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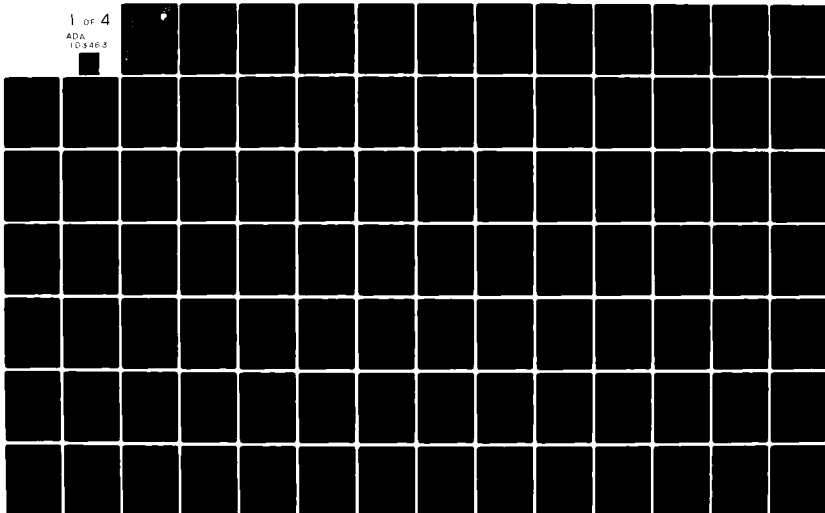
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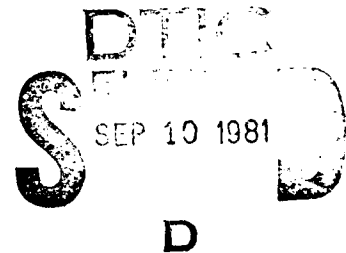


HEIGHT-GAIN ATLAS FOR AN ELEMENTAL VERTICAL ELECTRIC DIPOLE ABOVE A FLAT EARTH

**John L. Heckscher
Eli J. Tichovolsky**

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**ROME AIR DEVELOPMENT CENTER
Air Force Systems Command
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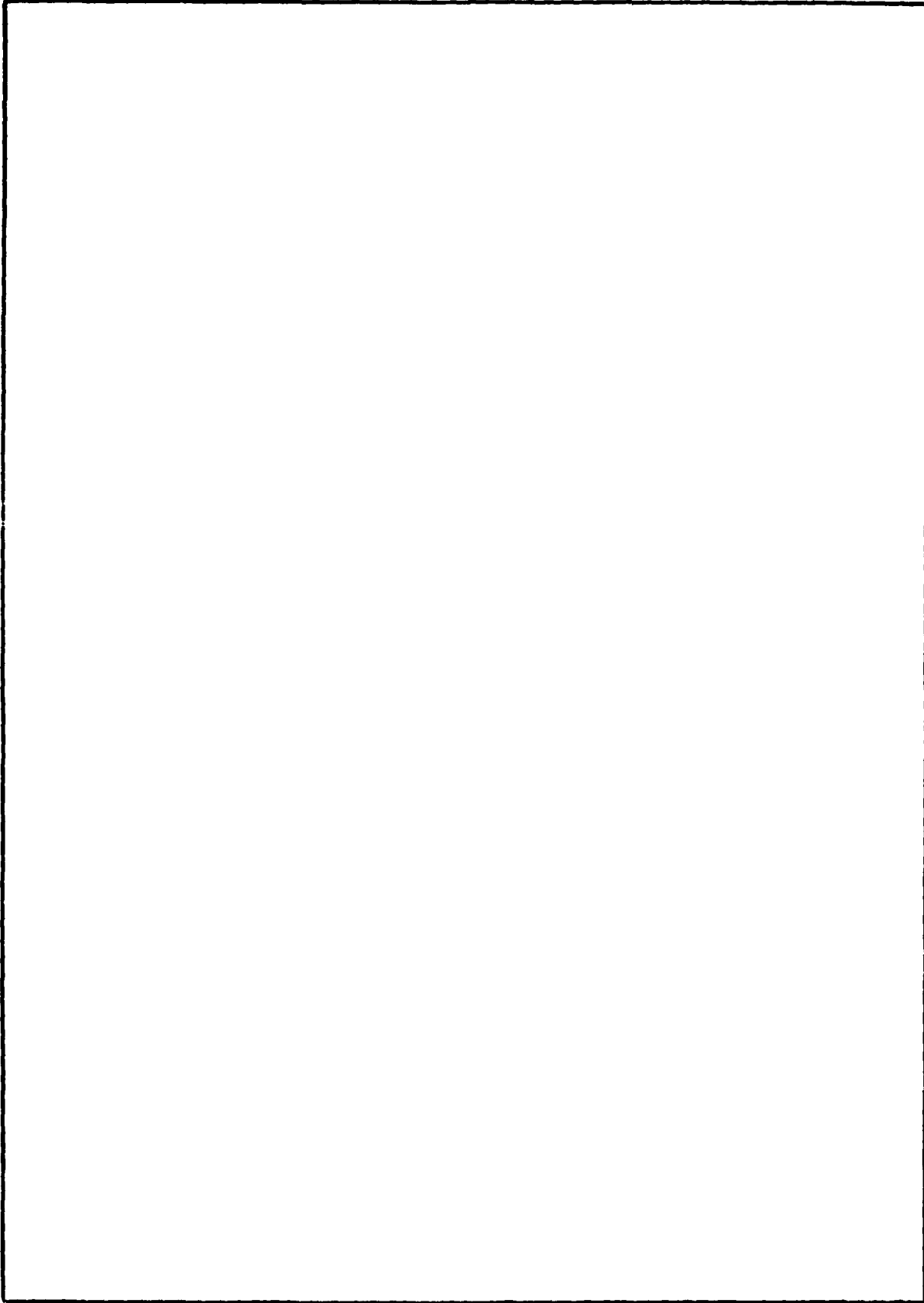
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Preface

We are grateful to Dr. E. A. Lewis for generous support of this project, and to J. P. Turtle and W. I. Klemetti for assistance in producing the numerous figures.

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Height-Gain Atlas for an Elemental Vertical Electric Dipole Above a Flat Earth

1. INTRODUCTION

The purpose of this report is to provide practical information on the height distribution of the electromagnetic fields from an elementary vertical electric dipole (VED) above five flat, homogeneous earth surfaces representative of sea water, well-conducting earth, poorly conducting earth, fresh water, and ice. Over the last several decades the need for such data has grown, primarily because of increased use of communication and navigation systems aboard aircraft. These data also could be of value in assessing the performance of a vertical distribution of VEDs.

Historically, the problem of the elementary VED above a plane, homogeneous earth dates back to Sommerfeld.¹ Since then, numerous authors have given mathematical expressions for the fields (for example, the work of Norton,^{2, 3} Wait,^{4, 5} Banos,⁶ and King⁷), and extensive numerical calculations for the fields as functions of distance along the surface have been provided (see work by Norton,⁸ Terman,⁹ Wait and Campbell,¹⁰ Wait and Howe,¹¹ and Wait,¹²). On the other hand, much less attention has been paid to the height-gain functions. Some results are available for certain frequencies and distances (such as was obtained by Norton,⁸ Wait and Campbell,¹⁰ and King et al^{13, 14}), while other data are given in the form of universal curves which require the user to calculate appropriate

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Because of the large number of references cited above, they will not be listed here. See References, page 333.

quantities.⁹ In this report both tables and curves are given with parameters selected for applicability to current AF systems.

Although strictly for an infinitesimal dipole, the data may be useful for source antennas as much as a half-wavelength in size. These data no longer represent the true height-gain when the free-space radiation pattern of the source differs appreciably from that of the infinitesimal dipole.

2. PRESENTATION OF RESULTS

This atlas presents height-gain data for each of the five representative earth surfaces, and Table 1 lists their assigned electromagnetic parameters. The air is assigned $\sigma_2 = 0$ and $\kappa_2 = (1.0003)$.² The magnetic permeability of both air and earth is $\mu_1 = \mu_2 = 4\pi \times 10^{-7}$ H/m.

Table 1. Conductivity and Dielectric Constants Adopted for Various Earth Surfaces

Type of Surface	σ_1 (S/m)	κ_1
Sea Water	4	80
Fresh Water	10^{-3}	80
Ice	2×10^{-5}	5
Well Conducting Soil	10^{-2}	20
Poorly Conducting Soil	10^{-3}	10

The vertical and radial electric fields E_z and E_ρ and the azimuthal magnetic field H_ϕ are given by Eqs. (A1), (A2), and (A3), respectively, in Appendix A. The height-gain amplitudes are computed as the ratios

$$E_z(\sigma_1, z)/E_z(\infty, 0) \quad (1)$$

$$E_\rho(\sigma_1, z)/E_z(\infty, 0) \quad (2)$$

and

$$H_\phi(\sigma_1, z)/H_\phi(\infty, 0) \quad (3)$$

where the normalization factor is either the vertical electrical or the azimuthal magnetic field at the surface of a perfect conductor. On the other hand, the height-gain phases are given as the phase differences

$$\arg E_z(\sigma_1, z) - \arg E_z(\infty, z) \quad (4)$$

$$\arg E_\rho(\sigma_1, z) - \arg E_\rho(\infty, z) \quad (5)$$

and

$$\arg H_\phi(\sigma_1, z) - \arg H_\phi(\infty, z) \quad (6)$$

between the fields at height z over the earth and over a perfect conductor, except in the special case of $\arg E_\rho(\infty, 0)$ which is indeterminate.

Height-gain curves for sea water are shown for E_z in Figures 1 to 24 and for E_ρ in Figures 25 to 48. Curves for H_ϕ are not given since they are practically identical to those of E_z . The figure titles give frequency, downrange distance d , and VED height. Each figure is composed of two plots: relative amplitude vs height and phase difference vs height. The relative amplitude plot contains two curves: one with the symbol X to indicate a perfect conductor ($\sigma_1 = \infty$), the other with the symbol $\blacksquare$ to denote the actual surface. The phase difference plot utilizes + and - to indicate that the phase leads or lags, respectively, the phase over a perfect conductor. The computer program to produce the plots incorporated an automatic routine to scale the amplitude and phase difference axes to within 3 dB and 3 degrees, respectively, of the maximum value calculated, to make the fullest practical use of the available space.

The height-gain functions also are given for E_z in Tables 2 to 13, E_ρ in Tables 14 to 25, and H_ϕ in Tables 26 to 37. The height interval is 1 percent of the maximum height for the lowest 30 points, and is 5 percent for the remainder.

Height-gain curves for fresh water are shown for E_z in Figures 49 to 72, and for E_ρ in Figures 73 to 96. The height gain functions also are given for E_z in Tables 38 to 49, E_ρ in Tables 50 to 61, and for H_ϕ in Tables 62 to 73.

Height-gain curves for ice are shown for E_z in Figures 97 to 121, and for E_ρ in Figures 122 to 144. The height gain functions also are given for E_z in Tables 74 to 85, E_ρ in Tables 86 to 97, and for H_ϕ in Tables 98 to 109.

Height-gain curves for well-conducting soil are shown for E_z in Figures 145 to 168 and for E_ρ in Figures 169 to 192. The height-gain functions also are given for E_z in Tables 110 to 121, E_ρ in Tables 122 to 133, and for H_ϕ in Tables 134 to 145.

Height-gain curves for poorly conducting soil are shown for E_z in Figures 192 to 216 and for E_ρ in Figures 217 to 240. The height-gain functions also are given for E_z in Tables 146 to 157, E_ρ in Tables 158 to 169 and for H_ϕ in Tables 170 to 181.

All of the values given in the above figures and tables lie within the ranges of validity derived in Appendix B.

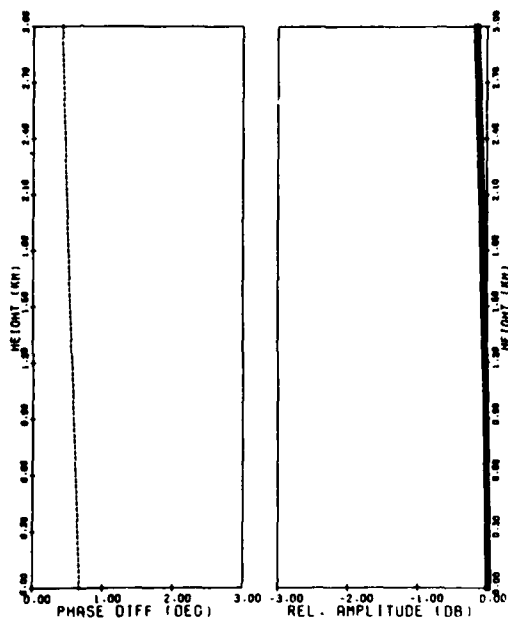


Figure 1. Vertical Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

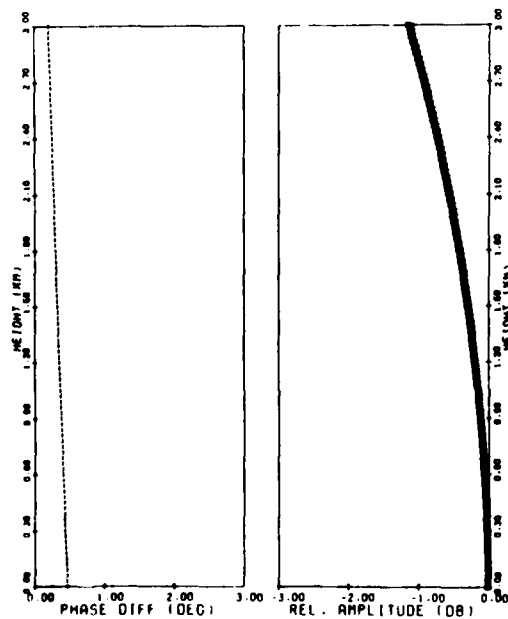


Figure 2. Vertical Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

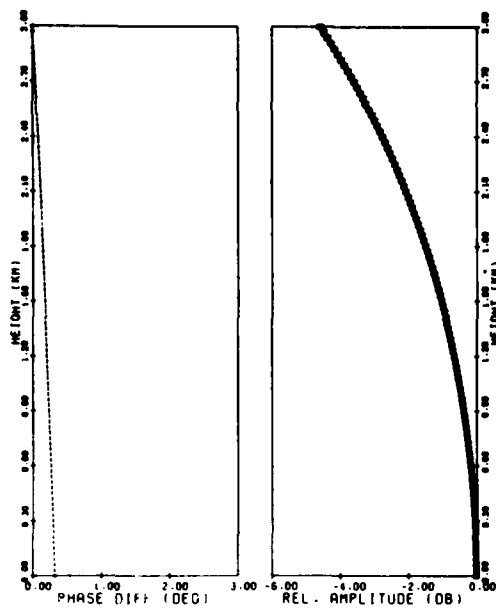


Figure 3. Vertical Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20

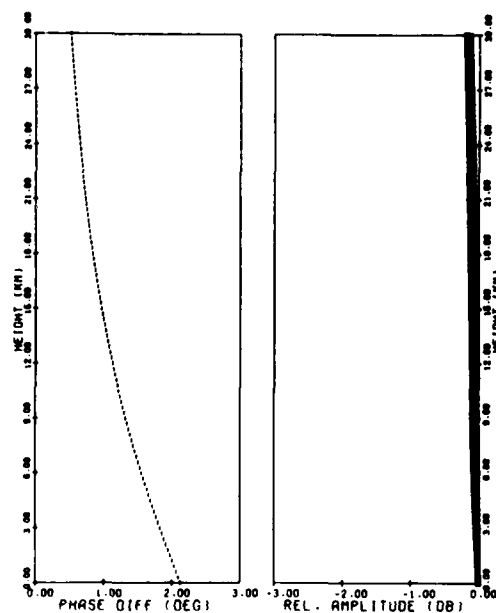


Figure 4. Vertical Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00m

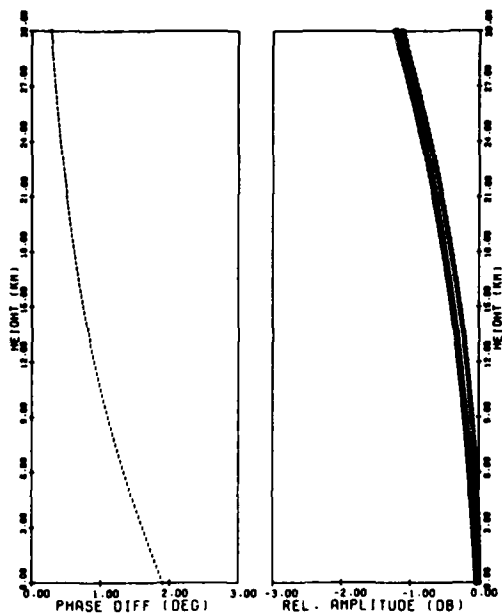


Figure 5. Vertical Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

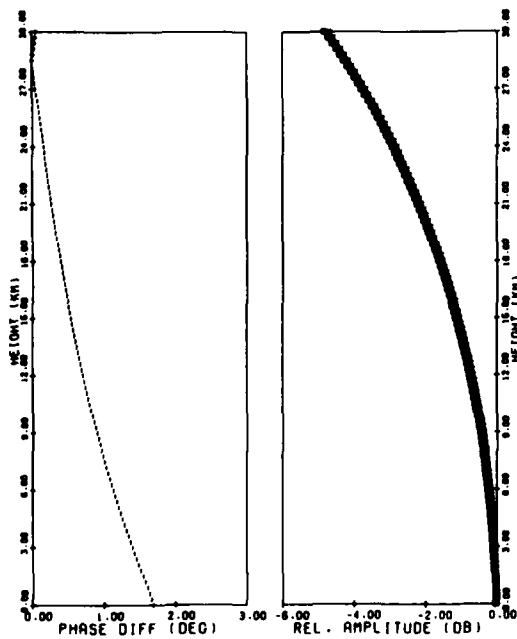


Figure 6. Vertical Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

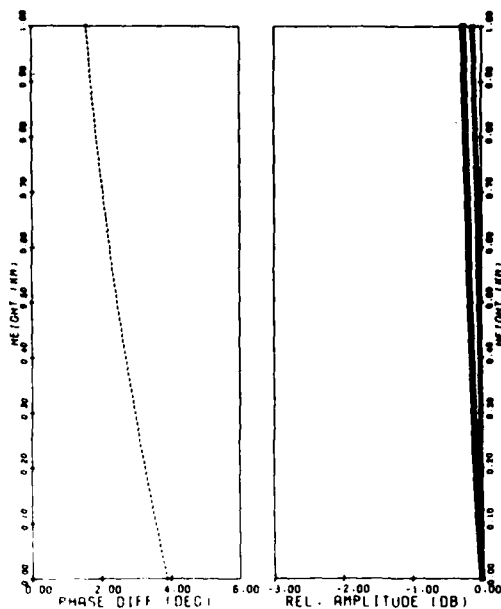


Figure 7. Vertical Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

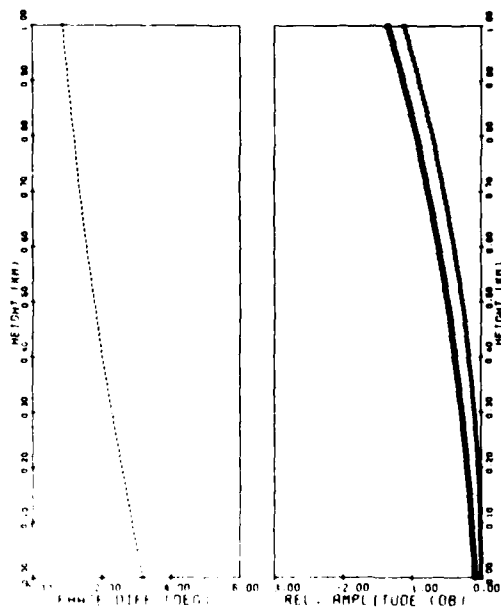


Figure 8. Vertical Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

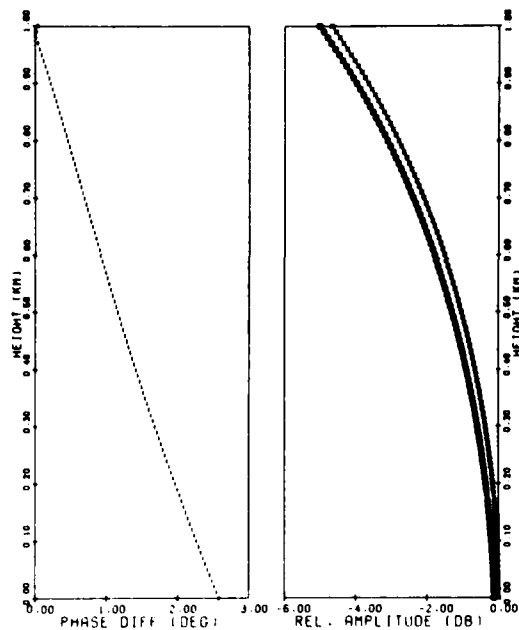


Figure 9. Vertical Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. 100 km,
VED Height = 449.52 m

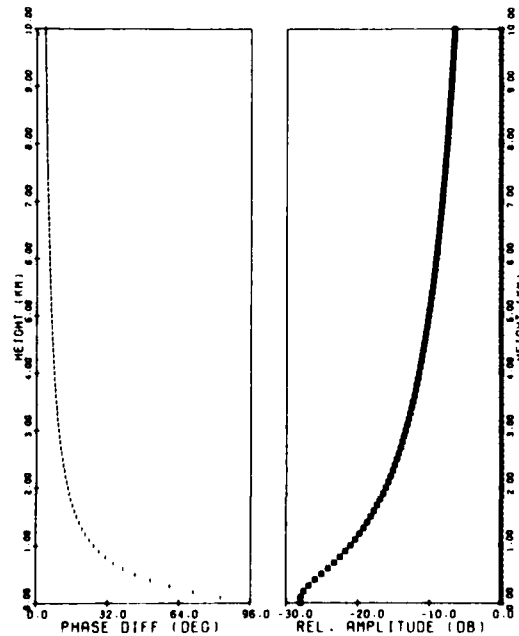


Figure 10. Vertical Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

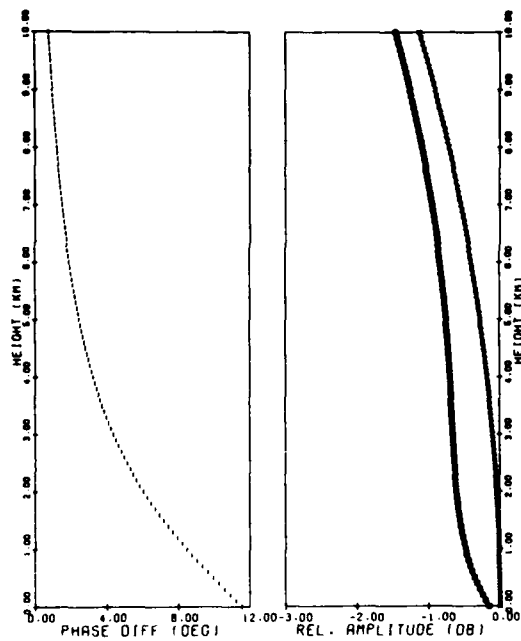


Figure 11. Vertical Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

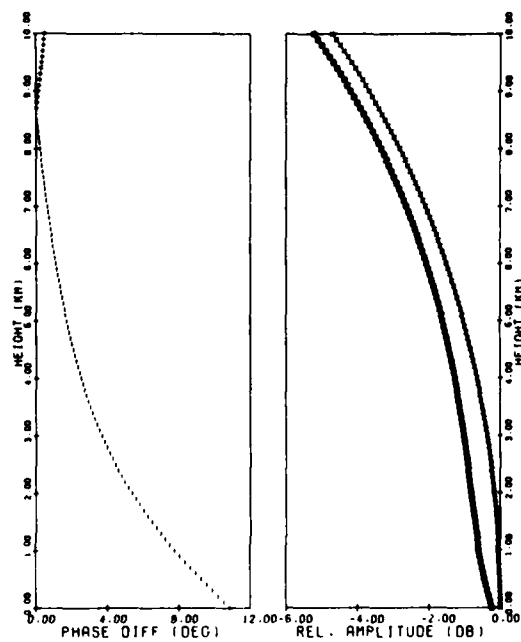


Figure 12. Vertical Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

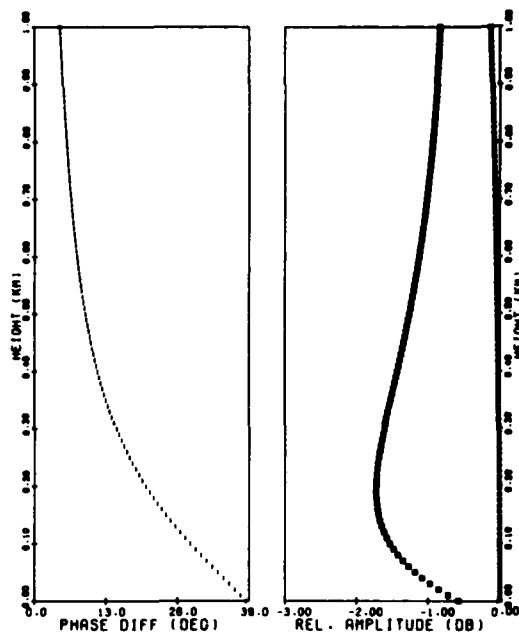


Figure 13. Vertical Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

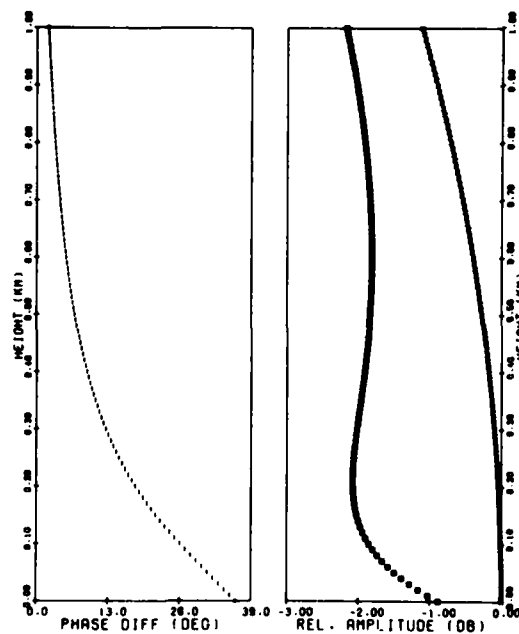


Figure 14. Vertical Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

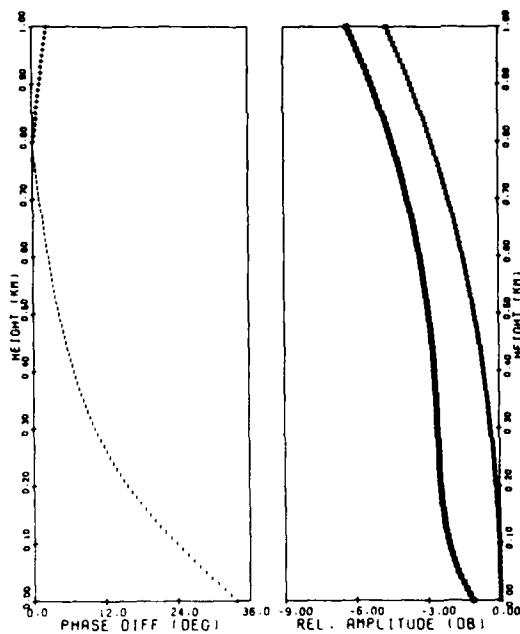


Figure 15. Vertical Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

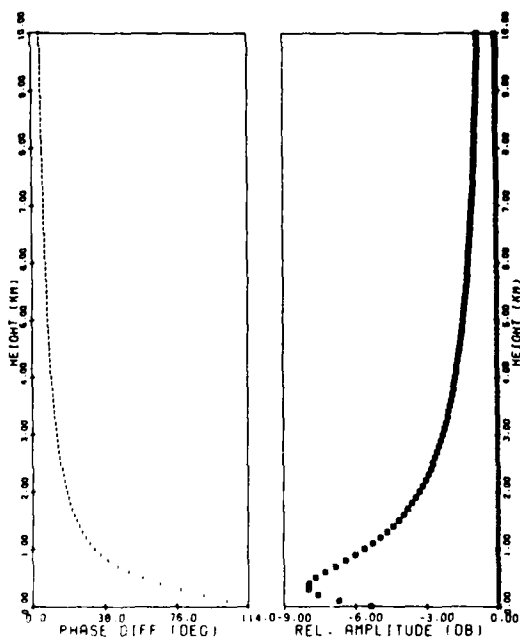


Figure 16. Vertical Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

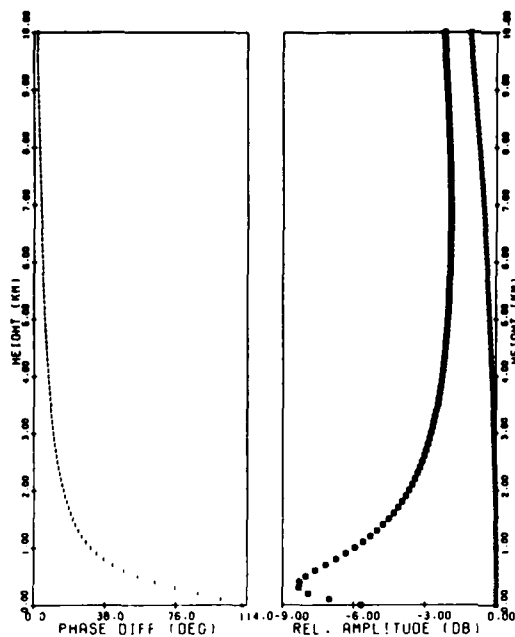


Figure 17. Vertical Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

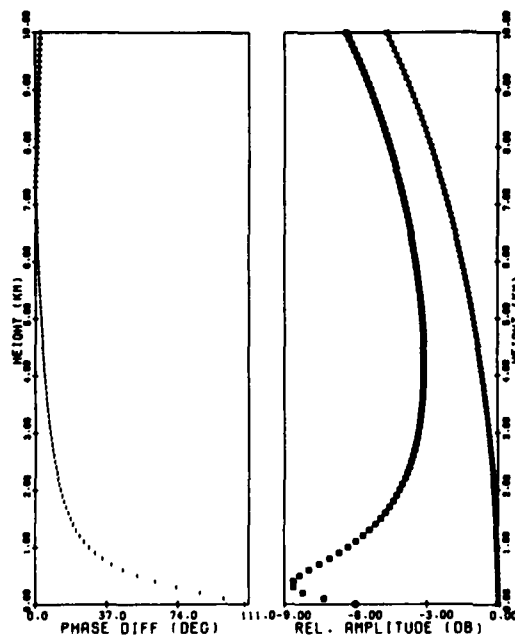


Figure 18. Vertical Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

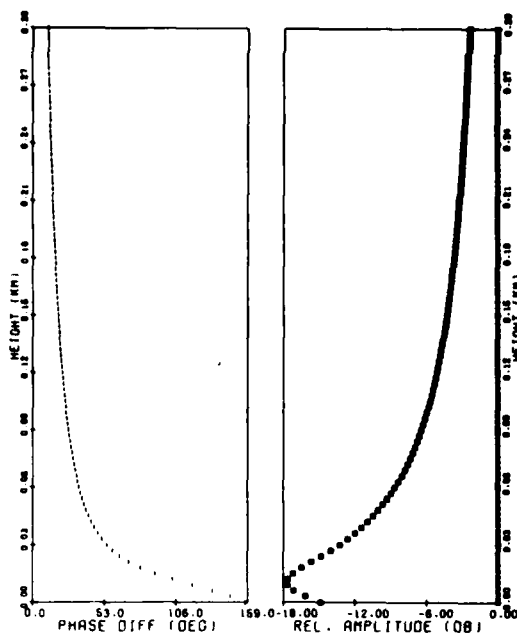


Figure 19. Vertical Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

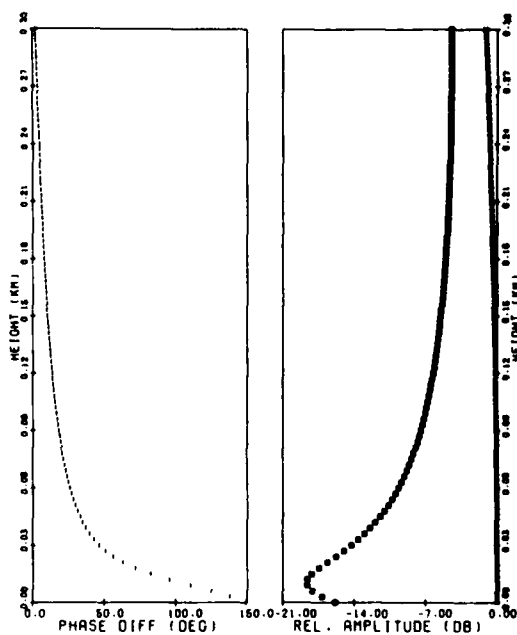


Figure 20. Vertical Electric Field
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

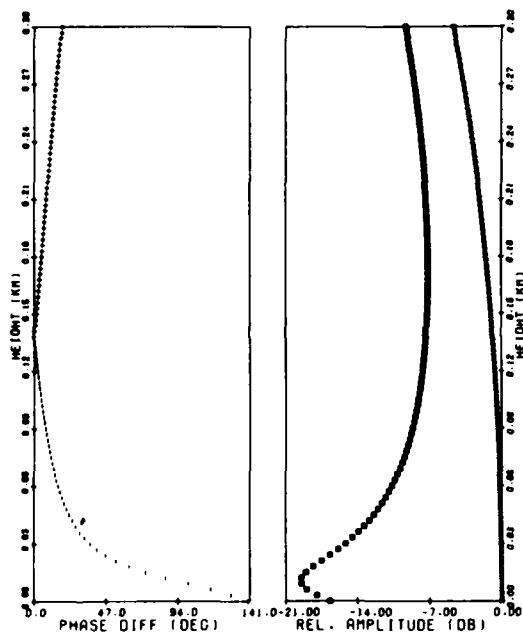


Figure 21. Vertical Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

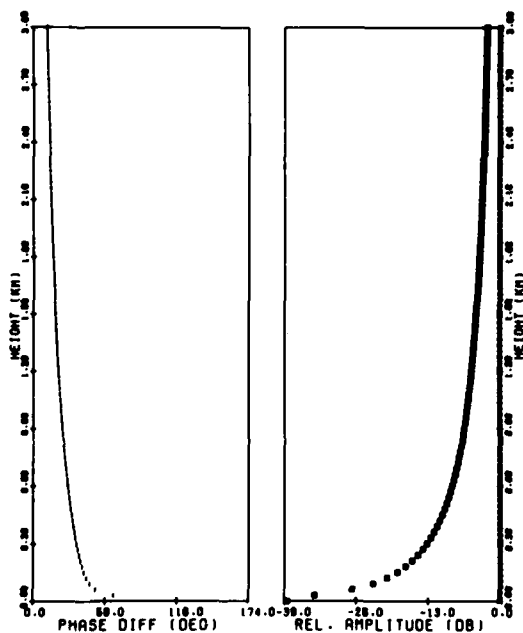


Figure 22. Vertical Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

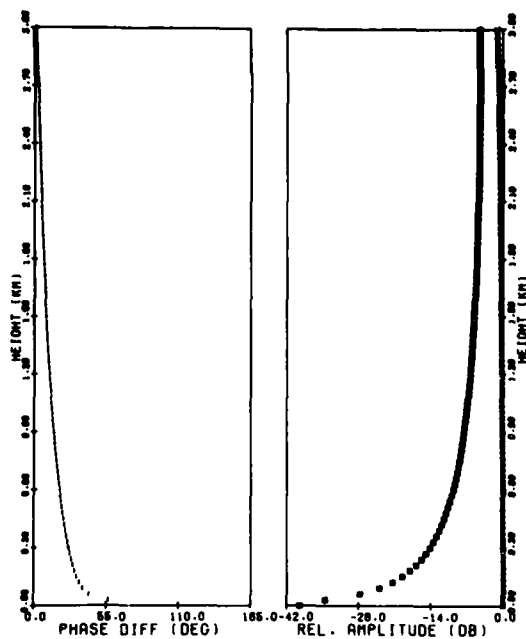


Figure 23. Vertical Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

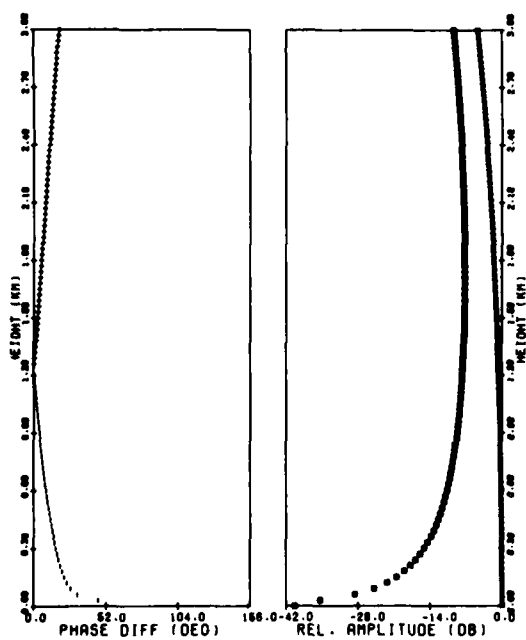


Figure 24. Vertical Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

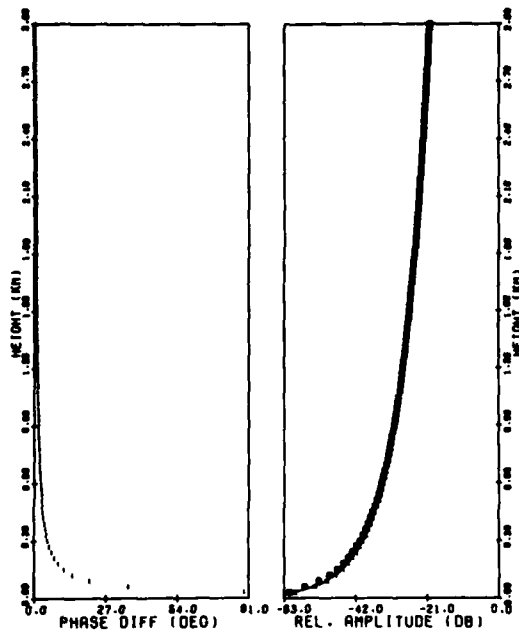


Figure 25. Radial Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

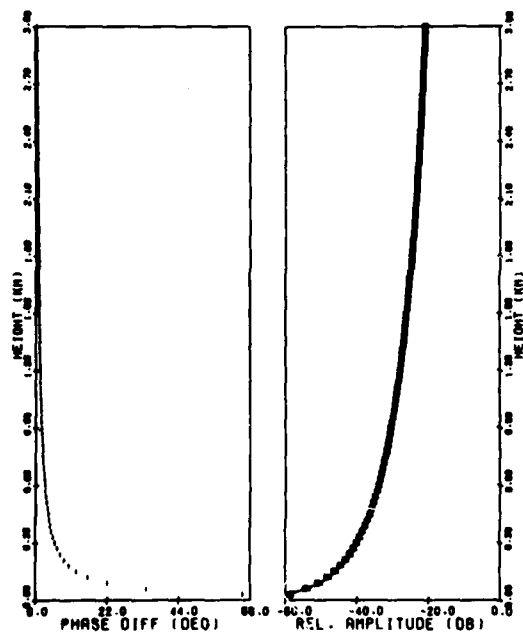


Figure 26. Radial Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

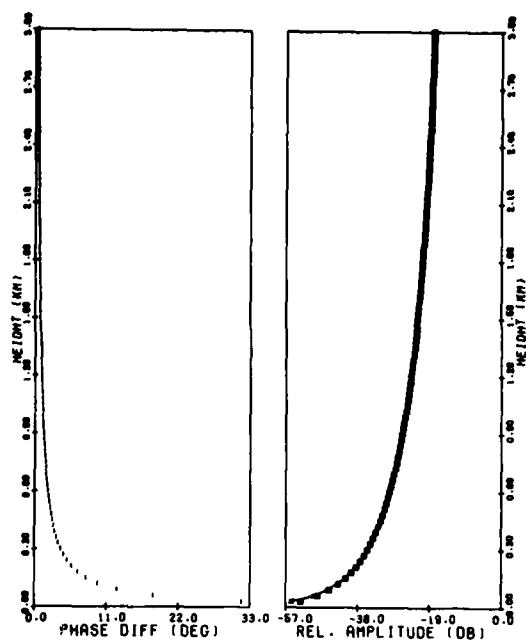


Figure 27. Radial Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

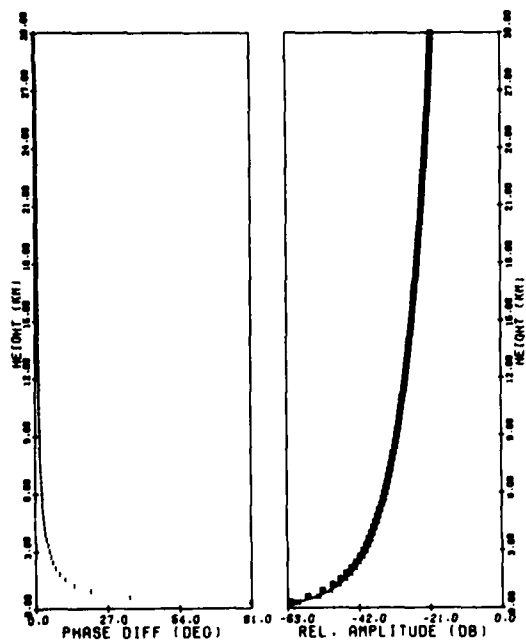


Figure 28. Radial Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

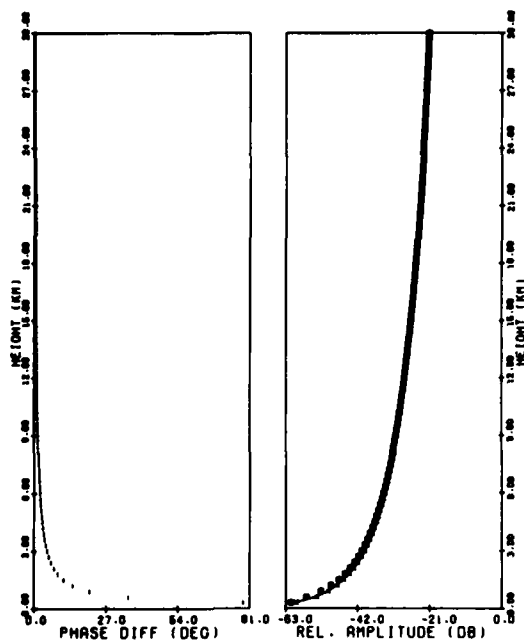


Figure 29. Radial Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

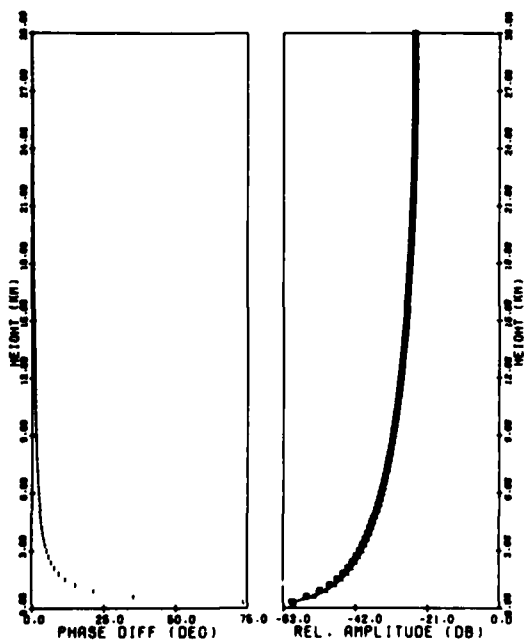


Figure 30. Radial Electric Field
(Sea Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

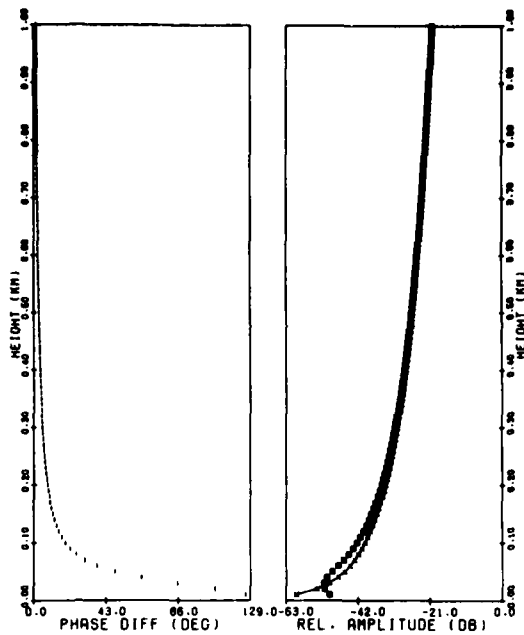


Figure 31. Radial Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

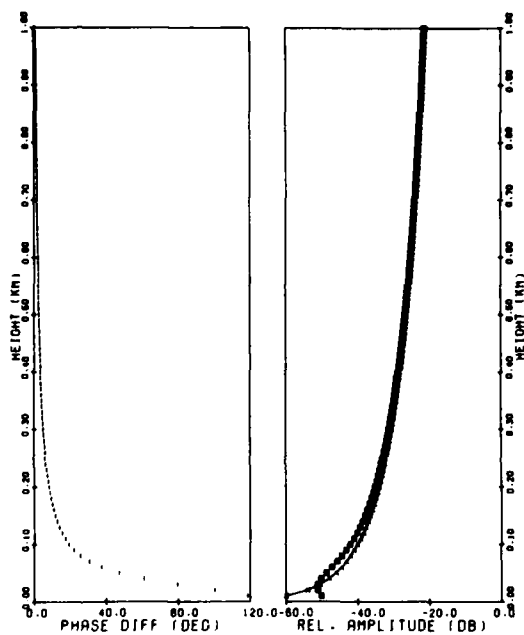


Figure 32. Radial Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

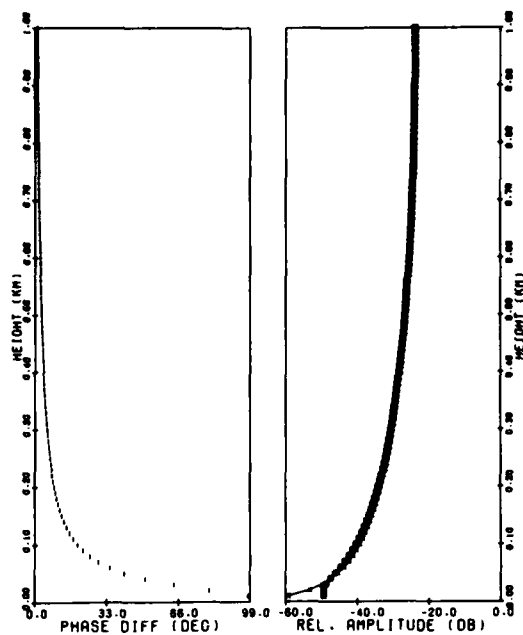


Figure 33. Radial Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

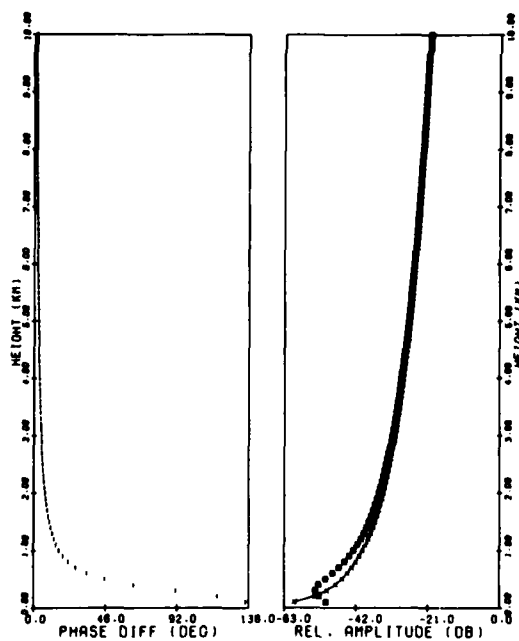


Figure 34. Radial Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

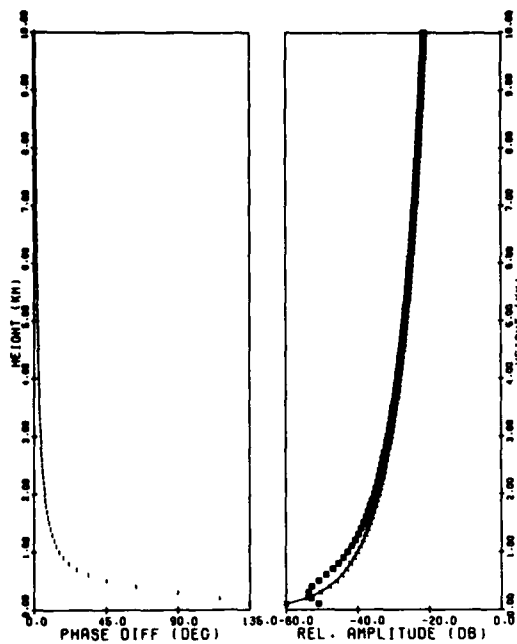


Figure 35. Radial Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

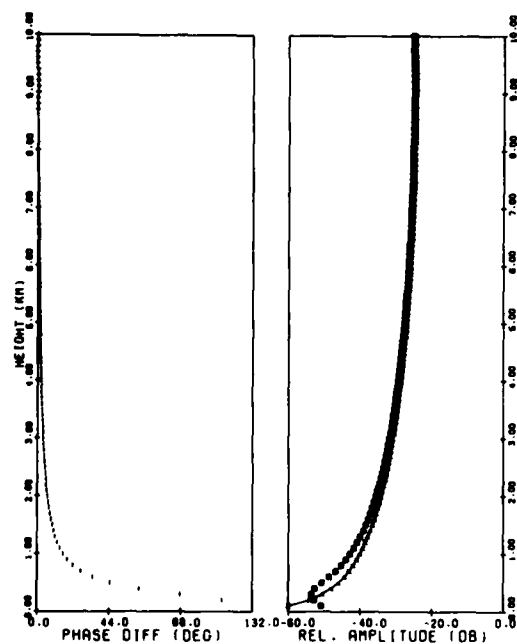


Figure 36. Radial Electric Field
(Sea Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

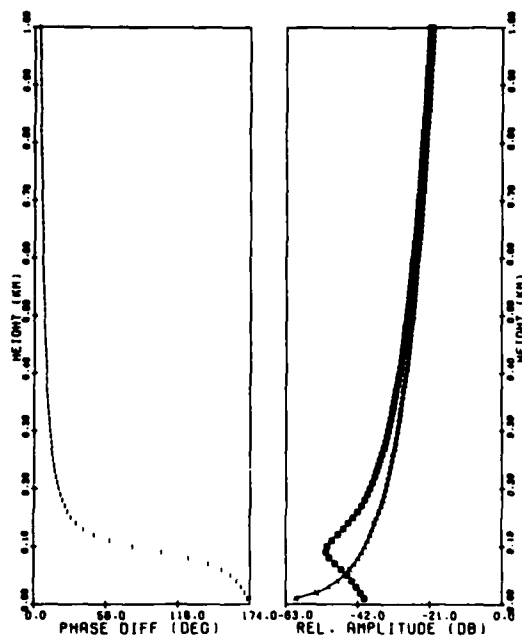


Figure 37. Radial Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

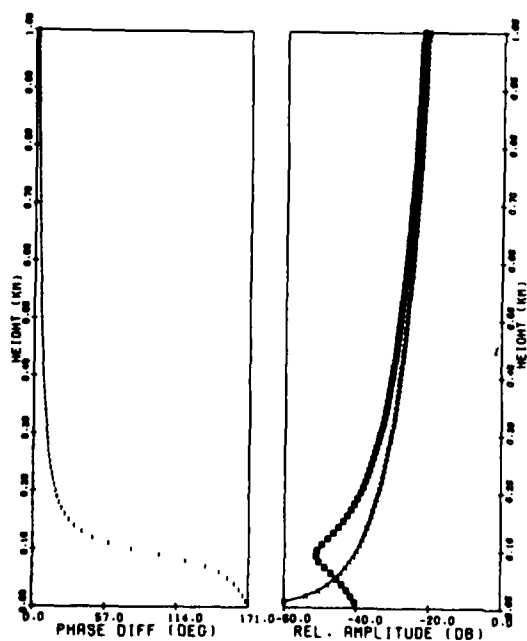


Figure 38. Radial Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

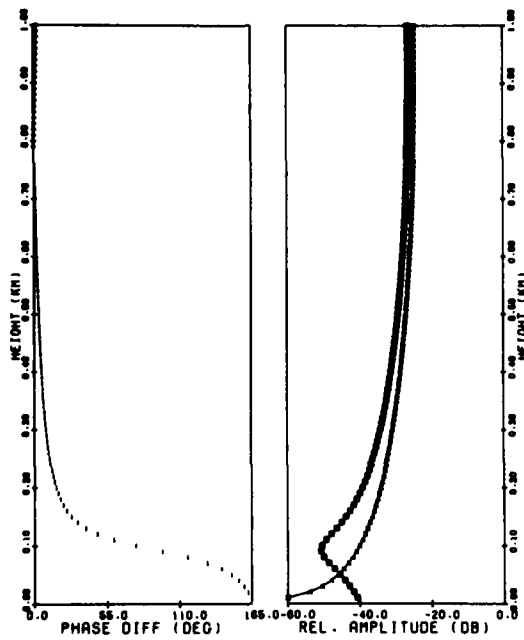


Figure 39. Radial Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

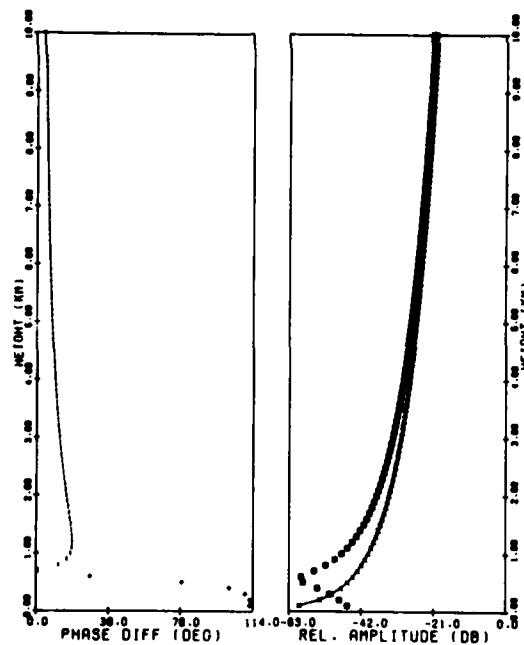


Figure 40. Radial Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

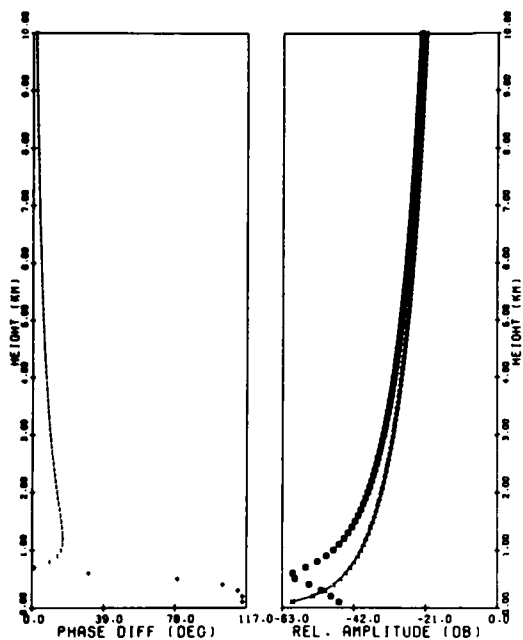


Figure 41. Radial Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

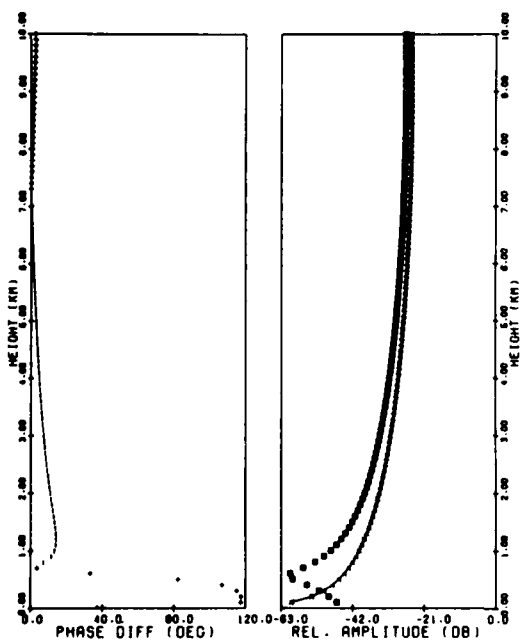


Figure 42. Radial Electric Field
(Sea Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

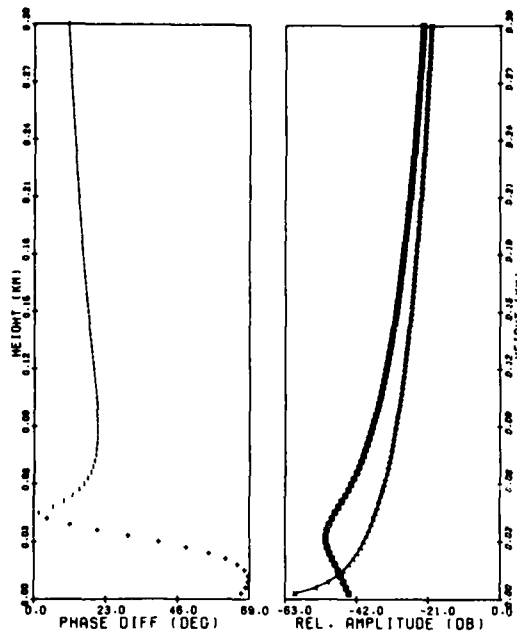


Figure 43. Radial Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

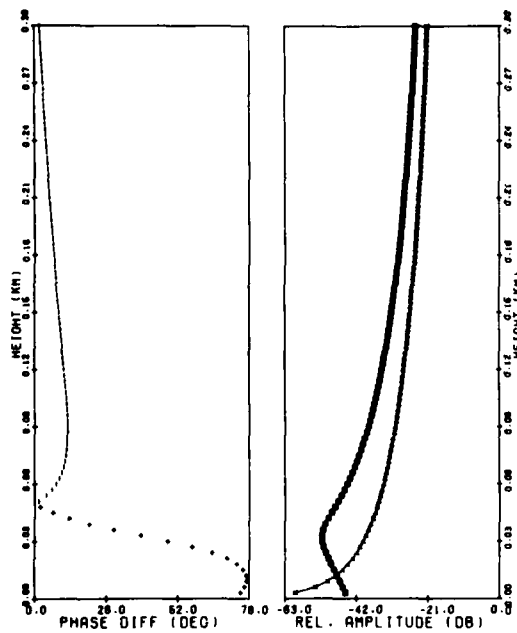


Figure 44. Radial Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

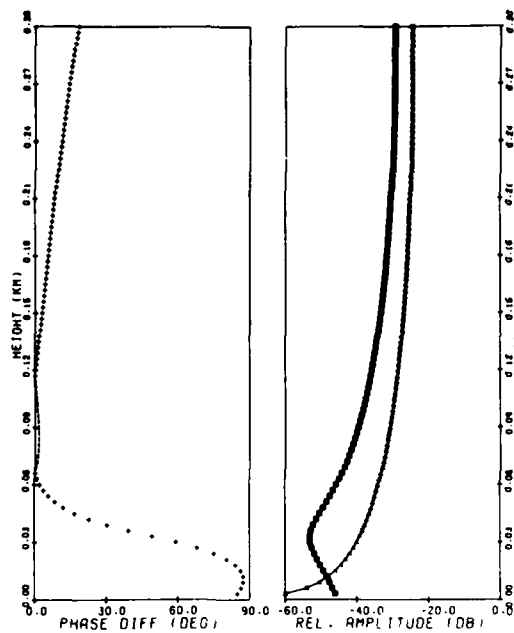


Figure 45. Radial Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

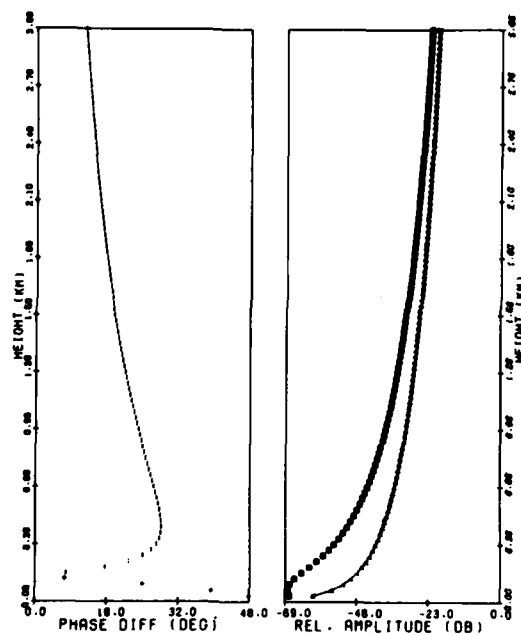


Figure 46. Radial Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

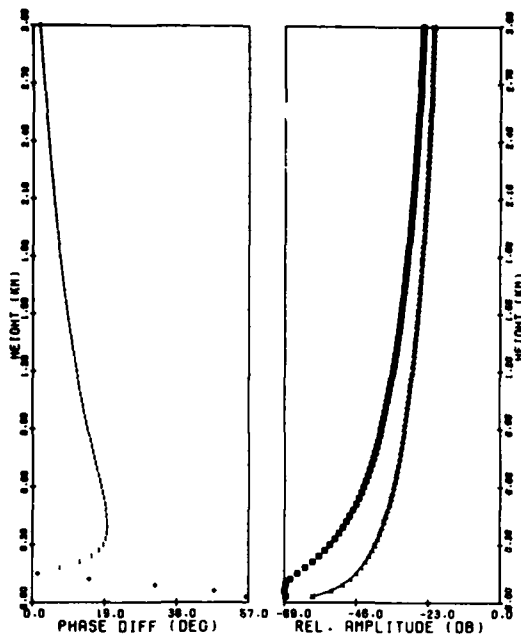


Figure 47. Radial Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

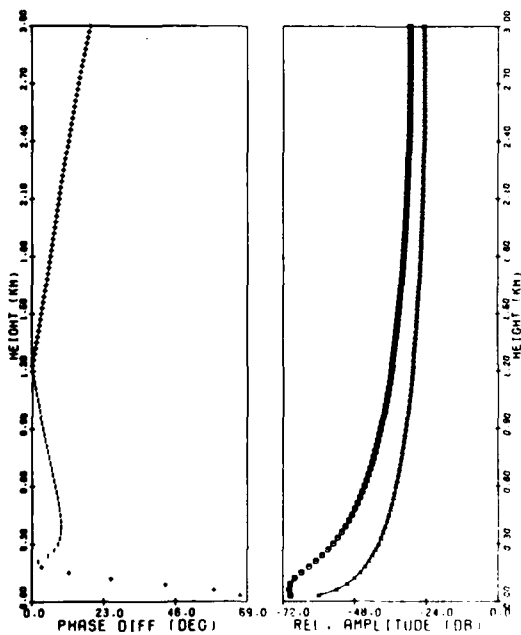


Figure 48. Radial Electric Field
(Sea Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

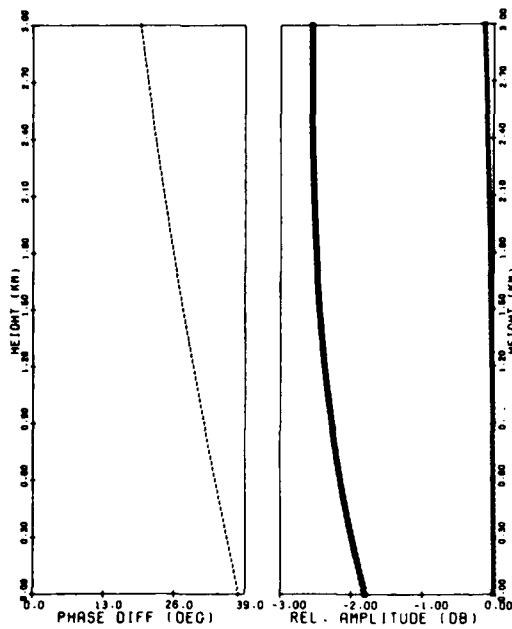


Figure 49. Vertical Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

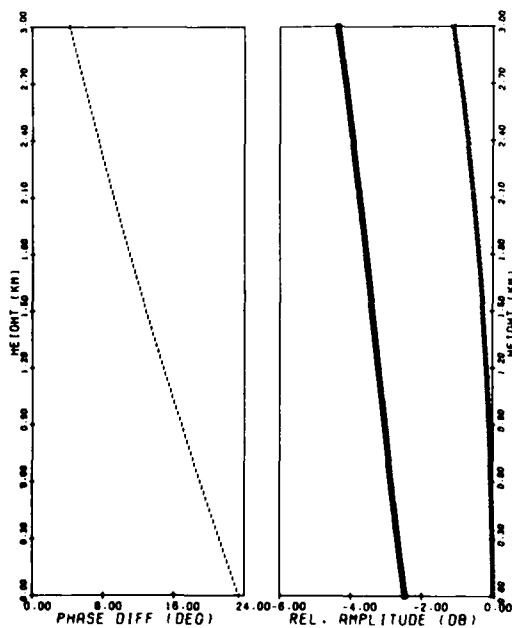


Figure 50. Vertical Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

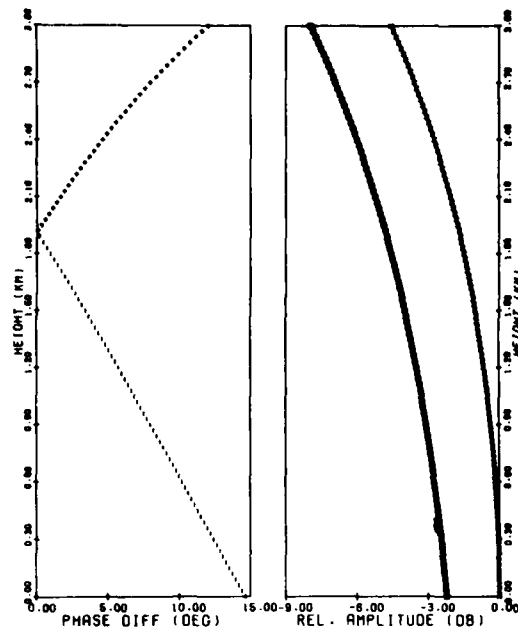


Figure 51. Vertical Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

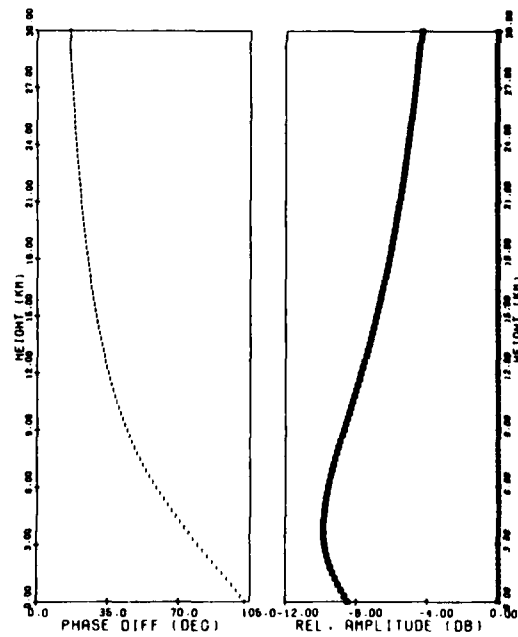


Figure 52. Vertical Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

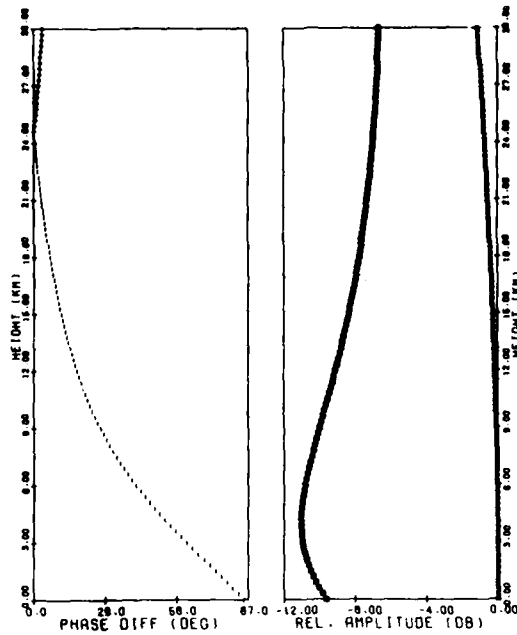


Figure 53. Vertical Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

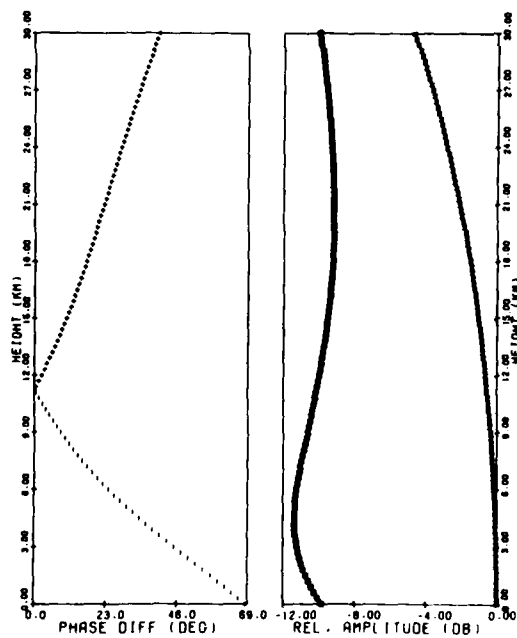


Figure 54. Vertical Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

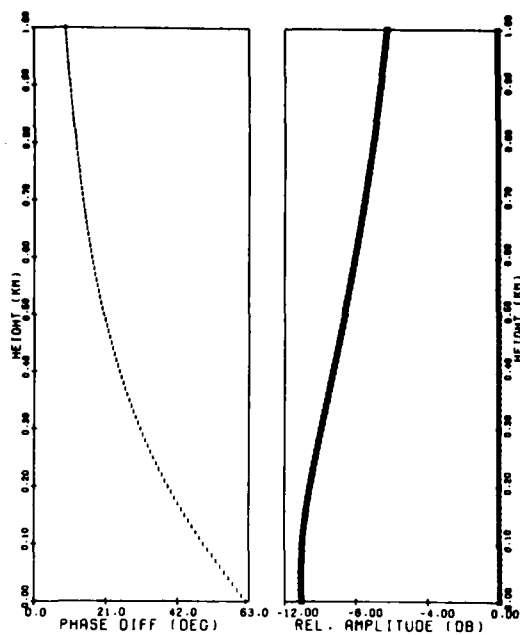


Figure 55. Vertical Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

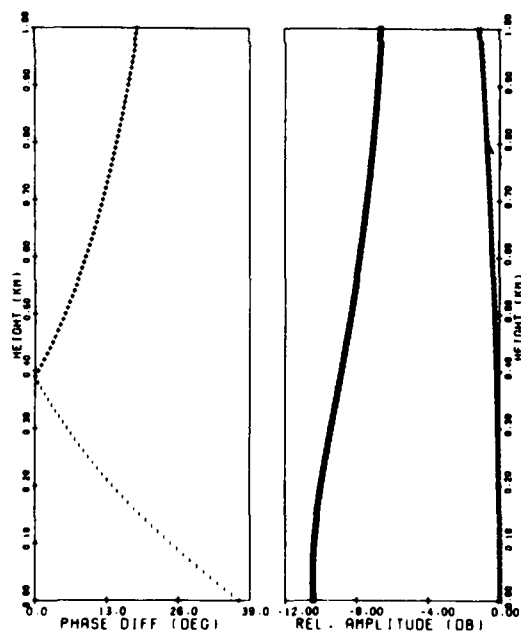


Figure 56. Vertical Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

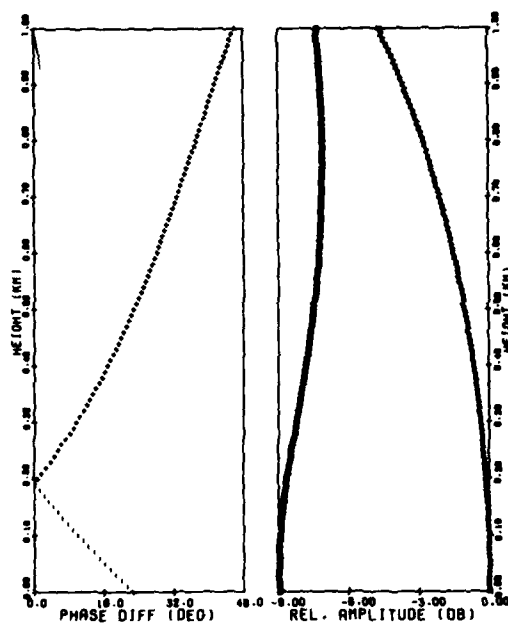


Figure 57. Vertical Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

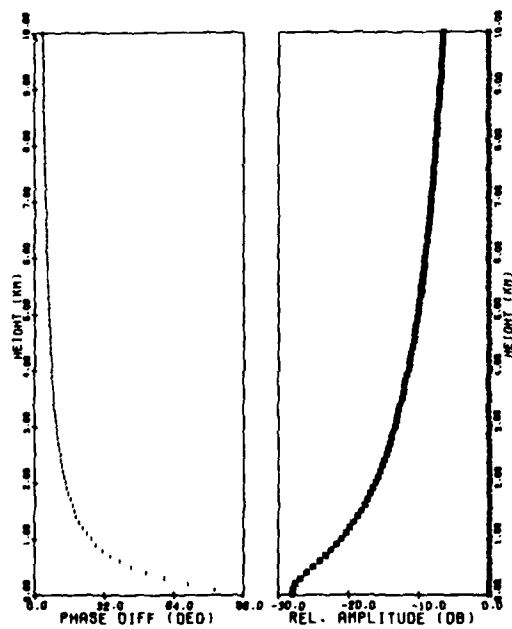


Figure 58. Vertical Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

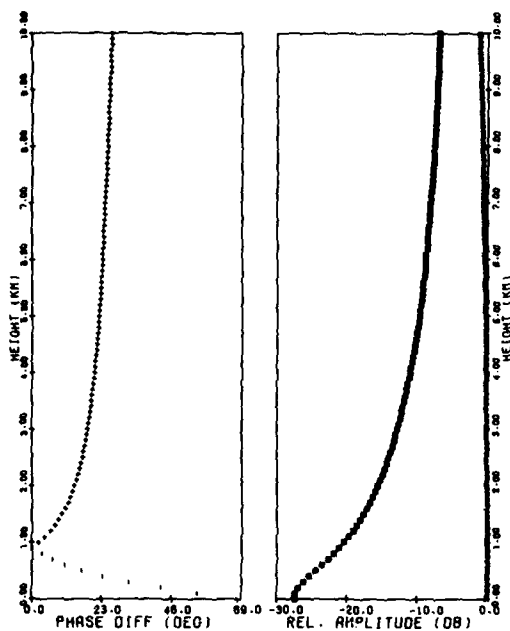


Figure 59. Vertical Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

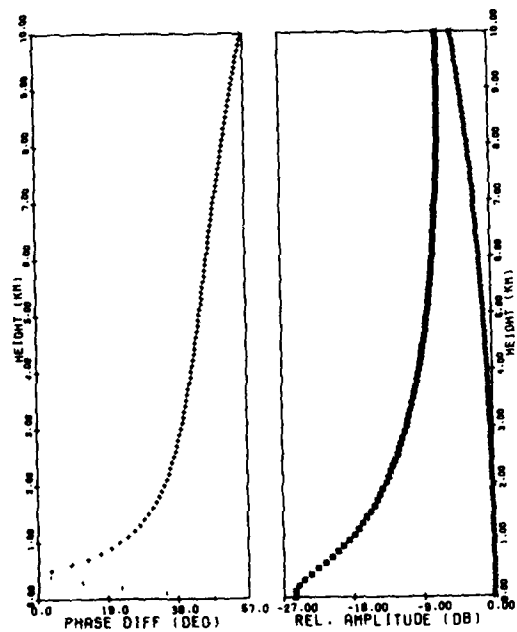


Figure 60. Vertical Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

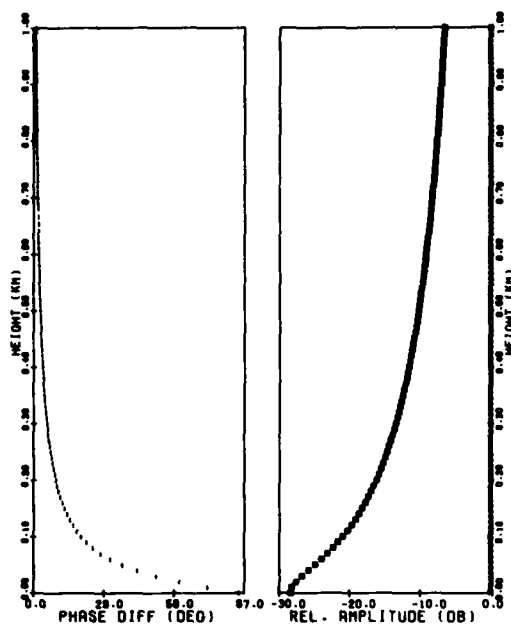


Figure 61. Vertical Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

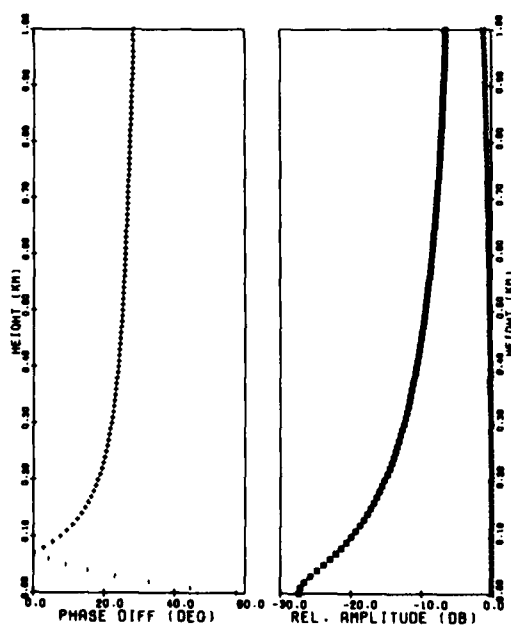


Figure 62. Vertical Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

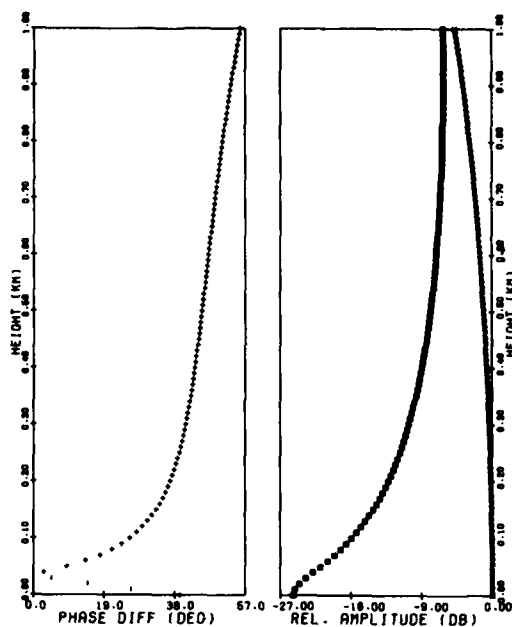


Figure 63. Vertical Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

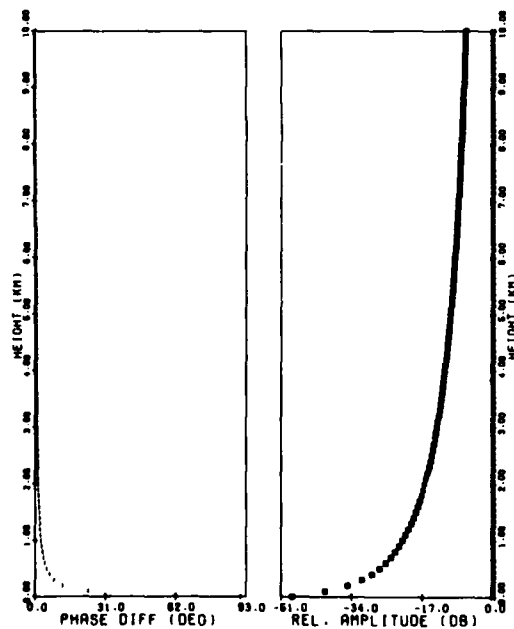


Figure 64. Vertical Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

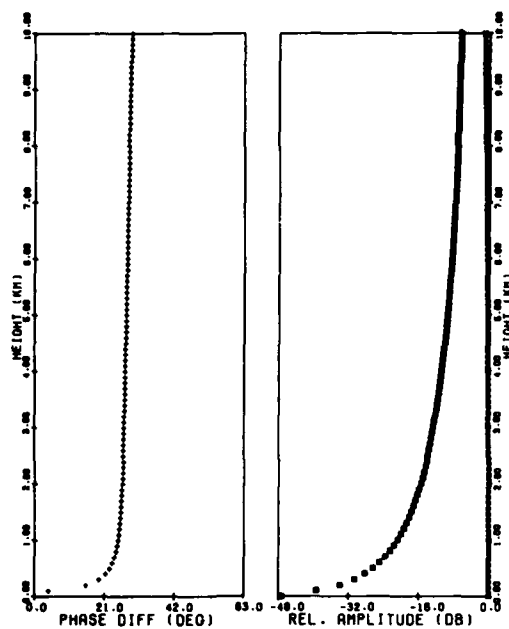


Figure 65. Vertical Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

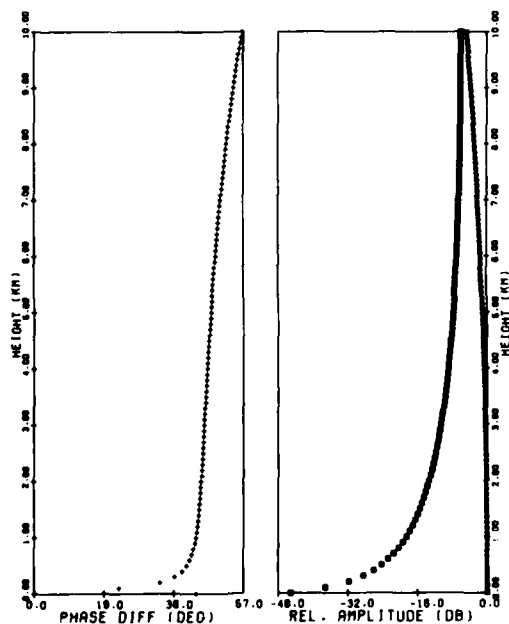


Figure 66. Vertical Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

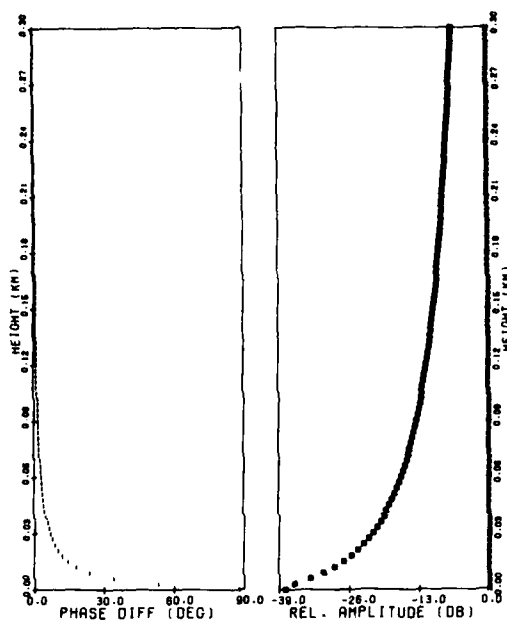


Figure 67. Vertical Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

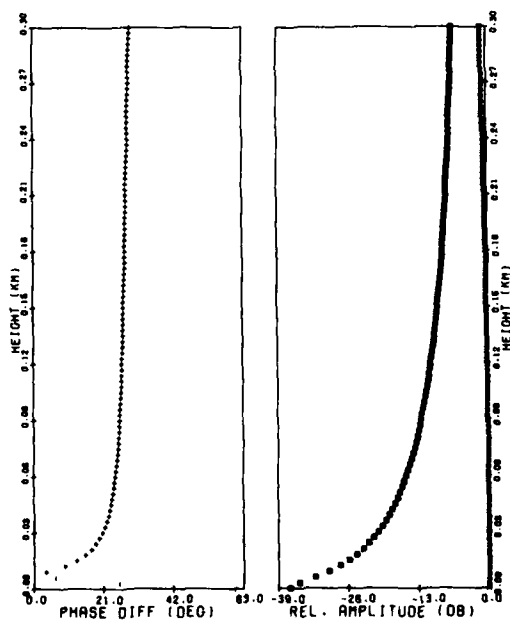


Figure 68. Vertical Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

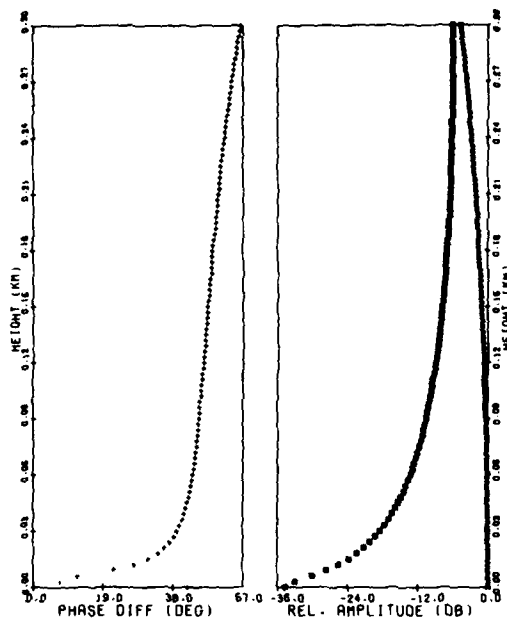


Figure 69. Vertical Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. $\approx$ 3 km,
VED Height = 4.50 m

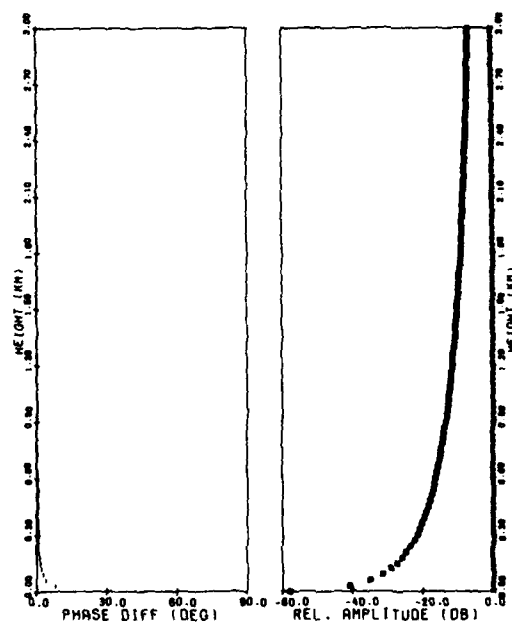


Figure 70. Vertical Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. $\approx$ 30 km,
VED Height = 0.00 m

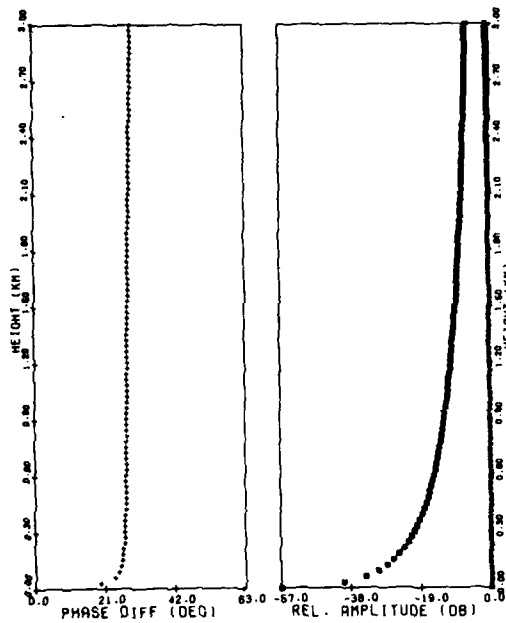


Figure 71. Vertical Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

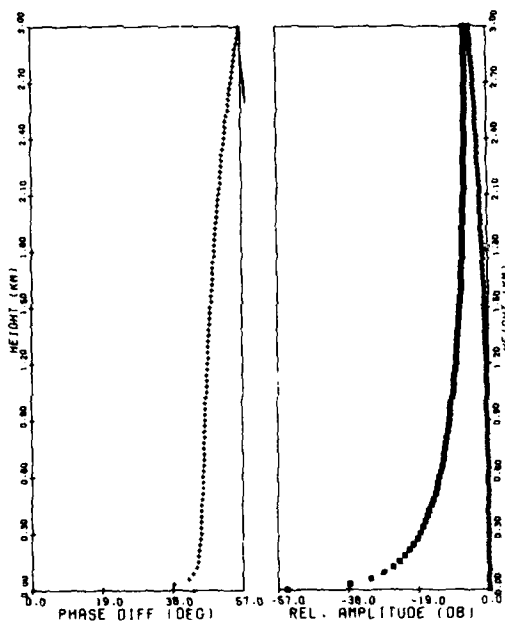


Figure 72. Vertical Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

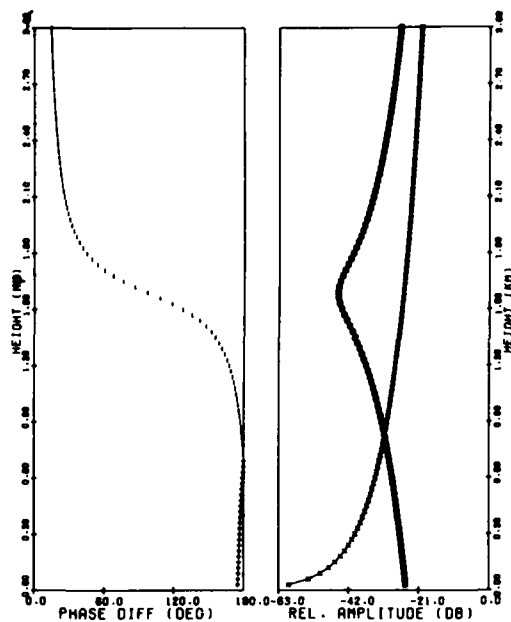


Figure 73. Radial Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00m

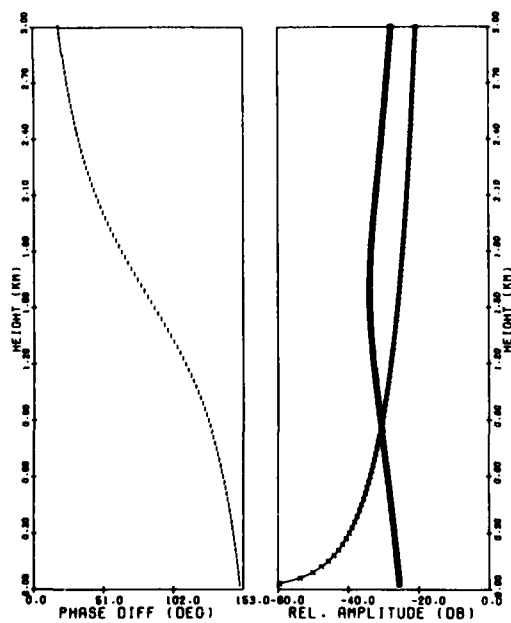


Figure 74. Radial Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

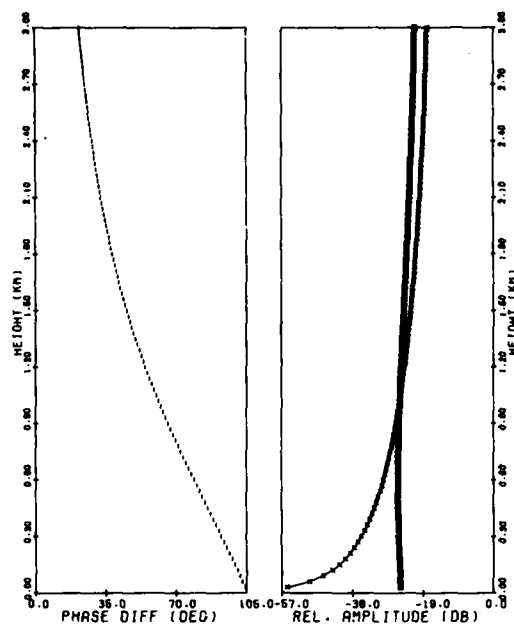


Figure 75. Radial Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

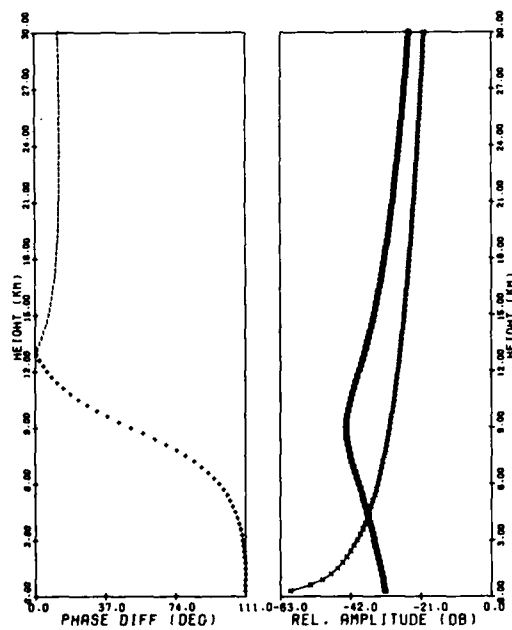


Figure 76. Radial Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

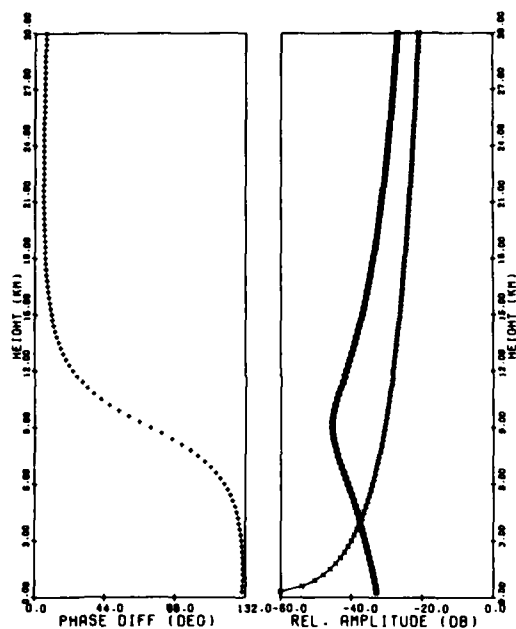


Figure 77. Radial Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

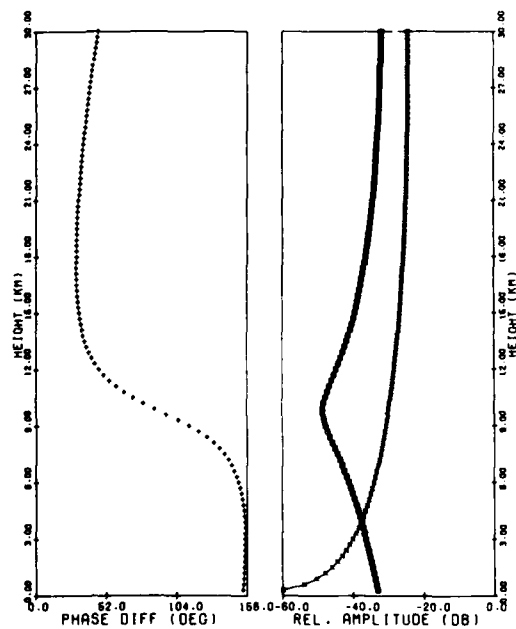


Figure 78. Radial Electric Field
(Fresh Water)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

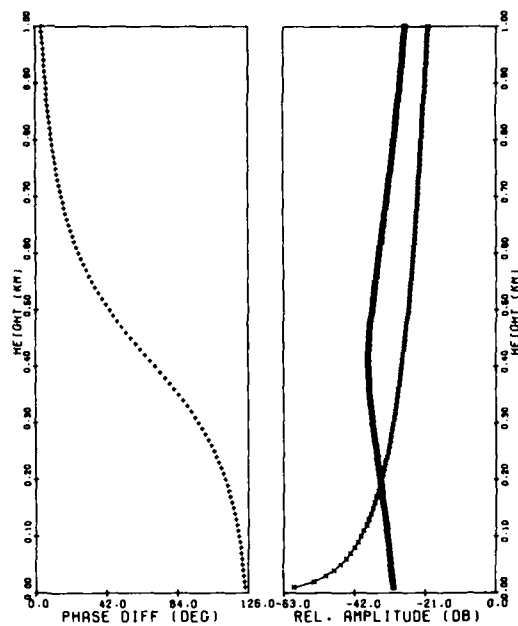


Figure 79. Radial Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

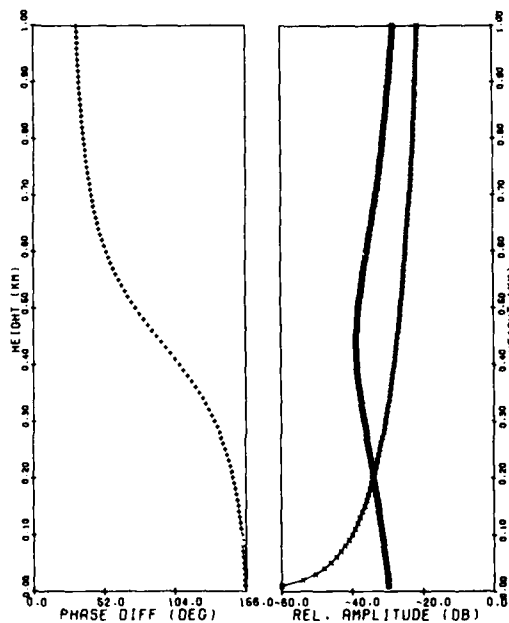


Figure 80. Radial Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

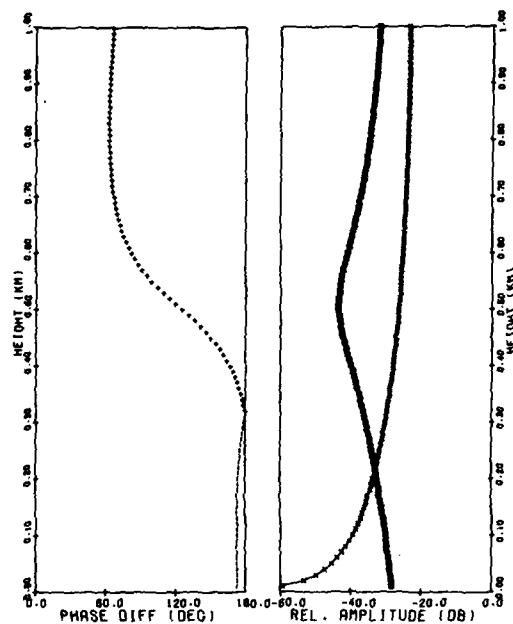


Figure 81. Radial Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

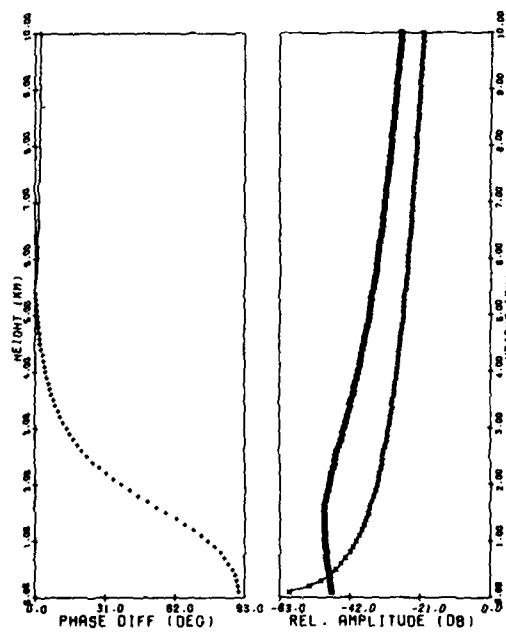


Figure 82. Radial Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

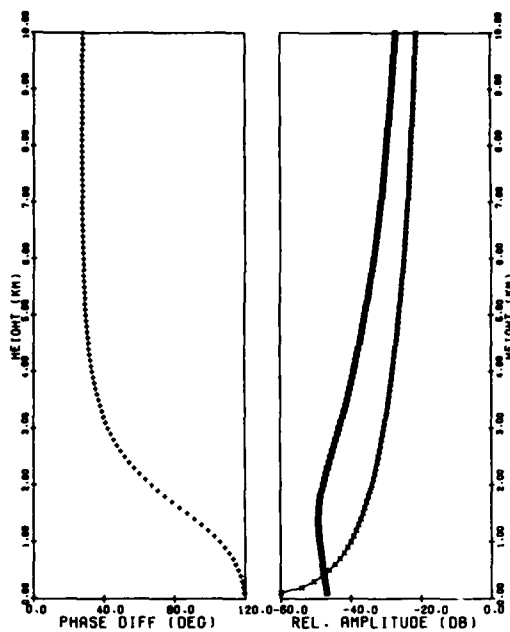


Figure 83. Radial Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

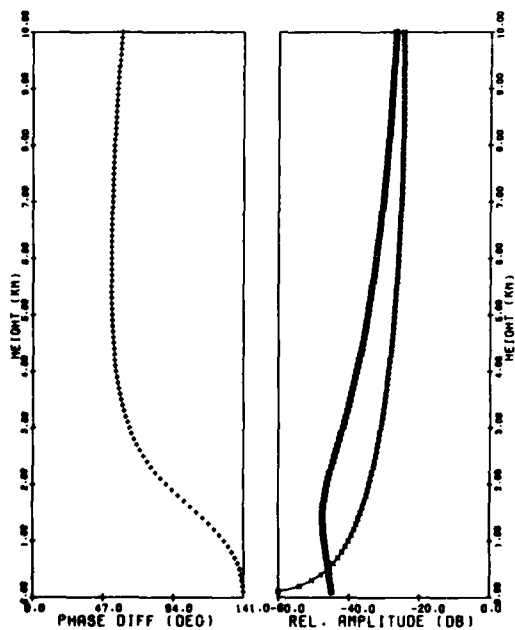


Figure 84. Radial Electric Field
(Fresh Water)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

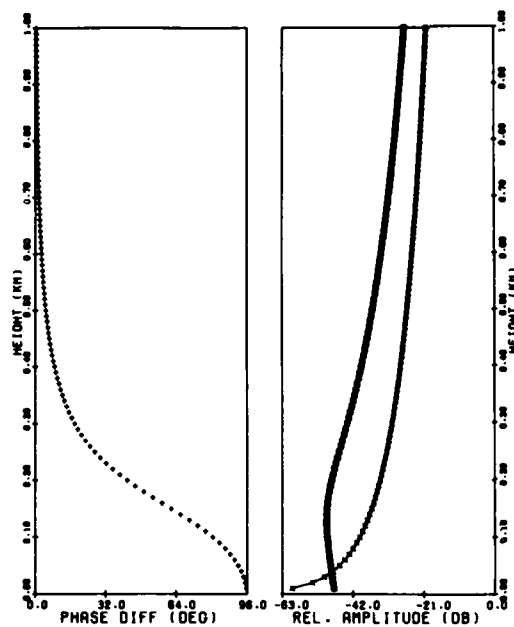


Figure 85. Radial Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

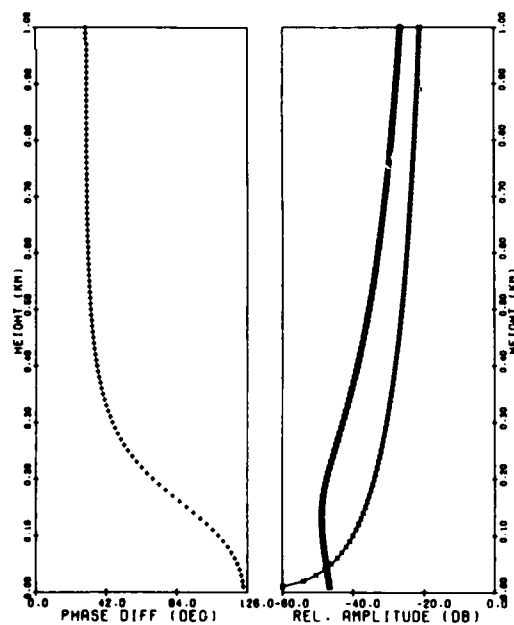


Figure 86. Radial Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

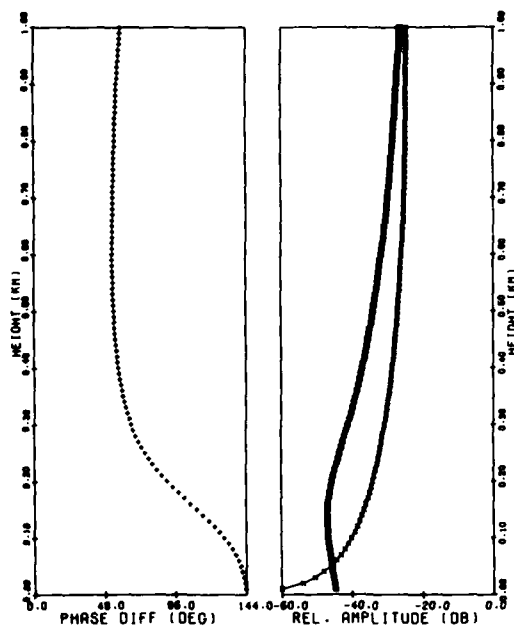


Figure 87. Radial Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

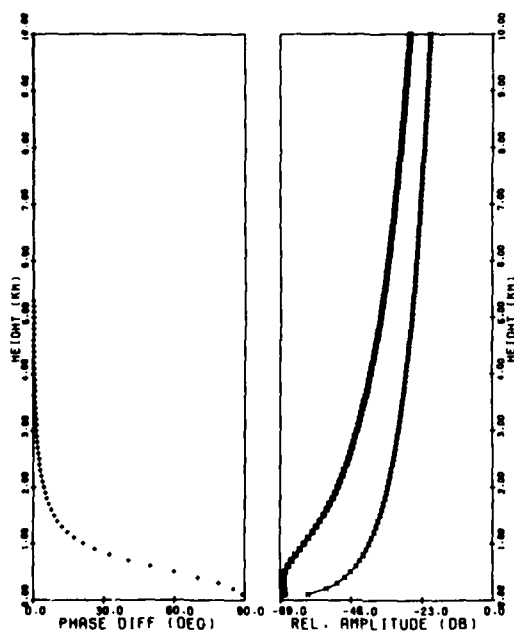


Figure 88. Radial Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

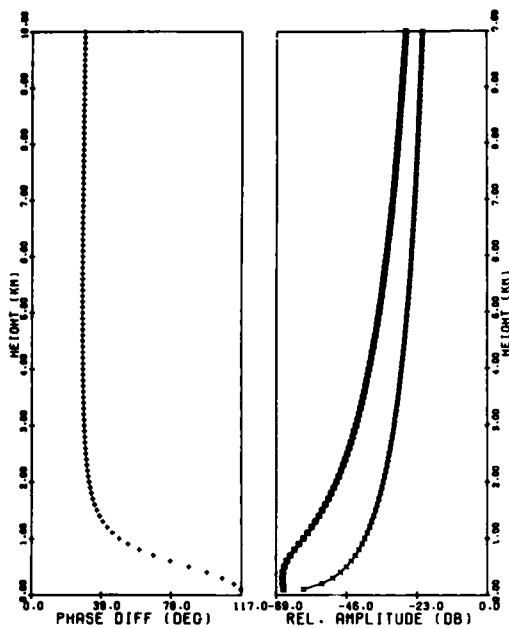


Figure 89. Radial Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

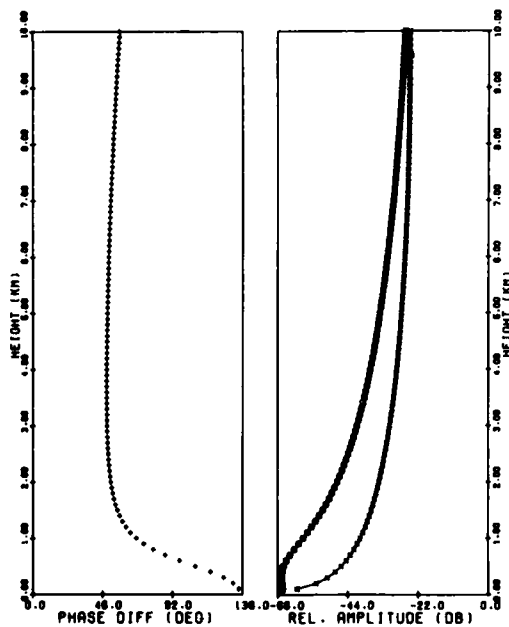


Figure 90. Radial Electric Field
(Fresh Water)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

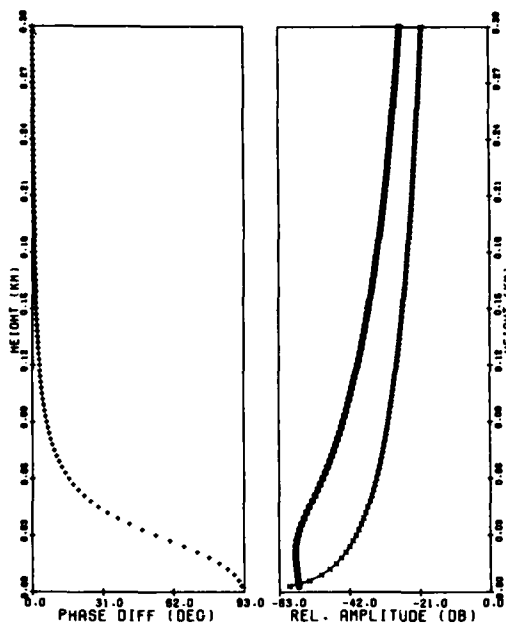


Figure 91. Radial Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

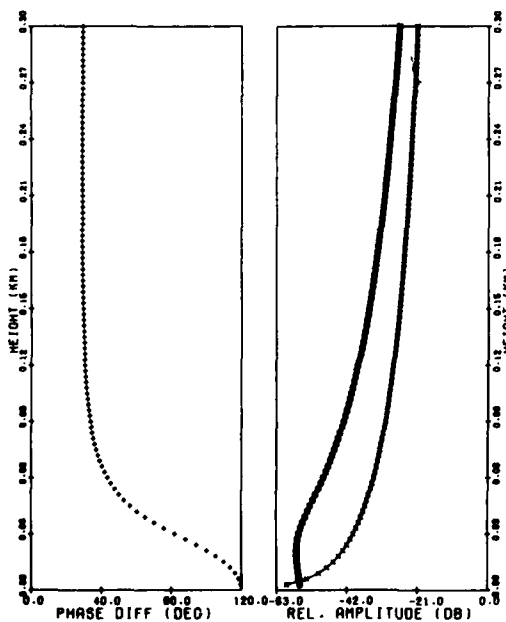


Figure 92. Radial Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

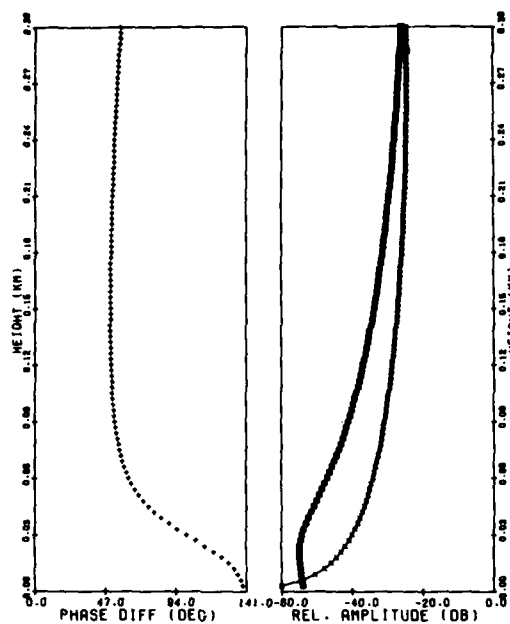


Figure 93. Radial Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

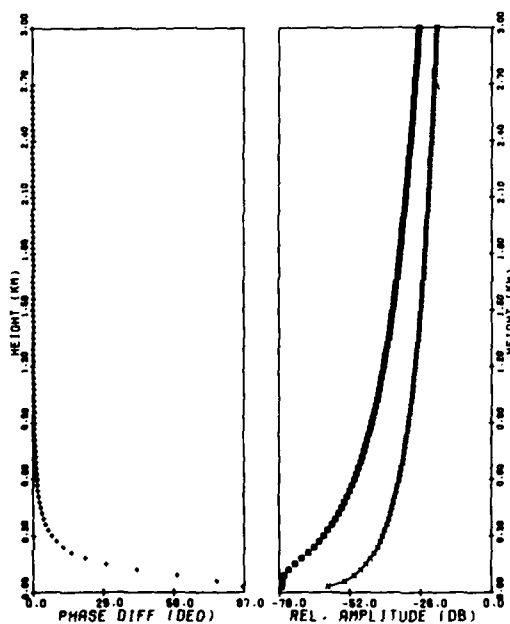


Figure 94. Radial Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

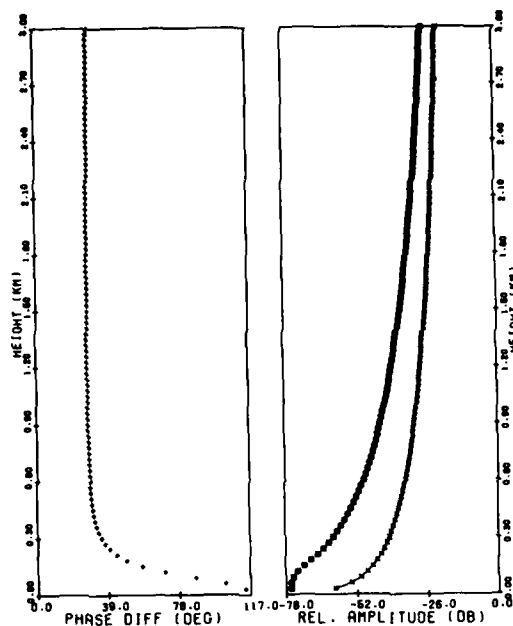


Figure 95. Radial Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

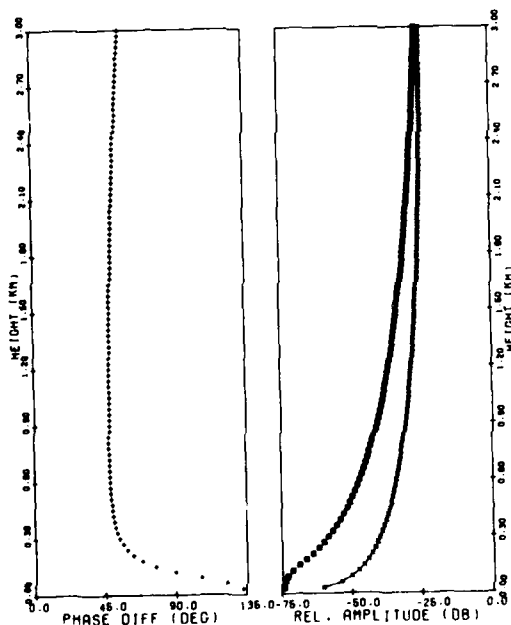


Figure 96. Radial Electric Field
(Fresh Water)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

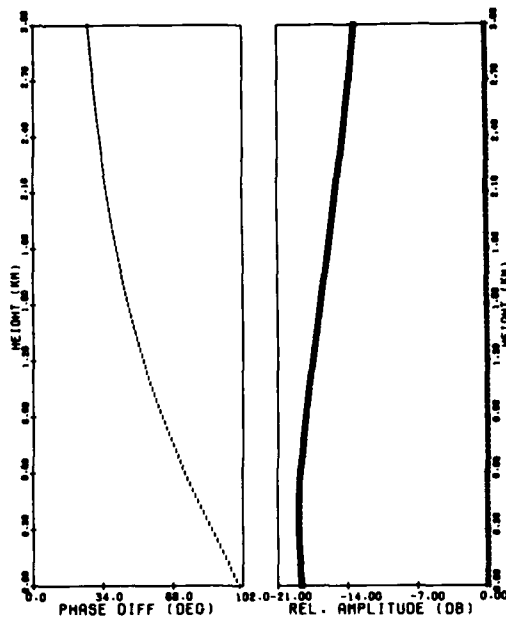


Figure 97. Vertical Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

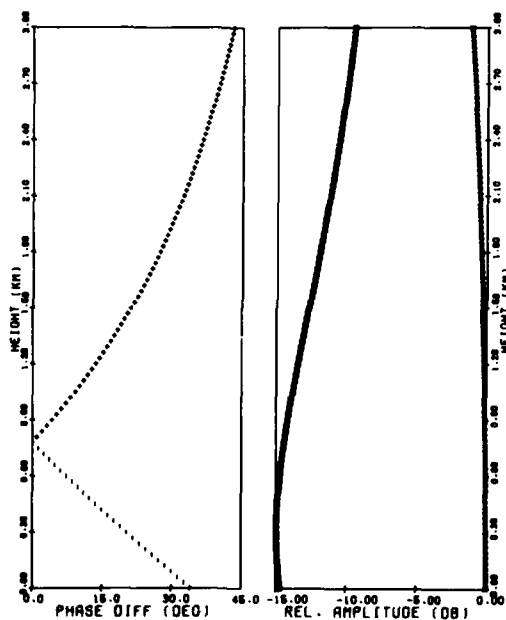


Figure 98. Vertical Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

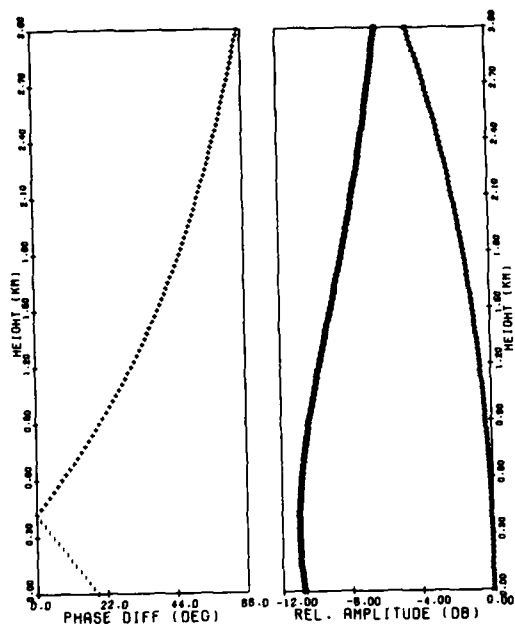


Figure 99. Vertical Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

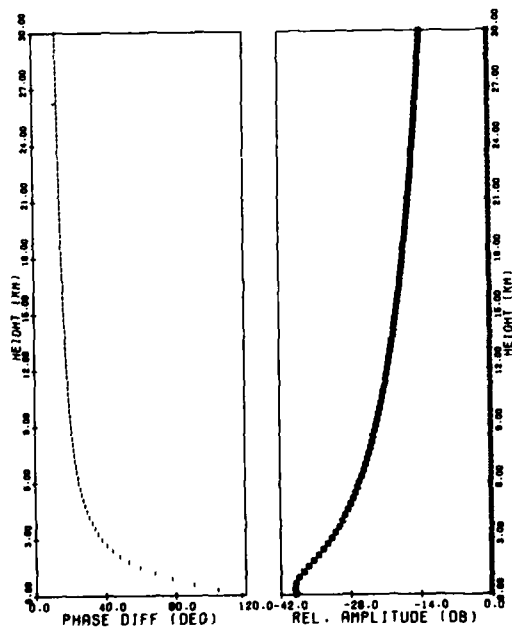


Figure 100. Vertical Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

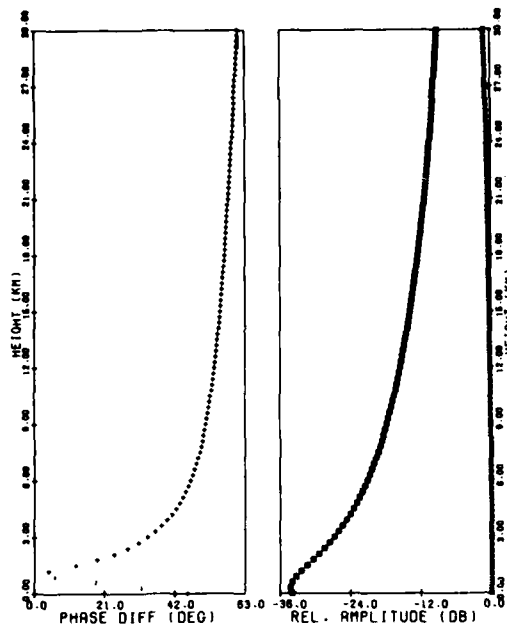


Figure 101. Vertical Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

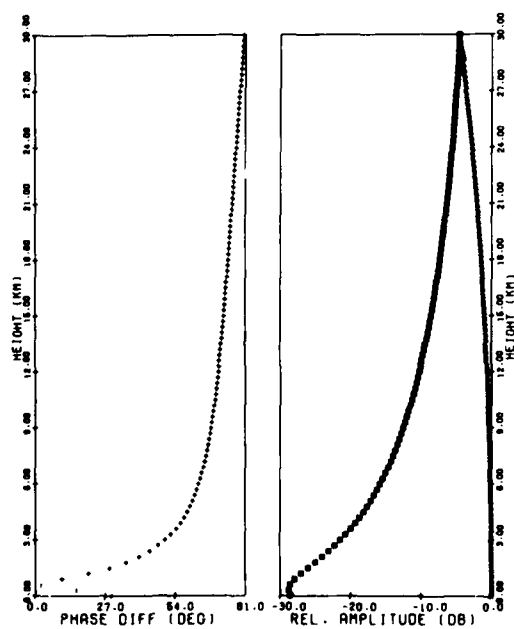


Figure 102. Vertical Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

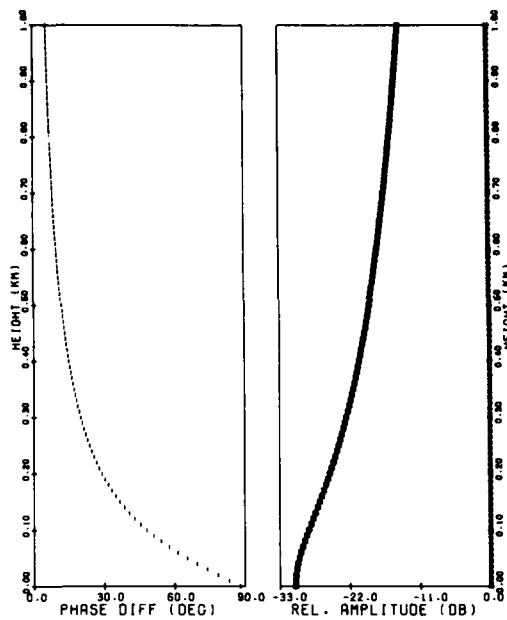


Figure 103. Vertical Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

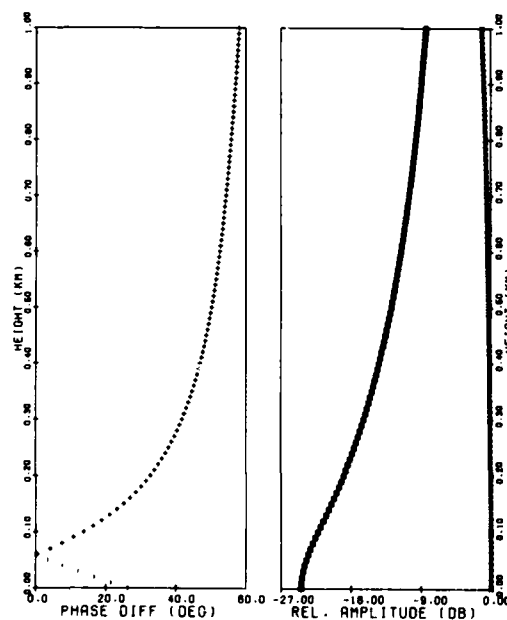


Figure 104. Vertical Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

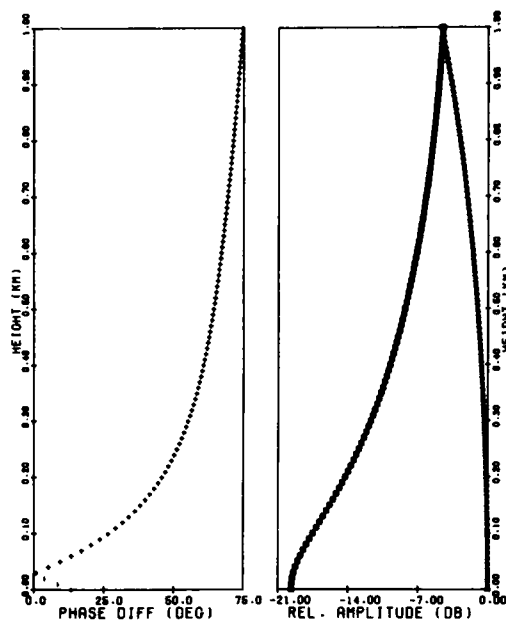


Figure 105. Vertical Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

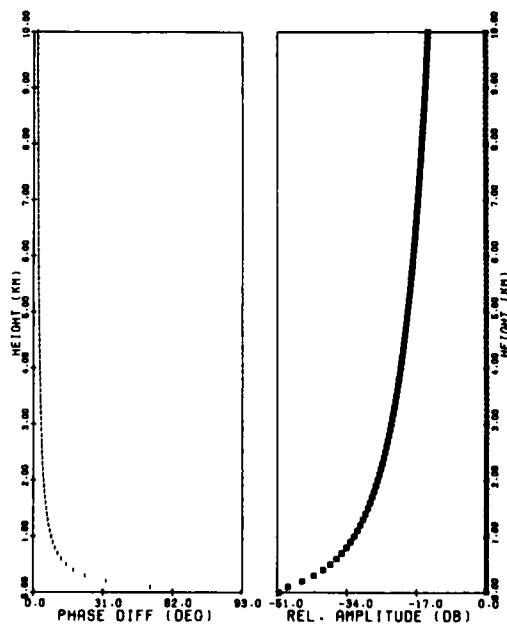


Figure 106. Vertical Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

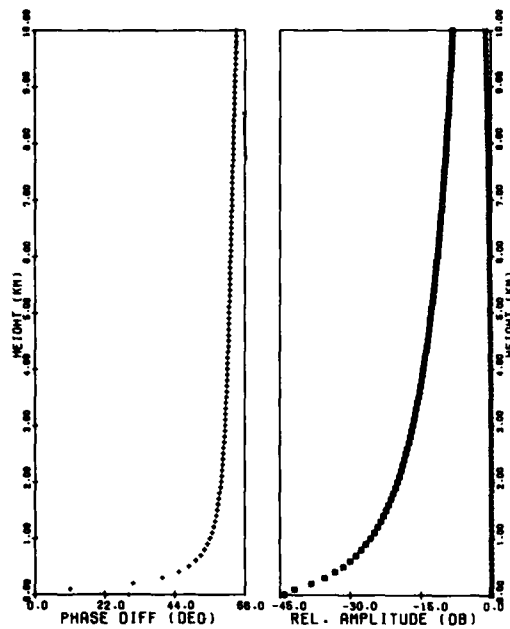


Figure 107. Vertical Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

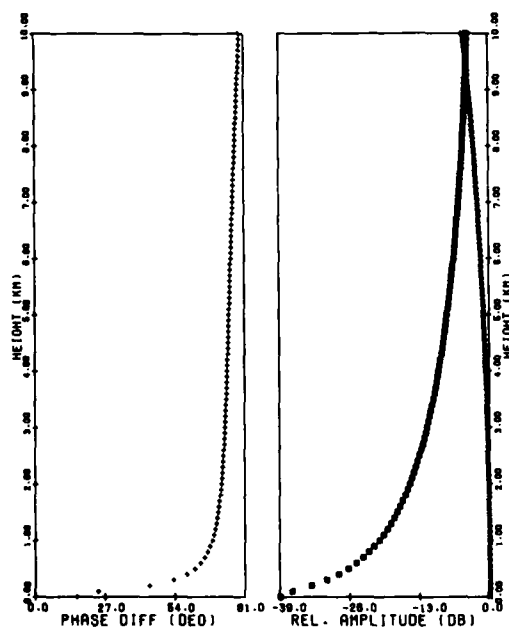


Figure 108. Vertical Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

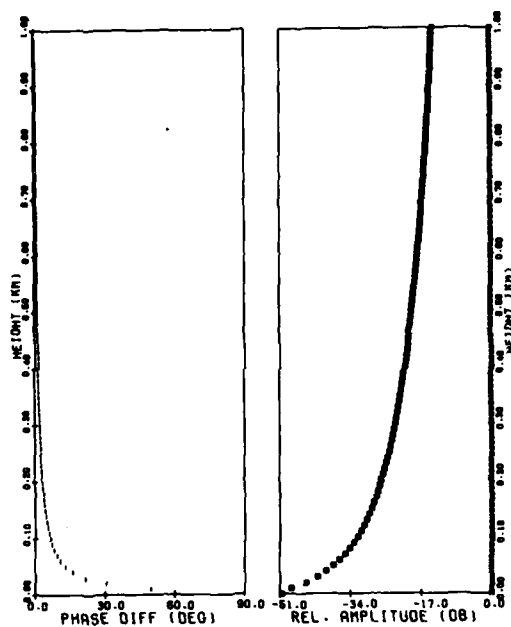


Figure 109. Vertical Electric Field
(ice)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

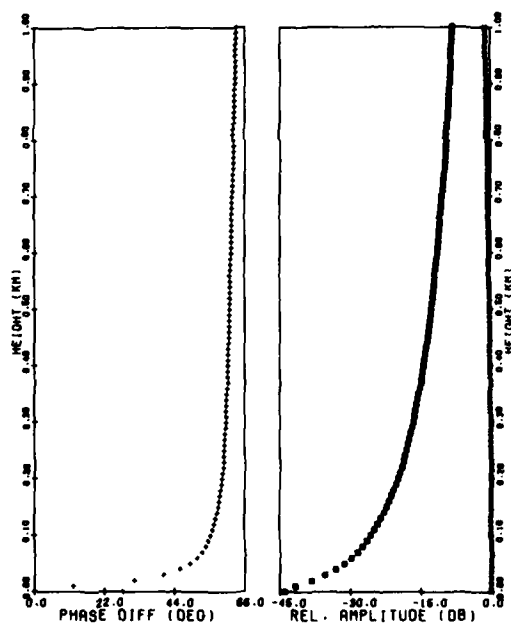


Figure 110. Vertical Electric Field
(ice)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

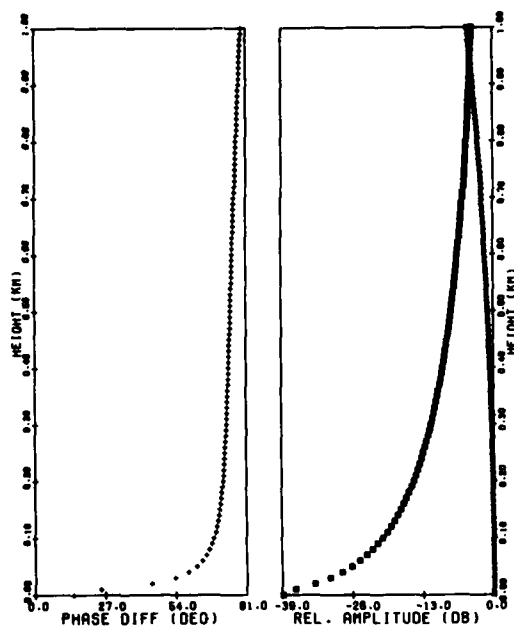


Figure 111. Vertical Electric Field (Ice)
 Freq. = 10.0 MHz, Dist. = 10 km,
 VED Height = 44.95 m

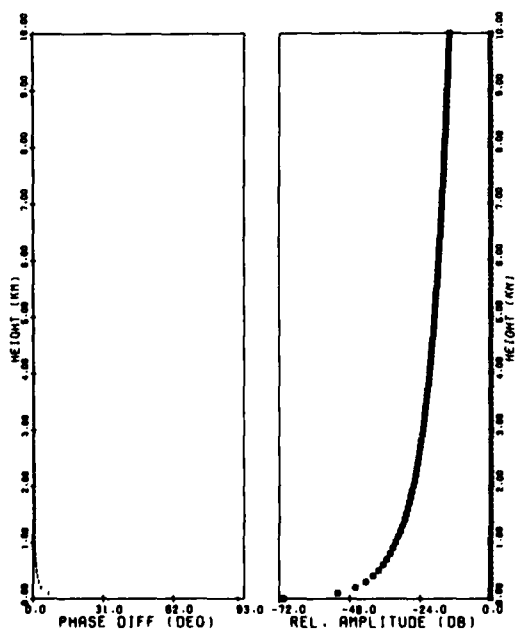


Figure 112. Vertical Electric Field (Ice)
 Freq. = 10.0 MHz, Dist. = 100 km,
 VED Height = 0.00 m

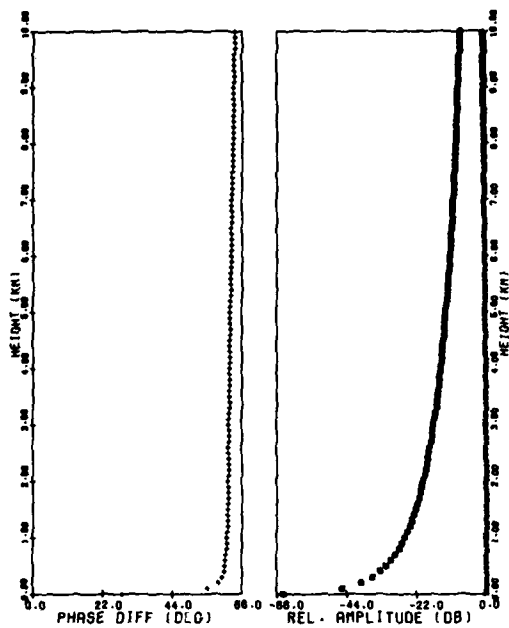


Figure 113. Vertical Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

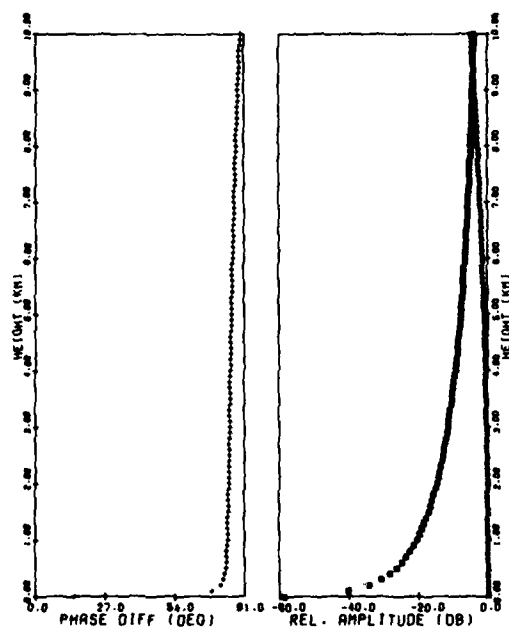


Figure 114. Vertical Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

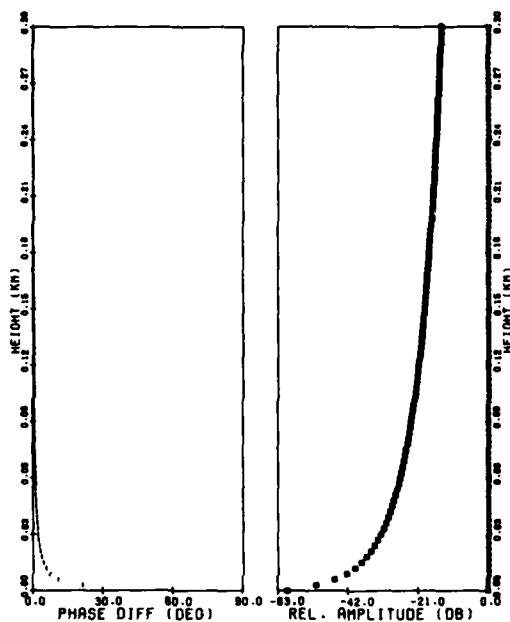


Figure 115. Vertical Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

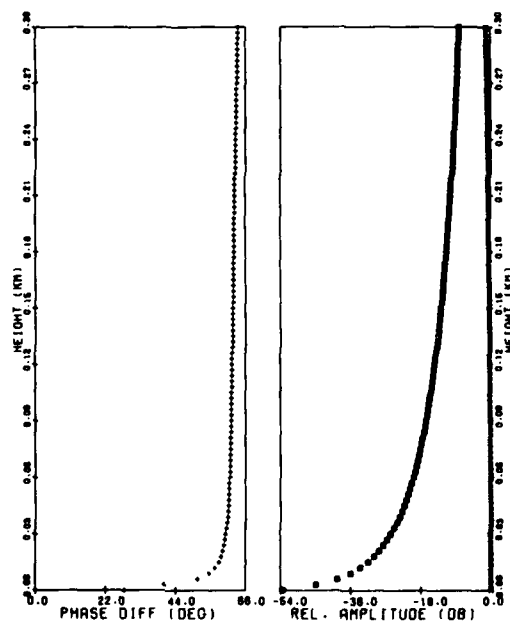


Figure 116. Vertical Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

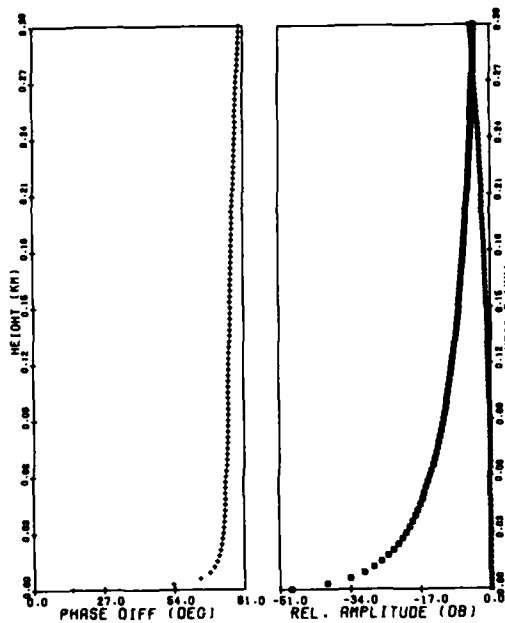


Figure 117. Vertical Electric Field (Ice)
 Freq. = 100.0 MHz, Dist. = 3 km,
 VED Height = 4.50 m

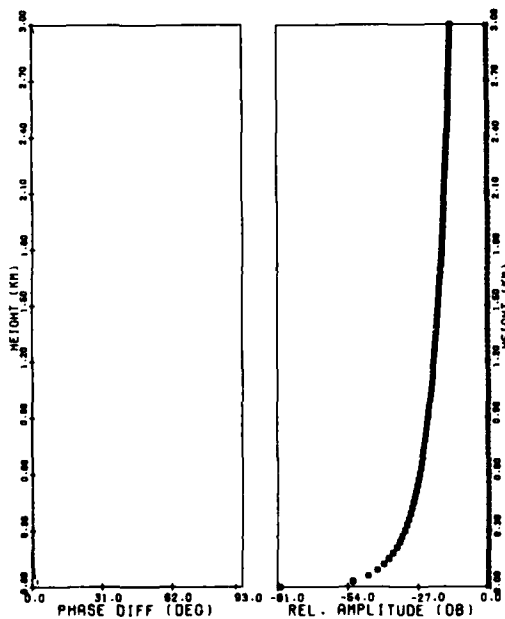


Figure 118. Vertical Electric Field (Ice)
 Freq. = 100.0 MHz, Dist. = 30 km,
 VED Height = 0.00 m

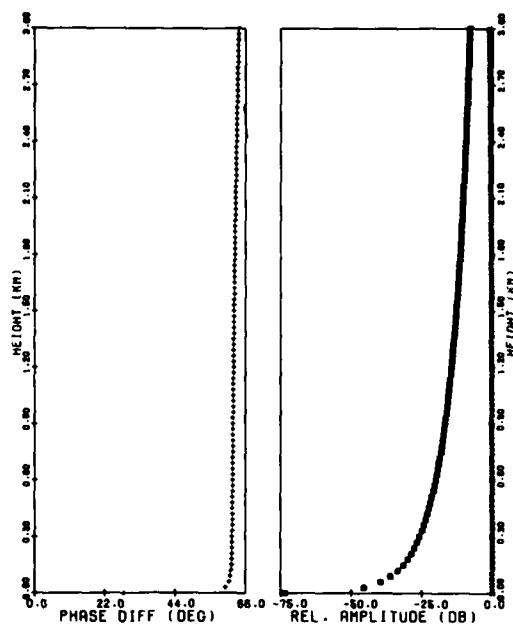


Figure 119. Vertical Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

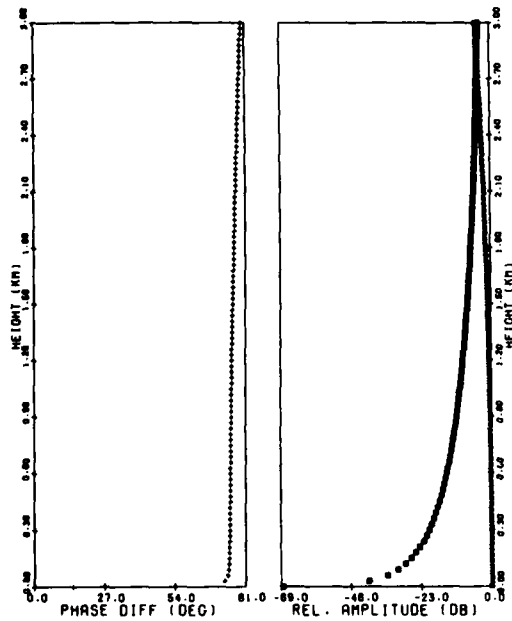


Figure 120. Vertical Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

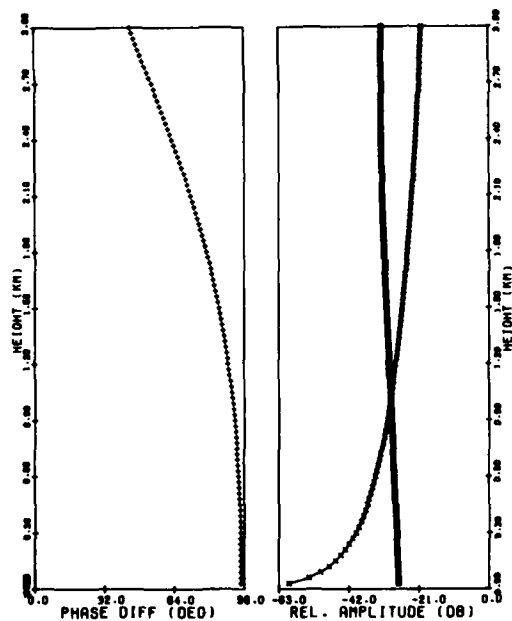


Figure 121. Radial Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

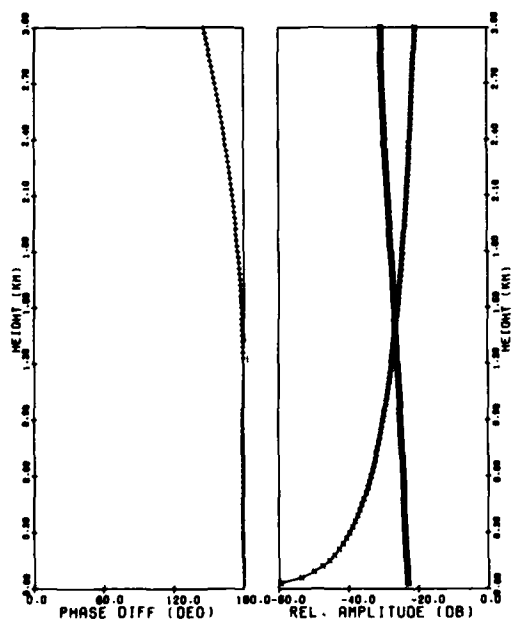


Figure 122. Radial Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

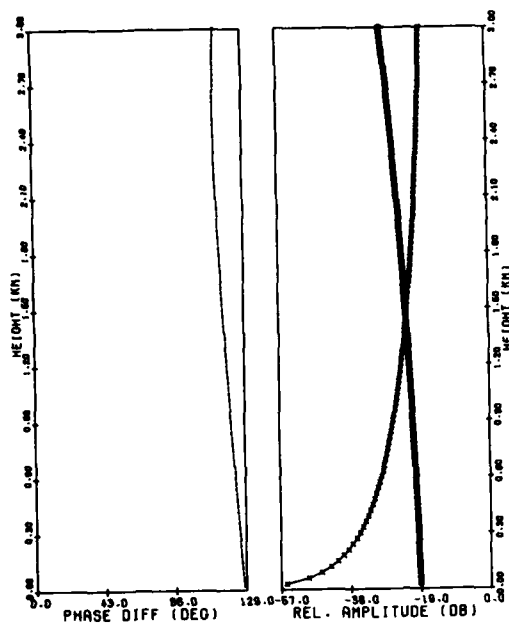


Figure 123. Radial Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

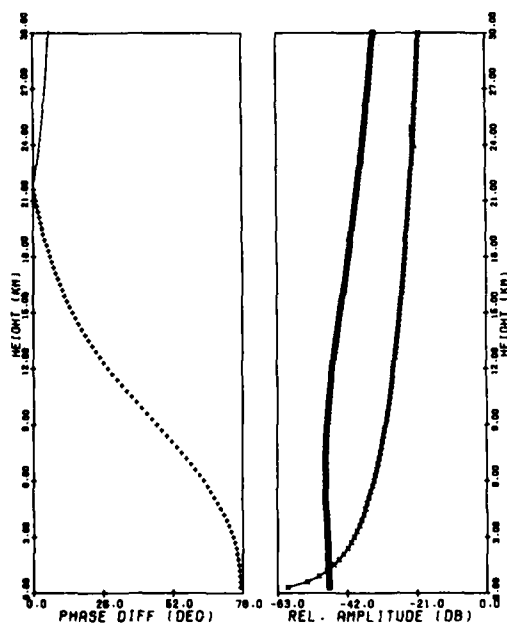


Figure 124. Radial Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

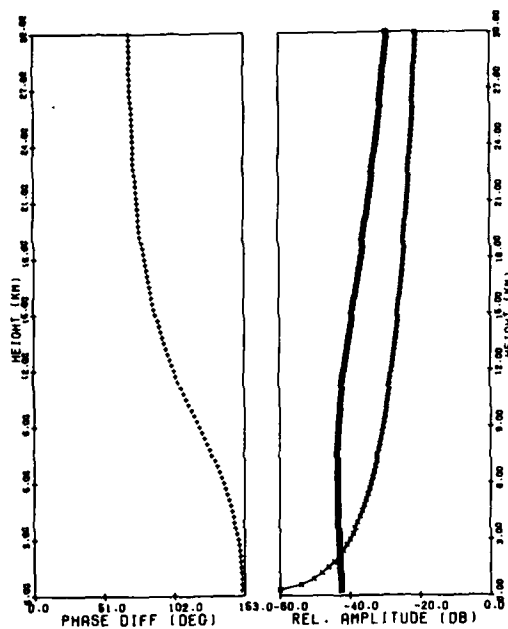


Figure 125. Radial Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

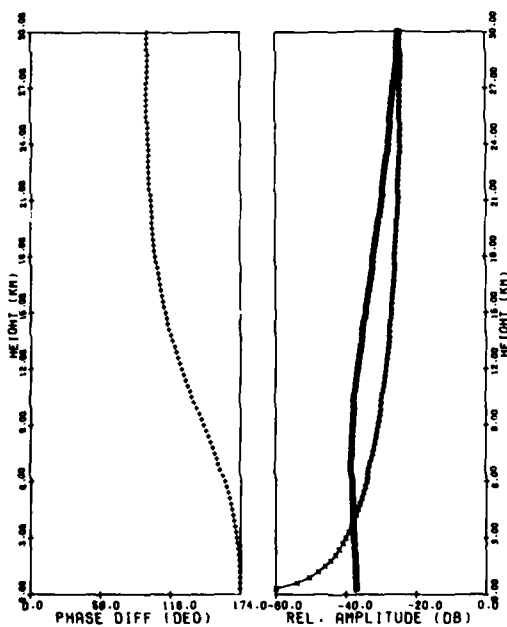


Figure 126. Radial Electric Field
(Ice)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

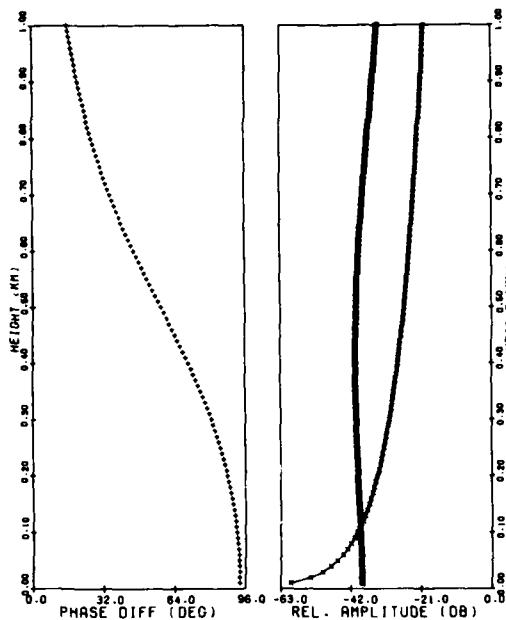


Figure 127. Radial Electric Field (Ice)
 Freq. = 1.0 MHz, Dist. = 10 km,
 VED Height = 0.00 m

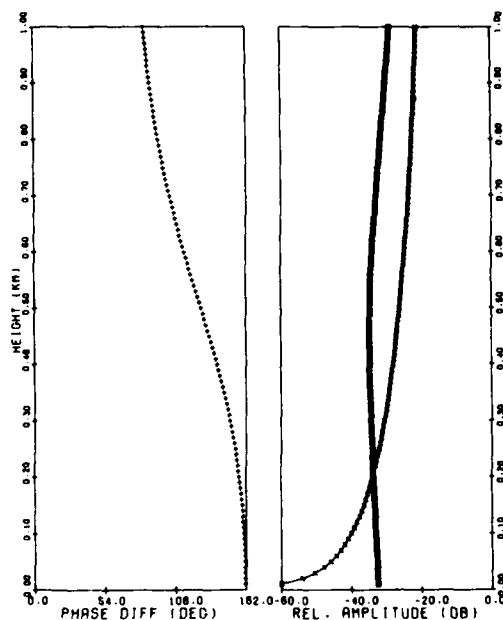


Figure 128. Radial Electric Field (Ice)
 Freq. = 1.0 MHz, Dist. = 10 km,
 VED Height = 224.76 m

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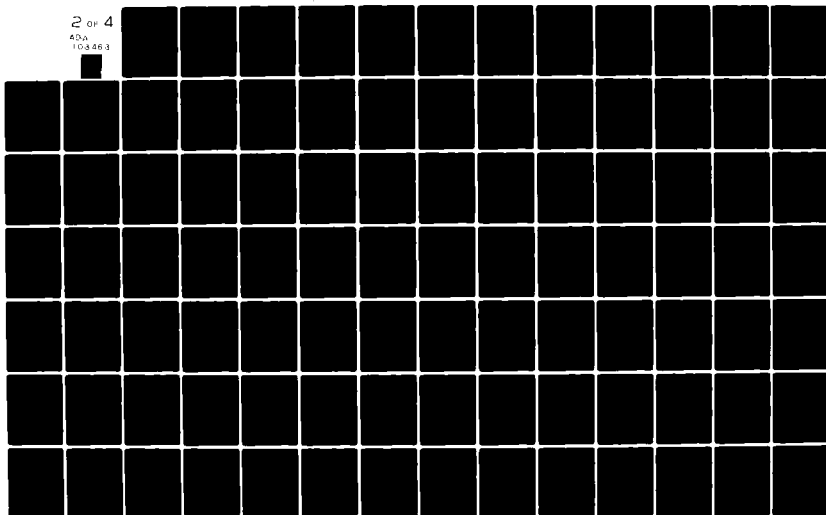
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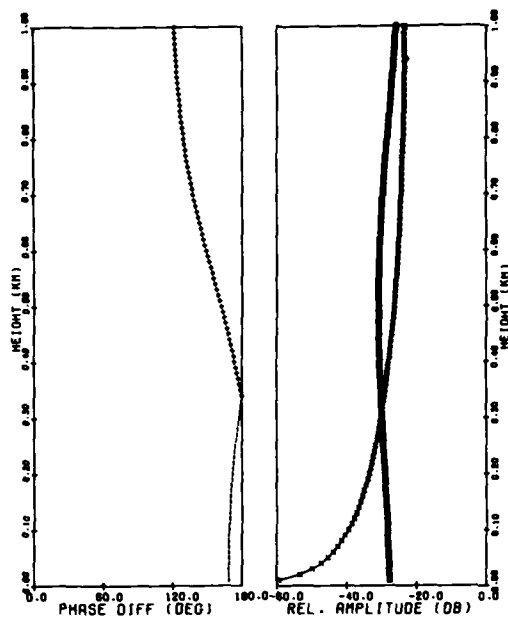


Figure 129. Radial Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

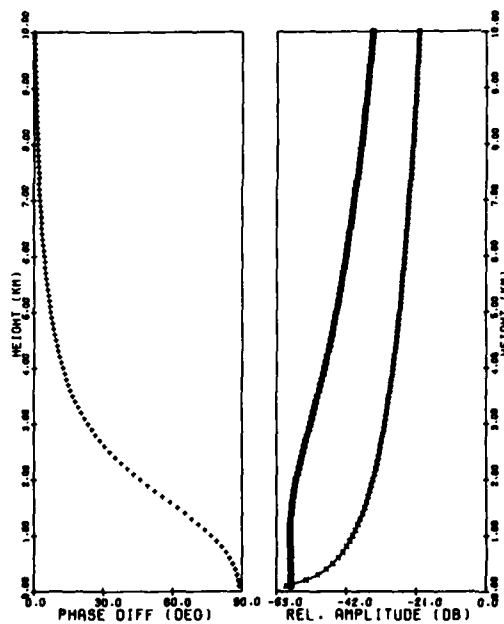


Figure 130. Radial Electric Field
(Ice)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

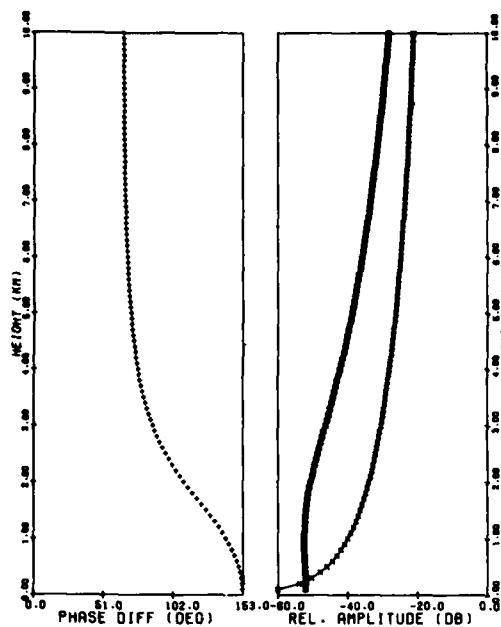


Figure 131. Radial Electric Field (Ice)
 Freq. = 1.0 MHz, Dist. = 100 km,
 VED Height = 224.76 m

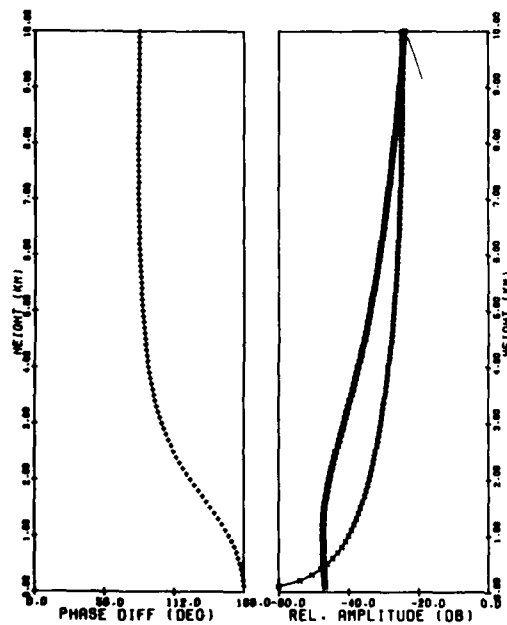


Figure 132. Radial Electric Field (Ice)
 Freq. = 1.0 MHz, Dist. = 100 km,
 VED Height = 449.52 m

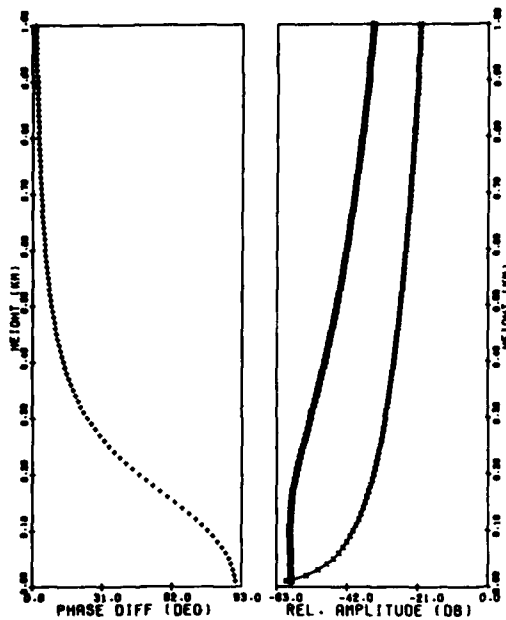


Figure 133. Radial Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

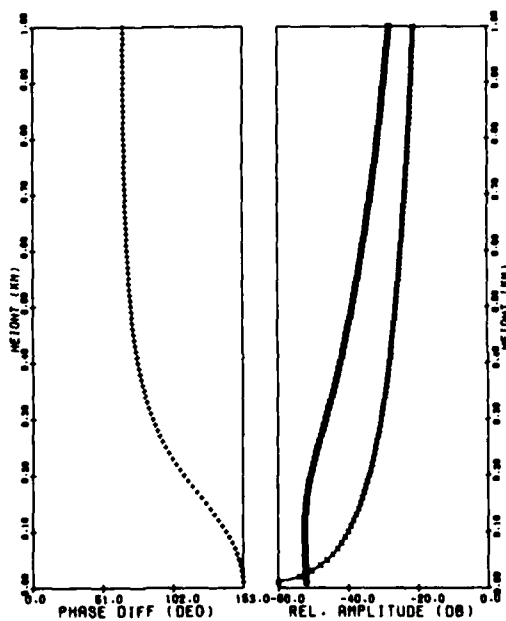


Figure 134. Radial Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

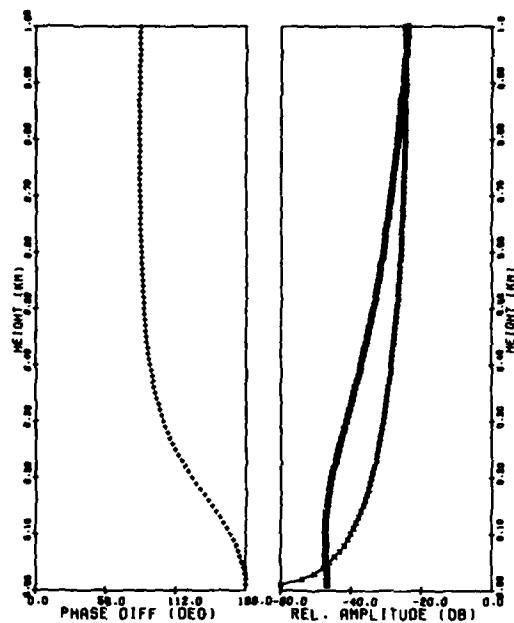


Figure 135. Radial Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

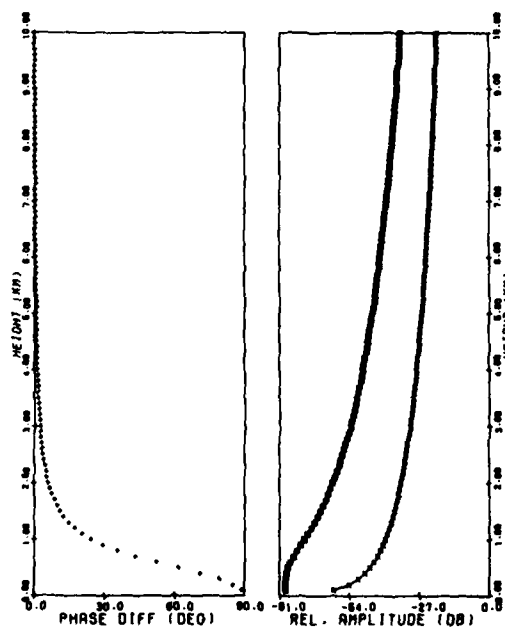


Figure 136. Radial Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

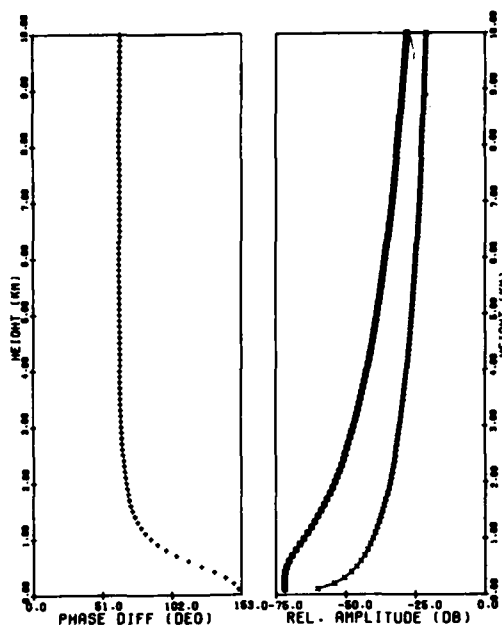


Figure 137. Radial Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

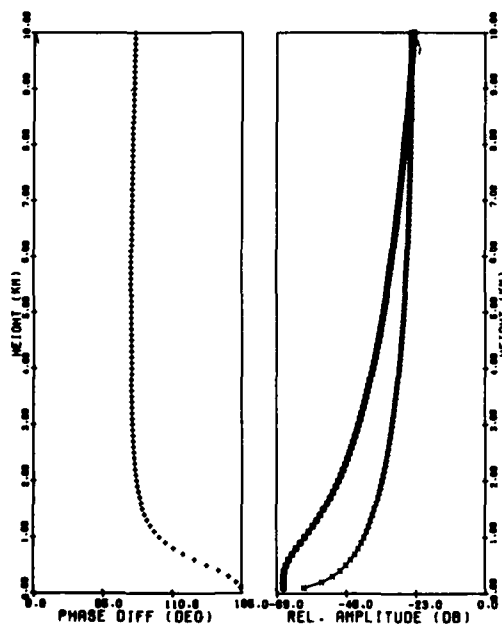


Figure 138. Radial Electric Field
(Ice)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

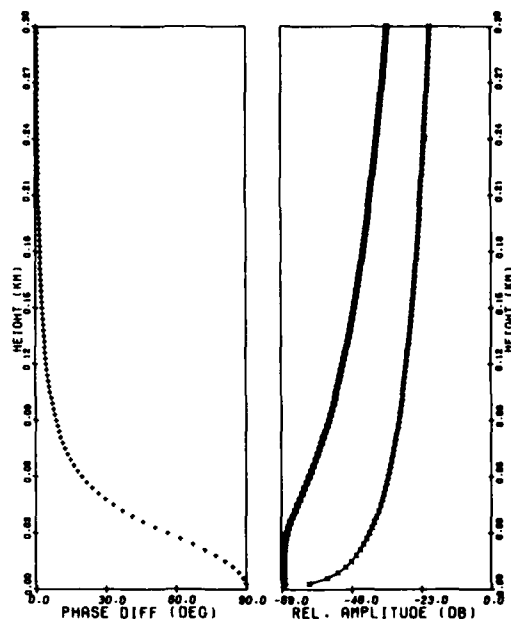


Figure 139. Radial Electric Field (Ice)
 Freq. = 100.0 MHz, Dist. = 3 km,
 VED Height = 0.00 m

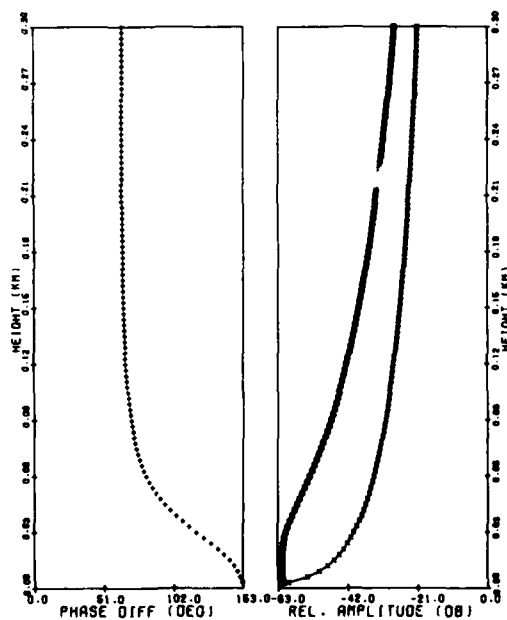


Figure 140. Radial Electric Field (Ice)
 Freq. = 100.0 MHz, Dist. = 3 km,
 VED Height = 2.25 m

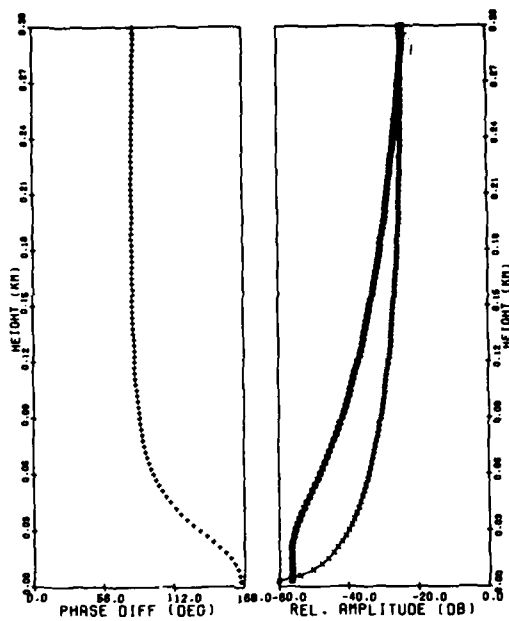


Figure 141. Radial Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

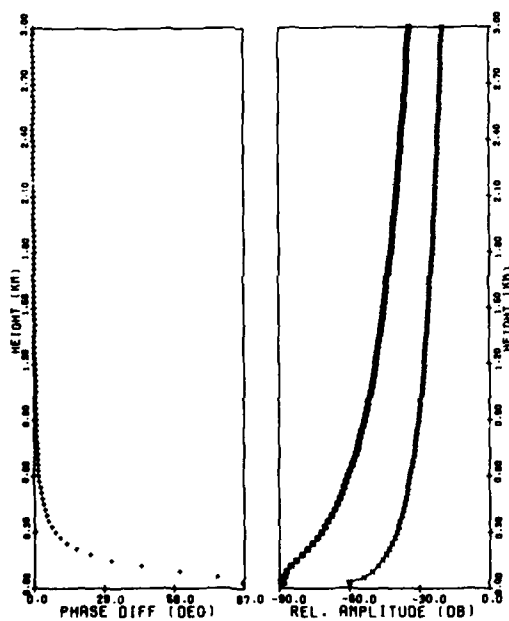


Figure 142. Radial Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

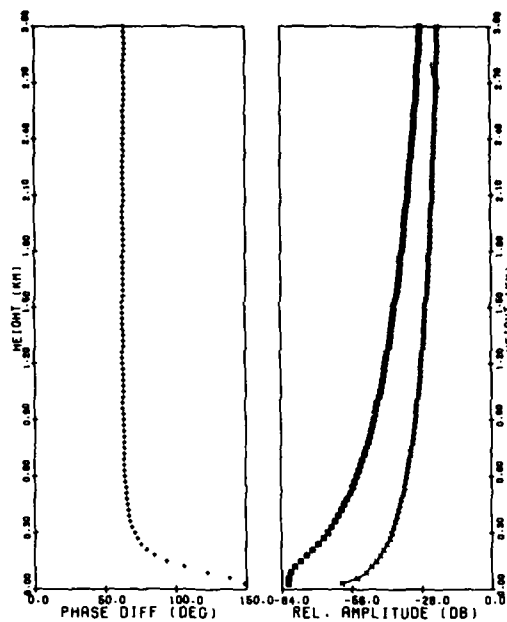


Figure 143. Radial Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

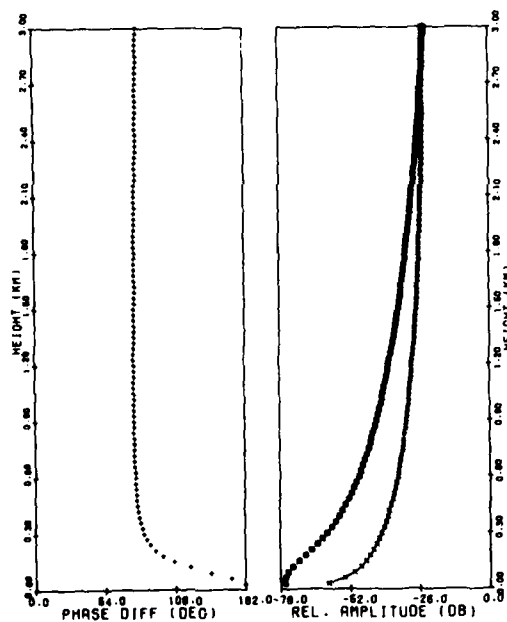


Figure 144. Radial Electric Field
(Ice)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

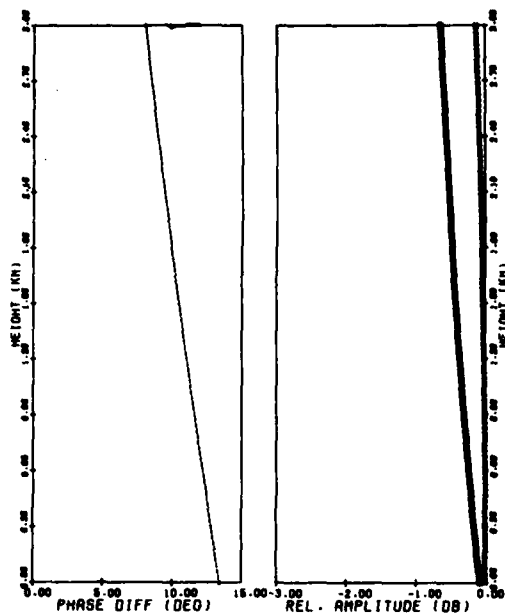


Figure 145. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

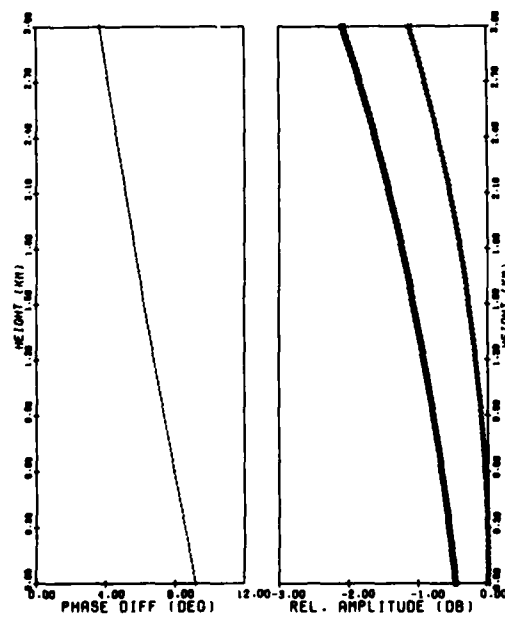


Figure 146. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

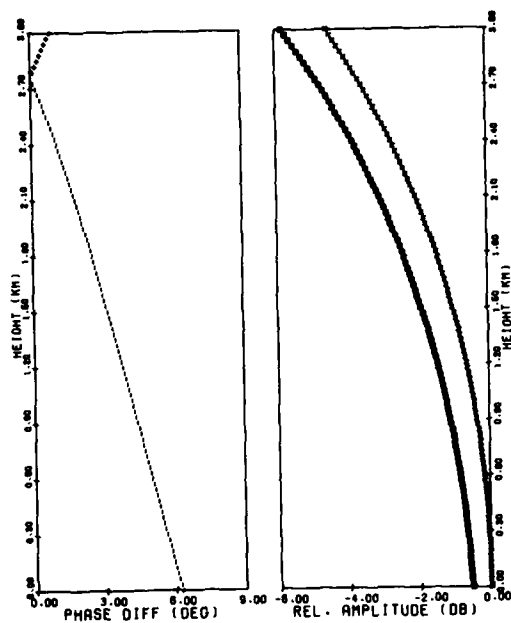


Figure 147. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

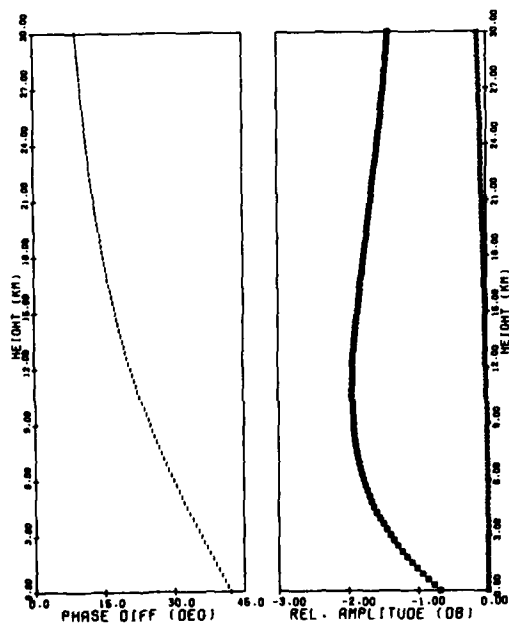


Figure 148. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

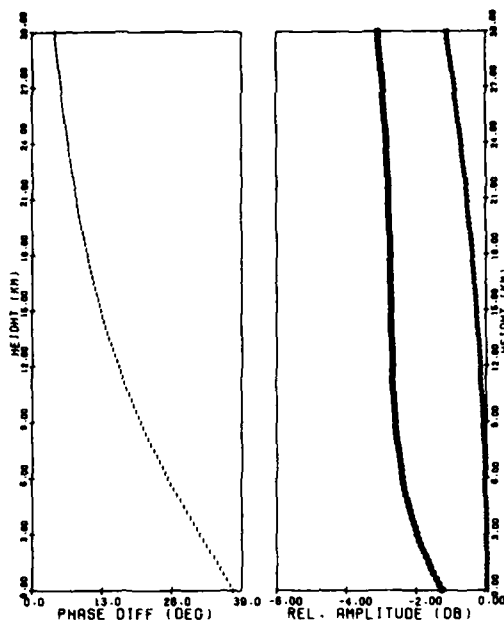


Figure 149. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

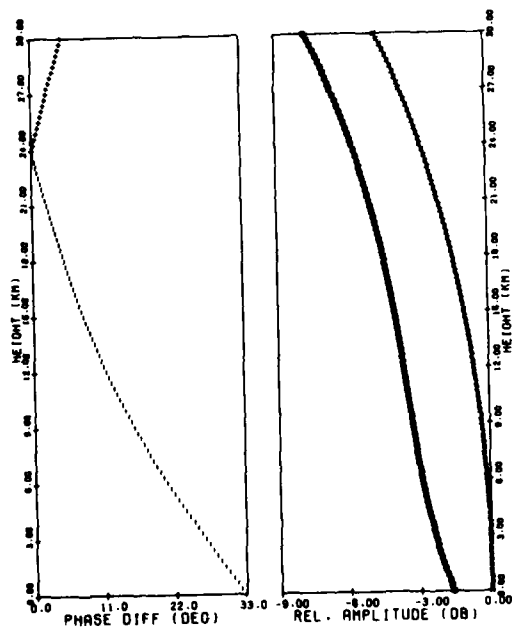


Figure 150. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

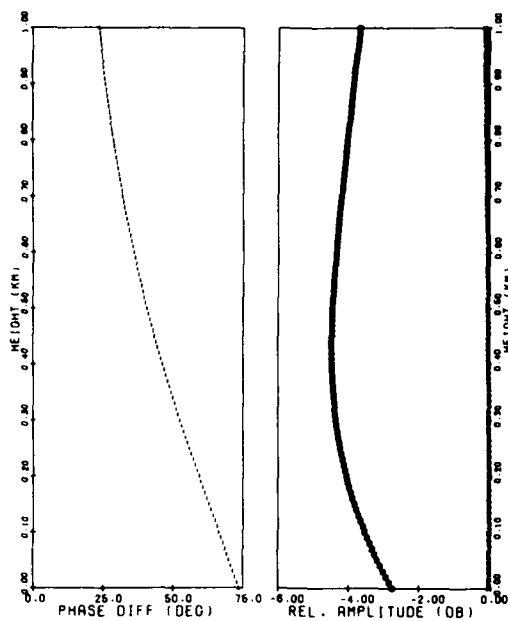


Figure 151. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

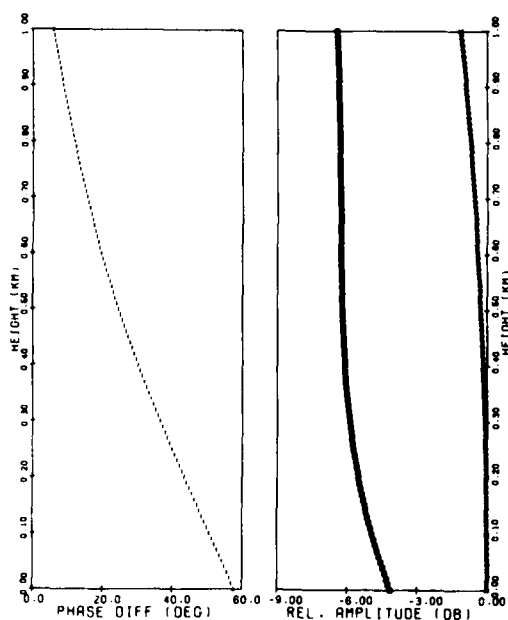


Figure 152. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

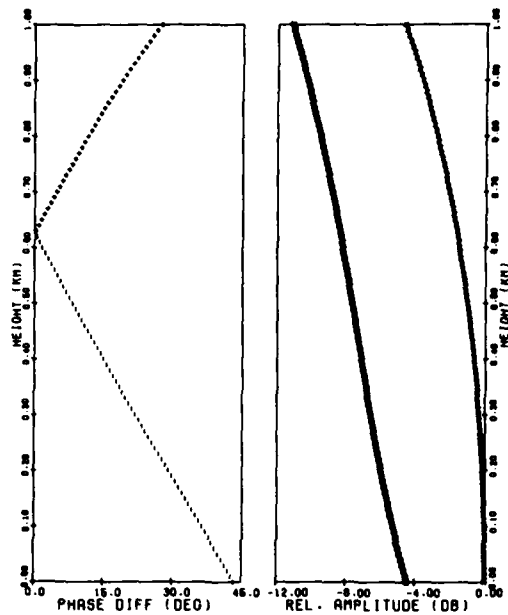


Figure 153. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

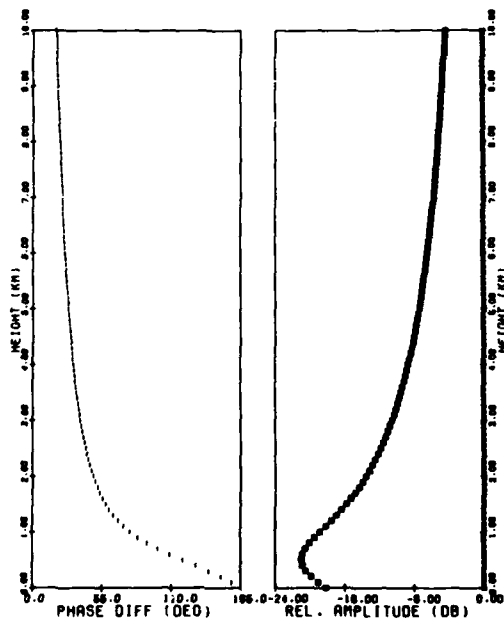


Figure 154. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

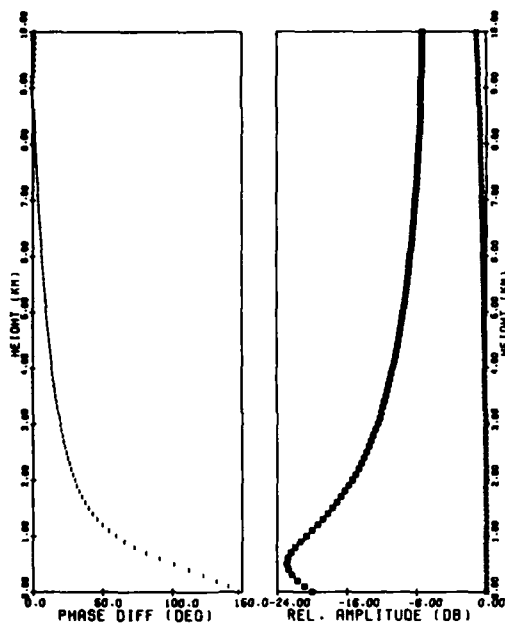


Figure 155. Vertical Electric Field
(Well- Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

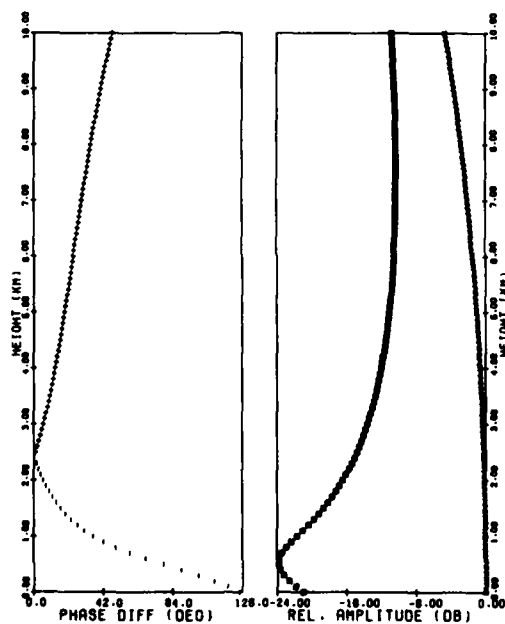


Figure 156. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

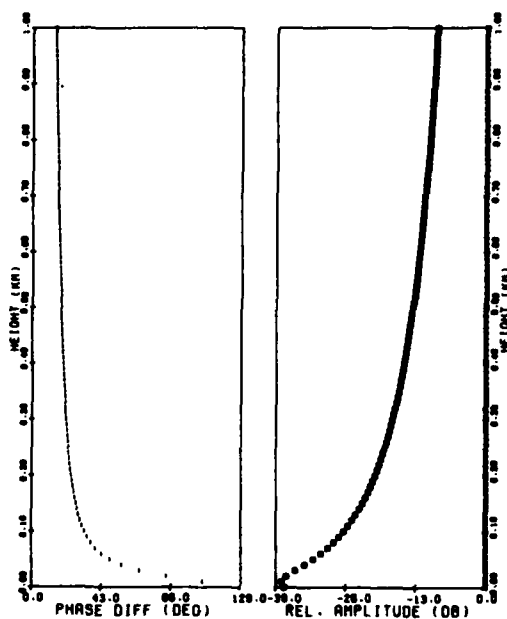


Figure 157. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10km,
VED Height = 0.00 m

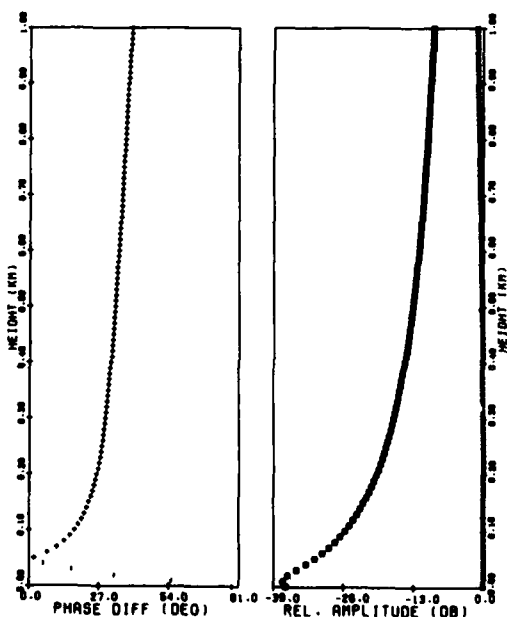


Figure 158. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

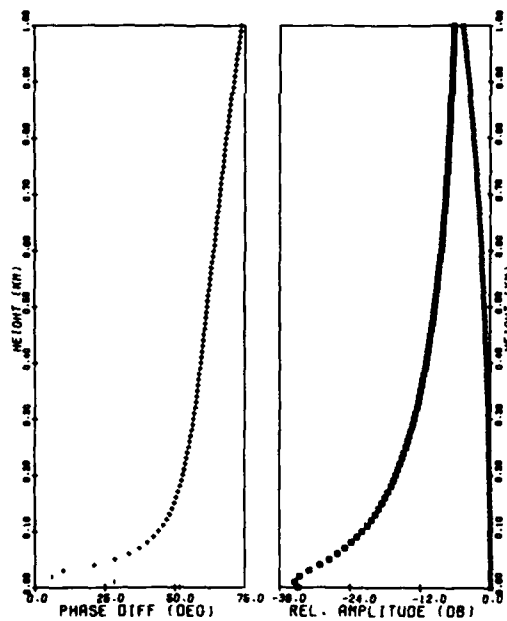


Figure 159. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

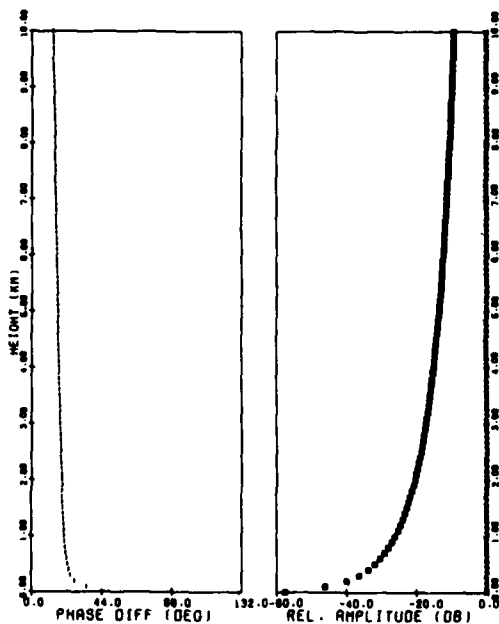


Figure 160. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

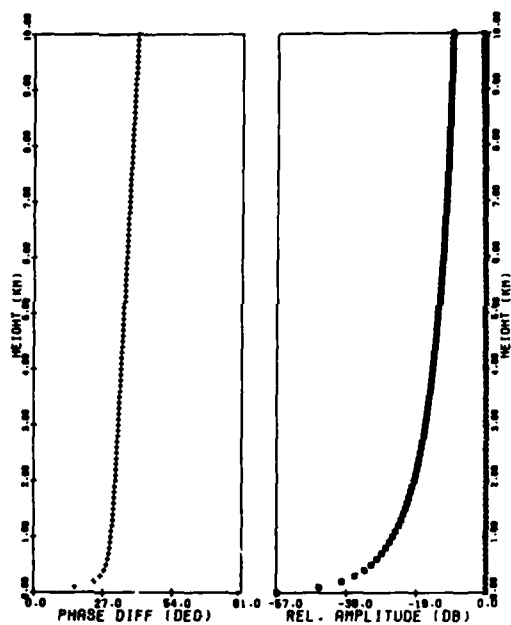


Figure 161. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

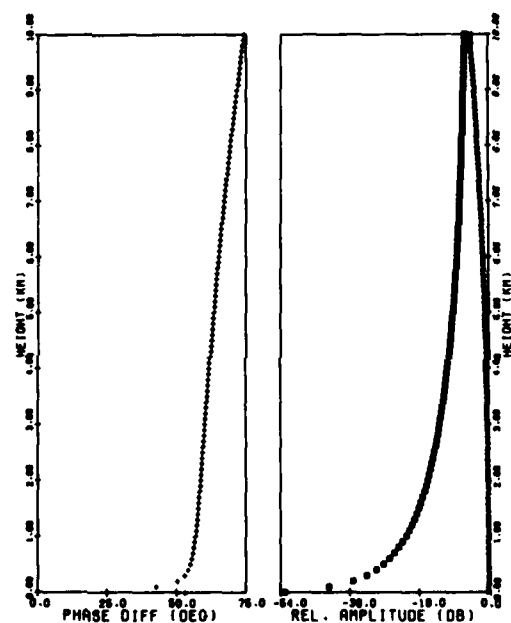


Figure 162. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

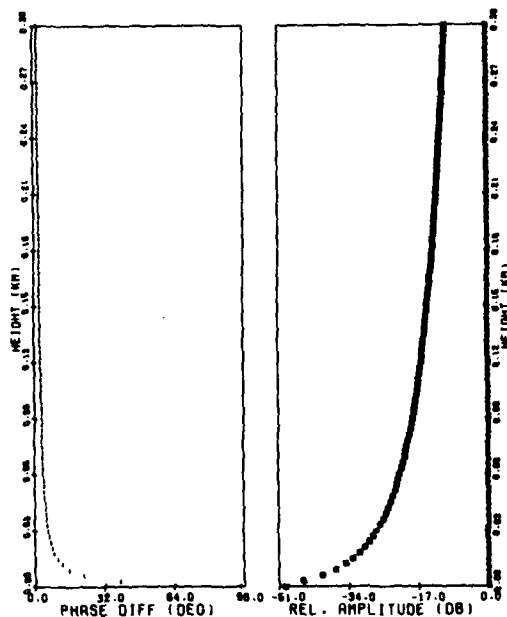


Figure 163. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

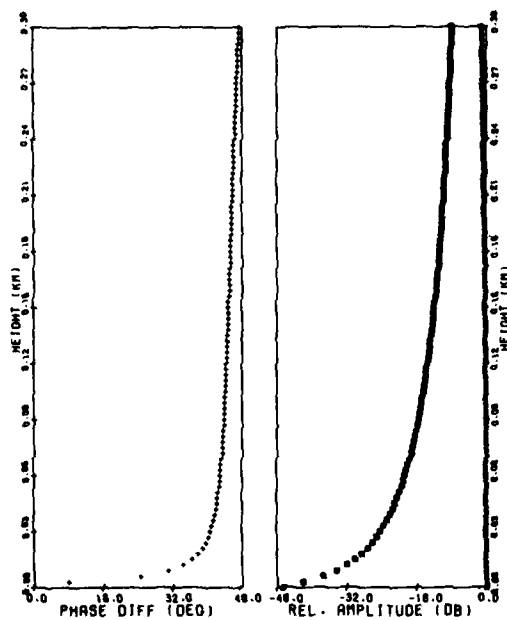


Figure 164. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

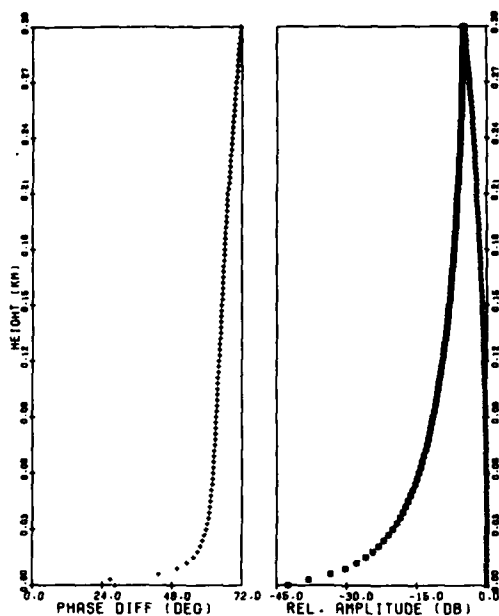


Figure 165. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

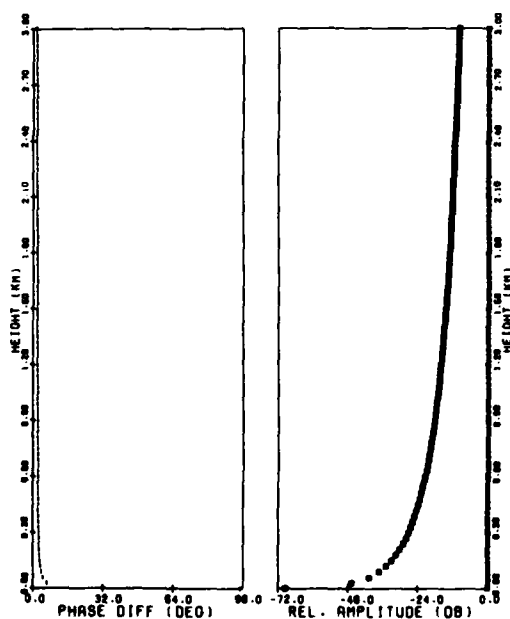


Figure 166. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

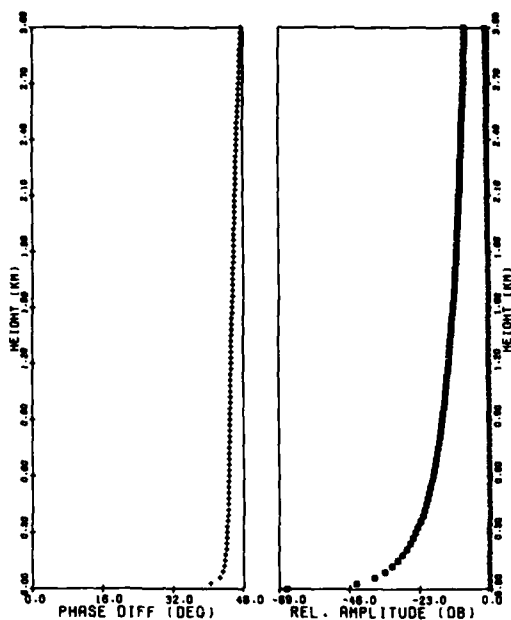


Figure 167. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

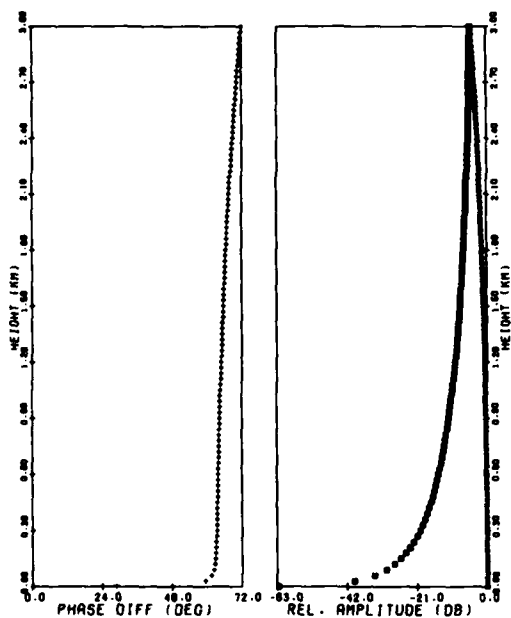


Figure 168. Vertical Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

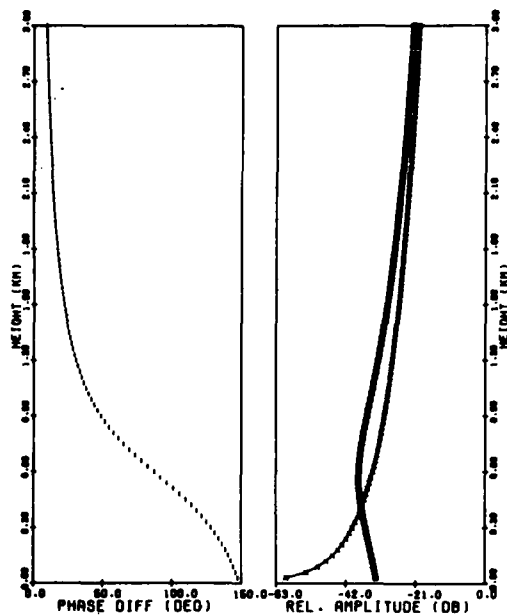


Figure 169. Radial Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

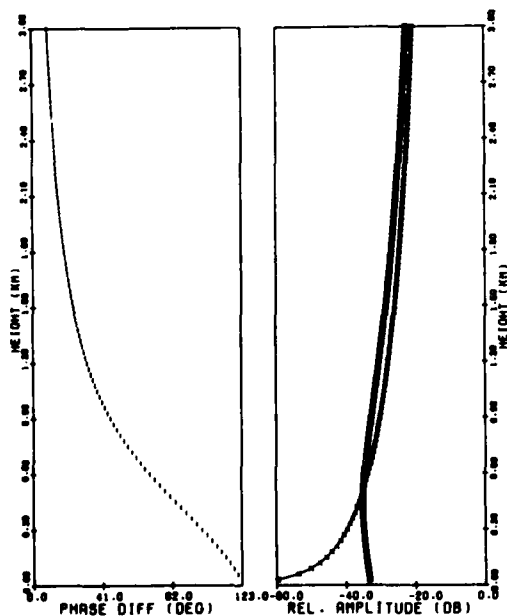


Figure 170. Radial Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

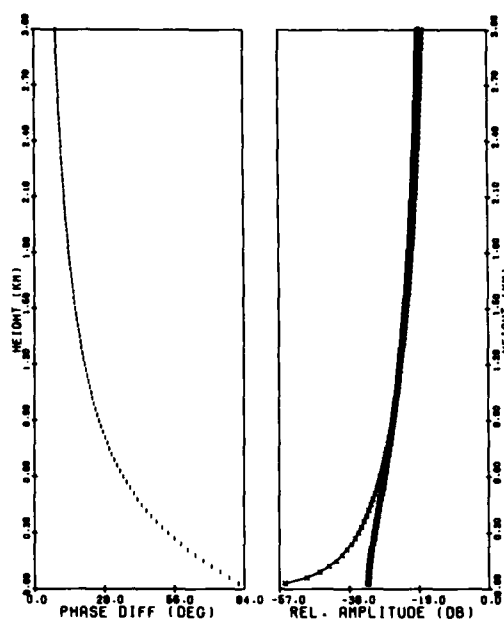


Figure 171. Radial Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

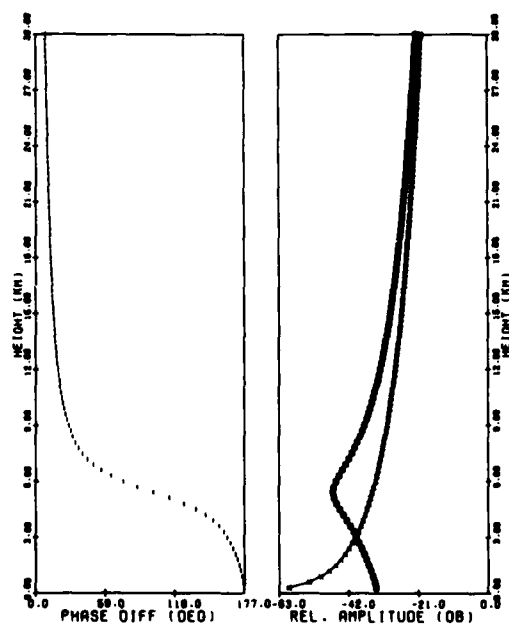


Figure 172. Radial Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

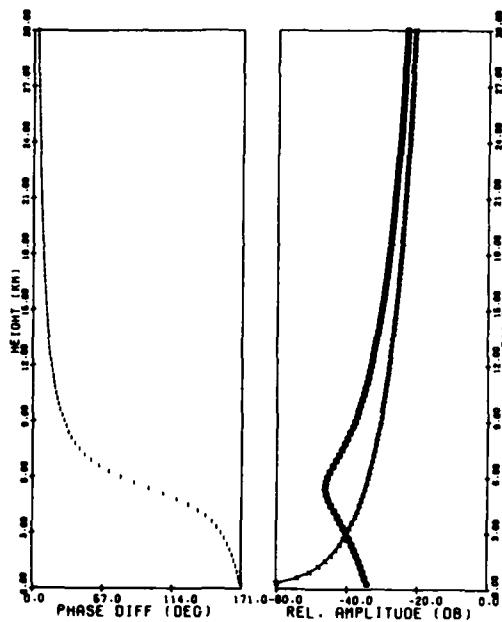


Figure 173. Radial Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

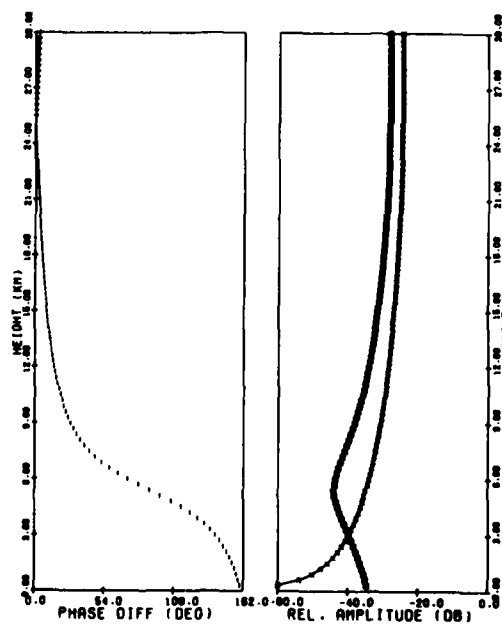


Figure 174. Radial Electric Field
(Well-Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

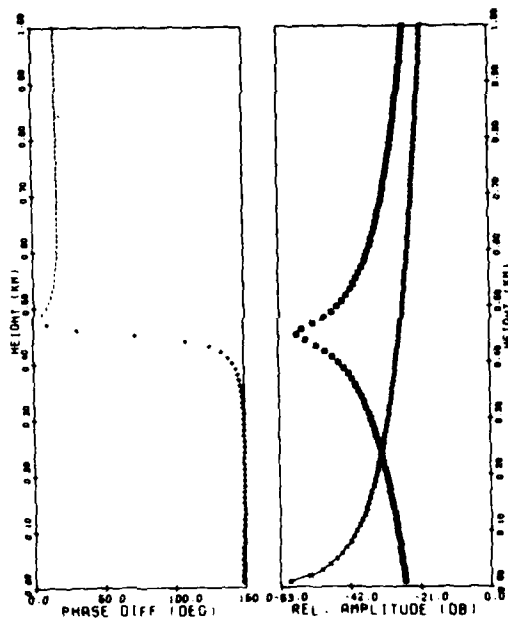


Figure 175. Radial Electric Field
(Well- Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

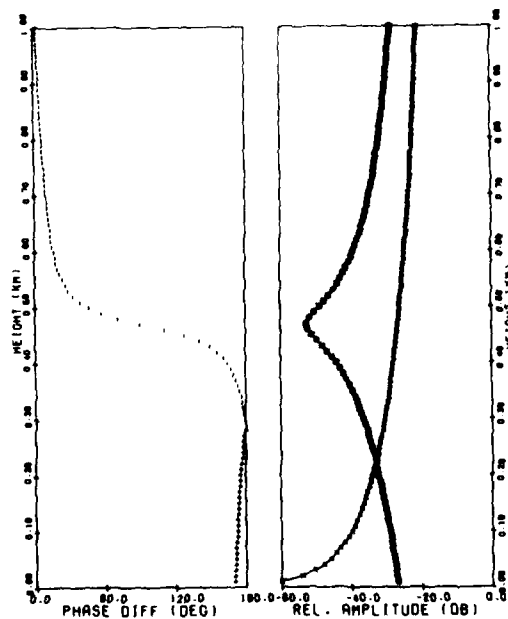


Figure 176. Radial Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

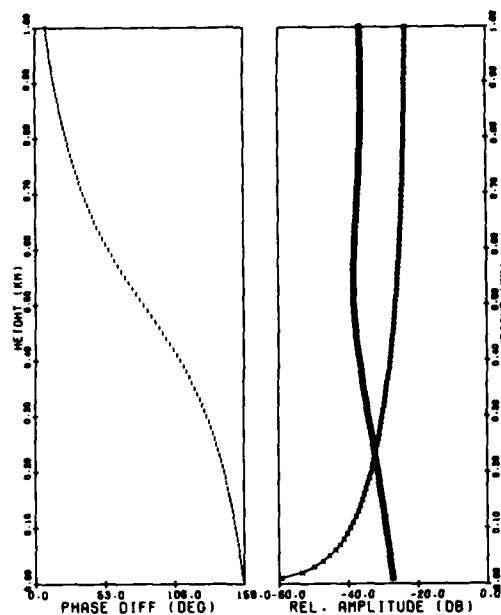


Figure 177. Radial Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

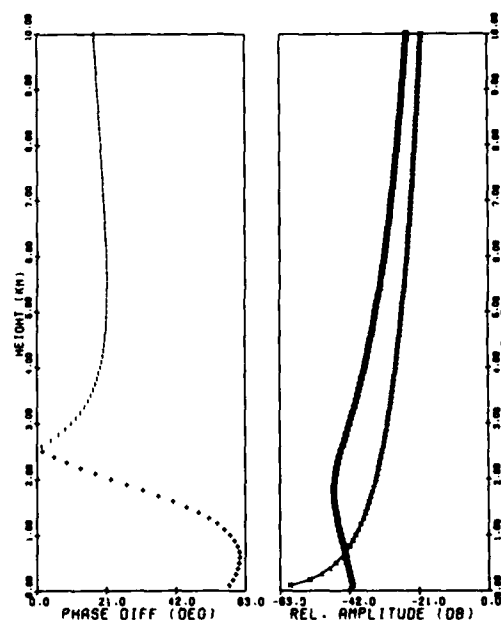


Figure 178. Radial Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

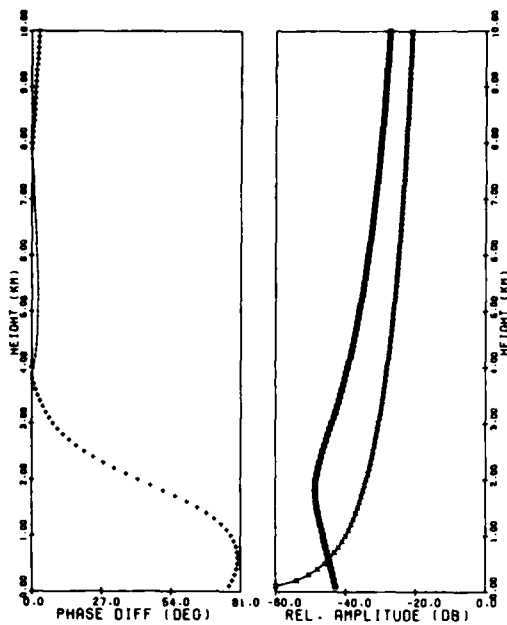


Figure 179. Radial Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

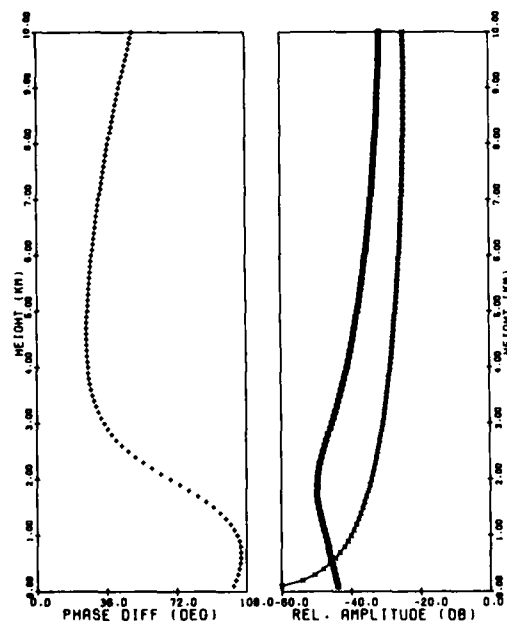


Figure 180. Radial Electric Field
(Well-Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

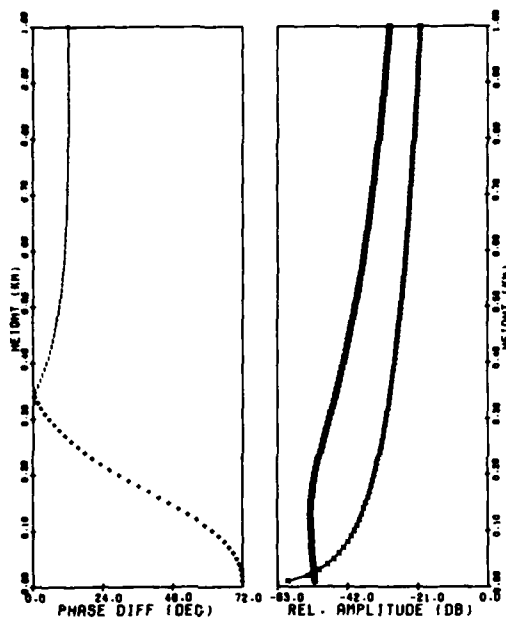


Figure 181. Radial Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

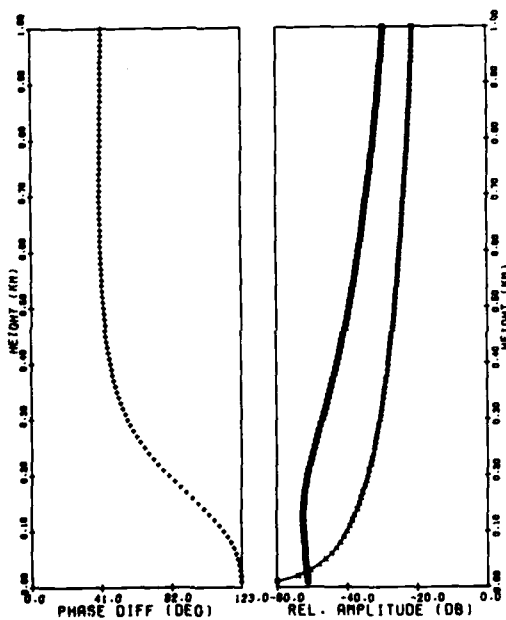


Figure 182. Radial Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

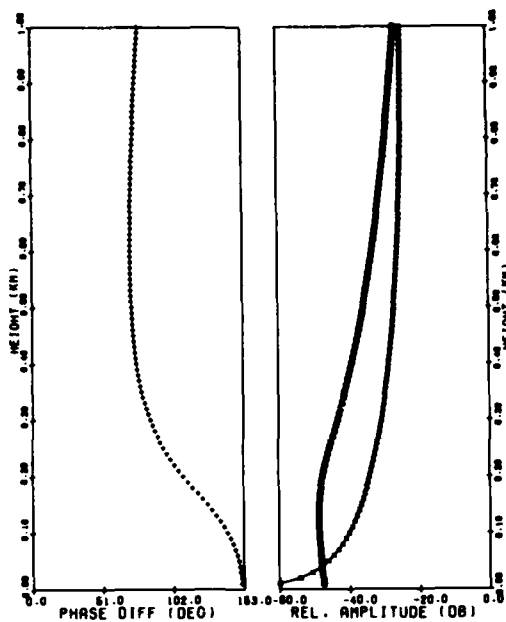


Figure 183. Radial Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

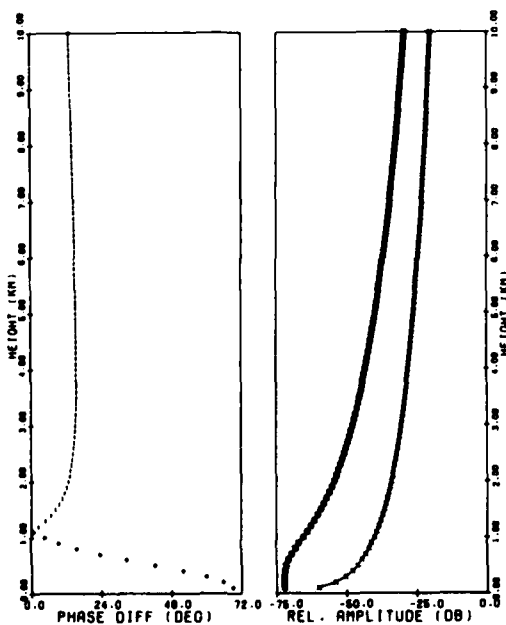


Figure 184. Radial Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

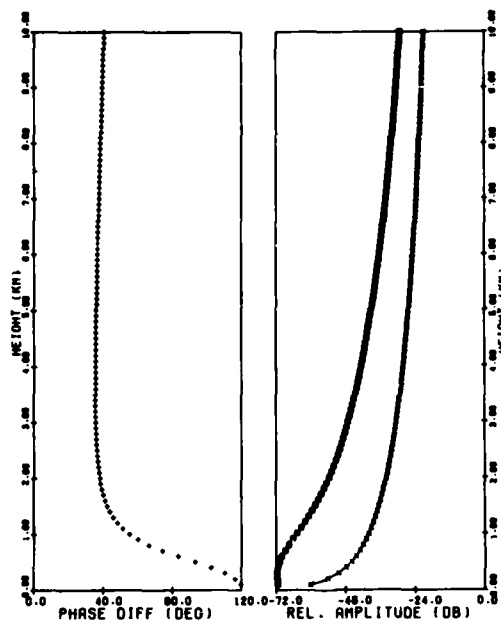


Figure 185. Radial Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

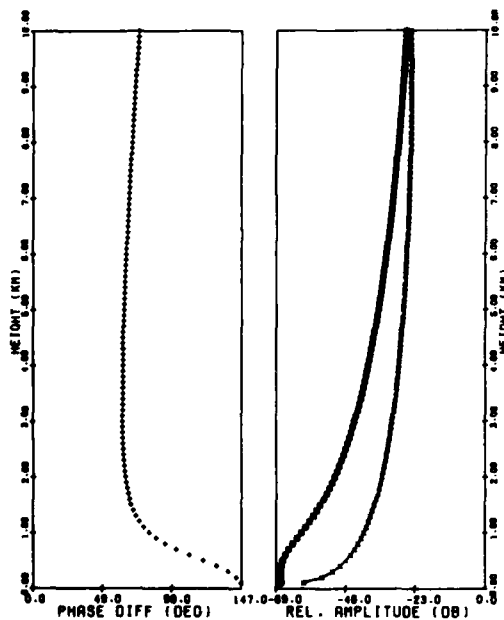


Figure 186. Radial Electric Field
(Well-Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

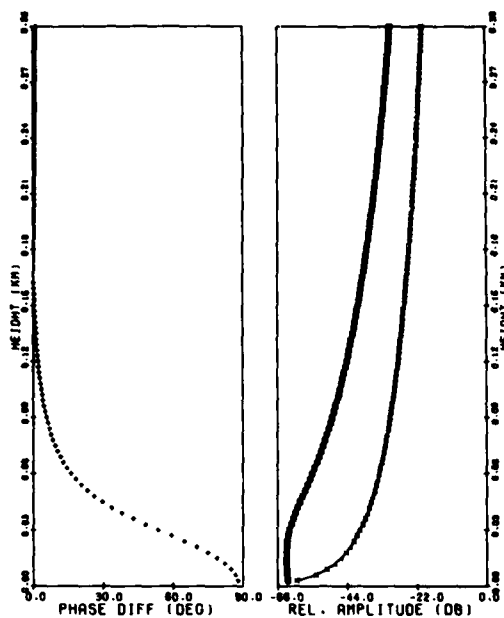


Figure 187. Radial Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

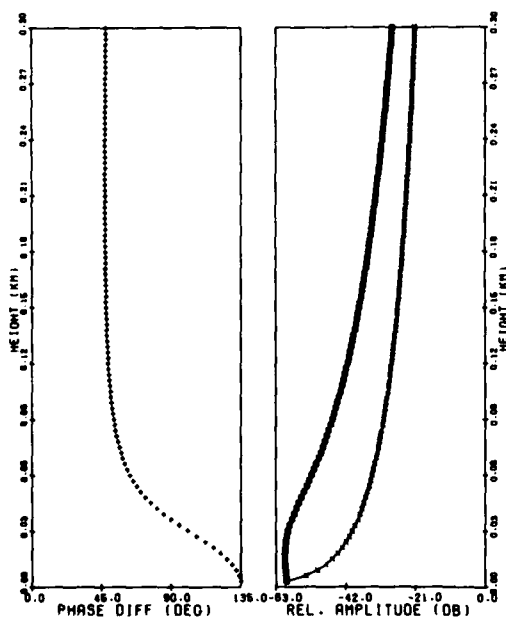


Figure 188. Radial Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

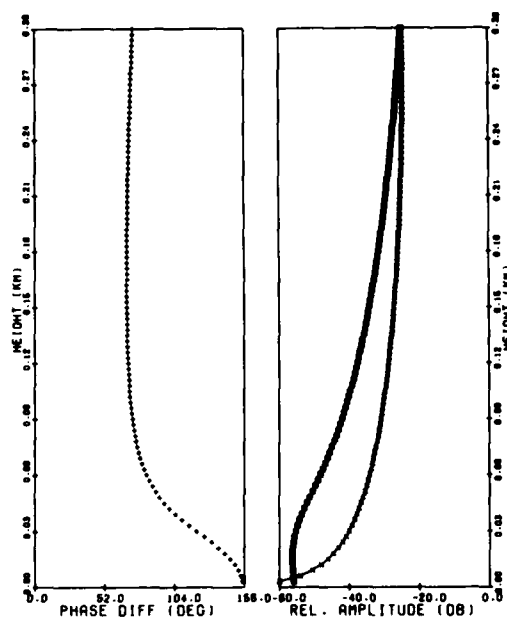


Figure 189. Radial Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

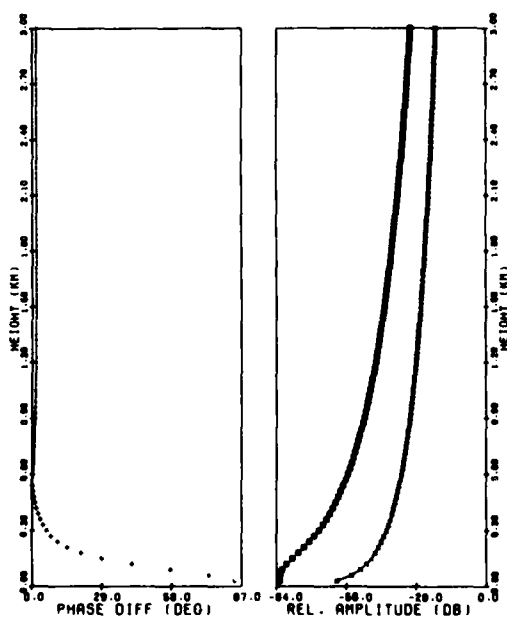


Figure 190. Radial Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

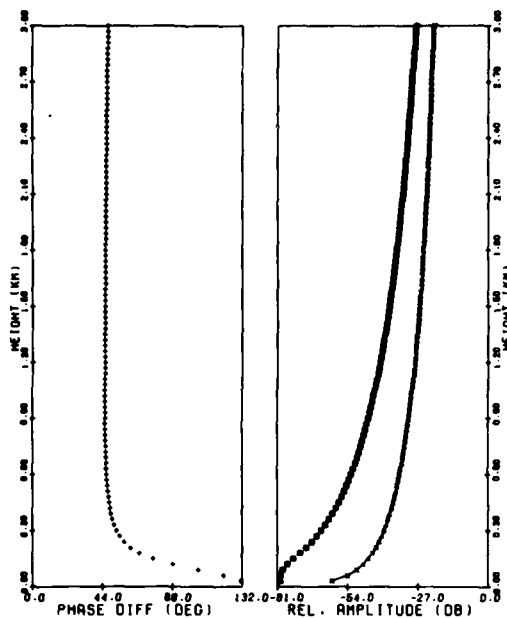


Figure 191. Radial Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

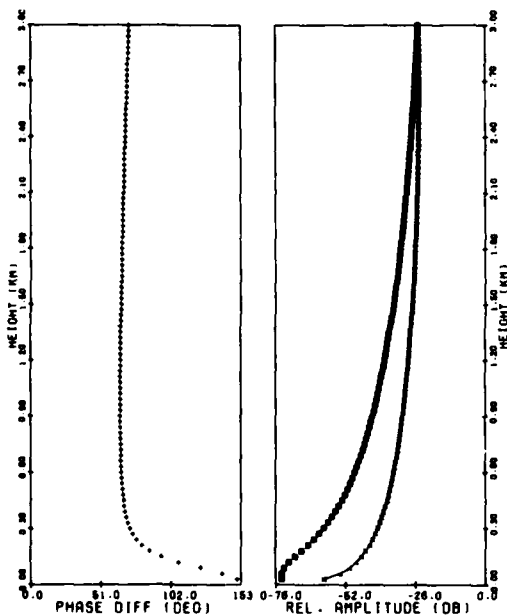


Figure 192. Radial Electric Field
(Well-Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

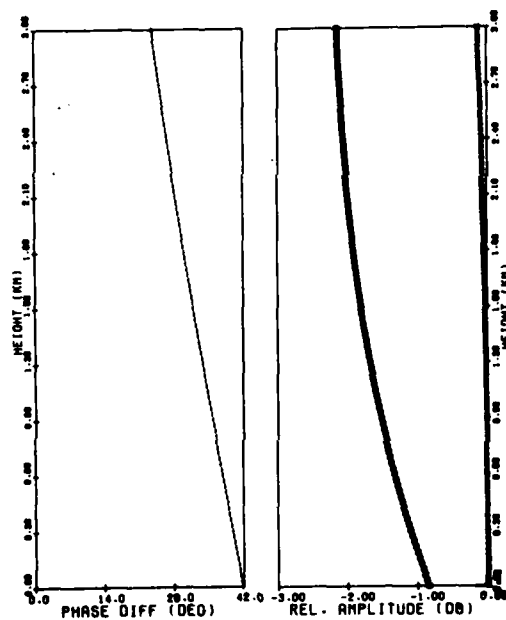


Figure 193. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

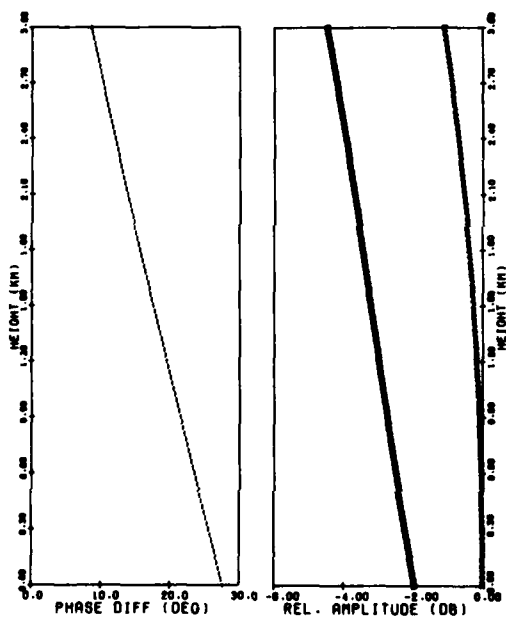


Figure 194. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

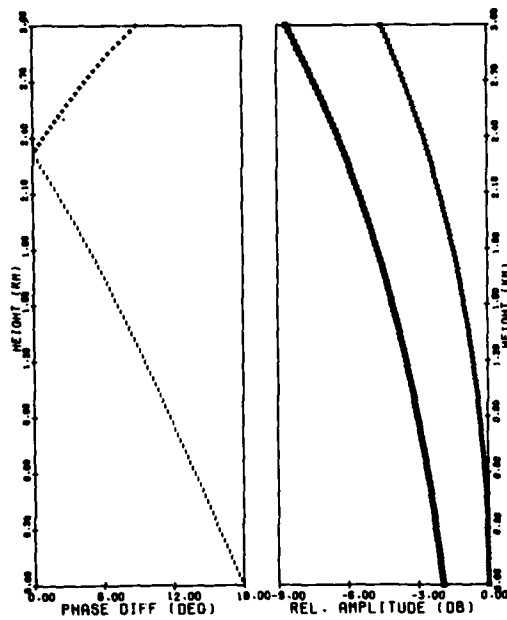


Figure 195. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

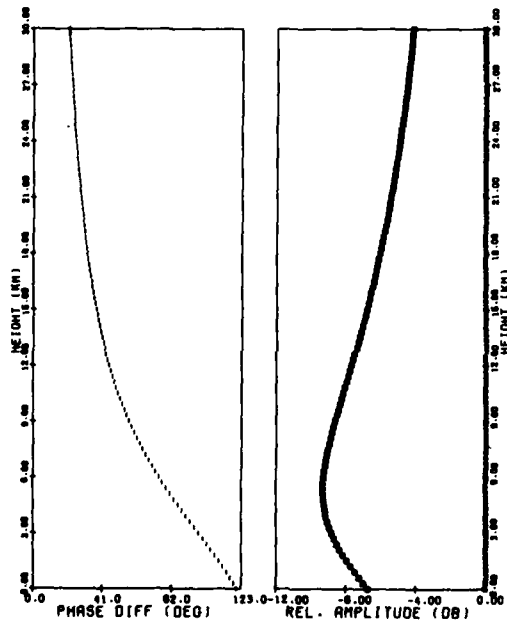


Figure 196. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

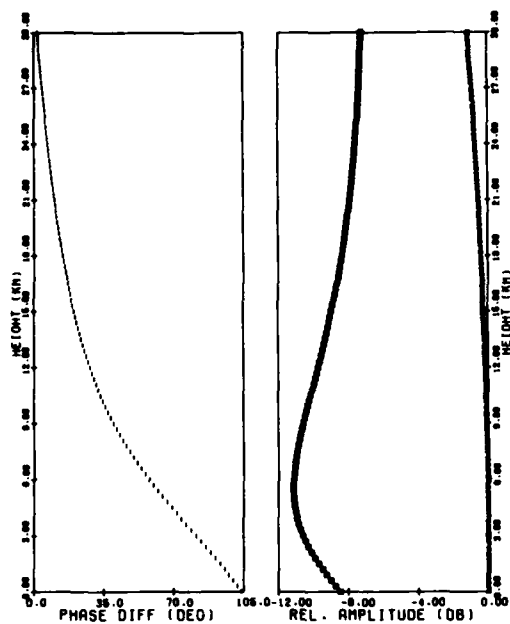


Figure 197. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

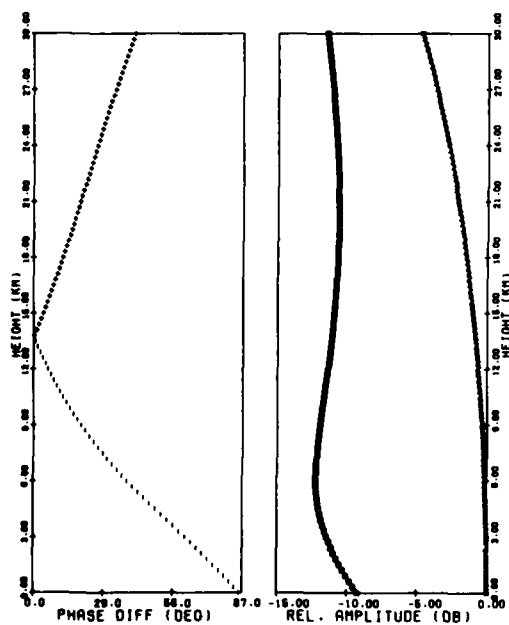


Figure 198. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

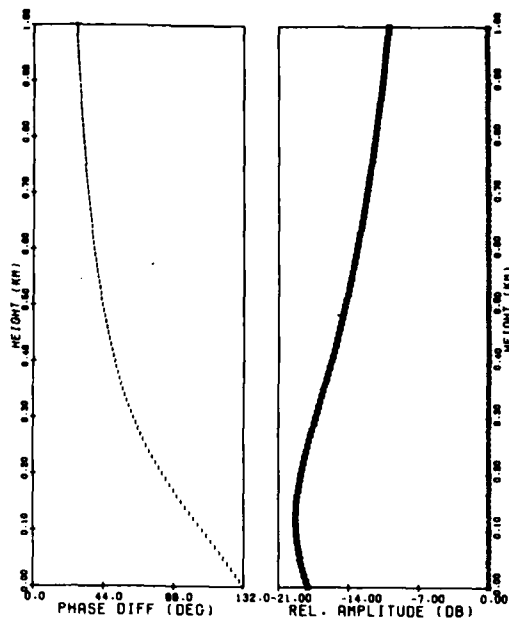


Figure 199. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

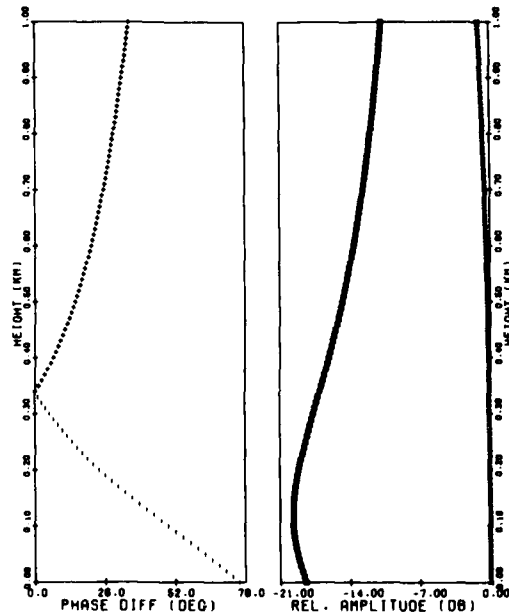


Figure 200. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

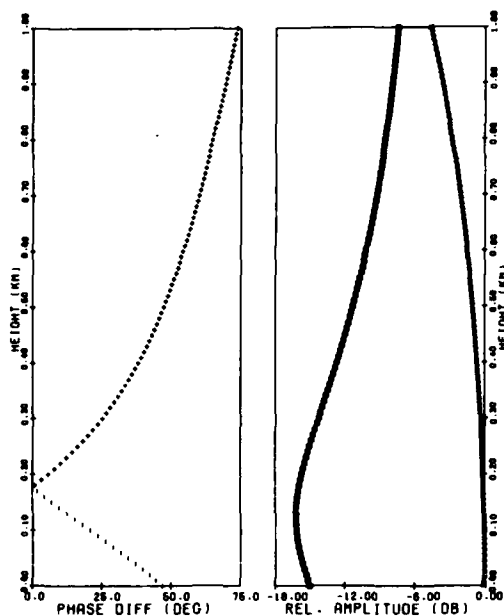


Figure 201. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

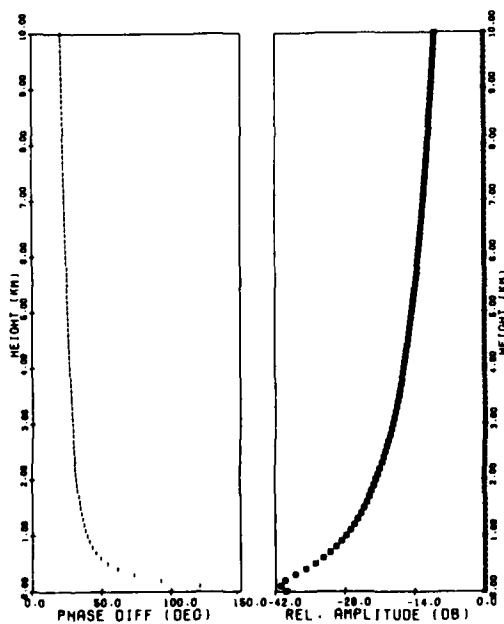


Figure 202. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

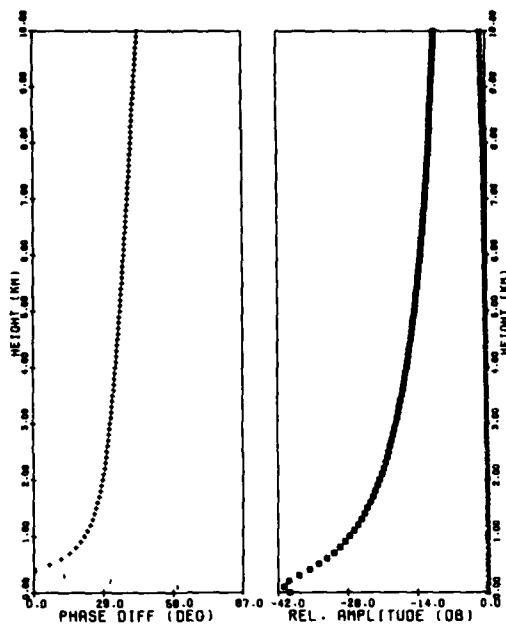


Figure 203. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

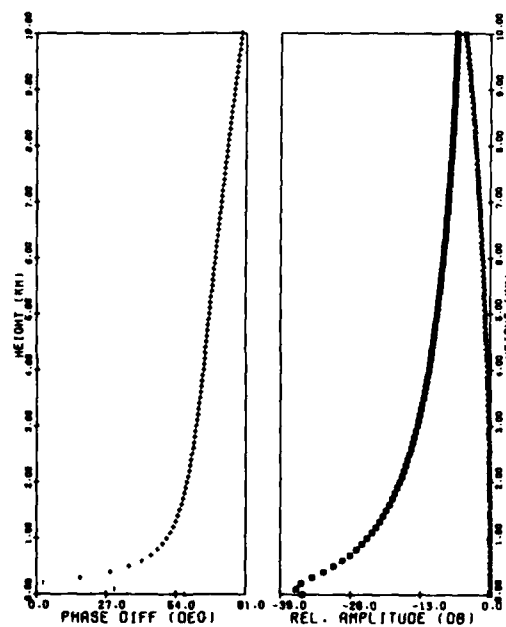


Figure 204. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

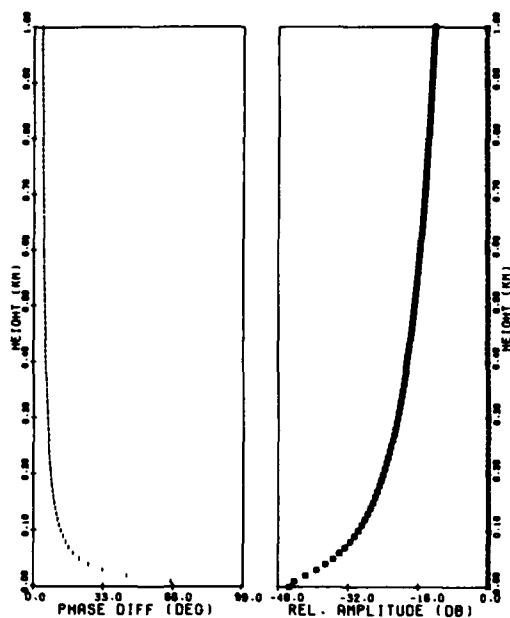


Figure 205. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. 10 km,
VED Height = 0.00 m

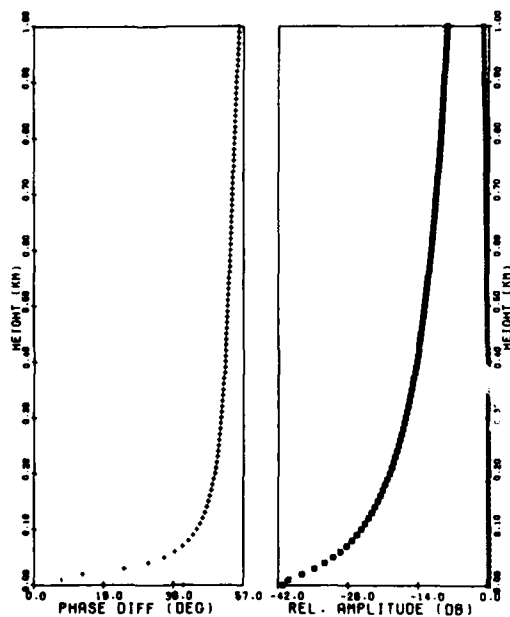


Figure 206. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

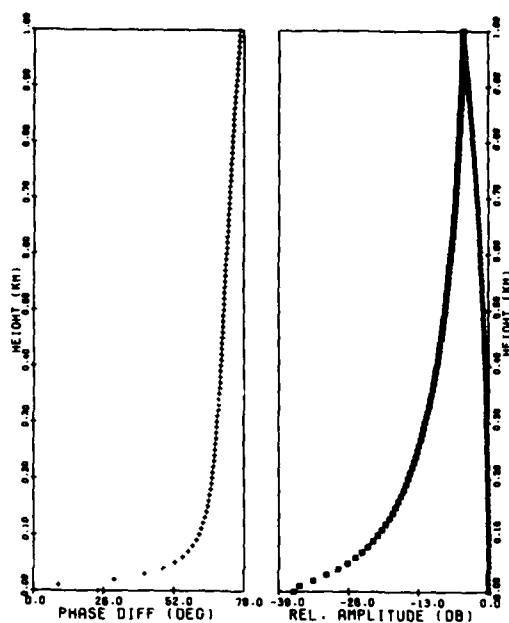


Figure 207. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 44.95 m

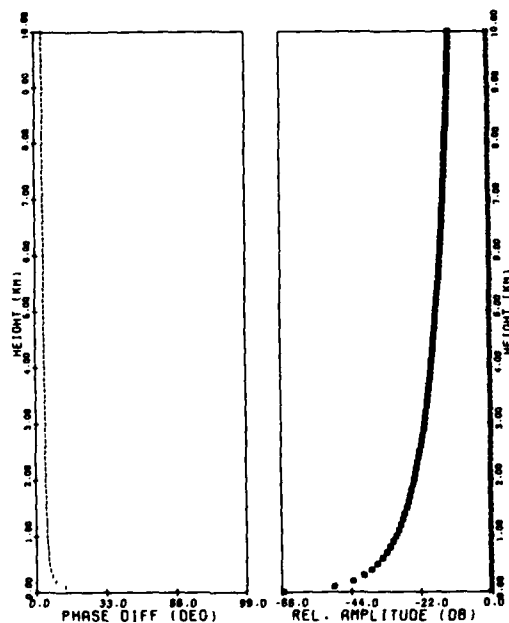


Figure 208. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

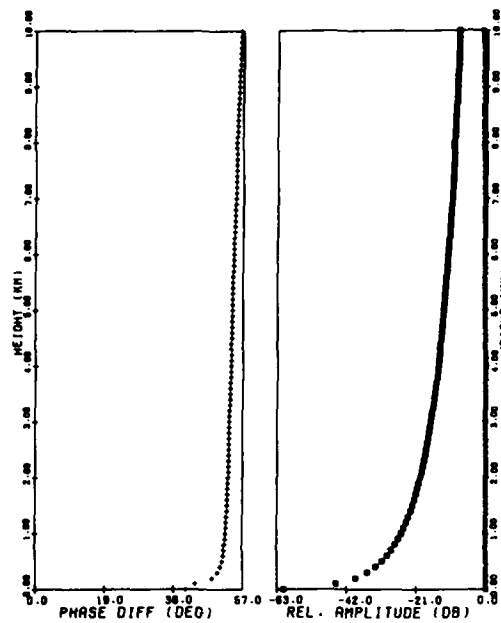


Figure 209. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

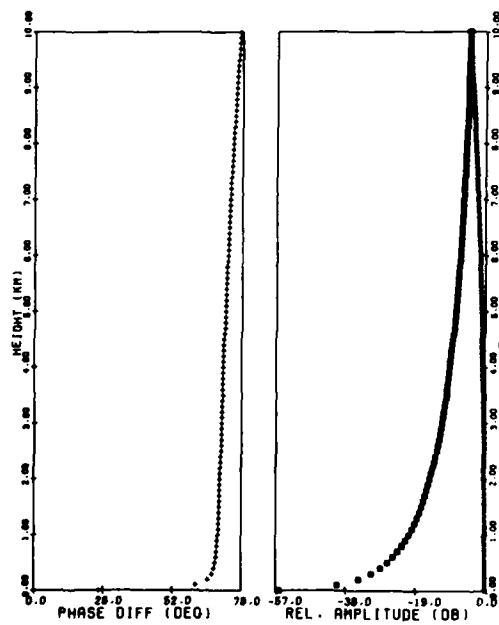


Figure 210. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

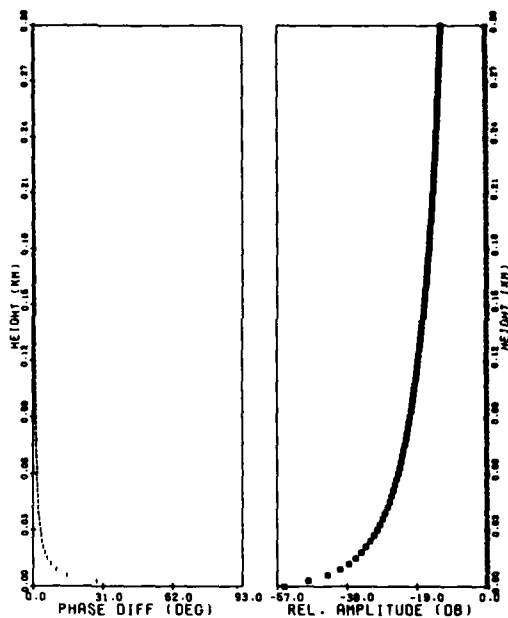


Figure 211. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

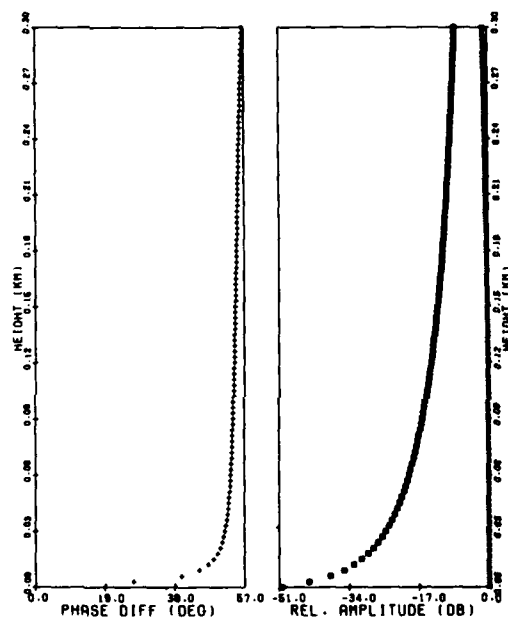


Figure 212. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

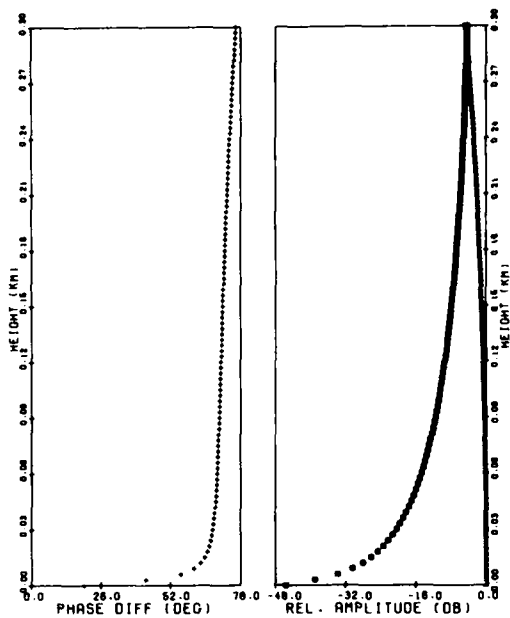


Figure 213. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

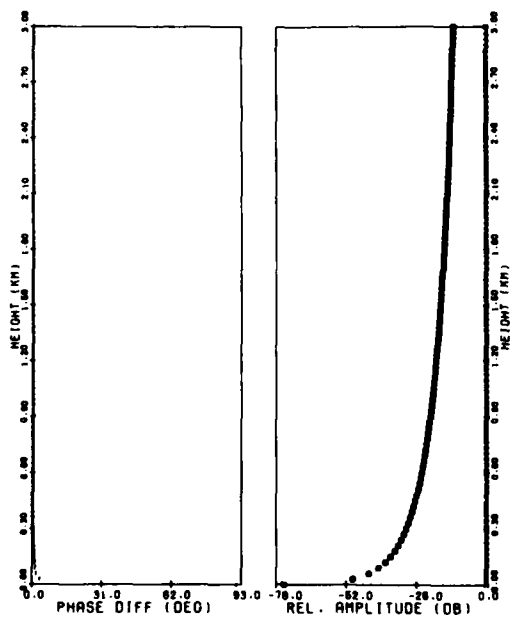


Figure 214. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

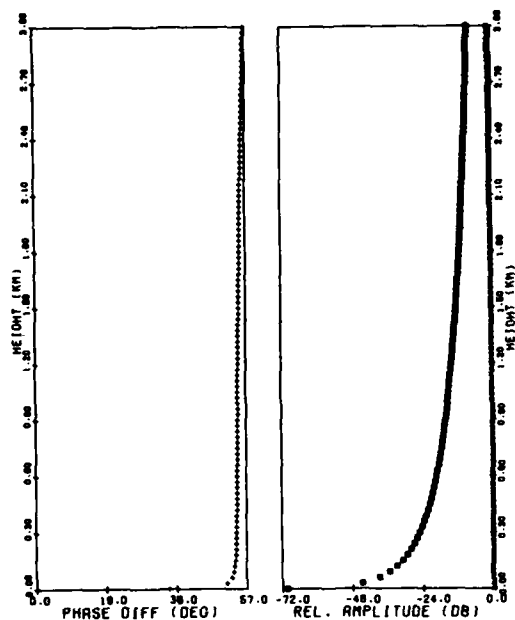


Figure 215. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

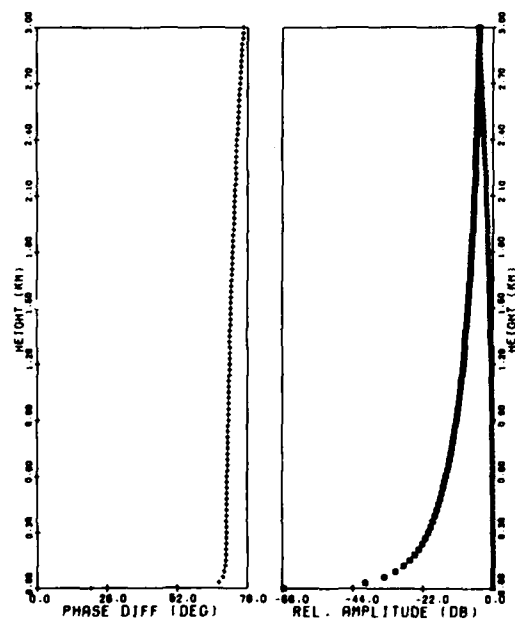


Figure 216. Vertical Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

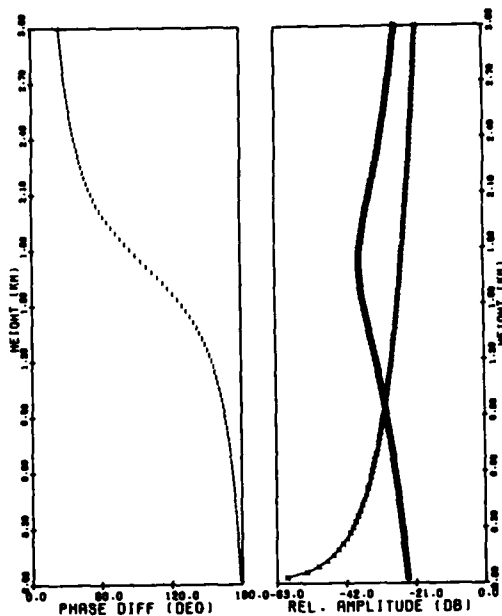


Figure 217. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 0.00 m

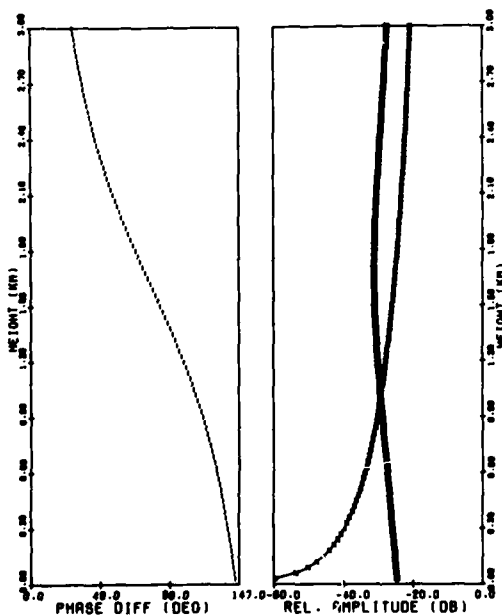


Figure 218. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 2247.60 m

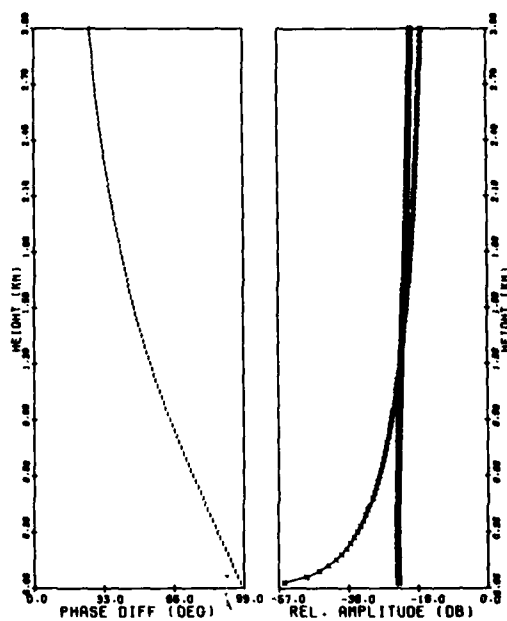


Figure 219. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 30 km,
VED Height = 4495.20 m

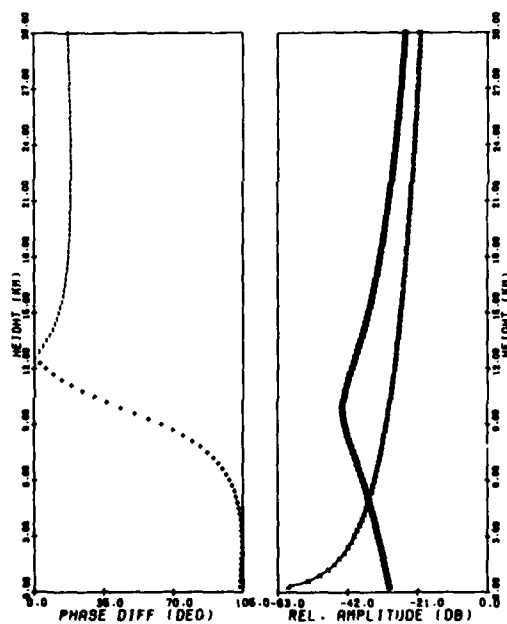


Figure 220. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 0.00 m

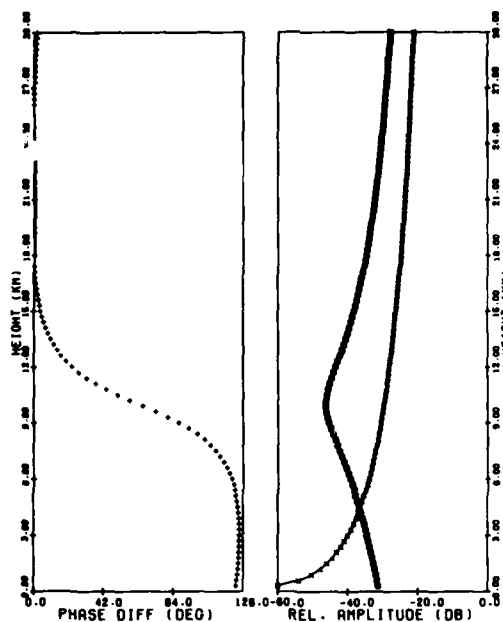


Figure 221. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 2247.60 m

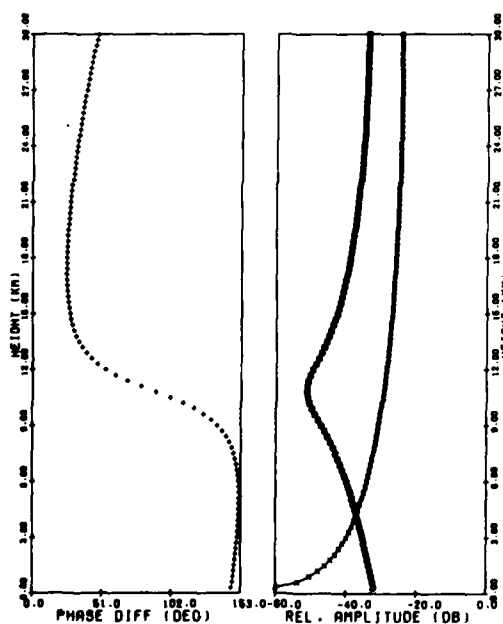


Figure 222. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 0.1 MHz, Dist. = 300 km,
VED Height = 4495.20 m

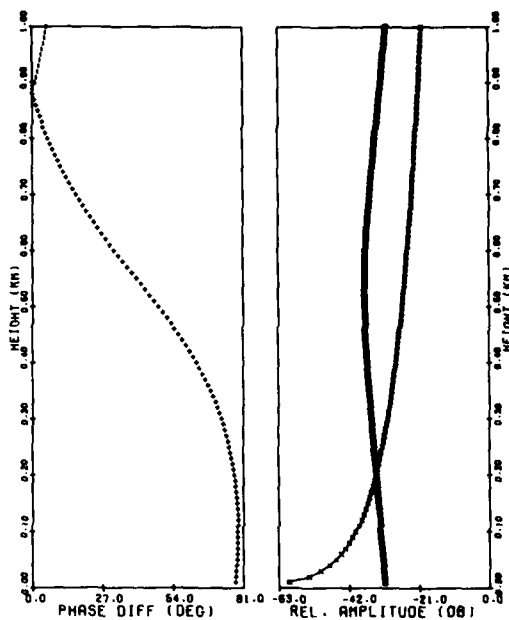


Figure 223. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

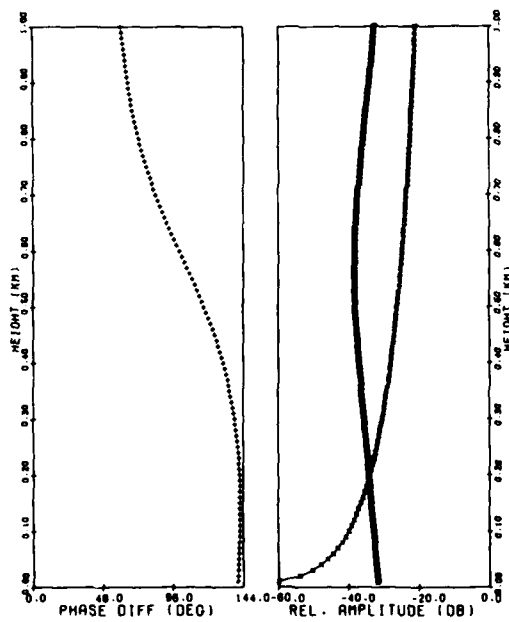


Figure 224. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 224.76 m

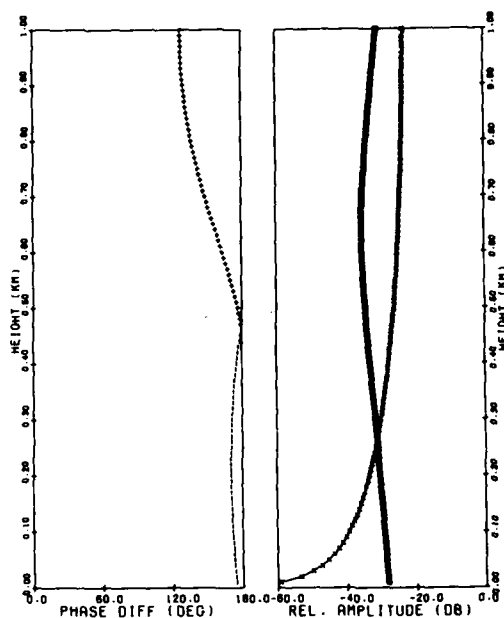


Figure 225. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 10 km,
VED Height = 449.52 m

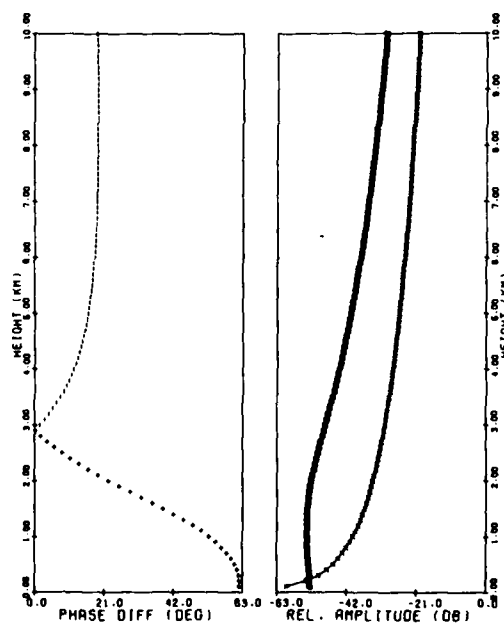


Figure 226. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

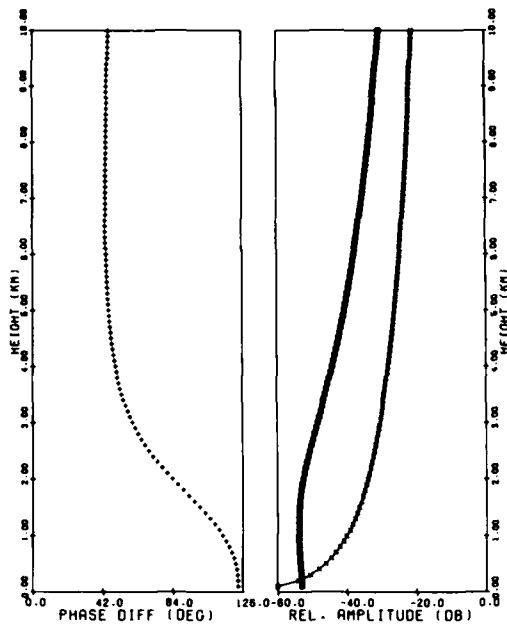


Figure 227. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 224.76 m

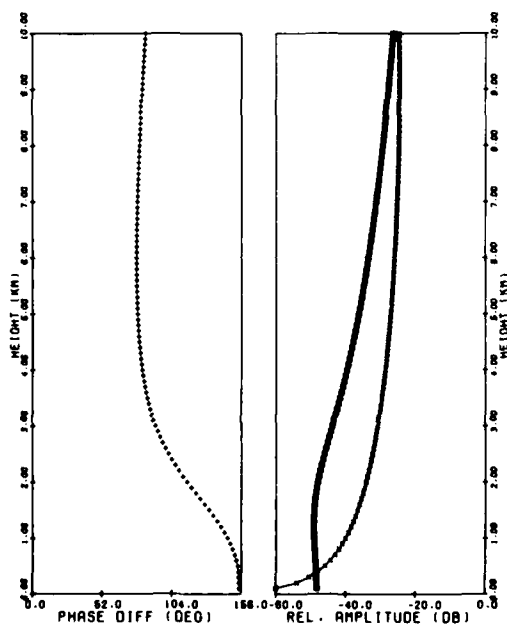


Figure 228. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 1.0 MHz, Dist. = 100 km,
VED Height = 449.52 m

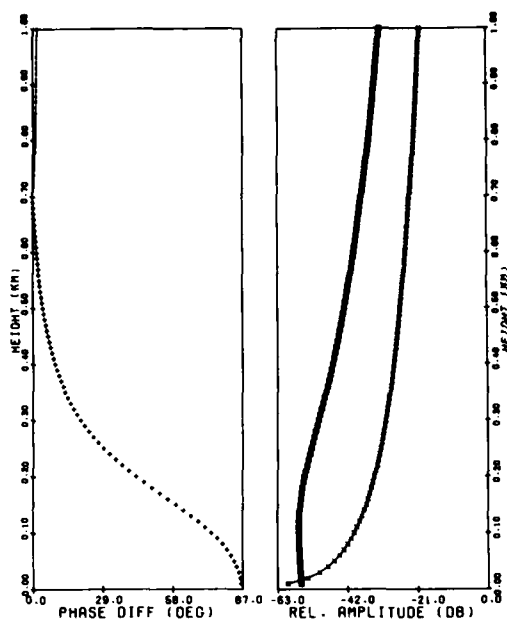


Figure 229. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 0.00 m

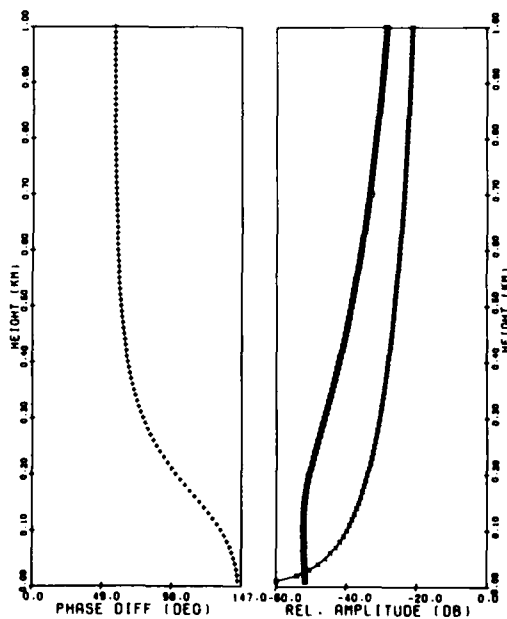


Figure 230. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 10 km,
VED Height = 22.48 m

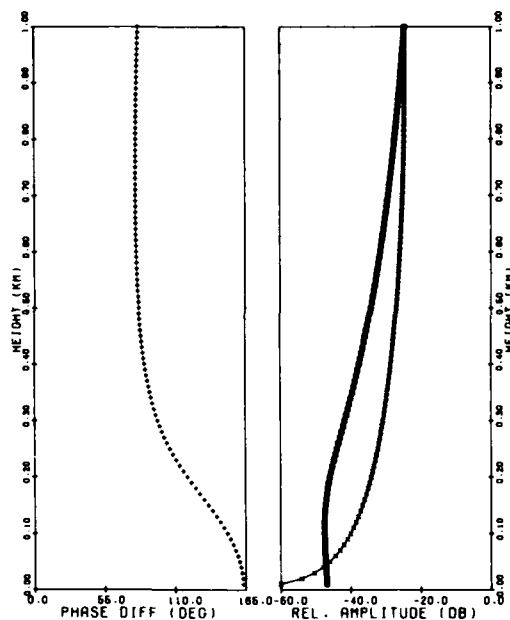


Figure 231. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist = 10 km,
VED Height = 44.95 m

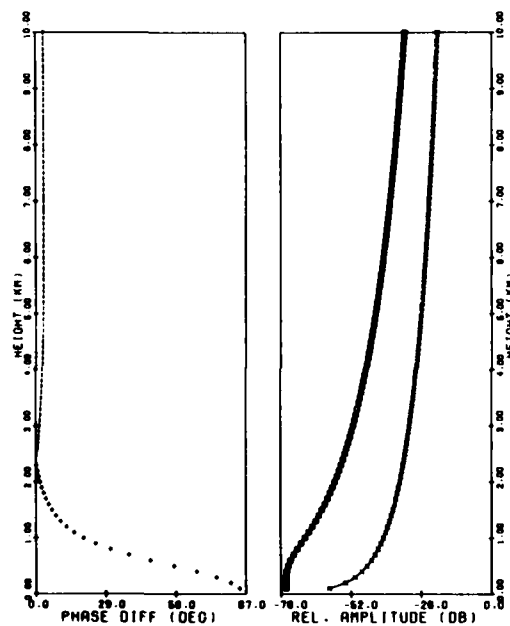


Figure 232. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 0.00 m

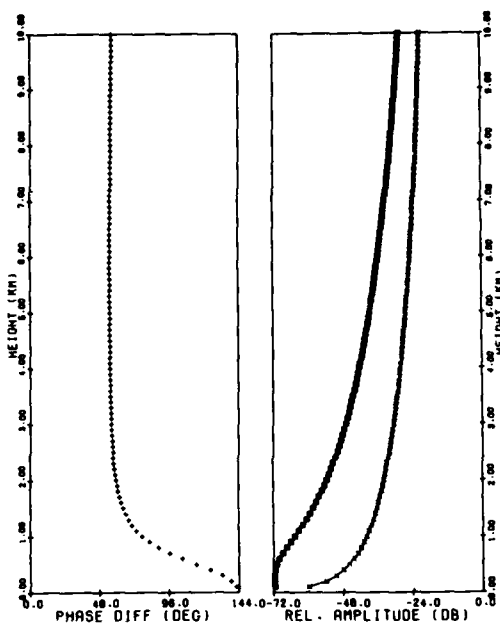


Figure 233. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 22.48 m

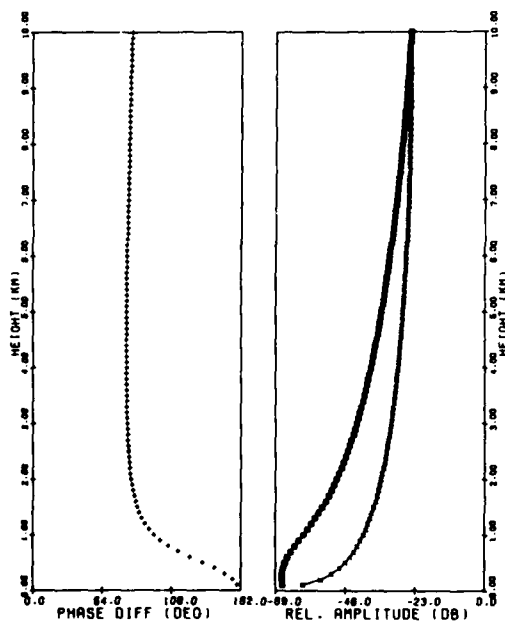


Figure 234. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 10.0 MHz, Dist. = 100 km,
VED Height = 44.95 m

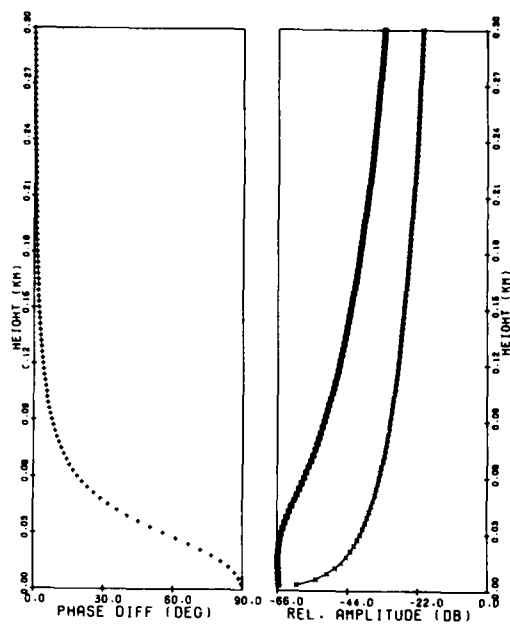


Figure 235. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 0.00 m

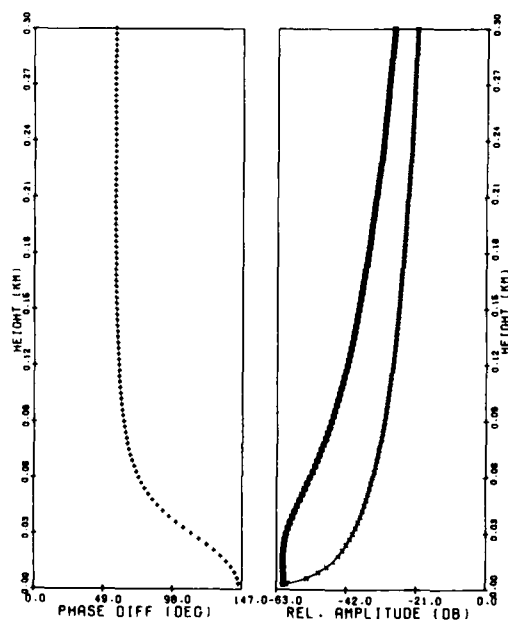


Figure 236. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 2.25 m

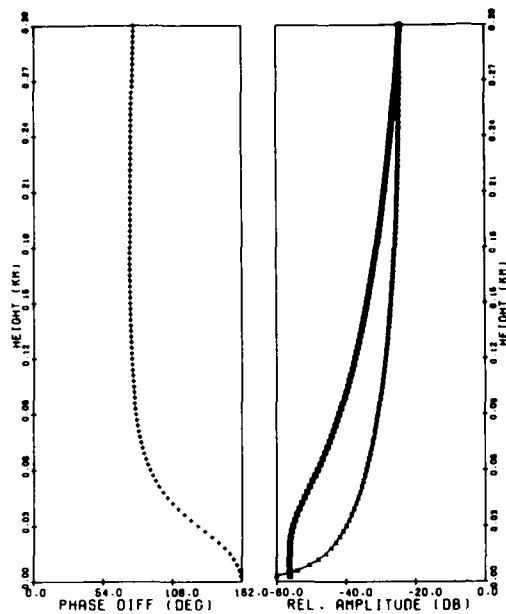


Figure 237. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 3 km,
VED Height = 4.50 m

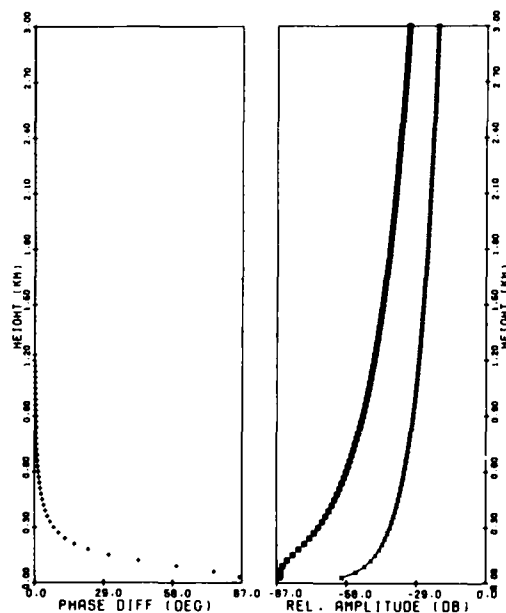


Figure 238. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 0.00 m

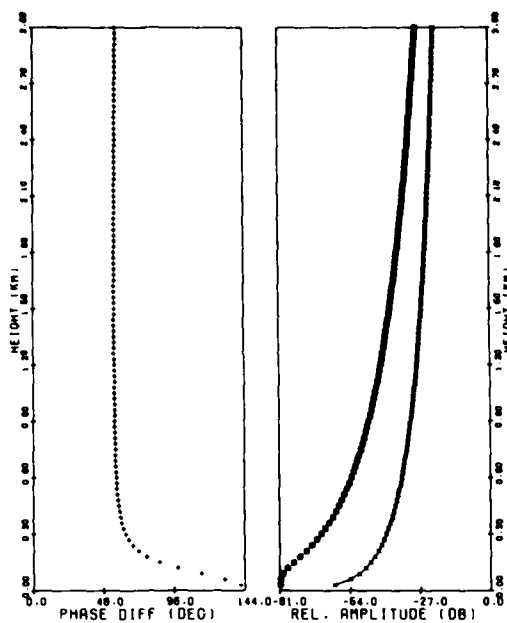


Figure 239. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 2.25 m

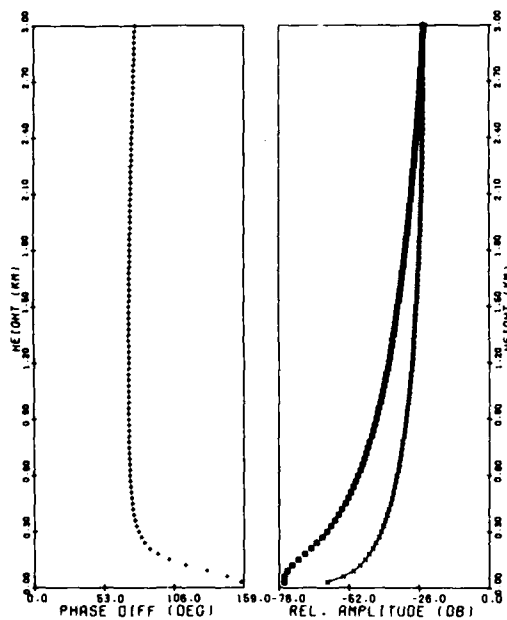


Figure 240. Radial Electric Field
(Poorly Conducting Soil)
Freq. = 100.0 MHz, Dist. = 30 km,
VED Height = 4.50 m

Table 2. Vertical Electric Field (Sea Water), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.000	-0.000	-0.67	0.000	-0.001	-1.23	0.000	-0.002	-6.12	0.000	-0.002	-6.12
0.030	-0.001	-0.67	0.100	-0.002	-1.22	0.300	-0.006	-6.09	0.300	-0.006	-6.09
0.060	-0.001	-0.67	0.200	-0.004	-1.21	0.600	-0.010	-6.06	0.600	-0.010	-6.06
0.090	-0.002	-0.66	0.300	-0.005	-1.20	0.900	-0.015	-6.03	0.900	-0.015	-6.03
0.120	-0.002	-0.66	0.400	-0.007	-1.19	1.200	-0.019	-6.00	1.200	-0.019	-6.00
0.150	-0.003	-0.65	0.500	-0.008	-1.18	1.500	-0.022	-5.97	1.500	-0.022	-5.97
0.180	-0.003	-0.65	0.600	-0.009	-1.17	1.800	-0.026	-5.95	1.800	-0.026	-5.95
0.210	-0.004	-0.65	0.700	-0.011	-1.16	2.100	-0.030	-5.92	2.100	-0.030	-5.92
0.240	-0.004	-0.65	0.800	-0.012	-1.15	2.400	-0.033	-5.89	2.400	-0.033	-5.89
0.270	-0.005	-0.64	0.900	-0.014	-1.14	2.700	-0.035	-5.86	2.700	-0.035	-5.86
0.300	-0.005	-0.64	1.000	-0.015	-1.13	3.000	-0.037	-5.83	3.000	-0.037	-5.83
0.330	-0.006	-0.64	1.100	-0.017	-1.12	3.300	-0.042	-5.80	3.300	-0.042	-5.80
0.360	-0.007	-0.64	1.200	-0.018	-1.11	3.600	-0.045	-5.77	3.600	-0.045	-5.77
0.390	-0.008	-0.63	1.300	-0.019	-1.10	3.900	-0.048	-5.74	3.900	-0.048	-5.74
0.420	-0.009	-0.63	1.400	-0.021	-1.09	4.200	-0.051	-5.71	4.200	-0.051	-5.71
0.450	-0.009	-0.63	1.500	-0.022	-1.08	4.500	-0.053	-5.69	4.500	-0.053	-5.69
0.480	-0.010	-0.62	1.600	-0.024	-1.07	4.800	-0.056	-5.66	4.800	-0.056	-5.66
0.510	-0.011	-0.62	1.700	-0.025	-1.06	5.100	-0.058	-5.64	5.100	-0.058	-5.64
0.540	-0.012	-0.62	1.800	-0.026	-1.05	5.400	-0.060	-5.61	5.400	-0.060	-5.61
0.570	-0.012	-0.62	1.900	-0.028	-1.04	5.700	-0.063	-5.58	5.700	-0.063	-5.58
0.600	-0.013	-0.61	2.000	-0.029	-1.03	6.000	-0.065	-5.55	6.000	-0.065	-5.55
0.630	-0.014	-0.61	2.100	-0.031	-1.02	6.300	-0.067	-5.53	6.300	-0.067	-5.53
0.660	-0.015	-0.61	2.200	-0.032	-1.01	6.600	-0.069	-5.51	6.600	-0.069	-5.51
0.690	-0.016	-0.60	2.300	-0.033	-1.00	6.900	-0.071	-5.48	6.900	-0.071	-5.48
0.720	-0.017	-0.60	2.400	-0.035	-0.99	7.200	-0.073	-5.46	7.200	-0.073	-5.46
0.750	-0.018	-0.60	2.500	-0.036	-0.98	7.500	-0.074	-5.44	7.500	-0.074	-5.44
0.780	-0.019	-0.59	2.600	-0.037	-0.97	7.800	-0.076	-5.41	7.800	-0.076	-5.41
0.810	-0.020	-0.59	2.700	-0.039	-0.96	8.100	-0.078	-5.39	8.100	-0.078	-5.39
0.840	-0.021	-0.59	2.800	-0.040	-0.96	8.400	-0.079	-5.37	8.400	-0.079	-5.37
0.870	-0.022	-0.59	2.900	-0.042	-0.95	8.700	-0.081	-5.35	8.700	-0.081	-5.35
0.900	-0.023	-0.58	3.000	-0.043	-0.94	9.000	-0.083	-5.32	9.000	-0.083	-5.32
1.050	-0.029	-0.57	3.500	-0.050	-0.90	10.500	-0.090	-5.26	10.500	-0.090	-5.26
1.200	-0.033	-0.56	4.000	-0.057	-0.86	12.000	-0.096	-5.13	12.000	-0.096	-5.13
1.350	-0.041	-0.54	4.500	-0.065	-0.82	13.500	-0.102	-5.04	13.500	-0.102	-5.04
1.500	-0.049	-0.53	5.000	-0.073	-0.78	15.000	-0.109	-4.97	15.000	-0.109	-4.97
1.650	-0.056	-0.52	5.500	-0.081	-0.74	16.500	-0.115	-4.90	16.500	-0.115	-4.90
1.800	-0.062	-0.50	6.000	-0.089	-0.71	18.000	-0.121	-4.84	18.000	-0.121	-4.84
1.950	-0.074	-0.49	6.500	-0.098	-0.68	19.500	-0.126	-4.78	19.500	-0.126	-4.78
2.100	-0.083	-0.48	7.000	-0.107	-0.65	21.000	-0.135	-4.73	21.000	-0.135	-4.73
2.250	-0.093	-0.47	7.500	-0.117	-0.62	22.500	-0.143	-4.68	22.500	-0.143	-4.68
2.400	-0.104	-0.45	8.000	-0.127	-0.59	24.000	-0.151	-4.64	24.000	-0.151	-4.64
2.550	-0.113	-0.44	8.500	-0.138	-0.57	25.500	-0.160	-4.61	25.500	-0.160	-4.61
2.700	-0.119	-0.43	9.000	-0.149	-0.54	27.000	-0.169	-4.57	27.000	-0.169	-4.57
2.850	-0.127	-0.42	9.500	-0.161	-0.52	28.500	-0.174	-4.54	28.500	-0.174	-4.54
3.000	-0.132	-0.41	10.000	-0.173	-0.50	30.000	-0.179	-4.52	30.000	-0.179	-4.52

Table 3. Vertical Electric Field (Sea Water), Frequency = 0.1 MHz, VED Height 2247.60 m

HEIGHT (KM)	30.0 KM DOWNRANGE			100.0 KM DOWNRANGE			300.0 KM DOWNRANGE		
	AMP (UB)	PHASE (DEG)	MEI/INT (KM)	AMP (UB)	PHASE (DEG)	MEI/INT (KM)	AMP (UB)	PHASE (DEG)	MEI/INT (KM)
0.000	-0.026	-0.47	0.000	-0.026	-1.01	0.000	-0.030	-1.40	0.000
0.030	-0.021	-0.46	0.000	-0.028	-1.00	0.000	-0.035	-1.67	0.000
0.060	-0.022	-0.46	0.000	-0.029	-0.99	0.000	-0.040	-1.84	0.000
0.090	-0.023	-0.46	0.000	-0.031	-0.98	0.000	-0.044	-1.91	0.000
0.120	-0.024	-0.45	0.000	-0.034	-0.97	0.000	-0.049	-1.78	0.000
0.150	-0.025	-0.45	0.000	-0.036	-0.96	0.000	-0.054	-1.75	0.000
0.180	-0.027	-0.45	0.000	-0.038	-0.95	0.000	-0.058	-1.72	0.000
0.210	-0.029	-0.44	0.000	-0.041	-0.94	0.000	-0.063	-1.69	0.000
0.240	-0.031	-0.44	0.000	-0.044	-0.93	0.000	-0.068	-1.66	0.000
0.270	-0.033	-0.44	0.000	-0.047	-0.92	0.000	-0.073	-1.63	0.000
0.300	-0.035	-0.44	0.000	-0.050	-0.91	0.000	-0.078	-1.61	0.000
0.330	-0.038	-0.43	0.000	-0.054	-0.90	0.000	-0.083	-1.58	0.000
0.360	-0.041	-0.43	0.000	-0.057	-0.89	0.000	-0.088	-1.55	0.000
0.390	-0.044	-0.43	0.000	-0.061	-0.88	0.000	-0.093	-1.52	0.000
0.420	-0.047	-0.42	0.000	-0.065	-0.87	0.000	-0.099	-1.49	0.000
0.450	-0.051	-0.42	0.000	-0.069	-0.86	0.000	-0.104	-1.47	0.000
0.480	-0.055	-0.42	0.000	-0.074	-0.85	0.000	-0.109	-1.44	0.000
0.510	-0.059	-0.41	0.000	-0.078	-0.84	0.000	-0.115	-1.41	0.000
0.540	-0.063	-0.41	0.000	-0.083	-0.83	0.000	-0.121	-1.39	0.000
0.570	-0.067	-0.41	0.000	-0.088	-0.82	0.000	-0.126	-1.36	0.000
0.600	-0.072	-0.41	0.000	-0.093	-0.81	0.000	-0.132	-1.34	0.000
0.630	-0.076	-0.40	0.000	-0.099	-0.80	0.000	-0.138	-1.31	0.000
0.660	-0.081	-0.40	0.000	-0.104	-0.79	0.000	-0.145	-1.29	0.000
0.690	-0.087	-0.40	0.000	-0.110	-0.79	0.000	-0.151	-1.26	0.000
0.720	-0.092	-0.39	0.000	-0.116	-0.78	0.000	-0.157	-1.24	0.000
0.750	-0.098	-0.39	0.000	-0.122	-0.77	0.000	-0.164	-1.22	0.000
0.780	-0.104	-0.39	0.000	-0.128	-0.76	0.000	-0.171	-1.19	0.000
0.810	-0.110	-0.39	0.000	-0.135	-0.75	0.000	-0.178	-1.17	0.000
0.840	-0.116	-0.38	0.000	-0.142	-0.74	0.000	-0.185	-1.15	0.000
0.870	-0.123	-0.38	0.000	-0.149	-0.73	0.000	-0.192	-1.13	0.000
0.900	-0.129	-0.38	0.000	-0.156	-0.72	0.000	-0.199	-1.10	0.000
1.050	-0.166	-0.36	0.000	-0.195	-0.68	0.000	-0.236	-1.00	0.000
1.200	-0.209	-0.35	0.000	-0.236	-0.64	0.000	-0.281	-0.91	0.000
1.350	-0.256	-0.33	0.000	-0.287	-0.60	0.000	-0.329	-0.82	0.000
1.500	-0.310	-0.32	0.000	-0.342	-0.56	0.000	-0.384	-0.75	0.000
1.650	-0.368	-0.31	0.000	-0.401	-0.51	0.000	-0.440	-0.68	0.000
1.800	-0.433	-0.30	0.000	-0.467	-0.46	0.000	-0.503	-0.62	0.000
1.950	-0.503	-0.28	0.000	-0.537	-0.43	0.000	-0.572	-0.56	0.000
2.100	-0.579	-0.27	0.000	-0.613	-0.40	0.000	-0.646	-0.51	0.000
2.250	-0.660	-0.26	0.000	-0.695	-0.38	0.000	-0.726	-0.46	0.000
2.400	-0.748	-0.25	0.000	-0.783	-0.36	0.000	-0.812	-0.42	0.000
2.550	-0.841	-0.23	0.000	-0.877	-0.35	0.000	-0.903	-0.38	0.000
2.700	-0.941	-0.22	0.000	-0.976	-0.33	0.000	-1.001	-0.35	0.000
2.850	-1.045	-0.21	0.000	-1.082	-0.30	0.000	-1.106	-0.31	0.000
3.000	-1.157	-0.20	0.000	-1.194	-0.28	0.000	-1.216	-0.28	0.000

Table 4. Vertical Electric Field (Sea Water), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM UORANGE				100.0 KM UORANGE				300.0 KM UORANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-0.024	-0.32	0.000	-0.034	-0.82	0.000	-0.050	-1.69	0.000	-0.050	-1.69
0.030	-0.023	-0.32	0.030	-0.040	-0.81	0.030	-0.055	-1.66	0.030	-0.055	-1.66
0.060	-0.027	-0.32	0.060	-0.043	-0.79	0.060	-0.061	-1.63	0.060	-0.061	-1.63
0.090	-0.024	-0.32	0.090	-0.046	-0.79	0.090	-0.067	-1.60	0.090	-0.067	-1.60
0.120	-0.032	-0.31	0.120	-0.051	-0.78	0.120	-0.073	-1.57	0.120	-0.073	-1.57
0.150	-0.036	-0.31	0.150	-0.056	-0.77	0.150	-0.081	-1.54	0.150	-0.081	-1.54
0.180	-0.041	-0.30	0.180	-0.061	-0.76	0.180	-0.084	-1.51	0.180	-0.084	-1.51
0.210	-0.046	-0.30	0.210	-0.068	-0.75	0.210	-0.097	-1.48	0.210	-0.097	-1.48
0.240	-0.053	-0.30	0.240	-0.075	-0.74	0.240	-0.106	-1.45	0.240	-0.106	-1.45
0.270	-0.059	-0.29	0.270	-0.083	-0.73	0.270	-0.116	-1.42	0.270	-0.116	-1.42
0.300	-0.067	-0.29	0.300	-0.092	-0.72	0.300	-0.127	-1.40	0.300	-0.127	-1.40
0.330	-0.076	-0.29	0.330	-0.101	-0.71	0.330	-0.138	-1.37	0.330	-0.138	-1.37
0.360	-0.085	-0.29	0.360	-0.112	-0.70	0.360	-0.150	-1.34	0.360	-0.150	-1.34
0.390	-0.096	-0.28	0.390	-0.123	-0.69	0.390	-0.162	-1.31	0.390	-0.162	-1.31
0.420	-0.106	-0.28	0.420	-0.135	-0.68	0.420	-0.176	-1.29	0.420	-0.176	-1.29
0.450	-0.118	-0.28	0.450	-0.147	-0.67	0.450	-0.190	-1.26	0.450	-0.190	-1.26
0.480	-0.131	-0.27	0.480	-0.161	-0.66	0.480	-0.204	-1.23	0.480	-0.204	-1.23
0.510	-0.144	-0.27	0.510	-0.175	-0.65	0.510	-0.219	-1.21	0.510	-0.219	-1.21
0.540	-0.158	-0.27	0.540	-0.190	-0.64	0.540	-0.235	-1.18	0.540	-0.235	-1.18
0.570	-0.173	-0.26	0.570	-0.206	-0.63	0.570	-0.252	-1.15	0.570	-0.252	-1.15
0.600	-0.189	-0.26	0.600	-0.223	-0.62	0.600	-0.270	-1.13	0.600	-0.270	-1.13
0.630	-0.205	-0.26	0.630	-0.240	-0.61	0.630	-0.288	-1.10	0.630	-0.288	-1.10
0.660	-0.222	-0.26	0.660	-0.258	-0.61	0.660	-0.307	-1.08	0.660	-0.307	-1.08
0.690	-0.241	-0.25	0.690	-0.277	-0.60	0.690	-0.326	-1.06	0.690	-0.326	-1.06
0.720	-0.259	-0.25	0.720	-0.297	-0.59	0.720	-0.347	-1.03	0.720	-0.347	-1.03
0.750	-0.279	-0.25	0.750	-0.318	-0.58	0.750	-0.368	-1.01	0.750	-0.368	-1.01
0.780	-0.300	-0.24	0.780	-0.339	-0.57	0.780	-0.390	-0.99	0.780	-0.390	-0.99
0.810	-0.321	-0.24	0.810	-0.362	-0.56	0.810	-0.413	-0.96	0.810	-0.413	-0.96
0.840	-0.343	-0.24	0.840	-0.385	-0.55	0.840	-0.436	-0.94	0.840	-0.436	-0.94
0.870	-0.366	-0.24	0.870	-0.409	-0.54	0.870	-0.461	-0.92	0.870	-0.461	-0.92
0.900	-0.390	-0.23	0.900	-0.433	-0.53	0.900	-0.486	-0.90	0.900	-0.486	-0.90
1.050	-0.522	-0.22	1.050	-0.570	-0.49	1.050	-0.623	-0.79	1.050	-0.623	-0.79
1.200	-0.675	-0.20	1.200	-0.729	-0.45	1.200	-0.782	-0.70	1.200	-0.782	-0.70
1.350	-0.850	-0.19	1.350	-0.909	-0.41	1.350	-0.962	-0.61	1.350	-0.962	-0.61
1.500	-1.048	-0.17	1.500	-1.113	-0.37	1.500	-1.166	-0.53	1.500	-1.166	-0.53
1.650	-1.269	-0.16	1.650	-1.342	-0.33	1.650	-1.393	-0.46	1.650	-1.393	-0.46
1.800	-1.510	-0.14	1.800	-1.596	-0.30	1.800	-1.646	-0.39	1.800	-1.646	-0.39
1.950	-1.769	-0.13	1.950	-1.877	-0.26	1.950	-1.926	-0.33	1.950	-1.926	-0.33
2.100	-2.050	-0.11	2.100	-2.187	-0.22	2.100	-2.235	-0.27	2.100	-2.235	-0.27
2.250	-2.340	-0.09	2.250	-2.527	-0.19	2.250	-2.575	-0.21	2.250	-2.575	-0.21
2.400	-2.640	-0.08	2.400	-2.901	-0.15	2.400	-2.948	-0.15	2.400	-2.948	-0.15
2.550	-3.017	-0.06	2.550	-3.310	-0.12	2.550	-3.357	-0.10	2.550	-3.357	-0.10
2.700	-3.410	-0.04	2.700	-3.758	-0.08	2.700	-3.805	-0.05	2.700	-3.805	-0.05
2.850	-3.808	-0.02	2.850	-4.249	-0.04	2.850	-4.296	-0.00	2.850	-4.296	-0.00
3.000	-4.200	0.01	3.000	-4.787	0.00	3.000	-4.835	0.06	3.000	-4.835	0.06

Table 5. Vertical Electric Field (Sea Water), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM UORANGE				30.0 KM UORANGE				100.0 KM UORANGE			
ME IUNT	AMP	PHASE	ME IUNT	AMP	PHASE	ME IUNT	AMP	PHASE	ME IUNT	AMP	PHASE
(K4)	(DB)	(DEG)	(K4)	(DB)	(DEG)	(K4)	(DB)	(DEG)	(K4)	(DB)	(DEG)
.000	.000	-6.16	.000	.000	-3.08	.000	.000	-0.17	.000	.000	-0.72
.003	.003	-6.11	.010	.010	-3.05	.030	.030	-0.31	.100	.100	-1.02
.006	.006	-6.11	.020	.015	-3.02	.060	.060	-0.44	.200	.200	-1.44
.009	.009	-6.09	.030	.020	-3.78	.090	.090	-0.57	.300	.300	-1.63
.012	.012	-6.09	.040	.024	-3.75	.120	.120	-0.70	.400	.400	-2.18
.015	.015	-6.06	.050	.024	-3.72	.150	.150	-0.82	.500	.500	-2.51
.016	.016	-6.07	.060	.033	-3.69	.180	.180	-0.93	.600	.600	-2.80
.021	.016	-6.06	.070	.037	-3.66	.210	.210	-1.04	.700	.700	-3.06
.024	.014	-6.05	.080	.041	-3.63	.240	.240	-1.14	.800	.800	-3.30
.027	.015	-6.04	.090	.045	-3.59	.270	.270	-1.24	.900	.900	-3.52
.030	.017	-6.03	.100	.049	-3.56	.300	.300	-1.33	.900	.900	-3.71
.033	.018	-6.02	.110	.053	-3.53	.330	.330	-1.42	1.000	1.000	-3.87
.036	.020	-6.01	.120	.057	-3.50	.360	.360	-1.50	1.100	1.100	-4.02
.039	.021	-6.00	.130	.061	-3.47	.390	.390	-1.58	1.200	1.200	-4.15
.042	.023	-1.99	.140	.064	-3.44	.420	.420	-1.66	1.300	1.300	-4.27
.045	.024	-1.98	.150	.068	-3.41	.450	.450	-1.73	1.400	1.400	-4.36
.048	.025	-1.97	.160	.071	-3.38	.480	.480	-1.80	1.500	1.500	-4.45
.051	.027	-1.96	.170	.075	-3.35	.510	.510	-1.86	1.600	1.600	-4.52
.054	.029	-1.95	.180	.078	-3.32	.540	.540	-1.93	1.700	1.700	-4.58
.057	.030	-1.95	.190	.082	-3.29	.570	.570	-1.98	1.800	1.800	-4.62
.060	.032	-1.94	.200	.085	-3.26	.600	.600	-2.04	1.900	1.900	-4.66
.063	.034	-1.93	.210	.088	-3.23	.630	.630	-2.09	2.000	2.000	-4.69
.066	.035	-1.92	.220	.091	-3.20	.660	.660	-2.14	2.100	2.100	-4.71
.069	.037	-1.91	.230	.094	-3.17	.690	.690	-2.19	2.200	2.200	-4.72
.072	.038	-1.90	.240	.097	-3.14	.720	.720	-2.23	2.300	2.300	-4.73
.075	.040	-1.89	.250	.100	-3.11	.750	.750	-2.27	2.400	2.400	-4.73
.078	.042	-1.88	.260	.103	-3.08	.780	.780	-2.31	2.500	2.500	-4.73
.081	.043	-1.87	.270	.106	-3.05	.810	.810	-2.35	2.600	2.600	-4.73
.084	.045	-1.86	.280	.109	-3.02	.840	.840	-2.38	2.700	2.700	-4.71
.087	.047	-1.85	.290	.112	-3.00	.870	.870	-2.42	2.800	2.800	-4.69
.090	.048	-1.84	.300	.115	-2.97	.900	.900	-2.45	2.900	2.900	-4.67
.105	.057	-1.80	.350	.128	-2.83	1.050	1.050	-2.58	3.500	3.500	-4.54
.120	.068	-1.76	.400	.140	-2.70	1.200	1.200	-2.67	4.000	4.000	-4.38
.135	.075	-1.71	.450	.152	-2.58	1.350	1.350	-2.74	4.500	4.500	-4.21
.150	.083	-1.67	.500	.163	-2.46	1.500	1.500	-2.79	5.000	5.000	-4.05
.165	.093	-1.63	.550	.173	-2.35	1.650	1.650	-2.83	5.500	5.500	-3.90
.180	.105	-1.59	.600	.183	-2.24	1.800	1.800	-2.86	6.000	6.000	-3.78
.195	.116	-1.55	.650	.194	-2.14	1.950	1.950	-2.89	6.500	6.500	-3.67
.210	.127	-1.51	.700	.204	-2.04	2.100	2.100	-2.93	7.000	7.000	-3.59
.225	.136	-1.47	.750	.214	-1.95	2.250	2.250	-2.96	7.500	7.500	-3.53
.240	.145	-1.43	.800	.224	-1.87	2.400	2.400	-3.00	8.000	8.000	-3.49
.255	.154	-1.40	.850	.235	-1.79	2.550	2.550	-3.04	8.500	8.500	-3.46
.270	.163	-1.36	.900	.245	-1.71	2.700	2.700	-3.09	9.000	9.000	-3.46
.285	.170	-1.33	.950	.257	-1.68	2.850	2.850	-3.15	9.500	9.500	-3.46
.300	.176	-1.30	1.000	.268	-1.58	3.000	3.000	-3.22	10.000	10.000	-3.49

Table 6. Vertical Electric Field (Sea Water), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
.000	-0.00	-0.00	.000	-0.00	-0.00	.000	-0.00	-0.00	.000	-0.00	-0.00	.000	-0.00	-0.00	.000
.003	-0.03	-1.47	.003	-0.03	-3.18	.003	-0.03	-1.08	.003	-0.03	-3.91	.003	-0.03	-1.54	.003
.006	-0.06	-1.46	.006	-0.06	-3.15	.006	-0.06	-1.22	.006	-0.06	-3.91	.006	-0.06	-1.54	.006
.009	-0.09	-1.45	.009	-0.09	-3.12	.009	-0.09	-1.36	.009	-0.09	-3.86	.009	-0.09	-1.54	.009
.012	-0.12	-1.44	.012	-0.12	-3.09	.012	-0.12	-1.50	.012	-0.12	-3.82	.012	-0.12	-1.54	.012
.015	-0.15	-1.43	.015	-0.15	-3.06	.015	-0.15	-1.64	.015	-0.15	-3.77	.015	-0.15	-1.54	.015
.018	-0.18	-1.42	.018	-0.18	-3.03	.018	-0.18	-1.78	.018	-0.18	-3.72	.018	-0.18	-1.54	.018
.021	-0.21	-1.41	.021	-0.21	-3.00	.021	-0.21	-1.92	.021	-0.21	-3.67	.021	-0.21	-1.54	.021
.024	-0.24	-1.40	.024	-0.24	-2.97	.024	-0.24	-2.06	.024	-0.24	-3.62	.024	-0.24	-1.54	.024
.027	-0.27	-1.39	.027	-0.27	-2.94	.027	-0.27	-2.20	.027	-0.27	-3.57	.027	-0.27	-1.54	.027
.030	-0.30	-1.38	.030	-0.30	-2.91	.030	-0.30	-2.34	.030	-0.30	-3.52	.030	-0.30	-1.54	.030
.033	-0.33	-1.37	.033	-0.33	-2.88	.033	-0.33	-2.48	.033	-0.33	-3.47	.033	-0.33	-1.54	.033
.036	-0.36	-1.36	.036	-0.36	-2.85	.036	-0.36	-2.62	.036	-0.36	-3.42	.036	-0.36	-1.54	.036
.039	-0.39	-1.35	.039	-0.39	-2.82	.039	-0.39	-2.76	.039	-0.39	-3.37	.039	-0.39	-1.54	.039
.042	-0.42	-1.34	.042	-0.42	-2.79	.042	-0.42	-2.90	.042	-0.42	-3.32	.042	-0.42	-1.54	.042
.045	-0.45	-1.33	.045	-0.45	-2.76	.045	-0.45	-3.04	.045	-0.45	-3.27	.045	-0.45	-1.54	.045
.048	-0.48	-1.32	.048	-0.48	-2.73	.048	-0.48	-3.18	.048	-0.48	-3.22	.048	-0.48	-1.54	.048
.051	-0.51	-1.31	.051	-0.51	-2.70	.051	-0.51	-3.32	.051	-0.51	-3.17	.051	-0.51	-1.54	.051
.054	-0.54	-1.30	.054	-0.54	-2.67	.054	-0.54	-3.46	.054	-0.54	-3.12	.054	-0.54	-1.54	.054
.057	-0.57	-1.29	.057	-0.57	-2.64	.057	-0.57	-3.60	.057	-0.57	-3.07	.057	-0.57	-1.54	.057
.060	-0.60	-1.28	.060	-0.60	-2.61	.060	-0.60	-3.74	.060	-0.60	-3.02	.060	-0.60	-1.54	.060
.063	-0.63	-1.27	.063	-0.63	-2.58	.063	-0.63	-3.88	.063	-0.63	-2.97	.063	-0.63	-1.54	.063
.066	-0.66	-1.26	.066	-0.66	-2.55	.066	-0.66	-4.02	.066	-0.66	-2.92	.066	-0.66	-1.54	.066
.069	-0.69	-1.25	.069	-0.69	-2.52	.069	-0.69	-4.16	.069	-0.69	-2.87	.069	-0.69	-1.54	.069
.072	-0.72	-1.24	.072	-0.72	-2.49	.072	-0.72	-4.30	.072	-0.72	-2.82	.072	-0.72	-1.54	.072
.075	-0.75	-1.23	.075	-0.75	-2.46	.075	-0.75	-4.44	.075	-0.75	-2.77	.075	-0.75	-1.54	.075
.078	-0.78	-1.22	.078	-0.78	-2.43	.078	-0.78	-4.58	.078	-0.78	-2.72	.078	-0.78	-1.54	.078
.081	-0.81	-1.21	.081	-0.81	-2.40	.081	-0.81	-4.72	.081	-0.81	-2.67	.081	-0.81	-1.54	.081
.084	-0.84	-1.20	.084	-0.84	-2.37	.084	-0.84	-4.86	.084	-0.84	-2.62	.084	-0.84	-1.54	.084
.087	-0.87	-1.19	.087	-0.87	-2.34	.087	-0.87	-5.00	.087	-0.87	-2.57	.087	-0.87	-1.54	.087
.090	-0.90	-1.18	.090	-0.90	-2.31	.090	-0.90	-5.14	.090	-0.90	-2.52	.090	-0.90	-1.54	.090
.105	-1.05	-1.14	.105	-1.05	-2.25	.105	-1.05	-5.28	.105	-1.05	-2.46	.105	-1.05	-1.54	.105
.120	-1.20	-1.10	.120	-1.20	-2.19	.120	-1.20	-5.42	.120	-1.20	-2.40	.120	-1.20	-1.54	.120
.135	-1.35	-1.06	.135	-1.35	-2.13	.135	-1.35	-5.56	.135	-1.35	-2.34	.135	-1.35	-1.54	.135
.150	-1.50	-1.01	.150	-1.50	-2.07	.150	-1.50	-5.70	.150	-1.50	-2.28	.150	-1.50	-1.54	.150
.165	-1.65	-0.97	.165	-1.65	-2.01	.165	-1.65	-5.84	.165	-1.65	-2.22	.165	-1.65	-1.54	.165
.180	-1.80	-0.93	.180	-1.80	-1.95	.180	-1.80	-5.98	.180	-1.80	-2.16	.180	-1.80	-1.54	.180
.195	-1.95	-0.89	.195	-1.95	-1.89	.195	-1.95	-6.12	.195	-1.95	-2.10	.195	-1.95	-1.54	.195
.210	-2.10	-0.85	.210	-2.10	-1.83	.210	-2.10	-6.26	.210	-2.10	-2.04	.210	-2.10	-1.54	.210
.225	-2.25	-0.81	.225	-2.25	-1.77	.225	-2.25	-6.40	.225	-2.25	-1.98	.225	-2.25	-1.54	.225
.240	-2.40	-0.77	.240	-2.40	-1.71	.240	-2.40	-6.54	.240	-2.40	-1.92	.240	-2.40	-1.54	.240
.255	-2.55	-0.74	.255	-2.55	-1.65	.255	-2.55	-6.68	.255	-2.55	-1.86	.255	-2.55	-1.54	.255
.270	-2.70	-0.70	.270	-2.70	-1.59	.270	-2.70	-6.82	.270	-2.70	-1.80	.270	-2.70	-1.54	.270
.285	-2.85	-0.66	.285	-2.85	-1.53	.285	-2.85	-6.96	.285	-2.85	-1.74	.285	-2.85	-1.54	.285
.300	-3.00	-0.63	.300	-3.00	-1.47	.300	-3.00	-7.10	.300	-3.00	-1.68	.300	-3.00	-1.54	.300

Table 7. Vertical Electric Field (Sea Water), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
.000	-0.00	-1.00	.000	-1.25	-2.58	.000	-1.10	-2.58	.000	-1.10	-2.58	.000	-1.10	-2.58	.000
.003	-0.01	-1.01	.010	-1.30	-2.59	.010	-1.15	-2.59	.010	-1.15	-2.59	.010	-1.15	-2.59	.010
.006	-0.02	-1.02	.020	-1.35	-2.60	.020	-1.20	-2.60	.020	-1.20	-2.60	.020	-1.20	-2.60	.020
.009	-0.03	-1.03	.030	-1.40	-2.61	.030	-1.25	-2.61	.030	-1.25	-2.61	.030	-1.25	-2.61	.030
.012	-0.04	-1.04	.040	-1.45	-2.62	.040	-1.30	-2.62	.040	-1.30	-2.62	.040	-1.30	-2.62	.040
.015	-0.05	-1.05	.050	-1.50	-2.63	.050	-1.35	-2.63	.050	-1.35	-2.63	.050	-1.35	-2.63	.050
.018	-0.06	-1.06	.060	-1.55	-2.64	.060	-1.40	-2.64	.060	-1.40	-2.64	.060	-1.40	-2.64	.060
.021	-0.07	-1.07	.070	-1.60	-2.65	.070	-1.45	-2.65	.070	-1.45	-2.65	.070	-1.45	-2.65	.070
.024	-0.08	-1.08	.080	-1.65	-2.66	.080	-1.50	-2.66	.080	-1.50	-2.66	.080	-1.50	-2.66	.080
.027	-0.09	-1.09	.090	-1.70	-2.67	.090	-1.55	-2.67	.090	-1.55	-2.67	.090	-1.55	-2.67	.090
.030	-0.10	-1.10	.100	-1.75	-2.68	.100	-1.60	-2.68	.100	-1.60	-2.68	.100	-1.60	-2.68	.100
.033	-0.11	-1.11	.110	-1.80	-2.69	.110	-1.65	-2.69	.110	-1.65	-2.69	.110	-1.65	-2.69	.110
.036	-0.12	-1.12	.120	-1.85	-2.70	.120	-1.70	-2.70	.120	-1.70	-2.70	.120	-1.70	-2.70	.120
.039	-0.13	-1.13	.130	-1.90	-2.71	.130	-1.75	-2.71	.130	-1.75	-2.71	.130	-1.75	-2.71	.130
.042	-0.14	-1.14	.140	-1.95	-2.72	.140	-1.80	-2.72	.140	-1.80	-2.72	.140	-1.80	-2.72	.140
.045	-0.15	-1.15	.150	-2.00	-2.73	.150	-1.85	-2.73	.150	-1.85	-2.73	.150	-1.85	-2.73	.150
.048	-0.16	-1.16	.160	-2.05	-2.74	.160	-1.90	-2.74	.160	-1.90	-2.74	.160	-1.90	-2.74	.160
.051	-0.17	-1.17	.170	-2.10	-2.75	.170	-1.95	-2.75	.170	-1.95	-2.75	.170	-1.95	-2.75	.170
.054	-0.18	-1.18	.180	-2.15	-2.76	.180	-2.00	-2.76	.180	-2.00	-2.76	.180	-2.00	-2.76	.180
.057	-0.19	-1.19	.190	-2.20	-2.77	.190	-2.05	-2.77	.190	-2.05	-2.77	.190	-2.05	-2.77	.190
.060	-0.20	-1.20	.200	-2.25	-2.78	.200	-2.10	-2.78	.200	-2.10	-2.78	.200	-2.10	-2.78	.200
.063	-0.21	-1.21	.210	-2.30	-2.79	.210	-2.15	-2.79	.210	-2.15	-2.79	.210	-2.15	-2.79	.210
.066	-0.22	-1.22	.220	-2.35	-2.80	.220	-2.20	-2.80	.220	-2.20	-2.80	.220	-2.20	-2.80	.220
.069	-0.23	-1.23	.230	-2.40	-2.81	.230	-2.25	-2.81	.230	-2.25	-2.81	.230	-2.25	-2.81	.230
.072	-0.24	-1.24	.240	-2.45	-2.82	.240	-2.30	-2.82	.240	-2.30	-2.82	.240	-2.30	-2.82	.240
.075	-0.25	-1.25	.250	-2.50	-2.83	.250	-2.35	-2.83	.250	-2.35	-2.83	.250	-2.35	-2.83	.250
.078	-0.26	-1.26	.260	-2.55	-2.84	.260	-2.40	-2.84	.260	-2.40	-2.84	.260	-2.40	-2.84	.260
.081	-0.27	-1.27	.270	-2.60	-2.85	.270	-2.45	-2.85	.270	-2.45	-2.85	.270	-2.45	-2.85	.270
.084	-0.28	-1.28	.280	-2.65	-2.86	.280	-2.50	-2.86	.280	-2.50	-2.86	.280	-2.50	-2.86	.280
.087	-0.29	-1.29	.290	-2.70	-2.87	.290	-2.55	-2.87	.290	-2.55	-2.87	.290	-2.55	-2.87	.290
.090	-0.30	-1.30	.300	-2.75	-2.88	.300	-2.60	-2.88	.300	-2.60	-2.88	.300	-2.60	-2.88	.300
.105	-0.35	-1.35	.350	-2.85	-2.93	.350	-2.70	-2.93	.350	-2.70	-2.93	.350	-2.70	-2.93	.350
.120	-0.40	-1.40	.400	-2.95	-2.98	.400	-2.80	-2.98	.400	-2.80	-2.98	.400	-2.80	-2.98	.400
.135	-0.45	-1.45	.450	-3.05	-3.03	.450	-2.90	-3.03	.450	-2.90	-3.03	.450	-2.90	-3.03	.450
.150	-0.50	-1.50	.500	-3.15	-3.08	.500	-3.00	-3.08	.500	-3.00	-3.08	.500	-3.00	-3.08	.500
.165	-0.55	-1.55	.550	-3.25	-3.13	.550	-3.10	-3.13	.550	-3.10	-3.13	.550	-3.10	-3.13	.550
.180	-0.60	-1.60	.600	-3.35	-3.18	.600	-3.20	-3.18	.600	-3.20	-3.18	.600	-3.20	-3.18	.600
.195	-0.65	-1.65	.650	-3.45	-3.23	.650	-3.30	-3.23	.650	-3.30	-3.23	.650	-3.30	-3.23	.650
.210	-0.70	-1.70	.700	-3.55	-3.28	.700	-3.40	-3.28	.700	-3.40	-3.28	.700	-3.40	-3.28	.700
.225	-0.75	-1.75	.750	-3.65	-3.33	.750	-3.50	-3.33	.750	-3.50	-3.33	.750	-3.50	-3.33	.750
.240	-0.80	-1.80	.800	-3.75	-3.38	.800	-3.60	-3.38	.800	-3.60	-3.38	.800	-3.60	-3.38	.800
.255	-0.85	-1.85	.850	-3.85	-3.43	.850	-3.70	-3.43	.850	-3.70	-3.43	.850	-3.70	-3.43	.850
.270	-0.90	-1.90	.900	-3.95	-3.48	.900	-3.80	-3.48	.900	-3.80	-3.48	.900	-3.80	-3.48	.900
.285	-0.95	-1.95	.950	-4.05	-3.53	.950	-3.90	-3.53	.950	-3.90	-3.53	.950	-3.90	-3.53	.950
.300	-1.00	-2.00	1.000	-4.15	-3.58	1.000	-4.00	-3.58	1.000	-4.00	-3.58	1.000	-4.00	-3.58	1.000

Table 8. Vertical Electric Field (Sea Water), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
.000	-1.01	-21.14	.000	-1.07	-65.66	.000	-1.07	-65.66	.000	-5.358	-113.58	.000	-5.358	-113.58
.003	-1.03	-20.84	.003	-1.10	-65.43	.003	-1.10	-65.43	.003	-5.358	-113.58	.003	-5.358	-113.58
.006	-1.06	-20.54	.006	-1.13	-65.20	.006	-1.13	-65.20	.006	-5.358	-113.58	.006	-5.358	-113.58
.009	-1.09	-20.24	.009	-1.16	-64.97	.009	-1.16	-64.97	.009	-5.358	-113.58	.009	-5.358	-113.58
.012	-1.12	-19.94	.012	-1.19	-64.74	.012	-1.19	-64.74	.012	-5.358	-113.58	.012	-5.358	-113.58
.015	-1.15	-19.64	.015	-1.22	-64.51	.015	-1.22	-64.51	.015	-5.358	-113.58	.015	-5.358	-113.58
.018	-1.18	-19.34	.018	-1.25	-64.28	.018	-1.25	-64.28	.018	-5.358	-113.58	.018	-5.358	-113.58
.021	-1.21	-19.04	.021	-1.28	-64.05	.021	-1.28	-64.05	.021	-5.358	-113.58	.021	-5.358	-113.58
.024	-1.24	-18.74	.024	-1.31	-63.82	.024	-1.31	-63.82	.024	-5.358	-113.58	.024	-5.358	-113.58
.027	-1.27	-18.44	.027	-1.34	-63.59	.027	-1.34	-63.59	.027	-5.358	-113.58	.027	-5.358	-113.58
.030	-1.30	-18.14	.030	-1.37	-63.36	.030	-1.37	-63.36	.030	-5.358	-113.58	.030	-5.358	-113.58
.033	-1.33	-17.84	.033	-1.40	-63.13	.033	-1.40	-63.13	.033	-5.358	-113.58	.033	-5.358	-113.58
.036	-1.36	-17.54	.036	-1.43	-62.90	.036	-1.43	-62.90	.036	-5.358	-113.58	.036	-5.358	-113.58
.039	-1.39	-17.24	.039	-1.46	-62.67	.039	-1.46	-62.67	.039	-5.358	-113.58	.039	-5.358	-113.58
.042	-1.42	-16.94	.042	-1.49	-62.44	.042	-1.49	-62.44	.042	-5.358	-113.58	.042	-5.358	-113.58
.045	-1.45	-16.64	.045	-1.52	-62.21	.045	-1.52	-62.21	.045	-5.358	-113.58	.045	-5.358	-113.58
.048	-1.48	-16.34	.048	-1.55	-61.98	.048	-1.55	-61.98	.048	-5.358	-113.58	.048	-5.358	-113.58
.051	-1.51	-16.04	.051	-1.58	-61.75	.051	-1.58	-61.75	.051	-5.358	-113.58	.051	-5.358	-113.58
.054	-1.54	-15.74	.054	-1.61	-61.52	.054	-1.61	-61.52	.054	-5.358	-113.58	.054	-5.358	-113.58
.057	-1.57	-15.44	.057	-1.64	-61.29	.057	-1.64	-61.29	.057	-5.358	-113.58	.057	-5.358	-113.58
.060	-1.60	-15.14	.060	-1.67	-61.06	.060	-1.67	-61.06	.060	-5.358	-113.58	.060	-5.358	-113.58
.063	-1.63	-14.84	.063	-1.70	-60.83	.063	-1.70	-60.83	.063	-5.358	-113.58	.063	-5.358	-113.58
.066	-1.66	-14.54	.066	-1.73	-60.60	.066	-1.73	-60.60	.066	-5.358	-113.58	.066	-5.358	-113.58
.069	-1.69	-14.24	.069	-1.76	-60.37	.069	-1.76	-60.37	.069	-5.358	-113.58	.069	-5.358	-113.58
.072	-1.72	-13.94	.072	-1.79	-60.14	.072	-1.79	-60.14	.072	-5.358	-113.58	.072	-5.358	-113.58
.075	-1.75	-13.64	.075	-1.82	-59.91	.075	-1.82	-59.91	.075	-5.358	-113.58	.075	-5.358	-113.58
.078	-1.78	-13.34	.078	-1.85	-59.68	.078	-1.85	-59.68	.078	-5.358	-113.58	.078	-5.358	-113.58
.081	-1.81	-13.04	.081	-1.88	-59.45	.081	-1.88	-59.45	.081	-5.358	-113.58	.081	-5.358	-113.58
.084	-1.84	-12.74	.084	-1.91	-59.22	.084	-1.91	-59.22	.084	-5.358	-113.58	.084	-5.358	-113.58
.087	-1.87	-12.44	.087	-1.94	-58.99	.087	-1.94	-58.99	.087	-5.358	-113.58	.087	-5.358	-113.58
.090	-1.90	-12.14	.090	-1.97	-58.76	.090	-1.97	-58.76	.090	-5.358	-113.58	.090	-5.358	-113.58
.105	-2.05	-11.84	.105	-2.05	-58.53	.105	-2.05	-58.53	.105	-2.05	-58.53	.105	-2.05	-58.53
.120	-2.10	-11.54	.120	-2.10	-58.30	.120	-2.10	-58.30	.120	-2.10	-58.30	.120	-2.10	-58.30
.135	-2.15	-11.24	.135	-2.15	-58.07	.135	-2.15	-58.07	.135	-2.15	-58.07	.135	-2.15	-58.07
.150	-2.20	-10.94	.150	-2.20	-57.84	.150	-2.20	-57.84	.150	-2.20	-57.84	.150	-2.20	-57.84
.165	-2.25	-10.64	.165	-2.25	-57.61	.165	-2.25	-57.61	.165	-2.25	-57.61	.165	-2.25	-57.61
.180	-2.30	-10.34	.180	-2.30	-57.38	.180	-2.30	-57.38	.180	-2.30	-57.38	.180	-2.30	-57.38
.195	-2.35	-10.04	.195	-2.35	-57.15	.195	-2.35	-57.15	.195	-2.35	-57.15	.195	-2.35	-57.15
.210	-2.40	-9.74	.210	-2.40	-56.92	.210	-2.40	-56.92	.210	-2.40	-56.92	.210	-2.40	-56.92
.225	-2.45	-9.44	.225	-2.45	-56.69	.225	-2.45	-56.69	.225	-2.45	-56.69	.225	-2.45	-56.69
.240	-2.50	-9.14	.240	-2.50	-56.46	.240	-2.50	-56.46	.240	-2.50	-56.46	.240	-2.50	-56.46
.255	-2.55	-8.84	.255	-2.55	-56.23	.255	-2.55	-56.23	.255	-2.55	-56.23	.255	-2.55	-56.23
.270	-2.60	-8.54	.270	-2.60	-56.00	.270	-2.60	-56.00	.270	-2.60	-56.00	.270	-2.60	-56.00
.285	-2.65	-8.24	.285	-2.65	-55.77	.285	-2.65	-55.77	.285	-2.65	-55.77	.285	-2.65	-55.77
.300	-2.70	-7.94	.300	-2.70	-55.54	.300	-2.70	-55.54	.300	-2.70	-55.54	.300	-2.70	-55.54

Table 9. Vertical Electric Field (Sea Water), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.00	-4.57	-16.91	0.00	-1.884	-35.18	0.00	-1.994	-63.35	0.00	-5.890	-111.27	0.00	-5.890	-111.27	0.00
0.03	-5.11	-16.60	0.10	-1.029	-35.16	0.30	-2.417	-60.25	0.100	-7.020	-100.24	0.100	-7.020	-100.24	0.100
0.06	-5.54	-16.30	0.20	-1.163	-34.13	0.60	-2.777	-57.03	0.200	-7.908	-87.96	0.200	-7.908	-87.96	0.200
0.09	-5.95	-16.00	0.30	-1.285	-33.09	0.90	-3.075	-53.76	0.300	-8.307	-75.70	0.300	-8.307	-75.70	0.300
0.12	-6.34	-17.69	0.40	-1.395	-32.06	1.20	-3.313	-50.50	0.400	-8.299	-64.66	0.400	-8.299	-64.66	0.400
0.15	-6.72	-17.39	0.50	-1.496	-31.02	1.50	-3.494	-47.31	0.500	-8.024	-55.42	0.500	-8.024	-55.42	0.500
0.18	-7.08	-17.08	0.60	-1.586	-29.99	1.80	-3.625	-44.23	0.600	-7.627	-47.97	0.600	-7.627	-47.97	0.600
0.21	-7.42	-16.78	0.70	-1.666	-28.98	2.10	-3.711	-41.30	0.700	-7.183	-42.05	0.700	-7.183	-42.05	0.700
0.24	-7.75	-16.48	0.80	-1.737	-27.98	2.40	-3.759	-38.54	0.800	-6.743	-37.33	0.800	-6.743	-37.33	0.800
0.27	-8.07	-16.18	0.90	-1.799	-27.00	2.70	-3.776	-35.97	0.900	-6.329	-33.51	0.900	-6.329	-33.51	0.900
0.30	-8.37	-15.88	1.00	-1.853	-26.04	3.00	-3.767	-33.58	1.000	-5.948	-30.40	1.000	-5.948	-30.40	1.000
0.33	-8.66	-15.58	1.10	-1.900	-25.11	3.30	-3.739	-31.38	1.100	-5.603	-27.81	1.100	-5.603	-27.81	1.100
0.36	-8.94	-15.29	1.20	-1.940	-24.20	3.60	-3.695	-29.36	1.200	-5.291	-25.62	1.200	-5.291	-25.62	1.200
0.39	-9.20	-15.00	1.30	-1.974	-23.32	3.90	-3.640	-27.51	1.300	-5.011	-23.76	1.300	-5.011	-23.76	1.300
0.42	-9.45	-14.71	1.40	-2.002	-22.47	4.20	-3.578	-25.82	1.400	-4.758	-22.16	1.400	-4.758	-22.16	1.400
0.45	-9.69	-14.43	1.50	-2.025	-21.65	4.50	-3.509	-24.26	1.500	-4.530	-20.76	1.500	-4.530	-20.76	1.500
0.48	-9.92	-14.15	1.60	-2.043	-20.86	4.80	-3.438	-22.87	1.600	-4.324	-19.52	1.600	-4.324	-19.52	1.600
0.51	-1.014	-13.87	1.70	-2.057	-20.09	5.10	-3.365	-21.57	1.700	-4.136	-18.42	1.700	-4.136	-18.42	1.700
0.54	-1.035	-13.60	1.80	-2.067	-19.36	5.40	-3.281	-20.34	1.800	-3.966	-17.44	1.800	-3.966	-17.44	1.800
0.57	-1.055	-13.33	1.90	-2.073	-18.65	5.70	-3.216	-19.16	1.900	-3.810	-16.56	1.900	-3.810	-16.56	1.900
0.60	-1.074	-13.06	2.00	-2.077	-17.98	6.00	-3.146	-18.32	2.000	-3.668	-15.75	2.000	-3.668	-15.75	2.000
0.63	-1.092	-12.80	2.10	-2.078	-17.33	6.30	-3.075	-17.60	2.100	-3.538	-15.02	2.100	-3.538	-15.02	2.100
0.66	-1.110	-12.54	2.20	-2.077	-16.71	6.60	-3.007	-16.56	2.200	-3.418	-14.35	2.200	-3.418	-14.35	2.200
0.69	-1.126	-12.28	2.30	-2.074	-16.11	6.90	-2.941	-15.76	2.300	-3.307	-13.74	2.300	-3.307	-13.74	2.300
0.72	-1.142	-12.03	2.40	-2.070	-15.54	7.20	-2.877	-15.07	2.400	-3.205	-13.17	2.400	-3.205	-13.17	2.400
0.75	-1.158	-11.79	2.50	-2.063	-15.00	7.50	-2.817	-14.40	2.500	-3.111	-12.64	2.500	-3.111	-12.64	2.500
0.78	-1.172	-11.55	2.60	-2.056	-14.48	7.80	-2.756	-13.78	2.600	-3.024	-12.15	2.600	-3.024	-12.15	2.600
0.81	-1.186	-11.31	2.70	-2.048	-13.98	8.10	-2.703	-13.21	2.700	-2.943	-11.69	2.700	-2.943	-11.69	2.700
0.84	-1.200	-11.08	2.80	-2.039	-13.50	8.40	-2.650	-12.67	2.800	-2.867	-11.26	2.800	-2.867	-11.26	2.800
0.87	-1.213	-10.85	2.90	-2.029	-13.05	8.70	-2.599	-12.17	2.900	-2.797	-10.86	2.900	-2.797	-10.86	2.900
0.90	-1.225	-10.62	3.00	-2.019	-12.61	9.00	-2.551	-11.71	3.000	-2.732	-10.48	3.000	-2.732	-10.48	3.000
1.05	-1.282	-9.57	3.50	-1.965	-10.70	1.050	-2.346	-9.76	3.500	-2.465	-8.89	3.500	-2.465	-8.89	3.500
1.20	-1.331	-8.61	4.00	-1.913	-9.16	1.200	-2.191	-8.29	4.000	-2.274	-7.66	4.000	-2.274	-7.66	4.000
1.35	-1.377	-7.75	4.50	-1.870	-7.92	1.350	-2.077	-7.15	4.500	-2.137	-6.67	4.500	-2.137	-6.67	4.500
1.50	-1.421	-6.96	5.00	-1.836	-6.89	1.500	-1.996	-6.23	5.000	-2.041	-5.86	5.000	-2.041	-5.86	5.000
1.65	-1.467	-6.24	5.50	-1.814	-6.04	1.650	-1.941	-5.47	5.500	-1.976	-5.19	5.500	-1.976	-5.19	5.500
1.80	-1.514	-5.67	6.00	-1.814	-5.42	1.800	-1.910	-4.84	6.000	-1.938	-4.61	6.000	-1.938	-4.61	6.000
1.95	-1.560	-5.11	6.50	-1.821	-4.71	1.950	-1.898	-4.30	6.500	-1.920	-4.11	6.500	-1.920	-4.11	6.500
2.10	-1.602	-4.61	7.00	-1.840	-4.19	2.100	-1.903	-3.83	7.000	-1.921	-3.67	7.000	-1.921	-3.67	7.000
2.25	-1.643	-4.16	7.50	-1.870	-3.73	2.250	-1.923	-3.42	7.500	-1.938	-3.29	7.500	-1.938	-3.29	7.500
2.40	-1.683	-3.76	8.00	-1.912	-3.33	2.400	-1.956	-3.06	8.000	-1.969	-2.95	8.000	-1.969	-2.95	8.000
2.55	-1.724	-3.39	8.50	-1.965	-2.97	2.550	-2.002	-2.73	8.500	-2.013	-2.64	8.500	-2.013	-2.64	8.500
2.70	-1.765	-3.05	9.00	-2.027	-2.65	2.700	-2.059	-2.44	9.000	-2.069	-2.36	9.000	-2.069	-2.36	9.000
2.85	-1.806	-2.74	9.50	-2.100	-2.36	2.850	-2.127	-2.14	9.500	-2.136	-2.11	9.500	-2.136	-2.11	9.500
3.00	-1.847	-2.46	1.000	-2.182	-2.10	3.000	-2.206	-1.93	10.000	-2.213	-1.87	10.000	-2.213	-1.87	10.000

Table 10. Vertical Electric Field (Sea Water), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)	
0.00	-0.57	-16.70		0.00	-1.135	-33.84		0.00	-2.282	-60.96		0.00	-6.004	-108.85	
0.03	-0.702	-16.40		0.10	-1.280	-32.83		0.30	-2.705	-57.86		1.00	-7.335	-97.83	
0.06	-0.745	-16.09		0.20	-1.415	-31.80		0.60	-3.066	-54.65		2.00	-8.224	-85.55	
0.09	-0.788	-15.79		0.30	-1.538	-30.76		0.90	-3.366	-51.38		3.00	-8.627	-73.30	
0.12	-0.829	-15.49		0.40	-1.651	-29.73		1.20	-3.606	-48.13		4.00	-8.622	-62.20	
0.15	-0.870	-15.18		0.50	-1.755	-28.70		1.50	-3.791	-44.94		5.00	-8.356	-53.01	
0.18	-0.909	-14.88		0.60	-1.848	-27.67		1.80	-3.926	-41.87		6.00	-7.961	-45.56	
0.21	-0.948	-14.58		0.70	-1.933	-26.66		2.10	-4.018	-38.95		7.00	-7.522	-39.63	
0.24	-0.988	-14.28		0.80	-2.009	-25.67		2.40	-4.072	-36.19		8.00	-7.088	-34.70	
0.27	-1.023	-13.98		0.90	-2.077	-24.70		2.70	-4.095	-33.62		9.00	-6.680	-31.08	
0.30	-1.059	-13.69		1.00	-2.138	-23.74		3.00	-4.094	-31.23		1.00	-6.306	-27.95	
0.33	-1.095	-13.40		1.10	-2.193	-22.81		3.30	-4.074	-29.03		1.10	-5.968	-25.35	
0.36	-1.130	-13.10		1.20	-2.241	-21.91		3.60	-4.039	-27.01		1.20	-5.664	-23.16	
0.39	-1.164	-12.82		1.30	-2.283	-21.03		3.90	-3.994	-25.16		1.30	-5.392	-21.24	
0.42	-1.198	-12.53		1.40	-2.320	-20.18		4.20	-3.941	-23.46		1.40	-5.148	-19.68	
0.45	-1.231	-12.25		1.50	-2.353	-19.36		4.50	-3.883	-21.91		1.50	-4.924	-18.27	
0.48	-1.264	-11.97		1.60	-2.382	-18.57		4.80	-3.823	-20.44		1.60	-4.732	-17.03	
0.51	-1.297	-11.70		1.70	-2.408	-17.81		5.10	-3.761	-19.20		1.70	-4.556	-15.92	
0.54	-1.329	-11.43		1.80	-2.430	-17.08		5.40	-3.700	-18.01		1.80	-4.396	-14.93	
0.57	-1.361	-11.16		1.90	-2.449	-16.37		5.70	-3.639	-16.92		1.90	-4.252	-14.04	
0.60	-1.393	-10.89		2.00	-2.467	-15.69		6.00	-3.580	-15.92		2.00	-4.123	-13.23	
0.63	-1.424	-10.63		2.10	-2.482	-15.04		6.30	-3.524	-14.94		2.10	-4.005	-12.44	
0.66	-1.456	-10.38		2.20	-2.496	-14.42		6.60	-3.470	-14.14		2.20	-3.899	-11.81	
0.69	-1.487	-10.12		2.30	-2.508	-13.82		6.90	-3.419	-13.36		2.30	-3.803	-11.18	
0.72	-1.519	-9.87		2.40	-2.520	-13.25		7.20	-3.371	-12.63		2.40	-3.715	-10.61	
0.75	-1.550	-9.63		2.50	-2.531	-12.70		7.50	-3.326	-11.95		2.50	-3.637	-10.07	
0.78	-1.581	-9.39		2.60	-2.541	-12.17		7.80	-3.285	-11.33		2.60	-3.565	-9.57	
0.81	-1.613	-9.15		2.70	-2.550	-11.67		8.10	-3.247	-10.74		2.70	-3.501	-9.10	
0.84	-1.645	-8.92		2.80	-2.560	-11.18		8.40	-3.212	-10.19		2.80	-3.443	-8.66	
0.87	-1.676	-8.69		2.90	-2.570	-10.72		8.70	-3.180	-9.68		2.90	-3.391	-8.25	
0.90	-1.709	-8.46		3.00	-2.580	-10.28		9.00	-3.151	-9.20		3.00	-3.345	-7.87	
1.05	-1.874	-7.34		3.50	-2.635	-8.32		1.050	-3.053	-7.14		3.500	-3.182	-6.22	
1.20	-2.050	-6.41		4.00	-2.710	-6.72		1.200	-3.021	-6.66		4.000	-3.112	-4.92	
1.35	-2.224	-5.52		4.50	-2.812	-5.40		1.350	-3.008	-6.44		4.500	-3.116	-3.86	
1.50	-2.403	-4.69		5.00	-2.943	-4.29		1.500	-3.127	-5.43		5.000	-3.174	-2.97	
1.65	-2.587	-3.94		5.50	-3.107	-3.35		1.650	-3.253	-4.58		5.500	-3.244	-2.20	
1.80	-2.792	-3.24		6.00	-3.305	-2.52		1.800	-3.423	-3.83		6.000	-3.457	-1.52	
1.95	-3.013	-2.58		6.50	-3.539	-1.78		1.950	-3.636	-3.16		6.500	-3.664	-0.90	
2.10	-3.252	-1.97		7.00	-3.810	-1.11		2.100	-3.891	-2.54		7.000	-3.915	-0.32	
2.25	-3.505	-1.38		7.50	-4.119	-0.44		2.250	-4.188	-0.82		7.500	-4.204	0.23	
2.40	-4.042	-0.81		8.00	-4.464	0.04		2.400	-4.524	0.57		8.000	-4.346	0.75	
2.55	-4.655	-0.26		8.50	-4.862	0.66		2.550	-4.914	1.10		8.500	-4.430	1.28	
2.70	-5.117	0.30		9.00	-5.302	1.23		2.700	-5.348	1.64		9.000	-4.562	1.80	
2.85	-5.624	0.86		9.50	-5.793	1.80		2.850	-5.834	2.20		9.500	-4.687	2.35	
3.00	-6.185	1.45		1.000	-6.340	2.40		3.000	-6.377	2.78		10.000	-4.834	2.93	

Table 11. Vertical Electric Field (Sea Water), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UG)	PHASE (DEG)	HEIGHT (KM)	AMP (UG)	PHASE (DEG)	HEIGHT (KM)	AMP (UG)
0.000	-6.032	-109.86	0.000	-14.886	-157.32	0.000	-28.213
0.001	-6.460	-106.43	0.003	-16.150	-146.20	0.010	-30.865
0.002	-6.880	-102.82	0.006	-17.140	-132.87	0.020	-37.607
0.003	-7.211	-99.06	0.009	-17.661	-118.13	0.030	-43.931
0.004	-7.514	-95.19	0.012	-17.844	-103.51	0.040	-49.213
0.005	-7.788	-91.25	0.015	-17.884	-90.50	0.050	-53.165
0.006	-7.972	-87.26	0.018	-17.864	-79.76	0.060	-55.552
0.007	-8.163	-83.33	0.021	-17.841	-71.20	0.070	-57.237
0.008	-8.331	-79.45	0.024	-17.811	-64.42	0.080	-58.136
0.009	-8.491	-75.67	0.027	-17.820	-59.01	0.090	-58.379
0.010	-8.631	-72.03	0.030	-17.827	-54.83	0.100	-57.934
0.011	-8.754	-68.54	0.033	-17.816	-51.01	0.110	-56.662
0.012	-8.864	-65.24	0.036	-17.803	-47.97	0.120	-54.625
0.013	-8.961	-62.12	0.039	-17.784	-45.39	0.130	-51.854
0.014	-9.048	-59.19	0.042	-17.754	-43.16	0.140	-48.939
0.015	-9.129	-56.46	0.045	-17.716	-41.20	0.150	-45.472
0.016	-9.206	-53.91	0.048	-17.670	-39.48	0.160	-41.045
0.017	-9.273	-51.53	0.051	-17.616	-37.94	0.170	-36.553
0.018	-9.333	-49.33	0.054	-17.555	-36.55	0.180	-31.292
0.019	-9.387	-47.28	0.057	-17.485	-35.30	0.190	-25.950
0.020	-9.436	-45.36	0.060	-17.408	-34.15	0.200	-20.648
0.021	-9.480	-43.61	0.063	-17.324	-33.10	0.210	-15.359
0.022	-9.520	-41.97	0.066	-17.233	-32.13	0.220	-10.090
0.023	-9.557	-40.44	0.069	-17.136	-31.23	0.230	-4.836
0.024	-9.593	-39.01	0.072	-17.034	-30.39	0.240	0.400
0.025	-9.628	-37.66	0.075	-16.927	-29.61	0.250	5.600
0.026	-9.660	-36.44	0.078	-16.814	-28.87	0.260	10.750
0.027	-9.688	-35.26	0.081	-16.696	-28.18	0.270	15.840
0.028	-9.713	-34.20	0.084	-16.573	-27.53	0.280	20.860
0.029	-9.736	-33.18	0.087	-16.446	-26.92	0.290	25.810
0.030	-9.756	-32.22	0.090	-16.314	-26.34	0.300	30.690
0.035	-9.832	-28.20	0.105	-15.886	-23.82	0.350	-5.716
0.040	-9.885	-25.13	0.120	-15.112	-21.81	0.400	-10.140
0.045	-9.961	-22.72	0.135	-14.046	-20.14	0.450	-14.671
0.050	-10.010	-20.77	0.150	-12.680	-18.73	0.500	-19.283
0.055	-10.023	-19.16	0.165	-11.036	-17.52	0.550	-23.957
0.060	-10.009	-17.80	0.180	-9.061	-16.47	0.600	-28.680
0.065	-9.978	-16.64	0.195	-6.742	-15.54	0.650	-33.441
0.070	-9.932	-15.63	0.210	-4.021	-14.72	0.700	-38.234
0.075	-9.870	-14.75	0.225	-1.041	-13.98	0.750	-43.054
0.080	-9.797	-13.97	0.240	2.083	-13.32	0.800	-47.895
0.085	-9.714	-13.28	0.255	5.245	-12.72	0.850	-52.758
0.090	-9.620	-12.65	0.270	8.422	-12.17	0.900	-57.634
0.095	-9.501	-12.09	0.285	11.613	-11.67	0.950	-62.524
1.00	-9.358	-11.58	0.300	14.815	-11.21	1.000	-67.423

Table 12. Vertical Electric Field (Sea Water), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)
0.000	-6.951	-101.90	0.000	-15.857	-139.20	0.000	-29.200	-164.32	0.000	-49.463	-184.94	0.000	-74.463	-184.94	0.000
0.001	-7.384	-98.48	0.003	-17.127	-138.07	0.010	-31.851	-113.09	0.030	-34.503	-96.59	0.030	-34.503	-96.59	0.030
0.002	-7.774	-94.87	0.006	-18.113	-124.75	0.020	-38.593	-72.51	0.060	-47.724	-41.88	0.060	-47.724	-41.88	0.060
0.003	-8.131	-91.11	0.009	-18.636	-110.01	0.030	-44.917	-54.93	0.090	-54.949	-37.04	0.090	-54.949	-37.04	0.090
0.004	-8.436	-87.45	0.012	-18.622	-95.39	0.040	-52.200	-40.47	0.120	-61.474	-34.30	0.120	-61.474	-34.30	0.120
0.005	-8.692	-83.31	0.015	-18.165	-82.36	0.050	-60.152	-41.42	0.150	-69.596	-32.36	0.150	-69.596	-32.36	0.150
0.006	-8.898	-79.34	0.018	-17.447	-71.81	0.060	-68.560	-37.95	0.180	-78.106	-30.85	0.180	-78.106	-30.85	0.180
0.007	-9.054	-75.40	0.021	-16.626	-63.03	0.070	-77.226	-33.34	0.210	-86.882	-29.56	0.210	-86.882	-29.56	0.210
0.008	-9.162	-71.52	0.024	-15.798	-56.24	0.080	-86.127	-31.26	0.240	-95.851	-28.42	0.240	-95.851	-28.42	0.240
0.009	-9.229	-67.74	0.027	-15.009	-50.82	0.090	-95.188	-31.52	0.270	-104.964	-27.40	0.270	-104.964	-27.40	0.270
0.010	-9.259	-64.10	0.030	-14.278	-46.42	0.100	-104.374	-30.02	0.300	-114.190	-26.46	0.300	-114.190	-26.46	0.300
0.011	-9.257	-60.61	0.033	-13.608	-42.80	0.110	-113.659	-28.71	0.330	-123.507	-25.59	0.330	-123.507	-25.59	0.330
0.012	-9.219	-57.31	0.036	-12.998	-39.75	0.120	-123.024	-27.53	0.360	-132.899	-24.78	0.360	-132.899	-24.78	0.360
0.013	-9.140	-54.18	0.039	-12.442	-37.16	0.130	-132.456	-26.46	0.390	-142.351	-24.01	0.390	-142.351	-24.01	0.390
0.014	-9.037	-51.25	0.042	-11.935	-34.92	0.140	-141.944	-25.46	0.420	-151.856	-23.29	0.420	-151.856	-23.29	0.420
0.015	-8.911	-48.51	0.045	-11.471	-32.96	0.150	-151.479	-24.58	0.450	-161.406	-22.60	0.450	-161.406	-22.60	0.450
0.016	-8.764	-45.96	0.048	-11.046	-31.23	0.160	-161.055	-23.74	0.480	-171.044	-21.94	0.480	-171.044	-21.94	0.480
0.017	-8.605	-43.57	0.051	-10.655	-29.68	0.170	-169.667	-22.95	0.510	-180.765	-21.32	0.510	-180.765	-21.32	0.510
0.018	-8.435	-41.36	0.054	-10.295	-28.29	0.180	-178.307	-22.21	0.540	-190.566	-20.72	0.540	-190.566	-20.72	0.540
0.019	-8.251	-39.30	0.057	-9.962	-27.02	0.190	-186.979	-21.51	0.570	-200.443	-20.14	0.570	-200.443	-20.14	0.570
0.020	-8.057	-37.39	0.060	-9.654	-25.87	0.200	-195.673	-20.85	0.600	-210.399	-19.59	0.600	-210.399	-19.59	0.600
0.021	-7.854	-35.61	0.063	-9.367	-24.81	0.210	-204.389	-20.22	0.630	-220.422	-19.06	0.630	-220.422	-19.06	0.630
0.022	-7.640	-33.96	0.066	-9.100	-23.84	0.220	-213.124	-19.62	0.660	-230.506	-18.55	0.660	-230.506	-18.55	0.660
0.023	-7.408	-32.42	0.069	-8.850	-22.93	0.230	-221.876	-19.06	0.690	-240.659	-18.06	0.690	-240.659	-18.06	0.690
0.024	-7.170	-30.99	0.072	-8.617	-22.06	0.240	-230.645	-18.51	0.720	-250.830	-17.59	0.720	-250.830	-17.59	0.720
0.025	-6.926	-29.65	0.075	-8.398	-21.30	0.250	-239.827	-17.99	0.750	-261.010	-17.13	0.750	-261.010	-17.13	0.750
0.026	-6.674	-28.40	0.078	-8.193	-20.56	0.260	-249.223	-17.49	0.780	-271.204	-16.69	0.780	-271.204	-16.69	0.780
0.027	-6.416	-27.23	0.081	-7.999	-19.86	0.270	-258.631	-17.01	0.810	-281.404	-16.26	0.810	-281.404	-16.26	0.810
0.028	-6.152	-26.13	0.084	-7.816	-19.20	0.280	-268.146	-16.55	0.840	-291.614	-15.85	0.840	-291.614	-15.85	0.840
0.029	-5.881	-25.10	0.087	-7.646	-18.58	0.290	-277.678	-16.11	0.870	-301.834	-15.45	0.870	-301.834	-15.45	0.870
0.030	-5.605	-24.13	0.090	-7.484	-17.99	0.300	-287.517	-15.68	0.900	-312.066	-15.06	0.900	-312.066	-15.06	0.900
0.035	-5.424	-20.06	0.105	-6.793	-15.45	0.350	-261.826	-13.75	1.050	-281.826	-13.29	1.050	-281.826	-13.29	1.050
0.040	-5.194	-16.94	0.120	-6.258	-13.40	0.400	-241.289	-12.11	1.200	-261.289	-11.75	1.200	-261.289	-11.75	1.200
0.045	-5.030	-14.40	0.135	-5.836	-11.89	0.450	-221.865	-10.64	1.350	-241.865	-10.41	1.350	-241.865	-10.41	1.350
0.050	-4.934	-12.47	0.150	-5.501	-10.24	0.500	-203.250	-9.44	1.500	-223.250	-9.21	1.500	-223.250	-9.21	1.500
0.055	-4.913	-9.39	0.165	-5.242	-8.99	0.550	-185.250	-8.33	1.650	-205.250	-8.15	1.650	-205.250	-8.15	1.650
0.060	-4.913	-6.39	0.180	-5.017	-7.89	0.600	-167.867	-7.35	1.800	-187.867	-7.19	1.800	-187.867	-7.19	1.800
0.065	-4.900	-3.37	0.195	-4.814	-6.91	0.650	-151.003	-6.45	1.950	-171.003	-6.33	1.950	-171.003	-6.33	1.950
0.070	-4.840	-0.30	0.210	-4.613	-6.03	0.700	-134.669	-5.64	2.100	-154.669	-5.54	2.100	-154.669	-5.54	2.100
0.075	-4.740	-2.31	0.225	-4.413	-5.23	0.750	-118.629	-4.90	2.250	-138.629	-4.81	2.250	-138.629	-4.81	2.250
0.080	-4.603	-5.31	0.240	-4.213	-4.51	0.800	-102.890	-4.22	2.400	-122.890	-4.74	2.400	-122.890	-4.74	2.400
0.085	-4.440	-8.34	0.255	-4.013	-3.84	0.850	-87.474	-3.59	2.550	-107.474	-4.71	2.550	-107.474	-4.71	2.550
0.090	-4.240	-11.34	0.270	-3.816	-3.22	0.900	-72.462	-3.00	2.700	-92.462	-4.77	2.700	-92.462	-4.77	2.700
0.095	-4.014	-14.39	0.285	-3.614	-2.64	0.950	-57.465	-2.44	2.850	-77.465	-4.86	2.850	-77.465	-4.86	2.850
0.100	-3.760	-17.45	0.300	-3.403	-2.10	1.000	-42.474	-1.92	3.000	-62.474	-4.97	3.000	-62.474	-4.97	3.000

Table 13. Vertical Electric Field (Sea Water), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
MEI (mT)	AMP (DB)	PHASE (DEG)		MEI (mT)	AMP (DB)	PHASE (DEG)		MEI (mT)	AMP (DB)	PHASE (DEG)		MEI (mT)	AMP (DB)	PHASE (DEG)	
0.000	-7.046	-93.25		0.000	-16.094	-139.80		0.000	-30.061	-154.15		0.000	-40.316	-156.60	
0.001	-6.060	-84.82		0.003	-17.966	-126.68		0.010	-32.714	-144.92		0.030	-35.355	-146.25	
0.002	-6.477	-80.22		0.006	-18.956	-115.36		0.020	-34.455	-142.32		0.060	-38.577	-141.54	
0.003	-6.031	-82.47		0.009	-19.486	-106.01		0.030	-35.774	-144.73		0.090	-44.053	-140.69	
0.004	-5.141	-78.61		0.012	-19.481	-95.95		0.040	-36.064	-138.27		0.120	-42.335	-142.95	
0.005	-5.403	-74.66		0.015	-19.036	-82.08		0.050	-36.101	-131.21		0.150	-20.455	-122.02	
0.006	-5.010	-70.73		0.018	-18.320	-62.08		0.060	-19.404	-27.73		0.180	-18.969	-20.48	
0.007	-5.181	-60.74		0.021	-17.504	-53.45		0.070	-18.099	-25.11		0.210	-17.747	-19.18	
0.008	-5.700	-62.91		0.024	-16.681	-46.61		0.080	-17.004	-23.01		0.240	-16.723	-18.04	
0.009	-5.975	-59.13		0.027	-15.898	-41.15		0.090	-16.070	-21.26		0.270	-15.841	-17.00	
0.010	-10.011	-53.48		0.030	-15.173	-36.71		0.100	-15.262	-19.75		0.300	-15.074	-16.05	
0.011	-10.012	-51.98		0.033	-14.509	-33.04		0.110	-14.553	-18.41		0.330	-14.397	-15.17	
0.012	-9.784	-48.66		0.036	-13.905	-29.46		0.120	-13.925	-17.22		0.360	-13.796	-14.34	
0.013	-9.730	-45.51		0.039	-13.357	-27.33		0.130	-13.365	-16.13		0.390	-13.657	-13.56	
0.014	-9.850	-42.55		0.042	-12.858	-25.08		0.140	-12.861	-15.13		0.420	-12.770	-12.81	
0.015	-9.768	-39.78		0.045	-12.403	-23.06		0.150	-12.405	-14.21		0.450	-12.329	-11.41	
0.016	-9.884	-37.19		0.048	-11.988	-21.30		0.160	-11.992	-13.34		0.480	-11.927	-11.43	
0.017	-9.552	-34.77		0.051	-11.508	-19.72		0.170	-11.614	-12.53		0.510	-11.559	-10.78	
0.018	-9.434	-32.51		0.054	-11.059	-18.29		0.180	-11.268	-11.77		0.540	-11.222	-10.16	
0.019	-9.313	-30.41		0.057	-10.637	-16.99		0.190	-10.950	-11.04		0.570	-10.911	-9.56	
0.020	-9.189	-28.45		0.060	-10.241	-15.80		0.200	-10.657	-10.36		0.600	-10.623	-8.99	
0.021	-9.065	-26.62		0.063	-10.368	-14.70		0.210	-10.388	-9.70		0.630	-10.358	-8.43	
0.022	-8.946	-24.92		0.066	-10.115	-13.69		0.220	-10.135	-9.07		0.660	-10.111	-7.89	
0.023	-8.821	-23.33		0.069	-9.880	-12.74		0.230	-9.902	-8.47		0.690	-9.882	-7.37	
0.024	-8.693	-21.84		0.072	-9.662	-11.86		0.240	-9.686	-7.90		0.720	-9.669	-6.87	
0.025	-8.567	-20.45		0.075	-9.459	-11.03		0.250	-9.485	-7.34		0.750	-9.471	-6.38	
0.026	-8.446	-19.14		0.078	-9.270	-10.25		0.260	-9.298	-6.81		0.780	-9.256	-5.90	
0.027	-8.368	-17.92		0.081	-9.095	-9.51		0.270	-9.123	-6.29		0.810	-9.114	-5.44	
0.028	-8.265	-16.76		0.084	-8.931	-8.81		0.280	-8.960	-5.79		0.840	-8.953	-4.99	
0.029	-8.168	-15.68		0.087	-8.779	-8.15		0.290	-8.808	-5.31		0.870	-8.802	-4.55	
0.030	-8.071	-14.65		0.090	-8.636	-7.51		0.300	-8.666	-4.84		0.900	-8.662	-4.13	
0.035	-7.685	-10.27		0.105	-8.056	-4.72		0.350	-8.085	-2.64		1.050	-8.080	-2.14	
0.040	-7.386	-6.82		0.120	-7.649	-2.36		0.400	-7.677	-1.78		1.200	-7.680	-1.34	
0.045	-7.162	-3.99		0.135	-7.376	-1.35		0.450	-7.402	-0.95		1.350	-7.405	-1.31	
0.050	-7.043	-1.58		0.150	-7.209	1.47		0.500	-7.232	2.55		1.500	-7.236	2.86	
0.055	-7.000	0.54		0.165	-7.131	3.14		0.550	-7.151	4.07		1.650	-7.155	4.35	
0.060	-7.024	2.46		0.180	-7.130	4.73		0.600	-7.146	5.53		1.800	-7.151	5.76	
0.065	-7.112	4.24		0.195	-7.198	6.26		0.650	-7.213	6.97		1.950	-7.216	7.11	
0.070	-7.259	5.96		0.210	-7.324	7.77		0.700	-7.342	8.47		2.100	-7.344	8.59	
0.075	-7.463	7.64		0.225	-7.520	9.29		0.750	-7.530	9.87		2.250	-7.532	10.04	
0.080	-7.724	9.33		0.240	-7.770	10.85		0.800	-7.777	11.34		2.400	-7.779	11.54	
0.085	-8.040	11.07		0.255	-8.076	12.49		0.850	-8.082	13.00		2.550	-8.083	13.14	
0.090	-8.414	12.90		0.270	-8.441	14.24		0.900	-8.444	14.72		2.700	-8.444	14.85	
0.095	-8.847	14.86		0.285	-8.868	16.15		0.950	-8.866	16.80		2.850	-8.866	16.73	
0.100	-9.341	17.01		0.300	-9.351	18.25		1.000	-9.349	18.69		3.000	-9.349	18.61	

Table 14. Radial Electric Field (Sea Water), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UG)	PHASE (DEG)		HEIGHT (KM)	AMP (UG)	PHASE (DEG)		HEIGHT (KM)	AMP (UG)	PHASE (DEG)	
0.000	-58.565	4.46		0.000	-58.565	-89.004		0.000	-58.566	4.46	
0.030	-61.526	-74.27		0.100	-61.625	-74.09		0.300	-61.787	-80.35	
0.060	-58.954	-35.46		0.200	-57.021	-35.39		0.600	-57.127	-35.21	
0.090	-52.733	-20.92		0.300	-52.770	-20.79		1.000	-52.827	-20.58	
0.120	-49.730	-14.64		0.400	-49.754	-14.53		1.500	-49.789	-14.34	
0.150	-47.458	-11.22		0.500	-47.475	-11.13		1.800	-47.501	-10.98	
0.180	-45.844	-9.08		0.600	-45.857	-9.00		1.900	-45.676	-8.89	
0.210	-44.137	-7.63		0.700	-44.147	-7.56		2.100	-44.162	-7.45	
0.240	-42.849	-6.57		0.800	-42.858	-6.51		2.400	-42.870	-6.42	
0.270	-41.727	-5.77		0.900	-41.734	-5.72		2.700	-41.744	-5.63	
0.300	-40.751	-5.14		1.000	-40.738	-5.10		3.000	-40.746	-5.02	
0.330	-39.838	-4.64		1.100	-39.843	-4.60		3.300	-39.850	-4.53	
0.360	-39.027	-4.23		1.200	-39.032	-4.19		3.600	-39.038	-4.13	
0.390	-38.286	-3.88		1.300	-38.290	-3.84		3.900	-38.295	-3.79	
0.420	-37.602	-3.59		1.400	-37.606	-3.55		4.200	-37.611	-3.50	
0.450	-36.969	-3.33		1.500	-36.972	-3.30		4.500	-36.976	-3.26	
0.480	-36.376	-3.11		1.600	-36.381	-3.08		4.800	-36.385	-3.04	
0.510	-35.825	-2.92		1.700	-35.828	-2.89		5.100	-35.831	-2.85	
0.540	-35.305	-2.75		1.800	-35.308	-2.73		5.400	-35.310	-2.69	
0.570	-34.815	-2.60		1.900	-34.817	-2.58		5.700	-34.819	-2.54	
0.600	-34.350	-2.46		2.000	-34.353	-2.44		6.000	-34.355	-2.41	
0.630	-33.910	-2.34		2.100	-33.912	-2.42		6.300	-33.913	-2.29	
0.660	-33.490	-2.23		2.200	-33.492	-2.41		6.600	-33.494	-2.18	
0.690	-33.090	-2.13		2.300	-33.092	-2.11		6.900	-33.093	-2.09	
0.720	-32.700	-2.04		2.400	-32.710	-2.02		7.200	-32.711	-2.00	
0.750	-32.342	-1.96		2.500	-32.343	-1.94		7.500	-32.344	-1.91	
0.780	-31.991	-1.88		2.600	-31.992	-1.86		7.800	-31.993	-1.84	
0.810	-31.653	-1.81		2.700	-31.654	-1.79		8.100	-31.655	-1.77	
0.840	-31.328	-1.74		2.800	-31.329	-1.72		8.400	-31.330	-1.70	
0.870	-31.015	-1.68		2.900	-31.016	-1.66		8.700	-31.017	-1.64	
0.900	-30.713	-1.62		3.000	-30.714	-1.61		9.000	-30.715	-1.59	
1.050	-29.344	-1.38		3.500	-29.344	-1.37		10.500	-29.344	-1.36	
1.200	-28.102	-1.21		4.000	-28.103	-1.20		12.000	-28.103	-1.19	
1.350	-27.025	-1.07		4.500	-27.125	-1.06		13.500	-27.125	-1.05	
1.500	-26.199	-0.96		5.000	-26.200	-0.96		15.000	-26.199	-0.95	
1.650	-25.585	-0.87		5.500	-25.585	-0.87		16.500	-25.585	-0.86	
1.800	-24.806	-0.80		6.000	-24.806	-0.80		18.000	-24.806	-0.79	
1.950	-23.909	-0.74		6.500	-23.909	-0.73		19.500	-23.909	-0.73	
2.100	-23.000	-0.69		7.000	-23.000	-0.68		21.000	-23.000	-0.68	
2.250	-22.089	-0.64		7.500	-22.089	-0.64		22.500	-22.089	-0.63	
2.400	-21.173	-0.60		8.000	-21.173	-0.60		24.000	-21.173	-0.59	
2.550	-20.251	-0.56		8.500	-20.251	-0.56		25.500	-20.251	-0.56	
2.700	-19.320	-0.53		9.000	-19.320	-0.53		27.000	-19.320	-0.53	
2.850	-18.384	-0.50		9.500	-18.384	-0.50		28.500	-18.384	-0.50	
3.000	-17.443	-0.47		10.000	-17.443	-0.47		30.000	-17.443	-0.47	

Table 15. Radial Electric Field (Sea Water), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-58.561	30.54		0.000	-58.569	178.15		0.000	-58.595	93.65	
0.030	-58.535	-63.60		0.100	-60.622	-74.77		0.300	-61.453	-78.56	
0.060	-54.472	-34.04		0.200	-56.291	-35.71		0.600	-56.908	-35.32	
0.090	-51.024	-22.05		0.300	-52.342	-21.65		0.900	-52.717	-20.81	
0.120	-48.420	-16.11		0.400	-49.465	-15.30		1.200	-49.725	-14.51	
0.150	-46.376	-12.63		0.500	-47.261	-11.76		1.500	-47.465	-11.08	
0.180	-44.767	-10.37		0.600	-45.468	-9.53		1.800	-45.655	-8.94	
0.210	-43.299	-8.75		0.700	-44.010	-7.94		2.100	-44.153	-7.47	
0.240	-42.004	-7.61		0.800	-42.744	-6.87		2.400	-42.865	-6.41	
0.270	-41.017	-6.71		0.900	-41.637	-6.02		2.700	-41.749	-5.61	
0.300	-40.060	-5.99		1.000	-40.655	-5.35		3.000	-40.757	-4.97	
0.330	-39.209	-5.41		1.100	-39.772	-4.81		3.300	-39.867	-4.47	
0.360	-38.427	-4.93		1.200	-38.971	-4.37		3.600	-39.059	-4.05	
0.390	-37.711	-4.53		1.300	-38.218	-4.00		3.900	-38.321	-3.70	
0.420	-37.050	-4.18		1.400	-37.562	-3.68		4.200	-37.641	-3.40	
0.450	-36.430	-3.89		1.500	-36.936	-3.41		4.500	-37.010	-3.15	
0.480	-35.862	-3.63		1.600	-36.352	-3.17		4.800	-36.423	-2.93	
0.510	-35.325	-3.40		1.700	-35.805	-2.97		5.100	-35.874	-2.74	
0.540	-34.820	-3.20		1.800	-35.292	-2.78		5.400	-35.358	-2.56	
0.570	-34.342	-3.02		1.900	-34.807	-2.62		5.700	-34.871	-2.41	
0.600	-33.891	-2.86		2.000	-34.349	-2.47		6.000	-34.411	-2.28	
0.630	-33.462	-2.71		2.100	-33.914	-2.34		6.300	-33.974	-2.15	
0.660	-33.054	-2.58		2.200	-33.501	-2.22		6.600	-33.560	-2.04	
0.690	-32.664	-2.46		2.300	-33.107	-2.11		6.900	-33.164	-1.94	
0.720	-32.292	-2.35		2.400	-32.731	-2.01		7.200	-32.787	-1.85	
0.750	-31.936	-2.25		2.500	-32.371	-1.92		7.500	-32.425	-1.76	
0.780	-31.595	-2.15		2.600	-32.026	-1.84		7.800	-32.079	-1.68	
0.810	-31.267	-2.07		2.700	-31.695	-1.76		8.100	-31.747	-1.61	
0.840	-30.951	-1.99		2.800	-31.376	-1.69		8.400	-31.428	-1.55	
0.870	-30.648	-1.91		2.900	-31.070	-1.62		8.700	-31.120	-1.48	
0.900	-30.355	-1.84		3.000	-30.774	-1.56		9.000	-30.824	-1.42	
1.050	-29.030	-1.50		3.500	-29.440	-1.30		10.500	-29.487	-1.19	
1.200	-27.895	-1.34		4.000	-28.296	-1.11		12.000	-28.343	-1.01	
1.350	-26.906	-1.18		4.500	-27.304	-0.96		13.500	-27.347	-0.87	
1.500	-26.031	-1.04		5.000	-26.427	-0.84		15.000	-26.469	-0.76	
1.650	-25.252	-0.93		5.500	-25.645	-0.75		16.500	-25.686	-0.67	
1.800	-24.550	-0.84		6.000	-24.943	-0.67		18.000	-24.984	-0.59	
1.950	-23.916	-0.77		6.500	-24.309	-0.60		19.500	-24.349	-0.53	
2.100	-23.344	-0.70		7.000	-23.734	-0.54		21.000	-23.773	-0.48	
2.250	-22.814	-0.65		7.500	-23.209	-0.49		22.500	-23.269	-0.43	
2.400	-22.334	-0.60		8.000	-22.731	-0.44		24.000	-22.770	-0.39	
2.550	-21.893	-0.55		8.500	-22.292	-0.41		25.500	-22.332	-0.35	
2.700	-21.486	-0.51		9.000	-21.891	-0.37		27.000	-21.930	-0.32	
2.850	-21.117	-0.48		9.500	-21.523	-0.34		28.500	-21.563	-0.29	
3.000	-20.775	-0.45		10.000	-21.186	-0.31		30.000	-21.225	-0.26	

Table 16. Radial Electric Field, Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM UOMRANGE				100.0 KM UOMRANGE				300.0 KM UOMRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-56.493	-80	0.000	-56.295	-100.76	0.000	-56.614	-83	0.000	-56.614	-83
0.030	-53.644	-31.70	0.100	-56.112	-80.31	0.300	-56.463	-73.54	0.600	-56.151	-35.40
0.060	-48.518	-16.20	0.200	-53.982	-32.53	0.900	-52.251	-21.52	1.200	-44.400	-15.20
0.090	-43.414	-1.64	0.300	-50.586	-21.24	1.500	-47.213	-11.67	1.800	-45.456	-9.43
0.120	-41.100	-7.81	0.400	-48.024	-12.24	1.800	-45.456	-9.43	2.100	-42.983	-7.88
0.150	-41.100	-7.81	0.500	-46.011	-10.05	2.100	-42.983	-7.88	2.400	-42.726	-6.76
0.180	-39.744	-6.56	0.600	-44.363	-8.52	2.400	-42.726	-6.76	2.700	-40.653	-5.23
0.210	-38.451	-5.85	0.700	-42.973	-7.37	2.700	-40.653	-5.23	3.000	-39.774	-4.68
0.240	-37.324	-4.97	0.800	-41.713	-6.30	3.000	-39.774	-4.68	3.300	-38.986	-4.24
0.270	-36.320	-4.43	0.900	-40.718	-5.43	3.300	-38.986	-4.24	3.600	-38.261	-3.86
0.300	-35.435	-4.00	1.000	-39.776	-4.76	3.600	-38.261	-3.86	3.900	-37.595	-3.54
0.330	-34.620	-3.65	1.100	-38.931	-4.31	3.900	-37.595	-3.54	4.200	-36.976	-3.27
0.360	-33.867	-3.35	1.200	-38.161	-4.03	4.200	-36.976	-3.27	4.500	-36.404	-3.03
0.390	-33.207	-3.10	1.300	-37.455	-3.74	4.500	-36.404	-3.03	4.800	-35.868	-2.82
0.420	-32.578	-2.86	1.400	-36.804	-3.48	4.800	-35.868	-2.82	5.100	-35.365	-2.64
0.450	-31.972	-2.70	1.500	-36.200	-3.26	5.100	-35.365	-2.64	5.400	-34.892	-2.47
0.480	-31.445	-2.53	1.600	-35.637	-3.06	5.400	-34.892	-2.47	5.700	-34.446	-2.32
0.510	-30.931	-2.39	1.700	-35.111	-2.88	5.700	-34.446	-2.32	6.000	-34.023	-2.19
0.540	-30.440	-2.26	1.800	-34.617	-2.69	6.000	-34.023	-2.19	6.300	-33.623	-2.07
0.570	-29.959	-2.14	1.900	-34.151	-2.53	6.300	-33.623	-2.07	6.600	-33.243	-1.94
0.600	-29.500	-2.04	2.000	-33.711	-2.37	6.600	-33.243	-1.94	6.900	-32.881	-1.86
0.630	-29.047	-1.94	2.100	-33.294	-2.23	6.900	-32.881	-1.86	7.200	-32.535	-1.77
0.660	-28.750	-1.86	2.200	-32.899	-2.13	7.200	-32.535	-1.77	7.500	-32.206	-1.68
0.690	-28.363	-1.76	2.300	-32.522	-2.03	7.500	-32.206	-1.68	7.800	-31.890	-1.60
0.720	-28.027	-1.70	2.400	-32.164	-1.95	7.800	-31.890	-1.60	8.100	-31.588	-1.53
0.750	-27.666	-1.64	2.500	-31.822	-1.87	8.100	-31.588	-1.53	8.400	-31.299	-1.46
0.780	-27.304	-1.58	2.600	-31.494	-1.80	8.400	-31.299	-1.46	8.700	-31.021	-1.40
0.810	-27.049	-1.52	2.700	-31.181	-1.67	8.700	-31.021	-1.40	9.000	-30.754	-1.34
0.840	-26.745	-1.47	2.800	-30.881	-1.50	9.000	-30.754	-1.34	9.300	-30.494	-1.28
0.870	-26.455	-1.42	2.900	-30.593	-1.37	9.300	-30.494	-1.28	9.600	-30.246	-1.22
0.900	-26.176	-1.37	3.000	-30.317	-1.23	9.600	-30.246	-1.22	9.900	-30.000	-1.17
1.050	-24.940	-1.18	3.200	-29.822	-1.05	10.500	-29.785	-1.14	10.500	-29.785	-1.14
1.100	-24.653	-1.13	3.400	-29.350	-0.83	11.000	-29.350	-0.83	11.000	-29.350	-0.83
1.150	-24.353	-1.03	3.600	-28.899	-0.59	11.500	-28.899	-0.59	11.500	-28.899	-0.59
1.200	-24.044	-0.93	3.800	-28.466	-0.33	12.000	-28.466	-0.33	12.000	-28.466	-0.33
1.250	-23.727	-0.84	4.000	-28.044	-0.07	12.500	-28.044	-0.07	12.500	-28.044	-0.07
1.300	-23.404	-0.76	4.200	-27.634	0.20	13.000	-27.634	0.20	13.000	-27.634	0.20
1.350	-23.077	-0.68	4.400	-27.234	0.43	13.500	-27.234	0.43	13.500	-27.234	0.43
1.400	-22.747	-0.60	4.600	-26.844	0.67	14.000	-26.844	0.67	14.000	-26.844	0.67
1.450	-22.414	-0.52	4.800	-26.466	0.91	14.500	-26.466	0.91	14.500	-26.466	0.91
1.500	-22.079	-0.44	5.000	-26.100	1.14	15.000	-26.100	1.14	15.000	-26.100	1.14
1.550	-21.742	-0.36	5.200	-25.744	1.37	15.500	-25.744	1.37	15.500	-25.744	1.37
1.600	-21.404	-0.28	5.400	-25.399	1.60	16.000	-25.399	1.60	16.000	-25.399	1.60
1.650	-21.067	-0.20	5.600	-25.066	1.83	16.500	-25.066	1.83	16.500	-25.066	1.83
1.700	-20.729	-0.12	5.800	-24.744	2.06	17.000	-24.744	2.06	17.000	-24.744	2.06
1.750	-20.392	-0.04	6.000	-24.434	2.29	17.500	-24.434	2.29	17.500	-24.434	2.29
1.800	-20.055	0.04	6.200	-24.134	2.53	18.000	-24.134	2.53	18.000	-24.134	2.53
1.850	-19.718	0.12	6.400	-23.844	2.76	18.500	-23.844	2.76	18.500	-23.844	2.76
1.900	-19.381	0.20	6.600	-23.566	2.99	19.000	-23.566	2.99	19.000	-23.566	2.99
1.950	-19.044	0.28	6.800	-23.299	3.22	19.500	-23.299	3.22	19.500	-23.299	3.22
2.000	-18.707	0.36	7.000	-23.044	3.45	20.000	-23.044	3.45	20.000	-23.044	3.45
2.050	-18.370	0.44	7.200	-22.799	3.68	20.500	-22.799	3.68	20.500	-22.799	3.68
2.100	-18.033	0.52	7.400	-22.566	3.91	21.000	-22.566	3.91	21.000	-22.566	3.91
2.150	-17.696	0.60	7.600	-22.344	4.14	21.500	-22.344	4.14	21.500	-22.344	4.14
2.200	-17.359	0.68	7.800	-22.134	4.37	22.000	-22.134	4.37	22.000	-22.134	4.37
2.250	-17.022	0.76	8.000	-21.934	4.60	22.500	-21.934	4.60	22.500	-21.934	4.60
2.300	-16.685	0.84	8.200	-21.744	4.83	23.000	-21.744	4.83	23.000	-21.744	4.83
2.350	-16.348	0.92	8.400	-21.566	5.06	23.500	-21.566	5.06	23.500	-21.566	5.06
2.400	-16.011	1.00	8.600	-21.399	5.29	24.000	-21.399	5.29	24.000	-21.399	5.29
2.450	-15.674	1.08	8.800	-21.244	5.52	24.500	-21.244	5.52	24.500	-21.244	5.52
2.500	-15.337	1.16	9.000	-21.099	5.75	25.000	-21.099	5.75	25.000	-21.099	5.75
2.550	-15.000	1.24	9.200	-20.966	5.98	25.500	-20.966	5.98	25.500	-20.966	5.98
2.600	-14.663	1.32	9.400	-20.844	6.21	26.000	-20.844	6.21	26.000	-20.844	6.21
2.650	-14.326	1.40	9.600	-20.734	6.44	26.500	-20.734	6.44	26.500	-20.734	6.44
2.700	-13.989	1.48	9.800	-20.634	6.67	27.000	-20.634	6.67	27.000	-20.634	6.67
2.750	-13.652	1.56	10.000	-20.544	6.90	27.500	-20.544	6.90	27.500	-20.544	6.90
2.800	-13.315	1.64									
2.850	-12.978	1.72									
2.900	-12.641	1.80									
2.950	-12.304	1.88									
3.000	-11.967	1.96									

Table 17. Radial Electric Field (Sea Water), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM UPHRADE				10.0 KM UPHRADE				30.0 KM UPHRADE				100.0 KM UPHRADE			
MEIUNT	AMP	PHASE		MEIUNT	AMP	PHASE		MEIUNT	AMP	PHASE		MEIUNT	AMP	PHASE	
(RM)	(DB)	(DEG)		(RM)	(DB)	(DEG)		(RM)	(DB)	(DEG)		(RM)	(DB)	(DEG)	
0.00	-60.571	39.50		0.00	-60.571	39.50		0.00	-60.566	-1.0		0.00	-60.620	144.01	
0.03	-50.531	-124.30		0.03	-50.531	-124.30		0.03	-50.564	-124.71		0.03	-50.751	-135.01	
0.06	-51.500	-100.10		0.06	-51.771	-100.10		0.06	-52.114	-111.46		0.06	-52.038	-117.04	
0.09	-51.500	-83.97		0.09	-52.185	-83.96		0.09	-52.724	-87.44		0.09	-53.071	-91.14	
0.12	-50.400	-63.46		0.12	-51.271	-63.44		0.12	-51.826	-64.30		0.12	-52.924	-66.14	
0.15	-44.306	-37.00		0.15	-44.810	-37.00		0.15	-50.076	-47.52		0.15	-50.000	-55.52	
0.18	-7.003	-37.00		0.18	-47.813	-37.00		0.18	-6.000	-30.52		0.18	-48.740	-34.13	
0.21	-46.070	-30.70		0.21	-46.742	-30.62		0.21	-44.842	-30.52		0.21	-46.050	-20.94	
0.24	-44.057	-24.04		0.24	-44.742	-24.04		0.24	-44.980	-24.20		0.24	-45.230	-22.22	
0.27	-33.394	-22.00		0.27	-44.354	-18.76		0.27	-42.871	-20.64		0.27	-44.016	-18.86	
0.30	-42.630	-14.23		0.30	-44.354	-16.76		0.30	-42.871	-17.94		0.30	-44.507	-18.41	
0.33	-31.627	-7.15		0.33	-41.334	-10.92		0.33	-41.830	-13.94		0.33	-44.507	-14.51	
0.36	-40.343	-15.30		0.36	-40.108	-14.91		0.36	-40.880	-16.24		0.36	-44.507	-13.01	
0.39	-34.504	-13.87		0.39	-39.506	-13.30		0.39	-39.633	-14.90		0.39	-39.633	-11.81	
0.42	-30.744	-12.60		0.42	-38.744	-12.34		0.42	-38.951	-11.70		0.42	-38.947	-10.01	
0.45	-30.034	-11.00		0.45	-38.003	-11.36		0.45	-37.135	-10.04		0.45	-38.000	-9.97	
0.48	-37.303	-10.02		0.48	-37.024	-10.32		0.48	-37.005	-10.05		0.48	-37.441	-9.25	
0.51	-30.773	-10.00		0.51	-36.010	-9.00		0.51	-36.046	-9.36		0.51	-36.004	-8.65	
0.54	-36.067	-9.43		0.54	-35.035	-9.17		0.54	-36.000	-8.62		0.54	-36.074	-8.12	
0.57	-35.067	-8.86		0.57	-35.046	-8.61		0.57	-35.722	-8.23		0.57	-35.731	-7.60	
0.60	-35.161	-8.30		0.60	-35.167	-8.12		0.60	-35.210	-7.77		0.60	-35.215	-7.24	
0.63	-34.062	-7.81		0.63	-34.700	-7.08		0.63	-34.700	-7.35		0.63	-34.728	-6.87	
0.66	-34.062	-7.30		0.66	-34.250	-6.74		0.66	-34.260	-6.96		0.66	-34.260	-6.34	
0.69	-33.757	-7.13		0.69	-33.816	-6.93		0.69	-33.836	-6.64		0.69	-33.830	-6.04	
0.72	-33.303	-6.50		0.72	-33.004	-6.61		0.72	-33.617	-6.34		0.72	-33.613	-5.71	
0.75	-32.890	-6.00		0.75	-33.004	-6.30		0.75	-33.000	-6.06		0.75	-33.010	-5.73	
0.78	-32.810	-5.50		0.78	-32.831	-5.05		0.78	-32.841	-5.01		0.78	-32.830	-5.20	
0.81	-31.620	-5.07		0.81	-32.854	-5.00		0.81	-32.870	-5.00		0.81	-32.870	-5.20	
0.84	-31.304	-5.74		0.84	-31.922	-5.36		0.84	-31.924	-5.36		0.84	-31.923	-5.10	
0.87	-31.370	-5.52		0.87	-31.506	-5.37		0.87	-31.594	-5.16		0.87	-31.590	-4.92	
0.90	-31.030	-5.32		0.90	-31.066	-5.17		0.90	-31.272	-4.98		0.90	-31.054	-4.70	
1.05	-24.000	-4.50		1.05	-24.015	-4.38		1.05	-24.017	-4.23		1.05	-24.004	-4.00	
1.20	-20.200	-3.50		1.20	-20.273	-3.30		1.20	-20.574	-3.64		1.20	-20.500	-3.20	
1.35	-17.000	-3.44		1.35	-17.000	-3.36		1.35	-17.007	-3.27		1.35	-17.000	-3.10	
1.50	-10.200	-3.10		1.50	-10.200	-3.01		1.50	-10.204	-2.94		1.50	-10.200	-2.60	
1.65	-09.000	-2.74		1.65	-09.000	-2.73		1.65	-09.004	-2.66		1.65	-09.000	-2.40	
1.80	-04.070	-2.55		1.80	-04.070	-2.44		1.80	-04.074	-2.44		1.80	-04.070	-2.20	
1.95	-03.157	-2.33		1.95	-03.150	-2.30		1.95	-03.156	-2.26		1.95	-03.152	-2.00	
2.10	-03.000	-2.17		2.10	-03.000	-2.13		2.10	-03.000	-2.09		2.10	-03.000	-1.80	
2.25	-02.000	-2.00		2.25	-02.000	-1.99		2.25	-02.000	-1.94		2.25	-02.000	-1.60	
2.40	-02.000	-1.90		2.40	-02.000	-1.88		2.40	-02.000	-1.84		2.40	-02.000	-1.50	
2.55	-01.701	-1.70		2.55	-01.701	-1.68		2.55	-01.701	-1.64		2.55	-01.701	-1.30	
2.70	-01.000	-1.50		2.70	-01.000	-1.46		2.70	-01.000	-1.44		2.70	-01.000	-1.10	
2.85	-00.604	-1.30		2.85	-00.604	-1.27		2.85	-00.604	-1.26		2.85	-00.604	-0.80	
3.00	-00.300	-1.10		3.00	-00.300	-1.07		3.00	-00.301	-1.06		3.00	-00.300	-0.50	

Table 18. Radial Electric Field (Sea Water), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)
0.000	-48.649	-150.45	0.000	-48.649	-94.06	0.000	-48.673	-2.68	0.000	-48.673	-2.68	0.000	-48.719	-34.98	0.000
0.003	-49.453	-101.04	0.010	-50.156	-118.59	0.030	-51.970	-126.59	0.050	-53.885	-136.68	0.100	-55.825	-146.68	0.200
0.006	-49.576	-83.34	0.020	-51.181	-100.29	0.040	-52.427	-85.05	0.060	-53.835	-69.90	0.100	-55.861	-116.32	0.200
0.009	-49.762	-66.73	0.030	-51.212	-79.54	0.050	-52.427	-65.99	0.070	-53.835	-45.44	0.100	-55.861	-21.47	0.200
0.012	-47.605	-53.32	0.040	-50.231	-60.99	0.060	-49.831	-47.11	0.080	-50.886	-34.98	0.100	-52.886	-14.44	0.200
0.015	-46.460	-43.32	0.050	-49.739	-37.11	0.070	-48.831	-36.96	0.100	-48.831	-36.96	0.150	-48.886	-45.02	0.250
0.018	-45.099	-35.94	0.060	-47.181	-37.51	0.080	-46.041	-36.86	0.120	-46.041	-36.86	0.150	-46.041	-36.86	0.250
0.021	-43.054	-30.68	0.070	-45.676	-30.74	0.090	-44.337	-25.86	0.130	-44.337	-25.86	0.180	-45.911	-26.54	0.300
0.024	-41.614	-26.33	0.080	-44.337	-25.86	0.100	-43.135	-22.22	0.140	-43.135	-22.22	0.200	-45.306	-21.77	0.400
0.027	-40.765	-23.11	0.090	-43.135	-22.22	0.110	-42.056	-19.42	0.160	-42.056	-19.42	0.220	-45.306	-18.39	0.500
0.030	-40.765	-20.55	0.100	-42.056	-19.42	0.120	-41.083	-17.21	0.180	-41.083	-17.21	0.250	-45.306	-15.89	0.600
0.033	-39.866	-18.47	0.110	-40.199	-15.43	0.130	-39.391	-13.97	0.200	-39.391	-13.97	0.300	-46.665	-12.47	0.800
0.036	-39.000	-16.75	0.120	-39.391	-13.97	0.140	-38.644	-12.74	0.220	-38.644	-12.74	0.350	-46.665	-11.24	1.000
0.039	-38.333	-15.22	0.130	-38.644	-12.74	0.150	-37.962	-11.70	0.250	-37.962	-11.70	0.400	-46.665	-10.23	1.200
0.042	-37.651	-14.01	0.140	-37.962	-11.70	0.160	-37.324	-10.81	0.300	-37.324	-10.81	0.450	-46.665	-9.34	1.400
0.045	-37.016	-13.05	0.150	-37.324	-10.81	0.170	-36.729	-10.04	0.350	-36.729	-10.04	0.500	-46.665	-8.67	1.600
0.048	-36.460	-12.14	0.160	-36.729	-10.04	0.180	-36.171	-9.37	0.400	-36.171	-9.37	0.550	-46.665	-8.05	1.800
0.051	-35.874	-11.34	0.170	-36.171	-9.37	0.190	-35.647	-8.77	0.450	-35.647	-8.77	0.600	-46.665	-7.51	2.000
0.054	-35.347	-10.64	0.180	-35.647	-8.77	0.200	-35.152	-8.24	0.500	-35.152	-8.24	0.650	-46.665	-7.04	2.200
0.057	-34.853	-10.01	0.190	-35.152	-8.24	0.210	-34.684	-7.77	0.550	-34.684	-7.77	0.700	-46.665	-6.62	2.400
0.060	-34.380	-9.45	0.200	-34.684	-7.77	0.220	-34.241	-7.35	0.600	-34.241	-7.35	0.750	-46.665	-6.25	2.600
0.063	-33.942	-8.95	0.210	-34.241	-7.35	0.230	-33.819	-6.96	0.650	-33.819	-6.96	0.800	-46.665	-5.91	2.800
0.066	-33.540	-8.50	0.220	-33.819	-6.96	0.240	-33.417	-6.61	0.700	-33.417	-6.61	0.850	-46.665	-5.61	3.000
0.069	-33.110	-8.09	0.230	-33.417	-6.61	0.250	-33.033	-6.29	0.750	-33.033	-6.29	0.900	-46.665	-5.33	3.200
0.072	-32.733	-7.71	0.240	-33.033	-6.29	0.260	-32.666	-6.00	0.800	-32.666	-6.00	0.950	-46.665	-5.08	3.400
0.075	-32.380	-7.36	0.250	-32.666	-6.00	0.270	-32.314	-5.73	0.850	-32.314	-5.73	1.000	-46.665	-4.85	3.600
0.078	-32.043	-7.05	0.260	-32.314	-5.73	0.280	-31.976	-5.49	0.900	-31.976	-5.49	1.050	-46.665	-4.64	3.800
0.081	-31.675	-6.75	0.270	-31.976	-5.49	0.290	-31.652	-5.26	0.950	-31.652	-5.26	1.100	-46.665	-4.45	4.000
0.084	-31.350	-6.48	0.280	-31.652	-5.26	0.300	-31.340	-5.05	1.000	-31.340	-5.05	1.150	-46.665	-4.27	4.200
0.087	-31.037	-6.23	0.290	-31.340	-5.05	0.310	-31.044	-4.86	1.050	-31.044	-4.86	1.200	-46.665	-4.10	4.400
0.090	-30.735	-6.06	0.300	-31.044	-4.86	0.320	-30.756	-4.69	1.100	-30.756	-4.69	1.250	-46.665	-3.94	4.600
0.105	-29.374	-5.04	0.350	-29.374	-4.18	0.400	-28.742	-3.54	1.200	-28.742	-3.54	1.300	-30.031	-3.41	4.800
0.120	-28.009	-4.33	0.400	-28.742	-3.54	0.450	-27.707	-3.05	1.250	-27.707	-3.05	1.350	-28.825	-2.90	5.000
0.135	-26.644	-3.76	0.450	-27.707	-3.05	0.500	-26.797	-2.67	1.300	-26.797	-2.67	1.400	-27.784	-2.51	5.200
0.150	-25.303	-3.34	0.500	-26.797	-2.67	0.550	-25.989	-2.35	1.350	-25.989	-2.35	1.450	-26.867	-2.19	5.400
0.165	-24.000	-2.99	0.550	-25.989	-2.35	0.600	-25.265	-2.09	1.400	-25.265	-2.09	1.500	-26.055	-1.93	5.600
0.180	-22.744	-2.70	0.600	-25.265	-2.09	0.650	-24.613	-1.88	1.450	-24.613	-1.88	1.550	-25.348	-1.71	5.800
0.195	-21.540	-2.45	0.650	-24.613	-1.88	0.700	-24.021	-1.69	1.500	-24.021	-1.69	1.600	-24.673	-1.53	6.000
0.210	-20.386	-2.24	0.700	-24.021	-1.69	0.750	-23.484	-1.53	1.550	-23.484	-1.53	1.650	-24.060	-1.37	6.200
0.225	-19.288	-2.05	0.750	-23.484	-1.53	0.800	-22.993	-1.39	1.600	-22.993	-1.39	1.700	-23.541	-1.23	6.400
0.240	-18.240	-1.87	0.800	-22.993	-1.39	0.850	-22.545	-1.26	1.650	-22.545	-1.26	1.750	-23.049	-1.10	6.600
0.255	-17.243	-1.75	0.850	-22.545	-1.26	0.900	-22.134	-1.15	1.700	-22.134	-1.15	1.800	-22.560	-0.99	6.800
0.270	-16.293	-1.63	0.900	-22.134	-1.15	0.950	-21.758	-1.05	1.750	-21.758	-1.05	1.850	-22.189	-0.90	7.000
0.285	-15.397	-1.52	0.950	-21.758	-1.05	1.000	-21.414	-0.96	1.800	-21.414	-0.96	1.900	-21.812	-0.81	7.200
0.300	-14.561	-1.42	1.000	-21.414	-0.96							1.950	-21.467	-0.72	

Table 19. Radial Electric Field (Sea Water), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.000	-48.546	-57.112	0.000	-48.681	77.45	0.000	-48.734	-118.77	0.000	-50.282	-118.77	0.000	-50.282	-118.77	0.000	-48.734	-151.74		
0.03	-47.430	-57.112	0.010	-47.453	-77.45	0.030	-50.282	-118.77	0.100	-51.356	-100.30	0.100	-51.356	-100.30	0.100	-50.831	-131.76		
0.06	-45.342	-57.112	0.020	-45.375	-77.45	0.060	-49.882	-80.22	0.200	-51.356	-100.30	0.200	-51.356	-100.30	0.200	-52.717	-113.25		
0.09	-43.470	-57.112	0.030	-43.503	-77.45	0.090	-48.099	-60.85	0.300	-51.356	-100.30	0.300	-51.356	-100.30	0.300	-52.506	-86.57		
0.12	-41.797	-57.112	0.040	-41.830	-77.45	0.120	-46.099	-41.34	0.400	-51.356	-100.30	0.400	-51.356	-100.30	0.400	-50.647	-62.55		
0.15	-40.322	-57.112	0.050	-40.355	-77.45	0.150	-44.099	-24.34	0.500	-51.356	-100.30	0.500	-51.356	-100.30	0.500	-48.645	-44.88		
0.18	-38.940	-57.112	0.060	-38.973	-77.45	0.180	-42.099	-9.14	0.600	-51.356	-100.30	0.600	-51.356	-100.30	0.600	-46.048	-33.75		
0.21	-37.650	-57.112	0.070	-37.683	-77.45	0.210	-40.099	4.14	0.700	-51.356	-100.30	0.700	-51.356	-100.30	0.700	-43.247	-26.01		
0.24	-36.450	-57.112	0.080	-36.483	-77.45	0.240	-38.099	19.14	0.800	-51.356	-100.30	0.800	-51.356	-100.30	0.800	-40.848	-18.35		
0.27	-35.340	-57.112	0.090	-35.373	-77.45	0.270	-36.099	34.14	0.900	-51.356	-100.30	0.900	-51.356	-100.30	0.900	-38.450	-10.70		
0.30	-34.310	-57.112	0.100	-34.343	-77.45	0.300	-34.099	49.14	1.000	-51.356	-100.30	1.000	-51.356	-100.30	1.000	-36.051	-3.05		
0.33	-33.360	-57.112	0.110	-33.393	-77.45	0.330	-32.099	64.14	1.100	-51.356	-100.30	1.100	-51.356	-100.30	1.100	-33.652	4.60		
0.36	-32.490	-57.112	0.120	-32.523	-77.45	0.360	-30.099	79.14	1.200	-51.356	-100.30	1.200	-51.356	-100.30	1.200	-31.253	12.15		
0.39	-31.690	-57.112	0.130	-31.723	-77.45	0.390	-28.099	94.14	1.300	-51.356	-100.30	1.300	-51.356	-100.30	1.300	-28.854	19.70		
0.42	-30.960	-57.112	0.140	-31.003	-77.45	0.420	-26.099	109.14	1.400	-51.356	-100.30	1.400	-51.356	-100.30	1.400	-26.455	27.25		
0.45	-30.290	-57.112	0.150	-30.333	-77.45	0.450	-24.099	124.14	1.500	-51.356	-100.30	1.500	-51.356	-100.30	1.500	-24.056	34.80		
0.48	-29.680	-57.112	0.160	-29.723	-77.45	0.480	-22.099	139.14	1.600	-51.356	-100.30	1.600	-51.356	-100.30	1.600	-21.657	42.35		
0.51	-29.120	-57.112	0.170	-29.163	-77.45	0.510	-20.099	154.14	1.700	-51.356	-100.30	1.700	-51.356	-100.30	1.700	-19.258	50.00		
0.54	-28.610	-57.112	0.180	-28.653	-77.45	0.540	-18.099	169.14	1.800	-51.356	-100.30	1.800	-51.356	-100.30	1.800	-16.859	57.55		
0.57	-28.140	-57.112	0.190	-28.183	-77.45	0.570	-16.099	184.14	1.900	-51.356	-100.30	1.900	-51.356	-100.30	1.900	-14.460	65.10		
0.60	-27.710	-57.112	0.200	-27.753	-77.45	0.600	-14.099	199.14	2.000	-51.356	-100.30	2.000	-51.356	-100.30	2.000	-12.061	72.65		
0.63	-27.320	-57.112	0.210	-27.363	-77.45	0.630	-12.099	214.14	2.100	-51.356	-100.30	2.100	-51.356	-100.30	2.100	-9.662	80.20		
0.66	-26.970	-57.112	0.220	-27.013	-77.45	0.660	-10.099	229.14	2.200	-51.356	-100.30	2.200	-51.356	-100.30	2.200	-7.263	87.75		
0.69	-26.660	-57.112	0.230	-26.703	-77.45	0.690	-8.099	244.14	2.300	-51.356	-100.30	2.300	-51.356	-100.30	2.300	-4.864	95.30		
0.72	-26.380	-57.112	0.240	-26.423	-77.45	0.720	-6.099	259.14	2.400	-51.356	-100.30	2.400	-51.356	-100.30	2.400	-2.465	102.85		
0.75	-26.130	-57.112	0.250	-26.173	-77.45	0.750	-4.099	274.14	2.500	-51.356	-100.30	2.500	-51.356	-100.30	2.500	-0.066	110.40		
0.78	-25.910	-57.112	0.260	-25.953	-77.45	0.780	-2.099	289.14	2.600	-51.356	-100.30	2.600	-51.356	-100.30	2.600	2.333	117.95		
0.81	-25.710	-57.112	0.270	-25.753	-77.45	0.810	-0.099	304.14	2.700	-51.356	-100.30	2.700	-51.356	-100.30	2.700	4.734	125.50		
0.84	-25.530	-57.112	0.280	-25.573	-77.45	0.840	1.909	319.14	2.800	-51.356	-100.30	2.800	-51.356	-100.30	2.800	7.135	133.05		
0.87	-25.370	-57.112	0.290	-25.413	-77.45	0.870	3.909	334.14	2.900	-51.356	-100.30	2.900	-51.356	-100.30	2.900	9.536	140.60		
0.90	-25.230	-57.112	0.300	-25.273	-77.45	0.900	5.909	349.14	3.000	-51.356	-100.30	3.000	-51.356	-100.30	3.000	11.937	148.15		
1.05	-24.750	-57.112	0.350	-24.793	-77.45	1.050	-30.356	-31.35	3.500	-51.356	-100.30	3.500	-51.356	-100.30	3.500	-30.440	-64.03		
1.20	-24.270	-57.112	0.400	-24.833	-77.45	1.200	-58.376	-61.35	4.000	-51.356	-100.30	4.000	-51.356	-100.30	4.000	-58.462	-94.24		
1.35	-23.790	-57.112	0.450	-24.873	-77.45	1.350	-86.396	-91.35	4.500	-51.356	-100.30	4.500	-51.356	-100.30	4.500	-86.484	-124.45		
1.50	-23.310	-57.112	0.500	-24.913	-77.45	1.500	-114.416	-121.35	5.000	-51.356	-100.30	5.000	-51.356	-100.30	5.000	-114.508	-154.66		
1.65	-22.830	-57.112	0.550	-24.953	-77.45	1.650	-142.436	-151.35	5.500	-51.356	-100.30	5.500	-51.356	-100.30	5.500	-142.530	-184.87		
1.80	-22.350	-57.112	0.600	-24.993	-77.45	1.800	-170.456	-181.35	6.000	-51.356	-100.30	6.000	-51.356	-100.30	6.000	-170.552	-215.08		
1.95	-21.870	-57.112	0.650	-25.033	-77.45	1.950	-198.476	-211.35	6.500	-51.356	-100.30	6.500	-51.356	-100.30	6.500	-198.574	-245.29		
2.10	-21.390	-57.112	0.700	-25.073	-77.45	2.100	-226.496	-241.35	7.000	-51.356	-100.30	7.000	-51.356	-100.30	7.000	-226.596	-275.50		
2.25	-20.910	-57.112	0.750	-25.113	-77.45	2.250	-254.516	-271.35	7.500	-51.356	-100.30	7.500	-51.356	-100.30	7.500	-254.618	-305.71		
2.40	-20.430	-57.112	0.800	-25.153	-77.45	2.400	-282.536	-301.35	8.000	-51.356	-100.30	8.000	-51.356	-100.30	8.000	-282.640	-335.92		
2.55	-19.950	-57.112	0.850	-25.193	-77.45	2.550	-310.556	-331.35	8.500	-51.356	-100.30	8.500	-51.356	-100.30	8.500	-310.662	-366.13		
2.70	-19.470	-57.112	0.900	-25.233	-77.45	2.700	-338.576	-361.35	9.000	-51.356	-100.30	9.000	-51.356	-100.30	9.000	-338.684	-396.34		
2.85	-18.990	-57.112	0.950	-25.273	-77.45	2.850	-366.596	-391.35	9.500	-51.356	-100.30	9.500	-51.356	-100.30	9.500	-366.706	-426.55		
3.00	-18.510	-57.112	1.000	-25.313	-77.45	3.000	-394.616	-421.35	10.000	-51.356	-100.30	10.000	-51.356	-100.30	10.000	-394.728	-456.76		

Table 20. Radial Electric Field (Sea Water), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM UPHRANGE					10.0 KM UPHRANGE					100.0 KM UPHRANGE				
REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)
0.000	-36.746	-14.94	0.000	-39.140	116.10	0.000	-40.237	-42.24	0.000	-41.423	-44.89	0.000	-42.923	-47.59
.003	-34.505	-15.02	.000	-40.116	116.07	.000	-41.595	16.00	.100	-43.362	112.37	.100	-45.017	112.37
.006	-40.312	-15.05	.000	-42.385	-16.07	.000	-43.126	16.16	.300	-45.207	109.87	.300	-47.362	109.87
.009	-41.166	-14.94	.000	-42.385	-16.07	.000	-43.126	16.16	.500	-47.362	109.87	.500	-50.444	76.70
.012	-42.069	-14.94	.000	-42.385	-16.07	.000	-43.126	16.16	.700	-50.444	76.70	.700	-53.522	28.25
.015	-43.001	-13.61	.000	-42.385	-16.07	.000	-43.126	16.16	.900	-53.522	28.25	.900	-56.600	-1.01
.018	-43.933	-13.61	.000	-42.385	-16.07	.000	-43.126	16.16	1.100	-56.600	-1.01	1.100	-59.678	-11.77
.021	-44.865	-11.66	.000	-42.385	-16.07	.000	-43.126	16.16	1.300	-59.678	-11.77	1.300	-62.756	-16.14
.024	-45.797	-11.66	.000	-42.385	-16.07	.000	-43.126	16.16	1.500	-62.756	-16.14	1.500	-65.834	-16.02
.027	-46.729	-10.42	.000	-42.385	-16.07	.000	-43.126	16.16	1.700	-65.834	-16.02	1.700	-68.912	-16.94
.030	-47.661	-9.94	.000	-42.385	-16.07	.000	-43.126	16.16	1.900	-68.912	-16.94	1.900	-71.990	-16.81
.033	-48.593	-7.71	.000	-42.385	-16.07	.000	-43.126	16.16	2.100	-71.990	-16.81	2.100	-75.068	-16.68
.036	-49.525	-5.74	.000	-42.385	-16.07	.000	-43.126	16.16	2.300	-75.068	-16.68	2.300	-78.146	-16.55
.039	-50.457	-4.09	.000	-42.385	-16.07	.000	-43.126	16.16	2.500	-78.146	-16.55	2.500	-81.224	-16.42
.042	-51.389	-4.09	.000	-42.385	-16.07	.000	-43.126	16.16	2.700	-81.224	-16.42	2.700	-84.302	-16.29
.045	-52.321	-3.07	.000	-42.385	-16.07	.000	-43.126	16.16	2.900	-84.302	-16.29	2.900	-87.380	-16.16
.048	-53.253	-3.07	.000	-42.385	-16.07	.000	-43.126	16.16	3.100	-90.469	-13.76	3.100	-90.469	-13.76
.051	-54.185	-3.07	.000	-42.385	-16.07	.000	-43.126	16.16	3.300	-93.547	-17.21	3.300	-93.547	-17.21
.054	-55.117	-3.07	.000	-42.385	-16.07	.000	-43.126	16.16	3.500	-96.625	-21.66	3.500	-96.625	-21.66
.057	-56.049	-2.05	.000	-42.385	-16.07	.000	-43.126	16.16	3.700	-99.703	-26.11	3.700	-99.703	-26.11
.060	-56.981	-2.05	.000	-42.385	-16.07	.000	-43.126	16.16	3.900	-102.781	-30.56	3.900	-102.781	-30.56
.063	-57.913	-2.05	.000	-42.385	-16.07	.000	-43.126	16.16	4.100	-105.859	-35.01	4.100	-105.859	-35.01
.066	-58.845	-2.05	.000	-42.385	-16.07	.000	-43.126	16.16	4.300	-108.937	-39.46	4.300	-108.937	-39.46
.069	-59.777	-2.05	.000	-42.385	-16.07	.000	-43.126	16.16	4.500	-112.015	-43.91	4.500	-112.015	-43.91
.072	-60.709	-2.05	.000	-42.385	-16.07	.000	-43.126	16.16	4.700	-115.093	-48.36	4.700	-115.093	-48.36
.075	-61.641	-1.03	.000	-42.385	-16.07	.000	-43.126	16.16	4.900	-118.171	-52.81	4.900	-118.171	-52.81
.078	-62.573	-1.03	.000	-42.385	-16.07	.000	-43.126	16.16	5.100	-121.249	-57.26	5.100	-121.249	-57.26
.081	-63.505	-1.03	.000	-42.385	-16.07	.000	-43.126	16.16	5.300	-124.327	-61.71	5.300	-124.327	-61.71
.084	-64.437	-1.03	.000	-42.385	-16.07	.000	-43.126	16.16	5.500	-127.405	-66.16	5.500	-127.405	-66.16
.087	-65.369	-1.03	.000	-42.385	-16.07	.000	-43.126	16.16	5.700	-130.483	-70.61	5.700	-130.483	-70.61
.090	-66.301	-1.03	.000	-42.385	-16.07	.000	-43.126	16.16	5.900	-133.561	-75.06	5.900	-133.561	-75.06
.105	-34.504	-14.94	.120	-36.746	-14.94	.120	-39.140	116.10	.120	-41.423	-44.89	.120	-42.923	-47.59
.120	-36.746	-14.94	.140	-39.140	116.10	.140	-41.595	16.00	.140	-43.362	112.37	.140	-45.017	112.37
.135	-26.746	-14.94	.160	-40.116	116.07	.160	-42.385	-16.07	.160	-43.126	16.16	.160	-45.207	109.87
.150	-26.746	-14.94	.180	-42.385	-16.07	.180	-43.126	16.16	.180	-45.207	109.87	.180	-47.362	109.87
.165	-26.746	-14.94	.200	-44.865	-1.01	.200	-47.362	109.87	.200	-50.444	76.70	.200	-53.522	28.25
.180	-26.746	-14.94	.220	-50.444	76.70	.220	-53.522	28.25	.220	-56.600	-1.01	.220	-59.678	-11.77
.195	-26.746	-14.94	.240	-53.522	28.25	.240	-56.600	-1.01	.240	-59.678	-11.77	.240	-62.756	-16.14
.210	-26.746	-14.94	.260	-56.600	-1.01	.260	-59.678	-11.77	.260	-62.756	-16.14	.260	-65.834	-16.02
.225	-26.746	-14.94	.280	-59.678	-11.77	.280	-62.756	-16.14	.280	-65.834	-16.02	.280	-68.912	-16.94
.240	-26.746	-14.94	.300	-62.756	-16.14	.300	-65.834	-16.02	.300	-68.912	-16.94	.300	-71.990	-16.81
.255	-26.746	-14.94	.320	-65.834	-16.02	.320	-68.912	-16.81	.320	-71.990	-16.81	.320	-75.068	-16.68
.270	-26.746	-14.94	.340	-68.912	-16.81	.340	-71.990	-16.68	.340	-75.068	-16.68	.340	-78.146	-16.55
.285	-26.746	-14.94	.360	-71.990	-16.68	.360	-75.068	-16.55	.360	-78.146	-16.55	.360	-81.224	-16.42
.300	-26.746	-14.94	.380	-75.068	-16.55	.380	-78.146	-16.42	.380	-81.224	-16.42	.380	-84.302	-16.29

Table 21. Radial Electric Field (Sea Water), Frequency 10.0 MHz, VED Height = 22.48 m

3.0 KM UPRANGE				10.0 KM UPRANGE				30.0 KM UPRANGE				100.0 KM UPRANGE			
HEIGHT (KM)	AMP (V)	PHASE (DEG)	MEI/MT (KM)	HEIGHT (KM)	AMP (V)	PHASE (DEG)	MEI/MT (KM)	HEIGHT (KM)	AMP (V)	PHASE (DEG)	MEI/MT (KM)	HEIGHT (KM)	AMP (V)	PHASE (DEG)	MEI/MT (KM)
.000	-34.001	-13.07	.000	.000	-34.001	-13.07	.000	.000	-40.554	-43.07	.000	.000	-44.255	-27.80	.000
.003	-34.112	-14.257	.010	.010	-40.421	-10.84	.000	.000	-41.990	-10.84	.000	.000	-46.714	11.76	.000
.006	-41.379	-14.083	.030	.030	-42.074	-10.84	.000	.000	-43.226	16.24	.000	.000	-51.540	112.30	.000
.012	-46.637	-13.007	.040	.040	-43.996	-10.16	.000	.000	-47.370	16.22	.000	.000	-55.110	103.95	.000
.015	-46.637	-13.007	.050	.050	-45.478	-15.98	.000	.000	-50.102	170.21	.000	.000	-55.129	79.22	.000
.018	-44.967	-12.507	.060	.060	-47.124	-14.78	.000	.000	-53.917	175.77	.000	.000	-55.925	30.61	.000
.021	-44.967	-11.748	.070	.070	-48.877	-13.88	.000	.000	-56.172	167.97	.000	.000	-56.090	1.27	.000
.024	-45.379	-10.783	.080	.080	-50.490	-12.09	.000	.000	-58.450	-82.03	.000	.000	-56.652	-9.44	.000
.027	-45.379	-9.701	.090	.090	-51.582	-10.03	.000	.000	-59.254	-37.14	.000	.000	-56.044	-13.84	.000
.030	-45.379	-8.583	.100	.100	-51.017	-7.78	.000	.000	-59.502	-2.75	.000	.000	-47.947	-15.72	.000
.033	-45.379	-7.401	.110	.110	-49.671	-5.74	.000	.000	-59.427	-23.64	.000	.000	-46.321	-16.46	.000
.036	-44.967	-6.061	.120	.120	-48.000	-4.27	.000	.000	-59.173	-21.24	.000	.000	-44.905	-16.63	.000
.039	-44.967	-5.000	.130	.130	-46.373	-3.67	.000	.000	-58.400	-19.62	.000	.000	-43.679	-16.49	.000
.042	-44.967	-4.084	.140	.140	-44.902	-3.65	.000	.000	-57.939	-18.35	.000	.000	-42.599	-16.19	.000
.045	-44.967	-3.256	.150	.150	-43.596	-2.85	.000	.000	-56.699	-17.31	.000	.000	-41.634	-15.79	.000
.048	-44.967	-2.413	.160	.160	-42.437	-2.32	.000	.000	-55.620	-16.43	.000	.000	-40.760	-15.35	.000
.051	-44.967	-1.643	.170	.170	-41.402	-2.01	.000	.000	-54.667	-15.66	.000	.000	-39.964	-14.88	.000
.054	-44.967	-0.942	.180	.180	-40.474	-2.01	.000	.000	-53.813	-14.97	.000	.000	-39.231	-14.40	.000
.057	-34.464	-0.204	.190	.190	-39.629	-1.93	.000	.000	-53.039	-14.35	.000	.000	-38.553	-13.93	.000
.060	-34.464	-0.507	.200	.200	-38.880	-1.77	.000	.000	-52.351	-13.78	.000	.000	-37.922	-13.47	.000
.063	-34.464	-0.807	.210	.210	-38.153	-1.60	.000	.000	-51.651	-13.26	.000	.000	-37.333	-13.03	.000
.066	-34.464	-1.107	.220	.220	-37.501	-1.53	.000	.000	-51.075	-12.77	.000	.000	-36.779	-12.60	.000
.069	-34.464	-1.407	.230	.230	-36.893	-1.42	.000	.000	-50.512	-12.31	.000	.000	-36.258	-12.18	.000
.072	-34.464	-1.707	.240	.240	-36.329	-1.34	.000	.000	-50.048	-11.88	.000	.000	-35.765	-11.79	.000
.075	-34.464	-2.007	.250	.250	-35.800	-1.25	.000	.000	-49.689	-11.48	.000	.000	-35.299	-11.41	.000
.078	-34.464	-2.307	.260	.260	-35.302	-1.16	.000	.000	-49.421	-11.10	.000	.000	-34.856	-11.05	.000
.081	-34.464	-2.607	.270	.270	-34.833	-1.07	.000	.000	-49.158	-10.74	.000	.000	-34.434	-10.70	.000
.084	-34.464	-2.907	.280	.280	-34.389	-1.00	.000	.000	-48.895	-10.40	.000	.000	-34.031	-10.37	.000
.087	-34.464	-3.207	.290	.290	-33.968	-1.00	.000	.000	-48.631	-10.08	.000	.000	-33.646	-10.05	.000
.090	-34.464	-3.507	.300	.300	-33.567	-1.00	.000	.000	-48.377	-9.77	.000	.000	-33.277	-9.75	.000
.105	-31.077	-10.93	.350	.350	-31.010	-9.93	.000	.000	-46.697	-8.43	.000	.000	-31.641	-8.42	.000
.120	-29.421	-9.07	.400	.400	-29.485	-7.86	.000	.000	-45.306	-7.35	.000	.000	-30.272	-7.33	.000
.135	-27.666	-7.71	.450	.450	-27.617	-6.67	.000	.000	-44.123	-6.46	.000	.000	-29.101	-6.44	.000
.150	-26.173	-6.00	.500	.500	-26.132	-5.86	.000	.000	-43.097	-5.71	.000	.000	-28.043	-5.69	.000
.165	-24.621	-5.02	.550	.550	-24.620	-5.14	.000	.000	-42.195	-5.08	.000	.000	-27.185	-5.06	.000
.180	-23.100	-4.14	.600	.600	-23.141	-4.63	.000	.000	-41.394	-4.53	.000	.000	-26.387	-4.51	.000
.195	-21.600	-3.37	.650	.650	-21.683	-4.14	.000	.000	-40.677	-4.05	.000	.000	-25.672	-4.03	.000
.210	-20.100	-2.60	.700	.700	-20.240	-3.71	.000	.000	-40.031	-3.63	.000	.000	-25.028	-3.61	.000
.225	-18.600	-1.83	.750	.750	-18.792	-3.33	.000	.000	-39.445	-3.26	.000	.000	-24.444	-3.24	.000
.240	-17.100	-1.06	.800	.800	-17.349	-2.99	.000	.000	-38.915	-2.93	.000	.000	-23.913	-2.91	.000
.255	-15.600	-0.29	.850	.850	-16.904	-2.69	.000	.000	-38.431	-2.62	.000	.000	-23.430	-2.60	.000
.270	-14.100	0.48	.900	.900	-16.461	-2.41	.000	.000	-37.989	-2.35	.000	.000	-22.948	-2.33	.000
.285	-12.600	1.25	.950	.950	-16.028	-2.16	.000	.000	-37.586	-2.10	.000	.000	-22.505	-2.08	.000
.300	-11.100	2.02	1.000	1.000	-15.606	-1.92	.000	.000	-37.217	-1.87	.000	.000	-22.117	-1.85	.000

Table 22. Radial Electric Field (Sea Water), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM UOMRANGE				10.0 KM UOMRANGE				100.0 KM UOMRANGE			
REL	AMP	PHASE	REL	AMP	PHASE	REL	AMP	REL	AMP	PHASE	REL
(DB)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(KM)	(DB)	(DEG)	(KM)
0.000	-37.221	-14.50	0.000	-37.700	-148.48	0.000	-40.847	0.000	-44.569	-25.28	0.000
0.003	-37.903	-14.08	0.010	-40.657	-164.78	0.030	-42.200	0.100	-46.863	117.39	0.100
0.006	-41.610	-13.728	0.020	-41.706	-162.33	0.060	-43.726	0.200	-49.030	117.46	0.200
0.009	-41.334	-13.301	0.030	-42.881	-159.21	0.090	-45.500	0.300	-51.859	115.05	0.300
0.012	-42.059	-12.799	0.040	-44.139	-155.14	0.120	-47.631	0.400	-55.442	106.85	0.400
0.015	-42.782	-12.207	0.050	-45.553	-149.66	0.150	-50.338	0.500	-59.681	62.28	0.500
0.018	-43.497	-11.516	0.060	-47.094	-142.05	0.180	-53.084	0.600	-60.366	33.20	0.600
0.021	-44.207	-10.729	0.070	-48.679	-131.25	0.210	-55.836	0.700	-58.493	3.54	0.700
0.024	-44.921	-9.854	0.080	-50.313	-118.11	0.240	-58.584	0.800	-53.034	-7.18	0.800
0.027	-45.639	-8.895	0.090	-52.010	-103.84	0.270	-61.331	0.900	-48.420	-11.50	0.900
0.030	-46.359	-7.857	0.100	-53.763	-88.74	0.300	-64.085	1.000	-44.372	-13.54	1.000
0.033	-47.080	-6.748	0.110	-55.579	-72.94	0.330	-66.855	1.100	-40.700	-14.06	1.100
0.036	-47.802	-5.567	0.120	-57.358	-57.07	0.360	-69.637	1.200	-37.288	-14.21	1.200
0.039	-48.525	-4.311	0.130	-59.104	-42.85	0.390	-72.433	1.300	-34.069	-13.74	1.300
0.042	-49.250	-3.000	0.140	-60.824	-29.80	0.420	-75.242	1.400	-31.039	-13.34	1.400
0.045	-49.976	-1.644	0.150	-62.524	-18.15	0.450	-78.062	1.500	-28.175	-12.89	1.500
0.048	-50.703	-0.254	0.160	-64.204	-8.05	0.480	-80.892	1.600	-25.468	-11.92	1.600
0.051	-51.431	0.154	0.170	-65.874	1.58	0.510	-83.734	1.700	-22.900	-10.97	1.700
0.054	-52.160	0.584	0.180	-67.534	13.32	0.540	-86.586	1.800	-20.464	-10.07	1.800
0.057	-52.890	0.954	0.190	-69.184	24.47	0.570	-89.448	1.900	-18.156	-9.05	1.900
0.060	-53.620	1.284	0.200	-70.824	35.71	0.600	-92.320	2.000	-15.980	-8.24	2.000
0.063	-54.350	1.574	0.210	-72.454	46.56	0.630	-95.202	2.100	-13.944	-8.85	2.100
0.066	-55.080	1.824	0.220	-74.084	56.90	0.660	-98.094	2.200	-12.048	-8.48	2.200
0.069	-55.810	2.034	0.230	-75.714	66.74	0.690	-100.996	2.300	-10.292	-8.13	2.300
0.072	-56.540	2.204	0.240	-77.344	76.08	0.720	-103.908	2.400	-8.676	-7.78	2.400
0.075	-57.270	2.334	0.250	-78.974	84.92	0.750	-106.830	2.500	-7.190	-7.46	2.500
0.078	-58.000	2.424	0.260	-80.604	93.26	0.780	-109.762	2.600	-5.824	-7.14	2.600
0.081	-58.730	2.474	0.270	-82.234	101.10	0.810	-112.704	2.700	-4.568	-6.81	2.700
0.084	-59.460	2.484	0.280	-83.864	108.44	0.840	-115.656	2.800	-3.402	-6.46	2.800
0.087	-60.190	2.454	0.290	-85.494	115.28	0.870	-118.618	2.900	-2.326	-6.09	2.900
0.090	-60.920	2.384	0.300	-87.124	121.62	0.900	-121.580	3.000	-1.350	-5.70	3.000
0.105	-63.550	-10.74	0.350	-92.514	-6.97	1.050	-126.414	3.500	-32.361	-5.76	3.500
0.120	-61.074	-8.26	0.400	-91.206	-25.50	1.200	-121.165	4.000	-31.113	-4.61	4.000
0.135	-58.000	-6.90	0.450	-89.141	-44.44	1.350	-116.102	4.500	-30.083	-3.65	4.500
0.150	-54.145	-5.43	0.500	-86.261	-63.52	1.500	-111.237	5.000	-29.223	-2.89	5.000
0.165	-50.410	-4.12	0.550	-82.530	-82.05	1.650	-106.515	5.500	-28.506	-2.09	5.500
0.180	-46.814	-3.07	0.600	-77.926	-100.45	1.800	-101.916	6.000	-27.910	-1.43	6.000
0.195	-43.360	-2.15	0.650	-72.431	-118.71	1.950	-97.425	6.500	-27.419	-0.83	6.500
0.210	-40.040	-1.35	0.700	-67.034	-136.86	2.100	-93.029	7.000	-27.024	-0.27	7.000
0.225	-36.863	-0.64	0.750	-61.726	-154.82	2.250	-88.722	7.500	-26.718	0.26	7.500
0.240	-33.800	0.00	0.800	-56.502	-172.50	2.400	-84.499	8.000	-26.494	0.78	8.000
0.255	-30.844	0.74	0.850	-51.360	-190.00	2.550	-80.356	8.500	-26.351	1.29	8.500
0.270	-28.019	1.55	0.900	-46.297	-207.31	2.700	-76.292	9.000	-26.286	1.81	9.000
0.285	-25.343	2.41	0.950	-41.314	-224.44	2.850	-72.308	9.500	-26.301	2.35	9.500
0.300	-22.809	3.33	1.000	-36.414	-241.26	3.000	-68.405	10.000	-26.397	2.92	10.000

Table 23. Radial Electric Field (Sea Water), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM UPHRANGE					3.0 KM UPHRANGE					10.0 KM UPHRANGE					30.0 KM UPHRANGE				
RE (V/M)	AMP (V)	PHASE (DEG)	RE (V/M)	AMP (V)	PHASE (DEG)	RE (V/M)	AMP (V)	PHASE (DEG)	RE (V/M)	AMP (V)	PHASE (DEG)	RE (V/M)	AMP (V)	PHASE (DEG)	RE (V/M)	AMP (V)	PHASE (DEG)		
0.000	-34.865	43.83	0.000	-43.476	-13.83	0.000	-56.800	-91.85	0.000	-67.070	-14.49	0.000	-76.010	-16.49	0.000	-83.703	-18.49		
0.001	-35.257	112.30	0.001	-44.272	66.46	0.001	-57.390	51.25	0.001	-67.010	47.32	0.001	-76.010	43.47	0.001	-83.703	39.47		
0.002	-35.713	112.69	0.002	-45.071	67.91	0.002	-58.570	52.76	0.002	-68.010	48.83	0.002	-77.010	44.83	0.002	-84.703	40.83		
0.003	-36.236	112.91	0.003	-45.883	69.03	0.003	-59.570	54.03	0.003	-69.010	50.03	0.003	-78.010	46.03	0.003	-85.703	42.03		
0.004	-36.824	112.99	0.004	-46.713	70.53	0.004	-60.570	55.53	0.004	-70.010	51.53	0.004	-79.010	47.53	0.004	-86.703	43.53		
0.005	-37.474	112.99	0.005	-47.585	72.42	0.005	-61.570	57.42	0.005	-71.010	53.42	0.005	-80.010	49.42	0.005	-87.703	45.42		
0.006	-38.183	112.90	0.006	-48.421	74.71	0.006	-62.570	59.71	0.006	-72.010	55.71	0.006	-81.010	51.71	0.006	-88.703	47.71		
0.007	-38.953	112.61	0.007	-49.274	77.41	0.007	-63.570	62.41	0.007	-73.010	58.41	0.007	-82.010	54.41	0.007	-89.703	49.41		
0.008	-40.674	111.18	0.008	-50.051	80.51	0.008	-64.570	65.51	0.008	-74.010	61.51	0.008	-83.010	57.51	0.008	-90.703	51.51		
0.009	-41.623	107.88	0.009	-50.873	84.01	0.009	-65.570	69.01	0.009	-75.010	65.01	0.009	-84.010	61.01	0.009	-91.703	55.01		
0.010	-42.634	103.46	0.010	-51.705	87.91	0.010	-66.570	72.91	0.010	-76.010	68.91	0.010	-85.010	64.91	0.010	-92.703	58.91		
0.011	-43.707	97.91	0.011	-52.570	92.41	0.011	-67.570	77.41	0.011	-77.010	73.41	0.011	-86.010	69.41	0.011	-93.703	62.41		
0.012	-44.843	90.51	0.012	-53.476	96.51	0.012	-68.570	81.91	0.012	-78.010	77.91	0.012	-87.010	73.91	0.012	-94.703	66.91		
0.013	-46.037	83.91	0.013	-54.421	100.01	0.013	-69.570	86.01	0.013	-79.010	81.91	0.013	-88.010	77.91	0.013	-95.703	70.91		
0.014	-47.283	76.81	0.014	-55.476	103.51	0.014	-70.570	90.51	0.014	-80.010	85.91	0.014	-89.010	81.91	0.014	-96.703	74.91		
0.015	-48.583	69.81	0.015	-56.570	107.01	0.015	-71.570	94.01	0.015	-81.010	89.91	0.015	-90.010	85.91	0.015	-97.703	78.91		
0.016	-49.937	62.81	0.016	-57.707	110.51	0.016	-72.570	97.51	0.016	-82.010	93.91	0.016	-91.010	89.91	0.016	-98.703	82.91		
0.017	-51.347	55.81	0.017	-58.871	114.01	0.017	-73.570	101.01	0.017	-83.010	97.91	0.017	-92.010	93.91	0.017	-99.703	86.91		
0.018	-52.813	48.81	0.018	-59.976	117.51	0.018	-74.570	104.51	0.018	-84.010	101.91	0.018	-93.010	97.91	0.018	-100.703	90.91		
0.019	-54.337	41.81	0.019	-61.101	121.01	0.019	-75.570	108.01	0.019	-85.010	105.91	0.019	-94.010	101.91	0.019	-101.703	94.91		
0.020	-55.917	34.81	0.020	-62.276	124.51	0.020	-76.570	111.51	0.020	-86.010	109.91	0.020	-95.010	105.91	0.020	-102.703	98.91		
0.021	-57.553	27.81	0.021	-63.476	128.01	0.021	-77.570	115.01	0.021	-87.010	113.91	0.021	-96.010	109.91	0.021	-103.703	102.91		
0.022	-59.247	20.81	0.022	-64.707	131.51	0.022	-78.570	118.51	0.022	-88.010	117.91	0.022	-97.010	113.91	0.022	-104.703	106.91		
0.023	-60.997	13.81	0.023	-65.976	135.01	0.023	-79.570	122.01	0.023	-89.010	121.91	0.023	-98.010	117.91	0.023	-105.703	110.91		
0.024	-62.803	6.81	0.024	-67.276	138.51	0.024	-80.570	125.51	0.024	-90.010	125.91	0.024	-99.010	121.91	0.024	-106.703	114.91		
0.025	-64.667	-0.19	0.025	-68.607	142.01	0.025	-81.570	129.01	0.025	-91.010	129.91	0.025	-100.010	125.91	0.025	-107.703	118.91		
0.026	-66.587	-7.19	0.026	-69.976	145.51	0.026	-82.570	132.51	0.026	-92.010	133.91	0.026	-101.010	129.91	0.026	-108.703	122.91		
0.027	-68.563	-14.19	0.027	-71.376	149.01	0.027	-83.570	136.01	0.027	-93.010	137.91	0.027	-102.010	133.91	0.027	-109.703	126.91		
0.028	-70.597	-21.19	0.028	-72.807	152.51	0.028	-84.570	139.51	0.028	-94.010	141.91	0.028	-103.010	137.91	0.028	-110.703	130.91		
0.029	-72.687	-28.19	0.029	-74.276	156.01	0.029	-85.570	143.01	0.029	-95.010	145.91	0.029	-104.010	141.91	0.029	-111.703	134.91		
0.030	-74.837	-35.19	0.030	-75.707	159.51	0.030	-86.570	146.51	0.030	-96.010	149.91	0.030	-105.010	145.91	0.030	-112.703	138.91		
0.035	-80.837	-57.19	0.035	-81.707	167.51	0.035	-91.570	154.51	0.035	-101.010	157.91	0.035	-110.010	153.91	0.035	-117.703	146.91		
0.040	-86.837	-79.19	0.040	-87.707	175.51	0.040	-97.570	162.51	0.040	-111.010	165.91	0.040	-120.010	161.91	0.040	-126.703	150.91		
0.045	-92.837	-101.19	0.045	-93.707	183.51	0.045	-103.570	170.51	0.045	-121.010	173.91	0.045	-130.010	169.91	0.045	-135.703	154.91		
0.050	-98.837	-123.19	0.050	-99.707	191.51	0.050	-111.570	178.51	0.050	-137.010	181.91	0.050	-146.010	177.91	0.050	-151.703	158.91		
0.055	-104.837	-145.19	0.055	-105.707	199.51	0.055	-119.570	186.51	0.055	-145.010	189.91	0.055	-158.010	185.91	0.055	-163.703	162.91		
0.060	-110.837	-167.19	0.060	-111.707	207.51	0.060	-127.570	194.51	0.060	-153.010	197.91	0.060	-166.010	193.91	0.060	-171.703	166.91		
0.065	-116.837	-189.19	0.065	-117.707	215.51	0.065	-135.570	202.51	0.065	-161.010	201.91	0.065	-174.010	199.91	0.065	-177.703	170.91		
0.070	-122.837	-211.19	0.070	-123.707	223.51	0.070	-143.570	210.51	0.070	-169.010	209.91	0.070	-182.010	199.91	0.070	-183.703	174.91		
0.075	-128.837	-233.19	0.075	-129.707	231.51	0.075	-151.570	218.51	0.075	-177.010	217.91	0.075	-190.010	199.91	0.075	-187.703	178.91		
0.080	-134.837	-255.19	0.080	-135.707	239.51	0.080	-159.570	226.51	0.080	-185.010	225.91	0.080	-198.010	199.91	0.080	-195.703	182.91		
0.085	-140.837	-277.19	0.085	-141.707	247.51	0.085	-167.570	234.51	0.085	-193.010	233.91	0.085	-206.010	199.91	0.085	-203.703	186.91		
0.090	-146.837	-299.19	0.090	-147.707	255.51	0.090	-175.570	242.51	0.090	-201.010	241.91	0.090	-214.010	199.91	0.090	-211.703	190.91		
0.095	-152.837	-321.19	0.095	-153.707	263.51	0.095	-183.570	250.51	0.095	-209.010	250.91	0.095	-222.010	199.91	0.095	-219.703	194.91		
0.100	-158.837	-343.19	0.100	-159.707	271.51	0.100	-191.570	258.51	0.100	-217.010	259.91	0.100	-230.010	199.91	0.100	-227.703	198.91		

Table 24. Radial Electric Field (Sea Water), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
TELENT (M)	AMP (UB)	PHASE (DEG)	TELENT (KM)	AMP (UB)	PHASE (DEG)	TELENT (KM)	AMP (UB)	PHASE (DEG)	TELENT (KM)	AMP (UB)	PHASE (DEG)	TELENT (KM)	AMP (UB)	PHASE (DEG)	TELENT (KM)
0.00	-35.543	51.40	0.00	-44.449	-41.81	0.00	-57.792	-33.54	0.00	-68.055	-6.11	0.00	-88.596	56.32	0.00
0.01	-36.116	120.95	0.03	-45.243	74.02	0.10	-58.375	37.05	0.30	-68.596	47.88	1.00	-88.596	56.32	3.00
0.02	-36.632	121.36	0.06	-46.043	74.02	0.20	-59.557	55.73	0.60	-69.189	14.98	1.50	-89.189	14.98	6.00
0.03	-37.210	121.58	0.09	-46.858	74.02	0.30	-60.006	49.08	0.90	-89.681	1.47	2.00	-89.681	1.47	9.00
0.04	-37.815	121.70	0.12	-47.688	74.02	0.40	-60.413	39.05	1.20	-90.181	-7.21	2.50	-90.181	-7.21	12.00
0.05	-38.443	121.83	0.15	-48.532	74.02	0.50	-60.780	29.11	1.50	-90.681	-15.64	3.00	-90.681	-15.64	15.00
0.06	-39.092	121.95	0.18	-49.387	74.02	0.60	-61.103	19.05	1.80	-91.181	-24.10	3.50	-91.181	-24.10	18.00
0.07	-39.762	122.07	0.21	-50.250	74.02	0.70	-61.382	9.05	2.10	-91.681	-32.50	4.00	-91.681	-32.50	21.00
0.08	-40.452	122.19	0.24	-51.120	74.02	0.80	-61.617	-1.05	2.40	-92.181	-40.85	4.50	-92.181	-40.85	24.00
0.09	-41.162	122.31	0.27	-52.000	74.02	0.90	-61.807	-11.05	2.70	-92.681	-49.10	5.00	-92.681	-49.10	27.00
0.10	-41.892	122.43	0.30	-52.880	74.02	1.00	-62.050	-21.05	3.00	-93.181	-57.35	3.50	-93.181	-57.35	30.00
0.11	-42.642	122.55	0.33	-53.760	74.02	1.10	-62.240	-31.05	3.30	-93.681	-65.60	4.00	-93.681	-65.60	33.00
0.12	-43.412	122.67	0.36	-54.640	74.02	1.20	-62.380	-41.05	3.60	-94.181	-73.85	4.50	-94.181	-73.85	36.00
0.13	-44.202	122.79	0.39	-55.520	74.02	1.30	-62.480	-51.05	3.90	-94.681	-82.10	5.00	-94.681	-82.10	39.00
0.14	-45.012	122.91	0.42	-56.400	74.02	1.40	-62.540	-61.05	4.20	-95.181	-90.35	5.50	-95.181	-90.35	42.00
0.15	-45.842	123.03	0.45	-57.280	74.02	1.50	-62.560	-71.05	4.50	-95.681	-98.60	6.00	-95.681	-98.60	45.00
0.16	-46.692	123.15	0.48	-58.160	74.02	1.60	-62.540	-81.05	4.80	-96.181	-106.85	6.50	-96.181	-106.85	48.00
0.17	-47.562	123.27	0.51	-59.040	74.02	1.70	-62.480	-91.05	5.10	-96.681	-115.10	7.00	-96.681	-115.10	51.00
0.18	-48.452	123.39	0.54	-59.920	74.02	1.80	-62.380	-101.05	5.40	-97.181	-123.35	7.50	-97.181	-123.35	54.00
0.19	-49.362	123.51	0.57	-60.800	74.02	1.90	-62.240	-111.05	5.70	-97.681	-131.60	8.00	-97.681	-131.60	57.00
0.20	-50.292	123.63	0.60	-61.680	74.02	2.00	-62.050	-121.05	6.00	-98.181	-139.85	8.50	-98.181	-139.85	60.00
0.21	-51.242	123.75	0.63	-62.560	74.02	2.10	-61.807	-131.05	6.30	-98.681	-148.10	9.00	-98.681	-148.10	63.00
0.22	-52.212	123.87	0.66	-63.440	74.02	2.20	-61.510	-141.05	6.60	-99.181	-156.35	9.50	-99.181	-156.35	66.00
0.23	-53.202	123.99	0.69	-64.320	74.02	2.30	-61.170	-151.05	6.90	-99.681	-164.60	10.00	-99.681	-164.60	69.00
0.24	-54.212	124.11	0.72	-65.200	74.02	2.40	-60.780	-161.05	7.20	-100.181	-172.85	10.50	-100.181	-172.85	72.00
0.25	-55.242	124.23	0.75	-66.080	74.02	2.50	-60.340	-171.05	7.50	-100.681	-181.10	11.00	-100.681	-181.10	75.00
0.26	-56.292	124.35	0.78	-66.960	74.02	2.60	-59.850	-181.05	7.80	-101.181	-189.35	11.50	-101.181	-189.35	78.00
0.27	-57.362	124.47	0.81	-67.840	74.02	2.70	-59.310	-191.05	8.10	-101.681	-197.60	12.00	-101.681	-197.60	81.00
0.28	-58.452	124.59	0.84	-68.720	74.02	2.80	-58.720	-201.05	8.40	-102.181	-205.85	12.50	-102.181	-205.85	84.00
0.29	-59.562	124.71	0.87	-69.600	74.02	2.90	-58.080	-211.05	8.70	-102.681	-214.10	13.00	-102.681	-214.10	87.00
0.30	-60.692	124.83	0.90	-70.480	74.02	3.00	-57.400	-221.05	9.00	-103.181	-222.35	13.50	-103.181	-222.35	90.00
0.35	-67.002	125.13	1.05	-76.211	74.02	3.50	-50.011	-242.58	1.050	-105.011	-242.58	1.050	-105.011	-242.58	1.050
0.40	-73.244	125.47	1.20	-81.931	74.02	4.00	-44.303	-242.58	1.200	-106.803	-242.58	1.200	-106.803	-242.58	1.200
0.45	-79.486	125.81	1.35	-87.651	74.02	4.50	-38.585	-242.58	1.350	-108.595	-242.58	1.350	-108.595	-242.58	1.350
0.50	-85.728	126.15	1.50	-93.371	74.02	5.00	-32.867	-242.58	1.500	-110.387	-242.58	1.500	-110.387	-242.58	1.500
0.55	-91.970	126.49	1.65	-99.091	74.02	5.50	-27.149	-242.58	1.650	-112.179	-242.58	1.650	-112.179	-242.58	1.650
0.60	-98.212	126.83	1.80	-104.811	74.02	6.00	-21.431	-242.58	1.800	-113.971	-242.58	1.800	-113.971	-242.58	1.800
0.65	-104.454	127.17	1.95	-110.531	74.02	6.50	-15.713	-242.58	1.950	-115.763	-242.58	1.950	-115.763	-242.58	1.950
0.70	-110.696	127.51	2.10	-116.251	74.02	7.00	-10.005	-242.58	2.100	-117.555	-242.58	2.100	-117.555	-242.58	2.100
0.75	-116.938	127.85	2.25	-121.971	74.02	7.50	-4.287	-242.58	2.250	-119.347	-242.58	2.250	-119.347	-242.58	2.250
0.80	-123.180	128.19	2.40	-127.691	74.02	8.00	1.431	-242.58	2.400	-121.139	-242.58	2.400	-121.139	-242.58	2.400
0.85	-129.422	128.53	2.55	-133.411	74.02	8.50	7.153	-242.58	2.550	-122.931	-242.58	2.550	-122.931	-242.58	2.550
0.90	-135.664	128.87	2.70	-139.131	74.02	9.00	12.875	-242.58	2.700	-124.723	-242.58	2.700	-124.723	-242.58	2.700
0.95	-141.906	129.21	2.85	-144.851	74.02	9.50	18.597	-242.58	2.850	-126.515	-242.58	2.850	-126.515	-242.58	2.850
1.00	-148.148	129.55	3.00	-150.571	74.02	10.00	24.319	-242.58	3.000	-128.307	-242.58	3.000	-128.307	-242.58	3.000

Table 25. Radial Electric Field (Sea Water), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE					3.0 KM DOWNRANGE					10.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	RELUMT (RM)	PHASE (DEG)	AMP (UB)	PHASE (DEG)	RELUMT (RM)	PHASE (DEG)	AMP (UB)	RELUMT (RM)	PHASE (DEG)	AMP (UB)	RELUMT (RM)	PHASE (DEG)
0.00	-30.420	135.19	0.000	-75.280	-75.280	135.15	0.000	-75.280	-75.280	135.15	0.000	-75.280	135.15	0.000
0.01	-30.671	131.53	0.003	-76.078	-76.078	128.90	0.003	-76.078	-76.078	128.90	0.003	-76.078	128.90	0.003
0.02	-37.324	132.01	0.006	-76.877	-76.877	125.42	0.006	-76.877	-76.877	125.42	0.006	-76.877	125.42	0.006
0.03	-30.600	136.40	0.009	-77.671	-77.671	121.95	0.009	-77.671	-77.671	121.95	0.009	-77.671	121.95	0.009
0.04	-30.702	136.81	0.012	-78.467	-78.467	118.48	0.012	-78.467	-78.467	118.48	0.012	-78.467	118.48	0.012
0.05	-37.043	136.80	0.015	-79.260	-79.260	115.01	0.015	-79.260	-79.260	115.01	0.015	-79.260	115.01	0.015
0.06	-40.421	136.76	0.018	-80.051	-80.051	111.54	0.018	-80.051	-80.051	111.54	0.018	-80.051	111.54	0.018
0.07	-41.244	136.50	0.021	-80.843	-80.843	108.07	0.021	-80.843	-80.843	108.07	0.021	-80.843	108.07	0.021
0.08	-42.123	131.96	0.024	-81.635	-81.635	104.60	0.024	-81.635	-81.635	104.60	0.024	-81.635	104.60	0.024
0.09	-43.006	131.08	0.027	-82.427	-82.427	101.13	0.027	-82.427	-82.427	101.13	0.027	-82.427	101.13	0.027
0.10	-44.005	129.74	0.030	-83.219	-83.219	97.66	0.030	-83.219	-83.219	97.66	0.030	-83.219	97.66	0.030
0.11	-45.013	127.71	0.033	-84.011	-84.011	94.19	0.033	-84.011	-84.011	94.19	0.033	-84.011	94.19	0.033
0.12	-46.004	124.93	0.036	-84.803	-84.803	90.72	0.036	-84.803	-84.803	90.72	0.036	-84.803	90.72	0.036
0.13	-47.025	120.80	0.039	-85.595	-85.595	87.25	0.039	-85.595	-85.595	87.25	0.039	-85.595	87.25	0.039
0.14	-48.043	114.39	0.042	-86.387	-86.387	83.78	0.042	-86.387	-86.387	83.78	0.042	-86.387	83.78	0.042
0.15	-50.063	108.52	0.045	-87.179	-87.179	80.31	0.045	-87.179	-87.179	80.31	0.045	-87.179	80.31	0.045
0.16	-51.081	98.52	0.048	-87.971	-87.971	76.84	0.048	-87.971	-87.971	76.84	0.048	-87.971	76.84	0.048
0.17	-52.099	78.72	0.051	-88.763	-88.763	73.37	0.051	-88.763	-88.763	73.37	0.051	-88.763	73.37	0.051
0.18	-53.063	80.93	0.054	-89.555	-89.555	69.90	0.054	-89.555	-89.555	69.90	0.054	-89.555	69.90	0.054
0.19	-54.024	44.04	0.057	-90.347	-90.347	66.43	0.057	-90.347	-90.347	66.43	0.057	-90.347	66.43	0.057
0.20	-54.004	31.99	0.060	-91.139	-91.139	62.96	0.060	-91.139	-91.139	62.96	0.060	-91.139	62.96	0.060
0.21	-54.000	22.93	0.063	-91.931	-91.931	59.49	0.063	-91.931	-91.931	59.49	0.063	-91.931	59.49	0.063
0.22	-50.053	16.50	0.066	-92.723	-92.723	56.02	0.066	-92.723	-92.723	56.02	0.066	-92.723	56.02	0.066
0.23	-47.011	12.07	0.069	-93.515	-93.515	52.55	0.069	-93.515	-93.515	52.55	0.069	-93.515	52.55	0.069
0.24	-43.970	8.63	0.072	-94.307	-94.307	49.08	0.072	-94.307	-94.307	49.08	0.072	-94.307	49.08	0.072
0.25	-44.900	8.45	0.075	-95.099	-95.099	45.61	0.075	-95.099	-95.099	45.61	0.075	-95.099	45.61	0.075
0.26	-44.003	4.09	0.078	-95.891	-95.891	42.14	0.078	-95.891	-95.891	42.14	0.078	-95.891	42.14	0.078
0.27	-43.000	3.37	0.081	-96.683	-96.683	38.67	0.081	-96.683	-96.683	38.67	0.081	-96.683	38.67	0.081
0.28	-42.001	2.38	0.084	-97.475	-97.475	35.20	0.084	-97.475	-97.475	35.20	0.084	-97.475	35.20	0.084
0.29	-41.001	1.64	0.087	-98.267	-98.267	31.73	0.087	-98.267	-98.267	31.73	0.087	-98.267	31.73	0.087
0.30	-40.001	1.08	0.090	-99.059	-99.059	28.26	0.090	-99.059	-99.059	28.26	0.090	-99.059	28.26	0.090
0.35	-30.400	0.1	0.105	-99.851	-99.851	24.79	0.105	-99.851	-99.851	24.79	0.105	-99.851	24.79	0.105
0.40	-30.400	0.0	0.120	-99.851	-99.851	21.32	0.120	-99.851	-99.851	21.32	0.120	-99.851	21.32	0.120
0.45	-30.401	1.13	0.135	-99.851	-99.851	17.85	0.135	-99.851	-99.851	17.85	0.135	-99.851	17.85	0.135
0.50	-30.401	2.19	0.150	-99.851	-99.851	14.38	0.150	-99.851	-99.851	14.38	0.150	-99.851	14.38	0.150
0.55	-30.400	3.37	0.165	-99.851	-99.851	10.91	0.165	-99.851	-99.851	10.91	0.165	-99.851	10.91	0.165
0.60	-30.400	4.60	0.180	-99.851	-99.851	7.44	0.180	-99.851	-99.851	7.44	0.180	-99.851	7.44	0.180
0.65	-30.400	5.83	0.195	-99.851	-99.851	3.97	0.195	-99.851	-99.851	3.97	0.195	-99.851	3.97	0.195
0.70	-30.401	7.20	0.210	-99.851	-99.851	0.50	0.210	-99.851	-99.851	0.50	0.210	-99.851	0.50	0.210
0.75	-30.401	8.57	0.225	-99.851	-99.851	-3.03	0.225	-99.851	-99.851	-3.03	0.225	-99.851	-3.03	0.225
0.80	-29.401	10.03	0.240	-99.851	-99.851	-6.56	0.240	-99.851	-99.851	-6.56	0.240	-99.851	-6.56	0.240
0.85	-29.401	11.57	0.255	-99.851	-99.851	-10.09	0.255	-99.851	-99.851	-10.09	0.255	-99.851	-10.09	0.255
0.90	-29.401	13.23	0.270	-99.851	-99.851	-13.62	0.270	-99.851	-99.851	-13.62	0.270	-99.851	-13.62	0.270
0.95	-29.401	15.06	0.285	-99.851	-99.851	-17.15	0.285	-99.851	-99.851	-17.15	0.285	-99.851	-17.15	0.285
1.00	-29.400	17.09	0.300	-99.851	-99.851	-20.68	0.300	-99.851	-99.851	-20.68	0.300	-99.851	-20.68	0.300

Table 26. Azimuthal Magnetic Field (Sea Water), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE					100.0 KM DOWNRANGE					300.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.00	-0.000	-0.07	0.00	-0.001	-1.23	0.00	-0.001	-1.23	0.00	-0.001	-1.23	0.00	-0.001	-1.23
.30	-0.001	-0.07	.30	-0.002	-1.22	.30	-0.002	-1.22	.30	-0.002	-1.22	.30	-0.002	-1.22
.60	-0.001	-0.07	.60	-0.004	-1.21	.60	-0.004	-1.21	.60	-0.004	-1.21	.60	-0.004	-1.21
.90	-0.002	-0.06	.90	-0.005	-1.20	.90	-0.005	-1.20	.90	-0.005	-1.20	.90	-0.005	-1.20
.120	-0.003	-0.06	.120	-0.006	-1.19	.120	-0.006	-1.19	.120	-0.006	-1.19	.120	-0.006	-1.19
.150	-0.003	-0.06	.150	-0.008	-1.18	.150	-0.008	-1.18	.150	-0.008	-1.18	.150	-0.008	-1.18
.180	-0.003	-0.05	.180	-0.009	-1.17	.180	-0.009	-1.17	.180	-0.009	-1.17	.180	-0.009	-1.17
.210	-0.004	-0.05	.210	-0.011	-1.16	.210	-0.011	-1.16	.210	-0.011	-1.16	.210	-0.011	-1.16
.240	-0.004	-0.05	.240	-0.012	-1.15	.240	-0.012	-1.15	.240	-0.012	-1.15	.240	-0.012	-1.15
.270	-0.005	-0.04	.270	-0.013	-1.14	.270	-0.013	-1.14	.270	-0.013	-1.14	.270	-0.013	-1.14
.300	-0.005	-0.04	.300	-0.015	-1.13	.300	-0.015	-1.13	.300	-0.015	-1.13	.300	-0.015	-1.13
.330	-0.006	-0.04	.330	-0.016	-1.12	.330	-0.016	-1.12	.330	-0.016	-1.12	.330	-0.016	-1.12
.360	-0.006	-0.04	.360	-0.017	-1.11	.360	-0.017	-1.11	.360	-0.017	-1.11	.360	-0.017	-1.11
.390	-0.007	-0.03	.390	-0.019	-1.10	.390	-0.019	-1.10	.390	-0.019	-1.10	.390	-0.019	-1.10
.420	-0.008	-0.03	.420	-0.020	-1.09	.420	-0.020	-1.09	.420	-0.020	-1.09	.420	-0.020	-1.09
.450	-0.008	-0.03	.450	-0.021	-1.08	.450	-0.021	-1.08	.450	-0.021	-1.08	.450	-0.021	-1.08
.480	-0.009	-0.02	.480	-0.023	-1.07	.480	-0.023	-1.07	.480	-0.023	-1.07	.480	-0.023	-1.07
.510	-0.010	-0.02	.510	-0.024	-1.06	.510	-0.024	-1.06	.510	-0.024	-1.06	.510	-0.024	-1.06
.540	-0.010	-0.02	.540	-0.025	-1.05	.540	-0.025	-1.05	.540	-0.025	-1.05	.540	-0.025	-1.05
.570	-0.011	-0.02	.570	-0.026	-1.04	.570	-0.026	-1.04	.570	-0.026	-1.04	.570	-0.026	-1.04
.600	-0.012	-0.01	.600	-0.027	-1.03	.600	-0.027	-1.03	.600	-0.027	-1.03	.600	-0.027	-1.03
.630	-0.013	-0.01	.630	-0.029	-1.02	.630	-0.029	-1.02	.630	-0.029	-1.02	.630	-0.029	-1.02
.660	-0.013	-0.01	.660	-0.030	-1.01	.660	-0.030	-1.01	.660	-0.030	-1.01	.660	-0.030	-1.01
.690	-0.014	-0.00	.690	-0.031	-1.00	.690	-0.031	-1.00	.690	-0.031	-1.00	.690	-0.031	-1.00
.720	-0.014	-0.00	.720	-0.032	-0.99	.720	-0.032	-0.99	.720	-0.032	-0.99	.720	-0.032	-0.99
.750	-0.015	-0.00	.750	-0.033	-0.98	.750	-0.033	-0.98	.750	-0.033	-0.98	.750	-0.033	-0.98
.780	-0.015	-0.00	.780	-0.035	-0.97	.780	-0.035	-0.97	.780	-0.035	-0.97	.780	-0.035	-0.97
.810	-0.016	-0.00	.810	-0.036	-0.96	.810	-0.036	-0.96	.810	-0.036	-0.96	.810	-0.036	-0.96
.840	-0.016	-0.00	.840	-0.037	-0.95	.840	-0.037	-0.95	.840	-0.037	-0.95	.840	-0.037	-0.95
.870	-0.016	-0.00	.870	-0.038	-0.95	.870	-0.038	-0.95	.870	-0.038	-0.95	.870	-0.038	-0.95
.900	-0.017	-0.00	.900	-0.039	-0.94	.900	-0.039	-0.94	.900	-0.039	-0.94	.900	-0.039	-0.94
1.050	-0.023	-0.57	1.050	-0.045	-0.90	1.050	-0.045	-0.90	1.050	-0.045	-0.90	1.050	-0.045	-0.90
1.200	-0.029	-0.26	1.200	-0.050	-0.86	1.200	-0.050	-0.86	1.200	-0.050	-0.86	1.200	-0.050	-0.86
1.350	-0.033	-0.04	1.350	-0.056	-0.82	1.350	-0.056	-0.82	1.350	-0.056	-0.82	1.350	-0.056	-0.82
1.500	-0.038	-0.24	1.500	-0.062	-0.78	1.500	-0.062	-0.78	1.500	-0.062	-0.78	1.500	-0.062	-0.78
1.650	-0.043	-0.20	1.650	-0.068	-0.74	1.650	-0.068	-0.74	1.650	-0.068	-0.74	1.650	-0.068	-0.74
1.800	-0.047	-0.04	1.800	-0.073	-0.71	1.800	-0.073	-0.71	1.800	-0.073	-0.71	1.800	-0.073	-0.71
1.950	-0.055	-0.44	1.950	-0.080	-0.68	1.950	-0.080	-0.68	1.950	-0.080	-0.68	1.950	-0.080	-0.68
2.100	-0.062	-0.48	2.100	-0.086	-0.65	2.100	-0.086	-0.65	2.100	-0.086	-0.65	2.100	-0.086	-0.65
2.250	-0.069	-0.47	2.250	-0.092	-0.62	2.250	-0.092	-0.62	2.250	-0.092	-0.62	2.250	-0.092	-0.62
2.400	-0.076	-0.43	2.400	-0.097	-0.59	2.400	-0.097	-0.59	2.400	-0.097	-0.59	2.400	-0.097	-0.59
2.550	-0.084	-0.44	2.550	-0.106	-0.57	2.550	-0.106	-0.57	2.550	-0.106	-0.57	2.550	-0.106	-0.57
2.700	-0.092	-0.43	2.700	-0.114	-0.54	2.700	-0.114	-0.54	2.700	-0.114	-0.54	2.700	-0.114	-0.54
2.850	-0.100	-0.42	2.850	-0.122	-0.52	2.850	-0.122	-0.52	2.850	-0.122	-0.52	2.850	-0.122	-0.52
3.000	-0.107	-0.41	3.000	-0.130	-0.50	3.000	-0.130	-0.50	3.000	-0.130	-0.50	3.000	-0.130	-0.50

Table 27. Azimuthal Magnetic Field (Sea Water), Frequency = 0.1 MHz, VED Height = 2247.60 m

300.0 KM DISTANCE				100.0 KM DISTANCE				300.0 KM DISTANCE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	RELINT (KM)	AMP (DB)	PHASE (DEG)	RELINT (KM)	RELINT (KM)	AMP (DB)	PHASE (DEG)	RELINT (KM)	AMP (DB)
0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.030	-0.001	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.060	-0.002	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.090	-0.003	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.120	-0.004	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.150	-0.005	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.180	-0.006	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.210	-0.007	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.240	-0.008	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.270	-0.009	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.300	-0.010	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.330	-0.011	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.360	-0.012	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.390	-0.013	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.420	-0.014	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.450	-0.015	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.480	-0.016	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.510	-0.017	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.540	-0.018	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.570	-0.019	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.600	-0.020	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.630	-0.021	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.660	-0.022	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.690	-0.023	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.720	-0.024	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.750	-0.025	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.780	-0.026	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.810	-0.027	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.840	-0.028	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.870	-0.029	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
0.900	-0.030	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.050	-0.101	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.200	-0.202	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.350	-0.404	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.500	-0.699	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.650	-1.050	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.800	-1.416	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
1.950	-1.800	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
2.100	-2.200	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
2.250	-2.600	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
2.400	-3.000	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
2.550	-3.400	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
2.700	-3.800	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
2.850	-4.200	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00
3.000	-4.600	-0.00	0.000	-0.000	-0.00	0.000	0.000	-0.000	-0.00	0.000	-0.00

Table 28. Azimuthal Magnetic Field (Sea Water), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM DISTANCE				100.0 KM DISTANCE				300.0 KM DISTANCE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.030	-0.003	-0.03	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.060	-0.006	-0.06	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.090	-0.009	-0.09	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.120	-0.012	-0.12	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.150	-0.015	-0.15	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.180	-0.018	-0.18	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.210	-0.021	-0.21	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.240	-0.024	-0.24	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.270	-0.027	-0.27	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.300	-0.030	-0.30	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.330	-0.033	-0.33	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.360	-0.036	-0.36	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.390	-0.039	-0.39	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.420	-0.042	-0.42	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.450	-0.045	-0.45	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.480	-0.048	-0.48	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.510	-0.051	-0.51	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.540	-0.054	-0.54	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.570	-0.057	-0.57	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.600	-0.060	-0.60	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.630	-0.063	-0.63	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.660	-0.066	-0.66	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.690	-0.069	-0.69	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.720	-0.072	-0.72	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.750	-0.075	-0.75	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.780	-0.078	-0.78	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.810	-0.081	-0.81	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.840	-0.084	-0.84	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.870	-0.087	-0.87	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
0.900	-0.090	-0.90	0.000	-0.000	-0.00	0.000	-0.000	-0.00	0.000	-0.000	-0.00
1.050	-0.511	-0.51	3.000	-0.505	-0.50	10.000	-0.505	-0.50	10.000	-0.505	-0.50
1.200	-0.804	-0.80	4.000	-0.722	-0.72	20.000	-0.722	-0.72	20.000	-0.722	-0.72
1.350	-1.043	-1.04	5.000	-1.003	-1.00	30.000	-1.003	-1.00	30.000	-1.003	-1.00
1.500	-1.204	-1.20	6.000	-1.127	-1.13	40.000	-1.127	-1.13	40.000	-1.127	-1.13
1.650	-1.304	-1.30	7.000	-1.201	-1.20	50.000	-1.201	-1.20	50.000	-1.201	-1.20
1.800	-1.375	-1.38	8.000	-1.250	-1.25	60.000	-1.250	-1.25	60.000	-1.250	-1.25
2.000	-1.400	-1.40	9.000	-1.280	-1.28	70.000	-1.280	-1.28	70.000	-1.280	-1.28
2.250	-1.400	-1.40	10.000	-1.290	-1.29	80.000	-1.290	-1.29	80.000	-1.290	-1.29
2.500	-1.380	-1.38	11.000	-1.280	-1.28	90.000	-1.280	-1.28	90.000	-1.280	-1.28
2.750	-1.340	-1.34	12.000	-1.250	-1.25	100.000	-1.250	-1.25	100.000	-1.250	-1.25
3.000	-1.280	-1.28	13.000	-1.200	-1.20	110.000	-1.200	-1.20	110.000	-1.200	-1.20
3.250	-1.200	-1.20	14.000	-1.130	-1.13	120.000	-1.130	-1.13	120.000	-1.130	-1.13
3.500	-1.100	-1.10	15.000	-1.040	-1.04	130.000	-1.040	-1.04	130.000	-1.040	-1.04
3.750	-0.980	-0.98	16.000	-0.930	-0.93	140.000	-0.930	-0.93	140.000	-0.930	-0.93
4.000	-0.840	-0.84	17.000	-0.800	-0.80	150.000	-0.800	-0.80	150.000	-0.800	-0.80
4.250	-0.680	-0.68	18.000	-0.650	-0.65	160.000	-0.650	-0.65	160.000	-0.650	-0.65
4.500	-0.500	-0.50	19.000	-0.490	-0.49	170.000	-0.490	-0.49	170.000	-0.490	-0.49
4.750	-0.310	-0.31	20.000	-0.320	-0.32	180.000	-0.320	-0.32	180.000	-0.320	-0.32
5.000	-0.110	-0.11	21.000	-0.130	-0.13	190.000	-0.130	-0.13	190.000	-0.130	-0.13
5.250	0.090	0.09	22.000	0.040	0.04	200.000	0.040	0.04	200.000	0.040	0.04
5.500	0.280	0.28	23.000	0.190	0.19	210.000	0.190	0.19	210.000	0.190	0.19
5.750	0.460	0.46	24.000	0.340	0.34	220.000	0.340	0.34	220.000	0.340	0.34
6.000	0.630	0.63	25.000	0.480	0.48	230.000	0.480	0.48	230.000	0.480	0.48
6.250	0.780	0.78	26.000	0.610	0.61	240.000	0.610	0.61	240.000	0.610	0.61
6.500	0.910	0.91	27.000	0.730	0.73	250.000	0.730	0.73	250.000	0.730	0.73
6.750	1.020	1.02	28.000	0.840	0.84	260.000	0.840	0.84	260.000	0.840	0.84
7.000	1.110	1.11	29.000	0.940	0.94	270.000	0.940	0.94	270.000	0.940	0.94
7.250	1.180	1.18	30.000	1.030	1.03	280.000	1.030	1.03	280.000	1.030	1.03
7.500	1.230	1.23	31.000	1.110	1.11	290.000	1.110	1.11	290.000	1.110	1.11
7.750	1.260	1.26	32.000	1.180	1.18	300.000	1.180	1.18	300.000	1.180	1.18
8.000	1.280	1.28	33.000	1.240	1.24	310.000	1.240	1.24	310.000	1.240	1.24
8.250	1.290	1.29	34.000	1.290	1.29	320.000	1.290	1.29	320.000	1.290	1.29
8.500	1.290	1.29	35.000	1.330	1.33	330.000	1.330	1.33	330.000	1.330	1.33
8.750	1.280	1.28	36.000	1.360	1.36	340.000	1.360	1.36	340.000	1.360	1.36
9.000	1.260	1.26	37.000	1.380	1.38	350.000	1.380	1.38	350.000	1.380	1.38
9.250	1.230	1.23	38.000	1.390	1.39	360.000	1.390	1.39	360.000	1.390	1.39
9.500	1.190	1.19	39.000	1.390	1.39	370.000	1.390	1.39	370.000	1.390	1.39
9.750	1.140	1.14	40.000	1.380	1.38	380.000	1.380	1.38	380.000	1.380	1.38
10.000	1.080	1.08	41.000	1.360	1.36	390.000	1.360	1.36	390.000	1.360	1.36
10.250	1.010	1.01	42.000	1.330	1.33	400.000	1.330	1.33	400.000	1.330	1.33
10.500	0.930	0.93	43.000	1.290	1.29	410.000	1.290	1.29	410.000	1.290	1.29
10.750	0.840	0.84	44.000	1.240	1.24	420.000	1.240	1.24	420.000	1.240	1.24
11.000	0.740	0.74	45.000	1.180	1.18	430.000	1.180	1.18	430.000	1.180	1.18
11.250	0.630	0.63	46.000	1.110	1.11	440.000	1.110	1.11	440.000	1.110	1.11
11.500	0.510	0.51	47.000	1.030	1.03	450.000	1.030	1.03	450.000	1.030	1.03
11.750	0.380	0.38	48.000	0.940	0.94	460.000	0.940	0.94	460.000	0.940	0.94
12.000	0.250	0.25	49.000	0.840	0.84	470.000	0.840	0.84	470.000	0.840	0.84
12.250	0.120	0.12	50.000	0.730	0.73	480.000	0.730	0.73	480.000	0.730	0.73
12.500	0.000	0.00	51.000	0.610	0.61	490.000	0.610	0.61	490.000	0.610	0.61
12.750	-0.120	-0.12	52.000	0.480	0.48	500.000	0.480	0.48	500.000	0.480	0.48
13.000	-0.240	-0.24	53.000	0.340	0.34	510.000	0.340	0.34	510.000	0.340	0.34
13.250	-0.360	-0.36	54.000	0.190	0.19	520.000	0.190	0.19	520.000	0.190	0.19
13.500	-0.480	-0.48	55.000	0.040	0.04	530.000	0.040	0.04	530.000	0.040	0.04
13.750	-0.590	-0.59	56.000	-0.110	-0.11	540.000	-0.110	-0.11	540.000	-0.110	-0.11
14.000	-0.690	-0.69	57.000	-0.240	-0.24	550.000	-0.240	-0.24	550.000	-0.240	-0.24
14.250	-0.780	-0.78	58.000	-0.360	-0.36	560.000	-0.360	-0.36	560.000	-0.360	-0.36
14.500	-0.860	-0.86	59.000	-0.480	-0.48	570.000	-0.480	-0.48	570.000	-0.480	-0.48
14.750	-0.930	-0.93	60.000	-0.590	-0.59	580.000	-0.590	-0.59	580.000	-0.590	-0.59
15.000	-0.990	-0.99	61.000	-0.690	-0.69	590.000	-0.690	-0.69	590.000	-0.690	-0.69
15.250	-1.040	-1.04	62.000	-0.780	-0.78	600.000	-0.780	-0.78	600.000	-0.780	-0.78
15.500	-1.080	-1.08	63.000	-0.860	-0.86	610.000	-0.860	-0.86	610.000	-0.860	-0.86
15.750	-1.110	-1.11	64.000	-0.930	-0.93	620.000	-0.930	-0.93	620.000	-0.930	-0.93
16.000	-1.140	-1.14	65.000	-0.990	-0.99	630.000	-0.990	-0.99	630.000	-0.990	-0.99
16.250	-1.160	-1.16	66.000	-1.040	-1.04	640.000	-1.040	-1.04	640.000	-1.040	-1.04
16.500	-1.180	-1.18	67.000	-1.080	-1.08	650.000	-1.080	-1.08	650.000	-1.080	-1.08
16.750	-1.190	-1.19	68.000	-1.110	-1.11						

Table 30. Azimuthal Magnetic Field (Sea Water), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DUE RANGE				10.0 KM DUE RANGE				30.0 KM DUE RANGE				100.0 KM DUE RANGE			
REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)
.000	-1.000	-1.46	.000	-1.000	-3.16	.000	-1.000	-5.01	.000	-1.000	-8.01	.000	-1.000	-11.54	.000
.003	-1.007	-1.44	.003	-1.006	-3.15	.003	-1.005	-5.00	.003	-1.004	-6.91	.003	-1.003	-11.52	.003
.006	-1.003	-1.43	.006	-1.002	-3.14	.006	-1.001	-4.99	.006	-1.000	-6.90	.006	-1.000	-11.51	.006
.009	-1.000	-1.42	.009	-1.000	-3.13	.009	-1.000	-4.98	.009	-1.000	-6.89	.009	-1.000	-11.50	.009
.012	-1.000	-1.41	.012	-1.000	-3.12	.012	-1.000	-4.97	.012	-1.000	-6.88	.012	-1.000	-11.49	.012
.015	-1.000	-1.40	.015	-1.000	-3.11	.015	-1.000	-4.96	.015	-1.000	-6.87	.015	-1.000	-11.48	.015
.018	-1.000	-1.39	.018	-1.000	-3.10	.018	-1.000	-4.95	.018	-1.000	-6.86	.018	-1.000	-11.47	.018
.021	-1.000	-1.38	.021	-1.000	-3.09	.021	-1.000	-4.94	.021	-1.000	-6.85	.021	-1.000	-11.46	.021
.024	-1.000	-1.37	.024	-1.000	-3.08	.024	-1.000	-4.93	.024	-1.000	-6.84	.024	-1.000	-11.45	.024
.027	-1.000	-1.36	.027	-1.000	-3.07	.027	-1.000	-4.92	.027	-1.000	-6.83	.027	-1.000	-11.44	.027
.030	-1.000	-1.35	.030	-1.000	-3.06	.030	-1.000	-4.91	.030	-1.000	-6.82	.030	-1.000	-11.43	.030
.033	-1.000	-1.34	.033	-1.000	-3.05	.033	-1.000	-4.90	.033	-1.000	-6.81	.033	-1.000	-11.42	.033
.036	-1.000	-1.33	.036	-1.000	-3.04	.036	-1.000	-4.89	.036	-1.000	-6.80	.036	-1.000	-11.41	.036
.039	-1.000	-1.32	.039	-1.000	-3.03	.039	-1.000	-4.88	.039	-1.000	-6.79	.039	-1.000	-11.40	.039
.042	-1.000	-1.31	.042	-1.000	-3.02	.042	-1.000	-4.87	.042	-1.000	-6.78	.042	-1.000	-11.39	.042
.045	-1.000	-1.30	.045	-1.000	-3.01	.045	-1.000	-4.86	.045	-1.000	-6.77	.045	-1.000	-11.38	.045
.048	-1.000	-1.29	.048	-1.000	-3.00	.048	-1.000	-4.85	.048	-1.000	-6.76	.048	-1.000	-11.37	.048
.051	-1.000	-1.28	.051	-1.000	-2.99	.051	-1.000	-4.84	.051	-1.000	-6.75	.051	-1.000	-11.36	.051
.054	-1.000	-1.27	.054	-1.000	-2.98	.054	-1.000	-4.83	.054	-1.000	-6.74	.054	-1.000	-11.35	.054
.057	-1.000	-1.26	.057	-1.000	-2.97	.057	-1.000	-4.82	.057	-1.000	-6.73	.057	-1.000	-11.34	.057
.060	-1.000	-1.25	.060	-1.000	-2.96	.060	-1.000	-4.81	.060	-1.000	-6.72	.060	-1.000	-11.33	.060
.063	-1.000	-1.24	.063	-1.000	-2.95	.063	-1.000	-4.80	.063	-1.000	-6.71	.063	-1.000	-11.32	.063
.066	-1.000	-1.23	.066	-1.000	-2.94	.066	-1.000	-4.79	.066	-1.000	-6.70	.066	-1.000	-11.31	.066
.069	-1.000	-1.22	.069	-1.000	-2.93	.069	-1.000	-4.78	.069	-1.000	-6.69	.069	-1.000	-11.30	.069
.072	-1.000	-1.21	.072	-1.000	-2.92	.072	-1.000	-4.77	.072	-1.000	-6.68	.072	-1.000	-11.29	.072
.075	-1.000	-1.20	.075	-1.000	-2.91	.075	-1.000	-4.76	.075	-1.000	-6.67	.075	-1.000	-11.28	.075
.078	-1.000	-1.19	.078	-1.000	-2.90	.078	-1.000	-4.75	.078	-1.000	-6.66	.078	-1.000	-11.27	.078
.081	-1.000	-1.18	.081	-1.000	-2.89	.081	-1.000	-4.74	.081	-1.000	-6.65	.081	-1.000	-11.26	.081
.084	-1.000	-1.17	.084	-1.000	-2.88	.084	-1.000	-4.73	.084	-1.000	-6.64	.084	-1.000	-11.25	.084
.087	-1.000	-1.16	.087	-1.000	-2.87	.087	-1.000	-4.72	.087	-1.000	-6.63	.087	-1.000	-11.24	.087
.090	-1.000	-1.15	.090	-1.000	-2.86	.090	-1.000	-4.71	.090	-1.000	-6.62	.090	-1.000	-11.23	.090
.105	-1.000	-1.15	.105	-1.000	-2.86	.105	-1.000	-4.71	.105	-1.000	-6.62	.105	-1.000	-11.23	.105
.120	-1.000	-1.10	.120	-1.000	-2.81	.120	-1.000	-4.66	.120	-1.000	-6.57	.120	-1.000	-11.18	.120
.135	-1.000	-1.00	.135	-1.000	-2.71	.135	-1.000	-4.56	.135	-1.000	-6.47	.135	-1.000	-11.08	.135
.150	-1.000	-1.00	.150	-1.000	-2.59	.150	-1.000	-4.44	.150	-1.000	-6.35	.150	-1.000	-10.96	.150
.165	-1.000	-1.00	.165	-1.000	-2.45	.165	-1.000	-4.30	.165	-1.000	-6.21	.165	-1.000	-10.82	.165
.180	-1.000	-1.00	.180	-1.000	-2.29	.180	-1.000	-4.14	.180	-1.000	-6.05	.180	-1.000	-10.66	.180
.195	-1.000	-1.00	.195	-1.000	-2.11	.195	-1.000	-3.96	.195	-1.000	-5.87	.195	-1.000	-10.48	.195
.210	-1.000	-1.00	.210	-1.000	-1.91	.210	-1.000	-3.77	.210	-1.000	-5.68	.210	-1.000	-10.29	.210
.225	-1.000	-1.00	.225	-1.000	-1.69	.225	-1.000	-3.57	.225	-1.000	-5.48	.225	-1.000	-10.09	.225
.240	-1.000	-1.00	.240	-1.000	-1.45	.240	-1.000	-3.35	.240	-1.000	-5.27	.240	-1.000	-9.88	.240
.255	-1.000	-1.00	.255	-1.000	-1.19	.255	-1.000	-3.12	.255	-1.000	-5.05	.255	-1.000	-9.66	.255
.270	-1.000	-1.00	.270	-1.000	-0.91	.270	-1.000	-2.88	.270	-1.000	-4.82	.270	-1.000	-9.43	.270
.285	-1.000	-1.00	.285	-1.000	-0.61	.285	-1.000	-2.63	.285	-1.000	-4.58	.285	-1.000	-9.19	.285
.300	-1.000	-1.00	.300	-1.000	-0.30	.300	-1.000	-2.37	.300	-1.000	-4.34	.300	-1.000	-8.94	.300

Table 29. Azimuthal Magnetic Field (Sea Water), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM DOWNSHADE				10.0 KM DOWNSHADE				30.0 KM DOWNSHADE				100.0 KM DOWNSHADE			
RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT
0.000	-0.002	-6.12	0.000	-0.000	-3.00	0.000	-0.017	-0.72	0.000	-0.055	-12.26	0.000	-0.351	-4.45	0.000
0.003	-0.003	-6.11	0.010	-0.010	-3.05	0.030	-0.031	-0.62	0.100	-0.102	-11.94	0.300	-0.374	-3.51	1.000
0.006	-0.005	-6.11	0.020	-0.015	-3.06	0.060	-0.044	-0.53	0.500	-0.444	-10.42	1.000	-0.377	-3.16	3.000
0.009	-0.006	-6.10	0.030	-0.020	-3.10	0.090	-0.057	-0.43	1.500	-0.503	-11.30	5.000	-0.360	-2.62	7.000
0.012	-0.008	-6.09	0.040	-0.024	-3.15	0.120	-0.070	-0.34	2.000	-0.613	-10.99	10.000	-0.339	-2.41	10.000
0.015	-0.009	-6.08	0.050	-0.028	-3.12	0.150	-0.081	-0.24	3.000	-0.650	-10.66	15.000	-0.321	-1.94	20.000
0.018	-0.010	-6.07	0.060	-0.033	-3.09	0.180	-0.093	-0.15	2.000	-0.680	-10.37	20.000	-0.315	-1.84	30.000
0.021	-0.012	-6.06	0.070	-0.037	-3.06	0.210	-0.103	-0.05	1.000	-0.700	-10.07	30.000	-0.310	-1.72	40.000
0.024	-0.013	-6.05	0.080	-0.041	-3.03	0.240	-0.113	-0.05	0.500	-0.710	-9.77	40.000	-0.307	-1.62	50.000
0.027	-0.015	-6.04	0.090	-0.045	-3.00	0.270	-0.123	-0.07	0.300	-0.720	-9.48	50.000	-0.306	-1.54	60.000
0.030	-0.016	-6.03	0.100	-0.049	-2.97	0.300	-0.133	-0.07	0.200	-0.730	-9.19	60.000	-0.305	-1.46	70.000
0.033	-0.018	-6.02	0.110	-0.053	-2.95	0.330	-0.141	-0.09	0.100	-0.740	-8.92	70.000	-0.304	-1.38	80.000
0.036	-0.019	-6.01	0.120	-0.056	-2.93	0.360	-0.150	-0.09	0.050	-0.750	-8.65	80.000	-0.303	-1.30	90.000
0.039	-0.020	-6.00	0.130	-0.060	-2.94	0.390	-0.159	-0.09	0.030	-0.760	-8.38	90.000	-0.302	-1.22	100.000
0.042	-0.022	-5.99	0.140	-0.063	-2.94	0.420	-0.165	-0.09	0.020	-0.770	-8.13	100.000	-0.301	-1.14	110.000
0.045	-0.023	-5.98	0.150	-0.067	-2.94	0.450	-0.172	-0.09	0.010	-0.780	-7.88	110.000	-0.300	-1.06	120.000
0.048	-0.025	-5.97	0.160	-0.070	-2.93	0.480	-0.179	-0.09	0.000	-0.790	-7.64	120.000	-0.299	-1.00	130.000
0.051	-0.026	-5.96	0.170	-0.074	-2.93	0.510	-0.185	-0.10	0.000	-0.800	-7.41	130.000	-0.298	-0.94	140.000
0.054	-0.027	-5.95	0.180	-0.077	-2.92	0.540	-0.191	-0.10	0.000	-0.810	-7.19	140.000	-0.297	-0.88	150.000
0.057	-0.029	-5.94	0.190	-0.080	-2.92	0.570	-0.197	-0.10	0.000	-0.820	-6.97	150.000	-0.296	-0.82	160.000
0.060	-0.030	-5.93	0.200	-0.083	-2.92	0.600	-0.202	-0.10	0.000	-0.830	-6.77	160.000	-0.295	-0.76	170.000
0.063	-0.032	-5.93	0.210	-0.086	-2.92	0.630	-0.207	-0.10	0.000	-0.840	-6.57	170.000	-0.294	-0.70	180.000
0.066	-0.033	-5.92	0.220	-0.089	-2.92	0.660	-0.212	-0.10	0.000	-0.850	-6.37	180.000	-0.293	-0.64	190.000
0.069	-0.035	-5.91	0.230	-0.092	-2.91	0.690	-0.218	-0.10	0.000	-0.860	-6.17	190.000	-0.292	-0.58	200.000
0.072	-0.036	-5.90	0.240	-0.095	-2.91	0.720	-0.221	-0.10	0.000	-0.870	-5.97	200.000	-0.291	-0.52	210.000
0.075	-0.037	-5.89	0.250	-0.098	-2.91	0.750	-0.225	-0.10	0.000	-0.880	-5.77	210.000	-0.290	-0.46	220.000
0.078	-0.039	-5.88	0.260	-0.100	-2.90	0.780	-0.229	-0.10	0.000	-0.890	-5.57	220.000	-0.289	-0.40	230.000
0.081	-0.040	-5.87	0.270	-0.103	-2.90	0.810	-0.232	-0.10	0.000	-0.900	-5.37	230.000	-0.288	-0.34	240.000
0.084	-0.042	-5.86	0.280	-0.106	-2.90	0.840	-0.235	-0.10	0.000	-0.910	-5.17	240.000	-0.287	-0.28	250.000
0.087	-0.043	-5.85	0.290	-0.108	-2.90	0.870	-0.238	-0.10	0.000	-0.920	-4.97	250.000	-0.286	-0.22	260.000
0.090	-0.045	-5.84	0.300	-0.111	-2.89	0.900	-0.241	-0.10	0.000	-0.930	-4.77	260.000	-0.285	-0.16	270.000
0.093	-0.047	-5.83	0.310	-0.114	-2.89	0.930	-0.244	-0.10	0.000	-0.940	-4.57	270.000	-0.284	-0.10	280.000
0.096	-0.049	-5.82	0.320	-0.117	-2.88	0.960	-0.247	-0.10	0.000	-0.950	-4.37	280.000	-0.283	-0.04	290.000
0.099	-0.050	-5.81	0.330	-0.120	-2.88	0.990	-0.250	-0.10	0.000	-0.960	-4.17	290.000	-0.282	0.02	300.000
0.102	-0.052	-5.80	0.340	-0.123	-2.87	1.020	-0.253	-0.10	0.000	-0.970	-3.97	300.000	-0.281	0.08	310.000
0.105	-0.054	-5.79	0.350	-0.126	-2.87	1.050	-0.256	-0.10	0.000	-0.980	-3.77	310.000	-0.280	0.14	320.000
0.108	-0.056	-5.78	0.360	-0.129	-2.86	1.080	-0.259	-0.10	0.000	-0.990	-3.57	320.000	-0.279	0.20	330.000
0.111	-0.058	-5.77	0.370	-0.132	-2.86	1.110	-0.262	-0.10	0.000	-1.000	-3.37	330.000	-0.278	0.26	340.000
0.114	-0.060	-5.76	0.380	-0.135	-2.85	1.140	-0.265	-0.10	0.000	-1.010	-3.17	340.000	-0.277	0.32	350.000
0.117	-0.062	-5.75	0.390	-0.138	-2.85	1.170	-0.268	-0.10	0.000	-1.020	-2.97	350.000	-0.276	0.38	360.000
0.120	-0.064	-5.74	0.400	-0.141	-2.84	1.200	-0.271	-0.10	0.000	-1.030	-2.77	360.000	-0.275	0.44	370.000
0.123	-0.066	-5.73	0.410	-0.144	-2.84	1.230	-0.274	-0.10	0.000	-1.040	-2.57	370.000	-0.274	0.50	380.000
0.126	-0.068	-5.72	0.420	-0.147	-2.83	1.260	-0.277	-0.10	0.000	-1.050	-2.37	380.000	-0.273	0.56	390.000
0.129	-0.070	-5.71	0.430	-0.150	-2.83	1.290	-0.280	-0.10	0.000	-1.060	-2.17	390.000	-0.272	0.62	400.000
0.132	-0.072	-5.70	0.440	-0.153	-2.82	1.320	-0.283	-0.10	0.000	-1.070	-1.97	400.000	-0.271	0.68	410.000
0.135	-0.074	-5.69	0.450	-0.156	-2.82	1.350	-0.286	-0.10	0.000	-1.080	-1.77	410.000	-0.270	0.74	420.000
0.138	-0.076	-5.68	0.460	-0.159	-2.81	1.380	-0.289	-0.10	0.000	-1.090	-1.57	420.000	-0.269	0.80	430.000
0.141	-0.078	-5.67	0.470	-0.162	-2.81	1.410	-0.292	-0.10	0.000	-1.100	-1.37	430.000	-0.268	0.86	440.000
0.144	-0.080	-5.66	0.480	-0.165	-2.80	1.440	-0.295	-0.10	0.000	-1.110	-1.17	440.000	-0.267	0.92	450.000
0.147	-0.082	-5.65	0.490	-0.168	-2.80	1.470	-0.298	-0.10	0.000	-1.120	-0.97	450.000	-0.266	0.98	460.000
0.150	-0.084	-5.64	0.500	-0.171	-2.79	1.500	-0.301	-0.10	0.000	-1.130	-0.77	460.000	-0.265	1.04	470.000
0.153	-0.086	-5.63	0.510	-0.174	-2.79	1.530	-0.304	-0.10	0.000	-1.140	-0.57	470.000	-0.264	1.10	480.000
0.156	-0.088	-5.62	0.520	-0.177	-2.78	1.560	-0.307	-0.10	0.000	-1.150	-0.37	480.000	-0.263	1.16	490.000
0.159	-0.090	-5.61	0.530	-0.180	-2.78	1.590	-0.310	-0.10	0.000	-1.160	-0.17	490.000	-0.262	1.22	500.000
0.162	-0.092	-5.60	0.540	-0.183	-2.77	1.620	-0.313	-0.10	0.000	-1.170	0.03	500.000	-0.261	1.28	510.000
0.165	-0.094	-5.59	0.550	-0.186	-2.77	1.650	-0.316	-0.10	0.000	-1.180	0.23	510.000	-0.260	1.34	520.000
0.168	-0.096	-5.58	0.560	-0.189	-2.76	1.680	-0.319	-0.10	0.000	-1.190	0.43	520.000	-0.259	1.40	530.000
0.171	-0.098	-5.57	0.570	-0.192	-2.76	1.710	-0.322	-0.10	0.000	-1.200	0.63	530.000	-0.258	1.46	540.000
0.174	-0.100	-5.56	0.580	-0.195	-2.75	1.740	-0.325	-0.10	0.000	-1.210	0.83	540.000	-0.257	1.52	550.000
0.177	-0.102	-5.55	0.590	-0.198	-2.75	1.770	-0.328	-0.10	0.000	-1.220	1.03	550.000	-0.256	1.58	560.000
0.180	-0.104	-5.54	0.600	-0.201	-2.74	1.800	-0.331	-0.10	0.000	-1.230	1.23	560.000	-0.255	1.64	570.000
0.183	-0.106	-5.53	0.610	-0.204	-2.74	1.830	-0.334	-0.10	0.000	-1.240	1.43	570.000	-0.254	1.70	580.000
0.186	-0.108	-5.52	0.620	-0.207	-2.73	1.860	-0.337	-0.10	0.000	-1.250	1.63	580.000	-0.253	1.76	590.000
0.189	-0.110	-5.51	0.630	-0.210	-2.73	1.890	-0.340	-0.10	0.000	-1.260	1.83	590.000	-0.252	1.82	600.000
0.192	-0.112	-5.50	0.640	-0.213	-2.72	1.920	-0.343	-0.10	0.000	-1.270	2.03	600.000	-0.251	1.88	610.000
0.195	-0.114	-5.49	0.650	-0.216	-2.72	1.950	-0.346	-0.10	0.000	-1.280	2.23	610.000	-0.250	1.94	620.000
0.198	-0.116	-5.48	0.660	-0.219	-2.71	1.980	-0.349	-0.10	0.000	-1.290	2.43	620.000	-0.249	2.00	630.000
0.201	-0.118	-5.47	0.670	-0.222	-2.71	2.010	-0.352	-0.10	0.000	-1.300	2.63	630.000	-0.248	2.06	640.000
0.204	-0.120	-5.46	0.680	-0.225	-2.70	2.040	-0.355	-0.10	0.000	-1.310	2.83	640.000	-0.247	2.12	650.000
0.207	-0.122	-5.45	0.690	-0.228	-2.70	2.070	-0.358	-0.10	0.000	-1.320	3.03	650.000	-0.246	2.18	660.000
0.210	-0.124	-5.44	0.700	-0.231	-2.69	2.100	-0.361	-0.10	0.000	-1.330	3.23	660.000	-0.245	2.24	670.000
0.213	-0.126	-5.43	0.710	-0.234	-2.69	2.130	-0.364	-0.10	0.000	-1.340	3.43	670.000	-0.244	2.30	680.000
0.216	-0.128	-5.42	0.720	-0.237	-2.68	2.160	-0.367	-0.10	0.000	-1.350					

Table 30. Azimuthal Magnetic Field (Sea Water), Frequency = 1.0 MHz, VED Height = 224.76 m

30.0 KM DISTANCE				100.0 KM DISTANCE				300.0 KM DISTANCE				1000.0 KM DISTANCE			
REL. INT.	AMP.	PHASE	REL. INT.	AMP.	PHASE	REL. INT.	AMP.	PHASE	REL. INT.	AMP.	PHASE	REL. INT.	AMP.	PHASE	REL. INT.
(%)	(dB)	(deg)	(%)	(dB)	(deg)	(%)	(dB)	(deg)	(%)	(dB)	(deg)	(%)	(dB)	(deg)	(%)
0.000	-1.000	-1.000	0.000	-1.000	-1.000	0.000	-1.000	-1.000	0.000	-1.000	-1.000	0.000	-1.000	-1.000	0.000
0.003	-1.001	-1.001	0.010	-1.001	-1.001	0.030	-1.001	-1.001	0.100	-1.001	-1.001	0.300	-1.001	-1.001	1.000
0.006	-1.002	-1.002	0.020	-1.002	-1.002	0.060	-1.002	-1.002	0.200	-1.002	-1.002	0.600	-1.002	-1.002	3.000
0.009	-1.003	-1.003	0.030	-1.003	-1.003	0.090	-1.003	-1.003	0.300	-1.003	-1.003	0.900	-1.003	-1.003	6.000
0.012	-1.004	-1.004	0.040	-1.004	-1.004	0.120	-1.004	-1.004	0.400	-1.004	-1.004	1.200	-1.004	-1.004	9.000
0.015	-1.005	-1.005	0.050	-1.005	-1.005	0.150	-1.005	-1.005	0.500	-1.005	-1.005	1.500	-1.005	-1.005	12.000
0.018	-1.006	-1.006	0.060	-1.006	-1.006	0.180	-1.006	-1.006	0.600	-1.006	-1.006	1.800	-1.006	-1.006	15.000
0.021	-1.007	-1.007	0.070	-1.007	-1.007	0.210	-1.007	-1.007	0.700	-1.007	-1.007	2.100	-1.007	-1.007	18.000
0.024	-1.008	-1.008	0.080	-1.008	-1.008	0.240	-1.008	-1.008	0.800	-1.008	-1.008	2.400	-1.008	-1.008	21.000
0.027	-1.009	-1.009	0.090	-1.009	-1.009	0.270	-1.009	-1.009	0.900	-1.009	-1.009	2.700	-1.009	-1.009	24.000
0.030	-1.010	-1.010	0.100	-1.010	-1.010	0.300	-1.010	-1.010	1.000	-1.010	-1.010	3.000	-1.010	-1.010	27.000
0.033	-1.011	-1.011	0.110	-1.011	-1.011	0.330	-1.011	-1.011	1.100	-1.011	-1.011	3.300	-1.011	-1.011	30.000
0.036	-1.012	-1.012	0.120	-1.012	-1.012	0.360	-1.012	-1.012	1.200	-1.012	-1.012	3.600	-1.012	-1.012	33.000
0.039	-1.013	-1.013	0.130	-1.013	-1.013	0.390	-1.013	-1.013	1.300	-1.013	-1.013	3.900	-1.013	-1.013	36.000
0.042	-1.014	-1.014	0.140	-1.014	-1.014	0.420	-1.014	-1.014	1.400	-1.014	-1.014	4.200	-1.014	-1.014	39.000
0.045	-1.015	-1.015	0.150	-1.015	-1.015	0.450	-1.015	-1.015	1.500	-1.015	-1.015	4.500	-1.015	-1.015	42.000
0.048	-1.016	-1.016	0.160	-1.016	-1.016	0.480	-1.016	-1.016	1.600	-1.016	-1.016	4.800	-1.016	-1.016	45.000
0.051	-1.017	-1.017	0.170	-1.017	-1.017	0.510	-1.017	-1.017	1.700	-1.017	-1.017	5.100	-1.017	-1.017	48.000
0.054	-1.018	-1.018	0.180	-1.018	-1.018	0.540	-1.018	-1.018	1.800	-1.018	-1.018	5.400	-1.018	-1.018	51.000
0.057	-1.019	-1.019	0.190	-1.019	-1.019	0.570	-1.019	-1.019	1.900	-1.019	-1.019	5.700	-1.019	-1.019	54.000
0.060	-1.020	-1.020	0.200	-1.020	-1.020	0.600	-1.020	-1.020	2.000	-1.020	-1.020	6.000	-1.020	-1.020	57.000
0.063	-1.021	-1.021	0.210	-1.021	-1.021	0.630	-1.021	-1.021	2.100	-1.021	-1.021	6.300	-1.021	-1.021	60.000
0.066	-1.022	-1.022	0.220	-1.022	-1.022	0.660	-1.022	-1.022	2.200	-1.022	-1.022	6.600	-1.022	-1.022	63.000
0.069	-1.023	-1.023	0.230	-1.023	-1.023	0.690	-1.023	-1.023	2.300	-1.023	-1.023	6.900	-1.023	-1.023	66.000
0.072	-1.024	-1.024	0.240	-1.024	-1.024	0.720	-1.024	-1.024	2.400	-1.024	-1.024	7.200	-1.024	-1.024	69.000
0.075	-1.025	-1.025	0.250	-1.025	-1.025	0.750	-1.025	-1.025	2.500	-1.025	-1.025	7.500	-1.025	-1.025	72.000
0.078	-1.026	-1.026	0.260	-1.026	-1.026	0.780	-1.026	-1.026	2.600	-1.026	-1.026	7.800	-1.026	-1.026	75.000
0.081	-1.027	-1.027	0.270	-1.027	-1.027	0.810	-1.027	-1.027	2.700	-1.027	-1.027	8.100	-1.027	-1.027	78.000
0.084	-1.028	-1.028	0.280	-1.028	-1.028	0.840	-1.028	-1.028	2.800	-1.028	-1.028	8.400	-1.028	-1.028	81.000
0.087	-1.029	-1.029	0.290	-1.029	-1.029	0.870	-1.029	-1.029	2.900	-1.029	-1.029	8.700	-1.029	-1.029	84.000
0.090	-1.030	-1.030	0.300	-1.030	-1.030	0.900	-1.030	-1.030	3.000	-1.030	-1.030	9.000	-1.030	-1.030	87.000
0.093	-1.031	-1.031	0.310	-1.031	-1.031	0.930	-1.031	-1.031	3.100	-1.031	-1.031	9.300	-1.031	-1.031	90.000
0.096	-1.032	-1.032	0.320	-1.032	-1.032	0.960	-1.032	-1.032	3.200	-1.032	-1.032	9.600	-1.032	-1.032	93.000
0.099	-1.033	-1.033	0.330	-1.033	-1.033	0.990	-1.033	-1.033	3.300	-1.033	-1.033	9.900	-1.033	-1.033	96.000
0.102	-1.034	-1.034	0.340	-1.034	-1.034	1.020	-1.034	-1.034	3.400	-1.034	-1.034	10.200	-1.034	-1.034	99.000
0.105	-1.035	-1.035	0.350	-1.035	-1.035	1.050	-1.035	-1.035	3.500	-1.035	-1.035	10.500	-1.035	-1.035	102.000
0.108	-1.036	-1.036	0.360	-1.036	-1.036	1.080	-1.036	-1.036	3.600	-1.036	-1.036	10.800	-1.036	-1.036	105.000
0.111	-1.037	-1.037	0.370	-1.037	-1.037	1.110	-1.037	-1.037	3.700	-1.037	-1.037	11.100	-1.037	-1.037	108.000
0.114	-1.038	-1.038	0.380	-1.038	-1.038	1.140	-1.038	-1.038	3.800	-1.038	-1.038	11.400	-1.038	-1.038	111.000
0.117	-1.039	-1.039	0.390	-1.039	-1.039	1.170	-1.039	-1.039	3.900	-1.039	-1.039	11.700	-1.039	-1.039	114.000
0.120	-1.040	-1.040	0.400	-1.040	-1.040	1.200	-1.040	-1.040	4.000	-1.040	-1.040	12.000	-1.040	-1.040	117.000
0.123	-1.041	-1.041	0.410	-1.041	-1.041	1.230	-1.041	-1.041	4.100	-1.041	-1.041	12.300	-1.041	-1.041	120.000
0.126	-1.042	-1.042	0.420	-1.042	-1.042	1.260	-1.042	-1.042	4.200	-1.042	-1.042	12.600	-1.042	-1.042	123.000
0.129	-1.043	-1.043	0.430	-1.043	-1.043	1.290	-1.043	-1.043	4.300	-1.043	-1.043	12.900	-1.043	-1.043	126.000
0.132	-1.044	-1.044	0.440	-1.044	-1.044	1.320	-1.044	-1.044	4.400	-1.044	-1.044	13.200	-1.044	-1.044	129.000
0.135	-1.045	-1.045	0.450	-1.045	-1.045	1.350	-1.045	-1.045	4.500	-1.045	-1.045	13.500	-1.045	-1.045	132.000
0.138	-1.046	-1.046	0.460	-1.046	-1.046	1.380	-1.046	-1.046	4.600	-1.046	-1.046	13.800	-1.046	-1.046	135.000
0.141	-1.047	-1.047	0.470	-1.047	-1.047	1.410	-1.047	-1.047	4.700	-1.047	-1.047	14.100	-1.047	-1.047	138.000
0.144	-1.048	-1.048	0.480	-1.048	-1.048	1.440	-1.048	-1.048	4.800	-1.048	-1.048	14.400	-1.048	-1.048	141.000
0.147	-1.049	-1.049	0.490	-1.049	-1.049	1.470	-1.049	-1.049	4.900	-1.049	-1.049	14.700	-1.049	-1.049	144.000
0.150	-1.050	-1.050	0.500	-1.050	-1.050	1.500	-1.050	-1.050	5.000	-1.050	-1.050	15.000	-1.050	-1.050	147.000
0.153	-1.051	-1.051	0.510	-1.051	-1.051	1.530	-1.051	-1.051	5.100	-1.051	-1.051	15.300	-1.051	-1.051	150.000
0.156	-1.052	-1.052	0.520	-1.052	-1.052	1.560	-1.052	-1.052	5.200	-1.052	-1.052	15.600	-1.052	-1.052	153.000
0.159	-1.053	-1.053	0.530	-1.053	-1.053	1.590	-1.053	-1.053	5.300	-1.053	-1.053	15.900	-1.053	-1.053	156.000
0.162	-1.054	-1.054	0.540	-1.054	-1.054	1.620	-1.054	-1.054	5.400	-1.054	-1.054	16.200	-1.054	-1.054	159.000
0.165	-1.055	-1.055	0.550	-1.055	-1.055	1.650	-1.055	-1.055	5.500	-1.055	-1.055	16.500	-1.055	-1.055	162.000
0.168	-1.056	-1.056	0.560	-1.056	-1.056	1.680	-1.056	-1.056	5.600	-1.056	-1.056	16.800	-1.056	-1.056	165.000
0.171	-1.057	-1.057	0.570	-1.057	-1.057	1.710	-1.057	-1.057	5.700	-1.057	-1.057	17.100	-1.057	-1.057	168.000
0.174	-1.058	-1.058	0.580	-1.058	-1.058	1.740	-1.058	-1.058	5.800	-1.058	-1.058	17.400	-1.058	-1.058	171.000
0.177	-1.059	-1.059	0.590	-1.059	-1.059	1.770	-1.059	-1.059	5.900	-1.059	-1.059	17.700	-1.059	-1.059	174.000
0.180	-1.060	-1.060	0.600	-1.060	-1.060	1.800	-1.060	-1.060	6.000	-1.060	-1.060	18.000	-1.060	-1.060	177.000
0.183	-1.061	-1.061	0.610	-1.061	-1.061	1.830	-1.061	-1.061	6.100	-1.061	-1.061	18.300	-1.061	-1.061	180.000
0.186	-1.062	-1.062	0.620	-1.062	-1.062	1.860	-1.062	-1.062	6.200	-1.062	-1.062	18.600	-1.062	-1.062	183.000
0.189	-1.063	-1.063	0.630	-1.063	-1.063	1.890	-1.063	-1.063	6.300	-1.063	-1.063	18.900	-1.063	-1.063	186.000
0.192	-1.064	-1.064	0.640	-1.064	-1.064	1.920	-1.064	-1.064	6.400	-1.064	-1.064	19.200	-1.064	-1.064	189.000
0.195	-1.065	-1.065	0.650	-1.065	-1.065	1.950	-1.065	-1.065	6.500	-1.065	-1.065	19.500	-1.065	-1.065	192.000
0.198	-1.066	-1.066	0.660	-1.066	-1.066	1.980	-1.066	-1.066	6.600	-1.066	-1.066	19.800	-1.066	-1.066	195.000
0.201	-1.067	-1.067	0.670	-1.067	-1.067	2.010	-1.067	-1.067	6.700	-1.067	-1.067	20.100	-1.067	-1.067	198.000
0.204	-1.068	-1.068	0.680	-1.068	-1.068	2.040	-1.068	-1.068	6.800	-1.068	-1.068	20.400	-1.068	-1.068	201.000
0.207	-1.069	-1.069	0.690	-1.069	-1.069	2.070	-1.069	-1.069	6.900	-1.069	-1.069	20.700	-1.069	-1.069	204.000
0.210	-1.070	-1.070	0.700	-1.070	-1.070	2.100	-1.070	-1.070	7.000	-1.070	-1.070	21.000	-1.070	-1.070	207.000
0.213	-														

Table 31. Azimuthal Magnetic Field (Sea Water), Frequency = 1.0 MHz, VED Height = 449.52 m

300 KM DISTANCE				1000 KM DISTANCE				1000 KM DISTANCE			
REL. INT.	AMP. (dB)	PHASE (DEG)	REL. INT.	AMP. (dB)	PHASE (DEG)	REL. INT.	AMP. (dB)	REL. INT.	AMP. (dB)	PHASE (DEG)	REL. INT.
0.00	-1.00	-1.00	0.00	-1.00	-1.00	0.00	-1.00	0.00	-1.00	-1.00	0.00
0.03	-1.03	-1.03	0.03	-1.03	-1.03	0.03	-1.03	0.03	-1.03	-1.03	0.03
0.06	-1.06	-1.06	0.06	-1.06	-1.06	0.06	-1.06	0.06	-1.06	-1.06	0.06
0.09	-1.09	-1.09	0.09	-1.09	-1.09	0.09	-1.09	0.09	-1.09	-1.09	0.09
0.12	-1.12	-1.12	0.12	-1.12	-1.12	0.12	-1.12	0.12	-1.12	-1.12	0.12
0.15	-1.15	-1.15	0.15	-1.15	-1.15	0.15	-1.15	0.15	-1.15	-1.15	0.15
0.18	-1.18	-1.18	0.18	-1.18	-1.18	0.18	-1.18	0.18	-1.18	-1.18	0.18
0.21	-1.21	-1.21	0.21	-1.21	-1.21	0.21	-1.21	0.21	-1.21	-1.21	0.21
0.24	-1.24	-1.24	0.24	-1.24	-1.24	0.24	-1.24	0.24	-1.24	-1.24	0.24
0.27	-1.27	-1.27	0.27	-1.27	-1.27	0.27	-1.27	0.27	-1.27	-1.27	0.27
0.30	-1.30	-1.30	0.30	-1.30	-1.30	0.30	-1.30	0.30	-1.30	-1.30	0.30
0.33	-1.33	-1.33	0.33	-1.33	-1.33	0.33	-1.33	0.33	-1.33	-1.33	0.33
0.36	-1.36	-1.36	0.36	-1.36	-1.36	0.36	-1.36	0.36	-1.36	-1.36	0.36
0.39	-1.39	-1.39	0.39	-1.39	-1.39	0.39	-1.39	0.39	-1.39	-1.39	0.39
0.42	-1.42	-1.42	0.42	-1.42	-1.42	0.42	-1.42	0.42	-1.42	-1.42	0.42
0.45	-1.45	-1.45	0.45	-1.45	-1.45	0.45	-1.45	0.45	-1.45	-1.45	0.45
0.48	-1.48	-1.48	0.48	-1.48	-1.48	0.48	-1.48	0.48	-1.48	-1.48	0.48
0.51	-1.51	-1.51	0.51	-1.51	-1.51	0.51	-1.51	0.51	-1.51	-1.51	0.51
0.54	-1.54	-1.54	0.54	-1.54	-1.54	0.54	-1.54	0.54	-1.54	-1.54	0.54
0.57	-1.57	-1.57	0.57	-1.57	-1.57	0.57	-1.57	0.57	-1.57	-1.57	0.57
0.60	-1.60	-1.60	0.60	-1.60	-1.60	0.60	-1.60	0.60	-1.60	-1.60	0.60
0.63	-1.63	-1.63	0.63	-1.63	-1.63	0.63	-1.63	0.63	-1.63	-1.63	0.63
0.66	-1.66	-1.66	0.66	-1.66	-1.66	0.66	-1.66	0.66	-1.66	-1.66	0.66
0.69	-1.69	-1.69	0.69	-1.69	-1.69	0.69	-1.69	0.69	-1.69	-1.69	0.69
0.72	-1.72	-1.72	0.72	-1.72	-1.72	0.72	-1.72	0.72	-1.72	-1.72	0.72
0.75	-1.75	-1.75	0.75	-1.75	-1.75	0.75	-1.75	0.75	-1.75	-1.75	0.75
0.78	-1.78	-1.78	0.78	-1.78	-1.78	0.78	-1.78	0.78	-1.78	-1.78	0.78
0.81	-1.81	-1.81	0.81	-1.81	-1.81	0.81	-1.81	0.81	-1.81	-1.81	0.81
0.84	-1.84	-1.84	0.84	-1.84	-1.84	0.84	-1.84	0.84	-1.84	-1.84	0.84
0.87	-1.87	-1.87	0.87	-1.87	-1.87	0.87	-1.87	0.87	-1.87	-1.87	0.87
0.90	-1.90	-1.90	0.90	-1.90	-1.90	0.90	-1.90	0.90	-1.90	-1.90	0.90
0.93	-1.93	-1.93	0.93	-1.93	-1.93	0.93	-1.93	0.93	-1.93	-1.93	0.93
0.96	-1.96	-1.96	0.96	-1.96	-1.96	0.96	-1.96	0.96	-1.96	-1.96	0.96
0.99	-1.99	-1.99	0.99	-1.99	-1.99	0.99	-1.99	0.99	-1.99	-1.99	0.99
1.02	-2.02	-2.02	1.02	-2.02	-2.02	1.02	-2.02	1.02	-2.02	-2.02	1.02
1.05	-2.05	-2.05	1.05	-2.05	-2.05	1.05	-2.05	1.05	-2.05	-2.05	1.05
1.08	-2.08	-2.08	1.08	-2.08	-2.08	1.08	-2.08	1.08	-2.08	-2.08	1.08
1.11	-2.11	-2.11	1.11	-2.11	-2.11	1.11	-2.11	1.11	-2.11	-2.11	1.11
1.14	-2.14	-2.14	1.14	-2.14	-2.14	1.14	-2.14	1.14	-2.14	-2.14	1.14
1.17	-2.17	-2.17	1.17	-2.17	-2.17	1.17	-2.17	1.17	-2.17	-2.17	1.17
1.20	-2.20	-2.20	1.20	-2.20	-2.20	1.20	-2.20	1.20	-2.20	-2.20	1.20
1.23	-2.23	-2.23	1.23	-2.23	-2.23	1.23	-2.23	1.23	-2.23	-2.23	1.23
1.26	-2.26	-2.26	1.26	-2.26	-2.26	1.26	-2.26	1.26	-2.26	-2.26	1.26
1.29	-2.29	-2.29	1.29	-2.29	-2.29	1.29	-2.29	1.29	-2.29	-2.29	1.29
1.32	-2.32	-2.32	1.32	-2.32	-2.32	1.32	-2.32	1.32	-2.32	-2.32	1.32
1.35	-2.35	-2.35	1.35	-2.35	-2.35	1.35	-2.35	1.35	-2.35	-2.35	1.35
1.38	-2.38	-2.38	1.38	-2.38	-2.38	1.38	-2.38	1.38	-2.38	-2.38	1.38
1.41	-2.41	-2.41	1.41	-2.41	-2.41	1.41	-2.41	1.41	-2.41	-2.41	1.41
1.44	-2.44	-2.44	1.44	-2.44	-2.44	1.44	-2.44	1.44	-2.44	-2.44	1.44
1.47	-2.47	-2.47	1.47	-2.47	-2.47	1.47	-2.47	1.47	-2.47	-2.47	1.47
1.50	-2.50	-2.50	1.50	-2.50	-2.50	1.50	-2.50	1.50	-2.50	-2.50	1.50
1.53	-2.53	-2.53	1.53	-2.53	-2.53	1.53	-2.53	1.53	-2.53	-2.53	1.53
1.56	-2.56	-2.56	1.56	-2.56	-2.56	1.56	-2.56	1.56	-2.56	-2.56	1.56
1.59	-2.59	-2.59	1.59	-2.59	-2.59	1.59	-2.59	1.59	-2.59	-2.59	1.59
1.62	-2.62	-2.62	1.62	-2.62	-2.62	1.62	-2.62	1.62	-2.62	-2.62	1.62
1.65	-2.65	-2.65	1.65	-2.65	-2.65	1.65	-2.65	1.65	-2.65	-2.65	1.65
1.68	-2.68	-2.68	1.68	-2.68	-2.68	1.68	-2.68	1.68	-2.68	-2.68	1.68
1.71	-2.71	-2.71	1.71	-2.71	-2.71	1.71	-2.71	1.71	-2.71	-2.71	1.71
1.74	-2.74	-2.74	1.74	-2.74	-2.74	1.74	-2.74	1.74	-2.74	-2.74	1.74
1.77	-2.77	-2.77	1.77	-2.77	-2.77	1.77	-2.77	1.77	-2.77	-2.77	1.77
1.80	-2.80	-2.80	1.80	-2.80	-2.80	1.80	-2.80	1.80	-2.80	-2.80	1.80
1.83	-2.83	-2.83	1.83	-2.83	-2.83	1.83	-2.83	1.83	-2.83	-2.83	1.83
1.86	-2.86	-2.86	1.86	-2.86	-2.86	1.86	-2.86	1.86	-2.86	-2.86	1.86
1.89	-2.89	-2.89	1.89	-2.89	-2.89	1.89	-2.89	1.89	-2.89	-2.89	1.89
1.92	-2.92	-2.92	1.92	-2.92	-2.92	1.92	-2.92	1.92	-2.92	-2.92	1.92
1.95	-2.95	-2.95	1.95	-2.95	-2.95	1.95	-2.95	1.95	-2.95	-2.95	1.95
1.98	-2.98	-2.98	1.98	-2.98	-2.98	1.98	-2.98	1.98	-2.98	-2.98	1.98
2.01	-3.01	-3.01	2.01	-3.01	-3.01	2.01	-3.01	2.01	-3.01	-3.01	2.01
2.04	-3.04	-3.04	2.04	-3.04	-3.04	2.04	-3.04	2.04	-3.04	-3.04	2.04
2.07	-3.07	-3.07	2.07	-3.07	-3.07	2.07	-3.07	2.07	-3.07	-3.07	2.07
2.10	-3.10	-3.10	2.10	-3.10	-3.10	2.10	-3.10	2.10	-3.10	-3.10	2.10
2.13	-3.13	-3.13	2.13	-3.13	-3.13	2.13	-3.13	2.13	-3.13	-3.13	2.13
2.16	-3.16	-3.16	2.16	-3.16	-3.16	2.16	-3.16	2.16	-3.16	-3.16	2.16
2.19	-3.19	-3.19	2.19	-3.19	-3.19	2.19	-3.19	2.19	-3.19	-3.19	2.19
2.22	-3.22	-3.22	2.22	-3.22	-3.22	2.22	-3.22	2.22	-3.22	-3.22	2.22
2.25	-3.25	-3.25	2.25	-3.25	-3.25	2.25	-3.25	2.25	-3.25	-3.25	2.25
2.28	-3.28	-3.28	2.28	-3.28	-3.28	2.28	-3.28	2.28	-3.28	-3.28	2.28
2.31	-3.31	-3.31	2.31	-3.31	-3.31	2.31	-3.31	2.31	-3.31	-3.31	2.31
2.34	-3.34	-3.34	2.34	-3.34	-3.34	2.34	-3.34	2.34	-3.34	-3.34	2.34
2.37	-3.37	-3.37	2.37	-3.37	-3.37	2.37	-3.37	2.37	-3.37	-3.37	2.37
2.40	-3.40	-3.40	2.40	-3.40	-3.40	2.40	-3.40	2.40	-3.40	-3.40	2.40
2.43	-3.43	-3.43	2.43	-3.43	-3.43	2.43	-3.43	2.43	-3.43	-3.43	2.43
2.46	-3.46	-3.46	2.46	-3.46	-3.46	2.46	-3.46	2.46	-3.46	-3.46	2.46
2.49	-3.49	-3.49	2.49	-3.49	-3.49	2.49	-3.49	2.49	-3.49	-3.49	2.49
2.52	-3.52	-3.52	2.52	-3.52	-3.52	2.52	-3.52	2.52	-3.52	-3.52	2.52
2.55	-3.55	-3.55	2.55	-3.55	-3.55	2.55	-3.55	2.55	-3.55	-3.55	2.55
2.58	-3.58	-3.58	2.58	-3.58	-3.58	2.58	-3.58	2.58	-3.58	-3.58	2.58
2.61	-3.61	-3.61	2.61	-3.61	-3.61	2.61	-3.61	2.61	-3.61	-3.61	2.61
2.64	-3.64	-3.64	2.64	-3.64	-3.64	2.64	-3.64	2.64	-3.64	-3.64	2.64
2.67	-3.67	-3.67	2.67	-3.67	-3.67	2.67	-3.67	2.67	-3.67	-3.67	2.67
2.70	-3.70	-3.70	2.70	-3.70	-3.70	2.70	-3.70	2.70	-3.70	-3.70	2.70
2.73	-3.73	-3.73	2.73	-3.73	-3.73	2.73	-3.73	2.73	-3.73	-3.73	2.73
2.76	-3.76	-3.76	2.76	-3.76	-3.76	2.76	-3.76	2.76	-3.76	-3.76	2.76
2.79	-3.79	-3.79	2.79	-3.79	-3.79	2.79	-3.79	2.79	-3.79	-3.79	2.79
2.82	-3.82	-3.82	2.82	-3.82	-3.82	2.82	-3.82	2.82	-3.82	-3.82	2.82
2.85	-3.85	-3.85	2.85	-3.85	-3.85	2.85	-3.85	2.85	-3.85	-3.85	2.85
2.88	-3.88	-3.88	2.88	-3.88	-3.88	2.88	-3.88	2.88	-3.88	-3.88	2.88
2.91	-3.91	-3.91	2.91	-3.91	-3.91	2.91	-3.91	2.91	-3.91	-3.91	2.91
2.94	-3.94	-3.94	2.94	-3.94	-3.94	2.94	-3.94	2.94	-3.94	-3.94	2.94
2.97	-3.97	-3.97	2.97	-3.97	-3.97	2.97	-3.97	2.97	-3.97	-3.97	2.97
3.00	-4.00	-4.00	3.00	-4.00	-4.00	3.00	-4.00	3.00	-4.00	-4.00	3.00
3.03	-4.03	-4.03	3.03	-4.03	-4.03	3.03	-4.03	3.03	-4.03	-4.03	3.03
3.06	-4.06	-4.06	3.06	-4.06	-4.06	3.06	-4.06	3.06	-4.06	-4.06	3.06
3.09	-4.09	-4.09	3.09	-4.09	-4.09	3.09	-4.09	3.09	-4.09	-4.09	3.09
3.12	-4.12	-4.12	3.12	-4.12	-4.12	3.12	-4.12	3.12	-4.12	-4.12	3.12
3.15	-4.15	-4.15	3.15	-4.15	-4.15	3.15	-4.15	3.15	-4.15	-4.15	3.15
3.18	-4.18	-4.18	3.18	-4.18	-4						

Table 32. Azimuthal Magnetic Field (Sea Water), Frequency = 10.0 MHz, VED Height = 0.00 m

[illegible]

Table 33. Azimuthal Magnetic Field (Sea Water), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM UPRANGE				30.0 KM UPRANGE				100.0 KM UPRANGE			
RE	AMP	PHASE		RE	AMP	PHASE		RE	AMP	PHASE	
(M)	(DB)	(DEG)		(M)	(DB)	(DEG)		(M)	(DB)	(DEG)	
0.000	-0.07	-10.94		0.000	-1.994	-64.35		0.000	-5.690	-111.27	
0.003	-0.31	-10.00		0.010	-2.417	-64.25		0.100	-7.020	-100.24	
0.006	-0.55	-10.00		0.020	-2.777	-64.03		0.200	-8.300	-87.96	
0.009	-0.79	-10.00		0.030	-3.075	-53.76		0.300	-9.507	-75.70	
0.012	-0.94	-17.64		0.040	-3.313	-50.50		0.400	-10.299	-64.66	
0.015	-0.97	-17.39		0.050	-3.504	-47.31		0.500	-10.928	-55.42	
0.018	-1.00	-17.08		0.060	-3.625	-44.23		0.600	-11.627	-47.97	
0.021	-1.02	-16.76		0.070	-3.711	-41.30		0.700	-12.163	-42.05	
0.024	-1.05	-16.48		0.080	-3.759	-38.54		0.800	-12.743	-37.33	
0.027	-1.07	-16.18		0.090	-3.775	-35.97		0.900	-13.328	-33.21	
0.030	-1.08	-15.88		0.100	-3.767	-33.58		1.000	-13.948	-30.40	
0.033	-1.09	-15.59		0.110	-3.738	-31.38		1.100	-14.602	-27.81	
0.036	-1.09	-15.29		0.120	-3.695	-29.36		1.200	-15.291	-25.82	
0.039	-1.09	-14.99		0.130	-3.640	-27.52		1.300	-16.010	-23.76	
0.042	-1.09	-14.71		0.140	-3.577	-25.82		1.400	-16.757	-21.80	
0.045	-1.08	-14.43		0.150	-3.508	-24.24		1.500	-17.529	-20.76	
0.048	-1.07	-14.15		0.160	-3.437	-22.87		1.600	-18.323	-19.52	
0.051	-1.06	-13.87		0.170	-3.363	-21.57		1.700	-19.135	-18.22	
0.054	-1.05	-13.60		0.180	-3.289	-20.39		1.800	-19.965	-17.44	
0.057	-1.04	-13.33		0.190	-3.216	-19.31		1.900	-20.809	-16.56	
0.060	-1.03	-13.06		0.200	-3.144	-18.32		2.000	-21.666	-15.75	
0.063	-1.00	-12.80		0.210	-3.075	-17.44		2.100	-22.536	-15.02	
0.066	-1.00	-12.54		0.220	-3.005	-16.56		2.200	-23.416	-14.35	
0.069	-1.00	-12.29		0.230	-2.939	-15.79		2.300	-24.305	-13.74	
0.072	-1.00	-12.04		0.240	-2.875	-15.07		2.400	-25.203	-13.17	
0.075	-1.00	-11.79		0.250	-2.814	-14.40		2.500	-26.108	-12.64	
0.078	-1.00	-11.55		0.260	-2.755	-13.78		2.600	-27.021	-12.15	
0.081	-1.00	-11.31		0.270	-2.700	-13.21		2.700	-27.944	-11.69	
0.084	-1.00	-11.08		0.280	-2.646	-12.67		2.800	-28.884	-11.26	
0.087	-1.00	-10.85		0.290	-2.596	-12.17		2.900	-29.834	-10.86	
0.090	-1.00	-10.63		0.300	-2.546	-11.71		3.000	-30.798	-10.48	
0.105	-1.0277	-9.57		1.050	-2.541	-9.76		3.500	-32.459	-8.89	
0.120	-1.020	-8.61		1.200	-2.184	-8.24		4.000	-34.267	-7.06	
0.135	-1.020	-7.68		1.350	-2.066	-7.15		4.500	-36.124	-5.67	
0.150	-1.011	-6.98		1.500	-1.985	-6.23		5.000	-38.030	-4.58	
0.165	-1.004	-6.49		1.650	-1.926	-5.47		5.500	-40.003	-3.71	
0.180	-1.004	-5.67		1.800	-1.798	-5.42		6.000	-42.042	-2.81	
0.195	-1.004	-5.16		1.950	-1.802	-4.71		6.500	-44.242	-2.11	
0.210	-1.004	-4.62		2.100	-1.814	-4.14		7.000	-46.592	-1.67	
0.225	-1.004	-4.11		2.250	-1.846	-3.73		7.500	-49.094	-1.34	
0.240	-1.020	-3.76		2.400	-1.888	-3.42		8.000	-51.744	-1.09	
0.255	-1.070	-3.59		2.550	-1.928	-3.06		8.500	-54.544	-0.92	
0.270	-1.070	-3.06		2.700	-1.971	-2.73		9.000	-57.494	-0.76	
0.285	-1.070	-2.47		2.850	-2.024	-2.44		9.500	-60.594	-0.61	
0.300	-1.070	-2.07		3.000	-2.086	-2.18		10.000	-63.844	-0.51	
					-2.153	-1.94					

Table 34. Azimuthal Magnetic Field (Sea Water), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.000	-0.537	-16.70	0.000	-33.84	0.000	-1.135	-53.84	0.000	-2.282	0.000	-6.004	-60.96	0.000	-6.004	0.000	-7.522	-108.85		
0.003	-1.702	-16.40	0.010	-32.83	0.010	-1.280	-52.83	0.030	-7.335	0.030	-7.522	-57.83	0.030	-7.335	0.030	-8.627	-97.83		
0.006	-2.745	-16.09	0.020	-31.80	0.020	-1.415	-51.80	0.060	-8.627	0.060	-9.921	-54.65	0.060	-8.627	0.060	-11.214	-85.55		
0.009	-3.788	-15.79	0.030	-30.76	0.030	-1.538	-50.76	0.090	-9.921	0.090	-11.214	-51.38	0.090	-9.921	0.090	-13.470	-73.30		
0.012	-4.831	-15.49	0.040	-29.73	0.040	-1.651	-49.73	0.120	-11.214	0.120	-13.470	-48.13	0.120	-11.214	0.120	-15.714	-62.26		
0.015	-5.874	-15.18	0.050	-28.70	0.050	-1.755	-48.70	0.150	-13.470	0.150	-15.714	-46.94	0.150	-13.470	0.150	-18.018	-52.01		
0.018	-6.917	-14.88	0.060	-27.68	0.060	-1.848	-47.68	0.180	-15.714	0.180	-18.018	-45.87	0.180	-15.714	0.180	-20.322	-43.56		
0.021	-7.960	-14.58	0.070	-26.67	0.070	-1.933	-46.67	0.210	-18.018	0.210	-20.322	-44.80	0.210	-18.018	0.210	-22.626	-34.63		
0.024	-8.999	-14.28	0.080	-25.67	0.080	-2.007	-45.67	0.240	-20.322	0.240	-22.626	-43.82	0.240	-20.322	0.240	-24.930	-27.95		
0.027	-10.042	-13.99	0.090	-24.67	0.090	-2.077	-44.67	0.270	-22.626	0.270	-24.930	-42.84	0.270	-22.626	0.270	-27.234	-21.08		
0.030	-11.085	-13.69	0.100	-23.67	0.100	-2.150	-43.67	0.300	-24.930	0.300	-27.234	-41.86	0.300	-24.930	0.300	-29.538	-15.08		
0.033	-12.128	-13.39	0.110	-22.67	0.110	-2.224	-42.67	0.330	-27.234	0.330	-29.538	-40.88	0.330	-27.234	0.330	-31.842	-9.08		
0.036	-13.171	-13.09	0.120	-21.67	0.120	-2.298	-41.67	0.360	-29.538	0.360	-31.842	-39.90	0.360	-29.538	0.360	-34.146	-3.08		
0.039	-14.214	-12.79	0.130	-20.67	0.130	-2.372	-40.67	0.390	-31.842	0.390	-34.146	-38.92	0.390	-31.842	0.390	-36.450	2.92		
0.042	-15.257	-12.49	0.140	-19.67	0.140	-2.446	-39.67	0.420	-34.146	0.420	-36.450	-37.94	0.420	-34.146	0.420	-38.754	8.92		
0.045	-16.300	-12.19	0.150	-18.67	0.150	-2.520	-38.67	0.450	-36.450	0.450	-38.754	-36.96	0.450	-36.450	0.450	-41.058	14.92		
0.048	-17.343	-11.89	0.160	-17.67	0.160	-2.594	-37.67	0.480	-38.754	0.480	-41.058	-35.98	0.480	-38.754	0.480	-43.362	20.92		
0.051	-18.386	-11.59	0.170	-16.67	0.170	-2.668	-36.67	0.510	-41.058	0.510	-43.362	-35.00	0.510	-41.058	0.510	-45.666	26.92		
0.054	-19.429	-11.29	0.180	-15.67	0.180	-2.742	-35.67	0.540	-43.362	0.540	-45.666	-34.02	0.540	-43.362	0.540	-47.970	32.92		
0.057	-20.472	-10.99	0.190	-14.67	0.190	-2.816	-34.67	0.570	-45.666	0.570	-47.970	-33.04	0.570	-45.666	0.570	-50.274	38.92		
0.060	-21.515	-10.69	0.200	-13.67	0.200	-2.890	-33.67	0.600	-47.970	0.600	-50.274	-32.06	0.600	-47.970	0.600	-52.578	44.92		
0.063	-22.558	-10.39	0.210	-12.67	0.210	-2.964	-32.67	0.630	-50.274	0.630	-52.578	-31.08	0.630	-50.274	0.630	-54.882	50.92		
0.066	-23.601	-10.09	0.220	-11.67	0.220	-3.038	-31.67	0.660	-52.578	0.660	-54.882	-30.10	0.660	-52.578	0.660	-57.186	56.92		
0.069	-24.644	-9.79	0.230	-10.67	0.230	-3.112	-30.67	0.690	-54.882	0.690	-57.186	-29.12	0.690	-54.882	0.690	-59.490	62.92		
0.072	-25.687	-9.49	0.240	-9.67	0.240	-3.186	-29.67	0.720	-57.186	0.720	-59.490	-28.14	0.720	-57.186	0.720	-61.794	68.92		
0.075	-26.730	-9.19	0.250	-8.67	0.250	-3.260	-28.67	0.750	-59.490	0.750	-61.794	-27.16	0.750	-59.490	0.750	-64.098	74.92		
0.078	-27.773	-8.89	0.260	-7.67	0.260	-3.334	-27.67	0.780	-61.794	0.780	-64.098	-26.18	0.780	-61.794	0.780	-66.402	80.92		
0.081	-28.816	-8.59	0.270	-6.67	0.270	-3.408	-26.67	0.810	-64.098	0.810	-66.402	-25.20	0.810	-64.098	0.810	-68.706	86.92		
0.084	-29.859	-8.29	0.280	-5.67	0.280	-3.482	-25.67	0.840	-66.402	0.840	-68.706	-24.22	0.840	-66.402	0.840	-71.010	92.92		
0.087	-30.902	-7.99	0.290	-4.67	0.290	-3.556	-24.67	0.870	-68.706	0.870	-71.010	-23.24	0.870	-68.706	0.870	-73.314	98.92		
0.090	-31.945	-7.69	0.300	-3.67	0.300	-3.630	-23.67	0.900	-71.010	0.900	-73.314	-22.26	0.900	-71.010	0.900	-75.618	104.92		
0.105	-37.030	-6.40	0.350	0.33	0.350	-4.130	-21.67	1.050	-76.195	1.050	-78.499	-20.26	1.050	-76.195	1.050	-80.822	116.92		
0.120	-42.115	-5.11	0.400	3.33	0.400	-4.520	-19.67	1.200	-81.380	1.200	-83.603	-18.26	1.200	-81.380	1.200	-83.126	128.92		
0.135	-47.200	-3.82	0.450	6.33	0.450	-4.910	-17.67	1.350	-86.565	1.350	-87.817	-16.26	1.350	-86.565	1.350	-85.580	140.92		
0.150	-52.285	-2.53	0.500	9.33	0.500	-5.300	-15.67	1.500	-91.750	1.500	-93.029	-14.26	1.500	-91.750	1.500	-87.864	152.92		
0.165	-57.370	-1.24	0.550	12.33	0.550	-5.690	-13.67	1.650	-96.935	1.650	-98.243	-12.26	1.650	-96.935	1.650	-90.168	164.92		
0.180	-62.455	0.05	0.600	15.33	0.600	-6.080	-11.67	1.800	-102.120	1.800	-103.457	-10.26	1.800	-102.120	1.800	-92.472	176.92		
0.195	-67.540	1.36	0.650	18.33	0.650	-6.470	-9.67	1.950	-107.305	1.950	-108.671	-8.26	1.950	-107.305	1.950	-94.776	188.92		
0.210	-72.625	2.67	0.700	21.33	0.700	-6.860	-7.67	2.100	-112.490	2.100	-113.885	-6.26	2.100	-112.490	2.100	-97.080	200.92		
0.225	-77.710	3.98	0.750	24.33	0.750	-7.250	-5.67	2.250	-117.675	2.250	-119.070	-4.26	2.250	-117.675	2.250	-99.384	212.92		
0.240	-82.795	5.29	0.800	27.33	0.800	-7.640	-3.67	2.400	-122.860	2.400	-124.255	-2.26	2.400	-122.860	2.400	-101.688	224.92		
0.255	-87.880	6.60	0.850	30.33	0.850	-8.030	-1.67	2.550	-128.045	2.550	-129.440	-0.26	2.550	-128.045	2.550	-103.992	236.92		
0.270	-92.965	7.91	0.900	33.33	0.900	-8.420	0.33	2.700	-133.230	2.700	-134.625	1.67	2.700	-133.230	2.700	-106.296	248.92		
0.285	-98.050	9.22	0.950	36.33	0.950	-8.810	2.33	2.850	-138.415	2.850	-139.810	3.67	2.850	-138.415	2.850	-108.600	260.92		
0.300	-103.135	10.53	1.000	39.33	1.000	-9.200	4.33	3.000	-143.600	3.000	-144.995	5.67	3.000	-143.600	3.000	-110.904	272.92		

Table 35. Azimuthal Magnetic Field (Sea Water), Frequency = 100.0 MHz, VED Height = 0.00 m

1.00 KM DOWNRANGE				3.00 KM DOWNRANGE			
REL IONT (RM)	AMP (DB)	PHASE (DEG)	REL IONT (RM)	AMP (DB)	PHASE (DEG)	REL IONT (RM)	AMP (DB)
.000	-6.000	-100.00	.000	-6.000	-100.00	.000	-6.000
.001	-6.000	-100.00	.001	-6.000	-100.00	.001	-6.000
.002	-6.000	-100.00	.002	-6.000	-100.00	.002	-6.000
.003	-6.000	-100.00	.003	-6.000	-100.00	.003	-6.000
.004	-6.000	-100.00	.004	-6.000	-100.00	.004	-6.000
.005	-6.000	-100.00	.005	-6.000	-100.00	.005	-6.000
.006	-6.000	-100.00	.006	-6.000	-100.00	.006	-6.000
.007	-6.000	-100.00	.007	-6.000	-100.00	.007	-6.000
.008	-6.000	-100.00	.008	-6.000	-100.00	.008	-6.000
.009	-6.000	-100.00	.009	-6.000	-100.00	.009	-6.000
.010	-6.000	-100.00	.010	-6.000	-100.00	.010	-6.000
.011	-6.000	-100.00	.011	-6.000	-100.00	.011	-6.000
.012	-6.000	-100.00	.012	-6.000	-100.00	.012	-6.000
.013	-6.000	-100.00	.013	-6.000	-100.00	.013	-6.000
.014	-6.000	-100.00	.014	-6.000	-100.00	.014	-6.000
.015	-6.000	-100.00	.015	-6.000	-100.00	.015	-6.000
.016	-6.000	-100.00	.016	-6.000	-100.00	.016	-6.000
.017	-6.000	-100.00	.017	-6.000	-100.00	.017	-6.000
.018	-6.000	-100.00	.018	-6.000	-100.00	.018	-6.000
.019	-6.000	-100.00	.019	-6.000	-100.00	.019	-6.000
.020	-6.000	-100.00	.020	-6.000	-100.00	.020	-6.000
.021	-6.000	-100.00	.021	-6.000	-100.00	.021	-6.000
.022	-6.000	-100.00	.022	-6.000	-100.00	.022	-6.000
.023	-6.000	-100.00	.023	-6.000	-100.00	.023	-6.000
.024	-6.000	-100.00	.024	-6.000	-100.00	.024	-6.000
.025	-6.000	-100.00	.025	-6.000	-100.00	.025	-6.000
.026	-6.000	-100.00	.026	-6.000	-100.00	.026	-6.000
.027	-6.000	-100.00	.027	-6.000	-100.00	.027	-6.000
.028	-6.000	-100.00	.028	-6.000	-100.00	.028	-6.000
.029	-6.000	-100.00	.029	-6.000	-100.00	.029	-6.000
.030	-6.000	-100.00	.030	-6.000	-100.00	.030	-6.000
.035	-5.500	-95.00	.035	-5.500	-95.00	.035	-5.500
.040	-5.000	-90.00	.040	-5.000	-90.00	.040	-5.000
.045	-4.500	-85.00	.045	-4.500	-85.00	.045	-4.500
.050	-4.000	-80.00	.050	-4.000	-80.00	.050	-4.000
.055	-3.500	-75.00	.055	-3.500	-75.00	.055	-3.500
.060	-3.000	-70.00	.060	-3.000	-70.00	.060	-3.000
.065	-2.500	-65.00	.065	-2.500	-65.00	.065	-2.500
.070	-2.000	-60.00	.070	-2.000	-60.00	.070	-2.000
.075	-1.500	-55.00	.075	-1.500	-55.00	.075	-1.500
.080	-1.000	-50.00	.080	-1.000	-50.00	.080	-1.000
.085	-.500	-45.00	.085	-.500	-45.00	.085	-.500
.090	0.000	-40.00	.090	0.000	-40.00	.090	0.000
.095	0.500	-35.00	.095	0.500	-35.00	.095	0.500
.100	1.000	-30.00	.100	1.000	-30.00	.100	1.000

Table 36. Azimuthal Magnetic Field (Sea Water), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-6.951	-101.90	0.000	-15.857	-149.20	0.000	-29.200	-16.32	0.000	-34.603	-164.94	0.000	-39.503	-164.94	0.000
0.001	-7.384	-98.48	0.003	-17.127	-138.07	0.010	-31.851	-113.09	0.030	-34.503	-56.59	0.060	-27.724	-41.88	0.100
0.002	-7.779	-94.87	0.006	-18.113	-110.01	0.030	-24.517	-54.93	0.090	-23.999	-37.04	0.150	-21.479	-34.30	0.200
0.003	-8.131	-91.11	0.012	-18.622	-93.39	0.050	-22.200	-41.42	0.120	-21.596	-32.38	0.180	-18.106	-30.85	0.250
0.004	-8.436	-87.25	0.015	-18.185	-82.37	0.070	-20.154	-31.95	0.150	-16.882	-29.56	0.210	-15.851	-28.42	0.270
0.005	-8.692	-83.31	0.018	-17.447	-71.61	0.090	-18.127	-33.26	0.240	-14.964	-27.40	0.300	-14.190	-26.46	0.350
0.006	-8.897	-79.35	0.021	-16.820	-63.03	0.110	-15.186	-31.52	0.270	-13.656	-25.71	0.330	-13.307	-25.39	0.380
0.007	-9.053	-75.40	0.024	-15.798	-55.25	0.130	-13.023	-27.53	0.300	-12.455	-23.46	0.350	-12.351	-24.01	0.400
0.008	-9.166	-71.52	0.027	-15.009	-48.43	0.150	-11.943	-25.46	0.330	-11.476	-23.58	0.380	-11.855	-23.29	0.430
0.009	-9.249	-67.74	0.030	-14.278	-42.80	0.170	-11.054	-23.74	0.350	-11.045	-23.58	0.400	-11.405	-22.80	0.450
0.010	-9.299	-64.10	0.033	-13.808	-37.75	0.190	-10.655	-22.95	0.370	-10.665	-22.95	0.430	-10.992	-22.54	0.480
0.011	-9.319	-60.51	0.036	-12.998	-33.19	0.210	-9.971	-21.51	0.390	-9.971	-21.51	0.450	-10.814	-21.32	0.500
0.012	-9.310	-57.19	0.039	-12.441	-28.41	0.230	-9.387	-20.22	0.410	-9.387	-20.22	0.470	-9.941	-20.14	0.530
0.013	-9.280	-54.26	0.042	-11.970	-24.90	0.250	-8.874	-19.63	0.430	-8.874	-19.63	0.490	-9.401	-19.06	0.550
0.014	-9.230	-51.50	0.045	-11.470	-22.43	0.270	-8.425	-18.51	0.450	-8.425	-18.51	0.500	-8.828	-17.59	0.570
0.015	-9.150	-48.96	0.048	-10.854	-20.00	0.290	-8.020	-17.49	0.470	-8.020	-17.49	0.530	-8.211	-16.69	0.590
0.016	-9.044	-46.50	0.051	-10.054	-17.50	0.310	-7.675	-16.55	0.490	-7.675	-16.55	0.550	-7.841	-15.85	0.600
0.017	-8.914	-44.10	0.054	-9.269	-15.40	0.330	-7.351	-15.68	0.500	-7.351	-15.68	0.570	-7.471	-15.45	0.620
0.018	-8.759	-41.80	0.057	-8.410	-13.40	0.350	-7.043	-14.80	0.520	-7.043	-14.80	0.590	-7.101	-14.06	0.630
0.019	-8.589	-39.60	0.060	-7.581	-11.40	0.370	-6.751	-13.95	0.530	-6.751	-13.95	0.600	-6.823	-13.29	0.640
0.020	-8.409	-37.40	0.063	-6.788	-9.40	0.390	-6.481	-13.11	0.550	-6.481	-13.11	0.620	-6.526	-12.41	0.650
0.021	-8.217	-35.20	0.066	-6.039	-7.40	0.410	-6.230	-12.29	0.570	-6.230	-12.29	0.630	-6.283	-11.75	0.660
0.022	-7.980	-33.00	0.069	-5.324	-5.40	0.430	-6.000	-11.49	0.590	-6.000	-11.49	0.640	-6.062	-10.41	0.670
0.023	-7.700	-30.80	0.072	-4.643	-3.40	0.450	-5.790	-10.71	0.600	-5.790	-10.71	0.650	-5.821	-9.21	0.680
0.024	-7.400	-28.60	0.075	-4.000	-1.40	0.470	-5.600	-9.95	0.620	-5.600	-9.95	0.660	-5.548	-8.15	0.690
0.025	-7.070	-26.40	0.078	-3.390	0.60	0.490	-5.420	-9.21	0.630	-5.420	-9.21	0.670	-5.269	-7.19	0.700
0.026	-6.710	-24.20	0.081	-2.810	2.60	0.510	-5.250	-8.49	0.640	-5.250	-8.49	0.680	-5.000	-6.33	0.710
0.027	-6.320	-22.00	0.084	-2.260	4.60	0.530	-5.090	-7.79	0.650	-5.090	-7.79	0.690	-4.715	-5.54	0.720
0.028	-5.910	-19.80	0.087	-1.740	6.60	0.550	-4.940	-7.11	0.660	-4.940	-7.11	0.700	-4.430	-4.81	0.730
0.029	-5.480	-17.60	0.090	-1.250	8.60	0.570	-4.800	-6.45	0.670	-4.800	-6.45	0.710	-4.145	-4.14	0.740
0.030	-5.030	-15.40	0.093	-0.790	10.60	0.590	-4.670	-5.81	0.680	-4.670	-5.81	0.720	-3.860	-3.51	0.750
0.035	-4.420	-10.00	0.105	-0.250	15.40	0.650	-4.280	-4.51	0.730	-4.280	-4.51	0.750	-3.500	-2.85	0.760
0.040	-3.980	-6.50	0.120	0.280	20.00	0.730	-3.820	-3.21	0.800	-3.820	-3.21	0.820	-3.150	-2.19	0.770
0.045	-3.600	-4.00	0.135	0.820	24.60	0.830	-3.380	-1.91	0.870	-3.380	-1.91	0.890	-2.780	-1.53	0.780
0.050	-3.280	-1.50	0.150	1.360	29.20	0.930	-2.950	-0.61	0.940	-2.950	-0.61	0.960	-2.410	-0.87	0.790
0.055	-3.020	1.00	0.165	1.900	33.80	1.030	-2.530	0.69	1.000	-2.530	0.69	1.020	-2.040	-0.21	0.800
0.060	-2.820	3.50	0.180	2.440	38.40	1.130	-2.120	1.99	1.070	-2.120	1.99	1.090	-1.670	0.45	0.810
0.065	-2.580	6.00	0.195	2.980	43.00	1.230	-1.720	3.29	1.140	-1.720	3.29	1.160	-1.300	1.19	0.820
0.070	-2.310	8.50	0.210	3.520	47.60	1.330	-1.330	4.59	1.210	-1.330	4.59	1.230	-0.930	1.93	0.830
0.075	-2.020	11.00	0.225	4.060	52.20	1.430	-0.940	5.89	1.280	-0.940	5.89	1.300	-0.560	2.67	0.840
0.080	-1.710	13.50	0.240	4.600	56.80	1.530	-0.550	7.19	1.350	-0.550	7.19	1.370	-0.190	3.41	0.850
0.085	-1.400	16.00	0.255	5.140	61.40	1.630	-0.160	8.49	1.420	-0.160	8.49	1.440	0.180	4.15	0.860
0.090	-1.090	18.50	0.270	5.680	66.00	1.730	0.210	9.79	1.490	0.210	9.79	1.510	0.550	4.89	0.870
0.095	-0.780	21.00	0.285	6.220	70.60	1.830	0.770	11.09	1.560	0.770	11.09	1.580	0.920	5.63	0.880
0.100	-0.470	23.50	0.300	6.760	75.20	1.930	1.330	12.39	1.630	1.330	12.39	1.650	1.290	6.37	0.890

Table 37. Azimuthal Magnetic Field (Sea Water), Frequency = 100.0 MHz, VED Height = 4.50 m

10.0 KM UPHRANGE				30.0 KM UPHRANGE				100.0 KM UPHRANGE				300.0 KM UPHRANGE			
RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT
(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)
0.000	-7.080	-73.25	0.000	-16.694	-139.80	0.000	-30.061	-154.15	0.000	-45.316	-150.60	0.000	-60.316	-150.60	0.000
0.001	-6.960	-69.82	0.003	-17.966	-128.60	0.010	-32.714	-104.92	0.030	-35.355	-96.25	0.060	-38.355	-96.25	0.090
0.002	-6.877	-66.22	0.006	-18.956	-115.30	0.020	-34.956	-82.32	0.060	-38.355	-82.32	0.100	-41.355	-82.32	0.140
0.003	-6.831	-62.47	0.009	-19.486	-100.61	0.030	-36.780	-64.74	0.090	-41.355	-64.74	0.130	-44.355	-64.74	0.170
0.004	-6.811	-58.61	0.012	-19.481	-85.96	0.040	-38.064	-48.27	0.120	-44.355	-48.27	0.160	-47.355	-48.27	0.200
0.005	-6.802	-54.69	0.015	-19.032	-72.69	0.050	-41.018	-31.21	0.150	-47.355	-31.21	0.190	-50.355	-31.21	0.230
0.006	-6.810	-50.73	0.018	-18.320	-62.08	0.060	-44.009	-14.73	0.180	-50.355	-14.73	0.220	-53.355	-14.73	0.260
0.007	-6.831	-46.74	0.021	-17.305	-53.45	0.070	-46.099	2.73	0.210	-53.355	2.73	0.250	-56.355	2.73	0.290
0.008	-6.877	-42.72	0.024	-16.062	-44.62	0.080	-48.070	19.75	0.240	-56.355	19.75	0.280	-59.355	19.75	0.320
0.009	-6.975	-38.74	0.027	-15.048	-36.15	0.090	-50.041	36.75	0.270	-59.355	36.75	0.310	-62.355	36.75	0.350
0.010	-7.011	-35.49	0.030	-15.173	-30.71	0.100	-51.945	53.75	0.300	-62.355	53.75	0.340	-65.355	53.75	0.380
0.011	-7.011	-31.99	0.033	-14.509	-23.05	0.110	-53.785	70.75	0.330	-65.355	70.75	0.370	-68.355	70.75	0.410
0.012	-7.004	-28.60	0.036	-13.705	-15.34	0.120	-55.565	87.75	0.360	-68.355	87.75	0.400	-71.355	87.75	0.440
0.013	-7.000	-25.32	0.039	-13.357	-8.94	0.130	-57.285	104.75	0.390	-71.355	104.75	0.430	-74.355	104.75	0.470
0.014	-7.000	-22.35	0.042	-12.858	-2.50	0.140	-58.945	121.75	0.420	-74.355	121.75	0.460	-77.355	121.75	0.500
0.015	-7.000	-19.79	0.045	-12.403	5.87	0.150	-60.545	138.75	0.450	-77.355	138.75	0.490	-80.355	138.75	0.530
0.016	-7.003	-17.19	0.048	-11.987	13.30	0.160	-62.085	155.75	0.480	-80.355	155.75	0.520	-83.355	155.75	0.560
0.017	-7.052	-14.77	0.051	-11.607	21.72	0.170	-63.565	172.75	0.510	-83.355	172.75	0.550	-86.355	172.75	0.590
0.018	-7.129	-12.52	0.054	-11.258	30.29	0.180	-64.985	189.75	0.540	-86.355	189.75	0.580	-89.355	189.75	0.630
0.019	-7.212	-10.42	0.057	-10.930	38.99	0.190	-66.345	206.75	0.570	-89.355	206.75	0.610	-92.355	206.75	0.670
0.020	-7.309	-8.40	0.060	-10.640	47.71	0.200	-67.655	223.75	0.600	-92.355	223.75	0.640	-95.355	223.75	0.730
0.021	-7.405	-6.45	0.063	-10.380	56.44	0.210	-68.915	240.75	0.630	-95.355	240.75	0.670	-98.355	240.75	0.830
0.022	-7.501	-4.54	0.066	-10.113	65.19	0.220	-70.125	257.75	0.660	-98.355	257.75	0.700	-101.355	257.75	0.930
0.023	-7.600	-2.64	0.069	-9.847	73.86	0.230	-71.285	274.75	0.690	-101.355	274.75	0.730	-104.355	274.75	1.130
0.024	-7.701	-0.74	0.072	-9.581	82.47	0.240	-72.395	291.75	0.720	-104.355	291.75	0.760	-107.355	291.75	1.330
0.025	-7.800	1.15	0.075	-9.315	91.00	0.250	-73.455	308.75	0.750	-107.355	308.75	0.790	-110.355	308.75	1.530
0.026	-7.904	3.15	0.078	-9.049	99.51	0.260	-74.465	325.75	0.780	-110.355	325.75	0.820	-113.355	325.75	1.730
0.027	-8.000	5.17	0.081	-8.783	107.92	0.270	-75.425	342.75	0.810	-113.355	342.75	0.850	-116.355	342.75	1.930
0.028	-8.093	7.17	0.084	-8.517	116.26	0.280	-76.345	359.75	0.840	-116.355	359.75	0.880	-119.355	359.75	2.130
0.029	-8.183	9.10	0.087	-8.251	124.53	0.290	-77.215	376.75	0.870	-119.355	376.75	0.910	-122.355	376.75	2.330
0.030	-8.269	10.95	0.090	-8.003	132.68	0.300	-78.035	393.75	0.900	-122.355	393.75	0.940	-125.355	393.75	2.530
0.035	-7.801	-10.40	0.105	-7.051	-44.72	0.350	-78.080	-2.64	1.050	-125.355	-2.64	1.050	-125.355	-2.64	3.030
0.040	-7.301	-20.63	0.120	-6.043	-92.36	0.400	-77.871	-7.76	1.200	-125.355	-7.76	1.200	-125.355	-7.76	3.530
0.045	-6.801	-30.80	0.135	-5.035	-140.00	0.450	-77.393	-12.88	1.350	-125.355	-12.88	1.350	-125.355	-12.88	4.030
0.050	-6.301	-40.94	0.150	-4.027	-187.64	0.500	-76.645	-17.99	1.500	-125.355	-17.99	1.500	-125.355	-17.99	4.530
0.055	-5.801	-51.07	0.165	-3.019	-235.28	0.550	-75.625	-23.10	1.650	-125.355	-23.10	1.650	-125.355	-23.10	5.030
0.060	-5.301	-61.20	0.180	-2.011	-282.92	0.600	-74.335	-28.21	1.800	-125.355	-28.21	1.800	-125.355	-28.21	5.530
0.065	-4.801	-71.33	0.195	-1.003	-330.56	0.650	-72.785	-33.32	1.950	-125.355	-33.32	1.950	-125.355	-33.32	6.030
0.070	-4.301	-81.46	0.210	-0.005	378.20	0.700	-70.975	-38.43	2.100	-125.355	-38.43	2.100	-125.355	-38.43	6.530
0.075	-3.801	-91.59	0.225	0.993	425.84	0.750	-68.905	-43.54	2.250	-125.355	-43.54	2.250	-125.355	-43.54	7.030
0.080	-3.301	-101.72	0.240	1.985	473.48	0.800	-66.675	-48.65	2.400	-125.355	-48.65	2.400	-125.355	-48.65	7.530
0.085	-2.801	-111.85	0.255	2.977	521.12	0.850	-64.285	-53.76	2.550	-125.355	-53.76	2.550	-125.355	-53.76	8.030
0.090	-2.301	-121.98	0.270	3.969	568.76	0.900	-61.735	-58.87	2.700	-125.355	-58.87	2.700	-125.355	-58.87	8.530
0.095	-1.801	-132.11	0.285	4.961	616.40	0.950	-59.025	-63.98	2.850	-125.355	-63.98	2.850	-125.355	-63.98	9.030
1.000	-0.303	-170.00	0.300	-5.953	664.04	1.000	-56.155	-69.09	3.000	-125.355	-69.09	3.000	-125.355	-69.09	9.530

Table 38. Vertical Electric Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM UPHRANGE				100.0 KM UPHRANGE				300.0 KM UPHRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-1.000	-37.02	0.000	-3.985	-65.84	0.000	-8.484	0.000	-8.484	-102.38	0.000
0.030	-1.027	-37.00	0.100	-4.034	-66.91	0.300	-8.688	0.300	-8.688	-100.20	0.300
0.060	-1.048	-37.00	0.200	-4.121	-68.19	0.600	-8.877	0.600	-8.877	-97.96	0.600
0.090	-1.068	-37.01	0.300	-4.185	-69.40	0.900	-9.050	0.900	-9.050	-95.69	0.900
0.120	-1.088	-36.95	0.400	-4.246	-70.73	1.200	-9.207	1.200	-9.207	-93.38	1.200
0.150	-1.107	-36.74	0.500	-4.305	-72.00	1.500	-9.347	1.500	-9.347	-91.04	1.500
0.180	-1.126	-36.52	0.600	-4.361	-73.21	1.800	-9.470	1.800	-9.470	-88.69	1.800
0.210	-1.145	-36.31	0.700	-4.414	-74.34	2.100	-9.575	2.100	-9.575	-86.33	2.100
0.240	-1.163	-36.09	0.800	-4.465	-75.40	2.400	-9.663	2.400	-9.663	-83.97	2.400
0.270	-1.181	-35.88	0.900	-4.514	-76.40	2.700	-9.734	2.700	-9.734	-81.63	2.700
0.300	-1.199	-35.66	1.000	-4.559	-77.34	3.000	-9.788	3.000	-9.788	-79.30	3.000
0.330	-1.216	-35.45	1.100	-4.601	-78.21	3.300	-9.826	3.300	-9.826	-77.01	3.300
0.360	-1.233	-35.23	1.200	-4.644	-79.00	3.600	-9.857	3.600	-9.857	-74.75	3.600
0.390	-1.249	-35.02	1.300	-4.682	-79.71	3.900	-9.882	3.900	-9.882	-72.54	3.900
0.420	-1.265	-34.81	1.400	-4.716	-80.35	4.200	-9.903	4.200	-9.903	-70.38	4.200
0.450	-1.281	-34.60	1.500	-4.752	-80.91	4.500	-9.920	4.500	-9.920	-68.27	4.500
0.480	-1.297	-34.38	1.600	-4.783	-81.39	4.800	-9.934	4.800	-9.934	-66.23	4.800
0.510	-1.312	-34.17	1.700	-4.812	-81.78	5.100	-9.945	5.100	-9.945	-64.25	5.100
0.540	-1.327	-33.96	1.800	-4.839	-82.09	5.400	-9.953	5.400	-9.953	-62.33	5.400
0.570	-1.341	-33.75	1.900	-4.865	-82.31	5.700	-9.958	5.700	-9.958	-60.44	5.700
0.600	-1.355	-33.54	2.000	-4.888	-82.46	6.000	-9.961	6.000	-9.961	-58.70	6.000
0.630	-1.369	-33.33	2.100	-4.908	-82.54	6.300	-9.961	6.300	-9.961	-57.00	6.300
0.660	-1.383	-33.12	2.200	-4.924	-82.58	6.600	-9.958	6.600	-9.958	-55.33	6.600
0.690	-1.396	-32.91	2.300	-4.941	-82.59	6.900	-9.953	6.900	-9.953	-53.75	6.900
0.720	-1.409	-32.70	2.400	-4.955	-82.55	7.200	-9.945	7.200	-9.945	-52.24	7.200
0.750	-1.421	-32.50	2.500	-4.968	-82.47	7.500	-9.934	7.500	-9.934	-50.74	7.500
0.780	-1.434	-32.29	2.600	-4.978	-82.34	7.800	-9.920	7.800	-9.920	-49.34	7.800
0.810	-1.446	-32.08	2.700	-4.987	-82.17	8.100	-9.903	8.100	-9.903	-48.06	8.100
0.840	-1.457	-31.88	2.800	-4.995	-81.95	8.400	-9.882	8.400	-9.882	-46.79	8.400
0.870	-1.469	-31.68	2.900	-5.000	-81.69	8.700	-9.857	8.700	-9.857	-45.57	8.700
0.900	-1.480	-31.47	3.000	-5.003	-81.41	9.000	-9.826	9.000	-9.826	-44.44	9.000
1.050	-2.031	-30.47	3.500	-5.004	-81.26	10.500	-9.620	10.500	-9.620	-39.24	10.500
1.100	-2.047	-30.24	4.000	-4.973	-80.77	11.000	-9.521	11.000	-9.521	-38.17	11.000
1.150	-2.061	-30.03	4.500	-4.918	-80.20	11.500	-9.425	11.500	-9.425	-37.06	11.500
1.200	-2.075	-29.80	5.000	-4.840	-79.54	12.000	-9.331	12.000	-9.331	-35.91	12.000
1.250	-2.088	-29.58	5.500	-4.738	-78.79	12.500	-9.238	12.500	-9.238	-34.76	12.500
1.300	-2.101	-29.36	6.000	-4.623	-77.97	13.000	-9.146	13.000	-9.146	-33.61	13.000
1.350	-2.114	-29.14	6.500	-4.495	-77.08	13.500	-9.055	13.500	-9.055	-32.45	13.500
1.400	-2.127	-28.92	7.000	-4.354	-76.12	14.000	-8.965	14.000	-8.965	-31.29	14.000
1.450	-2.140	-28.70	7.500	-4.200	-75.09	14.500	-8.876	14.500	-8.876	-30.13	14.500
1.500	-2.153	-28.48	8.000	-4.034	-74.00	15.000	-8.788	15.000	-8.788	-28.97	15.000
1.550	-2.166	-28.26	8.500	-3.857	-72.84	15.500	-8.699	15.500	-8.699	-27.81	15.500
1.600	-2.179	-28.04	9.000	-3.670	-71.61	16.000	-8.611	16.000	-8.611	-26.65	16.000
1.650	-2.192	-27.82	9.500	-3.473	-70.32	16.500	-8.523	16.500	-8.523	-25.50	16.500
1.700	-2.205	-27.60	10.000	-3.267	-68.97	17.000	-8.435	17.000	-8.435	-24.34	17.000
1.750	-2.218	-27.38	10.500	-3.051	-67.57	17.500	-8.347	17.500	-8.347	-23.18	17.500
1.800	-2.231	-27.16	11.000	-2.825	-66.12	18.000	-8.259	18.000	-8.259	-22.02	18.000
1.850	-2.244	-26.94	11.500	-2.599	-64.62	18.500	-8.171	18.500	-8.171	-20.86	18.500
1.900	-2.257	-26.72	12.000	-2.373	-63.07	19.000	-8.083	19.000	-8.083	-19.70	19.000
1.950	-2.270	-26.50	12.500	-2.147	-61.47	19.500	-8.000	19.500	-8.000	-18.54	19.500
2.000	-2.283	-26.28	13.000	-1.921	-59.82	20.000	-7.917	20.000	-7.917	-17.38	20.000
2.050	-2.296	-26.06	13.500	-1.695	-58.12	20.500	-7.834	20.500	-7.834	-16.22	20.500
2.100	-2.309	-25.84	14.000	-1.469	-56.37	21.000	-7.751	21.000	-7.751	-15.06	21.000
2.150	-2.322	-25.62	14.500	-1.243	-54.57	21.500	-7.668	21.500	-7.668	-13.90	21.500
2.200	-2.335	-25.40	15.000	-1.017	-52.72	22.000	-7.585	22.000	-7.585	-12.74	22.000
2.250	-2.348	-25.18	15.500	-0.791	-50.82	22.500	-7.502	22.500	-7.502	-11.58	22.500
2.300	-2.361	-24.96	16.000	-0.565	-48.87	23.000	-7.419	23.000	-7.419	-10.42	23.000
2.350	-2.374	-24.74	16.500	-0.339	-46.87	23.500	-7.336	23.500	-7.336	-9.26	23.500
2.400	-2.387	-24.52	17.000	-0.113	-44.82	24.000	-7.253	24.000	-7.253	-8.10	24.000
2.450	-2.400	-24.30	17.500	0.113	-42.72	24.500	-7.170	24.500	-7.170	-6.94	24.500
2.500	-2.413	-24.08	18.000	0.339	-40.57	25.000	-7.087	25.000	-7.087	-5.78	25.000
2.550	-2.426	-23.86	18.500	0.565	-38.37	25.500	-7.004	25.500	-7.004	-4.62	25.500
2.600	-2.439	-23.64	19.000	0.791	-36.12	26.000	-6.921	26.000	-6.921	-3.46	26.000
2.650	-2.452	-23.42	19.500	1.017	-33.82	26.500	-6.838	26.500	-6.838	-2.30	26.500
2.700	-2.465	-23.20	20.000	1.243	-31.47	27.000	-6.755	27.000	-6.755	-1.14	27.000
2.750	-2.478	-22.98	20.500	1.469	-29.07	27.500	-6.672	27.500	-6.672	0.02	27.500
2.800	-2.491	-22.76	21.000	1.695	-26.62	28.000	-6.589	28.000	-6.589	1.18	28.000
2.850	-2.504	-22.54	21.500	1.921	-24.12	28.500	-6.506	28.500	-6.506	2.34	28.500
2.900	-2.517	-22.32	22.000	2.147	-21.57	29.000	-6.423	29.000	-6.423	3.50	29.000
2.950	-2.530	-22.10	22.500	2.373	-18.97	29.500	-6.340	29.500	-6.340	4.66	29.500
3.000	-2.543	-21.88	23.000	2.599	-16.32	30.000	-6.257	30.000	-6.257	5.82	30.000

Table 39. Vertical Electric Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 2247.60 m

300.0 KM DOWNRANGE				1000.0 KM DOWNRANGE				3000.0 KM DOWNRANGE			
RELJNT (RM)	AMP (UB)	PHASE (DEG)	RELJNT (RM)	AMP (UB)	PHASE (DEG)	RELJNT (RM)	AMP (UB)	PHASE (DEG)	RELJNT (RM)	AMP (UB)	PHASE (DEG)
0.000	-6.460	-23.36	0.000	-4.720	-43.75	0.000	-9.820	-85.17	0.000	-9.820	-85.17
.030	-6.460	-23.14	.100	-4.795	-43.75	.300	-9.824	-85.17	.300	-9.824	-85.17
.060	-6.460	-22.92	.200	-5.062	-43.75	.600	-10.014	-85.17	.600	-10.014	-85.17
.090	-6.460	-22.70	.300	-5.121	-43.75	.900	-10.180	-85.17	.900	-10.180	-85.17
.120	-6.460	-22.48	.400	-5.189	-43.75	1.200	-10.347	-85.17	1.200	-10.347	-85.17
.150	-6.460	-22.26	.500	-5.249	-43.75	1.500	-10.489	-85.17	1.500	-10.489	-85.17
.180	-6.460	-22.04	.600	-5.307	-43.75	1.800	-10.614	-85.17	1.800	-10.614	-85.17
.210	-6.460	-21.82	.700	-5.362	-43.75	2.100	-10.722	-85.17	2.100	-10.722	-85.17
.240	-6.460	-21.60	.800	-5.415	-43.75	2.400	-10.815	-85.17	2.400	-10.815	-85.17
.270	-6.460	-21.38	.900	-5.466	-43.75	2.700	-10.888	-85.17	2.700	-10.888	-85.17
.300	-6.460	-21.16	1.000	-5.514	-43.75	3.000	-10.948	-85.17	3.000	-10.948	-85.17
.330	-6.460	-20.94	1.100	-5.561	-43.75	3.300	-11.001	-85.17	3.300	-11.001	-85.17
.360	-6.460	-20.72	1.200	-5.609	-43.75	3.600	-11.046	-85.17	3.600	-11.046	-85.17
.390	-6.460	-20.51	1.300	-5.657	-43.75	3.900	-11.093	-85.17	3.900	-11.093	-85.17
.420	-6.460	-20.29	1.400	-5.706	-43.75	4.200	-11.142	-85.17	4.200	-11.142	-85.17
.450	-6.460	-20.07	1.500	-5.754	-43.75	4.500	-11.191	-85.17	4.500	-11.191	-85.17
.480	-6.460	-19.86	1.600	-5.803	-43.75	4.800	-11.241	-85.17	4.800	-11.241	-85.17
.510	-6.460	-19.64	1.700	-5.851	-43.75	5.100	-11.291	-85.17	5.100	-11.291	-85.17
.540	-6.460	-19.43	1.800	-5.899	-43.75	5.400	-11.341	-85.17	5.400	-11.341	-85.17
.570	-6.460	-19.21	1.900	-5.948	-43.75	5.700	-11.391	-85.17	5.700	-11.391	-85.17
.600	-6.460	-19.00	2.000	-5.996	-43.75	6.000	-11.441	-85.17	6.000	-11.441	-85.17
.630	-6.460	-18.78	2.100	-6.045	-43.75	6.300	-11.491	-85.17	6.300	-11.491	-85.17
.660	-6.460	-18.57	2.200	-6.093	-43.75	6.600	-11.541	-85.17	6.600	-11.541	-85.17
.690	-6.460	-18.36	2.300	-6.142	-43.75	6.900	-11.591	-85.17	6.900	-11.591	-85.17
.720	-6.460	-18.15	2.400	-6.191	-43.75	7.200	-11.641	-85.17	7.200	-11.641	-85.17
.750	-6.460	-17.94	2.500	-6.240	-43.75	7.500	-11.691	-85.17	7.500	-11.691	-85.17
.780	-6.460	-17.73	2.600	-6.289	-43.75	7.800	-11.741	-85.17	7.800	-11.741	-85.17
.810	-6.460	-17.52	2.700	-6.338	-43.75	8.100	-11.791	-85.17	8.100	-11.791	-85.17
.840	-6.460	-17.31	2.800	-6.387	-43.75	8.400	-11.841	-85.17	8.400	-11.841	-85.17
.870	-6.460	-17.10	2.900	-6.436	-43.75	8.700	-11.891	-85.17	8.700	-11.891	-85.17
.900	-6.460	-16.89	3.000	-6.485	-43.75	9.000	-11.941	-85.17	9.000	-11.941	-85.17
1.050	-3.160	-15.87	3.500	-6.534	-43.75	10.500	-12.091	-85.17	10.500	-12.091	-85.17
1.200	-3.160	-14.66	4.000	-6.583	-43.75	12.000	-12.241	-85.17	12.000	-12.241	-85.17
1.350	-3.160	-13.45	4.500	-6.632	-43.75	13.500	-12.391	-85.17	13.500	-12.391	-85.17
1.500	-3.160	-12.24	5.000	-6.681	-43.75	15.000	-12.541	-85.17	15.000	-12.541	-85.17
1.650	-3.160	-11.03	5.500	-6.730	-43.75	16.500	-12.691	-85.17	16.500	-12.691	-85.17
1.800	-3.160	-9.82	6.000	-6.779	-43.75	18.000	-12.841	-85.17	18.000	-12.841	-85.17
2.000	-3.160	-8.61	6.500	-6.828	-43.75	20.000	-13.091	-85.17	20.000	-13.091	-85.17
2.200	-3.160	-7.40	7.000	-6.877	-43.75	22.000	-13.341	-85.17	22.000	-13.341	-85.17
2.400	-3.160	-6.19	7.500	-6.926	-43.75	24.000	-13.591	-85.17	24.000	-13.591	-85.17
2.600	-3.160	-4.98	8.000	-6.975	-43.75	26.000	-13.841	-85.17	26.000	-13.841	-85.17
2.800	-3.160	-3.77	8.500	-7.024	-43.75	28.000	-14.091	-85.17	28.000	-14.091	-85.17
3.000	-3.160	-2.56	9.000	-7.073	-43.75	30.000	-14.341	-85.17	30.000	-14.341	-85.17
3.200	-3.160	-1.35	9.500	-7.122	-43.75	32.000	-14.591	-85.17	32.000	-14.591	-85.17
3.400	-3.160	-0.14	10.000	-7.171	-43.75	34.000	-14.841	-85.17	34.000	-14.841	-85.17
3.600	-3.160	0.07	10.500	-7.220	-43.75	36.000	-15.091	-85.17	36.000	-15.091	-85.17
3.800	-3.160	1.28	11.000	-7.269	-43.75	38.000	-15.341	-85.17	38.000	-15.341	-85.17
4.000	-3.160	2.49	11.500	-7.318	-43.75	40.000	-15.591	-85.17	40.000	-15.591	-85.17
4.200	-3.160	3.70	12.000	-7.367	-43.75	42.000	-15.841	-85.17	42.000	-15.841	-85.17
4.400	-3.160	4.91	12.500	-7.416	-43.75	44.000	-16.091	-85.17	44.000	-16.091	-85.17
4.600	-3.160	6.12	13.000	-7.465	-43.75	46.000	-16.341	-85.17	46.000	-16.341	-85.17
4.800	-3.160	7.33	13.500	-7.514	-43.75	48.000	-16.591	-85.17	48.000	-16.591	-85.17
5.000	-3.160	8.54	14.000	-7.563	-43.75	50.000	-16.841	-85.17	50.000	-16.841	-85.17
5.200	-3.160	9.75	14.500	-7.612	-43.75	52.000	-17.091	-85.17	52.000	-17.091	-85.17
5.400	-3.160	10.96	15.000	-7.661	-43.75	54.000	-17.341	-85.17	54.000	-17.341	-85.17
5.600	-3.160	12.17	15.500	-7.710	-43.75	56.000	-17.591	-85.17	56.000	-17.591	-85.17
5.800	-3.160	13.38	16.000	-7.759	-43.75	58.000	-17.841	-85.17	58.000	-17.841	-85.17
6.000	-3.160	14.59	16.500	-7.808	-43.75	60.000	-18.091	-85.17	60.000	-18.091	-85.17
6.200	-3.160	15.80	17.000	-7.857	-43.75	62.000	-18.341	-85.17	62.000	-18.341	-85.17
6.400	-3.160	17.01	17.500	-7.906	-43.75	64.000	-18.591	-85.17	64.000	-18.591	-85.17
6.600	-3.160	18.22	18.000	-7.955	-43.75	66.000	-18.841	-85.17	66.000	-18.841	-85.17
6.800	-3.160	19.43	18.500	-8.004	-43.75	68.000	-19.091	-85.17	68.000	-19.091	-85.17
7.000	-3.160	20.64	19.000	-8.053	-43.75	70.000	-19.341	-85.17	70.000	-19.341	-85.17
7.200	-3.160	21.85	19.500	-8.102	-43.75	72.000	-19.591	-85.17	72.000	-19.591	-85.17
7.400	-3.160	23.06	20.000	-8.151	-43.75	74.000	-19.841	-85.17	74.000	-19.841	-85.17
7.600	-3.160	24.27	20.500	-8.200	-43.75	76.000	-20.091	-85.17	76.000	-20.091	-85.17
7.800	-3.160	25.48	21.000	-8.249	-43.75	78.000	-20.341	-85.17	78.000	-20.341	-85.17
8.000	-3.160	26.69	21.500	-8.298	-43.75	80.000	-20.591	-85.17	80.000	-20.591	-85.17
8.200	-3.160	27.90	22.000	-8.347	-43.75	82.000	-20.841	-85.17	82.000	-20.841	-85.17
8.400	-3.160	29.11	22.500	-8.396	-43.75	84.000	-21.091	-85.17	84.000	-21.091	-85.17
8.600	-3.160	30.32	23.000	-8.445	-43.75	86.000	-21.341	-85.17	86.000	-21.341	-85.17
8.800	-3.160	31.53	23.500	-8.494	-43.75	88.000	-21.591	-85.17	88.000	-21.591	-85.17
9.000	-3.160	32.74	24.000	-8.543	-43.75	90.000	-21.841	-85.17	90.000	-21.841	-85.17
9.200	-3.160	33.95	24.500	-8.592	-43.75	92.000	-22.091	-85.17	92.000	-22.091	-85.17
9.400	-3.160	35.16	25.000	-8.641	-43.75	94.000	-22.341	-85.17	94.000	-22.341	-85.17
9.600	-3.160	36.37	25.500	-8.690	-43.75	96.000	-22.591	-85.17	96.000	-22.591	-85.17
9.800	-3.160	37.58	26.000	-8.739	-43.75	98.000	-22.841	-85.17	98.000	-22.841	-85.17
10.000	-3.160	38.79	26.500	-8.788	-43.75	100.000	-23.091	-85.17	100.000	-23.091	-85.17

Table 40. Vertical Electric Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM DOWNRAILAGE				100.0 KM DOWNRAILAGE				300.0 KM DOWNRAILAGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	RE DIST (KM)	AMP (UB)	PHASE (DEG)	RE DIST (KM)	AMP (UB)	PHASE (DEG)	RE DIST (KM)	AMP (UB)	PHASE (DEG)
0.000	-6.410	-14.04	0.000	-4.092	-36.22	0.000	0.000	-68.31	0.000	-9.031	-68.31
0.030	-6.437	-14.42	0.100	-4.061	-35.49	0.300	-10.030	-60.12	0.000	-10.030	-60.12
0.060	-6.458	-14.76	0.200	-4.029	-34.76	0.600	-10.227	-61.88	0.000	-10.227	-61.88
0.090	-6.476	-15.07	0.300	-4.006	-34.03	0.900	-10.405	-61.60	0.000	-10.405	-61.60
0.120	-6.490	-15.35	0.400	-3.981	-33.30	1.200	-10.567	-59.29	0.000	-10.567	-59.29
0.150	-6.502	-15.60	0.500	-3.954	-32.56	1.500	-10.715	-56.95	0.000	-10.715	-56.95
0.180	-6.512	-15.83	0.600	-3.926	-31.82	1.800	-10.846	-54.59	0.000	-10.846	-54.59
0.210	-6.521	-16.04	0.700	-3.898	-31.09	2.100	-10.963	-52.23	0.000	-10.963	-52.23
0.240	-6.529	-16.23	0.800	-3.869	-30.35	2.400	-11.065	-49.86	0.000	-11.065	-49.86
0.270	-6.536	-16.40	0.900	-3.840	-29.61	2.700	-11.159	-47.50	0.000	-11.159	-47.50
0.300	-6.542	-16.54	1.000	-3.811	-28.86	3.000	-11.249	-45.16	0.000	-11.249	-45.16
0.330	-6.547	-16.67	1.100	-3.782	-28.14	3.300	-11.315	-42.84	0.000	-11.315	-42.84
0.360	-6.551	-16.79	1.200	-3.753	-27.41	3.600	-11.368	-40.55	0.000	-11.368	-40.55
0.390	-6.554	-16.90	1.300	-3.724	-26.67	3.900	-11.414	-38.30	0.000	-11.414	-38.30
0.420	-6.556	-17.00	1.400	-3.695	-25.94	4.200	-11.454	-36.09	0.000	-11.454	-36.09
0.450	-6.558	-17.09	1.500	-3.666	-25.21	4.500	-11.489	-33.94	0.000	-11.489	-33.94
0.480	-6.559	-17.17	1.600	-3.637	-24.48	4.800	-11.520	-31.82	0.000	-11.520	-31.82
0.510	-6.560	-17.25	1.700	-3.608	-23.75	5.100	-11.547	-29.77	0.000	-11.547	-29.77
0.540	-6.561	-17.32	1.800	-3.579	-23.04	5.400	-11.571	-27.74	0.000	-11.571	-27.74
0.570	-6.562	-17.39	1.900	-3.550	-22.32	5.700	-11.592	-25.85	0.000	-11.592	-25.85
0.600	-6.563	-17.46	2.000	-3.521	-21.60	6.000	-11.610	-24.16	0.000	-11.610	-24.16
0.630	-6.564	-17.53	2.100	-3.492	-20.89	6.300	-11.625	-22.57	0.000	-11.625	-22.57
0.660	-6.565	-17.59	2.200	-3.463	-20.18	6.600	-11.638	-21.07	0.000	-11.638	-21.07
0.690	-6.566	-17.65	2.300	-3.434	-19.47	6.900	-11.649	-19.67	0.000	-11.649	-19.67
0.720	-6.567	-17.71	2.400	-3.405	-18.76	7.200	-11.658	-18.37	0.000	-11.658	-18.37
0.750	-6.568	-17.77	2.500	-3.376	-18.05	7.500	-11.666	-17.10	0.000	-11.666	-17.10
0.780	-6.569	-17.83	2.600	-3.347	-17.34	7.800	-11.673	-15.87	0.000	-11.673	-15.87
0.810	-6.570	-17.89	2.700	-3.318	-16.63	8.100	-11.679	-14.70	0.000	-11.679	-14.70
0.840	-6.571	-17.95	2.800	-3.289	-15.92	8.400	-11.684	-13.57	0.000	-11.684	-13.57
0.870	-6.572	-18.01	2.900	-3.260	-15.21	8.700	-11.689	-12.48	0.000	-11.689	-12.48
0.900	-6.573	-18.07	3.000	-3.231	-14.50	9.000	-11.693	-11.45	0.000	-11.693	-11.45
1.050	-3.401	-3.73	3.200	-3.174	-13.79	10.500	-11.696	-10.53	0.000	-11.696	-10.53
1.200	-3.401	-4.08	3.400	-3.134	-13.08	12.000	-11.698	-9.66	0.000	-11.698	-9.66
1.350	-3.401	-4.43	3.600	-3.094	-12.37	13.500	-11.699	-8.84	0.000	-11.699	-8.84
1.500	-3.401	-4.78	3.800	-3.054	-11.66	15.000	-11.700	-8.07	0.000	-11.700	-8.07
1.650	-3.401	-5.13	4.000	-3.014	-10.95	16.500	-11.701	-7.35	0.000	-11.701	-7.35
1.800	-3.401	-5.48	4.200	-2.974	-10.24	18.000	-11.702	-6.68	0.000	-11.702	-6.68
1.950	-3.401	-5.83	4.400	-2.934	-9.53	19.500	-11.703	-6.06	0.000	-11.703	-6.06
2.100	-3.401	-6.18	4.600	-2.894	-8.82	21.000	-11.704	-5.49	0.000	-11.704	-5.49
2.250	-3.401	-6.53	4.800	-2.854	-8.11	22.500	-11.705	-4.92	0.000	-11.705	-4.92
2.400	-3.401	-6.88	5.000	-2.814	-7.40	24.000	-11.706	-4.40	0.000	-11.706	-4.40
2.550	-3.401	-7.23	5.200	-2.774	-6.69	25.500	-11.707	-3.93	0.000	-11.707	-3.93
2.700	-3.401	-7.58	5.400	-2.734	-5.98	27.000	-11.708	-3.51	0.000	-11.708	-3.51
2.850	-3.401	-7.93	5.600	-2.694	-5.27	28.500	-11.709	-3.14	0.000	-11.709	-3.14
3.000	-3.401	-8.28	5.800	-2.654	-4.56	30.000	-11.710	-2.82	0.000	-11.710	-2.82

F/G 8/14

ABO--ETC (U)

ADD: 216107

NL

ADΔ

ADA
73463

13463

Table 41. Vertical Electric Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)		
0.000	-6.000	-90.00	0.000	-11.000	-90.00	0.000	-15.000	-90.00	0.000	-27.000	-90.00	0.000	-42.000	-90.00	0.000	-67.000	-90.00		
0.003	-6.003	-89.97	0.003	-11.003	-89.97	0.003	-15.003	-89.97	0.003	-27.003	-89.97	0.003	-42.003	-89.97	0.003	-67.003	-89.97		
0.006	-6.006	-89.94	0.006	-11.006	-89.94	0.006	-15.006	-89.94	0.006	-27.006	-89.94	0.006	-42.006	-89.94	0.006	-67.006	-89.94		
0.009	-6.009	-89.91	0.009	-11.009	-89.91	0.009	-15.009	-89.91	0.009	-27.009	-89.91	0.009	-42.009	-89.91	0.009	-67.009	-89.91		
0.012	-6.012	-89.88	0.012	-11.012	-89.88	0.012	-15.012	-89.88	0.012	-27.012	-89.88	0.012	-42.012	-89.88	0.012	-67.012	-89.88		
0.015	-6.015	-89.85	0.015	-11.015	-89.85	0.015	-15.015	-89.85	0.015	-27.015	-89.85	0.015	-42.015	-89.85	0.015	-67.015	-89.85		
0.018	-6.018	-89.82	0.018	-11.018	-89.82	0.018	-15.018	-89.82	0.018	-27.018	-89.82	0.018	-42.018	-89.82	0.018	-67.018	-89.82		
0.021	-6.021	-89.79	0.021	-11.021	-89.79	0.021	-15.021	-89.79	0.021	-27.021	-89.79	0.021	-42.021	-89.79	0.021	-67.021	-89.79		
0.024	-6.024	-89.76	0.024	-11.024	-89.76	0.024	-15.024	-89.76	0.024	-27.024	-89.76	0.024	-42.024	-89.76	0.024	-67.024	-89.76		
0.027	-6.027	-89.73	0.027	-11.027	-89.73	0.027	-15.027	-89.73	0.027	-27.027	-89.73	0.027	-42.027	-89.73	0.027	-67.027	-89.73		
0.030	-6.030	-89.70	0.030	-11.030	-89.70	0.030	-15.030	-89.70	0.030	-27.030	-89.70	0.030	-42.030	-89.70	0.030	-67.030	-89.70		
0.033	-6.033	-89.67	0.033	-11.033	-89.67	0.033	-15.033	-89.67	0.033	-27.033	-89.67	0.033	-42.033	-89.67	0.033	-67.033	-89.67		
0.036	-6.036	-89.64	0.036	-11.036	-89.64	0.036	-15.036	-89.64	0.036	-27.036	-89.64	0.036	-42.036	-89.64	0.036	-67.036	-89.64		
0.039	-6.039	-89.61	0.039	-11.039	-89.61	0.039	-15.039	-89.61	0.039	-27.039	-89.61	0.039	-42.039	-89.61	0.039	-67.039	-89.61		
0.042	-6.042	-89.58	0.042	-11.042	-89.58	0.042	-15.042	-89.58	0.042	-27.042	-89.58	0.042	-42.042	-89.58	0.042	-67.042	-89.58		
0.045	-6.045	-89.55	0.045	-11.045	-89.55	0.045	-15.045	-89.55	0.045	-27.045	-89.55	0.045	-42.045	-89.55	0.045	-67.045	-89.55		
0.048	-6.048	-89.52	0.048	-11.048	-89.52	0.048	-15.048	-89.52	0.048	-27.048	-89.52	0.048	-42.048	-89.52	0.048	-67.048	-89.52		
0.051	-6.051	-89.49	0.051	-11.051	-89.49	0.051	-15.051	-89.49	0.051	-27.051	-89.49	0.051	-42.051	-89.49	0.051	-67.051	-89.49		
0.054	-6.054	-89.46	0.054	-11.054	-89.46	0.054	-15.054	-89.46	0.054	-27.054	-89.46	0.054	-42.054	-89.46	0.054	-67.054	-89.46		
0.057	-6.057	-89.43	0.057	-11.057	-89.43	0.057	-15.057	-89.43	0.057	-27.057	-89.43	0.057	-42.057	-89.43	0.057	-67.057	-89.43		
0.060	-6.060	-89.40	0.060	-11.060	-89.40	0.060	-15.060	-89.40	0.060	-27.060	-89.40	0.060	-42.060	-89.40	0.060	-67.060	-89.40		
0.063	-6.063	-89.37	0.063	-11.063	-89.37	0.063	-15.063	-89.37	0.063	-27.063	-89.37	0.063	-42.063	-89.37	0.063	-67.063	-89.37		
0.066	-6.066	-89.34	0.066	-11.066	-89.34	0.066	-15.066	-89.34	0.066	-27.066	-89.34	0.066	-42.066	-89.34	0.066	-67.066	-89.34		
0.069	-6.069	-89.31	0.069	-11.069	-89.31	0.069	-15.069	-89.31	0.069	-27.069	-89.31	0.069	-42.069	-89.31	0.069	-67.069	-89.31		
0.072	-6.072	-89.28	0.072	-11.072	-89.28	0.072	-15.072	-89.28	0.072	-27.072	-89.28	0.072	-42.072	-89.28	0.072	-67.072	-89.28		
0.075	-6.075	-89.25	0.075	-11.075	-89.25	0.075	-15.075	-89.25	0.075	-27.075	-89.25	0.075	-42.075	-89.25	0.075	-67.075	-89.25		
0.078	-6.078	-89.22	0.078	-11.078	-89.22	0.078	-15.078	-89.22	0.078	-27.078	-89.22	0.078	-42.078	-89.22	0.078	-67.078	-89.22		
0.081	-6.081	-89.19	0.081	-11.081	-89.19	0.081	-15.081	-89.19	0.081	-27.081	-89.19	0.081	-42.081	-89.19	0.081	-67.081	-89.19		
0.084	-6.084	-89.16	0.084	-11.084	-89.16	0.084	-15.084	-89.16	0.084	-27.084	-89.16	0.084	-42.084	-89.16	0.084	-67.084	-89.16		
0.087	-6.087	-89.13	0.087	-11.087	-89.13	0.087	-15.087	-89.13	0.087	-27.087	-89.13	0.087	-42.087	-89.13	0.087	-67.087	-89.13		
0.090	-6.090	-89.10	0.090	-11.090	-89.10	0.090	-15.090	-89.10	0.090	-27.090	-89.10	0.090	-42.090	-89.10	0.090	-67.090	-89.10		
0.105	-5.993	-88.01	0.105	-10.993	-88.01	0.105	-14.993	-88.01	0.105	-26.993	-88.01	0.105	-41.993	-88.01	0.105	-66.993	-88.01		
0.120	-5.937	-86.56	0.120	-10.937	-86.56	0.120	-14.937	-86.56	0.120	-26.937	-86.56	0.120	-41.937	-86.56	0.120	-66.937	-86.56		
0.135	-5.879	-85.10	0.135	-10.879	-85.10	0.135	-14.879	-85.10	0.135	-26.879	-85.10	0.135	-41.879	-85.10	0.135	-66.879	-85.10		
0.150	-5.815	-83.63	0.150	-10.815	-83.63	0.150	-14.815	-83.63	0.150	-26.815	-83.63	0.150	-41.815	-83.63	0.150	-66.815	-83.63		
0.165	-5.746	-82.15	0.165	-10.746	-82.15	0.165	-14.746	-82.15	0.165	-26.746	-82.15	0.165	-41.746	-82.15	0.165	-66.746	-82.15		
0.180	-5.675	-80.66	0.180	-10.675	-80.66	0.180	-14.675	-80.66	0.180	-26.675	-80.66	0.180	-41.675	-80.66	0.180	-66.675	-80.66		
0.195	-5.602	-79.17	0.195	-10.602	-79.17	0.195	-14.602	-79.17	0.195	-26.602	-79.17	0.195	-41.602	-79.17	0.195	-66.602	-79.17		
0.210	-5.528	-77.67	0.210	-10.528	-77.67	0.210	-14.528	-77.67	0.210	-26.528	-77.67	0.210	-41.528	-77.67	0.210	-66.528	-77.67		
0.225	-5.453	-76.16	0.225	-10.453	-76.16	0.225	-14.453	-76.16	0.225	-26.453	-76.16	0.225	-41.453	-76.16	0.225	-66.453	-76.16		
0.240	-5.378	-74.64	0.240	-10.378	-74.64	0.240	-14.378	-74.64	0.240	-26.378	-74.64	0.240	-41.378	-74.64	0.240	-66.378	-74.64		
0.255	-5.303	-73.11	0.255	-10.303	-73.11	0.255	-14.303	-73.11	0.255	-26.303	-73.11	0.255	-41.303	-73.11	0.255	-66.303	-73.11		
0.270	-5.228	-71.58	0.270	-10.228	-71.58	0.270	-14.228	-71.58	0.270	-26.228	-71.58	0.270	-41.228	-71.58	0.270	-66.228	-71.58		
0.285	-5.153	-70.05	0.285	-10.153	-70.05	0.285	-14.153	-70.05	0.285	-26.153	-70.05	0.285	-41.153	-70.05	0.285	-66.153	-70.05		
0.300	-5.078	-68.52	0.300	-10.078	-68.52	0.300	-14.078	-68.52	0.300	-26.078	-68.52	0.300	-41.078	-68.52	0.300	-66.078	-68.52		

Table 42. Vertical Electric Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 224.76 m

HEIGHT (KM)	3.0 KM DOWNRANGE			10.0 KM DOWNRANGE			30.0 KM DOWNRANGE			100.0 KM DOWNRANGE		
	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.00	0.000	-5.381	-18.41	0.000	-10.417	-37.03	0.000	-17.514	-55.24	0.000	-27.378	-67.62
0.03	0.003	-5.367	-18.01	0.010	-10.436	-35.72	0.030	-17.556	-51.30	0.100	-27.367	-54.52
0.06	0.006	-5.351	-17.62	0.020	-10.449	-34.41	0.060	-17.559	-47.41	0.200	-26.939	-42.30
0.09	0.009	-5.336	-17.22	0.030	-10.457	-33.12	0.090	-17.520	-43.60	0.300	-26.218	-31.81
0.12	0.012	-5.320	-16.83	0.040	-10.460	-31.84	0.120	-17.443	-39.90	0.400	-25.346	-23.24
0.15	0.015	-5.303	-16.44	0.050	-10.458	-30.58	0.150	-17.333	-36.34	0.500	-24.427	-16.41
0.18	0.018	-5.287	-16.05	0.060	-10.452	-29.33	0.180	-17.194	-32.93	0.600	-23.521	-10.96
0.21	0.021	-5.270	-15.66	0.070	-10.441	-28.10	0.210	-17.029	-29.70	0.700	-22.658	-6.80
0.24	0.024	-5.254	-15.28	0.080	-10.426	-26.89	0.240	-16.844	-26.64	0.800	-21.849	-3.07
0.27	0.027	-5.241	-14.90	0.090	-10.406	-25.69	0.270	-16.642	-23.77	0.900	-21.097	-1.16
0.30	0.030	-5.216	-14.52	0.100	-10.383	-24.52	0.300	-16.427	-21.07	1.000	-20.400	2.25
0.33	0.033	-5.217	-14.14	0.110	-10.357	-23.37	0.330	-16.203	-18.56	1.100	-19.753	4.29
0.36	0.036	-5.219	-13.77	0.120	-10.327	-22.24	0.360	-15.972	-16.21	1.200	-19.153	6.03
0.39	0.039	-5.220	-13.40	0.130	-10.294	-21.13	0.390	-15.737	-14.02	1.300	-18.595	7.52
0.42	0.042	-5.220	-13.03	0.140	-10.257	-20.04	0.420	-15.500	-11.98	1.400	-18.074	8.82
0.45	0.045	-5.221	-12.67	0.150	-10.219	-18.98	0.450	-15.262	-10.08	1.500	-17.598	9.96
0.48	0.048	-5.221	-12.30	0.160	-10.177	-17.94	0.480	-15.025	-8.31	1.600	-17.132	10.97
0.51	0.051	-5.220	-11.94	0.170	-10.133	-16.92	0.510	-14.791	-6.67	1.700	-16.704	11.87
0.54	0.054	-5.220	-11.59	0.180	-10.088	-15.93	0.540	-14.560	-5.13	1.800	-16.301	12.67
0.57	0.057	-5.219	-11.23	0.190	-10.040	-14.96	0.570	-14.332	-3.70	1.900	-15.921	13.39
0.60	0.060	-5.218	-10.88	0.200	-9.990	-14.01	0.600	-14.106	-2.37	2.000	-15.561	14.05
0.63	0.063	-5.217	-10.53	0.210	-9.939	-13.08	0.630	-13.889	-1.12	2.100	-15.221	14.64
0.66	0.066	-5.216	-10.18	0.220	-9.886	-12.16	0.660	-13.675	0.05	2.200	-14.899	15.19
0.69	0.069	-5.215	-9.84	0.230	-9.832	-11.30	0.690	-13.466	1.14	2.300	-14.592	15.69
0.72	0.072	-5.213	-9.50	0.240	-9.777	-10.44	0.720	-13.262	2.17	2.400	-14.300	16.15
0.75	0.075	-5.211	-9.16	0.250	-9.721	-9.61	0.750	-13.063	3.13	2.500	-14.022	16.58
0.78	0.078	-5.209	-8.83	0.260	-9.665	-8.75	0.780	-12.869	4.04	2.600	-13.757	16.97
0.81	0.081	-5.207	-8.49	0.270	-9.607	-7.90	0.810	-12.681	4.89	2.700	-13.503	17.34
0.84	0.084	-5.205	-8.16	0.280	-9.549	-7.23	0.840	-12.497	5.70	2.800	-13.261	17.68
0.87	0.087	-5.202	-7.83	0.290	-9.490	-6.54	0.870	-12.319	6.45	2.900	-13.029	18.01
0.90	0.090	-5.200	-7.51	0.300	-9.432	-5.74	0.900	-12.146	7.17	3.000	-12.806	18.31
0.105	0.105	-5.360	-2.93	0.350	-9.135	-2.46	1.050	-11.942	10.23	3.500	-11.518	19.59
0.120	0.120	-5.311	-4.41	0.400	-8.841	0.50	1.200	-10.655	12.62	4.000	-10.998	20.58
0.135	0.135	-5.335	-2.96	0.450	-8.556	3.19	1.350	-10.054	14.53	4.500	-10.307	21.38
0.150	0.150	-5.340	-1.57	0.500	-8.269	5.47	1.500	-9.529	16.04	5.000	-9.719	22.08
0.165	0.165	-5.360	-1.24	0.550	-8.037	7.49	1.650	-9.070	17.40	5.500	-9.213	22.65
0.180	0.180	-5.314	1.03	0.600	-7.804	9.26	1.800	-8.665	18.52	6.000	-8.779	23.17
0.195	0.195	-5.305	2.25	0.650	-7.590	10.87	1.950	-8.315	19.49	6.500	-8.397	23.64
0.210	0.210	-5.299	3.41	0.700	-7.396	12.31	2.100	-8.000	20.35	7.000	-8.068	24.08
0.225	0.225	-5.290	4.53	0.750	-7.220	13.61	2.250	-7.735	21.12	7.500	-7.779	24.50
0.240	0.240	-5.301	5.61	0.800	-7.063	14.80	2.400	-7.498	21.82	8.000	-7.529	24.89
0.255	0.255	-5.307	6.65	0.850	-6.924	15.89	2.550	-7.292	22.46	8.500	-7.312	25.27
0.270	0.270	-5.321	7.65	0.900	-6.803	16.89	2.700	-7.113	23.06	9.000	-7.125	25.65
0.285	0.285	-5.340	8.61	0.950	-6.696	17.83	2.850	-6.959	23.63	9.500	-6.964	26.01
0.300	0.300	-5.364	9.55	1.000	-6.609	18.71	3.000	-6.829	24.17	10.000	-6.827	26.36

Table 43. Vertical Electric Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	ME IONF (KMH)	AMP (DB)	PHASE (DEG)	ME IONF (KMH)	AMP (DB)	PHASE (DEG)	ME IONF (KMH)	AMP (DB)	PHASE (DEG)
0.000	-4.177	-9.18	0.000	-6.933	-22.58	0.000	-13.820	-37.27	0.000	-25.487	-47.777
0.003	-4.162	-9.78	0.010	-6.951	-21.26	0.030	-15.863	-33.33	0.100	-25.476	-34.67
0.006	-4.187	-9.38	0.020	-6.964	-19.76	0.060	-15.864	-29.43	0.200	-25.469	-22.44
0.009	-4.192	-7.98	0.030	-6.973	-18.56	0.090	-15.827	-25.61	0.300	-24.369	-11.94
0.012	-4.197	-7.59	0.040	-6.978	-17.36	0.120	-15.753	-21.90	0.400	-23.458	-3.36
0.015	-4.203	-7.20	0.050	-6.979	-16.11	0.150	-15.686	-18.43	0.500	-22.540	3.50
0.018	-4.209	-6.80	0.060	-6.978	-14.85	0.180	-15.510	-14.90	0.600	-21.615	8.96
0.021	-4.213	-6.42	0.070	-6.977	-13.61	0.210	-15.350	-11.40	0.700	-20.774	13.34
0.024	-4.221	-6.03	0.080	-6.966	-12.39	0.240	-15.170	-8.57	0.800	-19.958	16.90
0.027	-4.226	-5.64	0.090	-6.948	-11.19	0.270	-14.973	-5.66	0.900	-19.218	19.63
0.030	-4.233	-5.26	0.100	-6.930	-10.00	0.300	-14.784	-2.94	1.000	-18.524	22.27
0.033	-4.243	-4.86	0.110	-6.911	-8.83	0.330	-14.586	-0.38	1.100	-17.880	24.33
0.036	-4.250	-4.50	0.120	-6.889	-7.68	0.360	-14.381	2.01	1.200	-17.283	26.09
0.039	-4.258	-4.12	0.130	-6.864	-6.55	0.370	-14.169	4.24	1.300	-16.728	27.62
0.042	-4.267	-3.75	0.140	-6.837	-5.44	0.400	-13.961	6.33	1.400	-16.212	28.95
0.045	-4.276	-3.37	0.150	-6.808	-4.35	0.450	-13.630	8.27	1.500	-15.730	30.12
0.048	-4.283	-3.00	0.160	-6.777	-3.28	0.500	-13.401	10.07	1.600	-15.279	31.15
0.051	-4.294	-2.63	0.170	-6.744	-2.23	0.510	-13.173	11.79	1.700	-14.855	32.09
0.054	-4.304	-2.26	0.180	-6.710	-1.20	0.540	-12.949	13.34	1.800	-14.458	32.92
0.057	-4.314	-1.89	0.190	-6.674	-0.19	0.570	-12.729	14.86	1.900	-14.084	33.68
0.060	-4.323	-1.52	0.200	-6.637	0.80	0.600	-12.513	16.26	2.000	-13.731	34.38
0.063	-4.333	-1.15	0.210	-6.599	1.77	0.630	-12.303	17.56	2.100	-13.397	35.01
0.066	-4.340	-0.78	0.220	-6.560	2.76	0.660	-12.097	18.79	2.200	-13.081	35.50
0.069	-4.353	-0.43	0.230	-6.520	3.65	0.690	-11.896	19.95	2.300	-12.782	36.14
0.072	-4.372	0.07	0.240	-6.479	4.56	0.720	-11.701	21.04	2.400	-12.497	36.65
0.075	-4.383	0.69	0.250	-6.438	5.48	0.750	-11.511	22.07	2.500	-12.227	37.12
0.078	-4.398	1.33	0.260	-6.397	6.33	0.780	-11.327	23.04	2.600	-11.970	37.56
0.081	-4.412	1.98	0.270	-6.355	7.18	0.810	-11.146	23.96	2.700	-11.725	37.98
0.084	-4.426	2.64	0.280	-6.313	8.02	0.840	-10.975	24.83	2.800	-11.492	38.37
0.087	-4.440	3.31	0.290	-6.270	8.84	0.870	-10.807	25.66	2.900	-11.269	38.75
0.090	-4.456	3.97	0.300	-6.228	9.65	0.900	-10.644	26.45	3.000	-11.056	39.10
0.105	-4.539	3.82	0.350	-6.020	13.42	1.050	-9.904	29.89	3.500	-10.120	40.87
0.120	-4.633	5.36	0.400	-5.824	16.84	1.200	-9.271	32.70	4.000	-9.362	42.00
0.135	-4.746	7.22	0.450	-5.646	19.96	1.350	-8.649	35.07	4.500	-8.742	43.18
0.150	-4.871	9.50	0.500	-5.470	22.82	1.500	-8.030	37.14	5.000	-8.234	44.29
0.165	-5.012	12.12	0.550	-5.308	25.49	1.650	-7.438	39.00	5.500	-7.816	45.35
0.180	-5.169	14.45	0.600	-5.153	27.99	1.800	-6.866	40.75	6.000	-7.470	46.40
0.195	-5.343	16.60	0.650	-5.010	30.37	1.950	-6.392	42.35	6.500	-7.203	47.47
0.210	-5.534	18.58	0.700	-4.872	32.65	2.100	-5.920	43.83	7.000	-6.987	48.56
0.225	-5.743	21.00	0.750	-4.740	34.89	2.250	-5.455	45.24	7.500	-6.823	49.70
0.240	-5.970	23.66	0.800	-4.614	37.07	2.400	-5.000	46.55	8.000	-6.705	50.89
0.255	-6.213	26.61	0.850	-4.493	39.24	2.550	-4.557	47.84	8.500	-6.627	52.14
0.270	-6.476	29.83	0.900	-4.376	41.33	2.700	-4.126	49.07	9.000	-6.588	53.47
0.285	-6.758	33.33	0.950	-4.262	43.35	2.850	-3.706	50.27	9.500	-6.562	54.89
0.300	-7.055	37.13	1.000	-4.150	45.32	3.000	-3.300	51.45	10.000	-6.608	56.42

Table 44. Vertical Electric Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM UMRANGE				10.0 KM UMRANGE				30.0 KM UMRANGE				100.0 KM UMRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-16.706	-76.99	0.000	-26.368	-84.80	0.000	-37.812	-89.06	0.000	-48.282	-90.61	0.000	-58.700	-92.15	0.000
0.003	-16.690	-69.02	0.010	-26.162	-71.76	0.030	-36.155	-84.15	0.100	-46.667	-85.73	0.300	-57.139	-88.34	0.500
0.006	-16.632	-62.15	0.030	-27.572	-60.10	0.090	-35.254	-76.64	0.120	-38.659	-70.18	0.300	-49.139	-81.32	0.500
0.009	-16.530	-51.40	0.050	-28.748	-50.39	0.120	-36.748	-65.44	0.150	-40.970	-61.16	0.300	-51.525	-78.34	0.500
0.012	-16.405	-37.81	0.070	-29.864	-42.60	0.150	-38.864	-56.44	0.180	-43.571	-52.64	0.300	-54.742	-74.24	0.500
0.015	-16.243	-24.39	0.090	-30.886	-36.44	0.180	-40.970	-47.54	0.210	-46.364	-43.70	0.300	-58.004	-69.14	0.500
0.018	-16.057	-11.15	0.110	-31.831	-31.55	0.210	-43.571	-37.54	0.240	-48.282	-33.27	0.300	-61.262	-63.27	0.500
0.021	-15.851	4.11	0.130	-32.741	-27.04	0.240	-46.364	-30.30	0.270	-51.525	-25.92	0.300	-64.504	-58.34	0.500
0.024	-15.620	17.27	0.150	-33.611	-21.85	0.270	-49.139	-22.40	0.300	-54.742	-20.10	0.300	-67.742	-53.70	0.500
0.027	-15.374	30.34	0.170	-34.441	-16.84	0.300	-51.525	-16.84	0.330	-58.004	-16.84	0.300	-71.004	-48.34	0.500
0.030	-15.110	43.27	0.190	-35.231	-11.84	0.330	-54.742	-11.84	0.360	-61.262	-11.84	0.300	-74.262	-43.27	0.500
0.033	-14.830	56.11	0.210	-36.001	-6.84	0.360	-58.004	-6.84	0.390	-64.504	-6.84	0.300	-77.504	-38.27	0.500
0.036	-14.530	69.02	0.230	-36.741	-1.84	0.390	-61.262	-1.84	0.420	-67.742	-1.84	0.300	-80.742	-33.27	0.500
0.039	-14.210	81.95	0.250	-37.451	3.11	0.420	-64.504	3.11	0.450	-71.004	3.11	0.300	-84.004	-28.34	0.500
0.042	-13.880	94.88	0.270	-38.121	8.11	0.450	-67.742	8.11	0.480	-74.262	8.11	0.300	-87.262	-23.34	0.500
0.045	-13.530	107.81	0.290	-38.761	13.11	0.480	-71.004	13.11	0.510	-77.504	13.11	0.300	-90.504	-18.34	0.500
0.048	-13.170	120.74	0.310	-39.371	18.11	0.510	-74.262	18.11	0.540	-80.742	18.11	0.300	-93.742	-13.34	0.500
0.051	-12.800	133.67	0.330	-40.001	23.11	0.540	-77.504	23.11	0.570	-84.004	23.11	0.300	-97.004	-8.34	0.500
0.054	-12.420	146.60	0.350	-40.601	28.11	0.570	-80.742	28.11	0.600	-87.262	28.11	0.300	-100.262	-3.34	0.500
0.057	-12.040	159.53	0.370	-41.171	33.11	0.600	-84.004	33.11	0.630	-90.504	33.11	0.300	-103.504	1.66	0.500
0.060	-11.660	172.46	0.390	-41.721	38.11	0.630	-87.262	38.11	0.660	-93.742	38.11	0.300	-106.742	6.66	0.500
0.063	-11.280	185.39	0.410	-42.251	43.11	0.660	-90.504	43.11	0.690	-97.004	43.11	0.300	-110.004	11.66	0.500
0.066	-10.890	198.32	0.430	-42.761	48.11	0.690	-93.742	48.11	0.720	-100.262	48.11	0.300	-113.262	16.66	0.500
0.069	-10.500	211.25	0.450	-43.251	53.11	0.720	-97.004	53.11	0.750	-103.504	53.11	0.300	-116.504	21.66	0.500
0.072	-10.110	224.18	0.470	-43.721	58.11	0.750	-100.262	58.11	0.780	-106.742	58.11	0.300	-119.742	26.66	0.500
0.075	-9.720	237.11	0.490	-44.171	63.11	0.780	-103.504	63.11	0.810	-110.004	63.11	0.300	-123.004	31.66	0.500
0.078	-9.330	250.04	0.510	-44.601	68.11	0.810	-106.742	68.11	0.840	-113.262	68.11	0.300	-126.262	36.66	0.500
0.081	-8.940	262.97	0.530	-45.011	73.11	0.840	-110.004	73.11	0.870	-116.504	73.11	0.300	-129.504	41.66	0.500
0.084	-8.550	275.90	0.550	-45.401	78.11	0.870	-113.262	78.11	0.900	-119.742	78.11	0.300	-132.742	46.66	0.500
0.087	-8.160	288.83	0.570	-45.771	83.11	0.900	-116.504	83.11	0.930	-123.004	83.11	0.300	-136.004	51.66	0.500
0.090	-7.770	301.76	0.590	-46.121	88.11	0.930	-119.742	88.11	0.960	-126.262	88.11	0.300	-139.262	56.66	0.500
0.105	-11.002	-16.40	0.350	-42.375	-44.30	0.650	-95.427	-10.04	1.050	-124.427	-10.04	0.350	-124.427	-10.04	0.350
0.120	-11.142	-10.47	0.400	-41.528	-33.76	0.700	-94.580	-1.57	1.200	-121.581	-1.57	0.400	-121.581	-1.57	0.400
0.135	-10.507	-6.92	0.450	-40.805	-24.20	0.750	-93.833	8.37	1.350	-118.834	8.37	0.450	-118.834	8.37	0.450
0.150	-9.943	-3.68	0.500	-40.179	-15.74	0.800	-93.186	18.22	1.500	-116.087	18.22	0.500	-116.087	18.22	0.500
0.165	-9.443	-0.68	0.550	-39.630	-6.41	0.850	-92.639	27.69	1.650	-113.340	27.69	0.550	-113.340	27.69	0.550
0.180	-8.994	2.86	0.600	-39.144	3.13	0.900	-92.192	37.16	1.800	-110.593	37.16	0.600	-110.593	37.16	0.600
0.195	-8.589	9.16	0.650	-38.712	11.70	0.950	-91.745	46.63	1.950	-107.846	46.63	0.650	-107.846	46.63	0.650
0.210	-8.222	16.61	0.700	-38.324	21.14	1.000	-91.298	56.10	2.100	-105.099	56.10	0.700	-105.099	56.10	0.700
0.225	-7.887	24.12	0.750	-37.974	31.54	1.050	-90.851	65.57	2.250	-102.352	65.57	0.750	-102.352	65.57	0.750
0.240	-7.580	31.86	0.800	-37.651	42.98	1.100	-90.404	75.04	2.400	-99.605	75.04	0.800	-99.605	75.04	0.800
0.255	-7.300	39.36	0.850	-37.351	54.42	1.150	-90.057	84.51	2.550	-96.858	84.51	0.850	-96.858	84.51	0.850
0.270	-7.043	46.63	0.900	-37.071	66.86	1.200	-89.710	93.98	2.700	-94.111	93.98	0.900	-94.111	93.98	0.900
0.285	-6.810	53.76	0.950	-36.811	79.30	1.250	-89.463	103.45	2.850	-91.364	103.45	0.950	-91.364	103.45	0.950
0.300	-6.605	60.65	1.000	-36.564	91.74	1.300	-89.216	112.92	3.000	-88.617	112.92	1.000	-88.617	112.92	1.000

Table 45. Vertical Electric Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM UOMRANGE					10.0 KM UOMRANGE					100.0 KM UOMRANGE				
ME/LMT	AMP	PHASE	ME/LMT	AMP	PHASE	ME/LMT	AMP	PHASE	ME/LMT	AMP	PHASE	ME/LMT	AMP	PHASE
(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)
0.00	-17.762	-46.084	0.00	-27.304	-57.521	0.000	-36.811	-61.453	0.000	-47.253	-62.886	0.000	-57.253	-62.886
.003	-17.760	-46.717	.003	-26.587	-56.447	.003	-35.153	-60.553	.003	-45.212	-61.453	.003	-55.212	-61.453
.006	-17.757	-47.350	.006	-25.870	-55.280	.006	-34.436	-59.666	.006	-44.471	-60.553	.006	-54.471	-60.553
.009	-17.754	-47.983	.009	-25.153	-54.113	.009	-33.719	-58.779	.009	-43.754	-59.666	.009	-53.754	-59.666
.012	-17.751	-48.616	.012	-24.436	-52.946	.012	-33.002	-57.892	.012	-43.037	-58.779	.012	-53.037	-58.779
.015	-17.748	-49.249	.015	-23.719	-51.779	.015	-32.285	-57.005	.015	-42.320	-57.892	.015	-52.320	-57.892
.018	-17.745	-49.882	.018	-23.002	-50.612	.018	-31.568	-56.118	.018	-41.603	-57.005	.018	-51.603	-57.005
.021	-17.742	-50.515	.021	-22.285	-49.445	.021	-30.851	-55.231	.021	-40.886	-56.118	.021	-50.886	-56.118
.024	-17.739	-51.148	.024	-21.568	-48.278	.024	-30.134	-54.344	.024	-40.169	-55.231	.024	-50.169	-55.231
.027	-17.736	-51.781	.027	-20.851	-47.111	.027	-29.417	-53.457	.027	-39.452	-54.344	.027	-49.452	-54.344
.030	-17.733	-52.414	.030	-20.134	-45.944	.030	-28.700	-52.570	.030	-38.735	-53.457	.030	-48.735	-53.457
.033	-17.730	-53.047	.033	-19.417	-44.777	.033	-27.983	-51.683	.033	-38.018	-52.570	.033	-48.018	-52.570
.036	-17.727	-53.680	.036	-18.700	-43.610	.036	-27.266	-50.796	.036	-37.301	-51.683	.036	-47.301	-51.683
.039	-17.724	-54.313	.039	-17.983	-42.443	.039	-26.549	-49.909	.039	-36.584	-50.796	.039	-46.584	-50.796
.042	-17.721	-54.946	.042	-17.266	-41.276	.042	-25.832	-49.022	.042	-35.867	-49.909	.042	-45.867	-49.909
.045	-17.718	-55.579	.045	-16.549	-40.109	.045	-25.115	-48.135	.045	-35.150	-49.022	.045	-45.150	-49.022
.048	-17.715	-56.212	.048	-15.832	-38.942	.048	-24.398	-47.248	.048	-34.433	-48.135	.048	-44.433	-48.135
.051	-17.712	-56.845	.051	-15.115	-37.775	.051	-23.681	-46.361	.051	-33.716	-47.248	.051	-43.716	-47.248
.054	-17.709	-57.478	.054	-14.398	-36.608	.054	-22.964	-45.474	.054	-33.000	-46.361	.054	-43.000	-46.361
.057	-17.706	-58.111	.057	-13.681	-35.441	.057	-22.247	-44.587	.057	-32.283	-45.474	.057	-42.283	-45.474
.060	-17.703	-58.744	.060	-12.964	-34.274	.060	-21.530	-43.700	.060	-31.566	-44.587	.060	-41.566	-44.587
.063	-17.700	-59.377	.063	-12.247	-33.107	.063	-20.813	-42.813	.063	-30.849	-43.700	.063	-40.849	-43.700
.066	-17.697	-60.010	.066	-11.530	-31.940	.066	-20.096	-41.926	.066	-30.132	-42.813	.066	-40.132	-42.813
.069	-17.694	-60.643	.069	-10.813	-30.773	.069	-19.379	-41.039	.069	-29.415	-41.926	.069	-39.415	-41.926
.072	-17.691	-61.276	.072	-10.096	-29.606	.072	-18.662	-40.152	.072	-28.698	-41.039	.072	-38.698	-41.039
.075	-17.688	-61.909	.075	-9.379	-28.439	.075	-17.945	-39.265	.075	-27.981	-40.152	.075	-37.981	-40.152
.078	-17.685	-62.542	.078	-8.662	-27.272	.078	-17.228	-38.378	.078	-27.264	-39.265	.078	-37.264	-39.265
.081	-17.682	-63.175	.081	-7.945	-26.105	.081	-16.511	-37.491	.081	-26.547	-38.378	.081	-36.547	-38.378
.084	-17.679	-63.808	.084	-7.228	-24.938	.084	-15.794	-36.604	.084	-25.830	-37.491	.084	-35.830	-37.491
.087	-17.676	-64.441	.087	-6.511	-23.771	.087	-15.077	-35.717	.087	-25.113	-36.604	.087	-35.113	-36.604
.090	-17.673	-65.074	.090	-5.794	-22.604	.090	-14.360	-34.830	.090	-24.396	-35.717	.090	-34.396	-35.717
.105	-17.668	-66.312	.105	-5.077	-21.437	.105	-13.643	-33.943	.105	-23.679	-34.830	.105	-33.679	-34.830
.120	-17.663	-67.550	.120	-4.360	-20.274	.120	-12.926	-33.056	.120	-22.962	-33.943	.120	-32.962	-33.943
.135	-17.658	-68.788	.135	-3.643	-19.111	.135	-12.209	-32.169	.135	-22.245	-33.056	.135	-32.245	-33.056
.150	-17.653	-70.026	.150	-2.926	-17.946	.150	-11.492	-31.282	.150	-21.528	-32.169	.150	-31.528	-32.169
.165	-17.648	-71.264	.165	-2.209	-16.781	.165	-10.775	-30.395	.165	-20.811	-31.282	.165	-30.811	-31.282
.180	-17.643	-72.502	.180	-1.492	-15.616	.180	-10.058	-29.508	.180	-20.094	-30.395	.180	-30.094	-30.395
.195	-17.638	-73.740	.195	-0.775	-14.451	.195	-9.341	-28.621	.195	-19.377	-29.508	.195	-29.377	-29.508
.210	-17.633	-74.978	.210	-0.058	-13.286	.210	-8.624	-27.734	.210	-18.660	-28.621	.210	-28.660	-28.621
.225	-17.628	-76.216	.225	0.659	-12.121	.225	-7.907	-26.847	.225	-17.943	-27.734	.225	-27.943	-27.734
.240	-17.623	-77.454	.240	1.346	-10.956	.240	-7.190	-25.960	.240	-17.226	-26.847	.240	-27.226	-26.847
.255	-17.618	-78.692	.255	2.033	-9.800	.255	-6.473	-25.073	.255	-16.509	-25.960	.255	-26.509	-25.960
.270	-17.613	-79.930	.270	2.720	-8.644	.270	-5.756	-24.186	.270	-15.792	-25.073	.270	-25.792	-25.073
.285	-17.608	-81.168	.285	3.407	-7.488	.285	-5.039	-23.299	.285	-15.075	-24.186	.285	-25.075	-24.186
.300	-17.603	-82.406	.300	4.094	-6.332	.300	-4.322	-22.412	.300	-14.358	-23.299	.300	-24.358	-23.299

Table 46. Vertical Electric Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)	REL HT (KM)	AMP (UB)	PHASE (DEG)
0.000	-15.944	-30.24	0.000	-25.357	-37.37	0.000	-34.704	-42.40	0.000	-45.113	-44.07	0.000	-57.132	23.05
0.003	-15.877	-26.20	0.010	-25.150	-26.33	0.000	-33.045	-41.84	0.000	-47.178	34.22	0.000	-57.178	34.22
0.006	-15.860	-22.37	0.020	-24.501	-14.86	0.000	-30.144	11.54	0.000	-48.378	38.20	0.000	-57.178	34.22
0.009	-15.765	-18.61	0.030	-23.736	-4.93	0.000	-27.606	21.60	0.000	-48.378	38.20	0.000	-57.178	34.22
0.012	-15.576	-13.00	0.040	-22.815	2.87	0.000	-25.352	27.40	0.000	-48.378	38.20	0.000	-57.178	34.22
0.015	-15.339	-11.57	0.050	-21.879	9.05	0.000	-23.873	31.11	0.000	-48.378	38.20	0.000	-57.178	34.22
0.018	-15.257	-8.31	0.060	-20.976	13.96	0.000	-22.469	33.64	0.000	-48.378	38.20	0.000	-57.178	34.22
0.021	-15.050	-5.25	0.070	-20.126	17.90	0.000	-21.269	35.43	0.000	-48.378	38.20	0.000	-57.178	34.22
0.024	-14.839	-2.37	0.080	-19.334	21.10	0.000	-20.220	36.94	0.000	-48.378	38.20	0.000	-57.178	34.22
0.027	-14.611	0.32	0.090	-18.600	23.74	0.000	-19.310	38.06	0.000	-48.378	38.20	0.000	-57.178	34.22
0.030	-14.375	2.85	0.100	-17.921	25.95	0.000	-18.535	38.95	0.000	-48.378	38.20	0.000	-57.178	34.22
0.033	-14.134	5.16	0.110	-17.292	27.81	0.000	-17.892	39.70	0.000	-48.378	38.20	0.000	-57.178	34.22
0.036	-13.891	7.34	0.120	-16.708	29.41	0.000	-17.389	40.32	0.000	-48.378	38.20	0.000	-57.178	34.22
0.039	-13.640	9.36	0.130	-16.160	30.78	0.000	-16.980	40.85	0.000	-48.378	38.20	0.000	-57.178	34.22
0.042	-13.402	11.25	0.140	-15.640	31.99	0.000	-16.620	41.32	0.000	-48.378	38.20	0.000	-57.178	34.22
0.045	-13.161	13.00	0.150	-15.148	33.04	0.000	-16.280	41.72	0.000	-48.378	38.20	0.000	-57.178	34.22
0.048	-12.923	14.63	0.160	-14.676	33.98	0.000	-15.960	42.08	0.000	-48.378	38.20	0.000	-57.178	34.22
0.051	-12.689	16.15	0.170	-14.231	34.82	0.000	-15.660	42.40	0.000	-48.378	38.20	0.000	-57.178	34.22
0.054	-12.460	17.57	0.180	-13.804	35.57	0.000	-15.380	42.69	0.000	-48.378	38.20	0.000	-57.178	34.22
0.057	-12.230	18.90	0.190	-13.397	36.25	0.000	-15.120	42.95	0.000	-48.378	38.20	0.000	-57.178	34.22
0.060	-12.017	20.15	0.200	-13.020	36.87	0.000	-14.880	43.18	0.000	-48.378	38.20	0.000	-57.178	34.22
0.063	-11.804	21.31	0.210	-12.676	37.44	0.000	-14.660	43.43	0.000	-48.378	38.20	0.000	-57.178	34.22
0.066	-11.590	22.41	0.220	-12.358	37.90	0.000	-14.460	43.64	0.000	-48.378	38.20	0.000	-57.178	34.22
0.069	-11.375	23.43	0.230	-12.062	38.44	0.000	-14.280	43.83	0.000	-48.378	38.20	0.000	-57.178	34.22
0.072	-11.159	24.40	0.240	-11.781	38.89	0.000	-14.120	44.02	0.000	-48.378	38.20	0.000	-57.178	34.22
0.075	-10.943	25.36	0.250	-11.514	39.30	0.000	-13.980	44.19	0.000	-48.378	38.20	0.000	-57.178	34.22
0.078	-10.725	26.30	0.260	-11.261	39.69	0.000	-13.860	44.35	0.000	-48.378	38.20	0.000	-57.178	34.22
0.081	-10.507	27.10	0.270	-11.010	40.00	0.000	-13.760	44.52	0.000	-48.378	38.20	0.000	-57.178	34.22
0.084	-10.287	27.77	0.280	-10.760	40.73	0.000	-13.680	44.67	0.000	-48.378	38.20	0.000	-57.178	34.22
0.087	-10.067	28.30	0.290	-10.510	41.03	0.000	-13.620	44.81	0.000	-48.378	38.20	0.000	-57.178	34.22
0.090	-9.845	28.60	0.300	-10.260	41.33	0.000	-13.580	44.96	0.000	-48.378	38.20	0.000	-57.178	34.22
0.105	-9.410	32.24	0.350	-9.601	42.36	0.000	-13.350	45.42	0.000	-48.378	38.20	0.000	-57.178	34.22
0.120	-8.707	34.72	0.400	-8.909	43.20	0.000	-13.120	45.83	0.000	-48.378	38.20	0.000	-57.178	34.22
0.135	-8.000	36.60	0.450	-8.242	43.89	0.000	-12.900	46.23	0.000	-48.378	38.20	0.000	-57.178	34.22
0.150	-7.290	38.61	0.500	-7.590	44.47	0.000	-12.680	46.64	0.000	-48.378	38.20	0.000	-57.178	34.22
0.165	-6.580	40.24	0.550	-6.940	44.96	0.000	-12.460	47.05	0.000	-48.378	38.20	0.000	-57.178	34.22
0.180	-5.870	41.74	0.600	-6.290	45.41	0.000	-12.240	47.45	0.000	-48.378	38.20	0.000	-57.178	34.22
0.195	-5.160	43.16	0.650	-5.640	45.86	0.000	-12.020	47.85	0.000	-48.378	38.20	0.000	-57.178	34.22
0.210	-4.450	44.53	0.700	-5.000	46.34	0.000	-11.800	48.25	0.000	-48.378	38.20	0.000	-57.178	34.22
0.225	-3.740	45.89	0.750	-4.360	46.84	0.000	-11.580	48.65	0.000	-48.378	38.20	0.000	-57.178	34.22
0.240	-3.030	47.25	0.800	-3.720	47.35	0.000	-11.360	49.05	0.000	-48.378	38.20	0.000	-57.178	34.22
0.255	-2.320	48.63	0.850	-3.080	47.86	0.000	-11.140	49.45	0.000	-48.378	38.20	0.000	-57.178	34.22
0.270	-1.610	50.00	0.900	-2.440	48.37	0.000	-10.920	49.85	0.000	-48.378	38.20	0.000	-57.178	34.22
0.285	-0.900	51.34	0.950	-1.800	48.88	0.000	-10.700	50.25	0.000	-48.378	38.20	0.000	-57.178	34.22
0.300	-0.190	52.64	1.000	-1.160	49.39	0.000	-10.480	50.65	0.000	-48.378	38.20	0.000	-57.178	34.22

Table 47. Vertical Electric Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 0.00 m

10.0 KM UMBRANCE				30.0 KM UMBRANCE				100.0 KM UMBRANCE				300.0 KM UMBRANCE			
ME (GMT)	AMP (UB)	PHASE (DEG)	ME (GMT)	AMP (UB)	PHASE (DEG)	ME (GMT)	AMP (UB)	ME (GMT)	AMP (UB)	PHASE (DEG)	ME (GMT)	AMP (UB)	PHASE (DEG)	ME (GMT)	AMP (UB)
0.000	-20.300	-83.09	0.000	-37.021	-07.72	0.000	-48.286	0.000	-48.286	-07.06	0.000	-57.007	-04.91	0.000	-57.007
0.001	-20.103	-70.00	0.001	-36.122	-23.14	0.001	-46.253	0.001	-46.253	-26.43	0.001	-55.907	-04.06	0.001	-55.907
0.002	-27.257	-57.09	0.002	-33.220	-33.70	0.002	-34.852	0.002	-34.852	-11.74	0.002	-35.024	-04.01	0.002	-35.024
0.003	-26.121	-44.96	0.003	-30.087	-28.01	0.003	-31.516	0.003	-31.516	-7.77	0.003	-31.576	-2.03	0.003	-31.576
0.004	-25.777	-31.75	0.004	-28.038	-19.26	0.004	-29.132	0.004	-29.132	-3.76	0.004	-29.179	-1.97	0.004	-29.179
0.005	-24.001	-35.03	0.005	-26.961	-14.59	0.005	-27.267	0.005	-27.267	-4.55	0.005	-27.317	-1.56	0.005	-27.317
0.006	-23.926	-30.82	0.006	-25.957	-12.07	0.006	-25.786	0.006	-25.786	-3.74	0.006	-25.804	-1.24	0.006	-25.804
0.007	-23.104	-26.94	0.007	-24.357	-10.23	0.007	-23.524	0.007	-23.524	-3.10	0.007	-23.545	-1.10	0.007	-23.545
0.008	-22.310	-23.80	0.008	-23.314	-8.84	0.008	-22.447	0.008	-22.447	-2.73	0.008	-22.459	-0.95	0.008	-22.459
0.009	-21.574	-21.21	0.009	-22.394	-7.76	0.009	-21.500	0.009	-21.500	-2.34	0.009	-21.504	-0.84	0.009	-21.504
0.010	-20.893	-19.06	0.010	-21.572	-6.89	0.010	-20.650	0.010	-20.650	-2.13	0.010	-20.650	-0.75	0.010	-20.650
0.011	-20.200	-17.44	0.011	-20.833	-6.17	0.011	-20.004	0.011	-20.004	-1.91	0.011	-20.004	-0.67	0.011	-20.004
0.012	-19.503	-15.89	0.012	-20.100	-5.58	0.012	-19.281	0.012	-19.281	-1.73	0.012	-19.281	-0.61	0.012	-19.281
0.013	-18.813	-14.36	0.013	-19.346	-5.08	0.013	-18.504	0.013	-18.504	-1.57	0.013	-18.504	-0.56	0.013	-18.504
0.014	-18.113	-12.81	0.014	-18.580	-4.63	0.014	-17.786	0.014	-17.786	-1.44	0.014	-17.786	-0.52	0.014	-17.786
0.015	-17.413	-11.31	0.015	-17.810	-4.27	0.015	-17.064	0.015	-17.064	-1.33	0.015	-17.064	-0.48	0.015	-17.064
0.016	-16.700	-9.81	0.016	-17.037	-3.95	0.016	-16.304	0.016	-16.304	-1.23	0.016	-16.304	-0.45	0.016	-16.304
0.017	-16.000	-8.31	0.017	-16.261	-3.67	0.017	-15.546	0.017	-15.546	-1.14	0.017	-15.546	-0.42	0.017	-15.546
0.018	-15.300	-6.81	0.018	-15.484	-3.41	0.018	-14.786	0.018	-14.786	-1.07	0.018	-14.786	-0.39	0.018	-14.786
0.019	-14.600	-5.31	0.019	-14.717	-3.19	0.019	-14.031	0.019	-14.031	-1.00	0.019	-14.031	-0.37	0.019	-14.031
0.020	-13.900	-3.81	0.020	-13.951	-2.94	0.020	-13.286	0.020	-13.286	-0.94	0.020	-13.286	-0.35	0.020	-13.286
0.021	-13.200	-2.31	0.021	-13.182	-2.68	0.021	-12.531	0.021	-12.531	-0.83	0.021	-12.531	-0.33	0.021	-12.531
0.022	-12.500	-0.81	0.022	-12.413	-2.40	0.022	-11.786	0.022	-11.786	-0.74	0.022	-11.786	-0.31	0.022	-11.786
0.023	-11.800	0.69	0.023	-11.626	-2.13	0.023	-11.031	0.023	-11.031	-0.74	0.023	-11.031	-0.30	0.023	-11.031
0.024	-11.100	2.19	0.024	-10.950	-1.85	0.024	-10.286	0.024	-10.286	-0.74	0.024	-10.286	-0.28	0.024	-10.286
0.025	-10.400	3.69	0.025	-10.200	-1.57	0.025	-9.531	0.025	-9.531	-0.74	0.025	-9.531	-0.27	0.025	-9.531
0.026	-9.700	5.19	0.026	-9.500	-1.29	0.026	-8.786	0.026	-8.786	-0.74	0.026	-8.786	-0.26	0.026	-8.786
0.027	-9.000	6.69	0.027	-8.800	-1.01	0.027	-8.031	0.027	-8.031	-0.74	0.027	-8.031	-0.25	0.027	-8.031
0.028	-8.300	8.19	0.028	-8.100	-0.73	0.028	-7.286	0.028	-7.286	-0.74	0.028	-7.286	-0.24	0.028	-7.286
0.029	-7.600	9.69	0.029	-7.400	-0.45	0.029	-6.531	0.029	-6.531	-0.74	0.029	-6.531	-0.23	0.029	-6.531
0.030	-6.900	11.19	0.030	-6.700	-0.17	0.030	-5.786	0.030	-5.786	-0.74	0.030	-5.786	-0.22	0.030	-5.786
0.035	-12.312	-4.05	0.035	-12.427	-1.40	0.035	-12.443	0.035	-12.443	-0.45	0.035	-12.443	-0.18	0.035	-12.443
0.040	-11.527	-3.33	0.040	-11.501	-1.15	0.040	-11.572	0.040	-11.572	-0.38	0.040	-11.572	-0.16	0.040	-11.572
0.045	-10.805	-2.70	0.045	-10.835	-0.97	0.045	-10.836	0.045	-10.836	-0.32	0.045	-10.836	-0.14	0.045	-10.836
0.050	-10.100	-2.10	0.050	-10.202	-0.82	0.050	-10.204	0.050	-10.204	-0.28	0.050	-10.204	-0.12	0.050	-10.204
0.055	-9.400	-1.50	0.055	-9.404	-0.71	0.055	-9.404	0.055	-9.404	-0.24	0.055	-9.404	-0.11	0.055	-9.404
0.060	-8.700	-0.90	0.060	-8.704	-0.54	0.060	-8.704	0.060	-8.704	-0.21	0.060	-8.704	-0.10	0.060	-8.704
0.065	-8.000	-0.30	0.065	-8.004	-0.40	0.065	-8.004	0.065	-8.004	-0.19	0.065	-8.004	-0.09	0.065	-8.004
0.070	-7.300	0.30	0.070	-7.304	-0.26	0.070	-7.304	0.070	-7.304	-0.17	0.070	-7.304	-0.08	0.070	-7.304
0.075	-6.600	0.90	0.075	-6.604	-0.13	0.075	-6.604	0.075	-6.604	-0.14	0.075	-6.604	-0.07	0.075	-6.604
0.080	-5.900	1.50	0.080	-5.904	0.00	0.080	-5.904	0.080	-5.904	-0.13	0.080	-5.904	-0.07	0.080	-5.904
0.085	-5.200	2.10	0.085	-5.204	0.10	0.085	-5.204	0.085	-5.204	-0.11	0.085	-5.204	-0.06	0.085	-5.204
0.090	-4.500	2.70	0.090	-4.504	0.20	0.090	-4.504	0.090	-4.504	-0.10	0.090	-4.504	-0.06	0.090	-4.504
0.095	-3.800	3.30	0.095	-3.804	0.29	0.095	-3.804	0.095	-3.804	-0.09	0.095	-3.804	-0.06	0.095	-3.804
0.100	-3.100	3.90	0.100	-3.104	0.38	0.100	-3.104	0.100	-3.104	-0.08	0.100	-3.104	-0.06	0.100	-3.104

Table 48. Vertical Electric Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 2.25 m

HEIGHT (m)	100 CM DOWNRANGE			300 CM DOWNRANGE			500 CM DOWNRANGE		
	AMPL (V)	PHASE (DEG)	RELINT (V)	AMPL (V)	PHASE (DEG)	RELINT (V)	AMPL (V)	PHASE (DEG)	RELINT (V)
0.00	-27.356	-50.531	0.000	-26.764	-50.453	0.000	-26.172	-50.375	0.000
0.01	-27.342	-50.530	0.003	-26.750	-50.452	0.003	-26.158	-50.374	0.003
0.02	-27.328	-50.529	0.006	-26.736	-50.451	0.006	-26.144	-50.373	0.006
0.03	-27.314	-50.528	0.009	-26.722	-50.450	0.009	-26.130	-50.372	0.009
0.04	-27.300	-50.527	0.012	-26.708	-50.449	0.012	-26.116	-50.371	0.012
0.05	-27.286	-50.526	0.015	-26.694	-50.448	0.015	-26.102	-50.370	0.015
0.06	-27.272	-50.525	0.018	-26.680	-50.447	0.018	-26.088	-50.369	0.018
0.07	-27.258	-50.524	0.021	-26.666	-50.446	0.021	-26.074	-50.368	0.021
0.08	-27.244	-50.523	0.024	-26.652	-50.445	0.024	-26.060	-50.367	0.024
0.09	-27.230	-50.522	0.027	-26.638	-50.444	0.027	-26.046	-50.366	0.027
0.10	-27.216	-50.521	0.030	-26.624	-50.443	0.030	-26.032	-50.365	0.030
0.11	-27.202	-50.520	0.033	-26.610	-50.442	0.033	-26.018	-50.364	0.033
0.12	-27.188	-50.519	0.036	-26.596	-50.441	0.036	-26.004	-50.363	0.036
0.13	-27.174	-50.518	0.039	-26.582	-50.440	0.039	-25.990	-50.362	0.039
0.14	-27.160	-50.517	0.042	-26.568	-50.439	0.042	-25.976	-50.361	0.042
0.15	-27.146	-50.516	0.045	-26.554	-50.438	0.045	-25.962	-50.360	0.045
0.16	-27.132	-50.515	0.048	-26.540	-50.437	0.048	-25.948	-50.359	0.048
0.17	-27.118	-50.514	0.051	-26.526	-50.436	0.051	-25.934	-50.358	0.051
0.18	-27.104	-50.513	0.054	-26.512	-50.435	0.054	-25.920	-50.357	0.054
0.19	-27.090	-50.512	0.057	-26.498	-50.434	0.057	-25.906	-50.356	0.057
0.20	-27.076	-50.511	0.060	-26.484	-50.433	0.060	-25.892	-50.355	0.060
0.21	-27.062	-50.510	0.063	-26.470	-50.432	0.063	-25.878	-50.354	0.063
0.22	-27.048	-50.509	0.066	-26.456	-50.431	0.066	-25.864	-50.353	0.066
0.23	-27.034	-50.508	0.069	-26.442	-50.430	0.069	-25.850	-50.352	0.069
0.24	-27.020	-50.507	0.072	-26.428	-50.429	0.072	-25.836	-50.351	0.072
0.25	-27.006	-50.506	0.075	-26.414	-50.428	0.075	-25.822	-50.350	0.075
0.26	-26.992	-50.505	0.078	-26.400	-50.427	0.078	-25.808	-50.349	0.078
0.27	-26.978	-50.504	0.081	-26.386	-50.426	0.081	-25.794	-50.348	0.081
0.28	-26.964	-50.503	0.084	-26.372	-50.425	0.084	-25.780	-50.347	0.084
0.29	-26.950	-50.502	0.087	-26.358	-50.424	0.087	-25.766	-50.346	0.087
0.30	-26.936	-50.501	0.090	-26.344	-50.423	0.090	-25.752	-50.345	0.090
0.31	-26.922	-50.500	0.093	-26.330	-50.422	0.093	-25.738	-50.344	0.093
0.32	-26.908	-50.499	0.096	-26.316	-50.421	0.096	-25.724	-50.343	0.096
0.33	-26.894	-50.498	0.099	-26.302	-50.420	0.099	-25.710	-50.342	0.099
0.34	-26.880	-50.497	0.102	-26.288	-50.419	0.102	-25.696	-50.341	0.102
0.35	-26.866	-50.496	0.105	-26.274	-50.418	0.105	-25.682	-50.340	0.105
0.36	-26.852	-50.495	0.108	-26.260	-50.417	0.108	-25.668	-50.339	0.108
0.37	-26.838	-50.494	0.111	-26.246	-50.416	0.111	-25.654	-50.338	0.111
0.38	-26.824	-50.493	0.114	-26.232	-50.415	0.114	-25.640	-50.337	0.114
0.39	-26.810	-50.492	0.117	-26.218	-50.414	0.117	-25.626	-50.336	0.117
0.40	-26.796	-50.491	0.120	-26.204	-50.413	0.120	-25.612	-50.335	0.120
0.41	-26.782	-50.490	0.123	-26.190	-50.412	0.123	-25.598	-50.334	0.123
0.42	-26.768	-50.489	0.126	-26.176	-50.411	0.126	-25.584	-50.333	0.126
0.43	-26.754	-50.488	0.129	-26.162	-50.410	0.129	-25.570	-50.332	0.129
0.44	-26.740	-50.487	0.132	-26.148	-50.409	0.132	-25.556	-50.331	0.132
0.45	-26.726	-50.486	0.135	-26.134	-50.408	0.135	-25.542	-50.330	0.135
0.46	-26.712	-50.485	0.138	-26.120	-50.407	0.138	-25.528	-50.329	0.138
0.47	-26.698	-50.484	0.141	-26.106	-50.406	0.141	-25.514	-50.328	0.141
0.48	-26.684	-50.483	0.144	-26.092	-50.405	0.144	-25.500	-50.327	0.144
0.49	-26.670	-50.482	0.147	-26.078	-50.404	0.147	-25.486	-50.326	0.147
0.50	-26.656	-50.481	0.150	-26.064	-50.403	0.150	-25.472	-50.325	0.150
0.51	-26.642	-50.480	0.153	-26.050	-50.402	0.153	-25.458	-50.324	0.153
0.52	-26.628	-50.479	0.156	-26.036	-50.401	0.156	-25.444	-50.323	0.156
0.53	-26.614	-50.478	0.159	-26.022	-50.400	0.159	-25.430	-50.322	0.159
0.54	-26.600	-50.477	0.162	-26.008	-50.399	0.162	-25.416	-50.321	0.162
0.55	-26.586	-50.476	0.165	-25.994	-50.398	0.165	-25.402	-50.320	0.165
0.56	-26.572	-50.475	0.168	-25.980	-50.397	0.168	-25.388	-50.319	0.168
0.57	-26.558	-50.474	0.171	-25.966	-50.396	0.171	-25.374	-50.318	0.171
0.58	-26.544	-50.473	0.174	-25.952	-50.395	0.174	-25.360	-50.317	0.174
0.59	-26.530	-50.472	0.177	-25.938	-50.394	0.177	-25.346	-50.316	0.177
0.60	-26.516	-50.471	0.180	-25.924	-50.393	0.180	-25.332	-50.315	0.180
0.61	-26.502	-50.470	0.183	-25.910	-50.392	0.183	-25.318	-50.314	0.183
0.62	-26.488	-50.469	0.186	-25.896	-50.391	0.186	-25.304	-50.313	0.186
0.63	-26.474	-50.468	0.189	-25.882	-50.390	0.189	-25.290	-50.312	0.189
0.64	-26.460	-50.467	0.192	-25.868	-50.389	0.192	-25.276	-50.311	0.192
0.65	-26.446	-50.466	0.195	-25.854	-50.388	0.195	-25.262	-50.310	0.195
0.66	-26.432	-50.465	0.198	-25.840	-50.387	0.198	-25.248	-50.309	0.198
0.67	-26.418	-50.464	0.201	-25.826	-50.386	0.201	-25.234	-50.308	0.201
0.68	-26.404	-50.463	0.204	-25.812	-50.385	0.204	-25.220	-50.307	0.204
0.69	-26.390	-50.462	0.207	-25.798	-50.384	0.207	-25.206	-50.306	0.207
0.70	-26.376	-50.461	0.210	-25.784	-50.383	0.210	-25.192	-50.305	0.210
0.71	-26.362	-50.460	0.213	-25.770	-50.382	0.213	-25.178	-50.304	0.213
0.72	-26.348	-50.459	0.216	-25.756	-50.381	0.216	-25.164	-50.303	0.216
0.73	-26.334	-50.458	0.219	-25.742	-50.380	0.219	-25.150	-50.302	0.219
0.74	-26.320	-50.457	0.222	-25.728	-50.379	0.222	-25.136	-50.301	0.222
0.75	-26.306	-50.456	0.225	-25.714	-50.378	0.225	-25.122	-50.300	0.225
0.76	-26.292	-50.455	0.228	-25.700	-50.377	0.228	-25.108	-50.299	0.228
0.77	-26.278	-50.454	0.231	-25.686	-50.376	0.231	-25.094	-50.298	0.231
0.78	-26.264	-50.453	0.234	-25.672	-50.375	0.234	-25.080	-50.297	0.234
0.79	-26.250	-50.452	0.237	-25.658	-50.374	0.237	-25.066	-50.296	0.237
0.80	-26.236	-50.451	0.240	-25.644	-50.373	0.240	-25.052	-50.295	0.240
0.81	-26.222	-50.450	0.243	-25.630	-50.372	0.243	-25.038	-50.294	0.243
0.82	-26.208	-50.449	0.246	-25.616	-50.371	0.246	-25.024	-50.293	0.246
0.83	-26.194	-50.448	0.249	-25.602	-50.370	0.249	-25.010	-50.292	0.249
0.84	-26.180	-50.447	0.252	-25.588	-50.369	0.252	-24.996	-50.291	0.252
0.85	-26.166	-50.446	0.255	-25.574	-50.368	0.255	-24.982	-50.290	0.255
0.86	-26.152	-50.445	0.258	-25.560	-50.367	0.258	-24.968	-50.289	0.258
0.87	-26.138	-50.444	0.261	-25.546	-50.366	0.261	-24.954	-50.288	0.261
0.88	-26.124	-50.443	0.264	-25.532	-50.365	0.264	-24.940	-50.287	0.264
0.89	-26.110	-50.442	0.267	-25.518	-50.364	0.267	-24.926	-50.286	0.267
0.90	-26.096	-50.441	0.270	-25.504	-50.363	0.270	-24.912	-50.285	0.270
0.91	-26.082	-50.440	0.273	-25.490	-50.362	0.273	-24.898	-50.284	0.273
0.92	-26.068	-50.439	0.276	-25.476	-50.361	0.276	-24.884	-50.283	0.276
0.93	-26.054	-50.438	0.279	-25.462	-50.360	0.279	-24.870	-50.282	0.279
0.94	-26.040	-50.437	0.282	-25.448	-50.359	0.282	-24.856	-50.281	0.282
0.95	-26.026	-50.436	0.285	-25.434	-50.358	0.285	-24.842	-50.280	0.285
0.96	-26.012	-50.435	0.288	-25.420	-50.357	0.288	-24.828	-50.279	0.288
0.97	-26.000	-50.434	0.291	-25.406	-50.356	0.291	-24.814	-50.278	0.291
0.98	-25.986	-50.433	0.294	-25.392	-50.355	0.294	-24.800	-50.277	0.294
0.99	-25.972	-50.432	0.297	-25.378	-50.354	0.297	-24.786	-50.276	0.297
1.00	-25.958	-50.431	0.300	-25.364	-50.353	0.300	-24.772	-50.275	0.300

Table 49. Vertical Electric Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 4.50 m

10.0 KM UPLINKANCE					10.0 KM DOWNLINKANCE				
Alt (m)	AMP (dB)	PHASE (deg)	Alt (m)	AMP (dB)	PHASE (deg)	Alt (m)	AMP (dB)	PHASE (deg)	Alt (m)
1.05	-25.000	30.000	1.05	-25.000	30.000	1.05	-25.000	30.000	1.05
1.10	-25.000	30.000	1.10	-25.000	30.000	1.10	-25.000	30.000	1.10
1.15	-25.000	30.000	1.15	-25.000	30.000	1.15	-25.000	30.000	1.15
1.20	-25.000	30.000	1.20	-25.000	30.000	1.20	-25.000	30.000	1.20
1.25	-25.000	30.000	1.25	-25.000	30.000	1.25	-25.000	30.000	1.25
1.30	-25.000	30.000	1.30	-25.000	30.000	1.30	-25.000	30.000	1.30
1.35	-25.000	30.000	1.35	-25.000	30.000	1.35	-25.000	30.000	1.35
1.40	-25.000	30.000	1.40	-25.000	30.000	1.40	-25.000	30.000	1.40
1.45	-25.000	30.000	1.45	-25.000	30.000	1.45	-25.000	30.000	1.45
1.50	-25.000	30.000	1.50	-25.000	30.000	1.50	-25.000	30.000	1.50
1.55	-25.000	30.000	1.55	-25.000	30.000	1.55	-25.000	30.000	1.55
1.60	-25.000	30.000	1.60	-25.000	30.000	1.60	-25.000	30.000	1.60
1.65	-25.000	30.000	1.65	-25.000	30.000	1.65	-25.000	30.000	1.65
1.70	-25.000	30.000	1.70	-25.000	30.000	1.70	-25.000	30.000	1.70
1.75	-25.000	30.000	1.75	-25.000	30.000	1.75	-25.000	30.000	1.75
1.80	-25.000	30.000	1.80	-25.000	30.000	1.80	-25.000	30.000	1.80
1.85	-25.000	30.000	1.85	-25.000	30.000	1.85	-25.000	30.000	1.85
1.90	-25.000	30.000	1.90	-25.000	30.000	1.90	-25.000	30.000	1.90
1.95	-25.000	30.000	1.95	-25.000	30.000	1.95	-25.000	30.000	1.95
2.00	-25.000	30.000	2.00	-25.000	30.000	2.00	-25.000	30.000	2.00
2.05	-25.000	30.000	2.05	-25.000	30.000	2.05	-25.000	30.000	2.05
2.10	-25.000	30.000	2.10	-25.000	30.000	2.10	-25.000	30.000	2.10
2.15	-25.000	30.000	2.15	-25.000	30.000	2.15	-25.000	30.000	2.15
2.20	-25.000	30.000	2.20	-25.000	30.000	2.20	-25.000	30.000	2.20
2.25	-25.000	30.000	2.25	-25.000	30.000	2.25	-25.000	30.000	2.25
2.30	-25.000	30.000	2.30	-25.000	30.000	2.30	-25.000	30.000	2.30
2.35	-25.000	30.000	2.35	-25.000	30.000	2.35	-25.000	30.000	2.35
2.40	-25.000	30.000	2.40	-25.000	30.000	2.40	-25.000	30.000	2.40
2.45	-25.000	30.000	2.45	-25.000	30.000	2.45	-25.000	30.000	2.45
2.50	-25.000	30.000	2.50	-25.000	30.000	2.50	-25.000	30.000	2.50
2.55	-25.000	30.000	2.55	-25.000	30.000	2.55	-25.000	30.000	2.55
2.60	-25.000	30.000	2.60	-25.000	30.000	2.60	-25.000	30.000	2.60
2.65	-25.000	30.000	2.65	-25.000	30.000	2.65	-25.000	30.000	2.65
2.70	-25.000	30.000	2.70	-25.000	30.000	2.70	-25.000	30.000	2.70
2.75	-25.000	30.000	2.75	-25.000	30.000	2.75	-25.000	30.000	2.75
2.80	-25.000	30.000	2.80	-25.000	30.000	2.80	-25.000	30.000	2.80
2.85	-25.000	30.000	2.85	-25.000	30.000	2.85	-25.000	30.000	2.85
2.90	-25.000	30.000	2.90	-25.000	30.000	2.90	-25.000	30.000	2.90
2.95	-25.000	30.000	2.95	-25.000	30.000	2.95	-25.000	30.000	2.95
3.00	-25.000	30.000	3.00	-25.000	30.000	3.00	-25.000	30.000	3.00

Table 50. Radial Electric Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 0.00 m

10000 km Uppermantle		30000 km Uppermantle	
Depth (km)	Temperature (K)	Depth (km)	Temperature (K)
10000	1500	30000	1500
11000	1550	31000	1550
12000	1600	32000	1600
13000	1650	33000	1650
14000	1700	34000	1700
15000	1750	35000	1750
16000	1800	36000	1800
17000	1850	37000	1850
18000	1900	38000	1900
19000	1950	39000	1950
20000	2000	40000	2000
21000	2050	41000	2050
22000	2100	42000	2100
23000	2150	43000	2150
24000	2200	44000	2200
25000	2250	45000	2250
26000	2300	46000	2300
27000	2350	47000	2350
28000	2400	48000	2400
29000	2450	49000	2450
30000	2500	50000	2500
31000	2550	51000	2550
32000	2600	52000	2600
33000	2650	53000	2650
34000	2700	54000	2700
35000	2750	55000	2750
36000	2800	56000	2800
37000	2850	57000	2850
38000	2900	58000	2900
39000	2950	59000	2950
40000	3000	60000	3000
41000	3050	61000	3050
42000	3100	62000	3100
43000	3150	63000	3150
44000	3200	64000	3200
45000	3250	65000	3250
46000	3300	66000	3300
47000	3350	67000	3350
48000	3400	68000	3400
49000	3450	69000	3450
50000	3500	70000	3500
51000	3550	71000	3550
52000	3600	72000	3600
53000	3650	73000	3650
54000	3700	74000	3700
55000	3750	75000	3750
56000	3800	76000	3800
57000	3850	77000	3850
58000	3900	78000	3900
59000	3950	79000	3950
60000	4000	80000	4000
61000	4050	81000	4050
62000	4100	82000	4100
63000	4150	83000	4150
64000	4200	84000	4200
65000	4250	85000	4250
66000	4300	86000	4300
67000	4350	87000	4350
68000	4400	88000	4400
69000	4450	89000	4450
70000	4500	90000	4500
71000	4550	91000	4550
72000	4600	92000	4600
73000	4650	93000	4650
74000	4700	94000	4700
75000	4750	95000	4750
76000	4800	96000	4800
77000	4850	97000	4850
78000	4900	98000	4900
79000	4950	99000	4950
80000	5000	100000	5000

Table 51. Radial Electric Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 2247.60 m

[illegible]

Table 52. Radial Electric Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 4495.20 m

3000 KM DISTANCE				1000 KM DISTANCE				3000 KM DISTANCE			
HEIGHT (KM)	AMP (V)	PHASE (DEG)		HEIGHT (KM)	AMP (V)	PHASE (DEG)		HEIGHT (KM)	AMP (V)	PHASE (DEG)	
0.00	-25.000	-25.00		0.00	-27.569	-147.64		0.00	-32.775	-71.91	
0.30	-25.131	-104.33		0.30	-26.035	-134.81		0.30	-33.093	152.77	
0.60	-25.194	-103.07		0.60	-26.244	-134.32		0.60	-33.417	153.31	
0.90	-25.235	-101.63		0.90	-26.436	-133.61		0.90	-33.747	153.63	
1.20	-25.311	-100.36		1.20	-26.615	-132.75		1.20	-34.084	153.91	
1.50	-25.363	-99.27		1.50	-26.786	-131.75		1.50	-34.429	154.16	
1.80	-25.414	-98.39		1.80	-26.941	-130.61		1.80	-34.783	154.37	
2.10	-25.466	-97.69		2.10	-27.084	-129.36		2.10	-35.140	154.55	
2.40	-25.506	-97.17		2.40	-27.216	-128.00		2.40	-35.514	154.67	
2.70	-25.540	-96.81		2.70	-27.336	-126.53		2.70	-35.903	154.75	
3.00	-25.569	-96.52		3.00	-27.444	-125.00		3.00	-36.296	154.74	
3.30	-25.593	-96.30		3.30	-27.541	-123.46		3.30	-36.700	154.63	
3.60	-25.612	-96.14		3.60	-27.627	-121.90		3.60	-37.112	154.45	
3.90	-25.627	-96.04		3.90	-27.703	-120.31		3.90	-37.535	154.18	
4.20	-25.639	-96.00		4.20	-27.769	-118.70		4.20	-37.967	153.84	
4.50	-25.647	-96.01		4.50	-27.826	-117.07		4.50	-38.407	153.44	
4.80	-25.652	-96.06		4.80	-27.874	-115.43		4.80	-38.854	152.90	
5.10	-25.654	-96.14		5.10	-27.913	-113.78		5.10	-39.307	152.30	
5.40	-25.653	-96.26		5.40	-27.943	-112.11		5.40	-39.764	151.66	
5.70	-25.649	-96.41		5.70	-27.964	-110.43		5.70	-40.226	150.98	
6.00	-25.642	-96.58		6.00	-27.976	-108.74		6.00	-40.692	150.26	
6.30	-25.632	-96.77		6.30	-27.979	-107.03		6.30	-41.161	149.50	
6.60	-25.619	-96.97		6.60	-27.973	-105.31		6.60	-41.632	148.64	
6.90	-25.603	-97.18		6.90	-27.958	-103.58		6.90	-42.104	147.69	
7.20	-25.584	-97.39		7.20	-27.934	-101.84		7.20	-42.577	146.66	
7.50	-25.562	-97.60		7.50	-27.901	-100.09		7.50	-43.050	145.56	
7.80	-25.537	-97.81		7.80	-27.859	-98.34		7.80	-43.523	144.40	
8.10	-25.509	-98.01		8.10	-27.808	-96.59		8.10	-43.995	143.19	
8.40	-25.478	-98.20		8.40	-27.748	-94.84		8.40	-44.466	141.94	
8.70	-25.444	-98.38		8.70	-27.679	-93.09		8.70	-44.936	140.66	
9.00	-25.407	-98.54		9.00	-27.601	-91.34		9.00	-45.404	139.35	
9.30	-25.367	-98.68		9.30	-27.514	-89.59		9.30	-45.871	138.02	
9.60	-25.324	-98.80		9.60	-27.418	-87.84		9.60	-46.336	136.67	
9.90	-25.278	-98.89		9.90	-27.314	-86.09		9.90	-46.799	135.30	
10.20	-25.229	-98.96		10.20	-27.201	-84.34		10.20	-47.260	133.92	
10.50	-25.177	-99.00		10.50	-27.080	-82.59		10.50	-47.719	132.52	
10.80	-25.122	-99.01		10.80	-26.951	-80.84		10.80	-48.176	131.11	
11.10	-25.064	-99.00		11.10	-26.814	-79.09		11.10	-48.631	129.69	
11.40	-25.003	-98.96		11.40	-26.669	-77.34		11.40	-49.084	128.26	
11.70	-24.939	-98.89		11.70	-26.516	-75.59		11.70	-49.535	126.82	
12.00	-24.872	-98.79		12.00	-26.356	-73.84		12.00	-50.000	125.37	
12.30	-24.802	-98.66		12.30	-26.189	-72.09		12.30	-50.461	123.92	
12.60	-24.729	-98.50		12.60	-26.016	-70.34		12.60	-50.919	122.47	
12.90	-24.653	-98.31		12.90	-25.837	-68.59		12.90	-51.374	121.02	
13.20	-24.574	-98.09		13.20	-25.652	-66.84		13.20	-51.826	119.57	
13.50	-24.492	-97.84		13.50	-25.462	-65.09		13.50	-52.275	118.12	
13.80	-24.407	-97.56		13.80	-25.267	-63.34		13.80	-52.721	116.67	
14.10	-24.319	-97.25		14.10	-25.067	-61.59		14.10	-53.164	115.22	
14.40	-24.228	-96.91		14.40	-24.862	-59.84		14.40	-53.604	113.77	
14.70	-24.134	-96.54		14.70	-24.652	-58.09		14.70	-54.041	112.32	
15.00	-24.037	-96.14		15.00	-24.437	-56.34		15.00	-54.475	110.87	
15.30	-23.937	-95.71		15.30	-24.217	-54.59		15.30	-54.906	109.42	
15.60	-23.834	-95.25		15.60	-23.992	-52.84		15.60	-55.334	107.97	
15.90	-23.728	-94.76		15.90	-23.762	-51.09		15.90	-55.759	106.52	
16.20	-23.619	-94.24		16.20	-23.527	-49.34		16.20	-56.181	105.07	
16.50	-23.507	-93.69		16.50	-23.287	-47.59		16.50	-56.600	103.62	
16.80	-23.392	-93.11		16.80	-23.042	-45.84		16.80	-57.016	102.17	
17.10	-23.274	-92.50		17.10	-22.792	-44.09		17.10	-57.429	100.72	
17.40	-23.153	-91.86		17.40	-22.537	-42.34		17.40	-57.839	99.27	
17.70	-23.029	-91.19		17.70	-22.277	-40.59		17.70	-58.246	97.82	
18.00	-22.902	-90.49		18.00	-22.012	-38.84		18.00	-58.650	96.37	
18.30	-22.772	-89.76		18.30	-21.742	-37.09		18.30	-59.051	94.92	
18.60	-22.639	-89.00		18.60	-21.467	-35.34		18.60	-59.449	93.47	
18.90	-22.503	-88.21		18.90	-21.187	-33.59		18.90	-59.844	92.02	
19.20	-22.364	-87.39		19.20	-20.902	-31.84		19.20	-60.236	90.57	
19.50	-22.222	-86.54		19.50	-20.612	-30.09		19.50	-60.625	89.12	
19.80	-22.077	-85.66		19.80	-20.317	-28.34		19.80	-61.011	87.67	
20.10	-21.929	-84.75		20.10	-20.017	-26.59		20.10	-61.394	86.22	
20.40	-21.778	-83.81		20.40	-19.712	-24.84		20.40	-61.774	84.77	
20.70	-21.624	-82.84		20.70	-19.402	-23.09		20.70	-62.151	83.32	
21.00	-21.467	-81.84		21.00	-19.087	-21.34		21.00	-62.525	81.87	
21.30	-21.307	-80.81		21.30	-18.767	-19.59		21.30	-62.896	80.42	
21.60	-21.144	-79.75		21.60	-18.442	-17.84		21.60	-63.264	78.97	
21.90	-20.978	-78.66		21.90	-18.112	-16.09		21.90	-63.629	77.52	
22.20	-20.809	-77.54		22.20	-17.777	-14.34		22.20	-63.991	76.07	
22.50	-20.637	-76.39		22.50	-17.437	-12.59		22.50	-64.350	74.62	
22.80	-20.462	-75.21		22.80	-17.092	-10.84		22.80	-64.706	73.17	
23.10	-20.284	-73.99		23.10	-16.742	-9.09		23.10	-65.059	71.72	
23.40	-20.103	-72.74		23.40	-16.387	-7.34		23.40	-65.409	70.27	
23.70	-19.919	-71.46		23.70	-16.027	-5.59		23.70	-65.756	68.82	
24.00	-19.732	-70.14		24.00	-15.662	-3.84		24.00	-66.100	67.37	
24.30	-19.542	-68.79		24.30	-15.292	-2.09		24.30	-66.441	65.92	
24.60	-19.349	-67.41		24.60	-14.917	-0.34		24.60	-66.779	64.47	
24.90	-19.153	-65.99		24.90	-14.537	1.41		24.90	-67.114	63.02	
25.20	-18.954	-64.54		25.20	-14.152	3.16		25.20	-67.446	61.57	
25.50	-18.752	-63.06		25.50	-13.762	4.91		25.50	-67.775	60.12	
25.80	-18.547	-61.54		25.80	-13.367	6.66		25.80	-68.101	58.67	
26.10	-18.339	-60.00		26.10	-12.967	8.41		26.10	-68.424	57.22	
26.40	-18.128	-58.43		26.40	-12.562	10.16		26.40	-68.744	55.77	
26.70	-17.914	-56.84		26.70	-12.152	11.91		26.70	-69.061	54.32	
27.00	-17.697	-55.22		27.00	-11.737	13.66		27.00	-69.375	52.87	
27.30	-17.477	-53.57		27.30	-11.317	15.41		27.30	-69.686	51.42	
27.60	-17.254	-51.89		27.60	-10.892	17.16		27.60	-70.000	50.00	
27.90	-17.028	-50.18		27.90	-10.462	18.91		27.90	-70.311	48.55	
28.20	-16.799	-48.44		28.20	-10.027	20.66		28.20	-70.619	47.10	
28.50	-16.567	-46.67		28.50	-9.587	22.41		28.50	-70.924	45.65	
28.80	-16.332	-44.87		28.80	-9.142	24.16		28.80	-71.226	44.20	
29.10	-16.094	-43.04		29.10	-8.692	25.91		29.10	-71.525	42.75	
29.40	-15.853	-41.18		29.40	-8.237	27.66		29.40	-71.821	41.30	
29.70	-15.609	-39.29		29.70	-7.777	29.41		29.70	-72.114	39.85	
30.00	-15.362	-37.37		30.00	-7.312	31.16		30.00	-72.404	38.40	

Table 53. Radial Electric Field (Fresh Water), Frequency 1.0 MHz, VED Height 0.00 m

3.0 KM DISTANCE				10.0 KM DISTANCE				30.0 KM DISTANCE				100.0 KM DISTANCE			
HEIGHT (M)	AMP (V/M)	PHASE (DEG)	TELETYPE (M)	HEIGHT (M)	AMP (V/M)	PHASE (DEG)	TELETYPE (M)	HEIGHT (M)	AMP (V/M)	PHASE (DEG)	TELETYPE (M)	HEIGHT (M)	AMP (V/M)	PHASE (DEG)	TELETYPE (M)
0.03	-23.464	-31.174	0.000	0.03	-20.663	171.333	0.000	0.03	-21.501	-114.447	0.000	0.03	-47.100	22.452	0.000
0.06	-25.000	142.700	0.010	0.06	-20.504	123.970	0.010	0.06	-21.501	103.004	0.010	0.06	-47.358	90.408	0.010
0.09	-25.000	142.700	0.020	0.09	-20.507	123.970	0.020	0.09	-21.507	103.004	0.020	0.09	-47.358	90.408	0.020
0.12	-25.000	142.700	0.030	0.12	-20.502	123.970	0.030	0.12	-21.507	103.004	0.030	0.12	-47.358	90.408	0.030
0.15	-25.000	142.700	0.040	0.15	-20.502	123.970	0.040	0.15	-21.507	103.004	0.040	0.15	-47.358	90.408	0.040
0.18	-25.000	142.700	0.050	0.18	-20.502	123.970	0.050	0.18	-21.507	103.004	0.050	0.18	-47.358	90.408	0.050
0.21	-25.000	142.700	0.060	0.21	-20.502	123.970	0.060	0.21	-21.507	103.004	0.060	0.21	-47.358	90.408	0.060
0.24	-25.000	142.700	0.070	0.24	-20.502	123.970	0.070	0.24	-21.507	103.004	0.070	0.24	-47.358	90.408	0.070
0.27	-25.000	142.700	0.080	0.27	-20.502	123.970	0.080	0.27	-21.507	103.004	0.080	0.27	-47.358	90.408	0.080
0.30	-25.000	142.700	0.090	0.30	-20.502	123.970	0.090	0.30	-21.507	103.004	0.090	0.30	-47.358	90.408	0.090
0.33	-25.000	142.700	0.100	0.33	-20.502	123.970	0.100	0.33	-21.507	103.004	0.100	0.33	-47.358	90.408	0.100
0.36	-25.000	142.700	0.110	0.36	-20.502	123.970	0.110	0.36	-21.507	103.004	0.110	0.36	-47.358	90.408	0.110
0.39	-25.000	142.700	0.120	0.39	-20.502	123.970	0.120	0.39	-21.507	103.004	0.120	0.39	-47.358	90.408	0.120
0.42	-25.000	142.700	0.130	0.42	-20.502	123.970	0.130	0.42	-21.507	103.004	0.130	0.42	-47.358	90.408	0.130
0.45	-25.000	142.700	0.140	0.45	-20.502	123.970	0.140	0.45	-21.507	103.004	0.140	0.45	-47.358	90.408	0.140
0.48	-25.000	142.700	0.150	0.48	-20.502	123.970	0.150	0.48	-21.507	103.004	0.150	0.48	-47.358	90.408	0.150
0.51	-25.000	142.700	0.160	0.51	-20.502	123.970	0.160	0.51	-21.507	103.004	0.160	0.51	-47.358	90.408	0.160
0.54	-25.000	142.700	0.170	0.54	-20.502	123.970	0.170	0.54	-21.507	103.004	0.170	0.54	-47.358	90.408	0.170
0.57	-25.000	142.700	0.180	0.57	-20.502	123.970	0.180	0.57	-21.507	103.004	0.180	0.57	-47.358	90.408	0.180
0.60	-25.000	142.700	0.190	0.60	-20.502	123.970	0.190	0.60	-21.507	103.004	0.190	0.60	-47.358	90.408	0.190
0.63	-25.000	142.700	0.200	0.63	-20.502	123.970	0.200	0.63	-21.507	103.004	0.200	0.63	-47.358	90.408	0.200
0.66	-25.000	142.700	0.210	0.66	-20.502	123.970	0.210	0.66	-21.507	103.004	0.210	0.66	-47.358	90.408	0.210
0.69	-25.000	142.700	0.220	0.69	-20.502	123.970	0.220	0.69	-21.507	103.004	0.220	0.69	-47.358	90.408	0.220
0.72	-25.000	142.700	0.230	0.72	-20.502	123.970	0.230	0.72	-21.507	103.004	0.230	0.72	-47.358	90.408	0.230
0.75	-25.000	142.700	0.240	0.75	-20.502	123.970	0.240	0.75	-21.507	103.004	0.240	0.75	-47.358	90.408	0.240
0.78	-25.000	142.700	0.250	0.78	-20.502	123.970	0.250	0.78	-21.507	103.004	0.250	0.78	-47.358	90.408	0.250
0.81	-25.000	142.700	0.260	0.81	-20.502	123.970	0.260	0.81	-21.507	103.004	0.260	0.81	-47.358	90.408	0.260
0.84	-25.000	142.700	0.270	0.84	-20.502	123.970	0.270	0.84	-21.507	103.004	0.270	0.84	-47.358	90.408	0.270
0.87	-25.000	142.700	0.280	0.87	-20.502	123.970	0.280	0.87	-21.507	103.004	0.280	0.87	-47.358	90.408	0.280
0.90	-25.000	142.700	0.290	0.90	-20.502	123.970	0.290	0.90	-21.507	103.004	0.290	0.90	-47.358	90.408	0.290
0.93	-25.000	142.700	0.300	0.93	-20.502	123.970	0.300	0.93	-21.507	103.004	0.300	0.93	-47.358	90.408	0.300
0.96	-25.000	142.700	0.310	0.96	-20.502	123.970	0.310	0.96	-21.507	103.004	0.310	0.96	-47.358	90.408	0.310
0.99	-25.000	142.700	0.320	0.99	-20.502	123.970	0.320	0.99	-21.507	103.004	0.320	0.99	-47.358	90.408	0.320
1.02	-25.000	142.700	0.330	1.02	-20.502	123.970	0.330	1.02	-21.507	103.004	0.330	1.02	-47.358	90.408	0.330
1.05	-25.000	142.700	0.340	1.05	-20.502	123.970	0.340	1.05	-21.507	103.004	0.340	1.05	-47.358	90.408	0.340
1.08	-25.000	142.700	0.350	1.08	-20.502	123.970	0.350	1.08	-21.507	103.004	0.350	1.08	-47.358	90.408	0.350
1.11	-25.000	142.700	0.360	1.11	-20.502	123.970	0.360	1.11	-21.507	103.004	0.360	1.11	-47.358	90.408	0.360
1.14	-25.000	142.700	0.370	1.14	-20.502	123.970	0.370	1.14	-21.507	103.004	0.370	1.14	-47.358	90.408	0.370
1.17	-25.000	142.700	0.380	1.17	-20.502	123.970	0.380	1.17	-21.507	103.004	0.380	1.17	-47.358	90.408	0.380
1.20	-25.000	142.700	0.390	1.20	-20.502	123.970	0.390	1.20	-21.507	103.004	0.390	1.20	-47.358	90.408	0.390
1.23	-25.000	142.700	0.400	1.23	-20.502	123.970	0.400	1.23	-21.507	103.004	0.400	1.23	-47.358	90.408	0.400
1.26	-25.000	142.700	0.410	1.26	-20.502	123.970	0.410	1.26	-21.507	103.004	0.410	1.26	-47.358	90.408	0.410
1.29	-25.000	142.700	0.420	1.29	-20.502	123.970	0.420	1.29	-21.507	103.004	0.420	1.29	-47.358	90.408	0.420
1.32	-25.000	142.700	0.430	1.32	-20.502	123.970	0.430	1.32	-21.507	103.004	0.430	1.32	-47.358	90.408	0.430
1.35	-25.000	142.700	0.440	1.35	-20.502	123.970	0.440	1.35	-21.507	103.004	0.440	1.35	-47.358	90.408	0.440
1.38	-25.000	142.700	0.450	1.38	-20.502	123.970	0.450	1.38	-21.507	103.004	0.450	1.38	-47.358	90.408	0.450
1.41	-25.000	142.700	0.460	1.41	-20.502	123.970	0.460	1.41	-21.507	103.004	0.460	1.41	-47.358	90.408	0.460
1.44	-25.000	142.700	0.470	1.44	-20.502	123.970	0.470	1.44	-21.507	103.004	0.470	1.44	-47.358	90.408	0.470
1.47	-25.000	142.700	0.480	1.47	-20.502	123.970	0.480	1.47	-21.507	103.004	0.480	1.47	-47.358	90.408	0.480
1.50	-25.000	142.700	0.490	1.50	-20.502	123.970	0.490	1.50	-21.507	103.004	0.490	1.50	-47.358	90.408	0.490
1.53	-25.000	142.700	0.500	1.53	-20.502	123.970	0.500	1.53	-21.507	103.004	0.500	1.53	-47.358	90.408	0.500
1.56	-25.000	142.700	0.510	1.56	-20.502	123.970	0.510	1.56	-21.507	103.004	0.510	1.56	-47.358	90.408	0.510
1.59	-25.000	142.700	0.520	1.59	-20.502	123.970	0.520	1.59	-21.507	103.004	0.520	1.59	-47.358	90.408	0.520
1.62	-25.000	142.700	0.530	1.62	-20.502	123.970	0.530	1.62	-21.507	103.004	0.530	1.62	-47.358	90.408	0.530
1.65	-25.000	142.700	0.540	1.65	-20.502	123.970	0.540	1.65	-21.507	103.004	0.540	1.65	-47.358	90.408	0.540
1.68	-25.000	142.700	0.550	1.68	-20.502	123.970	0.550	1.68	-21.507	103.004	0.550	1.68	-47.358	90.408	0.550
1.71	-25.000	142.700	0.560	1.71	-20.502	123.970	0.560	1.71	-21.507	103.004	0.560	1.71	-47.358	90.408	0.560
1.74	-25.000	142.700	0.570	1.74	-20.502	123.970	0.570	1.74	-21.507	103.004	0.570	1.74	-47.358	90.408	0.570
1.77	-25.000	142.700	0.580	1.77	-20.502	123.970	0.580	1.77	-21.507	103.004	0.580	1.77	-47.358	90.408	0.580
1.80	-25.000	142.700	0.590	1.80	-20.502	123.970	0.590	1.80	-21.507	103.004	0.590	1.80	-47.358	90.408	0.590
1.83	-25.000	142.700	0.600	1.83	-20.502	123.970	0.600	1.83	-21.507	103.004	0.600	1.83	-47.358	90.408	0.600
1.86	-25.000	142.700	0.610	1.86	-20.502	123.970	0.610	1.86	-21.507	103.004	0.610	1.86	-47.358	90.408	0.610
1.89	-25.000	142.700	0.620	1.89	-20.502	123.970	0.620	1.89	-21.507	103.004	0.620	1.89	-47.358	90.408	0.620
1.92	-25.000	142.700	0.630	1.92	-20.502	123.970	0.630	1.92	-21.507	103.004	0.630	1.92	-47.358	90.408	0.630
1.95	-25.000	142.700	0.640	1.95	-20.502	123.970	0.640	1.95	-21.507	103.004	0.640	1.95	-47.358	90.408	0.640
1.98	-25.000	142.700	0.650	1.98	-20.502	123.970	0.650	1.98	-21.507	103.004	0.650	1.98	-47.358	90.408	0.650
2.01	-25.000	142.700	0.660	2.01	-20.502	123.970	0.660	2.01	-21.507	103.004	0.660	2.01	-47.358	90.408	0.660
2.04	-25.000	142.700	0.670	2.04	-20.502	123.970	0.670	2.04	-21.507	103.004	0.670	2.04	-47.358	90.408	0.670
2.07	-25.000	142.700	0.680	2.07	-20.502	123.970	0.680	2.07	-21.507	103.004	0.680	2.07	-47.358	90.408	0.680
2.10	-25.000	142.700	0.690												

Table 54. Radial Electric Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 224.76 m

100.0 KM DOWNWIND				100.0 KM DOWNWIND				100.0 KM DOWNWIND			
RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE
(NM)	(DB)	(DEG)	(NM)	(DB)	(DEG)	(NM)	(DB)	(DEG)	(NM)	(DB)	(DEG)
0.03	-24.00	-172.45	0.03	-26.77	-68.42	0.03	-26.77	-68.42	0.03	-26.77	-68.42
0.06	-24.00	-172.45	0.06	-26.77	-68.42	0.06	-26.77	-68.42	0.06	-26.77	-68.42
0.10	-24.00	-172.45	0.10	-26.77	-68.42	0.10	-26.77	-68.42	0.10	-26.77	-68.42
0.15	-24.00	-172.45	0.15	-26.77	-68.42	0.15	-26.77	-68.42	0.15	-26.77	-68.42
0.20	-24.00	-172.45	0.20	-26.77	-68.42	0.20	-26.77	-68.42	0.20	-26.77	-68.42
0.25	-24.00	-172.45	0.25	-26.77	-68.42	0.25	-26.77	-68.42	0.25	-26.77	-68.42
0.30	-24.00	-172.45	0.30	-26.77	-68.42	0.30	-26.77	-68.42	0.30	-26.77	-68.42
0.35	-24.00	-172.45	0.35	-26.77	-68.42	0.35	-26.77	-68.42	0.35	-26.77	-68.42
0.40	-24.00	-172.45	0.40	-26.77	-68.42	0.40	-26.77	-68.42	0.40	-26.77	-68.42
0.45	-24.00	-172.45	0.45	-26.77	-68.42	0.45	-26.77	-68.42	0.45	-26.77	-68.42
0.50	-24.00	-172.45	0.50	-26.77	-68.42	0.50	-26.77	-68.42	0.50	-26.77	-68.42
0.55	-24.00	-172.45	0.55	-26.77	-68.42	0.55	-26.77	-68.42	0.55	-26.77	-68.42
0.60	-24.00	-172.45	0.60	-26.77	-68.42	0.60	-26.77	-68.42	0.60	-26.77	-68.42
0.65	-24.00	-172.45	0.65	-26.77	-68.42	0.65	-26.77	-68.42	0.65	-26.77	-68.42
0.70	-24.00	-172.45	0.70	-26.77	-68.42	0.70	-26.77	-68.42	0.70	-26.77	-68.42
0.75	-24.00	-172.45	0.75	-26.77	-68.42	0.75	-26.77	-68.42	0.75	-26.77	-68.42
0.80	-24.00	-172.45	0.80	-26.77	-68.42	0.80	-26.77	-68.42	0.80	-26.77	-68.42
0.85	-24.00	-172.45	0.85	-26.77	-68.42	0.85	-26.77	-68.42	0.85	-26.77	-68.42
0.90	-24.00	-172.45	0.90	-26.77	-68.42	0.90	-26.77	-68.42	0.90	-26.77	-68.42
0.95	-24.00	-172.45	0.95	-26.77	-68.42	0.95	-26.77	-68.42	0.95	-26.77	-68.42
1.00	-24.00	-172.45	1.00	-26.77	-68.42	1.00	-26.77	-68.42	1.00	-26.77	-68.42
1.05	-24.00	-172.45	1.05	-26.77	-68.42	1.05	-26.77	-68.42	1.05	-26.77	-68.42
1.10	-24.00	-172.45	1.10	-26.77	-68.42	1.10	-26.77	-68.42	1.10	-26.77	-68.42
1.15	-24.00	-172.45	1.15	-26.77	-68.42	1.15	-26.77	-68.42	1.15	-26.77	-68.42
1.20	-24.00	-172.45	1.20	-26.77	-68.42	1.20	-26.77	-68.42	1.20	-26.77	-68.42
1.25	-24.00	-172.45	1.25	-26.77	-68.42	1.25	-26.77	-68.42	1.25	-26.77	-68.42
1.30	-24.00	-172.45	1.30	-26.77	-68.42	1.30	-26.77	-68.42	1.30	-26.77	-68.42
1.35	-24.00	-172.45	1.35	-26.77	-68.42	1.35	-26.77	-68.42	1.35	-26.77	-68.42
1.40	-24.00	-172.45	1.40	-26.77	-68.42	1.40	-26.77	-68.42	1.40	-26.77	-68.42
1.45	-24.00	-172.45	1.45	-26.77	-68.42	1.45	-26.77	-68.42	1.45	-26.77	-68.42
1.50	-24.00	-172.45	1.50	-26.77	-68.42	1.50	-26.77	-68.42	1.50	-26.77	-68.42
1.55	-24.00	-172.45	1.55	-26.77	-68.42	1.55	-26.77	-68.42	1.55	-26.77	-68.42
1.60	-24.00	-172.45	1.60	-26.77	-68.42	1.60	-26.77	-68.42	1.60	-26.77	-68.42
1.65	-24.00	-172.45	1.65	-26.77	-68.42	1.65	-26.77	-68.42	1.65	-26.77	-68.42
1.70	-24.00	-172.45	1.70	-26.77	-68.42	1.70	-26.77	-68.42	1.70	-26.77	-68.42
1.75	-24.00	-172.45	1.75	-26.77	-68.42	1.75	-26.77	-68.42	1.75	-26.77	-68.42
1.80	-24.00	-172.45	1.80	-26.77	-68.42	1.80	-26.77	-68.42	1.80	-26.77	-68.42
1.85	-24.00	-172.45	1.85	-26.77	-68.42	1.85	-26.77	-68.42	1.85	-26.77	-68.42
1.90	-24.00	-172.45	1.90	-26.77	-68.42	1.90	-26.77	-68.42	1.90	-26.77	-68.42
1.95	-24.00	-172.45	1.95	-26.77	-68.42	1.95	-26.77	-68.42	1.95	-26.77	-68.42
2.00	-24.00	-172.45	2.00	-26.77	-68.42	2.00	-26.77	-68.42	2.00	-26.77	-68.42
2.05	-24.00	-172.45	2.05	-26.77	-68.42	2.05	-26.77	-68.42	2.05	-26.77	-68.42
2.10	-24.00	-172.45	2.10	-26.77	-68.42	2.10	-26.77	-68.42	2.10	-26.77	-68.42
2.15	-24.00	-172.45	2.15	-26.77	-68.42	2.15	-26.77	-68.42	2.15	-26.77	-68.42
2.20	-24.00	-172.45	2.20	-26.77	-68.42	2.20	-26.77	-68.42	2.20	-26.77	-68.42
2.25	-24.00	-172.45	2.25	-26.77	-68.42	2.25	-26.77	-68.42	2.25	-26.77	-68.42
2.30	-24.00	-172.45	2.30	-26.77	-68.42	2.30	-26.77	-68.42	2.30	-26.77	-68.42
2.35	-24.00	-172.45	2.35	-26.77	-68.42	2.35	-26.77	-68.42	2.35	-26.77	-68.42
2.40	-24.00	-172.45	2.40	-26.77	-68.42	2.40	-26.77	-68.42	2.40	-26.77	-68.42
2.45	-24.00	-172.45	2.45	-26.77	-68.42	2.45	-26.77	-68.42	2.45	-26.77	-68.42
2.50	-24.00	-172.45	2.50	-26.77	-68.42	2.50	-26.77	-68.42	2.50	-26.77	-68.42
2.55	-24.00	-172.45	2.55	-26.77	-68.42	2.55	-26.77	-68.42	2.55	-26.77	-68.42
2.60	-24.00	-172.45	2.60	-26.77	-68.42	2.60	-26.77	-68.42	2.60	-26.77	-68.42
2.65	-24.00	-172.45	2.65	-26.77	-68.42	2.65	-26.77	-68.42	2.65	-26.77	-68.42
2.70	-24.00	-172.45	2.70	-26.77	-68.42	2.70	-26.77	-68.42	2.70	-26.77	-68.42
2.75	-24.00	-172.45	2.75	-26.77	-68.42	2.75	-26.77	-68.42	2.75	-26.77	-68.42
2.80	-24.00	-172.45	2.80	-26.77	-68.42	2.80	-26.77	-68.42	2.80	-26.77	-68.42
2.85	-24.00	-172.45	2.85	-26.77	-68.42	2.85	-26.77	-68.42	2.85	-26.77	-68.42
2.90	-24.00	-172.45	2.90	-26.77	-68.42	2.90	-26.77	-68.42	2.90	-26.77	-68.42
2.95	-24.00	-172.45	2.95	-26.77	-68.42	2.95	-26.77	-68.42	2.95	-26.77	-68.42
3.00	-24.00	-172.45	3.00	-26.77	-68.42	3.00	-26.77	-68.42	3.00	-26.77	-68.42
3.05	-24.00	-172.45	3.05	-26.77	-68.42	3.05	-26.77	-68.42	3.05	-26.77	-68.42
3.10	-24.00	-172.45	3.10	-26.77	-68.42	3.10	-26.77	-68.42	3.10	-26.77	-68.42
3.15	-24.00	-172.45	3.15	-26.77	-68.42	3.15	-26.77	-68.42	3.15	-26.77	-68.42
3.20	-24.00	-172.45	3.20	-26.77	-68.42	3.20	-26.77	-68.42	3.20	-26.77	-68.42
3.25	-24.00	-172.45	3.25	-26.77	-68.42	3.25	-26.77	-68.42	3.25	-26.77	-68.42
3.30	-24.00	-172.45	3.30	-26.77	-68.42	3.30	-26.77	-68.42	3.30	-26.77	-68.42
3.35	-24.00	-172.45	3.35	-26.77	-68.42	3.35	-26.77	-68.42	3.35	-26.77	-68.42
3.40	-24.00	-172.45	3.40	-26.77	-68.42	3.40	-26.77	-68.42	3.40	-26.77	-68.42
3.45	-24.00	-172.45	3.45	-26.77	-68.42	3.45	-26.77	-68.42	3.45	-26.77	-68.42
3.50	-24.00	-172.45	3.50	-26.77	-68.42	3.50	-26.77	-68.42	3.50	-26.77	-68.42
3.55	-24.00	-172.45	3.55	-26.77	-68.42	3.55	-26.77	-68.42	3.55	-26.77	-68.42
3.60	-24.00	-172.45	3.60	-26.77	-68.42	3.60	-26.77	-68.42	3.60	-26.77	-68.42
3.65	-24.00	-172.45	3.65	-26.77	-68.42	3.65	-26.77	-68.42	3.65	-26.77	-68.42
3.70	-24.00	-172.45	3.70	-26.77	-68.42	3.70	-26.77	-68.42	3.70	-26.77	-68.42
3.75	-24.00	-172.45	3.75	-26.77	-68.42	3.75	-26.77	-68.42	3.75	-26.77	-68.42
3.80	-24.00	-172.45	3.80	-26.77	-68.42	3.80	-26.77	-68.42	3.80	-26.77	-68.42
3.85	-24.00	-172.45	3.85	-26.77	-68.42	3.85	-26.77	-68.42	3.85	-26.77	-68.42
3.90	-24.00	-172.45	3.90	-26.77	-68.42	3.90	-26.77	-68.42	3.90	-26.77	-68.42
3.95	-24.00	-172.45	3.95	-26.77	-68.42	3.95	-26.77	-68.42	3.95	-26.77	-68.42
4.00	-24.00	-172.45	4.00	-26.77	-68.42	4.00	-26.77	-68.42	4.00	-26.77	-68.42
4.05	-24.00	-172.45	4.05	-26.77	-68.42	4.05	-26.77	-68.42	4.05	-26.77	-68.42
4.10	-24.00	-172.45	4.10	-26.77	-68.42	4.10	-26.77	-68.42	4.10	-26.77	-68.42
4.15	-24.00	-172.45	4.15	-26.77	-68.42	4.15	-26.77	-68.42	4.15	-26.77	-68.42
4.20	-24.00	-172.45	4.20	-26.77	-68.42	4.20	-26.77	-68.42	4.20	-26.77	-68.42
4.25	-24.00	-172.45	4.25	-26.77	-68.42	4.25	-26.77	-68.42	4.25	-26.77	-68.42
4.30	-24.00	-172.45	4.30	-26.77	-68.42	4.30	-26.77	-68.42	4.30	-26.77	-68.42
4.35	-24.00	-172.45	4.35	-26.77	-68.42	4.35	-26.77	-68.42	4.35	-26.77	-68.42
4.40	-24.00	-172.45	4.40	-26.77	-68.42	4.40	-26.77	-68.42	4.40	-26.77	-68.42
4.45	-24.00	-172.45	4.45	-26.77	-68.42	4.45	-26.77	-68.42	4.45	-26.77	-68.42
4.50	-24.00	-172.45	4.50	-26.77	-68.42	4.50	-26.77	-68.42	4.50	-26.77	-68.42
4.55	-24.00	-172.45	4.55	-26.77	-68.42	4.55	-26.77	-68.42	4.55	-26.77	-68.42
4.60	-24.00	-172.45	4.60	-26.77	-68.42	4.60	-26.77	-68.42	4.60	-26.77	-68.42
4.65	-24.00	-172.45	4.65	-26.77	-68.42	4.65	-26.77	-68.42	4.65	-26.77	-68.42
4.70	-24.00	-172.45	4.70	-26.77	-68.42	4.70	-26.77	-68.42	4.70	-26.77	-68.42
4.75	-24.00	-172.45	4.75	-26.77	-68.42	4.75	-26.77	-68.42	4.75	-26.77	-68.42
4.80	-24.00	-172.45	4.80	-26.77	-68.42	4.80	-26.77	-68.42	4.80	-26.77	-68.42
4.85	-24.00	-172.45	4.85	-26.77	-68.42	4.85	-26.77	-68.42	4.85	-26.77	-68.42
4.90	-24.00	-172.45	4.90	-26.77	-68.42	4.90	-26.77	-68.42	4.90	-26.77	-68.42
4.95	-24.00	-172.45	4.95	-26.77	-68.42	4.95	-26.77	-68.42	4.95	-26.77	-68.42
5.00	-24.00	-172.45	5.00	-26.77	-68.42</						

Table 55. Radial Electric Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM URMANCE					10.0 KM URMANCE					100.0 KM URMANCE				
TE (GMT)	AMP (UB)	PHASE (DEG)	TE (GMT)	AMP (UB)	PHASE (DEG)	TE (GMT)	AMP (UB)	PHASE (DEG)	TE (GMT)	AMP (UB)	PHASE (DEG)	TE (GMT)	AMP (UB)	PHASE (DEG)
0.000	-23.467	-47.00	0.000	-20.111	-13.13	0.000	-35.000	-73.44	0.000	-44.675	-134.61	0.000	-44.675	-134.61
0.003	-23.450	-125.02	0.010	-20.452	-13.10	0.030	-35.221	157.01	0.100	-44.710	-140.89	0.200	-44.710	-140.89
0.006	-23.433	-125.33	0.020	-20.452	-13.10	0.060	-35.441	150.73	0.300	-44.745	-140.10	0.400	-44.745	-140.10
0.009	-23.417	-125.64	0.030	-20.452	-13.10	0.090	-35.661	150.55	0.500	-44.780	-139.30	0.600	-44.780	-139.30
0.012	-23.400	-125.95	0.040	-20.452	-13.10	0.120	-35.881	150.37	0.700	-44.815	-138.51	0.800	-44.815	-138.51
0.015	-23.383	-126.26	0.050	-20.452	-13.10	0.150	-36.101	150.19	0.900	-44.850	-137.72	1.000	-44.850	-137.72
0.018	-23.367	-126.57	0.060	-20.452	-13.10	0.180	-36.321	149.99	1.100	-44.885	-136.93	1.200	-44.885	-136.93
0.021	-23.350	-126.88	0.070	-20.452	-13.10	0.210	-36.541	149.81	1.300	-44.920	-136.14	1.400	-44.920	-136.14
0.024	-23.333	-127.19	0.080	-20.452	-13.10	0.240	-36.761	149.63	1.500	-44.955	-135.35	1.600	-44.955	-135.35
0.027	-23.317	-127.50	0.090	-20.452	-13.10	0.270	-36.981	149.45	1.700	-44.990	-134.56	1.800	-44.990	-134.56
0.030	-23.300	-127.81	0.100	-20.452	-13.10	0.300	-37.201	149.27	1.900	-45.025	-133.77	2.000	-45.025	-133.77
0.033	-23.283	-128.12	0.110	-20.452	-13.10	0.330	-37.421	149.09	2.100	-45.060	-132.98	2.200	-45.060	-132.98
0.036	-23.267	-128.43	0.120	-20.452	-13.10	0.360	-37.641	148.91	2.300	-45.095	-132.19	2.400	-45.095	-132.19
0.039	-23.250	-128.74	0.130	-20.452	-13.10	0.390	-37.861	148.73	2.500	-45.130	-131.40	2.600	-45.130	-131.40
0.042	-23.233	-129.05	0.140	-20.452	-13.10	0.420	-38.081	148.55	2.700	-45.165	-130.61	2.800	-45.165	-130.61
0.045	-23.217	-129.36	0.150	-20.452	-13.10	0.450	-38.301	148.37	2.900	-45.200	-129.82	3.000	-45.200	-129.82
0.048	-23.200	-129.67	0.160	-20.452	-13.10	0.480	-38.521	148.19	3.100	-45.235	-129.03	3.200	-45.235	-129.03
0.051	-23.183	-129.98	0.170	-20.452	-13.10	0.510	-38.741	148.01	3.300	-45.270	-128.24	3.400	-45.270	-128.24
0.054	-23.167	-130.29	0.180	-20.452	-13.10	0.540	-38.961	147.83	3.500	-45.305	-127.45	3.600	-45.305	-127.45
0.057	-23.150	-130.60	0.190	-20.452	-13.10	0.570	-39.181	147.65	3.700	-45.340	-126.66	3.800	-45.340	-126.66
0.060	-23.133	-130.91	0.200	-20.452	-13.10	0.600	-39.401	147.47	3.900	-45.375	-125.87	4.000	-45.375	-125.87
0.063	-23.117	-131.22	0.210	-20.452	-13.10	0.630	-39.621	147.29	4.100	-45.410	-125.08	4.200	-45.410	-125.08
0.066	-23.100	-131.53	0.220	-20.452	-13.10	0.660	-39.841	147.11	4.300	-45.445	-124.29	4.400	-45.445	-124.29
0.069	-23.083	-131.84	0.230	-20.452	-13.10	0.690	-40.061	146.93	4.500	-45.480	-123.50	4.600	-45.480	-123.50
0.072	-23.067	-132.15	0.240	-20.452	-13.10	0.720	-40.281	146.75	4.700	-45.515	-122.71	4.800	-45.515	-122.71
0.075	-23.050	-132.46	0.250	-20.452	-13.10	0.750	-40.501	146.57	4.900	-45.550	-121.92	5.000	-45.550	-121.92
0.078	-23.033	-132.77	0.260	-20.452	-13.10	0.780	-40.721	146.39	5.100	-45.585	-121.13	5.200	-45.585	-121.13
0.081	-23.017	-133.08	0.270	-20.452	-13.10	0.810	-40.941	146.21	5.300	-45.620	-120.34	5.400	-45.620	-120.34
0.084	-23.000	-133.39	0.280	-20.452	-13.10	0.840	-41.161	146.03	5.500	-45.655	-119.55	5.600	-45.655	-119.55
0.087	-22.983	-133.70	0.290	-20.452	-13.10	0.870	-41.381	145.85	5.700	-45.690	-118.76	5.800	-45.690	-118.76
0.090	-22.967	-134.01	0.300	-20.452	-13.10	0.900	-41.601	145.67	5.900	-45.725	-117.97	6.000	-45.725	-117.97
0.093	-22.950	-134.32	0.310	-20.452	-13.10	0.930	-41.821	145.49	6.100	-45.760	-117.18	6.200	-45.760	-117.18
0.096	-22.933	-134.63	0.320	-20.452	-13.10	0.960	-42.041	145.31	6.300	-45.795	-116.39	6.400	-45.795	-116.39
0.099	-22.917	-134.94	0.330	-20.452	-13.10	0.990	-42.261	145.13	6.500	-45.830	-115.60	6.600	-45.830	-115.60
0.102	-22.900	-135.25	0.340	-20.452	-13.10	1.020	-42.481	144.95	6.700	-45.865	-114.81	6.800	-45.865	-114.81
0.105	-22.883	-135.56	0.350	-20.452	-13.10	1.050	-42.701	144.77	6.900	-45.900	-114.02	7.000	-45.900	-114.02
0.108	-22.867	-135.87	0.360	-20.452	-13.10	1.080	-42.921	144.59	7.100	-45.935	-113.23	7.200	-45.935	-113.23
0.111	-22.850	-136.18	0.370	-20.452	-13.10	1.110	-43.141	144.41	7.300	-45.970	-112.44	7.400	-45.970	-112.44
0.114	-22.833	-136.49	0.380	-20.452	-13.10	1.140	-43.361	144.23	7.500	-46.005	-111.65	7.600	-46.005	-111.65
0.117	-22.817	-136.80	0.390	-20.452	-13.10	1.170	-43.581	144.05	7.700	-46.040	-110.86	7.800	-46.040	-110.86
0.120	-22.800	-137.11	0.400	-20.452	-13.10	1.200	-43.801	143.87	7.900	-46.075	-110.07	8.000	-46.075	-110.07
0.123	-22.783	-137.42	0.410	-20.452	-13.10	1.230	-44.021	143.69	8.100	-46.110	-109.28	8.200	-46.110	-109.28
0.126	-22.767	-137.73	0.420	-20.452	-13.10	1.260	-44.241	143.51	8.300	-46.145	-108.49	8.400	-46.145	-108.49
0.129	-22.750	-138.04	0.430	-20.452	-13.10	1.290	-44.461	143.33	8.500	-46.180	-107.70	8.600	-46.180	-107.70
0.132	-22.733	-138.35	0.440	-20.452	-13.10	1.320	-44.681	143.15	8.700	-46.215	-106.91	8.800	-46.215	-106.91
0.135	-22.717	-138.66	0.450	-20.452	-13.10	1.350	-44.901	142.97	8.900	-46.250	-106.12	9.000	-46.250	-106.12
0.138	-22.700	-138.97	0.460	-20.452	-13.10	1.380	-45.121	142.79	9.100	-46.285	-105.33	9.200	-46.285	-105.33
0.141	-22.683	-139.28	0.470	-20.452	-13.10	1.410	-45.341	142.61	9.300	-46.320	-104.54	9.400	-46.320	-104.54
0.144	-22.667	-139.59	0.480	-20.452	-13.10	1.440	-45.561	142.43	9.500	-46.355	-103.75	9.600	-46.355	-103.75
0.147	-22.650	-139.90	0.490	-20.452	-13.10	1.470	-45.781	142.25	9.700	-46.390	-102.96	9.800	-46.390	-102.96
0.150	-22.633	-140.21	0.500	-20.452	-13.10	1.500	-46.001	142.07	9.900	-46.425	-102.17	10.000	-46.425	-102.17
0.153	-22.617	-140.52	0.510	-20.452	-13.10	1.530	-46.221	141.89	10.100	-46.460	-101.38	10.200	-46.460	-101.38
0.156	-22.600	-140.83	0.520	-20.452	-13.10	1.560	-46.441	141.71	10.300	-46.495	-100.59	10.400	-46.495	-100.59
0.159	-22.583	-141.14	0.530	-20.452	-13.10	1.590	-46.661	141.53	10.500	-46.530	-99.80	10.600	-46.530	-99.80
0.162	-22.567	-141.45	0.540	-20.452	-13.10	1.620	-46.881	141.35	10.700	-46.565	-99.01	10.800	-46.565	-99.01
0.165	-22.550	-141.76	0.550	-20.452	-13.10	1.650	-47.101	141.17	10.900	-46.600	-98.22	11.000	-46.600	-98.22
0.168	-22.533	-142.07	0.560	-20.452	-13.10	1.680	-47.321	140.99	11.100	-46.635	-97.43	11.200	-46.635	-97.43
0.171	-22.517	-142.38	0.570	-20.452	-13.10	1.710	-47.541	140.81	11.300	-46.670	-96.64	11.400	-46.670	-96.64
0.174	-22.500	-142.69	0.580	-20.452	-13.10	1.740	-47.761	140.63	11.500	-46.705	-95.85	11.600	-46.705	-95.85
0.177	-22.483	-143.00	0.590	-20.452	-13.10	1.770	-47.981	140.45	11.700	-46.740	-95.06	11.800	-46.740	-95.06
0.180	-22.467	-143.31	0.600	-20.452	-13.10	1.800	-48.201	140.27	11.900	-46.775	-94.27	12.000	-46.775	-94.27
0.183	-22.450	-143.62	0.610	-20.452	-13.10	1.830	-48.421	140.09	12.100	-46.810	-93.48	12.200	-46.810	-93.48
0.186	-22.433	-143.93	0.620	-20.452	-13.10	1.860	-48.641	139.91	12.300	-46.845	-92.69	12.400	-46.845	-92.69
0.189	-22.417	-144.24	0.630	-20.452	-13.10	1.890	-48.861	139.73	12.500	-46.880	-91.90	12.600	-46.880	-91.90
0.192	-22.400	-144.55	0.640	-20.452	-13.10	1.920	-49.081	139.55	12.700	-46.915	-91.11	12.800	-46.915	-91.11
0.195	-22.383	-144.86	0.650	-20.452	-13.10	1.950	-49.301	139.37	12.900	-46.950	-90.32	13.000	-46.950	-90.32
0.198	-22.367	-145.17	0.660	-20.452	-13.10	1.980	-49.521	139.19	13.100	-46.985	-89.53	13.200	-46.985	-89.53
0.201	-22.350	-145.48	0.670	-20.452	-13.10	2.010	-49.741	139.01	13.300	-47.020	-88.74	13.400	-47.020	-88.74
0.204	-22.333	-145.79	0.680	-20.452	-13.10	2.040	-49.961	138.83	13.500	-47.055	-87.95	13.600	-47.055	-87.95
0.207	-22.317	-146.10	0.690	-20.452	-13.10	2.070	-50.181	138.65	13.700	-47.090	-87.16	13.800	-47.090	-87.16
0.210	-22.300	-146.41	0.700	-20.452	-13.10	2.100	-50.401	138.47	13.900	-47.125	-86.37	14.000	-47.125	-86.37
0.213	-22.283	-146.72	0.710	-20.452	-13.10	2.130	-50.621	138.29	14.100	-47.160	-85.58	14.200	-47.160	-85.58
0.216	-22.267	-147.03	0.720	-20.452	-13.10	2.160	-50.841	138.11	14.300	-47.195	-84.79	14.400	-47.195	-84.79

Table 56. Radial Electric Field (Fresh Water), Frequency = 10 MHz, VED Height = 0.00 m

3.0 KM DISTANCE				10.0 KM DISTANCE				30.0 KM DISTANCE				100.0 KM DISTANCE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	ME (UNT)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	ME (UNT)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	ME (UNT)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	ME (UNT)
0.00	-37.570	-110.74	0.000	0.00	-47.432	27.74	0.000	0.00	-50.896	-112.72	0.000	0.00	-67.346	-50.95	0.000
0.03	-36.006	107.37	0.00	0.00	-47.084	75.02	0.00	0.00	-57.132	90.03	0.00	0.00	-67.574	88.61	0.00
0.06	-36.016	107.00	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.890	78.76	0.00
0.09	-36.033	106.04	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.770	70.17	0.00
0.12	-36.056	105.10	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.306	60.11	0.00
0.15	-36.074	104.51	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	49.81	0.00
0.18	-36.097	104.01	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	40.83	0.00
0.21	-36.122	103.50	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	32.57	0.00
0.24	-36.145	103.10	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	24.29	0.00
0.27	-36.175	102.70	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	17.56	0.00
0.30	-36.200	102.30	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	14.57	0.00
0.33	-36.227	101.90	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	12.21	0.00
0.36	-36.250	101.50	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	10.32	0.00
0.39	-36.270	101.10	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	8.80	0.00
0.42	-36.285	100.70	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	7.56	0.00
0.45	-36.300	100.30	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	6.54	0.00
0.48	-36.315	100.00	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	5.66	0.00
0.51	-36.330	99.70	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	4.97	0.00
0.54	-36.345	99.40	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	4.36	0.00
0.57	-36.360	99.10	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	3.84	0.00
0.60	-36.375	98.80	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	3.40	0.00
0.63	-36.390	98.50	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	3.02	0.00
0.66	-36.405	98.20	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	2.68	0.00
0.69	-36.420	97.90	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	2.34	0.00
0.72	-36.435	97.60	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	2.01	0.00
0.75	-36.450	97.30	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	1.71	0.00
0.78	-36.465	97.00	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	1.44	0.00
0.81	-36.480	96.70	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	1.20	0.00
0.84	-36.495	96.40	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	1.00	0.00
0.87	-36.510	96.10	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	0.84	0.00
0.90	-36.525	95.80	0.00	0.00	-47.113	75.13	0.00	0.00	-57.132	90.03	0.00	0.00	-67.454	0.71	0.00
1.05	-40.100	37.04	0.00	0.00	-47.473	17.32	0.00	0.00	-47.545	3.41	0.00	0.00	-47.545	0.81	0.00
1.20	-39.000	28.96	0.00	0.00	-47.513	0.73	0.00	0.00	-47.545	3.41	0.00	0.00	-47.545	0.46	0.00
1.35	-37.156	21.57	0.00	0.00	-47.174	0.77	0.00	0.00	-47.545	3.41	0.00	0.00	-47.545	0.23	0.00
1.50	-36.322	15.44	0.00	0.00	-46.237	4.75	0.00	0.00	-46.227	1.24	0.00	0.00	-46.225	0.08	0.00
1.65	-34.753	12.77	0.00	0.00	-44.857	3.01	0.00	0.00	-44.857	3.01	0.00	0.00	-44.857	-0.02	0.00
1.80	-33.110	10.03	0.00	0.00	-43.811	2.78	0.00	0.00	-43.859	0.85	0.00	0.00	-43.859	-0.04	0.00
1.95	-32.570	8.00	0.00	0.00	-42.474	2.17	0.00	0.00	-42.474	0.85	0.00	0.00	-42.474	-0.14	0.00
2.10	-31.526	6.40	0.00	0.00	-41.443	1.70	0.00	0.00	-41.443	0.85	0.00	0.00	-41.443	-0.18	0.00
2.25	-30.360	5.24	0.00	0.00	-40.470	1.35	0.00	0.00	-40.470	0.85	0.00	0.00	-40.470	-0.21	0.00
2.40	-29.064	4.36	0.00	0.00	-39.610	1.07	0.00	0.00	-39.610	0.85	0.00	0.00	-39.610	-0.23	0.00
2.55	-27.644	3.66	0.00	0.00	-38.742	0.84	0.00	0.00	-38.742	0.85	0.00	0.00	-38.742	-0.24	0.00
2.70	-26.006	3.03	0.00	0.00	-37.830	0.64	0.00	0.00	-37.830	0.85	0.00	0.00	-37.830	-0.25	0.00
2.85	-24.153	2.53	0.00	0.00	-36.830	0.54	0.00	0.00	-36.830	0.85	0.00	0.00	-36.830	-0.26	0.00
3.00	-22.076	2.13	0.00	0.00	-35.847	0.42	0.00	0.00	-35.847	0.85	0.00	0.00	-35.847	-0.26	0.00

Table 57. Radial Electric Field (Fresh Water), Frequency 10 MHz, VED Height = 22.48 m

30.0 KM DISTANCE				30.0 KM DISTANCE				100.0 KM DISTANCE			
HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)
0.00	-36.860	135.74	0.00	-46.900	123.73	0.00	-55.895	-53.21	0.00	-66.337	-63.26
0.03	-37.038	135.74	0.03	-46.900	123.73	0.03	-55.895	-53.21	0.03	-66.337	-63.26
0.06	-37.216	135.74	0.06	-46.900	123.73	0.06	-55.895	-53.21	0.06	-66.337	-63.26
0.09	-37.394	135.74	0.09	-46.900	123.73	0.09	-55.895	-53.21	0.09	-66.337	-63.26
0.12	-37.572	135.74	0.12	-46.900	123.73	0.12	-55.895	-53.21	0.12	-66.337	-63.26
0.15	-37.750	135.74	0.15	-46.900	123.73	0.15	-55.895	-53.21	0.15	-66.337	-63.26
0.18	-37.928	135.74	0.18	-46.900	123.73	0.18	-55.895	-53.21	0.18	-66.337	-63.26
0.21	-38.106	135.74	0.21	-46.900	123.73	0.21	-55.895	-53.21	0.21	-66.337	-63.26
0.24	-38.284	135.74	0.24	-46.900	123.73	0.24	-55.895	-53.21	0.24	-66.337	-63.26
0.27	-38.462	135.74	0.27	-46.900	123.73	0.27	-55.895	-53.21	0.27	-66.337	-63.26
0.30	-38.640	135.74	0.30	-46.900	123.73	0.30	-55.895	-53.21	0.30	-66.337	-63.26
0.33	-38.818	135.74	0.33	-46.900	123.73	0.33	-55.895	-53.21	0.33	-66.337	-63.26
0.36	-38.996	135.74	0.36	-46.900	123.73	0.36	-55.895	-53.21	0.36	-66.337	-63.26
0.39	-39.174	135.74	0.39	-46.900	123.73	0.39	-55.895	-53.21	0.39	-66.337	-63.26
0.42	-39.352	135.74	0.42	-46.900	123.73	0.42	-55.895	-53.21	0.42	-66.337	-63.26
0.45	-39.530	135.74	0.45	-46.900	123.73	0.45	-55.895	-53.21	0.45	-66.337	-63.26
0.48	-39.708	135.74	0.48	-46.900	123.73	0.48	-55.895	-53.21	0.48	-66.337	-63.26
0.51	-39.886	135.74	0.51	-46.900	123.73	0.51	-55.895	-53.21	0.51	-66.337	-63.26
0.54	-40.064	135.74	0.54	-46.900	123.73	0.54	-55.895	-53.21	0.54	-66.337	-63.26
0.57	-40.242	135.74	0.57	-46.900	123.73	0.57	-55.895	-53.21	0.57	-66.337	-63.26
0.60	-40.420	135.74	0.60	-46.900	123.73	0.60	-55.895	-53.21	0.60	-66.337	-63.26
0.63	-40.598	135.74	0.63	-46.900	123.73	0.63	-55.895	-53.21	0.63	-66.337	-63.26
0.66	-40.776	135.74	0.66	-46.900	123.73	0.66	-55.895	-53.21	0.66	-66.337	-63.26
0.69	-40.954	135.74	0.69	-46.900	123.73	0.69	-55.895	-53.21	0.69	-66.337	-63.26
0.72	-41.132	135.74	0.72	-46.900	123.73	0.72	-55.895	-53.21	0.72	-66.337	-63.26
0.75	-41.310	135.74	0.75	-46.900	123.73	0.75	-55.895	-53.21	0.75	-66.337	-63.26
0.78	-41.488	135.74	0.78	-46.900	123.73	0.78	-55.895	-53.21	0.78	-66.337	-63.26
0.81	-41.666	135.74	0.81	-46.900	123.73	0.81	-55.895	-53.21	0.81	-66.337	-63.26
0.84	-41.844	135.74	0.84	-46.900	123.73	0.84	-55.895	-53.21	0.84	-66.337	-63.26
0.87	-42.022	135.74	0.87	-46.900	123.73	0.87	-55.895	-53.21	0.87	-66.337	-63.26
0.90	-42.200	135.74	0.90	-46.900	123.73	0.90	-55.895	-53.21	0.90	-66.337	-63.26
1.05	-44.100	135.74	1.05	-46.900	123.73	1.05	-55.895	-53.21	1.05	-66.337	-63.26
1.20	-46.000	135.74	1.20	-46.900	123.73	1.20	-55.895	-53.21	1.20	-66.337	-63.26
1.35	-47.900	135.74	1.35	-46.900	123.73	1.35	-55.895	-53.21	1.35	-66.337	-63.26
1.50	-49.800	135.74	1.50	-46.900	123.73	1.50	-55.895	-53.21	1.50	-66.337	-63.26
1.65	-51.700	135.74	1.65	-46.900	123.73	1.65	-55.895	-53.21	1.65	-66.337	-63.26
1.80	-53.600	135.74	1.80	-46.900	123.73	1.80	-55.895	-53.21	1.80	-66.337	-63.26
1.95	-55.500	135.74	1.95	-46.900	123.73	1.95	-55.895	-53.21	1.95	-66.337	-63.26
2.10	-57.400	135.74	2.10	-46.900	123.73	2.10	-55.895	-53.21	2.10	-66.337	-63.26
2.25	-59.300	135.74	2.25	-46.900	123.73	2.25	-55.895	-53.21	2.25	-66.337	-63.26
2.40	-61.200	135.74	2.40	-46.900	123.73	2.40	-55.895	-53.21	2.40	-66.337	-63.26
2.55	-63.100	135.74	2.55	-46.900	123.73	2.55	-55.895	-53.21	2.55	-66.337	-63.26
2.70	-65.000	135.74	2.70	-46.900	123.73	2.70	-55.895	-53.21	2.70	-66.337	-63.26
2.85	-66.900	135.74	2.85	-46.900	123.73	2.85	-55.895	-53.21	2.85	-66.337	-63.26
3.00	-68.800	135.74	3.00	-46.900	123.73	3.00	-55.895	-53.21	3.00	-66.337	-63.26

Table 58. Radial Electric Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 44.95 m

300 KM DUNNKNVUE					300 KM DUNNKNVUE					1000 KM DUNNKNVUE				
HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)
0.00	-34.971	-16.00	0.00	-44.000	-44.00	0.00	-33.786	-33.786	0.00	-33.786	-33.786	0.00	-33.786	-33.786
0.33	-33.106	135.31	0.33	-44.000	-44.00	0.33	-33.786	-33.786	0.33	-33.786	-33.786	0.33	-33.786	-33.786
0.65	-32.237	125.16	0.65	-44.000	-44.00	0.65	-33.786	-33.786	0.65	-33.786	-33.786	0.65	-33.786	-33.786
0.98	-31.367	115.01	0.98	-44.000	-44.00	0.98	-33.786	-33.786	0.98	-33.786	-33.786	0.98	-33.786	-33.786
1.30	-30.497	104.86	1.30	-44.000	-44.00	1.30	-33.786	-33.786	1.30	-33.786	-33.786	1.30	-33.786	-33.786
1.63	-29.627	94.71	1.63	-44.000	-44.00	1.63	-33.786	-33.786	1.63	-33.786	-33.786	1.63	-33.786	-33.786
1.95	-28.757	84.56	1.95	-44.000	-44.00	1.95	-33.786	-33.786	1.95	-33.786	-33.786	1.95	-33.786	-33.786
2.28	-27.887	74.41	2.28	-44.000	-44.00	2.28	-33.786	-33.786	2.28	-33.786	-33.786	2.28	-33.786	-33.786
2.60	-27.017	64.26	2.60	-44.000	-44.00	2.60	-33.786	-33.786	2.60	-33.786	-33.786	2.60	-33.786	-33.786
2.93	-26.147	54.11	2.93	-44.000	-44.00	2.93	-33.786	-33.786	2.93	-33.786	-33.786	2.93	-33.786	-33.786
3.25	-25.277	43.96	3.25	-44.000	-44.00	3.25	-33.786	-33.786	3.25	-33.786	-33.786	3.25	-33.786	-33.786
3.58	-24.407	33.81	3.58	-44.000	-44.00	3.58	-33.786	-33.786	3.58	-33.786	-33.786	3.58	-33.786	-33.786
3.90	-23.537	23.66	3.90	-44.000	-44.00	3.90	-33.786	-33.786	3.90	-33.786	-33.786	3.90	-33.786	-33.786
4.23	-22.667	13.51	4.23	-44.000	-44.00	4.23	-33.786	-33.786	4.23	-33.786	-33.786	4.23	-33.786	-33.786
4.55	-21.797	3.36	4.55	-44.000	-44.00	4.55	-33.786	-33.786	4.55	-33.786	-33.786	4.55	-33.786	-33.786
4.88	-20.927	-7.79	4.88	-44.000	-44.00	4.88	-33.786	-33.786	4.88	-33.786	-33.786	4.88	-33.786	-33.786
5.20	-20.057	-17.94	5.20	-44.000	-44.00	5.20	-33.786	-33.786	5.20	-33.786	-33.786	5.20	-33.786	-33.786
5.53	-19.187	-28.09	5.53	-44.000	-44.00	5.53	-33.786	-33.786	5.53	-33.786	-33.786	5.53	-33.786	-33.786
5.85	-18.317	-38.24	5.85	-44.000	-44.00	5.85	-33.786	-33.786	5.85	-33.786	-33.786	5.85	-33.786	-33.786
6.18	-17.447	-48.39	6.18	-44.000	-44.00	6.18	-33.786	-33.786	6.18	-33.786	-33.786	6.18	-33.786	-33.786
6.50	-16.577	-58.54	6.50	-44.000	-44.00	6.50	-33.786	-33.786	6.50	-33.786	-33.786	6.50	-33.786	-33.786
6.83	-15.707	-68.69	6.83	-44.000	-44.00	6.83	-33.786	-33.786	6.83	-33.786	-33.786	6.83	-33.786	-33.786
7.15	-14.837	-78.84	7.15	-44.000	-44.00	7.15	-33.786	-33.786	7.15	-33.786	-33.786	7.15	-33.786	-33.786
7.48	-13.967	-88.99	7.48	-44.000	-44.00	7.48	-33.786	-33.786	7.48	-33.786	-33.786	7.48	-33.786	-33.786
7.80	-13.097	-99.14	7.80	-44.000	-44.00	7.80	-33.786	-33.786	7.80	-33.786	-33.786	7.80	-33.786	-33.786
8.13	-12.227	-109.29	8.13	-44.000	-44.00	8.13	-33.786	-33.786	8.13	-33.786	-33.786	8.13	-33.786	-33.786
8.45	-11.357	-119.44	8.45	-44.000	-44.00	8.45	-33.786	-33.786	8.45	-33.786	-33.786	8.45	-33.786	-33.786
8.78	-10.487	-129.59	8.78	-44.000	-44.00	8.78	-33.786	-33.786	8.78	-33.786	-33.786	8.78	-33.786	-33.786
9.10	-9.617	-139.74	9.10	-44.000	-44.00	9.10	-33.786	-33.786	9.10	-33.786	-33.786	9.10	-33.786	-33.786
9.43	-8.747	-149.89	9.43	-44.000	-44.00	9.43	-33.786	-33.786	9.43	-33.786	-33.786	9.43	-33.786	-33.786
9.75	-7.877	-159.04	9.75	-44.000	-44.00	9.75	-33.786	-33.786	9.75	-33.786	-33.786	9.75	-33.786	-33.786
10.08	-7.007	-169.19	10.08	-44.000	-44.00	10.08	-33.786	-33.786	10.08	-33.786	-33.786	10.08	-33.786	-33.786
10.40	-6.137	-179.34	10.40	-44.000	-44.00	10.40	-33.786	-33.786	10.40	-33.786	-33.786	10.40	-33.786	-33.786
10.73	-5.267	-189.49	10.73	-44.000	-44.00	10.73	-33.786	-33.786	10.73	-33.786	-33.786	10.73	-33.786	-33.786
11.05	-4.397	-199.64	11.05	-44.000	-44.00	11.05	-33.786	-33.786	11.05	-33.786	-33.786	11.05	-33.786	-33.786
11.38	-3.527	-209.79	11.38	-44.000	-44.00	11.38	-33.786	-33.786	11.38	-33.786	-33.786	11.38	-33.786	-33.786
11.70	-2.657	-219.94	11.70	-44.000	-44.00	11.70	-33.786	-33.786	11.70	-33.786	-33.786	11.70	-33.786	-33.786
12.03	-1.787	-230.09	12.03	-44.000	-44.00	12.03	-33.786	-33.786	12.03	-33.786	-33.786	12.03	-33.786	-33.786
12.35	-0.917	-240.24	12.35	-44.000	-44.00	12.35	-33.786	-33.786	12.35	-33.786	-33.786	12.35	-33.786	-33.786
12.68	0.053	-250.39	12.68	-44.000	-44.00	12.68	-33.786	-33.786	12.68	-33.786	-33.786	12.68	-33.786	-33.786
13.00	0.923	-260.54	13.00	-44.000	-44.00	13.00	-33.786	-33.786	13.00	-33.786	-33.786	13.00	-33.786	-33.786
13.33	1.793	-270.69	13.33	-44.000	-44.00	13.33	-33.786	-33.786	13.33	-33.786	-33.786	13.33	-33.786	-33.786
13.65	2.663	-280.84	13.65	-44.000	-44.00	13.65	-33.786	-33.786	13.65	-33.786	-33.786	13.65	-33.786	-33.786
13.98	3.533	-290.99	13.98	-44.000	-44.00	13.98	-33.786	-33.786	13.98	-33.786	-33.786	13.98	-33.786	-33.786
14.30	4.403	-301.14	14.30	-44.000	-44.00	14.30	-33.786	-33.786	14.30	-33.786	-33.786	14.30	-33.786	-33.786
14.63	5.273	-311.29	14.63	-44.000	-44.00	14.63	-33.786	-33.786	14.63	-33.786	-33.786	14.63	-33.786	-33.786
14.95	6.143	-321.44	14.95	-44.000	-44.00	14.95	-33.786	-33.786	14.95	-33.786	-33.786	14.95	-33.786	-33.786
15.28	7.013	-331.59	15.28	-44.000	-44.00	15.28	-33.786	-33.786	15.28	-33.786	-33.786	15.28	-33.786	-33.786
15.60	7.883	-341.74	15.60	-44.000	-44.00	15.60	-33.786	-33.786	15.60	-33.786	-33.786	15.60	-33.786	-33.786
15.93	8.753	-351.89	15.93	-44.000	-44.00	15.93	-33.786	-33.786	15.93	-33.786	-33.786	15.93	-33.786	-33.786
16.25	9.623	-362.04	16.25	-44.000	-44.00	16.25	-33.786	-33.786	16.25	-33.786	-33.786	16.25	-33.786	-33.786
16.58	10.493	-372.19	16.58	-44.000	-44.00	16.58	-33.786	-33.786	16.58	-33.786	-33.786	16.58	-33.786	-33.786
16.90	11.363	-382.34	16.90	-44.000	-44.00	16.90	-33.786	-33.786	16.90	-33.786	-33.786	16.90	-33.786	-33.786
17.23	12.233	-392.49	17.23	-44.000	-44.00	17.23	-33.786	-33.786	17.23	-33.786	-33.786	17.23	-33.786	-33.786
17.55	13.103	-402.64	17.55	-44.000	-44.00	17.55	-33.786	-33.786	17.55	-33.786	-33.786	17.55	-33.786	-33.786
17.88	13.973	-412.79	17.88	-44.000	-44.00	17.88	-33.786	-33.786	17.88	-33.786	-33.786	17.88	-33.786	-33.786
18.20	14.843	-422.94	18.20	-44.000	-44.00	18.20	-33.786	-33.786	18.20	-33.786	-33.786	18.20	-33.786	-33.786
18.53	15.713	-433.09	18.53	-44.000	-44.00	18.53	-33.786	-33.786	18.53	-33.786	-33.786	18.53	-33.786	-33.786
18.85	16.583	-443.24	18.85	-44.000	-44.00	18.85	-33.786	-33.786	18.85	-33.786	-33.786	18.85	-33.786	-33.786
19.18	17.453	-453.39	19.18	-44.000	-44.00	19.18	-33.786	-33.786	19.18	-33.786	-33.786	19.18	-33.786	-33.786
19.50	18.323	-463.54	19.50	-44.000	-44.00	19.50	-33.786	-33.786	19.50	-33.786	-33.786	19.50	-33.786	-33.786
19.83	19.193	-473.69	19.83	-44.000	-44.00	19.83	-33.786	-33.786	19.83	-33.786	-33.786	19.83	-33.786	-33.786
20.15	20.063	-483.84	20.15	-44.000	-44.00	20.15	-33.786	-33.786	20.15	-33.786	-33.786	20.15	-33.786	-33.786
20.48	20.933	-493.99	20.48	-44.000	-44.00	20.48	-33.786	-33.786	20.48	-33.786	-33.786	20.48	-33.786	-33.786
20.80	21.803	-504.14	20.80	-44.000	-44.00	20.80	-33.786	-33.786	20.80	-33.786	-33.786	20.80	-33.786	-33.786
21.13	22.673	-514.29	21.13	-44.000	-44.00	21.13	-33.786	-33.786	21.13	-33.786	-33.786	21.13	-33.786	-33.786
21.45	23.543	-524.44	21.45	-44.000	-44.00	21.45	-33.786	-33.786	21.45	-33.786	-33.786	21.45	-33.786	-33.786
21.78	24.413	-534.59	21.78	-44.000	-44.00	21.78	-33.786	-33.786	21.78	-33.786	-33.786	21.78	-33.786	-33.786
22.10	25.283	-544.74	22.10	-44.000	-44.00	22.10	-33.786	-33.786	22.10	-33.786	-33.786	22.10	-33.786	-33.786
22.43	26.153	-554.89	22.43	-44.000	-44.00	22.43	-33.786	-33.786	22.43	-33.786	-33.786	22.43	-33.786	-33.786
22.75	27.023	-565.04	22.75	-44.000	-44.00	22.75	-33.786	-33.786	22.75	-33.786	-33.786	22.75	-33.786	-33.786
23.08	27.893	-575.19	23.08	-44.000	-44.00	23.08	-33.786	-33.786	23.08	-33.786	-33.786	23.08	-33.786	-33.786
23.40	28.763	-585.34	23.40	-44.000	-44.00	23.40	-33.786	-33.786	23.40	-33.786	-33.786	23.40	-33.786	-33.786
23.73	29.633	-595.49	23.73	-44.000	-44.00	23.73	-33.786	-33.786	23.73	-33.786	-33.786	23.73	-33.786	-33.786
2														

Table 59. Radial Electric Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM DOWNRANGE					3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					
RE [UM]	AMP (UB)	PHASE (DEG)	RE [UM]	AMP (UB)	PHASE (DEG)	RE [UM]	AMP (UB)	PHASE (DEG)	RE [UM]	AMP (UB)	PHASE (DEG)	RE [UM]	AMP (UB)	PHASE (DEG)	RE [UM]	AMP (UB)	PHASE (DEG)	RE [UM]	AMP (UB)	PHASE (DEG)
0.000	-47.471	25.22	0.000	-35.704	-112.13	0.000	-67.384	-50.38	0.000	-67.384	-50.38	0.000	-67.384	-50.38	0.000	-67.384	-50.38	0.000	-67.384	-50.38
0.001	-47.471	25.15	0.003	-35.733	91.54	0.010	-67.384	89.53	0.030	-67.384	89.53	0.100	-67.384	89.53	0.300	-67.384	89.53	1.000	-67.384	89.53
0.002	-47.471	25.07	0.006	-35.762	90.57	0.020	-67.384	89.53	0.060	-67.384	89.53	0.200	-67.384	89.53	0.600	-67.384	89.53	2.000	-67.384	89.53
0.003	-47.471	25.00	0.009	-35.791	89.61	0.030	-67.384	89.53	0.090	-67.384	89.53	0.300	-67.384	89.53	0.900	-67.384	89.53	3.000	-67.384	89.53
0.004	-47.471	24.93	0.012	-35.820	88.65	0.040	-67.384	89.53	0.120	-67.384	89.53	0.400	-67.384	89.53	1.200	-67.384	89.53	4.000	-67.384	89.53
0.005	-47.471	24.85	0.015	-35.849	87.69	0.050	-67.384	89.53	0.150	-67.384	89.53	0.500	-67.384	89.53	1.500	-67.384	89.53	5.000	-67.384	89.53
0.006	-47.471	24.78	0.018	-35.878	86.73	0.060	-67.384	89.53	0.180	-67.384	89.53	0.600	-67.384	89.53	1.800	-67.384	89.53	6.000	-67.384	89.53
0.007	-47.471	24.71	0.021	-35.907	85.77	0.070	-67.384	89.53	0.210	-67.384	89.53	0.700	-67.384	89.53	2.100	-67.384	89.53	7.000	-67.384	89.53
0.008	-47.471	24.64	0.024	-35.936	84.81	0.080	-67.384	89.53	0.240	-67.384	89.53	0.800	-67.384	89.53	2.400	-67.384	89.53	8.000	-67.384	89.53
0.009	-47.471	24.57	0.027	-35.965	83.85	0.090	-67.384	89.53	0.270	-67.384	89.53	0.900	-67.384	89.53	2.700	-67.384	89.53	9.000	-67.384	89.53
0.010	-47.471	24.50	0.030	-35.994	82.89	0.100	-67.384	89.53	0.300	-67.384	89.53	1.000	-67.384	89.53	3.000	-67.384	89.53	10.000	-67.384	89.53
0.011	-47.471	24.43	0.033	-36.023	81.93	0.110	-67.384	89.53	0.330	-67.384	89.53	1.100	-67.384	89.53	3.300	-67.384	89.53			
0.012	-47.471	24.36	0.036	-36.052	80.97	0.120	-67.384	89.53	0.360	-67.384	89.53	1.200	-67.384	89.53	3.600	-67.384	89.53			
0.013	-47.471	24.29	0.039	-36.081	79.99	0.130	-67.384	89.53	0.390	-67.384	89.53	1.300	-67.384	89.53	3.900	-67.384	89.53			
0.014	-47.471	24.22	0.042	-36.110	79.03	0.140	-67.384	89.53	0.420	-67.384	89.53	1.400	-67.384	89.53	4.200	-67.384	89.53			
0.015	-47.471	24.15	0.045	-36.139	78.07	0.150	-67.384	89.53	0.450	-67.384	89.53	1.500	-67.384	89.53	4.500	-67.384	89.53			
0.016	-47.471	24.08	0.048	-36.168	77.11	0.160	-67.384	89.53	0.480	-67.384	89.53	1.600	-67.384	89.53	4.800	-67.384	89.53			
0.017	-47.471	24.01	0.051	-36.197	76.15	0.170	-67.384	89.53	0.510	-67.384	89.53	1.700	-67.384	89.53	5.100	-67.384	89.53			
0.018	-47.471	23.94	0.054	-36.226	75.19	0.180	-67.384	89.53	0.540	-67.384	89.53	1.800	-67.384	89.53	5.400	-67.384	89.53			
0.019	-47.471	23.87	0.057	-36.255	74.23	0.190	-67.384	89.53	0.570	-67.384	89.53	1.900	-67.384	89.53	5.700	-67.384	89.53			
0.020	-47.471	23.80	0.060	-36.284	73.27	0.200	-67.384	89.53	0.600	-67.384	89.53	2.000	-67.384	89.53	6.000	-67.384	89.53			
0.021	-47.471	23.73	0.063	-36.313	72.31	0.210	-67.384	89.53	0.630	-67.384	89.53	2.100	-67.384	89.53	6.300	-67.384	89.53			
0.022	-47.471	23.66	0.066	-36.342	71.35	0.220	-67.384	89.53	0.660	-67.384	89.53	2.200	-67.384	89.53	6.600	-67.384	89.53			
0.023	-47.471	23.59	0.069	-36.371	70.39	0.230	-67.384	89.53	0.690	-67.384	89.53	2.300	-67.384	89.53	6.900	-67.384	89.53			
0.024	-47.471	23.52	0.072	-36.400	69.43	0.240	-67.384	89.53	0.720	-67.384	89.53	2.400	-67.384	89.53	7.200	-67.384	89.53			
0.025	-47.471	23.45	0.075	-36.429	68.47	0.250	-67.384	89.53	0.750	-67.384	89.53	2.500	-67.384	89.53	7.500	-67.384	89.53			
0.026	-47.471	23.38	0.078	-36.458	67.51	0.260	-67.384	89.53	0.780	-67.384	89.53	2.600	-67.384	89.53	7.800	-67.384	89.53			
0.027	-47.471	23.31	0.081	-36.487	66.55	0.270	-67.384	89.53	0.810	-67.384	89.53	2.700	-67.384	89.53	8.100	-67.384	89.53			
0.028	-47.471	23.24	0.084	-36.516	65.59	0.280	-67.384	89.53	0.840	-67.384	89.53	2.800	-67.384	89.53	8.400	-67.384	89.53			
0.029	-47.471	23.17	0.087	-36.545	64.63	0.290	-67.384	89.53	0.870	-67.384	89.53	2.900	-67.384	89.53	8.700	-67.384	89.53			
0.030	-47.471	23.10	0.090	-36.574	63.67	0.300	-67.384	89.53	0.900	-67.384	89.53	3.000	-67.384	89.53	9.000	-67.384	89.53			
0.031	-47.471	23.03	0.093	-36.603	62.71	0.310	-67.384	89.53	0.930	-67.384	89.53	3.100	-67.384	89.53	9.300	-67.384	89.53			
0.032	-47.471	22.96	0.096	-36.632	61.75	0.320	-67.384	89.53	0.960	-67.384	89.53	3.200	-67.384	89.53	9.600	-67.384	89.53			
0.033	-47.471	22.89	0.099	-36.661	60.79	0.330	-67.384	89.53	0.990	-67.384	89.53	3.300	-67.384	89.53	9.900	-67.384	89.53			
0.034	-47.471	22.82	0.102	-36.690	59.83	0.340	-67.384	89.53	1.020	-67.384	89.53	3.400	-67.384	89.53	10.200	-67.384	89.53			
0.035	-47.471	22.75	0.105	-36.719	58.87	0.350	-67.384	89.53	1.050	-67.384	89.53	3.500	-67.384	89.53	10.500	-67.384	89.53			
0.036	-47.471	22.68	0.108	-36.748	57.91	0.360	-67.384	89.53	1.080	-67.384	89.53	3.600	-67.384	89.53	10.800	-67.384	89.53			
0.037	-47.471	22.61	0.111	-36.777	56.95	0.370	-67.384	89.53	1.110	-67.384	89.53	3.700	-67.384	89.53	11.100	-67.384	89.53			
0.038	-47.471	22.54	0.114	-36.806	55.99	0.380	-67.384	89.53	1.140	-67.384	89.53	3.800	-67.384	89.53	11.400	-67.384	89.53			
0.039	-47.471	22.47	0.117	-36.835	55.03	0.390	-67.384	89.53	1.170	-67.384	89.53	3.900	-67.384	89.53	11.700	-67.384	89.53			
0.040	-47.471	22.40	0.120	-36.864	54.07	0.400	-67.384	89.53	1.200	-67.384	89.53	4.000	-67.384	89.53	12.000	-67.384	89.53			
0.041	-47.471	22.33	0.123	-36.893	53.11	0.410	-67.384	89.53	1.230	-67.384	89.53	4.100	-67.384	89.53	12.300	-67.384	89.53			
0.042	-47.471	22.26	0.126	-36.922	52.15	0.420	-67.384	89.53	1.260	-67.384	89.53	4.200	-67.384	89.53	12.600	-67.384	89.53			
0.043	-47.471	22.19	0.129	-36.951	51.19	0.430	-67.384	89.53	1.290	-67.384	89.53	4.300	-67.384	89.53	12.900	-67.384	89.53			
0.044	-47.471	22.12	0.132	-36.980	50.23	0.440	-67.384	89.53	1.320	-67.384	89.53	4.400	-67.384	89.53	13.200	-67.384	89.53			
0.045	-47.471	22.05	0.135	-37.009	49.27	0.450	-67.384	89.53	1.350	-67.384	89.53	4.500	-67.384	89.53	13.500	-67.384	89.53			
0.046	-47.471	21.98	0.138	-37.038	48.31	0.460	-67.384	89.53	1.380	-67.384	89.53	4.600	-67.384	89.53	13.800	-67.384	89.53			
0.047	-47.471	21.91	0.141	-37.067	47.35	0.470	-67.384	89.53	1.410	-67.384	89.53	4.700	-67.384	89.53	14.100	-67.384	89.53			
0.048	-47.471	21.84	0.144	-37.096	46.39	0.480	-67.384	89.53	1.440	-67.384	89.53	4.800	-67.384	89.53	14.400	-67.384	89.53			
0.049	-47.471	21.77	0.147	-37.125	45.43	0.490	-67.384	89.53	1.470	-67.384	89.53	4.900	-67.384	89.53	14.700	-67.384	89.53			
0.050	-47.471	21.70	0.150	-37.154	44.47	0.500	-67.384	89.53	1.500	-67.384	89.53	5.000	-67.384	89.53	15.000	-67.384	89.53			
0.051	-47.471	21.63	0.153	-37.183	43.51	0.510	-67.384	89.53	1.530	-67.384	89.53	5.100	-67.384	89.53	15.300	-67.384	89.53			
0.052	-47.471	21.56	0.156	-37.212	42.55	0.520	-67.384	89.53	1.560	-67.384	89.53	5.200	-67.384	89.53	15.600	-67.384	89.53			
0.053	-47.471	21.49	0.159	-37.241	41.59	0.530	-67.384	89.53	1.590	-67.384	89.53	5.300	-67.384	89.53	15.900	-67.384	89.53			
0.054	-47.471	21.42	0.162	-37.270	40.63	0.540	-67.384	89.53	1.620	-67.384	89.53	5.400	-67.384	89.53	16.200	-67.384	89.53			
0.055	-47.471	21.35	0.165	-37.299	39.67	0.550	-67.384	89.53	1.650	-67.384	89.53	5.500	-67.384	89.53	16.500	-67.384	89.53			
0.056	-47.471	21.28	0.168	-37.328	38.71	0.560	-67.384	89.53	1.680	-67.384	89.53	5.600	-67.384	89.53	16.800	-67.384	89.53			
0.057	-47.471	21.21	0.171	-37.357	37.75	0														

Table 60. Radial Electric Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 2.25 m

[illegible]

Table 61. Radial Electric Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 4.50 m

100 KM COUNTERANGE				100 KM COUNTERANGE				300 KM COUNTERANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.00	-44.015	140.17	0.00	-33.751	-45.03	0.00	-33.751	-45.03	0.00	-33.751	-45.03
0.01	-44.015	143.76	0.01	-33.751	137.36	0.01	-33.751	137.36	0.01	-33.751	137.36
0.02	-44.015	147.35	0.02	-33.751	133.96	0.02	-33.751	133.96	0.02	-33.751	133.96
0.03	-44.015	150.94	0.03	-33.751	130.56	0.03	-33.751	130.56	0.03	-33.751	130.56
0.04	-44.015	154.53	0.04	-33.751	127.16	0.04	-33.751	127.16	0.04	-33.751	127.16
0.05	-44.015	158.12	0.05	-33.751	123.76	0.05	-33.751	123.76	0.05	-33.751	123.76
0.06	-44.015	161.71	0.06	-33.751	120.36	0.06	-33.751	120.36	0.06	-33.751	120.36
0.07	-44.015	165.30	0.07	-33.751	116.96	0.07	-33.751	116.96	0.07	-33.751	116.96
0.08	-44.015	168.89	0.08	-33.751	113.56	0.08	-33.751	113.56	0.08	-33.751	113.56
0.09	-44.015	172.48	0.09	-33.751	110.16	0.09	-33.751	110.16	0.09	-33.751	110.16
0.10	-44.015	176.07	0.10	-33.751	106.76	0.10	-33.751	106.76	0.10	-33.751	106.76
0.11	-44.015	179.66	0.11	-33.751	103.36	0.11	-33.751	103.36	0.11	-33.751	103.36
0.12	-44.015	183.25	0.12	-33.751	99.96	0.12	-33.751	99.96	0.12	-33.751	99.96
0.13	-44.015	186.84	0.13	-33.751	96.56	0.13	-33.751	96.56	0.13	-33.751	96.56
0.14	-44.015	190.43	0.14	-33.751	93.16	0.14	-33.751	93.16	0.14	-33.751	93.16
0.15	-44.015	194.02	0.15	-33.751	89.76	0.15	-33.751	89.76	0.15	-33.751	89.76
0.16	-44.015	197.61	0.16	-33.751	86.36	0.16	-33.751	86.36	0.16	-33.751	86.36
0.17	-44.015	201.20	0.17	-33.751	82.96	0.17	-33.751	82.96	0.17	-33.751	82.96
0.18	-44.015	204.79	0.18	-33.751	79.56	0.18	-33.751	79.56	0.18	-33.751	79.56
0.19	-44.015	208.38	0.19	-33.751	76.16	0.19	-33.751	76.16	0.19	-33.751	76.16
0.20	-44.015	211.97	0.20	-33.751	72.76	0.20	-33.751	72.76	0.20	-33.751	72.76
0.21	-44.015	215.56	0.21	-33.751	69.36	0.21	-33.751	69.36	0.21	-33.751	69.36
0.22	-44.015	219.15	0.22	-33.751	65.96	0.22	-33.751	65.96	0.22	-33.751	65.96
0.23	-44.015	222.74	0.23	-33.751	62.56	0.23	-33.751	62.56	0.23	-33.751	62.56
0.24	-44.015	226.33	0.24	-33.751	59.16	0.24	-33.751	59.16	0.24	-33.751	59.16
0.25	-44.015	229.92	0.25	-33.751	55.76	0.25	-33.751	55.76	0.25	-33.751	55.76
0.26	-44.015	233.51	0.26	-33.751	52.36	0.26	-33.751	52.36	0.26	-33.751	52.36
0.27	-44.015	237.10	0.27	-33.751	48.96	0.27	-33.751	48.96	0.27	-33.751	48.96
0.28	-44.015	240.69	0.28	-33.751	45.56	0.28	-33.751	45.56	0.28	-33.751	45.56
0.29	-44.015	244.28	0.29	-33.751	42.16	0.29	-33.751	42.16	0.29	-33.751	42.16
0.30	-44.015	247.87	0.30	-33.751	38.76	0.30	-33.751	38.76	0.30	-33.751	38.76

HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.31	-44.015	251.46	0.31	-33.751	35.36	0.31	-33.751	35.36	0.31	-33.751	35.36
0.32	-44.015	255.05	0.32	-33.751	31.96	0.32	-33.751	31.96	0.32	-33.751	31.96
0.33	-44.015	258.64	0.33	-33.751	28.56	0.33	-33.751	28.56	0.33	-33.751	28.56
0.34	-44.015	262.23	0.34	-33.751	25.16	0.34	-33.751	25.16	0.34	-33.751	25.16
0.35	-44.015	265.82	0.35	-33.751	21.76	0.35	-33.751	21.76	0.35	-33.751	21.76
0.36	-44.015	269.41	0.36	-33.751	18.36	0.36	-33.751	18.36	0.36	-33.751	18.36
0.37	-44.015	273.00	0.37	-33.751	14.96	0.37	-33.751	14.96	0.37	-33.751	14.96
0.38	-44.015	276.59	0.38	-33.751	11.56	0.38	-33.751	11.56	0.38	-33.751	11.56
0.39	-44.015	280.18	0.39	-33.751	8.16	0.39	-33.751	8.16	0.39	-33.751	8.16
0.40	-44.015	283.77	0.40	-33.751	4.76	0.40	-33.751	4.76	0.40	-33.751	4.76
0.41	-44.015	287.36	0.41	-33.751	1.36	0.41	-33.751	1.36	0.41	-33.751	1.36
0.42	-44.015	290.95	0.42	-33.751	-2.04	0.42	-33.751	-2.04	0.42	-33.751	-2.04
0.43	-44.015	294.54	0.43	-33.751	-5.44	0.43	-33.751	-5.44	0.43	-33.751	-5.44
0.44	-44.015	298.13	0.44	-33.751	-8.84	0.44	-33.751	-8.84	0.44	-33.751	-8.84
0.45	-44.015	301.72	0.45	-33.751	-12.24	0.45	-33.751	-12.24	0.45	-33.751	-12.24
0.46	-44.015	305.31	0.46	-33.751	-15.64	0.46	-33.751	-15.64	0.46	-33.751	-15.64
0.47	-44.015	308.90	0.47	-33.751	-19.04	0.47	-33.751	-19.04	0.47	-33.751	-19.04
0.48	-44.015	312.49	0.48	-33.751	-22.44	0.48	-33.751	-22.44	0.48	-33.751	-22.44
0.49	-44.015	316.08	0.49	-33.751	-25.84	0.49	-33.751	-25.84	0.49	-33.751	-25.84
0.50	-44.015	319.67	0.50	-33.751	-29.24	0.50	-33.751	-29.24	0.50	-33.751	-29.24

Table 62. Azimuthal Magnetic Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 0.00 m

3000 KM 0.00 MVE				10000 KM 0.00 MVE				30000 KM 0.00 MVE			
RELUM	AMP	PMASC	RELUM	AMP	PMASC	RELUM	AMP	PMASC	RELUM	AMP	PMASC
(m)	(uB)	(uB)	(m)	(uB)	(uB)	(m)	(uB)	(uB)	(m)	(uB)	(uB)
0.000	-10.000	-37.400	0.000	-3.7403	-63.004	0.000	-0.4084	-102.43	0.000	-0.4084	-102.43
0.100	-10.021	-37.470	0.100	-4.0334	-64.191	0.100	-0.4091	-102.46	0.100	-0.4091	-102.46
0.200	-10.042	-37.540	0.200	-4.3461	-65.372	0.200	-0.4100	-102.49	0.200	-0.4100	-102.49
0.300	-10.063	-37.610	0.300	-4.6588	-66.553	0.300	-0.4109	-102.52	0.300	-0.4109	-102.52
0.400	-10.084	-37.680	0.400	-4.9715	-67.734	0.400	-0.4118	-102.55	0.400	-0.4118	-102.55
0.500	-10.105	-37.750	0.500	-5.2842	-68.915	0.500	-0.4127	-102.58	0.500	-0.4127	-102.58
0.600	-10.126	-37.820	0.600	-5.5969	-70.096	0.600	-0.4136	-102.61	0.600	-0.4136	-102.61
0.700	-10.147	-37.890	0.700	-5.9096	-71.277	0.700	-0.4145	-102.64	0.700	-0.4145	-102.64
0.800	-10.168	-37.960	0.800	-6.2223	-72.458	0.800	-0.4154	-102.67	0.800	-0.4154	-102.67
0.900	-10.189	-38.030	0.900	-6.5350	-73.639	0.900	-0.4163	-102.70	0.900	-0.4163	-102.70
1.000	-10.210	-38.100	1.000	-6.8477	-74.820	1.000	-0.4172	-102.73	1.000	-0.4172	-102.73
1.100	-10.231	-38.170	1.100	-7.1604	-75.999	1.100	-0.4181	-102.76	1.100	-0.4181	-102.76
1.200	-10.252	-38.240	1.200	-7.4731	-77.179	1.200	-0.4190	-102.79	1.200	-0.4190	-102.79
1.300	-10.273	-38.310	1.300	-7.7858	-78.359	1.300	-0.4199	-102.82	1.300	-0.4199	-102.82
1.400	-10.294	-38.380	1.400	-8.0985	-79.539	1.400	-0.4208	-102.85	1.400	-0.4208	-102.85
1.500	-10.315	-38.450	1.500	-8.4112	-80.719	1.500	-0.4217	-102.88	1.500	-0.4217	-102.88
1.600	-10.336	-38.520	1.600	-8.7239	-81.899	1.600	-0.4226	-102.91	1.600	-0.4226	-102.91
1.700	-10.357	-38.590	1.700	-9.0366	-83.079	1.700	-0.4235	-102.94	1.700	-0.4235	-102.94
1.800	-10.378	-38.660	1.800	-9.3493	-84.259	1.800	-0.4244	-102.97	1.800	-0.4244	-102.97
1.900	-10.399	-38.730	1.900	-9.6620	-85.439	1.900	-0.4253	-103.00	1.900	-0.4253	-103.00
2.000	-10.420	-38.800	2.000	-9.9747	-86.619	2.000	-0.4262	-103.03	2.000	-0.4262	-103.03
2.100	-10.441	-38.870	2.100	-10.2874	-87.799	2.100	-0.4271	-103.06	2.100	-0.4271	-103.06
2.200	-10.462	-38.940	2.200	-10.6001	-88.979	2.200	-0.4280	-103.09	2.200	-0.4280	-103.09
2.300	-10.483	-39.010	2.300	-10.9128	-90.159	2.300	-0.4289	-103.12	2.300	-0.4289	-103.12
2.400	-10.504	-39.080	2.400	-11.2255	-91.339	2.400	-0.4298	-103.15	2.400	-0.4298	-103.15
2.500	-10.525	-39.150	2.500	-11.5382	-92.519	2.500	-0.4307	-103.18	2.500	-0.4307	-103.18
2.600	-10.546	-39.220	2.600	-11.8509	-93.699	2.600	-0.4316	-103.21	2.600	-0.4316	-103.21
2.700	-10.567	-39.290	2.700	-12.1636	-94.879	2.700	-0.4325	-103.24	2.700	-0.4325	-103.24
2.800	-10.588	-39.360	2.800	-12.4763	-96.059	2.800	-0.4334	-103.27	2.800	-0.4334	-103.27
2.900	-10.609	-39.430	2.900	-12.7890	-97.239	2.900	-0.4343	-103.30	2.900	-0.4343	-103.30
3.000	-10.630	-39.500	3.000	-13.1017	-98.419	3.000	-0.4352	-103.33	3.000	-0.4352	-103.33
3.100	-10.651	-39.570	3.100	-13.4144	-99.599	3.100	-0.4361	-103.36	3.100	-0.4361	-103.36
3.200	-10.672	-39.640	3.200	-13.7271	-100.779	3.200	-0.4370	-103.39	3.200	-0.4370	-103.39
3.300	-10.693	-39.710	3.300	-14.0398	-101.959	3.300	-0.4379	-103.42	3.300	-0.4379	-103.42
3.400	-10.714	-39.780	3.400	-14.3525	-103.139	3.400	-0.4388	-103.45	3.400	-0.4388	-103.45
3.500	-10.735	-39.850	3.500	-14.6652	-104.319	3.500	-0.4397	-103.48	3.500	-0.4397	-103.48
3.600	-10.756	-39.920	3.600	-14.9779	-105.499	3.600	-0.4406	-103.51	3.600	-0.4406	-103.51
3.700	-10.777	-39.990	3.700	-15.2906	-106.679	3.700	-0.4415	-103.54	3.700	-0.4415	-103.54
3.800	-10.798	-40.060	3.800	-15.6033	-107.859	3.800	-0.4424	-103.57	3.800	-0.4424	-103.57
3.900	-10.819	-40.130	3.900	-15.9160	-109.039	3.900	-0.4433	-103.60	3.900	-0.4433	-103.60
4.000	-10.840	-40.200	4.000	-16.2287	-110.219	4.000	-0.4442	-103.63	4.000	-0.4442	-103.63
4.100	-10.861	-40.270	4.100	-16.5414	-111.399	4.100	-0.4451	-103.66	4.100	-0.4451	-103.66
4.200	-10.882	-40.340	4.200	-16.8541	-112.579	4.200	-0.4460	-103.69	4.200	-0.4460	-103.69
4.300	-10.903	-40.410	4.300	-17.1668	-113.759	4.300	-0.4469	-103.72	4.300	-0.4469	-103.72
4.400	-10.924	-40.480	4.400	-17.4795	-114.939	4.400	-0.4478	-103.75	4.400	-0.4478	-103.75
4.500	-10.945	-40.550	4.500	-17.7922	-116.119	4.500	-0.4487	-103.78	4.500	-0.4487	-103.78
4.600	-10.966	-40.620	4.600	-18.1049	-117.299	4.600	-0.4496	-103.81	4.600	-0.4496	-103.81
4.700	-10.987	-40.690	4.700	-18.4176	-118.479	4.700	-0.4505	-103.84	4.700	-0.4505	-103.84
4.800	-11.008	-40.760	4.800	-18.7303	-119.659	4.800	-0.4514	-103.87	4.800	-0.4514	-103.87
4.900	-11.029	-40.830	4.900	-19.0430	-120.839	4.900	-0.4523	-103.90	4.900	-0.4523	-103.90
5.000	-11.050	-40.900	5.000	-19.3557	-122.019	5.000	-0.4532	-103.93	5.000	-0.4532	-103.93

Table 63. Azimuthal Magnetic Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 2247.60 m

[illegible]

Table 64. Azimuthal Magnetic Field (Fresh Water), Frequency = 0.1 MHz, VED Height = 4495.20 m

3000.0 KHz			3000.0 KHz		
LOCAL ANGLE			LOCAL ANGLE		
ANGLE (deg)	WAVE (dB)	FIELD (mT)	ANGLE (deg)	WAVE (dB)	FIELD (mT)
0.00	-66.210	0.000	180.00	-66.210	0.000
1.30	-66.237	0.000	181.30	-66.237	0.000
2.60	-66.264	0.000	182.60	-66.264	0.000
3.90	-66.291	0.000	183.90	-66.291	0.000
5.20	-66.318	0.000	185.20	-66.318	0.000
6.50	-66.345	0.000	186.50	-66.345	0.000
7.80	-66.372	0.000	187.80	-66.372	0.000
9.10	-66.399	0.000	189.10	-66.399	0.000
10.40	-66.426	0.000	190.40	-66.426	0.000
11.70	-66.453	0.000	191.70	-66.453	0.000
13.00	-66.480	0.000	193.00	-66.480	0.000
14.30	-66.507	0.000	194.30	-66.507	0.000
15.60	-66.534	0.000	195.60	-66.534	0.000
16.90	-66.561	0.000	196.90	-66.561	0.000
18.20	-66.588	0.000	198.20	-66.588	0.000
19.50	-66.615	0.000	199.50	-66.615	0.000
20.80	-66.642	0.000	200.80	-66.642	0.000
22.10	-66.669	0.000	202.10	-66.669	0.000
23.40	-66.696	0.000	203.40	-66.696	0.000
24.70	-66.723	0.000	204.70	-66.723	0.000
26.00	-66.750	0.000	206.00	-66.750	0.000
27.30	-66.777	0.000	207.30	-66.777	0.000
28.60	-66.804	0.000	208.60	-66.804	0.000
29.90	-66.831	0.000	209.90	-66.831	0.000
31.20	-66.858	0.000	211.20	-66.858	0.000
32.50	-66.885	0.000	212.50	-66.885	0.000
33.80	-66.912	0.000	213.80	-66.912	0.000
35.10	-66.939	0.000	215.10	-66.939	0.000
36.40	-66.966	0.000	216.40	-66.966	0.000
37.70	-66.993	0.000	217.70	-66.993	0.000
39.00	-67.020	0.000	219.00	-67.020	0.000
40.30	-67.047	0.000	220.30	-67.047	0.000
41.60	-67.074	0.000	221.60	-67.074	0.000
42.90	-67.101	0.000	222.90	-67.101	0.000
44.20	-67.128	0.000	224.20	-67.128	0.000
45.50	-67.155	0.000	225.50	-67.155	0.000
46.80	-67.182	0.000	226.80	-67.182	0.000
48.10	-67.209	0.000	228.10	-67.209	0.000
49.40	-67.236	0.000	229.40	-67.236	0.000
50.70	-67.263	0.000	230.70	-67.263	0.000
52.00	-67.290	0.000	232.00	-67.290	0.000
53.30	-67.317	0.000	233.30	-67.317	0.000
54.60	-67.344	0.000	234.60	-67.344	0.000
55.90	-67.371	0.000	235.90	-67.371	0.000
57.20	-67.398	0.000	237.20	-67.398	0.000
58.50	-67.425	0.000	238.50	-67.425	0.000
59.80	-67.452	0.000	239.80	-67.452	0.000
61.10	-67.479	0.000	241.10	-67.479	0.000
62.40	-67.506	0.000	242.40	-67.506	0.000
63.70	-67.533	0.000	243.70	-67.533	0.000
65.00	-67.560	0.000	245.00	-67.560	0.000
66.30	-67.587	0.000	246.30	-67.587	0.000
67.60	-67.614	0.000	247.60	-67.614	0.000
68.90	-67.641	0.000	248.90	-67.641	0.000
70.20	-67.668	0.000	250.20	-67.668	0.000
71.50	-67.695	0.000	251.50	-67.695	0.000
72.80	-67.722	0.000	252.80	-67.722	0.000
74.10	-67.749	0.000	254.10	-67.749	0.000
75.40	-67.776	0.000	255.40	-67.776	0.000
76.70	-67.803	0.000	256.70	-67.803	0.000
78.00	-67.830	0.000	258.00	-67.830	0.000
79.30	-67.857	0.000	259.30	-67.857	0.000
80.60	-67.884	0.000	260.60	-67.884	0.000
81.90	-67.911	0.000	261.90	-67.911	0.000
83.20	-67.938	0.000	263.20	-67.938	0.000
84.50	-67.965	0.000	264.50	-67.965	0.000
85.80	-67.992	0.000	265.80	-67.992	0.000
87.10	-68.019	0.000	267.10	-68.019	0.000
88.40	-68.046	0.000	268.40	-68.046	0.000
89.70	-68.073	0.000	269.70	-68.073	0.000
91.00	-68.100	0.000	271.00	-68.100	0.000
92.30	-68.127	0.000	272.30	-68.127	0.000
93.60	-68.154	0.000	273.60	-68.154	0.000
94.90	-68.181	0.000	274.90	-68.181	0.000
96.20	-68.208	0.000	276.20	-68.208	0.000
97.50	-68.235	0.000	277.50	-68.235	0.000
98.80	-68.262	0.000	278.80	-68.262	0.000
100.10	-68.289	0.000	280.10	-68.289	0.000
101.40	-68.316	0.000	281.40	-68.316	0.000
102.70	-68.343	0.000	282.70	-68.343	0.000
104.00	-68.370	0.000	284.00	-68.370	0.000
105.30	-68.397	0.000	285.30	-68.397	0.000
106.60	-68.424	0.000	286.60	-68.424	0.000
107.90	-68.451	0.000	287.90	-68.451	0.000
109.20	-68.478	0.000	289.20	-68.478	0.000
110.50	-68.505	0.000	290.50	-68.505	0.000
111.80	-68.532	0.000	291.80	-68.532	0.000
113.10	-68.559	0.000	293.10	-68.559	0.000
114.40	-68.586	0.000	294.40	-68.586	0.000
115.70	-68.613	0.000	295.70	-68.613	0.000
117.00	-68.640	0.000	297.00	-68.640	0.000
118.30	-68.667	0.000	298.30	-68.667	0.000
119.60	-68.694	0.000	299.60	-68.694	0.000
120.90	-68.721	0.000	300.90	-68.721	0.000
122.20	-68.748	0.000	302.20	-68.748	0.000
123.50	-68.775	0.000	303.50	-68.775	0.000
124.80	-68.802	0.000	304.80	-68.802	0.000
126.10	-68.829	0.000	306.10	-68.829	0.000
127.40	-68.856	0.000	307.40	-68.856	0.000
128.70	-68.883	0.000	308.70	-68.883	0.000
130.00	-68.910	0.000	310.00	-68.910	0.000
131.30	-68.937	0.000	311.30	-68.937	0.000
132.60	-68.964	0.000	312.60	-68.964	0.000
133.90	-68.991	0.000	313.90	-68.991	0.000
135.20	-69.018	0.000	315.20	-69.018	0.000
136.50	-69.045	0.000	316.50	-69.045	0.000
137.80	-69.072	0.000	317.80	-69.072	0.000
139.10	-69.099	0.000	319.10	-69.099	0.000
140.40	-69.126	0.000	320.40	-69.126	0.000
141.70	-69.153	0.000	321.70	-69.153	0.000
143.00	-69.180	0.000	323.00	-69.180	0.000
144.30	-69.207	0.000	324.30	-69.207	0.000
145.60	-69.234	0.000	325.60	-69.234	0.000
146.90	-69.261	0.000	326.90	-69.261	0.000
148.20	-69.288	0.000	328.20	-69.288	0.000
149.50	-69.315	0.000	329.50	-69.315	0.000
150.80	-69.342	0.000	330.80	-69.342	0.000
152.10	-69.369	0.000	332.10	-69.369	0.000
153.40	-69.396	0.000	333.40	-69.396	0.000
154.70	-69.423	0.000	334.70	-69.423	0.000
156.00	-69.450	0.000	336.00	-69.450	0.000
157.30	-69.477	0.000	337.30	-69.477	0.000
158.60	-69.504	0.000	338.60	-69.504	0.000
159.90	-69.531	0.000	339.90	-69.531	0.000
161.20	-69.558	0.000	341.20	-69.558	0.000
162.50	-69.585	0.000	342.50	-69.585	0.000
163.80	-69.612	0.000	343.80	-69.612	0.000
165.10	-69.639	0.000	345.10	-69.639	0.000
166.40	-69.666	0.000	346.40	-69.666	0.000
167.70	-69.693	0.000	347.70	-69.693	0.000
169.00	-69.720	0.000	349.00	-69.720	0.000
170.30	-69.747	0.000	350.30	-69.747	0.000
171.60	-69.774	0.000	351.60	-69.774	0.000
172.90	-69.801	0.000	352.90	-69.801	0.000
174.20	-69.828	0.000	354.20	-69.828	0.000
175.50	-69.855	0.000	355.50	-69.855	0.000
176.80	-69.882	0.000	356.80	-69.882	0.000
178.10	-69.909	0.000	358.10	-69.909	0.000
179.40	-69.936	0.000	359.40	-69.936	0.000
180.70	-69.963	0.000	360.70	-69.963	0.000
182.00	-69.990	0.000	362.00	-69.990	0.000
183.30	-70.017	0.000	363.30	-70.017	0.000
184.60	-70.044	0.000	364.60	-70.044	0.000
185.90	-70.071	0.000	365.90	-70.071	0.000
187.20	-70.098	0.000	367.20	-70.098	0.000
188.50	-70.125	0.000	368.50	-70.125	0.000
189.80	-70.152	0.000	369.80	-70.152	0.000
191.10	-70.179	0.000	371.10	-70.179	0.000
192.40	-70.206	0.000	372.40	-70.206	0.000
193.70	-70.233	0.000	373.70	-70.233	0.000
195.00	-70.260	0.000	375.00	-70.260	0.000
196.30	-70.287	0.000	376.30	-70.287	0.000
197.60	-70.314	0.000	377.60	-70.314	0.000
198.90	-70.341	0.000	378.90	-70.341	0.000
200.20	-70.368	0.000	380.20	-70.368	0.000
201.50	-70.395	0.000	381.50	-70.395	0.000
202.80	-70.422	0.000	382.80	-70.422	0.000
204.10	-70.449	0.000	384.10	-70.449	0.000
205.40	-70.476	0.000	385.40	-70.476	0.000
206.70	-70.503	0.000	386.70	-70.503	0.000
208.00	-70.530	0.000	388.00	-70.530	0.000
209.30	-70.557	0.000	389.30	-70.557	0.000
210.60	-70.584	0.000	390.60	-70.584	0.000
211.90	-70.611	0.000	391.90	-70.611	0.000
213.20	-70.638	0.000	393.20	-70.638	0.000
214.50	-70.665	0.000	394.50	-70.665	0.000
215.80	-70.692	0.000	395.80	-70.692	0.000
217.10	-70.719	0.000	397.10	-70.719	0.000
218.40	-70.746	0.000	398.40	-70.746	0.000
219.70	-70.773	0.000	399.70	-70.773	0.000
221.00	-70.800	0.000	401.00	-70.800	0.000
222.30	-70.827	0.000	402.30	-70.827	0.000
223.60	-70.854	0.000	403.60	-70.854	0.000
224.90	-70.881	0.000	404.90	-70.881	0.000
226.20	-70.908	0.000	406.20	-70.908	0.000
227.50	-70.935	0.000	407.50	-70.935	0.000</

Table 65. Azimuthal Magnetic Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 0.00 m

[illegible]

Table 66. Azimuthal Magnetic Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 224.76 m

2020-2021		2019-2020		2018-2019		2017-2018		2016-2017		2015-2016		2014-2015		2013-2014		2012-2013		2011-2012		2010-2011		2009-2010		2008-2009		2007-2008		2006-2007		2005-2006		2004-2005		2003-2004		2002-2003		2001-2002		2000-2001		1999-2000		1998-1999		1997-1998		1996-1997		1995-1996		1994-1995		1993-1994		1992-1993		1991-1992		1990-1991		1989-1990		1988-1989		1987-1988		1986-1987		1985-1986		1984-1985		1983-1984		1982-1983		1981-1982		1980-1981		1979-1980		1978-1979		1977-1978		1976-1977		1975-1976		1974-1975		1973-1974		1972-1973		1971-1972		1970-1971		1969-1970		1968-1969		1967-1968		1966-1967		1965-1966		1964-1965		1963-1964		1962-1963		1961-1962		1960-1961		1959-1960		1958-1959		1957-1958		1956-1957		1955-1956		1954-1955		1953-1954		1952-1953		1951-1952		1950-1951		1949-1950		1948-1949		1947-1948		1946-1947		1945-1946		1944-1945		1943-1944		1942-1943		1941-1942		1940-1941		1939-1940		1938-1939		1937-1938		1936-1937		1935-1936		1934-1935		1933-1934		1932-1933		1931-1932		1930-1931		1929-1930		1928-1929		1927-1928		1926-1927		1925-1926		1924-1925		1923-1924		1922-1923		1921-1922		1920-1921		1919-1920		1918-1919		1917-1918		1916-1917		1915-1916		1914-1915		1913-1914		1912-1913		1911-1912		1910-1911		1909-1910		1908-1909		1907-1908		1906-1907		1905-1906		1904-1905		1903-1904		1902-1903		1901-1902		1900-1901		1899-1900		1898-1899		1897-1898		1896-1897		1895-1896		1894-1895		1893-1894		1892-1893		1891-1892		1890-1891		1889-1890		1888-1889		1887-1888		1886-1887		1885-1886		1884-1885		1883-1884		1882-1883		1881-1882		1880-1881		1879-1880		1878-1879		1877-1878		1876-1877		1875-1876		1874-1875		1873-1874		1872-1873		1871-1872		1870-1871		1869-1870		1868-1869		1867-1868		1866-1867		1865-1866		1864-1865		1863-1864		1862-1863		1861-1862		1860-1861		1859-1860		1858-1859		1857-1858		1856-1857		1855-1856		1854-1855		1853-1854		1852-1853		1851-1852		1850-1851		1849-1850		1848-1849		1847-1848		1846-1847		1845-1846		1844-1845		1843-1844		1842-1843		1841-1842		1840-1841		1839-1840		1838-1839		1837-1838		1836-1837		1835-1836		1834-1835		1833-1834		1832-1833		1831-1832		1830-1831		1829-1830		1828-1829		1827-1828		1826-1827		1825-1826		1824-1825		1823-1824		1822-1823		1821-1822		1820-1821		1819-1820		1818-1819		1817-1818		1816-1817		1815-1816		1814-1815		1813-1814		1812-1813		1811-1812		1810-1811		1809-1810		1808-1809		1807-1808		1806-1807		1805-1806		1804-1805		1803-1804		1802-1803		1801-1802		1800-1801		1799-1800		1798-1799		1797-1798		1796-1797		1795-1796	
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000																													

Table 67. Azimuthal Magnetic Field (Fresh Water), Frequency = 1.0 MHz, VED Height = 449.52 m

30.0 KM DOMINANCE				10.0 KM DOMINANCE				30.0 KM DOMINANCE				10.0 KM DOMINANCE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
.000	-4.117	-7.15	.000	-0.933	-66.35	.000	-15.820	-31.27	.000	-25.457	-47.77	.000	-25.457	-47.77	.000
.003	-4.162	-8.76	.010	-0.951	-61.27	.030	-15.865	-33.33	.100	-25.470	-48.67	.200	-25.470	-48.67	.300
.006	-4.188	-9.38	.020	-0.965	-57.96	.060	-15.885	-35.44	.300	-25.484	-49.44	.600	-25.484	-49.44	.900
.009	-4.194	-9.59	.030	-0.975	-55.57	.090	-15.895	-36.62	.400	-25.490	-50.14	.700	-25.490	-50.14	1.000
.012	-4.200	-9.68	.040	-0.981	-53.39	.120	-15.900	-37.82	.500	-25.494	-50.74	.800	-25.494	-50.74	1.100
.015	-4.207	-9.75	.050	-0.986	-51.42	.150	-15.905	-39.03	.600	-25.497	-51.24	.900	-25.497	-51.24	1.200
.018	-4.213	-9.80	.060	-0.990	-49.67	.180	-15.910	-40.24	.700	-25.499	-51.64	1.000	-25.499	-51.64	1.300
.021	-4.220	-9.84	.070	-0.994	-48.13	.210	-15.915	-41.45	.800	-25.501	-52.04	1.100	-25.501	-52.04	1.400
.024	-4.226	-9.87	.080	-0.997	-46.71	.240	-15.920	-42.66	.900	-25.503	-52.44	1.200	-25.503	-52.44	1.500
.027	-4.233	-9.90	.090	-0.999	-45.41	.270	-15.925	-43.87	1.000	-25.505	-52.84	1.300	-25.505	-52.84	1.600
.030	-4.240	-9.93	.100	-1.000	-44.21	.300	-15.930	-45.08	1.100	-25.507	-53.24	1.400	-25.507	-53.24	1.700
.033	-4.247	-9.96	.110	-0.997	-43.12	.330	-15.935	-46.29	1.200	-25.509	-53.64	1.500	-25.509	-53.64	1.800
.036	-4.254	-9.99	.120	-0.994	-42.13	.360	-15.940	-47.50	1.300	-25.511	-54.04	1.600	-25.511	-54.04	1.900
.039	-4.261	-10.02	.130	-0.990	-41.24	.390	-15.945	-48.71	1.400	-25.513	-54.44	1.700	-25.513	-54.44	2.000
.042	-4.267	-10.05	.140	-0.985	-40.45	.420	-15.950	-49.92	1.500	-25.515	-54.84	1.800	-25.515	-54.84	2.100
.045	-4.274	-10.08	.150	-0.979	-39.76	.450	-15.955	-51.13	1.600	-25.517	-55.24	1.900	-25.517	-55.24	2.200
.048	-4.280	-10.11	.160	-0.972	-39.17	.480	-15.960	-52.34	1.700	-25.519	-55.64	2.000	-25.519	-55.64	2.300
.051	-4.286	-10.14	.170	-0.964	-38.68	.510	-15.965	-53.55	1.800	-25.521	-56.04	2.100	-25.521	-56.04	2.400
.054	-4.292	-10.17	.180	-0.955	-38.29	.540	-15.970	-54.76	1.900	-25.523	-56.44	2.200	-25.523	-56.44	2.500
.057	-4.298	-10.20	.190	-0.945	-37.90	.570	-15.975	-55.97	2.000	-25.525	-56.84	2.300	-25.525	-56.84	2.600
.060	-4.304	-10.23	.200	-0.934	-37.61	.600	-15.980	-57.18	2.100	-25.527	-57.24	2.400	-25.527	-57.24	2.700
.063	-4.311	-10.26	.210	-0.922	-37.41	.630	-15.985	-58.39	2.200	-25.529	-57.64	2.500	-25.529	-57.64	2.800
.066	-4.317	-10.29	.220	-0.909	-37.31	.660	-15.990	-59.60	2.300	-25.531	-58.04	2.600	-25.531	-58.04	2.900
.069	-4.323	-10.32	.230	-0.895	-37.31	.690	-15.995	-60.81	2.400	-25.533	-58.44	2.700	-25.533	-58.44	3.000
.072	-4.329	-10.35	.240	-0.880	-37.41	.720	-16.000	-62.02	2.500	-25.535	-58.84	2.800	-25.535	-58.84	3.100
.075	-4.335	-10.38	.250	-0.864	-37.61	.750	-16.005	-63.23	2.600	-25.537	-59.24	2.900	-25.537	-59.24	3.200
.078	-4.341	-10.41	.260	-0.847	-37.92	.780	-16.010	-64.44	2.700	-25.539	-59.64	3.000	-25.539	-59.64	3.300
.081	-4.347	-10.44	.270	-0.829	-38.33	.810	-16.015	-65.65	2.800	-25.541	-60.04	3.100	-25.541	-60.04	3.400
.084	-4.353	-10.47	.280	-0.810	-38.84	.840	-16.020	-66.86	2.900	-25.543	-60.44	3.200	-25.543	-60.44	3.500
.087	-4.359	-10.50	.290	-0.790	-39.45	.870	-16.025	-68.07	3.000	-25.545	-60.84	3.300	-25.545	-60.84	3.600
.090	-4.365	-10.53	.300	-0.769	-40.16	.900	-16.030	-69.28	3.100	-25.547	-61.24	3.400	-25.547	-61.24	3.700
.105	-4.363	-10.53	.350	-0.636	-43.43	1.050	-16.035	-70.49	3.500	-25.549	-61.64	3.500	-25.549	-61.64	3.800
.120	-4.363	-10.53	.400	-0.480	-46.60	1.200	-16.040	-71.70	3.600	-25.551	-62.04	3.600	-25.551	-62.04	3.900
.135	-4.363	-10.53	.450	-0.304	-49.77	1.350	-16.045	-72.91	3.700	-25.553	-62.44	3.700	-25.553	-62.44	4.000
.150	-4.363	-10.53	.500	-0.109	-52.94	1.500	-16.050	-74.12	3.800	-25.555	-62.84	3.800	-25.555	-62.84	4.100
.165	-4.363	-10.53	.550	0.096	-56.11	1.650	-16.055	-75.33	3.900	-25.557	-63.24	3.900	-25.557	-63.24	4.200
.180	-4.363	-10.53	.600	0.291	-59.28	1.800	-16.060	-76.54	4.000	-25.559	-63.64	4.000	-25.559	-63.64	4.300
.195	-4.363	-10.53	.650	0.486	-62.45	1.950	-16.065	-77.75	4.100	-25.561	-64.04	4.100	-25.561	-64.04	4.400
.210	-4.363	-10.53	.700	0.681	-65.62	2.100	-16.070	-78.96	4.200	-25.563	-64.44	4.200	-25.563	-64.44	4.500
.225	-4.363	-10.53	.750	0.876	-68.79	2.250	-16.075	-80.17	4.300	-25.565	-64.84	4.300	-25.565	-64.84	4.600
.240	-4.363	-10.53	.800	1.071	-71.96	2.400	-16.080	-81.38	4.400	-25.567	-65.24	4.400	-25.567	-65.24	4.700
.255	-4.363	-10.53	.850	1.266	-74.73	2.550	-16.085	-82.59	4.500	-25.569	-65.64	4.500	-25.569	-65.64	4.800
.270	-4.363	-10.53	.900	1.461	-77.50	2.700	-16.090	-83.80	4.600	-25.571	-66.04	4.600	-25.571	-66.04	4.900
.285	-4.363	-10.53	.950	1.656	-80.27	2.850	-16.095	-85.01	4.700	-25.573	-66.44	4.700	-25.573	-66.44	5.000
.300	-4.363	-10.53	1.000	1.851	-83.04	3.000	-16.100	-86.22	4.800	-25.575	-66.84	4.800	-25.575	-66.84	5.100

Table 68. Azimuthal Magnetic Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.000	-16.700	-76.99	0.000	-26.366	-84.60	0.000	-37.812	-89.06	0.000	-48.262	-90.61	0.000	-48.262	-90.61	0.000	-48.262	-90.61		
.003	-16.690	-69.06	.010	-26.162	-71.16	.030	-36.155	-84.15	.100	-46.867	-82.34	.200	-46.867	-82.34	.300	-46.867	-82.34		
.006	-16.636	-63.15	.020	-27.372	-60.10	.060	-36.714	-84.73	.120	-46.659	-84.08	.180	-46.659	-84.08	.240	-46.659	-84.08		
.009	-16.536	-61.40	.030	-26.748	-50.10	.090	-36.824	-84.64	.150	-46.978	-84.64	.210	-46.978	-84.64	.270	-46.978	-84.64		
.012	-16.494	-57.61	.040	-26.824	-42.60	.120	-36.859	-84.64	.180	-46.978	-84.64	.240	-46.978	-84.64	.300	-46.978	-84.64		
.015	-16.443	-54.39	.050	-26.886	-36.44	.150	-36.859	-84.64	.210	-46.978	-84.64	.270	-46.978	-84.64	.330	-46.978	-84.64		
.018	-16.357	-51.15	.060	-26.886	-31.55	.180	-36.859	-84.64	.240	-46.978	-84.64	.300	-46.978	-84.64	.360	-46.978	-84.64		
.021	-16.250	-48.11	.070	-26.824	-27.64	.210	-36.859	-84.64	.270	-46.978	-84.64	.330	-46.978	-84.64	.390	-46.978	-84.64		
.024	-16.126	-45.27	.080	-26.824	-21.85	.240	-36.859	-84.64	.300	-46.978	-84.64	.360	-46.978	-84.64	.420	-46.978	-84.64		
.027	-16.000	-42.61	.090	-26.824	-16.67	.270	-36.859	-84.64	.330	-46.978	-84.64	.390	-46.978	-84.64	.450	-46.978	-84.64		
.030	-15.875	-40.14	.100	-26.824	-11.84	.300	-36.859	-84.64	.360	-46.978	-84.64	.420	-46.978	-84.64	.480	-46.978	-84.64		
.033	-15.751	-37.65	.110	-26.824	-6.60	.330	-36.859	-84.64	.390	-46.978	-84.64	.450	-46.978	-84.64	.510	-46.978	-84.64		
.036	-15.627	-35.17	.120	-26.824	-1.36	.360	-36.859	-84.64	.420	-46.978	-84.64	.480	-46.978	-84.64	.540	-46.978	-84.64		
.039	-15.503	-32.70	.130	-26.824	3.88	.390	-36.859	-84.64	.450	-46.978	-84.64	.510	-46.978	-84.64	.570	-46.978	-84.64		
.042	-15.379	-30.21	.140	-26.824	9.13	.420	-36.859	-84.64	.480	-46.978	-84.64	.540	-46.978	-84.64	.600	-46.978	-84.64		
.045	-15.255	-27.72	.150	-26.824	14.38	.450	-36.859	-84.64	.510	-46.978	-84.64	.570	-46.978	-84.64	.630	-46.978	-84.64		
.048	-15.131	-25.23	.160	-26.824	19.63	.480	-36.859	-84.64	.540	-46.978	-84.64	.600	-46.978	-84.64	.660	-46.978	-84.64		
.051	-15.007	-22.74	.170	-26.824	24.88	.510	-36.859	-84.64	.570	-46.978	-84.64	.630	-46.978	-84.64	.690	-46.978	-84.64		
.054	-14.883	-20.25	.180	-26.824	30.13	.540	-36.859	-84.64	.600	-46.978	-84.64	.660	-46.978	-84.64	.720	-46.978	-84.64		
.057	-14.759	-17.76	.190	-26.824	35.38	.570	-36.859	-84.64	.630	-46.978	-84.64	.690	-46.978	-84.64	.750	-46.978	-84.64		
.060	-14.635	-15.27	.200	-26.824	40.63	.600	-36.859	-84.64	.660	-46.978	-84.64	.720	-46.978	-84.64	.780	-46.978	-84.64		
.063	-14.511	-12.78	.210	-26.824	45.88	.630	-36.859	-84.64	.690	-46.978	-84.64	.750	-46.978	-84.64	.810	-46.978	-84.64		
.066	-14.387	-10.29	.220	-26.824	51.13	.660	-36.859	-84.64	.720	-46.978	-84.64	.780	-46.978	-84.64	.840	-46.978	-84.64		
.069	-14.263	-7.80	.230	-26.824	56.38	.690	-36.859	-84.64	.750	-46.978	-84.64	.810	-46.978	-84.64	.870	-46.978	-84.64		
.072	-14.139	-5.31	.240	-26.824	61.63	.720	-36.859	-84.64	.780	-46.978	-84.64	.840	-46.978	-84.64	.900	-46.978	-84.64		
.075	-14.015	-2.82	.250	-26.824	66.88	.750	-36.859	-84.64	.810	-46.978	-84.64	.870	-46.978	-84.64	.930	-46.978	-84.64		
.078	-13.891	-0.33	.260	-26.824	72.13	.780	-36.859	-84.64	.840	-46.978	-84.64	.900	-46.978	-84.64					
.081	-13.767	2.16	.270	-26.824	77.38	.810	-36.859	-84.64	.870	-46.978	-84.64								
.084	-13.643	4.67	.280	-26.824	82.63	.840	-36.859	-84.64											
.087	-13.519	7.18	.290	-26.824	87.88	.870	-36.859	-84.64											
.090	-13.395	9.69	.300	-26.824	93.13	.900	-36.859	-84.64											
.105	-14.857	-12.46	.350	-26.824	108.38														
.120	-16.319	-10.47	.400	-26.824	123.63														
.135	-17.781	-8.48	.450	-26.824	138.88														
.150	-19.243	-6.49	.500	-26.824	154.13														
.165	-20.705	-4.50	.550	-26.824	169.38														
.180	-22.167	-2.51	.600	-26.824	184.63														
.195	-23.629	-0.52	.650	-26.824	199.88														
.210	-25.091	1.47	.700	-26.824	215.13														
.225	-26.553	3.48	.750	-26.824	230.38														
.240	-28.015	5.49	.800	-26.824	245.63														
.255	-29.477	7.50	.850	-26.824	260.88														
.270	-30.939	9.51	.900	-26.824	276.13														
.285	-32.401	11.52	.950	-26.824	291.38														
.300	-33.863	13.53	1.000	-26.824	306.63														

Table 69. Azimuthal Magnetic Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.000	-17.742	-46.04	0.000	-7.384	-57.21	0.000	-36.811	-61.45	0.000	-47.253	-62.88
0.003	-17.727	-46.72	0.010	-7.178	-44.47	0.030	-35.153	-29.53	0.100	-39.272	4.24
0.006	-17.669	-38.63	0.030	-6.388	-23.09	0.060	-32.252	-7.11	0.200	-33.858	15.40
0.009	-17.573	-35.08	0.040	-5.764	-15.30	0.090	-29.713	2.94	0.300	-30.517	19.38
0.012	-17.442	-31.48	0.050	-5.240	-7.13	0.120	-27.654	8.74	0.400	-28.131	21.41
0.015	-17.282	-28.06	0.060	-4.840	-4.24	0.150	-25.978	12.44	0.500	-26.285	22.63
0.018	-17.097	-24.82	0.070	-4.548	-1.31	0.180	-24.572	14.98	0.600	-24.786	23.45
0.021	-16.892	-21.77	0.080	-4.351	2.87	0.210	-23.321	16.83	0.700	-23.527	24.03
0.024	-16.671	-18.92	0.090	-4.251	5.44	0.240	-22.140	17.34	0.800	-22.445	24.47
0.027	-16.438	-16.26	0.100	-4.245	7.67	0.270	-21.046	17.34	0.900	-21.448	24.82
0.030	-16.197	-13.76	0.110	-4.333	9.51	0.300	-20.055	16.22	1.000	-20.659	25.10
0.033	-15.951	-11.47	0.120	-4.500	11.08	0.330	-19.175	14.94	1.100	-19.905	25.32
0.036	-15.701	-9.33	0.130	-4.713	12.43	0.360	-18.367	13.55	1.200	-19.223	25.51
0.039	-15.451	-7.34	0.140	-4.957	13.61	0.390	-17.621	12.06	1.300	-18.602	25.68
0.042	-15.201	-5.50	0.150	-5.218	14.64	0.420	-16.937	10.50	1.400	-18.031	25.82
0.045	-14.953	-3.79	0.160	-5.493	15.54	0.450	-16.315	8.89	1.500	-17.504	25.94
0.048	-14.708	-2.20	0.170	-5.773	16.35	0.480	-15.749	7.22	1.600	-17.015	26.05
0.051	-14.466	-0.72	0.180	-6.052	17.07	0.510	-15.230	5.50	1.700	-16.560	26.14
0.054	-14.230	0.85	0.190	-6.336	17.72	0.540	-14.751	3.78	1.800	-16.134	26.23
0.057	-13.998	2.43	0.200	-6.624	18.31	0.570	-14.312	2.02	1.900	-15.735	26.31
0.060	-13.771	4.04	0.210	-6.915	18.84	0.600	-13.906	0.24	2.000	-15.360	26.38
0.063	-13.550	5.68	0.220	-7.208	19.32	0.630	-13.533	-1.47	2.100	-15.006	26.45
0.066	-13.334	7.34	0.230	-7.503	19.76	0.660	-13.194	-3.17	2.200	-14.672	26.51
0.069	-13.124	9.03	0.240	-7.799	20.17	0.690	-12.888	-4.82	2.300	-14.355	26.57
0.072	-12.919	10.74	0.250	-8.096	20.54	0.720	-12.606	-6.42	2.400	-14.055	26.62
0.075	-12.720	12.43	0.260	-8.394	20.89	0.750	-12.347	-7.97	2.500	-13.769	26.67
0.078	-12.526	14.14	0.270	-8.693	21.21	0.780	-12.112	-9.48	2.600	-13.497	26.72
0.081	-12.337	15.84	0.280	-8.993	21.51	0.810	-11.899	-10.94	2.700	-13.237	26.76
0.084	-12.154	17.54	0.290	-9.294	21.79	0.840	-11.706	-12.36	2.800	-12.989	26.81
0.087	-11.976	19.24	0.300	-9.596	22.05	0.870	-11.533	-13.72	2.900	-12.752	26.85
0.090	-11.803	20.94				0.900	-11.380	-15.02	3.000	-12.525	26.89
0.105	-11.009	14.31	0.350	-11.484	23.13	1.050	-11.520	26.03	3.500	-11.519	27.07
0.120	-10.420	16.40	0.400	-10.667	23.95	1.200	-10.684	26.37	4.000	-10.687	27.22
0.135	-9.714	18.07	0.450	-9.977	24.60	1.350	-9.990	26.65	4.500	-9.987	27.37
0.150	-9.145	19.43	0.500	-9.386	25.13	1.500	-9.394	26.89	5.000	-9.390	27.52
0.165	-8.736	20.56	0.550	-8.880	25.58	1.650	-8.882	27.12	5.500	-8.878	27.66
0.180	-8.352	21.52	0.600	-8.440	25.98	1.800	-8.438	27.33	6.000	-8.434	27.81
0.195	-7.977	22.34	0.650	-8.057	26.34	1.950	-8.050	27.54	6.500	-8.048	27.96
0.210	-7.665	23.07	0.700	-7.723	26.66	2.100	-7.716	27.74	7.000	-7.711	28.11
0.225	-7.390	23.72	0.750	-7.430	26.97	2.250	-7.422	27.94	7.500	-7.417	28.28
0.240	-7.148	24.30	0.800	-7.175	27.27	2.400	-7.166	28.14	8.000	-7.161	28.45
0.255	-6.937	24.84	0.850	-6.952	27.55	2.550	-6.942	28.35	8.500	-6.937	28.63
0.270	-6.752	25.34	0.900	-6.758	27.83	2.700	-6.747	28.56	9.000	-6.742	28.82
0.285	-6.593	25.81	0.950	-6.591	28.11	2.850	-6.579	28.78	9.500	-6.574	29.01
0.300	-6.455	26.25	1.000	-6.447	28.39	3.000	-6.435	29.01	10.000	-6.430	29.22

Table 70. Azimuthal Magnetic Field (Fresh Water), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
0.000	-15.894	-30.64	0.000	-25.357	-19.37	0.000	-34.704	-42.80	0.000	-45.113	-44.07	0.000	-45.113	-44.07	0.000
0.003	-15.878	-26.26	0.010	-25.151	-26.33	0.030	-33.045	-47.89	0.100	-31.719	34.22	0.200	-31.719	34.22	0.300
0.006	-15.861	-22.38	0.020	-24.962	-14.66	0.060	-30.145	11.54	0.100	-27.606	21.60	0.200	-27.606	21.60	0.300
0.009	-15.726	-18.62	0.030	-23.739	-4.93	0.090	-27.606	21.60	0.120	-25.553	27.41	0.200	-25.553	27.41	0.300
0.012	-15.598	-15.61	0.040	-22.817	2.67	0.120	-25.553	27.41	0.150	-23.874	31.11	0.200	-23.874	31.11	0.300
0.015	-15.441	-11.57	0.050	-21.881	9.05	0.150	-23.874	31.11	0.180	-22.469	33.67	0.200	-22.469	33.67	0.300
0.018	-15.260	-8.32	0.060	-20.978	13.96	0.180	-22.469	33.67	0.210	-21.270	35.53	0.200	-21.270	35.53	0.300
0.021	-15.060	-5.25	0.070	-20.128	17.91	0.210	-21.270	35.53	0.240	-20.226	36.95	0.200	-20.226	36.95	0.300
0.024	-14.844	-2.38	0.080	-19.336	21.11	0.240	-20.226	36.95	0.270	-19.311	38.06	0.200	-19.311	38.06	0.300
0.027	-14.616	0.31	0.090	-18.602	23.75	0.270	-19.311	38.06	0.300	-18.493	38.96	0.200	-18.493	38.96	0.300
0.030	-14.381	3.03	0.100	-17.923	25.95	0.300	-18.493	38.96	0.330	-17.757	39.70	0.200	-17.757	39.70	0.300
0.033	-14.140	5.16	0.110	-17.294	27.62	0.330	-17.757	39.70	0.360	-17.089	40.33	0.200	-17.089	40.33	0.300
0.036	-13.896	7.34	0.120	-16.710	29.41	0.360	-17.089	40.33	0.390	-16.480	40.86	0.200	-16.480	40.86	0.300
0.039	-13.652	9.37	0.130	-16.168	30.79	0.390	-16.480	40.86	0.420	-15.920	41.32	0.200	-15.920	41.32	0.300
0.042	-13.408	11.25	0.140	-15.662	31.99	0.420	-15.920	41.32	0.450	-15.403	41.73	0.200	-15.403	41.73	0.300
0.045	-13.167	13.00	0.150	-15.190	33.05	0.450	-15.403	41.73	0.480	-14.924	42.09	0.200	-14.924	42.09	0.300
0.048	-12.929	14.64	0.160	-14.747	33.99	0.480	-14.924	42.09	0.510	-14.478	42.41	0.200	-14.478	42.41	0.300
0.051	-12.695	16.16	0.170	-14.332	34.83	0.510	-14.478	42.41	0.540	-14.061	42.70	0.200	-14.061	42.70	0.300
0.054	-12.466	17.59	0.180	-13.942	35.58	0.540	-14.061	42.70	0.570	-13.671	42.96	0.200	-13.671	42.96	0.300
0.057	-12.242	18.92	0.190	-13.574	36.26	0.570	-13.671	42.96	0.600	-13.304	43.21	0.200	-13.304	43.21	0.300
0.060	-12.023	20.16	0.200	-13.227	36.88	0.600	-13.304	43.21	0.630	-12.959	43.43	0.200	-12.959	43.43	0.300
0.063	-11.810	21.33	0.210	-12.896	37.45	0.630	-12.959	43.43	0.660	-12.633	43.64	0.200	-12.633	43.64	0.300
0.066	-11.602	22.42	0.220	-12.587	37.97	0.660	-12.633	43.64	0.690	-12.325	43.84	0.200	-12.325	43.84	0.300
0.069	-11.400	23.45	0.230	-12.292	38.45	0.690	-12.325	43.84	0.720	-12.034	44.02	0.200	-12.034	44.02	0.300
0.072	-11.205	24.42	0.240	-12.011	38.90	0.720	-12.034	44.02	0.750	-11.757	44.20	0.200	-11.757	44.20	0.300
0.075	-11.015	25.34	0.250	-11.744	39.32	0.750	-11.757	44.20	0.780	-11.495	44.36	0.200	-11.495	44.36	0.300
0.078	-10.831	26.20	0.260	-11.491	39.70	0.780	-11.495	44.36	0.810	-11.245	44.52	0.200	-11.245	44.52	0.300
0.081	-10.652	27.02	0.270	-11.244	40.07	0.810	-11.245	44.52	0.840	-11.007	44.67	0.200	-11.007	44.67	0.300
0.084	-10.479	27.79	0.280	-11.011	40.41	0.840	-11.007	44.67	0.870	-10.780	44.82	0.200	-10.780	44.82	0.300
0.087	-10.312	28.53	0.290	-10.797	40.74	0.870	-10.780	44.82	0.900	-10.563	44.96	0.200	-10.563	44.96	0.300
0.090	-10.149	29.23	0.300	-10.586	41.05	0.900	-10.563	44.96							
0.105	-9.414	32.28	0.350	-9.858	42.39	1.050	-9.814	45.62							
0.120	-8.791	34.75	0.400	-9.494	43.51	1.200	-9.494	46.24							
0.135	-8.266	36.84	0.450	-9.286	44.51	1.350	-9.286	46.84							
0.150	-7.826	38.65	0.500	-9.178	45.43	1.500	-9.178	47.46							
0.165	-7.459	40.28	0.550	-9.160	46.31	1.650	-9.160	48.09							
0.180	-7.158	41.79	0.600	-9.143	47.19	1.800	-9.143	48.77							
0.195	-6.914	43.21	0.650	-9.126	48.08	1.950	-9.126	49.44							
0.210	-6.721	44.54	0.700	-9.109	48.96	2.100	-9.109	50.26							
0.225	-6.576	45.96	0.750	-9.092	49.87	2.250	-9.092	51.10							
0.240	-6.473	47.32	0.800	-9.075	50.77	2.400	-9.075	52.00							
0.255	-6.404	48.71	0.850	-9.058	51.69	2.550	-9.058	52.98							
0.270	-6.361	50.15	0.900	-9.041	52.60	2.700	-9.041	54.05							
0.285	-6.346	51.64	0.950	-9.024	53.49	2.850	-9.024	55.20							
0.300	-6.342	53.20	1.000	-9.014	55.76	3.000	-9.014	56.46							

Table 71. Azimuthal Magnetic Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM DOWNRANGE			3.0 KM DOWNRANGE			10.0 KM DOWNRANGE			30.0 KM DOWNRANGE		
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
.000	-26.366	-63.64	.000	-37.621	-67.92	.000	-48.266	-89.46	.000	-57.807	-89.91
.001	-26.163	-70.68	.003	-36.122	-53.19	.010	-40.253	-22.83	.030	-40.907	-8.06
.002	-27.559	-59.04	.006	-33.220	-53.96	.020	-34.852	-11.74	.060	-35.029	-8.01
.003	-26.721	-49.46	.009	-30.687	-24.01	.030	-31.515	-7.77	.090	-31.596	-2.65
.004	-25.799	-41.75	.012	-28.637	-18.26	.040	-29.132	-2.76	.120	-24.178	-1.97
.005	-24.661	-35.65	.015	-26.960	-14.59	.050	-27.287	-4.55	.150	-27.317	-1.56
.006	-23.956	-30.82	.018	-25.557	-12.07	.060	-25.786	-3.74	.180	-25.609	-1.29
.007	-23.104	-26.94	.021	-24.357	-10.23	.070	-24.529	-3.16	.210	-24.544	-1.10
.008	-22.510	-23.60	.024	-23.313	-8.84	.080	-23.447	-2.73	.240	-23.458	-0.95
.009	-21.974	-21.21	.027	-22.393	-7.76	.090	-22.499	-2.39	.270	-22.509	-0.84
.010	-20.692	-19.06	.030	-21.572	-6.89	.100	-21.658	-2.13	.300	-21.666	-0.75
.011	-20.260	-17.24	.033	-20.832	-6.17	.110	-20.904	-1.91	.330	-20.910	-0.67
.012	-19.672	-15.69	.036	-20.160	-5.58	.120	-20.220	-1.73	.360	-20.225	-0.61
.013	-19.143	-14.36	.039	-19.545	-5.08	.130	-19.596	-1.57	.390	-19.601	-0.56
.014	-18.614	-13.21	.042	-18.979	-4.65	.140	-19.023	-1.44	.420	-19.027	-0.52
.015	-18.136	-12.20	.045	-18.456	-4.27	.150	-18.499	-1.33	.450	-18.497	-0.48
.016	-17.667	-11.31	.048	-17.969	-3.95	.160	-18.003	-1.23	.480	-18.006	-0.45
.017	-17.205	-10.52	.051	-17.515	-3.67	.170	-17.545	-1.14	.510	-17.548	-0.42
.018	-16.867	-9.81	.054	-17.090	-3.41	.180	-17.117	-1.07	.540	-17.119	-0.39
.019	-16.491	-9.16	.057	-16.691	-3.19	.190	-16.715	-1.00	.570	-16.717	-0.37
.020	-16.135	-8.61	.060	-16.315	-2.94	.200	-16.337	-0.94	.600	-16.339	-0.35
.021	-15.797	-8.10	.063	-15.960	-2.68	.210	-15.980	-0.88	.630	-15.981	-0.33
.022	-15.476	-7.63	.066	-15.624	-2.44	.220	-15.642	-0.83	.660	-15.643	-0.31
.023	-15.170	-7.21	.069	-15.305	-2.24	.230	-15.321	-0.79	.690	-15.323	-0.30
.024	-14.876	-6.82	.072	-15.002	-2.05	.240	-15.017	-0.74	.720	-15.018	-0.28
.025	-14.600	-6.46	.075	-14.714	-1.87	.250	-14.727	-0.71	.750	-14.728	-0.27
.026	-14.334	-6.13	.078	-14.438	-1.72	.260	-14.451	-0.67	.780	-14.452	-0.26
.027	-14.079	-5.83	.081	-14.175	-1.57	.270	-14.187	-0.64	.810	-14.188	-0.25
.028	-13.834	-5.55	.084	-13.924	-1.41	.280	-13.934	-0.61	.840	-13.935	-0.24
.029	-13.600	-5.29	.087	-13.683	-1.26	.290	-13.692	-0.58	.870	-13.693	-0.23
.030	-13.375	-5.04	.090	-13.451	-1.14	.300	-13.460	-0.56	.900	-13.461	-0.22
.035	-12.4367	-4.05	.105	-12.422	-1.40	.350	-12.426	-0.45	1.050	-12.428	-0.18
.040	-11.950	-3.30	.120	-11.960	-1.15	.400	-11.965	-0.38	1.200	-11.968	-0.16
.045	-10.796	-2.75	.135	-10.826	-0.97	.450	-10.829	-0.32	1.350	-10.830	-0.14
.050	-10.167	-2.36	.150	-10.191	-0.82	.500	-10.193	-0.28	1.500	-10.194	-0.12
.055	-9.617	-2.03	.165	-9.635	-0.71	.550	-9.637	-0.24	1.650	-9.637	-0.11
.060	-9.129	-1.76	.180	-9.143	-0.62	.600	-9.145	-0.21	1.800	-9.145	-0.10
.065	-8.694	-1.53	.195	-8.706	-0.54	.650	-8.707	-0.19	1.950	-8.707	-0.09
.070	-8.303	-1.35	.210	-8.313	-0.48	.700	-8.314	-0.17	2.100	-8.314	-0.08
.075	-7.950	-1.20	.225	-7.958	-0.43	.750	-7.959	-0.15	2.250	-7.959	-0.08
.080	-7.629	-1.07	.240	-7.636	-0.38	.800	-7.637	-0.14	2.400	-7.637	-0.07
.085	-7.337	-0.96	.255	-7.343	-0.34	.850	-7.343	-0.13	2.550	-7.343	-0.07
.090	-7.069	-0.86	.270	-7.074	-0.31	.900	-7.075	-0.12	2.700	-7.075	-0.06
.095	-6.823	-0.76	.285	-6.827	-0.28	.950	-6.828	-0.11	2.850	-6.828	-0.06
.100	-6.597	-0.71	.300	-6.600	-0.26	1.000	-6.601	-0.10	3.000	-6.601	-0.06

Table 72. Azimuthal Magnetic Field (Fresh Water), Frequency 100.0 MHz, VED Height = 2.25 m

10.0 KM DOWNRANGE			30.0 KM DOWNRANGE			50.0 KM DOWNRANGE			70.0 KM DOWNRANGE		
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
.00	-27.308	-56.51	.00	-36.784	-65.83	.00	-46.084	-75.17	.00	-56.084	-84.51
.01	-27.143	-56.51	.01	-36.619	-65.83	.01	-45.919	-75.17	.01	-55.919	-84.51
.02	-26.978	-56.51	.02	-36.454	-65.83	.02	-45.754	-75.17	.02	-55.754	-84.51
.03	-26.813	-56.51	.03	-36.289	-65.83	.03	-45.589	-75.17	.03	-55.589	-84.51
.04	-26.648	-56.51	.04	-36.124	-65.83	.04	-45.424	-75.17	.04	-55.424	-84.51
.05	-26.483	-56.51	.05	-35.959	-65.83	.05	-45.259	-75.17	.05	-55.259	-84.51
.06	-26.318	-56.51	.06	-35.794	-65.83	.06	-45.094	-75.17	.06	-55.094	-84.51
.07	-26.153	-56.51	.07	-35.629	-65.83	.07	-44.929	-75.17	.07	-54.929	-84.51
.08	-25.988	-56.51	.08	-35.464	-65.83	.08	-44.764	-75.17	.08	-54.764	-84.51
.09	-25.823	-56.51	.09	-35.299	-65.83	.09	-44.599	-75.17	.09	-54.599	-84.51
.10	-25.658	-56.51	.10	-35.134	-65.83	.10	-44.434	-75.17	.10	-54.434	-84.51
.11	-25.493	-56.51	.11	-34.969	-65.83	.11	-44.269	-75.17	.11	-54.269	-84.51
.12	-25.328	-56.51	.12	-34.804	-65.83	.12	-44.104	-75.17	.12	-54.104	-84.51
.13	-25.163	-56.51	.13	-34.639	-65.83	.13	-43.939	-75.17	.13	-53.939	-84.51
.14	-25.000	-56.51	.14	-34.474	-65.83	.14	-43.774	-75.17	.14	-53.774	-84.51
.15	-24.835	-56.51	.15	-34.309	-65.83	.15	-43.609	-75.17	.15	-53.609	-84.51
.16	-24.670	-56.51	.16	-34.144	-65.83	.16	-43.444	-75.17	.16	-53.444	-84.51
.17	-24.505	-56.51	.17	-33.979	-65.83	.17	-43.279	-75.17	.17	-53.279	-84.51
.18	-24.340	-56.51	.18	-33.814	-65.83	.18	-43.114	-75.17	.18	-53.114	-84.51
.19	-24.175	-56.51	.19	-33.649	-65.83	.19	-42.949	-75.17	.19	-52.949	-84.51
.20	-24.010	-56.51	.20	-33.484	-65.83	.20	-42.784	-75.17	.20	-52.784	-84.51
.21	-23.845	-56.51	.21	-33.319	-65.83	.21	-42.619	-75.17	.21	-52.619	-84.51
.22	-23.680	-56.51	.22	-33.154	-65.83	.22	-42.454	-75.17	.22	-52.454	-84.51
.23	-23.515	-56.51	.23	-32.989	-65.83	.23	-42.289	-75.17	.23	-52.289	-84.51
.24	-23.350	-56.51	.24	-32.824	-65.83	.24	-42.124	-75.17	.24	-52.124	-84.51
.25	-23.185	-56.51	.25	-32.659	-65.83	.25	-41.959	-75.17	.25	-51.959	-84.51
.26	-23.020	-56.51	.26	-32.494	-65.83	.26	-41.794	-75.17	.26	-51.794	-84.51
.27	-22.855	-56.51	.27	-32.329	-65.83	.27	-41.629	-75.17	.27	-51.629	-84.51
.28	-22.690	-56.51	.28	-32.164	-65.83	.28	-41.464	-75.17	.28	-51.464	-84.51
.29	-22.525	-56.51	.29	-31.999	-65.83	.29	-41.299	-75.17	.29	-51.299	-84.51
.30	-22.360	-56.51	.30	-31.834	-65.83	.30	-41.134	-75.17	.30	-51.134	-84.51
.35	-21.440	-56.51	.35	-30.914	-65.83	.35	-40.214	-75.17	.35	-50.214	-84.51
.40	-20.520	-56.51	.40	-29.994	-65.83	.40	-39.294	-75.17	.40	-49.294	-84.51
.45	-19.600	-56.51	.45	-29.074	-65.83	.45	-38.374	-75.17	.45	-48.374	-84.51
.50	-18.680	-56.51	.50	-28.154	-65.83	.50	-37.454	-75.17	.50	-47.454	-84.51
.55	-17.760	-56.51	.55	-27.234	-65.83	.55	-36.534	-75.17	.55	-46.534	-84.51
.60	-16.840	-56.51	.60	-26.314	-65.83	.60	-35.614	-75.17	.60	-45.614	-84.51
.65	-15.920	-56.51	.65	-25.394	-65.83	.65	-34.694	-75.17	.65	-44.694	-84.51
.70	-15.000	-56.51	.70	-24.474	-65.83	.70	-33.774	-75.17	.70	-43.774	-84.51
.75	-14.080	-56.51	.75	-23.554	-65.83	.75	-32.854	-75.17	.75	-42.854	-84.51
.80	-13.160	-56.51	.80	-22.634	-65.83	.80	-31.934	-75.17	.80	-41.934	-84.51
.85	-12.240	-56.51	.85	-21.714	-65.83	.85	-31.014	-75.17	.85	-41.014	-84.51
.90	-11.320	-56.51	.90	-20.794	-65.83	.90	-30.094	-75.17	.90	-40.094	-84.51
.95	-10.400	-56.51	.95	-19.874	-65.83	.95	-29.174	-75.17	.95	-39.174	-84.51
1.00	-9.480	-56.51	1.00	-18.954	-65.83	1.00	-28.254	-75.17	1.00	-38.254	-84.51

Table 73. Azimuthal Magnetic Field (Fresh Water), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)
0.000	-25.356	-30.555	0.000	-34.060	-41.96	0.000	-45.072	-43.22	0.000	-54.602	-43.58	0.000	-54.602	-43.58	0.000
0.01	-25.100	-29.534	0.01	-33.808	-41.23	0.01	-44.819	-42.42	0.01	-54.350	-42.86	0.01	-54.350	-42.86	0.01
0.02	-24.844	-28.513	0.02	-33.556	-40.50	0.02	-44.567	-41.61	0.02	-54.092	-42.13	0.02	-54.092	-42.13	0.02
0.03	-24.588	-27.492	0.03	-33.304	-39.77	0.03	-44.315	-40.80	0.03	-53.834	-41.40	0.03	-53.834	-41.40	0.03
0.04	-24.332	-26.471	0.04	-33.052	-39.04	0.04	-44.063	-40.00	0.04	-53.576	-40.68	0.04	-53.576	-40.68	0.04
0.05	-24.076	-25.450	0.05	-32.800	-38.31	0.05	-43.811	-39.25	0.05	-53.318	-39.95	0.05	-53.318	-39.95	0.05
0.06	-23.820	-24.429	0.06	-32.548	-37.58	0.06	-43.559	-38.50	0.06	-53.060	-39.22	0.06	-53.060	-39.22	0.06
0.07	-23.564	-23.408	0.07	-32.296	-36.85	0.07	-43.307	-37.75	0.07	-52.802	-38.49	0.07	-52.802	-38.49	0.07
0.08	-23.308	-22.387	0.08	-32.044	-36.12	0.08	-43.055	-37.00	0.08	-52.544	-37.76	0.08	-52.544	-37.76	0.08
0.09	-23.052	-21.366	0.09	-31.792	-35.39	0.09	-42.803	-36.25	0.09	-52.286	-37.03	0.09	-52.286	-37.03	0.09
0.10	-22.796	-20.345	0.10	-31.540	-34.66	0.10	-42.551	-35.50	0.10	-52.028	-36.30	0.10	-52.028	-36.30	0.10
0.11	-22.540	-19.324	0.11	-31.288	-33.93	0.11	-42.299	-34.75	0.11	-51.770	-35.57	0.11	-51.770	-35.57	0.11
0.12	-22.284	-18.303	0.12	-31.036	-33.20	0.12	-42.047	-34.00	0.12	-51.512	-34.84	0.12	-51.512	-34.84	0.12
0.13	-22.028	-17.282	0.13	-30.784	-32.47	0.13	-41.795	-33.25	0.13	-51.254	-34.11	0.13	-51.254	-34.11	0.13
0.14	-21.772	-16.261	0.14	-30.532	-31.74	0.14	-41.543	-32.50	0.14	-51.000	-33.38	0.14	-51.000	-33.38	0.14
0.15	-21.516	-15.240	0.15	-30.280	-31.01	0.15	-41.291	-31.75	0.15	-50.742	-32.65	0.15	-50.742	-32.65	0.15
0.16	-21.260	-14.219	0.16	-30.028	-30.28	0.16	-41.039	-31.00	0.16	-50.484	-31.92	0.16	-50.484	-31.92	0.16
0.17	-21.004	-13.198	0.17	-29.776	-29.55	0.17	-40.787	-30.25	0.17	-50.226	-31.19	0.17	-50.226	-31.19	0.17
0.18	-20.748	-12.177	0.18	-29.524	-28.82	0.18	-40.535	-29.50	0.18	-49.968	-30.46	0.18	-49.968	-30.46	0.18
0.19	-20.492	-11.156	0.19	-29.272	-28.09	0.19	-40.283	-28.75	0.19	-49.710	-29.73	0.19	-49.710	-29.73	0.19
0.20	-20.236	-10.135	0.20	-29.020	-27.36	0.20	-40.031	-28.00	0.20	-49.452	-29.00	0.20	-49.452	-29.00	0.20
0.21	-19.980	-9.114	0.21	-28.768	-26.63	0.21	-39.779	-27.25	0.21	-49.194	-28.27	0.21	-49.194	-28.27	0.21
0.22	-19.724	-8.093	0.22	-28.516	-25.90	0.22	-39.527	-26.50	0.22	-48.936	-27.54	0.22	-48.936	-27.54	0.22
0.23	-19.468	-7.072	0.23	-28.264	-25.17	0.23	-39.275	-25.75	0.23	-48.678	-26.81	0.23	-48.678	-26.81	0.23
0.24	-19.212	-6.051	0.24	-28.012	-24.44	0.24	-39.023	-25.00	0.24	-48.420	-26.08	0.24	-48.420	-26.08	0.24
0.25	-18.956	-5.030	0.25	-27.760	-23.71	0.25	-38.771	-24.25	0.25	-48.162	-25.35	0.25	-48.162	-25.35	0.25
0.26	-18.700	-4.009	0.26	-27.508	-22.98	0.26	-38.519	-23.50	0.26	-47.904	-24.62	0.26	-47.904	-24.62	0.26
0.27	-18.444	-2.988	0.27	-27.256	-22.25	0.27	-38.267	-22.75	0.27	-47.646	-23.89	0.27	-47.646	-23.89	0.27
0.28	-18.188	-1.967	0.28	-27.004	-21.52	0.28	-38.015	-22.00	0.28	-47.388	-23.16	0.28	-47.388	-23.16	0.28
0.29	-17.932	-0.946	0.29	-26.752	-20.79	0.29	-37.763	-21.25	0.29	-47.130	-22.43	0.29	-47.130	-22.43	0.29
0.30	-17.676	0.075	0.30	-26.500	-20.06	0.30	-37.511	-20.50	0.30	-46.872	-21.70	0.30	-46.872	-21.70	0.30
0.35	-16.611	4.633	0.35	-25.435	-19.03	0.35	-36.445	-19.47	0.35	-45.806	-20.67	0.35	-45.806	-20.67	0.35
0.40	-15.546	9.186	0.40	-24.370	-18.00	0.40	-35.380	-18.44	0.40	-44.740	-19.64	0.40	-44.740	-19.64	0.40
0.45	-14.481	13.739	0.45	-23.305	-16.97	0.45	-34.315	-17.41	0.45	-43.675	-18.61	0.45	-43.675	-18.61	0.45
0.50	-13.416	18.292	0.50	-22.240	-15.94	0.50	-33.250	-16.38	0.50	-42.610	-17.58	0.50	-42.610	-17.58	0.50
0.55	-12.351	22.845	0.55	-21.175	-14.91	0.55	-32.185	-15.35	0.55	-41.545	-16.55	0.55	-41.545	-16.55	0.55
0.60	-11.286	27.398	0.60	-20.110	-13.88	0.60	-31.120	-14.32	0.60	-40.480	-15.52	0.60	-40.480	-15.52	0.60
0.65	-10.221	31.951	0.65	-19.045	-12.85	0.65	-30.055	-13.29	0.65	-39.415	-14.49	0.65	-39.415	-14.49	0.65
0.70	-9.156	36.504	0.70	-17.980	-11.82	0.70	-29.000	-12.26	0.70	-38.350	-13.46	0.70	-38.350	-13.46	0.70
0.75	-8.091	41.057	0.75	-16.915	-10.79	0.75	-27.935	-11.23	0.75	-37.285	-12.43	0.75	-37.285	-12.43	0.75
0.80	-7.026	45.610	0.80	-15.850	-9.76	0.80	-26.870	-10.20	0.80	-36.220	-11.40	0.80	-36.220	-11.40	0.80
0.85	-5.961	50.163	0.85	-14.785	-8.73	0.85	-25.805	-9.17	0.85	-35.155	-10.37	0.85	-35.155	-10.37	0.85
0.90	-4.896	54.716	0.90	-13.720	-7.70	0.90	-24.740	-8.14	0.90	-34.090	-9.34	0.90	-34.090	-9.34	0.90
0.95	-3.831	59.269	0.95	-12.655	-6.67	0.95	-23.675	-7.11	0.95	-33.025	-8.31	0.95	-33.025	-8.31	0.95
1.00	-2.766	63.822	1.00	-11.590	-5.64	1.00	-22.610	-6.08	1.00	-31.960	-7.28	1.00	-31.960	-7.28	1.00

Table 74. Vertical Electric Field (Ice), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-18.610	-100.24		0.000	-29.115	-113.92		0.000	-38.875	-117.74	
0.030	-18.660	-98.92		0.100	-29.265	-109.48		0.300	-39.165	-104.07	
0.060	-18.706	-97.60		0.200	-29.363	-104.93		0.600	-39.957	-90.35	
0.090	-18.747	-96.27		0.300	-29.407	-100.33		0.900	-38.321	-77.98	
0.120	-18.783	-94.93		0.400	-29.395	-95.75		1.200	-37.420	-67.69	
0.150	-18.814	-93.59		0.500	-29.330	-91.22		1.500	-36.407	-59.49	
0.180	-18.840	-92.25		0.600	-29.213	-86.81		1.800	-35.379	-53.04	
0.210	-18.864	-90.91		0.700	-29.051	-82.57		2.100	-34.388	-47.95	
0.240	-18.879	-89.57		0.800	-28.848	-78.52		2.400	-33.455	-43.89	
0.270	-18.891	-88.23		0.900	-28.612	-74.69		2.700	-32.585	-40.60	
0.300	-18.898	-86.90		1.000	-28.348	-71.09		3.000	-31.777	-37.90	
0.330	-18.901	-85.57		1.100	-28.063	-67.73		3.300	-31.027	-35.65	
0.360	-18.898	-84.25		1.200	-27.762	-64.60		3.600	-30.330	-33.75	
0.390	-18.892	-82.93		1.300	-27.450	-61.71		3.900	-29.681	-32.12	
0.420	-18.880	-81.63		1.400	-27.131	-59.02		4.200	-29.075	-30.72	
0.450	-18.865	-80.34		1.500	-26.808	-56.54		4.500	-28.508	-29.49	
0.480	-18.845	-79.06		1.600	-26.485	-54.25		4.800	-27.974	-28.42	
0.510	-18.821	-77.79		1.700	-26.162	-52.13		5.100	-27.472	-27.46	
0.540	-18.793	-76.53		1.800	-25.842	-50.18		5.400	-26.998	-26.61	
0.570	-18.761	-75.30		1.900	-25.527	-48.37		5.700	-26.549	-25.85	
0.600	-18.726	-74.07		2.000	-25.216	-46.69		6.000	-26.123	-25.16	
0.630	-18.687	-72.87		2.100	-24.912	-45.13		6.300	-25.718	-24.53	
0.660	-18.644	-71.66		2.200	-24.614	-43.68		6.600	-25.332	-23.96	
0.690	-18.599	-70.51		2.300	-24.322	-42.34		6.900	-24.964	-23.43	
0.720	-18.550	-69.36		2.400	-24.037	-41.08		7.200	-24.612	-22.95	
0.750	-18.498	-68.22		2.500	-23.760	-39.91		7.500	-24.276	-22.50	
0.780	-18.444	-67.11		2.600	-23.489	-38.82		7.800	-23.953	-22.09	
0.810	-18.387	-66.02		2.700	-23.225	-37.79		8.100	-23.642	-21.71	
0.840	-18.328	-64.95		2.800	-22.967	-36.83		8.400	-23.344	-21.35	
0.870	-18.268	-63.89		2.900	-22.716	-35.93		8.700	-23.057	-21.01	
0.900	-18.203	-62.86		3.000	-22.472	-35.08		9.000	-22.780	-20.70	
1.050	-17.859	-58.01		3.500	-21.341	-31.49		10.500	-21.532	-19.37	
1.200	-17.483	-53.66		4.000	-20.345	-28.73		12.000	-20.484	-18.35	
1.350	-17.090	-49.78		4.500	-19.461	-26.54		13.500	-19.536	-17.53	
1.500	-16.691	-46.31		5.000	-18.671	-24.77		15.000	-18.718	-16.85	
1.600	-16.451	-43.27		5.500	-17.960	-23.30		16.500	-17.988	-16.27	
1.800	-15.901	-40.34		6.000	-17.316	-22.06		18.000	-17.332	-15.77	
1.950	-15.320	-38.11		6.500	-16.729	-21.00		19.500	-16.737	-15.33	
2.100	-15.151	-35.94		7.000	-16.192	-20.08		21.000	-16.195	-14.94	
2.250	-14.796	-34.00		7.500	-15.699	-19.27		22.500	-15.697	-14.59	
2.400	-14.456	-32.25		8.000	-15.243	-18.56		24.000	-15.234	-14.27	
2.550	-14.131	-30.67		8.500	-14.821	-17.92		25.500	-14.815	-13.98	
2.700	-13.820	-29.24		9.000	-14.428	-17.34		27.000	-14.421	-13.71	
2.850	-13.524	-27.94		9.500	-14.062	-16.82		28.500	-14.055	-13.46	
3.000	-13.241	-26.75		10.000	-13.726	-16.35		30.000	-13.713	-13.22	

Table 75. Vertical Electric Field (Ice), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-14.729	-34.03		0.000	-24.468	-33.03		0.000	-33.920	-45.84	
.030	-14.773	-32.67		.100	-24.611	-38.54		.300	-34.203	-32.14	
.060	-14.812	-31.30		.200	-24.701	-33.96		.600	-33.985	-18.40	
.090	-14.847	-29.93		.300	-24.737	-29.33		.900	-33.341	-6.05	
.120	-14.877	-28.56		.400	-24.716	-24.72		1.200	-32.435	4.22	
.150	-14.902	-27.18		.500	-24.642	-20.18		1.500	-31.418	12.39	
.180	-14.922	-25.80		.600	-24.517	-15.76		1.800	-30.390	18.82	
.210	-14.937	-24.42		.700	-24.347	-11.52		2.100	-29.399	23.89	
.240	-14.948	-23.05		.800	-24.137	-7.47		2.400	-28.466	27.94	
.270	-14.954	-21.68		.900	-23.895	-3.65		2.700	-27.597	31.22	
.300	-14.956	-20.31		1.000	-23.625	-.06		3.000	-26.790	33.91	
.330	-14.952	-18.95		1.100	-23.336	3.28		3.300	-26.041	36.16	
.360	-14.945	-17.60		1.200	-23.031	6.39		3.600	-25.346	38.06	
.390	-14.932	-16.26		1.300	-22.716	9.28		3.900	-24.698	39.69	
.420	-14.916	-14.93		1.400	-22.395	11.95		4.200	-24.093	41.09	
.450	-14.895	-13.61		1.500	-22.070	14.41		4.500	-23.527	42.32	
.480	-14.871	-12.30		1.600	-21.745	16.64		4.800	-22.995	43.40	
.510	-14.842	-11.01		1.700	-21.422	18.80		5.100	-22.495	44.36	
.540	-14.809	-9.73		1.800	-21.102	20.75		5.400	-22.022	45.22	
.570	-14.773	-8.47		1.900	-20.787	22.56		5.700	-21.574	45.99	
.600	-14.734	-7.23		2.000	-20.477	24.23		6.000	-21.150	46.69	
.630	-14.691	-6.00		2.100	-20.173	25.74		6.300	-20.747	47.33	
.660	-14.645	-4.79		2.200	-19.876	27.23		6.600	-20.363	47.91	
.690	-14.596	-3.60		2.300	-19.586	28.58		6.900	-19.997	48.45	
.720	-14.544	-2.42		2.400	-19.302	29.83		7.200	-19.647	48.94	
.750	-14.489	-1.27		2.500	-19.026	31.01		7.500	-19.312	49.40	
.780	-14.432	-.14		2.600	-18.756	32.11		7.800	-18.991	49.83	
.810	-14.373	.98		2.700	-18.494	33.14		8.100	-18.683	50.22	
.840	-14.312	2.07		2.800	-18.239	34.11		8.400	-18.387	50.60	
.870	-14.248	3.14		2.900	-17.990	35.02		8.700	-18.102	50.95	
.900	-14.183	4.19		3.000	-17.748	35.89		9.000	-17.828	51.28	
1.050	-13.834	9.15		3.500	-16.624	39.54		10.500	-16.592	52.68	
1.200	-13.458	13.61		4.000	-15.646	42.34		12.000	-15.540	53.80	
1.350	-13.071	17.62		4.500	-14.778	44.68		13.500	-14.624	54.72	
1.500	-12.680	21.21		5.000	-14.006	46.58		15.000	-13.830	55.52	
1.650	-12.295	24.43		5.500	-13.315	48.14		16.500	-13.121	56.23	
1.800	-11.919	27.33		6.000	-12.693	49.58		18.000	-12.486	56.87	
1.950	-11.557	29.95		6.500	-12.130	50.80		19.500	-11.916	57.46	
2.100	-11.209	32.33		7.000	-11.619	51.90		21.000	-11.403	58.01	
2.250	-10.876	34.49		7.500	-11.153	52.84		22.500	-10.935	58.54	
2.400	-10.563	36.46		8.000	-10.726	53.61		24.000	-10.506	59.05	
2.550	-10.266	38.31		8.500	-10.336	54.86		25.500	-10.117	59.54	
2.700	-9.985	40.00		9.000	-9.977	55.66		27.000	-9.759	60.02	
2.850	-9.720	41.57		9.500	-9.646	56.21		28.500	-9.430	60.49	
3.000	-9.471	43.04		10.000	-9.342	56.93		30.000	-9.127	60.96	

Table 76. Vertical Electric Field (Ice), Frequency = 0.1 MHz, VED Height = 4495, 20 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-10.770	-18.99	0.000	-19.443	-26.56	0.000	-18.513	0.000	-18.513	-29.51	0.000
0.030	-10.812	-17.65	0.100	-19.584	-22.09	0.300	-18.794	0.300	-18.794	-19.82	0.300
0.060	-10.851	-16.29	0.200	-19.674	-17.51	0.600	-18.577	0.600	-18.577	-2.10	0.600
0.090	-10.885	-14.93	0.300	-19.709	-12.69	0.900	-17.934	0.900	-17.934	10.24	0.900
0.120	-10.916	-13.56	0.400	-19.690	-8.29	1.200	-17.030	1.200	-17.030	20.50	1.200
0.150	-10.942	-12.19	0.500	-19.617	-3.76	1.500	-16.016	1.500	-16.016	28.68	1.500
0.180	-10.964	-10.81	0.600	-19.494	0.66	1.800	-14.989	1.800	-14.989	35.11	1.800
0.210	-10.982	-9.44	0.700	-19.327	4.90	2.100	-14.000	2.100	-14.000	40.19	2.100
0.240	-10.996	-8.06	0.800	-19.120	9.06	2.400	-13.068	2.400	-13.068	44.25	2.400
0.270	-11.006	-6.69	0.900	-18.881	12.79	2.700	-12.201	2.700	-12.201	47.54	2.700
0.300	-11.011	-5.32	1.000	-18.615	16.39	3.000	-11.396	3.000	-11.396	50.25	3.000
0.330	-11.013	-3.95	1.100	-18.328	19.75	3.300	-10.649	3.300	-10.649	52.51	3.300
0.360	-11.010	-2.59	1.200	-18.027	22.88	3.600	-19.955	3.600	-19.955	54.43	3.600
0.390	-11.004	-1.24	1.300	-17.715	25.79	3.900	-19.310	3.900	-19.310	56.06	3.900
0.420	-10.994	0.11	1.400	-17.397	28.48	4.200	-18.707	4.200	-18.707	57.48	4.200
0.450	-10.980	1.45	1.500	-17.076	30.97	4.500	-18.143	4.500	-18.143	58.72	4.500
0.480	-10.962	2.78	1.600	-16.754	33.28	4.800	-17.613	4.800	-17.613	59.82	4.800
0.510	-10.941	4.09	1.700	-16.434	35.42	5.100	-17.115	5.100	-17.115	60.79	5.100
0.540	-10.916	5.40	1.800	-16.117	37.39	5.400	-16.645	5.400	-16.645	61.67	5.400
0.570	-10.888	6.69	1.900	-15.805	39.23	5.700	-16.200	5.700	-16.200	62.45	5.700
0.600	-10.857	7.97	2.000	-15.498	40.93	6.000	-15.779	6.000	-15.779	63.17	6.000
0.630	-10.822	9.24	2.100	-15.198	42.52	6.300	-15.379	6.300	-15.379	63.82	6.300
0.660	-10.785	10.49	2.200	-14.904	44.00	6.600	-14.999	6.600	-14.999	64.42	6.600
0.690	-10.745	11.72	2.300	-14.617	45.37	6.900	-14.636	6.900	-14.636	64.97	6.900
0.720	-10.702	12.94	2.400	-14.337	46.66	7.200	-14.290	7.200	-14.290	65.49	7.200
0.750	-10.657	14.15	2.500	-14.064	47.87	7.500	-13.959	7.500	-13.959	65.96	7.500
0.780	-10.609	15.33	2.600	-13.798	49.00	7.800	-13.642	7.800	-13.642	66.41	7.800
0.810	-10.559	16.50	2.700	-13.539	50.07	8.100	-13.336	8.100	-13.336	66.82	8.100
0.840	-10.507	17.65	2.800	-13.288	51.07	8.400	-13.046	8.400	-13.046	67.22	8.400
0.870	-10.453	18.79	2.900	-13.043	52.02	8.700	-12.766	8.700	-12.766	67.59	8.700
0.900	-10.397	19.90	3.000	-12.805	52.91	9.000	-12.496	9.000	-12.496	67.94	9.000
1.050	-10.095	25.21	3.500	-11.706	56.74	10.500	-11.286	10.500	-11.286	69.45	10.500
1.200	-9.766	30.06	4.000	-10.752	59.77	12.000	-10.264	12.000	-10.264	70.69	12.000
1.350	-9.424	34.52	4.500	-9.914	62.26	13.500	-9.388	13.500	-9.388	71.76	13.500
1.500	-9.077	38.56	5.000	-9.176	64.36	15.000	-8.628	15.000	-8.628	72.71	15.000
1.650	-8.735	42.26	5.500	-8.523	66.18	16.500	-7.963	16.500	-7.963	73.56	16.500
1.800	-8.400	45.63	6.000	-7.943	67.79	18.000	-7.377	18.000	-7.377	74.40	18.000
1.950	-8.081	48.74	6.500	-7.427	69.25	19.500	-6.859	19.500	-6.859	75.18	19.500
2.100	-7.776	51.59	7.000	-6.966	70.66	21.000	-6.400	21.000	-6.400	75.94	21.000
2.250	-7.486	54.24	7.500	-6.554	71.85	22.500	-5.993	22.500	-5.993	76.70	22.500
2.400	-7.216	56.69	8.000	-6.187	73.03	24.000	-5.630	24.000	-5.630	77.44	24.000
2.550	-6.965	58.97	8.500	-5.858	74.16	25.500	-5.309	25.500	-5.309	78.19	25.500
2.700	-6.730	61.09	9.000	-5.565	75.24	27.000	-5.024	27.000	-5.024	78.94	27.000
2.850	-6.514	63.07	9.500	-5.305	76.29	28.500	-4.776	28.500	-4.776	79.70	28.500
3.000	-6.311	64.91	10.000	-5.074	77.31	30.000	-4.550	30.000	-4.550	80.47	30.000

Table 77. Vertical Electric Field (ice), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.00	-20.534	-77.92	0.00	-30.544	-68.01	0.00	-40.044	-91.38	0.00	-50.504	-92.58	0.00	-60.504	-92.58	0.00
0.03	-20.537	-76.48	0.10	-30.533	-83.22	0.30	-39.835	-77.21	0.30	-48.318	-52.04	1.00	-58.318	-52.04	1.00
0.06	-20.535	-75.05	0.20	-30.463	-78.50	0.60	-39.166	-64.69	0.60	-46.829	-32.37	2.00	-56.829	-32.37	2.00
0.09	-20.567	-73.63	0.30	-30.336	-73.91	0.90	-38.225	-54.00	0.90	-44.993	-23.06	3.00	-54.993	-23.06	3.00
0.12	-20.573	-72.22	0.40	-30.159	-69.50	1.20	-37.110	-63.72	1.20	-43.769	-17.91	4.00	-43.769	-17.91	4.00
0.15	-20.554	-70.81	0.50	-29.934	-65.30	1.50	-36.108	-39.28	1.50	-37.972	-14.68	5.00	-37.972	-14.68	5.00
0.18	-20.531	-69.43	0.60	-29.682	-61.36	1.60	-35.089	-34.24	1.60	-36.475	-12.48	6.00	-36.475	-12.48	6.00
0.21	-20.502	-68.05	0.70	-29.396	-57.67	1.70	-34.134	-30.24	1.70	-35.196	-10.89	7.00	-35.196	-10.89	7.00
0.24	-20.468	-66.69	0.80	-29.089	-54.24	1.80	-33.247	-27.03	1.80	-34.082	-9.69	8.00	-34.082	-9.69	8.00
0.27	-20.430	-65.35	0.90	-28.765	-51.06	1.90	-32.425	-24.40	1.90	-33.098	-8.75	9.00	-33.098	-8.75	9.00
0.30	-20.387	-64.03	1.00	-28.431	-48.14	2.00	-31.665	-22.22	2.00	-32.216	-8.00	1.00	-32.216	-8.00	1.00
0.33	-20.340	-62.73	1.10	-28.091	-45.44	2.10	-30.959	-20.39	2.10	-31.418	-7.38	1.10	-31.418	-7.38	1.10
0.36	-20.289	-61.45	1.20	-27.748	-42.97	2.20	-30.303	-18.64	2.20	-30.690	-6.86	1.20	-30.690	-6.86	1.20
0.39	-20.234	-60.19	1.30	-27.405	-40.64	2.30	-29.690	-17.50	2.30	-30.021	-6.42	1.30	-30.021	-6.42	1.30
0.42	-20.175	-58.95	1.40	-27.065	-38.60	2.40	-29.117	-16.34	2.40	-29.402	-6.05	1.40	-29.402	-6.05	1.40
0.45	-20.113	-57.74	1.50	-26.729	-36.67	2.50	-28.579	-15.32	2.50	-28.827	-5.72	1.50	-28.827	-5.72	1.50
0.48	-20.048	-56.55	1.60	-26.398	-34.90	2.60	-28.073	-14.42	2.60	-28.290	-5.43	1.60	-28.290	-5.43	1.60
0.51	-19.980	-55.38	1.70	-26.074	-33.26	2.70	-27.595	-13.62	2.70	-27.787	-5.18	1.70	-27.787	-5.18	1.70
0.54	-19.909	-54.24	1.80	-25.756	-31.75	2.80	-27.142	-12.91	2.80	-27.314	-4.95	1.80	-27.314	-4.95	1.80
0.57	-19.836	-53.12	1.90	-25.446	-30.35	2.90	-26.713	-12.27	2.90	-26.867	-4.75	1.90	-26.867	-4.75	1.90
0.60	-19.759	-52.03	2.00	-25.143	-29.05	3.00	-26.306	-11.64	3.00	-26.444	-4.57	2.00	-26.444	-4.57	2.00
0.63	-19.682	-50.96	2.10	-24.847	-27.84	3.10	-25.917	-11.16	3.10	-26.042	-4.40	2.10	-26.042	-4.40	2.10
0.66	-19.602	-49.91	2.20	-24.560	-26.72	3.20	-25.547	-10.68	3.20	-25.660	-4.25	2.20	-25.660	-4.25	2.20
0.69	-19.521	-48.84	2.30	-24.280	-25.68	3.30	-25.183	-10.24	3.30	-25.296	-4.12	2.30	-25.296	-4.12	2.30
0.72	-19.437	-47.89	2.40	-24.007	-24.70	3.40	-24.834	-9.84	3.40	-24.948	-3.99	2.40	-24.948	-3.99	2.40
0.75	-19.353	-46.92	2.50	-23.742	-23.74	3.50	-24.529	-9.47	3.50	-24.615	-3.87	2.50	-24.615	-3.87	2.50
0.78	-19.267	-45.97	2.60	-23.483	-22.94	3.60	-24.217	-9.13	3.60	-24.296	-3.77	2.60	-24.296	-3.77	2.60
0.81	-19.179	-45.04	2.70	-23.232	-22.14	3.70	-23.917	-8.81	3.70	-23.990	-3.67	2.70	-23.990	-3.67	2.70
0.84	-19.091	-44.14	2.80	-22.988	-21.34	3.80	-23.628	-8.51	3.80	-23.696	-3.57	2.80	-23.696	-3.57	2.80
0.87	-19.002	-43.26	2.90	-22.749	-20.68	3.90	-23.350	-8.23	3.90	-23.413	-3.49	2.90	-23.413	-3.49	2.90
0.90	-18.912	-42.40	3.00	-22.518	-20.01	4.00	-23.081	-7.97	4.00	-23.140	-3.41	3.00	-23.140	-3.41	3.00
1.05	-18.456	-38.43	3.50	-21.445	-17.19	1.05	-21.866	-6.90	3.50	-21.908	-3.07	3.50	-21.908	-3.07	3.50
1.20	-17.997	-34.95	4.00	-20.498	-15.01	1.20	-20.823	-6.09	4.00	-20.854	-2.82	4.00	-20.854	-2.82	4.00
1.35	-17.543	-31.90	4.50	-19.655	-13.29	1.35	-19.913	-5.47	4.50	-19.937	-2.61	4.50	-19.937	-2.61	4.50
1.50	-17.100	-29.21	5.00	-18.900	-11.89	1.50	-19.108	-4.96	5.00	-19.127	-2.45	5.00	-19.127	-2.45	5.00
1.65	-16.671	-26.85	5.50	-18.218	-10.74	1.65	-18.389	-4.55	5.50	-18.405	-2.32	5.50	-18.405	-2.32	5.50
1.80	-16.260	-24.77	6.00	-17.598	-9.78	1.80	-17.761	-4.20	6.00	-17.754	-2.20	6.00	-17.754	-2.20	6.00
1.95	-15.866	-22.92	6.50	-17.031	-8.96	1.95	-17.153	-3.91	6.50	-17.163	-2.11	6.50	-17.163	-2.11	6.50
2.10	-15.489	-21.27	7.00	-16.511	-8.26	2.10	-16.615	-3.66	7.00	-16.624	-2.02	7.00	-16.624	-2.02	7.00
2.25	-15.131	-19.80	7.50	-16.032	-7.66	2.25	-16.122	-3.45	7.50	-16.129	-1.95	7.50	-16.129	-1.95	7.50
2.40	-14.790	-18.48	8.00	-15.588	-7.13	2.40	-15.666	-3.26	8.00	-15.673	-1.88	8.00	-15.673	-1.88	8.00
2.55	-14.465	-17.29	8.50	-15.176	-6.66	2.55	-15.264	-3.09	8.50	-15.250	-1.82	8.50	-15.250	-1.82	8.50
2.70	-14.156	-16.21	9.00	-14.793	-6.25	2.70	-14.853	-2.94	9.00	-14.857	-1.77	9.00	-14.857	-1.77	9.00
2.85	-13.863	-15.24	9.50	-14.434	-5.88	2.85	-14.487	-2.81	9.50	-14.492	-1.72	9.50	-14.492	-1.72	9.50
3.00	-13.584	-14.35	1.000	-14.099	-5.55	3.00	-14.146	-2.69	10.000	-14.150	-1.66	10.000	-14.150	-1.66	10.000

Table 79. Vertical Electric Field (Ice), Frequency = 1.0 MHz, VED Height = 449.52 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (V)	PHASE (DEG)	HEIGHT (KM)	AMP (V)	PHASE (DEG)	HEIGHT (KM)	AMP (V)	PHASE (DEG)	HEIGHT (KM)	AMP (V)	PHASE (DEG)
0.00	-11.146	-8.85	0.00	-15.817	-13.30	0.00	-28.584	-13.33	0.00	-38.835	-16.14
0.03	-11.149	-7.19	0.03	-15.817	-8.30	0.03	-28.584	1.55	0.03	-38.835	24.38
0.06	-11.149	-8.30	0.06	-15.817	-3.77	0.06	-28.584	11.55	0.06	-38.835	44.02
0.09	-11.149	-8.30	0.09	-15.817	8.30	0.09	-28.584	22.01	0.09	-38.835	53.32
0.12	-11.149	-8.87	0.12	-15.817	13.30	0.12	-28.584	30.26	0.12	-38.835	58.48
0.15	-11.149	-1.45	0.15	-15.817	18.30	0.15	-28.584	38.69	0.15	-38.835	61.71
0.18	-11.149	-7.05	0.18	-15.817	23.30	0.18	-28.584	47.71	0.18	-38.835	65.51
0.21	-11.149	1.34	0.21	-15.817	28.30	0.21	-28.584	56.71	0.21	-38.835	69.72
0.24	-11.149	6.71	0.24	-15.817	33.30	0.24	-28.584	65.71	0.24	-38.835	73.40
0.27	-11.149	11.55	0.27	-15.817	38.30	0.27	-28.584	74.71	0.27	-38.835	77.07
0.30	-11.149	16.14	0.30	-15.817	43.30	0.30	-28.584	83.71	0.30	-38.835	80.43
0.33	-11.149	20.30	0.33	-15.817	48.30	0.33	-28.584	92.71	0.33	-38.835	83.41
0.36	-11.149	24.38	0.36	-15.817	53.30	0.36	-28.584	101.71	0.36	-38.835	86.43
0.39	-11.149	28.30	0.39	-15.817	58.30	0.39	-28.584	110.71	0.39	-38.835	89.43
0.42	-11.149	32.30	0.42	-15.817	63.30	0.42	-28.584	119.71	0.42	-38.835	92.43
0.45	-11.149	36.30	0.45	-15.817	68.30	0.45	-28.584	128.71	0.45	-38.835	95.43
0.48	-11.149	40.30	0.48	-15.817	73.30	0.48	-28.584	137.71	0.48	-38.835	98.43
0.51	-11.149	44.30	0.51	-15.817	78.30	0.51	-28.584	146.71	0.51	-38.835	101.43
0.54	-11.149	48.30	0.54	-15.817	83.30	0.54	-28.584	155.71	0.54	-38.835	104.43
0.57	-11.149	52.30	0.57	-15.817	88.30	0.57	-28.584	164.71	0.57	-38.835	107.43
0.60	-11.149	56.30	0.60	-15.817	93.30	0.60	-28.584	173.71	0.60	-38.835	110.43
0.63	-11.149	60.30	0.63	-15.817	98.30	0.63	-28.584	182.71	0.63	-38.835	113.43
0.66	-11.149	64.30	0.66	-15.817	103.30	0.66	-28.584	191.71	0.66	-38.835	116.43
0.69	-11.149	68.30	0.69	-15.817	108.30	0.69	-28.584	200.71	0.69	-38.835	119.43
0.72	-11.149	72.30	0.72	-15.817	113.30	0.72	-28.584	209.71	0.72	-38.835	122.43
0.75	-11.149	76.30	0.75	-15.817	118.30	0.75	-28.584	218.71	0.75	-38.835	125.43
0.78	-11.149	80.30	0.78	-15.817	123.30	0.78	-28.584	227.71	0.78	-38.835	128.43
0.81	-11.149	84.30	0.81	-15.817	128.30	0.81	-28.584	236.71	0.81	-38.835	131.43
0.84	-11.149	88.30	0.84	-15.817	133.30	0.84	-28.584	245.71	0.84	-38.835	134.43
0.87	-11.149	92.30	0.87	-15.817	138.30	0.87	-28.584	254.71	0.87	-38.835	137.43
0.90	-11.149	96.30	0.90	-15.817	143.30	0.90	-28.584	263.71	0.90	-38.835	140.43
1.03	-7.167	36.01	1.03	-10.847	58.22	1.03	-10.554	67.69	1.03	-10.406	73.89
1.10	-6.326	39.30	1.10	-9.751	60.25	1.10	-9.563	70.69	1.10	-9.405	74.32
1.15	-7.244	42.42	1.15	-8.275	64.33	1.15	-7.974	72.24	1.15	-7.806	75.10
1.18	-7.376	43.25	1.18	-7.864	65.80	1.18	-7.526	73.95	1.18	-7.358	75.47
1.19	-7.260	47.83	1.19	-7.122	67.10	1.19	-6.761	74.18	1.19	-6.589	75.85
1.19	-6.701	50.20	1.19	-6.640	68.27	1.19	-6.260	74.18	1.19	-6.088	76.24
1.20	-6.677	54.38	1.20	-6.212	69.35	1.20	-5.810	74.18	1.20	-5.645	76.64
1.25	-6.176	58.20	1.25	-5.831	70.35	1.25	-5.420	74.18	1.25	-5.254	77.05
1.25	-5.952	58.03	1.25	-5.493	71.30	1.25	-5.080	74.18	1.25	-4.908	77.48
1.27	-5.761	59.67	1.27	-5.194	72.21	1.27	-4.775	74.18	1.27	-4.604	77.93
1.28	-5.564	61.19	1.28	-4.869	73.07	1.28	-4.507	74.18	1.28	-4.337	78.41
1.30	-5.420	62.62	1.30	-4.695	74.73	1.30	-4.273	74.18	1.30	-4.104	78.90
1.30	-5.420	62.62	1.30	-4.495	74.73	1.30	-4.070	74.18	1.30	-3.902	79.42

Table 80. Vertical Electric Field (Ice), Frequency = 10.0 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE					50.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)
.000	-40.000	-80.000	.000	-50.000	-80.000	.000	-60.000	-80.000	.000	-70.000	-80.000	.000	-80.000	-80.000
.003	-39.000	-79.000	.003	-49.000	-79.000	.003	-59.000	-79.000	.003	-69.000	-79.000	.003	-79.000	-79.000
.006	-38.000	-78.000	.006	-48.000	-78.000	.006	-58.000	-78.000	.006	-68.000	-78.000	.006	-78.000	-78.000
.009	-37.000	-77.000	.009	-47.000	-77.000	.009	-57.000	-77.000	.009	-67.000	-77.000	.009	-77.000	-77.000
.012	-36.000	-76.000	.012	-46.000	-76.000	.012	-56.000	-76.000	.012	-66.000	-76.000	.012	-76.000	-76.000
.015	-35.000	-75.000	.015	-45.000	-75.000	.015	-55.000	-75.000	.015	-65.000	-75.000	.015	-75.000	-75.000
.018	-34.000	-74.000	.018	-44.000	-74.000	.018	-54.000	-74.000	.018	-64.000	-74.000	.018	-74.000	-74.000
.021	-33.000	-73.000	.021	-43.000	-73.000	.021	-53.000	-73.000	.021	-63.000	-73.000	.021	-73.000	-73.000
.024	-32.000	-72.000	.024	-42.000	-72.000	.024	-52.000	-72.000	.024	-62.000	-72.000	.024	-72.000	-72.000
.027	-31.000	-71.000	.027	-41.000	-71.000	.027	-51.000	-71.000	.027	-61.000	-71.000	.027	-71.000	-71.000
.030	-30.000	-70.000	.030	-40.000	-70.000	.030	-50.000	-70.000	.030	-60.000	-70.000	.030	-70.000	-70.000
.033	-29.000	-69.000	.033	-39.000	-69.000	.033	-49.000	-69.000	.033	-59.000	-69.000	.033	-69.000	-69.000
.036	-28.000	-68.000	.036	-38.000	-68.000	.036	-48.000	-68.000	.036	-58.000	-68.000	.036	-68.000	-68.000
.039	-27.000	-67.000	.039	-37.000	-67.000	.039	-47.000	-67.000	.039	-57.000	-67.000	.039	-67.000	-67.000
.042	-26.000	-66.000	.042	-36.000	-66.000	.042	-46.000	-66.000	.042	-56.000	-66.000	.042	-66.000	-66.000
.045	-25.000	-65.000	.045	-35.000	-65.000	.045	-45.000	-65.000	.045	-55.000	-65.000	.045	-65.000	-65.000
.048	-24.000	-64.000	.048	-34.000	-64.000	.048	-44.000	-64.000	.048	-54.000	-64.000	.048	-64.000	-64.000
.051	-23.000	-63.000	.051	-33.000	-63.000	.051	-43.000	-63.000	.051	-53.000	-63.000	.051	-63.000	-63.000
.054	-22.000	-62.000	.054	-32.000	-62.000	.054	-42.000	-62.000	.054	-52.000	-62.000	.054	-62.000	-62.000
.057	-21.000	-61.000	.057	-31.000	-61.000	.057	-41.000	-61.000	.057	-51.000	-61.000	.057	-61.000	-61.000
.060	-20.000	-60.000	.060	-30.000	-60.000	.060	-40.000	-60.000	.060	-50.000	-60.000	.060	-60.000	-60.000
.063	-19.000	-59.000	.063	-29.000	-59.000	.063	-39.000	-59.000	.063	-49.000	-59.000	.063	-59.000	-59.000
.066	-18.000	-58.000	.066	-28.000	-58.000	.066	-38.000	-58.000	.066	-48.000	-58.000	.066	-58.000	-58.000
.069	-17.000	-57.000	.069	-27.000	-57.000	.069	-37.000	-57.000	.069	-47.000	-57.000	.069	-57.000	-57.000
.072	-16.000	-56.000	.072	-26.000	-56.000	.072	-36.000	-56.000	.072	-46.000	-56.000	.072	-56.000	-56.000
.075	-15.000	-55.000	.075	-25.000	-55.000	.075	-35.000	-55.000	.075	-45.000	-55.000	.075	-55.000	-55.000
.078	-14.000	-54.000	.078	-24.000	-54.000	.078	-34.000	-54.000	.078	-44.000	-54.000	.078	-54.000	-54.000
.081	-13.000	-53.000	.081	-23.000	-53.000	.081	-33.000	-53.000	.081	-43.000	-53.000	.081	-53.000	-53.000
.084	-12.000	-52.000	.084	-22.000	-52.000	.084	-32.000	-52.000	.084	-42.000	-52.000	.084	-52.000	-52.000
.087	-11.000	-51.000	.087	-21.000	-51.000	.087	-31.000	-51.000	.087	-41.000	-51.000	.087	-51.000	-51.000
.090	-10.000	-50.000	.090	-20.000	-50.000	.090	-30.000	-50.000	.090	-40.000	-50.000	.090	-50.000	-50.000
.105	-21.000	-50.000	.105	-31.000	-50.000	.105	-41.000	-50.000	.105	-51.000	-50.000	.105	-61.000	-50.000
.120	-20.000	-49.000	.120	-30.000	-49.000	.120	-40.000	-49.000	.120	-50.000	-49.000	.120	-60.000	-49.000
.135	-19.000	-48.000	.135	-29.000	-48.000	.135	-39.000	-48.000	.135	-49.000	-48.000	.135	-59.000	-48.000
.150	-18.000	-47.000	.150	-28.000	-47.000	.150	-38.000	-47.000	.150	-48.000	-47.000	.150	-58.000	-47.000
.165	-17.000	-46.000	.165	-27.000	-46.000	.165	-37.000	-46.000	.165	-47.000	-46.000	.165	-57.000	-46.000
.180	-16.000	-45.000	.180	-26.000	-45.000	.180	-36.000	-45.000	.180	-46.000	-45.000	.180	-56.000	-45.000
.195	-15.000	-44.000	.195	-25.000	-44.000	.195	-35.000	-44.000	.195	-45.000	-44.000	.195	-55.000	-44.000
.210	-14.000	-43.000	.210	-24.000	-43.000	.210	-34.000	-43.000	.210	-44.000	-43.000	.210	-54.000	-43.000
.225	-13.000	-42.000	.225	-23.000	-42.000	.225	-33.000	-42.000	.225	-43.000	-42.000	.225	-53.000	-42.000
.240	-12.000	-41.000	.240	-22.000	-41.000	.240	-32.000	-41.000	.240	-42.000	-41.000	.240	-52.000	-41.000
.255	-11.000	-40.000	.255	-21.000	-40.000	.255	-31.000	-40.000	.255	-41.000	-40.000	.255	-51.000	-40.000
.270	-10.000	-39.000	.270	-20.000	-39.000	.270	-30.000	-39.000	.270	-40.000	-39.000	.270	-50.000	-39.000
.285	-9.000	-38.000	.285	-19.000	-38.000	.285	-29.000	-38.000	.285	-39.000	-38.000	.285	-49.000	-38.000
.300	-8.000	-37.000	.300	-18.000	-37.000	.300	-28.000	-37.000	.300	-38.000	-37.000	.300	-48.000	-37.000

Table 81. Vertical Electric Field (Ice), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM UOB RANGE				100.0 KM UOB RANGE			
MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)
0.000	-33.010	-20.09	0.000	-33.010	-20.09	0.000	-33.010
0.003	-33.347	-12.77	0.003	-33.347	-12.77	0.003	-33.347
0.006	-33.683	-4.05	0.006	-33.683	-4.05	0.006	-33.683
0.009	-34.019	4.77	0.009	-34.019	4.77	0.009	-34.019
0.012	-34.356	13.05	0.012	-34.356	13.05	0.012	-34.356
0.015	-34.692	21.31	0.015	-34.692	21.31	0.015	-34.692
0.018	-35.028	29.56	0.018	-35.028	29.56	0.018	-35.028
0.021	-35.364	37.81	0.021	-35.364	37.81	0.021	-35.364
0.024	-35.700	46.06	0.024	-35.700	46.06	0.024	-35.700
0.027	-36.036	54.31	0.027	-36.036	54.31	0.027	-36.036
0.030	-36.372	62.56	0.030	-36.372	62.56	0.030	-36.372
0.033	-36.708	70.81	0.033	-36.708	70.81	0.033	-36.708
0.036	-37.044	79.06	0.036	-37.044	79.06	0.036	-37.044
0.039	-37.380	87.31	0.039	-37.380	87.31	0.039	-37.380
0.042	-37.716	95.56	0.042	-37.716	95.56	0.042	-37.716
0.045	-38.052	103.81	0.045	-38.052	103.81	0.045	-38.052
0.048	-38.388	112.06	0.048	-38.388	112.06	0.048	-38.388
0.051	-38.724	120.31	0.051	-38.724	120.31	0.051	-38.724
0.054	-39.060	128.56	0.054	-39.060	128.56	0.054	-39.060
0.057	-39.396	136.81	0.057	-39.396	136.81	0.057	-39.396
0.060	-39.732	145.06	0.060	-39.732	145.06	0.060	-39.732
0.063	-40.068	153.31	0.063	-40.068	153.31	0.063	-40.068
0.066	-40.404	161.56	0.066	-40.404	161.56	0.066	-40.404
0.069	-40.740	169.81	0.069	-40.740	169.81	0.069	-40.740
0.072	-41.076	178.06	0.072	-41.076	178.06	0.072	-41.076
0.075	-41.412	186.31	0.075	-41.412	186.31	0.075	-41.412
0.078	-41.748	194.56	0.078	-41.748	194.56	0.078	-41.748
0.081	-42.084	202.81	0.081	-42.084	202.81	0.081	-42.084
0.084	-42.420	211.06	0.084	-42.420	211.06	0.084	-42.420
0.087	-42.756	219.31	0.087	-42.756	219.31	0.087	-42.756
0.090	-43.092	227.56	0.090	-43.092	227.56	0.090	-43.092
0.105	-43.428	235.81	0.105	-43.428	235.81	0.105	-43.428
0.120	-43.764	244.06	0.120	-43.764	244.06	0.120	-43.764
0.135	-44.100	252.31	0.135	-44.100	252.31	0.135	-44.100
0.150	-44.436	260.56	0.150	-44.436	260.56	0.150	-44.436
0.165	-44.772	268.81	0.165	-44.772	268.81	0.165	-44.772
0.180	-45.108	277.06	0.180	-45.108	277.06	0.180	-45.108
0.195	-45.444	285.31	0.195	-45.444	285.31	0.195	-45.444
0.210	-45.780	293.56	0.210	-45.780	293.56	0.210	-45.780
0.225	-46.116	301.81	0.225	-46.116	301.81	0.225	-46.116
0.240	-46.452	310.06	0.240	-46.452	310.06	0.240	-46.452
0.255	-46.788	318.31	0.255	-46.788	318.31	0.255	-46.788
0.270	-47.124	326.56	0.270	-47.124	326.56	0.270	-47.124
0.285	-47.460	334.81	0.285	-47.460	334.81	0.285	-47.460
0.300	-47.796	343.06	0.300	-47.796	343.06	0.300	-47.796

Table 82. Vertical Electric Field (Ice), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
0.00	-26.595	-13.69	0.00	-36.790	-14.67	0.00	-48.271	-14.50	0.00	-58.708	-14.98	0.00	-58.708	-14.98	0.00
0.03	-26.676	21	0.03	-36.490	23.30	0.03	-39.643	53.49	0.03	-40.197	68.35	0.03	-40.197	68.35	0.03
0.06	-27.156	16.72	0.06	-33.011	44.48	0.06	-34.114	63.44	0.06	-34.243	71.74	0.06	-34.243	71.74	0.06
0.09	-26.601	26.96	0.09	-30.190	53.48	0.09	-30.704	67.63	0.09	-30.752	72.88	0.09	-30.752	72.88	0.09
0.12	-25.540	31.02	0.12	-27.987	58.67	0.12	-28.261	69.51	0.12	-28.278	73.45	0.12	-28.278	73.45	0.12
0.15	-24.480	37.24	0.15	-26.202	61.86	0.15	-26.380	70.84	0.15	-26.384	73.79	0.15	-26.384	73.79	0.15
0.18	-23.480	46.20	0.18	-24.714	64.03	0.18	-24.808	71.40	0.18	-24.805	74.03	0.18	-24.805	74.03	0.18
0.21	-22.500	49.11	0.21	-23.443	65.81	0.21	-23.496	71.45	0.21	-23.490	74.20	0.21	-23.490	74.20	0.21
0.24	-21.540	49.25	0.24	-22.335	66.91	0.24	-22.365	72.36	0.24	-22.354	74.32	0.24	-22.354	74.32	0.24
0.27	-20.869	50.83	0.27	-21.358	67.75	0.27	-21.368	72.69	0.27	-21.355	74.43	0.27	-21.355	74.43	0.27
0.30	-20.077	52.98	0.30	-20.480	68.50	0.30	-20.476	73.16	0.30	-20.464	74.51	0.30	-20.464	74.51	0.30
0.33	-19.379	55.78	0.33	-19.687	69.13	0.33	-19.676	73.35	0.33	-19.661	74.58	0.33	-19.661	74.58	0.33
0.36	-18.731	57.32	0.36	-18.964	69.65	0.36	-18.946	73.50	0.36	-18.930	74.65	0.36	-18.930	74.65	0.36
0.39	-18.120	58.85	0.39	-18.300	70.09	0.39	-18.277	73.50	0.39	-18.260	74.70	0.39	-18.260	74.70	0.39
0.42	-17.580	59.81	0.42	-17.687	70.48	0.42	-17.659	73.84	0.42	-17.642	74.75	0.42	-17.642	74.75	0.42
0.45	-17.029	60.83	0.45	-17.117	70.92	0.45	-17.080	73.76	0.45	-17.068	74.74	0.45	-17.068	74.74	0.45
0.48	-16.530	61.73	0.48	-16.586	71.11	0.48	-16.551	73.87	0.48	-16.533	74.84	0.48	-16.533	74.84	0.48
0.51	-16.039	62.94	0.51	-16.088	71.36	0.51	-16.051	73.97	0.51	-16.033	74.88	0.51	-16.033	74.88	0.51
0.54	-15.614	63.60	0.54	-15.620	71.62	0.54	-15.581	74.06	0.54	-15.563	74.91	0.54	-15.563	74.91	0.54
0.57	-15.193	64.91	0.57	-15.179	71.83	0.57	-15.139	74.14	0.57	-15.120	74.95	0.57	-15.120	74.95	0.57
0.60	-14.793	64.50	0.60	-14.762	72.03	0.60	-14.720	74.24	0.60	-14.702	74.99	0.60	-14.702	74.99	0.60
0.63	-14.412	63.04	0.63	-14.387	72.21	0.63	-14.324	74.29	0.63	-14.305	75.02	0.63	-14.305	75.02	0.63
0.66	-14.049	63.54	0.66	-13.992	72.38	0.66	-13.947	74.36	0.66	-13.929	75.05	0.66	-13.929	75.05	0.66
0.69	-13.703	60.00	0.69	-13.624	72.53	0.69	-13.587	74.42	0.69	-13.571	75.09	0.69	-13.571	75.09	0.69
0.72	-13.376	60.42	0.72	-13.294	72.68	0.72	-13.240	74.54	0.72	-13.229	75.12	0.72	-13.229	75.12	0.72
0.75	-13.055	60.81	0.75	-12.964	72.81	0.75	-12.922	74.64	0.75	-12.903	75.15	0.75	-12.903	75.15	0.75
0.78	-12.751	61.16	0.78	-12.657	72.94	0.78	-12.610	74.60	0.78	-12.591	75.18	0.78	-12.591	75.18	0.78
0.81	-12.459	61.52	0.81	-12.359	73.06	0.81	-12.311	74.66	0.81	-12.292	75.22	0.81	-12.292	75.22	0.81
0.84	-12.179	61.84	0.84	-12.073	73.18	0.84	-12.024	74.71	0.84	-12.005	75.25	0.84	-12.005	75.25	0.84
0.87	-11.910	62.14	0.87	-11.798	73.29	0.87	-11.749	74.77	0.87	-11.730	75.28	0.87	-11.730	75.28	0.87
0.90	-11.650	62.43	0.90	-11.534	73.39	0.90	-11.484	74.82	0.90	-11.465	75.32	0.90	-11.465	75.32	0.90
1.05	-10.464	69.65	1.05	-10.349	73.86	1.05	-10.299	75.07	1.05	-10.280	75.49	1.05	-10.280	75.49	1.05
1.20	-9.490	70.63	1.20	-9.350	74.27	1.20	-9.299	75.31	1.20	-9.280	75.68	1.20	-9.280	75.68	1.20
1.35	-8.640	71.46	1.35	-8.494	74.65	1.35	-8.443	75.56	1.35	-8.424	75.88	1.35	-8.424	75.88	1.35
1.50	-7.919	72.16	1.50	-7.753	75.02	1.50	-7.702	75.82	1.50	-7.683	76.11	1.50	-7.683	76.11	1.50
1.65	-7.269	72.84	1.65	-7.107	75.36	1.65	-7.055	76.10	1.65	-7.036	76.35	1.65	-7.036	76.35	1.65
1.80	-6.604	73.45	1.80	-6.439	75.74	1.80	-6.487	76.39	1.80	-6.469	76.62	1.80	-6.469	76.62	1.80
1.95	-6.005	74.03	1.95	-5.839	76.11	1.95	-5.987	76.78	1.95	-5.969	76.91	1.95	-5.969	76.91	1.95
2.10	-5.476	74.59	2.10	-5.307	76.44	2.10	-5.356	77.03	2.10	-5.328	77.22	2.10	-5.328	77.22	2.10
2.25	-5.033	75.15	2.25	-4.863	76.89	2.25	-4.916	77.39	2.25	-4.895	77.56	2.25	-4.895	77.56	2.25
2.40	-4.603	75.70	2.40	-4.433	77.31	2.40	-4.480	77.76	2.40	-4.459	77.92	2.40	-4.459	77.92	2.40
2.55	-4.201	76.25	2.55	-4.030	77.74	2.55	-4.077	78.16	2.55	-4.056	78.31	2.55	-4.056	78.31	2.55
2.70	-3.821	76.82	2.70	-3.650	78.20	2.70	-3.697	78.59	2.70	-3.676	78.73	2.70	-3.676	78.73	2.70
2.85	-3.461	77.39	2.85	-3.290	78.68	2.85	-3.337	79.04	2.85	-3.316	79.17	2.85	-3.316	79.17	2.85
3.00	-3.120	77.97	3.00	-2.949	79.18	3.00	-2.996	79.53	3.00	-2.975	79.65	3.00	-2.975	79.65	3.00

Table 83. Vertical Electric Field (Ice), Frequency = 100.0 MHz, VED Height = 0.00 m

Altitude (m)	100 KM DISTANCE				100 KM DISTANCE				300.0 KM DISTANCE			
	REL (m)	AMP (dB)	PHASE (deg)	REL (m)	AMP (dB)	PHASE (deg)	REL (m)	AMP (dB)	REL (m)	AMP (dB)	PHASE (deg)	REL (m)
0.00	0.000	-50.054	-69.00	0.000	-50.054	-69.00	0.000	-50.054	0.000	-50.054	-90.01	0.000
0.01	0.000	-51.426	-61.57	0.000	-51.426	-61.57	0.000	-51.426	0.000	-51.426	-82.28	0.000
0.02	0.000	-44.732	-30.43	0.000	-44.732	-30.43	0.000	-44.732	0.000	-44.732	-1.14	0.000
0.03	0.000	-44.732	-30.43	0.000	-44.732	-30.43	0.000	-44.732	0.000	-44.732	-1.14	0.000
0.04	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.05	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.06	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.07	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.08	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.09	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.10	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.11	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.12	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.13	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.14	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.15	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.16	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.17	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.18	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.19	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.20	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.21	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.22	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.23	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.24	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.25	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.26	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.27	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.28	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.29	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.30	0.000	-39.713	-16.45	0.000	-39.713	-16.45	0.000	-39.713	0.000	-39.713	-1.14	0.000
0.35	0.000	-41.807	-14.66	0.000	-41.807	-14.66	0.000	-41.807	0.000	-41.807	-0.07	0.000
0.40	0.000	-40.034	-14.42	0.000	-40.034	-14.42	0.000	-40.034	0.000	-40.034	-0.06	0.000
0.45	0.000	-39.713	-14.24	0.000	-39.713	-14.24	0.000	-39.713	0.000	-39.713	-0.05	0.000
0.50	0.000	-39.713	-14.07	0.000	-39.713	-14.07	0.000	-39.713	0.000	-39.713	-0.05	0.000
0.55	0.000	-39.713	-13.90	0.000	-39.713	-13.90	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.60	0.000	-39.713	-13.73	0.000	-39.713	-13.73	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.65	0.000	-39.713	-13.56	0.000	-39.713	-13.56	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.70	0.000	-39.713	-13.39	0.000	-39.713	-13.39	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.75	0.000	-39.713	-13.22	0.000	-39.713	-13.22	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.80	0.000	-39.713	-13.05	0.000	-39.713	-13.05	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.85	0.000	-39.713	-12.88	0.000	-39.713	-12.88	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.90	0.000	-39.713	-12.71	0.000	-39.713	-12.71	0.000	-39.713	0.000	-39.713	-0.04	0.000
0.95	0.000	-39.713	-12.54	0.000	-39.713	-12.54	0.000	-39.713	0.000	-39.713	-0.04	0.000
1.00	0.000	-39.713	-12.37	0.000	-39.713	-12.37	0.000	-39.713	0.000	-39.713	-0.04	0.000

Table 84. Vertical Electric Field (Ice), Frequency = 100.0 MHz, VED Height = 2.25 m

TIME	1000 KM DUE RANGE			3000 KM DUE RANGE		
	PHASE (DEG)	RELUMT (KM)	AMP (DB)	PHASE (DEG)	RELUMT (KM)	AMP (DB)
10	100.0	100.0	100.0	100.0	100.0	100.0
11	100.0	100.0	100.0	100.0	100.0	100.0
12	100.0	100.0	100.0	100.0	100.0	100.0
13	100.0	100.0	100.0	100.0	100.0	100.0
14	100.0	100.0	100.0	100.0	100.0	100.0
15	100.0	100.0	100.0	100.0	100.0	100.0
16	100.0	100.0	100.0	100.0	100.0	100.0
17	100.0	100.0	100.0	100.0	100.0	100.0
18	100.0	100.0	100.0	100.0	100.0	100.0
19	100.0	100.0	100.0	100.0	100.0	100.0
20	100.0	100.0	100.0	100.0	100.0	100.0
21	100.0	100.0	100.0	100.0	100.0	100.0
22	100.0	100.0	100.0	100.0	100.0	100.0
23	100.0	100.0	100.0	100.0	100.0	100.0
24	100.0	100.0	100.0	100.0	100.0	100.0
25	100.0	100.0	100.0	100.0	100.0	100.0
26	100.0	100.0	100.0	100.0	100.0	100.0
27	100.0	100.0	100.0	100.0	100.0	100.0
28	100.0	100.0	100.0	100.0	100.0	100.0
29	100.0	100.0	100.0	100.0	100.0	100.0
30	100.0	100.0	100.0	100.0	100.0	100.0
31	100.0	100.0	100.0	100.0	100.0	100.0
32	100.0	100.0	100.0	100.0	100.0	100.0
33	100.0	100.0	100.0	100.0	100.0	100.0
34	100.0	100.0	100.0	100.0	100.0	100.0
35	100.0	100.0	100.0	100.0	100.0	100.0
36	100.0	100.0	100.0	100.0	100.0	100.0
37	100.0	100.0	100.0	100.0	100.0	100.0
38	100.0	100.0	100.0	100.0	100.0	100.0
39	100.0	100.0	100.0	100.0	100.0	100.0
40	100.0	100.0	100.0	100.0	100.0	100.0
41	100.0	100.0	100.0	100.0	100.0	100.0
42	100.0	100.0	100.0	100.0	100.0	100.0
43	100.0	100.0	100.0	100.0	100.0	100.0
44	100.0	100.0	100.0	100.0	100.0	100.0
45	100.0	100.0	100.0	100.0	100.0	100.0
46	100.0	100.0	100.0	100.0	100.0	100.0
47	100.0	100.0	100.0	100.0	100.0	100.0
48	100.0	100.0	100.0	100.0	100.0	100.0
49	100.0	100.0	100.0	100.0	100.0	100.0
50	100.0	100.0	100.0	100.0	100.0	100.0
51	100.0	100.0	100.0	100.0	100.0	100.0
52	100.0	100.0	100.0	100.0	100.0	100.0
53	100.0	100.0	100.0	100.0	100.0	100.0
54	100.0	100.0	100.0	100.0	100.0	100.0
55	100.0	100.0	100.0	100.0	100.0	100.0
56	100.0	100.0	100.0	100.0	100.0	100.0
57	100.0	100.0	100.0	100.0	100.0	100.0
58	100.0	100.0	100.0	100.0	100.0	100.0

Table 85. Vertical Electric Field (Ice), Frequency = 100.0 MHz, VED Height = 4.50 m

30.0 KM DOWNRANGE				300.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)	
0.000	-27.001	87.34		0.000	-37.896	120.01		0.000	-47.355	-141.43	
0.030	-27.159	94.56		0.100	-37.665	80.84		0.300	-47.423	77.07	
0.060	-27.227	94.53		0.200	-37.735	80.94		0.600	-47.560	77.00	
0.090	-27.295	94.53		0.300	-37.805	80.97		0.900	-47.629	76.85	
0.120	-27.364	94.53		0.400	-37.875	80.98		1.200	-47.697	76.85	
0.150	-27.433	94.53		0.500	-37.946	80.95		1.500	-47.766	76.82	
0.180	-27.502	94.50		0.600	-38.016	80.91		1.800	-47.834	76.82	
0.210	-27.571	94.48		0.700	-38.087	80.84		2.100	-47.902	76.84	
0.240	-27.641	94.45		0.800	-38.158	80.74		2.400	-47.968	76.48	
0.270	-27.711	94.41		0.900	-38.229	80.61		2.700	-48.034	76.44	
0.300	-27.781	94.38		1.000	-38.301	80.56		3.000	-48.100	76.31	
0.330	-27.852	94.31		1.100	-38.372	80.50		3.300	-48.166	76.61	
0.360	-27.922	94.25		1.200	-38.444	80.57		3.600	-48.232	76.82	
0.390	-27.993	94.18		1.300	-38.515	79.94		3.900	-48.298	76.95	
0.420	-28.063	94.10		1.400	-38.587	79.57		4.200	-48.364	69.82	
0.450	-28.133	94.01		1.500	-38.658	79.20		4.500	-48.430	69.82	
0.480	-28.203	93.92		1.600	-38.730	79.50		4.800	-48.496	69.33	
0.510	-28.273	93.84		1.700	-38.801	79.62		5.100	-48.562	69.33	
0.540	-28.343	93.71		1.800	-38.871	79.62		5.400	-48.628	69.33	
0.570	-28.413	93.59		1.900	-38.941	79.61		5.700	-48.694	69.33	
0.600	-28.483	93.46		2.000	-39.011	79.50		6.000	-48.760	69.33	
0.630	-28.553	93.32		2.100	-39.082	79.68		6.300	-48.826	69.33	
0.660	-28.623	93.17		2.200	-39.152	79.37		6.600	-48.892	69.33	
0.690	-28.693	93.01		2.300	-39.223	79.63		6.900	-48.958	69.33	
0.720	-28.763	92.85		2.400	-39.293	79.25		7.200	-49.024	69.33	
0.750	-28.833	92.67		2.500	-39.364	79.54		7.500	-49.090	69.33	
0.780	-28.903	92.49		2.600	-39.434	79.32		7.800	-49.156	69.33	
0.810	-28.973	92.29		2.700	-39.504	79.61		8.100	-49.222	69.33	
0.840	-29.043	92.08		2.800	-39.574	79.61		8.400	-49.288	69.33	
0.870	-29.113	91.86		2.900	-39.644	79.57		8.700	-49.354	69.33	
0.900	-29.183	91.63		3.000	-39.714	79.57		9.000	-49.420	69.33	
1.050	-29.613	90.36		3.500	-39.957	79.57		10.500	-49.857	69.33	
1.200	-29.993	88.76		4.000	-40.200	80.71		12.000	-50.294	69.33	
1.350	-30.373	86.74		4.500	-40.443	80.75		13.500	-50.731	69.33	
1.500	-30.753	84.51		5.000	-40.686	80.75		15.000	-51.168	69.33	
1.650	-31.133	82.28		5.500	-40.929	80.75		16.500	-51.605	69.33	
1.800	-31.513	80.05		6.000	-41.172	80.75		18.000	-52.042	69.33	
1.950	-31.893	77.82		6.500	-41.415	80.75		19.500	-52.479	69.33	
2.100	-32.273	75.59		7.000	-41.658	80.75		21.000	-52.916	69.33	
2.250	-32.653	73.36		7.500	-41.901	80.75		22.500	-53.353	69.33	
2.400	-33.033	71.13		8.000	-42.144	80.75		24.000	-53.790	69.33	
2.550	-33.413	68.90		8.500	-42.387	80.75		25.500	-54.227	69.33	
2.700	-33.793	66.67		9.000	-42.630	80.75		27.000	-54.664	69.33	
2.850	-34.173	64.44		9.500	-42.873	80.75		28.500	-55.101	69.33	
3.000	-34.553	62.21		10.000	-43.116	80.75		30.000	-55.538	69.33	

Table 86. Radial Electric Field (Ice), Frequency = 0.1 MHz, VED Height = 0.00 m

100 KM DISTANCE				100 KM DISTANCE				300 KM DISTANCE			
TELEMET (A)	AMP (DB)	PHASE (DEG)	TELEMET (A)	AMP (DB)	PHASE (DEG)	TELEMET (A)	AMP (DB)	TELEMET (A)	AMP (DB)	PHASE (DEG)	TELEMET (A)
0.00	-30.70	-14.50	0.00	-40.00	-14.50	0.00	-50.70	0.00	-60.70	-14.50	0.00
0.01	-30.70	-14.50	0.01	-39.50	-14.50	0.01	-39.50	0.01	-40.00	-14.50	0.01
0.02	-30.70	-14.50	0.02	-39.00	-14.50	0.02	-39.00	0.02	-40.00	-14.50	0.02
0.03	-30.70	-14.50	0.03	-38.50	-14.50	0.03	-38.50	0.03	-40.00	-14.50	0.03
0.04	-30.70	-14.50	0.04	-38.00	-14.50	0.04	-38.00	0.04	-40.00	-14.50	0.04
0.05	-30.70	-14.50	0.05	-37.50	-14.50	0.05	-37.50	0.05	-40.00	-14.50	0.05
0.06	-30.70	-14.50	0.06	-37.00	-14.50	0.06	-37.00	0.06	-40.00	-14.50	0.06
0.07	-30.70	-14.50	0.07	-36.50	-14.50	0.07	-36.50	0.07	-40.00	-14.50	0.07
0.08	-30.70	-14.50	0.08	-36.00	-14.50	0.08	-36.00	0.08	-40.00	-14.50	0.08
0.09	-30.70	-14.50	0.09	-35.50	-14.50	0.09	-35.50	0.09	-40.00	-14.50	0.09
0.10	-30.70	-14.50	0.10	-35.00	-14.50	0.10	-35.00	0.10	-40.00	-14.50	0.10
0.11	-30.70	-14.50	0.11	-34.50	-14.50	0.11	-34.50	0.11	-40.00	-14.50	0.11
0.12	-30.70	-14.50	0.12	-34.00	-14.50	0.12	-34.00	0.12	-40.00	-14.50	0.12
0.13	-30.70	-14.50	0.13	-33.50	-14.50	0.13	-33.50	0.13	-40.00	-14.50	0.13
0.14	-30.70	-14.50	0.14	-33.00	-14.50	0.14	-33.00	0.14	-40.00	-14.50	0.14
0.15	-30.70	-14.50	0.15	-32.50	-14.50	0.15	-32.50	0.15	-40.00	-14.50	0.15
0.16	-30.70	-14.50	0.16	-32.00	-14.50	0.16	-32.00	0.16	-40.00	-14.50	0.16
0.17	-30.70	-14.50	0.17	-31.50	-14.50	0.17	-31.50	0.17	-40.00	-14.50	0.17
0.18	-30.70	-14.50	0.18	-31.00	-14.50	0.18	-31.00	0.18	-40.00	-14.50	0.18
0.19	-30.70	-14.50	0.19	-30.50	-14.50	0.19	-30.50	0.19	-40.00	-14.50	0.19
0.20	-30.70	-14.50	0.20	-30.00	-14.50	0.20	-30.00	0.20	-40.00	-14.50	0.20
0.21	-30.70	-14.50	0.21	-29.50	-14.50	0.21	-29.50	0.21	-40.00	-14.50	0.21
0.22	-30.70	-14.50	0.22	-29.00	-14.50	0.22	-29.00	0.22	-40.00	-14.50	0.22
0.23	-30.70	-14.50	0.23	-28.50	-14.50	0.23	-28.50	0.23	-40.00	-14.50	0.23
0.24	-30.70	-14.50	0.24	-28.00	-14.50	0.24	-28.00	0.24	-40.00	-14.50	0.24
0.25	-30.70	-14.50	0.25	-27.50	-14.50	0.25	-27.50	0.25	-40.00	-14.50	0.25
0.26	-30.70	-14.50	0.26	-27.00	-14.50	0.26	-27.00	0.26	-40.00	-14.50	0.26
0.27	-30.70	-14.50	0.27	-26.50	-14.50	0.27	-26.50	0.27	-40.00	-14.50	0.27
0.28	-30.70	-14.50	0.28	-26.00	-14.50	0.28	-26.00	0.28	-40.00	-14.50	0.28
0.29	-30.70	-14.50	0.29	-25.50	-14.50	0.29	-25.50	0.29	-40.00	-14.50	0.29
0.30	-30.70	-14.50	0.30	-25.00	-14.50	0.30	-25.00	0.30	-40.00	-14.50	0.30
0.31	-30.70	-14.50	0.31	-24.50	-14.50	0.31	-24.50	0.31	-40.00	-14.50	0.31
0.32	-30.70	-14.50	0.32	-24.00	-14.50	0.32	-24.00	0.32	-40.00	-14.50	0.32
0.33	-30.70	-14.50	0.33	-23.50	-14.50	0.33	-23.50	0.33	-40.00	-14.50	0.33
0.34	-30.70	-14.50	0.34	-23.00	-14.50	0.34	-23.00	0.34	-40.00	-14.50	0.34
0.35	-30.70	-14.50	0.35	-22.50	-14.50	0.35	-22.50	0.35	-40.00	-14.50	0.35
0.36	-30.70	-14.50	0.36	-22.00	-14.50	0.36	-22.00	0.36	-40.00	-14.50	0.36
0.37	-30.70	-14.50	0.37	-21.50	-14.50	0.37	-21.50	0.37	-40.00	-14.50	0.37
0.38	-30.70	-14.50	0.38	-21.00	-14.50	0.38	-21.00	0.38	-40.00	-14.50	0.38
0.39	-30.70	-14.50	0.39	-20.50	-14.50	0.39	-20.50	0.39	-40.00	-14.50	0.39
0.40	-30.70	-14.50	0.40	-20.00	-14.50	0.40	-20.00	0.40	-40.00	-14.50	0.40
0.41	-30.70	-14.50	0.41	-19.50	-14.50	0.41	-19.50	0.41	-40.00	-14.50	0.41
0.42	-30.70	-14.50	0.42	-19.00	-14.50	0.42	-19.00	0.42	-40.00	-14.50	0.42
0.43	-30.70	-14.50	0.43	-18.50	-14.50	0.43	-18.50	0.43	-40.00	-14.50	0.43
0.44	-30.70	-14.50	0.44	-18.00	-14.50	0.44	-18.00	0.44	-40.00	-14.50	0.44
0.45	-30.70	-14.50	0.45	-17.50	-14.50	0.45	-17.50	0.45	-40.00	-14.50	0.45
0.46	-30.70	-14.50	0.46	-17.00	-14.50	0.46	-17.00	0.46	-40.00	-14.50	0.46
0.47	-30.70	-14.50	0.47	-16.50	-14.50	0.47	-16.50	0.47	-40.00	-14.50	0.47
0.48	-30.70	-14.50	0.48	-16.00	-14.50	0.48	-16.00	0.48	-40.00	-14.50	0.48
0.49	-30.70	-14.50	0.49	-15.50	-14.50	0.49	-15.50	0.49	-40.00	-14.50	0.49
0.50	-30.70	-14.50	0.50	-15.00	-14.50	0.50	-15.00	0.50	-40.00	-14.50	0.50
0.51	-30.70	-14.50	0.51	-14.50	-14.50	0.51	-14.50	0.51	-40.00	-14.50	0.51
0.52	-30.70	-14.50	0.52	-14.00	-14.50	0.52	-14.00	0.52	-40.00	-14.50	0.52
0.53	-30.70	-14.50	0.53	-13.50	-14.50	0.53	-13.50	0.53	-40.00	-14.50	0.53
0.54	-30.70	-14.50	0.54	-13.00	-14.50	0.54	-13.00	0.54	-40.00	-14.50	0.54
0.55	-30.70	-14.50	0.55	-12.50	-14.50	0.55	-12.50	0.55	-40.00	-14.50	0.55
0.56	-30.70	-14.50	0.56	-12.00	-14.50	0.56	-12.00	0.56	-40.00	-14.50	0.56
0.57	-30.70	-14.50	0.57	-11.50	-14.50	0.57	-11.50	0.57	-40.00	-14.50	0.57
0.58	-30.70	-14.50	0.58	-11.00	-14.50	0.58	-11.00	0.58	-40.00	-14.50	0.58
0.59	-30.70	-14.50	0.59	-10.50	-14.50	0.59	-10.50	0.59	-40.00	-14.50	0.59
0.60	-30.70	-14.50	0.60	-10.00	-14.50	0.60	-10.00	0.60	-40.00	-14.50	0.60
0.61	-30.70	-14.50	0.61	-9.50	-14.50	0.61	-9.50	0.61	-40.00	-14.50	0.61
0.62	-30.70	-14.50	0.62	-9.00	-14.50	0.62	-9.00	0.62	-40.00	-14.50	0.62
0.63	-30.70	-14.50	0.63	-8.50	-14.50	0.63	-8.50	0.63	-40.00	-14.50	0.63
0.64	-30.70	-14.50	0.64	-8.00	-14.50	0.64	-8.00	0.64	-40.00	-14.50	0.64
0.65	-30.70	-14.50	0.65	-7.50	-14.50	0.65	-7.50	0.65	-40.00	-14.50	0.65
0.66	-30.70	-14.50	0.66	-7.00	-14.50	0.66	-7.00	0.66	-40.00	-14.50	0.66
0.67	-30.70	-14.50	0.67	-6.50	-14.50	0.67	-6.50	0.67	-40.00	-14.50	0.67
0.68	-30.70	-14.50	0.68	-6.00	-14.50	0.68	-6.00	0.68	-40.00	-14.50	0.68
0.69	-30.70	-14.50	0.69	-5.50	-14.50	0.69	-5.50	0.69	-40.00	-14.50	0.69
0.70	-30.70	-14.50	0.70	-5.00	-14.50	0.70	-5.00	0.70	-40.00	-14.50	0.70
0.71	-30.70	-14.50	0.71	-4.50	-14.50	0.71	-4.50	0.71	-40.00	-14.50	0.71
0.72	-30.70	-14.50	0.72	-4.00	-14.50	0.72	-4.00	0.72	-40.00	-14.50	0.72
0.73	-30.70	-14.50	0.73	-3.50	-14.50	0.73	-3.50	0.73	-40.00	-14.50	0.73
0.74	-30.70	-14.50	0.74	-3.00	-14.50	0.74	-3.00	0.74	-40.00	-14.50	0.74
0.75	-30.70	-14.50	0.75	-2.50	-14.50	0.75	-2.50	0.75	-40.00	-14.50	0.75
0.76	-30.70	-14.50	0.76	-2.00	-14.50	0.76	-2.00	0.76	-40.00	-14.50	0.76
0.77	-30.70	-14.50	0.77	-1.50	-14.50	0.77	-1.50	0.77	-40.00	-14.50	0.77
0.78	-30.70	-14.50	0.78	-1.00	-14.50	0.78	-1.00	0.78	-40.00	-14.50	0.78
0.79	-30.70	-14.50	0.79	-0.50	-14.50	0.79	-0.50	0.79	-40.00	-14.50	0.79
0.80	-30.70	-14.50	0.80	0.00	-14.50	0.80	0.00	0.80	-40.00	-14.50	0.80
0.81	-30.70	-14.50	0.81	0.50	-14.50	0.81	0.50	0.81	-40.00	-14.50	0.81
0.82	-30.70	-14.50	0.82	1.00	-14.50	0.82	1.00	0.82	-40.00	-14.50	0.82
0.83	-30.70	-14.50	0.83	1.50	-14.50	0.83	1.50	0.83	-40.00	-14.50	0.83
0.84	-30.70	-14.50	0.84	2.00	-14.50	0.84	2.00	0.84	-40.00	-14.50	0.84
0.85	-30.70	-14.50	0.85	2.50	-14.50	0.85	2.50	0.85	-40.00	-14.50	0.85
0.86	-30.70	-14.50	0.86	3.00	-14.50	0.86	3.00	0.86	-40.00	-14.50	0.86
0.87	-30.70	-14.50	0.87	3.50	-14.50	0.87	3.50	0.87	-40.00	-14.50	0.87
0.88	-30.70	-14.50	0.88	4.00	-14.50	0.88	4.00	0.88	-40.00	-14.50	0.88
0.89	-30.70	-14.50	0.89	4.50	-14.50	0.89	4.50	0.89	-40.00	-14.50	0.89
0.90	-30.70	-14.50	0.90	5.00	-14.50	0.90	5.00	0.90	-40.00	-14.50	0.90
0.91	-30.70	-14.50	0.91	5.50	-14.50	0.91	5.50	0.91	-40.00	-14.50	0.91
0.92	-30.70	-14.50	0.92	6.00	-14.50	0.92	6.00	0.92	-40.00	-14.50	0.92
0.93	-30.70	-14.50	0.93	6.50	-14.50	0.93	6.50	0.93	-40.00	-14.50	0.93
0.94	-30.70	-14.50	0.94	7.00	-14.50	0.94	7.00	0.94	-40.00	-14.50	0.94
0.95	-30.70	-14.50	0.95	7.50	-14.50	0.95	7.50	0.95	-40.00	-14.50	0.95
0.96	-30.70	-14.50	0.96	8.00	-14.50	0.96	8.00	0.96	-40.00	-14.50	0.96
0.97	-30.70	-14.50	0.97	8.50	-14.50	0.97	8.50	0.97	-40.00	-14.50	0.97
0.98	-30.70	-14.50	0.98	9.00	-14.50	0.98	9.00	0.98	-40.00	-14.50	0.98
0.99	-30.70	-14.50	0.99	9.50	-14.50	0.99	9.50	0.99	-40.00	-14.50	0.99
1.00	-30.70	-14.50	1.00	10.00	-14.50	1.00	10.00	1.00	-40.00	-14.50</	

Table 87. Radial Electric Field (Ice), Frequency = 0.1 MHz, VED Height = 2247.60 m

[illegible]

Table 88. Radial Electric Field (Ice), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-19.141	-90.625	0.000	-27.913	-156.76	0.000	-36.993	-57.25	0.000	-36.993	-57.25
0.030	-19.107	-127.69	0.000	-27.975	-168.61	0.000	-37.059	173.37	0.000	-37.059	173.37
0.060	-19.074	-127.43	0.000	-28.038	-168.48	0.000	-37.125	173.39	0.000	-37.125	173.39
0.090	-19.041	-127.17	0.000	-28.102	-168.38	0.000	-37.193	173.35	0.000	-37.193	173.35
0.120	-19.008	-126.92	0.000	-28.166	-168.29	1.000	-37.262	173.23	1.000	-37.262	173.23
0.150	-18.975	-126.66	0.000	-28.232	-168.22	1.000	-37.332	173.04	1.000	-37.332	173.04
0.180	-18.942	-126.40	0.000	-28.299	-168.18	1.000	-37.402	172.78	1.000	-37.402	172.78
0.210	-18.909	-126.15	0.000	-28.367	-168.15	1.000	-37.473	172.44	1.000	-37.473	172.44
0.240	-18.876	-125.89	0.000	-28.436	-168.15	2.000	-37.545	172.03	2.000	-37.545	172.03
0.270	-18.843	-125.64	0.000	-28.506	-168.16	2.000	-37.616	171.54	2.000	-37.616	171.54
0.300	-18.810	-125.38	1.000	-28.577	-168.20	3.000	-37.688	170.97	3.000	-37.688	170.97
0.330	-18.777	-125.13	1.000	-28.649	-168.26	3.000	-37.759	170.32	3.000	-37.759	170.32
0.360	-18.744	-124.88	1.000	-28.723	-168.35	3.000	-37.828	169.59	3.000	-37.828	169.59
0.390	-18.711	-124.63	1.000	-28.797	-168.45	3.000	-37.896	168.78	3.000	-37.896	168.78
0.420	-18.678	-124.38	1.000	-28.872	-168.56	4.000	-37.962	167.89	4.000	-37.962	167.89
0.450	-18.645	-124.13	1.000	-28.948	-168.73	4.000	-38.025	166.91	4.000	-38.025	166.91
0.480	-18.612	-123.88	1.000	-29.025	-168.91	4.000	-38.085	165.45	4.000	-38.085	165.45
0.510	-18.579	-123.63	1.000	-29.103	-169.11	5.000	-38.140	164.71	5.000	-38.140	164.71
0.540	-18.546	-123.39	1.000	-29.182	-169.34	5.000	-38.190	163.48	5.000	-38.190	163.48
0.570	-18.513	-123.14	1.000	-29.261	-169.60	5.000	-38.235	162.18	5.000	-38.235	162.18
0.600	-18.480	-122.89	1.000	-29.341	-169.88	6.000	-38.272	160.79	6.000	-38.272	160.79
0.630	-18.447	-122.65	1.000	-29.422	-170.18	6.000	-38.302	159.33	6.000	-38.302	159.33
0.660	-18.414	-122.41	2.000	-29.504	-170.52	6.000	-38.323	157.80	6.000	-38.323	157.80
0.690	-18.381	-122.17	2.000	-29.588	-170.88	6.000	-38.334	156.19	6.000	-38.334	156.19
0.720	-18.348	-121.93	2.000	-29.673	-171.27	7.000	-38.335	154.53	7.000	-38.335	154.53
0.750	-18.315	-121.69	2.000	-29.759	-171.69	7.000	-38.325	152.80	7.000	-38.325	152.80
0.780	-18.282	-121.45	2.000	-29.843	-172.14	7.000	-38.303	151.02	7.000	-38.303	151.02
0.810	-18.249	-121.21	2.000	-29.916	-172.62	8.000	-38.268	149.20	8.000	-38.268	149.20
0.840	-18.216	-120.97	2.000	-29.999	-173.13	8.000	-38.219	147.34	8.000	-38.219	147.34
0.870	-18.183	-120.74	2.000	-30.081	-173.68	8.000	-38.157	145.46	8.000	-38.157	145.46
0.900	-18.150	-120.50	3.000	-30.163	-174.25	9.000	-38.081	143.55	9.000	-38.081	143.55
1.050	-21.667	-117.35	3.500	-30.558	-177.01	10.500	-37.494	134.03	10.500	-37.494	134.03
1.080	-21.634	-117.11	4.000	-30.910	-177.19	12.500	-36.604	125.23	12.500	-36.604	125.23
1.110	-21.601	-116.87	4.000	-31.104	-177.39	13.500	-35.514	117.77	13.500	-35.514	117.77
1.140	-21.568	-116.63	5.000	-31.342	-177.50	15.000	-34.324	111.79	15.000	-34.324	111.79
1.170	-21.535	-116.39	5.000	-31.552	-177.57	16.500	-33.130	107.10	16.500	-33.130	107.10
1.200	-21.502	-116.15	6.000	-31.760	-177.61	18.000	-31.963	103.71	18.000	-31.963	103.71
1.230	-21.469	-115.91	6.000	-31.962	-177.67	19.500	-30.854	101.13	19.500	-30.854	101.13
1.260	-21.436	-115.67	7.000	-32.166	-177.74	21.000	-29.812	99.27	21.000	-29.812	99.27
1.290	-21.403	-115.43	7.000	-32.361	-177.82	22.500	-28.841	97.47	22.500	-28.841	97.47
1.320	-21.370	-115.19	7.000	-32.558	-177.90	24.000	-27.939	95.84	24.000	-27.939	95.84
1.350	-21.337	-114.95	7.000	-32.756	-177.98	25.500	-27.101	94.29	25.500	-27.101	94.29
1.380	-21.304	-114.71	7.000	-32.954	-178.07	27.000	-26.325	92.84	27.000	-26.325	92.84
1.410	-21.271	-114.47	8.000	-33.152	-178.16	28.500	-25.609	91.43	28.500	-25.609	91.43
1.440	-21.238	-114.23	8.000	-33.350	-178.25	30.000	-24.939	90.08	30.000	-24.939	90.08

Table 89. Radial Electric Field (Ice), Frequency = 1.0 MHz, VED Height = 0.00 m

[illegible]

Table 90. Radial Electric Field (Ice), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DOWNRANGE			10.0 KM DOWNRANGE			30.0 KM DOWNRANGE			100.0 KM DOWNRANGE		
TELENT (NM)	AMP (DB)	PHASE (DEG)	TELENT (NM)	AMP (DB)	PHASE (DEG)	TELENT (NM)	AMP (DB)	PHASE (DEG)	TELENT (NM)	AMP (DB)	PHASE (DEG)
1.00	-26.379	147.74	3.00	-52.021	152.021	10.00	-66.447	152.021	30.00	-78.031	152.021
1.05	-26.382	147.74	3.05	-52.024	152.024	10.05	-66.450	152.024	30.05	-78.034	152.024
1.10	-26.385	147.74	3.10	-52.027	152.027	10.10	-66.453	152.027	30.10	-78.037	152.027
1.15	-26.388	147.74	3.15	-52.030	152.030	10.15	-66.456	152.030	30.15	-78.040	152.030
1.20	-26.391	147.74	3.20	-52.033	152.033	10.20	-66.459	152.033	30.20	-78.043	152.033
1.25	-26.394	147.74	3.25	-52.036	152.036	10.25	-66.462	152.036	30.25	-78.046	152.036
1.30	-26.397	147.74	3.30	-52.039	152.039	10.30	-66.465	152.039	30.30	-78.049	152.039
1.35	-26.400	147.74	3.35	-52.042	152.042	10.35	-66.468	152.042	30.35	-78.052	152.042
1.40	-26.403	147.74	3.40	-52.045	152.045	10.40	-66.471	152.045	30.40	-78.055	152.045
1.45	-26.406	147.74	3.45	-52.048	152.048	10.45	-66.474	152.048	30.45	-78.058	152.048
1.50	-26.409	147.74	3.50	-52.051	152.051	10.50	-66.477	152.051	30.50	-78.061	152.051
1.55	-26.412	147.74	3.55	-52.054	152.054	10.55	-66.480	152.054	30.55	-78.064	152.054
1.60	-26.415	147.74	3.60	-52.057	152.057	10.60	-66.483	152.057	30.60	-78.067	152.057
1.65	-26.418	147.74	3.65	-52.060	152.060	10.65	-66.486	152.060	30.65	-78.070	152.060
1.70	-26.421	147.74	3.70	-52.063	152.063	10.70	-66.489	152.063	30.70	-78.073	152.063
1.75	-26.424	147.74	3.75	-52.066	152.066	10.75	-66.492	152.066	30.75	-78.076	152.066
1.80	-26.427	147.74	3.80	-52.069	152.069	10.80	-66.495	152.069	30.80	-78.079	152.069
1.85	-26.430	147.74	3.85	-52.072	152.072	10.85	-66.498	152.072	30.85	-78.082	152.072
1.90	-26.433	147.74	3.90	-52.075	152.075	10.90	-66.501	152.075	30.90	-78.085	152.075
1.95	-26.436	147.74	3.95	-52.078	152.078	10.95	-66.504	152.078	30.95	-78.088	152.078
2.00	-26.439	147.74	4.00	-52.081	152.081	11.00	-66.507	152.081	31.00	-78.091	152.081
2.05	-26.442	147.74	4.05	-52.084	152.084	11.05	-66.510	152.084	31.05	-78.094	152.084
2.10	-26.445	147.74	4.10	-52.087	152.087	11.10	-66.513	152.087	31.10	-78.097	152.087
2.15	-26.448	147.74	4.15	-52.090	152.090	11.15	-66.516	152.090	31.15	-78.100	152.090
2.20	-26.451	147.74	4.20	-52.093	152.093	11.20	-66.519	152.093	31.20	-78.103	152.093
2.25	-26.454	147.74	4.25	-52.096	152.096	11.25	-66.522	152.096	31.25	-78.106	152.096
2.30	-26.457	147.74	4.30	-52.099	152.099	11.30	-66.525	152.099	31.30	-78.109	152.099
2.35	-26.460	147.74	4.35	-52.102	152.102	11.35	-66.528	152.102	31.35	-78.112	152.102
2.40	-26.463	147.74	4.40	-52.105	152.105	11.40	-66.531	152.105	31.40	-78.115	152.105
2.45	-26.466	147.74	4.45	-52.108	152.108	11.45	-66.534	152.108	31.45	-78.118	152.108
2.50	-26.469	147.74	4.50	-52.111	152.111	11.50	-66.537	152.111	31.50	-78.121	152.111
2.55	-26.472	147.74	4.55	-52.114	152.114	11.55	-66.540	152.114	31.55	-78.124	152.114
2.60	-26.475	147.74	4.60	-52.117	152.117	11.60	-66.543	152.117	31.60	-78.127	152.117
2.65	-26.478	147.74	4.65	-52.120	152.120	11.65	-66.546	152.120	31.65	-78.130	152.120
2.70	-26.481	147.74	4.70	-52.123	152.123	11.70	-66.549	152.123	31.70	-78.133	152.123
2.75	-26.484	147.74	4.75	-52.126	152.126	11.75	-66.552	152.126	31.75	-78.136	152.126
2.80	-26.487	147.74	4.80	-52.129	152.129	11.80	-66.555	152.129	31.80	-78.139	152.129
2.85	-26.490	147.74	4.85	-52.132	152.132	11.85	-66.558	152.132	31.85	-78.142	152.132
2.90	-26.493	147.74	4.90	-52.135	152.135	11.90	-66.561	152.135	31.90	-78.145	152.135
2.95	-26.496	147.74	4.95	-52.138	152.138	11.95	-66.564	152.138	31.95	-78.148	152.138
3.00	-26.499	147.74	5.00	-52.141	152.141	12.00	-66.567	152.141	32.00	-78.151	152.141

Table 91. Radial Electric Field (ice), Frequency = 1.0 MHz, VED Height = 449.52 m

30.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)
0.00	-16.967	-51.16	0.00	-16.967	-51.16	0.00	-36.545	-56.26	0.00	-46.796	-59.53	0.00	-46.796	-59.53
0.03	-17.003	-130.67	0.03	-17.003	-130.67	0.03	-36.609	-174.25	0.03	-46.861	-167.73	0.03	-46.861	-167.73
0.06	-17.039	-130.67	0.06	-17.039	-130.67	0.06	-36.674	-174.25	0.06	-46.926	-167.73	0.06	-46.926	-167.73
0.09	-17.075	-130.67	0.09	-17.075	-130.67	0.09	-36.738	-174.25	0.09	-47.000	-167.73	0.09	-47.000	-167.73
0.12	-17.111	-130.67	0.12	-17.111	-130.67	0.12	-36.802	-174.25	0.12	-47.074	-167.73	0.12	-47.074	-167.73
0.15	-17.147	-130.67	0.15	-17.147	-130.67	0.15	-36.866	-174.25	0.15	-47.148	-167.73	0.15	-47.148	-167.73
0.18	-17.183	-130.67	0.18	-17.183	-130.67	0.18	-36.930	-174.25	0.18	-47.222	-167.73	0.18	-47.222	-167.73
0.21	-17.219	-130.67	0.21	-17.219	-130.67	0.21	-37.000	-174.25	0.21	-47.296	-167.73	0.21	-47.296	-167.73
0.24	-17.255	-130.67	0.24	-17.255	-130.67	0.24	-37.064	-174.25	0.24	-47.370	-167.73	0.24	-47.370	-167.73
0.27	-17.291	-130.67	0.27	-17.291	-130.67	0.27	-37.128	-174.25	0.27	-47.444	-167.73	0.27	-47.444	-167.73
0.30	-17.327	-130.67	0.30	-17.327	-130.67	0.30	-37.192	-174.25	0.30	-47.518	-167.73	0.30	-47.518	-167.73
0.33	-17.363	-130.67	0.33	-17.363	-130.67	0.33	-37.256	-174.25	0.33	-47.592	-167.73	0.33	-47.592	-167.73
0.36	-17.399	-130.67	0.36	-17.399	-130.67	0.36	-37.320	-174.25	0.36	-47.666	-167.73	0.36	-47.666	-167.73
0.39	-17.435	-130.67	0.39	-17.435	-130.67	0.39	-37.384	-174.25	0.39	-47.740	-167.73	0.39	-47.740	-167.73
0.42	-17.471	-130.67	0.42	-17.471	-130.67	0.42	-37.448	-174.25	0.42	-47.814	-167.73	0.42	-47.814	-167.73
0.45	-17.507	-130.67	0.45	-17.507	-130.67	0.45	-37.512	-174.25	0.45	-47.888	-167.73	0.45	-47.888	-167.73
0.48	-17.543	-130.67	0.48	-17.543	-130.67	0.48	-37.576	-174.25	0.48	-47.962	-167.73	0.48	-47.962	-167.73
0.51	-17.579	-130.67	0.51	-17.579	-130.67	0.51	-37.640	-174.25	0.51	-48.036	-167.73	0.51	-48.036	-167.73
0.54	-17.615	-130.67	0.54	-17.615	-130.67	0.54	-37.704	-174.25	0.54	-48.110	-167.73	0.54	-48.110	-167.73
0.57	-17.651	-130.67	0.57	-17.651	-130.67	0.57	-37.768	-174.25	0.57	-48.184	-167.73	0.57	-48.184	-167.73
0.60	-17.687	-130.67	0.60	-17.687	-130.67	0.60	-37.832	-174.25	0.60	-48.258	-167.73	0.60	-48.258	-167.73
0.63	-17.723	-130.67	0.63	-17.723	-130.67	0.63	-37.896	-174.25	0.63	-48.332	-167.73	0.63	-48.332	-167.73
0.66	-17.759	-130.67	0.66	-17.759	-130.67	0.66	-37.960	-174.25	0.66	-48.406	-167.73	0.66	-48.406	-167.73
0.69	-17.795	-130.67	0.69	-17.795	-130.67	0.69	-38.024	-174.25	0.69	-48.480	-167.73	0.69	-48.480	-167.73
0.72	-17.831	-130.67	0.72	-17.831	-130.67	0.72	-38.088	-174.25	0.72	-48.554	-167.73	0.72	-48.554	-167.73
0.75	-17.867	-130.67	0.75	-17.867	-130.67	0.75	-38.152	-174.25	0.75	-48.628	-167.73	0.75	-48.628	-167.73
0.78	-17.903	-130.67	0.78	-17.903	-130.67	0.78	-38.216	-174.25	0.78	-48.702	-167.73	0.78	-48.702	-167.73
0.81	-17.939	-130.67	0.81	-17.939	-130.67	0.81	-38.280	-174.25	0.81	-48.776	-167.73	0.81	-48.776	-167.73
0.84	-17.975	-130.67	0.84	-17.975	-130.67	0.84	-38.344	-174.25	0.84	-48.850	-167.73	0.84	-48.850	-167.73
0.87	-18.011	-130.67	0.87	-18.011	-130.67	0.87	-38.408	-174.25	0.87	-48.924	-167.73	0.87	-48.924	-167.73
0.90	-18.047	-130.67	0.90	-18.047	-130.67	0.90	-38.472	-174.25	0.90	-49.000	-167.73	0.90	-49.000	-167.73
1.03	-21.356	-125.06	1.03	-21.356	-125.06	1.03	-30.175	-174.25	1.03	-39.218	-95.70	1.03	-39.218	-95.70
1.20	-21.608	-125.06	1.20	-21.608	-125.06	1.20	-30.484	-174.25	1.20	-39.235	-91.44	1.20	-39.235	-91.44
1.35	-21.644	-125.06	1.35	-21.644	-125.06	1.35	-30.793	-174.25	1.35	-39.252	-87.18	1.35	-39.252	-87.18
1.50	-21.680	-125.06	1.50	-21.680	-125.06	1.50	-31.102	-174.25	1.50	-39.269	-82.92	1.50	-39.269	-82.92
1.65	-21.716	-125.06	1.65	-21.716	-125.06	1.65	-31.411	-174.25	1.65	-39.286	-78.66	1.65	-39.286	-78.66
1.80	-21.752	-125.06	1.80	-21.752	-125.06	1.80	-31.720	-174.25	1.80	-39.303	-74.40	1.80	-39.303	-74.40
1.95	-21.788	-125.06	1.95	-21.788	-125.06	1.95	-32.029	-174.25	1.95	-39.320	-70.14	1.95	-39.320	-70.14
2.10	-21.824	-125.06	2.10	-21.824	-125.06	2.10	-32.338	-174.25	2.10	-39.337	-65.88	2.10	-39.337	-65.88
2.25	-21.860	-125.06	2.25	-21.860	-125.06	2.25	-32.647	-174.25	2.25	-39.354	-61.62	2.25	-39.354	-61.62
2.40	-21.896	-125.06	2.40	-21.896	-125.06	2.40	-32.956	-174.25	2.40	-39.371	-57.36	2.40	-39.371	-57.36
2.55	-21.932	-125.06	2.55	-21.932	-125.06	2.55	-33.265	-174.25	2.55	-39.388	-53.10	2.55	-39.388	-53.10
2.70	-21.968	-125.06	2.70	-21.968	-125.06	2.70	-33.574	-174.25	2.70	-39.405	-48.84	2.70	-39.405	-48.84
2.85	-22.004	-125.06	2.85	-22.004	-125.06	2.85	-33.883	-174.25	2.85	-39.422	-44.58	2.85	-39.422	-44.58
3.00	-22.040	-125.06	3.00	-22.040	-125.06	3.00	-34.192	-174.25	3.00	-39.439	-40.32	3.00	-39.439	-40.32

Table 92. Radial Electric Field (Ice), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM UMBRANGE				10.0 KM UMBRANGE				100.0 KM UMBRANGE			
RELUMT (KM)	AMP (UB)	PHASE (DEG)	RELUMT (KM)	AMP (UB)	PHASE (DEG)	RELUMT (KM)	AMP (UB)	RELUMT (KM)	AMP (UB)	PHASE (DEG)	PHASE (DEG)
0.00	-40.000	-120.00	0.00	-30.474	22.26	0.00	-00.016	0.00	-78.474	-51.09	-51.09
0.03	-40.009	91.51	0.10	-30.539	90.47	0.30	-00.081	0.10	-78.537	88.69	88.69
0.06	-40.134	91.39	0.20	-30.604	89.87	0.60	-00.144	0.20	-78.573	85.06	85.06
0.09	-40.219	91.20	0.30	-30.669	89.20	0.90	-00.190	0.30	-78.513	79.05	79.05
0.12	-40.265	90.93	0.40	-30.731	88.39	1.20	-00.233	0.40	-78.255	71.00	71.00
0.15	-40.350	90.59	0.50	-30.790	87.27	1.50	-00.273	0.50	-77.899	61.04	61.04
0.18	-40.415	90.11	0.60	-30.842	85.90	1.80	-00.310	0.60	-76.812	52.01	52.01
0.21	-40.460	89.67	0.70	-30.886	84.21	2.10	-00.345	0.70	-75.844	43.11	43.11
0.24	-40.543	89.09	0.80	-30.916	82.39	2.40	-00.378	0.80	-74.298	35.48	35.48
0.27	-40.605	88.43	0.90	-30.934	80.20	2.70	-00.401	0.90	-72.875	29.25	29.25
0.30	-40.660	87.69	1.00	-30.949	77.92	3.00	-00.410	1.00	-71.449	24.28	24.28
0.33	-40.724	86.87	1.10	-30.961	75.32	3.30	-00.415	1.10	-70.001	20.33	20.33
0.36	-40.779	85.96	1.20	-30.965	72.33	3.60	-00.416	1.20	-68.734	17.19	17.19
0.39	-40.831	84.97	1.30	-30.970	69.30	3.90	-00.417	1.30	-67.474	14.68	14.68
0.42	-40.880	83.90	1.40	-30.970	66.31	4.20	-00.417	1.40	-66.284	12.85	12.85
0.45	-40.923	82.74	1.50	-30.971	63.31	4.50	-00.417	1.50	-65.100	10.99	10.99
0.48	-40.961	81.51	1.60	-30.972	60.31	4.80	-00.417	1.60	-64.098	9.63	9.63
0.51	-40.992	80.19	1.70	-30.974	57.35	5.10	-00.417	1.70	-63.094	8.49	8.49
0.54	-41.017	78.80	1.80	-30.975	54.35	5.40	-00.417	1.80	-62.143	7.53	7.53
0.57	-41.033	77.33	1.90	-30.976	51.35	5.70	-00.417	1.90	-61.241	6.72	6.72
0.60	-41.041	75.79	2.00	-30.976	48.35	6.00	-00.417	2.00	-60.383	6.03	6.03
0.63	-41.039	74.18	2.10	-30.976	45.35	6.30	-00.417	2.10	-59.566	5.43	5.43
0.66	-41.027	72.51	2.20	-30.976	42.35	6.60	-00.417	2.20	-58.787	4.91	4.91
0.69	-41.003	70.78	2.30	-30.976	39.35	6.90	-00.417	2.30	-58.042	4.46	4.46
0.72	-40.961	69.01	2.40	-30.976	36.35	7.20	-00.417	2.40	-57.328	4.07	4.07
0.75	-40.909	67.18	2.50	-30.976	33.35	7.50	-00.417	2.50	-56.644	3.72	3.72
0.78	-40.859	65.33	2.60	-30.976	30.35	7.80	-00.417	2.60	-55.987	3.41	3.41
0.81	-40.804	63.44	2.70	-30.976	27.35	8.10	-00.417	2.70	-55.355	3.14	3.14
0.84	-40.757	61.53	2.80	-30.976	24.35	8.40	-00.417	2.80	-54.747	2.90	2.90
0.87	-40.705	59.61	2.90	-30.976	21.35	8.70	-00.417	2.90	-54.160	2.68	2.68
0.90	-40.648	57.69	3.00	-30.976	18.35	9.00	-00.417	3.00	-53.594	2.48	2.48
1.05	-44.713	40.29	4.50	-30.985	19.12	1.05	-30.982	4.50	-51.027	1.74	1.74
1.20	-46.091	37.79	4.00	-40.571	13.72	1.20	-40.570	4.00	-40.815	1.27	1.27
1.35	-47.500	35.02	3.50	-46.735	10.64	1.35	-46.861	3.50	-40.875	0.95	0.95
1.50	-48.901	32.70	3.00	-48.504	8.44	1.50	-48.595	3.00	-43.151	0.73	0.73
1.65	-50.302	29.13	2.50	-50.355	6.61	1.65	-50.355	2.50	-43.601	0.56	0.56
1.80	-51.707	25.49	2.00	-52.158	5.58	1.80	-52.191	2.00	-44.194	0.44	0.44
1.95	-53.103	21.85	1.50	-54.004	4.56	1.95	-54.006	1.50	-44.909	0.34	0.34
2.10	-54.500	18.13	1.00	-55.820	3.50	2.10	-55.820	1.00	-45.726	0.27	0.27
2.25	-55.896	14.43	0.50	-57.620	3.31	2.25	-57.631	0.50	-46.632	0.21	0.21
2.40	-57.291	9.67	0.00	-59.400	2.83	2.40	-59.400	0.00	-47.615	0.17	0.17
2.55	-58.687	5.39	0.50	-61.160	2.44	2.55	-61.160	0.50	-48.686	0.13	0.13
2.70	-60.084	7.33	0.00	-62.912	2.12	2.70	-62.912	0.00	-49.777	0.10	0.10
2.85	-61.480	5.43	0.50	-64.658	1.85	2.85	-64.658	0.50	-50.841	0.07	0.07
3.00	-62.877	3.00	1.00	-66.402	1.62	3.00	-66.402	1.00	-51.894	0.05	0.05

Table 93. Radial Electric Field (ke), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM UOMRANGE				10.0 KM UOMRANGE				30.0 KM UOMRANGE				100.0 KM UOMRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.000	-61.572	-66.18	0.000	-51.937	84.00	0.000	-51.454	0.000	-51.454	-52.24	0.000	-71.903	0.000	-71.903	11.05
0.003	-61.637	155.25	0.010	-52.002	152.84	0.030	-51.514	0.030	-51.514	151.99	0.100	-71.966	0.100	-71.966	150.92
0.006	-61.702	155.15	0.020	-52.066	152.84	0.060	-51.582	0.060	-51.582	150.90	0.200	-72.003	0.200	-72.003	147.24
0.009	-61.768	154.97	0.030	-52.133	151.92	0.090	-51.637	0.090	-51.637	149.07	0.300	-71.944	0.300	-71.944	141.29
0.012	-61.834	154.71	0.040	-52.196	151.06	0.120	-51.673	0.120	-51.673	146.50	0.400	-71.886	0.400	-71.886	133.23
0.015	-61.900	154.38	0.050	-52.256	149.45	0.150	-51.674	0.150	-51.674	143.21	0.500	-71.832	0.500	-71.832	123.87
0.018	-61.966	153.98	0.060	-52.310	148.58	0.180	-51.624	0.180	-51.624	139.23	0.600	-71.786	0.600	-71.786	114.24
0.021	-62.032	153.44	0.070	-52.356	147.56	0.210	-51.501	0.210	-51.501	134.66	0.700	-71.749	0.700	-71.749	105.33
0.024	-62.098	152.93	0.080	-52.399	146.50	0.240	-51.288	0.240	-51.288	129.62	0.800	-67.734	0.800	-67.734	97.71
0.027	-62.162	152.29	0.090	-52.440	145.04	0.270	-50.973	0.270	-50.973	124.29	0.900	-66.312	0.900	-66.312	91.47
0.030	-62.225	151.56	0.100	-52.478	143.61	0.300	-50.552	0.300	-50.552	118.66	1.000	-64.886	1.000	-64.886	86.20
0.033	-62.287	150.76	0.110	-52.513	142.03	0.330	-50.024	0.330	-50.024	113.52	1.100	-63.449	1.100	-63.449	82.25
0.036	-62.346	149.87	0.120	-52.530	140.43	0.360	-49.416	0.360	-49.416	108.44	1.200	-62.173	1.200	-62.173	79.42
0.039	-62.402	148.90	0.130	-52.546	138.81	0.390	-48.736	0.390	-48.736	103.46	1.300	-60.914	1.300	-60.914	76.91
0.042	-62.454	147.84	0.140	-52.560	137.18	0.420	-48.004	0.420	-48.004	98.51	1.400	-59.725	1.400	-59.725	74.89
0.045	-62.503	146.71	0.150	-52.572	135.54	0.450	-47.240	0.450	-47.240	93.51	1.500	-58.602	1.500	-58.602	73.23
0.048	-62.546	145.49	0.160	-52.581	133.89	0.480	-46.461	0.480	-46.461	88.46	1.600	-57.542	1.600	-57.542	71.87
0.051	-62.583	144.19	0.170	-52.587	132.24	0.510	-45.666	0.510	-45.666	83.40	1.700	-56.539	1.700	-56.539	70.74
0.054	-62.614	142.82	0.180	-52.590	130.59	0.540	-44.847	0.540	-44.847	78.34	1.800	-55.590	1.800	-55.590	69.78
0.057	-62.637	141.36	0.190	-52.590	128.93	0.570	-44.014	0.570	-44.014	73.37	1.900	-54.689	1.900	-54.689	68.98
0.060	-62.651	139.84	0.200	-52.587	127.24	0.600	-43.174	0.600	-43.174	68.40	2.000	-53.833	2.000	-53.833	68.24
0.063	-62.657	138.24	0.210	-52.581	125.54	0.630	-42.324	0.630	-42.324	63.37	2.100	-53.018	2.100	-53.018	67.70
0.066	-62.652	136.58	0.220	-52.572	123.84	0.660	-41.467	0.660	-41.467	58.45	2.200	-52.240	2.200	-52.240	67.20
0.069	-62.636	134.86	0.230	-52.557	122.14	0.690	-40.607	0.690	-40.607	53.51	2.300	-51.497	2.300	-51.497	66.75
0.072	-62.609	133.09	0.240	-52.531	120.44	0.720	-40.746	0.720	-40.746	48.57	2.400	-50.786	2.400	-50.786	66.37
0.075	-62.569	131.27	0.250	-52.494	118.74	0.750	-40.884	0.750	-40.884	43.63	2.500	-50.104	2.500	-50.104	66.03
0.078	-62.517	129.41	0.260	-52.449	117.04	0.780	-40.024	0.780	-40.024	38.69	2.600	-49.449	2.600	-49.449	65.73
0.081	-62.451	127.52	0.270	-52.399	115.34	0.810	-39.164	0.810	-39.164	33.75	2.700	-48.820	2.700	-48.820	65.47
0.084	-62.374	125.60	0.280	-52.347	113.64	0.840	-38.304	0.840	-38.304	28.81	2.800	-48.214	2.800	-48.214	65.23
0.087	-62.287	123.67	0.290	-52.287	111.94	0.870	-37.444	0.870	-37.444	23.87	2.900	-47.630	2.900	-47.630	65.02
0.090	-62.192	121.74	0.300	-52.225	110.24	0.900	-36.584	0.900	-36.584	18.93	3.000	-47.066	3.000	-47.066	64.84
0.105	-61.444	112.25	0.350	-44.159	80.77	1.050	-44.484	0.350	-44.484	68.58	3.500	-44.513	3.500	-44.513	64.16
0.120	-60.449	103.66	0.400	-42.146	76.42	1.200	-42.304	1.200	-42.304	67.08	4.000	-42.318	4.000	-42.318	63.75
0.135	-39.250	96.40	0.450	-40.320	73.41	1.350	-40.398	1.350	-40.398	65.10	4.500	-40.378	4.500	-40.378	63.51
0.150	-38.061	90.53	0.500	-38.669	71.28	1.500	-38.701	1.500	-38.701	63.43	5.000	-38.695	5.000	-38.695	63.37
0.165	-36.830	85.87	0.550	-37.172	69.75	1.650	-37.177	1.650	-37.177	61.98	5.500	-37.169	5.500	-37.169	63.30
0.180	-35.635	82.22	0.600	-35.809	68.63	1.800	-35.799	1.800	-35.799	60.67	6.000	-35.788	6.000	-35.788	63.24
0.195	-34.476	79.34	0.650	-34.563	67.40	1.950	-34.562	1.950	-34.562	59.35	6.500	-34.531	6.500	-34.531	63.31
0.210	-33.341	77.08	0.700	-33.417	67.18	2.100	-33.390	2.100	-33.390	58.02	7.000	-33.376	7.000	-33.376	63.36
0.225	-32.209	75.24	0.750	-32.360	66.72	2.250	-32.329	2.250	-32.329	56.67	7.500	-32.317	7.500	-32.317	63.43
0.240	-31.080	73.86	0.800	-31.301	66.39	2.400	-31.347	2.400	-31.347	55.33	8.000	-31.335	8.000	-31.335	63.53
0.255	-30.571	72.73	0.850	-30.471	66.16	2.550	-30.436	2.550	-30.436	54.02	8.500	-30.423	8.500	-30.423	63.64
0.270	-29.736	71.83	0.900	-29.622	66.00	2.700	-29.586	2.700	-29.586	52.77	9.000	-29.573	9.000	-29.573	63.77
0.285	-28.952	71.12	0.950	-28.829	65.91	2.850	-28.829	2.850	-28.829	51.54	9.500	-28.779	9.500	-28.779	63.92
0.300	-28.215	70.56	1.000	-28.086	65.87	3.000	-28.086	3.000	-28.086	50.34	10.000	-28.035	10.000	-28.035	64.08

Table 94. Radial Electric Field (Ice), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)
0.000	-36.501	-56.21	0.000	-46.747	-173.83	0.000	-56.228	-34.44	0.000	-66.665	24.07	0.000	-66.665	24.07	0.000
0.003	-36.565	174.24	0.010	-46.812	167.80	0.030	-56.294	163.71	0.100	-66.728	164.21	0.100	-66.728	164.21	0.100
0.006	-36.630	174.20	0.020	-46.876	167.44	0.060	-56.358	164.62	0.200	-66.766	160.58	0.200	-66.766	160.58	0.200
0.009	-36.697	174.04	0.030	-46.944	166.84	0.090	-56.414	162.79	0.300	-66.799	154.58	0.300	-66.799	154.58	0.300
0.012	-36.764	173.81	0.040	-47.009	166.00	0.120	-56.452	160.23	0.400	-66.831	146.53	0.400	-66.831	146.53	0.400
0.015	-36.832	173.51	0.050	-47.072	164.90	0.150	-56.456	150.94	0.500	-66.862	137.17	0.500	-66.862	137.17	0.500
0.018	-36.901	173.13	0.060	-47.129	163.34	0.180	-56.459	152.97	0.600	-66.890	127.53	0.600	-66.890	127.53	0.600
0.021	-36.970	172.67	0.070	-47.179	161.93	0.210	-56.460	148.40	0.700	-66.916	118.62	0.700	-66.916	118.62	0.700
0.024	-37.040	172.14	0.080	-47.216	160.07	0.240	-56.462	143.36	0.800	-66.940	110.99	0.800	-66.940	110.99	0.800
0.027	-37.109	171.53	0.090	-47.242	157.96	0.270	-56.462	138.03	0.900	-66.961	104.75	0.900	-66.961	104.75	0.900
0.030	-37.178	170.84	0.100	-47.247	155.62	0.300	-56.455	132.59	1.000	-66.979	99.17	1.000	-66.979	99.17	1.000
0.033	-37.245	170.07	0.110	-47.229	153.05	0.330	-56.443	127.23	1.100	-66.994	93.63	1.100	-66.994	93.63	1.100
0.036	-37.311	169.22	0.120	-47.184	150.28	0.360	-56.424	122.12	1.200	-66.999	88.10	1.200	-66.999	88.10	1.200
0.039	-37.376	168.29	0.130	-47.107	147.33	0.390	-56.401	117.38	1.300	-66.999	82.60	1.300	-66.999	82.60	1.300
0.042	-37.441	167.27	0.140	-46.996	144.24	0.420	-56.372	113.06	1.400	-66.999	77.10	1.400	-66.999	77.10	1.400
0.045	-37.505	166.17	0.150	-46.867	141.05	0.450	-56.338	108.19	1.500	-66.999	71.60	1.500	-66.999	71.60	1.500
0.048	-37.568	164.99	0.160	-46.660	137.60	0.480	-56.298	102.75	1.600	-66.999	66.10	1.600	-66.999	66.10	1.600
0.051	-37.631	163.73	0.170	-46.434	134.52	0.510	-56.252	96.73	1.700	-66.999	60.60	1.700	-66.999	60.60	1.700
0.054	-37.694	162.39	0.180	-46.171	131.27	0.540	-56.200	90.07	1.800	-66.999	55.10	1.800	-66.999	55.10	1.800
0.057	-37.757	160.96	0.190	-45.872	127.97	0.570	-56.142	83.14	1.900	-66.999	49.60	1.900	-66.999	49.60	1.900
0.060	-37.820	159.47	0.200	-45.534	124.91	0.600	-56.079	75.91	2.000	-66.999	44.10	2.000	-66.999	44.10	2.000
0.063	-37.883	157.90	0.210	-45.180	121.14	0.630	-56.011	68.43	2.100	-66.999	38.60	2.100	-66.999	38.60	2.100
0.066	-37.946	156.26	0.220	-44.796	117.14	0.660	-55.938	60.74	2.200	-66.999	33.10	2.200	-66.999	33.10	2.200
0.069	-38.009	154.56	0.230	-44.392	112.45	0.690	-55.860	52.94	2.300	-66.999	27.60	2.300	-66.999	27.60	2.300
0.072	-38.072	152.80	0.240	-43.971	107.92	0.720	-55.777	45.04	2.400	-66.999	22.10	2.400	-66.999	22.10	2.400
0.075	-38.135	150.98	0.250	-43.540	103.34	0.750	-55.689	36.94	2.500	-66.999	16.60	2.500	-66.999	16.60	2.500
0.078	-38.198	149.13	0.260	-43.099	98.74	0.780	-55.596	28.74	2.600	-66.999	11.10	2.600	-66.999	11.10	2.600
0.081	-38.261	147.24	0.270	-42.654	94.09	0.810	-55.498	20.44	2.700	-66.999	5.60	2.700	-66.999	5.60	2.700
0.084	-38.324	145.31	0.280	-42.207	89.40	0.840	-55.395	12.14	2.800	-66.999	0.10	2.800	-66.999	0.10	2.800
0.087	-38.387	143.37	0.290	-41.759	84.64	0.870	-55.287	3.84	2.900	-66.999	-4.40	2.900	-66.999	-4.40	2.900
0.090	-38.450	141.42	0.300	-41.313	79.82	0.900	-55.174	-4.46	3.000	-66.999	-8.90	3.000	-66.999	-8.90	3.000
0.105	-38.736	131.80	0.350	-39.156	95.63	1.050	-53.996	62.44	3.500	-66.999	-34.40	3.500	-66.999	-34.40	3.500
0.120	-39.002	123.05	0.400	-37.174	91.36	1.200	-53.257	61.04	4.000	-66.999	-39.90	4.000	-66.999	-39.90	4.000
0.135	-39.269	115.69	0.450	-35.386	86.46	1.350	-52.388	60.17	4.500	-66.999	-45.40	4.500	-66.999	-45.40	4.500
0.150	-39.536	109.60	0.500	-33.779	80.46	1.500	-51.737	74.64	5.000	-66.999	-50.90	5.000	-66.999	-50.90	5.000
0.165	-39.803	103.22	0.550	-32.332	73.14	1.650	-51.266	74.32	5.500	-66.999	-56.40	5.500	-66.999	-56.40	5.500
0.180	-40.070	96.74	0.600	-31.025	64.14	1.800	-50.944	74.20	6.000	-66.999	-61.90	6.000	-66.999	-61.90	6.000
0.195	-40.337	90.10	0.650	-29.839	53.50	1.950	-50.750	74.14	6.500	-66.999	-67.40	6.500	-66.999	-67.40	6.500
0.210	-40.604	83.46	0.700	-28.760	41.20	2.100	-50.666	74.04	7.000	-66.999	-72.90	7.000	-66.999	-72.90	7.000
0.225	-40.871	76.74	0.750	-27.775	28.02	2.250	-50.600	73.94	7.500	-66.999	-78.40	7.500	-66.999	-78.40	7.500
0.240	-41.138	70.00	0.800	-26.873	14.96	2.400	-50.545	73.84	8.000	-66.999	-83.90	8.000	-66.999	-83.90	8.000
0.255	-41.405	63.26	0.850	-26.045	1.90	2.550	-50.500	73.74	8.500	-66.999	-89.40	8.500	-66.999	-89.40	8.500
0.270	-41.672	56.52	0.900	-25.285	-1.24	2.700	-50.460	73.64	9.000	-66.999	-94.90	9.000	-66.999	-94.90	9.000
0.285	-41.939	49.78	0.950	-24.585	-4.37	2.850	-50.420	73.54	9.500	-66.999	-100.40	9.500	-66.999	-100.40	9.500
0.300	-42.206	43.04	1.000	-23.947	-7.51	3.000	-50.380	73.44	10.000	-66.999	-105.90	10.000	-66.999	-105.90	10.000

Table 95. Radial Electric Field (ice), Frequency = 100.0 MHz, VED Height = 0.00 m

10.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-50.474	25.40	0.000	-50.016	-114.14	0.000	-50.016	0.000	-50.016	-50.95	0.000
0.001	-50.540	90.37	0.003	-50.081	89.79	0.010	-50.537	0.030	-50.064	86.38	0.030
0.002	-50.605	90.01	0.006	-50.144	88.70	0.020	-50.573	0.060	-50.875	75.74	0.060
0.003	-50.669	85.39	0.009	-50.198	86.66	0.030	-50.513	0.090	-50.973	60.12	0.090
0.004	-50.731	80.53	0.012	-50.233	84.29	0.040	-50.255	0.120	-50.151	44.24	0.120
0.005	-50.790	87.41	0.015	-50.233	80.99	0.050	-50.255	0.150	-50.780	31.80	0.150
0.006	-50.843	86.03	0.018	-50.180	77.01	0.060	-50.814	0.180	-50.315	23.19	0.180
0.007	-50.886	84.40	0.021	-50.055	72.44	0.070	-50.644	0.210	-50.985	17.39	0.210
0.008	-50.918	82.52	0.024	-50.840	67.40	0.080	-50.298	0.240	-50.852	13.41	0.240
0.009	-50.934	80.39	0.027	-50.523	62.07	0.090	-50.285	0.270	-50.918	10.62	0.270
0.010	-50.930	78.03	0.030	-50.099	56.64	0.100	-50.446	0.300	-50.161	8.59	0.300
0.011	-50.901	75.44	0.033	-50.574	51.30	0.110	-50.061	0.330	-50.559	7.08	0.330
0.012	-50.845	72.66	0.036	-50.261	46.21	0.120	-50.733	0.360	-50.089	5.93	0.360
0.013	-50.750	69.71	0.039	-50.278	41.48	0.130	-50.474	0.390	-50.733	5.03	0.390
0.014	-50.634	66.62	0.042	-50.544	37.17	0.140	-50.283	0.420	-50.476	4.32	0.420
0.015	-50.491	63.44	0.045	-50.774	33.31	0.150	-50.159	0.450	-50.505	3.74	0.450
0.016	-50.321	60.20	0.048	-50.997	29.69	0.160	-50.096	0.480	-50.4209	3.27	0.480
0.017	-50.133	56.94	0.051	-50.211	26.06	0.170	-50.094	0.510	-50.3181	2.88	0.510
0.018	-50.758	53.71	0.054	-50.431	22.21	0.180	-50.143	0.540	-50.212	2.56	0.540
0.019	-50.447	50.55	0.057	-50.662	18.87	0.190	-50.1241	0.570	-50.1246	2.28	0.570
0.020	-50.105	47.47	0.060	-50.910	15.63	0.200	-50.383	0.600	-50.427	2.05	0.600
0.021	-50.336	44.52	0.063	-50.177	12.02	0.210	-50.566	0.630	-50.602	1.85	0.630
0.022	-50.344	41.70	0.066	-50.464	8.44	0.220	-50.787	0.660	-50.816	1.68	0.660
0.023	-50.344	39.04	0.069	-50.772	5.04	0.230	-50.042	0.690	-50.066	1.52	0.690
0.024	-50.3501	36.53	0.072	-50.102	1.79	0.240	-50.326	0.720	-50.344	1.39	0.720
0.025	-50.3062	34.18	0.075	-50.453	14.69	0.250	-50.664	0.750	-50.661	1.28	0.750
0.026	-50.614	31.99	0.078	-50.825	11.70	0.260	-50.987	0.780	-50.002	1.17	0.780
0.027	-50.102	29.95	0.081	-50.217	10.82	0.270	-50.385	0.810	-50.387	1.08	0.810
0.028	-50.707	28.06	0.084	-50.628	10.03	0.280	-50.747	0.840	-50.757	1.00	0.840
0.029	-50.233	26.31	0.087	-50.058	9.32	0.290	-50.160	0.870	-50.169	0.93	0.870
0.030	-50.600	24.69	0.090	-50.306	8.68	0.300	-50.594	0.900	-50.602	0.86	0.900
0.035	-50.604	18.24	0.105	-50.981	6.25	0.350	-50.026	1.050	-50.030	0.61	1.050
0.040	-50.577	13.84	0.120	-50.790	4.68	0.400	-50.815	1.200	-50.817	0.46	1.200
0.045	-50.734	10.77	0.135	-50.861	3.61	0.450	-50.875	1.350	-50.877	0.35	1.350
0.050	-50.503	8.56	0.150	-50.142	2.86	0.500	-50.151	1.500	-50.152	0.27	1.500
0.055	-50.345	6.93	0.165	-50.595	2.31	0.550	-50.601	1.650	-50.601	0.22	1.650
0.060	-50.157	5.70	0.180	-50.190	1.90	0.600	-50.194	1.800	-50.195	0.18	1.800
0.065	-50.083	4.76	0.195	-50.806	1.58	0.650	-50.909	1.950	-50.909	0.15	1.950
0.070	-50.708	4.02	0.210	-50.724	1.33	0.700	-50.726	2.100	-50.726	0.12	2.100
0.075	-50.619	3.42	0.225	-50.630	1.13	0.750	-50.632	2.250	-50.632	0.10	2.250
0.080	-50.606	2.95	0.240	-50.614	0.97	0.800	-50.615	2.400	-50.615	0.09	2.400
0.085	-50.609	2.55	0.255	-50.665	0.84	0.850	-50.666	2.550	-50.666	0.07	2.550
0.090	-50.712	2.23	0.270	-50.776	0.74	0.900	-50.777	2.700	-50.777	0.06	2.700
0.095	-50.938	1.96	0.285	-50.941	0.65	0.950	-50.941	2.850	-50.941	0.05	2.850
0.100	-50.151	1.73	0.300	-50.154	0.57	1.000	-50.154	3.000	-50.154	0.05	3.000

Table 96. Radial Electric Field (Ice), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)
0.00	-51.967	89.03	0.00	-71.894	11.06	0.00	-61.434
0.01	-51.974	156.92	0.01	-71.957	150.95	0.01	-61.482
0.02	-52.039	156.96	0.02	-71.994	147.31	0.02	-61.523
0.03	-52.124	151.95	0.03	-71.9935	141.31	0.03	-61.592
0.04	-52.187	151.95	0.04	-71.677	133.26	0.04	-61.571
0.05	-52.247	149.97	0.05	-71.123	123.89	0.05	-61.571
0.06	-52.302	148.61	0.06	-70.237	114.27	0.06	-61.571
0.07	-52.347	148.98	0.07	-69.076	103.46	0.07	-61.571
0.08	-52.381	148.11	0.08	-67.725	97.73	0.08	-61.571
0.09	-52.400	146.94	0.09	-66.303	91.50	0.09	-61.571
0.10	-52.437	146.63	0.10	-64.877	86.52	0.10	-61.571
0.11	-52.474	146.05	0.11	-63.490	82.56	0.11	-61.571
0.12	-52.521	135.27	0.12	-62.164	79.44	0.12	-61.571
0.13	-52.527	135.32	0.13	-60.905	76.94	0.13	-61.571
0.14	-52.511	129.24	0.14	-59.716	74.91	0.14	-61.571
0.15	-51.960	128.05	0.15	-58.593	73.26	0.15	-61.571
0.16	-51.764	126.81	0.16	-57.533	71.84	0.16	-61.571
0.17	-51.530	119.55	0.17	-56.530	70.76	0.17	-61.571
0.18	-51.239	116.31	0.18	-55.581	69.61	0.18	-61.571
0.19	-50.932	113.13	0.19	-54.680	68.42	0.19	-61.571
0.20	-50.614	110.05	0.20	-53.824	67.23	0.20	-61.571
0.21	-50.287	107.08	0.21	-53.009	66.05	0.21	-61.571
0.22	-49.951	104.29	0.22	-52.231	64.88	0.22	-61.571
0.23	-49.607	101.50	0.23	-51.498	63.70	0.23	-61.571
0.24	-49.257	98.71	0.24	-50.777	62.54	0.24	-61.571
0.25	-48.904	95.92	0.25	-50.095	61.39	0.25	-61.571
0.26	-48.543	93.24	0.26	-49.440	60.25	0.26	-61.571
0.27	-48.183	90.58	0.27	-48.811	59.11	0.27	-61.571
0.28	-47.823	87.94	0.28	-48.203	57.95	0.28	-61.571
0.29	-47.464	85.31	0.29	-47.621	56.78	0.29	-61.571
0.30	-47.104	82.67	0.30	-47.057	55.61	0.30	-61.571
0.31	-46.744	80.03	0.31	-46.504	54.44	0.31	-61.571
0.32	-46.384	77.39	0.32	-45.951	53.27	0.32	-61.571
0.33	-46.024	74.75	0.33	-45.400	52.10	0.33	-61.571
0.34	-45.664	72.11	0.34	-44.849	50.93	0.34	-61.571
0.35	-45.304	69.47	0.35	-44.298	49.76	0.35	-61.571
0.36	-44.944	66.81	0.36	-43.747	48.59	0.36	-61.571
0.37	-44.584	64.15	0.37	-43.196	47.42	0.37	-61.571
0.38	-44.224	61.49	0.38	-42.645	46.25	0.38	-61.571
0.39	-43.864	58.83	0.39	-42.094	45.08	0.39	-61.571
0.40	-43.504	56.17	0.40	-41.543	43.91	0.40	-61.571
0.41	-43.144	53.51	0.41	-40.992	42.74	0.41	-61.571
0.42	-42.784	50.85	0.42	-40.441	41.57	0.42	-61.571
0.43	-42.424	48.19	0.43	-39.890	40.40	0.43	-61.571
0.44	-42.064	45.53	0.44	-39.339	39.23	0.44	-61.571
0.45	-41.704	42.87	0.45	-38.788	38.06	0.45	-61.571
0.46	-41.344	40.21	0.46	-38.237	36.89	0.46	-61.571
0.47	-40.984	37.55	0.47	-37.686	35.72	0.47	-61.571
0.48	-40.624	34.89	0.48	-37.135	34.55	0.48	-61.571
0.49	-40.264	32.23	0.49	-36.584	33.38	0.49	-61.571
0.50	-39.904	29.57	0.50	-36.033	32.21	0.50	-61.571
0.51	-39.544	26.91	0.51	-35.482	31.04	0.51	-61.571
0.52	-39.184	24.25	0.52	-34.931	29.87	0.52	-61.571
0.53	-38.824	21.59	0.53	-34.380	28.70	0.53	-61.571
0.54	-38.464	18.93	0.54	-33.829	27.53	0.54	-61.571
0.55	-38.104	16.27	0.55	-33.278	26.36	0.55	-61.571
0.56	-37.744	13.61	0.56	-32.727	25.19	0.56	-61.571
0.57	-37.384	10.95	0.57	-32.176	24.02	0.57	-61.571
0.58	-37.024	8.29	0.58	-31.625	22.85	0.58	-61.571
0.59	-36.664	5.63	0.59	-31.074	21.68	0.59	-61.571
0.60	-36.304	2.97	0.60	-30.523	20.51	0.60	-61.571
0.61	-35.944	0.31	0.61	-30.000	19.34	0.61	-61.571
0.62	-35.584	-2.35	0.62	-29.449	18.17	0.62	-61.571
0.63	-35.224	-5.01	0.63	-28.898	17.00	0.63	-61.571
0.64	-34.864	-7.67	0.64	-28.347	15.83	0.64	-61.571
0.65	-34.504	-10.33	0.65	-27.796	14.66	0.65	-61.571
0.66	-34.144	-12.99	0.66	-27.245	13.49	0.66	-61.571
0.67	-33.784	-15.65	0.67	-26.694	12.32	0.67	-61.571
0.68	-33.424	-18.31	0.68	-26.143	11.15	0.68	-61.571
0.69	-33.064	-20.97	0.69	-25.592	9.98	0.69	-61.571
0.70	-32.704	-23.63	0.70	-25.041	8.81	0.70	-61.571
0.71	-32.344	-26.29	0.71	-24.490	7.64	0.71	-61.571
0.72	-31.984	-28.95	0.72	-23.939	6.47	0.72	-61.571
0.73	-31.624	-31.61	0.73	-23.388	5.30	0.73	-61.571
0.74	-31.264	-34.27	0.74	-22.837	4.13	0.74	-61.571
0.75	-30.904	-36.93	0.75	-22.286	2.96	0.75	-61.571
0.76	-30.544	-39.59	0.76	-21.735	1.79	0.76	-61.571
0.77	-30.184	-42.25	0.77	-21.184	0.62	0.77	-61.571
0.78	-29.824	-44.91	0.78	-20.633	-0.55	0.78	-61.571
0.79	-29.464	-47.57	0.79	-20.082	-1.72	0.79	-61.571
0.80	-29.104	-50.23	0.80	-19.531	-2.89	0.80	-61.571
0.81	-28.744	-52.89	0.81	-18.980	-4.06	0.81	-61.571
0.82	-28.384	-55.55	0.82	-18.429	-5.23	0.82	-61.571
0.83	-28.024	-58.21	0.83	-17.878	-6.40	0.83	-61.571
0.84	-27.664	-60.87	0.84	-17.327	-7.57	0.84	-61.571
0.85	-27.304	-63.53	0.85	-16.776	-8.74	0.85	-61.571
0.86	-26.944	-66.19	0.86	-16.225	-9.91	0.86	-61.571
0.87	-26.584	-68.85	0.87	-15.674	-11.08	0.87	-61.571
0.88	-26.224	-71.51	0.88	-15.123	-12.25	0.88	-61.571
0.89	-25.864	-74.17	0.89	-14.572	-13.42	0.89	-61.571
0.90	-25.504	-76.83	0.90	-14.021	-14.59	0.90	-61.571
0.91	-25.144	-79.49	0.91	-13.470	-15.76	0.91	-61.571
0.92	-24.784	-82.15	0.92	-12.919	-16.93	0.92	-61.571
0.93	-24.424	-84.81	0.93	-12.368	-18.10	0.93	-61.571
0.94	-24.064	-87.47	0.94	-11.817	-19.27	0.94	-61.571
0.95	-23.704	-90.13	0.95	-11.266	-20.44	0.95	-61.571
0.96	-23.344	-92.79	0.96	-10.715	-21.61	0.96	-61.571
0.97	-22.984	-95.45	0.97	-10.164	-22.78	0.97	-61.571
0.98	-22.624	-98.11	0.98	-9.613	-23.95	0.98	-61.571
0.99	-22.264	-100.77	0.99	-9.062	-25.12	0.99	-61.571
1.00	-21.904	-103.43	1.00	-8.511	-26.29	1.00	-61.571

Table 97. Radial Electric Field (Ice), Frequency = 100.0 MHz, VED Height = 4.50 m

10.0 KM DISTANCE					30.0 KM DISTANCE					50.0 KM DISTANCE					70.0 KM DISTANCE				
TIME (UT)	AMP (V)	PHASE (DEG)	RELUM (V)	PHASE (DEG)	TIME (UT)	AMP (V)	PHASE (DEG)	RELUM (V)	PHASE (DEG)	TIME (UT)	AMP (V)	PHASE (DEG)	RELUM (V)	PHASE (DEG)	TIME (UT)	AMP (V)	PHASE (DEG)	RELUM (V)	PHASE (DEG)
00.00	-60.42	172.15	0.000	-60.223	100.00	-60.223	100.00	0.000	-60.223	100.00	-60.223	100.00	0.000	-60.223	100.00	-60.223	100.00	0.000	-60.223
00.01	-60.60	167.43	0.000	-60.353	100.01	-60.353	100.01	0.000	-60.353	100.01	-60.353	100.01	0.000	-60.353	100.01	-60.353	100.01	0.000	-60.353
00.02	-60.67	157.43	0.000	-60.409	100.02	-60.409	100.02	0.000	-60.409	100.02	-60.409	100.02	0.000	-60.409	100.02	-60.409	100.02	0.000	-60.409
00.03	-60.73	150.43	0.000	-60.454	100.03	-60.454	100.03	0.000	-60.454	100.03	-60.454	100.03	0.000	-60.454	100.03	-60.454	100.03	0.000	-60.454
00.04	-60.79	140.43	0.000	-60.499	100.04	-60.499	100.04	0.000	-60.499	100.04	-60.499	100.04	0.000	-60.499	100.04	-60.499	100.04	0.000	-60.499
00.05	-60.85	130.43	0.000	-60.544	100.05	-60.544	100.05	0.000	-60.544	100.05	-60.544	100.05	0.000	-60.544	100.05	-60.544	100.05	0.000	-60.544
00.06	-60.91	120.43	0.000	-60.589	100.06	-60.589	100.06	0.000	-60.589	100.06	-60.589	100.06	0.000	-60.589	100.06	-60.589	100.06	0.000	-60.589
00.07	-60.97	110.43	0.000	-60.634	100.07	-60.634	100.07	0.000	-60.634	100.07	-60.634	100.07	0.000	-60.634	100.07	-60.634	100.07	0.000	-60.634
00.08	-61.03	100.43	0.000	-60.679	100.08	-60.679	100.08	0.000	-60.679	100.08	-60.679	100.08	0.000	-60.679	100.08	-60.679	100.08	0.000	-60.679
00.09	-61.09	90.43	0.000	-60.724	100.09	-60.724	100.09	0.000	-60.724	100.09	-60.724	100.09	0.000	-60.724	100.09	-60.724	100.09	0.000	-60.724
00.10	-61.15	80.43	0.000	-60.769	100.10	-60.769	100.10	0.000	-60.769	100.10	-60.769	100.10	0.000	-60.769	100.10	-60.769	100.10	0.000	-60.769
00.11	-61.21	70.43	0.000	-60.814	100.11	-60.814	100.11	0.000	-60.814	100.11	-60.814	100.11	0.000	-60.814	100.11	-60.814	100.11	0.000	-60.814
00.12	-61.27	60.43	0.000	-60.859	100.12	-60.859	100.12	0.000	-60.859	100.12	-60.859	100.12	0.000	-60.859	100.12	-60.859	100.12	0.000	-60.859
00.13	-61.33	50.43	0.000	-60.904	100.13	-60.904	100.13	0.000	-60.904	100.13	-60.904	100.13	0.000	-60.904	100.13	-60.904	100.13	0.000	-60.904
00.14	-61.39	40.43	0.000	-60.949	100.14	-60.949	100.14	0.000	-60.949	100.14	-60.949	100.14	0.000	-60.949	100.14	-60.949	100.14	0.000	-60.949
00.15	-61.45	30.43	0.000	-60.994	100.15	-60.994	100.15	0.000	-60.994	100.15	-60.994	100.15	0.000	-60.994	100.15	-60.994	100.15	0.000	-60.994
00.16	-61.51	20.43	0.000	-61.039	100.16	-61.039	100.16	0.000	-61.039	100.16	-61.039	100.16	0.000	-61.039	100.16	-61.039	100.16	0.000	-61.039
00.17	-61.57	10.43	0.000	-61.084	100.17	-61.084	100.17	0.000	-61.084	100.17	-61.084	100.17	0.000	-61.084	100.17	-61.084	100.17	0.000	-61.084
00.18	-61.63	0.43	0.000	-61.129	100.18	-61.129	100.18	0.000	-61.129	100.18	-61.129	100.18	0.000	-61.129	100.18	-61.129	100.18	0.000	-61.129
00.19	-61.69	340.43	0.000	-61.174	100.19	-61.174	340.43	0.000	-61.174	100.19	-61.174	340.43	0.000	-61.174	100.19	-61.174	340.43	0.000	-61.174
00.20	-61.75	230.43	0.000	-61.219	100.20	-61.219	230.43	0.000	-61.219	100.20	-61.219	230.43	0.000	-61.219	100.20	-61.219	230.43	0.000	-61.219
00.21	-61.81	120.43	0.000	-61.264	100.21	-61.264	120.43	0.000	-61.264	100.21	-61.264	120.43	0.000	-61.264	100.21	-61.264	120.43	0.000	-61.264
00.22	-61.87	10.43	0.000	-61.309	100.22	-61.309	10.43	0.000	-61.309	100.22	-61.309	10.43	0.000	-61.309	100.22	-61.309	10.43	0.000	-61.309
00.23	-61.93	350.43	0.000	-61.354	100.23	-61.354	350.43	0.000	-61.354	100.23	-61.354	350.43	0.000	-61.354	100.23	-61.354	350.43	0.000	-61.354
00.24	-61.99	240.43	0.000	-61.399	100.24	-61.399	240.43	0.000	-61.399	100.24	-61.399	240.43	0.000	-61.399	100.24	-61.399	240.43	0.000	-61.399
00.25	-62.05	130.43	0.000	-61.444	100.25	-61.444	130.43	0.000	-61.444	100.25	-61.444	130.43	0.000	-61.444	100.25	-61.444	130.43	0.000	-61.444
00.26	-62.11	20.43	0.000	-61.489	100.26	-61.489	20.43	0.000	-61.489	100.26	-61.489	20.43	0.000	-61.489	100.26	-61.489	20.43	0.000	-61.489
00.27	-62.17	110.43	0.000	-61.534	100.27	-61.534	110.43	0.000	-61.534	100.27	-61.534	110.43	0.000	-61.534	100.27	-61.534	110.43	0.000	-61.534
00.28	-62.23	0.43	0.000	-61.579	100.28	-61.579	0.43	0.000	-61.579	100.28	-61.579	0.43	0.000	-61.579	100.28	-61.579	0.43	0.000	-61.579
00.29	-62.29	340.43	0.000	-61.624	100.29	-61.624	340.43	0.000	-61.624	100.29	-61.624	340.43	0.000	-61.624	100.29	-61.624	340.43	0.000	-61.624
00.30	-62.35	230.43	0.000	-61.669	100.30	-61.669	230.43	0.000	-61.669	100.30	-61.669	230.43	0.000	-61.669	100.30	-61.669	230.43	0.000	-61.669
00.31	-62.41	120.43	0.000	-61.714	100.31	-61.714	120.43	0.000	-61.714	100.31	-61.714	120.43	0.000	-61.714	100.31	-61.714	120.43	0.000	-61.714
00.32	-62.47	10.43	0.000	-61.759	100.32	-61.759	10.43	0.000	-61.759	100.32	-61.759	10.43	0.000	-61.759	100.32	-61.759	10.43	0.000	-61.759
00.33	-62.53	350.43	0.000	-61.804	100.33	-61.804	350.43	0.000	-61.804	100.33	-61.804	350.43	0.000	-61.804	100.33	-61.804	350.43	0.000	-61.804
00.34	-62.59	240.43	0.000	-61.849	100.34	-61.849	240.43	0.000	-61.849	100.34	-61.849	240.43	0.000	-61.849	100.34	-61.849	240.43	0.000	-61.849
00.35	-62.65	130.43	0.000	-61.894	100.35	-61.894	130.43	0.000	-61.894	100.35	-61.894	130.43	0.000	-61.894	100.35	-61.894	130.43	0.000	-61.894
00.36	-62.71	20.43	0.000	-61.939	100.36	-61.939	20.43	0.000	-61.939	100.36	-61.939	20.43	0.000	-61.939	100.36	-61.939	20.43	0.000	-61.939
00.37	-62.77	110.43	0.000	-61.984	100.37	-61.984	110.43	0.000	-61.984	100.37	-61.984	110.43	0.000	-61.984	100.37	-61.984	110.43	0.000	-61.984
00.38	-62.83	0.43	0.000	-62.029	100.38	-62.029	0.43	0.000	-62.029	100.38	-62.029	0.43	0.000	-62.029	100.38	-62.029	0.43	0.000	-62.029
00.39	-62.89	340.43	0.000	-62.074	100.39	-62.074	340.43	0.000	-62.074	100.39	-62.074	340.43	0.000	-62.074	100.39	-62.074	340.43	0.000	-62.074
00.40	-62.95	230.43	0.000	-62.119	100.40	-62.119	230.43	0.000	-62.119	100.40	-62.119	230.43	0.000	-62.119	100.40	-62.119	230.43	0.000	-62.119
00.41	-63.01	120.43	0.000	-62.164	100.41	-62.164	120.43	0.000	-62.164	100.41	-62.164	120.43	0.000	-62.164	100.41	-62.164	120.43	0.000	-62.164
00.42	-63.07	10.43	0.000	-62.209	100.42	-62.209	10.43	0.000	-62.209	100.42	-62.209	10.43	0.000	-62.209	100.42	-62.209	10.43	0.000	-62.209
00.43	-63.13	350.43	0.000	-62.254	100.43	-62.254	350.43	0.000	-62.254	100.43	-62.254	350.43	0.000	-62.254	100.43	-62.254	350.43	0.000	-62.254
00.44	-63.19	240.43	0.000	-62.299	100.44	-62.299	240.43	0.000	-62.299	100.44	-62.299	240.43	0.000	-62.299	100.44	-62.299	240.43	0.000	-62.299
00.45	-63.25	130.43	0.000	-62.344	100.45	-62.344	130.43	0.000	-62.344	100.45	-62.344	130.43	0.000	-62.344	100.45	-62.344	130.43	0.000	-62.344
00.46	-63.31	20.43	0.000	-62.389	100.46	-62.389	20.43	0.000	-62.389	100.46	-62.389	20.43	0.000	-62.389	100.46	-62.389	20.43	0.000	-62.389
00.47	-63.37	110.43	0.000	-62.434	100.47	-62.434	110.43	0.000	-62.434	100.47	-62.434	110.43	0.000	-62.434	100.47	-62.434	110.43	0.000	-62.434
00.48	-63.43	0.43	0.000	-62.479	100.48	-62.479	0.43	0.000	-62.479	100.48	-62.479	0.43	0.000	-62.479	100.48	-62.479	0.43	0.000	-62.479
00.49	-63.49	340.43	0.000	-62.524	100.49	-62.524	340.43	0.000	-62.524	100.49	-62.524	340.43	0.000	-62.524	100.49	-62.524	340.43	0.000	-62.524
00.50	-63.55	230.43	0.000	-62.569	100.50	-62.569	230.43	0.000	-62.569	100.50	-62.569	230.43	0.000	-62.569	100.50	-62.569	230.43	0.000	-62.569
00.51	-63.61	120.43	0.000	-62.614	100.51	-62.614	120.43	0.000	-62.614	100.51	-62.614	120.43	0.000	-62.614	100.51	-62.614	120.43	0.000	-62.614
00.52	-63.67	10.43	0.000	-62.659	100.52	-62.659	10.43	0.000	-62.659	100.52	-62.659	10.43	0.000	-62.659	100.52	-62.659	10.43	0.000	-62.659
00.53	-63.73	350.43	0.000	-62.704	100.53	-62.704	350.43	0.000	-62.704	100.53	-62.704	350.43	0.000	-62.704	100.53	-62.704	350.43	0.000	-62.704
00.54	-63.79	240.43	0.000	-62.749	100.54	-62.749	240.43	0.000	-62.749	100.									

Table 98. Azimuthal Magnetic Field (Ice), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-18.610	-100.24	0.000	-29.115	-113.92	0.000	-38.875	-117.74	0.000	-38.875	-117.74
.030	-18.660	-98.92	.100	-29.265	-109.48	.300	-39.165	-106.07	.300	-39.165	-106.07
.060	-18.706	-97.60	.200	-29.363	-104.93	.600	-39.957	-99.35	.600	-39.957	-99.35
.090	-18.747	-96.27	.300	-29.407	-100.33	.900	-38.321	-71.98	.900	-38.321	-71.98
.120	-18.783	-94.93	.400	-29.495	-95.75	1.200	-37.420	-67.69	1.200	-37.420	-67.69
.150	-18.814	-93.59	.500	-29.530	-91.22	1.500	-36.407	-59.49	1.500	-36.407	-59.49
.180	-18.840	-92.25	.600	-29.513	-86.81	1.800	-35.379	-53.04	1.800	-35.379	-53.04
.210	-18.862	-90.91	.700	-29.451	-82.57	2.100	-34.388	-47.95	2.100	-34.388	-47.95
.240	-18.879	-89.57	.800	-29.348	-78.52	2.400	-33.454	-43.89	2.400	-33.454	-43.89
.270	-18.890	-88.23	.900	-29.212	-74.69	2.700	-32.584	-40.60	2.700	-32.584	-40.60
.300	-18.898	-86.90	1.000	-29.063	-71.09	3.000	-31.776	-37.90	3.000	-31.776	-37.90
.330	-18.900	-85.57	1.100	-28.903	-67.73	3.300	-31.027	-35.65	3.300	-31.027	-35.65
.360	-18.898	-84.25	1.200	-28.762	-64.60	3.600	-30.330	-33.75	3.600	-30.330	-33.75
.390	-18.891	-82.93	1.300	-28.650	-61.71	3.900	-29.681	-32.12	3.900	-29.681	-32.12
.420	-18.880	-81.63	1.400	-28.550	-59.02	4.200	-29.074	-30.72	4.200	-29.074	-30.72
.450	-18.864	-80.34	1.500	-28.467	-56.54	4.500	-28.507	-29.49	4.500	-28.507	-29.49
.480	-18.844	-79.06	1.600	-28.403	-54.25	4.800	-27.973	-28.42	4.800	-27.973	-28.42
.510	-18.820	-77.79	1.700	-28.361	-52.13	5.100	-27.471	-27.46	5.100	-27.471	-27.46
.540	-18.792	-76.53	1.800	-28.341	-50.18	5.400	-26.996	-26.61	5.400	-26.996	-26.61
.570	-18.760	-75.30	1.900	-28.3525	-48.37	5.700	-26.547	-25.85	5.700	-26.547	-25.85
.600	-18.724	-74.07	2.000	-28.3215	-46.69	6.000	-26.121	-25.16	6.000	-26.121	-25.16
.630	-18.683	-72.87	2.100	-28.2910	-45.13	6.300	-25.716	-24.53	6.300	-25.716	-24.53
.660	-18.642	-71.68	2.200	-28.2612	-43.68	6.600	-25.330	-23.96	6.600	-25.330	-23.96
.690	-18.596	-70.51	2.300	-28.2320	-42.34	6.900	-24.962	-23.43	6.900	-24.962	-23.43
.720	-18.546	-69.36	2.400	-28.2035	-41.08	7.200	-24.610	-22.95	7.200	-24.610	-22.95
.750	-18.490	-68.22	2.500	-28.1757	-39.91	7.500	-24.273	-22.50	7.500	-24.273	-22.50
.780	-18.441	-67.11	2.600	-28.1486	-38.82	7.800	-23.950	-22.09	7.800	-23.950	-22.09
.810	-18.384	-66.02	2.700	-28.1221	-37.75	8.100	-23.639	-21.71	8.100	-23.639	-21.71
.840	-18.323	-64.95	2.800	-28.0964	-36.83	8.400	-23.341	-21.35	8.400	-23.341	-21.35
.870	-18.263	-63.89	2.900	-28.0713	-35.93	8.700	-23.053	-21.01	8.700	-23.053	-21.01
.900	-18.199	-62.86	3.000	-28.0468	-35.08	9.000	-22.776	-20.70	9.000	-22.776	-20.70
1.050	-17.653	-56.01	3.500	-27.438	-31.49	10.500	-21.526	-19.37	10.500	-21.526	-19.37
1.200	-17.470	-53.06	4.000	-26.938	-28.73	12.000	-20.457	-18.35	12.000	-20.457	-18.35
1.350	-17.302	-49.78	4.500	-26.452	-26.54	13.500	-19.527	-17.53	13.500	-19.527	-17.53
1.500	-16.880	-46.33	5.000	-26.000	-24.71	15.000	-18.707	-16.85	15.000	-18.707	-16.85
1.650	-16.280	-43.27	5.500	-25.597	-23.30	16.500	-17.975	-16.27	16.500	-17.975	-16.27
1.800	-15.680	-40.34	6.000	-25.230	-22.06	18.000	-17.316	-15.77	18.000	-17.316	-15.77
2.000	-15.130	-38.11	6.500	-24.911	-21.00	19.500	-16.719	-15.33	19.500	-16.719	-15.33
2.250	-14.772	-35.94	7.000	-24.617	-20.08	21.000	-16.173	-14.94	21.000	-16.173	-14.94
2.400	-14.429	-32.25	7.500	-24.345	-19.27	22.500	-15.673	-14.59	22.500	-15.673	-14.59
2.550	-14.100	-30.67	8.000	-24.095	-18.56	24.000	-15.211	-14.27	24.000	-15.211	-14.27
2.700	-13.783	-29.24	8.500	-23.869	-17.92	25.500	-14.783	-13.98	25.500	-14.783	-13.98
2.850	-13.483	-27.94	9.000	-23.663	-17.34	27.000	-14.386	-13.71	27.000	-14.386	-13.71
3.000	-13.190	-26.75	10.000	-23.077	-16.55	30.000	-13.069	-13.46	30.000	-13.069	-13.46

Table 99. Azimuthal Magnetic Field (Ice), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-14.729	-34.03		0.000	-24.468	-43.03		0.000	-33.920	-43.84	
0.030	-14.775	-36.66		0.100	-24.613	-38.56		0.300	-34.205	-32.15	
0.060	-14.811	-31.33		0.200	-24.706	-33.96		0.600	-33.991	-18.41	
0.090	-14.854	-29.97		0.300	-24.745	-24.96		0.900	-33.350	-6.05	
0.120	-14.886	-28.60		0.400	-24.728	-24.75		1.200	-32.445	4.22	
0.150	-14.914	-27.24		0.500	-24.656	-20.22		1.500	-31.430	12.41	
0.180	-14.937	-25.87		0.600	-24.535	-15.80		1.800	-30.402	16.84	
0.210	-14.955	-24.50		0.700	-24.367	-11.55		2.100	-29.411	23.92	
0.240	-14.969	-23.13		0.800	-24.160	-7.50		2.400	-28.477	27.98	
0.270	-14.978	-21.76		0.900	-23.920	-3.67		2.700	-27.608	31.26	
0.300	-14.982	-20.40		1.000	-23.653	-0.07		3.000	-26.801	33.96	
0.330	-14.982	-19.05		1.100	-23.365	3.28		3.300	-26.052	36.21	
0.360	-14.977	-17.70		1.200	-23.051	6.41		3.600	-25.356	38.12	
0.390	-14.968	-16.36		1.300	-22.747	9.30		3.900	-24.708	39.74	
0.420	-14.954	-15.03		1.400	-22.427	11.98		4.200	-24.103	41.15	
0.450	-14.936	-13.71		1.500	-22.103	14.46		4.500	-23.537	42.38	
0.480	-14.914	-12.41		1.600	-21.778	16.75		4.800	-23.005	43.46	
0.510	-14.888	-11.11		1.700	-21.455	18.87		5.100	-22.503	44.42	
0.540	-14.859	-9.83		1.800	-21.136	20.82		5.400	-22.030	45.28	
0.570	-14.825	-8.57		1.900	-20.820	22.64		5.700	-21.583	46.06	
0.600	-14.788	-7.32		2.000	-20.510	24.32		6.000	-21.156	46.76	
0.630	-14.746	-6.09		2.100	-20.206	25.88		6.300	-20.755	47.39	
0.660	-14.704	-4.87		2.200	-19.909	27.34		6.600	-20.371	47.98	
0.690	-14.658	-3.66		2.300	-19.618	28.69		6.900	-20.004	48.51	
0.720	-14.608	-2.50		2.400	-19.335	29.95		7.200	-19.654	48.91	
0.750	-14.556	-1.34		2.500	-19.058	31.13		7.500	-19.319	49.27	
0.780	-14.501	-0.20		2.600	-18.788	32.24		7.800	-18.998	49.89	
0.810	-14.444	0.92		2.700	-18.526	33.27		8.100	-18.689	50.29	
0.840	-14.385	2.02		2.800	-18.270	34.25		8.400	-18.393	50.67	
0.870	-14.323	3.11		2.900	-18.020	35.17		8.700	-18.108	51.02	
0.900	-14.259	4.17		3.000	-17.778	36.03		9.000	-17.833	51.35	
1.050	-13.918	9.17		3.500	-16.857	39.70		10.500	-16.596	52.75	
1.200	-13.549	13.69		4.000	-15.872	42.57		12.000	-15.542	53.87	
1.350	-13.165	17.74		4.500	-14.801	44.67		13.500	-14.629	54.80	
1.500	-12.777	21.39		5.000	-13.826	46.07		15.000	-13.827	55.50	
1.650	-12.392	24.66		5.500	-13.332	46.39		16.500	-13.117	56.30	
1.800	-12.017	27.61		6.000	-12.707	44.96		18.000	-12.481	56.94	
1.950	-11.653	30.27		6.500	-12.144	41.01		19.500	-11.909	57.54	
2.100	-11.300	32.69		7.000	-11.627	36.12		21.000	-11.390	58.09	
2.250	-10.971	34.93		7.500	-11.158	33.12		22.500	-10.917	58.52	
2.400	-10.654	35.92		8.000	-10.728	30.04		24.000	-10.489	59.13	
2.550	-10.353	35.74		8.500	-10.334	26.89		25.500	-10.095	59.62	
2.700	-10.069	35.52		9.000	-9.971	23.70		27.000	-9.733	60.11	
2.850	-9.801	35.12		9.500	-9.637	20.46		28.500	-9.400	60.58	
3.000	-9.548	34.53		10.000	-9.326	17.17		30.000	-9.093	61.05	

Table 100. Azimuthal Magnetic Field (Ice), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-10.770	-18.99		0.000	-19.443	-26.56		0.000	-26.513	-29.51	
.030	-10.815	-17.65		.100	-19.587	-22.10		.300	-26.798	-15.83	
.060	-10.857	-16.31		.200	-19.680	-17.53		.600	-26.584	-2.11	
.090	-10.894	-14.95		.300	-19.714	-12.91		.900	-27.943	10.25	
.120	-10.928	-13.59		.400	-19.703	-8.31		1.200	-26.040	20.53	
.150	-10.957	-12.22		.500	-19.633	-3.77		1.500	-26.027	28.72	
.180	-10.983	-10.85		.600	-19.514	.65		1.800	-25.000	35.16	
.210	-11.004	-9.48		.700	-19.349	4.91		2.100	-24.010	40.25	
.240	-11.021	-8.11		.800	-19.145	8.97		2.400	-23.078	44.32	
.270	-11.034	-6.74		.900	-18.907	12.82		2.700	-22.210	47.61	
.300	-11.043	-5.37		1.000	-18.643	16.43		3.000	-21.405	50.32	
.330	-11.048	-4.00		1.100	-18.358	19.81		3.300	-20.658	52.59	
.360	-11.048	-2.64		1.200	-18.057	22.95		3.600	-19.963	54.50	
.390	-11.045	-1.28		1.300	-17.746	25.87		3.900	-19.317	56.14	
.420	-11.038	.07		1.400	-17.428	28.58		4.200	-18.714	57.56	
.450	-11.027	1.41		1.500	-17.107	31.09		4.500	-18.150	58.81	
.480	-11.013	2.75		1.600	-16.786	33.40		4.800	-17.620	59.90	
.510	-10.995	4.07		1.700	-16.466	35.55		5.100	-17.121	60.88	
.540	-10.973	5.39		1.800	-16.149	37.54		5.400	-16.651	61.75	
.570	-10.948	6.69		1.900	-15.836	39.38		5.700	-16.206	62.54	
.600	-10.919	7.98		2.000	-15.529	41.10		6.000	-15.785	63.26	
.630	-10.888	9.25		2.100	-15.228	42.69		6.300	-15.384	63.91	
.660	-10.853	10.51		2.200	-14.934	44.18		6.600	-15.003	64.51	
.690	-10.815	11.76		2.300	-14.646	45.56		6.900	-14.640	65.06	
.720	-10.773	12.99		2.400	-14.365	46.86		7.200	-14.294	65.58	
.750	-10.732	14.21		2.500	-14.092	48.07		7.500	-13.962	66.05	
.780	-10.687	15.41		2.600	-13.826	49.21		7.800	-13.645	66.50	
.810	-10.639	16.59		2.700	-13.566	50.28		8.100	-13.341	66.91	
.840	-10.589	17.76		2.800	-13.314	51.29		8.400	-13.049	67.31	
.870	-10.537	18.91		2.900	-13.069	52.24		8.700	-12.768	67.64	
.900	-10.483	20.04		3.000	-12.830	53.14		9.000	-12.496	68.03	
1.050	-10.187	23.43		3.500	-11.731	56.99		10.500	-11.287	69.55	
1.200	-9.886	30.36		4.000	-10.772	60.04		12.000	-10.263	70.79	
1.350	-9.526	37.90		4.500	-9.931	62.54		13.500	-9.385	71.86	
1.500	-9.104	45.04		5.000	-9.190	64.65		15.000	-8.623	72.81	
1.650	-8.682	52.62		5.500	-8.534	66.46		16.500	-7.955	73.68	
1.800	-8.257	60.29		6.000	-7.951	67.12		18.000	-7.367	74.51	
1.950	-7.838	67.49		6.500	-7.432	67.94		19.500	-6.847	75.30	
2.100	-7.424	74.44		7.000	-6.968	68.96		21.000	-6.385	76.07	
2.250	-7.012	81.16		7.500	-6.553	72.23		22.500	-5.974	76.83	
2.400	-6.603	87.74		8.000	-6.192	73.43		24.000	-5.609	77.58	
2.550	-6.195	94.13		8.500	-5.851	74.59		25.500	-5.283	78.34	
2.700	-5.787	100.36		9.000	-5.554	75.70		27.000	-4.995	79.10	
2.850	-5.380	106.49		9.500	-5.290	76.79		28.500	-4.739	79.87	
3.000	-4.983	112.44		10.000	-5.056	77.85		30.000	-4.513	80.65	

Table 101. Azimuthal Magnetic Field (Ice), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.00	-20.534	-77.572	0.00	-20.544	-86.01	0.00	-20.544	-90.00	0.00	-20.544	-90.00	0.00	-20.544	-90.00	0.00
0.03	-20.537	-76.440	0.03	-20.533	-85.01	0.03	-20.533	-89.01	0.03	-20.533	-89.01	0.03	-20.533	-89.01	0.03
0.06	-20.539	-75.305	0.06	-20.535	-84.00	0.06	-20.535	-88.00	0.06	-20.535	-88.00	0.06	-20.535	-88.00	0.06
0.09	-20.540	-74.163	0.09	-20.536	-83.00	0.09	-20.536	-87.00	0.09	-20.536	-87.00	0.09	-20.536	-87.00	0.09
0.12	-20.541	-73.020	0.12	-20.537	-82.00	0.12	-20.537	-86.00	0.12	-20.537	-86.00	0.12	-20.537	-86.00	0.12
0.15	-20.542	-71.877	0.15	-20.538	-81.00	0.15	-20.538	-85.00	0.15	-20.538	-85.00	0.15	-20.538	-85.00	0.15
0.18	-20.543	-70.734	0.18	-20.539	-80.00	0.18	-20.539	-84.00	0.18	-20.539	-84.00	0.18	-20.539	-84.00	0.18
0.21	-20.544	-69.591	0.21	-20.540	-79.00	0.21	-20.540	-83.00	0.21	-20.540	-83.00	0.21	-20.540	-83.00	0.21
0.24	-20.545	-68.448	0.24	-20.541	-78.00	0.24	-20.541	-82.00	0.24	-20.541	-82.00	0.24	-20.541	-82.00	0.24
0.27	-20.546	-67.305	0.27	-20.542	-77.00	0.27	-20.542	-81.00	0.27	-20.542	-81.00	0.27	-20.542	-81.00	0.27
0.30	-20.547	-66.162	0.30	-20.543	-76.00	0.30	-20.543	-80.00	0.30	-20.543	-80.00	0.30	-20.543	-80.00	0.30
0.33	-20.548	-65.019	0.33	-20.544	-75.00	0.33	-20.544	-79.00	0.33	-20.544	-79.00	0.33	-20.544	-79.00	0.33
0.36	-20.549	-63.876	0.36	-20.545	-74.00	0.36	-20.545	-78.00	0.36	-20.545	-78.00	0.36	-20.545	-78.00	0.36
0.39	-20.550	-62.733	0.39	-20.546	-73.00	0.39	-20.546	-77.00	0.39	-20.546	-77.00	0.39	-20.546	-77.00	0.39
0.42	-20.551	-61.590	0.42	-20.547	-72.00	0.42	-20.547	-76.00	0.42	-20.547	-76.00	0.42	-20.547	-76.00	0.42
0.45	-20.552	-60.447	0.45	-20.548	-71.00	0.45	-20.548	-75.00	0.45	-20.548	-75.00	0.45	-20.548	-75.00	0.45
0.48	-20.553	-59.304	0.48	-20.549	-70.00	0.48	-20.549	-74.00	0.48	-20.549	-74.00	0.48	-20.549	-74.00	0.48
0.51	-20.554	-58.161	0.51	-20.550	-69.00	0.51	-20.550	-73.00	0.51	-20.550	-73.00	0.51	-20.550	-73.00	0.51
0.54	-20.555	-57.018	0.54	-20.551	-68.00	0.54	-20.551	-72.00	0.54	-20.551	-72.00	0.54	-20.551	-72.00	0.54
0.57	-20.556	-55.875	0.57	-20.552	-67.00	0.57	-20.552	-71.00	0.57	-20.552	-71.00	0.57	-20.552	-71.00	0.57
0.60	-20.557	-54.732	0.60	-20.553	-66.00	0.60	-20.553	-70.00	0.60	-20.553	-70.00	0.60	-20.553	-70.00	0.60
0.63	-20.558	-53.589	0.63	-20.554	-65.00	0.63	-20.554	-69.00	0.63	-20.554	-69.00	0.63	-20.554	-69.00	0.63
0.66	-20.559	-52.446	0.66	-20.555	-64.00	0.66	-20.555	-68.00	0.66	-20.555	-68.00	0.66	-20.555	-68.00	0.66
0.69	-20.560	-51.303	0.69	-20.556	-63.00	0.69	-20.556	-67.00	0.69	-20.556	-67.00	0.69	-20.556	-67.00	0.69
0.72	-20.561	-50.160	0.72	-20.557	-62.00	0.72	-20.557	-66.00	0.72	-20.557	-66.00	0.72	-20.557	-66.00	0.72
0.75	-20.562	-49.017	0.75	-20.558	-61.00	0.75	-20.558	-65.00	0.75	-20.558	-65.00	0.75	-20.558	-65.00	0.75
0.78	-20.563	-47.874	0.78	-20.559	-60.00	0.78	-20.559	-64.00	0.78	-20.559	-64.00	0.78	-20.559	-64.00	0.78
0.81	-20.564	-46.731	0.81	-20.560	-59.00	0.81	-20.560	-63.00	0.81	-20.560	-63.00	0.81	-20.560	-63.00	0.81
0.84	-20.565	-45.588	0.84	-20.561	-58.00	0.84	-20.561	-62.00	0.84	-20.561	-62.00	0.84	-20.561	-62.00	0.84
0.87	-20.566	-44.445	0.87	-20.562	-57.00	0.87	-20.562	-61.00	0.87	-20.562	-61.00	0.87	-20.562	-61.00	0.87
0.90	-20.567	-43.302	0.90	-20.563	-56.00	0.90	-20.563	-60.00	0.90	-20.563	-60.00	0.90	-20.563	-60.00	0.90
0.93	-20.568	-42.159	0.93	-20.564	-55.00	0.93	-20.564	-59.00	0.93	-20.564	-59.00	0.93	-20.564	-59.00	0.93
0.96	-20.569	-41.016	0.96	-20.565	-54.00	0.96	-20.565	-58.00	0.96	-20.565	-58.00	0.96	-20.565	-58.00	0.96
0.99	-20.570	-39.873	0.99	-20.566	-53.00	0.99	-20.566	-57.00	0.99	-20.566	-57.00	0.99	-20.566	-57.00	0.99
1.02	-20.571	-38.730	1.02	-20.567	-52.00	1.02	-20.567	-56.00	1.02	-20.567	-56.00	1.02	-20.567	-56.00	1.02
1.05	-20.572	-37.587	1.05	-20.568	-51.00	1.05	-20.568	-55.00	1.05	-20.568	-55.00	1.05	-20.568	-55.00	1.05
1.08	-20.573	-36.444	1.08	-20.569	-50.00	1.08	-20.569	-54.00	1.08	-20.569	-54.00	1.08	-20.569	-54.00	1.08
1.11	-20.574	-35.301	1.11	-20.570	-49.00	1.11	-20.570	-53.00	1.11	-20.570	-53.00	1.11	-20.570	-53.00	1.11
1.14	-20.575	-34.158	1.14	-20.571	-48.00	1.14	-20.571	-52.00	1.14	-20.571	-52.00	1.14	-20.571	-52.00	1.14
1.17	-20.576	-33.015	1.17	-20.572	-47.00	1.17	-20.572	-51.00	1.17	-20.572	-51.00	1.17	-20.572	-51.00	1.17
1.20	-20.577	-31.872	1.20	-20.573	-46.00	1.20	-20.573	-50.00	1.20	-20.573	-50.00	1.20	-20.573	-50.00	1.20
1.23	-20.578	-30.729	1.23	-20.574	-45.00	1.23	-20.574	-49.00	1.23	-20.574	-49.00	1.23	-20.574	-49.00	1.23
1.26	-20.579	-29.586	1.26	-20.575	-44.00	1.26	-20.575	-48.00	1.26	-20.575	-48.00	1.26	-20.575	-48.00	1.26
1.29	-20.580	-28.443	1.29	-20.576	-43.00	1.29	-20.576	-47.00	1.29	-20.576	-47.00	1.29	-20.576	-47.00	1.29
1.32	-20.581	-27.300	1.32	-20.577	-42.00	1.32	-20.577	-46.00	1.32	-20.577	-46.00	1.32	-20.577	-46.00	1.32
1.35	-20.582	-26.157	1.35	-20.578	-41.00	1.35	-20.578	-45.00	1.35	-20.578	-45.00	1.35	-20.578	-45.00	1.35
1.38	-20.583	-25.014	1.38	-20.579	-40.00	1.38	-20.579	-44.00	1.38	-20.579	-44.00	1.38	-20.579	-44.00	1.38
1.41	-20.584	-23.871	1.41	-20.580	-39.00	1.41	-20.580	-43.00	1.41	-20.580	-43.00	1.41	-20.580	-43.00	1.41
1.44	-20.585	-22.728	1.44	-20.581	-38.00	1.44	-20.581	-42.00	1.44	-20.581	-42.00	1.44	-20.581	-42.00	1.44
1.47	-20.586	-21.585	1.47	-20.582	-37.00	1.47	-20.582	-41.00	1.47	-20.582	-41.00	1.47	-20.582	-41.00	1.47
1.50	-20.587	-20.442	1.50	-20.583	-36.00	1.50	-20.583	-40.00	1.50	-20.583	-40.00	1.50	-20.583	-40.00	1.50
1.53	-20.588	-19.299	1.53	-20.584	-35.00	1.53	-20.584	-39.00	1.53	-20.584	-39.00	1.53	-20.584	-39.00	1.53
1.56	-20.589	-18.156	1.56	-20.585	-34.00	1.56	-20.585	-38.00	1.56	-20.585	-38.00	1.56	-20.585	-38.00	1.56
1.59	-20.590	-17.013	1.59	-20.586	-33.00	1.59	-20.586	-37.00	1.59	-20.586	-37.00	1.59	-20.586	-37.00	1.59
1.62	-20.591	-15.870	1.62	-20.587	-32.00	1.62	-20.587	-36.00	1.62	-20.587	-36.00	1.62	-20.587	-36.00	1.62
1.65	-20.592	-14.727	1.65	-20.588	-31.00	1.65	-20.588	-35.00	1.65	-20.588	-35.00	1.65	-20.588	-35.00	1.65
1.68	-20.593	-13.584	1.68	-20.589	-30.00	1.68	-20.589	-34.00	1.68	-20.589	-34.00	1.68	-20.589	-34.00	1.68
1.71	-20.594	-12.441	1.71	-20.590	-29.00	1.71	-20.590	-33.00	1.71	-20.590	-33.00	1.71	-20.590	-33.00	1.71
1.74	-20.595	-11.298	1.74	-20.591	-28.00	1.74	-20.591	-32.00	1.74	-20.591	-32.00	1.74	-20.591	-32.00	1.74
1.77	-20.596	-10.155	1.77	-20.592	-27.00	1.77	-20.592	-31.00	1.77	-20.592	-31.00	1.77	-20.592	-31.00	1.77
1.80	-20.597	-9.012	1.80	-20.593	-26.00	1.80	-20.593	-30.00	1.80	-20.593	-30.00	1.80	-20.593	-30.00	1.80
1.83	-20.598	-7.869	1.83	-20.594	-25.00	1.83	-20.594	-29.00	1.83	-20.594	-29.00	1.83	-20.594	-29.00	1.83
1.86	-20.599	-6.726	1.86	-20.595	-24.00	1.86	-20.595	-28.00	1.86	-20.595	-28.00	1.86	-20.595	-28.00	1.86
1.89	-20.600	-5.583	1.89	-20.596	-23.00	1.89	-20.596	-27.00	1.89	-20.596	-27.00	1.89	-20.596	-27.00	1.89
1.92	-20.601	-4.440	1.92	-20.597	-22.00	1.92	-20.597	-26.00	1.92	-20.597	-26.00	1.92	-20.597	-26.00	1.92
1.95	-20.602	-3.297	1.95	-20.598	-21.00	1.95	-20.598	-25.00	1.95	-20.598	-25.00	1.95	-20.598	-25.00	1.95
1.98	-20.603	-2.154	1.98	-20.599	-20.00	1.98	-20.599	-24.00	1.98	-20.599	-24.00	1.98	-20.599	-24.00	1.98
2.01	-20.604	-1.011	2.01	-20.600	-19.00	2.01	-20.600	-23.00	2.01	-20.600	-23.00	2.01	-20.600	-23.00	2.01
2.04	-20.605	0.142	2.04	-20.601	-18.00	2.04	-20.601	-22.00	2.04	-20.601	-22.00	2.04	-20.601	-22.00	2.04
2.07	-20.606	1.299	2.07	-20.602	-17.00	2.07	-20.602	-21.00	2.07	-20.602	-21.00	2.07	-20.602	-21.00	2.07
2.10	-20.607	2.456	2.10	-20.603	-16.00	2.10	-20.603	-20.00	2.10	-20.603	-20.00	2.10	-20.603	-20.00	2.10
2.13	-20.608	3.613	2.13	-20.604	-15.00	2.13	-20.604	-19.00	2.13	-20.604	-19.00	2.13	-20.604	-19.00	2.13
2.16	-20.609	4.770	2.16	-20.6											

Table 102. Azimuthal Magnetic Field (Ice), Frequency = 1.0 MHz, VED Height = 224.76 m

30.0 KM UMRANGE					50.0 KM UMRANGE					100.0 KM UMRANGE				
REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)
0.00	-15.063	-17.062	0.00	-24.419	-26.022	0.00	-33.688	-28.558	0.00	-44.050	-29.445	0.00	-44.050	-29.445
0.03	-15.062	-16.930	0.01	-24.403	-26.911	0.03	-33.473	-29.440	0.01	-44.050	-30.108	0.03	-44.050	-30.108
0.06	-15.054	-16.971	0.02	-24.327	-16.958	0.06	-33.327	-30.108	0.02	-44.050	-30.774	0.06	-44.050	-30.774
0.09	-15.041	-16.947	0.03	-24.195	-16.908	0.09	-33.185	-30.774	0.03	-44.050	-31.440	0.09	-44.050	-31.440
0.12	-15.023	-16.904	0.04	-24.013	-16.859	0.12	-33.043	-31.440	0.04	-44.050	-32.104	0.12	-44.050	-32.104
0.15	-15.000	-16.862	0.05	-23.789	-16.817	0.15	-32.901	-32.104	0.05	-44.050	-32.768	0.15	-44.050	-32.768
0.18	-14.976	-16.820	0.06	-23.565	-16.775	0.18	-32.759	-32.768	0.06	-44.050	-33.432	0.18	-44.050	-33.432
0.21	-14.950	-16.778	0.07	-23.341	-16.733	0.21	-32.617	-33.432	0.07	-44.050	-34.096	0.21	-44.050	-34.096
0.24	-14.924	-16.736	0.08	-23.117	-16.691	0.24	-32.475	-34.096	0.08	-44.050	-34.760	0.24	-44.050	-34.760
0.27	-14.898	-16.694	0.09	-22.893	-16.649	0.27	-32.333	-34.760	0.09	-44.050	-35.424	0.27	-44.050	-35.424
0.30	-14.872	-16.652	0.10	-22.669	-16.607	0.30	-32.191	-35.424	0.10	-44.050	-36.088	0.30	-44.050	-36.088
0.33	-14.846	-16.610	0.11	-22.445	-16.565	0.33	-32.049	-36.088	0.11	-44.050	-36.752	0.33	-44.050	-36.752
0.36	-14.820	-16.568	0.12	-22.221	-16.523	0.36	-31.907	-36.752	0.12	-44.050	-37.416	0.36	-44.050	-37.416
0.39	-14.794	-16.526	0.13	-22.000	-16.481	0.39	-31.765	-37.416	0.13	-44.050	-38.080	0.39	-44.050	-38.080
0.42	-14.768	-16.484	0.14	-21.776	-16.439	0.42	-31.623	-38.080	0.14	-44.050	-38.744	0.42	-44.050	-38.744
0.45	-14.742	-16.442	0.15	-21.552	-16.397	0.45	-31.481	-38.744	0.15	-44.050	-39.408	0.45	-44.050	-39.408
0.48	-14.716	-16.400	0.16	-21.328	-16.355	0.48	-31.339	-39.408	0.16	-44.050	-40.072	0.48	-44.050	-40.072
0.51	-14.690	-16.358	0.17	-21.104	-16.313	0.51	-31.197	-40.072	0.17	-44.050	-40.736	0.51	-44.050	-40.736
0.54	-14.664	-16.316	0.18	-20.880	-16.271	0.54	-31.055	-40.736	0.18	-44.050	-41.400	0.54	-44.050	-41.400
0.57	-14.638	-16.274	0.19	-20.656	-16.229	0.57	-30.913	-41.400	0.19	-44.050	-42.064	0.57	-44.050	-42.064
0.60	-14.612	-16.232	0.20	-20.432	-16.187	0.60	-30.771	-42.064	0.20	-44.050	-42.728	0.60	-44.050	-42.728
0.63	-14.586	-16.190	0.21	-20.208	-16.145	0.63	-30.629	-42.728	0.21	-44.050	-43.392	0.63	-44.050	-43.392
0.66	-14.560	-16.148	0.22	-19.984	-16.103	0.66	-30.487	-43.392	0.22	-44.050	-44.056	0.66	-44.050	-44.056
0.69	-14.534	-16.106	0.23	-19.760	-16.061	0.69	-30.345	-44.056	0.23	-44.050	-44.720	0.69	-44.050	-44.720
0.72	-14.508	-16.064	0.24	-19.536	-16.019	0.72	-30.203	-44.720	0.24	-44.050	-45.384	0.72	-44.050	-45.384
0.75	-14.482	-16.022	0.25	-19.312	-15.977	0.75	-30.061	-45.384	0.25	-44.050	-46.048	0.75	-44.050	-46.048
0.78	-14.456	-15.980	0.26	-19.088	-15.935	0.78	-29.919	-46.048	0.26	-44.050	-46.712	0.78	-44.050	-46.712
0.81	-14.430	-15.938	0.27	-18.864	-15.893	0.81	-29.777	-46.712	0.27	-44.050	-47.376	0.81	-44.050	-47.376
0.84	-14.404	-15.896	0.28	-18.640	-15.851	0.84	-29.635	-47.376	0.28	-44.050	-48.040	0.84	-44.050	-48.040
0.87	-14.378	-15.854	0.29	-18.416	-15.809	0.87	-29.493	-48.040	0.29	-44.050	-48.704	0.87	-44.050	-48.704
0.90	-14.352	-15.812	0.30	-18.192	-15.767	0.90	-29.351	-48.704	0.30	-44.050	-49.368	0.90	-44.050	-49.368
1.05	-12.017	-20.115	0.35	-15.315	-44.800	1.05	-15.540	-50.000	0.35	-15.540	-50.000	1.05	-15.540	-50.000
1.20	-12.029	-23.714	0.40	-14.362	-47.000	1.20	-14.512	-50.900	0.40	-14.512	-50.900	1.20	-14.512	-50.900
1.35	-11.970	-20.911	0.45	-13.556	-48.000	1.35	-13.610	-51.600	0.45	-13.610	-51.600	1.35	-13.610	-51.600
1.50	-11.905	-24.713	0.50	-12.818	-50.300	1.50	-12.842	-52.200	0.50	-12.842	-52.200	1.50	-12.842	-52.200
1.65	-11.830	-26.244	0.55	-12.156	-51.000	1.65	-12.134	-52.800	0.55	-12.134	-52.800	1.65	-12.134	-52.800
1.80	-11.767	-34.444	0.60	-11.558	-52.700	1.80	-11.508	-53.400	0.60	-11.508	-53.400	1.80	-11.508	-53.400
1.95	-11.697	-36.551	0.65	-11.016	-53.700	1.95	-10.945	-54.000	0.65	-10.945	-54.000	1.95	-10.945	-54.000
2.10	-11.640	-38.555	0.70	-10.522	-54.500	2.10	-10.434	-54.600	0.70	-10.434	-54.600	2.10	-10.434	-54.600
2.25	-11.576	-40.500	0.75	-10.070	-55.000	2.25	-9.969	-55.200	0.75	-9.969	-55.200	2.25	-9.969	-55.200
2.40	-11.511	-42.500	0.80	-9.626	-55.500	2.40	-9.544	-55.400	0.80	-9.544	-55.400	2.40	-9.544	-55.400
2.55	-11.446	-44.500	0.85	-9.276	-56.000	2.55	-9.250	-55.600	0.85	-9.250	-55.600	2.55	-9.250	-55.600
2.70	-11.381	-46.500	0.90	-8.925	-56.500	2.70	-8.900	-55.800	0.90	-8.900	-55.800	2.70	-8.900	-55.800
2.85	-11.316	-48.500	0.95	-8.574	-57.000	2.85	-8.548	-56.000	0.95	-8.548	-56.000	2.85	-8.548	-56.000
3.00	-11.251	-50.500	1.00	-8.223	-57.500	3.00	-8.200	-56.200	1.00	-8.200	-56.200	3.00	-8.200	-56.200

Table 103. Azimuthal Magnetic Field (Ice), Frequency = 1.0 MHz, VED Height = 449.52 m

300 KM UMBRANGE				500 KM UMBRANGE				1000 KM UMBRANGE			
RELTIME (HR)	AMP (DB)	PHASE (DEG)	RELTIME (HR)	AMP (DB)	PHASE (DEG)	RELTIME (HR)	AMP (DB)	PHASE (DEG)	RELTIME (HR)	AMP (DB)	PHASE (DEG)
0.00	-11.143	-64.75	0.00	-19.060	-13.30	0.00	-26.364	-13.33	0.00	-38.835	-16.14
0.05	-11.143	-74.17	0.05	-19.060	-9.30	0.05	-26.364	-11.16	0.10	-38.835	24.39
0.10	-11.143	-54.75	0.10	-19.060	-3.77	0.10	-26.364	14.55	0.20	-38.835	44.04
0.15	-11.143	-44.31	0.15	-19.060	.22	0.15	-26.364	22.03	0.30	-38.835	53.34
0.20	-11.143	-24.86	0.20	-19.060	5.64	0.20	-26.364	30.25	0.40	-38.835	58.50
0.25	-11.143	-14.42	0.25	-19.060	9.43	0.25	-26.364	38.73	0.50	-38.835	61.73
0.30	-11.143	-4.97	0.30	-19.060	13.36	0.30	-26.364	47.77	0.60	-38.835	63.94
0.35	-11.143	4.97	0.35	-19.060	17.08	0.35	-26.364	56.55	0.70	-38.835	65.54
0.40	-11.143	14.42	0.40	-19.060	20.72	0.40	-26.364	64.99	0.80	-38.835	66.74
0.45	-11.143	24.86	0.45	-19.060	24.39	0.45	-26.364	73.47	0.90	-38.835	67.84
0.50	-11.143	34.31	0.50	-19.060	28.03	0.50	-26.364	81.92	1.00	-38.835	68.84
0.55	-11.143	44.31	0.55	-19.060	31.68	0.55	-26.364	90.35	1.10	-38.835	69.84
0.60	-11.143	54.75	0.60	-19.060	35.32	0.60	-26.364	98.78	1.20	-38.835	70.84
0.65	-11.143	64.75	0.65	-19.060	38.97	0.65	-26.364	107.21	1.30	-38.835	71.84
0.70	-11.143	74.17	0.70	-19.060	42.61	0.70	-26.364	115.64	1.40	-38.835	72.84
0.75	-11.143	84.17	0.75	-19.060	46.26	0.75	-26.364	124.09	1.50	-38.835	73.84
0.80	-11.143	94.17	0.80	-19.060	49.91	0.80	-26.364	132.54	1.60	-38.835	74.84
0.85	-11.143	104.17	0.85	-19.060	53.56	0.85	-26.364	140.99	1.70	-38.835	75.84
0.90	-11.143	114.17	0.90	-19.060	57.21	0.90	-26.364	149.44	1.80	-38.835	76.84
0.95	-11.143	124.17	0.95	-19.060	60.86	0.95	-26.364	157.89	1.90	-38.835	77.84
1.00	-11.143	134.17	1.00	-19.060	64.51	1.00	-26.364	166.34	2.00	-38.835	78.84
1.05	-11.143	144.17	1.05	-19.060	68.16	1.05	-26.364	174.79	2.10	-38.835	79.84
1.10	-11.143	154.17	1.10	-19.060	71.81	1.10	-26.364	183.24	2.20	-38.835	80.84
1.15	-11.143	164.17	1.15	-19.060	75.46	1.15	-26.364	191.69	2.30	-38.835	81.84
1.20	-11.143	174.17	1.20	-19.060	79.11	1.20	-26.364	200.14	2.40	-38.835	82.84
1.25	-11.143	184.17	1.25	-19.060	82.76	1.25	-26.364	208.59	2.50	-38.835	83.84
1.30	-11.143	194.17	1.30	-19.060	86.41	1.30	-26.364	217.04	2.60	-38.835	84.84
1.35	-11.143	204.17	1.35	-19.060	90.06	1.35	-26.364	225.49	2.70	-38.835	85.84
1.40	-11.143	214.17	1.40	-19.060	93.71	1.40	-26.364	233.94	2.80	-38.835	86.84
1.45	-11.143	224.17	1.45	-19.060	97.36	1.45	-26.364	242.39	2.90	-38.835	87.84
1.50	-11.143	234.17	1.50	-19.060	101.01	1.50	-26.364	250.84	3.00	-38.835	88.84
1.55	-11.143	244.17	1.55	-19.060	104.66	1.55	-26.364	259.29	3.10	-38.835	89.84
1.60	-11.143	254.17	1.60	-19.060	108.31	1.60	-26.364	267.74	3.20	-38.835	90.84
1.65	-11.143	264.17	1.65	-19.060	111.96	1.65	-26.364	276.19	3.30	-38.835	91.84
1.70	-11.143	274.17	1.70	-19.060	115.61	1.70	-26.364	284.64	3.40	-38.835	92.84
1.75	-11.143	284.17	1.75	-19.060	119.26	1.75	-26.364	293.09	3.50	-38.835	93.84
1.80	-11.143	294.17	1.80	-19.060	122.91	1.80	-26.364	301.54	3.60	-38.835	94.84
1.85	-11.143	304.17	1.85	-19.060	126.56	1.85	-26.364	310.00	3.70	-38.835	95.84
1.90	-11.143	314.17	1.90	-19.060	130.21	1.90	-26.364	318.45	3.80	-38.835	96.84
1.95	-11.143	324.17	1.95	-19.060	133.86	1.95	-26.364	326.90	3.90	-38.835	97.84
2.00	-11.143	334.17	2.00	-19.060	137.51	2.00	-26.364	335.35	4.00	-38.835	98.84
2.05	-11.143	344.17	2.05	-19.060	141.16	2.05	-26.364	343.80	4.10	-38.835	99.84
2.10	-11.143	354.17	2.10	-19.060	144.81	2.10	-26.364	352.25	4.20	-38.835	100.84
2.15	-11.143	364.17	2.15	-19.060	148.46	2.15	-26.364	360.70	4.30	-38.835	101.84
2.20	-11.143	374.17	2.20	-19.060	152.11	2.20	-26.364	369.15	4.40	-38.835	102.84
2.25	-11.143	384.17	2.25	-19.060	155.76	2.25	-26.364	377.60	4.50	-38.835	103.84
2.30	-11.143	394.17	2.30	-19.060	159.41	2.30	-26.364	386.05	4.60	-38.835	104.84
2.35	-11.143	404.17	2.35	-19.060	163.06	2.35	-26.364	394.50	4.70	-38.835	105.84
2.40	-11.143	414.17	2.40	-19.060	166.71	2.40	-26.364	402.95	4.80	-38.835	106.84
2.45	-11.143	424.17	2.45	-19.060	170.36	2.45	-26.364	411.40	4.90	-38.835	107.84
2.50	-11.143	434.17	2.50	-19.060	174.01	2.50	-26.364	419.85	5.00	-38.835	108.84
2.55	-11.143	444.17	2.55	-19.060	177.66	2.55	-26.364	428.30	5.10	-38.835	109.84
2.60	-11.143	454.17	2.60	-19.060	181.31	2.60	-26.364	436.75	5.20	-38.835	110.84
2.65	-11.143	464.17	2.65	-19.060	184.96	2.65	-26.364	445.20	5.30	-38.835	111.84
2.70	-11.143	474.17	2.70	-19.060	188.61	2.70	-26.364	453.65	5.40	-38.835	112.84
2.75	-11.143	484.17	2.75	-19.060	192.26	2.75	-26.364	462.10	5.50	-38.835	113.84
2.80	-11.143	494.17	2.80	-19.060	195.91	2.80	-26.364	470.55	5.60	-38.835	114.84
2.85	-11.143	504.17	2.85	-19.060	199.56	2.85	-26.364	479.00	5.70	-38.835	115.84
2.90	-11.143	514.17	2.90	-19.060	203.21	2.90	-26.364	487.45	5.80	-38.835	116.84
2.95	-11.143	524.17	2.95	-19.060	206.86	2.95	-26.364	495.90	5.90	-38.835	117.84
3.00	-11.143	534.17	3.00	-19.060	210.51	3.00	-26.364	504.35	6.00	-38.835	118.84
3.05	-11.143	544.17	3.05	-19.060	214.16	3.05	-26.364	512.80	6.10	-38.835	119.84
3.10	-11.143	554.17	3.10	-19.060	217.81	3.10	-26.364	521.25	6.20	-38.835	120.84
3.15	-11.143	564.17	3.15	-19.060	221.46	3.15	-26.364	529.70	6.30	-38.835	121.84
3.20	-11.143	574.17	3.20	-19.060	225.11	3.20	-26.364	538.15	6.40	-38.835	122.84
3.25	-11.143	584.17	3.25	-19.060	228.76	3.25	-26.364	546.60	6.50	-38.835	123.84
3.30	-11.143	594.17	3.30	-19.060	232.41	3.30	-26.364	555.05	6.60	-38.835	124.84
3.35	-11.143	604.17	3.35	-19.060	236.06	3.35	-26.364	563.50	6.70	-38.835	125.84
3.40	-11.143	614.17	3.40	-19.060	239.71	3.40	-26.364	571.95	6.80	-38.835	126.84
3.45	-11.143	624.17	3.45	-19.060	243.36	3.45	-26.364	580.40	6.90	-38.835	127.84
3.50	-11.143	634.17	3.50	-19.060	247.01	3.50	-26.364	588.85	7.00	-38.835	128.84
3.55	-11.143	644.17	3.55	-19.060	250.66	3.55	-26.364	597.30	7.10	-38.835	129.84
3.60	-11.143	654.17	3.60	-19.060	254.31	3.60	-26.364	605.75	7.20	-38.835	130.84
3.65	-11.143	664.17	3.65	-19.060	257.96	3.65	-26.364	614.20	7.30	-38.835	131.84
3.70	-11.143	674.17	3.70	-19.060	261.61	3.70	-26.364	622.65	7.40	-38.835	132.84
3.75	-11.143	684.17	3.75	-19.060	265.26	3.75	-26.364	631.10	7.50	-38.835	133.84
3.80	-11.143	694.17	3.80	-19.060	268.91	3.80	-26.364	639.55	7.60	-38.835	134.84
3.85	-11.143	704.17	3.85	-19.060	272.56	3.85	-26.364	648.00	7.70	-38.835	135.84
3.90	-11.143	714.17	3.90	-19.060	276.21	3.90	-26.364	656.45	7.80	-38.835	136.84
3.95	-11.143	724.17	3.95	-19.060	279.86	3.95	-26.364	664.90	7.90	-38.835	137.84
4.00	-11.143	734.17	4.00	-19.060	283.51	4.00	-26.364	673.35	8.00	-38.835	138.84
4.05	-11.143	744.17	4.05	-19.060	287.16	4.05	-26.364	681.80	8.10	-38.835	139.84
4.10	-11.143	754.17	4.10	-19.060	290.81	4.10	-26.364	690.25	8.20	-38.835	140.84
4.15	-11.143	764.17	4.15	-19.060	294.46	4.15	-26.364	698.70	8.30	-38.835	141.84
4.20	-11.143	774.17	4.20	-19.060	298.11	4.20	-26.364	707.15	8.40	-38.835	142.84
4.25	-11.143	784.17	4.25	-19.060	301.76	4.25	-26.364	715.60	8.50	-38.835	143.84
4.30	-11.143	794.17	4.30	-19.060	305.41	4.30	-26.364	724.05	8.60	-38.835	144.84
4.35	-11.143	804.17	4.35	-19.060	309.06	4.35	-26.364	732.50	8.70	-38.835	145.84
4.40	-11.143	814.17	4.40	-19.060	312.71	4.40	-26.364	740.95	8.80	-38.835	146.84
4.45	-11.143	824.17	4.45	-19.060	316.36	4.45	-26.364	749.40	8.90	-38.835	147.84
4.50	-11.143	834.17	4.50	-19.060	320.01	4.50	-26.364	757.85	9.00	-38.835	148.84
4.55	-11.143	844.17	4.55	-19.060	323.66	4.55	-26.364	766.30	9.10	-38.835	149.84
4.60	-11.143	854.17	4.60	-19.060	327.31	4.60	-26.364	774.75	9.20	-38.835	150.84
4.65	-11.143	864.17	4.65	-19.060	330.96	4.65	-26.364	783.20	9.30	-38.835	151.84
4.70	-11.143	874.17	4.70	-19.060	334.61	4.70	-26.364	791.65	9.40	-38.835	152.84
4.75	-11.143	884.17	4.75	-19.060	338.26	4.75	-26.364	800.10	9.50	-38.835	153.84
4.80	-11.										

Table 104. Azimuthal Magnetic Field (Ice), Frequency = 10.0 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE				1000.0 KM DOWNRANGE			
ME (km)	AMP (DB)	PHASE (DEG)	ME (km)	AMP (DB)	PHASE (DEG)	ME (km)	AMP (DB)	ME (km)	AMP (DB)	PHASE (DEG)	ME (km)	AMP (DB)	PHASE (DEG)	ME (km)	AMP (DB)
0.000	-40.000	-60.000	0.000	-50.517	-60.000	0.000	-70.517	0.000	-70.517	-60.000	0.000	-70.517	-60.000	0.000	-70.517
0.003	-39.807	-60.000	0.010	-40.254	-60.000	0.030	-41.433	0.030	-41.433	-60.000	0.030	-41.433	-60.000	0.030	-41.433
0.006	-39.614	-60.000	0.020	-40.508	-60.000	0.060	-42.891	0.060	-42.891	-60.000	0.060	-42.891	-60.000	0.060	-42.891
0.009	-39.421	-60.000	0.030	-40.762	-60.000	0.090	-44.380	0.090	-44.380	-60.000	0.090	-44.380	-60.000	0.090	-44.380
0.012	-39.228	-60.000	0.040	-41.016	-60.000	0.120	-45.869	0.120	-45.869	-60.000	0.120	-45.869	-60.000	0.120	-45.869
0.015	-39.035	-60.000	0.050	-41.270	-60.000	0.150	-47.358	0.150	-47.358	-60.000	0.150	-47.358	-60.000	0.150	-47.358
0.018	-38.842	-60.000	0.060	-41.524	-60.000	0.180	-48.847	0.180	-48.847	-60.000	0.180	-48.847	-60.000	0.180	-48.847
0.021	-38.649	-60.000	0.070	-41.778	-60.000	0.210	-50.336	0.210	-50.336	-60.000	0.210	-50.336	-60.000	0.210	-50.336
0.024	-38.456	-60.000	0.080	-42.032	-60.000	0.240	-51.825	0.240	-51.825	-60.000	0.240	-51.825	-60.000	0.240	-51.825
0.027	-38.263	-60.000	0.090	-42.286	-60.000	0.270	-53.314	0.270	-53.314	-60.000	0.270	-53.314	-60.000	0.270	-53.314
0.030	-38.070	-60.000	0.100	-42.540	-60.000	0.300	-54.803	0.300	-54.803	-60.000	0.300	-54.803	-60.000	0.300	-54.803
0.033	-37.877	-60.000	0.110	-42.794	-60.000	0.330	-56.292	0.330	-56.292	-60.000	0.330	-56.292	-60.000	0.330	-56.292
0.036	-37.684	-60.000	0.120	-43.048	-60.000	0.360	-57.781	0.360	-57.781	-60.000	0.360	-57.781	-60.000	0.360	-57.781
0.039	-37.491	-60.000	0.130	-43.302	-60.000	0.390	-59.270	0.390	-59.270	-60.000	0.390	-59.270	-60.000	0.390	-59.270
0.042	-37.298	-60.000	0.140	-43.556	-60.000	0.420	-60.759	0.420	-60.759	-60.000	0.420	-60.759	-60.000	0.420	-60.759
0.045	-37.105	-60.000	0.150	-43.810	-60.000	0.450	-62.248	0.450	-62.248	-60.000	0.450	-62.248	-60.000	0.450	-62.248
0.048	-36.912	-60.000	0.160	-44.064	-60.000	0.480	-63.737	0.480	-63.737	-60.000	0.480	-63.737	-60.000	0.480	-63.737
0.051	-36.719	-60.000	0.170	-44.318	-60.000	0.510	-65.226	0.510	-65.226	-60.000	0.510	-65.226	-60.000	0.510	-65.226
0.054	-36.526	-60.000	0.180	-44.572	-60.000	0.540	-66.715	0.540	-66.715	-60.000	0.540	-66.715	-60.000	0.540	-66.715
0.057	-36.333	-60.000	0.190	-44.826	-60.000	0.570	-68.204	0.570	-68.204	-60.000	0.570	-68.204	-60.000	0.570	-68.204
0.060	-36.140	-60.000	0.200	-45.080	-60.000	0.600	-69.693	0.600	-69.693	-60.000	0.600	-69.693	-60.000	0.600	-69.693
0.063	-35.947	-60.000	0.210	-45.334	-60.000	0.630	-71.182	0.630	-71.182	-60.000	0.630	-71.182	-60.000	0.630	-71.182
0.066	-35.754	-60.000	0.220	-45.588	-60.000	0.660	-72.671	0.660	-72.671	-60.000	0.660	-72.671	-60.000	0.660	-72.671
0.069	-35.561	-60.000	0.230	-45.842	-60.000	0.690	-74.160	0.690	-74.160	-60.000	0.690	-74.160	-60.000	0.690	-74.160
0.072	-35.368	-60.000	0.240	-46.096	-60.000	0.720	-75.649	0.720	-75.649	-60.000	0.720	-75.649	-60.000	0.720	-75.649
0.075	-35.175	-60.000	0.250	-46.350	-60.000	0.750	-77.138	0.750	-77.138	-60.000	0.750	-77.138	-60.000	0.750	-77.138
0.078	-34.982	-60.000	0.260	-46.604	-60.000	0.780	-78.627	0.780	-78.627	-60.000	0.780	-78.627	-60.000	0.780	-78.627
0.081	-34.789	-60.000	0.270	-46.858	-60.000	0.810	-80.116	0.810	-80.116	-60.000	0.810	-80.116	-60.000	0.810	-80.116
0.084	-34.596	-60.000	0.280	-47.112	-60.000	0.840	-81.605	0.840	-81.605	-60.000	0.840	-81.605	-60.000	0.840	-81.605
0.087	-34.403	-60.000	0.290	-47.366	-60.000	0.870	-83.094	0.870	-83.094	-60.000	0.870	-83.094	-60.000	0.870	-83.094
0.090	-34.210	-60.000	0.300	-47.620	-60.000	0.900	-84.583	0.900	-84.583	-60.000	0.900	-84.583	-60.000	0.900	-84.583
0.093	-34.017	-60.000	0.310	-47.874	-60.000	0.930	-86.072	0.930	-86.072	-60.000	0.930	-86.072	-60.000	0.930	-86.072
0.096	-33.824	-60.000	0.320	-48.128	-60.000	0.960	-87.561	0.960	-87.561	-60.000	0.960	-87.561	-60.000	0.960	-87.561
0.099	-33.631	-60.000	0.330	-48.382	-60.000	0.990	-89.050	0.990	-89.050	-60.000	0.990	-89.050	-60.000	0.990	-89.050
0.102	-33.438	-60.000	0.340	-48.636	-60.000	1.020	-90.539	1.020	-90.539	-60.000	1.020	-90.539	-60.000	1.020	-90.539
0.105	-33.245	-60.000	0.350	-48.890	-60.000	1.050	-92.028	1.050	-92.028	-60.000	1.050	-92.028	-60.000	1.050	-92.028
0.108	-33.052	-60.000	0.360	-49.144	-60.000	1.080	-93.517	1.080	-93.517	-60.000	1.080	-93.517	-60.000	1.080	-93.517
0.111	-32.859	-60.000	0.370	-49.398	-60.000	1.110	-95.006	1.110	-95.006	-60.000	1.110	-95.006	-60.000	1.110	-95.006
0.114	-32.666	-60.000	0.380	-49.652	-60.000	1.140	-96.495	1.140	-96.495	-60.000	1.140	-96.495	-60.000	1.140	-96.495
0.117	-32.473	-60.000	0.390	-49.906	-60.000	1.170	-97.984	1.170	-97.984	-60.000	1.170	-97.984	-60.000	1.170	-97.984
0.120	-32.280	-60.000	0.400	-50.160	-60.000	1.200	-99.473	1.200	-99.473	-60.000	1.200	-99.473	-60.000	1.200	-99.473
0.123	-32.087	-60.000	0.410	-50.414	-60.000	1.230	-100.962	1.230	-100.962	-60.000	1.230	-100.962	-60.000	1.230	-100.962
0.126	-31.894	-60.000	0.420	-50.668	-60.000	1.260	-102.451	1.260	-102.451	-60.000	1.260	-102.451	-60.000	1.260	-102.451
0.129	-31.701	-60.000	0.430	-50.922	-60.000	1.290	-103.940	1.290	-103.940	-60.000	1.290	-103.940	-60.000	1.290	-103.940
0.132	-31.508	-60.000	0.440	-51.176	-60.000	1.320	-105.429	1.320	-105.429	-60.000	1.320	-105.429	-60.000	1.320	-105.429
0.135	-31.315	-60.000	0.450	-51.430	-60.000	1.350	-106.918	1.350	-106.918	-60.000	1.350	-106.918	-60.000	1.350	-106.918
0.138	-31.122	-60.000	0.460	-51.684	-60.000	1.380	-108.407	1.380	-108.407	-60.000	1.380	-108.407	-60.000	1.380	-108.407
0.141	-30.929	-60.000	0.470	-51.938	-60.000	1.410	-109.896	1.410	-109.896	-60.000	1.410	-109.896	-60.000	1.410	-109.896
0.144	-30.736	-60.000	0.480	-52.192	-60.000	1.440	-111.385	1.440	-111.385	-60.000	1.440	-111.385	-60.000	1.440	-111.385
0.147	-30.543	-60.000	0.490	-52.446	-60.000	1.470	-112.874	1.470	-112.874	-60.000	1.470	-112.874	-60.000	1.470	-112.874
0.150	-30.350	-60.000	0.500	-52.700	-60.000	1.500	-114.363	1.500	-114.363	-60.000	1.500	-114.363	-60.000	1.500	-114.363
0.153	-30.157	-60.000	0.510	-52.954	-60.000	1.530	-115.852	1.530	-115.852	-60.000	1.530	-115.852	-60.000	1.530	-115.852
0.156	-30.000	-60.000	0.520	-53.208	-60.000	1.560	-117.341	1.560	-117.341	-60.000	1.560	-117.341	-60.000	1.560	-117.341
0.159	-29.800	-60.000	0.530	-53.462	-60.000	1.590	-118.830	1.590	-118.830	-60.000	1.590	-118.830	-60.000	1.590	-118.830
0.162	-29.600	-60.000	0.540	-53.716	-60.000	1.620	-120.319	1.620	-120.319	-60.000	1.620	-120.319	-60.000	1.620	-120.319
0.165	-29.400	-60.000	0.550	-53.970	-60.000	1.650	-121.808	1.650	-121.808	-60.000	1.650	-121.808	-60.000	1.650	-121.808
0.168	-29.200	-60.000	0.560	-54.224	-60.000	1.680	-123.297	1.680	-123.297	-60.000	1.680	-123.297	-60.000	1.680	-123.297
0.171	-29.000	-60.000	0.570	-54.478	-60.000	1.710	-124.786	1.710	-124.786	-60.000	1.710	-124.786	-60.000	1.710	-124.786
0.174	-28.800	-60.000	0.580	-54.732	-60.000	1.740	-126.275	1.740	-126.275	-60.000	1.740	-126.275	-60.000	1.740	-126.275
0.177	-28.600	-60.000	0.590	-54.986	-60.000	1.770	-127.764	1.770	-127.764	-60.000	1.770	-127.764	-60.000	1.770	-127.764
0.180	-28.400	-60.000	0.600	-55.240	-60.000	1.800	-129.253	1.800	-129.253	-60.000	1.800	-129.253	-60.000	1.800	-129.253
0.183	-28.200	-60.000	0.610	-55.494	-60.000	1.830	-130.742	1.830	-130.742	-60.000	1.830	-130.742	-60.000	1.830	-130.742
0.186	-28.000	-60.000	0.620	-55.748	-60.000	1.860	-132.231	1.860	-132.231	-60.000	1.860	-132.231	-60.000	1.860	-132.231
0.189	-27.800	-60.000	0.630	-56.002	-60.000	1.890	-133.720	1.890	-133.720	-60.000	1.890	-133.720	-60.000	1.890	-133.720
0.192	-27.600	-60.000	0.640	-56.256	-60.000	1.920	-135.209	1.920	-135.209	-60.000	1.920	-135.209	-60.000	1.920	-135.209
0.195	-27.400	-60.000	0.650	-56.510	-60.000	1.950	-136.698	1.950	-136.698	-60.000	1.950	-136.698	-60.000	1.950	-136.698
0.198	-27.200	-60.000	0.660	-56.764	-60.000	1.980	-138.187	1.980	-138.187	-60.000	1.980	-138.187	-60.000	1.980	-138.187
0.201	-27.000	-60.000	0.670	-57.018	-60.000	2.010	-139.676	2.010	-139.676	-60.					

Table 105. Azimuthal Magnetic Field (Ice), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.00	-33.010	-26.89	0.00	-43.980	-27.75	0.00	-53.497	-28.00	0.00	-63.446	-28.09	0.00	-73.446	-28.09	0.00
0.03	-33.350	-26.76	0.03	-44.180	-27.63	0.03	-53.689	-27.87	0.03	-63.639	-27.96	0.03	-73.639	-27.96	0.03
0.06	-33.690	-26.63	0.06	-44.380	-27.50	0.06	-53.881	-27.74	0.06	-63.831	-27.83	0.06	-73.831	-27.83	0.06
0.09	-34.030	-26.50	0.09	-44.580	-27.37	0.09	-54.073	-27.61	0.09	-64.023	-27.70	0.09	-74.023	-27.70	0.09
0.12	-34.370	-26.37	0.12	-44.780	-27.24	0.12	-54.265	-27.48	0.12	-64.215	-27.57	0.12	-74.215	-27.57	0.12
0.15	-34.710	-26.24	0.15	-44.980	-27.11	0.15	-54.457	-27.35	0.15	-64.407	-27.44	0.15	-74.407	-27.44	0.15
0.18	-35.050	-26.11	0.18	-45.180	-26.98	0.18	-54.649	-27.22	0.18	-64.599	-27.31	0.18	-74.599	-27.31	0.18
0.21	-35.390	-25.98	0.21	-45.380	-26.85	0.21	-54.841	-27.09	0.21	-64.791	-27.18	0.21	-74.791	-27.18	0.21
0.24	-35.730	-25.85	0.24	-45.580	-26.72	0.24	-55.033	-26.96	0.24	-64.983	-27.05	0.24	-74.983	-27.05	0.24
0.27	-36.070	-25.72	0.27	-45.780	-26.59	0.27	-55.225	-26.83	0.27	-65.175	-26.92	0.27	-75.175	-26.92	0.27
0.30	-36.410	-25.59	0.30	-45.980	-26.46	0.30	-55.417	-26.70	0.30	-65.367	-26.79	0.30	-75.367	-26.79	0.30
0.33	-36.750	-25.46	0.33	-46.180	-26.33	0.33	-55.609	-26.57	0.33	-65.559	-26.66	0.33	-75.559	-26.66	0.33
0.36	-37.090	-25.33	0.36	-46.380	-26.20	0.36	-55.801	-26.44	0.36	-65.751	-26.53	0.36	-75.751	-26.53	0.36
0.39	-37.430	-25.20	0.39	-46.580	-26.07	0.39	-55.993	-26.31	0.39	-65.943	-26.40	0.39	-75.943	-26.40	0.39
0.42	-37.770	-25.07	0.42	-46.780	-25.94	0.42	-56.185	-26.18	0.42	-66.135	-26.27	0.42	-76.135	-26.27	0.42
0.45	-38.110	-24.94	0.45	-46.980	-25.81	0.45	-56.377	-26.05	0.45	-66.327	-26.14	0.45	-76.327	-26.14	0.45
0.48	-38.450	-24.81	0.48	-47.180	-25.68	0.48	-56.569	-25.92	0.48	-66.519	-26.01	0.48	-76.519	-26.01	0.48
0.51	-38.790	-24.68	0.51	-47.380	-25.55	0.51	-56.761	-25.79	0.51	-66.711	-25.88	0.51	-76.711	-25.88	0.51
0.54	-39.130	-24.55	0.54	-47.580	-25.42	0.54	-56.953	-25.66	0.54	-66.903	-25.75	0.54	-76.903	-25.75	0.54
0.57	-39.470	-24.42	0.57	-47.780	-25.29	0.57	-57.145	-25.53	0.57	-67.095	-25.62	0.57	-77.095	-25.62	0.57
0.60	-39.810	-24.29	0.60	-47.980	-25.16	0.60	-57.337	-25.40	0.60	-67.287	-25.49	0.60	-77.287	-25.49	0.60
0.63	-40.150	-24.16	0.63	-48.180	-25.03	0.63	-57.529	-25.27	0.63	-67.479	-25.36	0.63	-77.479	-25.36	0.63
0.66	-40.490	-24.03	0.66	-48.380	-24.90	0.66	-57.721	-25.14	0.66	-67.671	-25.23	0.66	-77.671	-25.23	0.66
0.69	-40.830	-23.90	0.69	-48.580	-24.77	0.69	-57.913	-25.01	0.69	-67.863	-25.10	0.69	-77.863	-25.10	0.69
0.72	-41.170	-23.77	0.72	-48.780	-24.64	0.72	-58.105	-24.88	0.72	-68.055	-24.97	0.72	-78.055	-24.97	0.72
0.75	-41.510	-23.64	0.75	-48.980	-24.51	0.75	-58.297	-24.75	0.75	-68.247	-24.84	0.75	-78.247	-24.84	0.75
0.78	-41.850	-23.51	0.78	-49.180	-24.38	0.78	-58.489	-24.62	0.78	-68.439	-24.71	0.78	-78.439	-24.71	0.78
0.81	-42.190	-23.38	0.81	-49.380	-24.25	0.81	-58.681	-24.49	0.81	-68.631	-24.58	0.81	-78.631	-24.58	0.81
0.84	-42.530	-23.25	0.84	-49.580	-24.12	0.84	-58.873	-24.36	0.84	-68.823	-24.45	0.84	-78.823	-24.45	0.84
0.87	-42.870	-23.12	0.87	-49.780	-23.99	0.87	-59.065	-24.23	0.87	-69.015	-24.32	0.87	-79.015	-24.32	0.87
0.90	-43.210	-22.99	0.90	-49.980	-23.86	0.90	-59.257	-24.10	0.90	-69.207	-24.19	0.90	-79.207	-24.19	0.90
1.05	-43.434	-22.64	1.05	-50.415	-23.46	1.05	-59.398	-23.66	1.05	-69.348	-23.66	1.05	-79.348	-23.66	1.05
1.20	-43.404	-22.15	1.20	-50.377	-22.77	1.20	-59.360	-22.61	1.20	-69.300	-22.61	1.20	-79.300	-22.61	1.20
1.35	-43.310	-21.65	1.35	-50.278	-22.07	1.35	-59.261	-21.91	1.35	-69.201	-21.91	1.35	-79.201	-21.91	1.35
1.50	-43.134	-20.93	1.50	-50.109	-21.34	1.50	-59.092	-21.18	1.50	-69.032	-21.18	1.50	-79.032	-21.18	1.50
1.65	-42.837	-20.04	1.65	-49.795	-20.59	1.65	-58.778	-20.43	1.65	-68.718	-20.43	1.65	-78.718	-20.43	1.65
1.80	-42.413	-18.98	1.80	-49.350	-19.54	1.80	-58.333	-19.38	1.80	-68.273	-19.38	1.80	-78.273	-19.38	1.80
1.95	-41.850	-17.78	1.95	-48.795	-18.34	1.95	-57.678	-18.18	1.95	-67.618	-18.18	1.95	-77.618	-18.18	1.95
2.10	-41.150	-16.45	2.10	-48.015	-17.01	2.10	-56.818	-16.85	2.10	-66.758	-16.85	2.10	-76.758	-16.85	2.10
2.25	-40.310	-14.96	2.25	-47.076	-15.49	2.25	-55.818	-15.69	2.25	-65.758	-15.69	2.25	-75.758	-15.69	2.25
2.40	-39.350	-13.34	2.40	-46.000	-14.02	2.40	-54.693	-14.24	2.40	-64.633	-14.24	2.40	-74.633	-14.24	2.40
2.55	-38.264	-11.64	2.55	-44.804	-12.70	2.55	-53.453	-12.94	2.55	-63.393	-12.94	2.55	-73.393	-12.94	2.55
2.70	-37.064	-10.00	2.70	-43.496	-11.14	2.70	-52.113	-11.38	2.70	-62.053	-11.38	2.70	-72.053	-11.38	2.70
2.85	-35.754	-8.34	2.85	-42.074	-9.44	2.85	-50.693	-9.62	2.85	-60.633	-9.62	2.85	-70.633	-9.62	2.85
3.00	-34.334	-6.64	3.00	-40.654	-7.74	3.00	-49.273	-7.90	3.00	-59.213	-7.90	3.00	-69.213	-7.90	3.00

Table 106. Azimuthal Magnetic Field (Ice), Frequency = 10.0 MHz, VED Height = 44.95 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.00	-20.345	-13.09	0.00	0.00	-58.271	-74.90	0.00
0.03	-20.627	-13.09	0.03	0.03	-59.444	53.50	0.03
0.06	-21.576	16.73	0.06	0.06	-59.444	53.50	0.06
0.09	-22.006	26.96	0.09	0.09	-59.444	53.50	0.09
0.12	-22.340	31.05	0.12	0.12	-59.444	53.50	0.12
0.15	-22.576	37.33	0.15	0.15	-59.444	53.50	0.15
0.18	-22.810	42.23	0.18	0.18	-59.444	53.50	0.18
0.21	-23.040	46.10	0.21	0.21	-59.444	53.50	0.21
0.24	-23.260	49.31	0.24	0.24	-59.444	53.50	0.24
0.27	-23.470	51.89	0.27	0.27	-59.444	53.50	0.27
0.30	-23.670	54.04	0.30	0.30	-59.444	53.50	0.30
0.33	-23.870	55.55	0.33	0.33	-59.444	53.50	0.33
0.36	-24.070	57.33	0.36	0.36	-59.444	53.50	0.36
0.39	-24.270	59.33	0.39	0.39	-59.444	53.50	0.39
0.42	-24.470	61.51	0.42	0.42	-59.444	53.50	0.42
0.45	-24.670	63.81	0.45	0.45	-59.444	53.50	0.45
0.48	-24.870	66.21	0.48	0.48	-59.444	53.50	0.48
0.51	-25.070	68.71	0.51	0.51	-59.444	53.50	0.51
0.54	-25.270	71.31	0.54	0.54	-59.444	53.50	0.54
0.57	-25.470	74.01	0.57	0.57	-59.444	53.50	0.57
0.60	-25.670	76.81	0.60	0.60	-59.444	53.50	0.60
0.63	-25.870	79.71	0.63	0.63	-59.444	53.50	0.63
0.66	-26.070	82.71	0.66	0.66	-59.444	53.50	0.66
0.69	-26.270	85.81	0.69	0.69	-59.444	53.50	0.69
0.72	-26.470	89.01	0.72	0.72	-59.444	53.50	0.72
0.75	-26.670	92.31	0.75	0.75	-59.444	53.50	0.75
0.78	-26.870	95.71	0.78	0.78	-59.444	53.50	0.78
0.81	-27.070	99.21	0.81	0.81	-59.444	53.50	0.81
0.84	-27.270	102.81	0.84	0.84	-59.444	53.50	0.84
0.87	-27.470	106.51	0.87	0.87	-59.444	53.50	0.87
0.90	-27.670	110.31	0.90	0.90	-59.444	53.50	0.90
1.05	-28.470	124.74	1.05	1.05	-59.444	53.50	1.05
1.20	-29.470	141.55	1.20	1.20	-59.444	53.50	1.20
1.35	-30.470	160.86	1.35	1.35	-59.444	53.50	1.35
1.50	-31.470	182.67	1.50	1.50	-59.444	53.50	1.50
1.65	-32.470	207.08	1.65	1.65	-59.444	53.50	1.65
1.80	-33.470	234.09	1.80	1.80	-59.444	53.50	1.80
1.95	-34.470	263.70	1.95	1.95	-59.444	53.50	1.95
2.10	-35.470	296.01	2.10	2.10	-59.444	53.50	2.10
2.25	-36.470	331.12	2.25	2.25	-59.444	53.50	2.25
2.40	-37.470	369.03	2.40	2.40	-59.444	53.50	2.40
2.55	-38.470	409.74	2.55	2.55	-59.444	53.50	2.55
2.70	-39.470	453.25	2.70	2.70	-59.444	53.50	2.70
2.85	-40.470	499.56	2.85	2.85	-59.444	53.50	2.85
3.00	-41.470	548.67	3.00	3.00	-59.444	53.50	3.00

Table 107. Azimuthal Magnetic Field (ice), Frequency = 100.0 MHz, VED Height = 0.00 m

10.0 KM JOURNAL				30.0 KM JOURNAL			
MLT	AMP (UB)	PHASE (DEG)	MLT (KM)	MLT	AMP (UB)	PHASE (DEG)	MLT (KM)
01.00	-30.510	-89.534	0.000	01.00	-70.517	-89.548	0.000
01.01	-40.514	-89.534	0.000	01.01	-80.517	-89.548	0.000
01.02	-44.730	-30.443	0.000	01.02	-84.051	-30.443	0.000
01.03	-44.741	-21.333	0.000	01.03	-84.051	-21.333	0.000
01.04	-39.741	-10.420	0.012	01.04	-79.055	-10.420	0.012
01.05	-37.741	-13.000	0.015	01.05	-76.085	-13.000	0.015
01.06	-36.430	-10.741	0.018	01.06	-74.085	-10.741	0.018
01.07	-35.100	-8.100	0.021	01.07	-72.085	-8.100	0.021
01.08	-34.050	-6.100	0.024	01.08	-70.085	-6.100	0.024
01.09	-33.000	-4.200	0.027	01.09	-68.085	-4.200	0.027
01.10	-32.000	-2.400	0.030	01.10	-66.085	-2.400	0.030
01.11	-31.000	-0.600	0.033	01.11	-64.085	-0.600	0.033
01.12	-30.000	1.200	0.036	01.12	-62.085	1.200	0.036
01.13	-29.000	3.000	0.039	01.13	-60.085	3.000	0.039
01.14	-28.000	4.800	0.042	01.14	-58.085	4.800	0.042
01.15	-26.000	6.600	0.045	01.15	-56.085	6.600	0.045
01.16	-24.000	8.400	0.048	01.16	-54.085	8.400	0.048
01.17	-22.000	10.200	0.051	01.17	-52.085	10.200	0.051
01.18	-20.000	12.000	0.054	01.18	-50.085	12.000	0.054
01.19	-18.000	13.800	0.057	01.19	-48.085	13.800	0.057
01.20	-16.000	15.600	0.060	01.20	-46.085	15.600	0.060
01.21	-14.000	17.400	0.063	01.21	-44.085	17.400	0.063
01.22	-12.000	19.200	0.066	01.22	-42.085	19.200	0.066
01.23	-10.000	21.000	0.069	01.23	-40.085	21.000	0.069
01.24	-8.000	22.800	0.072	01.24	-38.085	22.800	0.072
01.25	-6.000	24.600	0.075	01.25	-36.085	24.600	0.075
01.26	-4.000	26.400	0.078	01.26	-34.085	26.400	0.078
01.27	-2.000	28.200	0.081	01.27	-32.085	28.200	0.081
01.28	0.000	30.000	0.084	01.28	-30.085	30.000	0.084
01.29	2.000	31.800	0.087	01.29	-28.085	31.800	0.087
01.30	4.000	33.600	0.090	01.30	-26.085	33.600	0.090
01.35	-21.700	-11.000	0.105	01.35	-21.700	-11.000	0.105
01.40	-20.000	-10.000	0.100	01.40	-20.000	-10.000	0.100
01.45	-18.000	-9.000	0.105	01.45	-18.000	-9.000	0.105
01.50	-17.000	-8.000	0.120	01.50	-17.000	-8.000	0.120
01.55	-16.000	-7.000	0.135	01.55	-16.000	-7.000	0.135
02.00	-15.000	-6.000	0.150	02.00	-15.000	-6.000	0.150
02.05	-14.000	-5.000	0.165	02.05	-14.000	-5.000	0.165
02.10	-13.000	-4.000	0.180	02.10	-13.000	-4.000	0.180
02.15	-12.000	-3.000	0.195	02.15	-12.000	-3.000	0.195
02.20	-11.000	-2.000	0.210	02.20	-11.000	-2.000	0.210
02.25	-10.000	-1.000	0.225	02.25	-10.000	-1.000	0.225
02.30	-9.000	0.000	0.240	02.30	-9.000	0.000	0.240
02.35	-8.000	1.000	0.255	02.35	-8.000	1.000	0.255
02.40	-7.000	2.000	0.270	02.40	-7.000	2.000	0.270
02.45	-6.000	3.000	0.285	02.45	-6.000	3.000	0.285
02.50	-5.000	4.000	0.300	02.50	-5.000	4.000	0.300

Table 108. Azimuthal Magnetic Field (Ice), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)
0.00	-43.972	-27.36	0.00	-53.488	-27.83	0.00	-63.937	-27.92	0.00	-73.477	-27.95	0.00	-83.937	-27.95	0.00
0.01	-44.003	16.34	0.01	-44.053	40.45	0.01	-45.423	55.27	0.01	-45.476	59.79	0.01	-45.476	59.79	0.01
0.02	-35.105	31.46	0.02	-35.324	54.57	0.02	-35.917	54.57	0.02	-35.917	54.57	0.02	-35.917	54.57	0.02
0.03	-35.371	40.36	0.03	-35.917	54.57	0.03	-35.917	54.57	0.03	-35.917	54.57	0.03	-35.917	54.57	0.03
0.04	-35.103	45.05	0.04	-35.324	54.57	0.04	-35.917	54.57	0.04	-35.917	54.57	0.04	-35.917	54.57	0.04
0.05	-31.376	48.83	0.05	-31.573	54.57	0.05	-31.573	54.57	0.05	-31.573	54.57	0.05	-31.573	54.57	0.05
0.06	-28.009	51.00	0.06	-30.020	54.57	0.06	-30.020	54.57	0.06	-30.020	54.57	0.06	-30.020	54.57	0.06
0.07	-26.017	52.57	0.07	-28.774	54.57	0.07	-28.774	54.57	0.07	-28.774	54.57	0.07	-28.774	54.57	0.07
0.08	-24.500	53.76	0.08	-26.575	54.57	0.08	-26.575	54.57	0.08	-26.575	54.57	0.08	-26.575	54.57	0.08
0.09	-23.050	55.44	0.09	-25.084	54.57	0.09	-25.084	54.57	0.09	-25.084	54.57	0.09	-25.084	54.57	0.09
0.10	-21.655	56.57	0.10	-23.444	60.24	0.10	-23.444	60.24	0.10	-23.444	60.24	0.10	-23.444	60.24	0.10
0.11	-20.320	57.01	0.11	-22.055	60.54	0.11	-22.055	60.54	0.11	-22.055	60.54	0.11	-22.055	60.54	0.11
0.12	-19.030	57.71	0.12	-20.714	60.73	0.12	-20.714	60.73	0.12	-20.714	60.73	0.12	-20.714	60.73	0.12
0.13	-17.780	58.00	0.13	-19.414	61.10	0.13	-19.414	61.10	0.13	-19.414	61.10	0.13	-19.414	61.10	0.13
0.14	-16.570	58.20	0.14	-18.154	61.21	0.14	-18.154	61.21	0.14	-18.154	61.21	0.14	-18.154	61.21	0.14
0.15	-15.390	58.34	0.15	-16.944	61.21	0.15	-16.944	61.21	0.15	-16.944	61.21	0.15	-16.944	61.21	0.15
0.16	-14.240	58.47	0.16	-15.784	61.21	0.16	-15.784	61.21	0.16	-15.784	61.21	0.16	-15.784	61.21	0.16
0.17	-13.120	58.59	0.17	-14.664	61.21	0.17	-14.664	61.21	0.17	-14.664	61.21	0.17	-14.664	61.21	0.17
0.18	-12.030	58.69	0.18	-13.584	61.21	0.18	-13.584	61.21	0.18	-13.584	61.21	0.18	-13.584	61.21	0.18
0.19	-10.970	58.77	0.19	-12.544	61.21	0.19	-12.544	61.21	0.19	-12.544	61.21	0.19	-12.544	61.21	0.19
0.20	-9.940	58.83	0.20	-11.544	61.21	0.20	-11.544	61.21	0.20	-11.544	61.21	0.20	-11.544	61.21	0.20
0.21	-8.940	58.87	0.21	-10.584	61.21	0.21	-10.584	61.21	0.21	-10.584	61.21	0.21	-10.584	61.21	0.21
0.22	-7.970	58.90	0.22	-9.664	61.21	0.22	-9.664	61.21	0.22	-9.664	61.21	0.22	-9.664	61.21	0.22
0.23	-7.030	58.92	0.23	-8.784	61.21	0.23	-8.784	61.21	0.23	-8.784	61.21	0.23	-8.784	61.21	0.23
0.24	-6.120	58.94	0.24	-7.944	61.21	0.24	-7.944	61.21	0.24	-7.944	61.21	0.24	-7.944	61.21	0.24
0.25	-5.240	58.95	0.25	-7.144	61.21	0.25	-7.144	61.21	0.25	-7.144	61.21	0.25	-7.144	61.21	0.25
0.26	-4.390	58.96	0.26	-6.384	61.21	0.26	-6.384	61.21	0.26	-6.384	61.21	0.26	-6.384	61.21	0.26
0.27	-3.570	58.97	0.27	-5.664	61.21	0.27	-5.664	61.21	0.27	-5.664	61.21	0.27	-5.664	61.21	0.27
0.28	-2.780	58.98	0.28	-4.984	61.21	0.28	-4.984	61.21	0.28	-4.984	61.21	0.28	-4.984	61.21	0.28
0.29	-2.020	58.99	0.29	-4.344	61.21	0.29	-4.344	61.21	0.29	-4.344	61.21	0.29	-4.344	61.21	0.29
0.30	-1.290	59.00	0.30	-3.744	61.21	0.30	-3.744	61.21	0.30	-3.744	61.21	0.30	-3.744	61.21	0.30
0.35	-15.400	60.48	0.35	-15.384	61.08	0.35	-15.384	61.08	0.35	-15.384	61.08	0.35	-15.384	61.08	0.35
0.40	-14.380	60.74	0.40	-14.351	61.02	0.40	-14.351	61.02	0.40	-14.351	61.02	0.40	-14.351	61.02	0.40
0.45	-13.400	61.05	0.45	-13.451	61.96	0.45	-13.451	61.96	0.45	-13.451	61.96	0.45	-13.451	61.96	0.45
0.50	-12.460	61.29	0.50	-12.660	62.10	0.50	-12.660	62.10	0.50	-12.660	62.10	0.50	-12.660	62.10	0.50
0.55	-11.570	61.50	0.55	-11.954	62.23	0.55	-11.954	62.23	0.55	-11.954	62.23	0.55	-11.954	62.23	0.55
0.60	-10.730	61.71	0.60	-11.332	62.37	0.60	-11.332	62.37	0.60	-11.332	62.37	0.60	-11.332	62.37	0.60
0.65	-9.940	61.91	0.65	-10.767	62.52	0.65	-10.767	62.52	0.65	-10.767	62.52	0.65	-10.767	62.52	0.65
0.70	-9.200	62.11	0.70	-10.255	62.66	0.70	-10.255	62.66	0.70	-10.255	62.66	0.70	-10.255	62.66	0.70
0.75	-8.500	62.30	0.75	-9.790	62.82	0.75	-9.790	62.82	0.75	-9.790	62.82	0.75	-9.790	62.82	0.75
0.80	-7.830	62.50	0.80	-9.365	62.98	0.80	-9.365	62.98	0.80	-9.365	62.98	0.80	-9.365	62.98	0.80
0.85	-7.190	62.70	0.85	-8.976	63.14	0.85	-8.976	63.14	0.85	-8.976	63.14	0.85	-8.976	63.14	0.85
0.90	-6.580	62.90	0.90	-8.618	63.32	0.90	-8.618	63.32	0.90	-8.618	63.32	0.90	-8.618	63.32	0.90
0.95	-6.000	63.11	0.95	-8.290	63.50	0.95	-8.290	63.50	0.95	-8.290	63.50	0.95	-8.290	63.50	0.95
1.00	-5.450	63.33	1.00	-7.988	63.70	1.00	-7.988	63.70	1.00	-7.988	63.70	1.00	-7.988	63.70	1.00

Table 109. Azimuthal Magnetic Field (Ice), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
MEI	PHASE	AMP	PHASE	MEI	PHASE	AMP	PHASE	MEI	PHASE	AMP	PHASE	MEI	PHASE	AMP	PHASE
(RM)	(DEG)	(DB)	(DEG)	(RM)	(DEG)	(DB)	(DEG)	(RM)	(DEG)	(DB)	(DEG)	(RM)	(DEG)	(DB)	(DEG)
0.000	-30.765	-14.352	14.352	0.000	-40.260	-14.75	14.75	0.000	-50.703	-14.83	14.83	0.000	-60.239	-14.86	14.86
0.001	-30.471	-14.352	14.352	0.003	-39.463	-14.75	14.75	0.010	-40.189	-14.83	14.83	0.030	-40.238	-14.86	14.86
0.002	-30.177	-14.352	14.352	0.006	-38.719	-14.75	14.75	0.020	-39.627	-14.83	14.83	0.060	-39.245	-14.91	14.91
0.003	-30.100	-14.352	14.352	0.009	-38.067	-14.75	14.75	0.030	-39.766	-14.83	14.83	0.090	-38.746	-14.94	14.94
0.004	-29.777	-14.352	14.352	0.012	-37.415	-14.75	14.75	0.040	-38.273	-14.83	14.83	0.120	-38.270	-14.94	14.94
0.005	-29.474	-14.352	14.352	0.015	-36.763	-14.75	14.75	0.050	-37.359	-14.83	14.83	0.150	-36.355	-14.94	14.94
0.006	-29.170	-14.352	14.352	0.018	-36.111	-14.75	14.75	0.060	-36.445	-14.83	14.83	0.180	-34.795	-14.94	14.94
0.007	-28.867	-14.352	14.352	0.021	-35.459	-14.75	14.75	0.070	-35.531	-14.83	14.83	0.210	-33.479	-14.94	14.94
0.008	-28.564	-14.352	14.352	0.024	-34.807	-14.75	14.75	0.080	-34.617	-14.83	14.83	0.240	-32.343	-14.94	14.94
0.009	-28.261	-14.352	14.352	0.027	-34.155	-14.75	14.75	0.090	-33.704	-14.83	14.83	0.270	-31.344	-14.94	14.94
0.010	-27.958	-14.352	14.352	0.030	-33.503	-14.75	14.75	0.100	-32.752	-14.83	14.83	0.300	-30.453	-14.94	14.94
0.011	-27.655	-14.352	14.352	0.033	-32.851	-14.75	14.75	0.110	-32.160	-14.83	14.83	0.330	-29.650	-14.94	14.94
0.012	-27.352	-14.352	14.352	0.036	-32.199	-14.75	14.75	0.120	-31.568	-14.83	14.83	0.360	-28.947	-14.94	14.94
0.013	-27.049	-14.352	14.352	0.039	-31.547	-14.75	14.75	0.130	-30.976	-14.83	14.83	0.390	-28.344	-14.94	14.94
0.014	-26.746	-14.352	14.352	0.042	-30.895	-14.75	14.75	0.140	-30.384	-14.83	14.83	0.420	-27.841	-14.94	14.94
0.015	-26.443	-14.352	14.352	0.045	-30.243	-14.75	14.75	0.150	-29.792	-14.83	14.83	0.450	-27.438	-14.94	14.94
0.016	-26.140	-14.352	14.352	0.048	-29.591	-14.75	14.75	0.160	-29.200	-14.83	14.83	0.480	-27.135	-14.94	14.94
0.017	-25.837	-14.352	14.352	0.051	-28.939	-14.75	14.75	0.170	-28.608	-14.83	14.83	0.510	-26.932	-14.94	14.94
0.018	-25.534	-14.352	14.352	0.054	-28.287	-14.75	14.75	0.180	-28.016	-14.83	14.83	0.540	-26.829	-14.94	14.94
0.019	-25.231	-14.352	14.352	0.057	-27.635	-14.75	14.75	0.190	-27.424	-14.83	14.83	0.570	-26.826	-14.94	14.94
0.020	-24.928	-14.352	14.352	0.060	-26.983	-14.75	14.75	0.200	-26.832	-14.83	14.83	0.600	-26.923	-14.94	14.94
0.021	-24.625	-14.352	14.352	0.063	-26.331	-14.75	14.75	0.210	-26.240	-14.83	14.83	0.630	-27.120	-14.94	

Table 110. Vertical Electric Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-0.077	-13.42	0.000	-2.34	-24.45	0.000	-6.87	-42.09	0.000	-6.87	-42.09
0.030	-0.086	-13.36	1.00	-2.64	-24.24	1.00	-7.76	-41.48	1.00	-7.76	-41.48
0.060	-0.095	-13.30	2.00	-2.98	-24.04	2.00	-8.61	-40.86	2.00	-8.61	-40.86
0.090	-0.104	-13.24	3.00	-3.26	-23.84	3.00	-9.41	-40.25	3.00	-9.41	-40.25
0.120	-0.113	-13.18	4.00	-3.54	-23.64	4.00	-1.018	-39.62	4.00	-1.018	-39.62
0.150	-0.121	-13.12	5.00	-3.81	-23.43	5.00	-1.092	-39.00	5.00	-1.092	-39.00
0.180	-0.130	-13.06	6.00	-4.07	-23.23	6.00	-1.161	-38.37	6.00	-1.161	-38.37
0.210	-0.138	-13.00	7.00	-4.32	-23.02	7.00	-1.227	-37.74	7.00	-1.227	-37.74
0.240	-0.146	-12.94	8.00	-4.57	-22.82	8.00	-1.289	-37.12	8.00	-1.289	-37.12
0.270	-0.155	-12.87	9.00	-4.81	-22.61	9.00	-1.347	-36.49	9.00	-1.347	-36.49
0.300	-0.163	-12.81	1.000	-5.05	-22.41	1.000	-1.402	-35.87	1.000	-1.402	-35.87
0.330	-0.171	-12.75	1.100	-5.28	-22.21	1.100	-1.454	-35.25	1.100	-1.454	-35.25
0.360	-0.179	-12.69	1.200	-5.50	-22.00	1.200	-1.502	-34.63	1.200	-1.502	-34.63
0.390	-0.187	-12.63	1.300	-5.71	-21.80	1.300	-1.547	-34.02	1.300	-1.547	-34.02
0.420	-0.194	-12.57	1.400	-5.92	-21.60	1.400	-1.589	-33.42	1.400	-1.589	-33.42
0.450	-0.202	-12.51	1.500	-6.12	-21.40	1.500	-1.628	-32.82	1.500	-1.628	-32.82
0.480	-0.210	-12.45	1.600	-6.32	-21.20	1.600	-1.664	-32.22	1.600	-1.664	-32.22
0.510	-0.217	-12.39	1.700	-6.51	-21.00	1.700	-1.697	-31.64	1.700	-1.697	-31.64
0.540	-0.225	-12.33	1.800	-6.69	-20.80	1.800	-1.728	-31.06	1.800	-1.728	-31.06
0.570	-0.232	-12.27	1.900	-6.87	-20.60	1.900	-1.756	-30.49	1.900	-1.756	-30.49
0.600	-0.239	-12.21	2.000	-7.04	-20.40	2.000	-1.782	-29.92	2.000	-1.782	-29.92
0.630	-0.246	-12.15	2.100	-7.21	-20.20	2.100	-1.805	-29.37	2.100	-1.805	-29.37
0.660	-0.254	-12.09	2.200	-7.37	-20.01	2.200	-1.826	-28.82	2.200	-1.826	-28.82
0.690	-0.261	-12.03	2.300	-7.53	-19.81	2.300	-1.845	-28.29	2.300	-1.845	-28.29
0.720	-0.267	-11.97	2.400	-7.68	-19.62	2.400	-1.861	-27.76	2.400	-1.861	-27.76
0.750	-0.274	-11.91	2.500	-7.83	-19.43	2.500	-1.876	-27.24	2.500	-1.876	-27.24
0.780	-0.281	-11.85	2.600	-7.97	-19.24	2.600	-1.889	-26.74	2.600	-1.889	-26.74
0.810	-0.288	-11.80	2.700	-8.10	-19.05	2.700	-1.900	-26.24	2.700	-1.900	-26.24
0.840	-0.294	-11.74	2.800	-8.24	-18.86	2.800	-1.910	-25.75	2.800	-1.910	-25.75
0.870	-0.301	-11.68	2.900	-8.36	-18.67	2.900	-1.918	-25.28	2.900	-1.918	-25.28
0.900	-0.308	-11.62	3.000	-8.48	-18.49	3.000	-1.924	-24.81	3.000	-1.924	-24.81
1.050	-0.334	-11.33	3.500	-9.03	-17.58	10.500	-1.936	-24.62	10.500	-1.936	-24.62
1.200	-0.364	-11.04	4.000	-9.48	-16.71	12.000	-1.927	-20.67	12.000	-1.927	-20.67
1.350	-0.397	-10.76	4.500	-9.84	-15.88	13.500	-1.898	-18.95	13.500	-1.898	-18.95
1.500	-0.424	-10.48	5.000	-1.013	-15.10	15.000	-1.858	-17.43	15.000	-1.858	-17.43
1.650	-0.444	-10.21	5.500	-1.035	-14.36	16.500	-1.811	-16.08	16.500	-1.811	-16.08
1.800	-0.473	-9.93	6.000	-1.052	-13.60	18.000	-1.761	-14.90	18.000	-1.761	-14.90
1.950	-0.496	-9.69	6.500	-1.065	-13.00	19.500	-1.710	-13.86	19.500	-1.710	-13.86
2.100	-0.514	-9.44	7.000	-1.074	-12.38	21.000	-1.654	-12.93	21.000	-1.654	-12.93
2.250	-0.534	-9.19	7.500	-1.080	-11.80	22.500	-1.604	-12.11	22.500	-1.604	-12.11
2.400	-0.561	-8.95	8.000	-1.084	-11.26	24.000	-1.562	-11.38	24.000	-1.562	-11.38
2.550	-0.581	-8.72	8.500	-1.086	-10.75	25.500	-1.510	-10.72	25.500	-1.510	-10.72
2.700	-0.604	-8.49	9.000	-1.087	-10.28	27.000	-1.471	-10.14	27.000	-1.471	-10.14
2.850	-0.614	-8.27	9.500	-1.088	-9.83	28.500	-1.434	-9.61	28.500	-1.434	-9.61
3.000	-0.637	-8.06	10.000	-1.088	-9.42	30.000	-1.404	-9.13	30.000	-1.404	-9.13

Table 111. Vertical Electric Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-4.67	-9.14		0.000	-7.38	-19.92		0.000	-1.257	-37.44	
0.030	-4.76	-9.13		0.100	-7.68	-19.71		0.300	-1.346	-36.83	
0.060	-4.85	-9.07		0.200	-7.98	-19.51		0.600	-1.431	-36.21	
0.090	-4.94	-9.01		0.300	-8.27	-19.31		0.900	-1.512	-35.60	
0.120	-5.04	-8.95		0.400	-8.55	-19.10		1.200	-1.590	-34.97	
0.150	-5.13	-8.88		0.500	-8.83	-18.90		1.500	-1.664	-34.35	
0.180	-5.23	-8.82		0.600	-9.10	-18.69		1.800	-1.735	-33.73	
0.210	-5.33	-8.76		0.700	-9.37	-18.49		2.100	-1.802	-33.10	
0.240	-5.42	-8.70		0.800	-9.63	-18.29		2.400	-1.866	-32.48	
0.270	-5.52	-8.64		0.900	-9.89	-18.08		2.700	-1.926	-31.85	
0.300	-5.62	-8.58		1.000	-1.015	-17.88		3.000	-1.983	-31.23	
0.330	-5.73	-8.51		1.100	-1.040	-17.68		3.300	-2.037	-30.61	
0.360	-5.83	-8.45		1.200	-1.064	-17.48		3.600	-2.088	-30.00	
0.390	-5.93	-8.39		1.300	-1.089	-17.27		3.900	-2.136	-29.39	
0.420	-6.04	-8.33		1.400	-1.112	-17.07		4.200	-2.181	-28.79	
0.450	-6.14	-8.27		1.500	-1.136	-16.87		4.500	-2.224	-28.19	
0.480	-6.25	-8.21		1.600	-1.158	-16.67		4.800	-2.263	-27.60	
0.510	-6.36	-8.15		1.700	-1.181	-16.47		5.100	-2.300	-27.02	
0.540	-6.47	-8.09		1.800	-1.203	-16.27		5.400	-2.335	-26.44	
0.570	-6.58	-8.03		1.900	-1.225	-16.08		5.700	-2.367	-25.87	
0.600	-6.69	-7.97		2.000	-1.246	-15.88		6.000	-2.398	-25.31	
0.630	-6.80	-7.91		2.100	-1.267	-15.69		6.300	-2.426	-24.76	
0.660	-6.92	-7.85		2.200	-1.288	-15.49		6.600	-2.452	-24.22	
0.690	-7.03	-7.79		2.300	-1.309	-15.30		6.900	-2.476	-23.68	
0.720	-7.15	-7.73		2.400	-1.329	-15.11		7.200	-2.498	-23.16	
0.750	-7.27	-7.67		2.500	-1.349	-14.92		7.500	-2.518	-22.64	
0.780	-7.38	-7.61		2.600	-1.368	-14.73		7.800	-2.537	-22.14	
0.810	-7.51	-7.55		2.700	-1.388	-14.54		8.100	-2.555	-21.64	
0.840	-7.63	-7.49		2.800	-1.407	-14.35		8.400	-2.571	-21.16	
0.870	-7.75	-7.43		2.900	-1.426	-14.17		8.700	-2.585	-20.68	
0.900	-7.87	-7.37		3.000	-1.444	-13.98		9.000	-2.599	-20.21	
1.050	-8.052	-7.08		3.500	-1.534	-13.08		10.500	-2.650	-18.03	
1.200	-8.420	-6.74		4.000	-1.614	-12.42		12.000	-2.682	-16.07	
1.350	-8.791	-6.51		4.500	-1.702	-11.40		13.500	-2.701	-14.34	
1.500	-9.167	-6.23		5.000	-1.782	-10.61		15.000	-2.715	-12.80	
1.650	-9.540	-5.95		5.500	-1.862	-9.67		16.500	-2.726	-11.44	
1.800	-9.910	-5.68		6.000	-1.942	-8.916		18.000	-2.740	-10.23	
1.950	-1.030	-5.42		6.500	-2.023	-8.44		19.500	-2.757	-9.16	
2.100	-1.141	-5.16		7.000	-2.106	-7.86		21.000	-2.780	-8.20	
2.250	-1.258	-4.90		7.500	-2.192	-7.26		22.500	-2.810	-7.34	
2.400	-1.380	-4.65		8.000	-2.280	-6.70		24.000	-2.847	-6.57	
2.550	-1.510	-4.40		8.500	-2.373	-6.17		25.500	-2.893	-5.88	
2.700	-1.630	-4.16		9.000	-2.471	-5.66		27.000	-2.947	-5.24	
2.850	-1.748	-3.92		9.500	-2.573	-5.18		28.500	-3.010	-4.67	
3.000	-1.871	-3.68		10.000	-2.680	-4.73		30.000	-3.082	-4.14	

Table 112. Vertical Electric Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 4495.20 m

300.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-1.525	-5.26		0.000	-0.957	-15.89		0.000	-1.625	-32.83	
0.30	-1.534	-5.20		1.00	-1.987	-15.69		1.00	-1.714	-32.22	
0.60	-1.544	-5.14		2.00	-1.018	-15.49		2.00	-1.800	-31.60	
0.90	-1.555	-5.07		3.00	-1.048	-15.28		3.00	-1.883	-30.99	
1.20	-1.566	-5.01		4.00	-1.079	-15.08		4.00	-1.963	-30.37	
1.50	-1.576	-5.95		5.00	-1.109	-14.87		5.00	-2.040	-29.75	
1.80	-1.591	-5.89		6.00	-1.140	-14.67		6.00	-2.115	-29.13	
2.10	-1.604	-5.82		7.00	-1.171	-14.47		7.00	-2.186	-28.51	
2.40	-1.618	-5.76		8.00	-1.202	-14.27		8.00	-2.255	-27.89	
2.70	-1.633	-5.70		9.00	-1.234	-14.06		9.00	-2.322	-27.27	
3.00	-1.649	-5.64		1.000	-1.265	-13.86		1.000	-2.386	-26.65	
3.30	-1.665	-5.57		1.100	-1.297	-13.66		1.100	-2.447	-26.04	
3.60	-1.682	-5.51		1.200	-1.329	-13.46		1.200	-2.507	-25.43	
3.90	-1.700	-5.45		1.300	-1.361	-13.26		1.300	-2.564	-24.83	
4.20	-1.718	-5.39		1.400	-1.394	-13.06		1.400	-2.619	-24.23	
4.50	-1.737	-5.33		1.500	-1.426	-12.86		1.500	-2.672	-23.64	
4.80	-1.757	-5.27		1.600	-1.459	-12.67		1.600	-2.723	-23.05	
5.10	-1.777	-5.21		1.700	-1.493	-12.47		1.700	-2.772	-22.47	
5.40	-1.799	-5.14		1.800	-1.526	-12.27		1.800	-2.820	-21.90	
5.70	-1.821	-5.08		1.900	-1.560	-12.08		1.900	-2.866	-21.33	
6.00	-1.843	-5.02		2.000	-1.595	-11.88		2.000	-2.910	-20.78	
6.30	-1.867	-4.96		2.100	-1.629	-11.69		2.100	-2.954	-20.23	
6.60	-1.891	-4.90		2.200	-1.664	-11.49		2.200	-2.996	-19.68	
6.90	-1.916	-4.84		2.300	-1.700	-11.30		2.300	-3.036	-19.15	
7.20	-1.942	-4.78		2.400	-1.736	-11.11		2.400	-3.076	-18.63	
7.50	-1.968	-4.72		2.500	-1.772	-10.92		2.500	-3.115	-18.11	
7.80	-1.996	-4.65		2.600	-1.809	-10.73		2.600	-3.153	-17.60	
8.10	-1.024	-4.59		2.700	-1.846	-10.54		2.700	-3.190	-17.10	
8.40	-1.053	-4.53		2.800	-1.883	-10.36		2.800	-3.227	-16.61	
8.70	-1.082	-4.47		2.900	-1.922	-10.17		2.900	-3.263	-16.13	
9.00	-1.113	-4.41		3.000	-1.960	-9.98		3.000	-3.299	-15.66	
1.050	-1.277	-4.10		3.500	-2.161	-9.07		10.500	-3.472	-13.42	
1.200	-1.462	-3.80		4.000	-2.378	-8.18		12.000	-3.645	-11.39	
1.350	-1.668	-3.48		4.500	-2.611	-7.31		13.500	-3.825	-9.54	
1.500	-1.898	-3.17		5.000	-2.863	-6.46		15.000	-4.020	-7.86	
1.650	-2.151	-2.85		5.500	-3.136	-5.63		16.500	-4.231	-6.32	
1.800	-2.429	-2.52		6.000	-3.431	-4.82		18.000	-4.471	-4.89	
1.950	-2.735	-2.18		6.500	-3.755	-4.01		19.500	-4.736	-3.57	
2.100	-3.069	-1.82		7.000	-4.100	-3.20		21.000	-5.033	-2.31	
2.250	-3.433	-1.46		7.500	-4.469	-2.39		22.500	-5.366	-1.11	
2.400	-3.831	-1.08		8.000	-4.869	-1.58		24.000	-5.737	0.06	
2.550	-4.265	-0.65		8.500	-5.302	-0.71		25.500	-6.151	1.22	
2.700	-4.739	-0.20		9.000	-5.861	0.17		27.000	-6.612	2.40	
2.850	-5.250	0.29		9.500	-6.469	1.11		28.500	-7.126	3.62	
3.000	-5.801	0.84		10.000	-7.111	2.12		30.000	-7.699	4.90	

Table 113. Vertical Electric Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM UPRANGE				10.0 KM UPRANGE				30.0 KM UPRANGE				100.0 KM DOWNRANGE			
MEIUMT	AMP	PHASE		MEIUMT	AMP	PHASE		MEIUMT	AMP	PHASE		MEIUMT	AMP	PHASE	
(KM)	(DB)	(DEG)		(KM)	(DB)	(DEG)		(KM)	(DB)	(DEG)		(KM)	(DB)	(DEG)	
0.00	-1.000	-41.44		0.000	-2.748	-73.46		0.000	-7.085	-117.93		0.000	-18.174	-164.97	
0.33	-1.033	-41.64		0.10	-2.837	-72.71		0.30	-7.349	-115.89		1.00	-19.438	-157.74	
0.66	-1.066	-41.84		0.20	-2.923	-72.11		0.60	-7.602	-113.74		2.00	-21.042	-149.34	
0.99	-1.099	-42.04		0.30	-3.007	-71.43		0.90	-7.841	-111.61		3.00	-20.462	-139.91	
1.32	-1.132	-42.24		0.40	-3.089	-70.74		1.20	-8.067	-109.37		4.00	-20.870	-129.63	
1.65	-1.165	-42.44		0.50	-3.168	-70.04		1.50	-8.277	-107.07		5.00	-21.014	-119.03	
1.98	-1.198	-42.64		0.60	-3.245	-69.34		1.80	-8.471	-104.73		6.00	-20.890	-108.73	
2.31	-1.231	-42.84		0.70	-3.319	-68.64		2.10	-8.649	-102.35		7.00	-20.542	-99.25	
2.64	-1.264	-43.04		0.80	-3.390	-67.93		2.40	-8.810	-99.94		8.00	-20.036	-90.88	
2.97	-1.297	-43.24		0.90	-3.460	-67.22		2.70	-8.953	-97.50		9.00	-19.438	-83.68	
3.30	-1.330	-43.44		1.00	-3.526	-66.51		3.00	-9.078	-95.05		1.000	-18.748	-77.56	
3.63	-1.363	-43.64		1.10	-3.590	-65.79		3.30	-9.184	-92.60		1.100	-18.152	-72.38	
3.96	-1.396	-43.84		1.20	-3.652	-65.07		3.60	-9.273	-90.16		1.200	-17.519	-67.98	
4.29	-1.429	-44.04		1.30	-3.711	-64.36		3.90	-9.345	-87.73		1.300	-16.911	-64.23	
4.62	-1.462	-44.24		1.40	-3.767	-63.64		4.20	-9.409	-85.33		1.400	-16.334	-60.99	
4.95	-1.495	-44.44		1.50	-3.821	-62.92		4.50	-9.459	-82.96		1.500	-15.790	-58.18	
5.28	-1.528	-44.64		1.60	-3.873	-62.20		4.80	-9.509	-80.64		1.600	-15.278	-55.71	
5.61	-1.561	-44.84		1.70	-3.922	-61.48		5.10	-9.566	-78.37		1.700	-14.797	-53.54	
5.94	-1.594	-45.04		1.80	-3.969	-60.76		5.40	-9.609	-76.15		1.800	-14.345	-51.59	
6.27	-1.627	-45.24		1.90	-4.013	-60.05		5.70	-9.641	-73.99		1.900	-13.920	-49.85	
6.60	-1.660	-45.44		2.00	-4.053	-59.34		6.00	-9.671	-71.89		2.000	-13.521	-48.28	
6.93	-1.693	-45.64		2.10	-4.092	-58.63		6.30	-9.700	-69.87		2.100	-13.144	-46.85	
7.26	-1.726	-45.84		2.20	-4.132	-57.92		6.60	-9.726	-67.91		2.200	-12.790	-45.54	
7.59	-1.759	-46.04		2.30	-4.167	-57.22		6.90	-9.762	-66.02		2.300	-12.454	-44.34	
7.92	-1.792	-46.24		2.40	-4.200	-56.52		7.20	-9.796	-64.20		2.400	-12.137	-43.23	
8.25	-1.825	-46.44		2.50	-4.231	-55.83		7.50	-9.825	-62.45		2.500	-11.837	-42.20	
8.58	-1.858	-46.64		2.60	-4.260	-55.14		7.80	-9.847	-60.77		2.600	-11.552	-41.24	
8.91	-1.891	-46.84		2.70	-4.286	-54.45		8.10	-9.865	-59.16		2.700	-11.282	-40.34	
9.24	-1.924	-47.04		2.80	-4.313	-53.77		8.40	-9.880	-57.62		2.800	-11.024	-39.50	
9.57	-1.957	-47.24		2.90	-4.343	-53.10		8.70	-9.891	-56.14		2.900	-10.779	-38.71	
9.90	-1.990	-47.44		3.00	-4.374	-52.43		9.00	-9.909	-54.72		3.000	-10.545	-37.96	
10.23	-2.023	-47.64													
10.56	-2.056	-47.84													
10.89	-2.089	-48.04													
11.22	-2.122	-48.24													
11.55	-2.155	-48.44													
11.88	-2.188	-48.64													
12.21	-2.221	-48.84													
12.54	-2.254	-49.04													
12.87	-2.287	-49.24													
13.20	-2.320	-49.44													
13.53	-2.353	-49.64													
13.86	-2.386	-49.84													
14.19	-2.419	-50.04													
14.52	-2.452	-50.24													
14.85	-2.485	-50.44													
15.18	-2.518	-50.64													
15.51	-2.551	-50.84													
15.84	-2.584	-51.04													
16.17	-2.617	-51.24													
16.50	-2.650	-51.44													
16.83	-2.683	-51.64													
17.16	-2.716	-51.84													
17.49	-2.749	-52.04													
17.82	-2.782	-52.24													
18.15	-2.815	-52.44													
18.48	-2.848	-52.64													
18.81	-2.881	-52.84													
19.14	-2.914	-53.04													
19.47	-2.947	-53.24													
19.80	-2.980	-53.44													
20.13	-3.013	-53.64													
20.46	-3.046	-53.84													
20.79	-3.079	-54.04													
21.12	-3.112	-54.24													
21.45	-3.145	-54.44													
21.78	-3.178	-54.64													
22.11	-3.211	-54.84													
22.44	-3.244	-55.04													
22.77	-3.277	-55.24													
23.10	-3.310	-55.44													
23.43	-3.343	-55.64													
23.76	-3.376	-55.84													
24.09	-3.409	-56.04													
24.42	-3.442	-56.24													
24.75	-3.475	-56.44													
25.08	-3.508	-56.64													
25.41	-3.541	-56.84													
25.74	-3.574	-57.04													
26.07	-3.607	-57.24													
26.40	-3.640	-57.44													
26.73	-3.673	-57.64													
27.06	-3.706	-57.84													
27.39	-3.739	-58.04													
27.72	-3.772	-58.24													
28.05	-3.805	-58.44													
28.38	-3.838	-58.64													
28.71	-3.871	-58.84													
29.04	-3.904	-59.04													
29.37	-3.937	-59.24													
29.70	-3.970	-59.44													
30.03	-4.003	-59.64													
30.36	-4.036	-59.84													
30.69	-4.069	-60.04													
31.02	-4.102	-60.24													
31.35	-4.135	-60.44													
31.68	-4.168	-60.64													
32.01	-4.201	-60.84													
32.34	-4.234	-61.04													
32.67	-4.267	-61.24													
33.00	-4.300	-61.44													
33.33	-4.333	-61.64													
33.66	-4.366	-61.84													
33.99	-4.399	-62.04													
34.32	-4.432	-62.24													
34.65	-4.465	-62.44													
34.98	-4.498	-62.64													
35.31	-4.531	-62.84													
35.64	-4.564	-63.04													
35.97	-4.597	-63.24													
36.30	-4.630	-63.44													
36.63	-4.663	-63.64													
36.96	-4.696	-63.84													
37.29	-4.729	-64.04													
37.62	-4.762	-64.24													
37.95	-4.795	-64.44													
38.28	-4.828	-64.64													
38.61	-4.861	-64.84													
38.94	-4.894	-65.04													
39.27	-4.927	-65.24													
39.60	-4.960	-65.44													
39.93	-4.993	-65.64													

Table 114. Vertical Electric Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM UMRANGE				10.0 KM UMRANGE				30.0 KM UMRANGE				100.0 KM UMRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
.000	-2.053	-27.06	.000	-4.143	-57.59	.000	-8.730	-101.17	.000	-20.005	-147.13	.000	-20.005	-147.13	.000
.003	-2.060	-26.86	.010	-4.232	-56.91	.030	-8.993	-99.13	.100	-20.880	-139.90	.300	-21.666	-131.53	.500
.006	-2.100	-26.65	.020	-4.319	-56.23	.060	-9.248	-97.02	.200	-21.666	-131.53	.300	-22.299	-122.06	.400
.009	-2.133	-26.44	.030	-4.404	-55.54	.090	-9.489	-94.84	.300	-22.299	-122.06	.400	-22.711	-111.76	.500
.012	-2.160	-26.24	.040	-4.487	-54.85	.120	-9.716	-92.60	.400	-22.711	-111.76	.500	-22.711	-111.76	.500
.015	-2.180	-26.03	.050	-4.567	-54.16	.150	-9.929	-90.31	.500	-22.711	-111.76	.500	-22.711	-111.76	.500
.018	-2.200	-25.82	.060	-4.646	-53.46	.180	-10.126	-87.97	.600	-22.739	-90.81	.600	-22.739	-90.81	.600
.021	-2.220	-25.62	.070	-4.722	-52.75	.210	-10.307	-85.59	.700	-22.739	-90.81	.700	-22.739	-90.81	.700
.024	-2.240	-25.41	.080	-4.795	-52.04	.240	-10.471	-83.18	.800	-22.739	-90.81	.800	-22.739	-90.81	.800
.027	-2.260	-25.20	.090	-4.867	-51.33	.270	-10.618	-80.75	.900	-22.739	-90.81	.900	-22.739	-90.81	.900
.030	-2.280	-24.99	.100	-4.937	-50.62	.300	-10.748	-78.30	1.000	-20.654	-59.51	1.000	-20.654	-59.51	1.000
.033	-2.301	-24.79	.110	-5.004	-49.90	.330	-10.860	-75.85	1.100	-20.009	-54.30	1.200	-19.377	-49.48	1.300
.036	-2.320	-24.58	.120	-5.069	-49.19	.360	-10.954	-73.41	1.300	-19.377	-49.48	1.400	-18.771	-46.11	1.500
.039	-2.340	-24.37	.130	-5.131	-48.47	.390	-11.032	-70.98	1.400	-18.771	-46.11	1.500	-18.771	-46.11	1.500
.042	-2.361	-24.16	.140	-5.192	-47.75	.420	-11.092	-68.58	1.600	-17.653	-42.85	1.600	-17.653	-42.85	1.600
.045	-2.380	-23.96	.150	-5.250	-47.03	.450	-11.137	-66.21	1.700	-17.143	-37.54	1.700	-17.143	-37.54	1.700
.048	-2.400	-23.75	.160	-5.306	-46.32	.480	-11.167	-63.88	1.800	-16.665	-35.34	1.800	-16.665	-35.34	1.800
.051	-2.421	-23.54	.170	-5.361	-45.60	.510	-11.182	-61.60	1.900	-16.216	-33.39	1.900	-16.216	-33.39	1.900
.054	-2.440	-23.33	.180	-5.412	-44.89	.540	-11.183	-59.37	2.000	-15.794	-31.63	2.000	-15.794	-31.63	2.000
.057	-2.460	-23.13	.190	-5.462	-44.17	.570	-11.172	-57.20	2.100	-15.398	-30.04	2.100	-15.398	-30.04	2.100
.060	-2.480	-22.92	.200	-5.510	-43.46	.600	-11.150	-55.09	2.200	-15.026	-28.59	2.200	-15.026	-28.59	2.200
.063	-2.500	-22.71	.210	-5.556	-42.75	.630	-11.118	-53.05	2.300	-14.675	-27.27	2.300	-14.675	-27.27	2.300
.066	-2.520	-22.51	.220	-5.600	-42.05	.660	-11.077	-51.07	2.400	-14.344	-26.05	2.400	-14.344	-26.05	2.400
.069	-2.540	-22.30	.230	-5.642	-41.34	.690	-11.027	-49.17	2.500	-14.032	-24.92	2.500	-14.032	-24.92	2.500
.072	-2.560	-22.10	.240	-5.682	-40.65	.720	-10.970	-47.33	2.600	-13.736	-23.87	2.600	-13.736	-23.87	2.600
.075	-2.580	-21.89	.250	-5.720	-39.95	.750	-10.908	-45.56	2.700	-13.456	-22.90	2.700	-13.456	-22.90	2.700
.078	-2.600	-21.68	.260	-5.756	-39.26	.780	-10.839	-43.86	2.800	-13.191	-21.98	2.800	-13.191	-21.98	2.800
.081	-2.620	-21.48	.270	-5.791	-38.56	.810	-10.767	-42.22	2.900	-12.939	-21.13	2.900	-12.939	-21.13	2.900
.084	-2.640	-21.27	.280	-5.824	-37.86	.840	-10.690	-40.66	3.000	-12.699	-20.32	3.000	-12.699	-20.32	3.000
.087	-2.660	-21.07	.290	-5.855	-37.22	.870	-10.611	-39.15							
.090	-2.680	-20.87	.300	-5.884	-36.55	.900	-10.524	-37.71							
.105	-6.919	-19.85	.350	-6.010	-33.30	1.050	-10.100	-31.34	3.500	-11.480	-16.28	3.500	-11.480	-16.28	3.500
.120	-3.034	-16.85	.400	-6.102	-30.21	1.200	-9.671	-26.17	4.000	-10.686	-13.64	4.000	-10.686	-13.64	4.000
.135	-3.148	-17.66	.450	-6.166	-27.30	1.350	-9.269	-21.95	4.500	-9.504	-11.45	4.500	-9.504	-11.45	4.500
.150	-3.262	-18.88	.500	-6.214	-24.58	1.500	-8.904	-18.44	5.000	-8.509	-9.56	5.000	-8.509	-9.56	5.000
.165	-3.376	-19.92	.550	-6.244	-22.04	1.650	-8.579	-15.49	5.500	-7.898	-8.45	5.500	-7.898	-8.45	5.500
.180	-3.490	-20.98	.600	-6.265	-19.69	1.800	-8.296	-12.98	6.000	-7.377	-7.91	6.000	-7.377	-7.91	6.000
.195	-3.603	-21.04	.650	-6.279	-17.50	1.950	-8.050	-10.80	6.500	-6.911	-7.52	6.500	-6.911	-7.52	6.500
.210	-3.722	-21.13	.700	-6.291	-15.48	2.100	-7.841	-8.89	7.000	-6.500	-7.19	7.000	-6.500	-7.19	7.000
.225	-3.840	-21.23	.750	-6.302	-13.60	2.250	-7.664	-7.19	7.500	-6.147	-6.78	7.500	-6.147	-6.78	7.500
.240	-3.961	-21.34	.800	-6.317	-11.85	2.400	-7.517	-5.67	8.000	-5.843	-6.37	8.000	-5.843	-6.37	8.000
.255	-4.084	-21.47	.850	-6.335	-10.22	2.550	-7.397	-4.29	8.500	-5.578	-6.04	8.500	-5.578	-6.04	8.500
.270	-4.211	-21.62	.900	-6.359	-8.70	2.700	-7.303	-3.03	9.000	-5.343	-5.76	9.000	-5.343	-5.76	9.000
.285	-4.341	-21.77	.950	-6.390	-7.28	2.850	-7.232	-1.85	9.500	-5.135	-5.48	9.500	-5.135	-5.48	9.500
.300	-4.475	-21.94	1.000	-6.428	-5.94	3.000	-7.182	-0.76	10.000	-4.950	-5.24	10.000	-4.950	-5.24	10.000

Table 115. Vertical Electric Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-1.599	-17.55	0.000	-4.445	-43.31	0.000	-9.433	-83.00	0.000	-20.976	-124.38	0.000	-20.976	-124.38	0.000
0.003	-2.024	-17.34	0.010	-4.535	-42.63	0.010	-9.469	-80.46	0.010	-21.852	-117.15	0.010	-21.852	-117.15	0.010
0.006	-2.051	-17.13	0.020	-4.823	-41.95	0.020	-9.955	-78.85	0.020	-22.643	-108.76	0.020	-22.643	-108.76	0.020
0.009	-2.079	-16.92	0.030	-4.710	-41.26	0.030	-10.194	-76.67	0.030	-23.284	-99.26	0.030	-23.284	-99.26	0.030
0.012	-2.107	-16.71	0.040	-4.795	-40.56	0.040	-10.431	-74.44	0.040	-23.707	-88.90	0.040	-23.707	-88.90	0.040
0.015	-2.135	-16.50	0.050	-4.879	-39.87	0.050	-10.655	-72.15	0.050	-23.863	-78.18	0.050	-23.863	-78.18	0.050
0.018	-2.163	-16.29	0.060	-4.962	-39.17	0.060	-10.855	-69.81	0.060	-23.750	-67.74	0.060	-23.750	-67.74	0.060
0.021	-2.190	-16.08	0.070	-5.044	-38.46	0.070	-11.046	-67.43	0.070	-23.408	-58.11	0.070	-23.408	-58.11	0.070
0.024	-2.218	-15.87	0.080	-5.124	-37.75	0.080	-11.222	-65.02	0.080	-22.905	-49.58	0.080	-22.905	-49.58	0.080
0.027	-2.246	-15.66	0.090	-5.203	-37.04	0.090	-11.382	-62.58	0.090	-22.307	-42.24	0.090	-22.307	-42.24	0.090
0.030	-2.274	-15.45	0.100	-5.280	-36.33	0.100	-11.526	-60.12	0.100	-21.668	-35.99	0.100	-21.668	-35.99	0.100
0.033	-2.302	-15.24	0.110	-5.357	-35.61	0.110	-11.654	-57.65	0.110	-21.021	-30.69	0.110	-21.021	-30.69	0.110
0.036	-2.330	-15.03	0.120	-5.432	-34.89	0.120	-11.766	-55.18	0.120	-20.389	-26.19	0.120	-20.389	-26.19	0.120
0.039	-2.358	-14.82	0.130	-5.505	-34.17	0.130	-11.863	-52.73	0.130	-19.784	-22.33	0.130	-19.784	-22.33	0.130
0.042	-2.386	-14.61	0.140	-5.578	-33.45	0.140	-11.944	-50.28	0.140	-19.210	-19.00	0.140	-19.210	-19.00	0.140
0.045	-2.414	-14.40	0.150	-5.649	-32.73	0.150	-12.016	-47.87	0.150	-18.670	-16.09	0.150	-18.670	-16.09	0.150
0.048	-2.442	-14.19	0.160	-5.719	-32.01	0.160	-12.082	-45.46	0.160	-18.163	-13.54	0.160	-18.163	-13.54	0.160
0.051	-2.470	-13.98	0.170	-5.789	-31.28	0.170	-12.140	-43.13	0.170	-17.689	-11.26	0.170	-17.689	-11.26	0.170
0.054	-2.498	-13.76	0.180	-5.857	-30.56	0.180	-12.185	-40.83	0.180	-17.245	-9.23	0.180	-17.245	-9.23	0.180
0.057	-2.526	-13.55	0.190	-5.923	-29.84	0.190	-12.213	-38.58	0.190	-16.830	-7.39	0.190	-16.830	-7.39	0.190
0.060	-2.554	-13.33	0.200	-5.989	-29.11	0.200	-12.235	-36.34	0.200	-16.441	-5.72	0.200	-16.441	-5.72	0.200
0.063	-2.582	-13.12	0.210	-6.054	-28.39	0.210	-12.253	-34.16	0.210	-16.076	-4.19	0.210	-16.076	-4.19	0.210
0.066	-2.610	-12.90	0.220	-6.118	-27.67	0.220	-12.267	-32.03	0.220	-15.734	-2.79	0.220	-15.734	-2.79	0.220
0.069	-2.638	-12.69	0.230	-6.181	-26.95	0.230	-12.275	-30.13	0.230	-15.412	-1.48	0.230	-15.412	-1.48	0.230
0.072	-2.666	-12.48	0.240	-6.243	-26.23	0.240	-12.279	-28.18	0.240	-15.109	-0.26	0.240	-15.109	-0.26	0.240
0.075	-2.694	-12.26	0.250	-6.304	-25.51	0.250	-12.279	-26.44	0.250	-14.825	1.87	0.250	-14.825	1.87	0.250
0.078	-2.722	-12.05	0.260	-6.364	-24.79	0.260	-12.275	-24.88	0.260	-14.556	3.95	0.260	-14.556	3.95	0.260
0.081	-2.750	-11.83	0.270	-6.424	-24.08	0.270	-12.267	-23.37	0.270	-14.303	5.90	0.270	-14.303	5.90	0.270
0.084	-2.778	-11.61	0.280	-6.483	-23.37	0.280	-12.255	-21.96	0.280	-14.063	7.82	0.280	-14.063	7.82	0.280
0.087	-2.806	-11.40	0.290	-6.541	-22.66	0.290	-12.239	-20.60	0.290	-13.837	9.68	0.290	-13.837	9.68	0.290
0.090	-2.834	-11.18	0.300	-6.598	-21.95	0.300	-12.219	-19.30	0.300	-13.624	11.54	0.300	-13.624	11.54	0.300
0.093	-2.862	-10.96	0.310	-6.657	-21.24	0.310	-12.194	-18.04	0.310	-13.421	13.41	0.310	-13.421	13.41	0.310
0.096	-2.890	-10.74	0.320	-6.714	-20.53	0.320	-12.164	-16.78	0.320	-13.228	15.28	0.320	-13.228	15.28	0.320
0.099	-2.918	-10.52	0.330	-6.770	-19.82	0.330	-12.129	-15.52	0.330	-13.045	17.15	0.330	-13.045	17.15	0.330
0.102	-2.946	-10.30	0.340	-6.826	-19.11	0.340	-12.089	-14.26	0.340	-12.872	19.02	0.340	-12.872	19.02	0.340
0.105	-2.974	-10.08	0.350	-6.881	-18.40	0.350	-12.044	-13.00	0.350	-12.709	20.89	0.350	-12.709	20.89	0.350
0.108	-3.002	-9.86	0.360	-6.936	-17.69	0.360	-12.004	-11.74	0.360	-12.556	22.76	0.360	-12.556	22.76	0.360
0.111	-3.030	-9.64	0.370	-6.991	-16.98	0.370	-11.959	-10.48	0.370	-12.413	24.63	0.370	-12.413	24.63	0.370
0.114	-3.058	-9.42	0.380	-7.046	-16.27	0.380	-11.909	-9.22	0.380	-12.280	26.50	0.380	-12.280	26.50	0.380
0.117	-3.086	-9.20	0.390	-7.101	-15.56	0.390	-11.864	-7.96	0.390	-12.157	28.37	0.390	-12.157	28.37	0.390
0.120	-3.114	-8.98	0.400	-7.156	-14.85	0.400	-11.814	-6.70	0.400	-12.044	30.24	0.400	-12.044	30.24	0.400
0.123	-3.142	-8.76	0.410	-7.211	-14.14	0.410	-11.759	-5.44	0.410	-11.941	32.11	0.410	-11.941	32.11	0.410
0.126	-3.170	-8.54	0.420	-7.266	-13.43	0.420	-11.700	-4.18	0.420	-11.848	33.98	0.420	-11.848	33.98	0.420
0.129	-3.198	-8.32	0.430	-7.321	-12.72	0.430	-11.645	-2.92	0.430	-11.765	35.85	0.430	-11.765	35.85	0.430
0.132	-3.226	-8.10	0.440	-7.376	-12.01	0.440	-11.588	-1.66	0.440	-11.692	37.72	0.440	-11.692	37.72	0.440
0.135	-3.254	-7.88	0.450	-7.431	-11.30	0.450	-11.526	-0.40	0.450	-11.629	39.59	0.450	-11.629	39.59	0.450
0.138	-3.282	-7.66	0.460	-7.486	-10.59	0.460	-11.460	0.86	0.460	-11.576	41.46	0.460	-11.576	41.46	0.460
0.141	-3.310	-7.44	0.470	-7.541	-9.88	0.470	-11.390	2.12	0.470	-11.531	43.33	0.470	-11.531	43.33	0.470
0.144	-3.338	-7.22	0.480	-7.596	-9.17	0.480	-11.316	3.38	0.480	-11.496	45.20	0.480	-11.496	45.20	0.480
0.147	-3.366	-7.00	0.490	-7.651	-8.46	0.490	-11.239	4.64	0.490	-11.471	47.07	0.490	-11.471	47.07	0.490
0.150	-3.394	-6.78	0.500	-7.706	-7.75	0.500	-11.159	5.90	0.500	-11.456	48.94	0.500	-11.456	48.94	0.500
0.153	-3.422	-6.56	0.510	-7.761	-7.04	0.510	-11.076	7.16	0.510	-11.451	50.81	0.510	-11.451	50.81	0.510
0.156	-3.450	-6.34	0.520	-7.816	-6.33	0.520	-11.000	8.42	0.520	-11.456	52.68	0.520	-11.456	52.68	0.520
0.159	-3.478	-6.12	0.530	-7.871	-5.62	0.530	-10.920	9.68	0.530	-11.471	54.55	0.530	-11.471	54.55	0.530
0.162	-3.506	-5.90	0.540	-7.926	-4.91	0.540	-10.837	10.94	0.540	-11.496	56.42	0.540	-11.496	56.42	0.540
0.165	-3.534	-5.68	0.550	-7.981	-4.20	0.550	-10.750	12.20	0.550	-11.531	58.29	0.550	-11.531	58.29	0.550
0.168	-3.562	-5.46	0.560	-8.036	-3.49	0.560	-10.659	13.46	0.560	-11.576	60.16	0.560	-11.576	60.16	0.560
0.171	-3.590	-5.24	0.570	-8.091	-2.78	0.570	-10.564	14.72	0.570	-11.631	62.03	0.570	-11.631	62.03	0.570
0.174	-3.618	-5.02	0.580	-8.146	-2.07	0.580	-10.465	15.98	0.580	-11.696	63.90	0.580	-11.696	63.90	0.580
0.177	-3.646	-4.80	0.590	-8.201	-1.36	0.590	-10.362	17.24	0.590	-11.771	65.77	0.590	-11.771	65.77	0.590
0.180	-3.674	-4.58	0.600	-8.256	-0.65	0.600	-10.255	18.50	0.600	-11.856	67.64	0.600	-11.856	67.64	0.600
0.183	-3.702	-4.36	0.610	-8.311	0.06	0.610	-10.144	19.76	0.610	-11.951	69.51	0.610	-11.951	69.51	0.610
0.186	-3.730	-4.14	0.620	-8.366	0.77	0.620	-10.029	21.02	0.620	-12.056	71.38	0.620	-12.056	71.38	0.620
0.189	-3.758	-3.92	0.630	-8.421	1.48	0.630	-9.910	22.28	0.630	-12.171	73.25	0.630	-12.171	73.25	0.630
0.192	-3.786	-3.70	0.640	-8.476	2.19	0.640	-9.787	23.54	0.640	-12.296	75.12	0.640	-12.296	75.12	0.640
0.195	-3.814	-3.48	0.650	-8.531	2.90	0.650	-9.660	24.80	0.650	-12.431	76.99	0.650	-12.431	76.99	0.650
0.198	-3.842	-3.26	0.660	-8.586	3.61	0.660	-9.529	26.06	0.660	-12.576	78.86	0.660	-12.576	78.86	0.660
0.201	-3.870	-3.04	0.670	-8.641	4.32	0.670	-9.394	27.32	0.670	-12.731	80.73	0.670	-12.731	80.73	0.670
0.204	-3.898	-2.82	0.680	-8.696	5.03	0.680	-9.255	28.58	0.680	-12.896	82.60	0.680	-12.896	82.60	0.680
0.207	-3.926	-2.60	0.690	-8.751	5.74	0.690	-9.112	29.84	0.690	-13.071	84.47	0.690	-13.071	84.47	0.690
0.210	-3.954	-2.38	0.700	-8.806	6.45	0.700	-8.965	31.10	0.700	-13.256	86.34	0.700	-13.256	86.34	0.700
0.213	-3.982	-2.16	0.710	-8.861	7.16	0.710	-8.815	32.36							

Table 116. Vertical Electric Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.00	-26.409	-123.34	0.00	-37.384	-128.65	0.00	-47.071	-129.90	0.00	-57.580	-130.31	0.00	-67.071	-129.90	0.00	-77.580	-130.31		
0.03	-26.791	-116.40	0.10	-37.931	-105.34	0.30	-45.056	-61.60	0.30	-55.056	-61.60	0.30	-65.056	-61.60	0.30	-75.056	-61.60		
0.06	-26.990	-109.94	0.20	-37.081	-83.04	0.60	-40.117	-35.34	0.60	-50.117	-35.34	0.60	-60.117	-35.34	0.60	-70.117	-35.34		
0.09	-27.055	-106.86	0.30	-35.446	-66.65	0.90	-36.647	-35.73	0.90	-46.647	-35.73	0.90	-56.647	-35.73	0.90	-66.647	-35.73		
0.12	-26.991	-95.85	0.40	-33.686	-55.72	1.20	-34.124	-31.42	1.20	-44.124	-31.42	1.20	-54.124	-31.42	1.20	-64.124	-31.42		
0.15	-26.807	-89.11	0.50	-32.062	-48.39	1.50	-32.167	-28.84	1.50	-42.167	-28.84	1.50	-52.167	-28.84	1.50	-62.167	-28.84		
0.18	-26.522	-82.79	0.60	-30.625	-43.27	1.80	-30.576	-21.10	1.80	-40.576	-21.10	1.80	-50.576	-21.10	1.80	-60.576	-21.10		
0.21	-26.151	-76.97	0.70	-29.362	-39.53	2.10	-29.239	-25.45	2.10	-39.239	-25.45	2.10	-49.239	-25.45	2.10	-59.239	-25.45		
0.24	-25.745	-71.72	0.80	-28.246	-36.69	2.40	-28.090	-24.89	2.40	-38.090	-24.89	2.40	-48.090	-24.89	2.40	-58.090	-24.89		
0.27	-25.277	-67.02	0.90	-27.253	-34.47	2.70	-27.082	-24.13	2.70	-37.082	-24.13	2.70	-47.082	-24.13	2.70	-57.082	-24.13		
0.30	-24.740	-62.84	1.00	-26.362	-32.68	3.00	-26.186	-23.51	3.00	-36.186	-23.51	3.00	-46.186	-23.51	3.00	-56.186	-23.51		
0.33	-24.311	-59.13	1.10	-25.556	-31.21	3.30	-25.383	-22.94	3.30	-35.383	-22.94	3.30	-45.383	-22.94	3.30	-55.383	-22.94		
0.36	-23.826	-55.84	1.20	-24.821	-29.97	3.60	-24.654	-22.54	3.60	-34.654	-22.54	3.60	-44.654	-22.54	3.60	-54.654	-22.54		
0.39	-23.380	-52.92	1.30	-24.148	-28.92	3.90	-23.986	-22.15	3.90	-33.986	-22.15	3.90	-43.986	-22.15	3.90	-53.986	-22.15		
0.42	-22.881	-50.33	1.40	-23.527	-28.01	4.20	-23.372	-21.80	4.20	-33.372	-21.80	4.20	-43.372	-21.80	4.20	-53.372	-21.80		
0.45	-22.429	-48.01	1.50	-22.951	-27.22	4.50	-22.804	-21.49	4.50	-32.804	-21.49	4.50	-42.804	-21.49	4.50	-52.804	-21.49		
0.48	-21.991	-45.93	1.60	-22.415	-26.51	4.80	-22.276	-21.21	4.80	-32.276	-21.21	4.80	-42.276	-21.21	4.80	-52.276	-21.21		
0.51	-21.570	-44.06	1.70	-21.914	-25.88	5.10	-21.782	-20.95	5.10	-31.782	-20.95	5.10	-41.782	-20.95	5.10	-51.782	-20.95		
0.54	-21.165	-42.37	1.80	-21.445	-25.32	5.40	-21.314	-20.71	5.40	-31.314	-20.71	5.40	-41.314	-20.71	5.40	-51.314	-20.71		
0.57	-20.775	-40.84	1.90	-21.003	-24.81	5.70	-20.884	-20.49	5.70	-30.884	-20.49	5.70	-40.884	-20.49	5.70	-50.884	-20.49		
0.60	-20.401	-39.45	2.00	-20.588	-24.34	6.00	-20.473	-20.28	6.00	-30.473	-20.28	6.00	-40.473	-20.28	6.00	-50.473	-20.28		
0.63	-20.042	-38.16	2.10	-20.191	-23.91	6.30	-20.084	-20.09	6.30	-30.084	-20.09	6.30	-40.084	-20.09	6.30	-50.084	-20.09		
0.66	-19.698	-37.01	2.20	-19.817	-23.52	6.60	-19.715	-19.90	6.60	-29.715	-19.90	6.60	-39.715	-19.90	6.60	-49.715	-19.90		
0.69	-19.368	-35.94	2.30	-19.461	-23.15	6.90	-19.365	-19.73	6.90	-29.365	-19.73	6.90	-39.365	-19.73	6.90	-49.365	-19.73		
0.72	-19.049	-34.95	2.40	-19.123	-22.81	7.20	-19.031	-19.56	7.20	-29.031	-19.56	7.20	-39.031	-19.56	7.20	-49.031	-19.56		
0.75	-18.742	-34.03	2.50	-18.800	-22.49	7.50	-18.712	-19.41	7.50	-28.712	-19.41	7.50	-38.712	-19.41	7.50	-48.712	-19.41		
0.78	-18.448	-33.16	2.60	-18.491	-22.19	7.80	-18.409	-19.25	7.80	-28.409	-19.25	7.80	-38.409	-19.25	7.80	-48.409	-19.25		
0.81	-18.164	-32.39	2.70	-18.196	-21.91	8.10	-18.117	-19.11	8.10	-28.117	-19.11	8.10	-38.117	-19.11	8.10	-48.117	-19.11		
0.84	-17.891	-31.65	2.80	-17.912	-21.65	8.40	-17.837	-18.97	8.40	-27.837	-18.97	8.40	-37.837	-18.97	8.40	-47.837	-18.97		
0.87	-17.627	-30.95	2.90	-17.641	-21.39	8.70	-17.569	-18.84	8.70	-27.569	-18.84	8.70	-37.569	-18.84	8.70	-47.569	-18.84		
0.90	-17.373	-30.31	3.00	-17.380	-21.16	9.00	-17.311	-18.70	9.00	-27.311	-18.70	9.00	-37.311	-18.70	9.00	-47.311	-18.70		
1.05	-16.425	-27.38	3.50	-16.210	-20.12	1.050	-16.155	-18.11	1.050	-26.155	-18.11	1.050	-36.155	-18.11	1.050	-46.155	-18.11		
1.20	-15.468	-25.49	4.00	-15.223	-19.26	1.200	-15.179	-17.58	1.200	-25.179	-17.58	1.200	-35.179	-17.58	1.200	-45.179	-17.58		
1.35	-14.599	-23.62	4.50	-14.374	-18.54	1.350	-14.338	-17.11	1.350	-24.338	-17.11	1.350	-34.338	-17.11	1.350	-44.338	-17.11		
1.50	-13.657	-22.45	5.00	-13.633	-17.91	1.500	-13.604	-16.68	1.500	-23.604	-16.68	1.500	-33.604	-16.68	1.500	-43.604	-16.68		
1.65	-12.801	-21.30	5.50	-12.980	-17.35	1.650	-12.955	-15.28	1.650	-22.955	-15.28	1.650	-32.955	-15.28	1.650	-42.955	-15.28		
1.80	-12.417	-20.32	6.00	-12.397	-16.85	1.800	-12.377	-14.90	1.800	-22.377	-14.90	1.800	-32.377	-14.90	1.800	-42.377	-14.90		
1.95	-11.891	-19.46	6.50	-11.874	-16.39	1.950	-11.857	-13.55	1.950	-21.857	-13.55	1.950	-31.857	-13.55	1.950	-41.857	-13.55		
2.10	-11.416	-18.70	7.00	-11.402	-15.97	2.100	-11.387	-13.22	2.100	-21.387	-13.22	2.100	-31.387	-13.22	2.100	-41.387	-13.22		
2.25	-10.988	-18.03	7.50	-10.972	-15.58	2.250	-10.960	-14.90	2.250	-20.960	-14.90	2.250	-30.960	-14.90	2.250	-40.960	-14.90		
2.40	-10.590	-17.42	8.00	-10.580	-15.21	2.400	-10.570	-14.60	2.400	-20.570	-14.60	2.400	-30.570	-14.60	2.400	-40.570	-14.60		
2.55	-10.228	-16.87	8.50	-10.220	-14.87	2.550	-10.211	-14.32	2.550	-20.211	-14.32	2.550	-30.211	-14.32	2.550	-40.211	-14.32		
2.70	-9.895	-16.37	9.00	-9.889	-14.55	2.700	-9.881	-14.05	2.700	-20.881	-14.05	2.700	-30.881	-14.05	2.700	-40.881	-14.05		
2.85	-9.588	-15.90	9.50	-9.583	-14.25	2.850	-9.577	-13.79	2.850	-20.577	-13.79	2.850	-30.577	-13.79	2.850	-40.577	-13.79		
3.00	-9.304	-15.48	1.000	-9.300	-13.96	3.000	-9.295	-13.54	3.000	-20.295	-13.54	3.000	-30.295	-13.54	3.000	-40.295	-13.54		

Table 117. Vertical Electric Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM UPRANGE				10.0 KM UPRANGE				30.0 KM UPRANGE				100.0 KM UPRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
.000	-25.955	-74.32	.000	-36.717	-78.39	.000	-46.362	-79.37	.000	-56.856	-79.70	.000	-56.856	-79.70	.000
.003	-26.262	-67.65	.010	-37.262	-55.01	.030	-44.345	-17.06	.100	-45.396	16.13	.200	-45.396	16.13	.300
.006	-26.553	-60.67	.020	-36.408	-32.74	.060	-39.404	6.19	.100	-39.404	6.19	.200	-39.404	6.19	.300
.009	-26.516	-53.36	.030	-34.771	-16.35	.090	-35.934	14.79	.140	-35.934	14.79	.200	-35.934	14.79	.300
.012	-26.447	-46.53	.040	-33.010	-5.43	.120	-33.412	19.10	.160	-33.412	19.10	.200	-33.412	19.10	.300
.015	-26.463	-39.76	.050	-31.485	1.90	.150	-31.455	21.69	.180	-29.885	23.43	.200	-31.223	28.25	.300
.018	-25.973	-33.43	.060	-29.949	7.02	.160	-29.885	23.43	.180	-29.885	23.43	.200	-29.885	23.43	.300
.021	-25.007	-27.61	.070	-28.066	10.76	.170	-28.066	10.76	.180	-28.066	10.76	.200	-28.066	10.76	.300
.024	-24.164	-22.34	.080	-27.572	13.60	.180	-27.572	13.60	.200	-27.572	13.60	.250	-27.572	13.60	.300
.027	-24.724	-17.63	.090	-26.580	15.83	.190	-26.580	15.83	.200	-26.580	15.83	.250	-26.580	15.83	.300
.030	-24.244	-13.44	.100	-25.690	17.62	.200	-25.690	17.62	.250	-25.690	17.62	.300	-25.690	17.62	.300
.033	-23.757	-9.73	.110	-24.885	19.14	.210	-24.885	19.14	.250	-24.885	19.14	.300	-24.885	19.14	.300
.036	-23.271	-6.43	.120	-24.151	20.34	.220	-24.151	20.34	.250	-24.151	20.34	.300	-24.151	20.34	.300
.039	-22.784	-3.20	.130	-23.479	21.34	.230	-23.479	21.34	.250	-23.479	21.34	.300	-23.479	21.34	.300
.042	-22.297	0.04	.140	-22.860	22.32	.240	-22.860	22.32	.250	-22.860	22.32	.300	-22.860	22.32	.300
.045	-21.810	3.44	.150	-22.286	23.13	.250	-22.286	23.13	.250	-22.286	23.13	.300	-22.286	23.13	.300
.048	-21.323	6.83	.160	-21.752	23.84	.260	-21.752	23.84	.250	-21.752	23.84	.300	-21.752	23.84	.300
.051	-20.836	10.21	.170	-21.253	24.46	.270	-21.253	24.46	.250	-21.253	24.46	.300	-21.253	24.46	.300
.054	-20.349	13.60	.180	-20.786	25.06	.280	-20.786	25.06	.250	-20.786	25.06	.300	-20.786	25.06	.300
.057	-19.862	16.99	.190	-20.346	25.58	.290	-20.346	25.58	.250	-20.346	25.58	.300	-20.346	25.58	.300
.060	-19.375	20.37	.200	-19.932	26.06	.300	-19.932	26.06	.250	-19.932	26.06	.300	-19.932	26.06	.300
.063	-18.888	23.76	.210	-19.540	26.50	.310	-19.540	26.50	.250	-19.540	26.50	.300	-19.540	26.50	.300
.066	-18.401	27.15	.220	-19.168	26.91	.320	-19.168	26.91	.250	-19.168	26.91	.300	-19.168	26.91	.300
.069	-17.914	30.54	.230	-18.816	27.30	.330	-18.816	27.30	.250	-18.816	27.30	.300	-18.816	27.30	.300
.072	-17.427	33.93	.240	-18.480	27.65	.340	-18.480	27.65	.250	-18.480	27.65	.300	-18.480	27.65	.300
.075	-16.940	37.32	.250	-18.160	27.99	.350	-18.160	27.99	.250	-18.160	27.99	.300	-18.160	27.99	.300
.078	-16.453	40.71	.260	-17.853	28.30	.360	-17.853	28.30	.250	-17.853	28.30	.300	-17.853	28.30	.300
.081	-15.966	44.10	.270	-17.563	28.60	.370	-17.563	28.60	.250	-17.563	28.60	.300	-17.563	28.60	.300
.084	-15.479	47.49	.280	-17.284	28.89	.380	-17.284	28.89	.250	-17.284	28.89	.300	-17.284	28.89	.300
.087	-14.992	50.88	.290	-17.016	29.16	.390	-17.016	29.16	.250	-17.016	29.16	.300	-17.016	29.16	.300
.090	-14.505	54.27	.300	-16.758	29.41	.400	-16.758	29.41	.250	-16.758	29.41	.300	-16.758	29.41	.300
.093	-14.018	57.66	.310	-16.510	30.56	.410	-16.510	30.56	.250	-16.510	30.56	.300	-16.510	30.56	.300
.096	-13.531	61.05	.320	-16.272	31.53	.420	-16.272	31.53	.250	-16.272	31.53	.300	-16.272	31.53	.300
.099	-13.044	64.44	.330	-16.044	32.37	.430	-16.044	32.37	.250	-16.044	32.37	.300	-16.044	32.37	.300
.102	-12.557	67.83	.340	-15.826	33.17	.440	-15.826	33.17	.250	-15.826	33.17	.300	-15.826	33.17	.300
.105	-12.070	71.22	.350	-15.610	33.90	.450	-15.610	33.90	.250	-15.610	33.90	.300	-15.610	33.90	.300
.108	-11.583	74.61	.360	-15.394	34.59	.460	-15.394	34.59	.250	-15.394	34.59	.300	-15.394	34.59	.300
.111	-11.096	78.00	.370	-15.178	35.25	.470	-15.178	35.25	.250	-15.178	35.25	.300	-15.178	35.25	.300
.114	-10.609	81.39	.380	-14.962	35.89	.480	-14.962	35.89	.250	-14.962	35.89	.300	-14.962	35.89	.300
.117	-10.122	84.78	.390	-14.746	36.52	.490	-14.746	36.52	.250	-14.746	36.52	.300	-14.746	36.52	.300
.120	-9.635	88.17	.400	-14.530	37.14	.500	-14.530	37.14	.250	-14.530	37.14	.300	-14.530	37.14	.300
.123	-9.148	91.56	.410	-14.314	37.75	.510	-14.314	37.75	.250	-14.314	37.75	.300	-14.314	37.75	.300
.126	-8.661	94.95	.420	-14.098	38.36	.520	-14.098	38.36	.250	-14.098	38.36	.300	-14.098	38.36	.300
.129	-8.174	98.34	.430	-13.882	38.97	.530	-13.882	38.97	.250	-13.882	38.97	.300	-13.882	38.97	.300
.132	-7.687	101.73	.440	-13.666	39.58	.540	-13.666	39.58	.250	-13.666	39.58	.300	-13.666	39.58	.300
.135	-7.200	105.12	.450	-13.450	40.19	.550	-13.450	40.19	.250	-13.450	40.19	.300	-13.450	40.19	.300
.138	-6.713	108.51	.460	-13.234	40.79	.560	-13.234	40.79	.250	-13.234	40.79	.300	-13.234	40.79	.300
.141	-6.226	111.90	.470	-13.018	41.39	.570	-13.018	41.39	.250	-13.018	41.39	.300	-13.018	41.39	.300
.144	-5.739	115.29	.480	-12.802	41.99	.580	-12.802	41.99	.250	-12.802	41.99	.300	-12.802	41.99	.300
.147	-5.252	118.68	.490	-12.586	42.59	.590	-12.586	42.59	.250	-12.586	42.59	.300	-12.586	42.59	.300
.150	-4.765	122.07	.500	-12.370	43.19	.600	-12.370	43.19	.250	-12.370	43.19	.300	-12.370	43.19	.300
.153	-4.278	125.46	.510	-12.154	43.79	.610	-12.154	43.79	.250	-12.154	43.79	.300	-12.154	43.79	.300
.156	-3.791	128.85	.520	-11.938	44.39	.620	-11.938	44.39	.250	-11.938	44.39	.300	-11.938	44.39	.300
.159	-3.304	132.24	.530	-11.722	44.99	.630	-11.722	44.99	.250	-11.722	44.99	.300	-11.722	44.99	.300
.162	-2.817	135.63	.540	-11.506	45.59	.640	-11.506	45.59	.250	-11.506	45.59	.300	-11.506	45.59	.300
.165	-2.330	139.02	.550	-11.290	46.19	.650	-11.290	46.19	.250	-11.290	46.19	.300	-11.290	46.19	.300
.168	-1.843	142.41	.560	-11.074	46.79	.660	-11.074	46.79	.250	-11.074	46.79	.300	-11.074	46.79	.300
.171	-1.356	145.80	.570	-10.858	47.39	.670	-10.858	47.39	.250	-10.858	47.39	.300	-10.858	47.39	.300
.174	-0.869	149.19	.580	-10.642	47.99	.680	-10.642	47.99	.250	-10.642	47.99	.300	-10.642	47.99	.300
.177	-0.382	152.58	.590	-10.426	48.59	.690	-10.426	48.59	.250	-10.426	48.59	.300	-10.426	48.59	.300
.180	0.105	155.97	.600	-10.210	49.19	.700	-10.210	49.19	.250	-10.210	49.19	.300	-10.210	49.19	.300
.183	0.598	159.36	.610	-10.000	49.79	.710	-10.000	49.79	.250	-10.000	49.79	.300	-10.000	49.79	.300
.186	1.091	162.75	.620	-9.784	50.39	.720	-9.784	50.39	.250	-9.784	50.39	.300	-9.784	50.39	.300
.189	1.584	166.14	.630	-9.568	50.99	.730	-9.568	50.99	.250	-9.568	50.99	.300	-9.568	50.99	.300
.192	2.077	169.53	.640	-9.352	51.59	.740	-9.352	51.59	.250	-9.352	51.59	.300	-9.352	51.59	.300
.195	2.570	172.92	.650	-9.136	52.19	.750	-9.136	52.19	.250	-9.136	52.19	.300	-9.136	52.19	.300
.198	3.063	176.31	.660	-8.920	52.79	.760	-8.920	52.79	.250	-8.920	52.79	.300	-8.920	52.79	.300
.201	3.556	179.70	.670	-8.704	53.39	.770	-8.704	53.39	.250	-8.704	53.39	.300	-8.704	53.39	.300
.204	4.049	183.09	.680	-8.488	53.99	.780	-8.488	53.99	.250	-8.488	53.99	.300	-8.488	53.99	.300
.207	4.542	186.48	.690	-8.272	54.59	.790	-8.272	54.59	.250	-8.272	54.59	.300	-8.272	54.59	.300
.210	5.035	189.87	.700	-8.056	55.19	.800	-8.056	55.19	.250	-8.056	55.19	.300	-8.056	55.19	.300
.213	5.528	193.26	.710	-7.840	55.79	.810	-7.840	55.79	.250	-7.840	55.79	.300	-7.840	55.79	.300
.216	6.021	196.65	.720	-7.624	56.39	.820	-7.624	56.39	.250	-7.624	56.39	.300	-7.624	56.39	.300
.219	6.514	200.04	.730	-7.408	56.99	.830	-7.408	56.99	.250	-7.408	56.99	.300	-7.408	56.99	.300
.222	7.007	203.43	.740	-7.192	57.59	.840	-7.192	57.59	.250	-7.192	57.59	.300	-7.192	57.59	.300
.225	7.500	206.82	.750	-6.976	58.19	.850	-6.976	58.19	.250	-6.976	58.19	.300	-6.97		

Table 118. Vertical Electric Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM UMRANGE				10.0 KM UMRANGE				30.0 KM UMRANGE				100.0 KM UMRANGE			
ME [UNT	AMP	PHASE	ME [UNT	AMP	PHASE	ME [UNT	AMP	PHASE	ME [UNT	AMP	PHASE	ME [UNT	AMP	PHASE	ME [UNT
(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)	(DB)	(DEG)	(RM)
.000	-26.433	-46.04	.000	-32.039	-51.74	.000	-42.407	-52.73	.000	-52.868	-53.06	.000	-52.868	-53.06	.000
.003	-26.736	-41.37	.010	-33.402	-28.38	.030	-40.390	7.54	.100	-41.408	42.76	.200	-41.408	42.76	.300
.006	-26.927	-34.37	.020	-32.547	-10.11	.060	-35.449	32.83	.200	-35.449	32.83	.400	-35.449	32.83	.500
.009	-26.990	-27.27	.030	-30.910	10.28	.100	-31.980	41.43	.400	-31.980	41.43	.600	-31.980	41.43	.700
.012	-26.923	-20.63	.040	-29.130	21.20	.120	-29.456	43.75	.600	-29.456	43.75	.800	-29.456	43.75	.900
.015	-26.737	-13.46	.050	-27.527	30.74	.150	-27.502	48.35	.800	-27.502	48.35	1.000	-27.502	48.35	1.100
.018	-26.449	-7.10	.060	-26.091	33.67	.180	-25.913	50.09	1.000	-25.913	50.09	1.200	-25.913	50.09	1.300
.021	-26.092	-1.26	.070	-24.629	37.42	.200	-24.576	51.36	1.200	-24.576	51.36	1.400	-24.576	51.36	1.500
.024	-21.037	4.92	.080	-23.715	40.27	.220	-23.431	52.33	1.400	-23.431	52.33	1.600	-23.431	52.33	1.700
.027	-21.000	8.76	.090	-22.724	42.51	.240	-22.426	53.11	1.600	-22.426	53.11	1.800	-22.426	53.11	1.900
.030	-20.721	12.97	.100	-21.836	44.32	.260	-21.534	53.75	1.800	-21.534	53.75	2.000	-21.534	53.75	2.100
.033	-20.234	16.72	.110	-21.032	45.82	.280	-20.733	54.29	2.000	-20.733	54.29	2.200	-20.733	54.29	2.300
.036	-19.749	20.05	.120	-20.300	47.08	.300	-20.006	54.76	2.200	-20.006	54.76	2.400	-20.006	54.76	2.500
.039	-19.276	23.01	.130	-19.630	48.18	.320	-19.343	55.18	2.400	-19.343	55.18	2.600	-19.343	55.18	2.700
.042	-18.807	25.65	.140	-19.013	49.10	.340	-18.733	55.56	2.600	-18.733	55.56	2.800	-18.733	55.56	2.900
.045	-18.330	28.01	.150	-18.441	49.72	.360	-18.169	55.90	2.800	-18.169	55.90	3.000	-18.169	55.90	3.100
.048	-17.851	30.13	.160	-17.909	50.66	.380	-17.640	56.21	3.000	-17.640	56.21	3.200	-17.640	56.21	3.300
.051	-17.362	32.05	.170	-17.413	51.32	.400	-17.157	56.50	3.200	-17.157	56.50	3.400	-17.157	56.50	3.500
.054	-16.874	33.79	.180	-16.948	51.93	.420	-16.699	56.78	3.400	-16.699	56.78	3.600	-16.699	56.78	3.700
.057	-16.384	35.37	.190	-16.512	52.49	.440	-16.270	57.03	3.600	-16.270	57.03	3.800	-16.270	57.03	3.900
.060	-15.894	36.82	.200	-16.100	52.99	.460	-15.865	57.24	3.800	-15.865	57.24	4.000	-15.865	57.24	4.100
.063	-15.404	38.13	.210	-15.712	53.46	.480	-15.442	57.52	4.000	-15.442	57.52	4.200	-15.442	57.52	4.300
.066	-14.914	39.37	.220	-15.344	53.90	.500	-15.120	57.74	4.200	-15.120	57.74	4.400	-15.120	57.74	4.500
.069	-14.424	40.51	.230	-14.975	54.31	.520	-14.777	57.96	4.400	-14.777	57.96	4.600	-14.777	57.96	4.700
.072	-13.934	41.55	.240	-14.603	54.70	.540	-14.450	58.17	4.600	-14.450	58.17	4.800	-14.450	58.17	4.900
.075	-13.444	42.54	.250	-14.234	55.07	.560	-14.140	58.36	4.800	-14.140	58.36	5.000	-14.140	58.36	5.100
.078	-12.954	43.48	.260	-13.866	55.43	.580	-13.843	58.54	5.000	-13.843	58.54	5.200	-13.843	58.54	5.300
.081	-12.464	44.36	.270	-13.498	55.78	.600	-13.560	58.74	5.200	-13.560	58.74	5.400	-13.560	58.74	5.500
.084	-11.974	45.19	.280	-13.130	56.09	.620	-13.283	58.97	5.400	-13.283	58.97	5.600	-13.283	58.97	5.700
.087	-11.484	45.97	.290	-12.762	56.40	.640	-13.030	59.17	5.600	-13.030	59.17	5.800	-13.030	59.17	5.900
.090	-10.994	46.61	.300	-12.394	56.70	.660	-12.780	59.35	5.800	-12.780	59.35	6.000	-12.780	59.35	6.100
.093	-10.504	47.24	.310	-12.026	56.98	.680	-12.530	59.52	6.000	-12.530	59.52	6.200	-12.530	59.52	6.300
.096	-10.014	47.82	.320	-11.658	57.26	.700	-12.280	59.69	6.200	-12.280	59.69	6.400	-12.280	59.69	6.500
.099	-9.524	48.36	.330	-11.290	57.54	.720	-12.030	59.86	6.400	-12.030	59.86	6.600	-12.030	59.86	6.700
.102	-9.034	48.89	.340	-10.922	57.81	.740	-11.780	59.97	6.600	-11.780	59.97	6.800	-11.780	59.97	6.900
.105	-8.544	49.36	.350	-10.554	58.07	.760	-11.530	60.14	6.800	-11.530	60.14	7.000	-11.530	60.14	7.100
.108	-8.054	49.78	.360	-10.186	58.32	.780	-11.280	60.31	7.000	-11.280	60.31	7.200	-11.280	60.31	7.300
.111	-7.564	50.15	.370	-9.818	58.57	.800	-11.030	60.47	7.200	-11.030	60.47	7.400	-11.030	60.47	7.500
.114	-7.074	50.46	.380	-9.450	58.81	.820	-10.780	60.63	7.400	-10.780	60.63	7.600	-10.780	60.63	7.700
.117	-6.584	50.72	.390	-9.082	59.04	.840	-10.530	60.79	7.600	-10.530	60.79	7.800	-10.530	60.79	7.900
.120	-6.094	50.95	.400	-8.714	59.26	.860	-10.280	60.95	7.800	-10.280	60.95	8.000	-10.280	60.95	8.100
.123	-5.604	51.13	.410	-8.346	59.47	.880	-10.030	61.10	8.000	-10.030	61.10	8.200	-10.030	61.10	8.300
.126	-5.114	51.28	.420	-7.978	59.67	.900	-9.780	61.25	8.200	-9.780	61.25	8.400	-9.780	61.25	8.500
.129	-4.624	51.40	.430	-7.610	59.86	.920	-9.530	61.40	8.400	-9.530	61.40	8.600	-9.530	61.40	8.700
.132	-4.134	51.49	.440	-7.242	59.99	.940	-9.280	61.54	8.600	-9.280	61.54	8.800	-9.280	61.54	8.900
.135	-3.644	51.55	.450	-6.874	60.11	.960	-9.030	61.68	8.800	-9.030	61.68	9.000	-9.030	61.68	9.100
.138	-3.154	51.58	.460	-6.506	60.22	.980	-8.780	61.81	9.000	-8.780	61.81	9.200	-8.780	61.81	9.300
.141	-2.664	51.59	.470	-6.138	60.32	1.000	-8.530	61.94	9.200	-8.530	61.94	9.400	-8.530	61.94	9.500
.144	-2.174	51.58	.480	-5.770	60.41	1.020	-8.280	62.07	9.400	-8.280	62.07	9.600	-8.280	62.07	9.700
.147	-1.684	51.54	.490	-5.402	60.49	1.040	-8.030	62.19	9.600	-8.030	62.19	9.800	-8.030	62.19	9.900
.150	-1.194	51.47	.500	-5.034	60.56	1.060	-7.780	62.31	9.800	-7.780	62.31	10.000	-7.780	62.31	10.100
.153	-0.704	51.37	.510	-4.666	60.61	1.080	-7.530	62.42	10.000	-7.530	62.42				

Table 119. Vertical Electric Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
.000	-37.925	-93.14	.000	-49.474	-94.29	.000	-59.936	-94.69	.000	-69.480	-94.81
.001	-37.632	-88.31	.003	-45.096	-88.97	.010	-46.664	-84.77	.030	-46.797	-84.57
.002	-37.318	-84.92	.006	-40.373	-82.36	.020	-40.799	-81.58	.060	-40.820	-81.47
.003	-35.399	-80.08	.009	-37.155	-75.83	.030	-37.332	-81.48	.090	-37.336	-81.76
.004	-33.644	-76.46	.012	-34.785	-72.43	.040	-34.876	-81.42	.120	-34.876	-81.40
.005	-32.304	-73.24	.015	-32.925	-68.46	.050	-32.978	-81.47	.150	-32.976	-81.18
.006	-30.760	-69.55	.018	-31.400	-64.97	.060	-31.433	-81.35	.180	-31.431	-81.03
.007	-29.794	-66.81	.021	-30.112	-61.77	.070	-30.133	-81.04	.210	-30.130	-81.22
.008	-28.736	-64.70	.024	-28.997	-58.22	.080	-28.912	-81.81	.240	-28.909	-81.81
.009	-27.629	-62.67	.027	-28.011	-55.63	.090	-28.027	-81.62	.270	-28.024	-81.77
.010	-26.593	-60.69	.030	-27.143	-53.16	.100	-27.150	-81.47	.300	-27.147	-81.71
.011	-25.538	-58.80	.033	-26.356	-50.77	.110	-26.360	-81.35	.330	-26.358	-81.66
.012	-24.530	-56.93	.036	-25.639	-48.44	.120	-25.642	-81.25	.360	-25.640	-81.62
.013	-24.090	-55.08	.039	-24.983	-46.17	.130	-24.985	-81.16	.390	-24.983	-81.58
.014	-24.300	-53.18	.042	-24.378	-43.93	.140	-24.379	-81.08	.420	-24.377	-81.55
.015	-23.733	-51.50	.045	-23.817	-41.72	.150	-23.817	-81.01	.450	-23.816	-81.52
.016	-23.434	-49.86	.048	-23.294	-39.54	.160	-23.294	-80.95	.480	-23.293	-81.49
.017	-23.479	-48.00	.051	-22.806	-37.38	.170	-22.805	-80.89	.510	-22.804	-81.47
.018	-23.306	-46.19	.054	-22.347	-35.23	.180	-22.346	-80.84	.540	-22.345	-81.45
.019	-23.074	-44.42	.057	-21.915	-33.10	.190	-21.914	-80.80	.570	-21.912	-81.42
.020	-21.875	-42.74	.060	-21.506	-31.00	.200	-21.505	-80.76	.600	-21.504	-81.40
.021	-21.671	-41.19	.063	-21.120	-28.96	.210	-21.119	-80.72	.630	-21.117	-81.37
.022	-21.467	-39.72	.066	-20.753	-26.97	.220	-20.752	-80.68	.660	-20.750	-81.35
.023	-21.260	-38.30	.069	-20.403	-25.04	.230	-20.402	-80.65	.690	-20.401	-81.33
.024	-21.050	-36.93	.072	-20.070	-23.17	.240	-20.069	-80.62	.720	-20.068	-81.30
.025	-20.834	-35.62	.075	-19.752	-21.35	.250	-19.751	-80.59	.750	-19.750	-81.28
.026	-20.621	-34.34	.078	-19.448	-19.58	.260	-19.447	-80.56	.780	-19.446	-81.26
.027	-20.411	-33.11	.081	-19.157	-17.87	.270	-19.156	-80.53	.810	-19.155	-81.24
.028	-20.203	-31.93	.084	-18.877	-16.21	.280	-18.876	-80.51	.840	-18.875	-81.22
.029	-20.000	-30.79	.087	-18.609	-14.61	.290	-18.607	-80.48	.870	-18.607	-81.20
.030	-19.800	-29.77	.090	-18.350	-13.07	.300	-18.349	-80.46	.900	-18.348	-81.18
.035	-17.402	-24.76	.105	-17.190	-10.96	.350	-17.189	-80.36	1.050	-17.188	-81.19
.040	-16.600	-23.30	.120	-16.206	-8.80	.400	-16.205	-80.28	1.200	-16.205	-81.13
.045	-15.935	-21.93	.135	-15.357	-6.86	.450	-15.356	-80.21	1.350	-15.355	-81.08
.050	-15.310	-20.64	.150	-14.613	-5.03	.500	-14.612	-80.15	1.500	-14.612	-81.03
.055	-14.721	-19.40	.165	-13.959	-3.33	.550	-13.953	-80.09	1.650	-13.953	-81.00
.060	-14.203	-18.19	.180	-13.365	-1.74	.600	-13.362	-80.04	1.800	-13.364	-81.05
.065	-13.683	-17.02	.195	-12.832	-0.26	.650	-12.834	-80.00	1.950	-12.834	-81.01
.070	-13.253	-15.87	.210	-12.354	1.16	.700	-12.354	-80.00	2.100	-12.354	-81.00
.075	-12.913	-14.73	.225	-11.916	2.62	.750	-11.916	-80.00	2.250	-11.915	-81.00
.080	-12.514	-13.62	.240	-11.515	4.06	.800	-11.514	-80.00	2.400	-11.514	-81.01
.085	-12.145	-12.51	.255	-11.146	5.48	.850	-11.146	-80.00	2.550	-11.145	-81.01
.090	-11.805	-11.42	.270	-10.805	6.86	.900	-10.805	-80.00	2.700	-10.805	-81.01
.095	-11.489	-10.33	.285	-10.490	8.19	.950	-10.490	-80.00	2.850	-10.490	-81.01
.100	-11.177	-9.26	.300	-10.197	9.47	1.000	-10.197	-80.00	3.000	-10.197	-81.01

Table 120. Vertical Electric Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE					3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.000	-37.039	-46.47	0.000	-42.177	-47.42	0.000	-57.008	-47.75	0.000	-66.549	-47.85	0.000	-66.549	-47.85	0.000	-66.549	-47.85		
.001	-36.362	-21.63	.001	-42.177	7.90	.001	-43.736	36.36	.001	-43.736	36.36	.001	-43.736	36.36	.001	-43.736	36.36		
.002	-36.826	-3.25	.002	-37.456	24.51	.002	-37.456	31.03	.002	-37.456	31.03	.002	-37.456	31.03	.002	-37.456	31.03		
.003	-36.706	6.59	.003	-34.236	31.03	.003	-34.236	31.03	.003	-34.236	31.03	.003	-34.236	31.03	.003	-34.236	31.03		
.004	-36.949	16.24	.004	-31.866	36.43	.004	-31.866	36.43	.004	-31.866	36.43	.004	-31.866	36.43	.004	-31.866	36.43		
.005	-29.412	21.43	.005	-30.007	36.50	.005	-30.007	36.50	.005	-30.007	36.50	.005	-30.007	36.50	.005	-30.007	36.50		
.006	-28.074	25.12	.006	-28.483	37.90	.006	-28.483	37.90	.006	-28.483	37.90	.006	-28.483	37.90	.006	-28.483	37.90		
.007	-28.902	27.86	.007	-27.195	38.90	.007	-27.195	38.90	.007	-27.195	38.90	.007	-27.195	38.90	.007	-27.195	38.90		
.008	-25.886	29.96	.008	-26.082	39.66	.008	-26.082	39.66	.008	-26.082	39.66	.008	-26.082	39.66	.008	-26.082	39.66		
.009	-24.939	31.63	.009	-25.103	40.25	.009	-25.103	40.25	.009	-25.103	40.25	.009	-25.103	40.25	.009	-25.103	40.25		
.01	-24.104	32.96	.01	-24.230	40.73	.01	-24.230	40.73	.01	-24.230	40.73	.01	-24.230	40.73	.01	-24.230	40.73		
.011	-23.346	34.10	.011	-23.444	41.12	.011	-23.444	41.12	.011	-23.444	41.12	.011	-23.444	41.12	.011	-23.444	41.12		
.012	-22.652	35.04	.012	-22.729	41.45	.012	-22.729	41.45	.012	-22.729	41.45	.012	-22.729	41.45	.012	-22.729	41.45		
.013	-22.014	35.84	.013	-22.074	41.74	.013	-22.074	41.74	.013	-22.074	41.74	.013	-22.074	41.74	.013	-22.074	41.74		
.014	-21.423	36.53	.014	-21.471	41.98	.014	-21.471	41.98	.014	-21.471	41.98	.014	-21.471	41.98	.014	-21.471	41.98		
.015	-20.875	37.13	.015	-20.911	42.19	.015	-20.911	42.19	.015	-20.911	42.19	.015	-20.911	42.19	.015	-20.911	42.19		
.016	-20.362	37.66	.016	-20.391	42.38	.016	-20.391	42.38	.016	-20.391	42.38	.016	-20.391	42.38	.016	-20.391	42.38		
.017	-19.882	38.12	.017	-19.904	42.55	.017	-19.904	42.55	.017	-19.904	42.55	.017	-19.904	42.55	.017	-19.904	42.55		
.018	-19.431	38.54	.018	-19.447	42.71	.018	-19.447	42.71	.018	-19.447	42.71	.018	-19.447	42.71	.018	-19.447	42.71		
.019	-19.006	38.92	.019	-19.012	42.84	.019	-19.012	42.84	.019	-19.012	42.84	.019	-19.012	42.84	.019	-19.012	42.84		
.020	-18.604	39.26	.020	-18.612	42.97	.020	-18.612	42.97	.020	-18.612	42.97	.020	-18.612	42.97	.020	-18.612	42.97		
.021	-18.224	39.57	.021	-18.228	43.09	.021	-18.228	43.09	.021	-18.228	43.09	.021	-18.228	43.09	.021	-18.228	43.09		
.022	-17.862	39.86	.022	-17.863	43.20	.022	-17.863	43.20	.022	-17.863	43.20	.022	-17.863	43.20	.022	-17.863	43.20		
.023	-17.518	40.12	.023	-17.517	43.30	.023	-17.517	43.30	.023	-17.517	43.30	.023	-17.517	43.30	.023	-17.517	43.30		
.024	-17.190	40.36	.024	-17.187	43.39	.024	-17.187	43.39	.024	-17.187	43.39	.024	-17.187	43.39	.024	-17.187	43.39		
.025	-16.877	40.59	.025	-16.872	43.48	.025	-16.872	43.48	.025	-16.872	43.48	.025	-16.872	43.48	.025	-16.872	43.48		
.026	-16.578	40.80	.026	-16.571	43.56	.026	-16.571	43.56	.026	-16.571	43.56	.026	-16.571	43.56	.026	-16.571	43.56		
.027	-16.291	40.99	.027	-16.283	43.64	.027	-16.283	43.64	.027	-16.283	43.64	.027	-16.283	43.64	.027	-16.283	43.64		
.028	-16.017	41.17	.028	-16.007	43.72	.028	-16.007	43.72	.028	-16.007	43.72	.028	-16.007	43.72	.028	-16.007	43.72		
.029	-15.753	41.34	.029	-15.742	43.79	.029	-15.742	43.79	.029	-15.742	43.79	.029	-15.742	43.79	.029	-15.742	43.79		
.030	-15.499	41.51	.030	-15.487	43.86	.030	-15.487	43.86	.030	-15.487	43.86	.030	-15.487	43.86	.030	-15.487	43.86		
.035	-14.362	42.40	.035	-14.347	44.10	.035	-14.347	44.10	.035	-14.347	44.10	.035	-14.347	44.10	.035	-14.347	44.10		
.040	-13.404	42.75	.040	-13.387	44.43	.040	-13.387	44.43	.040	-13.387	44.43	.040	-13.387	44.43	.040	-13.387	44.43		
.045	-12.583	43.22	.045	-12.564	44.68	.045	-12.564	44.68	.045	-12.564	44.68	.045	-12.564	44.68	.045	-12.564	44.68		
.050	-11.874	43.62	.050	-11.850	44.91	.050	-11.850	44.91	.050	-11.850	44.91	.050	-11.850	44.91	.050	-11.850	44.91		
.055	-11.245	43.99	.055	-11.225	45.13	.055	-11.225	45.13	.055	-11.225	45.13	.055	-11.225	45.13	.055	-11.225	45.13		
.060	-10.692	44.33	.060	-10.672	45.36	.060	-10.672	45.36	.060	-10.672	45.36	.060	-10.672	45.36	.060	-10.672	45.36		
.065	-10.202	44.66	.065	-10.181	45.58	.065	-10.181	45.58	.065	-10.181	45.58	.065	-10.181	45.58	.065	-10.181	45.58		
.070	-9.764	44.97	.070	-9.743	45.81	.070	-9.743	45.81	.070	-9.743	45.81	.070	-9.743	45.81	.070	-9.743	45.81		
.075	-9.371	45.21	.075	-9.351	46.05	.075	-9.351	46.05	.075	-9.351	46.05	.075	-9.351	46.05	.075	-9.351	46.05		
.080	-8.919	45.57	.080	-8.908	46.29	.080	-8.908	46.29	.080	-8.908	46.29	.080	-8.908	46.29	.080	-8.908	46.29		
.085	-8.702	45.88	.085	-8.681	46.54	.085	-8.681	46.54	.085	-8.681	46.54	.085	-8.681	46.54	.085	-8.681	46.54		
.090	-8.417	46.18	.090	-8.396	46.80	.090	-8.396	46.80	.090	-8.396	46.80	.090	-8.396	46.80	.090	-8.396	46.80		
.095	-8.160	46.44	.095	-8.139	47.07	.095	-8.139	47.07	.095	-8.139	47.07	.095	-8.139	47.07	.095	-8.139	47.07		
.100	-7.928	46.81	.100	-7.908	47.34	.100	-7.908	47.34	.100	-7.908	47.34	.100	-7.908	47.34	.100	-7.908	47.34		

Table 121. Vertical Electric Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-33.053	-27.162		0.000	-42.506	-28.45		0.000	-52.933	-28.75		0.000	-62.467	-28.84	
0.001	-32.373	-27.76		0.003	-38.125	-26.86		0.010	-39.661	-28.17		0.030	-39.784	-28.40	
0.002	-30.860	15.60		0.006	-33.405	43.47		0.020	-33.796	57.36		0.060	-33.808	61.51	
0.003	-28.721	17.44		0.009	-30.185	50.00		0.030	-30.330	59.67		0.090	-30.325	62.22	
0.004	-26.464	35.04		0.012	-27.817	53.40		0.040	-27.876	60.53		0.120	-27.866	62.58	
0.005	-23.424	40.28		0.015	-25.958	55.48		0.050	-25.979	61.18		0.150	-25.967	62.81	
0.006	-20.372	43.58		0.018	-24.436	56.88		0.060	-24.436	61.61		0.180	-24.424	62.97	
0.007	-17.322	46.73		0.021	-22.137	57.89		0.070	-22.138	62.19		0.210	-22.007	63.18	
0.008	-14.266	48.85		0.024	-20.033	58.66		0.080	-20.019	62.88		0.240	-22.007	63.18	
0.009	-11.210	50.51		0.027	-18.060	59.26		0.090	-18.037	62.37		0.270	-21.025	63.26	
0.010	-8.154	51.89		0.030	-16.189	59.75		0.100	-16.189	62.53		0.300	-20.152	63.33	
0.011	-5.103	53.02		0.033	-14.405	60.15		0.110	-14.378	62.67		0.330	-19.366	63.39	
0.012	-2.052	53.97		0.036	-12.693	60.45		0.120	-12.664	62.79		0.360	-18.652	63.45	
0.013	1.000	54.74		0.039	-11.041	60.74		0.130	-11.011	62.90		0.390	-17.999	63.51	
0.014	4.048	55.49		0.042	-9.440	61.05		0.140	-9.410	63.00		0.420	-17.398	63.56	
0.015	7.091	56.19		0.045	-7.884	61.27		0.150	-7.853	63.09		0.450	-16.842	63.61	
0.016	10.134	56.86		0.048	-6.367	61.48		0.160	-6.335	63.17		0.480	-16.324	63.66	
0.017	13.177	57.15		0.051	-4.884	61.67		0.170	-4.852	63.25		0.510	-15.841	63.70	
0.018	16.219	57.58		0.054	-3.431	61.84		0.180	-3.399	63.33		0.540	-15.388	63.75	
0.019	19.262	57.98		0.057	-1.905	61.99		0.190	-1.873	63.40		0.570	-14.962	63.80	
0.020	22.305	58.35		0.060	-0.404	62.14		0.200	-0.371	63.47		0.600	-14.561	63.85	
0.021	25.348	58.68		0.063	1.124	62.28		0.210	-1.092	63.53		0.630	-14.181	63.89	
0.022	28.391	59.00		0.066	2.644	62.41		0.220	-1.832	63.60		0.660	-13.822	63.94	
0.023	31.434	59.27		0.069	4.163	62.53		0.230	-1.431	63.67		0.690	-13.480	63.99	
0.024	34.477	59.54		0.072	5.682	62.65		0.240	1.166	63.73		0.720	-13.156	64.04	
0.025	37.520	59.79		0.075	7.201	62.76		0.250	12.856	63.80		0.750	-12.846	64.09	
0.026	40.563	60.03		0.078	8.720	62.87		0.260	12.561	63.86		0.780	-12.551	64.14	
0.027	43.606	60.25		0.081	10.239	62.97		0.270	12.279	63.92		0.810	-12.269	64.19	
0.028	46.649	60.46		0.084	12.311	63.07		0.280	11.009	63.99		0.840	-11.999	64.25	
0.029	49.692	60.66		0.087	14.343	63.17		0.290	9.750	64.05		0.870	-11.740	64.30	
0.030	52.735	60.86		0.090	16.375	63.27		0.300	8.502	64.12		0.900	-11.492	64.36	
0.035	60.788	61.72		0.105	20.407	63.74		0.350	6.259	64.45		1.050	-10.389	64.65	
0.040	68.837	62.47		0.120	24.450	64.20		0.400	5.000	64.97		1.200	9.471	64.97	
0.045	76.886	63.16		0.135	28.493	64.66		0.450	3.742	65.18		1.350	8.696	65.32	
0.050	84.935	63.82		0.150	32.536	65.13		0.500	2.484	65.59		1.500	7.469	65.72	
0.055	92.984	64.43		0.165	36.579	65.62		0.550	1.226	66.03		1.650	6.250	66.14	
0.060	101.033	65.11		0.180	40.622	66.15		0.600	0.969	66.51		1.800	5.030	66.61	
0.065	109.082	65.77		0.195	44.665	66.70		0.650	0.712	67.03		1.950	3.800	67.12	
0.070	117.131	66.45		0.210	48.708	67.29		0.700	0.455	67.58		2.100	2.570	67.67	
0.075	125.180	67.16		0.225	52.751	67.92		0.750	0.198	68.19		2.250	1.340	68.26	
0.080	133.229	67.80		0.240	56.794	68.59		0.800	0.041	68.83		2.400	0.110	68.90	
0.085	141.278	68.48		0.255	60.837	69.31		0.850	0.000	69.53		2.550	0.000	69.98	
0.090	149.327	69.15		0.270	64.880	70.07		0.900	0.000	70.27		2.700	0.000	70.33	
0.095	157.376	69.86		0.285	68.923	70.88		0.950	0.000	71.07		2.850	0.000	71.12	
0.100	165.425	70.57		0.300	72.966	71.75		1.000	0.000	71.92		3.000	0.000	71.97	

Table 122. Radial Electric Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 0.00 m

30000 KM QUANTUM				30000 KM QUANTUM			
RE DIST (KM)	AMP (DB)	PHASE (DEG)	RE DIST (KM)	AMP (DB)	PHASE (DEG)	RE DIST (KM)	AMP (DB)
0.000	-36.622	27.46	0.000	-36.622	27.46	0.000	-36.622
0.030	-36.752	27.46	0.030	-36.752	27.46	0.030	-36.752
0.060	-36.879	27.46	0.060	-36.879	27.46	0.060	-36.879
0.090	-36.999	27.46	0.090	-36.999	27.46	0.090	-36.999
0.120	-37.115	27.46	0.120	-37.115	27.46	0.120	-37.115
0.150	-37.228	27.46	0.150	-37.228	27.46	0.150	-37.228
0.180	-37.338	27.46	0.180	-37.338	27.46	0.180	-37.338
0.210	-37.444	27.46	0.210	-37.444	27.46	0.210	-37.444
0.240	-37.547	27.46	0.240	-37.547	27.46	0.240	-37.547
0.270	-37.647	27.46	0.270	-37.647	27.46	0.270	-37.647
0.300	-37.744	27.46	0.300	-37.744	27.46	0.300	-37.744
0.330	-37.838	27.46	0.330	-37.838	27.46	0.330	-37.838
0.360	-37.929	27.46	0.360	-37.929	27.46	0.360	-37.929
0.390	-38.017	27.46	0.390	-38.017	27.46	0.390	-38.017
0.420	-38.102	27.46	0.420	-38.102	27.46	0.420	-38.102
0.450	-38.184	27.46	0.450	-38.184	27.46	0.450	-38.184
0.480	-38.263	27.46	0.480	-38.263	27.46	0.480	-38.263
0.510	-38.339	27.46	0.510	-38.339	27.46	0.510	-38.339
0.540	-38.412	27.46	0.540	-38.412	27.46	0.540	-38.412
0.570	-38.482	27.46	0.570	-38.482	27.46	0.570	-38.482
0.600	-38.549	27.46	0.600	-38.549	27.46	0.600	-38.549
0.630	-38.613	27.46	0.630	-38.613	27.46	0.630	-38.613
0.660	-38.674	27.46	0.660	-38.674	27.46	0.660	-38.674
0.690	-38.732	27.46	0.690	-38.732	27.46	0.690	-38.732
0.720	-38.787	27.46	0.720	-38.787	27.46	0.720	-38.787
0.750	-38.839	27.46	0.750	-38.839	27.46	0.750	-38.839
0.780	-38.888	27.46	0.780	-38.888	27.46	0.780	-38.888
0.810	-38.934	27.46	0.810	-38.934	27.46	0.810	-38.934
0.840	-38.977	27.46	0.840	-38.977	27.46	0.840	-38.977
0.870	-39.017	27.46	0.870	-39.017	27.46	0.870	-39.017
0.900	-39.054	27.46	0.900	-39.054	27.46	0.900	-39.054
1.050	-39.800	27.46	1.050	-39.800	27.46	1.050	-39.800
1.200	-40.414	27.46	1.200	-40.414	27.46	1.200	-40.414
1.350	-40.949	27.46	1.350	-40.949	27.46	1.350	-40.949
1.500	-41.407	27.46	1.500	-41.407	27.46	1.500	-41.407
1.650	-41.789	27.46	1.650	-41.789	27.46	1.650	-41.789
1.800	-42.096	27.46	1.800	-42.096	27.46	1.800	-42.096
1.950	-42.329	27.46	1.950	-42.329	27.46	1.950	-42.329
2.100	-42.489	27.46	2.100	-42.489	27.46	2.100	-42.489
2.250	-42.666	27.46	2.250	-42.666	27.46	2.250	-42.666
2.400	-42.859	27.46	2.400	-42.859	27.46	2.400	-42.859
2.550	-43.068	27.46	2.550	-43.068	27.46	2.550	-43.068
2.700	-43.292	27.46	2.700	-43.292	27.46	2.700	-43.292
2.850	-43.531	27.46	2.850	-43.531	27.46	2.850	-43.531
3.000	-43.785	27.46	3.000	-43.785	27.46	3.000	-43.785
3.150	-44.054	27.46	3.150	-44.054	27.46	3.150	-44.054
3.300	-44.338	27.46	3.300	-44.338	27.46	3.300	-44.338
3.450	-44.637	27.46	3.450	-44.637	27.46	3.450	-44.637
3.600	-44.951	27.46	3.600	-44.951	27.46	3.600	-44.951
3.750	-45.280	27.46	3.750	-45.280	27.46	3.750	-45.280
3.900	-45.624	27.46	3.900	-45.624	27.46	3.900	-45.624
4.050	-45.983	27.46	4.050	-45.983	27.46	4.050	-45.983
4.200	-46.357	27.46	4.200	-46.357	27.46	4.200	-46.357
4.350	-46.746	27.46	4.350	-46.746	27.46	4.350	-46.746
4.500	-47.150	27.46	4.500	-47.150	27.46	4.500	-47.150
4.650	-47.569	27.46	4.650	-47.569	27.46	4.650	-47.569
4.800	-47.993	27.46	4.800	-47.993	27.46	4.800	-47.993
4.950	-48.432	27.46	4.950	-48.432	27.46	4.950	-48.432
5.100	-48.886	27.46	5.100	-48.886	27.46	5.100	-48.886
5.250	-49.355	27.46	5.250	-49.355	27.46	5.250	-49.355
5.400	-49.839	27.46	5.400	-49.839	27.46	5.400	-49.839
5.550	-50.338	27.46	5.550	-50.338	27.46	5.550	-50.338
5.700	-50.852	27.46	5.700	-50.852	27.46	5.700	-50.852
5.850	-51.381	27.46	5.850	-51.381	27.46	5.850	-51.381
6.000	-51.925	27.46	6.000	-51.925	27.46	6.000	-51.925
6.150	-52.484	27.46	6.150	-52.484	27.46	6.150	-52.484
6.300	-53.058	27.46	6.300	-53.058	27.46	6.300	-53.058
6.450	-53.647	27.46	6.450	-53.647	27.46	6.450	-53.647
6.600	-54.251	27.46	6.600	-54.251	27.46	6.600	-54.251
6.750	-54.870	27.46	6.750	-54.870	27.46	6.750	-54.870
6.900	-55.504	27.46	6.900	-55.504	27.46	6.900	-55.504
7.050	-56.153	27.46	7.050	-56.153	27.46	7.050	-56.153
7.200	-56.817	27.46	7.200	-56.817	27.46	7.200	-56.817
7.350	-57.496	27.46	7.350	-57.496	27.46	7.350	-57.496
7.500	-58.190	27.46	7.500	-58.190	27.46	7.500	-58.190
7.650	-58.900	27.46	7.650	-58.900	27.46	7.650	-58.900
7.800	-59.625	27.46	7.800	-59.625	27.46	7.800	-59.625
7.950	-60.365	27.46	7.950	-60.365	27.46	7.950	-60.365
8.100	-61.120	27.46	8.100	-61.120	27.46	8.100	-61.120
8.250	-61.890	27.46	8.250	-61.890	27.46	8.250	-61.890
8.400	-62.675	27.46	8.400	-62.675	27.46	8.400	-62.675
8.550	-63.475	27.46	8.550	-63.475	27.46	8.550	-63.475
8.700	-64.290	27.46	8.700	-64.290	27.46	8.700	-64.290
8.850	-65.120	27.46	8.850	-65.120	27.46	8.850	-65.120
9.000	-65.965	27.46	9.000	-65.965	27.46	9.000	-65.965

Table 123. Radial Electric Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM UPHRANGE				100.0 KM UPHRANGE				300.0 KM UPHRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.00	-33.987	21.53		0.00	-33.281	158.91		0.00	-33.801	57.79	
0.30	-33.219	-122.60		1.00	-33.647	-147.86		3.00	-34.294	-169.90	
0.60	-33.447	-120.67		2.00	-34.023	-146.40		6.00	-34.811	-168.95	
0.90	-33.667	-118.42		3.00	-34.409	-144.81		9.00	-35.353	-167.88	
1.20	-33.874	-116.06		4.00	-34.805	-143.07		12.00	-35.923	-166.69	
1.50	-34.080	-113.59		5.00	-35.210	-141.17		15.00	-36.525	-165.33	
1.80	-34.285	-111.00		6.00	-35.623	-139.08		18.00	-37.161	-163.77	
2.10	-34.443	-108.30		7.00	-36.042	-136.79		21.00	-37.834	-161.98	
2.40	-34.600	-105.50		8.00	-36.466	-134.26		24.00	-38.549	-159.91	
2.70	-34.738	-102.60		9.00	-36.891	-131.48		27.00	-39.308	-157.46	
3.00	-34.855	-99.62		10.00	-37.313	-128.42		30.00	-40.114	-154.57	
3.30	-34.950	-96.57		11.00	-37.728	-125.06		33.00	-40.968	-151.09	
3.60	-35.020	-93.46		12.00	-38.128	-121.37		36.00	-41.866	-146.87	
3.90	-35.065	-90.31		13.00	-38.505	-117.35		39.00	-42.798	-141.70	
4.20	-35.083	-87.14		14.00	-38.850	-112.98		42.00	-43.740	-135.33	
4.50	-35.075	-83.97		15.00	-39.153	-108.29		45.00	-44.643	-127.50	
4.80	-35.041	-80.82		16.00	-39.401	-103.30		48.00	-45.430	-118.05	
5.10	-34.981	-77.70		17.00	-39.585	-98.06		51.00	-46.191	-107.07	
5.40	-34.897	-74.64		18.00	-39.697	-92.66		54.00	-46.922	-95.10	
5.70	-34.790	-71.65		19.00	-39.730	-87.17		57.00	-47.607	-83.09	
6.00	-34.662	-68.75		20.00	-39.685	-81.71		60.00	-48.244	-72.00	
6.30	-34.514	-65.93		21.00	-39.563	-76.37		63.00	-48.864	-62.40	
6.60	-34.350	-63.22		22.00	-39.371	-71.22		66.00	-49.417	-54.44	
6.90	-34.171	-60.62		23.00	-39.120	-66.35		69.00	-49.917	-47.95	
7.20	-33.976	-58.14		24.00	-38.820	-61.79		72.00	-50.353	-42.68	
7.50	-33.776	-55.76		25.00	-38.481	-57.56		75.00	-50.786	-38.38	
7.80	-33.564	-53.50		26.00	-38.114	-53.67		78.00	-51.155	-34.84	
8.10	-33.346	-51.35		27.00	-37.728	-50.12		81.00	-51.467	-31.88	
8.40	-33.122	-49.32		28.00	-37.331	-46.88		84.00	-51.715	-29.39	
8.70	-32.894	-47.39		29.00	-36.928	-43.93		87.00	-51.949	-27.27	
9.00	-32.663	-45.56		30.00	-36.525	-41.26		90.00	-52.1824	-25.44	
1.050	-31.502	-37.79		3.500	-34.590	-31.06		10.500	-35.207	-19.12	
1.200	-30.365	-31.69		4.000	-32.887	-24.46		12.500	-33.200	-15.37	
1.350	-29.347	-27.34		4.500	-31.424	-19.94		13.500	-31.590	-12.85	
1.500	-28.396	-23.76		5.000	-30.164	-16.68		15.000	-30.256	-11.01	
1.650	-27.534	-20.91		5.500	-29.069	-14.23		16.500	-29.123	-9.59	
1.800	-26.749	-18.58		6.000	-28.110	-12.31		18.000	-28.144	-8.44	
1.950	-26.035	-16.65		6.500	-27.261	-10.78		19.500	-27.280	-7.49	
2.100	-25.385	-15.03		7.000	-26.505	-9.51		21.000	-26.526	-6.67	
2.250	-24.791	-13.66		7.500	-25.827	-8.46		22.500	-25.848	-5.96	
2.400	-24.244	-12.47		8.000	-25.217	-7.55		24.000	-25.234	-5.34	
2.550	-23.752	-11.45		8.500	-24.666	-6.77		25.500	-24.684	-4.78	
2.700	-23.297	-10.52		9.000	-24.166	-6.09		27.000	-24.192	-4.27	
2.850	-22.881	-9.75		9.500	-23.713	-5.46		28.500	-23.740	-3.80	
3.000	-22.499	-9.04		10.000	-23.300	-4.93		30.000	-23.330	-3.36	

Table 124. Radial Electric Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM UORANGE				100.0 KM UORANGE				300.0 KM UORANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-32.973	-5.67		0.000	-33.493	-116.17		0.000	-34.168	-30.64	
.030	-32.905	-81.63		.100	-33.773	-126.18		.300	-34.636	-157.00	
.060	-32.802	-77.96		.200	-34.050	-124.06		.600	-35.123	-157.76	
.090	-32.866	-74.39		.300	-34.323	-121.81		.900	-35.632	-150.38	
.120	-32.801	-70.94		.400	-34.591	-119.41		1.200	-36.161	-134.84	
.150	-32.811	-67.62		.500	-34.850	-116.87		1.500	-36.715	-153.11	
.180	-32.098	-64.46		.600	-35.099	-114.17		1.800	-37.292	-151.15	
.210	-31.866	-61.46		.700	-35.333	-111.33		2.100	-37.893	-146.93	
.240	-31.619	-58.62		.800	-35.551	-108.34		2.400	-38.520	-140.40	
.270	-31.360	-55.94		.900	-35.750	-105.22		2.700	-39.169	-143.49	
.300	-31.091	-53.42		1.000	-35.924	-101.96		3.000	-39.839	-140.14	
.330	-30.817	-51.06		1.100	-36.073	-98.59		3.300	-40.522	-136.25	
.360	-30.538	-48.84		1.200	-36.193	-95.12		3.600	-41.209	-131.75	
.390	-30.257	-46.76		1.300	-36.282	-91.58		3.900	-41.883	-126.52	
.420	-29.975	-44.82		1.400	-36.336	-87.99		4.200	-42.520	-123.50	
.450	-29.694	-43.00		1.500	-36.360	-84.36		4.500	-43.086	-119.65	
.480	-29.414	-41.29		1.600	-36.348	-80.79		4.800	-43.561	-106.00	
.510	-29.138	-39.69		1.700	-36.303	-77.23		5.100	-43.844	-97.73	
.540	-28.864	-38.20		1.800	-36.227	-73.73		5.400	-43.965	-89.11	
.570	-28.595	-36.79		1.900	-36.120	-70.32		5.700	-43.893	-80.53	
.600	-28.330	-35.47		2.000	-35.987	-67.03		6.000	-43.641	-72.32	
.630	-28.070	-34.24		2.100	-35.830	-63.85		6.300	-43.243	-64.78	
.660	-27.814	-33.07		2.200	-35.652	-60.81		6.600	-42.740	-58.03	
.690	-27.564	-31.97		2.300	-35.456	-57.92		6.900	-42.172	-52.12	
.720	-27.318	-30.94		2.400	-35.246	-55.17		7.200	-41.571	-46.99	
.750	-27.078	-29.96		2.500	-35.024	-52.57		7.500	-40.960	-42.56	
.780	-26.844	-29.04		2.600	-34.794	-50.12		7.800	-40.355	-38.74	
.810	-26.614	-28.17		2.700	-34.556	-47.81		8.100	-39.764	-35.43	
.840	-26.390	-27.34		2.800	-34.314	-45.64		8.400	-39.195	-32.56	
.870	-26.171	-26.56		2.900	-34.070	-43.60		8.700	-38.650	-30.04	
.900	-25.957	-25.82		3.000	-33.825	-41.68		9.000	-38.129	-27.83	
1.050	-24.958	-22.62		3.500	-32.621	-33.72		10.500	-35.883	-17.90	
1.200	-24.072	-20.09		4.000	-31.515	-27.86		12.000	-34.130	-13.01	
1.350	-23.203	-18.05		4.500	-30.535	-23.45		13.500	-32.740	-11.67	
1.500	-22.362	-16.37		5.000	-29.683	-20.05		15.000	-31.619	-9.18	
1.650	-21.557	-14.97		5.500	-28.952	-17.36		16.500	-30.709	-7.23	
1.800	-21.401	-13.78		6.000	-28.330	-15.19		18.000	-29.968	-5.63	
1.950	-20.966	-12.77		6.500	-27.808	-13.41		19.500	-29.369	-4.26	
2.100	-20.466	-11.90		7.000	-27.379	-11.92		21.000	-28.892	-3.04	
2.250	-20.077	-11.14		7.500	-27.034	-10.67		22.500	-28.526	-1.94	
2.400	-19.734	-10.47		8.000	-26.770	-9.60		24.000	-28.261	-.91	
2.550	-19.434	-9.89		8.500	-26.582	-8.68		25.500	-28.092	.08	
2.700	-19.173	-9.37		9.000	-26.469	-7.89		27.000	-28.016	1.05	
2.850	-18.950	-8.92		9.500	-26.430	-7.22		28.500	-28.035	2.02	
3.000	-18.761	-8.52		10.000	-26.463	-6.66		30.000	-28.149	3.02	

Table 125. Radial Electric Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
.000	-23.574	-3.01	.000	-25.322	-104.00	.000	-24.850	-11.64	.000	-24.850	-11.64	.000	-24.850	-11.64	.000	-40.748	-11.40		
.003	-23.734	-17.35	.010	-25.550	148.32	.030	-25.332	104.03	.030	-24.983	104.03	.100	-41.127	58.05	.100	-40.748	-11.40		
.006	-24.005	-17.35	.020	-26.018	148.33	.060	-26.016	148.53	.090	-30.332	104.03	.160	-41.506	60.11	.200	-41.506	59.19		
.009	-24.276	-17.35	.030	-26.254	148.34	.120	-26.254	148.54	.150	-31.025	104.54	.230	-41.885	60.11	.300	-42.267	60.78		
.012	-24.547	-17.35	.040	-26.504	148.35	.180	-26.504	148.74	.210	-31.741	104.54	.280	-42.643	61.18	.350	-42.643	61.18		
.015	-24.818	-17.35	.050	-26.754	148.35	.240	-26.754	148.95	.270	-32.465	104.54	.340	-43.022	61.11	.410	-43.404	61.11		
.018	-25.089	-17.35	.060	-27.004	148.35	.300	-27.004	149.15	.330	-32.889	104.54	.400	-43.404	60.58	.470	-43.787	60.58		
.021	-25.360	-17.35	.070	-27.254	148.35	.360	-27.254	149.35	.390	-33.282	104.54	.460	-43.787	59.69	.530	-44.170	59.69		
.024	-25.631	-17.35	.080	-27.504	148.35	.420	-27.504	149.55	.450	-33.656	104.54	.500	-44.170	58.80	.570	-44.550	58.80		
.027	-25.902	-17.35	.090	-27.754	148.35	.480	-27.754	149.75	.510	-34.029	104.54	.560	-44.550	57.91	.630	-44.933	57.91		
.030	-26.173	-17.35	.100	-28.004	148.35	.540	-28.004	149.95	.570	-34.382	104.54	.600	-44.933	57.02	.670	-45.316	57.02		
.033	-26.444	-17.35	.110	-28.254	148.35	.600	-28.254	150.15	.630	-34.735	104.54	.660	-45.316	56.13	.730	-45.699	56.13		
.036	-26.715	-17.35	.120	-28.504	148.35	.660	-28.504	150.35	.690	-35.088	104.54	.720	-45.699	55.24	.790	-46.082	55.24		
.039	-26.986	-17.35	.130	-28.754	148.35	.720	-28.754	150.55	.750	-35.441	104.54	.780	-45.699	54.35	.850	-46.465	54.35		
.042	-27.257	-17.35	.140	-29.004	148.35	.780	-29.004	150.75	.810	-35.794	104.54	.840	-45.699	53.46	.910	-46.848	53.46		
.045	-27.528	-17.35	.150	-29.254	148.35	.840	-29.254	150.95	.870	-36.147	104.54	.900	-45.699	52.57	.970	-47.231	52.57		
.048	-27.799	-17.35	.160	-29.504	148.35	.900	-29.504	151.15	.930	-36.496	104.54	.960	-45.699	51.68	.1000	-47.614	51.68		
.051	-28.070	-17.35	.170	-29.754	148.35	.960	-29.754	151.35	.990	-36.845	104.54	.1000	-45.699	50.79					
.054	-28.341	-17.35	.180	-30.004	148.35	.1000	-30.004	151.55	.1000	-37.194	104.54								
.057	-28.612	-17.35	.190	-30.254	148.35														
.060	-28.883	-17.35	.200	-30.504	148.35														
.063	-29.154	-17.35	.210	-30.754	148.35														
.066	-29.425	-17.35	.220	-31.004	148.35														
.069	-29.696	-17.35	.230	-31.254	148.35														
.072	-29.967	-17.35	.240	-31.504	148.35														
.075	-30.238	-17.35	.250	-31.754	148.35														
.078	-30.509	-17.35	.260	-32.004	148.35														
.081	-30.780	-17.35	.270	-32.254	148.35														
.084	-31.051	-17.35	.280	-32.504	148.35														
.087	-31.322	-17.35	.290	-32.754	148.35														
.090	-31.593	-17.35	.300	-33.004	148.35														
.105	-31.477	-163.11	.350	-34.146	147.49														
.120	-31.647	-156.38	.400	-34.467	147.49														
.135	-31.817	-146.14	.450	-34.788	147.49														
.150	-31.987	-130.11	.500	-35.109	147.49														
.165	-32.157	-106.80	.550	-35.430	147.49														
.180	-32.327	-81.04	.600	-35.751	147.49														
.195	-32.497	-60.96	.650	-36.072	147.49														
.210	-32.667	-47.84	.700	-36.393	147.49														
.225	-32.837	-34.72	.750	-36.714	147.49														
.240	-32.997	-21.60	.800	-37.035	147.49														
.255	-33.167	-8.48	.850	-37.356	147.49														
.270	-33.327	5.60	.900	-37.677	147.49														
.285	-33.487	18.48	.950	-38.000	147.49														
.300	-33.647	31.36	.1000	-38.321	147.49														

Table 126. Radial Electric Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM UPHRANGE					10.0 KM UPHRANGE					30.0 KM UPHRANGE					100.0 KM UPHRANGE				
REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)		
0.000	-24.662	-174.34	0.000	-26.714	-131.76	0.000	-31.303	-98.94	0.000	-42.578	-173.80	0.000	-42.578	-173.80	0.000	-42.578	-173.80		
0.03	-24.735	-145.22	0.10	-26.937	-170.36	0.300	-31.637	-122.84	1.000	-42.578	-173.80	3.000	-42.578	-173.80	10.000	-42.578	-173.80		
0.06	-24.809	-144.73	0.20	-27.104	-170.58	0.600	-31.970	-123.21	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.09	-25.005	-144.23	0.30	-27.394	-170.81	0.900	-32.320	-123.51	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.12	-25.142	-143.71	0.40	-27.629	-171.05	1.200	-32.669	-123.74	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.15	-25.280	-143.18	0.50	-27.869	-171.29	1.500	-33.025	-124.01	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.18	-25.419	-142.66	0.60	-28.113	-171.53	1.800	-33.387	-124.20	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.21	-25.560	-142.06	0.70	-28.361	-171.76	2.100	-33.750	-124.36	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.24	-25.702	-141.47	0.80	-28.615	-172.03	2.400	-34.113	-124.46	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.27	-25.845	-140.87	0.90	-28.875	-172.29	2.700	-34.476	-124.51	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.30	-25.989	-140.25	1.00	-29.140	-172.56	3.000	-34.839	-124.51	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.33	-26.135	-139.61	1.10	-29.411	-172.83	3.300	-35.202	-124.43	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.36	-26.281	-138.95	1.20	-29.689	-173.12	3.600	-35.565	-124.29	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.39	-26.429	-138.27	1.30	-29.974	-173.40	3.900	-35.928	-124.07	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.42	-26.578	-137.56	1.40	-30.266	-173.69	4.200	-36.291	-123.75	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.45	-26.727	-136.84	1.50	-30.565	-174.01	4.500	-36.654	-123.34	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.48	-26.876	-136.09	1.60	-30.873	-174.32	4.800	-37.017	-122.80	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.51	-27.027	-135.31	1.70	-31.189	-174.65	5.100	-37.380	-122.13	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.54	-27.182	-134.51	1.80	-31.515	-175.00	5.400	-37.743	-121.32	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.57	-27.344	-133.69	1.90	-31.851	-175.34	5.700	-38.106	-120.32	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.60	-27.508	-132.84	2.00	-32.196	-175.71	6.000	-38.469	-119.12	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.63	-27.674	-131.96	2.10	-32.556	-176.10	6.300	-38.832	-117.64	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.66	-27.842	-131.05	2.20	-32.927	-176.50	6.600	-39.195	-115.97	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.69	-28.013	-130.11	2.30	-33.312	-176.92	6.900	-39.558	-114.12	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.72	-28.185	-129.14	2.40	-33.711	-177.37	7.200	-39.921	-112.15	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.75	-28.359	-128.14	2.50	-34.126	-177.84	7.500	-40.284	-110.05	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.78	-28.534	-127.10	2.60	-34.556	-178.34	7.800	-40.647	-107.82	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.81	-28.710	-126.04	2.70	-34.991	-178.86	8.100	-41.010	-105.42	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.84	-28.887	-124.93	2.80	-35.432	-179.46	8.400	-41.369	-102.82	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.87	-29.065	-123.80	2.90	-35.879	-179.91	8.700	-41.728	-100.05	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
0.90	-29.244	-122.62	3.00	-36.334	-179.23	9.000	-42.087	-97.15	3.000	-42.578	-173.80	10.000	-42.578	-173.80	30.000	-42.578	-173.80		
1.05	-29.751	-116.20	3.50	-37.613	-174.55	1.050	-42.795	-84.43	3.500	-41.464	-174.55	1.050	-42.795	-84.43	3.500	-41.464	-174.55		
1.20	-30.402	-106.80	4.00	-39.141	-164.59	1.200	-43.214	-71.27	4.000	-41.883	-164.59	1.200	-43.214	-71.27	4.000	-41.883	-164.59		
1.35	-30.926	-100.51	4.50	-40.820	-152.79	1.350	-43.633	-58.09	4.500	-42.302	-152.79	1.350	-43.633	-58.09	4.500	-42.302	-152.79		
1.50	-31.474	-91.53	5.00	-42.651	-139.96	1.500	-44.052	-44.91	5.000	-42.721	-139.96	1.500	-44.052	-44.91	5.000	-42.721	-139.96		
1.65	-32.141	-82.24	5.50	-44.822	-126.24	1.650	-44.471	-31.74	5.500	-43.140	-126.24	1.650	-44.471	-31.74	5.500	-43.140	-126.24		
1.80	-32.834	-73.10	6.00	-47.644	-112.54	1.800	-44.890	-18.56	6.000	-43.559	-112.54	1.800	-44.890	-18.56	6.000	-43.559	-112.54		
1.95	-33.557	-64.54	6.50	-50.517	-98.81	1.950	-45.309	-5.38	6.500	-43.978	-98.81	1.950	-45.309	-5.38	6.500	-43.978	-98.81		
2.10	-34.310	-55.81	7.00	-53.440	-85.03	2.100	-45.728	7.80	7.000	-44.397	-85.03	2.100	-45.728	7.80	7.000	-44.397	-85.03		
2.25	-35.093	-46.18	7.50	-56.413	-71.27	2.250	-46.147	20.23	7.500	-44.816	-71.27	2.250	-46.147	20.23	7.500	-44.816	-71.27		
2.40	-35.906	-36.16	8.00	-59.436	-57.51	2.400	-46.566	32.45	8.000	-45.235	-57.51	2.400	-46.566	32.45	8.000	-45.235	-57.51		
2.55	-36.749	-26.07	8.50	-62.509	-43.74	2.550	-46.985	44.67	8.500	-45.654	-43.74	2.550	-46.985	44.67	8.500	-45.654	-43.74		
2.70	-37.622	-16.00	9.00	-65.642	-29.97	2.700	-47.404	56.89	9.000	-46.073	-29.97	2.700	-47.404	56.89	9.000	-46.073	-29.97		
2.85	-38.535	-5.18	9.50	-68.835	-16.21	2.850	-47.823	69.11	9.500	-46.492	-16.21	2.850	-47.823	69.11	9.500	-46.492	-16.21		
3.00	-39.488	5.80	1.000	-72.088	-2.11	3.000	-48.242	81.33	1.000	-46.911	5.80	3.000	-48.242	81.33	1.000	-46.911	5.80		

Table 127. Radial Electric Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
0.000	-24.474	-19.96	0.000	-27.010	33.42	0.000	-32.006	-83.81	0.000	-43.549	91.41	0.000	-43.549	91.41	0.000
0.003	-24.513	-19.50	0.010	-27.205	-156.05	0.030	-32.330	147.25	0.100	-43.914	101.19	0.300	-44.280	102.47	0.600
0.006	-24.549	-19.34	0.020	-27.402	-157.51	0.060	-32.658	147.76	0.200	-44.648	103.53	0.400	-45.020	104.35	0.700
0.009	-24.586	-19.17	0.030	-27.602	-156.94	0.090	-32.992	148.26	0.300	-45.398	104.92	0.500	-45.742	105.21	0.800
0.012	-24.611	-19.04	0.040	-27.804	-156.37	0.120	-33.330	148.75	0.400	-46.173	105.21	0.600	-46.569	104.90	0.900
0.015	-24.638	-18.90	0.050	-28.010	-155.77	0.150	-33.675	149.21	0.500	-46.971	104.23	0.800	-47.375	103.18	1.000
0.018	-24.661	-18.76	0.060	-28.218	-155.15	0.180	-34.026	149.64	0.600	-48.171	99.82	0.900	-48.171	99.82	1.000
0.021	-24.686	-18.61	0.070	-28.429	-154.51	0.210	-34.385	150.05	0.700	-48.551	97.45	1.000	-48.551	97.45	1.000
0.024	-24.698	-18.50	0.080	-28.642	-153.85	0.240	-34.751	150.43	0.800	-48.904	94.58	1.000	-48.904	94.58	1.000
0.027	-24.712	-18.39	0.090	-28.859	-153.17	0.270	-35.126	150.78	0.900	-49.218	91.22	1.000	-49.218	91.22	1.000
0.030	-24.722	-18.27	0.100	-29.079	-152.46	0.300	-35.510	151.10	1.000	-49.476	87.36	1.000	-49.476	87.36	1.000
0.033	-24.732	-18.15	0.110	-29.301	-151.73	0.330	-35.904	151.37	1.000	-49.774	83.10	1.000	-49.774	83.10	1.000
0.036	-24.736	-18.04	0.120	-29.527	-150.97	0.360	-36.310	151.60	1.000	-49.879	78.48	1.000	-49.879	78.48	1.000
0.039	-24.736	-17.93	0.130	-29.756	-150.19	0.390	-36.727	151.79	1.000	-49.879	73.64	1.000	-49.879	73.64	1.000
0.042	-24.736	-17.82	0.140	-29.988	-149.37	0.420	-37.158	151.92	1.000	-49.879	68.71	1.000	-49.879	68.71	1.000
0.045	-24.736	-17.72	0.150	-30.223	-148.53	0.450	-37.603	152.00	1.000	-49.879	63.84	1.000	-49.879	63.84	1.000
0.048	-24.736	-17.62	0.160	-30.461	-147.65	0.480	-38.064	152.00	1.000	-49.879	59.17	1.000	-49.879	59.17	1.000
0.051	-24.736	-17.53	0.170	-30.702	-146.73	0.510	-38.542	151.93	1.000	-49.879	54.79	1.000	-49.879	54.79	1.000
0.054	-24.736	-17.44	0.180	-30.947	-145.76	0.540	-39.040	151.77	1.000	-49.879	50.78	1.000	-49.879	50.78	1.000
0.057	-24.736	-17.35	0.190	-31.194	-144.74	0.570	-39.557	151.51	1.000	-49.879	47.17	1.000	-49.879	47.17	1.000
0.060	-24.736	-17.26	0.200	-31.445	-143.76	0.600	-40.098	151.14	1.000	-49.879	43.96	1.000	-49.879	43.96	1.000
0.063	-24.736	-17.17	0.210	-31.698	-142.69	0.630	-40.663	150.63	1.000	-49.879	41.13	1.000	-49.879	41.13	1.000
0.066	-24.736	-17.08	0.220	-31.954	-141.57	0.660	-41.255	149.95	1.000	-49.879	38.69	1.000	-49.879	38.69	1.000
0.069	-24.736	-16.99	0.230	-32.213	-140.41	0.690	-41.877	149.09	1.000	-49.879	36.55	1.000	-49.879	36.55	1.000
0.072	-24.736	-16.90	0.240	-32.474	-139.19	0.720	-42.531	148.00	1.000	-49.879	34.70	1.000	-49.879	34.70	1.000
0.075	-24.736	-16.81	0.250	-32.738	-137.92	0.750	-43.220	146.64	1.000	-49.879	28.79	1.000	-49.879	28.79	1.000
0.078	-24.736	-16.72	0.260	-33.004	-136.60	0.780	-43.946	145.03	1.000	-49.879	26.33	1.000	-49.879	26.33	1.000
0.081	-24.736	-16.63	0.270	-33.271	-135.21	0.810	-44.710	143.82	1.000	-49.879	23.84	1.000	-49.879	23.84	1.000
0.084	-24.736	-16.54	0.280	-33.540	-133.76	0.840	-45.511	142.82	1.000	-49.879	21.39	1.000	-49.879	21.39	1.000
0.087	-24.736	-16.45	0.290	-33.810	-132.25	0.870	-46.347	140.18	1.000	-49.879	18.95	1.000	-49.879	18.95	1.000
0.090	-24.736	-16.36	0.300	-34.081	-130.67	0.900	-47.207	136.83	1.000	-49.879	16.55	1.000	-49.879	16.55	1.000
0.105	-24.736	-15.98	0.350	-35.422	-121.60	1.000	-48.616	95.46	1.000	-49.879	14.11	1.000	-49.879	14.11	1.000
0.120	-24.736	-15.50	0.400	-36.659	-110.43	1.200	-49.575	52.49	1.000	-49.879	11.66	1.000	-49.879	11.66	1.000
0.135	-24.736	-15.04	0.450	-37.641	-97.42	1.350	-50.428	34.75	1.000	-49.879	9.21	1.000	-49.879	9.21	1.000
0.150	-24.736	-14.58	0.500	-38.213	-82.77	1.500	-51.242	28.50	1.000	-49.879	6.76	1.000	-49.879	6.76	1.000
0.165	-24.736	-14.13	0.550	-38.325	-68.52	1.650	-52.079	24.48	1.000	-49.879	4.31	1.000	-49.879	4.31	1.000
0.180	-24.736	-13.68	0.600	-38.074	-55.77	1.800	-52.905	20.35	1.000	-49.879	1.86	1.000	-49.879	1.86	1.000
0.195	-24.736	-13.23	0.650	-37.631	-45.09	1.950	-53.725	16.22	1.000	-49.879	-0.59	1.000	-49.879	-0.59	1.000
0.210	-24.736	-12.78	0.700	-37.142	-36.46	2.100	-54.521	12.09	1.000	-49.879	-3.04	1.000	-49.879	-3.04	1.000
0.225	-24.736	-12.33	0.750	-36.704	-29.36	2.250	-55.294	8.95	1.000	-49.879	-5.49	1.000	-49.879	-5.49	1.000
0.240	-24.736	-11.88	0.800	-36.369	-23.56	2.400	-56.044	5.81	1.000	-49.879	-7.94	1.000	-49.879	-7.94	1.000
0.255	-24.736	-11.43	0.850	-36.164	-18.68	2.550	-56.769	2.67	1.000	-49.879	-10.39	1.000	-49.879	-10.39	1.000
0.270	-24.736	-10.98	0.900	-36.110	-14.49	2.700	-57.477	-0.57	1.000	-49.879	-12.84	1.000	-49.879	-12.84	1.000
0.285	-24.736	-10.53	0.950	-36.221	-10.79	2.850	-58.172	-3.74	1.000	-49.879	-15.29	1.000	-49.879	-15.29	1.000
0.300	-24.736	-10.08	1.000	-36.520	-7.46	3.000	-58.864	-6.95	1.000	-49.879	-17.74	1.000	-49.879	-17.74	1.000

Table 128. Radial Electric Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.000	-40.703	-141.73	0.000	-51.797	3.99	0.000	-61.485	-133.95	0.000	-71.994	-71.05	0.000	-81.865	-133.95	0.000	-91.865	-71.05		
0.003	-41.041	76.91	0.010	-51.929	71.77	0.020	-61.615	70.29	0.030	-71.777	69.03	0.040	-81.615	70.29	0.050	-91.615	69.03		
0.006	-41.180	77.05	0.020	-52.062	71.70	0.030	-61.744	69.50	0.040	-71.910	67.94	0.050	-81.744	69.50	0.060	-91.744	67.94		
0.009	-41.320	77.12	0.030	-52.195	71.86	0.040	-61.877	69.81	0.050	-72.047	66.51	0.060	-81.877	69.81	0.070	-91.877	66.51		
0.012	-41.460	77.11	0.040	-52.328	70.81	0.050	-62.004	69.06	0.060	-72.199	63.41	0.070	-82.004	69.06	0.080	-92.004	63.41		
0.015	-41.601	77.03	0.050	-52.459	69.96	0.060	-62.135	68.32	0.070	-72.330	60.65	0.080	-82.135	68.32	0.090	-92.135	60.65		
0.018	-41.743	76.86	0.060	-52.586	68.83	0.070	-62.261	67.19	0.080	-72.461	57.52	0.090	-82.261	67.19	0.100	-92.261	57.52		
0.021	-41.886	76.62	0.070	-52.707	67.95	0.080	-62.381	66.06	0.090	-72.581	46.71	0.100	-82.381	66.06	0.110	-92.381	46.71		
0.024	-42.029	76.26	0.080	-52.817	65.76	0.090	-62.504	64.94	0.100	-72.691	35.47	0.110	-82.504	64.94	0.120	-92.504	35.47		
0.027	-42.172	75.86	0.090	-52.914	63.80	0.100	-62.614	63.80	0.110	-72.781	24.21	0.120	-82.614	63.80	0.130	-92.614	24.21		
0.030	-42.314	75.35	0.100	-53.014	61.55	0.110	-62.714	62.61	0.120	-72.881	12.96	0.130	-82.714	62.61	0.140	-92.714	12.96		
0.033	-42.456	74.74	0.110	-53.114	59.33	0.120	-62.814	61.41	0.130	-72.981	1.75	0.140	-82.814	61.41	0.150	-92.814	1.75		
0.036	-42.597	74.04	0.120	-53.214	57.13	0.130	-62.914	60.23	0.140	-73.081	0.74	0.150	-82.914	60.23	0.160	-92.914	0.74		
0.039	-42.739	73.23	0.130	-53.314	54.94	0.140	-63.014	59.06	0.150	-73.181	-0.27	0.160	-83.014	59.06	0.170	-93.014	-0.27		
0.042	-42.881	72.33	0.140	-53.414	52.77	0.150	-63.114	57.87	0.160	-73.281	-1.37	0.170	-83.114	57.87	0.180	-93.114	-1.37		
0.045	-43.023	71.34	0.150	-53.514	50.61	0.160	-63.214	56.71	0.170	-73.381	-2.47	0.180	-83.214	56.71	0.190	-93.214	-2.47		
0.048	-43.165	70.21	0.160	-53.614	48.47	0.170	-63.314	55.54	0.180	-73.481	-3.57	0.190	-83.314	55.54	0.200	-93.314	-3.57		
0.051	-43.307	69.08	0.170	-53.714	46.34	0.180	-63.414	54.37	0.190	-73.581	-4.67	0.200	-83.414	54.37	0.210	-93.414	-4.67		
0.054	-43.449	67.85	0.180	-53.814	44.21	0.190	-63.514	53.21	0.200	-73.681	-5.77	0.210	-83.514	53.21	0.220	-93.514	-5.77		
0.057	-43.591	66.62	0.190	-53.914	42.06	0.200	-63.614	52.06	0.210	-73.781	-6.87	0.220	-83.614	52.06	0.230	-93.614	-6.87		
0.060	-43.733	65.39	0.200	-54.014	39.91	0.210	-63.714	50.91	0.220	-73.881	-7.97	0.230	-83.714	50.91	0.240	-93.714	-7.97		
0.063	-43.875	64.16	0.210	-54.114	37.77	0.220	-63.814	49.77	0.230	-73.981	-9.07	0.240	-83.814	49.77	0.250	-93.814	-9.07		
0.066	-44.017	62.93	0.220	-54.214	35.62	0.230	-63.914	48.62	0.240	-74.081	-10.17	0.250	-83.914	48.62	0.260	-93.914	-10.17		
0.069	-44.159	61.70	0.230	-54.314	33.47	0.240	-64.014	47.47	0.250	-74.181	-11.27	0.260	-84.014	47.47	0.270	-94.014	-11.27		
0.072	-44.301	60.47	0.240	-54.414	31.32	0.250	-64.114	46.32	0.260	-74.281	-12.37	0.270	-84.114	46.32	0.280	-94.114	-12.37		
0.075	-44.443	59.24	0.250	-54.514	29.17	0.260	-64.214	45.17	0.270	-74.381	-13.47	0.280	-84.214	45.17	0.290	-94.214	-13.47		
0.078	-44.585	58.01	0.260	-54.614	27.02	0.270	-64.314	44.02	0.280	-74.481	-14.57	0.290	-84.314	44.02	0.300	-94.314	-14.57		
0.081	-44.727	56.78	0.270	-54.714	24.87	0.280	-64.414	42.87	0.290	-74.581	-15.67	0.300	-84.414	42.87	0.310	-94.414	-15.67		
0.084	-44.869	55.55	0.280	-54.814	22.72	0.290	-64.514	41.72	0.300	-74.681	-16.77	0.310	-84.514	41.72	0.320	-94.514	-16.77		
0.087	-45.011	54.32	0.290	-54.914	20.57	0.300	-64.614	40.57	0.310	-74.781	-17.87	0.320	-84.614	40.57	0.330	-94.614	-17.87		
0.090	-45.153	53.09	0.300	-55.014	18.42	0.310	-64.714	39.42	0.320	-74.881	-18.97	0.330	-84.714	39.42	0.340	-94.714	-18.97		
0.105	-45.652	33.02	0.350	-55.513	-8.68	0.350	-65.213	-8.68	0.350	-75.381	-20.07	0.360	-85.213	-8.68	0.370	-95.213	-20.07		
0.120	-46.151	22.89	0.400	-56.013	-18.86	0.400	-65.713	-18.86	0.400	-75.881	-31.17	0.410	-85.713	-18.86	0.420	-95.713	-31.17		
0.135	-46.650	12.76	0.450	-56.513	-29.05	0.450	-66.213	-29.05	0.450	-76.381	-42.27	0.460	-86.213	-29.05	0.470	-96.213	-42.27		
0.150	-47.149	2.63	0.500	-57.013	-39.24	0.500	-66.713	-39.24	0.500	-76.881	-53.37	0.510	-86.713	-39.24	0.520	-96.713	-53.37		
0.165	-47.648	-7.49	0.550	-57.513	-49.43	0.550	-67.213	-49.43	0.550	-77.381	-64.50	0.560	-87.213	-49.43	0.570	-97.213	-64.50		
0.180	-48.147	-17.68	0.600	-58.013	-59.62	0.600	-67.713	-59.62	0.600	-77.881	-75.63	0.610	-87.713	-59.62	0.620	-97.713	-75.63		
0.195	-48.646	-27.87	0.650	-58.513	-69.81	0.650	-68.213	-69.81	0.650	-78.381	-86.76	0.660	-88.213	-69.81	0.670	-98.213	-86.76		
0.210	-49.145	-38.06	0.700	-59.013	-80.00	0.700	-68.713	-80.00	0.700	-78.881	-97.89	0.710	-88.713	-80.00	0.720	-98.713	-97.89		
0.225	-49.644	-48.19	0.750	-59.513	-90.19	0.750	-69.213	-90.19	0.750	-79.381	-109.02	0.760	-89.213	-90.19	0.770	-99.213	-109.02		
0.240	-50.143	-58.38	0.800	-60.013	-100.38	0.800	-69.713	-100.38	0.800	-79.881	-120.15	0.810	-89.713	-100.38	0.820	-99.713	-120.15		
0.255	-50.642	-68.57	0.850	-60.513	-110.57	0.850	-70.213	-110.57	0.850	-80.381	-131.28	0.860	-90.213	-110.57	0.870	-100.213	-131.28		
0.270	-51.141	-78.76	0.900	-61.013	-120.76	0.900	-70.713	-120.76	0.900	-80.881	-142.41	0.910	-90.713	-120.76	0.920	-100.713	-142.41		
0.285	-51.640	-88.95	0.950	-61.513	-130.95	0.950	-71.213	-130.95	0.950	-81.381	-153.54	0.960	-91.213	-130.95	0.970	-101.213	-153.54		
0.300	-52.139	-99.14	1.000	-62.013	-141.14	1.000	-71.713	-141.14	1.000	-81.881	-164.67	1.010	-91.713	-141.14	1.020	-101.713	-164.67		

Table 129. Radial Electric Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM UPHRANGE				10.0 KM UPHRANGE				30.0 KM UPHRANGE				100.0 KM UPHRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
.000	-40.000	93.52	.000	-51.131	53.45	.000	-60.775	-83.53	.000	-71.275	-101.02	.000	-81.348	-119.70	.000
.003	-40.204	120.18	.010	-51.262	122.05	.030	-61.305	121.02	.100	-71.348	119.70	.200	-81.503	116.34	.300
.006	-40.504	120.35	.020	-51.394	122.59	.060	-61.514	118.68	.300	-71.518	110.53	.500	-81.734	102.54	.700
.009	-40.770	120.44	.030	-51.526	122.28	.100	-61.761	118.36	.500	-71.845	93.09	.700	-82.003	63.29	.900
.012	-40.941	120.46	.040	-51.661	121.72	.130	-61.937	117.91	.700	-72.117	66.45	.900	-82.275	51.33	1.100
.015	-41.057	120.41	.050	-51.793	120.89	.160	-62.083	117.29	.900	-72.400	48.28	1.100	-82.554	38.08	1.300
.018	-41.170	120.28	.060	-51.922	119.79	.190	-62.225	116.40	1.100	-72.687	34.65	1.300	-82.837	24.60	1.500
.021	-41.281	120.07	.070	-52.045	118.40	.220	-62.365	115.12	1.300	-72.975	21.11	1.500	-83.125	11.11	1.700
.024	-41.384	119.77	.080	-52.167	116.74	.250	-62.503	113.43	1.500	-73.265	7.60	1.700	-83.417	-2.20	1.900
.027	-41.480	119.39	.090	-52.285	114.79	.280	-62.639	111.30	1.700	-73.557	-11.41	1.900	-83.712	-15.54	2.100
.030	-41.571	118.92	.100	-52.400	113.05	.300	-62.775	108.84	1.900	-73.847	-24.80	2.100	-84.007	-28.83	2.300
.033	-41.657	118.36	.110	-52.511	110.05	.330	-62.910	106.00	2.100	-74.135	-37.04	2.300	-84.303	-41.07	2.500
.036	-41.738	117.71	.120	-52.618	107.29	.360	-63.043	102.84	2.300	-74.425	-48.27	2.500	-84.600	-53.27	2.700
.039	-41.814	116.95	.130	-52.721	104.30	.390	-63.175	99.33	2.500	-74.717	-58.50	2.700	-84.900	-64.50	2.900
.042	-41.885	116.10	.140	-52.820	101.12	.420	-63.305	95.57	2.700	-75.010	-68.73	2.900	-85.203	-74.73	3.100
.045	-41.952	115.14	.150	-52.915	97.70	.450	-63.433	91.06	2.900	-75.305	-77.96	3.100	-85.507	-83.96	3.300
.048	-42.015	114.08	.160	-53.007	94.33	.480	-63.559	86.80	3.100	-75.600	-86.19	3.300	-85.812	-92.19	3.500
.051	-42.074	112.91	.170	-53.095	90.83	.510	-63.683	82.00	3.300	-75.897	-93.42	3.500	-86.117	-100.42	3.700
.054	-42.129	111.64	.180	-53.178	87.54	.540	-63.805	77.33	3.500	-76.195	-100.65	3.700	-86.422	-108.65	3.900
.057	-42.180	110.28	.190	-53.257	83.89	.570	-63.925	72.72	3.700	-76.493	-107.88	3.900	-86.727	-116.88	4.100
.060	-42.227	110.75	.200	-53.332	80.54	.600	-64.043	68.21	3.900	-76.791	-115.11	4.100	-87.032	-125.11	4.300
.063	-42.270	110.14	.210	-53.404	77.33	.630	-64.159	63.70	4.100	-77.089	-122.34	4.300	-87.337	-133.34	4.500
.066	-42.309	110.43	.220	-53.473	74.21	.660	-64.273	59.20	4.300	-77.387	-129.57	4.500	-87.642	-141.57	4.700
.069	-42.344	111.02	.230	-53.539	71.40	.690	-64.385	54.69	4.500	-77.685	-136.80	4.700	-87.947	-149.80	4.900
.072	-42.375	109.71	.240	-53.601	68.72	.720	-64.495	50.18	4.700	-77.983	-144.03	4.900	-88.252	-158.03	5.100
.075	-42.403	107.71	.250	-53.658	66.23	.750	-64.603	45.67	4.900	-78.281	-151.26	5.100	-88.557	-166.26	5.300
.078	-42.428	105.62	.260	-53.712	63.93	.780	-64.709	41.16	5.100	-78.579	-158.49	5.300	-88.862	-174.49	5.500
.081	-42.450	103.47	.270	-53.762	61.82	.810	-64.813	36.65	5.300	-78.877	-165.72	5.500	-89.167	-182.72	5.700
.084	-42.469	101.26	.280	-53.813	59.80	.840	-64.915	32.14	5.500	-79.175	-172.95	5.700	-89.472	-190.95	5.900
.087	-42.485	99.00	.290	-53.861	58.11	.870	-65.015	27.63	5.700	-79.473	-180.18	5.900	-89.777	-199.18	6.100
.090	-42.498	96.70	.300	-53.908	56.49	.900	-65.113	23.12	5.900	-79.771	-187.41	6.100	-90.082	-207.41	6.300
.105	-42.763	85.23	.350	-54.684	50.31	1.050	-65.885	39.27	6.300	-80.547	-174.08	6.300	-90.857	-214.64	6.300
.120	-42.933	74.88	.400	-55.275	46.41	1.200	-66.581	36.29	6.500	-81.245	-161.31	6.500	-91.552	-201.87	6.500
.135	-43.084	66.49	.450	-55.876	43.93	1.350	-67.297	33.81	6.700	-81.943	-148.54	6.700	-92.250	-189.10	6.700
.150	-43.214	60.12	.500	-56.480	42.35	1.500	-68.025	31.33	6.900	-82.641	-135.77	6.900	-92.947	-176.33	6.900
.165	-43.334	55.42	.550	-57.085	40.74	1.650	-68.763	28.85	7.100	-83.339	-122.99	7.100	-93.645	-163.56	7.100
.180	-43.444	52.00	.600	-57.690	39.16	1.800	-69.511	26.37	7.300	-84.037	-110.22	7.300	-94.343	-150.79	7.300
.195	-43.544	49.52	.650	-58.297	37.57	1.950	-70.260	23.89	7.500	-84.735	-97.45	7.500	-95.041	-138.02	7.500
.210	-43.644	47.74	.700	-58.904	36.00	2.100	-71.018	21.41	7.700	-85.433	-84.68	7.700	-95.739	-125.25	7.700
.225	-43.744	46.47	.750	-59.511	34.42	2.250	-71.776	18.93	7.900	-86.131	-71.91	7.900	-96.437	-112.48	7.900
.240	-43.844	45.56	.800	-60.118	32.83	2.400	-72.534	16.45	8.100	-86.829	-59.14	8.100	-97.135	-99.71	8.100
.255	-43.944	44.99	.850	-60.725	31.24	2.550	-73.292	13.97	8.300	-87.527	-46.37	8.300	-97.833	-86.94	8.300
.270	-44.044	44.63	.900	-61.332	29.65	2.700	-74.050	11.49	8.500	-88.225	-33.60	8.500	-98.531	-74.17	8.500
.285	-44.144	44.45	.950	-61.939	28.06	2.850	-74.808	9.01	8.700	-88.923	-20.83	8.700	-99.229	-61.40	8.700
.300	-44.244	44.41	1.000	-62.546	26.47	3.000	-75.566	6.53	8.900	-89.621	-8.06	8.900	-100.000	-48.63	8.900

Table 130. Radial Electric Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.00	-36.840	-70.428		0.00	-44.273	109.114		0.00	-56.821	-57.118		0.00	-67.282	6.08	
0.03	-36.975	160.515		0.10	-47.402	151.112		0.00	-56.950	145.28		0.10	-67.416	146.53	
0.06	-37.110	160.471		0.20	-47.533	151.117		0.00	-57.080	145.50		0.20	-67.516	143.17	
0.09	-37.243	160.437		0.30	-47.666	150.76		0.00	-57.215	143.46		0.30	-67.532	127.37	
0.12	-37.371	160.402		0.40	-47.800	150.24		0.10	-57.315	143.46		0.40	-67.551	129.39	
0.15	-37.501	160.361		0.50	-47.933	149.44		0.20	-57.395	140.58		0.50	-68.004	119.95	
0.18	-37.625	160.314		0.60	-48.063	148.30		0.30	-57.428	136.75		0.60	-68.023	110.16	
0.21	-37.748	160.267		0.70	-48.188	147.02		0.40	-57.385	136.24		0.70	-68.065	93.31	
0.24	-37.875	160.217		0.80	-48.308	145.34		0.50	-57.251	121.18		0.80	-68.586	87.04	
0.27	-38.007	160.160		0.90	-48.431	143.48		0.60	-57.006	121.74		0.90	-68.125	87.04	
0.30	-38.131	159.78		1.00	-48.548	141.29		0.70	-56.643	116.13		1.00	-68.698	82.08	
0.33	-38.255	159.30		1.10	-48.658	138.84		0.80	-56.184	116.57		1.10	-69.313	78.21	
0.36	-38.379	158.74		1.20	-48.763	136.12		0.90	-55.583	105.27		1.20	-69.940	75.17	
0.39	-38.504	158.14		1.30	-48.868	133.11		1.00	-54.920	104.35		1.30	-70.738	72.70	
0.42	-38.629	157.43		1.40	-48.976	130.02		1.10	-54.191	92.89		1.40	-71.558	70.88	
0.45	-38.754	156.50		1.50	-49.071	126.41		1.20	-53.430	81.43		1.50	-72.446	69.36	
0.48	-38.879	155.36		1.60	-49.161	123.30		1.30	-52.656	86.45		1.60	-73.399	68.13	
0.51	-38.995	154.01		1.70	-49.243	119.84		1.40	-51.871	85.42		1.70	-74.418	67.14	
0.54	-39.110	152.37		1.80	-49.319	116.34		1.50	-51.091	84.79		1.80	-75.478	66.33	
0.57	-39.226	150.51		1.90	-49.390	112.50		1.60	-50.324	80.52		1.90	-76.574	65.67	
0.60	-39.340	148.75		2.00	-49.458	109.35		1.70	-49.575	78.55		2.00	-77.755	65.12	
0.63	-39.454	147.28		2.10	-49.520	106.34		1.80	-48.847	76.86		2.10	-79.059	64.67	
0.66	-39.563	147.71		2.20	-49.570	103.40		1.90	-48.141	75.39		2.20	-80.480	64.30	
0.69	-39.663	146.50		2.30	-49.613	100.41		2.00	-47.456	74.11		2.30	-82.047	64.00	
0.72	-39.759	144.45		2.40	-49.651	97.71		2.10	-46.799	73.01		2.40	-83.766	63.75	
0.75	-39.854	142.36		2.50	-49.682	95.22		2.20	-46.162	72.05		2.50	-85.625	63.55	
0.78	-39.949	140.42		2.60	-49.709	92.52		2.30	-45.547	70.49		2.60	-87.591	63.39	
0.81	-40.044	138.38		2.70	-49.739	90.01		2.40	-44.954	70.49		2.70	-89.683	63.27	
0.84	-40.139	136.27		2.80	-49.764	87.49		2.50	-44.381	69.85		2.80	-91.897	63.17	
0.87	-40.234	134.10		2.90	-49.789	84.93		2.60	-43.828	69.30		2.90	-94.237	63.10	
0.90	-40.329	131.88		3.00	-49.814	82.42		2.70	-43.294	68.82		3.00	-96.716	63.06	
1.05	-39.854	120.54		3.50	-49.047	79.47		1.050	-40.873	61.22		3.500	-40.759	63.08	
1.20	-39.000	110.16		4.00	-39.007	75.74		1.200	-38.801	65.51		4.000	-38.685	63.39	
1.35	-37.963	101.64		4.50	-37.301	73.60		1.350	-37.003	69.33		4.500	-36.841	63.88	
1.50	-36.951	95.33		5.00	-35.731	72.36		1.500	-35.426	69.49		5.000	-35.318	64.50	
1.65	-35.933	90.80		5.50	-34.330	71.77		1.650	-34.029	66.88		5.500	-33.925	65.22	
1.80	-34.919	87.72		6.00	-33.076	71.02		1.800	-32.781	61.44		6.000	-32.681	66.02	
1.95	-33.906	85.72		6.50	-31.947	71.80		1.950	-31.660	61.14		6.500	-31.563	66.86	
2.10	-32.893	84.55		7.00	-30.946	72.23		2.100	-30.660	68.45		7.000	-30.553	67.82	
2.25	-31.874	84.00		7.50	-30.000	72.86		2.250	-30.724	68.85		7.500	-29.637	68.82	
2.40	-30.849	83.46		8.00	-29.157	73.66		2.400	-28.892	70.85		8.000	-28.803	69.88	
2.55	-29.812	84.31		8.50	-28.387	74.61		2.550	-28.128	71.93		8.500	-28.041	72.04	
2.70	-28.782	85.01		9.00	-27.682	75.69		2.700	-27.426	73.09		9.000	-27.343	73.19	
2.85	-27.751	86.00		9.50	-27.035	76.89		2.850	-26.787	74.33		9.500	-26.703	73.46	
3.00	-26.735	87.27		1.000	-26.440	78.21		3.000	-26.196	75.65		10.000	-26.113	74.76	

Table 131. Radial Electric Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 0.00 m

	1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
	REL INT (dB)	AMP (V)	PHASE (DEG)	REL INT (dB)	AMP (V)	PHASE (DEG)	REL INT (dB)	AMP (V)	PHASE (DEG)	REL INT (dB)	AMP (V)	PHASE (DEG)	REL INT (dB)	AMP (V)	PHASE (DEG)	REL INT (dB)
.000	-53.171	21.26	21.26	0.000	-62.720	-110.15	0.000	-71.300	-53.24	0.000	-82.726	24.68	0.000	-92.726	24.68	0.000
.001	-53.291	21.19	21.19	.003	-62.840	86.73	.010	-71.300	86.56	.030	-82.829	84.02	.060	-92.829	84.02	.080
.002	-53.412	21.12	21.12	.006	-62.960	86.73	.020	-71.300	86.56	.040	-82.912	73.31	.070	-92.912	73.31	.090
.003	-53.533	21.05	21.05	.009	-63.080	86.73	.030	-71.300	86.56	.050	-83.005	57.50	.080	-93.005	57.50	.100
.004	-53.654	20.98	20.98	.012	-63.200	86.73	.040	-71.300	86.56	.060	-83.098	41.46	.090	-93.098	41.46	.110
.005	-53.775	20.91	20.91	.015	-63.320	86.73	.050	-71.300	86.56	.070	-83.191	25.42	.100	-93.191	25.42	.120
.006	-53.896	20.84	20.84	.018	-63.440	86.73	.060	-71.300	86.56	.080	-83.284	9.38	.110	-93.284	9.38	.130
.007	-54.017	20.77	20.77	.021	-63.560	86.73	.070	-71.300	86.56	.090	-83.377	-7.56	.120	-93.377	-7.56	.140
.008	-54.138	20.70	20.70	.024	-63.680	86.73	.080	-71.300	86.56	.100	-83.470	-21.52	.130	-93.470	-21.52	.150
.009	-54.259	20.63	20.63	.027	-63.800	86.73	.090	-71.300	86.56	.110	-83.563	-35.48	.140	-93.563	-35.48	.160
.010	-54.380	20.56	20.56	.030	-63.920	86.73	.100	-71.300	86.56	.120	-83.656	-49.44	.150	-93.656	-49.44	.170
.011	-54.501	20.49	20.49	.033	-64.040	86.73	.110	-71.300	86.56	.130	-83.749	-63.40	.160	-93.749	-63.40	.180
.012	-54.622	20.42	20.42	.036	-64.160	86.73	.120	-71.300	86.56	.140	-83.842	-77.36	.170	-93.842	-77.36	.190
.013	-54.743	20.35	20.35	.039	-64.280	86.73	.130	-71.300	86.56	.150	-83.935	-91.32	.180	-93.935	-91.32	.200
.014	-54.864	20.28	20.28	.042	-64.400	86.73	.140	-71.300	86.56	.160	-84.028	-105.28	.190	-94.028	-105.28	.210
.015	-54.985	20.21	20.21	.045	-64.520	86.73	.150	-71.300	86.56	.170	-84.121	-119.24	.200	-94.121	-119.24	.220
.016	-55.106	20.14	20.14	.048	-64.640	86.73	.160	-71.300	86.56	.180	-84.214	-133.20	.210	-94.214	-133.20	.230
.017	-55.227	20.07	20.07	.051	-64.760	86.73	.170	-71.300	86.56	.190	-84.307	-147.16	.220	-94.307	-147.16	.240
.018	-55.348	20.00	20.00	.054	-64.880	86.73	.180	-71.300	86.56	.200	-84.400	-161.12	.230	-94.400	-161.12	.250
.019	-55.469	19.93	19.93	.057	-65.000	86.73	.190	-71.300	86.56	.210	-84.493	-175.08	.240	-94.493	-175.08	.260
.020	-55.590	19.86	19.86	.060	-65.120	86.73	.200	-71.300	86.56	.220	-84.586	-189.04	.250	-94.586	-189.04	.270
.021	-55.711	19.79	19.79	.063	-65.240	86.73	.210	-71.300	86.56	.230	-84.679	-203.00	.260	-94.679	-203.00	.280
.022	-55.832	19.72	19.72	.066	-65.360	86.73	.220	-71.300	86.56	.240	-84.772	-216.96	.270	-94.772	-216.96	.290
.023	-55.953	19.65	19.65	.069	-65.480	86.73	.230	-71.300	86.56	.250	-84.865	-230.92	.280	-94.865	-230.92	.300
.024	-56.074	19.58	19.58	.072	-65.600	86.73	.240	-71.300	86.56	.260	-84.958	-244.88	.290	-94.958	-244.88	.310
.025	-56.195	19.51	19.51	.075	-65.720	86.73	.250	-71.300	86.56	.270	-85.051	-258.84	.300	-95.051	-258.84	.320
.026	-56.316	19.44	19.44	.078	-65.840	86.73	.260	-71.300	86.56	.280	-85.144	-272.80	.310	-95.144	-272.80	.330
.027	-56.437	19.37	19.37	.081	-65.960	86.73	.270	-71.300	86.56	.290	-85.237	-286.76	.320	-95.237	-286.76	.340
.028	-56.558	19.30	19.30	.084	-66.080	86.73	.280	-71.300	86.56	.300	-85.330	-300.72	.330	-95.330	-300.72	.350
.029	-56.679	19.23	19.23	.087	-66.200	86.73	.290	-71.300	86.56	.310	-85.423	-314.68	.340	-95.423	-314.68	.360
.030	-56.800	19.16	19.16	.090	-66.320	86.73	.300	-71.300	86.56	.320	-85.516	-328.64	.350	-95.516	-328.64	.370
.035	-57.041	18.95	18.95	.105	-66.562	86.73	.330	-71.300	86.56	.350	-85.658	-346.50	.360	-95.658	-346.50	.380
.040	-57.282	18.74	18.74	.120	-66.804	86.73	.350	-71.300	86.56	.370	-85.800	-364.36	.370	-95.800	-364.36	.390
.045	-57.523	18.53	18.53	.135	-67.046	86.73	.360	-71.300	86.56	.380	-85.942	-382.22	.380	-95.942	-382.22	.400
.050	-57.764	18.32	18.32	.150	-67.288	86.73	.370	-71.300	86.56	.390	-86.084	-400.08	.390	-96.084	-400.08	.410
.055	-58.005	18.11	18.11	.165	-67.530	86.73	.380	-71.300	86.56	.400	-86.226	-417.94	.400	-96.226	-417.94	.420
.060	-58.246	17.90	17.90	.180	-67.772	86.73	.390	-71.300	86.56	.410	-86.368	-435.80	.410	-96.368	-435.80	.430
.065	-58.487	17.69	17.69	.195	-68.014	86.73	.400	-71.300	86.56	.420	-86.510	-453.66	.420	-96.510	-453.66	.440
.070	-58.728	17.48	17.48	.210	-68.256	86.73	.410	-71.300	86.56	.430	-86.652	-471.52	.430	-96.652	-471.52	.450
.075	-58.969	17.27	17.27	.225	-68.498	86.73	.420	-71.300	86.56	.440	-86.794	-489.38	.440	-96.794	-489.38	.460
.080	-59.210	17.06	17.06	.240	-68.740	86.73	.430	-71.300	86.56	.450	-86.936	-507.24	.450	-96.936	-507.24	.470
.085	-59.451	16.85	16.85	.255	-68.982	86.73	.440	-71.300	86.56	.460	-87.078	-525.10	.460	-97.078	-525.10	.480
.090	-59.692	16.64	16.64	.270	-69.224	86.73	.450	-71.300	86.56	.470	-87.220	-542.96	.470	-97.220	-542.96	.490
.095	-59.933	16.43	16.43	.285	-69.466	86.73	.460	-71.300	86.56	.480	-87.362	-560.82	.480	-97.362	-560.82	.500
.100	-60.174	16.22	16.22	.300	-69.708	86.73	.470	-71.300	86.56	.490	-87.504	-578.68	.490	-97.504	-578.68	.510

Table 132. Radial Electric Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT
(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)
.000	-50.000	07.50	.000	-50.000	07.50	.000	-50.000	07.50	.000	-50.000	07.50	.000	-50.000	07.50	.000
.001	-50.000	130.47	.001	-50.000	130.47	.001	-50.000	130.47	.001	-50.000	130.47	.001	-50.000	130.47	.001
.002	-50.000	130.47	.002	-50.000	130.47	.002	-50.000	130.47	.002	-50.000	130.47	.002	-50.000	130.47	.002
.003	-50.000	130.47	.003	-50.000	130.47	.003	-50.000	130.47	.003	-50.000	130.47	.003	-50.000	130.47	.003
.004	-50.000	130.47	.004	-50.000	130.47	.004	-50.000	130.47	.004	-50.000	130.47	.004	-50.000	130.47	.004
.005	-50.000	130.47	.005	-50.000	130.47	.005	-50.000	130.47	.005	-50.000	130.47	.005	-50.000	130.47	.005
.006	-50.000	130.47	.006	-50.000	130.47	.006	-50.000	130.47	.006	-50.000	130.47	.006	-50.000	130.47	.006
.007	-50.000	130.47	.007	-50.000	130.47	.007	-50.000	130.47	.007	-50.000	130.47	.007	-50.000	130.47	.007
.008	-50.000	130.47	.008	-50.000	130.47	.008	-50.000	130.47	.008	-50.000	130.47	.008	-50.000	130.47	.008
.009	-50.000	130.47	.009	-50.000	130.47	.009	-50.000	130.47	.009	-50.000	130.47	.009	-50.000	130.47	.009
.010	-50.000	130.47	.010	-50.000	130.47	.010	-50.000	130.47	.010	-50.000	130.47	.010	-50.000	130.47	.010
.011	-50.000	130.47	.011	-50.000	130.47	.011	-50.000	130.47	.011	-50.000	130.47	.011	-50.000	130.47	.011
.012	-50.000	130.47	.012	-50.000	130.47	.012	-50.000	130.47	.012	-50.000	130.47	.012	-50.000	130.47	.012
.013	-50.000	130.47	.013	-50.000	130.47	.013	-50.000	130.47	.013	-50.000	130.47	.013	-50.000	130.47	.013
.014	-50.000	130.47	.014	-50.000	130.47	.014	-50.000	130.47	.014	-50.000	130.47	.014	-50.000	130.47	.014
.015	-50.000	130.47	.015	-50.000	130.47	.015	-50.000	130.47	.015	-50.000	130.47	.015	-50.000	130.47	.015
.016	-50.000	130.47	.016	-50.000	130.47	.016	-50.000	130.47	.016	-50.000	130.47	.016	-50.000	130.47	.016
.017	-50.000	130.47	.017	-50.000	130.47	.017	-50.000	130.47	.017	-50.000	130.47	.017	-50.000	130.47	.017
.018	-50.000	130.47	.018	-50.000	130.47	.018	-50.000	130.47	.018	-50.000	130.47	.018	-50.000	130.47	.018
.019	-50.000	130.47	.019	-50.000	130.47	.019	-50.000	130.47	.019	-50.000	130.47	.019	-50.000	130.47	.019
.020	-50.000	130.47	.020	-50.000	130.47	.020	-50.000	130.47	.020	-50.000	130.47	.020	-50.000	130.47	.020
.021	-50.000	130.47	.021	-50.000	130.47	.021	-50.000	130.47	.021	-50.000	130.47	.021	-50.000	130.47	.021
.022	-50.000	130.47	.022	-50.000	130.47	.022	-50.000	130.47	.022	-50.000	130.47	.022	-50.000	130.47	.022
.023	-50.000	130.47	.023	-50.000	130.47	.023	-50.000	130.47	.023	-50.000	130.47	.023	-50.000	130.47	.023
.024	-50.000	130.47	.024	-50.000	130.47	.024	-50.000	130.47	.024	-50.000	130.47	.024	-50.000	130.47	.024
.025	-50.000	130.47	.025	-50.000	130.47	.025	-50.000	130.47	.025	-50.000	130.47	.025	-50.000	130.47	.025
.026	-50.000	130.47	.026	-50.000	130.47	.026	-50.000	130.47	.026	-50.000	130.47	.026	-50.000	130.47	.026
.027	-50.000	130.47	.027	-50.000	130.47	.027	-50.000	130.47	.027	-50.000	130.47	.027	-50.000	130.47	.027
.028	-50.000	130.47	.028	-50.000	130.47	.028	-50.000	130.47	.028	-50.000	130.47	.028	-50.000	130.47	.028
.029	-50.000	130.47	.029	-50.000	130.47	.029	-50.000	130.47	.029	-50.000	130.47	.029	-50.000	130.47	.029
.030	-50.000	130.47	.030	-50.000	130.47	.030	-50.000	130.47	.030	-50.000	130.47	.030	-50.000	130.47	.030
.035	-43.454	51.40	.105	-43.454	50.05	.350	-43.454	46.80	.650	-43.454	45.70	1.050	-43.454	45.70	1.050
.040	-39.507	57.34	.120	-41.348	49.32	.400	-41.348	46.88	.700	-41.348	45.68	1.200	-41.348	45.68	1.200
.045	-37.507	54.05	.135	-39.509	46.48	.450	-39.509	46.33	.750	-39.509	45.71	1.350	-39.509	45.71	1.350
.050	-35.507	52.77	.150	-37.883	47.95	.500	-37.883	46.27	.800	-37.883	45.74	1.500	-37.883	45.74	1.500
.055	-33.507	51.46	.165	-36.431	47.02	.550	-36.431	46.28	.850	-36.431	45.90	1.650	-36.431	45.90	1.650
.060	-31.507	50.54	.180	-35.123	47.42	.600	-35.123	46.34	.900	-35.123	46.03	1.800	-35.123	46.03	1.800
.065	-29.507	49.84	.195	-33.937	47.32	.650	-33.937	46.43	.950	-33.937	46.18	1.950	-33.937	46.18	1.950
.070	-27.507	49.44	.210	-32.850	47.30	.700	-32.850	46.55	1.000	-32.850	46.34	2.100	-32.850	46.34	2.100
.075	-25.507	49.14	.225	-31.864	47.33	.750	-31.864	46.70	1.050	-31.864	46.52	2.250	-31.864	46.52	2.250
.080	-23.507	48.95	.240	-30.951	47.41	.800	-30.951	46.88	1.100	-30.951	46.72	2.400	-30.951	46.72	2.400
.085	-21.507	48.85	.255	-30.108	47.53	.850	-30.108	47.07	1.150	-30.108	46.93	2.550	-30.108	46.93	2.550
.090	-19.507	48.83	.270	-29.326	47.68	.900	-29.326	47.28	1.200	-29.326	47.16	2.700	-29.326	47.16	2.700
.095	-17.507	48.86	.285	-28.599	47.85	.950	-28.599	47.50	1.250	-28.599	47.40	2.850	-28.599	47.40	2.850
.100	-15.507	48.94	.300	-27.923	48.05	1.000	-27.923	47.74	1.300	-27.923	47.66	3.000	-27.923	47.66	3.000

Table 133. Radial Electric Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE			3.0 KM DOWNRANGE			10.0 KM DOWNRANGE			30.0 KM DOWNRANGE		
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-46.277	161.47	0.000	-55.752	-24.10	0.000	-66.174	106.58	0.000	-75.713	90.61
0.001	-46.414	157.10	0.003	-55.872	154.40	0.010	-66.298	152.75	0.030	-75.816	150.08
0.002	-46.553	152.83	0.006	-55.991	151.40	0.020	-66.391	149.12	0.060	-75.981	139.37
0.003	-46.691	150.25	0.012	-56.104	151.50	0.030	-66.387	145.06	0.090	-74.817	123.56
0.004	-46.828	150.42	0.018	-56.198	149.74	0.040	-66.174	134.87	0.120	-73.006	107.51
0.005	-46.961	150.32	0.025	-56.257	145.64	0.050	-65.661	125.30	0.150	-70.635	95.01
0.006	-47.100	152.90	0.032	-56.283	141.57	0.060	-64.794	115.47	0.180	-68.173	86.41
0.007	-47.243	151.32	0.040	-56.192	136.85	0.070	-63.632	106.41	0.210	-65.844	80.60
0.008	-47.386	147.41	0.048	-56.063	131.82	0.080	-62.286	96.69	0.240	-63.724	76.75
0.009	-47.530	147.22	0.056	-55.746	126.07	0.090	-60.863	96.44	0.270	-61.069	72.01
0.010	-47.671	144.77	0.064	-55.350	120.41	0.100	-59.434	87.48	0.300	-58.484	70.58
0.011	-47.810	142.06	0.072	-54.893	114.85	0.110	-58.050	83.58	0.330	-56.703	69.48
0.012	-47.950	139.12	0.080	-54.234	109.37	0.120	-56.734	80.50	0.360	-55.033	68.48
0.013	-47.089	135.98	0.088	-53.360	104.70	0.130	-55.492	78.09	0.390	-53.497	67.63
0.014	-47.228	132.67	0.096	-52.827	100.24	0.140	-54.315	76.04	0.420	-52.046	67.07
0.015	-47.365	129.44	0.104	-52.082	96.38	0.150	-53.207	74.50	0.450	-50.739	67.44
0.016	-47.503	125.75	0.112	-51.261	92.73	0.160	-52.163	73.20	0.480	-49.523	67.02
0.017	-47.640	122.23	0.120	-50.497	89.51	0.170	-51.177	72.13	0.510	-48.428	66.87
0.018	-47.778	118.74	0.128	-49.721	87.28	0.180	-50.245	71.24	0.540	-47.451	66.39
0.019	-47.917	115.33	0.136	-48.958	85.00	0.190	-49.363	70.49	0.570	-46.587	66.17
0.020	-48.054	112.03	0.144	-48.214	83.01	0.200	-48.526	69.86	0.600	-45.841	65.98
0.021	-48.190	108.87	0.152	-47.491	81.27	0.210	-47.730	69.32	0.630	-45.198	65.70
0.022	-48.326	105.89	0.160	-46.790	79.76	0.220	-46.972	68.87	0.660	-44.675	65.60
0.023	-48.460	103.04	0.168	-46.112	78.43	0.230	-46.244	68.48	0.690	-44.248	65.60
0.024	-48.594	100.47	0.176	-45.457	77.27	0.240	-45.550	68.15	0.720	-43.890	65.51
0.025	-48.725	98.03	0.184	-44.823	76.25	0.250	-44.897	67.86	0.750	-43.594	65.44
0.026	-48.857	95.81	0.192	-44.214	75.34	0.260	-44.285	67.61	0.780	-43.365	65.39
0.027	-48.987	93.75	0.200	-43.625	74.55	0.270	-43.655	67.40	0.810	-43.194	65.35
0.028	-49.117	91.86	0.208	-43.055	73.84	0.280	-43.071	67.22	0.840	-43.054	65.32
0.029	-49.243	90.12	0.216	-42.505	73.21	0.290	-42.508	67.06	0.870	-42.946	65.30
0.030	-49.367	88.53	0.224	-41.974	72.65	0.300	-41.967	66.93	0.900	-42.854	65.29
0.035	-39.564	86.42	0.102	-39.564	70.65	0.350	-39.527	66.51	1.050	-39.512	65.34
0.040	-37.574	78.50	0.120	-37.500	69.51	0.400	-37.450	66.34	1.200	-37.434	65.50
0.045	-35.635	70.96	0.135	-35.707	68.90	0.450	-35.652	66.45	1.350	-37.636	65.75
0.050	-34.267	74.36	0.150	-34.134	68.62	0.500	-34.077	66.91	1.500	-32.060	66.06
0.055	-32.905	73.35	0.165	-32.740	68.56	0.550	-32.682	66.93	1.650	-32.665	66.44
0.060	-31.660	72.77	0.180	-31.496	68.68	0.600	-31.438	67.27	1.800	-31.421	66.86
0.065	-30.532	72.51	0.195	-30.380	68.93	0.650	-30.321	67.69	1.950	-30.305	67.44
0.070	-29.546	72.48	0.210	-29.373	69.24	0.700	-29.315	68.18	2.100	-29.298	67.87
0.075	-28.635	72.65	0.225	-28.462	69.74	0.750	-28.403	68.73	2.250	-28.387	68.44
0.080	-27.808	72.98	0.240	-27.634	70.28	0.800	-27.576	69.34	2.400	-27.560	69.07
0.085	-27.055	73.45	0.255	-26.884	70.84	0.850	-26.824	70.00	2.550	-26.808	69.75
0.090	-26.364	74.02	0.270	-26.197	71.58	0.900	-26.136	70.72	2.700	-26.122	70.48
0.095	-25.734	74.76	0.285	-25.571	72.35	0.950	-25.513	71.50	2.850	-25.497	71.26
1.00	-25.174	75.54	0.300	-25.001	73.14	1.000	-24.943	72.35	3.000	-24.926	72.11

Table 134. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-0.77	-13.42		0.000	-2.34	-24.65		0.000	-0.87	-42.09	
0.030	-0.86	-13.36		0.100	-2.69	-24.24		0.300	-0.776	-41.48	
0.060	-0.95	-13.30		0.200	-2.96	-24.04		0.600	-0.861	-40.86	
0.090	-1.04	-13.24		0.300	-3.26	-23.84		0.900	-0.941	-40.25	
0.120	-1.12	-13.18		0.400	-3.54	-23.64		1.200	-1.018	-39.62	
0.150	-1.21	-13.12		0.500	-3.81	-23.43		1.500	-1.091	-39.00	
0.180	-1.30	-13.06		0.600	-4.07	-23.23		1.800	-1.161	-38.37	
0.210	-1.38	-13.00		0.700	-4.32	-23.02		2.100	-1.226	-37.74	
0.240	-1.46	-12.94		0.800	-4.57	-22.82		2.400	-1.288	-37.12	
0.270	-1.54	-12.87		0.900	-4.81	-22.62		2.700	-1.347	-36.49	
0.300	-1.62	-12.81		1.000	-5.04	-22.41		3.000	-1.402	-35.87	
0.330	-1.70	-12.75		1.100	-5.27	-22.21		3.300	-1.453	-35.25	
0.360	-1.78	-12.69		1.200	-5.49	-22.00		3.600	-1.501	-34.63	
0.390	-1.86	-12.63		1.300	-5.70	-21.80		3.900	-1.546	-34.02	
0.420	-1.94	-12.57		1.400	-5.91	-21.60		4.200	-1.588	-33.42	
0.450	-2.01	-12.51		1.500	-6.11	-21.40		4.500	-1.627	-32.82	
0.480	-2.09	-12.45		1.600	-6.31	-21.20		4.800	-1.663	-32.22	
0.510	-2.16	-12.39		1.700	-6.50	-21.00		5.100	-1.696	-31.64	
0.540	-2.23	-12.33		1.800	-6.68	-20.80		5.400	-1.727	-31.06	
0.570	-2.30	-12.27		1.900	-6.86	-20.60		5.700	-1.755	-30.49	
0.600	-2.38	-12.21		2.000	-7.03	-20.40		6.000	-1.780	-29.92	
0.630	-2.45	-12.15		2.100	-7.19	-20.20		6.300	-1.803	-29.37	
0.660	-2.51	-12.09		2.200	-7.35	-20.01		6.600	-1.824	-28.82	
0.690	-2.58	-12.03		2.300	-7.51	-19.81		6.900	-1.842	-28.29	
0.720	-2.65	-11.97		2.400	-7.66	-19.62		7.200	-1.859	-27.76	
0.750	-2.72	-11.91		2.500	-7.80	-19.43		7.500	-1.873	-27.24	
0.780	-2.78	-11.85		2.600	-7.94	-19.24		7.800	-1.886	-26.74	
0.810	-2.85	-11.80		2.700	-8.07	-19.05		8.100	-1.897	-26.24	
0.840	-2.91	-11.74		2.800	-8.20	-18.86		8.400	-1.906	-25.75	
0.870	-2.97	-11.68		2.900	-8.33	-18.67		8.700	-1.914	-25.26	
0.900	-3.04	-11.62		3.000	-8.45	-18.49		9.000	-1.920	-24.81	
1.050	-3.34	-11.33		3.500	-8.98	-17.38		10.500	-1.933	-22.62	
1.200	-3.62	-11.04		4.000	-9.41	-16.71		12.000	-1.920	-20.67	
1.350	-3.88	-10.76		4.500	-9.75	-15.88		13.500	-1.889	-18.95	
1.500	-4.13	-10.48		5.000	-10.02	-15.10		15.000	-1.847	-17.43	
1.650	-4.38	-10.21		5.500	-10.22	-14.36		16.500	-1.798	-16.08	
1.800	-4.58	-9.95		6.000	-10.37	-13.66		18.000	-1.746	-14.90	
1.950	-4.78	-9.69		6.500	-10.47	-13.00		19.500	-1.691	-13.86	
2.100	-4.97	-9.44		7.000	-10.53	-12.38		21.000	-1.638	-12.93	
2.250	-5.16	-9.19		7.500	-10.56	-11.80		22.500	-1.585	-12.11	
2.400	-5.33	-8.95		8.000	-10.56	-11.26		24.000	-1.535	-11.38	
2.550	-5.49	-8.72		8.500	-10.55	-10.75		25.500	-1.487	-10.72	
2.700	-5.65	-8.49		9.000	-10.52	-10.28		27.000	-1.442	-10.14	
2.850	-5.80	-8.27		9.500	-10.47	-9.83		28.500	-1.400	-9.61	
3.000	-5.94	-8.06		10.000	-10.42	-9.42		30.000	-1.361	-9.13	

Table 135. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM UORANGE				100.0 KM UORANGE				300.0 KM UORANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.000	-0.000	-0.000	0.000	-0.000	-0.000	0.000	-0.000	-0.000	0.000	-0.000	-0.000
0.030	-0.030	-0.030	0.030	-0.030	-0.030	0.030	-0.030	-0.030	0.030	-0.030	-0.030
0.060	-0.060	-0.060	0.060	-0.060	-0.060	0.060	-0.060	-0.060	0.060	-0.060	-0.060
0.090	-0.090	-0.090	0.090	-0.090	-0.090	0.090	-0.090	-0.090	0.090	-0.090	-0.090
0.120	-0.120	-0.120	0.120	-0.120	-0.120	0.120	-0.120	-0.120	0.120	-0.120	-0.120
0.150	-0.150	-0.150	0.150	-0.150	-0.150	0.150	-0.150	-0.150	0.150	-0.150	-0.150
0.180	-0.180	-0.180	0.180	-0.180	-0.180	0.180	-0.180	-0.180	0.180	-0.180	-0.180
0.210	-0.210	-0.210	0.210	-0.210	-0.210	0.210	-0.210	-0.210	0.210	-0.210	-0.210
0.240	-0.240	-0.240	0.240	-0.240	-0.240	0.240	-0.240	-0.240	0.240	-0.240	-0.240
0.270	-0.270	-0.270	0.270	-0.270	-0.270	0.270	-0.270	-0.270	0.270	-0.270	-0.270
0.300	-0.300	-0.300	0.300	-0.300	-0.300	0.300	-0.300	-0.300	0.300	-0.300	-0.300
0.330	-0.330	-0.330	0.330	-0.330	-0.330	0.330	-0.330	-0.330	0.330	-0.330	-0.330
0.360	-0.360	-0.360	0.360	-0.360	-0.360	0.360	-0.360	-0.360	0.360	-0.360	-0.360
0.390	-0.390	-0.390	0.390	-0.390	-0.390	0.390	-0.390	-0.390	0.390	-0.390	-0.390
0.420	-0.420	-0.420	0.420	-0.420	-0.420	0.420	-0.420	-0.420	0.420	-0.420	-0.420
0.450	-0.450	-0.450	0.450	-0.450	-0.450	0.450	-0.450	-0.450	0.450	-0.450	-0.450
0.480	-0.480	-0.480	0.480	-0.480	-0.480	0.480	-0.480	-0.480	0.480	-0.480	-0.480
0.510	-0.510	-0.510	0.510	-0.510	-0.510	0.510	-0.510	-0.510	0.510	-0.510	-0.510
0.540	-0.540	-0.540	0.540	-0.540	-0.540	0.540	-0.540	-0.540	0.540	-0.540	-0.540
0.570	-0.570	-0.570	0.570	-0.570	-0.570	0.570	-0.570	-0.570	0.570	-0.570	-0.570
0.600	-0.600	-0.600	0.600	-0.600	-0.600	0.600	-0.600	-0.600	0.600	-0.600	-0.600
0.630	-0.630	-0.630	0.630	-0.630	-0.630	0.630	-0.630	-0.630	0.630	-0.630	-0.630
0.660	-0.660	-0.660	0.660	-0.660	-0.660	0.660	-0.660	-0.660	0.660	-0.660	-0.660
0.690	-0.690	-0.690	0.690	-0.690	-0.690	0.690	-0.690	-0.690	0.690	-0.690	-0.690
0.720	-0.720	-0.720	0.720	-0.720	-0.720	0.720	-0.720	-0.720	0.720	-0.720	-0.720
0.750	-0.750	-0.750	0.750	-0.750	-0.750	0.750	-0.750	-0.750	0.750	-0.750	-0.750
0.780	-0.780	-0.780	0.780	-0.780	-0.780	0.780	-0.780	-0.780	0.780	-0.780	-0.780
0.810	-0.810	-0.810	0.810	-0.810	-0.810	0.810	-0.810	-0.810	0.810	-0.810	-0.810
0.840	-0.840	-0.840	0.840	-0.840	-0.840	0.840	-0.840	-0.840	0.840	-0.840	-0.840
0.870	-0.870	-0.870	0.870	-0.870	-0.870	0.870	-0.870	-0.870	0.870	-0.870	-0.870
0.900	-0.900	-0.900	0.900	-0.900	-0.900	0.900	-0.900	-0.900	0.900	-0.900	-0.900
1.050	-0.940	-7.10	1.050	-1.529	-13.09	1.050	-2.645	-19.03	1.050	-4.675	-26.08
1.200	-0.913	-6.92	1.200	-1.613	-12.23	1.200	-2.685	-19.08	1.200	-4.705	-26.13
1.350	-0.902	-6.54	1.350	-1.694	-11.41	1.350	-2.725	-19.17	1.350	-4.735	-26.18
1.500	-1.008	-5.40	1.500	-1.772	-10.63	1.500	-2.765	-19.26	1.500	-4.765	-26.23
1.650	-1.136	-5.39	1.650	-1.850	-9.88	1.650	-2.805	-19.35	1.650	-4.795	-26.28
1.800	-1.216	-5.72	1.800	-1.928	-9.18	1.800	-2.845	-19.44	1.800	-4.825	-26.33
1.950	-1.303	-5.20	1.950	-2.006	-8.51	1.950	-2.885	-19.53	1.950	-4.855	-26.38
2.100	-1.394	-5.20	2.100	-2.087	-7.88	2.100	-2.925	-19.62	2.100	-4.885	-26.43
2.250	-1.488	-4.95	2.250	-2.169	-7.29	2.250	-2.965	-19.71	2.250	-4.915	-26.48
2.400	-1.588	-4.70	2.400	-2.255	-6.72	2.400	-3.005	-19.80	2.400	-4.945	-26.53
2.550	-1.692	-4.45	2.550	-2.344	-6.19	2.550	-3.045	-19.89	2.550	-4.975	-26.58
2.700	-1.801	-4.21	2.700	-2.438	-5.68	2.700	-3.085	-19.98	2.700	-5.005	-26.63
2.850	-1.915	-3.97	2.850	-2.531	-5.17	2.850	-3.125	-20.07	2.850	-5.035	-26.68
3.000	-2.035	-3.74	3.000	-2.624	-4.75	3.000	-3.165	-20.16	3.000	-5.065	-26.73

Table 136. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)		HEIGHT (KM)	AMP (UB)	PHASE (DEG)	
0.000	-1.525	-8.25		0.000	-1.957	-15.84		0.000	-1.625	-32.83	
0.30	-1.534	-8.20		0.100	-1.987	-15.84		0.300	-1.714	-36.72	
0.60	-1.544	-8.14		0.200	-1.018	-15.84		0.600	-1.800	-31.61	
0.90	-1.555	-8.08		0.300	-1.048	-15.84		0.900	-1.883	-30.99	
1.20	-1.566	-8.01		0.400	-1.079	-15.84		1.200	-1.963	-30.37	
1.50	-1.576	-7.95		0.500	-1.110	-15.84		1.500	-2.040	-29.75	
1.80	-1.587	-7.89		0.600	-1.140	-15.84		1.800	-2.115	-29.13	
2.10	-1.597	-7.83		0.700	-1.171	-15.84		2.100	-2.186	-28.51	
2.40	-1.607	-7.77		0.800	-1.202	-15.84		2.400	-2.255	-27.89	
2.70	-1.617	-7.71		0.900	-1.234	-15.84		2.700	-2.322	-27.27	
3.00	-1.627	-7.65		1.000	-1.265	-15.84		3.000	-2.386	-26.66	
3.30	-1.637	-7.59		1.100	-1.297	-15.84		3.300	-2.447	-26.05	
3.60	-1.647	-7.53		1.200	-1.329	-15.84		3.600	-2.506	-25.44	
3.90	-1.657	-7.47		1.300	-1.361	-15.84		3.900	-2.563	-24.84	
4.20	-1.667	-7.41		1.400	-1.393	-15.84		4.200	-2.618	-24.24	
4.50	-1.677	-7.35		1.500	-1.426	-15.84		4.500	-2.671	-23.65	
4.80	-1.687	-7.29		1.600	-1.459	-15.84		4.800	-2.722	-23.06	
5.10	-1.697	-7.23		1.700	-1.492	-15.84		5.100	-2.771	-22.48	
5.40	-1.707	-7.17		1.800	-1.526	-15.84		5.400	-2.819	-21.91	
5.70	-1.717	-7.11		1.900	-1.560	-15.84		5.700	-2.865	-21.34	
6.00	-1.727	-7.05		2.000	-1.594	-15.84		6.000	-2.909	-20.78	
6.30	-1.737	-6.99		2.100	-1.628	-15.84		6.300	-2.952	-20.24	
6.60	-1.747	-6.93		2.200	-1.663	-15.84		6.600	-2.994	-19.69	
6.90	-1.757	-6.87		2.300	-1.697	-15.84		6.900	-3.035	-19.16	
7.20	-1.767	-6.81		2.400	-1.734	-15.84		7.200	-3.074	-18.64	
7.50	-1.777	-6.75		2.500	-1.770	-15.84		7.500	-3.113	-18.12	
7.80	-1.787	-6.69		2.600	-1.807	-15.84		7.800	-3.151	-17.61	
8.10	-1.797	-6.63		2.700	-1.844	-15.84		8.100	-3.188	-17.11	
8.40	-1.807	-6.57		2.800	-1.881	-15.84		8.400	-3.225	-16.62	
8.70	-1.817	-6.51		2.900	-1.919	-15.84		8.700	-3.260	-16.14	
9.00	-1.827	-6.45		3.000	-1.958	-15.84		9.000	-3.296	-15.67	
1.050	-1.827	-6.45		3.500	-2.050	-15.84		10.500	-3.468	-15.43	
1.200	-1.860	-6.83		4.000	-2.373	-15.84		12.000	-3.640	-11.40	
1.350	-1.893	-7.21		4.500	-2.695	-15.84		13.500	-3.818	-9.55	
1.500	-1.926	-7.59		5.000	-3.018	-15.84		15.000	-4.011	-7.87	
1.650	-1.959	-7.97		5.500	-3.341	-15.84		16.500	-4.222	-6.33	
1.800	-1.992	-8.35		6.000	-3.664	-15.84		18.000	-4.458	-4.91	
1.950	-2.025	-8.73		6.500	-3.987	-15.84		19.500	-4.721	-3.59	
2.100	-2.058	-9.11		7.000	-4.310	-15.84		21.000	-5.015	-2.33	
2.250	-2.091	-9.49		7.500	-4.633	-15.84		22.500	-5.345	-1.13	
2.400	-2.124	-9.87		8.000	-4.956	-15.84		24.000	-5.713	0.04	
2.550	-2.157	-10.25		8.500	-5.279	-15.84		25.500	-6.124	1.20	
2.700	-2.190	-10.63		9.000	-5.602	-15.84		27.000	-6.582	2.37	
2.850	-2.223	-11.01		9.500	-5.925	-15.84		28.500	-7.093	3.58	
3.000	-2.256	-11.39		10.000	-6.248	-15.84		30.000	-7.663	4.87	

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F/G 8/14

HEIGHT-GAIN ATLAS FOR AN ELEMENTAL VERTICAL ELECTRIC DIPOLE ARO--ETC(U)

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UNCLASSIFIED

RADC-TR-81-39

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Table 137. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM DUEKNANGE				10.0 KM DUEKNANGE				30.0 KM DUEKNANGE				100.0 KM DUEKNANGE			
ME (MT)	AMP (DB)	PHASE (DEG)	ME (MT)	AMP (DB)	PHASE (DEG)	ME (MT)	AMP (DB)	PHASE (DEG)	ME (MT)	AMP (DB)	PHASE (DEG)	ME (MT)	AMP (DB)	PHASE (DEG)	ME (MT)
0.000	-1.000	-41.44	0.000	-2.740	-73.46	0.000	-7.085	-117.93	0.000	-18.174	-164.97	0.000	-18.174	-164.97	0.000
0.03	-1.033	-41.24	0.03	-2.837	-72.74	0.03	-7.349	-115.44	0.03	-19.068	-157.74	0.03	-19.068	-157.74	0.03
0.06	-1.059	-41.04	0.06	-2.923	-72.11	0.06	-7.602	-113.78	0.06	-19.832	-149.38	0.06	-19.832	-149.38	0.06
0.09	-1.085	-40.84	0.09	-3.007	-71.43	0.09	-7.841	-111.61	0.09	-20.462	-139.91	0.09	-20.462	-139.91	0.09
0.12	-1.111	-40.63	0.12	-3.089	-70.74	0.12	-8.066	-109.37	0.12	-20.870	-129.63	0.12	-20.870	-129.63	0.12
0.15	-1.136	-40.43	0.15	-3.168	-70.04	0.15	-8.277	-107.07	0.15	-21.014	-119.03	0.15	-21.014	-119.03	0.15
0.18	-1.161	-40.23	0.18	-3.245	-69.34	0.18	-8.471	-104.73	0.18	-20.890	-108.73	0.18	-20.890	-108.73	0.18
0.21	-1.185	-40.03	0.21	-3.319	-68.64	0.21	-8.649	-102.35	0.21	-20.542	-99.25	0.21	-20.542	-99.25	0.21
0.24	-1.210	-39.82	0.24	-3.390	-67.93	0.24	-8.810	-100.00	0.24	-20.036	-90.88	0.24	-20.036	-90.88	0.24
0.27	-1.235	-39.62	0.27	-3.459	-67.22	0.27	-8.952	-97.50	0.27	-19.438	-83.88	0.27	-19.438	-83.88	0.27
0.30	-1.259	-39.42	0.30	-3.526	-66.51	0.30	-9.077	-95.05	0.30	-18.748	-77.56	0.30	-18.748	-77.56	0.30
0.33	-1.280	-39.21	0.33	-3.590	-65.79	0.33	-9.184	-92.60	0.33	-18.151	-72.38	0.33	-18.151	-72.38	0.33
0.36	-1.302	-39.01	0.36	-3.651	-65.07	0.36	-9.273	-90.16	0.36	-17.516	-67.96	0.36	-17.516	-67.96	0.36
0.39	-1.325	-38.81	0.39	-3.710	-64.36	0.39	-9.344	-87.73	0.39	-16.911	-64.23	0.39	-16.911	-64.23	0.39
0.42	-1.347	-38.60	0.42	-3.766	-63.64	0.42	-9.398	-85.33	0.42	-16.333	-60.99	0.42	-16.333	-60.99	0.42
0.45	-1.368	-38.40	0.45	-3.820	-62.92	0.45	-9.450	-82.96	0.45	-15.789	-58.18	0.45	-15.789	-58.18	0.45
0.48	-1.389	-38.20	0.48	-3.872	-62.20	0.48	-9.498	-80.64	0.48	-15.277	-55.71	0.48	-15.277	-55.71	0.48
0.51	-1.410	-37.99	0.51	-3.921	-61.48	0.51	-9.545	-78.37	0.51	-14.795	-53.54	0.51	-14.795	-53.54	0.51
0.54	-1.431	-37.79	0.54	-3.967	-60.76	0.54	-9.589	-76.15	0.54	-14.343	-51.59	0.54	-14.343	-51.59	0.54
0.57	-1.451	-37.58	0.57	-4.012	-60.05	0.57	-9.630	-73.99	0.57	-13.918	-49.85	0.57	-13.918	-49.85	0.57
0.60	-1.470	-37.38	0.60	-4.053	-59.34	0.60	-9.669	-71.89	0.60	-13.519	-48.26	0.60	-13.519	-48.26	0.60
0.63	-1.490	-37.18	0.63	-4.093	-58.63	0.63	-9.708	-69.87	0.63	-13.142	-46.85	0.63	-13.142	-46.85	0.63
0.66	-1.509	-36.97	0.66	-4.130	-57.92	0.66	-9.746	-67.91	0.66	-12.787	-45.54	0.66	-12.787	-45.54	0.66
0.69	-1.528	-36.77	0.69	-4.165	-57.17	0.69	-9.782	-66.02	0.69	-12.452	-44.34	0.69	-12.452	-44.34	0.69
0.72	-1.546	-36.57	0.72	-4.198	-56.42	0.72	-9.814	-64.20	0.72	-12.135	-43.23	0.72	-12.135	-43.23	0.72
0.75	-1.564	-36.37	0.75	-4.228	-55.63	0.75	-9.844	-62.45	0.75	-11.834	-42.20	0.75	-11.834	-42.20	0.75
0.78	-1.582	-36.16	0.78	-4.257	-54.84	0.78	-9.874	-60.77	0.78	-11.549	-41.24	0.78	-11.549	-41.24	0.78
0.81	-1.599	-35.96	0.81	-4.283	-54.05	0.81	-9.902	-59.16	0.81	-11.278	-40.34	0.81	-11.278	-40.34	0.81
0.84	-1.616	-35.76	0.84	-4.307	-53.27	0.84	-9.928	-57.62	0.84	-11.021	-39.50	0.84	-11.021	-39.50	0.84
0.87	-1.633	-35.56	0.87	-4.330	-53.10	0.87	-9.950	-56.14	0.87	-10.775	-38.71	0.87	-10.775	-38.71	0.87
0.90	-1.649	-35.36	0.90	-4.350	-52.43	0.90	-9.966	-54.72	0.90	-10.541	-37.96	0.90	-10.541	-37.96	0.90
1.05	-1.720	-34.36	1.05	-4.425	-49.19	1.05	-10.050	-48.49	1.05	-9.515	-34.77	1.05	-9.515	-34.77	1.05
1.20	-1.795	-33.36	1.20	-4.461	-46.14	1.20	-10.200	-43.48	1.20	-8.680	-32.22	1.20	-8.680	-32.22	1.20
1.35	-1.858	-32.41	1.35	-4.463	-43.28	1.35	-10.350	-39.41	1.35	-7.985	-30.13	1.35	-7.985	-30.13	1.35
1.50	-1.913	-31.46	1.50	-4.438	-40.63	1.50	-10.500	-36.06	1.50	-7.398	-28.35	1.50	-7.398	-28.35	1.50
1.65	-1.962	-30.53	1.65	-4.393	-38.18	1.65	-10.650	-33.27	1.65	-6.895	-26.81	1.65	-6.895	-26.81	1.65
1.80	-2.004	-29.63	1.80	-4.331	-35.97	1.80	-10.800	-30.92	1.80	-6.458	-25.46	1.80	-6.458	-25.46	1.80
1.95	-2.042	-28.74	1.95	-4.258	-33.87	1.95	-10.950	-28.91	1.95	-6.076	-24.26	1.95	-6.076	-24.26	1.95
2.10	-2.074	-27.88	2.10	-4.177	-31.98	2.10	-11.100	-27.18	2.10	-5.739	-23.19	2.10	-5.739	-23.19	2.10
2.25	-2.102	-27.05	2.25	-4.091	-30.25	2.25	-11.250	-25.66	2.25	-5.440	-22.22	2.25	-5.440	-22.22	2.25
2.40	-2.125	-26.24	2.40	-4.002	-28.68	2.40	-11.400	-24.33	2.40	-5.173	-21.33	2.40	-5.173	-21.33	2.40
2.55	-2.144	-25.46	2.55	-3.911	-27.23	2.55	-11.550	-23.15	2.55	-4.932	-20.52	2.55	-4.932	-20.52	2.55
2.70	-2.160	-24.70	2.70	-3.821	-25.91	2.70	-11.700	-22.09	2.70	-4.715	-19.78	2.70	-4.715	-19.78	2.70
2.85	-2.173	-24.00	2.85	-3.732	-24.81	2.85	-11.850	-21.13	2.85	-4.519	-19.09	2.85	-4.519	-19.09	2.85
3.00	-2.183	-23.27	3.00	-3.645	-23.59	3.00	-12.000	-20.27	3.00	-4.340	-18.46	3.00	-4.340	-18.46	3.00

Table 138. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)	MEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-2.000	-20.00	0.000	-4.143	-57.59	0.000	-8.730	-101.17	0.000	-20.005	-147.13
0.03	-2.000	-20.00	0.10	-4.232	-56.91	0.30	-8.995	-99.13	1.00	-20.879	-139.91
0.06	-2.107	-20.00	0.20	-4.319	-56.23	0.60	-9.248	-97.02	2.00	-21.665	-131.56
0.09	-2.133	-20.45	0.30	-4.404	-55.55	0.90	-9.489	-94.84	3.00	-22.248	-122.97
0.12	-2.160	-20.45	0.40	-4.487	-54.86	1.20	-9.710	-92.61	4.00	-22.711	-111.77
0.15	-2.180	-20.04	0.50	-4.567	-54.17	1.50	-9.929	-90.32	5.00	-22.858	-101.15
0.21	-2.239	-20.03	0.70	-4.721	-52.76	1.80	-10.126	-87.98	6.00	-22.738	-90.82
0.24	-2.263	-20.43	0.80	-4.795	-52.06	2.10	-10.307	-85.60	7.00	-22.394	-81.31
0.27	-2.290	-20.22	0.90	-4.867	-51.35	2.40	-10.471	-83.19	8.00	-21.890	-72.90
0.30	-2.310	-20.02	1.00	-4.936	-50.64	2.70	-10.618	-80.76	9.00	-21.293	-65.67
0.33	-2.342	-20.81	1.10	-5.003	-49.94	3.00	-10.747	-78.32	1.000	-20.655	-59.52
0.36	-2.367	-20.61	1.20	-5.068	-49.24	3.30	-10.859	-75.87	1.100	-20.009	-54.32
0.39	-2.394	-20.40	1.30	-5.131	-48.54	3.60	-10.954	-73.43	1.200	-19.377	-49.90
0.42	-2.417	-20.20	1.40	-5.191	-47.84	3.90	-11.031	-71.00	1.300	-18.771	-46.12
0.45	-2.442	-20.00	1.50	-5.250	-47.10	4.20	-11.092	-68.60	1.400	-18.196	-42.86
0.48	-2.467	-20.79	1.60	-5.306	-46.36	4.50	-11.136	-66.23	1.500	-17.654	-40.03
0.51	-2.492	-20.58	1.70	-5.360	-45.63	4.80	-11.166	-63.90	1.600	-17.144	-37.55
0.54	-2.516	-20.38	1.80	-5.412	-44.92	5.10	-11.181	-61.62	1.700	-16.665	-35.39
0.57	-2.541	-20.17	1.90	-5.462	-44.20	5.40	-11.182	-59.39	1.800	-16.216	-33.39
0.60	-2.565	-20.00	2.00	-5.509	-43.49	5.70	-11.174	-57.23	1.900	-15.794	-31.64
0.63	-2.590	-20.76	2.10	-5.555	-42.79	6.00	-11.150	-55.12	2.000	-15.398	-30.05
0.66	-2.614	-20.55	2.20	-5.599	-42.08	6.30	-11.117	-53.08	2.100	-15.025	-28.60
0.69	-2.638	-20.35	2.30	-5.641	-41.38	6.60	-11.076	-51.10	2.200	-14.674	-27.27
0.72	-2.662	-20.15	2.40	-5.681	-40.69	6.90	-11.026	-49.20	2.300	-14.343	-26.05
0.75	-2.686	-20.00	2.50	-5.719	-39.99	7.20	-10.970	-47.36	2.400	-14.031	-24.93
0.78	-2.709	-20.74	2.60	-5.755	-39.30	7.50	-10.907	-45.59	2.500	-13.735	-23.88
0.81	-2.733	-20.54	2.70	-5.790	-38.62	7.80	-10.836	-43.89	2.600	-13.455	-22.91
0.84	-2.757	-20.34	2.80	-5.822	-37.94	8.10	-10.766	-42.25	2.700	-13.189	-22.09
0.87	-2.780	-20.14	2.90	-5.853	-37.27	8.40	-10.689	-40.68	2.800	-12.937	-21.33
0.90	-2.803	-20.00	3.00	-5.883	-36.60	8.70	-10.609	-39.18	2.900	-12.697	-20.63
						9.00	-10.527	-37.74	3.000	-12.468	-19.97
1.05	-2.919	-19.93	3.50	-6.008	-33.35	1.050	-10.098	-31.37	3.500	-11.476	-16.28
1.20	-3.034	-19.94	4.00	-6.099	-30.27	1.200	-9.966	-28.20	4.000	-10.680	-13.65
1.35	-3.147	-19.96	4.50	-6.164	-27.36	1.350	-9.824	-25.97	4.500	-10.031	-11.45
1.50	-3.260	-19.99	5.00	-6.209	-24.64	1.500	-9.697	-23.47	5.000	-9.495	-9.57
1.65	-3.373	-19.04	5.50	-6.238	-22.11	1.650	-9.571	-21.52	5.500	-9.048	-7.92
1.80	-3.486	-19.10	6.00	-6.257	-19.76	1.800	-9.453	-19.80	6.000	-8.674	-6.45
1.95	-3.600	-19.18	6.50	-6.269	-17.58	1.950	-9.343	-18.82	6.500	-8.360	-5.12
2.10	-3.715	-19.27	7.00	-6.279	-15.55	2.100	-9.245	-17.91	7.000	-8.098	-3.91
2.25	-3.832	-19.38	7.50	-6.288	-13.67	2.250	-9.150	-17.22	7.500	-7.878	-2.79
2.40	-3.951	-19.50	8.00	-6.300	-11.92	2.400	-9.064	-16.70	8.000	-7.697	-1.75
2.55	-4.073	-19.64	8.50	-6.316	-10.30	2.550	-8.987	-16.31	8.500	-7.549	-0.77
2.70	-4.197	-19.79	9.00	-6.337	-8.78	2.700	-8.924	-16.05	9.000	-7.430	0.16
2.85	-4.322	-19.95	9.50	-6.364	-7.35	2.850	-8.869	-15.88	9.500	-7.338	1.04
3.00	-4.457	-20.13	1.000	-6.400	-6.02	3.000	-8.820	-15.74	10.000	-7.270	1.88

Table 139. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UE)	PHASE (DEG)	HEIGHT (KM)	AMP (UE)	PHASE (DEG)	HEIGHT (KM)	AMP (UE)	PHASE (DEG)	HEIGHT (KM)	AMP (UE)	PHASE (DEG)	HEIGHT (KM)	AMP (UE)	PHASE (DEG)	HEIGHT (KM)
0.000	-1.097	-17.55	0.000	-4.445	-43.31	0.000	-9.433	-83.00	0.000	-20.476	-124.38	0.000	-20.476	-124.38	0.000
0.003	-2.024	-17.34	0.010	-4.535	-42.03	0.030	-9.694	-80.96	0.100	-21.452	-117.15	0.100	-21.452	-117.15	0.100
0.006	-2.052	-17.14	0.020	-4.623	-41.95	0.060	-9.954	-78.65	0.200	-22.844	-104.77	0.200	-22.844	-104.77	0.200
0.009	-2.080	-16.93	0.030	-4.710	-41.27	0.090	-10.194	-76.68	0.300	-23.284	-99.27	0.300	-23.284	-99.27	0.300
0.012	-2.108	-16.72	0.040	-4.796	-40.58	0.120	-10.431	-74.45	0.400	-23.706	-88.91	0.400	-23.706	-88.91	0.400
0.015	-2.137	-16.52	0.050	-4.880	-39.88	0.150	-10.650	-72.18	0.500	-23.853	-78.20	0.500	-23.853	-78.20	0.500
0.018	-2.167	-16.31	0.060	-4.963	-39.18	0.180	-10.855	-69.83	0.600	-23.750	-67.76	0.600	-23.750	-67.76	0.600
0.021	-2.197	-16.10	0.070	-5.044	-38.48	0.210	-11.046	-67.45	0.700	-23.410	-58.13	0.700	-23.410	-58.13	0.700
0.024	-2.228	-15.90	0.080	-5.125	-37.78	0.240	-11.222	-65.04	0.800	-22.907	-49.60	0.800	-22.907	-49.60	0.800
0.027	-2.259	-15.69	0.090	-5.204	-37.07	0.270	-11.382	-62.50	0.900	-22.310	-42.26	0.900	-22.310	-42.26	0.900
0.030	-2.290	-15.48	0.100	-5.281	-36.36	0.300	-11.526	-60.15	1.000	-21.670	-36.01	1.000	-21.670	-36.01	1.000
0.033	-2.322	-15.27	0.110	-5.358	-35.64	0.330	-11.655	-57.68	1.100	-21.024	-30.71	1.100	-21.024	-30.71	1.100
0.036	-2.355	-15.07	0.120	-5.433	-34.93	0.360	-11.767	-55.22	1.200	-20.392	-26.21	1.200	-20.392	-26.21	1.200
0.039	-2.388	-14.86	0.130	-5.507	-34.21	0.390	-11.864	-52.76	1.300	-19.787	-22.35	1.300	-19.787	-22.35	1.300
0.042	-2.422	-14.65	0.140	-5.579	-33.49	0.420	-11.945	-50.32	1.400	-19.213	-19.01	1.400	-19.213	-19.01	1.400
0.045	-2.457	-14.44	0.150	-5.651	-32.77	0.450	-12.011	-47.91	1.500	-18.673	-16.11	1.500	-18.673	-16.11	1.500
0.048	-2.491	-14.23	0.160	-5.721	-32.05	0.480	-12.063	-45.52	1.600	-18.166	-13.55	1.600	-18.166	-13.55	1.600
0.051	-2.527	-14.02	0.170	-5.791	-31.33	0.510	-12.102	-43.18	1.700	-17.692	-11.27	1.700	-17.692	-11.27	1.700
0.054	-2.563	-13.81	0.180	-5.859	-30.61	0.540	-12.128	-40.88	1.800	-17.248	-9.24	1.800	-17.248	-9.24	1.800
0.057	-2.600	-13.60	0.190	-5.926	-29.89	0.570	-12.142	-38.63	1.900	-16.833	-7.40	1.900	-16.833	-7.40	1.900
0.060	-2.637	-13.39	0.200	-5.992	-29.17	0.600	-12.145	-36.43	2.000	-16.443	-5.73	2.000	-16.443	-5.73	2.000
0.063	-2.675	-13.18	0.210	-6.057	-28.45	0.630	-12.138	-34.29	2.100	-16.078	-4.20	2.100	-16.078	-4.20	2.100
0.066	-2.714	-12.97	0.220	-6.121	-27.73	0.660	-12.122	-32.21	2.200	-15.736	-2.79	2.200	-15.736	-2.79	2.200
0.069	-2.753	-12.76	0.230	-6.184	-27.01	0.690	-12.099	-30.18	2.300	-15.414	-1.44	2.300	-15.414	-1.44	2.300
0.072	-2.793	-12.55	0.240	-6.246	-26.30	0.720	-12.068	-28.22	2.400	-15.111	-0.27	2.400	-15.111	-0.27	2.400
0.075	-2.833	-12.34	0.250	-6.307	-25.58	0.750	-12.032	-26.33	2.500	-14.826	0.87	2.500	-14.826	0.87	2.500
0.078	-2.874	-12.12	0.260	-6.368	-24.87	0.780	-11.990	-24.49	2.600	-14.557	1.94	2.600	-14.557	1.94	2.600
0.081	-2.916	-11.91	0.270	-6.427	-24.15	0.810	-11.943	-22.72	2.700	-14.304	2.95	2.700	-14.304	2.95	2.700
0.084	-2.958	-11.70	0.280	-6.486	-23.44	0.840	-11.893	-21.01	2.800	-14.064	3.90	2.800	-14.064	3.90	2.800
0.087	-3.001	-11.49	0.290	-6.545	-22.73	0.870	-11.840	-19.35	2.900	-13.838	4.81	2.900	-13.838	4.81	2.900
0.090	-3.045	-11.27	0.300	-6.602	-22.03	0.900	-11.784	-17.75	3.000	-13.624	5.68	3.000	-13.624	5.68	3.000
0.105	-3.225	-10.19	0.350	-6.882	-18.53	1.050	-11.489	-10.56	3.500	-12.712	9.54	3.500	-12.712	9.54	3.500
0.120	-3.523	-9.09	0.400	-7.152	-15.09	1.200	-11.194	-4.48	4.000	-12.013	12.83	4.000	-12.013	12.83	4.000
0.135	-3.742	-7.97	0.450	-7.418	-11.72	1.350	-10.942	0.74	4.500	-11.475	15.78	4.500	-11.475	15.78	4.500
0.150	-4.002	-6.82	0.500	-7.685	-8.40	1.500	-10.733	5.31	5.000	-11.066	18.52	5.000	-11.066	18.52	5.000
0.165	-4.305	-5.63	0.550	-7.958	-5.12	1.650	-10.576	9.43	5.500	-10.762	21.13	5.500	-10.762	21.13	5.500
0.180	-4.734	-4.40	0.600	-8.241	-1.87	1.800	-10.472	13.22	6.000	-10.545	23.69	6.000	-10.545	23.69	6.000
0.195	-5.099	-3.11	0.650	-8.538	1.38	1.950	-10.420	16.80	6.500	-10.403	26.25	6.500	-10.403	26.25	6.500
0.210	-5.493	-1.75	0.700	-8.853	4.66	2.100	-10.417	20.25	7.000	-10.325	28.85	7.000	-10.325	28.85	7.000
0.225	-5.918	0.30	0.750	-9.187	8.00	2.250	-10.460	23.71	7.500	-10.303	31.54	7.500	-10.303	31.54	7.500
0.240	-6.378	1.25	0.800	-9.545	11.45	2.400	-10.546	27.11	8.000	-10.330	34.33	8.000	-10.330	34.33	8.000
0.255	-6.874	2.43	0.850	-9.925	15.06	2.550	-10.664	30.63	8.500	-10.401	37.29	8.500	-10.401	37.29	8.500
0.270	-7.411	3.78	0.900	-10.329	18.87	2.700	-10.825	34.29	9.000	-10.507	40.43	9.000	-10.507	40.43	9.000
0.285	-7.990	5.23	0.950	-10.754	22.95	2.850	-11.009	38.14	9.500	-10.644	43.80	9.500	-10.644	43.80	9.500
0.300	-8.616	6.84	1.000	-11.197	27.36	3.000	-11.213	42.24	10.000	-10.803	47.43	10.000	-10.803	47.43	10.000

Table 140. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.00	-26.409	-123.24	0.00	-37.384	-120.52	0.00	-47.071	-124.90	0.00	-57.280	-130.31
0.03	-26.797	-110.90	0.10	-37.931	-105.31	0.30	-45.058	-67.60	1.00	-48.121	-36.88
0.06	-26.990	-102.80	0.30	-37.081	-83.04	0.60	-40.117	-44.34	2.00	-39.955	-26.94
0.09	-27.035	-102.80	0.60	-35.446	-65.65	0.90	-36.647	-35.73	3.00	-38.383	-24.44
0.12	-26.991	-95.85	0.90	-33.686	-55.72	1.20	-34.124	-31.42	4.00	-33.875	-23.16
0.15	-26.807	-89.11	1.20	-32.062	-48.39	1.50	-32.167	-28.84	5.00	-31.947	-22.36
0.18	-26.521	-82.74	1.50	-30.625	-43.27	1.80	-30.575	-27.10	6.00	-30.383	-21.80
0.21	-26.157	-76.97	1.80	-29.362	-39.53	2.10	-29.239	-25.85	7.00	-29.069	-21.38
0.24	-25.735	-71.72	2.10	-28.246	-36.69	2.40	-28.089	-24.84	8.00	-27.949	-21.03
0.27	-25.260	-66.92	2.40	-27.253	-34.47	2.70	-27.082	-24.13	9.00	-27.848	-20.75
0.30	-24.790	-62.84	2.70	-26.362	-32.88	3.00	-26.187	-23.51	1.000	-26.067	-20.50
0.33	-24.311	-59.13	3.00	-25.556	-31.82	3.30	-25.383	-22.99	1.100	-25.274	-20.28
0.36	-23.823	-55.84	3.30	-24.821	-29.97	3.60	-24.653	-22.54	1.200	-24.554	-20.09
0.39	-23.347	-52.92	3.60	-24.147	-28.92	3.90	-23.986	-22.15	1.300	-23.895	-19.91
0.42	-22.869	-50.33	3.90	-23.526	-28.01	4.20	-23.372	-21.80	1.400	-23.288	-19.74
0.45	-22.440	-48.01	4.20	-22.950	-27.22	4.50	-22.803	-21.44	1.500	-22.726	-19.58
0.48	-21.990	-45.93	4.50	-22.414	-26.51	4.80	-22.274	-21.21	1.600	-22.603	-19.44
0.51	-21.569	-44.06	4.80	-21.913	-25.86	5.10	-22.174	-20.95	1.700	-22.715	-19.30
0.54	-21.163	-42.37	5.10	-21.443	-25.32	5.40	-21.318	-20.71	1.800	-22.256	-19.17
0.57	-20.774	-40.84	5.40	-21.001	-24.81	5.70	-20.882	-20.49	1.900	-20.825	-19.04
0.60	-20.400	-39.45	5.70	-20.584	-24.34	6.00	-20.471	-20.28	2.000	-20.417	-18.92
0.63	-20.040	-38.18	6.00	-20.189	-23.91	6.30	-20.082	-20.09	2.100	-20.032	-18.80
0.66	-19.695	-37.01	6.30	-19.815	-23.52	6.60	-19.713	-19.90	2.200	-19.666	-18.69
0.69	-19.364	-35.94	6.60	-19.459	-23.15	6.90	-19.362	-19.73	2.300	-19.318	-18.58
0.72	-19.040	-34.95	6.90	-19.120	-22.81	7.20	-19.028	-19.56	2.400	-18.987	-18.47
0.75	-18.739	-34.03	7.20	-18.797	-22.49	7.50	-18.710	-19.41	2.500	-18.670	-18.36
0.78	-18.445	-33.16	7.50	-18.488	-22.19	7.80	-18.405	-19.25	2.600	-18.568	-18.26
0.81	-18.161	-32.39	7.80	-18.192	-21.91	8.10	-18.113	-19.11	2.700	-18.078	-18.16
0.84	-17.887	-31.65	8.10	-17.909	-21.65	8.40	-17.834	-18.97	2.800	-17.800	-18.06
0.87	-17.624	-30.95	8.40	-17.637	-21.39	8.70	-17.565	-18.84	2.900	-17.534	-17.97
0.90	-17.369	-30.31	8.70	-17.376	-21.16	9.00	-17.307	-18.70	3.000	-17.277	-17.87
1.05	-16.660	-27.58	1.05	-16.205	-20.12	1.050	-16.150	-18.11	3.500	-16.127	-17.43
1.20	-15.639	-25.49	1.20	-15.216	-19.26	1.200	-15.172	-17.58	4.000	-15.153	-17.01
1.35	-14.390	-23.82	1.35	-14.365	-18.54	1.350	-14.329	-17.11	4.500	-14.314	-16.62
1.50	-13.060	-22.45	1.50	-13.623	-17.91	1.500	-13.593	-16.68	5.000	-13.580	-16.26
1.65	-12.500	-21.30	1.65	-12.967	-17.35	1.650	-12.942	-16.26	5.500	-12.932	-15.91
1.80	-11.840	-20.32	1.80	-12.382	-16.85	1.800	-12.361	-15.90	6.000	-12.353	-15.58
1.95	-11.187	-19.46	1.95	-11.856	-16.39	1.950	-11.834	-15.55	6.500	-11.832	-15.26
2.10	-11.395	-18.70	2.10	-11.381	-15.97	2.100	-11.366	-15.22	7.000	-11.360	-14.96
2.25	-11.900	-18.03	2.25	-11.948	-15.58	2.250	-11.936	-14.90	7.500	-11.931	-14.67
2.40	-11.562	-17.42	2.40	-11.552	-15.21	2.400	-11.542	-14.60	8.000	-11.538	-14.39
2.55	-11.197	-16.87	2.55	-11.189	-14.87	2.550	-11.180	-14.32	8.500	-11.176	-14.13
2.70	-10.800	-16.37	2.70	-10.854	-14.55	2.700	-10.846	-14.05	9.000	-10.843	-13.87
2.85	-10.349	-15.90	2.85	-10.544	-14.25	2.850	-10.538	-13.79	9.500	-10.535	-13.63
3.00	-9.901	-15.48	3.00	-10.257	-13.96	3.000	-10.251	-13.54	10.000	-10.249	-13.39

Table 141. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 2248 m

3.0 KM UPHWAVE				30.0 KM UPHWAVE				100.0 KM UPHWAVE			
ME (GMT)	AMP (DB)	PHASE (DEG)	ME (GMT)	AMP (DB)	PHASE (DEG)	ME (GMT)	AMP (DB)	PHASE (DEG)	ME (GMT)	AMP (DB)	PHASE (DEG)
0.00	-25.755	-74.32	0.00	-36.717	-76.54	0.00	-40.362	-79.37	0.00	-50.856	-79.70
0.03	-26.626	-67.86	0.10	-37.262	-55.02	0.30	-39.405	-17.07	1.00	-45.396	16.13
0.06	-26.454	-60.69	0.20	-36.410	-52.75	0.50	-35.935	6.19	1.30	-39.230	23.67
0.09	-26.316	-53.56	0.30	-34.774	-16.36	0.70	-33.413	17.10	1.40	-35.638	26.17
0.12	-26.452	-46.39	0.40	-33.013	-5.43	1.00	-31.456	21.69	1.50	-33.151	27.45
0.15	-26.267	-39.79	0.50	-31.369	1.90	1.30	-29.866	23.43	1.60	-31.223	28.25
0.18	-25.960	-33.46	0.70	-29.752	7.02	1.60	-28.530	24.69	1.70	-29.660	28.61
0.21	-25.614	-27.04	0.80	-28.090	10.77	1.80	-27.381	25.65	1.80	-28.347	29.25
0.24	-25.191	-20.37	0.90	-27.575	13.61	2.00	-26.375	26.41	1.90	-27.218	29.59
0.27	-24.736	-17.06	1.00	-26.283	15.83	2.30	-25.481	27.04	2.00	-26.226	29.69
0.30	-24.253	-13.46	1.10	-25.093	17.63	2.60	-24.676	27.57	2.10	-25.346	30.14
0.33	-23.766	-9.74	1.20	-24.087	19.11	3.00	-23.950	28.03	2.40	-24.556	30.36
0.36	-23.261	-6.44	1.30	-23.154	20.35	3.30	-23.285	28.43	2.70	-23.838	30.57
0.39	-22.603	-3.51	1.40	-22.382	21.41	3.60	-22.672	28.78	3.00	-23.181	30.75
0.42	-21.837	1.44	1.50	-21.666	22.33	4.00	-22.106	29.11	3.30	-22.576	30.93
0.45	-21.065	4.33	1.60	-21.574	23.14	4.30	-21.574	29.40	3.60	-21.926	31.09
0.48	-21.449	5.42	1.70	-21.255	24.49	4.60	-21.088	29.67	3.90	-21.406	31.25
0.51	-21.066	5.42	1.80	-20.788	25.07	5.00	-20.627	29.92	4.20	-21.009	31.40
0.54	-20.824	7.12	1.90	-20.348	25.54	5.30	-20.194	30.15	4.50	-20.553	31.54
0.57	-20.257	8.67	2.00	-19.933	26.07	5.60	-19.785	30.37	4.80	-20.124	31.68
0.60	-19.884	10.06	2.10	-19.541	26.51	6.00	-19.399	30.58	5.10	-19.719	31.81
0.63	-19.507	11.37	2.20	-19.169	26.92	6.30	-19.033	30.77	5.40	-19.337	31.94
0.66	-19.124	12.55	2.30	-18.817	27.30	6.60	-18.686	30.96	5.70	-18.974	32.07
0.69	-18.735	13.64	2.40	-18.481	27.66	7.00	-18.355	31.14	6.00	-18.629	32.19
0.72	-18.349	14.65	2.50	-18.161	28.00	7.30	-18.039	31.31	6.30	-18.301	32.32
0.75	-18.010	15.59	2.60	-17.855	28.31	7.60	-17.736	31.48	6.60	-17.988	32.43
0.78	-17.643	16.46	2.70	-17.563	28.61	8.00	-17.450	31.64	6.90	-17.689	32.55
0.81	-17.273	17.28	2.80	-17.283	28.90	8.30	-17.174	31.80	7.20	-17.403	32.67
0.84	-17.112	18.04	2.90	-17.015	29.17	8.60	-16.910	31.95	7.50	-17.129	32.78
0.87	-16.861	18.75	3.00	-16.758	29.42	9.00	-16.656	32.10	7.80	-16.866	32.90
0.90	-16.601	19.43							8.10	-16.614	33.01
1.05	-15.731	22.26	3.30	-15.605	30.57	1.050	-15.521	32.80	8.40	-15.486	33.56
1.20	-14.774	24.51	3.60	-14.845	31.54	1.200	-14.568	33.44	8.70	-14.538	34.09
1.35	-13.792	26.34	3.90	-13.623	32.40	1.350	-13.755	34.05	9.00	-13.729	34.61
1.50	-12.839	27.86	4.20	-13.112	33.19	1.500	-13.051	34.63	9.30	-13.028	35.12
1.65	-11.815	29.21	4.50	-12.492	33.91	1.650	-12.437	35.19	9.60	-12.416	35.63
1.80	-10.800	30.40	4.80	-11.946	34.60	1.800	-11.896	35.75	9.90	-11.876	36.15
1.95	-10.579	31.48	5.10	-11.463	35.26	1.950	-11.416	36.30	10.20	-11.399	36.66
2.10	-10.140	32.47	5.40	-11.034	35.91	2.100	-10.990	36.85	10.50	-10.974	37.17
2.25	-10.759	33.40	5.70	-10.651	36.53	2.250	-10.610	37.40	10.80	-10.594	37.69
2.40	-10.414	34.27	6.00	-10.308	37.15	2.400	-10.270	37.95	11.10	-10.255	38.22
2.55	-10.114	35.11	6.30	-10.002	37.77	2.550	-9.965	38.50	11.40	-9.951	38.75
2.70	-9.867	35.92	6.60	-9.727	38.36	2.700	-9.691	39.06	11.70	-9.678	39.29
2.85	-9.576	36.71	6.90	-9.480	38.99	2.850	-9.446	39.63	12.00	-9.434	39.84
3.00	-9.356	37.47	7.20	-9.259	39.61	3.000	-9.227	40.20			

Table 142. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
MEIUMT	AMP	PHASE	MEIUMT	AMP	PHASE	MEIUMT	AMP	PHASE	MEIUMT	AMP	PHASE	MEIUMT	AMP	PHASE
(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)
0.000	-26.433	-48.06	0.000	-26.854	-51.74	0.000	-42.407	-52.73	0.000	-52.868	-53.06	0.000	-52.868	-53.06
0.003	-26.739	-48.106	0.010	-33.403	-51.38	0.010	-33.403	-51.38	0.100	-41.408	-42.77	0.100	-41.408	-42.77
0.006	-26.930	-48.40	0.020	-36.551	-50.11	0.020	-36.551	-50.11	0.200	-35.243	-50.31	0.200	-35.243	-50.31
0.009	-26.994	-47.829	0.030	-30.914	-48.20	0.030	-30.914	-48.20	0.300	-31.671	-52.81	0.300	-31.671	-52.81
0.012	-26.969	-48.05	0.040	-24.154	-41.21	0.040	-24.154	-41.21	0.400	-29.164	-54.10	0.400	-29.164	-54.10
0.015	-26.744	-43.67	0.050	-27.530	-48.55	0.050	-27.530	-48.55	0.500	-27.237	-54.91	0.500	-27.237	-54.91
0.018	-26.450	-41.11	0.060	-26.094	-43.09	0.060	-26.094	-43.09	0.600	-25.675	-55.48	0.600	-25.675	-55.48
0.021	-26.093	-41.27	0.070	-24.832	-37.44	0.070	-24.832	-37.44	0.700	-24.363	-55.92	0.700	-24.363	-55.92
0.024	-21.610	4.02	0.080	-23.719	-40.29	0.080	-23.719	-40.29	0.800	-23.235	-56.28	0.800	-23.235	-56.28
0.027	-21.212	8.76	0.090	-22.728	-42.53	0.090	-22.728	-42.53	0.900	-22.247	-56.58	0.900	-22.247	-56.58
0.030	-20.733	12.99	0.100	-21.835	-44.34	0.100	-21.835	-44.34	1.000	-21.369	-56.85	1.000	-21.369	-56.85
0.033	-20.247	16.74	0.110	-21.035	-45.84	0.110	-21.035	-45.84	1.100	-20.579	-57.08	1.100	-20.579	-57.08
0.036	-19.762	20.07	0.120	-20.303	-47.10	0.120	-20.303	-47.10	1.200	-19.863	-57.30	1.200	-19.863	-57.30
0.039	-19.269	23.03	0.130	-19.633	-48.18	0.130	-19.633	-48.18	1.300	-19.208	-57.51	1.300	-19.208	-57.51
0.042	-18.819	25.08	0.140	-19.015	-49.12	0.140	-19.015	-49.12	1.400	-18.605	-57.70	1.400	-18.605	-57.70
0.045	-18.360	26.05	0.150	-18.443	-49.95	0.150	-18.443	-49.95	1.500	-18.048	-57.88	1.500	-18.048	-57.88
0.048	-17.933	30.16	0.160	-17.911	-50.68	0.160	-17.911	-50.68	1.600	-17.530	-58.06	1.600	-17.530	-58.06
0.051	-17.514	36.10	0.170	-17.415	-51.35	0.170	-17.415	-51.35	1.700	-17.047	-58.23	1.700	-17.047	-58.23
0.054	-17.112	33.64	0.180	-16.950	-51.95	0.180	-16.950	-51.95	1.800	-16.594	-58.40	1.800	-16.594	-58.40
0.057	-16.723	35.42	0.190	-16.513	-52.50	0.190	-16.513	-52.50	1.900	-16.168	-58.56	1.900	-16.168	-58.56
0.060	-16.355	36.87	0.200	-16.101	-53.01	0.200	-16.101	-53.01	2.000	-15.767	-58.72	2.000	-15.767	-58.72
0.063	-16.000	38.20	0.210	-15.713	-53.48	0.210	-15.713	-53.48	2.100	-15.388	-58.88	2.100	-15.388	-58.88
0.066	-15.659	39.43	0.220	-15.344	-53.92	0.220	-15.344	-53.92	2.200	-15.029	-59.03	2.200	-15.029	-59.03
0.069	-15.333	40.57	0.230	-14.995	-54.34	0.230	-14.995	-54.34	2.300	-14.688	-59.19	2.300	-14.688	-59.19
0.072	-15.019	41.62	0.240	-14.663	-54.73	0.240	-14.663	-54.73	2.400	-14.364	-59.34	2.400	-14.364	-59.34
0.075	-14.716	42.60	0.250	-14.347	-55.10	0.250	-14.347	-55.10	2.500	-14.056	-59.49	2.500	-14.056	-59.49
0.078	-14.429	43.52	0.260	-14.046	-55.45	0.260	-14.046	-55.45	2.600	-13.761	-59.65	2.600	-13.761	-59.65
0.081	-14.152	44.38	0.270	-13.758	-55.79	0.270	-13.758	-55.79	2.700	-13.480	-59.80	2.700	-13.480	-59.80
0.084	-13.883	45.19	0.280	-13.483	-56.11	0.280	-13.483	-56.11	2.800	-13.211	-59.95	2.800	-13.211	-59.95
0.087	-13.620	45.96	0.290	-13.219	-56.42	0.290	-13.219	-56.42	2.900	-12.953	-60.10	2.900	-12.953	-60.10
0.090	-13.361	46.68	0.300	-12.967	-56.72	0.300	-12.967	-56.72	3.000	-12.706	-60.25	3.000	-12.706	-60.25
0.105	-12.273	49.61	0.350	-11.845	-58.10	0.350	-11.845	-58.10	1.050	-11.672	-60.28	3.500	-11.607	-61.02
0.120	-11.541	52.36	0.400	-10.912	-59.34	0.400	-10.912	-59.34	1.200	-10.752	-61.18	4.000	-10.693	-61.81
0.135	-10.551	54.54	0.450	-10.126	-60.51	0.450	-10.126	-60.51	1.350	-9.976	-62.09	4.500	-9.921	-62.62
0.150	-9.5873	56.47	0.500	-9.456	-61.64	0.500	-9.456	-61.64	1.500	-9.314	-63.00	5.000	-9.262	-63.46
0.165	-8.609	58.24	0.550	-8.879	-62.74	0.550	-8.879	-62.74	1.650	-8.744	-63.94	5.500	-8.696	-64.34
0.180	-8.763	59.89	0.600	-8.382	-63.85	0.600	-8.382	-63.85	1.800	-8.252	-64.90	6.000	-8.206	-65.22
0.195	-8.343	61.48	0.650	-7.950	-64.98	0.650	-7.950	-64.98	1.950	-7.826	-65.90	6.500	-7.781	-66.22
0.210	-7.961	63.02	0.700	-7.576	-66.12	0.700	-7.576	-66.12	2.100	-7.456	-66.94	7.000	-7.413	-67.22
0.225	-7.629	64.54	0.750	-7.251	-67.30	0.750	-7.251	-67.30	2.250	-7.135	-68.02	7.500	-7.093	-68.27
0.240	-7.340	66.05	0.800	-6.969	-68.51	0.800	-6.969	-68.51	2.400	-6.857	-69.15	8.000	-6.817	-69.37
0.255	-7.089	67.57	0.850	-6.726	-69.75	0.850	-6.726	-69.75	2.550	-6.617	-70.33	8.500	-6.578	-70.53
0.270	-6.873	69.11	0.900	-6.517	-71.05	0.900	-6.517	-71.05	2.700	-6.411	-71.56	9.000	-6.373	-71.73
0.285	-6.680	70.67	0.950	-6.338	-72.39	0.950	-6.338	-72.39	2.850	-6.235	-72.84	9.500	-6.198	-73.00
0.300	-6.528	72.26	1.000	-6.187	-73.79	1.000	-6.187	-73.79	3.000	-6.086	-74.19	10.000	-6.050	-74.32

Table 143. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM UOMRANGE				3.0 KM UOMRANGE				10.0 KM UOMRANGE				30.0 KM UOMRANGE			
MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)	AMP (UB)	PHASE (DEG)	MEIGHT (KM)
0.00	-37.962	-94.14	0.00	-49.974	-94.29	0.00	-59.936	-94.59	0.00	-69.880	-94.81	0.00	-79.820	-94.81	0.00
.001	-37.952	-88.31	.003	-40.076	-88.97	.010	-46.084	-89.77	.030	-48.797	-90.57	.060	-48.820	-91.37	.090
.002	-37.910	-84.94	.006	-40.375	-86.30	.020	-47.733	-87.38	.040	-48.876	-88.47	.080	-48.876	-89.56	.120
.003	-37.977	-80.08	.009	-37.135	-82.30	.030	-34.785	-82.43	.060	-34.876	-83.40	.100	-34.876	-84.47	.150
.004	-37.942	-76.05	.012	-34.785	-82.43	.040	-32.925	-82.43	.070	-31.433	-83.40	.110	-31.433	-84.47	.160
.005	-37.904	-72.02	.015	-32.925	-82.43	.050	-30.111	-83.40	.080	-28.011	-84.47	.120	-28.011	-85.56	.170
.006	-37.966	-68.01	.018	-31.400	-83.40	.060	-28.011	-84.47	.090	-26.011	-85.56	.130	-26.011	-86.65	.180
.007	-37.974	-64.01	.021	-30.111	-83.40	.070	-26.011	-84.47	.100	-24.011	-85.56	.140	-24.011	-86.65	.190
.008	-37.950	-60.00	.024	-28.011	-84.47	.080	-24.011	-85.56	.110	-22.011	-86.65	.150	-22.011	-87.74	.200
.009	-37.922	-56.00	.027	-26.011	-85.56	.090	-22.011	-86.65	.120	-20.011	-87.74	.160	-20.011	-88.83	.210
.010	-37.894	-52.00	.030	-24.011	-86.65	.100	-20.011	-87.74	.130	-18.011	-88.83	.170	-18.011	-89.92	.220
.011	-37.866	-48.00	.033	-22.011	-87.74	.110	-18.011	-88.83	.140	-16.011	-90.00	.180	-16.011	-91.09	.230
.012	-37.838	-44.00	.036	-20.011	-88.83	.120	-16.011	-90.00	.150	-14.011	-91.09	.190	-14.011	-92.18	.240
.013	-37.810	-40.00	.039	-18.011	-90.00	.130	-14.011	-91.09	.160	-12.011	-92.18	.200	-12.011	-93.27	.250
.014	-37.782	-36.00	.042	-16.011	-91.09	.140	-12.011	-92.18	.170	-10.011	-93.27	.210	-10.011	-94.36	.260
.015	-37.754	-32.00	.045	-14.011	-92.18	.150	-10.011	-93.27	.180	-8.011	-94.36	.220	-8.011	-95.45	.270
.016	-37.726	-28.00	.048	-12.011	-93.27	.160	-8.011	-94.36	.190	-6.011	-95.45	.230	-6.011	-96.54	.280
.017	-37.698	-24.00	.051	-10.011	-94.36	.170	-6.011	-95.45	.200	-4.011	-96.54	.240	-4.011	-97.63	.290
.018	-37.670	-20.00	.054	-8.011	-95.45	.180	-4.011	-96.54	.210	-2.011	-97.63	.250	-2.011	-98.72	.300
.019	-37.642	-16.00	.057	-6.011	-96.54	.190	-2.011	-97.63	.220	-0.011	-98.72	.260	-0.011	-99.81	.310
.020	-37.614	-12.00	.060	-4.011	-97.63	.200	-0.011	-98.72	.230	0.011	-99.81	.270	0.011	-100.90	.320
.021	-37.586	-8.00	.063	-2.011	-98.72	.210	0.011	-99.81	.240	2.011	-100.90	.280	2.011	-101.99	.330
.022	-37.558	-4.00	.066	-0.011	-99.81	.220	2.011	-100.90	.250	4.011	-101.99	.290	4.011	-103.08	.340
.023	-37.530	0.00	.069	0.011	-100.90	.230	4.011	-101.99	.260	6.011	-103.08	.300	6.011	-104.17	.350
.024	-37.502	4.00	.072	2.011	-100.90	.240	6.011	-101.99	.270	8.011	-104.17	.310	8.011	-105.26	.360
.025	-37.474	8.00	.075	4.011	-99.81	.250	8.011	-100.90	.280	10.011	-105.26	.320	10.011	-106.35	.370
.026	-37.446	12.00	.078	6.011	-98.72	.260	10.011	-99.81	.290	12.011	-106.35	.330	12.011	-107.44	.380
.027	-37.418	16.00	.081	8.011	-97.63	.270	12.011	-98.72	.300	14.011	-107.44	.340	14.011	-108.53	.390
.028	-37.390	20.00	.084	10.011	-96.54	.280	14.011	-97.63	.310	16.011	-108.53	.350	16.011	-109.62	.400
.029	-37.362	24.00	.087	12.011	-95.45	.290	16.011	-96.54	.320	18.011	-109.62	.360	18.011	-110.71	.410
.030	-37.334	28.00	.090	14.011	-94.36	.300	18.011	-95.45	.330	20.011	-110.71	.370	20.011	-111.80	.420
.035	-17.170	-4.70	.105	-17.184	-2.98	.350	-17.183	-2.36	.400	-17.183	-2.36	.450	-17.183	-2.36	.500
.040	-16.193	-4.30	.120	-16.199	-2.80	.400	-16.198	-2.28	.450	-16.198	-2.28	.500	-16.198	-2.28	.550
.045	-15.344	-3.93	.135	-15.348	-2.60	.450	-15.347	-2.21	.500	-15.347	-2.21	.550	-15.347	-2.21	.600
.050	-14.599	-3.64	.150	-14.602	-2.53	.500	-14.601	-2.15	.550	-14.601	-2.15	.600	-14.601	-2.15	.650
.055	-13.940	-3.40	.165	-13.941	-2.43	.550	-13.940	-2.04	.600	-13.940	-2.04	.650	-13.940	-1.99	.700
.060	-13.340	-3.19	.180	-13.350	-2.34	.600	-13.349	-1.99	.650	-13.349	-1.99	.700	-13.349	-1.95	.750
.065	-12.815	-3.02	.195	-12.817	-2.26	.650	-12.816	-1.95	.700	-12.816	-1.95	.750	-12.816	-1.91	.800
.070	-12.332	-2.87	.210	-12.333	-2.18	.700	-12.333	-1.90	.750	-12.333	-1.90	.800	-12.333	-1.88	.850
.075	-11.880	-2.73	.225	-11.882	-2.12	.750	-11.881	-1.87	.800	-11.881	-1.87	.850	-11.881	-1.84	.900
.080	-11.460	-2.62	.240	-11.461	-2.06	.800	-11.461	-1.83	.850	-11.461	-1.83	.900	-11.461	-1.81	.950
.085	-11.114	-2.51	.255	-11.115	-2.01	.850	-11.114	-1.74	.900	-11.114	-1.74	.950	-11.114	-1.74	.1000
.090	-10.770	-2.42	.270	-10.770	-1.96	.900	-10.770	-1.76	.950	-10.770	-1.76	.1000	-10.770	-1.75	.1050
.095	-10.450	-2.33	.285	-10.451	-1.91	.950	-10.451	-1.73	.1000	-10.451	-1.73	.1050	-10.451	-1.72	.1100
.100	-10.154	-2.26	.300	-10.154	-1.87	.1000	-10.154	-1.73						-1.69	

Table 144. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE					3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE				
REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)	REL HT (KM)	AMP (DB)	PHASE (DEG)		
0.00	-37.053	-40.47	0.00	-46.557	-47.42	0.00	-57.008	-47.75	0.00	-66.569	-47.85	0.00	-77.008	-47.75	0.00	-86.569	-47.85		
0.01	-36.860	-41.03	0.01	-46.378	-47.90	0.01	-56.836	-48.17	0.01	-66.386	-48.27	0.01	-76.836	-48.17	0.01	-86.386	-48.27		
0.02	-36.660	-41.60	0.02	-46.207	-48.04	0.02	-56.664	-48.44	0.02	-66.207	-48.54	0.02	-76.664	-48.44	0.02	-86.207	-48.54		
0.03	-36.460	-42.17	0.03	-46.037	-48.11	0.03	-56.432	-48.71	0.03	-66.037	-48.81	0.03	-76.432	-48.71	0.03	-86.037	-48.81		
0.04	-36.260	-42.74	0.04	-45.864	-48.18	0.04	-56.260	-48.98	0.04	-65.864	-49.08	0.04	-76.260	-48.98	0.04	-85.864	-49.08		
0.05	-36.060	-43.31	0.05	-45.691	-48.25	0.05	-56.088	-49.15	0.05	-65.691	-49.25	0.05	-76.088	-49.15	0.05	-85.691	-49.25		
0.06	-35.860	-43.88	0.06	-45.518	-48.32	0.06	-55.915	-49.32	0.06	-65.518	-49.42	0.06	-75.915	-49.32	0.06	-85.518	-49.42		
0.07	-35.660	-44.45	0.07	-45.345	-48.39	0.07	-55.742	-49.39	0.07	-65.345	-49.49	0.07	-75.742	-49.39	0.07	-85.345	-49.49		
0.08	-35.460	-45.02	0.08	-45.172	-48.46	0.08	-55.569	-49.46	0.08	-65.172	-49.56	0.08	-75.569	-49.46	0.08	-85.172	-49.56		
0.09	-35.260	-45.59	0.09	-45.000	-48.53	0.09	-55.396	-49.53	0.09	-64.999	-49.63	0.09	-75.396	-49.53	0.09	-84.999	-49.63		
0.10	-35.060	-46.16	0.10	-44.827	-48.60	0.10	-55.223	-49.60	0.10	-64.827	-49.70	0.10	-75.223	-49.60	0.10	-84.827	-49.70		
0.11	-34.860	-46.73	0.11	-44.654	-48.67	0.11	-55.050	-49.67	0.11	-64.654	-49.77	0.11	-75.050	-49.67	0.11	-84.654	-49.77		
0.12	-34.660	-47.30	0.12	-44.481	-48.74	0.12	-54.877	-49.74	0.12	-64.481	-49.84	0.12	-74.877	-49.74	0.12	-84.481	-49.84		
0.13	-34.460	-47.87	0.13	-44.308	-48.81	0.13	-54.704	-49.81	0.13	-64.308	-49.91	0.13	-74.704	-49.81	0.13	-84.308	-49.91		
0.14	-34.260	-48.44	0.14	-44.135	-48.88	0.14	-54.531	-49.88	0.14	-64.135	-49.98	0.14	-74.531	-49.88	0.14	-84.135	-49.98		
0.15	-34.060	-49.01	0.15	-43.962	-48.95	0.15	-54.358	-49.95	0.15	-63.962	-50.05	0.15	-74.358	-49.95	0.15	-83.962	-50.05		
0.16	-33.860	-49.58	0.16	-43.789	-49.02	0.16	-54.185	-50.02	0.16	-63.789	-50.12	0.16	-74.185	-50.02	0.16	-83.789	-50.12		
0.17	-33.660	-50.15	0.17	-43.616	-49.09	0.17	-54.012	-50.09	0.17	-63.616	-50.19	0.17	-73.999	-50.09	0.17	-83.616	-50.19		
0.18	-33.460	-50.72	0.18	-43.443	-49.16	0.18	-53.839	-50.16	0.18	-63.443	-50.26	0.18	-73.839	-50.16	0.18	-83.443	-50.26		
0.19	-33.260	-51.29	0.19	-43.270	-49.23	0.19	-53.666	-50.23	0.19	-63.270	-50.33	0.19	-73.666	-50.23	0.19	-83.270	-50.33		
0.20	-33.060	-51.86	0.20	-43.097	-49.30	0.20	-53.493	-50.30	0.20	-63.097	-50.40	0.20	-73.493	-50.30	0.20	-83.097	-50.40		
0.21	-32.860	-52.43	0.21	-42.924	-49.37	0.21	-53.320	-50.37	0.21	-62.924	-50.50	0.21	-73.320	-50.37	0.21	-82.924	-50.50		
0.22	-32.660	-53.00	0.22	-42.751	-49.44	0.22	-53.147	-50.44	0.22	-62.751	-50.54	0.22	-73.147	-50.44	0.22	-82.751	-50.54		
0.23	-32.460	-53.57	0.23	-42.578	-49.51	0.23	-52.974	-50.51	0.23	-62.578	-50.64	0.23	-72.974	-50.51	0.23	-82.578	-50.64		
0.24	-32.260	-54.14	0.24	-42.405	-49.58	0.24	-52.801	-50.58	0.24	-62.405	-50.74	0.24	-72.801	-50.58	0.24	-82.405	-50.74		
0.25	-32.060	-54.71	0.25	-42.232	-49.65	0.25	-52.628	-50.65	0.25	-62.232	-50.84	0.25	-72.628	-50.65	0.25	-82.232	-50.84		
0.26	-31.860	-55.28	0.26	-42.059	-49.72	0.26	-52.455	-50.72	0.26	-62.059	-51.04	0.26	-72.455	-50.72	0.26	-82.059	-51.04		
0.27	-31.660	-55.85	0.27	-41.886	-49.79	0.27	-52.282	-50.79	0.27	-61.886	-51.24	0.27	-72.282	-50.79	0.27	-81.886	-51.24		
0.28	-31.460	-56.42	0.28	-41.713	-49.86	0.28	-52.109	-50.86	0.28	-61.713	-51.44	0.28	-72.109	-50.86	0.28	-81.713	-51.44		
0.29	-31.260	-56.99	0.29	-41.540	-49.93	0.29	-51.936	-50.93	0.29	-61.540	-51.64	0.29	-71.936	-50.93	0.29	-81.540	-51.64		
0.30	-31.060	-57.56	0.30	-41.367	-50.00	0.30	-51.763	-51.00	0.30	-61.367	-51.84	0.30	-71.763	-51.00	0.30	-81.367	-51.84		
0.35	-30.559	-58.60	0.35	-40.866	-50.50	0.35	-51.260	-51.50	0.35	-60.866	-52.38	0.35	-71.260	-51.50	0.35	-80.866	-52.38		
0.40	-30.058	-59.64	0.40	-39.864	-51.00	0.40	-50.759	-52.00	0.40	-59.864	-53.36	0.40	-70.759	-52.00	0.40	-79.864	-53.36		
0.45	-29.557	-60.68	0.45	-39.363	-51.50	0.45	-49.757	-52.50	0.45	-59.363	-54.72	0.45	-69.757	-52.50	0.45	-79.363	-54.72		
0.50	-29.056	-61.72	0.50	-38.862	-52.00	0.50	-48.755	-53.00	0.50	-58.862	-56.08	0.50	-68.755	-53.00	0.50	-78.862	-56.08		
0.55	-28.555	-62.76	0.55	-38.361	-52.50	0.55	-48.254	-53.50	0.55	-58.361	-57.44	0.55	-68.254	-53.50	0.55	-78.361	-57.44		
0.60	-28.054	-63.80	0.60	-37.860	-53.00	0.60	-47.753	-54.00	0.60	-57.860	-58.80	0.60	-67.753	-54.00	0.60	-77.860	-58.80		
0.65	-27.553	-64.84	0.65	-37.359	-53.50	0.65	-47.252	-54.50	0.65	-57.359	-60.16	0.65	-67.252	-54.50	0.65	-77.359	-60.16		
0.70	-27.052	-65.88	0.70	-36.858	-54.00	0.70	-46.751	-55.00	0.70	-56.858	-61.52	0.70	-66.751	-55.00	0.70	-76.858	-61.52		
0.75	-26.551	-66.92	0.75	-36.357	-54.50	0.75	-46.250	-55.50	0.75	-56.357	-62.88	0.75	-66.250	-55.50	0.75	-76.357	-62.88		
0.80	-26.050	-67.96	0.80	-35.856	-55.00	0.80	-45.749	-56.00	0.80	-55.856	-64.24	0.80	-65.749	-56.00	0.80	-75.856	-64.24		
0.85	-25.549	-69.00	0.85	-35.355	-55.50	0.85	-45.248	-56.50	0.85	-55.355	-65.60	0.85	-65.248	-56.50	0.85	-75.355	-65.60		
0.90	-25.048	-70.04	0.90	-34.854	-56.00	0.90	-44.747	-57.00	0.90	-54.854	-66.96	0.90	-64.747	-57.00	0.90	-74.854	-66.96		
0.95	-24.547	-71.08	0.95	-34.353	-56.50	0.95	-44.246	-57.50	0.95	-54.353	-68.32	0.95	-64.246	-57.50	0.95	-74.353	-68.32		
1.00	-24.046	-72.12	1.00	-34.046	-57.00	1.00	-43.745	-58.00	1.00	-53.854	-69.68	1.00	-63.745	-58.00	1.00	-73.854	-69.68		

Table 145. Azimuthal Magnetic Field (Well-Conducting Soil), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DISTANCE				3.0 KM DISTANCE				10.0 KM DISTANCE				30.0 KM DISTANCE			
MEI (M)	AMP (UB)	PHASE (DEG)	MEI (M)	AMP (UB)	PHASE (DEG)	MEI (M)	AMP (UB)	PHASE (DEG)	MEI (M)	AMP (UB)	PHASE (DEG)	MEI (M)	AMP (UB)	PHASE (DEG)	MEI (M)
0.000	-33.053	-27.062	0.000	-42.506	-26.445	0.000	-52.933	-26.755	0.000	-62.467	-28.884	0.000	-62.467	-28.884	0.000
0.01	-32.377	-27.070	0.01	-38.126	-26.886	0.01	-48.661	-27.177	0.01	-58.784	-29.450	0.01	-58.784	-29.450	0.01
0.02	-30.544	-27.070	0.02	-33.406	-27.144	0.02	-43.796	-27.377	0.02	-53.408	-30.151	0.02	-53.408	-30.151	0.02
0.03	-28.724	-27.070	0.03	-30.186	-27.144	0.03	-40.330	-27.477	0.03	-50.325	-30.822	0.03	-50.325	-30.822	0.03
0.04	-26.907	-27.070	0.04	-27.411	-27.144	0.04	-37.876	-27.534	0.04	-47.866	-31.508	0.04	-47.866	-31.508	0.04
0.05	-25.091	-27.070	0.05	-25.554	-27.144	0.05	-35.979	-27.611	0.05	-45.967	-32.201	0.05	-45.967	-32.201	0.05
0.06	-23.274	-27.070	0.06	-23.736	-27.144	0.06	-34.079	-27.699	0.06	-44.064	-32.901	0.06	-44.064	-32.901	0.06
0.07	-21.457	-27.070	0.07	-21.919	-27.144	0.07	-32.179	-27.790	0.07	-42.159	-33.606	0.07	-42.159	-33.606	0.07
0.08	-19.640	-27.070	0.08	-20.102	-27.144	0.08	-30.279	-27.886	0.08	-40.254	-34.316	0.08	-40.254	-34.316	0.08
0.09	-17.823	-27.070	0.09	-18.285	-27.144	0.09	-28.379	-27.986	0.09	-38.349	-35.031	0.09	-38.349	-35.031	0.09
0.10	-16.006	-27.070	0.10	-16.468	-27.144	0.10	-26.479	-28.086	0.10	-36.444	-35.751	0.10	-36.444	-35.751	0.10
0.11	-14.189	-27.070	0.11	-14.651	-27.144	0.11	-24.579	-28.186	0.11	-34.539	-36.476	0.11	-34.539	-36.476	0.11
0.12	-12.372	-27.070	0.12	-12.834	-27.144	0.12	-22.679	-28.286	0.12	-32.634	-37.201	0.12	-32.634	-37.201	0.12
0.13	-10.555	-27.070	0.13	-11.017	-27.144	0.13	-20.779	-28.386	0.13	-30.729	-37.926	0.13	-30.729	-37.926	0.13
0.14	-8.738	-27.070	0.14	-9.199	-27.144	0.14	-18.879	-28.486	0.14	-28.824	-38.651	0.14	-28.824	-38.651	0.14
0.15	-6.921	-27.070	0.15	-7.382	-27.144	0.15	-16.979	-28.586	0.15	-26.919	-39.376	0.15	-26.919	-39.376	0.15
0.16	-5.104	-27.070	0.16	-5.565	-27.144	0.16	-15.079	-28.686	0.16	-25.014	-40.101	0.16	-25.014	-40.101	0.16
0.17	-3.287	-27.070	0.17	-3.748	-27.144	0.17	-13.179	-28.786	0.17	-23.109	-40.826	0.17	-23.109	-40.826	0.17
0.18	-1.470	-27.070	0.18	-1.931	-27.144	0.18	-11.279	-28.886	0.18	-21.204	-41.551	0.18	-21.204	-41.551	0.18
0.19	-0.653	-27.070	0.19	-1.114	-27.144	0.19	-9.379	-28.986	0.19	-19.299	-42.276	0.19	-19.299	-42.276	0.19
0.20	-0.836	-27.070	0.20	-1.297	-27.144	0.20	-11.479	-29.086	0.20	-17.394	-43.001	0.20	-17.394	-43.001	0.20
0.21	-1.019	-27.070	0.21	-1.480	-27.144	0.21	-13.579	-29.186	0.21	-15.489	-43.726	0.21	-15.489	-43.726	0.21
0.22	-1.202	-27.070	0.22	-1.663	-27.144	0.22	-15.679	-29.286	0.22	-13.584	-44.451	0.22	-13.584	-44.451	0.22
0.23	-1.385	-27.070	0.23	-1.846	-27.144	0.23	-17.779	-29.386	0.23	-11.679	-45.176	0.23	-11.679	-45.176	0.23
0.24	-1.568	-27.070	0.24	-2.029	-27.144	0.24	-19.879	-29.486	0.24	-9.774	-45.901	0.24	-9.774	-45.901	0.24
0.25	-1.751	-27.070	0.25	-2.212	-27.144	0.25	-21.979	-29.586	0.25	-7.869	-46.626	0.25	-7.869	-46.626	0.25
0.26	-1.934	-27.070	0.26	-2.395	-27.144	0.26	-24.079	-29.686	0.26	-5.964	-47.351	0.26	-5.964	-47.351	0.26
0.27	-2.117	-27.070	0.27	-2.578	-27.144	0.27	-26.179	-29.786	0.27	-4.059	-48.076	0.27	-4.059	-48.076	0.27
0.28	-2.300	-27.070	0.28	-2.761	-27.144	0.28	-28.279	-29.886	0.28	-2.154	-48.801	0.28	-2.154	-48.801	0.28
0.29	-2.483	-27.070	0.29	-2.944	-27.144	0.29	-30.379	-29.986	0.29	-0.249	-49.526	0.29	-0.249	-49.526	0.29
0.30	-2.666	-27.070	0.30	-3.127	-27.144	0.30	-32.479	-30.086	0.30	1.656	-50.251	0.30	1.656	-50.251	0.30
0.31	-2.849	-27.070	0.31	-3.310	-27.144	0.31	-34.579	-30.186	0.31	3.751	-50.976	0.31	3.751	-50.976	0.31
0.32	-3.032	-27.070	0.32	-3.493	-27.144	0.32	-36.679	-30.286	0.32	5.846	-51.701	0.32	5.846	-51.701	0.32
0.33	-3.215	-27.070	0.33	-3.676	-27.144	0.33	-38.779	-30.386	0.33	7.941	-52.426	0.33	7.941	-52.426	0.33
0.34	-3.398	-27.070	0.34	-3.859	-27.144	0.34	-40.879	-30.486	0.34	10.036	-53.151	0.34	10.036	-53.151	0.34
0.35	-3.581	-27.070	0.35	-4.042	-27.144	0.35	-42.979	-30.586	0.35	12.131	-53.876	0.35	12.131	-53.876	0.35
0.36	-3.764	-27.070	0.36	-4.225	-27.144	0.36	-45.079	-30.686	0.36	14.226	-54.601	0.36	14.226	-54.601	0.36
0.37	-3.947	-27.070	0.37	-4.408	-27.144	0.37	-47.179	-30.786	0.37	16.321	-55.326	0.37	16.321	-55.326	0.37
0.38	-4.130	-27.070	0.38	-4.591	-27.144	0.38	-49.279	-30.886	0.38	18.416	-56.051	0.38	18.416	-56.051	0.38
0.39	-4.313	-27.070	0.39	-4.774	-27.144	0.39	-51.379	-30.986	0.39	20.511	-56.776	0.39	20.511	-56.776	0.39
0.40	-4.496	-27.070	0.40	-4.957	-27.144	0.40	-53.479	-31.086	0.40	22.606	-57.501	0.40	22.606	-57.501	0.40
0.41	-4.679	-27.070	0.41	-5.140	-27.144	0.41	-55.579	-31.186	0.41	24.701	-58.226	0.41	24.701	-58.226	0.41
0.42	-4.862	-27.070	0.42	-5.323	-27.144	0.42	-57.679	-31.286	0.42	26.796	-58.951	0.42	26.796	-58.951	0.42
0.43	-5.045	-27.070	0.43	-5.506	-27.144	0.43	-59.779	-31.386	0.43	28.891	-59.676	0.43	28.891	-59.676	0.43
0.44	-5.228	-27.070	0.44	-5.689	-27.144	0.44	-61.879	-31.486	0.44	30.986	-60.401	0.44	30.986	-60.401	0.44
0.45	-5.411	-27.070	0.45	-5.872	-27.144	0.45	-63.979	-31.586	0.45	33.081	-61.126	0.45	33.081	-61.126	0.45
0.46	-5.594	-27.070	0.46	-6.055	-27.144	0.46	-66.079	-31.686	0.46	35.176	-61.851	0.46	35.176	-61.851	0.46
0.47	-5.777	-27.070	0.47	-6.238	-27.144	0.47	-68.179	-31.786	0.47	37.271	-62.576	0.47	37.271	-62.576	0.47
0.48	-5.960	-27.070	0.48	-6.421	-27.144	0.48	-70.279	-31.886	0.48	39.366	-63.301	0.48	39.366	-63.301	0.48
0.49	-6.143	-27.070	0.49	-6.604	-27.144	0.49	-72.379	-31.986	0.49	41.461	-64.026	0.49	41.461	-64.026	0.49
0.50	-6.326	-27.070	0.50	-6.787	-27.144	0.50	-74.479	-32.086	0.50	43.556	-64.751	0.50	43.556	-64.751	0.50
0.51	-6.509	-27.070	0.51	-6.970	-27.144	0.51	-76.579	-32.186	0.51	45.651	-65.476	0.51	45.651	-65.476	0.51
0.52	-6.692	-27.070	0.52	-7.153	-27.144	0.52	-78.679	-32.286	0.52	47.746	-66.201	0.52	47.746	-66.201	0.52
0.53	-6.875	-27.070	0.53	-7.336	-27.144	0.53	-80.779	-32.386	0.53	49.841	-66.926	0.53	49.841	-66.926	0.53
0.54	-7.058	-27.070	0.54	-7.519	-27.144	0.54	-82.879	-32.486	0.54	51.936	-67.651	0.54	51.936	-67.651	0.54
0.55	-7.241	-27.070	0.55	-7.702	-27.144	0.55	-84.979	-32.586	0.55	54.031	-68.376	0.55	54.031	-68.376	0.55
0.56	-7.424	-27.070	0.56	-7.885	-27.144	0.56	-87.079	-32.686	0.56	56.126	-69.101	0.56	56.126	-69.101	0.56
0.57	-7.607	-27.070	0.57	-8.068	-27.144	0.57	-89.179	-32.786	0.57	58.221	-69.826	0.57	58.221	-69.826	0.57
0.58	-7.790	-27.070	0.58	-8.251	-27.144	0.58	-91.279	-32.886	0.58	60.316	-70.551	0.58	60.316	-70.551	0.58
0.59	-7.973	-27.070	0.59	-8.434	-27.144	0.59	-93.379	-32.986	0.59	62.411	-71.276	0.59	62.411	-71.276	0.59
0.60	-8.156	-27.070	0.60	-8.617	-27.144	0.60	-95.479	-33.086	0.60	64.506	-72.001	0.60	64.506	-72.001	0.60
0.61	-8.339	-27.070	0.61	-8.800	-27.144	0.61	-97.579	-33.186	0.61	66.601	-72.726	0.61	66.601	-72.726	0.61
0.62	-8.522	-27.070	0.62	-8.983	-27.144	0.62	-99.679	-33.286	0.62	68.696	-73.451	0.62	68.696	-73.451	0.62
0.63	-8.705	-27.070	0.63	-9.166	-27.144	0.63	-101.779	-33.386	0.63	70.791	-74.176	0.63	70.791	-74.176	0.63
0.64	-8.888	-27.070	0.64	-9.349	-27.144	0.64	-103.879	-33.486	0.64	72.886	-74.901	0.64	72.886	-74.901	0.64
0.65	-9.071	-27.070	0.65	-9.532	-27.144	0.65	-105.979	-33.586	0.65	74.981	-75.626	0.65	74.981	-75.626	0.65
0.66	-9.254	-27.070	0.66	-9.715	-27.144	0.66	-108.079	-33.686	0.66	77.076	-76.351	0.66	77.076	-76.351	0.66
0.67	-9.437	-27.070	0.67	-9.898	-27.144	0.67	-110.179	-33.786	0.67	79.171	-77.076	0.67	79.171	-77.076	0.67
0.68	-9.620	-27.070	0.68	-10.081	-27.144	0.68	-112.279	-33.886	0.68	81.266	-77.801	0.68	81.266	-77.801	0.68
0.69	-9.803	-27.070	0.69	-10.264	-27.144	0.69	-114.379	-33.986	0.69	83.361	-78.526	0.69	83.361	-78.526	0.69
0.70	-9.986	-27.070	0.70	-10.447	-27.144	0.70	-116.479	-34.086	0.70	85.456	-79.251	0.70	85.456	-79.251	0.70
0.71	-10.169	-27.070	0.71	-10.630	-27.14										

Table 146. Vertical Electric Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 NM UOMRANGE				100.0 NM UOMRANGE				300.0 NM UOMRANGE			
REL GMT	AMP	PHASE		REL GMT	AMP	PHASE		REL GMT	AMP	PHASE	
(KM)	(DB)	(DEG)		(KM)	(DB)	(DEG)		(KM)	(DB)	(DEG)	
0.000	-8.50	-41.82		0.000	-6.473	-76.47		0.000	-6.725	-120.36	
0.30	-8.88	-41.83		0.300	-6.555	-73.01		0.300	-6.999	-118.37	
0.60	-9.22	-41.83		0.600	-6.654	-73.15		0.600	-7.511	-114.16	
0.90	-9.59	-41.83		0.900	-6.741	-71.80		0.900	-7.748	-111.96	
1.20	-9.99	-40.84		1.200	-6.826	-71.12		1.200	-7.970	-109.70	
1.50	-10.37	-40.84		1.500	-6.909	-70.43		1.500	-8.177	-107.39	
1.80	-10.71	-40.84		1.800	-6.986	-69.74		1.800	-8.368	-105.03	
2.10	-11.00	-40.84		2.100	-7.060	-69.04		2.100	-8.542	-102.63	
2.40	-11.25	-40.84		2.400	-7.131	-68.34		2.400	-8.699	-100.21	
2.70	-11.46	-39.84		2.700	-7.200	-67.64		2.700	-8.838	-97.76	
3.00	-11.63	-39.84		3.000	-7.265	-66.93		3.000	-8.959	-95.31	
3.30	-11.76	-39.84		3.300	-7.326	-66.23		3.300	-9.061	-92.85	
3.60	-11.86	-39.84		3.600	-7.383	-65.52		3.600	-9.146	-90.41	
3.90	-11.92	-39.84		3.900	-7.437	-64.80		3.900	-9.214	-87.99	
4.20	-11.96	-39.84		4.200	-7.488	-64.09		4.200	-9.264	-85.60	
4.50	-12.01	-39.84		4.500	-7.536	-63.38		4.500	-9.299	-83.24	
4.80	-12.04	-39.84		4.800	-7.582	-62.67		4.800	-9.318	-80.93	
5.10	-12.05	-39.84		5.100	-7.625	-61.96		5.100	-9.323	-78.67	
5.40	-12.05	-39.84		5.400	-7.665	-61.25		5.400	-9.315	-76.46	
5.70	-12.03	-39.84		5.700	-7.702	-60.54		5.700	-9.294	-74.32	
6.00	-12.00	-39.84		6.000	-7.736	-59.83		6.000	-9.262	-72.25	
6.30	-11.95	-39.84		6.300	-7.767	-59.13		6.300	-9.220	-70.24	
6.60	-11.89	-39.84		6.600	-7.795	-58.43		6.600	-9.169	-68.29	
6.90	-11.82	-39.84		6.900	-7.821	-57.73		6.900	-9.110	-66.42	
7.20	-11.74	-39.84		7.200	-7.844	-57.04		7.200	-9.044	-64.62	
7.50	-11.64	-39.84		7.500	-7.864	-56.35		7.500	-8.972	-62.89	
7.80	-11.53	-39.84		7.800	-7.881	-55.66		7.800	-8.895	-61.23	
8.10	-11.40	-39.84		8.100	-7.895	-54.98		8.100	-8.813	-59.64	
8.40	-11.25	-39.84		8.400	-7.907	-54.31		8.400	-8.728	-58.11	
8.70	-11.09	-39.84		8.700	-7.918	-53.64		8.700	-8.640	-56.64	
9.00	-10.91	-39.84		9.000	-7.928	-53.04		9.000			
1.050	-10.59	-39.85		1.050	-7.937	-52.43		10.500	-8.547	-55.20	
1.200	-10.44	-39.85		1.200	-7.945	-51.81		12.000	-8.450	-53.80	
1.350	-10.28	-39.85		1.350	-7.952	-51.19		13.500	-8.348	-52.44	
1.500	-10.11	-39.85		1.500	-7.958	-50.57		15.000	-8.241	-51.12	
1.650	-9.94	-39.85		1.650	-7.963	-49.95		16.500	-8.129	-49.84	
1.800	-9.76	-39.85		1.800	-7.967	-49.33		18.000	-8.013	-48.60	
1.950	-9.58	-39.85		1.950	-7.970	-48.71		19.500	-7.893	-47.40	
2.100	-9.39	-39.85		2.100	-7.972	-48.09		21.000	-7.767	-46.24	
2.250	-9.20	-39.85		2.250	-7.973	-47.47		22.500	-7.636	-45.12	
2.400	-9.00	-39.85		2.400	-7.973	-46.85		24.000	-7.500	-44.04	
2.550	-8.79	-39.85		2.550	-7.972	-46.23		25.500	-7.359	-43.00	
2.700	-8.57	-39.85		2.700	-7.970	-45.61		27.000	-7.213	-42.00	
2.850	-8.34	-39.85		2.850	-7.967	-44.99		28.500	-7.062	-41.04	
3.000	-8.11	-39.85		3.000	-7.963	-44.37		30.000	-6.906	-40.12	

Table 147. Vertical Electric Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 2247.60 m

300.0 KM. DISTANCE				100.0 KM. DISTANCE				300.0 KM. DISTANCE			
HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)
0.000	-1.2553	-27.50	0.000	-5.444	-26.74	0.000	-8.455	-103.85	0.000	-8.455	-103.85
0.30	-1.781	-27.35	0.100	-4.037	-26.14	0.300	-6.730	-101.86	0.300	-6.730	-101.86
0.60	-2.009	-27.16	0.200	-3.127	-25.47	0.600	-5.993	-99.74	0.600	-5.993	-99.74
0.90	-2.064	-26.92	0.300	-2.215	-24.80	0.900	-5.245	-97.65	0.900	-5.245	-97.65
1.20	-2.091	-26.76	0.400	-1.301	-24.12	1.200	-4.483	-95.46	1.200	-4.483	-95.46
1.50	-2.091	-26.57	0.500	-0.386	-23.44	1.500	-3.706	-93.20	1.500	-3.706	-93.20
1.80	-2.070	-26.37	0.600	-0.466	-22.75	1.800	-2.918	-90.84	1.800	-2.918	-90.84
2.10	-2.040	-26.17	0.700	-0.546	-22.06	2.100	-2.111	-88.53	2.100	-2.111	-88.53
2.40	-2.010	-25.96	0.800	-0.625	-21.36	2.400	-1.290	-86.16	2.400	-1.290	-86.16
2.70	-1.979	-25.76	0.900	-0.704	-20.66	2.700	-0.451	-83.72	2.700	-0.451	-83.72
3.00	-1.948	-25.56	1.000	-0.771	-19.96	3.000	-0.594	-81.27	3.000	-0.594	-81.27
3.30	-1.917	-25.35	1.100	-0.840	-19.25	3.300	-0.720	-78.82	3.300	-0.720	-78.82
3.60	-1.886	-25.15	1.200	-0.910	-18.54	3.600	-0.829	-76.37	3.600	-0.829	-76.37
3.90	-1.855	-24.94	1.300	-0.978	-17.83	3.900	-0.920	-73.93	3.900	-0.920	-73.93
4.20	-1.824	-24.74	1.400	-1.046	-17.12	4.200	-1.004	-71.51	4.200	-1.004	-71.51
4.50	-1.793	-24.53	1.500	-1.112	-16.41	4.500	-1.082	-69.11	4.500	-1.082	-69.11
4.80	-1.762	-24.33	1.600	-1.176	-15.70	4.800	-1.154	-66.75	4.800	-1.154	-66.75
5.10	-1.731	-24.13	1.700	-1.240	-15.00	5.100	-1.221	-64.43	5.100	-1.221	-64.43
5.40	-1.699	-23.92	1.800	-1.304	-14.29	5.400	-1.284	-62.16	5.400	-1.284	-62.16
5.70	-1.668	-23.72	1.900	-1.367	-13.58	5.700	-1.343	-59.85	5.700	-1.343	-59.85
6.00	-1.637	-23.51	2.000	-1.430	-12.87	6.000	-1.400	-57.57	6.000	-1.400	-57.57
6.30	-1.606	-23.31	2.100	-1.492	-12.16	6.300	-1.454	-55.30	6.300	-1.454	-55.30
6.60	-1.575	-23.11	2.200	-1.554	-11.45	6.600	-1.506	-53.06	6.600	-1.506	-53.06
6.90	-1.544	-22.90	2.300	-1.616	-10.74	6.900	-1.557	-50.83	6.900	-1.557	-50.83
7.20	-1.513	-22.70	2.400	-1.678	-10.03	7.200	-1.607	-48.60	7.200	-1.607	-48.60
7.50	-1.482	-22.50	2.500	-1.740	-9.32	7.500	-1.656	-46.39	7.500	-1.656	-46.39
7.80	-1.451	-22.30	2.600	-1.802	-8.61	7.800	-1.704	-44.19	7.800	-1.704	-44.19
8.10	-1.420	-22.10	2.700	-1.864	-7.90	8.100	-1.752	-41.99	8.100	-1.752	-41.99
8.40	-1.389	-21.90	2.800	-1.926	-7.19	8.400	-1.800	-39.79	8.400	-1.800	-39.79
8.70	-1.358	-21.70	2.900	-1.988	-6.48	8.700	-1.847	-37.59	8.700	-1.847	-37.59
9.00	-1.327	-21.50	3.000	-2.050	-5.77	9.000	-1.895	-35.39	9.000	-1.895	-35.39
9.30	-1.296	-21.30	3.100	-2.112	-5.06	9.300	-1.942	-33.19	9.300	-1.942	-33.19
9.60	-1.265	-21.10	3.200	-2.174	-4.35	9.600	-1.989	-30.99	9.600	-1.989	-30.99
9.90	-1.234	-20.90	3.300	-2.236	-3.64	9.900	-2.036	-28.79	9.900	-2.036	-28.79
10.20	-1.203	-20.70	3.400	-2.298	-2.93	10.200	-2.083	-26.59	10.200	-2.083	-26.59
10.50	-1.172	-20.50	3.500	-2.360	-2.22	10.500	-2.130	-24.39	10.500	-2.130	-24.39
10.80	-1.141	-20.30	3.600	-2.422	-1.51	10.800	-2.177	-22.19	10.800	-2.177	-22.19
11.10	-1.110	-20.10	3.700	-2.484	-0.80	11.100	-2.224	-19.99	11.100	-2.224	-19.99
11.40	-1.079	-19.90	3.800	-2.546	-0.09	11.400	-2.271	-17.79	11.400	-2.271	-17.79
11.70	-1.048	-19.70	3.900	-2.608	0.62	11.700	-2.318	-15.59	11.700	-2.318	-15.59
12.00	-1.017	-19.50	4.000	-2.670	1.33	12.000	-2.365	-13.39	12.000	-2.365	-13.39
12.30	-0.986	-19.30	4.100	-2.732	2.04	12.300	-2.412	-11.19	12.300	-2.412	-11.19
12.60	-0.955	-19.10	4.200	-2.794	2.75	12.600	-2.459	-8.99	12.600	-2.459	-8.99
12.90	-0.924	-18.90	4.300	-2.856	3.46	12.900	-2.506	-6.79	12.900	-2.506	-6.79
13.20	-0.893	-18.70	4.400	-2.918	4.17	13.200	-2.553	-4.59	13.200	-2.553	-4.59
13.50	-0.862	-18.50	4.500	-2.980	4.88	13.500	-2.600	-2.39	13.500	-2.600	-2.39
13.80	-0.831	-18.30	4.600	-3.042	5.59	13.800	-2.647	0.00	13.800	-2.647	0.00
14.10	-0.800	-18.10	4.700	-3.104	6.30	14.100	-2.694	2.20	14.100	-2.694	2.20
14.40	-0.769	-17.90	4.800	-3.166	7.01	14.400	-2.741	4.40	14.400	-2.741	4.40
14.70	-0.738	-17.70	4.900	-3.228	7.72	14.700	-2.788	6.60	14.700	-2.788	6.60
15.00	-0.707	-17.50	5.000	-3.290	8.43	15.000	-2.835	8.80	15.000	-2.835	8.80
15.30	-0.676	-17.30	5.100	-3.352	9.14	15.300	-2.882	11.00	15.300	-2.882	11.00
15.60	-0.645	-17.10	5.200	-3.414	9.85	15.600	-2.929	13.20	15.600	-2.929	13.20
15.90	-0.614	-16.90	5.300	-3.476	10.56	15.900	-2.976	15.40	15.900	-2.976	15.40
16.20	-0.583	-16.70	5.400	-3.538	11.27	16.200	-3.023	17.60	16.200	-3.023	17.60
16.50	-0.552	-16.50	5.500	-3.600	11.98	16.500	-3.070	19.80	16.500	-3.070	19.80
16.80	-0.521	-16.30	5.600	-3.662	12.69	16.800	-3.117	22.00	16.800	-3.117	22.00
17.10	-0.490	-16.10	5.700	-3.724	13.40	17.100	-3.164	24.20	17.100	-3.164	24.20
17.40	-0.459	-15.90	5.800	-3.786	14.11	17.400	-3.211	26.40	17.400	-3.211	26.40
17.70	-0.428	-15.70	5.900	-3.848	14.82	17.700	-3.258	28.60	17.700	-3.258	28.60
18.00	-0.397	-15.50	6.000	-3.910	15.53	18.000	-3.305	30.80	18.000	-3.305	30.80
18.30	-0.366	-15.30	6.100	-3.972	16.24	18.300	-3.352	33.00	18.300	-3.352	33.00
18.60	-0.335	-15.10	6.200	-4.034	16.95	18.600	-3.399	35.20	18.600	-3.399	35.20
18.90	-0.304	-14.90	6.300	-4.096	17.66	18.900	-3.446	37.40	18.900	-3.446	37.40
19.20	-0.273	-14.70	6.400	-4.158	18.37	19.200	-3.493	39.60	19.200	-3.493	39.60
19.50	-0.242	-14.50	6.500	-4.220	19.08	19.500	-3.540	41.80	19.500	-3.540	41.80
19.80	-0.211	-14.30	6.600	-4.282	19.79	19.800	-3.587	44.00	19.800	-3.587	44.00
20.10	-0.180	-14.10	6.700	-4.344	20.50	20.100	-3.634	46.20	20.100	-3.634	46.20
20.40	-0.149	-13.90	6.800	-4.406	21.21	20.400	-3.681	48.40	20.400	-3.681	48.40
20.70	-0.118	-13.70	6.900	-4.468	21.92	20.700	-3.728	50.60	20.700	-3.728	50.60
21.00	-0.087	-13.50	7.000	-4.530	22.63	21.000	-3.775	52.80	21.000	-3.775	52.80
21.30	-0.056	-13.30	7.100	-4.592	23.34	21.300	-3.822	55.00	21.300	-3.822	55.00
21.60	-0.025	-13.10	7.200	-4.654	24.05	21.600	-3.869	57.20	21.600	-3.869	57.20
21.90	0.006	-12.90	7.300	-4.716	24.76	21.900	-3.916	59.40	21.900	-3.916	59.40
22.20	0.035	-12.70	7.400	-4.778	25.47	22.200	-3.963	61.60	22.200	-3.963	61.60
22.50	0.064	-12.50	7.500	-4.840	26.18	22.500	-4.010	63.80	22.500	-4.010	63.80
22.80	0.093	-12.30	7.600	-4.902	26.89	22.800	-4.057	66.00	22.800	-4.057	66.00
23.10	0.122	-12.10	7.700	-4.964	27.60	23.100	-4.104	68.20	23.100	-4.104	68.20
23.40	0.151	-11.90	7.800	-5.026	28.31	23.400	-4.151	70.40	23.400	-4.151	70.40
23.70	0.180	-11.70	7.900	-5.088	29.02	23.700	-4.198	72.60	23.700	-4.198	72.60
24.00	0.209	-11.50	8.000	-5.150	29.73	24.000	-4.245	74.80	24.000	-4.245	74.80
24.30	0.238	-11.30	8.100	-5.212	30.44	24.300	-4.292	77.00	24.300	-4.292	77.00
24.60	0.267	-11.10	8.200	-5.274	31.15	24.600	-4.339	79.20	24.600	-4.339	79.20
24.90	0.296	-10.90	8.300	-5.336	31.86	24.900	-4.386	81.40	24.900	-4.386	81.40
25.20	0.325	-10.70	8.400	-5.398	32.57	25.200	-4.433	83.60	25.200	-4.433	83.60
25.50	0.354	-10.50	8.500	-5.460	33.28	25.500	-4.480	85.80	25.500	-4.480	85.80
25.80	0.383	-10.30	8.600	-5.522	33.99	25.800	-4.527	88.00	25.800	-4.527	88.00
26.10	0.412	-10.10	8.700	-5.584	34.70	26.100	-4.574	90.20	26.100	-4.574	90.20
26.40	0.441	-9.90	8.800	-5.646	35.41	26.400	-4.621	92.40	26.400	-4.621	92.40
26.70	0.470	-9.70	8.900	-5.708	36.12	26.700	-4.668	94.60	26.700	-4.668	94.60
27.00	0.499	-9.50	9.000	-5.770	36.83	27.000	-4.715	96.80	27.000	-4.715	96.80
27.30	0.528	-9.30	9.100	-5.832	37.54	27.300	-4.762	99.00	27.300	-4.762	99.00
27.60	0.557	-9.10	9.200	-5.894	38.25	27.600	-4.809	101.20	27.600	-4.809	101.20
27.90	0.586	-8.90	9.300	-5.956	38.96	27.900	-4.856	103.40	27.900	-4.856	103.40
28.20	0.615	-8.70	9.400	-6.018	39.67	28.200	-4.903	105.60	28.200	-4.903	105.60
28.50	0.644	-8.50	9.500	-6.080	40.38	28.500	-				

Table 148. Vertical Electric Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 4495.20 m

3000 KM CURRENTAGE				10000 KM CURRENTAGE				50000 KM CURRENTAGE			
RELUMT	AMP	PHASE		RELUMT	AMP	PHASE		RELUMT	AMP	PHASE	
(RM)	(UB)	(UEB)		(RM)	(UB)	(UEB)		(RM)	(UB)	(UEB)	
3.000	-14.930	-17.499		0.000	-44.310	-44.493		0.000	-94.261	-94.663	
4.300	-14.900	-17.474		1.000	-44.400	-44.374		1.000	-94.535	-94.633	
5.600	-14.994	-17.450		2.000	-44.499	-44.342		2.000	-94.806	-94.657	
6.900	-14.963	-17.435		3.000	-44.599	-44.344		3.000	-100.057	-77.443	
8.200	-14.956	-17.417		4.000	-44.570	-44.370		4.000	-100.300	-77.424	
9.500	-14.966	-17.447		5.000	-44.700	-44.350		5.000	-100.530	-74.440	
10.800	-14.916	-17.470		6.000	-44.937	-44.337		6.000	-100.750	-74.440	
12.100	-14.945	-17.455		7.000	-44.937	-44.337		7.000	-100.954	-70.330	
13.400	-14.914	-17.435		8.000	-44.900	-44.300		8.000	-111.143	-67.993	
14.700	-14.939	-17.414		9.000	-44.900	-44.300		9.000	-111.317	-67.950	
16.000	-14.900	-17.394		1.000	-44.900	-44.300		1.000	-111.476	-67.950	
17.300	-14.925	-17.374		2.000	-44.900	-44.300		2.000	-111.614	-67.950	
18.600	-14.900	-17.354		3.000	-44.900	-44.300		3.000	-111.746	-67.950	
19.900	-14.925	-17.334		4.000	-44.900	-44.300		4.000	-111.857	-67.950	
21.200	-14.900	-17.314		5.000	-44.900	-44.300		5.000	-111.953	-67.950	
22.500	-14.925	-17.294		6.000	-44.900	-44.300		6.000	-112.040	-67.950	
23.800	-14.900	-17.274		7.000	-44.900	-44.300		7.000	-112.124	-67.950	
25.100	-14.925	-17.254		8.000	-44.900	-44.300		8.000	-112.208	-67.950	
26.400	-14.900	-17.234		9.000	-44.900	-44.300		9.000	-112.292	-67.950	
27.700	-14.925	-17.214		1.000	-44.900	-44.300		1.000	-112.376	-67.950	
29.000	-14.900	-17.194		2.000	-44.900	-44.300		2.000	-112.460	-67.950	
30.300	-14.925	-17.174		3.000	-44.900	-44.300		3.000	-112.544	-67.950	
31.600	-14.900	-17.154		4.000	-44.900	-44.300		4.000	-112.628	-67.950	
32.900	-14.925	-17.134		5.000	-44.900	-44.300		5.000	-112.712	-67.950	
34.200	-14.900	-17.114		6.000	-44.900	-44.300		6.000	-112.796	-67.950	
35.500	-14.925	-17.094		7.000	-44.900	-44.300		7.000	-112.880	-67.950	
36.800	-14.900	-17.074		8.000	-44.900	-44.300		8.000	-112.964	-67.950	
38.100	-14.925	-17.054		9.000	-44.900	-44.300		9.000	-113.048	-67.950	
39.400	-14.900	-17.034		1.000	-44.900	-44.300		1.000	-113.132	-67.950	
40.700	-14.925	-17.014		2.000	-44.900	-44.300		2.000	-113.216	-67.950	
42.000	-14.900	-16.994		3.000	-44.900	-44.300		3.000	-113.300	-67.950	
43.300	-14.925	-16.974		4.000	-44.900	-44.300		4.000	-113.384	-67.950	
44.600	-14.900	-16.954		5.000	-44.900	-44.300		5.000	-113.468	-67.950	
45.900	-14.925	-16.934		6.000	-44.900	-44.300		6.000	-113.552	-67.950	
47.200	-14.900	-16.914		7.000	-44.900	-44.300		7.000	-113.636	-67.950	
48.500	-14.925	-16.894		8.000	-44.900	-44.300		8.000	-113.720	-67.950	
49.800	-14.900	-16.874		9.000	-44.900	-44.300		9.000	-113.804	-67.950	
51.100	-14.925	-16.854		1.000	-44.900	-44.300		1.000	-113.888	-67.950	
52.400	-14.900	-16.834		2.000	-44.900	-44.300		2.000	-113.972	-67.950	
53.700	-14.925	-16.814		3.000	-44.900	-44.300		3.000	-114.056	-67.950	
55.000	-14.900	-16.794		4.000	-44.900	-44.300		4.000	-114.140	-67.950	
56.300	-14.925	-16.774		5.000	-44.900	-44.300		5.000	-114.224	-67.950	
57.600	-14.900	-16.754		6.000	-44.900	-44.300		6.000	-114.308	-67.950	
58.900	-14.925	-16.734		7.000	-44.900	-44.300		7.000	-114.392	-67.950	
60.200	-14.900	-16.714		8.000	-44.900	-44.300		8.000	-114.476	-67.950	
61.500	-14.925	-16.694		9.000	-44.900	-44.300		9.000	-114.560	-67.950	
62.800	-14.900	-16.674		1.000	-44.900	-44.300		1.000	-114.644	-67.950	
64.100	-14.925	-16.654		2.000	-44.900	-44.300		2.000	-114.728	-67.950	
65.400	-14.900	-16.634		3.000	-44.900	-44.300		3.000	-114.812	-67.950	
66.700	-14.925	-16.614		4.000	-44.900	-44.300		4.000	-114.896	-67.950	
68.000	-14.900	-16.594		5.000	-44.900	-44.300		5.000	-114.980	-67.950	
69.300	-14.925	-16.574		6.000	-44.900	-44.300		6.000	-115.064	-67.950	
70.600	-14.900	-16.554		7.000	-44.900	-44.300		7.000	-115.148	-67.950	
71.900	-14.925	-16.534		8.000	-44.900	-44.300		8.000	-115.232	-67.950	
73.200	-14.900	-16.514		9.000	-44.900	-44.300		9.000	-115.316	-67.950	
74.500	-14.925	-16.494		1.000	-44.900	-44.300		1.000	-115.400	-67.950	
75.800	-14.900	-16.474		2.000	-44.900	-44.300		2.000	-115.484	-67.950	
77.100	-14.925	-16.454		3.000	-44.900	-44.300		3.000	-115.568	-67.950	
78.400	-14.900	-16.434		4.000	-44.900	-44.300		4.000	-115.652	-67.950	
79.700	-14.925	-16.414		5.000	-44.900	-44.300		5.000	-115.736	-67.950	
81.000	-14.900	-16.394		6.000	-44.900	-44.300		6.000	-115.820	-67.950	
82.300	-14.925	-16.374		7.000	-44.900	-44.300		7.000	-115.904	-67.950	
83.600	-14.900	-16.354		8.000	-44.900	-44.300		8.000	-115.988	-67.950	
84.900	-14.925	-16.334		9.000	-44.900	-44.300		9.000	-116.072	-67.950	
86.200	-14.900	-16.314		1.000	-44.900	-44.300		1.000	-116.156	-67.950	
87.500	-14.925	-16.294		2.000	-44.900	-44.300		2.000	-116.240	-67.950	
88.800	-14.900	-16.274		3.000	-44.900	-44.300		3.000	-116.324	-67.950	
90.100	-14.925	-16.254		4.000	-44.900	-44.300		4.000	-116.408	-67.950	
91.400	-14.900	-16.234		5.000	-44.900	-44.300		5.000	-116.492	-67.950	
92.700	-14.925	-16.214		6.000	-44.900	-44.300		6.000	-116.576	-67.950	
94.000	-14.900	-16.194		7.000	-44.900	-44.300		7.000	-116.660	-67.950	
95.300	-14.925	-16.174		8.000	-44.900	-44.300		8.000	-116.744	-67.950	
96.600	-14.900	-16.154		9.000	-44.900	-44.300		9.000	-116.828	-67.950	
97.900	-14.925	-16.134		1.000	-44.900	-44.300		1.000	-116.912	-67.950	
99.200	-14.900	-16.114		2.000	-44.900	-44.300		2.000	-116.996	-67.950	
100.500	-14.925	-16.094		3.000	-44.900	-44.300		3.000	-117.080	-67.950	
101.800	-14.900	-16.074		4.000	-44.900	-44.300		4.000	-117.164	-67.950	
103.100	-14.925	-16.054		5.000	-44.900	-44.300		5.000	-117.248	-67.950	
104.400	-14.900	-16.034		6.000	-44.900	-44.300		6.000	-117.332	-67.950	
105.700	-14.925	-16.014		7.000	-44.900	-44.300		7.000	-117.416	-67.950	
107.000	-14.900	-15.994		8.000	-44.900	-44.300		8.000	-117.500	-67.950	
108.300	-14.925	-15.974		9.000	-44.900	-44.300		9.000	-117.584	-67.950	
109.600	-14.900	-15.954		1.000	-44.900	-44.300		1.000	-117.668	-67.950	
110.900	-14.925	-15.934		2.000	-44.900	-44.300		2.000	-117.752	-67.950	
112.200	-14.900	-15.914		3.000	-44.900	-44.300		3.000	-117.836	-67.950	
113.500	-14.925	-15.894		4.000	-44.900	-44.300		4.000	-117.920	-67.950	
114.800	-14.900	-15.874		5.000	-44.900	-44.300		5.000	-118.004	-67.950	
116.100	-14.925	-15.854		6.000	-44.900	-44.300		6.000	-118.088	-67.950	
117.400	-14.900	-15.834		7.000	-44.900	-44.300		7.000	-118.172	-67.950	
118.700	-14.925	-15.814		8.000	-44.900	-44.300		8.000	-118.256	-67.950	
120.000	-14.900	-15.794		9.000	-44.900	-44.300		9.000	-118.340	-67.950	
121.300	-14.925	-15.774		1.000	-44.900	-44.300		1.000	-118.424	-67.950	
122.600	-14.900	-15.754		2.000	-44.900	-44.300		2.000	-118.508	-67.950	
123.900	-14.925	-15.734		3.000	-44.900	-44.300		3.000	-118.592	-67.950	
125.200	-14.900	-15.714		4.000	-44.900	-44.300		4.000	-118.676	-67.950	
126.500	-14.925	-15.694		5.000	-44.900	-44.300		5.000	-118.760	-67.950	
127.800	-14.900	-15.674		6.000	-44.900	-44.300		6.000	-118.844	-67.950	
129.100	-14.925	-15.654		7.000	-44.900	-44.300		7.000	-118.928	-67.950	
130.400	-14.900	-15.634		8.000	-44.900	-44.300		8.000	-119.012	-67.950	
131.700	-14.925	-15.614		9.000	-44.900	-44.300		9.000	-119.096	-67.950	
133.000	-14.900	-15.594		1.000	-44.900	-44.300		1.000	-119.180	-67.950	
134.300	-14.925	-15.574		2.000	-44.900	-44.300		2.000	-119.264	-67.950	
135.600	-14.900	-15.554		3.000	-44.900	-44.300		3.000	-119.348	-67.950	
136.90											

Table 149. Vertical Electric Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 0.00 m

30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
RE (M)	AMP (DB)	PHASE (DEG)	RE (M)	AMP (DB)	PHASE (DEG)	RE (M)	AMP (DB)	PHASE (DEG)	RE (M)
.00	-8.791	-73.62	.00	-18.000	-13.50	.00	-20.735	-14.402	.00
.03	-8.800	-73.57	.03	-18.240	-13.50	.03	-20.735	-14.402	.03
.06	-8.790	-73.50	.06	-18.424	-13.50	.06	-20.735	-14.402	.06
.09	-8.760	-73.45	.09	-18.507	-13.50	.09	-20.735	-14.402	.09
.12	-8.711	-73.40	.12	-18.735	-13.50	.12	-20.735	-14.402	.12
.15	-8.655	-73.35	.15	-18.908	-13.50	.15	-20.735	-14.402	.15
.18	-8.613	-73.30	.18	-19.084	-13.50	.18	-20.735	-14.402	.18
.21	-8.561	-73.25	.21	-19.262	-13.50	.21	-20.735	-14.402	.21
.24	-8.500	-73.20	.24	-19.440	-13.50	.24	-20.735	-14.402	.24
.27	-8.439	-73.15	.27	-19.618	-13.50	.27	-20.735	-14.402	.27
.30	-8.378	-73.10	.30	-19.796	-13.50	.30	-20.735	-14.402	.30
.33	-8.317	-73.05	.33	-19.974	-13.50	.33	-20.735	-14.402	.33
.36	-8.256	-73.00	.36	-20.152	-13.50	.36	-20.735	-14.402	.36
.39	-8.195	-72.95	.39	-20.330	-13.50	.39	-20.735	-14.402	.39
.42	-8.134	-72.90	.42	-20.508	-13.50	.42	-20.735	-14.402	.42
.45	-8.073	-72.85	.45	-20.686	-13.50	.45	-20.735	-14.402	.45
.48	-8.012	-72.80	.48	-20.864	-13.50	.48	-20.735	-14.402	.48
.51	-7.951	-72.75	.51	-21.042	-13.50	.51	-20.735	-14.402	.51
.54	-7.890	-72.70	.54	-21.220	-13.50	.54	-20.735	-14.402	.54
.57	-7.829	-72.65	.57	-21.398	-13.50	.57	-20.735	-14.402	.57
.60	-7.768	-72.60	.60	-21.576	-13.50	.60	-20.735	-14.402	.60
.63	-7.707	-72.55	.63	-21.754	-13.50	.63	-20.735	-14.402	.63
.66	-7.646	-72.50	.66	-21.932	-13.50	.66	-20.735	-14.402	.66
.69	-7.585	-72.45	.69	-22.110	-13.50	.69	-20.735	-14.402	.69
.72	-7.524	-72.40	.72	-22.288	-13.50	.72	-20.735	-14.402	.72
.75	-7.463	-72.35	.75	-22.466	-13.50	.75	-20.735	-14.402	.75
.78	-7.402	-72.30	.78	-22.644	-13.50	.78	-20.735	-14.402	.78
.81	-7.341	-72.25	.81	-22.822	-13.50	.81	-20.735	-14.402	.81
.84	-7.280	-72.20	.84	-23.000	-13.50	.84	-20.735	-14.402	.84
.87	-7.219	-72.15	.87	-23.178	-13.50	.87	-20.735	-14.402	.87
.90	-7.158	-72.10	.90	-23.356	-13.50	.90	-20.735	-14.402	.90
.93	-7.097	-72.05	.93	-23.534	-13.50	.93	-20.735	-14.402	.93
.96	-7.036	-72.00	.96	-23.712	-13.50	.96	-20.735	-14.402	.96
.99	-6.975	-71.95	.99	-23.890	-13.50	.99	-20.735	-14.402	.99
1.02	-6.914	-71.90	1.02	-24.068	-13.50	1.02	-20.735	-14.402	1.02
1.05	-6.853	-71.85	1.05	-24.246	-13.50	1.05	-20.735	-14.402	1.05
1.08	-6.792	-71.80	1.08	-24.424	-13.50	1.08	-20.735	-14.402	1.08
1.11	-6.731	-71.75	1.11	-24.602	-13.50	1.11	-20.735	-14.402	1.11
1.14	-6.670	-71.70	1.14	-24.780	-13.50	1.14	-20.735	-14.402	1.14
1.17	-6.609	-71.65	1.17	-24.958	-13.50	1.17	-20.735	-14.402	1.17
1.20	-6.548	-71.60	1.20	-25.136	-13.50	1.20	-20.735	-14.402	1.20
1.23	-6.487	-71.55	1.23	-25.314	-13.50	1.23	-20.735	-14.402	1.23
1.26	-6.426	-71.50	1.26	-25.492	-13.50	1.26	-20.735	-14.402	1.26
1.29	-6.365	-71.45	1.29	-25.670	-13.50	1.29	-20.735	-14.402	1.29
1.32	-6.304	-71.40	1.32	-25.848	-13.50	1.32	-20.735	-14.402	1.32
1.35	-6.243	-71.35	1.35	-26.026	-13.50	1.35	-20.735	-14.402	1.35
1.38	-6.182	-71.30	1.38	-26.204	-13.50	1.38	-20.735	-14.402	1.38
1.41	-6.121	-71.25	1.41	-26.382	-13.50	1.41	-20.735	-14.402	1.41
1.44	-6.060	-71.20	1.44	-26.560	-13.50	1.44	-20.735	-14.402	1.44
1.47	-6.000	-71.15	1.47	-26.738	-13.50	1.47	-20.735	-14.402	1.47
1.50	-5.939	-71.10	1.50	-26.916	-13.50	1.50	-20.735	-14.402	1.50
1.53	-5.878	-71.05	1.53	-27.094	-13.50	1.53	-20.735	-14.402	1.53
1.56	-5.817	-71.00	1.56	-27.272	-13.50	1.56	-20.735	-14.402	1.56
1.59	-5.756	-70.95	1.59	-27.450	-13.50	1.59	-20.735	-14.402	1.59
1.62	-5.695	-70.90	1.62	-27.628	-13.50	1.62	-20.735	-14.402	1.62
1.65	-5.634	-70.85	1.65	-27.806	-13.50	1.65	-20.735	-14.402	1.65
1.68	-5.573	-70.80	1.68	-27.984	-13.50	1.68	-20.735	-14.402	1.68
1.71	-5.512	-70.75	1.71	-28.162	-13.50	1.71	-20.735	-14.402	1.71
1.74	-5.451	-70.70	1.74	-28.340	-13.50	1.74	-20.735	-14.402	1.74
1.77	-5.390	-70.65	1.77	-28.518	-13.50	1.77	-20.735	-14.402	1.77
1.80	-5.329	-70.60	1.80	-28.696	-13.50	1.80	-20.735	-14.402	1.80
1.83	-5.268	-70.55	1.83	-28.874	-13.50	1.83	-20.735	-14.402	1.83
1.86	-5.207	-70.50	1.86	-29.052	-13.50	1.86	-20.735	-14.402	1.86
1.89	-5.146	-70.45	1.89	-29.230	-13.50	1.89	-20.735	-14.402	1.89
1.92	-5.085	-70.40	1.92	-29.408	-13.50	1.92	-20.735	-14.402	1.92
1.95	-5.024	-70.35	1.95	-29.586	-13.50	1.95	-20.735	-14.402	1.95
1.98	-4.963	-70.30	1.98	-29.764	-13.50	1.98	-20.735	-14.402	1.98
2.01	-4.902	-70.25	2.01	-29.942	-13.50	2.01	-20.735	-14.402	2.01
2.04	-4.841	-70.20	2.04	-30.120	-13.50	2.04	-20.735	-14.402	2.04
2.07	-4.780	-70.15	2.07	-30.298	-13.50	2.07	-20.735	-14.402	2.07
2.10	-4.719	-70.10	2.10	-30.476	-13.50	2.10	-20.735	-14.402	2.10
2.13	-4.658	-70.05	2.13	-30.654	-13.50	2.13	-20.735	-14.402	2.13
2.16	-4.597	-70.00	2.16	-30.832	-13.50	2.16	-20.735	-14.402	2.16
2.19	-4.536	-69.95	2.19	-31.010	-13.50	2.19	-20.735	-14.402	2.19
2.22	-4.475	-69.90	2.22	-31.188	-13.50	2.22	-20.735	-14.402	2.22
2.25	-4.414	-69.85	2.25	-31.366	-13.50	2.25	-20.735	-14.402	2.25
2.28	-4.353	-69.80	2.28	-31.544	-13.50	2.28	-20.735	-14.402	2.28
2.31	-4.292	-69.75	2.31	-31.722	-13.50	2.31	-20.735	-14.402	2.31
2.34	-4.231	-69.70	2.34	-31.900	-13.50	2.34	-20.735	-14.402	2.34
2.37	-4.170	-69.65	2.37	-32.078	-13.50	2.37	-20.735	-14.402	2.37
2.40	-4.109	-69.60	2.40	-32.256	-13.50	2.40	-20.735	-14.402	2.40
2.43	-4.048	-69.55	2.43	-32.434	-13.50	2.43	-20.735	-14.402	2.43
2.46	-3.987	-69.50	2.46	-32.612	-13.50	2.46	-20.735	-14.402	2.46
2.49	-3.926	-69.45	2.49	-32.790	-13.50	2.49	-20.735	-14.402	2.49
2.52	-3.865	-69.40	2.52	-32.968	-13.50	2.52	-20.735	-14.402	2.52
2.55	-3.804	-69.35	2.55	-33.146	-13.50	2.55	-20.735	-14.402	2.55
2.58	-3.743	-69.30	2.58	-33.324	-13.50	2.58	-20.735	-14.402	2.58
2.61	-3.682	-69.25	2.61	-33.502	-13.50	2.61	-20.735	-14.402	2.61
2.64	-3.621	-69.20	2.64	-33.680	-13.50	2.64	-20.735	-14.402	2.64
2.67	-3.560	-69.15	2.67	-33.858	-13.50	2.67	-20.735	-14.402	2.67
2.70	-3.500	-69.10	2.70	-34.036	-13.50	2.70	-20.735	-14.402	2.70
2.73	-3.439	-69.05	2.73	-34.214	-13.50	2.73	-20.735	-14.402	2.73
2.76	-3.378	-69.00	2.76	-34.392	-13.50	2.76	-20.735	-14.402	2.76
2.79	-3.317	-68.95	2.79	-34.570	-13.50	2.79	-20.735	-14.402	2.79
2.82	-3.256	-68.90	2.82	-34.748	-13.50	2.82	-20.735	-14.402	2.82
2.85	-3.195	-68.85	2.85	-34.926	-13.50	2.85	-20.735	-14.402	2.85
2.88	-3.134	-68.80	2.88	-35.104	-13.50	2.88	-20.735	-14.402	2.88
2.91	-3.073	-68.75	2.91	-35.282	-13.50	2.91	-20.735	-14.402	2.91
2.94	-3.012	-68.70	2.94	-35.460	-13.50	2.94	-20.735	-14.402	2.94
2.97	-2.951	-68.65	2.97	-35.638	-13.50	2.97	-20.735	-14.402	2.97
3.00	-2.890	-68.60	3.00	-35.816	-13.50	3.00	-20.735	-14.402	3.00

Table 150. Vertical Electric Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM UMBRANAGE				10.0 KM UMBRANAGE				100.0 KM UMBRANAGE			
ME [UMT]	AMP (DB)	PHASE (DEG)	ME [UMT]	AMP (DB)	PHASE (DEG)	ME [UMT]	AMP (DB)	PHASE (DEG)	ME [UMT]	AMP (DB)	PHASE (DEG)
.000	-9.107	-47.76	.000	-10.444	-75.79	.000	-28.775	-84.91	.000	-39.500	-86.84
.003	-9.244	-47.42	.010	-10.532	-73.23	.030	-29.305	-77.60	.100	-40.742	-59.74
.006	-9.297	-46.52	.020	-10.800	-70.00	.060	-29.705	-69.54	.200	-39.505	-31.85
.009	-9.333	-45.79	.030	-10.971	-68.30	.090	-29.931	-60.96	.300	-37.834	-12.51
.012	-9.400	-45.06	.040	-11.119	-65.73	.120	-29.975	-52.19	.400	-35.871	-7.79
.015	-9.457	-44.33	.050	-11.232	-63.11	.150	-29.820	-43.61	.500	-33.805	6.53
.018	-9.507	-43.60	.060	-11.368	-60.44	.180	-29.490	-35.56	.600	-32.193	11.42
.021	-9.556	-42.86	.070	-11.506	-57.74	.210	-29.042	-28.25	.700	-30.808	14.90
.024	-9.604	-42.12	.080	-11.647	-55.00	.240	-28.501	-21.79	.800	-29.504	17.48
.027	-9.650	-41.37	.090	-11.809	-52.25	.270	-27.909	-16.15	.900	-28.545	19.49
.030	-9.695	-40.63	.100	-11.951	-49.49	.300	-27.294	-11.27	1.000	-27.802	21.10
.033	-9.738	-39.88	.110	-12.075	-46.74	.330	-26.670	-7.05	1.100	-26.754	22.42
.036	-9.780	-39.13	.120	-12.180	-44.00	.360	-26.042	-3.41	1.200	-25.985	23.53
.039	-9.821	-38.38	.130	-12.267	-41.29	.390	-25.404	0.25	1.300	-25.283	24.48
.042	-9.860	-37.62	.140	-12.337	-38.62	.420	-24.756	2.51	1.400	-24.637	25.30
.045	-9.898	-36.87	.150	-12.390	-35.90	.450	-24.106	4.94	1.500	-24.040	26.03
.048	-9.934	-36.11	.160	-12.428	-33.44	.480	-23.450	7.08	1.600	-23.485	26.67
.051	-9.969	-35.36	.170	-12.451	-30.93	.510	-22.795	8.94	1.700	-22.967	27.26
.054	-10.003	-34.60	.180	-12.460	-28.50	.540	-22.143	10.69	1.800	-22.442	27.74
.057	-10.035	-33.84	.190	-12.458	-26.14	.570	-21.485	12.27	1.900	-21.927	28.21
.060	-10.066	-33.09	.200	-12.446	-23.86	.600	-20.826	13.61	2.000	-21.597	28.71
.063	-10.096	-32.33	.210	-12.424	-21.66	.630	-20.163	14.87	2.100	-21.192	29.13
.066	-10.124	-31.58	.220	-12.392	-19.54	.660	-19.496	16.02	2.200	-20.807	29.51
.069	-10.151	-30.82	.230	-12.350	-17.49	.690	-18.826	17.08	2.300	-20.442	29.88
.072	-10.177	-30.07	.240	-12.308	-15.53	.720	-18.153	18.05	2.400	-20.095	30.22
.075	-10.201	-29.32	.250	-12.266	-13.65	.750	-17.477	18.96	2.500	-19.764	30.54
.078	-10.224	-28.56	.260	-12.214	-11.84	.780	-16.804	19.79	2.600	-19.447	30.85
.081	-10.245	-27.81	.270	-12.160	-10.11	.810	-16.134	20.58	2.700	-19.145	31.14
.084	-10.265	-27.07	.280	-12.100	-8.46	.840	-15.464	21.31	2.800	-18.855	31.42
.087	-10.284	-26.32	.290	-12.034	-6.87	.870	-14.791	22.00	2.900	-18.578	31.69
.090	-10.302	-25.58	.300	-11.965	-5.35	.900	-14.116	22.64	3.000	-18.311	31.95
.105	-10.433	-21.91	.350	-11.889	1.33	1.050	-13.450	23.40	3.500	-17.119	33.13
.120	-10.445	-18.32	.400	-11.825	6.75	1.200	-12.820	24.59	4.000	-16.118	34.16
.135	-10.452	-14.84	.450	-11.764	11.19	1.350	-12.234	25.41	4.500	-15.262	35.10
.150	-10.457	-11.48	.500	-11.706	14.91	1.500	-11.697	26.07	5.000	-14.514	35.98
.165	-10.459	-8.24	.550	-11.650	18.07	1.650	-11.206	26.56	5.500	-13.869	36.81
.180	-10.458	-5.14	.600	-11.606	20.81	1.800	-10.754	26.92	6.000	-13.245	37.61
.195	-10.456	-2.18	.650	-11.573	23.21	1.950	-10.340	27.17	6.500	-12.685	38.39
.210	-10.450	.60	.700	-11.544	25.34	2.100	-9.960	27.36	7.000	-12.193	39.16
.225	-10.440	3.37	.750	-11.520	27.28	2.250	-9.612	27.89	7.500	-11.923	39.91
.240	-10.421	5.95	.800	-11.500	29.04	2.400	-9.284	28.87	8.000	-11.557	40.66
.255	-10.403	8.41	.850	-11.484	30.68	2.550	-8.979	29.83	8.500	-11.227	41.41
.270	-10.376	10.77	.900	-11.470	32.20	2.700	-8.695	30.76	9.000	-10.929	42.16
.285	-10.350	13.03	.950	-11.458	33.64	2.850	-8.430	31.67	9.500	-10.661	42.91
.300	-10.325	15.19	1.000	-11.448	35.00	3.000	-8.182	41.57	10.000	-10.419	43.67

Table 151. Vertical Electric Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 449.52 m

30.0 KM DISTANCE				100.0 KM DISTANCE				100.0 KM DISTANCE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
.000	-7.014	-27.51	0.000	-14.983	-86.94	0.000	-24.879	-57.04	0.000	-34.879	-57.04
.003	-7.007	-28.19	.010	-15.108	-84.58	.030	-24.913	-47.74	.100	-35.058	-30.32
.006	-7.023	-28.07	.020	-15.343	-82.14	.060	-25.311	-37.66	.200	-35.180	-2.44
.009	-7.111	-25.34	.030	-15.504	-79.63	.100	-25.534	-31.10	.300	-33.111	16.89
.012	-7.230	-24.84	.040	-15.622	-77.06	.150	-25.570	-22.33	.400	-30.484	28.81
.015	-7.262	-24.87	.050	-15.785	-74.42	.200	-25.420	-13.75	.500	-24.084	45.94
.018	-7.334	-23.13	.060	-15.902	-71.74	.250	-25.095	-5.70	.700	-27.473	40.84
.021	-7.385	-22.13	.070	-16.002	-69.00	.300	-24.841	1.61	.900	-26.089	44.32
.024	-7.436	-21.64	.080	-16.085	-66.24	.350	-24.099	8.09	.900	-24.886	46.92
.027	-7.486	-20.89	.090	-16.149	-63.45	.400	-23.507	13.74	.900	-23.827	48.94
.030	-7.535	-20.13	.100	-16.194	-60.66	.450	-22.893	18.63	1.000	-22.885	50.56
.033	-7.584	-19.37	.110	-16.221	-57.88	.500	-22.276	23.66	1.000	-22.038	51.89
.036	-7.632	-18.60	.120	-16.229	-55.07	.550	-21.670	28.52	1.200	-21.270	53.02
.039	-7.680	-17.83	.130	-16.219	-52.31	.600	-21.083	33.44	1.300	-20.569	53.98
.042	-7.727	-17.06	.140	-16.192	-49.58	.650	-20.517	38.44	1.400	-19.925	54.82
.045	-7.773	-16.28	.150	-16.158	-46.84	.700	-19.976	43.43	1.500	-19.329	55.57
.048	-7.818	-15.50	.160	-16.098	-44.08	.750	-19.460	48.41	1.600	-18.776	56.23
.051	-7.863	-14.72	.170	-16.013	-41.33	.800	-18.969	53.40	1.700	-18.280	56.84
.054	-7.907	-13.93	.180	-15.925	-38.57	.850	-18.501	58.39	1.800	-17.777	57.39
.057	-7.950	-13.14	.190	-15.825	-35.82	.900	-18.058	63.37	1.900	-17.323	57.89
.060	-7.993	-12.35	.200	-15.714	-33.07	.950	-17.534	68.35	2.000	-16.896	58.36
.063	-8.035	-11.55	.210	-15.594	-30.32	1.000	-17.028	73.33	2.100	-16.492	58.80
.066	-8.076	-10.75	.220	-15.464	-27.57	1.050	-16.444	78.31	2.200	-16.110	59.22
.069	-8.116	-9.95	.230	-15.328	-24.82	1.100	-15.945	83.29	2.300	-15.748	59.61
.072	-8.158	-9.14	.240	-15.188	-22.07	1.150	-15.475	88.27	2.400	-15.403	59.98
.075	-8.199	-8.34	.250	-15.046	-19.32	1.200	-15.023	93.25	2.500	-15.075	60.33
.078	-8.239	-7.53	.260	-14.907	-16.57	1.250	-14.586	98.23	2.600	-14.761	60.67
.081	-8.279	-6.71	.270	-14.773	-13.82	1.300	-14.158	103.21	2.700	-14.462	61.00
.084	-8.317	-5.90	.280	-14.641	-11.07	1.350	-13.744	108.19	2.800	-14.175	61.31
.087	-8.353	-5.08	.290	-14.510	-8.32	1.400	-13.339	113.17	2.900	-13.901	61.62
.090	-8.388	-4.26	.300	-14.376	-5.57	1.450	-12.946	118.15	3.000	-13.637	61.91
.105	-8.546	-1.13	.350	-13.457	32.41	1.500	-12.564	123.13	3.500	-12.284	63.29
.120	-8.686	4.04	.400	-12.691	36.11	1.600	-12.188	128.11	4.000	-11.485	64.55
.135	-8.811	8.23	.450	-11.976	43.05	1.700	-11.820	133.09	4.500	-10.852	65.76
.150	-8.916	12.44	.500	-11.326	47.27	1.800	-11.460	138.07	5.000	-9.937	66.93
.165	-9.011	16.65	.550	-10.735	50.46	1.900	-11.109	143.05	5.500	-9.317	68.08
.180	-9.088	20.85	.600	-10.201	54.21	2.000	-10.764	148.03	6.000	-8.775	69.24
.195	-9.167	25.03	.650	-9.720	57.41	2.100	-10.424	153.01	6.500	-8.300	70.41
.210	-9.247	29.18	.700	-9.287	60.65	2.200	-10.094	158.00	7.000	-7.882	71.60
.225	-9.328	33.30	.750	-8.897	63.91	2.300	-9.764	163.00	7.500	-7.512	72.81
.240	-9.410	37.36	.800	-8.545	67.11	2.400	-9.434	168.00	8.000	-7.186	74.05
.255	-9.493	41.36	.850	-8.224	70.31	2.500	-9.104	173.00	8.500	-6.898	75.31
.270	-9.576	45.28	.900	-7.943	73.52	2.600	-8.774	178.00	9.000	-6.643	76.62
.285	-9.659	49.12	.950	-7.685	76.73	2.700	-8.444	183.00	9.500	-6.418	77.93
.300	-9.742	52.86	1.000	-7.451	79.94	2.800	-8.114	188.00	10.000	-6.219	79.23

Table 152. Vertical Electric Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM UMRANGE				10.0 KM UMRANGE				30.0 KM UMRANGE				100.0 KM UMRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
0.000	-34.511	-95.01	0.000	-45.394	-98.17	0.000	-54.715	-98.74	0.000	-65.411	-98.94	0.000	-65.411	-98.94	0.000
0.003	-34.500	-85.30	0.010	-44.290	-85.00	0.030	-43.337	-85.33	0.100	-42.014	-85.04	0.300	-40.059	-85.04	1.000
0.006	-34.578	-75.00	0.020	-43.592	-75.00	0.060	-42.014	-85.04	0.200	-40.059	-85.04	0.600	-37.585	-85.04	2.000
0.009	-34.544	-65.00	0.030	-42.211	-65.00	0.100	-40.014	-85.04	0.300	-37.585	-85.04	0.800	-35.115	-85.04	3.000
0.012	-34.537	-55.00	0.040	-41.136	-55.00	0.150	-37.574	-85.04	0.400	-35.115	-85.04	1.000	-32.603	-85.04	4.000
0.015	-34.537	-45.00	0.050	-40.061	-45.00	0.200	-36.074	-85.04	0.500	-34.123	-85.04	1.500	-30.071	-85.04	5.000
0.018	-34.536	-35.00	0.060	-38.986	-35.00	0.250	-34.123	-85.04	0.600	-32.603	-85.04	2.000	-27.585	-85.04	6.000
0.021	-34.536	-25.00	0.070	-37.911	-25.00	0.300	-32.603	-85.04	0.700	-31.081	-85.04	2.500	-25.115	-85.04	7.000
0.024	-34.536	-15.00	0.080	-36.836	-15.00	0.350	-31.081	-85.04	0.800	-29.600	-85.04	3.000	-22.603	-85.04	8.000
0.027	-34.536	-5.00	0.090	-35.761	-5.00	0.400	-29.600	-85.04	0.900	-28.079	-85.04	3.500	-20.071	-85.04	9.000
0.030	-28.000	5.00	0.100	-34.686	5.00	0.450	-28.079	-85.04	1.000	-26.558	-85.04	4.000	-17.585	-85.04	10.000
0.033	-28.000	15.00	0.110	-33.611	15.00	0.500	-26.558	-85.04	1.100	-25.037	-85.04	4.500	-15.071	-85.04	11.000
0.036	-28.000	25.00	0.120	-32.536	25.00	0.550	-25.037	-85.04	1.200	-23.516	-85.04	5.000	-12.585	-85.04	12.000
0.039	-28.000	35.00	0.130	-31.461	35.00	0.600	-23.516	-85.04	1.300	-21.995	-85.04	5.500	-10.071	-85.04	13.000
0.042	-28.000	45.00	0.140	-30.386	45.00	0.650	-21.995	-85.04	1.400	-20.474	-85.04	6.000	-7.585	-85.04	14.000
0.045	-28.000	55.00	0.150	-29.311	55.00	0.700	-20.474	-85.04	1.500	-18.953	-85.04	6.500	-5.071	-85.04	15.000
0.048	-28.000	65.00	0.160	-28.236	65.00	0.750	-18.953	-85.04	1.600	-17.432	-85.04	7.000	-2.585	-85.04	16.000
0.051	-28.000	75.00	0.170	-27.161	75.00	0.800	-17.432	-85.04	1.700	-15.911	-85.04	7.500	0.000	-85.04	17.000
0.054	-28.000	85.00	0.180	-26.086	85.00	0.850	-15.911	-85.04	1.800	-14.390	-85.04	8.000	2.516	-85.04	18.000
0.057	-28.000	95.00	0.190	-25.011	95.00	0.900	-14.390	-85.04	1.900	-12.869	-85.04	8.500	5.031	-85.04	19.000
0.060	-28.000	0.00	0.200	-23.936	0.00	0.950	-12.869	-85.04	2.000	-11.348	-85.04	9.000	7.546	-85.04	20.000
0.063	-28.000	10.00	0.210	-22.861	10.00	1.000	-11.348	-85.04	2.100	-9.827	-85.04	9.500	10.061	-85.04	21.000
0.066	-28.000	20.00	0.220	-21.786	20.00	1.050	-9.827	-85.04	2.200	-8.306	-85.04	10.000	12.576	-85.04	22.000
0.069	-28.000	30.00	0.230	-20.711	30.00	1.100	-8.306	-85.04	2.300	-6.785	-85.04	10.500	15.091	-85.04	23.000
0.072	-28.000	40.00	0.240	-19.636	40.00	1.150	-6.785	-85.04	2.400	-5.264	-85.04	11.000	17.606	-85.04	24.000
0.075	-28.000	50.00	0.250	-18.561	50.00	1.200	-5.264	-85.04	2.500	-3.743	-85.04	11.500	20.121	-85.04	25.000
0.078	-28.000	60.00	0.260	-17.486	60.00	1.250	-3.743	-85.04	2.600	-2.222	-85.04	12.000	22.636	-85.04	26.000
0.081	-28.000	70.00	0.270	-16.411	70.00	1.300	-2.222	-85.04	2.700	-0.701	-85.04	12.500	25.151	-85.04	27.000
0.084	-28.000	80.00	0.280	-15.336	80.00	1.350	-0.701	-85.04	2.800	0.820	-85.04	13.000	27.666	-85.04	28.000
0.087	-28.000	90.00	0.290	-14.261	90.00	1.400	0.820	-85.04	2.900	2.339	-85.04	13.500	30.181	-85.04	29.000
0.090	-28.000	0.00	0.300	-13.186	0.00	1.450	2.339	-85.04	3.000	3.858	-85.04	14.000	32.696	-85.04	30.000
0.105	-19.547	-11.06	0.350	-15.803	-6.17	1.050	-19.547	-6.77	1.050	-19.547	-6.77	3.500	-19.547	-6.77	3.500
0.120	-18.537	-9.95	0.400	-18.577	-5.74	1.200	-18.577	-6.60	4.000	-18.577	-6.60	4.000	-18.577	-6.60	4.000
0.135	-17.527	-8.84	0.450	-17.587	-5.44	1.350	-17.587	-6.46	4.500	-17.587	-6.46	4.500	-17.587	-6.46	4.500
0.150	-16.517	-7.73	0.500	-16.597	-5.14	1.500	-16.597	-6.34	5.000	-16.597	-6.34	5.000	-16.597	-6.34	5.000
0.165	-15.507	-6.62	0.550	-15.607	-4.84	1.650	-15.607	-6.23	5.500	-15.607	-6.23	5.500	-15.607	-6.23	5.500
0.180	-14.497	-5.51	0.600	-14.617	-4.54	1.800	-14.617	-6.12	6.000	-14.617	-6.12	6.000	-14.617	-6.12	6.000
0.195	-13.487	-4.40	0.650	-13.627	-4.24	1.950	-13.627	-6.00	6.500	-13.627	-6.00	6.500	-13.627	-6.00	6.500
0.210	-12.477	-3.29	0.700	-12.637	-3.94	2.100	-12.637	-5.89	7.000	-12.637	-5.89	7.000	-12.637	-5.89	7.000
0.225	-11.467	-2.18	0.750	-11.647	-3.64	2.250	-11.647	-5.78	7.500	-11.647	-5.78	7.500	-11.647	-5.78	7.500
0.240	-10.457	-1.07	0.800	-10.657	-3.34	2.400	-10.657	-5.67	8.000	-10.657	-5.67	8.000	-10.657	-5.67	8.000
0.255	-9.447	0.04	0.850	-9.667	-3.04	2.550	-9.667	-5.56	8.500	-9.667	-5.56	8.500	-9.667	-5.56	8.500
0.270	-8.437	1.15	0.900	-8.677	-2.74	2.700	-8.677	-5.45	9.000	-8.677	-5.45	9.000	-8.677	-5.45	9.000
0.285	-7.427	2.26	0.950	-7.687	-2.44	2.850	-7.687	-5.34	9.500	-7.687	-5.34	9.500	-7.687	-5.34	9.500
0.300	-6.417	3.37	1.000	-6.697	-2.14	3.000	-6.697	-5.23	10.000	-6.697	-5.23	10.000	-6.697	-5.23	10.000

Table 153. Vertical Electric Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (V)	PHASE (DEG)		HEIGHT (KM)	AMP (V)	PHASE (DEG)		HEIGHT (KM)	AMP (V)	PHASE (DEG)		HEIGHT (KM)	AMP (V)	PHASE (DEG)	
0.000	-30.000	-37.10		0.000	-41.043	-40.76		0.000	-30.567	-41.23		0.000	-61.018	-41.40	
0.003	-30.034	-28.37		0.010	-34.933	-7.58		0.000	-44.333	24.21		0.100	-45.124	43.95	
0.006	-30.068	-18.12		0.020	-37.332	13.19		0.000	-44.333	38.04		0.200	-39.161	48.55	
0.009	-30.102	-8.91		0.030	-34.851	24.52		0.000	-35.630	43.05		0.300	-35.666	50.10	
0.012	-29.000	-1.98		0.040	-32.776	31.15		0.000	-31.291	47.15		0.400	-33.192	50.88	
0.015	-28.000	7.09		0.050	-31.052	38.41		0.100	-24.740	48.19		0.500	-31.280	51.35	
0.018	-27.000	13.23		0.060	-29.595	44.34		0.200	-18.431	48.93		0.600	-29.724	51.68	
0.021	-26.000	19.06		0.070	-28.342	49.48		0.300	-12.508	51.41		0.700	-26.412	51.91	
0.024	-25.011	19.65		0.080	-27.246	52.11		0.400	-6.011	51.69		0.800	-27.280	52.04	
0.027	-24.000	24.87		0.090	-26.275	53.48		0.500	-0.544	51.92		0.900	-26.286	52.24	
0.030	-23.010	29.54		0.100	-25.404	54.41		0.600	5.814	52.02		1.000	-25.399	52.36	
0.033	-22.000	34.71		0.110	-24.615	55.29		0.700	11.818	52.12		1.100	-24.600	52.46	
0.036	-21.000	39.32		0.120	-23.896	55.97		0.800	18.518	52.21		1.200	-23.673	52.55	
0.039	-20.000	43.10		0.130	-23.236	56.57		0.900	25.562	52.29		1.300	-23.207	52.63	
0.042	-19.000	46.03		0.140	-22.625	57.09		1.000	32.897	52.37		1.400	-22.592	52.70	
0.045	-18.000	48.10		0.150	-22.058	57.55		1.100	40.481	52.44		1.500	-22.022	52.76	
0.048	-17.000	49.71		0.160	-21.529	57.95		1.200	48.264	52.51		1.600	-21.491	52.82	
0.051	-16.000	50.76		0.170	-21.033	58.31		1.300	56.200	52.58		1.700	-20.994	52.87	
0.054	-15.000	51.10		0.180	-20.568	58.63		1.400	64.264	52.64		1.800	-20.527	52.92	
0.057	-14.000	51.50		0.190	-20.125	58.92		1.500	72.444	52.69		1.900	-20.087	52.97	
0.060	-13.000	51.94		0.200	-19.703	59.16		1.600	80.728	52.71		2.000	-19.671	53.02	
0.063	-12.000	52.41		0.210	-19.300	59.42		1.700	89.107	52.72		2.100	-19.277	53.06	
0.066	-11.000	52.90		0.220	-18.916	59.68		1.800	97.581	52.73		2.200	-18.903	53.10	
0.069	-10.000	53.41		0.230	-18.550	59.94		1.900	106.141	52.74		2.300	-18.547	53.14	
0.072	-9.000	53.92		0.240	-18.200	60.20		2.000	114.786	52.75		2.400	-18.207	53.18	
0.075	-8.000	54.44		0.250	-17.865	60.46		2.100	123.516	52.76		2.500	-17.883	53.22	
0.078	-7.000	54.96		0.260	-17.545	60.71		2.200	132.331	52.77		2.600	-17.572	53.26	
0.081	-6.000	55.48		0.270	-17.238	60.97		2.300	141.231	52.78		2.700	-17.275	53.30	
0.084	-5.000	56.00		0.280	-16.943	61.23		2.400	150.216	52.79		2.800	-16.989	53.34	
0.087	-4.000	56.51		0.290	-16.659	61.49		2.500	159.286	52.80		2.900	-16.715	53.37	
0.090	-3.000	57.02		0.300	-16.386	61.75		2.600	168.441	52.81		3.000	-16.451	53.41	
0.105	-15.332	48.04		0.350	-15.306	51.50		1.050	-15.277	53.04		3.500	-15.265	53.58	
0.120	-14.400	47.24		0.400	-14.300	51.96		1.200	-14.272	53.29		4.000	-14.260	53.76	
0.135	-13.400	46.27		0.450	-13.432	52.36		1.350	-13.404	53.53		4.500	-13.393	53.93	
0.150	-12.400	45.09		0.500	-12.674	52.72		1.500	-12.647	53.75		5.000	-12.636	54.11	
0.165	-11.400	43.79		0.550	-12.004	53.05		1.650	-11.978	53.98		5.500	-11.968	54.30	
0.180	-10.400	42.42		0.600	-11.409	53.36		1.800	-11.384	54.20		6.000	-11.374	54.49	
0.195	-9.400	40.98		0.650	-10.876	53.67		1.950	-10.851	54.43		6.500	-10.842	54.70	
0.210	-8.400	39.50		0.700	-10.397	53.96		2.100	-10.372	54.66		7.000	-10.363	54.91	
0.225	-7.400	37.99		0.750	-9.961	54.26		2.250	-9.934	54.90		7.500	-9.930	55.13	
0.240	-6.400	36.45		0.800	-9.571	54.55		2.400	-9.547	55.15		8.000	-9.938	55.36	
0.255	-5.400	34.89		0.850	-9.214	54.84		2.550	-9.190	55.40		8.500	-9.182	55.59	
0.270	-4.400	33.32		0.900	-8.889	55.14		2.700	-8.866	55.66		9.000	-8.857	55.84	
0.285	-3.400	31.74		0.950	-8.592	55.45		2.850	-8.852	55.93		9.500	-8.852	56.10	
0.300	-2.400	30.15		1.000	-8.322	55.76		3.000	-8.300	56.21		10.000	-8.292	56.37	

Table 154. Vertical Electric Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.00	-26.030	-22.40	0.00	-36.243	-23.91	0.00	-45.718	-24.36	0.00	-56.152	-24.52	0.00	-66.586	-24.52	0.00	-76.999	-24.52		
0.03	-26.001	-11.68	0.03	-36.133	3.25	0.03	-45.684	41.07	0.03	-56.127	60.83	0.03	-66.561	60.83	0.03	-76.974	60.83		
0.06	-25.993	-1.44	0.06	-36.053	30.02	0.06	-45.655	54.91	0.06	-56.098	66.98	0.06	-66.532	66.98	0.06	-76.947	66.98		
0.09	-25.943	7.77	0.09	-35.979	47.99	0.09	-45.626	62.48	0.09	-56.071	68.24	0.09	-66.505	68.24	0.09	-76.921	68.24		
0.12	-25.857	15.70	0.12	-35.893	52.25	0.12	-45.599	64.03	0.12	-56.045	68.57	0.12	-66.479	68.57	0.12	-76.895	68.57		
0.15	-25.746	22.37	0.15	-35.800	55.19	0.15	-45.570	65.07	0.15	-56.019	68.81	0.15	-66.443	68.81	0.15	-76.871	68.81		
0.18	-25.616	27.92	0.18	-35.706	57.34	0.18	-45.545	65.34	0.18	-55.983	69.04	0.18	-66.417	69.04	0.18	-76.843	69.04		
0.21	-25.476	32.52	0.21	-35.612	58.97	0.21	-45.519	65.67	0.21	-55.957	69.27	0.21	-66.391	69.27	0.21	-76.819	69.27		
0.24	-25.326	36.37	0.24	-35.518	60.25	0.24	-45.493	66.00	0.24	-55.931	69.50	0.24	-66.365	69.50	0.24	-76.795	69.50		
0.27	-25.176	39.54	0.27	-35.424	61.14	0.27	-45.467	66.33	0.27	-55.905	69.73	0.27	-66.339	69.73	0.27	-76.771	69.73		
0.30	-25.026	42.33	0.30	-35.330	62.15	0.30	-45.441	66.66	0.30	-55.879	69.96	0.30	-66.313	69.96	0.30	-76.747	69.96		
0.33	-24.876	44.67	0.33	-35.236	62.87	0.33	-45.415	66.99	0.33	-55.853	70.19	0.33	-66.287	70.19	0.33	-76.723	70.19		
0.36	-24.726	46.66	0.36	-35.142	63.48	0.36	-45.389	67.32	0.36	-55.827	70.42	0.36	-66.261	70.42	0.36	-76.699	70.42		
0.39	-24.576	48.44	0.39	-35.048	64.02	0.39	-45.363	67.65	0.39	-55.801	70.65	0.39	-66.235	70.65	0.39	-76.675	70.65		
0.42	-24.426	49.98	0.42	-34.954	64.48	0.42	-45.337	67.98	0.42	-55.775	70.88	0.42	-66.209	70.88	0.42	-76.651	70.88		
0.45	-24.276	51.34	0.45	-34.860	64.90	0.45	-45.311	68.31	0.45	-55.749	71.11	0.45	-66.183	71.11	0.45	-76.627	71.11		
0.48	-24.126	52.55	0.48	-34.766	65.27	0.48	-45.285	68.64	0.48	-55.723	71.34	0.48	-66.157	71.34	0.48	-76.603	71.34		
0.51	-23.976	53.64	0.51	-34.672	65.60	0.51	-45.259	68.97	0.51	-55.697	71.57	0.51	-66.131	71.57	0.51	-76.579	71.57		
0.54	-23.826	54.61	0.54	-34.578	65.93	0.54	-45.233	69.30	0.54	-55.671	71.80	0.54	-66.105	71.80	0.54	-76.555	71.80		
0.57	-23.676	55.50	0.57	-34.484	66.18	0.57	-45.207	69.63	0.57	-55.645	72.03	0.57	-66.079	72.03	0.57	-76.531	72.03		
0.60	-23.526	56.31	0.60	-34.390	66.44	0.60	-45.181	69.96	0.60	-55.619	72.26	0.60	-66.053	72.26	0.60	-76.507	72.26		
0.63	-23.376	57.05	0.63	-34.296	66.68	0.63	-45.155	70.29	0.63	-55.593	72.49	0.63	-66.027	72.49	0.63	-76.483	72.49		
0.66	-23.226	57.73	0.66	-34.202	66.93	0.66	-45.129	70.62	0.66	-55.567	72.72	0.66	-65.999	72.72	0.66	-76.459	72.72		
0.69	-23.076	58.35	0.69	-34.108	67.10	0.69	-45.103	70.95	0.69	-55.541	72.95	0.69	-65.973	72.95	0.69	-76.435	72.95		
0.72	-22.926	58.93	0.72	-34.014	67.30	0.72	-45.077	71.28	0.72	-55.515	73.18	0.72	-65.947	73.18	0.72	-76.411	73.18		
0.75	-22.776	59.47	0.75	-33.920	67.48	0.75	-45.051	71.61	0.75	-55.489	73.41	0.75	-65.921	73.41	0.75	-76.387	73.41		
0.78	-22.626	59.98	0.78	-33.826	67.66	0.78	-45.025	71.94	0.78	-55.463	73.64	0.78	-65.895	73.64	0.78	-76.363	73.64		
0.81	-22.476	60.45	0.81	-33.732	67.82	0.81	-45.000	72.26	0.81	-55.437	73.87	0.81	-65.869	73.87	0.81	-76.339	73.87		
0.84	-22.326	60.89	0.84	-33.638	67.98	0.84	-44.974	72.59	0.84	-55.411	74.10	0.84	-65.843	74.10	0.84	-76.315	74.10		
0.87	-22.176	61.31	0.87	-33.544	68.13	0.87	-44.948	72.92	0.87	-55.385	74.33	0.87	-65.817	74.33	0.87	-76.291	74.33		
0.90	-22.026	61.71	0.90	-33.450	68.25	0.90	-44.922	73.25	0.90	-55.359	74.56	0.90	-65.791	74.56	0.90	-76.267	74.56		
1.05	-19.815	63.40	1.05	-31.265	68.82	1.05	-42.825	70.36	1.05	-53.544	70.36	1.05	-64.320	70.36	1.05	-74.820	70.36		
1.20	-19.655	64.78	1.20	-31.171	69.43	1.20	-42.731	70.75	1.20	-53.450	70.75	1.20	-64.226	70.75	1.20	-74.726	70.75		
1.35	-19.495	65.94	1.35	-31.077	69.99	1.35	-42.637	71.14	1.35	-53.356	71.14	1.35	-64.132	71.14	1.35	-74.632	71.14		
1.50	-19.335	66.96	1.50	-30.983	70.53	1.50	-42.543	71.54	1.50	-53.262	71.54	1.50	-64.038	71.54	1.50	-74.538	71.54		
1.65	-19.175	67.89	1.65	-30.889	71.06	1.65	-42.449	71.96	1.65	-53.168	71.96	1.65	-63.944	71.96	1.65	-74.444	71.96		
1.80	-19.015	68.75	1.80	-30.795	71.60	1.80	-42.355	72.40	1.80	-53.074	72.40	1.80	-63.850	72.40	1.80	-74.350	72.40		
1.95	-18.855	69.56	1.95	-30.701	72.14	1.95	-42.261	72.86	1.95	-52.980	72.86	1.95	-63.756	72.86	1.95	-74.256	72.86		
2.10	-18.695	70.36	2.10	-30.607	72.70	2.10	-42.167	73.35	2.10	-52.886	73.35	2.10	-63.662	73.35	2.10	-74.162	73.35		
2.25	-18.535	71.18	2.25	-30.513	73.28	2.25	-42.073	73.88	2.25	-52.792	73.88	2.25	-63.568	73.88	2.25	-74.068	73.88		
2.40	-18.375	71.96	2.40	-30.419	73.89	2.40	-41.979	74.43	2.40	-52.700	74.43	2.40	-63.474	74.43	2.40	-73.974	74.43		
2.55	-18.215	72.76	2.55	-30.325	74.52	2.55	-41.885	75.01	2.55	-52.606	75.01	2.55	-63.380	75.01	2.55	-73.880	75.01		
2.70	-18.055	73.56	2.70	-30.231	75.18	2.70	-41.791	75.63	2.70	-52.512	75.63	2.70	-63.286	75.63	2.70	-73.786	75.63		
2.85	-17.895	74.37	2.85	-30.137	75.87	2.85	-41.697	76.29	2.85	-52.418	76.29	2.85	-63.192	76.29	2.85	-73.692	76.29		
3.00	-17.735	75.21	3.00	-30.043	76.59	3.00	-41.603	76.98	3.00	-52.324	76.98	3.00	-63.098	76.98	3.00	-73.598	76.98		

Table 155. Vertical Electric Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM DOWNRANGE					3.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.00	-45.514	-90.61	0.00	-55.514	-90.82	0.00	-75.061	-90.86	0.00
0.01	-44.110	-57.79	0.01	-49.475	-74.44	0.01	-49.564	-3.47	0.01
0.02	-41.467	-38.39	0.02	-43.559	-4.94	0.02	-43.580	-1.95	0.02
0.03	-39.024	-27.80	0.03	-40.079	-3.63	0.03	-40.088	-1.45	0.03
0.04	-36.990	-21.55	0.04	-37.614	-2.67	0.04	-37.618	-1.19	0.04
0.05	-35.298	-17.51	0.05	-35.706	-2.21	0.05	-35.709	-1.04	0.05
0.06	-33.803	-14.71	0.06	-34.152	-1.91	0.06	-34.154	-0.94	0.06
0.07	-32.430	-12.06	0.07	-32.843	-1.69	0.07	-32.844	-0.86	0.07
0.08	-31.249	-11.11	0.08	-31.712	-1.53	0.08	-31.712	-0.81	0.08
0.09	-30.240	-9.88	0.09	-30.717	-1.40	0.09	-30.718	-0.76	0.09
0.10	-29.375	-8.90	0.10	-29.831	-1.30	0.10	-29.831	-0.73	0.10
0.11	-28.645	-8.09	0.11	-29.031	-1.21	0.11	-29.031	-0.70	0.11
0.12	-28.031	-7.41	0.12	-28.304	-1.14	0.12	-28.304	-0.67	0.12
0.13	-27.525	-6.84	0.13	-27.637	-1.08	0.13	-27.637	-0.65	0.13
0.14	-27.100	-6.35	0.14	-27.021	-1.03	0.14	-27.021	-0.64	0.14
0.15	-26.744	-5.92	0.15	-26.450	-0.99	0.15	-26.450	-0.62	0.15
0.16	-26.447	-5.55	0.16	-25.914	-0.95	0.16	-25.918	-0.61	0.16
0.17	-26.204	-5.22	0.17	-25.419	-0.91	0.17	-25.419	-0.59	0.17
0.18	-26.017	-4.92	0.18	-24.951	-0.86	0.18	-24.951	-0.58	0.18
0.19	-25.881	-4.66	0.19	-24.509	-0.85	0.19	-24.509	-0.57	0.19
0.20	-25.780	-4.42	0.20	-24.091	-0.83	0.20	-24.091	-0.56	0.20
0.21	-25.712	-4.21	0.21	-23.695	-0.81	0.21	-23.695	-0.55	0.21
0.22	-25.676	-4.01	0.22	-23.317	-0.79	0.22	-23.319	-0.55	0.22
0.23	-25.661	-3.83	0.23	-22.961	-0.77	0.23	-22.960	-0.54	0.23
0.24	-25.661	-3.67	0.24	-22.619	-0.75	0.24	-22.618	-0.53	0.24
0.25	-25.676	-3.52	0.25	-22.290	-0.73	0.25	-22.291	-0.53	0.25
0.26	-25.704	-3.38	0.26	-21.977	-0.72	0.26	-21.978	-0.52	0.26
0.27	-25.745	-3.25	0.27	-21.677	-0.70	0.27	-21.678	-0.51	0.27
0.28	-25.777	-3.13	0.28	-21.390	-0.69	0.28	-21.390	-0.51	0.28
0.29	-25.811	-3.02	0.29	-21.111	-0.68	0.29	-21.112	-0.50	0.29
0.30	-25.834	-2.92	0.30	-20.844	-0.67	0.30	-20.845	-0.50	0.30
0.35	-19.635	-2.49	0.35	-19.642	-0.62	0.35	-19.642	-0.48	0.35
0.40	-18.612	-2.17	0.40	-18.617	-0.59	0.40	-18.618	-0.46	0.40
0.45	-17.724	-1.93	0.45	-17.729	-0.55	0.45	-17.729	-0.45	0.45
0.50	-16.943	-1.73	0.50	-16.946	-0.53	0.50	-16.946	-0.44	0.50
0.55	-16.248	-1.57	0.55	-16.251	-0.50	0.55	-16.250	-0.43	0.55
0.60	-15.623	-1.43	0.60	-15.626	-0.49	0.60	-15.626	-0.42	0.60
0.65	-15.059	-1.32	0.65	-15.061	-0.47	0.65	-15.061	-0.41	0.65
0.70	-14.545	-1.22	0.70	-14.546	-0.46	0.70	-14.546	-0.40	0.70
0.75	-14.074	-1.14	0.75	-14.075	-0.44	0.75	-14.076	-0.39	0.75
0.80	-13.641	-1.07	0.80	-13.643	-0.43	0.80	-13.643	-0.39	0.80
0.85	-13.242	-1.00	0.85	-13.243	-0.42	0.85	-13.243	-0.38	0.85
0.90	-12.872	-0.95	0.90	-12.873	-0.41	0.90	-12.873	-0.37	0.90
0.95	-12.528	-0.90	0.95	-12.529	-0.40	0.95	-12.529	-0.37	0.95
1.00	-12.207	-0.85	1.00	-12.208	-0.40	1.00	-12.208	-0.36	1.00

Table 156. Vertical Electric Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 2.25 m

1.0 KM DOWNRANGE					3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE				
HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)		
.000	-50.083	-35.17	.000	-50.338	-35.64	.000	-50.785	-35.81	.000	-50.785	-35.81	.000	-50.785	-35.81	.000	-70.325	-35.85		
.001	-39.411	-25.95	.001	-39.795	-26.71	.001	-44.741	-45.57	.001	-44.741	-45.57	.001	-44.741	-45.57	.001	-44.828	-51.56		
.002	-36.703	16.43	.002	-36.574	39.88	.002	-38.574	44.68	.002	-38.574	44.68	.002	-38.574	44.68	.002	-38.844	53.08		
.003	-34.362	27.01	.003	-35.239	44.68	.003	-35.239	44.68	.003	-35.239	44.68	.003	-35.239	44.68	.003	-35.352	53.59		
.004	-31.680	33.60	.004	-32.825	47.15	.004	-32.825	47.15	.004	-32.825	47.15	.004	-32.825	47.15	.004	-32.883	53.84		
.005	-30.596	37.30	.005	-30.942	48.65	.005	-30.942	48.65	.005	-30.942	48.65	.005	-30.942	48.65	.005	-30.974	54.00		
.006	-29.185	40.10	.006	-29.401	49.60	.006	-29.401	49.60	.006	-29.401	49.60	.006	-29.401	49.60	.006	-29.420	54.10		
.007	-27.931	42.15	.007	-28.100	50.38	.007	-28.100	50.38	.007	-28.100	50.38	.007	-28.100	50.38	.007	-28.110	54.16		
.008	-26.850	43.70	.008	-26.974	50.93	.008	-26.974	50.93	.008	-26.974	50.93	.008	-26.974	50.93	.008	-26.979	54.18		
.009	-25.890	44.93	.009	-25.984	51.35	.009	-25.984	51.35	.009	-25.984	51.35	.009	-25.984	51.35	.009	-26.979	54.24		
.010	-25.069	45.92	.010	-25.101	51.69	.010	-25.101	51.69	.010	-25.101	51.69	.010	-25.101	51.69	.010	-25.100	54.28		
.011	-24.349	46.73	.011	-24.304	51.97	.011	-24.304	51.97	.011	-24.304	51.97	.011	-24.304	51.97	.011	-24.302	54.32		
.012	-23.727	47.41	.012	-23.580	52.21	.012	-23.580	52.21	.012	-23.580	52.21	.012	-23.580	52.21	.012	-23.575	54.36		
.013	-23.202	47.89	.013	-22.915	52.41	.013	-22.915	52.41	.013	-22.915	52.41	.013	-22.915	52.41	.013	-22.910	54.38		
.014	-22.777	48.34	.014	-22.302	52.58	.014	-22.302	52.58	.014	-22.302	52.58	.014	-22.302	52.58	.014	-22.295	54.41		
.015	-22.444	48.64	.015	-21.733	52.73	.015	-21.733	52.73	.015	-21.733	52.73	.015	-21.733	52.73	.015	-21.726	54.43		
.016	-22.109	49.31	.016	-21.202	52.87	.016	-21.202	52.87	.016	-21.202	52.87	.016	-21.202	52.87	.016	-21.195	54.46		
.017	-21.869	49.64	.017	-20.700	52.98	.017	-20.700	52.98	.017	-20.700	52.98	.017	-20.700	52.98	.017	-20.698	54.48		
.018	-21.634	49.95	.018	-20.240	53.09	.018	-20.240	53.09	.018	-20.240	53.09	.018	-20.240	53.09	.018	-20.231	54.49		
.019	-21.497	50.22	.019	-19.800	53.19	.019	-19.800	53.19	.019	-19.800	53.19	.019	-19.800	53.19	.019	-20.231	54.51		
.020	-21.364	50.46	.020	-19.385	53.28	.020	-19.385	53.28	.020	-19.385	53.28	.020	-19.385	53.28	.020	-19.376	54.53		
.021	-21.233	50.69	.021	-18.991	53.36	.021	-18.991	53.36	.021	-18.991	53.36	.021	-18.991	53.36	.021	-18.982	54.55		
.022	-21.103	50.89	.022	-18.617	53.43	.022	-18.617	53.43	.022	-18.617	53.43	.022	-18.617	53.43	.022	-18.608	54.56		
.023	-21.067	51.08	.023	-18.261	53.50	.023	-18.261	53.50	.023	-18.261	53.50	.023	-18.261	53.50	.023	-18.252	54.60		
.024	-21.000	51.25	.024	-17.922	53.57	.024	-17.922	53.57	.024	-17.922	53.57	.024	-17.922	53.57	.024	-17.913	54.61		
.025	-21.000	51.41	.025	-17.598	53.63	.025	-17.598	53.63	.025	-17.598	53.63	.025	-17.598	53.63	.025	-17.588	54.63		
.026	-21.000	51.56	.026	-17.287	53.69	.026	-17.287	53.69	.026	-17.287	53.69	.026	-17.287	53.69	.026	-17.278	54.65		
.027	-21.000	51.70	.027	-16.990	53.74	.027	-16.990	53.74	.027	-16.990	53.74	.027	-16.990	53.74	.027	-16.980	54.66		
.028	-21.000	51.83	.028	-16.705	53.80	.028	-16.705	53.80	.028	-16.705	53.80	.028	-16.705	53.80	.028	-16.695	54.68		
.029	-21.000	51.96	.029	-16.430	53.85	.029	-16.430	53.85	.029	-16.430	53.85	.029	-16.430	53.85	.029	-16.421	54.70		
.030	-21.000	52.07	.030	-16.166	53.89	.030	-16.166	53.89	.030	-16.166	53.89	.030	-16.166	53.89	.030	-16.157	54.71		
.035	-14.990	52.57	.035	-14.981	54.11	.035	-14.981	54.11	.035	-14.981	54.11	.035	-14.981	54.11	.035	-14.971	54.80		
.040	-13.993	52.97	.040	-13.976	54.30	.040	-13.976	54.30	.040	-13.976	54.30	.040	-13.976	54.30	.040	-13.966	54.89		
.045	-13.160	53.31	.045	-13.110	54.47	.045	-13.110	54.47	.045	-13.110	54.47	.045	-13.110	54.47	.045	-13.100	54.99		
.050	-12.371	53.61	.050	-12.353	54.64	.050	-12.353	54.64	.050	-12.353	54.64	.050	-12.353	54.64	.050	-12.343	55.10		
.055	-11.704	53.88	.055	-11.685	54.81	.055	-11.685	54.81	.055	-11.685	54.81	.055	-11.685	54.81	.055	-11.675	55.22		
.060	-11.110	54.14	.060	-11.090	54.98	.060	-11.090	54.98	.060	-11.090	54.98	.060	-11.090	54.98	.060	-11.080	55.35		
.065	-10.578	54.39	.065	-10.558	55.15	.065	-10.558	55.15	.065	-10.558	55.15	.065	-10.558	55.15	.065	-10.548	55.49		
.070	-10.099	54.63	.070	-10.079	55.33	.070	-10.079	55.33	.070	-10.079	55.33	.070	-10.079	55.33	.070	-10.070	55.64		
.075	-9.667	54.87	.075	-9.647	55.51	.075	-9.647	55.51	.075	-9.647	55.51	.075	-9.647	55.51	.075	-9.637	55.80		
.080	-9.275	55.10	.080	-9.255	55.70	.080	-9.255	55.70	.080	-9.255	55.70	.080	-9.255	55.70	.080	-9.245	55.97		
.085	-8.910	55.35	.085	-8.899	55.90	.085	-8.899	55.90	.085	-8.899	55.90	.085	-8.899	55.90	.085	-8.889	56.15		
.090	-8.594	55.59	.090	-8.575	56.11	.090	-8.575	56.11	.090	-8.575	56.11	.090	-8.575	56.11	.090	-8.565	56.34		
.095	-8.299	55.84	.095	-8.279	56.33	.095	-8.279	56.33	.095	-8.279	56.33	.095	-8.279	56.33	.095	-8.270	56.54		
.100	-8.069	56.10	.100	-8.010	56.55	.100	-8.010	56.55	.100	-8.010	56.55	.100	-8.010	56.55	.100	-8.001	56.76		

Table 157. Vertical Electric Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 4.50 m

10.0 KM DOWNWAVE					20.0 KM DOWNWAVE					30.0 KM DOWNWAVE				
RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE	RELUMT	AMP	PHASE
(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)	(KM)	(DB)	(DEG)
0.00	-36.114	-19.35	0.00	-35.580	-19.77	0.00	-35.011	-19.92	0.00	-34.486	-20.00	0.00	-33.966	-19.96
0.01	-34.700	16.86	0.03	-33.037	42.58	0.10	-31.960	61.46	0.30	-30.969	67.45	0.50	-30.069	67.45
0.02	-32.055	36.24	0.06	-30.817	55.71	0.20	-29.551	65.96	0.60	-28.405	68.97	1.00	-27.374	69.48
0.03	-29.613	46.82	0.09	-28.482	63.55	0.30	-26.973	67.48	0.90	-25.974	69.48	1.20	-25.105	69.74
0.04	-27.050	47.06	0.12	-26.059	63.03	0.40	-24.810	68.24	1.20	-23.810	69.48	1.50	-22.810	69.48
0.05	-24.690	53.16	0.15	-24.167	64.55	0.50	-22.810	68.70	1.50	-21.810	69.48	1.80	-20.810	69.48
0.06	-22.459	55.93	0.18	-22.047	65.55	0.60	-20.810	69.48	1.80	-19.810	69.48	2.10	-18.810	69.48
0.07	-20.340	57.98	0.21	-19.947	66.47	0.70	-19.550	69.48	2.10	-18.550	69.48	2.40	-17.550	69.48
0.08	-18.340	59.25	0.24	-17.947	67.47	0.80	-18.340	69.48	2.40	-17.340	69.48	2.70	-16.340	69.48
0.09	-16.450	60.76	0.27	-17.447	68.47	0.90	-17.740	69.48	2.70	-16.740	69.48	3.00	-15.740	69.48
0.10	-14.660	62.46	0.30	-16.947	69.48	1.00	-16.947	69.48	3.00	-15.947	69.48	3.30	-14.947	69.48
0.11	-13.000	64.36	0.33	-16.447	70.48	1.10	-16.447	70.48	3.30	-15.447	70.48	3.60	-14.447	70.48
0.12	-11.460	66.46	0.36	-15.947	71.48	1.20	-15.947	71.48	3.60	-14.947	71.48	3.90	-13.947	71.48
0.13	-10.040	68.76	0.39	-15.447	72.48	1.30	-15.447	72.48	3.90	-13.947	72.48	4.20	-12.947	72.48
0.14	-8.740	71.26	0.42	-14.947	73.48	1.40	-14.947	73.48	4.20	-12.947	73.48	4.50	-11.947	73.48
0.15	-7.560	73.96	0.45	-14.447	74.48	1.50	-14.447	74.48	4.50	-12.447	74.48	4.80	-11.447	74.48
0.16	-6.500	76.86	0.48	-13.947	75.48	1.60	-13.947	75.48	4.80	-11.947	75.48	5.10	-10.947	75.48
0.17	-5.560	79.96	0.51	-13.447	76.48	1.70	-13.447	76.48	5.10	-11.447	76.48	5.40	-10.447	76.48
0.18	-4.740	83.26	0.54	-12.947	77.48	1.80	-12.947	77.48	5.40	-10.947	77.48	5.70	-9.947	77.48
0.19	-4.040	86.76	0.57	-12.447	78.48	1.90	-12.447	78.48	5.70	-10.447	78.48	6.00	-9.447	78.48
0.20	-3.460	90.46	0.60	-11.947	79.48	2.00	-11.947	79.48	6.00	-9.447	79.48	6.30	-8.947	79.48
0.21	-2.990	94.36	0.63	-11.447	80.48	2.10	-11.447	80.48	6.30	-8.947	80.48	6.60	-8.447	80.48
0.22	-2.630	98.46	0.66	-10.947	81.48	2.20	-10.947	81.48	6.60	-8.447	81.48	6.90	-7.947	81.48
0.23	-2.370	102.76	0.69	-10.447	82.48	2.30	-10.447	82.48	6.90	-7.947	82.48	7.20	-7.447	82.48
0.24	-2.210	107.26	0.72	-9.947	83.48	2.40	-9.947	83.48	7.20	-7.447	83.48	7.50	-6.947	83.48
0.25	-2.150	111.96	0.75	-9.447	84.48	2.50	-9.447	84.48	7.50	-6.947	84.48	7.80	-6.447	84.48
0.26	-2.190	116.86	0.78	-8.947	85.48	2.60	-8.947	85.48	7.80	-6.447	85.48	8.10	-5.947	85.48
0.27	-2.330	121.96	0.81	-8.447	86.48	2.70	-8.447	86.48	8.10	-5.947	86.48	8.40	-5.447	86.48
0.28	-2.570	127.26	0.84	-7.947	87.48	2.80	-7.947	87.48	8.40	-5.447	87.48	8.70	-4.947	87.48
0.29	-2.910	132.76	0.87	-7.447	88.48	2.90	-7.447	88.48	8.70	-4.947	88.48	9.00	-4.447	88.48
0.30	-3.350	138.46	0.90	-6.947	89.48	3.00	-6.947	89.48	9.00	-4.447	89.48	9.30	-3.947	89.48
0.31	-3.890	144.36	0.93	-6.447	90.48	3.10	-6.447	90.48	9.30	-3.947	90.48	9.60	-3.447	90.48
0.32	-4.530	150.46	0.96	-5.947	91.48	3.20	-5.947	91.48	9.60	-3.447	91.48	9.90	-2.947	91.48
0.33	-5.270	156.76	0.99	-5.447	92.48	3.30	-5.447	92.48	9.90	-2.947	92.48	10.20	-2.447	92.48
0.34	-6.110	163.26	1.02	-4.947	93.48	3.40	-4.947	93.48	10.20	-2.447	93.48	10.50	-1.947	93.48
0.35	-7.050	170.06	1.05	-4.447	94.48	3.50	-4.447	94.48	10.50	-1.947	94.48	10.80	-1.447	94.48
0.36	-8.090	177.16	1.08	-3.947	95.48	3.60	-3.947	95.48	10.80	-1.447	95.48	11.10	-0.947	95.48
0.37	-9.330	184.56	1.11	-3.447	96.48	3.70	-3.447	96.48	11.10	-0.947	96.48	11.40	-0.447	96.48
0.38	-10.770	192.26	1.14	-2.947	97.48	3.80	-2.947	97.48	11.40	-0.447	97.48	11.70	0.047	97.48
0.39	-12.410	200.26	1.17	-2.447	98.48	3.90	-2.447	98.48	11.70	0.047	98.48	12.00	0.547	98.48
0.40	-14.250	208.56	1.20	-1.947	99.48	4.00	-1.947	99.48	12.00	0.547	99.48	12.30	1.047	99.48
0.41	-16.290	217.06	1.23	-1.447	100.48	4.10	-1.447	100.48	12.30	1.047	100.48	12.60	1.547	100.48
0.42	-18.530	225.76	1.26	-0.947	101.48	4.20	-0.947	101.48	12.60	1.547	101.48	12.90	2.047	101.48
0.43	-20.970	234.76	1.29	-0.447	102.48	4.30	-0.447	102.48	12.90	2.047	102.48	13.20	2.547	102.48
0.44	-23.610	244.06	1.32	0.047	103.48	4.40	0.047	103.48	13.20	2.547	103.48	13.50	3.047	103.48
0.45	-26.450	253.66	1.35	0.547	104.48	4.50	0.547	104.48	13.50	3.047	104.48	13.80	3.547	104.48
0.46	-29.490	263.56	1.38	1.047	105.48	4.60	1.047	105.48	13.80	3.547	105.48	14.10	4.047	105.48
0.47	-32.730	273.76	1.41	1.547	106.48	4.70	1.547	106.48	14.10	4.047	106.48	14.40	4.547	106.48
0.48	-36.170	284.26	1.44	2.047	107.48	4.80	2.047	107.48	14.40	4.547	107.48	14.70	5.047	107.48
0.49	-39.810	295.06	1.47	2.547	108.48	4.90	2.547	108.48	14.70	5.047	108.48	15.00	5.547	108.48
0.50	-43.650	306.16	1.50	3.047	109.48	5.00	3.047	109.48	15.00	5.547	109.48	15.30	6.047	109.48
0.51	-47.690	317.56	1.53	3.547	110.48	5.10	3.547	110.48	15.30	6.047	110.48	15.60	6.547	110.48
0.52	-51.930	329.26	1.56	4.047	111.48	5.20	4.047	111.48	15.60	6.547	111.48	15.90	7.047	111.48
0.53	-56.370	341.26	1.59	4.547	112.48	5.30	4.547	112.48	15.90	7.047	112.48	16.20	7.547	112.48
0.54	-61.010	353.56	1.62	5.047	113.48	5.40	5.047	113.48	16.20	7.547	113.48	16.50	8.047	113.48
0.55	-65.850	366.16	1.65	5.547	114.48	5.50	5.547	114.48	16.50	8.047	114.48	16.80	8.547	114.48
0.56	-70.890	379.06	1.68	6.047	115.48	5.60	6.047	115.48	16.80	8.547	115.48	17.10	9.047	115.48
0.57	-76.130	392.26	1.71	6.547	116.48	5.70	6.547	116.48	17.10	9.047	116.48	17.40	9.547	116.48
0.58	-81.570	405.76	1.74	7.047	117.48	5.80	7.047	117.48	17.40	9.547	117.48	17.70	10.047	117.48
0.59	-87.210	419.56	1.77	7.547	118.48	5.90	7.547	118.48	17.70	10.047	118.48	18.00	10.547	118.48
0.60	-93.050	433.66	1.80	8.047	119.48	6.00	8.047	119.48	18.00	10.547	119.48	18.30	11.047	119.48
0.61	-99.090	448.06	1.83	8.547	120.48	6.10	8.547	120.48	18.30	11.047	120.48	18.60	11.547	120.48
0.62	-105.330	462.76	1.86	9.047	121.48	6.20	9.047	121.48	18.60	11.547	121.48	18.90	12.047	121.48
0.63	-111.770	477.76	1.89	9.547	122.48	6.30	9.547	122.48	18.90	12.047	122.48	19.20	12.547	122.48
0.64	-118.410	493.06	1.92	10.047	123.48	6.40	10.047	123.48	19.20	12.547	123.48	19.50	13.047	123.48
0.65	-125.250	508.66	1.95	10.547	124.48	6.50	10.547	124.48	19.50	13.047	124.48	19.80	13.547	124.48
0.66	-132.290	524.56	1.98	11.047	125.48	6.60	11.047	125.48	19.80	13.547	125.48	20.10	14.047	125.48
0.67	-139.530	540.76	2.01	11.547	126.48	6.70	11.547	126.48	20.10	14.047	126.48	20.40	14.547	126.48
0.68	-146.970	557.26	2.04	12.047	127.48	6.80	12.047	127.48	20.40	14.547	127.48	20.70	15.047	127.48
0.69	-154.610	574.06	2.07	12.547	128.48	6.90	12.547	128.48	20.70	15.047	128.48	21.00	15.547	128.48
0.70	-162.450	591.16	2.10	13.047	129.48	7.00	13.047	129.48	21.00	15.547	129.48	21.30	16.047	129.48
0.71	-170.490	608.56	2.13	13.547	130.48	7.10	13.547	130.48	21.30	16.047	130.48	21.60	16.547	130.48
0.72	-178.730	626.26	2.16	14.047	131.48	7.20	14.047	131.48	21.60	16.547	131.48	21.90	17.047	131.48
0.73	-187.170	644.26	2.19	14.547	132.48	7.30	14.547	132.48	21.90	17.047	132.48	22.20	17.547	132.48
0.74	-195.810	662.56	2.22	15.047	133.48	7.40	15.047	133.48	22.20	17.547	133.48	22.50	18.047	133.48
0.75	-204.650	681.06	2.25	15.547	134.48	7.50	15.547	134.48	22.50	18.047	134.48	22.80	18.547	134.48
0.76</														

Table 158. Radial Electric Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 0.00 m

30.0 V AT VED HEIGHT				300.0 RM VED HEIGHT			
RE (GMT)	AMP (UB)	PHASE (DEG)		RE (GMT)	AMP (UB)	PHASE (DEG)	
0.00	-23.392	-170.35		0.00	-23.277	-113.54	
0.30	-23.350	-170.35		0.30	-23.614	103.21	
0.60	-23.104	-170.12		0.60	-23.956	103.50	
0.90	-23.012	-170.04		0.90	-23.301	103.76	
1.20	-23.000	-170.04		1.20	-23.652	103.99	
1.50	-23.004	-170.04		1.50	-23.009	104.18	
1.80	-23.014	-170.13		1.80	-23.372	104.33	
2.10	-23.047	-170.30		2.10	-23.761	104.43	
2.40	-23.763	-170.30		2.40	-23.110	104.43	
2.70	-23.704	-170.20		2.70	-23.502	104.49	
3.00	-23.004	-170.30		3.00	-23.896	104.43	
3.30	-23.007	-170.30		3.30	-23.293	104.30	
3.60	-23.007	-170.30		3.60	-23.713	104.10	
3.90	-23.004	-170.30		3.90	-23.130	103.81	
4.20	-23.004	-170.30		4.20	-23.575	103.42	
4.50	-23.004	-170.30		4.50	-23.024	102.93	
4.80	-23.004	-170.30		4.80	-23.468	102.32	
5.10	-23.004	-170.30		5.10	-23.907	101.57	
5.40	-23.004	-170.30		5.40	-23.461	100.85	
5.70	-23.004	-170.30		5.70	-23.971	99.56	
6.00	-23.004	-170.30		6.00	-23.498	98.26	
6.30	-23.004	-170.30		6.30	-23.046	96.71	
6.60	-23.004	-170.30		6.60	-23.801	94.89	
6.90	-23.004	-170.30		6.90	-23.175	92.73	
7.20	-23.004	-170.30		7.20	-23.760	90.20	
7.50	-23.004	-170.30		7.50	-23.350	87.53	
7.80	-23.004	-170.30		7.80	-23.939	83.76	
8.10	-23.004	-170.30		8.10	-23.512	79.72	
8.40	-23.004	-170.30		8.40	-23.055	75.06	
8.70	-23.004	-170.30		8.70	-23.546	69.79	
9.00	-23.004	-170.30		9.00	-23.950	63.89	
1.50	-31.070	-161.09		10.500	-23.103	30.21	
1.80	-31.070	-161.09		12.000	-23.701	2.85	
2.10	-31.070	-161.09		13.500	-23.013	-0.36	
2.40	-31.070	-161.09		15.000	-23.728	-12.41	
2.70	-31.070	-161.09		16.500	-23.835	-15.55	
3.00	-31.070	-161.09		18.000	-23.244	-17.21	
3.30	-31.070	-161.09		19.500	-23.879	-18.06	
3.60	-31.070	-161.09		21.000	-23.686	-18.43	
3.90	-31.070	-161.09		22.500	-23.029	-18.52	
4.20	-31.070	-161.09		24.000	-23.880	-18.43	
4.50	-31.070	-161.09		25.500	-23.820	-18.23	
4.80	-31.070	-161.09		27.000	-23.034	-17.95	
5.10	-31.070	-161.09		28.500	-23.311	-17.63	
5.40	-31.070	-161.09		30.000	-23.641	-17.24	

Table 159. Radial Electric Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM UPRANGE				100.0 KM UPRANGE				300.0 KM UPRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-24.461	1.72		0.000	-26.494	118.61		0.000	-31.007	-10.05	
0.030	-24.611	-144.15		0.100	-26.716	170.74		0.300	-31.344	121.80	
0.060	-24.743	-143.66		0.200	-26.942	170.98		0.600	-31.686	122.15	
0.090	-24.876	-143.14		0.300	-27.171	171.22		0.900	-32.031	122.48	
0.120	-25.010	-142.62		0.400	-27.405	171.57		1.200	-32.383	122.78	
0.150	-25.145	-142.08		0.500	-27.643	171.92		1.500	-32.740	123.04	
0.180	-25.281	-141.52		0.600	-27.885	172.25		1.800	-33.103	123.27	
0.210	-25.418	-140.95		0.700	-28.132	172.52		2.100	-33.473	123.46	
0.240	-25.556	-140.35		0.800	-28.384	172.82		2.400	-33.852	123.60	
0.270	-25.696	-139.75		0.900	-28.641	173.09		2.700	-34.236	123.70	
0.300	-25.836	-139.12		1.000	-28.904	173.38		3.000	-34.634	123.74	
0.330	-25.978	-138.47		1.100	-29.172	173.64		3.300	-35.040	123.72	
0.360	-26.120	-137.80		1.200	-29.447	173.89		3.600	-35.456	123.63	
0.390	-26.264	-137.12		1.300	-29.728	174.10		3.900	-35.885	123.47	
0.420	-26.408	-136.41		1.400	-30.017	174.32		4.200	-36.326	123.23	
0.450	-26.553	-135.68		1.500	-30.312	174.56		4.500	-36.782	122.89	
0.480	-26.699	-134.92		1.600	-30.616	175.00		4.800	-37.253	122.44	
0.510	-26.845	-134.15		1.700	-30.927	175.36		5.100	-37.740	121.86	
0.540	-26.992	-133.35		1.800	-31.248	175.74		5.400	-38.245	121.15	
0.570	-27.140	-132.52		1.900	-31.578	176.13		5.700	-38.768	120.27	
0.600	-27.288	-131.67		2.000	-31.919	176.53		6.000	-39.311	119.20	
0.630	-27.436	-130.79		2.100	-32.270	176.96		6.300	-39.875	117.92	
0.660	-27.584	-129.88		2.200	-32.633	177.41		6.600	-40.460	116.37	
0.690	-27.732	-128.95		2.300	-33.009	177.88		6.900	-41.065	114.52	
0.720	-27.880	-127.98		2.400	-33.399	178.36		7.200	-41.690	112.31	
0.750	-28.028	-126.99		2.500	-33.803	178.90		7.500	-42.332	109.67	
0.780	-28.176	-125.96		2.600	-34.224	179.47		7.800	-42.985	106.54	
0.810	-28.323	-124.90		2.700	-34.662	-179.93		8.100	-43.640	102.82	
0.840	-28.469	-123.81		2.800	-35.120	-179.28		8.400	-44.282	98.44	
0.870	-28.613	-122.69		2.900	-35.598	-178.58		8.700	-44.890	93.33	
0.900	-28.757	-121.53		3.000	-36.100	-177.82		9.000	-45.436	87.43	
1.050	-29.446	-115.23		3.500	-39.061	-172.59		10.500	-46.114	50.63	
1.500	-30.057	-106.04		4.000	-43.204	-162.02		12.500	-49.571	23.06	
1.950	-30.648	-100.05		4.500	-46.098	-129.85		13.500	-49.677	10.09	
1.500	-30.675	-91.45		5.000	-48.613	-57.91		15.000	-58.293	4.08	
1.650	-31.010	-86.58		5.500	-49.126	-29.80		16.500	-56.369	1.15	
1.800	-30.949	-73.85		6.000	-50.439	-20.20		18.000	-54.787	-0.27	
1.950	-30.713	-65.62		6.500	-50.861	-15.33		19.500	-53.455	-0.88	
2.100	-30.343	-58.13		7.000	-50.916	-12.26		21.000	-52.312	-1.02	
2.250	-29.884	-51.51		7.500	-53.372	-10.04		22.500	-51.319	-0.84	
2.400	-29.375	-45.74		8.000	-52.103	-8.30		24.000	-50.445	-0.56	
2.550	-28.848	-40.76		8.500	-51.034	-6.85		25.500	-49.669	-0.37	
2.700	-28.324	-36.46		9.000	-50.118	-5.60		27.000	-48.976	-0.13	
2.850	-27.811	-32.76		9.500	-49.364	-4.49		28.500	-48.354	0.02	
3.000	-27.335	-29.55		10.000	-48.628	-3.47		30.000	-47.793	1.51	

Table 160. Radial Electric Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM DOWNRANGE				100.0 KM DOWNRANGE				300.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)		HEIGHT (KM)	AMP (DB)	PHASE (DEG)	
0.000	-24.394	-18.82		0.000	-26.859	-146.14		0.000	-31.812	-84.86	
0.030	-24.428	-97.37		0.100	-27.052	-157.60		0.300	-32.139	148.22	
0.060	-24.459	-98.22		0.200	-27.248	-157.05		0.600	-32.469	148.76	
0.090	-24.487	-95.06		0.300	-27.446	-156.48		0.900	-32.805	147.29	
0.120	-24.516	-93.89		0.400	-27.646	-155.89		1.200	-33.145	147.80	
0.150	-24.534	-92.72		0.500	-27.849	-155.28		1.500	-33.492	148.30	
0.180	-24.553	-91.54		0.600	-28.055	-154.66		1.800	-33.844	148.77	
0.210	-24.569	-90.35		0.700	-28.263	-154.01		2.100	-34.204	149.22	
0.240	-24.581	-89.16		0.800	-28.474	-153.34		2.400	-34.571	149.64	
0.270	-24.591	-87.97		0.900	-28.687	-152.65		2.700	-34.946	150.03	
0.300	-24.596	-86.76		1.000	-28.904	-151.93		3.000	-35.330	150.40	
0.330	-24.599	-85.59		1.100	-29.123	-151.19		3.300	-35.723	150.72	
0.360	-24.599	-84.40		1.200	-29.345	-150.42		3.600	-36.126	151.01	
0.390	-24.595	-83.22		1.300	-29.569	-149.62		3.900	-36.544	151.26	
0.420	-24.588	-82.03		1.400	-29.797	-148.80		4.200	-36.973	151.46	
0.450	-24.577	-80.85		1.500	-30.027	-147.94		4.500	-37.416	151.60	
0.480	-24.564	-79.67		1.600	-30.260	-147.05		4.800	-37.874	151.69	
0.510	-24.547	-78.51		1.700	-30.496	-146.13		5.100	-38.346	151.70	
0.540	-24.528	-77.34		1.800	-30.734	-145.17		5.400	-38.842	151.64	
0.570	-24.505	-76.19		1.900	-30.975	-144.17		5.700	-39.355	151.49	
0.600	-24.480	-75.04		2.000	-31.218	-143.14		6.000	-39.890	151.24	
0.630	-24.451	-73.91		2.100	-31.464	-142.06		6.300	-40.450	150.87	
0.660	-24.420	-72.76		2.200	-31.713	-140.94		6.600	-41.037	150.35	
0.690	-24.387	-71.67		2.300	-31.963	-139.77		6.900	-41.653	149.67	
0.720	-24.351	-70.57		2.400	-32.216	-138.56		7.200	-42.301	148.79	
0.750	-24.316	-69.48		2.500	-32.470	-137.29		7.500	-42.984	147.66	
0.780	-24.271	-68.40		2.600	-32.726	-135.97		7.800	-43.706	146.24	
0.810	-24.228	-67.34		2.700	-32.983	-134.59		8.100	-44.468	144.66	
0.840	-24.183	-66.29		2.800	-33.242	-133.15		8.400	-45.273	142.22	
0.870	-24.136	-65.26		2.900	-33.500	-131.66		8.700	-46.120	139.41	
0.900	-24.087	-64.24		3.000	-33.759	-130.09		9.000	-47.005	135.88	
1.050	-23.819	-59.35		3.500	-35.032	-121.24		10.500	-51.009	100.93	
1.200	-23.563	-54.93		4.000	-36.199	-110.49		12.000	-49.434	53.68	
1.350	-23.310	-50.69		4.500	-37.128	-97.98		13.500	-45.571	33.87	
1.500	-23.096	-47.25		5.000	-37.896	-84.42		15.000	-42.639	27.24	
1.650	-22.879	-44.97		5.500	-37.860	-71.00		16.500	-40.500	25.20	
1.800	-22.676	-41.03		6.000	-37.699	-58.93		18.000	-38.884	25.14	
1.950	-22.490	-38.46		6.500	-37.451	-46.98		19.500	-37.630	26.16	
2.100	-22.324	-36.04		7.000	-36.948	-39.93		21.000	-36.642	27.85	
2.250	-22.180	-33.93		7.500	-36.582	-32.93		22.500	-35.860	30.06	
2.400	-21.961	-32.05		8.000	-36.305	-27.14		24.000	-35.243	32.71	
2.550	-21.768	-30.36		8.500	-36.150	-22.29		25.500	-34.782	35.74	
2.700	-21.590	-28.85		9.000	-36.139	-17.15		27.000	-34.396	39.31	
2.850	-21.430	-27.51		9.500	-36.291	-14.55		28.500	-34.126	43.34	
3.000	-21.289	-26.36		10.000	-36.632	-11.39		30.000	-33.934	47.94	

Table 161. Radial Electric Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 0.00 m

300 KM DOWNWAVE					1000 KM DOWNWAVE					1000 KM DOWNWAVE				
RELJNT	AMP	PHASE	RELJNT	AMP	PHASE	RELJNT	AMP	PHASE	RELJNT	AMP	PHASE	RELJNT	AMP	PHASE
(M)	(DB)	(DEG)	(M)	(DB)	(DEG)	(M)	(DB)	(DEG)	(M)	(DB)	(DEG)	(M)	(DB)	(DEG)
.000	-22.000	-69.000	.000	-31.290	14.000	.000	-31.290	14.000	.000	-31.290	14.000	.000	-31.290	14.000
.003	-22.123	113.970	.010	-31.415	77.000	.010	-31.415	77.000	.010	-31.415	77.000	.010	-31.415	77.000
.006	-22.247	114.000	.020	-31.541	76.000	.020	-31.541	76.000	.020	-31.541	76.000	.020	-31.541	76.000
.009	-22.371	114.000	.030	-31.668	75.000	.030	-31.668	75.000	.030	-31.668	75.000	.030	-31.668	75.000
.012	-22.495	114.000	.040	-31.795	74.000	.040	-31.795	74.000	.040	-31.795	74.000	.040	-31.795	74.000
.015	-22.619	114.000	.050	-31.922	73.000	.050	-31.922	73.000	.050	-31.922	73.000	.050	-31.922	73.000
.018	-22.743	114.000	.060	-32.050	72.000	.060	-32.050	72.000	.060	-32.050	72.000	.060	-32.050	72.000
.021	-22.867	114.000	.070	-32.178	71.000	.070	-32.178	71.000	.070	-32.178	71.000	.070	-32.178	71.000
.024	-22.991	114.000	.080	-32.306	70.000	.080	-32.306	70.000	.080	-32.306	70.000	.080	-32.306	70.000
.027	-23.115	114.000	.090	-32.434	69.000	.090	-32.434	69.000	.090	-32.434	69.000	.090	-32.434	69.000
.030	-23.239	114.000	.100	-32.562	68.000	.100	-32.562	68.000	.100	-32.562	68.000	.100	-32.562	68.000
.033	-23.363	114.000	.110	-32.690	67.000	.110	-32.690	67.000	.110	-32.690	67.000	.110	-32.690	67.000
.036	-23.487	114.000	.120	-32.818	66.000	.120	-32.818	66.000	.120	-32.818	66.000	.120	-32.818	66.000
.039	-23.611	114.000	.130	-32.946	65.000	.130	-32.946	65.000	.130	-32.946	65.000	.130	-32.946	65.000
.042	-23.735	114.000	.140	-33.074	64.000	.140	-33.074	64.000	.140	-33.074	64.000	.140	-33.074	64.000
.045	-23.859	114.000	.150	-33.202	63.000	.150	-33.202	63.000	.150	-33.202	63.000	.150	-33.202	63.000
.048	-23.983	114.000	.160	-33.330	62.000	.160	-33.330	62.000	.160	-33.330	62.000	.160	-33.330	62.000
.051	-24.107	114.000	.170	-33.458	61.000	.170	-33.458	61.000	.170	-33.458	61.000	.170	-33.458	61.000
.054	-24.231	114.000	.180	-33.586	60.000	.180	-33.586	60.000	.180	-33.586	60.000	.180	-33.586	60.000
.057	-24.355	114.000	.190	-33.714	59.000	.190	-33.714	59.000	.190	-33.714	59.000	.190	-33.714	59.000
.060	-24.479	114.000	.200	-33.842	58.000	.200	-33.842	58.000	.200	-33.842	58.000	.200	-33.842	58.000
.063	-24.603	114.000	.210	-33.970	57.000	.210	-33.970	57.000	.210	-33.970	57.000	.210	-33.970	57.000
.066	-24.727	114.000	.220	-34.098	56.000	.220	-34.098	56.000	.220	-34.098	56.000	.220	-34.098	56.000
.069	-24.851	114.000	.230	-34.226	55.000	.230	-34.226	55.000	.230	-34.226	55.000	.230	-34.226	55.000
.072	-24.975	114.000	.240	-34.354	54.000	.240	-34.354	54.000	.240	-34.354	54.000	.240	-34.354	54.000
.075	-25.099	114.000	.250	-34.482	53.000	.250	-34.482	53.000	.250	-34.482	53.000	.250	-34.482	53.000
.078	-25.223	114.000	.260	-34.610	52.000	.260	-34.610	52.000	.260	-34.610	52.000	.260	-34.610	52.000
.081	-25.347	114.000	.270	-34.738	51.000	.270	-34.738	51.000	.270	-34.738	51.000	.270	-34.738	51.000
.084	-25.471	114.000	.280	-34.866	50.000	.280	-34.866	50.000	.280	-34.866	50.000	.280	-34.866	50.000
.087	-25.595	114.000	.290	-34.994	49.000	.290	-34.994	49.000	.290	-34.994	49.000	.290	-34.994	49.000
.090	-25.719	114.000	.300	-35.122	48.000	.300	-35.122	48.000	.300	-35.122	48.000	.300	-35.122	48.000
.105	-26.109	114.110	.350	-35.513	66.39	.350	-35.513	66.39	.350	-35.513	66.39	.350	-35.513	66.39
.120	-26.500	109.74	.400	-35.904	62.51	.400	-35.904	62.51	.400	-35.904	62.51	.400	-35.904	62.51
.135	-27.000	106.00	.450	-36.295	58.16	.450	-36.295	58.16	.450	-36.295	58.16	.450	-36.295	58.16
.150	-27.500	102.76	.500	-36.686	46.36	.500	-36.686	46.36	.500	-36.686	46.36	.500	-36.686	46.36
.165	-28.000	100.43	.550	-37.077	39.90	.550	-37.077	39.90	.550	-37.077	39.90	.550	-37.077	39.90
.180	-28.500	99.43	.600	-37.468	31.44	.600	-37.468	31.44	.600	-37.468	31.44	.600	-37.468	31.44
.195	-29.000	99.01	.650	-37.859	23.56	.650	-37.859	23.56	.650	-37.859	23.56	.650	-37.859	23.56
.210	-29.500	99.53	.700	-38.250	16.03	.700	-38.250	16.03	.700	-38.250	16.03	.700	-38.250	16.03
.225	-30.000	99.88	.750	-38.641	10.79	.750	-38.641	10.79	.750	-38.641	10.79	.750	-38.641	10.79
.240	-30.500	99.88	.800	-39.032	5.98	.800	-39.032	5.98	.800	-39.032	5.98	.800	-39.032	5.98
.255	-31.000	99.88	.850	-39.423	1.09	.850	-39.423	1.09	.850	-39.423	1.09	.850	-39.423	1.09
.270	-31.500	99.88	.900	-39.814	-1.04	.900	-39.814	-1.04	.900	-39.814	-1.04	.900	-39.814	-1.04
.285	-32.000	99.88	.950	-40.205	-3.56	.950	-40.205	-3.56	.950	-40.205	-3.56	.950	-40.205	-3.56
.300	-32.500	99.88	1.000	-40.596	-5.59	1.000	-40.596	-5.59	1.000	-40.596	-5.59	1.000	-40.596	-5.59

Table 162. Radial Electric Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE					
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
.000	-26.392	147.32	.000	-31.671	177.78	.000	-31.671	177.78	.000	-31.671	177.78	.000	-31.671	177.78	.000	-31.671	177.78	.000	-31.671	177.78
.003	-26.484	176.88	.010	-31.790	139.97	.010	-31.790	139.97	.010	-31.790	139.97	.010	-31.790	139.97	.010	-31.790	139.97	.010	-31.790	139.97
.006	-26.576	176.88	.020	-31.909	140.24	.020	-31.909	140.24	.020	-31.909	140.24	.020	-31.909	140.24	.020	-31.909	140.24	.020	-31.909	140.24
.009	-26.672	176.88	.030	-32.029	140.49	.030	-32.029	140.49	.030	-32.029	140.49	.030	-32.029	140.49	.030	-32.029	140.49	.030	-32.029	140.49
.012	-26.767	176.88	.040	-32.149	140.73	.040	-32.149	140.73	.040	-32.149	140.73	.040	-32.149	140.73	.040	-32.149	140.73	.040	-32.149	140.73
.015	-26.860	176.88	.050	-32.270	140.94	.050	-32.270	140.94	.050	-32.270	140.94	.050	-32.270	140.94	.050	-32.270	140.94	.050	-32.270	140.94
.018	-26.956	176.88	.060	-32.392	141.14	.060	-32.392	141.14	.060	-32.392	141.14	.060	-32.392	141.14	.060	-32.392	141.14	.060	-32.392	141.14
.021	-27.053	176.88	.070	-32.515	141.31	.070	-32.515	141.31	.070	-32.515	141.31	.070	-32.515	141.31	.070	-32.515	141.31	.070	-32.515	141.31
.024	-27.152	176.88	.080	-32.639	141.47	.080	-32.639	141.47	.080	-32.639	141.47	.080	-32.639	141.47	.080	-32.639	141.47	.080	-32.639	141.47
.027	-27.251	176.88	.090	-32.764	141.60	.090	-32.764	141.60	.090	-32.764	141.60	.090	-32.764	141.60	.090	-32.764	141.60	.090	-32.764	141.60
.030	-27.350	176.88	.100	-32.890	141.71	.100	-32.890	141.71	.100	-32.890	141.71	.100	-32.890	141.71	.100	-32.890	141.71	.100	-32.890	141.71
.033	-27.450	176.88	.110	-33.017	141.79	.110	-33.017	141.79	.110	-33.017	141.79	.110	-33.017	141.79	.110	-33.017	141.79	.110	-33.017	141.79
.036	-27.550	176.88	.120	-33.144	141.86	.120	-33.144	141.86	.120	-33.144	141.86	.120	-33.144	141.86	.120	-33.144	141.86	.120	-33.144	141.86
.039	-27.652	176.88	.130	-33.273	141.91	.130	-33.273	141.91	.130	-33.273	141.91	.130	-33.273	141.91	.130	-33.273	141.91	.130	-33.273	141.91
.042	-27.754	176.88	.140	-33.403	141.91	.140	-33.403	141.91	.140	-33.403	141.91	.140	-33.403	141.91	.140	-33.403	141.91	.140	-33.403	141.91
.045	-27.857	176.88	.150	-33.534	141.90	.150	-33.534	141.90	.150	-33.534	141.90	.150	-33.534	141.90	.150	-33.534	141.90	.150	-33.534	141.90
.048	-27.961	176.88	.160	-33.667	141.86	.160	-33.667	141.86	.160	-33.667	141.86	.160	-33.667	141.86	.160	-33.667	141.86	.160	-33.667	141.86
.051	-28.066	176.88	.170	-33.800	141.79	.170	-33.800	141.79	.170	-33.800	141.79	.170	-33.800	141.79	.170	-33.800	141.79	.170	-33.800	141.79
.054	-28.172	176.88	.180	-33.935	141.70	.180	-33.935	141.70	.180	-33.935	141.70	.180	-33.935	141.70	.180	-33.935	141.70	.180	-33.935	141.70
.057	-28.279	176.88	.190	-34.070	141.57	.190	-34.070	141.57	.190	-34.070	141.57	.190	-34.070	141.57	.190	-34.070	141.57	.190	-34.070	141.57
.060	-28.386	176.88	.200	-34.207	141.42	.200	-34.207	141.42	.200	-34.207	141.42	.200	-34.207	141.42	.200	-34.207	141.42	.200	-34.207	141.42
.063	-28.493	176.88	.210	-34.345	141.23	.210	-34.345	141.23	.210	-34.345	141.23	.210	-34.345	141.23	.210	-34.345	141.23	.210	-34.345	141.23
.066	-28.603	176.88	.220	-34.484	141.02	.220	-34.484	141.02	.220	-34.484	141.02	.220	-34.484	141.02	.220	-34.484	141.02	.220	-34.484	141.02
.069	-28.715	176.88	.230	-34.623	140.76	.230	-34.623	140.76	.230	-34.623	140.76	.230	-34.623	140.76	.230	-34.623	140.76	.230	-34.623	140.76
.072	-28.827	176.88	.240	-34.764	140.46	.240	-34.764	140.46	.240	-34.764	140.46	.240	-34.764	140.46	.240	-34.764	140.46	.240	-34.764	140.46
.075	-28.940	176.88	.250	-34.906	140.16	.250	-34.906	140.16	.250	-34.906	140.16	.250	-34.906	140.16	.250	-34.906	140.16	.250	-34.906	140.16
.078	-29.054	176.88	.260	-35.048	139.80	.260	-35.048	139.80	.260	-35.048	139.80	.260	-35.048	139.80	.260	-35.048	139.80	.260	-35.048	139.80
.081	-29.169	176.88	.270	-35.192	139.40	.270	-35.192	139.40	.270	-35.192	139.40	.270	-35.192	139.40	.270	-35.192	139.40	.270	-35.192	139.40
.084	-29.285	176.88	.280	-35.335	138.97	.280	-35.335	138.97	.280	-35.335	138.97	.280	-35.335	138.97	.280	-35.335	138.97	.280	-35.335	138.97
.087	-29.402	176.88	.290	-35.480	138.49	.290	-35.480	138.49	.290	-35.480	138.49	.290	-35.480	138.49	.290	-35.480	138.49	.290	-35.480	138.49
.090	-29.521	176.88	.300	-35.624	137.97	.300	-35.624	137.97	.300	-35.624	137.97	.300	-35.624	137.97	.300	-35.624	137.97	.300	-35.624	137.97
.105	-26.146	173.51	.350	-36.344	134.69	.350	-36.344	134.69	.350	-36.344	134.69	.350	-36.344	134.69	.350	-36.344	134.69	.350	-36.344	134.69
.120	-26.116	172.92	.400	-37.033	130.17	.400	-37.033	130.17	.400	-37.033	130.17	.400	-37.033	130.17	.400	-37.033	130.17	.400	-37.033	130.17
.135	-27.463	172.92	.450	-37.640	124.28	.450	-37.640	124.28	.450	-37.640	124.28	.450	-37.640	124.28	.450	-37.640	124.28	.450	-37.640	124.28
.150	-28.192	172.02	.500	-38.094	117.07	.500	-38.094	117.07	.500	-38.094	117.07	.500	-38.094	117.07	.500	-38.094	117.07	.500	-38.094	117.07
.165	-28.973	171.74	.550	-38.321	108.83	.550	-38.321	108.83	.550	-38.321	108.83	.550	-38.321	108.83	.550	-38.321	108.83	.550	-38.321	108.83
.180	-29.814	171.61	.600	-38.268	100.14	.600	-38.268	100.14	.600	-38.268	100.14	.600	-38.268	100.14	.600	-38.268	100.14	.600	-38.268	100.14
.195	-30.719	171.70	.650	-37.933	91.68	.650	-37.933	91.68	.650	-37.933	91.68	.650	-37.933	91.68	.650	-37.933	91.68	.650	-37.933	91.68
.210	-31.706	172.05	.700	-37.366	84.05	.700	-37.366	84.05	.700	-37.366	84.05	.700	-37.366	84.05	.700	-37.366	84.05	.700	-37.366	84.05
.225	-32.789	172.77	.750	-36.642	77.58	.750	-36.642	77.58	.750	-36.642	77.58	.750	-36.642	77.58	.750	-36.642	77.58	.750	-36.642	77.58
.240	-33.985	174.00	.800	-35.834	72.28	.800	-35.834	72.28	.800	-35.834	72.28	.800	-35.834	72.28	.800	-35.834	72.28	.800	-35.834	72.28
.255	-35.317	175.98	.850	-34.996	68.09	.850	-34.996	68.09	.850	-34.996	68.09	.850	-34.996	68.09	.850	-34.996	68.09	.850	-34.996	68.09
.270	-36.810	179.07	.900	-34.166	64.84	.900	-34.166	64.84	.900	-34.166	64.84	.900	-34.166	64.84	.900	-34.166	64.84	.900	-34.166	64.84
.285	-38.483	176.10	.950	-33.362	62.35	.950	-33.362	62.35	.950	-33.362	62.35	.950	-33.362	62.35	.950	-33.362	62.35	.950	-33.362	62.35
.300	-40.322	168.47	1.000	-32.596	60.47	1.000	-32.596	60.47	1.000	-32.596	60.47	1.000	-32.596	60.47	1.000	-32.596	60.47	1.000	-32.596	60.47
.350	-46.175	53.62	3.500	-46.175	53.62	3.500	-46.175	53.62	3.500	-46.175	53.62	3.500	-46.175	53.62	3.500	-46.175	53.62	3.500	-46.175	53.62
.400	-44.148	49.66	4.000	-44.148	49.66	4.000	-44.148	49.66	4.000	-44.148	49.66	4.000	-44.148	49.66	4.000	-44.148	49.66	4.000	-44.148	49.66
.4500	-42.324	47.17	4.500	-42.324	47.17	4.500	-42.324	47.17	4.500	-42.324	47.17	4.500	-42.324	47.17	4.500	-42.324	47.17	4.500	-42.324	47.17
.5000	-40.688	45.60	5.000	-40.688	45.60	5.000	-40.688	45.60	5.000	-40.688	45.60	5.000	-40.688	45.60	5.000	-40.688	45.60	5.000	-40.688	45.60
.5500	-39.215	44.65	5.500	-39.215	44.65	5.500	-39.215	44.65	5.500	-39.215	44.65	5.500	-39.215	44.65	5.500	-39.215	44.65	5.500	-39.215	44.65
.6000	-37.884	44.11	6.000	-37.884	44.11	6.000	-37.884	44.11	6.000	-37.884	44.11	6.000	-37.884	44.11	6.000	-37.884	44.11	6.000	-37.884	44.11
.6500	-36.675	43.86	6.500	-36.675	43.86	6.500	-36.675	43.86	6.500	-36.675	43.86	6.500	-36.675	43.86	6.500	-36.675	43.86	6.500	-36.675	43.86
.7000	-35.570	43.82	7.000	-35.570	43.82	7.000	-35.570	43.82	7.000	-35.570	43.82	7.000	-35.570	43.82	7.000	-35.570	43.82	7.000	-35.570	43.82
.7500	-34.558	43.94	7.500	-34.558	43.94	7.500	-34.558	43.94	7.500	-34.558	43.94	7.500	-34.558	43.94	7.500	-34.558	43.94	7.500	-34.558	43.94
.8000	-33.625	44.17	8.000	-33.625	44.17	8.000	-33.625	44.17	8.000	-33.625	44.17	8.000	-33.625							

Table 163. Radial Electric Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height 449.52 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-20.145	-121.59	0.000	-26.204	-17.34	0.000	-37.614	-68.31	0.000	-48.104	-145.93	0.000	-48.104	-145.93	0.000
0.003	-20.201	-121.59	0.010	-26.304	-17.34	0.030	-37.719	-68.57	0.100	-48.214	-145.93	0.300	-48.214	-145.93	0.500
0.006	-20.258	-121.12	0.020	-26.405	-17.34	0.060	-37.825	-68.87	0.200	-48.320	-145.93	0.400	-48.320	-145.93	0.600
0.009	-20.315	-120.66	0.030	-26.507	-17.34	0.090	-37.932	-69.10	0.300	-48.427	-145.93	0.500	-48.427	-145.93	0.700
0.012	-20.372	-120.19	0.040	-26.610	-17.34	0.120	-38.041	-69.35	0.400	-48.535	-145.93	0.600	-48.535	-145.93	0.800
0.015	-20.429	-119.72	0.050	-26.713	-17.34	0.150	-38.151	-69.60	0.500	-48.643	-145.93	0.700	-48.643	-145.93	0.900
0.018	-20.487	-119.26	0.060	-26.818	-17.34	0.180	-38.262	-69.85	0.600	-48.751	-145.93	0.800	-48.751	-145.93	1.000
0.021	-20.544	-118.79	0.070	-26.924	-17.34	0.210	-38.375	-70.10	0.700	-48.859	-145.93	0.900	-48.859	-145.93	1.100
0.024	-20.603	-118.32	0.080	-27.032	-17.34	0.240	-38.489	-70.35	0.800	-48.967	-145.93	1.000	-48.967	-145.93	1.200
0.027	-20.661	-117.86	0.090	-27.140	-17.34	0.270	-38.604	-70.60	0.900	-49.075	-145.93	1.100	-49.075	-145.93	1.300
0.030	-20.719	-117.39	0.100	-27.250	-17.34	0.300	-38.720	-70.85	1.000	-49.183	-145.93	1.200	-49.183	-145.93	1.400
0.033	-20.776	-116.92	0.110	-27.360	-17.34	0.330	-38.835	-71.10	1.100	-49.291	-145.93	1.300	-49.291	-145.93	1.500
0.036	-20.833	-116.46	0.120	-27.472	-17.34	0.360	-38.953	-71.35	1.200	-49.400	-145.93	1.400	-49.400	-145.93	1.600
0.039	-20.890	-115.99	0.130	-27.586	-17.34	0.390	-39.070	-71.60	1.300	-49.508	-145.93	1.500	-49.508	-145.93	1.700
0.042	-20.947	-115.52	0.140	-27.701	-17.34	0.420	-39.187	-71.85	1.400	-49.616	-145.93	1.600	-49.616	-145.93	1.800
0.045	-21.005	-115.05	0.150	-27.817	-17.34	0.450	-39.302	-72.10	1.500	-49.724	-145.93	1.700	-49.724	-145.93	1.900
0.048	-21.062	-114.58	0.160	-27.934	-17.34	0.480	-39.416	-72.35	1.600	-49.832	-145.93	1.800	-49.832	-145.93	2.000
0.051	-21.119	-114.11	0.170	-28.053	-17.34	0.510	-39.532	-72.60	1.700	-49.940	-145.93	1.900	-49.940	-145.93	2.100
0.054	-21.176	-113.64	0.180	-28.174	-17.34	0.540	-39.646	-72.85	1.800	-50.048	-145.93	2.000	-50.048	-145.93	2.200
0.057	-21.233	-113.17	0.190	-28.295	-17.34	0.570	-39.760	-73.10	1.900	-50.156	-145.93	2.100	-50.156	-145.93	2.300
0.060	-21.290	-112.70	0.200	-28.419	-17.34	0.600	-39.874	-73.35	2.000	-50.264	-145.93	2.200	-50.264	-145.93	2.400
0.063	-21.347	-112.23	0.210	-28.543	-17.34	0.630	-39.988	-73.60	2.100	-50.372	-145.93	2.300	-50.372	-145.93	2.500
0.066	-21.404	-111.76	0.220	-28.667	-17.34	0.660	-40.102	-73.85	2.200	-50.480	-145.93	2.400	-50.480	-145.93	2.600
0.069	-21.461	-111.29	0.230	-28.791	-17.34	0.690	-40.216	-74.10	2.300	-50.588	-145.93	2.500	-50.588	-145.93	2.700
0.072	-21.518	-110.82	0.240	-28.915	-17.34	0.720	-40.330	-74.35	2.400	-50.696	-145.93	2.600	-50.696	-145.93	2.800
0.075	-21.575	-110.35	0.250	-29.039	-17.34	0.750	-40.444	-74.60	2.500	-50.804	-145.93	2.700	-50.804	-145.93	2.900
0.078	-21.632	-109.88	0.260	-29.163	-17.34	0.780	-40.558	-74.85	2.600	-50.912	-145.93	2.800	-50.912	-145.93	3.000
0.081	-21.689	-109.41	0.270	-29.287	-17.34	0.810	-40.672	-75.10	2.700	-51.020	-145.93	2.900	-51.020	-145.93	3.100
0.084	-21.746	-108.94	0.280	-29.411	-17.34	0.840	-40.786	-75.35	2.800	-51.128	-145.93	3.000	-51.128	-145.93	3.200
0.087	-21.803	-108.47	0.290	-29.535	-17.34	0.870	-40.900	-75.60	2.900	-51.236	-145.93	3.100	-51.236	-145.93	3.300
0.090	-21.860	-108.00	0.300	-29.659	-17.34	0.900	-41.014	-75.85	3.000	-51.344	-145.93	3.200	-51.344	-145.93	3.400
0.105	-22.221	-104.05	0.350	-32.429	-17.34	1.050	-43.972	-128.40	3.500	-54.972	-128.40	10.000	-54.972	-128.40	100.000
0.120	-22.556	-101.19	0.400	-33.141	-17.34	1.200	-45.223	-118.66	1.200	-45.223	-118.66	4.000	-45.223	-118.66	40.000
0.135	-22.895	-98.27	0.450	-33.835	-17.34	1.350	-46.474	-110.62	1.350	-46.474	-110.62	4.500	-46.474	-110.62	45.000
0.150	-23.190	-95.31	0.500	-34.461	-17.34	1.500	-47.711	-104.02	1.500	-47.711	-104.02	5.000	-47.711	-104.02	50.000
0.165	-23.454	-92.33	0.550	-35.072	-17.34	1.650	-48.941	-97.34	1.650	-48.941	-97.34	5.500	-48.941	-97.34	55.000
0.180	-23.755	-89.33	0.600	-35.679	-17.34	1.800	-50.174	-90.67	1.800	-50.174	-90.67	6.000	-50.174	-90.67	60.000
0.195	-24.053	-86.34	0.650	-36.284	-17.34	1.950	-51.404	-84.00	1.950	-51.404	-84.00	6.500	-51.404	-84.00	65.000
0.210	-24.349	-83.37	0.700	-36.889	-17.34	2.100	-52.634	-77.32	2.100	-52.634	-77.32	7.000	-52.634	-77.32	70.000
0.225	-24.643	-80.40	0.750	-37.494	-17.34	2.250	-53.864	-70.65	2.250	-53.864	-70.65	7.500	-53.864	-70.65	75.000
0.240	-24.937	-77.43	0.800	-38.100	-17.34	2.400	-55.094	-64.00	2.400	-55.094	-64.00	8.000	-55.094	-64.00	80.000
0.255	-25.231	-74.46	0.850	-38.705	-17.34	2.550	-56.324	-57.32	2.550	-56.324	-57.32	8.500	-56.324	-57.32	85.000
0.270	-25.525	-71.49	0.900	-39.310	-17.34	2.700	-57.554	-50.65	2.700	-57.554	-50.65	9.000	-57.554	-50.65	90.000
0.285	-25.819	-68.52	0.950	-39.915	-17.34	2.850	-58.784	-44.00	2.850	-58.784	-44.00	9.500	-58.784	-44.00	95.000
0.300	-26.113	-65.55	1.000	-40.520	-17.34	3.000	-60.014	-37.32	3.000	-60.014	-37.32	10.000	-60.014	-37.32	100.000

Table 164. Radial Electric Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM UMRANGE				10.0 KM UMRANGE				30.0 KM UMRANGE				100.0 KM UMRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-45.420	-129.90	0.000	-55.902	18.27	0.000	-65.457	-110.53	0.000	-75.920	-55.43	0.000	-85.920	-55.43	0.000
0.003	-45.207	88.52	0.010	-55.990	88.59	0.030	-65.565	88.54	0.100	-76.005	88.58	0.300	-86.005	88.58	1.000
0.006	-45.595	88.53	0.020	-56.077	88.57	0.060	-65.707	88.59	0.200	-76.027	88.59	0.600	-86.027	88.59	2.000
0.009	-45.883	88.58	0.030	-56.165	88.58	0.100	-65.839	88.59	0.300	-76.059	88.59	1.000	-86.059	88.59	3.000
0.012	-45.772	88.54	0.040	-56.250	88.58	0.150	-65.970	88.58	0.500	-76.088	88.58	1.500	-86.088	88.58	5.000
0.015	-45.880	88.54	0.050	-56.332	88.57	0.200	-66.100	88.57	0.700	-76.117	88.57	2.000	-86.117	88.57	7.000
0.018	-45.949	88.53	0.060	-56.408	88.56	0.250	-66.227	88.56	0.800	-76.146	88.56	2.500	-86.146	88.56	8.000
0.021	-46.037	88.58	0.070	-56.475	88.55	0.300	-66.353	88.55	1.000	-76.175	88.55	3.000	-86.175	88.55	10.000
0.024	-46.124	88.51	0.080	-56.531	88.54	0.350	-66.479	88.54	1.200	-76.204	88.54	3.500	-86.204	88.54	12.000
0.027	-46.210	88.67	0.090	-56.570	88.53	0.400	-66.605	88.53	1.400	-76.233	88.53	4.000	-86.233	88.53	14.000
0.030	-46.295	88.94	0.100	-56.609	88.52	0.450	-66.731	88.52	1.600	-76.262	88.52	4.500	-86.262	88.52	16.000
0.033	-46.377	89.13	0.110	-56.683	88.51	0.500	-66.857	88.51	1.800	-76.291	88.51	5.000	-86.291	88.51	18.000
0.036	-46.457	89.23	0.120	-56.758	88.50	0.550	-66.983	88.50	2.000	-76.320	88.50	5.500	-86.320	88.50	20.000
0.039	-46.534	89.24	0.130	-56.832	88.49	0.600	-67.109	88.49	2.200	-76.349	88.49	6.000	-86.349	88.49	22.000
0.042	-46.607	89.17	0.140	-56.907	88.48	0.650	-67.235	88.48	2.400	-76.378	88.48	6.500	-86.378	88.48	24.000
0.045	-46.675	89.00	0.150	-56.979	88.47	0.700	-67.361	88.47	2.600	-76.407	88.47	7.000	-86.407	88.47	26.000
0.048	-46.738	88.74	0.160	-57.050	88.46	0.750	-67.487	88.46	2.800	-76.436	88.46	7.500	-86.436	88.46	28.000
0.051	-46.794	88.49	0.170	-57.114	88.45	0.800	-67.613	88.45	3.000	-76.465	88.45	8.000	-86.465	88.45	30.000
0.054	-46.843	88.47	0.180	-57.179	88.44	0.850	-67.739	88.44	3.200	-76.494	88.44	8.500	-86.494	88.44	32.000
0.057	-46.883	88.46	0.190	-57.239	88.43	0.900	-67.865	88.43	3.400	-76.523	88.43	9.000	-86.523	88.43	34.000
0.060	-46.914	88.47	0.200	-57.300	88.42	0.950	-67.991	88.42	3.600	-76.552	88.42	9.500	-86.552	88.42	36.000
0.063	-46.935	88.46	0.210	-57.353	88.41	1.000	-68.117	88.41	3.800	-76.581	88.41	10.000	-86.581	88.41	38.000
0.066	-46.944	88.46	0.220	-57.407	88.40	1.050	-68.243	88.40	4.000	-76.610	88.40	10.500	-86.610	88.40	40.000
0.069	-46.941	88.46	0.230	-57.461	88.39	1.100	-68.369	88.39	4.200	-76.639	88.39	11.000	-86.639	88.39	42.000
0.072	-46.933	88.46	0.240	-57.514	88.38	1.150	-68.495	88.38	4.400	-76.668	88.38	11.500	-86.668	88.38	44.000
0.075	-46.919	88.46	0.250	-57.568	88.37	1.200	-68.621	88.37	4.600	-76.697	88.37	12.000	-86.697	88.37	46.000
0.078	-46.899	88.46	0.260	-57.622	88.36	1.250	-68.747	88.36	4.800	-76.726	88.36	12.500	-86.726	88.36	48.000
0.081	-46.871	88.46	0.270	-57.676	88.35	1.300	-68.873	88.35	5.000	-76.755	88.35	13.000	-86.755	88.35	50.000
0.084	-46.836	88.46	0.280	-57.730	88.34	1.350	-68.999	88.34	5.200	-76.784	88.34	13.500	-86.784	88.34	52.000
0.087	-46.800	88.46	0.290	-57.784	88.33	1.400	-69.125	88.33	5.400	-76.813	88.33	14.000	-86.813	88.33	54.000
0.090	-46.755	88.46	0.300	-57.838	88.32	1.450	-69.251	88.32	5.600	-76.842	88.32	14.500	-86.842	88.32	56.000
0.105	-46.111	43.94	0.320	-46.380	13.43	1.500	-46.380	13.43	1.500	-46.380	13.43	1.500	-46.380	13.43	1.500
0.120	-44.743	33.07	0.400	-46.524	7.13	1.600	-46.524	7.13	1.600	-46.524	7.13	1.600	-46.524	7.13	1.600
0.135	-43.539	27.84	0.450	-44.529	6.20	1.700	-44.529	6.20	1.700	-44.529	6.20	1.700	-44.529	6.20	1.700
0.150	-42.270	21.80	0.500	-42.575	5.12	1.800	-42.575	5.12	1.800	-42.575	5.12	1.800	-42.575	5.12	1.800
0.165	-41.004	17.18	0.550	-41.575	4.00	1.900	-41.575	4.00	1.900	-41.575	4.00	1.900	-41.575	4.00	1.900
0.180	-39.761	13.57	0.600	-40.508	2.84	2.000	-40.508	2.84	2.000	-40.508	2.84	2.000	-40.508	2.84	2.000
0.195	-38.618	10.74	0.650	-39.475	1.63	2.100	-39.475	1.63	2.100	-39.475	1.63	2.100	-39.475	1.63	2.100
0.210	-37.521	8.30	0.700	-38.465	0.38	2.200	-38.465	0.38	2.200	-38.465	0.38	2.200	-38.465	0.38	2.200
0.225	-36.483	6.72	0.750	-37.483	-0.93	2.300	-37.483	-0.93	2.300	-37.483	-0.93	2.300	-37.483	-0.93	2.300
0.240	-35.509	5.00	0.800	-36.543	-2.23	2.400	-36.543	-2.23	2.400	-36.543	-2.23	2.400	-36.543	-2.23	2.400
0.255	-34.604	3.11	0.850	-35.617	-3.53	2.500	-35.617	-3.53	2.500	-35.617	-3.53	2.500	-35.617	-3.53	2.500
0.270	-33.753	1.16	0.900	-34.751	-4.83	2.600	-34.751	-4.83	2.600	-34.751	-4.83	2.600	-34.751	-4.83	2.600
0.285	-32.943	-0.37	0.950	-33.938	-6.17	2.700	-33.938	-6.17	2.700	-33.938	-6.17	2.700	-33.938	-6.17	2.700
0.300	-32.183	-1.71	1.000	-33.172	-7.50	2.800	-33.172	-7.50	2.800	-33.172	-7.50	2.800	-33.172	-7.50	2.800

Table 165. Radial Electric Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 22.48 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					30.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)		
0.00	-41.174	74.40	0.00	-51.551	75.38	0.00	-61.075	-51.09	0.00	-71.527	2.13	0.00	-81.512	142.04	0.00	-91.527	142.04		
0.03	-41.257	147.34	0.03	-51.638	147.34	0.03	-61.163	143.14	0.03	-71.612	138.44	0.03	-81.547	138.44	0.03	-91.562	138.44		
0.06	-41.344	147.34	0.06	-51.726	147.34	0.06	-61.248	140.35	0.06	-71.697	132.44	0.06	-81.581	132.44	0.06	-91.596	132.44		
0.09	-41.433	147.34	0.09	-51.814	147.34	0.09	-61.336	137.80	0.09	-71.784	124.36	0.09	-81.669	124.36	0.09	-91.684	124.36		
0.12	-41.521	147.34	0.12	-51.902	147.34	0.12	-61.424	134.51	0.12	-71.872	114.93	0.12	-81.757	114.93	0.12	-91.772	114.93		
0.15	-41.610	146.74	0.15	-51.983	141.52	0.15	-61.411	130.52	0.15	-71.960	105.23	0.15	-81.845	105.23	0.15	-91.860	105.23		
0.18	-41.698	146.73	0.18	-52.061	140.18	0.18	-61.384	125.91	0.18	-72.048	96.26	0.18	-81.933	96.26	0.18	-91.948	96.26		
0.21	-41.783	145.51	0.21	-52.131	138.57	0.21	-61.287	120.42	0.21	-72.136	88.50	0.21	-82.021	88.50	0.21	-92.036	88.50		
0.24	-41.870	145.38	0.24	-52.189	136.71	0.24	-61.181	115.42	0.24	-72.224	82.36	0.24	-82.109	82.36	0.24	-92.124	82.36		
0.27	-41.957	144.76	0.27	-52.251	134.58	0.27	-61.073	109.44	0.27	-72.312	77.39	0.27	-82.197	77.39	0.27	-92.212	77.39		
0.30	-42.044	144.08	0.30	-52.314	132.21	0.30	-60.977	103.44	0.30	-72.400	73.46	0.30	-82.285	73.46	0.30	-92.300	73.46		
0.33	-42.130	143.68	0.33	-52.376	129.60	0.33	-60.881	97.44	0.33	-72.488	69.52	0.33	-82.373	69.52	0.33	-92.388	69.52		
0.36	-42.216	143.40	0.36	-52.438	126.78	0.36	-60.785	91.44	0.36	-72.576	65.58	0.36	-82.461	65.58	0.36	-92.476	65.58		
0.39	-42.302	143.14	0.39	-52.500	123.77	0.39	-60.689	85.44	0.39	-72.664	61.65	0.39	-82.549	61.65	0.39	-92.564	61.65		
0.42	-42.388	142.89	0.42	-52.562	120.65	0.42	-60.593	79.44	0.42	-72.752	57.79	0.42	-82.637	57.79	0.42	-92.652	57.79		
0.45	-42.474	142.65	0.45	-52.624	117.35	0.45	-60.497	73.44	0.45	-72.840	54.04	0.45	-82.725	54.04	0.45	-92.740	54.04		
0.48	-42.560	142.42	0.48	-52.686	114.02	0.48	-60.401	67.44	0.48	-72.928	50.29	0.48	-82.813	50.29	0.48	-92.828	50.29		
0.51	-42.646	142.19	0.51	-52.748	110.68	0.51	-60.305	61.44	0.51	-73.016	46.54	0.51	-82.901	46.54	0.51	-92.916	46.54		
0.54	-42.732	141.97	0.54	-52.810	107.35	0.54	-60.209	55.44	0.54	-73.104	42.67	0.54	-82.989	42.67	0.54	-93.004	42.67		
0.57	-42.818	141.76	0.57	-52.872	104.03	0.57	-60.113	49.44	0.57	-73.192	38.73	0.57	-83.077	38.73	0.57	-93.092	38.73		
0.60	-42.904	141.56	0.60	-52.934	100.73	0.60	-60.017	43.44	0.60	-73.280	34.79	0.60	-83.165	34.79	0.60	-93.180	34.79		
0.63	-42.990	141.36	0.63	-52.996	97.40	0.63	-59.921	37.44	0.63	-73.368	30.85	0.63	-83.253	30.85	0.63	-93.268	30.85		
0.66	-43.076	141.17	0.66	-53.058	94.01	0.66	-59.825	31.44	0.66	-73.456	26.91	0.66	-83.341	26.91	0.66	-93.356	26.91		
0.69	-43.162	140.98	0.69	-53.120	90.56	0.69	-59.729	25.44	0.69	-73.544	22.97	0.69	-83.429	22.97	0.69	-93.444	22.97		
0.72	-43.248	140.79	0.72	-53.182	87.13	0.72	-59.633	19.44	0.72	-73.632	19.03	0.72	-83.517	19.03	0.72	-93.532	19.03		
0.75	-43.334	140.61	0.75	-53.244	83.73	0.75	-59.537	15.44	0.75	-73.720	15.09	0.75	-83.605	15.09	0.75	-93.620	15.09		
0.78	-43.420	140.43	0.78	-53.306	80.33	0.78	-59.441	11.44	0.78	-73.808	11.15	0.78	-83.693	11.15	0.78	-93.708	11.15		
0.81	-43.506	140.26	0.81	-53.368	76.93	0.81	-59.345	7.44	0.81	-73.896	6.81	0.81	-83.781	6.81	0.81	-93.796	6.81		
0.84	-43.592	140.08	0.84	-53.430	73.53	0.84	-59.249	3.44	0.84	-73.984	2.97	0.84	-83.869	2.97	0.84	-93.884	2.97		
0.87	-43.678	139.91	0.87	-53.492	70.13	0.87	-59.153	-0.56	0.87	-74.072	-0.09	0.87	-83.957	-0.09	0.87	-93.972	-0.09		
0.90	-43.764	139.74	0.90	-53.554	66.73	0.90	-59.057	-4.56	0.90	-74.160	-4.63	0.90	-84.045	-4.63	0.90	-94.060	-4.63		
1.05	-44.174	103.26	1.05	-54.551	71.49	1.05	-64.075	59.80	1.05	-74.527	55.61	1.05	-84.409	55.61	1.05	-94.424	55.61		
1.20	-44.257	94.27	1.20	-54.638	67.27	1.20	-64.163	54.82	1.20	-74.612	53.74	1.20	-84.497	53.74	1.20	-94.512	53.74		
1.35	-44.344	86.20	1.35	-54.726	64.40	1.35	-64.250	50.98	1.35	-74.700	51.86	1.35	-84.589	51.86	1.35	-94.600	51.86		
1.50	-44.433	80.86	1.50	-54.814	62.41	1.50	-64.338	48.16	1.50	-74.788	50.74	1.50	-84.677	50.74	1.50	-94.692	50.74		
1.65	-44.521	76.24	1.65	-54.902	60.02	1.65	-64.426	45.41	1.65	-74.876	48.62	1.65	-84.765	48.62	1.65	-94.780	48.62		
1.80	-44.610	72.68	1.80	-54.990	57.31	1.80	-64.514	42.66	1.80	-74.964	46.73	1.80	-84.853	46.73	1.80	-94.868	46.73		
1.95	-44.698	69.14	1.95	-55.078	54.81	1.95	-64.602	39.91	1.95	-75.052	44.84	1.95	-84.941	44.84	1.95	-94.952	44.84		
2.10	-44.786	66.18	2.10	-55.166	52.47	2.10	-64.690	37.18	2.10	-75.140	42.91	2.10	-85.030	42.91	2.10	-95.064	42.91		
2.25	-44.874	63.17	2.25	-55.254	50.12	2.25	-64.778	34.45	2.25	-75.228	40.98	2.25	-85.119	40.98	2.25	-95.152	40.98		
2.40	-44.962	60.17	2.40	-55.342	47.87	2.40	-64.866	31.73	2.40	-75.316	39.05	2.40	-85.207	39.05	2.40	-95.240	39.05		
2.55	-45.050	57.17	2.55	-55.430	45.57	2.55	-64.954	29.08	2.55	-75.404	37.18	2.55	-85.295	37.18	2.55	-95.328	37.18		
2.70	-45.138	54.17	2.70	-55.518	43.27	2.70	-65.042	26.33	2.70	-75.492	35.24	2.70	-85.383	35.24	2.70	-95.416	35.24		
2.85	-45.226	51.17	2.85	-55.606	40.98	2.85	-65.130	23.58	2.85	-75.580	33.31	2.85	-85.471	33.31	2.85	-95.504	33.31		
3.00	-45.314	48.18	3.00	-55.694	38.69	3.00	-65.218	20.83	3.00	-75.668	31.38	3.00	-85.560	31.38	3.00	-95.592	31.38		

Table 166. Radial Electric Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
RELUMT	AMP (UEU)	PHASE (UEU)	RELUMT	AMP (UEU)	PHASE (UEU)	RELUMT	AMP (UEU)	PHASE (UEU)	RELUMT	AMP (UEU)	PHASE (UEU)	RELUMT	AMP (UEU)	PHASE (UEU)
.000	-36.536	60.33	0.000	-46.751	-176.99	0.000	-56.226	-44.52	0.000	-66.660	16.92	0.000	-66.660	16.92
.003	-36.663	170.21	.010	-46.836	162.66	.030	-56.314	160.68	.100	-66.746	159.10	.300	-66.807	155.50
.006	-36.787	170.16	.020	-46.926	162.66	.060	-56.400	159.63	.200	-66.877	157.84	.400	-66.938	149.51
.009	-36.911	170.03	.030	-47.015	162.12	.120	-56.479	159.31	.300	-67.007	155.30	.500	-67.068	141.43
.012	-36.980	169.88	.040	-47.103	161.31	.180	-56.558	158.99	.400	-67.137	152.99	.700	-67.198	122.30
.015	-36.970	169.80	.050	-47.189	160.42	.240	-56.637	158.67	.500	-67.267	150.67	.800	-67.328	103.30
.018	-36.967	169.67	.060	-47.269	159.92	.300	-56.715	158.34	.600	-67.397	148.34	1.000	-67.458	113.33
.021	-36.961	169.60	.070	-47.343	159.34	.360	-56.794	158.02	.700	-67.527	146.02	1.000	-67.588	103.60
.024	-36.951	169.37	.080	-47.400	158.49	.420	-56.873	157.70	1.000	-67.657	143.70	1.300	-67.718	94.45
.027	-36.944	169.37	.090	-47.454	158.49	.480	-56.952	157.38	1.300	-67.786	141.38	1.600	-67.847	85.30
.030	-36.930	169.14	.100	-47.483	158.03	.540	-57.031	157.06	1.600	-67.915	139.06	1.900	-67.976	76.15
.033	-36.921	168.91	.110	-47.548	148.44	.600	-57.110	156.74	1.900	-68.044	136.74	2.200	-68.105	67.00
.036	-36.910	168.59	.120	-47.605	148.44	.660	-57.189	156.42	2.200	-68.173	134.42	2.500	-68.234	57.85
.039	-36.901	168.00	.130	-47.660	148.44	.720	-57.268	156.10	2.500	-68.302	132.10	2.800	-68.363	48.70
.042	-36.893	167.69	.140	-47.717	148.44	.780	-57.347	155.78	2.800	-68.371	129.78	3.100	-68.434	39.55
.045	-36.885	167.60	.150	-47.774	148.44	.840	-57.426	155.46	3.100	-68.440	127.46	3.400	-68.496	30.40
.048	-36.876	167.43	.160	-47.831	148.44	.900	-57.505	155.14	3.400	-68.509	125.14	3.700	-68.565	21.25
.051	-36.867	167.17	.170	-47.888	148.44	.960	-57.584	154.82	3.700	-68.578	122.82	4.000	-68.626	12.10
.054	-36.858	166.93	.180	-47.945	148.44	1.020	-57.663	154.50	4.000	-68.647	120.50	4.300	-68.687	2.95
.057	-36.850	166.67	.190	-48.002	148.44	1.080	-57.742	154.18	4.300	-68.716	118.18	4.600	-68.747	-7.20
.060	-36.841	166.43	.200	-48.059	148.44	1.140	-57.821	153.86	4.600	-68.785	115.86	4.900	-68.808	-17.35
.063	-36.833	166.17	.210	-48.116	148.44	1.200	-57.900	153.54	4.900	-68.854	113.54	5.200	-68.870	-27.50
.066	-36.824	165.93	.220	-48.173	148.44	1.260	-57.979	153.22	5.200	-68.923	111.22	5.500	-68.940	-37.65
.069	-36.816	165.67	.230	-48.230	148.44	1.320	-58.058	152.90	5.500	-68.992	108.90	5.800	-69.009	-47.80
.072	-36.807	165.43	.240	-48.287	148.44	1.380	-58.137	152.58	5.800	-69.061	106.58	6.100	-69.078	-57.95
.075	-36.800	165.17	.250	-48.344	148.44	1.440	-58.216	152.26	6.100	-69.130	104.26	6.400	-69.147	-68.10
.078	-36.791	164.93	.260	-48.401	148.44	1.500	-58.295	151.94	6.400	-69.199	101.94	6.700	-69.206	-78.25
.081	-36.783	164.67	.270	-48.458	148.44	1.560	-58.374	151.62	6.700	-69.268	99.62	7.000	-69.275	-88.40
.084	-36.774	164.43	.280	-48.515	148.44	1.620	-58.453	151.30	7.000	-69.337	97.30	7.300	-69.334	-98.55
.087	-36.766	164.17	.290	-48.572	148.44	1.680	-58.532	150.98	7.300	-69.406	94.98	7.600	-69.442	-108.70
.090	-36.757	163.93	.300	-48.629	148.44	1.740	-58.611	150.66	7.600	-69.475	92.66	7.900	-69.501	-118.85
.105	-36.700	162.04	.350	-48.753	148.44	1.850	-58.715	150.26	8.100	-69.564	90.26	8.400	-69.598	-128.95
.120	-36.643	160.16	.400	-48.887	148.44	1.960	-58.819	149.86	8.400	-69.633	87.94	8.700	-69.636	-139.05
.135	-36.586	158.28	.450	-49.021	148.44	2.070	-58.923	149.46	8.700	-69.702	85.62	9.000	-69.705	-149.15
.150	-36.529	156.40	.500	-49.155	148.44	2.180	-59.027	149.06	9.000	-69.771	83.30	9.300	-69.774	-159.25
.165	-36.472	154.52	.550	-49.289	148.44	2.290	-59.131	148.66	9.300	-69.840	80.98	9.600	-69.843	-169.35
.180	-36.415	152.64	.600	-49.423	148.44	2.400	-59.235	148.26	9.600	-69.909	78.66	9.900	-69.906	-179.45
.195	-36.358	150.76	.650	-49.557	148.44	2.510	-59.339	147.86	9.900	-69.978	76.34	10.200	-69.971	-189.55
.210	-36.301	148.88	.700	-49.691	148.44	2.620	-59.443	147.46	10.200	-70.047	74.02	10.500	-70.040	-199.65
.225	-36.244	147.00	.750	-49.825	148.44	2.730	-59.547	147.06	10.500	-70.116	71.70	10.800	-70.113	-209.75
.240	-36.187	145.12	.800	-49.959	148.44	2.840	-59.651	146.66	10.800	-70.185	69.38	11.100	-70.180	-219.85
.255	-36.130	143.24	.850	-50.093	148.44	2.950	-59.755	146.26	11.100	-70.254	67.06	11.400	-70.251	-229.95
.270	-36.073	141.36	.900	-50.227	148.44	3.060	-59.859	145.86	11.400	-70.323	64.74	11.700	-70.320	-240.05
.285	-36.016	139.48	.950	-50.361	148.44	3.170	-59.963	145.46	11.700	-70.392	62.42	12.000	-70.389	-250.15
.300	-35.959	137.60	1.000	-50.495	148.44	3.280	-60.067	145.06	12.000	-70.461	60.10			

Table 167. Radial Electric Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 0.00 m

1.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
.000	-52.173	42.55	.000	-65.517	-114.45	.000	-75.974	-51.35	.000	-85.517	26.83
.001	-50.102	50.33	.001	-65.603	84.49	.010	-76.080	84.43	.030	-85.587	85.95
.002	-50.147	59.96	.002	-65.686	86.39	.020	-76.074	78.75	.060	-85.418	59.57
.003	-50.235	69.35	.003	-65.764	86.55	.030	-76.019	70.63	.090	-84.529	43.63
.004	-50.320	78.47	.004	-65.821	83.95	.040	-75.836	61.18	.120	-82.710	31.16
.005	-50.401	87.34	.005	-65.862	80.62	.050	-75.294	51.48	.150	-80.338	22.56
.006	-50.473	95.95	.006	-65.894	76.59	.060	-74.413	42.51	.180	-77.874	16.77
.007	-50.541	104.29	.007	-65.912	71.95	.070	-73.245	34.45	.210	-75.545	12.82
.008	-50.595	112.37	.008	-65.924	66.83	.080	-71.898	26.61	.240	-73.417	10.04
.009	-50.641	120.20	.009	-65.932	61.41	.090	-70.474	19.65	.270	-71.488	8.03
.010	-50.674	127.78	.010	-65.937	55.89	.100	-69.047	14.71	.300	-69.737	6.53
.011	-50.708	135.13	.011	-65.940	49.31	.110	-67.661	10.60	.330	-68.140	5.39
.012	-50.737	142.27	.012	-65.944	42.31	.120	-66.336	7.45	.360	-66.676	4.50
.013	-50.760	149.20	.013	-65.953	35.19	.130	-65.080	4.46	.390	-65.326	3.80
.014	-50.778	155.95	.014	-65.959	28.11	.140	-63.893	1.45	.420	-64.076	3.23
.015	-50.791	162.53	.015	-65.962	21.08	.150	-62.774	0.45	.450	-62.911	2.77
.016	-50.799	168.88	.016	-65.966	14.13	.160	-61.718	0.45	.480	-61.822	2.39
.017	-50.804	175.03	.017	-65.968	7.44	.170	-60.714	0.45	.510	-60.800	2.07
.018	-50.807	180.99	.018	-65.970	0.89	.180	-59.774	0.45	.540	-59.837	1.80
.019	-50.809	186.78	.019	-65.973	0.89	.190	-58.877	0.45	.570	-58.924	1.57
.020	-50.810	192.40	.020	-65.975	0.89	.200	-58.025	0.45	.600	-58.069	1.36
.021	-50.811	197.86	.021	-65.976	0.89	.210	-57.214	0.45	.630	-57.247	1.21
.022	-50.812	203.17	.022	-65.977	0.89	.220	-56.441	0.45	.660	-56.467	1.06
.023	-50.813	208.34	.023	-65.978	0.89	.230	-55.701	0.45	.690	-55.723	0.93
.024	-50.814	213.37	.024	-65.979	0.89	.240	-55.004	0.45	.720	-55.012	0.82
.025	-50.815	218.26	.025	-65.980	0.89	.250	-54.348	0.45	.750	-54.331	0.72
.026	-50.816	223.01	.026	-65.981	0.89	.260	-53.733	0.45	.780	-53.677	0.63
.027	-50.817	227.63	.027	-65.982	0.89	.270	-53.159	0.45	.810	-53.050	0.55
.028	-50.818	232.12	.028	-65.983	0.89	.280	-52.626	0.45	.840	-52.445	0.48
.029	-50.819	236.47	.029	-65.984	0.89	.290	-52.135	0.45	.870	-51.863	0.42
.030	-50.820	240.68	.030	-65.985	0.89	.300	-51.685	0.45	.900	-51.302	0.37
.035	-48.373	17.00	.105	-46.720	3.53	.350	-48.758	1.38	1.050	-48.761	.19
.040	-48.370	16.70	.110	-46.554	4.02	.400	-48.575	.92	1.200	-48.576	.04
.045	-48.360	16.39	.115	-46.382	3.00	.450	-48.383	.41	1.350	-48.384	-.06
.050	-48.350	16.08	.120	-46.210	2.28	.500	-48.190	.26	1.500	-48.191	-.13
.055	-48.340	15.77	.125	-46.038	1.76	.550	-47.997	.14	1.650	-47.998	-.21
.060	-48.330	15.46	.130	-45.866	1.37	.600	-47.804	.06	1.800	-47.805	-.23
.065	-48.320	15.15	.135	-45.694	1.08	.650	-47.611	-.01	1.950	-47.612	-.25
.070	-48.310	14.84	.140	-45.522	.85	.700	-47.418	-.06	2.100	-47.419	-.27
.075	-48.300	14.53	.145	-45.350	.67	.750	-47.225	-.10	2.250	-47.226	-.28
.080	-48.290	14.22	.150	-45.178	.52	.800	-47.032	-.13	2.400	-47.033	-.29
.085	-48.280	13.91	.155	-45.006	.41	.850	-46.839	-.15	2.550	-46.840	-.30
.090	-48.270	13.60	.160	-44.834	.31	.900	-46.646	-.17	2.700	-46.647	-.31
.095	-48.260	13.29	.165	-44.662	.23	.950	-46.453	-.19	2.850	-46.454	-.32
.100	-48.250	12.98	.170	-44.490	.17	1.000	-46.260	-.21	3.000	-46.261	-.33

Table 168. Radial Electric Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 2.25 m

10.0 KM UPRANGE				30.0 KM UPRANGE				100.0 KM UPRANGE				300.0 KM UPRANGE			
REL IONT (RM)	AMP (UB)	PHASE (DEG)	REL IONT (RM)	AMP (UB)	PHASE (DEG)	REL IONT (RM)	AMP (UB)	PHASE (DEG)	REL IONT (RM)	AMP (UB)	PHASE (DEG)	REL IONT (RM)	AMP (UB)	PHASE (DEG)	REL IONT (RM)
.001	-51.000	70.00	.001	-60.794	30.42	.001	-61.241	3.84	.001	-71.327	143.51	.001	-80.781	81.85	.001
.002	-51.000	143.77	.002	-60.880	144.80	.002	-71.385	143.51	.002	-80.851	141.01	.002	-80.883	130.33	.002
.003	-51.000	143.41	.003	-61.043	141.73	.003	-71.443	133.83	.003	-80.910	114.02	.003	-80.943	98.09	.003
.004	-51.000	143.00	.004	-61.100	139.14	.004	-71.500	125.72	.004	-81.000	86.21	.004	-81.030	77.61	.004
.005	-51.000	142.61	.005	-61.157	135.81	.005	-71.557	109.54	.005	-81.057	71.82	.005	-81.087	67.87	.005
.006	-51.000	142.20	.006	-61.214	132.48	.006	-71.614	83.69	.006	-81.114	63.10	.006	-81.144	61.59	.006
.007	-51.000	141.79	.007	-61.271	129.15	.007	-71.671	74.74	.007	-81.171	60.40	.007	-81.201	59.57	.007
.008	-51.000	141.38	.008	-61.328	125.82	.008	-71.728	67.14	.008	-81.228	58.88	.008	-81.258	58.32	.008
.009	-51.000	140.97	.009	-61.385	122.49	.009	-71.785	60.10	.009	-81.285	58.91	.009	-81.315	58.69	.009
.010	-51.000	140.56	.010	-61.442	119.16	.010	-71.842	54.17	.010	-81.342	58.94	.010	-81.372	58.64	.010
.011	-51.000	140.15	.011	-61.499	115.83	.011	-71.899	48.80	.011	-81.399	58.97	.011	-81.429	58.59	.011
.012	-51.000	139.74	.012	-61.556	112.50	.012	-71.956	43.47	.012	-81.456	58.99	.012	-81.486	58.54	.012
.013	-51.000	139.33	.013	-61.613	109.17	.013	-72.013	38.14	.013	-81.513	58.99	.013	-81.543	58.49	.013
.014	-51.000	138.92	.014	-61.670	105.84	.014	-72.070	32.81	.014	-81.570	58.99	.014	-81.600	58.44	.014
.015	-51.000	138.51	.015	-61.727	102.51	.015	-72.127	27.48	.015	-81.627	58.99	.015	-81.657	58.39	.015
.016	-51.000	138.10	.016	-61.784	99.18	.016	-72.184	22.15	.016	-81.684	58.99	.016	-81.714	58.34	.016
.017	-51.000	137.69	.017	-61.841	95.85	.017	-72.241	16.82	.017	-81.741	58.99	.017	-81.771	58.29	.017
.018	-51.000	137.28	.018	-61.898	92.52	.018	-72.298	11.49	.018	-81.798	58.99	.018	-81.828	58.24	.018
.019	-51.000	136.87	.019	-61.955	89.19	.019	-72.355	6.16	.019	-81.855	58.99	.019	-81.885	58.19	.019
.020	-51.000	136.46	.020	-62.012	85.86	.020	-72.412	0.83	.020	-81.912	58.99	.020	-81.942	58.14	.020
.021	-51.000	136.05	.021	-62.069	82.53	.021	-72.469	-4.50	.021	-81.969	58.99	.021	-81.999	58.09	.021
.022	-51.000	135.64	.022	-62.126	79.20	.022	-72.526	-9.17	.022	-82.026	58.99	.022	-82.056	58.04	.022
.023	-51.000	135.23	.023	-62.183	75.87	.023	-72.583	-13.84	.023	-82.083	58.99	.023	-82.113	57.99	.023
.024	-51.000	134.82	.024	-62.240	72.54	.024	-72.640	-18.51	.024	-82.140	58.99	.024	-82.170	57.94	.024
.025	-51.000	134.41	.025	-62.297	69.21	.025	-72.697	-23.18	.025	-82.197	58.99	.025	-82.227	57.89	.025
.026	-51.000	134.00	.026	-62.354	65.88	.026	-72.754	-27.85	.026	-82.254	58.99	.026	-82.284	57.84	.026
.027	-51.000	133.59	.027	-62.411	62.55	.027	-72.811	-32.52	.027	-82.311	58.99	.027	-82.341	57.79	.027
.028	-51.000	133.18	.028	-62.468	59.22	.028	-72.868	-37.19	.028	-82.368	58.99	.028	-82.398	57.74	.028
.029	-51.000	132.77	.029	-62.525	55.89	.029	-72.925	-41.86	.029	-82.425	58.99	.029	-82.455	57.69	.029
.030	-51.000	132.36	.030	-62.582	52.56	.030	-72.982	-46.53	.030	-82.482	58.99	.030	-82.512	57.64	.030
.031	-51.000	131.95	.031	-62.639	49.23	.031	-73.039	-51.20	.031	-82.539	58.99	.031	-82.569	57.59	.031
.032	-51.000	131.54	.032	-62.696	45.90	.032	-73.096	-55.87	.032	-82.596	58.99	.032	-82.626	57.54	.032
.033	-51.000	131.13	.033	-62.753	42.57	.033	-73.153	-60.54	.033	-82.653	58.99	.033	-82.683	57.49	.033
.034	-51.000	130.72	.034	-62.810	39.24	.034	-73.210	-65.21	.034	-82.710	58.99	.034	-82.740	57.44	.034
.035	-51.000	130.31	.035	-62.867	35.91	.035	-73.267	-69.88	.035	-82.767	58.99	.035	-82.797	57.39	.035
.036	-51.000	129.90	.036	-62.924	32.58	.036	-73.324	-74.55	.036	-82.824	58.99	.036	-82.854	57.34	.036
.037	-51.000	129.49	.037	-62.981	29.25	.037	-73.381	-79.22	.037	-82.881	58.99	.037	-82.911	57.29	.037
.038	-51.000	129.08	.038	-63.038	25.92	.038	-73.438	-83.89	.038	-82.938	58.99	.038	-82.968	57.24	.038
.039	-51.000	128.67	.039	-63.095	22.59	.039	-73.495	-88.56	.039	-82.995	58.99	.039	-83.025	57.19	.039
.040	-51.000	128.26	.040	-63.152	19.26	.040	-73.552	-93.23	.040	-83.052	58.99	.040	-83.082	57.14	.040
.041	-51.000	127.85	.041	-63.209	15.93	.041	-73.609	-97.90	.041	-83.109	58.99	.041	-83.139	57.09	.041
.042	-51.000	127.44	.042	-63.266	12.60	.042	-73.666	-102.57	.042	-83.166	58.99	.042	-83.196	57.04	.042
.043	-51.000	127.03	.043	-63.323	9.27	.043	-73.723	-107.24	.043	-83.223	58.99	.043	-83.253	56.99	.043
.044	-51.000	126.62	.044	-63.380	5.94	.044	-73.780	-111.91	.044	-83.280	58.99	.044	-83.310	56.94	.044
.045	-51.000	126.21	.045	-63.437	2.61	.045	-73.837	-116.58	.045	-83.337	58.99	.045	-83.367	56.89	.045
.046	-51.000	125.80	.046	-63.494	-0.72	.046	-73.894	-121.25	.046	-83.394	58.99	.046	-83.424	56.84	.046
.047	-51.000	125.39	.047	-63.551	-3.39	.047	-73.951	-125.92	.047	-83.451	58.99	.047	-83.481	56.79	.047
.048	-51.000	124.98	.048	-63.608	-6.06	.048	-74.008	-130.59	.048	-83.508	58.99	.048	-83.538	56.74	.048
.049	-51.000	124.57	.049	-63.665	-8.73	.049	-74.065	-135.26	.049	-83.565	58.99	.049	-83.595	56.69	.049
.050	-51.000	124.16	.050	-63.722	-11.40	.050	-74.122	-139.93	.050	-83.622	58.99	.050	-83.652	56.64	.050
.051	-51.000	123.75	.051	-63.779	-14.07	.051	-74.179	-144.60	.051	-83.679	58.99	.051	-83.709	56.59	.051
.052	-51.000	123.34	.052	-63.836	-16.74	.052	-74.236	-149.27	.052	-83.736	58.99	.052	-83.766	56.54	.052
.053	-51.000	122.93	.053	-63.893	-19.41	.053	-74.293	-153.94	.053	-83.793	58.99	.053	-83.823	56.49	.053
.054	-51.000	122.52	.054	-63.950	-22.08	.054	-74.350	-158.61	.054	-83.850	58.99	.054	-83.880	56.44	.054
.055	-51.000	122.11	.055	-64.007	-24.75	.055	-74.407	-163.28	.055	-83.907	58.99	.055	-83.937	56.39	.055
.056	-51.000	121.70	.056	-64.064	-27.42	.056	-74.464	-167.95	.056	-83.964	58.99	.056	-83.994	56.34	.056
.057	-51.000	121.29	.057	-64.121	-30.09	.057	-74.521	-172.62	.057	-84.021	58.99	.057	-84.051	56.29	.057
.058	-51.000	120.88	.058	-64.178	-32.76	.058	-74.578	-177.29	.058	-84.078	58.99	.058	-84.108	56.24	.058
.059	-51.000	120.47	.059	-64.235	-35.43	.059	-74.635	-181.96	.059	-84.135	58.99	.059	-84.165	56.19	.059
.060	-51.000	120.06	.060	-64.292	-38.10	.060	-74.692	-186.63	.060	-84.192	58.99	.060	-84.222	56.14	.060
.061	-51.000	119.65	.061	-64.349	-40.77	.061	-74.749	-191.30	.061	-84.249	58.99	.061	-84.279	56.09	.061
.062	-51.000	119.24	.062	-64.406	-43.44	.062	-74.806	-195.97	.062	-84.306	58.99	.062	-84.336	56.04	.062
.063	-51.000	118.83	.063	-64.463	-46.11	.063	-74.863	-200.64	.063	-84.363	58.99	.063	-84.393	55.99	.063
.064	-51.000	118.42	.064	-64.520	-48.78	.064	-74.920	-205.31	.064	-84.420	58.99	.064	-84.450	55.94	.064
.065	-51.000	118.01	.065	-64.577	-51.45	.065	-74.977	-209.98	.065	-84.477	58.99	.065	-84.507	55.89	.065
.066	-51.000	117.60	.066	-64.634	-54.12	.066	-75.034	-214.65	.066	-84.534	58.99	.066	-84.564	55.84	.066
.067	-51.000	117.19	.067	-64.691	-56.79	.067	-75.091	-219.32	.067	-84.591	58.99	.067	-84.621	55.79	.067
.068	-51.000	116.78	.068	-64.748	-59.46	.068	-75.148	-223.99	.068	-84.648	58.99	.068	-84.678	55.74	.068
.069	-51.000	116.37	.069	-64.805	-62.13	.069	-75.205	-228.66	.069	-84.705	58.99	.069	-84.735	55.69	.069
.070	-51.000	115.96	.070	-64.862	-64.80	.070	-75.262	-233.33	.070	-84.762	58.99	.070	-84.792	55.64	.070
.071	-51.000	115.55	.071	-64.919	-67.47	.071	-75.319	-238.00	.071	-84.819	58.99	.071	-84.849	55.59	.071
.072	-51.000	115.14	.072	-64.976	-70.14	.072	-75.376	-242.67	.072	-84.876	58.99	.072	-84.906	55.54	.072
.073	-51.000	114.73	.073	-65.033	-72.81	.073	-75.433	-247.34	.073	-84.933	58.99	.073	-84.963	55.49	.073
.074	-51.000	114.32	.074	-65.090	-75.48	.074	-75.490	-252.01	.074	-84.990	58.99	.074	-85.020	55.44	.074
.075	-51.000	113.91	.075	-65.147	-78.15	.075	-75.547	-256.68							

Table 169. Radial Electric Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DISTANCE				3.0 KM DISTANCE				10.0 KM DISTANCE				30.0 KM DISTANCE			
HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)	AMP (UB)	PHASE (DEG)	HEIGHT (M)
0.00	-40.570	157.76	0.00	-56.036	-17.44	0.00	-66.552	157.44	0.00	-76.001	157.51	0.00	-86.001	157.51	0.00
0.01	-40.657	163.43	0.01	-56.123	161.44	0.01	-66.552	157.58	0.01	-76.072	156.96	0.01	-86.001	156.96	0.01
0.02	-40.743	169.07	0.02	-56.209	167.08	0.02	-66.552	157.94	0.02	-76.143	146.29	0.02	-86.001	146.29	0.02
0.03	-40.830	174.70	0.03	-56.296	172.71	0.03	-66.552	158.30	0.03	-76.214	130.58	0.03	-86.001	130.58	0.03
0.04	-40.916	180.34	0.04	-56.383	178.34	0.04	-66.552	158.66	0.04	-76.285	114.83	0.04	-86.001	114.83	0.04
0.05	-41.003	185.97	0.05	-56.470	183.97	0.05	-66.552	159.02	0.05	-76.356	99.08	0.05	-86.001	99.08	0.05
0.06	-41.089	191.60	0.06	-56.557	189.60	0.06	-66.552	159.38	0.06	-76.427	83.33	0.06	-86.001	83.33	0.06
0.07	-41.176	197.24	0.07	-56.644	195.24	0.07	-66.552	159.74	0.07	-76.498	67.58	0.07	-86.001	67.58	0.07
0.08	-41.263	202.87	0.08	-56.731	200.87	0.08	-66.552	160.10	0.08	-76.569	51.83	0.08	-86.001	51.83	0.08
0.09	-41.350	208.50	0.09	-56.818	206.50	0.09	-66.552	160.46	0.09	-76.640	36.08	0.09	-86.001	36.08	0.09
0.10	-41.437	214.14	0.10	-56.905	212.14	0.10	-66.552	160.82	0.10	-76.711	20.33	0.10	-86.001	20.33	0.10
0.11	-41.524	219.77	0.11	-56.992	217.77	0.11	-66.552	161.18	0.11	-76.782	4.58	0.11	-86.001	4.58	0.11
0.12	-41.611	225.41	0.12	-57.079	223.41	0.12	-66.552	161.54	0.12	-76.853	-11.17	0.12	-86.001	-11.17	0.12
0.13	-41.698	231.04	0.13	-57.166	229.04	0.13	-66.552	161.90	0.13	-76.924	-26.92	0.13	-86.001	-26.92	0.13
0.14	-41.785	236.68	0.14	-57.253	234.68	0.14	-66.552	162.26	0.14	-77.000	-42.67	0.14	-86.001	-42.67	0.14
0.15	-41.872	242.31	0.15	-57.340	240.31	0.15	-66.552	162.62	0.15	-77.071	-58.42	0.15	-86.001	-58.42	0.15
0.16	-41.959	247.95	0.16	-57.427	245.95	0.16	-66.552	162.98	0.16	-77.142	-74.17	0.16	-86.001	-74.17	0.16
0.17	-42.046	253.58	0.17	-57.514	251.58	0.17	-66.552	163.34	0.17	-77.213	-89.92	0.17	-86.001	-89.92	0.17
0.18	-42.133	259.22	0.18	-57.601	257.22	0.18	-66.552	163.70	0.18	-77.284	-105.67	0.18	-86.001	-105.67	0.18
0.19	-42.220	264.85	0.19	-57.688	262.85	0.19	-66.552	164.06	0.19	-77.355	-121.42	0.19	-86.001	-121.42	0.19
0.20	-42.307	270.49	0.20	-57.775	268.49	0.20	-66.552	164.42	0.20	-77.426	-137.17	0.20	-86.001	-137.17	0.20
0.21	-42.394	276.12	0.21	-57.862	274.12	0.21	-66.552	164.78	0.21	-77.497	-152.92	0.21	-86.001	-152.92	0.21
0.22	-42.481	281.76	0.22	-57.949	279.76	0.22	-66.552	165.14	0.22	-77.568	-168.67	0.22	-86.001	-168.67	0.22
0.23	-42.568	287.39	0.23	-58.036	285.39	0.23	-66.552	165.50	0.23	-77.639	-184.42	0.23	-86.001	-184.42	0.23
0.24	-42.655	293.03	0.24	-58.123	291.03	0.24	-66.552	165.86	0.24	-77.710	-200.17	0.24	-86.001	-200.17	0.24
0.25	-42.742	298.66	0.25	-58.210	296.66	0.25	-66.552	166.22	0.25	-77.781	-215.92	0.25	-86.001	-215.92	0.25
0.26	-42.829	304.30	0.26	-58.297	302.30	0.26	-66.552	166.58	0.26	-77.852	-231.67	0.26	-86.001	-231.67	0.26
0.27	-42.916	309.93	0.27	-58.384	307.93	0.27	-66.552	166.94	0.27	-77.923	-247.42	0.27	-86.001	-247.42	0.27
0.28	-43.003	315.57	0.28	-58.471	313.57	0.28	-66.552	167.30	0.28	-77.994	-263.17	0.28	-86.001	-263.17	0.28
0.29	-43.090	321.20	0.29	-58.558	319.20	0.29	-66.552	167.66	0.29	-78.065	-278.92	0.29	-86.001	-278.92	0.29
0.30	-43.177	326.84	0.30	-58.645	324.84	0.30	-66.552	168.02	0.30	-78.136	-294.67	0.30	-86.001	-294.67	0.30
0.35	-37.290	90.14	0.35	-35.460	77.60	0.35	-33.630	65.06	0.35	-31.800	52.52	0.35	-30.000	40.00	0.35
0.40	-37.331	86.05	0.40	-35.501	73.51	0.40	-33.671	61.07	0.40	-31.841	48.53	0.40	-30.000	36.01	0.40
0.45	-37.372	81.96	0.45	-35.542	69.42	0.45	-33.712	57.08	0.45	-31.882	44.54	0.45	-30.000	32.02	0.45
0.50	-37.413	77.87	0.50	-35.583	65.33	0.50	-33.753	53.09	0.50	-31.923	40.55	0.50	-30.000	28.03	0.50
0.55	-37.454	73.78	0.55	-35.624	61.24	0.55	-33.794	49.10	0.55	-31.964	36.56	0.55	-30.000	24.04	0.55
0.60	-37.495	69.69	0.60	-35.665	57.15	0.60	-33.835	45.11	0.60	-32.005	32.57	0.60	-30.000	20.05	0.60
0.65	-37.536	65.60	0.65	-35.706	53.06	0.65	-33.876	41.12	0.65	-32.046	28.58	0.65	-30.000	16.06	0.65
0.70	-37.577	61.51	0.70	-35.747	48.97	0.70	-33.917	37.13	0.70	-32.087	24.59	0.70	-30.000	12.07	0.70
0.75	-37.618	57.42	0.75	-35.788	44.88	0.75	-33.958	33.14	0.75	-32.128	20.60	0.75	-30.000	8.08	0.75
0.80	-37.659	53.33	0.80	-35.829	40.79	0.80	-33.999	29.15	0.80	-32.169	16.61	0.80	-30.000	4.09	0.80
0.85	-37.700	49.24	0.85	-35.870	36.70	0.85	-34.040	25.16	0.85	-32.210	12.62	0.85	-30.000	0.10	0.85
0.90	-37.741	45.15	0.90	-35.911	32.61	0.90	-34.081	21.17	0.90	-32.251	8.63	0.90	-30.000	-3.89	0.90
0.95	-37.782	41.06	0.95	-35.952	28.52	0.95	-34.122	17.18	0.95	-32.292	-4.80	0.95	-30.000	-7.90	0.95
1.00	-37.823	36.97	1.00	-35.993	24.43	1.00	-34.163	13.19	1.00	-32.333	-10.81	1.00	-30.000	-11.91	1.00

Table 170. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 0.00 m

300.0 NM DOWNRANGE				100.0 NM DOWNRANGE				300.0 NM DOWNRANGE			
HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)
0.000	-6.940	-41.02	0.000	-6.473	-74.47	0.000	-6.725	0.000	-6.725	-120.36	0.000
0.030	-6.800	-41.03	0.100	-6.365	-73.01	0.100	-6.996	0.300	-6.996	-118.37	0.300
0.060	-6.675	-41.03	0.200	-6.264	-73.15	0.200	-7.261	0.600	-7.261	-116.30	0.600
0.100	-6.562	-41.03	0.300	-6.174	-72.48	0.300	-7.511	1.000	-7.511	-114.16	1.000
0.150	-6.469	-41.03	0.400	-6.086	-71.80	0.400	-7.746	1.500	-7.746	-111.96	1.500
0.200	-6.393	-40.84	0.500	-6.006	-71.12	0.500	-7.970	2.000	-7.970	-109.70	2.000
0.250	-6.328	-40.64	0.600	-5.936	-70.43	0.600	-8.177	2.500	-8.177	-107.39	2.500
0.300	-6.271	-40.44	0.700	-5.874	-69.74	0.700	-8.368	3.000	-8.368	-105.03	3.000
0.350	-6.221	-40.24	0.800	-5.819	-69.04	0.800	-8.542	3.500	-8.542	-102.63	3.500
0.400	-6.176	-39.04	0.900	-5.769	-68.34	0.900	-8.699	4.000	-8.699	-100.21	4.000
0.450	-6.134	-37.84	1.000	-5.723	-67.64	1.000	-8.837	4.500	-8.837	-97.76	4.500
0.500	-6.094	-36.64	1.100	-5.683	-66.93	1.100	-8.956	5.000	-8.956	-95.31	5.000
0.550	-6.056	-35.44	1.200	-5.645	-66.23	1.200	-9.058	5.500	-9.058	-92.85	5.500
0.600	-6.021	-34.24	1.300	-5.608	-65.52	1.300	-9.146	6.000	-9.146	-90.41	6.000
0.650	-5.987	-33.04	1.400	-5.573	-64.80	1.400	-9.223	6.500	-9.223	-87.99	6.500
0.700	-5.955	-31.84	1.500	-5.539	-64.09	1.500	-9.290	7.000	-9.290	-85.60	7.000
0.750	-5.924	-30.64	1.600	-5.506	-63.38	1.600	-9.348	7.500	-9.348	-83.24	7.500
0.800	-5.894	-29.44	1.700	-5.474	-62.67	1.700	-9.398	8.000	-9.398	-80.93	8.000
0.850	-5.865	-28.24	1.800	-5.443	-61.96	1.800	-9.440	8.500	-9.440	-78.67	8.500
0.900	-5.836	-27.04	1.900	-5.411	-61.25	1.900	-9.475	9.000	-9.475	-76.46	9.000
0.950	-5.808	-25.84	2.000	-5.380	-60.54	2.000	-9.503	9.500	-9.503	-74.32	9.500
1.000	-5.781	-24.64	2.100	-5.350	-59.83	2.100	-9.525	10.000	-9.525	-72.25	10.000
1.050	-5.755	-23.44	2.200	-5.320	-59.13	2.200	-9.541	10.500	-9.541	-70.24	10.500
1.100	-5.730	-22.24	2.300	-5.290	-58.43	2.300	-9.552	11.000	-9.552	-68.29	11.000
1.150	-5.705	-21.04	2.400	-5.260	-57.73	2.400	-9.558	11.500	-9.558	-66.42	11.500
1.200	-5.681	-20.84	2.500	-5.230	-57.03	2.500	-9.560	12.000	-9.560	-64.62	12.000
1.250	-5.657	-19.64	2.600	-5.200	-56.33	2.600	-9.558	12.500	-9.558	-62.89	12.500
1.300	-5.634	-18.44	2.700	-5.170	-55.63	2.700	-9.552	13.000	-9.552	-61.23	13.000
1.350	-5.611	-17.24	2.800	-5.140	-54.93	2.800	-9.542	13.500	-9.542	-59.64	13.500
1.400	-5.589	-16.04	2.900	-5.110	-54.23	2.900	-9.528	14.000	-9.528	-58.11	14.000
1.450	-5.567	-14.84	3.000	-5.080	-53.53	3.000	-9.511	14.500	-9.511	-56.64	14.500
1.500	-5.546	-13.64	3.100	-5.050	-52.83	3.100	-9.490	15.000	-9.490	-55.20	15.000
1.550	-5.525	-12.44	3.200	-5.020	-52.13	3.200	-9.465	15.500	-9.465	-53.84	15.500
1.600	-5.504	-11.24	3.300	-5.000	-51.43	3.300	-9.436	16.000	-9.436	-52.54	16.000
1.650	-5.483	-10.04	3.400	-4.970	-50.73	3.400	-9.403	16.500	-9.403	-51.29	16.500
1.700	-5.463	-8.84	3.500	-4.940	-50.03	3.500	-9.366	17.000	-9.366	-50.09	17.000
1.750	-5.443	-7.64	3.600	-4.910	-49.33	3.600	-9.325	17.500	-9.325	-48.94	17.500
1.800	-5.423	-6.44	3.700	-4.880	-48.63	3.700	-9.280	18.000	-9.280	-47.84	18.000
1.850	-5.403	-5.24	3.800	-4.850	-47.93	3.800	-9.232	18.500	-9.232	-46.79	18.500
1.900	-5.383	-4.04	3.900	-4.820	-47.23	3.900	-9.181	19.000	-9.181	-45.79	19.000
1.950	-5.363	-2.84	4.000	-4.790	-46.53	4.000	-9.127	19.500	-9.127	-44.84	19.500
2.000	-5.343	-1.64	4.100	-4.760	-45.83	4.100	-9.070	20.000	-9.070	-43.94	20.000
2.050	-5.323	-0.44	4.200	-4.730	-45.13	4.200	-9.010	20.500	-9.010	-43.09	20.500
2.100	-5.303	0.76	4.300	-4.700	-44.43	4.300	-8.948	21.000	-8.948	-42.29	21.000
2.150	-5.283	1.96	4.400	-4.670	-43.73	4.400	-8.883	21.500	-8.883	-41.54	21.500
2.200	-5.263	3.16	4.500	-4.640	-43.03	4.500	-8.815	22.000	-8.815	-40.84	22.000
2.250	-5.243	4.36	4.600	-4.610	-42.33	4.600	-8.745	22.500	-8.745	-40.19	22.500
2.300	-5.223	5.56	4.700	-4.580	-41.63	4.700	-8.673	23.000	-8.673	-39.59	23.000
2.350	-5.203	6.76	4.800	-4.550	-40.93	4.800	-8.600	23.500	-8.600	-39.04	23.500
2.400	-5.183	7.96	4.900	-4.520	-40.23	4.900	-8.525	24.000	-8.525	-38.54	24.000
2.450	-5.163	9.16	5.000	-4.490	-39.53	5.000	-8.449	24.500	-8.449	-38.09	24.500
2.500	-5.143	10.36	5.100	-4.460	-38.83	5.100	-8.371	25.000	-8.371	-37.69	25.000
2.550	-5.123	11.56	5.200	-4.430	-38.13	5.200	-8.292	25.500	-8.292	-37.34	25.500
2.600	-5.103	12.76	5.300	-4.400	-37.43	5.300	-8.211	26.000	-8.211	-37.04	26.000
2.650	-5.083	13.96	5.400	-4.370	-36.73	5.400	-8.129	26.500	-8.129	-36.79	26.500
2.700	-5.063	15.16	5.500	-4.340	-36.03	5.500	-8.046	27.000	-8.046	-36.59	27.000
2.750	-5.043	16.36	5.600	-4.310	-35.33	5.600	-7.962	27.500	-7.962	-36.44	27.500
2.800	-5.023	17.56	5.700	-4.280	-34.63	5.700	-7.877	28.000	-7.877	-36.29	28.000
2.850	-5.003	18.76	5.800	-4.250	-33.93	5.800	-7.791	28.500	-7.791	-36.14	28.500
2.900	-4.983	19.96	5.900	-4.220	-33.23	5.900	-7.704	29.000	-7.704	-35.99	29.000
2.950	-4.963	21.16	6.000	-4.190	-32.53	6.000	-7.617	29.500	-7.617	-35.84	29.500
3.000	-4.943	22.36	6.100	-4.160	-31.83	6.100	-7.529	30.000	-7.529	-35.69	30.000

Table 171. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 2247.60 m

30.0 KM COUNTRANGE				100.0 KM COUNTRANGE				300.0 KM COUNTRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.00	-1.953	-27.50	0.00	-3.944	-58.74	0.00	-8.455	-103.85	0.00	-8.455	-103.85
0.30	-1.981	-27.35	0.100	-4.037	-58.14	0.300	-8.730	-101.86	0.300	-8.730	-101.86
0.60	-2.009	-27.19	0.200	-4.127	-57.47	0.600	-9.093	-97.74	0.600	-9.093	-97.74
0.90	-2.037	-26.94	0.300	-4.215	-56.80	0.900	-9.265	-97.06	0.900	-9.265	-97.06
1.20	-2.064	-26.74	0.400	-4.301	-56.13	1.200	-9.483	-95.46	1.200	-9.483	-95.46
1.50	-2.092	-26.58	0.500	-4.384	-55.46	1.500	-9.706	-93.20	1.500	-9.706	-93.20
1.80	-2.119	-26.38	0.600	-4.468	-54.76	1.800	-9.917	-90.89	1.800	-9.917	-90.89
2.10	-2.146	-26.18	0.700	-4.545	-54.07	2.100	-10.111	-88.54	2.100	-10.111	-88.54
2.40	-2.173	-25.98	0.800	-4.623	-53.37	2.400	-10.289	-86.15	2.400	-10.289	-86.15
2.70	-2.200	-25.78	0.900	-4.698	-52.67	2.700	-10.450	-83.73	2.700	-10.450	-83.73
3.00	-2.226	-25.58	1.000	-4.770	-51.97	3.000	-10.593	-81.24	3.000	-10.593	-81.24
3.30	-2.253	-25.38	1.100	-4.841	-51.27	3.300	-10.719	-78.84	3.300	-10.719	-78.84
3.60	-2.279	-25.18	1.200	-4.910	-50.56	3.600	-10.825	-76.39	3.600	-10.825	-76.39
3.90	-2.305	-24.96	1.300	-4.976	-49.86	3.900	-10.919	-73.95	3.900	-10.919	-73.95
4.20	-2.331	-24.77	1.400	-5.040	-49.15	4.200	-10.993	-71.53	4.200	-10.993	-71.53
4.50	-2.357	-24.57	1.500	-5.102	-48.44	4.500	-11.051	-69.13	4.500	-11.051	-69.13
4.80	-2.383	-24.37	1.600	-5.161	-47.73	4.800	-11.093	-66.77	4.800	-11.093	-66.77
5.10	-2.409	-24.17	1.700	-5.219	-47.02	5.100	-11.120	-64.45	5.100	-11.120	-64.45
5.40	-2.434	-23.97	1.800	-5.275	-46.32	5.400	-11.133	-62.19	5.400	-11.133	-62.19
5.70	-2.460	-23.77	1.900	-5.328	-45.61	5.700	-11.133	-59.97	5.700	-11.133	-59.97
6.00	-2.485	-23.56	2.000	-5.379	-44.90	6.000	-11.120	-57.82	6.000	-11.120	-57.82
6.30	-2.510	-23.36	2.100	-5.429	-44.20	6.300	-11.097	-55.73	6.300	-11.097	-55.73
6.60	-2.535	-23.16	2.200	-5.476	-43.50	6.600	-11.064	-53.70	6.600	-11.064	-53.70
6.90	-2.560	-22.96	2.300	-5.521	-42.80	6.900	-11.022	-51.75	6.900	-11.022	-51.75
7.20	-2.585	-22.76	2.400	-5.565	-42.11	7.200	-10.972	-49.86	7.200	-10.972	-49.86
7.50	-2.610	-22.56	2.500	-5.608	-41.42	7.500	-10.916	-48.03	7.500	-10.916	-48.03
7.80	-2.635	-22.36	2.600	-5.646	-40.73	7.800	-10.853	-46.28	7.800	-10.853	-46.28
8.10	-2.659	-22.16	2.700	-5.684	-40.05	8.100	-10.786	-44.60	8.100	-10.786	-44.60
8.40	-2.684	-21.96	2.800	-5.720	-39.37	8.400	-10.714	-42.98	8.400	-10.714	-42.98
8.70	-2.708	-21.76	2.900	-5.755	-38.70	8.700	-10.638	-41.42	8.700	-10.638	-41.42
9.00	-2.733	-21.56	3.000	-5.788	-38.03	9.000	-10.559	-39.93	9.000	-10.559	-39.93
1.050	-2.853	-20.57	3.200	-5.929	-34.77	10.500	-10.142	-33.34	10.500	-10.142	-33.34
1.200	-2.972	-19.54	4.000	-6.035	-31.66	12.000	-9.719	-27.99	12.000	-9.719	-27.99
1.350	-3.091	-18.52	4.500	-6.114	-28.73	13.500	-9.318	-23.62	13.500	-9.318	-23.62
1.500	-3.208	-17.50	5.000	-6.171	-25.98	15.000	-8.953	-19.99	15.000	-8.953	-19.99
1.650	-3.325	-16.71	5.500	-6.212	-23.42	16.500	-8.626	-16.94	16.500	-8.626	-16.94
1.800	-3.443	-15.76	6.000	-6.240	-21.03	18.000	-8.343	-13.34	18.000	-8.343	-13.34
1.950	-3.561	-14.86	6.500	-6.262	-18.81	19.500	-8.095	-10.09	19.500	-8.095	-10.09
2.100	-3.681	-13.96	7.000	-6.279	-16.74	21.000	-7.883	-8.37	21.000	-7.883	-8.37
2.250	-3.802	-13.07	7.500	-6.296	-14.83	22.500	-7.704	-6.80	22.500	-7.704	-6.80
2.400	-3.926	-12.19	8.000	-6.314	-13.05	24.000	-7.555	-5.38	24.000	-7.555	-5.38
2.550	-4.052	-11.33	8.500	-6.335	-11.39	25.500	-7.433	-4.08	25.500	-7.433	-4.08
2.700	-4.180	-10.48	9.000	-6.361	-9.83	27.000	-7.336	-2.87	27.000	-7.336	-2.87
2.850	-4.312	-9.65	9.500	-6.394	-8.38	28.500	-7.263	-1.75	28.500	-7.263	-1.75
3.000	-4.448	-8.82	10.000	-6.434	-7.01	30.000	-7.211	-0.75	30.000	-7.211	-0.75

Table 172. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 0.1 MHz, VED Height = 4495.20 m

30.0 KM UPHRANGE				100.0 KM UPHRANGE				300.0 KM UPHRANGE			
HEIGHT (KM)	AMP (UE)	PHASE (UEU)	MEIUNT (KM)	AMP (UE)	PHASE (UEU)	MEIUNT (KM)	AMP (UE)	MEIUNT (KM)	AMP (UE)	PHASE (UEU)	MEIUNT (KM)
0.00	-1.720	-17.79	0.000	-4.310	-44.45	0.000	-9.261	0.000	-9.261	-85.63	0.000
0.30	-1.700	-17.74	0.100	-4.400	-43.74	0.100	-9.530	0.300	-9.530	-83.84	0.300
0.60	-1.770	-17.59	0.200	-4.500	-43.12	0.200	-9.801	0.600	-9.801	-79.44	0.600
0.90	-1.700	-17.59	0.300	-4.590	-42.45	0.300	-10.050	0.900	-10.050	-77.25	0.900
1.20	-1.600	-17.19	0.400	-4.670	-41.77	0.400	-10.300	1.200	-10.300	-73.00	1.200
1.50	-1.500	-16.78	0.500	-4.760	-41.04	0.500	-10.531	1.500	-10.531	-70.00	1.500
1.80	-1.410	-16.78	0.600	-4.850	-40.31	0.600	-10.749	1.800	-10.749	-70.64	1.800
2.10	-1.310	-16.36	0.700	-4.937	-39.72	0.700	-10.953	2.100	-10.953	-70.34	2.100
2.40	-1.210	-15.93	0.800	-5.021	-39.02	0.800	-11.143	2.400	-11.143	-67.95	2.400
2.70	-1.100	-15.51	0.900	-5.103	-38.33	0.900	-11.317	2.700	-11.317	-65.53	2.700
3.00	-1.000	-15.07	1.000	-5.185	-37.63	1.000	-11.470	3.000	-11.470	-63.08	3.000
3.30	-0.900	-14.64	1.100	-5.264	-36.93	1.100	-11.619	3.300	-11.619	-60.62	3.300
3.60	-0.800	-14.20	1.200	-5.343	-36.22	1.200	-11.760	3.600	-11.760	-58.15	3.600
3.90	-0.700	-13.76	1.300	-5.421	-35.51	1.300	-11.895	3.900	-11.895	-55.68	3.900
4.20	-0.600	-13.33	1.400	-5.497	-34.80	1.400	-12.034	4.200	-12.034	-53.23	4.200
4.50	-0.500	-12.89	1.500	-5.570	-34.09	1.500	-12.169	4.500	-12.169	-50.79	4.500
4.80	-0.400	-12.46	1.600	-5.640	-33.38	1.600	-12.300	4.800	-12.300	-48.37	4.800
5.10	-0.300	-12.03	1.700	-5.719	-32.67	1.700	-12.426	5.100	-12.426	-45.99	5.100
5.40	-0.200	-11.60	1.800	-5.791	-31.96	1.800	-12.549	5.400	-12.549	-43.65	5.400
5.70	-0.100	-11.17	1.900	-5.862	-31.24	1.900	-12.670	5.700	-12.670	-41.36	5.700
6.00	-0.000	-10.74	2.000	-5.932	-30.53	2.000	-12.789	6.000	-12.789	-39.02	6.000
6.30	-0.000	-10.31	2.100	-6.001	-29.81	2.100	-12.906	6.300	-12.906	-36.79	6.300
6.60	-0.000	-9.88	2.200	-6.069	-29.10	2.200	-13.021	6.600	-13.021	-34.57	6.600
6.90	-0.000	-9.45	2.300	-6.135	-28.39	2.300	-13.134	6.900	-13.134	-32.34	6.900
7.20	-0.000	-9.02	2.400	-6.201	-27.67	2.400	-13.246	7.200	-13.246	-30.11	7.200
7.50	-0.000	-8.59	2.500	-6.267	-26.96	2.500	-13.357	7.500	-13.357	-27.88	7.500
7.80	-0.000	-8.16	2.600	-6.331	-26.25	2.600	-13.467	7.800	-13.467	-25.65	7.800
8.10	-0.000	-7.73	2.700	-6.395	-25.54	2.700	-13.576	8.100	-13.576	-23.42	8.100
8.40	-0.000	-7.30	2.800	-6.457	-24.83	2.800	-13.684	8.400	-13.684	-21.19	8.400
8.70	-0.000	-6.87	2.900	-6.520	-24.13	2.900	-13.791	8.700	-13.791	-18.96	8.700
9.00	-0.000	-6.44	3.000	-6.581	-23.42	3.000	-13.897	9.000	-13.897	-16.73	9.000
1.050	-3.001	-10.76	3.500	-6.660	-22.72	3.500	-14.002	10.500	-14.002	-14.50	10.500
1.200	-3.500	-9.08	4.000	-7.189	-16.48	4.000	-15.340	12.000	-15.340	-6.14	12.000
1.350	-3.700	-8.57	4.500	-7.454	-13.08	4.500	-16.143	13.500	-16.143	-0.73	13.500
1.500	-4.070	-7.43	5.000	-7.739	-9.74	5.000	-16.940	15.000	-16.940	4.02	15.000
1.650	-4.390	-6.09	5.500	-8.029	-6.43	5.500	-17.730	16.500	-17.730	8.28	16.500
1.800	-4.740	-5.04	6.000	-8.330	-3.14	6.000	-18.510	18.000	-18.510	12.20	18.000
1.950	-5.110	-3.76	6.500	-8.640	0.16	6.500	-19.280	19.500	-19.280	15.91	19.500
2.100	-5.510	-2.41	7.000	-8.977	3.50	7.000	-20.040	21.000	-20.040	19.44	21.000
2.250	-5.940	-0.97	7.500	-9.330	6.91	7.500	-20.790	22.500	-20.790	23.03	22.500
2.400	-6.410	0.57	8.000	-9.700	10.44	8.000	-21.530	24.000	-21.530	26.60	24.000
2.550	-6.920	2.03	8.500	-10.100	14.13	8.500	-22.260	25.500	-22.260	30.25	25.500
2.700	-7.480	3.54	9.000	-10.520	18.05	9.000	-23.000	27.000	-23.000	34.05	27.000
2.850	-8.090	5.14	9.500	-11.069	22.20	9.500	-23.750	28.500	-23.750	38.06	28.500
3.000	-8.760	6.86	10.000	-11.649	26.60	10.000	-24.510	30.000	-24.510	42.30	30.000

Table 173. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 0.00 m

3.0 KM UPHRANGE				10.0 KM UPHRANGE				30.0 KM UPHRANGE				100.0 KM UPHRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.03	-6.791	-93.26	0.03	-18.000	-131.39	0.03	-28.735	-149.62	0.03	-39.745	-147.46	0.03	-40.930	-120.40	0.03
0.06	-6.940	-94.57	0.06	-18.248	-129.26	0.06	-29.266	-147.34	0.06	-40.059	-92.52	0.06	-37.742	-74.16	0.06
0.09	-6.994	-95.88	0.09	-18.424	-126.80	0.09	-29.903	-129.81	0.09	-35.649	-61.43	0.09	-35.649	-61.43	0.09
0.12	-7.011	-96.48	0.12	-18.735	-124.65	0.12	-29.946	-116.07	0.12	-33.953	-34.10	0.12	-33.953	-34.10	0.12
0.15	-7.003	-97.17	0.15	-18.686	-119.30	0.15	-29.797	-103.52	0.15	-32.351	-49.21	0.15	-32.351	-49.21	0.15
0.18	-7.112	-97.80	0.18	-18.686	-116.67	0.18	-29.679	-95.49	0.18	-30.965	-45.74	0.18	-30.965	-45.74	0.18
0.21	-7.161	-98.36	0.21	-18.686	-114.01	0.21	-29.603	-88.19	0.21	-29.761	-43.15	0.21	-29.761	-43.15	0.21
0.24	-7.267	-98.93	0.24	-18.686	-111.32	0.24	-29.694	-81.73	0.24	-28.700	-41.15	0.24	-28.700	-41.15	0.24
0.27	-7.326	-99.43	0.27	-18.686	-108.61	0.27	-29.725	-76.05	0.27	-27.756	-39.55	0.27	-27.756	-39.55	0.27
0.30	-7.376	-99.88	0.30	-18.686	-105.90	0.30	-29.725	-71.21	0.30	-26.907	-38.23	0.30	-26.907	-38.23	0.30
0.33	-7.437	-100.37	0.33	-18.686	-103.20	0.33	-29.679	-66.99	0.33	-26.137	-37.13	0.33	-26.137	-37.13	0.33
0.36	-7.500	-100.80	0.36	-18.686	-100.51	0.36	-29.679	-63.35	0.36	-25.433	-36.19	0.36	-25.433	-36.19	0.36
0.39	-7.563	-101.18	0.39	-18.686	-97.80	0.39	-29.679	-60.19	0.39	-24.785	-35.36	0.39	-24.785	-35.36	0.39
0.42	-7.626	-101.51	0.42	-18.686	-95.17	0.42	-29.679	-57.43	0.42	-24.186	-34.66	0.42	-24.186	-34.66	0.42
0.45	-7.689	-101.79	0.45	-18.686	-92.57	0.45	-29.679	-55.01	0.45	-23.630	-34.03	0.45	-23.630	-34.03	0.45
0.48	-7.752	-102.02	0.48	-18.686	-89.95	0.48	-29.679	-52.87	0.48	-23.110	-33.46	0.48	-23.110	-33.46	0.48
0.51	-7.815	-102.21	0.51	-18.686	-87.30	0.51	-29.679	-50.98	0.51	-22.623	-32.94	0.51	-22.623	-32.94	0.51
0.54	-7.878	-102.36	0.54	-18.686	-84.63	0.54	-29.679	-49.26	0.54	-22.165	-32.47	0.54	-22.165	-32.47	0.54
0.57	-7.941	-102.47	0.57	-18.686	-82.00	0.57	-29.679	-47.74	0.57	-21.734	-32.04	0.57	-21.734	-32.04	0.57
0.60	-8.004	-102.54	0.60	-18.686	-79.37	0.60	-29.679	-46.39	0.60	-21.325	-31.64	0.60	-21.325	-31.64	0.60
0.63	-8.067	-102.58	0.63	-18.686	-76.70	0.63	-29.679	-45.14	0.63	-20.938	-31.27	0.63	-20.938	-31.27	0.63
0.66	-8.130	-102.59	0.66	-18.686	-74.03	0.66	-29.679	-44.00	0.66	-20.570	-30.93	0.66	-20.570	-30.93	0.66
0.69	-8.193	-102.58	0.69	-18.686	-71.36	0.69	-29.679	-42.96	0.69	-20.220	-30.60	0.69	-20.220	-30.60	0.69
0.72	-8.256	-102.54	0.72	-18.686	-68.69	0.72	-29.679	-42.03	0.72	-19.886	-30.30	0.72	-19.886	-30.30	0.72
0.75	-8.319	-102.47	0.75	-18.686	-66.02	0.75	-29.679	-41.12	0.75	-19.567	-30.01	0.75	-19.567	-30.01	0.75
0.78	-8.382	-102.36	0.78	-18.686	-63.35	0.78	-29.679	-40.30	0.78	-19.261	-29.74	0.78	-19.261	-29.74	0.78
0.81	-8.445	-102.21	0.81	-18.686	-60.68	0.81	-29.679	-39.54	0.81	-18.968	-29.48	0.81	-18.968	-29.48	0.81
0.84	-8.508	-102.02	0.84	-18.686	-58.01	0.84	-29.679	-38.83	0.84	-18.686	-29.23	0.84	-18.686	-29.23	0.84
0.87	-8.571	-101.79	0.87	-18.686	-55.34	0.87	-29.679	-38.16	0.87	-18.416	-28.99	0.87	-18.416	-28.99	0.87
0.90	-8.634	-101.51	0.90	-18.686	-52.67	0.90	-29.679	-37.54	0.90	-18.150	-28.79	0.90	-18.150	-28.79	0.90
1.05	-9.000	-100.80	1.05	-18.686	-49.95	1.05	-29.679	-36.89	1.05	-17.886	-28.54	1.05	-17.886	-28.54	1.05
1.20	-9.367	-100.00	1.20	-18.686	-47.20	1.20	-29.679	-36.19	1.20	-17.630	-28.29	1.20	-17.630	-28.29	1.20
1.35	-9.734	-99.15	1.35	-18.686	-44.45	1.35	-29.679	-35.44	1.35	-17.374	-28.04	1.35	-17.374	-28.04	1.35
1.50	-10.101	-98.30	1.50	-18.686	-41.70	1.50	-29.679	-34.69	1.50	-17.118	-27.79	1.50	-17.118	-27.79	1.50
1.65	-10.468	-97.45	1.65	-18.686	-38.95	1.65	-29.679	-33.94	1.65	-16.862	-27.54	1.65	-16.862	-27.54	1.65
1.80	-10.835	-96.60	1.80	-18.686	-36.20	1.80	-29.679	-33.19	1.80	-16.606	-27.29	1.80	-16.606	-27.29	1.80
1.95	-11.202	-95.75	1.95	-18.686	-33.45	1.95	-29.679	-32.44	1.95	-16.350	-27.04	1.95	-16.350	-27.04	1.95
2.10	-11.569	-94.90	2.10	-18.686	-30.70	2.10	-29.679	-31.69	2.10	-16.094	-26.79	2.10	-16.094	-26.79	2.10
2.25	-11.936	-94.05	2.25	-18.686	-27.95	2.25	-29.679	-30.94	2.25	-15.838	-26.54	2.25	-15.838	-26.54	2.25
2.40	-12.303	-93.20	2.40	-18.686	-25.20	2.40	-29.679	-30.19	2.40	-15.582	-26.29	2.40	-15.582	-26.29	2.40
2.55	-12.670	-92.35	2.55	-18.686	-22.45	2.55	-29.679	-29.44	2.55	-15.326	-26.04	2.55	-15.326	-26.04	2.55
2.70	-13.037	-91.50	2.70	-18.686	-19.70	2.70	-29.679	-28.69	2.70	-15.070	-25.79	2.70	-15.070	-25.79	2.70
2.85	-13.404	-90.65	2.85	-18.686	-16.95	2.85	-29.679	-27.94	2.85	-14.814	-25.54	2.85	-14.814	-25.54	2.85
3.00	-13.771	-89.80	3.00	-18.686	-14.20	3.00	-29.679	-27.19	3.00	-14.558	-25.29	3.00	-14.558	-25.29	3.00

Table 174. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 224.76 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)
0.000	-74.187	-47.96	0.000	-18.444	-75.59	0.000	-18.632	-73.24	0.000	-28.775	-84.91	0.000	-34.600	-86.84	0.000
0.003	-74.244	-47.25	0.010	-18.809	-70.82	0.030	-18.832	-68.33	0.060	-29.305	-77.61	0.100	-40.783	-59.75	0.100
0.006	-74.300	-46.54	0.030	-18.972	-68.33	0.090	-19.121	-65.78	0.120	-29.980	-61.00	0.200	-39.908	-51.86	0.200
0.012	-74.408	-45.10	0.040	-19.121	-65.78	0.150	-19.255	-63.17	0.180	-30.827	-52.23	0.300	-37.839	-42.52	0.300
0.015	-74.461	-44.38	0.050	-19.255	-63.17	0.170	-19.372	-60.51	0.210	-31.809	-43.66	0.400	-35.695	-32.79	0.400
0.019	-74.511	-43.65	0.070	-19.372	-60.51	0.190	-19.471	-57.91	0.240	-32.812	-35.61	0.500	-33.809	-23.54	0.500
0.021	-74.561	-42.92	0.080	-19.471	-57.91	0.210	-19.553	-55.34	0.270	-33.809	-28.30	0.600	-32.197	-16.40	0.600
0.024	-74.609	-42.19	0.090	-19.553	-55.34	0.230	-19.616	-52.84	0.290	-34.806	-21.82	0.700	-30.812	-10.40	0.700
0.027	-74.656	-41.45	0.100	-19.616	-52.84	0.250	-19.666	-50.34	0.310	-35.806	-16.18	0.800	-29.606	-4.44	0.800
0.030	-74.702	-40.71	0.110	-19.666	-50.34	0.270	-19.709	-47.84	0.330	-36.806	-11.29	0.900	-28.549	14.50	0.900
0.033	-74.746	-39.97	0.120	-19.709	-47.84	0.290	-19.743	-45.34	0.350	-37.806	-6.07	1.000	-27.606	21.11	1.000
0.036	-74.789	-39.23	0.130	-19.743	-45.34	0.310	-19.773	-42.84	0.370	-38.806	-0.85	1.100	-26.758	28.43	1.100
0.039	-74.831	-38.49	0.140	-19.773	-42.84	0.330	-19.803	-40.34	0.390	-39.806	4.37	1.200	-25.989	35.54	1.200
0.042	-74.871	-37.74	0.150	-19.803	-40.34	0.350	-19.833	-37.84	0.410	-40.806	9.65	1.300	-25.286	42.49	1.300
0.045	-74.910	-37.00	0.160	-19.833	-37.84	0.370	-19.863	-35.34	0.430	-41.806	14.93	1.400	-24.640	49.31	1.400
0.048	-74.948	-36.25	0.170	-19.863	-35.34	0.390	-19.893	-32.84	0.450	-42.806	20.21	1.500	-24.043	56.04	1.500
0.051	-74.984	-35.50	0.180	-19.893	-32.84	0.410	-19.923	-30.34	0.470	-43.806	25.49	1.600	-23.488	62.69	1.600
0.054	-75.019	-34.75	0.190	-19.923	-30.34	0.430	-19.953	-27.84	0.490	-44.806	30.77	1.700	-22.970	69.27	1.700
0.057	-75.054	-34.00	0.200	-19.953	-27.84	0.450	-19.983	-25.34	0.510	-45.806	36.05	1.800	-22.485	75.80	1.800
0.060	-75.088	-33.25	0.210	-19.983	-25.34	0.470	-20.013	-22.84	0.530	-46.806	41.33	1.900	-22.029	82.26	1.900
0.063	-75.125	-32.50	0.220	-20.013	-22.84	0.490	-20.043	-20.34	0.550	-47.806	46.61	2.000	-21.600	88.73	2.000
0.066	-75.164	-31.75	0.230	-20.043	-20.34	0.510	-20.073	-17.84	0.570	-48.806	51.89	2.100	-21.194	95.14	2.100
0.069	-75.202	-31.00	0.240	-20.073	-17.84	0.530	-20.103	-15.34	0.590	-49.806	57.17	2.200	-20.809	101.54	2.200
0.072	-75.240	-30.25	0.250	-20.103	-15.34	0.550	-20.133	-12.84	0.610	-50.806	62.45	2.300	-20.444	107.89	2.300
0.075	-75.278	-29.50	0.260	-20.133	-12.84	0.570	-20.163	-10.34	0.630	-51.806	67.73	2.400	-20.096	114.23	2.400
0.078	-75.315	-28.75	0.270	-20.163	-10.34	0.590	-20.193	-7.84	0.650	-52.806	73.01	2.500	-19.765	120.56	2.500
0.081	-75.353	-28.00	0.280	-20.193	-7.84	0.610	-20.223	-5.34	0.670	-53.806	78.29	2.600	-19.448	126.86	2.600
0.084	-75.391	-27.25	0.290	-20.223	-5.34	0.630	-20.253	-2.84	0.690	-54.806	83.57	2.700	-19.146	133.16	2.700
0.087	-75.429	-26.50	0.300	-20.253	-2.84	0.650	-20.283	-0.34	0.710	-55.806	88.85	2.800	-18.856	139.44	2.800
0.090	-75.466	-25.75	0.310	-20.283	-0.34	0.670	-20.313	2.16	0.730	-56.806	94.13	2.900	-18.576	145.71	2.900
			0.320	-20.313	2.16	0.690	-20.343	4.66	0.750	-57.806	99.41	3.000	-18.311	151.97	3.000
0.105	-76.407	-26.14	0.350	-20.343	4.66	0.710	-20.373	7.16	0.800	-58.806	104.69	3.500	-17.118	168.14	3.500
0.120	-76.450	-25.39	0.400	-20.373	7.16	0.750	-20.403	9.66	0.900	-59.806	109.97	4.000	-16.115	184.31	4.000
0.135	-76.491	-24.64	0.450	-20.403	9.66	0.800	-20.433	12.16	1.000	-60.806	115.25	4.500	-15.257	200.48	4.500
0.150	-76.533	-23.89	0.500	-20.433	12.16	0.850	-20.463	14.66	1.100	-61.806	120.53	5.000	-14.512	216.65	5.000
0.165	-76.575	-23.14	0.550	-20.463	14.66	0.900	-20.493	17.16	1.200	-62.806	125.81	5.500	-13.860	232.82	5.500
0.180	-76.617	-22.39	0.600	-20.493	17.16	0.950	-20.523	19.66	1.300	-63.806	131.09	6.000	-13.283	248.99	6.000
0.195	-76.659	-21.64	0.650	-20.523	19.66	1.000	-20.553	22.16	1.400	-64.806	136.37	6.500	-12.771	265.16	6.500
0.210	-76.701	-20.89	0.700	-20.553	22.16	1.050	-20.583	24.66	1.500	-65.806	141.65	7.000	-12.313	281.33	7.000
0.225	-76.743	-20.14	0.750	-20.583	24.66	1.100	-20.613	27.16	1.600	-66.806	146.93	7.500	-11.902	297.50	7.500
0.240	-76.785	-19.39	0.800	-20.613	27.16	1.150	-20.643	29.66	1.700	-67.806	152.21	8.000	-11.533	313.67	8.000
0.255	-76.827	-18.64	0.850	-20.643	29.66	1.200	-20.673	32.16	1.800	-68.806	157.49	8.500	-11.199	329.84	8.500
0.270	-76.869	-17.89	0.900	-20.673	32.16	1.250	-20.703	34.66	1.900	-69.806	162.77	9.000	-10.898	346.01	9.000
0.285	-76.911	-17.14	0.950	-20.703	34.66	1.300	-20.733	37.16	2.000	-70.806	168.05	9.500	-10.626	362.18	9.500
0.300	-76.953	-16.39	1.000	-20.733	37.16	1.350	-20.763	39.66	2.100	-71.806	173.33	10.000	-10.380	378.35	10.000

Table 175. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 1.0 MHz, VED Height = 449.52 m

3.0 KM UPHRANGE				10.0 KM UPHRANGE				30.0 KM UPHRANGE				100.0 KM UPHRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
0.000	-7.014	-27.51	0.000	-14.993	-40.54	0.000	-24.365	-53.04	0.000	-34.079	-67.40	0.000	-44.061	-80.32	0.000
0.003	-7.070	-26.00	0.010	-15.170	-44.54	0.030	-24.914	-57.75	0.100	-34.105	-71.45	0.300	-44.110	-84.44	0.500
0.006	-7.126	-25.08	0.020	-15.345	-48.16	0.060	-25.314	-61.13	0.200	-34.115	-75.40	0.500	-44.115	-88.40	0.700
0.009	-7.180	-24.37	0.030	-15.508	-51.00	0.100	-25.565	-64.40	0.300	-34.115	-79.35	0.500	-44.115	-92.35	0.700
0.012	-7.235	-23.84	0.040	-15.658	-53.47	0.120	-25.564	-67.35	0.400	-34.115	-83.30	0.600	-44.115	-96.30	0.800
0.015	-7.289	-23.42	0.050	-15.793	-55.47	0.150	-25.441	-70.30	0.500	-34.115	-87.25	0.700	-44.115	-100.25	0.900
0.018	-7.344	-23.10	0.060	-15.912	-57.47	0.180	-25.108	-73.25	0.600	-34.115	-91.20	0.800	-44.115	-104.20	1.000
0.021	-7.399	-22.85	0.070	-16.014	-59.47	0.210	-24.655	-76.20	0.700	-34.115	-95.15	0.900	-44.115	-108.15	1.100
0.024	-7.447	-22.70	0.080	-16.098	-61.47	0.240	-24.114	-79.15	0.800	-34.115	-99.10	1.000	-44.115	-112.10	1.200
0.027	-7.499	-22.96	0.090	-16.165	-63.47	0.270	-23.523	-82.10	0.900	-34.115	-103.05	1.100	-44.115	-116.05	1.300
0.030	-7.550	-23.21	0.100	-16.212	-65.47	0.300	-22.909	-85.05	1.000	-34.115	-106.95	1.200	-44.115	-120.00	1.400
0.033	-7.600	-19.45	0.110	-16.241	-67.47	0.330	-22.290	-87.95	1.100	-34.115	-110.90	1.300	-44.115	-123.95	1.500
0.036	-7.650	-18.64	0.120	-16.252	-69.47	0.360	-21.680	-90.85	1.200	-34.115	-114.85	1.400	-44.115	-127.90	1.600
0.039	-7.699	-17.93	0.130	-16.244	-71.47	0.390	-21.090	-93.75	1.300	-34.115	-118.80	1.500	-44.115	-131.85	1.700
0.042	-7.748	-17.23	0.140	-16.219	-73.47	0.420	-20.532	-96.65	1.400	-34.115	-122.75	1.600	-44.115	-135.80	1.800
0.045	-7.796	-16.53	0.150	-16.177	-75.47	0.450	-20.014	-99.55	1.500	-34.115	-126.70	1.700	-44.115	-139.75	1.900
0.048	-7.843	-15.82	0.160	-16.114	-77.47	0.480	-19.541	-102.45	1.600	-34.115	-130.65	1.800	-44.115	-143.70	2.000
0.051	-7.889	-15.11	0.170	-16.047	-79.47	0.510	-19.106	-105.35	1.700	-34.115	-134.60	1.900	-44.115	-147.65	2.100
0.054	-7.935	-14.40	0.180	-15.962	-81.47	0.540	-18.714	-108.25	1.800	-34.115	-138.55	2.000	-44.115	-151.60	2.200
0.057	-7.981	-13.69	0.190	-15.862	-83.47	0.570	-18.364	-111.15	1.900	-34.115	-142.50	2.100	-44.115	-155.55	2.300
0.060	-8.025	-12.98	0.200	-15.752	-85.47	0.600	-18.054	-114.05	2.000	-34.115	-146.45	2.200	-44.115	-159.50	2.400
0.063	-8.069	-12.27	0.210	-15.633	-87.47	0.630	-17.784	-116.95	2.100	-34.115	-150.40	2.300	-44.115	-163.45	2.500
0.066	-8.112	-11.56	0.220	-15.505	-89.47	0.660	-17.554	-119.85	2.200	-34.115	-154.35	2.400	-44.115	-167.40	2.600
0.069	-8.155	-10.85	0.230	-15.369	-91.47	0.690	-17.364	-122.75	2.300	-34.115	-158.30	2.500	-44.115	-171.35	2.700
0.072	-8.198	-10.14	0.240	-15.228	-93.47	0.720	-17.214	-125.65	2.400	-34.115	-162.25	2.600	-44.115	-175.30	2.800
0.075	-8.241	-9.43	0.250	-15.081	-95.47	0.750	-17.104	-128.55	2.500	-34.115	-166.20	2.700	-44.115	-179.25	2.900
0.078	-8.284	-8.72	0.260	-14.930	-97.47	0.780	-17.034	-131.45	2.600	-34.115	-170.15	2.800	-44.115	-183.20	3.000
0.081	-8.327	-8.01	0.270	-14.776	-99.47	0.810	-17.004	-134.35	2.700	-34.115	-174.10	2.900	-44.115	-187.15	3.100
0.084	-8.370	-7.30	0.280	-14.619	-101.47	0.840	-17.014	-137.25	2.800	-34.115	-178.05	3.000	-44.115	-191.10	3.200
0.087	-8.413	-6.59	0.290	-14.460	-103.47	0.870	-17.064	-140.15	2.900	-34.115	-182.00	3.100	-44.115	-195.05	3.300
0.090	-8.456	-5.88	0.300	-14.300	-105.47	0.900	-17.154	-143.05	3.000	-34.115	-185.95	3.200	-44.115	-199.00	3.400
0.093	-8.500	-5.17	0.310	-14.139	-107.47	0.930	-17.284	-145.95	3.100	-34.115	-190.00	3.300	-44.115	-202.95	3.500
0.096	-8.543	-4.46	0.320	-13.978	-109.47	0.960	-17.454	-148.85	3.200	-34.115	-194.05	3.400	-44.115	-206.90	3.600
0.099	-8.587	-3.75	0.330	-13.817	-111.47	0.990	-17.664	-151.75	3.300	-34.115	-198.10	3.500	-44.115	-210.85	3.700
0.102	-8.630	-3.04	0.340	-13.656	-113.47	1.020	-17.914	-154.65	3.400	-34.115	-202.15	3.600	-44.115	-214.80	3.800
0.105	-8.674	-2.33	0.350	-13.495	-115.47	1.050	-18.204	-157.55	3.500	-34.115	-206.20	3.700	-44.115	-218.75	3.900
0.108	-8.717	-1.62	0.360	-13.334	-117.47	1.080	-18.534	-160.45	3.600	-34.115	-210.25	3.800	-44.115	-222.70	4.000
0.111	-8.761	-0.91	0.370	-13.173	-119.47	1.110	-18.904	-163.35	3.700	-34.115	-214.30	3.900	-44.115	-226.65	4.100
0.114	-8.804	-0.20	0.380	-13.012	-121.47	1.140	-19.314	-166.25	3.800	-34.115	-218.35	4.000	-44.115	-230.60	4.200
0.117	-8.848	0.51	0.390	-12.851	-123.47	1.170	-19.764	-169.15	3.900	-34.115	-222.40	4.100	-44.115	-234.55	4.300
0.120	-8.891	1.22	0.400	-12.690	-125.47	1.200	-20.254	-172.05	4.000	-34.115	-226.45	4.200	-44.115	-238.50	4.400
0.123	-8.935	1.93	0.410	-12.529	-127.47	1.230	-20.784	-174.95	4.100	-34.115	-230.50	4.300	-44.115	-242.45	4.500
0.126	-8.978	2.64	0.420	-12.368	-129.47	1.260	-21.354	-177.85	4.200	-34.115	-234.55	4.400	-44.115	-246.40	4.600
0.129	-9.022	3.35	0.430	-12.207	-131.47	1.290	-21.964	-180.75	4.300	-34.115	-238.60	4.500	-44.115	-250.35	4.700
0.132	-9.065	4.06	0.440	-12.046	-133.47	1.320	-22.614	-183.65	4.400	-34.115	-242.65	4.600	-44.115	-254.30	4.800
0.135	-9.109	4.77	0.450	-11.885	-135.47	1.350	-23.304	-186.55	4.500	-34.115	-246.70	4.700	-44.115	-258.25	4.900
0.138	-9.152	5.48	0.460	-11.724	-137.47	1.380	-24.034	-189.45	4.600	-34.115	-250.75	4.800	-44.115	-262.20	5.000
0.141	-9.196	6.19	0.470	-11.563	-139.47	1.410	-24.804	-192.35	4.700	-34.115	-254.80	4.900	-44.115	-266.15	5.100
0.144	-9.239	6.90	0.480	-11.402	-141.47	1.440	-25.614	-195.25	4.800	-34.115	-258.85	5.000	-44.115	-270.10	5.200
0.147	-9.283	7.61	0.490	-11.241	-143.47	1.470	-26.464	-198.15	4.900	-34.115	-262.90	5.100	-44.115	-274.05	5.300
0.150	-9.326	8.32	0.500	-11.080	-145.47	1.500	-27.354	-201.05	5.000	-34.115	-266.95	5.200	-44.115	-278.00	5.400
0.153	-9.370	9.03	0.510	-10.919	-147.47	1.530	-28.284	-203.95	5.100	-34.115	-271.00	5.300	-44.115	-281.95	5.500
0.156	-9.413	9.74	0.520	-10.758	-149.47	1.560	-29.254	-206.85	5.200	-34.115	-275.05	5.400	-44.115	-285.90	5.600
0.159	-9.457	10.45	0.530	-10.597	-151.47	1.590	-30.264	-209.75	5.300	-34.115	-279.10	5.500	-44.115	-289.85	5.700
0.162	-9.500	11.16	0.540	-10.436	-153.47	1.620	-31.314	-212.65	5.400	-34.115	-283.15	5.600	-44.115	-293.80	5.800
0.165	-9.544	11.87	0.550	-10.275	-155.47	1.650	-32.404	-215.55	5.500	-34.115	-287.20	5.700	-44.115	-297.75	5.900
0.168	-9.587	12.58	0.560	-10.114	-157.47	1.680	-33.534	-218.45	5.600	-34.115	-291.25	5.800	-44.115	-301.70	6.000
0.171	-9.631	13.29	0.570	-9.953	-159.47	1.710	-34.704	-221.35	5.700	-34.115	-295.30	5.900	-44.115	-305.65	6.100
0.174	-9.674	14.00	0.580	-9.792	-161.47	1.740	-35.914	-224.25	5.800	-34.115	-299.35	6.000	-44.115	-309.60	6.200
0.177	-9.718	14.71	0.590	-9.631	-163.47	1.770	-37.164	-227.15	5.900	-34.115	-303.40	6.100	-44.115	-313.55	6.300
0.180	-9.761	15.42	0.600	-9.470	-165.47	1.800	-38.454	-230.05	6.000	-34.115	-307.45	6.200	-44.115	-317.50	6.400
0.183	-9.805	16.13	0.610	-9.309	-167.47	1.830	-39.784	-232.95	6.100	-34.115	-311.50	6.300	-44.115	-321.45	6.500
0.186	-9.848	16.84	0.620	-9.148	-169.47	1.860	-41.154	-235.85	6.200	-34.115	-315.55	6.400	-44.115	-325.40	6.600
0.189	-9.892	17.55	0.630	-8.987	-171.47	1.890	-42.564	-238.75	6.300	-34.115	-319.60	6.500	-44.115	-329.35	6.700
0.192	-9.935	18.26	0.640	-8.826	-173.47	1.920	-44.014	-241.65	6.400	-34.115	-323.65	6.600	-44.115	-333.30	6.800
0.195	-9.979	18.97	0.650	-8.665	-175.47	1.950	-45.504	-244.55	6.500	-34.115	-327.70	6.700	-44.115	-337.25	6.900
0.198	-10.022	19.68	0.660	-8.504	-177.47	1.980	-47.034	-247.45	6.600	-34.115	-331.75	6.800	-44.115	-341.20	7.000
0.201	-10.066	20.39	0.670	-8.343	-179.47	2.010	-48.604	-250.35	6.700	-34.115	-335.80	6.900	-44.115	-345.15	7.100
0.204	-10.109	21.10	0.680	-8.182	-181.47	2.040	-50.214	-253.25	6.800	-34.115	-339.85	7.000	-44.115	-349.10	7.200
0.207	-10.153	21.81	0.690	-8.021	-183.47										

Table 176. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 0.00 m

3.0 KM DOWNRANGE					10.0 KM DOWNRANGE					100.0 KM DOWNRANGE				
MEIUMT (NM)	AMP (DB)	PHASE (DEG)	MEIUMT (NM)	AMP (DB)	PHASE (DEG)	MEIUMT (NM)	AMP (DB)	PHASE (DEG)	MEIUMT (NM)	AMP (DB)	PHASE (DEG)	MEIUMT (NM)	AMP (DB)	PHASE (DEG)
.000	-34.911	-98.01	.000	-45.594	-98.17	.000	-54.949	-98.78	.000	-65.411	-98.99	.000	-65.411	-98.99
.003	-34.866	-98.30	.010	-44.890	-98.30	.030	-48.718	-98.33	.100	-49.517	-98.04	.200	-49.517	-98.04
.006	-34.876	-98.50	.020	-44.892	-98.21	.060	-49.014	-98.00	.300	-49.554	-7.49	.400	-49.554	-7.49
.009	-34.844	-98.55	.030	-44.811	-98.00	.120	-50.014	-98.00	.500	-49.585	-6.71	.600	-49.585	-6.71
.012	-34.837	-98.57	.040	-44.810	-98.00	.180	-50.014	-98.00	.700	-49.585	-6.71	.800	-49.585	-6.71
.015	-34.837	-98.57	.050	-44.810	-98.00	.240	-50.014	-98.00	.900	-49.585	-6.71			
.018	-34.837	-98.57	.060	-44.810	-98.00	.300	-50.014	-98.00						
.021	-34.837	-98.57	.070	-44.810	-98.00	.360	-50.014	-98.00						
.024	-34.837	-98.57	.080	-44.810	-98.00	.420	-50.014	-98.00						
.027	-34.837	-98.57	.090	-44.810	-98.00	.480	-50.014	-98.00						
.030	-34.837	-98.57	.100	-44.810	-98.00	.540	-50.014	-98.00						
.033	-34.837	-98.57	.110	-44.810	-98.00	.600	-50.014	-98.00						
.036	-34.837	-98.57	.120	-44.810	-98.00	.660	-50.014	-98.00						
.039	-34.837	-98.57	.130	-44.810	-98.00	.720	-50.014	-98.00						
.042	-34.837	-98.57	.140	-44.810	-98.00	.780	-50.014	-98.00						
.045	-34.837	-98.57	.150	-44.810	-98.00	.840	-50.014	-98.00						
.048	-34.837	-98.57	.160	-44.810	-98.00	.900	-50.014	-98.00						
.051	-34.837	-98.57	.170	-44.810	-98.00									
.054	-34.837	-98.57	.180	-44.810	-98.00									
.057	-34.837	-98.57	.190	-44.810	-98.00									
.060	-34.837	-98.57	.200	-44.810	-98.00									
.063	-34.837	-98.57	.210	-44.810	-98.00									
.066	-34.837	-98.57	.220	-44.810	-98.00									
.069	-34.837	-98.57	.230	-44.810	-98.00									
.072	-34.837	-98.57	.240	-44.810	-98.00									
.075	-34.837	-98.57	.250	-44.810	-98.00									
.078	-34.837	-98.57	.260	-44.810	-98.00									
.081	-34.837	-98.57	.270	-44.810	-98.00									
.084	-34.837	-98.57	.280	-44.810	-98.00									
.087	-34.837	-98.57	.290	-44.810	-98.00									
.090	-34.837	-98.57	.300	-44.810	-98.00									
.105	-17.594	-98.57	.350	-17.594	-98.57	.400	-17.594	-98.57	.450	-17.594	-98.57	.500	-17.594	-98.57
.120	-16.556	-98.57	.400	-16.556	-98.57	.450	-16.556	-98.57	.500	-16.556	-98.57	.550	-16.556	-98.57
.135	-16.556	-98.57	.450	-16.556	-98.57	.500	-16.556	-98.57	.550	-16.556	-98.57	.600	-16.556	-98.57
.150	-16.556	-98.57	.500	-16.556	-98.57	.550	-16.556	-98.57	.600	-16.556	-98.57	.650	-16.556	-98.57
.165	-16.556	-98.57	.550	-16.556	-98.57	.600	-16.556	-98.57	.650	-16.556	-98.57	.700	-16.556	-98.57
.180	-16.556	-98.57	.600	-16.556	-98.57	.650	-16.556	-98.57	.700	-16.556	-98.57	.750	-16.556	-98.57
.195	-16.556	-98.57	.650	-16.556	-98.57	.700	-16.556	-98.57	.750	-16.556	-98.57	.800	-16.556	-98.57
.210	-16.556	-98.57	.700	-16.556	-98.57	.750	-16.556	-98.57	.800	-16.556	-98.57	.850	-16.556	-98.57
.225	-16.556	-98.57	.750	-16.556	-98.57	.800	-16.556	-98.57	.850	-16.556	-98.57	.900	-16.556	-98.57
.240	-16.556	-98.57	.800	-16.556	-98.57	.850	-16.556	-98.57	.900	-16.556	-98.57	.950	-16.556	-98.57
.255	-16.556	-98.57	.850	-16.556	-98.57	.900	-16.556	-98.57						
.270	-16.556	-98.57	.900	-16.556	-98.57									
.285	-16.556	-98.57	.950	-16.556	-98.57									
.300	-16.556	-98.57	1.000	-16.556	-98.57									

Table 177. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 22.48 m

HEIGHT (KM)	3.0 KM DOWNRANGE			10.0 KM DOWNRANGE			30.0 KM DOWNRANGE			100.0 KM DOWNRANGE		
	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)
0.000	0.000	-30.662	-39.10	0.000	-41.043	-40.76	0.000	-50.567	-41.23	0.000	-61.018	-41.40
0.003	0.003	-30.635	-28.37	0.010	-39.935	-17.58	0.030	-39.013	24.21	0.100	-45.124	43.95
0.006	0.006	-30.462	-18.13	0.020	-37.335	13.20	0.060	-35.630	43.06	0.200	-59.161	48.55
0.009	0.009	-29.761	-8.92	0.030	-34.854	24.53	0.090	-33.191	43.61	0.300	-55.666	50.10
0.012	0.012	-29.095	-1.98	0.040	-32.779	31.16	0.120	-31.292	47.15	0.400	-53.192	50.88
0.015	0.015	-28.333	5.69	0.050	-31.055	35.42	0.150	-29.741	48.15	0.500	-49.724	51.68
0.018	0.018	-27.548	11.24	0.060	-29.598	38.36	0.180	-28.432	48.94	0.700	-28.412	51.91
0.021	0.021	-26.771	15.84	0.070	-28.345	40.50	0.210	-27.301	49.50	0.800	-27.280	52.10
0.024	0.024	-26.000	19.68	0.080	-27.249	42.12	0.240	-26.306	49.94	0.900	-26.285	52.24
0.027	0.027	-25.204	22.69	0.090	-26.277	43.40	0.270	-25.419	50.30	1.000	-25.399	52.36
0.030	0.030	-24.425	25.62	0.100	-25.406	44.43	0.300	-24.620	50.60	1.100	-24.600	52.46
0.033	0.033	-23.684	27.94	0.110	-24.617	45.27	0.330	-23.872	50.85	1.200	-23.873	52.55
0.036	0.036	-23.000	29.95	0.120	-23.898	45.99	0.360	-23.225	51.07	1.300	-23.206	52.63
0.039	0.039	-22.361	31.69	0.130	-23.237	46.59	0.390	-22.610	51.25	1.400	-22.592	52.70
0.042	0.042	-21.764	33.22	0.140	-22.627	47.11	0.420	-22.020	51.42	1.500	-22.522	52.76
0.045	0.045	-21.208	34.56	0.150	-22.059	47.57	0.450	-21.506	51.57	1.600	-21.493	52.82
0.048	0.048	-20.686	35.75	0.160	-21.530	47.97	0.480	-21.010	51.70	1.700	-20.993	52.87
0.051	0.051	-20.204	36.82	0.170	-21.034	48.32	0.510	-20.543	51.82	1.800	-20.926	52.93
0.054	0.054	-19.760	37.78	0.180	-20.569	48.64	0.540	-20.102	51.93	1.900	-20.866	52.97
0.057	0.057	-19.359	38.65	0.190	-20.124	48.93	0.570	-19.688	52.03	2.000	-19.870	53.02
0.060	0.060	-18.999	39.44	0.200	-19.714	49.20	0.600	-19.292	52.13	2.100	-19.870	53.06
0.063	0.063	-18.676	40.15	0.210	-19.320	49.43	0.630	-18.917	52.21	2.200	-18.901	53.11
0.066	0.066	-18.380	40.81	0.220	-18.945	49.65	0.660	-18.560	52.30	2.300	-18.945	53.15
0.069	0.069	-18.100	41.41	0.230	-18.590	49.86	0.690	-18.220	52.37	2.400	-18.205	53.19
0.072	0.072	-17.820	41.97	0.240	-18.250	50.05	0.720	-17.895	52.45	2.500	-17.880	53.23
0.075	0.075	-17.551	42.49	0.250	-17.925	50.22	0.750	-17.594	52.52	2.600	-17.570	53.26
0.078	0.078	-17.291	42.97	0.260	-17.614	50.39	0.780	-17.306	52.59	2.700	-17.272	53.30
0.081	0.081	-17.042	43.42	0.270	-17.316	50.54	0.810	-17.020	52.65	2.800	-16.966	53.34
0.084	0.084	-16.794	43.81	0.280	-17.030	50.68	0.840	-16.725	52.71	2.900	-16.711	53.37
0.087	0.087	-16.557	44.22	0.290	-16.750	50.82	0.870	-16.461	52.77	3.000	-16.447	53.41
0.090	0.090	-16.339	44.59	0.300	-16.491	50.95	0.900	-16.257	52.83			
0.105	0.105	-15.335	46.14	0.350	-15.303	51.51	1.050	-15.273	53.05	3.500	-15.260	53.58
0.120	0.120	-14.342	47.35	0.400	-14.295	51.98	1.200	-14.255	53.30	4.000	-14.253	53.76
0.135	0.135	-13.461	48.33	0.450	-13.425	52.48	1.350	-13.306	53.53	4.500	-13.365	53.94
0.150	0.150	-12.671	49.15	0.500	-12.665	52.77	1.500	-12.637	53.76	5.000	-12.626	54.12
0.165	0.165	-11.960	49.85	0.550	-11.944	53.07	1.650	-11.966	54.21	5.500	-11.955	54.30
0.180	0.180	-11.305	50.48	0.600	-11.396	53.36	1.800	-11.369	54.44	6.000	-11.358	54.50
0.195	0.195	-10.692	51.05	0.650	-10.860	53.69	1.950	-10.834	54.67	6.500	-10.824	54.70
0.210	0.210	-10.115	51.57	0.700	-10.370	53.98	2.100	-10.352	54.91	7.000	-10.342	54.91
0.225	0.225	-9.571	52.05	0.750	-9.941	54.28	2.250	-9.916	55.15	7.500	-9.906	55.13
0.240	0.240	-9.059	52.51	0.800	-9.455	54.57	2.400	-9.520	55.41	8.000	-9.511	55.36
0.255	0.255	-8.579	52.96	0.850	-8.985	54.87	2.550	-9.160	55.61	8.500	-9.151	55.60
0.270	0.270	-8.131	53.39	0.900	-8.530	55.16	2.700	-8.831	55.87	9.000	-8.822	55.85
0.285	0.285	-7.711	53.81	0.950	-8.090	55.47	2.850	-8.404	56.11	9.500	-8.423	56.11
0.300	0.300	-7.316	54.22	1.000	-7.681	55.76	3.000	-8.025	56.22	10.000	-8.244	56.48

Table 178. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 10.0 MHz, VED Height = 44.95 m

3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				100.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)	HEIGHT (KM)	AMP (DB)	PHASE (DEG)
0.000	-26.000	-22.40	0.000	-36.243	-23.191	0.000	-43.716	-24.36	0.000	-56.152	-24.52
0.003	-26.000	-11.08	0.010	-35.135	9.25	0.030	-39.485	41.08	0.100	-40.256	60.83
0.006	-25.000	-1.44	0.020	-32.336	30.63	0.060	-34.165	54.91	0.200	-34.295	65.43
0.009	-25.150	7.77	0.030	-30.025	41.37	0.090	-30.782	59.93	0.300	-30.800	66.98
0.012	-24.404	15.76	0.040	-27.982	49.01	0.120	-28.344	62.48	0.400	-28.327	67.76
0.015	-23.704	22.40	0.050	-26.256	52.27	0.150	-26.445	64.03	0.500	-26.416	68.24
0.018	-22.961	27.95	0.060	-24.802	55.22	0.180	-24.895	65.08	0.600	-24.861	68.57
0.021	-22.140	32.56	0.070	-23.550	57.36	0.210	-23.587	65.83	0.700	-23.551	68.81
0.024	-21.376	36.41	0.080	-22.455	58.99	0.240	-22.458	66.40	0.800	-22.420	69.00
0.027	-20.661	39.64	0.090	-21.485	60.28	0.270	-21.465	66.85	0.900	-21.427	69.15
0.030	-20.000	42.36	0.100	-20.616	61.31	0.300	-20.580	67.21	1.000	-20.542	69.27
0.033	-19.300	44.72	0.110	-19.850	62.17	0.330	-19.782	67.52	1.100	-19.745	69.38
0.036	-18.704	46.74	0.120	-19.112	62.89	0.360	-19.057	67.78	1.200	-19.020	69.48
0.039	-18.197	48.50	0.130	-18.454	63.51	0.390	-18.393	68.00	1.300	-18.356	69.57
0.042	-17.602	50.04	0.140	-17.846	64.04	0.420	-17.780	68.20	1.400	-17.744	69.65
0.045	-17.157	51.41	0.150	-17.281	64.51	0.450	-17.213	68.37	1.500	-17.177	69.72
0.048	-16.680	52.62	0.160	-16.755	64.92	0.480	-16.684	68.53	1.600	-16.649	69.79
0.051	-16.260	53.71	0.170	-16.262	65.29	0.510	-16.169	68.68	1.700	-16.155	69.86
0.054	-15.799	54.66	0.180	-15.800	65.63	0.540	-15.725	68.81	1.800	-15.691	69.92
0.057	-15.392	55.57	0.190	-15.364	65.93	0.570	-15.288	68.93	1.900	-15.255	69.98
0.060	-15.000	56.38	0.200	-14.952	66.21	0.600	-14.876	69.05	2.000	-14.843	70.04
0.063	-14.630	57.12	0.210	-14.562	66.46	0.630	-14.445	69.16	2.100	-14.413	70.10
0.066	-14.284	57.80	0.220	-14.192	66.70	0.660	-14.115	69.26	2.200	-14.083	70.16
0.069	-13.947	58.43	0.230	-13.841	66.92	0.690	-13.767	69.36	2.300	-13.731	70.21
0.072	-13.626	59.01	0.240	-13.505	67.13	0.720	-13.427	69.46	2.400	-13.395	70.27
0.075	-13.311	59.55	0.250	-13.185	67.32	0.750	-13.107	69.55	2.500	-13.076	70.33
0.078	-13.000	60.05	0.260	-12.879	67.51	0.780	-12.801	69.64	2.600	-12.770	70.38
0.081	-12.700	60.53	0.270	-12.587	67.69	0.810	-12.506	69.73	2.700	-12.477	70.44
0.084	-12.400	60.97	0.280	-12.306	67.85	0.840	-12.228	69.81	2.800	-12.197	70.49
0.087	-12.100	61.39	0.290	-12.036	68.01	0.870	-11.958	69.89	2.900	-11.928	70.55
0.090	-11.800	61.79	0.300	-11.778	68.16	0.900	-11.700	69.97	3.000	-11.670	70.61
0.105	-10.017	63.49	0.350	-10.621	68.85	1.050	-10.564	70.37	3.500	-10.515	70.90
0.120	-9.059	64.86	0.400	-9.649	69.45	1.200	-9.573	70.75	4.000	-9.545	71.21
0.135	-8.036	66.03	0.450	-8.821	70.02	1.350	-8.573	71.14	4.500	-8.719	71.54
0.150	-6.930	67.05	0.500	-8.108	70.56	1.500	-8.034	71.54	5.000	-8.006	71.89
0.165	-5.712	67.96	0.550	-7.488	71.09	1.650	-7.415	71.97	5.500	-7.388	72.27
0.180	-4.412	68.66	0.600	-6.946	71.63	1.800	-6.874	72.41	6.000	-6.848	72.68
0.195	-3.099	69.69	0.650	-6.472	72.18	1.950	-6.401	72.81	6.500	-6.375	73.12
0.210	-2.262	70.50	0.700	-6.056	72.74	2.100	-5.986	73.37	7.000	-5.960	73.58
0.225	-1.516	71.30	0.750	-5.690	73.32	2.250	-5.621	73.89	7.500	-5.596	74.09
0.240	-0.995	72.09	0.800	-5.370	73.93	2.400	-5.302	74.44	8.000	-5.278	74.62
0.255	-0.5314	72.89	0.850	-5.091	74.56	2.550	-5.023	75.03	8.500	-4.999	75.19
0.270	-0.1070	73.70	0.900	-4.848	75.22	2.700	-4.761	75.65	9.000	-4.757	75.79
0.285	-0.000	74.51	0.950	-4.638	75.92	2.850	-4.572	76.30	9.500	-4.569	76.44
0.300	-0.077	75.36	1.000	-4.459	76.64	3.000	-4.394	77.00	10.000	-4.371	77.12

Table 179. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 0.00 m

1.00 KM DOWNRANGE			30.0 KM DOWNRANGE			30.0 KM DOWNRANGE		
HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)	HEIGHT (M)	AMP (DB)	PHASE (DEG)
.001	-43.319	-90.00	.001	-65.519	-90.82	.001	-75.001	-90.88
.002	-44.119	-97.75	.002	-66.225	-94.44	.002	-75.904	-90.88
.003	-44.507	-96.39	.003	-66.300	-94.44	.003	-76.559	-90.88
.004	-44.507	-96.39	.004	-66.300	-94.44	.004	-76.559	-90.88
.005	-44.507	-96.39	.005	-66.300	-94.44	.005	-76.559	-90.88
.006	-44.507	-96.39	.006	-66.300	-94.44	.006	-76.559	-90.88
.007	-44.507	-96.39	.007	-66.300	-94.44	.007	-76.559	-90.88
.008	-44.507	-96.39	.008	-66.300	-94.44	.008	-76.559	-90.88
.009	-44.507	-96.39	.009	-66.300	-94.44	.009	-76.559	-90.88
.010	-44.507	-96.39	.010	-66.300	-94.44	.010	-76.559	-90.88
.011	-44.507	-96.39	.011	-66.300	-94.44	.011	-76.559	-90.88
.012	-44.507	-96.39	.012	-66.300	-94.44	.012	-76.559	-90.88
.013	-44.507	-96.39	.013	-66.300	-94.44	.013	-76.559	-90.88
.014	-44.507	-96.39	.014	-66.300	-94.44	.014	-76.559	-90.88
.015	-44.507	-96.39	.015	-66.300	-94.44	.015	-76.559	-90.88
.016	-44.507	-96.39	.016	-66.300	-94.44	.016	-76.559	-90.88
.017	-44.507	-96.39	.017	-66.300	-94.44	.017	-76.559	-90.88
.018	-44.507	-96.39	.018	-66.300	-94.44	.018	-76.559	-90.88
.019	-44.507	-96.39	.019	-66.300	-94.44	.019	-76.559	-90.88
.020	-44.507	-96.39	.020	-66.300	-94.44	.020	-76.559	-90.88
.021	-44.507	-96.39	.021	-66.300	-94.44	.021	-76.559	-90.88
.022	-44.507	-96.39	.022	-66.300	-94.44	.022	-76.559	-90.88
.023	-44.507	-96.39	.023	-66.300	-94.44	.023	-76.559	-90.88
.024	-44.507	-96.39	.024	-66.300	-94.44	.024	-76.559	-90.88
.025	-44.507	-96.39	.025	-66.300	-94.44	.025	-76.559	-90.88
.026	-44.507	-96.39	.026	-66.300	-94.44	.026	-76.559	-90.88
.027	-44.507	-96.39	.027	-66.300	-94.44	.027	-76.559	-90.88
.028	-44.507	-96.39	.028	-66.300	-94.44	.028	-76.559	-90.88
.029	-44.507	-96.39	.029	-66.300	-94.44	.029	-76.559	-90.88
.030	-44.507	-96.39	.030	-66.300	-94.44	.030	-76.559	-90.88
.035	-44.507	-96.39	.035	-66.300	-94.44	.035	-76.559	-90.88
.040	-44.507	-96.39	.040	-66.300	-94.44	.040	-76.559	-90.88
.045	-44.507	-96.39	.045	-66.300	-94.44	.045	-76.559	-90.88
.050	-44.507	-96.39	.050	-66.300	-94.44	.050	-76.559	-90.88
.055	-44.507	-96.39	.055	-66.300	-94.44	.055	-76.559	-90.88
.060	-44.507	-96.39	.060	-66.300	-94.44	.060	-76.559	-90.88
.065	-44.507	-96.39	.065	-66.300	-94.44	.065	-76.559	-90.88
.070	-44.507	-96.39	.070	-66.300	-94.44	.070	-76.559	-90.88
.075	-44.507	-96.39	.075	-66.300	-94.44	.075	-76.559	-90.88
.080	-44.507	-96.39	.080	-66.300	-94.44	.080	-76.559	-90.88
.085	-44.507	-96.39	.085	-66.300	-94.44	.085	-76.559	-90.88
.090	-44.507	-96.39	.090	-66.300	-94.44	.090	-76.559	-90.88
.095	-44.507	-96.39	.095	-66.300	-94.44	.095	-76.559	-90.88
.100	-44.507	-96.39	.100	-66.300	-94.44	.100	-76.559	-90.88

Table 180. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 2.25 m

10.0 KM UORANGE				30.0 KM UORANGE			
MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)	PHASE (DEG)	MEI (M)	AMP (DB)
0.000	-40.000	-35.17	0.000	-30.785	-35.81	0.000	-70.325
0.01	-39.416	-2.95	0.01	-34.740	45.58	0.01	-44.828
0.02	-38.767	15.44	0.02	-33.575	30.67	0.02	-38.644
0.03	-38.024	27.01	0.03	-32.440	15.54	0.03	-35.352
0.04	-37.291	37.27	0.04	-31.340	0.35	0.04	-32.883
0.05	-36.569	47.31	0.05	-30.242	46.88	0.05	-30.974
0.06	-35.851	57.01	0.06	-29.140	52.81	0.06	-29.420
0.07	-35.137	66.35	0.07	-28.035	58.11	0.07	-28.110
0.08	-34.428	75.34	0.08	-26.928	62.81	0.08	-26.979
0.09	-33.724	83.98	0.09	-25.818	66.81	0.09	-25.985
0.10	-33.025	92.27	0.10	-24.705	69.91	0.10	-25.100
0.11	-32.331	100.21	0.11	-23.588	72.11	0.11	-24.301
0.12	-31.642	107.80	0.12	-22.468	73.43	0.12	-23.575
0.13	-30.958	115.04	0.13	-21.344	73.87	0.13	-22.909
0.14	-30.279	121.93	0.14	-20.216	73.42	0.14	-22.295
0.15	-29.605	128.47	0.15	-19.084	72.07	0.15	-21.725
0.16	-28.936	134.66	0.16	-17.948	69.81	0.16	-21.194
0.17	-28.272	140.50	0.17	-16.808	66.61	0.17	-20.697
0.18	-27.613	146.00	0.18	-15.664	62.41	0.18	-20.230
0.19	-26.959	151.15	0.19	-14.516	57.11	0.19	-19.790
0.20	-26.310	155.96	0.20	-13.364	50.71	0.20	-19.374
0.21	-25.666	160.43	0.21	-12.208	43.21	0.21	-18.980
0.22	-25.027	164.57	0.22	-11.048	34.61	0.22	-18.606
0.23	-24.393	168.38	0.23	-9.884	24.91	0.23	-18.250
0.24	-23.764	171.86	0.24	-8.716	15.11	0.24	-17.910
0.25	-23.140	175.01	0.25	-7.544	5.21	0.25	-17.586
0.26	-22.521	177.83	0.26	-6.368	-4.61	0.26	-17.275
0.27	-21.907	180.33	0.27	-5.188	-13.71	0.27	-16.977
0.28	-21.298	182.51	0.28	-4.004	-22.11	0.28	-16.692
0.29	-20.694	184.37	0.29	-2.816	-29.71	0.29	-16.417
0.30	-20.095	185.91	0.30	-1.624	-36.41	0.30	-16.153
0.35	-18.973	192.33	0.35	-14.976	54.11	0.35	-14.986
0.40	-17.900	197.44	0.40	-13.970	54.30	0.40	-13.959
0.45	-16.864	201.25	0.45	-13.042	54.49	0.45	-13.091
0.50	-15.863	204.78	0.50	-12.194	54.65	0.50	-12.332
0.55	-14.893	207.94	0.55	-11.326	54.78	0.55	-11.662
0.60	-13.950	210.73	0.60	-10.438	54.81	0.60	-11.065
0.65	-13.030	213.16	0.65	-9.531	54.84	0.65	-10.530
0.70	-12.130	215.24	0.70	-8.605	54.85	0.70	-10.049
0.75	-11.250	216.97	0.75	-7.670	54.84	0.75	-9.613
0.80	-10.390	218.35	0.80	-6.726	54.81	0.80	-9.218
0.85	-9.550	219.38	0.85	-5.773	54.76	0.85	-8.858
0.90	-8.730	220.06	0.90	-4.811	54.69	0.90	-8.530
0.95	-7.930	220.40	0.95	-3.840	54.59	0.95	-8.231
1.00	-7.150	220.41	1.00	-2.861	54.44	1.00	-7.957

Table 181. Azimuthal Magnetic Field (Poorly Conducting Soil), Frequency = 100.0 MHz, VED Height = 4.50 m

1.0 KM DOWNRANGE				3.0 KM DOWNRANGE				10.0 KM DOWNRANGE				30.0 KM DOWNRANGE			
HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)	AMP (UB)	PHASE (DEG)	HEIGHT (KM)
0.000	-30.114	-19.35	0.000	-45.580	-19.77	0.000	-56.011	-19.92	0.000	-65.546	-19.96	0.000	-65.546	-19.96	0.000
0.001	-34.702	12.87	0.003	-39.038	42.59	0.010	-39.967	61.47	0.030	-40.049	67.45	0.030	-40.049	67.45	0.030
0.002	-32.050	32.25	0.006	-33.818	55.72	0.020	-34.051	63.96	0.060	-34.065	68.97	0.060	-34.065	68.97	0.060
0.003	-29.615	42.84	0.009	-30.483	60.50	0.030	-30.573	67.44	0.090	-30.574	69.48	0.090	-30.574	69.48	0.090
0.004	-27.582	49.09	0.012	-28.070	63.04	0.040	-28.108	68.74	0.120	-28.105	69.74	0.120	-28.105	69.74	0.120
0.005	-25.894	53.14	0.015	-26.187	64.34	0.050	-26.202	68.70	0.150	-26.197	69.90	0.150	-26.197	69.90	0.150
0.006	-24.401	55.95	0.018	-24.848	65.55	0.060	-24.850	69.02	0.180	-24.844	70.01	0.180	-24.844	70.01	0.180
0.007	-23.220	58.00	0.021	-23.347	66.26	0.070	-23.342	69.24	0.210	-23.335	70.09	0.210	-23.335	70.09	0.210
0.008	-22.148	59.57	0.024	-22.224	66.83	0.080	-22.213	69.41	0.240	-22.206	70.15	0.240	-22.206	70.15	0.240
0.009	-21.191	60.80	0.027	-21.235	67.26	0.090	-21.221	69.55	0.270	-21.214	70.21	0.270	-21.214	70.21	0.270
0.010	-20.331	61.80	0.030	-20.354	67.61	0.100	-20.337	69.66	0.300	-20.330	70.25	0.300	-20.330	70.25	0.300
0.011	-19.553	62.62	0.033	-19.559	67.90	0.110	-19.541	69.76	0.330	-19.534	70.29	0.330	-19.534	70.29	0.330
0.012	-18.843	63.32	0.036	-18.837	68.14	0.120	-18.817	69.84	0.360	-18.810	70.33	0.360	-18.810	70.33	0.360
0.013	-18.190	63.91	0.039	-18.174	68.35	0.130	-18.154	69.91	0.390	-18.147	70.36	0.390	-18.147	70.36	0.390
0.014	-17.597	64.42	0.042	-17.564	68.53	0.140	-17.543	69.98	0.420	-17.535	70.39	0.420	-17.535	70.39	0.420
0.015	-17.067	64.86	0.045	-17.027	68.69	0.150	-17.006	70.04	0.450	-17.000	70.43	0.450	-17.000	70.43	0.450
0.016	-16.500	65.26	0.048	-16.470	68.84	0.160	-16.448	70.10	0.480	-16.441	70.46	0.480	-16.441	70.46	0.480
0.017	-16.016	65.61	0.051	-16.077	68.97	0.170	-16.054	70.15	0.510	-16.047	70.49	0.510	-16.047	70.49	0.510
0.018	-15.557	65.92	0.054	-15.514	69.09	0.180	-15.491	70.20	0.540	-15.484	70.52	0.540	-15.484	70.52	0.540
0.019	-15.124	66.21	0.057	-15.078	69.20	0.190	-15.055	70.25	0.570	-15.048	70.55	0.570	-15.048	70.55	0.570
0.020	-14.715	66.47	0.060	-14.667	69.30	0.200	-14.643	70.29	0.600	-14.636	70.58	0.600	-14.636	70.58	0.600
0.021	-14.327	66.71	0.063	-14.277	69.40	0.210	-14.254	70.34	0.630	-14.246	70.61	0.630	-14.246	70.61	0.630
0.022	-13.959	66.93	0.066	-13.907	69.49	0.220	-13.884	70.38	0.660	-13.877	70.64	0.660	-13.877	70.64	0.660
0.023	-13.610	67.14	0.069	-13.556	69.57	0.230	-13.532	70.43	0.690	-13.525	70.67	0.690	-13.525	70.67	0.690
0.024	-13.276	67.33	0.072	-13.221	69.66	0.240	-13.197	70.47	0.720	-13.190	70.70	0.720	-13.190	70.70	0.720
0.025	-12.958	67.51	0.075	-12.902	69.73	0.250	-12.876	70.51	0.750	-12.871	70.74	0.750	-12.871	70.74	0.750
0.026	-12.654	67.68	0.078	-12.596	69.81	0.260	-12.572	70.56	0.780	-12.565	70.77	0.780	-12.565	70.77	0.780
0.027	-12.362	67.84	0.081	-12.304	69.88	0.270	-12.280	70.60	0.810	-12.273	70.80	0.810	-12.273	70.80	0.810
0.028	-12.083	67.99	0.084	-12.024	69.96	0.280	-12.000	70.64	0.840	-11.993	70.84	0.840	-11.993	70.84	0.840
0.029	-11.815	68.13	0.087	-11.755	70.03	0.290	-11.731	70.69	0.870	-11.724	70.88	0.870	-11.724	70.88	0.870
0.030	-11.558	68.27	0.090	-11.497	70.09	0.300	-11.473	70.73	0.900	-11.466	70.91	0.900	-11.466	70.91	0.900
0.035	-10.400	68.89	0.105	-10.344	70.42	0.350	-10.320	70.96	1.050	-10.313	71.11	1.050	-10.313	71.11	1.050
0.040	-9.440	69.43	0.120	-9.376	70.75	0.400	-9.352	71.20	1.200	-9.345	71.33	1.200	-9.345	71.33	1.200
0.045	-8.616	69.93	0.135	-8.551	71.07	0.450	-8.527	71.27	1.350	-8.520	71.58	1.350	-8.520	71.58	1.350
0.050	-7.900	70.41	0.150	-7.841	71.41	0.500	-7.817	71.76	1.500	-7.810	71.86	1.500	-7.810	71.86	1.500
0.055	-7.290	70.88	0.165	-7.225	71.77	0.550	-7.201	72.08	1.650	-7.194	72.17	1.650	-7.194	72.17	1.650
0.060	-6.754	71.35	0.180	-6.687	72.15	0.600	-6.664	72.42	1.800	-6.657	72.50	1.800	-6.657	72.50	1.800
0.065	-6.286	71.83	0.195	-6.217	72.55	0.650	-6.194	72.80	1.950	-6.187	72.87	1.950	-6.187	72.87	1.950
0.070	-5.870	72.33	0.210	-5.802	72.96	0.700	-5.782	73.20	2.100	-5.775	73.27	2.100	-5.775	73.27	2.100
0.075	-5.509	72.85	0.225	-5.445	73.44	0.750	-5.422	73.64	2.250	-5.415	73.70	2.250	-5.415	73.70	2.250
0.080	-5.193	73.40	0.240	-5.129	73.93	0.800	-5.107	74.11	2.400	-5.100	74.17	2.400	-5.100	74.17	2.400
0.085	-4.918	73.97	0.255	-4.855	74.45	0.850	-4.832	74.62	2.550	-4.826	74.67	2.550	-4.826	74.67	2.550
0.090	-4.681	74.57	0.270	-4.618	75.01	0.900	-4.595	75.16	2.700	-4.589	75.21	2.700	-4.589	75.21	2.700
0.095	-4.476	75.20	0.285	-4.414	75.60	0.950	-4.392	75.75	2.850	-4.385	75.79	2.850	-4.385	75.79	2.850
0.100	-4.303	75.87	0.300	-4.241	76.24	1.000	-4.219	76.37	3.000	-4.213	76.40	3.000	-4.213	76.40	3.000

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Appendix A

ELECTROMAGNETIC FIELD EQUATIONS

An elemental VED of moment $I\ell$ in air above a plane, homogeneous earth radiates transverse magnetic (TM) fields which can be represented in cylindrical coordinates by the three components

$$E_z = \frac{-ik_2 I\ell \eta_0}{4\pi} \left[\cos^2 \psi_D \frac{e^{-ik_2 D}}{D} + \Gamma_M \cos^2 \psi_R \frac{e^{-ik_2 R}}{R} + (1 - \Gamma_M)F(w) \cos^2 \psi_R \frac{e^{-ik_2 R}}{R} \right] \quad (A1)$$

$$E_\rho = \frac{-ik_2 I\ell \eta_0}{4\pi} \left[\sin \psi_D \cos \psi_D \frac{e^{-ik_2 D}}{D} - \Gamma_M \sin \psi_R \cos \psi_R \frac{e^{-ik_2 R}}{R} + (1 - \Gamma_M)F(w)\Delta_R \cos \psi_R \frac{e^{-ik_2 R}}{R} \right] \quad (A2)$$

and

$$H_{\phi} = \frac{ik_2 I f}{4\pi} \left[\cos \psi_D \frac{e^{-ik_2 D}}{D} + \Gamma_M \cos \psi_R \frac{e^{-ik_2 R}}{R} + (1 - \Gamma_M) F(w) \cos \psi_R \frac{e^{-ik_2 R}}{R} \right] \quad (A3)$$

where E_z is the vertical electric field, E_{ρ} is the radial electric field, and H_{ϕ} is the azimuthal magnetic field.⁷ Each component is expressed as the sum of three terms, corresponding to Norton's³ direct, reflected, and surface wave representation. Near field contributions and the $\exp(+i\omega t)$ time dependence have been omitted.

The geometry is given in Figure A1, where

d = downrange distance along $z = 0$ plane

h = VED height above $z = 0$

z = field point above $z = 0$

$D = [d^2 + (h - z)^2]^{1/2}$

$R = [d^2 + (h + z)^2]^{1/2}$

$\cos \psi_D = d/D$

$\cos \psi_R = d/R$

$\sin \psi_D = (h - z)/D$

and

$\sin \psi_R = (h + z)/R.$

The TM Fresnel reflection coefficient for parallel polarization,

$$\Gamma_M = (\sin \psi_R - \Delta_R) / (\sin \psi_R + \Delta_R)$$

where

$$\Delta_R = \frac{\mu_1 k_2}{\mu_2 k_1} \left[1 - \left(\frac{k_2}{k_1} \right)^2 \cos^2 \psi_R \right]^{1/2}$$

is the normalized surface impedance. The propagation constant in the air

$$k_2 = \frac{i\omega}{c} \sqrt{\kappa_2} \quad , \quad (z > 0)$$

while in the earth

$$k_1 = \frac{i\omega}{c} \left[\kappa_1 - i \frac{\sigma_1}{\omega \epsilon_0} \right]^{1/2} \quad , \quad (z < 0) \quad .$$

Also,

$$\mu_0 = 4\pi \times 10^{-7} \text{ H/m} = \text{permeability of free space}$$

$$\epsilon_0 = 8.854 \times 10^{-12} \text{ F/m} = \text{permittivity of free space}$$

$$\eta_0 = (\mu_0/\epsilon_0)^{1/2} = \text{impedance of free space}$$

$$\mu_1 = \text{earth permeability}$$

$$\kappa_1 = \text{earth relative permittivity} = \epsilon_1/\epsilon_0$$

$$\sigma_1 = \text{earth conductivity}$$

$$\mu_2 = \text{air permeability}$$

$$\kappa_2 = \text{air relative permittivity} = \epsilon_2/\epsilon_0$$

$$\omega = 2\pi f, \text{ where } f \text{ is the frequency (Hz), and}$$

$$c = 2.997 \times 10^8 \text{ m/sec.}$$

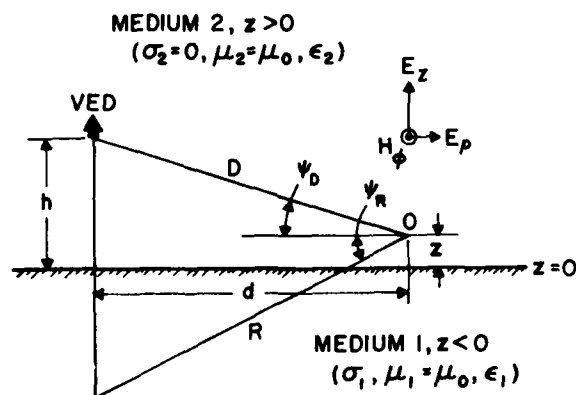


Figure A1. Geometry for the Field Equations, Showing the VED Source at Height h Above the $z = 0$ Plane and the Three Field Components E_z , E_ρ , and H_ϕ (Out of Paper) at Point O at Height z and Downrange Distance d

The attenuation function $F(w)$, which accounts for the effect of the lossy plane earth on the surface wave terms, can be written as

$$F(w) = 1 - i \sqrt{\pi w} e^{-w} \operatorname{erfc}(i \sqrt{w}) \quad (\text{A4})$$

where w , the so called 'numerical distance', is given by

$$w = \frac{-ik_2 R}{2 \cos^2 \psi_R} (\Delta_R + \sin \psi_R)^2 \quad (\text{A5})$$

and $\operatorname{erfc}(i \sqrt{w})$ is the complement of the error function of argument $i \sqrt{w}$.

Appendix B

RANGE OF APPLICABILITY

Equations (A1), (A2), and (A3) may be derived from the approximate Hertz potential

$$\Pi_z = \frac{e^{-ik_2 D}}{D} + \Gamma_M \frac{e^{-ik_2 R}}{R} + (1 - \Gamma_M) \frac{e^{-ik_2 R}}{R}$$

by multiplying Π_z by $-i\mu/4\pi\omega\epsilon_0$, applying

$$\vec{E} = \vec{\nabla} \vec{\nabla} \cdot \vec{\Pi} + k^2 \vec{\Pi}$$

$$\vec{H} = -\frac{k^2}{i\omega\mu_0} \vec{\nabla} \times \vec{\Pi}$$

and then discarding terms in ρ^{-2} or smaller. Since the fields must satisfy the wave equation

$$\vec{\nabla}^2 \vec{A} = k^2 \vec{A}, \quad (B1)$$

the restrictions imposed by the Hertz potential approximation may be found by inserting Eqs. (A1), (A2), and (A3) into Eq. (B1) and studying the remainder terms. It may be shown that these terms are negligible if

$$\sin \psi_R \ll |\Delta_R| \cdot \left| \frac{k_1}{k_2} \right|^4 \cdot \left| \frac{\mu_2}{\mu_1} \right|^2 \quad (\text{B2})$$

and

$$|\sin \psi_R + \Delta_R|^2 \ll 1 \quad (\text{B3})$$

More detailed discussion of these approximations may be found in King.⁷

Numerical values of the factors in Eqs. (B2) and (B3) for the five earth surfaces are given in Tables B1 to B5. These show that Eq. (B2) is satisfied for any value of ψ_R . On the other hand, since the phase of Δ_R for a smooth, homogeneous surface is confined within the range 0 degrees (for a nonconducting surface) to +45 degrees (for a good conductor), Eq. (B3) can be satisfied only if both

$$|\Delta_R|^2 \ll 1 \quad (\text{B4})$$

and

$$\sin^2 \psi_R \ll 1 \quad (\text{B5})$$

For all frequencies and surfaces considered, the tables show that Eq. (B4) is satisfied. Equation (B5) restricts ψ_R to about 20 degrees or so, but in deriving Eq. (A4) for $F(w)$, the more stringent condition⁷

$$(h + z)/d \ll 1 \quad (\text{B6})$$

is used, which further limits ψ_R to 6 degrees or less. Consequently, the criterion adopted for this report is

$$(h + z)/d \leq 0.1 \quad (\text{B7})$$

It should be noted that Eq. (B7) is probably much more restrictive than necessary since the surface wave terms rapidly become negligible compared to the combination of direct and reflected terms as ψ_R is increased.¹³

The minimum distance for which Eqs. (A1), (A2), and (A3) are valid is of the order of 10λ , because the static and induction fields were neglected. Earth curvature limits the maximum practical range. Norton⁸ suggests the plane surface TM equations are valid for distances $d < 80 f^{-1/3}$, where d is in kilometers and f is the frequency in Megahertz. These restrictions on d combined with the criterion of Eq. (B7) determine the trapezoidal areas shown in Figure B1.

Table B1. Propagation Parameters for $\sigma_1 = 4 \text{ S/m}$, $\kappa_1 = 80$ (Sea Water)

$f \text{ (Hz)}$	$ k_2 \text{ (m}^{-1}\text{)}$	$ k_1 \text{ (m}^{-1}\text{)}$	$ \Delta_R \approx \left \frac{k_2}{k_1} \right $	$ \Delta_R \cdot \left \frac{k_1}{k_2} \right ^4 \cdot \left \frac{\mu_2}{\mu_1} \right ^2$
10^5	2.10×10^{-3}	1.78	1.18×10^{-3}	6.10×10^8
10^6	2.10×10^{-2}	5.63	3.73×10^{-3}	1.93×10^7
10^7	2.10×10^{-1}	17.8	1.18×10^{-2}	6.10×10^5
10^8	2.10	56.3	3.73×10^{-2}	1.93×10^4

Table B2. Propagation Parameters for $\sigma_1 = 0.001 \text{ S/m}$, $\kappa_1 = 80$ (Fresh Water)

$f \text{ (Hz)}$	$ k_2 \text{ (m}^{-1}\text{)}$	$ k_1 \text{ (m}^{-1}\text{)}$	$ \Delta_R \approx \left \frac{k_2}{k_1} \right $	$ \Delta_R \cdot \left \frac{k_1}{k_2} \right ^4 \cdot \left \frac{\mu_2}{\mu_1} \right ^2$
10^5	2.10×10^{-3}	2.95×10^{-2}	7.12×10^{-2}	2.77×10^3
10^6	2.10×10^{-2}	1.90×10^{-1}	1.10×10^{-1}	7.43×10^2
10^7	2.10×10^{-1}	1.88	1.12×10^{-1}	7.16×10^2
10^8	2.10	18.8	1.12×10^{-1}	7.16×10^2

Table B3. Propagation Parameters for $\sigma_1 = 2 \times 10^{-5} \text{ S/m}$, $\kappa_1 = 5$ (Ice)

$f \text{ (Hz)}$	$ k_2 \text{ (m}^{-1}\text{)}$	$ k_1 \text{ (m}^{-1}\text{)}$	$ \Delta_R \approx \left \frac{k_2}{k_1} \right $	$ \Delta_R \cdot \left \frac{k_1}{k_2} \right ^4 \cdot \left \frac{\mu_2}{\mu_1} \right ^2$
10^5	2.10×10^{-3}	5.21×10^{-3}	4.03×10^{-1}	15.3
10^6	2.10×10^{-2}	4.70×10^{-2}	4.47×10^{-1}	11.2
10^7	2.10×10^{-1}	4.70×10^{-1}	4.47×10^{-1}	11.2
10^8	2.10	4.70	4.47×10^{-1}	11.2

Table B4. Propagation Parameters for $\sigma_1 = 0.01$ S/m, $\kappa_1 = 20$
(Well-Conducting Soil)

f (Hz)	$ k_2 $ (m ⁻¹)	$ k_1 $ (m ⁻¹)	$ \Delta_R \approx \left \frac{k_2}{k_1} \right $	$ \Delta_R \cdot \left \frac{k_1}{k_2} \right ^4 \cdot \left \frac{\mu_2}{\mu_1} \right ^2$
10^5	2.10×10^{-3}	8.90×10^{-2}	2.36×10^{-2}	7.61×10^4
10^6	2.10×10^{-2}	2.84×10^{-1}	7.41×10^{-2}	2.46×10^3
10^7	2.10×10^{-1}	1.09	1.93×10^{-1}	1.39×10^2
10^8	2.10	9.41	2.23×10^{-1}	9.02×10^1

Table B5. Propagation Parameters for $\sigma_1 = 0.001$ S/m, $\kappa_1 = 10$
(Poorly Conducting Soil)

f (Hz)	$ k_2 $ (m ⁻¹)	$ k_1 $ (m ⁻¹)	$ \Delta_R \approx \left \frac{k_2}{k_1} \right $	$ \Delta_R \cdot \left \frac{k_1}{k_2} \right ^4 \cdot \left \frac{\mu_2}{\mu_1} \right ^2$
10^5	2.10×10^{-3}	2.81×10^{-2}	7.46×10^{-2}	2.41×10^3
10^6	2.10×10^{-2}	9.53×10^{-2}	2.20×10^{-1}	9.36×10^1
10^7	2.10×10^{-1}	6.70×10^{-1}	3.13×10^{-1}	3.25×10^1
10^8	2.10	6.64	3.16×10^{-1}	3.16×10^1

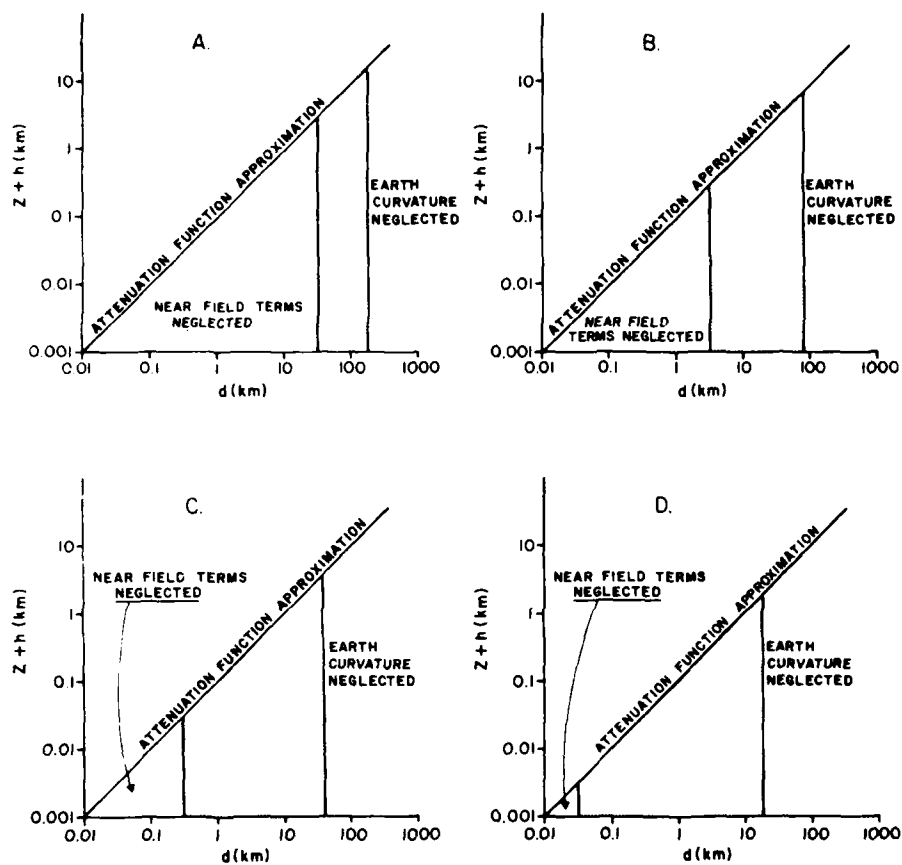


Figure B1. Regions of Validity for the Flat Earth Equations: A) 0.1 MHz, B) 1.0 MHz, C) 10 MHz, and D) 100 MHz

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