

AD-759 928

SIMULATION RESEARCH TO DEVELOP OBJECTIVE  
METEOROLOGICAL PREDICTION CAPABILITY

Tom E. Sanford

Texas A and M Research Foundation

Prepared for:

Army Electronics Command

February 1973

DISTRIBUTED BY:



National Technical Information Service  
U. S. DEPARTMENT OF COMMERCE  
5285 Port Royal Road, Springfield Va. 22151

AD



AD 759928

RESEARCH AND DEVELOPMENT TECHNICAL REPORT  
ECOM-0280-F1

SIMULATION RESEARCH TO DEVELOP OBJECTIVE  
METEOROLOGICAL PREDICTION CAPABILITY

FINAL REPORT  
VOLUME I

By

Tom E. Sanford, Principal Investigator

February 1973

Reproduced by  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. Department of Commerce  
Springfield VA 22151

D D C  
REF ID: A  
MAI 15 1973  
REGISTRED  
B

**ECOM**

UNITED STATES ARMY ELECTRONICS COMMAND • FORT MONMOUTH, N.J.

Contact DAAB07-68-C-0280

DEPARTMENTS OF METEOROLOGY AND OCEANOGRAPHY

TEXAS A&M UNIVERSITY

College Station, Texas 77843

DISTRIBUTION STATEMENT

Approved for public release; distribution unlimited.

## Security Classification

## DOCUMENT CONTROL DATA - R &amp; D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION
Texas A & M Research Foundation College Station, Texas 77843		2b. GROUP
3. REPORT TITLE		
Simulation Research to Develop Objective Meteorological Prediction Capability		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Final Report for 14 June 1972 to 14 November 1972		
5. AUTHOR(S) (First name, middle initial, last name)  Tom E. Sanford		
6. REPORT DATE  February 1973		7a. TOTAL NO. OF PAGES  -258 357
6b. CONTRACT OR GRANT NO  DAAB07-68-C-0280		7b. NO. OF REFS  none
6c. PROJECT NO  DA No. 170.6211.A126		8b. ORIGINATOR'S REPORT NUMBER(S)  72-5A
6d. Task-05		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)  ECOM-0280-F1 (Volume I)
10. DISTRIBUTION STATEMENT  Approved for public release; distribution unlimited.		
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY  U. S. Army Electronics Command Fort Monmouth, New Jersey 07703 AMSEL-BL-FM-A
13. ABSTRACT  This study is a further evaluation of the system of equations employed currently for simulating the atmospheric friction layer. Five sets of data, each 12 hr in length, were collected in August, 1969, at Dugway Proving Ground, Utah. Preliminary solutions for these sets of data were included in Technical Reports ECOM-0280-3, dated December, 1969, and ECOM-0280-4, dated September, 1970. Subsequent to obtaining these solutions, the data were re-evaluated for each of the cases. After re-evaluation, solutions of the equation system for the sets of data were obtained again. The results of these solutions are included in this report, which appears in two volumes. Volume I contains solutions for five sets of data collected at Dugway. Volume II contains solutions for Cases I-A through VIII of the Dallas Tower Network Data, incorporating a modified form of the exchange coefficient derived from Deacon's wind hypothesis and miscellaneous solutions of the system of equations for a wide range of meteorological conditions.		

DD FORM 1 NOV 68 1473 (PAGE 1)

S/N 0101-807-6801

Security Classification

## Security Classification

14 KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
<p>1. Meteorology</p> <p>2. Meteorological Simulator</p> <p>3. Dept. of the Army Contract No. <u>DAAB07-68-C-0280</u></p>						

DD FORM 1 NOV 68 1473 (BACK)  
(PAGE 2)

14

Security Classification

Technical Report ECOM-0280-F1  
February 1973

Reports Control Symbol  
OSD-1366

SIMULATION RESEARCH TO DEVELOP OBJECTIVE  
METEOROLOGICAL PREDICTION CAPABILITY

Final Report

Volume I

14 June 1972 to 14 November 1972

Report No. 9

Contract No. DAAB07-68-C-0280

DA Project No. 1T0.6211.A126.05

Project 582

Reference 72-5A

Prepared by

Tom E. Sanford, Principal Investigator

TEXAS A & M RESEARCH FOUNDATION

College Station, Texas

For

U. S. Army Electronics Command, Fort Monmouth, New Jersey

DISTRIBUTION STATEMENT

Approved for public release; distribution unlimited.

j.lc

#### ACKNOWLEDGMENT

The research reported herein has been performed under Contract DAAB07-68-C-0280, sponsored by the U. S. Army Electronics Command at Fort Monmouth, New Jersey. Personnel and equipment support for the general purpose analog computer facility utilized in this research are provided jointly by the U. S. Army Electronics Command and Texas A&M University.

## TABLE OF CONTENTS

	<b>Page</b>
<b>Abstract .....</b>	<b>11</b>
<b>Acknowledgement .....</b>	<b>111</b>
<b>I. INTRODUCTION .....</b>	<b>1</b>
<b>II. GENERAL PURPOSE ANALOG COMPUTER (GPAC) SOLUTION FORMATS .....</b>	<b>3</b>
<b>III. GENERAL PURPOSE ANALOG COMPUTER SOLUTIONS .....</b>	<b>9</b>
<b>IV. COMPARISON OF THE SOLUTIONS OBTAINED BY USE OF THE VARIOUS CIRCUIT CONFIGURATIONS .....</b>	<b>334</b>
<b>Distribution List .....</b>	<b>351</b>
<b>DD Form 1473 .....</b>	<b>358</b>

## I. INTRODUCTION

In late August, 1969, a series of five meteorological tests were conducted at Dugway Proving Ground to evaluate further the suitability of the set of meteorological predictive equations presently in use for simulating the temporal variation of wind, temperature, and vapor pressure in the lowest kilometer of the earth's atmosphere. The prevailing synoptic weather conditions for these tests as well as the manner in which the data were collected are described in Technical Report ECOM-0280-3, dated December, 1969.

The basic philosophy in the initial collection and analysis phase of this program differed markedly from that under which the Dallas Tower Network data were prepared. During the Dallas Tower Network program, data were collected and analyzed, and computer solutions were obtained solely by project personnel. After solutions had been obtained for 11 of these sets of data, tests at another geographical location and tests that would approximate more closely operational conditions were desired.

For the tests conducted, operational conditions were simulated as closely as possible except for the element of time. The Meteorological Division in conjunction with the Air Weather Service personnel at Dugway collected the necessary data, reduced it to coded form, and entered it into digital computer data processing punch cards for direct entry into the digital preparation program used at Texas A&M to perform the necessary calculations for preparing atmospheric data for processing

on the General Purpose Analog Computer. The purpose of handling the data in this manner was to obtain, as far as possible, an objective assessment of the set of predictive equations. Objective in the sense used here simply means that project personnel at Texas A&M were not involved in the collection, analysis, or preparation of the data. As the data, entered on punch cards, were received at Texas A&M, they were processed through an IBM 360/65 digital computer to obtain the required analog computer potentiometer settings and amplifier check voltages. Using these data, project personnel obtained 1, 2, 6, and 12-hr solutions for the set of equations. The results obtained from these solutions are described in two reports, Technical Report ECOM-0280-3, December, 1969, and Technical Report ECOM-0280-4, September, 1970.

Subsequent to obtaining these initial trial solutions, project personnel undertook to re-evaluate the reported data to insure consistency and continuity in time and space. Some discontinuities in space were anticipated due to the fact that the observations obtained from meteorologically instrumented towers were located approximately 10 mi from the site where the upper-air data were collected. In the re-evaluation of these data special care was taken to insure that vertical consistency in the individual atmospheric variables was maintained.

## II. GENERAL PURPOSE ANALOG COMPUTER (GPAC) SOLUTION FORMATS

Results obtained using these data begin on page 10. The data for each case are presented in four parts: a tape log which contains the tape number, forecast interval, and conditions under which the solutions were obtained; a set of initial conditions giving the initial input values of the variables for each layer simulated; observed data for verification of predictions at 1, 2, 6, and 12 hrs after the initial time; and results of the GPAC solutions.

Abbreviated headings are used for the columns in the tape log. In order to understand these headings, refer to page 10. The first column in this table shows the individual tape numbers. The second column contains the simulated time interval for the solutions expressed in hours. Column three, headed SM, refers to the soil model that was selected for the solution. Two choices are available: Soil Model A, a stratified soil model; or Soil Model B, a simplified model. The column headed  $K_{m,8}$  and  $D_8$  refers to the momentum exchange coefficient at 8-m height and the integral exchange coefficient for the surface layer. This column may contain either an F or a V. F indicates that the initial value of  $K_{m,8}$  and  $D_8$  are held constant throughout the solution period. The letter V in this column indicates that  $K_{m,8}$  and  $D_8$  vary with wind speed.

The column headed SCC contains the letter A, indicating that the surface contour gradient changed linearly during the solution cycle, or the letter F, indicating that the gradient was held fixed at its initial value throughout the solution cycle.

The column headed ADV indicates the manner in which the advection is applied during the solution. Either an N or an F may appear in this column. An F in this column indicates that the advection of wind, temperature, and vapor pressure remains fixed at the initial value throughout the solution period. An N indicates that the gradients of the wind, temperature, and vapor pressure are constant throughout the solution period but that advection is allowed to vary with the wind.

The column headed GEO may contain either an I or an O. An I in this column indicates that the wind vector at the 1000-m level is coupled to the geostrophic wind. An O in this column indicates that the 1000-m level is not coupled to the geostrophic wind.

The column headed GEO indicates whether or not the geostrophic coupling term was omitted (indicated by O) or was included (indicated by I). The geostrophic coupling term is,  $C_g/\rho$ , where  $\rho$  is air density and  $C_g = A(V_g - V_{1000})$ . The parameter  $V_g$  is the geostrophic wind,  $V_{1000}$  is the wind at 1000-m height, and A is the coupling coefficient. For all the solutions in this report, A has the value of  $8.33 \times 10^{-4} \text{ gm cm}^{-3} \text{ sec}^{-1}$ . Any non-normal conditions under which a particular tape was run is indicated in the remarks column.

Following the tape log are two pages which contain the initial conditions for the particular case. The initial soil temperature profile and other soil parameters, radiation parameters, local time, and horizontal gradients of vapor pressure and temperature are shown on the first page. The second page contains the initial profiles of wind,

temperature, and vapor pressure from 8- to 1000-m height and the wind advection terms, alpha and beta, at 200, 600, and 1000 m. In addition, the surface contour gradient terms at the initial time, indicated as 0 hr and the four prediction intervals of 1, 2, 6, and 12 hr are given on the second page. The azimuth angle for the surface contour gradient terms is measured clockwise from true north and the magnitude of the surface contour gradient is given in feet per 100 km.

Four pages of verification data follow the two pages containing the initial conditions. These four pages contain the verification data for 1, 2, 6, and 12 hr after the initial time. Vertical profiles of the east-west and north-south components of wind, indicated respectively as u and v, are given for heights from 8 through 1000 m. In addition, the geostrophic values are shown. Temperature profiles are given for 2 through 1000 m, and vapor pressure profiles for 8 through 1000 m. Soil temperature measurements are given at all simulation levels from 3 cm below the soil surface, indicated by a minus zero, to a depth of -2 m.

The level indicated as 8' refers to a modified wind speed used to compute the Richardson number for determination of the surface integral exchange coefficient and the exchange coefficient for momentum at the height of 8 m. The modified wind speed is defined by the relation  $(S_8')^2 = S_8^2 + a^2$  where a represents the threshold wind speed required to limit the maximum value of the exchange coefficient for momentum at 8-m height to 50,000  $\text{cm}^2/\text{sec}$  for zero wind at 8-m height.

On these sheets the surface shearing stress  $\tau_c$ , net radiation  $R_n$ ,

surface convective heat flux  $q_{c,o}$ , surface evaporative heat flux  $q_{e,o}$ , soil heat flux  $q_{s,o}$ , and the integrated evapotranspiration E are not measured inputs so their values are indicated by XXXX.

The pages that appear after the verification data for a particular case are the GPAC output solutions obtained for the 1, 2, 6, and 12 hr periods. Three pages contain a data set of four tapes. The first page contains the velocity components; the second page, the air temperature and vapor pressure; and, the third page contains various miscellaneous variables such as soil temperature, wind speed at 2- and 8-m height, surface energy terms, surface shearing stress, and integrated evapotranspiration. For an explanation of the data sheets for the GPAC output parameters, refer to pages 18 through 20 which show the 12 hour solutions for Case DPG 1 as recorded on tapes 1, 2, 3, and 4.

The first line of data on the first page contains the value of the momentum exchange coefficient at 8-m height obtained by the GPAC at the end of the 12-hr solution interval. The next line contains the tape numbers of the four tapes. The length of the prediction intervals for each solution occurs on the following line in the column in which the tape number appears. For tapes 1, 2, 3, and 4 all are solutions for 12 hr intervals.

Note that the value for the momentum exchange coefficient at 8-m height, indicated by a K, the tape number, and the forecast intervals are shown centered above two columns which appear below the forecast interval. These two columns are headed GPAC and DIFF. The column

headed GPAC contains the solution values obtained on the General Purpose Analog Computer and the second column, headed DIFF, is the algebraic difference between the GPAC value and the value given in the comparison data.

The column to the extreme left contains the applicable level for the particular variables expressed in meters. For u- and v-wind components, GEO refers to the geostrophic value. Algebraic signs attached to the components of wind indicate the direction of air motion. Positive values of the u-components of wind indicate that the wind is blowing from west to east. Negative values of the u-component indicate that the wind is blowing from east to west. Similarly, positive values of the v-component indicate that the wind is blowing from south to north and negative values of the v-component indicate that the wind is blowing from north to south.

On the second and third pages of the GPAC output data, the tape numbers and forecast intervals are repeated but the exchange coefficient values are not. In this case, as with the winds, differences between the solutions obtained on the GPAC and the comparison data are computed by subtracting the comparison data from the GPAC data; therefore, positive values indicate that the GPAC value is greater than the comparison value and negative differences indicate that the GPAC value is less than that of the comparison value. The symbol XXXX in the difference column indicates that the differences could not be obtained due to the fact that comparison data are not available.

A root-mean-square error evaluation for each tape run for a particular case follows the GPAC solutions for that case. The evaluation for Case DPG 1 appears on pages 69 through 72. The numbers in the body of the page are root-mean-squares of the differences obtained for all prediction levels in a particular profile for the parameter appearing at the head of the column in which the number appears. In the left-most column RMS MAGNITUDE refers to the magnitude of the observed data for the atmospheric variable at the indicated number of hours after the initial time. PERSIST DIFF is the root-mean-square difference between the observed data at the time of verification and at the initial time. GPAC DIFF is the difference between the GPAC values and the observed values at verification time.

### **III. GENERAL PURPOSE ANALOG COMPUTER SOLUTIONS**

## CASE DPG 1 TAPE LOG

TAPE NO.	FCST INT	SM D8	KMB	SCG	ADV	GEO	REMARKS
-------------	-------------	----------	-----	-----	-----	-----	---------

1.	12.00	A	V	A		N	0110011010001010011010
2.	12.00	A	V	A		N	FF
3.	12.00	A	V	A		F	FF
4.	12.00	A	V	A		F	FF
5.	12.00	B	V	A		F	NN
6.	12.00	B	V	A		F	NN
7.	12.00	B	V	A		F	NN
8.	12.00	B	V	A		F	NN
11.	12.00	A	V	F		F	FF
12.	12.00	A	V	F		F	FF
13.	12.00	B	V	F		F	FF
14.	12.00	B	V	F		F	FF
25.	12.00	B	F	F		F	FF
26.	12.00	B	F	F		F	FF
27.	12.00	B	F	F		F	FF
28.	12.00	B	F	F		F	FF
29.	12.00	A	F	F		F	FF
30.	12.00	A	F	F		F	FF
31.	12.00	A	F	F		F	FF
32.	12.00	A	F	F		F	FF
34.	6.00	A	V	V		F	FF
35.	6.00	A	V	V		F	FF
36.	6.00	A	V	V		F	FF
37.	6.00	A	V	V		F	FF
38.	6.00	B	V	V		F	FF
39.	6.00	B	V	V		F	FF
40.	6.00	B	V	V		F	FF
41.	6.00	B	V	V		F	FF
44.	6.00	A	V	V		F	FF
45.	6.00	A	V	V		F	FF
46.	6.00	B	V	V		F	FF
47.	6.00	B	V	V		F	FF
58.	6.00	B	F	F		F	FF
59.	6.00	B	F	F		F	FF
60.	6.00	B	F	F		F	FF
61.	6.00	B	F	F		F	FF
67.	2.00	A	V	V		A	FF
68.	2.00	A	V	V		A	FF
69.	2.00	A	V	V		A	FF
70.	2.00	A	V	V		A	FF

## CASE DPG 1 TAPE LOG

TAPE NO.	FCST INT	SM D8	KM8	SCG	ADV	GEO	REMARKS
71.	2.00	B	V	A	F		O
72.	2.00	B	V	A	F		I
73.	2.00	B	V	A	N		I
74.	2.00	B	V	A	N		O
77.	2.00	A	V	F	F		
78.	2.00	A	V	F	F		
79.	2.00	B	V	F	F		
80.	2.00	B	V	F	F		
81.	2.00	B	V	F	N		
82.	2.00	B	V	F	N		
87.	2.00	A	F	A	F		
88.	2.00	A	F	A	F		
100.	1.00	A	V	A	N		
101.	1.00	A	V	A	N		
102.	1.00	A	V	A	N		
103.	1.00	A	V	A	N		
104.	1.00	B	V	A	N		
105.	1.00	B	V	A	N		
106.	1.00	B	V	A	N		
107.	1.00	B	V	A	N		
108.	1.00	A	V	A	N		
109.	1.00	A	V	A	N		
110.	1.00	A	V	F	F		
111.	1.00	A	V	F	F		
112.	1.00	B	V	F	F		
113.	1.00	B	V	F	F		
114.	1.00	B	V	F	F		
115.	1.00	B	V	F	F		

DPG 1 INITIAL CONDITIONS - 0500L 12 AUGUST 1969  
 (PAGE 1 OF 2 PAGES)

SOIL PARAMETERS

LEVEL (M)	TEMP (DEG C)		
-0.000	16.00	LAMBDA	= 0.59 CAL/CM DEG <sup>3</sup>
-0.125	24.60	MU/LAMBDA	= 0.0037 CM <sup>2</sup> /SEC
-0.250	25.10	(MU/LAMBDA) <sup>1/2</sup>	= 0.036 CAL/CM <sup>4</sup> DEG <sup>2</sup> SEC
-0.500	22.90	Z(0)	= 2.0 CM
-1.000	19.10	S(0)	= 0.0004 CAL/CM <sup>2</sup> SEC MB
-2.000	18.90	G	= 3500 CM SEC DEG/CAL

RADIATION PARAMETERS

LOCAL TIME = 0500	N = 0.40
DELTA = 15.27 DEG	PSI = 0.975
R = 2.31 X 10 <sup>-5</sup> DEG C/SEC	F(C) = 0.31
CLOUD CLASS = 3	J = 0.26
E'(8) = 15.78 MB	M = 0.750
EPSILON = 0.950	N = 0.0270 MB
PHI = 40.2 DEG	H = -105.0 DEG

HORIZONTAL GRADIENTS

LEVEL (M)	DE/DX (MB/100KM)	DE/DY (MB/100KM)	DT/DX (DEG C/100KM)	DT/DY (DEG C/100KM)
200	0.57	-0.68	-0.24	1.19
600	0.50	-0.58	0.01	0.64
1000	0.42	-0.49	0.26	0.09

DPG 1 INITIAL CONDITIONS - OSCOL 12 AUGUST 1969  
 (PAGE 2 OF 2 PAGES)

LEVEL (M)	WIND COMPONENTS		TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
	U (M/SEC)	V		
1000	7.63	-1.21	18.00	12.12
900	7.72	-0.27	18.80	12.70
800	7.70	0.54	19.60	13.13
700	7.55	1.61	20.30	13.75
600	7.16	2.89	21.00	14.40
500	6.55	4.09	21.20	15.07
400	5.65	5.27	21.80	15.98
300	3.49	6.30	22.10	16.94
200	1.07	6.08	22.00	17.72
100	0.18	5.14	23.00	17.27
32	-0.33	4.67	24.70	16.30
8	-0.79	3.73	24.20	15.78

ADVECTION TERMS  
 $-1^5$   
 $(\text{SEC} \times 10^5)$

LEVEL (M)	ALPHA(1)	BETA(1)	ALPHA(2)	BETA(2)
200	0.26	0.24	0.00	-2.20
600	0.30	0.26	0.00	-1.45
1000	0.34	0.28	0.00	-0.70

SURFACE CONTOUR GRADIENTS

PREDICTION INTERVAL (HR)	AZIMUTH (DEG FROM NORTH)	MAGNITUDE (FT/100KM)
0	273.0	20.41
1	270.0	24.35
2	280.0	30.43
6	300.0	60.87
12	330.0	68.48

CASE DPG 1 COMPARISON DATA FROM DUGWAY ( 1 HOUR )

	WIND COMPONENTS		TEMPERATURE	VAPOR PRESSURE
	U (M/SEC)	V	(DEG C)	(MB)
GEO	0.00	-7.72		
1000	8.37	2.56	17.00	11.40
900	9.30	3.02	17.90	12.20
800	8.32	2.70	18.80	12.95
700	7.79	2.68	19.80	13.57
600	7.26	2.64	20.50	14.21
500	6.53	3.05	21.20	14.98
400	5.34	4.03	21.80	15.88
300	2.57	5.05	22.30	16.83
200	-0.45	5.13	22.10	17.38
100	-1.80	3.12	22.00	17.27
32	-1.54	1.59	21.00	19.07
8	-1.30	1.09	20.30	18.77
-	-1.18	0.99	19.60	XXXX
	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	16.20	8	1.70
-0.125	24.20	2	1.54
-0.250	25.00		
-0.500	23.00		
-1.000	19.10		
-2.000	18.90		

SURFACE SHEAR STRESS  
(DYNES/CM SQ.) $\times 10^0$   
TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC)  $\times 1000$

S(D)=	0.20	Q(E,0)=	XXXX
R(N)=	XXXX	Q(S,C)=	XXXX
Q(C,O)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E= XXXX

CASE DPG 1 COMPARISON DATA FROM DUGWAY ( 2 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	-1.68	-9.51		
1000	4.84	-1.76	16.40	9.81
900	4.87	-1.68	17.20	10.23
800	4.87	-1.68	17.90	10.73
700	4.99	-1.59	18.90	11.25
600	5.02	-1.16	19.80	11.79
500	4.63	-0.24	20.70	12.28
400	4.53	0.96	21.40	12.87
300	3.06	1.91	22.10	13.84
270	1.59	2.65	22.30	15.07
100	0.00	2.06	22.00	16.09
32	-0.48	1.31	21.30	18.56
8	-0.53	1.00	21.00	18.64
2	-0.51	0.89	20.60	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

-0.000	17.20
-0.125	24.00
-0.250	24.80
-0.500	23.00
-1.000	19.10
-2.000	18.90

WIND SPEED (M/SEC)

8	1.13
2	1.03
	SURFACE SHEAR STRESS (DYNES/CM SQ.) $\times 10^0$
	TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 1000$

S(D)=	1.20	Q(E,0)=	XXXX
R(N)=	XXXX	Q(S,0)=	XXXX
Q(C,0)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E= XXXX

CASE DPG 1 COMPARISON DATA FROM DUGWAY ( 6 HOUR )

	WIND COMPONENTS		TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
	U (M/SEC)	V		
GEO	-9.65	-16.73		
1000	2.11	-5.80	20.60	10.02
900	2.01	-5.84	21.20	10.37
800	1.84	-6.43	22.00	10.58
700	1.61	-7.55	22.60	10.73
600	1.57	-8.09	23.20	11.10
500	1.82	-8.56	24.00	11.33
400	2.24	-8.99	24.70	11.56
300	2.13	-7.42	25.20	11.79
200	1.59	-4.90	26.00	12.12
100	1.41	-3.32	26.60	12.28
32	1.16	-2.18	27.10	14.48
8	1.05	-1.89	27.20	14.62
2	1.03	-1.78	27.30	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	36.60	8	2.16
-0.125	23.50	2	2.06
-0.250	23.90		
-0.500	22.80		
-1.000	19.10		
-2.000	18.90		

SURFACE SHEAR STRESS  
(DYNES/CM SQ.) $\times 10$   
TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 1000$

S(D)=	5.60	Q(F,C)=	XXXX
R(N)=	XXXX	Q(S,O)=	XXXX
Q(C,O)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E= XXXX

CASE DPG 1 COMPARISON DATA FROM CUGWAY (12 HOUR )

	WIND COMPONENTS U (M/SEC) V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	-18.82	-10.87	
1000	1.62	-6.49	9.42
900	1.84	-6.43	10.02
800	2.07	-6.36	10.73
700	1.91	-5.88	11.48
600	2.31	-5.73	10.37
500	2.34	-4.59	9.22
400	2.46	-3.93	8.19
300	2.72	-3.75	7.21
200	2.85	-3.65	6.52
100	2.92	-3.60	5.68
32	3.24	-3.86	8.89
8	3.28	-3.90	8.78
2	3.31	-3.94	XXXX
0	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	36.90	8	5.10
-0.125	25.70	2	5.15
-0.250	24.40		
-0.500	23.40		
-1.000	19.00		
-2.000	18.90		

SURFACE SHEAR STRESS  
(DYNES/CM SQ.)X10  
TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(D)=	1.20	Q(E,0)=	XXXX
R(N)=	XXXX	Q(S,0)=	XXXX
Q(C,0)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E= XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	27769	26474	27984	29589
TAPE NO.	1.	2.	3.	4.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-18.82	-0.00	-18.82	-0.00	-18.82	0.00	-18.82	0.00
1000	-20.14	-21.76	-17.00	-18.62	-17.54	-19.16	-21.39	-23.01
900	-17.96	-19.80	-15.39	-17.23	-16.06	-17.90	-19.02	-20.86
800	-16.79	-18.86	-14.54	-16.61	-15.19	-17.25	-17.74	-19.81
700	-15.95	-17.86	-13.90	-15.81	-14.50	-16.41	-16.03	-18.74
600	-15.23	-17.54	-13.33	-15.64	-13.99	-16.21	-16.06	-18.37
500	-14.58	-16.92	-12.80	-15.14	-13.34	-15.68	-15.37	-17.71
400	-13.94	-16.40	-12.26	-14.72	-12.77	-15.23	-14.68	-17.14
300	-13.26	-15.98	-11.68	-14.40	-12.17	-14.89	-13.96	-16.68
200	-12.46	-15.31	-10.98	-13.83	-11.44	-14.29	-13.12	-15.97
100	-11.33	-14.25	-9.99	-12.91	-10.41	-13.33	-11.93	-14.85
32	-9.71	-12.95	-8.56	-11.80	-8.92	-12.16	-10.23	-13.47
8	-7.85	-11.13	-6.92	-10.20	-7.21	-10.49	-8.27	-11.55

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-10.87	0.00	-10.87	0.00	-10.86	0.01	-10.86	0.01
1000	-20.99	-14.50	-16.03	-9.54	-16.72	-10.23	-22.16	-15.67
900	-20.24	-13.81	-18.43	-12.00	-19.17	-12.74	-21.25	-14.82
800	-19.67	-13.31	-18.64	-12.28	-19.35	-12.99	-20.60	-14.24
700	-19.16	-13.28	-18.48	-12.60	-19.15	-13.27	-20.02	-14.14
600	-18.68	-12.95	-18.18	-12.45	-18.82	-13.09	-19.48	-13.75
500	-18.18	-13.59	-17.80	-13.21	-18.41	-13.82	-18.93	-14.34
400	-17.63	-13.70	-17.34	-13.41	-17.91	-13.98	-18.34	-14.41
300	-17.00	-13.25	-16.77	-13.02	-17.31	-13.56	-17.66	-13.91
200	-16.19	-12.54	-16.01	-12.36	-16.50	-12.85	-16.79	-13.14
100	-14.94	-11.34	-14.80	-11.20	-15.23	-11.63	-15.46	-11.86
32	-12.98	-9.12	-12.88	-9.02	-13.23	-9.37	-13.42	-9.56
8	-10.55	-6.65	-10.47	-6.57	-10.76	-6.86	-10.90	-7.00

## CASE OPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	1. 12.00HR	2. 12.00HR	3. 12.00HR	4. 12.00HR
----------------------	---------------	---------------	---------------	---------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.95	5.65	23.83	5.53	20.27	1.97	20.27	1.57
900	23.89	4.69	23.79	4.59	20.22	1.02	20.21	1.01
800	23.82	3.82	23.75	3.75	20.18	0.18	20.16	0.16
700	23.77	2.87	23.71	2.81	20.15	-0.75	20.14	-0.76
600	23.70	1.70	23.64	1.64	20.09	-1.91	20.09	-1.91
500	23.64	0.64	23.59	0.59	20.08	-2.92	20.07	-2.93
400	23.56	-0.44	23.51	-0.49	20.03	-3.97	20.02	-3.98
300	23.49	-1.61	23.44	-1.66	20.01	-5.09	19.99	-5.11
200	23.35	-2.75	23.30	-2.80	19.95	-6.15	19.94	-6.16
100	23.17	-4.03	23.12	-4.08	19.91	-7.29	19.91	-7.29
32	22.76	-5.24	22.72	-5.28	19.68	-8.32	19.70	-8.30
8	22.60	-5.80	22.56	-5.84	19.74	-8.66	19.75	-8.65
2	22.09	-6.71	22.04	-6.76	19.57	-9.23	19.59	-9.21
0	21.09	XXXX	21.05	XXXX	19.16	XXXX	19.18	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.84	-0.58	10.37	0.95	10.51	1.09	10.51	1.09
900	13.62	3.60	13.90	3.88	15.65	5.63	15.67	5.65
800	13.85	3.12	14.12	3.39	15.93	5.20	15.93	5.20
700	14.11	2.63	14.38	2.90	16.21	4.73	16.21	4.73
600	14.33	3.96	14.59	4.22	16.44	6.07	16.44	6.07
500	14.57	5.35	14.84	5.62	16.71	7.49	16.72	7.50
400	14.80	6.61	15.07	6.88	16.95	8.76	16.96	8.77
300	15.05	7.84	15.32	8.11	17.21	10.00	17.22	10.01
200	15.32	8.80	15.59	9.07	17.48	10.96	17.48	10.96
100	15.62	9.94	15.91	10.23	17.75	12.07	17.75	12.07
32	15.88	6.99	16.18	7.29	17.96	9.07	17.96	9.07
8	16.12	7.34	16.41	7.63	18.11	9.33	18.10	9.32
2	16.37	XXXX	16.67	XXXX	18.21	XXXX	18.19	XXXX
0	16.87	XXXX	17.16	XXXX	18.45	XXXX	18.43	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	1. 12.00HR	2. 12.00HR	3. 12.00HR	4. 12.00HR
----------------------	---------------	---------------	---------------	---------------

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-C.000	21.99	-14.91	21.98	-14.92	21.00	-15.90	21.01	-15.89
-0.125	22.95	-2.75	22.94	-2.76	22.72	-2.98	22.72	-2.98
-0.250	23.81	-0.59	23.81	-0.59	23.76	-0.64	23.77	-0.63
-C.500	22.92	-0.48	22.92	-0.48	22.92	-0.48	22.92	-0.48
-1.000	19.25	0.25	19.25	0.25	19.25	0.25	19.25	0.25
-2.00	18.88	-0.02	18.88	-0.02	18.88	-0.02	18.87	-0.03

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	13.40	XXXX	12.92	XXXX	13.31	XXXX	14.02	XXXX
8	13.15	8.06	12.55	7.46	12.95	7.86	13.69	8.59
2	8.65	3.54	8.21	3.07	9.22	4.07	9.83	4.69

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.18	XXXX	-0.18	XXXX	-0.24	XXXX	-0.25	XXXX
Q(C,0)	-3.24	XXXX	-3.09	XXXX	-1.27	XXXX	-1.29	XXXX
Q(E,0)	3.31	XXXX	3.16	XXXX	1.54	XXXX	1.56	XXXX
Q(S,0)	-0.25	XXXX	-0.25	XXXX	-0.52	XXXX	-0.51	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	86.16	XXXX	78.62	XXXX	85.54	XXXX	95.32	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	20.70	XXXX	20.20	XXXX	14.20	XXXX	14.30	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	29634	28009	26504	27814
TAPE NO.	5.	6.	7.	8.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-18.82	-0.00	-18.82	-0.00	-18.82	-0.00	-18.82	-0.00
1000	-21.33	-22.95	-17.51	-19.13	-16.97	-18.59	-20.08	-21.70
900	-18.95	-20.79	-16.01	-17.85	-15.35	-17.19	-17.91	-19.75
800	-17.69	-19.76	-15.13	-17.20	-14.50	-16.57	-16.74	-18.81
700	-16.77	-18.68	-14.45	-16.36	-13.84	-15.75	-15.89	-17.80
600	-16.01	-18.32	-13.86	-16.17	-13.28	-15.59	-15.18	-17.49
500	-15.31	-17.65	-13.29	-15.63	-12.75	-15.09	-14.53	-16.87
400	-14.63	-17.09	-12.73	-15.19	-12.21	-14.67	-13.89	-16.35
300	-13.92	-16.64	-12.12	-14.84	-11.63	-14.35	-13.22	-15.94
200	-13.08	-15.93	-11.40	-14.25	-10.94	-13.80	-12.42	-15.27
100	-11.89	-14.81	-10.37	-13.29	-9.95	-12.87	-11.30	-14.22
32	-10.19	-13.43	-8.88	-12.12	-8.52	-11.76	-9.68	-12.92
8	-8.24	-11.52	-7.18	-10.46	-6.89	-10.17	-7.82	-11.10

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-10.87	0.00	-10.86	0.01	-10.86	0.01	-10.86	0.01
1000	-22.21	-15.72	-16.74	-10.25	-16.05	-9.56	-21.05	-14.56
900	-21.30	-14.87	-19.19	-12.76	-18.46	-12.03	-20.29	-13.86
800	-20.64	-14.28	-19.38	-13.02	-18.67	-12.31	-19.72	-13.36
700	-20.07	-14.19	-19.18	-13.30	-18.51	-12.63	-19.21	-13.33
600	-19.52	-13.79	-18.84	-13.11	-18.20	-12.47	-18.72	-12.99
500	-18.97	-14.38	-18.42	-13.83	-17.82	-13.23	-18.22	-13.63
400	-18.38	-14.45	-17.93	-14.00	-17.36	-13.43	-17.67	-13.74
300	-17.70	-13.95	-17.32	-13.57	-16.79	-13.04	-17.04	-13.29
200	-16.83	-13.18	-16.52	-12.87	-16.03	-12.38	-16.23	-12.58
100	-15.50	-11.90	-15.25	-11.65	-14.82	-11.22	-14.96	-11.36
32	-13.45	-9.59	-13.25	-9.39	-12.85	-8.99	-13.01	-9.15
8	-10.92	-7.02	-10.77	-6.87	-10.48	-6.58	-10.57	-6.67

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NJ. INTERVAL	5. 12.00HR	6. 12.00HR	7. 12.00HR	8. 12.00HR
----------------------	---------------	---------------	---------------	---------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.46	2.16	20.47	2.17	24.01	5.71	24.14	5.84
900	20.41	1.21	20.42	1.22	23.98	4.78	24.08	4.88
800	20.37	0.37	20.38	0.38	23.95	3.95	24.02	4.02
700	20.34	-0.56	20.36	-0.54	23.91	3.01	23.97	3.07
600	20.30	-1.70	20.31	-1.69	23.84	1.84	23.91	1.91
500	20.29	-2.71	20.31	-2.69	23.80	0.80	23.86	0.86
400	20.25	-3.75	20.26	-3.74	23.73	-0.27	23.78	-0.22
300	20.23	-4.87	20.24	-4.86	23.65	-1.45	23.71	-1.39
200	20.18	-5.92	20.18	-5.92	23.53	-2.57	23.57	-2.53
100	20.14	-7.06	20.15	-7.05	23.35	-3.85	23.41	-3.79
32	19.94	-8.06	19.94	-8.06	22.95	-5.05	22.99	-5.01
8	20.01	-8.39	20.02	-8.38	22.81	-5.59	22.85	-5.55
2	19.87	-8.93	19.87	-8.93	22.31	-6.49	22.36	-6.44
0	19.50	XXXX	19.49	XXXX	21.35	XXXX	21.39	XXXX

## VAPOR PRESSURE (MBI)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.51	1.09	10.51	1.09	10.37	0.95	8.84	-0.58
900	15.83	5.81	15.81	5.79	14.05	4.03	13.79	3.77
800	16.09	5.36	16.08	5.35	14.29	3.56	14.02	3.29
700	16.38	4.90	16.36	4.88	14.54	3.06	14.28	2.80
600	16.61	6.24	16.62	6.25	14.76	4.39	14.51	4.14
500	16.88	7.66	16.87	7.65	15.02	5.80	14.75	5.53
400	17.13	8.94	17.13	8.94	15.26	7.07	14.98	6.79
300	17.40	10.19	17.38	10.17	15.51	8.30	15.24	8.03
200	17.66	11.14	17.66	11.14	15.78	9.26	15.51	8.99
100	17.94	12.26	17.94	12.26	16.11	10.43	15.81	10.13
32	18.14	9.25	18.15	9.26	16.37	7.48	16.03	7.19
8	18.29	9.51	18.31	9.53	16.61	7.83	16.32	7.54
2	18.39	XXXX	18.42	XXXX	16.90	XXXX	16.59	XXXX
0	18.64	XXXX	18.69	XXXX	17.44	XXXX	17.13	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	5. 12.00HR	6. 12.00HR	7. 12.00HR	8. 12.00HR
----------------------	---------------	---------------	---------------	---------------

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.07	-14.83	22.08	-14.82	22.97	-13.93	22.98	-13.92
-0.125	23.45	-2.25	23.46	-2.24	23.68	-2.02	23.68	-2.02
-0.250	24.07	-0.33	24.08	-0.32	24.1	-0.29	24.11	-0.29
-0.500	22.94	-0.46	22.95	-0.45	22.9	-0.45	22.95	-0.45
-1.000	19.36	0.36	19.36	0.36	19.36	0.36	19.37	0.37
-2.000	24.57	-1.13	24.57	-1.13	24.57	-1.13	24.57	-1.13

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	14.03	XXXX	13.30	XXXX	12.92	XXXX	13.50	XXXX
8	13.69	8.59	12.95	7.85	12.55	7.45	13.16	8.06
2	9.89	4.74	9.28	4.13	8.24	3.09	8.71	3.57

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.26	XXXX	-0.26	XXXX	-0.19	XXXX	-0.19	XXXX
Q(C,0)	-1.17	XXXX	-1.14	XXXX	-2.98	XXXX	-3.14	XXXX
Q(E,0)	1.63	XXXX	1.61	XXXX	3.24	XXXX	3.36	XXXX
Q(S,0)	-0.72	XXXX	-0.72	XXXX	-0.45	XXXX	-0.44	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	95.48	XXXX	85.60	XXXX	76.68	XXXX	86.32	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	15.70	XXXX	15.60	XXXX	21.50	XXXX	22.00	XXXX

CASE DFG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(M SQ/SEC)	10084	10439	10599	10234
TAPE NO.	11.	12.	13.	14.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	18.54	-0.27	18.54	-0.27	18.54	-0.28	18.54
1000	-2.66	-4.28	-10.05	-11.67	-9.95	-11.57	-2.63	-4.25
900	-4.92	-6.76	-8.45	-10.29	-8.35	-10.19	-4.83	-6.67
800	-5.06	-7.13	-7.60	-9.67	-7.51	-9.58	-4.96	-7.03
700	-4.92	-6.83	-7.01	-8.92	-6.91	-8.82	-4.82	-6.73
600	-4.71	-7.02	-6.52	-8.84	-6.44	-8.75	-4.61	-6.92
500	-4.47	-6.81	-6.10	-8.44	-6.02	-8.36	-4.38	-6.72
400	-4.22	-6.68	-5.71	-8.17	-5.63	-8.09	-4.13	-6.59
300	-3.95	-6.67	-5.32	-8.05	-5.25	-7.97	-3.86	-6.59
200	-3.64	-6.49	-4.90	-7.76	-4.84	-7.69	-3.56	-6.41
100	-3.23	-6.15	-4.37	-7.29	-4.30	-7.22	-3.16	-6.08
32	-2.71	-5.95	-3.67	-6.91	-3.62	-6.86	-2.64	-5.88
8	-2.16	-5.44	-2.94	-6.22	-2.90	-6.18	-2.11	-5.39

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	4.41	-6.46	4.41	-6.46	4.41	-6.46	4.41
1000	-7.72	-1.23	-7.76	-1.27	-7.83	-1.34	-7.73	-1.24
900	-8.27	-1.84	-7.68	-1.25	-7.75	-1.32	-8.29	-1.86
800	-8.14	-1.78	-7.50	-1.14	-7.55	-1.19	-8.16	-1.80
700	-7.92	-2.04	-7.28	-1.40	-7.33	-1.45	-7.93	-2.05
600	-7.68	-1.95	-7.06	-1.33	-7.10	-1.38	-7.69	-1.96
500	-7.40	-2.81	-6.81	-2.22	-6.85	-2.26	-7.42	-2.83
400	-7.11	-3.18	-6.53	-2.60	-6.58	-2.65	-7.13	-3.20
300	-6.77	-3.02	-6.23	-2.48	-6.27	-2.52	-6.79	-3.04
200	-6.36	-2.72	-5.86	-2.21	-5.89	-2.24	-6.38	-2.73
100	-5.77	-2.17	-5.30	-1.70	-5.33	-1.73	-5.78	-2.18
32	-4.95	-1.09	-4.55	-0.69	-4.58	-0.72	-4.96	-1.10
8	-4.00	-0.10	-3.68	0.22	-3.70	0.19	-4.01	-0.11

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	11. 12.00HR	12. 12.00HR	13. 12.00HR	14. 12.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.36	2.06	20.36	2.06	20.50	2.20	20.50	2.20
900	20.33	1.13	20.32	1.12	20.49	1.29	20.48	1.28
800	20.30	0.30	20.29	0.29	20.47	0.47	20.46	0.46
700	20.28	-0.62	20.27	-0.63	20.45	-0.45	20.45	-0.45
600	20.23	-1.77	20.22	-1.78	20.41	-1.59	20.41	-1.59
500	20.21	-2.79	20.19	-2.81	20.39	-2.61	20.39	-2.61
400	20.15	-3.85	20.14	-3.86	20.34	-3.66	20.34	-3.66
300	20.12	-4.98	20.11	-4.99	20.31	-4.79	20.32	-4.78
200	20.07	-6.03	20.05	-6.05	20.26	-5.84	20.27	-5.83
100	20.02	-7.18	19.99	-7.21	20.21	-6.99	20.22	-6.98
32	19.75	-8.24	19.76	-8.24	20.00	-8.00	20.01	-7.99
8	19.75	-8.65	19.74	-8.66	20.02	-8.38	20.02	-8.38
2	19.36	-9.44	19.35	-9.45	19.68	-9.12	19.68	-9.12
0	18.86	XXXX	18.85	XXXX	19.23	XXXX	19.23	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.51	1.09	10.51	1.09	10.51	1.09	10.50	1.08
900	15.40	5.38	15.42	5.40	15.59	5.57	15.57	5.55
800	15.71	4.98	15.72	4.99	15.90	5.17	15.87	5.14
700	16.02	4.54	16.04	4.56	16.22	4.74	16.21	4.73
600	16.31	5.94	16.32	5.95	16.49	6.12	16.48	6.11
500	16.62	7.40	16.62	7.40	16.81	7.59	16.81	7.59
400	16.90	8.71	16.90	8.71	17.09	8.90	17.08	8.89
300	17.18	9.97	17.19	9.98	17.38	10.17	17.39	10.18
200	17.51	10.99	17.51	10.99	17.71	11.19	17.71	11.19
100	17.83	12.15	17.84	12.16	18.04	12.36	18.04	12.36
32	18.11	9.22	18.10	9.21	18.33	9.44	18.33	9.44
8	18.34	9.56	18.33	9.55	18.55	9.77	18.57	9.79
2	18.66	XXXX	18.64	XXXX	18.87	XXXX	18.89	XXXX
0	19.08	XXXX	19.05	XXXX	19.29	XXXX	19.32	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	11.	12.	13.	14.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.05	-15.85	21.04	-15.86	22.09	-14.81	22.11	-14.79
-0.125	22.75	-2.95	22.75	-2.95	23.49	-2.21	23.49	-2.21
-0.250	23.77	-0.63	23.78	-0.62	24.08	-0.32	24.08	-0.32
-0.500	22.92	-0.48	22.91	-0.49	22.45	-0.45	22.95	-0.45
-1.000	19.25	0.25	19.25	0.25	19.37	0.37	19.36	0.36
-2.000	18.88	-0.02	18.87	-0.03	24.57	-1.13	24.57	-1.13

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.46	XXXX	5.60	XXXX	5.58	XXXX	5.45	XXXX
8	4.55	-0.54	4.71	-0.38	4.70	-0.39	4.54	-0.56
2	2.56	-2.59	2.67	-2.48	2.70	-2.45	2.58	-2.56

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.20	XXXX	-0.20	XXXX	-0.23	XXXX	-0.23	XXXX
Q(C,0)	-0.71	XXXX	-0.72	XXXX	-0.64	XXXX	-0.63	XXXX
Q(E,0)	1.12	XXXX	1.13	XXXX	1.23	XXXX	1.22	XXXX
Q(S,0)	-0.62	XXXX	-0.62	XXXX	-0.81	XXXX	-0.81	XXXX

SURFACE SHEAR STRFSS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	12.72	XXXX	13.48	XXXX	13.68	XXXX	12.88	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	13.90	XXXX	13.90	XXXX	15.30	XXXX	15.30	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KI CM SQ/SEC)	1534	1539	1534	1534
TAPE NO.	25.	26.	27.	28.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	18.54	-0.27	18.54	-0.28	18.54	-0.28	18.54
1000	-11.52	-13.14	-1.55	-3.17	-1.81	-3.43	-14.18	-15.80
900	-12.47	-14.31	-10.91	-12.75	-12.42	-14.26	-15.08	-16.92
800	-12.63	-14.70	-12.26	-14.33	-14.11	-16.18	-15.14	-17.21
700	-12.51	-14.42	-12.40	-14.31	-14.38	-16.29	-14.80	-16.81
600	-12.23	-14.54	-12.18	-14.49	-14.18	-16.49	-14.47	-16.78
500	-11.83	-14.17	-11.81	-14.15	-13.72	-16.06	-13.89	-16.23
400	-11.31	-13.77	-11.30	-13.76	-13.08	-15.54	-13.19	-15.65
300	-10.68	-13.40	-10.68	-13.40	-12.29	-15.01	-12.36	-15.08
200	-9.88	-12.73	-9.88	-12.73	-11.32	-14.17	-11.36	-14.21
100	-8.69	-11.61	-8.70	-11.62	-9.93	-12.85	-9.96	-12.88
32	-7.14	-10.38	-7.14	-10.38	-8.16	-11.40	-8.17	-11.41
8	-5.60	-8.88	-5.60	-8.88	-6.41	-9.69	-6.42	-9.70

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	4.41	-6.46	4.41	-6.46	4.41	-6.46	4.41
1000	-1.80	4.69	-7.07	-0.58	-7.23	-0.74	-1.61	4.88
900	-3.45	2.98	-5.04	1.39	-5.26	1.17	-3.61	2.82
800	-4.61	1.75	-5.29	1.07	-5.73	0.63	-5.05	1.31
700	-5.42	0.46	-5.77	0.11	-6.42	-0.54	-6.08	-0.20
600	-6.04	-0.31	-6.24	-0.51	-7.04	-1.31	-6.85	-1.13
500	-6.51	-1.92	-6.63	-2.03	-7.51	-2.92	-7.39	-2.80
400	-6.83	-2.90	-6.91	-2.98	-7.83	-3.90	-7.76	-3.83
300	-7.02	-3.27	-7.06	-3.31	-7.99	-4.24	-7.95	-4.20
200	-7.06	-3.41	-7.08	-3.43	-7.95	-4.31	-7.93	-4.28
100	-6.81	-3.21	-6.83	-3.23	-7.54	-3.94	-7.53	-3.93
32	-6.19	-2.33	-6.20	-2.35	-6.74	-2.89	-6.73	-2.87
8	-5.11	-1.21	-5.11	-1.22	-5.53	-1.63	-5.53	-1.63

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	25.	26.	27.	28.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.15	2.85	20.73	2.43	19.22	0.92	19.22	0.92
900	22.99	3.79	22.71	3.51	20.12	0.92	20.12	0.92
800	23.97	3.97	23.81	3.81	20.47	0.47	20.47	0.47
700	24.63	3.73	24.54	3.64	20.66	-0.24	20.66	-0.24
600	25.09	3.09	25.04	3.04	20.76	-1.24	20.75	-1.25
500	25.47	2.47	25.45	2.45	20.82	-2.18	20.82	-2.18
400	25.73	1.73	25.70	1.70	20.87	-3.13	20.87	-3.13
300	25.92	0.82	25.92	0.82	20.97	-4.13	20.97	-4.13
200	25.97	-0.13	25.97	-0.13	21.12	-4.98	21.13	-4.97
100	25.83	-1.37	25.84	-1.36	21.41	-5.79	21.42	-5.78
32	25.37	-2.63	25.39	-2.61	21.56	-6.44	21.57	-6.43
8	24.92	-3.48	24.93	-3.47	21.74	-6.66	21.75	-6.65
2	23.37	-5.43	23.38	-5.42	21.43	-7.37	21.43	-7.37
0	21.71	XXXX	21.72	XXXX	21.01	XXXX	21.00	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.17	0.75	10.52	1.10	10.51	1.09	10.50	1.08
900	11.70	1.68	11.64	1.62	13.09	3.07	13.09	3.07
800	12.08	1.35	12.08	1.35	13.80	3.07	13.80	3.07
700	12.52	1.04	12.57	1.09	14.52	3.04	14.52	3.04
600	12.95	2.58	13.04	2.67	15.20	4.83	15.20	4.83
500	13.46	4.24	13.54	4.32	15.91	6.69	15.91	6.69
400	14.01	5.82	14.08	5.89	16.62	8.43	16.63	8.44
300	14.63	7.42	14.71	7.50	17.35	10.14	17.36	10.15
200	15.42	8.90	15.49	8.97	18.17	11.65	18.17	11.65
100	16.56	10.88	16.61	10.93	19.12	13.44	19.13	13.45
32	17.78	8.89	17.83	8.94	20.04	11.15	20.05	11.16
8	19.03	10.25	19.07	10.29	20.86	12.08	20.87	12.09
2	21.16	XXXX	21.19	XXXX	21.95	XXXX	21.95	XXXX
0	23.44	XXXX	23.46	XXXX	23.41	XXXX	23.41	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	25.	26.	27.	28.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	24.13	-12.77	24.13	-12.77	23.83	-13.07	23.83	-13.07
-0.125	24.35	-1.35	24.35	-1.35	24.28	-1.42	24.30	-1.40
-0.250	24.24	-0.16	24.24	-0.16	24.23	-0.17	24.24	-0.16
-0.500	22.96	-0.44	22.96	-0.44	22.95	-0.45	22.96	-0.44
-1.000	19.36	0.36	19.36	0.36	19.36	0.36	19.36	0.36
-2.000	24.57	-1.13	24.57	-1.13	24.57	-1.13	24.57	-1.13

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	8.17	XXXX	8.17	XXXX	9.00	XXXX	9.00	XXXX
8	7.58	2.49	7.58	2.49	8.47	3.37	8.47	3.38
2	3.93	-1.22	3.93	-1.22	4.86	-0.28	4.87	-0.28

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	0.00	XXXX	0.00	XXXX	-0.26	XXXX	-0.26	XXXX
Q(C,0)	-0.38	XXXX	-0.39	XXXX	-0.08	XXXX	-0.08	XXXX
Q(E,0)	1.08	XXXX	1.07	XXXX	0.63	XXXX	0.63	XXXX
Q(S,0)	-0.69	XXXX	-0.68	XXXX	-0.80	XXXX	-0.80	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	2.90	XXXX	2.90	XXXX	3.18	XXXX	3.22	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	11.10	XXXX	11.10	XXXX	9.60	XXXX	9.60	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	1534	1534	1534	1534
TAFÉ NO.	29.	30.	31.	32.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	18.54	-0.28	18.54	-0.28	18.54	-0.28	18.54
1000	-14.19	-15.81	-1.81	-3.43	-1.55	-3.17	-11.52	-13.14
900	-15.08	-16.92	-12.42	-14.26	-10.90	-12.74	-12.47	-14.31
800	-15.14	-17.21	-14.10	-16.17	-12.25	-14.32	-12.63	-14.70
700	-14.89	-16.80	-14.38	-16.29	-12.39	-14.30	-12.50	-14.41
600	-14.47	-16.78	-14.17	-16.48	-12.18	-14.49	-12.23	-14.54
500	-13.89	-16.23	-13.72	-16.06	-11.80	-14.14	-11.82	-14.16
400	-13.19	-15.65	-13.08	-15.54	-11.30	-13.76	-11.31	-13.77
300	-12.36	-15.08	-12.30	-15.02	-10.68	-13.40	-10.68	-13.40
200	-11.36	-14.21	-11.31	-14.16	-9.88	-12.73	-9.88	-12.73
100	-9.95	-12.87	-9.92	-12.84	-8.69	-11.61	-8.69	-11.61
32	-8.17	-11.41	-8.15	-11.39	-7.13	-10.37	-7.13	-10.37
8	-5.41	-9.69	-6.40	-9.68	-5.59	-8.87	-5.59	-8.87

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	4.41	-6.46	4.41	-6.46	4.41	-6.46	4.41
1000	-1.61	4.88	-7.23	-0.74	-7.07	-0.58	-1.80	4.69
900	-3.62	2.81	-5.26	1.17	-5.04	1.39	-3.44	2.99
800	-5.05	1.31	-5.73	0.63	-5.29	1.07	-4.60	1.76
700	-6.08	-0.20	-6.41	-0.53	-5.76	0.12	-5.41	0.47
600	-6.85	-1.13	-7.04	-1.31	-6.24	-0.52	-6.04	-0.31
500	-7.40	-2.81	-7.50	-2.91	-6.62	-2.03	-6.50	-1.91
400	-7.76	-3.83	-7.83	-3.90	-6.90	-2.97	-6.83	-2.90
300	-7.95	-4.20	-7.99	-4.24	-7.06	-3.31	-7.02	-3.27
200	-7.93	-4.28	-7.95	-4.31	-7.08	-3.42	-7.06	-3.41
100	-7.53	-3.93	-7.54	-3.94	-6.82	-3.22	-6.80	-3.20
32	-6.73	-2.87	-6.74	-2.88	-6.19	-2.34	-6.18	-2.32
8	-5.52	-1.63	-5.53	-1.63	-5.11	-1.21	-5.10	-1.20

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	29.	30.	31.	32.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	19.22	0.92	19.22	0.92	20.73	2.43	21.14	2.84
900	20.09	0.89	20.09	0.89	22.68	3.48	22.96	3.76
800	20.43	0.43	20.43	0.43	23.75	3.75	23.93	3.93
700	20.61	-0.29	20.59	-0.31	24.48	3.58	24.57	3.67
600	20.67	-1.33	20.66	-1.34	24.96	2.96	25.01	3.01
500	20.72	-2.28	20.71	-2.29	25.35	2.35	25.36	2.36
400	20.74	-3.26	20.74	-3.26	25.50	1.59	25.60	1.60
300	20.81	-4.29	20.82	-4.28	25.76	0.66	25.76	0.66
200	20.95	-5.15	20.94	-5.16	25.79	-0.31	25.79	-0.31
100	21.21	-5.99	21.20	-6.00	25.62	-1.58	25.61	-1.59
32	21.30	-6.70	21.30	-6.70	25.12	-2.88	25.12	-2.88
8	21.44	-6.96	21.44	-6.96	24.62	-3.78	24.61	-3.79
2	21.06	-7.74	21.06	-7.74	23.00	-5.80	22.99	-5.81
0	20.56	XXXX	20.56	XXXX	21.27	XXXX	21.25	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.51	1.09	10.51	1.09	10.51	1.09	10.17	0.75
900	13.05	3.03	13.05	3.03	11.61	1.59	11.66	1.64
800	13.74	3.01	13.75	3.02	12.03	1.30	12.03	1.30
700	14.44	2.96	14.44	2.96	12.49	1.01	12.44	0.96
600	15.09	4.72	15.09	4.72	12.94	2.57	12.85	2.48
500	15.78	6.56	15.79	6.57	13.41	4.19	13.33	4.11
400	16.46	8.27	16.47	8.28	13.93	5.74	13.84	5.65
300	17.16	9.95	17.16	9.95	14.52	7.31	14.44	7.23
200	17.93	11.41	17.93	11.41	15.26	8.74	15.19	8.67
100	18.83	13.15	18.84	13.16	16.31	10.63	16.26	10.58
32	19.70	10.81	19.71	10.82	17.49	8.60	17.44	8.55
8	20.46	11.68	20.47	11.69	18.67	9.89	18.63	9.85
2	21.47	XXXX	21.49	XXXX	20.69	XXXX	20.65	XXXX
0	22.79	XXXX	22.81	XXXX	22.85	XXXX	22.81	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	29.	30.	31.	32.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	23.06	-13.84	23.06	-13.84	23.38	-13.52	23.37	-13.53
-0.125	23.49	-2.21	23.49	-2.21	23.55	-2.15	23.55	-2.15
-0.250	23.91	-0.49	23.91	-0.49	23.91	-0.49	23.91	-0.49
-0.500	22.93	-0.47	22.92	-0.48	22.92	-0.48	22.92	-0.48
-1.000	19.25	0.25	19.25	0.25	19.25	0.25	19.25	0.25
-2.000	18.87	-0.03	18.88	-0.02	18.88	-0.02	18.87	-0.03

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	9.00	XXXX	8.99	XXXX	8.16	XXXX	8.15	XXXX
8	8.47	3.37	8.46	3.36	7.57	2.48	7.57	2.47
2	4.79	-0.36	4.76	-0.38	3.92	-1.23	3.91	-1.23

SURFACE ENERGY TFRMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.24	XXXX	-0.24	XXXX	0.02	XXXX	0.02	XXXX
Q(C,0)	-0.10	XXXX	-0.10	XXXX	-0.41	XXXX	-0.41	XXXX
Q(E,0)	0.57	XXXX	0.57	XXXX	1.02	XXXX	1.03	XXXX
Q(S,0)	-0.71	XXXX	-0.71	XXXX	-0.60	XXXX	-0.60	XXXX

SURFACE SHEAR STRESS (DYNFS/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.22	XXXX	3.22	XXXX	2.90	XXXX	2.90	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	8.30	XXXX	8.30	XXXX	9.80	XXXX	9.90	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KILOM SQ/SEC)	29159	27019	27964	29264
TAPE NO.	34.	35.	36.	37.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-9.64	0.01	-9.64	0.01	-9.64	0.01	-9.64	0.01
1000	3.88	1.77	-1.92	-4.03	-1.82	-3.93	4.16	2.05
900	4.54	2.53	2.47	0.46	2.56	0.55	4.80	2.79
800	4.78	2.94	3.56	1.72	3.67	1.83	5.03	3.19
700	4.89	3.28	4.03	2.42	4.15	2.54	5.14	3.53
600	4.94	3.37	4.27	2.70	4.40	2.83	5.18	3.61
500	4.95	3.	4.40	2.59	4.53	2.72	5.18	3.36
400	4.92	2.00	4.46	2.22	4.58	2.34	5.13	2.89
300	4.64	2.71	4.45	2.32	4.57	2.44	5.05	2.92
200	4.70	3.11	4.38	2.10	4.49	2.90	4.90	3.31
100	4.44	3.03	4.16	2.75	4.26	2.85	4.61	3.20
32	3.92	2.76	3.70	2.54	3.78	2.62	4.06	2.90
8	3.22	2.17	3.04	1.99	3.10	2.05	3.33	2.28

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-16.72	0.01	-16.72	0.01	-16.72	0.01	-16.72	0.01
1000	-27.18	-21.38	-20.61	-14.81	-21.17	-15.37	-28.11	-22.31
900	-25.57	-19.73	-22.44	-16.60	-23.07	-17.23	-26.39	-20.55
800	-24.55	-18.12	-22.38	-15.95	-22.99	-16.56	-25.30	-18.87
700	-23.72	-16.17	-22.00	-14.45	-22.58	-15.03	-24.42	-16.87
600	-22.96	-14.87	-21.52	-13.43	-22.07	-13.98	-23.63	-15.54
500	-22.22	-13.66	-20.97	-12.41	-21.49	-12.93	-22.85	-14.29
400	-21.45	-12.46	-20.33	-11.34	-20.83	-11.84	-22.04	-13.05
300	-20.59	-13.17	-19.58	-12.16	-20.05	-12.63	-21.14	-13.72
200	-19.50	-14.60	-18.61	-13.71	-19.05	-14.15	-20.03	-15.13
100	-17.91	-14.59	-17.12	-13.80	-17.51	-14.19	-18.37	-15.05
32	-15.48	-13.30	-14.82	-12.64	-15.15	-12.97	-15.88	-13.69
8	-12.56	-10.67	-12.03	-10.14	-12.29	-10.40	-12.88	-10.98

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	34.	35.	36.	37.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.43	0.83	21.51	0.91	20.23	-0.37	20.24	-0.36
900	21.67	0.47	21.73	0.53	20.24	-0.96	20.23	-0.97
800	21.77	-0.23	21.82	-0.18	20.22	-1.78	20.22	-1.78
700	21.83	-0.77	21.86	-0.72	20.23	-2.37	20.22	-2.38
600	21.86	-1.34	21.90	-1.30	20.22	-2.98	20.20	-3.00
500	21.90	-2.10	21.93	-2.07	20.22	-3.78	20.22	-3.78
400	21.90	-2.80	21.92	-2.78	20.21	-4.49	20.21	-4.49
300	21.90	-3.30	21.93	-3.27	20.22	-4.98	20.22	-4.98
200	21.87	-4.13	21.90	-4.10	20.23	-5.77	20.23	-5.77
100	21.82	-4.78	21.86	-4.74	20.25	-6.35	20.25	-6.35
32	21.62	-5.48	21.66	-5.44	20.19	-6.91	20.18	-6.92
8	21.72	-5.48	21.75	-5.45	20.41	-6.79	20.40	-6.80
2	21.62	-5.68	21.65	-5.65	20.44	-6.86	20.43	-6.87
0	21.36	XXXX	21.39	XXXX	20.57	XXXX	20.56	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.88	-0.14	10.67	0.65	11.32	1.30	11.32	1.30
900	13.07	2.70	13.29	2.92	14.75	4.38	14.75	4.38
800	13.31	2.73	13.51	2.93	15.01	4.43	15.02	4.44
700	13.57	2.84	13.75	3.02	15.29	4.56	15.29	4.56
600	13.78	2.68	13.96	2.86	15.52	4.42	15.53	4.43
500	14.04	2.71	14.22	2.89	15.79	4.46	15.79	4.46
400	14.28	2.72	14.44	2.88	16.04	4.48	16.04	4.48
300	14.52	2.73	14.69	2.90	16.29	4.50	16.29	4.50
200	14.81	2.69	14.98	2.86	16.57	4.45	16.57	4.45
100	15.12	2.84	15.29	3.01	16.86	4.58	16.85	4.57
32	15.42	0.94	15.59	1.11	17.11	2.63	17.09	2.61
8	15.67	1.05	15.84	1.22	17.31	2.69	17.28	2.66
2	15.89	XXXX	16.07	XXXX	17.43	XXXX	17.40	XXXX
0	16.48	XXXX	16.58	XXXX	17.88	XXXX	17.84	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	34.	35.	36.	37.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.96	-15.64	20.99	-15.61	20.71	-15.89	20.71	-15.89
-0.125	22.95	-0.55	22.96	-0.54	22.93	-0.57	22.93	-0.57
-0.250	24.36	0.46	24.36	0.46	24.36	0.46	24.36	0.46
-0.500	22.92	0.12	22.92	0.12	22.92	0.12	22.93	0.13
-1.000	19.19	0.09	19.17	0.07	19.18	0.08	19.18	0.08
-2.000	18.87	-0.03	18.87	-0.03	18.88	-0.02	18.88	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	13.32	XXXX	12.78	XXXX	13.04	XXXX	13.64	XXXX
8	12.97	10.81	12.41	10.25	12.68	10.52	13.30	11.14
2	9.46	7.40	9.02	6.97	10.03	7.98	10.48	8.43

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.77	0.17	5.77	0.17	5.77	0.17	5.77	0.17
R(N)	2.93	XXXX	2.93	XXXX	2.88	XXXX	2.89	XXXX
Q(C,0)	-0.82	XXXX	-0.77	XXXX	0.35	XXXX	0.36	XXXX
Q(E,0)	3.64	XXXX	3.58	XXXX	2.56	XXXX	2.57	XXXX
Q(S,0)	0.12	XXXX	0.13	XXXX	-0.03	XXXX	-0.03	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	86.22	XXXX	79.32	XXXX	83.80	XXXX	91.72	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	7.40	XXXX	7.40	XXXX	6.20	XXXX	6.20	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KI CM SQ/SEC)	29189	27875	26929	28104
TAPE NO.	38.	39.	40.	41.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-9.64	0.01	-9.64	0.01	-9.64	0.01	-9.64	0.01
1000	4.25	2.14	-1.83	-3.94	-1.93	-4.04	3.97	1.86
900	4.85	2.84	2.54	0.53	2.46	0.45	4.59	2.58
800	5.07	3.23	3.65	1.81	3.55	1.71	4.82	2.98
700	5.16	3.55	4.13	2.52	4.02	2.41	4.92	3.31
600	5.20	3.63	4.38	2.81	4.26	2.69	4.96	3.39
500	5.19	3.38	4.51	2.69	4.39	2.57	4.96	3.14
400	5.15	2.91	4.57	2.33	4.45	2.21	4.92	2.68
300	5.06	2.93	4.56	2.43	4.44	2.31	4.85	2.72
200	4.91	3.32	4.47	2.88	4.36	2.77	4.72	3.13
100	4.61	3.20	4.24	2.84	4.15	2.74	4.45	3.05
32	4.07	2.91	3.76	2.60	3.69	2.53	3.93	2.77
8	3.33	2.28	3.09	2.04	3.03	1.98	3.22	2.17

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-16.72	0.01	-16.72	0.01	-16.72	0.01	-16.72	0.01
1000	-27.97	-22.17	-21.07	-15.27	-20.51	-14.71	-27.04	-21.24
900	-26.25	-20.41	-22.93	-17.09	-22.30	-16.46	-25.44	-19.60
800	-25.17	-18.74	-22.84	-16.41	-22.23	-15.80	-24.42	-17.99
700	-24.29	-16.74	-22.45	-14.90	-21.86	-14.31	-23.60	-16.05
600	-23.51	-15.42	-21.93	-13.84	-21.38	-13.29	-22.84	-14.75
500	-22.73	-14.17	-21.36	-12.80	-20.82	-12.26	-22.11	-13.55
400	-21.93	-12.94	-20.70	-11.71	-20.20	-11.21	-21.34	-12.35
300	-21.03	-13.61	-19.93	-12.51	-19.45	-12.03	-20.47	-13.05
200	-19.92	-15.02	-18.93	-14.03	-18.45	-13.59	-19.41	-14.51
100	-18.27	-14.95	-17.39	-14.07	-17.01	-13.69	-17.81	-14.49
32	-15.79	-13.61	-15.06	-12.88	-14.73	-12.55	-15.40	-13.22
8	-12.81	-10.92	-12.22	-10.33	-11.95	-10.06	-12.49	-10.60

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	38. 6.00HR	39. 6.00HR	40. 6.00HR	41. 6.00HR
----------------------	---------------	---------------	---------------	---------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.31	-0.29	20.31	-0.29	21.59	0.99	21.50	0.90
900	20.32	-0.88	20.32	-0.88	21.82	0.62	21.76	0.56
800	20.31	-1.69	20.31	-1.69	21.91	-0.09	21.86	-0.14
700	20.32	-2.28	20.32	-2.28	21.99	-0.61	21.93	-0.67
600	20.31	-2.89	20.32	-2.88	22.01	-1.19	21.97	-1.23
500	20.32	-3.68	20.32	-3.68	22.04	-1.96	22.01	-1.99
400	20.32	-4.38	20.33	-4.37	22.11	-2.59	22.02	-2.68
300	20.34	-4.86	20.35	-4.85	22.06	-3.14	22.03	-3.17
200	20.36	-5.64	20.35	-5.65	22.04	-3.96	22.01	-3.99
100	20.39	-6.21	20.39	-6.21	22.00	-4.60	21.96	-4.64
32	20.33	-6.77	20.35	-6.75	21.83	-5.27	21.79	-5.31
8	20.58	-6.62	20.58	-6.62	21.94	-5.26	21.91	-5.29
2	20.63	-6.67	20.63	-6.67	21.87	-5.43	21.84	-5.46
0	20.83	XXXX	20.84	XXXX	21.68	XXXX	21.63	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.33	1.31	11.3?	1.30	10.68	0.66	9.90	-0.12
900	14.86	4.49	14.85	4.48	13.41	3.04	13.19	2.82
800	15.13	4.55	15.13	4.55	13.63	3.05	13.44	2.86
700	15.41	4.68	15.41	4.68	13.90	3.17	13.71	2.98
600	15.66	4.56	15.65	4.55	14.11	3.01	13.92	2.82
500	15.92	4.59	15.91	4.58	14.35	3.02	14.19	2.86
400	16.17	4.61	16.17	4.61	14.59	3.03	14.43	2.87
300	16.42	4.63	16.41	4.62	14.84	3.05	14.67	2.88
200	16.70	4.58	16.71	4.59	15.13	3.01	14.96	2.84
100	17.01	4.73	17.01	4.73	15.46	3.18	15.29	3.01
32	17.24	2.76	17.25	2.77	15.75	1.27	15.57	1.09
8	17.44	2.82	17.46	2.84	16.02	1.40	15.84	1.22
2	17.55	XXXX	17.58	XXXX	16.25	XXXX	16.06	XXXX
0	18.01	XXXX	18.06	XXXX	16.84	XXXX	16.68	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	38.	39.	40.	41.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.12	-14.48	22.13	-14.47	22.41	-14.19	22.39	-14.21
-0.125	23.71	0.21	23.71	0.21	23.74	0.24	23.73	0.23
-0.250	24.53	0.63	24.53	0.63	24.53	0.63	24.53	0.63
-0.500	22.93	0.13	22.93	0.13	22.93	0.13	22.93	0.13
-1.000	19.24	0.14	19.23	0.13	19.23	0.13	19.24	0.14
-2.000	24.57	1.07	24.57	1.07	24.58	1.08	24.57	1.07

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	13.58	XXXX	12.97	XXXX	12.70	XXXX	13.26	XXXX
8	13.24	11.07	12.60	10.44	12.33	10.17	12.90	10.74
2	10.60	8.54	10.16	8.10	9.09	7.03	9.53	7.47

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.77	0.17	5.77	0.17	5.77	0.17	5.77	0.17
R(N)	2.88	XXXX	2.88	XXXX	2.92	XX X	2.92	XXXX
Q(C,0)	0.55	XXXX	0.55	XXXX	-0.56	XXXX	-0.60	XXXX
Q(E,0)	2.69	XXXX	2.67	XXXX	3.68	XXXX	3.74	XXXX
Q(S,0)	-0.36	XXXX	-0.36	XXXX	-0.20	XXXX	-0.21	XXXX

SURFACE SHEAR STRESS (DYNFS/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	91.06	XXXX	83.04	XXXX	78.62	XXXX	85.64	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	7.20	XXXX	7.10	XXXX	8.40	XXXX	8.50	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	17669	18294	18289	17629
TAPE NO.	44.	45.	46.	47.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	9.36	-0.28	9.36	-0.28	9.37	-0.28	9.36
1000	0.63	-1.48	1.20	-0.90	1.35	-0.76	0.63	-1.47
900	2.07	0.06	2.21	0.20	2.27	0.26	2.06	0.05
800	2.56	0.72	2.61	0.77	2.64	0.80	2.53	0.69
700	2.79	1.18	2.82	1.22	2.83	1.22	2.76	1.15
600	2.94	1.37	2.95	1.39	2.95	1.38	2.90	1.34
500	3.02	1.20	3.02	1.20	3.01	1.19	2.98	1.16
400	3.06	0.82	3.05	0.81	3.04	0.80	3.02	0.78
300	3.05	0.92	3.04	0.91	3.02	0.89	3.01	0.88
200	3.00	1.41	2.99	1.40	2.96	1.37	2.96	1.37
100	2.84	1.43	2.82	1.41	2.80	1.39	2.80	1.39
32	2.52	1.36	2.51	1.35	2.48	1.32	2.49	1.34
8	2.06	1.01	2.05	1.00	2.03	0.98	2.04	0.99

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	10.27	-6.46	10.27	-6.46	10.27	-6.46	10.27
1000	-10.73	-4.93	-17.28	-11.48	-17.15	-11.35	-10.65	-4.85
900	-13.51	-7.67	-16.21	-10.37	-16.07	-10.23	-13.36	-7.52
800	-13.76	-7.33	-15.45	-9.02	-15.35	-8.92	-13.60	-7.17
700	-13.61	-6.06	-14.90	-7.35	-14.75	-7.20	-13.43	-5.88
600	-13.32	-5.23	-14.36	-6.27	-14.22	-6.13	-13.14	-5.05
500	-12.95	-4.39	-13.83	-5.27	-13.69	-5.13	-12.78	-4.22
400	-12.52	-3.53	-13.29	-4.30	-13.15	-4.16	-12.36	-3.37
300	-12.01	-4.59	-12.69	-5.27	-12.55	-5.13	-11.85	-4.43
200	-11.37	-6.47	-11.96	-7.06	-11.84	-6.94	-11.22	-6.32
100	-10.39	-7.07	-10.91	-7.59	-10.79	-7.47	-10.25	-6.93
32	-8.96	-6.78	-9.39	-7.21	-9.29	-7.11	-8.83	-6.65
8	-7.25	-5.36	-7.60	-5.71	-7.51	-5.62	-7.16	-5.27

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	44.	45.	46.	47.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.21	-0.39	20.21	-0.39	20.29	-0.31	20.28	-0.32
900	20.26	-0.94	20.26	-0.94	20.33	-0.87	20.33	-0.87
800	20.27	-1.73	20.27	-1.73	20.34	-1.66	20.34	-1.66
700	20.27	-2.33	20.27	-2.33	20.35	-2.25	20.35	-2.25
600	20.26	-2.94	20.26	-2.94	20.34	-2.86	20.34	-2.86
500	20.27	-3.73	20.27	-3.73	20.36	-3.64	20.36	-3.64
400	20.26	-4.44	20.25	-4.45	20.35	-4.35	20.36	-4.34
300	20.28	-4.92	20.28	-4.92	20.38	-4.82	20.39	-4.81
200	20.28	-5.72	20.27	-5.73	20.40	-5.60	20.41	-5.59
100	20.32	-6.28	20.33	-6.27	20.45	-6.15	20.47	-6.13
32	20.26	-6.84	20.26	-6.84	20.42	-6.68	20.43	-6.67
8	20.52	-6.68	20.52	-6.68	20.71	-6.49	20.71	-6.49
2	20.55	-6.75	20.55	-6.75	20.71	-6.59	20.69	-6.61
0	20.80	XXXX	20.78	XXXX	21.09	XXXX	21.11	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.33	1.31	11.33	1.31	11.32	1.30	11.32	1.30
900	14.62	4.25	14.62	4.25	14.74	4.37	14.73	4.36
800	14.90	4.32	14.91	4.33	15.02	4.44	15.02	4.44
700	15.21	4.48	15.21	4.48	15.32	4.59	15.32	4.59
600	15.46	4.36	15.46	4.36	15.58	4.48	15.57	4.47
500	15.74	4.41	15.75	4.42	15.89	4.56	15.88	4.55
400	16.02	4.46	16.02	4.46	16.15	4.59	16.15	4.59
300	16.29	4.50	16.29	4.50	16.42	4.63	16.42	4.63
200	16.60	4.48	16.60	4.48	16.74	4.62	16.74	4.62
100	16.93	4.65	16.93	4.65	17.07	4.79	17.08	4.80
32	17.24	2.76	17.22	2.74	17.38	2.90	17.39	2.91
8	17.51	2.89	17.49	2.87	17.65	3.03	17.67	3.05
2	17.59	XXXX	17.59	XXXX	17.65	XXXX	17.62	XXXX
0	18.39	XXXX	18.35	XXXX	18.56	XXXX	18.61	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	44.	45.	46.	47.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.75	-15.85	20.76	-15.84	22.21	-14.39	22.21	-14.39
-0.125	22.93	-0.57	22.92	-0.58	23.71	0.21	23.71	0.21
-0.250	24.36	0.46	24.36	0.46	24.53	0.63	24.53	0.63
-0.500	22.93	0.13	22.92	0.12	22.93	0.13	22.93	0.13
-1.000	19.18	0.08	19.18	0.08	19.24	0.14	19.24	0.14
-2.000	18.88	-0.02	18.87	-0.03	24.57	1.07	24.58	1.08

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	8.12	XXXX	8.43	XXXX	8.35	XXXX	8.03	XXXX
8	7.54	5.38	7.87	5.71	7.79	5.62	7.44	5.28
2	6.82	4.76	6.95	4.90	7.75	5.70	7.87	5.81

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.77	0.17	5.77	0.17	5.77	0.17	5.78	0.18
R(N)	2.88	XXXX	2.88	XXXX	2.85	XXXX	2.85	XXXX
Q(C,0)	0.35	XXXX	0.35	XXXX	0.53	XXXX	0.53	XXXX
Q(E,0)	2.50	XXXX	2.51	XXXX	2.63	XXXX	2.63	XXXX
Q(S,0)	0.02	XXXX	0.01	XXXX	-0.31	XXXX	-0.30	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	33.06	XXXX	35.50	XXXX	35.14	XXXX	32.58	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	6.10	XXXX	6.10	XXXX	7.10	XXXX	7.10	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(M SQ/SEC)	764	764	769	769
TAPE NO.	58.	59.	60.	61.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	9.37	-0.27	9.37	-0.28	9.37	-0.29	9.35
1000	-2.79	-4.90	-0.81	-2.92	-0.95	-3.06	-3.03	-5.14
900	-1.67	-3.68	-1.33	-3.34	-1.69	-3.70	-1.82	-3.84
800	-0.38	-2.22	-0.18	-2.02	-0.37	-2.20	-0.43	-2.26
700	0.96	-0.64	1.14	-0.47	1.13	-0.48	1.04	-0.57
600	2.26	0.69	2.47	0.90	2.62	1.05	2.49	0.92
500	3.55	1.73	3.80	1.98	4.07	2.25	3.92	2.10
400	4.76	2.52	4.95	2.71	5.31	3.07	5.20	2.96
300	5.88	3.74	5.98	3.85	6.41	4.28	6.36	4.23
200	6.84	5.25	6.85	5.26	7.34	5.75	7.33	5.74
100	7.67	6.26	7.70	6.29	8.01	6.60	8.04	6.63
32	7.67	6.51	7.68	6.52	7.86	6.70	7.90	6.74
8	6.60	5.55	6.61	5.56	6.73	5.68	6.76	5.71

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	10.27	-6.46	10.26	-6.46	10.27	-6.46	10.27
1000	-17.12	-11.32	-7.84	-2.04	-8.03	-2.23	-18.08	-12.28
900	-17.82	-11.98	-17.23	-11.39	-17.81	-11.97	-18.79	-12.95
800	-18.16	-11.73	-18.22	-11.79	-18.95	-12.52	-19.13	-12.70
700	-18.16	-10.61	-18.21	-10.66	-19.05	-11.50	-19.13	-11.58
600	-17.95	-9.86	-17.88	-9.79	-18.77	-10.68	-18.87	-10.78
500	-17.48	-8.92	-17.20	-8.64	-18.09	-9.53	-18.27	-9.71
400	-16.78	-7.79	-16.65	-7.66	-17.49	-8.50	-17.58	-8.59
300	-15.88	-8.46	-15.85	-8.43	-16.59	-9.17	-16.63	-9.20
200	-14.78	-9.88	-14.77	-9.87	-15.41	-10.51	-15.41	-10.51
100	-13.24	-9.92	-13.24	-9.92	-13.69	-10.38	-13.68	-10.36
32	-11.43	-9.25	-11.44	-9.26	-11.70	-9.52	-11.70	-9.52
8	-9.34	-7.45	-9.35	-7.46	-9.55	-7.66	-9.50	-7.61

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	58. 6.00HR	59. 6.00HR	60. 6.00HR	61. 6.00HR
----------------------	---------------	---------------	---------------	---------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.67	-1.93	18.79	-1.81	18.32	-2.28	18.32	-2.28
900	20.09	-1.11	20.16	-1.04	19.38	-1.82	19.37	-1.83
800	21.12	-0.88	21.17	-0.83	20.08	-1.92	20.07	-1.93
700	21.94	-0.66	21.96	-0.64	20.58	-2.02	20.57	-2.03
600	22.52	-0.68	22.54	-0.66	20.88	-2.32	20.87	-2.33
500	23.02	-0.98	23.03	-0.97	21.08	-2.92	21.07	-2.93
400	23.43	-1.27	23.44	-1.26	21.24	-3.46	21.24	-3.46
300	23.76	-1.44	23.77	-1.43	21.41	-3.79	21.41	-3.79
200	23.94	-2.06	23.94	-2.06	21.63	-4.37	21.64	-4.36
100	23.82	-2.78	23.81	-2.79	22.08	-4.52	22.11	-4.49
32	23.79	-3.31	23.79	-3.31	22.63	-4.47	22.65	-4.45
8	24.43	-2.77	24.43	-2.77	23.57	-3.63	23.52	-3.58
2	26.04	-1.26	26.04	-1.26	25.55	-1.75	25.60	-1.70
0	27.47	XXXX	27.47	XXXX	27.35	XXXX	27.41	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.40	0.38	11.18	1.16	11.26	1.24	11.26	1.24
900	11.31	0.94	11.83	1.46	12.41	2.04	12.39	2.02
800	11.83	1.25	12.17	1.59	13.11	2.53	13.09	2.51
700	12.41	1.68	12.59	1.86	13.83	3.10	13.82	3.09
600	12.93	1.83	13.02	1.92	14.53	3.43	14.52	3.42
500	13.51	2.18	13.54	2.21	15.24	3.91	15.24	3.91
400	14.06	2.50	14.08	2.52	15.91	4.35	15.92	4.36
300	14.66	2.87	14.66	2.87	16.56	4.77	16.56	4.77
200	15.46	3.34	15.46	3.34	17.27	5.15	17.27	5.15
100	16.82	4.54	16.82	4.54	18.19	5.91	18.17	5.89
32	18.68	4.20	18.68	4.20	19.64	5.16	19.64	5.16
8	21.32	6.70	21.32	6.70	22.02	7.40	22.06	7.44
2	27.63	XXXX	27.64	XXXX	27.86	XXXX	27.97	XXXX
0	33.27	XXXX	33.28	XXXX	33.19	XXXX	33.35	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	58.	59.	60.	61.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	24.71	-11.89	24.71	-11.89	24.68	-11.92	24.70	-11.90
-0.125	24.01	0.51	23.99	0.49	23.99	0.49	24.01	0.51
-0.250	24.55	0.65	24.55	0.65	24.55	0.65	24.56	0.66
-0.500	22.94	0.14	22.93	0.13	22.94	0.14	22.93	0.13
-1.000	19.23	0.13	19.23	0.13	19.24	0.14	19.24	0.14
-2.000	24.57	1.07	24.57	1.07	24.58	1.08	24.57	1.07

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	11.84	XXXX	11.85	XXXX	12.07	XXXX	12.05	XXXX
8	11.44	9.28	11.45	9.29	11.68	9.52	11.66	9.50
2	5.40	3.34	5.40	3.35	5.57	3.52	5.56	3.50

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.79	0.19	5.80	0.20	5.81	0.20	5.79	0.19
R(N)	2.46	XXXX	2.46	XXXX	2.38	XXXX	2.37	XXXX
Q(C,0)	0.19	XXXX	0.19	XXXX	0.23	XXXX	0.23	XXXX
Q(E,0)	1.48	XXXX	1.48	XXXX	1.38	XXXX	1.36	XXXX
Q(S,0)	0.79	XXXX	0.80	XXXX	0.77	XXXX	0.78	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	2.12	XXXX	2.12	XXXX	2.16	XXXX	2.10	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.90	XXXX	2.90	XXXX	2.90	XXXX	2.70	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	12419	12429	12674	12679
TAPE NO.	67.	68.	69.	70.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.66	0.02	-1.66	0.02	-1.66	0.02	-1.66	0.02
1000	9.52	4.68	3.14	-1.70	3.16	-1.68	9.61	4.77
900	10.35	5.48	9.24	4.37	9.27	4.40	10.46	5.59
800	10.77	5.90	10.44	5.57	10.50	5.63	10.87	6.00
700	10.91	6.01	10.80	5.90	10.88	5.98	11.02	6.12
600	10.89	5.87	10.84	5.82	10.93	5.91	10.99	5.97
500	10.74	6.11	10.71	6.08	10.81	6.18	10.84	6.21
400	10.49	5.96	10.48	5.95	10.58	6.05	10.59	6.06
300	10.14	7.08	10.14	7.08	10.23	7.17	10.24	7.18
200	9.66	8.07	9.66	8.07	9.75	8.16	9.76	8.17
100	8.91	8.91	8.91	8.91	8.99	8.99	8.99	8.99
32	7.70	8.18	7.75	8.23	7.81	8.29	7.81	8.29
8	6.30	6.83	6.31	6.84	6.36	6.89	6.36	6.89

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-9.50	0.01	-9.50	0.01	-9.50	0.01	-9.50	0.01
1000	-9.21	-7.45	-8.95	-7.19	-9.08	-7.30	-9.30	-7.54
900	-7.95	-6.27	-7.85	-6.17	-7.96	-6.28	-8.02	-6.34
800	-6.71	-5.03	-6.65	-4.97	-6.74	-5.06	-6.76	-5.08
700	-5.57	-3.98	-5.54	-3.95	-5.61	-4.02	-5.61	-4.02
600	-4.55	-3.39	-4.54	-3.38	-4.59	-3.43	-4.60	-3.44
500	-3.65	-3.41	-3.64	-3.40	-3.69	-3.45	-3.69	-3.45
400	-2.85	-3.81	-2.84	-3.80	-2.88	-3.84	-2.88	-3.84
300	-2.13	-4.03	-2.13	-4.04	-2.17	-4.08	-2.17	-4.08
200	-1.50	-4.15	-1.50	-4.15	-1.54	-4.19	-1.55	-4.20
100	-0.92	-2.98	-0.92	-2.98	-0.96	-3.02	-0.97	-3.03
32	-0.55	-1.86	-0.56	-1.88	-0.59	-1.90	-0.60	-1.91
8	-0.39	-1.39	-0.39	-1.39	-0.43	-1.42	-0.43	-1.42

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	67. 2.00HR	68. 2.00HR	69. 2.00HR	70. 2.00HR
----------------------	---------------	---------------	---------------	---------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.52	2.12	18.60	2.20	18.51	2.11	18.52	2.12
900	19.70	2.50	19.75	2.55	19.60	2.40	19.64	2.44
800	20.37	2.47	20.39	2.49	20.25	2.35	20.25	2.35
700	20.83	1.93	20.85	1.95	20.68	1.78	20.68	1.78
600	21.13	1.33	21.15	1.35	20.95	1.15	20.95	1.15
500	21.37	0.67	21.38	0.68	21.16	0.46	21.16	0.46
400	21.54	0.14	21.55	0.15	21.31	-0.09	21.31	-0.09
300	21.64	-0.46	21.65	-0.45	21.41	-0.69	21.40	-0.70
200	21.65	-0.65	21.65	-0.65	21.41	-0.89	21.41	-0.89
100	21.57	-0.43	21.57	-0.43	21.35	-0.65	21.34	-0.66
32	21.21	-0.09	21.20	-0.10	21.02	-0.28	21.02	-0.28
8	20.90	-0.10	20.89	-0.11	20.75	-0.25	20.74	-0.26
2	20.06	-0.54	20.05	-0.55	19.95	-0.65	19.95	-0.65
0	19.00	XXXX	18.99	XXXX	18.94	XXXX	18.94	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.64	1.83	11.74	1.93	11.82	2.01	11.81	2.00
900	13.03	2.80	13.08	2.85	13.25	3.02	13.25	3.02
800	13.57	2.84	13.61	2.88	13.80	3.07	13.81	3.08
700	14.12	2.87	14.15	2.90	14.35	3.10	14.35	3.10
600	14.58	2.79	14.59	2.80	14.82	3.03	14.82	3.03
500	15.03	2.75	15.04	2.76	15.29	3.01	15.28	3.00
400	15.44	2.57	15.45	2.58	15.70	2.83	15.69	2.82
300	15.83	1.99	15.83	1.99	16.07	2.23	16.07	2.23
200	16.24	1.17	16.23	1.16	16.47	1.40	16.47	1.40
100	16.68	0.59	16.69	0.60	16.90	0.81	16.90	0.81
32	17.04	-1.52	17.04	-1.52	17.24	-1.32	17.23	-1.33
8	17.31	-1.33	17.31	-1.33	17.49	-1.15	17.48	-1.16
2	17.66	XXXX	17.67	XXXX	17.81	XXXX	17.81	XXXX
0	18.10	XXXX	18.11	XXXX	18.22	XXXX	18.22	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	67.	68.	69.	70.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	18.35	1.15	18.35	1.15	18.35	1.15	18.35	1.15
-0.125	23.58	-0.42	23.58	-0.42	23.58	-0.42	23.57	-0.43
-0.250	24.90	0.10	24.88	0.08	24.88	0.08	24.89	0.09
-0.500	22.90	-0.10	22.90	-0.10	22.90	-0.10	22.91	-0.09
-1.000	19.13	0.03	19.12	0.02	19.12	0.02	19.13	0.03
-2.000	18.87	-0.03	18.87	-0.03	18.87	-0.03	18.87	-0.03

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.00	XXXX	7.00	XXXX	7.05	XXXX	7.05	XXXX
8	6.32	5.19	6.32	5.19	6.37	5.24	6.37	5.24
2	3.51	2.48	3.51	2.49	3.56	2.54	3.56	2.54

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.37	0.17	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.09	XXXX	-0.09	XXXX	-0.10	XXXX	-0.10	XXXX
Q(C,0)	-1.84	XXXX	-1.84	XXXX	-1.77	XXXX	-1.77	XXXX
Q(E,0)	1.56	XXXX	1.55	XXXX	1.49	XXXX	1.49	XXXX
Q(S,0)	0.19	XXXX	0.19	XXXX	0.18	XXXX	0.18	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	20.04	XXXX	20.06	XXXX	20.58	XXXX	20.62	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	0.80	XXXX	0.70	XXXX	0.70	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	13379	13375	13119	13114
TAPE NO.	71.	72.	73.	74.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.66	0.02	-1.66	0.02	-1.66	0.02	-1.65	0.02
1000	9.76	4.92	3.49	-1.35	3.47	-1.37	9.66	4.82
900	10.50	5.63	9.14	4.27	9.11	4.24	10.41	5.54
800	10.74	5.87	10.23	5.36	10.18	5.31	10.64	5.77
700	10.76	5.86	10.53	5.63	10.46	5.56	10.67	5.77
600	10.68	5.66	10.56	5.54	10.48	5.46	10.58	5.56
500	10.52	5.89	10.46	5.83	10.37	5.74	10.42	5.79
400	10.30	5.77	10.26	5.73	10.17	5.64	10.20	5.67
300	9.99	6.93	9.98	6.92	9.88	6.82	9.89	6.83
200	9.58	7.99	9.56	7.97	9.47	7.88	9.48	7.89
100	8.88	8.88	8.88	8.88	8.79	8.79	8.80	8.80
32	7.75	8.23	7.75	8.23	7.69	8.17	7.69	8.17
8	6.31	6.84	6.31	6.84	6.26	6.79	6.27	6.80

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-9.50	0.01	-9.50	0.01	-9.50	0.01	-9.50	0.01
1000	-9.02	-7.26	-8.88	-7.12	-8.78	-7.02	-8.94	-7.18
900	-7.43	-5.75	-7.38	-5.69	-7.27	-5.59	-7.38	-5.69
800	-6.18	-4.50	-6.16	-4.48	-6.08	-4.40	-6.14	-4.46
700	-5.19	-3.69	-5.19	-3.60	-5.11	-3.52	-5.15	-3.56
600	-4.38	-3.22	-4.38	-3.22	-4.32	-3.16	-4.34	-3.18
500	-3.70	-3.46	-3.69	-3.45	-3.64	-3.40	-3.66	-3.42
400	-3.10	-4.06	-3.10	-4.06	-3.05	-4.01	-3.06	-4.02
300	-2.56	-4.47	-2.57	-4.48	-2.52	-4.43	-2.53	-4.44
200	-2.10	-4.75	-2.10	-4.75	-2.05	-4.70	-2.06	-4.71
100	-1.63	-3.69	-1.63	-3.69	-1.58	-3.64	-1.59	-3.65
32	-1.24	-2.56	-1.25	-2.56	-1.21	-2.52	-1.22	-2.53
8	-0.97	-1.97	-0.97	-1.97	-0.95	-1.95	-0.95	-1.95

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	71. 2.00HR	72. 2.00HR	73. 2.00HR	74. 2.00HR
----------------------	---------------	---------------	---------------	---------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.83	2.43	18.83	2.43	18.90	2.50	18.84	2.44
900	19.92	2.72	19.91	2.71	20.03	2.83	19.99	2.79
800	20.42	2.52	20.41	2.51	20.57	2.67	20.53	2.63
700	20.74	1.84	20.74	1.84	20.92	2.02	20.89	1.99
600	20.91	1.11	20.91	1.11	21.11	1.31	21.10	1.30
500	21.04	0.34	21.05	0.35	21.27	0.57	21.25	0.55
400	21.11	-0.29	21.12	-0.28	21.36	-0.04	21.32	-0.05
300	21.15	-0.95	21.15	-0.95	21.41	-0.69	21.32	-0.78
200	21.12	-1.18	21.13	-1.17	21.38	-0.92	21.38	-0.92
100	21.06	-0.94	21.05	-0.95	21.29	-0.71	21.28	-0.72
32	20.78	-0.52	20.78	-0.52	20.98	-0.32	20.97	-0.33
8	20.62	-0.38	20.62	-0.38	20.71	-0.29	20.80	-0.20
2	20.08	-0.52	20.08	-0.52	20.15	-0.45	20.21	-0.39
0	19.35	XXXX	19.35	XXXX	19.41	XXXX	19.42	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.81	2.00	11.81	2.00	11.74	1.93	11.64	1.83
900	13.61	3.38	13.61	3.38	13.44	3.21	13.36	3.13
800	14.06	3.33	14.06	3.33	13.88	3.15	13.83	3.10
700	14.53	3.28	14.53	3.28	14.33	3.08	14.29	3.04
600	14.93	3.14	14.94	3.15	14.71	2.92	14.69	2.90
500	15.33	3.05	15.33	3.05	15.09	2.81	15.09	2.81
400	15.69	2.82	15.70	2.83	15.45	2.58	15.44	2.57
300	16.04	2.20	16.04	2.20	15.79	1.95	15.70	1.86
200	16.41	1.34	16.41	1.34	16.16	1.09	16.16	1.09
100	16.81	0.72	16.82	0.73	16.59	0.50	16.59	0.50
32	17.15	-1.41	17.14	-1.42	16.94	-1.62	16.94	-1.62
8	17.41	-1.23	17.41	-1.23	17.22	-1.42	17.22	-1.42
2	17.75	XXXX	17.75	XXXX	17.59	XXXX	17.59	XXXX
0	18.21	XXXX	18.21	XXXX	18.08	XXXX	18.08	XXXX

## CASE DPG 1 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	71. 2.00HR	72. 2.00HR	73. 2.00HR	74. 2.00HR
----------------------	---------------	---------------	---------------	---------------

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.31	4.11	21.31	4.11	21.31	4.11	21.32	4.12
-0.125	24.14	0.14	24.15	0.15	24.15	0.15	24.15	0.15
-0.250	24.92	0.12	24.93	0.13	24.92	0.12	24.92	0.12
-0.500	22.90	-0.10	22.91	-0.09	22.90	-0.10	22.90	-0.10
-1.000	19.14	0.04	19.15	0.05	19.15	0.05	19.15	0.05
-2.000	24.57	0.57	24.58	0.58	24.57	0.57	24.58	0.58

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.08	XXXX	7.06	XXXX	7.01	XXXX	7.01	XXXX
8	6.39	5.26	6.38	5.25	6.34	5.20	6.34	5.21
2	3.69	2.67	3.69	2.66	3.63	2.60	3.63	2.50

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.17	XXXX	-0.17	XXXX	-0.16	XXXX	-0.16	XXXX
Q(C,0)	-1.32	XXXX	-1.32	XXXX	-1.41	XXXX	-1.41	XXXX
Q(E,0)	1.70	XXXX	1.70	XXXX	1.79	XXXX	1.79	XXXX
Q(S,0)	-0.55	XXXX	-0.55	XXXX	-0.53	XXXX	-0.53	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	21.78	XXXX	21.78	XXXX	21.20	XXXX	21.20	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.40	XXXX	1.40	XXXX	1.50	XXXX	1.50	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CH SQ/SEC)	11139	11139	11939	11949
TAPE NO.	77.	78.	79.	80.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	1.40	-0.28	1.39	-0.28	1.39	-0.28	1.39
1000	3.09	-1.75	8.69	3.85	8.85	4.01	3.42	-1.42
900	8.55	3.68	9.54	4.67	9.61	4.74	8.44	3.57
800	9.69	4.82	9.99	5.12	9.86	4.99	9.45	4.58
700	10.06	5.16	10.17	5.27	9.91	5.01	9.72	4.82
600	10.12	5.10	10.16	5.14	9.83	4.81	9.74	4.72
500	10.00	5.37	10.02	5.39	9.68	5.05	9.63	5.00
400	9.76	5.23	9.77	5.24	9.46	4.93	9.45	4.92
300	9.42	6.36	9.42	6.36	9.17	6.11	9.16	6.10
200	8.95	7.36	8.95	7.36	8.77	7.18	8.76	7.17
100	8.20	8.20	8.20	8.20	8.11	8.11	8.11	8.11
32	7.09	7.57	7.09	7.57	7.06	7.54	7.06	7.54
8	5.76	6.29	5.76	6.29	5.74	6.27	5.74	6.27

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.45	3.06	-6.46	3.05	-6.46	3.05	-6.46	3.05
1000	-7.57	-5.81	-8.67	-6.91	-8.39	-6.63	-7.42	-5.66
900	-7.27	-5.59	-7.45	-5.77	-6.84	-5.16	-6.65	-4.97
800	-6.14	-4.46	-6.19	-4.51	-5.59	-3.91	-5.52	-3.84
700	-5.01	-3.42	-5.02	-3.43	-4.58	-2.99	-4.54	-2.95
600	-3.96	-2.80	-3.96	-2.80	-3.74	-2.58	-3.72	-2.56
500	-3.01	-2.77	-3.02	-2.78	-3.03	-2.79	-3.01	-2.77
400	-2.17	-3.13	-2.17	-3.13	-2.41	-3.37	-2.40	-3.36
300	-1.42	-3.33	-1.42	-3.33	-1.87	-3.78	-1.86	-3.77
200	-0.78	-3.43	-0.78	-3.43	-1.39	-4.04	-1.39	-4.04
100	-0.20	-2.27	-0.21	-2.27	-0.93	-2.99	-0.93	-2.99
32	0.09	-1.22	0.08	-1.23	-0.63	-1.94	-0.63	-1.94
8	0.14	-0.86	0.14	-0.86	-0.46	-1.46	-0.46	-1.46

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	77. 2.00HR	78. 2.00HR	79. 2.00HR	80. 2.00HR
----------------------	---------------	---------------	---------------	---------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.46	2.06	18.46	2.06	18.79	2.39	18.78	2.38
900	19.58	2.38	19.57	2.37	19.87	2.67	19.88	2.68
800	20.22	2.32	20.22	2.32	20.40	2.50	20.40	2.50
700	20.66	1.76	20.66	1.76	20.74	1.84	20.74	1.84
600	20.95	1.15	20.95	1.15	20.92	1.12	20.92	1.12
500	21.19	0.49	21.19	0.49	21.06	0.36	21.06	0.36
400	21.35	-0.05	21.35	-0.05	21.14	-0.26	21.14	-0.26
300	21.46	-0.64	21.45	-0.65	21.18	-0.92	21.19	-0.91
200	21.47	-0.63	21.48	-0.82	21.16	-1.14	21.16	-1.14
100	21.42	-0.58	21.42	-0.58	21.01	-0.99	21.11	-0.89
32	21.07	-0.23	21.08	-0.22	20.80	-0.50	20.80	-0.50
8	20.78	-0.22	20.78	-0.22	20.64	-0.36	20.64	-0.36
2	19.91	-0.69	19.91	-0.69	20.06	-0.54	20.06	-0.54
0	18.86	XXXX	18.86	XXXX	19.30	XXXX	19.31	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.82	2.01	11.81	2.00	11.81	2.00	11.81	2.00
900	13.19	2.96	13.19	2.96	13.55	3.32	13.55	3.32
800	13.75	3.02	13.75	3.02	14.03	3.30	14.03	3.30
700	14.32	3.07	14.32	3.07	14.51	3.26	14.52	3.27
600	14.80	3.01	14.80	3.01	14.92	3.13	14.93	3.14
500	15.29	3.01	15.27	2.99	15.33	3.05	15.33	3.05
400	15.71	2.84	15.69	2.82	15.70	2.83	15.70	2.83
300	16.09	2.25	16.09	2.25	16.05	2.21	16.05	2.21
200	16.50	1.43	16.51	1.44	16.43	1.36	16.43	1.36
100	16.94	0.85	16.94	0.85	16.84	0.75	16.84	0.75
32	17.28	-1.28	17.28	-1.28	17.19	-1.37	17.19	-1.37
8	17.55	-1.09	17.55	-1.09	17.46	-1.18	17.46	-1.18
2	17.91	XXXX	17.91	XXXX	17.84	XXXX	17.84	XXXX
0	18.34	XXXX	18.35	XXXX	18.33	XXXX	18.33	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	77.	78.	79.	80.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	18.33	1.13	18.33	1.13	21.26	4.06	21.28	4.08
-0.125	23.58	-0.42	23.58	-0.42	24.15	0.15	24.15	0.15
-0.250	24.90	0.10	24.88	0.08	24.92	0.12	24.92	0.12
-0.500	22.91	-0.09	22.90	-0.10	22.90	-0.10	22.90	-0.10
-1.000	19.13	0.03	19.13	0.03	19.15	0.05	19.15	0.05
-2.000	18.87	-0.03	18.87	-0.03	24.56	0.56	24.56	0.56

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
0	6.50	XXXX	6.49	XXXX	6.50	XXXX	6.50	XXXX
3	5.76	4.63	5.76	4.63	5.76	4.63	5.76	4.63
2	3.15	2.13	3.15	2.13	3.25	2.23	3.25	2.23

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.38	0.18
R(N)	-0.09	XXXX	-0.08	XXXX	-0.16	XXXX	-0.16	XXXX
Q(C,0)	-1.66	XXXX	-1.66	XXXX	-1.24	XXXX	-1.24	XXXX
Q(E,0)	1.41	XXXX	1.41	XXXX	1.63	XXXX	1.63	XXXX
Q(S,0)	0.16	XXXX	0.16	XXXX	-0.55	XXXX	-0.56	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	16.60	XXXX	16.70	XXXX	17.90	XXXX	17.90	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.70	XXXX	0.80	XXXX	1.40	XXXX	1.40	XXXX

## CASE DPG 1 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	11679	11684	784	789
TAPE NO.	81.	82.	87.	88.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	1.40	-0.28	1.39	-1.66	0.02	-1.66	0.02
1000	3.40	-1.44	8.76	3.92	9.37	4.53	1.77	-3.07
900	8.42	3.55	9.52	4.65	10.13	5.26	9.88	5.01
800	9.40	4.53	9.78	4.91	10.76	5.89	10.74	5.87
700	9.66	4.76	9.82	4.92	11.34	6.44	11.33	6.43
600	9.67	4.65	9.75	4.73	11.72	6.70	11.73	6.71
500	9.55	4.92	9.59	4.96	11.86	7.23	11.88	7.25
400	9.35	4.82	9.38	4.85	11.60	7.07	11.61	7.08
300	9.07	6.01	9.00	5.94	10.94	7.88	10.94	7.88
200	8.68	7.09	8.68	7.09	9.96	8.37	9.96	8.37
100	8.03	8.03	8.04	8.04	8.82	8.82	8.82	8.82
32	7.00	7.48	7.00	7.48	7.72	8.20	7.72	8.20
8	5.70	6.23	5.70	6.23	6.52	7.05	6.52	7.05

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	3.05	-6.46	3.05	-9.50	0.01	-9.50	0.01
1000	-7.32	-5.56	-8.31	-6.55	-9.59	-7.83	-9.23	-7.47
900	-6.57	-4.89	-6.78	-5.10	-8.88	-7.20	-8.87	-7.19
800	-5.45	-3.77	-5.54	-3.86	-8.05	-6.37	-8.05	-6.37
700	-4.49	-2.90	-4.53	-2.94	-6.92	-5.33	-6.91	-5.32
600	-3.67	-2.51	-3.70	-2.55	-5.63	-4.47	-5.61	-4.45
500	-2.97	-2.73	-2.98	-2.74	-4.14	-3.90	-4.09	-3.85
400	-2.36	-3.32	-2.37	-3.33	-2.60	-3.56	-2.63	-3.59
300	-1.81	-3.72	-1.83	-3.74	-1.16	-3.07	-1.15	-3.06
200	-1.35	-4.00	-1.36	-4.01	0.07	-2.57	0.07	-2.57
100	-0.90	-2.96	-0.90	-2.97	0.99	-1.07	1.00	-1.06
32	-0.59	-1.90	-0.59	-1.90	1.13	-0.18	1.13	-0.18
8	-0.44	-1.44	-0.44	-1.44	0.95	-0.05	0.95	-0.05

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	81.	82.	87.	88.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.85	2.45	18.79	2.39	18.08	1.68	18.08	1.68
900	19.99	2.79	19.95	2.75	19.92	1.82	19.01	1.81
800	20.54	2.64	20.51	2.61	19.79	1.89	19.79	1.89
700	20.91	2.01	20.88	1.98	20.46	1.56	20.45	1.55
600	21.11	1.31	21.11	1.31	20.89	1.09	20.89	1.09
500	21.27	0.57	21.27	0.57	21.24	0.54	21.24	0.54
400	21.38	-0.02	21.37	-0.03	21.54	0.14	21.53	0.13
300	21.43	-0.67	21.43	-0.67	21.84	-0.26	21.84	-0.26
200	21.41	-0.89	21.41	-0.89	22.22	-0.08	22.22	-0.08
100	21.32	-0.68	21.32	-0.68	22.78	0.78	22.78	0.78
32	21.00	-0.30	21.01	-0.29	22.75	1.45	22.74	1.44
8	20.81	-0.19	20.79	-0.21	22.08	1.08	22.08	1.08
2	20.17	-0.43	20.16	-0.44	20.19	-0.41	20.19	-0.41
0	19.36	XXXX	19.35	XXXX	18.24	XXXX	18.23	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.75	1.94	11.65	1.84	11.81	2.00	11.81	2.00
900	13.41	3.18	13.36	3.13	12.57	2.34	12.56	2.33
800	13.86	3.13	13.83	3.10	13.12	2.79	13.12	2.39
700	14.33	3.08	14.31	3.06	13.79	2.54	13.79	2.54
600	14.71	2.92	14.71	2.92	14.49	2.70	14.48	2.69
500	15.11	2.83	15.11	2.83	15.24	2.96	15.24	2.96
400	15.47	2.60	15.46	2.59	15.97	3.10	15.97	3.10
300	15.82	1.98	15.82	1.98	16.59	2.75	16.60	2.76
200	16.20	1.13	16.19	1.12	17.06	1.99	17.06	1.99
100	16.64	0.55	16.64	0.55	17.24	1.15	17.24	1.15
32	16.99	-1.57	17.01	-1.55	17.31	-1.25	17.30	-1.26
8	17.29	-1.35	17.29	-1.35	17.67	-0.97	17.67	-0.97
2	17.70	XXXX	17.69	XXXX	18.95	XXXX	18.95	XXXX
0	18.22	XXXX	18.21	XXXX	20.27	XXXX	20.27	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	81.	82.	87.	88.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.29	4.09	21.29	4.09	18.08	0.88	18.07	0.87
-0.125	24.15	0.15	24.14	0.14	23.56	-0.44	23.57	-0.43
-0.250	24.92	0.12	24.92	0.12	24.88	0.08	24.90	0.10
-0.500	22.90	-0.10	22.90	-0.10	22.90	-0.10	22.90	-0.10
-1.000	19.15	0.05	19.15	0.05	19.13	0.03	19.13	0.03
-2.000	24.57	0.57	24.57	0.57	18.86	-0.04	18.87	-0.03

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	6.45	XXXX	6.46	XXXX	7.24	XXXX	7.24	XXXX
8	5.72	4.59	5.72	4.59	6.59	5.46	6.59	5.46
?	3.20	2.18	3.20	2.18	3.35	2.33	3.35	2.32

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.18	1.38	0.18	1.38	0.18	1.37	0.17
R(N)	-0.15	XXXX	-0.15	XXXX	0.13	XXXX	0.13	XXXX
Q(C,0)	-1.31	XXXX	-1.31	XXXX	-0.23	XXXX	-0.23	XXXX
Q(E,0)	1.71	XXXX	1.70	XXXX	0.31	XXXX	0.31	XXXX
Q(S,0)	-0.55	XXXX	-0.55	XXXX	0.05	XXXX	0.05	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	17.38	XXXX	17.42	XXXX	1.24	XXXX	1.24	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.40	XXXX	1.50	XXXX	0.20	XXXX	0.30	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K (CM SQ/SEC)	4424	4429	4454	4464
TAPE NO.	100.	101.	102.	103.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	8.90	0.53	4.57	-3.80	4.58	-3.79	8.92	0.55
900	9.33	0.03	9.22	-0.08	9.23	-0.07	9.36	0.06
800	9.63	1.31	9.63	1.31	9.65	1.33	9.66	1.34
700	9.81	2.02	9.81	2.02	9.84	2.05	9.84	2.05
600	9.79	2.53	9.80	2.54	9.83	2.57	9.83	2.57
500	9.49	2.96	9.49	2.96	9.52	2.99	9.53	3.00
400	8.76	3.42	8.76	3.42	8.79	3.45	8.79	3.45
300	7.51	4.94	7.51	4.94	7.54	4.97	7.54	4.97
200	6.01	6.46	6.01	6.46	6.04	6.49	6.04	6.49
100	4.69	6.49	4.69	6.49	4.70	6.51	4.71	6.51
32	3.77	5.31	3.77	5.31	3.77	5.31	3.77	5.31
8	3.03	4.34	3.04	4.34	3.04	4.34	3.04	4.34

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-7.72	0.00	-7.72	0.00	-7.71	0.01	-7.71	0.01
1000	-4.93	-7.49	-6.13	-8.69	-6.17	-8.73	-4.95	-7.52
900	-4.04	-7.06	-4.05	-7.07	-4.09	-7.11	-4.05	-7.07
800	-3.13	-5.83	-3.13	-5.82	-3.15	-5.85	-3.15	-5.85
700	-1.96	-4.64	-1.90	-4.64	-1.97	-4.65	-1.97	-4.65
600	-0.66	-3.31	-0.66	-3.31	-0.66	-3.30	-0.64	-3.28
500	0.69	-2.36	0.68	-2.36	0.72	-2.33	0.77	-2.28
400	2.05	-1.98	2.05	-1.98	2.07	-1.96	2.08	-1.95
300	3.26	-1.79	3.26	-1.79	3.27	-1.78	3.27	-1.78
200	3.99	-1.14	3.99	-1.14	4.00	-1.13	4.00	-1.13
100	4.18	1.06	4.18	1.06	4.18	1.06	4.18	1.06
32	3.83	2.24	3.83	2.24	3.83	2.24	3.83	2.24
8	3.16	2.07	3.16	2.07	3.16	2.07	3.16	2.07

## CASE DPG 1 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	100. 1.00HR	101. 1.00HR	102. 1.00HR	103. 1.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.04	1.04	18.06	1.06	18.03	1.03	18.03	1.03
900	18.95	1.05	18.96	1.06	18.94	1.04	18.94	1.04
800	19.73	0.93	19.75	0.95	19.71	0.91	19.71	0.91
700	20.44	0. -	20.45	0.65	20.41	0.61	20.41	0.61
600	20.92	0. 2	20.92	0.42	20.89	0.39	20.89	0.39
500	21.31	0.11	21.31	0.11	21.26	0.06	21.27	0.07
400	21.65	-0.15	21.66	-0.14	21.61	-0.19	21.60	-0.20
300	22.01	-0.29	22.00	-0.30	21.94	-0.36	21.94	-0.36
200	22.43	0.33	22.42	0.32	22.36	0.26	22.37	0.27
100	23.13	1.13	23.13	1.13	23.08	1.08	23.08	1.08
32	23.22	2.22	23.22	2.22	23.19	2.19	23.19	2.19
8	22.45	2.15	22.44	2.14	22.43	2.13	22.42	2.12
2	20.18	0.58	20.18	0.58	20.17	0.57	20.17	0.57
0	17.83	XXXX	17.83	XXXX	17.83	XXXX	17.83	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.90	0.50	11.89	0.49	11.94	0.54	11.94	0.54
900	12.61	0.41	12.61	0.41	12.64	0.44	12.65	0.45
800	13.11	0.16	13.11	0.16	13.16	0.21	13.16	0.21
700	13.75	0.18	13.75	0.18	13.81	0.24	13.81	0.24
600	14.42	0.21	14.42	0.21	14.48	0.27	14.47	0.26
500	15.17	0.19	15.17	0.19	15.23	0.25	15.23	0.25
400	15.92	0.04	15.92	0.04	15.98	0.10	15.99	0.11
300	16.59	-0.24	16.59	-0.24	16.65	-0.18	16.65	-0.18
200	17.05	-0.33	17.05	-0.33	17.11	-0.27	17.10	-0.28
100	17.15	-0.12	17.16	-0.11	17.19	-0.08	17.19	-0.08
32	17.04	-2.03	17.04	-2.03	17.06	-2.01	17.06	-2.01
8	17.21	-1.56	17.21	-1.56	17.23	-1.54	17.23	-1.54
2	17.80	XXXX	17.80	XXXX	17.81	XXXX	17.81	XXXX
0	18.41	XXXX	18.42	XXXX	18.42	XXXX	18.42	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	100. 1.00HR	101. 1.00HR	102. 1.00HR	103. 1.00HR
----------------------	----------------	----------------	----------------	----------------

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	17.18	0.98	17.18	0.98	17.18	0.98	17.19	0.99
-0.125	23.98	-0.22	23.98	-0.22	23.99	-0.21	23.99	-0.21
-0.250	25.01	0.01	25.01	0.01	25.00	0.00	25.00	0.00
-0.500	22.90	-0.10	22.88	-0.12	22.89	-0.11	22.89	-0.11
-1.000	19.11	0.01	19.11	0.01	19.11	0.01	19.11	0.01
-2.000	18.86	-0.04	18.87	-0.03	18.86	-0.04	18.86	-0.04

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.31	XXXX	5.31	XXXX	5.32	XXXX	5.32	XXXX
8	4.38	2.68	4.38	2.69	4.38	2.69	4.39	2.70
2	2.23	0.69	2.23	0.69	2.23	0.69	2.24	0.70

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.27	0.07	0.27	0.07	0.27	0.07	0.27	0.07
R(N)	-0.56	XXXX	-0.56	XXXX	-0.56	XXXX	-0.56	XXXX
Q(C,0)	-1.59	XXXX	-1.59	XXXX	-1.60	XXXX	-1.60	XXXX
Q(E,0)	0.84	XXXX	0.84	XXXX	0.84	XXXX	0.84	XXXX
Q(S,0)	0.19	XXXX	0.19	XXXX	0.19	XXXX	0.19	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.48	XXXX	5.48	XXXX	5.52	XXXX	5.52	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.30	XXXX	0.10	XXXX	0.20	XXXX	0.20	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	7529	7519	7459	7464
TAPE NO.	104.	105.	106.	107.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	8.98	0.61	4.85	-3.52	4.84	-3.53	8.95	0.58
900	9.41	0.11	9.05	-0.25	9.04	-0.26	9.39	0.09
800	9.60	1.28	9.54	1.22	9.53	1.21	9.58	1.26
700	9.56	1.77	9.55	1.76	9.53	1.74	9.53	1.74
600	9.29	2.03	9.29	2.03	9.26	2.00	9.26	2.00
500	8.81	2.28	8.81	2.28	8.78	2.25	8.78	2.25
400	8.17	2.83	8.16	2.82	8.13	2.79	8.13	2.79
300	7.40	4.84	7.40	4.84	7.36	4.80	7.36	4.80
200	6.53	6.98	6.53	6.98	6.46	6.91	6.50	6.95
100	5.53	7.34	5.54	7.34	5.51	7.31	5.51	7.31
32	4.55	6.09	4.55	6.09	4.54	6.08	4.53	6.07
8	3.65	4.95	3.65	4.95	3.64	4.94	3.64	4.94

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-7.71	0.01	-7.71	0.01	-7.71	0.01	-7.71	0.01
1000	-4.83	-7.39	-6.01	-8.57	-5.97	-8.53	-4.81	-7.38
900	-3.72	-6.74	-3.83	-6.85	-3.79	-6.81	-3.72	-6.74
800	-2.58	-5.28	-2.59	-5.29	-2.57	-5.27	-2.57	-5.27
700	-1.36	-4.05	-1.36	-4.05	-1.36	-4.04	-1.36	-4.05
600	-0.20	-2.85	-0.20	-2.85	-0.20	-2.85	-0.20	-2.85
500	0.87	-2.18	0.86	-2.19	0.85	-2.20	0.85	-2.20
400	1.79	-2.24	1.79	-2.24	1.78	-2.25	1.78	-2.25
300	2.56	-2.3	2.56	-2.49	2.55	-2.50	2.55	-2.50
200	3.11	-2.2	3.11	-2.02	3.10	-2.03	3.10	-2.03
100	3.42	0.30	3.42	0.30	3.42	0.30	3.42	0.30
32	3.23	1.64	3.23	1.64	3.23	1.64	3.20	1.61
8	2.69	1.60	2.69	1.60	2.69	1.60	2.69	1.60

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	104. 1.00HR	105. 1.00HR	106. 1.00HR	107. 1.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.21	1.21	18.21	1.21	18.22	1.22	18.20	1.20
900	19.24	1.34	19.25	1.35	19.27	1.37	19.25	1.35
800	19.97	1.17	19.97	1.17	20.01	1.21	19.99	1.19
700	20.55	0.75	20.55	0.75	20.59	0.79	20.58	0.78
600	20.95	0.45	20.95	0.45	20.99	0.49	21.00	0.50
500	21.31	0.11	21.32	0.12	21.37	0.17	21.37	0.17
400	21.62	-0.18	21.62	-0.18	21.68	-0.12	21.68	-0.12
300	21.89	-0.41	21.89	-0.41	21.96	-0.34	21.96	-0.34
200	22.09	-0.01	22.08	-0.02	22.16	0.06	22.15	0.05
100	22.11	0.11	22.21	0.21	22.25	0.25	22.25	0.25
32	21.92	0.92	21.91	0.91	21.96	0.96	21.96	0.96
8	21.52	1.22	21.53	1.23	21.55	1.25	21.55	1.25
2	20.32	0.72	20.33	0.73	20.34	0.74	20.34	0.74
0	19.00	XXXX	19.01	XXXX	19.02	XXXX	19.02	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.95	0.55	11.95	0.55	11.92	0.52	11.75	0.35
900	12.91	0.71	12.91	0.71	12.87	0.67	12.86	0.66
800	13.49	0.54	13.49	0.54	13.45	0.50	13.44	0.49
700	14.14	0.57	14.13	0.56	14.08	0.51	14.08	0.51
600	14.71	0.50	14.72	0.51	14.66	0.45	14.66	0.45
500	15.29	0.31	15.29	0.31	15.23	0.25	15.23	0.25
400	15.80	-0.08	15.79	-0.09	15.73	-0.15	15.72	-0.16
300	16.26	-0.57	16.25	-0.58	16.19	-0.64	16.19	-0.64
200	16.69	-0.69	16.69	-0.69	16.64	-0.74	16.62	-0.76
100	17.16	-0.11	17.16	-0.11	17.11	-0.16	17.11	-0.16
32	17.53	-1.54	17.54	-1.53	17.49	-1.58	17.49	-1.58
8	17.86	-0.91	17.86	-0.91	17.83	-0.94	17.82	-0.95
2	18.36	XXXX	18.36	XXXX	18.34	XXXX	18.34	XXXX
0	18.91	XXXX	18.91	XXXX	18.90	XXXX	18.90	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	104.	105.	106.	107.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.17	4.97	21.17	4.97	21.17	4.97	21.17	4.97
-0.125	24.34	0.14	24.35	0.15	24.34	0.14	24.34	0.14
-0.250	25.02	0.02	25.02	0.02	25.02	0.02	25.02	0.02
-0.500	22.88	-0.12	22.90	-0.10	22.89	-0.11	22.90	-0.10
-1.000	19.12	0.02	19.12	0.02	19.12	0.02	19.12	0.02
-2.000	24.57	0.37	24.57	0.37	24.56	0.36	24.56	0.36

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	5.44	XXXX	5.44	XXXX	5.43	XXXX	5.43	XXXX
8	4.54	2.84	4.54	2.84	4.53	2.83	4.53	2.83
2	2.38	0.83	2.37	0.83	2.37	0.82	2.37	0.83

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.27	0.07	0.27	0.07	0.27	0.07	0.26	0.06
K(IN)	-0.82	XXXX	-0.82	XXXX	-0.82	XXXX	-0.82	XXXX
Q(C,0)	-1.47	XXXX	-1.47	XXXX	-1.47	XXXX	-1.47	XXXX
Q(E,0)	1.25	XXXX	1.25	XXXX	1.26	XXXX	1.26	XXXX
Q(S,0)	-0.61	XXXX	-0.61	XXXX	-0.61	XXXX	-0.61	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	9.48	XXXX	9.48	XXXX	9.38	XXXX	9.38	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.60	XXXX	0.70	XXXX	0.60	XXXX	0.60	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3844	3854	3884	3884
TAPE NO.	108.	109.	110.	111.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28
1000	8.68	0.31	4.34	-4.03	4.34	-4.03	8.71	0.34
900	9.12	-0.18	9.02	-0.28	9.03	-0.27	9.14	-0.16
800	9.41	1.09	9.42	1.10	9.43	1.11	9.45	1.13
700	9.60	1.81	9.61	1.82	9.63	1.84	9.63	1.84
600	9.60	2.34	9.60	2.34	9.63	2.37	9.63	2.37
500	9.32	2.79	9.31	2.78	9.34	2.81	9.34	2.81
400	8.59	3.25	8.59	3.25	8.61	3.27	8.62	3.28
300	7.31	4.74	7.31	4.74	7.34	4.77	7.33	4.76
200	5.75	6.20	5.76	6.21	5.78	6.23	5.78	6.23
100	4.42	6.22	4.43	6.23	4.45	6.26	4.45	6.26
32	3.53	5.07	3.53	5.07	3.54	5.08	3.54	5.08
8	2.83	4.13	2.84	4.14	2.84	4.14	2.84	4.14

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	1.26	-6.46	1.26	-6.46	1.26	-6.46	1.26
1000	-4.96	-7.52	-5.83	-8.39	-5.87	-8.43	-4.98	-7.54
900	-4.07	-7.10	-4.08	-7.10	-4.12	-7.14	-4.09	-7.11
800	-3.18	-5.88	-3.17	-5.87	-3.20	-5.90	-3.19	-5.89
700	-2.01	-4.69	-2.01	-4.69	-2.02	-4.70	-2.02	-4.70
600	-0.69	-3.34	-0.69	-3.34	-0.70	-3.35	-0.70	-3.35
500	0.70	-2.35	0.70	-2.35	0.69	-2.36	0.68	-2.36
400	2.05	-1.98	2.05	-1.98	2.05	-1.98	2.04	-1.99
300	3.29	-1.76	3.28	-1.77	3.28	-1.77	3.28	-1.77
200	4.02	-1.11	4.01	-1.12	4.02	-1.11	4.01	-1.12
100	4.18	1.06	4.18	1.06	4.18	1.06	4.18	1.06
32	3.82	2.23	3.82	2.23	3.82	2.23	3.82	2.23
8	3.15	2.06	3.15	2.06	3.15	2.06	3.15	2.06

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	108. 1.00HR	109. 1.00HR	110. 1.00HR	111. 1.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.03	1.03	18.06	1.06	18.03	1.03	18.03	1.03
900	18.94	1.04	18.96	1.06	18.93	1.03	18.93	1.03
800	19.72	0.92	19.73	0.93	19.71	0.91	19.70	0.90
700	20.44	0.64	20.44	0.64	20.41	0.61	20.41	0.61
600	20.92	0.42	20.92	0.42	20.88	0.38	20.89	0.39
500	21.31	0.11	21.31	0.11	21.26	0.06	21.27	0.07
400	21.67	-0.13	21.66	-0.14	21.61	-0.19	21.61	-0.19
300	21.99	-0.31	21.99	-0.31	21.93	-0.37	21.93	-0.37
200	22.42	0.32	22.42	0.32	22.35	0.25	22.35	0.25
100	23.18	1.18	23.17	1.17	23.14	1.14	23.13	1.13
32	23.33	2.33	23.32	2.32	23.28	2.28	23.28	2.28
8	22.53	2.23	22.52	2.22	22.51	2.21	22.51	2.21
2	20.14	0.54	20.13	0.53	20.14	0.54	20.13	0.53
0	17.68	XXXX	17.67	XXXX	17.69	XXXX	17.68	XXXX

VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.91	0.51	11.89	0.49	11.78	0.38	11.95	0.55
900	12.59	0.39	12.61	0.41	12.64	0.44	12.64	0.44
800	13.09	0.14	13.10	0.15	13.14	0.19	13.14	0.19
700	13.73	0.16	13.74	0.17	13.79	0.22	13.79	0.22
600	14.41	0.20	14.39	0.18	14.46	0.25	14.46	0.25
500	15.16	0.18	15.16	0.18	15.22	0.24	15.22	0.24
400	15.92	0.04	15.93	0.05	15.99	0.11	15.99	0.11
300	16.61	-0.22	16.62	-0.21	16.67	-0.16	16.67	-0.16
200	17.09	-0.29	17.09	-0.29	17.14	-0.24	17.12	-0.26
100	17.16	-0.11	17.16	-0.11	17.21	-0.06	17.19	-0.08
32	17.00	-2.07	16.99	-2.08	17.01	-2.06	17.02	-2.05
8	17.14	-1.63	17.15	-1.62	17.17	-1.60	17.16	-1.61
2	17.76	XXXX	17.77	XXXX	17.78	XXXX	17.78	XXXX
0	18.41	XXXX	18.42	XXXX	18.42	XXXX	18.42	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	108.	109.	110.	111.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	17.17	0.97	17.17	0.97	17.17	0.97	17.18	0.98
-0.125	23.99	-0.21	23.99	-0.21	23.99	-0.21	23.99	-0.21
-0.250	25.01	0.01	25.01	0.01	25.01	0.01	25.01	0.01
-0.500	22.89	-0.11	22.90	-0.10	22.90	-0.10	22.88	-0.12
-1.000	19.11	0.01	19.11	0.01	19.11	0.01	19.11	0.01
-2.000	18.86	-0.04	18.86	-0.04	18.87	-0.03	18.86	-0.04

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.20	XXXX	5.20	XXXX	5.20	XXXX	5.20	XXXX
8	4.24	2.55	4.24	2.55	4.25	2.55	4.24	2.55
2	2.16	0.61	2.16	0.62	2.16	0.62	2.16	0.62

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.27	0.07	0.27	0.07	0.27	0.07	0.27	0.07
R(N)	-0.53	XXXX	-0.53	XXXX	-0.53	XXXX	-0.53	XXXX
Q(C,0)	-1.45	XXXX	-1.46	XXXX	-1.46	XXXX	-1.46	XXXX
Q(E,0)	0.77	XXXX	0.77	XXXX	0.77	XXXX	0.77	XXXX
Q(S,0)	0.15	XXXX	0.15	XXXX	0.15	XXXX	0.15	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	4.66	XXXX	4.66	XXXX	4.72	XXXX	4.72	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.10	XXXX	0.20	XXXX	0.20	XXXX	0.20	XXXX

CASE DPG 1 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	7125	7134	7074	7074
TAPE NO.	112.	113.	114.	115.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28
1000	8.76	0.39	4.62	-3.75	4.61	-3.76	8.73	0.36
900	9.19	-0.11	8.84	-0.46	8.83	-0.47	9.17	-0.13
800	9.39	1.07	9.33	1.01	9.32	1.00	9.36	1.04
700	9.35	1.56	9.34	1.55	9.32	1.53	9.33	1.54
600	9.08	1.82	9.08	1.82	9.06	1.80	9.06	1.80
500	8.60	2.07	8.61	2.08	8.58	2.05	8.58	2.05
400	7.96	2.62	7.96	2.62	7.93	2.59	7.93	2.59
300	7.18	4.61	7.18	4.61	7.15	4.58	7.15	4.59
200	6.31	6.76	6.31	6.76	6.27	6.72	6.27	6.72
100	5.31	7.11	5.31	7.11	5.29	7.09	5.29	7.09
32	4.34	5.88	4.33	5.87	4.32	5.86	4.32	5.86
8	3.47	4.77	3.47	4.77	3.46	4.76	3.46	4.76

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-6.46	1.26	-6.46	1.26	-6.46	1.26	-6.46	1.26
1000	-4.86	-7.42	-5.72	-8.28	-5.68	-8.24	-4.84	-7.40
900	-3.76	-6.78	-3.84	-6.86	-3.81	-6.83	-3.75	-6.77
800	-2.62	-5.32	-2.63	-5.33	-2.61	-5.31	-2.61	-5.31
700	-1.41	-4.10	-1.42	-4.10	-1.40	-4.09	-1.40	-4.09
600	-0.20	-2.85	-0.25	-2.89	-0.25	-2.89	-0.25	-2.89
500	0.82	-2.23	0.81	-2.24	0.82	-2.23	0.82	-2.23
400	1.76	-2.27	1.76	-2.27	1.76	-2.27	1.76	-2.27
300	2.54	-2.51	2.53	-2.52	2.54	-2.51	2.54	-2.51
200	3.10	-2.03	3.10	-2.03	3.10	-2.03	3.10	-2.03
100	3.42	0.30	3.42	0.30	3.43	0.31	3.42	0.30
32	3.23	1.64	3.23	1.64	3.23	1.64	3.23	1.64
8	2.68	1.57	2.69	1.60	2.69	1.60	2.68	1.59

CASE DPG 1 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	112. 1.00HR	113. 1.00HR	114. 1.00HR	115. 1.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	18.19	1.19	18.19	1.19	18.21	1.21	18.19	1.19
900	19.24	1.34	19.23	1.33	19.26	1.36	19.25	1.35
800	19.96	1.16	19.96	1.16	19.99	1.19	19.99	1.19
700	20.55	0.75	20.54	0.74	20.58	0.78	20.58	0.78
600	20.95	0.45	20.95	0.45	21.01	0.51	20.99	0.49
500	21.31	0.11	21.31	0.11	21.37	0.17	21.36	0.16
400	21.63	-0.17	21.61	-0.19	21.68	-0.12	21.68	-0.12
300	21.90	-0.40	21.90	-0.40	21.96	-0.34	21.96	-0.34
200	22.09	-0.01	22.09	-0.01	22.17	0.07	22.16	0.06
100	22.22	0.22	22.22	0.22	22.28	0.28	22.26	0.26
32	21.93	0.93	21.94	0.94	21.99	0.99	21.98	0.98
8	21.53	1.23	21.53	1.23	21.56	1.26	21.56	1.26
2	20.31	0.71	20.30	0.70	20.32	0.72	20.32	0.72
0	18.98	XXXX	18.97	XXXX	18.98	XXXX	18.98	XXXX

VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.95	0.55	11.95	0.55	11.79	0.39	11.91	0.51
900	12.91	0.71	12.90	0.70	12.86	0.66	12.85	0.65
800	13.48	0.53	13.48	0.53	13.44	0.49	13.43	0.48
700	14.14	0.57	14.12	0.55	14.07	0.50	14.07	0.50
600	14.71	0.50	14.71	0.50	14.66	0.45	14.66	0.45
500	15.29	0.31	15.29	0.31	15.23	0.25	15.23	0.25
400	15.80	-0.08	15.80	-0.08	15.74	-0.14	15.74	-0.14
300	16.26	-0.57	16.26	-0.57	16.19	-0.64	16.19	-0.64
200	16.70	-0.68	16.71	-0.67	16.64	-0.74	16.64	-0.74
100	17.17	-0.10	17.17	-0.10	17.12	-0.15	17.11	-0.16
32	17.53	-1.54	17.53	-1.54	17.50	-1.57	17.49	-1.58
8	17.87	-0.90	17.87	-0.90	17.84	-0.93	17.84	-0.93
2	18.39	XXXX	18.38	XXXX	18.36	XXXX	18.36	XXXX
0	18.95	XXXX	18.94	XXXX	18.93	XXXX	18.93	XXXX

CASE DPG 1 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	112.	113.	114.	115.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.17	4.97	21.16	4.96	21.16	4.96	21.17	4.97
-0.125	24.34	0.14	24.34	0.14	24.35	0.15	24.35	0.15
-0.250	25.02	0.02	25.02	0.02	25.02	0.02	25.02	0.02
-0.500	22.89	-0.11	22.88	-0.12	22.90	-0.10	22.90	-0.10
-1.000	19.12	0.02	19.12	0.02	19.11	0.01	19.12	0.02
-2.000	24.57	0.37	24.57	0.37	24.57	0.37	24.57	0.37

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.32	XXXX	5.32	XXXX	5.31	XXXX	5.31	XXXX
8	4.39	2.69	4.39	2.69	4.38	2.69	4.38	2.68
2	2.29	0.75	2.29	0.75	2.28	0.74	2.28	0.74

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.27	0.07	0.27	0.07	0.27	0.07	0.26	0.06
R(N)	-0.82	XXXX	-0.82	XXXX	-0.81	XXXX	-0.81	XXXX
Q(C,0)	-1.42	XXXX	-1.42	XXXX	-1.42	XXXX	-1.42	XXXX
Q(E,0)	1.22	XXXX	1.22	XXXX	1.23	XXXX	1.23	XXXX
Q(S,0)	-0.62	XXXX	-0.62	XXXX	-0.62	XXXX	-0.62	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	8.76	XXXX	8.78	XXXX	8.77	XXXX	8.70	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.60	XXXX	0.60	XXXX	0.60	XXXX	0.60	XXXX

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 1

12.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	2.52	4.99	23.75	9.03	25.44
PERSIST DIFF	4.34	8.20	2.51	7.04	8.55
GPAC DIFF 1.	16.14	12.04	4.05	6.18	6.20
GPAC DIFF 2.	14.33	11.19	4.04	6.43	6.20
GPAC DIFF 3.	14.83	11.73	5.40	8.10	6.61
GPAC DIFF 4.	16.92	12.77	5.40	8.10	6.61
GPAC DIFF 5.	16.87	12.80	5.22	8.26	6.15
GPAC DIFF 6.	14.78	11.75	5.22	8.26	6.14
GPAC DIFF 7.	14.29	11.20	3.99	6.60	5.77
GPAC DIFF 8.	16.10	12.08	4.00	6.35	5.77
GPAC DIFF 11.	8.02	2.42	5.38	8.09	6.59
GPAC DIFF 12.	9.77	2.04	5.39	8.09	6.59
GPAC DIFF 13.	9.70	2.07	5.21	8.27	6.14
GPAC DIFF 14.	7.96	2.43	5.21	8.17	6.13
GPAC DIFF 25.	13.62	2.85	3.06	6.44	5.27
GPAC DIFF 26.	12.98	2.42	2.97	6.51	5.27
GPAC DIFF 27.	14.34	2.92	4.24	8.46	5.39
GPAC DIFF 28.	15.36	3.27	4.23	8.43	5.39
GPAC DIFF 29.	15.36	3.27	4.42	8.25	5.73
GPAC DIFF 30.	14.34	2.91	4.42	8.16	5.73
GPAC DIFF 31.	12.97	2.42	3.05	6.21	5.60
GPAC DIFF 32.	13.61	2.85	3.14	6.20	5.60

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 1

6.00 HOUR

	TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE		1.75	6.35	24.30	11.83	24.85
PERSIST DIFF		4.16	9.69	2.78	3.62	8.44
GPAC DIFF	34.	2.72	14.91	3.49	2.41	6.39
GPAC DIFF	35.	2.41	13.04	3.47	2.58	6.38
GPAC DIFF	36.	2.48	13.52	4.74	4.04	6.49
GPAC DIFF	37.	2.92	15.52	4.75	4.04	6.49
GPAC DIFF	38.	2.94	15.41	4.63	4.16	5.93
GPAC DIFF	39.	2.47	13.40	4.62	4.16	5.93
GPAC DIFF	40.	2.40	12.92	3.34	2.71	5.82
GPAC DIFF	41.	2.74	14.80	3.37	2.54	5.82
GPAC DIFF	44.	2.82	6.36	4.68	4.03	6.48
GPAC DIFF	45.	2.81	7.78	4.68	4.03	6.47
GPAC DIFF	46.	2.80	7.67	4.57	4.15	5.90
GPAC DIFF	47.	2.81	6.24	4.57	4.15	5.90
GPAC DIFF	58.	4.76	9.90	1.83	3.19	4.89
GPAC DIFF	59.	4.64	9.32	1.81	3.25	4.89
GPAC DIFF	60.	4.83	9.89	3.19	4.41	4.90
GPAC DIFF	61.	4.57	10.58	3.18	4.41	4.89

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 1

2.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	3.81	1.61	20.18	13.75	21.35
PERSIST DIFF	1.85	3.30	1.75	2.57	0.56
GPAC DIFF	67.	6.44	4.13	1.36	2.22
GPAC DIFF	68.	6.22	4.07	1.38	2.74
GPAC DIFF	69.	6.29	4.13	1.32	2.40
GPAC DIFF	70.	6.53	4.18	1.33	2.40
GPAC DIFF	71.	6.39	4.16	1.48	2.50
GPAC DIFF	72.	6.09	4.13	1.47	2.50
GPAC DIFF	73.	6.03	4.07	1.51	2.35
GPAC DIFF	74.	6.31	4.12	1.49	2.32
GPAC DIFF	77.	5.61	3.52	1.30	2.38
GPAC DIFF	78.	5.78	3.70	1.30	2.38
GPAC DIFF	79.	5.65	3.67	1.46	2.49
GPAC DIFF	80.	5.43	3.52	1.46	2.49
GPAC DIFF	81.	5.37	3.46	1.49	2.35
GPAC DIFF	82.	5.57	3.63	1.47	2.33
GPAC DIFF	87.	6.79	4.36	1.17	2.28
GPAC DIFF	88.	6.71	4.31	1.17	2.28
					0.40

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 1

1.00 HOUR

TAPE NU.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	5.95	3.27	20.46	15.57	21.31
PERSIST DIFF	1.02	2.17	1.71	1.21	0.19
GPAC DIFF 100.	3.81	3.89	1.08	0.78	0.41
GPAC DIFF 101.	3.95	4.08	1.08	0.78	0.41
GPAC DIFF 102.	3.96	4.09	1.06	0.78	0.41
GPAC DIFF 103.	3.83	3.89	1.06	0.78	0.42
GPAC DIFF 104.	4.02	3.70	0.81	0.69	2.04
GPAC DIFF 105.	4.13	3.91	0.81	0.69	2.04
GPAC DIFF 106.	4.11	3.89	0.83	0.70	2.04
GPAC DIFF 107.	4.00	3.70	0.82	0.69	2.04
GPAC DIFF 108.	3.63	3.93	1.11	0.80	0.41
GPAC DIFF 109.	3.80	4.06	1.11	0.80	0.41
GPAC DIFF 110.	3.81	4.08	1.09	0.79	0.41
GPAC DIFF 111.	3.65	3.94	1.09	0.80	0.41
GPAC DIFF 112.	3.86	3.74	0.81	0.69	2.04
GPAC DIFF 113.	3.99	3.89	0.81	0.69	2.03
GPAC DIFF 114.	3.98	3.88	0.83	0.69	2.03
GPAC DIFF 115.	3.84	3.74	0.82	0.69	2.04

## CASE DPG 2 TAPE LOG

TAPE NO.	FCST INT	SM	KMB	SCG	ADV	GEO	REMARKS
			D8				

133.	12.00	A	V	A		N	O
134.	12.00	A	V	A		NN	I
135.	12.00	A	V	A		FFF	I
136.	12.00	A	V	A		F	0
137.	12.00	B	V	A		F	I
138.	12.00	B	V	A		F	0
139.	12.00	B	V	A		F	I
140.	12.00	B	V	A		F	0
141.	12.00	A	V	F		F	I
142.	12.00	A	V	F		F	0
143.	12.00	A	V	F		F	I
144.	12.00	B	V	F		F	0
145.	12.00	B	V	F		F	I
146.	12.00	B	V	F		F	0
156.	12.00	A	V	A		N	I
157.	6.00	A	V	A		N	0
158.	6.00	A	V	A		N	I
159.	6.00	A	V	A		N	0
160.	6.00	A	V	A		N	I
161.	6.00	A	V	A		N	0
162.	6.00	A	V	A		N	I
163.	6.00	B	V	A		N	0
164.	6.00	B	V	A		N	I
165.	6.00	B	V	A		N	0
166.	6.00	B	V	F		N	I
167.	6.00	B	V	F		N	0
168.	6.00	B	V	F		N	I
169.	6.00	A	V	F		N	0
170.	6.00	A	V	F		N	I
171.	6.00	A	V	F		N	0
172.	6.00	A	V	F		N	I
173.	6.00	A	V	F		N	0
174.	6.00	A	V	F		N	I
176.	2.00	A	V	F		N	0
177.	2.00	A	V	F		N	I
178.	2.00	A	V	F		N	0
179.	2.00	A	V	F		N	I
180.	2.00	A	V	F		N	0
181.	2.00	A	V	F		N	I
182.	2.00	B	V	F		N	0

## CASE DPG 2 TAPE LOG

TAPE NO.	FCST INT	SM D8	KM8	SCG	ADV	GEO	REMARKS
183.	2.00	B	V	F	N	I	
184.	2.00	S	V	F	N	0	
185.	2.00	B	V	A	N	0	
186.	2.00	B	F	A	N	0	
187.	2.00	B	F	A	F	I	
188.	2.00	B	F	A	F	0	
189.	2.00	A	F	A	F	0	
190.	2.00	A	F	A	N	1	
191.	2.00	A	F	A	N	0	
192.	2.00	A	F	F	F	0	
194.	2.00	A	F	F	N	0	
196.	1.00	A	V	A	N	0	
197.	1.00	A	V	A	N	0	
198.	1.00	A	V	A	F	0	
199.	1.00	A	V	F	N	0	
200.	1.00	A	V	F	N	1	
201.	1.00	A	V	F	F	1	
202.	1.00	A	V	F	F	0	
203.	1.00	B	V	F	F	0	
204.	1.00	B	V	F	F	1	
205.	1.00	B	V	F	A	0	
206.	1.00	B	F	F	A	0	
207.	1.00	B	F	F	A	1	
208.	1.00	B	F	F	A	0	

DPG 2 INITIAL CONDITIONS - 0500L 13 AUGUST 1969  
 (PAGE 1 OF 2 PAGES)

SOIL PARAMETERS

LEVEL (M)	TEMP (DEG C)		
-0.000	2.80	LAMBDA	= 0.59 CAL/CM DEG
-0.125	24.50	MU/LAMBDA	= 0.037 CM <sup>2</sup> /SEC
-0.250	25.80	(MU/LAMBDA) <sup>1/2</sup>	= 0.036 CAL/CM <sup>4</sup> DEG <sup>2</sup> SEC
-0.500	24.70	Z(C)	= 2.0 CM
-1.000	20.90	S(0)	= 0.004 CAL/CM <sup>2</sup> SEC MB <sup>2</sup>
-2.000	20.70	G	= 3500 CM SEC DEG/CAL

RADIATION PARAMETERS

LOCAL TIME = 0500	N = 0.20
DELTA = 14.97 DEG	PSI = 0.975
R = 1.16 X 10 <sup>-5</sup> DEG C/SEC	F(C) = 1.00
CLOUD CLASS = 1	J = 0.26
E'(8) = 7.69 MB	M = 0.620
EPSILON = 0.950	N = 0.0415 MB <sup>-1/2</sup>
Psi = 40.2 DEG	H = -50.0 DEG

HORIZONTAL GRADIENTS

LEVEL (M)	DE/DX (MB/100KM)	DE/DY (MB/100KM)	DT/DX (DEG C/100KM)	DT/DY (DEG C/100KM)
200	0.85	-1.05	-0.45	-0.79
600	0.61	-0.99	-0.42	-0.75
1000	0.37	-0.54	-0.38	-0.72

DPG 2 INITIAL CONDITIONS - C500L 13 AUGUST 1969  
 (PAGE 2 OF 2 PAGES)

LEVEL (M)	WIND COMPONENTS	TEMPERATURE	VAPOR PRESSURE
	U (M/SEC) V	(DEG C)	(MB)
1000	-4.55	-0.88	16.00
900	-4.70	-2.09	16.60
800	-4.46	-3.49	17.30
700	-3.31	-3.94	18.00
600	-2.18	-4.09	18.30
500	-1.27	-3.92	18.40
400	-0.75	-3.52	18.40
300	-0.45	-2.53	18.40
200	-0.92	-2.40	17.80
100	-1.85	-1.79	16.40
32	-2.56	-2.07	15.90
8	-2.14	-2.37	14.50

ADVECTION TERMS  
 $-1 \times 10^5$   
 (SEC X 10<sup>5</sup>)

LEVEL (M)	ALPHA(1)	BETA(1)	ALPHA(2)	BETA(2)
200	0.22	-0.21	-0.14	2
600	0.16	-0.62	-0.42	1.05
1000	0.10	-1.03	-0.71	0.03

SURFACE CONTOUR GRADIENTS

PREDICTION INTERVAL (HR)	AZIMUTH (DEG FROM NORTH)	MAGNITUDE (FT/100KM)
0	12.0	27.34
1	350.0	30.43
2	350.0	22.83
6	20.0	15.22
12	40.0	15.22

CASE DPG 2 COMPARISON DATA FROM DUGWAY ( 1 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MBI)
GEO	-9.51	-1.67		
1000	-0.93	-1.83	16.70	4.65
900	-1.12	-1.73	17.40	5.12
800	-1.32	-1.58	17.90	5.68
700	-1.48	-1.43	18.40	6.38
600	-1.91	-1.72	18.70	7.06
500	-2.30	-2.07	19.00	7.58
400	-2.68	-2.41	19.20	7.96
300	-1.55	-1.35	19.20	8.02
200	-1.55	-1.35	18.80	7.42
100	-0.62	-0.82	17.50	6.81
32	-0.06	-0.30	15.90	9.68
8	0.00	-0.05	15.30	9.61
2	0.00	0.00	14.70	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	11.70	8	0.05
-0.125	24.40	2	0.00
-0.250	25.60		
-0.500	24.70		
-1.000	26.90		
-2.000	26.70		

SURFACE SHEAR STRESS  
(DYNES/CM SQ.) $\times 10^0$   
TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 1000$

S(D)=	6.60	Q(E, $\gamma$ )=	XXXX
R(N)=	XXXX	Q(S, $\gamma$ )=	XXXX
Q(C,0)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/LM SQ.) $\times 100$

E= XXXX

CASE DPG 2 COMPARISON DATA FROM DUGWAY ( 2 HOUR )

	WIND COMPONENTS		TEMPERATURE	VAPOR PRESSURE
	U (M/SEC)	V	(DEG C)	(MB)
GEO	-7.13	-1.26		
1000	-1.49	-0.40	16.30	6.81
900	-1.49	-0.40	16.90	7.06
800	-1.95	-0.67	17.30	7.31
700	-1.85	-0.90	17.80	7.52
600	-2.06	-1.55	18.20	8.36
500	-1.99	-2.37	18.70	8.66
400	-1.96	-3.02	18.90	8.78
300	-2.07	-2.30	18.80	8.60
200	-2.37	-1.01	18.60	8.48
100	-2.57	0.09	18.50	8.02
32	-2.00	0.81	18.60	10.30
8	-1.88	0.96	18.50	10.09
2	-1.78	1.03	18.40	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	24.00	8	2.11
-0.125	23.70	2	2.06
-0.250	25.40		
-0.500	24.70		
-1.000	20.90		
-2.000	20.70	TAU=	XXXX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(D)=	11.90	Q(F,C)=	XXXX
R(N)=	XXXX	Q(S,D)=	XXXX
Q(C,D)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E=           XXXX

CASE DPG 2 COMPARISON DATA FROM DUGWAY ( 6 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	-4.54	1.65		
1000	-0.84	1.30	17.50	6.66
900	-1.07	1.11	18.40	6.86
800	-1.18	0.99	19.20	7.16
700	-1.15	1.03	20.10	7.47
600	-0.58	1.43	21.10	7.74
500	0.93	1.23	22.10	8.02
400	2.01	-0.43	23.20	8.31
300	1.51	-1.40	24.40	8.54
200	1.43	-1.48	25.60	8.66
100	1.62	-1.27	26.70	8.54
32	2.05	-1.28	27.40	10.87
8	2.16	-1.30	27.70	10.80
2	2.23	-1.29	28.00	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	45.30	8	2.52
-0.125	24.10	2	2.58
-0.250	24.60		
-0.500	24.40	SURFACE SHEAR STRESS	
-1.000	20.90	(DYNES/CM SQ.) $\times 10$	
-2.000	20.70	TAU=	XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 1000$

S(D)=	22.30	Q(E,C)=	XXXX
R(N)=	XXXX	Q(S,O)=	XXXX
Q(L,C)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E=           XXXX

CASE DPG 2 COMPARISON DATA FROM DUGWAY (12 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	-3.70	3.10		
1000	0.22	-6.17	21.20	6.47
900	0.22	-6.17	22.30	6.71
800	0.20	-5.66	23.40	7.01
700	0.30	-5.65	24.40	7.31
600	0.81	-5.08	25.40	7.58
500	1.34	-3.89	26.40	7.91
400	1.80	-3.12	27.50	8.19
300	1.86	-2.47	28.40	8.48
200	1.32	-1.58	29.20	8.72
100	0.51	-0.89	30.10	8.91
32	0.05	-0.30	30.70	11.48
8	0.00	-0.05	30.90	11.56
2	0.00	0.00	31.10	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

-0.000  
-0.125  
-0.250  
-0.500  
-1.000  
-2.000

39.10  
29.00  
25.10  
24.00  
20.90  
20.70

WIND SPEED (M/SEC)

8  
2  
SURFACE SHEAR STRESS  
(DYNES/CM SQ.)X10  
TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(O)=  
R(N)=  
Q(C,O)=

1.60  
XXXX  
XXXX

Q(E,V)=  
Q(S,C)=

XXXX  
XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E = XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	12274	11679	11119	11459
TAPE NO.	133.	134.	135.	136.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-3.67	0.03	-3.66	0.03	-3.67	0.03	-3.67	0.03
1000	-4.60	-4.82	-3.84	-4.06	-3.42	-3.64	-3.19	-3.41
900	-4.82	-5.04	-4.30	-4.52	-3.60	-3.82	-3.61	-3.83
800	-4.87	-5.07	-4.45	-4.65	-3.74	-3.94	-3.78	-3.98
700	-4.88	-5.17	-4.51	-4.81	-3.82	-4.12	-3.88	-4.17
600	-4.84	-5.65	-4.52	-5.33	-3.87	-4.68	-3.92	-4.73
500	-4.79	-6.13	-4.50	-5.84	-3.89	-5.23	-3.94	-5.28
400	-4.72	-6.52	-4.45	-6.26	-3.88	-5.68	-3.93	-5.73
300	-4.61	-6.47	-4.36	-6.22	-3.84	-5.70	-3.89	-5.75
200	-4.45	-5.77	-4.23	-5.55	-3.75	-5.07	-3.79	-5.11
100	-4.16	-4.67	-3.96	-4.47	-3.54	-4.05	-3.58	-4.09
32	-3.64	-3.69	-3.48	-3.53	-3.13	-3.18	-3.15	-3.20
8	-2.97	-2.97	-2.84	-2.84	-2.56	-2.56	-2.58	-2.58

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	3.10	-0.00	3.10	-0.00	3.10	-0.00	3.10	0.00
1000	6.89	13.06	4.29	10.46	4.16	10.34	6.63	12.80
900	6.01	12.18	4.70	10.88	4.54	10.71	5.85	12.02
800	5.50	11.16	4.50	10.16	4.38	10.03	5.39	11.05
700	5.12	10.77	4.27	9.92	4.16	9.81	5.04	10.69
600	4.82	9.90	4.04	9.12	3.96	9.04	4.76	9.84
500	4.54	8.43	3.84	7.73	3.76	7.65	6.50	8.39
400	4.28	7.40	3.62	6.74	3.55	6.67	4.23	7.35
300	4.01	6.48	3.39	5.86	3.32	5.79	3.96	6.43
200	3.71	5.29	3.13	4.71	3.07	4.65	3.66	5.24
100	3.32	4.21	2.80	3.69	2.73	3.62	3.27	4.16
32	2.80	3.10	2.35	2.65	2.29	2.59	2.75	3.05
8	2.25	2.30	1.89	1.94	1.83	1.88	2.21	2.26

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	133.	134.	135.	136.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.53	-0.67	20.56	-0.64	20.26	-0.94	20.29	-0.91
900	20.84	-1.46	20.88	-1.42	20.59	-1.71	20.61	-1.69
800	20.93	-2.47	21.00	-2.40	20.59	-2.71	20.69	-2.71
700	20.91	-3.49	21.06	-3.34	20.77	-3.63	20.77	-3.63
600	21.01	-4.39	21.07	-4.33	20.78	-4.62	20.79	-4.61
500	21.02	-5.38	21.08	-5.32	20.81	-5.59	20.81	-5.59
400	21.02	-6.48	21.07	-6.43	20.81	-6.69	20.80	-6.70
300	20.98	-7.42	21.04	-7.36	20.78	-7.62	20.78	-7.62
200	20.90	-8.30	20.95	-8.25	20.70	-8.50	20.69	-8.51
100	20.77	-9.33	20.82	-9.28	20.56	-9.54	20.55	-9.55
32	20.41	-10.29	20.44	-10.26	20.17	-10.53	20.17	-10.53
8	20.09	-10.81	20.09	-10.81	19.79	-11.11	19.77	-11.13
2	19.16	-11.94	19.09	-12.01	18.70	-12.40	18.70	-12.40
0	18.12	XXXX	17.99	XXXX	17.52	XXXX	17.53	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.91	5.44	11.12	4.65	10.10	3.63	10.11	3.64
900	12.36	5.65	11.56	4.85	10.51	3.80	10.51	3.80
800	12.66	5.65	11.99	4.98	10.78	3.77	10.79	3.78
700	12.95	5.64	12.35	5.04	11.06	3.75	11.06	3.75
600	13.19	5.61	12.63	5.05	11.31	3.73	11.30	3.72
500	13.46	5.55	12.92	5.01	11.56	3.65	11.56	3.65
400	13.71	5.52	13.19	5.00	11.81	3.62	11.80	3.61
300	13.99	5.51	13.49	5.01	12.09	3.61	12.09	3.61
200	14.23	5.51	13.73	5.01	12.35	3.63	12.34	3.62
100	14.57	5.66	14.09	5.18	12.74	3.83	12.72	3.81
32	14.87	3.39	14.41	2.93	13.09	1.61	13.07	1.59
8	15.16	3.60	14.72	3.16	13.44	1.88	13.42	1.86
2	15.63	XXXX	15.24	XXXX	14.04	XXXX	14.00	XXXX
0	16.15	XXXX	15.81	XXXX	14.69	XXXX	14.64	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	133.	134.	135.	136.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.19	-16.91	22.17	-16.93	22.07	-17.03	22.04	-17.06
-0.125	22.93	-6.07	22.93	-6.07	22.94	-6.06	22.93	-6.07
-0.250	24.12	-0.98	24.13	-0.97	24.13	-0.97	24.12	-0.98
-0.500	24.49	0.49	24.49	0.49	24.50	0.50	24.49	0.49
-1.000	21.04	0.14	21.04	0.14	21.04	0.14	21.04	0.14
-2.000	20.67	-0.03	20.67	-0.03	20.66	-0.04	20.67	-0.03

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	6.96	XXXX	6.78	XXXX	6.65	XXXX	6.78	XXXX
8	3.73	3.68	3.41	3.36	3.15	3.10	3.40	3.35
2	1.97	1.97	1.79	1.79	1.63	1.63	1.77	1.77

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.53	-0.07	1.52	-0.08	1.52	-0.08	1.51	-0.09
R(N)	-1.11	XXXX	-1.09	XXXX	-1.07	XXXX	-1.07	XXXX
Q(C,0)	-1.87	XXXX	-1.69	XXXX	-1.96	XXXX	-2.00	XXXX
Q(E,0)	1.90	XXXX	1.99	XXXX	2.18	XXXX	2.22	XXXX
Q(S,0)	-1.16	XXXX	-1.19	XXXX	-1.30	XXXX	-1.29	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	19.68	XXXX	18.26	XXXX	17.08	XXXX	17.92	XXXX

INTEGRATED EVAPUTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
F	36.60	XXXX	37.10	XXXX	37.80	XXXX	37.90	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(M SQ/SEC)	11404	11C64	11709	12189
TAPE NO.	137.	138.	139.	140.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-3.67	0.03	-3.67	0.03	-3.67	0.03	-3.67	0.03
1000	-3.26	-3.48	-3.43	-3.65	-3.86	-4.08	-4.66	-4.88
900	-3.67	-3.89	-3.64	-3.86	-4.33	-4.55	-4.88	-5.09
800	-3.83	-4.03	-3.78	-3.98	-4.48	-4.68	-4.92	-5.12
700	-3.93	-4.23	-3.87	-4.17	-4.54	-4.84	-4.92	-5.22
600	-3.97	-4.78	-3.91	-4.72	-4.55	-5.36	-4.89	-5.70
500	-3.99	-5.34	-3.93	-5.27	-4.53	-5.87	-4.84	-6.18
400	-3.98	-5.78	-3.92	-5.72	-4.48	-6.28	-4.76	-6.56
300	-3.94	-5.80	-3.88	-5.74	-4.40	-6.26	-4.66	-6.52
200	-3.83	-5.15	-3.79	-5.11	-4.25	-5.57	-4.49	-5.81
100	-3.62	-4.13	-3.58	-4.09	-3.99	-4.50	-4.19	-4.70
32	-3.19	-3.24	-3.16	-3.21	-3.50	-3.55	-3.68	-3.73
8	-2.61	-2.61	-2.58	-2.58	-2.86	-2.86	-3.00	-3.00

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	3.09	-0.01	3.10	0.00	3.10	0.00	3.10	-0.00
1000	6.60	12.77	4.15	10.32	4.28	10.45	6.87	13.04
900	5.83	12.00	4.52	10.69	4.67	10.84	5.99	12.16
800	5.38	11.04	4.35	10.01	4.47	10.13	5.48	11.14
700	5.02	10.67	4.14	9.79	4.23	9.88	5.10	10.75
600	4.74	9.82	3.93	9.01	4.01	9.09	4.80	9.88
500	4.48	8.37	3.73	7.62	3.80	7.69	4.52	8.41
400	4.22	7.34	3.52	6.64	3.58	6.70	4.26	7.38
300	3.95	6.43	3.29	5.76	3.36	5.83	3.99	6.47
200	3.65	5.23	3.03	4.61	3.10	4.68	3.69	5.27
100	3.26	4.15	2.71	3.60	2.77	3.66	3.30	4.19
32	2.74	3.04	2.27	2.57	2.32	2.62	2.78	3.08
8	2.20	2.25	1.82	1.87	1.87	1.92	2.24	2.29

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	137.	138.	139.	140.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.85	-0.35	20.84	-0.36	21.17	-0.03	21.06	-0.14
900	21.16	-1.14	21.16	-1.14	21.51	-0.79	21.37	-0.93
800	21.27	-2.13	21.27	-2.13	21.60	-1.80	21.45	-1.95
700	21.33	-3.07	21.34	-3.06	21.68	-2.72	21.52	-2.88
600	21.34	-4.06	21.37	-4.03	21.69	-3.71	21.52	-3.88
500	21.37	-5.03	21.40	-5.00	21.71	-4.69	21.54	-4.86
400	21.35	-6.15	21.38	-6.12	21.69	-5.81	21.52	-5.98
300	21.33	-7.07	21.36	-7.04	21.67	-6.73	21.49	-6.91
200	21.24	-7.96	21.28	-7.92	21.58	-7.62	21.40	-7.80
100	21.11	-8.99	21.13	-8.97	21.45	-8.65	21.27	-8.83
32	20.69	-10.01	20.73	-9.97	21.08	-9.62	20.89	-9.81
8	20.29	-10.61	20.33	-10.57	20.74	-10.16	20.55	-10.35
2	19.18	-11.92	19.21	-11.89	19.75	-11.35	19.58	-11.52
0	17.98	XXXX	18.01	XXXX	18.07	XXXX	18.50	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.03	3.56	10.03	3.56	11.79	5.32	11.56	5.09
900	10.45	3.74	10.44	3.73	12.29	5.58	11.96	5.25
800	10.73	3.72	10.78	3.77	12.69	5.68	12.37	5.36
700	11.02	3.71	11.09	3.78	13.04	5.73	12.73	5.42
600	11.26	3.68	11.35	3.77	13.32	5.74	13.00	5.42
500	11.53	3.62	11.62	3.71	13.62	5.71	13.29	5.38
400	11.78	3.59	11.88	3.69	13.88	5.69	13.55	5.36
300	12.07	3.59	12.19	3.71	14.19	5.71	13.85	5.37
200	12.34	3.62	12.46	3.74	14.43	5.73	14.10	5.38
100	12.73	3.82	12.86	3.95	14.82	5.91	14.46	5.55
32	13.09	1.61	13.22	1.74	15.15	3.67	14.78	3.30
8	13.47	1.91	13.61	2.05	15.47	3.91	15.11	3.55
2	14.10	XXXX	14.26	XXXX	15.99	XXXX	15.63	XXXX
0	14.79	XXXX	14.95	XXXX	16.57	XXXX	16.20	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	137.	138.	139.	140.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.96	-16.14	22.99	-16.11	23.20	-15.90	23.09	-16.01
-0.125	24.41	-4.59	24.42	-4.58	24.44	-4.56	24.41	-4.59
-0.250	24.86	-0.24	24.87	-0.23	24.87	-0.23	24.87	-0.23
-0.500	24.56	0.56	24.56	0.56	24.56	0.56	24.52	0.52
-1.000	21.13	0.23	21.13	0.23	21.12	0.22	21.12	0.22
-2.000	24.48	-4.52	24.47	-4.53	24.47	-4.53	24.47	-4.53

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8"	6.79	XXXX	6.66	XXXX	6.79	XXXX	6.96	XXXX
8	3.42	3.37	3.16	3.11	3.42	3.37	3.75	3.70
2	1.78	1.78	1.64	1.64	1.79	1.79	1.98	1.98

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.52	-0.08	1.52	-0.08	1.52	-0.08	1.51	-0.09
R(N)	-1.08	XXXX	-1.08	XXXX	-1.13	XXXX	-1.13	XXXX
Q(C,0)	-2.05	XXXX	-1.99	XXXX	-1.88	XXXX	-1.93	XXXX
Q(E,0)	2.39	XXXX	2.34	XXXX	2.04	XXXX	2.11	XXXX
Q(S,0)	-1.42	XXXX	-1.42	XXXX	-1.29	XXXX	-1.31	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup>)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	17.84	XXXX	16.98	XXXX	18.34	XXXX	19.54	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	41.70	XXXX	41.40	XXXX	40.10	XXXX	40.30	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	14084	13694	13159	13129
TAPE NO.	141.	142.	143.	144.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	-4.78	-8.48	-4.78	-8.48	-4.78	-8.48	-4.78
1000	-8.95	-9.17	-8.06	-8.28	-7.80	-8.02	-7.80	-8.08
900	-8.82	-9.04	-8.07	-8.29	-7.85	-8.08	-7.91	-8.13
800	-8.68	-8.88	-8.03	-8.23	-7.81	-8.01	-7.87	-8.07
700	-8.53	-8.83	-7.95	-8.25	-7.74	-8.04	-7.80	-8.10
600	-8.37	-9.18	-7.82	-8.63	-7.64	-8.45	-7.69	-8.56
500	-8.14	-9.53	-7.69	-9.03	-7.52	-8.86	-7.56	-8.90
400	-7.98	-9.78	-7.51	-9.31	-7.36	-9.16	-7.41	-9.21
300	-7.73	-9.59	-7.29	-9.15	-7.15	-9.01	-7.27	-9.06
200	-7.39	-8.71	-6.98	-8.30	-6.86	-8.18	-6.90	-8.22
100	-6.84	-7.35	-6.48	-6.99	-6.38	-6.88	-6.41	-6.92
32	-5.95	-6.00	-5.64	-5.69	-5.55	-5.60	-5.59	-5.61
8	-4.84	-4.84	-4.59	-4.59	-4.52	-4.52	-4.54	-4.54

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	-1.37	1.73	-1.37	1.73	-1.37	1.73	-1.37
1000	2.05	8.22	1.66	7.84	2.43	8.57	2.41	8.58
900	1.30	7.47	0.86	7.03	1.66	7.83	1.64	7.81
800	0.91	6.57	0.46	6.12	1.23	6.89	1.21	6.97
700	0.64	6.29	0.19	5.84	0.93	6.58	0.91	6.56
600	0.43	5.51	0.00	5.18	0.69	5.77	0.68	5.76
500	0.26	4.15	-0.15	3.74	0.50	4.34	0.49	4.38
400	0.11	3.23	-0.29	2.83	0.32	3.44	0.31	3.43
300	-0.02	2.45	-0.41	2.06	0.17	2.64	0.15	2.63
200	-0.14	1.43	-0.52	1.06	0.02	1.60	0.00	1.58
100	-0.25	0.63	-0.67	0.29	-0.11	0.18	-0.13	0.76
32	-0.32	-0.02	-0.63	-0.33	-0.20	0.10	-0.22	0.08
8	-0.29	-0.24	-0.54	-0.49	-0.20	-0.15	-0.21	-0.16

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	141.	142.	143.	144.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	19.82	-1.38	20.03	-1.17	20.35	-0.85	20.93	-0.27
900	20.12	-2.18	20.32	-1.38	20.64	-1.66	21.21	-1.09
800	20.22	-3.18	20.40	-3.00	20.71	-2.69	21.28	-2.12
700	20.27	-4.13	20.47	-3.93	20.77	-3.63	21.34	-3.06
600	20.28	-5.12	20.46	-4.94	20.76	-4.64	21.34	-4.06
500	20.31	-6.09	20.49	-5.91	20.78	-5.62	21.35	-5.05
400	20.29	-7.21	20.48	-7.02	20.77	-6.73	21.39	-6.17
300	20.27	-8.13	20.46	-7.94	20.74	-7.66	21.29	-7.11
200	20.26	-9.00	20.38	-8.82	20.64	-8.56	21.21	-7.99
100	20.09	-10.01	20.27	-9.83	20.50	-9.60	21.05	-9.05
32	19.76	-10.94	19.94	-10.76	20.11	-10.59	20.66	-10.94
8	19.49	-11.41	19.65	-11.25	19.75	-11.15	20.27	-10.63
2	18.68	-12.42	18.82	-12.28	18.75	-12.35	19.24	-11.86
0	17.70	XXXX	17.83	XXXX	17.61	XXXX	18.07	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.38	4.91	11.49	5.02	10.17	3.70	10.02	3.55
900	11.83	5.12	11.94	5.23	10.56	3.85	10.39	3.68
800	12.13	5.12	12.25	5.24	10.81	3.80	10.72	3.71
700	12.41	5.10	12.54	5.23	11.05	3.78	11.02	3.71
600	12.66	5.08	12.78	5.20	11.31	3.73	11.26	3.68
500	12.91	5.00	13.05	5.14	11.56	3.65	11.53	3.62
400	13.15	4.96	13.28	5.09	11.80	3.61	11.77	3.58
300	13.41	4.93	13.56	5.08	12.07	3.59	12.05	3.57
200	13.65	4.93	13.80	5.08	12.32	3.60	12.31	3.59
100	13.98	5.07	14.13	5.22	12.69	3.78	12.69	3.78
32	14.25	2.77	14.42	2.94	13.01	1.53	13.03	1.55
8	14.54	2.98	14.69	3.13	13.34	1.78	13.39	1.83
2	14.95	XXXX	15.12	XXXX	13.86	XXXX	13.96	XXXX
0	15.44	XXXX	15.62	XXXX	14.46	XXXX	14.61	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	141.	142.	143.	144.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.92	-17.18	22.02	-17.08	21.99	-17.11	22.93	-16.17
-0.125	22.86	-6.14	22.90	-6.10	22.91	-6.10	24.38	-4.62
-0.250	24.11	-0.99	24.11	-0.99	24.12	-0.98	24.86	-0.24
-0.500	24.49	0.49	24.49	0.49	24.50	0.51	24.56	0.56
-1.000	21.05	0.15	21.06	0.16	21.05	0.15	21.13	0.23
-2.000	20.68	-0.02	20.67	-0.03	20.68	-0.02	24.46	-4.54

WIND SPEED (IN/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
B'	7.61	XXXX	7.47	XXXX	7.41	XXXX	7.42	XXXX
B	4.85	4.80	4.63	4.58	4.52	4.47	4.55	4.50
Z	2.64	2.64	2.51	2.51	2.42	2.42	2.43	2.43

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(u)	1.51	-0.09	1.51	-0.09	1.51	-0.09	1.51	-0.09
R(N)	-1.13	XXXX	-1.13	XXXX	-1.03	XXXX	-1.09	XXXX
Q(C,D)	-1.94	XXXX	-1.93	XXXX	-2.14	XXXX	-2.24	XXXX
Q(F,C)	2.01	XXXX	2.00	XXXX	2.34	XXXX	2.53	XXXX
Q(S,D)	-1.20	XXXX	-1.19	XXXX	-1.25	XXXX	-1.39	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	24.66	XXXX	23.55	XXXX	22.45	XXXX	22.44	XXXX

INTEGRATED EVAPOTRANSPIRATION (CM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	36.30	XXXX	36.40	XXXX	37.60	XXXX	41.60	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	13689	14109	12254	20904
TAPE NU.	145.	146.	156.	157.
INTERVAL	12.00HR	12.00HR	12.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	-4.78	-8.48	-4.78	-3.67	0.03	-4.52	0.02
1000	-8.06	-5.28	-8.99	-9.21	-4.63	-4.84	-8.31	-7.47
900	-8.08	-8.30	-8.86	-9.08	-4.85	-5.07	-8.19	-7.13
800	-8.03	-8.23	-8.72	-8.92	-4.91	-5.11	-8.14	-6.86
700	-7.96	-8.26	-8.58	-8.88	-4.92	-5.22	-7.88	-6.73
600	-7.84	-8.65	-8.40	-9.21	-4.89	-5.70	-7.71	-7.13
500	-7.70	-9.05	-8.23	-9.57	-4.84	-6.18	-7.53	-8.46
400	-7.52	-9.32	-8.02	-9.82	-4.77	-6.57	-7.32	-9.34
300	-7.30	-9.16	-7.76	-9.62	-4.66	-6.52	-7.07	-8.59
200	-6.99	-8.31	-7.42	-8.74	-4.49	-5.81	-6.75	-8.18
100	-6.49	-7.20	-6.87	-7.38	-4.20	-4.71	-6.23	-7.85
32	-5.64	-5.69	-5.97	-6.02	-3.68	-3.73	-5.40	-7.45
8	-4.60	-4.60	-4.86	-4.86	-3.00	-3.00	-4.39	-6.55

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	-1.37	1.72	-1.38	3.10	0.00	1.14	-0.01
1000	1.64	7.81	1.99	8.16	6.87	13.04	0.37	-1.03
900	0.82	6.99	1.25	7.42	5.96	12.13	-0.08	-1.19
800	0.42	6.08	0.96	6.52	5.44	11.10	-0.26	-1.25
700	0.15	5.80	0.59	6.24	5.04	10.69	-0.39	-1.42
600	-0.03	5.04	0.38	5.46	4.73	9.81	-0.47	-1.90
500	-0.19	3.70	0.22	4.11	4.45	8.34	-0.54	-1.77
400	-0.33	2.79	0.07	3.19	4.19	7.31	-0.55	-0.12
300	-0.45	2.02	-0.06	2.41	3.93	6.40	-0.63	0.76
200	-0.55	1.02	-0.18	1.40	3.64	5.22	-0.67	0.80
100	-0.63	0.26	-0.29	0.60	3.26	4.15	-0.67	0.60
32	-0.65	-0.35	-0.35	-0.05	2.75	3.05	-0.63	0.55
8	-0.56	-0.51	-0.32	-0.27	2.22	2.27	-0.52	0.78

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	145.	146.	156.	157.
INTERVAL	12.00HR	12.00HR	12.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.63	-0.57	20.42	-0.78	20.48	-0.72	17.17	-0.33
900	20.92	-1.38	20.73	-1.57	20.79	-1.51	17.67	-0.73
800	21.02	-2.38	20.82	-2.58	20.88	-2.52	17.95	-1.25
700	21.07	-3.33	20.89	-3.51	20.94	-3.46	18.21	-1.89
600	21.09	-4.31	20.89	-4.51	20.95	-4.45	18.41	-2.69
500	21.11	-5.29	20.91	-5.49	20.97	-5.43	18.63	-3.47
400	21.09	-6.41	20.91	-6.59	20.95	-6.55	18.85	-4.35
300	21.07	-7.33	20.87	-7.53	20.92	-7.48	19.12	-5.28
200	20.99	-8.21	20.81	-8.39	20.84	-8.36	19.44	-6.16
100	20.88	-9.22	20.71	-9.39	20.71	-9.39	19.92	-6.78
32	20.55	-10.15	20.38	-10.32	20.35	-10.35	20.61	-6.79
8	20.25	-10.65	20.09	-10.81	20.03	-10.87	21.55	-6.15
2	19.41	-11.69	19.28	-11.82	19.10	-12.00	23.51	-4.49
0	18.41	XXXX	18.31	XXXX	18.06	XXXX	25.25	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.77	5.30	11.70	5.23	11.91	5.44	8.33	1.67
900	12.24	5.53	12.16	5.45	12.35	5.64	8.78	1.92
800	12.55	5.54	12.47	5.46	12.64	5.63	9.07	1.91
700	12.86	5.55	12.79	5.48	12.95	5.64	9.36	1.89
600	13.11	5.53	13.02	5.44	13.18	5.60	9.59	1.85
500	13.39	5.48	13.29	5.38	13.45	5.54	9.86	1.84
400	13.63	5.44	13.53	5.34	13.69	5.50	10.11	1.80
300	13.91	5.43	13.79	5.31	13.97	5.49	10.41	1.87
200	14.15	5.43	14.05	5.33	14.21	5.49	10.69	2.03
100	14.51	5.60	14.39	5.48	14.56	5.65	11.13	2.59
32	14.80	3.32	14.68	3.20	14.85	3.37	11.61	0.74
8	15.10	3.54	14.97	3.41	15.15	3.59	12.16	1.36
2	15.55	XXXX	15.40	XXXX	15.61	XXXX	13.32	XXXX
0	16.08	XXXX	15.92	XXXX	16.13	XXXX	14.35	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	145.	146.	156.	157.
INTERVAL	12.00HR	12.00HR	12.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	23.02	-16.08	22.94	-16.16	22.13	-16.97	20.85	-24.45
-0.125	24.39	-4.61	24.36	-4.64	22.91	-6.09	21.75	-2.35
-0.250	24.86	-0.24	24.85	-0.25	24.12	-0.98	24.71	0.11
-0.500	24.56	0.56	24.56	0.56	24.49	0.49	24.62	0.22
-1.000	21.13	0.23	21.13	0.23	21.06	0.16	20.98	0.08
-2.000	24.46	-4.54	24.46	-4.54	20.67	-0.03	20.68	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.47	XXXX	7.62	XXXX	6.95	XXXX	7.34	XXXX
8	4.63	4.58	4.87	4.82	3.74	3.69	4.42	1.90
2	2.51	2.51	2.66	2.66	1.97	1.97	2.07	-0.50

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.51	-0.09	1.52	-0.08	1.51	-0.09	23.67	1.37
R(N)	-1.15	XXXX	-1.14	XXXX	-1.13	XXXX	14.47	XXXX
Q(C,^)	-1.95	XXXX	-1.95	XXXX	-1.87	XXXX	6.01	XXXX
Q(E,^)	2.11	XXXX	2.13	XXXX	1.91	XXXX	7.19	XXXX
Q(S,^)	-1.31	XXXX	-1.32	XXXX	-1.16	XXXX	1.27	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	23.56	XXXX	24.76	XXXX	19.62	XXXX	35.30	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	39.90	XXXX	39.90	XXXX	36.40	XXXX	16.70	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	20759	20719	22019	21769
TAPE NO.	158.	159.	160.	161.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEN	-4.52	7.02	-4.52	0.02	-8.48	-3.94	-8.48	-3.94
1000	-6.11	-5.27	-8.16	-7.32	-10.29	-9.45	-8.89	-8.05
900	-7.21	-6.14	-8.05	-6.98	-10.06	-8.99	-9.33	-8.26
800	-7.38	-6.19	-7.91	-6.73	-9.84	-8.66	-9.31	-8.13
700	-7.35	-6.20	-7.76	-6.61	-9.63	-8.48	-9.19	-8.04
600	-7.27	-6.69	-7.60	-7.02	-9.40	-8.82	-9.03	-8.45
500	-7.14	-8.07	-7.43	-8.36	-9.17	-10.10	-8.83	-9.76
400	-6.97	-9.98	-7.23	-9.24	-8.91	-10.92	-8.55	-10.56
300	-6.76	-8.27	-7.00	-8.51	-8.60	-10.11	-8.32	-9.83
200	-6.45	-7.89	-6.68	-8.11	-8.19	-9.63	-7.93	-9.36
100	-5.97	-7.59	-6.17	-7.79	-7.56	-9.18	-7.32	-8.94
32	-5.19	-7.24	-5.35	-7.40	-6.55	-8.60	-6.35	-8.40
8	-4.21	-6.37	-4.35	-6.51	-5.32	-7.48	-5.16	-7.32

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEN	1.64	-0.01	1.64	-0.01	1.73	0.08	1.73	0.08
1000	1.39	0.09	0.72	-0.58	-2.64	-3.94	0.02	-1.27
900	0.56	-0.55	0.32	-0.78	-2.90	-4.01	-1.66	-2.77
800	0.21	-0.78	0.10	-0.89	-3.02	-4.01	-2.16	-3.15
700	0.01	-1.02	-0.03	-1.06	-3.08	-4.11	-2.39	-3.42
600	-0.13	-1.56	-0.14	-1.57	-3.11	-4.54	-2.52	-3.95
500	-0.22	-1.45	-0.22	-1.45	-3.11	-4.34	-2.60	-3.83
400	-0.31	0.12	-0.31	0.13	-3.10	-2.67	-2.64	-2.21
300	-0.38	1.02	-0.36	1.04	-3.06	-1.66	-2.65	-1.25
200	-0.44	1.04	-0.42	1.06	-2.99	-1.51	-2.62	-1.14
100	-0.47	0.80	-0.45	0.82	-2.82	-1.55	-2.49	-1.22
32	-0.45	0.82	-0.44	0.83	-2.51	-1.23	-2.23	-0.95
8	-0.38	0.92	-0.37	0.94	-2.05	-0.75	-1.83	-0.53

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	158.	159.	160.	161.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	17.33	-0.17	17.49	-0.1	17.02	-0.48	17.21	-0.29
900	17.79	-0.61	17.97	-0.43	17.52	-0.88	17.66	-0.74
800	18.05	-1.15	18.24	-0.96	17.81	-1.39	17.91	-1.29
700	18.30	-1.80	18.48	-1.62	18.06	-2.04	18.15	-1.95
600	18.50	-2.60	18.68	-2.42	18.27	-2.83	18.35	-2.75
500	18.72	-3.38	18.91	-3.19	18.49	-3.61	18.56	-3.54
400	18.94	-4.26	19.13	-4.07	18.71	-4.49	18.78	-4.42
300	19.19	-5.21	19.38	-5.02	18.95	-5.44	19.04	-5.36
200	19.52	-6.08	19.69	-5.91	19.28	-6.32	19.35	-6.25
100	19.99	-6.71	20.17	-6.53	19.76	-6.94	19.83	-6.87
32	20.67	-6.73	20.84	-6.56	20.43	-6.97	20.50	-6.90
8	21.63	-6.07	21.76	-5.94	21.36	-6.34	21.43	-6.27
2	23.59	-4.41	23.68	-4.32	23.35	-4.65	23.40	-4.60
0	25.33	XXXX	25.38	XXXX	24.98	XXXX	25.04	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.47	1.81	8.07	1.41	8.20	1.54	8.21	1.55
900	8.91	2.05	8.45	1.59	8.64	1.78	8.61	1.75
800	9.18	2.02	8.71	1.55	8.93	1.77	8.91	1.75
700	9.47	2.00	8.99	1.52	9.23	1.76	9.21	1.74
600	9.69	1.95	9.21	1.47	9.45	1.71	9.44	1.70
500	9.97	1.95	9.47	1.45	9.71	1.69	9.70	1.68
400	10.21	1.90	9.71	1.40	9.95	1.64	9.93	1.62
300	10.49	1.95	10.00	1.46	10.23	1.69	10.22	1.68
200	10.78	2.12	10.28	1.62	10.51	1.85	10.51	1.85
100	11.23	2.69	10.74	2.20	10.94	2.40	10.94	2.40
32	11.72	0.85	11.24	0.37	11.41	0.54	11.41	0.54
8	12.27	1.47	11.81	1.01	11.92	1.12	11.93	1.13
2	13.43	XXXX	13.02	XXXX	13.05	XXXX	13.07	XXXX
0	14.47	XXXX	14.09	XXXX	13.97	XXXX	14.02	XXXX

CASE UPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	158.	159.	160.	161.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.87	-24.43	20.92	-24.38	20.76	-24.54	20.77	-24.53
-0.125	21.76	-2.34	21.76	-2.34	21.74	-2.36	21.74	-2.36
-0.250	24.70	0.10	24.71	0.11	24.71	0.11	24.71	0.11
-0.500	24.61	0.21	24.61	0.21	24.62	0.22	24.61	0.21
-1.000	20.98	0.08	20.97	0.07	20.99	0.08	20.98	0.08
-2.000	20.67	-0.03	20.67	-0.03	20.67	-0.03	20.67	-0.03

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.23	XXXX	7.31	XXXX	8.18	XXXX	8.03	XXXX
8	4.23	1.71	4.37	1.84	5.70	3.18	5.48	2.96
2	1.99	-0.58	2.05	-0.53	2.56	-0.02	2.48	-0.10

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	23.68	1.38	23.68	1.38	23.68	1.33	23.66	1.36
R(N)	14.47	XXXX	14.48	XXXX	14.50	XXXX	14.48	XXXX
T(C,0)	5.98	XXXX	5.81	XXXX	6.18	XXXX	6.11	XXXX
G,E,0)	7.20	XXXX	7.39	XXXX	7.10	XXXX	7.14	XXXX
Q(S,0)	1.29	XXXX	1.29	XXXX	1.22	XXXX	1.23	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	34.54	XXXX	34.84	XXXX	41.42	XXXX	40.18	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	16.80	XXXX	16.90	XXXX	16.60	XXXX	16.60	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	21789	21889	21879	22114
TAPE NO.	162.	163.	164.	165.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	-3.94	-8.48	-3.94	-8.48	-3.94	-8.48	-3.94
1000	-10.29	-9.45	-10.27	-9.43	-8.86	-8.02	-10.25	-9.41
900	-10.05	-8.98	-9.99	-8.92	-9.27	-8.20	-10.01	-8.94
800	-9.82	-8.64	-9.76	-8.58	-9.73	-8.05	-9.78	-8.60
700	-9.61	-8.46	-9.55	-8.40	-9.11	-7.96	-9.56	-8.41
600	-9.39	-8.81	-9.32	-8.74	-8.95	-8.37	-9.34	-8.76
500	-9.16	-10.09	-9.09	-10.02	-8.74	-9.67	-9.11	-10.04
400	-8.90	-10.91	-8.83	-10.84	-8.52	-10.53	-8.84	-10.85
300	-8.59	-12.10	-8.53	-10.04	-8.23	-9.74	-8.53	-10.04
200	-8.19	-9.62	-8.13	-9.56	-7.86	-9.29	-8.13	-9.56
100	-7.55	-9.17	-7.49	-9.11	-7.26	-8.88	-7.50	-9.12
32	-6.54	-8.59	-6.46	-8.51	-6.29	-8.34	-6.51	-8.56
8	-5.32	-7.48	-5.28	-7.44	-5.11	-7.27	-5.28	-7.44

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	0.08	1.73	0.08	1.72	0.07	1.73	0.08
1000	-2.03	-3.33	-2.11	-3.41	0.00	-1.30	-2.71	-4.01
900	-2.37	-3.48	-2.45	-3.50	-1.70	-2.81	-2.97	-4.08
800	-2.53	-3.52	-2.60	-3.59	-2.20	-3.19	-3.08	-4.07
700	-2.63	-3.65	-2.70	-3.73	-2.44	-3.47	-3.14	-4.17
600	-2.68	-4.11	-2.75	-4.18	-2.57	-4.00	-3.16	-4.60
500	-2.71	-3.94	-2.78	-4.01	-2.64	-3.87	-3.16	-4.39
400	-2.73	-2.30	-2.79	-2.36	-2.68	-2.25	-3.15	-2.72
300	-2.72	-1.32	-2.77	-1.38	-2.68	-1.28	-3.11	-1.71
200	-2.68	-1.20	-2.73	-1.25	-2.65	-1.18	-3.03	-1.56
100	-2.54	-1.27	-2.59	-1.32	-2.53	-1.26	-2.86	-1.59
32	-2.27	-0.99	-2.31	-1.03	-2.26	-0.98	-2.54	-1.26
8	-1.86	-0.56	-1.89	-0.59	-1.85	-0.55	-2.07	-0.77

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	162. 6.00HR	163. 6.00HR	164. 6.00HR	165. 6.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	17.54	0.04	17.99	0.49	17.66	0.16	17.48	-0.02
900	18.01	-0.39	18.54	0.14	18.19	-0.21	18.05	-0.35
800	18.28	-0.92	18.82	-0.38	18.47	-0.73	18.36	-0.84
700	18.52	-1.58	19.10	-1.00	18.73	-1.37	18.63	-1.47
600	18.73	-2.37	19.30	-1.80	18.94	-2.16	18.85	-2.25
500	18.93	-3.17	19.53	-2.57	19.17	-2.93	19.08	-3.02
400	19.16	-4.04	19.76	-3.44	19.39	-3.81	19.32	-3.88
300	19.40	-5.00	20.02	-4.38	19.67	-4.73	19.59	-4.81
200	19.71	-5.89	20.33	-5.27	19.98	-5.62	19.91	-5.69
100	20.17	-6.53	20.81	-5.89	20.48	-6.22	20.41	-6.29
32	20.80	-6.60	21.47	-5.93	21.17	-6.23	21.10	-6.30
8	21.71	-5.99	22.41	-5.29	22.12	-5.58	22.06	-5.64
2	23.63	-4.37	24.38	-3.62	24.15	-3.85	24.10	-3.90
0	25.20	XXXX	25.99	XXXX	25.85	XXXX	25.77	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.10	1.44	8.30	1.64	8.49	1.83	8.39	1.73
900	8.01	1.61	8.69	1.83	8.92	2.06	8.87	1.91
800	8.7	1.55	8.96	1.80	9.22	2.06	9.17	2.01
700	9.00	1.53	9.24	1.77	9.51	2.04	9.48	2.01
600	9.21	1.47	9.47	1.73	9.75	2.01	9.72	1.98
500	9.46	1.44	9.74	1.72	10.04	2.02	10.00	1.98
400	9.70	1.39	9.98	1.67	10.27	1.96	10.24	1.93
300	9.97	1.43	10.29	1.75	10.56	2.02	10.53	1.99
200	10.26	1.60	10.57	1.91	10.85	2.19	10.82	2.16
100	10.61	2.07	11.04	2.50	11.31	2.77	11.29	2.75
32	11.18	0.1	11.53	0.66	11.81	0.94	11.76	0.89
8	11.72	0.97	12.11	1.31	12.36	1.56	12.31	1.51
2	12.90	XXXX	13.36	XXXX	13.56	XXXX	13.50	XXXX
0	13.86	XXXX	14.38	XXXX	14.57	XXXX	14.48	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	162.	163.	164.	165.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.85	-24.45	24.05	-21.25	23.98	-21.32	23.96	-21.34
-0.125	21.76	-2.34	23.79	-0.31	23.78	-0.32	23.78	-0.32
-0.250	24.71	0.11	25.15	0.55	25.14	0.54	25.15	0.55
-0.500	24.61	0.21	24.63	0.23	24.63	0.23	24.63	0.23
-1.000	20.98	0.08	21.02	0.12	21.03	0.13	21.03	0.13
-2.000	20.67	-0.03	24.47	0.37	24.46	0.36	24.47	0.37

WIND SPEED (M/SEC.)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
0'	8.13	XXXX	8.12	XXXX	8.00	XXXX	8.16	XXXX
8	5.64	3.11	5.51	3.09	5.44	2.92	5.67	3.15
2	2.53	-0.05	2.53	-0.05	2.47	-0.10	2.56	-0.02

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	23.68	1.38	23.66	1.36	23.67	1.37	23.66	1.36
R(N)	14.50	XXXX	14.45	XXXX	14.45	XXXX	14.45	XXXX
Q(C,0)	5.91	XXXX	6.08	XXXX	6.31	XXXX	6.36	XXXX
Q(E,0)	7.33	XXXX	7.80	XXXX	7.59	XXXX	7.56	XXXX
Q(S,0)	1.25	XXXX	0.56	XXXX	0.54	XXXX	0.52	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	40.74	XXXX	40.86	XXXX	40.24	XXXX	41.50	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	16.90	XXXX	19.30	XXXX	19.10	XXXX	19.10	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	6519	6514	6514	6514
TAPE NO.	166.	167.	168.	169.
INTERVAL	6.00HR	6.00HR	5.00HR	6.07HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-4.52	0.02	-4.52	0.02	-4.52	0.02	-4.52	0.02
1000	-7.88	-7.04	-5.31	-4.47	-7.64	-6.80	-7.65	-6.81
900	-8.98	-7.91	-7.93	-6.86	-8.75	-7.68	-8.75	-7.68
800	-9.40	-9.22	-8.74	-7.56	-9.18	-8.00	-9.19	-8.01
700	-9.61	-8.46	-9.12	-7.97	-9.41	-8.26	-9.41	-8.26
600	-9.63	-9.10	-9.30	-8.72	-9.52	-8.94	-9.52	-8.94
500	-9.68	-10.61	-9.38	-10.31	-9.54	-10.47	-9.54	-10.47
400	-9.60	-11.61	-9.39	-11.39	-9.49	-11.50	-9.49	-11.50
300	-9.45	-10.96	-9.26	-10.77	-9.36	-10.87	-9.36	-10.87
200	-9.15	-10.58	-9.01	-10.44	-9.09	-10.52	-9.09	-10.52
100	-8.58	-10.20	-8.48	-10.10	-8.54	-10.16	-8.54	-10.16
32	-7.53	-9.59	-7.45	-9.51	-7.49	-9.55	-7.50	-9.55
8	-6.14	-8.30	-6.08	-8.24	-6.11	-8.27	-6.12	-8.28

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.64	-0.01	1.64	-0.01	1.64	-0.01	1.64	-0.01
1000	1.24	-1.06	2.24	0.94	1.66	0.36	1.66	0.36
900	0.76	-0.35	1.59	0.48	1.22	0.11	1.21	0.10
800	0.44	-0.55	1.15	0.16	0.90	-0.09	0.91	-0.08
700	0.19	-0.83	0.83	-0.20	0.65	-0.38	0.65	-0.38
600	0.02	-1.40	0.59	-0.84	0.47	-0.96	0.46	-0.97
500	-0.12	-1.35	0.38	-0.84	0.29	-1.93	0.29	-0.93
400	-0.26	0.17	0.19	0.63	0.12	0.55	0.12	0.55
300	-0.38	1.02	0.03	1.43	-0.03	1.37	-0.03	1.37
200	-0.51	0.97	-0.14	1.34	-0.19	1.28	-0.19	1.28
100	-0.60	0.67	-0.29	0.98	-0.33	0.94	-0.33	0.94
32	-0.64	0.63	-0.39	0.88	-0.42	0.86	-0.43	0.85
8	-0.55	0.75	-0.36	0.94	-0.38	0.92	-0.38	0.92

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	166.	167.	168.	169.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.57	-0.93	16.84	-0.66	16.83	-0.67	16.71	-0.79
900	16.94	-1.46	17.26	-1.14	17.25	-1.15	17.03	-1.37
800	17.19	-2.01	17.53	-1.57	17.54	-1.66	17.23	-1.97
700	17.47	-2.63	17.83	-2.27	17.83	-2.27	17.47	-2.63
600	17.75	-3.35	18.13	-2.97	18.12	-2.98	17.72	-3.38
500	18.06	-4.04	18.45	-3.65	18.45	-3.65	18.02	-4.08
400	18.42	-4.78	18.82	-4.38	18.82	-4.38	18.34	-4.86
300	18.86	-5.54	19.26	-5.14	19.26	-5.14	18.74	-5.66
200	19.45	-5.15	19.84	-5.76	19.84	-5.76	19.28	-6.32
100	20.39	-5.31	20.75	-5.95	20.76	-5.94	20.10	-6.60
32	21.83	-5.57	22.14	-5.26	22.14	-5.26	21.47	-5.93
8	23.71	-3.99	23.96	-3.74	23.97	-3.73	23.24	-4.46
2	27.66	-0.34	27.80	-0.20	27.91	-0.19	26.96	-1.04
0	31.42	XXXX	31.45	XXXX	31.45	XXXX	30.49	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	7.56	3.90	7.21	0.55	7.28	0.62	7.21	0.55
900	8.21	1.35	7.72	0.86	7.80	0.94	7.66	0.80
800	8.68	1.52	8.14	0.98	8.21	1.05	8.02	0.86
700	9.17	1.70	8.60	1.13	8.67	1.20	8.43	0.96
600	9.61	1.87	9.32	1.28	9.38	1.34	8.80	1.06
500	10.11	2.09	9.52	1.50	9.56	1.54	9.25	1.23
400	10.62	2.31	10.03	1.72	10.07	1.76	9.72	1.41
300	11.22	2.68	10.65	2.11	10.69	2.15	10.29	1.75
200	11.95	3.24	11.39	2.73	11.42	2.76	10.97	2.31
100	13.14	4.60	12.64	4.10	12.67	4.13	12.13	3.59
32	14.71	3.84	14.25	3.38	14.27	3.40	13.63	2.76
8	16.68	5.48	16.27	5.47	16.24	5.49	15.52	4.72
2	20.98	XXXX	20.64	XXXX	20.66	XXXX	19.63	XXXX
0	25.07	XXXX	24.79	XXXX	24.81	XXXX	23.52	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NU.	166.	167.	168.	169.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	26.59	-18.71	26.62	-18.68	26.62	-18.68	23.20	-22.10
-0.125	24.17	0.07	24.19	0.09	24.19	0.09	22.06	-2.04
-0.250	25.17	0.57	25.18	0.58	25.18	0.58	24.72	0.12
-0.500	24.64	0.24	24.64	0.24	24.63	0.23	24.62	0.22
-1.000	21.03	0.13	21.02	0.12	21.02	0.12	20.93	0.08
-2.000	24.47	7.37	24.46	0.36	24.46	0.36	20.66	-0.04

## WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	8.52	XXXX	8.45	XXXX	8.48	XXXX	8.48	XXXX
8	6.17	3.65	6.09	3.57	6.13	3.61	6.13	3.61
2	3.01	0.43	2.97	0.39	2.98	0.41	2.98	0.41

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	23.65	1.35	23.64	1.34	23.65	1.35	23.65	1.35
R(N)	13.84	XXXX	13.86	XXXX	13.86	XXXX	13.93	XXXX
Q(C,C)	3.89	XXXX	3.77	XXXX	3.77	XXXX	3.66	XXXX
Q(F,D)	8.56	XXXX	8.70	XXXX	8.70	XXXX	8.16	XXXX
Q(S,D)	1.39	XXXX	1.39	XXXX	1.39	XXXX	2.14	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	12.74	XXXX	12.66	XXXX	12.68	XXXX	12.70	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	19.90	XXXX	20.00	XXXX	19.90	XXXX	17.20	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	6509	6514	6514	6514
TAPE NO.	170.	171.	172.	173.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## U COMPONENT (CM/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-4.52	0.02	-4.52	0.02	-8.48	-3.94	-8.48	-3.94
1000	-5.51	-4.67	-7.88	-7.04	-9.93	-9.09	-8.36	-7.52
900	-8.27	-7.20	-8.98	-7.91	-11.01	-9.94	-10.31	-9.24
800	-9.04	-7.86	-9.40	-8.22	-11.43	-10.25	-11.01	-9.83
700	-9.38	-8.23	-9.60	-8.45	-11.63	-10.48	-11.35	-10.20
600	-9.52	-8.94	-9.67	-9.09	-11.71	-11.13	-11.51	-10.93
500	-9.56	-10.49	-9.67	-10.60	-11.70	-12.63	-11.54	-12.47
400	-9.51	-11.52	-9.58	-11.59	-11.61	-13.62	-11.49	-13.50
300	-9.36	-10.87	-9.42	-10.93	-11.42	-12.93	-11.32	-12.83
200	-9.08	-10.51	-9.13	-10.56	-11.07	-12.50	-10.98	-12.41
100	-8.52	-10.14	-8.56	-10.18	-10.38	-11.99	-10.31	-11.93
32	-7.48	-9.53	-7.51	-9.56	-9.09	-11.14	-9.04	-11.09
8	-6.10	-8.26	-6.13	-8.29	-7.41	-9.57	-7.38	-9.53

## V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.64	-0.01	1.64	-0.01	1.73	0.09	1.73	0.08
1000	2.17	0.87	1.25	-0.05	-1.09	-2.39	1.47	0.17
900	1.36	0.25	0.77	-0.34	-1.54	-2.65	-0.64	-1.75
800	0.84	-0.15	0.46	-0.53	-1.84	-2.83	-1.36	-2.35
700	0.50	-0.53	0.24	-0.79	-2.78	-3.11	-1.78	-2.81
600	0.26	-1.16	0.07	-1.36	-2.26	-3.69	-2.05	-3.48
500	0.09	-1.13	-0.04	-1.27	-2.42	-3.65	-2.26	-3.49
400	-0.05	0.38	-0.16	0.27	-2.56	-2.13	-2.45	-2.02
300	-0.18	1.22	-0.27	1.12	-2.67	-1.27	-2.58	-1.18
200	-0.31	1.16	-0.39	1.08	-2.77	-1.29	-2.70	-1.22
100	-0.44	0.83	-0.50	0.77	-2.77	-1.50	-2.72	-1.45
32	-0.51	0.77	-0.56	0.72	-2.60	-1.32	-2.55	-1.27
8	-0.45	0.85	-0.49	0.81	-2.18	-0.88	-2.14	-0.84

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	170.	171.	172.	173.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.71	-0.79	16.47	-1.03	16.72	-0.78	16.71	-0.79
900	16.86	-1.54	16.72	-1.68	17.02	-1.38	17.02	-1.38
800	17.01	-2.19	16.90	-2.30	17.23	-1.97	17.23	-1.97
700	17.19	-2.91	17.13	-2.97	17.47	-2.63	17.47	-2.63
600	17.41	-3.69	17.35	-3.75	17.71	-3.39	17.72	-3.38
500	17.67	-4.43	17.63	-4.47	18.02	-4.08	18.02	-4.08
400	17.98	-5.22	17.95	-5.25	18.33	-4.87	18.34	-4.86
300	18.38	-6.02	18.36	-6.04	18.74	-5.66	18.75	-5.65
200	18.94	-6.66	18.91	-6.69	19.28	-6.32	19.29	-6.31
100	19.82	-6.88	19.79	-6.91	20.15	-6.55	20.15	-6.55
32	21.18	-6.22	21.17	-6.23	21.48	-5.92	21.47	-5.93
8	23.01	-4.69	22.99	-4.71	23.24	-4.46	23.25	-4.45
2	26.85	-1.15	26.82	-1.18	27.02	-0.98	27.02	-0.98
0	30.49	XXXX	30.45	XXXX	30.51	XXXX	30.50	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	7.75	1.09	7.73	0.37	7.28	0.62	7.28	0.62
900	8.23	1.37	7.40	0.54	7.71	0.85	7.71	0.85
800	8.63	1.47	8.08	0.92	8.06	0.97	8.06	0.90
700	9.06	1.59	8.65	1.18	8.47	1.00	8.45	0.98
600	9.44	1.70	9.12	1.38	8.84	1.10	8.83	1.09
500	9.90	1.88	9.62	1.60	9.27	1.25	9.27	1.25
400	10.35	2.04	10.12	1.81	9.74	1.43	9.73	1.42
300	10.89	2.35	10.69	2.15	10.31	1.77	10.29	1.75
200	11.56	2.90	11.38	2.72	11.01	2.35	10.98	2.32
100	12.66	4.12	12.57	3.96	12.15	3.61	12.15	3.61
32	14.11	3.24	13.97	3.10	13.66	2.79	13.64	2.77
8	15.99	5.19	15.83	5.03	15.55	4.75	15.54	4.74
2	20.02	XXXX	19.87	XXXX	19.71	XXXX	19.70	XXXX
0	23.84	XXXX	23.71	XXXX	23.55	XXXX	23.55	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	170.	171.	172.	173.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	23.17	-22.13	23.16	-22.14	23.21	-22.09	23.19	-22.11
-0.125	22.06	-2.04	22.06	-2.04	22.07	-2.03	22.07	-2.03
-0.250	24.73	0.13	24.72	0.12	24.72	0.12	24.72	0.12
-0.500	24.62	0.22	24.61	0.21	24.62	0.22	24.61	0.21
-1.000	20.98	0.08	20.98	0.08	20.98	0.08	20.98	0.08
-2.000	20.67	-0.03	20.66	-0.04	20.67	-0.03	20.66	-0.04

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	8.48	XXXX	8.50	XXXX	9.71	XXXX	9.67	XXXX
8	6.12	3.60	6.15	3.63	7.73	5.21	7.68	5.16
2	2.98	0.40	2.99	0.42	3.71	1.14	3.69	1.12

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	23.65	1.35	23.65	1.35	23.65	1.35	23.66	1.36
R(N)	13.91	XXXX	13.91	XXXX	13.93	XXXX	13.93	XXXX
Q(I,C,0)	3.77	XXXX	3.76	XXXX	3.65	XXXX	3.66	XXXX
Q(E,0)	8.03	XXXX	8.05	XXXX	8.17	XXXX	8.17	XXXX
Q(S,0)	2.10	XXXX	2.10	XXXX	2.10	XXXX	2.10	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	12.60	XXXX	12.72	XXXX	14.56	XXXX	14.48	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	17.10	XXXX	17.10	XXXX	17.20	XXXX	17.20	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	6514	16194	16189	16174
TAPE NU.	174.	176.	177.	178.
INTERVAL	6.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.49	-3.95	-7.13	0.00	-7.13	0.00	-7.13	0.01
1000	-9.99	-9.15	-4.76	-3.27	-6.01	-4.52	-4.81	-3.32
900	-11.10	-10.03	-4.76	-3.27	-5.11	-3.63	-4.81	-3.32
800	-11.52	-10.34	-4.64	-2.69	-4.80	-2.85	-4.68	-2.73
700	-11.72	-10.57	-4.51	-2.66	-4.60	-2.75	-4.55	-2.70
600	-11.77	-11.19	-4.39	-2.33	-4.45	-2.39	-4.42	-2.36
500	-11.75	-12.68	-4.26	-2.27	-4.30	-2.31	-4.30	-2.31
400	-11.64	-13.65	-4.14	-2.18	-4.16	-2.20	-4.17	-2.21
300	-11.43	-12.94	-3.98	-1.91	-4.00	-1.93	-4.02	-1.95
200	-11.07	-12.50	-3.79	-1.42	-3.81	-1.44	-3.83	-1.46
100	-10.38	-11.99	-3.51	-0.94	-3.51	-0.94	-3.52	-0.95
32	-9.10	-11.15	-3.03	-1.03	-3.04	-1.04	-3.05	-1.05
8	-7.42	-9.58	-2.46	-0.58	-2.46	-0.58	-2.47	-0.59

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	0.08	-1.25	0.01	-1.25	0.01	-1.25	0.01
1000	-1.71	-3.01	-2.73	-2.33	-1.40	-1.00	-2.70	-2.30
900	-2.15	-3.26	-3.95	-3.55	-3.55	-3.15	-3.92	-3.52
800	-2.44	-3.43	-4.46	-3.79	-4.27	-3.60	-4.42	-3.75
700	-2.65	-3.68	-4.72	-3.82	-4.61	-3.71	-4.68	-3.78
600	-2.80	-4.23	-4.87	-3.32	-4.80	-3.25	-4.83	-3.28
500	-2.91	-4.14	-4.93	-2.56	-4.89	-2.52	-4.90	-2.53
400	-3.01	-2.53	-4.96	-1.94	-4.93	-1.91	-4.93	-1.91
300	-3.08	-1.68	-4.91	-2.61	-4.89	-2.59	-4.88	-2.58
200	-3.13	-1.65	-4.81	-3.80	-4.77	-3.78	-4.78	-3.77
100	-3.08	-1.81	-4.54	-4.63	-4.54	-4.63	-4.53	-4.62
32	-2.84	-1.56	-4.03	-4.84	-4.02	-4.83	-4.71	-4.82
8	-2.38	-1.07	-3.29	-4.25	-3.29	-4.25	-3.29	-4.24

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	174.	176.	177.	178.
INTERVAL	6.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.24	-1.26	16.62	0.32	16.64	0.34	16.69	0.39
900	16.48	-1.92	16.95	0.05	16.96	0.06	17.02	0.12
800	16.67	-2.53	16.98	-0.32	16.98	-0.32	17.05	-0.25
700	16.90	-3.20	16.98	-0.82	16.99	-0.81	17.05	-0.75
600	17.13	-3.97	16.94	-1.26	16.94	-1.26	17.02	-1.18
500	17.41	-4.69	16.93	-1.77	16.93	-1.77	17.02	-1.68
400	17.74	-5.46	16.90	-2.00	16.90	-2.00	16.98	-1.92
300	18.15	-6.25	16.88	-1.92	16.88	-1.92	16.97	-1.83
200	18.71	-6.89	16.85	-1.75	16.85	-1.75	16.94	-1.66
100	19.62	-7.08	16.88	-1.62	16.89	-1.62	16.97	-1.53
32	21.02	-6.38	16.87	-1.73	16.87	-1.73	16.95	-1.65
8	22.85	-4.85	17.11	-1.39	17.11	-1.39	17.17	-1.33
2	26.76	-1.24	17.58	-0.82	17.58	-0.82	17.65	-0.75
0	30.39	XXXX	17.76	XXXX	17.75	XXXX	17.81	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.95	0.29	6.92	0.11	6.86	0.05	6.97	0.16
900	7.25	0.39	7.26	0.20	7.12	0.06	7.29	0.23
800	7.98	0.82	7.47	0.16	7.38	0.07	7.49	0.18
700	8.55	1.08	7.69	0.17	7.62	0.10	7.71	0.19
600	9.02	1.28	7.85	-0.51	7.89	-0.56	7.86	-0.50
500	9.52	1.50	8.05	-0.61	8.02	-0.64	8.05	-0.61
400	10.01	1.70	8.22	-0.56	8.19	-0.59	8.22	-0.56
300	10.59	2.05	8.43	-0.17	8.42	-0.18	8.44	-0.16
200	11.28	2.62	8.63	0.15	8.61	0.13	8.64	0.16
100	12.30	3.76	8.96	0.94	8.94	0.92	8.97	0.95
32	13.86	2.99	9.31	-0.99	9.27	-1.03	9.31	-0.99
8	15.72	4.92	9.68	-0.41	9.66	-0.43	9.70	-0.39
2	19.80	XXXX	10.75	XXXX	10.73	XXXX	10.79	XXXX
0	23.58	XXXX	11.15	XXXX	11.12	XXXX	11.16	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	174.	176.	177.	178.
INTERVAL	6.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	23.14	-22.16	11.65	-12.35	11.64	-12.36	11.66	-12.34
-0.125	22.06	-2.04	22.23	-1.47	22.23	-1.47	22.23	-1.47
-0.250	24.72	0.12	25.48	0.08	25.49	0.09	25.48	0.08
-0.500	24.61	0.21	24.67	-0.03	24.66	-0.04	24.67	-0.03
-1.000	20.98	0.08	20.92	0.02	20.92	0.02	20.92	0.02
-2.000	20.67	-0.03	20.67	-0.03	20.66	-0.04	20.67	-0.03

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	9.75	XXXX	7.16	XXXX	7.16	XXXX	7.16	XXXX
8	7.79	5.27	4.11	2.00	4.11	2.00	4.11	2.00
2	3.75	1.17	1.11	-0.95	1.10	-0.95	1.05	-1.01

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	23.66	1.36	11.91	0.01	11.90	0.00	11.90	0.00
R(N)	13.91	XXXX	6.32	XXXX	6.32	XXXX	6.31	XXXX
Q(C,0)	3.80	XXXX	0.82	XXXX	0.82	XXXX	0.79	XXXX
Q(E,0)	8.03	XXXX	3.73	XXXX	3.73	XXXX	3.74	XXXX
Q(S,0)	2.08	XXXX	1.76	XXXX	1.76	XXXX	1.77	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	14.58	XXXX	26.7	XXXX	26.7	XXXX	26.64	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	17.10	XXXX	2.70	XXXX	2.90	XXXX	2.90	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

KIOM SQ/SEC)	16929	16829	16799	17654
TAPE NO.	179.	180.	181.	182.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	-1.35	-8.48	-1.35	-8.48	-1.35	-8.48	-1.35
1000	-5.83	-4.34	-7.10	-5.61	-5.89	-4.40	-5.87	-4.38
900	-5.62	-4.34	-6.18	-4.69	-5.88	-4.39	-5.78	-4.30
800	-5.69	-3.74	-5.87	-3.92	-5.74	-3.80	-5.64	-3.69
700	-5.56	-3.71	-5.66	-3.81	-5.61	-3.76	-5.52	-3.67
600	-5.44	-3.38	-5.49	-3.43	-5.47	-3.41	-5.39	-3.33
500	-5.30	-3.31	-5.35	-3.36	-5.35	-3.36	-5.27	-3.28
400	-5.16	-3.20	-5.19	-3.23	-5.20	-3.24	-5.24	-3.18
300	-5.00	-2.93	-5.02	-2.95	-5.03	-2.97	-4.7	-2.90
200	-4.78	-2.41	-4.79	-2.42	-4.82	-2.45	-4.6	-2.39
100	-4.42	-1.85	-4.43	-1.86	-4.46	-1.89	-4.11	-1.84
32	-3.85	-1.85	-3.86	-1.86	-3.88	-1.88	-3.83	-1.83
8	-3.13	-1.25	-3.14	-1.26	-3.15	-1.27	-3.11	-1.23

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	2.99	1.73	2.99	1.73	2.99	1.72	2.98
1000	-3.00	-2.60	-0.53	-0.13	-2.95	-2.55	-3.12	-2.72
900	-4.20	-3.80	-3.56	-3.16	-4.15	-3.75	-4.21	-3.81
800	-4.69	-4.02	-4.41	-3.74	-4.64	-3.97	-4.63	-3.96
700	-4.95	-4.05	-4.80	-3.90	-4.89	-3.99	-4.85	-3.95
600	-5.09	-3.54	-5.00	-3.45	-5.03	-3.48	-4.97	-3.42
500	-5.15	-2.78	-5.09	-2.72	-5.11	-2.74	-5.02	-2.65
400	-5.16	-2.14	-5.13	-2.11	-5.13	-2.10	-5.02	-2.00
300	-5.12	-2.82	-5.09	-2.79	-5.08	-2.78	-4.98	-2.68
200	-5.00	-3.99	-4.99	-3.98	-4.98	-3.97	-4.87	-3.86
100	-4.73	-4.82	-4.72	-4.81	-4.71	-4.81	-4.60	-4.69
32	-4.19	-5.00	-4.18	-4.99	-4.17	-4.98	-4.07	-4.98
8	-3.42	-4.38	-3.42	-4.38	-3.41	-4.37	-3.33	-4.29

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	179.	180.	181.	182.
INTERVAL	2.000HR	2.000HR	2.000HR	2.000HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.62	0.32	16.65	0.35	16.69	0.39	16.79	0.49
900	16.93	0.03	16.95	0.05	17.01	0.11	17.09	0.19
800	16.95	-0.35	16.97	-0.33	17.04	-0.26	17.17	-0.13
700	16.95	-0.85	16.96	-0.84	17.05	-0.75	17.22	-0.58
600	16.91	-1.29	16.92	-1.28	17.02	-1.18	17.24	-0.96
500	16.91	-1.79	16.91	-1.79	17.02	-1.68	17.29	-1.41
400	16.88	-2.02	16.90	-2.00	16.98	-1.92	17.32	-1.58
300	16.86	-1.94	16.86	-1.94	16.96	-1.84	17.36	-1.44
200	16.84	-1.76	16.84	-1.76	16.94	-1.66	17.42	-1.18
100	16.87	-1.63	16.87	-1.63	16.95	-1.55	17.55	-0.95
32	16.87	-1.73	16.87	-1.73	16.96	-1.64	17.71	-0.89
8	17.09	-1.41	17.09	-1.41	17.18	-1.32	18.09	-0.41
2	17.64	-0.76	17.65	-0.75	17.74	-0.66	18.89	0.49
0	17.72	XXXX	17.73	XXXX	17.79	XXXX	19.41	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.94	0.13	7.04	0.23	6.98	0.17	7.05	0.24
900	7.29	0.23	7.34	0.28	7.31	0.25	7.37	0.31
800	7.49	0.18	7.53	0.22	7.49	0.18	7.58	0.27
700	7.71	0.19	7.74	0.22	7.72	0.20	7.81	0.29
600	7.86	-0.50	7.90	-0.46	7.87	-0.49	7.97	-0.39
500	8.06	-0.60	8.08	-0.58	8.06	-0.60	8.18	-0.48
400	8.24	-0.54	8.25	-0.53	8.23	-0.55	8.37	-0.41
300	8.45	-0.15	8.46	-0.14	8.44	-0.16	8.59	-0.01
200	8.64	0.16	8.65	0.17	8.64	0.16	8.81	0.33
100	8.96	0.94	8.97	0.95	8.95	0.94	9.16	1.14
32	9.29	-1.01	9.30	-1.00	9.29	-1.01	9.53	-0.77
8	9.66	-0.43	9.67	-0.42	9.67	-0.42	9.95	-0.14
2	10.90	XXXX	10.90	XXXX	10.97	XXXX	10.90	XXXX
0	11.07	XXXX	11.08	XXXX	11.09	XXXX	11.53	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	179.	180.	181.	182.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	11.64	-12.36	11.65	-12.35	11.66	-12.34	19.53	-4.47
-0.125	22.23	-1.47	22.23	-1.47	22.23	-1.47	23.79	0.00
-0.250	25.49	0.08	25.48	0.08	25.48	0.08	25.58	0.18
-0.500	24.67	-0.03	24.67	-0.03	24.66	-0.04	24.66	-0.04
-1.000	20.92	0.02	20.92	0.02	20.92	0.02	20.93	0.03
-2.000	20.67	-0.03	20.67	-0.03	20.67	-0.03	24.47	0.77

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
0	7.48	XXXX	7.48	XXXX	7.49	XXXX	7.43	XXXX
1	4.64	2.53	4.54	2.53	4.65	2.54	4.56	2.45
2	0.56	-1.49	0.58	-1.47	0.39	-1.67	1.81	-0.25

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	11.90	0.00	11.91	0.01	11.91	0.01	11.91	0.01
R(N)	6.32	XXXX	6.33	XXXX	6.32	XXXX	6.20	XXXX
Q(C,0)	0.82	XXXX	0.83	XXXX	0.79	XXXX	1.81	XXXX
Q(E,0)	3.74	XXXX	3.74	XXXX	3.76	XXXX	4.42	XXXX
Q(S,0)	1.75	XXXX	1.75	XXXX	1.76	XXXX	-0.03	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup>)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	28.96	XXXX	28.96	XXXX	28.94	XXXX	30.18	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM<sup>2</sup> SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.90	XXXX	2.90	XXXX	2.90	XXXX	3.90	XXXX

## CASE DPG 2 GPAC OUT PUT DATA

## VELOCITY COMPONENT

K(CM SQ/SEC <sup>2</sup> )	17674	17659	7109	2754
TAPE NO.	183.	184.	85.	186.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	-1.35	-8.48	-1.35	-7.13	0.71	-7.13	0.01
1000	-7.04	-5.55	-5.81	-4.31	-4.73	-3.44	-4.60	-3.11
900	-6.09	-4.60	-5.72	-4.23	-4.66	-3.1	-5.38	-3.89
800	-5.77	-3.82	-5.59	-3.64	-4.53	-2.59	-5.36	-3.41
700	-5.58	-3.73	-5.47	-3.62	-4.42	-2.57	-5.07	-3.22
600	-5.42	-3.36	-5.35	-3.29	-4.37	-2.24	-4.73	-2.67
500	-5.28	-3.29	-5.22	-3.23	-4.19	-2.20	-4.45	-2.47
400	-5.13	-3.16	-5.09	-3.13	-4.07	-2.11	-4.25	-2.29
300	-4.96	-2.89	-4.93	-2.86	-3.92	-1.85	-4.11	-2.04
200	-4.74	-2.37	-4.72	-2.35	-3.74	-1.38	-3.19	-1.63
100	-4.38	-1.81	-4.37	-1.80	-3.45	-0.88	-3.61	-1.24
32	-3.82	-1.82	-3.80	-1.80	-2.99	-0.99	-3.31	-1.38
8	-3.10	-1.22	-3.09	-1.21	-2.42	-0.54	-2.68	-0.80

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.72	2.98	1.73	2.99	-1.25	0.01	-1.26	0.00
1000	-0.67	-0.27	-3.16	-2.76	-2.90	-2.50	-1.78	-1.18
900	-3.58	-3.18	-4.25	-3.85	-4.01	-3.61	-3.14	-2.71
800	-4.38	-3.71	-4.68	-4.01	-4.45	-3.78	-4.26	-3.59
700	-4.73	-3.83	-4.90	-4.00	-4.66	-3.76	-5.01	-4.11
600	-4.91	-3.36	-5.01	-3.46	-4.78	-3.23	-5.40	-3.85
500	-4.99	-2.63	-5.05	-2.68	-4.83	-2.46	-5.61	-3.24
400	-5.01	-1.99	-5.05	-2.03	-4.84	-1.82	-5.70	-2.68
300	-4.98	-2.68	-5.00	-2.70	-4.79	-2.49	-5.68	-3.38
200	-4.87	-3.86	-4.94	-3.93	-4.68	-3.67	-5.57	-4.56
100	-4.60	-4.69	-4.61	-4.70	-4.42	-4.51	-5.31	-5.40
32	-4.08	-4.89	-4.08	-4.89	-3.91	-4.72	-4.75	-5.56
8	-3.33	-4.29	-3.33	-4.29	-3.20	-4.16	-3.84	-4.80

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	183. 2.00HR	184. 2.00HR	185. 2.00HR	186- 2.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.75	0.45	16.71	0.41	16.72	0.42	16.06	-0.24
900	17.05	0.15	17.02	0.12	17.03	0.13	16.86	-0.04
800	17.09	-0.21	17.08	-0.22	17.10	-0.20	17.28	-0.02
700	17.14	-0.66	17.13	-0.67	17.14	-0.66	17.51	-0.29
600	17.15	-1.05	17.14	-1.06	17.16	-1.04	17.57	-0.63
500	17.19	-1.51	17.19	-1.51	17.19	-1.51	17.59	-1.11
400	17.22	-1.68	17.21	-1.69	17.23	-1.67	17.52	-1.38
300	17.26	-1.54	17.25	-1.54	17.28	-1.52	17.43	-1.37
200	17.32	-1.28	17.32	-1.28	17.33	-1.27	17.33	-1.27
100	17.46	-1.04	17.46	-1.04	17.47	-1.03	17.37	-1.13
32	17.62	-0.98	17.62	-0.98	17.54	-0.96	17.71	-0.89
8	18.01	-0.49	18.02	-0.49	18.03	-0.47	18.81	0.31
2	18.82	0.42	18.82	0.42	18.82	0.42	21.09	2.69
0	19.36	XXXX	19.35	XXXX	19.40	XXXX	23.27	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	7.11	0.30	7.01	0.20	7.01	0.20	6.63	-0.18
900	7.42	0.36	7.36	0.30	7.35	0.29	6.99	-0.07
800	7.62	0.31	7.57	0.26	7.56	0.25	7.25	-0.06
700	7.84	0.32	7.81	0.29	7.82	0.28	7.53	0.01
600	8.01	-0.35	7.98	-0.38	7.97	-0.39	7.72	-0.64
500	8.21	-0.45	8.19	-0.47	8.18	-0.48	7.94	-0.72
400	8.41	-0.37	8.38	-0.42	8.37	-0.41	8.14	-0.64
300	8.62	0.02	8.61	0.01	8.59	-0.01	8.39	-0.21
200	8.83	0.35	8.82	0.34	8.81	0.33	8.70	0.22
100	9.14	1.16	9.17	1.15	9.17	1.15	9.37	1.35
32	9.54	-0.76	9.53	-0.77	9.53	-0.77	10.51	0.21
8	9.95	-0.14	9.94	-0.15	9.97	-0.12	12.31	2.22
2	10.90	XXXX	10.89	XXXX	10.90	XXXX	15.99	XXXX
0	11.53	XXXX	11.52	XXXX	11.59	XXXX	19.52	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	183.	184.	185.	186.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	19.53	-4.47	19.52	-4.48	19.52	-4.48	20.03	-3.97
-0.125	23.78	0.08	23.79	0.09	23.79	0.09	23.76	0.06
-0.250	25.59	0.19	25.58	0.18	25.58	0.18	25.57	0.17
-0.500	24.66	-0.04	24.67	-0.03	24.67	-0.03	24.66	-0.04
-1.000	20.94	0.04	20.93	0.03	20.93	0.03	20.93	0.03
-2.000	24.47	0.77	24.47	0.77	24.47	0.77	24.46	0.76

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.43	XXXX	7.43	XXXX	7.11	XXXX	7.51	XXXX
8	4.55	2.44	4.55	2.44	4.02	1.90	4.68	2.57
2	1.82	-0.24	1.81	-0.24	1.71	-0.35	2.29	0.24

SURFACE ENERGY TERMS (LY/SFC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	11.91	0.01	11.89	-0.01	11.90	-0.00	11.89	-0.01
R(N)	6.19	XXXX	6.19	XXXX	6.18	XXXX	5.74	XXXX
Q(C,0)	1.84	XXXX	1.83	XXXX	1.82	XXXX	1.13	XXXX
Q(E,0)	4.40	XXXX	4.39	XXXX	4.39	XXXX	3.68	XXXX
Q(S,0)	-0.04	XXXX	-0.04	XXXX	-0.03	XXXX	0.94	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	30.22	XXXX	30.18	XXXX	27.98	XXXX	5.62	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	3.90	XXXX	3.85	XXXX	3.90	XXXX	2.70	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	2754	2759	2759	2759
TAPE NO.	187.	188.	189.	190.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-7.13	0.00	-7.13	0.00	-7.13	0.00	-7.13	0.00
1000	-6.24	-4.76	-4.64	-3.15	-4.64	-3.15	-6.27	-4.78
900	-5.56	-4.07	-5.41	-3.93	-5.41	-3.93	-5.59	-4.10
800	-5.43	-3.48	-5.40	-3.45	-5.35	-3.40	-5.43	-3.48
700	-5.12	-3.27	-5.11	-3.26	-5.11	-3.26	-5.10	-3.25
600	-4.78	-2.72	-4.77	-2.71	-4.77	-2.71	-4.74	-2.68
500	-4.50	-2.51	-4.49	-2.51	-4.50	-2.51	-4.46	-2.47
400	-4.30	-2.34	-4.30	-2.34	-4.30	-2.34	-4.26	-2.30
300	-4.16	-2.09	-4.15	-2.09	-4.16	-2.09	-4.11	-2.05
200	-4.04	-1.67	-4.03	-1.66	-4.03	-1.66	-3.99	-1.63
100	-3.84	-1.27	-3.85	-1.28	-3.85	-1.28	-3.82	-1.25
32	-3.40	-1.40	-3.40	-1.40	-3.40	-1.40	-3.38	-1.38
8	-2.70	-0.82	-2.69	-0.81	-2.69	-0.81	-2.68	-0.80

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.25	0.01	-1.26	0.00	-1.26	0.00	-1.26	0.00
1000	-0.32	0.08	-1.77	-1.37	-1.77	-1.37	-0.38	0.02
900	-2.92	-2.52	-3.11	-2.71	-3.12	-2.72	-2.99	-2.59
800	-4.17	-3.50	-4.21	-3.54	-4.22	-3.55	-4.25	-3.58
700	-4.95	-4.05	-4.95	-4.05	-4.96	-4.06	-5.01	-4.11
600	-5.36	-3.81	-5.35	-3.80	-5.35	-3.80	-5.41	-3.86
500	-5.57	-3.20	-5.57	-3.20	-5.57	-3.20	-5.63	-3.26
400	-5.67	-2.65	-5.67	-2.65	-5.67	-2.65	-5.71	-2.69
300	-5.66	-3.36	-5.66	-3.30	-5.66	-3.36	-5.68	-3.38
200	-5.56	-4.55	-5.56	-4.55	-5.56	-4.55	-5.58	-4.57
100	-5.29	-5.38	-5.29	-5.38	-5.30	-5.39	-5.31	-5.40
32	-4.74	-5.55	-4.74	-5.55	-4.75	-5.56	-4.75	-5.56
8	-3.84	-4.80	-3.84	-4.80	-3.84	-4.80	-3.84	-4.80

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPF NU. INTERVAL	187. 2.00HR	188. 2.00HR	189. 2.00HR	190. 2.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.10	-0.20	16.10	-0.20	16.10	-0.20	16.09	-0.21
900	16.91	0.01	16.91	0.01	16.91	0.01	16.87	-0.03
800	17.34	0.04	17.35	0.05	17.34	0.04	17.29	-0.01
700	17.59	-0.21	17.59	-0.21	17.57	-0.23	17.51	-0.29
600	17.66	-0.54	17.67	-0.53	17.64	-0.56	17.55	-0.65
500	17.68	-1.02	17.69	-1.01	17.63	-1.07	17.53	-1.17
400	17.63	-1.27	17.63	-1.27	17.53	-1.37	17.42	-1.48
300	17.55	-1.25	17.55	-1.25	17.37	-1.43	17.25	-1.55
200	17.45	-1.15	17.44	-1.16	17.13	-1.47	17.01	-1.59
100	17.46	-1.04	17.47	-1.03	16.91	-1.59	16.81	-1.64
32	17.77	-0.83	17.77	-0.83	16.78	-1.82	16.72	-1.88
8	18.85	0.35	18.85	0.35	17.39	-1.11	17.33	-1.17
2	21.13	2.73	21.07	2.67	18.86	0.46	18.82	0.42
0	23.31	XXXX	23.21	XXXX	20.24	XXXX	20.22	XXXX

VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.67	-0.14	6.67	-0.14	6.67	-0.14	6.72	-0.09
900	7.02	-0.04	7.01	-0.05	7.02	-0.04	6.86	-0.20
800	7.28	-0.03	7.28	-0.03	7.27	-0.04	7.25	-0.06
700	7.55	0.03	7.54	0.02	7.53	0.01	7.53	0.01
600	7.73	-0.63	7.73	-0.63	7.71	-0.65	7.72	-0.64
500	7.96	-0.70	7.95	-0.71	7.92	-0.74	7.91	-0.75
400	8.16	-0.62	8.16	-0.62	8.09	-0.69	8.08	-0.70
300	8.41	-0.19	8.41	-0.19	8.20	-0.40	8.27	-0.33
200	8.73	0.25	8.72	0.24	8.52	0.04	8.49	0.01
100	9.40	1.38	9.39	1.37	9.01	0.99	8.99	0.97
32	10.54	0.24	10.53	0.23	9.82	-0.48	9.80	-0.50
8	12.34	2.25	12.33	2.24	11.16	1.07	11.15	1.06
2	16.62	XXXX	16.01	XXXX	14.00	XXXX	13.98	XXXX
0	19.55	XXXX	19.55	XXXX	16.67	XXXX	16.64	XXXX

CASE OPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	187.	188.	189.	190.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DFG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.03	-3.97	20.03	-3.97	11.52	-12.38	11.61	-12.39
-0.125	23.77	0.07	23.76	0.06	22.20	-1.50	22.20	-1.50
-0.250	25.58	0.18	25.58	0.18	25.48	0.08	25.48	0.08
-0.500	24.66	-0.04	24.67	-0.03	24.67	-0.03	24.67	-0.03
-1.000	20.93	0.03	20.93	0.03	20.92	0.02	20.92	0.02
-2.000	24.47	0.77	24.47	0.77	20.66	-0.04	20.67	-0.03

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.51	XXX	7.51	XXX	7.51	XXX	7.51	XXX
8	4.70	2.59	4.69	2.58	4.69	2.57	4.69	2.57
2	2.30	0.24	2.30	0.24	2.27	0.2	2.27	0.21

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	11.89	-0.01	11.90	-0.00	11.90	0.00	11.90	-0.00
R(N)	5.75	XXX	5.75	XXX	6.01	XXX	6.01	XXX
Q(C,0)	1.12	XXX	1.13	XXX	0.71	XXX	0.73	XXX
Q(F,0)	3.59	XXX	3.69	XXX	2.81	XXX	2.81	XXX
Q(S,0)	0.94	XXX	0.94	XXX	2.48	XXX	2.47	XXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.64	XXX	5.64	XXX	5.62	XXX	5.62	XXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.90	XXX	2.90	XXX	1.90	XXX	1.90	XXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	2754	2759	2759	1250
TAPE NO.	191.	192.	194.	196.
INTERVAL	2.00HR	2.00HR	2.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-7.13	0.00	-8.48	-1.35	-8.48	-1.35	-9.50	0.01
1000	-4.60	-3.11	-5.71	-4.22	-5.68	-4.19	-4.49	-3.56
900	-5.38	-3.89	-6.50	-5.01	-6.45	-4.97	-4.48	-3.36
800	-5.36	-3.41	-6.48	-4.53	-6.43	-4.48	-4.04	-2.72
700	-5.08	-3.23	-6.19	-4.34	-6.15	-4.30	-3.61	-2.14
600	-4.73	-2.67	-5.85	-3.79	-5.80	-3.74	-3.26	-1.35
500	-4.46	-2.47	-5.57	-3.59	-5.53	-3.54	-3.00	-0.70
400	-4.25	-2.29	-5.38	-3.42	-5.32	-3.36	-2.78	-0.10
300	-4.11	-2.05	-5.23	-3.16	-5.18	-3.11	-2.60	-1.05
200	-3.99	-1.03	-5.10	-2.73	-5.05	-2.68	-2.45	-0.90
100	-3.82	-1.25	-4.89	-2.32	-4.86	-2.29	-2.24	-1.62
32	-3.38	-1.38	-4.38	-2.38	-4.35	-2.35	-1.95	-1.89
8	-2.68	-0.80	-3.45	-1.57	-3.48	-1.60	-1.58	-1.58

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.25	0.01	1.73	2.99	1.73	2.99	-1.68	-0.01
1000	-1.78	-1.38	-1.98	-1.58	-2.03	-1.63	-2.13	-0.30
900	-3.14	-2.74	-3.33	-2.93	-3.39	-2.99	-3.59	-1.86
800	-4.26	-3.59	-4.43	-3.76	-4.49	-3.82	-4.34	-2.76
700	-5.01	-4.11	-5.17	-4.27	-5.24	-4.34	-4.71	-3.28
600	-5.40	-3.85	-5.57	-4.02	-5.63	-4.08	-4.88	-3.16
500	-5.63	-3.26	-5.79	-3.42	-5.84	-3.47	-4.92	-2.85
400	-5.71	-2.60	-5.89	-2.87	-5.93	-2.91	-4.91	-2.50
300	-5.68	-3.38	-5.88	-3.57	-5.90	-3.60	-4.82	-3.47
200	-5.57	-4.56	-5.77	-4.76	-5.80	-4.79	-4.67	-3.32
100	-5.31	-5.40	-5.51	-5.60	-5.52	-5.61	-4.39	-3.57
32	-4.75	-5.56	-4.95	-5.76	-4.96	-5.77	-3.88	-3.58
8	-3.84	-4.80	-4.01	-4.97	-4.02	-4.98	-3.18	-3.13

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	191.	192.	194.	196.
INTERVAL	2.00HR	2.00HR	2.00HR	1.00HR

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.07	-0.23	16.09	-0.21	16.05	-0.25	16.29	-0.41
900	16.86	-0.04	16.92	0.02	16.85	-0.05	17.07	-0.33
800	17.28	-0.02	17.36	0.06	17.26	-0.04	17.36	-0.54
700	17.49	-0.31	17.59	-0.21	17.48	-0.32	17.48	-0.92
600	17.55	-0.65	17.66	-0.54	17.53	-0.67	17.46	-1.24
500	17.53	-1.17	17.64	-1.06	17.51	-1.19	17.41	-1.59
400	17.41	-1.49	17.54	-1.36	17.41	-1.49	17.31	-1.89
300	17.25	-1.55	17.37	-1.43	17.23	-1.57	17.15	-2.05
200	17.01	-1.59	17.14	-1.46	16.99	-1.61	16.92	-1.88
100	16.81	-1.69	16.91	-1.59	16.79	-1.71	16.62	-0.88
32	16.72	-1.88	16.79	-1.81	16.71	-1.89	16.12	0.22
8	17.33	-1.17	17.39	-1.11	17.32	-1.18	15.81	0.51
2	18.82	0.42	18.87	0.47	18.82	0.42	15.07	0.37
0	20.22	XXXX	20.23	XXXX	20.20	XXXX	14.23	XXXX

VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.65	-0.16	6.67	-0.14	6.65	-0.16	6.71	2.06
900	7.01	-0.05	6.99	-0.07	7.01	-0.05	7.12	2.00
800	7.27	-0.04	7.26	-0.05	7.27	-0.04	7.38	1.70
700	7.53	0.01	7.53	0.01	7.53	0.01	7.61	1.23
600	7.70	-0.66	7.71	-0.65	7.71	-0.65	7.77	0.71
500	7.91	-0.75	7.92	-0.74	7.92	-0.74	7.95	0.37
400	8.07	-0.71	8.09	-0.69	8.08	-0.70	8.11	0.15
300	8.27	-0.33	8.29	-0.31	8.27	-0.33	8.29	0.27
200	8.49	0.01	8.52	0.04	8.50	0.02	8.45	1.03
100	8.97	0.95	9.01	0.99	8.99	1.47	8.72	1.91
32	9.71	-0.59	9.82	-0.48	9.81	-0.49	8.98	-0.70
8	11.15	1.06	11.16	1.07	11.16	1.07	9.30	-0.31
2	13.98	XXXX	14.03	XXXX	14.02	XXXX	9.85	XXXX
0	16.64	XXXX	16.68	XXXX	16.66	XXXX	10.47	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	191. 2.00HR	192. 2.00HR	194. 2.00HR	196. 1.00HR
----------------------	----------------	----------------	----------------	----------------

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	11.61	-12.39	11.62	-12.38	11.61	-12.39	7.67	-4.03
-0.125	22.20	-1.50	22.20	-1.50	22.21	-1.49	23.78	-1.32
-0.250	25.48	0.08	25.48	0.08	25.48	0.08	25.67	0.07
-0.500	24.67	-0.03	24.66	-0.04	24.66	-0.04	24.67	-0.03
-1.000	20.92	0.02	20.93	0.03	20.92	0.02	20.91	0.01
-2.000	20.67	-0.03	20.66	-0.04	20.66	-0.04	20.66	-0.04

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
0	7.51	XXXX	7.93	XXXX	7.92	XXXX	6.85	XXXX
8	4.69	2.57	5.30	3.19	5.32	3.21	3.56	3.51
2	2.27	0.21	2.54	0.49	2.56	0.50	1.89	1.89

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	11.89	-0.01	11.89	-0.01	11.89	-0.01	6.51	-0.09
R(N)	6.01	XXXX	6.01	XXXX	6.01	XXXX	2.66	XXXX
Q(C,T)	0.72	XXXX	0.71	XXXX	0.73	XXXX	-1.52	XXXX
Q(E,C)	2.81	XXXX	2.82	XXXX	2.81	XXXX	2.30	XXXX
Q(S,D)	2.47	XXXX	2.47	XXXX	2.47	XXXX	1.89	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.64	XXXX	5.94	XXXX	5.92	XXXX	19.74	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.90	XXXX	1.90	XXXX	1.90	XXXX	0.80	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	12504	12489	12569	12569
TAPE NO.	197.	198.	199.	200.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-9.50	0.01	-9.50	0.01	-8.45	1.06	-8.48	1.03
1000	-6.26	-5.33	-4.51	-3.58	-5.04	-4.11	-6.42	-5.49
900	-4.73	-3.61	-4.49	-3.38	-5.03	-3.91	-5.25	-4.13
800	-4.11	-2.79	-4.05	-2.73	-4.59	-3.27	-4.66	-3.34
700	-3.64	-2.16	-3.63	-2.15	-4.17	-2.69	-4.19	-2.72
600	-3.27	-1.36	-3.27	-1.36	-3.82	-1.91	-3.83	-1.92
500	-2.99	-0.69	-3.01	-0.71	-3.55	-1.25	-3.55	-1.25
400	-2.78	-0.10	-2.79	-0.11	-3.33	-0.65	-3.34	-0.66
300	-2.60	-1.05	-2.62	-1.07	-3.16	-1.61	-3.16	-1.61
200	-2.45	-0.90	-2.46	-0.91	-2.99	-1.43	-2.99	-1.44
100	-2.24	-1.62	-2.25	-1.63	-2.77	-2.15	-2.76	-2.14
32	-1.95	-1.89	-1.95	-1.89	-2.42	-2.36	-2.42	-2.36
8	-1.58	-1.58	-1.58	-1.58	-1.97	-1.97	-1.97	-1.97

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.68	-2.01	-1.67	-0.00	1.73	3.40	1.73	3.40
1000	-1.34	0.49	-2.13	-0.30	-1.90	-0.07	-0.38	1.45
900	-3.47	-1.74	-3.59	-1.86	-3.37	-1.64	-3.16	-1.43
800	-4.31	-2.73	-4.33	-2.75	-4.11	-2.53	-4.07	-2.49
700	-4.70	-3.27	-4.70	-3.27	-4.48	-3.05	-4.47	-3.04
600	-4.88	-3.15	-4.87	-3.15	-4.65	-2.93	-4.64	-2.92
500	-4.92	-2.85	-4.92	-2.85	-4.69	-2.63	-4.69	-2.63
400	-4.90	-2.49	-4.91	-2.49	-4.67	-2.26	-4.67	-2.26
300	-4.82	-3.47	-4.82	-3.47	-4.59	-3.24	-4.59	-3.24
200	-4.68	-3.33	-4.72	-3.37	-4.45	-3.10	-4.45	-3.10
100	-4.39	-3.57	-4.39	-3.57	-4.17	-3.35	-4.17	-3.35
32	-3.88	-3.58	-3.88	-3.58	-3.68	-3.38	-3.68	-3.38
8	-3.18	-3.13	-3.18	-3.13	-3.02	-2.97	-3.02	-2.97

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	197. 1.00HR	198. 1.00HR	199. 1.00HR	200. 1.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.29	-0.41	16.31	-0.39	16.29	-0.41	16.30	-0.40
900	17.07	-0.33	17.09	-0.31	17.07	-0.33	17.08	-0.32
800	17.36	-0.54	17.38	-0.52	17.36	-0.54	17.36	-0.54
700	17.47	-0.93	17.51	-0.89	17.49	-0.91	17.48	-0.92
600	17.47	-1.23	17.49	-1.21	17.46	-1.24	17.47	-1.23
500	17.42	-1.58	17.44	-1.56	17.42	-1.58	17.41	-1.59
400	17.30	-1.90	17.33	-1.87	17.30	-1.90	17.31	-1.89
300	17.15	-2.05	17.18	-2.02	17.15	-2.05	17.15	-2.05
200	16.91	-1.89	16.95	-1.85	16.91	-1.89	16.91	-1.89
100	16.62	-0.88	16.65	-0.85	16.61	-0.89	16.62	-0.88
32	16.12	0.22	16.14	0.24	16.12	0.22	16.12	0.22
8	15.81	0.51	15.82	0.52	15.81	0.51	15.81	0.51
2	15.07	0.37	15.08	0.38	15.07	0.37	15.07	0.37
0	14.23	XXXX	14.24	XXXX	14.23	XXXX	14.23	XXXX

VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.73	2.08	6.70	2.05	6.72	2.07	6.75	2.10
900	7.13	2.01	7.07	1.95	7.12	2.00	7.16	2.04
800	7.38	1.70	7.35	1.67	7.38	1.70	7.39	1.71
700	7.62	1.24	7.61	1.23	7.61	1.23	7.62	1.24
600	7.78	1.72	7.77	0.71	7.78	0.72	7.78	0.72
500	7.96	0.38	7.96	0.38	7.96	0.38	7.97	0.39
400	8.12	0.16	8.12	0.16	8.12	0.16	8.11	0.15
300	8.29	0.27	8.31	0.29	8.30	0.28	8.30	0.28
200	8.45	1.03	8.46	1.04	8.45	1.03	8.46	1.04
100	8.72	1.91	8.73	1.92	8.73	1.92	8.74	1.93
32	8.98	-0.70	8.99	-0.69	8.98	-0.70	8.99	-0.69
8	9.30	-0.31	9.31	-0.30	9.30	-0.31	9.31	-0.30
2	9.85	XXXX	9.86	XXXX	9.84	XXXX	9.85	XXXX
0	10.47	XXXX	10.48	XXXX	10.46	XXXX	10.47	XXXX

## CASE DPG 2 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	197.	198.	199.	200.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-C.000	7.67	-4.03	7.67	-4.03	7.67	-4.03	7.67	-4.03
-C.125	23.07	-1.33	23.07	-1.33	23.07	-1.33	23.07	-1.33
-C.250	25.67	0.07	25.67	0.07	25.67	0.07	25.67	0.07
-0.500	24.67	-0.03	24.68	-0.02	24.67	-0.03	24.67	-0.03
-1.000	20.91	0.01	20.91	0.01	20.91	0.01	20.91	0.01
-2.000	20.67	-0.03	20.67	-0.03	20.68	-0.02	20.67	-0.03

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
R <sup>1</sup>	6.85	XXXX	6.85	XXXX	6.88	XXXX	6.88	XXXX
R	3.56	3.51	3.56	3.51	3.61	3.56	3.61	3.56
2	1.89	1.89	1.89	1.89	1.92	1.92	1.92	1.92

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(U)	6.50	-0.10	6.50	-0.10	6.50	-0.10	6.51	-0.19
R(N)	2.66	XXXX	2.65	XXXX	2.66	XXXX	2.66	XXXX
Q(C,0)	-1.52	XXXX	-1.53	XXXX	-1.52	XXXX	-1.52	XXXX
Q(E,0)	2.30	XXXX	2.31	XXXX	2.31	XXXX	2.31	XXXX
Q(S,0)	1.88	XXXX	1.89	XXXX	1.89	XXXX	1.89	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	19.74	XXXX	19.72	XXXX	19.90	XXXX	19.92	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.90	XXXX	0.80	XXXX	0.80	XXXX	0.90	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	12564	12564	14269	14279
TAPE NO.	201.	202.	203.	204.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	1.03	-8.48	1.03	-8.47	1.04	-8.48	1.03
1000	-6.41	-5.48	-5.06	-4.13	-5.05	-4.12	-6.36	-5.43
900	-5.24	-4.12	-5.05	-3.93	-4.88	-3.76	-5.09	-3.97
800	-4.66	-3.34	-4.60	-3.28	-4.45	-3.14	-4.52	-3.20
700	-4.20	-2.72	-4.18	-2.70	-4.09	-2.61	-4.12	-2.64
600	-3.84	-1.93	-3.83	-1.92	-3.80	-1.89	-3.81	-1.90
500	-3.56	-1.26	-3.56	-1.26	-3.57	-1.27	-3.57	-1.27
400	-3.35	-0.67	-3.35	-0.67	-3.38	-0.70	-3.38	-0.69
300	-3.17	-1.62	-3.17	-1.62	-3.21	-1.66	-3.19	-1.64
200	-3.00	-1.45	-3.00	-1.45	-3.02	-1.47	-3.02	-1.47
100	-2.78	-2.16	-2.78	-2.16	-2.78	-2.16	2.77	-2.15
32	-2.43	-2.37	-2.43	-2.37	-2.42	-2.36	-2.41	-2.35
8	-1.98	-1.98	-1.98	-1.98	-1.96	-1.96	-1.96	-1.96

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	3.40	1.73	3.40	1.72	3.39	1.72	3.39
1000	-0.34	1.48	-1.89	-0.06	-2.05	-0.22	-0.53	1.30
900	-3.13	-1.40	-3.35	-1.63	-3.46	-1.73	-3.23	-1.50
800	-4.04	-2.46	-4.10	-2.52	-4.08	-2.50	-4.03	-2.45
700	-4.45	-3.02	-4.47	-3.04	-4.38	-2.95	-4.37	-2.94
600	-4.62	-2.90	-4.63	-2.91	-4.52	-2.80	-4.52	-2.80
500	-4.68	-2.61	-4.68	-2.61	-4.57	-2.50	-4.58	-2.51
400	-4.66	-2.26	-4.67	-2.26	-4.56	-2.15	-4.57	-2.16
300	-4.58	-3.23	-4.58	-3.23	-4.49	-3.14	-4.50	-3.15
200	-4.45	-3.10	-4.45	-3.10	-4.34	-3.02	-4.38	-3.03
100	-4.17	-3.35	-4.17	-3.35	-4.12	-3.30	-4.13	-3.30
32	-3.63	-3.38	-3.69	-3.39	-3.64	-3.34	-3.64	-3.34
8	-3.02	-2.97	-3.02	-2.97	-2.98	-2.93	-2.98	-2.93

CASE DPG 2 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	201. 1.00HR	202. 1.00HR	203. 1.00HR	204. 1.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DFG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.31	-0.39	16.31	-0.39	16.43	-0.27	16.42	-0.28
900	17.09	-0.31	17.10	-0.30	17.14	-0.26	17.12	-0.28
800	17.38	-0.52	17.39	-0.51	17.36	-0.54	17.34	-0.56
700	17.51	-0.89	17.51	-0.89	17.46	-0.94	17.43	-0.97
600	17.48	-1.22	17.49	-1.21	17.46	-1.24	17.43	-1.27
500	17.44	-1.56	17.45	-1.55	17.45	-1.55	17.42	-1.58
400	17.34	-1.86	17.34	-1.86	17.41	-1.79	17.38	-1.82
300	17.17	-2.03	17.18	-2.02	17.36	-1.84	17.33	-1.87
200	16.95	-1.85	16.94	-1.86	17.26	-1.54	17.23	-1.57
100	16.65	-0.85	16.65	-0.85	17.17	-0.33	17.14	-0.36
32	16.15	0.25	16.15	0.25	16.97	1.07	16.95	1.05
8	15.83	0.53	15.82	0.52	16.99	1.69	16.95	1.65
2	15.09	0.39	15.09	0.39	16.88	2.18	16.85	2.15
0	14.25	XXXX	14.25	XXXX	16.71	XXXX	16.69	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.74	2.09	6.73	2.08	6.71	2.06	6.81	2.16
900	7.13	2.01	7.13	2.01	6.96	1.84	7.21	2.79
800	7.38	1.70	7.38	1.70	7.31	1.63	7.43	1.75
700	7.62	1.24	7.62	1.24	7.58	1.20	7.65	1.27
600	7.77	0.71	7.77	0.71	7.77	0.71	7.82	0.76
500	7.97	0.39	7.96	0.38	7.99	0.41	8.01	0.43
400	8.12	0.16	8.12	0.16	8.17	0.21	8.18	0.22
300	8.31	0.29	8.29	0.27	8.37	0.35	8.38	0.36
200	8.46	1.04	8.46	1.04	8.57	1.15	8.57	1.15
100	8.73	1.92	8.73	1.92	8.91	2.09	8.90	2.09
32	8.99	-0.69	8.99	-0.69	9.22	-0.46	9.21	-0.47
8	9.31	-0.30	9.31	-0.30	9.59	-0.02	9.59	-0.02
2	9.85	XXXX	9.85	XXXX	10.13	XXXX	10.13	XXXX
0	10.47	XXXX	10.47	XXXX	11.03	XXXX	11.04	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	201.	202.	203.	204.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	7.68	-4.02	7.67	-4.03	18.38	6.68	18.38	6.68
-0.125	23.07	-1.33	23.07	-1.33	24.06	-0.34	24.06	-0.34
-0.250	25.67	0.07	25.67	0.07	25.70	0.10	25.70	0.10
-0.500	24.67	-0.03	24.68	-0.02	24.67	-0.03	24.67	-0.03
-1.000	20.91	0.01	20.91	0.01	20.92	0.02	20.91	0.01
-2.000	20.66	-0.04	20.67	-0.03	24.48	0.08	24.47	0.07

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	6.88	XXXX	6.88	XXXX	6.86	XXXX	6.86	XXXX
8	3.61	3.56	3.61	3.56	3.57	3.52	3.57	3.52
2	1.92	1.92	1.93	1.93	2.22	2.22	2.23	2.23

SURFACE ENERGY TERMS (LY/SEC)X100C

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	6.50	-0.10	6.51	-0.09	6.50	-0.10	6.49	-0.11
R(N)	2.66	XXXX	2.66	XXXX	2.45	XXXX	2.45	XXXX
Q(C,D)	-1.53	XXXX	-1.53	XXXX	-0.30	XXXX	-0.29	XXXX
Q(E,D)	2.31	XXXX	2.31	XXXX	3.23	XXXX	3.22	XXXX
Q(S,D)	1.89	XXXX	1.89	XXXX	-0.47	XXXX	-0.47	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	19.92	XXXX	19.92	XXXX	22.54	XXXX	22.54	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.90	XXXX	0.90	XXXX	1.50	XXXX	1.50	XXXX

CASE DPG 2 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(C' SQ/SEC)	14274	3254	3254	3250
TAPE NU.	205.	206.	207.	208.
INTERV. L	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-8.48	1.03	-9.50	0.01	-9.50	0.01	-9.50	0.01
1000	-5.03	-1.10	-4.45	-3.52	-6.41	-5.48	-4.47	-3.54
900	-4.86	-3.74	-4.88	-3.76	-5.01	-3.89	-4.89	-3.77
800	-4.45	-3.12	-4.59	-3.27	-4.63	-3.31	-4.61	-3.24
700	-4.08	-2.60	-3.95	-2.47	-3.97	-2.49	-3.96	-2.48
600	-3.79	-1.88	-3.30	-1.39	-3.32	-1.41	-3.32	-1.41
500	-3.56	-1.26	-2.80	-0.50	-2.82	-0.52	-2.82	-0.52
400	-3.37	-0.69	-2.48	0.20	-2.49	0.19	-2.49	0.19
300	-3.19	-1.04	-2.32	-0.17	-2.34	-0.79	-2.34	-0.79
200	-3.01	-1.46	-2.31	-0.76	-2.33	-0.78	-2.33	-0.78
100	-2.77	-2.15	-2.39	-1.77	-2.39	-1.78	-2.40	-1.78
32	-2.41	-2.35	-2.31	-2.25	-2.32	-2.26	-2.31	-2.25
8	-1.96	-1.96	-1.94	-1.94	-1.90	-1.94	-1.94	-1.94

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.73	3.40	-1.68	-0.01	-1.68	-0.01	-1.65	0.07
1000	-2.06	-0.23	-1.79	0.04	-0.93	0.89	-1.79	0.04
900	-3.47	-1.74	-3.18	-1.45	-3.11	-1.38	-3.18	-1.45
800	-4.09	-2.51	-4.32	-2.74	-4.30	-2.72	-4.31	-2.73
700	-4.40	-2.97	-4.98	-3.55	-4.97	-3.54	-4.97	-3.54
600	-4.53	-2.81	-5.26	-3.54	-5.25	-3.53	-5.25	-3.53
500	-4.58	-2.51	-5.32	-3.25	-5.32	-3.25	-5.31	-3.24
400	-4.57	-2.16	-5.22	-2.81	-5.22	-2.81	-5.22	-2.81
300	-4.50	-3.15	-5.03	-3.68	-5.02	-3.67	-5.02	-3.67
200	-4.38	-3.73	-4.78	-3.43	-4.78	-3.43	-4.78	-3.43
100	-4.12	-3.30	-4.43	-3.61	-4.45	-3.63	-4.45	-3.63
32	-3.64	-3.34	-3.99	-3.69	-3.99	-3.69	-4.00	-3.70
8	-2.98	-2.93	-3.33	-3.28	-3.33	-3.28	-3.33	-3.28

## CASE DPG 2 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	205.	206.	207.	208.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	16.41	-0.29	16.03	-0.67	16.04	-0.66	16.05	-0.55
900	17.12	-0.28	16.82	-0.58	16.84	-0.56	16.84	-0.56
800	17.33	-0.57	17.38	-0.52	17.39	-0.51	17.40	-0.50
700	17.44	-0.96	17.73	-0.67	17.75	-0.65	17.75	-0.65
600	17.43	-1.27	17.87	-0.83	17.97	-0.80	17.91	-0.79
500	17.42	-1.58	17.91	-1.09	17.94	-1.06	17.94	-1.06
400	17.38	-1.82	17.83	-1.37	17.87	-1.33	17.86	-1.34
300	17.32	-1.88	17.65	-1.55	17.68	-1.52	17.69	-1.51
200	17.23	-1.57	17.35	-1.45	17.39	-1.41	17.38	-1.42
100	17.14	-0.36	16.99	-0.51	17.02	-0.48	17.02	-0.48
32	16.95	1.05	16.61	0.71	16.62	0.72	16.62	0.72
8	16.96	1.66	16.71	1.41	16.71	1.41	16.71	1.41
2	16.86	2.16	17.16	2.46	17.16	2.46	17.16	2.46
0	16.69	XXXX	17.54	XXXX	17.54	XXXX	17.54	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.76	2.11	6.61	1.96	6.62	1.97	6.62	1.97
900	7.17	2.05	6.95	1.83	6.96	1.84	6.96	1.84
800	7.42	1.74	7.25	1.57	7.27	1.59	7.26	1.58
700	7.65	1.27	7.57	1.19	7.58	1.20	7.58	1.20
600	7.81	0.75	7.81	0.75	7.82	0.76	7.82	0.76
500	8.01	0.43	8.04	0.46	8.06	0.48	8.06	0.48
400	8.18	0.22	8.21	0.25	8.23	0.27	8.23	0.27
300	8.38	0.36	8.36	0.34	8.37	0.35	8.39	0.37
200	8.57	1.15	8.47	1.05	8.49	1.06	8.48	1.06
100	8.91	2.10	8.74	1.93	8.74	1.93	8.74	1.93
32	9.21	-0.47	9.23	-0.45	9.24	-0.44	9.23	-0.45
8	9.10	-0.01	10.11	0.52	10.14	0.53	10.13	0.52
2	10.14	XXXX	12.54	XXXX	12.55	XXXX	12.55	XXXX
0	11.03	XXXX	14.54	XXXX	14.54	XXXX	14.55	XXXX

CASE DPG 2 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	205.	206.	207.	208.
INTERVAL	1.0LHR	1.00HR	1.00HR	1.00HR

SUIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-C.000	18.38	6.68	18.09	6.39	18.09	6.39	18.09	6.39
-0.125	24.06	-0.34	24.03	-0.37	24.03	-0.37	24.03	-0.37
-0.250	25.71	0.11	25.71	0.11	25.70	0.10	25.69	0.09
-0.500	24.68	-0.02	24.67	-0.03	24.68	-0.02	24.67	-0.03
-1.000	20.91	0.01	20.91	0.01	20.92	0.02	20.92	0.02
-2.000	24.48	0.08	24.48	0.08	24.47	0.07	24.47	0.07

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	6.86	XXXX	7.02	XXXX	7.02	XXXX	7.02	XXXX
8	3.57	3.52	3.85	3.80	3.84	3.79	3.86	3.81
2	2.22	2.22	1.75	1.75	1.74	1.74	1.75	1.75

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	6.50	-0.10	6.49	-0.11	6.50	-0.10	6.49	-0.11
R(N)	2.45	XXXX	2.31	XXXX	2.31	XXXX	2.31	XXXX
Q(C,0)	-0.30	XXXX	0.21	XXXX	0.20	XXXX	0.20	XXXX
Q(E,0)	3.22	XXXX	2.25	XXXX	2.25	XXXX	2.25	XXXX
Q(S,0)	-0.47	XXXX	-0.15	XXXX	-0.15	XXXX	-0.15	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	22.54	XXXX	5.26	XXXX	5.26	XXXX	5.24	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.50	XXXX	1.10	XXXX	1.10	XXXX	1.10	XXXX

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 2                            12.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	0.97	4.09	26.85	8.51	27.21
PERSIST DIFF	3.31	2.30	10.17	1.69	14.94
GPAC DIFF	133.	5.00	8.26	7.27	5.29
GPAC DIFF	134.	4.75	7.33	7.25	4.71
GPAC DIFF	135.	4.24	7.24	7.50	3.45
GPAC DIFF	136.	4.26	8.17	7.50	3.45
GPAC DIFF	137.	4.30	8.15	7.04	3.42
GPAC DIFF	138.	4.27	7.22	7.01	3.50
GPAC DIFF	139.	4.78	7.30	6.70	5.41
GPAC DIFF	140.	5.10	8.24	6.85	5.09
GPAC DIFF	141.	8.31	4.60	7.85	4.73
GPAC DIFF	142.	7.82	4.28	7.69	4.87
GPAC DIFF	143.	7.66	4.82	7.52	3.45
GPAC DIFF	144.	7.70	4.81	7.05	3.40
GPAC DIFF	145.	7.82	4.25	7.16	5.20
GPAC DIFF	146.	8.34	4.56	7.31	5.10
GPAC DIFF	150.	5.10	8.20	7.32	5.27
					7.37

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 2

6.00 HOUR

	TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE		1.46	1.22	23.04	8.40	27.98
PERSIST DIFF		3.14	3.30	6.88	1.39	17.36
GPAC DIFF	157.	7.39	1.09	4.47	1.84	10.03
GPAC DIFF	158.	6.87	0.91	4.40	1.94	10.02
GPAC DIFF	159.	7.30	0.96	4.26	1.48	10.00
GPAC DIFF	160.	8.95	3.05	4.61	1.68	10.07
GPAC DIFF	161.	8.53	2.35	4.55	1.67	10.06
GPAC DIFF	162.	8.94	2.67	4.26	1.46	10.03
GPAC DIFF	163.	8.88	2.73	3.73	1.74	8.68
GPAC DIFF	164.	8.47	2.38	4.00	2.00	8.71
GPAC DIFF	165.	8.89	3.10	4.00	1.96	8.72
GPAC DIFF	166.	9.11	0.80	4.11	3.02	7.64
GPAC DIFF	167.	8.71	0.85	3.80	2.58	7.63
GPAC DIFF	168.	8.99	0.80	3.80	2.62	7.63
GPAC DIFF	169.	9.00	0.80	4.27	2.21	9.06
GPAC DIFF	170.	8.84	0.82	4.53	2.69	9.07
GPAC DIFF	171.	9.10	0.82	4.57	2.47	9.08
GPAC DIFF	172.	10.97	2.32	4.26	2.23	9.06
GPAC DIFF	173.	10.71	2.00	4.26	2.22	9.06
GPAC DIFF	174.	11.01	2.76	4.74	2.37	9.09

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 2   2.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	1.99	1.49	18.11	8.40	23.30
PERSIST DIFF	1.73	2.13	1.56	1.15	8.66
GPAC DIFF	176.	2.13	3.43	1.37	0.51
GPAC DIFF	177.	2.38	3.31	1.37	0.52
GPAC DIFF	178.	2.17	3.40	1.31	0.51
GPAC DIFF	179.	3.07	3.71	1.39	0.51
GPAC DIFF	180.	3.30	3.54	1.38	0.52
GPAC DIFF	181.	3.11	3.68	1.30	0.52
GPAC DIFF	182.	3.25	3.63	0.94	0.49
GPAC DIFF	183.	3.24	3.47	1.01	0.50
GPAC DIFF	184.	3.01	3.66	1.02	0.49
GPAC DIFF	185.	2.07	3.37	1.00	0.49
GPAC DIFF	186.	2.42	3.80	1.13	0.03
GPAC DIFF	187.	2.67	3.74	1.08	0.84
GPAC DIFF	188.	2.46	3.77	1.07	0.83
GPAC DIFF	189.	2.45	3.77	1.07	0.58
GPAC DIFF	190.	2.66	3.77	1.14	0.57
GPAC DIFF	191.	2.42	3.80	1.14	0.58
GPAC DIFF	192.	3.44	4.05	1.07	0.57
GPAC DIFF	194.	3.41	4.08	1.16	0.57
					5.09

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 2

1.00 HOUR

	TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE		1.51	1.54	17.88	7.32	21.84
PERSIST DIFF		2.20	1.66	0.72	1.47	3.63
GPAC DIFF	196.	1.94	2.84	1.18	1.25	1.73
GPAC DIFF	197.	2.27	2.83	1.18	1.25	1.73
GPAC DIFF	198.	1.95	2.84	1.16	1.24	1.73
GPAC DIFF	199.	2.41	2.81	1.18	1.25	1.73
GPAC DIFF	200.	2.65	2.82	1.18	1.26	1.73
GPAC DIFF	201.	2.65	2.81	1.16	1.26	1.73
GPAC DIFF	202.	2.43	2.80	1.16	1.25	1.73
GPAC DIFF	203.	2.38	2.75	1.33	1.24	2.73
GPAC DIFF	204.	2.60	2.76	1.34	1.31	2.73
GPAC DIFF	205.	2.37	2.75	1.34	1.30	2.73
GPAC DIFF	206.	2.13	2.99	1.20	1.20	2.61
GPAC DIFF	207.	2.45	2.99	1.18	1.21	2.61
GPAC DIFF	208.	2.14	2.99	1.18	1.21	2.61

## CASE DPG 3 TAPE LOG

TAPE NO.	FCST INT	SM	KM8 DB	SCG	ADV	GEO	REMARKS
-------------	-------------	----	-----------	-----	-----	-----	---------

220.	12.00	A	V	F	N	O	
221.	12.00	A	V	FF	NN	I	
222.	12.00	A	V	FF	NN	O	
225.	12.00	B	V	FF	NN	O	
239.	6.00	A	V	FF	NN	O	
240.	6.00	A	V	FF	NN	O	
241.	6.00	A	V	FF	NN	O	
255.	2.00	A	V	AA	NN	O	
256.	2.00	A	V	AA	NN	O	
257.	2.00	A	V	AA	NN	O	
258.	2.00	A	V	FF	NN	O	
259.	2.00	A	V	FF	NN	O	
260.	2.00	A	V	FF	NN	O	
264.	2.00	B	F	AA	NN	O	
265.	2.00	B	F	AA	NN	O	
266.	2.00	B	F	AA	NN	O	
267.	2.00	A	F	AA	NN	O	
268.	2.00	A	F	AA	NN	O	
269.	2.00	A	F	AA	NN	O	
270.	2.00	A	F	AA	NN	O	
271.	2.00	A	F	AA	NN	O	
272.	2.00	A	F	AA	NN	O	
274.	1.00	A	V	AA	NN	O	
275.	1.00	A	V	AA	NN	O	
276.	1.00	A	V	AA	NN	O	
277.	1.00	A	V	FF	NN	O	
278.	1.00	A	V	FF	NN	O	
279.	1.00	A	V	FF	NN	O	
283.	1.00	B	F	AA	NN	O	
284.	1.00	B	F	AA	NN	O	
285.	1.00	B	F	AA	NN	O	
286.	1.00	A	F	AA	NN	O	
287.	1.00	A	F	AA	NN	O	
288.	1.00	A	F	AA	NN	O	
289.	1.00	A	F	FF	NN	O	
290.	1.00	A	F	FF	NN	O	

DPG 3 INITIAL CONDITIONS - 0500L 14 AUGUST 1969  
 (PAGE 1 OF 2 PAGES)

SOIL PARAMETERS

LEVEL (M)	TEMP (DEG C)		
-0.000	8.80	LAMBDA	= 0.59 CAL/CM DEG <sup>3</sup>
-0.125	26.90	MU/LAMBDA	= 0.0037 CM /SEC <sup>2</sup>
-0.250	27.60	(MU/LAMBDA) <sup>1/2</sup>	= 0.036 CAL/CM DEG SEC <sup>4</sup> <sup>2</sup>
-0.500	26.40	Z(0)	= 2.0 CM
-1.000	22.70	S(0)	= 0.0004 CAL/CM SEC MB <sup>2</sup>
-2.000	22.60	G	= 3500 CM SEC DEG/CAL

RADIATION PARAMETERS

LOCAL TIME = 0500	N = 0.20
DELTA = 14.66 DEG	PSI = 0.976
R = 1.16 X 10 <sup>-5</sup> DEG C/SEC	F(C) = 1.00
CLOUD CLASS = 1	J = 0.26
E'(8) = 6.66 MB	M = 0.620
EPSILON = 0.950	N = 0.0415 MB <sup>-1/2</sup>
PHI = 40.2 DEG	H = -105.0 DEG

HORIZONTAL GRADIENTS

LEVEL (M)	DE/DX (MB/100KM)	DE/DY (MB/100KM)	DT/DX (DEG C/100KM)	DT/DY (DEG C/100KM)
200	0.72	-0.69	-0.30	0.07
600	0.55	-0.73	-0.30	0.15
1000	0.37	-0.77	-0.30	0.23

DPG 3 INITIAL CONDITIONS - 0500L 14 AUGUST 1969  
 (PAGE 2 OF 2 PAGES)

LEVEL (M)	WIND COMPONENTS		TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
	U (M/SEC)	V		
1000	2.86	2.96	20.00	
900	2.65	3.15	20.80	6.61
800	2.42	3.33	21.60	6.81
700	2.18	3.49	22.30	7.01
600	1.80	3.12	23.00	7.26
500	1.80	3.12	23.00	7.69
400	1.31	2.80	23.00	7.69
300	0.31	2.55	23.00	7.85
200	-0.96	2.39	23.10	8.02
100	-2.50	1.82	21.00	7.80
32	-3.73	0.79	19.60	7.16
8	-2.98	0.16	14.20	6.41
				6.66

ADVECTION TERMS  
 $-1 \quad 5$   
 $(\text{SEC} \times 10^5)$

LEVEL (M)	ALPHA(1)	BETA(1)	ALPHA(2)	BETA(2)
200	0.25	-0.12	0.00	2.18
600	0.27	-0.31	0.00	1.38
1000	0.30	-0.50	0.00	0.58

SURFACE CONTOUR GRADIENTS

PREDICTION INTERVAL (HR)	AZIMUTH (DEG FROM NORTH)	MAGNITUDE (FT/100KM)
0	150.0	15.22
1	160.0	15.22
2	170.0	15.22
6	180.0	15.22
12	220.0	15.22

CASE DPG 3 COMPARISON DATA FROM DUGWAY ( 1 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	4.54	1.65		
1000	2.00	3.60	20.00	3.45
900	1.81	3.70	21.00	3.61
800	1.74	3.73	21.80	3.84
700	1.74	3.73	22.30	3.99
600	1.96	4.20	23.00	4.18
500	2.18	4.67	23.50	4.34
400	1.94	5.32	22.30	4.72
300	0.72	5.10	22.20	5.24
200	-0.72	4.06	22.50	5.76
100	-1.54	2.57	19.50	6.52
32	-1.64	1.70	15.20	10.20
8	-1.57	1.41	14.00	10.37
2	-1.58	1.32	12.80	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	7.90	8	2.11
-0.125	26.30	2	2.06
-0.250	27.40		
-0.500	26.20		
-1.000	22.70		SURFACE SHFAR STRESS (DYNES/CM SQ.)X10
-2.000	22.60		TAU= X)XX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(D)=	1.50	Q(E,C)=	XXXX
R(N)=	XXXX	Q(S,C)=	XXXX
Q(C,C)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E= XXXX

CASE OPG 3 COMPARISON DATA FROM DUGWAY ( 2 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEU	4.76	0.84		
1000	2.30	3.41	17.60	5.24
900	2.18	3.49	18.60	5.12
800	2.00	3.60	19.60	5.12
700	1.87	3.67	20.00	5.24
600	1.74	3.73	20.80	5.47
500	1.74	3.73	21.30	5.72
400	1.48	3.84	21.00	5.93
300	0.56	3.56	20.20	6.11
200	-0.43	3.06	20.20	6.33
100	-1.21	2.27	20.10	6.71
32	-1.51	1.62	20.10	10.00
8	-1.57	1.41	20.10	10.05
2	-1.58	1.32	20.10	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	19.60	8	2.11
-0.125	26.00	2	2.06
-0.250	27.10		
-0.500	26.30		
-1.000	22.70		SURFACE SHEAR STRESS (DYNES/CM SQ.) X10
-2.000	22.60		TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC) X1000

S(D)=	6.50	Q(E,C)=	XXXX
R(N)=	XXXX	Q(S,C)=	XXXX
Q(C,O)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) X100

E= XXXX

CASE DPG 3 COMPARISON DATA FROM DUGWAY ( 6 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	4.83	0.00		
1000	6.02	7.71	20.50	8.72
900	6.16	7.60	21.50	9.22
800	6.16	7.60	22.60	9.61
700	5.56	7.10	23.70	10.09
600	5.96	7.10	24.90	10.65
500	5.63	6.70	25.80	10.23
400	5.07	5.83	26.90	11.56
300	4.05	4.66	27.80	11.48
200	2.98	3.55	29.20	10.80
100	1.65	1.97	30.70	9.68
32	1.26	1.50	31.70	11.50
8	1.09	1.30	32.00	11.31
2	0.99	1.18	32.30	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	49.70	8	1.70
-0.125	25.60	2	1.54
-0.250	26.20		
-0.500	26.00		
-1.000	22.70		SURFACE SHEAR STRESS (DYNES/CM SQ.) $\times 10^3$
-2.000	22.60		TAU = XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 10^3$

S(D)=	22.50	Q(E,T)=	XXXX
R(N)=	XXXX	Q(S,O)=	XXXX
Q(C,O)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 10^3$

E = XXXX

CASE DPG 3 COMPARISON DATA FROM DUGWAY (12 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	3.70	-3.10		
1000	-2.04	0.29	23.50	9.09
900	-1.54	0.00	24.30	9.29
800	-1.53	0.19	25.30	9.48
700	-0.92	0.47	26.50	9.42
600	-0.73	0.73	27.70	9.29
500	-0.58	0.85	28.90	9.16
400	-0.27	0.99	30.00	8.97
300	-0.04	1.03	31.00	8.85
200	0.00	0.51	32.00	8.72
100	0.00	0.51	33.20	8.66
32	0.00	0.10	34.10	11.19
8	0.00	0.05	34.30	11.18
2	0.00	0.00	34.50	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)                            WIND SPEED (M/SEC)

-0.000	48.20	8	0.05
-0.125	28.70	2	0.00
-0.250	26.70		
-0.500	25.60		
-1.000	22.70		SURFACE SHEAR STRESS (DYNES/CM SQ.)X10
-2.000	22.60		TAU=        XXXX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(D)=	0.50	Q(E,0)=	XXXX
R(N)=	XXXX	Q(S,0)=	XXXX
Q(C,0)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E=        XXXX

## CASE DPG 3 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(M SEC)	6834	6914	7014	6984
TAPE NO.	220.	221.	222.	225.
INTERVAL	12.00HR	12.00HR	12.00HR	12.0. HR

## U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.18	0.48	4.18	0.48	4.18	0.48	4.18	0.48
1000	5.15	7.19	4.54	6.58	4.83	6.87	5.17	7.21
900	4.79	6.33	4.57	6.11	4.52	6.06	4.81	6.35
800	4.54	6.07	4.41	5.94	4.31	5.84	4.55	6.08
700	4.33	5.25	4.23	5.15	4.12	5.04	4.34	5.26
600	4.14	4.87	4.06	4.79	3.95	4.68	4.15	4.88
500	3.96	4.54	3.89	4.47	3.78	4.36	3.96	4.54
400	3.78	4.05	3.72	3.99	3.62	3.89	3.78	4.05
300	3.58	3.62	3.53	3.57	3.44	3.48	3.58	3.62
200	3.35	3.35	3.30	3.30	3.21	3.21	3.35	3.35
100	3.03	3.03	2.99	2.99	2.90	2.90	3.03	3.03
32	2.57	2.57	2.54	2.54	2.46	2.46	2.57	2.57
8	2.07	2.07	2.04	2.04	1.98	1.98	2.07	2.07

## V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.40	5.51	2.40	5.51	2.40	5.51	2.40	5.51
1000	0.86	0.57	2.04	1.75	0.61	0.32	0.93	0.64
900	1.38	1.38	1.91	1.91	1.15	1.15	1.45	1.45
800	1.63	1.43	1.99	1.80	1.39	1.20	1.69	1.50
700	1.77	1.30	2.08	1.61	1.56	1.09	1.83	1.36
600	1.88	1.14	2.14	1.41	1.66	0.93	1.93	1.20
500	1.95	1.10	2.18	1.33	1.75	0.90	2.00	1.15
400	1.99	1.00	2.21	1.22	1.80	0.81	2.04	1.05
300	2.01	0.98	2.21	1.18	1.84	0.81	2.06	1.03
200	2.01	1.50	2.18	1.67	1.84	1.33	2.05	1.54
100	1.95	1.44	2.10	1.59	1.79	1.28	1.99	1.48
32	1.76	1.66	1.89	1.79	1.63	1.53	1.79	1.69
8	1.46	1.41	1.57	1.52	1.35	1.30	1.49	1.44

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	220.	221.	222.	225.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	24.15	0.65	24.11	0.61	23.53	0.03	24.43	0.93
900	24.58	0.28	24.54	0.24	24.02	-0.28	24.86	0.56
800	24.74	-0.56	24.72	-0.58	24.22	-1.08	25.05	-0.25
700	24.88	-1.62	24.85	-1.65	24.38	-2.12	25.18	-1.32
600	24.96	-2.74	24.93	-2.77	24.48	-3.22	25.27	-2.43
500	25.03	-3.87	25.02	-3.88	24.58	-4.32	25.35	-3.55
400	25.08	-4.92	25.06	-4.94	24.66	-5.34	25.40	-4.60
300	25.12	-5.88	25.11	-5.89	24.71	-6.29	25.45	-5.55
200	25.13	-6.87	25.11	-6.89	24.74	-7.26	25.46	-6.54
100	25.12	-8.09	25.11	-8.09	24.76	-8.44	25.46	-7.74
32	24.92	-9.18	24.92	-9.18	24.67	-9.50	25.26	-8.84
8	24.74	-9.56	24.72	-9.58	24.46	-9.84	25.11	-9.19
2	24.05	-10.45	24.03	-10.47	23.87	-10.63	24.45	-10.05
0	23.31	XXXX	23.30	XXXX	23.24	XXXX	23.75	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.15	1.06	10.23	1.14	10.62	1.53	10.44	1.35
900	10.89	1.60	10.92	1.63	11.33	2.04	11.19	1.90
800	11.34	1.86	11.37	1.89	11.79	2.31	11.64	2.16
700	11.76	2.34	11.79	2.37	12.21	2.79	12.08	2.66
600	12.12	2.83	12.15	2.86	12.57	3.28	12.44	3.15
500	12.51	3.35	12.52	3.36	12.94	3.78	12.83	3.67
400	12.87	3.90	12.90	3.93	13.31	4.34	13.21	4.24
300	13.29	4.44	13.31	4.46	13.72	4.87	13.63	4.78
200	13.71	4.99	13.73	5.01	14.15	5.43	14.07	5.35
100	14.39	5.73	14.41	5.75	14.79	6.13	14.76	6.10
32	15.13	3.94	15.14	3.95	15.49	4.30	15.51	4.32
8	15.99	4.81	15.99	4.81	16.31	5.13	16.37	5.19
2	17.67	XXXX	17.66	XXXX	17.90	XXXX	18.06	XXXX
0	19.46	XXXX	19.44	XXXX	19.60	XXXX	19.88	XXXX

## CASE 20G 3 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	220.	221.	222.	225.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	25.69	-22.51	25.69	-22.51	25.62	-22.58	26.72	-21.48
-0.125	25.19	-3.51	25.19	-3.51	25.17	-3.53	26.40	-2.30
-0.250	26.08	-0.62	26.08	-0.62	26.09	-0.62	26.67	-0.03
-0.500	26.25	0.65	26.26	0.66	26.25	0.65	26.30	0.70
-1.000	22.86	0.16	22.86	0.16	22.86	0.16	22.95	0.25
-2.000	22.58	-0.02	22.57	-0.03	22.58	-0.02	26.87	-1.83

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.52	XXXX	4.55	XXXX	4.45	XXXX	4.53	XXXX
8	2.54	2.49	2.58	2.53	2.40	2.35	2.56	2.51
2	1.31	1.31	1.34	1.34	1.24	1.24	1.32	1.32

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	6.60	0.10	6.59	0.09	6.60	0.10	6.60	0.10
R(N)	2.31	XXXX	2.30	XXXX	2.28	XXXX	2.28	XXXX
Q(C,0)	-0.75	XXXX	-0.76	XXXX	-0.66	XXXX	-0.73	XXXX
Q(E,0)	3.74	XXXX	3.74	XXXX	3.63	XXXX	3.86	XXXX
Q(S,0)	-0.67	XXXX	-0.67	XXXX	-0.67	XXXX	-0.84	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	7.14	XXXX	7.26	XXXX	7.22	XXXX	7.32	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	44.00	XXXX	44.10	XXXX	43.50	XXXX	46.80	XXXX

## CASE DPG 3 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

KICM SQ/SEC)	16934	16914	17034	7119
TAPE NO.	239.	240.	241.	255.
INTERVAL	6.00HR	6.00HR	6.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.18	-0.65	4.18	-0.65	4.18	-0.65	4.76	-0.00
1000	5.63	-0.40	4.81	-1.21	5.67	-0.35	4.44	2.14
900	5.34	-0.82	5.25	-1.11	5.41	-0.75	4.25	2.07
800	5.11	-1.05	4.95	-1.21	5.19	-0.97	3.97	1.97
700	4.91	-1.05	4.80	-1.16	5.00	-0.96	3.61	1.74
600	4.73	-1.23	4.64	-1.32	4.82	-1.14	3.20	1.46
500	4.55	-1.08	4.48	-1.15	4.63	-1.00	2.73	0.99
400	4.37	-0.70	4.30	-0.77	4.45	-0.62	2.23	0.75
300	4.16	0.11	4.11	0.06	4.25	0.20	1.69	1.13
200	3.91	0.94	3.88	0.90	3.99	1.02	1.14	1.57
100	3.56	1.91	3.52	1.88	3.63	1.98	0.59	1.80
32	3.05	1.79	3.02	1.76	3.11	1.85	0.21	1.72
8	2.46	1.37	2.44	1.35	2.51	1.42	0.09	1.66

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.40	2.40	2.40	2.40	2.40	2.40	0.82	-0.02
1000	3.28	-4.43	2.84	-4.87	3.13	-4.58	3.38	-0.03
900	3.78	-3.82	3.62	-3.98	3.64	-3.96	3.79	0.30
800	3.95	-3.65	3.84	-3.76	3.81	-3.79	4.05	0.45
700	4.01	-3.09	3.93	-3.17	3.84	-3.22	4.26	0.59
600	4.02	-3.08	3.96	-3.14	3.90	-3.20	4.44	0.71
500	4.01	-2.69	3.96	-2.74	3.90	-2.80	4.62	0.89
400	3.95	-1.88	3.92	-1.91	3.85	-1.98	4.76	0.92
300	3.88	-0.78	3.84	-0.82	3.78	-0.88	4.91	1.35
200	3.73	0.18	3.70	0.15	3.64	0.09	4.99	1.93
100	3.50	1.53	3.47	1.50	3.41	1.44	4.95	2.68
32	3.06	1.56	3.04	1.54	2.99	1.49	4.52	2.90
8	2.50	1.20	2.49	1.19	2.45	1.15	3.74	2.34

CASE DPG 3 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	239. 6.00HR	240. 6.00HR	241. 6.00HR	255. 2.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.76	1.26	21.77	1.27	21.47	0.97	20.37	2.77
900	22.01	0.51	22.02	0.52	21.75	0.25	21.41	2.81
800	22.13	-0.47	22.14	-0.46	21.90	-0.70	21.99	2.39
700	22.27	-1.43	22.28	-1.42	22.06	-1.64	22.29	2.29
600	22.39	-2.51	22.40	-2.50	22.19	-2.71	22.39	1.59
500	22.53	-3.27	22.53	-3.27	22.34	-3.46	22.35	1.05
400	22.67	-4.23	22.67	-4.23	22.49	-4.41	22.18	1.18
300	22.84	-4.96	22.85	-4.95	22.66	-5.14	21.90	1.70
200	23.05	-6.15	23.06	-6.14	22.97	-6.30	21.45	1.25
100	23.42	-7.28	23.41	-7.29	23.26	-7.44	20.83	0.73
32	23.90	-7.80	23.90	-7.80	23.75	-7.95	19.94	-0.16
8	24.62	-7.38	24.65	-7.35	24.52	-7.48	19.33	-0.77
2	26.14	-6.16	26.16	-6.14	26.05	-6.25	18.10	-2.00
0	27.52	XXXX	27.52	XXXX	27.43	XXXX	16.78	XXXX

VAPOR PRESSURE (MB)

LEVFL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	7.68	-1.04	7.64	-1.08	7.70	-1.02	6.72	1.48
900	8.21	-1.01	8.17	-1.05	8.23	-0.99	7.01	1.89
800	8.53	-1.08	8.50	-1.11	8.56	-1.05	7.22	2.10
700	8.87	-1.22	8.83	-1.26	8.91	-1.18	7.41	2.17
600	9.14	-1.51	9.10	-1.55	9.17	-1.48	7.52	2.05
500	9.44	-0.79	9.41	-0.82	9.48	-0.75	7.64	1.92
400	9.74	-1.82	9.70	-1.86	9.77	-1.79	7.73	1.80
300	10.07	-1.41	10.05	-1.43	10.13	-1.35	7.85	1.74
200	10.44	-0.36	10.42	-0.38	10.49	-0.31	7.97	1.64
100	11.03	1.35	11.02	1.34	11.07	1.30	8.25	1.54
32	11.71	0.21	11.68	0.18	11.73	0.23	8.67	-1.33
8	12.51	1.20	12.48	1.17	12.53	1.22	9.30	-0.75
2	14.19	XXXX	14.17	XXXX	14.19	XXXX	10.56	XXXX
0	15.72	XXXX	15.71	XXXX	15.70	XXXX	11.91	XXXX

## CASE DPG 3 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	239.	240.	241.	255.
INTERVAL	6.00HR	6.00HR	6.00HR	2.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.63	-27.07	22.63	-27.07	22.63	-27.10	13.41	-6.19
-0.125	23.87	-1.73	23.87	-1.73	23.87	-1.73	24.69	-1.31
-0.250	26.64	0.44	26.64	0.44	26.64	0.44	27.37	0.27
-0.500	26.35	0.35	26.35	0.35	26.35	0.35	26.38	0.08
-1.000	22.79	0.09	22.79	0.09	22.79	0.09	22.73	0.03
-2.000	22.59	-0.01	22.58	-0.02	22.58	-0.02	22.58	-0.02

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
3	5.14	XXXX	5.12	XXXX	5.14	XXXX	5.30	XXXX
9	3.51	1.82	3.49	1.79	3.51	1.81	3.75	1.64
2	1.67	0.13	1.56	0.12	1.67	0.13	1.94	-0.12

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	22.76	0.26	22.77	0.27	22.76	0.26	6.40	-0.10
R(N)	13.71	XXXX	13.71	XXXX	13.71	XXXX	2.50	XXXX
Q(C,0)	3.76	XXXX	3.76	XXXX	3.84	XXXX	-1.40	XXXX
Q(F,0)	8.54	XXXX	8.55	XXXX	8.47	XXXX	2.04	XXXX
Q(S,0)	1.41	XXXX	1.41	XXXX	1.39	XXXX	0.97	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	20.04	XXXX	19.92	XXXX	20.14	XXXX	8.72	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	16.20	XXXX	16.20	XXXX	16.10	XXXX	1.30	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	7125	7129	7054	7054
TAPE NU.	256.	257.	258.	259.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.76	0.00	4.76	-0.00	4.18	-0.58	4.17	-0.59
1000	4.70	2.40	4.46	2.16	3.88	1.58	4.19	1.89
900	4.30	2.12	4.27	2.09	3.69	1.51	3.74	1.56
800	3.99	1.99	3.99	1.99	3.41	1.41	3.43	1.43
700	3.62	1.75	3.63	1.76	3.05	1.18	3.06	1.19
600	3.20	1.46	3.22	1.48	2.63	0.89	2.64	0.90
500	2.73	0.99	2.76	1.02	2.17	0.43	2.17	0.43
400	2.23	0.75	2.25	0.77	1.67	0.19	1.67	0.19
300	1.69	1.13	1.72	1.16	1.15	0.59	1.15	0.59
200	1.15	1.58	1.17	1.60	0.61	1.04	0.61	1.04
100	0.59	1.80	0.61	1.82	0.07	1.28	0.07	1.28
32	0.21	1.72	0.22	1.73	-0.25	1.26	-0.24	1.27
8	0.09	1.66	0.10	1.67	-0.28	1.28	-0.28	1.28

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.83	-0.01	0.83	-0.01	2.40	1.56	2.40	1.56
1000	2.06	-1.35	3.35	-0.06	3.37	-0.11	2.66	-0.75
900	3.65	0.16	3.77	0.28	3.71	0.22	3.63	0.14
800	4.03	0.43	4.03	0.43	3.97	0.37	3.96	0.36
700	4.25	0.58	4.24	0.57	4.18	0.51	4.17	0.50
600	4.43	0.70	4.42	0.69	4.35	0.63	4.35	0.63
500	4.62	0.89	4.60	0.88	4.53	0.81	4.52	0.80
400	4.77	0.93	4.75	0.92	4.68	0.84	4.68	0.84
300	4.91	1.35	4.91	1.35	4.83	1.27	4.83	1.27
200	4.99	1.93	4.99	1.93	4.91	1.85	4.91	1.85
100	4.94	2.67	4.94	2.67	4.86	2.59	4.86	2.59
32	4.51	2.89	4.52	2.90	4.45	2.83	4.44	2.82
8	3.74	2.34	3.74	2.34	3.67	2.26	3.67	2.26

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.

256.  
INTERVAL  
2.00HR257.  
2.00HR258.  
2.00HR259.  
2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.39	2.79	20.24	2.64	20.36	2.76	20.38	2.78
900	21.43	2.83	21.30	2.70	21.38	2.78	21.41	2.81
800	21.98	2.38	21.90	2.30	21.98	2.38	21.98	2.38
700	22.30	2.30	22.22	2.22	22.29	2.29	22.29	2.29
600	22.39	1.59	22.32	1.52	22.38	1.58	22.38	1.58
500	22.35	1.05	22.31	1.01	22.34	1.04	22.34	1.04
400	22.18	1.18	22.16	1.16	22.16	1.16	22.17	1.17
300	21.90	1.70	21.88	1.68	21.90	1.70	21.88	1.68
200	21.44	1.24	21.43	1.23	21.43	1.23	21.43	1.23
100	20.83	0.73	20.83	0.73	20.82	0.72	20.82	0.72
32	19.93	-0.17	19.95	-0.15	19.93	-0.17	19.94	-0.16
8	19.32	-0.78	19.34	-0.76	19.33	-0.77	19.33	-0.77
2	18.10	-2.00	18.11	-1.99	18.10	-2.00	18.11	-1.99
0	16.79	XXXX	16.79	XXXX	16.79	XXXX	16.80	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.68	1.44	6.72	1.48	6.73	1.49	6.69	1.45
900	6.99	1.87	7.01	1.89	7.01	1.89	6.99	1.87
800	7.19	2.07	7.20	2.08	7.22	2.10	7.20	2.08
700	7.39	2.15	7.40	2.16	7.41	2.17	7.41	2.17
600	7.51	2.04	7.51	2.04	7.52	2.05	7.51	2.04
500	7.64	1.92	7.63	1.91	7.65	1.93	7.64	1.92
400	7.73	1.80	7.71	1.78	7.73	1.80	7.73	1.80
300	7.86	1.75	7.85	1.72	7.86	1.75	7.87	1.76
200	7.97	1.64	7.95	1.62	7.98	1.65	7.98	1.65
100	8.25	1.54	8.23	1.52	8.26	1.55	8.26	1.55
32	8.66	-1.34	8.64	-1.36	8.68	-1.32	8.67	-1.33
8	9.29	-0.76	9.27	-0.78	9.31	-0.74	9.31	-0.74
2	10.56	XXXX	10.54	XXXX	10.59	XXXX	10.59	XXXX
0	11.92	XXXX	11.91	XXXX	11.95	XXXX	11.95	XXXX

CASE DPG 3 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	256.	257.	258.	259.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	13.41	-6.19	13.41	-6.19	13.42	-6.18	13.42	-6.18
-0.125	24.69	-1.31	24.69	-1.31	24.69	-1.31	24.69	-1.31
-0.250	27.37	0.27	27.36	0.26	27.36	0.26	27.36	0.26
-0.500	26.38	0.08	26.38	0.08	26.39	0.09	26.38	0.08
-1.000	22.74	0.04	22.73	0.03	22.73	0.03	22.74	0.04
-2.000	22.59	-0.01	22.58	-0.02	22.58	-0.02	22.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.30	XXXX	2.12	XXXX	5.26	XXXX	5.26	XXXX
8	3.75	1.64	3.75	1.64	3.69	1.58	3.69	1.58
2	1.94	-0.12	1.94	-0.12	1.90	-0.15	1.90	-0.15

SURFACE ENERGY TERMS (LY/SFC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	6.40	-0.10	6.41	-0.08	6.41	-0.09	6.41	-0.08
R(N)	2.51	XXXX	2.51	XXXX	2.52	XXXX	2.52	XXXX
Q(C,0)	-1.40	XXXX	-1.40	XXXX	-1.38	XXXX	-1.38	XXXX
Q(E,0)	2.93	XXXX	2.95	XXXX	2.93	XXXX	2.93	XXXX
Q(S,0)	0.97	XXXX	0.98	XXXX	0.97	XXXX	0.97	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	8.72	XXXX	8.74	XXXX	8.56	XXXX	8.56	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.30	XXXX	1.30	XXXX	1.30	XXXX	1.30	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SFC)	7C39	3694	3694	3694
TAPE NU.	260.	264.	265.	266.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.18	-0.58	4.76	-0.20	4.76	-0.00	4.76	-0.00
1000	3.90	1.60	4.42	2.12	4.70	2.40	4.45	2.15
900	3.71	1.53	4.20	2.02	4.25	2.07	4.22	2.04
800	3.43	1.43	3.87	1.87	3.90	1.90	3.89	1.89
700	3.07	1.20	3.47	1.60	3.50	1.63	3.49	1.63
600	2.66	0.92	3.05	1.31	3.08	1.34	3.08	1.34
500	2.20	0.46	2.61	0.68	2.64	0.90	2.64	0.90
400	1.73	0.23	2.17	0.69	2.20	0.72	2.20	0.73
300	1.17	0.61	1.73	1.17	1.75	1.19	1.76	1.20
200	0.63	1.06	1.28	1.71	1.31	1.74	1.31	1.74
100	0.09	1.30	0.84	2.05	0.86	2.07	0.86	2.07
32	-0.24	1.27	0.51	2.02	0.53	2.04	0.53	2.04
8	-0.28	1.29	0.36	1.93	0.37	1.94	0.37	1.94

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.40	1.56	0.83	-0.01	0.83	-0.01	0.83	-0.01
1000	3.28	-0.13	3.40	-0.01	2.01	-1.40	3.38	-0.03
900	3.70	0.22	3.81	0.32	3.65	0.16	3.80	0.31
800	3.97	0.37	4.07	0.47	4.03	0.43	4.06	0.46
700	4.17	0.50	4.27	0.60	4.26	0.59	4.27	0.60
600	4.35	0.63	4.45	0.72	4.43	0.70	4.45	0.72
500	4.53	0.81	4.60	0.88	4.60	0.88	4.60	0.88
400	4.69	0.85	4.74	0.90	4.74	0.90	4.74	0.90
300	4.84	1.28	4.85	1.29	4.85	1.29	4.86	1.30
200	4.91	1.85	4.89	1.83	4.89	1.83	4.89	1.83
100	4.87	2.60	4.81	2.54	4.82	2.55	4.82	2.55
32	4.45	2.83	4.40	2.78	4.40	2.78	4.40	2.78
8	3.68	2.27	3.66	2.26	3.66	2.26	3.66	2.26

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	260.	264.	265.	266.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.24	2.64	20.47	2.87	20.34	2.74	20.34	2.74
900	21.31	2.71	21.51	2.91	21.39	2.79	21.39	2.79
800	21.90	2.30	21.96	2.36	21.87	2.27	21.87	2.27
700	22.21	2.21	22.19	2.19	22.12	2.12	22.12	2.12
600	22.32	1.52	22.22	1.42	22.16	1.36	22.17	1.37
500	22.31	1.01	22.16	0.86	22.12	0.82	22.11	0.81
400	22.14	1.14	21.99	0.99	21.96	0.96	21.96	0.96
300	21.87	1.67	21.75	1.55	21.72	1.52	21.72	1.52
200	21.43	1.23	21.36	1.16	21.36	1.16	21.36	1.16
100	20.83	0.73	20.89	0.79	20.89	0.79	20.89	0.79
32	19.95	-0.15	20.23	0.13	20.23	0.13	20.23	0.13
8	19.33	-0.77	19.91	-0.19	19.91	-0.19	19.91	-0.19
2	18.10	-2.00	19.40	-0.70	19.40	-0.70	19.40	-0.70
0	16.78	XXXX	18.83	XXXX	18.83	XXXX	18.83	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.73	1.49	6.74	1.50	6.75	1.51	6.75	1.51
900	7.01	1.89	7.04	1.92	7.04	1.92	7.03	1.91
800	7.21	2.09	7.21	2.09	7.21	2.09	7.21	2.09
700	7.41	2.17	7.41	2.17	7.39	2.15	7.38	2.14
600	7.51	2.04	7.51	2.04	7.49	2.02	7.49	2.02
500	7.62	1.90	7.65	1.93	7.63	1.91	7.64	1.92
400	7.72	1.79	7.78	1.85	7.75	1.82	7.76	1.83
300	7.83	1.72	7.95	1.84	7.93	1.82	7.94	1.83
200	7.95	1.62	8.16	1.83	8.14	1.81	8.14	1.81
100	8.24	1.53	8.58	1.87	8.56	1.85	8.56	1.85
32	8.65	-1.35	9.24	-0.76	9.23	-0.77	9.24	-0.76
8	9.20	-0.76	10.26	0.21	10.25	0.20	10.25	0.20
2	10.57	XXXX	12.51	XXXX	12.50	XXXX	12.49	XXXX
0	11.93	XXXX	15.01	XXXX	15.01	XXXX	14.99	XXXX

CASE DPG 3 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	260.	264.	265.	266.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DFG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	13.42	-0.18	19.32	-0.28	19.32	-0.28	19.32	-0.28
-0.125	24.69	-1.31	25.72	-0.28	25.73	-0.27	25.72	-0.28
-0.250	27.36	0.26	27.42	0.32	27.42	0.32	27.43	0.33
-0.500	26.39	0.09	26.38	0.08	26.39	0.09	26.38	0.08
-1.000	22.74	0.04	22.75	0.05	22.05	-0.65	22.75	0.05
-2.000	22.58	-0.02	26.90	0.90	26.90	0.90	26.90	0.90

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.26	XXXX	5.25	XXXX	5.26	XXXX	5.26	XXXX
8	3.69	1.58	3.68	1.57	3.68	1.57	3.68	1.57
2	1.91	-0.15	1.94	-0.12	1.94	-0.12	1.94	-0.12

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	6.41	-0.09	6.41	-0.09	6.41	-0.08	6.41	-0.08
R(N)	2.51	XXXX	2.30	XXXX	2.30	XXXX	2.30	XXXX
Q(C,0)	-1.39	XXXX	-0.30	XXXX	-0.30	XXXX	-0.30	XXXX
Q(E,0)	2.93	XXXX	2.74	XXXX	2.70	XXXX	2.74	XXXX
Q(S,0)	0.97	XXXX	-0.13	XXXX	-0.13	XXXX	-0.13	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	8.56	XXXX	4.44	XXXX	4.44	XXXX	4.46	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.30	XXXX	2.10	XXXX	2.10	XXXX	2.10	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3694	3694	3694	3694
TAPE NO.	267.	268.	269.	270.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.76	-0.00	4.76	-0.00	4.76	-0.00	4.18	-0.58
1000	4.45	2.15	4.70	2.40	4.42	2.12	3.89	1.59
900	4.22	2.04	4.25	2.07	4.19	2.01	3.66	1.48
800	3.89	1.89	3.88	1.88	3.86	1.86	3.33	1.33
700	3.49	1.63	3.48	1.61	3.47	1.60	2.95	1.09
600	3.08	1.34	3.06	1.32	3.05	1.31	2.52	0.78
500	2.64	0.90	2.62	0.88	2.62	0.88	2.08	0.34
400	2.19	0.72	2.17	0.69	2.17	0.69	1.64	0.16
300	1.75	1.19	1.72	1.16	1.73	1.17	1.20	0.64
200	1.31	1.74	1.28	1.71	1.29	1.72	0.76	1.19
100	0.86	2.07	0.84	2.05	0.84	2.05	0.32	1.53
32	0.53	2.04	0.51	2.02	0.52	2.03	0.03	1.54
8	0.37	1.93	0.36	1.93	0.36	1.93	-0.04	1.52

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.83	-0.01	0.83	-0.01	0.83	-0.01	2.40	1.56
1000	3.38	-0.03	2.04	-1.37	3.40	-0.01	3.31	-0.10
900	3.80	0.31	3.08	0.19	3.81	0.32	3.73	0.24
800	4.06	0.46	4.05	0.45	4.07	0.47	3.99	0.39
700	4.27	0.60	4.27	0.60	4.27	0.60	4.20	0.53
600	4.44	0.71	4.45	0.72	4.45	0.72	4.37	0.64
500	4.60	0.88	4.60	0.88	4.60	0.88	4.54	0.81
400	4.74	0.90	4.74	0.90	4.74	0.90	4.66	0.82
300	4.86	1.30	4.85	1.29	4.85	1.29	4.78	1.22
200	4.90	1.84	4.89	1.83	4.89	1.83	4.83	1.77
100	4.82	2.55	4.81	2.54	4.82	2.55	4.74	2.47
32	4.40	2.78	4.47	2.78	4.40	2.78	4.33	2.71
8	3.66	2.26	3.66	2.25	3.66	2.26	3.61	2.20

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	267.	268.	269.	270.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.34	2.74	20.48	2.88	20.48	2.88	20.34	2.74
900	21.31	2.71	21.51	2.91	21.51	2.91	21.39	2.79
800	21.87	2.27	21.97	2.37	21.97	2.37	21.87	2.27
700	22.11	2.11	22.19	2.19	22.18	2.18	22.11	2.11
600	22.13	1.33	22.19	1.39	22.19	1.39	22.13	1.33
500	22.05	0.75	22.11	0.81	22.11	0.81	22.06	0.76
400	21.88	0.88	21.90	0.90	21.90	0.90	21.87	0.87
300	21.59	1.38	21.58	1.38	21.59	1.39	21.58	1.38
200	21.13	0.93	21.14	0.94	21.13	0.93	21.13	0.93
100	20.51	0.41	20.51	0.41	20.52	0.42	20.52	0.42
32	19.62	-0.48	19.62	-0.48	19.61	-0.49	19.62	-0.48
8	19.03	-1.07	19.03	-1.07	19.03	-1.07	19.03	-1.07
2	17.95	-2.15	17.96	-2.14	17.95	-2.15	17.95	-2.15
0	16.81	XXXX	16.82	XXXX	16.81	XXXX	16.82	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.74	1.50	6.71	1.47	6.74	1.50	6.75	1.51
900	7.03	1.51	7.02	1.90	7.03	1.91	7.02	1.90
800	7.20	2.08	7.19	2.07	7.21	2.09	7.20	2.08
700	7.38	2.14	7.38	2.14	7.39	2.15	7.38	2.14
600	7.47	2.00	7.48	2.01	7.49	2.02	7.47	2.00
500	7.61	1.89	7.62	1.90	7.62	1.90	7.61	1.89
400	7.71	1.78	7.73	1.80	7.72	1.79	7.72	1.79
300	7.86	1.75	7.88	1.77	7.87	1.76	7.86	1.75
200	8.02	1.69	8.03	1.70	8.03	1.70	8.02	1.69
100	8.35	1.64	8.36	1.65	8.36	1.65	8.35	1.64
32	8.87	-1.13	8.88	-1.12	8.90	-1.10	8.87	-1.13
8	9.72	-0.33	9.72	-0.33	9.73	-0.32	9.71	-0.34
2	11.62	XXXX	11.63	XXXX	11.63	XXXX	11.62	XXXX
0	13.63	XXXX	13.64	XXXX	13.64	XXXX	13.64	XXXX

## CASE UPG 3 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	267.	268.	269.	270.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	13.88	-5.72	13.89	-5.71	13.89	-5.71	13.87	-5.73
-0.125	24.75	-1.25	24.75	-1.25	24.76	-1.24	24.76	-1.24
-0.25	27.37	0.27	27.37	0.27	27.37	0.27	27.37	0.27
-0.50	26.38	0.08	26.38	0.08	26.38	0.08	26.38	0.08
-1.000	22.73	0.03	22.73	0.03	22.73	0.03	22.74	0.04
-2.000	22.58	-0.02	22.59	-0.01	22.59	-0.01	22.58	-0.02

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.26	XXXX	5.25	XXXX	5.25	XXXX	5.20	XXXX
8	3.68	1.57	3.68	1.57	3.68	1.57	3.61	1.50
2	1.89	-0.17	1.89	-0.17	1.89	-0.17	1.85	-0.20

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	6.41	-0.09	6.41	-0.08	6.41	-0.08	6.41	-0.09
R(N)	2.49	XXXX	2.48	XXXX	2.48	XXXX	2.49	XXXX
Q(C,D)	-0.63	XXXX	-0.63	XXXX	-0.63	XXXX	-0.63	XXXX
Q(E,C)	2.27	XXXX	2.27	XXXX	2.27	XXXX	2.27	XXXX
Q(S,C)	0.85	XXXX	0.85	XXXX	0.85	XXXX	0.85	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	4.46	XXXX	4.44	XXXX	4.44	XXXX	4.40	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.60	XXXX	1.60	XXXX	1.50	XXXX	1.60	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3694	3694	2869	2875
TAPE NO.	271.	272.	274.	275.
INTERVAL	2.00HR	2.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.18	-0.58	4.18	-0.58	4.54	0.00	4.53	-0.01
1000	4.20	1.90	3.87	1.57	3.49	1.49	3.99	1.99
900	3.71	1.53	3.64	1.46	3.31	1.50	3.32	1.51
800	3.34	1.34	3.31	1.31	3.12	1.38	3.12	1.38
700	2.95	1.08	2.92	1.05	2.84	1.10	2.84	1.10
600	2.52	0.78	2.49	0.76	2.49	0.53	2.49	0.53
500	2.08	0.34	2.06	0.32	2.17	-0.01	2.18	-0.00
400	1.64	0.16	1.61	0.14	1.58	-0.36	1.58	-0.36
300	1.20	0.64	1.17	0.61	0.69	-0.03	0.69	-0.03
200	0.76	1.19	0.73	1.16	-0.44	0.28	-0.44	0.28
100	0.32	1.53	0.31	1.51	-1.82	-0.20	-1.82	-0.20
32	0.03	1.54	0.02	1.53	-2.76	-1.12	-2.76	-1.12
8	-0.04	1.53	-0.05	1.52	-2.54	-0.97	-2.54	-0.97

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.40	1.56	2.40	1.56	1.64	-0.01	1.64	-0.01
1000	2.63	-0.78	3.32	-0.09	3.22	-0.38	2.61	-0.99
900	3.63	0.14	3.74	0.25	3.53	-0.17	3.52	-0.18
800	3.96	0.36	3.99	0.39	3.77	0.05	3.78	0.06
700	4.19	0.52	4.20	0.53	3.91	0.19	3.92	0.19
600	4.36	0.64	4.30	0.64	3.82	-0.38	3.82	-0.38
500	4.53	0.81	4.53	0.80	3.79	-0.88	3.79	-0.88
400	4.67	0.83	4.66	0.82	3.77	-1.55	3.77	-1.55
300	4.78	1.22	4.77	1.21	3.85	-1.25	3.85	-1.25
200	4.83	1.77	4.82	1.76	3.95	-0.11	3.96	-0.10
100	4.75	2.48	4.74	2.47	3.91	1.24	3.91	1.24
32	4.33	2.71	4.32	2.70	3.47	1.77	3.46	1.76
8	3.60	2.19	3.60	2.19	2.85	1.44	2.85	1.44

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	271.	272.	274.	275.
INTERVAL	2.00HR	2.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.34	2.74	20.46	2.86	20.06	0.06	20.07	0.07
900	21.39	2.79	21.51	2.91	18.99	-2.01	20.97	-0.03
800	21.87	2.27	21.96	2.36	21.73	-0.07	21.74	-0.06
700	22.11	2.11	22.17	2.17	22.41	0.11	22.41	0.11
600	22.13	1.33	22.19	1.39	22.82	-0.18	22.81	-0.19
500	22.06	0.76	22.10	0.80	22.97	-0.53	22.97	-0.53
400	21.86	0.86	21.90	0.90	22.97	0.67	22.97	0.67
300	21.58	1.38	21.59	1.39	22.84	0.64	22.85	0.65
200	21.13	0.93	21.13	0.93	22.31	-0.19	22.31	-0.19
100	20.51	0.41	20.51	0.41	20.83	1.33	20.83	1.33
32	19.62	-0.48	19.62	-0.48	18.35	3.15	18.35	3.15
8	19.03	-1.07	19.02	-1.08	16.28	2.28	16.29	2.29
2	17.95	-2.15	17.95	-2.15	13.19	0.30	13.20	0.40
0	16.82	XXXX	16.82	XXXX	10.05	XXXX	10.06	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.75	1.51	6.74	1.50	6.65	3.20	6.63	3.18
900	7.02	1.90	7.04	1.92	6.87	3.26	6.86	3.25
800	7.20	2.08	7.22	2.10	7.09	3.25	7.08	3.24
700	7.38	2.14	7.39	2.15	7.38	3.39	7.38	3.39
600	7.48	2.01	7.50	2.03	7.61	3.43	7.59	3.41
500	7.61	1.84	7.62	1.90	7.76	3.42	7.76	3.42
400	7.72	1.79	7.73	1.87	7.86	3.14	7.86	3.14
300	7.86	1.75	7.90	1.79	7.89	2.65	7.88	2.64
200	8.01	1.68	8.04	1.71	7.70	1.94	7.69	1.93
100	8.35	1.64	8.36	1.65	7.36	0.84	7.36	0.84
32	8.87	-1.13	8.90	-1.10	7.17	-3.03	7.16	-3.04
8	9.72	-0.33	9.72	-0.33	7.51	-2.86	7.51	-2.86
2	11.63	XXXX	11.62	XXXX	8.63	XXXX	8.62	XXXX
0	13.64	XXXX	13.63	XXXX	9.77	XXXX	9.76	XXXX

CASE DPG 3 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	271.	272.	274.	275.
INTERVAL	2.00HR	2.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	13.87	-5.73	13.89	-5.71	10.75	2.85	10.75	2.85
-0.125	24.75	-1.25	24.76	-1.24	25.60	-0.70	25.59	-0.71
-0.250	27.37	0.27	27.36	0.26	27.53	0.13	27.52	0.12
-0.500	26.38	0.08	26.39	0.09	26.39	0.19	26.39	0.19
-1.000	22.73	0.03	22.74	0.04	22.73	0.03	22.72	0.02
-2.000	22.58	-0.02	22.58	-0.02	22.58	-0.02	22.59	-0.01

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8"	5.20	XXXX	5.20	XXXX	5.35	XXXX	5.35	XXXX
8	3.61	1.50	3.60	1.49	3.82	1.71	3.82	1.71
2	1.85	-0.21	1.85	-0.21	1.93	-0.13	1.93	-0.13

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(N)	6.41	-0.09	6.40	-0.09	1.42	-0.08	1.42	-0.08
R(N)	2.48	XXXX	2.48	XXXX	-0.56	XXXX	-0.57	XXXX
Q(C,N)	-0.63	XXXX	-0.63	XXXX	-1.39	XXXX	-1.39	XXXX
Q(F,N)	2.27	XXXX	2.26	XXXX	1.02	XXXX	1.02	XXXX
Q(S,N)	0.85	XXXX	0.85	XXXX	-0.19	XXXX	-0.19	XXXX

SURFACE SHEAR STRESS (DYNES/CM SEC)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	4.42	XXXX	4.42	XXXX	3.60	XXXX	3.62	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.50	XXXX	1.60	XXXX	0.20	XXXX	0.20	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	2869	2954	2959	2954
TAPE NO.	276.	277.	278.	279.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.53	-0.01	4.17	-0.37	4.18	-0.36	4.18	-0.36
1000	3.50	1.50	3.36	1.36	3.81	1.81	3.37	1.37
900	3.31	1.50	3.18	1.37	3.19	1.38	3.18	1.37
800	3.13	1.39	2.98	1.24	2.98	1.24	2.99	1.25
700	2.85	1.11	2.71	0.97	2.71	0.97	2.71	0.97
600	2.50	0.54	2.36	0.40	2.36	0.40	2.36	0.40
500	2.19	0.01	2.04	-0.14	2.04	-0.14	2.04	-0.14
400	1.58	-0.36	1.44	-0.50	1.41	-0.50	1.45	-0.49
300	0.69	-0.03	0.54	-0.18	0.45	-0.17	0.55	-0.17
200	-0.44	0.29	-0.57	0.15	-0.44	0.15	-0.57	0.15
100	-1.81	-0.27	-1.94	-0.40	-1.94	-0.40	-1.94	-0.40
32	-2.75	-1.11	-2.86	-1.22	-2.86	-1.22	-2.85	-1.21
8	-2.53	-0.57	-2.63	-1.06	-2.63	-1.06	-2.63	-1.06

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.64	-0.01	2.40	0.76	2.40	0.76	2.40	0.76
1000	3.22	-0.38	3.18	-0.42	2.78	-0.82	3.18	-0.42
900	3.53	-0.17	3.48	-0.22	3.48	-0.22	3.48	-0.22
800	3.77	0.25	3.72	0.00	3.73	0.01	3.72	-0.01
700	3.92	0.19	3.87	0.14	3.88	0.15	3.87	0.14
600	3.83	-0.37	3.78	-0.41	3.78	-0.41	3.78	-0.41
500	3.79	-0.88	3.74	-0.93	3.74	-0.93	3.74	-0.93
400	3.78	-1.54	3.73	-1.59	3.73	-1.59	3.73	-1.59
300	3.86	-1.24	3.81	-1.29	3.81	-1.29	3.81	-1.24
200	3.96	-0.10	3.90	-0.16	3.90	-0.16	3.91	-0.15
100	3.92	1.25	3.86	1.19	3.85	1.19	3.87	1.20
32	3.47	1.77	3.42	1.72	3.42	1.72	3.42	1.72
8	2.85	1.44	2.81	1.40	2.81	1.40	2.81	1.40

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	276.	277.	278.	279.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.02	0.02	20.06	0.06	20.06	0.06	19.99	-0.01
900	20.89	-0.11	20.97	-0.03	20.97	-0.03	20.91	-0.09
800	21.68	-0.12	21.73	-0.07	21.74	-0.06	21.69	-0.12
700	22.36	0.06	22.41	0.11	22.41	0.11	22.36	0.06
600	22.78	-0.22	22.81	-0.19	22.91	-0.19	22.78	-0.22
500	22.95	-0.55	22.96	-0.54	22.97	-0.53	22.94	-0.56
400	22.97	0.67	22.97	0.67	22.97	0.67	22.96	0.66
300	22.84	0.64	22.83	0.63	22.83	0.63	22.83	0.63
200	22.32	-0.18	22.27	-0.23	22.28	-0.22	22.29	-0.21
100	20.85	1.35	20.81	1.31	20.82	1.32	20.82	1.32
32	18.36	3.16	18.37	3.17	18.36	3.16	18.38	3.18
8	16.29	2.29	16.32	2.32	16.33	2.33	16.33	2.33
2	13.20	0.40	13.25	0.45	13.25	0.45	13.25	0.45
0	10.05	XXXX	10.11	XXXX	10.11	XXXX	10.11	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.64	3.19	6.64	3.19	6.63	3.18	6.64	3.19
900	6.87	3.26	6.86	3.25	6.86	3.25	6.87	3.26
800	7.08	3.24	7.09	3.25	7.08	3.24	7.08	3.24
700	7.37	3.38	7.38	3.39	7.38	3.39	7.37	3.38
600	7.59	3.41	7.54	3.41	7.59	3.41	7.59	3.41
500	7.76	3.42	7.76	3.42	7.76	3.42	7.75	3.41
400	7.84	3.12	7.84	3.12	7.85	3.13	7.85	3.13
300	7.87	2.63	7.89	2.65	7.88	2.64	7.86	2.62
200	7.68	1.92	7.69	1.93	7.70	1.94	7.68	1.92
100	7.36	0.84	7.36	0.84	7.36	0.84	7.36	0.84
32	7.16	-3.04	7.18	-3.02	7.16	-3.02	7.18	-3.02
8	7.51	-2.86	7.53	-2.84	7.54	-2.83	7.53	-2.84
2	8.62	XXXX	8.63	XXXX	8.64	XXXX	8.63	XXXX
0	9.76	XXXX	9.76	XXXX	9.77	XXXX	9.75	XXXX

CASE DPG 3 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	276.	277.	278.	279.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	10.75	2.85	10.75	2.85	10.75	2.85	10.75	2.85
-0.125	25.59	-0.71	25.60	-0.70	25.61	-0.69	25.60	-0.70
-0.250	27.52	0.12	27.52	0.12	27.52	0.12	27.52	0.12
-0.500	26.39	0.19	26.39	0.19	26.38	0.18	26.39	0.19
-1.000	22.72	0.02	20.99	-1.71	22.73	0.03	22.73	0.03
-2.000	22.59	-0.01	22.58	-0.02	22.58	-0.02	22.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.35	XXXX	5.38	XXXX	5.38	XXXX	5.37	XXXX
8	3.82	1.71	3.85	1.74	3.85	1.74	3.85	1.74
2	1.93	-0.13	1.94	-0.12	1.94	-0.12	1.95	-0.11

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.42	-0.08	1.42	-0.08	1.42	-0.08	1.42	-0.08
R(N)	-0.56	XXXX	-0.57	XXXX	-0.57	XXXX	-0.57	XXXX
Q(C,D)	-1.39	XXXX	-1.43	XXXX	-1.42	XXXX	-1.43	XXXX
Q(F,C)	1.01	XXXX	1.04	XXXX	1.04	XXXX	1.04	XXXX
Q(S,C)	-0.19	XXXX	-0.18	XXXX	-0.18	XXXX	-0.18	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.58	XXXX	3.72	XXXX	3.72	XXXX	3.72	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.20	XXXX	0.17	XXXX	0.19	XXXX	0.20	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC <sup>2</sup> )	3694	3694	3694	3694
TAPE NO.	283.	284.	285.	286.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.54	0.00	4.54	0.00	4.54	0.00	4.53	-0.01
1000	3.47	1.47	3.96	1.96	3.48	1.48	3.48	1.48
900	3.24	1.43	3.28	1.47	3.25	1.44	3.25	1.44
800	2.98	1.24	2.99	1.25	2.98	1.24	2.98	1.24
700	2.64	0.90	2.64	0.90	2.65	0.91	2.64	0.90
600	2.24	0.28	2.24	0.28	2.24	0.28	2.24	0.28
500	1.76	-0.42	1.76	-0.42	1.76	-0.42	1.76	-0.42
400	1.18	-0.76	1.19	-0.75	1.18	-0.76	1.18	-0.76
300	0.53	-0.19	0.53	-0.19	0.53	-0.19	0.53	-0.19
200	-0.17	0.55	-0.16	0.56	-0.17	0.55	-0.16	0.56
100	-0.89	0.65	-0.88	0.66	-0.88	0.66	-0.88	0.66
32	-1.27	0.37	-1.26	0.38	-1.26	0.38	-1.26	0.38
8	-1.16	0.41	-1.16	0.40	-1.16	0.40	-1.16	0.40

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.64	-0.01	1.64	-0.01	1.64	-0.01	1.64	-0.01
1000	3.26	-0.34	2.64	-0.96	3.26	-0.34	3.26	-0.34
900	3.57	-0.13	3.54	-0.16	3.57	-0.13	3.57	-0.13
800	3.76	0.03	3.75	0.02	3.76	0.03	3.75	0.02
700	3.82	0.10	3.82	0.10	3.82	0.09	3.82	0.10
600	3.83	-0.37	3.83	-0.37	3.82	-0.38	3.83	-0.37
500	3.83	-1.84	3.83	-0.84	3.83	-0.84	3.83	-0.84
400	3.83	1.49	3.83	-1.49	3.83	-1.49	3.83	-1.49
300	3.84	-1.26	3.84	-1.26	3.84	-1.26	3.84	-1.26
200	3.79	-1.27	3.79	-0.27	3.79	-0.27	3.79	-0.27
100	3.67	1.00	3.67	1.00	3.67	1.00	3.67	1.00
32	3.31	1.61	3.31	1.61	3.31	1.61	3.32	1.62
8	2.75	1.34	2.75	1.34	2.75	1.34	2.75	1.34

## CASE UPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	283.	284.	285.	286.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.20	0.20	20.14	0.14	20.14	0.14	20.15	0.15
900	21.23	0.23	21.17	0.17	21.17	0.17	21.17	0.17
800	21.90	0.10	21.85	0.05	21.85	0.05	21.85	0.05
700	22.33	0.03	22.29	-0.01	22.29	-0.01	22.30	-0.00
600	22.52	-0.48	22.49	-0.51	22.49	-0.51	22.49	-0.51
500	22.56	-0.94	22.54	-0.96	22.54	-0.96	22.53	-0.97
400	22.44	0.14	22.42	0.12	22.42	0.12	22.40	0.10
300	22.13	-0.07	22.13	-0.07	22.12	-0.08	22.08	-0.12
200	21.60	-0.90	21.61	-0.89	21.61	-0.89	21.50	-1.00
100	20.78	1.28	20.78	1.28	20.79	1.29	20.54	1.04
32	19.50	4.30	19.50	4.30	19.50	4.30	19.00	3.80
8	18.39	4.39	18.39	4.39	18.38	4.38	17.48	3.48
2	16.10	3.30	16.10	3.30	16.09	3.29	14.39	1.59
0	13.76	XXXX	13.76	XXXX	13.76	XXXX	11.25	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.67	3.22	6.67	3.22	6.67	3.22	6.67	3.22
900	6.93	3.32	6.93	3.32	6.93	3.32	6.93	3.32
800	7.15	3.31	7.15	3.31	7.15	3.31	7.15	3.31
700	7.37	3.38	7.37	3.38	7.37	3.38	7.37	3.38
600	7.49	3.31	7.49	3.31	7.50	3.32	7.48	3.30
500	7.61	3.27	7.61	3.27	7.62	3.28	7.61	3.27
400	7.67	2.95	7.67	2.95	7.69	2.97	7.67	2.95
300	7.75	2.51	7.74	2.50	7.75	2.51	7.72	2.48
200	7.79	2.03	7.77	2.01	7.78	2.02	7.72	1.96
100	7.94	1.42	7.94	1.42	7.94	1.42	7.82	1.30
32	8.27	-1.93	8.27	-1.93	8.27	-1.93	8.02	-2.18
8	8.87	-1.50	8.87	-1.50	8.87	-1.50	8.43	-1.94
2	10.28	XXXX	10.28	XXXX	10.28	XXXX	9.44	XXXX
0	11.71	XXXX	11.71	XXXX	11.71	XXXX	10.47	XXXX

CASE DFG 3 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	283.	284.	285.	286.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	17.94	10.04	17.94	10.04	17.94	10.04	11.34	3.44
-0.125	26.22	-0.08	26.21	-0.09	26.22	-0.08	25.62	-0.68
-0.250	27.54	0.14	27.54	0.14	27.54	0.14	27.52	0.12
-0.500	26.39	0.19	26.39	0.19	26.38	0.18	26.39	0.19
-1.000	22.73	0.03	22.73	0.03	22.73	0.03	22.72	0.02
-2.000	26.88	0.58	26.87	0.57	26.87	0.57	22.59	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.79	XXXX	4.80	XXXX	4.80	XXXX	4.80	XXXX
8	2.99	0.88	2.99	0.88	2.99	0.88	2.99	0.88
2	1.51	-0.55	1.51	-0.55	1.51	-0.55	1.51	-0.55

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(0)	1.42	-0.08	1.42	-0.08	1.42	-0.08	1.42	-0.08
R(IN)	-0.85	XXXX	-0.86	XXXX	-0.86	XXXX	-0.61	XXXX
Q(IC,0)	-1.32	XXXX	-1.32	XXXX	-1.32	XXXX	-1.78	XXXX
Q(E,0)	1.65	XXXX	1.65	XXXX	1.65	XXXX	1.18	XXXX
Q(S,0)	-1.19	XXXX	-1.19	XXXX	-1.19	XXXX	-0.01	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	4.06	XXXX	4.06	XXXX	4.06	XXXX	4.06	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	0.80	XXXX	0.90	XXXX	0.50	XXXX

CASE DPG 3 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3704	3694	3694	3694
TAPE NO.	287.	288.	289.	290.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.54	0.00	4.53	-0.01	4.17	-0.37	4.17	-0.37
1000	3.96	1.96	3.47	1.47	3.34	1.34	3.78	1.78
900	3.28	1.47	3.25	1.44	3.12	1.31	3.15	1.34
800	2.98	1.24	2.98	1.24	2.85	1.11	2.85	1.11
700	2.64	0.90	2.64	0.90	2.51	0.77	2.51	0.77
600	2.24	0.28	2.23	0.27	2.11	0.15	2.11	0.15
500	1.75	-0.43	1.75	-0.43	1.63	-0.56	1.63	-0.56
400	1.18	-0.76	1.18	-0.76	1.04	-0.90	1.05	-0.89
300	0.52	-0.20	0.53	-0.19	0.39	-0.33	0.39	-0.33
200	-0.17	0.55	-0.17	0.55	-0.31	0.42	-0.31	0.42
100	-0.88	0.66	-0.89	0.65	-1.02	0.52	-1.02	0.52
32	-1.27	0.37	-1.26	0.38	-1.39	0.25	-1.39	0.25
8	-1.16	0.40	-1.16	0.40	-1.27	0.30	-1.27	0.30

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.64	-0.01	1.64	-0.01	2.40	0.76	2.40	0.76
1000	2.65	-0.95	3.26	-0.34	3.21	-0.39	2.81	-0.79
900	3.54	-0.16	3.58	-0.12	3.53	-0.17	3.51	-0.19
800	3.75	0.02	3.76	0.03	3.71	-0.02	3.71	-0.02
700	3.83	0.10	3.83	0.10	3.77	0.05	3.77	0.05
600	3.83	-0.37	3.83	-0.37	3.78	-0.41	3.78	-0.41
500	3.83	-0.84	3.83	-0.84	3.79	-0.88	3.79	-0.88
400	3.83	-1.49	3.83	-1.49	3.79	-1.53	3.79	-1.53
300	3.83	-1.27	3.84	-1.26	3.79	-1.31	3.79	-1.31
200	3.79	-0.27	3.79	-0.27	3.75	-0.31	3.75	-0.31
100	3.67	1.00	3.67	1.00	3.63	0.95	3.63	0.96
32	3.31	1.61	3.31	1.61	3.27	1.57	3.27	1.57
8	2.75	1.34	2.75	1.34	2.71	1.30	2.71	1.30

## CASE DPG 3 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	287.	288.	289.	290.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	20.22	0.22	20.21	0.21	20.15	0.15	20.14	0.14
900	21.23	0.23	21.22	0.22	21.17	0.17	21.18	0.18
800	21.91	0.11	21.90	0.10	21.85	0.05	21.85	0.05
700	22.33	0.03	22.34	0.04	22.29	-0.01	22.29	-0.01
600	22.52	-0.48	22.52	-0.48	22.49	-0.51	22.49	-0.51
500	22.55	-0.95	22.55	-0.95	22.54	-0.96	22.53	-0.97
400	22.41	0.11	22.41	0.11	22.41	0.11	22.39	0.09
300	22.09	-0.11	22.09	-0.11	22.08	-0.12	22.08	-0.12
200	21.50	-1.00	21.50	-1.00	21.50	-1.00	21.49	-1.01
100	20.54	1.04	20.54	1.04	20.54	1.04	20.54	1.04
32	18.98	3.78	18.97	3.77	18.99	3.79	19.00	3.80
8	17.49	3.49	17.47	3.47	17.49	3.49	17.48	3.48
2	14.39	1.59	14.39	1.59	14.39	1.59	14.39	1.59
0	11.25	XXXX	11.26	XXXX	11.25	XXXX	11.26	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	6.66	3.21	6.67	3.22	6.67	3.22	6.66	3.21
900	6.93	3.32	6.93	3.32	6.93	3.32	6.94	3.33
800	7.15	3.31	7.16	3.32	7.15	3.31	7.15	3.31
700	7.37	3.38	7.38	3.39	7.37	3.38	7.37	3.38
600	7.49	3.31	7.49	3.31	7.49	3.31	7.49	3.31
500	7.61	3.27	7.61	3.27	7.61	3.27	7.62	3.28
400	7.67	2.95	7.67	2.95	7.67	2.95	7.66	2.94
300	7.72	2.48	7.73	2.49	7.72	2.48	7.72	2.48
200	7.73	1.97	7.73	1.97	7.72	1.96	7.72	1.96
100	7.82	1.30	7.82	1.30	7.82	1.30	7.81	1.29
32	8.01	-2.19	8.02	-2.18	8.02	-2.18	8.02	-2.18
8	8.44	-1.93	8.44	-1.93	8.44	-1.93	8.44	-1.93
2	9.45	XXXX	9.45	XXXX	9.45	XXXX	9.45	XXXX
0	10.47	XXXX	10.47	XXXX	10.47	XXXX	10.47	XXXX

CASE DPG 3 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	287.	288.	289.	290.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	11.34	3.44	11.35	3.45	11.34	3.44	11.34	3.44
-0.125	25.62	-0.68	25.63	-0.67	25.63	-0.67	25.63	-0.67
-0.250	27.51	0.11	27.52	0.12	27.52	0.12	27.52	0.12
-0.500	26.39	0.19	26.39	0.19	26.39	0.19	26.39	0.19
-1.000	22.72	0.02	22.72	0.02	22.72	0.02	22.73	0.03
-2.000	22.57	-0.03	22.59	-0.01	22.57	-0.03	22.58	-0.02

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.80	XXXX	4.80	XXXX	4.80	XXXX	4.80	XXXX
8	2.99	0.88	2.99	0.88	3.00	0.89	3.00	0.89
2	1.51	-0.55	1.51	-0.55	1.51	-0.55	1.51	-0.55

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.42	-0.08	1.42	-0.08	1.42	-0.08	1.42	-0.08
R(N)	-0.61	XXXX	-0.61	XXXX	-0.62	XXXX	-0.61	XXXX
Q(C,D)	-1.78	XXXX	-1.78	XXXX	-1.78	XXXX	-1.78	XXXX
Q(F,D)	1.18	XXXX	1.18	XXXX	1.18	XXXX	1.18	XXXX
Q(S,D)	-0.02	XXXX	-0.01	XXXX	-0.02	XXXX	-0.02	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	4.06	XXXX	4.08	XXXX	4.06	XXXX	4.08	XXXX

INTEGRATED EVAP/TRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.50	XXXX	0.57	XXXX	0.50	XXXX	0.50	XXXX

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 3

12.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	0.94	0.59	29.46	9.48	30.39
PERSIST DIFF	3.05	2.20	9.43	2.52	16.11
GPAC DIFF	220.	4.49	1.96	6.09	3.69
GPAC DIFF	221.	4.34	2.16	6.10	3.71
GPAC DIFF	222.	4.30	1.86	6.37	4.07
GPAC DIFF	225.	4.50	1.99	5.82	4.01

CASE DPG 3

6.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	4.76	5.75	26.71	10.45	30.31
PERSIST DIFF	3.93	3.15	7.35	3.28	16.72
GPAC DIFF	239.	1.12	2.63	4.86	1.17
GPAC DIFF	240.	1.20	2.73	4.86	1.19
GPAC DIFF	241.	1.11	2.71	4.98	1.15

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 3

2.00 HOUR

	TAPE NU.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE		1.65	3.22	19.99	6.64	24.19
PERSIST DIFF		0.90	0.72	2.64	2.15	4.43
GPAC DIFF	255.	1.57	1.50	1.78	1.74	2.59
GPAC DIFF	256.	1.61	1.55	1.78	1.73	2.59
GPAC DIFF	257.	1.59	1.50	1.72	1.73	2.59
GPAC DIFF	258.	1.11	1.51	1.77	1.75	2.58
GPAC DIFF	259.	1.15	1.52	1.77	1.74	2.58
GPAC DIFF	260.	1.12	1.51	1.72	1.74	2.58
GPAC DIFF	264.	1.62	1.44	1.66	1.76	0.42
GPAC DIFF	265.	1.67	1.49	1.60	1.75	0.50
GPAC DIFF	266.	1.64	1.45	1.60	1.75	0.43
GPAC DIFF	267.	1.64	1.45	1.68	1.72	2.39
GPAC DIFF	268.	1.65	1.49	1.74	1.72	2.39
GPAC DIFF	269.	1.62	1.45	1.74	1.73	2.39
GPAC DIFF	270.	1.16	1.46	1.69	1.72	2.40
GPAC DIFF	271.	1.21	1.47	1.68	1.72	2.40
GPAC DIFF	272.	1.15	1.45	1.74	1.73	2.39

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 3

1.00 HOUR

	TAPE NU.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE		1.69	3.84	20.81	5.98	23.16
PERSIST DIFF		0.92	1.39	1.40	3.09	0.46
CPAC DIFF	274.	0.89	0.95	1.31	2.96	1.20
GPAC DIFF	275.	0.97	0.99	1.19	2.95	1.20
GPAC DIFF	276.	0.90	0.95	1.19	2.95	1.20
GPAC DIFF	277.	0.86	0.98	1.20	2.95	1.39
GPAC DIFF	278.	0.92	1.00	1.20	2.95	1.20
GPAC DIFF	279.	0.86	0.98	1.20	2.95	1.20
GPAC DIFF	283.	0.81	0.89	2.01	2.78	4.11
GPAC DIFF	284.	0.89	0.92	2.01	2.77	4.11
GPAC DIFF	285.	0.81	0.89	2.00	2.78	4.11
GPAC DIFF	286.	0.81	0.89	1.58	2.80	1.43
GPAC DIFF	287.	0.89	0.92	1.58	2.80	1.43
GPAC DIFF	288.	0.81	0.89	1.57	2.81	1.44
GPAC DIFF	289.	0.75	0.92	1.58	2.80	1.43
GPAC DIFF	290.	0.82	0.94	1.58	2.80	1.43

## CASE DPG 4 TAPE LOG

TAPE NO.	FCST INT	SM DR	KME	SCG	ADV	GFM	REMARKS
-------------	-------------	----------	-----	-----	-----	-----	---------

294.	12.00	A	V	A	N	O	
295.	12.00	A	V	A	N	I	
296.	12.00	A	V	A	F	O	
303.	12.00	R	F	A	N	O	
304.	12.00	R	F	A	F	I	
305.	12.00	B	F	A	F	O	
306.	12.00	A	F	A	F	O	
307.	12.00	A	F	AA	N	I	
308.	12.00	A	F	AF	NN	O	
309.	12.00	A	F	FF	F	O	
310.	12.00	A	F	FF	FN	I	
311.	12.00	A	F	FF	NN	O	
316.	6.00	A	V	FF	NN	O	
317.	6.00	A	V	FF	NN	I	
318.	6.00	A	V	FA	NN	O	
322.	6.00	B	F	AA	NN	O	
323.	6.00	B	F	AA	FF	I	
324.	6.00	B	F	AA	FF	O	
325.	6.00	A	F	AA	FF	O	
326.	6.00	A	F	AA	NN	I	
327.	6.00	A	F	AA	NN	O	
328.	6.00	A	F	AA	NN	O	
329.	6.00	A	F	AA	NN	I	
330.	6.00	A	F	FA	NN	O	
332.	2.00	A	V	AA	NN	O	
333.	2.00	A	V	AA	NN	I	
334.	2.00	A	V	AA	NN	O	
335.	2.00	A	V	FF	NN	I	
335.	2.00	A	V	FF	NN	O	
337.	2.00	A	V	FF	NN	I	
338.	2.00	B	V	FF	NN	O	
339.	2.00	B	V	FF	NN	I	
340.	2.00	B	V	FA	NN	O	
341.	2.00	B	F	AA	NN	I	
342.	2.00	B	F	AA	NN	O	
343.	2.00	B	F	AA	NN	I	
344.	2.00	A	F	AA	NN	O	
345.	2.00	A	F	AA	NN	I	
346.	2.00	A	F	AA	NN	O	
347.	2.00	A	F	AA	NN	I	

## CASE DPG 4 TAPE LOG

TAPE NO.	FC ST INT	SM 08	KM8	SCG	ADV	GEC	REMARKS
-------------	--------------	----------	-----	-----	-----	-----	---------

348.	2.00	A	F	F	F	F	I
349.	2.00	A	F	F	N	N	O
351.	1.00	A	V	A	N	N	O
352.	1.00	A	V	A	N	N	I
353.	1.00	A	V	A	F	N	O
354.	1.00	A	V	F	N	N	O
355.	1.00	A	V	F	N	F	I
356.	1.00	A	V	F	F	F	O
357.	1.00	B	V	F	F	F	O
358.	1.00	B	V	F	N	N	I
359.	1.00	B	V	F	N	N	O
360.	1.00	B	F	A	N	N	O
361.	1.00	B	F	A	F	F	I
362.	1.00	B	F	A	F	F	O
363.	1.00	A	F	A	F	F	I
364.	1.00	A	F	A	N	N	I
365.	1.00	A	F	A	N	N	O
366.	1.00	A	F	F	F	F	O
367.	1.00	A	F	F	F	F	I
368.	1.00	A	F	F	F	N	O

WPG 4 INITIAL CONDITIONS - 0500L 15 AUGUST 1969  
 (PAGE 1 OF 2 PAGES)

SOIL PARAMETERS

LEVEL (M)	TEMP (DEG C.)		
-0.000	17.10	LAMBDA	= 0.59 CAL/CM DEG
-0.125	25.90	MU/LAMBDA	= 0.0737 CM /SEC
-0.250	26.00	(MU/LAMBDA) <sup>1/2</sup>	= 0.036 CAL/CM DEG SEC
-0.500	24.20	Z(0)	= 2.0 CM
-1.000	20.70	S(0)	= 0.0004 CAL/CM SEC MB
-2.000	20.60	G	= 3500 CM SEC DEG/CAL

RADIATION PARAMETERS

LOCAL TIME = 0500	N = 0.26
DELTA = 14.35 DEG	Psi = 0.976
R = 1.74 X 10 <sup>-5</sup> DEG C/SEC	Fpsi = 0.93
CLOUD CLASS = 1	J = 0.26
E'(8) = 7.11 MB	M = 0.62 <sup>0</sup>
EPSILON = 0.95 <sup>0</sup>	N = 0.0415 MB
PHI = 40.2 DEG	H = -105.0 DEG

HORIZONTAL GRADIENTS

LEVEL (M)	DE/DX (MB/100KM)	DE/DY (MB/100KM)	DT/DX (DEG C/100KM)	DT/DY (DEG C/100KM)
200	0.33	-0.08	-0.78	0.30
600	0.27	-0.22	-0.01	0.18
1000	0.21	-0.36	0.26	0.06

DPG 4 INITIAL CONDITIONS - C500L 15 AUGUST 1969  
 (PAGE 2 OF 2 PAGES)

LEVEL (M)	WIND COMPONENTS U (M/SEC) V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
1000	2.95	22.40	11.56
900	2.53	23.00	12.12
800	2.03	23.80	12.78
700	1.85	24.30	13.66
600	1.72	25.00	13.75
500	1.99	25.70	14.12
400	1.86	26.20	14.59
300	0.43	26.90	15.07
200	-0.56	26.60	13.93
100	-0.22	25.50	10.87
32	1.83	24.90	7.58
8	0.60	21.80	7.11

ADVECTION TERMS  
 -1 5  
 (SEC X 10<sup>5</sup>)

LEVEL (M)	ALPHA(1)	BETA(1)	ALPHA(2)	BETA(2)
200	-0.03	0.00	0.11	1.31
600	-0.08	-0.01	0.33	0.84
1000	-0.13	-0.02	0.56	0.38

SURFACE CONTOUR GRADIENTS

PREDICTION INTERVAL (HR)	AZIMUTH (DEG FROM NORTH)	MAGNITUDE (FT/100KM)
0	145.0	11.35
1	150.0	22.70
2	180.0	29.18
6	135.0	30.43
12	135.0	30.43

CASE DPG 4 COMPARISON DATA FROM DUGWAY ( 1 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
0	6.77	2.47		
1000	3.60	0.00	23.10	12.95
900	4.03	0.85	24.00	13.39
800	3.87	1.41	24.80	14.02
700	3.21	1.64	25.50	14.59
600	1.86	2.47	26.10	15.88
500	0.43	3.06	26.80	15.47
400	0.75	3.00	27.20	15.88
300	1.77	2.53	27.50	15.88
200	2.84	1.21	26.60	14.12
100	2.88	-1.11	24.90	11.72
32	1.99	-2.37	23.40	11.40
8	1.50	-2.70	22.90	10.87
2	1.31	-2.80	22.40	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	22.00	8	3.09
-0.125	25.50	2	3.09
-0.250	25.80		
-0.500	24.10	SURFACE SHEAR STRESS	
-1.000	20.90	(DYNES/CM SQ.) X 1000	
-2.000	20.60	TAU =	XXXX

SURFACE ENERGY TERMS (LY/SEC) X 1000

S(D) =	0.90	Q(E,C) =	XXXX
R(N) =	XXXX	Q(S,C) =	XXXX
Q(C,C) =	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) X 100

E = XXXX

CASE DPG 4 COMPARISON DATA FROM DUGWAY ( 2 HOUR )

	WIND COMPONENTS U (M/SEC) V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	9.26	0.00	
1000	4.63	0.00	11.79
900	3.59	0.31	12.28
800	3.02	0.64	12.78
700	3.36	1.29	13.57
600	3.25	2.54	14.40
500	3.64	3.64	14.98
400	2.73	4.37	15.37
300	1.20	4.48	15.07
200	-0.31	3.59	13.39
100	-0.87	1.87	11.02
32	-0.82	1.05	11.87
8	-0.74	0.79	11.48
2	-0.73	0.73	XXXX
0	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	21.30	9	1.08
-0.125	25.10	2	1.03
-0.250	25.60		
-0.500	24.00	SURFACE SHFAR STRESS	
-1.000	20.80	(DYNES/CM SQ.)X10	
-2.000	20.60	TAU=	XXXX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(D)=	5.00	Q(E,S)=	XXXX
R(N)=	XXXX	Q(S,S)=	XXXX
O(C,F)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E=           XXXX

CASE DPG 4 COMPARISON DATA FROM DUGWAY ( 6 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MH)
GEO	2.95	2.06		
1000	1.46	1.46	23.00	13.66
900	1.51	1.40	24.00	14.30
800	1.94	1.69	24.90	15.07
700	2.37	1.99	25.70	15.98
600	2.40	1.94	26.50	16.94
500	2.92	2.12	27.30	17.72
400	3.02	1.96	28.20	18.53
300	3.33	2.42	29.10	19.50
200	2.65	3.15	30.20	20.77
100	1.41	3.87	32.00	22.95
32	3.43	4.10	33.80	31.86
8	0.14	4.12	34.40	33.24
2	0.00	4.12	35.00	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	49.30	4	4.12
-0.125	25.00	2	4.12
-0.250	25.00		
-0.500	23.90		
-1.000	20.80	SURFACE SHEAR STRESS (DYNES/CM SQ.)X10	
-2.000	20.60	TAU=	XXXX

SURFACE ENERGY TERMS (LY/SEC)X1000

S(F)=	19.50	Q(F,0)=	XXXX
R(N)=	XXXX	Q(S,0)=	XXXX
Q(C,V)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

E = XXXX

CASE DPG 4 COMPARISON DATA FROM BUGWAY (12 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	6.83	6.83		
1000	3.76	3.51	27.00	17.61
900	3.31	3.94	28.00	18.77
800	3.03	4.16	29.00	19.62
700	2.50	4.56	30.00	20.77
600	2.34	4.59	31.00	21.97
500	2.26	4.63	32.10	23.09
400	2.66	5.00	33.10	24.26
300	2.99	5.40	34.00	23.24
200	2.21	5.21	34.70	18.77
100	0.96	4.53	35.40	13.75
32	0.23	4.32	36.00	13.21
8	0.07	4.17	36.10	12.43
2	0.00	4.12	36.20	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	41.60	8	4.17
-0.125	28.20	2	4.12
-0.250	25.90		
-0.500	23.90		
-1.000	20.70		SURFACE SHEAR STRESS (DYNES/CM SQ.) $\times 10$
-2.000	20.60		TAU = XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 1000$

S(D)=	5.00	Q(E,C)=	XXXX
R(N)=	XXXX	Q(S,D)=	XXXX
Q(C,T)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E = XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(M SEC)	12339	11969	12254	9514
TAPE NO.	294.	295.	296.	303.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.81	-0.02	6.81	-0.02	6.81	-0.02	6.82	-0.01
1000	4.49	0.73	5.53	1.77	4.39	0.63	5.12	1.36
900	4.04	0.73	4.15	0.84	3.96	0.65	4.86	1.55
800	3.77	0.74	3.72	0.69	3.69	0.66	4.64	1.61
700	3.54	1.04	3.45	0.95	3.48	0.98	4.45	1.95
600	3.35	1.01	3.23	0.89	3.30	0.96	4.25	1.91
500	3.16	0.90	3.04	0.78	3.11	0.85	4.06	1.80
400	2.99	0.34	2.86	0.20	2.94	0.28	3.86	1.20
300	2.79	-0.20	2.66	-0.32	2.75	-0.24	3.64	0.65
200	2.58	0.37	2.45	0.24	2.54	0.33	3.38	1.17
100	2.28	1.32	2.16	1.20	2.24	1.28	3.01	2.05
32	1.91	1.68	1.80	1.57	1.88	1.64	2.52	2.29
8	1.51	1.44	1.42	1.35	1.49	1.42	2.01	1.94

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.83	0.00	6.83	0.00	6.83	0.00	6.84	0.01
1000	8.98	5.47	7.14	3.63	8.93	5.42	8.73	5.22
900	8.99	5.05	8.09	4.15	8.96	5.02	8.86	4.92
800	8.93	4.77	8.29	4.13	8.85	4.69	8.88	4.72
700	8.84	4.34	8.32	3.82	8.81	4.31	8.85	4.35
600	8.73	4.14	8.29	3.70	8.70	4.11	8.80	4.21
500	8.58	3.95	8.20	3.57	8.50	3.93	8.70	4.07
400	8.42	3.42	8.07	3.07	8.40	3.40	8.57	3.57
300	8.20	2.80	7.89	2.49	8.18	2.78	8.39	2.99
200	7.88	2.66	7.59	2.38	7.86	2.65	8.10	2.89
100	7.34	2.81	7.10	2.57	7.34	2.81	7.60	3.07
32	6.42	2.10	6.23	1.91	6.42	2.10	6.68	2.36
8	5.24	1.07	5.09	0.92	5.24	1.07	5.46	1.29

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	294.	295.	296.	303.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	26.23	-0.77	26.23	-0.77	26.35	-0.65	25.49	-1.51
900	26.45	-1.55	26.44	-1.56	26.61	-1.39	25.88	-2.12
800	26.55	-2.45	26.56	-2.44	26.69	-2.31	26.98	-2.92
700	26.59	-3.41	26.61	-3.39	26.74	-3.26	26.20	-3.80
600	26.63	-4.37	26.64	-4.36	26.78	-4.22	26.29	-4.71
500	26.64	-5.46	26.65	-5.45	26.79	-5.31	26.37	-5.73
400	26.64	-6.46	26.66	-6.44	26.78	-6.32	26.41	-6.69
300	26.62	-7.38	26.64	-7.36	26.76	-7.24	26.45	-7.55
200	26.57	-8.13	26.59	-8.11	26.70	-8.00	26.45	-8.25
100	26.43	-8.92	26.40	-8.90	26.50	-8.80	26.41	-8.99
32	26.26	-9.74	26.27	-9.73	26.37	-9.63	26.24	-9.76
8	25.95	-10.15	25.96	-10.14	26.04	-10.06	25.96	-10.14
2	25.27	-10.93	25.28	-10.92	25.34	-10.86	25.33	-10.87
0	24.43	XXXX	24.43	XXXX	24.47	XXXX	24.54	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	15.53	-2.08	15.41	-2.20	15.29	-2.32	15.15	-2.46
900	16.09	-2.68	16.01	-2.76	15.91	-2.86	15.95	-2.82
800	16.64	-2.98	16.57	-3.05	16.49	-3.13	16.63	-2.99
700	17.03	-3.74	16.97	-3.80	16.91	-3.86	17.12	-3.55
600	17.41	-4.56	17.35	-4.62	17.29	-4.68	17.57	-4.40
500	17.77	-5.32	17.73	-5.36	17.67	-5.42	18.02	-5.07
400	18.14	-6.12	18.10	-6.16	18.05	-6.21	18.44	-5.82
300	18.53	-6.71	18.49	-6.75	18.44	-6.80	18.88	-6.36
200	18.95	0.18	18.92	0.15	18.88	0.11	19.39	0.62
100	19.45	5.70	19.43	5.68	19.39	5.64	20.00	6.25
32	19.97	6.76	19.95	6.74	19.91	6.70	20.60	7.39
8	20.43	8.00	20.42	7.99	20.38	7.95	21.15	8.72
2	21.21	XXXX	21.23	XXXX	21.18	XXXX	22.05	XXXX
0	22.18	XXXX	22.22	XXXX	22.17	XXXX	23.19	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	294.	295.	296.	303.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	26.38	-15.22	26.38	-15.22	26.40	-15.20	26.93	-14.67
-0.125	25.27	-2.93	25.27	-2.93	25.28	-2.92	26.11	-2.09
-0.250	25.03	-0.87	25.04	-0.86	25.04	-0.86	25.38	-0.52
-0.500	24.11	0.21	24.11	0.21	24.12	0.22	24.14	0.24
-1.000	20.81	0.11	20.80	0.10	20.78	0.08	20.91	0.21
-2.000	20.59	-0.01	20.58	-0.02	20.58	-0.02	25.88	-2.32

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	6.77	XXXX	6.64	XXXX	6.76	XXXX	7.06	XXXX
8	5.46	1.29	5.29	1.12	5.45	1.28	5.82	1.65
2	3.03	-1.09	2.92	-1.20	3.02	-1.10	3.24	-0.88

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.31	0.31	5.31	0.31	5.32	0.32	5.24	0.24
R(N)	1.38	XXXX	1.38	XXXX	1.38	XXXX	1.31	XXXX
Q(C,0)	-1.44	XXXX	-1.41	XXXX	-1.48	XXXX	-1.75	XXXX
Q(E,0)	3.38	XXXX	3.36	XXXX	3.41	XXXX	3.04	XXXX
Q(S,0)	-0.55	XXXX	-0.56	XXXX	-0.55	XXXX	-0.68	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	19.20	XXXX	18.26	XXXX	19.06	XXXX	15.48	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	39.20	XXXX	39.30	XXXX	39.30	XXXX	40.80	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	9504	9504	9504	9504
TAPE NO.	304.	305.	306.	307.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.82	-0.01	6.82	-0.01	6.82	-0.01	6.82	-0.01
1000	5.84	2.08	5.02	1.26	5.02	1.26	5.88	2.11
900	4.78	1.47	4.77	1.46	4.77	1.46	4.84	1.53
800	4.46	1.43	4.55	1.52	4.57	1.55	4.52	1.49
700	4.24	1.74	4.38	1.88	4.38	1.88	4.29	1.79
600	4.05	1.71	4.20	1.86	4.20	1.86	4.09	1.75
500	3.86	1.60	4.01	1.75	4.01	1.75	3.90	1.64
400	3.67	1.01	3.82	1.16	3.82	1.16	3.71	1.05
300	3.45	0.47	3.60	0.61	3.60	0.61	3.49	0.51
200	3.21	1.00	3.34	1.13	3.35	1.14	3.24	1.03
100	2.85	1.89	2.97	2.01	2.97	2.01	2.99	1.92
32	2.39	2.16	2.49	2.26	2.49	2.26	2.41	2.18
8	1.89	1.82	1.98	1.91	1.98	1.91	1.91	1.84

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.84	0.01	6.84	0.01	6.84	0.01	6.84	0.01
1000	6.93	3.42	8.70	5.19	8.70	5.19	6.94	3.43
900	8.01	4.07	8.83	4.89	8.83	4.89	8.03	4.09
800	8.32	4.16	8.85	4.69	8.86	4.70	8.33	4.17
700	8.42	3.52	8.93	4.33	8.83	4.33	8.43	3.93
600	8.45	3.86	8.78	4.19	8.78	4.19	8.45	3.86
500	8.41	3.78	8.69	4.06	8.69	4.06	8.41	3.78
400	8.32	3.32	8.56	3.56	8.57	3.57	8.33	3.33
300	8.17	2.77	8.38	2.98	8.39	2.99	8.17	2.77
200	7.91	2.70	8.10	2.89	8.10	2.89	7.91	2.70
100	7.43	2.90	7.55	3.02	7.60	3.07	7.43	2.90
32	6.54	2.22	6.68	2.36	6.68	2.36	6.54	2.22
8	5.35	1.18	5.46	1.29	5.46	1.29	5.35	1.18

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	304.	305.	306.	307.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	25.66	-1.34	25.65	-1.35	25.51	-1.49	25.37	-1.63
900	26.06	-1.94	26.07	-1.93	25.91	-2.09	26.76	-7.24
800	26.27	-2.73	26.26	-2.74	26.79	-2.91	25.93	-3.07
700	26.39	-3.61	26.39	-3.61	26.21	-3.79	26.06	-3.94
600	26.46	-4.54	26.46	-4.54	26.31	-4.89	26.14	-4.86
500	26.53	-5.57	26.53	-5.57	26.37	-5.73	26.22	-5.88
400	26.58	-6.52	26.58	-6.52	26.41	-6.67	26.26	-6.84
300	26.61	-7.39	26.61	-7.39	26.44	-7.56	26.29	-7.71
200	26.61	-8.09	26.61	-8.09	26.43	-8.27	26.29	-8.41
100	26.55	-8.85	26.55	-8.85	26.38	-9.02	26.25	-9.15
32	26.38	-9.62	26.38	-9.62	26.21	-9.79	26.09	-9.91
8	26.08	-10.02	26.07	-10.03	25.92	-10.18	25.81	-10.29
2	25.42	-10.78	25.42	-10.78	25.27	-10.93	25.19	-11.01
0	24.60	XXXX	24.60	XXXX	24.46	XXXX	24.42	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	14.90	-2.71	14.90	-2.71	14.79	-2.82	14.95	-2.56
900	15.78	-2.99	15.78	-2.99	15.66	-3.11	15.77	-3.00
800	16.40	-3.22	16.50	-3.12	16.37	-3.25	16.45	-3.17
700	16.99	-3.78	16.99	-3.78	16.86	-3.91	16.93	-3.84
600	17.40	-4.57	17.47	-4.50	17.33	-4.64	17.38	-4.59
500	17.92	-5.17	17.92	-5.17	17.78	-5.31	17.82	-5.27
400	18.37	-5.89	18.37	-5.89	18.22	-6.04	18.26	-6.00
300	18.83	-6.41	18.84	-6.40	18.68	-6.56	18.77	-6.54
200	19.32	0.55	19.34	0.57	19.17	0.40	19.20	0.43
100	19.94	6.19	19.95	6.20	19.78	6.03	19.79	6.04
32	20.55	7.34	20.57	7.36	20.39	7.18	20.40	7.19
8	21.11	8.68	21.12	8.69	20.94	8.51	20.94	8.51
2	22.04	XXXX	22.04	XXXX	21.85	XXXX	21.85	XXXX
0	23.19	XXXX	23.19	XXXX	22.99	XXXX	22.98	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	304.	305.	306.	307.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	26.96	-14.64	26.96	-14.64	26.88	-14.72	26.86	-14.74
-0.125	26.12	-2.08	26.13	-2.07	25.60	-2.60	25.59	-2.61
-0.250	25.38	-0.52	25.39	-0.51	25.14	-0.76	25.13	-0.77
-0.500	24.16	0.26	24.15	0.25	24.12	0.22	24.12	0.22
-1.000	20.85	0.15	20.86	0.16	20.78	0.08	20.78	0.08
-2.000	25.88	-2.32	25.88	-2.32	20.58	-0.02	20.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8°	6.95	XXXX	7.06	XXXX	7.06	XXXX	6.95	XXXX
8	5.68	1.51	5.81	1.64	5.81	1.64	5.68	1.51
2	3.15	-0.97	3.22	-0.90	3.23	-0.89	3.16	-0.96

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.26	0.26	5.23	0.23	5.22	0.22	5.24	0.24
R(IN)	1.32	XXXX	1.31	XXXX	1.25	XXXX	1.31	XXXX
Q(E,D)	-1.08	XXXX	-1.09	XXXX	-1.07	XXXX	-1.03	XXXX
Q(E,C)	3.09	XXXX	3.08	XXXX	3.07	XXXX	3.04	XXXX
Q(S,C)	-0.68	XXXX	-0.68	XXXX	-0.69	XXXX	-0.70	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	15.20	XXXX	15.44	XXXX	15.44	XXXX	15.22	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	40.80	XXXX	40.90	XXXX	39.60	XXXX	39.50	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

KIOM SQ/SEC)	9504	9504	9504
TAPE NO.	308.	309.	310.
INTERVAL	12.00HR	12.00HR	12.00HR
			311.
			12.00HR

## U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.82	-0.01	2.95	-3.88	2.94	-3.89	2.95	-3.88
1000	5.13	1.35	2.52	-1.24	2.80	-0.96	2.52	-1.24
900	4.86	1.55	2.53	-0.78	2.58	-0.73	2.53	-0.78
800	4.65	1.63	2.49	-0.53	2.51	-0.52	2.50	-0.51
700	4.45	1.95	2.44	-0.06	2.43	-0.07	2.44	-0.06
600	4.26	1.92	2.39	0.03	2.36	0.02	2.38	0.04
500	4.06	1.80	2.30	0.04	2.02	-0.24	2.30	0.04
400	3.87	1.71	2.22	-0.44	2.20	-0.45	2.23	-0.43
300	3.64	2.65	2.13	-0.86	2.11	-0.89	2.13	-0.86
200	3.39	1.18	2.00	-0.21	1.98	-0.23	2.01	-0.20
100	3.01	2.05	1.81	0.85	1.79	0.83	1.82	0.86
32	2.52	2.29	1.55	1.32	1.53	1.30	1.55	1.32
8	2.01	1.94	1.24	1.17	1.22	1.15	1.24	1.17

## V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.84	0.01	2.06	-4.77	2.06	-4.77	2.06	-4.77
1000	8.73	5.22	1.41	-2.10	1.72	-1.79	1.39	-2.12
900	8.86	4.92	1.62	-2.32	1.57	-2.27	1.59	-2.35
800	8.88	4.72	1.73	-2.43	1.74	-2.42	1.71	-2.45
700	8.85	4.35	1.80	-2.70	1.80	-2.70	1.78	-2.72
600	8.80	4.21	1.85	-2.74	1.84	-2.75	1.84	-2.75
500	8.70	4.07	1.89	-2.74	1.88	-2.75	1.88	-2.76
400	8.58	3.58	1.91	-3.04	1.90	-3.10	1.90	-3.10
300	8.34	2.99	1.92	-3.48	1.91	-3.49	1.91	-3.49
200	8.11	2.50	1.93	-3.31	1.89	-3.32	1.89	-3.32
100	7.67	3.07	1.83	-2.70	1.82	-2.71	1.82	-2.71
32	6.68	2.36	1.64	-2.68	1.63	-2.69	1.63	-2.69
8	5.46	1.29	1.35	-2.82	1.34	-2.83	1.34	-2.83

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	308.	309.	310.	311.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG. C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	25.36	-1.64	25.50	-1.50	25.51	-1.49	25.52	-1.48
900	25.75	-2.25	25.90	-2.10	25.90	-2.10	25.92	-2.08
800	25.93	-3.07	26.09	-2.91	26.09	-2.91	26.12	-2.88
700	26.06	-3.94	26.21	-3.79	26.21	-3.79	26.24	-3.76
600	26.14	-4.86	26.30	-4.70	26.29	-4.71	26.33	-4.67
500	26.21	-5.89	26.36	-5.74	26.37	-5.73	26.40	-5.70
400	26.25	-6.85	26.40	-6.70	26.41	-6.69	26.44	-6.66
300	26.28	-7.72	26.43	-7.57	26.43	-7.57	26.47	-7.53
200	26.29	-8.41	26.43	-8.27	26.43	-8.27	26.46	-8.24
100	26.25	-9.15	26.38	-9.02	26.38	-9.02	26.42	-8.98
32	26.09	-9.91	26.20	-9.80	26.21	-9.79	26.23	-9.77
8	25.82	-10.26	25.92	-10.16	25.92	-10.16	25.93	-10.17
2	25.20	-11.00	25.21	-10.99	25.21	-10.99	25.21	-10.99
0	24.42	XXXX	24.46	XXXX	24.47	XXXX	24.45	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	15.06	-2.55	14.79	-2.82	14.79	-2.82	14.71	-2.90
900	15.85	-2.92	15.66	-3.11	15.66	-3.11	15.56	-3.21
800	16.52	-3.10	16.30	-3.20	16.36	-3.26	16.26	-3.36
700	16.99	-3.78	16.85	-3.91	16.86	-3.91	16.75	-4.02
600	17.44	-4.53	17.34	-4.63	17.33	-4.64	17.22	-4.75
500	17.87	-5.22	17.79	-5.30	17.77	-5.32	17.65	-5.44
400	18.31	-5.95	18.22	-6.04	18.22	-6.04	18.09	-6.17
300	18.74	-6.50	18.68	-6.56	18.68	-6.56	18.54	-6.70
200	19.23	6.46	19.17	6.40	19.17	6.40	19.04	6.27
100	19.83	6.03	19.79	6.04	19.79	6.04	19.65	5.90
32	20.44	7.23	20.34	7.18	20.40	7.19	20.27	7.06
8	20.98	8.55	20.95	8.52	20.94	8.51	20.82	8.39
2	21.88	XXXX	21.96	XXXX	21.95	XXXX	21.84	XXXX
0	22.01	XXXX	23.01	XXXX	23.01	XXXX	22.90	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	308.	309.	310.	311.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	26.86	-14.74	26.88	-14.72	26.88	-14.72	26.87	-14.73
-0.125	25.51	-2.69	25.60	-2.60	25.60	-2.60	25.61	-2.59
-0.250	25.14	-0.76	25.14	-0.76	25.13	-0.77	25.14	-0.76
-0.500	24.13	0.23	24.13	0.23	24.12	0.22	24.13	0.23
-1.000	20.78	0.08	20.78	0.08	20.78	0.08	20.78	0.08
-2.000	20.58	-0.02	20.58	-0.02	20.58	-0.02	20.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	7.06	XXXX	4.40	XXXX	4.39	XXXX	4.01	XXXX
8	5.82	1.65	1.84	-2.33	1.82	-2.35	1.83	-2.34
2	3.25	-0.87	0.94	-3.18	0.93	-3.19	0.94	-3.18

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.22	0.22	5.21	0.21	5.23	0.23	5.23	0.23
R(N)	1.29	XXXX	1.29	XXXX	1.31	XXXX	1.31	XXXX
Q(C,0)	-1.03	XXXX	-1.07	XXXX	-1.07	XXXX	-1.09	XXXX
Q(E,0)	3.03	XXXX	3.06	XXXX	3.07	XXXX	3.10	XXXX
Q(S,0)	-0.70	XXXX	-0.69	XXXX	-0.69	XXXX	-0.69	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	15.46	XXXX	9.62	XXXX	9.62	XXXX	9.62	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	39.50	XXXX	39.50	XXXX	39.50	XXXX	39.60	XXXX

CASE DPG 4 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	15034	15029	15064	9539
TAPE NO.	316.	317.	318.	322.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.94	-0.01	2.94	-0.01	2.94	-0.01	6.81	3.86
1000	2.69	1.23	2.96	1.50	2.69	1.23	1.51	0.05
900	2.92	1.41	3.05	1.54	2.91	1.40	1.66	0.15
800	2.96	1.02	3.04	1.10	2.95	1.02	1.68	-0.26
700	2.94	0.57	3.00	0.63	2.93	0.56	1.63	-0.74
600	2.89	0.49	2.94	0.54	2.88	0.48	1.57	-0.82
500	2.82	-0.10	2.86	-0.06	2.81	-0.11	1.49	-1.43
400	2.74	-0.28	2.77	-0.25	2.73	-0.29	1.41	-1.61
300	2.63	-0.70	2.66	-0.66	2.63	-0.70	1.30	-2.03
200	2.50	-0.15	2.53	-0.12	2.45	-0.19	1.18	-1.47
100	2.28	0.88	2.00	0.89	2.27	0.86	1.01	-0.40
32	1.96	1.53	1.98	1.55	1.96	1.53	0.80	0.37
8	1.58	1.44	1.59	1.45	1.58	1.44	0.61	0.47

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.06	0.00	2.06	0.00	2.06	0.00	6.83	4.77
1000	2.03	0.57	2.02	0.56	2.04	0.58	7.56	6.10
900	2.32	0.92	2.30	0.90	2.32	0.92	7.81	6.41
800	2.42	0.73	2.41	0.72	2.42	0.73	7.88	6.19
700	2.47	0.48	2.46	0.47	2.47	0.48	7.88	5.89
600	2.50	0.56	2.49	0.55	2.49	0.56	7.85	5.91
500	2.49	0.38	2.49	0.38	2.49	0.38	7.78	5.56
400	2.48	0.52	2.48	0.52	2.48	0.52	7.68	5.72
300	2.45	0.03	2.44	0.02	2.45	0.03	7.53	5.11
200	2.38	-0.77	2.37	-0.78	2.38	-0.77	7.28	4.14
100	2.24	-1.63	2.23	-1.64	2.24	-1.63	6.84	2.97
32	1.97	-2.13	1.97	-2.13	1.97	-2.13	6.02	1.92
8	1.62	-2.50	1.61	-2.51	1.62	-2.50	4.93	0.81

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	316.	317.	318.	322.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	24.44	1.44	24.44	1.44	24.44	1.44	24.25	1.25
900	24.72	0.72	24.73	0.73	24.73	0.73	24.35	0.35
800	24.90	0.00	24.90	0.00	24.90	0.00	24.43	-0.47
700	25.01	-0.69	25.01	-0.69	25.02	-0.68	24.52	-1.18
600	25.12	-1.38	25.12	-1.38	25.12	-1.38	24.61	-1.89
500	25.22	-2.08	25.22	-2.08	25.22	-2.08	24.71	-2.59
400	25.34	-2.86	25.33	-2.87	25.33	-2.87	24.85	-3.35
300	25.47	-3.63	25.47	-3.63	25.47	-3.63	25.02	-4.08
200	25.64	-4.56	25.64	-4.56	25.64	-4.56	25.25	-4.95
100	25.90	-6.10	25.91	-6.09	25.91	-6.09	25.64	-6.36
32	26.35	-7.45	26.34	-7.46	26.34	-7.46	26.27	-7.53
8	26.86	-7.54	26.86	-7.54	26.86	-7.54	27.07	-7.33
2	28.03	-6.97	28.02	-6.98	28.03	-6.97	28.90	-6.10
0	29.13	XXXX	29.12	XXXX	29.14	XXXX	30.56	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	12.65	-1.01	12.65	-1.01	12.67	-0.99	12.81	-0.85
900	13.07	-1.23	13.07	-1.23	13.11	-1.19	13.19	-1.11
800	13.58	-1.49	13.58	-1.49	13.62	-1.45	13.71	-1.36
700	13.94	-2.04	13.95	-2.03	13.99	-1.99	14.11	-1.87
600	14.31	-2.63	14.30	-2.64	14.35	-2.59	14.49	-2.45
500	14.67	-3.05	14.66	-3.06	14.72	-3.00	14.90	-2.82
400	15.05	-3.48	15.04	-3.49	15.08	-3.45	15.32	-3.21
300	15.44	-4.06	15.44	-4.06	15.51	-3.99	15.81	-3.69
200	15.94	-4.83	15.94	-4.83	16.01	-4.76	16.42	-4.35
100	16.56	-6.39	16.56	-6.39	16.63	-6.32	17.24	-5.71
32	17.31	-14.55	17.31	-14.55	17.37	-14.49	18.33	-13.53
8	18.10	-15.19	18.11	-15.18	18.17	-15.12	19.54	-13.75
2	19.78	XXXX	19.78	XXXX	19.84	XXXX	22.26	XXXX
0	21.36	XXXX	21.36	XXXX	21.41	XXXX	24.71	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NU.	316.	317.	318.	322.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	24.61	-24.69	24.60	-24.70	24.60	-24.70	26.65	-22.65
-0.125	24.24	-0.76	24.25	-0.75	24.25	-0.75	25.09	0.09
-0.250	25.35	0.35	25.35	0.35	25.35	0.35	25.51	0.51
-0.500	24.18	0.28	24.17	0.27	24.17	0.27	24.17	0.27
-1.000	20.74	-1.06	20.74	-0.06	20.74	-0.06	20.02	-0.78
-2.000	20.58	-0.02	20.59	-0.01	20.58	-0.02	25.90	0.90

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8*	4.60	XXXX	4.60	XXXX	4.58	XXXX	6.37	XXXX
8	2.27	-1.86	2.27	-1.85	2.26	-1.86	4.97	0.85
2	1.10	-3.02	1.10	-3.02	1.10	-3.02	2.36	-1.76

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.82	0.32	19.82	0.32	19.82	0.32	19.82	0.32
R(N)	11.59	XXXX	11.59	XXXX	11.59	XXXX	11.41	XXXX
Q(C,0)	2.64	XXXX	2.64	XXXX	2.65	XXXX	2.58	XXXX
Q(E,0)	7.65	XXXX	7.65	XXXX	7.63	XXXX	7.71	XXXX
Q(S,0)	1.30	XXXX	1.30	XXXX	1.30	XXXX	1.12	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	15.84	XXXX	15.8	XXXX	15.88	XXXX	13.96	XXXX

INTEGRATED EVAPOTRIPRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	14.90	XXXX	14.90	XXXX	14.90	XXXX	16.60	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	9534	9534	9534	9534
TAPE NO.	323.	324.	325.	326.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.81	3.86	6.81	3.86	6.81	3.86	6.81	3.86
1000	4.71	3.25	1.49	0.03	1.49	0.03	4.72	3.26
900	2.56	1.05	1.06	0.15	1.65	0.14	2.59	1.08
800	2.12	0.18	1.67	-0.27	1.67	-0.27	2.13	0.19
700	1.90	-0.47	1.63	-0.74	1.63	-0.74	1.92	-0.45
600	1.75	-0.65	1.57	-0.83	1.56	-0.84	1.77	-0.63
500	1.63	-1.30	1.48	-1.44	1.48	-1.44	1.64	-1.29
400	1.51	-1.51	1.40	-1.62	1.40	-1.62	1.52	-1.50
300	1.38	-1.95	1.29	-2.04	1.29	-2.04	1.39	-1.94
200	1.24	-1.41	1.17	-1.48	1.18	-1.47	1.25	-1.40
100	1.05	-0.36	1.00	-0.41	1.00	-0.41	1.06	-0.35
32	0.84	0.41	0.79	0.36	0.80	0.37	0.85	0.42
8	0.64	0.50	0.61	0.47	0.61	0.47	0.64	0.50

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.83	4.77	6.83	4.77	6.82	4.76	6.83	4.77
1000	6.51	5.05	7.53	6.07	7.52	6.06	6.53	5.07
900	7.32	5.92	7.76	6.36	7.77	6.37	7.35	5.95
800	7.57	5.88	7.43	6.14	7.84	6.15	7.60	5.91
700	7.66	5.68	7.84	5.85	7.84	5.85	7.69	5.70
600	7.68	5.74	7.82	5.88	7.81	5.88	7.71	5.77
500	7.64	5.52	7.75	5.63	7.75	5.63	7.67	5.55
400	7.57	5.61	7.65	5.69	7.56	5.70	7.59	5.63
300	7.44	5.02	7.51	5.09	7.51	5.09	7.45	5.03
200	7.21	4.06	7.26	4.11	7.26	4.11	7.22	4.07
100	6.78	2.91	6.82	2.95	6.82	2.95	6.79	2.92
32	5.97	1.87	6.01	1.91	6.01	1.91	5.98	1.88
8	4.89	0.77	4.92	0.80	4.92	0.80	4.90	0.78

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	323.	324.	325.	326.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	24.29	1.29	24.28	1.28	24.23	1.23	24.18	1.18
900	24.39	0.39	24.39	0.39	24.29	0.29	24.25	0.25
800	24.49	-0.41	24.49	-0.41	24.37	-0.53	24.32	-0.58
700	24.58	-1.12	24.58	-1.12	24.45	-1.25	24.39	-1.31
600	24.68	-1.82	24.67	-1.83	24.54	-1.96	24.47	-2.03
500	24.78	-2.52	24.78	-2.52	24.64	-2.66	24.57	-2.73
400	24.91	-3.29	24.92	-3.28	24.76	-3.44	24.70	-3.50
300	25.08	-4.02	25.08	-4.02	24.91	-4.19	24.85	-4.25
200	25.31	-4.89	25.32	-4.88	25.13	-5.07	25.07	-5.13
100	25.70	-6.30	25.69	-6.31	25.49	-6.51	25.44	-6.56
32	26.32	-7.48	26.33	-7.47	26.11	-7.69	26.06	-7.74
8	27.12	-7.28	27.11	-7.29	26.87	-7.53	26.82	-7.58
2	28.93	-6.07	28.93	-6.07	28.63	-6.37	28.60	-6.40
0	30.57	XXXX	30.58	XXXX	30.21	XXXX	30.20	XXXX

## VAPOR PRESSURE (MH)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	12.65	-1.01	12.65	-1.01	12.62	-1.04	12.72	-0.94
900	13.08	-1.22	13.09	-1.21	13.03	-1.27	13.11	-1.19
800	13.62	-1.45	13.61	-1.46	13.55	-1.52	13.62	-1.45
700	14.02	-1.96	14.02	-1.96	13.94	-2.04	14.01	-1.97
600	14.42	-2.52	14.43	-2.51	14.34	-2.60	14.39	-2.55
500	14.84	-2.88	14.84	-2.88	14.74	-2.98	14.79	-2.93
400	15.28	-3.25	15.27	-3.26	15.17	-3.36	15.21	-3.32
300	15.78	-3.72	15.77	-3.73	15.65	-3.85	15.69	-3.81
200	16.40	-4.37	16.39	-4.38	16.28	-4.49	16.30	-4.47
100	17.23	-5.72	17.22	-5.73	17.08	-5.87	17.10	-5.85
32	18.31	-15.55	18.30	-13.56	18.13	-13.73	18.15	-13.71
8	19.53	-13.76	19.52	-13.77	19.32	-13.97	19.33	-13.96
2	22.26	XXXX	22.25	XXXX	21.96	XXXX	21.97	XXXX
0	24.72	XXXX	24.71	XXXX	24.34	XXXX	24.34	XXXX

CASE UPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	323.	324.	325.	326.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	26.67	-22.63	26.67	-22.63	25.09	-24.21	25.08	-24.22
-0.125	25.09	0.09	25.09	0.09	24.44	-0.56	24.44	-0.56
-0.250	25.51	0.51	25.51	0.51	25.39	0.39	25.39	0.39
-0.500	24.18	0.28	24.18	0.28	24.18	0.28	24.17	0.27
-1.000	20.79	-0.01	20.79	-0.01	20.74	-0.06	20.74	-0.06
-2.000	25.88	0.88	25.88	0.88	20.56	-0.04	20.57	-0.03

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	6.00	XXXX	6.36	XXXX	6.37	XXXX	6.35	XXXX
8	4.94	0.81	4.96	0.84	4.96	0.84	4.95	0.82
2	2.34	-1.78	2.35	-1.77	2.35	-1.77	2.34	-1.78

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(U)	19.82	0.32	19.83	0.34	19.82	0.32	19.82	0.32
R(N)	11.42	XXXX	11.43	XXXX	11.45	XXXX	11.45	XXXX
Q(C,O)	2.56	XXXX	2.56	XXXX	2.48	XXXX	2.49	XXXX
Q(E,O)	7.73	XXXX	7.74	XXXX	7.50	XXXX	7.48	XXXX
Q(S,O)	1.12	XXXX	1.12	XXXX	1.47	XXXX	1.46	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	13.92	XXXX	13.96	XXXX	13.96	XXXX	13.92	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	16.60	XXXX	16.70	XXXX	15.70	XXXX	15.80	XXXX

CASE DPG 4 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KI CM SQ/SEC)	9529	9539	9539	9539
TAPE NO.	327.	328.	329.	330.
INTERVAL	6.00 HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.81	3.86	2.94	-0.01	2.95	0.07	2.94	-0.01
1000	1.50	0.04	2.73	1.27	2.94	1.48	2.73	1.27
900	1.66	0.15	2.91	1.40	2.99	1.48	2.91	1.40
800	1.67	-0.27	2.93	0.99	2.98	1.05	2.94	1.01
700	1.63	-0.74	2.90	0.53	2.93	0.56	2.91	0.55
600	1.57	-0.82	2.85	0.45	2.88	0.48	2.87	0.47
500	1.49	-1.43	2.78	-0.14	2.80	-0.12	2.70	-0.13
400	1.41	-1.61	2.70	-0.32	2.72	-0.30	2.71	-0.31
300	1.30	-2.03	2.59	-0.74	2.61	-0.72	2.60	-0.73
200	1.18	-1.47	2.46	-0.19	2.47	-0.18	2.46	-0.19
100	1.01	-0.40	2.24	0.83	2.25	0.84	2.24	0.84
32	0.80	0.37	1.92	1.49	1.93	1.50	1.92	1.49
8	0.61	0.47	1.54	1.40	1.55	1.41	1.55	1.41

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.82	4.76	2.06	-0.00	2.06	-0.00	2.06	0.00
1000	7.57	6.11	2.13	0.66	1.98	0.52	2.12	0.66
900	7.81	6.41	2.42	1.02	2.35	0.95	2.42	1.02
800	7.88	6.19	2.55	0.86	2.51	0.82	2.55	0.86
700	7.88	5.89	2.62	0.63	2.59	0.60	2.63	0.64
600	7.85	5.91	2.67	0.73	2.64	0.70	2.66	0.73
500	7.78	5.66	2.68	0.56	2.66	0.55	2.68	0.56
400	7.68	5.72	2.69	0.73	2.67	0.71	2.69	0.73
300	7.53	5.11	2.67	0.25	2.65	0.23	2.67	0.25
200	7.24	4.10	2.61	-0.54	2.60	-0.55	2.61	-0.54
100	6.84	2.97	2.48	-1.39	2.47	-1.40	2.48	-1.39
32	6.03	1.93	2.20	-1.90	2.19	-1.91	2.20	-1.90
8	4.93	0.81	1.81	-2.31	1.80	-2.32	1.81	-2.31

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	327.	328.	329.	330.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	24.19	1.19	24.23	1.23	24.23	1.23	24.23	1.23
900	24.24	0.24	24.31	0.31	24.31	0.31	24.31	0.31
800	24.33	-0.57	24.38	-0.52	24.38	-0.52	24.37	-0.53
700	24.39	-1.31	24.45	-1.25	24.45	-1.25	24.45	-1.25
600	24.47	-2.03	24.54	-1.96	24.54	-1.96	24.54	-1.96
500	24.58	-2.72	24.64	-2.66	24.64	-2.66	24.64	-2.66
400	24.69	-3.51	24.76	-3.44	24.76	-3.44	24.76	-3.44
300	24.85	-4.25	24.92	-4.18	24.92	-4.18	24.92	-4.18
200	25.08	-5.12	25.13	-5.07	25.14	-5.06	25.15	-5.05
100	25.44	-6.56	25.50	-6.50	25.49	-6.51	25.51	-6.49
32	26.05	-7.75	26.11	-7.69	26.11	-7.69	26.11	-7.69
8	26.82	-7.58	26.86	-7.54	26.87	-7.53	26.86	-7.54
2	28.60	-6.40	28.56	-6.44	28.57	-6.43	28.56	-6.44
0	30.20	XXXX	30.21	XXXX	30.22	XXXX	30.21	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	12.78	-0.88	12.62	-1.04	12.62	-1.04	12.62	-1.04
900	13.15	-1.15	13.03	-1.27	13.03	-1.27	13.01	-1.29
800	13.64	-1.43	13.55	-1.52	13.55	-1.52	13.52	-1.55
700	14.03	-1.95	13.95	-2.03	13.94	-2.04	13.91	-2.07
600	14.41	-2.53	14.33	-2.61	14.34	-2.60	14.29	-2.65
500	14.81	-2.91	14.74	-2.98	14.75	-2.97	14.70	-3.02
400	15.22	-3.31	15.17	-3.36	15.17	-3.36	15.12	-3.41
300	15.69	-3.81	15.60	-3.90	15.65	-3.85	15.59	-3.91
200	16.31	-4.48	16.28	-4.49	16.28	-4.49	16.22	-4.55
100	17.10	-5.85	17.09	-5.86	17.08	-5.87	17.03	-5.92
32	18.15	-13.71	18.13	-13.73	18.13	-13.73	18.08	-13.78
8	19.33	-13.96	19.33	-13.96	19.32	-13.97	19.27	-14.02
2	21.97	XXXX	21.98	XXXX	21.87	XXXX	21.82	XXXX
0	24.34	XXXX	24.34	XXXX	24.34	XXXX	24.29	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	327.	328.	329.	330.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	25.10	-24.20	25.08	-24.22	25.10	-24.20	25.09	-24.21
-0.125	24.45	-0.55	24.44	-0.56	24.44	-0.56	24.44	-0.56
-0.250	25.38	0.38	25.39	0.39	25.39	0.39	25.39	0.39
-0.500	24.10	0.20	24.18	0.28	24.17	0.27	24.17	0.27
-1.000	20.74	-0.06	20.75	-0.05	20.74	-0.06	20.75	-0.05
-2.000	20.57	-0.03	20.57	-0.03	20.57	-0.03	20.57	-0.03

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8	3.18	XXXX	4.65	XXXX	4.61	XXXX	2.16	XXXX
4	4.97	0.85	2.38	-1.75	2.38	-1.74	2.38	-1.74
2	2.35	-1.77	1.17	-2.95	1.17	-2.95	1.17	-2.95

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.82	0.32	19.81	0.31	19.82	0.32	19.82	0.32
R(N)	11.44	XXXX	11.44	XXXX	11.45	XXXX	11.45	XXXX
Q(C,D)	2.49	XXXX	2.47	XXXX	2.47	XXXX	2.47	XXXX
Q(E,0)	7.48	XXXX	7.49	XXXX	7.50	XXXX	7.51	XXXX
Q(S,0)	1.46	XXXX	1.47	XXXX	1.47	XXXX	1.47	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	13.96	XXXX	10.18	XXXX	10.20	XXXX	10.22	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	15.80	XXXX	15.80	XXXX	15.70	XXXX	15.90	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	9414	9414	9434	6549
TAPE NO.	332.	333.	334.	335.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	9.25	-0.01	9.25	-0.01	9.25	-0.01	2.94	-6.32
1000	3.88	-0.75	5.88	1.25	3.88	-0.76	2.77	-1.86
900	3.39	-0.20	3.63	0.64	3.39	-0.20	2.25	-1.34
800	3.25	0.23	3.31	0.29	3.25	0.23	2.06	-0.96
700	3.22	-0.14	3.24	-0.11	3.22	-0.14	2.04	-1.32
600	3.23	-0.02	3.23	-0.02	3.22	-0.03	2.08	-1.17
500	3.21	-0.43	3.22	-0.42	3.21	-0.43	2.09	-1.55
400	3.20	0.48	3.20	0.48	3.19	0.47	2.09	-0.64
300	3.14	1.94	3.14	1.94	3.14	1.94	2.05	0.85
200	3.06	3.37	3.06	3.37	3.06	3.37	1.99	2.30
100	2.88	3.75	2.88	3.75	2.88	3.75	1.84	2.76
32	2.54	3.36	2.54	3.36	2.53	3.35	1.68	2.50
8	2.07	2.81	2.06	2.80	2.06	2.80	1.37	2.11

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.00	0.00	0.00	0.00	-0.00	-0.00	2.06	2.06
1000	3.52	3.52	1.95	1.95	3.52	3.52	1.59	1.59
900	3.78	3.47	3.57	3.26	3.78	3.47	1.79	1.48
800	4.11	3.47	4.07	3.43	4.12	3.48	2.08	1.44
700	4.48	3.19	4.47	3.18	4.48	3.19	2.43	1.14
600	4.86	2.32	4.85	2.31	4.85	2.31	2.83	0.29
500	5.20	1.56	5.20	1.56	5.20	1.56	3.25	-0.39
400	5.51	1.14	5.51	1.14	5.51	1.14	3.67	-0.70
300	5.76	1.28	5.76	1.28	5.76	1.28	4.04	-0.44
200	5.84	2.26	5.89	2.30	5.89	2.29	4.31	0.72
100	5.82	3.95	5.82	3.95	5.82	3.95	4.38	2.51
32	5.31	4.26	5.30	4.25	5.30	4.25	4.03	2.98
8	4.39	3.60	4.39	3.60	4.39	3.60	3.34	2.55

CASE D1G 4 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	332.	333.	334.	335.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.81	1.21	22.81	1.21	22.82	1.22	22.71	1.11
900	23.54	1.14	23.77	1.37	23.75	1.35	23.57	1.17
800	24.41	1.11	24.41	1.11	24.41	1.11	24.29	0.99
700	24.84	0.34	24.83	0.33	24.84	0.34	24.82	0.32
600	25.11	-0.59	25.11	-0.59	25.12	-0.58	25.20	-0.50
500	25.27	-0.83	25.27	-0.83	25.29	-0.81	25.46	-0.64
400	25.32	-0.98	25.32	-0.98	25.34	-0.96	25.59	-0.71
300	25.28	-1.62	25.27	-1.63	25.29	-1.61	25.58	-1.42
200	25.11	-0.29	25.11	-0.29	25.12	-0.28	25.41	0.01
100	24.76	1.16	24.76	1.16	24.77	1.17	25.01	1.41
32	24.15	1.65	24.14	1.64	24.16	1.66	24.28	1.78
8	23.47	2.37	23.46	2.36	23.47	2.37	23.48	2.38
2	22.15	2.45	22.14	2.44	22.15	2.45	21.94	2.24
0	20.69	XXXX	20.69	XXXX	20.69	XXXX	20.33	XXXX

VAPOR PRESSURE (MPA)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.82	0.03	11.79	0.10	11.82	0.03	11.73	-0.06
900	12.43	0.15	12.42	0.14	12.43	0.15	12.36	0.08
800	12.93	0.15	12.92	0.14	12.93	0.15	12.98	0.20
700	13.16	-0.41	13.15	-0.42	13.16	-0.41	13.29	-0.28
600	13.28	-1.12	13.29	-1.11	13.29	-1.11	13.47	-0.93
500	13.36	-1.62	13.36	-1.62	13.36	-1.62	13.52	-1.46
400	13.41	-1.96	13.40	-1.97	13.41	-1.96	13.50	-1.87
300	13.44	-1.63	13.45	-1.62	13.46	-1.61	13.42	-1.65
200	13.53	0.14	13.53	0.14	13.55	0.16	13.33	-0.06
100	13.69	2.67	13.70	2.68	13.71	2.69	13.30	2.28
32	14.01	2.14	14.01	2.14	14.02	2.15	13.53	1.66
8	14.46	2.98	14.49	3.01	14.49	3.01	14.00	2.52
2	15.44	XXXX	15.50	XXXX	15.51	XXXX	15.38	XXXX
0	16.61	XXXX	16.62	XXXX	16.64	XXXX	16.84	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	332.	333.	334.	335.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	18.61	-2.69	18.61	-2.69	18.61	-2.69	18.46	-2.84
-0.125	24.69	-0.41	24.70	-0.40	24.69	-0.41	24.68	-0.42
-0.250	25.82	0.22	25.82	0.22	25.82	0.22	25.82	0.22
-0.500	24.19	0.19	24.19	0.19	24.18	0.18	24.19	0.19
-1.000	20.72	-0.08	20.72	-0.08	20.72	-0.08	20.72	-0.08
-2.000	20.58	-0.02	20.58	-0.02	20.57	-0.03	20.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
80	6.20	XXXX	6.28	XXXX	6.28	XXXX	5.39	XXXX
8	4.86	3.78	4.86	3.77	4.85	3.77	3.61	2.53
2	2.55	1.52	2.55	1.52	2.55	1.51	1.85	0.82

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.44	0.44	5.43	0.43	5.44	0.44	5.43	0.43
R(N)	1.72	XXXX	1.72	XXXX	1.72	XXXX	1.77	XXXX
Q(C,D)	-2.03	XXXX	-2.03	XXXX	-2.02	XXXX	-1.60	XXXX
Q(E,0)	3.16	XXXX	3.15	XXXX	3.15	XXXX	2.83	XXXX
Q(S,C)	0.60	XXXX	0.60	XXXX	0.60	XXXX	0.54	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	13.62	XXXX	13.58	XXXX	13.56	XXXX	8.10	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.70	XXXX	1.70	XXXX	1.90	XXXX	1.40	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	6544	6554	6864	6869
TAPE NO.	336.	337.	338.	339.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.94	-6.32	2.94	-6.32	2.94	-6.32	2.94	-6.32
1000	2.85	-1.78	2.77	-1.86	2.75	-1.88	2.83	-1.80
900	2.26	-1.33	2.25	-1.34	2.24	-1.35	2.25	-1.34
800	2.06	-0.96	2.06	-0.96	2.08	-0.94	2.08	-0.94
700	2.04	-1.32	2.04	-1.32	2.06	-1.30	2.06	-1.30
600	2.08	-1.17	2.08	-1.17	2.08	-1.17	2.08	-1.17
500	2.09	-1.55	2.09	-1.55	2.08	-1.56	2.08	-1.56
400	2.09	-0.64	2.09	-0.64	2.07	-0.65	2.07	-0.65
300	2.05	0.85	2.05	0.85	2.03	0.84	2.04	0.84
200	1.99	2.30	1.99	2.30	1.97	2.28	1.97	2.28
100	1.89	2.76	1.89	2.76	1.85	2.72	1.85	2.72
32	1.68	2.50	1.68	2.50	1.63	2.44	1.63	2.44
8	1.37	2.11	1.37	2.11	1.31	2.05	1.31	2.05

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06
1000	1.79	1.79	1.59	1.59	1.60	1.60	1.79	1.79
900	1.81	1.50	1.79	1.48	1.82	1.51	1.84	1.53
800	2.08	1.44	2.08	1.44	2.13	1.49	2.14	1.50
700	2.43	1.14	2.43	1.14	2.49	1.20	2.50	1.21
600	2.83	0.29	2.83	0.29	2.89	0.35	2.89	0.35
500	3.25	-0.35	3.26	-0.38	3.28	-0.36	3.28	-0.36
400	3.68	-0.69	3.68	-0.69	3.65	-0.72	3.65	-0.72
300	4.05	-0.43	4.04	-0.44	3.97	-0.51	3.97	-0.51
200	4.31	0.72	4.31	0.72	4.19	0.60	4.19	0.60
100	4.38	2.51	4.38	2.51	4.23	2.36	4.23	2.36
32	4.03	2.98	4.03	2.98	3.89	2.84	3.89	2.84
8	3.30	2.51	3.35	2.56	3.22	2.43	3.22	2.43

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	336.	337.	338.	339.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.71	1.11	22.69	1.09	22.75	1.15	22.75	1.15
900	23.59	1.19	23.57	1.17	23.64	1.24	23.67	1.27
800	24.28	0.98	24.29	0.99	24.35	1.05	24.35	1.05
700	24.82	0.32	24.82	0.32	24.84	0.34	24.83	0.33
600	25.20	-0.50	25.21	-0.49	25.18	-0.52	25.17	-0.53
500	25.46	-0.64	25.47	-0.63	25.40	-0.70	25.38	-0.72
400	25.59	-0.71	25.59	-0.71	25.48	-0.82	25.47	-0.83
300	25.59	-1.31	25.59	-1.31	25.45	-1.45	25.45	-1.45
200	25.41	0.01	25.42	0.02	25.29	-0.11	25.28	-0.12
100	25.01	1.41	25.01	1.41	24.92	1.32	24.91	1.31
32	24.28	1.78	24.29	1.79	24.28	1.78	24.27	1.77
8	23.48	2.38	23.49	2.39	23.58	2.48	23.57	2.47
2	21.94	2.24	21.95	2.25	22.24	2.54	22.24	2.54
0	20.32	XXXX	20.33	XXXX	20.83	XXXX	20.83	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.74	-0.05	11.74	-0.05	11.77	-0.02	11.77	-0.02
900	12.36	0.08	12.36	0.08	12.40	0.12	12.39	0.11
800	12.98	0.20	12.98	0.20	12.95	-0.18	12.96	0.18
700	13.30	-0.27	13.31	-0.26	13.24	-0.33	13.23	-0.34
600	13.46	-0.94	13.47	-0.93	13.38	-1.02	13.37	-1.03
500	13.53	-1.45	13.54	-1.44	13.45	-1.53	13.45	-1.53
400	13.50	-1.87	13.51	-1.86	13.47	-1.90	13.45	-1.92
300	13.41	-1.66	13.43	-1.64	13.45	-1.62	13.44	-1.63
200	13.33	-0.06	13.34	-0.05	13.47	0.08	13.46	0.07
100	13.31	2.29	13.32	2.30	13.57	2.55	13.56	2.54
32	13.52	1.65	13.53	1.66	13.90	2.03	13.90	2.03
8	14.07	2.59	14.08	2.60	14.48	3.00	14.48	3.00
2	15.42	XXXX	15.43	XXXX	15.84	XXXX	15.83	XXXX
0	16.84	XXXX	16.85	XXXX	17.27	XXXX	17.26	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	336.	337.	338.	339.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	18.46	-2.84	18.46	-2.84	20.18	-1.12	20.18	-1.12
-0.125	24.68	-0.42	24.60	-0.50	24.92	-0.18	24.92	-0.18
-0.250	25.82	0.22	25.82	0.22	25.83	0.23	25.83	0.23
-0.500	24.19	0.19	24.19	0.19	24.19	0.19	24.18	0.18
-1.000	20.73	-0.07	20.71	-0.09	20.73	-0.07	20.73	-0.07
-2.000	20.58	-0.02	20.58	-0.02	25.90	0.80	25.90	0.80

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.39	XXXX	5.39	XXXX	5.30	XXXX	5.30	XXXX
8	3.58	2.50	3.62	2.54	3.48	2.40	3.48	2.40
2	1.83	0.80	1.86	0.82	1.79	0.76	1.79	0.76

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.44	0.44	5.44	0.44	5.44	0.44	5.43	0.43
R(N)	1.77	XXXX	1.77	XXXX	1.71	XXXX	1.71	XXXX
Q(C,0)	-1.60	XXXX	-1.60	XXXX	-1.46	XXXX	-1.46	XXXX
Q(E,0)	2.83	XXXX	2.84	XXXX	2.94	XXXX	2.99	XXXX
Q(S,0)	0.54	XXXX	0.54	XXXX	0.19	XXXX	0.19	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	8.10	XXXX	8.10	XXXX	8.36	XXXX	8.36	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.40	XXXX	1.40	XXXX	1.70	XXXX	1.90	XXXX

CASE DPG 4 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	6869	9539	9539	9539
TAPE NO.	340.	341.	342.	343.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.95	-6.31	9.25	-0.01	9.25	-0.01	9.24	-0.02
1000	2.75	-1.88	3.68	-0.95	5.70	1.07	3.68	-0.95
900	2.24	-1.35	3.38	-0.22	3.67	0.08	3.37	-0.22
800	2.08	-0.94	3.27	0.25	3.36	0.34	3.27	0.25
700	2.05	-1.31	3.20	-0.16	3.24	-0.12	3.19	-0.16
600	2.07	-1.18	3.14	-0.11	3.15	-0.10	3.14	-0.11
500	2.07	-1.57	3.07	-0.57	3.08	-0.56	3.07	-0.57
400	2.07	-0.65	3.01	0.28	3.01	0.28	3.00	0.27
300	2.03	0.84	2.91	1.71	2.91	1.72	2.91	1.71
200	1.97	2.28	2.78	3.79	2.78	3.09	2.78	3.09
100	1.85	2.72	2.57	3.44	2.57	3.44	2.57	3.44
32	1.63	2.44	2.24	3.06	2.24	3.06	2.24	3.06
8	1.32	2.06	1.82	2.56	1.81	2.55	1.81	2.55

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.06	2.06	0.00	0.00	0.00	0.00	0.00	0.00
1000	1.60	1.60	3.69	3.69	2.13	2.13	3.69	3.69
900	1.82	1.51	4.20	3.89	3.94	3.63	4.19	3.88
800	2.13	1.49	4.54	3.90	4.45	3.81	4.54	3.90
700	2.50	1.21	4.79	3.57	4.75	3.46	4.78	3.49
600	2.89	0.35	4.97	2.43	4.94	2.40	4.96	2.42
500	3.28	-0.36	5.09	1.45	5.07	1.43	5.08	1.44
400	3.65	-0.72	5.16	0.79	5.15	0.78	5.15	0.78
300	3.97	-0.51	5.18	0.70	5.17	0.69	5.18	0.70
200	4.19	0.60	5.13	1.53	5.12	1.53	5.12	1.53
100	4.23	2.36	4.91	3.05	4.91	3.04	4.91	3.05
32	3.89	2.84	4.40	3.35	4.40	3.35	4.40	3.35
8	3.22	2.43	3.64	2.85	3.63	2.84	3.63	2.84

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NU. INTERVAL	340. 2.00HR	341. 2.00HR	342. 2.00HR	343. 2.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.76	1.16	23.43	1.83	23.44	1.84	23.44	1.84
900	23.64	1.24	24.22	1.82	24.22	1.82	24.23	1.83
800	24.34	1.04	24.47	1.17	24.48	1.18	24.49	1.19
700	24.84	0.34	24.57	0.07	24.58	0.08	24.58	0.08
600	25.17	-0.53	24.58	-1.12	24.59	-1.11	24.58	-1.12
500	25.37	-0.73	24.55	-1.55	24.56	-1.54	24.55	-1.55
400	25.47	-0.83	24.46	-1.84	24.46	-1.84	24.46	-1.84
300	25.44	-1.46	24.34	-2.56	24.35	-2.55	24.33	-2.57
200	25.27	-0.13	24.15	-1.25	24.15	-1.25	24.16	-1.24
100	24.92	1.32	23.88	0.28	23.89	0.29	23.89	0.29
32	24.26	1.76	23.43	0.93	23.44	0.94	23.44	0.94
8	23.57	2.47	22.99	1.89	23.00	1.90	22.99	1.89
2	22.23	2.53	22.12	2.42	22.13	2.43	22.12	2.42
0	20.82	XXXX	21.15	XXXX	21.15	XXXX	21.15	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.77	-0.02	12.10	0.31	12.09	0.30	12.09	0.30
900	12.40	0.12	12.40	0.12	12.39	0.11	12.39	0.11
800	12.97	0.19	12.73	-0.25	12.72	-0.06	12.72	-0.06
700	13.23	-0.34	12.93	-0.64	12.93	-0.64	12.92	-0.65
600	13.37	-1.63	13.11	-1.29	13.12	-1.28	13.12	-1.28
500	13.44	-1.54	13.32	-1.66	13.33	-1.65	13.33	-1.65
400	13.45	-1.92	13.54	-1.83	13.55	-1.82	13.54	-1.83
300	13.44	-1.63	13.77	-1.30	13.79	-1.28	13.78	-1.29
200	13.46	0.07	14.06	0.67	14.08	0.69	14.08	0.69
100	13.56	2.54	14.45	3.43	14.46	3.44	14.47	3.45
32	13.88	2.01	14.90	3.03	14.91	3.04	14.91	3.04
8	14.47	2.99	15.39	3.91	15.40	3.92	15.39	3.91
2	15.82	XXXX	16.36	XXXX	16.38	XXXX	16.37	XXXX
0	17.25	XXXX	17.46	XXXX	17.49	XXXX	17.48	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	340. 2.00HR	341. 2.00HR	342. 2.00HR	343. 2.00HR
----------------------	----------------	----------------	----------------	----------------

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.17	-1.13	21.60	0.30	21.60	0.30	21.61	0.31
-0.125	24.91	-0.19	25.18	0.08	25.17	0.07	25.18	0.08
-0.250	25.83	0.23	25.84	0.24	25.84	0.24	25.85	0.25
-0.500	24.19	0.19	24.19	0.19	24.19	0.19	24.19	0.19
-1.000	20.74	-0.06	20.74	-0.06	20.74	-0.06	20.75	-0.05
-2.000	25.90	0.80	25.90	0.80	25.90	0.80	25.90	0.80

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.30	XXXX	5.70	XXXX	5.70	XXXX	5.70	XXXX
8	3.48	2.40	4.07	2.99	4.06	2.98	4.06	2.98
2	1.79	0.76	2.15	1.12	2.15	1.12	2.15	1.12

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.44	0.44	5.43	0.43	5.44	0.44	5.44	0.44
R(N)	1.72	XXXX	1.62	XXXX	1.62	XXXX	1.61	XXXX
Q(C,0)	-1.46	XXXX	-1.35	XXXX	-1.35	XXXX	-1.35	XXXX
Q(E,C)	2.99	XXXX	3.11	XXXX	3.10	XXXX	3.11	XXXX
Q(S,0)	0.19	XXXX	-0.13	XXXX	-0.13	XXXX	-0.13	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	8.36	XXXX	12.48	XXXX	12.46	XXXX	12.46	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.70	XXXX	3.10	XXXX	3.20	XXXX	3.20	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	9539	9539	9539	9454
TAPE NO.	344.	345.	346.	347.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	9.24	-0.02	9.25	-0.01	9.25	-0.01	9.94	-6.32
1000	3.68	-0.95	5.71	1.08	3.68	-0.95	2.54	-2.09
900	3.38	-0.22	3.68	0.09	3.37	-0.22	2.22	-1.37
800	3.27	0.25	3.36	0.34	3.27	0.25	2.13	-0.90
700	3.21	-0.15	3.24	-0.12	3.20	-0.16	2.05	-1.31
600	3.14	-0.11	3.16	-0.09	3.14	-0.11	2.00	-1.25
500	3.07	-0.57	3.08	-0.56	3.07	-0.57	1.94	-1.70
400	3.01	0.28	3.01	0.28	3.01	0.28	1.88	-0.85
300	2.91	1.71	2.91	1.72	2.91	1.71	1.80	0.60
200	2.78	3.09	2.78	3.09	2.78	3.09	1.70	2.01
100	2.57	3.44	2.57	3.44	2.57	3.44	1.55	2.42
32	2.24	3.06	2.24	3.06	2.23	3.07	1.32	2.14
8	1.81	2.55	1.82	2.56	1.82	2.00	1.06	1.80

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.00	0.00	0.00	0.00	0.00	0.00	2.06	2.06
1000	3.69	3.69	2.13	2.13	3.70	3.70	1.78	1.78
900	4.19	3.88	3.94	3.63	4.20	3.89	2.28	1.97
800	4.53	3.89	4.46	3.82	4.55	3.91	2.63	1.99
700	4.78	3.49	4.76	3.47	4.79	3.50	2.88	1.59
600	4.96	2.42	4.95	2.41	4.97	2.43	3.06	0.52
500	5.08	1.44	5.07	1.43	5.09	1.45	3.19	-0.45
400	5.15	0.78	5.15	0.78	5.16	0.79	3.28	-1.09
300	5.17	0.69	5.17	0.69	5.18	0.70	3.33	-1.15
200	5.11	1.52	5.12	1.53	5.13	1.54	3.30	-0.29
100	4.91	3.05	4.91	3.05	4.91	3.05	3.17	1.30
32	4.40	3.35	4.40	3.35	4.40	3.35	2.83	1.70
8	3.63	2.84	3.63	2.84	3.63	2.84	2.32	1.53

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	344. 2.00HR	345. 2.00HR	346. 2.00HR	347. 2.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.44	1.84	23.43	1.83	23.43	1.83	23.43	1.83
900	24.22	1.82	24.19	1.79	24.21	1.81	24.21	1.81
800	24.46	1.16	24.45	1.15	24.45	1.15	24.47	1.17
700	24.54	0.04	24.54	0.04	24.53	0.03	24.55	0.05
600	24.54	-1.16	24.53	-1.17	24.53	-1.17	24.54	-1.16
500	24.49	-1.61	24.48	-1.62	24.48	-1.62	24.51	-1.59
400	24.39	-1.91	24.38	-1.92	24.38	-1.92	24.39	-1.91
300	24.25	-2.65	24.24	-2.66	24.25	-2.65	24.22	-2.68
200	24.04	-1.36	24.03	-1.37	24.03	-1.37	24.04	-1.36
100	23.73	0.13	23.72	0.12	23.72	0.12	23.73	0.13
32	23.24	0.74	23.23	0.73	23.23	0.73	23.23	0.73
8	22.72	1.62	22.72	1.62	22.72	1.62	22.71	1.61
2	21.73	2.03	21.72	2.02	21.72	2.02	21.69	1.99
0	20.63	XXXX	20.62	XXXX	20.61	XXXX	20.62	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	12.09	0.30	12.07	0.28	12.10	0.31	12.09	0.30
900	12.39	0.11	12.38	0.10	12.39	0.11	12.39	0.11
800	12.72	-0.06	12.71	-0.07	12.71	-0.07	12.71	-0.07
700	12.91	-0.66	12.91	-0.66	12.91	-0.66	12.91	-0.66
600	13.09	-1.31	13.09	-1.31	13.09	-1.31	13.10	-1.30
500	13.30	-1.68	13.29	-1.69	13.29	-1.69	13.29	-1.69
400	13.51	-1.86	13.50	-1.87	13.51	-1.86	13.52	-1.85
300	13.74	-1.33	13.73	-1.34	13.72	-1.35	13.74	-1.33
200	14.02	0.63	14.01	0.62	14.01	0.62	14.03	0.64
100	14.40	3.38	14.37	3.35	14.38	3.36	14.42	3.40
32	14.81	2.94	14.79	2.92	14.79	2.92	14.81	2.94
8	15.26	3.78	15.25	3.77	15.24	3.76	15.27	3.79
2	16.18	XXXX	16.17	XXXX	16.16	XXXX	16.20	XXXX
0	17.20	XXXX	17.18	XXXX	17.18	XXXX	17.19	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NU.	344.	345.	346.	347.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVFL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	19.48	-1.82	19.48	-1.82	19.47	-1.33	19.47	-1.82
-0.125	24.81	-0.29	24.82	-0.28	24.82	-0.28	24.81	-0.29
-0.250	25.83	0.23	25.82	0.22	25.82	0.22	25.82	0.22
-0.500	24.20	0.20	24.19	0.19	24.19	0.19	24.10	0.10
-1.000	20.73	-0.07	20.72	-0.08	20.73	-0.07	20.72	-0.08
-2.000	20.57	-0.03	20.57	-0.03	20.58	-0.02	20.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.70	XXXX	5.70	XXXX	5.70	XXXX	4.75	XXXX
8	4.06	2.98	4.07	2.98	4.07	2.98	2.56	1.47
2	2.13	1.10	2.14	1.10	2.14	1.10	1.31	0.28

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.43	0.43	5.44	0.44	5.43	0.43	5.43	0.43
R(N)	1.65	XXXX	1.66	XXXX	1.65	XXXX	1.65	XXXX
Q(C,0)	-1.55	XXXX	-1.55	XXXX	-1.55	XXXX	-1.54	XXXX
Q(E,0)	2.88	XXXX	2.88	XXXX	2.88	XXXX	2.88	XXXX
Q(S,0)	0.33	XXXX	0.33	XXXX	0.32	XXXX	0.33	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	12.46	XXXX	12.46	XXXX	12.46	XXXX	10.40	XXXX

INTEGRATED EVAPOTRANSPIRA IN (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.90	XXXX	2.90	XXXX	2.90	XXXX	2.90	XXXX

CASE DPG 4 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SO/SEC)	9454	9454	3769	3779
TAPE NU.	348.	349.	351.	352.
INTERVAL	2.00HR	2.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.94	-0.32	2.94	-6.32	6.76	-0.01	6.77	-0.00
1000	2.72	-1.91	2.53	-2.10	2.94	-0.66	3.94	0.34
900	2.25	-1.34	2.22	-1.37	2.42	-1.61	2.44	-1.59
800	2.13	-0.89	2.12	-0.90	1.96	-1.91	1.96	-1.91
700	2.06	-1.30	2.05	-1.31	1.85	-1.36	1.85	-1.36
600	2.00	-1.25	2.00	-1.25	1.86	0.00	1.86	0.00
500	1.94	-1.70	1.95	-1.69	2.03	1.60	2.04	1.61
400	1.88	-0.85	1.88	-0.85	1.92	1.17	1.92	1.17
300	1.80	0.60	1.80	0.60	1.27	-0.50	1.26	-0.51
200	1.70	2.01	1.71	2.02	0.63	-2.22	0.63	-2.22
100	1.55	2.42	1.55	2.42	0.87	-2.01	0.88	-2.01
32	1.32	2.14	1.32	2.14	1.73	-0.26	1.73	-0.26
8	1.06	1.80	1.05	1.79	1.47	-0.03	1.47	-0.03

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.06	2.06	2.06	2.06	2.46	-0.01	2.46	-0.01
1000	1.90	1.90	1.78	1.73	2.46	2.46	2.40	2.40
900	2.31	2.00	2.28	1.97	2.36	1.50	2.35	1.49
800	2.64	2.00	2.63	1.99	2.39	0.98	2.38	0.97
700	2.88	1.59	2.88	1.59	2.64	1.00	2.64	1.00
600	3.06	0.52	3.07	0.53	2.89	0.42	2.88	0.41
500	3.19	-0.45	3.20	-0.44	3.33	0.27	3.33	0.27
400	3.28	-1.09	3.28	-1.09	4.07	1.07	4.06	1.06
300	3.33	-1.15	3.31	-1.17	4.93	2.40	4.92	2.39
200	3.30	-0.29	3.31	-0.29	5.25	4.04	5.24	4.03
100	3.17	1.30	3.17	1.30	5.45	6.56	5.44	6.55
32	2.83	1.78	2.83	1.78	5.08	7.45	5.07	7.44
8	2.32	1.53	2.32	1.53	4.17	6.87	4.17	6.87

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	348.	349.	351.	352.
INTERVAL	2.00HR	2.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.42	1.82	23.43	1.82	22.49	-0.62	22.49	-0.61
900	24.21	1.81	24.21	1.81	23.12	-0.88	23.12	-0.98
800	24.46	1.16	24.46	1.16	23.90	-0.90	23.90	-0.90
700	24.55	0.05	24.54	0.04	24.47	-1.03	24.48	-1.02
600	24.55	-1.15	24.54	-1.16	25.11	-0.90	25.11	-0.99
500	24.50	-1.60	24.49	-1.61	25.70	-1.10	25.69	-1.11
400	24.39	-1.91	24.39	-1.91	26.21	-0.99	26.21	-0.99
300	24.25	-2.65	24.25	-2.65	26.51	-0.99	26.51	-0.99
200	24.05	-1.35	24.04	-1.36	26.34	-0.26	26.35	-0.25
100	23.73	0.13	23.73	0.13	25.61	0.71	25.61	0.71
32	23.23	0.73	23.23	0.73	24.38	0.98	24.38	0.98
8	22.72	1.62	22.72	1.62	22.46	-0.44	22.47	-0.43
2	21.70	2.00	21.70	2.00	18.99	-3.41	19.00	-3.40
0	20.63	XXXX	20.62	XXXX	15.43	XXXX	15.45	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	12.09	0.30	12.08	0.29	11.61	-1.34	11.61	-1.34
900	12.39	0.11	12.38	0.10	12.09	-1.30	12.08	-1.31
800	12.71	-0.07	12.71	-0.07	12.89	-1.14	12.89	-1.13
700	12.91	-0.66	12.91	-0.66	13.53	-1.06	13.52	-1.07
600	13.10	-1.30	13.09	-1.31	13.84	-2.04	13.83	-2.05
500	13.29	-1.69	13.30	-1.68	14.16	-1.31	14.16	-1.31
400	13.51	-1.86	13.50	-1.87	14.02	-1.86	14.41	-1.47
300	13.74	-1.33	13.73	-1.34	14.33	-1.55	14.32	-1.56
200	14.03	0.64	14.01	0.62	13.42	-0.70	13.41	-0.71
100	14.42	3.40	14.41	3.39	11.34	0.32	11.35	0.33
32	14.81	2.94	14.79	2.92	9.53	-1.87	9.55	-1.85
8	15.26	3.78	15.25	3.77	9.56	-1.31	9.57	-1.30
2	16.20	XXXX	16.19	XXXX	11.16	XXXX	11.17	XXXX
0	17.19	XXXX	17.18	XXXX	12.79	XXXX	12.81	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	348.	349.	351.	352.
INTERVAL	2.00HR	2.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	19.48	-1.82	19.47	-1.83	17.32	-4.68	17.31	-4.69
-0.125	24.81	-0.29	24.82	-0.28	25.23	-0.27	25.22	-0.28
-0.250	25.82	0.22	25.82	0.22	25.93	0.13	25.93	0.13
-0.500	24.20	0.20	24.19	0.19	24.11	0.01	24.19	0.09
-1.000	20.72	-0.08	20.73	-0.07	20.72	-0.18	20.71	-0.19
-2.000	20.57	-0.03	20.57	-0.03	20.58	-0.02	20.58	-0.02

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8*	4.75	XXXX	4.75	XXXX	5.96	XXXX	5.96	XXXX
8	2.56	1.47	2.55	1.47	4.43	1.34	4.42	1.33
2	1.31	0.28	1.31	0.28	2.24	-0.85	2.24	-0.85

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	5.44	0.40	5.43	0.43	1.36	0.46	1.34	0.48
R(N)	1.66	XXXX	1.65	XXXX	-0.69	XXXX	-0.68	XXXX
Q(C,0)	-1.54	XXXX	-1.54	XXXX	-2.06	XXXX	-2.06	XXXX
Q(E,0)	2.88	XXXX	2.88	XXXX	1.91	XXXX	0.00	XXXX
Q(S,0)	0.33	XXXX	0.33	XXXX	-0.54	XXXX	-0.53	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	10.40	XXXX	10.38	XXXX	5.18	XXXX	5.22	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.90	XXXX	2.90	XXXX	0.20	XXXX	0.30	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	3784	2719	2179	2144
TAPE NU.	353.	354.	355.	356.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.76	-0.01	2.94	-3.83	2.95	-3.82	2.94	-3.83
1000	2.92	-0.68	2.95	-0.65	2.95	-0.65	2.95	-0.65
900	2.40	-1.63	2.43	-1.60	2.43	-1.60	2.43	-1.60
800	1.96	-1.91	1.95	-1.92	1.94	-1.93	1.95	-1.92
700	1.86	-1.35	1.84	-1.37	1.84	-1.37	1.84	-1.37
600	1.86	0.01	1.82	-0.03	1.82	-0.04	1.81	-0.05
500	2.04	1.61	2.08	1.65	2.08	1.65	2.08	1.65
400	1.92	1.17	2.04	1.29	2.04	1.29	2.05	1.30
300	1.26	-0.51	1.25	-0.52	1.25	-0.52	1.25	-0.52
200	0.62	-2.22	0.45	-2.39	0.44	-2.39	0.44	-2.40
100	0.88	-2.01	0.80	-2.07	0.79	-2.09	0.79	-2.09
32	1.74	-1.24	2.01	0.02	2.02	0.03	2.03	0.05
8	1.47	-0.03	1.45	-0.05	1.45	-0.05	1.44	-0.06

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.47	-0.00	2.06	-0.41	2.06	-0.41	2.06	-0.41
1000	2.46	2.46	1.81	1.81	1.88	1.88	1.81	1.81
900	2.36	1.50	1.70	0.84	1.70	0.84	1.70	0.84
800	2.39	0.98	1.72	0.31	1.72	0.31	1.72	0.31
700	2.63	0.99	1.98	0.34	1.98	0.34	1.98	0.34
600	2.88	1.41	2.20	-0.27	2.20	-0.27	2.20	-0.27
500	3.33	0.27	2.61	-0.45	2.61	-0.45	2.61	-0.45
400	4.07	1.07	3.38	0.38	3.38	0.38	3.38	0.38
300	4.93	2.40	4.40	1.88	4.41	1.88	4.41	1.89
200	5.24	4.03	4.02	3.41	4.61	3.40	4.61	3.40
100	5.45	6.56	4.88	5.99	4.88	5.99	4.88	5.99
32	5.08	7.45	4.52	6.89	4.53	6.90	4.53	6.90
8	4.17	0.87	3.57	0.27	3.56	0.26	3.55	0.25

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	353.	354.	355.	356.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.48	-0.62	22.47	-0.63	22.47	-0.63	22.47	-0.63
900	23.08	-0.92	23.09	-0.91	23.09	-0.91	23.09	-0.91
800	23.90	-0.90	23.86	-0.94	23.87	-0.93	23.87	-0.93
700	24.48	-1.02	24.44	-1.06	24.43	-1.07	24.42	-1.08
600	25.11	-0.99	25.09	-1.01	25.09	-1.01	25.09	-1.01
500	25.70	-1.10	25.69	-1.11	25.69	-1.11	25.69	-1.11
400	26.21	-0.99	26.24	-0.96	26.24	-0.96	26.24	-0.96
300	26.52	-0.98	26.64	-0.86	26.66	-0.84	26.67	-0.83
200	26.35	-0.25	26.45	-0.15	26.45	-0.15	26.46	-0.14
100	25.61	0.71	25.63	0.73	25.63	0.73	25.63	0.73
32	24.38	0.98	24.53	1.13	24.53	1.13	24.55	1.15
8	22.46	-0.44	22.32	-0.58	22.31	-0.59	22.31	-0.59
2	18.99	-3.41	18.54	-3.86	18.51	-3.89	18.50	-3.90
0	15.44	XXXX	14.71	XXXX	14.66	XXXX	14.64	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.61	-1.34	11.59	-1.36	11.61	-1.34	11.60	-1.35
900	12.09	-1.30	12.06	-1.33	12.06	-1.33	12.05	-1.34
800	12.88	-1.14	12.85	-1.17	12.85	-1.17	12.85	-1.17
700	13.53	-1.06	13.56	-1.03	13.57	-1.02	13.57	-1.02
600	13.83	-2.05	13.81	-2.07	13.81	-2.07	13.81	-2.07
500	14.16	-1.31	14.16	-1.31	14.15	-1.32	14.15	-1.32
400	14.42	-1.46	14.52	-1.36	14.53	-1.35	14.53	-1.35
300	14.34	-1.54	14.57	-1.31	14.59	-1.29	14.61	-1.27
200	13.42	-0.70	13.60	-0.52	13.61	-0.51	13.62	-0.50
100	11.34	0.32	11.15	0.13	11.13	0.11	11.12	0.10
32	9.54	-1.46	8.85	-2.55	8.82	-2.58	8.79	-2.61
8	9.50	-1.31	8.83	-1.99	8.84	-2.03	8.81	-2.06
2	11.16	XXXX	10.96	XXXX	10.94	XXXX	10.93	XXXX
0	12.79	XXXX	13.07	XXXX	13.06	XXXX	13.07	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	353.	354.	355.	356.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	17.33	-4.67	17.31	-4.69	17.30	-4.70	17.31	-4.69
-0.125	25.22	-0.28	25.22	-0.28	25.22	-0.28	25.21	-0.29
-0.250	25.93	0.13	25.93	0.13	25.93	0.13	25.93	0.13
-0.500	24.19	0.09	24.19	0.09	24.19	0.09	24.19	0.09
-1.000	20.70	-0.20	20.72	-0.18	20.71	-0.19	20.71	-0.19
-2.000	20.58	-0.02	20.58	-0.02	20.57	-0.03	20.58	-0.02

WIND SPEED (M/SFC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.96	XXXX	5.56	XXXX	5.55	XXXX	5.54	XXXX
8	4.43	1.34	3.86	0.77	3.85	0.76	3.84	0.75
2	2.24	-0.85	1.94	-1.15	1.94	-1.15	1.93	-1.16

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.38	0.48	1.38	0.48	1.37	0.47	1.38	0.48
R(N)	-0.68	XXXX	-0.59	XXXX	-0.60	XXXX	-0.60	XXXX
Q(C,O)	-2.07	XXXX	-1.32	XXXX	-1.30	XXXX	-1.28	XXXX
Q(E,O)	1.92	XXXX	1.46	XXXX	1.44	XXXX	1.43	XXXX
Q(S,O)	-0.53	XXXX	-0.74	XXXX	-0.75	XXXX	-0.76	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.22	XXXX	2.96	XXXX	2.78	XXXX	2.74	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.30	XXXX	0.20	XXXX	0.20	XXXX	0.20	XXXX

CASE DPG 4 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3009	2994	3004	9544
TAPE NU.	357.	358.	359.	360.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.95	-3.82	2.94	-3.83	2.95	-3.82	6.75	-0.02
1000	2.93	-0.67	2.94	-0.66	2.94	-0.66	2.76	-0.84
900	2.41	-1.62	2.41	-1.62	2.41	-1.62	2.24	-1.79
800	1.96	-1.91	1.96	-1.91	1.96	-1.91	2.01	-1.86
700	1.85	-1.36	1.85	-1.36	1.85	-1.36	1.86	-1.35
600	1.87	0.01	1.88	0.02	1.88	0.02	1.74	-0.12
500	1.99	1.56	2.00	1.57	2.00	1.57	1.60	1.17
400	1.85	1.10	1.85	1.10	1.85	1.10	1.52	0.77
300	1.27	-0.50	1.27	-0.50	1.26	-0.51	1.40	-0.37
200	0.71	-2.13	0.72	-2.11	0.72	-2.12	1.28	-1.56
100	0.90	-1.98	0.90	-1.98	0.90	-1.98	1.13	-1.75
32	1.58	-0.41	1.57	-0.41	1.58	-0.41	0.95	-1.04
8	1.40	-0.10	1.40	-0.10	1.40	-0.10	0.75	-0.75

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.06	-0.41	2.06	-0.41	2.06	-0.41	2.46	-0.01
1000	1.81	1.81	1.88	1.88	1.81	1.81	2.45	2.45
900	1.71	0.85	1.71	0.85	1.71	0.85	2.58	1.72
800	1.76	0.35	1.75	0.34	1.75	0.34	2.88	1.47
700	2.00	0.36	2.00	0.36	2.01	0.36	3.19	1.55
600	2.27	-0.20	2.27	-0.20	2.27	-0.20	3.48	1.01
500	2.73	-0.33	2.73	-0.33	2.73	-0.33	3.72	0.66
400	3.44	0.44	3.44	0.44	3.44	0.44	3.93	0.93
300	4.20	1.68	4.20	1.68	4.21	1.68	4.08	1.55
200	4.56	3.35	4.57	3.36	4.57	3.36	4.15	2.94
100	4.75	5.86	4.75	5.86	4.75	5.86	4.27	5.18
32	4.39	6.76	4.39	6.76	4.39	6.76	3.69	6.06
8	3.62	6.32	3.61	6.31	3.61	6.31	3.55	5.75

CASE OPG 4 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	357. 1.00HR	358. 1.00HR	359. 1.00HR	360. 1.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.49	-0.61	22.49	-0.61	22.49	-0.61	22.91	-0.19
900	23.15	-0.85	23.15	-0.85	23.15	-0.85	23.88	-0.12
800	23.91	-0.89	23.91	-0.89	23.91	-0.89	24.45	-0.35
700	24.51	-0.99	24.51	-0.99	24.51	-0.99	24.79	-0.71
600	25.13	-0.97	25.13	-0.97	25.13	-0.97	24.97	-1.13
500	25.69	-1.11	25.69	-1.11	25.70	-1.10	25.07	-1.73
400	26.17	-1.03	26.16	-1.04	26.17	-1.03	25.06	-2.14
300	26.43	-1.07	26.42	-1.08	26.43	-1.07	24.98	-2.52
200	26.27	-0.33	26.27	-0.33	26.27	-0.33	24.76	-1.84
100	25.57	0.67	25.57	0.67	25.57	0.67	24.36	-0.54
32	24.31	0.91	24.31	0.91	24.32	0.92	23.63	0.23
8	22.55	-0.35	22.56	-0.34	22.55	-0.35	22.73	-0.17
2	19.23	-3.17	19.24	-3.16	19.22	-3.18	20.82	-1.58
0	15.85	XXXX	15.85	XXXX	15.83	XXXX	18.83	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.61	-1.34	11.61	-1.34	11.51	-1.44	11.87	-1.08
900	12.11	-1.28	12.11	-1.28	12.11	-1.28	12.44	-0.95
800	12.90	-1.12	12.91	-1.11	12.90	-1.12	12.84	-1.18
700	13.51	-1.08	13.51	-1.08	13.51	-1.08	13.02	-1.57
600	13.84	-2.04	13.83	-2.05	13.83	-2.05	13.14	-2.74
500	14.15	-1.32	14.15	-1.32	14.14	-1.33	13.24	-2.23
400	14.33	-1.55	14.33	-1.55	14.34	-1.54	13.34	-2.54
300	14.27	-1.71	14.16	-1.72	14.16	-1.72	13.45	-2.43
200	13.32	-0.80	13.31	-0.81	13.32	-0.80	13.61	-0.51
100	11.53	0.51	11.53	0.51	11.53	0.51	13.81	2.79
32	10.06	-1.34	10.08	-1.32	10.05	-1.35	14.09	2.69
8	10.24	-0.63	10.20	-0.67	10.23	-0.64	14.45	3.58
2	12.02	XXXX	12.01	XXXX	12.02	XXXX	15.21	XXXX
0	13.84	XXXX	13.85	XXXX	13.84	XXXX	16.01	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	357.	358.	359.	360.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	18.85	-3.15	18.84	-3.16	18.83	-3.17	20.81	-1.19
-0.125	25.34	-0.16	25.33	-0.17	25.34	-0.16	25.49	-0.01
-0.250	25.93	0.13	25.94	0.14	25.93	0.13	25.93	0.13
-0.500	24.19	0.09	24.19	0.09	24.21	0.11	24.21	0.11
-1.000	20.72	-0.18	20.72	-0.18	20.72	-0.18	20.72	-0.18
-2.000	25.90	0.40	25.89	0.39	25.89	0.39	25.89	0.39

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.57	XXXX	5.57	XXXX	5.57	XXXX	5.08	XXXX
8	3.88	0.79	3.88	0.79	3.88	0.79	3.15	0.06
2	1.96	-1.13	1.96	-1.13	1.96	-1.13	1.61	-1.49

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(U)	1.38	0.48	1.38	0.48	1.38	0.48	1.37	0.47
R(N)	-0.72	XXXX	-0.73	XXXX	-0.72	XXXX	-1.11	XXXX
Q(C,0)	-1.58	XXXX	-1.56	XXXX	-1.57	XXXX	-2.88	XXXX
Q(E,0)	1.70	XXXX	1.69	XXXX	1.70	XXXX	2.33	XXXX
Q(S,0)	-0.85	XXXX	-0.86	XXXX	-0.85	XXXX	-0.56	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup> SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.85	XXXX	3.86	XXXX	3.86	XXXX	11.14	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM<sup>2</sup> SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.40	XXXX	0.40	XXXX	0.40	XXXX	1.60	XXXX

CASE DPG 4 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	9544	9544	9549	9549
TAPE NO.	361.	362.	363.	364.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.74	-0.03	6.75	-0.02	6.75	-0.02	6.75	-0.02
1000	3.72	0.12	2.75	-0.85	2.75	-0.85	3.72	0.12
900	2.33	-1.70	2.24	-1.79	2.24	-1.79	2.33	-1.70
800	2.03	-1.84	2.01	-1.86	2.01	-1.86	2.03	-1.84
700	1.87	-1.34	1.86	-1.35	1.85	-1.36	1.86	-1.35
600	1.74	-0.12	1.73	-0.13	1.74	-0.12	1.74	-0.12
500	1.62	1.19	1.62	1.19	1.62	1.19	1.62	1.19
400	1.52	0.77	1.52	0.77	1.52	0.77	1.52	0.77
300	1.40	-0.37	1.40	-0.37	1.40	-0.37	1.40	-0.37
200	1.29	-1.55	1.29	-1.55	1.29	-1.55	1.29	-1.55
100	1.13	-1.75	1.13	-1.75	1.13	-1.75	1.13	-1.75
32	0.90	-1.09	0.95	-1.04	0.95	-1.03	0.95	-1.03
8	0.75	-0.75	0.75	-0.75	0.75	-0.75	0.76	-0.74

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.46	-0.01	2.46	-0.01	2.46	-0.01	2.46	-0.01
1000	2.41	2.41	2.45	2.45	2.45	2.45	2.41	2.41
900	2.58	1.72	2.58	1.72	2.58	1.72	2.58	1.72
800	2.88	1.47	2.88	1.47	2.88	1.47	2.88	1.47
700	3.18	1.54	3.18	1.54	3.19	1.55	3.19	1.55
600	3.47	1.00	3.47	1.00	3.48	1.01	3.48	1.01
500	3.72	0.66	3.72	0.66	3.72	0.66	3.73	0.67
400	3.92	0.92	3.93	0.93	3.93	0.93	3.94	0.94
300	4.08	1.55	4.08	1.55	4.08	1.55	4.09	1.56
200	4.14	2.93	4.15	2.94	4.14	2.93	4.15	2.94
100	4.07	5.18	4.07	5.18	4.07	5.18	4.07	5.18
32	3.69	6.06	3.69	6.06	3.69	6.06	3.69	6.06
8	3.05	5.75	3.05	5.75	3.05	5.75	3.05	5.75

CASE DPG 4 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	361.	362.	363.	364.
INTERVAL	1.00HHR	1.00HHR	1.00HHR	1.00HHR

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.91	-0.19	22.91	-0.19	22.91	-0.19	22.91	-0.19
900	23.90	-0.10	23.90	-0.10	23.90	-0.10	23.90	-0.10
800	24.46	-0.34	24.45	-0.35	24.45	-0.35	24.45	-0.35
700	24.79	-0.71	24.79	-0.71	24.78	-0.72	24.78	-0.72
600	24.97	-1.13	24.98	-1.12	24.96	-1.14	24.96	-1.14
500	25.07	-1.73	25.07	-1.73	25.05	-1.75	25.04	-1.76
400	25.07	-2.13	25.08	-2.12	25.03	-2.17	25.03	-2.17
300	24.98	-2.52	24.98	-2.52	24.93	-2.57	24.93	-2.57
200	24.77	-1.83	24.77	-1.83	24.69	-1.91	24.70	-1.90
100	24.37	-0.53	24.36	-0.54	24.24	-0.66	24.24	-0.66
32	23.62	0.22	23.63	0.23	23.44	0.04	23.44	0.04
8	22.73	-0.17	22.73	-0.17	22.46	-0.44	22.46	-0.44
2	20.82	-1.58	20.82	-1.58	20.37	-2.03	20.37	-2.03
0	18.84	XXXX	18.84	XXXX	18.21	XXXX	18.21	XXXX

VAPOR PRESSURE (MH)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.87	-1.08	11.88	-1.07	11.87	-1.08	11.87	-1.08
900	12.43	-0.96	12.43	-0.96	12.43	-0.96	12.44	-0.95
800	12.84	-1.18	12.83	-1.19	12.84	-1.18	12.84	-1.18
700	13.02	-1.57	13.02	-1.57	13.02	-1.57	13.02	-1.57
600	13.14	-2.74	13.14	-2.74	13.13	-2.75	13.14	-2.74
500	13.25	-2.22	13.27	-2.27	13.24	-2.23	13.24	-2.23
400	13.34	-2.54	13.34	-2.54	13.33	-2.55	13.32	-2.56
300	13.46	-2.42	13.46	-2.42	13.44	-2.44	13.43	-2.45
200	13.62	-0.50	13.61	-0.51	13.58	-0.54	13.57	-0.55
100	13.81	2.79	13.82	2.81	13.77	2.75	13.76	2.74
32	14.11	2.71	14.11	2.71	14.04	2.64	14.03	2.63
8	14.46	3.59	14.46	3.59	14.35	3.48	14.34	3.47
2	15.22	XXXX	15.22	XXXX	15.04	XXXX	15.04	XXXX
0	16.02	XXXX	16.01	XXXX	15.76	XXXX	15.76	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	361.	362.	363.	364.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	20.83	-1.17	20.82	-1.18	18.33	-3.67	18.33	-3.67
-0.125	25.49	-0.01	25.48	-0.02	25.26	-0.24	25.27	-0.23
-0.250	25.94	0.14	25.94	0.14	25.93	0.13	25.93	0.13
-0.500	24.19	0.09	24.20	0.10	24.19	0.09	24.19	0.09
-1.000	20.72	-0.18	20.72	-0.18	20.72	-0.18	20.71	-0.19
-2.000	25.89	0.39	25.89	0.39	20.59	-0.01	20.60	-0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.08	XXXX	5.08	XXXX	5.08	XXXX	5.08	XXXX
8	3.15	0.06	3.15	0.06	3.15	0.06	3.15	0.06
2	1.61	-1.49	1.61	-1.49	1.60	-1.49	1.60	-1.49

SURFACE ENERGY TERMS (LY/SFC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.36	0.46	1.37	0.47	1.37	0.47	1.37	0.47
R(IN)	-1.11	XXXX	-1.11	XXXX	-1.05	XXXX	-1.06	XXXX
Q(C,0)	-2.88	XXXX	-2.88	XXXX	-3.14	XXXX	-3.14	XXXX
Q(E,0)	2.33	XXXX	2.33	XXXX	2.11	XXXX	2.11	XXXX
Q(S,0)	-0.57	XXXX	-0.56	XXXX	-0.03	XXXX	-0.03	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10^6

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	11.12	XXXX	11.14	XXXX	11.14	XXXX	11.12	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X10^6

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.60	XXXX	1.50	XXXX	1.40	XXXX	1.40	XXXX

## CASE DPG 4 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	9544	9544	9544	9544
TAPE NO.	365.	366.	367.	368.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.74	-0.03	2.94	-3.83	2.94	-3.83	2.94	-3.83
1000	2.76	-0.84	2.75	-0.85	2.80	-0.80	2.75	-0.85
900	2.23	-1.80	2.23	-1.80	2.24	-1.79	2.23	-1.80
800	2.01	-1.86	2.00	-1.87	2.01	-1.86	2.01	-1.86
700	1.86	-1.35	1.85	-1.36	1.85	-1.36	1.86	-1.35
600	1.73	-0.13	1.73	-0.13	1.73	-0.13	1.73	-0.13
500	1.62	1.19	1.61	1.18	1.61	1.18	1.62	1.19
400	1.51	0.76	1.51	0.76	1.51	0.76	1.51	0.76
300	1.40	-0.37	1.40	-0.37	1.39	-0.38	1.40	-0.37
200	1.29	-1.55	1.28	-1.56	1.28	-1.56	1.28	-1.56
100	1.13	-1.75	1.13	-1.75	1.13	-1.75	1.13	-1.75
32	0.95	-1.03	0.94	-1.05	0.95	-1.04	0.95	-1.04
8	0.75	-0.75	0.75	-0.75	0.75	-0.75	0.75	-0.75

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.46	-0.01	2.06	-0.41	2.06	-0.41	2.06	-0.41
1000	2.45	2.45	1.88	1.80	1.87	1.87	1.80	1.80
900	2.59	1.73	1.93	1.07	1.95	1.09	1.94	1.08
800	2.88	1.47	2.22	0.91	2.22	0.81	2.22	0.81
700	3.19	1.55	2.54	0.90	2.54	0.90	2.54	0.90
600	3.48	1.01	2.83	0.36	2.83	0.36	2.83	0.36
500	3.72	0.66	3.07	0.01	3.08	0.02	3.07	0.01
400	3.93	0.93	3.28	0.28	3.28	0.29	3.28	0.28
300	4.08	1.55	3.44	0.91	3.44	0.91	3.44	0.91
200	4.15	2.94	3.51	2.32	3.51	2.32	3.51	2.32
100	4.07	5.18	3.45	4.56	3.45	4.56	3.45	4.56
32	3.69	0.06	3.13	5.49	3.13	5.49	3.13	5.50
8	3.05	5.75	2.58	5.28	2.58	5.28	2.58	5.28

## CASE DPG 4 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	365.	366.	367.	368.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.91	-0.19	22.91	-0.19	22.91	-0.19	22.92	-0.18
900	23.90	-0.10	23.90	-0.10	23.90	-0.10	23.90	-0.10
800	24.45	-0.35	24.45	-0.35	24.45	-0.35	24.46	-0.34
700	24.77	-0.73	24.78	-0.72	24.78	-0.72	24.77	-0.73
600	24.96	-1.14	24.96	-1.14	24.96	-1.14	24.96	-1.14
500	25.05	-1.75	25.04	-1.76	25.05	-1.75	25.05	-1.75
400	25.03	-2.17	25.03	-2.17	25.03	-2.17	25.03	-2.17
300	24.94	-2.56	24.93	-2.57	24.93	-2.57	24.94	-2.56
200	24.69	-1.91	24.70	-1.90	24.70	-1.90	24.69	-1.91
100	24.25	-0.65	24.25	-0.65	24.25	-0.65	24.25	-0.65
32	23.44	0.04	23.44	0.04	23.45	0.05	23.44	0.04
8	22.46	-0.44	22.46	-0.44	22.46	-0.44	22.46	-0.44
2	20.37	-2.03	20.37	-2.03	20.37	-2.03	20.37	-2.03
0	18.20	XXXX	18.21	XXXX	18.22	XXXX	18.21	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	11.87	-1.08	11.87	-1.08	11.88	-1.07	11.87	-1.08
900	12.44	-0.95	12.42	-0.97	12.43	-0.96	12.43	-0.96
800	12.84	-1.18	12.83	-1.19	12.83	-1.19	12.83	-1.19
700	13.01	-1.58	13.02	-1.57	13.02	-1.57	13.01	-1.58
600	13.13	-2.75	13.13	-2.75	13.13	-2.75	13.13	-2.75
500	13.23	-2.24	13.24	-2.23	13.23	-2.24	13.23	-2.24
400	13.32	-2.50	13.33	-2.55	13.33	-2.55	13.34	-2.54
300	13.43	-2.45	13.43	-2.45	13.44	-2.44	13.43	-2.45
200	13.58	-0.54	13.59	-0.53	13.58	-0.54	13.57	-0.55
100	13.76	2.74	13.78	2.76	13.77	2.75	13.76	2.74
32	14.02	2.62	14.03	2.63	14.03	2.63	14.03	2.63
8	14.35	3.48	14.35	3.48	14.36	3.49	14.35	3.49
2	15.04	XXXX	15.04	XXXX	15.05	XXXX	15.04	XXXX
0	15.76	XXXX	15.76	XXXX	15.76	XXXX	15.76	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	365.	366.	367.	368.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	18.33	-3.67	18.32	-3.68	18.32	-3.68	18.32	-3.68
-0.125	25.27	-0.23	25.26	-0.24	25.26	-0.24	25.27	-0.23
-0.250	25.93	0.13	25.93	0.13	25.93	0.13	25.93	0.13
-0.500	24.19	0.09	24.19	0.09	24.19	0.09	24.20	0.10
-1.000	20.71	-0.19	20.72	-0.18	20.72	-0.18	20.72	-0.19
-2.000	20.59	-0.01	20.61	0.01	20.60	-0.00	20.60	-0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.08	XXXX	4.82	XXXX	4.82	XXXX	4.82	XXXX
8	3.15	0.06	2.69	-0.40	2.69	-0.40	2.69	-0.40
2	1.60	-1.49	1.36	-1.73	1.36	-1.73	1.36	-1.73

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	1.36	0.46	1.36	0.46	1.38	0.48	1.37	0.47
R(N)	-1.06	XXXX	-1.05	XXXX	-1.05	XXXX	-1.05	XXXX
Q(C,0)	-3.14	XXXX	-3.14	XXXX	-3.14	XXXX	-3.14	XXXX
Q(E,0)	2.11	XXXX	2.11	XXXX	2.11	XXXX	2.11	XXXX
Q(S,0)	-0.03	XXXX	-0.03	XXXX	-0.03	XXXX	-0.03	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	11.12	XXXX	10.54	XXXX	10.56	XXXX	10.54	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.40	XXXX	1.40	XXXX	1.40	XXXX	1.50	XXXX

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 4

12.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	2.47	4.53	32.34	19.35	27.75
PERSIST DIFF	1.36	1.93	8.02	6.94	10.05
GPAC DIFF	294.	0.94	3.62	6.95	6.34
GPAC DIFF	295.	0.95	3.65	6.95	6.34
GPAC DIFF	296.	0.90	3.59	6.85	6.33
GPAC DIFF	303.	1.62	3.66	7.08	6.13
GPAC DIFF	304.	1.54	3.17	6.95	6.12
GPAC DIFF	305.	1.57	3.64	6.95	6.11
GPAC DIFF	306.	1.57	3.64	7.10	6.11
GPAC DIFF	307.	1.58	3.18	7.46	6.12
GPAC DIFF	308.	1.62	3.66	7.22	6.13
GPAC DIFF	309.	1.31	2.98	7.11	6.11
GPAC DIFF	310.	1.29	2.97	7.11	6.11
GPAC DIFF	311.	1.31	2.99	7.08	6.11

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 4

6.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	2.19	2.70	28.49	20.98	29.18
PERSIST DIFF	1.57	0.82	5.09	11.35	13.16
GPAC DIFF 316.	0.92	1.13	4.38	6.83	10.09
GPAC DIFF 317.	0.98	1.13	4.38	6.83	10.09
GPAC DIFF 318.	0.91	1.13	4.38	6.79	10.09
GPAC DIFF 322.	1.46	5.04	4.42	6.25	9.26
GPAC DIFF 323.	1.70	4.80	4.38	6.27	9.25
GPAC DIFF 324.	1.46	5.01	4.38	6.28	9.25
GPAC DIFF 325.	1.46	5.01	4.54	6.38	9.89
GPAC DIFF 326.	1.70	4.82	4.58	6.36	9.89
GPAC DIFF 327.	1.46	5.04	4.58	6.36	9.89
GPAC DIFF 328.	0.90	1.08	4.55	6.38	9.89
GPAC DIFF 329.	0.95	1.07	4.55	6.38	9.89
GPAC DIFF 330.	0.91	1.08	4.55	6.42	9.89

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 4

2.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	2.73	2.57	24.19	13.25	22.99
PERSIST DIFF	1.38	1.61	1.05	1.82	1.76
GPAC DIFF 332.	1.95	2.90	1.37	1.61	1.12
GPAC DIFF 333.	1.97	2.76	1.39	1.62	1.12
GPAC DIFF 334.	1.95	2.90	1.39	1.62	1.12
GPAC DIFF 335.	2.42	1.65	1.31	1.40	1.18
GPAC DIFF 336.	2.42	1.67	1.31	1.42	1.18
GPAC DIFF 337.	2.42	1.65	1.31	1.41	1.18
GPAC DIFF 338.	2.41	1.61	1.39	1.57	0.58
GPAC DIFF 339.	2.01	1.63	1.39	1.57	0.58
GPAC DIFF 340.	2.41	1.61	1.39	1.56	0.58
GPAC DIFF 341.	1.79	2.72	1.61	1.97	0.37
GPAC DIFF 342.	1.80	2.54	1.61	1.97	0.37
GPAC DIFF 343.	1.79	2.72	1.61	1.98	0.37
GPAC DIFF 344.	1.79	2.72	1.56	1.94	0.76
GPAC DIFF 345.	1.80	2.55	1.56	1.93	0.76
GPAC DIFF 346.	1.79	2.73	1.56	1.93	0.77
GPAC DIFF 347.	2.35	1.47	1.56	1.94	0.76
GPAC DIFF 348.	2.34	1.49	1.56	1.94	0.76
GPAC DIFF 349.	2.35	1.47	1.56	1.94	0.77

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 4

1.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SFC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	2.55	2.78	25.28	13.91	23.24
PERSIST DIFF	1.72	3.09	3.98	1.90	2.01
GPAC DIFF 351.	1.29	3.72	1.26	1.40	1.92
GPAC DIFF 352.	1.28	3.71	1.25	1.36	1.92
GPAC DIFF 353.	1.29	3.72	1.26	1.36	1.91
GPAC DIFF 354.	1.71	3.31	1.36	1.48	1.92
GPAC DIFF 355.	1.71	3.32	1.37	1.49	1.92
GPAC DIFF 356.	1.71	3.31	1.37	1.49	1.92
GPAC DIFF 357.	1.66	3.27	1.20	1.30	1.30
GPAC DIFF 358.	1.66	3.27	1.20	1.30	1.31
GPAC DIFF 359.	1.66	3.27	1.20	1.31	1.51
GPAC DIFF 360.	1.19	3.08	1.30	2.21	0.52
GPAC DIFF 361.	1.16	3.08	1.30	2.22	0.51
GPAC DIFF 362.	1.19	3.08	1.30	2.22	0.52
GPAC DIFF 363.	1.19	3.08	1.38	2.20	1.50
GPAC DIFF 364.	1.15	3.08	1.38	2.19	1.50
GPAC DIFF 365.	1.19	3.09	1.38	2.20	1.50
GPAC DIFF 366.	1.60	2.65	1.38	2.20	1.51
GPAC DIFF 367.	1.59	2.65	1.38	2.20	1.51
GPAC DIFF 368.	1.60	2.65	1.38	2.20	1.51

## CASE UPG 5 TAPE LOG

TAPE NO.	FCST INT	SM DB	KMB	SCG	ADV	GEO	REMARKS
-------------	-------------	----------	-----	-----	-----	-----	---------

371.	12.00	A	V	A	N	O	
372.	12.00	A	V	A	NN	I	
373.	12.00	A	V	A	FF	IO	
374.	12.00	A	V	A	FF	IO	
375.	12.00	A	V	F	FF	OO	
376.	12.00	A	V	F	FF	II	
377.	12.00	A	V	F	NN	II	
378.	12.00	A	V	F	NN	IO	
379.	12.00	B	V	F	NN	OO	
380.	12.00	B	V	F	NN	II	
381.	12.00	B	V	F	NN	IC	
382.	12.00	B	V	F	NN	OC	
383.	12.00	B	V	A	NN	OC	
384.	12.00	B	V	A	NN	OC	
385.	12.00	B	V	A	NN	OC	
386.	12.00	B	V	A	NN	OC	
387.	12.00	B	F	A	NN	OC	
388.	12.00	B	F	A	NN	II	
389.	12.00	B	F	A	NN	II	
390.	12.00	B	F	A	NN	OO	
391.	12.00	B	F	F	NN	OO	
392.	12.00	B	F	F	NN	II	
393.	12.00	B	F	F	NN	II	
394.	12.00	B	F	F	NN	OO	
395.	12.00	A	F	F	NN	OO	
396.	12.00	A	F	F	NN	II	
397.	12.00	A	F	F	NN	II	
398.	12.00	A	F	F	NN	II	
399.	12.00	A	F	F	NN	II	
400.	12.00	A	F	F	NN	II	
401.	12.00	A	F	F	NN	II	
404.	6.00	A	V	A	NN	II	
405.	6.00	A	V	A	NN	II	
406.	6.00	A	V	A	NN	II	
407.	6.00	A	V	A	NN	II	
408.	6.00	A	V	F	NN	II	
409.	6.00	A	V	F	NN	II	
410.	6.00	A	V	F	NN	II	
411.	6.00	A	V	F	NN	II	
412.	6.00	B	V	F	NN	II	

## CASE DPG 5 TAPE LOG

TAPE NO.	FC ST INT	SM	KM8 DB	SCG	ADV	GFC	REMARKS
413.	3.00	B	V	F		N	I
414.	6.00	B	V	F		F	I
416.	6.00	B	V	A		F	I
417.	6.00	B	V	A		F	I
418.	6.00	B	V	A		N	I
419.	6.00	B	V	A		N	I
421.	6.00	B	F	A		N	I
422.	6.00	B	F	A		N	I
423.	6.00	B	F	A		F	I
424.	6.00	B	F	F		F	I
425.	6.00	B	F	F		F	I
426.	6.00	B	F	F		N	I
427.	6.00	B	F	F		N	I
428.	6.00	A	F	F		N	I
429.	6.00	A	F	F		N	I
430.	6.00	A	F	F		N	I
431.	6.00	A	F	F		F	I
432.	6.00	A	F	F		F	I
433.	6.00	A	F	F		F	I
434.	6.00	A	F	F		N	I
435.	6.00	A	F	F		N	I
437.	2.00	A	V	A		A	O
438.	2.00	A	V	A		A	O
439.	2.00	A	V	A		A	O
440.	2.00	A	V	A		A	O
441.	2.00	A	V	A		F	O
442.	2.00	A	V	F		F	O
443.	2.00	A	V	F		N	O
444.	2.00	A	V	F		N	O
445.	2.00	B	V	F		N	O
446.	2.00	B	V	F		N	O
447.	2.00	B	V	F		N	O
448.	2.00	B	V	F		N	O
449.	2.00	B	V	F		N	O
450.	2.00	B	V	F		N	O
451.	2.00	B	V	F		N	O
452.	2.00	B	F	F		N	O
453.	2.00	B	F	F		N	O
454.	2.00	B	F	F		N	O
455.	2.00	B	F	F		N	O

## CASE DPG 5 TAPE LCG

TAPE NO.	FCST INT	SM 08	KM8	SCG	ADV	SEO	REMARKS
-------------	-------------	----------	-----	-----	-----	-----	---------

456.	2.00	B	F	A	F		
457.	2.00	R	F	F	F		C
458.	2.00	B	F	F	F		C
459.	2.00	B	F	F	N		I
460.	2.00	B	F	F	N		O
461.	2.00	A	F	F	N		O
462.	2.00	A	F	F	N		I
463.	2.00	A	F	F	N		I
464.	2.00	A	F	F	F		O
465.	2.00	A	F	A	F		I
466.	2.00	A	F	A	F		O
467.	2.00	A	F	A	N		I
468.	2.00	A	F	A	N		O
470.	1.00	A	V	A	N		I
471.	1.00	A	V	A	N		O
472.	1.00	A	V	A	N		C
473.	1.00	A	V	A	F		C
474.	1.00	A	V	F	F		C
475.	1.00	A	V	F	F		C
476.	1.00	A	V	F	N		C
477.	1.00	A	V	F	N		C
478.	1.00	R	V	F	N		C
479.	1.00	B	V	F	N		C
480.	1.00	B	V	F	N		C
481.	1.00	B	V	F	N		C
482.	1.00	B	V	A	N		C
483.	1.00	B	V	A	F		C
484.	1.00	B	V	A	F		C
485.	1.00	B	V	A	F		C
486.	1.00	B	F	A	F		C
487.	1.00	B	F	A	F		C
488.	1.00	B	F	A	F		C
489.	1.00	B	F	A	F		C
490.	1.00	B	F	A	F		C
491.	1.00	B	F	F	F		C
492.	1.00	B	F	F	F		C
493.	1.00	B	F	F	F		C
494.	1.00	A	F	F	F		C
495.	1.00	A	F	F	F		C
496.	1.00	A	F	F	F		C

## CASE DPG 5 TAPE LCG

TAPE NO.	FCST INT	SM	KM8	SCG	ADV	GEU	REMARKS
497.	1.00	A	F	F	F	O	
498.	1.00	A	F	A	F	O	
499.	1.00	A	F	A	F	I	
500.	1.00	A	F	A	N	I	

497.	1.00	A	F	F	F	O	
498.	1.00	A	F	A	F	O	
499.	1.00	A	F	A	F	I	
500.	1.00	A	F	A	N	I	

DPG 5 INITIAL CONDITIONS - 0500L 22 AUGUST 1969  
 (PAGE 1 OF 2 PAGES)

SOIL PARAMETERS

LEVEL (M)	TEMP (DEG C)		
-0.000	10.60	LAMBDA	= 0.59 CAL/CM DEG <sup>3</sup>
-0.125	30.10	MU/LAMBDA	= 0.0037 CM /SEC <sup>2</sup>
-0.250	30.40	(MU/LAMBDA) <sup>1/2</sup>	= 0.036 CAL/CM DEG SEC <sup>4</sup> <sup>2</sup>
-0.500	28.00	Z(0)	= 2.0 CM
-1.000	24.00	S(0)	= 0.0004 CAL/CM SEC MB <sup>2</sup>
-2.000	23.90	G	= 3500 CM SEC DEG/CAL <sup>2</sup>

RADIATION PARAMETERS

LOCAL TIME = 0500	N = 0.24
DELTA = 12.07 DEG	PST = 0.979
R = 1.55 X 10 <sup>-5</sup> DEG C/SEC	F(C) = 0.90
CLOUD CLASS = 1	J = 0.13
E'(8) = 9.88 MB	M = 0.620
EPSILON = 0.950	N = 0.0415 MB <sup>-1/2</sup>
PHI = 40.2 DEG	H = -105.0 DEG

HORIZONTAL GRADIENTS

LEVEL (M)	DE/DX (MB/100KM)	DE/DY (MB/100KM)	DT/DX (DEG C/100KM)	DT/DY (DEG C/100KM)
200	1.28	-0.06	0.10	0.05
600	1.12	0.07	0.03	0.04
1000	0.96	0.19	-0.05	0.02

DPG 5 INITIAL CONDITIONS - OSCOL 22 AUGUST 1969  
 (PAGE 2 OF 2 PAGES)

LEVEL (M)	WIND COMPONENTS		TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
	U (M/SEC)	V		
1000	-0.64	1.96	21.60	8.85
900	-1.03	1.78	22.0	9.16
800	-1.51	1.40	22.50	9.48
700	-1.31	0.82	23.00	9.88
600	-0.77	0.69	23.50	10.23
500	-0.42	0.94	24.00	10.58
400	-0.13	1.02	24.60	11.02
300	-0.09	1.03	25.00	11.40
200	-0.37	1.50	24.50	11.02
100	-0.96	2.39	22.70	9.22
32	-1.35	3.34	20.70	9.95
8	-1.11	3.21	19.40	9.88

ADVECTION TERMS  
 $-1 \times 10^5$   
 (SEC X 10<sup>5</sup>)

LEVEL (M)	ALPHA(1)	BETA(1)	ALPHA(2)	BETA(2)
200	0.02	0.33	0.00	2.09
600	0.01	0.32	0.00	1.14
1000	0.00	0.30	0.00	0.18

SURFACE CONTOUR GRADIENTS

PREDICTION INTERVAL (HR)	AZIMUTH (DEG FROM NORTH)	MAGNITUDE (FT/100K/1)
0	40.0	7.61
1	50.0	7.61
2	60.0	7.61
6	90.0	15.22
12	120.0	22.83

CASE DPG 5 COMPARISON DATA FROM DUGWAY ( 1 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
0	-1.55	1.85		
1000	-1.03	0.05	21.90	6.91
900	-1.03	0.05	22.50	7.21
800	-1.01	0.21	23.10	7.47
700	-0.84	0.59	23.70	7.69
600	-0.45	0.93	24.20	7.95
500	0.02	1.03	24.90	8.25
400	0.23	1.00	25.50	8.48
300	0.05	1.03	25.80	8.78
200	-0.30	0.98	25.20	9.29
100	-0.58	0.85	21.60	9.22
32	-0.75	0.70	17.00	10.80
8	-0.78	0.68	15.30	10.50
2	-0.81	0.63	13.60	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	11.20	8	1.03
-0.125	29.50	2	1.03
-0.250	30.10		
-0.500	28.00		
-1.000	24.10		
-2.000	23.90		

SURFACE SHEAR STRESS  
(DYNES/CM SQ.)X10  
TAU= XXXX

SURFACE ENERGY TERMS (LY/SEC) X1000

S(D)=	0.70	Q(E,D)=	XXXX
R(N)=	XXXX	Q(S,D)=	XXXX
Q(C,D)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.)X100

F= XXXX

CASE DPG 5 COMPARISON DATA FROM DUGWAY ( 2 HOUR )

	WIND COMPONENTS U (M/SEC) V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	-1.21	2.09	
1000	-1.54	-0.03	6.11
900	-1.54	0.05	6.38
800	-1.54	0.08	6.71
700	-1.54	0.11	7.11
600	-1.53	0.21	7.52
500	-1.50	0.37	8.08
400	-0.96	0.37	8.60
300	-0.85	0.58	9.22
200	-0.79	0.66	9.83
100	-0.66	0.79	9.95
32	-0.56	0.86	11.65
8	-0.53	0.88	11.48
2	-0.51	0.89	XXXX
0	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)	WIND SPEED (M/SEC)	SURFACE SHEAR STRESS (DYNES/CM SQ.) TAU=
-0.000	20.20	8 1.03
-0.125	29.10	2 1.03
-0.250	29.90	
-0.500	28.00	SURFACE SHEAR STRESS
-1.000	24.00	(DYNES/CM SQ.) TAU= XXXX
-2.000	23.90	

SURFACE ENERGY TERMS (LY/SFC) X1000

S(D)=	4.60	Q(F,D)=	XXXX
R(N)=	XXXX	Q(S,U)=	XXXX
Q(C,C)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) X100

E= XXXX

CASE DPG 5 COMPARISON DATA FROM DUGWAY ( 6 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	0.00	4.83		
1000	-2.90	1.06	21.00	6.11
500	-2.40	0.92	22.00	6.33
800	-1.90	0.80	22.90	6.57
700	-1.41	0.63	23.80	6.81
600	-1.15	1.03	24.80	7.05
500	-0.19	1.53	25.60	7.31
400	1.18	0.99	26.50	7.58
300	1.53	-0.21	27.40	7.85
200	1.36	-0.73	28.20	8.13
100	0.89	-0.51	29.80	8.60
32	0.89	-0.51	31.30	11.48
8	0.89	-0.51	31.80	11.59
2	0.89	-0.51	32.30	XXXX
0	XXXX	XXXX	XXXX	XXXX

SCIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	54.00	8	1.03
-0.125	28.50	2	1.03
-0.250	28.90		
-0.500	27.70		
-1.000	24.10		
-2.000	23.90		

SURFACE SHEAR STRESS  
(DYNES/CM SQ.) $\times 10^2$   
TAU = XXXX

SURFACE ENERGY TERMS (LY/SEC) $\times 1000$

S(D)=	18.80	Q(E,V)=	XXXX
R(N)=	XXXX	Q(S,C)=	XXXX
Q(C,O)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E = XXXX

CASE DPG 5 COMPARISON DATA FROM DUGWAY (12 HOUR )

	WIND COMPONENTS U (M/SEC)	V	TEMPERATURE (DEG C)	VAPOR PRESSURE (MB)
GEO	3.62	6.27		
1000	-5.13	4.30	20.70	7.16
900	-6.40	4.32	22.00	7.74
800	-8.18	4.35	23.30	8.31
700	-9.25	4.51	24.60	8.97
600	-10.40	4.43	25.70	8.67
500	-11.10	4.05	26.40	10.30
400	-11.90	3.41	27.00	10.87
300	-12.10	2.57	27.60	11.48
200	-11.30	0.20	28.50	11.56
100	-9.40	-2.70	29.80	10.80
32	-13.30	-6.80	30.80	12.26
8	-13.30	-7.67	31.10	12.20
2	-13.10	-8.18	31.40	XXXX
0	XXXX	XXXX	XXXX	XXXX

SOIL TEMPERATURE (DEG C)

WIND SPEED (M/SEC)

-0.000	43.40	8	15.35
-0.125	30.70	2	15.44
-0.250	29.10		
-0.500	27.50		
-1.000	24.00		SURFACE SHEAR STRESS (DYNES/CM SQ.) $\times 10^3$
-2.000	23.90		TAU = XXXX

SURFACE ENERGY TERMS (LY/SEC)  $\times 1000$

S(U)=	4.60	Q(E,T)=	XXXX
R(N)=	XXXX	Q(S,T)=	XXXX
Q(C,N)=	XXXX		

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ.) $\times 100$

E = XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K (CM SQ/SEC)	11664	11219	11375	11804
TAPE NO.	371.	372.	373.	374.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	3.61	-0.01	3.63	0.01	3.59	-0.03	3.61	-0.01
1000	1.26	6.39	2.21	7.34	2.14	7.27	0.94	6.07
900	0.86	7.26	0.89	7.29	0.76	7.16	0.56	6.96
800	0.66	8.85	0.55	8.73	0.40	8.58	0.37	8.55
700	0.52	9.77	0.36	9.61	0.20	9.45	0.23	9.48
600	0.41	10.81	0.24	10.64	0.08	10.48	0.13	10.53
500	0.31	11.41	0.13	11.23	-0.02	11.08	0.04	11.14
400	0.23	12.13	0.06	11.95	-0.09	11.80	-0.02	11.88
300	0.14	12.24	-0.02	12.07	-0.17	11.93	-0.09	12.01
200	0.06	11.36	-0.09	11.20	-0.24	11.06	-0.15	11.14
100	-0.02	9.38	-0.18	9.22	-0.29	9.10	-0.22	9.18
32	-0.08	13.22	-0.21	13.09	-0.31	12.99	-0.25	13.05
8	-0.08	13.22	-0.20	13.10	-0.28	13.02	-0.22	13.08

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.27	0.00	6.28	0.01	6.28	0.01	6.27	0.00
1000	9.79	5.49	7.02	2.72	7.13	2.83	10.06	5.76
900	9.48	5.15	8.19	3.88	8.40	4.08	9.72	5.40
800	9.23	4.88	8.36	4.01	8.56	4.21	9.47	5.12
700	9.02	4.51	8.32	3.81	8.53	4.02	9.24	4.73
600	8.82	4.39	8.23	3.80	8.43	4.00	9.03	4.60
500	8.60	4.55	8.08	4.03	8.28	4.23	8.80	4.75
400	8.36	4.95	7.90	4.49	8.09	4.68	8.55	5.14
300	8.08	5.51	7.66	5.10	7.84	5.27	8.26	5.69
200	7.71	7.51	7.34	7.14	7.50	7.30	7.88	7.68
100	7.13	9.83	6.80	9.50	6.95	9.65	7.28	9.98
32	6.20	13.01	5.93	12.73	6.05	12.85	6.33	13.13
8	5.04	12.71	4.83	12.50	4.93	12.60	5.15	12.82

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	371.	372.	373.	374.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	25.61	4.91	25.60	4.90	25.61	4.91	25.62	4.92
900	25.95	3.95	25.95	3.95	25.94	3.94	25.96	3.96
800	26.11	2.81	26.12	2.82	26.11	2.81	26.12	2.82
700	26.20	1.00	26.21	1.01	26.20	1.00	26.20	1.00
600	26.27	0.57	26.28	0.58	26.27	0.57	26.27	0.57
500	26.32	-0.08	26.32	-0.08	26.31	-0.09	26.30	-0.10
400	26.34	-0.66	26.34	-0.66	26.33	-0.67	26.32	-0.68
300	26.34	-1.26	26.35	-1.25	26.33	-1.27	26.30	-1.30
200	26.31	-2.19	26.33	-2.17	26.31	-2.19	26.29	-2.21
100	26.25	-3.55	26.27	-3.53	26.24	-3.56	26.22	-3.58
32	26.05	-4.75	26.07	-4.73	26.03	-4.77	26.01	-4.79
8	25.78	-5.32	25.79	-5.31	25.75	-5.35	25.73	-5.37
2	25.15	-6.25	25.15	-6.25	25.09	-6.31	25.08	-6.32
0	24.37	XXXX	24.36	XXXX	24.28	XXXX	24.27	XXXX

## VAPOR PRESSURE (MH)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	13.25	6.09	13.06	5.97	13.03	5.87	13.05	5.89
900	13.96	5.22	13.82	6.08	13.69	5.95	13.71	5.97
800	14.57	5.26	14.45	6.14	14.28	5.97	14.30	5.99
700	15.00	6.03	14.90	5.93	14.69	5.72	14.71	5.74
600	15.40	6.80	15.29	6.69	15.07	6.47	15.08	6.48
500	15.74	5.49	15.68	5.38	15.44	5.14	15.45	5.15
400	16.17	5.30	16.07	5.20	15.82	4.95	15.82	4.95
300	16.56	5.78	16.47	4.99	16.20	4.72	16.20	4.72
200	17.02	5.46	16.94	5.39	16.66	5.10	16.65	5.09
100	17.56	6.76	17.48	6.68	17.19	6.39	17.17	6.37
32	18.13	5.87	18.06	5.80	17.77	5.51	17.74	5.48
8	18.67	5.47	18.63	6.43	18.33	6.13	18.28	6.08
2	19.62	XXXX	19.61	XXXX	19.32	XXXX	19.23	XXXX
0	20.80	XXXX	20.82	XXXX	20.54	XXXX	20.43	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	371.	372.	373.	374.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	27.29	-16.11	27.29	-16.11	27.24	-16.16	27.22	-16.18
-0.125	27.50	-3.20	27.51	-3.19	27.49	-3.21	27.49	-3.21
-0.250	28.47	-0.63	28.47	-0.63	28.47	-0.63	28.46	-0.64
-0.500	27.91	0.41	27.90	0.40	27.90	0.40	27.90	0.40
-1.000	24.15	0.15	24.14	0.14	24.15	0.15	24.15	0.15
-2.000	23.90	0.00	23.90	0.00	23.90	0.00	23.89	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	6.44	XXXX	6.27	XXXX	6.35	XXXX	6.52	XXXX
3	5.05	-10.31	4.83	-10.52	4.94	-10.42	5.16	-10.19
2	2.80	-12.64	2.66	-12.78	2.73	-12.72	2.87	-12.58

SURFACE ENERGY TERMS (LY/SEC) X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.74	0.14	4.75	0.15	4.75	0.15	4.75	0.15
R(N)	1.77	XXXX	1.77	XXXX	1.78	XXXX	1.78	XXXX
Q(C,0)	-1.28	XXXX	-1.25	XXXX	-1.29	XXXX	-1.33	XXXX
Q(E,C)	3.89	XXXX	3.86	XXXX	3.93	XXXX	3.76	XXXX
Q(S,T)	-0.83	XXXX	-0.84	XXXX	-0.85	XXXX	-0.84	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ) X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	17.28	XXXX	16.18	XXXX	16.62	XXXX	17.74	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ) X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	43.10	XXXX	43.11	XXXX	43.30	XXXX	43.40	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KICM SQ/SEC)	6219	6144	6219	6299
TAPE NO.	375.	376.	377.	378.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46
1000	-2.82	2.31	-2.11	3.02	-2.09	3.04	-2.68	2.45
900	-2.84	3.56	-2.55	3.85	-2.47	3.93	-2.70	3.70
800	-2.81	5.37	-2.63	5.56	-2.52	5.66	-2.67	5.51
700	-2.79	6.46	-2.63	6.62	-2.53	6.72	-2.65	6.60
600	-2.74	7.66	-2.61	7.79	-2.50	7.90	-2.61	7.79
500	-2.69	8.41	-2.57	8.53	-2.47	8.63	-2.57	8.53
400	-2.63	9.27	-2.52	9.38	-2.42	9.48	-2.50	9.40
300	-2.55	9.55	-2.45	9.65	-2.36	9.74	-2.43	9.67
200	-2.44	8.86	-2.35	8.95	-2.27	9.03	-2.34	8.96
100	-2.27	7.13	-2.19	7.20	-2.12	7.28	-2.18	7.22
32	-1.98	11.32	-1.91	11.39	-1.84	11.46	-1.89	11.41
8	-1.61	11.69	-1.55	11.75	-1.50	11.80	-1.54	11.76

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-4.72	1.55	-4.72	1.55	-4.72	1.55	-4.72
1000	2.20	-2.10	1.60	-2.70	1.62	-2.68	2.25	-2.05
900	2.02	-2.30	1.70	-2.61	1.73	-2.59	2.07	-2.25
800	1.90	-2.45	1.66	-2.69	1.69	-2.66	1.94	-2.41
700	1.80	-2.71	1.60	-2.91	1.63	-2.88	1.84	-2.67
600	1.72	-2.71	1.54	-2.89	1.57	-2.86	1.76	-2.67
500	1.63	-2.42	1.47	-2.58	1.51	-2.54	1.67	-2.38
400	1.55	-1.86	1.41	-2.07	1.43	-1.98	1.59	-1.82
300	1.46	-1.11	1.33	-1.24	1.36	-1.21	1.49	-1.07
200	1.36	1.16	1.23	1.13	1.26	1.06	1.39	1.19
100	1.22	3.92	1.19	3.86	1.13	3.83	1.24	3.94
32	1.02	7.82	0.93	7.73	0.95	7.75	1.04	7.84
8	0.82	8.49	0.74	8.41	0.76	8.43	0.83	8.50

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	375.	376.	377.	378.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	25.45	4.75	25.45	4.75	25.47	4.77	25.47	4.77
900	25.85	3.85	25.86	3.86	25.89	3.89	25.88	3.88
800	26.06	2.76	26.06	2.76	26.09	2.79	26.09	2.79
700	26.18	1.58	26.18	1.58	26.22	1.62	26.22	1.62
600	26.27	0.57	26.28	0.58	26.32	0.62	26.33	0.63
500	26.35	-0.05	26.35	-0.05	26.35	-0.05	26.40	0.00
400	26.40	-0.60	26.41	-0.59	26.45	-0.54	26.46	-0.54
300	26.44	-1.16	26.44	-1.16	26.49	-1.11	26.49	-1.11
200	26.45	-2.05	26.46	-2.04	26.52	-1.98	26.52	-1.98
100	26.43	-3.37	26.43	-3.37	26.49	-3.31	26.49	-3.31
32	26.27	-4.53	26.27	-4.53	26.34	-4.46	26.35	-4.45
8	26.01	-5.09	26.01	-5.09	26.09	-5.01	26.09	-5.01
2	25.27	-6.13	25.27	-6.13	25.38	-6.02	25.38	-6.02
0	24.49	XXXX	24.51	XXXX	24.65	XXXX	24.65	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	12.79	5.63	12.78	5.62	13.34	6.18	13.42	6.26
900	13.49	5.75	13.49	5.75	14.05	6.31	14.11	6.37
800	14.11	5.80	14.11	5.80	14.68	6.37	14.73	6.42
700	14.56	5.59	14.55	5.58	15.13	6.16	15.18	6.21
600	14.97	6.37	14.95	6.35	15.54	6.94	15.59	6.99
500	15.37	5.07	15.37	5.07	15.96	5.66	16.00	5.70
400	15.79	4.92	15.79	4.92	16.38	5.51	16.42	5.55
300	16.23	4.75	16.22	4.74	16.82	5.34	16.85	5.37
200	16.77	5.21	16.77	5.21	17.35	5.79	17.38	5.82
100	17.42	6.62	17.43	6.63	18.01	7.21	18.03	7.23
32	18.19	5.93	18.21	5.95	18.77	6.51	18.79	6.53
8	19.01	6.81	19.03	6.83	19.55	7.35	19.57	7.37
2	20.68	XXXX	20.72	XXXX	21.19	XXXX	21.19	XXXX
0	22.41	XXXX	22.48	XXXX	22.90	XXXX	22.98	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	375.	376.	377.	378.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	27.36	-16.04	27.37	-16.03	27.43	-15.97	27.42	-15.98
-0.125	27.52	-3.18	27.51	-3.19	27.52	-3.18	27.53	-3.17
-0.250	28.47	-0.63	28.47	-0.63	28.47	-0.63	28.47	-0.63
-0.500	27.90	0.40	27.91	0.41	27.90	0.40	27.90	0.40
-1.000	24.12	0.12	24.14	0.14	24.15	0.15	24.15	0.15
-2.000	23.90	0.00	23.90	0.00	23.90	0.00	23.90	0.00

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.39	XXXX	4.36	XXXX	4.34	XXXX	4.37	XXXX
A	1.81	-13.55	1.72	-13.63	1.69	-13.67	1.76	-13.60
2	0.92	-14.52	0.88	-14.57	0.86	-14.59	0.90	-14.55

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(0)	4.74	0.14	4.75	0.15	4.75	0.15	4.74	0.14
R(N)	1.77	XXXX	1.78	XXXX	1.77	XXXX	1.76	XXXX
Q(C,0)	-0.72	XXXX	-0.71	XXXX	-0.69	XXXX	-0.70	XXXX
Q(E,0)	3.32	XXXX	3.32	XXXX	3.25	XXXX	3.26	XXXX
Q(S,0)	-0.82	XXXX	-0.82	XXXX	-0.79	XXXX	-0.79	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	6.28	XXXX	6.16	XXXX	6.22	XXXX	6.34	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	43.10	XXXX	42.00	XXXX	42.00	XXXX	42.00	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	6639	6469	6434	6509
TAPE NO.	379.	380.	381.	382.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46
1000	-2.71	2.42	-2.79	3.04	-2.13	3.00	-2.06	2.27
900	-2.73	3.67	-2.49	3.91	-2.57	3.82	-2.87	3.53
800	-2.70	5.48	-2.54	5.64	-2.64	5.54	-2.84	5.34
700	-2.67	6.58	-2.55	6.70	-2.64	6.61	-2.81	6.44
600	-2.63	7.77	-2.52	7.88	-2.62	7.78	-2.76	7.64
500	-2.58	8.52	-2.49	8.61	-2.58	8.52	-2.71	8.39
400	-2.52	9.38	-2.43	9.47	-2.53	9.37	-2.64	9.26
300	-2.45	9.65	-2.38	9.73	-2.40	9.64	-2.56	9.54
200	-2.35	8.95	-2.28	9.02	-2.36	8.94	-2.45	8.85
100	-2.18	7.22	-2.13	7.27	-2.20	7.19	-2.28	7.11
32	-1.97	11.40	-1.85	11.45	-1.92	11.38	-1.99	11.31
8	-1.55	11.75	-1.51	11.79	-1.56	11.74	-1.61	11.69

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-4.72	1.55	-4.72	1.55	-4.72	1.55	-4.72
1000	2.25	-2.05	1.62	-2.68	1.59	-2.71	2.19	-2.11
900	2.06	-2.26	1.72	-2.60	1.69	-2.63	2.01	-2.31
800	1.93	-2.42	1.68	-2.67	1.64	-2.71	1.89	-2.46
700	1.84	-2.67	1.62	-2.89	1.58	-2.93	1.79	-2.72
600	1.75	-2.68	1.56	-2.87	1.52	-2.91	1.70	-2.73
500	1.66	-2.39	1.49	-2.56	1.45	-2.59	1.62	-2.43
400	1.58	-1.83	1.42	-1.99	1.39	-2.02	1.54	-1.87
300	1.49	-1.07	1.34	-1.23	1.31	-1.26	1.45	-1.11
200	1.39	1.19	1.25	1.05	1.22	1.02	1.34	1.14
100	1.24	3.94	1.12	3.82	1.09	3.79	1.20	3.90
32	1.04	7.84	0.93	7.73	0.92	7.72	1.01	7.81
8	0.83	9.50	0.74	8.41	0.73	8.40	0.81	8.48

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	379. 12.00HR	380. 12.00HR	381. 12.00HR	382. 12.00HR
----------------------	-----------------	-----------------	-----------------	-----------------

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	25.71	5.01	25.73	5.03	25.72	5.02	25.73	5.03
900	26.15	4.15	26.16	4.16	26.14	4.14	26.14	4.14
800	26.35	3.05	26.38	3.08	26.35	3.05	26.35	3.05
700	26.49	1.89	26.52	1.92	26.48	1.88	26.48	1.88
600	26.61	0.91	26.63	0.93	26.58	0.89	26.59	0.89
500	26.69	0.29	26.71	0.31	26.66	0.26	26.66	0.26
400	26.74	-0.26	26.77	-0.23	26.72	-0.28	26.72	-0.28
300	26.79	-0.81	26.82	-0.78	26.76	-0.84	26.76	-0.84
200	26.82	-1.68	26.85	-1.65	26.79	-1.71	26.79	-1.71
100	26.81	-2.99	26.83	-2.97	26.78	-3.02	26.77	-3.03
32	26.69	-4.11	26.71	-4.09	26.64	-4.16	26.64	-4.16
8	26.46	-4.64	26.48	-4.62	26.41	-4.69	26.39	-4.71
2	25.84	-5.56	25.84	-5.56	25.75	-5.65	25.73	-5.67
0	25.20	XXXX	25.18	XXXX	25.06	XXXX	25.04	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	13.77	5.61	13.70	5.54	13.15	5.99	13.15	5.99
900	14.49	5.75	14.43	6.69	13.87	6.13	13.87	6.13
800	15.11	5.80	15.07	6.76	14.49	6.18	14.49	6.18
700	15.56	6.59	15.52	6.55	14.94	5.97	14.95	5.98
600	15.96	7.36	15.95	7.35	15.37	6.77	15.37	6.77
500	16.41	6.11	16.37	6.07	15.70	5.49	15.79	5.49
400	16.82	5.95	16.81	5.94	16.21	5.34	16.21	5.34
300	17.26	5.78	17.25	5.77	16.66	5.18	16.65	5.17
200	17.81	6.25	17.79	6.23	17.21	5.65	17.21	5.65
100	18.47	7.67	18.45	7.65	17.87	7.07	17.87	7.07
32	19.24	6.98	19.23	6.97	18.68	6.42	18.66	6.40
8	20.04	7.84	20.04	7.84	19.51	7.31	19.49	7.29
2	21.64	XXXX	21.71	XXXX	21.23	XXXX	21.19	XXXX
0	23.41	XXXX	23.46	XXXX	23.72	XXXX	22.96	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	379.	380.	381.	382.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-C.000	29.11	-14.29	28.91	-14.49	28.85	-14.55	28.85	-14.55
-0.125	28.97	-1.73	29.06	-1.64	29.05	-1.65	29.04	-1.66
-0.250	29.13	0.03	29.15	0.05	29.15	0.05	29.15	0.75
-0.500	27.96	0.46	27.97	0.47	27.96	0.46	27.96	0.46
-1.000	24.26	0.26	24.26	0.26	24.26	0.26	24.26	0.26
-2.000	30.09	-0.61	30.09	-0.61	30.10	-0.60	30.09	-0.61

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.37	XXXX	4.34	XXXX	4.36	XXXX	4.39	XXXX
8	1.76	-13.59	1.68	-13.67	1.72	-13.63	1.81	-13.54
2	0.90	-14.54	0.86	-14.58	0.88	-14.56	0.92	-14.52

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.75	0.15	4.75	0.15	4.78	0.18	4.77	0.17
R(N)	1.73	XXXX	1.73	XXXX	1.76	XXXX	1.76	XXXX
Q(C,D)	-0.65	XXXX	-0.65	XXXX	-0.67	XXXX	-0.68	XXXX
Q(E,C)	3.51	XXXX	3.46	XXXX	3.53	XXXX	3.54	XXXX
Q(S,D)	-1.12	XXXX	-1.07	XXXX	-1.09	XXXX	-1.09	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	6.68	XXXX	6.48	XXXX	6.46	XXXX	6.58	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	46.20	XXXX	46.40	XXXX	46.60	XXXX	46.60	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	11974	11519	11364	11814
TAPE NO.	383.	384.	385.	386.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	3.61	-0.01	3.61	-0.01	3.59	-0.03	3.61	-0.01
1000	0.93	0.06	2.13	7.26	2.21	7.34	1.19	6.32
900	0.55	6.95	0.73	7.13	0.88	7.28	0.80	7.20
800	0.36	8.54	0.37	8.55	0.53	8.71	0.61	8.79
700	0.22	9.47	0.18	9.42	0.34	9.59	0.46	9.71
600	0.13	10.52	0.05	10.45	0.21	10.61	0.36	10.76
500	0.03	11.14	-0.05	11.05	0.10	11.20	0.26	11.36
400	-0.03	11.87	-0.12	11.78	0.03	11.93	0.18	12.08
300	-0.10	11.99	-0.20	11.90	-0.06	12.05	0.09	12.19
200	-0.16	11.14	-0.25	11.05	-0.12	11.18	0.02	11.32
100	-0.23	9.17	-0.32	9.08	-0.19	9.20	-0.06	9.34
32	-0.25	13.05	-0.33	12.97	-0.23	13.07	-0.12	13.18
8	-0.23	13.07	-0.29	13.01	-0.21	13.09	-0.12	13.18

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.27	0.00	6.28	0.01	6.28	0.01	6.28	0.01
1000	10.08	5.78	7.14	2.84	7.03	2.73	9.81	5.51
900	9.74	5.42	8.39	4.07	8.20	3.88	9.49	5.17
800	9.49	5.14	8.56	4.21	8.36	4.01	9.25	4.90
700	9.26	4.75	8.52	4.01	8.33	3.82	9.03	4.52
600	9.04	4.61	8.42	3.99	8.23	3.80	8.83	4.40
500	8.81	4.76	8.27	4.22	8.08	4.03	8.60	4.55
400	8.56	5.15	8.08	4.67	7.90	4.49	8.36	4.95
300	8.27	5.70	7.83	5.26	7.66	5.10	8.08	5.51
200	7.89	7.69	7.49	7.29	7.33	7.13	7.52	7.32
100	7.29	9.99	6.95	9.65	6.80	9.50	7.13	9.83
32	6.34	13.14	6.04	12.84	5.92	12.72	6.20	13.00
8	5.16	12.83	4.92	12.59	4.82	12.49	5.04	12.71

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	383.	384.	385.	386.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	25.88	5.18	25.87	5.17	25.87	5.17	25.87	5.17
900	26.25	4.25	26.24	4.24	26.25	4.25	26.25	4.25
800	26.42	3.12	26.41	3.11	26.42	3.12	26.42	3.12
700	26.51	1.91	26.51	1.91	26.51	1.91	26.51	1.91
600	26.58	0.88	26.58	0.88	26.59	0.89	26.59	0.89
500	26.63	0.23	26.63	0.23	26.64	0.24	26.63	0.23
400	26.64	-0.36	26.65	-0.35	26.67	-0.33	26.66	-0.34
300	26.66	-0.94	26.67	-0.93	26.58	-0.92	26.68	-0.92
200	26.64	-1.86	26.65	-1.85	26.67	-1.83	26.67	-1.83
100	26.58	-3.22	26.59	-3.21	26.62	-3.18	26.61	-3.19
32	26.39	-4.41	26.41	-4.39	26.43	-4.37	26.43	-4.37
8	26.13	-4.97	26.14	-4.96	26.19	-4.91	26.18	-4.92
2	25.54	-5.86	25.54	-5.86	25.60	-5.80	25.61	-5.79
0	24.78	XXXX	24.79	XXXX	24.86	XXXX	24.89	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	13.40	6.24	13.38	6.22	13.42	6.26	13.62	6.46
900	14.08	6.34	14.06	6.32	14.19	6.45	14.34	6.60
800	14.68	6.37	14.66	6.35	14.83	6.52	14.96	6.65
700	15.09	6.12	15.08	6.11	15.27	6.30	15.41	6.44
600	15.47	6.87	15.47	6.87	15.69	7.09	15.81	7.21
500	15.85	5.55	15.86	5.56	16.09	5.79	16.20	5.90
400	16.24	5.37	16.24	5.37	16.49	5.62	16.59	5.72
300	16.63	5.15	16.62	5.14	16.90	5.42	16.99	5.51
200	17.09	5.53	17.09	5.53	17.37	5.81	17.47	5.91
100	17.62	6.82	17.64	6.84	17.96	7.16	18.03	7.23
32	18.21	5.95	18.24	5.98	18.54	6.28	18.60	6.34
8	18.77	6.57	18.82	6.62	19.11	6.91	19.16	6.96
2	19.74	XXXX	19.83	XXXX	20.12	XXXX	20.12	XXXX
0	20.97	XXXX	21.09	XXXX	21.38	XXXX	21.35	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	383.	384.	385.	386.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	28.71	-14.69	28.71	-14.69	28.76	-14.64	28.75	-14.65
-0.125	29.03	-1.67	29.03	-1.67	29.04	-1.66	29.04	-1.66
-0.250	29.15	0.05	29.16	0.06	29.16	0.06	29.16	0.06
-0.500	27.96	0.46	27.96	0.46	27.96	0.46	27.96	0.46
-1.000	24.26	0.26	24.27	0.27	24.27	0.27	24.26	0.26
-2.000	30.10	-0.60	30.09	-0.61	30.09	-0.61	30.10	-0.60

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	6.53	XXXX	6.35	XXXX	6.27	XXXX	6.44	XXXX
8	5.17	-10.19	4.93	-10.42	4.82	-10.53	5.05	-10.31
2	2.89	-12.55	2.74	-12.70	2.68	-12.77	2.82	-12.62

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.75	0.15	4.76	0.16	4.75	0.15	4.75	0.15
R(N)	1.75	XXXX	1.76	XXXX	1.75	XXXX	1.75	XXXX
Q(C,0)	-1.25	XXXX	-1.21	XXXX	-1.17	XXXX	-1.19	XXXX
Q(E,0)	4.13	XXXX	4.09	XXXX	4.03	XXXX	4.05	XXXX
Q(S,0)	-1.12	XXXX	-1.12	XXXX	-1.11	XXXX	-1.11	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	18.00	XXXX	16.82	XXXX	16.38	XXXX	17.50	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	46.90	XXXX	47.00	XXXX	46.70	XXXX	46.60	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3209	3204
TAPE NO.	387.	388.	389.	390.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	3.61	-0.01	3.61	-0.01	3.61	-0.01	3.59	-0.03
1000	2.29	7.42	2.81	7.94	2.77	7.90	2.02	7.15
900	2.34	8.74	2.14	8.54	2.01	8.40	2.06	8.46
800	2.29	10.47	2.13	10.31	1.93	10.11	2.00	10.18
700	2.21	11.46	2.10	11.35	1.88	11.13	1.91	11.16
600	2.11	12.51	2.03	12.43	1.79	12.19	1.81	12.21
500	1.99	13.10	1.94	13.04	1.69	12.79	1.70	12.91
400	1.88	13.77	1.83	13.73	1.59	13.49	1.59	13.49
300	1.71	13.81	1.68	13.78	1.44	13.55	1.44	13.55
200	1.52	12.82	1.48	12.78	1.27	12.57	1.26	12.56
100	1.22	10.62	1.19	10.59	1.01	10.41	1.01	10.41
32	0.90	14.20	0.86	14.16	0.72	14.02	0.71	14.01
8	0.66	13.97	0.67	13.90	0.50	13.80	0.50	13.80

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	6.25	-7.02	6.28	0.01	6.28	0.01	6.27	0.00
1000	10.01	5.71	6.40	2.16	6.56	2.26	10.32	6.02
900	10.13	5.81	9.28	4.76	9.39	5.07	10.47	6.15
800	10.14	5.79	9.64	5.29	9.99	5.64	10.49	6.14
700	10.11	5.60	9.83	5.32	10.20	5.69	10.47	5.96
600	10.07	5.64	9.89	5.46	10.26	5.83	10.43	6.00
500	9.99	5.94	9.87	5.82	10.23	6.18	10.34	6.29
400	9.88	6.47	9.79	6.38	10.14	6.73	10.22	6.81
300	9.71	7.14	9.65	7.08	9.97	7.40	10.03	7.46
200	9.42	9.22	9.38	9.18	9.69	9.49	9.73	9.53
100	8.90	11.60	8.88	11.58	9.14	11.84	9.16	11.86
32	7.88	14.68	7.86	14.66	8.07	14.87	8.09	14.89
8	6.47	14.14	6.45	14.13	6.63	14.30	6.63	14.30

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NU. INTERVAL	387. 12.00HR	388. 12.00HR	389. 12.00HR	390. 12.00HR
----------------------	-----------------	-----------------	-----------------	-----------------

## AIR TEMPERATURE (DFG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.39	2.69	23.43	2.73	23.46	2.76	23.46	2.76
900	23.05	1.95	23.99	1.99	24.01	2.01	24.01	2.01
800	24.38	1.08	24.39	1.09	24.42	1.12	24.42	1.12
700	24.74	0.14	24.75	0.15	24.77	0.17	24.77	0.17
600	25.09	-0.61	25.09	-0.61	25.12	-0.58	25.12	-0.58
500	25.41	-0.99	25.41	-0.99	25.44	-0.96	25.43	-0.97
400	25.74	-1.26	25.75	-1.25	25.77	-1.23	25.77	-1.23
300	26.09	-1.51	26.10	-1.50	26.12	-1.48	26.13	-1.47
200	26.49	-2.01	26.49	-2.01	26.51	-1.99	26.51	-1.99
100	26.93	-2.87	26.93	-2.87	26.94	-2.86	26.94	-2.86
32	27.35	-3.45	27.36	-3.44	27.36	-3.44	27.36	-3.44
8	27.49	-3.61	27.50	-3.60	27.47	-3.63	27.47	-3.63
2	27.40	-4.00	27.41	-3.99	27.35	-4.05	27.35	-4.05
0	27.23	XXXX	27.25	XXXX	27.15	XXXX	27.15	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.32	3.16	9.97	2.81	10.26	3.13	10.25	3.09
900	11.63	3.89	11.41	3.67	11.48	3.74	11.49	3.75
800	12.82	4.51	12.65	4.34	12.62	4.31	12.63	4.32
700	13.80	4.83	13.66	4.69	13.56	4.59	13.56	4.59
600	14.74	6.14	14.63	6.03	14.48	5.88	14.48	5.88
500	15.69	5.39	15.61	5.31	15.41	5.11	15.41	5.11
400	16.67	5.80	16.61	5.74	16.36	5.49	16.37	5.50
300	17.72	5.24	17.67	5.19	17.39	5.91	17.39	5.91
200	18.95	7.39	18.89	7.33	18.58	7.02	18.58	7.02
100	20.53	9.73	20.46	9.66	20.12	9.32	20.12	9.32
32	22.24	9.98	22.23	9.97	21.87	9.63	21.88	9.62
8	23.81	11.61	23.81	11.61	23.47	11.27	23.47	11.27
2	25.83	XXXX	25.83	XXXX	25.58	XXXX	25.58	XXXX
0	29.41	XXXX	29.41	XXXX	29.13	XXXX	29.14	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	387.	388.	389.	390.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	31.42	-11.98	31.43	-11.97	31.38	-12.02	31.38	-12.02
-0.125	30.34	-0.36	30.34	-0.36	30.33	-0.37	30.33	-0.37
-0.250	29.42	0.32	29.42	0.32	29.42	0.32	29.41	0.31
-0.500	27.98	0.48	27.98	0.48	27.97	0.47	27.97	0.47
-1.000	24.27	0.27	24.24	0.24	24.25	0.25	24.24	0.24
-2.000	30.10	-0.60	30.09	-0.61	30.09	-0.61	30.09	-0.61

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8	7.64	XXXX	7.62	XXXX	7.76	XXXX	7.76	XXXX
8	6.51	-8.84	6.48	-8.87	6.64	-8.71	6.65	-8.70
2	4.16	-11.28	4.14	-11.30	4.17	-11.28	4.18	-11.27

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(0)	4.75	0.15	4.75	0.15	4.74	0.14	4.74	0.14
R(N)	1.50	XXXX	1.50	XXXX	1.56	XXXX	1.57	XXXX
Q(C,0)	-0.06	XXXX	-0.06	XXXX	-0.08	XXXX	-0.08	XXXX
Q(E,0)	2.82	XXXX	2.82	XXXX	2.86	XXXX	2.86	XXXX
Q(S,0)	-1.20	XXXX	-1.20	XXXX	-1.21	XXXX	-1.21	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10<sup>10</sup>

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.66	XXXX	5.54	XXXX	5.74	XXXX	5.76	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SO)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	43.17	XXXX	43.17	XXXX	43.11	XXXX	43.10	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

KI CM SQ/SEC)	3199	3204	3204	3204
TAPE NO.	391.	392.	393.	394.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46
1000	-2.62	2.51	-1.94	3.19	-1.92	3.21	-2.45	2.68
900	-2.54	3.86	-2.31	4.09	-2.19	4.10	-2.38	4.02
800	-2.54	5.64	-2.42	5.76	-2.26	5.92	-2.38	5.80
700	-2.50	6.69	-2.48	6.77	-2.30	6.95	-2.39	6.86
600	-2.56	7.84	-2.50	7.90	-2.32	8.08	-2.41	7.99
500	-2.50	8.54	-2.52	8.58	-2.34	8.76	-2.42	8.68
400	-2.54	9.36	-2.51	9.39	-2.33	9.57	-2.40	9.49
300	-2.51	9.59	-2.49	9.61	-2.32	9.78	-2.39	9.71
200	-2.45	8.85	-2.44	8.86	-2.28	9.02	-2.34	8.96
100	-2.34	7.06	-2.32	7.07	-2.19	7.20	-2.23	7.16
32	-2.09	11.21	-2.07	11.23	-1.96	11.34	-2.00	11.30
8	-1.72	11.58	-1.71	11.54	-1.63	11.68	-1.65	11.65

## V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-4.72	1.55	-4.72	1.55	-4.72	1.55	-4.72
1000	2.53	-1.77	1.63	-2.67	1.65	-2.65	2.58	-1.72
900	2.65	-1.66	2.35	-1.97	2.35	-1.97	2.66	-1.65
800	2.66	-1.69	2.57	-1.85	2.50	-1.85	2.66	-1.69
700	2.64	-1.87	2.53	-1.98	2.53	-1.98	2.62	-1.89
600	2.60	-1.83	2.52	-1.91	2.52	-1.91	2.57	-1.86
500	2.54	-1.51	2.48	-1.57	2.47	-1.58	2.49	-1.56
400	2.46	-0.95	2.42	-0.99	2.42	-0.99	2.43	-0.98
300	2.36	-0.21	2.32	-0.24	2.33	-0.24	2.34	-0.23
200	2.22	2.02	2.19	1.99	2.20	2.00	2.21	2.01
100	2.01	4.71	1.99	4.69	2.00	4.70	2.00	4.70
32	1.70	8.50	1.68	8.48	1.69	8.48	1.69	8.49
8	1.36	9.03	1.35	9.02	1.30	8.97	1.35	9.02

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	391.	392.	393.	394.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.45	2.75	23.45	2.75	23.42	2.72	23.41	2.71
900	24.01	2.01	24.00	2.00	23.99	1.99	23.99	1.99
800	24.42	1.12	24.42	1.12	24.42	1.12	24.41	1.11
700	24.77	0.17	24.77	0.17	24.78	0.18	24.78	0.18
600	25.11	-0.59	25.11	-0.59	25.13	-0.57	25.13	-0.57
500	25.44	-0.96	25.43	-0.97	25.45	-0.95	25.46	-0.94
400	25.76	-1.24	25.77	-1.23	25.80	-1.20	25.80	-1.20
300	26.12	-1.48	26.12	-1.48	26.16	-1.44	26.16	-1.44
200	26.51	-1.99	26.51	-1.99	26.55	-1.95	26.56	-1.94
100	26.94	-2.86	26.94	-2.86	27.00	-2.80	27.00	-2.80
32	27.36	-3.44	27.36	-3.44	27.42	-3.38	27.42	-3.38
8	27.47	-3.63	27.47	-3.63	27.56	-3.54	27.56	-3.54
2	27.33	-4.07	27.33	-4.07	27.46	-3.94	27.45	-3.95
0	27.16	XXXX	27.17	XXXX	27.34	XXXX	27.31	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.26	3.1^	10.25	3.09	10.30	3.64	10.92	3.76
900	11.49	3.74	11.49	3.75	12.08	4.34	12.16	4.42
800	12.62	4.31	12.63	4.32	13.05	4.94	13.31	5.00
700	13.56	4.59	13.57	4.60	14.22	5.25	14.25	5.28
600	14.48	5.88	14.49	5.87	15.15	6.55	15.18	6.58
500	15.41	5.11	15.41	5.11	16.08	5.78	16.11	5.81
400	16.36	5.49	16.36	5.49	17.05	6.18	17.06	6.19
300	17.39	5.91	17.39	5.91	18.08	6.67	18.09	6.61
200	18.58	7.02	18.58	7.02	19.37	7.71	19.27	7.71
100	20.12	9.32	20.13	9.33	20.79	9.99	20.79	9.99
32	21.88	9.62	21.08	9.62	22.61	10.25	22.51	10.25
8	23.48	11.28	23.49	11.28	24.17	11.87	24.07	11.87
2	26.09	XXXX	26.09	XXXX	26.57	XXXX	26.58	XXXX
0	29.15	XXXX	29.17	XXXX	29.64	XXXX	29.63	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	391.	392.	393.	394.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	31.38	-12.02	31.39	-12.01	31.45	-11.95	31.44	-11.96
-0.125	30.33	-0.37	30.32	-0.38	30.34	-0.36	30.34	-0.36
-0.250	29.41	0.31	29.41	0.31	29.42	0.32	29.41	0.31
-0.500	27.98	0.48	27.97	0.47	27.97	0.47	27.97	0.47
-1.000	24.24	0.24	24.24	0.24	24.24	0.24	24.25	0.25
-2.000	30.09	-0.61	30.09	-0.61	30.09	-0.61	30.09	-0.61

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8+	4.56	XXXX	4.56	XXXX	4.52	XXXX	4.53	XXXX
8	2.20	-13.15	2.18	-13.17	2.08	-13.27	2.14	-13.21
2	1.19	-14.26	1.18	-14.26	1.15	-14.30	1.17	-14.27

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.74	0.14	4.76	0.17	4.77	0.17	4.74	0.14
R(N)	1.56	XXXX	1.58	XXXX	1.58	XXXX	1.56	XXXX
Q(C,D)	-0.08	XXXX	-0.07	XXXX	-0.06	XXXX	-0.06	XXXX
Q(E,D)	2.86	XXXX	2.87	XXXX	2.81	XXXX	2.80	XXXX
Q(S,D)	-1.21	XXXX	-1.21	XXXX	-1.18	XXXX	-1.18	XXXX

## SURFACE SHEAR STRESS (LYNFS/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.38	XXXX	3.36	XXXX	3.34	XXXX	3.34	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	43.10	XXXX	43.10	XXXX	42.90	XXXX	43.00	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3204	3204
TAPE NU.	395.	396.	397.	398.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46	-1.84	-5.46
1000	-2.44	2.69	-1.92	3.21	-1.94	3.19	-2.62	2.51
900	-2.36	4.03	-2.19	4.20	-2.31	4.09	-2.54	3.86
800	-2.35	5.83	-2.25	5.93	-2.41	5.77	-2.54	5.64
700	-2.35	6.90	-2.28	6.97	-2.46	6.79	-2.54	6.71
600	-2.36	8.04	-2.32	8.08	-2.49	7.90	-2.56	7.84
500	-2.38	8.72	-2.34	8.76	-2.51	8.59	-2.56	8.54
400	-2.36	9.53	-2.33	9.57	-2.50	9.40	-2.54	9.36
300	-2.35	9.75	-2.32	9.78	-2.48	9.62	-2.51	9.59
200	-2.30	9.00	-2.28	9.02	-2.43	8.87	-2.46	8.84
100	-2.21	7.19	-2.19	7.20	-2.32	7.08	-2.34	7.06
32	-1.97	11.33	-1.96	11.34	-2.07	11.23	-2.09	11.21
8	-1.63	11.67	-1.63	11.67	-1.71	11.59	-1.70	11.60

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-4.72	1.55	-4.72	1.55	-4.72	1.55	-4.72
1000	2.58	-1.72	1.64	-2.06	1.63	-2.67	2.52	-1.78
900	2.67	-1.65	2.35	-1.97	2.35	-1.97	2.65	-1.66
800	2.67	-1.68	2.45	-1.90	2.50	-1.85	2.66	-1.69
700	2.64	-1.87	2.53	-1.98	2.54	-1.97	2.63	-1.88
600	2.60	-1.83	2.52	-1.91	2.53	-1.90	2.60	-1.83
500	2.54	-1.51	2.48	-1.57	2.48	-1.57	2.53	-1.52
400	2.47	-0.94	2.42	-1.99	2.42	-0.99	2.46	-0.95
300	2.37	-0.20	2.33	-0.24	2.33	-0.24	2.36	-0.21
200	2.23	2.03	2.20	2.07	2.20	2.00	2.22	2.02
100	2.02	4.72	2.02	4.72	1.99	4.69	2.01	4.71
32	1.70	8.51	1.68	8.48	1.68	8.48	1.69	8.49
8	1.36	9.03	1.35	9.02	1.35	9.02	1.36	9.03

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	395.	396.	397.	398.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.33	2.63	23.34	2.64	23.37	2.67	23.37	2.67
900	23.82	1.82	23.83	1.83	23.83	1.83	23.83	1.83
800	24.21	0.91	24.21	0.91	24.21	0.91	24.21	0.91
700	24.53	-0.07	24.54	-0.06	24.53	-0.07	24.53	-0.07
600	24.86	-0.84	24.86	-0.84	24.84	-0.86	24.84	-0.86
500	25.16	-1.24	25.17	-1.23	25.14	-1.26	25.14	-1.26
400	25.49	-1.51	25.49	-1.51	25.46	-1.54	25.46	-1.54
300	25.83	-1.77	25.83	-1.77	25.80	-1.80	25.79	-1.81
200	26.20	-2.30	26.21	-2.29	26.16	-2.34	26.16	-2.34
100	26.62	-3.18	26.62	-3.18	26.58	-3.22	26.57	-3.23
32	27.43	-3.77	27.04	-3.76	26.97	-3.83	26.97	-3.83
8	27.16	-3.94	27.16	-3.94	27.08	-4.02	27.08	-4.02
2	27.04	-4.36	27.04	-4.36	26.92	-4.48	26.92	-4.48
0	26.89	XXXX	26.90	XXXX	26.74	XXXX	26.74	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.83	3.67	10.72	3.56	10.16	3.00	10.17	3.01
900	11.96	4.22	11.89	4.15	11.29	3.55	11.29	3.55
800	13.05	4.74	12.99	4.68	12.36	4.05	12.36	4.05
700	13.94	4.97	13.91	4.94	13.26	4.29	13.25	4.28
600	14.81	6.21	14.79	6.19	14.12	5.52	14.12	5.52
500	15.70	5.40	15.68	5.38	15.00	4.70	14.99	4.69
400	16.62	5.75	16.60	5.73	15.92	5.05	15.92	5.05
300	17.61	6.13	17.59	6.11	16.91	5.43	16.91	5.43
200	18.74	7.18	18.74	7.18	18.05	6.49	18.05	6.49
100	20.20	9.40	20.20	9.40	19.54	8.74	19.53	8.73
32	21.87	9.61	21.87	9.61	21.26	9.00	21.25	8.99
8	23.41	11.21	23.41	11.20	22.80	10.60	22.80	10.60
2	25.90	XXXX	25.90	XXXX	25.39	XXXX	25.38	XXXX
0	28.85	XXXX	28.85	XXXX	28.35	XXXX	28.38	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	395.	396.	397.	398.
INTERVAL	12.00HR	12.00HR	12.00HR	12.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	30.73	-12.67	30.75	-12.65	30.67	-12.73	30.67	-12.73
-0.125	28.90	-1.80	28.90	-1.80	28.89	-1.81	28.89	-1.81
-0.250	28.74	-0.36	28.74	-0.36	28.74	-0.36	28.74	-0.36
-0.500	27.91	0.41	27.92	0.42	27.92	0.42	27.91	0.41
-1.000	24.12	0.12	24.13	0.13	24.13	0.13	24.13	0.13
-2.000	23.89	-0.01	23.89	-0.01	23.90	0.00	23.89	-0.01

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.53	XXXX	4.52	XXXX	4.55	XXXX	4.56	XXXX
8	2.13	-13.22	2.12	-13.23	2.19	-13.17	2.18	-13.18
2	1.16	-14.29	1.15	-14.29	1.17	-14.27	1.17	-14.28

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.74	0.14	4.74	0.14	4.76	0.17	4.75	0.15
R(N)	1.57	XXXX	1.57	XXXX	1.60	XXXX	1.58	XXXX
Q(C,D)	-0.07	XXXX	-0.07	XXXX	-0.08	XXXX	-0.08	XXXX
Q(E,D)	2.75	XXXX	2.75	XXXX	2.81	XXXX	2.80	XXXX
Q(S,D)	-1.10	XXXX	-1.10	XXXX	-1.12	XXXX	-1.13	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.34	XXXX	3.34	XXXX	3.38	XXXX	3.36	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	39.60	XXXX	39.60	XXXX	39.80	XXXX	39.80	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3204	17004
TAPE NU.	399.	400.	401.	404.
INTERVAL	12.00HR	12.00HR	12.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEN	3.61	-0.01	3.61	-0.01	3.61	-0.01	0.00	0.00
1000	2.03	7.16	2.76	7.69	2.81	7.94	-3.77	-0.87
900	2.07	3.47	1.99	8.39	2.13	8.53	-3.80	-1.40
800	2.02	10.20	1.93	10.11	2.12	10.30	-3.77	-1.88
700	1.94	11.19	1.86	11.11	2.09	11.34	-3.73	-2.32
600	1.84	12.24	1.79	12.19	2.03	12.43	-3.68	-2.53
500	1.72	12.82	1.69	12.79	1.94	13.04	-3.62	-3.43
400	1.61	13.51	1.58	13.48	1.83	13.73	-3.54	-4.72
300	1.46	13.56	1.44	13.55	1.68	13.78	-3.44	-4.97
200	1.28	12.59	1.27	12.57	1.48	12.78	-3.30	-4.66
100	1.02	10.42	1.01	10.41	1.19	10.59	-3.08	-3.97
32	0.72	14.02	0.72	14.02	0.85	14.15	-2.70	-3.59
8	0.50	13.80	0.50	13.80	0.60	13.90	-2.21	-3.10

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEN	6.28	0.01	6.27	0.00	6.27	0.00	4.83	0.00
1000	10.34	0.04	6.55	2.25	6.46	2.16	3.78	2.72
900	10.48	6.16	9.40	5.08	9.09	4.77	3.70	2.78
800	10.51	6.16	10.01	5.66	9.65	5.30	3.60	2.80
700	10.49	5.98	10.20	5.69	9.84	5.33	3.51	2.88
600	10.44	0.01	10.26	5.83	9.90	5.47	3.42	2.39
500	10.35	6.30	10.23	6.18	9.88	5.82	3.32	1.80
400	10.23	6.82	10.15	6.74	9.80	6.39	3.22	2.23
300	10.04	7.47	9.98	7.41	9.66	7.09	3.09	3.30
200	9.74	9.54	9.69	9.49	9.40	9.20	2.94	3.67
100	9.18	11.88	9.15	11.85	8.88	11.58	2.70	3.21
32	8.11	14.91	8.08	14.88	7.86	14.66	2.33	2.84
8	6.65	14.32	6.63	14.30	6.46	14.13	1.89	2.40

CASE DPG 5 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NU. INTERVAL	399. 12.00HR	400. 12.00HR	401. 12.00HR	404. 6.00HR
----------------------	-----------------	-----------------	-----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.36	2.66	23.36	2.66	23.34	2.64	23.15	2.15
900	23.83	1.83	23.83	1.83	23.81	1.81	23.43	1.43
800	24.20	0.90	24.20	0.90	24.18	0.88	23.63	0.73
700	24.52	-0.08	24.53	-0.07	24.50	-0.10	23.78	-0.02
600	24.84	-0.86	24.84	-0.86	24.82	-0.88	23.93	-0.87
500	25.14	-1.26	25.14	-1.26	25.11	-1.29	24.07	-1.53
400	25.47	-1.53	25.46	-1.54	25.44	-1.56	24.72	-2.28
300	25.80	-1.80	25.79	-1.81	25.76	-1.84	24.39	-3.01
200	26.16	-2.34	26.16	-2.34	26.15	-2.35	24.61	-3.59
100	26.57	-3.23	26.58	-3.22	26.57	-3.23	24.95	-4.85
32	26.97	-3.83	26.97	-3.83	26.98	-3.82	25.50	-5.80
8	27.08	-4.02	27.08	-4.02	27.11	-3.99	26.17	-5.63
2	26.96	-4.44	26.95	-4.45	27.01	-4.39	27.66	-4.64
0	26.75	XXXX	26.73	XXXX	26.84	XXXX	29.04	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.17	3.01	10.16	3.00	9.88	2.72	10.27	4.16
900	11.28	3.54	11.29	3.55	11.21	3.47	10.79	4.46
800	12.36	4.05	12.36	4.05	12.39	4.08	11.30	4.73
700	13.26	4.29	13.26	4.29	13.35	4.38	11.66	4.85
600	14.12	5.52	14.12	5.52	14.27	5.67	12.00	4.94
500	14.99	4.69	15.00	4.70	15.21	4.91	12.34	5.03
400	15.91	5.04	15.91	5.04	16.16	5.29	12.69	5.11
300	16.91	5.43	16.91	5.43	17.17	5.69	13.06	5.21
200	18.05	6.49	18.05	6.49	18.37	6.81	13.51	5.38
100	19.53	8.73	19.53	8.73	19.87	9.07	14.79	5.49
32	21.24	8.98	21.25	8.99	21.59	9.33	14.81	3.33
8	22.80	10.60	22.81	10.61	23.14	10.94	15.58	3.99
2	24.91	XXXX	24.91	XXXX	25.16	XXXX	17.26	XXXX
0	28.40	XXXX	28.39	XXXX	28.66	XXXX	18.82	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	399.	400.	401.	404.
INTERVAL	12.00HR	12.00HR	12.00HR	6.00HR

SOIL TEMPERATURE (DFG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	30.67	-12.73	30.67	-12.73	30.73	-12.67	24.63	-29.37
-0.125	28.89	-1.81	28.89	-1.81	28.90	-1.80	26.53	-1.97
-0.250	28.74	-0.36	28.75	-0.35	28.75	-0.35	29.24	0.34
-0.500	27.91	0.41	27.92	0.42	27.92	0.42	27.99	0.29
-1.000	24.13	5.13	24.13	5.13	24.13	5.13	24.07	-0.03
-2.000	23.89	-0.01	23.90	0.00	23.90	0.00	23.89	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
9	7.78	XXXX	7.76	XXXX	7.62	XXXX	4.95	XXXX
8	6.67	-8.68	6.65	-8.70	6.49	-8.86	2.92	1.89
2	4.16	-11.28	4.15	-11.29	4.11	-11.33	1.40	0.37

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(U)	4.76	0.17	4.76	0.16	4.77	0.17	19.05	0.25
R(N)	1.60	XXXX	1.59	XXXX	1.59	XXXX	13.63	XXXX
Q(C,0)	-0.08	XXXX	-0.08	XXXX	-0.07	XXXX	3.78	XXXX
Q(E,0)	2.81	XXXX	2.81	XXXX	2.78	XXXX	8.59	XXXX
Q(S,0)	-1.12	XXXX	-1.13	XXXX	-1.11	XXXX	1.26	XXXX

SURFACE SHEAR STRESS (DYNFS/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.76	XXXX	5.74	XXXX	5.64	XXXX	19.30	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	39.80	XXXX	39.80	XXXX	39.70	XXXX	15.30	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	16969	16924	16914	16804
TAPE NU.	405.	406.	407.	408.
INTERVAL	5.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.00	0.00	-0.00	-0.00	-0.01	-0.01	-1.84	-1.84
1000	-1.73	1.17	-3.83	-0.93	-1.77	1.13	-2.53	0.37
900	-3.11	-0.72	-3.88	-1.48	-3.18	-0.78	-2.57	-0.17
800	-3.39	-1.49	-3.84	-1.94	-3.46	-1.56	-2.55	-0.65
700	-3.47	-2.06	-3.79	-2.38	-3.55	-2.14	-2.52	-1.11
600	-3.49	-2.35	-3.75	-2.60	-3.57	-2.42	-2.47	-1.32
500	-3.47	-3.28	-3.69	-3.50	-3.55	-3.36	-2.42	-2.23
400	-3.42	-4.60	-3.60	-4.78	-3.49	-4.68	-2.35	-3.53
300	-3.35	-4.88	-3.51	-5.04	-3.41	-4.94	-2.28	-3.81
200	-3.22	-4.58	-3.36	-4.72	-3.29	-4.65	-2.17	-3.53
100	-3.02	-3.91	-3.14	-4.03	-3.07	-3.96	-2.02	-2.91
32	-2.64	-3.53	-2.74	-3.63	-2.69	-3.58	-1.75	-2.64
8	-2.16	-3.05	-2.24	-3.13	-2.20	-3.00	-1.43	-2.32

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.83	0.00	4.83	0.00	4.83	0.00	1.55	-3.28
1000	4.16	3.10	3.70	2.64	4.14	3.08	0.59	-0.47
900	3.80	2.88	3.63	2.70	3.75	2.83	0.58	-0.34
800	3.65	2.85	3.53	2.73	3.60	2.80	0.55	-0.25
700	3.54	2.91	3.44	2.81	3.49	2.86	0.51	-0.12
600	3.44	2.41	3.35	2.32	3.39	2.36	0.49	-0.54
500	3.34	1.81	3.25	1.72	3.28	1.76	0.45	-1.07
400	3.23	2.24	3.15	2.10	3.18	2.19	0.42	-0.57
300	3.11	3.32	3.03	3.24	3.06	3.27	0.39	0.60
200	2.95	3.68	2.88	3.61	2.89	3.62	0.35	1.08
100	2.71	3.22	2.64	3.15	2.65	3.17	0.31	0.82
32	2.34	2.85	2.28	2.79	2.29	2.80	0.25	0.76
8	1.90	2.41	1.85	2.36	1.86	2.37	0.19	0.70

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	405.	406.	407.	408.
INTERVAL	6.00HHR	6.00CHR	6.00HHR	6.00HHR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.15	2.15	23.16	2.16	23.16	2.16	23.15	2.15
900	23.45	1.45	23.45	1.45	23.05	1.05	23.46	1.46
800	23.64	0.74	23.64	0.74	23.64	0.74	23.64	0.74
700	23.78	-0.02	23.77	-0.03	23.78	-0.02	23.78	-0.02
600	23.93	-1.87	23.92	-0.88	23.92	-0.88	23.92	-0.88
500	24.07	-1.53	24.05	-1.55	24.06	-1.54	24.06	-1.54
400	24.21	-2.29	24.20	-2.30	24.20	-2.30	24.21	-2.29
300	24.39	-3.01	24.37	-3.03	24.37	-3.03	24.38	-3.02
200	24.62	-3.58	24.59	-3.61	24.59	-3.61	24.61	-3.59
100	24.96	-4.84	24.94	-4.86	24.94	-4.86	24.95	-4.85
32	25.50	-5.80	25.47	-5.83	25.47	-5.83	25.49	-5.81
8	26.17	-5.63	26.14	-5.66	26.14	-5.66	26.16	-5.64
2	27.67	-4.63	27.62	-4.68	28.14	-4.16	27.60	-4.70
0	29.05	XXXX	28.99	XXXX	29.99	XXXX	29.01	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.18	4.07	9.98	3.87	9.98	3.87	9.96	3.85
900	10.72	4.39	10.49	4.16	10.41	4.07	10.46	4.13
800	11.26	4.69	10.99	4.42	10.99	4.42	10.97	4.40
700	11.62	4.81	11.35	4.54	11.35	4.54	11.34	4.53
600	11.97	4.91	11.69	4.63	11.68	4.62	11.68	4.62
500	12.31	5.00	12.02	4.71	12.02	4.71	12.02	4.71
400	12.67	5.09	12.37	4.79	12.37	4.79	12.36	4.78
300	13.04	5.19	12.74	4.89	12.74	4.89	12.73	4.88
200	13.51	5.38	13.20	5.07	13.20	5.07	13.19	5.06
100	14.08	5.48	13.74	5.14	13.74	5.14	13.74	5.14
32	14.79	3.31	14.51	3.03	14.51	3.03	14.52	3.04
8	15.57	3.48	15.29	3.70	15.29	3.70	15.31	3.72
2	17.26	XXXX	16.99	XXXX	16.99	XXXX	16.98	XXXX
0	18.82	XXXX	18.56	XXXX	18.57	XXXX	18.61	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	405.	406.	407.	408.
INTERVAL	6.00HR	6.70HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-C.000	24.64	-29.36	24.62	-29.38	24.62	-29.38	24.64	-29.36
-0.125	26.54	-1.96	26.53	-1.97	26.53	-1.97	26.53	-1.97
-C.250	29.24	0.34	29.24	0.34	29.24	0.34	29.24	0.34
-C.500	27.98	0.28	27.98	0.28	27.98	0.28	27.98	0.28
-1.000	24.06	-0.04	24.07	-0.03	24.07	-0.03	24.06	-0.04
-2.000	23.88	-0.02	23.99	0.09	23.89	-0.01	23.89	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.93	XXXX	4.95	XXXX	4.94	XXXX	4.25	XXXX
8	2.88	1.85	2.91	1.88	2.89	1.86	1.44	0.42
2	1.38	0.36	1.40	0.37	1.39	0.36	0.71	-0.31

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.05	0.25	19.05	0.25	19.06	0.26	19.05	0.25
R(N)	13.64	XXXX	13.64	XXXX	13.64	XXXX	13.64	XXXX
Q(C,0)	3.78	XXXX	3.73	XXXX	3.74	XXXX	3.73	XXXX
Q(E,0)	8.60	XXXX	8.65	XXXX	8.65	XXXX	8.66	XXXX
Q(S,0)	1.26	XXXX	1.25	XXXX	1.25	XXXX	1.26	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	19.22	XXXX	19.22	XXXX	19.18	XXXX	16.42	XXXX

INTEGRATED EVAP/TRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	15.30	XXXX	15.30	XXXX	15.30	XXXX	15.30	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	16804	16839	16829	17514
TAPE NO.	409.	410.	411.	412.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84
1000	-2.14	0.76	-2.14	0.76	-2.53	0.36	-2.56	0.34
900	-2.44	-0.04	-2.43	-0.03	-2.57	-0.17	-2.57	-0.18
800	-2.47	-0.57	-2.46	-0.56	-2.54	-0.64	-2.54	-0.64
700	-2.46	-1.05	-2.45	-1.05	-2.51	-1.10	-2.50	-1.09
600	-2.43	-1.28	-2.42	-1.27	-2.46	-1.31	-2.45	-1.31
500	-2.39	-2.20	-2.38	-2.19	-2.41	-2.22	-2.41	-2.22
400	-2.32	-3.51	-2.32	-3.50	-2.34	-3.52	-2.34	-3.52
300	-2.26	-3.79	-2.25	-3.78	-2.27	-3.80	-2.26	-3.79
200	-2.16	-3.52	-2.14	-3.50	-2.17	-3.53	-2.16	-3.52
100	-2.00	-2.89	-1.99	-2.88	-2.01	-2.90	-2.00	-2.89
32	-1.73	-2.62	-1.73	-2.62	-1.74	-2.63	-1.73	-2.62
8	-1.42	-2.31	-1.41	-2.30	-1.42	-2.31	-1.42	-2.31

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-3.28	1.55	-3.28	1.55	-3.28	1.55	-3.28
1000	1.21	0.15	1.24	0.18	0.66	-0.40	0.64	-0.42
900	0.84	-0.08	0.90	-0.02	0.65	-0.27	0.62	-0.30
800	0.71	-0.09	0.77	-0.03	0.61	-0.19	0.57	-0.23
700	0.63	-0.00	0.69	0.06	0.57	-0.06	0.54	-0.09
600	0.57	-0.45	0.63	-0.39	0.54	-0.49	0.51	-0.52
500	0.52	-1.01	0.58	-0.95	0.51	-1.02	0.47	-1.06
400	0.49	-0.50	0.54	-0.45	0.48	-0.51	0.44	-0.55
300	0.44	0.65	0.50	0.71	0.44	0.65	0.41	0.62
200	0.39	1.13	0.46	1.19	0.40	1.13	0.38	1.10
100	0.34	0.85	0.39	0.90	0.35	0.86	0.32	0.83
32	0.28	0.79	0.32	0.83	0.29	0.80	0.26	0.77
8	0.21	0.72	0.25	0.76	0.23	0.74	0.21	0.72

CASE DPG 5 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	409. 6.00HR	410. 6.00HR	411. 6.00HR	412. 6.00HR
----------------------	----------------	----------------	----------------	----------------

AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	CPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.15	2.15	23.15	2.15	23.15	2.15	23.24	2.24
900	23.45	1.45	23.46	1.46	23.46	1.46	23.55	1.55
800	23.65	0.75	23.65	0.75	23.64	0.74	23.75	0.85
700	23.78	-0.02	23.79	-0.01	23.79	-0.01	23.91	0.11
600	23.93	-0.87	23.94	-0.86	23.94	-0.86	24.07	-0.73
500	24.07	-1.53	24.07	-1.53	24.08	-1.52	24.22	-1.30
400	24.22	-2.28	24.23	-2.27	24.25	-2.25	24.40	-2.10
300	24.38	-3.02	24.40	-3.00	24.41	-2.99	24.58	-2.82
200	24.61	-3.59	24.62	-3.58	24.62	-3.58	24.82	-3.38
100	24.95	-4.85	24.97	-4.83	24.97	-4.83	25.11	-4.69
32	25.49	-5.81	25.51	-5.79	25.51	-5.79	25.78	-5.52
8	26.16	-5.64	26.19	-5.61	26.18	-5.62	26.50	-5.30
2	27.61	-4.69	27.64	-4.66	27.64	-4.66	28.06	-4.24
0	29.02	XXXX	29.06	XXXX	29.06	XXXX	29.59	XXXX

VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.96	3.85	10.17	4.06	10.16	4.05	10.39	4.28
900	10.46	4.13	10.67	4.34	10.66	4.33	10.92	4.59
800	10.98	4.41	11.19	4.62	11.17	4.60	11.45	4.88
700	11.34	4.53	11.54	4.73	11.53	4.72	11.81	5.00
600	11.68	4.62	11.89	4.83	11.87	4.81	12.17	5.11
500	12.02	4.71	12.23	4.92	12.21	4.90	12.51	5.20
400	12.37	4.79	12.57	4.99	12.56	4.98	12.86	5.28
300	12.74	4.89	12.94	5.09	12.93	5.08	13.24	5.30
200	13.19	5.06	13.40	5.27	13.38	5.25	13.71	5.58
100	13.70	5.10	13.99	5.39	13.99	5.39	14.29	5.69
32	14.52	3.04	14.71	3.23	14.70	3.22	15.02	3.54
8	15.31	3.72	15.49	3.90	15.48	3.89	15.81	4.22
2	16.98	XXXX	17.16	XXXX	17.15	XXXX	17.46	XXXX
0	18.61	XXXX	18.78	XXXX	18.77	XXXX	19.08	XX :X

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	409.	410.	411.	412.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	24.64	-29.36	24.65	-29.35	24.56	-29.34	28.06	-25.94
-0.125	26.53	-1.97	26.53	-1.97	26.53	-1.97	28.36	-0.14
-0.250	29.24	0.34	29.24	0.34	29.24	0.34	29.62	0.72
-0.500	27.98	0.28	27.99	0.29	27.98	0.28	28.01	0.31
-1.000	24.07	-0.03	24.07	-0.03	24.06	-0.04	24.13	0.03
-2.000	23.90	0.00	23.90	0.00	23.88	-0.02	30.08	1.58

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.25	XXXX	4.25	XXXX	4.25	XXXX	4.25	XXXX
8	1.44	0.41	1.44	0.41	1.44	0.42	1.44	0.41
2	0.71	-0.32	0.71	-0.32	0.71	-0.31	0.71	-0.32

SURFACE ENERGY TERMS (LY/SEC)X10<sup>20</sup>

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.05	0.25	19.05	0.25	19.05	0.25	19.04	0.24
R(N)	13.64	XXXX	13.64	XXXX	13.64	XXXX	13.60	XXXX
Q(C,C)	3.73	XXXX	3.75	XXXX	3.74	XXX	4.18	XXXX
Q(E,C)	8.66	XXXX	8.62	XXXX	8.63	XXXX	8.96	XXXX
Q(S,C)	1.26	XXXX	1.26	XXXX	1.26	XXXX	0.44	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10<sup>2</sup>

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	16.38	XXXX	16.44	XXXX	16.46	XXXX	17.10	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X10<sup>20</sup>

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	15.30	XXXX	15.26	XXXX	15.27	XXXX	17.80	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	17524	17484	17474	17489
TAPE NO.	413.	414.	416.	417.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-1.84	-1.84	-1.84	-0.01	-0.01	-0.02	-0.02
1000	-2.15	0.74	-2.15	0.74	-3.87	-0.97	-1.81	1.09
900	-2.42	-0.02	-2.43	-0.03	-3.89	-1.49	-3.19	-0.80
800	-2.44	-1.54	-2.46	-0.56	-3.85	-1.95	-3.46	-1.56
700	-2.42	-1.01	-2.44	-1.03	-3.81	-2.47	-3.55	-2.14
600	-2.40	-1.25	-2.42	-1.27	-3.75	-2.60	-3.56	-2.41
500	-2.35	-2.16	-2.38	-2.18	-3.69	-3.50	-3.54	-3.35
400	-2.30	-3.48	-2.31	-3.49	-3.67	-4.78	-3.48	-4.66
300	-2.23	-3.76	-2.24	-3.77	-3.50	-5.03	-3.40	-4.93
200	-2.13	-3.49	-2.14	-3.50	-3.36	-4.72	-3.27	-4.63
100	-1.97	-2.86	-1.98	-2.87	-3.13	-4.02	-3.06	-3.95
32	-1.71	-2.60	-1.72	-2.61	-2.73	-3.62	-2.68	-3.57
8	-1.40	-2.29	-1.41	-2.30	-2.23	-3.12	-2.19	-3.08

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.28	1.55	-3.28	4.83	0.00	4.82	-0.01
1000	1.21	0.15	1.17	0.11	3.63	2.62	4.10	3.04
900	0.85	-0.07	0.80	-0.12	3.58	2.66	3.70	2.73
800	0.73	-0.07	0.67	-0.13	3.48	2.68	3.54	2.74
700	0.65	0.02	0.59	-0.04	3.33	2.75	3.42	2.79
600	0.60	-0.43	0.54	-0.49	3.30	2.27	3.32	2.29
500	0.50	-1.03	0.50	-1.03	3.21	1.68	3.22	1.69
400	0.51	-0.48	0.46	-0.53	3.10	2.11	3.11	2.12
300	0.47	0.08	0.41	0.62	2.98	3.19	2.99	3.20
200	0.43	1.15	0.38	1.10	2.63	3.56	2.84	3.57
100	0.37	0.88	0.32	0.83	2.59	3.10	2.60	3.11
32	0.31	0.61	0.26	0.77	2.24	2.75	2.24	2.75
8	0.25	0.75	0.21	0.72	1.82	2.33	1.82	2.33

## CASE UPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NU. INTERVAL	413. 6.00HR	414. 6.00HR	416. 6.00HR	417. 6.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.24	2.24	23.24	2.24	23.25	2.25	23.25	2.25
900	23.55	1.55	23.54	1.54	23.54	1.54	23.54	1.54
800	23.75	0.85	23.75	0.85	23.74	0.84	23.74	0.84
700	23.91	0.11	23.91	0.11	23.90	0.10	23.90	0.10
600	24.08	-0.72	24.06	-0.74	24.05	-0.75	24.06	-0.74
500	24.23	-1.37	24.21	-1.39	24.21	-1.39	24.21	-1.39
400	24.39	-2.11	24.38	-2.12	24.37	-2.13	24.36	-2.14
300	24.59	-2.81	24.57	-2.83	24.56	-2.84	24.56	-2.84
200	24.83	-3.37	24.81	-3.39	24.81	-3.40	24.80	-3.40
100	25.21	-4.59	25.18	-4.62	25.16	-4.62	25.17	-4.63
32	25.79	-5.51	25.77	-5.53	25.76	-5.54	25.75	-5.55
8	26.51	-5.29	26.49	-5.31	26.48	-5.32	26.47	-5.33
2	28.07	-4.23	28.04	-4.26	28.07	-4.23	28.07	-4.24
7	29.59	XXXX	29.55	XXXX	29.55	XXXX	29.55	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.40	4.29	10.19	4.08	10.21	4.10	10.21	4.10
900	10.93	4.60	10.73	4.40	10.74	4.41	10.74	4.41
800	11.46	4.89	11.25	4.69	11.27	4.70	11.26	4.69
700	11.83	5.02	11.63	4.82	11.63	4.82	11.63	4.82
600	12.18	5.12	11.97	4.91	11.97	4.91	11.97	4.91
500	12.52	5.21	12.32	5.01	12.32	5.01	12.32	5.01
400	12.87	5.29	12.67	5.09	12.67	5.09	12.67	5.09
300	13.25	5.40	13.04	5.19	13.04	5.19	13.04	5.19
200	13.71	5.58	13.51	5.38	13.51	5.38	13.51	5.38
100	14.31	5.71	14.11	5.51	14.11	5.51	14.11	5.51
32	15.03	3.55	14.83	3.35	14.83	3.35	14.83	3.35
8	15.82	4.23	15.63	4.04	15.62	4.03	15.63	4.04
2	17.47	XXXX	17.29	XXXX	17.33	XXXX	17.33	XXXX
7	19.09	XXXX	18.91	XXXX	18.92	XXXX	18.92	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	413.	414.	416.	417.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	28.05	-25.95	28.04	-25.96	28.02	-25.98	28.03	-25.97
-0.125	28.36	-0.14	28.37	-0.13	28.36	-0.14	28.36	-0.14
-0.250	29.62	0.72	29.61	0.71	29.61	0.71	29.61	0.71
-0.500	27.99	0.29	27.99	0.29	28.00	0.30	28.00	0.30
-1.000	24.14	0.04	24.13	0.03	24.13	0.03	24.13	0.03
-2.000	30.08	1.58	30.09	1.59	30.08	1.59	30.08	1.58

WIND SPEED (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.24	XXXX	4.24	XXXX	4.93	XXXX	4.92	XXXX
8	1.43	0.40	1.43	0.40	2.88	1.06	2.85	1.08
2	0.77	-0.32	0.70	-0.32	1.39	0.36	1.38	0.35

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.05	0.25	19.05	0.25	19.05	0.25	19.05	0.25
R(N)	13.60	XXXX	13.60	XXXX	13.60	XXXX	13.60	XXXX
Q(C,0)	4.19	XXXX	4.16	XXXX	4.16	XXXX	4.17	XXXX
Q(E,0)	8.96	XXXX	9.00	XXXX	8.99	XXXX	9.00	XXXX
Q(S,0)	0.44	XXXX	0.44	XX	0.44	XXXX	0.44	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	17.08	XXXX	17.26	XXXX	19.82	XXXX	19.76	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	17.80	XXXX	17.90	XXXX	17.90	XXXX	17.90	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(M SQ/SEC)	17529	17539	3204	3204
TAPE NO.	418.	419.	421.	422.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.04	-0.04	-0.02	-0.02	-0.00	-0.00	-0.01	-0.01
1000	-1.79	1.11	-3.82	-0.92	-1.24	1.86	-1.08	1.82
900	-3.13	-0.73	-3.83	-1.43	-3.40	-1.00	-3.48	-1.09
800	-3.40	-1.50	-3.79	-1.89	-3.77	-1.87	-3.87	-1.97
700	-3.48	-2.07	-3.75	-2.34	-3.89	-2.48	-3.98	-2.57
600	-3.49	-2.35	-3.69	-2.55	-3.91	-2.77	-4.02	-2.87
500	-3.47	-3.28	-3.63	-3.44	-3.92	-3.73	-4.02	-3.83
400	-3.42	-4.60	-3.55	-4.73	-3.69	-5.07	-3.48	-5.16
300	-3.34	-4.87	-3.45	-4.98	-3.85	-5.38	-3.95	-5.48
200	-3.22	-4.58	-3.31	-4.67	-3.77	-5.13	-3.85	-5.21
100	-3.01	-3.90	-3.08	-3.97	-3.63	-4.51	-3.69	-4.58
32	-2.64	-3.53	-2.70	-3.59	-3.28	-4.17	-3.33	-4.22
8	-2.15	-3.05	-2.20	-3.09	-2.73	-3.62	-2.77	-3.66

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.83	0.00	4.83	0.00	4.83	0.00	4.83	0.00
1000	4.12	3.26	3.74	2.68	4.27	3.21	4.26	3.20
900	3.72	2.80	3.64	2.72	4.05	3.13	4.03	3.11
800	3.57	2.77	3.54	2.74	4.01	3.21	3.97	3.17
700	3.46	2.83	3.44	2.81	3.95	3.33	3.91	3.28
600	3.36	2.33	3.35	2.32	3.90	2.88	3.84	2.81
500	3.25	1.72	3.25	1.72	3.82	2.30	3.76	2.23
400	3.15	2.16	3.15	2.16	3.74	2.75	3.68	2.69
300	3.02	3.23	3.03	3.24	3.64	3.85	3.57	3.78
200	2.81	3.67	2.88	3.60	3.49	4.22	3.43	4.16
100	2.63	3.14	2.63	3.14	3.24	3.75	3.19	3.70
32	2.27	2.78	2.27	2.78	2.83	3.34	2.79	3.30
8	1.84	2.35	1.84	2.35	2.31	2.82	2.28	2.79

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	418.	419.	421.	422.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	23.24	2.24	23.23	2.23	22.57	1.57	22.58	1.58
900	23.55	1.55	23.54	1.54	23.07	1.07	23.08	1.08
800	23.75	0.85	23.74	0.84	23.27	0.37	23.27	0.37
700	23.91	0.11	23.91	0.11	23.39	-0.42	23.39	-0.41
600	24.07	-0.73	24.06	-0.74	23.51	-1.29	23.50	-1.30
500	24.22	-1.38	24.22	-1.38	23.62	-1.98	23.61	-1.99
400	24.39	-2.11	24.39	-2.11	23.79	-2.71	23.78	-2.72
300	24.57	-2.83	24.57	-2.83	24.04	-3.36	24.03	-3.37
200	24.82	-3.38	24.82	-3.38	24.42	-3.78	24.41	-3.79
100	25.20	-4.60	25.20	-4.60	25.14	-4.66	25.13	-4.67
32	25.78	-5.52	25.79	-5.51	26.51	-4.79	26.49	-4.81
8	26.51	-5.29	26.51	-5.29	28.39	-3.41	28.37	-3.43
2	28.11	-4.19	28.12	-4.18	32.65	0.35	32.62	0.32
0	29.61	XXXX	29.61	XXXX	36.84	XXXX	36.81	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	10.41	4.30	10.50	4.39	9.47	3.36	9.34	3.23
900	10.99	4.66	11.05	4.72	9.90	3.57	9.49	3.36
800	11.53	4.96	11.56	4.99	10.45	3.83	10.19	3.62
700	11.91	5.10	11.94	5.13	10.84	4.08	10.59	3.78
600	12.24	5.22	12.29	5.23	11.33	4.21	11.01	3.95
500	12.61	5.30	12.64	5.33	11.85	4.54	11.52	4.21
400	12.97	5.39	12.99	5.41	12.47	4.89	12.12	4.54
300	13.35	5.50	13.36	5.51	13.25	5.40	12.91	5.06
200	13.80	5.67	13.83	5.70	14.33	6.20	14.00	5.87
100	14.40	5.80	14.42	5.82	16.16	7.55	15.85	7.25
32	15.12	3.64	15.13	3.65	19.14	7.66	18.87	7.39
8	15.91	4.32	15.92	4.33	23.76	11.47	22.82	11.23
2	17.59	XXXX	17.61	XXXX	31.91	XXXX	31.62	XXXX
0	19.16	XXXX	19.18	XXXX	40.62	XXXX	40.43	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	418.	419.	421.	422.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	28.05	-25.95	28.05	-25.95	30.91	-23.09	30.99	-23.11
-0.125	28.36	-0.14	28.36	-0.14	28.71	0.21	28.70	0.20
-0.250	29.62	0.72	29.61	0.71	29.63	0.73	29.63	0.73
-0.500	28.01	0.31	28.00	0.30	28.01	0.31	28.01	0.31
-1.000	24.13	0.03	24.13	0.03	24.13	0.03	24.13	0.03
-2.000	30.08	1.58	30.08	1.58	30.08	1.58	30.09	1.59

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
0	4.91	XXXX	4.93	XXXX	5.37	XXXX	5.37	XXXX
1	2.84	1.81	2.86	1.85	3.58	2.55	3.59	2.57
2	1.37	0.34	1.39	0.36	1.78	1.75	1.78	0.76

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.05	0.25	19.05	0.25	19.04	0.24	19.05	0.25
R(N)	13.60	XXXX	13.60	XXXX	12.63	XXXX	12.64	XXXX
Q(C,D)	4.20	XXXX	4.20	XXXX	2.10	XXXX	2.05	XXXX
Q(E,D)	8.94	XXXX	8.94	XXXX	8.82	XXXX	8.84	XXXX
Q(S,D)	0.45	XXXX	0.45	XXXX	1.70	XXXX	1.69	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	19.78	XXXX	19.90	XXXX	3.94	XXXX	3.96	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
F	17.90	XXXX	17.90	XXXX	16.20	XXXX	16.20	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3204	3204
TAPE NO.	423.	424.	425.	426.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	0.00	0.00	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84
1000	-3.71	-0.81	-2.41	0.49	-1.98	0.92	-1.98	0.92
900	-3.93	-1.53	-2.63	-0.23	-2.54	-0.14	-2.51	-0.11
800	-4.00	-2.10	-2.70	-0.81	-2.66	-0.77	-2.63	-0.73
700	-4.02	-2.61	-2.73	-1.32	-2.70	-1.30	-2.67	-1.26
600	-4.04	-2.89	-2.73	-1.58	-2.72	-1.57	-2.69	-1.55
500	-4.03	-3.84	-2.71	-2.52	-2.71	-2.52	-2.69	-2.50
400	-3.99	-5.18	-2.68	-3.86	-2.67	-3.85	-2.65	-3.84
300	-3.94	-5.47	-2.63	-4.16	-2.63	-4.15	-2.62	-4.15
200	-3.85	-5.21	-2.54	-3.90	-2.54	-3.90	-2.53	-3.89
100	-3.68	-4.57	-2.41	-3.30	-2.40	-3.29	-2.40	-3.29
32	-3.32	-4.21	-2.14	-3.03	-2.14	-3.03	-2.13	-3.02
8	-2.77	-3.66	-1.76	-2.65	-1.77	-2.66	-1.76	-2.65

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.83	2.00	1.55	-3.28	1.55	-3.28	1.55	-3.28
1000	3.66	2.60	0.51	-0.55	1.40	0.34	1.42	0.36
900	3.91	2.99	0.77	-0.15	1.00	0.08	1.04	0.12
800	3.91	3.11	0.77	-0.03	0.87	0.07	0.92	0.12
700	3.87	3.24	0.73	0.10	0.78	0.15	0.83	0.20
600	3.82	2.79	0.69	-0.34	0.72	-0.31	0.77	-0.26
500	3.74	2.22	0.63	-0.89	0.65	-0.88	0.71	-0.82
400	3.67	2.68	0.58	-0.41	0.59	-0.40	0.65	-0.34
300	3.56	3.77	0.52	0.73	0.52	0.73	0.59	0.80
200	3.42	4.15	0.45	1.18	0.45	1.18	0.51	1.24
100	3.19	3.70	0.37	0.88	0.37	0.88	0.42	0.93
32	2.78	3.29	0.26	0.77	0.26	0.77	0.31	0.81
8	2.27	2.78	0.19	0.70	0.19	0.70	0.22	0.73

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	423.	424.	425.	426.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.58	1.58	22.58	1.58	22.58	1.58	22.57	1.57
900	23.08	1.08	23.08	1.08	23.08	1.08	23.06	1.06
800	23.27	0.37	23.27	0.37	23.28	0.38	23.28	0.38
700	23.38	-0.42	23.39	-0.41	23.38	-0.42	23.38	-0.42
600	23.50	-1.30	23.50	-1.30	23.50	-1.30	23.51	-1.29
500	23.62	-1.98	23.61	-1.99	23.62	-1.98	23.63	-1.97
400	23.79	-2.71	23.77	-2.73	23.77	-2.73	23.79	-2.71
300	24.02	-3.38	24.02	-3.38	24.02	-3.38	24.04	-3.36
200	24.41	-3.79	24.41	-3.79	24.41	-3.79	24.42	-3.78
100	25.13	-4.67	25.12	-4.68	25.13	-4.67	25.14	-4.66
32	26.49	-4.81	26.50	-4.80	26.48	-4.82	26.51	-4.79
8	28.38	-3.42	28.37	-3.43	28.37	-3.43	28.39	-3.41
2	32.62	0.32	32.60	0.30	32.59	0.29	32.61	0.31
0	36.80	XXXX	36.80	XXXX	36.79	XXXX	36.81	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.34	3.23	9.34	3.23	9.35	3.24	9.56	3.45
900	9.72	3.37	9.71	3.38	9.70	3.37	9.92	3.59
800	10.19	3.62	10.19	3.62	10.19	3.62	10.42	3.85
700	10.59	3.78	10.59	3.78	10.59	3.78	10.81	4.00
600	11.02	3.96	11.01	3.95	11.02	3.96	11.24	4.18
500	11.52	4.21	11.52	4.21	11.52	4.21	11.75	4.44
400	12.13	4.55	12.13	4.55	12.13	4.55	12.36	4.78
300	12.91	5.06	12.91	5.06	12.90	5.05	13.12	5.27
200	14.00	5.87	14.00	5.87	13.99	5.86	14.22	6.09
100	15.86	7.26	15.86	7.26	15.86	7.26	16.05	7.45
32	18.88	7.40	18.87	7.39	18.86	7.38	19.04	7.56
8	22.82	11.23	22.81	11.22	22.81	11.22	22.97	11.38
2	31.68	XXXX	31.63	XXXX	31.63	XXXX	31.77	XXXX
0	40.41	XXXX	40.41	XXXX	40.41	XXXX	40.52	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	423.	424.	425.	426.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	30.89	-23.11	30.89	-23.12	30.89	-23.12	30.88	-23.12
-0.125	28.69	0.19	28.69	0.19	28.69	0.19	28.70	0.20
-0.250	29.64	0.74	29.63	0.73	29.63	0.73	29.63	0.73
-0.500	28.01	0.31	28.01	0.31	28.01	0.31	28.02	0.30
-1.000	24.13	0.03	24.13	0.03	24.12	0.02	24.13	0.03
-2.000	30.08	1.58	30.08	1.58	30.09	1.59	30.08	1.58

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.37	XXXX	4.38	XXXX	4.38	XXXX	4.38	XXXX
8	3.58	2.56	1.78	0.75	1.78	0.75	1.77	0.75
2	1.78	0.75	0.89	-0.14	0.89	-0.14	0.88	-0.14

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(0)	19.04	0.24	19.04	0.24	19.04	0.24	19.04	0.24
R(N)	12.64	XXXX	12.63	XXXX	12.63	XXXX	12.63	XXXX
Q(C,0)	2.09	XXXX	2.09	XXXX	2.09	XXXX	2.09	XXXX
Q(E,0)	8.84	XXXX	8.83	XXXX	8.83	XXXX	8.82	XXXX
Q(S,0)	1.69	XXXX	1.69	XXXX	1.70	XXXX	1.70	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup>)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.96	XXXX	3.24	XXXX	3.22	XXXX	3.22	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM<sup>2</sup>)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	16.30	XXXX	16.70	XXXX	16.21	XXXX	16.22	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3204	3204
TAPE NO.	427.	428.	429.	430.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84
1000	-2.42	0.48	-2.42	0.48	-1.97	0.93	-1.97	0.93
900	-2.63	-0.23	-2.63	-0.23	-2.51	-0.11	-2.54	-0.14
800	-2.69	-0.80	-2.68	-0.78	-2.63	-0.73	-2.67	-0.77
700	-2.72	-1.31	-2.71	-1.30	-2.08	-1.27	-2.73	-1.32
600	-2.72	-1.57	-2.71	-1.56	-2.69	-1.54	-2.73	-1.58
500	-2.70	-2.51	-2.70	-2.51	-2.69	-2.50	-2.72	-2.53
400	-2.65	-3.85	-2.66	-3.85	-2.65	-3.84	-2.66	-3.86
300	-2.62	-4.15	-2.62	-4.15	-2.61	-4.14	-2.63	-4.15
200	-2.54	-3.90	-2.54	-3.90	-2.53	-3.89	-2.54	-3.90
100	-2.40	-3.29	-2.40	-3.29	-2.40	-3.29	-2.40	-3.29
32	-2.13	-3.02	-2.13	-3.01	-2.13	-3.02	-2.13	-3.02
8	-1.76	-2.65	-1.76	-2.65	-1.76	-2.65	-1.76	-2.65

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-3.28	1.55	-3.28	1.55	-3.28	1.55	-3.28
1000	0.58	-0.48	0.58	-0.48	1.42	0.36	1.40	0.34
900	0.84	-0.08	0.84	-0.08	1.06	0.14	1.02	0.10
800	0.84	0.34	0.84	0.34	0.93	0.13	0.89	0.19
700	0.80	0.17	0.80	0.17	0.86	0.23	0.80	0.17
600	0.76	-0.26	0.76	-0.27	0.79	-0.24	0.73	-0.30
500	0.70	-0.82	0.71	-0.82	0.72	-0.80	0.66	-0.86
400	0.65	-0.34	0.65	-0.34	0.66	-0.33	0.60	-0.39
300	0.59	0.80	0.59	0.80	0.59	0.80	0.54	0.75
200	0.51	1.24	0.52	1.25	0.52	1.25	0.46	1.19
100	0.42	0.93	0.42	0.93	0.43	0.94	0.37	0.89
32	0.31	0.82	0.31	0.81	0.31	0.81	0.26	0.77
8	0.23	0.74	0.22	0.73	0.23	0.74	0.20	0.71

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	427. 6.00HR	428. 6.00HR	429. 6.00HR	430. 6.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.57	1.57	22.57	1.57	22.55	1.55	22.57	1.57
900	23.07	1.07	23.03	1.03	23.03	1.03	23.04	1.04
800	23.27	0.37	23.18	0.28	23.18	0.28	23.19	0.29
700	23.39	-0.41	23.25	-0.55	23.25	-0.55	23.25	-0.55
600	23.51	-1.29	23.33	-1.47	23.32	-1.48	23.31	-1.49
500	23.63	-1.97	23.40	-2.20	23.40	-2.20	23.39	-2.21
400	23.82	-2.68	23.52	-2.98	23.51	-2.99	23.51	-2.99
300	24.04	-3.36	23.71	-3.69	23.71	-3.69	23.69	-3.71
200	24.43	-3.77	24.03	-4.17	24.04	-4.16	24.01	-4.19
100	25.15	-4.65	24.68	-5.12	24.68	-5.12	24.66	-5.14
32	26.51	-4.79	25.94	-5.36	25.95	-5.35	25.93	-5.37
8	28.40	-3.40	27.74	-4.06	27.75	-4.05	27.72	-4.08
2	32.62	0.32	31.79	-0.51	31.79	-0.51	31.76	-0.54
0	36.82	XXXX	35.81	XXXX	35.81	XXXX	35.77	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.53	3.42	9.52	3.41	9.55	3.44	9.32	3.21
900	9.91	3.58	9.85	3.52	9.87	3.54	9.69	3.36
800	10.39	3.82	10.31	3.74	10.33	3.76	10.11	3.54
700	10.81	4.00	10.67	3.86	10.68	3.87	10.45	3.64
600	11.23	4.17	11.06	4.00	11.08	4.02	10.75	3.69
500	11.74	4.43	11.52	4.21	11.52	4.21	11.29	3.98
400	12.34	4.76	12.07	4.49	12.08	4.50	11.85	4.27
300	13.12	5.27	12.77	4.92	12.77	4.92	12.56	4.71
200	14.21	6.08	13.77	5.64	13.77	5.64	13.55	5.42
100	16.04	7.44	15.45	6.85	15.45	6.85	15.28	6.68
32	19.04	7.56	18.25	6.77	18.26	6.78	18.08	6.60
8	22.97	11.38	21.95	10.36	21.95	10.36	21.79	10.20
2	31.77	XXXX	30.22	XXXX	30.23	XXXX	30.07	XXXX
0	40.52	XXXX	38.44	XXXX	38.46	XXXX	38.31	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	427.	428.	429.	430.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	30.90	-23.10	27.17	-26.83	27.17	-26.83	27.10	-26.90
-0.125	28.69	0.19	26.90	-1.60	26.89	-1.61	26.89	-1.61
-0.250	29.63	0.73	29.28	0.38	29.27	0.37	29.27	0.37
-0.500	28.01	0.31	27.98	0.28	27.99	0.29	27.99	0.29
-1.000	24.13	0.03	24.05	-0.05	24.06	-0.04	24.05	-0.05
-2.000	30.08	1.58	23.90	0.00	23.90	0.00	23.89	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.38	XXXX	4.38	XXXX	4.38	XXXX	4.38	XXXX
8	1.77	0.75	1.77	0.75	1.77	0.75	1.78	0.75
2	0.89	-0.14	0.88	-0.14	0.89	-0.14	0.89	-0.14

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.01	0.21	19.04	0.24	19.05	0.25	19.04	0.24
R(N)	12.63	XXXX	12.73	XXXX	12.74	XXXX	12.74	XXXX
Q(C,0)	2.10	XXXX	1.99	XXXX	1.99	XXXX	1.99	XXXX
Q(E,0)	8.82	XXXX	8.25	XXXX	8.26	XXXX	8.27	XXXX
Q(S,0)	1.70	XXXX	2.48	XXXX	2.48	XXXX	2.47	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.22	XXXX	3.22	XXXX	3.22	XXXX	3.22	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
F	16.30	XXXX	14.10	XXXX	14.10	XXXX	14.10	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3204	3204
TAPE NO.	431.	432.	433.	434.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-1.84	-0.01	-0.01	-0.03	-0.03	-0.01	-0.01
1000	-2.40	-0.49	-3.70	-0.81	-1.09	1.81	-1.04	1.86
900	-2.62	-0.22	-3.92	-1.52	-3.49	-1.09	-3.30	-0.99
800	-2.69	-0.79	-3.98	-2.09	-3.86	-1.97	-3.74	-1.85
700	-2.72	-1.31	-4.01	-2.60	-3.99	-2.58	-3.85	-2.44
600	-2.72	-1.57	-4.02	-2.88	-4.02	-2.88	-3.90	-2.75
500	-2.71	-2.52	-4.02	-3.83	-4.02	-3.83	-3.91	-3.72
400	-2.67	-3.85	-3.98	-5.16	-3.99	-5.18	-3.88	-5.06
300	-2.63	-4.16	-3.90	-5.43	-3.95	-5.46	-3.45	-5.38
200	-2.55	-3.91	-3.85	-5.21	-3.86	-5.22	-3.77	-5.13
100	-2.41	-3.30	-3.68	-4.57	-3.70	-4.59	-3.63	-4.52
32	-2.13	-3.02	-3.32	-4.21	-3.33	-4.22	-3.28	-4.17
8	-1.76	-2.65	-2.77	-3.66	-2.77	-3.66	-2.73	-3.62

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-3.28	4.83	0.00	4.83	0.00	4.83	0.00
1000	0.50	-0.56	3.65	2.59	4.26	3.20	4.26	3.20
900	0.76	-0.16	3.91	2.99	4.01	3.09	4.02	3.10
800	0.76	-0.04	3.90	3.10	3.95	0.15	3.97	3.17
700	0.72	0.09	3.86	3.23	3.88	3.25	3.92	3.29
600	0.68	-0.34	3.81	2.78	3.82	2.79	3.87	2.84
500	0.63	-0.90	3.74	2.21	3.74	2.22	3.79	2.26
400	0.58	-0.41	3.65	2.67	3.66	2.67	3.72	2.73
300	0.51	0.12	3.56	3.77	3.55	3.73	3.62	3.83
200	0.44	1.17	3.42	4.15	3.41	4.14	3.49	4.21
100	0.36	0.87	3.18	3.69	3.17	0.68	3.23	3.74
32	0.26	0.77	2.78	3.29	2.77	3.28	2.81	3.32
8	0.19	0.70	2.27	2.78	2.26	2.77	2.30	2.81

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	431.	432.	433.	434.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.67	1.57	22.58	1.58	22.58	1.58	22.56	1.56
900	23.03	1.03	23.03	1.03	23.03	1.03	23.02	1.02
800	23.19	0.29	23.18	0.28	23.18	0.28	23.18	0.28
700	23.25	-0.55	23.25	-0.55	23.25	-0.55	23.25	-0.55
600	23.31	-1.49	23.31	-1.49	23.31	-1.49	23.32	-1.48
500	23.39	-2.21	23.38	-2.22	23.40	-2.20	23.40	-2.20
400	23.50	-3.00	23.51	-2.99	23.50	-3.00	23.51	-2.99
300	23.69	-3.71	23.69	-3.71	23.69	-3.71	23.71	-3.69
200	24.01	-4.19	24.02	-4.18	24.02	-4.18	24.04	-4.16
100	24.67	-5.13	24.67	-5.13	24.66	-5.14	24.68	-5.12
32	25.93	-5.37	25.93	-5.37	25.93	-5.37	25.95	-5.35
8	27.73	-4.07	27.73	-4.07	27.73	-4.07	27.75	-4.05
2	31.76	-0.54	31.78	-0.52	31.78	-0.52	31.82	-0.48
0	35.77	XXXX	35.76	XXXX	35.77	XXXX	35.82	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.33	3.22	9.33	3.22	9.33	3.22	9.45	3.34
900	9.73	3.40	9.65	3.32	9.65	3.32	9.88	3.55
800	10.11	3.54	10.11	3.54	10.11	3.54	10.36	3.79
700	10.46	3.65	10.40	3.59	10.45	3.64	10.75	3.94
600	10.68	3.62	10.84	3.78	10.84	3.78	11.11	4.05
500	11.31	4.00	11.29	3.98	11.29	3.98	11.63	4.32
400	11.85	4.27	11.84	4.26	11.84	4.26	12.19	4.61
300	12.56	4.71	12.55	4.70	12.56	4.71	12.91	5.06
200	13.55	5.42	13.56	5.43	13.55	5.42	13.91	5.78
100	15.29	6.69	15.26	6.55	15.26	6.66	15.58	6.98
32	18.09	8.61	18.09	8.61	18.08	8.60	18.36	8.88
8	21.79	10.20	21.80	10.21	21.79	10.20	22.05	10.46
2	30.08	XXXX	30.12	XXXX	30.12	XXXX	30.35	XXXX
0	38.32	XXXX	38.32	XXXX	38.32	XXXX	38.53	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	431.	432.	433.	434.
INTERVAL	6.00HR	6.00HR	6.00HR	6.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	27.16	-26.84	27.16	-26.84	27.15	-26.84	27.17	-26.83
-0.125	26.88	-1.62	26.90	-1.60	26.89	-1.61	26.99	-1.61
-0.250	29.28	0.38	29.27	0.37	29.28	0.38	29.27	0.37
-0.500	27.99	0.29	27.98	0.28	27.98	0.28	28.09	0.39
-1.000	24.06	-0.04	24.05	-0.05	24.06	-0.04	24.06	-0.04
-2.000	23.90	0.00	23.90	0.00	23.90	0.00	23.90	0.00

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.38	XXXX	5.37	XXXX	5.37	XXXX	5.36	XXXX
8	1.78	0.75	3.58	2.56	3.58	2.56	3.57	2.54
2	0.89	-0.14	1.78	0.75	1.78	0.75	1.77	0.75

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.05	3.25	19.04	0.24	19.05	0.25	19.04	0.24
R(N)	12.74	XXXX	12.74	XXXX	12.74	XXXX	12.73	XXXX
Q(C,0)	1.99	XXXX	1.99	XXXX	1.99	XXXX	2.00	XXXX
Q(E,0)	8.27	XXXX	8.27	XXXX	8.27	XXXX	8.25	XXXX
Q(S,0)	2.47	XXXX	2.47	XXXX	2.47	XXXX	2.48	XXXX

## SURFACE SHEAR STRESS (DYNES/CM SEC)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.20	XXXX	3.94	XXXX	3.92	XXXX	3.94	XXXX

## INTEGRATED EVAPOTRANSPIRATION (MM/CM SEC)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	14.10	XXXX	14.10	XXXX	14.10	XXXX	14.10	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	4089	4079	4074
TAPE NO.	435.	437.	438.	439.
INTERVAL	6.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-0.02	-0.02	-1.20	0.01	-1.20	0.01	-1.20	0.01
1000	-3.65	-3.76	-0.89	0.65	-1.34	0.20	-1.34	0.21
900	-3.85	-1.45	-1.40	0.14	-1.43	0.11	-1.43	0.11
800	-3.91	-2.02	-1.78	-0.24	-1.79	-0.25	-1.78	-0.24
700	-3.94	-2.53	-1.81	-0.27	-1.82	-0.28	-1.80	-0.26
600	-3.95	-2.80	-1.62	-0.09	-1.62	-0.09	-1.62	-0.09
500	-3.93	-3.74	-1.39	0.11	-1.39	0.11	-1.39	0.11
400	-3.90	-5.09	-1.19	-0.23	-1.19	-0.23	-1.18	-0.22
300	-3.86	-5.39	-1.04	-0.19	-1.04	-0.19	-1.04	-0.19
200	-3.78	-5.14	-0.91	-0.12	-0.91	-0.12	-0.90	-0.11
100	-3.63	-4.52	-0.78	-0.12	-0.78	-0.12	-0.78	-0.12
32	-3.28	-4.17	-0.65	-0.09	-0.65	-0.09	-0.64	-0.08
8	-2.73	-3.62	-0.53	-0.00	-0.53	-0.00	-0.53	-0.00

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	4.83	0.00	2.09	-0.00	2.09	0.00	2.09	0.00
1000	3.73	2.67	1.27	1.30	1.71	1.74	1.70	1.73
900	3.98	3.06	1.38	1.33	1.41	1.36	1.40	1.35
800	3.98	3.18	1.19	1.11	1.20	1.12	1.18	1.10
700	3.94	3.31	0.85	0.74	0.85	0.74	0.83	0.72
600	3.98	2.85	0.62	0.41	0.63	0.42	0.61	0.40
500	3.81	2.28	0.52	0.15	0.51	0.14	0.51	0.14
400	3.73	2.74	0.54	0.17	0.54	0.17	0.54	0.17
300	3.63	3.84	0.70	0.12	0.70	0.12	0.70	0.12
200	3.48	4.21	1.01	0.35	1.02	0.36	1.01	0.35
100	3.24	3.75	1.45	0.66	1.44	0.65	1.44	0.65
32	2.82	3.33	1.66	0.80	1.66	0.80	1.66	0.80
8	2.30	2.81	1.46	0.58	1.46	0.58	1.46	0.58

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	435.	437.	438.	439.
INTERVAL	6.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	22.55	1.55	21.77	0.17	21.76	0.16	21.77	0.17
900	23.02	1.02	22.27	0.17	22.27	0.17	22.28	0.18
800	23.17	0.27	22.81	-0.29	22.81	-0.29	22.81	-0.29
700	23.25	-0.55	23.29	-0.61	23.31	-0.59	23.30	-0.60
600	23.31	-1.49	23.70	-0.50	23.70	-0.50	23.69	-0.51
500	23.40	-2.20	24.01	-0.59	24.00	-0.60	24.01	-0.59
400	23.52	-2.98	24.13	-0.67	24.13	-0.67	24.13	-0.67
300	23.71	-3.69	24.04	-0.86	24.04	-0.86	24.04	-0.86
200	24.04	-4.16	23.65	-1.35	23.65	-1.35	23.64	-1.36
100	24.69	-5.11	22.86	-0.84	22.86	-0.84	22.86	-0.84
32	25.95	-5.35	21.76	0.46	21.76	0.46	21.75	0.45
8	27.76	-4.04	20.89	0.49	20.91	0.51	20.89	0.49
2	31.82	-0.48	19.55	0.05	19.57	0.07	19.55	0.05
0	35.82	XXXX	18.19	XXXX	18.21	XXXX	18.20	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.61	3.50	8.95	2.84	8.95	2.84	8.93	2.82
900	10.04	3.71	9.20	2.82	9.29	2.91	9.31	2.93
800	10.43	3.86	9.69	2.98	9.70	2.99	9.67	2.96
700	10.79	3.98	10.04	2.93	10.05	2.94	10.03	2.92
600	11.05	3.99	10.33	2.81	10.19	2.67	10.06	2.54
500	11.65	4.34	10.57	2.49	10.57	2.49	10.55	2.47
400	12.21	4.63	10.72	2.12	10.71	2.11	10.69	2.09
300	12.92	5.07	10.76	1.54	10.77	1.55	10.75	1.53
200	13.90	5.77	10.77	0.89	10.77	0.89	10.75	0.87
100	15.60	7.00	10.75	0.80	10.79	0.84	10.79	0.84
32	18.36	6.88	11.08	-0.57	11.09	-0.56	11.08	-0.57
8	22.06	10.47	11.81	0.33	11.81	0.33	11.80	0.32
2	30.36	XXXX	13.57	XXXX	13.58	XXXX	13.57	XXXX
0	38.54	XXXX	15.36	XXXX	15.37	XXXX	15.37	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	435.	437.	438.	439.
INTERVAL	6.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DFG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	27.17	-26.83	15.44	-4.76	15.44	-4.76	15.44	-4.76
-0.125	26.88	-1.62	27.67	-1.43	27.67	-1.43	27.67	-1.43
-0.250	29.27	0.37	30.09	0.19	30.09	0.19	30.09	0.19
-0.500	27.99	0.29	28.00	0.00	28.01	0.01	27.99	-0.01
-1.000	24.06	-0.04	24.02	0.02	24.02	0.02	24.02	0.02
-2.000	23.90	0.00	23.90	0.00	23.90	0.00	23.90	0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	5.36	XXXX	4.29	XXXX	4.29	XXXX	4.29	XXXX
8	3.57	2.54	1.56	0.53	1.55	0.53	1.56	0.53
2	1.77	0.75	0.19	-0.24	0.78	-0.24	0.79	-0.24

SURFACE ENERGY TERMS (LY/SEC)/1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	19.05	0.25	4.87	0.27	4.88	0.28	4.88	0.28
R(N)	12.74	XXXX	2.21	XXXX	2.21	XXXX	2.21	XXXX
Q(C,0)	2.00	XXXX	-0.85	XXXX	-0.86	XXXX	-0.86	XXXX
Q(E,0)	8.25	XXXX	2.27	XXXX	2.27	XXXX	2.27	XXXX
Q(S,0)	2.48	XXXX	0.79	XXXX	0.79	XXXX	0.79	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.94	XXXX	4.04	XXXX	4.04	XXXX	4.04	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	14.10	XXXX	0.70	XXXX	0.80	XXXX	0.80	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	4084	3909	3914	3924
TAPE NO.	440.	441.	442.	443.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.20	0.01	-1.84	-0.63	-1.84	-0.63	-1.84	-0.63
1000	-0.88	0.66	-0.75	0.79	-1.55	-0.01	-1.55	-0.01
900	-1.39	0.15	-1.26	0.28	-1.31	0.23	-1.32	0.22
800	-1.78	-0.24	-1.66	-0.13	-1.67	-0.13	-1.67	-0.13
700	-1.82	-0.28	-1.69	-0.15	-1.69	-0.15	-1.70	-0.16
600	-1.62	-0.09	-1.50	0.03	-1.49	0.03	-1.50	0.03
500	-1.39	0.11	-1.26	0.24	-1.26	0.24	-1.26	0.24
400	-1.18	-0.22	-1.05	-0.09	-1.05	-0.09	-1.06	-0.10
300	-1.03	-0.18	-0.90	-0.05	-0.90	-0.05	-0.91	-0.06
200	-0.90	-0.11	-0.77	0.02	-0.77	0.02	-0.78	0.01
100	-0.78	-0.12	-0.65	0.01	-0.65	0.01	-0.65	0.01
32	-0.64	-0.08	-0.52	0.04	-0.52	0.04	-0.52	0.04
8	-0.53	-0.00	-0.43	0.10	-0.43	0.10	-0.43	0.10

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.09	0.00	1.55	-0.54	1.55	-0.54	1.55	-0.54
1000	1.26	1.29	1.01	1.04	1.36	1.39	1.38	1.40
900	1.38	1.32	1.13	1.08	1.15	1.10	1.16	1.11
800	1.18	1.10	0.94	0.86	0.95	0.87	0.96	0.98
700	0.84	0.73	0.59	0.48	0.59	0.48	0.60	0.49
600	0.61	0.40	0.36	0.15	0.36	0.15	0.37	0.16
500	0.51	0.14	0.25	-0.12	0.25	-0.13	0.26	-0.11
400	0.53	0.16	0.27	-0.10	0.27	-0.10	0.28	-0.09
300	0.70	0.12	0.44	-0.13	0.44	-0.13	0.45	-0.13
200	1.01	0.35	0.75	0.00	0.76	0.10	0.76	0.10
100	1.44	0.65	1.22	0.43	1.22	0.43	1.22	0.43
32	1.66	0.80	1.47	0.61	1.47	0.61	1.47	0.61
8	1.46	0.58	1.30	0.42	1.30	0.42	1.30	0.42

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	440.	441.	442.	443.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.77	0.17	21.76	0.16	21.76	0.16	21.76	0.16
900	22.27	0.17	22.26	0.16	22.26	0.16	22.25	0.15
800	22.81	-0.29	22.81	-0.29	22.81	-0.29	22.80	-0.30
700	23.30	-0.60	23.29	-0.61	23.29	-0.61	23.30	-0.60
600	23.70	-0.50	23.70	-0.50	23.70	-0.50	23.70	-0.50
500	24.00	-0.60	24.02	-0.58	24.01	-0.59	24.01	-0.59
400	24.13	-0.67	24.15	-0.65	24.15	-0.65	24.16	-0.64
300	24.04	-0.86	24.08	-0.82	24.07	-0.83	24.08	-0.82
200	23.64	-1.36	23.68	-1.32	23.68	-1.32	23.68	-1.32
100	22.86	-0.84	22.87	-0.83	22.87	-0.83	22.87	-0.83
32	21.76	0.46	21.75	0.45	21.74	0.44	21.74	0.44
8	20.90	0.50	20.87	0.47	20.87	0.47	20.87	0.47
2	19.57	0.07	19.53	0.03	19.53	0.03	19.54	0.04
0	18.22	XXXX	18.18	XXXX	18.18	XXXX	18.19	XXXX

## VAPOR PRESSURE (MBI)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.92	2.81	8.93	2.82	8.90	2.79	8.93	2.92
900	9.34	2.96	9.35	2.97	9.38	3.00	9.45	3.07
800	9.67	2.96	9.67	2.96	9.66	2.95	9.70	2.99
700	10.03	2.92	10.02	2.91	10.01	2.90	10.05	2.94
600	9.99	2.47	9.99	2.47	9.90	2.38	9.85	2.33
500	10.55	2.47	10.56	2.48	10.56	2.48	10.58	2.50
400	10.69	2.09	10.70	2.10	10.71	2.11	10.72	2.12
300	10.75	1.53	10.77	1.55	10.78	1.56	10.79	1.57
200	10.74	0.86	10.74	0.86	10.73	0.85	10.75	0.87
100	10.80	0.85	10.72	0.77	10.79	0.84	10.81	0.86
32	11.07	-0.58	11.05	-0.60	11.04	-0.61	11.04	-0.61
8	11.81	0.33	11.78	0.30	11.78	0.30	11.79	0.31
2	13.57	XXXX	13.59	XXXX	13.59	XXXX	13.59	XXXX
0	15.36	XXXX	15.43	XXXX	15.43	XXXX	15.41	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO. INTERVAL	440. 2.00HR	441. 2.00HR	442. 2.00HR	443. 2.00HR
----------------------	----------------	----------------	----------------	----------------

SUIL TEMPERATURE (DFG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	15.45	-4.75	15.44	-4.76	15.43	-4.77	15.43	-4.77
-0.125	27.67	-1.43	27.68	-1.42	27.67	-1.43	27.67	-1.43
-0.250	30.09	0.19	30.09	0.19	30.09	0.19	30.09	0.19
-0.500	27.99	-0.01	28.00	0.00	28.01	0.01	28.00	0.00
-1.000	24.02	0.02	24.01	0.01	24.02	0.02	24.02	0.02
-2.000	23.90	0.00	23.89	-0.01	23.90	0.00	23.90	0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
0°	4.29	XXXX	4.23	XXXX	4.23	XXXX	4.23	XXXX
8	1.55	0.53	1.37	0.35	1.37	0.35	1.37	0.35
2	0.78	-0.24	0.69	-0.33	0.69	-0.34	0.69	-0.34

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.88	0.28	4.88	0.28	4.88	0.28
R(M)	2.21	XXXX	2.21	XXXX	2.21	XXXX	2.21	XXXX
Q(C,0)	-0.35	XXXX	-0.81	XXXX	-0.81	XXXX	-0.82	XXXX
Q(E,0)	2.27	XXXX	2.24	XXXX	2.23	XXXX	2.24	XXXX
Q(S,0)	0.79	XXXX	0.79	XXXX	0.79	XXXX	0.79	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	4.04	XXXX	3.82	XXXX	3.84	XXXX	3.82	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	0.80	XXXX	0.70	XXXX	0.80	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KI CM SQ/SEC)	3929	5789	5759	5754
TAPE NO.	444.	445.	446.	447.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.63	-1.84	-0.63	-1.84	-0.63	-1.84	-0.63
1000	-0.76	0.78	-0.83	0.71	-1.56	-0.02	-1.55	-0.01
900	-1.27	0.27	-1.33	0.21	-1.42	0.12	-1.41	0.13
800	-1.67	-0.13	-1.51	0.03	-1.52	0.02	-1.52	0.02
700	-1.70	-0.16	-1.48	0.06	-1.49	0.05	-1.48	0.06
600	-1.50	0.03	-1.36	0.16	-1.37	0.16	-1.36	0.16
500	-1.26	0.24	-1.24	0.26	-1.24	0.26	-1.23	0.27
400	-1.06	-0.10	-1.10	-0.14	-1.10	-0.14	-1.10	-0.14
300	-0.91	-0.06	-0.98	-0.13	-0.98	-0.13	-0.98	-0.13
200	-0.78	0.01	-0.87	-0.08	-0.87	-0.08	-0.86	-0.07
100	-0.66	0.00	-0.77	-0.11	-0.77	-0.11	-0.77	-0.11
32	-0.52	0.04	-0.66	-0.10	-0.66	-0.10	-0.65	-0.09
8	-0.44	0.09	-0.54	-0.01	-0.55	-0.02	-0.54	-0.01

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.54	1.55	-0.54	1.55	-0.54	1.55	-0.54
1000	1.02	1.05	1.02	1.05	1.36	1.39	1.35	1.38
900	1.13	1.08	1.02	0.97	1.06	1.01	1.05	1.00
800	0.95	0.87	0.79	0.71	0.81	0.73	0.79	0.71
700	0.60	0.49	0.60	0.49	0.60	0.49	0.60	0.49
600	0.37	0.16	0.50	0.29	0.50	0.24	0.50	0.29
500	0.26	-0.11	0.47	0.10	0.47	0.10	0.46	0.09
400	0.28	-0.09	0.51	0.14	0.51	0.14	0.51	0.14
300	0.45	-0.13	0.59	0.01	0.60	0.02	0.59	0.01
200	0.76	0.10	0.70	0.04	0.71	0.05	0.70	0.04
100	1.22	0.43	0.80	0.01	0.80	0.01	0.80	0.01
32	1.47	0.61	0.79	-0.07	0.79	-0.07	0.78	-0.08
8	1.30	0.42	0.66	-0.22	0.66	-0.22	0.66	-0.22

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	444. 2.00HR	445. 2.00HR	446. 2.00HR	447. 2.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.76	0.16	21.88	0.28	21.87	0.27	21.88	0.28
900	22.26	0.16	22.52	0.42	22.52	0.42	22.52	0.42
800	22.81	-0.29	23.02	-0.08	23.02	-0.08	23.02	-0.08
700	23.29	-0.61	23.36	-0.54	23.35	-0.55	23.35	-0.55
600	23.70	-0.50	23.55	-0.65	23.55	-0.65	23.55	-0.65
500	24.02	-0.58	23.64	-0.96	23.63	-0.97	23.63	-0.97
400	24.15	-0.65	23.61	-1.19	23.60	-1.20	23.61	-1.19
300	24.08	-0.82	23.47	-1.43	23.48	-1.42	23.48	-1.42
200	23.67	-1.33	23.22	-1.78	23.22	-1.78	23.23	-1.77
100	22.88	-0.82	22.83	-0.87	22.83	-0.87	22.83	-0.87
32	21.73	0.43	22.29	0.99	22.29	0.99	22.29	0.99
8	20.87	0.47	21.90	1.50	21.90	1.50	21.90	1.50
2	19.54	0.04	21.23	1.73	21.22	1.72	21.21	1.71
0	18.19	XXXX	20.55	XXXX	20.53	XXXX	20.51	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.91	2.80	8.96	2.85	9.03	2.92	9.00	2.89
900	9.46	3.08	9.66	3.28	9.34	2.96	9.31	2.93
800	9.69	2.98	9.78	3.07	9.78	3.07	9.74	3.03
700	10.04	2.93	10.04	2.93	10.05	2.94	10.02	2.91
600	9.80	2.28	9.56	2.04	10.25	2.73	10.23	2.71
500	10.59	2.51	10.44	2.36	10.44	2.36	10.41	2.33
400	10.73	2.13	10.61	2.01	10.62	2.02	10.59	1.99
300	10.79	1.57	10.83	1.61	10.79	1.57	10.77	1.55
200	10.75	0.87	11.04	1.16	11.06	1.18	11.04	1.16
100	10.82	0.87	11.57	1.62	11.44	1.49	11.43	1.48
32	11.05	-0.60	12.09	0.44	12.09	0.44	12.08	0.43
8	11.79	0.31	12.91	1.43	12.91	1.43	12.90	1.42
	13.60	XXXX	14.64	XXXX	14.64	XXXX	14.63	XXXX
0	15.43	XXXX	16.40	XXXX	16.40	XXXX	16.39	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	444.	445.	446.	447.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	15.44	-4.76	22.38	2.18	22.38	2.18	22.39	2.19
-0.125	27.66	-1.44	28.91	-0.19	28.90	-0.20	28.91	-0.19
-0.250	30.09	0.19	30.17	0.27	30.16	0.26	30.16	0.26
-0.500	28.01	0.01	28.01	0.01	28.01	0.01	28.01	0.01
-1.000	24.02	0.02	24.04	0.04	24.03	0.03	24.03	0.03
-2.000	23.90	0.00	30.09	0.99	30.09	0.99	30.10	1.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.23	XXXX	4.09	XXXX	4.09	XXXX	4.09	XXXX
8	1.38	0.35	0.86	-0.17	0.86	-0.16	0.86	-0.17
2	0.69	-0.33	0.43	-0.59	0.43	-0.59	0.43	-0.59

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.90	0.30	4.88	0.28	4.88	0.28
R(N)	2.21	XXXX	2.02	XXXX	2.00	XXXX	2.00	XXXX
Q(C,0)	-0.82	XXXX	-0.60	XXXX	-0.61	XXXX	-0.61	XXXX
Q(E,0)	2.24	XXXX	3.15	XXXX	3.14	XXXX	3.15	XXXX
Q(S,0)	0.78	XXXX	-0.53	XXXX	-0.53	XXXX	-0.53	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.80	XXXX	5.46	XXXX	5.42	XXXX	5.42	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	2.10	XXXX	1.90	XXXX	1.90	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	5764	5869	5864	5869
TAPE NO.	448.	449.	450.	451.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.63	-1.21	0.00	-1.21	0.00	-1.21	0.00
1000	-0.82	0.72	-0.95	0.59	-1.36	0.18	-1.36	0.18
900	-1.33	0.21	-1.46	0.08	-1.52	0.02	-1.52	0.02
800	-1.51	0.03	-1.63	-0.09	-1.64	-0.10	-1.64	-0.10
700	-1.48	0.06	-1.60	-0.06	-1.61	-0.07	-1.60	-0.06
600	-1.36	0.16	-1.49	0.04	-1.49	0.03	-1.48	0.05
500	-1.23	0.27	-1.36	0.14	-1.36	0.14	-1.36	0.14
400	-1.09	-0.13	-1.22	-0.26	-1.22	-0.26	-1.22	-0.26
300	-0.98	-0.13	-1.11	-0.26	-1.11	-0.26	-1.11	-0.26
200	-0.87	-0.08	-0.99	-0.20	-0.99	-0.20	-1.00	-0.21
100	-0.77	-0.11	-0.89	-0.23	-0.89	-0.23	-0.90	-0.24
32	-0.65	-0.09	-0.77	-0.21	-0.77	-0.21	-0.77	-0.21
8	-0.54	-0.01	-0.64	-0.12	-0.64	-0.12	-0.64	-0.12

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.54	2.09	-0.00	2.09	0.00	2.09	-0.00
1000	1.02	1.05	1.26	1.29	1.69	1.72	1.69	1.72
900	1.01	0.96	1.26	1.21	1.30	1.25	1.31	1.26
800	0.78	0.70	1.04	0.96	1.04	0.96	1.05	0.97
700	0.59	0.48	0.84	0.73	0.85	0.74	0.85	0.74
600	0.50	0.29	0.74	0.53	0.74	0.53	0.75	0.54
500	0.46	0.09	0.72	0.35	0.72	0.35	0.72	0.35
400	0.50	0.13	0.76	0.39	0.76	0.39	0.76	0.39
300	0.54	0.01	0.84	0.26	0.84	0.26	0.85	0.27
200	0.70	0.04	0.04	0.28	0.94	0.28	0.95	0.29
100	0.80	0.01	1.03	0.24	1.03	0.24	1.03	0.24
32	0.79	-0.07	1.00	0.14	0.99	0.13	1.00	0.14
8	0.66	-0.22	0.84	-0.04	0.83	-0.05	0.84	-0.04

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	448.	449.	450.	451.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.88	0.28	21.88	0.28	21.89	0.29	21.88	0.28
900	22.53	0.43	22.52	0.42	22.53	0.43	22.52	0.42
800	23.02	-0.08	23.02	-0.08	23.02	-0.08	23.02	-0.08
700	23.36	-0.54	23.35	-0.55	23.35	-0.55	23.30	-0.60
600	23.54	-0.66	23.54	-0.66	23.54	-0.66	23.54	-0.66
500	23.64	-0.96	23.62	-0.98	23.62	-0.98	23.63	-0.97
400	23.60	-1.20	23.59	-1.21	23.59	-1.21	23.59	-1.21
300	23.47	-1.43	23.40	-1.44	23.47	-1.43	23.47	-1.43
200	23.22	-1.78	23.22	-1.78	23.22	-1.78	23.22	-1.78
100	22.83	-2.87	22.83	-0.87	22.83	-0.87	22.83	-0.87
32	22.28	0.98	22.29	0.99	22.29	0.99	22.30	1.00
8	21.88	1.48	21.89	1.49	21.90	1.50	21.90	1.50
2	21.20	1.70	21.21	1.71	21.21	1.71	21.22	1.72
0	20.52	XXXX	20.52	XXXX	20.51	XXXX	20.52	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.99	2.88	9.00	2.89	8.99	2.88	9.03	2.92
900	9.31	2.93	9.31	2.93	9.31	2.93	9.34	2.96
800	9.74	3.03	9.75	3.04	9.75	3.04	9.78	3.07
700	10.03	2.92	10.01	2.90	10.01	2.90	10.04	2.93
600	10.23	2.71	10.23	2.71	10.23	2.71	10.26	2.74
500	10.41	2.33	10.41	2.33	10.41	2.33	10.44	2.36
400	10.59	1.99	10.59	1.99	10.60	2.00	10.62	2.02
300	10.78	1.56	10.78	1.56	10.77	1.55	10.81	1.59
200	11.04	1.16	11.05	1.17	11.05	1.17	11.07	1.19
100	11.42	1.47	11.43	1.48	11.43	1.48	11.45	1.50
32	12.08	0.43	12.09	0.44	12.08	0.43	12.01	0.36
8	12.91	1.43	12.89	1.41	12.90	1.42	12.91	1.43
2	14.64	XXXX	14.60	XXXX	14.60	XXXX	14.61	XXXX
0	16.39	XXXX	16.34	XXXX	16.34	XXXX	16.35	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## MISCELLANEOUS VARIABLES

TAPE NO.	448.	449.	450.	451.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.00	22.38	2.18	22.38	2.18	22.39	2.19	22.39	2.19
-0.125	28.91	-0.19	28.91	-0.19	28.91	-0.19	28.90	-0.20
-0.250	30.16	0.26	30.17	0.27	30.16	0.26	30.16	0.26
-0.500	28.01	0.01	28.01	0.01	28.01	0.01	27.99	-0.01
-1.000	24.05	0.05	24.04	0.04	24.04	0.04	24.04	0.04
-2.000	30.08	0.98	30.09	0.99	30.09	0.99	30.09	0.99

## WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.09	XXXX	4.14	XXXX	4.13	XXXX	4.14	XXXX
8	0.86	-0.17	1.06	0.03	1.06	0.03	1.06	0.03
2	0.43	-0.59	0.53	-0.49	0.53	-0.49	0.53	-0.49

## SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.88	0.28	4.88	0.28	4.88	0.28
R(N)	2.00	XXXX	2.00	XXXX	2.00	XXXX	2.00	XXXX
Q(C,0)	-0.61	XXXX	-0.63	XXXX	-0.63	XXXX	-0.63	XXXX
Q(E,0)	3.15	XXXX	3.16	XXXX	3.16	XXXX	3.16	XXXX
Q(S,0)	-0.53	XXXX	-0.53	XXXX	-0.53	XXXX	-0.53	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup>)X10<sup>12</sup>

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.42	XXXX	5.57	XXXX	5.50	XXXX	5.58	XXXX

## INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.90	XXXX	1.97	XXXX	1.97	XXXX	1.90	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	5875	3199	3199	3204
T/ E NO.	452.	453.	454.	455.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.20	0.01	-1.20	0.01	-1.20	0.01	-1.21	0.00
1000	-0.96	0.58	-0.97	0.57	-1.36	0.18	-1.35	0.18
900	-1.46	0.08	-1.46	0.08	-1.52	0.02	-1.52	0.02
800	-1.63	-0.09	-1.62	-0.08	-1.61	-0.07	-1.63	-0.09
700	-1.61	-0.07	-1.59	-0.05	-1.57	-0.03	-1.57	-0.03
600	-1.49	0.03	-1.48	0.05	-1.47	0.06	-1.47	0.06
500	-1.36	0.14	-1.36	0.14	-1.35	0.15	-1.36	0.14
400	-1.23	-0.27	-1.23	-0.27	-1.22	-0.26	-1.23	-0.27
300	-1.11	-0.26	-1.12	-0.27	-1.12	-0.27	-1.12	-0.27
200	-0.99	-0.20	-1.02	-0.23	-1.01	-0.22	-1.01	-0.22
100	-0.89	-0.23	-0.92	-0.26	-0.91	-0.25	-0.91	-0.25
32	-0.77	-0.21	-0.80	-0.24	-0.80	-0.24	-0.80	-0.24
8	-0.64	-0.11	-0.68	-0.15	-0.67	-0.14	-0.67	-0.14

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.09	-0.00	2.09	0.00	2.09	-0.00	2.09	0.01
1000	1.27	1.30	1.27	1.30	1.70	1.73	1.59	1.72
900	1.26	1.21	1.25	1.20	1.29	1.24	1.28	1.23
800	1.04	1.96	1.03	0.95	1.03	0.95	1.03	0.95
700	0.86	0.75	0.86	0.75	0.86	0.75	0.85	0.74
600	0.70	0.54	0.77	0.56	0.76	0.55	0.76	0.55
500	0.72	0.35	0.74	0.37	0.74	0.37	0.73	0.36
400	0.76	0.39	0.78	0.41	0.78	0.41	0.77	0.40
300	0.85	0.27	0.85	0.27	0.85	0.27	0.84	0.26
200	0.95	0.29	0.93	0.27	0.93	0.27	0.93	0.27
100	1.04	0.25	1.00	0.21	1.00	0.21	0.99	0.20
32	1.00	0.14	0.95	0.09	0.95	0.09	0.94	0.08
8	0.84	-0.04	0.79	-0.09	0.79	-0.09	0.78	-0.10

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	452.	453.	454.	455.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.88	0.28	21.90	0.30	21.89	0.29	21.90	0.30
900	22.52	0.42	22.56	0.46	22.55	0.45	22.56	0.46
800	23.02	-0.08	23.03	-0.07	23.03	-0.07	23.03	-0.07
700	23.35	-0.55	23.34	-0.56	23.34	-0.56	23.34	-0.56
600	23.54	-0.66	23.51	-0.69	23.51	-0.69	23.52	-0.68
500	23.62	-0.98	23.58	-1.02	23.58	-1.02	23.58	-1.02
400	23.59	-1.21	23.54	-1.26	23.53	-1.27	23.53	-1.27
300	23.47	-1.43	23.40	-1.50	23.41	-1.49	23.40	-1.50
200	23.21	-1.79	23.14	-1.86	23.14	-1.86	23.14	-1.86
100	22.82	-0.88	22.74	-0.96	22.74	-0.96	22.73	-0.97
32	22.20	0.90	22.18	0.88	22.18	0.88	22.18	0.88
8	21.90	1.50	21.82	1.42	21.82	1.42	21.82	1.42
2	21.22	1.72	21.38	1.88	21.37	1.87	21.37	1.87
0	20.52	XXXX	20.93	XXXX	20.92	XXXX	20.92	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.00	2.89	9.01	2.90	9.03	2.92	9.00	2.89
900	9.33	2.95	9.34	2.96	9.35	2.97	9.32	2.94
800	9.78	3.07	9.77	3.06	9.79	3.08	9.75	3.04
700	10.04	2.93	10.04	2.93	10.04	2.93	10.03	2.92
600	10.25	2.73	10.24	2.72	10.25	2.73	10.22	2.70
500	10.44	2.36	10.43	2.35	10.43	2.35	10.41	2.33
400	10.62	2.02	10.61	2.01	10.61	2.01	10.59	1.99
300	10.80	1.58	10.79	1.57	10.81	1.59	10.77	1.55
200	11.07	1.19	11.07	1.19	11.06	1.18	11.04	1.16
100	11.45	1.50	11.46	1.51	11.46	1.51	11.45	1.50
32	12.10	0.45	12.20	0.55	12.21	0.56	12.19	0.54
8	12.91	1.43	13.27	1.79	13.27	1.79	13.20	1.72
2	14.61	XXXX	15.83	XXXX	15.83	XXXX	15.78	XXXX
0	16.34	XXXX	18.44	XXXX	18.44	XXXX	18.42	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	452.	453.	454.	455.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.38	2.18	22.41	2.21	22.39	2.17	22.41	2.21
-0.125	28.91	-0.19	28.90	-0.20	28.90	-0.20	28.90	-0.20
-0.250	30.16	0.26	30.16	0.26	30.16	0.26	30.16	0.26
-0.500	28.00	0.00	28.01	0.01	28.01	0.01	28.00	0.00
-1.000	24.04	0.04	24.04	0.04	24.03	0.03	24.03	0.03
-2.000	30.09	0.99	30.09	0.99	30.09	0.99	30.09	0.99

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.13	xxxx	4.13	xxxx	4.13	xxxx	4.13	xxxx
8	1.06	0.03	1.05	0.02	1.04	0.02	1.04	0.01
2	0.54	-0.49	0.53	-0.50	0.53	-0.50	0.52	-0.50

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.88	0.28	4.88	0.28	4.88	0.28
R(N)	2.01	xxxx	1.94	xxxx	1.94	xxxx	1.94	xxxx
Q(C,C)	-0.63	xxxx	-0.23	xxxx	-0.22	xxxx	-0.22	xxxx
Q(E,C)	3.16	xxxx	2.59	xxxx	2.59	xxxx	2.58	xxxx
Q(S,O)	-0.53	xxxx	-0.42	xxxx	-0.42	xxxx	-0.42	xxxx

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	5.58	xxxx	3.02	xxxx	3.04	xxxx	3.02	xxxx

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.90	xxxx	2.10	xxxx	2.10	xxxx	1.90	xxxx

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3199	3204	3204	3204
TAPE NO.	456.	457.	458.	459.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.20	0.01	-1.84	-0.63	-1.84	-0.63	-1.84	-0.63
1000	-0.96	0.58	-0.83	0.71	-1.57	-0.03	-1.57	-0.03
900	-1.45	0.09	-1.33	0.21	-1.42	0.12	-1.42	0.12
800	-1.61	-0.07	-1.48	0.06	-1.51	0.03	-1.51	0.03
700	-1.58	-0.04	-1.46	0.08	-1.46	0.08	-1.46	0.08
600	-1.48	0.05	-1.35	0.18	-1.35	0.18	-1.35	0.18
500	-1.35	0.15	-1.23	0.27	-1.23	0.27	-1.23	0.27
400	-1.23	-0.27	-1.12	-0.14	-1.10	-0.14	-1.10	-0.14
300	-1.12	-0.27	-0.99	-0.14	-0.99	-0.14	-0.99	-0.14
200	-1.01	-0.22	-0.88	-0.09	-0.88	-0.09	-0.88	-0.09
100	-0.91	-0.25	-0.78	-0.12	-0.79	-0.13	-0.79	-0.13
32	-0.80	-0.24	-0.68	-0.12	-0.68	-0.12	-0.68	-0.12
8	-0.68	-0.15	-0.57	-0.04	-0.57	-0.04	-0.57	-0.04

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.09	0.00	1.55	-0.54	1.55	-0.54	1.54	-0.55
1000	1.26	1.29	1.01	1.04	1.35	1.38	1.35	1.38
900	1.24	1.19	0.99	0.94	1.03	0.98	1.04	0.99
800	1.02	0.94	0.77	0.69	0.78	0.70	0.79	0.71
700	0.85	0.74	0.60	0.49	0.61	0.50	0.61	0.50
600	0.76	0.55	0.51	0.30	0.51	0.30	0.52	0.31
500	0.73	0.36	0.49	0.12	0.50	0.13	0.50	0.13
400	0.77	0.40	0.52	0.15	0.52	0.15	0.53	0.16
300	0.85	0.27	0.59	0.01	0.59	0.01	0.60	0.02
200	0.93	0.27	0.68	0.02	0.68	0.01	0.69	0.03
100	0.99	0.20	0.76	-0.03	0.75	-0.04	0.76	-0.03
32	0.95	0.09	0.72	-0.14	0.72	-0.14	0.72	-0.14
8	0.79	-0.09	0.59	-0.29	0.59	-0.29	0.60	-0.28

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	456. 2.00HR	457. 2.00HR	458. 2.00HR	459. 2.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.92	0.32	21.91	0.31	21.90	0.30	21.90	0.30
900	22.55	0.45	22.56	0.46	22.55	0.45	22.55	0.45
800	23.03	-0.07	23.04	-0.06	23.03	-0.07	23.04	-0.06
700	23.34	-0.56	23.34	-0.56	23.34	-0.56	23.34	-0.56
600	23.51	-0.69	23.51	-0.69	23.51	-0.69	23.51	-0.69
500	23.58	-1.02	23.58	-1.02	23.57	-1.03	23.58	-1.02
400	23.53	-1.27	23.53	-1.27	23.53	-1.27	23.54	-1.26
300	23.31	-1.59	23.40	-1.50	23.40	-1.50	23.40	-1.50
200	23.14	-1.86	23.15	-1.85	23.14	-1.86	23.15	-1.85
100	22.74	-0.96	22.74	-0.96	22.74	-0.96	22.74	-0.96
32	22.18	0.88	22.18	0.88	22.18	0.88	22.19	0.89
8	21.82	1.42	21.82	1.42	21.82	1.42	21.82	1.42
2	21.37	1.87	21.37	1.87	21.38	1.88	21.38	1.88
0	20.92	xxxx	20.92	xxxx	20.93	xxxx	20.94	xxxx

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.00	2.89	9.00	2.89	9.00	2.89	9.04	2.93
900	9.32	2.94	9.32	2.94	9.32	2.94	9.35	2.97
800	9.75	3.04	9.75	3.04	9.76	3.05	9.78	3.07
700	10.02	2.91	10.01	2.90	10.01	2.90	10.04	2.93
600	10.22	2.70	10.21	2.69	10.22	2.70	10.25	2.73
500	10.41	2.33	10.40	2.32	10.41	2.33	10.42	2.34
400	10.58	1.98	10.59	1.98	10.58	1.98	10.61	2.01
300	10.77	1.55	10.77	1.55	10.77	1.55	10.79	1.57
200	11.04	1.16	11.04	1.16	11.04	1.16	11.07	1.19
100	11.46	1.51	11.49	1.54	11.49	1.54	11.49	1.54
32	12.19	0.54	12.19	0.54	12.20	0.55	12.21	0.56
8	13.26	1.78	13.26	1.78	13.26	1.78	13.27	1.79
2	15.82	xxxx	15.82	xxxx	15.83	xxxx	15.83	xxxx
0	18.43	xxxx	18.42	xxxx	18.43	xxxx	18.44	xxxx

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	456.	457.	458.	459.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.39	2.19	2.41	2.21	22.40	2.20	22.41	2.21
-0.125	28.90	-0.20	28.91	-0.19	28.90	-0.20	28.90	-0.20
-0.250	30.16	0.26	30.16	0.26	30.16	0.26	30.17	0.27
-0.500	28.00	0.00	28.00	0.00	28.00	0.00	28.01	0.01
-1.000	24.04	0.04	24.03	0.03	24.04	0.04	24.03	0.03
-2.000	30.09	0.99	30.09	0.99	30.09	0.99	30.09	0.99

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.13	XXXX	4.09	XXXX	4.09	XXXX	4.09	XXXX
8	1.04	0.02	0.92	-0.20	0.83	-0.20	0.83	-0.19
2	0.53	-0.50	0.42	-0.61	0.42	-0.61	0.42	-0.61

SURFACE ENERGY TERMS (LY/SECX1000)

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.88	0.28	4.88	0.28	4.90	0.31
R(N)	1.94	XXXX	1.95	XXXX	1.94	XXXX	1.96	XXXX
Q(C,C)	-0.22	XXXX	-0.22	XXXX	-0.22	XXXX	-0.22	XXXX
Q(E,C)	2.59	XXXX	2.59	XXXX	2.59	XXXX	2.60	XXXX
Q(S,C)	-0.42	XXXX	-0.42	XXXX	-0.42	XXXX	-0.42	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.06	XXXX	3.00	XXXX	3.00	XXXX	3.02	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.10	XXXX	2.10	XXXX	2.17	XXXX	2.10	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3199	3199	3204	3204
TAPE NO.	460.	461.	462.	463.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-1.63	-1.85	-0.64	-1.84	-0.63	-1.85	-0.64
1000	-0.84	0.70	-0.84	0.70	-1.57	-0.03	-1.56	-0.02
900	-1.34	0.20	-1.34	0.20	-1.42	0.12	-1.41	0.13
800	-1.48	0.06	-1.49	0.05	-1.51	0.03	-1.50	0.04
700	-1.45	0.09	-1.46	0.08	-1.46	0.08	-1.46	0.08
600	-1.35	0.18	-1.35	0.18	-1.36	0.17	-1.35	0.18
500	-1.23	0.27	-1.23	0.27	-1.23	0.27	-1.23	0.27
400	-1.10	-0.14	-1.10	-0.14	-1.10	-0.14	-1.10	-0.14
300	-0.99	-0.14	-0.99	-0.14	-0.99	-0.14	-0.99	-0.14
200	-0.89	-0.10	-0.89	-0.09	-0.88	-0.09	-0.88	-0.09
100	-0.79	-0.13	-0.79	-0.13	-0.75	-0.09	-0.78	-0.12
32	-0.68	-0.12	-0.69	-0.13	-0.68	-0.12	-0.68	-0.12
8	-0.58	-0.05	-0.57	-0.04	-0.57	-0.04	-0.57	-0.04

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.54	1.55	-0.54	1.55	-0.54	1.55	-0.54
1000	1.02	1.05	1.02	1.05	1.35	1.38	1.35	1.38
900	0.99	0.94	1.00	0.95	1.04	0.99	1.02	0.97
800	0.78	0.70	0.78	0.70	0.79	0.71	0.78	0.70
700	0.60	0.49	0.61	0.50	0.61	0.50	0.60	0.49
600	0.51	0.30	0.51	0.30	0.52	0.31	0.51	0.30
500	0.50	0.13	0.50	0.13	0.50	0.13	0.49	0.12
400	0.53	0.16	0.53	0.16	0.53	0.16	0.52	0.15
300	0.60	0.02	0.60	0.02	0.60	0.02	0.59	0.01
200	0.68	0.02	0.68	0.02	0.68	0.02	0.68	0.02
100	0.75	-0.03	0.76	-0.03	0.76	-0.03	0.75	-0.04
32	0.72	-0.14	0.72	-0.14	0.72	-0.14	0.72	-0.14
8	0.60	-0.28	0.59	-0.29	0.60	-0.28	0.55	-0.33

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPF NO. INTERVAL	460. 2.00HR	461. 2.00HR	462. 2.00HR	463. 2.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.90	0.30	21.90	0.30	21.90	0.30	21.90	0.30
900	22.55	0.45	22.55	0.45	22.55	0.45	22.55	0.45
800	23.03	-0.07	23.03	-0.07	23.03	-0.07	23.04	-0.06
700	23.34	-0.56	23.33	-0.57	23.33	-0.57	23.33	-0.57
600	23.51	-0.69	23.49	-0.71	23.48	-0.72	23.49	-0.71
500	23.58	-1.02	23.53	-1.07	23.53	-1.07	23.53	-1.07
400	23.53	-1.27	23.45	-1.35	23.45	-1.35	23.45	-1.35
300	23.40	-1.50	23.25	-1.65	23.25	-1.65	23.25	-1.65
200	23.14	-1.86	22.90	-2.10	22.90	-2.10	22.90	-2.10
100	22.74	-0.96	22.32	-1.38	22.33	-1.37	22.32	-1.38
32	22.19	0.89	21.47	0.17	21.47	0.17	21.47	0.17
8	21.82	1.42	20.77	0.37	20.77	0.36	20.77	0.37
2	21.38	1.88	19.65	0.15	19.64	0.14	19.65	0.15
0	20.93	XXXX	18.53	XXXX	18.52	XXXX	18.53	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.01	2.90	9.01	2.90	9.01	2.93	9.00	2.89
900	9.33	2.95	9.33	2.95	9.35	2.97	9.31	2.93
800	9.77	3.06	9.77	3.06	9.78	3.07	9.75	3.04
700	10.04	2.93	10.04	2.93	10.04	2.93	10.01	2.90
600	10.24	2.72	10.22	2.70	10.23	2.71	10.21	2.69
500	10.43	2.35	10.39	2.31	10.39	2.31	10.37	2.29
400	10.61	2.01	10.55	1.95	10.55	1.95	10.53	1.93
300	10.79	1.57	10.69	1.47	10.69	1.47	10.69	1.47
200	11.06	1.18	10.91	1.03	10.90	1.02	10.88	1.00
100	11.50	1.55	11.23	1.28	11.23	1.28	11.21	1.26
32	12.21	0.56	11.73	0.58	11.73	0.58	11.72	0.57
8	13.27	1.79	12.53	1.05	12.53	1.05	12.52	1.04
2	15.83	XXXX	14.50	XXXX	14.50	XXXX	14.49	XXXX
0	18.43	XXXX	16.48	XXXX	16.48	XXXX	16.47	XXXX

CASE DPG 5 SPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	460.	461.	462.	463.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	22.41	2.21	16.01	-4.19	16.01	-4.19	16.02	-4.18
-0.125	28.90	-0.20	27.75	-1.35	27.74	-1.36	27.75	-1.35
-0.250	30.17	0.27	30.09	0.19	30.09	0.19	30.10	0.20
-0.500	28.00	0.00	28.00	0.00	27.99	-0.01	28.00	0.00
-1.000	24.03	0.03	24.02	0.02	24.02	0.02	24.02	0.02
-2.00	30.09	0.99	23.89	-0.01	23.90	0.00	23.89	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.08	XXX	4.09	XXXX	4.09	XXXX	4.09	XXX
8	0.84	-0.19	0.83	-0.20	0.83	-0.20	0.80	-0.23
2	0.42	-0.60	0.41	-0.61	0.42	-0.61	0.40	-0.63

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.88	0.28	4.88	0.28	4.88	0.28
RIN	1.94	XXXX	2.15	XXXX	2.15	XXXX	2.16	XXXX
Q(C,0)	-0.22	XXXX	-0.55	XXXX	-0.55	XXXX	-0.56	XXXX
Q(E,0)	2.59	XXXX	2.00	XXXX	1.99	XXXX	1.95	XXXX
Q(S,0)	-0.42	XXXX	0.72	XXXX	0.72	XXXX	0.72	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.00	XXXX	3.02	XXXX	3.02	XXXX	3.02	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	2.10	XXXX	1.30	XXXX	1.30	XXXX	1.30	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SW/SEC)	3204	3199	3204	3204
TAPE NO.	464.	465.	466.	467.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.63	-1.20	0.01	-1.23	-0.02	-1.21	-0.00
1000	-0.83	0.71	-0.96	0.58	-1.37	0.17	-1.36	0.18
900	-1.33	0.21	-1.46	0.08	-1.53	0.01	-1.52	0.02
800	-1.49	0.05	-1.62	-0.08	-1.63	-0.09	-1.63	-0.09
700	-1.46	0.08	-1.59	-0.05	-1.59	0.05	-1.58	-0.04
600	-1.35	0.18	-1.48	0.05	-1.48	0.05	-1.48	0.05
500	-1.23	0.27	-1.36	0.14	-1.36	0.14	-1.36	0.14
400	-1.10	-0.14	-1.23	-0.27	-1.23	-0.27	-1.23	-0.27
300	-0.99	-0.14	-1.12	-0.27	-1.12	-0.27	-1.12	-0.27
200	-0.88	-0.09	-1.01	-0.22	-1.01	-0.22	-1.01	-0.22
100	-0.79	-0.13	-0.91	-0.25	-0.91	-0.25	-0.91	-0.25
32	-0.68	-0.12	-0.80	-0.24	-0.80	-0.24	-0.80	-0.24
8	-0.57	-0.04	-0.67	-0.14	-0.67	-0.14	-0.67	-0.14

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.54	2.09	0.00	2.09	-0.00	2.09	0.00
1000	1.02	1.05	1.26	1.29	1.69	1.72	1.69	1.72
900	0.99	0.94	1.24	1.19	1.27	1.22	1.29	1.24
800	0.77	0.69	1.02	0.94	1.03	0.95	1.04	0.96
700	0.60	0.49	0.95	0.74	0.84	0.73	0.86	0.75
600	0.51	0.30	0.76	0.55	0.75	0.54	0.77	0.56
500	0.49	0.12	0.73	0.36	0.73	0.36	0.74	0.37
400	0.52	0.15	0.77	0.40	0.76	0.39	0.78	0.41
300	0.59	0.01	0.84	0.26	0.84	0.26	0.85	0.27
200	0.68	0.02	0.92	0.26	0.92	0.26	0.93	0.27
100	0.75	-0.04	0.99	0.20	0.99	0.20	0.95	0.16
32	0.72	-0.14	0.94	0.08	0.94	0.08	0.94	0.08
8	0.59	-0.29	0.78	-0.10	0.78	-0.10	0.78	-0.10

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	464.	465.	466.	467.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.90	0.30	21.90	0.30	21.90	0.30	21.90	0.30
900	22.56	0.46	22.56	0.46	22.56	0.46	22.55	0.45
800	23.03	-0.07	23.03	-0.07	23.04	-0.06	23.02	-0.08
700	23.33	-0.57	23.33	-0.57	23.33	-0.57	23.33	-0.57
600	23.48	-0.72	23.48	-0.72	23.48	-0.72	23.49	-0.71
500	23.53	-1.07	23.53	-1.07	23.53	-1.07	23.53	-1.07
400	23.45	-1.35	23.45	-1.35	23.45	-1.35	23.45	-1.35
300	23.25	-1.65	23.25	-1.65	23.25	-1.65	23.25	-1.65
200	22.90	-2.10	22.90	-2.10	22.90	-2.10	22.90	-2.10
100	22.31	-1.39	22.32	-1.38	22.32	-1.38	22.32	-1.38
32	21.47	0.17	21.47	0.17	21.47	0.17	21.47	0.17
8	20.77	0.37	20.77	0.37	20.77	0.37	20.76	0.36
2	19.65	0.15	19.66	0.16	19.65	0.15	19.65	0.15
0	18.53	XXXX	18.55	XXXX	18.53	XXXX	18.53	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.00	2.89	9.00	2.89	9.00	2.89	9.03	2.92
900	9.32	2.94	9.31	2.93	9.32	2.94	9.36	2.98
800	9.75	3.04	9.76	3.05	9.75	3.04	9.78	3.07
700	10.01	2.90	10.01	2.90	10.03	2.92	10.04	2.93
600	10.20	2.68	10.21	2.69	10.21	2.69	10.24	2.72
500	10.37	2.29	10.37	2.29	10.36	2.28	10.41	2.33
400	10.53	1.93	10.53	1.93	10.53	1.93	10.55	1.95
300	10.69	1.47	10.69	1.47	10.69	1.47	10.69	1.47
200	10.88	1.00	10.89	1.01	10.89	1.01	10.91	1.03
100	11.21	1.26	11.21	1.26	11.21	1.26	11.23	1.28
32	11.72	0.07	11.72	0.07	11.72	0.07	11.74	0.09
8	12.53	1.05	12.52	1.04	12.52	1.04	12.53	1.05
2	14.49	XXXX	14.49	XXXX	14.49	XXXX	14.50	XXXX
0	16.47	XXXX	16.49	XXXX	16.47	XXXX	16.48	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	454.	465.	466.	467.
INTERVAL	2.00HR	2.00HR	2.00HR	2.00HR

SOIL TEMPERATURE (DEC C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	16.01	-4.19	16.01	-4.19	16.01	-4.19	16.01	-4.19
-0.125	27.74	-1.36	27.75	-1.35	27.75	-1.35	27.74	-1.36
-0.250	30.10	0.20	30.10	0.20	30.09	0.19	30.09	0.19
-0.500	28.01	0.01	28.00	0.00	28.01	0.01	28.01	0.01
-1.000	24.01	0.01	24.03	0.03	24.02	0.02	24.03	0.03
-2.000	23.90	0.00	23.90	0.00	23.89	-0.01	23.90	0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.09	XXXX	4.13	XXXX	4.13	XXXX	4.13	XXXX
8	0.83	-0.20	1.04	0.01	1.03	0.00	1.04	0.01
2	0.41	-0.61	0.52	-0.51	0.52	-0.51	0.52	-0.51

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	4.88	0.28	4.89	0.29	4.88	0.28	4.88	0.28
R(N)	2.15	XXXX	2.17	XXXX	2.15	XXXX	2.15	XXXX
Q(C,D)	-0.56	XXXX	-0.55	XXXX	-0.56	XXXX	-0.56	XXXX
Q(E,D)	1.99	XXXX	2.00	XXXX	1.99	XXXX	1.99	XXXX
Q(S,D)	0.72	XXXX	0.72	XXXX	0.72	XXXX	0.72	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.02	XXXX	3.06	XXXX	3.06	XXXX	3.06	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.30	XXXX	1.30	XXXX	1.21	XXXX	1.20	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	1099	1059	984
TAPE NO.	468.	470.	471.	472.
INTERVAL	2.00HR	1.00HR	1.00HR	1.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.25	-0.04	-1.55	-0.00	-1.55	-0.00	-1.55	-0.00
1000	-0.96	0.58	-0.63	0.39	-1.16	-0.13	-1.16	-0.13
900	-1.47	0.07	-1.09	-0.06	-1.59	-0.06	-1.79	-0.06
800	-1.61	-0.07	-1.65	-0.64	-1.65	-0.64	-1.65	-0.64
700	-1.58	-0.04	-1.77	-0.93	-1.61	-0.77	-1.97	-1.13
600	-1.49	0.05	-1.21	-0.76	-1.21	-0.76	-1.22	-0.77
500	-1.36	0.14	-0.89	-0.82	-0.79	-0.81	-0.79	-0.81
400	-1.23	-0.27	-0.50	-0.73	-0.50	-0.73	-0.50	-0.73
300	-1.13	-0.27	-0.45	-0.50	-0.45	-0.50	-0.45	-0.50
200	-1.02	-0.23	-0.53	-0.23	-0.54	-0.24	-0.53	-0.23
100	-0.92	-0.26	-0.77	-0.19	-0.77	-0.19	-0.77	-0.19
32	-0.80	-0.24	-0.89	-0.05	-0.80	-0.05	-0.81	-0.06
8	-0.68	-0.15	-0.66	0.12	-0.66	0.12	-0.66	0.12

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	2.09	-0.00	1.84	-0.01	1.85	-0.00	1.85	-0.00
1000	1.25	1.28	1.54	1.49	1.63	1.57	1.62	1.57
900	1.23	1.18	1.52	1.47	1.53	1.48	1.52	1.47
800	1.01	0.93	1.31	1.10	1.32	1.11	1.31	1.10
700	0.84	0.73	0.74	0.15	0.72	0.13	0.77	0.18
600	0.75	0.54	0.45	-0.48	0.45	-0.48	0.45	-0.48
500	0.73	0.36	0.53	-0.49	0.53	-0.49	0.53	-0.49
400	0.76	0.39	0.52	-0.48	0.52	-0.48	0.52	-0.48
300	0.84	0.26	0.57	-0.46	0.56	-0.47	0.56	-0.47
200	0.92	0.26	1.07	0.09	1.07	0.09	1.07	0.09
100	0.99	0.20	2.07	1.22	2.07	1.22	2.07	1.22
32	0.93	0.07	3.01	2.31	3.01	2.31	3.01	2.31
8	0.77	-0.11	2.54	2.16	2.84	2.16	2.84	2.16

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	468. 2.00HR	470. 1.00HR	471. 1.00HR	472. 1.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.90	0.30	21.66	-0.24	21.56	-0.24	21.67	+0.23
900	22.55	0.45	22.05	-0.45	22.05	-0.44	22.06	-0.44
800	23.03	-0.07	22.56	-0.54	22.56	-0.54	22.56	-0.54
700	23.33	-0.57	23.05	-0.65	23.05	-0.65	23.06	-0.64
600	23.48	-0.72	23.54	-0.65	23.54	-0.66	23.54	-0.66
500	23.53	-1.07	24.06	-0.84	24.05	-0.85	24.06	-0.84
400	23.45	-1.35	24.62	-0.88	24.63	-0.87	24.62	-0.88
300	23.25	-1.65	24.94	-0.86	24.94	-0.86	24.94	-0.86
200	22.90	-2.10	24.42	-0.78	24.43	-0.77	24.42	-0.78
100	22.32	-1.38	22.79	1.19	22.78	1.18	22.79	1.19
32	21.47	0.17	20.92	3.42	20.92	3.42	20.92	3.42
8	20.77	0.37	19.18	3.88	19.18	3.88	19.18	3.88
2	19.65	0.15	15.53	1.93	15.51	1.91	15.44	1.84
0	18.53	XXXX	11.85	XXXX	11.81	XXXX	11.68	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	9.01	2.90	8.69	1.48	8.97	1.99	8.88	1.97
900	9.34	2.96	9.09	1.89	9.18	1.89	9.08	1.87
800	9.77	3.06	9.53	2.06	9.53	2.06	9.53	2.06
700	10.03	2.92	9.92	2.23	9.93	2.24	9.92	2.23
600	10.23	2.71	10.25	2.24	10.25	2.29	10.26	2.30
500	10.40	2.32	10.62	2.37	10.62	2.37	10.61	2.36
400	10.55	1.95	11.04	2.50	11.04	2.56	11.04	2.56
300	10.70	1.48	11.34	2.56	11.34	2.56	11.33	2.55
200	10.92	1.04	10.95	1.66	10.94	1.65	10.94	1.65
100	11.22	1.27	9.45	0.23	9.45	0.23	9.45	0.23
32	11.73	0.08	9.91	-0.89	9.91	-0.89	9.91	-0.89
8	12.54	1.06	10.06	-1.44	10.16	-0.44	10.06	-0.44
2	14.50	XXXX	11.42	XXXX	11.41	XXXX	11.41	XXXX
0	16.48	XXXX	12.79	XXXX	12.77	XXXX	12.77	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	468.	470.	471.	472.
INTERVAL	2.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DFG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	16.01	-4.19	12.84	1.64	12.84	1.64	12.84	1.64
-0.125	27.74	-1.36	28.69	-0.81	28.70	-0.80	28.70	-0.80
-0.250	30.11	0.21	30.28	0.18	30.28	0.18	30.28	0.18
-0.400	28.01	0.01	28.01	0.01	28.01	0.01	28.01	0.01
-1.000	24.02	0.02	24.00	-0.10	24.01	-0.09	24.00	-0.10
-2.000	23.88	-0.02	23.90	0.00	23.90	0.00	23.89	-0.01

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.13	XXXX	4.95	XXXX	4.95	XXXX	4.95	XXXX
8	1.03	0.00	2.92	1.88	2.92	1.88	2.92	1.89
2	0.52	-0.51	1.46	0.44	1.46	0.44	1.47	0.44

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(0)	4.88	0.28	1.05	0.35	1.01	0.31	0.97	0.27
R(IN)	2.15	XXXX	-0.45	XXXX	-0.47	XXXX	-0.50	XXXX
Q(C,0)	-0.55	XXXX	-0.63	XXXX	-0.60	XXXX	-0.58	XXXX
Q(E,0)	1.99	XXXX	0.47	XXXX	0.45	XXXX	0.42	XXXX
Q(S,0)	0.72	XXXX	-0.29	XXXX	-0.31	XXXX	-0.33	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.06	XXXX	1.24	XXXX	1.24	XXXX	1.12	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	1.7	XXXX	0.10	XXXX	0.10	XXXX	0.10	XXXX

## CASE DPG 5 GPAC OUTPUT DATA

## VELOCITY COMPONENTS

K(CM SQ/SEC)	994	894	909	889
TAPE NO.	473.	474.	475.	476.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.55	-0.00	-1.84	-0.29	-1.84	-0.29	-1.84	-0.29
1000	-0.63	0.39	-0.59	0.43	-1.21	-0.18	-1.21	-0.18
900	-1.09	-0.06	-1.04	-0.01	-1.04	-0.01	-1.05	-0.02
800	-1.64	-0.63	-1.60	-0.59	-1.60	-0.59	-1.55	-0.54
700	-1.63	-0.79	-1.46	-0.62	-1.55	-0.71	-1.38	-0.54
600	-1.20	-0.75	-1.15	-0.70	-1.16	-0.71	-1.15	-0.70
500	-0.79	-0.81	-0.75	-0.77	-0.75	-0.77	-0.75	-0.77
400	-0.50	-0.73	-0.44	-0.68	-0.44	-0.68	-0.44	-0.68
300	-0.45	-0.50	-0.43	-0.45	-0.47	-0.45	-0.40	-0.45
200	-0.54	-0.24	-0.50	-0.19	-0.50	-0.19	-0.50	-0.19
100	-0.77	-0.19	-0.73	-0.15	-0.73	-0.15	-0.73	-0.15
32	-0.80	-0.05	-0.76	-0.01	-0.76	-0.01	-0.76	-0.01
8	-0.56	0.12	-0.61	0.17	-0.62	0.16	-0.62	0.16

## V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.85	-0.00	1.55	-0.30	1.55	-0.30	1.55	-0.30
1000	1.54	1.49	1.48	1.43	1.50	1.45	1.51	1.46
900	1.52	1.47	1.47	1.42	1.47	1.42	1.47	1.42
800	1.31	1.10	1.26	1.05	1.26	1.05	1.26	1.05
700	0.70	0.11	0.64	0.06	0.65	0.06	0.63	0.04
600	0.45	-0.48	0.39	-0.54	0.39	-0.54	0.39	-0.54
500	0.53	-0.50	0.47	-0.55	0.48	-0.55	0.48	-0.55
400	0.52	-0.48	0.47	-0.53	0.47	-0.53	0.47	-0.53
300	0.56	-0.47	0.51	-0.52	0.51	-0.52	0.51	-0.52
200	1.07	0.09	1.02	0.04	1.01	0.03	1.02	0.04
100	2.06	1.21	2.01	1.16	2.01	1.16	2.01	1.16
32	3.01	2.31	2.97	2.27	2.97	2.27	2.97	2.27
8	2.84	2.16	2.80	2.12	2.80	2.12	2.80	2.12

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	473.	474.	475.	476.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.67	-0.23	21.66	-0.24	21.66	-0.24	21.66	-0.24
900	22.06	-0.44	22.06	-0.44	22.04	-0.46	22.05	-0.45
800	22.56	-0.54	22.56	-0.54	22.57	-0.53	22.56	-0.54
700	23.06	-0.64	23.06	-0.64	23.05	-0.65	23.06	-0.64
600	23.53	-0.67	23.53	-0.67	23.54	-0.66	23.53	-0.67
500	24.06	-0.84	24.02	-0.98	24.05	-0.85	24.05	-0.85
400	24.62	-0.88	24.63	-0.87	24.62	-0.86	24.63	-0.87
300	24.95	-0.85	24.95	-0.85	24.95	-0.85	24.96	-0.84
200	24.42	-0.78	24.43	-0.77	24.43	-0.77	24.43	-0.77
100	22.79	1.19	22.78	1.18	22.77	1.17	22.79	1.19
32	20.92	3.92	20.91	3.91	20.91	3.91	20.91	3.91
8	19.18	3.88	19.20	3.90	19.20	3.90	19.20	3.90
2	15.46	1.86	15.43	1.83	15.45	1.85	15.43	1.83
0	11.71	XXXX	11.53	XXXX	11.67	XXXX	11.64	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.89	1.98	8.89	1.98	8.88	1.97	8.90	1.99
900	9.08	1.87	9.07	1.86	9.11	1.90	9.09	1.88
800	9.52	2.05	9.52	2.05	9.52	2.05	9.53	2.06
700	9.92	2.23	9.92	2.23	9.92	2.23	9.92	2.23
600	10.27	2.31	10.26	2.30	10.11	2.15	10.27	2.31
500	10.61	2.36	10.61	2.36	10.61	2.36	10.62	2.37
400	11.04	2.56	11.03	2.55	11.04	2.56	11.04	2.56
300	11.33	2.55	11.34	2.56	11.34	2.56	11.35	2.57
200	10.94	1.65	10.95	1.66	10.95	1.66	10.95	1.66
100	9.46	0.24	9.43	0.21	9.43	0.21	9.43	0.21
32	9.91	-0.89	9.91	-0.89	9.92	-0.88	9.91	-0.89
8	10.08	-0.42	10.05	-0.45	10.05	-0.45	10.05	-0.45
2	11.43	XXXX	11.43	XXXX	11.43	XXXX	11.43	XXXX
0	12.78	XXXX	12.81	XXXX	12.82	XXXX	12.82	XXXX

CASE DPG 4 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	473.	474.	475.	476.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	12.84	1.64	12.84	1.64	12.84	1.64	12.84	1.64
-0.125	28.70	-0.80	28.70	-0.80	28.70	-0.80	28.69	-0.81
-0.250	30.28	0.18	30.28	0.18	30.28	0.18	30.28	0.18
-0.500	28.00	0.00	28.01	0.01	28.01	0.01	28.01	0.01
-1.000	24.00	-0.10	24.01	-0.09	24.01	-0.09	24.01	-0.09
-2.000	23.90	0.00	23.90	0.00	23.90	0.00	23.90	0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
80	4.95	XXXX	4.93	XXXX	4.93	XXXX	4.93	XXXX
8	2.92	1.89	2.87	1.84	2.87	1.84	2.87	1.84
2	1.47	0.44	1.44	0.41	1.44	0.41	1.44	0.41

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
SLD1	0.99	0.29	0.97	0.27	0.99	0.29	0.97	0.27
R(N)	-0.48	XXXX	-0.48	XXXX	-0.47	XXXX	-0.48	XXXX
Q(C,0)	-0.58	XXXX	-0.53	XXXX	-0.53	XXXX	-0.52	XXXX
Q(E,0)	0.42	XXXX	0.38	XXXX	0.38	XXXX	0.38	XXXX
Q(S,0)	-0.32	XXXX	-0.34	XXXX	-0.33	XXXX	-0.34	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	1.12	XXXX	1.00	XXXX	1.02	XXXX	1.02	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.00	XXXX	-0.10	XXXX	0.10	XXXX	0.10	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	904	2194	2174	2169
TAPE NU.	477.	478.	479.	480.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.29	-1.84	-0.29	-1.84	-0.29	-1.84	-0.29
1000	-0.59	0.43	-0.63	0.39	-1.22	-0.19	-1.22	-0.19
900	-1.04	-0.01	-1.13	-0.10	-1.15	-0.13	-1.15	-0.13
800	-1.60	-0.59	-1.42	-0.41	-1.42	-0.41	-1.42	-0.41
700	-1.49	-0.65	-1.30	-0.46	-1.31	-0.47	-1.30	-0.46
600	-1.16	-0.71	-1.07	-0.62	-1.07	-0.62	-1.06	-0.61
500	-0.75	-0.77	-0.83	-0.85	-0.83	-0.85	-0.83	-0.85
400	-0.40	-0.63	-0.65	-0.88	-0.65	-0.88	-0.65	-0.88
300	-0.40	-0.45	-0.58	-0.63	-0.58	-0.63	-0.58	-0.63
200	-0.50	-0.19	-0.56	-0.26	-0.56	-0.26	-0.56	-0.26
100	-0.73	-0.15	-0.61	-0.03	-0.61	-0.03	-0.61	-0.03
32	-0.76	-0.01	-0.62	0.13	-0.61	0.14	-0.61	0.14
8	-0.62	0.16	-0.55	0.23	-0.55	0.23	-0.55	0.23

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.30	1.55	-0.30	1.55	-0.30	1.55	-0.30
1000	1.48	1.43	1.48	1.43	1.50	1.45	1.49	1.44
900	1.46	1.41	1.38	1.33	1.39	1.34	1.38	1.33
800	1.26	1.05	1.07	0.86	1.07	0.86	1.07	0.86
700	0.64	0.06	0.72	0.14	0.72	0.14	0.73	0.14
600	0.39	-0.54	0.58	-0.35	0.58	-0.35	0.58	-0.35
500	0.48	-0.55	0.56	-0.47	0.55	-0.47	0.55	-0.47
400	0.46	-0.54	0.65	-0.35	0.65	-0.35	0.65	-0.35
300	0.51	-0.52	0.85	-0.18	0.85	-0.18	0.85	-0.18
200	1.02	0.04	1.17	0.19	1.17	0.19	1.17	0.19
100	2.02	1.17	1.59	0.74	1.59	0.74	1.59	0.74
32	2.56	2.26	1.77	1.07	1.77	1.07	1.77	1.07
8	2.80	2.12	1.55	0.87	1.54	0.86	1.54	0.86

CASE DPG 5 GPAC OUTPUT DATA

AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	477.	478.	479.	480.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.66	-0.24	21.72	-0.18	21.71	-0.19	21.71	-0.19
900	22.05	-0.45	22.23	-0.27	22.22	-0.28	22.22	-0.28
800	22.55	-0.55	22.77	-0.33	22.76	-0.34	22.76	-0.34
700	23.05	-0.65	23.25	-0.45	23.24	-0.46	23.24	-0.46
600	23.53	-0.67	23.65	-0.55	23.65	-0.55	23.65	-0.55
500	24.06	-0.84	23.95	-0.95	23.95	-0.95	23.95	-0.95
400	24.63	-0.87	24.08	-1.42	24.08	-1.42	24.08	-1.42
300	24.95	-0.85	24.00	-1.80	23.99	-1.81	23.99	-1.81
200	24.43	-0.77	23.61	-1.59	23.61	-1.59	23.61	-1.59
100	22.79	1.19	22.82	1.22	22.82	1.22	22.82	1.22
32	20.91	3.91	21.63	4.63	21.64	4.64	21.63	4.63
8	19.20	3.90	20.46	5.16	20.46	5.16	20.47	5.17
2	15.44	1.84	18.35	4.75	18.34	4.74	18.35	4.75
0	11.65	XXXX	16.23	XXXX	16.21	XXXX	16.21	XXXX

VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.89	1.98	8.90	1.99	8.90	1.99	8.90	1.99
900	9.07	1.86	9.22	2.01	9.27	2.06	9.30	2.09
800	9.53	2.06	9.64	2.17	9.65	2.18	9.65	2.18
700	9.93	2.24	10.00	2.31	10.00	2.31	10.00	2.31
600	10.27	2.31	10.18	2.22	10.08	2.12	10.02	2.06
500	10.62	2.37	10.51	2.26	10.52	2.27	10.51	2.26
400	11.04	2.56	10.67	2.19	10.66	2.18	10.64	2.16
300	11.35	2.57	10.73	1.95	10.73	1.95	10.73	1.95
200	10.45	1.66	10.72	1.43	10.71	1.42	10.70	1.41
100	9.42	0.20	10.74	1.52	10.76	1.54	10.77	1.55
32	9.91	-0.89	11.02	0.22	11.02	0.22	11.02	0.22
8	10.05	-0.45	11.74	1.24	11.74	1.24	11.73	1.23
2	11.43	XXXX	13.57	XXXX	13.57	XXXX	13.57	XXXX
0	12.81	XXXX	15.41	XXXX	15.41	XXXX	15.42	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	477.	478.	479.	480.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LFVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	12.84	1.64	21.44	10.24	21.44	10.24	21.44	10.24
-0.125	28.70	-0.80	29.44	-0.06	29.44	-0.06	29.44	-0.06
-0.250	30.29	0.19	30.31	0.21	30.31	0.21	30.30	0.20
-0.500	28.01	0.01	28.01	0.01	28.00	0.00	28.01	0.01
-1.000	24.01	-0.09	24.02	-0.08	24.01	-0.09	24.02	-0.08
-2.000	23.90	0.00	30.08	0.58	30.08	0.58	30.08	0.58

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.93	XXXX	4.33	XXXX	4.33	XXXX	4.32	XXXX
8	2.87	1.84	1.64	0.61	1.64	0.61	1.64	0.61
2	1.44	0.41	0.83	-0.20	0.82	-0.20	0.82	-0.20

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.98	0.28	0.99	0.29	0.97	0.27	0.97	0.27
R(N)	-0.48	XXXX	-0.96	XXXX	-0.96	XXXX	-0.96	XXXX
Q(C,0)	-0.54	XXXX	-0.72	XXXX	-0.72	XXXX	-0.72	XXXX
Q(E,0)	0.40	XXXX	1.26	XXXX	1.25	XXXX	1.25	XXXX
Q(S,0)	-0.34	XXXX	-1.49	XXXX	-1.50	XXXX	-1.50	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	1.02	XXXX	2.02	XXXX	2.06	XXXX	2.08	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.10	XXXX	0.70	XXXX	0.80	XXXX	0.70	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KIOM SQ/SEC)	2169	2219	2219	2224
TAPE NO.	481.	482.	483.	484.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.29	-1.55	-0.02	-1.57	-0.02	-1.55	0.00
1000	-0.63	0.39	-0.67	0.36	-1.18	-0.15	-1.17	-0.14
900	-1.13	-0.10	-1.17	-0.14	-1.20	-0.17	-1.20	-0.17
800	-1.39	-0.38	-1.47	-0.46	-1.47	-0.46	-1.47	-0.46
700	-1.20	-0.36	-1.38	-0.54	-1.38	-0.54	-1.38	-0.54
600	-1.04	-0.59	-1.12	-0.67	-1.12	-0.67	-1.12	-0.67
500	-0.82	-0.94	-0.88	-0.90	-0.88	-0.90	-0.88	-0.90
400	-0.65	-0.88	-0.70	-0.93	-0.70	-0.93	-0.70	-0.93
300	-0.58	-0.63	-0.63	-0.67	-0.63	-0.67	-0.63	-0.67
200	-0.56	-0.26	-0.61	-0.31	-0.61	-0.31	-0.61	-0.31
100	-0.61	-0.03	-0.65	-0.07	-0.65	-0.07	-0.65	-0.07
32	-0.61	0.14	-0.66	0.09	-0.66	0.09	-0.65	0.10
8	-0.55	0.23	-0.59	0.19	-0.58	0.20	-0.58	0.20

V COMPONENT (M/SEC)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.30	1.84	-0.01	1.84	-0.01	1.84	-0.01
1000	1.47	1.42	1.52	1.47	1.60	1.55	1.61	1.56
900	1.38	1.33	1.44	1.39	1.44	1.39	1.44	1.39
800	1.06	1.85	1.13	0.92	1.12	0.91	1.13	0.92
700	0.72	0.13	0.79	0.20	0.79	0.20	0.79	0.20
600	0.57	-0.36	0.64	-0.29	0.63	-0.30	0.64	-0.29
500	0.55	-0.47	0.61	-0.41	0.61	-0.42	0.61	-0.41
400	0.64	-0.36	0.71	-0.29	0.70	-0.30	0.71	-0.29
300	0.95	-0.18	0.91	-0.12	0.90	-0.13	0.91	-0.12
200	1.17	0.19	1.22	0.24	1.22	0.24	1.22	0.24
100	1.59	0.74	1.64	0.74	1.64	0.79	1.64	0.79
32	1.77	1.07	1.92	1.12	1.82	1.12	1.82	1.12
8	1.54	0.96	1.59	0.90	1.58	0.90	1.58	0.90

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	481.	482.	483.	484.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.72	-0.18	21.72	-0.18	21.71	-0.19	21.71	-0.19
900	22.23	-0.27	22.23	-0.27	22.23	-0.27	22.22	-0.28
800	22.76	-0.34	22.77	-0.33	22.77	-0.33	22.76	-0.34
700	23.24	-0.46	23.24	-0.46	23.24	-0.46	23.24	-0.46
600	23.64	-0.56	23.65	-0.55	23.64	-0.56	23.64	-0.56
500	23.95	-0.95	23.95	-0.95	23.95	-0.95	23.94	-0.96
400	24.08	-1.42	24.08	-1.42	24.07	-1.43	24.08	-1.42
300	23.99	-1.81	23.99	-1.81	23.99	-1.81	23.99	-1.81
200	23.61	-1.59	23.61	-1.59	23.61	-1.59	23.60	-1.60
100	22.82	1.22	22.82	1.22	22.82	1.22	22.82	1.22
32	21.63	4.63	21.64	4.64	21.64	4.64	21.63	4.63
8	20.47	5.17	20.47	5.17	20.46	5.16	20.46	5.16
2	18.35	4.75	18.35	4.75	18.34	4.74	18.34	4.74
0	16.21	XXXX	16.21	XXXX	16.21	XXXX	16.21	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.87	1.96	8.91	2.00	8.91	2.00	8.92	2.01
900	9.33	2.12	9.17	1.95	9.17	1.96	9.24	2.02
800	9.63	2.16	9.64	2.17	9.64	2.17	9.65	2.10
700	9.98	2.29	9.99	2.31	9.98	2.29	10.01	2.32
600	9.92	1.96	10.28	2.32	10.28	2.32	10.16	2.20
500	10.51	2.26	10.51	2.26	10.51	2.26	10.51	2.26
400	10.66	2.18	10.66	2.18	10.65	2.17	10.66	2.18
300	10.74	1.96	10.72	1.94	10.72	1.94	10.72	1.94
200	10.71	1.42	10.72	1.43	10.72	1.43	10.72	1.43
100	10.71	1.49	10.72	1.50	10.72	1.50	10.75	1.53
32	11.03	0.23	11.03	0.23	11.03	0.23	11.03	0.23
8	11.74	1.24	11.74	1.24	11.74	1.24	11.74	1.24
2	13.57	XXXX	13.55	XXXX	13.55	XXXX	13.55	XXXX
0	15.42	XXXX	15.38	XXXX	15.37	XXXX	15.37	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	481.	482.	483.	484.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.44	10.24	21.44	10.24	21.43	10.23	21.44	10.24
-0.125	29.44	-0.06	29.44	-0.06	29.44	-0.06	29.44	-0.06
-0.250	30.30	0.20	30.29	0.19	30.30	0.20	30.29	0.19
-0.500	28.01	0.01	28.01	0.01	28.01	0.01	27.99	-0.01
-1.000	24.01	-0.09	24.02	-0.08	24.01	-0.09	24.02	-0.08
-2.000	30.08	0.58	30.09	0.59	30.08	0.58	30.07	0.57

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
9'	4.33	XXXX	4.35	XXXX	4.34	XXXX	4.34	XXXX
8	1.64	0.61	1.69	0.66	1.64	0.65	1.69	0.65
2	0.62	-0.20	0.85	-0.18	0.85	-0.18	0.85	-0.18

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.97	0.27	0.97	0.27	0.97	0.27	0.97	0.27
R(N)	-0.96	XXXX	-0.96	XXXX	-0.96	XXXX	-0.96	XXXX
Q(C,C)	-0.72	XXXX	-0.73	XXXX	-0.73	XXXX	-0.74	XXXX
Q(E,C)	1.25	XXXX	1.27	XXXX	1.27	XXXX	1.26	XXXX
Q(S,C)	-1.50	XXXX	-1.49	XXXX	-1.50	XXXX	-1.50	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup>)X10<sup>6</sup>

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	2.16	XXXX	2.22	XXXX	2.22	XXXX	2.20	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM<sup>2</sup>)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	0.70	XXXX	0.70	XXXX	0.70	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	2214	3204	3204	3204
TAPE NO.	485.	486.	487.	488.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.55	-0.00	-1.55	-0.00	-1.55	-0.00	-1.55	-0.00
1000	-0.68	0.35	-0.69	0.34	-1.18	-0.15	-1.18	-0.15
900	-1.17	-0.14	-1.19	-0.16	-1.22	-0.19	-1.22	-0.19
800	-1.47	-0.46	-1.41	-0.47	-1.42	-0.41	-1.42	-0.41
700	-1.37	-0.53	-1.31	-0.47	-1.31	-0.47	-1.31	-0.47
600	-1.12	-0.67	-1.09	-0.64	-1.09	-0.64	-1.09	-0.64
500	-0.88	-0.40	-0.99	-0.92	-0.89	-0.91	-0.89	-0.91
400	-0.70	-0.93	-0.74	-0.97	-0.74	-0.97	-0.74	-0.97
300	-0.63	-0.67	-0.66	-0.71	-0.65	-0.71	-0.66	-0.71
200	-0.61	-0.31	-0.63	-0.33	-0.63	-0.33	-0.63	-0.32
100	-0.65	-0.07	-0.64	-0.06	-0.64	-0.06	-0.64	-0.06
32	-0.66	0.09	-0.62	0.13	-0.62	0.13	-0.63	0.13
8	-0.59	0.19	-0.54	0.24	-0.54	0.24	-0.54	0.24

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.84	-0.01	1.84	-0.01	1.85	-0.00	1.84	-0.01
1000	1.52	1.47	1.52	1.47	1.60	1.55	1.60	1.55
900	1.43	1.38	1.41	1.35	1.41	1.36	1.40	1.35
800	1.13	0.92	1.09	0.98	1.09	0.98	1.09	0.98
700	0.88	0.21	0.81	0.22	0.81	0.22	0.81	0.22
600	0.64	-0.29	0.68	-0.25	0.68	-0.25	0.68	-0.25
500	0.61	-0.41	0.67	-0.36	0.67	-0.36	0.66	-0.36
400	0.71	-0.29	0.77	-0.23	0.77	-0.23	0.76	-0.24
300	0.91	-1.12	0.95	-0.07	0.95	-0.07	0.95	-0.07
200	1.22	0.24	1.21	0.23	1.21	0.23	1.21	0.23
100	1.64	0.79	1.51	0.66	1.51	0.66	1.51	0.66
32	1.82	1.12	1.60	0.90	1.60	0.90	1.60	0.90
8	1.58	0.90	1.37	0.69	1.39	0.69	1.38	0.69

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	485.	486.	487.	488.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.71	-0.19	21.74	-0.16	21.73	-0.17	21.73	-0.17
900	22.22	-0.28	22.28	-0.22	22.28	-0.22	22.28	-0.22
800	22.76	-0.34	22.83	-0.27	22.82	-0.28	22.83	-0.27
700	23.25	-0.45	23.28	-0.42	23.29	-0.42	23.28	-0.42
600	23.64	-0.56	23.63	-0.57	23.63	-0.57	23.63	-0.57
500	23.94	-0.96	23.84	-1.06	23.84	-1.06	23.85	-1.05
400	24.07	-1.43	23.91	-1.59	23.90	-1.60	23.90	-1.60
300	23.90	-1.90	23.79	-2.01	23.79	-2.01	23.79	-2.01
200	23.59	-1.61	23.44	-1.76	23.44	-1.76	23.44	-1.76
100	22.82	1.22	22.76	1.16	22.76	1.16	22.76	1.16
32	21.64	4.64	21.71	4.71	21.70	4.70	21.70	4.70
8	20.47	5.17	20.63	5.33	20.61	5.31	20.61	5.31
2	18.34	4.74	18.50	4.90	18.49	4.89	18.49	4.89
0	16.20	XXXX	16.36	XXXX	16.36	XXXX	16.35	XXXX

## VAPOR PRESSURE (MBR)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.88	1.97	8.92	2.01	8.93	2.02	8.92	2.01
900	9.29	2.08	9.19	1.98	9.21	2.00	9.20	1.99
800	9.65	2.18	9.68	2.21	9.69	2.21	9.67	2.20
700	10.00	2.31	10.07	2.31	10.07	2.31	10.00	2.31
600	10.03	2.07	10.26	2.30	10.26	2.30	10.25	2.29
500	10.52	2.27	10.46	2.21	10.46	2.21	10.46	2.21
400	10.66	2.18	10.61	2.13	10.61	2.13	10.59	2.11
300	10.73	1.95	10.69	1.91	10.68	1.90	10.68	1.90
200	10.71	1.42	10.76	1.47	10.76	1.47	10.76	1.47
100	10.74	1.57	10.89	1.67	10.89	1.67	10.89	1.67
32	11.04	0.24	11.23	0.43	11.22	0.42	11.22	0.42
8	11.74	1.24	11.82	1.32	11.83	1.33	11.83	1.33
2	13.54	XXXX	13.35	XXXX	13.36	XXXX	13.36	XXXX
0	15.35	XXXX	14.90	XXXX	14.90	XXXX	14.90	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	485.	486.	487.	488.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.44	10.24	21.41	10.21	21.40	10.20	21.40	10.20
-0.125	29.44	-0.06	29.44	-0.06	29.43	-0.07	29.43	-0.07
-0.250	30.29	0.19	30.30	0.20	30.29	0.19	30.38	0.28
-0.500	29.00	0.00	27.99	-0.01	28.00	0.00	27.99	-0.01
-1.000	24.01	-0.09	24.01	-0.09	24.02	-0.08	24.02	-0.08
-2.000	30.08	0.58	30.07	0.57	30.08	0.58	30.08	0.58

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.34	XXXX	4.26	XXXX	4.26	XXXX	4.26	XXXX
8	1.69	0.66	1.47	0.44	1.48	0.44	1.48	0.44
2	0.85	-0.18	0.74	-0.29	0.74	-0.28	0.74	-0.28

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.97	0.27	0.97	0.27	0.97	0.27	0.97	0.27
R(N)	-0.96	XXXX	-0.96	XXXX	-0.96	XXXX	-0.96	XXXX
Q(C,D)	-0.73	XXXX	-1.36	XXXX	-1.36	XXXX	-1.06	XXXX
Q(E,D)	1.27	XXXX	1.54	XXXX	1.54	XXXX	1.53	XXXX
Q(S,D)	-1.50	XXXX	-1.44	XXXX	-1.44	XXXX	-1.44	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	2.22	XXXX	3.14	XXXX	3.14	XXXX	3.14	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	0.90	XXXX	(.8)	XXXX	0.80	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(CM SQ/SEC)	3204	3204	3204	3204
TAPE NO.	489.	490.	491.	492.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.55	-0.00	-1.84	-0.29	-1.84	-0.29	-1.84	-0.29
1000	-0.69	0.34	-0.65	0.38	-1.22	-0.19	-1.22	-0.19
900	-1.19	-0.16	-1.15	-0.12	-1.18	-0.15	-1.18	-0.15
800	-1.41	-0.40	-1.37	-0.36	-1.38	-0.36	-1.38	-0.36
700	-1.31	-0.47	-1.27	-0.43	-1.26	-0.42	-1.27	-0.43
600	-1.09	-0.64	-1.05	-0.60	-1.05	-0.60	-1.05	-0.60
500	-0.89	-0.91	-0.85	-0.87	-0.85	-0.87	-0.85	-0.87
400	-0.74	-0.97	-0.69	-0.92	-0.70	-0.93	-0.69	-0.92
300	-0.66	-0.71	-0.61	-0.66	-0.62	-0.67	-0.62	-0.67
200	-0.63	-0.33	-0.58	-0.28	-0.58	-0.28	-0.59	-0.29
100	-0.64	-0.06	-0.60	-0.02	-0.60	-0.02	-0.59	-0.01
32	-0.63	0.13	-0.58	0.17	-0.58	0.17	-0.58	0.17
8	-0.54	0.24	-0.50	0.28	-0.50	0.28	-0.50	0.28

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.84	-1.01	1.55	-0.30	1.54	-0.31	1.55	-0.30
1000	1.51	1.46	1.46	1.41	1.49	1.44	1.48	1.43
900	1.40	1.35	1.35	1.30	1.35	1.30	1.35	1.30
800	1.09	0.88	1.03	0.92	1.03	0.82	1.03	0.82
700	0.81	0.22	0.76	0.17	0.75	0.16	0.76	0.17
600	0.68	-0.25	0.63	-0.31	0.63	-0.31	0.63	-0.30
500	0.47	-0.36	0.61	-0.41	0.61	-0.41	0.62	-0.41
400	0.76	-0.24	0.71	-0.29	0.71	-0.29	0.71	-0.29
300	0.95	-0.07	0.89	-0.13	0.90	-0.13	0.90	-0.13
200	1.21	0.23	1.16	0.18	1.16	0.18	1.15	0.17
100	1.51	0.66	1.46	0.61	1.46	0.61	1.46	0.61
32	1.60	0.90	1.55	0.85	1.54	0.84	1.55	0.85
8	1.38	0.69	1.33	0.65	1.33	0.65	1.33	0.65

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	489.	490.	491.	492.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.73	-0.17	21.73	-0.17	21.74	-0.16	21.73	-0.17
900	22.28	-0.22	22.28	-0.22	22.29	-0.21	22.28	-0.22
800	22.83	-0.27	22.83	-0.27	22.82	-0.28	22.83	-0.27
700	23.28	-0.42	23.28	-0.42	23.28	-0.42	23.28	-0.42
600	23.63	-0.57	23.63	-0.57	23.63	-0.57	23.63	-0.57
500	23.85	-1.05	23.85	-1.05	23.85	-1.05	23.84	-1.06
400	23.90	-1.60	23.91	-1.59	23.91	-1.59	23.90	-1.60
300	23.79	-2.01	23.79	-2.01	23.79	-2.01	23.79	-2.01
20	23.44	-1.76	23.44	-1.76	23.44	-1.76	23.45	-1.75
10	22.76	1.16	22.76	1.16	22.77	1.17	22.76	1.16
32	21.71	4.71	21.71	4.71	21.71	4.71	21.70	4.70
8	20.61	5.31	20.61	5.31	20.61	5.31	20.61	5.31
2	18.49	4.89	18.49	4.89	18.49	4.89	18.49	4.89
0	16.35	XXXX	16.35	XXXX	16.35	XXXX	16.36	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.92	2.01	8.92	2.01	8.92	2.01	8.93	2.02
900	9.20	1.99	9.19	1.98	9.20	1.99	9.21	2.00
800	9.67	2.20	9.67	2.20	9.66	2.19	9.67	2.20
700	10.00	2.31	10.00	2.31	10.00	2.31	10.01	2.32
600	10.25	2.29	10.25	2.29	10.26	2.30	10.26	2.30
500	10.46	2.21	10.45	2.20	10.45	2.20	10.46	2.21
400	10.60	2.12	10.59	2.11	10.59	2.11	10.60	2.12
300	10.67	1.89	10.58	1.90	10.68	1.90	10.69	1.91
200	10.76	1.47	10.76	1.47	10.76	1.47	10.77	1.48
100	10.89	1.67	10.89	1.67	10.89	1.67	10.89	1.67
32	11.22	1.42	11.22	0.42	11.22	0.42	11.22	0.42
8	11.43	1.33	11.43	1.33	11.43	1.33	11.43	1.33
2	13.36	XXXX	13.35	XXXX	13.36	XXXX	13.36	XXXX
0	14.00	XXXX	14.89	XXXX	14.97	XXXX	14.90	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	489.	490.	491.	492.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.41	10.21	21.40	10.20	21.40	10.20	21.41	10.21
-0.125	29.43	-0.07	29.43	-0.07	29.43	-0.07	29.43	-0.07
-0.250	30.29	0.19	30.29	0.19	30.29	0.19	30.29	0.19
-0.500	27.99	-0.01	27.99	-0.01	27.99	-0.01	27.99	-0.01
-1.000	24.01	-0.09	24.01	-0.09	24.01	-0.09	24.02	-0.08
-2.000	30.08	0.58	30.07	0.57	30.07	0.57	30.08	0.58

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.26	XXXX	4.24	XXXX	4.24	XXXX	4.24	XXXX
8	1.48	0.44	1.42	0.39	1.42	0.39	1.42	0.39
2	0.74	-0.28	0.71	-0.31	0.71	-0.31	0.71	-0.31

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.97	0.27	0.97	0.27	0.98	0.28	0.97	0.27
R(N)	+0.98	XXXX	-0.96	XXXX	-0.96	XXXX	-0.96	XXXX
Q(C,0)	-1.06	XXXX	-1.06	XXXX	-1.05	XXXX	-1.06	XXXX
Q(E,0)	1.54	XXXX	1.54	XXXX	1.54	XXXX	1.54	XXXX
Q(S,0)	-1.44	XXXX	-1.44	XXXX	-1.44	XXXX	-1.44	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup> SEC)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.14	XXXX	3.12	XXXX	3.12	XXXX	3.12	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM<sup>2</sup> SEC)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.80	XXXX	0.80	XXXX	0.80	XXXX	0.80	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

KI CM SQ/SEC)	3204	3204	3204	3204
TAPE NO.	493.	494.	495.	496.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.29	-1.84	-0.29	-1.84	-0.29	-1.84	-0.29
1000	-0.65	0.38	-0.65	0.38	-1.22	-0.19	-1.22	-0.19
900	-1.15	-0.13	-1.15	-0.13	-1.18	-0.15	-1.18	-0.15
800	-1.38	-0.36	-1.37	-0.36	-1.38	-0.36	-1.38	-0.36
700	-1.27	-0.43	-1.27	-0.43	-1.27	-0.43	-1.27	-0.43
600	-1.05	-0.60	-1.05	-0.60	-1.05	-0.60	-1.06	-0.61
500	-0.85	-0.87	-0.85	-0.87	-0.85	-0.87	-0.85	-0.87
400	-0.69	-0.92	-0.70	-0.93	-0.69	-0.92	-0.69	-0.92
300	-0.62	-0.57	-0.62	-0.67	-0.61	-0.66	-0.63	-0.67
200	-0.58	-0.28	-0.59	-0.29	-0.58	-0.28	-0.59	-0.29
100	-0.60	-0.02	-0.60	-0.02	-0.60	-0.02	-0.60	-0.02
32	-0.58	0.17	-0.58	0.17	-0.58	0.17	-0.58	0.17
8	-0.50	0.28	-0.50	0.28	-0.50	0.28	-0.50	0.28

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.30	1.55	-0.30	1.55	-0.30	1.55	-0.30
1000	1.46	1.41	1.46	1.41	1.44	1.44	1.48	1.43
900	1.35	1.30	1.35	1.30	1.35	1.30	1.35	1.30
800	1.03	0.82	1.03	0.82	1.04	0.83	1.03	0.82
700	0.76	0.17	0.75	0.16	0.76	0.17	0.76	0.17
600	0.63	-0.30	0.63	-0.30	0.53	-0.30	0.63	-0.30
500	0.61	-0.41	0.62	-0.41	0.62	-0.41	0.61	-0.41
400	0.71	-0.29	0.71	-0.29	0.71	-0.29	0.71	-0.29
300	0.90	-0.13	0.89	-0.13	0.90	-0.13	0.89	-0.13
200	1.16	0.18	1.16	0.18	1.16	0.18	1.16	0.18
100	1.46	0.61	1.46	0.61	1.46	0.61	1.46	0.61
32	1.55	0.85	1.55	0.85	1.55	0.85	1.55	0.85
8	1.32	0.64	1.33	0.65	1.33	0.65	1.33	0.65

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO. INTERVAL	493. 1.00HR	494. 1.00HR	495. 1.00HR	496. 1.00HR
----------------------	----------------	----------------	----------------	----------------

## AIR TEMPERATURE (DEG C)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.73	-0.17	21.73	-0.17	21.73	-0.17	21.73	-0.17
900	22.28	-0.22	22.28	-0.22	22.28	-0.22	22.29	-0.21
800	22.82	-0.28	22.83	-0.27	22.83	-0.27	22.83	-0.27
700	23.28	-0.42	23.28	-0.42	23.28	-0.42	23.28	-0.42
600	23.63	-0.57	23.62	-0.58	23.62	-0.58	23.62	-0.58
500	23.84	-1.06	23.84	-1.06	23.84	-1.06	23.84	-1.06
400	23.90	-1.60	23.90	-1.60	23.89	-1.61	23.88	-1.62
300	23.79	-2.01	23.75	-2.05	23.74	-2.06	23.75	-2.05
200	23.44	-1.76	23.34	-1.86	23.33	-1.87	23.33	-1.87
100	22.76	1.16	22.51	0.91	22.51	0.91	22.51	0.91
32	21.71	4.71	21.10	4.10	21.09	4.09	21.10	4.10
8	20.61	5.31	19.54	4.24	19.53	4.23	19.54	4.24
2	18.49	4.89	16.43	2.93	16.43	2.83	16.43	2.83
0	16.35	XXXX	13.31	XXXX	13.31	XXXX	13.31	XXXX

## VAPOR PRESSURE (MB)

LEVEL (M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.92	2.01	8.92	2.01	8.93	2.02	8.92	2.01
900	9.20	1.99	9.19	1.98	9.21	2.00	9.19	1.98
800	9.67	2.20	9.62	2.15	9.68	2.21	9.66	2.19
700	10.00	2.31	10.03	2.31	10.00	2.31	10.00	2.31
600	10.76	2.30	10.26	2.30	10.26	2.30	10.25	2.29
500	10.46	2.21	10.45	2.20	10.45	2.20	10.44	2.19
400	10.60	2.12	10.54	2.10	10.58	2.10	10.58	2.10
300	10.68	1.90	10.65	1.87	10.65	1.87	10.64	1.86
200	10.76	1.47	10.70	1.41	10.71	1.42	10.71	1.42
100	10.89	1.67	10.74	1.52	10.74	1.52	10.74	1.52
32	11.22	0.42	10.89	0.29	10.88	0.28	10.89	0.28
8	11.83	1.33	11.22	0.72	11.21	0.71	11.21	0.71
2	13.36	XXXX	12.14	XXXX	12.13	XXXX	12.13	XXXX
0	14.90	XXXX	13.06	XXXX	13.05	XXXX	13.05	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	493.	494.	495.	496.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	21.39	10.19	13.45	2.25	13.45	2.25	13.45	2.25
-0.125	29.43	-7.07	28.72	-0.78	28.71	-0.79	28.72	-0.78
-0.250	30.29	0.19	30.27	0.17	30.28	0.18	30.27	0.17
-0.500	28.00	0.00	27.99	-0.01	27.99	-0.01	27.99	-0.01
-1.000	24.02	-0.08	24.00	-0.10	24.00	-0.10	24.01	-0.09
-2.000	30.08	0.58	23.90	0.00	23.90	0.00	23.90	0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8'	4.24	XXXX	4.24	XXXX	4.24	XXXX	4.24	XXXX
8	1.42	0.38	1.42	0.39	1.42	0.39	1.42	0.39
2	0.71	-0.31	0.71	-0.31	0.71	-0.31	0.71	-0.31

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.97	0.27	0.97	0.27	0.97	0.27	0.98	0.28
R(N)	-0.96	XXXX	-0.67	XXXX	-0.67	XXXX	-0.67	XXXX
Q(C,0)	-1.06	XXXX	-1.55	XXXX	-1.55	XXXX	-1.55	XXXX
Q(E,0)	1.54	XXXX	0.92	XXXX	0.92	XXXX	0.92	XXXX
Q(S,0)	-1.44	XXXX	-0.74	XXXX	-0.74	XXXX	-0.03	XXXX

SURFACE SHEAR STRESS (DYNES/CM<sup>2</sup>)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.12	XXXX	3.12	XXXX	3.12	XXXX	3.12	XXXX

INTEGRATED EVAPOTRANSPIRATION (CM/CM<sup>2</sup>)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.90	XXXX	0.50	XXXX	0.50	XXXX	0.40	XXXX

CASE DPG 5 GPAC OUTPUT DATA

VELOCITY COMPONENTS

K(M SQ/SEC)	3204	3199	3204	3204
TAPE NO.	497.	498.	499.	500.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

U COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	-1.84	-0.29	-1.55	-0.00	-1.56	-0.01	-1.55	-0.00
1000	-0.65	0.38	-0.69	0.34	-1.18	-0.15	-1.18	-0.15
900	-1.14	-0.11	-1.19	-0.16	-1.22	-0.19	-1.22	-0.19
800	-1.38	-0.36	-1.41	-0.40	-1.41	-0.40	-1.42	-0.41
700	-1.27	-0.43	-1.31	-0.47	-1.31	-0.47	-1.31	-0.47
600	-1.05	-0.60	-1.09	-0.64	-1.09	-0.64	-1.09	-0.64
500	-0.85	-0.87	-0.89	-0.91	-0.89	-0.91	-0.89	-0.91
400	-0.69	-0.92	-0.73	-0.96	-0.74	-0.97	-0.74	-0.97
300	-0.61	-0.66	-0.66	-0.71	-0.66	-0.71	-0.66	-0.71
200	-0.58	-0.28	-0.63	-0.33	-0.63	-0.33	-0.63	-0.33
100	-0.60	-0.02	-0.64	-0.06	-0.64	-0.06	-0.64	-0.06
32	-0.58	0.17	-0.63	0.13	-0.62	0.13	-0.62	0.13
8	-0.50	0.28	-0.54	0.24	-0.54	0.24	-0.54	0.24

V COMPONENT (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
GEO	1.55	-0.30	1.84	-0.01	1.84	-0.01	1.84	-0.01
1000	1.46	1.41	1.52	1.47	1.59	1.54	1.60	1.55
900	1.35	1.30	1.40	1.35	1.40	1.35	1.41	1.36
800	1.03	0.82	1.09	0.88	1.08	0.87	1.09	0.88
700	0.75	0.16	0.81	0.22	0.81	0.22	0.81	0.22
600	0.63	-1.31	0.68	-0.25	0.68	-0.25	0.68	-0.25
500	0.61	-0.41	0.67	-0.36	0.67	-0.36	0.67	-0.36
400	0.71	-0.29	0.76	-0.24	0.76	-0.24	0.77	-0.23
300	0.90	-0.13	0.95	-0.07	0.95	-0.07	0.95	-0.07
200	1.15	0.17	1.21	0.23	1.21	0.23	1.21	0.23
100	1.46	0.61	1.51	0.66	1.51	0.66	1.51	0.66
32	1.54	0.84	1.60	0.90	1.60	0.90	1.60	0.90
8	1.33	0.65	1.38	0.69	1.38	0.69	1.38	0.69

## CASE DPG 5 GPAC OUTPUT DATA

## AIR TEMPERATURE AND VAPOR PRESSURE

TAPE NO.	497.	498.	499.	500.
INTERVAL	1.00HHR	1.00HHR	1.00HHR	1.00HHR

## AIR TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	21.73	-0.17	21.73	-0.17	21.73	-0.17	21.73	-0.17
900	22.28	-0.22	22.28	-0.22	22.28	-0.22	22.28	-0.22
800	22.83	-0.27	22.82	-0.28	22.83	-0.27	22.83	-0.27
700	23.28	-0.42	23.28	-0.42	23.28	-0.42	23.28	-0.42
600	23.62	-0.58	23.62	-0.58	23.63	-0.57	23.63	-0.57
500	23.85	-1.05	23.84	-1.06	23.84	-1.06	23.84	-1.06
400	23.88	-1.62	23.89	-1.61	23.88	-1.62	23.89	-1.61
300	23.74	-2.06	23.75	-2.05	23.75	-2.05	23.74	-2.06
200	23.34	-1.86	23.33	-1.97	23.33	-1.87	23.33	-1.97
100	22.51	0.91	22.51	0.91	22.51	0.91	22.51	0.91
32	21.10	4.10	21.10	4.10	21.11	4.11	21.11	4.11
8	19.54	4.24	19.53	4.23	19.53	4.23	19.53	4.23
2	16.43	2.83	16.42	2.82	16.43	2.83	16.41	2.81
0	13.31	XXXX	13.30	XXXX	13.31	XXXX	13.28	XXXX

## VAPOR PRESSURE (MB)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
1000	8.92	2.01	8.92	2.01	8.92	2.01	8.93	2.02
900	9.19	1.98	9.20	1.99	9.19	1.98	9.21	2.00
800	9.67	2.20	9.67	2.20	9.67	2.20	9.67	2.20
700	10.00	2.31	10.00	2.31	10.00	2.31	10.01	2.02
600	10.25	2.29	10.25	2.29	10.25	2.29	10.26	2.30
500	10.45	2.20	10.45	2.20	10.45	2.20	10.46	2.21
400	10.58	2.10	10.58	2.10	10.58	2.10	10.59	2.11
300	10.64	1.86	10.65	1.87	10.64	1.86	10.65	1.87
200	10.69	1.40	10.70	1.41	10.70	1.41	10.70	1.41
100	10.74	1.52	10.73	1.51	10.73	1.51	10.74	1.52
32	10.88	0.08	10.88	0.08	10.88	0.08	10.88	0.08
8	11.22	0.72	11.21	0.71	11.22	0.72	11.22	0.72
2	12.14	XXXX	12.13	XXXX	12.14	XXXX	12.13	XXXX
0	13.06	XXXX	13.05	XXXX	13.06	XXXX	13.05	XXXX

CASE DPG 5 GPAC OUTPUT DATA

MISCELLANEOUS VARIABLES

TAPE NO.	497.	498.	499.	500.
INTERVAL	1.00HR	1.00HR	1.00HR	1.00HR

SOIL TEMPERATURE (DEG C)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
-0.000	13.45	2.25	13.44	2.24	13.45	2.25	13.44	2.24
-0.125	28.72	-0.78	28.72	-0.78	28.72	-0.78	28.72	-0.78
-0.250	30.27	0.17	30.27	0.17	30.28	0.18	30.27	0.17
-0.500	27.99	-0.01	27.99	-0.01	27.99	-0.01	27.99	-0.01
-1.000	24.00	-0.10	24.01	-0.09	24.00	-0.10	24.01	-0.09
-2.000	23.90	0.00	23.90	0.00	23.90	0.00	23.90	0.00

WIND SPEED (M/SEC)

LEVEL(M)	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
8	4.25	XXXX	4.26	XXXX	4.26	XXXX	4.26	XXXX
9	1.42	0.39	1.48	0.44	1.48	0.44	1.48	0.44
2	0.71	-0.31	0.74	-0.29	0.74	-0.29	0.74	-0.28

SURFACE ENERGY TERMS (LY/SEC)X1000

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
S(D)	0.98	0.28	0.97	0.27	0.98	0.28	0.96	0.26
R(N)	-0.67	XXXX	-0.66	XXXX	-0.67	XXXX	-0.68	XXXX
Q(C,O)	-1.55	XXXX	-1.55	XXXX	-1.55	XXXX	-1.55	XXXX
Q(E,C)	0.92	XXXX	0.92	XXXX	0.92	XXXX	0.92	XXXX
Q(S,G)	-0.04	XXXX	-0.04	XXXX	-0.04	XXXX	-0.04	XXXX

SURFACE SHEAR STRESS (DYNES/CM SQ)X10

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
TAU	3.12	XXXX	3.14	XXXX	3.14	XXXX	3.12	XXXX

INTEGRATED EVAPOTRANSPIRATION (GM/CM SQ)X100

PARAMETER	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF	GPAC	DIFF
E	0.40	XXXX	0.50	XXXX	0.40	XXXX	0.40	XXXX

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 5

12.00 HOUR

TAPE NO.	U (M/SFC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	10.44	4.50	26.65	10.17	30.49
PFRSIST DIFF	9.70	5.12	5.26	1.39	13.40
GPAC DIFF	371.	10.30	7.23	3.51	6.01
GPAC DIFF	372.	10.22	6.73	3.50	5.91
GPAC DIFF	373.	10.10	6.87	3.52	5.69
GPAC DIFF	374.	10.07	7.39	3.53	5.69
GPAC DIFF	375.	7.94	4.05	3.39	5.74
GPAC DIFF	376.	8.05	4.10	3.39	5.74
GPAC DIFF	377.	8.12	4.10	3.35	6.31
GPAC DIFF	378.	8.03	4.04	3.35	6.35
GPAC DIFF	379.	8.02	4.04	3.26	6.75
GPAC DIFF	380.	8.11	4.10	3.26	6.73
GPAC DIFF	381.	8.04	4.10	3.28	6.16
GPAC DIFF	382.	7.92	4.05	3.29	6.16
GPAC DIFF	383.	10.74	7.40	3.42	6.10
GPAC DIFF	384.	10.07	6.86	3.42	6.10
GPAC DIFF	385.	10.20	6.73	3.40	6.32
GPAC DIFF	386.	10.25	7.22	3.40	6.43
GPAC DIFF	387.	11.62	8.44	2.33	7.02
GPAC DIFF	388.	11.58	8.19	2.33	6.95
GPAC DIFF	389.	11.40	8.43	2.34	6.74
GPAC DIFF	390.	11.38	8.70	2.34	6.74
GPAC DIFF	391.	7.59	4.13	2.35	5.74
GPAC DIFF	392.	8.04	4.18	2.35	6.74
GPAC DIFF	393.	8.17	4.17	2.30	7.34
CPAC DIFF	394.	8.10	4.12	2.30	7.36
GPAC DIFF	395.	8.13	4.12	2.53	6.92
GPAC DIFF	396.	8.17	4.18	2.52	6.90
GPAC DIFF	397.	8.05	4.18	2.57	6.30
GPAC DIFF	398.	7.99	4.12	2.57	6.29
GPAC DIFF	399.	11.34	8.71	2.57	6.29
GPAC DIFF	400.	11.40	8.43	2.57	6.30
GPAC DIFF	401.	11.58	8.19	2.55	6.51

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 5

6.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	1.56	0.85	26.48	8.14	32.87
PERSIST DIFF	1.50	1.96	5.36	2.78	17.74
GPAC DIFF	404.	3.25	2.69	3.37	4.76
GPAC DIFF	405.	3.14	2.74	3.37	4.73
GPAC DIFF	406.	3.30	2.63	3.39	4.46
GPAC DIFF	407.	3.19	2.69	3.33	4.45
GPAC DIFF	408.	2.36	1.12	3.38	4.45
GPAC DIFF	409.	2.35	1.12	3.38	4.44
GPAC DIFF	410.	2.34	1.11	3.37	4.65
GPAC DIFF	411.	2.35	1.12	3.37	4.64
GPAC DIFF	412.	2.35	1.12	3.20	4.93
GPAC DIFF	413.	2.32	1.11	3.18	4.44
GPAC DIFF	414.	2.34	1.10	3.20	4.74
GPAC DIFF	416.	3.30	2.58	3.20	4.75
GPAC DIFF	417.	3.18	2.64	3.20	4.75
GPAC DIFF	418.	3.13	2.67	3.18	5.02
GPAC DIFF	419.	3.25	2.63	3.18	5.05
GPAC DIFF	421.	3.59	3.14	2.76	6.01
GPAC DIFF	422.	3.66	3.10	2.77	5.75
GPAC DIFF	423.	3.65	3.03	2.77	5.75
GPAC DIFF	424.	2.62	1.11	2.77	5.75
GPAC DIFF	425.	2.63	1.10	2.77	5.75
GPAC DIFF	426.	2.62	1.11	2.76	5.93
GPAC DIFF	427.	2.62	1.12	2.75	5.93
GPAC DIFF	428.	2.61	1.11	3.07	5.50
GPAC DIFF	429.	2.62	1.11	3.07	5.51
GPAC DIFF	430.	2.63	1.10	3.08	5.31
GPAC DIFF	431.	2.62	1.11	3.08	5.32
GPAC DIFF	432.	3.64	3.03	3.08	5.31
GPAC DIFF	433.	3.66	3.08	3.08	5.31
GPAC DIFF	434.	3.59	3.12	3.07	5.50
GPAC DIFF	435.	3.59	3.09	3.06	5.61
					10.97

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 5

2.00 HOUR

TAPE NO.	U (M/SFC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	1.20	0.52	23.35	8.75	26.08
PERSIST DIFF	0.67	1.45	0.63	2.27	3.95
GPAC DIFF	437.	0.24	0.74	0.64	2.17
GPAC DIFF	438.	0.16	0.81	0.64	2.16
GPAC DIFF	439.	0.16	0.80	0.64	2.14
GPAC DIFF	440.	0.24	0.73	0.64	2.14
GPAC DIFF	441.	0.31	0.58	0.62	2.14
GPAC DIFF	442.	0.21	0.64	0.62	2.13
GPAC DIFF	443.	0.21	0.64	0.62	2.15
GPAC DIFF	444.	0.30	0.58	0.62	2.15
GPAC DIFF	445.	0.29	0.50	1.09	2.23
GPAC DIFF	446.	0.21	0.57	1.09	2.25
GPAC DIFF	447.	0.21	0.56	1.09	2.23
GPAC DIFF	448.	0.29	0.50	1.09	2.23
GPAC DIFF	449.	0.23	0.64	1.09	2.23
GPAC DIFF	450.	0.17	0.72	1.09	2.23
GPAC DIFF	451.	0.17	0.73	1.10	2.25
GPAC DIFF	452.	0.23	0.65	1.09	2.25
GPAC DIFF	453.	0.23	0.65	1.13	2.27
GPAC DIFF	454.	0.18	0.73	1.13	2.28
GPAC DIFF	455.	0.18	0.72	1.13	2.25
GPAC DIFF	456.	0.23	0.64	1.14	2.25
GPAC DIFF	457.	0.30	0.50	1.13	2.25
GPAC DIFF	458.	0.22	0.56	1.13	2.25
GPAC DIFF	459.	0.22	0.57	1.13	2.28
GPAC DIFF	460.	0.29	0.50	1.13	2.27
GPAC DIFF	461.	0.29	0.50	1.01	2.19
GPAC DIFF	462.	0.22	0.57	1.01	2.20
GPAC DIFF	463.	0.22	0.56	1.01	2.17
GPAC DIFF	464.	0.30	0.50	1.01	2.17
GPAC DIFF	465.	0.23	0.64	1.01	2.17
GPAC DIFF	466.	0.18	0.72	1.01	2.18
GPAC DIFF	467.	0.18	0.72	1.01	2.20
GPAC DIFF	468.	0.24	0.64	1.01	2.19

ROOT MEAN SQUARES OF THE DIFFERENCES BETWEEN  
PREDICTED AND OBSERVED ATMOSPHERIC COLUMNS

CASE DPG 5

1.00 HOUR

TAPE NO.	U (M/SEC)	V (M/SEC)	T(AIR) (DEG C)	E (MB)	T(SOIL) (DEG C)
RMS MAGNITUDE	0.69	0.76	22.78	8.63	25.29
PERSIST DIFF	0.37	1.42	1.74	1.92	0.37
GPAC DIFF	470.	0.52	1.18	1.75	0.75
GPAC DIFF	471.	0.49	1.19	1.75	0.75
GPAC DIFF	472.	0.54	1.19	1.74	0.75
GPAC DIFF	473.	0.50	1.18	1.74	0.75
GPAC DIFF	474.	0.47	1.16	1.74	0.75
GPAC DIFF	475.	0.47	1.16	1.74	0.75
GPAC DIFF	476.	0.44	1.16	1.74	0.75
GPAC DIFF	477.	0.47	1.16	1.74	0.75
GPAC DIFF	478.	0.49	0.77	2.50	4.19
GPAC DIFF	479.	0.48	0.77	2.51	4.19
GPAC DIFF	480.	0.48	0.77	2.51	4.19
GPAC DIFF	481.	0.47	0.77	2.51	4.19
GPAC DIFF	482.	0.51	0.79	2.51	4.19
GPAC DIFF	483.	0.50	0.80	2.51	4.18
GPAC DIFF	484.	0.50	0.80	2.51	4.19
GPAC DIFF	485.	0.51	0.79	2.51	4.19
GPAC DIFF	486.	0.51	0.73	2.59	4.18
GPAC DIFF	487.	0.51	0.74	2.59	4.17
GPAC DIFF	488.	0.51	0.74	2.59	4.17
GPAC DIFF	489.	0.51	0.73	2.59	4.18
GPAC DIFF	490.	0.49	0.70	2.59	4.17
GPAC DIFF	491.	0.49	0.71	2.59	4.17
GPAC DIFF	492.	0.49	0.71	2.59	4.18
GPAC DIFF	493.	0.49	0.70	2.59	4.17
GPAC DIFF	494.	0.50	0.70	2.07	0.98
GPAC DIFF	495.	0.49	0.71	2.07	0.98
GPAC DIFF	496.	0.49	0.70	2.07	0.98
GPAC DIFF	497.	0.49	0.70	2.07	0.98
GPAC DIFF	498.	0.51	0.73	2.07	0.97
GPAC DIFF	499.	0.51	0.74	2.07	0.98
GPAC DIFF	500.	0.51	0.74	2.07	0.97

#### IV. COMPARISON OF THE SOLUTIONS OBTAINED BY USE OF THE VARIOUS CIRCUIT CONFIGURATIONS

##### A. General

Perusal of the tape logs for each of the cases under study reveals that the simulation equations have been solved under a number of varied assumptions in order to assess the relative importance of the various terms.

In this section of the report, we make some comparisons of the variables most affected by individual solution options. In comparing solutions obtained using the various options, proper pairing of computer tapes must be done so that the conditions under which the solutions are obtained are identical except for the parameter being inspected. For example, in inspecting the effects of soil model selection for Case DPG 1, Tape Number 1, obtained by use of Soil Model A, should be compared with Tape Number 8, obtained by use of Soil Model B. All other conditions are identical for the two solutions.

Considering the vertical profiles of wind, air temperature, vapor pressure, and soil temperature in their entirety, the root-mean-squares of the differences between parameter values predicted by the GPAC solutions and comparison values derived from observed air and soil columns indicate best the relative prediction accuracy obtained by use of each solution option. Individual levels may be compared separately by inspecting the individual tapes, but our comments will be confined to the root-mean-square differences.

### B. Case DPG 1

Tape numbers falling between numbers 1 and 32, inclusive, are the solution tapes for a 12 hr time period for case DPG 1. Solutions have been obtained for the various options available in the GPAC wiring. Tapes 1 through 4, 11, 12, 29, 30, 31, and 32 are solutions obtained using Soil Model A, and the remainder of the 12-hr solutions involve Soil Model B.

For the set of solutions appearing as Tape Number 1, Soil Model A was selected as was variable  $K_{m,8}$  and  $D_8$ . The surface contour gradient varied linearly in time, advection varied with the wind, and the geostrophic coupling factor was not included in the solution.

Reference to Tape Number 1 in the root-mean-square difference table, page 69, indicates that the GPAC difference in the u-component of the wind profile was  $16.14 \text{ m sec}^{-1}$ , the v-component was  $12.04 \text{ m sec}^{-1}$ , the difference in temperature was  $4.05 \text{ deg C}$ , the vapor pressure difference was  $6.18 \text{ mb}$ , and the difference in soil temperature was  $6.20 \text{ deg C}$ . The results for this solution compared to the results of Tape Number 8 indicate that soil temperature predictions were closer to the comparison values when Soil Model B was used. The root-mean-square difference in the predicted soil temperatures and the temperatures derived from observations, hereafter referred to as "observed values," was  $5.77 \text{ deg C}$ . This difference is  $0.43 \text{ deg C}$  less than that resulting from use of Soil Model A.

Compared to the persistence differences the differences in winds are much larger for GPAC values than for the values that would have been obtained based on persistence (no change); however, the vapor pressure and soil temperature values predicted by the GPAC are nearer observed values than are those that would have been obtained by prediction based on persistence. Prediction of temperature on the other hand, resulted in a GPAC difference of 4.05 deg C as compared to a persistence difference of 2.51 deg C.

The effects on the solutions may be shown by introducing the various options one at a time. Addition of the geostrophic coupling to the equations is illustrated by Tape Number 2. The u- and v-components, are reduced in magnitude 1 to  $2 \text{ m sec}^{-1}$  as they approach their corresponding geostrophic values. Little change occurs in air temperature, no change in soil temperature, and only approximately  $1/4$  mb change in vapor pressure.

Switching advection from the normal condition to a constant resulted in the differences in predicted u-components of the wind, increasing from  $14.33 \text{ m sec}^{-1}$  to  $14.83 \text{ m sec}^{-1}$ , a change of  $0.50 \text{ m sec}^{-1}$ , and the v-component differences increasing from  $11.19 \text{ m sec}^{-1}$  to  $11.73 \text{ m sec}^{-1}$ , an increase of  $0.54 \text{ m sec}^{-1}$ . A considerable increase occurred in the temperature differences, indicating a somewhat poorer prediction of temperature for the fixed advection case than for the normal advection case. The root-mean-square difference increased from 4.04 deg C for the case of normal advection to 5.40 deg C for the case

of fixed advection. A similar increase in the differences was obtained for the vapor pressure which increased from 6.43 mb to 8.10 mb. Soil temperature differences increased slightly, also as a result of the increase of air temperature differences.

Changing from Soil Model A to Soil Model B takes place between Tape Number 4 and Tape Number 5. Comparing the two tapes indicates a little change in the wind speed showing the influence of stability on  $K_{m,8}$  and  $D_8$ . Air temperature differences decreased from 5.40 deg C to 5.22 deg C, and vapor pressure differences increased from 8.10 mb to 8.26 mb. The differences in soil temperature decreased from 6.61 deg to 6.15 deg C.

For this case, the most accurate solutions for wind were obtained using fixed surface contour gradient and fixed wind advection. Coupling of the geostrophic wind to the upper level improved further the prediction. The wind predictions nearest to the comparison values appear in Tape Numbers 11 and 14.

The smallest differences in the temperature prediction occurred in Tape Number 26. For this tape, advection was normal and the surface contour gradient was held constant. The smallest difference obtained from the GPAC for vapor pressure was 6.18 mb which occurs with Tape Number 1. For this tape, Soil Model A was used as was variable  $K_{m,8}$  and  $D_8$ . Advection was normal and the surface contour gradient was allowed to vary linearly in time. The geostrophic coupling was not included in the solutions. The smallest differences in soil temperature

occurred with Tapes 25 and 26. These both involve Soil Model B, fixed contour gradient, and normal advection. The only difference in these two tapes is inclusion or omission of the geostrophic coupling factor. GPAC predictions of vapor pressure and soil temperature only yielded more accurate results than did predictions based upon persistence.

The most accurate wind predictions for the 6-hr solutions occurred with Tape Number 47. The mean difference between the GPAC values and the observed values for the u-component of wind was  $2.81 \text{ m sec}^{-1}$ , and for the v-component differences it was  $6.24 \text{ m sec}^{-1}$ . These predictions are more accurate in both the u-component and the v-component than prediction based upon persistence. The significant factor affecting this wind solution was variable  $K_{m,8}$  and  $D_8$ , fixed surface contour gradient, fixed advection, and inclusion of geostrophic coupling.

The most accurate air temperature predictions were obtained with Tapes 58 and 59, which incorporate Soil Model B, normal advection, fixed surface contour gradient, and fixed  $K_{m,8}$  and  $D_8$ . These same tapes resulted in the most accurate solution being obtained for the soil temperature profile. The vapor pressure profile on the other hand, was more accurate for Tape Number 34, in which Soil Model A and normal advection were employed. For the 6-hr prediction interval the GPAC solution yielded results closer to the comparative figures for all five variables, the u-component of wind, the v-component of wind, air temperature, vapor pressure, and soil temperature.

For the 2-hr solutions, persistence yielded a better predictive value of the winds than did the GPAC. The persistence difference for u-component of wind was  $1.85 \text{ m sec}^{-1}$  and for the v-component of wind, it was  $3.30 \text{ m sec}^{-1}$  as compared to the best solution obtained by the GPAC of  $6.03 \text{ m sec}^{-1}$  for the u-component and  $4.07 \text{ m sec}^{-1}$  for the v-component of velocity. On the other hand, the GPAC yielded better predictions of temperature, vapor pressure, and soil temperature than did persistence. The most accurate prediction produced by the GPAC appears on Tapes 87 and 88 for air temperature, where a difference of 1.17 deg C was recorded compared to a persistence difference of 1.75 deg C. The minimum GPAC difference obtained for vapor pressure was 2.22 mb on Tape Number 67, which was a case involving normal advection and Soil Model A, and that for soil temperature was obtained by Tapes 87 and 88. The soil model employed for these two tapes was Soil Model A. The GPAC difference for Tapes 87 and 88 were 0.41 deg C and 0.40 deg C, respectively. Persistence yielded a difference of 0.56 deg C.

The most accurate 1-hr prediction for wind was obtained with Tape Number 108 on the GPAC.  $K_{m,8}$  and  $D_8$  were variable, the surface contour gradient was constant, advection was normal, and geostrophic coupling was not employed. The differences obtained were  $3.63 \text{ m sec}^{-1}$  for the u-component of wind and  $3.93 \text{ m sec}^{-1}$  for the v-component of wind. These results compare with persistence differences of  $1.02 \text{ m sec}^{-1}$  for the u-component of wind, and  $2.17 \text{ m sec}^{-1}$  for the v-component of wind. The GPAC yielded somewhat smaller differences than the persistence values for

both temperature and vapor pressure. The results were obtained under Tape Numbers 104 through 107, 111, 112, and 113 through 115. The common denominator was Soil Model B rather than Soil Model A. On the other hand, the most accurate soil temperature predictions were obtained from Tapes 101 through 104, and 108 through 112, which represent solutions obtained using Soil Model A.

#### C. Case DPG 2

Considering the wind, temperature, vapor pressure, and soil temperature profiles in their entirety and comparing results obtained by the use of Soil Model A and Soil Model B, we see from Tapes 138, 139, and 144 that the smallest CPAC differences for a 12-hr prediction interval, were obtained for soil temperature by use of Soil Model B rather than Soil Model A. The most accurate wind predictions were obtained with a variable exchange coefficient for momentum at 8-m height,  $K_{m,8}$ , and a variable integral exchange coefficient,  $D_8$ , rather than the constant values. The smallest difference in wind speed was obtained on Tape 138 which incorporates a linear variation in surface pressure gradient. This difference was  $8.38 \text{ m sec}^{-1}$  with the u-component of wind being  $4.27 \text{ m sec}^{-1}$ , and the v-component of wind being  $7.22 \text{ m sec}^{-1}$ . For a fixed surface pressure gradient, the minimum value obtained for differences in wind speed were obtained on Tape Number 145, the differences for the u-component of wind being  $7.82 \text{ m sec}^{-1}$ , and for the v-component  $4.25 \text{ m sec}^{-1}$ .

In the case of advection, somewhat conflicting results were obtained for temperature. The smallest GPAC difference in temperature was obtained on Tape 139 under conditions of normal temperature advection, and for vapor pressure and wind the minimum GPAC differences were obtained with fixed advection. The use, or lack thereof, of geostrophic coupling indicated that wind predictions obtained by the GPAC were nearer observed values when geostrophic coupling was applied to the 1000-m wind.

The results for a 6-hr simulation indicate that most accurate soil and air temperature predictions were obtained by use of Soil Model B. On the other hand, most accurate vapor pressure predictions were obtained by use of Soil Model A. Wind, air temperature, and vapor pressure predictions closer to observed values were obtained by use of variable  $K_{m,8}$  and  $D_g$ . In addition, values of wind most nearly approaching those of observed values were obtained by using a linearly varying surface pressure gradient. Use of advection and geostrophic coupling indicated that temperatures were obtained more accurately by use of fixed advection for temperature and vapor pressure; however, wind predictions were most accurately obtained by use of normal advection coupled with employment of the geostrophic coupling factor.

Tape Number 185 yielded the best overall results for the 2 hr predictions. The difference obtained for the u-component of the wind was  $2.07 \text{ m sec}^{-1}$ , and for the v-component it was  $3.37 \text{ m sec}^{-1}$ . The difference in predicted temperature was 1 deg C, for vapor pressure

the difference was 0.49 mb, and for soil temperature it was 1.86 deg C. These compare with values obtained by persistence of  $1.73 \text{ m sec}^{-1}$  for the u-component of velocity,  $2.13 \text{ m sec}^{-1}$  for the v-component of velocity, 1.56 deg C for air temperature, 1.15 mb of vapor pressure, and 8.66 deg C for soil temperature. For Tape 185 Soil Model B was employed with a variable  $K_{m,8}$  and  $D_8$ . The surface contour gradient was allowed to vary linearly in time. Wind advection, temperature, and vapor pressure advection were all normal, and the geostrophic approximation was not included.

For the 1-hr prediction, Tapes 196 through 198 yielded comparable results. Soil Model A was used as was variable  $K_{m,8}$  and  $D_8$ . The surface contour gradient was allowed to change linearly with time. Advection for Tapes 196 and 197 was normal, but for 198 it was fixed. Consequently, the type of advection used had little effect on the results. Geostrophic coupling gave a slightly larger error in the u-component of the velocity than was obtained for Tapes 196 and 198 where geostrophic coupling was omitted.

#### D. Case DPG 3

The best approximation to the soil temperature profile was obtained by employment of Soil Model B as shown by Tape 225. Employment of fixed advection yielded best results for winds as is evidenced by Tape 222. For the u-component of wind, the difference obtained was  $4.30 \text{ m sec}^{-1}$ , and the difference for the v-component was  $1.86 \text{ m sec}^{-1}$ .

The corresponding values based on persistence were  $3.05 \text{ m sec}^{-1}$  for the u-component of velocity and  $2.20 \text{ m sec}^{-1}$  for the v-component of velocity. Employment of normal advection yielded best results for both temperature and vapor pressure. Employment of the geostrophic coupling term in this particular case gave no improvement over the lack of its use.

For the 6-hr solution only three tapes were run, Tapes 239, 240, and 241. Consequently, comparison of the results obtained by the GPAC with the results obtained by persistence would be most appropriate. For all of the tapes, the accuracy of the wind predictions exceeded those obtained by persistence as did that of the temperature, vapor pressure, and soil temperature predictions. Looking at Tape 239, which was obtained by use of Soil Model A, variable  $K_{m,8}$  and  $D_g$ , constant pressure gradient, normal advection, and omission of the geostrophic term, we observe differences in the u-component of wind of  $1.12 \text{ m sec}^{-1}$  as compared to  $3.93 \text{ m sec}^{-1}$  obtained by persistence, and  $2.63 \text{ m sec}^{-1}$  for the v-component of wind compared to  $3.15 \text{ m sec}^{-1}$  obtained by persistence.

A difference in temperature of  $4.86 \text{ deg C}$  was obtained for the 6-hr prediction by the GPAC. The corresponding value derived from persistence was  $7.35 \text{ deg C}$ . The vapor pressure prediction obtained by the GPAC was in error  $1.17 \text{ mb}$  as compared to a persistence error of  $3.28 \text{ mb}$ . Soil temperature predictions resulted in differences of  $11.08 \text{ deg C}$  by the GPAC and  $16.72 \text{ deg C}$  by persistence.

For the 1-hr predictions of Case DPG 3, use of Soil Model B resulted in soil temperatures more nearly approximating the observed values. Tape 264 for example, shows a mean difference of 0.42 deg C in soil temperature compared to a persistence difference of 4.43 deg C. Wind predictions were obtained by employment of both variable  $K_{m,8}$  and fixed  $K_{m,8}$ . Tape 272 shows the smallest difference in vector wind speed to be  $1.85 \text{ m sec}^{-1}$ . This value resulted from use of constant  $K_{m,8}$  and  $D_g$ ; however, there is little difference in this value and the value obtained by Tapes 258, 259, 260, where a variable  $K_{m,8}$  was employed. Of course this result is expected when one takes note that the exchange coefficients for this period changed very little.

Better results were obtained for the winds by use of a fixed pressure gradient than by use of a time varying pressure gradient as is shown by Tapes 258, 259, 260, and 272. The smallest GPAC difference for the temperature profile is shown in Tapes 265 and 266 to be 1.60 deg C. This value was obtained under conditions of fixed advection of the wind, temperature, and vapor pressure. As far as the vapor pressure profile is concerned, all of the solutions between Tapes 255 and 272, yielded similar values. For this short time period, the introduction or inclusion of the geostrophic coupling term had little effect on the results.

For the 1-hr time period, temperature profiles in the air and in the soil were predicted better by using Soil Model A than by using Soil Model B as is evidenced by Tapes 283 through 285; however, the

results obtained for the vapor pressure profiles were slightly improved when Soil Model B was used rather than Soil Model A. No significant difference was observed in the winds by using variable  $K_{m,8}$  and  $D_8$  as opposed to fixed  $K_{m,8}$  and  $D_8$ ; however, for each solution, the results obtained were somewhat better than would have been obtained by persistence. For example, Tape 279 shows the difference in the u-component of wind to be  $0.86 \text{ m sec}^{-1}$  compared to a value of  $0.92 \text{ m sec}^{-1}$  that would have been obtained by persistence. The v-component of wind predicted by the GPAC was  $0.98 \text{ m sec}^{-1}$  as compared to  $1.39 \text{ m sec}^{-1}$  that would have been obtained by predictions based on persistence. Use of either a constant pressure gradient or a linearly changing pressure gradient did not yield any significant difference in the results obtained for winds. Similarly, the use of normal or constant wind advection did not yield significant differences in the results, nor did the inclusion or omission of the geostrophic coupling term.

#### E. Case DPG 4

For the 12-hr solution for case DPG 4 the use of Soil Model A or Soil Model B shows no significant difference as is indicated by the uniformity of root-mean-square soil temperature differences obtained for Tapes 303 through 311. Tapes 303 through 305 were obtained by use of Soil Model B and 306 through 311 by use of Soil Model A. Inclusion of variable  $K_{m,8}$  and  $D_8$  in conjunction with the geostrophic wind coupling yielded slightly better results than did the other options for these

parameters. The use of fixed surface contour gradient (Tape 309) yielded  $1.31 \text{ m sec}^{-1}$  difference in the u-component of velocity and  $0.98 \text{ m sec}^{-1}$  difference in the v-component of velocity. These values are slightly better than those obtained using a linearly varying height contour gradient. For example, Tape 308 showed the u-component of wind difference to be  $1.62 \text{ m sec}^{-1}$ , and the v-component of wind difference to be  $3.66 \text{ m sec}^{-1}$ . No significant differences were obtained by using either normal advection or fixed advection.

For 6 hr the use of Soil Model B yielded slightly better results in soil temperature than did the use of Soil Model A. This result can be seen in Tapes 323 and 324, where the predicted soil temperature difference was 9.25 deg C as compared to Tapes 325 through 330 where the temperature difference was 9.88 or 9.89 deg C. In either case, these differences were smaller than the differences that would have been predicted by use of persistence. As shown by Tapes 316 through 318 and 329 and 330, slight improvement was obtained by using variable  $K_{m,8}$  and  $D_8$  rather than fixed  $K_{m,8}$  and  $D_6$ . Choice of either option for the surface contour gradient, advection, and geostrophic coupling did not yield significant differences in results obtained.

For the 2-hr prediction interval, Soil Model B yielded soil temperature differences of 0.37 deg C for Tapes 341 through 343, compared to a mean soil temperature difference of 1.76 deg C predicted by persistence. The best soil temperature results obtained using Soil Model A resulted in a GPAC difference of 0.76 deg C

as indicated by Tapes 344, 345, 347, and 348. The use of variable  $K_{m,8}$  and  $D_8$  rather than the fixed values resulted in little change in the magnitude of the winds. The primary effect was a change of wind direction. Use of variable  $K_{m,8}$  and  $D_8$  resulted in winds shifting more easterly than those obtained using fixed  $K_{m,8}$  and  $D_8$ .

The use of fixed advection resulted in wind being shifted more easterly with little change in speed; however, there was some slight reduction in the GPAC difference by use of fixed surface contour gradient. The smallest GPAC difference in temperature and vapor pressure was obtained for Tapes 335 through 337. For these tapes, variable  $K_{m,8}$  and  $D_8$  was employed as was a fixed contour gradient. Advection was normal for Tapes 335 and 336, but fixed for Tape 337. Little difference was evident in the resulting temperatures and vapor pressures. Of course for this short time period, for the entire profile, the geostrophic coupling had little effect.

For the 1-hr simulation, Soil Model B resulted in predictions closer to observed values than did Soil Model A. In addition, the use of fixed  $K_{m,8}$  and  $D_8$  in conjunction with a variable surface contour gradient yielded wind predictions closest to observed values. The effects of advection for the 1-hr solution was small with no significant differences occurring in the use of either normal or fixed advection. Likewise, inclusion or omission of the geostrophic coupling factor did not materially affect the resulting differences.

#### F. Case DPG 5

For the 12-hr solutions for Case DPG 5, use of Soil Model B resulted in the lowest root-mean-square difference for the soil temperature profile. The value, which amounts to 4.89 deg C, appears on Tape 393 and compares very favorably with the value of 13.40 deg C which is based on persistence. Little difference exists in the soil temperature differences for Tapes 387 through 394. For each of the tapes Soil Model B was used in conjunction with constant exchange coefficients.

The effects of the exchange coefficients are reflected in each of the profiles, of course, as is the surface contour gradient and advection. Use of variable  $K_{m,8}$  and  $D_8$  along with constant wind advection and pressure gradient resulted in minimum wind speed differences (Tape 382) of  $7.92 \text{ m sec}^{-1}$  in the u-component of wind and  $4.05 \text{ m sec}^{-1}$  in the v-component of wind. The corresponding values based on persistence were  $9.70 \text{ m sec}^{-1}$  for the u-component of velocity and  $5.12 \text{ m sec}^{-1}$  for the v-component of velocity. For this case, these values amount to an improvement of  $10.97 \text{ m sec}^{-1}$  over a mean wind speed prediction based on persistence.

The minimum root-mean-square difference for air temperature for the 12-hr solutions was 2.33 deg C (Tapes 387 and 388) and was associated with a linearly varying surface pressure gradient and normal advection. On the other hand the minimum difference in vapor pressures was associated with constant advection and a linearly varying surface

pressure gradient. For this case for the 12-hr solution interval, geostrophic coupling did not result in any significant improvements in the computer solutions.

For the solutions representing a simulated period of 6 hr, the predicted values of wind that approach most nearly the observed values were associated primarily with variable exchange coefficients, constant surface contour gradient, and inclusion of geostrophic coupling (Tapes 413 and 414). Minimum differences in air temperature were associated with normal advection (Tape 427), and minimum differences in vapor pressure were associated with constant advection (Tape 409). Use of Soil Model B resulted in the minimum difference in soil temperature.

For a time interval of 2 hr, soil temperatures obtained by use of Soil Model B more closely approximated observed values than did temperatures obtained by use of Soil Model A. The smallest difference obtained was 0.98 deg C (Tape 448). Predictions based on persistence resulted in a temperature difference of 3.95 deg C. The use of variable or fixed  $K_{m,8}$  and  $D_8$  could not be differentiated by the resulting predictions of winds, temperatures, or vapor pressures. The wind predictions were controlled primarily by the surface contour gradient. Winds closer to observed winds resulted from the use of a constant surface contour gradient (Tapes 445 through 448 and 457 through 464). Since advection was weak for this case and the time period was short, the manner in which advection was applied did not affect the results significantly. Likewise, geostrophic coupling did not materially affect the profiles as a whole.