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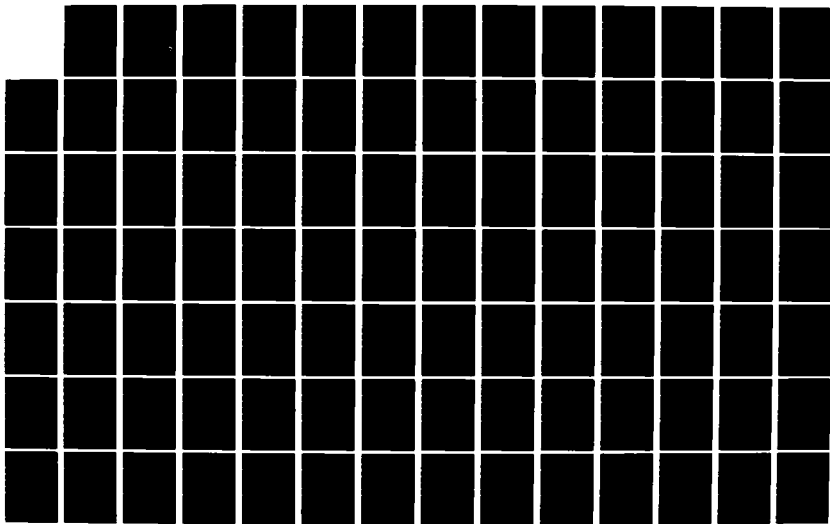
FINAL TACTICAL DECISION AID (FTDA) FOR INFRARED (8-12
MICROMETERS) SYSTEM. (U) SYSTEMS AND APPLIED SCIENCES
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SCIENTIFIC-3 AFGL-TR-82-0294

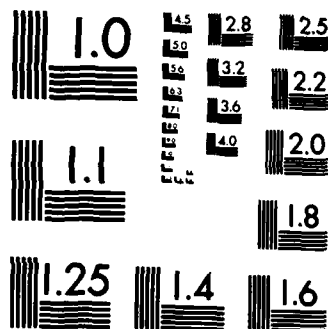
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AFGL-TR-82-0294 (III)

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FINAL TACTICAL DECISION AID (FTDA) FOR
INFRARED (8-12 μ m) SYSTEMS -
MANUAL VERSION

ADA 127853

Appendix B - Insolation and Sky Radiation Tables

Donald B. Hodges
Ralph Shapiro
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Ronald F. Wachtmann

Systems and Applied Sciences Corporation (SASC)
6811 Kenilworth Avenue
Riverdale, MD 20737

September 15, 1982

Scientific Report No. 3

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Tables are presented for use in determining solar irradiance and sky radiation values needed to calculate maximum lock-on range (MLOR) and maximum acquisition range (AR) from the Manual Version of the IR FTDA. A table for use in determining solar irradiance as a function of terrain elevation is also presented. Errors in computed sea level values of sky radiation as a function of terrain elevation are discussed and found to be small.		

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TABLE OF CONTENTS

1. Fig. B-1. Mean Sun Time (MST) as a Function of Greenwich Mean Time (GMT) and Longitude.	7
2. Table B-1. Solar Parameters (Cosine of Zenith Angle (COS Z) and Extra-Terrestrial Irradiance (X_0)) as Functions of Date, Time and Latitude.	9
a. Small-Scale Tables.	9
54 N.	9
Jan - Apr.	9
May - Aug.	15
Sep - Dec.	21
52 N.	27
Jan - Apr.	27
May - Aug.	33
Sep - Dec.	39
50 N.	45
Jan - Apr.	45
May - Aug.	51
Sep - Dec.	57
48 N.	63
Jan - Apr.	63
May - Aug.	69
Sep - Dec.	75
38 N.	81
Jan - Apr.	81
May - Aug.	87
Sep - Dec.	93
36 N.	99
Jan - Apr.	99
May - Aug.	105
Sep - Dec.	111
34 N.	117
Jan - Apr.	117
May - Aug.	123
Sep - Dec.	129
32 N.	135
Jan - Apr.	135
May - Aug.	141
Sep - Dec.	147

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Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	



30 N.	.153
Jan - Apr.	.153
May - Aug.	.159
Sep - Dec.	.165
28 N.	.171
Jan - Apr.	.171
May - Aug.	.177
Sep - Dec.	.183
b. Large-Scale Tables.	189
80 N.	.189
Jan - Apr.	.189
May - Aug.	.197
Sep - Dec.	.205
60 N.	.211
Jan - Apr.	.211
May - Aug.	.217
Sep - Dec.	.225
40 N.	.231
Jan - Apr.	.231
May - Aug.	.237
Sep - Dec.	.243
20 N.	.249
Jan - Apr.	.249
May - Aug.	.255
Sep - Dec.	.261
0.	.267
Jan - Apr.	.267
May - Aug.	.271
Sep - Dec.	.275
20 S.	.279
Jan - Apr.	.279
May - Aug.	.285
Sep - Dec.	.289
40 S.	.295
Jan - Apr.	.295
May - Aug.	.301
Sep - Dec.	.305
60 S.	.311
Jan - Apr.	.311
May - Aug.	.319
Sep - Dec.	.323

80 S.	.331
Jan - Apr.	.331
May - Aug.	.339
Sep - Dec.	.341
3. Table B-2. Solar Transmission (τ) as a Function of the State of the Weather and Cloud Cover.	.349
4. Table B-3. Ratio of Solar Irradiance (W_{SUN}) on a 10,000 ft Ground Surface to That Which Would Have Been Observed if the Ground Were at Sea Level.	.365
5. Sky Radiation (W_{SKY}).	.366
6. Fig. B-2. Sky Radiation (W_{SKY}) as a Function of Temperature and Dewpoint.	.367
7. Table B-4. Sky Radiation (W_{SKY}) Cloud Correction (watts m^{-2}). . .	.371

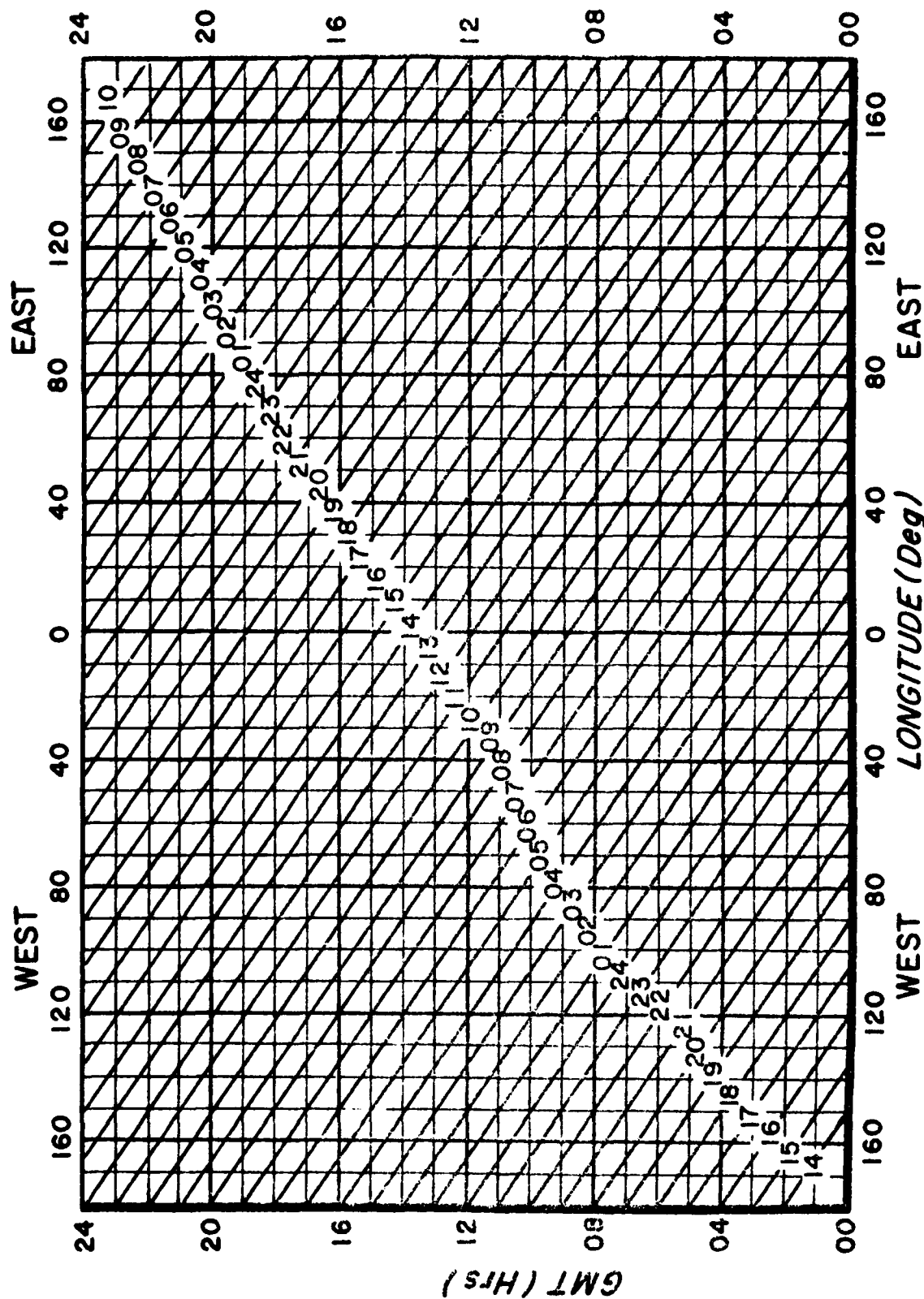


Fig. B-1. Mean Sun Time (MST) as a Function of Greenwich Mean Time (GMT) and Longitude

Mean Sun Time (MST) may be computed from the equation $MST = GMT \pm (\text{Longitude}/15)$, where the expression in parenthesis is positive for east longitude and negative for west longitude.

MST

MST	DATE																			
	JAN					FEB					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0400	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
0600	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

JAN-APR

54 N

TABLE B-1

SOLAR PARAMETERS

COS 2

X0 (W/M**2.)

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	JAN				FEB				MAR				APR												
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1000	.15	.15	.16	.17	.18	.20	.22	.25	.27	.30	.32	.35	.40	.43	.46	.49	.52	.55	.58	.61	.64	.66	.68	.70	
	208	214	225	240	259	282	309	345	379	414	452	491	556	597	638	678	717	755	798	832	863	892	919	943	
	15	.16	.17	.18	.19	.20	.22	.24	.26	.29	.32	.34	.37	.42	.45	.48	.51	.54	.57	.60	.63	.65	.68	.70	.72
15	233	238	250	265	285	309	336	372	406	442	480	519	584	624	665	705	743	781	823	857	888	916	942	966	
	30	.18	.18	.19	.20	.22	.24	.26	.28	.31	.33	.36	.39	.44	.47	.50	.53	.56	.59	.62	.64	.67	.69	.71	.73
	254	260	272	288	308	332	360	397	430	467	504	544	608	649	689	728	767	804	846	879	909	937	963	986	
45	.19	.20	.21	.22	.23	.25	.27	.30	.32	.35	.38	.41	.45	.48	.51	.54	.57	.60	.63	.65	.68	.70	.73	.74	
	272	279	291	308	328	353	380	418	452	488	526	565	629	670	710	749	787	823	865	897	927	955	980	003	
	1100	.20	.22	.23	.24	.26	.28	.31	.33	.36	.39	.42	.45	.47	.50	.53	.56	.58	.61	.64	.67	.69	.72	.74	.75
15	299	307	324	345	370	398	436	470	507	544	584	629	647	687	727	766	803	840	881	912	942	970	995	017	
	300	.22	.23	.24	.25	.27	.29	.32	.35	.37	.40	.43	.48	.51	.54	.57	.59	.62	.65	.69	.70	.72	.74	.76	
	308	320	338	359	384	413	451	485	522	560	599	662	702	741	780	817	853	893	925	954	981	006	028		
30	.27	.29	.30	.32	.34	.36	.38	.41	.44	.46	.48	.51	.54	.57	.60	.63	.66	.68	.71	.73	.75	.77	.77	.77	
	308	330	348	370	395	424	462	497	533	571	610	649	674	713	752	790	827	862	902	933	962	989	014	036	
	45	.22	.23	.24	.25	.27	.29	.31	.33	.36	.39	.41	.44	.49	.52	.55	.58	.61	.63	.66	.69	.71	.73	.75	.77
1200	314	322	337	355	377	403	432	471	505	542	580	619	682	721	759	797	834	869	908	939	967	994	018	040	
	.22	.23	.24	.25	.27	.29	.31	.34	.36	.39	.42	.45	.47	.50	.53	.56	.58	.61	.64	.67	.69	.71	.73	.75	.77
	317	325	340	359	381	407	437	475	510	547	585	623	686	725	763	801	837	871	910	941	969	995	019	041	
15	.22	.23	.24	.25	.27	.29	.31	.34	.36	.39	.42	.45	.47	.50	.53	.56	.58	.61	.63	.67	.69	.71	.73	.75	.77
	316	325	340	359	382	408	438	477	512	548	586	625	687	726	764	801	837	871	909	939	968	993	017	039	
	30	.22	.23	.24	.25	.27	.29	.31	.34	.36	.39	.42	.45	.49	.52	.55	.58	.61	.63	.66	.69	.71	.73	.75	.77
45	311	321	336	356	379	406	436	475	510	547	584	623	685	723	761	798	833	867	905	935	962	988	012	033	
	.22	.23	.24	.25	.26	.28	.31	.33	.36	.39	.41	.44	.49	.52	.55	.57	.60	.63	.66	.69	.70	.72	.74	.76	
	304	314	330	350	373	400	430	470	505	541	579	617	679	717	754	791	826	859	897	927	954	980	003	024	

JAN-APR 54 N TABLE B-1 SOLAR PARAMETERS COS Z X0 (W/M*2.) *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																													
	JAN				FEB				MAR				APR																	
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30											
1300	.21	.21	.23	.24	.26	.28	.30	.33	.35	.38	.41	.44	.48	.51	.54	.57	.59	.62	.65	.67	.69	.71	.73	.75	.886	.915	.942	.968	.991	.012
15	.20	.21	.22	.23	.25	.27	.29	.32	.34	.37	.40	.43	.47	.50	.53	.56	.58	.61	.64	.65	.68	.70	.72	.74	.871	.900	.927	.953	.976	.997
30	.19	.19	.21	.22	.24	.26	.28	.31	.33	.36	.39	.42	.45	.49	.52	.54	.57	.60	.62	.65	.67	.69	.71	.73	.853	.882	.909	.934	.957	.979
45	.17	.18	.19	.21	.22	.24	.27	.30	.32	.35	.37	.40	.45	.47	.50	.53	.55	.58	.61	.63	.65	.67	.69	.71	.832	.861	.888	.913	.936	.957
1400	.16	.16	.18	.19	.21	.23	.25	.28	.31	.33	.36	.39	.43	.46	.49	.51	.54	.56	.59	.61	.64	.66	.67	.69	.808	.837	.864	.889	.912	.933
15	.14	.15	.16	.17	.19	.21	.23	.26	.29	.31	.34	.37	.41	.44	.47	.49	.52	.54	.57	.59	.62	.64	.65	.67	.781	.810	.836	.861	.885	.906
30	.12	.13	.14	.15	.17	.19	.21	.24	.27	.29	.32	.35	.39	.42	.45	.47	.50	.52	.55	.57	.59	.61	.63	.65	.751	.780	.806	.831	.855	.876
45	.10	.10	.12	.13	.15	.17	.19	.22	.25	.27	.30	.33	.37	.40	.42	.45	.47	.50	.53	.55	.57	.59	.61	.63	.719	.747	.774	.799	.822	.844
1500	.07	.08	.09	.11	.13	.15	.17	.20	.22	.25	.27	.30	.34	.37	.40	.42	.45	.47	.50	.52	.54	.56	.58	.60	.683	.712	.738	.764	.787	.809
15	.05	.05	.07	.08	.10	.12	.14	.17	.20	.22	.25	.28	.32	.34	.37	.40	.42	.44	.47	.49	.52	.54	.55	.57	.646	.674	.701	.726	.750	.772
30	.02	.03	.04	.06	.08	.10	.12	.14	.17	.19	.22	.25	.29	.32	.34	.37	.39	.42	.44	.47	.49	.51	.53	.54	.606	.634	.661	.686	.710	.733
45	.00	.00	.01	.03	.05	.07	.09	.12	.14	.17	.19	.22	.26	.29	.31	.34	.36	.38	.41	.43	.46	.48	.49	.51	.563	.592	.619	.645	.669	.691

*** SIGNIFIES COS 2 = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS 2
XO (W/M*2.)

TABLE 8-1

54 N

JAN-APR

MST	JAN					FEB					DATE					MAR					APR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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1600	.00 .00 .00 .00 .02 .04 .06 000 000 000 000 023 051 082	.09 .11 .14 .16 .19 121 154 189 225 260	.23 .25 .28 .30 .33 .35 317 352 386 420 452 483	.38 .40 .42 .44 .46 .48 519 548 575 601 625 648										.23 .25 .28 .30 .33 .35 317 352 386 420 452 483	.38 .40 .42 .44 .46 .48 519 548 575 601 625 648																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

JAN-APR 54 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																			
	JAN				FEB				MAR				APR							
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	007	036	065
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	017
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

JAN-APR 54 N TABLE B-1 SOLAR PARAMETERS COS 2 *** SIGNIFIES COS 2 =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
0600	.23	.25	.27	.28	.30	.31	.31	.32	.32	.32	.31	.30
	311	337	359	378	394	406	416	421	423	422	419	412
15	.27	.29	.30	.32	.33	.34	.35	.35	.35	.35	.35	.35
	361	386	408	426	441	453	463	468	470	469	465	459
30	.31	.32	.34	.36	.37	.38	.38	.39	.39	.39	.38	.38
	411	435	456	474	489	501	510	515	517	516	512	505
45	.34	.36	.38	.39	.40	.41	.42	.42	.42	.42	.42	.42
	460	484	504	522	536	548	557	561	563	562	558	552
0700	.38	.40	.41	.43	.44	.45	.45	.46	.46	.46	.46	.45
	508	531	552	569	583	594	603	607	609	607	604	597
15	.41	.43	.45	.46	.47	.48	.49	.49	.49	.49	.49	.49
	555	578	598	615	629	639	648	652	654	652	649	642
30	.45	.47	.48	.49	.51	.51	.52	.52	.53	.53	.52	.52
	602	624	644	660	673	684	692	696	697	696	693	686
45	.48	.50	.51	.53	.54	.55	.55	.56	.56	.56	.56	.55
	647	669	688	704	717	727	735	739	740	739	735	729
0800	.51	.53	.55	.56	.57	.58	.58	.59	.59	.59	.59	.58
	690	712	730	746	759	768	777	780	782	780	777	771
15	.54	.56	.58	.59	.60	.61	.61	.62	.62	.62	.62	.61
	732	753	771	787	799	809	816	820	821	820	817	811
30	.57	.59	.61	.62	.63	.64	.64	.65	.65	.65	.65	.64
	772	793	811	826	838	847	855	858	859	858	855	850
45	.60	.62	.63	.65	.66	.66	.67	.67	.68	.68	.67	.67
	810	830	848	862	874	883	891	895	896	895	891	886

MAY-AUG 54 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
0900	.63	.65	.66	.67	.68	.69	.70	.70	.70	.70	.70	.70	.69	.68	.68	.67	.66	.64	.63	.61	.60	.58	.56	.54
	846	866	883	897	909	918	925	929	930	929	926	921	914	905	895	882	869	853	833	815	795	773	750	726
15	.65	.67	.68	.70	.71	.71	.72	.72	.73	.73	.72	.72	.72	.71	.70	.69	.68	.67	.65	.64	.62	.60	.59	.57
	879	899	916	930	941	950	957	961	962	961	958	953	947	938	928	916	902	887	867	843	829	808	785	761
30	.68	.69	.71	.72	.73	.74	.74	.75	.75	.75	.75	.74	.74	.73	.72	.71	.70	.69	.68	.65	.65	.63	.61	.59
	910	929	946	960	971	980	987	990	992	991	988	984	977	969	959	947	934	919	899	881	862	841	818	794
45	.70	.71	.73	.74	.75	.76	.76	.77	.77	.77	.77	.76	.76	.75	.75	.74	.73	.71	.70	.69	.67	.65	.63	.61
	939	957	974	987	998	007	014	018	019	018	016	011	005	997	987	976	963	948	929	911	892	870	848	824
1000	.72	.73	.75	.76	.77	.78	.78	.79	.79	.79	.79	.78	.78	.77	.77	.76	.75	.73	.72	.70	.69	.67	.65	.63
	964	983	999	012	023	032	039	042	044	043	041	037	031	023	013	002	990	975	956	939	919	898	875	851
15	.73	.75	.76	.77	.78	.79	.80	.80	.80	.80	.80	.80	.80	.79	.78	.77	.76	.75	.74	.72	.71	.69	.67	.65
	987	005	021	034	045	054	061	064	066	066	063	059	053	046	037	026	013	999	980	962	943	922	899	875
30	.75	.76	.78	.79	.80	.81	.81	.82	.82	.82	.82	.82	.81	.81	.80	.79	.78	.77	.75	.74	.72	.71	.69	.67
	007	025	041	054	064	073	080	084	085	085	083	079	074	066	057	047	034	020	001	984	964	943	921	896
45	.76	.78	.79	.80	.81	.82	.83	.83	.83	.83	.83	.83	.82	.82	.81	.80	.79	.78	.77	.75	.74	.72	.70	.68
	024	042	057	070	081	089	096	100	102	102	100	096	091	084	075	065	053	039	020	002	983	962	939	914
1100	.77	.79	.80	.81	.82	.83	.84	.84	.84	.84	.84	.84	.84	.83	.82	.81	.81	.79	.78	.76	.75	.73	.71	.69
	037	055	070	083	094	102	110	114	116	116	114	111	105	099	090	080	068	054	035	018	998	977	954	929
15	.78	.79	.81	.82	.83	.84	.84	.85	.85	.85	.85	.85	.84	.84	.83	.82	.81	.80	.79	.77	.76	.74	.72	.70
	048	065	081	093	104	113	120	124	126	127	125	122	117	110	102	092	080	066	048	030	011	989	966	941
30	.78	.80	.81	.82	.83	.84	.85	.85	.86	.86	.86	.85	.85	.85	.84	.83	.82	.81	.79	.78	.76	.75	.73	.71
	055	073	088	101	111	120	127	132	134	135	133	130	126	119	111	101	089	076	057	039	020	998	975	949
45	.79	.80	.82	.83	.84	.84	.85	.86	.86	.86	.86	.86	.85	.85	.84	.84	.83	.81	.80	.78	.77	.75	.73	.71
	059	077	092	105	115	124	132	136	139	139	138	136	131	125	117	107	095	082	063	045	026	004	980	954

MAY-AUG 54 N TABLE B-1 SOLAR PARAMETERS CCS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST

DATE

MAY

JUN

JUL

AUG

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

1200 .79 .80 .82 .83 .84 .85

.060*077*092*105*116*125

.85 .86 .86 .86 .86 .86

*133*137*140*141*140*138

.86 .85 .85 .84 .83 .82

*133*127*119*110*098*085

.80 .79 .77 .75 .73 .71

*066*043*028*006 982 956

15 .79 .80 .81 .83 .84 .84

*058*075*090*103*114*123

.85 .86 .86 .86 .86 .86

*131*136*139*140*139*137

.86 .85 .85 .84 .83 .82

*133*127*119*109*098*084

.80 .79 .77 .75 .73 .71

*066*043*028*005 981 955

30 .78 .80 .81 .82 .83 .84

*052*069*084*097*108*118

.85 .85 .86 .86 .86 .86

*126*131*134*136*135*133

.85 .85 .84 .83 .83 .81

*129*123*116*106*095*081

.80 .78 .77 .75 .73 .71

*062*044*024*001 977 950

45 .78 .79 .80 .81 .82 .83

*043*061*078*089*100*109

.84 .85 .85 .85 .85 .85

*118*123*127*128*128*126

.85 .84 .84 .83 .82 .81

*122*117*109*100*088*075

.79 .78 .75 .74 .72 .70

*055*037*017 994 969 942

1300 .77 .78 .79 .81 .82 .82

*031*049*064*077*088*098

.83 .84 .84 .84 .84 .84

*107*112*116*118*118*116

.84 .84 .83 .82 .81 .80

*113*107*100*090*079*065

.79 .77 .75 .74 .71 .69

*046*027*006 983 958 930

15 .76 .77 .78 .80 .81 .81

*016*033*049*062*074*084

.82 .83 .83 .83 .83 .83

*093*098*102*104*105*103

.83 .83 .82 .81 .80 .79

*100*094*087*078*066*052

.78 .76 .74 .72 .70 .68

*033*014 993 969 944 916

30 .74 .76 .77 .78 .79 .80

998*015*031*044*056*066

.81 .82 .82 .82 .82 .82

*076*082*086*088*089*087

.82 .82 .81 .80 .79 .78

*084*079*071*062*050*036

.76 .75 .73 .71 .69 .67

*017 999 976 952 926 898

45 .73 .74 .75 .77 .78 .79

977 994*010*024*036*046

.79 .80 .80 .81 .81 .81

*056*062*067*063*070*069

.81 .80 .80 .79 .78 .77

*066*060*053*043*032*018

.75 .73 .72 .70 .68 .65

998 978 957 932 906 877

1400 .71 .72 .74 .75 .76 .77

953 970 986*000*013*023

.78 .78 .79 .79 .79 .79

*033*040*045*047*048*047

.79 .79 .78 .77 .76 .75

*044*039*032*022*010 996

.73 .72 .70 .68 .66 .63

976 955 934 909 882 853

15 .69 .70 .72 .73 .74 .75

926 944 960 974 987 997

.76 .76 .77 .77 .77 .77

*008*015*020*023*024*023

.77 .77 .76 .75 .74 .73

*020*015*008 998 986 972

.72 .70 .68 .66 .64 .62

951 931 909 884 856 826

30 .67 .68 .70 .71 .72 .73

896 914 931 945 958 969

.74 .74 .75 .75 .75 .75

980 987 993 996 997 996

.75 .75 .74 .73 .72 .71

994 988 981 971 959 945

.69 .68 .66 .64 .62 .59

924 903 880 855 827 797

45 .64 .66 .67 .68 .70 .71

864 882 899 914 927 939

.72 .72 .73 .73 .73 .73

950 957 963 966 968 967

.73 .72 .72 .71 .70 .69

964 959 952 942 930 915

.67 .65 .64 .62 .59 .57

894 873 850 824 795 764

MAY-AUG 54 N

TABLE B-1 SOLAR PARAMETERS COS Z

X0 (W/M*2.)

*** SIGNIFIES COS Z =1.

ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	MAY						JUN						JUL						AUG						
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1500	.62	.63	.65	.66	.67	.68	.69	.70	.70	.71	.71	.71	.71	.933	.928	.921	.911	.898	.883	.65	.63	.61	.59	.57	.54
15	.59	.60	.62	.63	.64	.65	.66	.67	.68	.68	.68	.68	.68	.883	.891	.897	.901	.902	.902	.62	.60	.59	.56	.54	.52
30	.56	.58	.59	.60	.62	.63	.64	.64	.65	.65	.65	.65	.65	.846	.854	.860	.865	.867	.866	.59	.59	.56	.54	.51	.49
45	.53	.55	.56	.57	.59	.60	.61	.61	.62	.62	.63	.63	.63	.807	.816	.822	.827	.829	.829	.56	.55	.53	.51	.48	.46
1600	.50	.51	.53	.54	.56	.57	.58	.58	.59	.59	.60	.60	.60	.767	.776	.783	.787	.789	.789	.53	.52	.50	.47	.45	.42
15	.47	.48	.50	.51	.52	.53	.55	.55	.56	.56	.57	.57	.57	.725	.734	.741	.746	.748	.748	.50	.48	.46	.44	.42	.39
30	.43	.45	.46	.48	.49	.50	.51	.52	.53	.53	.53	.53	.53	.682	.691	.699	.704	.706	.706	.47	.45	.43	.41	.38	.36
45	.40	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.50	.50	.637	.647	.655	.660	.662	.662	.43	.42	.39	.37	.35	.32
1700	.36	.38	.39	.41	.42	.43	.45	.45	.46	.46	.47	.47	.47	.592	.602	.610	.615	.618	.618	.40	.38	.36	.34	.31	.28
15	.33	.34	.36	.37	.39	.40	.41	.42	.43	.43	.43	.43	.43	.546	.556	.564	.570	.572	.572	.36	.34	.32	.30	.27	.25
30	.29	.31	.32	.34	.35	.36	.38	.38	.39	.40	.40	.40	.40	.499	.510	.518	.524	.526	.526	.33	.31	.29	.26	.24	.21
45	.25	.27	.29	.30	.32	.33	.34	.35	.36	.36	.36	.36	.36	.452	.463	.471	.477	.480	.480	.29	.27	.25	.23	.20	.17
	338	361	383	402	420	436	452	463	471	477	480	480	480	477	471	462	449	433	415	388	362	333	301	267	230

MAY-AUG 54 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1800	.21	.23	.25	.27	.28	.29	.31	.31	.32	.33	.33	.33	.33	.32	.31	.30	.29	.28	.26	.23
	288	312	334	354	372	389	405	416	425	430	433	433	433	430	424	414	402	386	339	313
15	.18	.20	.21	.23	.24	.26	.27	.28	.29	.29	.29	.29	.29	.28	.28	.27	.25	.24	.22	.20
	239	263	285	306	324	341	356	369	378	384	386	386	386	383	377	367	354	338	290	263
30	.14	.16	.18	.19	.21	.22	.23	.24	.25	.25	.26	.26	.26	.25	.25	.24	.23	.22	.18	.16
	189	214	237	258	277	294	311	322	331	337	340	340	340	336	330	320	306	290	241	214
45	.10	.12	.14	.16	.17	.19	.20	.21	.22	.22	.22	.22	.22	.22	.21	.21	.20	.18	.15	.12
	140	165	189	210	230	247	264	276	285	291	294	293	293	290	283	273	259	242	193	165
1900	.07	.09	.11	.12	.14	.15	.16	.17	.18	.19	.19	.19	.19	.18	.18	.17	.16	.15	.11	.09
	092	117	141	163	183	201	218	230	239	245	248	248	248	244	237	226	212	195	145	117
15	.03	.05	.07	.09	.10	.12	.13	.14	.15	.15	.15	.15	.15	.15	.15	.14	.13	.11	.07	.05
	044	070	095	117	137	155	173	185	194	200	203	203	203	199	192	181	166	149	098	069
30	.00	.02	.04	.05	.07	.08	.10	.11	.11	.12	.12	.12	.12	.12	.11	.10	.09	.08	.04	.02
	000	025	049	072	093	111	129	141	150	156	159	159	159	155	147	136	121	103	051	023
45	.00	.00	.00	.02	.04	.05	.07	.07	.08	.09	.09	.09	.09	.08	.08	.07	.06	.04	.01	.00
	000	000	005	028	049	068	086	098	108	114	116	116	116	112	104	092	077	059	006	000
2000	.00	.00	.00	.00	.01	.02	.03	.04	.05	.06	.06	.06	.06	.05	.05	.04	.03	.01	.00	.00
	000	000	000	000	007	026	045	057	066	072	075	074	074	070	062	050	035	016	000	000
15	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03	.03	.03	.03	.02	.02	.01	.00	.00	.00	.00
	000	000	000	000	000	000	005	017	027	033	035	034	034	029	021	009	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.)

MAY-AUG 54 N

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
30	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	038	008	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
45	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	089	060	030	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
0600	.10	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	141	112	082	052	021	000	000	000	000	000	000	000	000	000	000	000	000	000		
15	.14	.12	.10	.08	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	192	164	134	104	073	042	010	000	000	000	000	000	000	000	000	000	000	000		
30	.18	.16	.14	.12	.09	.07	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	243	215	186	156	125	094	062	029	000	000	000	000	000	000	000	000	000	000		
45	.22	.20	.18	.15	.13	.11	.08	.06	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00		
	294	266	237	207	177	145	113	081	048	014	000	000	000	000	000	000	000	000		
0700	.26	.23	.21	.19	.17	.14	.12	.10	.07	.05	.02	.00	.00	.00	.00	.00	.00	.00		
	344	316	287	258	227	196	164	131	098	065	031	000	000	000	000	000	000	000		
15	.29	.27	.25	.23	.20	.18	.16	.13	.11	.08	.06	.03	.01	.00	.00	.00	.00	.00		
	393	366	337	307	277	245	213	180	147	114	080	046	007	000	000	000	000	000		
30	.33	.31	.28	.26	.24	.22	.19	.17	.14	.12	.09	.07	.04	.02	.00	.00	.00	.00		
	441	414	385	356	325	294	261	229	195	161	127	094	054	022	000	000	000	000		
45	.36	.34	.32	.30	.27	.25	.23	.20	.18	.15	.13	.10	.07	.05	.03	.01	.00	.00		
	488	461	432	403	372	341	308	275	241	207	173	139	099	067	036	007	000	000		

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

SEP-DEC 54 N

TABLE B-1

MST	DATE											
	SEP						OCT					
	5	10	15	20	25	30	5	10	15	20	25	30
0800	.40	.37	.35	.33	.31	.28	.26	.23	.21	.18	.16	.13
	533	506	478	448	417	386	353	320	286	252	217	183
15	.43	.41	.38	.36	.34	.31	.29	.26	.24	.21	.19	.16
	577	550	521	492	461	429	396	363	329	294	260	225
30	.46	.44	.42	.39	.37	.34	.32	.29	.27	.24	.22	.19
	618	591	563	533	502	470	437	404	369	335	300	265
45	.49	.47	.44	.42	.40	.37	.35	.32	.30	.27	.24	.22
	658	631	602	573	542	509	476	442	408	373	338	303
0900	.52	.49	.47	.45	.42	.40	.37	.35	.32	.30	.27	.24
	695	668	640	610	578	546	513	479	444	409	373	338
15	.54	.52	.50	.47	.45	.42	.40	.37	.35	.32	.29	.27
	730	703	674	644	613	580	547	512	477	442	406	371
30	.57	.54	.52	.50	.47	.45	.42	.40	.37	.34	.32	.29
	763	735	706	676	644	612	578	543	508	472	437	401
45	.59	.57	.54	.52	.49	.47	.44	.42	.39	.36	.34	.31
	792	765	736	705	673	640	606	571	536	500	464	428
1000	.61	.59	.56	.54	.51	.49	.46	.43	.41	.38	.35	.33
	819	792	762	732	699	666	632	596	560	524	488	453
15	.63	.60	.58	.56	.53	.50	.48	.45	.42	.40	.37	.34
	843	815	786	755	722	689	654	618	582	546	510	474
30	.64	.62	.60	.57	.54	.52	.49	.46	.44	.41	.38	.35
	864	836	806	775	742	708	673	637	601	564	528	492
45	.65	.63	.61	.58	.56	.53	.50	.48	.45	.42	.39	.36
	882	854	824	792	759	724	689	653	616	579	543	507

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.)

SEP-DEC 54 N

MST	DATE											
	SEP				OCT				NOV			
	5	10	15	20	25	30	5	10	15	20	25	30
1100	.67	.64	.62	.59	.57	.54	.51	.48	.46	.43	.40	.37
	897	868	838	806	772	737	702	665	628	591	554	518
15	.67	.65	.63	.60	.57	.55	.52	.49	.46	.43	.41	.38
	908	879	848	816	782	747	711	674	637	600	563	526
30	.68	.66	.63	.61	.58	.55	.52	.49	.47	.44	.41	.38
	916	887	856	823	789	753	717	680	642	605	567	531
45	.68	.66	.63	.61	.58	.55	.52	.50	.47	.44	.41	.38
	921	891	860	826	792	756	719	682	644	606	569	533
1200	.68	.66	.63	.61	.58	.55	.52	.50	.47	.44	.41	.38
	922	892	860	827	791	755	718	680	642	604	567	531
15	.68	.66	.63	.61	.58	.55	.52	.49	.46	.43	.41	.38
	921	890	857	823	788	751	714	675	637	599	562	525
30	.68	.65	.63	.60	.57	.54	.52	.49	.46	.43	.40	.37
	915	884	851	817	781	744	706	667	629	590	553	516
45	.67	.65	.62	.59	.57	.54	.51	.48	.45	.42	.39	.36
	906	875	842	807	770	733	694	656	617	578	541	504
1300	.66	.64	.61	.58	.56	.53	.50	.47	.44	.41	.38	.35
	895	862	829	793	756	718	680	641	602	563	525	489
15	.65	.63	.60	.57	.54	.51	.48	.45	.42	.39	.37	.34
	879	847	812	776	739	701	662	623	583	545	507	470
30	.64	.61	.59	.56	.53	.50	.47	.44	.41	.38	.35	.32
	861	828	793	757	719	680	641	601	562	523	485	449
45	.62	.60	.57	.54	.51	.48	.45	.42	.39	.36	.33	.31
	839	806	770	734	695	656	617	577	537	498	460	424

SEP-DEC 54 N TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.60	.58	.55	.52	.49	.46	.43	.40	.37	.34	.31	.29	.26	.23	.21	.19	.18	.16	.15	.15	.14	.14	.15	.15
	815	781	745	708	669	629	589	549	509	470	432	396	355	324	295	270	249	231	217	208	203	202	206	214
15	.58	.56	.53	.50	.47	.44	.41	.38	.35	.32	.29	.26	.23	.21	.19	.17	.16	.14	.13	.13	.12	.12	.13	.13
	787	753	717	679	640	600	559	519	479	440	402	366	325	294	266	241	220	202	189	180	175	175	180	188
30	.56	.53	.51	.48	.45	.42	.38	.35	.32	.29	.27	.24	.21	.19	.17	.15	.13	.12	.11	.11	.10	.10	.11	.11
	757	722	685	647	607	567	527	486	446	406	368	332	292	261	233	209	188	171	158	150	146	146	151	160
45	.54	.51	.48	.45	.42	.39	.36	.33	.30	.27	.24	.21	.18	.16	.14	.12	.11	.10	.09	.08	.08	.08	.08	.09
	724	689	651	613	573	532	491	450	410	371	333	297	256	226	198	174	154	137	125	117	113	114	119	128
1500	.51	.48	.45	.42	.39	.36	.33	.30	.27	.24	.21	.19	.16	.14	.12	.10	.08	.07	.06	.05	.06	.06	.06	.07
	689	653	615	576	535	494	453	412	372	332	294	258	218	188	161	137	117	101	089	081	078	079	085	095
15	.48	.46	.43	.40	.36	.33	.30	.27	.24	.21	.18	.16	.13	.11	.09	.07	.06	.04	.04	.03	.03	.03	.03	.04
	651	615	576	537	496	454	413	372	331	292	254	218	178	148	121	098	078	063	051	044	041	043	048	058
30	.45	.43	.40	.36	.33	.30	.27	.24	.21	.18	.15	.13	.10	.08	.06	.04	.03	.02	.01	.00	.00	.00	.01	.01
	611	574	535	495	454	412	371	329	288	249	211	176	136	106	080	057	037	022	011	004	002	004	010	020
45	.42	.39	.36	.33	.30	.27	.24	.21	.18	.15	.12	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00
	569	532	492	452	410	368	326	285	244	204	167	131	092	062	036	014	000	000	000	000	000	000	000	000
1600	.39	.36	.33	.30	.27	.24	.20	.17	.14	.11	.09	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	525	487	448	407	365	322	280	238	198	158	121	085	046	017	000	000	000	000	000	000	000	000	000	000
15	.36	.33	.30	.27	.23	.20	.17	.14	.11	.08	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	480	441	401	360	318	275	233	191	150	110	073	038	000	000	000	000	000	000	000	000	000	000	000	000
30	.32	.29	.26	.23	.20	.17	.13	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	433	394	353	311	269	226	184	142	101	061	024	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.29	.26	.22	.19	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	385	345	304	262	219	176	134	091	051	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

COS Z
X0 (W/M*2.)

SOLAR PARAMETERS

SEP-DEC 54 N

TABLE B-1

MST	DATE												SOLAR PARAMETERS												COS Z XO (W/M**2.)	*** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *														
	JAN				FEB				MAR				APR				52 N	TABLE B-1																						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15			20	25	30																			
0700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	.13	.16	.19		.23	.26	.29	.31	.34	.36		.23	.26	.29	.31	.34	.36		.314	.353	.389	.423	.455	.484	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.03	.11	.14	.17	.20	.23		.27	.30	.32	.35	.37	.40		.27	.30	.32	.35	.37	.40		.367	.405	.441	.475	.506	.534	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.07	.12	.15	.18	.21	.24	.27		.31	.33	.36	.39	.41	.43		.31	.33	.36	.39	.41	.43		.418	.455	.492	.525	.555	.583
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.08	.11	.15	.18	.22	.25	.28	.31		.34	.37	.40	.42	.45	.47		.34	.37	.40	.42	.45	.47		.468	.506	.541	.574	.604	.631
0800	.00	.00	.00	.00	.00	.00	.01	.02					.04	.07	.09	.12	.14			.38	.41	.43	.46	.48	.50		.38	.41	.43	.46	.48	.50		.517	.554	.593	.621	.650	.677	
15	.00	.00	.01	.01	.02	.04	.06						.08	.10	.12	.15	.18			.41	.44	.47	.49	.51	.54		.41	.44	.47	.49	.51	.54		.564	.600	.634	.666	.695	.721	
30	.03	.03	.04	.05	.06	.07	.09						.11	.13	.16	.18	.21			.45	.47	.50	.52	.55	.57		.45	.47	.50	.52	.55	.57		.609	.645	.678	.710	.738	.764	
45	.06	.06	.07	.08	.09	.10	.12						.14	.17	.19	.22	.24			.48	.50	.53	.55	.58	.60		.48	.50	.53	.55	.58	.60		.652	.687	.720	.751	.779	.804	
0900	.09	.09	.09	.10	.12	.13	.15						.17	.20	.22	.25	.27			.51	.53	.56	.58	.60	.62		.51	.53	.56	.58	.60	.62		.692	.727	.760	.790	.817	.842	
15	.11	.11	.12	.13	.14	.16	.18						.20	.22	.25	.28	.30			.53	.56	.59	.61	.63	.65		.53	.56	.59	.61	.63	.65		.730	.765	.797	.826	.853	.877	
30	.14	.14	.15	.16	.17	.18	.20						.23	.25	.28	.30	.33			.56	.59	.61	.63	.66	.68		.56	.59	.61	.63	.66	.68		.766	.800	.831	.860	.886	.910	
45	.16	.16	.17	.18	.19	.21	.23						.25	.27	.30	.33	.36			.58	.61	.63	.66	.68	.70		.58	.61	.63	.66	.68	.70		.798	.832	.862	.891	.917	.940	

MST	DATE																													
	JAN				FEB				MAR				APR																	
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30											
1000	.18	.18	.19	.20	.21	.23	.25	.27	.30	.32	.35	.38	.43	.45	.49	.52	.54	.57	.61	.63	.65	.68	.70	.72	.828	861	891	919	945	968
	251	256	267	281	300	323	349	385	418	453	490	528	592	632	672	711	749	786												
	.20	.20	.21	.22	.23	.25	.27	.29	.32	.34	.37	.40	.43	.43	.51	.54	.56	.59	.62	.65	.67	.70	.72	.74	854	887	917	944	969	992
15	277	282	293	308	328	351	377	413	446	482	519	557	620	660	700	739	777	813												
	.21	.22	.22	.24	.25	.27	.29	.31	.34	.36	.39	.42	.45	.49	.52	.55	.58	.61	.64	.67	.69	.71	.73	.75	878	909	939	966	991	013
	299	305	316	332	352	375	402	439	472	507	545	583	646	686	725	764	801	837												
30	.23	.23	.24	.25	.26	.28	.30	.33	.35	.38	.41	.43	.48	.51	.54	.57	.60	.62	.66	.68	.70	.73	.75	.76	898	929	958	985	009	031
	318	325	337	353	373	397	424	461	494	530	567	605	669	708	747	785	822	857												
	.24	.24	.25	.26	.28	.29	.31	.34	.37	.39	.42	.45	.49	.52	.55	.58	.61	.64	.67	.69	.72	.74	.76	.78	914	945	974	000	024	045
1100	334	341	353	370	391	415	443	480	514	549	587	625	687	726	765	803	839	875												
	.25	.25	.26	.27	.29	.31	.33	.35	.38	.40	.43	.46	.51	.53	.56	.59	.62	.65	.68	.70	.73	.75	.77	.78	927	958	989	012	036	057
	347	354	367	384	405	430	458	496	529	565	602	641	703	742	780	817	854	888												
15	.25	.26	.27	.28	.30	.31	.33	.36	.39	.41	.44	.47	.51	.54	.57	.60	.63	.65	.69	.71	.73	.75	.77	.79	937	967	995	020	044	065
	356	364	377	395	417	442	470	508	542	577	615	653	715	753	791	828	864	898												
	.26	.26	.27	.28	.30	.32	.34	.37	.39	.42	.45	.47	.52	.55	.58	.61	.63	.66	.69	.71	.74	.76	.78	.79	943	973	000	025	048	069
30	362	370	384	402	424	450	478	516	550	586	623	662	723	761	799	836	871	905												
	.26	.26	.27	.29	.30	.32	.34	.37	.40	.42	.45	.48	.52	.55	.58	.61	.64	.66	.69	.71	.74	.76	.78	.79	946	975	002	027	050	070
	364	373	388	406	428	454	483	521	556	591	629	667	729	766	803	840	874	908												
15	.26	.26	.27	.29	.30	.32	.34	.37	.40	.42	.45	.48	.52	.55	.59	.61	.64	.66	.69	.71	.74	.76	.77	.79	944	973	000	025	047	068
	364	372	387	406	429	455	484	523	557	593	630	668	729	767	804	840	874	907												
	.25	.26	.27	.29	.30	.32	.34	.37	.40	.42	.45	.48	.52	.55	.58	.61	.63	.66	.69	.71	.73	.75	.77	.79	940	968	995	019	042	062
30	359	368	384	403	426	453	482	521	555	591	628	666	726	764	801	836	870	903												
	.25	.26	.27	.28	.30	.32	.34	.37	.39	.42	.45	.47	.52	.55	.57	.60	.63	.65	.68	.70	.73	.75	.76	.78	932	960	989	010	033	053
	351	361	377	397	420	447	476	515	550	586	623	660	720	757	794	829	863	895												

JAN-APR 52 N TABLE B-1 SOLAR PARAMETERS COS Z X0 (W/M**2.) *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1300	.24	.25	.26	.27	.29	.31	.33	.36	.39	.41	.44	.47	.51	.54	.57	.59	.62	.64	.67	.70	.72	.74	.75	.77	
	340	350	367	387	410	437	467	506	541	576	613	651	710	747	783	818	852	884	920	943	974	998	020	040	
15	.23	.24	.25	.26	.28	.30	.32	.35	.38	.40	.43	.46	.50	.53	.56	.58	.61	.63	.66	.69	.70	.72	.74	.76	
	326	336	353	373	397	425	455	493	528	564	601	638	697	734	769	804	837	869	905	932	958	982	004	024	
30	.22	.23	.24	.25	.27	.29	.31	.34	.36	.39	.42	.45	.49	.52	.54	.57	.60	.62	.65	.67	.69	.71	.73	.75	
	308	319	336	357	381	408	438	477	512	548	584	621	680	717	752	786	819	850	886	913	939	963	985	005	
45	.20	.21	.22	.24	.26	.28	.30	.33	.35	.38	.40	.43	.47	.50	.53	.55	.58	.60	.63	.65	.67	.69	.71	.73	
	287	298	315	337	361	389	419	458	492	528	565	601	660	696	731	765	798	829	864	891	917	941	963	983	
1400	.19	.19	.21	.22	.24	.26	.28	.31	.33	.36	.39	.41	.46	.49	.51	.54	.56	.59	.61	.64	.66	.68	.69	.71	
	263	274	292	313	338	366	396	435	470	505	541	578	636	672	707	740	773	804	839	865	891	915	937	957	
15	.17	.18	.19	.20	.22	.24	.26	.29	.32	.34	.37	.40	.44	.46	.49	.52	.54	.57	.59	.61	.63	.65	.67	.69	
	236	248	266	287	312	340	370	409	444	479	515	552	609	645	679	713	745	776	810	837	853	887	909	929	
30	.15	.15	.17	.18	.20	.22	.24	.27	.30	.32	.35	.37	.42	.44	.47	.49	.52	.54	.57	.59	.61	.63	.65	.67	
	206	218	236	258	283	311	341	380	415	450	486	522	579	615	649	682	714	744	779	805	831	855	877	898	
45	.12	.13	.14	.16	.18	.20	.22	.25	.27	.30	.32	.35	.39	.42	.44	.47	.49	.52	.54	.57	.59	.61	.62	.64	
	173	185	204	226	251	279	309	348	383	418	453	489	546	581	615	648	680	710	745	772	797	821	843	864	
1500	.10	.11	.12	.14	.15	.17	.20	.22	.25	.27	.30	.33	.37	.39	.42	.44	.47	.49	.52	.54	.56	.58	.60	.61	
	138	150	169	191	216	244	275	314	348	383	418	454	510	545	579	612	643	673	708	735	750	784	807	827	
15	.07	.08	.09	.11	.13	.15	.17	.20	.22	.25	.27	.30	.34	.37	.39	.42	.44	.46	.49	.51	.53	.55	.57	.58	
	100	113	132	154	179	207	238	276	310	345	380	416	472	506	540	572	604	634	668	695	721	745	767	789	
30	.04	.05	.07	.08	.10	.12	.14	.17	.19	.22	.24	.27	.31	.34	.36	.38	.41	.43	.46	.48	.50	.52	.54	.55	
	060	073	092	114	140	168	198	236	270	304	340	375	431	465	498	531	562	592	626	653	679	703	726	747	
45	.01	.02	.04	.05	.07	.09	.11	.14	.16	.19	.21	.24	.28	.30	.33	.35	.38	.40	.43	.45	.47	.49	.50	.52	
	018	031	050	072	098	126	156	194	227	262	297	332	387	421	454	487	518	548	582	609	635	659	683	704	

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
COS Z
XO (W/M**2.)

TABLE B-1

JAN-APR

52 N

MST	DATE																							
	JAN					FEB					MAR					APR								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1600	.00	.00	.00	.02	.04	.06	.08	.11	.13	.16	.18	.21	.25	.27	.30	.32	.34	.37	.39	.41	.43	.45	.47	.49
	000	000	006	028	054	081	111	150	183	217	252	286	341	375	408	440	471	501	536	563	589	614	637	659
15	.00	.00	.00	.00	.01	.03	.05	.07	.10	.12	.15	.17	.21	.24	.26	.28	.31	.33	.36	.33	.30	.42	.44	.45
	000	000	000	000	008	035	065	103	136	170	204	239	294	327	360	392	423	453	488	515	541	566	590	612
30	.00	.00	.00	.00	.00	.00	.01	.04	.06	.09	.11	.14	.18	.20	.22	.25	.27	.29	.32	.34	.36	.38	.40	.42
	000	000	000	000	000	000	017	055	088	121	155	190	244	278	310	342	373	403	438	468	492	517	541	564
45	.00	.00	.00	.00	.00	.00	.00	.00	.03	.05	.08	.10	.14	.16	.19	.21	.23	.26	.28	.30	.33	.34	.36	.38
	000	000	000	000	000	000	000	005	038	071	105	139	193	226	259	291	322	352	387	415	442	467	492	515
1700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.06	.10	.13	.15	.17	.20	.22	.25	.27	.29	.31	.33	.34
	000	000	000	000	000	000	000	000	000	020	053	087	141	174	207	238	269	300	335	363	390	416	441	464
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.06	.09	.11	.13	.16	.18	.21	.23	.25	.27	.29	.31
	000	000	000	000	000	000	000	000	000	000	000	034	087	120	153	185	216	246	281	310	337	363	389	413
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.07	.09	.12	.14	.17	.19	.21	.23	.25	.27
	000	000	000	000	000	000	000	000	000	000	000	000	033	066	098	130	161	192	227	255	284	311	336	361
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.08	.10	.13	.15	.17	.19	.21	.23
	000	000	000	000	000	000	000	000	000	000	000	000	000	011	043	075	106	137	173	202	230	257	283	308
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.06	.09	.11	.13	.15	.17	.19
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	020	051	082	118	147	175	204	230
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.07	.09	.11	.13	.15
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	063	093	122	150	177	203
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.07	.09	.11
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	009	039	068	097	124	151
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.07
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	015	044	072	099

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE B-1

52 N

JAN-APR

MST	DATE																		
	JAN				FEB				MAR				APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	020	048
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1

52 N

JAN-APR

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0400	.00	.00	.00	.00	.00	.01	.02	.03	.03	.03	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	014	027	034	037	037	034	027	018	005	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.02	.03	.04	.05	.06	.06	.06	.06	.05	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	004	025	043	058	071	077	081	080	077	061	048	033	016	000	000	000	000	000	000	000	000
30	.00	.02	.04	.05	.07	.08	.09	.09	.09	.09	.09	.09	.08	.07	.06	.05	.03	.02	.00	.00	.00	.00	.00	.00
	000	026	051	072	089	104	116	122	125	125	121	115	105	093	078	061	041	020	000	000	000	000	000	000
45	.04	.06	.07	.09	.10	.11	.12	.13	.13	.13	.13	.12	.11	.11	.09	.08	.07	.05	.03	.01	.00	.00	.00	.00
	048	075	099	119	137	150	162	168	171	171	167	160	151	139	124	107	088	067	039	015	000	000	000	000
0500	.07	.09	.11	.13	.14	.15	.16	.16	.16	.16	.16	.16	.15	.14	.13	.12	.10	.09	.07	.05	.03	.01	.00	.00
	098	124	148	168	185	198	210	216	218	217	214	207	198	185	171	154	135	115	088	064	039	013	000	000
15	.11	.13	.15	.16	.18	.19	.19	.20	.20	.20	.20	.19	.19	.18	.17	.15	.14	.12	.10	.09	.07	.05	.03	.01
	149	175	198	218	234	247	258	264	266	265	261	255	245	233	219	202	184	164	138	114	090	064	038	010
30	.15	.17	.19	.20	.21	.22	.23	.24	.24	.24	.23	.23	.22	.21	.20	.19	.18	.16	.14	.12	.11	.09	.07	.05
	200	226	249	268	284	296	307	312	314	313	310	303	294	282	268	252	233	214	188	165	141	116	090	063
45	.19	.21	.22	.24	.25	.26	.27	.27	.27	.27	.27	.27	.26	.25	.24	.23	.21	.20	.18	.15	.14	.13	.11	.09
	252	277	300	318	334	346	356	361	363	362	358	352	342	331	317	301	283	264	239	215	193	168	142	116
0600	.23	.25	.26	.28	.29	.30	.31	.31	.31	.31	.31	.30	.30	.29	.28	.27	.25	.24	.22	.20	.18	.17	.15	.13
	304	329	351	369	384	396	406	411	412	411	407	401	391	380	366	351	334	315	290	263	245	221	195	169
15	.27	.28	.30	.31	.33	.34	.34	.35	.35	.35	.34	.34	.33	.32	.31	.30	.29	.28	.26	.24	.22	.20	.19	.17
	356	381	402	420	434	446	455	460	461	460	456	450	441	429	416	401	384	365	341	320	297	273	248	223
30	.30	.32	.34	.35	.36	.37	.38	.38	.39	.38	.38	.38	.37	.36	.35	.34	.33	.31	.30	.29	.28	.27	.26	.25
	408	432	453	470	484	495	504	509	510	509	505	498	490	479	465	451	434	416	392	371	349	326	301	276
45	.34	.36	.38	.39	.40	.41	.42	.42	.42	.42	.42	.41	.41	.40	.39	.38	.37	.35	.33	.32	.30	.28	.26	.25
	459	483	503	520	534	544	553	557	559	557	553	547	538	527	515	500	484	466	443	422	400	378	354	329

MAY-AUG 52 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M+2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																		AUG					
	MAY						JUN						JUL											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
	.38	.40	.41	.43	.44	.45	.45	.46	.46	.46	.45	.45	.44	.44	.43	.41	.40	.39	.37	.36	.34	.32	.30	.28
0700	510	533	552	569	582	593	601	605	606	605	601	595	580	570	563	549	533	516	493	471	451	429	405	381
15	.42	.43	.45	.46	.47	.48	.49	.49	.49	.49	.49	.49	.49	.49	.47	.45	.44	.43	.41	.39	.38	.36	.34	.32
	560	582	601	617	630	640	649	652	653	652	649	642	634	623	611	597	582	565	542	523	502	479	456	432
30	.45	.47	.48	.50	.51	.52	.52	.53	.53	.53	.52	.52	.51	.51	.50	.49	.47	.46	.44	.42	.41	.40	.38	.36
	608	630	649	664	677	687	695	698	699	698	694	688	680	670	659	644	629	613	591	571	551	529	506	482
45	.49	.50	.52	.53	.54	.55	.56	.56	.56	.56	.56	.55	.54	.54	.53	.52	.51	.50	.48	.46	.45	.43	.41	.40
	655	677	695	710	723	732	740	743	744	743	739	733	725	715	704	690	676	659	638	619	599	577	555	531
0800	.52	.54	.55	.56	.58	.58	.59	.59	.59	.59	.59	.59	.58	.57	.56	.55	.54	.53	.51	.50	.48	.47	.45	.43
	701	722	740	755	767	776	783	787	787	786	782	777	769	759	748	735	721	705	684	665	645	624	602	578
15	.55	.57	.58	.60	.61	.61	.62	.62	.63	.63	.62	.62	.61	.61	.60	.59	.58	.56	.55	.53	.52	.50	.48	.46
	745	765	783	797	809	818	825	828	829	828	824	819	811	802	791	778	764	748	728	710	690	669	647	624
30	.58	.60	.62	.63	.64	.64	.65	.65	.66	.66	.65	.65	.64	.64	.63	.62	.61	.60	.58	.56	.55	.53	.52	.50
	787	807	824	838	849	858	865	868	869	868	864	859	852	842	832	819	806	790	770	752	733	712	690	667
45	.61	.63	.64	.66	.67	.67	.68	.68	.68	.68	.68	.68	.67	.67	.66	.65	.64	.63	.61	.60	.58	.56	.55	.53
	826	846	863	877	888	896	903	906	907	906	902	897	890	881	871	859	845	831	811	793	774	753	732	709
0900	.64	.66	.67	.68	.69	.70	.71	.71	.71	.71	.71	.71	.70	.69	.69	.68	.67	.65	.64	.62	.61	.59	.58	.56
	864	883	899	913	924	932	939	942	943	942	939	933	927	918	908	896	883	869	849	832	813	792	771	748
15	.67	.68	.70	.71	.72	.73	.73	.74	.74	.74	.73	.73	.72	.72	.71	.70	.69	.68	.67	.65	.64	.62	.60	.58
	899	918	934	947	958	966	973	976	977	975	972	967	961	952	943	931	918	904	885	865	849	829	807	784
30	.69	.71	.72	.73	.74	.75	.76	.76	.76	.76	.76	.76	.75	.74	.74	.73	.72	.71	.69	.68	.66	.65	.63	.61
	931	950	965	978	989	997	+004	+007	+008	+007	+004	999	993	985	975	964	951	937	919	902	883	863	841	818
45	.71	.73	.74	.75	.76	.77	.78	.78	.78	.78	.78	.78	.77	.77	.76	.75	.74	.73	.71	.70	.68	.67	.65	.63
	961	979	994	+007	+018	+026	+032	+035	+036	+035	+033	+028	+022	+014	+005	994	982	968	950	932	914	894	873	850
MAY-AUG	52	N	TABLE 8-1 SOLAR PARAMETERS														COS Z XO (W/M+2.)		*** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY +					

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1000	.73	.75	.76	.77	.78	.79	.80	.80	.80	.80	.80	.80	.79	.79	.78	.77	.76	.75	.74	.72	.71	.69	.67	.65
	988*006	*021	*033	*044	*051		*058	*061	*062	*062	*059	*055	*049	*041	*032	*022	*010	996	978	961	943	923	901	878
15	.75	.77	.78	.79	.80	.81	.81	.82	.82	.82	.82	.81	.81	.91	.90	.79	.78	.77	.75	.74	.73	.71	.69	.67
	*012	*029	*044	*057	*067	*074	*081	*084	*085	*085	*083	*079	*073	*066	*057	*046	*035	*021	*003	986	969	948	927	903
30	.77	.78	.80	.81	.81	.82	.83	.83	.83	.83	.83	.83	.83	.82	.81	.81	.80	.79	.77	.76	.74	.73	.71	.69
	*033	*050	*064	*077	*087	*095	*101	*104	*106	*105	*103	*099	*093	*067	*078	*068	*057	*043	*026	*009	951	971	949	926
45	.78	.80	.81	.82	.83	.84	.84	.85	.85	.85	.85	.84	.84	.84	.83	.82	.81	.80	.79	.77	.76	.74	.72	.70
	*050	*067	*082	*094	*104	*112	*118	*122	*123	*123	*121	*117	*112	*105	*097	*087	*076	*063	*045	*023	*010	990	968	945
1100	.79	.81	.82	.83	.84	.85	.85	.86	.86	.86	.86	.86	.85	.85	.84	.83	.82	.81	.80	.78	.77	.75	.73	.71
	*065	*081	*096	*106	*118	*125	*132	*136	*137	*137	*136	*132	*127	*121	*113	*103	*092	*079	*061	*044	*026	*006	984	960
15	.80	.81	.83	.84	.85	.85	.86	.86	.87	.87	.87	.86	.86	.86	.85	.84	.83	.82	.81	.79	.78	.76	.74	.72
	*076	*092	*106	*118	*128	*136	*143	*147	*149	*149	*147	*144	*139	*133	*125	*116	*104	*092	*074	*057	*039	*019	996	973
30	.81	.82	.83	.84	.85	.86	.87	.87	.87	.87	.87	.87	.87	.86	.85	.85	.84	.83	.81	.80	.79	.77	.75	.73
	*083	*100	*114	*126	*136	*144	*151	*155	*157	*157	*156	*153	*148	*142	*134	*125	*114	*101	*084	*067	*048	*028	*006	981
45	.81	.82	.84	.85	.85	.86	.87	.87	.88	.88	.88	.88	.87	.87	.86	.85	.84	.83	.82	.81	.79	.77	.75	.73
	*088	*104	*118	*130	*140	*148	*155	*159	*161	*162	*161	*158	*154	*148	*141	*131	*120	*108	*090	*073	*055	*034	*011	987
1200	.81	.82	.84	.85	.86	.86	.87	.87	.88	.88	.88	.88	.87	.87	.86	.86	.85	.84	.82	.81	.79	.77	.76	.74
	*089	*105	*119	*131	*141	*149	*156	*161	*163	*164	*163	*161	*157	*151	*143	*134	*123	*111	*093	*076	*057	*036	*014	989
15	.81	.82	.83	.84	.85	.86	.87	.87	.88	.88	.88	.88	.87	.87	.86	.86	.85	.84	.82	.81	.79	.77	.76	.73
	*086	*102	*116	*128	*139	*147	*154	*159	*162	*163	*162	*160	*150	*150	*143	*134	*123	*111	*093	*076	*057	*036	*012	987
30	.80	.82	.83	.84	.85	.86	.86	.87	.87	.87	.87	.87	.87	.87	.86	.85	.84	.83	.82	.80	.79	.77	.75	.73
	*080	*096	*110	*123	*133	*141	*149	*154	*157	*158	*158	*156	*152	*147	*140	*131	*120	*107	*089	*072	*053	*031	*008	982
45	.80	.81	.82	.83	.84	.85	.86	.86	.87	.87	.87	.87	.87	.86	.86	.85	.84	.83	.81	.80	.78	.77	.75	.72
	*071	*087	*101	*114	*124	*133	*141	*146	*149	*150	*150	*148	*145	*140	*133	*124	*113	*100	*082	*065	*045	*023	*000	974

MAY-AUG 52 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30							
1300	.79	.80	.81	.82	.83	.84	.85	.85	.86	.86	.86	.86	.85	.85	.85	.84	.83	.82	.81	.80	.79	.77	.76	.74	.72
	*C58*074	*089	*101	*112	*121		*129	*134	*138	*140	*140	*138	*135	*130	*123	*114	*103	.090		.072	.051	.034	.012	.988	.962
15	.77	.79	.80	.81	.82	.83	.84	.84	.85	.85	.85	.85	.85	.84	.84	.83	.82	.81	.80	.79	.78	.76	.75	.73	.70
	*042*059	*073	*086	*097	*106		*114	*120	*124	*126	*126	*125	*121	*116	*109	*101	.090	.077		.058	.040	.020	.998	.973	.946
30	.76	.77	.79	.80	.81	.82	.83	.83	.83	.84	.84	.84	.83	.83	.83	.82	.81	.80	.79	.78	.77	.75	.73	.71	.69
	*023*040	*054	*067	*078	*088		*097	*102	*106	*109	*109	*108	*105	*100	.093	.084	.073	.060		.041	.023	.003	.980	.955	.927
45	.74	.76	.77	.78	.79	.80	.81	.82	.82	.82	.82	.82	.82	.82	.81	.80	.79	.78	.77	.75	.74	.72	.70	.67	.65
	*001*018	*032	*045	*057	*066		*076	*082	*086	*089	.083	.068	*085	.081	.074	.065	.054	.041		.022	.003	.932	.959	.933	.906
1400	.73	.74	.75	.76	.77	.78	.79	.80	.80	.80	.81	.81	.80	.80	.79	.79	.78	.77	.75	.74	.72	.70	.68	.66	.63
	.976	.993	*008	*021	*033	*042	*052	*058	*063	*066	*067	.066	*063	.058	.052	.043	.031	.018		.999	.980	.959	.935	.909	.881
15	.70	.72	.73	.74	.75	.76	.77	.78	.78	.79	.79	.79	.78	.78	.78	.77	.76	.75	.73	.72	.70	.68	.66	.63	.61
	.948	.965	.980	.993	*005	*016	*026	*032	*037	*040	*041	.041	*038	.033	.026	.017	.006	.992		.973	.954	.932	.908	.881	.852
30	.68	.70	.71	.72	.73	.74	.75	.76	.76	.76	.77	.77	.76	.76	.75	.75	.74	.73	.71	.69	.67	.65	.63	.61	.59
	.917	.934	.949	.963	.975	.986	.997	*003	*009	*012	.013	.013	*010	.005	.999	.989	.978	.964		.944	.925	.903	.878	.851	.821
45	.66	.67	.68	.70	.71	.72	.73	.73	.74	.74	.74	.74	.74	.74	.73	.72	.71	.70	.69	.67	.65	.63	.61	.59	.57
	.883	.900	.916	.930	.943	.954	.965	.972	.977	.981	.983	.982	.980	.975	.968	.959	.947	.933		.913	.893	.870	.845	.818	.788
1500	.63	.64	.66	.67	.68	.69	.70	.71	.71	.72	.72	.72	.72	.71	.71	.70	.69	.68	.66	.64	.63	.61	.58	.56	.53
	.847	.864	.881	.895	.908	.919	.931	.938	.944	.948	.949	.949	.947	.942	.935	.926	.914	.899		.879	.854	.835	.810	.782	.751
15	.60	.62	.63	.64	.65	.66	.67	.68	.69	.69	.69	.69	.69	.69	.68	.67	.66	.65	.63	.62	.60	.58	.55	.53	.50
	.808	.826	.843	.858	.871	.883	.894	.902	.908	.912	.914	.914	.911	.907	.900	.890	.878	.863		.842	.822	.800	.772	.743	.712
30	.57	.59	.60	.61	.62	.63	.64	.65	.66	.66	.66	.66	.66	.66	.65	.64	.63	.62	.60	.59	.57	.55	.52	.50	.47
	.767	.786	.803	.818	.832	.844	.856	.864	.870	.874	.876	.876	.874	.869	.862	.853	.840	.825		.803	.782	.759	.732	.703	.671
45	.54	.55	.57	.58	.59	.60	.61	.62	.63	.63	.63	.63	.63	.63	.62	.61	.60	.59	.57	.55	.54	.52	.49	.47	.44
	.724	.743	.761	.776	.790	.803	.815	.824	.830	.835	.837	.837	.835	.830	.823	.813	.800	.785		.763	.741	.717	.690	.660	.628

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY -

XO (W/H=-*2.)

SOLAR PARAMETERS COS Z

MAY-AUG 52 N

TABLE B-1

MST	DATE																							
	MAY				JUN				JUL				AUG											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1600	.51	.52	.54	.55	.56	.57	.58	.59	.60	.60	.60	.60	.60	.60	.59	.58	.57	.56	.54	.52	.50	.48	.46	.43
	680	699	717	733	747	760	773	782	789	793	796	796	793	789	781	771	758	743	720	694	673	645	615	582
15	.47	.49	.50	.51	.53	.54	.55	.56	.56	.57	.57	.57	.57	.57	.56	.55	.54	.53	.51	.49	.47	.45	.42	.40
	633	653	671	688	703	716	729	738	745	750	753	753	751	746	738	728	715	699	675	653	628	599	569	535
30	.44	.45	.47	.48	.49	.50	.52	.52	.53	.53	.54	.54	.53	.53	.52	.52	.50	.49	.47	.46	.44	.41	.39	.36
	586	606	624	641	657	670	684	693	701	706	708	709	706	701	693	683	669	653	629	606	581	552	521	487
45	.40	.42	.43	.44	.46	.47	.48	.49	.49	.50	.50	.50	.50	.50	.49	.48	.47	.46	.44	.42	.40	.38	.35	.33
	537	557	576	594	609	623	638	647	655	660	663	663	661	655	647	637	623	606	582	558	532	503	471	437
1700	.36	.38	.39	.41	.42	.43	.44	.45	.46	.46	.47	.47	.46	.46	.45	.44	.43	.42	.40	.38	.36	.34	.31	.29
	486	507	527	545	561	575	590	600	608	613	616	616	614	609	600	589	575	558	533	509	483	453	421	386
15	.32	.34	.36	.37	.38	.40	.41	.42	.42	.43	.43	.43	.43	.42	.42	.41	.40	.38	.36	.35	.32	.30	.28	.25
	436	457	477	495	512	527	542	552	560	565	568	569	566	561	552	541	527	509	484	459	432	402	369	334
30	.29	.30	.32	.33	.35	.36	.37	.38	.39	.39	.39	.39	.39	.39	.38	.37	.36	.35	.33	.31	.29	.26	.24	.21
	384	406	426	445	462	477	493	503	511	517	520	520	518	512	504	492	477	459	433	409	381	350	317	281
45	.25	.26	.28	.30	.31	.32	.33	.34	.35	.35	.36	.36	.35	.35	.34	.33	.32	.31	.29	.27	.25	.22	.20	.17
	332	354	375	395	412	428	444	454	463	468	471	472	469	463	454	442	427	409	383	357	329	298	264	228
1800	.21	.23	.24	.26	.27	.28	.30	.31	.31	.32	.32	.32	.32	.31	.31	.30	.28	.27	.25	.23	.21	.18	.16	.13
	280	303	324	344	362	378	394	405	414	419	423	423	420	414	405	393	377	358	332	306	277	245	211	174
15	.17	.19	.20	.22	.23	.25	.26	.27	.28	.28	.28	.28	.28	.28	.27	.26	.25	.23	.21	.19	.17	.14	.12	.09
	228	251	273	293	312	328	345	356	365	370	374	374	371	365	355	343	327	308	280	254	225	193	158	121
30	.13	.15	.17	.18	.20	.21	.22	.23	.24	.24	.25	.25	.24	.24	.23	.22	.21	.19	.17	.15	.13	.11	.08	.05
	176	200	222	243	262	278	295	307	316	322	325	325	322	315	306	293	277	257	229	203	173	140	105	068
45	.09	.11	.13	.14	.16	.17	.19	.20	.20	.21	.21	.21	.21	.20	.19	.18	.17	.16	.13	.11	.09	.07	.04	.01
	125	149	172	193	212	229	247	258	267	273	276	276	273	267	257	243	227	207	178	151	121	088	053	015

MAY-AUG 52 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 XO (W/M*2.) ADD 1000 TO VALUES PRECEDED BY .

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1900	.06	.07	.09	.11	.12	.14	.15	.16	.17	.17	.17	.17	.17	.17	.16	.15	.13	.12	.10	.09	.05	.03	.00	.00
	074	099	122	144	164	181	199	210	219	226	229	228	225	218	208	195	178	157	128	101	070	037	001	000
15	.02	.04	.06	.07	.09	.10	.11	.12	.13	.14	.14	.14	.13	.13	.12	.11	.10	.08	.06	.04	.02	.00	.00	.00
	025	050	074	096	116	133	151	163	172	179	182	181	178	171	160	146	129	108	079	051	020	000	000	000
30	.00	.00	.02	.04	.05	.07	.08	.09	.10	.10	.10	.10	.10	.09	.09	.08	.06	.05	.02	.00	.00	.00	.00	.00
	000	002	026	049	069	087	105	117	126	133	136	135	131	124	113	099	081	060	031	002	000	000	000	000
45	.00	.00	.00	.00	.02	.03	.05	.06	.06	.07	.07	.07	.07	.06	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00
	000	000	000	000	003	023	042	060	072	082	088	091	090	085	079	068	053	035	014	000	000	000	000	000
2000	.00	.00	.00	.00	.00	.00	.01	.02	.03	.03	.04	.04	.03	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	017	029	038	045	047	047	042	035	023	009	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	003	005	005	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

MAY-AUG 52 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.41	.39	.37	.34	.32	.30	.27	.25	.23	.20	.18	.15	.12	.10	.08	.06	.04	.02	.01	.00	.00	.00	.00	.00	
	549	523	495	467	438	407	376	344	311	278	245	211	172	140	109	080	054	029	008	000	000	000	000	000	
	15	.44	.42	.40	.38	.36	.33	.31	.28	.26	.23	.21	.18	.16	.13	.11	.09	.07	.05	.04	.02	.01	.01	.00	.00
30	594	568	541	513	483	453	421	389	356	323	289	255	216	184	153	124	097	073	051	033	018	007	001	000	
	.47	.45	.43	.41	.39	.36	.34	.31	.29	.26	.24	.21	.19	.16	.14	.12	.10	.08	.07	.05	.04	.04	.03	.03	
	638	612	595	556	527	496	464	432	399	365	331	297	257	225	194	165	138	114	093	075	050	050	043	041	
45	.50	.48	.46	.44	.42	.39	.37	.34	.32	.29	.27	.24	.21	.19	.17	.15	.13	.11	.09	.03	.07	.06	.06	.06	
	679	653	626	598	568	537	505	472	439	405	371	337	297	264	233	204	177	153	132	114	100	090	084	082	
	0900	.53	.51	.49	.47	.45	.42	.40	.37	.35	.32	.29	.27	.24	.22	.19	.17	.15	.14	.12	.11	.10	.09	.09	
15	718	692	665	636	607	575	543	510	476	442	408	374	334	301	270	241	214	190	169	151	137	128	122	120	
	.56	.54	.52	.50	.47	.45	.42	.40	.37	.35	.32	.29	.26	.24	.22	.20	.18	.16	.14	.13	.12	.12	.11	.11	
	755	729	701	673	643	611	579	545	511	477	442	408	368	335	304	275	248	224	203	185	172	163	158	157	
30	.59	.56	.54	.52	.50	.47	.45	.42	.39	.37	.34	.32	.29	.26	.24	.22	.20	.18	.17	.15	.15	.14	.14	.13	
	789	763	735	706	676	644	611	578	544	509	474	440	399	366	335	306	280	256	235	213	205	196	191	190	
	45	.61	.59	.57	.54	.52	.49	.47	.44	.42	.39	.36	.34	.31	.28	.26	.24	.22	.20	.19	.13	.17	.16	.16	
1000	820	794	766	737	706	674	641	607	573	538	503	468	427	395	364	335	308	284	264	247	235	226	221	221	
	.63	.61	.59	.56	.54	.51	.49	.46	.43	.41	.38	.36	.33	.30	.28	.26	.24	.22	.21	.13	.19	.16	.19	.18	
	848	822	794	764	733	701	668	633	599	563	528	493	453	420	389	360	334	310	290	271	251	253	249	249	
15	.65	.63	.60	.58	.56	.53	.50	.48	.45	.42	.40	.37	.34	.32	.29	.27	.25	.24	.22	.21	.20	.20	.19	.19	
	873	847	818	788	757	725	691	657	621	596	561	516	475	442	411	382	356	333	313	297	285	277	274	275	
	30	.66	.64	.62	.60	.57	.55	.52	.49	.47	.44	.41	.38	.35	.33	.31	.29	.27	.25	.24	.23	.22	.21	.21	
45	895	868	840	810	778	745	711	676	641	605	570	534	493	461	430	401	375	352	333	317	305	298	295	297	
	.68	.66	.63	.61	.58	.56	.53	.50	.48	.45	.42	.40	.37	.34	.32	.30	.28	.26	.25	.24	.23	.22	.22	.22	
	914	887	858	827	795	762	728	693	657	621	585	550	508	476	445	417	391	369	350	334	323	316	314	316	

SEP-DEC 52 N

TABLE B-1 SOLAR PARAMETERS

COSS Z
XO (W/M**2.)

*** SIGNIFIES COS Z = 1.

ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1100	.69	.67	.64	.62	.59	.57	.54	.51	.49	.46	.43	.40	.37	.35	.33	.31	.29	.27	.26	.25	.24	.23	.23	.23	
	929	902	873	842	809	776	741	706	670	633	597	562	521	483	458	429	404	382	363	343	337	331	329	331	
15	.70	.68	.65	.63	.60	.58	.55	.52	.49	.46	.44	.41	.38	.36	.33	.31	.29	.28	.26	.25	.25	.24	.24	.24	
	941	913	884	852	820	786	751	715	679	642	606	571	529	497	466	438	413	391	373	353	348	342	341	344	
30	.70	.68	.66	.63	.61	.58	.55	.52	.50	.47	.44	.41	.38	.36	.34	.32	.30	.28	.27	.26	.25	.25	.25	.25	
	950	922	891	860	827	792	757	721	684	647	611	576	534	502	472	444	419	397	379	365	358	350	349	353	
45	.71	.69	.66	.64	.61	.58	.55	.53	.50	.47	.44	.42	.38	.36	.34	.32	.30	.28	.27	.25	.26	.25	.25	.25	
	955	926	896	864	830	795	759	723	686	649	613	577	536	504	473	446	421	400	383	365	360	355	355	359	
1200	.71	.69	.66	.64	.61	.58	.55	.53	.50	.47	.44	.41	.38	.36	.34	.32	.30	.28	.27	.25	.26	.25	.25	.26	
	956	927	896	864	830	794	758	721	684	647	611	575	534	502	472	444	420	399	382	364	360	356	356	361	
15	.71	.68	.66	.63	.61	.58	.55	.52	.49	.46	.44	.41	.38	.36	.33	.31	.30	.28	.27	.25	.25	.25	.25	.25	
	954	925	893	860	826	790	754	716	679	642	605	569	528	490	466	439	415	395	378	365	358	354	355	360	
30	.70	.68	.65	.63	.60	.57	.54	.52	.49	.46	.43	.40	.37	.35	.33	.31	.29	.28	.26	.25	.25	.25	.25	.25	
	949	919	887	853	818	782	745	708	670	633	596	560	519	487	458	431	407	387	371	353	352	348	349	355	
45	.70	.67	.65	.62	.59	.56	.54	.51	.48	.45	.42	.39	.36	.34	.32	.30	.28	.27	.26	.25	.24	.24	.24	.25	
	939	909	877	843	807	771	732	696	658	620	583	547	507	475	446	419	396	376	361	343	342	339	341	347	
1300	.69	.66	.64	.61	.58	.55	.52	.50	.47	.44	.41	.38	.35	.33	.31	.29	.27	.26	.25	.24	.23	.23	.23	.24	
	927	896	863	829	793	756	718	680	642	604	567	531	491	459	420	404	381	362	347	335	329	327	329	336	
15	.68	.65	.62	.60	.57	.54	.51	.48	.45	.42	.40	.37	.34	.32	.29	.28	.26	.24	.23	.23	.22	.22	.22	.23	
	911	879	846	811	775	738	699	661	623	585	548	512	471	440	411	385	363	344	330	314	313	311	314	321	
30	.66	.64	.61	.58	.55	.52	.49	.46	.44	.41	.38	.35	.32	.30	.28	.26	.24	.23	.22	.21	.21	.21	.21	.21	
	892	860	826	790	754	716	677	639	600	562	525	489	449	417	389	364	342	323	309	293	294	292	296	303	
45	.65	.62	.59	.56	.54	.51	.48	.45	.42	.39	.36	.33	.30	.28	.26	.24	.23	.21	.20	.20	.19	.19	.19	.20	
	869	837	802	766	729	691	652	613	574	536	499	463	423	392	364	339	317	299	286	275	271	270	274	282	

SEP-DEC 52 N TABLE B-1 SOLAR PARAMETERS COS 2 *** SIGNIFIES COS 2 = 1.
 X0 (W/V**2.) ADD 1000 TC VALUES PRECEDED BY .

MST	DATE												NOV												DEC																							
	SEP						OCT						5						10						15						20						25						30					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30																		
1400	.63	.60	.57	.54	.51	.49	.46	.43	.40	.37	.34	.31	.26	.26	.24	.22	.21	.19	.18	.16	.15	.17	.17	.18	.18	.259	.250	.245	.245	.249	.258																	
	844	810	776	739	701	663	624	584	545	507	470	434	394	363	335	311	290	272																														
15	.60	.58	.55	.52	.49	.46	.43	.40	.37	.34	.32	.29	.26	.24	.22	.20	.18	.17	.16	.16	.15	.15	.15	.16	.16	.230	.221	.217	.217	.222	.231																	
30	.58	.55	.53	.50	.47	.44	.41	.38	.35	.32	.29	.26	.24	.21	.19	.18	.16	.15	.14	.13	.13	.13	.13	.14	.14	.197	.189	.185	.186	.191	.200																	
45	.56	.53	.50	.47	.44	.41	.38	.35	.32	.29	.26	.24	.21	.19	.17	.15	.14	.12	.12	.11	.11	.11	.11	.11	.12	.162	.155	.152	.153	.158	.168																	
1500	.53	.50	.47	.44	.41	.38	.35	.32	.29	.26	.23	.21	.18	.16	.14	.12	.11	.10	.09	.03	.08	.08	.08	.09	.09	.125	.113	.115	.117	.122	.132																	
15	.50	.47	.44	.41	.38	.35	.32	.29	.26	.23	.20	.18	.15	.13	.11	.09	.08	.07	.06	.03	.05	.06	.06	.06	.07	.085	.079	.076	.078	.084	.094																	
30	.47	.44	.41	.38	.35	.32	.29	.26	.23	.20	.17	.15	.12	.10	.08	.06	.05	.04	.03	.03	.03	.03	.03	.04	.04	.043	.037	.035	.037	.044	.054																	
45	.44	.41	.38	.35	.32	.29	.25	.22	.19	.17	.14	.11	.09	.06	.05	.03	.02	.01	.00	.00	.00	.00	.00	.01	.000	.000	.000	.000	.000	.012																		
1600	.40	.37	.34	.31	.28	.25	.22	.19	.16	.13	.10	.08	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.000	.000	.000	.000	.000	.000																	
15	.37	.34	.31	.28	.24	.21	.18	.15	.12	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.000	.000	.000	.000	.000	.000																	
30	.33	.30	.27	.24	.21	.18	.15	.11	.09	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.000	.000	.000	.000	.000	.000																	
45	.29	.26	.23	.20	.17	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.000	.000	.000	.000	.000	.000																	

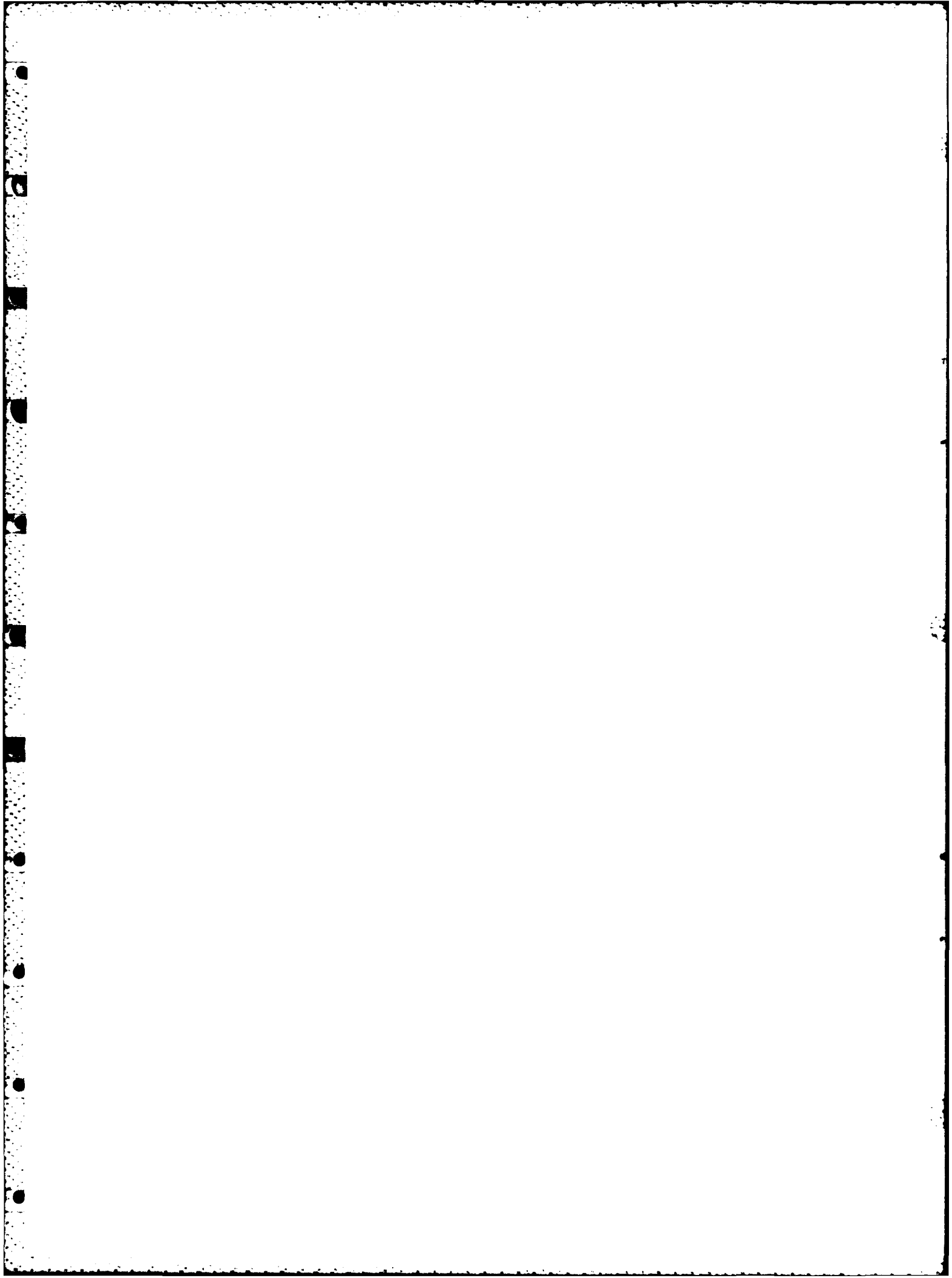
*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SEP-DEC 52 N SOLAR PARAMETERS COS Z
XO (W/M**2.)

TABLE B-1

MST	DATE																														
	SEP						OCT						NOV						DEC												
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1700	.25	.22	.19	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	341	302	261	220	177	135	093	051	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.21	.18	.15	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	289	249	208	166	123	081	038	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.18	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	235	195	154	112	069	026	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.14	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	182	141	100	057	014	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
1800	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	128	087	045	002	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	074	033	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	020	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

SEP-DEC 52 N TABLE B-1 SOLAR PARAMETERS COS Z X0 (W/M*2.) *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *



MST	JAN					FEB					MAR					APR								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
0800	.00	.00	.00	.00	.01	.02	.04	.06	.08	.11	.13	.16	.20	.23	.26	.30	.33	.36	.39	.42	.44	.47	.49	.51
	000	000	000	001	015	034	056	087	117	149	185	222	285	325	356	407	447	487	532	563	602	633	662	688
15	.02	.02	.03	.04	.05	.06	.08	.10	.12	.14	.17	.20	.24	.27	.30	.33	.36	.39	.43	.45	.48	.50	.52	.54
	030	032	038	049	064	083	105	137	167	200	235	273	335	376	417	457	497	536	581	617	650	681	709	734
30	.05	.06	.06	.07	.08	.09	.11	.13	.15	.18	.20	.23	.26	.31	.34	.37	.40	.43	.46	.49	.51	.54	.56	.58
	075	077	084	095	111	130	153	185	216	249	284	322	384	425	465	506	545	584	628	663	696	726	753	778
45	.08	.09	.09	.10	.11	.12	.14	.16	.19	.21	.24	.26	.31	.34	.37	.40	.43	.46	.49	.52	.54	.57	.59	.61
	118	120	128	140	155	175	199	231	262	295	331	369	431	471	512	552	591	629	673	707	739	769	796	820
0900	.11	.11	.12	.13	.14	.15	.17	.20	.22	.24	.27	.30	.34	.37	.40	.43	.46	.49	.52	.55	.57	.60	.62	.64
	158	161	169	182	198	218	242	275	306	340	376	413	476	516	556	596	635	672	715	749	781	810	836	860
15	.14	.14	.15	.16	.17	.18	.20	.23	.25	.27	.30	.33	.37	.40	.43	.46	.49	.52	.55	.58	.60	.63	.65	.67
	196	200	208	221	238	259	283	317	348	382	418	455	518	558	597	637	675	712	755	789	819	848	874	897
30	.16	.17	.17	.18	.20	.21	.23	.25	.28	.30	.33	.35	.40	.43	.46	.49	.52	.55	.58	.60	.63	.65	.67	.69
	231	236	245	258	275	296	321	355	387	421	457	495	557	597	636	675	713	750	792	825	855	883	908	931
45	.19	.19	.20	.21	.22	.24	.25	.28	.30	.33	.35	.38	.43	.46	.49	.52	.54	.57	.60	.63	.65	.68	.70	.71
	264	269	278	292	310	331	357	391	423	457	493	531	593	633	672	711	748	785	826	859	888	915	940	963
1000	.21	.21	.22	.23	.24	.26	.28	.30	.32	.35	.38	.40	.45	.48	.51	.54	.57	.59	.63	.65	.68	.70	.72	.74
	294	299	309	323	341	363	389	424	456	491	527	564	627	666	705	743	780	816	857	889	918	945	969	991
15	.23	.23	.24	.25	.26	.28	.30	.32	.35	.37	.40	.43	.47	.50	.53	.56	.59	.62	.65	.67	.69	.72	.74	.75
	320	326	336	351	370	392	418	454	486	521	557	595	657	696	734	772	809	844	884	915	944	971	995	016
30	.24	.25	.26	.27	.28	.30	.32	.34	.37	.39	.42	.45	.49	.52	.55	.58	.61	.63	.66	.69	.71	.73	.75	.77
	344	349	361	376	395	418	445	480	513	548	584	622	683	722	760	798	834	869	909	939	968	994	017	038
45	.26	.26	.27	.28	.30	.31	.33	.36	.38	.41	.43	.46	.51	.54	.57	.59	.62	.65	.68	.70	.73	.75	.77	.78
	364	370	382	397	417	441	468	504	536	571	608	645	707	745	783	820	856	891	929	963	988	013	036	057

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SOLAR PARAMETERS COS Z
XO (W/M**2.)

TABLE B-1

JAN-APR 50 N

MST

DATE

JAN

FEB

MAR

APR

1 5 10 15 20 25 30

5 10 15 20 25

5 10 15 20 25 30

5 10 15 20 25 30

1100 .27 .27 .28 .29 .31 .33 .35

.37 .40 .42 .45 .48

.52 .55 .58 .61 .64 .66

.69 .72 .74 .76 .78 .80

390 387 399 416 436 460 487

523 556 591 626 665

726 763 802 839 874 908

947 973 004 029 052 072

15 .28 .28 .29 .30 .32 .34 .36

.38 .41 .43 .46 .49

.53 .56 .59 .62 .65 .67

.70 .73 .75 .77 .79 .80

393 401 413 430 451 475 503

540 573 608 644 682

743 781 818 854 889 923

960 990 017 042 064 084

30 .29 .29 .30 .31 .33 .35 .37

.39 .42 .44 .47 .50

.54 .57 .60 .63 .65 .68

.71 .73 .75 .77 .79 .81

403 411 424 441 463 487 515

552 586 621 657 695

755 793 830 866 900 932

971 991 025 050 073 092

45 .29 .30 .31 .32 .33 .35 .37

.40 .42 .45 .48 .50

.55 .58 .61 .63 .66 .69

.71 .74 .76 .78 .80 .81

409 417 431 449 471 496 524

561 595 630 666 704

764 801 838 873 908 940

977 000 032 056 078 097

1200 .29 .30 .31 .32 .34 .35 .38

.40 .43 .45 .48 .51

.55 .58 .61 .64 .66 .69

.72 .74 .76 .78 .80 .81

412 420 435 453 475 501 529

567 600 635 672 709

769 808 842 877 911 943

979 007 033 057 079 098

15 .29 .30 .31 .32 .34 .36 .38

.40 .43 .45 .48 .51

.55 .58 .61 .64 .66 .69

.72 .74 .76 .78 .80 .81

411 420 435 453 476 502 530

568 602 637 673 710

770 807 843 877 911 943

978 003 032 055 076 096

47

30 .29 .29 .31 .32 .34 .35 .37

.40 .43 .45 .48 .51

.55 .58 .61 .63 .66 .68

.71 .73 .75 .77 .79 .81

406 416 431 450 473 499 528

566 600 635 671 708

767 804 839 874 907 938

973 001 026 049 071 090

45 .28 .29 .30 .31 .33 .35 .37

.40 .42 .45 .48 .50

.55 .57 .60 .63 .65 .68

.71 .73 .75 .77 .78 .80

398 408 424 443 467 493 522

560 594 629 665 702

761 797 832 866 899 930

965 992 017 040 061 080

1300 .27 .28 .29 .31 .32 .34 .36

.39 .42 .44 .47 .50

.54 .57 .59 .62 .64 .67

.70 .72 .74 .76 .78 .79

387 397 413 433 456 483 512

551 585 620 656 692

751 786 821 855 887 918

953 973 004 027 048 067

15 .26 .27 .28 .30 .31 .33 .35

.38 .41 .43 .46 .49

.53 .56 .58 .61 .63 .66

.69 .71 .73 .75 .76 .78

372 382 399 419 443 470 499

537 571 607 642 679

737 772 807 840 872 902

937 963 988 010 031 050

30 .25 .26 .27 .28 .30 .32 .34

.37 .40 .42 .45 .47

.52 .54 .57 .60 .62 .64

.67 .69 .71 .73 .75 .76

353 364 381 401 425 453 482

521 555 590 625 662

719 754 788 822 853 883

917 943 968 990 011 030

45 .23 .24 .25 .27 .29 .31 .33

.36 .38 .41 .43 .46

.50 .53 .55 .58 .60 .63

.65 .68 .69 .71 .73 .75

331 342 360 381 405 432 462

500 534 569 605 641

698 733 767 799 831 861

894 920 945 967 988 007

JAN-APR

50 N

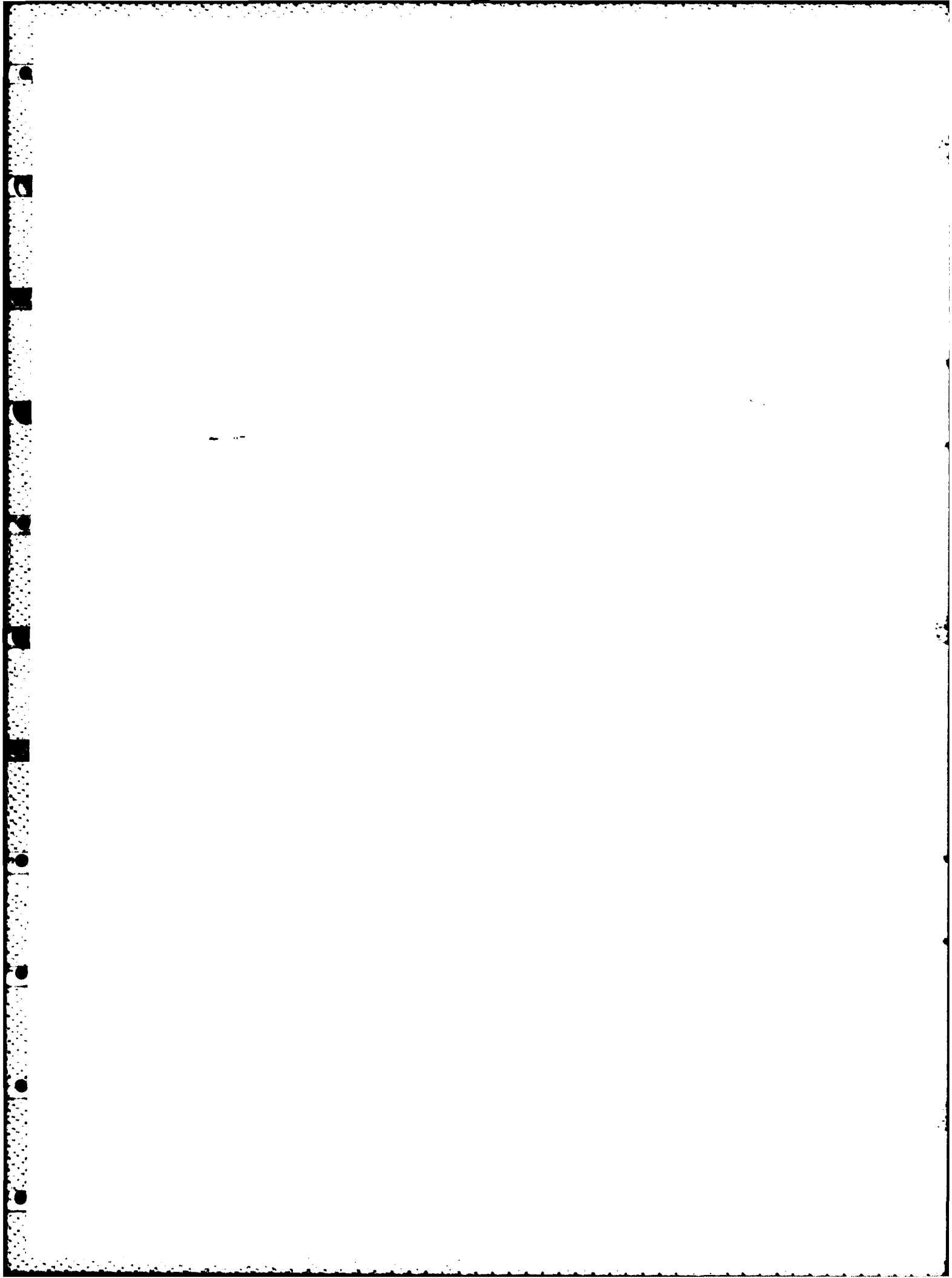
TABLE B-1

SOLAR PARAMETERS

COS Z
X0 (W/M**2.)** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	5	10	15	20	25	30	5	10	15	20	25	30	
1400	.22	.22	.24	.25	.27	.29	.31	.34	.36	.39	.42	.44	.48	.51	.54	.56	.59	.61	.63	.65	.68	.69	.71	.73	
	306	317	335	356	381	408	438	477	511	545	581	617	673	708	741	774	805	834	868	894	918	941	961	980	
	15	.20	.20	.22	.23	.25	.27	.29	.32	.34	.37	.40	.42	.46	.49	.52	.54	.56	.59	.61	.63	.65	.67	.69	.71
30	278	289	307	329	354	381	411	450	483	518	553	589	645	679	713	745	776	805	838	864	888	911	932	951	
	30	.17	.18	.20	.21	.23	.25	.27	.30	.32	.35	.37	.40	.41	.47	.49	.52	.54	.56	.59	.61	.63	.65	.66	.68
	247	258	277	298	323	351	381	419	453	486	523	558	614	643	681	713	743	772	805	831	855	878	899	918	
45	.15	.16	.17	.19	.21	.23	.25	.27	.30	.32	.35	.38	.42	.44	.47	.49	.51	.54	.56	.58	.60	.62	.64	.65	
	212	225	243	265	290	318	348	386	420	454	489	524	573	613	646	677	708	737	770	795	820	842	863	883	
	1500	.12	.13	.15	.16	.18	.20	.22	.25	.27	.30	.32	.35	.38	.41	.44	.46	.49	.51	.53	.56	.57	.59	.61	.63
15	176	188	207	229	254	282	311	350	383	417	452	487	542	575	608	639	669	698	731	757	781	804	825	845	
	15	.10	.11	.12	.13	.15	.17	.19	.22	.25	.27	.29	.32	.36	.39	.41	.43	.46	.48	.50	.52	.54	.56	.58	.60
	136	149	168	190	215	243	273	311	344	378	412	447	501	535	567	598	628	657	690	715	740	763	784	804	
30	.07	.08	.09	.11	.12	.14	.16	.19	.22	.24	.26	.29	.33	.35	.36	.40	.43	.45	.47	.49	.51	.53	.55	.56	
	094	107	126	148	174	201	231	269	302	336	370	404	458	491	524	555	585	613	646	672	696	715	741	761	
	45	.04	.05	.06	.07	.09	.11	.13	.16	.18	.21	.23	.26	.30	.32	.35	.37	.39	.41	.44	.45	.48	.50	.51	.53
45	050	063	082	105	130	157	187	225	258	291	325	359	413	446	478	509	539	567	600	625	650	674	696	716	
	1600	.00	.01	.03	.04	.06	.08	.10	.13	.15	.17	.20	.22	.26	.29	.31	.33	.36	.38	.40	.42	.44	.46	.48	.50
	004	017	036	059	084	111	141	178	211	244	278	312	365	398	430	460	490	519	552	578	602	626	648	669	
15	.00	.00	.00	.01	.03	.05	.07	.09	.12	.14	.16	.19	.23	.25	.27	.30	.32	.34	.37	.39	.41	.43	.44	.46	
	000	000	000	011	036	063	093	130	162	195	229	262	315	343	379	410	440	469	501	528	553	576	599	620	
	30	.00	.00	.00	.00	.00	.01	.03	.06	.08	.10	.13	.15	.19	.21	.24	.26	.28	.30	.33	.35	.37	.39	.41	.42
45	000	000	000	000	000	014	043	080	112	145	178	211	264	296	328	358	388	417	450	476	501	525	548	570	
	.00	.00	.00	.00	.00	.00	.00	.02	.04	.07	.09	.11	.15	.18	.20	.22	.24	.26	.29	.31	.33	.35	.37	.38	
	000	000	000	000	000	000	000	028	060	092	125	158	210	243	274	305	334	363	396	423	448	473	496	518	

JAN-APR 50 N TABLE B-1 SOLAR PARAMETERS COS Z (W/M**2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *



MST	DATE																	
	MAY				JUN				JUL				AUG					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0400	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	006	009	009	006	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.01	.02	.03	.04	.04	.04	.04	.03	.03	.02	.01	.00	.00	.00
	000	000	000	001	018	033	045	051	054	054	050	034	034	022	007	000	000	000
30	.00	.00	.02	.04	.05	.06	.07	.07	.08	.08	.07	.07	.06	.05	.04	.03	.01	.00
	000	005	029	049	066	080	092	098	101	101	097	090	081	068	054	037	017	000
45	.02	.04	.06	.07	.09	.10	.11	.11	.11	.11	.11	.10	.10	.09	.08	.06	.05	.03
	029	055	079	099	116	129	141	146	149	148	145	138	128	116	102	085	066	046
0500	.06	.08	.10	.11	.13	.14	.14	.15	.15	.15	.15	.14	.13	.13	.11	.10	.09	.07
	081	107	130	150	166	179	190	196	198	197	193	187	177	165	151	134	116	096
15	.10	.12	.14	.15	.16	.17	.18	.19	.19	.19	.18	.18	.17	.16	.15	.14	.13	.11
	134	160	182	202	218	230	241	246	248	247	243	236	227	215	201	185	167	147
30	.14	.16	.18	.19	.20	.21	.22	.22	.23	.22	.22	.22	.21	.20	.19	.18	.16	.15
	188	213	235	254	269	282	292	297	299	297	293	287	277	266	252	236	218	199
45	.18	.20	.22	.23	.24	.25	.26	.26	.26	.26	.26	.26	.25	.24	.23	.22	.20	.19
	242	267	288	307	322	333	343	348	350	348	344	337	328	317	303	288	270	251
0600	.22	.24	.26	.27	.28	.29	.30	.30	.30	.30	.30	.29	.29	.28	.27	.26	.24	.23
	297	321	342	360	374	386	395	399	401	399	395	389	379	368	355	340	323	304
15	.26	.28	.30	.31	.32	.33	.34	.34	.34	.34	.34	.33	.33	.32	.31	.30	.28	.27
	351	375	395	413	427	438	447	451	452	450	446	440	431	420	407	392	375	357
30	.30	.32	.34	.35	.36	.37	.38	.38	.38	.38	.38	.37	.36	.36	.35	.34	.32	.31
	405	428	448	465	479	489	498	502	503	501	497	491	482	471	458	444	428	410
45	.34	.36	.37	.39	.40	.41	.41	.42	.42	.42	.41	.41	.40	.39	.39	.37	.36	.35
	459	481	501	517	530	541	549	553	554	552	548	541	533	522	510	495	480	462

MAY-AUG 50 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY ,

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0700	.38	.40	.41	.43	.44	.44	.45	.45	.46	.45	.45	.45	.44	.43	.42	.41	.40	.39	.37	.35	.34	.32	.31	.29
	511	534	553	568	581	591	599	603	603	602	598	591	583	572	560	546	531	514	492	473	453	431	409	385
	.42	.44	.45	.46	.47	.48	.49	.49	.49	.49	.49	.48	.48	.47	.46	.45	.44	.43	.41	.39	.38	.36	.34	.33
15	563	585	603	619	631	641	648	652	653	651	647	641	632	622	610	597	582	565	544	525	505	484	462	439
	.46	.47	.49	.50	.51	.52	.52	.53	.53	.53	.53	.52	.51	.51	.50	.49	.48	.46	.45	.43	.42	.40	.38	.37
	614	635	653	668	680	689	697	700	701	699	695	689	681	671	659	646	631	615	595	575	555	536	514	491
45	.49	.51	.52	.54	.55	.55	.56	.56	.56	.55	.55	.56	.55	.54	.53	.52	.51	.50	.48	.47	.45	.44	.42	.40
	663	684	701	716	728	737	744	747	747	746	742	736	728	718	707	694	680	664	644	626	606	586	564	542
	0800	.53	.54	.56	.57	.58	.59	.59	.60	.60	.60	.59	.59	.58	.58	.57	.56	.55	.54	.52	.51	.49	.47	.46
711		731	748	762	774	782	789	792	792	791	787	781	773	764	753	741	727	711	692	674	655	635	614	591
.56		.58	.59	.60	.61	.62	.63	.63	.63	.63	.63	.62	.62	.61	.60	.59	.58	.57	.55	.54	.53	.51	.49	.48
15	756	776	793	807	818	826	833	836	836	834	831	825	818	808	796	786	772	757	738	720	702	682	661	639
	.60	.61	.62	.64	.64	.65	.66	.66	.66	.66	.66	.66	.65	.64	.63	.63	.62	.60	.59	.57	.56	.54	.53	.51
	800	819	836	849	860	868	874	877	878	876	873	867	860	851	841	829	816	801	782	765	746	727	706	684
45	.63	.64	.65	.67	.68	.68	.69	.69	.69	.69	.69	.69	.68	.67	.67	.66	.65	.63	.62	.61	.59	.58	.56	.54
	842	860	876	889	900	908	914	917	917	916	912	907	900	892	881	870	857	843	824	807	789	770	749	727
	0900	.65	.67	.68	.69	.70	.71	.72	.72	.72	.72	.72	.71	.71	.70	.69	.69	.68	.66	.65	.64	.62	.61	.59
881		899	915	928	936	945	952	954	955	953	950	945	939	930	920	909	896	883	864	845	830	811	790	768
.68		.70	.71	.72	.73	.74	.74	.75	.75	.75	.74	.74	.74	.73	.72	.71	.70	.69	.68	.66	.65	.63	.62	.60
15	918	935	951	963	973	981	987	989	990	989	985	981	974	966	957	946	933	920	902	885	868	849	828	807
	.71	.72	.73	.75	.75	.76	.77	.77	.77	.77	.77	.77	.76	.76	.75	.74	.73	.72	.70	.69	.68	.66	.64	.63
	951	969	984	996	006	013	*019	*022	*022	*021	*018	*014	*007	*000	990	980	968	955	937	921	903	884	864	842
30	.73	.74	.76	.77	.78	.78	.79	.79	.79	.79	.79	.79	.78	.78	.77	.76	.75	.74	.73	.72	.70	.69	.67	.65
	982	000	014	026	036	043	*049	*052	*052	*051	*048	*014	*038	*031	*022	*011	*000	987	969	953	936	917	897	875

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M*2.)

TABLE B-1

MAY-AUG 50 N

MST	MAY							JUN							JUL							AUG						
	5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30	
1000	.75	.77	.78	.79	.80	.80		.81	.81	.81	.81	.81	.81		.81	.80	.79	.78	.78	.76		.75	.74	.72	.71	.69	.67	
	*010	*027	*041	*053	*063	*070		*076	*079	*079	*078	*076	*072		*066	*059	*050	*040	*029	*016		*099	*083	*065	*047	*026	*004	
15	.77	.78	.80	.81	.82	.82		.83	.83	.83	.83	.83	.83		.82	.82	.81	.80	.80	.78		.77	.76	.74	.73	.71	.69	
	*035	*052	*066	*077	*087	*094		*100	*103	*104	*103	*100	*096		*091	*084	*076	*066	*055	*042		*025	*009	*092	*073	*053	*031	
30	.79	.80	.81	.82	.83	.84		.84	.85	.85	.85	.85	.84		.84	.84	.83	.82	.81	.80		.79	.79	.75	.75	.73	.71	
	*057	*073	*087	*099	*108	*115		*121	*124	*125	*124	*122	*118		*113	*106	*098	*089	*078	*065		*048	*033	*015	*097	*076	*054	
45	.80	.81	.83	.84	.84	.85		.86	.86	.86	.86	.85	.86		.86	.85	.84	.84	.83	.82		.80	.79	.78	.76	.74	.72	
	*075	*091	*105	*116	*126	*133		*139	*142	*143	*143	*141	*137		*132	*126	*118	*108	*098	*085		*069	*053	*036	*017	*096	*074	
1100	.81	.82	.84	.85	.85	.86		.87	.87	.87	.87	.87	.87		.87	.86	.86	.85	.84	.83		.82	.80	.79	.77	.76	.74	
	*090	*106	*120	*131	*140	*147		*153	*156	*158	*158	*156	*153		*143	*142	*134	*125	*114	*102		*085	*070	*052	*033	*013	*090	
15	.82	.83	.84	.85	.86	.87		.88	.88	.88	.88	.88	.88		.88	.87	.87	.86	.85	.84		.83	.81	.80	.78	.77	.75	
	*102	*118	*131	*142	*151	*158		*165	*168	*170	*170	*168	*165		*160	*154	*147	*138	*128	*116		*099	*083	*065	*047	*026	*003	
30	.83	.84	.85	.86	.87	.88		.88	.89	.89	.89	.89	.89		.88	.88	.87	.87	.86	.85		.83	.82	.81	.79	.77	.75	
	*110	*125	*139	*150	*159	*166		*173	*176	*178	*178	*177	*174		*170	*164	*157	*148	*138	*126		*109	*093	*076	*057	*035	*012	
45	.83	.84	.85	.86	.87	.88		.89	.89	.89	.89	.89	.89		.89	.88	.88	.87	.86	.85		.84	.83	.81	.79	.78	.76	
	*115	*130	*143	*154	*163	*171		*177	*181	*183	*183	*182	*180		*176	*170	*163	*154	*144	*132		*116	*100	*082	*063	*041	*018	
1200	.83	.84	.85	.86	.87	.88		.89	.89	.89	.89	.89	.89		.89	.89	.88	.87	.87	.86		.84	.83	.81	.80	.78	.76	
	*116	*131	*144	*155	*164	*172		*179	*182	*185	*185	*185	*182		*178	*173	*166	*158	*147	*136		*119	*103	*085	*065	*044	*020	
15	.83	.84	.85	.86	.87	.88		.89	.89	.89	.89	.89	.89		.89	.89	.88	.87	.86	.85		.84	.83	.81	.80	.78	.76	
	*113	*128	*141	*152	*162	*170		*177	*181	*183	*184	*183	*181		*178	*173	*166	*157	*147	*135		*119	*102	*084	*064	*042	*018	
30	.82	.84	.85	.86	.87	.87		.88	.89	.89	.89	.89	.89		.89	.88	.88	.87	.86	.85		.84	.82	.81	.79	.77	.75	
	*107	*122	*135	*146	*156	*164		*171	*175	*178	*179	*179	*177		*174	*169	*162	*154	*144	*132		*115	*099	*080	*060	*037	*013	
45	.82	.83	.84	.85	.86	.87		.87	.88	.88	.88	.88	.88		.88	.88	.87	.87	.86	.85		.83	.82	.80	.79	.77	.75	
	*097	*112	*125	*137	*147	*155		*162	*167	*170	*171	*171	*169		*166	*161	*155	*147	*136	*124		*107	*091	*072	*052	*029	*004	

MAY-AUG 50 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY -

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1300	.81	.82	.83	.84	.85	.86	.87	.87	.87	.88	.88	.88	.87	.87	.86	.86	.85	.84	.82	.81	.80	.78	.76	.74
	.084	.099	.112	.124	.134	.142	.150	.155	.158	.160	.160	.159	.156	.151	.144	.136	.126	.114	.097	.080	.061	.040	.017	.992
15	.79	.81	.82	.83	.84	.85	.85	.86	.86	.86	.87	.86	.85	.86	.85	.85	.84	.83	.81	.80	.78	.77	.75	.73
	.067	.083	.096	.108	.118	.127	.135	.140	.143	.145	.146	.144	.142	.137	.131	.122	.112	.100	.083	.065	.046	.025	.001	.975
30	.78	.79	.80	.81	.82	.83	.84	.85	.85	.85	.85	.85	.85	.85	.84	.83	.83	.82	.80	.79	.77	.75	.73	.71
	.047	.063	.076	.089	.099	.108	.116	.122	.125	.128	.128	.127	.124	.120	.114	.105	.095	.083	.065	.048	.028	.006	.982	.956
45	.76	.77	.79	.80	.81	.82	.82	.83	.83	.84	.84	.84	.83	.83	.83	.82	.81	.80	.79	.77	.75	.74	.72	.69
	.024	.040	.054	.066	.077	.086	.094	.100	.104	.107	.108	.107	.104	.100	.093	.085	.075	.062	.044	.027	.007	.985	.960	.933
1400	.74	.76	.77	.78	.79	.80	.81	.81	.81	.82	.82	.82	.82	.81	.81	.80	.79	.78	.77	.75	.74	.72	.70	.68
	.998	.014	.028	.040	.051	.061	.070	.076	.080	.083	.084	.083	.081	.076	.070	.062	.051	.039	.020	.002	.982	.959	.934	.907
15	.72	.73	.75	.76	.77	.78	.78	.79	.79	.80	.80	.80	.80	.79	.79	.78	.77	.76	.75	.73	.72	.70	.68	.65
	.968	.984	.999	.012	.023	.033	.042	.048	.053	.056	.057	.057	.055	.050	.044	.036	.025	.012	.993	.975	.954	.931	.906	.878
30	.70	.71	.72	.73	.74	.75	.76	.77	.77	.77	.78	.78	.77	.77	.77	.76	.75	.74	.72	.71	.69	.67	.65	.63
	.936	.952	.967	.980	.992	.002	.012	.018	.023	.026	.028	.028	.025	.021	.015	.006	.996	.982	.963	.945	.924	.900	.874	.845
45	.67	.68	.70	.71	.72	.73	.74	.74	.75	.75	.75	.75	.75	.75	.74	.74	.73	.72	.70	.69	.67	.65	.63	.60
	.901	.917	.932	.946	.958	.968	.979	.986	.991	.994	.996	.996	.994	.999	.983	.974	.963	.950	.931	.911	.890	.866	.839	.810
1500	.64	.66	.67	.68	.69	.70	.71	.72	.72	.72	.73	.73	.72	.72	.72	.71	.70	.69	.67	.65	.64	.62	.60	.57
	.863	.880	.895	.909	.921	.932	.943	.950	.956	.960	.961	.961	.959	.955	.949	.940	.929	.915	.895	.876	.853	.829	.802	.772
15	.61	.63	.64	.65	.66	.67	.68	.69	.69	.70	.70	.70	.70	.69	.69	.68	.67	.66	.64	.63	.61	.59	.57	.54
	.823	.840	.856	.870	.883	.894	.905	.913	.918	.922	.924	.925	.922	.918	.912	.903	.891	.877	.857	.837	.815	.789	.762	.731
30	.58	.59	.61	.62	.63	.64	.65	.66	.66	.67	.67	.67	.67	.66	.66	.65	.64	.63	.61	.60	.58	.56	.54	.51
	.780	.798	.814	.828	.842	.853	.865	.873	.879	.883	.885	.885	.883	.879	.873	.863	.852	.837	.817	.796	.773	.747	.719	.688
45	.55	.56	.58	.59	.60	.61	.62	.63	.63	.64	.64	.64	.64	.63	.63	.62	.61	.60	.58	.57	.55	.53	.50	.48
	.735	.753	.770	.785	.798	.810	.823	.831	.837	.842	.844	.844	.842	.838	.831	.822	.810	.795	.774	.753	.730	.703	.674	.643

TABLE B-1 SOLAR PARAMETERS COS Z
 MAY-AUG 50 N
 *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1900	.04	.06	.08	.09	.11	.12	.13	.14	.15	.16	.16	.16	.16	.16	.16	.16	.16	.16	.16	.08	.03	.04	.02	.00	.00
	056	081	104	125	144	161	178	190	199	206	209	209	209	209	209	209	209	209	112	085	055	022	000	000	
15	.00	.02	.04	.06	.07	.08	.10	.11	.11	.12	.12	.12	.12	.12	.12	.12	.12	.12	.05	.02	.00	.00	.00	.00	
	005	029	053	074	094	111	129	141	150	157	160	160	160	160	160	160	160	160	060	033	002	000	000	000	
30	.00	.00	.00	.02	.03	.05	.06	.07	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.01	.00	.00	.00	.00	.00	
	000	000	000	003	025	045	063	081	093	102	109	112	112	112	112	112	112	112	010	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.01	.03	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	016	034	046	056	062	065	065	065	065	065	065	065	065	000	000	000	000	000	000	
2000	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.02	.01	.01	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	001	010	017	020	019	019	019	019	019	019	019	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

50 N

MAY-AUG

MST	DATE																		
	SEP					OCT					NOV					DEC			
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	022	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	078	051	023	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0600	.10	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	134	107	080	053	024	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.14	.12	.10	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	190	164	137	110	082	053	023	000	000	000	000	000	000	000	000	000	000	000	000
30	.18	.16	.14	.12	.10	.08	.06	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	246	220	194	166	138	110	080	050	020	000	000	000	000	000	000	000	000	000	000
45	.22	.20	.18	.16	.14	.12	.10	.08	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00
	302	276	250	223	195	166	136	106	075	044	013	000	000	000	000	000	000	000	000
0700	.26	.25	.23	.20	.18	.16	.14	.12	.10	.07	.05	.03	.00	.00	.00	.00	.00	.00	.00
	356	331	305	278	250	221	192	161	130	099	068	036	000	000	000	000	000	000	000
15	.30	.29	.27	.24	.22	.20	.18	.16	.13	.11	.09	.06	.04	.02	.00	.00	.00	.00	.00
	410	385	359	332	304	275	246	215	184	153	121	089	051	021	000	000	000	000	000
30	.34	.32	.30	.28	.26	.24	.22	.20	.17	.15	.13	.10	.07	.05	.03	.01	.00	.00	.00
	463	438	412	385	357	328	298	268	237	205	173	141	103	072	042	014	000	000	000
45	.38	.36	.34	.32	.30	.28	.26	.23	.21	.19	.16	.14	.11	.09	.07	.05	.03	.01	.00
	514	489	463	436	408	379	349	319	287	255	223	191	153	121	091	063	037	012	000

SEP-DEC 50 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY .

MST	DATE																								
	SEP					OCT					NOV					DEC									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.42	.40	.38	.36	.34	.31	.29	.27	.24	.22	.20	.17	.14	.12	.10	.08	.06	.04	.03	.01	.00	.00	.00	.00	.00
	563	539	513	486	458	429	399	368	336	304	271	239	200	169	139	110	084	060	038	020	005	000	000	000	
15	.45	.43	.41	.39	.37	.35	.33	.30	.28	.25	.23	.21	.18	.15	.13	.11	.09	.08	.06	.03	.04	.03	.02	.02	.02
	611	586	560	533	505	476	446	415	383	350	318	285	246	215	184	156	129	105	084	065	051	040	033	030	
30	.49	.47	.45	.43	.40	.38	.36	.33	.31	.29	.26	.24	.21	.19	.16	.14	.12	.11	.09	.03	.07	.06	.05	.05	.05
	656	632	606	579	551	521	491	459	427	395	362	329	290	259	228	199	172	148	127	109	094	084	077	074	
45	.52	.50	.48	.46	.44	.41	.39	.37	.34	.32	.29	.27	.24	.21	.19	.17	.15	.13	.12	.11	.10	.09	.08	.08	.08
	700	675	649	622	594	564	533	502	469	436	403	370	331	299	269	240	213	189	168	150	136	126	119	117	
0900	.55	.53	.51	.49	.47	.44	.42	.39	.37	.34	.32	.29	.27	.24	.22	.20	.18	.16	.15	.13	.12	.12	.11	.11	.11
	740	716	690	662	634	604	573	541	509	475	442	409	369	337	307	278	252	228	207	183	175	165	159	157	
15	.58	.56	.54	.52	.49	.47	.45	.42	.40	.37	.35	.32	.29	.27	.24	.22	.20	.19	.17	.15	.15	.14	.14	.14	.14
	779	754	728	700	671	641	610	578	545	512	478	444	405	373	342	314	287	263	243	225	212	202	196	195	
30	.60	.58	.56	.54	.52	.49	.47	.45	.42	.39	.37	.34	.31	.29	.27	.25	.23	.21	.20	.19	.17	.17	.16	.16	.16
	814	789	763	735	706	676	644	612	579	545	511	477	438	406	375	346	320	296	276	253	245	236	231	230	
45	.63	.61	.59	.56	.54	.52	.49	.47	.44	.42	.39	.37	.34	.31	.29	.27	.25	.23	.22	.21	.20	.19	.19	.19	.19
	847	822	795	767	738	707	675	642	609	575	541	507	467	435	405	376	350	326	306	283	275	268	263	263	
1000	.65	.63	.61	.59	.56	.54	.51	.49	.46	.44	.41	.38	.35	.33	.31	.29	.27	.25	.24	.22	.22	.21	.21	.21	.21
	876	851	824	796	766	735	703	670	636	602	568	533	493	461	431	402	376	353	333	317	304	296	292	292	
15	.67	.65	.63	.60	.58	.56	.53	.51	.48	.45	.43	.40	.37	.35	.32	.30	.28	.27	.25	.24	.23	.23	.22	.23	.23
	902	877	850	821	791	760	727	694	660	625	591	557	517	484	454	426	400	377	357	341	329	321	318	318	
30	.69	.67	.64	.62	.60	.57	.55	.52	.49	.47	.44	.42	.39	.36	.34	.32	.30	.28	.27	.26	.25	.24	.24	.24	.24
	925	900	872	843	813	781	748	715	680	646	611	576	535	504	474	445	420	397	378	362	351	343	340	342	
45	.70	.68	.66	.63	.61	.58	.56	.53	.51	.48	.45	.43	.40	.37	.35	.33	.31	.29	.28	.27	.26	.26	.25	.26	.26
	945	919	891	862	831	799	766	732	697	662	627	593	552	520	490	462	437	414	395	380	369	362	359	361	

*** SIGNIFICES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

TABLE B-1 SOLAR PARAMETERS
XC (W/M**2.)

SEP-DEC 50 N

MST	DATE																								
	SEP					OCT					NOV					DEC									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1100	.71	.69	.67	.65	.62	.60	.57	.54	.52	.49	.46	.44	.41	.39	.36	.34	.32	.30	.29	.27	.27	.27	.27	.27	.27
	961	934	906	877	846	813	780	745	710	675	640	605	565	533	503	475	450	428	409	394	384	377	375	378	378
15	.72	.70	.68	.65	.63	.60	.58	.55	.52	.50	.47	.44	.41	.39	.37	.35	.33	.31	.30	.29	.28	.28	.27	.28	.28
	973	947	918	888	857	824	790	755	720	684	649	614	574	542	512	484	459	438	420	405	395	389	388	391	391
30	.73	.71	.68	.66	.63	.61	.58	.55	.53	.50	.47	.45	.42	.39	.37	.35	.33	.32	.30	.29	.29	.28	.28	.28	.28
	982	955	926	896	864	830	796	761	725	690	654	619	579	547	517	490	465	444	426	413	403	398	397	400	400
45	.73	.71	.69	.66	.64	.61	.58	.56	.53	.50	.47	.45	.42	.39	.37	.35	.33	.32	.31	.30	.29	.28	.28	.29	.29
	987	960	931	900	867	833	799	763	727	691	656	621	581	549	519	492	468	447	430	416	407	402	402	406	406
1200	.73	.71	.69	.66	.64	.61	.58	.55	.53	.50	.47	.45	.42	.39	.37	.35	.33	.32	.30	.29	.29	.29	.29	.29	.29
	989	961	931	900	867	833	798	762	726	689	654	619	578	547	517	490	467	446	429	417	408	404	404	408	408
15	.73	.71	.69	.66	.63	.61	.58	.55	.52	.49	.47	.44	.41	.39	.37	.35	.33	.31	.30	.29	.29	.28	.28	.29	.29
	987	958	928	896	863	828	793	757	720	684	648	613	573	541	512	485	462	442	425	413	405	401	402	407	407
30	.73	.70	.68	.65	.63	.60	.57	.54	.52	.49	.46	.43	.40	.38	.36	.34	.32	.31	.30	.29	.28	.28	.28	.28	.28
	981	952	921	889	855	820	784	748	711	674	638	603	563	532	503	476	453	434	418	405	399	395	397	402	402
45	.72	.70	.67	.65	.62	.59	.56	.53	.51	.48	.45	.42	.39	.37	.35	.33	.31	.30	.29	.28	.28	.27	.27	.28	.28
	971	942	911	878	844	808	772	735	698	661	625	590	550	519	490	464	441	422	407	395	389	386	388	394	394
1300	.71	.69	.66	.64	.61	.58	.55	.52	.49	.47	.44	.41	.38	.36	.34	.32	.30	.29	.28	.27	.27	.26	.27	.27	.27
	958	928	897	863	828	792	756	719	681	644	608	573	533	502	474	448	426	407	392	382	375	373	375	382	382
15	.70	.67	.65	.62	.59	.57	.54	.51	.48	.45	.42	.40	.37	.35	.32	.31	.29	.28	.27	.25	.25	.25	.25	.26	.26
	942	911	879	845	810	773	736	699	661	624	588	553	513	482	454	429	407	389	374	364	358	357	360	367	367
30	.68	.66	.63	.61	.58	.55	.52	.49	.46	.43	.41	.38	.35	.33	.31	.29	.27	.26	.25	.24	.24	.24	.24	.25	.25
	921	891	858	823	787	751	713	675	638	600	564	529	489	459	431	406	385	367	353	343	338	337	340	348	348
45	.67	.64	.61	.59	.56	.53	.50	.47	.44	.41	.39	.36	.33	.31	.29	.27	.26	.24	.23	.23	.22	.22	.23	.23	.23
	898	866	833	798	762	725	687	649	611	573	537	502	462	432	405	380	359	342	329	319	314	314	318	326	326

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

SEP-DEC 50 N

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1400	.65	.62	.59	.57	.54	.51	.48	.45	.42	.39	.37	.34	.31	.29	.27	.25	.24	.22	.21	.21	.20	.20	.21	.21	
	871	839	805	776	733	695	657	619	580	543	506	472	432	402	375	351	330	314	301	292	288	288	292	301	
15	.62	.60	.57	.54	.51	.49	.46	.43	.40	.37	.34	.32	.29	.26	.25	.23	.21	.20	.19	.19	.18	.18	.19	.19	
	841	808	774	738	701	663	624	585	547	509	473	438	399	369	342	319	299	282	270	262	258	259	263	272	
30	.60	.57	.55	.52	.49	.46	.43	.40	.37	.34	.32	.29	.26	.24	.22	.20	.19	.18	.17	.16	.16	.16	.16	.17	
	808	775	740	703	666	627	588	549	511	473	437	402	363	334	307	284	264	248	236	223	225	226	232	241	
45	.57	.55	.52	.49	.46	.43	.40	.37	.34	.31	.29	.26	.23	.21	.19	.18	.16	.15	.14	.14	.13	.14	.14	.15	
	772	738	703	666	628	589	549	510	471	434	397	363	324	295	269	246	227	211	200	193	190	191	197	207	
1500	.54	.52	.49	.46	.43	.40	.37	.34	.31	.28	.26	.23	.20	.18	.16	.15	.13	.12	.11	.11	.11	.11	.11	.12	
	733	699	663	625	587	548	508	469	430	392	355	321	283	254	228	205	187	172	161	154	152	154	160	170	
15	.51	.49	.46	.43	.40	.37	.34	.31	.28	.25	.22	.20	.17	.15	.13	.12	.10	.09	.09	.09	.08	.08	.09	.09	
	692	657	621	583	544	504	464	424	385	347	311	277	239	210	185	163	144	130	119	113	111	113	120	130	
30	.48	.45	.43	.40	.37	.34	.31	.28	.25	.22	.19	.17	.14	.12	.10	.08	.07	.06	.05	.05	.05	.05	.06	.06	
	648	613	576	537	498	458	418	378	339	301	265	230	193	164	139	118	100	086	076	070	059	071	077	088	
45	.45	.42	.39	.36	.33	.30	.27	.24	.21	.18	.16	.13	.10	.08	.07	.05	.04	.03	.02	.02	.02	.02	.02	.03	
	602	567	529	490	450	410	369	329	290	252	216	182	144	116	092	070	053	039	030	024	023	026	033	044	
1600	.41	.38	.35	.32	.29	.26	.23	.20	.17	.15	.12	.10	.07	.05	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	
	555	518	480	440	400	360	319	279	239	202	165	132	094	067	042	021	004	000	000	000	000	000	000	000	
15	.37	.35	.32	.29	.26	.23	.20	.17	.14	.11	.08	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	505	468	429	389	349	308	267	226	187	149	113	080	043	015	000	000	000	000	000	000	000	000	000	000	
30	.34	.31	.28	.25	.22	.19	.16	.13	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	453	416	377	337	296	254	213	173	133	096	060	026	000	000	000	000	000	000	000	000	000	000	000	000	
45	.30	.27	.24	.21	.18	.15	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	401	363	323	282	241	200	158	118	079	041	005	000	000	000	000	000	000	000	000	000	000	000	000	000	

*** SIGNIFIFES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.)

SEP-DEC 50 N

MST	DATE																							
	SEP						OCT						NOV						DEC					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.26	.23	.20	.17	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	347	308	268	227	186	144	103	062	023	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.22	.19	.16	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	292	253	213	171	129	088	046	005	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.18	.15	.12	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	236	197	156	115	073	030	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	180	140	099	058	015	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1800	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	124	084	042	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	068	027	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	012	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 50 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	JAN							FEB							DATE							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
0800	.01	.01	.01	.02	.03	.04	.06	.08	.10	.12	.15	.17		.22	.25	.28	.31	.34	.37		.40	.43	.45	.48	.50	.52		.547	.582	.613	.645	.673	.698		
	.02	.014	.019	.029	.043	.060	.082	.112	.141	.173	.207	.243		.305	.344	.364	.424	.464	.502																
15	.04	.04	.05	.06	.07	.08	.09	.12	.14	.16	.19	.21		.26	.29	.32	.35	.38	.40		.44	.45	.49	.51	.53	.55		.598	.632	.663	.694	.721	.746		
	.061	.063	.069	.079	.093	.111	.133	.164	.193	.225	.260	.296		.358	.397	.437	.477	.516	.554																
30	.08	.08	.08	.09	.10	.11	.13	.15	.17	.20	.22	.25		.29	.32	.35	.38	.41	.44		.47	.50	.52	.55	.57	.59		.647	.683	.712	.741	.768	.792		
	.108	.110	.117	.127	.142	.161	.183	.214	.244	.276	.311	.347		.409	.448	.488	.527	.566	.603																
45	.11	.11	.11	.12	.13	.15	.16	.19	.21	.23	.26	.28		.33	.36	.39	.42	.45	.47		.51	.53	.55	.58	.60	.62		.693	.725	.758	.786	.812	.836		
	.152	.155	.162	.173	.188	.208	.230	.262	.292	.325	.359	.396		.457	.497	.536	.575	.613	.651																
0900	.14	.14	.15	.15	.17	.18	.20	.22	.24	.26	.29	.32		.36	.39	.42	.45	.48	.51		.54	.56	.59	.61	.63	.65		.737	.770	.800	.828	.854	.877		
	.195	.198	.205	.217	.233	.252	.276	.308	.338	.371	.406	.443		.504	.543	.582	.621	.659	.695																
15	.17	.17	.17	.18	.19	.21	.23	.25	.27	.30	.32	.35		.39	.42	.45	.48	.51	.54		.57	.59	.62	.64	.66	.68		.778	.811	.841	.868	.893	.915		
	.234	.238	.246	.258	.274	.294	.318	.351	.381	.414	.450	.486		.547	.586	.625	.664	.701	.737																
30	.19	.19	.20	.21	.22	.24	.25	.28	.30	.32	.35	.38		.42	.45	.48	.51	.54	.57		.60	.62	.65	.67	.69	.71		.817	.849	.878	.905	.929	.951		
	.271	.275	.284	.296	.313	.334	.358	.391	.422	.455	.490	.527		.588	.627	.665	.704	.741	.776																
45	.22	.22	.23	.24	.25	.26	.28	.30	.33	.35	.38	.41		.45	.48	.51	.54	.56	.59		.62	.65	.67	.69	.71	.73		.852	.883	.912	.939	.962	.984		
	.305	.309	.318	.332	.349	.370	.395	.428	.460	.493	.528	.565		.626	.664	.703	.740	.777	.812																
1000	.24	.24	.25	.26	.27	.29	.30	.33	.35	.38	.40	.43		.48	.50	.53	.56	.59	.62		.65	.67	.69	.71	.73	.75		.884	.915	.943	.969	.993	.013		
	.336	.341	.350	.364	.382	.404	.429	.463	.494	.528	.563	.600		.661	.699	.737	.774	.810	.845																
15	.26	.26	.27	.28	.29	.31	.33	.35	.37	.40	.43	.45		.50	.53	.55	.58	.61	.64		.67	.69	.71	.73	.75	.77		.913	.943	.971	.996	.019	.040		
	.363	.369	.379	.393	.412	.434	.459	.494	.525	.559	.595	.632		.692	.730	.768	.804	.840	.874																
30	.27	.28	.29	.30	.31	.33	.35	.37	.39	.42	.45	.47		.52	.55	.57	.60	.63	.66		.69	.71	.73	.75	.77	.79		.938	.968	.995	.020	.043	.063		
	.388	.393	.404	.419	.438	.461	.486	.521	.553	.587	.623	.660		.720	.758	.795	.831	.867	.900																
45	.29	.29	.30	.31	.33	.34	.36	.39	.41	.44	.46	.49		.54	.56	.59	.62	.65	.67		.70	.73	.75	.77	.79	.80		.960	.989	.015	.040	.062	.082		
	.409	.415	.426	.442	.461	.484	.510	.546	.578	.612	.647	.684		.744	.782	.818	.855	.889	.923																

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
COS Z
XO (W/M=+2.)

TABLE B-1

JAN-APR 48 N

MST	JAN							FEB							DATE							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
1100	.30	.31	.31	.33	.34	.36	.38	.40	.43	.45	.43	.51	.55	.58	.61	.63	.66	.69	.72	.74	.75	.78	.80	.81	.978	.007	.033	.057	.079	.098					
	.426	.433	.444	.461	.480	.504	.530	.566	.598	.633	.668	.705	.765	.802	.838	.874	.908	.941																	
15	.31	.32	.32	.34	.35	.37	.39	.41	.44	.46	.49	.52	.56	.59	.62	.64	.67	.70	.73	.75	.77	.79	.81	.82	.992	.023	.046	.070	.091	.110					
	.440	.447	.459	.476	.496	.520	.547	.583	.616	.650	.685	.722	.782	.818	.855	.890	.924	.956																	
30	.32	.32	.33	.35	.36	.38	.40	.42	.45	.47	.50	.53	.57	.60	.63	.65	.68	.70	.73	.75	.78	.80	.81	.83	.003	.030	.056	.079	.100	.119					
	.450	.457	.470	.487	.508	.533	.560	.596	.629	.663	.699	.736	.794	.831	.867	.902	.935	.967																	
45	.32	.33	.34	.35	.37	.38	.40	.43	.45	.48	.51	.53	.58	.61	.63	.66	.69	.71	.74	.75	.78	.80	.82	.83	.009	.037	.062	.085	.105	.124					
	.456	.464	.478	.495	.517	.541	.569	.606	.638	.673	.709	.745	.804	.840	.875	.910	.943	.974																	
1200	.32	.33	.34	.35	.37	.39	.41	.43	.46	.48	.51	.54	.58	.61	.64	.66	.69	.71	.74	.75	.78	.80	.82	.83	.012	.033	.064	.086	.107	.125					
	.459	.467	.481	.500	.521	.546	.574	.611	.644	.679	.714	.750	.809	.845	.880	.914	.946	.977																	
15	.32	.33	.34	.35	.37	.39	.41	.44	.46	.49	.51	.54	.58	.61	.64	.66	.69	.71	.74	.75	.78	.80	.82	.83	.011	.037	.062	.084	.104	.122					
	.458	.467	.481	.500	.522	.547	.576	.613	.646	.680	.716	.752	.810	.846	.880	.914	.946	.977																	
30	.32	.33	.34	.35	.37	.39	.41	.43	.46	.48	.51	.54	.58	.61	.63	.66	.68	.71	.74	.75	.78	.80	.81	.83	.006	.032	.055	.078	.098	.116					
	.453	.462	.478	.497	.519	.545	.573	.611	.644	.678	.714	.750	.807	.842	.877	.910	.942	.972																	
45	.31	.32	.33	.35	.36	.38	.40	.43	.45	.48	.51	.53	.58	.60	.63	.65	.68	.70	.73	.75	.77	.79	.80	.82	.997	.023	.046	.068	.088	.106					
	.445	.454	.470	.489	.512	.538	.567	.604	.638	.672	.708	.743	.800	.835	.870	.902	.934	.964																	
1300	.31	.31	.32	.34	.36	.37	.40	.42	.45	.47	.50	.53	.57	.59	.62	.65	.67	.69	.72	.74	.76	.78	.79	.81	.984	.010	.033	.055	.074	.092					
	.433	.443	.459	.479	.502	.528	.557	.595	.628	.662	.698	.733	.790	.824	.858	.891	.922	.951																	
15	.29	.30	.31	.33	.35	.36	.39	.41	.44	.46	.49	.52	.56	.58	.61	.63	.66	.68	.71	.73	.75	.77	.78	.80	.968	.030	.055	.078	.097	.116					
	.417	.427	.444	.464	.487	.514	.543	.581	.614	.648	.684	.719	.775	.810	.843	.875	.906	.935																	
30	.28	.29	.30	.32	.33	.35	.37	.40	.42	.45	.48	.50	.54	.57	.60	.62	.64	.67	.69	.71	.73	.75	.77	.78	.947	.072	.095	.117	.136	.155					
	.398	.408	.425	.446	.470	.496	.526	.563	.597	.631	.666	.701	.757	.791	.824	.856	.886	.915																	
45	.27	.27	.29	.30	.32	.34	.36	.39	.41	.44	.46	.49	.53	.55	.58	.60	.63	.65	.68	.70	.73	.75	.77	.78	.923	.043	.067	.091	.115	.139					
	.375	.386	.403	.424	.448	.475	.504	.542	.575	.610	.644	.679	.735	.769	.801	.833	.863	.891																	

JAN-APR 48 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.25	.25	.27	.28	.30	.32	.34	.37	.39	.42	.44	.47	.51	.54	.56	.58	.61	.63	.66	.68	.69	.71	.73	.74	
	349	360	378	399	423	450	480	518	551	585	619	654	709	743	775	806	836	864	896	921	944	965	984	1002	
15	.23	.23	.25	.26	.28	.30	.32	.35	.37	.40	.42	.45	.49	.51	.54	.56	.59	.61	.63	.65	.67	.69	.71	.72	
	319	331	349	370	395	422	452	489	522	556	591	625	680	713	745	776	806	834	865	890	913	934	953	971	
30	.20	.21	.22	.24	.26	.28	.30	.33	.35	.37	.40	.43	.47	.49	.51	.54	.56	.58	.61	.63	.65	.66	.68	.70	
	287	299	317	339	363	391	420	458	491	525	559	593	647	680	712	743	772	800	831	855	878	900	919	937	
45	.18	.19	.20	.22	.23	.25	.27	.30	.32	.35	.37	.40	.44	.46	.49	.51	.53	.56	.58	.60	.62	.64	.65	.67	
	251	263	282	304	329	356	385	423	456	490	524	558	611	644	676	706	735	763	794	813	831	862	882	901	
1500	.15	.16	.17	.19	.21	.23	.25	.27	.30	.32	.35	.37	.41	.44	.46	.48	.51	.53	.55	.57	.59	.61	.62	.64	
	213	225	244	266	291	318	348	385	418	452	485	519	572	605	636	666	695	723	754	773	801	822	842	861	
15	.12	.13	.14	.16	.18	.20	.22	.25	.27	.29	.32	.34	.38	.41	.43	.45	.47	.50	.52	.54	.56	.58	.59	.61	
	172	184	203	225	250	278	307	345	377	410	444	478	530	562	594	623	652	680	711	735	758	780	800	819	
30	.09	.10	.11	.13	.15	.17	.19	.21	.24	.26	.29	.31	.35	.37	.40	.42	.44	.46	.49	.51	.52	.54	.56	.57	
	128	141	160	182	207	235	264	301	334	367	400	433	480	517	549	578	607	634	665	690	713	734	755	774	
45	.06	.07	.08	.10	.11	.13	.16	.18	.21	.23	.25	.28	.32	.34	.36	.38	.41	.43	.45	.47	.49	.51	.52	.54	
	082	095	115	137	162	189	218	255	288	320	353	386	438	470	501	530	559	586	617	642	665	687	708	727	
1600	.02	.03	.05	.06	.08	.10	.12	.15	.17	.19	.22	.24	.28	.30	.33	.35	.37	.39	.41	.43	.45	.47	.49	.50	
	034	047	067	089	114	141	170	207	239	272	304	337	389	420	451	480	508	536	567	592	615	637	658	678	
15	.00	.00	.01	.03	.05	.07	.09	.11	.13	.16	.18	.20	.24	.27	.29	.31	.33	.35	.38	.40	.41	.43	.45	.47	
	000	000	017	039	064	091	120	157	188	221	253	286	337	368	398	428	456	483	515	539	563	586	607	627	
30	.00	.00	.00	.00	.01	.03	.05	.07	.10	.12	.14	.17	.20	.23	.25	.27	.29	.31	.34	.35	.38	.39	.41	.43	
	000	000	000	000	012	039	068	104	136	168	200	232	283	314	344	374	402	429	461	486	510	533	554	575	
45	.00	.00	.00	.00	.00	.00	.01	.04	.06	.08	.10	.13	.16	.19	.21	.23	.25	.27	.30	.32	.33	.35	.37	.39	
	000	000	000	000	000	000	014	050	081	113	145	177	228	258	288	318	346	374	405	430	455	478	500	521	

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1

JAN-APR 48 N

MST	DATE																			
	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0400	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
15	.00	.00	.00	.00	.00	.01	.01	.02	.02	.02	.02	.01	.01	.00	.00	.00	.00	.00		
	000	000	000	000	000	007	019	025	028	028	024	017	003	000	000	000	000	000		
30	.00	.00	.01	.02	.03	.04	.05	.06	.06	.06	.06	.05	.04	.03	.02	.01	.00	.00		
	000	000	007	027	044	057	068	074	077	076	072	065	050	044	029	012	000	000		
45	.01	.03	.04	.06	.07	.08	.09	.09	.10	.10	.09	.09	.08	.07	.06	.05	.03	.02		
	010	036	059	079	095	108	119	124	127	126	122	115	106	094	079	063	044	024		
0500	.05	.07	.08	.10	.11	.12	.13	.13	.13	.13	.13	.13	.12	.11	.10	.09	.07	.06		
	064	090	112	132	147	160	170	176	178	177	173	166	156	144	130	114	096	076		
15	.09	.11	.12	.14	.15	.16	.17	.17	.17	.17	.17	.16	.16	.15	.14	.13	.11	.10		
	119	145	167	185	201	213	223	228	230	228	224	218	208	196	182	167	149	130		
30	.13	.15	.17	.18	.19	.20	.21	.21	.21	.21	.21	.20	.20	.19	.18	.17	.15	.14		
	176	200	222	240	255	266	276	281	282	281	277	270	261	249	235	221	203	184		
45	.17	.19	.21	.22	.23	.24	.25	.25	.25	.25	.25	.24	.24	.23	.22	.21	.19	.18		
	232	256	277	295	309	320	330	334	335	334	330	323	314	302	289	274	257	238		
0600	.21	.23	.25	.26	.27	.28	.29	.29	.29	.29	.29	.28	.28	.27	.26	.25	.24	.22		
	289	312	333	350	364	375	384	388	389	387	383	376	367	356	343	328	311	293		
15	.26	.27	.29	.30	.31	.32	.33	.33	.33	.33	.33	.32	.32	.31	.30	.29	.28	.26		
	345	368	388	405	418	429	437	441	442	440	436	429	420	410	397	382	366	349		
30	.30	.32	.33	.34	.35	.36	.37	.37	.37	.37	.37	.36	.36	.35	.34	.33	.32	.30		
	401	424	443	460	473	483	491	494	495	493	489	482	474	463	450	436	421	404		
45	.34	.36	.37	.38	.40	.40	.41	.41	.41	.41	.41	.40	.40	.39	.38	.37	.36	.35		
	457	479	498	514	526	536	544	547	548	546	542	535	527	516	504	490	475	458		

MAY-AUG 48 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0700	.38	.40	.41	.42	.43	.44	.45	.45	.45	.45	.45	.44	.43	.42	.41	.40	.39	.37	.35	.34
	512	534	552	567	579	589	596	599	600	598	594	587	579	569	557	543	528	491	473	453
15	.42	.44	.45	.46	.47	.48	.49	.49	.49	.49	.48	.48	.48	.47	.45	.44	.43	.41	.40	.38
	566	587	605	620	631	640	647	650	651	649	635	638	630	620	609	596	581	545	527	508
30	.46	.48	.49	.50	.51	.52	.53	.53	.53	.53	.52	.52	.51	.51	.50	.49	.48	.45	.44	.42
	619	639	657	671	682	691	698	700	701	699	695	689	681	671	660	647	633	597	580	561
45	.50	.51	.53	.54	.55	.56	.56	.56	.57	.56	.56	.56	.55	.54	.54	.53	.52	.49	.47	.46
	670	690	707	721	732	740	747	749	749	747	743	737	730	720	709	697	683	649	631	613
0800	.54	.55	.56	.58	.58	.59	.60	.60	.60	.60	.60	.59	.59	.58	.57	.56	.55	.53	.51	.50
	720	739	755	769	780	788	794	796	796	795	791	785	777	768	757	745	732	699	682	664
15	.57	.59	.60	.61	.62	.63	.63	.63	.64	.63	.63	.63	.62	.62	.61	.60	.59	.56	.55	.53
	767	786	802	815	825	833	839	842	842	840	836	830	823	814	804	792	779	747	730	712
30	.60	.62	.63	.64	.65	.66	.66	.67	.67	.67	.66	.66	.66	.65	.64	.63	.62	.60	.58	.57
	813	831	847	859	869	877	883	885	885	883	880	874	867	859	849	837	825	793	776	759
45	.64	.65	.66	.67	.68	.69	.70	.70	.70	.70	.70	.69	.69	.68	.67	.66	.65	.63	.62	.60
	856	874	889	901	911	918	924	926	927	925	921	916	909	901	891	880	868	837	821	804
0900	.67	.68	.69	.70	.71	.72	.72	.73	.73	.73	.73	.72	.72	.71	.70	.69	.69	.66	.65	.63
	897	914	929	941	950	958	963	965	965	964	960	955	947	941	931	921	909	878	863	846
15	.70	.71	.72	.73	.74	.75	.75	.75	.76	.76	.75	.75	.75	.74	.73	.72	.71	.69	.68	.65
	935	952	966	978	987	994	*000	*002	*002	*000	997	992	985	978	969	959	947	917	902	885
30	.72	.74	.75	.76	.77	.77	.78	.78	.78	.78	.78	.78	.77	.77	.76	.75	.74	.72	.70	.68
	970	987	*001	*012	*021	*028	*033	*036	*036	*034	*031	*027	*021	*013	*004	994	983	954	933	922
45	.75	.76	.77	.78	.79	.80	.80	.80	.80	.80	.80	.80	.80	.79	.78	.78	.77	.74	.73	.72
	*003	*019	*032	*044	*052	*059	*064	*067	*067	*066	*063	*058	*053	*045	*037	*027	*016	987	972	956

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SOLAR PARAMETERS
X0 (W/M*2.)

TABLE B-1

MAY-AUG 48 N

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1000	.77	.78	.79	.80	.81	.82	.82	.82	.83	.83	.82	.82	.82	.81	.81	.80	.79	.78	.77	.75	.74	.72	.71	.69
	*032	*048	*061	*072	*081	*087	*092	*095	*095	*094	*091	*087	*082	*075	*067	*057	*046	*034	*018	*003	*97	*969	*950	*930
15	.79	.80	.81	.82	.83	.84	.84	.84	.85	.85	.84	.84	.84	.83	.83	.82	.81	.80	.79	.77	.76	.75	.73	.71
	*058	*073	*086	*097	*106	*112	*117	*120	*120	*119	*117	*113	*103	*101	*093	*084	*073	*062	*046	*031	*015	*997	*978	*957
30	.80	.82	.83	.84	.85	.85	.86	.86	.86	.86	.86	.86	.85	.85	.84	.84	.83	.82	.80	.77	.78	.76	.75	.73
	*080	*095	*108	*119	*127	*134	*139	*142	*142	*142	*139	*136	*131	*124	*117	*108	*097	*086	*070	*055	*039	*021	*002	*981
45	.82	.83	.84	.85	.86	.87	.87	.87	.88	.88	.88	.87	.87	.86	.86	.85	.84	.83	.82	.81	.79	.78	.76	.75
	*099	*114	*127	*138	*146	*152	*158	*160	*161	*161	*159	*155	*150	*144	*137	*128	*118	*107	*091	*075	*060	*042	*023	*002
1100	.83	.84	.85	.86	.87	.88	.88	.89	.89	.89	.89	.89	.88	.88	.87	.86	.86	.85	.83	.82	.81	.79	.78	.76
	*115	*130	*142	*153	*161	*168	*173	*176	*177	*176	*175	*171	*167	*161	*154	*145	*135	*124	*108	*094	*078	*060	*040	*019
15	.84	.85	.86	.87	.88	.89	.89	.89	.90	.90	.90	.89	.89	.89	.88	.87	.87	.86	.84	.83	.82	.80	.79	.77
	*127	*142	*154	*164	*173	*179	*185	*188	*189	*189	*187	*184	*180	*174	*167	*159	*149	*138	*123	*103	*092	*074	*054	*032
30	.84	.86	.87	.88	.89	.89	.90	.90	.90	.90	.90	.90	.89	.89	.89	.88	.87	.86	.85	.84	.83	.81	.79	.78
	*135	*150	*162	*172	*181	*187	*193	*196	*198	*198	*196	*194	*190	*184	*178	*169	*160	*149	*133	*112	*102	*084	*064	*042
45	.85	.86	.87	.88	.89	.90	.90	.91	.91	.91	.91	.91	.90	.90	.89	.89	.88	.87	.86	.84	.83	.82	.80	.78
	*140	*154	*167	*177	*185	*192	*198	*201	*203	*203	*202	*200	*190	*191	*184	*176	*167	*156	*140	*125	*109	*090	*070	*048
1200	.85	.86	.87	.88	.89	.90	.90	.91	.91	.91	.91	.91	.91	.90	.90	.89	.88	.87	.86	.85	.83	.82	.80	.78
	*141	*155	*167	*178	*186	*193	*199	*203	*205	*205	*205	*202	*199	*194	*187	*179	*170	*159	*143	*123	*112	*093	*072	*050
15	.85	.86	.87	.88	.89	.89	.90	.90	.91	.91	.91	.91	.91	.90	.90	.89	.88	.87	.86	.85	.83	.82	.80	.78
	*138	*153	*165	*175	*184	*191	*197	*201	*203	*204	*203	*201	*193	*193	*187	*179	*170	*159	*143	*123	*111	*092	*071	*048
30	.84	.85	.87	.87	.88	.89	.90	.90	.90	.91	.91	.90	.90	.90	.89	.89	.88	.87	.86	.84	.83	.81	.80	.78
	*132	*146	*158	*169	*178	*185	*192	*195	*198	*199	*199	*197	*194	*189	*183	*175	*166	*155	*139	*124	*107	*087	*066	*043
45	.83	.85	.86	.87	.88	.88	.89	.89	.90	.90	.90	.90	.89	.89	.89	.88	.87	.86	.85	.84	.82	.81	.79	.77
	*122	*136	*148	*159	*168	*175	*182	*187	*189	*191	*191	*189	*186	*182	*176	*168	*159	*147	*131	*115	*096	*079	*057	*033

MAY-AUG 48 N TABLE B-1 SOLAR PARAMETERS COS Z XO (W/M*2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1300	.82 .84 .85 .86 .87 .87	*108*122*135*146*155*162					.88 .88 .89 .89 .89 .89	*170*174*177*179*179*178			.84 .88 .88 .87 .87 .86	*175*171*165*157*143*136		.84 .83 .81 .80 .78 .76	*120*105*087*067*045*020					
15	.81 .82 .83 .84 .85 .86	*091*105*118*129*138*146					.87 .87 .88 .88 .88 .88	*154*158*162*164*164*163			.83 .67 .87 .86 .85 .84	*160*156*150*143*133*122		.83 .62 .80 .79 .77 .75	*105*085*071*051*028*004					
30	.80 .81 .82 .83 .84 .85	*070*085*097*109*118*126					.85 .86 .86 .86 .87 .87	*134*139*143*145*145*145			.85 .80 .85 .85 .84 .83	*143*136*133*125*115*104		.82 .80 .79 .77 .75 .73	*087*071*052*032*009*983					
45	.78 .79 .80 .81 .82 .83	*046*061*074*085*095*103					.84 .84 .85 .85 .85 .85	*112*117*121*123*124*124			.85 .84 .84 .83 .83 .82	*121*117*112*104*094*083		.80 .73 .77 .75 .74 .71	*066*040*030*009*985*960					
1400	.76 .77 .78 .79 .80 .81	*019*033*047*058*069*077					.82 .82 .83 .83 .83 .83	*086*092*096*099*100*099			.83 .83 .82 .81 .81 .80	*097*093*087*080*070*058		.78 .77 .75 .73 .72 .69	*041*024*004*983*959*932					
15	.73 .75 .76 .77 .78 .79	988*003*016*028*039*048					.80 .80 .81 .81 .81 .81	*057*063*068*071*072*072			.81 .81 .80 .79 .79 .78	*070*066*060*052*042*030		.76 .75 .73 .71 .69 .67	*013*995*975*953*929*902					
30	.71 .72 .73 .75 .75 .76	954*969*983*996*007*016					.77 .78 .78 .79 .79 .79	*026*032*037*040*042*041			.79 .78 .78 .77 .76 .75	*040*036*030*022*012*999		.74 .72 .71 .69 .67 .65	981*964*943*921*896*868					
45	.68 .70 .71 .72 .73 .74	918*933*947*960*971*981					.75 .75 .76 .76 .76 .76	991*998*003*006*008*008			.76 .76 .75 .75 .74 .73	*006*003*997*989*978*966		.71 .70 .68 .66 .64 .62	947*923*908*885*859*831					
1500	.65 .67 .68 .69 .70 .71	878*894*909*922*933*944					.72 .72 .73 .73 .73 .73	954*961*966*970*972*972			.73 .73 .73 .72 .71 .70	971*967*961*953*942*929		.68 .67 .65 .63 .61 .59	910*892*870*847*820*792					
15	.62 .64 .65 .66 .67 .68	836*853*867*881*893*904					.69 .69 .70 .70 .71 .71	915*922*928*932*934*934			.70 .70 .70 .69 .68 .67	932*929*922*914*903*890		.65 .64 .62 .60 .58 .56	871*852*830*806*779*749					
30	.59 .60 .62 .63 .64 .65	792*809*824*838*850*861					.66 .66 .67 .67 .67 .68	873*880*886*891*893*893			.67 .67 .67 .66 .65 .64	892*888*882*873*862*848		.62 .61 .59 .57 .55 .52	829*803*787*762*735*705					
45	.55 .57 .58 .59 .60 .61	745*762*778*792*805*817					.62 .63 .64 .64 .64 .64	829*837*843*847*850*851			.64 .64 .63 .63 .62 .61	843*845*839*830*819*805		.59 .57 .55 .54 .51 .49	784*764*742*716*688*658					

MAY-AUG 48 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
1900	.03	.05	.06	.08	.09	.11	.12	.13	.14	.14	.14	.14
	039	062	085	105	124	141	158	170	179	185	189	189
15	.00	.01	.02	.04	.05	.07	.08	.09	.10	.10	.10	.10
	000	009	032	053	072	089	107	119	128	134	138	138
30	.00	.00	.00	.00	.02	.03	.04	.05	.06	.06	.07	.07
	000	000	000	000	021	039	057	069	078	084	088	088
45	.00	.00	.00	.00	.00	.00	.01	.02	.02	.03	.03	.03
	000	000	000	000	000	000	008	020	029	036	039	039

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
X0 (W/M*2.)

48 N

MAY-AUG

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

MST	DATE															NOV					DEC				
	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	013	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.05	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	072	046	020	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
0600	.10	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	130	105	079	053	026	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.14	.12	.10	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	189	164	139	112	086	058	030	001	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.18	.17	.15	.13	.11	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	247	223	197	171	145	117	089	060	031	001	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.23	.21	.19	.17	.15	.13	.11	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	305	281	256	230	203	176	148	119	089	059	029	000	000	000	000	000	000	000	000	000	000	000	000	000	
0700	.27	.25	.23	.21	.19	.17	.15	.13	.11	.08	.06	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	362	338	313	287	261	233	205	176	146	116	086	055	019	000	000	000	000	000	000	000	000	000	000	000	
15	.31	.29	.27	.25	.23	.21	.19	.17	.15	.12	.10	.08	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	418	394	369	344	317	290	261	232	202	172	141	110	074	044	015	000	000	000	000	000	000	000	000	000	
30	.35	.33	.31	.29	.27	.25	.23	.21	.19	.16	.14	.12	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	
	472	449	424	399	372	345	316	287	257	226	195	164	127	097	068	040	014	000	000	000	000	000	000	000	
45	.39	.37	.35	.33	.31	.29	.27	.25	.23	.20	.18	.16	.13	.11	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	
	526	502	478	452	426	398	369	340	310	279	248	216	179	148	119	091	065	041	019	001	000	000	000	000	

*** SIGNIFIFES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

XO (W/M**2.)

SOLAR PARAMETERS COS Z

TABLE B-1

48 N

SEP-DEC

MST	DATE												NOV												DEC											
	SEP						OCT						NOV						DEC																	
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30												
0800	.43	.41	.39	.37	.35	.33	.31	.28	.26	.24	.22	.19	.16	.14	.12	.10	.08	.06	.05	.03	.03	.02	.01	.01												
	577	554	529	504	477	449	421	391	360	329	298	266	223	196	169	140	114	090	069	050	035	024	016	012												
15	.47	.45	.43	.41	.39	.37	.34	.32	.30	.27	.25	.23	.20	.18	.15	.13	.12	.10	.08	.07	.06	.05	.05	.04												
	627	603	579	553	527	499	470	440	409	378	346	314	276	246	216	188	161	137	116	098	083	072	064	061												
30	.50	.48	.46	.44	.42	.40	.38	.35	.33	.31	.28	.26	.23	.21	.19	.17	.15	.13	.11	.10	.09	.08	.08	.08												
	674	651	626	601	574	546	517	486	455	424	392	360	322	291	261	233	206	182	161	143	129	118	111	108												
45	.53	.52	.50	.48	.45	.43	.41	.39	.36	.34	.31	.29	.26	.24	.22	.20	.18	.16	.15	.13	.12	.11	.11	.11												
	719	696	671	646	618	590	561	530	499	467	435	403	364	333	303	275	249	225	204	185	172	161	155	152												
0900	.57	.55	.53	.51	.48	.46	.44	.42	.39	.37	.34	.32	.29	.27	.25	.22	.21	.19	.17	.16	.15	.14	.14	.14												
	762	738	714	688	660	632	602	572	540	508	475	443	404	373	343	315	289	265	244	227	213	202	196	194												
15	.59	.58	.56	.54	.51	.49	.47	.44	.42	.40	.37	.35	.32	.29	.27	.25	.23	.22	.20	.19	.18	.17	.17	.17												
	802	778	753	727	700	671	641	610	578	546	513	480	442	410	380	352	326	302	282	264	251	241	235	234												
30	.62	.60	.58	.56	.54	.52	.49	.47	.44	.42	.40	.37	.34	.32	.30	.28	.26	.24	.22	.21	.20	.20	.19	.19												
	838	815	790	763	736	707	676	645	613	580	547	514	476	444	414	386	360	336	316	294	286	276	271	270												
45	.65	.63	.61	.59	.56	.54	.52	.49	.47	.44	.42	.39	.36	.34	.32	.30	.28	.26	.25	.23	.23	.22	.22	.22												
	872	849	823	797	769	739	709	677	645	612	578	545	506	475	445	417	391	368	348	331	318	309	304	304												
1000	.67	.65	.63	.61	.59	.56	.54	.51	.49	.46	.44	.41	.38	.36	.34	.32	.30	.28	.27	.25	.25	.24	.24	.24												
	903	879	854	827	798	768	738	706	673	640	606	573	534	502	472	444	419	396	376	360	347	339	334	334												
15	.69	.67	.65	.63	.61	.58	.56	.53	.51	.48	.46	.43	.40	.38	.35	.33	.32	.30	.28	.27	.26	.26	.26	.26												
	930	906	880	853	824	794	763	731	698	664	630	597	558	526	496	468	443	420	401	385	373	365	361	362												
30	.71	.69	.67	.64	.62	.60	.57	.55	.52	.50	.47	.44	.42	.39	.37	.35	.33	.31	.30	.29	.28	.27	.27	.27												
	954	930	904	876	847	816	785	752	719	685	651	618	578	547	517	489	464	441	422	407	395	388	385	386												
45	.72	.70	.68	.66	.64	.61	.59	.56	.53	.51	.48	.46	.43	.40	.38	.36	.34	.33	.31	.30	.29	.29	.29	.29												
	974	950	923	895	866	835	803	770	736	702	668	634	595	561	534	506	481	459	440	425	414	407	405	406												

SEP-DEC 48 N TABLE B-1 SOLAR PARAMETERS COS Z ADD 1000 TO VALUES PRECEDED BY .

MST	DATE																						
	SEP					OCT					NOV					DEC							
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1100	.74	.71	.69	.67	.65	.62	.60	.57	.54	.52	.49	.47	.44	.41	.39	.37	.35	.34	.32	.31	.30	.30	.30
	991	966	939	911	881	850	817	784	750	716	681	648	608	577	547	520	495	473	455	440	430	423	421
15	.75	.72	.70	.68	.65	.63	.60	.58	.55	.52	.50	.47	.44	.42	.40	.38	.36	.34	.33	.32	.31	.31	.31
	*004	979	951	923	892	861	828	794	760	725	691	657	617	586	557	529	505	484	466	452	442	436	434
30	.75	.73	.71	.68	.66	.64	.61	.58	.56	.53	.50	.48	.45	.42	.40	.38	.36	.35	.34	.33	.32	.31	.31
	*013	987	960	931	900	868	834	800	766	731	696	662	623	592	562	535	511	490	473	453	450	444	443
45	.76	.73	.71	.69	.66	.64	.61	.58	.56	.53	.50	.48	.45	.43	.40	.38	.37	.35	.34	.33	.32	.32	.32
	*019	992	964	935	903	871	837	803	768	733	698	664	624	593	564	538	514	493	476	463	454	449	449
1200	.76	.74	.71	.69	.66	.64	.61	.58	.56	.53	.50	.48	.45	.42	.40	.38	.37	.35	.34	.33	.32	.32	.32
	*020	994	965	935	903	870	836	801	766	731	696	662	622	591	562	536	513	492	476	463	455	451	451
15	.76	.73	.71	.69	.66	.63	.61	.58	.55	.52	.50	.47	.44	.42	.40	.38	.36	.35	.34	.33	.32	.32	.32
	*018	991	962	931	899	865	831	796	760	725	690	655	616	585	557	531	508	488	472	460	452	448	449
30	.75	.73	.70	.68	.65	.63	.60	.57	.54	.52	.49	.46	.44	.41	.39	.37	.36	.34	.33	.32	.32	.31	.31
	*012	984	955	923	891	857	822	786	751	715	680	645	606	576	547	521	499	480	464	453	445	442	444
45	.74	.72	.70	.67	.65	.62	.59	.56	.53	.51	.48	.45	.43	.40	.38	.36	.35	.33	.32	.31	.31	.31	.31
	*002	974	944	912	879	844	809	773	737	701	666	632	593	562	534	509	486	468	453	442	435	432	434
1300	.73	.71	.69	.66	.63	.61	.58	.55	.52	.49	.47	.44	.41	.39	.37	.35	.33	.32	.31	.30	.30	.30	.30
	988	960	929	897	863	828	792	756	720	684	648	614	575	545	517	492	470	452	437	427	421	419	421
15	.72	.70	.67	.65	.62	.59	.56	.54	.51	.48	.45	.43	.40	.38	.35	.34	.32	.31	.30	.29	.29	.28	.29
	971	942	911	878	844	808	772	735	699	663	627	593	554	524	496	472	450	433	419	409	403	402	405
30	.71	.68	.66	.63	.60	.57	.55	.52	.49	.46	.43	.41	.38	.36	.34	.32	.30	.29	.28	.27	.27	.27	.27
	950	920	888	855	820	785	748	711	674	638	602	568	530	500	472	448	427	410	397	387	382	381	385
45	.69	.66	.64	.61	.58	.55	.53	.50	.47	.44	.41	.39	.36	.34	.32	.30	.29	.27	.26	.25	.25	.25	.26
	926	895	863	829	794	757	721	683	646	610	574	540	501	472	445	421	401	384	371	362	358	357	361

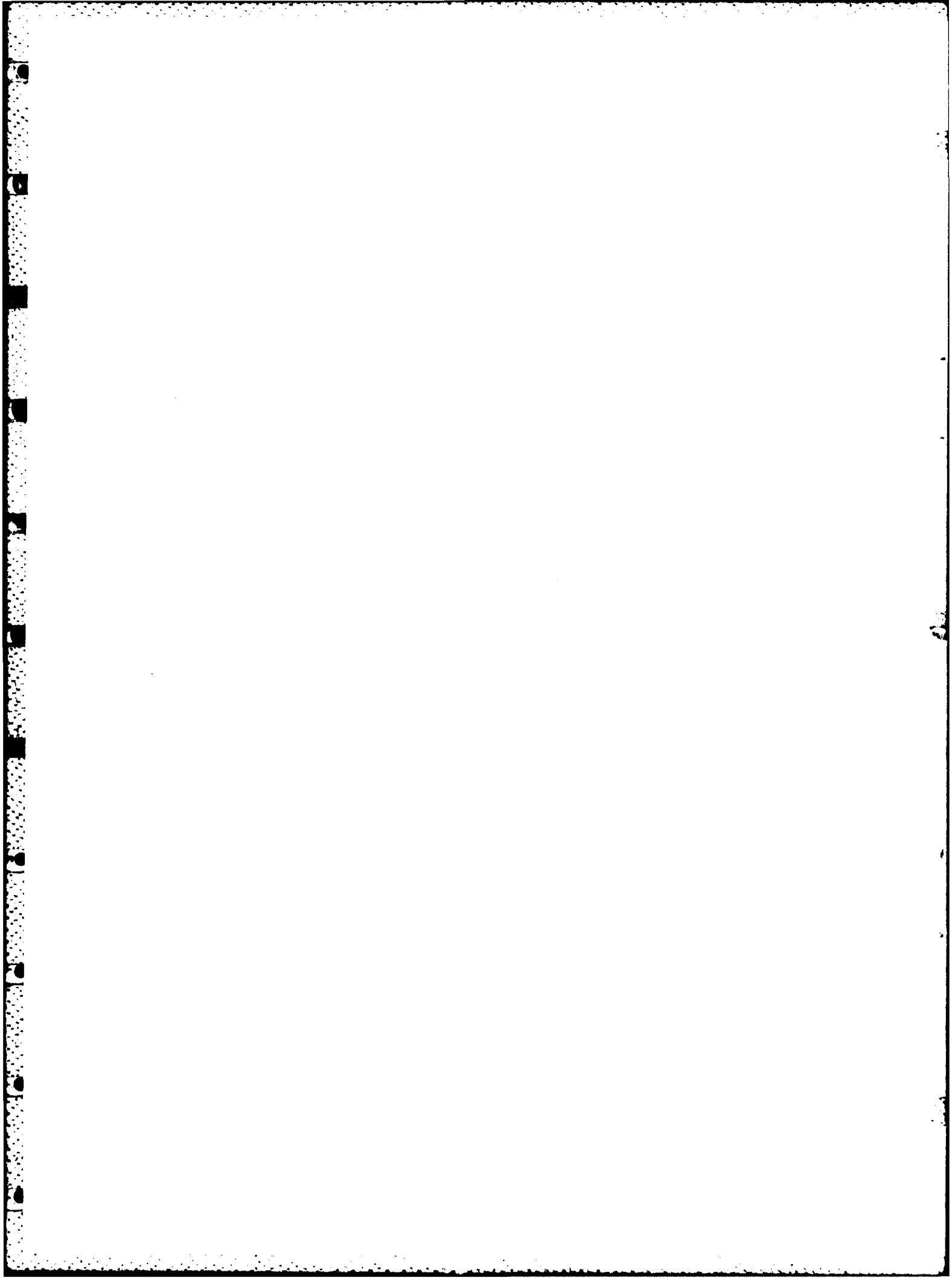
SEP-DEC 48 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
XO (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.67	.64	.62	.59	.56	.53	.50	.47	.45	.42	.39	.37	.34	.32	.30	.28	.26	.25	.24	.24	.23	.23	.24	.24
	898	867	834	799	764	727	690	652	615	578	543	508	470	441	414	391	371	354	342	334	330	330	335	343
15	.64	.62	.59	.56	.54	.51	.48	.45	.42	.39	.37	.34	.31	.29	.27	.26	.24	.23	.22	.21	.21	.21	.22	.22
	866	835	801	766	730	693	655	618	580	543	508	474	436	407	380	357	338	322	310	302	299	300	305	314
30	.62	.59	.57	.54	.51	.48	.45	.42	.39	.37	.34	.31	.28	.26	.25	.23	.22	.20	.20	.19	.19	.19	.19	.20
	832	800	766	730	694	656	618	580	542	505	470	436	398	369	343	321	302	286	275	263	255	266	272	281
45	.59	.56	.54	.51	.48	.45	.42	.39	.36	.34	.31	.28	.26	.24	.22	.20	.19	.18	.17	.15	.16	.16	.17	.17
	795	762	727	691	654	616	578	539	501	465	429	395	358	329	304	281	263	248	237	230	228	230	235	245
1500	.56	.53	.51	.48	.45	.42	.39	.36	.33	.30	.28	.25	.23	.21	.19	.17	.16	.15	.14	.14	.13	.14	.14	.15
	754	721	686	649	612	573	534	496	458	421	385	352	314	286	261	239	221	207	196	190	188	190	197	207
15	.53	.50	.47	.45	.42	.39	.36	.33	.30	.27	.25	.22	.19	.17	.15	.14	.13	.12	.11	.10	.10	.11	.11	.12
	711	677	642	605	566	528	489	450	412	375	339	306	269	241	216	195	177	163	153	147	146	148	155	166
30	.49	.47	.44	.41	.38	.35	.32	.29	.26	.24	.21	.19	.16	.14	.12	.11	.09	.08	.08	.07	.07	.07	.08	.09
	666	631	595	557	519	480	440	401	363	326	291	257	221	193	169	148	130	117	108	102	101	104	111	122
45	.46	.43	.40	.37	.34	.31	.28	.26	.23	.20	.17	.15	.12	.10	.09	.07	.06	.05	.04	.04	.04	.04	.05	.05
	618	583	546	508	469	430	390	351	313	275	240	207	170	143	119	099	082	069	060	055	054	058	065	076
1600	.42	.39	.37	.34	.31	.28	.25	.22	.19	.16	.14	.11	.09	.07	.05	.03	.02	.01	.01	.00	.00	.01	.01	.02
	568	532	495	457	417	377	338	298	260	223	188	155	116	091	068	048	031	019	010	000	005	009	017	028
15	.38	.36	.33	.30	.27	.24	.21	.18	.15	.12	.10	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
	516	480	442	403	364	323	283	244	205	168	133	101	065	028	015	000	000	000	000	000	000	000	000	000
30	.34	.32	.29	.26	.23	.20	.17	.14	.11	.08	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	463	426	388	348	308	268	228	188	150	113	078	045	009	000	000	000	000	000	000	000	000	000	000	000
45	.30	.27	.25	.22	.19	.15	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	408	371	332	292	252	211	171	131	092	056	021	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 48 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					DATE															NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.26	.23	.20	.17	.14	.11	.08	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	352	314	275	235	194	153	112	073	034	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.22	.19	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	295	256	217	176	135	094	054	014	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.18	.15	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	237	198	158	117	076	035	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	178	139	099	058	017	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1800	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	120	080	040	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	061	022	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	003	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 48 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *



MST	JAN							FEB							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30			
0800	.11	.11	.11	.12	.13	.14	.15	.17	.18	.20	.23	.25	.27	.31	.34	.36	.39	.42	.45	.47	.49	.51	.53	.54				
	158	158	161	167	178	191	209	234	258	285	315	346	390	434	468	503	537	570	608	633	656	691	714	734				
	.15	.15	.15	.16	.17	.18	.19	.21	.23	.25	.27	.29	.33	.36	.38	.41	.44	.46	.49	.51	.53	.55	.57	.59				
15	216	216	219	226	237	252	270	295	320	347	377	408	462	496	530	565	599	631	668	693	724	749	771	791				
	.30	.19	.19	.20	.20	.21	.22	.23	.25	.27	.29	.31	.34	.36	.40	.43	.45	.48	.50	.53	.55	.57	.59	.61	.63			
	271	271	275	283	295	310	328	354	379	407	437	468	522	556	590	624	657	690	726	751	781	805	826	845				
45	.23	.23	.23	.24	.25	.26	.27	.29	.31	.33	.35	.38	.42	.44	.47	.49	.52	.54	.57	.59	.61	.63	.65	.66				
	324	324	329	337	349	365	384	411	436	464	494	526	579	613	647	681	713	745	781	803	834	857	878	896				
	0900	.26	.27	.27	.28	.28	.30	.31	.33	.35	.37	.39	.42	.46	.48	.51	.53	.56	.58	.61	.63	.65	.67	.69	.70			
373		375	380	389	401	418	437	464	490	519	549	581	634	667	701	734	767	798	833	860	885	907	927	945				
15		.30	.30	.30	.31	.32	.33	.35	.37	.39	.41	.43	.45	.49	.52	.54	.57	.59	.62	.64	.67	.69	.70	.72	.73			
30	420	422	428	437	450	467	487	515	541	570	600	632	685	719	752	785	817	847	881	903	932	954	973	990				
	.30	.33	.33	.33	.34	.35	.36	.38	.40	.42	.44	.46	.49	.53	.55	.58	.60	.63	.65	.68	.70	.72	.74	.75	.77			
	463	466	472	482	496	513	534	563	589	618	648	680	733	766	799	832	863	893	927	952	975	997	016	032				
45	.36	.36	.36	.37	.38	.39	.41	.43	.45	.47	.50	.52	.56	.58	.61	.63	.66	.68	.71	.73	.75	.76	.78	.79				
	503	506	513	524	538	556	577	607	633	662	693	725	778	811	843	875	906	935	968	993	016	037	055	071				
	1000	.38	.38	.39	.40	.41	.42	.44	.46	.48	.50	.52	.55	.59	.61	.64	.66	.69	.71	.74	.75	.77	.79	.81	.82			
540		543	551	562	577	596	617	647	674	703	734	766	818	851	883	915	945	974	006	031	053	073	091	106				
15		.40	.41	.41	.42	.43	.45	.46	.49	.51	.53	.55	.58	.61	.64	.66	.69	.71	.74	.76	.78	.80	.81	.83	.84			
30	572	576	584	596	612	631	653	683	711	740	771	803	855	888	920	951	980	009	040	064	085	105	122	137				
	.42	.43	.43	.44	.46	.47	.49	.51	.53	.55	.57	.60	.64	.66	.69	.71	.74	.76	.78	.80	.82	.84	.85	.86				
	601	605	614	627	643	663	685	716	744	773	804	836	888	920	952	982	011	039	070	093	114	133	150	164				
45	.44	.45	.45	.46	.47	.49	.51	.53	.55	.57	.60	.62	.66	.68	.71	.73	.75	.78	.80	.82	.84	.85	.87	.88				
	625	630	640	653	670	690	713	744	773	802	833	865	917	948	980	010	038	065	095	113	139	157	173	187				

JAN-APR 38 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.46	.46	.47	.48	.49	.51	.52	.55	.57	.59	.61	.64	.66	.70	.72	.75	.77	.79	.82	.84	.85	.87	.88	.89	
	646	651	662	676	693	714	737	769	797	827	858	890	941	972	003	033	061	087	*117	*133	*153	*176	*192	*206	
15	.47	.47	.48	.49	.50	.52	.54	.56	.58	.60	.63	.65	.69	.71	.74	.76	.78	.81	.83	.85	.85	.88	.89	.90	
	662	668	679	694	712	733	757	789	817	847	878	910	961	992	022	051	079	105	*133	*155	*174	*192	*207	*220	
30	.48	.48	.49	.50	.51	.53	.55	.57	.59	.62	.64	.66	.70	.73	.75	.77	.79	.81	.84	.86	.87	.89	.90	.91	
	674	680	692	707	726	748	772	804	833	863	894	926	976	007	037	065	092	118	*146	*167	*185	*203	*217	*230	
45	.48	.49	.50	.51	.52	.54	.56	.58	.60	.62	.65	.67	.71	.73	.76	.78	.80	.82	.84	.86	.88	.89	.90	.92	
	681	689	701	717	736	758	783	815	844	874	905	937	987	017	047	075	101	126	*153	*174	*193	*209	*223	*236	
1200	.48	.49	.50	.51	.52	.54	.56	.58	.61	.63	.65	.68	.71	.74	.76	.78	.80	.82	.85	.86	.88	.89	.91	.92	
	685	692	705	722	741	764	789	822	851	881	912	943	993	023	052	080	106	130	*157	*177	*195	*211	*225	*237	
15	.48	.49	.50	.51	.53	.54	.56	.59	.61	.63	.65	.68	.71	.74	.76	.78	.80	.82	.84	.86	.88	.89	.90	.92	
	683	692	705	722	742	765	791	824	853	883	914	945	994	024	052	080	105	129	*155	*175	*193	*209	*222	*234	
30	.48	.49	.50	.51	.52	.54	.56	.58	.61	.63	.65	.67	.71	.74	.76	.78	.80	.82	.84	.86	.87	.89	.90	.91	
	678	686	701	718	739	762	788	821	850	881	911	942	991	020	048	075	100	124	*149	*163	*184	*201	*215	*227	
45	.47	.48	.49	.50	.52	.53	.55	.58	.60	.62	.65	.67	.71	.73	.75	.77	.79	.81	.83	.85	.86	.88	.89	.90	
	668	677	692	710	731	754	780	814	843	873	904	935	983	012	040	066	091	114	*139	*153	*175	*190	*203	*215	
1300	.46	.47	.48	.49	.51	.53	.55	.57	.59	.61	.64	.66	.70	.72	.74	.76	.78	.80	.82	.84	.85	.87	.88	.89	
	654	663	678	697	718	742	768	802	832	862	892	923	970	999	026	052	077	099	*124	*142	*159	*174	*187	*199	
15	.45	.46	.47	.48	.50	.51	.53	.56	.58	.60	.63	.65	.69	.71	.73	.75	.77	.79	.81	.82	.84	.85	.86	.87	
	635	645	661	680	701	726	752	786	815	846	876	906	953	982	009	034	058	080	*104	*122	*139	*154	*167	*178	
30	.43	.44	.45	.47	.48	.50	.52	.54	.57	.59	.61	.63	.67	.69	.71	.73	.75	.77	.79	.81	.82	.83	.84	.86	
	612	623	639	658	680	705	732	765	795	825	855	885	932	960	986	011	035	056	*080	*093	*114	*129	*142	*154	
45	.41	.42	.43	.45	.46	.48	.50	.53	.55	.57	.59	.62	.65	.67	.69	.71	.73	.75	.77	.78	.80	.81	.82	.83	
	585	596	613	633	655	680	707	741	770	800	830	860	906	933	959	984	007	029	*052	*070	*086	*100	*114	*125	

03

JAN-APR 38 N TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	JAN							FEB							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30			
1400	.39	.40	.41	.43	.44	.46	.48	.51	.53	.55	.57	.59	.63	.65	.67	.69	.71	.73	.75	.76	.77	.79	.80	.81				
	555	566	583	603	626	651	677	711	741	771	800	830	875	903	928	953	976	997	.020	.037	.053	.068	.081	.093				
	15	.37	.38	.39	.40	.42	.44	.46	.48	.50	.53	.55	.57	.60	.63	.65	.66	.68	.70	.72	.73	.75	.76	.77	.78			
	520	532	549	569	592	617	644	678	708	737	767	795	841	868	893	917	940	961	.984	.001	.017	.031	.044	.056				
30	.34	.35	.36	.38	.39	.41	.43	.46	.48	.50	.52	.54	.56	.60	.62	.64	.65	.67	.69	.70	.72	.73	.74	.75				
	482	494	511	532	555	580	607	641	670	700	729	758	803	829	854	878	900	921	.943	.961	.977	.991	.004	.016				
	45	.31	.32	.33	.35	.36	.38	.40	.43	.45	.47	.49	.51	.55	.57	.59	.60	.62	.64	.66	.67	.69	.70	.71	.72			
	440	452	470	491	514	540	567	600	629	659	688	716	760	786	811	835	857	877	.900	.917	.933	.947	.961	.973				
1500	.28	.29	.30	.32	.33	.35	.37	.40	.42	.44	.46	.48	.51	.53	.55	.57	.59	.60	.62	.64	.65	.66	.68	.69				
	395	407	426	447	470	495	522	556	585	614	642	671	714	740	765	788	809	830	.852	.863	.885	.900	.914	.926				
	15	.25	.25	.27	.28	.30	.32	.34	.36	.38	.40	.42	.45	.48	.50	.52	.53	.55	.57	.59	.60	.61	.63	.64	.65			
	346	359	378	399	422	448	474	508	537	565	594	622	665	690	715	738	759	779	.802	.819	.835	.850	.864	.877				
30	.21	.22	.23	.25	.26	.28	.30	.32	.35	.37	.39	.41	.44	.46	.48	.50	.51	.53	.55	.56	.57	.59	.60	.61				
	295	308	327	348	371	397	424	457	485	514	542	570	612	637	661	684	705	726	.748	.765	.781	.797	.811	.824				
	45	.17	.18	.19	.21	.23	.24	.26	.29	.31	.33	.35	.37	.40	.42	.44	.46	.47	.49	.51	.52	.53	.55	.56	.57			
	241	254	273	294	318	343	370	403	431	459	487	514	557	581	605	628	649	669	.691	.709	.725	.741	.755	.769				
1600	.13	.14	.15	.17	.19	.20	.22	.25	.27	.29	.31	.33	.36	.38	.40	.41	.43	.44	.46	.48	.49	.50	.52	.53				
	185	198	217	238	262	287	313	346	374	402	429	456	498	523	546	569	590	610	.632	.650	.665	.682	.697	.711				
	15	.09	.10	.11	.13	.14	.16	.18	.20	.22	.24	.26	.28	.31	.33	.35	.37	.38	.40	.42	.43	.45	.46	.47	.48			
	126	139	158	179	203	228	254	286	314	342	369	396	437	461	485	507	528	548	.571	.583	.605	.621	.637	.651				
30	.05	.06	.07	.08	.10	.12	.14	.16	.18	.20	.22	.24	.27	.29	.30	.32	.34	.35	.37	.39	.40	.41	.43	.44				
	065	078	097	119	142	167	193	225	252	279	306	333	374	398	421	443	464	484	.507	.525	.542	.559	.574	.590				
	45	.00	.01	.03	.04	.06	.07	.09	.11	.13	.15	.17	.19	.22	.24	.26	.27	.29	.31	.32	.34	.35	.36	.38	.39			
	003	016	035	056	079	104	129	161	188	215	242	268	308	332	355	378	399	419	.442	.460	.478	.494	.511	.526				

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M**2.)

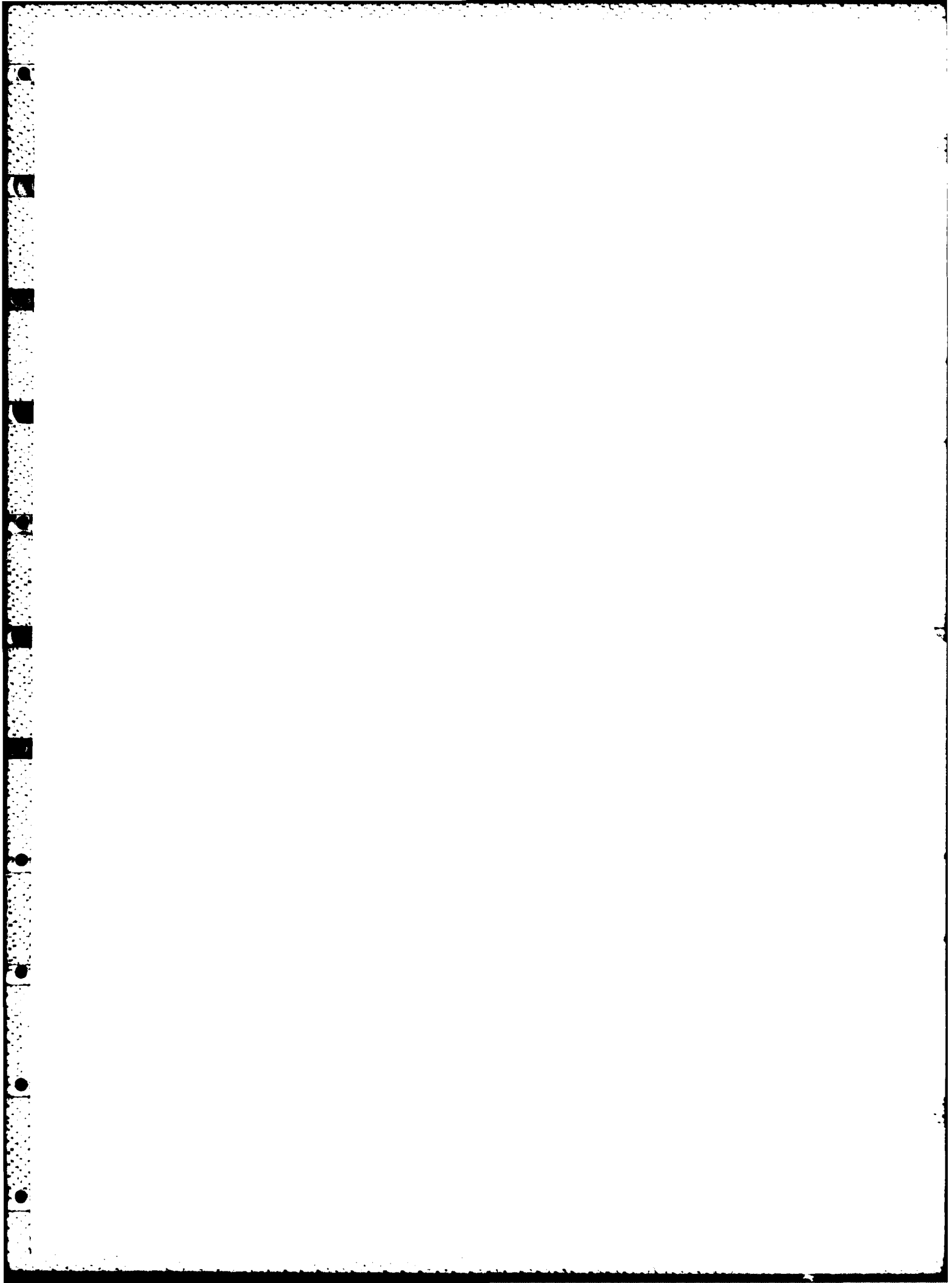
TABLE B-1

38 N

JAN-APR

MST	DATE																		
	JAN				FEB				MAR				APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.00 .00 .00 .00 .01 .03 .05 000 000 000 000 015 039 064	.07 .09 .11 .13 .14 096 122 149 175 201	.17 .19 .21 .23 .24 .26 241 265 298 310 331 352	.27 .29 .30 .32 .33 .34 375 393 411 429 445 462															
15	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.02 .04 .06 .08 .10 029 055 081 108 133	.12 .14 .16 .18 .19 .21 173 196 219 241 263 283	.22 .24 .25 .27 .28 .29 307 325 344 362 379 396															
30	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .01 .03 .05 000 000 013 038 064	.07 .09 .11 .12 .14 .16 103 127 150 172 193 214	.17 .19 .20 .22 .23 .24 238 257 276 294 312 329															
45	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.02 .04 .06 .07 .09 .10 033 056 079 101 123 143	.12 .14 .15 .17 .18 .19 168 183 207 226 244 262															
1800	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .01 .02 .04 .05 000 000 008 030 052 073	.07 .09 .10 .12 .13 .14 098 119 138 157 176 195															
15	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.02 .04 .05 .07 .08 .09 027 049 068 088 108 127															
30	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .02 .03 .05 000 000 000 020 040 060															
45	.00 .00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000 000															

JAN-APR 38 N TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) *** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *



MST	DATE																		
	MAY				JUN				JUL				AUG						
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0400	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	008	012	013	011	007	000	000	000	000	000	000	000	000
0500	.00	.00	.02	.03	.04	.05	.05	.06	.06	.05	.05	.05	.04	.03	.02	.01	.00	.00	.00
	000	002	021	038	051	061	069	073	073	071	067	060	051	039	026	012	000	000	000
15	.03	.05	.06	.08	.09	.09	.10	.10	.10	.10	.10	.09	.08	.08	.07	.06	.04	.03	.02
	045	066	085	101	114	123	131	134	134	132	128	121	112	101	088	074	058	042	021
30	.08	.10	.11	.12	.13	.14	.15	.15	.15	.15	.14	.14	.13	.12	.11	.10	.09	.08	.06
	111	132	150	165	177	186	193	196	196	194	189	182	173	163	150	137	122	106	086
45	.13	.15	.16	.17	.18	.19	.19	.20	.20	.19	.19	.19	.18	.17	.16	.15	.14	.13	.11
	177	198	215	230	241	250	257	259	259	256	252	245	236	225	213	200	185	170	151
0600	.18	.20	.21	.22	.23	.24	.24	.24	.24	.24	.24	.23	.23	.22	.21	.20	.19	.18	.16
	244	264	281	295	306	314	320	322	322	319	314	307	299	288	277	264	250	235	216
15	.23	.25	.26	.27	.28	.28	.29	.29	.29	.29	.29	.28	.27	.27	.26	.25	.24	.23	.21
	310	330	346	359	370	378	383	385	385	382	377	370	362	352	340	328	314	300	282
30	.28	.29	.31	.32	.33	.33	.34	.34	.34	.34	.33	.33	.32	.31	.31	.30	.29	.27	.26
	377	395	411	424	434	441	446	448	447	444	439	433	424	415	403	391	378	364	347
45	.33	.34	.36	.37	.37	.38	.38	.38	.38	.38	.38	.37	.37	.36	.35	.34	.33	.32	.31
	442	460	475	488	497	504	509	510	509	506	501	495	487	477	466	455	442	429	412

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE B-1

38 N

MAY-AUG

MST	MAY					JUN					JUL					AUG						
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
0700	.38	.39	.40	.41	.42	.43	.43	.43	.43	.43	.43	.42	.41	.41	.40	.39	.38	.37				
	507	524	539	551	560	566	570	571	570	567	562	556	543	539	529	517	505	492				
15	.42	.44	.45	.46	.47	.47	.47	.48	.48	.47	.47	.47	.46	.45	.45	.44	.43	.42				
	571	587	601	612	621	627	631	632	630	627	623	616	609	600	590	579	567	555				
30	.47	.48	.49	.50	.51	.52	.52	.52	.52	.52	.52	.51	.50	.50	.49	.48	.47	.46				
	633	649	662	673	681	686	690	691	689	686	682	675	668	659	650	639	628	616				
45	.52	.53	.54	.55	.55	.56	.56	.56	.56	.56	.56	.55	.55	.54	.54	.53	.52	.51				
	693	708	721	731	739	744	747	748	747	744	739	733	726	717	708	698	687	676				
0800	.56	.57	.58	.59	.60	.60	.60	.61	.61	.60	.60	.60	.59	.58	.58	.57	.56	.55				
	751	766	778	788	795	800	803	803	802	799	794	789	782	774	765	755	745	734				
15	.60	.61	.62	.63	.64	.64	.64	.65	.65	.64	.64	.64	.63	.63	.62	.61	.60	.60				
	807	822	833	843	849	854	857	857	855	852	848	842	836	828	820	811	801	790				
30	.64	.65	.66	.67	.68	.60	.68	.68	.68	.68	.68	.68	.67	.67	.66	.65	.64	.64				
	861	875	886	895	901	905	908	908	907	904	899	894	888	880	872	863	854	844				
45	.68	.69	.70	.71	.71	.72	.72	.72	.72	.72	.72	.71	.71	.70	.70	.69	.68	.67				
	912	925	936	944	950	954	957	957	955	952	948	943	937	930	922	914	905	895				
0900	.71	.72	.73	.74	.75	.75	.75	.76	.76	.75	.75	.75	.74	.74	.73	.73	.72	.71				
	960	973	983	991	996	000	002	002	001	998	994	990	984	977	970	962	953	944				
15	.75	.76	.77	.77	.78	.78	.79	.79	.79	.79	.78	.78	.78	.77	.77	.76	.75	.75				
	005	017	027	034	040	043	045	045	044	041	038	033	023	021	014	007	998	990				
30	.78	.79	.80	.80	.81	.81	.82	.82	.82	.82	.81	.81	.81	.80	.80	.79	.78	.78				
	046	058	067	075	080	083	085	085	084	081	078	074	063	062	056	049	041	032				
45	.81	.82	.83	.83	.84	.84	.84	.85	.85	.84	.84	.84	.84	.83	.83	.82	.81	.81				
	084	096	105	112	117	120	122	122	121	118	115	111	106	100	094	087	080	071				
MAY-AUG	38	N	TABLE B-1					SOLAR PARAMETERS					COS Z					*** SIGNIFIES COS Z =1.				
								X0 (W/M**2.)					ADD 1000 TO VALUES PRECEDED BY -									

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY -

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M*2.)

MAY-AUG 38 N

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1000	.83	.84	.85	.86	.86	.87	.87	.87	.87	.87	.87	.97	.85	.86	.65	.85	.84	.83	.82	.82	.91	.80	.78	.77
	*119	*130	*138	*145	*150	*153	*155	*155	*154	*152	*149	*145	*140	*135	*129	*122	*115	*107		.097	.087	.076	.065	*052*038
15	.85	.86	.87	.88	.88	.89	.89	.89	.89	.89	.89	.59	.83	.68	.88	.87	.86	.86	.85	.84	.83	.82	.81	.80
	*149	*160	*168	*175	*179	*182	*184	*184	*183	*182	*179	*175	*171	.166	.160	.154	*147*139		.129	*120	*103	.097	*085*071	
30	.87	.88	.89	.90	.90	.91	.91	.91	.91	.91	.91	.91	.91	.90	.90	.89	.89	.88	.87	.85	.85	.84	.83	.82
	*176	*186	*194	*200	*205	*208	*210	*210	*209	*208	*205	*202	*198	.193	.188	*182*175*168			*158	*143	.138	.126	*113*099	
45	.89	.90	.91	.91	.92	.92	.93	.93	.93	.93	.93	.93	.92	.92	.92	.91	.90	.90	.89	.88	.87	.86	.85	.84
	*199	*208	*216	*222	*227	*230	*232	*232	*232	*230	*228	*225	*221	.217	.212	*206*200*192			*182	*173	.163	.151	*138*123	
1100	.90	.91	.92	.93	.93	.94	.94	.94	.94	.94	.94	.94	.94	.93	.93	.93	.92	.91	.90	.90	.89	.88	.86	.85
	*217	*226	*234	*240	*245	*248	*250	*250	*250	*249	*247	*244	*241	.237	.232	*226*220*213			*203	*194	.183	.171	*158*143	
15	.92	.92	.93	.94	.94	.95	.95	.95	.95	.95	.95	.95	.95	.95	.94	.94	.93	.93	.92	.91	.90	.89	.88	.86
	*231	*240	*248	*254	*258	*261	*264	*264	*264	*263	*262	*259	*256	.252	.248	*243*236*229			*220	*210	.200	.188	*174*159	
30	.92	.93	.94	.95	.95	.95	.96	.96	.96	.96	.96	.96	.96	.95	.95	.95	.94	.94	.93	.92	.91	.90	.88	.87
	*241	*250	*257	*263	*268	*271	*273	*274	*275	*274	*272	*270	*268	.264	.260	*255*249*242			*232	*223	.212	.200	*186*170	
45	.93	.94	.94	.95	.95	.96	.96	.96	.97	.97	.97	.97	.96	.96	.96	.95	.95	.94	.93	.92	.91	.90	.89	.88
	*247	*255	*263	*269	*273	*277	*279	*280	*281	*280	*279	*277	*275	.272	.268	*263*257*250			*240	*231	.220	.207	*193*177	
1200	.93	.94	.94	.95	.96	.96	.96	.97	.97	.97	.97	.97	.96	.96	.96	.96	.95	.94	.94	.93	.92	.90	.89	.88
	*248	*256	*264	*270	*274	*278	*281	*282	*283	*283	*282	*280	*278	.275	.271	*267*261*254			*244	*234	.223	.210	*196*180	
15	.93	.93	.94	.95	.95	.96	.96	.96	.97	.97	.97	.97	.96	.96	.96	.96	.95	.94	.93	.93	.92	.90	.89	.88
	*244	*253	*261	*267	*271	*275	*278	*280	*281	*281	*281	*279	*277	.274	.271	*266*261*254			*244	*234	.222	.209	*194*178	
30	.92	.93	.94	.94	.95	.95	.96	.96	.96	.96	.96	.96	.96	.96	.96	.95	.95	.94	.93	.92	.91	.90	.89	.87
	*237	*246	*253	*259	*264	*268	*272	*274	*275	*275	*275	*274	*272	.270	.266	*262*256*249			*239	*223	.217	.204	*188*171	
45	.91	.92	.93	.93	.94	.94	.95	.95	.95	.96	.96	.96	.95	.95	.95	.95	.94	.93	.92	.92	.90	.89	.88	.86
	*225	*234	*241	*248	*253	*257	*261	*263	*265	*265	*265	*265	*263	.261	.257	*253*247*240			*230	*220	.208	.194	*178*160	

MAY-AUG 38 N TABLE B-1 SOLAR PARAMETERS COS Z
 ... SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY .

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1300	.90 .91 .92 .92 .93 .93	*209*218*225*232*237*242	.94 .94 .94 .94 .95 .95	*246*248*250*251*252*251	.91 .91 .91 .91 .92 .92	*204*208*210*212*213*213	.89 .89 .89 .89 .90 .90	*178*181*184*186*187*188	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866
15	.88 .89 .90 .91 .91 .92	*189*198*205*212*218*222	.92 .93 .93 .93 .93 .93	*227*230*232*234*234*234	.91 .91 .91 .91 .92 .92	*204*208*210*212*213*213	.89 .89 .89 .89 .90 .90	*178*181*184*186*187*188	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866
30	.87 .87 .88 .89 .90 .90	*164*173*181*188*194*199	.91 .91 .91 .91 .92 .92	*227*230*232*234*234*234	.91 .91 .91 .91 .92 .92	*204*208*210*212*213*213	.89 .89 .89 .89 .90 .90	*178*181*184*186*187*188	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866
45	.84 .85 .86 .87 .87 .88	*136*145*153*160*167*172	.89 .89 .89 .89 .90 .90	*227*230*232*234*234*234	.91 .91 .91 .91 .92 .92	*204*208*210*212*213*213	.89 .89 .89 .89 .90 .90	*178*181*184*186*187*188	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866
1400	.82 .83 .84 .84 .85 .86	*103*113*121*129*136*141	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						
15	.79 .80 .81 .82 .83 .83	*067*077*086*094*101*107	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866								
30	.76 .77 .78 .79 .80 .80	*028*038*047*055*063*069	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						
45	.73 .74 .75 .76 .77 .77	984 995*004*013*021*028	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						
1500	.70 .71 .72 .72 .73 .74	938 949 959 968 976 984	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						
15	.66 .67 .68 .69 .70 .70	889 900 910 920 929 937	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						
30	.62 .63 .64 .65 .66 .67	836 848 859 869 879 887	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						
45	.58 .59 .60 .61 .62 .63	782 794 805 816 826 835	.86 .87 .87 .87 .88 .88	*147*151*155*157*159*159	.84 .84 .85 .85 .85 .85	*113*118*121*124*126*127	.81 .81 .82 .82 .82 .82	*076*081*085*088*090*091	.78 .78 .79 .79 .79 .79	*036*041*045*048*051*052	.75 .75 .76 .76 .76 .76	992 998*002*006*008*010	.71 .72 .72 .73 .73 .73	945 951 956 960 963 964	.67 .68 .68 .69 .69 .69	896 902 908 912 915 917	.64 .64 .65 .65 .65 .65	844 851 857 861 864 866						

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M*+2.)

MAY-AUG 38 N

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M*2.)

TABLE B-1

MAY-AUG 38 N

MST	DATE												AUG											
	MAY						JUN						JUL						AUG					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1600	.54	.55	.56	.57	.58	.59	.59	.60	.61	.61	.61	.61	.61	.61	.61	.61	.61	.61	.58	.56	.55	.53	.51	.49
	724	737	749	760	771	780	790	797	803	808	812	813	813	811	808	802	793	783	767	750	731	710	686	660
15	.49	.51	.52	.53	.54	.54	.55	.56	.56	.57	.57	.57	.57	.57	.57	.56	.56	.55	.53	.52	.50	.49	.47	.45
	665	678	691	703	713	723	734	742	748	753	757	758	758	758	755	752	746	737	726	710	693	673	651	627
30	.45	.46	.47	.48	.49	.50	.51	.52	.52	.53	.53	.53	.53	.53	.53	.52	.51	.50	.49	.43	.43	.43	.42	.40
	604	618	631	643	654	665	676	684	691	696	700	702	702	702	700	695	689	680	668	651	633	613	590	565
45	.40	.41	.43	.44	.45	.45	.46	.47	.48	.48	.48	.49	.49	.49	.48	.48	.47	.46	.44	.43	.41	.39	.37	.35
	541	556	569	582	594	605	617	625	632	638	641	643	643	641	636	629	620	608	590	572	551	528	502	473
1700	.35	.37	.38	.39	.40	.41	.42	.43	.43	.44	.44	.44	.44	.44	.44	.43	.42	.41	.40	.38	.37	.35	.33	.30
	477	492	506	520	532	544	556	565	572	578	581	583	583	581	576	569	559	546	528	503	489	464	437	408
15	.31	.32	.33	.34	.35	.36	.37	.38	.39	.39	.39	.40	.40	.39	.39	.38	.37	.36	.35	.33	.32	.30	.28	.25
	412	427	442	456	469	481	494	503	511	517	521	523	523	520	515	507	497	484	464	445	423	398	371	341
30	.26	.27	.28	.29	.30	.31	.33	.33	.34	.34	.35	.35	.35	.35	.35	.34	.33	.32	.30	.29	.27	.25	.23	.20
	346	362	377	392	406	418	431	441	449	455	459	461	461	460	458	452	444	434	400	380	357	332	304	274
45	.21	.22	.23	.25	.26	.27	.28	.29	.29	.30	.30	.30	.30	.30	.29	.29	.28	.27	.25	.24	.22	.20	.18	.15
	279	296	312	327	342	355	368	378	386	392	397	398	398	398	395	389	381	370	335	314	291	265	237	206
1800	.16	.17	.18	.20	.21	.22	.23	.24	.24	.25	.25	.25	.25	.25	.25	.24	.23	.22	.20	.19	.17	.15	.13	.10
	213	230	247	263	277	291	305	315	323	330	334	336	336	335	332	326	317	305	269	243	224	198	169	138
15	.11	.12	.14	.15	.16	.17	.18	.19	.20	.20	.21	.21	.21	.21	.20	.20	.19	.17	.15	.14	.12	.10	.08	.05
	146	164	181	198	213	227	242	252	261	267	271	273	273	272	269	262	253	241	204	182	158	131	101	069
30	.06	.07	.09	.10	.11	.12	.13	.14	.15	.15	.16	.16	.16	.16	.16	.15	.14	.13	.10	.09	.07	.05	.03	.00
	080	098	116	133	149	163	179	189	198	205	209	210	210	210	206	199	190	177	138	116	091	063	033	001
45	.01	.03	.04	.05	.06	.08	.09	.10	.10	.11	.11	.11	.11	.11	.11	.10	.09	.07	.06	.04	.02	.00	.00	.00
	014	033	052	069	086	101	116	127	136	143	147	148	148	147	143	136	126	113	074	051	025	000	000	000

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
COS Z
XO (W/M**2.)

TABLE B-1

MAY-AUG 38 N

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
1900	.00 .00 .00 .01 .02 .03 000 000 000 007 023 039	.04 .05 .06 .07 .07 055 066 075 082 086 087	.07 .06 .05 .05 .04 .03 086 081 074 064 050 033	.01 .03 .00 .00 .00 .00 009 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .00 .00 .00 .00 000 000 000 000 000 000
15	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .01 .02 .02 .02 000 006 015 021 026 027	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000
30	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000
45	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

COS Z

TABLE B-1

38 N

MAY-AUG

MST	DATE												NOV												DEC																							
	SEP						OCT						5						10						15						20						25						30					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30												
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00										
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000									
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000									
45	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	041	022	003	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
0600	.08	.07	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	110	091	073	053	034	013	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
15	.13	.12	.11	.09	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	179	161	142	123	104	083	062	040	018	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
30	.18	.17	.16	.14	.13	.11	.10	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	247	230	212	193	173	153	132	110	087	064	039	015	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
45	.23	.22	.21	.19	.18	.16	.15	.13	.11	.10	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	315	298	280	262	242	222	201	179	156	132	107	082	052	026	001	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
0700	.28	.27	.26	.24	.23	.21	.20	.18	.16	.14	.13	.11	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	382	365	348	329	310	290	269	246	223	199	174	149	118	092	067	042	018	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
15	.33	.32	.31	.29	.28	.26	.25	.23	.21	.19	.17	.15	.13	.11	.09	.08	.06	.04	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
	448	432	414	396	377	356	335	313	289	265	240	214	183	157	131	106	082	060	039	021	005	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										
30	.38	.37	.35	.34	.32	.31	.29	.27	.26	.24	.22	.20	.18	.16	.14	.12	.10	.09	.07	.05	.04	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03									
	513	496	479	461	441	421	400	377	353	329	303	277	246	219	194	168	144	122	101	083	067	055	045	039	039	039	039	039	039	039	039	039	039	039	039	039	039	039										
45	.43	.41	.40	.39	.37	.35	.34	.32	.30	.28	.26	.24	.22	.20	.18	.16	.15	.13	.11	.10	.09	.08	.08	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07										
	575	559	542	524	504	484	462	439	415	391	365	339	307	280	254	229	205	182	161	143	128	115	106	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100										

SEP-DEC 38 N TABLE E-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY +

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.47	.46	.44	.43	.41	.40	.38	.36	.35	.33	.31	.29	.26	.24	.22	.20	.19	.17	.16	.14	.13	.12	.12	.11	
	636	620	603	584	565	544	523	499	475	450	424	396	365	339	312	287	263	240	220	202	185	174	165	160	
15	.52	.50	.49	.47	.46	.44	.42	.41	.39	.37	.35	.33	.30	.29	.26	.24	.23	.21	.20	.19	.17	.16	.16	.15	
	694	678	661	643	623	602	580	557	533	507	481	454	422	395	368	342	318	296	275	257	232	230	222	217	
30	.56	.54	.53	.51	.50	.48	.46	.45	.43	.41	.39	.37	.33	.32	.30	.28	.26	.25	.23	.22	.21	.20	.20	.19	
	750	734	717	698	679	658	635	612	587	561	535	508	475	448	421	395	371	349	328	311	284	284	276	272	
45	.60	.58	.57	.55	.54	.52	.50	.48	.46	.44	.42	.40	.33	.36	.34	.32	.30	.28	.27	.25	.25	.24	.23	.23	
	803	787	770	751	731	710	688	664	639	613	585	558	525	498	471	445	421	399	379	361	347	336	328	324	
0900	.63	.62	.61	.59	.57	.56	.54	.52	.50	.48	.46	.44	.41	.39	.37	.35	.33	.32	.30	.29	.28	.27	.27	.26	
	853	837	820	801	781	759	736	712	687	660	633	606	572	545	518	492	468	446	426	409	395	384	377	374	
15	.67	.65	.64	.62	.61	.59	.57	.55	.53	.51	.49	.47	.44	.42	.40	.38	.36	.35	.33	.32	.31	.30	.30	.30	
	900	884	866	847	827	805	782	757	732	705	677	650	616	588	562	536	512	490	470	453	440	429	423	420	
30	.70	.69	.67	.66	.64	.62	.60	.58	.56	.54	.52	.50	.47	.45	.43	.41	.39	.38	.36	.35	.34	.33	.33	.33	
	944	927	909	890	869	847	824	799	773	746	718	690	656	628	602	576	552	530	511	494	481	471	465	463	
45	.73	.72	.70	.68	.67	.65	.63	.61	.59	.57	.54	.52	.50	.48	.46	.44	.42	.40	.39	.38	.37	.36	.36	.36	
	984	967	949	929	908	886	862	836	810	783	755	726	692	665	638	612	588	567	548	532	519	510	504	503	
1000	.76	.74	.73	.71	.69	.67	.65	.63	.61	.59	.57	.55	.51	.50	.48	.46	.44	.43	.41	.40	.39	.39	.38	.38	
	*020	*003	984	964	943	920	896	870	843	816	787	759	725	697	670	645	621	600	581	563	553	545	540	539	
15	.78	.77	.75	.73	.71	.70	.68	.65	.63	.61	.59	.57	.54	.52	.50	.48	.46	.45	.43	.42	.41	.41	.40	.40	
	*052	*035	*016	996	974	950	926	900	872	844	816	787	753	725	698	673	650	629	611	595	584	576	571	571	
30	.80	.79	.77	.75	.73	.71	.69	.67	.65	.63	.61	.58	.56	.54	.52	.50	.48	.46	.45	.44	.43	.43	.42	.42	
	*080	*062	*043	*023	*000	977	951	925	897	869	840	811	777	749	722	698	674	654	636	621	610	603	599	599	
45	.82	.80	.79	.77	.75	.73	.71	.69	.67	.64	.62	.60	.57	.55	.53	.51	.49	.48	.47	.46	.45	.44	.44	.44	
	*104	*086	*066	*045	*023	998	973	946	918	889	860	831	797	769	742	718	695	675	657	643	633	626	623	624	

SEP-DEC 38 N TABLE B-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1100	.83	.82	.80	.78	.76	.74	.72	.70	.68	.65	.63	.61	.58	.56	.54	.52	.51	.49	.48	.47	.45	.46	.45	.46	
	124	105*	085*	064*	040*	016	990	962	934	905	876	847	812	784	758	733	711	691	674	661	651	644	642	644	
15	.84	.83	.81	.79	.77	.75	.73	.71	.69	.66	.64	.62	.50	.57	.55	.53	.51	.50	.49	.48	.47	.47	.46	.47	
	139	120*	100*	077*	054*	029	*002	974	946	916	887	858	823	795	769	745	723	703	687	674	655	659	657	660	
30	.95	.84	.82	.80	.78	.76	.74	.71	.69	.67	.64	.62	.60	.57	.55	.54	.52	.51	.49	.48	.48	.47	.47	.47	
	150	130*	109*	087*	063*	037	*010	982	953	923	893	864	830	802	776	752	730	711	695	683	674	669	668	671	
45	.86	.84	.82	.80	.78	.76	.74	.72	.69	.67	.65	.62	.60	.58	.56	.54	.52	.51	.50	.49	.48	.48	.48	.48	
	156	136*	115*	092*	067*	041	*013	984	955	925	895	866	831	804	778	755	733	715	699	683	679	675	675	678	
1200	.86	.84	.82	.80	.78	.76	.74	.72	.69	.67	.64	.62	.58	.57	.55	.54	.52	.51	.50	.49	.48	.48	.48	.48	
	158	138*	116*	092*	066*	040	*012	983	953	923	893	863	829	802	776	753	732	714	699	683	680	677	677	681	
15	.86	.84	.82	.80	.78	.76	.73	.71	.69	.66	.64	.62	.50	.57	.55	.53	.52	.50	.49	.48	.48	.48	.48	.48	
	155	134*	112*	087*	061*	034	*006	976	946	916	886	856	822	795	769	746	726	708	694	684	677	674	675	680	
30	.85	.83	.81	.79	.77	.75	.73	.70	.68	.65	.63	.61	.58	.56	.54	.52	.51	.50	.49	.48	.47	.47	.47	.48	
	148	127*	103*	078*	052*	024	995	965	935	904	874	844	810	783	758	735	716	699	685	675	659	667	668	674	
45	.84	.82	.80	.78	.76	.74	.72	.69	.67	.64	.62	.60	.57	.55	.53	.51	.50	.49	.48	.47	.47	.46	.47	.47	
	136	114*	091*	065*	038*	009	980	950	919	888	858	828	794	767	743	720	701	685	672	662	657	655	657	664	
1300	.83	.81	.79	.77	.75	.72	.70	.68	.65	.63	.60	.58	.56	.53	.52	.50	.49	.47	.46	.45	.45	.45	.45	.46	
	120	098*	073*	047*	019	990	960	930	899	868	837	807	773	747	723	701	682	666	654	645	640	639	642	649	
15	.82	.80	.78	.75	.73	.71	.68	.66	.63	.61	.59	.56	.54	.52	.50	.48	.47	.46	.45	.44	.44	.44	.44	.45	
	100	077*	052*	025	996	967	936	905	874	843	812	782	749	722	698	677	659	643	632	624	619	619	623	630	
30	.80	.78	.76	.73	.71	.69	.66	.64	.61	.59	.57	.54	.52	.50	.48	.46	.45	.44	.43	.42	.42	.42	.42	.43	
	075	051*	026	998	969	939	908	877	845	814	783	753	720	694	670	649	631	617	606	593	595	595	599	607	
45	.78	.76	.73	.71	.69	.66	.64	.61	.59	.56	.54	.52	.49	.47	.46	.44	.43	.42	.41	.40	.40	.40	.40	.41	
	046	022	995	967	938	907	876	844	812	780	750	720	687	661	638	617	600	586	575	563	566	567	572	580	

SEP-DEC 38 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1400	.75	.73	.71	.69	.66	.64	.61	.59	.56	.54	.51	.49	.47	.45	.43	.41	.40	.39	.38	.38
	.014	.988	.961	.932	.902	.871	.839	.807	.775	.743	.712	.683	.650	.621	.602	.582	.565	.551	.541	.535
15	.72	.70	.68	.66	.63	.61	.58	.56	.53	.51	.49	.46	.44	.42	.40	.39	.37	.36	.36	.35
	.977	.951	.923	.894	.863	.831	.799	.766	.734	.702	.671	.642	.609	.584	.562	.542	.526	.513	.504	.498
30	.69	.67	.65	.63	.60	.58	.55	.53	.50	.48	.45	.43	.41	.39	.37	.36	.34	.34	.33	.32
	.936	.910	.881	.851	.820	.788	.755	.722	.689	.657	.627	.597	.565	.540	.518	.499	.483	.471	.462	.453
45	.66	.64	.62	.59	.57	.54	.52	.49	.47	.44	.42	.40	.37	.35	.34	.32	.31	.30	.30	.29
	.892	.865	.836	.805	.773	.740	.707	.674	.641	.609	.579	.549	.517	.483	.471	.453	.438	.426	.418	.413
1500	.63	.60	.58	.56	.53	.51	.48	.45	.43	.40	.38	.36	.35	.32	.30	.29	.28	.27	.26	.25
	.845	.817	.787	.756	.723	.690	.657	.623	.590	.558	.527	.498	.466	.442	.421	.403	.389	.377	.370	.366
15	.59	.57	.54	.52	.49	.47	.44	.41	.39	.36	.34	.32	.30	.28	.26	.25	.24	.23	.23	.22
	.794	.765	.735	.703	.670	.636	.603	.569	.536	.504	.473	.444	.412	.389	.368	.351	.337	.326	.319	.316
30	.55	.53	.50	.48	.45	.42	.40	.37	.35	.32	.30	.28	.26	.24	.22	.21	.20	.19	.19	.19
	.741	.711	.680	.648	.614	.580	.546	.512	.479	.446	.416	.387	.356	.333	.312	.295	.282	.272	.265	.263
45	.51	.48	.46	.43	.41	.38	.36	.33	.30	.28	.26	.24	.21	.20	.18	.17	.16	.15	.15	.15
	.684	.654	.622	.589	.555	.521	.486	.452	.419	.387	.356	.328	.297	.274	.254	.238	.225	.215	.209	.207
1600	.46	.44	.42	.39	.36	.34	.31	.28	.26	.24	.21	.19	.17	.15	.14	.13	.12	.11	.11	.11
	.625	.595	.562	.529	.494	.460	.425	.390	.357	.325	.294	.266	.235	.213	.194	.178	.165	.156	.151	.143
15	.42	.39	.37	.34	.32	.29	.26	.24	.21	.19	.17	.15	.12	.11	.09	.08	.07	.07	.06	.05
	.564	.533	.500	.466	.431	.396	.361	.326	.293	.261	.230	.202	.172	.150	.131	.116	.104	.095	.090	.089
30	.37	.35	.32	.30	.27	.24	.22	.19	.17	.14	.12	.10	.08	.06	.05	.04	.03	.02	.02	.02
	.501	.469	.436	.401	.366	.331	.295	.261	.227	.195	.165	.137	.107	.086	.067	.052	.040	.032	.028	.027
45	.32	.30	.27	.25	.22	.19	.17	.14	.12	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00
	.437	.404	.370	.335	.299	.264	.228	.193	.160	.128	.098	.070	.041	.019	.001	.000	.000	.000	.000	.000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1

38 N

SEP-DEC

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1700	.28	.25	.22	.20	.17	.14	.12	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	
	371	337	303	267	231	195	160	125	091	059	030	002	000	000	000	000	000	000	000	
15	.23	.20	.17	.15	.12	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	303	270	235	199	162	126	090	055	022	000	000	000	000	000	000	000	000	000	000	
30	.17	.15	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	235	201	166	129	093	056	020	000	000	000	000	000	000	000	000	000	000	000	000	
45	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	166	132	096	059	022	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
1800	.07	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	097	062	026	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	028	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

SEP-DEC 38 N TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.) ** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0800	.13	.13	.13	.14	.14	.15	.17	.18	.20	.22	.24	.26	.30	.32	.35	.37	.40	.42	.45	.47	.50	.51	.53	.55	
	187	186	189	194	204	217	234	258	281	307	335	365	411	450	484	517	550	582	619	647	674	698	719	738	
15	.17	.17	.18	.18	.19	.20	.21	.23	.25	.26	.29	.31	.35	.37	.40	.42	.45	.47	.50	.52	.54	.56	.58	.59	
	246	246	249	255	265	279	296	321	344	371	399	429	481	514	547	580	613	644	680	703	734	757	778	797	
30	.21	.21	.22	.22	.23	.24	.25	.27	.29	.31	.33	.35	.38	.41	.44	.46	.49	.51	.54	.56	.58	.60	.62	.63	
	303	303	306	313	324	338	356	381	405	432	461	491	542	575	608	641	673	704	739	767	792	814	835	852	
45	.25	.25	.26	.26	.27	.28	.29	.31	.33	.35	.37	.39	.43	.46	.48	.51	.53	.56	.58	.60	.62	.64	.66	.67	
	357	357	361	369	380	395	413	439	464	491	520	550	601	634	667	699	731	761	796	822	847	869	888	905	
0900	.29	.29	.29	.30	.31	.32	.33	.35	.37	.39	.41	.43	.47	.50	.52	.55	.57	.59	.62	.64	.66	.68	.69	.71	
	408	409	413	422	434	449	468	494	519	546	576	606	657	690	722	754	786	815	849	875	898	920	939	955	
15	.32	.32	.33	.33	.34	.35	.37	.39	.41	.43	.45	.47	.51	.54	.56	.58	.61	.63	.66	.69	.70	.71	.73	.74	
	456	457	462	471	484	500	519	546	572	599	628	659	710	742	775	806	837	866	899	924	947	968	986	1002	
30	.35	.36	.36	.37	.38	.39	.40	.42	.44	.46	.48	.51	.55	.57	.60	.62	.64	.67	.69	.71	.73	.75	.76	.77	
	500	502	508	518	531	548	567	595	621	648	678	709	759	792	823	855	885	913	945	970	992	1012	1030	1045	
45	.38	.38	.39	.40	.41	.42	.43	.46	.47	.50	.52	.54	.58	.60	.63	.65	.67	.70	.72	.74	.76	.78	.79	.80	
	541	544	550	561	575	592	612	640	666	694	724	755	805	837	868	899	929	957	988	1012	1034	1053	1070	1085	
1000	.41	.41	.42	.42	.44	.45	.46	.48	.50	.53	.55	.57	.61	.63	.66	.68	.70	.73	.75	.77	.79	.80	.82	.83	
	578	582	589	600	614	632	653	682	708	736	766	797	847	879	910	940	969	996	1027	1050	1071	1090	1106	1120	
15	.43	.44	.44	.45	.46	.47	.49	.51	.53	.55	.57	.60	.64	.66	.68	.71	.73	.75	.78	.80	.81	.83	.84	.85	
	612	616	623	635	650	669	690	719	746	774	804	835	885	916	947	977	1005	1032	1062	1084	1105	1123	1139	1152	
30	.45	.46	.46	.47	.48	.50	.51	.52	.55	.58	.60	.62	.66	.68	.71	.73	.75	.77	.80	.82	.83	.85	.86	.87	
	641	645	654	666	682	701	723	752	779	808	838	869	919	950	980	1009	1037	1063	1092	1114	1134	1152	1167	1180	
45	.47	.47	.48	.49	.50	.52	.53	.56	.58	.60	.62	.64	.68	.71	.73	.75	.77	.79	.82	.84	.85	.87	.88	.89	
	666	671	681	694	710	729	752	782	809	838	868	898	948	979	1008	1037	1064	1090	1118	1140	1159	1176	1191	1203	
JAN-APR	36 N					TABLE B-1					SOLAR PARAMETERS					COS Z XO (W/M*2.)					*** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY +				

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

COS Z
X0 (W/M*2.)

SOLAR PARAMETERS

TABLE B-1

JAN-APR 36 N

MST	JAN							FEB							DATE							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
1100	.49	.49	.50	.51	.52	.53	.55	.57	.59	.62	.64	.66	.70	.72	.75	.77	.79	.81	.83	.85	.88	.90	.91	.83	.85	.88	.90	.91	.83	.85	.88	.90	.91		
	687	693	703	716	733	753	776	807	834	863	893	924	973	1003	1033	1061	1088	1113																	
15	.50	.50	.51	.52	.53	.55	.56	.59	.61	.63	.65	.68	.71	.74	.76	.78	.80	.82	.85	.86	.88	.89	.91	.92	.85	.86	.88	.89	.91	.92	.85	.86	.88	.89	
	704	710	721	735	752	773	796	827	855	884	914	944	993	1023	1052	1080	1106	1131																	
30	.51	.51	.52	.53	.54	.56	.58	.60	.62	.64	.66	.69	.73	.75	.77	.79	.81	.83	.86	.87	.89	.90	.91	.93	.86	.87	.89	.90	.91	.93	.86	.87	.89	.90	
	716	723	734	749	767	788	812	843	871	900	930	960	1003	1038	1067	1094	1120	1144																	
45	.51	.52	.53	.54	.55	.57	.58	.61	.63	.65	.67	.70	.73	.75	.78	.80	.82	.84	.86	.88	.89	.91	.92	.93	.86	.88	.89	.91	.92	.93	.86	.88	.89	.91	
	724	731	743	759	777	799	823	854	882	912	942	972	1020	1049	1077	1104	1129	1153																	
1200	.51	.52	.53	.54	.55	.57	.59	.61	.63	.66	.68	.70	.74	.76	.78	.80	.82	.84	.86	.88	.89	.91	.92	.93	.86	.88	.89	.91	.92	.93	.86	.88	.89	.91	
	727	735	748	764	783	805	829	861	889	918	948	979	1026	1055	1083	1109	1134	1156																	
15	.51	.52	.53	.54	.55	.57	.59	.61	.63	.66	.68	.70	.74	.76	.78	.80	.82	.84	.86	.88	.89	.91	.92	.93	.86	.88	.89	.91	.92	.93	.86	.88	.89	.91	
	726	734	747	764	784	806	831	863	891	921	950	980	1028	1056	1083	1109	1133	1156																	
30	.51	.52	.53	.54	.55	.57	.59	.61	.63	.65	.68	.70	.74	.76	.78	.80	.82	.84	.86	.87	.89	.90	.91	.92	.86	.87	.89	.90	.91	.92	.86	.87	.89	.90	
	720	729	743	760	780	803	828	860	889	918	948	978	1024	1052	1079	1104	1128	1150																	
45	.50	.51	.52	.53	.55	.56	.58	.61	.63	.65	.67	.69	.73	.75	.77	.79	.81	.83	.85	.87	.88	.89	.90	.91	.86	.87	.88	.89	.90	.91	.86	.87	.88	.89	
	710	719	734	751	772	795	820	853	881	911	940	970	1016	1044	1070	1095	1118	1140																	
1300	.49	.50	.51	.52	.54	.55	.57	.60	.62	.64	.66	.69	.72	.74	.76	.78	.80	.82	.84	.85	.87	.88	.89	.90	.84	.85	.87	.88	.89	.90	.84	.85	.87	.88	
	696	705	720	738	759	783	808	841	870	899	928	958	1003	1030	1056	1081	1104	1125																	
15	.48	.49	.50	.51	.53	.54	.56	.59	.61	.63	.65	.67	.71	.73	.75	.77	.79	.81	.82	.84	.85	.86	.88	.89	.82	.84	.85	.86	.88	.89	.82	.84	.85	.86	
	677	686	702	721	742	766	791	824	853	882	911	940	986	1013	1038	1062	1084	1105																	
30	.46	.47	.48	.49	.51	.53	.55	.57	.59	.61	.64	.66	.69	.71	.73	.75	.77	.79	.81	.82	.83	.85	.86	.87	.81	.82	.83	.85	.86	.87	.81	.82	.83	.85	
	653	664	680	699	720	744	770	803	832	861	890	919	963	990	1015	1039	1061	1081																	
45	.44	.45	.46	.48	.49	.51	.53	.55	.57	.60	.62	.64	.67	.69	.71	.73	.75	.77	.79	.80	.81	.82	.84	.85	.79	.80	.81	.82	.84	.85	.79	.80	.81	.82	
	626	636	653	672	694	719	745	778	806	835	864	893	937	963	988	1011	1033	1052																	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1

36 N

JAN-APR

AD-A127 853

FINAL TACTICAL DECISION AID (FTDA) FOR INFRARED (8-12
MICROMETERS) SYSTEM. (U) SYSTEMS AND APPLIED SCIENCES
CORP RIVERDALE MD D B HODGES ET AL. 15 SEP 82

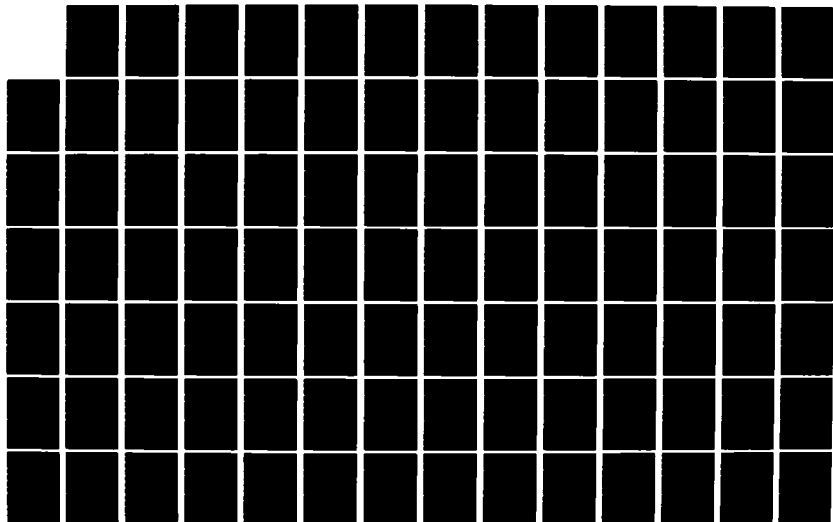
245

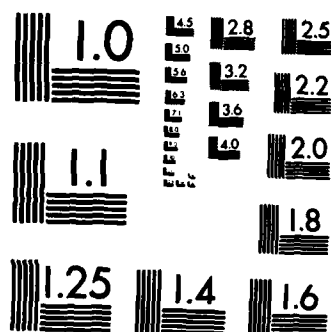
UNCLASSIFIED

SCIENTIFIC-3 AFGL-TR-82-0294

F/G 3/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

MST	DATE																		
	JAN				FEB				MAR				APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.42	.43	.44	.45	.47	.49	.51	.53	.55	.57	.60	.62	.65	.67	.69	.71	.73	.74	
	594	605	622	642	664	689	715	748	776	805	834	862	906	931	956	979	1000	1020	
15	.39	.40	.42	.43	.45	.46	.48	.51	.53	.55	.57	.59	.63	.65	.66	.68	.70	.72	
	559	570	587	607	630	654	681	714	742	771	799	827	870	896	920	942	963	983	
30	.37	.38	.39	.40	.42	.44	.46	.48	.50	.52	.54	.56	.60	.62	.64	.65	.67	.69	
	519	531	549	569	592	616	643	676	704	732	761	788	831	856	880	902	922	942	
45	.34	.35	.36	.37	.39	.41	.43	.45	.47	.49	.51	.53	.57	.59	.60	.62	.64	.65	
	476	488	506	527	550	575	601	634	662	690	718	745	787	812	836	857	878	897	
1500	.30	.31	.33	.34	.36	.38	.39	.42	.44	.46	.48	.50	.53	.55	.57	.59	.60	.62	
	430	442	460	481	504	529	555	588	616	644	672	699	740	765	788	809	830	848	
15	.27	.28	.29	.31	.32	.34	.36	.38	.40	.42	.44	.46	.50	.51	.53	.55	.57	.58	
	380	393	411	432	455	480	506	539	567	594	622	649	690	714	736	758	778	796	
30	.23	.24	.25	.27	.29	.31	.32	.35	.37	.39	.41	.43	.46	.48	.49	.51	.53	.54	
	328	340	359	380	403	428	454	486	514	541	568	595	635	659	682	703	723	741	
45	.19	.20	.22	.23	.25	.26	.28	.31	.33	.35	.37	.39	.42	.43	.45	.47	.48	.50	
	272	285	304	325	348	373	399	431	458	485	512	538	578	602	624	645	665	683	
1600	.15	.16	.17	.19	.21	.22	.24	.27	.28	.30	.32	.34	.37	.39	.41	.42	.44	.45	
	214	227	246	267	290	315	341	372	399	426	453	479	518	541	563	584	604	622	
15	.11	.12	.13	.15	.16	.18	.20	.22	.24	.26	.28	.30	.33	.35	.36	.38	.39	.41	
	154	167	186	207	230	254	280	312	338	365	391	416	455	479	500	521	541	559	
30	.07	.07	.09	.10	.12	.14	.15	.18	.20	.21	.23	.25	.28	.30	.31	.33	.35	.36	
	091	105	124	145	167	192	217	248	275	301	327	352	390	413	435	456	475	494	
45	.02	.03	.04	.06	.07	.09	.11	.13	.15	.17	.19	.20	.23	.25	.27	.28	.30	.31	
	027	041	059	080	103	127	152	183	209	235	260	285	323	346	368	388	408	426	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M**2.)

TABLE B-1

36 N

JAN-APR

MST	DATE																			
	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0500	.00	.00	.00	.01	.02	.03	.04	.04	.04	.04	.03	.03	.02	.01	.00	.00	.00	.00		
	000	000	003	018	031	041	048	052	052	050	045	038	029	018	005	000	000	000		
15	.02	.04	.05	.06	.07	.08	.08	.09	.09	.09	.08	.08	.07	.06	.05	.04	.03	.02		
	029	050	068	084	096	105	112	115	115	112	108	101	092	081	069	055	040	024		
30	.07	.09	.10	.11	.12	.13	.13	.14	.14	.13	.13	.12	.12	.11	.10	.09	.08	.07		
	097	117	135	149	161	170	176	179	178	176	171	164	155	145	133	119	105	090		
45	.12	.14	.15	.16	.17	.18	.18	.18	.18	.18	.18	.17	.17	.16	.15	.14	.13	.12		
	165	185	202	216	227	235	241	243	243	240	235	228	219	209	197	184	170	156		
0600	.17	.19	.20	.21	.22	.23	.23	.23	.23	.23	.23	.22	.21	.21	.20	.19	.18	.17		
	234	253	269	282	293	300	306	308	307	304	299	292	284	274	262	250	236	222		
15	.23	.24	.25	.26	.27	.28	.28	.28	.28	.28	.28	.27	.26	.26	.25	.24	.23	.22		
	302	321	336	349	359	366	371	372	372	369	364	357	348	339	328	315	302	289		
30	.28	.29	.30	.31	.32	.32	.33	.33	.33	.33	.32	.32	.31	.30	.30	.29	.28	.27		
	370	388	403	415	424	431	436	437	436	433	428	421	413	403	393	381	368	355		
45	.33	.34	.35	.36	.37	.37	.38	.38	.38	.37	.37	.37	.36	.35	.35	.34	.33	.32		
	438	455	469	481	489	496	500	501	500	496	491	485	477	467	457	446	434	421		
0700	.38	.39	.40	.41	.42	.42	.42	.43	.42	.42	.42	.41	.41	.40	.39	.39	.38	.37		
	504	521	534	545	553	559	563	564	562	559	554	548	540	531	521	510	499	487		
15	.42	.44	.45	.46	.46	.47	.47	.47	.47	.47	.47	.46	.46	.45	.44	.43	.42	.42		
	569	585	598	609	616	622	625	626	624	621	616	610	602	593	584	573	562	551		
30	.47	.48	.49	.50	.51	.51	.52	.52	.52	.51	.51	.51	.50	.49	.49	.48	.47	.46		
	633	648	661	671	678	683	686	686	684	681	676	670	663	655	645	635	625	614		
45	.52	.53	.54	.55	.55	.56	.56	.56	.56	.56	.56	.55	.55	.54	.53	.53	.52	.51		
	695	710	721	731	738	742	745	745	743	740	735	729	722	714	705	696	686	675		

*** SIGNIFIES' COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
0800	.56	.57	.58	.59	.60	.60	.60	.60	.60	.60	.59	.59	.58	.58	.57	.56	.55	.54	.53	.52	.51	.50	.49	
	755	769	780	789	795	800	802	802	800	797	792	787	780	772	764	755	745	735	722	711	700	688	675	662
15	.60	.62	.63	.63	.64	.64	.65	.65	.65	.64	.64	.64	.63	.63	.62	.61	.60	.60	.59	.57	.56	.55	.54	
	813	826	837	845	851	855	857	857	855	852	847	842	835	828	820	811	802	792	780	770	758	747	735	722
30	.65	.66	.67	.67	.68	.68	.68	.69	.68	.68	.68	.68	.67	.67	.66	.65	.65	.64	.63	.62	.61	.60	.59	.58
	868	880	891	898	904	908	910	909	907	904	900	895	888	881	874	866	857	848	836	825	815	804	792	779
45	.68	.69	.70	.71	.72	.72	.72	.72	.72	.72	.72	.71	.71	.70	.70	.69	.69	.68	.67	.65	.65	.64	.63	.62
	920	932	942	949	955	958	960	959	957	954	950	945	939	933	925	917	909	900	889	879	869	858	846	833
0900	.72	.73	.74	.75	.75	.76	.76	.75	.76	.76	.75	.75	.75	.74	.74	.73	.72	.72	.71	.70	.69	.68	.67	.66
	969	981	990	997	1002	1005	1007	1006	1004	1002	998	993	987	981	974	967	959	950	939	930	920	909	897	885
15	.75	.76	.77	.78	.78	.79	.79	.79	.79	.79	.79	.78	.78	.78	.77	.76	.76	.75	.74	.73	.72	.72	.71	.69
	1015	1026	1035	1042	1047	1049	1051	1050	1049	1046	1042	1037	1032	1026	1020	1013	1005	997	987	977	967	957	945	933
30	.79	.80	.80	.81	.82	.82	.82	.82	.82	.82	.82	.82	.81	.81	.80	.80	.79	.78	.77	.77	.76	.75	.74	.73
	1058	1068	1077	1083	1088	1090	1092	1091	1090	1087	1083	1079	1074	1068	1062	1056	1048	1041	1031	1022	1012	1002	990	978
45	.82	.83	.83	.84	.84	.85	.85	.85	.85	.85	.85	.84	.84	.84	.83	.83	.82	.81	.81	.80	.79	.78	.77	.76
	1097	1107	1115	1121	1125	1128	1129	1129	1127	1125	1121	1117	1113	1107	1102	1095	1088	1081	1071	1063	1053	1043	1031	1019
1000	.84	.85	.86	.86	.87	.87	.88	.88	.88	.87	.87	.87	.87	.86	.86	.85	.85	.84	.83	.83	.82	.81	.80	.79
	1132	1142	1150	1155	1159	1162	1163	1163	1161	1159	1156	1152	1148	1143	1137	1131	1125	1118	1108	1100	1090	1080	1069	1056
15	.87	.87	.88	.89	.89	.90	.90	.90	.90	.90	.90	.89	.89	.89	.88	.88	.87	.87	.86	.85	.84	.83	.82	.81
	1164	1173	1180	1186	1190	1192	1193	1193	1192	1190	1187	1183	1179	1175	1170	1164	1158	1151	1142	1133	1124	1114	1102	1089
30	.89	.89	.90	.91	.91	.92	.92	.92	.92	.92	.92	.91	.91	.91	.90	.90	.89	.89	.88	.87	.86	.85	.84	.83
	1191	1200	1207	1212	1216	1218	1220	1220	1218	1217	1214	1211	1207	1203	1198	1193	1187	1180	1171	1163	1153	1143	1131	1119
45	.90	.91	.92	.92	.93	.93	.93	.94	.94	.94	.93	.93	.93	.93	.92	.92	.91	.91	.90	.89	.88	.87	.86	.85
	1214	1223	1230	1235	1238	1241	1242	1242	1241	1240	1237	1234	1231	1227	1223	1217	1212	1205	1196	1188	1179	1168	1157	1144

TABLE 8-1 SOLAR PARAMETERS COS Z
 MAY-AUG 36 N X0 (W/M+2.)
 ... SIGNIFIES COS Z =1.
 ADD 1000 TO VALUES PRECEDED BY *

MST

	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.83	.84	.85	.85	.86	.86	.87	.87	.88	.88	.88	.88	.88	.88	.88	.87	.87	.86	.85	.84	.83	.82	.80	.79
	*116	*125	*132	*139	*145	*150	*155	*159	*162	*165	*166	*167	*167	*165	*163	*159	*154	*147	*136	*123	*112	*096	*079	*059
15	.80	.81	.82	.83	.83	.84	.84	.85	.85	.85	.86	.86	.86	.85	.85	.85	.84	.84	.83	.82	.81	.79	.78	.76
	*079	*088	*096	*103	*109	*115	*121	*125	*128	*131	*133	*134	*133	*132	*130	*126	*120	*113	*102	*090	*077	*061	*043	*022
30	.77	.78	.79	.80	.80	.81	.81	.82	.82	.83	.83	.83	.83	.83	.83	.82	.82	.81	.80	.79	.78	.76	.75	.73
	*039	*048	*056	*063	*070	*076	*082	*087	*091	*094	*096	*097	*097	*096	*093	*089	*083	*076	*064	*052	*038	*021	*003	982
45	.74	.75	.76	.76	.77	.78	.78	.79	.79	.80	.80	.80	.80	.80	.80	.79	.79	.78	.77	.75	.75	.73	.72	.70
	994	*004	*012	*020	*027	*034	*041	*046	*050	*053	*055	*057	*057	*056	*053	*049	*043	*035	*023	*010	.995	.978	.959	.937
1500	.70	.71	.72	.73	.74	.74	.75	.75	.76	.76	.76	.77	.77	.76	.76	.76	.75	.75	.74	.72	.71	.70	.68	.66
	947	956	965	974	981	988	996	*001	*006	*009	*012	*013	*014	*012	*010	*005	.999	.991	.978	.965	.950	.932	.912	.889
15	.67	.68	.68	.69	.70	.71	.71	.72	.72	.73	.73	.73	.73	.73	.73	.72	.72	.71	.70	.69	.67	.66	.64	.62
	896	906	916	924	933	940	948	954	959	963	965	967	967	966	963	959	952	943	930	917	.901	.882	.861	.838
30	.63	.64	.64	.65	.66	.67	.68	.68	.69	.69	.69	.69	.69	.69	.69	.68	.67	.67	.66	.65	.64	.62	.60	.58
	842	853	863	872	881	889	897	904	909	913	916	918	918	917	914	909	902	893	879	865	.849	.829	.808	.784
45	.58	.59	.60	.61	.62	.63	.64	.64	.65	.65	.65	.65	.65	.65	.65	.64	.63	.63	.62	.61	.59	.58	.56	.54
	786	797	808	818	827	835	844	851	856	861	864	866	866	865	862	857	850	840	826	811	.794	.774	.752	.727
1600	.54	.55	.56	.57	.58	.59	.59	.60	.60	.61	.61	.61	.61	.61	.61	.60	.59	.59	.58	.57	.55	.54	.52	.50
	727	739	750	760	770	779	789	796	802	806	810	812	812	811	807	802	795	785	769	.754	.735	.716	.693	.668
15	.50	.51	.52	.53	.53	.54	.55	.56	.56	.57	.57	.57	.57	.57	.57	.56	.55	.55	.53	.52	.51	.49	.47	.45
	666	679	690	701	711	721	731	739	745	750	753	755	755	754	751	745	737	727	711	.695	.676	.655	.632	.606
30	.45	.46	.47	.48	.49	.50	.51	.51	.52	.52	.53	.53	.53	.53	.52	.52	.51	.50	.49	.48	.46	.44	.42	.40
	604	616	629	640	651	661	672	679	686	691	695	697	697	696	692	686	678	667	650	.634	.615	.593	.569	.542
45	.40	.41	.42	.43	.44	.45	.46	.47	.47	.48	.48	.48	.48	.48	.48	.47	.46	.46	.44	.43	.41	.40	.38	.35
	539	553	565	577	589	599	611	619	626	631	635	637	637	636	632	625	617	605	588	.571	.551	.529	.504	.476

MAY-AUG 36 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1700	.35	.36	.37	.38	.39	.40	.41	.42	.43	.43	.43	.42	.41	.41	.43	.43	.43	.42	.39	.38	.35	.35	.33	.30	
	473	487	501	513	525	536	543	557	564	570	574	576	576	576	574	570	563	554	542	524	505	485	463	437	409
15	.30	.31	.33	.34	.35	.36	.37	.37	.38	.38	.39	.39	.36	.36	.39	.38	.38	.37	.36	.35	.33	.31	.30	.28	.25
	406	421	435	448	461	472	485	494	501	507	511	513	513	513	511	507	500	490	478	459	441	420	396	369	341
30	.25	.26	.28	.29	.30	.31	.32	.32	.33	.34	.34	.34	.31	.31	.34	.33	.33	.32	.31	.30	.28	.25	.25	.22	.20
	339	354	369	382	395	408	420	430	438	444	448	450	450	450	448	443	435	425	412	393	374	352	328	301	272
45	.20	.21	.23	.24	.25	.26	.27	.28	.28	.29	.29	.29	.26	.26	.29	.28	.28	.27	.26	.25	.23	.21	.19	.17	.15
	270	286	302	316	330	342	356	365	373	380	384	386	386	386	383	378	370	360	346	326	307	294	259	232	202
1800	.15	.16	.18	.19	.20	.21	.22	.23	.23	.24	.24	.24	.21	.21	.24	.24	.23	.22	.21	.20	.18	.16	.14	.12	.10
	202	218	234	249	264	277	291	301	309	315	320	322	322	322	318	313	305	294	280	259	239	215	190	162	132
15	.10	.11	.13	.14	.15	.16	.17	.18	.18	.19	.19	.19	.16	.16	.19	.19	.18	.17	.16	.14	.13	.11	.09	.07	.05
	133	151	167	183	198	211	226	236	244	251	255	257	257	257	254	248	239	228	213	192	171	147	121	092	061
30	.05	.06	.08	.09	.10	.11	.12	.13	.14	.14	.14	.15	.11	.11	.14	.14	.13	.12	.11	.09	.08	.05	.04	.02	.00
	065	083	100	117	132	146	161	172	180	187	191	193	193	193	189	183	174	162	147	125	103	079	052	023	000
45	.00	.01	.03	.04	.05	.06	.07	.08	.09	.09	.10	.10	.06	.06	.09	.08	.07	.06	.04	.03	.01	.00	.00	.00	.00
	000	017	034	051	067	082	097	108	117	123	127	129	129	129	125	118	109	096	081	058	035	011	000	000	000
1900	.00	.00	.00	.00	.00	.01	.03	.03	.04	.05	.05	.05	.01	.01	.05	.04	.03	.02	.01	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	018	034	045	054	060	065	066	066	066	061	054	044	031	015	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	003	004	004	004	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

MAY-AUG 36 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES' COS Z =1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
45	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	034	017	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
0600	.08	.07	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	105	088	071	053	035	016	000	000	000	000	000	000	000	000	000	000	000	000		
15	.13	.12	.11	.09	.08	.07	.05	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	176	159	143	125	107	088	069	048	027	005	000	000	000	000	000	000	000	000		
30	.18	.17	.16	.15	.13	.12	.10	.09	.07	.06	.04	.02	.00	.00	.00	.00	.00	.00		
	246	230	214	196	179	160	140	120	098	076	053	029	000	000	000	000	000	000		
45	.23	.22	.21	.20	.18	.17	.15	.14	.12	.11	.09	.07	.05	.03	.02	.00	.00	.00		
	316	300	284	267	249	231	211	190	169	146	123	099	070	045	021	000	000	000		
0700	.29	.27	.26	.25	.23	.22	.21	.19	.17	.16	.14	.12	.10	.08	.06	.05	.03	.01		
	385	370	354	337	319	300	280	260	238	215	192	167	138	113	088	064	041	019		
15	.34	.32	.31	.30	.28	.27	.25	.24	.22	.20	.19	.17	.15	.13	.11	.09	.08	.06		
	453	438	422	405	387	368	349	328	306	283	259	234	204	179	154	130	106	084		
30	.39	.37	.36	.35	.33	.32	.30	.29	.27	.25	.23	.22	.19	.17	.16	.14	.12	.11		
	519	504	488	471	454	435	415	394	371	348	324	299	269	243	218	194	170	148		
45	.43	.42	.41	.39	.38	.37	.35	.33	.32	.30	.28	.26	.24	.22	.20	.18	.17	.15		
	583	568	553	536	518	499	479	458	435	412	387	362	331	306	280	256	232	210		

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.)

SEP-DEC 36 N

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0800	.48	.47	.45	.44	.43	.41	.40	.38	.36	.34	.32	.30	.28	.26	.24	.23	.21	.19	.18	.15	.15	.14	.14	.13
	646	631	615	598	581	561	541	519	497	473	448	423	392	366	350	315	291	269	249	231	216	204	194	189
15	.52	.51	.50	.48	.47	.45	.44	.42	.40	.38	.37	.35	.32	.30	.28	.27	.25	.23	.22	.20	.19	.19	.18	.18
	705	691	675	658	640	621	600	579	556	531	506	481	449	423	397	372	349	326	306	284	274	262	253	247
30	.57	.55	.54	.53	.51	.50	.48	.46	.44	.42	.41	.39	.36	.34	.32	.30	.29	.27	.26	.24	.23	.22	.22	.22
	763	748	732	716	697	678	657	635	611	587	562	536	504	478	452	427	403	381	361	343	329	317	309	304
45	.61	.59	.58	.57	.55	.54	.52	.50	.48	.46	.44	.42	.40	.38	.36	.34	.32	.31	.29	.24	.27	.26	.26	.25
	817	803	787	770	751	732	710	688	664	639	614	588	556	529	503	478	454	432	413	395	381	370	362	358
0900	.64	.63	.62	.60	.59	.57	.56	.54	.52	.50	.49	.46	.43	.41	.39	.38	.36	.34	.33	.32	.30	.30	.29	.29
	869	854	838	821	802	782	761	736	714	689	663	636	604	577	551	526	503	481	461	441	430	419	412	408
15	.68	.67	.65	.64	.62	.61	.59	.57	.55	.53	.51	.49	.47	.45	.43	.41	.39	.37	.36	.35	.34	.33	.32	.32
	917	902	886	868	849	829	807	784	760	734	708	681	649	622	596	571	547	526	506	490	476	466	459	456
30	.71	.70	.69	.67	.66	.64	.62	.60	.58	.56	.54	.52	.50	.47	.46	.44	.42	.40	.39	.38	.37	.36	.36	.35
	961	946	930	912	893	872	850	827	802	776	750	723	690	663	637	612	589	567	548	532	519	509	503	500
45	.74	.73	.72	.70	.68	.67	.65	.63	.61	.59	.57	.55	.52	.50	.48	.46	.45	.43	.42	.40	.40	.39	.38	.38
	*002	987	971	952	933	912	889	865	840	814	787	760	727	700	674	649	626	605	586	570	558	548	543	541
1000	.77	.76	.74	.73	.71	.69	.67	.65	.63	.61	.59	.57	.55	.53	.51	.49	.47	.45	.44	.43	.42	.41	.41	.41
	*039	*024	*007	989	969	947	924	900	874	848	821	793	760	733	707	683	660	639	620	605	593	584	579	578
15	.80	.78	.77	.75	.73	.72	.70	.68	.66	.64	.61	.59	.57	.55	.53	.51	.49	.48	.46	.45	.44	.44	.43	.43
	*072	*057	*039	*021	*000	976	955	930	904	878	850	823	789	762	736	712	689	668	651	635	624	616	611	611
30	.82	.80	.79	.77	.75	.74	.72	.70	.67	.65	.63	.61	.58	.56	.54	.53	.51	.49	.48	.47	.46	.46	.45	.45
	*101	*085	*068	*048	*027	*005	981	956	930	903	875	847	814	787	761	737	714	694	677	662	651	644	640	640
45	.84	.82	.81	.79	.77	.75	.73	.71	.69	.67	.65	.62	.60	.58	.56	.54	.52	.51	.50	.49	.48	.47	.47	.47
	*126	*109	*091	*072	*050	*027	*003	978	951	924	896	868	834	808	782	757	735	715	698	685	674	667	664	665

*** SIGNIFIFES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE B-1

SEP-DEC 36 N

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
11	.85	.84	.82	.80	.78	.77	.74	.72	.70	.68	.66	.64	.61	.59	.57	.55	.54	.52	.51	.50	.49	.49	.48	.48	
	146	*129*	*111*	*090*	*069*	*045	*021	.995	.968	.940	.912	.884	.850	.823	.798	.774	.752	.732	.716	.703	.693	.687	.684	.686	
15	.86	.85	.83	.81	.79	.77	.75	.73	.71	.69	.67	.64	.62	.60	.58	.56	.54	.53	.52	.51	.50	.50	.49	.50	
	162	*144*	*125*	*105*	*082*	*058	*033*	.007	.979	.951	.923	.895	.861	.835	.809	.785	.764	.745	.729	.716	.707	.701	.700	.702	
	.87	.85	.84	.82	.80	.78	.76	.74	.72	.69	.67	.65	.62	.60	.58	.57	.55	.54	.52	.51	.51	.50	.50	.50	
	.73*	*155*	*136*	*114*	*091*	*067	*041*	.014	.987	.958	.930	.901	.868	.841	.816	.793	.772	.753	.738	.725	.717	.712	.711	.714	
45	.88	.86	.84	.82	.80	.78	.76	.74	.72	.70	.67	.65	.62	.60	.58	.57	.55	.54	.53	.52	.51	.51	.51	.51	
	179	*161*	*141*	*119*	*096*	*071	*045*	.017	.989	.961	.932	.903	.870	.843	.818	.795	.775	.757	.742	.730	.722	.718	.718	.721	
1200	.88	.86	.84	.82	.80	.78	.76	.74	.72	.69	.67	.65	.62	.60	.58	.57	.55	.54	.53	.52	.51	.51	.51	.51	
	181	*162*	*142*	*119*	*095*	*070	*043*	.015	.987	.958	.929	.901	.867	.841	.816	.793	.773	.756	.741	.730	.723	.720	.720	.724	
15	.87	.86	.84	.82	.80	.78	.76	.73	.71	.69	.67	.64	.62	.60	.58	.56	.55	.53	.52	.51	.51	.51	.51	.51	
	179	*159*	*138*	*115*	*090*	*064	*037*	.009	.980	.951	.922	.893	.860	.834	.809	.787	.767	.750	.736	.725	.720	.717	.718	.723	
30	.87	.85	.83	.81	.79	.77	.75	.73	.70	.68	.66	.63	.61	.59	.57	.55	.54	.53	.52	.51	.50	.50	.50	.51	
	171	*151*	*129*	*106*	*080*	*054	*026	.998	.968	.939	.910	.881	.848	.822	.796	.776	.757	.740	.727	.717	.711	.709	.711	.717	
45	.86	.84	.82	.80	.78	.76	.74	.71	.69	.67	.64	.62	.60	.58	.56	.54	.53	.52	.51	.50	.49	.49	.50	.50	
	159	*139*	*116*	*092*	*066*	*039	*011	.982	.952	.922	.893	.864	.831	.806	.782	.760	.741	.726	.713	.704	.699	.697	.700	.706	
1300	.85	.83	.81	.79	.77	.75	.72	.70	.68	.65	.63	.61	.58	.56	.54	.53	.51	.50	.49	.49	.48	.48	.48	.49	
	143	*121*	*098*	*073*	*047*	*019	.991	.961	.931	.901	.872	.843	.810	.785	.761	.740	.722	.707	.695	.687	.682	.681	.684	.691	
15	.83	.81	.79	.77	.75	.73	.70	.68	.66	.63	.61	.59	.56	.54	.53	.51	.50	.49	.48	.47	.47	.47	.47	.48	
	122	*100*	*076*	*050*	*023	.995	.966	.936	.906	.876	.846	.818	.785	.760	.737	.716	.698	.683	.672	.665	.661	.661	.664	.672	
30	.81	.79	.77	.75	.73	.71	.68	.66	.64	.61	.59	.57	.54	.52	.51	.49	.48	.47	.46	.45	.45	.45	.45	.46	
	096	*074*	*049*	*023	.995	.967	.937	.907	.876	.846	.816	.788	.755	.730	.707	.687	.670	.656	.645	.638	.635	.636	.640	.648	
45	.79	.77	.75	.73	.71	.68	.66	.64	.61	.59	.56	.54	.52	.50	.48	.47	.45	.44	.44	.43	.43	.43	.43	.44	
	067	*044*	*018	.991	.963	.934	.904	.873	.842	.812	.782	.754	.721	.697	.674	.655	.638	.624	.614	.609	.606	.607	.612	.621	

SEP-DEC 36 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1400	.77	.75	.73	.70	.68	.66	.63	.61	.58	.56	.54	.52	.43	.47	.46	.44	.43	.42	.41	.41	.41	.41	.41	.42	
	.033	.009	.983	.956	.927	.897	.866	.835	.804	.774	.744	.715	.683	.659	.637	.618	.602	.589	.580	.571	.572	.574	.579	.589	
15	.74	.72	.70	.67	.65	.63	.60	.58	.55	.53	.51	.48	.46	.44	.43	.41	.40	.39	.38	.38	.38	.38	.38	.39	
	.995	.971	.944	.916	.886	.856	.825	.793	.762	.732	.702	.673	.642	.618	.596	.577	.562	.550	.541	.535	.534	.537	.543	.553	
30	.71	.69	.67	.64	.62	.59	.57	.54	.52	.50	.47	.45	.43	.41	.39	.38	.37	.36	.35	.35	.35	.35	.36	.36	
	.954	.928	.901	.872	.842	.811	.780	.748	.716	.686	.656	.628	.596	.573	.551	.533	.518	.507	.498	.491	.493	.496	.503	.513	
45	.67	.65	.63	.61	.58	.56	.53	.51	.48	.46	.44	.42	.39	.38	.36	.35	.34	.33	.32	.32	.32	.32	.33	.33	
	.909	.882	.854	.825	.794	.763	.731	.699	.667	.636	.607	.578	.547	.524	.503	.486	.471	.460	.453	.443	.443	.452	.460	.470	
1500	.64	.62	.59	.57	.55	.52	.50	.47	.45	.42	.40	.38	.36	.34	.32	.31	.30	.29	.29	.29	.28	.29	.29	.30	
	.860	.833	.804	.774	.743	.711	.679	.646	.614	.584	.554	.526	.495	.472	.452	.435	.421	.410	.403	.400	.401	.405	.413	.424	
15	.60	.58	.55	.53	.51	.48	.46	.43	.41	.38	.36	.34	.32	.30	.28	.27	.26	.25	.25	.25	.25	.25	.26	.26	
	.808	.780	.751	.720	.688	.656	.623	.591	.559	.528	.496	.470	.440	.417	.397	.381	.367	.358	.351	.347	.350	.354	.362	.374	
30	.56	.54	.51	.49	.46	.44	.41	.39	.36	.34	.32	.30	.27	.26	.24	.23	.22	.21	.21	.21	.21	.21	.22	.23	
	.753	.725	.695	.663	.631	.598	.565	.532	.500	.469	.439	.412	.382	.360	.340	.324	.311	.302	.296	.294	.296	.301	.309	.321	
45	.52	.49	.47	.44	.42	.39	.37	.34	.32	.30	.27	.25	.23	.21	.20	.19	.18	.17	.17	.17	.17	.17	.18	.19	
	.695	.666	.635	.604	.571	.537	.504	.471	.439	.408	.378	.351	.321	.299	.280	.265	.252	.244	.238	.237	.239	.244	.253	.266	
1600	.47	.45	.42	.40	.37	.35	.32	.30	.27	.25	.23	.21	.19	.17	.16	.15	.14	.13	.13	.13	.13	.13	.14	.15	
	.635	.605	.574	.541	.508	.474	.441	.407	.375	.344	.315	.288	.258	.237	.218	.203	.191	.183	.178	.177	.180	.186	.195	.208	
15	.42	.40	.38	.35	.33	.30	.27	.25	.22	.20	.18	.16	.14	.12	.11	.10	.09	.09	.08	.08	.08	.09	.10	.10	
	.572	.542	.510	.477	.443	.409	.375	.342	.309	.278	.249	.222	.193	.172	.154	.139	.128	.120	.116	.115	.118	.125	.134	.147	
30	.38	.35	.33	.30	.28	.25	.22	.20	.18	.15	.13	.11	.09	.08	.06	.05	.05	.04	.04	.04	.04	.04	.05	.06	
	.507	.476	.444	.411	.376	.342	.308	.274	.242	.211	.182	.155	.126	.106	.088	.074	.063	.056	.052	.052	.055	.062	.072	.085	
45	.33	.30	.28	.25	.23	.20	.17	.15	.13	.10	.08	.06	.04	.03	.02	.01	.00	.00	.00	.00	.00	.00	.01	.01	
	.441	.409	.376	.342	.308	.273	.239	.205	.173	.142	.113	.086	.058	.038	.021	.007	.000	.000	.000	.000	.000	.000	.007	.020	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY +

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.)

SEP-DEC 36 N

MST	SEP									OCT									NOV									DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.28	.25	.23	.20	.18	.15	.12	.10	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	373	341	307	273	238	203	168	135	102	072	043	017	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.23	.20	.18	.15	.12	.10	.07	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	304	271	237	202	167	132	097	063	031	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.17	.15	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	234	201	166	131	096	060	025	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	163	130	095	059	024	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1800	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	093	058	023	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	022	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 36 N TABLE B-1 SOLAR PARAMETERS COS 2 (W/M**2.) *** SIGNIFIES COS 2 =1. ADD 1000 TO VALUES PRECEDED BY *

MST	JAN							FEB							MAR							APR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
0800	.15	.15	.15	.16	.16	.17	.18	.20	.22	.23	.25	.28	.31	.34	.36	.38	.41	.43	.46	.48	.50	.52	.54	.55	.56	.58	.59	.61	.62	.64	.66	.68	.70	.72	.74	.76	.77	.78	.79	.80	.81	.82	.83	.84	.85	.86	.87	.88	.89	.90	.91	.92	.93	.94	.95	.96	.97	.98	.99	1.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	216	214	216	221	230	242	258	281	303	328	355	384	434	466	498	530	562	593	628	655	681	704	724	742	765	785	802	823	842	859	879	897	913	929	945	961	977	993	1.009	1.025	1.041	1.057	1.073	1.089	1.105	1.121	1.134	1.146	1.158	1.170	1.182	1.194	1.207	1.219	1.231	1.243	1.255	1.267	1.279	1.291	1.303	1.315	1.327	1.339	1.351	1.363	1.375	1.387	1.399	1.411	1.423	1.435	1.447	1.459	1.471	1.483	1.495	1.507	1.519	1.531	1.543	1.555	1.567	1.579	1.591	1.603	1.615	1.627	1.639	1.651	1.663	1.675	1.687	1.699	1.711	1.723	1.735	1.747	1.759	1.771	1.783	1.795	1.807	1.819	1.831	1.843	1.855	1.867	1.879	1.891	1.903	1.915	1.927	1.939	1.951	1.963	1.975	1.987	1.999	2.011	2.023	2.035	2.047	2.059	2.071	2.083	2.095	2.107	2.119	2.131	2.143	2.155	2.167	2.179	2.191	2.203	2.215	2.227	2.239	2.251	2.263	2.275	2.287	2.299	2.311	2.323	2.335	2.347	2.359	2.371	2.383	2.395	2.407	2.419	2.431	2.443	2.455	2.467	2.479	2.491	2.503	2.515	2.527	2.539	2.551	2.563	2.575	2.587	2.599	2.611	2.623	2.635	2.647	2.659	2.671	2.683	2.695	2.707	2.719	2.731	2.743	2.755	2.767	2.779	2.791	2.803	2.815	2.827	2.839	2.851	2.863	2.875	2.887	2.899	2.911	2.923	2.935	2.947	2.959	2.971	2.983	2.995	3.007	3.019	3.031	3.043	3.055	3.067	3.079	3.091	3.103	3.115	3.127	3.139	3.151	3.163	3.175	3.187	3.199	3.211	3.223	3.235	3.247	3.259	3.271	3.283	3.295	3.307	3.319	3.331	3.343	3.355	3.367	3.379	3.391	3.403	3.415	3.427	3.439	3.451	3.463	3.475	3.487	3.499	3.511	3.523	3.535	3.547	3.559	3.571	3.583	3.595	3.607	3.619	3.631	3.643	3.655	3.667	3.679	3.691	3.703	3.715	3.727	3.739	3.751	3.763	3.775	3.787	3.799	3.811	3.823	3.835	3.847	3.859	3.871	3.883	3.895	3.907	3.919	3.931	3.943	3.955	3.967	3.979	3.991	4.003	4.015	4.027	4.039	4.051	4.063	4.075	4.087	4.099	4.111	4.123	4.135	4.147	4.159	4.171	4.183	4.195	4.207	4.219	4.231	4.243	4.255	4.267	4.279	4.291	4.303	4.315	4.327	4.339	4.351	4.363	4.375	4.387	4.399	4.411	4.423	4.435	4.447	4.459	4.471	4.483	4.495	4.507	4.519	4.531	4.543	4.555	4.567	4.579	4.591	4.603	4.615	4.627	4.639	4.651	4.663	4.675	4.687	4.699	4.711	4.723	4.735	4.747	4.759	4.771	4.783	4.795	4.807	4.819	4.831	4.843	4.855	4.867	4.879	4.891	4.903	4.915	4.927	4.939	4.951	4.963	4.975	4.987	4.999	5.011	5.023	5.035	5.047	5.059	5.071	5.083	5.095	5.107	5.119	5.131	5.143	5.155	5.167	5.179	5.191	5.203	5.215	5.227	5.239	5.251	5.263	5.275	5.287	5.299	5.311	5.323	5.335	5.347	5.359	5.371	5.383	5.395	5.407	5.419	5.431	5.443	5.455	5.467	5.479	5.491	5.503	5.515	5.527	5.539	5.551	5.563	5.575	5.587	5.599	5.611	5.623	5.635	5.647	5.659	5.671	5.683	5.695	5.707	5.719	5.731	5.743	5.755	5.767	5.779	5.791	5.803	5.815	5.827	5.839	5.851	5.863	5.875	5.887	5.899	5.911	5.923	5.935	5.947	5.959	5.971	5.983	5.995	6.007	6.019	6.031	6.043	6.055	6.067	6.079	6.091	6.103	6.115	6.127	6.139	6.151	6.163	6.175	6.187	6.199	6.211	6.223	6.235	6.247	6.259	6.271	6.283	6.295	6.307	6.319	6.331	6.343	6.355	6.367	6.379	6.391	6.403	6.415	6.427	6.439	6.451	6.463	6.475	6.487	6.499	6.511	6.523	6.535	6.547	6.559	6.571	6.583	6.595	6.607	6.619	6.631	6.643	6.655	6.667	6.679	6.691	6.703	6.715	6.727	6.739	6.751	6.763	6.775	6.787	6.799	6.811	6.823	6.835	6.847	6.859	6.871	6.883	6.895	6.907	6.919	6.931	6.943	6.955	6.967	6.979	6.991	7.003	7.015	7.027	7.039	7.051	7.063	7.075	7.087	7.099	7.111	7.123	7.135	7.147	7.159	7.171	7.183	7.195	7.207	7.219	7.231	7.243	7.255	7.267	7.279	7.291	7.303	7.315	7.327	7.339	7.351	7.363	7.375	7.387	7.399	7.411	7.423	7.435	7.447	7.459	7.471	7.483	7.495	7.507	7.519	7.531	7.543	7.555	7.567	7.579	7.591	7.603	7.615	7.627	7.639	7.651	7.663	7.675	7.687	7.699	7.711	7.723	7.735	7.747	7.759	7.771	7.783	7.795	7.807	7.819	7.831	7.843	7.855	7.867	7.879	7.891	7.903	7.915	7.927	7.939	7.951	7.963	7.975	7.987	7.999	8.011	8.023	8.035	8.047	8.059	8.071	8.083	8.095	8.107	8.119	8.131	8.143	8.155	8.167	8.179	8.191	8.203	8.215	8.227	8.239	8.251	8.263	8.275	8.287	8.299	8.311	8.323	8.335	8.347	8.359	8.371	8.383	8.395	8.407	8.419	8.431	8.443	8.455	8.467	8.479	8.491	8.503	8.515	8.527	8.539	8.551	8.563	8.575	8.587	8.599	8.611	8.623	8.635	8.647	8.659	8.671	8.683	8.695	8.707	8.719	8.731	8.743	8.755	8.767	8.779	8.791	8.803	8.815	8.827	8.839	8.851	8.863	8.875	8.887	8.899	8.911	8.923	8.935	8.947	8.959	8.971	8.983	8.995	9.007	9.019	9.031	9.043	9.055	9.067	9.079	9.091	9.103	9.115	9.127	9.139	9.151	9.163	9.175	9.187	9.199	9.211	9.223	9.235	9.247	9.259	9.271	9.283	9.295	9.307	9.319	9.331	9.343	9.355	9.367	9.379	9.391	9.403	9.415	9.427	9.439	9.451	9.463	9.475	9.487	9.499	9.511	9.523	9.535	9.547	9.559	9.571	9.583	9.595	9.607	9.619	9.631	9.643	9.655	9.667	9.679	9.691	9.703	9.715	9.727	9.739	9.751	9.763	9.775	9.787	9.799	9.811	9.823	9.835	9.847	9.859	9.871	9.883	9.895	9.907	9.919	9.931	9.943	9.955	9.967	9.979	9.991	10.003	10.015	10.027	10.039	10.051	10.063	10.075	10.087	10.099	10.111	10.123	10.135	10.147	10.159	10.171	10.183	10.195	10.207	10.219	10.231	10.243	10.255	10.267	10.279	10.291	10.303	10.315	10.327	10.339	10.351	10.363	10.375	10.387	10.399	10.411	10.423	10.435	10.447	10.459	10.471	10.483	10.495	10.507	10.519	10.531	10.543	10.555	10.567	10.579	10.591	10.603	10.615	10.627	10.639	10.651	10.663	10.675	10.687	10.699	10.711	10.723	10.735	10.747	10.759	10.771	10.783	10.795	10.807	10.819	10.831	10.843	10.855	10.867	10.879	10.891	10.903	10.915	10.927	10.939	10.951	10.963	10.975	10.987	10.999	11.011	11.023	11.035	11.047	11.059	11.071	11.083	11.095	11.107	11.119	11.131	11.143	11.155	11.167	11.179	11.191	11.203	11.215	11.227	11.239	11.251	11.263	11.275	11.287	11.299	11.311	11.323	11.335	11.347	11.359	11.371	11.383	11.395	11.407	11.419	11.431	11.443	11.455	11.467	11.479	11.491	11.503	11.515	11.527	11.539	11.551	11.563	11.575	11.587	11.599	11.611	11.623	11.635	11.647	11.659	11.671	11.683	11.695	11.707	11.719	11.731	11.743	11.755	11.767	11.779	11.791	11.803	11.815	11.827	11.839	11.851	11.863	11.875	11.887	11.899	11.911	11.923	11.935	11.947	11.959	11.971	11.983	11.995	12.007	12.019	12.031	12.043	12.055	12.067	12.079	12.091	12.103	12.115	12.127	12.139	12.151	12.163	12.175	12.187	12.199	12.211	12.223	12.235	12.247	12.259	12.271	12.283	12.295	12.307	12.319	12.331	12.343	12.355	12.367	12.379	12.391	12.403	12.415	12.427	12.439	12.451	12.463	

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.52	.52	.53	.54	.55	.56	.58	.60	.62	.64	.66	.69	.72	.74	.77	.79	.81	.83	.85	.87	.88	.90	.91	.92	.92
	728	734	743	756	773	792	814	843	870	898	927	956	*004	.033	.061	.088	*113	.137	*163	.182	.199	*214	.227	*238	
15	.53	.53	.54	.55	.56	.58	.59	.61	.63	.66	.68	.70	.74	.76	.78	.80	.82	.84	.85	.86	.88	.89	.91	.92	.93
	745	751	761	775	792	812	835	864	891	919	948	978	*024	.052	.081	*107	.132	.155	*180	.193	.216	.230	*243	*254	
30	.54	.54	.55	.56	.57	.59	.60	.63	.65	.67	.69	.71	.75	.77	.79	.81	.83	.85	.85	.87	.88	.90	.92	.93	.94
	758	764	775	790	807	828	851	881	908	936	965	994	*041	.069	.096	.122	*146	.169	*193	.212	.228	*242	*254	*264	
45	.54	.55	.55	.57	.58	.59	.61	.63	.65	.68	.70	.72	.76	.78	.80	.82	.84	.86	.86	.88	.88	.91	.92	.93	.94
	766	773	784	799	818	839	862	892	920	948	977	006	*052	.080	.106	.132	*156	.178	*201	.213	.235	*249	*260	*270	
1200	.54	.55	.56	.57	.58	.60	.62	.64	.66	.68	.70	.73	.76	.78	.80	.82	.84	.86	.86	.88	.90	.91	.92	.93	.94
	769	777	789	805	823	845	868	899	927	955	984	013	*053	.086	.112	.137	*160	.182	*205	.222	.237	*251	*262	*272	
15	.54	.55	.56	.57	.58	.60	.62	.64	.66	.68	.70	.73	.76	.78	.80	.82	.84	.86	.86	.88	.88	.91	.92	.93	.94
	768	776	789	805	824	846	870	901	929	957	986	015	*060	.087	.113	.137	*160	.181	*203	.220	.235	*248	*259	*269	
30	.54	.54	.55	.57	.58	.60	.62	.64	.66	.68	.70	.72	.76	.78	.80	.82	.84	.86	.86	.88	.88	.90	.91	.93	.93
	762	771	784	801	821	843	867	899	926	954	983	012	*056	.083	.108	.132	*155	.175	*197	.213	.228	*240	*251	*261	
45	.53	.54	.55	.56	.58	.59	.61	.63	.65	.68	.70	.72	.75	.77	.79	.81	.83	.85	.85	.87	.88	.89	.91	.92	.93
	752	761	775	792	812	835	859	891	919	947	975	004	*046	.074	.099	.123	*144	.164	*186	.202	.216	*228	*239	*248	
1300	.52	.53	.54	.55	.57	.58	.60	.62	.65	.67	.69	.71	.74	.76	.78	.80	.82	.84	.84	.86	.87	.88	.89	.90	.91
	737	746	761	779	799	822	847	879	906	935	963	991	*035	.061	.085	.108	*129	.149	*170	.185	.199	*212	*222	*231	
15	.51	.51	.52	.54	.55	.57	.59	.61	.63	.65	.68	.70	.73	.75	.77	.79	.81	.82	.82	.84	.85	.87	.88	.89	.90
	717	727	742	761	781	805	830	862	889	918	946	974	*017	.042	.066	.089	*110	.129	*150	.165	.178	*190	*201	*210	
30	.49	.50	.51	.52	.54	.55	.57	.60	.62	.64	.66	.68	.71	.73	.75	.77	.79	.80	.80	.82	.84	.85	.86	.87	.88
	693	704	719	738	759	783	808	840	868	896	924	951	994	.019	.043	.065	*085	.104	*124	.133	.153	.165	*175	*184	
45	.47	.48	.49	.50	.52	.54	.55	.58	.60	.62	.64	.66	.70	.71	.73	.75	.77	.78	.78	.80	.81	.83	.84	.85	.86
	665	676	692	711	733	756	782	814	842	869	897	925	967	.931	.015	*036	*057	.075	*095	.110	.123	*134	*145	*154	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SOLAR PARAMETERS
COS Z
XO (W/M**2.)

TABLE B-1

JAN-APR 34 N

MST	JAN							FEB							DATE							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
1400	.45	.46	.47	.48	.50	.51	.53	.55	.58	.60	.62	.64	.67	.69	.71	.73	.74	.76	.78	.79	.80	.81	.82	.83	.84	.85	.86	.87	.88	.89	.90	.91			
	633	644	660	680	702	726	751	783	811	839	866	893	925	959	982	1003	1023	1041	1061	1075	1094	1105	1120	1130	1140	1150	1160	1170	1180	1190	1200				
	15	.42	.43	.44	.46	.47	.49	.51	.53	.55	.57	.59	.61	.65	.67	.68	.70	.72	.73	.75	.76	.77	.78	.79	.80	.81	.82	.83	.84	.85	.86	.87			
30	.39	.40	.41	.43	.44	.46	.48	.50	.52	.55	.57	.59	.62	.64	.65	.67	.69	.70	.72	.73	.74	.75	.76	.77	.78	.79	.80	.81	.82	.83	.84	.85			
	556	568	585	605	628	652	677	709	737	764	791	818	858	882	904	925	944	961	980	999	1019	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120				
	45	.36	.37	.38	.40	.41	.43	.45	.47	.49	.51	.53	.55	.59	.60	.62	.64	.65	.67	.68	.70	.71	.72	.73	.74	.75	.76	.77	.78	.79	.80	.81			
1500	.33	.34	.35	.36	.38	.40	.42	.44	.46	.48	.50	.52	.55	.57	.59	.60	.62	.63	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.77	.78			
	464	477	495	515	538	562	588	620	647	674	700	726	765	788	810	830	849	866	884	899	912	924	935	945	955	965	975	985	995	1005	1015	1025			
	15	.29	.30	.31	.33	.35	.36	.38	.40	.42	.44	.46	.48	.51	.53	.55	.56	.58	.59	.61	.62	.63	.64	.65	.66	.67	.68	.69	.70	.71	.72	.73			
30	.25	.26	.28	.29	.31	.33	.34	.37	.39	.41	.42	.44	.47	.49	.51	.52	.54	.55	.57	.58	.59	.60	.61	.62	.63	.64	.65	.66	.67	.68	.69	.70			
	360	372	391	412	434	459	484	515	542	569	594	620	658	680	701	721	739	756	775	789	802	815	826	837	847	857	867	877	887	897	907	917			
	45	.21	.22	.24	.25	.27	.29	.30	.33	.35	.36	.38	.40	.43	.45	.46	.48	.49	.51	.52	.53	.54	.55	.56	.57	.58	.59	.60	.61	.62	.63	.64			
1600	.17	.18	.19	.21	.23	.24	.26	.28	.30	.32	.34	.36	.39	.40	.42	.43	.45	.46	.48	.49	.50	.51	.52	.53	.54	.55	.56	.57	.58	.59	.60	.61			
	243	256	275	296	319	343	368	399	425	450	476	500	535	559	580	599	617	634	653	664	681	694	707	718	728	738	748	758	768	778	788	798			
	15	.13	.14	.15	.17	.18	.20	.22	.24	.26	.28	.29	.31	.34	.36	.37	.39	.40	.42	.43	.44	.45	.47	.48	.49	.50	.51	.52	.53	.54	.55	.56			
30	.08	.09	.11	.12	.14	.15	.17	.19	.21	.23	.25	.27	.29	.31	.32	.34	.35	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50	.51			
	118	131	150	170	193	216	241	271	297	322	347	370	407	428	448	467	485	502	521	537	551	565	578	590	603	617	630	643	655	668	681	694			
	45	.04	.05	.06	.07	.09	.11	.12	.15	.16	.18	.20	.22	.24	.26	.27	.29	.30	.32	.33	.34	.35	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46			

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M**2.)

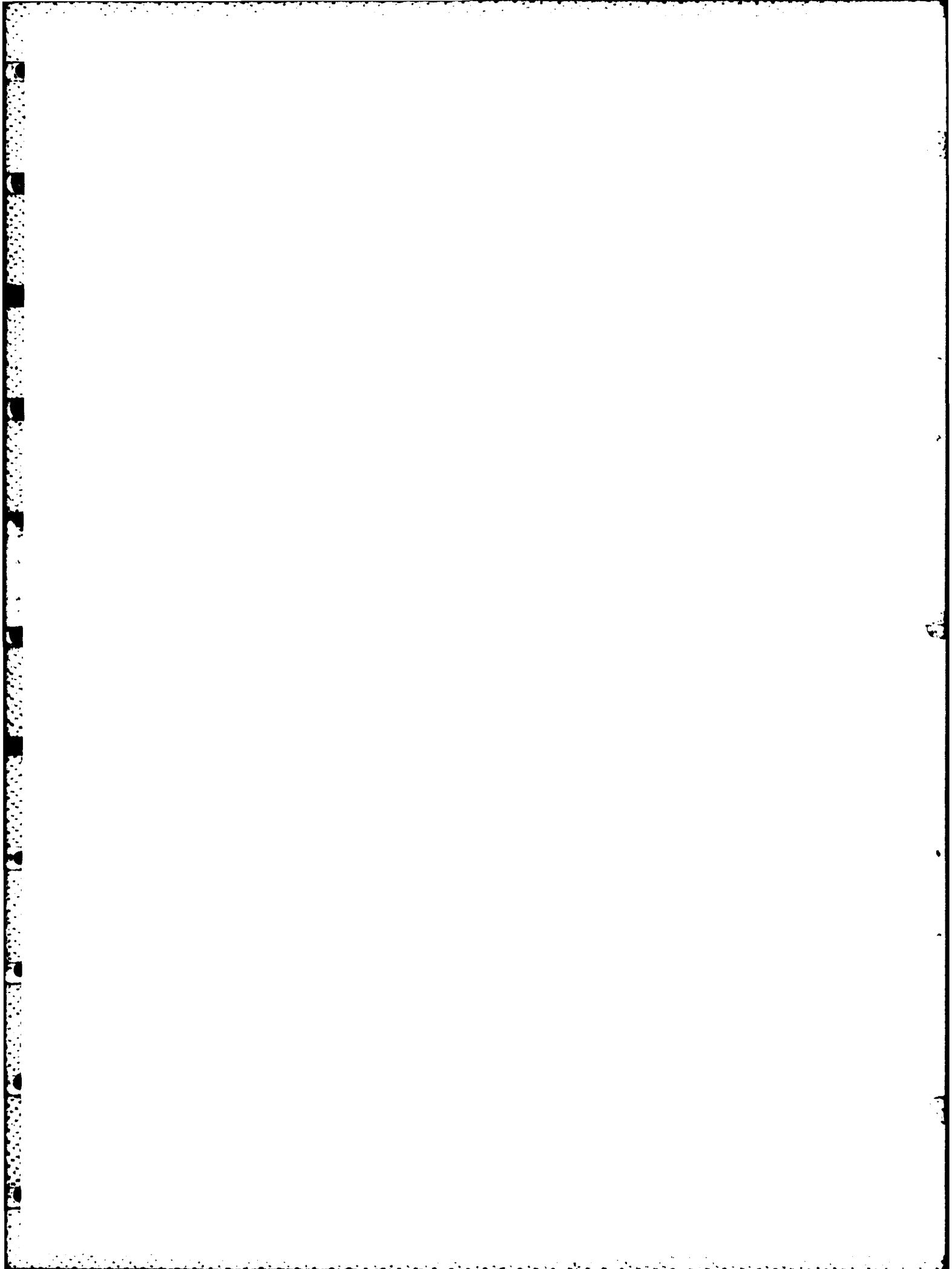
TABLE B-1

34 N

JAN-APR

MST	DATE																							
	JAN						FEB						MAR						APR					
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1700	.00	.00	.01	.03	.04	.06	.08	.10	.11	.13	.15	.17	.19	.21	.22	.24	.25	.26	.28	.29	.30	.32	.33	.34
	000	000	016	037	059	082	106	136	160	185	209	232	269	288	308	327	345	363	382	393	413	428	442	456
15	.00	.00	.00	.00	.00	.01	.03	.05	.06	.08	.10	.12	.14	.16	.17	.19	.20	.21	.23	.24	.25	.26	.28	.29
	000	000	000	000	000	013	036	065	090	114	137	160	195	216	236	255	273	291	311	327	342	357	372	386
30	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.06	.09	.10	.12	.13	.15	.16	.17	.19	.20	.21	.22	.23
	000	000	000	000	000	000	000	000	018	041	065	087	122	143	163	182	200	218	238	251	270	286	301	316
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.06	.08	.09	.11	.12	.13	.15	.16	.17	.18
	000	000	000	000	000	000	000	000	000	000	000	014	045	069	088	107	126	144	164	181	198	214	230	246
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.04	.05	.07	.08	.09	.11	.12	.13
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	013	033	051	069	091	108	125	142	159	175
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.04	.05	.06	.08
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	017	035	052	070	087	104
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	016	034
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

JAN-APR 34 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *



MST	DATE																			
	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0500	.00	.00	.00	.00	.01	.02	.02	.02	.02	.02	.02	.01	.01	.00	.00	.00	.00	.00	.00	
	000	000	000	000	011	021	028	031	031	028	024	017	003	000	000	000	000	000	000	
15	.01	.03	.04	.05	.06	.07	.07	.07	.07	.07	.07	.06	.05	.05	.04	.03	.02	.01	.00	
	014	034	052	066	078	086	093	095	095	092	088	081	072	061	049	036	022	006	000	
30	.06	.08	.09	.10	.11	.12	.12	.12	.12	.12	.12	.11	.10	.10	.09	.08	.07	.06	.04	
	083	103	120	134	145	153	159	161	160	158	153	146	137	127	115	102	088	073	055	
45	.11	.13	.14	.15	.16	.17	.17	.17	.17	.17	.17	.16	.15	.15	.14	.13	.12	.11	.09	
	153	172	188	202	212	220	225	227	226	223	218	211	203	192	181	169	155	141	124	
0600	.17	.18	.19	.20	.21	.22	.22	.22	.22	.22	.21	.21	.20	.20	.19	.18	.17	.16	.15	
	224	242	257	270	280	287	292	293	292	289	284	277	269	259	248	236	223	209	192	
15	.22	.23	.24	.25	.26	.27	.27	.27	.27	.27	.26	.26	.25	.25	.24	.23	.22	.21	.20	
	294	311	326	338	347	354	358	359	358	355	350	343	335	325	315	303	291	278	261	
30	.27	.28	.29	.30	.31	.32	.32	.32	.32	.32	.31	.31	.30	.30	.29	.28	.27	.26	.25	
	363	380	394	406	414	421	425	425	424	421	416	409	401	392	381	370	358	346	330	
45	.32	.33	.35	.35	.36	.37	.37	.37	.37	.37	.36	.36	.35	.35	.34	.33	.32	.31	.30	
	433	449	462	473	481	487	490	491	489	486	481	474	466	457	447	437	425	413	398	
0700	.37	.38	.40	.40	.41	.41	.42	.42	.42	.42	.41	.41	.40	.39	.39	.38	.37	.36	.35	
	501	516	529	539	547	552	555	555	554	550	545	539	531	522	513	502	492	480	466	
15	.42	.43	.44	.45	.46	.46	.47	.47	.47	.46	.46	.46	.45	.44	.44	.43	.42	.41	.40	
	567	582	595	604	611	616	619	619	617	613	608	602	595	586	577	567	557	546	533	
30	.47	.48	.49	.50	.51	.51	.51	.51	.51	.51	.51	.50	.50	.49	.48	.48	.47	.46	.45	
	633	647	659	668	674	679	681	681	679	675	670	664	657	649	640	631	621	611	598	
45	.52	.53	.54	.55	.55	.56	.56	.56	.56	.56	.55	.55	.54	.54	.53	.52	.52	.51	.50	
	696	710	721	729	735	739	741	741	739	736	731	725	718	710	702	693	683	673	661	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
COS Z
XO (W/M**2.)

TABLE B-1

MAY-AUG 34 N

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0800	.56	.57	.58	.59	.60	.60	.60	.60	.60	.60	.60	.59	.58	.58	.58	.57	.56	.55	.54	.54
	758	771	781	789	795	798	800	799	797	794	789	784	777	769	761	753	744	735	723	715
15	.61	.62	.63	.63	.64	.64	.64	.64	.64	.64	.64	.63	.63	.62	.62	.61	.61	.60	.59	.59
	817	829	839	846	852	855	856	856	854	850	846	840	834	827	819	811	802	794	782	773
30	.65	.66	.67	.67	.68	.68	.69	.69	.68	.68	.68	.68	.67	.67	.66	.65	.65	.64	.63	.63
	873	885	894	901	906	909	916	909	907	904	900	894	883	882	874	867	859	850	840	833
45	.69	.70	.71	.71	.72	.72	.72	.72	.72	.72	.72	.71	.71	.71	.70	.69	.69	.68	.67	.67
	927	938	947	953	958	960	961	961	958	955	951	946	940	934	927	920	912	904	894	885
0900	.73	.74	.74	.75	.75	.76	.76	.76	.76	.76	.76	.75	.75	.74	.74	.73	.73	.72	.71	.71
	977	988	996	002	006	009	010	009	007	004	000	995	989	983	977	970	963	955	946	937
15	.76	.77	.78	.78	.79	.79	.79	.79	.79	.79	.79	.79	.78	.78	.77	.77	.76	.76	.75	.75
	024	034	042	048	052	054	055	054	052	049	045	041	036	030	024	017	011	003	994	980
30	.79	.80	.81	.82	.82	.82	.83	.83	.83	.82	.82	.82	.81	.81	.81	.80	.80	.79	.78	.77
	068	078	085	091	094	096	097	096	094	091	088	083	070	073	068	061	055	048	039	031
45	.82	.83	.84	.85	.85	.85	.85	.85	.85	.85	.85	.85	.84	.84	.84	.83	.83	.82	.81	.81
	108	117	124	129	133	135	135	134	133	130	126	123	118	113	108	102	096	089	081	073
1000	.85	.86	.87	.87	.88	.88	.88	.88	.88	.88	.88	.88	.87	.87	.86	.86	.85	.85	.84	.83
	144	153	160	164	168	169	170	169	167	165	162	158	154	149	144	139	133	127	119	111
15	.87	.88	.89	.89	.90	.90	.90	.90	.90	.90	.90	.90	.90	.89	.89	.88	.88	.87	.87	.86
	176	185	191	196	199	200	201	200	199	196	194	190	186	182	177	172	167	161	153	145
30	.90	.90	.91	.92	.92	.92	.92	.92	.92	.92	.92	.92	.92	.91	.91	.91	.90	.90	.89	.89
	204	212	218	223	226	227	228	227	226	224	221	218	215	211	207	202	197	191	183	175
45	.91	.92	.93	.93	.94	.94	.94	.94	.94	.94	.94	.94	.94	.93	.93	.93	.92	.92	.91	.90
	228	236	242	246	249	250	251	251	249	248	245	242	239	236	232	227	222	217	209	202

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M*2.)

MAY-AUG 34 N

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.84	.85	.85	.86	.86	.87	.97	.88	.88	.88	.89	.89	.87	.87	.87	.88	.88	.86	.86	.85	.84	.83	.82	.80
	*128	*135	*142	*148	*153	*157	*162	*160	*155	*171	*172	*173	*173	*172	*170	*167	*163	*156	*147	*13	*125	*111	*094	*076
15	.81	.82	.82	.83	.84	.84	.85	.85	.86	.86	.86	.86	.84	.84	.83	.86	.85	.84	.84	.83	.82	.80	.79	.77
	*090	*095	*104	*111	*116	*121	*126	*130	*133	*136	*138	*139	*133	*133	*137	*133	*129	*122	*112	*102	*89	*074	*057	*038
30	.78	.79	.79	.80	.81	.81	.82	.82	.83	.83	.83	.83	.82	.82	.83	.83	.83	.82	.81	.80	.79	.77	.76	.74
	*038	*056	*063	*070	*076	*081	*031	*091	*055	*098	*100	*101	*83	*83	*83	*83	*82	*82	*073	*062	*59	*034	*016	997
45	.75	.75	.76	.77	.77	.78	.79	.79	.79	.80	.80	.80	.78	.78	.80	.80	.80	.79	.78	.77	.75	.74	.72	.71
	*003	*011	*019	*026	*032	*038	*045	*049	*053	*056	*059	*060	*061	*560	*059	*054	*049	*042	*031	*020	*006	990	972	951
1500	.71	.72	.73	.73	.74	.75	.75	.76	.76	.76	.77	.77	.75	.75	.77	.77	.76	.76	.74	.73	.72	.70	.69	.67
	954	963	971	978	985	992	999	*004	*009	*012	*014	*016	*016	*016	*014	*010	*004	997	985	973	959	942	923	902
15	.67	.68	.69	.69	.70	.71	.71	.72	.72	.73	.73	.73	.71	.71	.73	.73	.73	.72	.70	.67	.68	.67	.65	.63
	902	911	920	928	935	942	950	955	960	964	967	968	969	968	968	962	956	948	936	924	909	891	872	850
30	.63	.64	.65	.65	.66	.67	.68	.68	.69	.69	.69	.69	.68	.68	.69	.69	.68	.68	.66	.65	.64	.63	.61	.59
	847	857	866	874	882	890	898	904	909	913	916	918	919	919	919	915	911	905	884	871	855	837	817	794
45	.59	.60	.60	.61	.62	.63	.63	.64	.65	.65	.65	.65	.63	.63	.65	.65	.64	.63	.62	.61	.60	.58	.57	.55
	790	800	809	818	827	835	843	850	855	859	863	865	866	865	862	858	851	843	829	815	799	780	759	736
1600	.54	.55	.56	.57	.58	.58	.59	.60	.60	.61	.61	.61	.59	.59	.61	.61	.60	.59	.58	.57	.55	.54	.52	.50
	729	740	750	760	769	777	786	793	799	804	807	809	810	809	806	802	795	786	772	757	740	721	699	675
15	.50	.51	.51	.52	.53	.54	.55	.55	.56	.56	.57	.57	.55	.55	.57	.57	.56	.55	.54	.52	.51	.49	.47	.46
	667	678	689	699	709	718	727	734	741	746	749	752	752	751	748	743	736	726	712	697	679	659	636	611
30	.45	.46	.47	.48	.49	.49	.50	.51	.51	.52	.52	.52	.50	.50	.52	.52	.51	.50	.49	.48	.46	.44	.43	.41
	603	614	626	636	647	656	666	674	680	686	690	692	693	691	688	683	675	665	650	634	616	595	572	546
45	.40	.41	.42	.43	.44	.45	.45	.46	.47	.47	.47	.48	.43	.43	.48	.47	.46	.45	.44	.43	.41	.40	.38	.36
	537	549	561	572	583	593	604	612	619	624	628	630	631	630	620	621	612	602	586	569	550	529	505	479

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XC (W/M*2.)

MAY-AUG 34 N

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XC (W/M**2.)

MAY-AUG 34 N

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1700	.35	.36	.37	.38	.39	.40	.41	.41	.42	.42	.43	.43	.43	.43	.43	.42	.41	.40	.39	.38	.35	.35	.33	.31
	469	482	495	507	518	528	540	548	555	561	565	568	569	567	563	557	548	537	520	503	484	461	437	410
15	.30	.31	.32	.33	.34	.35	.36	.36	.37	.38	.38	.38	.38	.38	.38	.37	.36	.36	.34	.33	.31	.29	.27	.25
	400	414	427	440	452	463	475	484	491	497	501	504	504	502	498	492	483	471	454	435	416	393	367	340
30	.25	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.33	.33	.33	.33	.32	.31	.30	.29	.28	.26	.24	.22	.20
	331	345	359	372	385	396	409	418	426	432	436	439	439	437	433	426	416	404	386	363	347	323	297	269
45	.19	.21	.22	.23	.24	.25	.26	.27	.27	.28	.28	.28	.28	.28	.28	.27	.26	.25	.24	.22	.21	.19	.17	.15
	261	276	291	304	317	330	343	352	360	366	371	373	373	371	366	359	349	336	317	293	277	253	226	197
1800	.14	.15	.17	.18	.19	.20	.21	.22	.22	.23	.23	.23	.23	.23	.23	.22	.21	.20	.19	.17	.16	.14	.12	.09
	191	207	222	236	250	262	276	286	294	300	305	307	307	305	300	292	281	268	249	223	207	182	155	125
15	.09	.10	.11	.13	.14	.15	.16	.17	.17	.18	.18	.18	.18	.18	.18	.17	.16	.15	.14	.12	.10	.08	.06	.04
	121	137	153	168	182	195	209	219	228	234	239	241	241	238	233	225	214	200	180	159	137	111	083	053
30	.04	.05	.06	.08	.09	.10	.11	.12	.12	.13	.13	.13	.13	.13	.13	.12	.11	.10	.08	.07	.05	.03	.01	.00
	031	068	084	100	115	129	143	153	162	169	173	175	175	172	166	158	146	132	111	090	067	041	012	000
45	.00	.00	.01	.03	.04	.05	.06	.07	.07	.08	.08	.08	.08	.08	.08	.07	.06	.05	.03	.02	.00	.00	.00	.00
	000	000	017	033	048	062	077	088	097	103	108	110	109	106	100	091	079	064	042	021	000	000	000	000
1900	.00	.00	.00	.00	.00	.00	.01	.02	.02	.03	.03	.03	.03	.03	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	013	023	032	039	044	045	045	041	035	025	013	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
COS Z
X0 (W/M**2.)

MAY-AUG 34 N

MST	DATE												NOV												DEC											
	SEP				OCT				DATE				NOV				DEC				NOV				DEC											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30												
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
45	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	028	012	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
0600	.08	.06	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	100	085	069	053	036	019	001	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
15	.13	.12	.11	.09	.08	.07	.06	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	173	158	143	127	110	093	075	056	036	015	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
30	.18	.17	.16	.15	.14	.12	.11	.09	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	245	231	216	200	183	166	148	129	109	088	066	044	016	000	000	000	000	000	000	000	000	000	000	000												
45	.24	.22	.21	.20	.19	.18	.16	.15	.13	.12	.10	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00												
	317	302	288	272	256	239	221	202	181	160	138	115	087	064	040	017	000	000	000	000	000	000	000	000												
0700	.29	.28	.27	.25	.24	.23	.21	.20	.18	.17	.15	.13	.11	.10	.08	.06	.05	.03	.02	.00	.00	.00	.00	.00												
	387	373	359	343	327	310	292	273	252	231	208	185	157	133	109	086	063	042	022	001	000	000	000	000												
15	.34	.33	.32	.30	.29	.28	.26	.25	.23	.22	.20	.18	.16	.14	.13	.11	.09	.08	.06	.05	.04	.03	.02	.02												
	457	443	429	413	397	380	362	342	322	300	277	254	225	201	177	153	130	109	089	070	055	042	031	024												
30	.39	.38	.37	.35	.34	.33	.31	.30	.28	.27	.25	.23	.21	.19	.17	.16	.14	.12	.11	.10	.09	.08	.07	.06												
	524	511	497	482	465	448	430	410	389	367	344	320	291	267	242	219	196	174	154	136	120	107	097	090												
45	.44	.43	.42	.40	.39	.38	.36	.35	.33	.31	.30	.28	.26	.24	.22	.20	.18	.17	.15	.14	.13	.12	.11	.11												
	590	577	563	548	532	514	495	476	454	432	409	385	355	331	306	282	259	237	217	199	184	171	161	155												

SEP-DEC 34 N

TABLE B-1 SOLAR PARAMETERS

COS Z
X0 (W/M**2.)

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0800	.49	.47	.46	.45	.44	.42	.41	.39	.38	.36	.34	.32	.30	.28	.26	.25	.23	.21	.20	.18	.17	.17	.16	.15
	654	641	627	612	595	578	559	539	517	495	471	447	417	392	367	343	320	298	278	260	245	233	223	217
15	.53	.52	.51	.50	.48	.47	.45	.44	.42	.40	.38	.36	.34	.32	.30	.29	.27	.25	.24	.23	.22	.21	.20	.20
	716	703	688	673	657	639	620	599	578	555	531	506	476	451	426	402	378	357	337	319	304	292	283	278
30	.57	.56	.55	.54	.53	.51	.49	.48	.46	.44	.42	.41	.39	.36	.34	.33	.31	.29	.28	.27	.26	.25	.24	.24
	774	761	747	732	715	697	678	657	635	612	588	563	532	507	482	457	434	413	393	375	361	349	341	335
45	.62	.60	.59	.58	.57	.55	.53	.52	.50	.48	.46	.44	.42	.40	.38	.36	.35	.33	.32	.30	.29	.29	.28	.28
	830	817	803	787	770	752	733	712	689	666	641	616	585	560	534	510	487	465	446	429	414	403	395	390
0900	.66	.64	.63	.62	.60	.59	.57	.56	.54	.52	.50	.48	.45	.44	.42	.40	.38	.37	.35	.34	.33	.32	.32	.31
	883	870	855	840	822	804	784	763	740	716	691	666	635	609	584	559	536	515	496	479	465	454	446	442
15	.69	.68	.67	.65	.64	.62	.61	.59	.57	.55	.53	.51	.49	.47	.45	.43	.41	.40	.38	.37	.36	.36	.35	.35
	932	919	904	888	871	852	832	810	787	763	738	712	681	655	630	605	582	561	542	525	512	502	495	491
30	.73	.71	.70	.69	.67	.66	.64	.62	.60	.58	.56	.54	.52	.50	.48	.46	.44	.43	.42	.40	.39	.39	.38	.38
	978	964	950	933	916	896	876	854	830	806	780	754	723	697	672	647	624	603	585	563	556	546	539	537
45	.76	.74	.73	.72	.70	.69	.67	.65	.63	.61	.59	.57	.55	.53	.51	.49	.47	.46	.44	.43	.42	.41	.41	.41
	*020*006	991	975	956	937		916	893	869	845	819	793	761	735	710	686	663	642	624	603	595	586	580	578
1000	.78	.77	.76	.74	.73	.71	.69	.68	.66	.64	.62	.60	.57	.55	.53	.51	.50	.48	.47	.45	.45	.44	.44	.44
	*058*044*029*012	993	973	952	929	904	879	853	827		795	769	744	720	697	677			659	641	632	623	618	616
15	.81	.80	.78	.77	.75	.74	.72	.70	.68	.66	.64	.62	.59	.57	.55	.53	.52	.50	.49	.48	.47	.46	.46	.46
	*092*077*062*044*025*005			983	960	935	910	883	857		825	799	774	750	727	707			690	675	664	655	651	650
30	.83	.82	.80	.79	.77	.76	.74	.72	.70	.68	.66	.64	.61	.59	.57	.55	.54	.52	.51	.50	.49	.48	.48	.48
	*121*107*091*073*053*032			*010	986	961	936	909	882		850	824	799	775	753	734			716	702	691	684	680	680
45	.85	.84	.82	.81	.79	.77	.75	.73	.71	.69	.67	.65	.63	.61	.59	.57	.55	.54	.52	.51	.51	.50	.50	.50
	*146*131*115*097*077*055			*033*008	983	957	930	903			871	845	820	796	775	755			739	725	715	708	705	705

*** SIGNIFIFES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1
COS Z

SEP-DEC
24 N

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.87	.85	.84	.82	.80	.79	.77	.75	.73	.70	.68	.66	.64	.62	.60	.58	.56	.55	.54	.53	.52	.51	.51	.51
	*167	*152	*135	*116	*096	*074	*050	*026	*000	973	947	919	887	861	836	813	792	773	757	741	734	728	725	727
15	.88	.86	.85	.83	.81	.80	.78	.76	.73	.71	.69	.67	.65	.62	.61	.59	.57	.56	.55	.54	.53	.53	.52	.53
	*183	*167	*150	*131	*110	*087	*063	*038	*012	985	958	931	899	873	848	825	804	786	770	754	749	743	741	743
30	.89	.87	.86	.84	.82	.80	.78	.76	.74	.72	.70	.67	.65	.63	.61	.59	.58	.56	.55	.54	.54	.53	.53	.53
	*195	*178	*160	*140	*119	*096	*072	*046	*020	992	965	938	905	880	855	833	812	794	779	767	759	754	753	756
45	.89	.88	.86	.84	.82	.80	.78	.76	.74	.72	.70	.68	.65	.63	.61	.60	.58	.57	.56	.55	.54	.54	.54	.54
	*201	*184	*166	*145	*123	*100	*075	*049	*022	995	967	940	907	882	858	835	815	798	783	772	764	760	760	763
1200	.89	.88	.86	.84	.82	.80	.78	.76	.74	.72	.70	.67	.65	.63	.61	.59	.58	.57	.56	.55	.54	.54	.54	.54
	*203	*186	*167	*146	*123	*099	*073	*047	*020	992	964	937	905	879	855	833	814	797	783	772	765	762	762	766
15	.89	.88	.86	.84	.82	.80	.78	.76	.73	.71	.69	.67	.64	.62	.61	.59	.57	.56	.55	.54	.54	.54	.54	.54
	*200	*182	*163	*141	*118	*093	*067	*040	*013	985	957	929	897	872	848	827	807	791	778	763	751	759	760	765
30	.89	.87	.85	.83	.81	.79	.77	.75	.73	.70	.68	.66	.64	.62	.60	.58	.57	.55	.55	.54	.53	.53	.53	.54
	*193	*174	*154	*132	*108	*082	*056	*029	*001	973	944	917	885	860	836	815	797	781	768	754	753	751	753	759
45	.88	.86	.84	.82	.80	.78	.76	.74	.71	.69	.67	.65	.62	.60	.59	.57	.56	.54	.53	.53	.52	.52	.52	.53
	*181	*161	*140	*117	*093	*067	*040	*012	984	956	927	900	868	843	820	799	781	766	754	745	740	739	741	748
1300	.86	.85	.83	.81	.79	.77	.74	.72	.70	.68	.65	.63	.61	.59	.57	.56	.54	.53	.52	.52	.51	.51	.51	.52
	*164	*144	*122	*098	*073	*047	*020	991	963	934	906	878	846	822	799	779	761	746	735	727	723	722	726	732
15	.85	.83	.81	.79	.77	.75	.73	.70	.68	.66	.63	.61	.54	.57	.55	.54	.52	.51	.51	.50	.50	.50	.50	.50
	*142	*122	*099	*075	*049	*022	994	966	937	908	879	852	820	796	774	754	737	723	712	705	701	701	705	713
30	.83	.81	.79	.77	.75	.73	.70	.68	.66	.63	.61	.59	.57	.55	.53	.52	.50	.49	.49	.48	.48	.48	.48	.49
	*116	*095	*072	*047	*021	993	965	936	906	877	849	821	790	766	744	725	708	695	684	673	675	676	680	688
45	.81	.79	.77	.75	.72	.70	.68	.66	.63	.61	.59	.57	.54	.52	.51	.49	.48	.47	.46	.45	.46	.46	.46	.47
	*086	*064	*040	*015	988	959	930	901	872	842	814	786	755	731	710	691	675	662	653	647	645	646	651	660

SEP-DEC 34 N TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.78	.76	.74	.72	.70	.67	.65	.63	.60	.58	.56	.54	.51	.50	.48	.47	.45	.44	.44	.43	.43	.43	.44	.44
	.051	.029	.004	.978	.950	.922	.892	.862	.833	.803	.775	.747	.716	.693	.672	.653	.638	.626	.617	.612	.610	.612	.618	.627
15	.75	.73	.71	.69	.67	.64	.62	.60	.57	.55	.53	.51	.48	.47	.45	.44	.43	.42	.41	.41	.40	.41	.41	.42
	.013	.989	.964	.937	.909	.880	.850	.820	.790	.760	.731	.704	.674	.650	.620	.612	.597	.585	.577	.573	.572	.574	.581	.591
30	.72	.70	.68	.66	.63	.61	.59	.56	.54	.52	.49	.47	.45	.43	.42	.40	.39	.38	.38	.38	.38	.38	.38	.39
	.970	.946	.920	.892	.863	.834	.803	.773	.743	.713	.684	.657	.627	.604	.584	.567	.552	.541	.534	.530	.530	.533	.540	.550
45	.69	.67	.64	.62	.60	.57	.55	.53	.50	.48	.46	.44	.41	.40	.38	.37	.36	.35	.35	.34	.34	.35	.35	.36
	.924	.899	.872	.844	.814	.784	.753	.723	.692	.662	.634	.607	.577	.554	.535	.518	.504	.494	.487	.484	.484	.488	.495	.506
1500	.65	.63	.61	.58	.56	.54	.51	.49	.46	.44	.42	.40	.38	.36	.34	.33	.32	.31	.31	.31	.31	.31	.32	.32
	.874	.848	.821	.792	.762	.731	.700	.669	.638	.608	.580	.553	.523	.501	.482	.466	.453	.443	.436	.434	.435	.439	.447	.458
15	.61	.59	.57	.54	.52	.49	.47	.45	.42	.40	.38	.36	.34	.32	.30	.29	.28	.28	.27	.27	.27	.27	.28	.29
	.821	.794	.766	.737	.706	.675	.643	.612	.581	.551	.523	.496	.467	.445	.426	.410	.398	.389	.383	.381	.382	.387	.396	.407
30	.57	.55	.52	.50	.48	.45	.43	.40	.38	.36	.33	.31	.29	.28	.26	.25	.24	.24	.23	.23	.23	.24	.24	.25
	.764	.737	.708	.678	.647	.615	.584	.552	.521	.491	.463	.436	.407	.386	.368	.352	.340	.332	.326	.325	.327	.332	.341	.353
45	.52	.50	.48	.45	.43	.41	.38	.36	.33	.31	.29	.27	.25	.23	.22	.21	.20	.19	.19	.19	.19	.19	.20	.21
	.705	.677	.648	.617	.585	.553	.521	.489	.458	.428	.400	.374	.345	.324	.306	.291	.280	.272	.267	.265	.269	.275	.284	.296
1600	.48	.46	.43	.41	.38	.36	.33	.31	.29	.26	.24	.22	.20	.19	.17	.16	.16	.15	.15	.15	.15	.16	.17	
	.643	.615	.585	.553	.521	.489	.456	.424	.393	.363	.335	.309	.281	.260	.243	.228	.217	.210	.206	.205	.208	.215	.224	.237
15	.43	.41	.38	.36	.33	.31	.28	.26	.24	.21	.19	.17	.15	.14	.13	.12	.11	.10	.10	.10	.10	.11	.11	.12
	.579	.550	.519	.487	.455	.422	.389	.357	.325	.296	.268	.242	.214	.194	.177	.163	.153	.146	.142	.142	.145	.152	.162	.175
30	.38	.36	.33	.31	.28	.26	.23	.21	.19	.16	.14	.12	.10	.09	.08	.07	.06	.06	.05	.05	.06	.06	.07	.08
	.513	.483	.452	.419	.386	.353	.320	.287	.256	.226	.196	.170	.146	.126	.109	.096	.086	.080	.077	.077	.081	.088	.098	.111
45	.33	.31	.28	.26	.23	.21	.18	.16	.13	.11	.09	.07	.05	.04	.03	.02	.01	.01	.01	.01	.01	.02	.02	.03
	.445	.414	.382	.349	.316	.282	.249	.217	.185	.156	.128	.103	.076	.056	.040	.027	.018	.012	.009	.010	.014	.022	.032	.045

SEP-DEC 34 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1700	.28	.25	.23	.21	.18	.15	.13	.11	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	
	375	344	312	278	244	211	177	145	113	084	056	031	000	000	000	000	000	000	000	
15	.23	.20	.18	.15	.13	.10	.08	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	304	273	240	206	172	138	104	071	040	011	000	000	000	000	000	000	000	000	000	
30	.17	.15	.12	.10	.07	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	232	200	167	133	098	064	030	000	000	000	000	000	000	000	000	000	000	000	000	
45	.12	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	160	128	094	059	025	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
1800	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	088	055	020	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	015	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

SEP-DEC 34 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												SOLAR PARAMETERS												CC3 Z X0 (W/M**2.)	*** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *									
	JAN						FEB						MAR						APR																
	1	5	10	15	20	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30											
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0600	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.03	.03	.03	.03	.04	.05	.07	.08	.10	.12	.14	.16	.17	.19	.22	.24	.26	.29	.31	.34	.36	.37	.39	.41	.42	.45	.48	.50	.52	.55	.57	.59	.61	.63	.65
30	.08	.08	.08	.08	.09	.10	.12	.13	.15	.17	.19	.22	.25	.27	.29	.32	.34	.37	.39	.41	.43	.44	.46	.48	.50	.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
45	.13	.13	.13	.13	.14	.15	.17	.18	.20	.22	.24	.27	.30	.32	.34	.37	.39	.42	.44	.46	.47	.49	.51	.53	.55	.57	.59	.61	.63	.65	.67	.69	.71	.73	.75

MST	DATE												APR															
	JAN				FEB				MAR				APR				APR				APR							
	1	5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30
0800	.17	.17	.17	.18	.18	.19	.20		.22	.23	.25	.27	.29		.32	.35	.37	.39	.42	.44		.47	.43	.51	.52	.54	.55	
	244	242	244	248	256	268	282		304	325	349	375	403		450	481	512	543	574	603		637	663	687	709	728	745	
	15	.22	.22	.22	.22	.23	.24	.25		.26	.28	.30	.32	.34		.37	.40	.42	.44	.46	.49		.51	.53	.55	.57	.58	.60
	306	305	307	312	320	332	348		370	391	416	442	470		517	548	579	610	640	669		701	727	750	771	790	806	
30	.26	.26	.26	.26	.27	.28	.29		.31	.32	.34	.36	.38		.42	.44	.46	.49	.51	.53		.56	.53	.50	.61	.63	.64	
	365	365	367	373	382	395	411		433	455	480	506	535		582	612	643	673	703	731		763	783	811	831	849	864	
	45	.30	.30	.30	.31	.31	.32	.33		.35	.37	.39	.41	.43		.46	.49	.51	.53	.55	.58		.60	.62	.64	.65	.67	.68
	422	422	425	431	441	454	471		494	517	541	568	596		644	674	704	734	763	791		822	846	868	888	905	920	
0900	.34	.34	.34	.34	.35	.36	.37		.39	.41	.43	.45	.47		.51	.53	.55	.57	.60	.62		.64	.63	.68	.69	.71	.72	
	475	476	479	486	497	511	528		552	575	600	627	655		702	733	762	792	820	848		878	901	923	942	958	972	
	15	.37	.37	.38	.38	.39	.40	.41		.43	.45	.47	.49	.51		.54	.57	.59	.61	.64	.66		.68	.70	.72	.73	.75	.76
	526	526	531	539	550	564	582		606	630	655	682	711		758	788	817	846	874	901		930	953	974	992	008	021	
30	.40	.41	.41	.42	.42	.44	.45		.47	.49	.50	.52	.55		.58	.60	.63	.65	.67	.69		.72	.73	.75	.77	.78	.79	
	572	574	579	587	599	614	632		658	681	707	734	763		810	839	868	897	924	950		979	001	021	038	053	066	
	45	.43	.44	.44	.45	.46	.47	.48		.50	.52	.54	.56	.58		.62	.64	.66	.68	.71	.73		.75	.77	.78	.80	.81	.82
	615	617	623	632	645	660	679		705	729	755	782	811		857	887	916	944	970	996		024	045	064	081	096	108	
1000	.46	.46	.47	.48	.49	.50	.51		.53	.55	.57	.59	.61		.65	.67	.69	.71	.74	.76		.78	.80	.81	.83	.84	.85	
	654	657	663	673	686	703	722		748	773	799	826	855		901	930	959	986	013	037		065	085	104	120	134	145	
	15	.49	.49	.49	.50	.51	.53	.54		.56	.58	.60	.62	.64		.68	.70	.72	.74	.76	.78		.81	.82	.84	.85	.86	.87
	689	692	699	710	724	741	761		788	812	839	866	895		941	970	998	025	050	075		101	121	139	154	168	179	
30	.51	.51	.52	.53	.54	.55	.56		.58	.60	.62	.64	.67		.70	.72	.75	.77	.79	.81		.83	.85	.86	.87	.89	.90	
	720	724	732	743	757	775	795		823	848	874	902	930		976	005	032	059	084	107		133	152	169	184	197	208	
	45	.53	.53	.54	.55	.56	.57	.59		.61	.63	.65	.67	.69		.72	.75	.77	.79	.81	.83		.85	.83	.88	.89	.90	.91
	746	751	759	771	786	805	825		853	879	905	933	961		007	035	062	088	113	136		161	179	195	210	222	232	
JAN-APR	32 N				TABLE B-1				SOLAR PARAMETERS				COS Z				** SIGNIFIES COS Z =1.				ADD 1000 TO VALUES PRECEDED BY *							
					X0 (W/M**2.)																							

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
COS Z
XO (W/M**2.)

TABLE B-1

32 N

JAN-APR

MST	JAN							FEB							MAR							APR										
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30							
1100	.54	.55	.55	.56	.57	.59	.60	.63	.64	.66	.69	.71	.73	.74	.76	.79	.81	.83	.84	.87	.88	.90	.91	.92	.93	.87	.88	.90	.91	.92	.93	
	768	773	783	795	811	830	851	879	905	932	950	968			.033	.061	.088	.113	.137	.159	.184	.202	.217	.231	.243	.253						
15	.56	.56	.57	.58	.59	.60	.62	.64	.66	.68	.70	.72	.74	.75	.76	.78	.80	.82	.84	.86	.88	.89	.91	.92	.93	.94	.88	.89	.91	.92	.93	.94
	786	791	801	815	831	850	872	901	927	954	981	010			.054	.082	.108	.133	.156	.178	.202	.219	.233	.248	.259	.268						
30	.56	.57	.58	.59	.60	.61	.63	.65	.67	.69	.71	.74	.76	.77	.79	.81	.83	.85	.87	.89	.90	.92	.93	.94	.95	.89	.90	.92	.93	.94	.95	
	799	805	815	829	846	866	888	918	944	971	998	027			.071	.098	.124	.148	.171	.192	.215	.232	.248	.259	.270	.279						
45	.57	.58	.58	.59	.61	.62	.64	.66	.68	.70	.72	.74	.76	.78	.80	.82	.84	.86	.88	.89	.91	.92	.93	.94	.95	.89	.91	.92	.93	.94	.95	
	807	814	825	839	857	877	900	929	956	983	011	038			.082	.109	.134	.158	.181	.201	.223	.240	.254	.266	.277	.285						
1200	.57	.58	.59	.60	.61	.63	.64	.67	.69	.71	.73	.75	.77	.78	.80	.82	.84	.86	.88	.90	.91	.92	.94	.95	.95	.90	.91	.92	.94	.95	.95	
	810	817	830	845	863	884	906	936	963	990	018	045			.089	.115	.140	.163	.185	.205	.227	.242	.256	.268	.278	.287						
15	.57	.58	.59	.60	.61	.63	.64	.67	.69	.71	.73	.75	.77	.78	.80	.82	.84	.86	.88	.90	.91	.92	.93	.94	.95	.90	.91	.92	.93	.94	.95	
	809	817	829	845	864	885	908	938	965	992	020	047			.090	.116	.141	.164	.185	.204	.225	.240	.254	.265	.275	.283						
30	.57	.57	.58	.59	.61	.62	.64	.67	.69	.71	.73	.75	.77	.78	.80	.82	.84	.86	.87	.89	.90	.92	.93	.94	.95	.89	.90	.92	.93	.94	.95	
	803	811	825	841	860	882	905	936	962	990	017	044			.087	.112	.136	.159	.180	.198	.219	.231	.247	.258	.267	.275						
45	.56	.57	.58	.59	.60	.62	.64	.66	.68	.70	.72	.74	.76	.78	.80	.81	.83	.85	.87	.88	.90	.91	.92	.93	.94	.88	.90	.91	.92	.93	.94	
	792	801	815	832	851	873	897	928	955	982	009	036			.078	.103	.127	.149	.163	.186	.207	.222	.234	.245	.255	.263						
1300	.55	.56	.57	.58	.59	.61	.63	.65	.67	.69	.71	.73	.75	.77	.79	.80	.82	.84	.85	.87	.88	.90	.91	.92	.92	.87	.88	.90	.91	.92	.92	
	777	786	801	818	838	860	885	915	942	969	997	023			.065	.089	.113	.134	.154	.172	.191	.205	.218	.228	.237	.245						
15	.54	.54	.55	.57	.58	.60	.62	.64	.66	.68	.70	.72	.74	.75	.77	.79	.81	.82	.84	.86	.87	.88	.89	.90	.91	.86	.87	.88	.89	.90	.91	
	757	767	782	800	820	843	867	898	925	952	979	006			.047	.071	.093	.114	.134	.151	.170	.184	.195	.207	.216	.223						
30	.52	.53	.54	.55	.56	.58	.60	.62	.64	.66	.68	.70	.72	.74	.75	.77	.79	.81	.82	.84	.85	.86	.87	.88	.89	.84	.85	.86	.87	.88	.89	
	733	743	758	777	797	820	845	876	903	930	956	983			.023	.047	.069	.090	.109	.126	.144	.158	.170	.180	.189	.197						
45	.50	.51	.52	.53	.55	.56	.58	.60	.62	.64	.66	.68	.70	.72	.73	.75	.77	.78	.80	.81	.83	.84	.85	.86	.86	.81	.83	.84	.85	.86	.86	
	704	714	730	749	770	793	818	849	876	903	929	955			.995	.019	.041	.061	.079	.096	.114	.127	.139	.149	.158	.166						

JAN-APR 32 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST	JAN							FEB							MAR							APR								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1400	.47	.48	.49	.51	.52	.54	.56	.58	.60	.62	.64	.66	.69	.71	.73	.74	.76	.77	.79	.80	.81	.82	.83	.84	.079	.092	.104	.114	.123	.131
15	.45	.46	.47	.48	.50	.51	.53	.56	.58	.60	.62	.64	.67	.68	.70	.72	.73	.75	.76	.77	.78	.79	.80	.81	.040	.053	.065	.075	.084	.092
30	.42	.43	.44	.45	.47	.49	.50	.53	.55	.57	.59	.61	.64	.65	.67	.69	.70	.71	.73	.74	.75	.76	.77	.78	.997	.010	.021	.032	.041	.049
45	.39	.40	.41	.42	.44	.46	.47	.50	.52	.54	.55	.57	.60	.62	.64	.65	.67	.68	.69	.71	.72	.73	.74	.74	.950	.963	.974	.984	.994	.002
1500	.35	.36	.37	.39	.40	.42	.44	.46	.48	.50	.52	.54	.57	.58	.60	.62	.63	.64	.66	.67	.68	.69	.70	.71	.899	.912	.923	.934	.943	.952
15	.32	.32	.34	.35	.37	.39	.40	.43	.44	.46	.48	.50	.53	.55	.56	.58	.59	.60	.62	.63	.64	.65	.66	.67	.845	.857	.869	.880	.889	.899
30	.28	.29	.30	.31	.33	.35	.36	.39	.41	.42	.44	.46	.49	.50	.52	.53	.55	.56	.58	.59	.60	.61	.62	.62	.787	.800	.811	.822	.832	.842
45	.24	.24	.26	.27	.29	.31	.32	.35	.36	.38	.40	.42	.45	.46	.48	.49	.50	.52	.53	.54	.55	.56	.57	.58	.726	.733	.751	.762	.773	.783
1600	.19	.20	.22	.23	.25	.26	.28	.30	.32	.34	.36	.37	.40	.42	.43	.44	.46	.47	.48	.50	.51	.52	.53	.53	.662	.673	.688	.699	.710	.721
15	.15	.16	.17	.19	.20	.22	.24	.26	.27	.29	.31	.33	.35	.37	.38	.40	.41	.42	.44	.45	.46	.47	.48	.49	.596	.609	.622	.634	.645	.656
30	.10	.11	.12	.14	.15	.17	.19	.21	.23	.24	.26	.28	.30	.32	.33	.35	.36	.37	.39	.40	.41	.42	.43	.44	.528	.541	.554	.566	.578	.590
45	.05	.06	.08	.09	.11	.12	.14	.16	.18	.20	.21	.23	.25	.27	.28	.30	.31	.32	.33	.35	.36	.37	.38	.39	.457	.471	.484	.497	.510	.522

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M**2.)

JAN-APR 32 N TABLE 8-1

MST	DATE												
	JAN			FEB			MAR			APR			
	1	5	10	15	20	25	30	5	10	15	20	25	30
1700	.01	.02	.03	.04	.06	.07	.09						
	008	021	039	059	081	104	127	.11	.13	.14	.16	.18	
								155	179	202	225	247	
15	.00	.00	.00	.00	.01	.02	.04						
	000	000	000	000	010	032	055	.06	.08	.09	.11	.12	
								083	107	130	152	174	
30	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	.01	.02	.04	.06	.07	
								010	033	056	078	099	
45	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	.00	.00	.00	.00	.02	
								000	000	000	002	023	
1800	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	.00	.00	.00	.00	.00	
								000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	.00	.00	.00	.00	.00	
								000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	.00	.00	.00	.00	.00	
								000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	.00	.00	.00	.00	.00	
								000	000	000	000	000	

JAN-APR 32 N TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) *** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																																					
	MAY						JUL						AUG																									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30																				
0800	.56	.58	.58	.59	.59	.60	.60	.60	.60	.59	.59	.59	.53	.53	.57	.57	.56	.55	.54	.54	.53	.52	.51	.50	.723	.714	.705	.695	.685	.675								
15	.61	.62	.63	.63	.64	.64	.64	.64	.64	.64	.63	.63	.63	.62	.62	.61	.60	.60	.59	.59	.58	.57	.56	.55	.784	.775	.767	.757	.748	.738								
30	.65	.66	.67	.68	.68	.68	.68	.68	.68	.68	.67	.67	.67	.67	.66	.65	.65	.64	.63	.63	.63	.62	.61	.60	.842	.831	.823	.813	.808	.798								
45	.69	.70	.71	.72	.72	.72	.72	.72	.72	.72	.71	.71	.71	.71	.70	.70	.69	.68	.68	.67	.66	.65	.65	.64	.898	.890	.882	.874	.865	.855								
0900	.73	.74	.75	.75	.76	.76	.76	.76	.76	.75	.75	.75	.75	.74	.74	.73	.73	.72	.71	.71	.71	.70	.69	.68	.951	.943	.935	.927	.918	.909								
15	.77	.78	.78	.79	.79	.79	.79	.79	.79	.79	.79	.79	.78	.78	.77	.77	.76	.76	.75	.75	.75	.74	.73	.72	.000	.593	.585	.578	.569	.559								
30	.80	.81	.82	.82	.82	.83	.83	.83	.83	.82	.82	.82	.82	.81	.81	.80	.80	.79	.79	.79	.79	.77	.77	.76	.75	.046	.040	.032	.024	.016	.006							
45	.83	.84	.85	.85	.85	.86	.86	.86	.86	.85	.85	.85	.85	.84	.84	.84	.83	.83	.82	.81	.81	.80	.79	.78	.089	.082	.075	.067	.059	.049								
1000	.86	.87	.87	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.87	.87	.86	.86	.85	.85	.85	.84	.83	.82	.81	.128	.121	.114	.107	.098	.088								
15	.88	.89	.90	.90	.90	.91	.91	.91	.91	.91	.90	.90	.90	.90	.89	.89	.88	.88	.87	.87	.86	.85	.85	.84	.163	.157	.150	.142	.133	.123								
30	.90	.91	.92	.92	.93	.93	.93	.93	.93	.93	.92	.92	.92	.92	.91	.91	.90	.90	.90	.89	.89	.88	.87	.86	.194	.187	.181	.173	.164	.154								
45	.92	.93	.94	.94	.94	.95	.95	.95	.95	.95	.94	.94	.94	.94	.93	.93	.92	.92	.92	.91	.90	.89	.88	.87	.220	.214	.207	.199	.190	.180								
MAY-AUG																			32	N	TABLE B-1						SOLAR PARAMETERS						COS Z		COS Z = 1.		*** SIGNIFIES COS Z = 1.	
																			X0	(W/M**2.)													ADD 1000 TO VALUES PRECEDED BY *					

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1

MAY-AUG 32 N

MST	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30							
1100	.94	.94	.94	.95	.95	.96	.96	.96	.96	.96	.96	.96	.96	.95	.95	.95	.94	.94	.93	.93	.92	.91	.90	.89	
	*261	*267	*271	*275	*277	*278	*278	*277	*276	*274	*272	*270	*267	*264	*261	*257	*253	*249	*242	*235	*224	*221	*212	*201	
15	.95	.96	.96	.96	.96	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.96	.95	.95	.95	.91	.93	.93	.92	.91	
	*276	*282	*286	*289	*291	*292	*293	*292	*291	*290	*288	*286	*284	*281	*278	*275	*271	*267	*260	*251	*247	*239	*229	*218	
30	.96	.96	.96	.97	.97	.98	.98	.98	.98	.98	.98	.98	.98	.98	.97	.97	.97	.96	.96	.95	.94	.94	.93	.92	
	*286	*292	*296	*300	*302	*303	*303	*303	*302	*301	*300	*298	*295	*294	*291	*288	*284	*280	*274	*267	*260	*252	*242	*231	
45	.96	.97	.97	.97	.98	.98	.99	.99	.99	.99	.99	.99	.99	.99	.98	.98	.97	.97	.96	.95	.95	.94	.93	.92	
	*292	*298	*302	*305	*307	*309	*309	*309	*309	*308	*307	*305	*304	*302	*299	*296	*293	*289	*282	*275	*269	*260	*250	*238	
1200	.96	.97	.97	.97	.98	.98	.98	.99	.99	.99	.99	.99	.99	.99	.98	.98	.98	.97	.97	.95	.95	.94	.93	.92	
	*294	*299	*303	*306	*309	*310	*311	*311	*311	*311	*310	*309	*307	*307	*305	*303	*300	*297	*293	*287	*280	*273	*263	*253	*241
15	.96	.97	.97	.97	.98	.98	.98	.99	.99	.99	.99	.99	.99	.99	.98	.98	.98	.97	.97	.95	.95	.94	.93	.92	
	*290	*296	*300	*303	*305	*307	*308	*309	*309	*309	*308	*307	*306	*305	*303	*300	*297	*293	*289	*286	*280	*272	*262	*251	*238
30	.95	.96	.96	.96	.97	.97	.98	.98	.98	.98	.98	.98	.98	.98	.98	.97	.97	.97	.96	.95	.95	.94	.93	.92	
	*282	*287	*292	*295	*298	*299	*301	*302	*302	*302	*302	*302	*301	*300	*298	*295	*292	*288	*281	*274	*266	*256	*245	*231	
45	.94	.95	.96	.96	.96	.97	.97	.97	.97	.98	.98	.98	.98	.97	.97	.97	.97	.96	.96	.95	.94	.93	.92	.91	
	*269	*275	*279	*283	*285	*287	*289	*291	*291	*292	*292	*292	*291	*290	*288	*286	*283	*278	*272	*264	*256	*246	*234	*220	
1300	.93	.94	.94	.95	.95	.95	.96	.96	.96	.96	.96	.97	.96	.96	.96	.96	.96	.95	.95	.91	.93	.92	.91	.90	
	*252	*257	*262	*266	*269	*271	*273	*275	*276	*277	*277	*277	*277	*276	*275	*272	*269	*264	*257	*250	*241	*230	*218	*203	
15	.91	.92	.93	.93	.94	.94	.94	.95	.95	.95	.95	.95	.95	.95	.95	.95	.94	.94	.93	.92	.92	.90	.89	.88	
	*230	*236	*240	*244	*248	*250	*253	*255	*257	*258	*258	*259	*259	*256	*256	*254	*251	*246	*239	*231	*221	*210	*197	*182	
30	.89	.90	.91	.91	.92	.92	.92	.93	.93	.93	.93	.93	.93	.93	.93	.93	.93	.92	.91	.91	.90	.89	.87	.86	
	*204	*209	*214	*219	*222	*225	*229	*231	*233	*234	*235	*236	*236	*235	*234	*232	*228	*223	*216	*207	*198	*186	*172	*156	
45	.87	.88	.88	.89	.89	.90	.90	.91	.91	.91	.91	.91	.91	.91	.91	.91	.91	.90	.89	.89	.88	.86	.85	.84	
	*173	*179	*184	*189	*193	*196	*200	*203	*205	*207	*208	*209	*209	*209	*207	*205	*201	*196	*188	*180	*169	*157	*143	*126	

MAY-AUG 32 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST

DATE

MAY

JUN

JUL

AUG

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

1400 .85 .85 .86 .86 .87 .87
 *138*144*150*155*159*163
 15 .82 .82 .83 .84 .84 .85
 *099*106*112*117*122*126
 30 .79 .79 .80 .81 .81 .82
 *057*064*070*075*081*086
 45 .75 .76 .76 .77 .78 .78
 *010*017*024*030*036*041

.88 .88 .88 .89 .89 .89
 *167*170*173*175*177*178
 .85 .85 .86 .86 .86 .86
 *131*134*137*140*142*143
 .82 .82 .83 .83 .83 .83
 *091*095*098*101*103*105
 .79 .79 .80 .80 .80 .80
 *047*051*055*058*061*063

.87 .83 .85 .84 .83 .81
 *157*143*137*124*109*092
 .84 .83 .82 .81 .80 .78
 *121*111*100*086*071*053
 .81 .80 .79 .78 .77 .75
 *081*071*053*045*029*010
 .78 .77 .77 .75 .73 .72
 *038*023*015*000 983 964

1500 .71 .72 .73 .73 .74 .75
 960 968 975 982 988 994
 15 .67 .68 .69 .70 .70 .71
 907 915 923 930 937 943
 30 .63 .64 .65 .66 .66 .67
 851 860 868 875 883 889
 45 .59 .60 .60 .61 .62 .63
 792 801 810 818 826 833

.75 .76 .76 .76 .77 .77
 *000*005*009*013*015*017
 .72 .72 .72 .73 .73 .73
 950 955 960 964 967 969
 .68 .68 .68 .69 .69 .69
 897 903 907 912 915 917
 .63 .64 .64 .65 .65 .65
 841 847 853 857 860 863

.75 .74 .72 .71 .70 .68
 991 980 967 951 934 914
 .71 .70 .69 .67 .66 .64
 941 923 915 899 881 860
 .67 .63 .65 .63 .62 .60
 888 875 851 844 825 803
 .63 .61 .60 .59 .57 .55
 832 813 803 786 766 744

1600 .54 .55 .56 .57 .57 .58
 731 740 749 758 766 774
 15 .50 .50 .51 .52 .53 .54
 667 677 687 696 705 713
 30 .45 .46 .46 .47 .48 .49
 601 612 622 632 642 650
 45 .40 .41 .42 .42 .43 .44
 533 545 556 566 576 586

.59 .60 .60 .60 .61 .61
 783 789 795 800 804 806
 .54 .55 .56 .56 .56 .56
 723 730 736 741 744 747
 .50 .50 .51 .51 .52 .52
 660 668 674 679 683 686
 .45 .46 .46 .47 .47 .47
 596 604 611 616 620 623

.58 .57 .55 .54 .53 .51
 773 759 743 725 704 681
 .53 .52 .51 .49 .48 .46
 711 697 681 662 640 616
 .49 .43 .42 .45 .43 .41
 648 633 615 596 574 549
 .44 .43 .41 .40 .38 .36
 583 567 549 529 506 481

MAY-AUG

32 N

TABLE B-1

SOLAR PARAMETERS

COS Z

X0 (W/M*2.)

*** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY .

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1700	.35	.36	.36	.37	.38	.39	.40	.41	.41	.42	.42	.42	.42	.42	.42	.41	.40	.39	.39	.39	.39	.39	.39	.39
	464	476	488	499	510	520	531	539	546	552	556	559	550	558	565	550	542	516	500	481	460	436	410	
15	.29	.30	.31	.32	.33	.34	.35	.36	.36	.37	.37	.37	.37	.37	.37	.36	.35	.34	.32	.31	.29	.27	.25	
	394	407	419	431	442	453	464	473	480	486	490	493	493	489	483	475	464	447	431	411	389	365	338	
30	.24	.25	.26	.27	.28	.29	.30	.31	.31	.32	.32	.32	.32	.32	.32	.31	.30	.28	.27	.25	.24	.22	.20	
	323	336	349	362	374	385	397	406	413	420	424	427	427	426	422	416	407	378	361	341	318	293	266	
45	.19	.20	.21	.22	.23	.24	.25	.26	.26	.27	.27	.27	.27	.27	.27	.26	.25	.23	.22	.20	.18	.16	.14	
	251	266	279	292	305	316	329	338	346	352	357	360	360	358	354	347	338	308	290	269	246	220	193	
1800	.13	.15	.16	.17	.18	.19	.20	.20	.21	.22	.22	.22	.22	.22	.22	.21	.20	.18	.16	.15	.13	.11	.09	
	180	194	209	222	236	248	261	270	279	285	290	292	292	290	286	279	269	238	219	198	174	147	119	
15	.08	.09	.10	.11	.13	.13	.15	.15	.16	.16	.17	.17	.17	.17	.17	.16	.15	.13	.11	.09	.08	.06	.03	
	108	123	138	153	166	179	193	203	211	218	222	225	225	222	218	210	200	167	145	126	101	74	45	
30	.03	.04	.05	.06	.07	.08	.09	.10	.11	.11	.12	.12	.12	.12	.11	.10	.09	.07	.05	.04	.02	.00	.00	
	037	053	068	083	098	111	125	135	144	150	155	157	157	155	149	141	131	097	077	054	029	002	000	
45	.00	.00	.00	.01	.02	.03	.04	.05	.06	.06	.07	.07	.07	.07	.06	.06	.05	.02	.01	.00	.00	.00	.00	
	000	000	000	015	029	043	058	068	077	084	088	090	090	087	082	073	062	048	027	005	000	000	000	
1900	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.02	.02	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	002	011	018	022	024	024	021	015	006	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

TABLE B-1 SOLAR PARAMETERS COS Z
 *** SIGNIFIES COS Z =1.
 ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												NOV												DEC											
	SEP						OCT						NOV						DEC																	
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30												
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
45	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	021	007	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
0600	.07	.06	.05	.04	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	096	082	068	053	038	022	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000												
15	.13	.12	.11	.09	.08	.07	.06	.05	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	170	156	143	128	113	098	081	064	045	026	006	000	000	000	000	000	000	000	000	000	000	000	000	000												
30	.18	.17	.16	.15	.14	.13	.11	.10	.09	.07	.06	.04	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00												
	244	231	217	203	188	173	156	138	120	100	080	059	032	010	000	000	000	000	000	000	000	000	000	000												
45	.24	.23	.22	.20	.19	.18	.17	.16	.14	.13	.11	.10	.08	.06	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00												
	317	304	291	277	262	247	230	212	194	174	153	132	105	082	059	037	015	000	000	000	000	000	000	000												
0700	.29	.28	.27	.26	.25	.23	.22	.21	.19	.18	.16	.15	.13	.11	.09	.08	.06	.05	.03	.02	.01	.00	.00	.00												
	389	377	364	350	335	320	303	285	266	246	225	203	176	153	130	107	085	064	045	027	011	000	000	000												
15	.34	.33	.32	.31	.30	.29	.27	.26	.25	.23	.21	.20	.18	.16	.14	.13	.11	.09	.08	.07	.05	.05	.04	.03												
	460	448	435	421	407	391	374	356	337	317	296	273	246	223	199	176	154	133	113	095	079	066	056	048												
30	.39	.38	.37	.36	.35	.34	.32	.31	.30	.28	.26	.25	.23	.21	.19	.17	.16	.14	.13	.12	.10	.09	.09	.08												
	529	517	505	491	477	461	444	426	406	386	364	341	314	290	266	243	221	200	180	162	146	133	123	116												
45	.44	.43	.42	.41	.40	.39	.37	.36	.34	.33	.31	.29	.27	.25	.24	.22	.20	.19	.17	.15	.15	.14	.13	.13												
	597	585	572	559	544	528	511	493	473	452	430	407	379	355	332	308	286	264	245	227	211	199	189	182												

SEP-DEC 32 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.49	.48	.47	.46	.45	.43	.42	.41	.39	.37	.35	.34	.32	.30	.28	.26	.25	.23	.22	.21	.19	.19	.18	.17	
	662	650	638	624	610	594	576	558	538	516	494	471	442	419	394	371	348	327	307	290	274	262	252	246	
15	.54	.53	.52	.51	.49	.48	.47	.45	.44	.42	.40	.38	.36	.34	.32	.31	.29	.28	.26	.25	.24	.23	.22	.22	
	725	713	701	687	672	656	638	619	599	578	555	532	503	478	454	431	408	387	367	350	335	323	313	308	
30	.58	.57	.56	.55	.54	.52	.51	.49	.48	.46	.44	.42	.40	.38	.37	.35	.33	.32	.30	.29	.28	.27	.26	.26	
	785	773	761	747	732	716	698	678	658	636	613	589	560	535	511	488	465	444	424	407	393	381	372	367	
45	.63	.61	.60	.59	.58	.57	.55	.53	.52	.50	.48	.46	.44	.42	.40	.39	.37	.35	.34	.33	.32	.31	.30	.30	
	842	831	818	804	789	772	754	734	713	691	668	644	611	590	565	541	519	498	479	462	447	436	428	423	
0900	.67	.65	.64	.63	.62	.60	.59	.57	.56	.54	.52	.50	.48	.46	.44	.42	.41	.39	.38	.36	.35	.35	.34	.34	
	896	884	872	857	842	825	806	786	765	743	719	695	665	640	616	592	569	548	529	513	493	488	480	476	
15	.70	.69	.68	.67	.65	.64	.62	.61	.59	.57	.55	.53	.51	.49	.47	.46	.44	.42	.41	.40	.39	.38	.37	.37	
	947	935	922	907	891	874	855	835	813	790	767	742	712	687	663	639	616	596	577	561	547	537	530	526	
30	.74	.73	.71	.70	.69	.67	.66	.64	.62	.60	.58	.57	.54	.52	.50	.49	.47	.45	.44	.43	.42	.41	.41	.40	
	993	981	968	953	937	919	900	880	858	834	810	785	755	730	705	682	660	639	621	605	592	582	575	572	
45	.77	.76	.75	.73	.72	.70	.69	.67	.65	.63	.61	.59	.57	.55	.53	.51	.50	.48	.47	.46	.45	.44	.44	.43	
	*036*024*010	995	979	961			941	920	898	874	850	825	794	769	745	721	699	679	661	645	633	623	617	615	
1000	.80	.79	.77	.76	.75	.73	.71	.70	.68	.66	.64	.62	.60	.58	.56	.54	.52	.51	.49	.48	.47	.47	.46	.46	
	*075*063*049*033*016	998					978	956	933	910	885	860	829	804	779	756	734	714	696	681	669	661	656	654	
15	.82	.81	.80	.79	.77	.75	.74	.72	.70	.68	.66	.64	.62	.60	.58	.56	.54	.53	.52	.51	.50	.49	.49	.49	
	*110*097*083*067*049*030						*010	996	965	941	916	890	859	834	810	787	765	745	728	714	702	694	689	688	
30	.85	.83	.82	.81	.79	.77	.76	.74	.72	.70	.68	.66	.64	.62	.60	.58	.56	.55	.54	.53	.52	.51	.51	.51	
	*140*127*112*096*078*059						*038*015	992	967	942	916		885	860	836	813	791	772	755	741	731	723	719	719	
45	.86	.85	.84	.82	.81	.79	.77	.76	.74	.72	.70	.67	.65	.63	.61	.60	.58	.56	.55	.54	.53	.53	.53	.53	
	*166*152*137*120*102*082						*061*038*014	989	963	938			907	881	857	834	813	795	778	765	755	748	745	745	

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

COS Z
XC (W/M**2.)

TABLE B-1 SOLAR PARAMETERS

SEP-DEC 32 N

MST	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.88	.87	.85	.84	.82	.81	.79	.77	.75	.73	.71	.69	.66	.64	.62	.61	.59	.58	.57	.55	.55	.54	.54	.54
	*187	*173	*157	*140	*121	*101	*079	*056	*031	*006	980	954	923	893	874	851	831	812	797	781	774	768	766	767
15	.89	.88	.87	.85	.83	.82	.80	.78	.76	.74	.72	.70	.67	.65	.63	.62	.60	.59	.58	.57	.55	.55	.55	.55
	*203	*189	*173	*155	*136	*115	*092	*069	*044	*018	992	966	935	910	886	864	843	825	810	792	780	784	782	784
30	.90	.89	.87	.86	.84	.82	.80	.78	.76	.74	.72	.70	.67	.65	.64	.62	.61	.59	.58	.57	.57	.56	.56	.56
	*215	*200	*183	*165	*145	*124	*101	*076	*051	*025	993	973	942	917	893	871	851	834	819	803	800	795	794	796
45	.91	.89	.88	.86	.84	.83	.81	.79	.76	.74	.72	.70	.68	.66	.64	.62	.61	.60	.58	.57	.57	.57	.57	.57
	*222	*206	*189	*170	*150	*127	*104	*079	*054	*028	001	975	944	919	895	874	855	838	824	813	805	801	801	804
1200	.91	.89	.88	.86	.84	.82	.80	.78	.76	.74	.72	.70	.68	.66	.64	.62	.61	.59	.58	.57	.57	.57	.57	.57
	*224	*208	*190	*170	*149	*127	*103	*077	*051	*025	998	972	941	916	893	872	853	837	823	813	806	803	803	807
15	.91	.89	.88	.86	.84	.82	.80	.78	.76	.74	.71	.69	.67	.65	.63	.62	.60	.59	.58	.57	.57	.57	.57	.57
	*221	*204	*186	*166	*144	*121	*096	*070	*044	*017	991	964	933	909	886	865	847	831	818	803	802	800	801	806
30	.90	.89	.87	.85	.83	.81	.79	.77	.75	.73	.71	.68	.66	.64	.62	.61	.59	.58	.57	.57	.56	.56	.56	.57
	*213	*196	*177	*156	*134	*110	*085	*059	*032	*005	978	951	921	897	874	854	836	820	808	793	794	792	794	799
45	.89	.88	.86	.84	.82	.80	.78	.76	.74	.71	.69	.67	.65	.63	.61	.60	.58	.57	.56	.55	.55	.55	.55	.56
	*201	*183	*163	*142	*118	*094	*068	*042	*015	988	961	934	903	879	857	837	820	805	794	785	781	780	782	788
1300	.88	.86	.84	.83	.81	.79	.76	.74	.72	.70	.68	.66	.63	.61	.60	.58	.57	.56	.55	.54	.54	.54	.54	.55
	*183	*165	*144	*122	*098	*073	*047	*020	993	966	938	912	881	853	836	816	799	785	774	767	763	763	766	773
15	.86	.85	.83	.81	.79	.77	.75	.72	.70	.68	.65	.64	.61	.60	.58	.56	.55	.54	.53	.53	.52	.52	.53	.53
	*161	*142	*121	*098	*074	*048	*022	994	966	939	911	885	855	831	810	791	774	761	751	744	741	741	745	752
30	.84	.83	.81	.79	.77	.75	.72	.70	.68	.66	.64	.61	.59	.57	.56	.54	.53	.52	.51	.51	.51	.51	.51	.51
	*135	*115	*093	*069	*044	*018	.991	963	935	907	880	854	824	800	779	761	745	732	723	715	714	715	720	728
45	.82	.80	.78	.76	.74	.72	.70	.68	.65	.63	.61	.59	.57	.55	.53	.52	.51	.50	.49	.49	.48	.48	.49	.49
	*104	*083	*061	*036	*011	984	.956	928	900	872	844	818	788	765	745	727	711	699	690	685	683	685	690	699

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

COS Z
XO (W/M*2.)

SOLAR PARAMETERS

TABLE B-1

SEP-DEC 32 N

MST	SEP					OCT					DATE					NOV					DEC							
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
1400	.79	.77	.76	.74	.71	.69	.67	.65	.62	.60	.58	.56	.54	.52	.50	.49	.48	.47	.46	.45	.45	.46	.46	.47				
	.068-.047-.024						999	973	945	917	888	860	832	804	778	748	726	706	688	673	662	654	643	636	665			
15	.76	.75	.73	.70	.68	.66	.64	.61	.59	.57	.55	.53	.51	.49	.47	.46	.45	.44	.44	.43	.43	.43	.44	.44				
	.029-.007						983	957	930	902	874	845	816	788	760	734	705	682	663	646	632	621	613	603	608	611	618	628
30	.73	.71	.69	.67	.65	.63	.60	.58	.56	.54	.51	.49	.47	.45	.44	.43	.42	.41	.41	.40	.40	.40	.41	.41				
	.985						962	938	911	884	855	826	797	768	739	712	686	657	635	616	599	586	575	569	565	565	569	576
45	.70	.68	.66	.63	.61	.59	.57	.54	.52	.50	.48	.46	.43	.40	.39	.38	.37	.37	.37	.37	.37	.37	.38	.38				
	.938						914	889	862	834	805	775	746	716	688	660	634	606	584	565	549	536	527	520	518	518	523	530
1500	.66	.64	.62	.60	.57	.55	.53	.50	.48	.46	.44	.42	.40	.38	.37	.35	.34	.34	.33	.33	.33	.33	.34	.35				
	.887						862	836	809	780	750	720	691	661	632	605	579	551	530	512	496	484	475	469	467	468	473	481
15	.62	.60	.58	.55	.53	.51	.48	.46	.44	.42	.39	.38	.35	.34	.32	.31	.30	.30	.29	.29	.29	.30	.30	.31				
	.832						807	780	752	723	693	662	632	603	574	547	521	493	472	454	440	428	419	414	413	414	420	428
30	.57	.55	.53	.51	.49	.46	.44	.42	.39	.37	.35	.33	.31	.30	.28	.27	.26	.26	.25	.25	.25	.26	.26	.27				
	.775						749	721	692	662	632	601	571	541	512	485	460	432	412	394	380	369	361	356	355	358	364	373
45	.53	.51	.49	.46	.44	.42	.39	.37	.35	.32	.30	.29	.26	.25	.24	.23	.22	.21	.21	.21	.21	.22	.22	.23				
	.714						687	659	630	599	568	537	507	477	448	421	396	369	349	332	318	307	300	296	296	298	305	314
1600	.48	.46	.44	.42	.39	.37	.34	.32	.30	.28	.26	.24	.22	.20	.19	.18	.17	.17	.17	.17	.17	.18	.19					
	.651						623	595	564	534	502	471	440	410	381	354	329	303	283	267	253	243	236	233	233	236	243	253
15	.43	.41	.39	.37	.34	.32	.29	.27	.25	.23	.21	.19	.17	.15	.14	.13	.13	.12	.12	.12	.12	.13	.14					
	.585						557	528	497	466	434	402	371	341	312	286	261	234	215	199	187	177	171	168	163	172	179	189
30	.38	.36	.34	.31	.29	.27	.24	.22	.20	.18	.16	.14	.12	.10	.09	.08	.07	.07	.07	.08	.08	.08	.09	.10				
	.517						489	458	427	396	363	332	300	270	242	215	190	164	146	130	118	109	103	101	102	106	113	124
45	.33	.31	.29	.26	.24	.21	.19	.17	.14	.12	.10	.09	.07	.05	.04	.03	.02	.02	.02	.03	.03	.04	.05					
	.448						418	388	356	324	291	259	228	198	169	143	119	093	075	060	048	039	034	032	033	038	046	056

SEP-DEC 32 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1700	.28	.26	.23	.21	.18	.16	.14	.11	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00
	376	347	315	283	251	218	186	154	124	096	069	045	020	002	000	000	000	000	000	001
15	.23	.20	.18	.15	.13	.11	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	304	274	242	209	176	143	111	079	049	021	000	000	000	000	000	000	000	000	000	000
30	.17	.15	.12	.10	.07	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	231	200	167	135	101	068	036	004	000	000	000	000	000	000	000	000	000	000	000	000
45	.12	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	157	125	093	059	026	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1800	.06	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	083	051	017	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	008	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 32 N TABLE B-1 SOLAR PARAMETERS COS Z X0 (W/M**2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST

	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0800	.19	.19	.19	.19	.20	.21	.22	.23	.25	.26	.28	.30	.34	.30	.38	.40	.42	.45	.47	.44	.51	.53	.54	.55	.55
	272	270	271	275	282	292	306	326	347	369	394	421	466	495	525	555	584	613	645	661	632	713	731	747	747
15	.24	.24	.24	.24	.25	.25	.26	.28	.30	.31	.33	.35	.33	.41	.43	.45	.47	.50	.52	.54	.56	.57	.59	.60	.60
	335	334	335	339	347	359	373	394	414	437	462	489	535	564	594	623	652	679	711	735	757	777	794	809	809
30	.28	.28	.28	.28	.29	.30	.31	.33	.34	.36	.38	.40	.43	.45	.43	.50	.52	.54	.57	.54	.60	.62	.63	.64	.64
	396	395	397	402	410	422	437	459	480	503	528	555	601	630	659	688	716	743	774	797	819	838	855	869	869
45	.32	.32	.32	.33	.33	.34	.35	.37	.39	.40	.42	.44	.48	.50	.52	.54	.57	.59	.61	.63	.65	.66	.67	.69	.69
	454	453	456	461	471	483	499	521	542	566	591	618	664	693	722	750	778	804	834	857	877	896	912	926	926
0900	.36	.36	.36	.37	.37	.38	.40	.41	.43	.45	.47	.49	.52	.54	.56	.59	.61	.63	.65	.67	.69	.70	.71	.73	.73
	508	508	511	518	528	541	557	580	602	626	651	678	724	753	781	809	836	862	891	913	933	951	966	979	979
15	.40	.40	.40	.40	.41	.42	.43	.45	.47	.49	.51	.53	.56	.58	.61	.63	.65	.67	.69	.71	.72	.74	.75	.76	.76
	559	560	564	571	582	595	612	636	658	682	708	735	780	809	837	865	891	917	945	965	955	002	017	029	029
30	.43	.43	.43	.44	.45	.46	.47	.49	.51	.52	.54	.56	.60	.62	.64	.66	.68	.70	.73	.74	.76	.77	.79	.80	.80
	607	608	613	621	632	646	663	688	710	735	761	788	833	861	889	916	942	967	994	015	033	049	063	075	075
45	.46	.46	.47	.47	.48	.49	.50	.52	.54	.56	.58	.60	.63	.66	.68	.70	.72	.74	.76	.78	.79	.81	.82	.83	.83
	651	653	658	667	678	693	711	736	759	784	810	837	882	910	937	964	990	014	040	060	078	093	106	117	117
1000	.49	.49	.49	.50	.51	.52	.54	.55	.57	.59	.61	.63	.67	.69	.71	.73	.75	.77	.79	.81	.82	.84	.85	.86	.86
	691	693	699	708	721	737	755	780	804	829	855	882	927	954	982	008	033	056	082	101	118	133	145	156	156
15	.51	.52	.52	.53	.54	.55	.56	.58	.60	.62	.64	.66	.70	.72	.74	.76	.78	.80	.82	.83	.85	.86	.87	.88	.88
	727	730	736	746	759	776	795	820	844	869	896	923	967	995	021	047	071	094	119	137	154	168	180	190	190
30	.54	.54	.54	.55	.56	.57	.59	.61	.63	.65	.67	.69	.72	.74	.76	.78	.80	.82	.84	.85	.87	.88	.89	.90	.90
	758	762	769	780	794	810	830	856	880	906	932	960	003	030	057	082	105	128	152	163	185	199	210	219	219
45	.56	.56	.56	.57	.58	.60	.61	.63	.65	.67	.69	.71	.74	.77	.79	.81	.82	.84	.86	.88	.89	.90	.91	.92	.92
	785	789	797	809	823	841	861	888	912	938	964	991	035	061	087	112	135	156	180	197	212	225	236	245	245

JAN-APR 30 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
XO (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												APR											
	JAN						FEB						MAR						APR					
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25
1400	.50	.51	.52	.53	.55	.56	.58	.61	.62	.64	.65	.68	.71	.73	.75	.76	.77	.79	.80	.81	.82	.83	.84	.85
	708	719	735	753	774	797	821	851	877	903	926	952	990	011	031	049	066	081	097	103	118	127	135	141
15	.47	.48	.49	.51	.52	.54	.56	.58	.60	.62	.64	.66	.68	.70	.72	.73	.75	.76	.77	.79	.80	.81	.82	
	670	681	697	717	738	761	785	815	840	866	891	915	952	973	992	010	027	041	057	063	078	087	095	101
30	.44	.45	.46	.48	.49	.51	.53	.55	.57	.59	.61	.63	.65	.67	.69	.70	.71	.73	.74	.75	.76	.77	.78	.78
	627	639	656	675	697	720	744	774	799	825	850	873	900	930	949	967	983	997	013	024	034	043	050	057
45	.41	.42	.43	.45	.46	.48	.50	.52	.54	.56	.57	.59	.62	.64	.65	.67	.68	.69	.71	.72	.72	.73	.74	.75
	581	593	611	630	652	675	699	729	754	779	804	828	863	883	902	920	935	949	964	975	985	995	003	010
1500	.38	.38	.40	.41	.43	.44	.46	.48	.50	.52	.54	.56	.58	.60	.62	.63	.64	.65	.67	.68	.69	.70	.70	.71
	532	544	562	581	603	626	650	680	705	730	754	778	813	833	851	868	883	897	912	924	934	943	951	959
15	.34	.35	.36	.37	.39	.41	.42	.45	.46	.48	.50	.52	.55	.56	.58	.59	.60	.61	.63	.64	.65	.65	.66	.67
	479	491	509	529	551	574	598	628	652	677	701	724	758	778	796	813	828	842	857	863	878	887	896	904
30	.30	.31	.32	.33	.35	.37	.38	.41	.42	.44	.46	.48	.50	.52	.53	.55	.56	.57	.58	.59	.60	.61	.62	.63
	422	435	453	473	495	518	542	571	596	620	644	666	700	720	738	754	769	783	798	803	819	829	838	846
45	.26	.27	.28	.29	.31	.33	.34	.36	.38	.40	.42	.43	.46	.47	.49	.50	.51	.53	.54	.55	.55	.57	.57	.58
	363	376	394	414	436	459	483	512	536	560	583	606	639	658	676	692	707	721	736	747	758	767	777	785
1600	.21	.22	.24	.25	.27	.28	.30	.32	.34	.35	.37	.39	.41	.43	.44	.45	.47	.48	.49	.50	.51	.52	.53	.54
	301	314	332	352	374	397	421	449	473	497	520	542	575	594	611	627	642	656	671	682	693	703	713	722
15	.17	.18	.19	.20	.22	.24	.25	.27	.29	.31	.32	.34	.37	.38	.39	.41	.42	.43	.44	.45	.46	.47	.48	.49
	236	249	268	288	310	332	356	384	408	431	454	475	508	526	543	559	574	588	603	615	626	636	646	656
30	.12	.13	.14	.16	.17	.19	.20	.23	.24	.26	.28	.29	.32	.33	.34	.35	.37	.38	.39	.40	.41	.42	.43	.44
	170	183	201	221	243	265	288	316	340	363	385	406	438	456	473	489	504	518	533	545	557	568	578	588
45	.07	.08	.09	.11	.12	.14	.16	.18	.19	.21	.22	.24	.26	.28	.29	.30	.31	.33	.34	.35	.36	.37	.38	.38
	101	114	132	152	174	196	219	247	270	292	314	335	366	384	401	417	432	446	461	474	485	497	508	519

JAN-APR 30 N TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												
	JAN			FEB			MAR			APR			
	1	5	10	15	20	25	30	5	10	15	20	25	30
1700	.02	.03	.04	.06	.07	.09	.10	.21	.22	.24	.25	.26	.27
	031	044	062	082	103	125	147	293	310	327	343	358	372
15	.00	.00	.00	.01	.02	.04	.05	.16	.17	.18	.19	.21	.22
	000	000	000	010	031	052	074	217	235	252	268	283	297
30	.00	.00	.00	.00	.00	.00	.00	.10	.11	.13	.14	.15	.16
	000	000	000	000	000	000	000	141	158	175	191	206	220
45	.00	.00	.00	.00	.00	.00	.00	.05	.06	.07	.08	.09	.10
	000	000	000	000	000	000	000	063	081	097	113	129	143
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.04	.05
	000	000	000	000	000	000	000	000	002	019	035	051	066
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000

JAN-APR 30 N TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) *** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												AUG											
	MAY						JUN						JUL						AUG					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.01	.02	.03	.04	.04	.04	.04	.04	.04	.03	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.04	.06	.07	.08	.09	.09	.09	.09	.09	.09	.09	.08	.08	.07	.06	.05	.04	.03	.02	.01	.00	.00	.00	.00
45	.10	.11	.12	.13	.14	.14	.15	.15	.15	.14	.14	.13	.13	.12	.11	.10	.09	.08	.07	.06	.05	.04	.03	.02
0600	.15	.16	.17	.18	.19	.19	.20	.20	.20	.19	.19	.19	.18	.17	.16	.15	.14	.13	.12	.11	.10	.09	.08	.07
15	.21	.22	.23	.24	.24	.25	.25	.25	.25	.24	.24	.24	.23	.23	.22	.21	.20	.19	.18	.17	.16	.15	.14	.13
30	.26	.27	.28	.29	.30	.30	.30	.30	.30	.29	.29	.29	.28	.28	.27	.26	.25	.25	.23	.23	.22	.21	.20	.19
45	.31	.32	.33	.34	.35	.35	.35	.35	.35	.34	.34	.34	.34	.33	.32	.31	.30	.29	.29	.28	.27	.26	.25	.25
0700	.37	.38	.39	.39	.40	.40	.40	.40	.40	.39	.39	.39	.39	.38	.37	.36	.35	.34	.34	.33	.33	.32	.31	.30
15	.42	.43	.44	.44	.45	.45	.45	.45	.45	.44	.44	.44	.44	.43	.42	.41	.40	.39	.39	.38	.37	.36	.35	.35
30	.47	.48	.49	.49	.50	.50	.50	.50	.50	.49	.49	.49	.49	.48	.47	.46	.45	.44	.44	.43	.42	.41	.41	.41
45	.52	.53	.54	.54	.55	.55	.55	.55	.55	.54	.54	.54	.53	.53	.52	.51	.50	.49	.49	.48	.47	.46	.46	.46

TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY .

MST

DATE

MAY

JUN

JUL

AUG

	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.57	.57	.58	.59	.59	.60	.60	.60	.60	.59	.59	.59	.54	.54	.54	.53	.52	.51	.51
	760	771	780	786	790	793	793	792	789	785	780	775	768	761	754	747	739	731	681
15	.61	.62	.63	.63	.64	.64	.64	.64	.64	.64	.63	.63	.63	.62	.62	.61	.60	.60	.55
	822	832	840	846	850	852	852	850	848	844	839	834	828	821	814	807	800	793	745
30	.66	.66	.67	.68	.68	.68	.68	.68	.68	.68	.68	.67	.67	.66	.66	.65	.65	.64	.60
	881	891	898	903	907	908	908	906	904	900	895	890	883	879	872	866	859	852	806
45	.70	.71	.71	.72	.72	.72	.72	.72	.72	.72	.72	.71	.71	.71	.70	.70	.69	.68	.64
	937	946	953	958	961	962	962	960	957	953	949	944	933	933	927	921	915	909	864
0900	.74	.74	.75	.76	.76	.76	.76	.76	.76	.76	.76	.75	.75	.74	.74	.73	.73	.72	.68
	990	998	004	009	012	013	013	012	010	008	004	000	995	990	985	979	974	968	962
15	.77	.78	.79	.79	.79	.80	.80	.80	.80	.79	.79	.79	.78	.78	.78	.77	.77	.76	.72
	039	047	053	057	059	060	060	059	057	055	051	049	043	038	033	029	023	018	012
30	.81	.81	.82	.82	.83	.83	.83	.83	.83	.83	.82	.82	.82	.81	.81	.81	.80	.80	.76
	085	092	097	101	103	104	104	103	101	099	095	092	088	083	079	074	069	064	059
45	.84	.84	.85	.85	.86	.86	.86	.86	.86	.86	.86	.85	.85	.85	.84	.84	.83	.83	.79
	126	133	138	142	144	144	144	143	141	139	136	132	129	125	120	116	112	107	102
1000	.87	.87	.88	.88	.88	.89	.89	.89	.89	.89	.88	.88	.88	.88	.88	.87	.87	.86	.86
	164	171	175	178	180	180	180	179	178	175	173	169	166	162	159	154	150	146	141
15	.89	.90	.90	.91	.91	.91	.91	.91	.91	.91	.91	.91	.91	.90	.90	.90	.89	.89	.89
	198	204	208	211	212	213	213	212	210	208	205	203	199	196	192	189	185	181	177
30	.91	.92	.92	.93	.93	.93	.93	.93	.93	.93	.93	.93	.93	.93	.92	.92	.92	.91	.91
	227	233	237	239	241	241	241	240	239	237	234	232	229	226	223	219	216	212	208
45	.93	.94	.94	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.94	.94	.94	.93	.93
	252	257	261	263	265	265	265	264	263	261	259	257	254	251	248	245	242	239	235

MAY-AUG 30 N TABLE 8-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY -

MST

DATE

MAY

JUN

JUL

AUG

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

1400 .85 .86 .86 .87 .87 .88
 *147*152*157*161*164*168

15 .82 .83 .83 .84 .84 .85
 *107*113*118*122*126*130

30 .79 .80 .80 .81 .81 .82
 *064*070*075*080*084*088

45 .76 .76 .77 .77 .78 .78
 *016*023*028*034*039*043

1500 .72 .72 .73 .74 .74 .75
 966 972 978 984 989 995

15 .68 .68 .69 .70 .70 .71
 911 918 925 931 937 943

30 .63 .64 .65 .66 .66 .67
 854 861 868 875 882 888

45 .59 .60 .60 .61 .62 .62
 794 802 809 817 824 831

1600 .54 .55 .56 .57 .57 .58
 731 739 748 756 763 771

15 .49 .50 .51 .52 .53 .53
 666 675 684 692 700 708

30 .45 .45 .46 .47 .48 .48
 598 608 618 627 636 644

45 .39 .40 .41 .42 .43 .43
 529 540 550 560 569 578

.81 .83 .89 .89 .89 .88
 *182*182*181*180*177*172

.87 .87 .87 .86 .86 .86
 *147*147*146*144*141*136

.84 .84 .84 .83 .83 .83
 *106*106*107*105*101*096

.80 .80 .80 .80 .80 .79
 *065*065*064*062*058*053

.77 .77 .77 .77 .76 .76
 *019*019*018*015*011*005

.73 .73 .73 .73 .72 .72
 969 969 968 965 961 955

.69 .69 .69 .69 .68 .68
 916 916 915 912 908 901

.65 .65 .65 .65 .64 .64
 861 861 859 856 851 844

.61 .61 .61 .60 .60 .59
 803 803 801 798 792 785

.56 .56 .56 .56 .55 .54
 743 742 740 737 731 723

.51 .51 .51 .51 .50 .50
 680 680 678 674 667 659

.47 .47 .46 .46 .45 .45
 616 615 613 609 602 593

.88 .87 .85 .85 .84 .82
 *165*157*147*135*122*106

.85 .81 .83 .82 .81 .79
 *128*120*110*097*083*066

.82 .81 .80 .79 .78 .76
 *088*073*053*055*040*023

.78 .73 .77 .75 .74 .73
 *044*031*023*009 993 975

.75 .74 .73 .72 .70 .69
 996 985 974 959 943 924

.71 .70 .69 .68 .66 .65
 945 934 921 906 889 869

.67 .65 .65 .64 .62 .60
 890 873 856 850 832 811

.63 .62 .60 .59 .58 .56
 833 821 807 790 771 750

.58 .57 .55 .54 .53 .51
 773 760 745 728 708 687

.53 .52 .51 .50 .48 .46
 710 697 681 663 643 620

.49 .47 .45 .45 .43 .41
 645 632 615 596 575 552

.44 .42 .41 .39 .38 .36
 579 564 547 528 506 482

MAY-AUG 30 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.34	.35	.36	.37	.38	.38	.39	.40	.40	.41	.41	.42	.42	.42	.41	.41	.40	.40	.38	.37	.36	.34	.32	.31
	459	470	481	491	501	511	521	529	536	542	546	549	550	549	547	542	535	525	510	495	477	457	435	410
15	.29	.30	.31	.32	.32	.33	.34	.35	.35	.36	.36	.36	.37	.36	.36	.36	.35	.34	.33	.32	.30	.29	.27	.25
	387	399	410	421	432	442	453	462	469	475	479	482	483	482	479	474	466	456	441	425	405	385	362	337
30	.23	.24	.25	.26	.27	.28	.29	.30	.30	.31	.31	.31	.31	.31	.31	.31	.30	.29	.28	.27	.25	.23	.22	.20
	315	327	339	351	362	373	385	393	401	407	411	414	415	414	411	405	397	386	370	353	334	313	289	263
45	.18	.19	.20	.21	.22	.23	.24	.24	.25	.25	.26	.26	.26	.26	.26	.25	.25	.24	.22	.21	.20	.18	.16	.14
	242	255	267	280	292	303	315	324	332	338	343	346	346	345	341	335	327	315	298	281	261	239	215	188
1800	.13	.14	.15	.16	.17	.18	.19	.19	.20	.20	.21	.21	.21	.21	.21	.20	.19	.18	.17	.15	.14	.12	.10	.08
	168	182	196	209	221	233	246	255	263	269	274	277	277	276	272	265	256	244	226	209	188	165	140	113
15	.07	.08	.09	.10	.11	.12	.13	.14	.15	.15	.16	.16	.16	.16	.15	.15	.14	.13	.12	.10	.09	.07	.05	.03
	095	110	124	137	150	163	176	186	194	200	205	208	208	206	202	195	185	173	154	135	115	091	065	037
30	.02	.03	.04	.05	.06	.07	.08	.09	.09	.10	.10	.11	.11	.10	.10	.09	.09	.08	.06	.05	.03	.01	.00	.00
	022	037	052	067	080	093	107	117	125	132	137	139	139	137	132	125	115	102	083	063	042	018	000	000
45	.00	.00	.00	.00	.01	.02	.03	.04	.04	.05	.05	.05	.05	.05	.05	.04	.03	.02	.01	.00	.00	.00	.00	.00
	000	000	000	000	011	024	038	048	057	064	068	071	071	068	063	055	045	031	011	000	000	000	000	000

MAY-AUG 30 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.50	.49	.48	.47	.46	.45	.43	.42	.40	.39	.37	.36	.34	.32	.30	.28	.27	.25	.24	.23	.21	.21	.20	.19	
	669	659	648	636	623	608	593	576	557	537	516	494	467	444	421	398	376	355	336	313	293	290	281	274	
15	.54	.54	.53	.52	.50	.49	.48	.47	.45	.43	.42	.40	.38	.36	.34	.33	.31	.30	.28	.27	.25	.25	.24	.24	
	733	723	712	700	687	672	656	639	620	600	579	556	524	505	482	459	437	416	397	380	355	353	343	337	
30	.59	.58	.57	.56	.55	.54	.52	.51	.49	.48	.46	.44	.42	.40	.39	.37	.35	.34	.32	.31	.29	.29	.29	.28	
	795	785	774	761	748	733	717	699	680	659	639	615	587	564	540	517	495	474	455	433	424	412	403	397	
45	.63	.62	.61	.60	.59	.58	.56	.55	.53	.52	.50	.48	.46	.44	.43	.41	.39	.38	.36	.35	.34	.33	.33	.32	
	853	843	832	820	806	791	774	756	736	716	694	671	643	619	595	572	550	529	511	494	480	468	460	455	
0900	.67	.66	.65	.64	.63	.62	.60	.59	.57	.56	.54	.52	.50	.48	.46	.44	.43	.41	.40	.39	.38	.37	.36	.36	
	908	898	887	874	860	845	828	809	789	768	746	723	694	670	647	624	602	581	563	543	532	522	514	509	
15	.71	.70	.69	.68	.67	.66	.64	.63	.61	.59	.57	.56	.53	.51	.50	.48	.46	.45	.43	.42	.41	.40	.40	.40	
	960	949	938	925	911	895	878	859	839	817	794	771	742	718	695	672	650	629	611	595	582	571	564	560	
30	.75	.74	.73	.72	.70	.69	.67	.66	.64	.62	.61	.59	.56	.55	.53	.51	.49	.48	.47	.45	.44	.44	.43	.43	
	*007	997	985	972	958	941	924	904	884	862	839	815	786	762	739	716	694	674	656	640	627	617	611	607	
45	.78	.77	.76	.75	.73	.72	.70	.69	.67	.65	.63	.62	.59	.57	.56	.54	.52	.51	.49	.48	.47	.47	.46	.46	
	*051	*041	*029	*015	*000	984	965	946	925	903	879	855	826	802	778	755	734	714	696	681	669	660	654	651	
1000	.81	.80	.79	.78	.76	.75	.73	.72	.70	.68	.66	.64	.62	.60	.58	.56	.55	.53	.52	.51	.50	.49	.49	.49	
	*091	*080	*068	*054	*038	*021	*003	983	961	939	915	891	862	838	814	791	770	750	733	713	707	698	693	691	
15	.84	.83	.81	.80	.79	.77	.76	.74	.72	.70	.68	.66	.64	.62	.60	.59	.57	.56	.54	.53	.52	.52	.51	.51	
	*126	*115	*102	*088	*072	*055	*036	*015	993	970	947	922	893	869	845	822	801	782	765	751	740	732	727	726	
30	.86	.85	.84	.82	.81	.79	.78	.76	.74	.72	.70	.68	.66	.64	.62	.61	.59	.58	.56	.55	.54	.54	.54	.54	
	*157	*146	*132	*118	*101	*083	*064	*043	*021	997	973	949	919	895	872	849	828	810	793	780	769	762	758	757	
45	.88	.87	.85	.84	.83	.81	.79	.78	.76	.74	.72	.70	.68	.66	.64	.62	.61	.59	.58	.57	.56	.56	.55	.55	
	*183	*171	*158	*143	*126	*107	*087	*066	*043	*020	995	971	941	917	893	871	851	833	817	804	794	787	784	784	
SEP-DEC	30 N					TABLE B-1					SOLAR PARAMETERS					COS Z					*** SIGNIFICES COS Z = 1.				
																XO (W/M**2.)					ADD 1000 TO VALUES PRECEDED BY *				

MST	SEP							OCT							DATE							NOV							DEC						
	5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30		5	10	15	20	25	30	
1100	.89	.88	.87	.86	.84	.82		.81	.79	.77	.75	.73	.71		.61	.67	.65	.63	.62	.60		.59	.57	.58	.57	.57	.57		.59	.57	.58	.57	.57	.57	
	*205	*193	*179	*163	*145	*126		*106	*084	*061	*037	*013	988		958	934	911	869	869	851		835	823	814	808	805	806		835	823	814	808	805	806	
15	.91	.89	.88	.87	.85	.83		.82	.80	.78	.76	.74	.72		.70	.68	.66	.64	.63	.61		.60	.59	.59	.58	.58	.58		.60	.59	.59	.58	.58	.58	
	*222	*209	*194	*178	*160	*141		*120	*097	*074	*050	*025	000		970	946	923	901	882	864		849	833	820	824	822	824		849	833	820	824	822	824	
30	.92	.90	.89	.87	.86	.84		.82	.80	.78	.76	.74	.72		.70	.68	.66	.65	.63	.62		.61	.60	.59	.59	.59	.59		.61	.60	.59	.59	.59	.59	
	*234	*220	*205	*188	*170	*150		*128	*105	*082	*057	*032	007		977	953	930	909	890	873		859	847	830	835	834	836		859	847	830	835	834	836	
45	.92	.91	.89	.88	.86	.84		.83	.81	.79	.77	.75	.73		.70	.68	.67	.65	.64	.62		.61	.60	.60	.60	.59	.60		.61	.60	.60	.60	.59	.60	
	*241	*227	*211	*194	*174	*154		*132	*108	*084	*059	*034	009		973	955	933	912	893	877		863	852	845	841	841	844		863	852	845	841	841	844	
1200	.92	.91	.89	.88	.86	.84		.82	.81	.78	.76	.74	.72		.70	.68	.66	.65	.63	.62		.61	.60	.60	.60	.60	.60		.61	.60	.60	.60	.60	.60	
	*243	*228	*212	*194	*174	*153		*130	*106	*082	*057	*031	006		976	953	930	910	891	876		863	853	846	843	843	847		863	853	846	843	843	847	
15	.92	.91	.89	.88	.86	.84		.82	.80	.78	.76	.74	.72		.69	.68	.66	.64	.63	.62		.61	.60	.60	.59	.59	.60		.61	.60	.60	.59	.59	.60	
	*240	*225	*208	*189	*169	*147		*124	*099	*074	*049	*023	998		968	945	923	903	885	870		857	843	842	840	841	846		857	843	842	840	841	846	
30	.91	.90	.88	.87	.85	.83		.81	.79	.77	.75	.73	.71		.69	.67	.65	.64	.62	.61		.60	.59	.59	.59	.59	.59		.60	.59	.59	.59	.59	.59	
	*232	*216	*198	*179	*158	*136		*112	*087	*062	*036	*010	995		956	932	911	891	874	859		847	831	831	832	834	839		847	831	831	832	834	839	
45	.90	.89	.87	.86	.84	.82		.80	.78	.76	.74	.72	.70		.67	.66	.64	.62	.61	.60		.59	.58	.56	.58	.58	.59		.59	.58	.56	.58	.58	.59	
	*219	*203	*184	*164	*143	*120		*095	*070	*044	*018	993	967		938	915	894	874	858	843		832	825	820	819	822	828		832	825	820	819	822	828	
1300	.89	.88	.86	.84	.82	.80		.78	.76	.74	.72	.70	.68		.66	.64	.62	.61	.60	.59		.58	.57	.57	.57	.57	.57		.58	.57	.57	.57	.57	.57	
	*202	*184	*165	*145	*127	*099		*074	*048	*022	996	970	944		915	893	872	853	837	823		813	805	802	802	805	812		813	805	802	802	805	812	
15	.87	.86	.84	.82	.81	.79		.76	.74	.72	.70	.68	.66		.64	.62	.60	.59	.58	.57		.56	.55	.55	.55	.55	.56		.56	.55	.55	.55	.55	.56	
	*179	*161	*141	*120	*097	*073		*047	*021	995	969	942	917		888	866	845	827	811	798		789	782	779	780	784	791		789	782	779	780	784	791	
30	.85	.84	.82	.80	.78	.76		.74	.72	.70	.68	.66	.64		.61	.60	.58	.57	.56	.55		.54	.53	.53	.53	.54	.54		.54	.53	.53	.53	.54	.54	
	*152	*133	*113	*091	*067	*042		*016	990	963	937	910	885		856	834	814	796	781	769		760	754	752	753	758	766		760	754	752	753	758	766	
45	.83	.81	.80	.78	.76	.74		.72	.69	.67	.65	.63	.61		.59	.57	.56	.54	.53	.52		.52	.51	.51	.51	.51	.52		.52	.51	.51	.51	.51	.52	
	*120	*101	*080	*057	*033	*007		981	954	927	900	874	849		820	798	778	761	747	735		727	722	720	722	728	736		727	722	720	722	728	736	

SEP-DEC 30 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY +

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5 10 15 20 25 30

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1400 .80 .79 .77 .75 .73 .71

.69 .65 .64 .62 .60 .58

.56 .54 .53 .51 .50 .50

.49 .43 .48 .49 .49 .50

.084*064*042*019 994 968

941 913 886 859 833 808

779 753 739 722 708 697

689 685 694 687 693 702

15 .77 .76 .74 .72 .70 .68

.65 .63 .61 .59 .57 .55

.53 .51 .50 .48 .47 .47

.46 .45 .45 .46 .46 .47

.044*023*000 976 950 924

896 869 841 814 788 763

735 714 695 679 665 655

648 641 644 647 654 664

30 .74 .72 .70 .68 .66 .64

.62 .60 .57 .55 .53 .51

.48 .48 .46 .45 .44 .43

.43 .43 .43 .43 .43 .44

999 978 954 929 903 876

848 820 792 765 739 714

685 665 647 631 619 609

603 603 600 604 611 622

45 .71 .69 .67 .65 .63 .60

.58 .56 .54 .52 .50 .48

.45 .44 .43 .41 .40 .40

.39 .39 .39 .39 .40 .41

951 928 904 879 852 824

796 768 739 712 686 661

634 613 595 580 568 559

553 551 552 557 565 576

1500 .67 .65 .63 .61 .58 .56

.54 .52 .50 .47 .45 .44

.41 .40 .39 .38 .37 .36

.36 .35 .35 .36 .36 .37

899 875 851 824 797 769

740 711 683 656 629 605

578 558 540 526 514 506

501 499 501 506 514 526

15 .63 .61 .59 .56 .54 .52

.50 .47 .45 .43 .41 .39

.37 .36 .34 .33 .33 .32

.32 .31 .32 .32 .33 .33

843 819 793 767 738 710

681 652 623 596 570 545

519 499 482 468 457 449

445 444 445 452 461 472

30 .58 .56 .54 .52 .50 .47

.45 .43 .41 .39 .37 .35

.33 .31 .30 .29 .28 .28

.27 .27 .28 .28 .29 .29

784 759 733 706 677 648

618 589 561 533 507 483

456 437 421 407 397 390

386 385 388 394 404 416

45 .54 .52 .49 .47 .45 .43

.40 .38 .36 .34 .32 .30

.28 .27 .26 .25 .24 .23

.23 .23 .23 .24 .24 .25

722 697 670 642 612 583

553 524 495 467 442 417

392 373 357 344 334 328

324 324 328 334 344 356

1600 .49 .47 .45 .42 .40 .38

.35 .33 .31 .29 .27 .25

.23 .22 .21 .20 .19 .19

.18 .19 .19 .19 .20 .21

658 631 604 575 545 515

485 456 427 399 373 350

324 306 290 278 269 263

260 261 264 271 281 294

15 .44 .42 .40 .37 .35 .33

.30 .28 .26 .24 .22 .20

.18 .17 .16 .15 .14 .14

.14 .14 .14 .15 .15 .16

591 564 535 506 476 445

415 385 356 329 303 280

255 237 222 210 201 196

193 195 199 206 217 230

30 .39 .37 .34 .32 .30 .27

.25 .23 .21 .19 .17 .15

.13 .12 .11 .10 .09 .09

.09 .09 .09 .10 .11 .12

521 494 465 435 404 374

343 313 284 257 231 208

183 166 151 140 132 127

125 125 131 139 150 163

45 .33 .31 .29 .27 .24 .22

.20 .17 .15 .13 .11 .10

.08 .07 .06 .05 .04 .04

.04 .04 .04 .05 .06 .07

450 422 393 362 331 300

269 239 210 183 157 134

110 093 079 068 060 056

055 057 062 070 081 094

SEP-DEC

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	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1700	.28	.26	.24	.21	.19	.16	.14	.12	.10	.08	.06	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02						
	377	349	319	288	256	225	194	164	135	108	082	060	030	019	006	000	000	000	000	000	000	000	010	024						
15	.23	.20	.18	.16	.13	.11	.09	.06	.04	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	304	274	244	212	180	149	118	087	058	031	005	000	000	000	000	000	000	000	000	000	000	000	000	000						
30	.17	.15	.12	.10	.08	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	229	199	168	136	104	072	041	010	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000						
45	.11	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	153	123	091	059	027	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000						
1800	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	077	046	015	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000						
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	002	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000						
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000						
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000						

SEP-DEC 30 N TABLE B-1 SOLAR PARAMETERS COS Z X0 (W/M*2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	JAN						FEB						MAR						APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0600	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0700	.02	.01	.01	.01	.01	.02	.03	.04	.05	.07	.08	.10	.13	.13	.15	.17	.19	.21	.23	.24	.26	.28	.30	.32	.35
	021	017	015	016	020	027	037	054	071	091	113	138	181	209	239	268	298	327	360	386	411	433	453	471	471
15	.07	.06	.06	.06	.07	.07	.08	.09	.11	.12	.14	.15	.19	.21	.23	.25	.27	.29	.32	.34	.36	.37	.39	.40	.40
	093	089	088	089	094	102	113	130	148	168	191	215	258	287	316	346	375	403	436	461	485	507	526	543	543
30	.12	.11	.11	.11	.12	.12	.13	.15	.16	.17	.19	.21	.24	.26	.28	.31	.33	.35	.37	.39	.41	.43	.44	.46	.46
	164	161	159	162	167	175	187	205	223	243	266	291	335	363	392	421	450	478	510	535	558	579	597	613	613
45	.16	.16	.16	.16	.17	.18	.18	.20	.21	.23	.24	.26	.29	.32	.34	.36	.38	.40	.43	.44	.46	.48	.49	.51	.51
	233	230	229	232	238	247	259	278	296	317	341	366	409	437	466	495	523	551	582	606	628	649	666	682	682

JAN-APR 28 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 021 017 015 016 020 027 037 054 071 091 113 138 181 209 239 268 298 327 360 386 411 433 453 471
 093 089 088 089 094 102 113 130 148 168 191 215 258 287 316 346 375 403 436 461 485 507 526 543 579 597 613
 164 161 159 162 167 175 187 205 223 243 266 291 335 363 392 421 450 478 510 535 558 579 597 613 646 666 682
 233 230 229 232 238 247 259 278 296 317 341 366 409 437 466 495 523 551 582 605 628 649 666 682

MST	JAN					FEB					MAR					DATE								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
0800	.21	.21	.21	.21	.22	.22	.23	.25	.26	.28	.30	.31	.35	.37	.39	.41	.43	.45	.48	.50	.51	.53	.54	.55
	300	297	297	301	307	317	330	349	368	389	413	438	481	510	538	566	594	621	652	675	697	716	733	748
	.26	.26	.26	.26	.27	.27	.28	.30	.31	.33	.35	.36	.40	.42	.44	.46	.48	.50	.53	.54	.55	.58	.59	.60
15	364	362	363	367	374	384	398	417	437	459	482	508	551	579	608	636	663	689	719	742	761	781	798	812
30	.30	.30	.30	.30	.31	.32	.33	.34	.36	.38	.39	.41	.43	.47	.49	.51	.53	.55	.57	.59	.61	.62	.64	.65
	426	425	426	430	438	449	463	484	503	526	550	575	619	647	674	702	729	755	784	806	826	844	859	872
	.34	.34	.34	.34	.35	.35	.37	.39	.40	.42	.44	.46	.49	.51	.53	.55	.58	.60	.62	.61	.65	.67	.68	.69
45	485	484	486	491	500	511	526	547	567	590	614	640	683	711	738	765	792	817	845	866	886	903	918	930
0900	.38	.38	.38	.39	.40	.40	.42	.43	.45	.46	.48	.50	.54	.56	.58	.60	.62	.64	.66	.63	.69	.71	.72	.73
	541	540	543	549	558	570	585	607	628	651	675	701	741	772	799	826	851	876	903	924	942	959	973	984
	.42	.42	.42	.43	.43	.44	.46	.47	.49	.51	.52	.54	.58	.60	.62	.64	.66	.68	.70	.72	.73	.75	.76	.77
15	593	593	596	603	613	626	641	664	685	708	733	759	802	829	856	882	907	931	958	977	995	011	024	035
30	.45	.45	.46	.46	.47	.48	.49	.51	.53	.54	.56	.58	.62	.64	.66	.68	.70	.72	.74	.75	.77	.78	.79	.80
	641	642	646	654	664	678	694	717	738	762	787	813	856	883	909	935	959	983	*008	*027	*041	*059	*072	*083
	.49	.49	.49	.50	.50	.51	.53	.54	.56	.58	.60	.62	.65	.67	.69	.71	.73	.75	.77	.79	.80	.81	.83	.83
45	686	687	692	700	711	726	743	766	788	812	837	863	905	932	958	984	*008	*030	*055	*073	*090	*104	*116	*126
1000	.51	.52	.52	.53	.53	.55	.56	.58	.59	.61	.63	.65	.66	.70	.73	.74	.76	.78	.80	.82	.83	.84	.85	.86
	727	729	734	743	755	770	787	811	834	858	883	909	951	978	003	028	051	073	*097	*115	*131	*144	*155	*165
	.54	.54	.55	.55	.56	.57	.59	.61	.62	.64	.66	.68	.71	.73	.75	.77	.79	.81	.83	.85	.86	.87	.88	.89
15	763	766	772	782	794	810	828	852	875	899	924	950	993	018	044	068	091	*112	*135	*152	*167	*180	*191	*199
30	.56	.56	.57	.58	.59	.60	.61	.63	.65	.67	.69	.71	.74	.76	.78	.80	.82	.84	.85	.87	.88	.89	.90	.91
	795	798	805	816	829	845	864	889	912	936	962	987	*029	*055	*080	*103	*126	*146	*169	*185	*199	*211	*222	*230
	.58	.58	.59	.60	.61	.62	.64	.65	.67	.69	.71	.73	.76	.78	.80	.82	.84	.86	.88	.89	.90	.91	.92	.93
45	823	827	834	845	859	876	895	921	944	969	994	020	*061	*087	*111	*134	*156	*176	*197	*213	*227	*238	*248	*255

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M*2.)

TABLE B-1

28 N

JAN-APR

MST

MST	JAN							FEB							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30			
1100	.60	.60	.61	.62	.63	.64	.65	.67	.69	.71	.73	.75	.76	.80	.82	.84	.86	.87	.89	.91	.92	.93	.94	.95				
	846	850	859	870	885	902	922	948	971	996	022	047	085	113	137	160	181	200	221	233	249	260	269	276				
15	.61	.61	.62	.63	.64	.65	.67	.69	.71	.73	.75	.77	.78	.80	.82	.84	.86	.87	.89	.91	.92	.93	.94	.95				
	864	869	878	890	906	923	944	970	994	019	044	070	111	135	159	181	201	220	240	251	267	277	286	293				
30	.62	.62	.63	.64	.65	.67	.68	.70	.72	.74	.76	.78	.81	.83	.85	.87	.89	.90	.92	.93	.94	.95	.96	.97				
	877	883	893	906	922	940	961	988	012	037	062	088	128	152	175	196	216	234	254	269	279	289	298	304				
45	.63	.63	.64	.65	.66	.67	.69	.71	.73	.75	.77	.79	.82	.84	.86	.87	.89	.91	.92	.94	.95	.96	.96	.97				
	886	892	903	916	933	952	973	000	024	049	075	100	140	163	186	207	226	244	262	276	287	297	304	310				
1200	.63	.63	.64	.65	.66	.68	.69	.72	.73	.75	.77	.79	.82	.84	.86	.88	.89	.91	.93	.94	.95	.96	.97	.97				
	889	896	907	922	939	958	979	007	032	057	082	107	147	170	192	212	231	248	266	279	290	299	306	312				
15	.63	.63	.64	.65	.67	.68	.70	.72	.74	.76	.77	.79	.83	.84	.86	.88	.89	.91	.92	.94	.95	.96	.96	.97				
	888	895	907	922	940	960	981	009	034	059	084	109	148	171	193	213	231	247	264	277	287	296	303	308				
30	.62	.63	.64	.65	.66	.68	.69	.72	.73	.75	.77	.79	.82	.84	.86	.88	.89	.90	.92	.93	.94	.95	.96	.96				
	882	890	902	918	936	956	978	006	031	056	081	106	145	167	188	207	225	241	258	270	280	288	295	300				
45	.62	.62	.63	.64	.66	.67	.69	.71	.73	.75	.77	.79	.82	.83	.85	.87	.88	.90	.91	.92	.93	.94	.95	.95				
	871	879	892	908	927	948	970	998	023	048	073	098	136	158	178	197	214	230	246	257	267	275	282	287				
1300	.60	.61	.62	.63	.65	.66	.68	.70	.72	.74	.76	.78	.81	.82	.84	.86	.87	.88	.90	.91	.92	.93	.93	.94				
	855	864	877	894	913	934	957	985	010	035	060	084	122	143	163	182	199	213	229	243	259	267	264	269				
15	.59	.60	.61	.62	.63	.65	.67	.69	.71	.73	.74	.76	.79	.81	.83	.84	.86	.87	.88	.89	.90	.91	.92	.92				
	834	843	858	875	894	915	938	967	992	017	042	066	102	124	143	161	178	192	207	219	227	234	241	246				
30	.57	.58	.59	.60	.62	.63	.65	.67	.69	.71	.73	.75	.78	.79	.81	.82	.84	.85	.86	.87	.88	.89	.90	.90				
	808	818	833	851	871	892	915	944	969	994	018	042	078	099	118	136	152	166	180	191	200	207	213	218				
45	.55	.56	.57	.58	.60	.61	.63	.65	.67	.69	.71	.73	.75	.77	.79	.80	.81	.83	.84	.85	.86	.87	.87	.88				
	778	789	804	822	842	864	887	916	941	966	990	014	049	070	088	105	121	135	149	153	158	175	181	186				

JAN-APR

28 N

TABLE B-1

SOLAR PARAMETERS
COS Z
XO (W/M*2.)

*** SIGNIFIES COS Z =1.

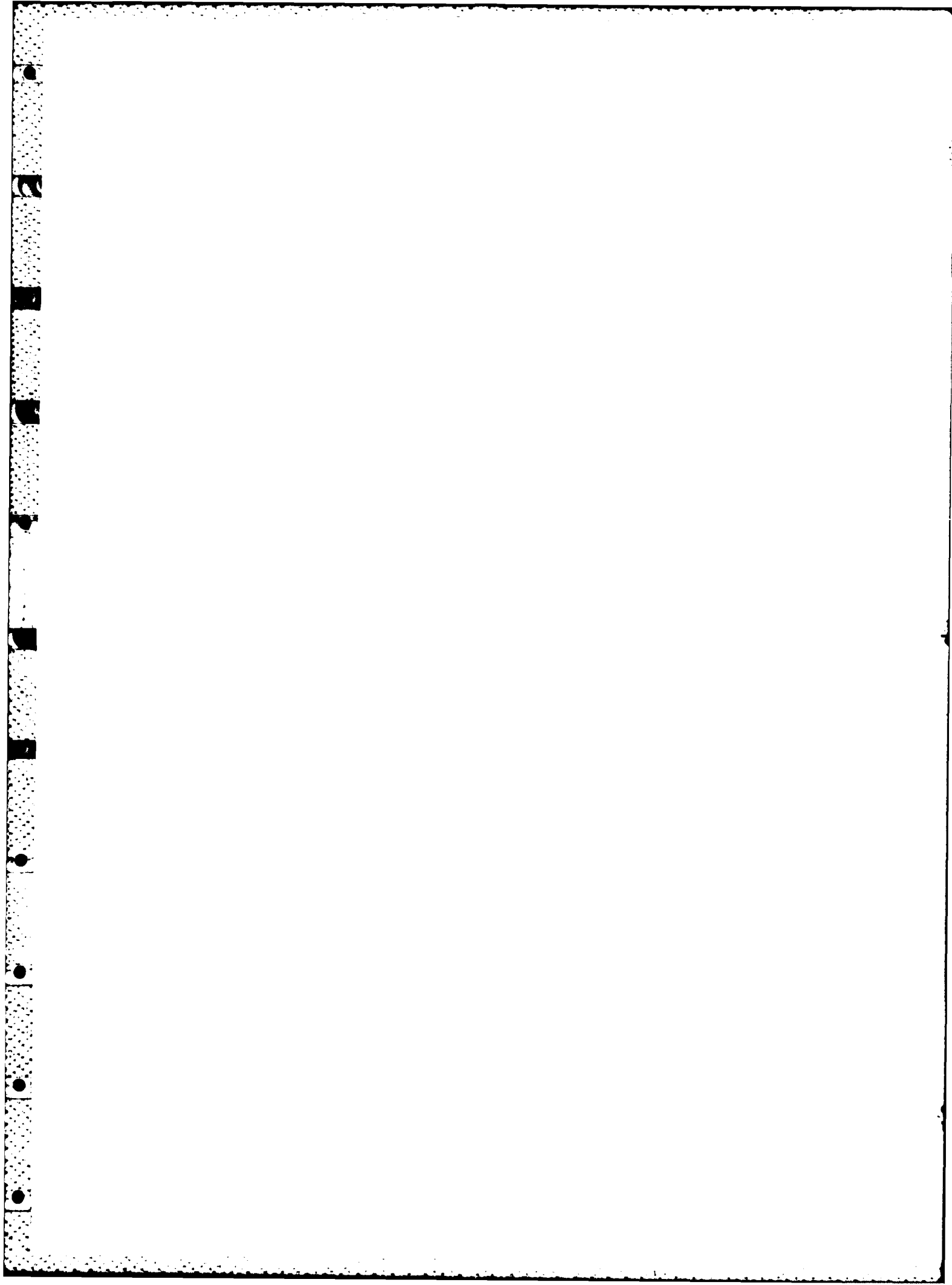
ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1400	.53	.53	.54	.56	.57	.59	.61	.63	.65	.67	.68	.70	.73	.75	.76	.78	.79	.80	.81	.82	.83	.84	.85	.85	.85
	744	755	770	789	809	831	855	884	908	933	957	980	*015	.035	.054	.070	.085	.099	*113	.123	.131	.138	.145	*150	*150
15	.50	.51	.52	.53	.55	.56	.58	.60	.62	.64	.66	.67	.70	.72	.73	.75	.76	.77	.78	.79	.80	.81	.82	.82	.82
	705	716	733	751	772	794	818	847	871	895	919	942	977	.996	.014	.031	.045	.059	*072	.082	.090	.097	*104	*109	*109
30	.47	.48	.49	.50	.52	.53	.55	.57	.59	.61	.63	.64	.67	.69	.70	.71	.73	.74	.75	.75	.77	.78	.78	.78	.79
	662	674	690	709	730	753	776	805	829	854	877	900	934	.953	.970	.986	*001	*014	*027	.037	.045	.052	*059	*065	*065
45	.44	.44	.46	.47	.48	.50	.52	.54	.56	.58	.59	.61	.64	.65	.67	.68	.69	.70	.72	.72	.73	.74	.75	.75	.75
	615	627	644	663	684	707	730	759	783	807	831	853	886	.905	.922	.938	.952	.965	.978	.987	.996	*003	*010	*016	*016
1500	.40	.41	.42	.43	.45	.47	.48	.50	.52	.54	.56	.57	.60	.62	.63	.64	.65	.66	.68	.69	.69	.70	.71	.71	.71
	565	577	594	614	635	657	681	709	733	757	780	802	835	.853	.870	.886	.899	.912	.925	.934	.943	.950	.957	.964	.964
15	.36	.37	.38	.40	.41	.43	.45	.47	.48	.50	.52	.54	.56	.57	.59	.60	.61	.62	.63	.64	.65	.66	.67	.67	.67
	510	523	540	560	581	604	627	656	680	703	726	747	779	.797	.814	.829	.843	.855	.868	.878	.886	.894	.901	.908	.908
30	.32	.33	.34	.36	.37	.39	.40	.43	.44	.46	.48	.49	.52	.53	.55	.56	.57	.58	.59	.60	.61	.62	.62	.63	.63
	453	466	483	503	524	547	570	598	622	645	667	689	720	.738	.754	.769	.783	.795	.808	.813	.825	.834	.842	.849	.849
45	.28	.29	.30	.31	.33	.35	.36	.38	.40	.42	.43	.45	.47	.49	.50	.51	.52	.53	.54	.55	.56	.57	.58	.58	.58
	392	405	423	443	464	487	510	538	561	584	606	627	658	.675	.691	.706	.719	.732	.745	.754	.763	.772	.780	.787	.787
1600	.23	.24	.25	.27	.28	.30	.32	.34	.35	.37	.39	.40	.43	.44	.45	.46	.47	.49	.50	.50	.51	.52	.53	.54	.54
	329	342	360	380	401	423	446	474	.497	.520	.541	.562	592	.610	.625	.640	.653	.665	.678	.688	.698	.706	.714	.722	.722
15	.19	.20	.21	.22	.24	.25	.27	.29	.31	.32	.34	.35	.38	.39	.40	.41	.42	.43	.45	.45	.46	.47	.48	.49	.49
	263	276	294	314	335	357	380	408	.430	.452	.474	.494	524	.541	.557	.571	.584	.596	.609	.620	.629	.638	.647	.655	.655
30	.14	.15	.16	.17	.19	.21	.22	.24	.26	.27	.29	.30	.33	.34	.35	.36	.37	.38	.39	.40	.41	.42	.43	.43	.43
	195	208	226	246	267	289	311	338	.361	.383	.403	.423	453	.470	.485	.499	.513	.525	.538	.543	.559	.568	.577	.586	.586
45	.09	.10	.11	.12	.14	.16	.17	.19	.21	.22	.24	.25	.27	.29	.30	.31	.32	.33	.34	.35	.36	.37	.37	.38	.38
	125	138	156	176	197	218	241	267	.289	.310	.331	.351	380	.396	.412	.426	.439	.451	.465	.475	.486	.496	.506	.515	.515

JAN-APR 28 N TABLE B-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST	DATE																							
	JAN			FEB			MAR			APR														
	1	5	10	15	20	25	30	5	10	15	20	25	30											
1700	.04	.05	.06	.07	.09	.10	.12	.14	.15	.17	.18	.20	.22	.23	.24	.25	.26	.27	.29	.23	.30	.31	.32	.33
	054	067	085	104	125	146	168	194	215	236	257	276	305	321	336	350	364	376	390	401	412	422	433	443
15	.00	.00	.01	.02	.04	.05	.07	.09	.10	.12	.13	.14	.16	.18	.19	.20	.21	.22	.23	.24	.25	.26	.27	.27
	000	000	011	031	051	072	093	119	140	161	181	200	223	244	259	273	287	299	314	325	336	347	358	369
30	.00	.00	.00	.00	.00	.00	.01	.03	.05	.06	.07	.09	.11	.12	.13	.14	.15	.16	.17	.18	.19	.20	.21	.22
	000	000	000	000	000	000	018	043	064	084	103	122	150	166	181	195	209	221	236	243	260	271	283	294
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.05	.06	.07	.08	.09	.10	.12	.13	.13	.14	.15	.16
	000	000	000	000	000	000	000	000	000	006	025	043	071	087	102	116	130	143	158	170	183	195	207	219
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	.11
	000	000	000	000	000	000	000	000	000	000	000	030	000	007	022	036	050	064	079	092	105	118	131	144
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03	.04	.05
	000	000	000	000	000	000	000	000	000	000	000	030	000	000	000	000	000	000	001	014	028	041	055	068
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

JAN-APR 28 N TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) *** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *



MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.01	.02	.02	.03	.03	.03	.02	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	001	013	023	030	035	036	035	032	027	020	012	002	000	000	000	000	000	000	000	000	000
30	.03	.04	.06	.06	.07	.08	.08	.08	.08	.08	.07	.07	.06	.05	.05	.04	.03	.02	.01	.00	.00	.00	.00	.00
	042	059	074	085	094	101	105	106	105	101	095	089	081	071	061	049	037	024	009	000	000	000	000	000
45	.09	.10	.11	.12	.12	.13	.13	.13	.13	.13	.13	.12	.11	.11	.10	.09	.08	.07	.06	.05	.04	.03	.03	.02
	117	133	147	158	166	172	176	176	175	171	166	159	151	141	131	120	108	096	082	070	058	046	034	022
0600	.14	.15	.16	.17	.18	.18	.19	.19	.19	.18	.18	.17	.17	.16	.15	.14	.14	.13	.12	.11	.10	.09	.08	.07
	191	207	220	230	238	243	247	247	245	241	236	229	221	212	202	192	180	169	155	141	132	121	110	099
15	.20	.21	.22	.23	.23	.24	.24	.24	.24	.24	.23	.23	.22	.21	.21	.20	.19	.18	.17	.15	.15	.15	.14	.13
	266	281	293	303	310	315	318	317	315	312	306	300	292	283	273	263	253	242	229	213	207	196	186	176
30	.25	.26	.27	.28	.29	.29	.29	.29	.29	.29	.28	.28	.27	.27	.26	.25	.25	.24	.23	.22	.21	.20	.20	.19
	340	355	366	375	382	386	388	388	386	382	376	370	362	353	344	335	325	314	302	292	282	272	262	252
45	.31	.32	.33	.33	.34	.34	.35	.35	.34	.34	.34	.33	.33	.32	.31	.31	.30	.29	.28	.27	.27	.26	.25	.24
	414	427	438	447	453	456	458	457	455	451	446	439	432	424	415	405	396	386	375	365	356	346	337	327
0700	.36	.37	.38	.39	.39	.40	.40	.40	.40	.39	.39	.38	.38	.37	.37	.36	.35	.34	.34	.33	.32	.31	.31	.30
	486	499	509	517	523	526	527	526	524	520	514	508	501	493	484	476	467	458	447	433	420	411	402	
15	.41	.42	.43	.44	.44	.45	.45	.45	.45	.44	.44	.44	.43	.42	.42	.41	.40	.40	.39	.39	.38	.37	.36	.35
	558	570	579	586	591	594	595	594	591	587	582	575	569	561	553	545	536	528	517	503	501	492	484	476
30	.47	.48	.48	.49	.49	.50	.50	.50	.50	.49	.49	.49	.48	.47	.47	.46	.46	.45	.44	.43	.43	.42	.41	.41
	627	639	647	654	658	661	661	660	657	653	648	642	635	628	620	612	604	596	587	573	571	563	555	547
45	.52	.53	.53	.54	.54	.55	.55	.55	.54	.54	.54	.53	.53	.52	.52	.51	.51	.50	.49	.49	.48	.47	.47	.46
	695	705	714	720	724	726	726	724	721	717	712	706	700	693	686	678	671	663	655	647	640	633	625	617

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) *** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
	DATE																							
0800	.57	.57	.58	.59	.59	.59	.59	.59	.59	.59	.58	.58	.58	.57	.57	.56	.55	.55	.54	.54	.53	.52	.52	.51
	760	770	778	783	787	788	788	786	783	779	774	769	762	756	749	742	735	729	720	713	706	700	692	685
15	.61	.62	.63	.63	.64	.64	.64	.64	.64	.63	.63	.63	.62	.62	.61	.61	.60	.60	.59	.58	.58	.57	.57	.56
	823	832	839	844	847	849	848	846	843	834	834	829	823	817	811	804	798	791	784	777	771	764	757	750
30	.66	.66	.67	.68	.68	.68	.68	.68	.68	.67	.67	.67	.67	.66	.66	.65	.65	.64	.63	.63	.62	.62	.61	.60
	883	892	898	903	905	906	905	903	900	896	892	887	881	875	869	864	858	852	844	838	832	826	820	813
45	.70	.71	.71	.72	.72	.72	.72	.72	.72	.72	.72	.71	.71	.70	.70	.69	.69	.68	.68	.67	.67	.66	.66	.65
	940	948	954	958	960	961	960	958	955	951	946	942	936	931	926	920	915	909	902	897	891	885	879	872
0900	.74	.75	.75	.76	.76	.76	.76	.76	.76	.75	.75	.75	.75	.74	.74	.73	.73	.73	.72	.71	.71	.70	.70	.69
	994	001	007	010	012	013	011	009	006	002	998	994	989	984	979	974	969	964	957	952	947	941	935	928
15	.78	.78	.79	.79	.80	.80	.80	.80	.80	.79	.79	.79	.78	.78	.77	.77	.76	.76	.76	.75	.75	.74	.74	.73
	044	051	056	059	061	061	060	057	054	051	047	042	038	033	029	024	019	015	009	004	999	993	987	981
30	.81	.82	.82	.83	.83	.83	.83	.83	.83	.82	.82	.82	.82	.82	.81	.81	.80	.80	.79	.79	.78	.78	.77	.77
	091	097	102	104	106	106	104	102	099	096	092	088	084	079	075	071	067	062	057	052	048	042	036	030
45	.84	.85	.85	.86	.86	.86	.86	.86	.86	.86	.85	.85	.85	.85	.84	.84	.84	.83	.83	.82	.82	.81	.81	.80
	133	139	143	146	147	147	145	143	140	137	133	130	126	122	118	114	110	106	101	097	092	087	081	074
1000	.87	.88	.88	.89	.89	.89	.89	.89	.89	.88	.88	.88	.88	.88	.87	.87	.87	.86	.86	.85	.85	.84	.84	.83
	172	177	181	183	184	184	182	180	177	174	171	168	163	161	157	154	150	146	142	138	133	128	122	115
15	.90	.90	.91	.91	.91	.91	.91	.91	.91	.91	.91	.91	.91	.90	.90	.90	.89	.89	.89	.88	.88	.87	.86	.86
	206	211	214	216	217	217	215	213	211	208	205	202	199	195	192	189	186	183	178	174	170	164	158	151
30	.92	.92	.93	.93	.93	.94	.94	.94	.94	.93	.93	.93	.93	.93	.92	.92	.92	.91	.91	.91	.90	.89	.89	.88
	236	241	244	245	246	245	244	242	240	237	234	232	229	226	223	220	218	214	210	203	202	197	190	183
45	.94	.94	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.94	.94	.94	.94	.93	.93	.92	.92	.91	.90
	261	266	268	270	270	270	268	267	265	262	260	257	255	253	250	248	245	242	238	234	230	224	218	210

MAY-AUG 28 N TABLE 8-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY +

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1100	.95 .96 .96 .97 .97 .97	*282*286*288*290*290*290	.97 .97 .97 .97 .97 .97	*288*287*285*283*261*279	.96 .96 .96 .96 .96 .95	*277*275*272*270*268*265	.95 .94 .94 .93 .93 .92	*261*257*253*247*241*233	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252		
15	.96 .97 .97 .98 .98 .98	*298*301*304*305*305*305	.98 .98 .98 .98 .98 .98	*304*303*301*299*293*296	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
30	.97 .98 .98 .98 .99 .99	*309*312*315*316*316*316	.99 .99 .99 .99 .99 .99	*315*314*313*311*310*308	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
45	.98 .98 .99 .99 .99 .99	*315*318*320*322*322*322	.99 .99 .99 .99 .99 .99	*321*321*320*318*317*316	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
1200	.98 .98 .99 .99 .99 .99	*316*320*322*323*324*324	.99 .99 .99 .99 .99 .99	*323*323*322*321*320*320	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
15	.98 .98 .98 .99 .99 .99	*313*316*318*319*320*320	.99 .99 .99 .99 .99 .99	*320*320*320*319*319*318	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
30	.97 .97 .98 .98 .98 .99	*304*307*310*311*312*313	.99 .99 .99 .99 .99 .99	*313*313*313*313*313*312	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
45	.96 .96 .97 .97 .97 .98	*291*294*296*298*299*300	.98 .98 .98 .98 .98 .98	*301*301*301*302*302*302	.98 .98 .98 .98 .98 .98	*294*292*290*288*286*284	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252				
1300	.95 .95 .95 .96 .96 .96	*273*276*279*280*282*283	.97 .97 .97 .97 .97 .97	*284*285*286*286*287*287	.96 .96 .96 .96 .96 .96	*277*275*272*270*268*265	.95 .94 .94 .93 .93 .92	*261*257*253*247*241*233	.96 .93 .93 .95 .95 .94	*280*273*271*266*259*251	.97 .97 .96 .96 .95 .94	*294*290*285*279*272*263	.98 .97 .97 .97 .96 .95	*303*293*294*288*280*271	.98 .93 .97 .97 .96 .95	*307*303*298*291*283*274	.98 .93 .97 .96 .96 .95	*307*302*297*290*281*272	.98 .97 .97 .96 .95 .94	*301*297*291*284*275*264	.97 .97 .95 .95 .94 .93	*291*286*280*272*263*252		
15	.93 .93 .94 .94 .94 .95	*250*253*256*258*260*261	.95 .95 .95 .96 .96 .96	*263*264*265*266*267*268	.94 .94 .94 .94 .94 .94	*245*243*241*238*238*238	.93 .92 .92 .92 .92 .92	*233*227*220*210*199*186	.95 .94 .93 .92 .92 .91	*257*252*244*236*225*213	.93 .92 .91 .90 .89 .88	*233*227*220*210*199*186	.91 .90 .89 .88 .87 .86	*205*193*190*180*168*155	.96 .95 .95 .94 .93 .92	*277*271*265*256*247*235	.95 .94 .93 .92 .92 .91	*257*252*244*236*225*213	.93 .92 .91 .90 .89 .88	*233*227*220*210*199*186	.91 .90 .89 .88 .87 .86	*205*193*190*180*168*155		
30	.91 .91 .92 .92 .93 .93	*223*226*229*232*234*235	.93 .93 .94 .94 .94 .94	*237*239*240*242*243*244	.92 .92 .92 .92 .92 .92	*217*217*217*216*214*210	.91 .91 .91 .91 .91 .91	*208*210*211*213*215*216	.96 .95 .95 .94 .93 .92	*277*271*265*256*247*235	.95 .94 .93 .92 .92 .91	*257*252*244*236*225*213	.93 .92 .91 .90 .89 .88	*233*227*220*210*199*186	.91 .90 .89 .88 .87 .86	*205*193*190*180*168*155	.96 .95 .95 .94 .93 .92	*277*271*265*256*247*235	.95 .94 .93 .92 .92 .91	*257*252*244*236*225*213	.93 .92 .91 .90 .89 .88	*233*227*220*210*199*186	.91 .90 .89 .88 .87 .86	*205*193*190*180*168*155
45	.89 .89 .89 .90 .90 .91	*191*195*198*200*203*205	.91 .91 .91 .91 .91 .91	*208*210*211*213*215*216	.92 .92 .92 .92 .92 .92	*217*217*217*216*214*210	.91 .91 .91 .91 .91 .91	*208*210*211*213*215*216	.96 .95 .95 .94 .93 .92	*277*271*265*256*247*235	.95 .94 .93 .92 .92 .91	*257*252*244*236*225*213	.93 .92 .91 .90 .89 .88	*233*227*220*210*199*186	.91 .90 .89 .88 .87 .86	*205*193*190*180*168*155	.96 .95 .95 .94 .93 .92	*277*271*265*256*247*235	.95 .94 .93 .92 .92 .91	*257*252*244*236*225*213	.93 .92 .91 .90 .89 .88	*233*227*220*210*199*186	.91 .90 .89 .88 .87 .86	*205*193*190*180*168*155

MAY-AUG 28 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 ADD 1000 TO VALUES PRECEDED BY *

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
1700	.34	.35	.35	.36	.37	.38	.38	.39	.40	.40	.41	.41
	453	463	473	482	492	501	511	519	525	531	536	539
15	.28	.29	.30	.31	.32	.32	.33	.34	.34	.35	.35	.36
	380	391	401	411	421	431	442	450	457	463	467	470
30	.23	.24	.25	.25	.26	.27	.28	.29	.29	.30	.30	.30
	306	317	329	340	350	360	372	380	387	393	398	401
45	.17	.18	.19	.20	.21	.22	.23	.23	.24	.24	.25	.25
	231	243	255	267	278	289	301	310	317	324	328	331
1800	.12	.13	.14	.15	.16	.16	.17	.18	.19	.19	.20	.20
	157	169	182	194	206	218	230	239	247	253	258	261
15	.06	.07	.08	.09	.10	.11	.12	.13	.13	.14	.14	.14
	082	095	109	122	134	146	159	168	177	183	188	191
30	.01	.02	.03	.04	.05	.06	.07	.07	.08	.09	.09	.09
	008	022	036	050	063	075	086	098	106	113	118	121
45	.00	.00	.00	.00	.00	.00	.01	.02	.03	.03	.04	.04
	000	000	000	000	000	005	018	028	037	044	049	051

MAY-AUG 28 N TABLE B-1 SOLAR PARAMETERS COS Z XO (W/M**2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	009	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0600	.06	.06	.05	.04	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	086	075	064	052	040	028	014	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.12	.11	.11	.10	.09	.08	.07	.06	.05	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	163	153	142	131	119	106	093	079	063	047	029	011	000	000	000	000	000	000	000	000	000	000	000	000
30	.18	.17	.16	.15	.14	.14	.13	.11	.10	.09	.08	.06	.05	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	240	230	219	208	197	184	171	157	141	124	106	058	064	044	023	002	000	000	000	000	000	000	000	000
45	.23	.23	.22	.21	.20	.19	.18	.17	.16	.15	.13	.12	.10	.09	.07	.06	.04	.03	.01	.00	.00	.00	.00	.00
	316	306	296	286	274	262	248	234	218	201	183	164	140	119	099	077	056	036	018	000	000	000	000	000
0700	.29	.28	.27	.27	.26	.25	.24	.23	.21	.20	.19	.17	.15	.14	.12	.11	.09	.08	.06	.05	.04	.03	.02	.02
	391	382	372	361	350	338	324	309	293	276	258	238	214	193	172	150	129	109	090	073	057	044	032	024
15	.35	.34	.33	.32	.31	.30	.29	.28	.27	.25	.24	.22	.21	.19	.17	.16	.14	.13	.12	.10	.09	.08	.07	.07
	465	456	446	436	424	412	398	383	367	350	331	311	286	265	243	222	201	181	162	144	129	115	104	096
30	.40	.39	.38	.37	.37	.35	.34	.33	.32	.31	.29	.28	.26	.24	.22	.21	.19	.18	.16	.15	.14	.13	.12	.12
	537	528	519	508	497	485	471	456	439	421	402	382	357	335	313	292	271	250	231	214	198	185	174	166
45	.45	.44	.44	.43	.42	.41	.39	.38	.37	.36	.34	.32	.31	.29	.27	.26	.24	.23	.21	.20	.19	.18	.17	.17
	608	599	589	579	568	555	541	526	509	491	471	451	425	403	381	359	338	318	299	281	256	253	243	233

SEP-DEC 28 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST

DATE

DEC

SEP

OCT

NOV

DEC

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

0800 .50 .49 .49 .48 .47 .46

609 593 576 557 538 517

.35 .34 .32 .30 .29 .27

.26 .25 .23 .23 .22 .21

15 .55 .54 .53 .52 .51 .50

673 657 640 621 601 580

.40 .38 .36 .35 .33 .32

.30 .29 .28 .27 .26 .26

30 .60 .59 .58 .57 .56 .55

735 719 701 682 662 640

.44 .42 .41 .39 .37 .36

.34 .33 .32 .31 .31 .30

45 .64 .63 .62 .61 .60 .59

793 777 759 739 719 697

.42 .40 .45 .43 .41 .40

.38 .37 .36 .35 .35 .34

0900 .68 .67 .66 .66 .64 .63

848 831 813 793 772 750

.52 .50 .48 .47 .45 .44

.42 .41 .40 .39 .39 .38

15 .72 .71 .70 .69 .68 .67

899 882 863 843 821 799

.55 .54 .52 .50 .49 .47

.46 .45 .44 .43 .42 .42

30 .76 .75 .74 .73 .72 .70

946 928 909 888 867 844

.59 .57 .55 .53 .52 .50

.49 .48 .47 .46 .46 .45

45 .79 .78 .77 .76 .75 .74

988 970 951 930 908 885

.62 .60 .58 .56 .55 .53

.52 .51 .50 .49 .49 .49

1000 .82 .81 .80 .79 .78 .76

*027*008 988 967 945 922

.64 .62 .61 .59 .57 .56

.55 .53 .53 .52 .52 .51

15 .85 .84 .83 .82 .80 .79

*060*041*021 999 977 953

.66 .65 .63 .61 .60 .58

.57 .55 .55 .54 .54 .54

30 .87 .86 .85 .84 .82 .81

*089*069*049*027*004 981

.68 .67 .65 .63 .62 .60

.59 .58 .57 .57 .56 .56

45 .89 .88 .87 .86 .84 .83

*113*093*072*049*026*003

.70 .68 .66 .65 .63 .62

.61 .60 .59 .58 .58 .58

SEP-DEC

28 N

TABLE B-1

SOLAR PARAMETERS

COS Z

XO (W/M**2.)

*** SIGNIFIES COS Z = 1.

ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1100	.91	.90	.88	.87	.86	.84	.83	.81	.79	.77	.75	.73	.71	.69	.68	.66	.64	.63	.62	.61	.60	.60	.60	.60	
	*222	*211	*198	*184	*168	*151	*132	*111	*090	*067	*043	*020	992	968	946	925	906	888	873	861	852	846	843	844	
15	.92	.91	.90	.88	.87	.85	.84	.82	.80	.78	.76	.74	.72	.70	.68	.67	.65	.64	.63	.62	.61	.61	.61	.61	
	*239	*227	*214	*200	*183	*165	*146	*125	*103	*080	*056	*032	*004	.631	.959	.938	.919	.902	888	875	868	862	860	862	
30	.93	.92	.90	.89	.88	.86	.84	.82	.81	.79	.77	.75	.73	.71	.69	.67	.66	.65	.64	.63	.62	.62	.62	.62	
	*251	*239	*225	*210	*193	*175	*154	*133	*111	*087	*063	*040	*011	.988	.966	.946	.927	.911	897	885	878	874	873	875	
45	.93	.92	.91	.89	.88	.86	.85	.83	.81	.79	.77	.75	.73	.71	.69	.68	.66	.65	.64	.63	.63	.62	.62	.62	
	*258	*246	*231	*215	*198	*179	*158	*136	*113	*090	*066	*042	*013	.990	.969	.949	.930	.915	901	891	884	880	880	883	
1200	.94	.92	.91	.89	.88	.86	.84	.83	.81	.79	.77	.75	.72	.71	.69	.67	.66	.65	.64	.63	.63	.62	.62	.63	
	*260	*247	*232	*216	*197	*178	*156	*134	*111	*087	*063	*039	*010	.988	.966	.946	.929	.914	901	891	885	882	883	886	
15	.93	.92	.91	.89	.87	.86	.84	.82	.80	.78	.76	.74	.72	.70	.68	.67	.66	.64	.64	.63	.62	.62	.62	.63	
	*257	*244	*228	*211	*192	*171	*150	*127	*103	*079	*055	*030	*002	.980	.959	.939	.922	.907	896	887	881	879	880	885	
30	.93	.91	.90	.88	.87	.85	.83	.81	.79	.77	.75	.73	.71	.69	.68	.66	.65	.64	.63	.62	.62	.62	.62	.62	
	*249	*235	*219	*201	*181	*160	*138	*115	*091	*066	*042	*017	989	.967	.946	.927	.911	.897	885	877	872	871	873	878	
45	.92	.90	.89	.87	.86	.84	.82	.80	.78	.76	.74	.72	.70	.68	.66	.65	.64	.63	.62	.61	.61	.61	.61	.61	
	*236	*221	*204	*186	*165	*144	*121	*097	*073	*048	*023	.969	971	.949	.929	.910	.894	.881	870	863	859	858	861	867	
1300	.90	.89	.87	.86	.84	.82	.80	.78	.76	.74	.72	.70	.68	.66	.65	.63	.62	.61	.60	.60	.59	.59	.60	.60	
	*218	*202	*185	*166	*145	*122	*099	*075	*050	*025	*000	.976	949	.926	.906	.888	.873	.860	850	844	840	840	844	850	
15	.89	.87	.86	.84	.82	.80	.78	.76	.74	.72	.70	.68	.66	.64	.63	.61	.60	.59	.59	.58	.58	.58	.58	.59	
	*195	*179	*161	*140	*119	*096	*072	*047	*022	.997	.972	.948	920	.899	.879	.862	.847	.835	826	820	817	818	822	829	
30	.87	.85	.84	.82	.80	.78	.76	.74	.72	.70	.68	.66	.64	.62	.61	.59	.58	.57	.57	.55	.55	.56	.56	.57	
	*168	*150	*131	*111	*088	*065	*040	*015	.990	.965	.940	.915	883	.867	.848	.831	.816	.805	796	791	789	791	795	804	
45	.84	.83	.81	.79	.77	.75	.73	.71	.69	.67	.65	.63	.61	.59	.58	.57	.56	.55	.54	.54	.54	.54	.54	.55	
	*135	*117	*098	*076	*053	*029	*004	.979	.953	.927	.902	.878	851	.830	.811	.795	.781	.770	763	759	757	759	765	773	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

X0 (W/M**2.)

COS Z

SOLAR PARAMETERS

TABLE B-1

28 N

SEP-DEC

MST	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1400	.82	.80	.78	.76	.74	.72	.70	.68	.66	.64	.62	.60	.58	.57	.55	.54	.53	.52	.51	.51	.51	.51	.52	.52
	*099.080.059.037.013 989						963	937	911	886	861	837	810	789	771	755	742	732	724	721	720	723	729	739
15	.78	.77	.75	.73	.71	.69	.67	.65	.63	.61	.59	.57	.55	.53	.52	.51	.50	.49	.48	.43	.48	.48	.49	.49
	*057.038.016 994 969 944						918	892	866	840	815	791	764	744	726	711	698	689	682	673	673	683	690	700
30	.75	.73	.72	.70	.68	.66	.63	.61	.59	.57	.55	.53	.51	.50	.48	.47	.46	.46	.45	.43	.45	.45	.46	.46
	*012 992 970 946 921 895						869	842	816	790	765	741	714	695	677	662	651	642	636	633	634	638	646	656
45	.71	.70	.68	.66	.64	.62	.60	.57	.55	.53	.51	.49	.47	.46	.45	.44	.43	.42	.42	.41	.41	.42	.42	.43
	963 941 919 894 869 842						816	789	762	736	711	687	661	642	625	610	599	591	586	584	585	590	598	609
1500	.67	.66	.64	.62	.60	.58	.55	.53	.51	.49	.47	.45	.43	.42	.41	.40	.39	.38	.38	.33	.38	.38	.39	.40
	909 888 864 839 813 786						759	731	704	678	653	630	604	585	569	555	544	537	532	531	533	539	547	559
15	.63	.61	.59	.57	.55	.53	.51	.49	.47	.45	.43	.41	.39	.38	.36	.35	.35	.34	.34	.34	.34	.34	.35	.36
	853 830 806 780 753 726						698	671	643	617	592	569	544	525	509	496	486	479	475	475	477	483	492	504
30	.59	.57	.55	.53	.51	.49	.46	.44	.42	.40	.38	.36	.34	.33	.32	.31	.30	.30	.29	.29	.30	.30	.31	.32
	793 769 744 718 691 663						635	607	579	553	528	505	480	462	447	434	425	418	415	415	418	425	434	447
45	.54	.52	.50	.48	.46	.44	.41	.39	.37	.35	.33	.32	.30	.28	.27	.26	.26	.25	.25	.25	.25	.26	.26	.27
	730 705 680 653 625 597						568	540	513	486	462	439	414	396	381	369	361	355	352	353	357	363	373	386
1600	.49	.47	.45	.43	.41	.39	.36	.34	.32	.30	.28	.27	.25	.24	.22	.22	.21	.21	.20	.20	.21	.21	.22	.23
	664 639 612 585 556 528						499	471	443	417	392	370	345	328	314	302	294	289	287	286	292	299	310	323
15	.41	.42	.40	.38	.36	.33	.31	.29	.27	.25	.23	.22	.20	.18	.17	.17	.16	.16	.16	.15	.16	.17	.17	.18
	593 570 543 515 486 456						427	399	371	345	321	298	275	258	244	233	225	220	219	220	225	233	243	257
30	.39	.37	.35	.33	.30	.28	.26	.24	.22	.20	.18	.16	.15	.13	.12	.12	.11	.11	.11	.11	.11	.12	.12	.13
	525 498 471 442 413 383						354	325	298	271	247	225	202	185	172	161	154	150	149	151	156	164	175	188
45	.34	.32	.29	.27	.25	.23	.20	.18	.16	.14	.12	.11	.09	.08	.07	.06	.06	.06	.06	.05	.06	.07	.07	.08
	452 425 397 368 338 308						279	250	222	196	172	150	127	111	098	088	081	078	077	080	085	094	105	118

*** SIGNIFIES COS 2 = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.)

SEP-DEC 28 N

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1700	.28	.26	.24	.22	.19	.17	.15	.13	.11	.09	.07	.05	.04	.03	.02	.01	.01	.02	.02	.03
	378	351	322	292	262	232	202	173	145	119	095	074	051	035	023	014	008	004		
15	.22	.20	.18	.16	.14	.11	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
	303	275	245	215	184	154	124	095	068	042	018	000	000	000	000	000	000	000	000	000
30	.17	.15	.12	.10	.08	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	226	198	168	137	106	076	046	017	000	000	000	000	000	000	000	000	000	000	000	000
45	.11	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	149	120	090	059	028	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1800	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	072	042	012	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 28 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	JAN						FEB						MAR						APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	028	068	106	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	029	069	106	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	030	070	108	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	033	073	110	
0100	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.08	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	036	076	114	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.09	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	041	081	118	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.09	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	046	086	124	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	010	053	093	130						
0200	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	018	060	100	137						
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.06	.11	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	020	068	108	145						
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.09	.11	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	035	077	117	154						
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.09	.12	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	044	086	126	164						

JAN-APR 80 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST

DATE

JAN

FEB

MAR

APR

	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0300	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.10	.13
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	011	055	097	137	174
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	.11	.14
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	022	066	108	148	185
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.09	.12	.15
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	031	074	120	159	197
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.07	.10	.13	.16
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	043	086	132	172	209
0400	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.08	.11	.14	.16
	000	000	000	000	000	000	000	000	000	000	000	000	000	013	057	103	145	184	221
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.09	.12	.15	.17
	000	000	000	000	000	000	000	000	000	000	000	000	000	027	073	116	158	198	235
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.13	.16	.18
	000	000	000	000	000	000	000	000	000	000	000	000	000	041	085	130	172	211	248
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.11	.14	.17	.19
	000	000	000	000	000	000	000	000	000	000	000	000	000	055	101	145	186	225	262
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.09	.12	.15	.18	.21
	000	000	000	000	000	000	000	000	000	000	000	000	000	070	115	159	201	240	276
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.10	.13	.16	.19	.22
	000	000	000	000	000	000	000	000	000	000	000	000	000	085	130	174	215	254	291
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.11	.14	.17	.20	.23
	000	000	000	000	000	000	000	000	000	000	000	000	000	100	145	189	230	269	306
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.12	.15	.18	.21	.24
	000	000	000	000	000	000	000	000	000	000	000	000	000	116	161	204	245	284	320

JAN-APR

80 N

TABLE B-1

SOLAR PARAMETERS

COS Z

X0 (W/M*2.)

... SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY .

[illegible]

MST	DATE												COS Z XO (W/M*2.)	SOLAR PARAMETERS	COS Z XO (W/M*2.)	*** SIGNIFIES' COS Z =1. ADD 1000 TO VALUES PRECEDED BY +														
	JAN				FEB				MAR								APR													
	1	5	10	15	20	25	30	5	10	15	20	25					30	5	10	15	20	25	30							
1500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.09	.12	.15	.18	.22	.25	.28	.31	.34	.36	.304	.345	.384	.422	.458	.491
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.08	.11	.14	.18	.21	.25	.27	.30	.33	.36	.292	.331	.373	.411	.446	.480
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	.13	.17	.21	.24	.27	.29	.32	.35	.281	.322	.351	.399	.435	.468
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.09	.13	.16	.20	.23	.25	.29	.31	.34	.268	.303	.349	.387	.423	.456
1600	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	.12	.15	.19	.22	.25	.28	.30	.33	.255	.295	.336	.374	.410	.443
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.11	.14	.18	.21	.24	.27	.29	.32	.242	.283	.323	.361	.396	.430
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.13	.17	.20	.23	.26	.28	.31	.228	.269	.309	.347	.383	.416
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.09	.12	.16	.19	.22	.25	.27	.30	.213	.255	.295	.333	.369	.403
1700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.11	.15	.18	.21	.23	.26	.29	.198	.240	.280	.318	.354	.388
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.13	.17	.20	.22	.25	.28	.183	.225	.265	.303	.340	.374
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.09	.12	.15	.18	.21	.24	.27	.168	.210	.250	.288	.325	.359
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.11	.14	.17	.20	.23	.26	.153	.195	.235	.273	.310	.344

MST	DATE																			
	JAN					FEB					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
1900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
2000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

JAN-APR 80 N TABLE B-1 SOLAR PARAMETERS COS Z XO (W/M**2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												AUG											
	MAY						JUN						JUL						AUG					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0000	.10	.13	.15	.17	.19	.20	.22	.22	.23	.23	.23	.23	.22	.21	.20	.19	.17	.15	.13	.13	.08	.05	.02	.00
	140	172	201	227	250	268	286	297	304	308	307	303	295	283	268	249	227	202	168	135	101	064	025	000
15	.11	.13	.15	.17	.19	.20	.22	.22	.23	.23	.23	.23	.22	.21	.20	.19	.17	.15	.13	.13	.08	.05	.02	.00
	141	173	202	228	250	269	287	298	305	308	308	303	295	284	268	250	227	202	168	135	102	065	026	000
30	.11	.13	.15	.17	.19	.20	.22	.23	.23	.23	.23	.23	.22	.22	.20	.19	.17	.15	.13	.13	.08	.05	.02	.00
	143	175	204	229	252	271	288	299	306	309	309	305	296	285	269	251	228	203	169	137	103	066	027	000
45	.11	.13	.15	.17	.19	.21	.22	.23	.23	.24	.24	.23	.23	.22	.21	.19	.17	.15	.13	.13	.08	.05	.02	.00
	145	177	206	232	254	273	291	302	308	312	311	307	298	287	271	252	230	205	171	139	105	068	029	000
0100	.11	.14	.16	.18	.19	.21	.22	.23	.24	.24	.24	.23	.23	.22	.21	.19	.18	.16	.13	.11	.08	.05	.02	.00
	149	181	210	236	258	276	294	305	312	315	314	309	301	289	274	255	233	208	174	142	108	071	033	000
15	.11	.14	.16	.18	.20	.21	.22	.23	.24	.24	.24	.24	.23	.22	.21	.20	.18	.16	.13	.11	.08	.06	.03	.00
	153	185	214	240	262	281	298	309	316	319	318	313	305	293	278	259	237	212	177	145	112	075	037	000
30	.12	.14	.16	.18	.20	.22	.23	.24	.24	.24	.24	.24	.23	.23	.21	.20	.18	.16	.14	.11	.09	.06	.03	.00
	159	191	220	245	267	286	303	314	320	323	323	318	310	298	282	264	242	216	182	151	117	080	042	002
45	.12	.15	.17	.19	.21	.22	.23	.24	.25	.25	.25	.24	.24	.23	.22	.20	.19	.17	.14	.12	.09	.06	.04	.01
	165	197	226	251	273	292	309	320	326	329	328	324	315	303	288	269	247	222	188	155	122	086	048	008
0200	.13	.15	.17	.19	.21	.22	.24	.25	.25	.25	.25	.25	.24	.23	.22	.21	.19	.17	.15	.12	.10	.07	.04	.01
	172	204	233	258	280	299	316	326	333	336	335	330	322	310	294	275	253	228	194	163	129	093	055	015
15	.13	.16	.18	.20	.22	.23	.24	.25	.26	.26	.26	.25	.25	.24	.23	.21	.20	.18	.15	.13	.10	.08	.05	.02
	180	212	241	266	288	306	323	334	340	343	342	337	329	317	301	282	260	235	202	170	137	101	063	023
30	.14	.16	.19	.21	.22	.24	.25	.26	.26	.27	.26	.26	.25	.25	.23	.22	.20	.18	.16	.13	.11	.08	.05	.02
	189	221	249	274	296	314	332	342	348	351	350	345	336	324	309	290	268	243	210	179	145	109	071	032
45	.15	.17	.19	.21	.23	.24	.26	.26	.27	.27	.27	.27	.26	.25	.24	.23	.21	.19	.16	.14	.12	.09	.06	.03
	198	230	259	284	305	324	340	351	357	359	358	353	345	333	318	299	277	252	218	183	154	118	081	041

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

(W/ **2.)

COS Z
X0

TABLE B-1 SOLAR PARAMETERS

MAY-AUG 80 N

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0300	.16 .18 .20 .22 .24 .25	209 240 269 294 315 333					.26 .27 .28 .28 .28 .27	350 360 366 369 368 363					.27 .26 .25 .23 .22 .20	354 342 327 308 286 262					.17 .15 .12 .10 .07 .04	228 197 163 128 91 52
15	.16 .19 .21 .23 .24 .26	219 251 279 304 326 344					.27 .28 .28 .23 .29 .28	360 370 376 379 378 373					.28 .27 .25 .24 .22 .21	364 352 337 318 297 272					.18 .15 .13 .10 .08 .05	238 203 174 139 102 62
30	.17 .20 .22 .24 .25 .27	231 262 291 315 337 355					.28 .29 .29 .29 .29 .29	371 381 387 389 388 383					.26 .27 .26 .25 .23 .21	375 363 348 329 307 283					.19 .16 .14 .11 .08 .06	249 213 186 150 113 74
45	.18 .20 .23 .25 .26 .28	243 274 302 327 348 366					.29 .30 .30 .30 .30 .30	383 392 398 401 399 394					.29 .28 .27 .26 .24 .22	386 374 359 340 319 294					.20 .17 .15 .12 .09 .06	261 230 197 162 125 86
0400	.19 .21 .24 .25 .27 .28	256 287 315 339 361 378					.30 .30 .31 .31 .31 .31	395 404 410 412 411 406					.30 .29 .28 .27 .25 .23	398 386 370 352 330 306					.21 .18 .15 .13 .10 .07	273 242 210 175 138 99
15	.20 .22 .25 .26 .28 .29	269 300 328 352 373 391					.31 .31 .32 .32 .32 .32	407 416 422 425 423 418					.31 .30 .29 .28 .26 .24	410 398 383 364 343 318					.21 .19 .17 .14 .11 .08	285 255 223 188 151 112
30	.21 .23 .25 .27 .29 .30	282 313 341 365 386 404					.32 .32 .33 .33 .33 .33	420 429 435 437 436 431					.32 .31 .30 .28 .27 .25	422 410 395 377 355 331					.22 .20 .18 .15 .12 .09	298 263 235 201 165 126
45	.22 .24 .27 .28 .30 .31	296 327 354 379 400 417					.33 .33 .34 .34 .34 .34	433 442 448 450 449 444					.33 .32 .31 .29 .28 .26	435 423 408 390 369 344					.23 .21 .19 .16 .13 .10	312 282 243 215 178 140
0500	.23 .25 .28 .29 .31 .32	310 341 368 392 413 430					.34 .34 .35 .35 .35 .35	446 455 461 463 462 457					.34 .33 .32 .30 .29 .27	448 436 421 403 382 358					.25 .22 .20 .17 .14 .12	325 293 263 229 193 155
15	.24 .26 .29 .30 .32 .33	325 355 382 406 427 444					.35 .35 .36 .36 .36 .36	460 469 475 477 475 470					.35 .34 .33 .31 .30 .28	462 450 435 417 396 372					.26 .23 .21 .18 .16 .13	339 310 278 243 207 169
30	.25 .28 .30 .32 .33 .34	339 369 397 421 441 458					.36 .36 .37 .37 .37 .37	474 483 488 490 489 484					.36 .35 .34 .33 .31 .29	475 464 449 431 410 386					.27 .24 .22 .19 .17 .14	354 324 292 258 222 184
45	.26 .29 .31 .33 .34 .35	354 384 411 435 455 472					.37 .37 .38 .38 .38 .38	488 497 502 504 502 497					.37 .36 .35 .34 .32 .30	489 477 463 445 424 400					.28 .25 .23 .20 .18 .15	368 339 307 273 237 199

MAY-AUG 80 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
XO (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY						JUN						JUL						AUG					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0600	.27	.30	.32	.34	.35	.37	.38	.38	.39	.39	.39	.39	.38	.37	.36	.35	.33	.31	.29	.27	.24	.22	.19	.16
	368	399	425	449	469	486	501	510	516	518	516	511	503	491	477	459	438	414	382	353	321	288	252	214
15	.29	.31	.33	.35	.36	.38	.39	.40	.40	.40	.40	.40	.39	.38	.37	.36	.34	.32	.30	.28	.25	.23	.20	.17
	383	413	440	463	483	500	515	524	530	532	530	525	517	505	491	473	452	429	397	363	335	302	267	229
30	.30	.32	.34	.36	.37	.39	.40	.41	.41	.41	.41	.41	.40	.39	.38	.37	.35	.33	.31	.29	.26	.24	.21	.18
	398	428	454	478	498	514	529	538	543	545	544	539	531	519	504	487	466	443	411	382	351	317	282	244
45	.31	.33	.35	.37	.38	.40	.41	.42	.42	.42	.42	.42	.41	.40	.39	.38	.36	.34	.32	.30	.27	.25	.22	.19
	412	442	468	492	511	528	543	552	557	559	557	553	544	533	518	501	480	457	426	397	365	332	296	259
0700	.32	.34	.36	.38	.39	.41	.42	.43	.43	.43	.43	.43	.42	.41	.40	.39	.37	.35	.33	.31	.28	.26	.23	.20
	426	456	482	505	525	542	557	565	571	572	571	566	558	547	532	515	494	471	440	411	380	346	311	274
15	.33	.35	.37	.39	.40	.42	.43	.44	.44	.44	.44	.44	.43	.42	.41	.40	.38	.37	.34	.32	.30	.27	.24	.21
	440	470	496	519	539	555	570	579	584	586	584	579	571	560	546	528	508	485	454	425	394	361	325	288
30	.34	.36	.38	.40	.41	.43	.44	.45	.45	.45	.45	.45	.44	.43	.42	.41	.39	.38	.35	.33	.31	.28	.25	.23
	454	483	510	532	552	568	583	592	597	599	597	592	584	573	559	541	521	498	467	439	408	375	339	302
45	.35	.37	.39	.41	.42	.44	.45	.46	.46	.46	.46	.46	.45	.44	.43	.42	.40	.39	.36	.34	.32	.29	.26	.24
	467	497	523	545	565	581	596	604	609	611	610	605	597	586	572	554	534	512	481	452	421	388	353	316
0800	.36	.38	.40	.42	.43	.45	.46	.46	.47	.47	.47	.47	.46	.45	.44	.43	.41	.40	.37	.35	.33	.30	.27	.25
	480	509	535	558	577	593	608	617	622	624	622	617	609	598	584	567	547	524	494	465	434	401	366	329
15	.37	.39	.41	.43	.44	.45	.47	.47	.48	.48	.48	.48	.47	.46	.45	.44	.42	.40	.38	.35	.34	.31	.28	.26
	493	522	547	570	589	605	620	628	633	635	634	629	621	610	596	579	559	537	506	473	447	414	379	342
30	.38	.40	.42	.44	.45	.46	.48	.48	.49	.49	.49	.48	.48	.47	.46	.45	.43	.41	.39	.37	.34	.32	.29	.26
	504	533	559	581	601	616	631	640	645	647	645	641	633	622	608	591	571	548	518	490	459	426	391	355
45	.38	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.49	.49	.48	.47	.45	.44	.42	.40	.38	.35	.33	.30	.27
	516	544	570	592	611	627	642	650	655	657	656	651	644	633	619	602	582	560	529	501	471	438	403	366

MAY-AUG 80 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
0900	.39	.41	.43	.45	.47	.48	.49	.50	.50	.50	.50	.50
	526	555	580	602	622	637	652	660	666	667	666	662
15	.40	.42	.44	.46	.47	.49	.50	.50	.51	.51	.51	.51
	536	565	590	612	631	647	661	670	675	677	676	671
30	.41	.43	.45	.47	.48	.49	.50	.51	.52	.52	.52	.51
	545	574	599	621	640	656	670	679	684	686	685	680
45	.41	.43	.45	.47	.49	.50	.51	.52	.52	.52	.52	.52
	554	582	607	629	648	664	678	687	692	694	693	688
1000	.42	.44	.46	.48	.49	.50	.52	.52	.53	.53	.53	.53
	561	589	614	636	655	671	685	694	699	701	700	696
15	.42	.44	.46	.48	.50	.51	.52	.53	.53	.53	.53	.53
	568	596	621	643	662	677	692	700	706	708	707	703
30	.43	.45	.47	.49	.50	.51	.53	.53	.54	.54	.54	.54
	574	602	627	649	667	683	698	706	711	714	713	708
45	.43	.45	.47	.49	.50	.52	.53	.54	.54	.54	.54	.54
	579	607	632	654	672	688	702	711	716	719	718	713
1100	.43	.46	.47	.49	.51	.52	.53	.54	.54	.55	.55	.54
	583	611	636	657	676	692	705	715	720	723	722	718
15	.44	.46	.48	.49	.51	.52	.53	.54	.55	.55	.55	.54
	586	614	639	660	679	695	709	718	724	726	725	721
30	.44	.46	.48	.50	.51	.52	.54	.54	.55	.55	.55	.55
	588	616	641	663	681	697	712	720	726	728	727	723
45	.44	.46	.48	.50	.51	.52	.54	.54	.55	.55	.55	.55
	589	617	642	664	682	698	713	722	727	730	729	725

MAY-AUG 80 N TABLE D-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	MAY				JUN				JUL				AUG											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1500	.39	.41	.43	.45	.46	.48	.49	.50	.50	.51	.51	.50	.50	.49	.48	.47	.45	.44	.41	.39	.37	.34	.31	.28
	521	550	575	597	617	634	650	659	666	669	669	666	660	650	637	621	602	579	548	520	488	454	417	378
15	.38	.40	.42	.44	.46	.47	.46	.49	.49	.50	.50	.50	.49	.48	.47	.46	.45	.43	.40	.38	.35	.33	.30	.27
	511	539	564	587	607	623	639	649	656	659	659	656	650	640	627	611	592	569	538	509	478	443	406	367
30	.37	.39	.41	.43	.45	.46	.47	.48	.49	.49	.49	.49	.48	.48	.47	.45	.44	.42	.40	.37	.35	.32	.29	.27
	499	527	553	576	596	612	628	638	645	648	649	645	639	629	616	600	581	558	527	493	456	432	395	356
45	.36	.38	.40	.42	.44	.45	.46	.47	.48	.48	.48	.48	.47	.47	.46	.44	.43	.41	.39	.37	.34	.31	.29	.26
	487	515	541	564	584	601	617	627	634	637	637	634	628	618	605	589	570	547	516	487	455	420	383	343
1600	.35	.38	.40	.41	.43	.44	.46	.46	.47	.47	.47	.47	.47	.46	.45	.44	.42	.40	.38	.36	.33	.30	.28	.25
	474	503	529	552	572	589	605	615	622	626	626	623	616	607	594	577	558	535	504	474	442	407	370	331
15	.34	.37	.39	.40	.42	.43	.45	.45	.46	.46	.46	.46	.45	.45	.44	.43	.41	.39	.37	.35	.32	.30	.27	.24
	461	490	516	539	559	576	593	603	610	613	614	611	604	594	581	565	545	523	491	462	429	394	357	317
30	.33	.36	.38	.39	.41	.42	.44	.44	.45	.45	.45	.45	.45	.44	.43	.42	.40	.38	.36	.34	.31	.29	.26	.23
	448	477	503	526	546	563	580	590	597	601	601	598	592	582	569	552	533	510	478	443	416	381	344	304
45	.32	.35	.37	.38	.40	.41	.43	.44	.44	.44	.44	.44	.44	.43	.42	.41	.39	.37	.35	.33	.30	.27	.25	.22
	434	463	489	512	533	550	567	577	584	588	588	585	579	569	556	539	519	496	465	435	403	367	330	290
1700	.31	.33	.36	.37	.39	.40	.42	.43	.43	.43	.43	.43	.43	.42	.41	.40	.38	.36	.34	.32	.29	.26	.24	.21
	420	449	475	499	519	537	553	564	571	575	575	572	566	556	543	526	506	483	451	421	389	353	315	275
15	.30	.32	.34	.36	.38	.39	.41	.41	.42	.42	.42	.42	.42	.41	.40	.39	.37	.35	.33	.31	.28	.25	.22	.19
	405	435	461	485	505	523	540	550	558	561	562	559	552	542	529	512	492	469	437	407	374	339	301	261
30	.29	.31	.33	.35	.37	.38	.40	.40	.41	.41	.41	.41	.41	.40	.39	.38	.36	.34	.32	.30	.27	.24	.21	.18
	391	420	447	471	491	509	526	537	544	548	548	545	539	529	515	498	478	455	423	393	360	324	286	246
45	.28	.30	.32	.34	.36	.37	.39	.39	.40	.40	.40	.40	.40	.39	.38	.37	.35	.33	.31	.28	.26	.23	.20	.17
	376	406	432	456	477	495	512	523	530	534	534	531	525	515	501	485	464	441	409	378	345	309	271	231

MAY-AUG 80 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30							
1800	.27	.29	.31	.33	.35	.36	.38	.38	.39	.39	.39	.39	.39	.38	.37	.36	.34	.32	.30	.27	.25	.22	.19	.16	
	362	391	418	442	463	481	498	509	516	520	521	518		511	501	487	470	450	427	394	364	331	295	256	216
15	.26	.28	.30	.32	.34	.35	.36	.37	.38	.38	.38	.38	.38	.38	.37	.36	.34	.33	.31	.29	.25	.24	.21	.18	.15
	347	377	404	428	449	467	484	495	502	506	507	504		497	487	473	456	436	412	380	343	316	280	241	201
30	.25	.27	.29	.31	.33	.34	.35	.36	.37	.37	.37	.37	.37	.37	.36	.35	.33	.32	.30	.27	.25	.23	.20	.17	.14
	332	362	389	414	435	453	470	481	489	493	493	490		483	473	459	442	422	398	365	335	301	265	226	186
45	.24	.26	.28	.30	.32	.33	.34	.35	.36	.36	.36	.36	.36	.36	.35	.34	.32	.31	.29	.26	.24	.22	.19	.16	.13
	318	348	375	399	421	439	457	467	475	479	479	476		470	459	446	428	408	384	351	320	287	250	212	171
1900	.23	.25	.27	.29	.31	.32	.33	.34	.35	.35	.35	.35	.35	.34	.34	.33	.31	.30	.28	.25	.23	.20	.18	.15	.12
	304	334	361	386	407	425	443	454	461	465	466	463		456	446	432	415	394	370	337	305	272	236	197	156
15	.22	.24	.26	.28	.30	.31	.32	.33	.34	.34	.34	.34	.34	.33	.33	.32	.30	.29	.27	.24	.22	.19	.17	.14	.11
	290	320	347	372	394	412	430	441	448	452	453	449		443	432	418	401	380	356	323	292	258	222	183	142
30	.21	.23	.25	.27	.29	.30	.31	.32	.33	.33	.33	.33	.33	.32	.32	.31	.29	.28	.26	.23	.21	.18	.16	.13	.10
	276	306	334	359	380	399	417	428	435	439	440	436		430	419	405	388	367	343	309	278	244	208	169	127
45	.20	.22	.24	.26	.28	.29	.30	.31	.32	.32	.32	.32	.32	.32	.31	.30	.28	.27	.25	.22	.20	.17	.15	.12	.09
	263	293	321	346	368	386	404	415	423	427	427	424		417	406	392	375	354	329	296	265	231	194	155	114
2000	.19	.21	.23	.25	.27	.28	.30	.30	.31	.31	.31	.31	.31	.31	.30	.29	.27	.26	.24	.21	.19	.16	.14	.11	.08
	250	280	308	333	355	374	392	403	410	414	415	411		405	394	380	362	341	317	283	252	218	181	142	100
15	.18	.20	.22	.24	.26	.27	.29	.30	.30	.30	.30	.30	.30	.30	.29	.28	.26	.25	.23	.20	.18	.15	.13	.10	.07
	237	268	296	321	343	362	380	391	399	403	403	400		393	382	368	350	329	304	271	239	205	168	129	088
30	.17	.19	.21	.23	.25	.26	.28	.29	.29	.30	.30	.29	.29	.29	.28	.27	.26	.24	.22	.19	.17	.14	.12	.09	.06
	226	256	285	310	332	351	369	380	387	391	392	388		381	370	356	338	317	292	259	227	193	156	117	075
45	.16	.18	.20	.22	.24	.26	.27	.28	.28	.29	.29	.29	.29	.28	.27	.26	.25	.23	.21	.19	.16	.14	.11	.08	.05
	214	245	274	299	321	340	358	369	377	381	381	377		370	360	345	327	306	281	247	216	181	144	105	064

TABLE B-1 SOLAR PARAMETERS COS Z
 MAY-AUG 80 N X0 (W/M**2.) *** SIGNIFIES COS Z =1.
 ADD 1000 TO VALUES PRECEDED BY .

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
2100	.15	.18	.20	.22	.23	.25	.26	.27	.28	.28	.28	.28	.27	.26	.25	.24	.22	.20	.18	.15	.13	.10	.07	.04
	204	235	263	289	311	330	348	359	367	370	371	367	360	349	335	317	295	270	236	205	170	133	094	053
15	.14	.17	.19	.21	.23	.24	.25	.26	.27	.27	.27	.27	.27	.26	.25	.23	.22	.20	.17	.15	.12	.09	.06	.03
	194	225	254	279	301	320	338	350	357	361	361	358	350	339	325	307	285	260	226	195	160	123	084	042
30	.14	.16	.18	.20	.22	.23	.25	.26	.26	.27	.27	.26	.26	.25	.24	.22	.21	.19	.16	.14	.11	.09	.06	.02
	185	216	245	270	292	311	330	341	348	352	352	349	341	330	316	298	276	251	217	185	151	113	074	033
45	.13	.16	.18	.20	.21	.23	.24	.25	.25	.26	.26	.26	.25	.24	.23	.22	.20	.18	.16	.13	.11	.08	.05	.02
	176	208	236	262	284	303	321	333	340	344	344	340	333	322	307	289	267	242	208	176	142	105	065	024
2200	.13	.15	.17	.19	.21	.22	.24	.25	.25	.25	.25	.25	.25	.24	.23	.21	.20	.18	.15	.13	.10	.07	.04	.01
	169	200	229	255	277	296	314	325	333	337	337	333	326	314	300	281	259	234	200	168	134	097	057	016
15	.12	.14	.17	.19	.20	.22	.23	.24	.25	.25	.25	.25	.24	.23	.22	.21	.19	.17	.15	.12	.10	.07	.04	.01
	162	194	222	248	271	290	308	319	326	330	330	326	319	308	293	274	252	227	193	161	127	089	050	009
30	.12	.14	.16	.18	.20	.21	.23	.24	.24	.25	.25	.24	.24	.23	.22	.20	.19	.17	.14	.12	.09	.06	.03	.00
	156	188	217	242	265	284	302	313	321	324	324	320	313	301	287	268	246	221	187	155	120	083	044	002
45	.11	.14	.16	.18	.20	.21	.22	.23	.24	.24	.24	.24	.23	.22	.21	.20	.18	.16	.14	.11	.09	.06	.03	.00
	151	183	212	238	260	279	297	308	316	319	319	315	308	296	281	263	241	216	181	149	115	078	038	000
2300	.11	.13	.16	.18	.19	.21	.22	.23	.24	.24	.24	.24	.23	.22	.21	.20	.18	.16	.13	.11	.08	.06	.03	.00
	147	179	208	234	256	275	293	304	312	315	315	311	303	292	277	258	236	211	177	145	110	073	034	000
15	.11	.13	.15	.17	.19	.20	.22	.23	.23	.24	.24	.23	.23	.22	.21	.19	.18	.16	.13	.11	.08	.05	.02	.00
	144	176	205	231	253	272	290	301	309	312	312	308	300	288	273	255	233	207	173	141	107	070	030	000
30	.11	.13	.15	.17	.19	.20	.22	.23	.23	.23	.23	.23	.23	.22	.20	.19	.17	.15	.13	.10	.08	.05	.02	.00
	142	174	203	229	251	270	288	299	306	310	309	305	297	286	271	252	230	205	170	138	104	067	028	000
45	.10	.13	.15	.17	.19	.20	.22	.22	.23	.23	.23	.23	.22	.22	.20	.19	.17	.15	.13	.10	.08	.05	.02	.00
	141	173	202	227	250	269	287	298	305	308	308	304	296	284	269	250	228	203	168	137	102	065	026	000

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1

80 N

MAY-AUG

MST	DATE												DEC											
	SEP				OCT				NOV				5				5				5			
0300	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0400	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0500	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1

SEP-DEC 80 N

MST	DATE												*** SIGNIFICES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *																	
	SEP					OCT					NOV					DEC					COS Z X0 (W/M**2.)									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0600	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	167	126	084	041	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.14	.11	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	182	141	099	057	013	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.15	.12	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	197	157	115	072	028	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.16	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	212	172	130	087	044	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0700	.17	.14	.11	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	227	187	145	102	059	015	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.18	.15	.12	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	242	201	159	117	073	029	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.19	.16	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	256	215	174	131	087	044	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.20	.17	.14	.11	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	270	229	188	145	101	057	013	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0800	.21	.18	.15	.12	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	283	243	201	158	115	071	026	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.22	.19	.16	.13	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	296	255	214	171	128	083	039	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.23	.20	.17	.14	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	308	268	226	183	140	096	051	007	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.24	.21	.18	.14	.11	.08	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	320	279	238	195	151	107	063	018	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS 2
X0 (W/M**2.)

SEP-DEC 80 N

MST	DATE											
	SEP				OCT				NOV			
	5	10	15	20	25	30	5	10	15	20	25	30
9900	.25	.22	.18	.15	.12	.09	.05	.02	.00	.00	.00	.00
	331	290	249	206	162	118	074	029	000	000	000	000
15	.25	.22	.19	.16	.13	.09	.06	.03	.00	.00	.00	.00
	341	301	259	216	172	128	084	039	000	000	000	000
30	.26	.23	.20	.17	.13	.10	.07	.04	.00	.00	.00	.00
	351	310	269	226	182	137	093	048	004	000	000	000
45	.27	.24	.20	.17	.14	.11	.07	.04	.01	.00	.00	.00
	360	319	277	234	190	146	101	056	012	000	000	000
1000	.27	.24	.21	.18	.15	.11	.08	.05	.01	.00	.00	.00
	368	327	285	242	198	153	109	064	019	000	000	000
15	.28	.25	.22	.18	.15	.12	.08	.05	.02	.00	.00	.00
	375	334	292	249	205	160	115	070	026	000	000	000
30	.28	.25	.22	.19	.16	.12	.09	.06	.02	.00	.00	.00
	381	340	298	255	211	166	121	076	031	000	000	000
45	.29	.26	.22	.19	.16	.13	.09	.06	.03	.00	.00	.00
	386	345	303	260	216	171	126	081	036	000	000	000
1100	.29	.26	.23	.19	.16	.13	.09	.06	.03	.00	.00	.00
	390	350	307	264	219	175	129	084	039	000	000	000
15	.29	.26	.23	.20	.16	.13	.10	.06	.03	.00	.00	.00
	394	353	310	267	222	177	132	087	042	000	000	000
30	.29	.26	.23	.20	.17	.13	.10	.06	.03	.00	.00	.00
	396	355	313	269	224	179	134	088	044	000	000	000
45	.30	.26	.23	.20	.17	.13	.10	.07	.03	.00	.00	.00
	398	356	314	270	225	180	134	089	044	000	000	000

SEP-DEC 80 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1200	.30	.26	.23	.20	.17	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	398	357	314	270	225	180	134	089	044	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.30	.26	.23	.20	.16	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	397	356	313	269	224	179	133	087	042	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.29	.26	.23	.20	.16	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	396	354	311	267	222	176	131	085	040	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.29	.26	.23	.19	.16	.13	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	393	352	308	264	219	173	127	081	036	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1300	.29	.26	.23	.19	.16	.12	.09	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	390	348	305	260	215	169	123	077	032	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.29	.25	.22	.19	.15	.12	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	385	343	300	255	210	164	118	072	026	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.28	.25	.22	.18	.15	.12	.08	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	380	338	294	249	204	158	111	065	020	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.28	.25	.21	.18	.14	.11	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	373	331	287	243	197	151	104	058	013	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1400	.27	.24	.21	.17	.14	.10	.07	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	366	324	280	235	189	143	096	050	004	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.27	.23	.20	.17	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	358	316	272	226	180	134	087	041	000	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.26	.23	.19	.16	.13	.09	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	349	306	262	217	171	124	078	031	000	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.25	.22	.19	.15	.12	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	339	297	252	207	161	114	067	021	000	000	000	000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

COS 2
XO (W/M**2.)

SOLAR PARAMETERS

80 N

SEP-DEC

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1500	.24	.21	.18	.14	.11	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	329	286	242	196	150	103	056	009	000	000	000	000	000	000	000	000	000	000	000	
15	.24	.20	.17	.14	.10	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	318	275	230	184	138	091	044	000	000	000	000	000	000	000	000	000	000	000	000	
30	.23	.19	.16	.13	.09	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	306	263	218	172	126	079	032	000	000	000	000	000	000	000	000	000	000	000	000	
45	.22	.19	.15	.12	.08	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	294	250	205	159	113	066	018	000	000	000	000	000	000	000	000	000	000	000	000	
1600	.21	.18	.14	.11	.07	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	281	237	192	146	099	052	005	000	000	000	000	000	000	000	000	000	000	000	000	
15	.20	.17	.13	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	267	223	178	132	085	038	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.19	.16	.12	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	253	209	164	118	071	024	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.18	.14	.11	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	239	195	150	103	056	009	000	000	000	000	000	000	000	000	000	000	000	000	000	
1700	.17	.13	.10	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	224	180	135	088	041	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.16	.12	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	210	165	120	073	026	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.14	.11	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	195	150	105	058	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.13	.10	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	179	135	089	043	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

SEP-DEC 80 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1800	.12	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	164	120	074	027	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.11	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	149	104	059	012	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.10	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	134	089	043	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.09	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	119	074	028	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1900	.08	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	104	059	013	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	090	045	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	075	031	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	062	017	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
2000	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	048	003	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	035	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	023	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M*2.)

TABLE B-1

SEP-DEC 80 N

AD-A127 853

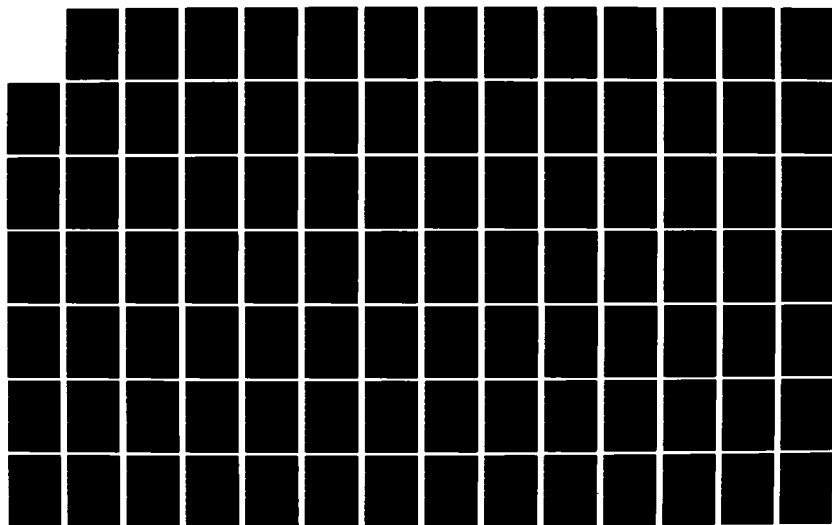
FINAL TACTICAL DECISION AID (FTDA) FOR INFRARED (8-12
MICROMETERS) SYSTEM. (U) SYSTEMS AND APPLIED SCIENCES
CORP RIVERDALE MD D B HODGES ET AL. 15 SEP 82
SCIENTIFIC-3 AFGL-TR-82-0294

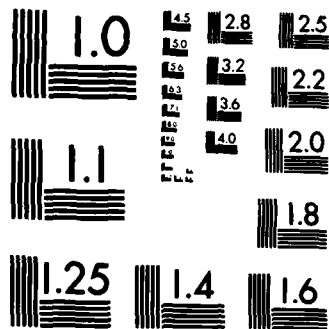
3/5

UNCLASSIFIED

F/G 3/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

MST	DATE												APR												
	JAN						FEB						MAR						APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.11	.14	.17	.21	.24	.27	.30	.32	.35
	000	000	000	000	000	000	000	000	000	000	000	000	000	009	054	099	144	190	234	286	327	366	403	438	469
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	.14	.17	.20	.24	.27	.30	.33	.35	.38
	000	000	000	000	000	000	000	000	000	000	000	000	000	053	098	143	188	233	277	329	370	409	445	479	510
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.10	.13	.17	.20	.23	.27	.30	.33	.36	.38	.41
	000	000	000	000	000	000	000	000	000	000	000	000	000	096	141	186	231	276	319	370	411	450	486	519	550
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.13	.16	.20	.23	.26	.30	.33	.36	.39	.41	.44
	000	000	000	000	000	000	000	000	000	000	000	000	000	138	183	228	273	317	361	411	452	490	525	558	589
0800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.16	.19	.23	.26	.29	.33	.35	.39	.42	.44	.46
	000	000	000	000	000	000	000	000	000	000	000	000	000	179	224	268	313	357	401	451	491	528	564	596	626
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	.19	.22	.26	.29	.32	.36	.39	.42	.44	.47	.49
	000	000	000	000	000	000	000	000	000	000	000	000	000	219	263	308	352	396	439	489	529	566	600	633	662
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.22	.25	.29	.32	.35	.38	.41	.44	.47	.49	.52
	000	000	000	000	000	000	000	000	000	000	000	000	000	257	301	346	390	434	476	526	567	601	636	668	697
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.24	.28	.31	.34	.37	.41	.44	.47	.49	.52	.54
	000	000	000	000	000	000	000	000	000	000	000	000	000	294	338	382	426	469	512	560	599	635	669	701	729
0900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.27	.30	.33	.37	.40	.43	.45	.49	.52	.54	.56
	000	000	000	000	000	000	000	000	000	000	000	000	000	326	372	416	460	503	545	593	631	667	701	732	760
15	.00	.01	.01	.02	.04	.05	.07	.10	.12	.15	.18	.21	.24	.26	.29	.32	.36	.39	.42	.46	.49	.51	.54	.56	.59
	003	008	018	033	052	076	103	140	175	212	251	292	331	361	404	448	492	535	576	624	662	697	731	761	789
30	.02	.03	.03	.04	.06	.07	.09	.12	.15	.17	.20	.23	.26	.28	.31	.35	.38	.41	.44	.48	.51	.53	.56	.58	.60
	030	036	046	062	081	105	133	170	205	242	282	323	361	391	435	478	522	564	605	653	690	725	758	788	816
45	.04	.04	.05	.06	.08	.09	.11	.14	.17	.19	.22	.25	.28	.30	.33	.37	.40	.43	.46	.50	.53	.55	.58	.60	.62
	055	061	073	088	108	132	160	198	233	270	310	351	389	420	463	506	549	591	632	679	715	751	783	813	840

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1

60 N

JAN-APR

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1300	.11	.11	.13	.14	.16	.18	.20	.23	.26	.28	.31	.34	.33	.42	.45	.48	.51	.54	.57	.53	.62	.64	.66	.68	.778
15	151	161	177	198	222	250	281	322	359	397	436	477	542	582	622	662	700	736	778	811	841	870	897	921	
30	.10	.11	.12	.13	.15	.17	.19	.22	.25	.28	.30	.33	.38	.41	.44	.47	.50	.53	.56	.53	.61	.63	.65	.67	
45	139	149	166	187	212	240	271	312	348	387	426	466	531	571	611	650	688	724	765	793	829	857	884	908	
1400	.09	.10	.11	.12	.14	.16	.18	.21	.24	.27	.30	.32	.37	.40	.43	.46	.49	.52	.55	.57	.60	.62	.64	.66	
15	125	135	152	173	198	227	258	299	335	373	413	453	517	557	597	636	673	709	750	783	813	842	868	893	
30	.08	.08	.10	.11	.13	.15	.17	.20	.23	.26	.28	.31	.36	.39	.42	.45	.48	.50	.54	.55	.58	.61	.63	.65	
45	108	119	136	157	182	211	242	283	320	358	397	437	501	541	580	618	656	691	732	765	795	823	850	874	
1500	.06	.07	.08	.10	.12	.14	.16	.19	.21	.24	.27	.30	.35	.38	.41	.43	.46	.49	.52	.55	.57	.59	.61	.63	
15	088	099	117	138	164	192	224	265	301	339	378	418	482	521	560	598	635	671	712	741	774	803	829	854	
30	.05	.06	.07	.08	.10	.12	.14	.17	.20	.23	.26	.28	.33	.36	.39	.42	.45	.47	.50	.53	.55	.58	.60	.62	
45	066	077	095	117	143	171	203	244	280	318	357	396	460	499	538	576	613	648	689	721	751	780	806	831	
1500	.03	.04	.05	.07	.08	.11	.13	.16	.18	.21	.24	.27	.31	.34	.37	.40	.43	.45	.49	.51	.53	.56	.58	.60	
15	042	053	071	093	119	148	179	220	256	294	333	372	435	475	513	551	588	623	663	695	726	754	781	805	
30	.01	.02	.03	.05	.07	.09	.11	.14	.16	.19	.22	.25	.29	.32	.35	.38	.41	.43	.46	.49	.51	.54	.56	.58	
45	015	027	045	067	093	122	153	194	230	268	306	346	409	448	486	524	560	595	636	667	698	726	753	778	
1500	.00	.00	.01	.03	.05	.07	.09	.12	.14	.17	.20	.23	.27	.30	.33	.36	.39	.41	.44	.47	.49	.51	.54	.56	
15	000	000	017	039	065	094	125	166	202	239	278	317	379	418	456	494	530	565	606	637	658	696	723	748	
30	.00	.00	.00	.01	.02	.05	.07	.10	.12	.15	.18	.20	.25	.28	.31	.34	.36	.39	.42	.44	.47	.49	.51	.53	
45	000	000	000	009	035	063	095	136	171	209	247	286	348	387	425	462	498	533	573	605	636	664	691	717	
1500	.00	.00	.00	.00	.00	.02	.04	.07	.10	.13	.15	.18	.23	.25	.28	.31	.34	.36	.39	.42	.44	.47	.49	.51	
15	000	000	000	000	002	031	063	103	139	176	214	253	315	353	391	428	464	499	539	571	602	631	658	683	
30	.00	.00	.00	.00	.00	.00	.02	.05	.07	.10	.13	.16	.20	.23	.26	.28	.31	.34	.37	.39	.42	.44	.46	.48	
45	000	000	000	000	000	000	028	069	104	141	179	218	279	318	355	392	428	463	503	535	566	595	623	648	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

SOLAR PARAMETERS COS Z
XO (W/M*2.)

TABLE B-1

JAN-APR 60 N

MST	DATE												
	JAN			FEB			MAR			APR			
	1	5	10	15	20	25	30	5	10	15	20	25	30
1900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.06	.09
	000	000	000	000	000	000	000	000	000	020	053	085	115
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.06
	000	000	000	000	000	000	000	000	000	000	011	043	074
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03
	000	000	000	000	000	000	000	000	000	000	000	003	035
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS 2 = 1.
ADD 1000 TO VALUES PRECEDED BY *

COS 2
X0 (W/M*2.)

SOLAR PARAMETERS

TABLE B-1

60 N

JAN-APR

MST	DATE												AUG											
	MAY				JUN				JUL				AUG											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
0200	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0300	.00	.00	.00	.00	.00	.00	.01	.01	.02	.02	.02	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.02	.03	.04	.04	.04	.04	.03	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.01	.03	.04	.05	.06	.06	.06	.06	.06	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00
45	.00	.00	.02	.04	.05	.07	.08	.08	.09	.09	.09	.08	.07	.06	.05	.04	.02	.00	.00	.00	.00	.00	.00	.00
0400	.01	.03	.05	.06	.08	.09	.10	.11	.11	.11	.11	.11	.10	.09	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00
15	.03	.06	.08	.09	.11	.12	.13	.14	.14	.14	.14	.13	.13	.12	.10	.09	.07	.06	.03	.01	.00	.00	.00	.00
30	.06	.08	.10	.12	.14	.15	.16	.16	.17	.17	.16	.16	.15	.14	.13	.12	.10	.09	.06	.04	.02	.00	.00	.00
45	.09	.11	.13	.15	.16	.18	.19	.19	.19	.19	.19	.19	.18	.17	.16	.15	.13	.11	.09	.07	.05	.03	.00	.00

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
COS Z
XO (W/M**2.)

TABLE B-1

MAY-AUG 60 N

MST

MAY					JUN					JUL					AUG				
5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
.12	.14	.16	.18	.19	.20	.21	.22	.22	.22	.22	.22	.21	.20	.19	.18	.16	.14	.12	.10
163	192	217	239	257	272	285	292	296	296	293	286	277	264	249	232	212	190	161	134
.15	.17	.19	.21	.22	.23	.24	.25	.25	.25	.25	.25	.24	.23	.22	.20	.19	.17	.15	.13
204	233	258	279	297	312	324	331	334	334	331	325	315	303	288	271	251	230	201	175
.18	.20	.22	.24	.25	.26	.27	.28	.28	.28	.28	.28	.27	.26	.25	.23	.22	.20	.18	.16
246	274	299	320	337	352	364	371	374	374	370	364	355	343	328	311	292	270	242	216
.21	.24	.25	.27	.28	.29	.30	.31	.31	.31	.31	.31	.30	.29	.28	.27	.25	.23	.21	.19
288	316	340	361	378	392	404	410	413	413	410	404	394	382	368	351	332	311	283	253
.25	.27	.29	.30	.31	.33	.33	.34	.34	.34	.34	.34	.33	.32	.31	.30	.28	.27	.24	.23
331	358	382	402	419	432	444	450	453	453	450	443	434	422	408	392	373	352	325	300
.28	.30	.32	.33	.35	.36	.36	.37	.37	.37	.37	.37	.36	.35	.34	.33	.31	.30	.28	.25
373	400	423	443	460	473	484	490	493	493	489	483	474	463	448	432	414	393	366	342
.31	.33	.35	.36	.38	.39	.39	.40	.40	.40	.40	.40	.39	.38	.37	.36	.34	.33	.31	.29
415	441	464	484	500	513	524	530	533	532	529	523	514	503	489	473	454	434	408	384
.34	.36	.38	.39	.41	.42	.42	.43	.43	.43	.43	.43	.42	.41	.40	.39	.37	.36	.34	.32
457	483	505	524	540	553	564	570	572	572	568	562	553	542	529	513	495	475	449	425
.37	.39	.41	.42	.44	.45	.45	.46	.46	.46	.46	.45	.45	.44	.43	.42	.40	.39	.37	.35
498	523	545	564	580	592	603	609	611	610	607	601	592	581	568	552	535	515	490	465
.40	.42	.44	.45	.46	.47	.48	.49	.49	.49	.49	.48	.48	.47	.46	.45	.43	.42	.40	.38
538	563	585	604	619	631	642	647	649	649	645	639	631	620	607	592	574	555	530	507
.43	.45	.47	.48	.49	.50	.51	.52	.52	.52	.52	.51	.51	.50	.49	.48	.46	.45	.43	.41
578	602	624	642	657	669	679	684	686	686	683	677	669	658	645	630	613	594	569	545
.46	.48	.49	.51	.52	.53	.54	.54	.55	.55	.54	.54	.53	.53	.52	.50	.49	.48	.46	.44
616	640	661	679	694	706	716	721	723	722	719	713	705	695	682	667	651	632	607	585

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M*2.)

TABLE B-1

MAY-AUG 60 N

MST	DATE																							
	MAY				JUN				JUL				AUG											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
0800	.49	.50	.52	.54	.55	.56	.57	.57	.57	.57	.57	.57	.56	.55	.54	.53	.52	.50	.48	.47	.45	.43	.41	.39
	653	677	697	715	730	741	751	756	758	757	754	749	741	730	718	704	687	669	644	622	599	574	547	519
15	.51	.53	.55	.56	.57	.58	.59	.60	.60	.60	.60	.59	.59	.58	.57	.56	.54	.53	.51	.49	.48	.46	.44	.41
	689	712	732	750	764	775	785	790	792	791	788	783	775	765	753	739	722	704	680	659	635	610	584	556
30	.54	.56	.57	.59	.60	.61	.62	.62	.62	.62	.62	.62	.61	.60	.59	.58	.57	.56	.54	.52	.50	.48	.46	.44
	723	746	766	783	797	808	817	822	824	824	821	816	808	798	786	772	756	738	715	693	670	645	619	591
45	.56	.58	.60	.61	.62	.63	.64	.64	.65	.65	.64	.64	.63	.63	.62	.61	.59	.58	.56	.55	.53	.51	.49	.47
	755	778	797	814	828	839	848	853	855	855	852	847	839	830	818	804	789	771	748	726	703	679	653	625
0900	.58	.60	.62	.63	.64	.65	.66	.66	.67	.67	.67	.66	.66	.65	.64	.63	.62	.60	.59	.57	.55	.53	.51	.49
	785	808	827	844	857	868	877	882	884	884	881	876	869	859	848	835	819	802	779	759	735	710	684	657
15	.61	.62	.64	.65	.66	.67	.68	.69	.69	.69	.69	.68	.68	.67	.66	.65	.64	.63	.61	.59	.57	.55	.53	.51
	814	836	855	871	885	895	905	909	912	911	909	904	897	888	876	863	848	831	808	787	764	740	714	686
30	.62	.64	.66	.67	.68	.69	.70	.70	.71	.71	.71	.70	.70	.69	.68	.67	.66	.65	.63	.61	.59	.57	.55	.53
	840	862	881	897	910	921	930	935	937	937	934	930	923	914	903	890	875	858	835	814	792	768	742	714
45	.64	.66	.68	.69	.70	.71	.72	.72	.72	.72	.72	.72	.72	.71	.70	.69	.68	.66	.65	.63	.61	.59	.57	.55
	864	886	904	920	933	944	953	958	960	960	958	953	946	938	927	914	899	883	860	840	817	793	767	739
1000	.66	.68	.69	.70	.72	.72	.73	.74	.74	.74	.74	.74	.73	.73	.72	.71	.70	.68	.66	.65	.63	.61	.59	.57
	886	907	926	942	955	965	974	979	981	981	979	975	968	960	949	936	922	905	883	863	840	816	790	762
15	.67	.69	.71	.72	.73	.74	.75	.75	.75	.76	.75	.75	.75	.74	.73	.72	.71	.70	.68	.65	.65	.63	.60	.58
	905	926	945	960	973	984	993	998	000	000	998	994	988	979	969	957	942	926	904	883	861	837	811	783
30	.69	.70	.72	.73	.74	.75	.76	.76	.77	.77	.77	.76	.76	.75	.74	.74	.72	.71	.69	.68	.66	.64	.62	.60
	922	943	961	977	990	000	009	014	017	017	015	011	005	997	986	974	960	944	922	902	879	855	829	801
45	.70	.71	.73	.74	.75	.76	.77	.77	.78	.78	.78	.77	.77	.76	.76	.75	.74	.72	.71	.69	.67	.65	.63	.61
	937	957	975	991	003	014	023	028	031	031	029	026	020	012	002	990	976	960	938	917	895	871	845	816

MAY-AUG 60 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1100	.71	.72	.74	.75	.76	.77	.78	.78	.79	.79	.79	.78	.78	.77	.77	.76	.75	.73	.71	.70	.68	.66	.64	.62
	948	969	987	002	015	025	*034	*039	*042	*043	*041	*038	*032	*024	*014	*002	989	973	951	930	908	884	857	829
15	.71	.73	.74	.76	.77	.78	.79	.79	.79	.79	.79	.79	.79	.78	.77	.76	.75	.74	.72	.71	.69	.67	.65	.62
	957	978	995	011	023	034	*043	*048	*051	*052	*051	*047	*042	*034	*024	*013	999	983	961	941	919	894	868	839
30	.72	.73	.75	.76	.77	.78	.79	.79	.80	.80	.80	.80	.79	.79	.78	.77	.76	.75	.73	.71	.69	.67	.65	.63
	964	9	.01	*017	*029	*040	*049	*055	*058	*059	*058	*054	*049	*042	*032	*020	*007	991	969	943	926	902	875	846
45	.72	4	.75	.76	.77	.78	.79	.80	.80	.80	.80	.80	.80	.79	.78	.77	.76	.75	.73	.72	.70	.68	.66	.63
	967	*007	*005	*020	*033	*043	*053	*058	*062	*063	*062	*059	*054	*046	*037	*025	*012	996	974	954	931	907	880	851
1200	.72	.	.75	.76	.78	.78	.79	.80	.80	.80	.80	.80	.80	.79	.78	.78	.76	.75	.73	.72	.70	.68	.66	.63
	968	986	.05	*021	*034	*044	*054	*060	*063	*064	*064	*061	*056	*049	*039	*028	*014	999	977	955	934	909	881	852
15	.72	.73	.75	.76	.77	.78	.79	.80	.80	.80	.80	.80	.80	.79	.78	.78	.76	.75	.73	.72	.70	.68	.66	.63
	966	986	*003	*019	*032	*042	*052	*058	*062	*063	*063	*060	*055	*048	*039	*028	*014	998	977	955	933	908	880	851
30	.71	.73	.75	.76	.77	.78	.79	.79	.80	.80	.80	.80	.79	.79	.78	.77	.76	.75	.73	.72	.70	.68	.65	.63
	961	981	999	*014	*027	*038	*048	*054	*058	*060	*059	*057	*052	*045	*036	*025	*011	996	974	953	930	904	877	847
45	.71	.73	.74	.75	.76	.77	.78	.79	.79	.80	.80	.79	.78	.77	.76	.75	.74	.73	.71	.69	.67	.65	.63	.60
	953	973	991	*007	*020	*031	*041	*047	*051	*053	*053	*051	*046	*039	*031	*019	*006	990	968	947	924	898	870	840
1300	.70	.72	.73	.75	.76	.77	.78	.78	.79	.79	.79	.79	.78	.78	.77	.76	.75	.74	.72	.70	.69	.66	.64	.62
	943	963	981	997	*010	*021	*032	*038	*042	*045	*045	*042	*038	*031	*022	*011	998	982	960	938	915	889	861	830
15	.69	.71	.72	.74	.75	.76	.77	.77	.78	.78	.78	.78	.78	.77	.76	.76	.74	.73	.71	.70	.68	.66	.63	.61
	930	950	968	984	998	*009	*020	*026	*031	*033	*033	*031	*027	*021	*012	*000	987	971	949	927	903	877	849	818
30	.68	.70	.71	.73	.74	.75	.76	.76	.77	.77	.77	.77	.77	.76	.75	.75	.73	.72	.70	.69	.67	.65	.62	.60
	915	935	953	969	983	994	*005	*012	*017	*019	*020	*018	*014	*007	998	987	974	958	935	913	889	863	834	803
45	.67	.68	.70	.71	.72	.73	.74	.75	.75	.76	.76	.76	.75	.75	.74	.73	.72	.71	.69	.67	.65	.63	.61	.58
	897	917	935	951	965	977	988	996	*000	*003	*004	*002	998	992	983	972	958	942	919	897	873	846	816	785

MAY-AUG 60 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 AO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1400	.65	.67	.68	.70	.71	.72	.73	.74	.74	.74	.74	.74	.74	.74	.73	.72	.71	.70	.68	.66	.64	.62	.59	.57	
	876	897	915	931	946	958	969	977	982	985	985	984	980	973	965	953	940	923	900	878	853	826	796	764	
15	.63	.65	.67	.68	.69	.70	.71	.72	.72	.73	.73	.73	.73	.72	.72	.71	.70	.69	.68	.66	.64	.62	.60	.58	.55
	853	874	893	909	923	936	948	955	961	964	965	963	959	953	944	933	919	902	879	857	832	804	774	742	
30	.62	.63	.65	.66	.67	.69	.70	.70	.71	.71	.71	.71	.71	.71	.70	.70	.69	.68	.66	.64	.63	.61	.58	.56	.53
	828	849	868	885	899	912	924	932	938	941	942	940	937	930	922	910	896	879	856	833	808	780	749	716	
45	.60	.61	.63	.64	.65	.67	.68	.68	.69	.69	.69	.69	.69	.69	.68	.68	.67	.66	.64	.62	.61	.59	.56	.54	.51
	801	822	841	858	873	886	898	906	912	916	917	916	912	906	897	885	871	854	830	807	782	753	722	689	
1500	.57	.59	.61	.62	.63	.64	.66	.66	.67	.67	.67	.67	.67	.67	.66	.66	.65	.64	.62	.60	.59	.56	.54	.52	.49
	771	793	812	829	845	858	871	879	885	889	890	889	885	879	870	858	844	827	803	779	753	725	693	659	
15	.55	.57	.58	.60	.61	.62	.63	.64	.65	.65	.65	.65	.65	.65	.64	.64	.63	.61	.60	.58	.56	.54	.52	.49	.47
	740	762	781	799	814	828	841	850	856	860	861	860	857	850	841	830	815	798	773	743	723	694	662	628	
30	.53	.54	.56	.57	.59	.60	.61	.62	.62	.63	.63	.63	.63	.62	.62	.61	.60	.59	.58	.56	.54	.52	.49	.47	.44
	707	729	749	767	782	796	810	819	825	829	831	830	826	820	811	799	784	767	742	718	691	661	629	594	
45	.50	.52	.53	.55	.56	.57	.58	.59	.60	.60	.60	.60	.60	.60	.60	.59	.58	.57	.55	.53	.51	.49	.47	.44	.42
	672	694	715	733	749	763	777	786	793	797	799	798	794	788	779	767	752	734	709	684	657	627	594	559	
1600	.47	.49	.51	.52	.54	.55	.56	.57	.57	.58	.58	.58	.58	.58	.57	.56	.55	.54	.53	.51	.49	.47	.44	.42	.39
	636	658	679	697	714	728	743	752	759	763	765	764	761	754	745	733	718	700	674	643	621	591	558	522	
15	.44	.46	.48	.49	.51	.52	.53	.54	.55	.55	.55	.55	.55	.55	.54	.54	.53	.51	.50	.48	.46	.44	.41	.39	.36
	598	621	642	661	678	692	707	717	724	728	730	730	726	719	710	698	682	664	638	613	585	554	520	484	
30	.42	.43	.45	.47	.48	.49	.50	.51	.52	.52	.52	.52	.52	.52	.52	.51	.50	.49	.47	.45	.43	.41	.39	.36	.33
	559	583	604	623	640	655	670	680	687	692	694	693	690	683	674	661	646	627	600	575	546	515	481	445	
45	.39	.40	.42	.44	.45	.46	.48	.48	.49	.49	.49	.50	.50	.49	.49	.48	.47	.46	.44	.42	.40	.38	.36	.33	.30
	520	543	565	584	602	617	633	643	650	655	657	656	653	646	636	624	608	589	562	535	507	475	441	404	

MAY-AUG 60 N TABLE B-1 SOLAR PARAMETERS COS 2 *** SIGNIFIES' COS 2 =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	MAY				JUN				JUL				AUG												
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30							
1700	.36	.37	.39	.41	.42	.43	.45	.46	.46	.47	.47	.47	.46	.46	.45	.44	.43	.41	.39	.37	.35	.33	.30	.27	
	479	503	525	545	563	578	594	604	612	617	619	619	615	608	598	585	569	550	522	496	467	435	400	363	
15	.33	.34	.36	.38	.39	.40	.42	.43	.43	.44	.44	.44	.44	.43	.42	.41	.40	.38	.36	.34	.32	.29	.27	.24	
	438	462	484	505	523	539	555	565	573	578	581	580	576	569	559	546	530	510	482	455	426	393	358	320	
30	.29	.31	.33	.35	.36	.37	.39	.40	.40	.41	.41	.41	.41	.40	.39	.38	.37	.35	.33	.31	.29	.26	.24	.21	
	396	420	443	464	482	499	515	526	534	539	541	541	537	530	520	506	489	469	441	414	384	351	316	278	
45	.26	.28	.30	.32	.33	.34	.36	.37	.37	.38	.38	.38	.38	.37	.36	.35	.34	.32	.30	.28	.25	.23	.20	.17	
	353	379	402	423	442	458	475	486	494	500	502	501	497	490	480	466	449	429	400	372	342	309	273	234	
1800	.23	.25	.27	.29	.30	.31	.33	.34	.34	.35	.35	.35	.35	.34	.33	.32	.31	.29	.27	.25	.22	.20	.17	.14	
	311	337	360	382	401	418	435	446	454	460	462	461	457	450	439	425	408	387	358	331	300	266	230	191	
15	.20	.22	.24	.26	.27	.28	.30	.31	.31	.32	.32	.32	.32	.32	.31	.30	.29	.28	.26	.24	.22	.19	.17	.14	.11
	269	295	319	341	360	377	395	406	414	420	422	422	417	410	399	385	367	346	317	289	257	223	187	148	
30	.17	.19	.21	.22	.24	.25	.27	.28	.28	.29	.29	.29	.29	.28	.27	.26	.25	.23	.21	.19	.16	.14	.11	.08	
	227	253	277	300	320	337	355	366	375	380	383	382	378	370	359	345	327	305	275	247	215	181	144	104	
45	.14	.16	.18	.19	.21	.22	.24	.25	.25	.26	.26	.26	.26	.25	.24	.23	.22	.20	.18	.15	.13	.10	.08	.05	
	185	212	237	259	279	297	315	327	335	341	343	342	338	330	319	304	286	264	234	205	173	139	101	062	
1900	.11	.13	.15	.16	.18	.19	.21	.22	.22	.23	.23	.23	.23	.22	.21	.20	.19	.17	.15	.12	.10	.07	.04	.01	
	144	171	196	219	240	258	276	288	297	302	305	304	299	291	280	265	246	224	193	164	132	097	059	019	
15	.08	.10	.12	.14	.15	.17	.18	.19	.20	.20	.20	.20	.20	.19	.18	.17	.16	.14	.12	.09	.07	.04	.01	.00	
	104	131	157	180	201	219	238	250	258	264	266	265	261	253	241	226	207	184	153	124	091	056	018	000	
30	.05	.07	.09	.11	.12	.14	.15	.16	.17	.17	.17	.17	.17	.16	.15	.14	.13	.11	.09	.06	.04	.01	.00	.00	
	064	092	118	142	163	182	200	212	221	227	229	228	223	215	203	187	168	145	114	084	051	016	000	000	
45	.02	.04	.06	.08	.09	.11	.12	.13	.14	.14	.15	.14	.14	.13	.13	.11	.10	.08	.06	.03	.01	.00	.00	.00	
	026	054	081	105	126	145	164	176	185	190	193	191	186	178	166	150	130	108	076	045	012	000	000	000	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

CCS Z
XO (W/M**2.)

SOLAR PARAMETERS

TABLE B-1

MAY-AUG 60 N

MST	DATE											
	MAY			JUN			JUL			AUG		
	5	10	15	20	25	30	5	10	15	20	25	30
2000	.00	.01	.03	.05	.07	.08	.10	.11	.11	.10	.09	.07
	000	018	044	069	090	109	128	141	150	155	157	156
15	.00	.00	.01	.03	.04	.06	.07	.08	.09	.09	.09	.09
	000	000	009	034	056	075	094	107	116	121	123	122
30	.00	.00	.00	.00	.02	.03	.05	.06	.06	.07	.07	.07
	000	000	000	001	023	043	062	074	083	089	091	089
45	.00	.00	.00	.00	.00	.01	.02	.03	.04	.04	.05	.04
	000	000	000	000	000	012	031	043	052	058	060	058
2100	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.02	.02
	000	000	000	000	000	000	002	014	023	029	031	029
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	001	003	001
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) *** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.01	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	019	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	062	029	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.08	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	106	073	040	006	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
0600	.11	.09	.06	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	150	117	084	050	016	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.14	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	193	161	128	095	060	025	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.18	.15	.13	.10	.08	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	237	205	172	139	105	070	034	000	000	000	000	000	000	000	000	000	000	000	000	
45	.21	.18	.16	.13	.11	.08	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	280	248	216	182	148	113	078	042	006	000	000	000	000	000	000	000	000	000	000	
0700	.24	.22	.19	.17	.14	.11	.09	.06	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	323	291	259	225	191	156	121	085	049	012	000	000	000	000	000	000	000	000	000	
15	.27	.25	.22	.20	.17	.15	.12	.09	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	
	364	333	301	268	233	198	163	127	090	054	018	000	000	000	000	000	000	000	000	
30	.30	.28	.25	.23	.20	.18	.15	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	
	405	374	342	309	275	240	204	168	131	094	058	022	000	000	000	000	000	000	000	
45	.33	.31	.28	.26	.23	.20	.18	.15	.12	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	
	445	414	382	348	314	278	244	207	170	134	097	061	025	000	000	000	000	000	000	

*** SIGNIFIES CCS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SEP-DEC 60 N

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.)

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0800	.36	.34	.31	.29	.26	.23	.21	.18	.15	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	484	453	420	387	353	318	282	245	208	171	135	098	056	022	000	000	000	000	000	000	000	000	000	000
15	.39	.36	.34	.31	.29	.26	.23	.21	.18	.15	.12	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	521	490	458	424	390	355	319	282	245	208	171	134	091	057	025	000	000	000	000	000	000	000	000	000
30	.41	.39	.36	.34	.31	.29	.26	.23	.20	.18	.15	.12	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00
	556	525	493	460	425	390	354	317	279	242	205	168	125	091	059	028	001	000	000	000	000	000	000	000
45	.44	.41	.39	.36	.34	.31	.28	.25	.23	.20	.17	.14	.11	.09	.07	.04	.02	.01	.00	.00	.00	.00	.00	.00
	590	559	527	493	459	423	387	350	312	274	237	200	157	123	090	060	032	008	000	000	000	000	000	000
0900	.46	.44	.41	.39	.36	.33	.31	.28	.25	.22	.19	.17	.13	.11	.09	.06	.04	.03	.01	.00	.00	.00	.00	.00
	621	591	558	525	490	454	418	380	343	305	267	230	187	153	120	090	062	038	016	000	000	000	000	000
15	.48	.46	.43	.41	.38	.35	.33	.30	.27	.24	.21	.19	.15	.13	.11	.08	.06	.05	.03	.02	.01	.00	.00	.00
	651	620	588	554	519	483	446	409	371	333	295	258	215	180	148	118	090	065	044	027	014	005	001	001
30	.50	.48	.45	.43	.40	.37	.35	.32	.29	.26	.23	.20	.17	.15	.12	.10	.08	.07	.05	.04	.03	.02	.02	.02
	679	648	615	581	546	510	473	435	397	359	321	284	240	206	173	143	115	091	070	053	040	032	028	028
45	.52	.50	.47	.45	.42	.39	.36	.33	.31	.28	.25	.22	.19	.16	.14	.12	.10	.08	.07	.05	.05	.04	.04	.04
	704	673	640	606	571	534	497	459	421	382	344	307	263	229	196	166	139	114	094	077	064	056	053	054
1000	.54	.51	.49	.46	.44	.41	.38	.35	.32	.29	.26	.24	.20	.18	.16	.13	.11	.10	.08	.07	.06	.06	.05	.05
	727	696	663	628	593	556	519	480	442	403	365	327	284	249	217	187	159	135	115	093	085	078	075	076
15	.55	.53	.50	.48	.45	.42	.39	.36	.33	.31	.28	.25	.22	.19	.17	.15	.13	.11	.10	.09	.08	.07	.07	.07
	747	716	683	648	612	575	538	499	460	422	383	345	302	267	235	205	178	154	134	117	105	098	095	097
30	.57	.54	.52	.49	.46	.43	.40	.38	.35	.32	.29	.26	.23	.20	.18	.16	.14	.12	.11	.10	.09	.08	.08	.08
	765	733	700	665	629	592	554	515	476	437	399	361	317	282	250	220	193	170	150	134	122	115	113	115
45	.58	.55	.53	.50	.47	.44	.41	.38	.36	.33	.30	.27	.24	.21	.19	.17	.15	.13	.12	.11	.10	.09	.09	.09
	780	748	715	680	643	606	567	529	489	450	411	373	330	295	263	233	206	183	163	148	136	130	128	130

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS 2
X0 (W/M**2.)

TABLE B-1

SEP-DEC 60 N

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.59	.56	.54	.51	.48	.45	.42	.39	.36	.33	.30	.28	.24	.22	.20	.17	.15	.14	.12	.11	.11	.10	.10	.10
	793	761	727	691	655	617	578	539	499	460	421	383	339	305	273	243	216	193	174	159	148	142	140	143
15	.60	.57	.54	.52	.49	.46	.43	.40	.37	.34	.31	.28	.25	.22	.20	.18	.16	.14	.13	.12	.11	.11	.11	.11
	803	770	736	700	663	625	586	547	507	467	428	390	343	312	280	250	224	201	182	167	157	151	150	153
30	.60	.57	.55	.52	.49	.46	.43	.40	.37	.34	.31	.28	.25	.23	.20	.18	.16	.15	.13	.12	.12	.11	.11	.11
	809	777	742	706	669	630	591	551	511	472	432	394	350	316	284	255	229	206	187	173	163	157	157	160
45	.60	.58	.55	.52	.49	.46	.43	.40	.37	.34	.31	.28	.25	.23	.20	.18	.16	.15	.14	.13	.12	.11	.11	.12
	813	780	745	709	671	633	593	553	513	473	434	395	352	317	285	256	230	208	190	176	166	161	161	165
1200	.60	.58	.55	.52	.49	.46	.43	.40	.37	.34	.31	.28	.25	.23	.20	.18	.16	.15	.13	.13	.12	.12	.12	.12
	815	781	746	709	671	632	592	552	511	471	432	394	350	316	284	255	230	208	190	176	167	162	162	167
15	.60	.58	.55	.52	.49	.46	.43	.40	.37	.34	.31	.28	.25	.22	.20	.18	.16	.15	.13	.12	.12	.11	.11	.12
	813	779	744	706	668	629	588	548	507	467	427	389	345	311	280	251	226	204	187	173	165	160	161	166
30	.60	.57	.55	.52	.49	.46	.42	.39	.36	.33	.30	.28	.24	.22	.20	.17	.16	.14	.13	.12	.11	.11	.11	.12
	808	774	738	701	662	622	582	541	500	460	420	382	338	304	273	244	219	198	181	163	160	156	157	162
45	.59	.57	.54	.51	.48	.45	.42	.39	.36	.33	.30	.27	.24	.21	.19	.17	.15	.13	.12	.11	.11	.11	.11	.11
	801	766	730	692	653	613	572	531	490	449	410	371	328	294	263	235	210	189	172	160	152	148	150	156
300	.59	.56	.53	.50	.47	.44	.41	.38	.35	.32	.29	.26	.23	.20	.18	.16	.14	.13	.11	.11	.10	.10	.10	.10
	791	756	719	681	641	601	560	518	477	436	397	358	315	281	250	222	198	177	161	149	141	138	140	147
15	.58	.55	.52	.49	.46	.43	.40	.37	.34	.30	.28	.25	.21	.19	.17	.15	.13	.12	.10	.10	.09	.09	.09	.10
	778	742	705	667	627	586	544	503	461	421	381	342	299	265	235	207	183	163	147	135	128	126	128	135
30	.57	.54	.51	.48	.45	.42	.38	.35	.32	.29	.26	.23	.20	.18	.16	.14	.12	.10	.09	.08	.08	.08	.08	.09
	762	726	689	650	609	568	527	485	443	402	362	324	281	247	217	189	166	146	130	119	112	110	113	120
45	.55	.52	.49	.46	.43	.40	.37	.34	.31	.28	.25	.22	.19	.16	.14	.12	.10	.09	.08	.07	.07	.07	.07	.07
	744	708	670	630	590	548	506	464	422	381	341	303	260	227	196	169	146	127	111	100	094	092	095	103

SEP-DEC 60 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIFES COS Z =1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																						
	SEP				OCT				NOV				DEC										
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1400	.54	.51	.48	.45	.42	.38	.35	.32	.29	.26	.23	.20	.17	.15	.12	.10	.09	.07	.06	.05	.05	.05	.06
	723	686	648	608	567	525	483	440	399	357	317	279	236	203	173	147	124	105	090	079	073	072	075
15	.52	.49	.46	.43	.40	.37	.33	.30	.27	.24	.21	.18	.15	.13	.11	.09	.07	.06	.05	.04	.04	.04	.04
	700	663	624	583	542	500	457	415	373	331	291	253	210	178	148	122	099	080	066	056	050	049	053
30	.50	.47	.44	.41	.38	.35	.31	.28	.25	.22	.19	.16	.13	.11	.09	.07	.05	.04	.03	.02	.02	.02	.03
	674	636	597	556	515	472	429	387	344	303	263	225	182	150	120	094	072	054	040	030	025	024	028
45	.48	.45	.42	.39	.36	.32	.29	.26	.23	.20	.17	.14	.11	.09	.07	.05	.03	.02	.01	.00	.00	.00	.01
	646	608	568	527	485	442	399	356	314	272	233	195	152	120	091	065	043	025	011	002	000	000	010
1500	.46	.43	.40	.37	.33	.30	.27	.24	.20	.17	.14	.12	.09	.06	.04	.02	.01	.00	.00	.00	.00	.00	.00
	616	578	537	496	453	410	367	324	281	240	200	162	120	088	059	033	012	000	000	000	000	000	000
15	.43	.40	.37	.34	.31	.28	.24	.21	.18	.15	.12	.09	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00
	584	545	504	463	420	376	333	289	247	205	166	128	086	054	025	000	000	000	000	000	000	000	000
30	.41	.38	.35	.31	.28	.25	.22	.18	.15	.12	.09	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
	550	511	470	427	384	340	297	253	211	169	129	092	050	018	000	000	000	000	000	000	000	000	000
45	.38	.35	.32	.29	.25	.22	.19	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	514	474	433	390	347	303	259	215	173	131	092	054	012	000	000	000	000	000	000	000	000	000	000
1600	.35	.32	.29	.26	.23	.19	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	477	437	395	352	308	264	220	176	133	092	052	015	000	000	000	000	000	000	000	000	000	000	000
15	.33	.29	.26	.23	.20	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	438	398	355	312	268	224	179	135	093	051	012	000	000	000	000	000	000	000	000	000	000	000	000
30	.30	.26	.23	.20	.17	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	398	357	315	271	227	182	138	094	051	010	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.27	.23	.20	.17	.14	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	357	316	273	229	184	140	095	051	008	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

X0 (W/M*2.)

COS Z

SOLAR PARAMETERS

TABLE B-1

60 N

SEP-DEC

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1700	.23	.20	.17	.14	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	315	273	230	186	141	096	052	008	000	000	000	000	000	000	000	000	000	000		
15	.20	.17	.14	.11	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	272	230	187	143	098	052	008	000	000	000	000	000	000	000	000	000	000	000		
30	.17	.14	.11	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	229	187	143	098	053	008	000	000	000	000	000	000	000	000	000	000	000	000		
45	.14	.11	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	186	143	099	054	009	000	000	000	000	000	000	000	000	000	000	000	000	000		
1800	.11	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	142	099	055	010	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
15	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	098	055	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
30	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	054	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		
45	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000		

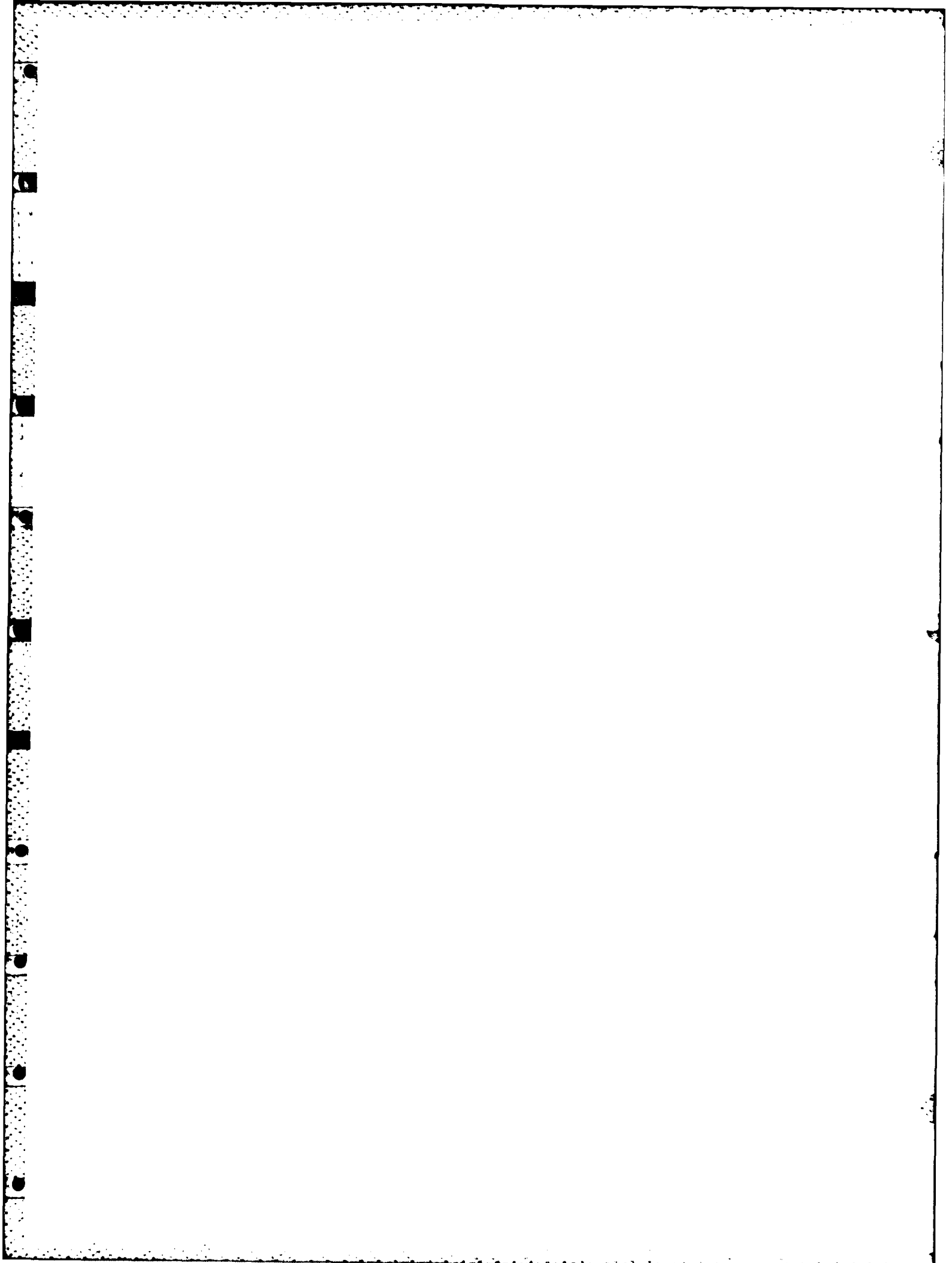
*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1

60 N

SEP-DEC



MST	DATE												SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY -											
	JAN				FEB				MAR					APR										
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
0800	.09	.09	.09	.10	.11	.12	.13	.15	.17	.19	.21	.23	.27	.30	.33	.35	.38	.41	.44	.45	.48	.50	.52	.54
	129	129	133	140	151	166	184	210	235	253	264	326	381	417	453	488	524	558	597	624	657	683	707	728
	.13	.13	.13	.14	.15	.16	.17	.19	.21	.23	.25	.28	.32	.34	.37	.40	.42	.45	.48	.50	.53	.55	.56	.58
15	185	186	190	197	209	224	243	270	295	324	354	387	442	477	513	549	583	617	656	685	713	740	763	784
30	.17	.17	.17	.18	.19	.20	.21	.23	.25	.27	.30	.32	.36	.39	.41	.44	.47	.49	.52	.54	.57	.59	.60	.62
	239	240	244	252	265	280	300	327	353	382	413	445	500	535	571	606	641	674	712	741	769	794	816	836
	.21	.21	.21	.22	.23	.24	.25	.27	.29	.31	.33	.36	.40	.42	.45	.48	.51	.53	.56	.58	.60	.62	.64	.66
45	290	291	296	305	318	334	354	382	408	437	468	501	556	591	626	661	695	728	765	794	821	845	867	886
0900	.24	.24	.24	.25	.26	.27	.29	.31	.33	.35	.37	.40	.44	.46	.49	.52	.54	.57	.60	.62	.64	.66	.68	.69
	338	340	346	355	368	385	406	434	461	490	521	554	609	644	679	713	747	779	816	844	870	894	915	934
	.27	.27	.28	.28	.29	.31	.32	.34	.36	.39	.41	.43	.47	.50	.53	.55	.58	.60	.63	.65	.67	.69	.71	.73
15	384	386	392	402	416	434	454	483	511	540	571	604	659	694	728	762	795	827	863	891	916	939	960	978
30	.30	.30	.31	.32	.33	.34	.35	.38	.40	.42	.44	.47	.51	.53	.56	.59	.61	.64	.66	.68	.71	.72	.74	.76
	426	428	435	446	461	479	500	529	557	587	618	651	706	740	774	808	841	872	907	934	959	981	1001	019
	.33	.33	.34	.34	.36	.37	.38	.41	.43	.45	.47	.50	.54	.56	.59	.62	.64	.67	.69	.71	.73	.75	.77	.78
45	465	468	475	487	502	520	542	572	600	630	662	695	749	783	817	850	882	913	947	974	998	1020	1039	056
1000	.35	.36	.36	.37	.38	.40	.41	.43	.46	.48	.50	.53	.57	.59	.62	.64	.67	.69	.72	.74	.75	.78	.79	.81
	500	504	512	524	539	559	581	611	640	670	702	735	789	823	856	889	920	950	984	1013	1033	1055	1074	090
	.38	.38	.39	.39	.41	.42	.44	.46	.48	.50	.53	.55	.59	.62	.64	.67	.69	.72	.74	.75	.78	.80	.82	.83
15	532	536	544	557	573	593	616	647	675	706	738	771	825	858	891	924	955	984	1017	1042	1065	1086	1104	120
30	.40	.40	.41	.42	.43	.44	.46	.48	.50	.53	.55	.58	.62	.64	.67	.69	.72	.74	.76	.79	.80	.82	.84	.85
	559	564	573	587	604	624	647	679	707	738	770	803	856	890	923	954	985	014	046	071	093	113	131	146
	.41	.42	.42	.43	.45	.46	.48	.50	.52	.55	.57	.60	.64	.66	.69	.71	.73	.76	.78	.80	.82	.84	.85	.87
45	583	588	599	612	630	651	674	706	735	766	798	831	884	917	950	981	1011	039	071	095	117	136	154	169
JAN-APR	40 N				TABLE B-1				SOLAR PARAMETERS				COS Z X0 (W/M.*2.)				*** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY -							

MST	JAN						FEB						MAR						APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.43	.43	.44	.45	.46	.48	.50	.52	.54	.56	.59	.61	.65	.68	.70	.73	.75	.77	.80	.82	.84	.85	.87	.88	
	603	609	620	634	652	673	698	730	759	790	822	855	908	940	972	003	033	061	*091	*115	*135	*155	*172	*187	
	15	.44	.44	.45	.46	.47	.49	.51	.53	.55	.58	.60	.63	.67	.69	.72	.74	.76	.79	.81	.83	.85	.86	.88	.89
30	619	625	637	652	670	692	717	749	779	810	842	874	927	959	991	021	050	078	*108	*131	*152	*170	*187	*201	
	45	.45	.45	.46	.47	.48	.50	.52	.54	.57	.59	.61	.64	.68	.70	.73	.75	.77	.79	.82	.84	.85	.87	.89	.90
	630	637	649	665	684	706	731	764	794	825	857	890	942	974	005	035	063	090	*120	*142	*163	*181	*197	*211	
45	.45	.46	.47	.48	.49	.51	.53	.55	.57	.60	.62	.65	.68	.71	.73	.76	.78	.80	.82	.84	.85	.88	.89	.90	
	638	645	658	674	694	716	742	775	805	836	868	900	952	984	015	044	072	098	*127	*143	*169	*187	*203	*216	
	1200	.45	.46	.47	.48	.49	.51	.53	.56	.58	.60	.63	.65	.69	.71	.74	.76	.78	.80	.83	.84	.85	.88	.89	.90
15	641	649	662	679	699	722	748	781	811	843	874	907	959	990	020	049	076	102	*130	*152	*171	*189	*204	*218	
	.45	.46	.47	.48	.50	.51	.53	.56	.58	.60	.63	.65	.69	.71	.74	.76	.78	.80	.83	.84	.85	.87	.89	.90	
	640	648	662	679	700	723	749	783	813	845	876	909	960	991	020	049	076	101	*129	*153	*169	*186	*201	*215	
30	.45	.45	.47	.48	.49	.51	.53	.55	.58	.60	.62	.65	.69	.71	.73	.76	.78	.80	.82	.84	.85	.87	.88	.90	
	634	643	657	675	696	720	747	781	811	842	874	906	956	987	016	045	071	096	*123	*141	*163	*179	*194	*207	
	45	.44	.45	.46	.47	.49	.51	.52	.55	.57	.60	.62	.64	.68	.71	.73	.75	.77	.79	.81	.83	.85	.86	.87	.89
45	625	634	649	667	689	713	739	774	804	835	867	899	949	979	008	036	062	086	*113	*133	*152	*168	*183	*196	
	1300	.43	.44	.45	.46	.48	.50	.52	.54	.56	.59	.61	.64	.67	.70	.72	.74	.76	.78	.80	.82	.84	.85	.86	.88
	611	620	636	655	676	701	728	762	793	824	855	887	937	966	995	022	048	072	*098	*115	*135	*153	*167	*180	
15	.42	.43	.44	.45	.47	.49	.51	.53	.55	.58	.60	.62	.66	.68	.71	.73	.75	.77	.79	.81	.82	.84	.85	.86	
	593	603	619	638	660	685	712	747	777	808	839	871	920	949	978	005	030	053	*079	*093	*117	*133	*148	*160	
	30	.40	.41	.42	.44	.45	.47	.49	.52	.54	.56	.59	.61	.65	.67	.69	.71	.73	.75	.77	.79	.80	.82	.83	.84
45	571	581	598	617	640	665	692	727	757	788	819	850	899	928	956	982	007	031	*056	*075	*093	*109	*124	*137	
	.39	.39	.40	.42	.44	.45	.47	.50	.52	.54	.57	.59	.63	.65	.67	.69	.71	.73	.75	.77	.78	.80	.81	.82	
	545	556	572	592	615	640	668	703	733	764	795	826	874	902	930	956	981	004	*029	*043	*056	*081	*096	*109	

JAN-APR 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	JAN							FEB							DATE							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
1400	.36	.37	.38	.40	.42	.43	.45	.48	.50	.52	.55	.57	.61	.63	.65	.67	.69	.71	.73	.75	.76	.77	.79	.80	.997	.015	.034	.050	.064	.077					
	515	526	543	563	587	612	639	674	704	735	766	797	844	873	900	926	950	972																	
15	.34	.35	.36	.38	.39	.41	.43	.46	.48	.50	.52	.55	.59	.60	.63	.65	.67	.68	.70	.72	.73	.75	.76	.77	.962	.981	.993	.014	.029	.042					
	481	493	510	531	554	580	607	642	672	703	733	764	811	839	866	891	915	937																	
30	.31	.32	.34	.35	.37	.39	.41	.43	.45	.48	.50	.52	.56	.58	.60	.62	.64	.65	.68	.69	.71	.72	.73	.74	.923	.942	.959	.975	.990	.003					
	444	456	474	494	518	544	571	606	636	666	697	727	773	801	828	853	876	899																	
45	.29	.29	.31	.32	.34	.36	.38	.40	.42	.45	.47	.49	.53	.55	.57	.59	.61	.62	.64	.65	.67	.69	.70	.71	.880	.893	.915	.933	.947	.961					
	403	415	433	455	478	504	532	566	596	626	656	686	732	760	786	811	834	856																	
1500	.25	.26	.28	.29	.31	.33	.35	.37	.39	.42	.44	.46	.49	.52	.54	.55	.57	.59	.61	.63	.64	.65	.67	.68	.834	.853	.871	.887	.902	.916					
	359	372	390	411	435	461	488	523	553	583	612	642	688	715	741	765	788	810																	
15	.22	.23	.24	.26	.28	.29	.31	.34	.36	.38	.40	.43	.46	.48	.50	.52	.54	.55	.57	.59	.60	.62	.63	.64	.785	.804	.821	.838	.853	.867					
	312	325	344	365	389	415	442	476	506	536	565	594	639	666	692	716	739	761																	
30	.19	.19	.21	.22	.24	.26	.28	.30	.32	.35	.37	.39	.42	.44	.46	.48	.50	.52	.54	.55	.57	.58	.59	.61	.733	.752	.769	.786	.801	.816					
	262	275	294	316	339	365	392	427	456	485	515	544	588	615	640	664	687	709																	
45	.15	.16	.17	.19	.20	.22	.24	.27	.29	.31	.33	.35	.38	.40	.42	.44	.46	.48	.50	.51	.53	.54	.55	.57	.678	.697	.715	.732	.747	.762					
	210	223	242	263	287	313	340	374	403	432	461	490	534	560	586	610	632	654																	
1600	.11	.12	.13	.15	.16	.18	.20	.23	.25	.27	.29	.31	.34	.36	.38	.40	.42	.43	.45	.47	.48	.50	.51	.52	.621	.640	.658	.675	.691	.706					
	155	168	187	209	232	258	285	319	348	376	405	433	477	503	528	552	575	596																	
15	.07	.08	.09	.11	.12	.14	.16	.19	.21	.23	.25	.27	.30	.32	.34	.36	.37	.39	.41	.43	.44	.45	.47	.48	.561	.580	.598	.616	.632	.648					
	098	111	130	152	175	201	228	261	290	318	347	375	418	444	469	492	515	536																	
30	.03	.04	.05	.07	.08	.10	.12	.14	.16	.18	.20	.22	.26	.28	.29	.31	.33	.35	.37	.38	.40	.41	.42	.44	.499	.513	.537	.555	.572	.588					
	039	052	071	093	116	141	168	201	229	259	286	313	356	382	407	430	453	474																	
45	.00	.00	.01	.02	.04	.06	.08	.10	.12	.14	.16	.18	.21	.23	.25	.27	.28	.30	.32	.33	.35	.36	.38	.39	.435	.455	.474	.492	.510	.526					
	000	000	010	032	055	080	107	139	167	195	223	250	293	318	343	366	389	411																	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1

40 N

JAN-APR

MST	DATE												APR																	
	JAN				FEB				MAR				APR				APR				APR									
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1700	.00	.00	.00	.00	.00	.01	.03	.05	.07	.09	.11	.13	.16	.18	.20	.22	.24	.25	.27	.29	.30	.32	.33	.34	.370	.390	.410	.428	.446	.464
15	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.07	.09	.12	.13	.15	.17	.19	.20	.22	.24	.25	.27	.28	.30	.304	.325	.344	.363	.382	.400
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.07	.09	.10	.12	.14	.15	.17	.19	.20	.22	.23	.25	.237	.253	.278	.297	.316	.335
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.05	.07	.09	.10	.12	.14	.16	.17	.19	.20	.169	.190	.211	.231	.251	.270
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.05	.07	.09	.10	.12	.14	.15	.101	.123	.144	.164	.185	.204
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.06	.07	.09	.10	.033	.055	.076	.098	.118	.139
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.06	.000	.000	.009	.031	.053	.074
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.000	.000	.000	.000	.000	.009

JAN-APR 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.

X0 (W/M*2.)

ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0400	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.01	.02	.02	.03	.03	.03	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	010	021	031	035	036	034	030	023	014	002	000	000	000	000	000	000	000	000	000	000
0500	.00	.01	.03	.04	.05	.06	.07	.07	.07	.07	.07	.06	.05	.05	.04	.03	.01	.00	.00	.00	.00	.00	.00	.00
	000	019	040	056	070	081	090	093	094	093	088	081	072	061	047	033	016	000	000	000	000	000	000	000
15	.04	.06	.08	.09	.10	.11	.11	.12	.12	.12	.11	.11	.10	.09	.08	.07	.06	.05	.03	.01	.00	.00	.00	.00
	060	082	102	118	131	142	150	153	154	152	147	140	131	120	107	093	077	060	038	019	000	000	000	000
30	.09	.11	.12	.14	.15	.15	.16	.16	.16	.16	.16	.15	.15	.14	.13	.12	.10	.09	.08	.03	.05	.03	.02	.00
	124	146	165	181	193	203	211	214	214	212	207	200	191	180	168	154	138	122	101	082	064	044	025	005
45	.14	.16	.17	.18	.19	.20	.21	.21	.21	.21	.20	.20	.19	.18	.17	.16	.15	.14	.12	.11	.10	.08	.07	.05
	188	210	228	243	256	265	272	275	275	273	269	261	252	241	229	215	200	184	164	146	128	109	090	071
0600	.19	.20	.22	.23	.24	.25	.25	.25	.25	.25	.24	.24	.24	.23	.22	.21	.20	.19	.17	.16	.14	.13	.12	.10
	253	274	292	306	318	327	333	336	336	334	329	322	313	303	291	277	263	247	228	210	193	175	156	137
15	.24	.25	.27	.28	.29	.29	.30	.30	.30	.30	.29	.29	.28	.28	.27	.26	.25	.23	.22	.21	.19	.18	.17	.15
	318	338	355	369	381	389	395	397	397	394	390	383	374	364	352	339	325	310	291	275	258	240	222	204
30	.28	.30	.31	.32	.33	.34	.34	.35	.35	.34	.34	.34	.33	.32	.31	.30	.29	.28	.27	.25	.24	.23	.22	.20
	383	402	418	432	443	450	456	458	458	455	450	444	435	425	414	401	388	373	355	339	322	305	288	270
45	.33	.35	.36	.37	.38	.38	.39	.39	.39	.39	.39	.38	.37	.37	.36	.35	.34	.33	.31	.30	.29	.28	.26	.25
	446	465	481	494	504	512	517	519	518	515	511	504	496	486	475	463	450	436	418	402	386	370	353	336

MAY-AUG 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
0700	.38	.39	.41	.42	.42	.43	.43	.44	.44	.43	.43	.43	.42	.41	.40	.40	.39	.37	.36	.35	.34	.32	.31	.30
	509	527	543	555	565	572	577	578	578	575	570	564	556	546	536	524	511	497	480	465	450	434	417	400
15	.42	.44	.45	.46	.47	.47	.48	.48	.48	.48	.48	.47	.46	.46	.45	.44	.43	.42	.41	.40	.38	.37	.36	.35
	571	589	603	615	624	631	636	637	636	633	629	622	614	605	595	584	571	558	542	527	512	497	481	464
30	.47	.48	.50	.50	.51	.52	.52	.52	.52	.52	.52	.51	.51	.50	.49	.48	.48	.47	.45	.44	.43	.42	.41	.39
	631	648	663	674	683	689	693	694	693	690	686	680	672	663	653	642	631	618	602	587	573	558	543	526
45	.51	.53	.54	.55	.55	.56	.56	.57	.57	.56	.56	.56	.55	.54	.54	.53	.52	.51	.50	.49	.47	.46	.45	.44
	690	706	720	731	739	745	749	750	749	746	742	736	728	720	710	700	688	676	661	647	633	618	603	587
0800	.56	.57	.58	.59	.60	.60	.60	.61	.61	.60	.60	.60	.59	.59	.58	.57	.56	.55	.54	.53	.52	.51	.49	.48
	747	763	776	786	794	799	803	804	803	800	796	790	783	775	765	755	744	733	718	705	691	677	662	646
15	.60	.61	.62	.63	.64	.64	.64	.65	.64	.64	.64	.64	.63	.63	.62	.61	.60	.59	.58	.57	.55	.55	.54	.52
	801	817	829	839	847	852	855	856	855	852	848	842	835	827	819	809	798	787	773	760	747	733	718	702
30	.63	.65	.66	.67	.67	.68	.68	.68	.68	.68	.68	.67	.67	.66	.66	.65	.64	.63	.62	.61	.60	.59	.58	.56
	854	868	880	890	897	902	905	906	904	902	898	892	886	878	870	860	850	839	825	813	800	786	772	756
45	.67	.68	.69	.70	.71	.71	.72	.72	.72	.72	.71	.71	.71	.70	.69	.69	.68	.67	.66	.65	.64	.63	.61	.60
	903	917	929	938	945	949	952	953	952	949	945	940	934	926	918	909	900	889	876	864	851	838	823	808
0900	.71	.72	.73	.74	.74	.75	.75	.75	.75	.75	.75	.74	.74	.73	.73	.72	.71	.71	.69	.68	.67	.66	.65	.64
	950	963	974	983	990	994	997	997	996	994	990	985	979	972	964	956	947	936	923	912	899	886	872	857
15	.74	.75	.76	.77	.77	.78	.78	.78	.78	.78	.78	.78	.77	.77	.76	.75	.75	.74	.73	.72	.71	.70	.68	.67
	993	006	017	025	032	036	039	039	038	036	032	027	022	015	008	000	991	981	968	957	945	932	917	902
30	.77	.78	.79	.80	.80	.81	.81	.81	.81	.81	.81	.81	.80	.80	.79	.79	.78	.77	.76	.75	.74	.73	.72	.70
	034	046	057	065	071	075	077	078	077	075	071	067	061	055	048	040	032	022	010	999	937	974	960	945
45	.80	.81	.82	.82	.83	.83	.84	.84	.84	.84	.84	.83	.83	.83	.82	.81	.81	.80	.79	.78	.77	.76	.75	.73
	071	083	093	101	106	110	113	113	113	110	107	103	098	092	085	078	069	060	048	038	028	013	999	984

MAY-AUG 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1000	.82 .83 .84 .85 .85 .86						.86 .86 .86 .86 .86 .86						.85 .85 .85 .84 .83 .92						.81 .81 .79 .78 .77 .76	
	*104*116*125*133*139*143						*145*146*145*143*140*136						*131*126*119*112*104*095						*084*073*051*048*034*019	
15	.84 .85 .86 .87 .88 .88						.88 .88 .89 .88 .88 .88						.83 .87 .87 .86 .86 .85						.84 .83 .82 .81 .80 .78	
	*134*145*155*162*167*171						*174*174*174*172*169*165						*161*156*150*143*135*127						*115*101*033*080*066*050	
30	.86 .87 .88 .89 .89 .90						.90 .90 .90 .90 .90 .90						.90 .89 .89 .88 .88 .87						.86 .85 .84 .83 .82 .80	
	*160*171*180*187*192*196						*199*199*199*197*195*192						*187*182*177*170*163*154						*143*132*121*108*094*078	
45	.88 .89 .90 .90 .91 .91						.92 .92 .92 .92 .92 .92						.91 .91 .91 .90 .89 .89						.88 .87 .85 .85 .83 .82	
	*182*192*201*208*213*217						*220*221*221*219*217*214						*210*205*200*193*186*178						*167*153*145*132*117*102	
1100	.89 .90 .91 .92 .92 .93						.93 .93 .93 .93 .93 .93						.93 .93 .92 .92 .91 .90						.89 .83 .87 .86 .85 .83	
	*199*210*219*226*231*235						*237*238*238*237*235*232						*225*224*219*213*206*198						*187*177*165*152*137*121	
15	.90 .91 .92 .93 .93 .94						.94 .94 .94 .94 .94 .94						.94 .94 .93 .93 .92 .91						.90 .90 .88 .87 .86 .85	
	*213*224*232*239*244*248						*251*252*252*251*250*247						*244*240*235*229*222*214						*203*193*181*168*153*136	
30	.91 .92 .93 .93 .94 .94						.95 .95 .95 .95 .95 .95						.95 .95 .94 .94 .93 .92						.91 .90 .89 .88 .87 .85	
	*223*233*241*248*253*257						*260*262*262*262*260*258						*255*251*245*241*234*226						*215*203*193*179*164*147	
45	.91 .92 .93 .94 .94 .95						.95 .96 .96 .96 .96 .96						.95 .95 .95 .94 .94 .93						.92 .91 .90 .89 .87 .86	
	*228*238*247*253*259*263						*266*268*268*268*267*265						*262*258*254*248*242*234						*223*212*200*187*171*154	
1200	.91 .92 .93 .94 .94 .95						.95 .96 .96 .96 .96 .96						.96 .95 .95 .94 .94 .93						.92 .91 .90 .89 .88 .86	
	*229*239*248*254*260*264						*268*269*270*270*269*268						*265*262*258*252*246*238						*227*213*204*190*174*157	
15	.91 .92 .93 .94 .94 .95						.95 .95 .96 .96 .96 .96						.95 .95 .95 .94 .94 .93						.92 .91 .90 .89 .87 .86	
	*226*236*244*251*257*261						*265*267*268*269*268*267						*264*261*257*252*245*238						*227*215*203*189*173*155	
30	.91 .92 .92 .93 .94 .94						.95 .95 .95 .95 .95 .95						.95 .95 .95 .94 .94 .93						.92 .91 .90 .88 .87 .85	
	*219*229*237*244*250*254						*259*261*262*263*263*262						*260*257*253*247*241*233						*222*211*198*183*167*148	
45	.90 .91 .92 .92 .93 .93						.94 .94 .94 .95 .95 .95						.95 .94 .94 .93 .93 .92						.91 .90 .89 .88 .86 .85	
	*207*217*226*233*239*244						*248*251*253*253*253*253						*251*248*244*239*233*225						*213*202*189*174*157*138	

MAY-AUG 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/V*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG										
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30								
1300	.89	.90	.90	.91	.92	.92	.93	.93	.93	.94	.94	.94	.91	.93	.93	.93	.92	.91	.90	.90	.89	.88	.87	.85	.84	
	*192	*202	*210	*217	*224	*229	*234	*237	*239	*240	*240	*240	*23	*235	*232	*227	*220	*212		*200	*189	*175	*160	*142	*123	
15	.87	.88	.89	.90	.90	.91	.91	.92	.92	.92	.92	.92	.92	.92	.92	.91	.91	.90		.89	.88	.87	.85	.84	.82	
	*172	*182	*191	*198	*205	*210	*215	*219	*221	*223	*223	*223	*221	*219	*215	*210	*204	*196		*184	*172	*159	*142	*124	*104	
30	.85	.86	.87	.88	.89	.89	.90	.90	.90	.91	.91	.91	.91	.91	.91	.90	.90	.89	.88		.87	.85	.85	.84	.82	.80
	*148	*158	*167	*175	*182	*187	*193	*197	*200	*201	*202	*202	*201	*199	*195	*190	*183	*175		*163	*150	*136	*120	*101	*080	
45	.83	.84	.85	.86	.87	.87	.88	.88	.89	.89	.89	.89	.87	.89	.88	.88	.87	.87		.86	.84	.83	.82	.80	.78	
	*120	*131	*140	*148	*155	*161	*167	*171	*174	*177	*178	*178	*177	*175	*171	*166	*159	*151		*138	*125	*110	*094	*074	*053	
1400	.81	.82	.83	.84	.84	.85	.86	.86	.86	.87	.87	.87	.85	.87	.86	.86	.85	.85		.83	.82	.81	.80	.78	.76	
	*089	*100	*109	*117	*125	*131	*138	*142	*146	*148	*150	*150	*149	*147	*143	*138	*131	*122		*109	*093	*081	*064	*044	*022	
15	.78	.79	.80	.81	.82	.82	.83	.84	.84	.84	.84	.85	.82	.84	.84	.84	.83	.82		.81	.80	.79	.77	.75	.73	
	*054	*065	*075	*083	*091	*098	*105	*110	*113	*116	*118	*118	*118	*116	*112	*107	*100	*091		*077	*064	*048	*030	*010	*987	
30	.75	.76	.77	.78	.79	.80	.80	.81	.81	.82	.82	.82	.79	.82	.81	.81	.80	.79		.78	.77	.76	.74	.72	.71	
	*015	*026	*037	*046	*054	*061	*069	*074	*078	*081	*083	*084	*083	.81	.77	.77	.76	.75		*042	*023	*011	.993	.972	.948	
45	.72	.73	.74	.75	.76	.77	.77	.78	.78	.79	.79	.79	.77	.79	.78	.78	.77	.77		.75	.74	.73	.71	.69	.67	
	.973	.985	.995	*005	*014	*021	*029	*035	*039	*043	*045	*046	*045	.043	.039	.034	.026	.017		*002	.983	.971	.952	.930	.906	
1500	.69	.70	.71	.72	.73	.73	.74	.75	.75	.76	.76	.76	.73	.76	.75	.75	.74	.73		.72	.71	.70	.68	.66	.64	
	.928	.940	.951	.961	.970	.978	.987	.993	.997	*001	*004	*005	*004	.002	.998	.993	.985	.975		.960	.945	.928	.908	.886	.861	
15	.65	.67	.68	.68	.69	.70	.71	.71	.72	.72	.72	.73	.70	.73	.72	.72	.71	.70		.69	.68	.66	.64	.63	.60	
	.880	.893	.904	.914	.924	.932	.941	.948	.953	.957	.959	.961	.960	.958	.954	.948	.940	.930		.915	.893	.881	.861	.838	.813	
30	.62	.63	.64	.65	.66	.66	.67	.68	.68	.69	.69	.69	.66	.69	.69	.68	.67	.66		.65	.64	.62	.61	.59	.57	
	.830	.842	.854	.865	.875	.884	.894	.900	.906	.910	.913	.914	.914	.912	.908	.901	.893	.883		.867	.851	.832	.811	.787	.761	
45	.58	.59	.60	.61	.62	.63	.63	.64	.65	.65	.65	.65	.63	.65	.65	.64	.64	.63		.61	.60	.58	.57	.55	.53	
	.776	.789	.802	.813	.824	.833	.843	.850	.856	.861	.864	.865	.865	.863	.858	.852	.843	.832		.816	.793	.783	.758	.734	.707	

MAY-AUG 40 N TABLE B-1 SOLAR PARAMETERS COS 2 *** SIGNIFIES COS 2 = 1.
 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY +

MST	DATE																								
	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30							
1600	.54	.55	.56	.57	.58	.59	.60	.60	.61	.61	.61	.61	.61	.61	.61	.61	.60	.60	.59	.57	.55	.54	.53	.51	.48
	721	734	747	759	770	780	791	798	804	809	812	814	813	811	807	800	791	780	763	745	726	703	676	651	
	15	.49	.50	.52	.53	.54	.54	.55	.56	.57	.57	.57	.57	.57	.57	.57	.56	.56	.55	.53	.52	.50	.48	.46	.44
30	663	677	691	703	714	725	736	744	750	755	759	760	760	758	753	746	737	725	707	690	659	646	620	593	
	30	.45	.46	.47	.48	.49	.50	.51	.52	.52	.53	.53	.53	.53	.53	.53	.52	.51	.50	.49	.47	.45	.44	.42	.40
	604	618	632	645	657	668	680	688	695	700	704	705	705	702	698	690	681	668	650	632	611	587	561	532	
45	45	.40	.42	.43	.44	.45	.46	.47	.48	.48	.49	.49	.49	.49	.49	.48	.47	.46	.44	.43	.41	.39	.37	.35	
	543	558	572	586	598	610	622	631	638	643	647	648	648	645	640	633	623	610	591	572	550	526	499	470	
	1700	.36	.37	.38	.39	.40	.41	.42	.43	.44	.44	.44	.45	.45	.44	.44	.43	.42	.41	.40	.38	.37	.35	.33	.30
15	480	496	511	525	538	550	563	572	579	585	589	590	590	587	582	574	563	550	530	511	489	464	436	406	
	15	.31	.32	.34	.35	.36	.37	.38	.39	.39	.40	.40	.40	.40	.40	.39	.38	.37	.35	.34	.32	.30	.28	.25	
	417	433	449	464	477	490	503	512	520	526	529	531	531	528	522	514	503	489	469	443	426	400	372	342	
30	30	.26	.28	.29	.30	.31	.32	.33	.34	.35	.35	.36	.36	.35	.35	.34	.33	.32	.31	.29	.27	.25	.23	.21	
	353	370	386	401	415	428	442	452	459	465	469	471	471	467	461	453	441	427	406	385	362	336	307	276	
	45	.21	.23	.24	.25	.27	.28	.29	.29	.30	.31	.31	.31	.31	.31	.30	.30	.29	.27	.26	.24	.22	.20	.18	.16
1800	288	306	322	338	353	366	381	391	399	405	409	410	410	406	400	391	379	365	343	322	298	271	241	210	
	1800	.17	.18	.19	.21	.22	.23	.24	.25	.26	.26	.26	.26	.26	.26	.25	.24	.23	.21	.19	.17	.15	.13	.11	
	223	241	259	275	290	304	319	329	338	344	348	350	350	349	345	339	329	317	279	253	233	205	176	143	
15	15	.12	.13	.15	.16	.17	.18	.19	.20	.21	.21	.22	.22	.22	.21	.21	.20	.19	.18	.16	.15	.13	.11	.08	.06
	158	177	195	212	228	242	257	268	277	283	287	289	289	287	284	277	267	254	216	193	168	140	110	077	
	30	.07	.08	.10	.11	.12	.14	.15	.16	.16	.17	.17	.17	.17	.17	.16	.16	.15	.13	.11	.10	.08	.06	.03	.01
45	094	113	132	150	166	181	196	207	216	222	226	228	228	225	222	215	205	192	152	123	103	075	044	011	
	45	.02	.04	.05	.07	.08	.09	.10	.11	.12	.12	.13	.13	.13	.12	.12	.11	.10	.09	.07	.05	.03	.01	.00	.00
	030	050	069	088	104	120	135	147	156	162	166	167	167	166	162	154	144	130	.089	.065	.039	.010	.000	.000	

MAY-AUG 40 N TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
1900	.00 .00 .01 .02 .03 .04	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08	.06 .07 .07 .08 .08 .08
15	.00 .00 .00 .00 .00 .00	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04	.01 .02 .03 .03 .04 .04
30	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00
45	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00

MAY-AUG 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.04	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	047	027	006	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0600	.09	.07	.06	.04	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	114	094	074	053	032	010	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.13	.12	.11	.09	.07	.06	.04	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	181	162	142	121	100	079	056	033	009	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.18	.17	.15	.14	.12	.11	.09	.07	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	248	229	209	189	168	146	124	100	076	051	026	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.23	.22	.20	.19	.17	.16	.14	.12	.10	.09	.07	.05	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	314	295	276	256	235	213	191	167	143	118	092	066	034	008	000	000	000	000	000	000	000	000	000	000
0700	.28	.27	.25	.24	.22	.20	.19	.17	.15	.13	.11	.09	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00
	379	361	342	322	301	279	257	233	208	183	157	130	098	072	046	020	000	000	000	000	000	000	000	000
15	.33	.31	.30	.28	.27	.25	.23	.22	.20	.18	.16	.14	.12	.10	.08	.06	.04	.03	.01	.00	.00	.00	.00	.00
	443	425	406	386	366	344	321	297	272	247	221	194	161	134	108	082	058	035	014	000	000	000	000	000
30	.38	.36	.35	.33	.31	.30	.28	.26	.24	.22	.20	.18	.16	.14	.12	.10	.08	.07	.05	.04	.03	.02	.01	.01
	506	488	469	449	429	407	384	360	335	309	282	255	223	195	169	143	118	096	075	055	041	028	019	013
45	.42	.41	.39	.38	.36	.34	.32	.31	.29	.27	.25	.23	.20	.18	.16	.14	.13	.11	.10	.03	.07	.06	.06	.05
	567	549	530	511	490	468	445	420	395	369	342	315	282	254	228	202	177	154	133	115	100	087	078	073

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE B-1

SEP-DEC 40 N

MST	DATE											
	SEP						OCT					
	5	10	15	20	25	30	5	10	15	20	25	30
0800	.46	.45	.44	.42	.40	.39	.37	.35	.33	.31	.29	.27
	626	608	589	570	549	527	503	479	453	427	400	372
15	.51	.49	.48	.46	.44	.43	.41	.39	.37	.35	.33	.31
	682	665	646	626	605	583	560	535	509	482	455	427
30	.55	.53	.52	.50	.48	.47	.45	.43	.41	.39	.37	.35
	737	719	700	681	659	637	613	588	562	535	507	479
45	.59	.57	.55	.54	.52	.50	.48	.46	.44	.42	.40	.38
	788	771	752	732	710	688	664	638	612	585	557	528
0900	.62	.61	.59	.57	.56	.54	.52	.50	.48	.46	.44	.41
	837	819	800	780	759	736	711	686	659	631	603	574
15	.66	.64	.62	.61	.59	.57	.55	.53	.51	.49	.47	.44
	883	865	846	825	803	780	755	729	702	675	646	617
30	.69	.67	.66	.64	.62	.60	.58	.56	.54	.52	.49	.47
	925	907	888	867	845	821	796	770	742	714	685	656
45	.72	.70	.68	.67	.65	.63	.61	.59	.57	.54	.52	.50
	964	945	926	905	882	858	833	806	779	750	721	692
1000	.74	.73	.71	.69	.67	.65	.63	.61	.59	.57	.54	.52
	999	980	960	939	916	892	866	839	811	782	753	723
15	.76	.75	.73	.71	.69	.67	.65	.63	.61	.59	.56	.54
	030	011	991	969	946	921	895	868	839	810	781	751
30	.78	.77	.75	.73	.71	.69	.67	.65	.63	.60	.58	.56
	057	038*	018	996	972	947	920	892	864	834	804	774
45	.80	.79	.77	.75	.73	.71	.69	.66	.64	.62	.59	.57
	081	061*	040*	018	994	968	941	913	884	854	824	794

SEP-DEC 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1100	.82	.80	.78	.76	.74	.72	.70	.68	.65	.63	.61	.58	.55	.53	.51	.49	.48	.46	.45	.41	.43	.43	.42	.43
	.100	.080	.059	.036	.011	.985	.957	.929	.899	.869	.839	.809	.773	.745	.718	.692	.669	.649	.632	.613	.608	.602	.599	.601
15	.83	.81	.79	.77	.75	.73	.71	.68	.66	.64	.61	.59	.56	.54	.52	.50	.48	.47	.46	.45	.44	.44	.43	.44
	.114	.094	.073	.049	.024	.997	.969	.940	.911	.880	.850	.819	.784	.755	.728	.703	.681	.661	.644	.631	.621	.616	.614	.616
30	.83	.82	.80	.78	.76	.74	.71	.69	.67	.64	.62	.59	.57	.55	.53	.51	.49	.48	.46	.45	.45	.44	.44	.44
	.125	.104	.082	.058	.032	.005	.977	.948	.917	.887	.856	.826	.790	.762	.735	.710	.688	.669	.652	.640	.631	.626	.625	.628
45	.84	.82	.80	.78	.76	.74	.72	.69	.67	.64	.62	.59	.57	.55	.53	.51	.49	.48	.47	.45	.45	.45	.45	.45
	.131	.110	.087	.063	.037	.009	.980	.950	.920	.889	.858	.827	.792	.764	.737	.713	.691	.672	.656	.644	.635	.631	.631	.635
1200	.84	.82	.80	.78	.76	.74	.71	.69	.67	.64	.62	.59	.57	.55	.53	.51	.49	.48	.47	.45	.45	.45	.45	.45
	.133	.111	.088	.063	.036	.008	.979	.949	.918	.886	.855	.825	.789	.761	.735	.711	.689	.671	.656	.644	.637	.633	.633	.638
15	.84	.82	.80	.78	.76	.73	.71	.69	.66	.64	.61	.59	.56	.54	.52	.50	.49	.47	.46	.45	.45	.45	.45	.45
	.130	.108	.084	.059	.031	.003	.973	.942	.911	.880	.848	.818	.782	.754	.728	.705	.684	.666	.651	.640	.633	.630	.631	.636
30	.83	.81	.79	.77	.75	.73	.70	.68	.65	.63	.60	.58	.55	.53	.51	.50	.48	.47	.46	.45	.44	.44	.44	.45
	.123	.101	.076	.050	.022	.993	.963	.932	.900	.868	.837	.806	.771	.743	.718	.694	.674	.656	.642	.632	.626	.623	.625	.630
45	.83	.81	.79	.76	.74	.72	.69	.67	.64	.62	.59	.57	.54	.52	.50	.48	.47	.46	.45	.44	.43	.43	.43	.44
	.112	.089	.064	.037	.008	.979	.948	.916	.885	.853	.821	.791	.755	.728	.702	.680	.659	.643	.629	.620	.614	.612	.614	.621
1300	.81	.79	.77	.75	.73	.70	.68	.65	.63	.60	.58	.55	.53	.51	.49	.47	.46	.44	.43	.43	.42	.42	.42	.43
	.097	.073	.047	.019	.990	.960	.929	.897	.865	.833	.801	.770	.735	.708	.683	.661	.641	.625	.612	.603	.598	.597	.599	.606
15	.80	.78	.76	.73	.71	.69	.66	.64	.61	.59	.56	.54	.51	.49	.47	.45	.44	.43	.42	.41	.41	.41	.41	.42
	.077	.052	.026	.998	.968	.937	.906	.873	.841	.809	.777	.746	.711	.684	.660	.638	.618	.603	.590	.582	.578	.577	.581	.588
30	.78	.76	.74	.72	.69	.67	.64	.62	.59	.56	.54	.52	.49	.47	.45	.44	.42	.41	.40	.40	.39	.39	.39	.40
	.053	.028	.000	.972	.942	.910	.878	.845	.813	.780	.749	.718	.683	.650	.632	.610	.592	.577	.565	.557	.553	.554	.558	.566
45	.76	.74	.72	.69	.67	.64	.62	.59	.57	.54	.52	.49	.47	.45	.43	.41	.40	.39	.38	.37	.37	.37	.38	.38
	.025	.999	.971	.942	.911	.879	.847	.814	.781	.748	.716	.686	.651	.625	.601	.579	.561	.547	.536	.529	.525	.526	.531	.539

SEP-DEC 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY +

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1400	.74	.72	.69	.67	.64	.62	.59	.57	.54	.52	.49	.47	.44	.42	.40	.39	.38	.36	.36	.35	.35	.35	.35	.36	
	993	966	938	908	877	844	811	778	745	712	680	649	615	589	565	545	527	513	503	493	494	495	500	509	
15	.71	.69	.66	.64	.62	.59	.56	.54	.51	.49	.46	.44	.41	.39	.36	.36	.35	.34	.33	.33	.32	.33	.33	.34	
	957	930	901	870	838	805	772	738	705	672	640	610	576	550	527	506	489	476	466	460	458	460	466	475	
30	.68	.66	.63	.61	.58	.56	.53	.51	.48	.46	.43	.41	.38	.36	.35	.33	.32	.31	.30	.30	.30	.30	.30	.31	
	918	890	860	829	796	763	729	695	662	629	597	566	533	507	484	465	448	435	426	421	419	422	428	438	
45	.65	.63	.60	.58	.55	.53	.50	.47	.45	.42	.40	.37	.35	.33	.31	.30	.29	.28	.27	.27	.27	.27	.27	.28	
	875	846	816	784	751	717	683	649	615	582	550	520	486	461	439	419	404	391	382	373	377	380	387	397	
1500	.61	.59	.57	.54	.52	.49	.46	.44	.41	.39	.36	.34	.31	.30	.28	.27	.25	.24	.24	.24	.23	.24	.24	.25	
	829	799	768	735	703	668	634	599	565	532	500	470	437	412	380	371	356	344	336	332	331	335	342	353	
15	.58	.55	.53	.50	.48	.45	.42	.40	.37	.35	.32	.30	.28	.26	.24	.23	.22	.21	.20	.20	.20	.20	.21	.22	
	779	750	718	685	651	616	581	546	512	479	447	417	385	360	339	320	305	294	287	283	283	287	295	306	
30	.54	.52	.49	.46	.44	.41	.38	.36	.33	.31	.28	.26	.24	.22	.20	.19	.18	.17	.17	.15	.16	.17	.17	.18	
	727	697	665	631	596	561	526	491	457	423	392	362	330	305	284	266	252	241	234	231	232	236	244	256	
45	.50	.47	.45	.42	.40	.37	.34	.32	.29	.26	.24	.22	.20	.18	.16	.15	.14	.13	.13	.13	.13	.13	.14	.14	
	673	641	609	574	539	504	468	433	399	365	334	304	272	248	228	210	196	186	180	177	178	183	191	203	
1600	.46	.43	.41	.38	.35	.33	.30	.27	.25	.22	.20	.18	.15	.14	.12	.11	.10	.09	.09	.09	.09	.09	.10	.11	
	615	584	550	516	480	444	408	373	338	305	274	244	213	189	169	152	139	129	123	121	122	127	136	148	
15	.41	.39	.36	.33	.31	.28	.25	.23	.20	.18	.15	.13	.11	.09	.08	.07	.06	.05	.05	.04	.05	.05	.06	.06	
	556	524	490	455	419	382	346	311	276	243	212	182	151	126	109	992	079	070	064	062	064	070	079	091	
30	.37	.34	.32	.29	.26	.23	.21	.18	.15	.13	.11	.09	.06	.05	.03	.02	.01	.01	.00	.00	.00	.01	.01	.02	
	495	462	427	392	355	319	282	247	212	179	148	119	088	065	046	030	017	009	003	002	004	010	019	032	
45	.32	.30	.27	.24	.21	.19	.16	.13	.11	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	432	398	363	327	291	254	217	181	147	114	083	054	023	001	000	000	000	000	000	000	000	000	000	000	

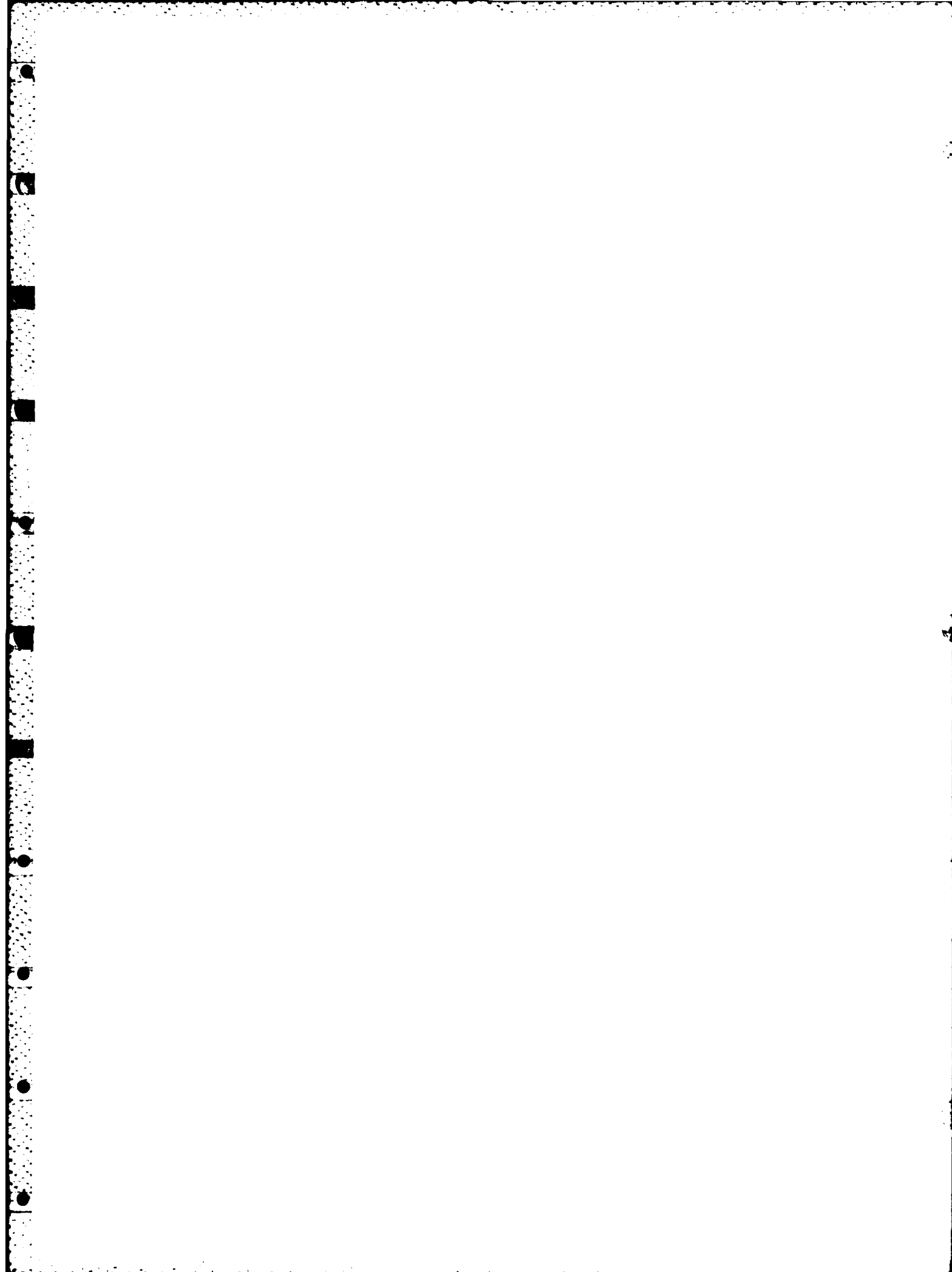
*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.)

SEP-DEC 40 N

MST	DATE																			
	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1700	.27	.25	.22	.19	.17	.14	.11	.08	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	
	368	334	298	261	224	187	151	115	080	047	016	000	000	000	000	000	000	000	000	
15	.22	.20	.17	.14	.12	.09	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	302	268	232	195	157	120	083	047	012	000	000	000	000	000	000	000	000	000	000	
30	.18	.15	.12	.09	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	236	201	164	127	090	052	015	000	000	000	000	000	000	000	000	000	000	000	000	
45	.13	.10	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	169	134	097	059	021	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
1800	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	102	066	029	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	035	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

SEP-DEC 40 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *



MST	DATE																								
	JAN						FEB						MAR						APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
0600	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.02	.02	.01	.01	.01	.01	.02	.02	.04	.05	.06	.07	.07	.10	.11	.13	.15	.17	.18	.21	.22	.24	.25	.26	.27
	031	025	020	018	018	018	021	027	037	049	064	080	099	133	156	160	204	229	253	280	302	322	340	356	370
0700	.08	.07	.07	.07	.07	.07	.08	.09	.09	.10	.12	.13	.13	.16	.17	.19	.21	.23	.24	.26	.23	.30	.31	.32	.33
	109	104	099	098	098	102	108	119	132	147	164	183	217	240	264	288	312	335	362	383	402	420	435	448	
15	.13	.13	.13	.12	.13	.13	.13	.14	.15	.16	.18	.19	.19	.22	.23	.25	.27	.29	.30	.32	.34	.35	.37	.38	.39
	186	181	177	176	177	181	188	200	213	228	246	265	300	322	346	370	393	416	442	463	481	498	512	525	
30	.19	.18	.18	.18	.18	.18	.19	.20	.21	.22	.23	.25	.25	.27	.29	.31	.33	.34	.36	.38	.40	.41	.42	.44	.44
	262	257	254	253	255	260	267	280	293	309	327	346	381	403	427	450	473	496	521	541	558	574	588	600	
45	.24	.23	.23	.23	.23	.24	.24	.25	.26	.28	.29	.30	.30	.33	.35	.37	.38	.40	.42	.44	.45	.47	.48	.49	.50
	335	331	328	328	331	336	344	357	371	387	405	425	460	483	506	529	551	573	598	617	634	649	662	672	

JAN-APR 20 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	JAN					FEB					MAR					APR								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
0800	.29	.28	.28	.28	.29	.29	.30	.31	.32	.33	.34	.36	.39	.40	.42	.44	.46	.47	.49	.51	.52	.53	.54	.55
	406	403	400	401	404	410	419	433	447	464	482	502	537	559	582	605	627	648	672	690	707	721	733	743
15	.34	.33	.33	.33	.34	.34	.35	.36	.37	.38	.40	.41	.44	.46	.47	.49	.51	.53	.54	.55	.57	.58	.59	.60
	475	472	470	471	475	482	492	506	521	538	557	577	611	634	656	679	700	721	744	761	776	790	801	810
30	.38	.38	.38	.38	.39	.39	.40	.41	.42	.43	.45	.46	.43	.51	.53	.54	.56	.58	.59	.61	.62	.63	.64	.65
	541	538	537	539	544	551	561	577	592	609	628	648	683	705	727	749	770	790	812	825	844	856	867	875
45	.43	.43	.43	.43	.43	.44	.45	.46	.47	.48	.50	.51	.54	.56	.57	.59	.61	.62	.64	.65	.67	.68	.69	.69
	603	601	601	604	609	617	628	644	660	677	696	717	751	773	795	817	837	857	878	894	907	919	929	937
0900	.47	.47	.47	.47	.48	.48	.49	.50	.52	.53	.54	.56	.59	.60	.62	.64	.65	.67	.69	.70	.71	.72	.73	.74
	663	661	662	665	671	680	691	708	724	742	762	782	816	838	860	881	901	919	940	955	968	979	988	995
15	.51	.51	.51	.51	.52	.52	.53	.55	.56	.57	.59	.60	.63	.65	.67	.68	.70	.71	.73	.74	.75	.76	.77	.78
	718	717	719	723	730	739	751	768	785	803	823	844	878	899	920	941	960	978	998	1012	1024	1034	1043	1049
30	.54	.54	.55	.55	.56	.56	.57	.59	.60	.61	.63	.65	.67	.69	.71	.72	.74	.75	.77	.78	.79	.80	.81	.81
	770	770	772	776	784	794	807	825	842	861	880	901	935	956	977	997	1016	1033	1052	1065	1075	1086	1093	1099
45	.58	.58	.58	.58	.59	.60	.61	.62	.64	.65	.67	.68	.71	.73	.74	.76	.78	.79	.81	.82	.83	.84	.84	.85
	818	818	821	826	835	845	859	877	895	914	934	954	988	1009	1029	1049	1067	1083	1101	1114	1125	1133	1140	1145
1000	.61	.61	.61	.62	.62	.63	.64	.66	.67	.69	.70	.72	.75	.76	.78	.79	.81	.82	.84	.85	.86	.87	.87	.88
	861	862	865	872	881	892	906	925	943	962	983	1003	1037	1057	1077	1096	1114	1129	1146	1158	1168	1176	1182	1186
15	.64	.64	.64	.65	.65	.66	.67	.69	.70	.72	.73	.75	.74	.79	.81	.83	.84	.85	.87	.88	.89	.90	.90	.91
	900	901	906	913	923	935	949	969	987	1007	1027	1048	1081	1101	1120	1139	1155	1171	1187	1195	1207	1214	1220	1223
30	.66	.66	.67	.67	.68	.69	.70	.72	.73	.75	.76	.78	.81	.82	.84	.85	.87	.88	.89	.90	.91	.92	.93	.93
	934	936	941	949	960	972	987	1008	1026	1046	1066	1087	1120	1140	1159	1176	1193	1207	1222	1233	1241	1248	1253	1256
45	.58	.68	.69	.69	.70	.71	.72	.74	.76	.77	.79	.80	.83	.85	.86	.88	.89	.90	.92	.93	.93	.94	.95	.95

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M*2.)

TABLE 8-1

JAN-APR 20 N

MST	DATE																							
	JAN				FEB				MAR				APR											
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1400	.62	.63	.64	.65	.66	.68	.69	.71	.73	.74	.76	.77	.79	.81	.82	.83	.84	.84	.85	.85	.86	.87	.87	
	879	889	904	921	939	958	978	*003*	023*	043*	062*	079	*105*	111*	131*	141*	150*	157	*163*	163*	169*	170*	171*	171
15	.59	.60	.61	.62	.64	.65	.67	.68	.70	.72	.73	.74	.76	.78	.79	.80	.80	.81	.82	.82	.83	.83	.83	.84
	838	848	864	880	899	918	938	963	983*	003*	021*	039	*064*	077*	089*	099*	107*	114	*119*	123*	125*	126*	127*	127
30	.56	.57	.58	.59	.61	.62	.63	.65	.67	.68	.70	.71	.73	.74	.75	.76	.77	.78	.78	.79	.79	.80	.80	.80
	792	803	819	836	855	874	894	919	939	958	977	994	*018*	031*	042*	052*	060*	066	*071*	075*	077*	079*	079*	080
45	.52	.53	.54	.56	.57	.59	.60	.62	.63	.65	.66	.68	.70	.71	.72	.72	.73	.74	.75	.75	.75	.76	.76	.76
	742	754	769	787	806	825	846	870	890	909	927	944	968	980	991*	000*	008*	014	*019*	022*	025*	026*	027*	028
1500	.49	.49	.51	.52	.53	.55	.56	.58	.60	.61	.62	.64	.66	.67	.68	.68	.69	.70	.70	.71	.71	.72	.72	.72
	688	700	716	734	753	773	793	817	837	855	873	890	913	925	936	944	952	957	963	963	968	970	971	972
15	.45	.45	.47	.48	.49	.51	.52	.54	.55	.57	.58	.60	.61	.62	.63	.64	.65	.65	.66	.63	.67	.67	.67	.68
	631	643	659	677	696	716	736	760	779	798	815	831	854	866	876	885	892	897	902	905	907	910	912	913
30	.40	.41	.42	.44	.45	.46	.48	.50	.51	.53	.54	.55	.57	.58	.59	.59	.60	.61	.61	.62	.62	.62	.63	.63
	570	582	598	616	635	655	675	699	718	736	753	769	791	803	812	821	828	833	838	842	844	847	848	850
45	.36	.37	.38	.39	.40	.42	.43	.45	.47	.48	.49	.50	.52	.53	.54	.55	.55	.56	.56	.57	.57	.58	.58	.58
	505	517	534	552	572	591	611	634	653	671	688	703	725	736	745	754	760	766	771	774	777	780	782	784
1600	.31	.32	.33	.34	.36	.37	.39	.40	.42	.43	.44	.45	.47	.48	.49	.50	.50	.51	.51	.52	.52	.52	.53	.53
	438	450	467	485	504	524	543	567	585	603	619	634	655	666	675	683	690	695	700	704	707	710	713	716
15	.26	.27	.28	.29	.31	.32	.34	.35	.37	.38	.39	.40	.42	.43	.44	.44	.45	.45	.46	.43	.47	.47	.47	.48
	368	380	397	415	434	454	473	496	514	531	547	562	582	593	602	610	616	622	627	631	634	638	641	644
30	.21	.22	.23	.24	.26	.27	.28	.30	.31	.33	.34	.35	.36	.37	.38	.39	.39	.40	.40	.41	.41	.42	.42	.42
	295	308	325	343	362	381	400	422	440	457	472	487	506	517	526	534	540	546	551	555	559	563	567	571
45	.16	.17	.18	.19	.20	.22	.23	.25	.26	.27	.28	.29	.31	.32	.32	.33	.34	.34	.35	.35	.35	.36	.36	.37
	221	233	250	268	287	306	324	346	364	380	395	409	429	439	448	455	462	467	473	473	482	486	491	495
JAN-APR	20 N				TABLE B-1				SOLAR PARAMETERS				COS Z X0 (W/M*2.)				*** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *							

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
XO (W/M**2.)

TABLE B-1

JAN-APR 20 N

MST	DATE												
	JAN			FEB			MAR			APR			
	1	5	10	15	20	25	30	5	10	15	20	25	30
1700	.10	.11	.12	.14	.15	.16	.18	.19	.20	.22	.23	.24	
	144	157	174	192	210	229	247	268	285	301	316	330	
15	.05	.06	.07	.08	.09	.11	.12	.13	.15	.16	.17	.18	
	067	079	096	114	132	150	168	189	205	221	235	249	
30	.00	.00	.01	.02	.04	.05	.06	.08	.09	.10	.11	.12	
	000	000	017	034	052	070	087	108	124	139	153	166	
45	.00	.00	.00	.00	.00	.00	.00	.02	.03	.04	.05	.06	
	000	000	000	000	000	000	006	025	041	056	070	082	
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	
	.29	.29	.30	.30	.30	.31	.31	.25	.26	.27	.27	.28	.28
	394	399	403	408	413	418	418	349	359	367	375	381	387
	.23	.23	.24	.24	.24	.25	.25	.19	.20	.21	.21	.22	.22
	312	318	323	328	334	340	340	267	277	285	293	300	306
	.17	.17	.18	.18	.18	.19	.19	.13	.14	.15	.15	.16	.16
	230	235	241	247	254	260	260	184	193	202	210	216	223
	.11	.11	.12	.12	.12	.13	.13	.07	.08	.09	.09	.10	.10
	147	153	159	166	173	180	180	100	109	118	125	133	139
	.05	.05	.06	.06	.06	.07	.07	.01	.02	.02	.03	.04	.04
	063	070	077	084	092	100	100	015	024	033	041	048	055
	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00
	000	000	000	002	011	019	019	000	000	000	000	000	000
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000

JAN-APR 20 N TABLE B-1 SOLAR PARAMETERS COS 2 ** SIGNIFIES COS 2 = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																		
	MAY				JUN				JUL				AUG						
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
30	.00	.00	.01	.02	.02	.02	.02	.02	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	
	000	000	011	019	026	030	032	031	029	025	019	013	005	000	000	000	000	000	
45	.05	.06	.07	.07	.08	.08	.08	.08	.08	.07	.07	.06	.05	.05	.04	.03	.03	.02	
	066	078	089	097	102	106	107	106	103	099	094	087	079	071	062	053	044	035	
0600	.11	.12	.12	.13	.13	.14	.14	.14	.13	.13	.13	.12	.12	.11	.10	.09	.09	.08	
	145	157	167	174	179	182	182	181	178	174	168	162	154	146	138	129	121	113	
15	.17	.18	.18	.19	.19	.19	.19	.19	.19	.19	.18	.18	.17	.17	.16	.16	.15	.14	.14
	225	236	245	251	255	258	258	256	253	249	243	237	229	222	214	206	198	190	
30	.23	.23	.24	.25	.25	.25	.25	.25	.25	.24	.24	.24	.23	.22	.22	.21	.21	.20	.20
	304	314	322	328	332	333	333	331	328	323	317	311	304	297	289	282	274	267	
45	.28	.29	.30	.30	.31	.31	.31	.31	.30	.30	.30	.29	.29	.28	.28	.27	.26	.26	.25
	382	392	399	404	407	408	408	405	402	397	391	385	378	371	364	357	350	344	
0700	.34	.35	.35	.36	.36	.36	.36	.36	.36	.36	.35	.35	.34	.34	.33	.33	.32	.32	.31
	459	468	475	479	482	482	481	478	475	470	464	458	452	445	438	432	426	420	
15	.40	.40	.41	.41	.42	.42	.42	.41	.41	.41	.41	.40	.40	.39	.39	.38	.38	.37	.37
	535	543	549	553	555	555	553	550	546	542	536	530	524	518	511	505	500	494	
30	.45	.46	.46	.47	.47	.47	.47	.47	.47	.46	.46	.45	.45	.44	.44	.44	.43	.43	.43
	609	616	622	625	626	626	624	621	617	612	606	601	595	589	583	577	572	567	
45	.51	.51	.52	.52	.52	.52	.52	.52	.52	.51	.51	.51	.50	.50	.49	.49	.48	.48	.48
	681	688	692	695	695	695	692	689	685	680	675	669	664	658	653	648	643	639	

TABLE B-1 SOLAR PARAMETERS COS Z
 MAY-AUG 20 N X0 (W/M*2.) *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY .

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0800	.56	.56	.57	.57	.57	.57	.57	.57	.57	.56	.56	.56	.55	.55	.54	.54	.54	.53		
	751	756	760	762	763	762	759	755	751	746	741	736	730	725	720	716	712	708		
15	.61	.61	.62	.62	.62	.62	.62	.62	.61	.61	.61	.60	.60	.60	.59	.59	.59	.58		
	818	823	826	827	827	826	822	819	815	810	805	800	795	790	786	782	778	775		
30	.66	.66	.66	.67	.67	.67	.67	.66	.66	.66	.65	.65	.65	.64	.64	.64	.63	.63		
	882	886	888	889	890	887	884	880	876	871	866	861	857	852	848	845	842	839		
45	.70	.71	.71	.71	.71	.71	.71	.71	.70	.70	.70	.70	.69	.69	.68	.68	.68	.68		
	942	946	948	948	947	945	942	938	933	929	924	920	915	912	908	905	902	900		
0900	.74	.75	.75	.75	.75	.75	.75	.75	.75	.74	.74	.74	.73	.73	.73	.73	.72	.72		
	999	003	004	004	003	000	996	992	988	984	979	975	971	968	965	962	960	958		
15	.78	.79	.79	.79	.79	.79	.79	.79	.78	.78	.78	.78	.77	.77	.77	.77	.76	.76		
	053	056	056	056	054	052	048	044	039	035	031	027	024	020	018	015	014	013		
30	.82	.82	.83	.83	.83	.83	.82	.82	.82	.82	.82	.81	.81	.81	.81	.80	.80	.80		
	103	104	105	104	102	099	095	091	087	083	079	075	072	069	067	065	064	063		
45	.85	.86	.86	.86	.86	.86	.86	.86	.85	.85	.85	.85	.84	.84	.84	.84	.84	.84		
	148	149	149	148	146	143	139	135	131	127	123	120	117	115	113	111	111	110		
1000	.88	.89	.89	.89	.89	.89	.89	.88	.88	.88	.88	.88	.87	.87	.87	.87	.87	.87		
	189	190	189	188	185	182	178	174	170	167	163	160	156	156	154	153	153	153		
15	.91	.91	.91	.92	.92	.91	.91	.91	.91	.91	.91	.90	.90	.90	.90	.90	.90	.90		
	225	226	225	223	221	217	213	209	206	202	199	197	193	193	192	191	191	191		
30	.93	.94	.94	.94	.94	.94	.94	.93	.93	.93	.93	.93	.93	.93	.92	.92	.92	.92		
	257	257	256	254	251	248	244	240	237	234	231	229	227	225	225	225	225	225		
45	.95	.96	.96	.96	.96	.96	.96	.95	.95	.95	.95	.95	.95	.95	.95	.95	.94	.94		
	284	284	282	280	277	274	270	266	263	260	258	256	254	254	253	253	254	254		

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M*2.)

TABLE 8-1

MAY-AUG 20 N

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1100	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.96	.95	.95	.96	.95	.95	
	*306	*305	*304	*301	*298	*295	*291	*288	*285	*282	*280	*279	*278	*277	*277	*277	*278	*280	*278	
15	.98	.99	.99	.99	.99	.99	.98	.98	.98	.98	.98	.98	.98	.98	.98	.97	.97	.97	.96	
	*323	*322	*320	*318	*315	*312	*308	*305	*302	*300	*298	*297	*296	*296	*296	*297	*298	*299	*297	
30	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.98	.98	.97	
	*335	*333	*332	*329	*326	*323	*320	*317	*314	*312	*311	*310	*310	*310	*310	*311	*312	*313	*310	
45	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	.98	
	*341	*340	*338	*335	*333	*330	*326	*324	*322	*320	*319	*318	*318	*319	*320	*321	*322	*322	*318	
1200	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	.98	
	*342	*341	*339	*337	*334	*331	*328	*326	*324	*323	*322	*322	*322	*323	*324	*325	*327	*328	*325	
15	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	.98	
	*339	*337	*335	*333	*330	*328	*325	*323	*322	*321	*321	*321	*321	*321	*322	*324	*325	*326	*323	
30	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.98	.98	
	*330	*328	*326	*324	*322	*320	*317	*316	*315	*314	*314	*314	*314	*315	*317	*318	*320	*321	*311	
45	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.97	.97	
	*316	*314	*312	*310	*308	*306	*304	*303	*302	*302	*303	*303	*303	*305	*306	*308	*309	*311	*312	
1300	.96	.96	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.97	.96	.96	.95	
	*296	*295	*293	*291	*290	*288	*287	*286	*286	*286	*286	*287	*287	*289	*291	*292	*294	*295	*286	
15	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.96	.96	.96	.96	.95	.95	.95	.94	.93	
	*272	*271	*269	*268	*266	*265	*264	*264	*264	*264	*265	*267	*267	*268	*270	*272	*274	*275	*266	
30	.92	.93	.93	.93	.93	.93	.93	.93	.93	.93	.94	.94	.94	.94	.94	.94	.94	.93	.91	
	*243	*242	*241	*239	*238	*237	*237	*237	*238	*238	*240	*241	*241	*243	*245	*247	*249	*250	*228	
45	.90	.90	.90	.90	.90	.91	.91	.91	.91	.91	.92	.92	.92	.92	.91	.91	.91	.90	.89	
	*209	*208	*207	*206	*206	*205	*205	*206	*207	*208	*210	*212	*212	*214	*216	*218	*219	*220	*194	

MAY-AUG 20 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1400	.87	.87	.87	.87	.88	.88	.88	.88	.89	.89	.89	.89	.89	.89	.89	.88	.88	.87	.86	
	170	170*	169*	169*	168*	169	*169*	170*	171*	173*	175*	177	*180*	182*	184*	185*	186*	186	156	
15	.84	.84	.84	.84	.85	.85	.85	.85	.86	.86	.86	.86	.86	.86	.86	.87	.87	.86	.83	
	127	127*	127*	127*	127*	128	*129*	130*	132*	134*	136*	139	*141*	143*	145*	147*	148*	147	113	
30	.80	.80	.81	.81	.81	.81	.82	.82	.82	.82	.83	.83	.83	.83	.83	.83	.83	.83	.79	
	080	080*	080*	081*	081*	083	*084*	086*	088*	091*	093*	096	*092*	101*	103*	104*	105*	104	066	
45	.76	.77	.77	.77	.77	.78	.78	.78	.79	.79	.79	.79	.80	.80	.80	.80	.80	.80	.75	
	029	029*	030*	031*	032*	034	*036*	038*	041*	044*	047*	049	*052*	055*	056*	058*	058*	057	014	
1500	.72	.73	.73	.73	.73	.74	.74	.74	.75	.75	.75	.75	.76	.76	.76	.76	.76	.76	.71	
	973	974	976	977	979	981	984	987	990	993	996	999	*002*	004*	006*	007*	007*	005	959	
15	.68	.68	.69	.69	.69	.69	.70	.70	.71	.71	.71	.71	.72	.72	.72	.72	.72	.72	.67	
	914	916	918	920	922	925	928	932	935	938	942	945	948	951	952	953	952	950	899	
30	.63	.64	.64	.64	.65	.65	.65	.66	.66	.67	.67	.67	.67	.68	.68	.68	.67	.67	.62	
	852	854	856	859	862	865	869	873	877	881	885	888	891	893	895	895	894	892	837	
45	.59	.59	.59	.60	.60	.60	.61	.61	.62	.62	.62	.63	.63	.63	.63	.63	.63	.63	.57	
	787	789	792	795	799	803	808	812	816	820	824	828	831	833	834	835	833	830	770	
1600	.53	.54	.54	.55	.55	.55	.56	.56	.57	.57	.58	.58	.58	.58	.58	.58	.58	.58	.52	
	719	722	725	729	733	738	743	748	753	757	761	765	768	770	771	771	769	766	701	
15	.48	.49	.49	.49	.50	.50	.51	.51	.52	.52	.53	.53	.53	.53	.53	.53	.53	.53	.47	
	648	652	656	660	665	670	676	681	687	691	696	700	703	705	705	705	703	699	629	
30	.43	.43	.44	.44	.45	.45	.46	.46	.47	.47	.47	.48	.48	.48	.48	.48	.48	.47	.41	
	575	579	584	589	595	600	607	613	618	623	628	632	635	637	637	636	634	629	555	
45	.37	.38	.38	.39	.39	.40	.40	.41	.41	.42	.42	.43	.43	.43	.43	.43	.42	.42	.36	
	500	505	511	517	523	529	536	542	548	554	558	562	565	567	567	566	563	558	479	

MAY-AUG 20 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.32	.32	.33	.33	.34	.34	.35	.35	.36	.36	.37	.37	.37	.37	.37	.36	.36	.35	.36	.35	.34	.33	.31	.30
	424	429	436	442	449	456	464	470	477	482	487	491	494	495	495	493	490	484	475	464	452	437	420	401
15	.26	.26	.27	.27	.28	.29	.29	.30	.30	.31	.31	.32	.32	.32	.32	.31	.31	.30	.29	.28	.27	.25	.24	
	346	352	359	367	374	381	390	397	404	409	414	418	421	422	422	420	416	409	399	383	375	359	341	322
30	.20	.20	.21	.22	.22	.23	.24	.24	.25	.25	.26	.26	.26	.26	.26	.26	.25	.25	.24	.23	.22	.21	.20	.18
	267	274	282	290	298	306	315	323	330	336	341	345	347	348	347	345	340	333	322	310	295	280	261	241
45	.14	.15	.15	.16	.17	.17	.18	.19	.19	.20	.20	.20	.21	.21	.21	.20	.19	.18	.17	.16	.15	.14	.12	
	188	196	204	213	222	230	240	248	255	261	266	270	273	273	272	269	264	257	245	232	217	200	181	160
1800	.08	.09	.09	.10	.11	.12	.12	.13	.14	.14	.15	.15	.15	.15	.15	.14	.14	.13	.12	.12	.10	.09	.08	.06
	108	117	126	136	145	154	165	173	180	187	192	196	198	198	197	193	187	179	167	153	138	120	100	078
15	.02	.03	.04	.04	.05	.06	.07	.07	.08	.08	.09	.09	.09	.09	.09	.08	.08	.07	.06	.05	.04	.03	.01	.00
	029	038	048	058	068	078	089	098	105	112	117	121	123	123	121	117	111	102	088	075	058	040	019	000
30	.00	.00	.00	.00	.00	.00	.01	.02	.02	.03	.03	.04	.04	.04	.03	.03	.02	.01	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	002	014	023	031	037	043	046	048	046	046	041	034	025	011	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

259

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.) ** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	SEP															OCT															DATE															NOV															DEC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	5					10					15					20					25					30					5					10					15					20					25					30					5					10					15					20					25					30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

SEP-DEC 20 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
0900	.71	.70	.70	.69	.69	.68	.67	.66	.65	.64	.63	.61	.53	.58	.56	.55	.54	.52	.51	.50	.49	.48	.47	.47
	952	949	946	942	936	928	919	908	896	882	866	849	828	809	790	771	752	734	718	703	690	679	670	664
15	.75	.74	.74	.73	.73	.72	.71	.70	.69	.68	.66	.65	.63	.62	.60	.59	.57	.56	.55	.54	.53	.52	.51	.51
	*008	*005	*002	997	991	983	973	962	949	935	919	902	880	861	842	823	804	786	770	755	743	733	725	720
30	.79	.78	.78	.77	.76	.76	.75	.74	.72	.71	.70	.68	.67	.65	.64	.62	.61	.59	.58	.57	.56	.55	.55	.55
	*059	*057	*053	*048	*041	*033	*023	*012	998	983	967	950	926	906	889	870	852	835	819	801	792	783	776	771
45	.82	.82	.81	.81	.80	.79	.78	.77	.76	.74	.73	.71	.70	.68	.67	.65	.64	.62	.61	.60	.59	.59	.58	.58
	*107	*104	*100	*094	*087	*079	*068	*056	*043	*027	*011	993	971	952	932	914	895	878	863	843	838	829	822	818
1000	.85	.85	.84	.84	.83	.82	.81	.80	.79	.77	.76	.74	.72	.71	.69	.68	.67	.65	.64	.63	.62	.62	.61	.61
	*150	*147	*142	*136	*129	*120	*109	*097	*082	*067	*050	*032	*009	990	971	952	934	918	903	889	878	870	864	861
15	.88	.88	.87	.86	.86	.85	.84	.82	.81	.80	.78	.77	.75	.73	.72	.70	.69	.68	.67	.66	.65	.64	.64	.64
	*188	*185	*180	*174	*166	*156	*145	*132	*117	*101	*084	*066	*043	*024	*005	986	969	952	938	925	915	907	902	900
30	.91	.90	.89	.89	.88	.87	.86	.85	.83	.82	.80	.79	.77	.75	.74	.72	.71	.70	.69	.68	.67	.66	.66	.66
	*222	*218	*213	*206	*197	*187	*175	*162	*147	*131	*113	*095	*072	*053	*034	*015	998	982	968	955	946	939	935	934
45	.93	.92	.92	.91	.90	.89	.88	.86	.85	.84	.82	.80	.79	.77	.76	.74	.73	.72	.70	.70	.69	.68	.68	.68
	*250	*246	*240	*233	*224	*213	*201	*187	*171	*155	*137	*118	*095	*076	*057	*039	*022	*007	993	982	973	967	963	963
1100	.95	.94	.93	.92	.91	.90	.89	.88	.86	.85	.83	.82	.80	.78	.77	.75	.74	.73	.72	.71	.70	.70	.70	.70
	*274	*269	*263	*255	*245	*234	*221	*206	*191	*173	*155	*137	*114	*095	*076	*058	*042	*027	*014	*003	995	989	986	987
15	.96	.95	.94	.94	.93	.91	.90	.89	.87	.86	.84	.83	.81	.79	.78	.76	.75	.74	.73	.72	.72	.71	.71	.71
	*292	*287	*280	*271	*261	*249	*236	*221	*204	*187	*169	*150	*127	*108	*089	*072	*056	*041	*029	*019	*011	*006	*004	*006
30	.97	.96	.95	.94	.93	.92	.91	.89	.88	.86	.85	.83	.81	.80	.78	.77	.76	.75	.74	.73	.72	.72	.72	.72
	*305	*299	*292	*282	*272	*259	*245	*230	*213	*195	*176	*157	*134	*116	*097	*080	*065	*051	*039	*023	*023	*019	*017	*019
45	.97	.97	.96	.95	.94	.92	.91	.90	.88	.87	.85	.83	.82	.80	.79	.77	.76	.75	.74	.73	.73	.73	.72	.73
	*313	*306	*298	*288	*277	*264	*249	*233	*216	*198	*179	*150	*137	*118	*100	*083	*068	*055	*044	*035	*029	*026	*025	*028

SEP-DEC 20 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1200	.98	.97	.96	.95	.94	.92	.91	.90	.88	.86	.85	.83	.81	.80	.78	.77	.76	.75	.74	.73	.73	.73	.73	.73	.73
	*315	*308	*299	*288	*276	*262	*247	*231	*213	*195	*176	*156	*133	*115	*097	*081	*066	*054	*043	*035	*030	*027	*028	*031	
15	.97	.96	.96	.94	.93	.92	.90	.89	.87	.86	.84	.83	.81	.79	.78	.77	.75	.74	.74	.73	.73	.72	.73	.73	
	*312	*304	*294	*283	*270	*256	*240	*223	*205	*186	*167	*148	*125	*107	*089	*073	*059	*047	*037	*030	*026	*024	*025	*030	
30	.97	.96	.95	.94	.92	.91	.90	.88	.86	.85	.83	.82	.80	.78	.77	.76	.75	.74	.73	.72	.72	.72	.72	.72	
	*303	*295	*284	*272	*259	*244	*228	*210	*192	*172	*153	*134	*111	*093	*076	*061	*047	*035	*026	*020	*016	*015	*018	*023	
45	.96	.95	.94	.92	.91	.90	.88	.87	.85	.83	.82	.80	.78	.77	.76	.74	.73	.72	.72	.71	.71	.71	.71	.71	
	*289	*280	*269	*256	*242	*226	*209	*191	*173	*153	*134	*114	*092	*074	*057	*043	*029	*019	*010	*005	*002	*002	*005	*010	
1300	.94	.93	.92	.91	.90	.88	.87	.85	.83	.82	.80	.78	.77	.75	.74	.73	.72	.71	.70	.70	.70	.70	.70	.70	
	*270	*260	*248	*235	*220	*204	*186	*168	*148	*129	*109	*090	*067	*050	*034	*019	*007	.997	.989	.981	.982	.983	.987	.993	
15	.92	.91	.90	.89	.88	.86	.84	.83	.81	.80	.78	.76	.74	.73	.72	.71	.70	.69	.68	.63	.68	.68	.68	.69	
	*246	*235	*222	*208	*193	*176	*158	*139	*119	*099	*079	*060	*038	*021	.005	.991	.979	.970	.963	.953	.957	.959	.963	.971	
30	.90	.89	.88	.87	.85	.84	.82	.80	.79	.77	.75	.74	.72	.71	.69	.68	.67	.67	.66	.65	.63	.66	.66	.67	
	*216	*205	*191	*177	*160	*143	*124	*104	*084	*064	*045	*025	*003	.986	.971	.958	.947	.938	.932	.923	.928	.930	.935	.943	
45	.88	.87	.85	.84	.82	.81	.79	.78	.76	.74	.73	.71	.69	.68	.67	.66	.65	.64	.64	.63	.63	.63	.64	.64	
	*182	*170	*155	*140	*123	*104	*085	*065	*045	*025	*005	.986	.964	.947	.933	.920	.909	.901	.896	.893	.893	.896	.902	.911	
1400	.85	.84	.82	.81	.79	.78	.76	.74	.73	.71	.69	.68	.66	.65	.64	.63	.62	.61	.61	.60	.60	.61	.61	.62	
	*143	*130	*115	*098	*080	*061	*042	*021	*001	.980	.960	.941	.920	.904	.889	.877	.867	.860	.855	.853	.854	.858	.865	.874	
15	.82	.80	.79	.77	.76	.74	.73	.71	.69	.67	.66	.64	.63	.61	.60	.59	.58	.58	.57	.57	.57	.58	.58	.59	
	*099	*085	*069	*052	*033	*014	.994	.973	.952	.931	.912	.893	.871	.856	.842	.830	.821	.814	.810	.803	.811	.815	.823	.833	
30	.78	.77	.75	.74	.72	.70	.69	.67	.65	.64	.62	.60	.59	.58	.56	.56	.55	.54	.54	.54	.54	.54	.55	.56	
	*051	*036	*019	*001	.982	.962	.941	.920	.899	.878	.858	.839	.819	.803	.790	.779	.770	.764	.761	.760	.763	.768	.776	.787	
45	.74	.73	.71	.70	.68	.66	.65	.63	.61	.59	.58	.56	.55	.53	.52	.52	.51	.50	.50	.50	.50	.51	.51	.52	
	.998	.982	.965	.946	.927	.906	.884	.863	.842	.821	.801	.782	.762	.747	.734	.724	.716	.710	.708	.703	.711	.717	.725	.736	

SEP-DEC 20 N TABLE B-1 SOLAR PARAMETERS COS Z X0 (W/M*2.) ** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP						OCT						NOV						DEC					
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1500	.70	.68	.67	.65	.64	.62	.60	.58	.57	.55	.53	.52	.50	.49	.48	.47	.47	.46	.46	.45	.45	.47	.47	.48
	941	925	907	897	867	846	824	802	781	760	740	721	701	687	674	664	657	652	651	651	655	662	671	682
15	.65	.64	.62	.61	.59	.57	.55	.54	.52	.50	.49	.47	.46	.45	.44	.43	.42	.42	.42	.42	.42	.43	.43	.44
	881	864	845	825	804	782	760	737	716	695	675	657	637	623	611	602	595	591	590	591	595	603	613	625
30	.61	.59	.58	.56	.54	.52	.51	.49	.47	.45	.44	.42	.41	.40	.39	.38	.37	.37	.37	.37	.38	.38	.39	.40
	817	799	779	759	737	714	692	669	648	627	607	589	570	556	545	536	530	526	526	523	533	541	551	563
45	.56	.54	.52	.51	.49	.47	.45	.44	.42	.40	.39	.37	.36	.35	.34	.33	.33	.33	.33	.33	.33	.34	.34	.35
	750	731	711	689	667	644	621	598	576	555	536	518	499	486	475	467	462	459	459	462	467	475	486	499
1600	.50	.49	.47	.45	.44	.42	.40	.38	.36	.35	.33	.32	.31	.30	.29	.28	.28	.28	.28	.23	.28	.29	.30	.31
	680	660	639	617	594	571	547	525	502	481	462	444	425	413	403	395	391	388	389	393	399	407	418	431
15	.45	.43	.42	.40	.38	.36	.34	.33	.31	.29	.28	.27	.25	.24	.24	.23	.23	.22	.23	.23	.23	.24	.25	.26
	607	587	565	542	519	495	471	448	426	405	386	368	351	338	328	321	317	316	317	321	327	336	348	361
30	.39	.38	.36	.34	.32	.31	.29	.27	.25	.24	.22	.21	.20	.19	.18	.18	.17	.17	.17	.13	.18	.19	.19	.20
	532	511	488	465	441	417	393	370	348	327	308	290	273	261	252	245	242	241	243	247	254	263	275	289
45	.34	.32	.30	.28	.27	.25	.23	.21	.19	.18	.16	.15	.14	.13	.12	.12	.12	.12	.12	.12	.13	.13	.14	.15
	455	433	410	386	362	337	313	290	267	246	228	211	194	182	174	168	165	164	166	171	179	188	200	214
1700	.28	.26	.24	.23	.21	.19	.17	.15	.14	.12	.11	.09	.08	.07	.07	.06	.06	.06	.06	.07	.07	.08	.09	.10
	376	353	330	305	280	256	231	208	186	165	146	130	113	102	094	089	086	086	089	094	102	112	124	138
15	.22	.20	.18	.16	.15	.13	.11	.09	.08	.06	.05	.03	.02	.02	.01	.01	.00	.01	.01	.01	.02	.02	.03	.04
	296	273	248	223	198	173	149	125	103	082	064	048	032	021	013	008	006	007	010	016	024	034	046	060
30	.16	.14	.12	.10	.08	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	214	191	166	141	115	090	065	041	019	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.10	.08	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	132	108	083	057	031	006	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M*2.)

COS Z

TABLE B-1

20 N

SEP-DEC

MST	DATE											
	SEP				OCT				NOV			
	5	10	15	20	25	30	5	10	15	20	25	30
1800	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	050	025	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 20 N TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																																							
	JAN										FEB										MAR										APR									
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30									
0600	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01									
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	012	017									
15	.05	.04	.03	.02	.02	.01	.01	.01	.00	.00	.00	.01	.01	.02	.02	.03	.04	.04	.04	.04	.05	.05	.06	.07	.07	.08	.07	.08	.07	.07	.08	.09								
	066	056	045	034	025	017	011	006	004	004	006	009	018	025	033	042	052	061	061	072	080	087	094	098	102	102	098	094	098	102	102	102								
30	.11	.10	.09	.09	.08	.07	.07	.07	.07	.07	.07	.07	.08	.08	.09	.10	.10	.11	.11	.12	.12	.12	.13	.13	.14	.14	.12	.12	.13	.13	.14	.14								
	151	141	130	120	112	105	099	095	093	094	096	099	108	116	124	133	141	150	150	160	163	175	180	184	187	187	163	175	180	184	187	187								
45	.17	.16	.15	.15	.14	.14	.13	.13	.13	.13	.13	.14	.14	.15	.15	.16	.17	.17	.17	.18	.18	.19	.20	.20	.20	.20	.18	.19	.20	.20	.20	.20								
	235	226	215	206	198	191	186	183	182	183	185	199	198	206	214	222	231	239	239	248	255	261	266	269	271	271	255	261	266	269	271	271								
0700	.23	.22	.21	.21	.20	.20	.19	.19	.19	.19	.20	.20	.21	.21	.22	.23	.23	.24	.24	.25	.25	.25	.26	.26	.26	.26	.25	.25	.26	.26	.26	.26								
	318	310	300	291	283	277	273	270	270	271	274	278	287	295	303	311	319	327	327	336	342	347	351	353	354	354	342	347	351	353	354	354								
15	.28	.28	.27	.27	.26	.26	.25	.25	.25	.26	.26	.26	.27	.28	.28	.29	.30	.30	.30	.31	.31	.32	.32	.32	.32	.32	.31	.31	.32	.32	.32	.32								
	400	392	382	374	367	362	358	356	356	358	361	366	375	383	390	398	406	413	413	421	427	431	434	436	436	436	427	431	434	436	436	436								
30	.34	.33	.33	.32	.32	.32	.31	.31	.31	.32	.32	.32	.33	.34	.34	.35	.36	.36	.36	.37	.37	.38	.38	.38	.38	.38	.37	.37	.38	.38	.38	.38								
	481	473	464	456	450	445	442	441	441	443	447	452	462	469	476	484	491	498	498	505	510	513	515	516	516	516	510	513	515	516	516	516								
45	.40	.39	.38	.38	.38	.37	.37	.37	.37	.38	.38	.38	.39	.40	.41	.41	.42	.42	.42	.43	.43	.44	.44	.44	.44	.44	.43	.43	.44	.44	.44	.44								
	559	551	543	536	530	527	524	523	524	527	531	536	546	553	560	567	574	580	580	586	590	593	594	594	594	594	586	590	593	594	594	594								
0800	.45	.44	.44	.43	.43	.43	.43	.43	.43	.43	.44	.44	.45	.46	.46	.47	.48	.48	.48	.49	.49	.49	.50	.50	.50	.50	.49	.49	.49	.50	.50	.50								
	634	627	620	614	609	606	604	604	605	608	613	618	628	635	642	648	655	660	660	666	669	671	671	670	668	668	666	669	671	671	670	668								
15	.50	.50	.49	.49	.48	.48	.48	.48	.49	.49	.49	.50	.51	.51	.52	.53	.53	.54	.54	.54	.55	.55	.55	.55	.55	.55	.54	.55	.55	.55	.55	.55								
	708	701	694	689	684	682	681	682	684	687	692	697	707	714	720	727	732	737	737	742	744	745	745	743	740	740	742	744	745	745	743	740								
30	.55	.55	.54	.54	.54	.54	.54	.54	.54	.54	.55	.55	.56	.57	.58	.58	.59	.59	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60								
	778	772	765	761	757	755	755	757	759	763	768	773	783	790	796	802	807	811	811	815	816	817	815	813	809	809	815	816	817	815	813	809								
45	.60	.59	.59	.59	.59	.59	.59	.59	.59	.59	.60	.61	.62	.62	.63	.63	.64	.64	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65								
	844	839	833	829	827	826	826	828	831	836	841	846	856	862	868	874	878	882	882	884	885	884	882	879	874	874	884	885	884	882	879	874								

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

TABLE B-1

0

JAN-APR

MCT	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0900	.64	.64	.63	.63	.63	.63	.63	.64	.64	.65	.65	.66		.67	.67	.68	.68	.69	.69	.70	.70	.70	.70	.70	.69
	907	903	898	895	893	892	893	896	900	905	910	916		925	931	937	942	946	949	950	950	949	946	941	936
15	.68	.68	.68	.68	.68	.68	.68	.68	.69	.69	.70	.70		.71	.72	.72	.73	.73	.74	.74	.74	.74	.74	.74	.74
	966	962	958	956	955	955	957	961	965	970	975	981		991	996	001	006	009	011	012	011	009	005	000	993
30	.72	.72	.72	.72	.72	.72	.72	.73	.73	.74	.74	.75		.76	.76	.77	.77	.78	.78	.78	.78	.78	.78	.78	.78
	*021	*018	*015	*013	*013	*014	*017	*021	*025	*031	*036	*042		*052	*057	*062	*066	*068	*070	*069	*063	*064	*060	*054	*047
45	.76	.76	.75	.75	.76	.76	.76	.77	.77	.78	.78	.79		.80	.80	.81	.81	.82	.82	.82	.82	.82	.82	.82	.81
	*072	*069	*067	*066	*067	*069	*072	*077	*082	*087	*093	*099		*103	*113	*117	*121	*123	*123	*122	*120	*116	*110	*103	*095
1000	.79	.79	.79	.79	.79	.79	.80	.80	.81	.81	.82	.82		.83	.84	.84	.85	.85	.85	.86	.85	.85	.85	.85	.85
	*118	*116	*115	*115	*116	*119	*122	*128	*133	*139	*145	*151		*160	*165	*168	*171	*172	*172	*170	*167	*162	*156	*148	*140
15	.82	.82	.82	.82	.82	.82	.83	.83	.84	.85	.85	.86		.87	.87	.88	.88	.88	.89	.89	.89	.88	.88	.88	.87
	*160	*158	*157	*158	*160	*164	*168	*174	*180	*186	*192	*198		*207	*211	*214	*216	*217	*216	*213	*209	*203	*196	*188	*179
30	.85	.84	.85	.85	.85	.85	.86	.86	.87	.88	.88	.89		.90	.90	.91	.91	.91	.91	.91	.91	.91	.91	.90	.90
	*196	*195	*195	*197	*200	*204	*209	*216	*222	*228	*234	*240		*249	*253	*255	*256	*256	*255	*251	*245	*240	*232	*223	*213
45	.87	.87	.87	.87	.87	.88	.88	.89	.90	.90	.91	.91		.92	.93	.93	.94	.94	.94	.94	.94	.93	.93	.93	.92
	*227	*227	*228	*230	*234	*239	*244	*252	*258	*265	*271	*277		*285	*288	*290	*291	*291	*288	*283	*278	*271	*262	*253	*242
1100	.89	.89	.89	.89	.89	.90	.90	.91	.92	.92	.93	.94		.95	.95	.95	.96	.96	.96	.96	.95	.95	.95	.94	.94
	*253	*254	*255	*259	*263	*268	*275	*282	*289	*296	*302	*308		*315	*318	*320	*320	*319	*316	*310	*304	*299	*287	*277	*266
15	.90	.90	.90	.91	.91	.92	.92	.93	.94	.94	.95	.96		.96	.97	.97	.97	.98	.98	.97	.97	.96	.96	.96	.95
	*274	*275	*278	*282	*287	*293	*299	*308	*315	*322	*328	*334		*341	*343	*344	*344	*342	*338	*332	*325	*318	*307	*296	*285
30	.91	.91	.91	.92	.92	.93	.94	.94	.95	.96	.96	.97		.98	.98	.98	.99	.99	.99	.99	.98	.98	.97	.97	.96
	*289	*291	*294	*299	*305	*311	*319	*327	*335	*342	*348	*354		*360	*362	*363	*362	*359	*355	*347	*340	*331	*320	*309	*297
45	.92	.92	.92	.93	.93	.94	.94	.95	.96	.97	.97	.98		.99	.99	.99	***	***	***	.99	.98	.98	.98	.97	.97
	*298	*301	*305	*311	*317	*324	*332	*341	*349	*356	*362	*368		*374	*375	*375	*374	*370	*365	*357	*349	*339	*328	*317	*305

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

JAN-APR 0 TABLE B-1

MST	JAN					FEB					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1200	.92	.92	.93	.93	.94	.94	.95	.96	.97	.97	.98	.99	.99	.99	.93	.93	.98	.98	.97	
	*302	*306	*311	*317	*324	*332	*340	*350	*357	*365	*371	*376	*381	*382	*382	*380	*376	*370	*361	
15	.92	.92	.93	.93	.94	.94	.95	.96	.97	.97	.98	.99	.99	.99	.93	.93	.98	.97	.97	
	*301	*305	*311	*318	*325	*334	*342	*352	*360	*367	*373	*378	*383	*384	*383	*380	*375	*369	*360	
30	.91	.92	.92	.93	.93	.94	.95	.96	.97	.97	.98	.98	.99	.99	.93	.99	.97	.97	.99	
	*294	*298	*305	*313	*321	*330	*338	*349	*357	*364	*370	*375	*379	*373	*378	*374	*369	*362	*352	
45	.91	.91	.91	.91	.93	.94	.94	.95	.96	.97	.97	.98	.98	.99	.99	.99	.99	.98	.98	
	*281	*286	*294	*302	*311	*320	*329	*340	*348	*355	*361	*365	*369	*369	*367	*363	*357	*350	*339	
1300	.89	.90	.90	.91	.92	.92	.93	.94	.95	.96	.96	.97	.97	.97	.97	.98	.97	.97	.96	
	*263	*269	*277	*286	*295	*305	*314	*325	*333	*340	*346	*350	*353	*352	*350	*345	*339	*331	*319	
15	.88	.88	.89	.89	.90	.91	.92	.93	.93	.94	.95	.95	.96	.96	.96	.96	.96	.95	.95	
	*239	*246	*254	*264	*274	*284	*293	*304	*313	*320	*325	*329	*331	*330	*327	*322	*315	*307	*295	
30	.86	.86	.87	.87	.88	.89	.90	.91	.92	.92	.93	.93	.94	.94	.94	.94	.93	.93	.92	
	*211	*217	*227	*237	*247	*257	*267	*278	*286	*293	*299	*302	*304	*302	*299	*293	*286	*277	*264	
45	.83	.84	.84	.85	.86	.87	.88	.89	.89	.90	.91	.91	.91	.91	.91	.91	.91	.90	.90	
	*177	*184	*194	*204	*215	*225	*236	*247	*255	*262	*267	*270	*271	*269	*265	*259	*251	*242	*229	
1400	.80	.81	.82	.83	.83	.84	.85	.86	.87	.87	.88	.88	.89	.89	.89	.88	.88	.88	.87	
	*137	*145	*156	*167	*178	*188	*199	*210	*218	*224	*229	*232	*232	*230	*225	*219	*211	*201	*188	
15	.77	.78	.79	.79	.80	.81	.82	.82	.84	.84	.85	.85	.85	.85	.85	.85	.85	.84	.83	
	*094	*102	*113	*124	*135	*146	*157	*168	*176	*182	*186	*189	*189	*186	*181	*174	*165	*155	*142	
30	.74	.74	.75	.76	.77	.78	.79	.80	.80	.81	.81	.82	.82	.82	.82	.81	.81	.81	.80	
	*045	*054	*065	*076	*088	*099	*110	*121	*128	*134	*139	*141	*140	*137	*131	*124	*115	*105	*091	
45	.70	.71	.72	.72	.73	.74	.75	.76	.77	.77	.78	.78	.78	.78	.78	.77	.77	.76	.76	
	*992	*001	*013	*024	*036	*047	*058	*069	*076	*082	*086	*088	*086	*082	*077	*069	*060	*049	*035	

JAN-APR 0 TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
500	.66	.67	.68	.68	.69	.70	.71	.72	.73	.73	.74	.74	.74	.74	.74	.74	.73	.73	.72	.71	.71	.70	.69	.68	.68
	935	934	956	968	980	991	002	*012*	*020*	*025*	*029*	*030	*025*	*024*	*018*	*010*	*000	989	975	962	949	936	924	912	912
15	.62	.62	.63	.64	.65	.66	.67	.68	.68	.69	.69	.69	.69	.69	.69	.69	.68	.67	.67	.67	.65	.65	.64	.64	.63
	873	883	895	907	919	931	941	952	959	964	967	968	965	961	954	946	936	925	911	898	885	873	860	849	849
30	.57	.58	.59	.60	.61	.61	.62	.63	.64	.64	.64	.65	.65	.64	.64	.64	.63	.62	.62	.62	.61	.60	.59	.59	.58
	808	818	831	843	855	866	876	887	893	898	901	902	895	893	897	878	868	857	843	830	817	805	793	782	782
45	.52	.53	.54	.55	.56	.57	.57	.58	.59	.59	.59	.60	.60	.59	.59	.58	.58	.57	.57	.56	.55	.55	.54	.53	.53
	740	750	762	775	787	798	808	818	824	829	831	832	828	822	815	807	796	785	771	753	745	734	722	712	712
1600	.47	.48	.49	.50	.51	.51	.52	.53	.54	.54	.54	.54	.54	.54	.54	.53	.52	.52	.52	.51	.50	.49	.49	.48	.47
	668	678	691	703	715	726	736	746	752	756	758	758	753	748	740	732	721	710	696	684	671	660	649	639	639
15	.42	.43	.44	.45	.45	.46	.47	.48	.48	.49	.49	.49	.49	.48	.48	.47	.47	.46	.46	.45	.44	.44	.43	.42	.42
	593	604	617	629	641	652	661	670	676	680	682	681	676	670	662	653	643	632	618	606	594	583	572	563	563
30	.37	.37	.38	.39	.40	.41	.41	.42	.43	.43	.43	.43	.43	.43	.42	.42	.41	.40	.40	.39	.39	.38	.37	.37	.36
	516	527	540	552	564	574	583	592	598	601	602	601	596	589	582	572	562	551	537	525	514	503	493	485	485
45	.31	.32	.33	.33	.34	.35	.36	.36	.37	.37	.37	.37	.37	.37	.36	.35	.34	.34	.33	.33	.32	.31	.31	.30	.30
	437	447	460	472	484	494	503	511	516	519	520	519	513	506	498	489	479	468	454	443	432	422	412	404	404
1700	.25	.26	.27	.28	.29	.29	.30	.30	.31	.31	.31	.31	.31	.30	.30	.29	.29	.28	.28	.27	.26	.26	.25	.24	.24
	356	366	379	391	402	412	421	429	433	436	436	434	427	421	413	404	393	382	369	358	348	338	329	322	322
15	.19	.20	.21	.22	.23	.23	.24	.24	.25	.25	.25	.25	.25	.24	.24	.23	.22	.22	.22	.21	.20	.19	.19	.18	.18
	273	283	296	308	319	328	336	344	348	350	350	348	341	334	326	316	306	296	283	272	262	253	245	238	238
30	.13	.14	.15	.16	.17	.17	.18	.18	.19	.19	.19	.19	.18	.18	.17	.17	.16	.15	.15	.14	.14	.13	.12	.12	.11
	189	199	212	223	234	243	251	257	261	263	262	260	252	245	237	228	218	207	195	185	176	167	160	154	154
45	.07	.08	.09	.10	.11	.11	.12	.12	.12	.12	.12	.12	.12	.11	.11	.10	.09	.09	.08	.07	.07	.07	.06	.06	.05
	104	115	127	138	148	157	164	170	173	174	174	171	163	156	147	138	128	118	106	097	088	081	074	069	069

JAN-APR 0 TABLE 8-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0900	.69	.69	.68	.68	.67	.67	.66	.65	.65	.65	.64	.64	.64	.64	.64	.65	.65	.65	.66	.69
	929	921	913	904	895	886	876	868	861	855	851	848	840	840	849	852	857	864	875	885
15	.73	.73	.72	.72	.71	.71	.70	.70	.69	.69	.68	.68	.68	.68	.68	.69	.69	.69	.70	.74
	986	977	968	959	950	940	930	922	915	910	906	903	902	902	905	909	915	922	933	944
30	.77	.77	.76	.76	.75	.74	.74	.73	.73	.73	.72	.72	.72	.72	.72	.73	.73	.74	.74	.76
	*038	*029	*020	*010	*001	991	981	973	966	961	957	954	954	955	958	962	968	976	988	993
45	.81	.80	.80	.79	.79	.78	.77	.77	.76	.76	.76	.76	.75	.76	.76	.76	.77	.77	.78	.79
	*087	*077	*067	*057	*047	*038	*027	*019	*013	*007	*004	*002	*001	*003	*006	*011	*018	*026	*038	*043
1000	.84	.83	.83	.82	.82	.81	.80	.80	.80	.79	.79	.79	.79	.79	.79	.80	.80	.81	.81	.83
	*130	*120	*110	*099	*089	*080	*069	*061	*055	*050	*046	*045	*045	*047	*050	*056	*063	*071	*084	*095
15	.87	.86	.86	.85	.84	.84	.83	.83	.82	.82	.82	.82	.82	.82	.82	.83	.83	.84	.85	.86
	*169	*159	*148	*137	*127	*117	*106	*099	*092	*088	*085	*083	*084	*086	*090	*096	*103	*112	*125	*133
30	.89	.89	.88	.88	.87	.86	.86	.85	.85	.85	.84	.84	.84	.85	.85	.85	.85	.86	.87	.88
	*203	*192	*181	*170	*159	*149	*139	*131	*125	*121	*118	*117	*118	*121	*125	*131	*139	*148	*161	*173
45	.92	.91	.90	.90	.89	.88	.88	.87	.87	.87	.87	.87	.87	.87	.87	.88	.88	.89	.90	.90
	*231	*220	*209	*198	*187	*177	*167	*159	*154	*149	*147	*146	*148	*151	*156	*162	*170	*180	*192	*203
1100	.93	.93	.92	.91	.91	.90	.90	.89	.89	.89	.88	.88	.88	.89	.89	.90	.90	.91	.92	.93
	*255	*243	*231	*220	*209	*200	*189	*182	*177	*173	*171	*171	*172	*176	*181	*188	*196	*206	*219	*231
15	.95	.94	.93	.93	.92	.91	.91	.90	.90	.90	.90	.90	.90	.90	.91	.91	.92	.92	.93	.94
	*273	*261	*249	*238	*227	*217	*207	*200	*195	*191	*190	*190	*192	*196	*201	*208	*217	*227	*240	*252
30	.96	.95	.94	.94	.93	.92	.92	.91	.91	.91	.91	.91	.91	.91	.92	.92	.93	.94	.94	.95
	*285	*273	*261	*250	*239	*229	*220	*213	*208	*205	*203	*204	*206	*210	*216	*224	*232	*242	*256	*267
45	.96	.95	.95	.94	.93	.93	.92	.92	.92	.92	.92	.92	.92	.92	.93	.93	.94	.94	.95	.96
	*292	*280	*268	*256	*246	*236	*227	*220	*216	*213	*212	*213	*216	*220	*226	*234	*243	*253	*266	*277

MAY-AUG 0 SOLAR PARAMETERS COS Z X0 (W/M*2.) *** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY .

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1200	.96	.95	.95	.94	.94	.93	.92	.92	.92	.92	.92	.92	.92	.93	.93	.93	.94	.95	.96	.95	.97	.98	.98	.99
	*294	*281	*269	*258	*247	*238	*229	*223	*219	*216	*216	*217	*220	*225	*231	*239	*248	*258	*271	*282	*294	*305	*316	*327
15	.96	.95	.94	.94	.93	.93	.92	.92	.92	.92	.92	.92	.92	.92	.93	.93	.94	.95	.95	.95	.97	.97	.98	.99
	*290	*277	*265	*254	*243	*234	*226	*220	*216	*214	*214	*215	*219	*224	*230	*238	*247	*257	*270	*281	*293	*304	*314	*324
30	.95	.94	.94	.93	.93	.92	.92	.91	.91	.91	.91	.91	.92	.92	.92	.93	.94	.94	.95	.95	.95	.97	.97	.98
	*280	*268	*256	*244	*234	*226	*217	*212	*208	*207	*207	*209	*212	*218	*224	*233	*242	*252	*264	*275	*285	*297	*307	*316
45	.94	.93	.93	.92	.91	.91	.91	.90	.90	.90	.90	.90	.91	.91	.92	.92	.93	.93	.94	.95	.95	.96	.96	.97
	*265	*252	*241	*230	*220	*211	*203	*198	*195	*194	*195	*197	*201	*206	*213	*222	*231	*241	*253	*264	*274	*284	*293	*302
1300	.93	.92	.91	.91	.90	.90	.89	.89	.89	.89	.89	.89	.89	.90	.90	.91	.92	.92	.93	.91	.94	.95	.95	.95
	*245	*232	*220	*210	*200	*192	*184	*180	*177	*176	*177	*180	*184	*190	*197	*205	*214	*224	*236	*245	*255	*266	*275	*282
15	.91	.90	.89	.89	.88	.88	.87	.87	.87	.87	.87	.87	.86	.88	.89	.89	.90	.91	.91	.92	.92	.93	.93	.94
	*219	*206	*195	*184	*175	*168	*161	*156	*154	*154	*155	*158	*162	*168	*176	*184	*193	*202	*214	*224	*233	*242	*250	*258
30	.88	.88	.87	.86	.86	.86	.85	.85	.85	.85	.85	.85	.86	.86	.87	.87	.88	.89	.89	.90	.90	.91	.91	.91
	*188	*176	*164	*154	*145	*138	*132	*128	*126	*126	*128	*131	*136	*142	*149	*157	*166	*176	*187	*195	*205	*213	*221	*227
45	.86	.85	.84	.84	.83	.83	.83	.82	.82	.83	.83	.83	.83	.84	.84	.85	.86	.86	.87	.87	.88	.88	.88	.89
	*152	*140	*129	*119	*111	*104	*096	*095	*093	*094	*096	*099	*104	*110	*118	*126	*135	*144	*155	*164	*172	*179	*186	*192
1400	.83	.82	.81	.81	.80	.80	.80	.80	.80	.80	.80	.80	.80	.81	.81	.82	.82	.83	.83	.84	.85	.85	.86	.86
	*111	*099	*088	*079	*071	*065	*059	*057	*056	*057	*059	*063	*068	*074	*082	*090	*098	*107	*117	*125	*133	*140	*146	*151
15	.79	.79	.78	.77	.77	.77	.77	.76	.76	.77	.77	.77	.77	.78	.78	.79	.80	.80	.81	.81	.82	.82	.82	.82
	*065	*053	*043	*034	*027	*021	*016	*014	*014	*015	*018	*022	*027	*034	*041	*049	*057	*066	*075	*083	*090	*096	*101	*105
30	.75	.75	.74	.74	.73	.73	.73	.73	.73	.73	.74	.74	.74	.75	.75	.76	.76	.77	.77	.78	.78	.78	.78	.79
	*014	*004	.994	.985	.979	.973	.969	.967	.967	.969	.972	.976	.982	.988	.996	*003	*011	*019	*029	*033	*042	*048	*052	*055
45	.71	.71	.70	.70	.69	.69	.69	.69	.69	.70	.70	.70	.70	.71	.71	.72	.72	.73	.74	.74	.74	.74	.74	.74
	.960	.949	.940	.932	.926	.921	.916	.916	.917	.919	.922	.927	.932	.939	.946	.954	.961	.969	.978	.984	.990	.995	.998	*000

MAY-AUG 0 TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 XO (W/M+*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1500	.67	.66	.66	.66	.65	.65	.65	.65	.65	.65	.68	.69	.69	.70	.70	.70	.70	.70		
	901	891	882	875	869	865	862	862	862	865	868	873	879	885	892	900	907	915		
15	.62	.62	.61	.61	.61	.61	.60	.61	.61	.61	.64	.64	.65	.65	.65	.65	.65	.65		
	838	829	821	814	809	805	803	803	804	807	811	815	822	828	835	842	849	856		
30	.57	.57	.56	.56	.56	.56	.56	.56	.56	.56	.59	.60	.58	.58	.58	.59	.59	.60		
	772	763	756	750	745	742	741	741	743	746	750	755	761	767	774	781	788	794		
45	.52	.52	.51	.51	.51	.51	.51	.51	.51	.51	.54	.55	.53	.53	.54	.54	.54	.55		
	702	694	687	682	678	676	675	676	678	681	686	691	697	703	710	716	723	728		
1600	.47	.46	.46	.46	.46	.46	.46	.46	.46	.46	.49	.50	.48	.48	.49	.49	.49	.50		
	630	622	616	611	608	606	606	608	610	614	619	624	630	636	643	649	655	660		
15	.41	.41	.41	.40	.40	.40	.40	.40	.41	.41	.44	.44	.42	.43	.43	.44	.44	.44		
	555	548	542	538	536	534	535	537	540	544	549	554	560	566	572	578	584	588		
30	.35	.35	.35	.35	.35	.35	.35	.35	.35	.36	.36	.36	.37	.37	.38	.38	.38	.39		
	477	471	466	463	461	460	461	464	467	472	477	482	488	494	500	505	510	514		
45	.30	.29	.29	.29	.29	.29	.29	.29	.30	.30	.33	.33	.31	.32	.32	.33	.33	.33		
	397	392	388	385	384	384	386	389	393	397	403	408	414	420	425	430	435	438		
1700	.24	.23	.23	.23	.23	.23	.23	.24	.24	.24	.27	.27	.26	.26	.26	.27	.27	.27		
	316	311	308	306	305	306	309	312	316	321	327	332	338	344	349	353	357	360		
15	.17	.17	.17	.17	.17	.17	.17	.18	.18	.18	.21	.21	.20	.20	.20	.21	.21	.21		
	233	229	227	225	226	227	230	234	239	244	249	255	261	266	271	275	278	280		
30	.11	.11	.11	.11	.11	.11	.11	.12	.12	.13	.13	.13	.14	.14	.15	.15	.15	.15		
	149	146	144	144	145	147	151	155	160	165	171	177	182	187	192	195	198	199		
45	.05	.05	.05	.05	.05	.05	.05	.06	.06	.07	.07	.07	.08	.08	.08	.09	.09	.09		
	065	063	062	062	064	066	071	076	081	086	092	098	103	108	112	115	117	118		

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
XO (W/M**2.)

COS Z

TABLE B-1

MAY-AUG

0

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0600	.01	.01	.02	.03	.04	.05	.05	.06	.06	.07	.07	.07	.07	.07	.06	.06	.05	.04	.04	.03	.02	.01	.00	.00
	009	018	030	041	052	062	072	080	087	092	095	096	095	092	087	080	071	062	050	038	020	013	000	000
15	.07	.08	.09	.10	.10	.11	.12	.12	.13	.13	.13	.13	.12	.13	.12	.12	.11	.10	.10	.09	.08	.07	.06	.05
	095	106	118	129	141	151	161	169	176	181	183	194	183	179	173	166	157	147	136	123	111	098	084	072
30	.14	.14	.15	.16	.17	.18	.18	.19	.19	.19	.20	.20	.19	.19	.19	.18	.17	.17	.16	.15	.14	.13	.12	.11
	182	194	206	216	229	240	249	257	264	268	271	272	269	265	259	252	242	232	220	203	185	182	169	156
45	.20	.21	.22	.22	.23	.24	.25	.25	.25	.26	.26	.26	.26	.25	.25	.24	.23	.22	.22	.21	.20	.19	.18	.17
	269	281	293	305	316	327	337	345	351	355	357	358	355	351	344	336	327	316	304	291	273	266	253	241
0700	.26	.27	.28	.29	.30	.30	.31	.31	.32	.32	.32	.32	.32	.31	.31	.30	.29	.28	.27	.27	.26	.25	.24	.23
	354	365	379	391	403	413	423	430	436	440	442	442	439	434	427	419	409	398	386	371	351	348	336	324
15	.32	.33	.34	.35	.36	.36	.37	.37	.38	.38	.38	.38	.37	.37	.36	.36	.35	.34*	.33	.32	.31	.30	.30	.29
	437	450	463	475	487	497	507	514	520	524	525	525	521	516	509	500	490	479	467	453	442	429	417	405
30	.39	.39	.40	.41	.42	.42	.43	.43	.44	.44	.44	.44	.43	.43	.42	.41	.41	.40	.39	.38	.37	.36	.35	.34
	519	532	545	557	569	580	589	596	602	605	606	605	601	596	588	579	569	558	546	533	521	508	497	485
45	.44	.45	.46	.47	.48	.48	.49	.49	.49	.49	.49	.49	.49	.48	.48	.47	.46	.45	.44	.43	.42	.41	.41	.40
	599	612	625	637	649	659	668	675	680	683	684	683	679	673	665	656	645	634	622	610	593	585	574	563
0800	.50	.51	.52	.53	.53	.54	.54	.55	.55	.55	.55	.55	.54	.53	.53	.52	.51	.50	.49	.48	.48	.47	.46	.45
	676	689	702	714	726	736	745	752	756	759	759	758	753	747	739	730	719	708	696	684	672	660	649	639
15	.56	.56	.57	.58	.59	.59	.60	.60	.60	.60	.60	.60	.59	.59	.58	.57	.56	.55	.54	.53	.53	.52	.51	.50
	750	763	776	789	800	810	818	825	829	831	831	829	824	818	810	800	790	778	767	755	743	732	721	711
30	.61	.62	.63	.63	.64	.64	.65	.65	.65	.65	.65	.65	.64	.63	.63	.62	.61	.60	.59	.58	.57	.56	.55	.55
	821	834	847	859	870	880	888	894	898	900	900	897	892	885	877	867	857	846	834	822	811	800	790	781
45	.66	.67	.67	.68	.69	.69	.70	.70	.70	.70	.70	.69	.69	.68	.67	.66	.66	.65	.64	.63	.62	.61	.61	.60
	888	901	914	926	937	946	954	960	963	965	964	962	955	949	941	931	920	909	898	887	876	865	856	848

SEP-DEC 0 TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SLP					CCT					DATE					NDV					EC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0900	.71	.71	.72	.73	.73	.74	.74	.74	.74	.74	.74	.74	.73	.72	.71	.71	.70	.69	.68	.67	.66	.66	.65	.64	
	952	965	978	989	000	009	*016	*021	*025	*026	*025	*022	*016	*008	*000	990	980	969	958	947	933	927	918	910	
15	.75	.76	.77	.77	.78	.78	.78	.78	.78	.78	.78	.78	.77	.76	.75	.75	.74	.73	.72	.71	.70	.70	.69	.69	
	*011	*024	*037	*048	*058	*067	*074	*079	*081	*082	*081	*077	*071	*064	*055	*046	*035	*025	*014	*003	*003	984	976	969	
30	.79	.80	.81	.81	.82	.82	.82	.82	.82	.82	.81	.81	.81	.80	.79	.78	.77	.76	.76	.75	.74	.73	.72	.72	
	*066	*079	*091	*103	*112	*120	*127	*131	*134	*134	*132	*129	*122	*115	*106	*096	*086	*076	*066	*053	*045	*038	*030	*024	
45	.83	.84	.84	.85	.85	.86	.86	.86	.85	.85	.85	.85	.84	.83	.82	.81	.81	.80	.79	.78	.77	.77	.76	.76	
	*117	*129	*141	*152	*161	*169	*175	*179	*181	*181	*179	*175	*163	*160	*152	*143	*133	*123	*113	*103	*094	*086	*080	*074	
1000	.86	.87	.88	.88	.88	.89	.89	.89	.88	.88	.88	.88	.87	.86	.85	.84	.84	.83	.82	.81	.81	.80	.80	.79	
	*163	*175	*186	*197	*206	*213	*218	*222	*223	*223	*220	*216	*203	*201	*193	*184	*174	*164	*155	*145	*136	*130	*124	*120	
15	.89	.90	.91	.91	.91	.92	.92	.92	.91	.91	.91	.90	.89	.89	.88	.87	.86	.85	.85	.84	.83	.83	.82	.82	
	*203	*215	*227	*236	*245	*251	*256	*259	*260	*259	*257	*252	*245	*237	*229	*220	*211	*201	*192	*184	*176	*170	*165	*161	
30	.92	.93	.93	.94	.94	.94	.94	.94	.93	.93	.93	.92	.92	.91	.90	.89	.88	.88	.87	.86	.85	.85	.85	.85	
	*235	*251	*261	*271	*278	*285	*289	*291	*292	*290	*287	*283	*275	*268	*260	*251	*242	*233	*224	*217	*210	*204	*200	*197	
45	.94	.95	.95	.96	.96	.96	.96	.96	.95	.95	.94	.94	.93	.93	.92	.91	.90	.89	.89	.88	.88	.87	.87	.87	
	*269	*281	*291	*299	*307	*312	*316	*318	*318	*316	*313	*308	*300	*293	*285	*276	*268	*259	*251	*241	*238	*233	*230	*228	
1100	.96	.97	.97	.97	.98	.98	.98	.97	.97	.97	.96	.96	.95	.94	.93	.92	.92	.91	.90	.90	.89	.89	.89	.89	
	*294	*305	*315	*323	*329	*334	*337	*339	*338	*336	*333	*328	*320	*313	*305	*296	*288	*280	*273	*267	*261	*257	*254	*253	
15	.97	.98	.98	.99	.99	.99	.99	.99	.98	.98	.97	.97	.96	.95	.94	.93	.93	.92	.91	.91	.91	.90	.90	.90	
	*314	*324	*333	*340	*346	*351	*353	*354	*353	*351	*347	*341	*334	*327	*319	*311	*303	*296	*289	*283	*279	*276	*274	*273	
30	.98	.99	.99	***	***	***	.99	.99	.99	.98	.98	.97	.96	.96	.95	.94	.93	.93	.92	.92	.91	.91	.91	.91	
	*328	*337	*345	*352	*357	*361	*363	*363	*362	*359	*355	*350	*342	*335	*327	*320	*313	*306	*300	*295	*291	*289	*288	*288	
45	.99	.99	***	***	***	***	***	.99	.99	.99	.98	.97	.96	.96	.95	.94	.94	.93	.93	.92	.92	.92	.92	.92	
	*336	*344	*352	*358	*363	*366	*367	*367	*365	*362	*357	*352	*344	*337	*330	*323	*316	*310	*305	*301	*298	*296	*296	*297	

SEP-DEC 0 TABLE B-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1500	.70	.69	.69	.69	.64	.67	.67	.66	.65	.65	.64	.64	.63	.63	.63	.63	.63	.63	.63	.63	.63	.64	.65	.66
	941	939	936	932	927	921	915	908	902	896	890	885	881	878	877	877	879	882	887	883	880	909	919	929
15	.65	.65	.64	.64	.63	.62	.62	.61	.60	.60	.59	.59	.58	.58	.58	.58	.58	.58	.58	.58	.59	.60	.61	.61
	876	874	870	865	859	853	846	840	833	827	821	817	813	811	810	811	813	817	822	820	837	846	857	868
30	.60	.60	.59	.59	.58	.57	.57	.56	.55	.55	.54	.54	.53	.53	.53	.53	.53	.53	.54	.51	.55	.55	.56	.57
	808	805	800	795	788	781	774	767	760	754	749	744	741	739	739	741	744	748	754	761	770	780	791	803
45	.55	.54	.54	.53	.52	.52	.51	.50	.50	.49	.49	.48	.48	.48	.48	.48	.48	.48	.48	.48	.50	.50	.51	.52
	737	733	727	721	714	706	699	692	685	678	673	669	666	665	665	667	671	676	683	691	700	711	722	734
1600	.49	.49	.48	.47	.47	.46	.45	.45	.44	.43	.43	.43	.42	.42	.42	.42	.42	.43	.43	.44	.44	.45	.46	.47
	662	657	651	644	636	629	621	613	606	600	595	591	588	587	588	591	595	601	609	617	627	638	650	662
15	.43	.43	.42	.42	.41	.40	.39	.39	.38	.38	.37	.37	.36	.36	.36	.37	.37	.37	.38	.38	.39	.40	.41	.42
	585	579	572	564	556	548	540	532	525	519	514	510	508	508	509	512	517	524	532	541	551	563	575	587
30	.37	.37	.36	.36	.35	.34	.33	.33	.32	.32	.31	.31	.31	.31	.31	.31	.31	.32	.32	.33	.34	.34	.35	.36
	505	498	491	482	474	465	456	448	441	435	430	427	425	426	428	432	437	444	453	462	473	485	497	510
45	.31	.31	.30	.29	.29	.28	.27	.26	.26	.25	.25	.25	.24	.25	.25	.25	.25	.26	.26	.27	.28	.29	.30	.30
	423	415	407	398	389	380	371	363	356	350	345	342	341	342	344	349	355	363	372	382	393	405	418	431
1700	.25	.25	.24	.23	.22	.21	.21	.20	.20	.19	.19	.18	.18	.18	.19	.19	.19	.20	.21	.21	.22	.23	.24	.25
	339	331	322	312	303	293	284	276	269	263	259	256	255	256	260	265	271	279	289	300	311	324	337	350
15	.19	.18	.17	.17	.16	.15	.14	.14	.13	.13	.12	.12	.12	.12	.12	.12	.13	.14	.15	.15	.15	.17	.18	.19
	253	245	235	225	215	205	196	188	181	175	171	169	168	170	174	179	186	195	205	215	228	241	254	267
30	.12	.12	.11	.10	.09	.09	.08	.07	.07	.06	.06	.06	.06	.06	.06	.07	.07	.08	.09	.09	.10	.11	.12	.13
	167	157	147	137	127	117	107	099	092	086	082	080	081	083	087	093	101	110	120	132	144	157	170	183
45	.06	.05	.04	.04	.03	.02	.01	.01	.00	.00	.00	.00	.00	.00	.00	.01	.01	.02	.03	.03	.04	.05	.06	.07
	080	070	059	048	038	027	018	009	002	000	000	000	000	000	000	000	007	015	024	035	047	059	072	085

SEP-DEC0*** SIGNIFICES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1SOLAR PARAMETERSCOS ZXC (W/(m²·°2.))

*** SIGNIFICES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XC (W/M-2.)

SEP-DEC 0

MST

DATE

JAN

FEB

MAR

APR

1 5 10 15 20 25 30

5 10 15 20 25 30

5 10 15 20 25 30

0800 .56 .55 .54 .53 .52 .51
786 777 765 752 740 728 716.42 .41 .40 .39 .38
579 567 554 540 526 51215 .60 .60 .59 .58 .57 .56
855 846 834 823 811 800 788.48 .47 .46 .45 .44 .43
650 638 624 610 595 58030 .65 .64 .64 .63 .62 .61
920 912 901 890 879 869 858.53 .52 .51 .50 .49 .48
719 703 689 676 66545 .69 .69 .68 .68 .67 .66
983 975 965 955 945 935 925.57 .56 .55 .54 .53 .52
785 770 755 739 723 7060900 .74 .73 .73 .72 .71 .70
*042*035*026*016*007 997 988.62 .61 .60 .59 .58 .57
846 831 815 798 781 76415 .78 .77 .77 .76 .75 .74
*098*091*083*074*065*056*048.66 .65 .64 .63 .62 .61
904 883 872 854 836 81830 .81 .81 .80 .80 .79 .78
*150*144*136*128*120*112*104.70 .69 .68 .67 .66 .64
958 942 924 906 887 86845 .85 .84 .84 .83 .82 .82
*197*192*185*178*170*163*155.74 .73 .72 .70 .69 .68
*008 990 972 953 934 9141000 .88 .87 .87 .86 .86 .85
*241*236*229*223*217*210*203.77 .75 .75 .73 .72 .71
*053*033*010 996 976 95515 .90 .90 .90 .89 .89 .88
*279*275*270*264*258*252*246.80 .79 .78 .76 .75 .74
*093*074*055*034*013 99230 .93 .93 .92 .92 .91 .91
*314*310*305*300*295*290*284.83 .81 .80 .79 .77 .76
*129*103*089*068*046*02545 .95 .95 .94 .94 .94 .93
*343*340*336*332*328*323*318.85 .84 .82 .81 .79 .78
*159*139*118*096*074*052

JAN-APR

20 S

TABLE B-1

SOLAR PARAMETERS

COS Z

XO (W/M**2.)

*** SIGNIFIES COS Z = 1.

ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					MAR					APR								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1100	.97	.96	.96	.96	.96	.96	.95	.95	.95	.94	.94	.93	.92	.91	.90	.89	.88	.87	.85	.84	.83	.81	.80	
	*367	*365	*362	*359	*355	*351	*346	*339	*333	*328	*317	*307	*280	*276	*261	*245	*228	*209	*185	*161	*142	*119	*097	*074
15	.98	.98	.98	.98	.97	.97	.97	.97	.97	.96	.96	.95	.94	.94	.93	.92	.91	.90	.88	.87	.85	.84	.82	.81
	*387	*385	*383	*380	*377	*373	*369	*363	*357	*350	*341	*332	*313	*293	*284	*267	*249	*230	*205	*183	*161	*138	*115	*092
30	.99	.99	.99	.99	.99	.99	.98	.98	.98	.98	.97	.97	.96	.95	.94	.93	.92	.91	.89	.88	.85	.85	.83	.82
	*401	*400	*398	*396	*394	*391	*387	*382	*376	*369	*360	*350	*331	*317	*301	*284	*265	*245	*220	*197	*174	*151	*127	*104
45	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.98	.98	.97	.96	.95	.94	.93	.91	.90	.88	.87	.85	.84	.82
	*410	*409	*409	*407	*406	*403	*400	*395	*389	*382	*374	*363	*344	*329	*313	*295	*276	*255	*229	*203	*182	*158	*134	*111
1200	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.98	.98	.97	.96	.95	.94	.93	.92	.90	.89	.87	.86	.84	.82
	*414	*414	*414	*413	*412	*410	*407	*403	*397	*390	*382	*371	*351	*336	*319	*301	*281	*260	*233	*203	*185	*160	*136	*112
15	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.98	.97	.96	.95	.94	.93	.92	.90	.89	.87	.85	.84	.82
	*412	*413	*414	*414	*413	*412	*409	*405	*400	*393	*384	*373	*353	*337	*320	*301	*281	*259	*231	*207	*182	*157	*133	*109
30	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.98	.97	.96	.95	.94	.93	.91	.89	.88	.85	.85	.83	.82
	*405	*407	*408	*409	*409	*408	*406	*402	*397	*390	*381	*370	*343	*323	*315	*296	*275	*252	*224	*193	*174	*149	*124	*100
45	.98	.99	.99	.99	.99	.99	.99	.99	.99	.98	.98	.97	.96	.95	.94	.93	.92	.90	.89	.87	.85	.84	.82	.80
	*394	*396	*398	*399	*400	*399	*397	*393	*388	*381	*372	*361	*339	*323	*305	*285	*263	*240	*211	*183	*161	*135	*110	*086
1300	.97	.97	.98	.98	.98	.98	.96	.98	.98	.97	.97	.96	.95	.94	.93	.92	.91	.89	.87	.85	.84	.82	.81	.79
	*377	*379	*382	*384	*385	*385	*383	*379	*374	*367	*358	*347	*324	*308	*289	*269	*246	*223	*193	*163	*142	*116	*091	*066
15	.96	.96	.96	.96	.97	.97	.97	.97	.96	.96	.96	.95	.94	.93	.92	.90	.89	.87	.86	.84	.82	.81	.79	.77
	*354	*358	*361	*363	*365	*365	*364	*360	*355	*348	*339	*327	*304	*287	*268	*247	*224	*200	*170	*144	*118	*092	*067	*042
30	.94	.94	.94	.95	.95	.95	.95	.95	.95	.94	.94	.93	.92	.91	.90	.88	.87	.85	.83	.82	.80	.78	.77	.75
	*327	*331	*335	*338	*340	*340	*339	*336	*330	*323	*314	*302	*278	*261	*241	*220	*196	*172	*142	*115	*089	*063	*037	*013
45	.92	.92	.92	.92	.93	.93	.93	.93	.93	.92	.92	.91	.90	.89	.87	.86	.85	.83	.81	.79	.78	.76	.74	.73
	*295	*299	*304	*307	*309	*310	*309	*306	*301	*293	*284	*272	*247	*229	*209	*187	*164	*139	*108	*082	*055	*029	*003	*979

JAN-APR 20 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 YO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST

DATE

	JAN					FEB					MAR					APR								
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1400	.89	.89	.90	.90	.90	.90	.90	.90	.90	.90	.89	.89	.87	.88	.85	.83	.82	.80	.78	.75	.75	.73	.71	.70
	.259	.253	.268	.272	.274	.275	.275	.271	.265	.258	.249	.236	.211	.193	.172	.150	.126	.101	.069	.043	.015	.990	.964	.940
15	.86	.86	.87	.87	.87	.88	.88	.88	.87	.87	.86	.86	.84	.83	.82	.80	.79	.77	.75	.73	.72	.70	.68	.66
	.217	.222	.229	.232	.235	.236	.235	.232	.226	.219	.202	.195	.170	.151	.130	.108	.083	.058	.026	.993	.973	.946	.921	.897
30	.83	.83	.84	.84	.84	.84	.84	.84	.84	.84	.83	.82	.81	.80	.78	.77	.75	.74	.72	.70	.68	.66	.65	.63
	.172	.177	.183	.187	.190	.192	.191	.187	.182	.174	.163	.150	.124	.105	.084	.061	.036	.010	.978	.951	.925	.898	.873	.849
45	.79	.80	.80	.81	.81	.81	.81	.81	.81	.80	.80	.79	.77	.76	.75	.73	.72	.70	.68	.66	.64	.62	.61	.59
	.122	.127	.134	.138	.142	.143	.142	.139	.133	.125	.114	.101	.074	.054	.032	.009	.984	.958	.926	.899	.872	.846	.821	.797
1500	.75	.75	.76	.77	.77	.77	.77	.77	.77	.76	.76	.75	.73	.72	.71	.69	.67	.66	.64	.62	.60	.58	.57	.55
	.058	.074	.080	.085	.089	.090	.089	.086	.080	.071	.060	.046	.010	.999	.977	.953	.928	.902	.870	.843	.816	.790	.765	.742
15	.71	.72	.72	.73	.73	.73	.73	.73	.73	.72	.72	.71	.69	.68	.66	.65	.63	.61	.59	.57	.56	.54	.52	.51
	.010	.017	.023	.028	.032	.033	.033	.029	.022	.014	.002	.998	.960	.940	.917	.893	.868	.841	.809	.792	.755	.730	.705	.682
30	.67	.68	.68	.68	.69	.69	.69	.69	.68	.68	.67	.65	.63	.63	.62	.60	.58	.57	.55	.53	.51	.49	.48	.46
	.949	.950	.962	.968	.971	.973	.972	.968	.961	.952	.940	.926	.897	.877	.854	.830	.804	.777	.745	.718	.692	.666	.642	.619
45	.63	.63	.64	.64	.64	.64	.64	.64	.64	.63	.63	.62	.60	.58	.57	.55	.54	.52	.50	.48	.46	.44	.43	.41
	.865	.891	.893	.904	.907	.909	.908	.903	.896	.887	.875	.860	.831	.810	.787	.762	.737	.710	.678	.651	.625	.600	.576	.554
1600	.58	.58	.59	.59	.59	.60	.60	.59	.59	.58	.58	.57	.55	.53	.52	.50	.48	.47	.44	.43	.41	.39	.37	.36
	.817	.824	.831	.837	.840	.841	.840	.835	.828	.818	.806	.791	.761	.740	.716	.692	.666	.639	.607	.581	.555	.530	.506	.485
15	.53	.53	.54	.54	.55	.55	.55	.54	.54	.53	.52	.51	.50	.48	.47	.45	.43	.41	.39	.37	.35	.34	.32	.31
	.747	.754	.761	.767	.770	.771	.770	.764	.757	.747	.734	.718	.688	.667	.643	.618	.592	.566	.534	.508	.482	.458	.435	.413
30	.43	.48	.49	.49	.49	.49	.49	.49	.49	.48	.47	.46	.44	.43	.41	.39	.38	.36	.34	.32	.30	.28	.27	.25
	.675	.682	.689	.694	.697	.698	.697	.691	.683	.673	.659	.643	.613	.591	.567	.542	.516	.490	.458	.432	.407	.383	.360	.340
45	.42	.43	.43	.44	.44	.44	.44	.44	.43	.43	.42	.41	.38	.37	.35	.34	.32	.30	.28	.25	.24	.23	.21	.20
	.600	.607	.615	.620	.623	.623	.621	.615	.607	.596	.582	.556	.535	.513	.489	.464	.438	.412	.380	.354	.330	.306	.284	.264

JAN-APR 20 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																								
	JAN						FEB						MAR						APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.37	.38	.38	.38	.39	.39	.39	.38	.38	.37	.36	.35	.33	.31	.30	.28	.26	.24	.22	.20	.18	.17	.15	.14	
	524	531	538	543	546	546	544	537	529	517	503	486	455	433	409	384	358	332	300	275	251	228	206	187	
15	.32	.32	.33	.33	.33	.33	.33	.33	.32	.31	.30	.29	.27	.25	.24	.22	.20	.18	.16	.14	.13	.11	.09	.08	
	446	453	460	465	467	467	464	457	448	437	422	405	373	351	327	302	276	250	219	194	170	148	127	109	
30	.26	.26	.27	.27	.27	.27	.27	.27	.26	.25	.24	.23	.21	.19	.18	.16	.14	.12	.10	.09	.07	.05	.04	.02	
	367	374	381	386	388	387	384	376	367	355	340	322	290	267	243	218	193	167	137	112	89	67	47	29	
45	.20	.21	.21	.22	.22	.22	.21	.21	.20	.19	.18	.17	.15	.13	.12	.10	.08	.06	.04	.02	.01	.00	.00	.00	
	289	296	301	305	307	306	302	294	284	272	256	239	206	183	159	134	109	83	53	23	00	00	00	00	
1800	.15	.15	.16	.16	.16	.16	.16	.15	.14	.13	.12	.11	.09	.07	.05	.04	.02	.00	.00	.00	.00	.00	.00	.00	
	208	214	221	224	226	224	220	211	201	188	172	154	121	98	74	49	24	00	00	00	00	00	00	00	
15	.09	.10	.10	.10	.10	.10	.10	.09	.08	.07	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	128	134	140	143	144	142	138	128	118	104	88	70	56	41	26	00	00	00	00	00	00	00	00	00	
30	.03	.04	.04	.04	.04	.04	.04	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	048	056	060	062	063	060	055	045	034	020	004	000	000	000	000	000	000	000	000	000	000	000	000	000	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

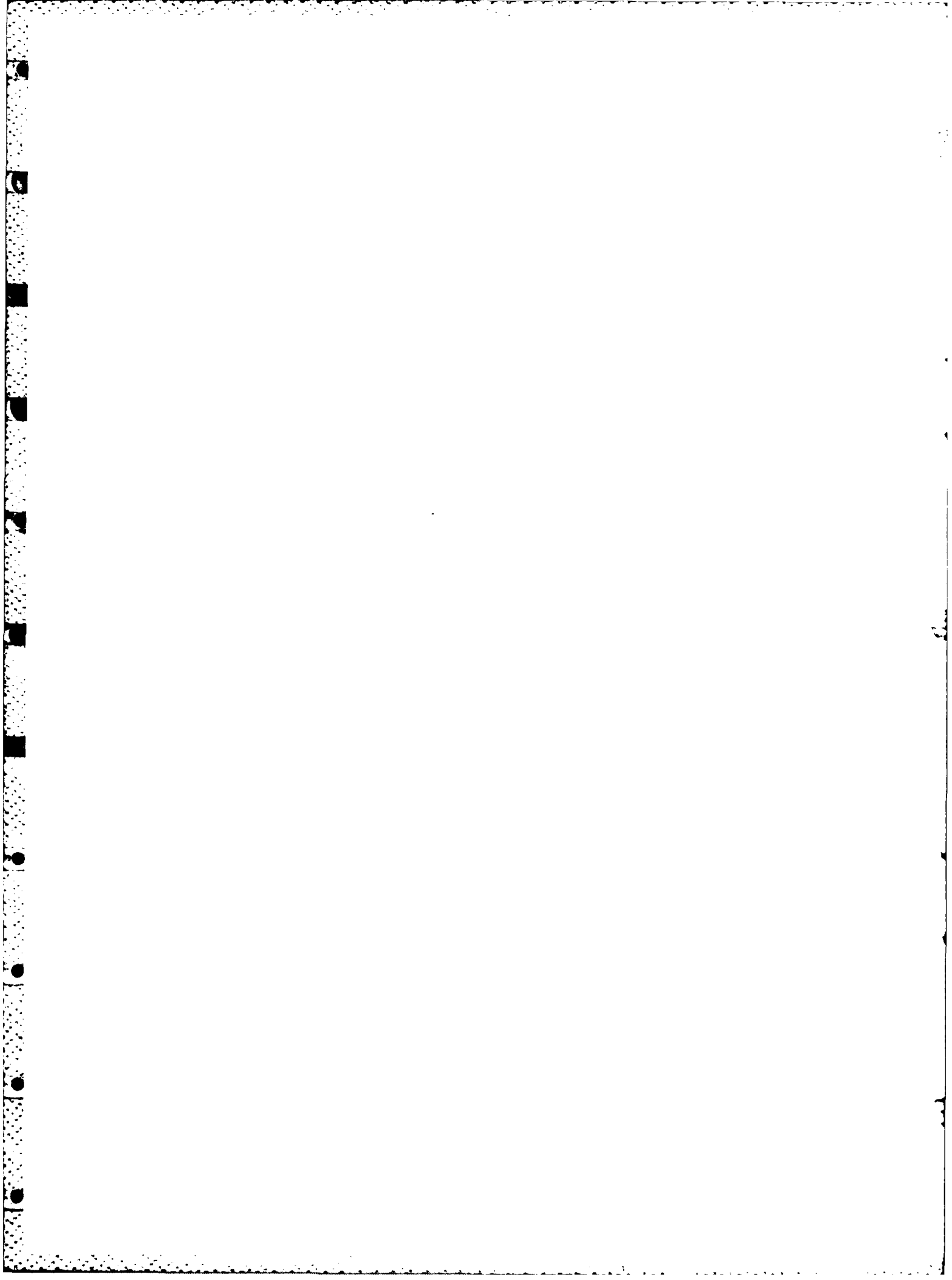
X0 (W/M**2.)

SOLAR PARAMETERS

TABLE B-1

20 S

JAN-APR



MST	DATE															AUG									
	MAY					JUN					JUL														
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15		20	25	30						
0900	.55	.54	.53	.52	.51	.50	.49	.48	.48	.47	.47	.47	.47	.47	.48	.48	.49	.50	.52	.53	.55	.56	.58	.60	
	746	728	711	695	679	664	649	638	630	623	619	618	619	623	630	639	651	666	687	707	729	753	778	804	
15	.59	.58	.57	.56	.55	.54	.53	.52	.51	.51	.51	.51	.51	.51	.52	.52	.53	.54	.56	.57	.59	.60	.62	.64	
	799	781	763	746	730	716	700	690	681	675	671	670	671	676	683	693	705	721	742	762	785	808	834	860	
30	.63	.62	.61	.59	.58	.57	.56	.56	.55	.55	.54	.54	.54	.55	.55	.56	.57	.58	.60	.61	.63	.64	.66	.68	
	849	830	812	795	778	763	748	737	729	723	719	718	720	725	732	743	756	771	793	814	834	860	886	912	
45	.66	.65	.64	.63	.62	.61	.60	.59	.58	.58	.58	.58	.58	.58	.59	.60	.60	.62	.63	.65	.66	.68	.70	.71	
	894	875	856	839	822	807	791	781	772	766	763	763	765	770	778	789	802	818	840	861	884	908	934	960	
1000	.70	.68	.67	.66	.65	.64	.63	.62	.61	.61	.61	.61	.61	.61	.62	.63	.64	.65	.66	.68	.69	.71	.73	.75	
	935	916	896	878	862	847	831	820	812	806	803	803	806	811	820	831	845	861	883	904	927	952	977	1003	
15	.72	.71	.70	.68	.67	.66	.65	.64	.64	.64	.63	.63	.63	.64	.65	.66	.67	.68	.69	.71	.72	.74	.76	.78	
	972	952	932	914	897	882	866	855	847	842	839	839	842	848	857	869	883	899	922	943	966	990	1016	1042	
30	.75	.73	.72	.71	.70	.69	.67	.67	.66	.66	.66	.66	.66	.67	.67	.68	.69	.70	.72	.73	.75	.77	.78	.80	
	1004	983	963	945	927	912	897	886	878	873	871	871	875	881	890	902	916	933	956	973	1001	1025	1050	1076	
45	.77	.75	.74	.73	.72	.70	.69	.69	.68	.68	.68	.68	.68	.69	.69	.70	.71	.72	.74	.75	.77	.79	.81	.82	
	1030	1009	989	971	953	938	923	912	905	900	898	899	902	909	918	931	945	962	986	1007	1030	1054	1079	1105	
1100	.78	.77	.75	.74	.73	.72	.71	.70	.70	.70	.70	.70	.70	.70	.71	.72	.73	.74	.76	.77	.79	.81	.82	.84	
	1052	1031	1011	992	975	959	944	934	927	922	920	921	925	932	942	955	970	987	1010	1032	1055	1079	1103	1129	
15	.79	.78	.77	.75	.74	.73	.72	.72	.71	.71	.71	.71	.71	.72	.73	.74	.75	.76	.77	.79	.80	.82	.84	.85	
	1077	1048	1027	1008	991	976	961	951	944	939	938	939	944	951	961	974	989	1007	1030	1052	1074	1098	1123	1147	
30	.80	.79	.78	.76	.75	.74	.73	.73	.72	.72	.72	.72	.72	.73	.74	.75	.76	.77	.79	.80	.82	.83	.85	.86	
	1081	1059	1039	1020	1002	987	972	963	956	952	951	953	958	965	976	989	1004	1021	1045	1066	1089	1112	1136	1161	
45	.81	.79	.78	.77	.76	.75	.74	.73	.73	.72	.72	.72	.73	.74	.75	.76	.78	.79	.81	.82	.84	.85	.87	.87	
	1088	1065	1045	1026	1009	994	979	970	963	960	959	961	966	974	985	998	1014	1031	1055	1076	1098	1121	1145	1169	
MAY-AUG	20 S					TABLE B-1					SOLAR PARAMETERS					COS Z X0 (W/M**2.)					*** SIGNIFIES COS Z =1. ADD 1000 TO VALUES PRECEDED BY +				

MST

DATE

MAY

JUN

JUL

AUG

	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1200	.81	.80	.78	.77	.76	.75	.74	.73	.73	.73	.73	.73	.73	.74	.75	.76	.77	.78
	.089	.067	.046	.027	.010	.995	.981	.972	.966	.963	.962	.955	.970	.978	.969	.003	.018	.036
15	.81	.79	.78	.77	.75	.75	.74	.73	.73	.73	.73	.73	.73	.74	.75	.76	.77	.78
	.085	.063	.042	.023	.007	.992	.978	.969	.963	.960	.960	.953	.963	.978	.989	.002	.018	.036
30	.80	.79	.77	.76	.75	.74	.73	.72	.72	.72	.72	.72	.72	.73	.74	.75	.76	.78
	.076	.054	.033	.015	.998	.984	.970	.962	.956	.954	.954	.957	.963	.972	.983	.997	.013	.030
45	.79	.77	.76	.75	.74	.73	.72	.72	.71	.71	.71	.71	.72	.73	.73	.74	.76	.77
	.062	.040	.019	.001	.984	.970	.957	.949	.944	.942	.942	.946	.952	.961	.973	.987	.002	.020
1300	.78	.76	.75	.74	.72	.72	.71	.70	.70	.70	.70	.70	.71	.71	.72	.73	.74	.76
	.043	.021	.000	.982	.966	.952	.939	.932	.927	.925	.926	.930	.937	.946	.957	.971	.987	.004
15	.76	.74	.73	.72	.71	.70	.69	.69	.68	.68	.68	.69	.69	.70	.71	.72	.73	.74
	.018	.997	.976	.958	.943	.929	.917	.910	.905	.904	.905	.909	.916	.926	.937	.951	.967	.984
30	.74	.72	.71	.70	.69	.68	.67	.67	.66	.66	.66	.67	.67	.68	.69	.70	.71	.72
	.989	.968	.948	.930	.914	.902	.890	.883	.879	.878	.880	.884	.891	.901	.912	.926	.942	.959
45	.71	.70	.68	.67	.66	.65	.65	.64	.64	.64	.64	.65	.65	.66	.67	.68	.69	.70
	.955	.934	.914	.897	.882	.869	.856	.852	.848	.847	.850	.854	.862	.871	.883	.897	.912	.929
1400	.68	.67	.65	.64	.63	.63	.62	.62	.61	.61	.62	.62	.63	.63	.64	.65	.66	.67
	.917	.896	.876	.859	.845	.833	.822	.816	.813	.813	.815	.820	.827	.837	.849	.863	.878	.894
15	.65	.64	.62	.61	.60	.59	.59	.58	.58	.58	.59	.59	.60	.60	.61	.62	.63	.64
	.874	.853	.834	.817	.803	.792	.782	.776	.773	.773	.776	.781	.789	.799	.811	.824	.839	.855
30	.61	.60	.59	.58	.57	.56	.55	.55	.55	.55	.55	.56	.56	.57	.58	.59	.60	.61
	.826	.806	.787	.771	.758	.747	.737	.732	.730	.730	.733	.739	.747	.756	.768	.782	.796	.812
45	.58	.56	.55	.54	.53	.52	.52	.52	.51	.52	.52	.52	.53	.54	.55	.55	.57	.58
	.775	.755	.737	.721	.708	.698	.689	.684	.682	.683	.686	.692	.700	.710	.722	.735	.749	.765

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1500	.54	.52	.51	.50	.49	.48	.48	.48	.48	.48	.48	.49	.43	.50	.51	.52	.53	.54	.55	.56
	720	700	683	667	655	645	637	633	631	632	635	642	650	650	671	684	698	713	732	743
15	.49	.48	.47	.45	.45	.44	.44	.44	.44	.44	.44	.44	.45	.46	.47	.48	.49	.50	.51	.52
	661	642	625	610	598	589	581	577	577	578	582	588	590	606	617	630	644	658	676	692
30	.45	.43	.42	.41	.40	.40	.39	.39	.39	.39	.40	.40	.41	.41	.42	.43	.44	.45	.46	.47
	599	580	564	550	538	529	522	519	519	520	525	531	533	549	560	573	586	600	617	632
45	.40	.38	.37	.36	.36	.35	.35	.35	.35	.35	.35	.36	.36	.37	.38	.39	.40	.41	.42	.43
	533	515	499	486	475	467	461	458	458	460	454	471	479	489	500	512	525	538	555	563
1600	.35	.33	.32	.31	.31	.30	.30	.30	.30	.30	.30	.31	.31	.32	.33	.34	.35	.36	.37	.38
	465	448	432	420	409	402	396	394	394	397	401	408	416	426	436	448	461	474	490	503
15	.29	.28	.27	.26	.26	.25	.25	.25	.25	.25	.25	.26	.27	.27	.28	.29	.30	.31	.32	.33
	394	377	363	351	341	334	329	327	328	331	336	342	350	360	371	382	394	407	422	434
30	.24	.23	.22	.21	.20	.20	.20	.20	.20	.20	.20	.21	.21	.22	.23	.24	.25	.25	.26	.27
	321	305	291	280	271	265	260	259	260	263	268	275	283	292	302	314	325	337	352	363
45	.18	.17	.16	.16	.15	.15	.14	.14	.14	.15	.15	.16	.16	.17	.18	.18	.19	.20	.21	.22
	246	231	218	207	199	193	189	188	190	193	198	205	213	222	232	243	254	266	279	290
1700	.13	.12	.11	.10	.09	.09	.09	.09	.09	.09	.10	.10	.11	.11	.12	.13	.14	.15	.15	.16
	170	155	143	133	125	120	117	116	118	122	127	134	142	151	160	171	181	192	205	215
15	.07	.06	.05	.04	.04	.03	.03	.03	.03	.04	.04	.05	.05	.06	.07	.07	.08	.09	.10	.10
	092	078	066	057	050	046	043	043	045	049	054	061	063	078	087	097	107	117	129	139
30	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.03	.04	.05
	014	000	000	000	000	000	000	000	000	000	000	000	000	004	013	022	032	041	053	061
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

TABLE B-1 SOLAR PARAMETERS
COS Z
XO (W/M*2.)

MAY-AUG 20 S

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0500	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.00	.00	.00	.00	.05	.05	.05	.05	.05	.05	.05	.05
	000	000	000	000	000	000	000	000	000	000	001	019	035	051	061	068	073	074	073	070	061	055	045	033
45	.00	.00	.00	.00	.00	.00	.01	.03	.05	.06	.07	.09	.10	.10	.11	.11	.11	.11	.11	.11	.10	.10	.09	.08
	000	000	000	000	000	000	019	043	065	085	103	118	133	143	150	154	155	154	150	143	135	124	112	098
0600	.00	.00	.00	.02	.04	.06	.08	.09	.11	.12	.13	.15	.16	.16	.17	.17	.17	.17	.16	.16	.15	.15	.14	.13
	000	000	000	026	053	078	103	127	149	169	186	201	216	225	232	235	236	234	230	223	215	204	192	178
15	.02	.04	.06	.08	.10	.12	.14	.15	.17	.18	.19	.20	.21	.22	.22	.23	.23	.22	.22	.22	.21	.20	.19	.18
	032	057	083	110	136	162	187	210	232	252	269	284	298	307	313	316	317	315	310	303	295	284	272	258
30	.08	.10	.12	.14	.16	.18	.20	.21	.23	.24	.25	.26	.27	.28	.28	.28	.28	.28	.28	.27	.27	.26	.25	.24
	114	140	166	193	219	245	270	293	315	334	352	366	380	388	394	397	397	394	390	383	374	363	351	338
45	.15	.16	.18	.20	.22	.24	.26	.27	.29	.30	.31	.32	.33	.34	.34	.34	.34	.34	.33	.33	.32	.31	.30	.30
	195	221	248	275	301	327	352	375	397	416	433	447	460	468	473	476	476	473	468	461	452	442	430	417
0700	.20	.22	.24	.26	.28	.30	.32	.33	.35	.36	.37	.38	.39	.39	.39	.40	.39	.39	.39	.38	.37	.36	.35	.35
	275	301	328	355	382	408	433	456	477	496	512	526	539	547	552	554	553	551	546	538	530	520	508	495
15	.26	.28	.30	.32	.34	.36	.37	.39	.40	.42	.43	.43	.44	.45	.45	.45	.45	.45	.44	.44	.43	.42	.41	.40
	354	380	408	435	461	487	512	535	556	574	590	604	616	624	628	630	630	627	622	615	606	596	584	572
30	.32	.34	.36	.38	.40	.41	.43	.45	.46	.47	.48	.49	.50	.50	.50	.50	.50	.50	.49	.49	.48	.47	.47	.46
	430	457	485	512	539	565	589	612	632	651	666	679	691	698	703	704	704	701	696	689	680	670	659	647
45	.38	.39	.41	.43	.45	.47	.48	.50	.51	.52	.53	.54	.55	.55	.55	.55	.55	.55	.54	.54	.53	.53	.52	.51
	505	532	560	587	614	639	664	686	706	724	740	752	764	771	775	776	775	772	767	760	752	742	732	720

SEP-DEC 20 S TABLE B-1 SOLAR PARAMETERS COS Z ... SIGNIFIES COS Z = 1. ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0800	.43	.45	.47	.49	.50	.52	.54	.55	.56	.58	.58	.59	.60	.60	.60	.60	.60	.60	.59	.54	.58	.57	.57	.56
	577	605	632	660	686	712	736	758	778	795	810	823	834	841	844	846	845	842	837	830	822	812	802	791
15	.48	.50	.52	.54	.55	.57	.59	.60	.61	.62	.63	.64	.65	.65	.65	.65	.65	.65	.64	.61	.63	.62	.62	.61
	647	674	702	729	756	781	805	826	846	863	876	890	901	907	911	912	911	908	903	897	889	880	870	860
30	.53	.55	.57	.59	.60	.62	.64	.65	.66	.67	.68	.69	.69	.69	.70	.70	.69	.69	.69	.63	.67	.67	.66	.65
	714	741	769	796	822	847	870	892	911	928	942	954	965	971	974	975	974	971	966	960	953	944	935	925
45	.58	.60	.61	.63	.65	.67	.68	.69	.71	.72	.72	.73	.74	.74	.74	.74	.74	.73	.73	.72	.72	.71	.70	.70
	777	804	832	859	885	909	932	953	972	989	1003	1014	1025	1030	1034	1035	1034	1031	1026	1021	1013	1005	997	987
0900	.62	.64	.66	.68	.69	.71	.72	.74	.75	.76	.76	.77	.78	.78	.78	.78	.78	.77	.77	.75	.75	.75	.75	.74
	837	864	891	918	944	968	991	1011	1030	1046	1060	1071	1081	1086	1090	1091	1090	1087	1083	1077	1071	1063	1055	1046
15	.66	.68	.70	.72	.73	.75	.76	.78	.79	.80	.80	.81	.81	.82	.82	.81	.81	.81	.81	.80	.80	.79	.78	.78
	893	920	947	973	998	1022	1045	1065	1083	1099	1112	1123	1133	1138	1142	1143	1142	1139	1135	1130	1124	1117	1110	1102
30	.70	.72	.74	.75	.77	.79	.80	.81	.82	.83	.84	.84	.85	.85	.85	.85	.85	.84	.84	.81	.83	.83	.82	.81
	944	971	998	1024	1049	1073	1095	1115	1132	1148	1161	1171	1181	1186	1189	1190	1190	1188	1184	1179	1174	1167	1160	1153
45	.74	.75	.77	.79	.80	.82	.83	.84	.85	.86	.87	.87	.88	.88	.88	.88	.87	.87	.87	.87	.86	.86	.85	.85
	1092	1119	1145	1171	1195	1219	1240	1259	1277	1292	1304	1315	1324	1329	1332	1334	1333	1331	1328	1324	1319	1313	1307	1300
1000	.77	.79	.80	.82	.83	.85	.86	.87	.88	.89	.90	.90	.91	.91	.91	.91	.91	.90	.90	.90	.89	.89	.88	.88
	1305	1331	1356	1381	1405	1429	1449	1467	1483	1498	1511	1523	1533	1538	1541	1542	1541	1539	1536	1532	1527	1521	1515	1508
15	.80	.81	.83	.85	.86	.88	.89	.90	.91	.92	.92	.93	.93	.93	.93	.93	.93	.93	.92	.92	.92	.91	.91	.91
	1507	1532	1556	1580	1603	1626	1645	1662	1678	1692	1705	1717	1726	1731	1734	1735	1734	1732	1729	1725	1720	1714	1707	1700
30	.82	.84	.85	.87	.88	.90	.91	.92	.93	.94	.94	.95	.95	.95	.95	.95	.95	.95	.95	.94	.94	.94	.93	.93
	1707	1732	1756	1780	1803	1826	1845	1862	1878	1892	1905	1917	1926	1931	1934	1935	1934	1932	1929	1925	1920	1914	1907	1900
45	.84	.86	.87	.89	.90	.92	.93	.94	.95	.95	.96	.96	.97	.97	.97	.97	.97	.97	.96	.96	.96	.95	.95	.95
	1907	1932	1956	1980	2003	2026	2045	2062	2078	2092	2105	2117	2126	2131	2134	2135	2134	2132	2129	2125	2120	2114	2107	2100

*** SIGNIFICES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

SEP-DEC 20 S COS Z

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1100	.86	.88	.89	.91	.92	.93	.94	.95	.96	.97	.97	.98	.93	.98	.98	.98	.98	.98	.98	.93	.98	.97	.97	.97	.97
	*159	*184	*208	*231	*253	*274	*292	*310	*325	*338	*349	*358	*367	*372	*376	*378	*379	*380	*387	*379	*375	*377	*374	*371	*368
15	.87	.89	.90	.92	.93	.94	.95	.96	.97	.98	.98	.99	.94	.99	.99	.99	.99	.99	.99	.99	.93	.99	.98	.98	.98
	*177	*201	*225	*248	*269	*289	*307	*324	*338	*351	*362	*371	*380	*385	*389	*392	*394	*394	*394	*394	*393	*392	*391	*369	*387
30	.88	.90	.91	.93	.94	.95	.96	.97	.98	.98	.99	.99	.96	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99
	*190	*214	*237	*259	*280	*299	*317	*333	*347	*359	*370	*379	*388	*393	*397	*400	*402	*404	*404	*404	*403	*404	*403	*402	*401
45	.89	.90	.92	.93	.94	.95	.96	.97	.98	.99	.99	.99	.96	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99
	*198	*221	*243	*264	*285	*303	*320	*336	*350	*362	*372	*381	*390	*396	*400	*403	*406	*408	*408	*408	*410	*410	*410	*410	*410
1200	.89	.90	.92	.93	.94	.95	.96	.97	.98	.98	.99	.99	.96	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99
	*200	*222	*244	*265	*284	*302	*319	*334	*347	*359	*369	*378	*387	*393	*397	*401	*404	*407	*407	*407	*410	*411	*412	*413	*413
15	.89	.90	.91	.93	.94	.95	.96	.96	.97	.98	.98	.99	.96	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99
	*197	*218	*239	*259	*278	*296	*312	*326	*339	*351	*361	*369	*378	*384	*389	*394	*397	*400	*400	*400	*403	*405	*407	*409	*410
30	.88	.89	.91	.92	.93	.94	.95	.96	.96	.97	.97	.98	.96	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99	.99
	*168	*209	*229	*249	*267	*284	*299	*313	*326	*337	*347	*355	*364	*371	*376	*381	*385	*388	*388	*388	*392	*395	*397	*400	*402
45	.87	.88	.90	.91	.92	.93	.94	.94	.95	.95	.96	.96	.93	.97	.97	.97	.97	.97	.97	.97	.98	.98	.98	.98	.98
	*174	*195	*214	*233	*250	*266	*281	*294	*307	*318	*327	*336	*345	*352	*357	*363	*367	*372	*372	*372	*376	*379	*383	*386	*389
1300	.86	.87	.88	.89	.90	.91	.92	.92	.93	.94	.94	.94	.92	.95	.95	.95	.96	.96	.96	.96	.96	.96	.97	.97	.97
	*155	*175	*193	*211	*228	*243	*258	*271	*282	*293	*303	*311	*321	*327	*334	*339	*345	*350	*350	*354	*359	*363	*367	*371	*375
15	.84	.85	.86	.87	.88	.89	.90	.90	.91	.91	.92	.92	.90	.93	.93	.93	.94	.94	.94	.94	.94	.95	.95	.95	.96
	*131	*150	*168	*185	*201	*215	*229	*242	*253	*263	*273	*282	*291	*298	*305	*311	*317	*323	*323	*328	*333	*336	*343	*348	*353
30	.82	.83	.84	.85	.86	.87	.87	.88	.88	.89	.89	.90	.87	.90	.90	.91	.91	.92	.92	.92	.92	.93	.93	.93	.94
	*101	*119	*137	*153	*168	*182	*195	*207	*218	*229	*238	*247	*257	*264	*271	*278	*284	*291	*291	*297	*303	*309	*315	*320	*325
45	.79	.80	.81	.82	.83	.84	.84	.85	.86	.86	.86	.87	.87	.88	.88	.88	.89	.89	.89	.89	.90	.90	.91	.91	.91
	*067	*084	*101	*116	*131	*144	*157	*168	*179	*189	*198	*207	*217	*225	*233	*240	*247	*254	*254	*261	*263	*274	*281	*287	*293

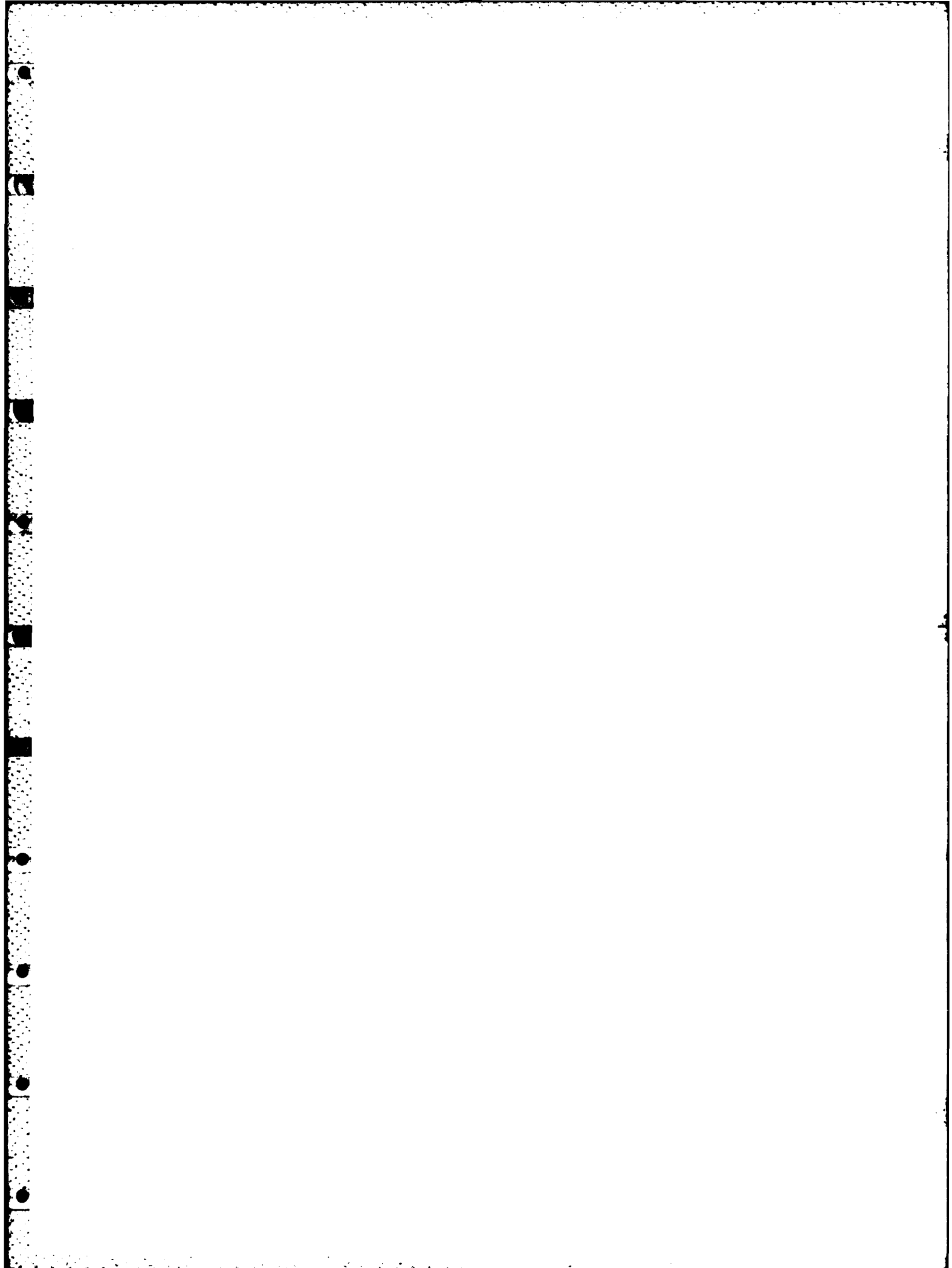
SEP-DEC 20 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFICES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1400	.76	.77	.78	.79	.80	.81	.81	.82	.82	.83	.83	.84	.84	.85	.85	.85	.86	.86	.87	.87
	.028	.044	.060	.075	.088	.101	.113	.124	.135	.145	.152	.163	.173	.181	.189	.197	.205	.213	.220	.223
15	.73	.74	.75	.76	.76	.77	.78	.78	.79	.79	.80	.80	.81	.81	.82	.82	.82	.83	.83	.84
	.584	.999	.014	.028	.041	.054	.065	.076	.086	.096	.105	.114	.121	.133	.142	.150	.159	.167	.175	.184
30	.69	.70	.71	.72	.73	.73	.74	.74	.75	.75	.76	.76	.77	.77	.78	.78	.79	.79	.80	.80
	.935	.950	.964	.978	.990	.002	.013	.023	.033	.043	.052	.051	.072	.081	.090	.099	.108	.117	.126	.135
45	.66	.66	.67	.68	.69	.69	.70	.70	.71	.71	.72	.72	.73	.73	.74	.74	.75	.76	.76	.77
	.863	.897	.910	.923	.934	.945	.956	.966	.976	.985	.995	.004	.015	.024	.034	.044	.053	.063	.073	.083
1500	.61	.62	.63	.64	.64	.65	.65	.66	.66	.67	.67	.68	.68	.69	.70	.70	.71	.71	.72	.73
	.826	.840	.852	.864	.875	.885	.895	.905	.915	.924	.933	.943	.954	.964	.974	.985	.995	.005	.016	.023
15	.57	.58	.58	.59	.60	.60	.61	.61	.62	.62	.63	.63	.64	.64	.65	.66	.66	.67	.68	.69
	.766	.778	.790	.801	.811	.821	.831	.840	.850	.859	.869	.878	.890	.900	.911	.922	.933	.944	.955	.963
30	.52	.53	.53	.54	.55	.55	.56	.56	.57	.57	.58	.58	.59	.60	.60	.61	.62	.62	.63	.64
	.702	.714	.725	.735	.745	.754	.763	.772	.782	.791	.800	.810	.823	.833	.845	.856	.868	.879	.891	.903
45	.47	.48	.48	.49	.50	.50	.51	.51	.52	.52	.53	.53	.54	.55	.55	.56	.57	.58	.58	.59
	.635	.646	.656	.666	.675	.684	.693	.701	.710	.720	.729	.740	.752	.764	.775	.787	.799	.812	.824	.837
1600	.42	.43	.43	.44	.44	.45	.45	.46	.46	.47	.47	.48	.49	.49	.50	.51	.52	.53	.54	.55
	.565	.575	.584	.593	.602	.610	.619	.628	.636	.646	.656	.666	.679	.691	.703	.716	.728	.741	.754	.767
15	.37	.37	.38	.38	.39	.39	.40	.40	.41	.41	.42	.42	.43	.43	.45	.46	.47	.48	.48	.49
	.492	.501	.510	.518	.527	.535	.543	.551	.560	.569	.579	.590	.601	.616	.628	.642	.655	.669	.682	.695
30	.31	.32	.32	.33	.33	.33	.34	.34	.35	.36	.36	.37	.38	.39	.39	.40	.41	.42	.43	.44
	.417	.425	.434	.441	.449	.457	.465	.473	.482	.491	.501	.512	.526	.539	.552	.566	.580	.594	.608	.622
45	.25	.26	.26	.27	.27	.28	.28	.29	.29	.30	.30	.31	.32	.33	.34	.35	.36	.37	.38	.39
	.340	.348	.355	.362	.369	.377	.384	.393	.401	.411	.421	.432	.447	.460	.474	.488	.502	.517	.532	.545

SEP-DEC 20 S TABLE B-1 SOLAR PARAMETERS COS 2 XO (W/M**2.) *** SIGNIFIES COS 2 =1. ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																							
	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.19	.20	.20	.21	.21	.22	.22	.23	.23	.24	.25	.25	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35	.36	.37
	261	268	275	282	288	295	303	311	320	329	340	351	365	380	394	409	424	439	454	467	483	496	509	520
15	.13	.14	.14	.15	.15	.16	.16	.17	.17	.18	.19	.19	.20	.21	.22	.23	.25	.26	.27	.28	.29	.30	.30	.31
	181	187	193	200	206	213	220	228	237	247	257	269	285	299	313	329	344	360	375	390	405	419	431	442
30	.07	.08	.08	.09	.09	.10	.10	.11	.11	.12	.13	.13	.15	.16	.17	.18	.19	.20	.21	.22	.23	.24	.25	.26
	099	105	111	117	123	129	136	144	153	163	174	186	202	217	232	248	264	280	296	311	325	340	352	363
45	.01	.02	.02	.03	.03	.03	.04	.04	.05	.06	.07	.07	.09	.10	.11	.12	.13	.14	.15	.15	.17	.18	.19	.20
	017	023	028	033	039	045	052	060	069	079	091	103	120	135	150	166	183	199	216	231	245	260	273	284
1800	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03	.04	.05	.06	.07	.08	.10	.11	.12	.13	.14	.14
	000	000	000	000	000	000	000	000	000	000	007	020	037	052	068	085	102	119	135	151	166	180	193	204
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.04	.05	.06	.07	.08	.09
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	004	021	038	055	071	087	101	113	124
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.01	.02	.02	.03
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	003	007	021	034	044
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	003	000	000	000	000

SEP-DEC 20 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .



MST

DATE

JAN

FEB

MAR

APR

	1	5	10	15	20	25	30	5	10	15	20	25	30
0700	.42 .42 .40 .39 .38 .36 .35 601 589 572 553 533 511 488	.33 .31 .29 .28 .26 459 435 410 385 360	.23 .21 .20 .18 .16 .14 320 295 271 246 222 198	.12 .11 .09 .07 .06 .04 169 143 122 099 077 054									
15	.47 .46 .45 .44 .42 .41 .39 663 652 635 617 597 576 553	.37 .36 .34 .32 .31 525 501 477 452 427	.20 .20 .24 .23 .21 .19 387 363 338 313 289 264	.17 .15 .14 .12 .10 .09 235 211 187 163 140 117									
30	.51 .50 .49 .48 .47 .45 .44 725 713 697 680 660 639 618	.42 .40 .39 .37 .35 590 567 542 518 493	.33 .31 .29 .27 .26 .24 453 429 404 379 354 329	.22 .20 .18 .17 .15 .13 299 274 250 225 201 178									
45	.55 .55 .54 .52 .51 .50 .48 785 774 758 741 722 702 680	.46 .45 .43 .42 .40 653 630 606 582 558	.37 .36 .34 .32 .30 .29 518 493 468 443 417 392	.26 .23 .23 .21 .19 .18 362 333 311 286 261 237									
0800	.60 .59 .58 .57 .55 .54 .53 843 832 817 800 782 762 741	.51 .49 .48 .46 .44 715 692 669 645 620	.42 .40 .38 .37 .35 .33 581 556 530 506 479 453	.31 .29 .27 .25 .24 .22 422 398 370 345 319 295									
15	.64 .63 .62 .61 .59 .58 .57 899 888 874 858 840 821 800	.55 .54 .52 .50 .49 775 752 729 705 681	.46 .44 .43 .41 .39 .37 642 616 591 565 539 512	.35 .33 .31 .30 .28 .26 481 451 424 401 375 350									
30	.67 .67 .66 .65 .63 .62 .61 952 942 928 913 896 877 857	.59 .58 .56 .55 .53 832 810 787 764 740	.50 .49 .47 .45 .43 .42 700 675 649 622 596 569	.39 .37 .35 .34 .32 .30 537 503 482 455 429 402									
45	.71 .70 .69 .68 .67 .66 .65 *003 994 981 966 949 931 912	.63 .62 .60 .59 .57 887 865 843 820 796	.54 .53 .51 .49 .47 .45 756 730 704 677 650 623	.43 .41 .39 .37 .35 .34 590 563 534 507 479 453									
0900	.74 .74 .73 .72 .71 .70 .68 *052*043*030*015 999 982 963	.67 .65 .64 .62 .61 939 918 896 873 849	.58 .56 .55 .53 .51 .49 809 783 757 730 702 674	.47 .45 .43 .41 .39 .37 640 612 583 555 527 500									
15	.78 .77 .76 .75 .74 .73 .72 *097*089*076*063*047*030*012	.70 .69 .67 .66 .64 988 968 946 923 899	.62 .60 .58 .56 .55 .53 859 833 806 779 751 722	.50 .48 .46 .44 .42 .40 688 659 629 600 572 544									
30	.81 .80 .79 .78 .77 .76 .75 *139*131*120*106*092*075*058	.74 .72 .71 .69 .68 *035*014 992 969 946	.65 .63 .62 .60 .58 .56 905 879 852 824 796 767	.54 .51 .49 .47 .45 .43 732 702 672 643 613 585									
45	.83 .83 .82 .81 .80 .79 .78 *178*171*160*147*133*117*100	.77 .75 .74 .72 .71 *077*057*036*013 999	.68 .66 .65 .63 .61 .59 949 922 895 867 838 808	.56 .54 .52 .50 .48 .46 772 742 711 681 651 622									

COS Z

... SIGNIFIES COS Z = 1.

ADD 1000 TO VALUES PRECEDED BY *

XO (W/M**2.)

SOLAR PARAMETERS

TABLE B-1

40 S

JAN-APR

MST	DATE												APR											
	JAN				FEB				MAR															
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1000	.86	.85	.85	.84	.83	.82	.81	.79	.78	.77	.75	.74	.71	.69	.68	.66	.64	.62	.59	.57	.55	.53	.51	.49
	*213	*206	*196	*184	*170	*155	*138	*116	*097	*075	*053	*029	98	*62	934	905	876	846	809	773	747	716	686	656
15	.88	.88	.87	.86	.85	.84	.83	.82	.81	.79	.76	.76	.74	.72	.70	.68	.66	.64	.62	.59	.57	.55	.53	.51
	*245	*238	*229	*217	*204	*190	*174	*152	*132	*111	*083	*065	*024	997	969	940	910	879	842	810	773	747	716	686
30	.90	.90	.89	.88	.87	.86	.85	.84	.83	.82	.80	.79	.76	.74	.72	.70	.68	.66	.64	.62	.59	.57	.55	.53
	*273	*267	*258	*247	*235	*221	*205	*184	*164	*143	*121	*097	*056	*023	*000	971	940	909	871	833	805	774	743	713
45	.92	.91	.91	.90	.89	.88	.87	.86	.85	.84	.82	.81	.78	.76	.74	.72	.70	.68	.66	.63	.61	.59	.57	.55
	*297	*291	*283	*273	*261	*247	*232	*211	*192	*172	*149	*125	*084	*056	*027	997	966	934	896	863	830	798	766	735
1100	.93	.93	.92	.92	.91	.90	.89	.88	.87	.85	.84	.82	.80	.78	.76	.74	.72	.70	.67	.65	.63	.60	.58	.56
	*317	*312	*304	*294	*283	*270	*255	*235	*216	*196	*173	*149	*108	*080	*050	*020	988	956	916	883	850	817	784	753
15	.94	.94	.93	.93	.92	.91	.90	.89	.88	.87	.85	.84	.81	.79	.77	.75	.73	.71	.68	.65	.64	.61	.59	.57
	*332	*328	*321	*312	*301	*289	*274	*254	*236	*215	*193	*169	*127	*098	*069	*038	*006	973	933	893	855	832	799	767
30	.95	.95	.94	.94	.93	.92	.91	.90	.89	.88	.86	.85	.82	.80	.78	.76	.74	.72	.69	.67	.64	.62	.60	.58
	*344	*340	*334	*325	*315	*303	*269	*269	*251	*231	*208	*134	*142	*113	*083	*051	*019	985	945	910	875	842	809	777
45	.95	.95	.95	.94	.94	.93	.92	.91	.90	.89	.87	.86	.83	.81	.79	.77	.75	.72	.70	.67	.65	.63	.60	.58
	*351	*348	*342	*334	*325	*313	*299	*280	*262	*242	*219	*195	*152	*123	*092	*061	*028	994	952	917	883	848	815	783
1200	.96	.96	.95	.95	.94	.93	.93	.91	.90	.89	.88	.86	.83	.81	.79	.77	.75	.73	.70	.67	.65	.63	.60	.58
	*354	*352	*346	*339	*330	*319	*305	*286	*268	*248	*226	*201	*153	*129	*098	*065	*032	997	955	920	885	850	816	784
15	.96	.95	.95	.95	.94	.94	.93	.92	.90	.89	.88	.86	.83	.81	.79	.77	.75	.73	.70	.67	.65	.63	.60	.58
	*353	*351	*346	*340	*331	*320	*307	*288	*270	*250	*228	*203	*159	*130	*098	*065	*031	996	954	919	883	848	814	781
30	.95	.95	.95	.94	.94	.93	.93	.91	.90	.89	.88	.86	.83	.81	.79	.77	.75	.72	.69	.67	.64	.62	.60	.57
	*348	*346	*342	*336	*327	*317	*304	*286	*268	*248	*225	*200	*156	*126	*094	*061	*027	991	948	912	876	841	806	774
45	.95	.94	.94	.94	.93	.93	.92	.91	.90	.88	.87	.85	.83	.81	.78	.76	.74	.72	.69	.66	.64	.61	.59	.57
	*338	*337	*333	*327	*320	*309	*297	*279	*261	*241	*218	*193	*148	*118	*086	*052	*017	981	938	901	865	830	795	762

JAN-APR 40 S TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST

DATE

JAN

FEB

MAR

APR

1 5 10 15 20 25 30

5 10 15 20 25

5 10 15 20 25 30

5 10 15 20 25 30

1300 .94 .94 .94 .93 .93 .92 .91

*324*323*320*315*308*298*285

.90 .89 .88 .86 .85

*267*250*229*207*181

.82 .80 .78 .75 .73 .70

*136*105*073*039*003 967

.68 .65 .63 .60 .58 .55

923 883 850 814 780 746

15 .92 .92 .92 .92 .91 .91 .90

*306*306*303*298*291*282*270

.89 .88 .87 .85 .83

*252*234*214*191*165

.80 .78 .76 .74 .72 .69

*120*088*055*021 985 949

.66 .64 .61 .59 .56 .54

904 867 830 794 760 727

30 .91 .91 .91 .90 .90 .89 .89

*284*284*282*278*271*261*250

.88 .86 .85 .84 .82

*232*214*193*170*145

.72 .72 .75 .72 .70 .67

*093*067*034 999 963 926

.64 .62 .59 .57 .54 .52

881 841 807 771 736 703

45 .89 .89 .89 .89 .88 .88 .87

*258*258*257*253*246*237*225

.86 .85 .83 .82 .80

*208*190*169*146*120

.77 .75 .73 .70 .68 .66

*073*041*008 972 936 899

.62 .60 .57 .55 .52 .50

854 816 779 743 708 675

1400 .87 .87 .87 .87 .86 .86 .85

*228*229*227*224*218*209*197

.84 .83 .81 .80 .78

*179*161*141*117*091

.75 .73 .71 .68 .66 .63

*044*012 978 942 905 868

.60 .59 .55 .52 .50 .48

822 784 747 711 676 643

15 .84 .84 .84 .84 .84 .83 .83

*194*195*195*191*185*176*165

.82 .80 .79 .77 .76

*147*129*108*094*058

.73 .70 .68 .66 .63 .61

*010 978 943 908 870 833

.58 .55 .52 .50 .47 .45

787 743 712 676 641 608

30 .82 .82 .82 .82 .81 .81 .80

*157*156*158*155*149*140*129

.79 .78 .76 .75 .73

*111*093*072*038*021

.70 .68 .65 .63 .60 .58

973 940 905 869 832 794

.55 .52 .49 .47 .45 .42

748 710 673 636 602 569

45 .79 .79 .79 .79 .79 .78 .77

*117*118*118*115*109*101*089

.76 .75 .74 .72 .70

*071*053*032*008 930

.67 .65 .62 .60 .57 .55

932 899 864 827 790 751

.52 .49 .46 .44 .41 .39

705 667 630 594 559 527

1500 .76 .76 .76 .76 .75 .75 .74

*073*074*074*072*066*058*046

.73 .72 .70 .69 .67

*028*010 988 964 936

.64 .62 .59 .57 .54 .51

887 854 818 782 744 705

.48 .46 .43 .40 .38 .36

859 821 784 748 714 682

15 .72 .73 .73 .73 .72 .72 .71

*026*028*028*025*020*011*000

.70 .69 .67 .65 .64

981 963 941 916 899

.60 .58 .56 .53 .51 .48

830 805 770 733 695 656

.45 .42 .39 .37 .34 .32

610 572 535 499 465 433

30 .69 .69 .69 .69 .69 .68 .67

976 978 978 976 970 962 950

.66 .65 .64 .62 .60

932 913 891 866 838

.57 .54 .52 .49 .47 .44

788 754 718 681 643 604

.41 .39 .36 .33 .31 .28

558 520 483 447 414 382

45 .65 .65 .65 .65 .65 .64 .64

923 926 926 924 918 910 898

.62 .61 .60 .58 .56

879 860 838 812 784

.53 .50 .48 .45 .43 .40

734 700 663 626 588 549

.37 .34 .32 .29 .27 .24

503 465 428 393 360 328

JAN-APR

40 S

TABLE B-1

SOLAR PARAMETERS

COS Z

XO (W/M*2.)

*** SIGNIFIES COS Z = 1.

ADD 1000 TO VALUES PRECEDED BY *

MST	DATE												APR													
	JAN						FEB						MAR						APR							
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1600	.61	.62	.62	.61	.61	.61	.60	.59	.57	.56	.54	.52		.49	.45	.44	.41	.39	.36		.33	.33	.27	.25	.22	.20
	868	871	871	869	864	855	843	824	805	782	756	728		677	642	606	569	530	492		445	403	371	336	303	272
15	.57	.58	.58	.57	.57	.57	.56	.54	.53	.52	.50	.48		.44	.42	.40	.37	.34	.31		.28	.25	.23	.20	.18	.16
	811	814	814	812	806	798	785	766	747	724	698	669		618	583	546	509	470	432		386	343	312	277	244	214
30	.53	.53	.53	.53	.53	.52	.51	.50	.49	.47	.46	.44		.40	.38	.35	.32	.30	.27		.24	.21	.18	.16	.14	.11
	752	755	755	753	747	738	726	706	686	663	637	608		556	521	484	447	408	370		324	285	250	216	184	154
45	.49	.49	.49	.49	.49	.48	.47	.46	.44	.43	.41	.39		.35	.33	.30	.28	.25	.22		.19	.15	.14	.11	.09	.07
	691	694	695	692	686	677	664	644	624	601	574	545		493	457	421	383	344	306		260	223	188	154	122	093
1700	.44	.45	.45	.45	.44	.44	.43	.41	.40	.38	.36	.34		.31	.28	.26	.23	.20	.18		.14	.12	.09	.07	.04	.02
	629	632	632	630	624	614	601	581	560	536	510	480		427	392	355	317	279	241		195	153	123	090	058	030
15	.40	.40	.40	.40	.40	.39	.38	.37	.35	.34	.32	.30		.26	.23	.21	.18	.15	.13		.09	.07	.04	.02	.00	.00
	566	568	569	566	560	550	536	516	495	471	444	414		361	325	288	250	212	174		129	093	058	025	000	000
30	.35	.36	.36	.35	.35	.34	.33	.32	.31	.29	.27	.25		.21	.19	.16	.13	.11	.08		.05	.02	.00	.00	.00	.00
	502	504	504	501	495	485	471	450	428	404	376	346		293	257	220	183	144	106		062	026	000	000	000	000
45	.31	.31	.31	.31	.30	.30	.29	.27	.26	.24	.22	.20		.16	.14	.11	.08	.06	.03		.00	.00	.00	.00	.00	.00
	437	439	439	436	429	418	404	383	361	336	309	278		224	189	152	114	076	038		000	000	000	000	000	000
1800	.26	.26	.26	.26	.26	.25	.24	.22	.21	.19	.17	.15		.11	.09	.06	.03	.01	.00		.00	.00	.00	.00	.00	.00
	371	374	374	370	363	352	337	315	293	268	240	209		155	120	083	045	007	000		000	000	000	000	000	000
15	.22	.22	.22	.22	.21	.20	.19	.18	.16	.14	.12	.10		.06	.04	.01	.00	.00	.00		.00	.00	.00	.00	.00	.00
	306	308	308	304	296	285	270	248	225	200	171	140		083	050	013	000	000	000		000	000	000	000	000	000
30	.17	.17	.17	.17	.16	.15	.14	.13	.11	.09	.07	.05		.01	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	241	243	242	238	230	218	203	180	157	131	102	071		017	000	000	000	000	000		000	000	000	000	000	000
45	.13	.13	.13	.12	.12	.11	.10	.08	.06	.05	.02	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	177	178	177	172	164	152	136	112	089	063	034	002		000	000	000	000	000	000		000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

XO (W/M**2.)

SOLAR PARAMETERS

TABLE B-1

40 S

MST	DATE																										
	JAN							FEB							MAR							APR					
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1900	.08	.08	.08	.08	.07	.06	.05							.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	113	114	113	107	099	086	070	.03	.02	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
15	.04	.04	.04	.03	.02	.02	.00							.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	050	051	049	044	034	021	004	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
30	.00	.00	.00	.00	.00	.00	.00							.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
45	.00	.00	.00	.00	.00	.00	.00							.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		

JAN-APR 40 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

[illegible]

MST	DATE																			
	MAY					JUN					JUL					AUG				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0900	.35	.33	.32	.30	.29	.27	.26	.25	.24	.24	.24	.24	.24	.25	.25	.26	.28	.29	.31	.33
	473	448	424	402	381	363	345	332	323	316	313	314	317	325	335	349	367	388	417	441
15	.38	.37	.35	.33	.32	.30	.29	.28	.27	.27	.27	.27	.27	.28	.29	.30	.31	.33	.35	.37
	517	491	467	444	423	405	386	374	364	358	355	355	360	368	379	393	411	432	461	481
30	.41	.40	.38	.36	.35	.33	.32	.31	.30	.30	.30	.30	.30	.31	.32	.33	.34	.36	.38	.40
	557	531	506	483	462	444	425	413	403	397	395	395	400	408	419	434	452	473	503	531
45	.44	.42	.41	.39	.37	.36	.35	.34	.33	.33	.33	.33	.33	.34	.34	.36	.37	.39	.41	.43
	594	567	542	519	498	479	460	448	439	433	431	432	436	444	456	471	490	512	542	570
1000	.47	.45	.43	.41	.40	.38	.37	.36	.35	.35	.35	.35	.35	.36	.37	.38	.40	.41	.43	.45
	628	600	575	551	530	511	493	480	471	465	463	465	469	478	490	506	524	546	577	605
15	.49	.47	.45	.43	.42	.41	.39	.38	.38	.37	.37	.37	.38	.38	.39	.40	.42	.44	.46	.48
	657	630	604	580	559	540	521	509	500	494	493	494	499	508	521	536	555	578	608	637
30	.51	.49	.47	.45	.44	.42	.41	.40	.40	.39	.39	.39	.40	.40	.41	.43	.44	.46	.48	.50
	683	655	629	605	584	565	546	534	525	520	518	520	526	535	547	564	583	605	636	664
45	.52	.50	.49	.47	.45	.44	.43	.42	.41	.41	.41	.41	.41	.42	.43	.44	.46	.47	.50	.52
	705	677	651	627	605	586	567	555	547	542	540	542	546	558	571	587	607	629	660	689
1100	.54	.52	.50	.48	.47	.45	.44	.43	.43	.42	.42	.42	.43	.44	.45	.46	.47	.49	.51	.53
	723	695	668	644	622	603	585	573	565	560	559	561	567	577	590	607	626	649	680	703
15	.55	.53	.51	.49	.48	.46	.45	.44	.44	.43	.43	.44	.44	.45	.46	.47	.48	.50	.52	.54
	737	708	681	657	636	617	598	587	579	574	573	576	582	592	606	622	642	665	696	725
30	.56	.53	.52	.50	.48	.47	.46	.45	.44	.44	.44	.44	.45	.46	.47	.48	.49	.51	.53	.55
	746	718	691	666	645	626	608	596	589	584	584	587	593	603	617	634	654	677	708	737
45	.56	.54	.52	.50	.49	.47	.46	.45	.45	.45	.45	.45	.45	.46	.47	.48	.50	.52	.54	.56
	752	723	696	672	650	632	614	602	595	591	590	593	600	611	625	642	662	685	716	745

MAY-AUG 40 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1200	.56	.54	.52	.50	.49	.48	.46	.46	.45	.45	.45	.45	.45	.46	.47	.49	.50	.52	.54	.55	.58	.61	.63	.65
	753	724	697	673	651	633	615	604	597	593	593	596	604	614	628	646	666	689	720	743	778	810	842	876
15	.56	.54	.52	.50	.49	.47	.46	.45	.45	.45	.45	.45	.45	.46	.47	.49	.50	.52	.54	.55	.58	.60	.63	.65
	750	721	694	670	648	630	613	602	595	591	591	595	603	614	628	645	666	689	720	743	777	809	841	874
30	.55	.53	.51	.50	.48	.47	.46	.45	.44	.44	.44	.45	.45	.46	.47	.48	.50	.52	.54	.55	.58	.60	.62	.65
	742	713	686	662	641	623	606	596	589	586	586	590	598	609	623	641	661	684	715	743	772	803	835	868
45	.54	.52	.50	.49	.47	.46	.45	.44	.44	.44	.44	.44	.45	.45	.46	.48	.49	.51	.53	.55	.57	.59	.62	.64
	731	702	675	651	630	612	596	585	579	576	577	581	589	600	615	633	653	676	706	734	763	794	825	857
1300	.53	.51	.49	.48	.46	.45	.44	.43	.43	.42	.43	.43	.44	.44	.46	.47	.48	.50	.52	.54	.56	.58	.60	.63
	715	686	660	636	615	598	581	571	565	562	564	568	576	588	602	620	640	663	694	721	750	780	811	842
15	.52	.50	.48	.46	.45	.44	.42	.42	.41	.41	.41	.42	.42	.43	.44	.46	.47	.49	.51	.53	.55	.57	.59	.61
	695	666	640	617	596	579	563	553	547	545	546	551	560	571	586	604	624	647	677	704	732	762	792	823
30	.50	.48	.46	.44	.43	.42	.41	.40	.40	.40	.40	.40	.41	.42	.43	.44	.46	.47	.49	.51	.53	.55	.57	.60
	672	643	617	593	573	556	541	531	526	524	526	531	539	551	566	583	604	626	656	682	711	740	769	800
45	.48	.46	.44	.42	.41	.40	.39	.38	.38	.38	.38	.38	.39	.40	.41	.42	.44	.45	.47	.49	.51	.53	.55	.58
	644	615	589	566	547	530	515	506	501	499	501	506	515	527	542	559	579	602	631	657	685	713	743	773
1400	.46	.44	.42	.40	.39	.38	.37	.36	.36	.36	.36	.36	.37	.38	.39	.40	.42	.43	.45	.47	.49	.51	.53	.55
	613	584	558	536	516	500	485	477	472	471	473	478	487	499	514	532	551	574	603	629	655	684	712	741
15	.43	.41	.39	.38	.36	.35	.34	.34	.33	.33	.33	.34	.34	.35	.36	.38	.39	.41	.43	.45	.47	.49	.51	.53
	577	549	524	502	483	467	452	444	440	439	441	447	456	468	483	500	520	542	570	595	622	650	678	706
30	.40	.38	.36	.35	.33	.32	.31	.31	.31	.30	.31	.31	.32	.33	.34	.35	.37	.38	.40	.42	.44	.46	.48	.50
	539	511	486	464	445	430	416	408	404	403	405	412	421	433	448	465	485	507	535	560	585	613	640	668
45	.37	.35	.33	.32	.30	.29	.28	.28	.28	.28	.28	.28	.29	.30	.31	.32	.34	.35	.37	.39	.41	.43	.45	.47
	497	469	445	423	405	390	377	369	366	365	368	374	383	395	410	427	447	468	496	520	545	572	599	626

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1
COS Z

MAY-AUG 40 S

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
1500	.34	.32	.30	.28	.27	.26	.25	.25	.24	.24	.25	.25
	452	425	401	379	362	347	334	327	324	324	327	333
15	.30	.28	.26	.25	.24	.23	.22	.21	.21	.21	.21	.22
	404	377	353	333	315	301	289	282	279	279	283	289
30	.26	.24	.23	.21	.20	.19	.18	.18	.18	.18	.18	.18
	353	327	304	283	266	253	241	235	232	232	236	243
45	.22	.20	.19	.17	.16	.15	.14	.14	.14	.14	.14	.15
	300	274	251	232	215	202	191	185	182	183	187	194
1600	.18	.16	.15	.13	.12	.11	.10	.10	.10	.10	.10	.11
	244	219	197	177	162	149	138	133	131	132	135	142
15	.14	.12	.10	.09	.08	.07	.06	.06	.06	.06	.06	.07
	187	162	140	121	106	094	084	079	077	078	082	089
30	.09	.08	.06	.05	.04	.03	.02	.02	.02	.02	.02	.03
	127	103	082	064	049	037	027	023	021	023	027	034
45	.05	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	066	042	022	004	000	000	000	000	000	000	000	000
1700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	004	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

COS 2

MAY-AUG 40 S

MST	SEP					OCT					DATE					NOV					DEC														
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30											
0700	.12	.15	.18	.20	.23	.26	.29	.31	.33	.36	.38	.39	.41	.43	.44	.44	.45	.45	.45	.45	.45	.44	.44	.43											
	163	200	239	277	316	354	391	427	460	492	521	547	574	593	609	622	631	637	639	630	635	628	619	607											
	15	.17	.20	.22	.25	.28	.31	.33	.36	.38	.40	.42	.44	.46	.47	.48	.49	.49	.50	.50	.50	.49	.48	.47											
30	.22	.24	.27	.30	.33	.35	.38	.40	.43	.45	.47	.48	.50	.51	.52	.53	.54	.54	.54	.54	.54	.53	.52	.52											
	290	327	366	405	443	481	518	553	587	618	646	672	693	717	733	745	753	759	761	761	757	751	742	731											
	45	.26	.29	.32	.34	.37	.40	.42	.45	.47	.49	.51	.53	.54	.56	.57	.57	.58	.58	.58	.58	.57	.57	.56											
0800	.30	.33	.36	.39	.41	.44	.47	.49	.51	.53	.55	.57	.58	.60	.61	.61	.62	.62	.62	.62	.62	.61	.61	.60											
	409	448	486	525	564	601	638	672	705	736	764	789	815	833	848	860	868	874	876	875	873	867	859	848											
	15	.35	.37	.40	.43	.46	.48	.51	.53	.55	.57	.59	.61	.62	.64	.64	.65	.66	.66	.66	.66	.65	.65	.64											
30	.39	.41	.44	.47	.49	.52	.55	.57	.59	.61	.63	.64	.66	.67	.68	.69	.69	.70	.70	.70	.69	.69	.68	.68											
	521	559	597	636	674	711	747	782	814	844	871	896	921	939	954	965	974	980	982	982	980	974	967	957											
	45	.42	.45	.48	.51	.53	.56	.58	.61	.63	.65	.66	.68	.70	.71	.72	.72	.73	.73	.73	.73	.72	.72	.71											
0900	.46	.49	.51	.54	.57	.59	.62	.64	.66	.68	.70	.71	.73	.74	.75	.76	.76	.76	.76	.75	.76	.76	.75	.75											
	621	659	697	736	773	810	846	879	911	940	967	991	*016	*033	*048	*060	*068	*074	*077	*079	*076	*071	*065	*056											
	15	.49	.52	.55	.57	.60	.63	.65	.67	.69	.71	.73	.74	.76	.77	.78	.79	.79	.79	.79	.79	.79	.78	.78											
30	.53	.55	.58	.61	.63	.66	.68	.70	.72	.74	.76	.77	.79	.80	.81	.81	.82	.82	.82	.82	.82	.82	.81	.81											
	709	746	784	822	859	896	930	963	994	023	049	073	*097	*115	*129	*141	*150	*156	*160	*161	*160	*156	*151	*143											
	45	.55	.58	.61	.63	.66	.68	.71	.73	.75	.77	.78	.80	.81	.82	.83	.84	.84	.85	.85	.85	.85	.84	.84											
SEP-DEC	747	785	823	860	897	933	967	000	031	059	085	108	*133	*150	*164	*176	*185	*192	*196	*197	*196	*194	*189	*182											
	*** SIGNIFIES COS Z =1.												ADD 1000 TO VALUES PRECEDED BY *																						
	TABLE B-1												SOLAR PARAMETERS												COS Z										
40 S												X0 (W/M*2.)																							

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.)

SEP-DEC 40 S

MST	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1000	.58	.61	.63	.66	.68	.71	.73	.75	.77	.79	.81	.82	.84	.85	.86	.87	.87	.86	.86	.86
	782	820	857	895	931	966	*000*033*063*091*117*140						*164*161*196*208*217*224					*228*230*230*227*223*217		
15	.60	.63	.66	.68	.71	.73	.75	.77	.79	.81	.83	.84	.86	.87	.88	.89	.89	.89	.88	.88
	814	851	888	925	961	996	*029*061*091*119*141*167						*191*209*223*235*245*252					*257*259*259*257*254*248		
30	.62	.65	.68	.70	.72	.75	.77	.79	.81	.83	.84	.86	.87	.88	.89	.90	.91	.91	.91	.90
	841	878	915	951	987	021	*054*086*116*143*168*191						*215*232*247*259*269*276					*281*281*281*284*281*276		
45	.64	.67	.69	.72	.74	.76	.78	.80	.82	.84	.86	.87	.89	.90	.91	.92	.92	.92	.92	.92
	864	901	937	973	008	042	*075*106*136*163*188*210						*234*251*266*279*289*296					*302*303*307*306*304*299		
1100	.66	.68	.71	.73	.75	.78	.80	.82	.84	.85	.87	.88	.90	.91	.92	.92	.93	.93	.93	.93
	883	919	955	991	026	059	*092*122*151*178*203*225						*249*266*281*294*304*312					*318*322*321*324*322*319		
15	.67	.69	.72	.74	.76	.78	.81	.83	.84	.86	.88	.89	.90	.91	.92	.93	.94	.94	.94	.94
	898	934	969	004	039	072	*104*134*163*189*213*236						*260*277*292*305*316*324					*331*335*336*338*337*334		
30	.67	.70	.72	.75	.77	.79	.81	.83	.85	.87	.88	.89	.91	.92	.93	.94	.94	.95	.95	.95
	909	944	979	014	047	080	*111*141*169*196*220*242						*266*283*299*312*323*332					*339*344*347*348*348*346		
45	.68	.70	.73	.75	.77	.79	.81	.83	.85	.87	.88	.90	.91	.92	.93	.94	.94	.95	.96	.96
	915	950	984	018	051	084	*114*144*172*198*222*244						*268*285*301*314*326*335					*343*349*352*354*354*353		
1200	.68	.70	.73	.75	.77	.79	.81	.83	.85	.86	.88	.89	.91	.92	.93	.94	.94	.95	.96	.96
	917	951	985	018	051	083	*113*142*170*195*219*241						*265*283*299*313*324*334					*343*349*353*356*356*355		
15	.68	.70	.72	.75	.77	.79	.81	.83	.84	.86	.87	.89	.90	.91	.92	.93	.94	.94	.96	.96
	914	948	981	014	046	077	*107*136*163*188*212*234						*258*276*292*306*319*329					*338*345*350*353*354*354		
30	.67	.70	.72	.74	.76	.78	.80	.82	.84	.85	.87	.88	.89	.91	.92	.92	.93	.94	.95	.95
	907	940	973	005	037	068	*097*125*152*177*201*223						*247*265*281*296*309*320					*329*336*342*346*348*348		
45	.66	.69	.71	.73	.75	.77	.79	.81	.82	.84	.86	.87	.88	.89	.90	.91	.92	.93	.95	.95
	896	928	961	992	023	053	*082*110*137*162*185*207						*231*250*266*281*294*306					*316*324*330*335*337*338		

SEP-DEC 40 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1300	.65	.68	.70	.72	.74	.76	.78	.79	.81	.83	.84	.85	.87	.88	.89	.90	.91	.92	.92	.93	.93	.93	.94	.94	
	880	912	944	975	005	035	.063	.091	.117	.142	.165	.187	.211	.230	.247	.262	.276	.288		.298	.307	.314	.319	.323	.324
15	.64	.66	.68	.70	.72	.74	.76	.78	.79	.81	.82	.84	.85	.86	.87	.88	.89	.90	.91	.91	.92	.92	.92	.92	.92
	861	892	923	953	983	012	.040	.067	.093	.117	.141	.163	.187	.206	.223	.239	.253	.266		.277	.285	.294	.300	.304	.306
30	.62	.64	.66	.68	.70	.72	.74	.76	.77	.79	.80	.82	.83	.84	.85	.86	.87	.88	.89	.89	.90	.90	.90	.91	.91
	837	867	897	927	956	985	.012	.039	.065	.089	.112	.134	.159	.178	.196	.212	.227	.240		.252	.262	.270	.276	.281	.284
45	.60	.62	.64	.66	.68	.70	.72	.73	.75	.76	.78	.79	.81	.82	.83	.84	.85	.86	.87	.87	.88	.88	.88	.89	.89
	808	838	868	897	926	954	.981	.007	.032	.057	.080	.102	.127	.146	.164	.181	.196	.210		.222	.233	.242	.249	.254	.257
1400	.58	.60	.62	.64	.65	.67	.69	.71	.72	.74	.75	.77	.78	.80	.81	.82	.83	.84	.84	.85	.86	.86	.86	.86	.87
	777	806	835	863	891	919	.946	.971	.996	.021	.044	.066	.091	.111	.129	.146	.162	.177		.189	.200	.210	.218	.223	.227
15	.55	.57	.59	.61	.63	.64	.66	.68	.69	.71	.72	.74	.75	.77	.78	.79	.80	.81	.82	.83	.83	.83	.84	.84	.84
	741	769	798	826	853	880	.906	.932	.957	.981	.004	.026	.052	.072	.090	.108	.124	.139		.153	.164	.174	.183	.189	.193
30	.52	.54	.56	.58	.60	.61	.63	.65	.66	.68	.69	.71	.72	.74	.75	.76	.77	.78	.79	.80	.80	.81	.81	.81	.82
	701	729	757	784	811	838	.864	.889	.913	.937	.960	.983	.009	.029	.048	.066	.083	.099		.113	.125	.136	.144	.151	.156
45	.49	.51	.53	.54	.56	.58	.60	.61	.63	.64	.66	.67	.69	.70	.72	.73	.74	.75	.76	.77	.77	.78	.78	.78	.79
	659	686	713	740	766	792	.817	.842	.867	.891	.914	.936	.962	.983	.003	.021	.038	.055		.069	.082	.093	.103	.110	.115
1500	.45	.47	.49	.51	.53	.54	.56	.58	.59	.61	.62	.64	.66	.67	.68	.69	.71	.72	.73	.73	.74	.75	.75	.75	.76
	612	639	665	691	717	743	.768	.793	.817	.841	.864	.886	.913	.934	.954	.973	.991	.007		.023	.035	.048	.058	.065	.071
15	.42	.44	.45	.47	.49	.51	.52	.54	.55	.57	.59	.60	.62	.63	.64	.66	.67	.68	.69	.70	.71	.71	.71	.72	.72
	563	589	615	640	666	691	.716	.740	.764	.788	.811	.834	.860	.882	.902	.922	.940	.957	.973	.987	.999	.010	.018	.024	
30	.38	.40	.41	.43	.45	.47	.48	.50	.51	.53	.55	.56	.58	.59	.61	.62	.63	.64	.65	.65	.67	.68	.68	.69	.69
	511	536	561	586	611	636	.660	.685	.708	.732	.756	.779	.805	.827	.848	.868	.887	.905	.921	.935	.948	.959	.963	.974	
45	.34	.36	.37	.39	.41	.42	.44	.46	.47	.49	.50	.52	.54	.55	.57	.58	.59	.60	.61	.62	.63	.64	.65	.65	.65
	456	481	505	530	554	576	.603	.627	.650	.674	.698	.721	.748	.770	.792	.812	.831	.850	.866	.881	.895	.906	.915	.921	.921

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE B-1

SEP-DEC 40 S

MST	DATE																							
	SEP				OCT				NOV				DEC											
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1600	.30	.31	.33	.35	.36	.38	.40	.41	.43	.44	.46	.48	.49	.51	.52	.54	.55	.56	.57	.59	.59	.60	.61	.61
	399	423	447	471	495	519	543	566	590	614	637	661	688	711	733	754	774	792	809	825	839	850	959	866
15	.25	.27	.29	.30	.32	.33	.35	.37	.38	.40	.42	.43	.45	.47	.48	.49	.51	.52	.53	.54	.55	.56	.57	.57
	340	363	387	410	433	457	481	504	528	552	575	599	627	650	672	693	714	733	751	767	781	792	802	809
30	.21	.22	.24	.26	.27	.29	.30	.32	.34	.35	.37	.39	.40	.42	.44	.45	.46	.48	.49	.50	.51	.52	.53	.53
	279	301	324	347	370	393	417	440	464	488	512	535	564	587	610	631	652	672	690	706	721	733	743	750
45	.16	.18	.19	.21	.22	.24	.26	.27	.29	.31	.32	.34	.36	.37	.39	.41	.42	.43	.45	.46	.47	.48	.48	.49
	216	238	260	283	305	328	351	375	398	422	446	470	493	523	546	568	589	609	628	645	659	672	682	689
1700	.11	.13	.14	.16	.18	.19	.21	.22	.24	.26	.27	.29	.31	.33	.34	.36	.37	.39	.40	.41	.42	.43	.44	.44
	151	173	195	217	239	262	285	308	332	356	380	404	433	457	481	504	525	546	565	582	597	609	619	627
15	.06	.08	.10	.11	.13	.14	.16	.18	.19	.21	.23	.24	.26	.28	.30	.31	.33	.34	.36	.37	.38	.39	.39	.40
	086	107	128	150	172	195	217	241	264	288	313	337	367	391	415	438	460	481	500	513	533	546	556	563
30	.04	.03	.05	.06	.08	.09	.11	.13	.14	.16	.18	.19	.22	.23	.25	.27	.28	.30	.31	.32	.33	.34	.35	.35
	020	040	061	083	104	127	149	173	196	220	245	270	300	324	349	372	395	416	435	453	468	481	492	499
45	.00	.00	.00	.01	.03	.04	.06	.08	.09	.11	.13	.15	.17	.18	.20	.22	.23	.25	.26	.28	.29	.30	.30	.31
	000	000	000	015	036	058	081	104	128	152	177	202	232	257	282	306	329	350	370	383	404	417	427	434
1800	.00	.00	.00	.00	.00	.00	.01	.03	.04	.06	.08	.10	.12	.14	.15	.17	.19	.20	.22	.23	.24	.25	.26	.26
	000	000	000	000	000	000	012	036	059	084	109	134	165	190	215	240	263	285	305	323	338	352	362	369
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.07	.09	.11	.12	.14	.16	.17	.18	.19	.20	.21	.22
	000	000	000	000	000	000	000	000	000	016	041	067	098	124	149	174	197	219	239	253	273	287	297	304
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.06	.08	.09	.11	.12	.14	.15	.16	.16	.17
	000	000	000	000	000	000	000	000	000	000	000	000	032	059	083	108	132	154	175	193	209	222	232	239
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.05	.06	.08	.09	.10	.11	.12	.12
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	018	043	067	090	110	129	145	158	168	175

SEP-DEC 40 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																	
	SEP					OCT					NOV					DEC		
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	004	027
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	004	020	033
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 40 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

AD-A127 853

FINAL TACTICAL DECISION AID (FTDA) FOR INFRARED (8-12
MICROMETERS) SYSTEM. (U) SYSTEMS AND APPLIED SCIENCES
CORP RIVERDALE MD D B HODGES ET AL. 15 SEP 82

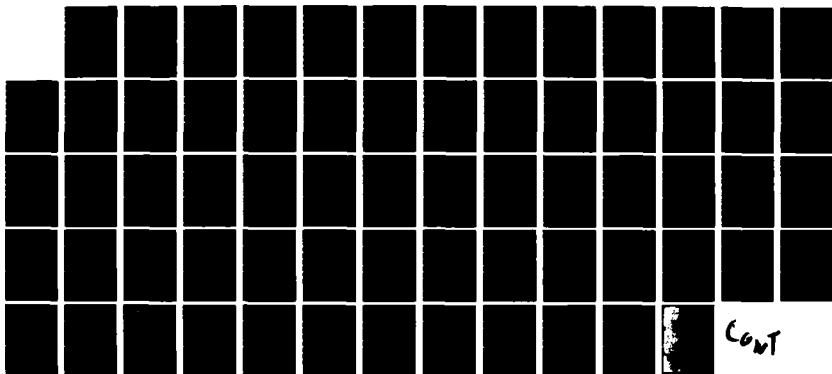
4/5

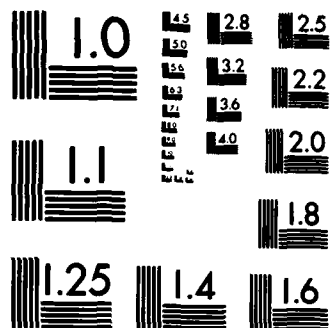
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SCIENTIFIC-3 AFGL-TR-82-8294

F/G 3/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0900	.66	.65	.64	.63	.62	.60	.58	.56	.54	.52	.49	.47	.43	.40	.38	.35	.32	.29	.26	.23	.21	.18	.16	.13	
	934	925	910	892	872	848	822	788	758	725	691	656	597	559	521	482	443	404	357	319	281	245	209	176	
15	.68	.67	.66	.65	.64	.62	.61	.58	.56	.54	.52	.49	.45	.43	.40	.37	.35	.32	.28	.25	.23	.20	.18	.15	
30	964	955	940	923	903	880	854	821	790	758	724	689	630	592	553	514	474	435	388	343	311	274	239	204	
	.70	.69	.68	.67	.66	.64	.63	.60	.58	.56	.54	.52	.47	.45	.42	.39	.37	.34	.31	.23	.25	.22	.20	.17	
45	991	982	968	951	932	909	884	851	821	788	755	719	660	622	583	544	504	464	417	379	339	302	266	231	
	.72	.71	.70	.69	.68	.66	.65	.62	.60	.58	.56	.54	.50	.47	.44	.41	.39	.36	.32	.30	.27	.24	.22	.19	
1000	*017	*008	995	978	959	936	911	879	849	817	783	748	689	650	611	571	531	491	443	404	365	327	290	255	
	.73	.73	.72	.71	.70	.68	.66	.64	.62	.60	.58	.55	.51	.49	.46	.43	.40	.38	.34	.31	.29	.26	.23	.21	
15	*040	*031	*018	*002	983	961	937	904	874	843	809	774	715	676	637	597	556	516	467	427	388	350	313	278	
	.75	.74	.74	.72	.71	.70	.68	.66	.64	.62	.60	.57	.53	.50	.48	.45	.42	.39	.36	.33	.30	.27	.25	.22	
30	*060	*052	*040	*024	*005	984	960	927	898	866	833	797	738	699	660	619	578	538	489	443	409	370	333	297	
	.76	.76	.75	.74	.73	.71	.70	.67	.65	.63	.61	.59	.55	.52	.49	.46	.43	.41	.37	.34	.31	.29	.26	.23	
45	*079	*071	*059	*043	*025	*004	980	948	919	887	854	818	759	720	680	639	598	557	507	467	427	388	350	314	
	.77	.77	.76	.75	.74	.72	.71	.69	.67	.65	.62	.60	.56	.53	.50	.48	.45	.42	.38	.35	.33	.30	.27	.24	
1100	*094	*087	*075	*060	*042	*021	998	966	937	906	872	837	777	738	698	657	615	574	524	483	442	403	365	329	
	.78	.78	.77	.76	.75	.73	.72	.70	.68	.66	.63	.61	.57	.54	.52	.49	.46	.43	.39	.36	.33	.31	.28	.25	
15	*107	*100	*089	*074	*057	*036	*013	981	952	921	888	852	792	753	712	671	629	587	537	495	455	415	377	341	
	.79	.79	.78	.77	.76	.74	.73	.71	.69	.67	.64	.62	.58	.55	.52	.50	.47	.44	.40	.37	.34	.31	.29	.26	
30	*117	*111	*100	*086	*068	*048	*025	994	965	934	901	865	805	765	725	683	641	599	548	505	465	425	387	350	
	.80	.79	.78	.77	.76	.75	.73	.71	.69	.67	.65	.63	.59	.56	.53	.50	.47	.44	.41	.38	.35	.32	.29	.26	
45	*125	*119	*108	*094	*078	*058	*035	*004	975	944	911	875	815	775	734	692	649	607	556	514	472	432	393	356	
	.80	.79	.79	.78	.77	.75	.74	.72	.70	.68	.66	.63	.59	.56	.54	.51	.48	.45	.41	.38	.35	.32	.29	.27	
	*130	*124	*114	*100	*084	*064	*042	*011	982	951	918	882	821	781	740	698	655	612	561	518	477	436	397	360	

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE 8-1

60 S

JAN-APR

MST

DATE

JAN

FEB

MAR

APR

	1	5	10	15	20	25	30	5	10	15	20	25	30
1200	.80 .80	.79 .78	.77 .76	.74				.59 .57	.54 .51	.48 .45			.41 .38
	.132*.126*	.116*.103*	.087*.068*	.046				.825	.785	.743	.701	.658	.615
15	.80 .80	.79 .78	.77 .76	.74				.59 .57	.54 .51	.48 .45			.41 .38
	.131*.126*	.116*.104*	.088*.069*	.047				.826	.786	.744	.701	.658	.614
30	.80 .79	.79 .78	.77 .76	.74				.59 .56	.54 .51	.48 .45			.41 .38
	.127*.123*	.113*.101*	.086*.067*	.045				.824	.783	.741	.698	.655	.611
45	.79 .79	.78 .78	.76 .75	.74				.59 .56	.53 .50	.47 .44			.40 .37
	.121*.117*	.108*.096*	.060*.062*	.040				.819	.778	.736	.692	.648	.604
1300	.79 .78	.78 .77	.76 .75	.73				.58 .56	.53 .50	.46 .43			.40 .37
	.112*.108*	.099*.088*	.073*.054*	.033				.811	.770	.727	.684	.639	.595
15	.78 .77	.77 .76	.75 .74	.73				.58 .55	.52 .49	.46 .42			.39 .35
	.100*.096*	.088*.077*	.062*.044*	.022				.800	.759	.716	.672	.628	.583
30	.77 .76	.76 .75	.74 .73	.72				.57 .54	.51 .48	.45 .41			.38 .35
	.086*.082*	.074*.063*	.049*.031*	.009				.786	.745	.702	.658	.613	.568
45	.76 .75	.75 .74	.73 .72	.70				.55 .52	.50 .46	.43 .40			.36 .33
	.069*.065*	.058*.047*	.033*.015*	.993				.770	.728	.685	.640	.595	.550
1400	.74 .74	.73 .73	.72 .71	.69				.54 .51	.48 .45	.42 .39			.35 .32
	.049*.046*	.039*.028*	.014	.996	.975			.751	.709	.665	.621	.575	.530
15	.73 .72	.72 .71	.70 .69	.68				.52 .50	.45 .43	.40 .37			.33 .30
	.027*.024*	.017*.007	.993	.975	.954			.729	.687	.643	.598	.553	.507
30	.71 .71	.70 .70	.69 .67	.66				.51 .48	.45 .42	.38 .35			.31 .28
	.003*.000	.993	.983	.969	.957	.930		.705	.662	.618	.573	.527	.482
45	.69 .69	.68 .68	.67 .66	.64				.49 .46	.43 .40	.36 .33			.29 .26
	.977	.974	.967	.957	.943	.926	.905	.676	.635	.591	.546	.500	.454

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

COS Z

TABLE B-1

60 S

JAN-APR

MST	DATE																							
	JAN				FEB				MAR				APR											
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30					
1500	.67	.67	.66	.66	.65	.64	.62	.60	.58	.56	.54	.51	.47	.44	.41	.37	.34	.31	.27	.24	.21	.18	.15	.12
	948	945	939	929	915	898	876	846	818	786	751	713	649	606	561	516	470	424	369	325	282	240	201	164
15	.65	.65	.64	.64	.63	.61	.60	.58	.56	.54	.51	.49	.44	.41	.38	.35	.32	.29	.25	.22	.18	.15	.13	.10
	917	915	909	899	885	867	846	816	787	755	720	682	617	574	529	484	438	392	337	293	250	208	169	132
30	.63	.62	.62	.61	.60	.59	.58	.56	.54	.52	.49	.47	.42	.39	.36	.33	.29	.26	.22	.19	.16	.13	.10	.07
	885	882	876	866	853	835	814	784	755	722	687	649	584	540	496	450	404	358	303	259	216	174	135	099
45	.60	.60	.60	.59	.58	.57	.55	.53	.51	.49	.47	.44	.39	.36	.33	.30	.27	.24	.20	.16	.13	.10	.07	.05
	850	848	842	832	819	801	780	749	720	688	652	614	548	505	460	414	368	322	267	223	180	139	100	064
1600	.58	.57	.57	.56	.55	.54	.53	.51	.49	.46	.44	.41	.37	.34	.31	.27	.24	.21	.17	.14	.11	.08	.05	.02
	815	812	806	797	783	765	744	713	684	651	616	577	511	468	423	377	331	284	230	185	143	102	063	027
15	.55	.55	.54	.54	.53	.52	.50	.48	.46	.44	.41	.39	.34	.31	.28	.25	.21	.18	.14	.11	.08	.05	.02	.00
	777	775	769	759	746	728	706	675	646	613	577	539	473	429	384	338	291	245	191	147	104	063	025	000
30	.52	.52	.52	.51	.50	.49	.47	.45	.43	.41	.38	.36	.31	.28	.25	.22	.18	.15	.11	.08	.05	.02	.00	.00
	739	737	731	721	707	689	667	636	607	574	538	499	432	388	343	297	251	205	150	106	064	024	000	000
45	.49	.49	.49	.48	.47	.46	.45	.42	.40	.38	.36	.33	.28	.25	.22	.19	.15	.12	.08	.05	.02	.00	.00	.00
	699	697	691	681	667	649	627	596	566	533	497	458	391	347	302	256	209	163	109	065	023	000	000	000
1700	.47	.46	.46	.45	.44	.43	.42	.39	.37	.35	.33	.30	.25	.22	.19	.15	.12	.09	.05	.02	.00	.00	.00	.00
	658	657	650	640	626	608	586	554	524	491	455	415	348	304	259	213	167	121	067	023	000	000	000	000
15	.44	.43	.43	.42	.41	.40	.39	.36	.34	.32	.29	.27	.22	.19	.16	.12	.09	.06	.02	.00	.00	.00	.00	.00
	617	615	609	599	584	566	544	512	482	448	411	372	305	261	215	169	123	077	023	000	000	000	000	000
30	.41	.41	.40	.39	.38	.37	.36	.33	.31	.29	.26	.24	.19	.16	.12	.09	.06	.02	.00	.00	.00	.00	.00	.00
	575	573	567	557	542	523	501	469	438	405	368	328	261	216	171	125	079	033	000	000	000	000	000	000
45	.38	.38	.37	.36	.35	.34	.32	.30	.28	.26	.23	.20	.16	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00
	533	531	524	514	499	480	458	425	394	360	323	284	216	171	126	080	034	000	000	000	000	000	000	000

JAN-APR 60 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	JAN					FEB					DATE					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1800	.35	.35	.34	.33	.32	.31	.29	.27	.25	.23	.20	.17		.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00
	490	488	482	471	456	437	414	381	350	316	279	239		171	126	081	035	000	000	000	000	000	000	000	000
15	.32	.32	.31	.30	.29	.28	.26	.24	.22	.19	.17	.14		.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00
	448	445	439	428	412	393	370	337	306	271	234	194		126	081	036	000	000	000	000	000	000	000	000	000
30	.29	.28	.28	.27	.26	.25	.23	.21	.19	.16	.14	.11		.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	405	403	396	385	369	350	326	293	261	226	189	149		080	036	000	000	000	000	000	000	000	000	000	000
45	.26	.26	.25	.24	.23	.22	.20	.18	.15	.13	.10	.07		.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	363	360	353	342	326	306	282	249	217	182	144	104		035	000	000	000	000	000	000	000	000	000	000	000
1900	.23	.23	.22	.21	.20	.19	.17	.15	.12	.10	.07	.04		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	321	319	311	299	283	263	239	205	173	138	100	059		000	000	000	000	000	000	000	000	000	000	000	000
15	.20	.20	.19	.18	.17	.16	.14	.12	.09	.07	.04	.01		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	280	277	270	258	241	221	196	162	130	094	056	016		000	000	000	000	000	000	000	000	000	000	000	000
30	.17	.17	.16	.15	.14	.13	.11	.09	.06	.04	.01	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	240	237	229	217	200	179	155	120	087	052	013	000		000	000	000	000	000	000	000	000	000	000	000	000
45	.14	.14	.13	.13	.11	.10	.08	.06	.03	.01	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	201	198	190	177	160	139	114	079	046	010	000	000		000	000	000	000	000	000	000	000	000	000	000	000
2000	.12	.11	.11	.10	.09	.07	.05	.03	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	163	160	151	138	121	099	074	038	005	000	000	000		000	000	000	000	000	000	000	000	000	000	000	000
15	.09	.09	.08	.07	.06	.04	.03	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	127	123	114	101	083	061	035	000	000	000	000	000		000	000	000	000	000	000	000	000	000	000	000	000
30	.07	.06	.06	.05	.03	.02	.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	092	088	078	065	046	024	000	000	000	000	000	000		000	000	000	000	000	000	000	000	000	000	000	000
45	.04	.04	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	059	054	044	030	012	000	000	000	000	000	000	000		000	000	000	000	000	000	000	000	000	000	000	000

*** SIGNIFIES COS 2 =1.
ADD 1000 TO VALUES PRECEDED BY *

COS 2
XO (W/M**2.)

SOLAR PARAMETERS

TABLE 8-1

60 S

JAN-APR

MST	DATE												
	JAN			FEB			MAR			APR			
	1	5	10	15	20	25	30	5	10	15	20	25	30
2100	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	027	022	012	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000

JAN-APR 60 S TABLE B-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z =1.
X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																		
	MAY					JUN					JUL					AUG			
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0700	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	022
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	023	063
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	024	062	103
0800	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	.11
	011	000	000	000	000	000	000	000	000	000	000	000	000	000	000	025	062	100	141
15	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.07	.10
	047	018	000	000	000	000	000	000	000	000	000	000	000	000	000	023	062	098	137
30	.06	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.07	.10	.13
	081	051	024	000	000	000	000	000	000	000	000	000	000	000	000	032	063	037	133
45	.08	.06	.04	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.10	.13	.16
	113	083	056	030	008	000	000	000	000	000	000	000	000	000	000	035	030	167	206
0900	.11	.08	.06	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.15	.18	.21
	143	113	085	060	037	018	000	000	000	000	000	000	000	000	000	127	161	198	237
15	.13	.11	.09	.07	.05	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.12	.14	.17	.20
	172	141	113	088	065	045	026	013	004	000	000	000	000	000	000	125	157	191	228
30	.15	.13	.10	.09	.07	.05	.04	.03	.02	.02	.02	.02	.02	.02	.02	.14	.16	.19	.22
	198	167	139	113	090	070	051	038	029	024	022	025	000	000	000	152	181	219	256
45	.17	.14	.12	.10	.09	.07	.06	.05	.04	.04	.04	.04	.04	.04	.04	.16	.18	.21	.24
	222	191	163	137	114	094	074	061	052	047	046	048	000	000	000	177	209	244	281

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS
COS Z
XO (W/M**2.)

MAY-AUG 60 S

MST	MAY					JUN					JUL					AUG								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30						
1000	.18	.16	.14	.12	.10	.09	.07	.06	.06	.05	.05	.05	.06	.07	.08	.09	.11	.13	.15	.17	.20	.23	.26	.29
	244	213	184	158	135	115	095	082	074	069	067	070	077	087	101	119	141	166	200	232	267	304	343	384
	.20	.17	.15	.13	.12	.10	.09	.08	.07	.07	.07	.07	.07	.08	.09	.11	.12	.14	.17	.13	.22	.24	.27	.30
15	264	232	203	177	153	133	114	101	092	087	085	089	096	107	121	139	161	186	221	253	288	325	364	405
30	.21	.19	.16	.14	.13	.11	.10	.09	.08	.08	.08	.08	.03	.09	.11	.12	.14	.15	.18	.20	.23	.26	.29	.32
	280	249	220	193	170	150	130	118	109	104	103	106	113	124	139	157	179	204	239	271	303	343	382	423
	.22	.20	.17	.16	.14	.12	.11	.10	.09	.09	.09	.09	.10	.11	.12	.13	.15	.17	.19	.22	.24	.27	.30	.33
45	295	263	233	207	184	163	144	131	123	118	118	121	128	139	154	172	195	220	255	287	322	359	398	438
1100	.23	.20	.18	.16	.15	.13	.12	.11	.10	.10	.10	.10	.11	.11	.13	.14	.16	.18	.20	.23	.25	.28	.31	.34
	306	274	245	218	195	175	155	143	135	130	130	133	140	152	167	185	208	233	268	300	335	372	411	451
	.23	.21	.19	.17	.15	.14	.12	.11	.11	.11	.11	.11	.11	.12	.13	.15	.16	.18	.21	.23	.26	.29	.31	.34
15	315	283	254	227	203	183	164	152	144	139	139	143	150	162	177	196	218	244	278	311	345	382	421	461
30	.24	.22	.19	.17	.16	.14	.13	.12	.11	.11	.11	.11	.12	.13	.14	.15	.17	.19	.22	.24	.26	.29	.32	.35
	322	289	260	233	210	190	170	158	150	146	146	150	157	169	184	203	226	251	286	313	353	390	428	468
	.24	.22	.20	.18	.16	.15	.13	.12	.12	.11	.11	.12	.12	.13	.14	.16	.17	.19	.22	.24	.27	.30	.32	.35
45	325	293	263	236	213	193	174	162	154	150	150	154	162	174	189	208	231	257	291	324	358	395	433	473
1200	.24	.22	.20	.18	.16	.15	.13	.12	.12	.11	.12	.12	.12	.13	.15	.16	.18	.20	.22	.24	.27	.30	.32	.35
	326	293	264	237	214	194	175	163	155	152	152	156	164	176	192	211	233	259	294	325	360	397	435	474
	.24	.22	.20	.18	.16	.14	.13	.12	.12	.11	.11	.12	.12	.13	.14	.16	.18	.20	.22	.24	.27	.30	.32	.35
15	324	291	262	235	212	192	173	162	154	151	151	155	164	176	191	211	233	259	294	325	360	396	434	473
30	.24	.21	.19	.17	.16	.14	.13	.12	.11	.11	.11	.12	.12	.13	.14	.16	.17	.19	.22	.24	.27	.29	.32	.35
	319	287	257	230	207	188	169	158	150	147	147	152	160	173	188	208	230	256	291	322	356	392	430	469
	.23	.21	.19	.17	.15	.14	.12	.11	.11	.11	.11	.11	.12	.13	.14	.15	.17	.19	.21	.24	.26	.29	.32	.34
45	312	279	249	223	200	181	162	151	144	141	141	146	155	167	183	202	225	251	285	317	350	386	423	462

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MAY-AUG 60 S TABLE B-1 SOLAR PARAMETERS COS Z
X0 (W/M**2.)

MST	DATE																								
	MAY					JUN					JUL					AUG									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1300	.22	.20	.18	.16	.14	.13	.12	.11	.10	.10	.10	.10	.11	.12	.13	.15	.16	.18	.21	.23	.26	.28	.31	.34	
	301	269	239	213	190	171		153	142	135	132	133	138	146	159	175	194	217	242	277	303	342	377	414	452
15	.21	.19	.17	.15	.13	.12	.11	.10	.09	.09	.09	.10	.10	.11	.12	.14	.16	.17	.20	.22	.25	.27	.30	.33	
	288	256	227	200	178	159		141	130	123	120	122	127	135	148	164	183	206	231	266	297	330	365	402	440
30	.20	.18	.16	.14	.12	.11	.10	.09	.08	.08	.08	.09	.09	.10	.11	.13	.15	.16	.19	.21	.24	.26	.29	.32	
	273	241	211	185	163	144		126	116	109	107	108	113	122	135	151	170	193	218	252	283	316	351	387	425
45	.19	.17	.14	.13	.11	.10	.08	.08	.07	.07	.07	.07	.07	.08	.09	.10	.12	.13	.15	.18	.20	.22	.25	.28	.30
	255	223	194	168	145	127		109	099	093	090	092	097	106	119	135	154	177	202	236	267	299	334	370	407
1400	.17	.15	.13	.11	.09	.08	.07	.06	.06	.05	.06	.06	.06	.07	.08	.09	.10	.12	.14	.16	.19	.21	.24	.26	.29
	234	202	173	148	126	107		090	080	074	072	074	079	088	101	117	136	159	184	217	243	280	314	350	386
15	.16	.13	.11	.09	.08	.06	.05	.04	.04	.04	.04	.04	.04	.05	.06	.07	.09	.10	.12	.15	.17	.19	.22	.24	.27
	211	180	151	125	104	085		069	059	053	051	053	058	068	080	097	116	138	163	196	223	258	292	327	364
30	.14	.12	.09	.08	.06	.05	.03	.03	.02	.02	.02	.03	.03	.03	.04	.06	.07	.09	.11	.13	.15	.18	.20	.23	.25
	186	155	126	101	079	061		045	036	030	028	030	036	045	058	074	093	115	140	173	203	234	268	303	338
45	.12	.10	.07	.06	.04	.03	.01	.01	.00	.00	.00	.01	.01	.02	.03	.04	.05	.07	.09	.11	.13	.16	.18	.21	.23
	159	127	099	074	053	035		019	010	005	003	005	011	020	033	049	068	090	115	147	177	208	241	276	311
1500	.10	.07	.05	.03	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03	.05	.07	.09	.11	.14	.16	.18	.21
	129	098	070	046	025	007		000	000	000	000	000	000	000	006	022	041	063	088	120	143	180	213	246	281
15	.07	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.04	.07	.09	.11	.14	.16	.19
	098	067	039	015	000	000		000	000	000	000	000	000	000	000	000	013	034	058	090	119	150	182	215	250
30	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.04	.07	.09	.11	.14	.16
	065	034	007	000	000	000		000	000	000	000	000	000	000	000	000	000	003	027	059	087	118	149	182	216
45	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.05	.09	.11	.14
	030	000	000	000	000	000		000	000	000	000	000	000	000	000	000	000	000	000	026	054	084	115	148	181

MAY-AUG 60 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000

MAY-AUG 60 S TABLE 8-1 SOLAR PARAMETERS COS 2 X0 (W/M**2.) *** SIGNIFIES COS 2 =1. ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0800	.14	.18	.21	.24	.27	.31	.34	.37	.40	.43	.45	.47	.50	.52	.54	.55	.56	.57	.58	.59	.59	.58	.57	.57	
	192	236	282	327	373	418	463	506	548	587	625	659	697	726	743	770	787	801	810	813	814	817	812	803	
	.17	.20	.24	.27	.30	.32	.36	.40	.42	.45	.48	.50	.53	.56	.58	.60	.61	.62	.60	.60	.60	.60	.60	.59	
	229	273	319	364	410	455	500	543	584	624	661	695	733	760	785	805	823	836	846	852	851	853	848	839	
30	.20	.23	.26	.29	.33	.36	.39	.42	.45	.48	.50	.53	.55	.57	.58	.60	.61	.62	.62	.63	.63	.62	.62	.62	
	265	309	354	400	445	490	534	577	619	658	695	729	766	794	818	839	856	870	880	885	888	887	882	874	
	.22	.25	.29	.32	.35	.38	.41	.44	.47	.50	.52	.55	.57	.59	.61	.62	.63	.64	.65	.65	.65	.65	.65	.64	
	298	343	388	433	479	523	568	610	651	691	727	761	798	826	850	871	888	902	911	913	920	920	915	907	
0900	.25	.28	.31	.34	.37	.41	.44	.47	.50	.52	.55	.57	.59	.61	.63	.64	.65	.66	.67	.67	.67	.67	.67	.66	
	330	374	419	465	510	555	599	641	682	721	757	791	828	856	880	901	918	931	942	943	951	950	946	939	
	.27	.30	.33	.36	.40	.43	.46	.49	.52	.54	.57	.59	.61	.63	.65	.66	.67	.68	.69	.69	.69	.69	.69	.68	
	360	404	449	494	539	584	627	670	710	749	785	819	856	883	907	928	945	959	969	975	979	979	975	968	
30	.29	.32	.35	.38	.42	.45	.48	.51	.53	.56	.59	.61	.63	.65	.67	.68	.69	.70	.71	.71	.71	.71	.71	.70	
	387	431	476	521	566	610	654	696	736	775	811	845	881	909	933	954	971	985	995	002	000	006	002	995	
	.31	.34	.37	.40	.43	.46	.49	.52	.55	.58	.60	.62	.65	.67	.69	.70	.71	.72	.72	.73	.73	.73	.73	.72	
	413	457	501	546	591	635	678	720	760	799	834	868	905	932	956	977	994	008	019	025	030	030	027	021	
1000	.32	.36	.39	.42	.45	.48	.51	.54	.57	.59	.62	.64	.66	.68	.70	.71	.72	.73	.74	.74	.74	.74	.74	.74	
	436	479	524	568	613	657	700	741	781	819	855	889	925	952	976	997	015	029	040	047	051	052	049	043	
	.34	.37	.40	.43	.46	.49	.52	.55	.58	.61	.63	.65	.68	.69	.71	.72	.74	.74	.75	.75	.76	.76	.76	.75	
	455	500	544	588	632	676	719	760	800	838	873	907	943	970	994	015	033	047	059	065	071	072	069	064	
30	.35	.38	.41	.45	.48	.51	.54	.56	.59	.62	.64	.66	.68	.71	.72	.73	.75	.76	.76	.77	.77	.77	.77	.76	
	474	517	561	605	649	693	735	776	816	853	889	922	958	985	010	031	049	063	075	083	087	089	087	082	
	.36	.39	.43	.46	.49	.52	.55	.57	.60	.63	.65	.67	.70	.71	.73	.74	.76	.76	.77	.78	.78	.78	.78	.78	
	489	532	576	620	663	706	748	789	829	866	901	935	971	998	022	043	062	077	088	097	101	103	102	097	

TABLE 9-1 SOLAR PARAMETERS COS Z
 ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1100	.37	.40	.43	.46	.50	.53	.55	.58	.61	.63	.66	.68	.70	.72	.74	.75	.76	.77	.78	.73	.79	.79	.79	.79	.78
	502	544	588	631	675	717	759	800	839	876	911	944	931	908	882	854	826	798	770	743	715	687	659	631	
15	.38	.41	.44	.47	.50	.53	.56	.59	.61	.64	.66	.68	.71	.73	.74	.76	.77	.78	.79	.74	.80	.80	.79	.79	.79
	511	554	597	640	683	726	767	807	846	883	918	951	987	1015	1039	1061	1083	1105	1127	1150	1172	1194	1216	1238	
30	.38	.41	.45	.48	.51	.53	.56	.59	.62	.64	.67	.69	.71	.73	.75	.76	.77	.78	.79	.74	.80	.80	.80	.80	.80
	518	560	603	646	689	731	772	812	851	888	923	955	992	1019	1044	1065	1084	1100	1112	1122	1128	1131	1131	1128	
45	.39	.42	.45	.48	.51	.54	.56	.59	.62	.64	.67	.69	.71	.73	.75	.76	.77	.78	.79	.74	.80	.80	.80	.80	.80
	522	564	607	649	691	733	774	814	852	889	924	957	993	1020	1045	1067	1086	1102	1115	1125	1131	1135	1135	1132	
1200	.39	.42	.45	.48	.51	.54	.56	.59	.62	.64	.67	.69	.71	.73	.75	.76	.77	.78	.79	.74	.80	.80	.80	.80	.80
	523	565	607	649	691	733	773	813	851	887	922	955	991	1019	1044	1066	1085	1101	1115	1125	1132	1136	1137	1134	
15	.39	.42	.45	.48	.51	.53	.56	.59	.61	.64	.66	.68	.71	.73	.74	.76	.77	.78	.79	.74	.80	.80	.80	.80	.80
	522	563	605	646	688	729	769	809	847	883	919	950	987	1014	1039	1062	1081	1098	1112	1122	1130	1134	1135	1133	
30	.38	.41	.44	.47	.50	.53	.56	.58	.61	.63	.66	.68	.70	.72	.74	.75	.76	.78	.79	.74	.80	.80	.80	.80	.80
	517	558	599	641	682	723	763	802	839	876	910	943	979	1007	1032	1055	1075	1092	1106	1117	1123	1129	1131	1129	
45	.38	.41	.44	.47	.49	.52	.55	.58	.60	.63	.65	.67	.70	.71	.73	.75	.76	.77	.78	.74	.79	.79	.79	.79	.79
	510	550	591	632	673	713	753	792	829	865	900	932	969	1007	1022	1045	1065	1083	1097	1109	1117	1122	1124	1123	
1300	.37	.40	.43	.46	.49	.51	.54	.57	.59	.62	.64	.66	.68	.70	.72	.74	.75	.76	.77	.73	.79	.79	.79	.79	.79
	500	540	580	621	661	701	741	779	816	852	887	919	951	984	1010	1033	1053	1071	1086	1098	1101	1112	1114	1114	
15	.36	.39	.42	.45	.47	.50	.52	.56	.58	.61	.63	.65	.67	.69	.71	.73	.74	.75	.76	.71	.77	.78	.78	.78	.78
	487	526	566	607	647	686	725	764	801	837	871	904	940	969	994	1018	1039	1057	1072	1081	1093	1099	1102	1102	
30	.35	.38	.41	.43	.46	.49	.52	.54	.57	.59	.62	.64	.66	.69	.70	.71	.73	.74	.75	.70	.76	.77	.77	.77	.77
	471	510	550	590	629	669	707	745	782	818	852	885	922	950	976	1000	1021	1040	1055	1063	1073	1084	1087	1087	
45	.34	.36	.39	.42	.45	.47	.50	.53	.55	.58	.60	.62	.65	.67	.69	.70	.71	.72	.74	.74	.75	.75	.76	.76	.76
	453	491	531	570	609	648	687	725	761	797	831	864	901	929	956	980	1001	1020	1036	1041	1053	1066	1070	1070	

SEP-DEC 60 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 XC (W/M**2.) ADD 1000 TO VALUES PRECEDED BY .

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1400	.32	.35	.38	.40	.43	.46	.48	.51	.54	.56	.58	.60	.63	.65	.67	.68	.70	.71	.72	.73	.74	.74	.74	.74	
	432	470	509	548	587	626	664	701	738	773	808	840	877	906	933	957	979	998	.015	.023	.039	.046	.050	.050	
15	.30	.33	.36	.39	.41	.44	.47	.49	.52	.54	.56	.59	.61	.63	.65	.66	.68	.69	.70	.71	.72	.72	.73	.73	
	408	446	485	523	562	600	638	675	712	747	782	814	852	881	909	932	954	974	.991	.005	.015	.023	.027	.028	
30	.28	.31	.34	.37	.39	.42	.45	.47	.50	.52	.54	.57	.59	.61	.63	.65	.66	.67	.68	.69	.70	.71	.71	.71	
	383	420	458	496	535	573	610	647	684	719	753	786	824	853	880	905	927	947	.965	.974	.980	.998	.002	.004	
45	.26	.29	.32	.34	.37	.40	.42	.45	.47	.50	.52	.54	.57	.59	.61	.62	.64	.65	.66	.67	.68	.69	.69	.69	
	355	392	429	467	505	543	580	617	653	689	723	756	793	823	850	875	898	919	.936	.951	.962	.971	.976	.977	
1500	.24	.27	.29	.32	.35	.37	.40	.43	.45	.47	.50	.52	.55	.57	.58	.60	.62	.63	.64	.65	.65	.67	.67	.67	
	325	361	398	436	473	511	548	585	621	656	690	723	761	791	818	844	867	888	.906	.921	.933	.941	.947	.948	
15	.22	.24	.27	.30	.32	.35	.38	.40	.43	.45	.47	.50	.52	.54	.56	.58	.59	.61	.62	.63	.64	.64	.65	.65	
	293	329	365	403	440	477	514	550	586	621	656	689	727	757	785	811	834	855	.874	.883	.901	.910	.916	.917	
30	.19	.22	.24	.27	.30	.32	.35	.37	.40	.42	.45	.47	.50	.52	.54	.55	.57	.58	.60	.61	.61	.62	.62	.63	
	259	294	331	367	404	441	478	514	550	585	620	653	691	721	749	776	800	821	.840	.855	.868	.877	.883	.885	
45	.17	.19	.22	.24	.27	.30	.32	.35	.37	.40	.42	.44	.47	.49	.51	.53	.54	.56	.57	.53	.59	.60	.60	.60	
	223	258	294	330	367	403	440	476	512	547	582	615	654	684	712	739	763	785	.804	.820	.833	.842	.848	.851	
600	.14	.16	.19	.22	.24	.27	.29	.32	.34	.37	.39	.41	.44	.46	.48	.50	.52	.53	.54	.55	.55	.57	.57	.58	
	185	220	256	292	328	365	401	437	473	508	542	576	615	645	674	701	725	747	.767	.783	.794	.806	.812	.815	
15	.11	.13	.16	.19	.21	.24	.26	.29	.31	.34	.36	.39	.41	.43	.45	.47	.49	.50	.52	.53	.54	.54	.55	.55	
	147	181	217	252	288	324	360	396	432	467	502	536	574	605	634	662	686	709	.728	.745	.758	.768	.775	.777	
30	.08	.10	.13	.16	.18	.21	.23	.26	.28	.31	.33	.36	.38	.40	.42	.44	.46	.48	.49	.50	.51	.52	.52	.52	
	107	141	176	211	247	283	319	355	390	426	460	494	532	564	594	621	646	669	.689	.705	.719	.729	.736	.739	
45	.05	.07	.10	.12	.15	.18	.20	.23	.25	.28	.30	.33	.35	.37	.39	.41	.43	.45	.46	.47	.48	.49	.49	.49	
	066	100	134	169	204	240	276	312	348	383	413	452	491	522	552	580	605	628	.648	.665	.679	.689	.696	.699	

SEP-DEC 60 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
 XO (W/M*2.) ADD 1000 TO VALUES PRECEDED BY *

MST

DATE

	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1700	.02	.04	.07	.09	.12	.14	.17	.20	.22	.25	.27	.29	.32	.34	.36	.38	.40	.42	.43	.41	.45	.46	.46	.47
	024	057	091	126	161	197	233	268	304	339	374	409	443	480	510	538	563	587	607	621	638	649	655	658
15	.00	.01	.04	.06	.09	.11	.14	.16	.19	.21	.24	.26	.29	.31	.33	.35	.37	.39	.40	.41	.42	.43	.43	.44
	000	014	048	083	118	153	189	224	260	295	331	355	405	437	467	495	521	544	565	583	597	607	614	617
50	.00	.00	.00	.03	.05	.08	.11	.13	.16	.18	.21	.23	.25	.28	.30	.32	.34	.36	.37	.38	.39	.40	.40	.41
	000	000	004	038	073	109	144	180	216	251	286	321	361	393	423	452	478	502	523	540	555	565	572	575
45	.00	.00	.00	.00	.02	.05	.07	.10	.12	.15	.17	.20	.23	.25	.27	.29	.31	.33	.34	.35	.35	.37	.37	.38
	000	000	000	000	029	064	099	135	171	207	242	277	317	349	360	409	435	459	480	493	512	523	530	533
1800	.00	.00	.00	.00	.00	.01	.04	.07	.09	.12	.14	.17	.20	.22	.24	.26	.28	.30	.31	.32	.33	.34	.34	.35
	000	000	000	000	000	019	055	090	126	162	198	232	273	305	336	365	392	416	437	453	470	481	487	490
15	.00	.00	.00	.00	.00	.00	.01	.03	.06	.09	.11	.14	.16	.19	.21	.23	.25	.27	.28	.29	.30	.31	.31	.32
	000	000	000	000	000	000	010	046	082	118	153	188	229	262	293	322	349	373	395	413	427	438	445	448
30	.00	.00	.00	.00	.00	.00	.00	.00	.03	.05	.08	.10	.13	.16	.18	.20	.22	.24	.25	.25	.27	.28	.29	.29
	000	000	000	000	000	000	000	002	038	074	110	145	186	219	250	279	307	331	352	371	385	396	403	405
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.07	.10	.13	.15	.17	.19	.21	.22	.23	.24	.25	.26	.26
	000	000	000	000	000	000	000	000	000	030	066	102	143	176	208	237	264	289	311	329	343	354	361	363
1900	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.07	.10	.12	.14	.16	.18	.19	.20	.21	.22	.23	.23
	000	000	000	000	000	000	000	000	000	000	021	059	101	134	166	196	223	248	269	283	302	313	319	322
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.09	.11	.13	.15	.16	.15	.19	.19	.20	.20
	000	000	000	000	000	000	000	000	000	000	000	018	060	093	125	155	183	207	229	247	262	272	279	281
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.06	.08	.10	.12	.13	.15	.16	.16	.17	.17
	000	000	000	000	000	000	000	000	000	000	000	030	020	054	086	116	143	168	190	203	222	233	239	241
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.06	.08	.09	.11	.12	.13	.14	.14	.14
	000	000	000	000	000	000	000	000	000	000	000	000	000	015	047	077	105	130	151	170	184	194	200	202

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

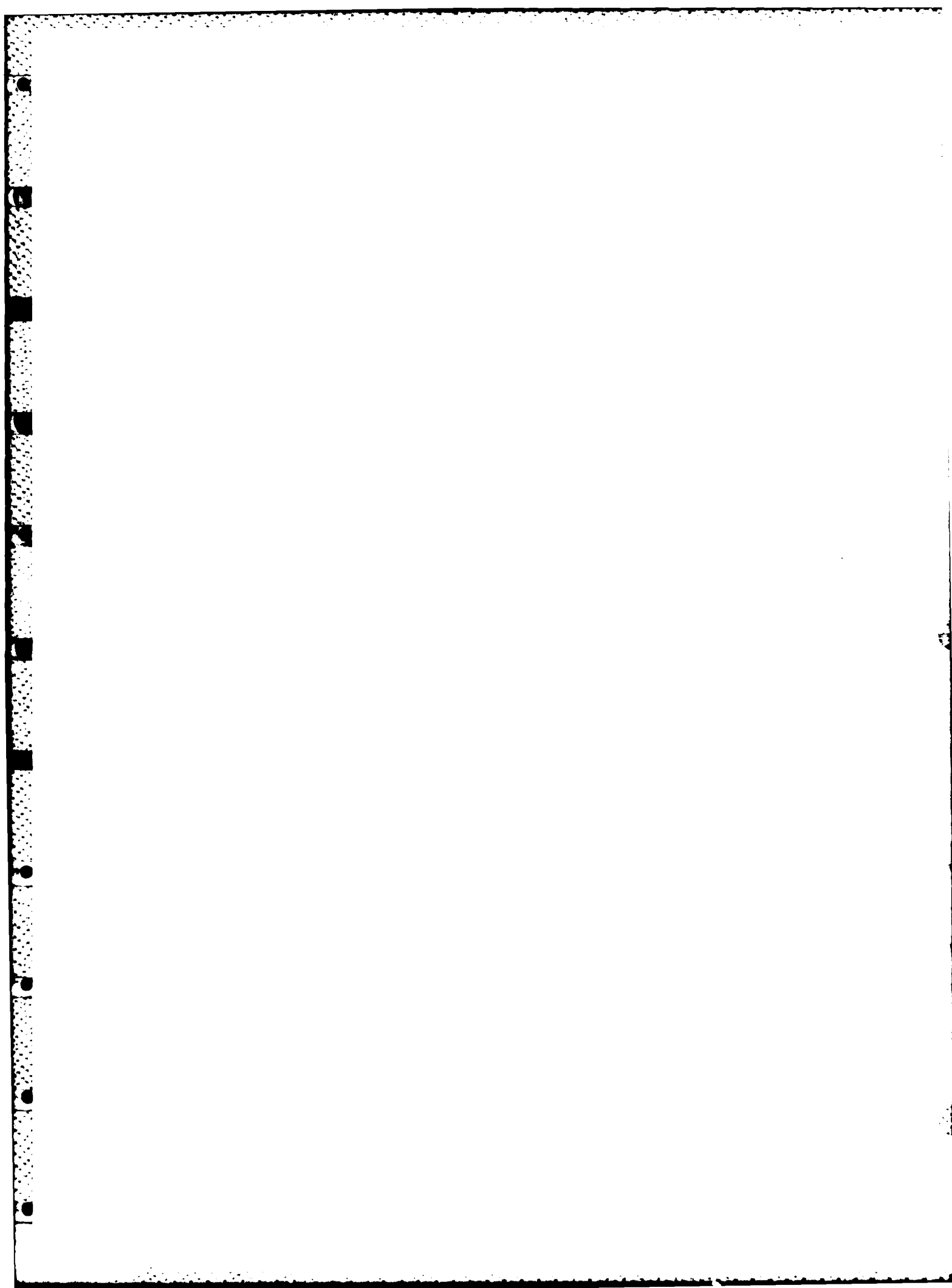
TABLE B-1

60 S

SEP-DEC

MST	DATE																	
	SEP					OCT					NOV					DEC		
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
2000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
2100	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

SEP-DEC 60 S TABLE B-1: SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z = 1.
X0 (W/M=2.) ADD 1000 TO VALUES PRECEDED BY .



MST	DATE																			
	JAN					FEB					MAR					APR				
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
0000	.23	.22	.21	.20	.18	.16	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	320	312	297	277	253	226	194	153	114	074	031	000	000	000	000	000	000	000	000	000
15	.23	.22	.21	.20	.18	.16	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	321	312	297	277	253	226	194	152	114	073	031	000	000	000	000	000	000	000	000	000
30	.23	.22	.21	.20	.18	.16	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	322	313	298	278	254	226	195	153	114	074	031	000	000	000	000	000	000	000	000	000
45	.23	.22	.21	.20	.18	.16	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
	324	315	300	280	256	228	196	154	116	075	033	000	000	000	000	000	000	000	000	000
0100	.23	.23	.21	.20	.18	.16	.14	.11	.08	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00
	327	318	303	283	259	231	199	157	119	078	035	000	000	000	000	000	000	000	000	000
15	.23	.23	.22	.20	.19	.17	.14	.11	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00
	331	322	306	286	262	234	203	160	122	082	039	000	000	000	000	000	000	000	000	000
30	.24	.23	.22	.21	.19	.17	.15	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00
	336	327	311	291	267	239	207	165	127	086	044	000	000	000	000	000	000	000	000	000
45	.24	.24	.22	.21	.19	.17	.15	.12	.09	.07	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00
	342	333	317	297	272	244	213	170	132	092	049	005	000	000	000	000	000	000	000	000
0200	.25	.24	.23	.21	.20	.18	.16	.13	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00
	349	339	324	303	279	251	219	177	139	098	056	012	000	000	000	000	000	000	000	000
15	.25	.25	.23	.22	.20	.18	.16	.13	.10	.08	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00
	357	347	331	311	286	258	226	184	146	105	063	019	000	000	000	000	000	000	000	000
30	.26	.25	.24	.23	.21	.19	.17	.14	.11	.08	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00
	365	355	339	319	294	266	234	192	154	114	071	027	000	000	000	000	000	000	000	000
45	.26	.26	.25	.23	.22	.20	.17	.14	.12	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00
	374	365	348	328	303	275	243	201	163	123	080	037	000	000	000	000	000	000	000	000

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS COS Z
X0 (W/M**2.)

TABLE B-1

JAN-APR 80 S

MST	DATE												DATE												DATE																							
	JAN				FEB				MAR				APR				MAY				JUN				JUL				AUG				SEP				OCT				NOV				DEC			
	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25	30	1	5	10	15	20	25
0300	.27	.27	.25	.24	.22	.20	.18		.15	.12	.10	.07	.03		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	384	374	358	338	313	285	253		211	173	133	090	0-7		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.15	.12	.10	.07	.03				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
15	.28	.27	.26	.25	.23	.21	.19		.16	.13	.10	.07	.04		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	395	385	369	348	324	295	264		222	184	143	101	057		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.16	.13	.10	.07	.04				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
30	.29	.28	.27	.25	.24	.22	.20		.17	.14	.11	.08	.05		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	406	396	380	359	335	307	275		233	195	155	113	069		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.17	.14	.11	.08	.05				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
45	.30	.29	.28	.26	.25	.23	.20		.17	.15	.12	.09	.06		.01	.00	.00	.00	.00	.00		.01	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	418	408	392	371	347	319	287		245	207	167	125	081		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.20	.17	.14	.11	.08	.05			.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
0400	.30	.30	.29	.27	.25	.23	.21		.18	.16	.13	.10	.07		.02	.00	.00	.00	.00	.00		.02	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	431	421	404	384	359	331	299		257	219	179	137	094		022	000	000	000	000	000		022	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.19	.17	.14	.11	.08				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
15	.31	.31	.30	.28	.26	.24	.22		.19	.17	.14	.11	.08		.03	.00	.00	.00	.00	.00		.03	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	444	434	417	397	372	344	312		270	233	193	151	107		030	000	000	000	000	000		030	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.20	.18	.15	.12	.09				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
30	.32	.32	.30	.29	.27	.25	.23		.20	.18	.15	.12	.09		.04	.00	.00	.00	.00	.00		.04	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	457	447	431	410	386	357	326		264	246	206	164	121		050	000	000	000	000	000		050	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.21	.19	.16	.13	.10				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
45	.33	.33	.31	.30	.28	.26	.24		.21	.19	.16	.13	.10		.05	.01	.00	.00	.00	.00		.05	.01	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	471	461	444	424	399	371	340		298	260	220	179	135		064	019	000	000	000	000		064	019	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.22	.20	.17	.14	.11				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
0500	.34	.34	.32	.31	.29	.27	.25		.22	.20	.17	.14	.11		.06	.02	.00	.00	.00	.00		.06	.02	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	485	475	458	438	414	386	354		312	275	235	193	150		079	033	000	000	000	000		079	033	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.23	.21	.18	.15	.12				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
15	.35	.35	.33	.32	.30	.28	.26		.23	.21	.18	.15	.12		.07	.04	.00	.00	.00	.00		.07	.04	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	499	489	473	452	428	400	369		327	290	250	208	165		094	049	000	000	000	000		094	049	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.24	.22	.19	.16	.13				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
30	.36	.36	.34	.33	.31	.29	.27		.24	.22	.19	.16	.13		.08	.05	.01	.00	.00	.00		.08	.05	.01	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	514	504	487	467	443	415	384		342	305	265	223	180		109	064	018	000	000	000		109	064	018	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000
	.25	.23	.20	.17	.14				.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00
45	.37	.37	.36	.34	.32	.30	.28		.25	.23	.20	.17	.14		.09	.06	.03	.00	.00	.00		.09	.06	.03	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00		.00	.00	.00	.00	.00	.00
	528	518	502	482	458	430	399		357	320	280	239	196		125	080	034	000	000	000		125	080	034	000	000	000		000	000	000	000	000	000		000	000	000	000	000	000		000	000	00			

JAN-APR 80 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
X0 (W/M+2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																		
	JAN					FEB					MAR					APR			
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0600	.38	.38	.37	.35	.33	.32	.29	.27	.24	.21	.18	.15	.10	.07	.04	.00	.00	.00	.00
	543	533	517	497	473	445	414	373	335	296	254	211	140	095	050	004	000	000	000
15	.39	.39	.38	.36	.35	.33	.30	.28	.25	.22	.19	.16	.11	.08	.05	.01	.00	.00	.00
	558	548	532	512	488	460	429	388	351	311	270	227	156	111	065	020	000	000	000
30	.41	.40	.39	.37	.36	.34	.32	.29	.26	.23	.20	.17	.12	.09	.06	.03	.00	.00	.00
	573	563	547	527	503	475	444	403	366	327	286	243	172	127	081	036	000	000	000
45	.42	.41	.40	.38	.37	.35	.33	.30	.27	.24	.22	.19	.14	.10	.07	.04	.00	.00	.00
	587	578	562	542	518	490	460	419	382	342	301	258	187	142	097	051	006	000	000
0700	.43	.42	.41	.39	.38	.36	.34	.31	.28	.26	.23	.20	.15	.11	.08	.05	.02	.00	.00
	602	592	576	556	533	505	475	434	397	358	317	274	203	158	112	066	021	000	000
15	.44	.43	.42	.40	.39	.37	.35	.32	.29	.27	.24	.21	.16	.13	.09	.06	.03	.00	.00
	616	606	591	571	547	520	489	449	412	373	332	289	218	173	127	082	036	000	000
30	.45	.44	.43	.41	.40	.38	.36	.33	.30	.28	.25	.22	.17	.14	.10	.07	.04	.00	.00
	630	620	605	585	562	534	504	463	427	388	347	304	233	188	142	097	051	006	000
45	.46	.45	.44	.42	.41	.39	.37	.34	.31	.29	.26	.23	.18	.15	.11	.08	.05	.02	.00
	644	634	619	599	576	549	518	478	441	402	361	319	248	203	157	111	065	020	000
0800	.46	.46	.45	.43	.42	.40	.38	.35	.32	.30	.27	.24	.19	.16	.12	.09	.06	.03	.00
	657	647	632	612	589	562	532	492	455	416	375	333	262	217	171	125	079	034	000
15	.47	.47	.46	.44	.43	.41	.39	.36	.33	.31	.28	.25	.20	.17	.13	.10	.07	.04	.00
	669	660	645	625	602	576	545	505	469	430	389	347	276	230	185	139	093	048	000
30	.48	.48	.46	.45	.44	.42	.40	.37	.34	.32	.29	.26	.21	.18	.14	.11	.08	.04	.00
	682	672	657	638	615	588	558	518	482	443	402	360	289	244	198	152	106	061	000
45	.49	.48	.47	.46	.44	.43	.41	.38	.35	.33	.30	.27	.22	.19	.15	.12	.09	.05	.00
	693	684	669	650	627	600	571	531	494	456	415	372	302	256	210	164	118	073	000

JAN-APR 80 S TABLE 8-1 SOLAR PARAMETERS COS Z *** SIGNIFIES' COS Z = 1.
XO (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

MST	JAN							FEB							DATE							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30				
0900	.50	.49	.48	.47	.45	.43	.41	.39	.36	.33	.31	.28	.23	.19	.16	.13	.09	.06	.02	.03	.00	.00	.00	.00	.00	.02	.03	.00	.00	.00	.00	.00			
	704	695	680	661	638	612	582	543	506	468	427	385	314	268	222	176	130	84	031	003	000	000	000	000	000	031	003	000	000	000	000				
15	.51	.50	.49	.48	.46	.44	.42	.39	.37	.34	.31	.28	.23	.20	.17	.14	.10	.07	.03	.03	.00	.00	.00	.00	.00	.03	.03	.00	.00	.00	.00	.00			
	714	705	691	672	649	623	593	554	518	479	438	396	325	280	233	187	141	95	041	000	000	000	000	000	000	041	000	000	000	000	000				
30	.51	.51	.50	.48	.47	.45	.43	.40	.38	.35	.32	.29	.24	.21	.18	.14	.11	.08	.04	.01	.00	.00	.00	.00	.00	.04	.01	.00	.00	.00	.00	.00			
	724	715	700	682	659	633	604	564	528	490	449	407	335	290	244	198	151	105	051	003	000	000	000	000	000	051	003	000	000	000	000	000			
45	.52	.51	.50	.49	.47	.46	.44	.41	.38	.36	.33	.30	.25	.22	.18	.15	.12	.08	.04	.01	.00	.00	.00	.00	.00	.04	.01	.00	.00	.00	.00	.00			
	733	724	710	691	669	643	613	574	538	499	459	416	345	300	254	207	161	115	061	017	000	000	000	000	000	061	017	000	000	000	000	000			
1000	.52	.52	.51	.49	.48	.46	.44	.41	.39	.36	.33	.30	.26	.22	.19	.16	.12	.09	.05	.02	.00	.00	.00	.00	.00	.05	.02	.00	.00	.00	.00	.00			
	741	732	718	699	677	651	622	583	547	508	462	425	354	309	262	216	169	123	069	025	000	000	000	000	000	069	025	000	000	000	000	000			
15	.53	.52	.51	.50	.49	.47	.45	.42	.40	.37	.34	.31	.26	.23	.20	.16	.13	.10	.06	.02	.00	.00	.00	.00	.00	.06	.02	.00	.00	.00	.00	.00			
	748	739	725	707	685	659	630	591	555	517	476	434	363	317	270	224	177	131	076	032	000	000	000	000	000	076	032	000	000	000	000	000			
30	.53	.53	.52	.51	.49	.47	.45	.43	.40	.37	.35	.32	.27	.23	.20	.17	.13	.10	.06	.03	.00	.00	.00	.00	.00	.06	.03	.00	.00	.00	.00	.00			
	754	746	732	714	692	666	637	598	562	524	483	441	370	324	277	231	184	138	083	033	000	000	000	000	000	083	033	000	000	000	000	000			
45	.54	.53	.52	.51	.49	.48	.46	.43	.40	.38	.35	.32	.27	.24	.21	.17	.14	.10	.07	.03	.00	.00	.00	.00	.00	.07	.03	.00	.00	.00	.00	.00			
	760	751	737	720	698	672	643	604	569	530	490	447	376	330	284	237	190	143	089	044	001	000	000	000	000	089	044	001	000	000	000	000			
1100	.54	.53	.52	.51	.50	.48	.46	.43	.41	.38	.35	.32	.27	.24	.21	.18	.14	.11	.07	.04	.00	.00	.00	.00	.00	.07	.04	.00	.00	.00	.00	.00			
	764	756	742	724	703	677	648	610	574	536	495	453	381	335	289	242	195	148	093	043	006	000	000	000	000	093	043	006	000	000	000	000			
15	.54	.54	.53	.52	.50	.48	.46	.44	.41	.39	.36	.33	.28	.25	.21	.18	.14	.11	.07	.01	.01	.00	.00	.00	.00	.07	.01	.01	.00	.00	.00	.00			
	768	760	746	728	707	682	653	614	578	540	500	457	386	340	293	246	199	152	097	052	009	000	000	000	000	097	052	009	000	000	000	000			
30	.54	.54	.53	.52	.50	.49	.47	.44	.41	.39	.36	.33	.28	.25	.21	.18	.15	.11	.07	.01	.01	.00	.00	.00	.00	.07	.01	.01	.00	.00	.00	.00			
	770	762	749	731	710	685	656	617	582	544	503	461	389	343	296	249	202	155	100	055	012	000	000	000	000	100	055	012	000	000	000	000			
45	.55	.54	.53	.52	.50	.49	.47	.44	.42	.39	.36	.33	.28	.25	.22	.18	.15	.11	.07	.01	.01	.00	.00	.00	.00	.07	.01	.01	.00	.00	.00	.00			
	772	764	751	733	712	687	658	620	584	546	506	463	392	345	298	251	204	157	101	057	013	000	000	000	000	101	057	013	000	000	000	000			

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

... SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

SOLAR PARAMETERS
X0 (W/M**2.)

TABLE B-1

JAN-APR 80 S

MST

	JAN							FEB							MAR							APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30			
1200	.55	.54	.53	.52	.51	.49	.47	.44	.42	.39	.36	.33		.28	.25	.22	.18	.15	.12	.08	.04	.01	.00	.00	.00			
	773	765	752	735	713	688	660	621	586	548	507	464		393	347	300	252	205	158	102	057	014	000	000	000			
15	.55	.54	.53	.52	.51	.49	.47	.44	.42	.39	.36	.33		.28	.25	.22	.18	.15	.12	.07	.04	.01	.00	.00	.00			
	772	765	752	735	714	689	660	622	586	548	507	465		393	347	300	252	205	157	102	057	013	000	000	000			
30	.55	.54	.53	.52	.50	.49	.47	.44	.42	.39	.36	.33		.28	.25	.22	.18	.15	.11	.07	.04	.01	.00	.00	.00			
	771	764	751	734	713	688	660	621	586	548	507	464		392	346	299	251	204	156	101	055	012	000	000	000			
45	.54	.54	.53	.52	.50	.49	.47	.44	.42	.39	.36	.33		.28	.25	.21	.18	.15	.11	.07	.04	.01	.00	.00	.00			
	769	762	749	732	711	686	658	620	584	546	505	463		391	344	297	249	201	154	098	053	009	000	000	000			
1300	.54	.54	.53	.52	.50	.48	.47	.44	.41	.39	.36	.33		.26	.25	.21	.18	.14	.11	.07	.04	.00	.00	.00	.00			
	766	759	746	729	708	684	655	617	582	543	503	460		388	341	294	246	198	151	095	043	006	000	000	000			
15	.54	.53	.52	.51	.50	.48	.46	.44	.41	.39	.36	.33		.28	.24	.21	.18	.14	.11	.07	.03	.00	.00	.00	.00			
	762	755	742	725	705	680	652	613	578	540	499	456		384	337	290	242	194	147	091	045	001	000	000	000			
30	.54	.53	.52	.51	.50	.48	.46	.43	.41	.38	.35	.32		.27	.24	.21	.17	.14	.10	.06	.03	.00	.00	.00	.00			
	757	750	737	721	700	675	647	609	573	535	495	452		379	333	285	237	189	141	085	040	000	000	000	000			
45	.53	.53	.52	.51	.49	.47	.46	.43	.40	.38	.35	.32		.27	.24	.20	.17	.13	.10	.06	.03	.00	.00	.00	.00			
	751	744	732	715	694	670	642	603	568	530	489	446		374	327	279	231	183	135	079	031	000	000	000	000			
1400	.53	.52	.51	.50	.49	.47	.45	.42	.40	.37	.35	.32		.26	.23	.20	.16	.13	.09	.05	.02	.00	.00	.00	.00			
	744	737	725	708	688	663	635	597	562	523	482	439		367	320	272	224	176	128	072	025	000	000	000	000			
15	.52	.52	.51	.50	.48	.47	.45	.42	.39	.37	.34	.31		.25	.23	.19	.16	.12	.09	.05	.01	.00	.00	.00	.00			
	736	730	717	701	681	656	628	590	554	516	475	432		359	312	265	216	168	120	064	013	000	000	000	000			
30	.51	.51	.50	.49	.48	.46	.44	.41	.39	.36	.33	.30		.25	.22	.19	.15	.12	.08	.04	.01	.00	.00	.00	.00			
	728	721	709	693	672	648	620	581	546	508	467	424		351	304	256	208	159	112	055	003	000	000	000	000			
45	.51	.50	.50	.48	.47	.45	.43	.41	.38	.36	.33	.30		.25	.21	.18	.14	.11	.07	.03	.00	.00	.00	.00	.00			
	719	712	700	684	663	639	611	572	537	499	458	414		342	294	247	198	150	102	045	000	000	000	000	000			

JAN-APR

80 S

TABLE 8-1

SOLAR PARAMETERS

COS Z
X0 (W//H**2.)*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST

DATE

JAN

FEB

MAR

APR

	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1500	.50	.50	.49	.48	.46	.45	.43	.40	.38	.35	.32	.29	.24	.21	.17	.14	.10	.07	.03
	709	702	690	674	654	629	601	563	527	489	448	404	332	284	236	188	139	92	035
15	.49	.49	.48	.47	.46	.44	.42	.39	.37	.34	.31	.28	.23	.20	.16	.13	.09	.06	.02
	698	692	680	663	643	619	591	552	517	478	437	394	321	273	225	177	128	80	024
30	.49	.48	.47	.46	.45	.43	.41	.38	.36	.33	.30	.27	.22	.19	.15	.12	.09	.05	.01
	687	680	668	652	632	607	579	541	505	467	425	382	303	262	214	165	117	69	012
45	.48	.47	.46	.45	.44	.42	.40	.38	.35	.32	.30	.27	.21	.18	.15	.11	.08	.04	.00
	675	669	657	640	620	596	567	529	493	455	413	370	297	249	201	153	104	56	000
1600	.47	.46	.46	.44	.43	.41	.39	.37	.34	.32	.29	.26	.20	.17	.14	.10	.07	.03	.00
	662	656	644	628	608	583	555	516	481	442	401	357	284	236	188	140	91	43	000
15	.46	.45	.45	.44	.42	.40	.38	.36	.33	.31	.28	.25	.19	.16	.13	.09	.06	.02	.00
	650	643	631	615	595	570	542	503	467	429	387	344	270	223	175	126	77	29	000
30	.45	.45	.44	.43	.41	.39	.38	.35	.32	.30	.27	.24	.18	.15	.12	.08	.05	.01	.00
	636	630	618	602	581	557	528	490	454	415	374	330	256	209	161	112	63	15	000
45	.44	.44	.43	.42	.40	.38	.37	.34	.31	.29	.26	.23	.17	.14	.11	.07	.04	.00	.00
	622	616	604	588	567	543	515	476	440	401	359	316	242	194	146	97	49	001	000
1700	.43	.43	.42	.41	.39	.37	.36	.33	.30	.28	.25	.22	.16	.13	.10	.06	.03	.00	.00
	608	602	590	574	553	529	500	461	425	386	345	301	227	180	131	83	34	000	000
15	.42	.42	.41	.40	.38	.36	.34	.32	.29	.27	.24	.21	.15	.12	.08	.05	.01	.00	.00
	594	588	576	559	539	514	486	447	410	371	330	296	212	164	116	67	19	000	000
30	.41	.41	.40	.39	.37	.35	.33	.31	.28	.25	.23	.19	.14	.11	.07	.04	.00	.00	.00
	579	573	561	545	524	499	471	432	395	356	315	271	197	149	101	52	004	000	000
45	.40	.39	.39	.38	.36	.34	.32	.30	.27	.24	.21	.18	.13	.10	.06	.03	.00	.00	.00
	565	558	546	530	509	484	456	416	380	341	299	255	181	134	85	37	000	000	000

JAN-APR 80 S TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M**2.)

*** SIGNIFIES COS Z =1.
ADD 1000 TO VALUES PRECEDED BY .

MST	DATE																		
	JAN				FEB				MAR				APR						
	1	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
1800	.39	.38	.38	.36	.35	.33	.31							.00	.00	.00	.00	.00	.00
	550	543	531	515	494	469	440							166	118	069	021	000	000
15	.38	.37	.37	.35	.34	.32	.30							.00	.00	.00	.00	.00	.00
	535	529	516	500	479	454	425							150	102	054	005	000	000
30	.37	.36	.35	.34	.33	.31	.29							.00	.00	.00	.00	.00	.00
	520	514	502	485	464	439	410							134	086	038	000	000	000
45	.36	.35	.34	.33	.32	.30	.28							.00	.00	.00	.00	.00	.00
	506	499	487	470	449	424	395							119	071	022	000	000	000
1900	.35	.34	.33	.32	.31	.29	.27							.00	.00	.00	.00	.00	.00
	491	485	472	455	434	409	380							103	055	007	000	000	000
15	.34	.33	.32	.31	.30	.28	.26							.00	.00	.00	.00	.00	.00
	477	470	458	441	420	394	365							088	040	000	000	000	000
30	.33	.32	.31	.30	.29	.27	.25							.00	.00	.00	.00	.00	.00
	463	456	444	427	405	380	350							073	025	000	000	000	000
45	.32	.31	.30	.29	.28	.26	.24							.00	.00	.00	.00	.00	.00
	450	443	430	413	391	366	336							058	011	000	000	000	000
2000	.31	.30	.29	.28	.27	.25	.23							.00	.00	.00	.00	.00	.00
	436	429	417	399	378	352	322							044	000	000	000	000	000
15	.30	.29	.29	.27	.26	.24	.22							.00	.00	.00	.00	.00	.00
	424	417	404	386	365	339	309							030	000	000	000	000	000
30	.29	.29	.28	.26	.25	.23	.21							.00	.00	.00	.00	.00	.00
	412	404	391	374	352	326	296							017	000	000	000	000	000
45	.28	.28	.27	.26	.24	.22	.20							.00	.00	.00	.00	.00	.00
	400	393	380	362	340	314	284							004	000	000	000	000	000

JAN-APR 80 S TABLE B-1 SOLAR PARAMETERS COS Z *** SIGNIFIES COS Z =1.
 X0 (W/M**2.) ADD 1000 TO VALUES PRECEDED BY *

[illegible]

MST	DATE											
	MAY				JUN				JUL			
	5	10	15	20	25	30	5	10	15	20	25	30
1300	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	000	000	000	000	000	000	000	000	000	000	000	000

MAY-AUG 80 S

TABLE B-1 SOLAR PARAMETERS
X0 (W/M**2.)

COS Z

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
0000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	001	044	085	132	169	201	232	258	281	299		
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	002	045	086	133	170	203	233	259	282	300		
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	005	048	089	136	172	205	235	262	284	303		
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	008	051	093	139	176	209	239	265	287	305		
0100	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	013	056	097	144	180	213	243	269	291	309		
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	018	061	103	149	185	218	248	274	296	314		
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	025	068	109	156	192	225	254	280	302	320		
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	032	05	08	163	199	232	261	287	309	327		
0200	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	040	083	125	171	207	240	269	295	317	334		
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	049	092	134	180	216	249	278	304	325	342		
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	014	059	102	143	190	226	258	287	313	334		
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
	000	000	000	000	000	000	000	000	025	070	113	154	200	236	269	298	323	344		

SEP-DEC 80 S TABLE B-1 SOLAR PARAMETERS COS Z
 *** SIGNIFIES COS Z = 1.
 ADD 1000 TO VALUES PRECEDED BY .

MST

	SEP					OCT					NOV					DEC								
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0300	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.09	.12	.15	.16	.20	.22	.24	.25	.26	.27	.29	.28	.28	.27
	000	000	000	000	000	000	000	000	036	081	124	165	212	247	293	309	334	355	372	393	411	396	354	388
15	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	.13	.15	.19	.21	.23	.25	.26	.27	.27	.27	.29	.29	.28
	000	000	000	000	000	000	000	003	046	093	136	177	223	253	281	300	345	366	383	393	403	407	405	399
30	.00	.00	.00	.00	.00	.00	.00	.01	.04	.08	.11	.14	.17	.19	.22	.24	.25	.27	.28	.28	.27	.30	.29	.29
	000	000	000	000	000	000	000	015	061	106	149	190	230	271	304	332	357	378	395	407	411	418	417	410
45	.00	.00	.00	.00	.00	.00	.00	.02	.05	.09	.12	.15	.18	.20	.23	.25	.26	.28	.29	.30	.30	.30	.30	.30
	000	000	000	000	000	000	000	028	074	119	162	203	249	284	316	345	370	391	407	420	427	430	429	422
0400	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.13	.16	.19	.21	.24	.26	.27	.29	.30	.31	.31	.31	.31	.31
	000	000	000	000	000	000	000	042	082	132	175	216	262	298	330	358	383	404	420	432	440	443	441	435
15	.00	.00	.00	.00	.00	.00	.01	.04	.07	.11	.14	.17	.20	.22	.25	.27	.28	.30	.31	.32	.32	.32	.32	.32
	000	000	000	000	000	000	009	056	102	147	190	230	276	312	343	372	397	417	434	443	453	456	454	448
30	.00	.00	.00	.00	.00	.00	.02	.05	.08	.12	.15	.18	.21	.23	.26	.28	.29	.31	.32	.33	.33	.33	.33	.33
	000	000	000	000	000	000	024	070	116	161	204	245	291	326	358	386	411	431	447	453	457	459	463	461
45	.00	.00	.00	.00	.00	.00	.03	.06	.10	.13	.16	.19	.22	.24	.27	.29	.30	.32	.33	.34	.34	.34	.34	.34
	000	000	000	000	000	000	036	085	131	176	219	260	305	340	372	400	425	445	461	473	481	483	481	475
0500	.00	.00	.00	.00	.00	.01	.04	.07	.11	.14	.17	.20	.23	.25	.28	.30	.31	.33	.34	.35	.35	.35	.35	.35
	000	000	000	000	000	006	054	100	146	191	234	275	320	355	387	415	439	460	476	483	483	497	496	489
15	.00	.00	.00	.00	.00	.02	.05	.08	.12	.15	.18	.21	.24	.27	.29	.31	.32	.34	.35	.35	.35	.36	.36	.36
	000	000	000	000	000	021	069	116	162	206	249	290	335	370	402	430	454	474	490	502	503	512	510	503
30	.00	.00	.00	.00	.00	.03	.06	.10	.13	.16	.19	.22	.25	.28	.30	.32	.33	.35	.36	.37	.37	.37	.37	.37
	000	000	000	000	000	037	084	131	177	222	264	305	351	385	417	445	469	489	505	517	524	526	524	518
45	.00	.00	.00	.00	.00	.04	.07	.11	.14	.17	.20	.23	.26	.29	.31	.33	.34	.36	.37	.38	.38	.38	.38	.38
	000	000	000	000	000	052	100	147	193	237	280	320	366	400	432	460	484	504	520	531	540	541	539	533

SEP-DEC 80 S TABLE 3-1 SOLAR PARAMETERS COS 2 SIGNIFIES COS 2 = 1.
 AC (N/4*2.) ADD 1000 TO VALUES PRECEDED BY *

MST	DATE																	
	SEP					OCT					NOV					DEC		
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
0600	.00	.00	.00	.00	.02	.05	.08	.12	.15	.18	.21	.24	.27	.30	.32	.34	.36	.37
	000	000	000	000	020	058	115	162	206	253	295	336	381	416	447	475	499	519
15	.00	.00	.00	.00	.03	.06	.10	.13	.15	.19	.22	.25	.29	.31	.33	.35	.37	.38
	000	000	000	000	036	083	131	178	223	266	311	351	395	431	462	490	514	534
30	.00	.00	.00	.00	.04	.07	.11	.14	.17	.21	.24	.26	.30	.32	.34	.36	.38	.39
	000	000	000	000	051	099	146	193	239	293	326	356	411	445	477	505	529	548
45	.00	.00	.00	.01	.05	.08	.12	.15	.18	.22	.25	.27	.31	.33	.35	.37	.39	.40
	000	000	000	019	066	114	161	208	254	298	341	381	426	461	492	519	543	563
0700	.00	.00	.00	.03	.06	.09	.13	.16	.20	.23	.25	.27	.32	.34	.36	.38	.40	.41
	000	000	000	034	081	129	176	223	269	313	356	396	441	475	506	534	557	577
15	.00	.00	.00	.04	.07	.11	.14	.17	.21	.24	.27	.30	.33	.35	.37	.39	.41	.42
	000	000	000	048	096	144	191	238	283	328	370	410	455	494	520	548	572	591
30	.00	.00	.01	.05	.08	.12	.15	.18	.22	.25	.28	.31	.34	.36	.38	.40	.42	.43
	000	000	016	063	110	158	205	252	297	342	384	424	461	503	534	562	585	605
45	.00	.00	.02	.06	.09	.13	.16	.19	.23	.26	.29	.32	.35	.37	.39	.41	.43	.44
	000	000	030	077	124	172	219	266	311	355	399	438	482	516	547	575	599	618
0800	.00	.00	.03	.07	.10	.14	.17	.20	.24	.27	.30	.32	.36	.38	.40	.42	.44	.45
	000	000	013	090	137	185	232	279	324	368	411	451	495	529	560	588	611	631
15	.00	.01	.04	.08	.11	.15	.18	.21	.24	.28	.31	.33	.36	.39	.41	.43	.44	.46
	000	010	056	103	150	198	245	291	337	381	422	463	508	542	572	600	624	643
30	.00	.02	.05	.09	.12	.15	.19	.22	.25	.28	.31	.34	.37	.40	.42	.44	.45	.47
	000	022	068	115	162	210	257	304	345	393	435	475	519	553	584	612	635	655
45	.00	.03	.06	.09	.13	.16	.20	.23	.26	.29	.32	.35	.38	.40	.43	.44	.46	.47
	000	034	080	127	174	221	269	315	360	404	446	486	531	564	595	623	646	666

MST	SEP					OCT					DATE					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
1500	.00	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.37	.40	.42	.44	.45	.47	.48	.49	.50	.50	.50	.50	
	000	040	084	128	172	217	262	306	350	392	433	473	513	552	584	613	639	661	680	695	702	711	714	711	
15	.00	.02	.05	.09	.12	.15	.16	.21	.25	.28	.30	.33	.35	.39	.41	.43	.45	.46	.47	.48	.49	.50	.50	.50	
	000	029	072	116	161	205	250	294	338	380	421	451	486	520	553	582	602	628	650	669	683	694	701	703	
30	.00	.01	.04	.08	.11	.14	.17	.21	.24	.27	.30	.32	.35	.38	.40	.42	.44	.45	.47	.48	.49	.49	.49	.49	
	000	017	060	104	148	193	237	282	325	368	409	446	480	515	547	570	590	616	638	657	672	683	689	691	
45	.00	.00	.04	.07	.10	.13	.16	.20	.23	.26	.29	.31	.34	.37	.40	.41	.43	.44	.46	.47	.47	.48	.48	.48	
	000	004	047	091	135	180	224	268	312	354	392	425	460	494	527	547	563	579	604	623	637	648	659	677	
1600	.00	.00	.03	.06	.09	.12	.15	.19	.22	.25	.28	.30	.34	.36	.38	.40	.42	.44	.45	.46	.47	.47	.47	.47	
	000	000	034	073	122	166	211	255	298	341	382	422	467	512	534	554	590	613	632	647	658	664	667	665	
15	.00	.00	.02	.05	.08	.11	.14	.18	.21	.24	.27	.29	.32	.35	.37	.39	.41	.43	.44	.45	.46	.46	.46	.46	
	000	000	020	064	108	152	197	241	284	327	368	408	453	495	520	550	576	599	618	633	645	651	654	652	
30	.00	.00	.01	.04	.07	.10	.13	.16	.20	.23	.26	.28	.31	.34	.36	.38	.40	.42	.43	.44	.44	.45	.45	.45	
	000	000	006	050	094	138	182	226	270	312	353	393	433	474	505	536	562	585	605	623	631	638	640	638	
45	.00	.00	.00	.03	.06	.09	.12	.15	.19	.22	.24	.27	.30	.33	.35	.37	.39	.41	.42	.43	.44	.44	.44	.44	
	000	000	000	035	079	123	167	211	255	297	339	378	424	464	492	521	548	571	590	605	617	624	627	625	
1700	.00	.00	.00	.02	.05	.08	.11	.14	.17	.20	.23	.26	.29	.32	.34	.36	.38	.40	.41	.42	.43	.43	.43	.43	
	000	000	000	020	064	108	152	196	240	282	324	363	403	444	477	507	534	557	576	592	603	610	612	611	
15	.00	.00	.00	.00	.04	.07	.10	.13	.16	.19	.22	.25	.28	.31	.33	.35	.37	.39	.40	.41	.42	.42	.42	.42	
	000	000	000	000	049	093	137	181	224	267	308	348	394	435	462	492	519	542	562	577	588	595	599	596	
30	.00	.00	.00	.00	.02	.06	.09	.12	.15	.18	.21	.24	.27	.30	.32	.34	.36	.37	.39	.40	.41	.41	.41	.41	
	000	000	000	000	033	077	122	165	209	252	293	333	373	414	447	477	504	527	547	562	574	581	584	582	
45	.00	.00	.00	.00	.01	.05	.08	.11	.14	.17	.20	.23	.26	.29	.31	.33	.35	.36	.38	.39	.40	.40	.40	.40	
	000	000	000	000	018	062	106	150	193	236	275	318	363	406	432	462	489	512	532	543	559	566	569	567	

*** SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY *

TABLE B-1 SOLAR PARAMETERS COS Z
XO (W/M=2.)

SEP-DEC 80 S

MST	SEP					OCT					NOV					DEC				
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30		
1800	.00 .00 .00 .00 .00 .03 000 000 000 000 002 046	.07 .10 .13 .16 .19 .22 090 134 178 221 262 302	.25 .28 .30 .32 .34 .35 342 384 417 447 474 497	.37 .39 .39 .39 .39 .39 517 523 531 551 554 552									.37 .39 .39 .39 .39 .39 517 523 531 551 554 552							
15	.00 .00 .00 .00 .00 .02 000 000 000 000 000 031	.06 .09 .12 .15 .18 .21 075 119 162 205 247 287	.23 .25 .26 .27 .29 .31 333 359 392 432 459 483	.36 .37 .38 .38 .38 .38 502 513 531 537 539 537									.36 .37 .38 .38 .38 .38 502 513 531 537 539 537							
30	.00 .00 .00 .00 .00 .01 000 000 000 000 000 016	.04 .08 .11 .14 .17 .20 060 104 147 190 232 272	.23 .25 .26 .27 .29 .31 316 354 387 417 444 468	.35 .36 .36 .36 .36 .36 488 503 515 522 525 523									.35 .36 .36 .36 .36 .36 488 503 515 522 525 523							
45	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.03 .06 .10 .13 .16 .19 044 088 132 175 217 257	.22 .24 .27 .29 .31 .32 303 339 372 403 430 453	.34 .35 .35 .35 .35 .35 473 489 500 508 510 508									.34 .35 .35 .35 .35 .35 473 489 500 508 510 508							
1900	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.02 .05 .09 .12 .15 .17 030 074 117 160 202 242	.21 .23 .26 .28 .30 .31 285 324 358 388 415 439	.33 .34 .34 .34 .34 .34 459 475 493 496 496 494									.33 .34 .34 .34 .34 .34 459 475 493 496 496 494							
15	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.01 .04 .07 .11 .14 .16 015 059 103 146 187 228	.20 .22 .25 .27 .29 .30 274 310 344 374 401 425	.32 .33 .33 .33 .33 .33 445 461 472 479 482 479									.32 .33 .33 .33 .33 .33 445 461 472 479 482 479							
30	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .03 .06 .10 .13 .15 001 045 089 132 173 214	.19 .21 .24 .26 .28 .29 260 296 330 360 388 411	.31 .32 .32 .32 .32 .32 431 447 458 465 468 466									.31 .32 .32 .32 .32 .32 431 447 458 465 468 466							
45	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .02 .05 .09 .12 .14 000 031 075 118 160 200	.18 .20 .23 .25 .27 .28 247 283 316 347 374 398	.30 .31 .32 .32 .32 .32 418 434 445 452 454 452									.30 .31 .32 .32 .32 .32 418 434 445 452 454 452							
2000	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .01 .05 .08 .11 .14 000 018 062 105 147 187	.17 .19 .22 .24 .26 .27 234 270 304 334 362 385	.29 .30 .31 .31 .31 .31 405 421 432 439 441 439									.29 .30 .31 .31 .31 .31 405 421 432 439 441 439							
15	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .04 .07 .10 .12 000 005 049 092 134 175	.16 .18 .21 .23 .25 .27 221 258 291 322 349 373	.28 .29 .30 .30 .30 .30 393 405 420 427 429 426									.28 .29 .30 .30 .30 .30 393 405 420 427 429 426							
30	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .03 .06 .09 .12 000 000 037 080 122 163	.15 .18 .20 .22 .24 .26 210 246 280 310 338 361	.27 .29 .29 .29 .29 .29 381 397 404 415 417 414									.27 .29 .29 .29 .29 .29 381 397 404 415 417 414							
45	.00 .00 .00 .00 .00 .00 000 000 000 000 000 000	.00 .00 .02 .05 .08 .11 000 000 026 069 111 152	.14 .17 .19 .21 .23 .25 190 225 269 299 327 350	.26 .27 .28 .29 .29 .28 370 385 397 403 405 403									.26 .27 .28 .29 .29 .28 370 385 397 403 405 403							

SEP-DEC 80 S TABLE B-1 SOLAR PARAMETERS COS Z ** SIGNIFIES COS Z = 1.
 XO (W/M=2.) ADD 1000 TO VALUES PRECEDED BY *

MST	SEP					OCT					NOV					DEC									
	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	
2100	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.10	.14	.16	.18	.21	.23	.24	.26	.27	.27	.28	.28	.28	
	000	000	000	000	000	000	000	000	015	058	101	142	182	225	263	299	316	340	360	375	383	393	395	392	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.07	.10	.13	.15	.18	.20	.22	.23	.25	.25	.27	.27	.27	.27	
	000	000	000	000	000	000	000	000	005	049	091	132	173	215	249	279	307	330	350	365	371	383	385	382	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.05	.09	.12	.15	.17	.19	.21	.23	.24	.25	.25	.26	.27	.26	
	000	000	000	000	000	000	000	000	000	040	082	123	170	208	240	271	293	321	341	355	367	373	375	372	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	.12	.14	.17	.19	.21	.22	.24	.25	.25	.26	.26	.26	
	000	000	000	000	000	000	000	000	000	032	074	115	162	198	232	263	290	313	333	343	353	365	367	363	
2200	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	.11	.14	.16	.18	.20	.22	.23	.24	.25	.25	.25	.25	
	000	000	000	000	000	000	000	000	000	024	067	108	155	191	225	255	283	306	325	341	351	357	359	355	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.11	.13	.16	.18	.20	.21	.23	.23	.24	.25	.25	.25	
	000	000	000	000	000	000	000	000	000	018	050	102	149	185	218	249	276	300	319	334	345	351	352	348	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.10	.13	.15	.17	.19	.21	.22	.23	.24	.24	.24	.24	
	000	000	000	000	000	000	000	000	000	012	055	096	143	180	213	244	271	294	313	325	339	345	346	342	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.10	.13	.15	.17	.19	.21	.22	.23	.24	.24	.24	.24	
	000	000	000	000	000	000	000	000	000	008	051	092	139	175	209	239	266	289	309	323	334	340	340	337	
2300	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.12	.15	.17	.19	.20	.22	.23	.23	.24	.24	.24	
	000	000	000	000	000	000	000	000	000	005	047	089	135	172	205	236	263	286	305	320	330	335	336	332	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.12	.15	.17	.19	.20	.21	.22	.23	.24	.24	.23	
	000	000	000	000	000	000	000	000	000	002	046	086	133	169	203	233	260	283	302	317	327	332	333	329	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.12	.14	.17	.18	.20	.21	.22	.23	.23	.23	.23	
	000	000	000	000	000	000	000	000	000	031	043	085	132	168	201	232	258	281	300	315	325	330	330	326	
45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.10	.12	.14	.17	.18	.20	.21	.22	.23	.23	.23	.23	
	000	000	000	000	000	000	000	000	000	043	084		131	167	201	231	258	281	299	314	323	329	329	325	
SEP-DEC	80 S					SOLAR PARAMETERS					COS 7					... SIGNIFICES COS 7 = 1.					ADD 1000 TO VALUES PRECEDED BY *				
						X0 (2777-2.)																			

... SIGNIFIES COS Z = 1.
ADD 1000 TO VALUES PRECEDED BY .

TABLE B-1 SOLAR PARAMETERS COS Z
TO (M/1--2.)

SEP-DEC 80 S

		COS Z													
		.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70
LOW	MID	HIGH													
			.75	.80	.85	.90	.95								
CLR	CLR	CLR	.45	.49	.54	.58	.61	.65	.68	.71	.73	.75	.77	.78	.79
	SCT	SCT	.43	.48	.52	.56	.60	.64	.67	.70	.72	.74	.76	.77	.79
	BKN	BKN	.39	.43	.48	.52	.56	.60	.63	.66	.69	.71	.73	.74	.76
	OVC	OVC	.38	.42	.46	.49	.53	.56	.59	.62	.65	.67	.69	.71	.74
CLR	SCT	CLR	.38	.42	.46	.50	.54	.57	.60	.63	.66	.68	.70	.71	.74
	SCT	SCT	.37	.41	.45	.49	.53	.56	.60	.63	.65	.67	.69	.71	.74
	BKN	BKN	.34	.38	.42	.46	.50	.53	.57	.60	.62	.65	.67	.68	.71
	OVC	OVC	.33	.37	.40	.44	.47	.50	.53	.56	.59	.61	.63	.65	.68
C'R	BKN	CLR	.30	.34	.37	.40	.43	.46	.49	.52	.54	.56	.57	.59	.61
	SCT	SCT	.29	.33	.36	.39	.43	.46	.48	.51	.53	.55	.57	.59	.61
	BKN	BKN	.27	.30	.34	.37	.40	.43	.46	.49	.51	.53	.55	.57	.59
	OVC	OVC	.27	.30	.33	.36	.39	.41	.44	.46	.49	.51	.53	.54	.56
CLR	OVC	CLR	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.31	.32	.34
	SCT	SCT	.18	.19	.21	.22	.24	.25	.27	.28	.29	.30	.31	.32	.34
	BKN	BKN	.16	.18	.20	.21	.23	.25	.26	.27	.29	.30	.31	.32	.33
	OVC	OVC	.16	.18	.19	.21	.22	.24	.25	.26	.27	.29	.30	.31	.32
SCT	CLR	CLR	.37	.41	.45	.49	.52	.56	.59	.62	.65	.67	.69	.71	.74
	SCT	SCT	.36	.40	.44	.48	.51	.55	.58	.61	.64	.67	.69	.70	.72
	BKN	BKN	.32	.36	.41	.45	.48	.52	.55	.59	.61	.64	.66	.68	.71
	OVC	OVC	.32	.35	.39	.42	.46	.49	.52	.55	.58	.60	.63	.65	.68
SCT	SCT	CLR	.32	.36	.39	.43	.47	.50	.53	.56	.59	.61	.63	.65	.68
	SCT	SCT	.31	.35	.38	.42	.46	.49	.52	.56	.58	.61	.63	.65	.67
	BKN	BKN	.28	.32	.36	.40	.43	.47	.50	.53	.56	.58	.61	.63	.66
	OVC	OVC	.28	.31	.35	.38	.41	.44	.47	.50	.53	.55	.58	.60	.63
SCT	BKN	CLR	.26	.29	.32	.35	.38	.41	.44	.46	.49	.51	.53	.54	.57
	SCT	SCT	.25	.28	.31	.34	.38	.41	.43	.46	.48	.51	.52	.54	.56
	BKN	BKN	.23	.26	.29	.33	.36	.39	.42	.44	.47	.49	.51	.52	.55
	OVC	OVC	.23	.26	.28	.31	.34	.37	.40	.42	.44	.47	.49	.50	.53
SCT	OVC	CLR	.16	.17	.19	.21	.22	.23	.25	.26	.27	.28	.29	.30	.32
	SCT	SCT	.15	.17	.19	.20	.22	.23	.25	.26	.27	.28	.29	.30	.32
	BKN	BKN	.15	.16	.18	.19	.21	.23	.24	.25	.27	.28	.29	.30	.32
	OVC	OVC	.14	.16	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.31

STATE 1-1-1 THIN HIGH CLOUD
LOW ALBEDO
VIS => 11 KM

TABLE B-2 SOLAR TRANSMISSION (τ)

		COS Z																			
LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN	CLR	CLR	.30	.33	.35	.39	.42	.45	.48	.50	.52	.54	.55	.57	.58	.59	.60	.61	.61	.61	.61
	SCT	SCT	.29	.32	.35	.39	.42	.44	.47	.49	.52	.54	.55	.57	.58	.59	.60	.60	.60	.61	.61
	BKN	BKN	.26	.30	.33	.36	.39	.42	.45	.47	.50	.52	.53	.55	.56	.57	.58	.58	.58	.58	.58
	OVC	OVC	.26	.29	.32	.35	.37	.40	.43	.45	.47	.49	.51	.52	.54	.55	.56	.57	.57	.57	.57
BKN	SCT	CLR	.26	.29	.32	.35	.38	.41	.43	.46	.48	.50	.51	.53	.54	.55	.56	.57	.58	.58	.58
	SCT	SCT	.25	.29	.32	.35	.38	.40	.43	.45	.47	.49	.51	.53	.54	.55	.56	.57	.57	.58	.58
	BKN	BKN	.24	.27	.30	.33	.36	.38	.41	.44	.46	.48	.50	.51	.52	.53	.54	.55	.55	.55	.55
	OVC	OVC	.23	.26	.29	.31	.34	.37	.39	.41	.43	.46	.47	.49	.50	.52	.53	.54	.54	.54	.55
BKN	BKN	CLR	.22	.24	.27	.29	.32	.34	.37	.39	.41	.42	.44	.45	.46	.47	.48	.49	.49	.49	.49
	SCT	SCT	.21	.24	.26	.29	.31	.34	.36	.38	.40	.42	.44	.45	.46	.47	.48	.49	.49	.49	.49
	BKN	BKN	.19	.22	.25	.27	.30	.32	.35	.37	.39	.41	.42	.44	.45	.46	.46	.47	.47	.47	.47
	OVC	OVC	.19	.22	.24	.26	.29	.31	.33	.35	.37	.39	.41	.42	.43	.44	.45	.46	.46	.46	.46
BKN	OVC	CLR	.14	.15	.17	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.29	.29	.29	.29
	SCT	SCT	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.26	.27	.28	.28	.29	.29	.29	.29
	BKN	BKN	.13	.14	.16	.17	.18	.20	.21	.22	.24	.25	.26	.27	.29	.30	.31	.32	.32	.32	.32
	OVC	OVC	.12	.14	.15	.17	.18	.20	.21	.22	.24	.25	.27	.28	.29	.30	.31	.32	.32	.32	.32
OVC	CLR	CLR	.13	.15	.17	.18	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.34
	SCT	SCT	.13	.14	.16	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.33
	BKN	BKN	.12	.14	.15	.17	.19	.21	.22	.24	.25	.26	.27	.29	.29	.30	.31	.32	.32	.32	.32
	OVC	OVC	.12	.13	.15	.17	.18	.20	.21	.23	.24	.25	.27	.28	.29	.30	.31	.32	.32	.32	.32
OVC	SCT	CLR	.12	.14	.15	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.32	.33
	SCT	SCT	.12	.13	.15	.17	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.30	.32	.32	.32	.32
	BKN	BKN	.11	.12	.14	.16	.18	.19	.21	.22	.24	.25	.26	.27	.28	.29	.30	.31	.31	.31	.31
	OVC	OVC	.11	.12	.14	.15	.17	.18	.20	.21	.23	.24	.25	.26	.27	.28	.29	.30	.30	.31	.31
OVC	BKN	CLR	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.29	.29
	SCT	SCT	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.26	.27	.28	.28	.28	.29
	BKN	BKN	.09	.11	.12	.14	.16	.17	.18	.20	.21	.22	.23	.24	.25	.26	.26	.27	.27	.28	.28
	OVC	OVC	.09	.11	.12	.14	.15	.16	.18	.19	.20	.21	.23	.24	.25	.26	.26	.27	.27	.27	.27
OVC	OVC	CLR	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.17	.17	.18	.18	.19	.19	.19	.19
	SCT	SCT	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.16	.17	.17	.18	.19	.19	.19	.19
	BKN	BKN	.07	.08	.09	.10	.11	.12	.12	.13	.14	.15	.16	.16	.17	.17	.18	.18	.18	.18	.18
	OVC	OVC	.07	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.16	.17	.17	.18	.18	.18	.18

TABLE B-2 SOLAR TRANSMISSION (τ)

THIN HIGH CLOUD
LOW ALBEDO
VIS $\geq$ 11 KM

STATE 1-1-1

COS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR	CLR	CLR	.38	.42	.45	.49	.52	.56	.59	.62	.64	.66	.68	.70	.71	.72	.72	.73	.73	.73	.73
	SCT		.36	.40	.44	.48	.51	.55	.58	.61	.64	.66	.68	.69	.71	.72	.72	.72	.72	.72	.72
	BKN		.33	.37	.41	.45	.48	.52	.55	.58	.61	.63	.65	.67	.68	.69	.69	.69	.69	.69	.69
	OVC		.32	.36	.39	.42	.46	.49	.52	.55	.57	.60	.62	.64	.65	.66	.67	.67	.67	.67	.67
CLR	SCT	CLR	.32	.36	.40	.43	.46	.50	.53	.56	.58	.60	.63	.64	.66	.67	.68	.68	.68	.68	.68
	SCT		.31	.35	.39	.42	.46	.49	.52	.55	.58	.60	.62	.64	.65	.66	.67	.68	.68	.68	.68
	BKN		.29	.32	.36	.39	.43	.46	.50	.53	.55	.58	.60	.62	.63	.64	.65	.65	.65	.65	.65
	OVC		.28	.31	.35	.38	.41	.44	.47	.50	.52	.55	.57	.59	.60	.62	.63	.64	.64	.64	.64
CLR	BKN	CLR	.26	.29	.32	.35	.38	.41	.43	.46	.48	.50	.52	.53	.55	.55	.56	.56	.56	.56	.56
	SCT		.25	.28	.31	.34	.37	.40	.43	.45	.48	.50	.52	.53	.54	.55	.56	.56	.56	.56	.56
	BKN		.23	.26	.29	.32	.35	.38	.41	.44	.46	.48	.50	.51	.53	.53	.54	.54	.54	.54	.54
	OVC		.23	.26	.28	.31	.34	.36	.39	.41	.44	.46	.48	.49	.51	.52	.52	.53	.53	.53	.53
CLR	OVC	CLR	.16	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.30	.31	.31	.31	.32	.32	.32
	SCT		.15	.17	.18	.20	.21	.23	.24	.25	.27	.28	.29	.29	.30	.31	.31	.31	.31	.31	.31
	BKN		.15	.16	.18	.19	.21	.22	.23	.25	.26	.27	.28	.29	.30	.30	.30	.31	.31	.31	.31
	OVC		.14	.16	.17	.19	.20	.21	.23	.24	.25	.26	.27	.28	.29	.29	.30	.30	.30	.30	.30
SCT	CLR	CLR	.31	.35	.38	.42	.45	.49	.52	.55	.57	.60	.62	.64	.66	.67	.68	.69	.69	.69	.69
	SCT		.30	.34	.37	.41	.45	.48	.51	.54	.57	.59	.62	.64	.65	.67	.67	.68	.68	.68	.68
	BKN		.28	.31	.35	.38	.42	.45	.49	.52	.55	.57	.59	.61	.63	.64	.65	.66	.66	.66	.66
	OVC		.27	.30	.34	.37	.40	.43	.46	.49	.52	.54	.56	.58	.60	.62	.63	.64	.64	.64	.64
SCT	SCT	CLR	.27	.31	.34	.37	.41	.44	.47	.50	.52	.55	.57	.59	.61	.62	.64	.65	.65	.65	.65
	SCT		.26	.30	.33	.37	.40	.43	.46	.49	.52	.55	.57	.59	.61	.62	.63	.64	.64	.65	.65
	BKN		.24	.28	.31	.34	.38	.41	.44	.47	.50	.53	.55	.57	.59	.60	.61	.62	.62	.62	.62
	OVC		.24	.27	.30	.33	.36	.39	.42	.45	.47	.50	.52	.54	.56	.58	.59	.61	.61	.61	.61
SCT	BKN	CLR	.22	.25	.28	.31	.34	.36	.39	.41	.44	.46	.48	.50	.51	.52	.53	.54	.54	.54	.54
	SCT		.22	.24	.27	.30	.33	.36	.39	.41	.43	.46	.48	.49	.51	.52	.53	.53	.54	.54	.54
	BKN		.20	.23	.26	.29	.31	.34	.37	.40	.42	.44	.46	.48	.49	.50	.51	.52	.52	.52	.52
	OVC		.20	.22	.25	.28	.30	.33	.35	.38	.40	.42	.44	.46	.47	.49	.50	.51	.51	.51	.51
SCT	OVC	CLR	.14	.15	.17	.18	.20	.21	.23	.24	.25	.26	.27	.28	.29	.30	.30	.31	.31	.31	.31
	SCT		.14	.15	.17	.18	.20	.21	.23	.24	.25	.26	.27	.28	.29	.29	.30	.30	.30	.30	.30
	BKN		.13	.14	.16	.17	.19	.20	.22	.23	.24	.25	.26	.27	.28	.29	.29	.30	.30	.30	.30
	OVC		.13	.14	.16	.17	.18	.20	.21	.22	.23	.25	.26	.27	.27	.28	.29	.29	.29	.29	.29

STATE 1-1-2

THIN HIGH CLOUD
LOW ALBEDO
VIS < 11 KM

TABLE B-2 SOLAR TRANSMISSION (T)

COS Z

	LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN CLR	CLR	CLR	CLR	.26	.29	.32	.35	.37	.40	.42	.45	.47	.49	.51	.52	.54	.55	.55	.56	.56	.57	.57
BKN SCT	SCT	SCT	SCT	.25	.28	.31	.34	.37	.39	.42	.44	.47	.49	.50	.52	.53	.54	.55	.56	.56	.57	.57
BKN BKN	BKN	BKN	BKN	.23	.26	.29	.32	.35	.38	.40	.43	.45	.47	.49	.50	.52	.53	.53	.54	.54	.54	.54
BKN OVC	OVC	OVC	OVC	.23	.25	.28	.31	.33	.36	.38	.40	.43	.45	.47	.48	.50	.51	.52	.53	.53	.53	.53
BKN CLR	CLR	CLR	CLR	.23	.26	.28	.31	.34	.36	.38	.41	.43	.45	.47	.49	.50	.51	.52	.53	.54	.54	.54
BKN SCT	SCT	SCT	SCT	.22	.25	.28	.31	.33	.36	.38	.41	.43	.45	.47	.49	.50	.51	.52	.53	.53	.53	.53
BKN BKN	BKN	BKN	BKN	.21	.23	.26	.29	.32	.34	.37	.39	.42	.44	.45	.47	.48	.50	.50	.51	.51	.51	.51
BKN OVC	OVC	OVC	OVC	.20	.23	.25	.28	.30	.33	.35	.37	.40	.42	.43	.45	.47	.48	.49	.50	.50	.51	.51
BKN CLR	CLR	CLR	CLR	.19	.21	.24	.26	.29	.31	.33	.35	.37	.39	.40	.42	.43	.44	.45	.45	.46	.46	.46
BKN SCT	SCT	SCT	SCT	.18	.21	.23	.26	.28	.30	.33	.35	.37	.39	.40	.42	.43	.44	.44	.45	.45	.45	.45
BKN BKN	BKN	BKN	BKN	.17	.20	.22	.24	.27	.29	.31	.34	.36	.37	.39	.40	.42	.43	.43	.44	.44	.44	.44
BKN OVC	OVC	OVC	OVC	.17	.19	.21	.24	.26	.28	.30	.32	.34	.36	.37	.39	.40	.41	.42	.43	.43	.43	.43
BKN CLR	CLR	CLR	CLR	.12	.14	.15	.16	.17	.19	.20	.21	.22	.23	.24	.25	.25	.26	.27	.27	.27	.27	.27
BKN SCT	SCT	SCT	SCT	.12	.13	.15	.16	.17	.19	.20	.21	.22	.23	.24	.25	.25	.26	.26	.26	.26	.26	.26
BKN BKN	BKN	BKN	BKN	.11	.13	.14	.15	.17	.18	.19	.20	.21	.22	.23	.24	.25	.25	.26	.26	.26	.26	.26
BKN OVC	OVC	OVC	OVC	.11	.12	.14	.15	.16	.17	.18	.20	.21	.22	.23	.24	.24	.25	.25	.26	.26	.26	.26
OVC CLR	CLR	CLR	CLR	.13	.15	.17	.18	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.34
OVC SCT	SCT	SCT	SCT	.13	.14	.16	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.33
OVC BKN	BKN	BKN	BKN	.12	.14	.15	.17	.19	.21	.22	.24	.25	.26	.27	.29	.29	.30	.31	.31	.32	.32	.32
OVC OVC	OVC	OVC	OVC	.12	.13	.15	.17	.18	.20	.21	.23	.24	.25	.27	.28	.29	.29	.30	.31	.31	.32	.32
OVC CLR	CLR	CLR	CLR	.12	.14	.15	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.31	.32	.32	.33
OVC SCT	SCT	SCT	SCT	.12	.13	.15	.17	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.30	.31	.32	.32	.32
OVC BKN	BKN	BKN	BKN	.11	.12	.14	.16	.18	.19	.21	.22	.24	.25	.26	.27	.28	.29	.30	.30	.31	.31	.31
OVC OVC	OVC	OVC	OVC	.11	.12	.14	.15	.17	.18	.20	.21	.23	.24	.25	.26	.27	.28	.29	.30	.30	.31	.31
OVC CLR	CLR	CLR	CLR	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.29	.29
OVC SCT	SCT	SCT	SCT	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.26	.27	.28	.28	.29	.29
OVC BKN	BKN	BKN	BKN	.09	.11	.12	.14	.16	.17	.18	.20	.21	.22	.23	.24	.25	.26	.26	.27	.27	.28	.28
OVC OVC	OVC	OVC	OVC	.09	.11	.12	.14	.15	.16	.18	.19	.20	.21	.23	.24	.24	.25	.26	.27	.27	.27	.27
OVC CLR	CLR	CLR	CLR	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.17	.17	.18	.18	.18	.19	.19	.19
OVC SCT	SCT	SCT	SCT	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.16	.17	.18	.18	.18	.19	.19	.19
OVC BKN	BKN	BKN	BKN	.07	.08	.09	.10	.11	.12	.12	.13	.14	.15	.16	.16	.17	.17	.18	.18	.18	.18	.18
OVC OVC	OVC	OVC	OVC	.07	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.16	.17	.17	.18	.18	.18	.18

STATE 1-1-2 THIN HIGH CLOUD LOW ALBEDO VIS < 11 KM

TABLE 8-2 SOLAR TRANSMISSION (T)

COS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR	CLR	CLR	.54	.58	.62	.66	.69	.72	.74	.77	.79	.80	.82	.83	.84	.84	.84	.84	.85	.85	.85
	SCT	SCT	.52	.56	.61	.64	.68	.71	.74	.76	.78	.80	.81	.82	.83	.84	.84	.84	.84	.84	.84
	BKN	BKN	.48	.53	.57	.61	.65	.69	.72	.74	.76	.78	.80	.81	.82	.82	.83	.83	.83	.83	.83
	OVC	OVC	.48	.52	.56	.59	.63	.66	.69	.71	.74	.76	.77	.79	.80	.81	.81	.81	.81	.81	.81
CLR	SCT	CLR	.48	.53	.57	.61	.64	.67	.70	.73	.75	.77	.78	.80	.81	.81	.82	.82	.82	.82	.82
	SCT	SCT	.47	.51	.56	.60	.63	.67	.70	.72	.74	.76	.78	.79	.80	.81	.82	.82	.82	.82	.82
	BKN	BKN	.44	.48	.53	.57	.61	.64	.67	.70	.73	.75	.76	.78	.79	.80	.80	.80	.80	.80	.80
	OVC	OVC	.43	.47	.51	.55	.59	.62	.65	.68	.70	.72	.74	.76	.77	.78	.79	.79	.79	.79	.79
CLR	BKN	CLR	.41	.45	.49	.53	.56	.60	.63	.65	.67	.69	.71	.72	.73	.74	.75	.75	.75	.75	.75
	SCT	SCT	.40	.44	.48	.52	.56	.59	.62	.65	.67	.69	.71	.72	.73	.74	.75	.75	.75	.75	.75
	BKN	BKN	.37	.41	.46	.50	.54	.57	.60	.63	.66	.68	.69	.71	.72	.73	.73	.73	.73	.73	.73
	OVC	OVC	.37	.41	.45	.48	.52	.55	.58	.61	.63	.66	.67	.69	.70	.71	.72	.72	.72	.72	.72
CLR	OVC	CLR	.27	.30	.33	.35	.38	.40	.43	.45	.47	.48	.50	.51	.52	.53	.53	.54	.54	.54	.54
	SCT	SCT	.27	.30	.32	.35	.38	.40	.42	.45	.46	.48	.50	.51	.52	.53	.53	.53	.53	.53	.53
	BKN	BKN	.25	.28	.31	.34	.36	.39	.41	.44	.46	.47	.49	.50	.51	.52	.52	.52	.52	.52	.52
	OVC	OVC	.25	.28	.30	.33	.35	.38	.40	.42	.44	.46	.48	.49	.50	.51	.51	.52	.52	.52	.52
SCT	CLR	CLR	.49	.53	.57	.61	.65	.68	.70	.73	.75	.77	.78	.80	.81	.82	.82	.83	.83	.83	.83
	SCT	SCT	.48	.52	.56	.60	.64	.67	.70	.72	.75	.77	.78	.80	.81	.81	.82	.82	.82	.82	.82
	BKN	BKN	.44	.49	.53	.57	.61	.65	.68	.70	.73	.75	.77	.78	.79	.80	.80	.81	.81	.81	.81
	OVC	OVC	.44	.48	.52	.55	.59	.62	.65	.68	.70	.73	.74	.76	.77	.78	.79	.80	.80	.80	.80
SCT	SCT	CLR	.44	.49	.53	.57	.60	.63	.66	.69	.71	.73	.75	.77	.78	.79	.80	.81	.81	.81	.81
	SCT	SCT	.43	.47	.52	.56	.59	.63	.66	.69	.71	.73	.75	.77	.78	.79	.79	.80	.80	.80	.80
	BKN	BKN	.40	.45	.49	.53	.57	.61	.64	.67	.69	.72	.73	.75	.76	.77	.78	.78	.78	.78	.78
	OVC	OVC	.40	.44	.48	.51	.55	.58	.61	.64	.67	.69	.71	.73	.75	.76	.77	.77	.78	.78	.78
SCT	BKN	CLR	.38	.42	.46	.49	.53	.56	.59	.62	.64	.66	.68	.70	.71	.72	.73	.73	.73	.73	.73
	SCT	SCT	.37	.41	.45	.49	.52	.56	.59	.62	.64	.66	.68	.70	.71	.72	.73	.73	.73	.73	.73
	BKN	BKN	.34	.39	.43	.47	.50	.54	.57	.60	.63	.65	.67	.68	.70	.71	.71	.72	.72	.72	.72
	OVC	OVC	.34	.38	.42	.45	.49	.52	.55	.58	.61	.63	.65	.67	.68	.69	.70	.71	.71	.71	.71
SCT	OVC	CLR	.26	.28	.31	.33	.36	.38	.40	.43	.44	.46	.48	.49	.50	.51	.52	.52	.52	.52	.52
	SCT	SCT	.25	.28	.30	.33	.35	.38	.40	.42	.44	.46	.48	.49	.50	.51	.52	.52	.52	.52	.52
	BKN	BKN	.24	.26	.29	.32	.34	.37	.39	.41	.43	.45	.47	.48	.49	.50	.51	.51	.51	.51	.51
	OVC	OVC	.23	.26	.28	.31	.33	.36	.38	.40	.42	.44	.46	.47	.48	.49	.50	.50	.51	.51	.51

STATE 1-2-1
THIN HIGH CLOUD
HIGH ALBEDO
VIS > 11 KM
TABLE B-2 SOLAR TRANSMISSION (T)

105 Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN	CLR	CLR	.44	.46	.52	.55	.59	.61	.64	.66	.68	.70	.72	.73	.74	.75	.75	.76	.76	.76	.76
	SCT	SCT	.43	.47	.51	.54	.58	.61	.64	.66	.68	.70	.71	.73	.74	.75	.75	.76	.76	.76	.76
	BKN	BKN	.40	.44	.48	.52	.55	.59	.62	.64	.66	.68	.70	.71	.72	.73	.74	.74	.74	.74	.74
	OVC	OVC	.39	.43	.47	.50	.53	.57	.59	.62	.64	.66	.68	.69	.71	.72	.72	.73	.73	.73	.73
BKN	SCT	CLR	.40	.44	.48	.51	.55	.58	.60	.63	.65	.67	.69	.70	.71	.72	.73	.74	.74	.74	.74
	SCT	SCT	.39	.43	.47	.51	.54	.57	.60	.63	.65	.67	.68	.70	.71	.72	.73	.74	.74	.74	.74
	BKN	BKN	.36	.40	.44	.48	.52	.55	.58	.61	.63	.65	.67	.69	.70	.71	.71	.72	.72	.72	.72
	OVC	OVC	.36	.40	.43	.47	.50	.53	.55	.59	.61	.63	.65	.67	.68	.69	.70	.71	.71	.71	.71
BKN	BKN	CLR	.34	.38	.42	.45	.48	.51	.54	.57	.59	.61	.62	.64	.65	.66	.67	.67	.67	.67	.67
	SCT	SCT	.33	.37	.41	.44	.48	.51	.54	.56	.58	.60	.62	.64	.65	.66	.66	.67	.67	.67	.67
	BKN	BKN	.31	.35	.39	.43	.46	.49	.52	.55	.57	.59	.61	.62	.64	.64	.65	.65	.66	.66	.66
	OVC	OVC	.31	.34	.38	.41	.44	.47	.50	.53	.55	.57	.59	.61	.62	.63	.64	.65	.65	.65	.65
BKN	OVC	CLR	.23	.26	.28	.31	.33	.35	.37	.39	.41	.42	.44	.45	.46	.47	.47	.48	.48	.48	.48
	SCT	SCT	.23	.25	.28	.30	.33	.35	.37	.39	.41	.42	.43	.45	.46	.47	.47	.48	.48	.48	.48
	BKN	BKN	.22	.24	.27	.29	.32	.34	.36	.38	.40	.41	.43	.44	.45	.46	.46	.47	.47	.47	.47
	OVC	OVC	.22	.24	.26	.28	.31	.33	.35	.37	.39	.40	.42	.43	.44	.45	.46	.46	.46	.46	.46
OVC	CLR	CLR	.26	.29	.32	.35	.38	.41	.43	.45	.47	.49	.50	.52	.53	.54	.55	.56	.57	.57	.57
	SCT	SCT	.25	.29	.32	.35	.38	.40	.43	.45	.47	.49	.50	.52	.53	.54	.55	.56	.56	.56	.56
	BKN	BKN	.24	.27	.30	.33	.36	.39	.41	.44	.46	.48	.49	.51	.52	.53	.54	.55	.55	.55	.55
	OVC	OVC	.23	.26	.29	.32	.35	.38	.40	.42	.44	.45	.48	.49	.51	.52	.53	.54	.54	.54	.54
OVC	SCT	CLR	.24	.27	.30	.33	.36	.38	.41	.43	.45	.47	.48	.50	.51	.52	.53	.54	.55	.55	.55
	SCT	SCT	.23	.27	.30	.33	.35	.38	.41	.43	.45	.47	.48	.50	.51	.52	.53	.54	.55	.55	.55
	BKN	BKN	.22	.25	.28	.31	.34	.37	.39	.42	.44	.46	.47	.49	.50	.51	.52	.53	.54	.54	.54
	OVC	OVC	.22	.25	.27	.30	.33	.36	.38	.40	.42	.44	.46	.48	.49	.50	.51	.52	.53	.53	.53
OVC	BKN	CLR	.21	.24	.27	.29	.32	.35	.37	.39	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.50
	SCT	SCT	.20	.23	.26	.29	.32	.34	.37	.39	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.50
	BKN	BKN	.19	.22	.25	.28	.31	.33	.36	.38	.40	.42	.43	.45	.46	.47	.48	.48	.49	.49	.49
	OVC	OVC	.19	.22	.24	.27	.30	.32	.34	.37	.39	.41	.42	.44	.45	.46	.47	.48	.48	.49	.49
OVC	OVC	CLR	.15	.17	.19	.21	.23	.24	.26	.28	.29	.30	.32	.33	.34	.34	.35	.36	.36	.36	.37
	SCT	SCT	.15	.17	.19	.21	.22	.24	.26	.28	.29	.30	.32	.33	.34	.34	.35	.36	.36	.36	.37
	BKN	BKN	.14	.16	.18	.20	.22	.24	.25	.27	.28	.30	.31	.32	.33	.34	.34	.35	.35	.36	.36
	OVC	OVC	.14	.16	.17	.19	.21	.23	.25	.26	.28	.29	.30	.32	.33	.33	.34	.35	.35	.36	.36

TABLE B-2 SOLAR TRANSMISSION (τ)

STATE 1-2-1
THIN HIGH CLOUD
HIGH ALBEDO
VIS $\geq$ 11 KM

COS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR	CLR	CLR	.48	.52	.56	.59	.63	.66	.68	.71	.73	.75	.76	.78	.79	.79	.80	.80	.80	.80	.80
		SCT	.47	.51	.55	.58	.62	.65	.68	.70	.73	.74	.76	.77	.78	.79	.79	.80	.80	.80	.80
		BKN	.43	.47	.52	.56	.59	.63	.66	.68	.71	.73	.74	.76	.77	.77	.78	.78	.78	.78	.78
		OVC	.43	.46	.50	.54	.57	.60	.63	.66	.68	.70	.72	.73	.75	.76	.76	.77	.77	.77	.77
CLR	SCT	CLR	.43	.47	.51	.55	.58	.61	.64	.67	.69	.71	.73	.74	.75	.76	.77	.77	.77	.77	.77
		SCT	.42	.46	.50	.54	.57	.61	.64	.66	.69	.71	.73	.74	.75	.76	.77	.77	.77	.77	.77
		BKN	.39	.43	.47	.51	.55	.58	.61	.64	.67	.69	.71	.72	.74	.75	.75	.75	.75	.75	.75
		OVC	.39	.42	.46	.49	.53	.56	.59	.62	.64	.67	.69	.70	.72	.73	.74	.74	.74	.74	.74
CLR	BKN	CLR	.37	.40	.44	.47	.51	.54	.57	.59	.62	.64	.66	.67	.68	.69	.70	.70	.70	.70	.70
		SCT	.36	.39	.43	.47	.50	.53	.56	.59	.61	.64	.65	.67	.68	.69	.69	.70	.70	.70	.70
		BKN	.33	.37	.41	.45	.48	.51	.55	.57	.60	.62	.64	.65	.67	.68	.68	.68	.68	.68	.68
		OVC	.33	.36	.40	.43	.46	.50	.53	.55	.58	.60	.62	.64	.65	.66	.67	.67	.67	.67	.67
CLR	OVC	CLR	.24	.27	.29	.31	.34	.36	.38	.40	.42	.43	.45	.46	.47	.48	.48	.49	.49	.49	.49
		SCT	.24	.26	.29	.31	.33	.35	.38	.40	.41	.43	.45	.46	.47	.48	.48	.49	.49	.49	.49
		BKN	.23	.25	.27	.30	.32	.34	.37	.39	.41	.42	.44	.45	.46	.47	.47	.48	.48	.48	.48
		OVC	.22	.25	.27	.29	.31	.33	.35	.37	.39	.41	.43	.44	.45	.46	.47	.47	.47	.47	.47
SCT	CLR	CLR	.44	.48	.52	.56	.59	.62	.65	.68	.70	.72	.74	.75	.76	.77	.78	.78	.78	.78	.78
		SCT	.43	.47	.51	.55	.58	.62	.64	.67	.69	.72	.73	.75	.76	.77	.78	.78	.78	.78	.78
		BKN	.40	.44	.48	.52	.56	.59	.62	.65	.68	.70	.72	.73	.75	.76	.76	.76	.76	.76	.76
		OVC	.39	.43	.47	.50	.54	.57	.60	.63	.65	.67	.69	.71	.72	.74	.75	.75	.75	.75	.75
SCT	SCT	CLR	.40	.44	.48	.51	.55	.58	.61	.64	.66	.68	.70	.72	.73	.74	.75	.76	.76	.76	.76
		SCT	.39	.43	.47	.51	.54	.57	.61	.63	.66	.68	.70	.72	.73	.74	.75	.76	.76	.76	.76
		BKN	.36	.40	.44	.48	.52	.55	.59	.62	.64	.66	.68	.70	.72	.73	.74	.74	.74	.74	.74
		OVC	.36	.39	.43	.47	.50	.53	.56	.59	.62	.64	.66	.68	.70	.71	.72	.73	.73	.73	.73
SCT	BKN	CLR	.34	.38	.41	.45	.48	.51	.54	.57	.59	.61	.63	.65	.66	.67	.68	.69	.69	.69	.69
		SCT	.33	.37	.41	.44	.48	.51	.54	.57	.59	.61	.63	.65	.66	.67	.68	.68	.68	.68	.68
		BKN	.31	.35	.38	.42	.46	.49	.52	.55	.58	.60	.62	.63	.65	.66	.67	.67	.67	.67	.67
		OVC	.31	.34	.37	.41	.44	.47	.50	.53	.56	.58	.60	.62	.63	.64	.65	.66	.66	.66	.66
SCT	OVC	CLR	.23	.25	.28	.30	.32	.34	.36	.38	.40	.42	.43	.45	.46	.47	.47	.48	.48	.48	.48
		SCT	.22	.25	.27	.30	.32	.34	.36	.38	.40	.42	.43	.45	.46	.47	.47	.48	.48	.48	.48
		BKN	.21	.24	.26	.28	.31	.33	.35	.37	.39	.41	.42	.44	.45	.46	.46	.47	.47	.47	.47
		OVC	.21	.23	.26	.28	.30	.32	.34	.36	.38	.40	.41	.43	.44	.45	.46	.46	.46	.46	.46

TABLE B-2 SOLAR TRANSMISSION (T)

THIN HIGH CLOUD
HIGH ALBEDO
VIS < 11 KM

STATE 1-2-2

COS Z

	LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN CLR	CLR	CLR	.43	.41	.48	.51	.54	.57	.60	.62	.64	.66	.68	.69	.70	.71	.72	.72	.72	.72	.72	.72
BKN SCT	CLR	CLR	.36	.39	.43	.46	.49	.52	.55	.58	.60	.62	.64	.66	.67	.69	.68	.69	.70	.70	.70	.70
BKN SCT	CLR	CLR	.36	.40	.44	.47	.50	.53	.56	.59	.61	.63	.65	.66	.68	.68	.69	.69	.70	.70	.70	.70
BKN SCT	SCT	SCT	.35	.39	.43	.46	.50	.53	.56	.58	.61	.63	.65	.66	.67	.68	.68	.69	.70	.70	.70	.70
BKN BKN	BKN	BKN	.33	.37	.41	.44	.48	.51	.54	.57	.59	.61	.63	.65	.66	.67	.68	.68	.68	.68	.68	.68
BKN BKN	OVC	OVC	.33	.36	.40	.43	.46	.49	.52	.55	.57	.59	.61	.63	.65	.66	.67	.67	.68	.68	.68	.68
BKN BKN	CLR	CLR	.31	.35	.38	.41	.44	.47	.50	.53	.55	.57	.59	.60	.61	.62	.63	.63	.64	.64	.64	.64
BKN BKN	SCT	SCT	.30	.34	.37	.41	.44	.47	.50	.52	.55	.57	.58	.60	.61	.62	.63	.63	.64	.64	.64	.64
BKN BKN	BKN	BKN	.28	.32	.36	.39	.42	.45	.48	.51	.53	.55	.57	.59	.60	.61	.62	.62	.62	.62	.62	.62
BKN BKN	OVC	OVC	.28	.31	.35	.38	.41	.44	.47	.49	.52	.54	.56	.57	.59	.60	.61	.61	.61	.61	.61	.61
BKN OVC	CLR	CLR	.21	.24	.26	.28	.30	.32	.34	.36	.38	.39	.40	.42	.43	.44	.44	.44	.45	.45	.45	.45
BKN OVC	SCT	SCT	.21	.23	.25	.28	.30	.32	.34	.36	.37	.39	.40	.42	.43	.44	.44	.44	.45	.45	.45	.45
BKN OVC	BKN	BKN	.20	.22	.24	.27	.29	.31	.33	.35	.37	.38	.40	.41	.42	.43	.43	.43	.44	.44	.44	.44
BKN OVC	OVC	OVC	.20	.22	.24	.26	.28	.30	.32	.34	.36	.37	.39	.40	.41	.42	.43	.43	.43	.43	.43	.43
OVC CLR	CLR	CLR	.26	.29	.32	.35	.38	.41	.43	.45	.47	.49	.50	.52	.53	.54	.55	.55	.56	.56	.56	.56
OVC CLR	SCT	SCT	.25	.29	.32	.35	.38	.40	.43	.45	.47	.49	.50	.52	.53	.54	.55	.55	.56	.56	.56	.56
OVC CLR	BKN	BKN	.24	.27	.30	.33	.36	.39	.41	.44	.46	.48	.49	.51	.52	.53	.54	.54	.55	.55	.55	.55
OVC CLR	OVC	OVC	.23	.26	.29	.32	.35	.38	.40	.42	.44	.46	.48	.49	.51	.52	.53	.53	.54	.54	.54	.54
OVC SCT	CLR	CLR	.24	.27	.30	.33	.36	.38	.41	.43	.45	.47	.48	.50	.51	.52	.52	.53	.54	.54	.54	.54
OVC SCT	SCT	SCT	.23	.27	.30	.33	.35	.38	.41	.43	.45	.47	.48	.50	.51	.52	.52	.53	.54	.54	.54	.54
OVC SCT	BKN	BKN	.22	.25	.28	.31	.34	.37	.39	.42	.44	.46	.47	.49	.50	.51	.52	.52	.53	.53	.53	.53
OVC SCT	OVC	OVC	.22	.25	.27	.30	.33	.36	.38	.40	.42	.44	.46	.48	.49	.51	.52	.52	.53	.53	.53	.53
OVC BKN	CLR	CLR	.21	.24	.27	.29	.32	.35	.38	.41	.43	.45	.47	.48	.50	.51	.52	.53	.54	.54	.54	.54
OVC BKN	SCT	SCT	.20	.23	.26	.29	.32	.34	.37	.39	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.50	.50
OVC BKN	BKN	BKN	.19	.22	.25	.28	.31	.34	.37	.39	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.50	.50
OVC BKN	OVC	OVC	.19	.22	.24	.27	.30	.33	.36	.38	.40	.42	.44	.46	.48	.49	.50	.51	.52	.52	.53	.53
OVC OVC	CLR	CLR	.15	.17	.19	.21	.23	.24	.26	.28	.29	.29	.30	.32	.33	.34	.34	.35	.36	.36	.36	.36
OVC OVC	SCT	SCT	.15	.17	.19	.21	.22	.24	.24	.26	.28	.29	.30	.32	.33	.34	.34	.35	.36	.36	.36	.36
OVC OVC	BKN	BKN	.14	.16	.18	.20	.22	.24	.24	.25	.27	.28	.30	.31	.32	.33	.34	.34	.35	.35	.36	.36
OVC OVC	OVC	OVC	.14	.16	.17	.19	.21	.23	.23	.25	.26	.28	.29	.30	.31	.32	.33	.34	.35	.35	.36	.36

TABLE B-2 SOLAR TRANSMISSION (τ)

THIN HIGH CLOUD
HIGH ALBEDO
VIS < 11 KM

STATE 1-2-2

COS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR	CLR	CLR	.45	.49	.54	.58	.61	.65	.68	.71	.73	.75	.77	.78	.79	.79	.80	.80	.80	.80	.80
		SCT	.40	.44	.48	.52	.56	.60	.63	.66	.69	.71	.73	.75	.76	.77	.78	.78	.78	.78	.78
		BKN	.36	.40	.43	.47	.50	.54	.57	.59	.62	.64	.66	.67	.68	.69	.70	.70	.70	.70	.70
		OVC	.28	.31	.33	.36	.39	.42	.45	.48	.50	.52	.54	.56	.58	.59	.60	.61	.61	.61	.61
CLR	SCT	CLR	.38	.42	.46	.50	.54	.57	.60	.63	.66	.68	.70	.71	.73	.74	.74	.75	.75	.75	.75
		SCT	.34	.38	.42	.46	.50	.53	.57	.60	.62	.65	.67	.69	.70	.72	.72	.73	.73	.73	.73
		BKN	.31	.35	.38	.42	.45	.48	.51	.54	.56	.59	.61	.62	.63	.64	.65	.66	.66	.66	.66
		OVC	.24	.27	.30	.33	.36	.38	.41	.44	.46	.48	.51	.52	.54	.55	.56	.58	.58	.58	.58
CLR	BKN	CLR	.30	.34	.37	.40	.43	.46	.49	.52	.54	.56	.57	.59	.60	.61	.61	.61	.61	.61	.61
		SCT	.27	.31	.34	.37	.40	.43	.46	.49	.51	.54	.55	.57	.58	.59	.60	.60	.60	.60	.60
		BKN	.25	.28	.31	.34	.37	.40	.42	.45	.47	.49	.51	.52	.53	.54	.55	.55	.55	.55	.55
		OVC	.20	.22	.25	.27	.30	.32	.35	.37	.39	.41	.43	.45	.46	.47	.48	.49	.49	.49	.49
CLR	OVC	CLR	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.31	.32	.33	.33	.34	.34	.34	.34	.34
		SCT	.17	.18	.20	.21	.23	.25	.26	.27	.28	.30	.31	.31	.32	.33	.33	.34	.34	.34	.34
		BKN	.15	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.30	.31	.31	.31	.31	.31	.31
		OVC	.13	.14	.16	.17	.18	.20	.21	.22	.23	.25	.26	.26	.27	.28	.28	.29	.29	.29	.29
SCT	CLR	CLR	.37	.41	.45	.49	.52	.56	.59	.62	.65	.67	.69	.71	.72	.73	.74	.76	.76	.76	.76
		SCT	.33	.37	.41	.45	.48	.52	.55	.59	.61	.64	.66	.68	.70	.71	.73	.74	.74	.74	.74
		BKN	.30	.33	.37	.40	.44	.47	.50	.53	.55	.58	.60	.62	.63	.64	.65	.66	.66	.66	.66
		OVC	.23	.26	.29	.32	.35	.37	.40	.43	.45	.48	.50	.52	.54	.55	.56	.58	.58	.58	.58
SCT	SCT	CLR	.32	.36	.39	.43	.47	.50	.53	.56	.59	.61	.63	.65	.67	.68	.69	.71	.71	.71	.72
		SCT	.29	.32	.36	.40	.43	.47	.50	.53	.56	.59	.61	.63	.65	.67	.68	.70	.70	.70	.71
		BKN	.26	.30	.33	.36	.39	.42	.45	.48	.51	.53	.55	.57	.59	.60	.61	.62	.62	.63	.63
		OVC	.21	.23	.26	.29	.31	.34	.37	.39	.42	.44	.47	.49	.50	.52	.53	.55	.55	.55	.55
SCT	BKN	CLR	.26	.29	.32	.35	.38	.41	.44	.46	.49	.51	.53	.54	.56	.57	.58	.59	.59	.59	.59
		SCT	.23	.26	.30	.33	.36	.39	.42	.44	.47	.49	.51	.53	.54	.56	.57	.58	.58	.58	.58
		BKN	.21	.24	.27	.30	.33	.36	.38	.41	.43	.45	.47	.48	.50	.51	.52	.52	.52	.52	.52
		OVC	.17	.20	.22	.24	.27	.29	.32	.34	.36	.38	.40	.42	.43	.45	.46	.47	.47	.47	.47
SCT	OVC	CLR	.16	.17	.19	.21	.22	.23	.25	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.33	.33
		SCT	.15	.16	.18	.19	.21	.22	.24	.25	.27	.28	.29	.30	.31	.31	.32	.32	.32	.32	.32
		BKN	.14	.15	.17	.18	.20	.21	.22	.24	.25	.26	.27	.28	.29	.29	.30	.30	.30	.30	.30
		OVC	.11	.13	.14	.15	.17	.18	.19	.21	.22	.23	.24	.25	.26	.27	.27	.28	.28	.28	.28

STATE 2-1-1

 THICK HIGH CLOUD
 LOW ALBEDO
 VIS > 11 KM
 TABLE B-2 SOLAR TRANSMISSION (τ)

COS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN	CLR	CLR	.30	.33	.36	.39	.42	.45	.48	.50	.52	.54	.55	.57	.58	.59	.60	.61	.61	.61	.61
	SCT	SCT	.27	.30	.33	.36	.39	.42	.45	.47	.50	.52	.54	.55	.56	.58	.59	.60	.60	.60	.60
	BKN	BKN	.25	.27	.30	.33	.36	.38	.41	.43	.45	.47	.49	.50	.52	.52	.53	.54	.54	.54	.54
	OVC	OVC	.19	.22	.24	.26	.29	.31	.33	.36	.38	.40	.42	.43	.45	.46	.47	.48	.48	.48	.48
BKN	SCT	CLR	.26	.29	.32	.35	.38	.41	.43	.46	.48	.50	.51	.53	.54	.55	.56	.57	.58	.58	.58
	SCT	SCT	.24	.27	.30	.33	.36	.38	.41	.43	.46	.48	.50	.51	.53	.54	.55	.56	.57	.57	.57
	BKN	BKN	.22	.25	.27	.30	.33	.35	.38	.40	.42	.44	.46	.47	.48	.50	.50	.51	.51	.52	.52
	OVC	OVC	.17	.20	.22	.24	.26	.29	.31	.33	.35	.37	.39	.41	.42	.43	.44	.45	.46	.46	.46
BKN	BKN	CLR	.22	.24	.27	.29	.32	.34	.37	.39	.41	.42	.44	.45	.46	.47	.48	.49	.49	.49	.49
	SCT	SCT	.20	.22	.25	.27	.30	.32	.35	.37	.39	.41	.42	.44	.45	.46	.47	.48	.48	.48	.48
	BKN	BKN	.18	.21	.23	.25	.28	.30	.32	.34	.36	.38	.39	.41	.42	.43	.43	.44	.44	.44	.44
	OVC	OVC	.15	.17	.19	.21	.23	.25	.27	.29	.31	.32	.34	.35	.37	.38	.39	.39	.40	.40	.40
BKN	OVC	CLR	.14	.15	.17	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.29	.29	.29	.29
	SCT	SCT	.13	.14	.16	.17	.18	.20	.21	.22	.23	.24	.25	.26	.26	.27	.28	.28	.28	.29	.29
	BKN	BKN	.12	.13	.15	.16	.17	.18	.20	.21	.22	.23	.24	.24	.25	.26	.26	.27	.27	.27	.27
	OVC	OVC	.10	.11	.12	.13	.15	.16	.17	.18	.19	.20	.21	.22	.23	.23	.24	.24	.25	.25	.25
OVC	CLR	CLR	.13	.15	.17	.18	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.34
	SCT	SCT	.12	.14	.15	.17	.19	.20	.22	.24	.25	.26	.28	.29	.30	.31	.31	.32	.33	.33	.33
	BKN	BKN	.11	.13	.14	.16	.18	.19	.21	.22	.23	.25	.26	.27	.28	.29	.29	.30	.30	.30	.31
	OVC	OVC	.09	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.26	.27	.28	.28	.28
OVC	SCT	CLR	.12	.14	.15	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.32	.33
	SCT	SCT	.11	.13	.14	.16	.18	.19	.21	.22	.24	.25	.26	.27	.28	.29	.30	.31	.31	.32	.32
	BKN	BKN	.10	.12	.13	.15	.16	.18	.19	.21	.22	.23	.24	.26	.27	.27	.28	.29	.29	.30	.30
	OVC	OVC	.08	.10	.11	.12	.14	.15	.17	.18	.19	.20	.22	.23	.24	.25	.25	.26	.27	.27	.27
OVC	BKN	CLR	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.29	.29
	SCT	SCT	.09	.11	.12	.14	.16	.17	.18	.20	.21	.22	.23	.24	.25	.26	.27	.27	.28	.28	.28
	BKN	BKN	.09	.10	.12	.13	.14	.16	.17	.19	.20	.21	.22	.23	.24	.24	.25	.26	.26	.26	.26
	OVC	OVC	.07	.08	.10	.11	.12	.14	.15	.16	.17	.18	.20	.21	.21	.22	.23	.23	.24	.24	.24
OVC	OVC	CLR	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.17	.17	.18	.18	.19	.19	.19	.19
	SCT	SCT	.07	.08	.09	.10	.11	.11	.12	.13	.14	.15	.16	.16	.17	.17	.18	.18	.18	.19	.19
	BKN	BKN	.06	.07	.08	.09	.10	.11	.12	.13	.13	.14	.15	.15	.16	.16	.17	.17	.17	.18	.18
	OVC	OVC	.05	.06	.07	.08	.09	.09	.10	.11	.12	.13	.13	.14	.15	.15	.16	.16	.16	.16	.17

TABLE B-2 SOLAR TRANSMISSION (T)

THICK HIGH CLOUD
LOW ALBEDO
VIS ≥ 11 KM

STATE 2-1-1

COS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR	CLR	CLR	.38	.42	.45	.49	.52	.56	.59	.62	.64	.66	.68	.70	.71	.72	.72	.73	.73	.73	.73
		SCT	.34	.37	.41	.45	.48	.52	.55	.58	.61	.63	.66	.67	.69	.70	.71	.71	.71	.71	.71
		BKN	.30	.34	.37	.40	.44	.47	.50	.52	.55	.57	.59	.61	.62	.63	.63	.64	.64	.64	.64
		OVC	.24	.26	.29	.32	.34	.37	.40	.42	.45	.47	.49	.51	.53	.54	.55	.55	.56	.56	.56
CLR	SCT	CLR	.32	.36	.40	.43	.46	.50	.53	.56	.58	.60	.63	.64	.66	.67	.68	.68	.68	.68	.68
		SCT	.29	.33	.36	.40	.43	.46	.50	.53	.55	.58	.60	.62	.64	.65	.66	.67	.67	.67	.67
		BKN	.27	.30	.33	.36	.39	.42	.45	.48	.50	.52	.54	.56	.58	.59	.60	.60	.60	.60	.60
		OVC	.21	.23	.26	.28	.31	.34	.36	.39	.41	.44	.46	.48	.49	.51	.52	.52	.53	.53	.53
CLR	BKN	CLR	.26	.29	.32	.35	.38	.41	.43	.46	.48	.50	.52	.53	.55	.55	.56	.56	.56	.56	.56
		SCT	.24	.26	.29	.32	.35	.38	.41	.44	.46	.48	.50	.52	.53	.54	.55	.55	.55	.55	.55
		BKN	.22	.24	.27	.30	.32	.35	.38	.40	.42	.44	.46	.47	.49	.50	.50	.50	.50	.50	.50
		OVC	.17	.20	.22	.24	.26	.29	.31	.33	.35	.37	.39	.41	.42	.43	.44	.45	.45	.45	.45
CLR	OVC	CLR	.16	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.30	.31	.31	.31	.32	.32	.32
		SCT	.15	.16	.18	.19	.21	.22	.23	.25	.26	.27	.28	.29	.30	.30	.31	.31	.31	.31	.31
		BKN	.14	.15	.16	.18	.19	.21	.22	.23	.24	.25	.26	.27	.28	.28	.29	.29	.29	.29	.29
		OVC	.11	.13	.14	.15	.16	.18	.19	.20	.21	.22	.23	.24	.25	.26	.26	.27	.27	.27	.27
SCT	CLR	CLR	.31	.35	.38	.42	.45	.49	.52	.55	.57	.60	.62	.64	.66	.67	.68	.69	.69	.69	.69
		SCT	.28	.32	.35	.39	.42	.45	.49	.52	.55	.57	.60	.62	.64	.65	.66	.66	.68	.68	.68
		BKN	.25	.29	.32	.35	.38	.41	.44	.47	.49	.52	.54	.56	.57	.59	.60	.61	.61	.61	.61
		OVC	.20	.23	.25	.28	.30	.33	.36	.38	.41	.43	.45	.47	.49	.51	.52	.53	.53	.53	.53
SCT	SCT	CLR	.27	.31	.34	.37	.41	.44	.47	.50	.52	.55	.57	.59	.61	.62	.64	.64	.65	.65	.65
		SCT	.25	.28	.31	.35	.38	.41	.44	.47	.50	.53	.55	.57	.59	.61	.62	.63	.64	.64	.64
		BKN	.23	.26	.28	.31	.34	.37	.40	.43	.46	.48	.50	.52	.54	.55	.56	.57	.57	.57	.57
		OVC	.18	.20	.23	.25	.28	.30	.33	.35	.38	.40	.42	.44	.46	.48	.49	.50	.51	.51	.51
SCT	BKN	CLR	.22	.25	.28	.31	.34	.36	.39	.41	.44	.46	.48	.50	.51	.52	.53	.54	.54	.54	.54
		SCT	.20	.23	.26	.29	.31	.34	.37	.40	.42	.44	.46	.48	.50	.51	.52	.53	.53	.53	.53
		BKN	.19	.21	.24	.26	.29	.32	.34	.36	.39	.41	.43	.44	.46	.47	.48	.48	.48	.48	.48
		OVC	.15	.17	.19	.22	.24	.26	.28	.30	.33	.35	.37	.38	.40	.41	.42	.43	.43	.43	.43
SCT	OVC	CLR	.14	.15	.17	.18	.20	.21	.23	.24	.25	.26	.27	.28	.29	.30	.30	.31	.31	.31	.31
		SCT	.13	.14	.16	.17	.19	.20	.22	.23	.24	.25	.27	.28	.28	.29	.30	.30	.30	.30	.30
		BKN	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.28	.28	.28
		OVC	.10	.11	.13	.14	.15	.16	.18	.19	.20	.21	.22	.23	.24	.25	.25	.26	.26	.26	.26

STATE 2-1-2

THICK HIGH CLOUD
LOW ALBEDO
VIS < 11 KM

TABLE B-2 SOLAR TRANSMISSION (T)

		COS Z																			
LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN	CLR	CLR	.26	.29	.32	.35	.37	.40	.42	.45	.47	.49	.51	.52	.54	.55	.55	.56	.56	.57	.57
	SCT	SCT	.23	.26	.29	.32	.35	.38	.40	.43	.45	.47	.49	.51	.52	.53	.54	.55	.55	.56	.56
	BKN	BKN	.21	.24	.27	.29	.32	.34	.37	.39	.41	.43	.45	.46	.48	.49	.49	.50	.50	.50	.50
	OVC	OVC	.17	.19	.21	.23	.26	.28	.30	.32	.34	.36	.38	.40	.41	.43	.43	.44	.45	.45	.45
BKN	SCT	CLR	.23	.26	.28	.31	.34	.36	.39	.41	.43	.45	.47	.49	.50	.51	.52	.53	.54	.54	.54
	SCT	SCT	.21	.24	.26	.29	.32	.34	.37	.39	.42	.44	.46	.47	.49	.50	.51	.52	.53	.53	.53
	BKN	BKN	.19	.22	.24	.27	.29	.31	.34	.36	.38	.40	.42	.43	.45	.46	.47	.48	.48	.48	.48
	OVC	OVC	.15	.17	.19	.22	.24	.26	.28	.30	.32	.34	.36	.38	.39	.40	.41	.42	.43	.43	.43
BKN	CLR	CLR	.19	.21	.24	.26	.29	.31	.33	.35	.37	.39	.40	.42	.43	.44	.45	.45	.46	.46	.46
	SCT	SCT	.17	.20	.22	.24	.27	.29	.31	.34	.36	.37	.39	.41	.42	.43	.44	.44	.45	.45	.45
	BKN	BKN	.16	.18	.20	.23	.25	.27	.29	.31	.33	.35	.36	.38	.39	.40	.40	.41	.41	.41	.41
	OVC	OVC	.13	.15	.17	.19	.21	.22	.24	.26	.28	.30	.31	.33	.34	.35	.36	.37	.37	.37	.37
BKN	OVC	CLR	.12	.14	.15	.16	.17	.19	.20	.21	.22	.23	.24	.25	.25	.26	.27	.27	.27	.27	.27
	SCT	SCT	.11	.13	.14	.15	.17	.18	.19	.20	.21	.22	.23	.24	.25	.26	.26	.27	.27	.27	.27
	BKN	BKN	.11	.12	.13	.14	.16	.17	.18	.19	.20	.21	.22	.23	.24	.24	.25	.25	.25	.25	.25
	OVC	OVC	.09	.10	.11	.12	.13	.15	.16	.17	.18	.19	.20	.21	.22	.23	.23	.23	.23	.23	.23
OVC	CLR	CLR	.13	.15	.17	.18	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.32	.32	.33	.33	.34
	SCT	SCT	.12	.14	.15	.17	.19	.20	.22	.24	.25	.26	.28	.29	.30	.31	.31	.32	.33	.33	.33
	BKN	BKN	.11	.13	.14	.16	.18	.19	.21	.22	.23	.25	.26	.27	.28	.29	.29	.30	.30	.30	.30
	OVC	OVC	.09	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.26	.27	.28	.28	.28
OVC	SCT	CLR	.12	.14	.15	.17	.19	.20	.22	.23	.24	.26	.27	.28	.29	.30	.31	.31	.32	.32	.33
	SCT	SCT	.11	.13	.14	.16	.18	.19	.21	.22	.24	.25	.26	.27	.28	.29	.30	.31	.31	.32	.32
	BKN	BKN	.10	.12	.13	.15	.16	.18	.19	.21	.22	.23	.24	.26	.27	.27	.28	.29	.29	.29	.30
	OVC	OVC	.08	.10	.11	.12	.14	.15	.17	.18	.19	.20	.22	.23	.24	.25	.25	.26	.27	.27	.27
OVC	BKN	CLR	.10	.12	.13	.15	.16	.18	.19	.20	.22	.23	.24	.25	.26	.27	.27	.28	.28	.29	.29
	SCT	SCT	.09	.11	.12	.14	.16	.17	.18	.20	.21	.22	.23	.24	.25	.26	.27	.27	.28	.28	.28
	BKN	BKN	.09	.10	.12	.13	.14	.16	.17	.19	.20	.21	.22	.23	.24	.24	.25	.26	.26	.26	.26
	OVC	OVC	.07	.08	.10	.11	.12	.14	.15	.16	.17	.18	.20	.21	.22	.23	.24	.24	.24	.24	.24
OVC	CLR	CLR	.07	.08	.09	.10	.11	.12	.13	.14	.14	.15	.16	.17	.17	.18	.18	.19	.19	.19	.19
	SCT	SCT	.07	.08	.09	.10	.11	.11	.12	.13	.14	.15	.16	.16	.17	.17	.18	.18	.18	.19	.19
	BKN	BKN	.06	.07	.08	.09	.10	.11	.12	.13	.13	.14	.15	.15	.16	.16	.17	.17	.17	.18	.18
	OVC	OVC	.05	.06	.07	.08	.09	.09	.10	.11	.12	.13	.13	.14	.15	.15	.16	.16	.16	.16	.17

TABLE 8-2 SOLAR TRANSMISSION (τ)

THICK HIGH CLOUD
LOW ALBEDO
VIS < 11 KM

STATE 2-1-2

CDS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR	CLR	CLR	.54	.58	.62	.66	.69	.72	.74	.77	.79	.80	.82	.83	.84	.84	.84	.84	.85	.85	.85
		SCT	.49	.53	.57	.61	.65	.68	.71	.74	.76	.78	.80	.81	.82	.83	.83	.83	.84	.84	.84
		BKN	.45	.49	.53	.57	.60	.64	.67	.69	.72	.74	.75	.77	.78	.78	.79	.79	.79	.79	.79
		OVC	.36	.40	.43	.47	.51	.54	.57	.60	.63	.65	.67	.69	.71	.72	.73	.73	.73	.73	.73
CLR	SCT	CLR	.48	.53	.57	.61	.64	.67	.70	.73	.75	.77	.78	.80	.81	.81	.82	.82	.82	.82	.82
		SCT	.44	.49	.53	.57	.61	.64	.67	.70	.73	.75	.77	.78	.79	.80	.81	.81	.81	.81	.81
		BKN	.41	.45	.49	.53	.56	.60	.63	.66	.68	.70	.72	.74	.75	.76	.76	.77	.77	.77	.77
		OVC	.33	.37	.40	.44	.47	.51	.54	.57	.60	.63	.65	.67	.68	.70	.70	.71	.71	.71	.71
CLR	BKN	CLR	.41	.45	.49	.53	.56	.60	.63	.65	.67	.69	.71	.72	.73	.74	.75	.75	.75	.75	.75
		SCT	.38	.42	.46	.50	.54	.57	.60	.63	.66	.68	.70	.71	.72	.73	.74	.74	.74	.74	.74
		BKN	.35	.39	.43	.46	.50	.53	.56	.59	.62	.64	.66	.67	.68	.69	.70	.70	.70	.70	.70
		OVC	.29	.32	.35	.39	.42	.46	.49	.52	.54	.57	.59	.61	.62	.64	.65	.65	.65	.65	.65
CLR	OVC	CLR	.27	.30	.33	.35	.38	.40	.43	.45	.47	.48	.50	.51	.52	.53	.53	.54	.54	.54	.54
		SCT	.26	.28	.31	.34	.36	.39	.41	.43	.45	.47	.49	.50	.51	.52	.53	.53	.53	.53	.53
		BKN	.24	.26	.29	.32	.34	.37	.39	.41	.43	.45	.46	.48	.49	.50	.50	.50	.50	.50	.50
		OVC	.20	.22	.25	.27	.30	.32	.34	.37	.39	.41	.42	.44	.45	.46	.47	.47	.47	.47	.47
SCT	CLR	CLR	.49	.53	.57	.61	.65	.68	.70	.73	.75	.77	.78	.80	.81	.82	.82	.83	.83	.83	.83
		SCT	.45	.49	.53	.57	.61	.64	.68	.70	.73	.75	.77	.78	.80	.81	.81	.82	.82	.82	.82
		BKN	.41	.45	.49	.53	.57	.60	.63	.66	.68	.71	.72	.74	.75	.76	.77	.77	.77	.77	.77
		OVC	.33	.37	.40	.44	.47	.51	.54	.57	.60	.63	.65	.67	.68	.70	.71	.71	.72	.72	.72
SCT	SCT	CLR	.44	.49	.53	.57	.60	.63	.66	.69	.71	.73	.75	.77	.78	.79	.80	.80	.81	.81	.81
		SCT	.41	.45	.49	.53	.57	.60	.64	.67	.69	.72	.74	.75	.77	.78	.79	.79	.80	.80	.80
		BKN	.37	.41	.45	.49	.53	.56	.60	.63	.65	.67	.69	.71	.72	.74	.74	.75	.75	.75	.75
		OVC	.30	.34	.38	.41	.45	.48	.51	.54	.57	.60	.62	.64	.66	.67	.69	.69	.70	.70	.70
SCT	BKN	CLR	.38	.42	.46	.49	.53	.56	.59	.62	.64	.66	.68	.70	.71	.72	.73	.73	.73	.73	.73
		SCT	.35	.39	.43	.47	.50	.54	.57	.60	.63	.65	.67	.69	.70	.71	.72	.72	.73	.73	.73
		BKN	.32	.36	.40	.43	.47	.50	.53	.56	.59	.61	.63	.65	.66	.67	.68	.68	.69	.69	.69
		OVC	.26	.30	.33	.36	.40	.43	.46	.49	.52	.55	.57	.59	.60	.62	.63	.63	.64	.64	.64
SCT	OVC	CLR	.26	.28	.31	.33	.36	.38	.40	.43	.44	.46	.48	.49	.50	.51	.52	.52	.52	.52	.52
		SCT	.24	.26	.29	.32	.34	.37	.39	.41	.43	.45	.47	.48	.49	.50	.51	.51	.52	.52	.52
		BKN	.22	.25	.27	.30	.32	.35	.37	.39	.41	.43	.45	.46	.47	.48	.49	.49	.49	.49	.49
		OVC	.19	.21	.23	.26	.28	.30	.33	.35	.37	.39	.40	.42	.43	.44	.45	.46	.46	.46	.46

STATE 2-2-1 THICK HIGH CLOUD
HIGH ALBEDO
VIS => 11 KM

TABLE B-2 SOLAR TRANSMISSION (T)

		COS Z													
		.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70
LOW MID HIGH	CLR	.44	.43	.52	.55	.59	.61	.64	.66	.68	.70	.72	.73	.74	.75
	SCT	.40	.44	.48	.52	.55	.59	.61	.64	.66	.68	.70	.72	.73	.74
	BKN	.37	.41	.45	.48	.52	.55	.57	.60	.62	.64	.66	.68	.69	.70
	OVC	.30	.33	.37	.40	.43	.46	.49	.52	.55	.57	.59	.61	.63	.64
		.75	.76	.77	.78	.79	.80	.81	.82	.83	.84	.85	.86	.87	.88
BKN SCT	CLR	.40	.44	.48	.51	.55	.58	.60	.63	.65	.67	.69	.70	.71	.72
	SCT	.37	.41	.45	.48	.52	.55	.58	.61	.63	.65	.67	.69	.70	.71
	BKN	.34	.38	.41	.45	.48	.51	.54	.57	.59	.62	.63	.65	.66	.67
	OVC	.28	.31	.34	.37	.41	.44	.47	.50	.52	.55	.57	.59	.60	.62
		.74	.75	.76	.77	.78	.79	.80	.81	.82	.83	.84	.85	.86	.87
BKN BKN	CLR	.34	.38	.42	.45	.48	.51	.54	.57	.59	.61	.62	.64	.65	.66
	SCT	.32	.35	.39	.43	.46	.49	.52	.55	.57	.59	.61	.63	.64	.65
	BKN	.29	.33	.36	.40	.43	.46	.49	.51	.54	.56	.58	.59	.60	.61
	OVC	.24	.27	.30	.33	.36	.39	.42	.45	.47	.50	.52	.54	.55	.56
		.59	.60	.61	.62	.63	.64	.65	.66	.67	.68	.69	.70	.71	.72
BKN OVC	CLR	.23	.26	.28	.31	.33	.35	.37	.39	.41	.42	.44	.45	.46	.47
	SCT	.22	.24	.27	.29	.31	.34	.36	.38	.40	.41	.43	.44	.45	.46
	BKN	.20	.23	.25	.27	.30	.32	.34	.36	.38	.39	.41	.42	.43	.44
	OVC	.17	.19	.21	.24	.26	.28	.30	.32	.34	.35	.37	.38	.40	.41
		.48	.49	.50	.51	.52	.53	.54	.55	.56	.57	.58	.59	.60	.61
OVC CLR	CLR	.26	.29	.32	.35	.38	.41	.43	.45	.47	.49	.50	.52	.53	.54
	SCT	.24	.27	.30	.33	.36	.39	.41	.44	.46	.48	.49	.51	.52	.53
	BKN	.22	.25	.28	.31	.34	.36	.39	.41	.43	.45	.47	.48	.49	.50
	OVC	.18	.21	.23	.26	.29	.31	.34	.36	.38	.40	.42	.44	.45	.46
		.57	.58	.59	.60	.61	.62	.63	.64	.65	.66	.67	.68	.69	.70
OVC SCT	CLR	.24	.27	.30	.33	.36	.38	.41	.43	.45	.47	.48	.50	.51	.52
	SCT	.22	.25	.28	.31	.34	.37	.39	.42	.44	.46	.47	.49	.50	.52
	BKN	.20	.23	.26	.29	.32	.34	.37	.39	.41	.43	.45	.46	.48	.49
	OVC	.17	.19	.22	.25	.27	.30	.32	.34	.37	.39	.40	.42	.44	.45
		.49	.50	.51	.52	.53	.54	.55	.56	.57	.58	.59	.60	.61	.62
OVC BKN	CLR	.21	.24	.27	.29	.32	.35	.37	.39	.41	.43	.44	.46	.47	.48
	SCT	.19	.22	.25	.28	.31	.33	.36	.38	.40	.42	.43	.45	.46	.47
	BKN	.18	.21	.23	.26	.29	.31	.34	.36	.38	.39	.41	.43	.44	.45
	OVC	.15	.17	.20	.22	.25	.27	.29	.31	.33	.35	.37	.39	.40	.41
		.44	.45	.46	.47	.48	.49	.50	.51	.52	.53	.54	.55	.56	.57
OVC OVC	CLR	.15	.17	.19	.21	.23	.24	.26	.28	.29	.30	.32	.33	.34	.35
	SCT	.14	.16	.18	.20	.22	.24	.25	.27	.28	.30	.31	.32	.33	.34
	BKN	.13	.15	.17	.19	.21	.22	.24	.26	.27	.28	.30	.31	.32	.33
	OVC	.11	.13	.14	.16	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30
		.32	.33	.34	.35	.36	.37	.38	.39	.40	.41	.42	.43	.44	.45

TABLE B-2 SOLAR TRANSMISSION (T)

THICK HIGH CLOUD
HIGH ALBEDO
VIS > 11 KM

STATE 2-2-1

COS Z

	LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
CLR CLR				.48	.52	.56	.59	.63	.66	.68	.71	.73	.75	.76	.78	.79	.79	.80	.80	.80	.80	.80
SCT				.44	.48	.52	.56	.59	.62	.65	.68	.71	.73	.74	.76	.77	.78	.79	.79	.79	.79	.80
BKN				.40	.44	.48	.51	.55	.58	.61	.64	.66	.68	.70	.71	.73	.73	.74	.74	.74	.74	.74
OVC				.32	.36	.39	.42	.45	.49	.52	.55	.57	.60	.62	.64	.66	.67	.68	.68	.68	.68	.68
CLR SCT				.43	.47	.51	.55	.58	.61	.64	.67	.69	.71	.73	.74	.75	.76	.77	.77	.77	.77	.77
SCT				.40	.44	.48	.51	.55	.58	.61	.64	.67	.69	.71	.73	.74	.75	.76	.76	.76	.76	.76
BKN				.36	.40	.44	.47	.51	.54	.57	.60	.63	.65	.67	.68	.70	.71	.71	.72	.72	.72	.72
OVC				.30	.33	.36	.39	.43	.46	.49	.52	.55	.57	.60	.62	.63	.65	.66	.66	.66	.66	.66
CLR BKN				.37	.40	.44	.47	.51	.54	.57	.59	.62	.64	.66	.67	.68	.69	.70	.70	.70	.70	.70
SCT				.34	.37	.41	.45	.48	.51	.54	.57	.60	.62	.64	.66	.67	.68	.69	.69	.69	.69	.69
BKN				.31	.35	.38	.41	.45	.48	.51	.54	.56	.58	.60	.62	.63	.64	.65	.65	.65	.65	.65
OVC				.26	.29	.32	.35	.38	.41	.44	.47	.49	.52	.54	.56	.57	.59	.60	.60	.60	.60	.60
CLR OVC				.24	.27	.29	.31	.34	.36	.38	.40	.42	.43	.45	.46	.47	.48	.48	.49	.49	.49	.49
SCT				.23	.25	.27	.30	.32	.34	.36	.39	.40	.42	.44	.45	.46	.47	.48	.48	.48	.48	.48
BKN				.21	.23	.26	.28	.30	.32	.34	.36	.38	.40	.42	.43	.44	.45	.46	.46	.46	.46	.46
OVC				.18	.20	.22	.24	.26	.28	.30	.32	.34	.36	.38	.39	.40	.41	.42	.43	.43	.43	.43
SCT CLR				.44	.48	.52	.56	.59	.62	.65	.68	.70	.72	.74	.75	.76	.77	.78	.78	.78	.78	.78
SCT				.40	.44	.48	.52	.56	.59	.62	.65	.68	.70	.72	.73	.75	.76	.77	.77	.77	.77	.77
BKN				.37	.41	.45	.48	.52	.55	.58	.61	.63	.66	.67	.69	.70	.72	.72	.73	.73	.73	.73
OVC				.30	.33	.36	.40	.43	.46	.49	.52	.55	.58	.60	.62	.64	.65	.66	.67	.67	.67	.67
SCT SCT				.40	.44	.48	.51	.55	.58	.61	.64	.66	.68	.70	.72	.73	.74	.75	.76	.76	.76	.76
SCT				.37	.41	.44	.48	.52	.55	.58	.61	.64	.67	.69	.70	.72	.73	.74	.75	.75	.75	.75
BKN				.34	.37	.41	.45	.48	.51	.55	.57	.60	.62	.65	.66	.68	.69	.70	.71	.71	.71	.71
OVC				.27	.31	.34	.37	.40	.44	.47	.50	.53	.55	.58	.60	.61	.63	.64	.65	.65	.65	.65
SCT BKN				.34	.38	.41	.45	.48	.51	.54	.57	.59	.61	.63	.65	.66	.67	.68	.69	.69	.69	.69
SCT				.31	.35	.39	.42	.46	.49	.52	.55	.57	.60	.62	.64	.65	.66	.67	.68	.68	.68	.68
BKN				.29	.32	.36	.39	.43	.46	.49	.51	.54	.56	.58	.60	.61	.63	.63	.64	.64	.64	.64
OVC				.24	.27	.30	.33	.36	.39	.42	.45	.47	.50	.52	.54	.56	.57	.58	.59	.59	.59	.59
SCT OVC				.23	.25	.28	.30	.32	.34	.36	.38	.40	.42	.43	.45	.46	.47	.47	.48	.48	.48	.48
SCT				.21	.24	.26	.28	.31	.33	.35	.37	.39	.41	.43	.44	.45	.46	.47	.48	.48	.48	.48
BKN				.20	.22	.24	.27	.29	.31	.33	.35	.37	.39	.40	.42	.43	.44	.45	.45	.45	.45	.45
OVC				.17	.19	.21	.23	.25	.27	.29	.31	.33	.35	.37	.38	.39	.41	.41	.42	.42	.42	.42

TABLE B-2 SOLAR TRANSMISSION (τ)

THICK HIGH CLOUD
HIGH ALBEDO
VIS < 11 KM

STATE 2-2-2

CDS Z

LOW	MID	HIGH	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95
BKN	CLR	CLR	.40	.44	.48	.51	.54	.57	.60	.62	.64	.66	.68	.69	.70	.71	.72	.72	.72	.72	.72
	SCT	SCT	.37	.40	.44	.48	.51	.54	.57	.60	.62	.64	.66	.68	.69	.70	.71	.72	.72	.72	.72
	BKN	BKN	.34	.37	.41	.44	.48	.51	.53	.56	.58	.60	.62	.64	.65	.66	.67	.67	.67	.67	.67
	OVC	OVC	.27	.30	.34	.37	.40	.43	.46	.49	.51	.53	.56	.58	.59	.60	.61	.62	.62	.62	.62
BKN	SCT	CLR	.36	.40	.44	.47	.50	.53	.56	.59	.61	.63	.65	.66	.68	.69	.69	.70	.70	.70	.70
	SCT	SCT	.33	.37	.41	.44	.48	.51	.54	.57	.59	.61	.63	.65	.66	.68	.69	.69	.70	.70	.70
	BKN	BKN	.31	.34	.38	.41	.44	.48	.50	.53	.56	.58	.60	.61	.63	.64	.65	.65	.65	.65	.65
	OVC	OVC	.25	.28	.31	.34	.37	.40	.43	.46	.49	.51	.53	.55	.57	.58	.59	.59	.61	.61	.61
BKN	CLR	CLR	.31	.35	.38	.41	.44	.47	.50	.53	.55	.57	.59	.60	.61	.62	.63	.64	.64	.64	.64
	SCT	SCT	.29	.32	.36	.39	.42	.45	.48	.51	.53	.55	.57	.59	.60	.61	.62	.63	.63	.63	.63
	BKN	BKN	.27	.30	.33	.36	.39	.42	.45	.48	.50	.52	.54	.56	.57	.58	.59	.59	.59	.59	.59
	OVC	OVC	.22	.25	.28	.31	.33	.36	.39	.42	.44	.46	.49	.50	.52	.53	.54	.55	.55	.55	.55
BKN	OVC	CLR	.21	.24	.26	.28	.30	.32	.34	.36	.38	.39	.40	.42	.43	.44	.44	.45	.45	.45	.45
	SCT	SCT	.20	.22	.24	.27	.29	.31	.33	.35	.37	.38	.40	.41	.42	.43	.44	.44	.45	.45	.45
	BKN	BKN	.19	.21	.23	.25	.27	.29	.31	.33	.35	.36	.38	.39	.40	.41	.42	.42	.42	.42	.42
	OVC	OVC	.16	.18	.19	.21	.23	.25	.27	.29	.31	.33	.34	.36	.37	.38	.39	.39	.40	.40	.40
OVC	CLR	CLR	.26	.29	.32	.35	.38	.41	.43	.45	.47	.49	.50	.52	.53	.54	.55	.56	.56	.57	.57
	SCT	SCT	.24	.27	.30	.33	.36	.39	.41	.44	.46	.48	.49	.51	.52	.53	.54	.55	.56	.56	.56
	BKN	BKN	.22	.25	.28	.31	.34	.36	.39	.41	.43	.45	.47	.48	.49	.50	.51	.52	.52	.53	.53
	OVC	OVC	.18	.21	.23	.26	.29	.31	.34	.36	.38	.40	.42	.44	.45	.46	.47	.48	.49	.49	.49
OVC	SCT	CLR	.24	.27	.30	.33	.36	.38	.41	.43	.45	.47	.48	.50	.51	.52	.53	.54	.55	.55	.55
	SCT	SCT	.22	.25	.28	.31	.34	.37	.39	.42	.44	.46	.47	.49	.50	.52	.53	.54	.54	.55	.55
	BKN	BKN	.20	.23	.26	.29	.32	.34	.37	.39	.41	.43	.45	.46	.48	.49	.50	.51	.51	.52	.52
	OVC	OVC	.17	.19	.22	.25	.27	.30	.32	.34	.37	.39	.40	.42	.44	.45	.46	.47	.48	.48	.48
OVC	BKN	CLR	.21	.24	.27	.29	.32	.35	.37	.39	.41	.43	.44	.46	.47	.48	.49	.49	.50	.50	.51
	SCT	SCT	.19	.22	.25	.28	.31	.33	.36	.38	.40	.42	.43	.45	.46	.47	.48	.49	.50	.50	.50
	BKN	BKN	.18	.21	.23	.26	.29	.31	.34	.36	.38	.39	.41	.43	.44	.45	.46	.47	.47	.47	.47
	OVC	OVC	.15	.17	.20	.22	.25	.27	.29	.31	.33	.35	.37	.39	.40	.41	.42	.43	.44	.44	.44
OVC	OVC	CLR	.15	.17	.19	.21	.23	.24	.26	.28	.29	.30	.32	.33	.34	.34	.35	.36	.36	.36	.37
	SCT	SCT	.14	.16	.18	.20	.22	.24	.25	.27	.28	.30	.31	.32	.33	.34	.35	.35	.36	.36	.36
	BKN	BKN	.13	.15	.17	.19	.21	.22	.24	.26	.27	.28	.30	.31	.32	.32	.33	.34	.34	.34	.34
	OVC	OVC	.11	.13	.14	.16	.18	.20	.21	.23	.24	.26	.27	.28	.29	.30	.31	.31	.32	.32	.32

STATE 2-2-2 THICK HIGH CLOUD HIGH ALBEDO VIS < 11 KM TABLE B-2 SOLAR TRANSMISSION (T)

TABLE B-3. RATIO OF SOLAR IRRADIANCE (W_{SUN}) ON A 10,000 FT GROUND SURFACE TO THAT WHICH WOULD HAVE BEEN OBSERVED IF THE GROUND WERE AT SEA LEVEL

	COS Z									
	.05	.15	.25	.35	.45	.55	.65	.75	.85	.95
Ground Albedo = 0.15										
	1.33	1.28	1.19	1.15	1.12	1.10	1.10	1.09	1.09	1.09
Ground Albedo = 0.80										
	1.28	1.23	1.15	1.12	1.09	1.08	1.07	1.07	1.07	1.07

For ground surfaces with elevations less than 10,000 ft but more than 2,000 ft, interpolate for the corresponding elevation.

Sky Radiation (W_{SKY})

Fig. B-2 consists of nomograms that produce the clear sky radiation as a function of the forecast surface temperature and dewpoint. Four nomograms cover four different ranges of surface temperature.

These nomograms produce values of the clear sky irradiance for terrain near sea level. At high terrain elevation the irradiance values will differ slightly. The differences may be positive or negative and are a function of elevation, temperature, and dewpoint. Correction tables are under development. The approximate maximum values of the difference will be:

<u>Terrain Elevation (km)</u>	<u>Maximum Difference (watts/m²)</u>	<u>Approximate Percentage of Clear Sky Irradiance</u>
1	5	2
2	11	4
3	15	5

Table B-4 provides corrections that are added to the clear sky irradiance values when cloud cover is forecast. The user enters the table with the amount and height above ground level of the two lowest cloud levels forecast to obtain the correction.

The values for the cloud correction in Table B-4 are strictly valid only for terrain near sea level. At high terrain elevations the cloud corrections will be slightly larger. However, the magnitude of the differences will be small (probably less than 10 watts m⁻²) and does not represent a major error. The largest error will occur with low clouds at high terrain elevations. Estimates of the maximum error incurred by using Table B-4 values at high terrain elevations are:

<u>Terrain Elevation (km)</u>	<u>Maximum Error (watts/m²)</u>	<u>Approximate Percentage of Total Cloudy Sky Irradiance</u>
1	5	1.5
2	8	2.0
3	10	3.0

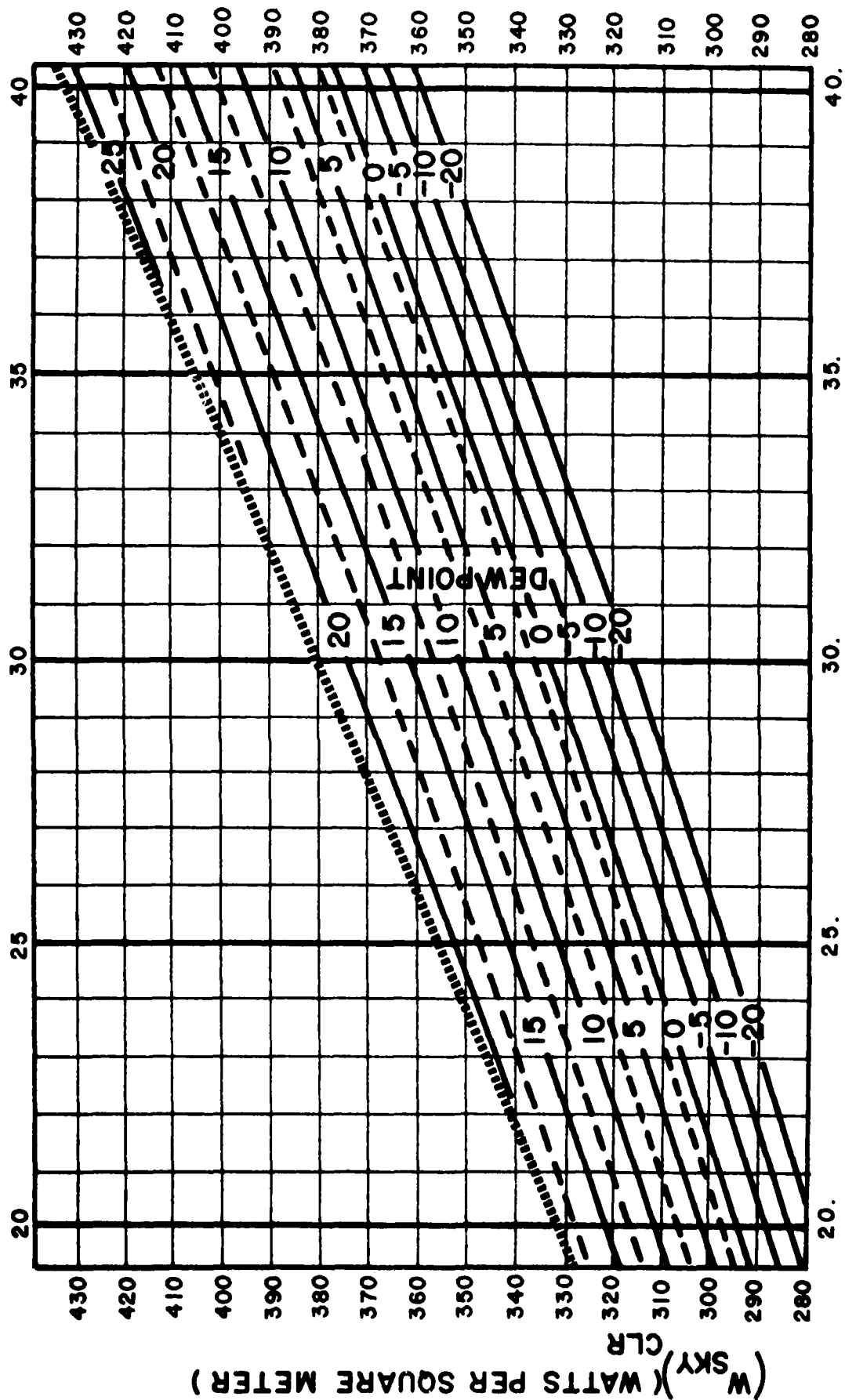


Fig. B-2. Sky Radiation (W_{SKY}) Nomogram

20° to 40° C

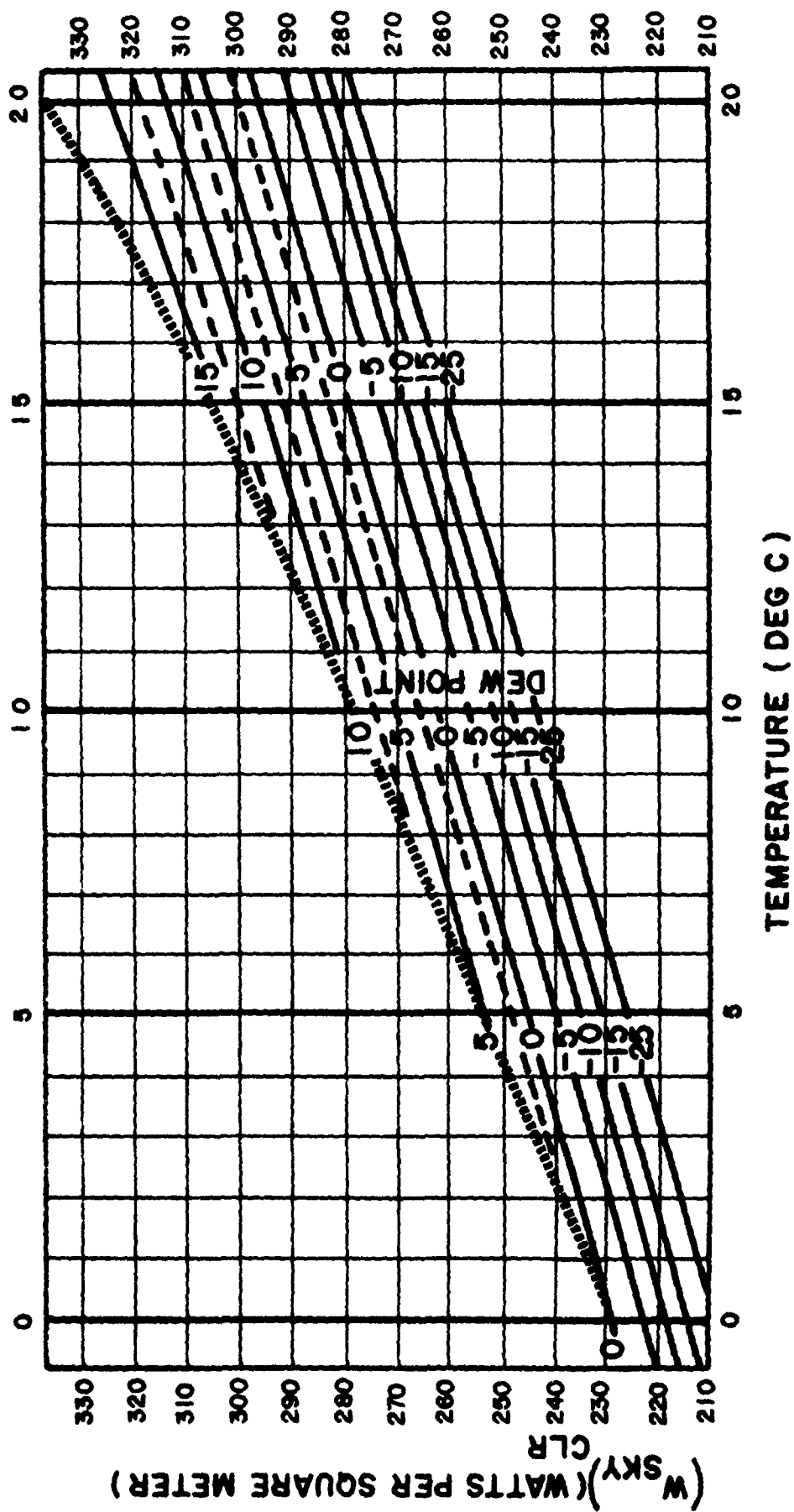


Fig. B-2. (Continued)
0°C to 20°C

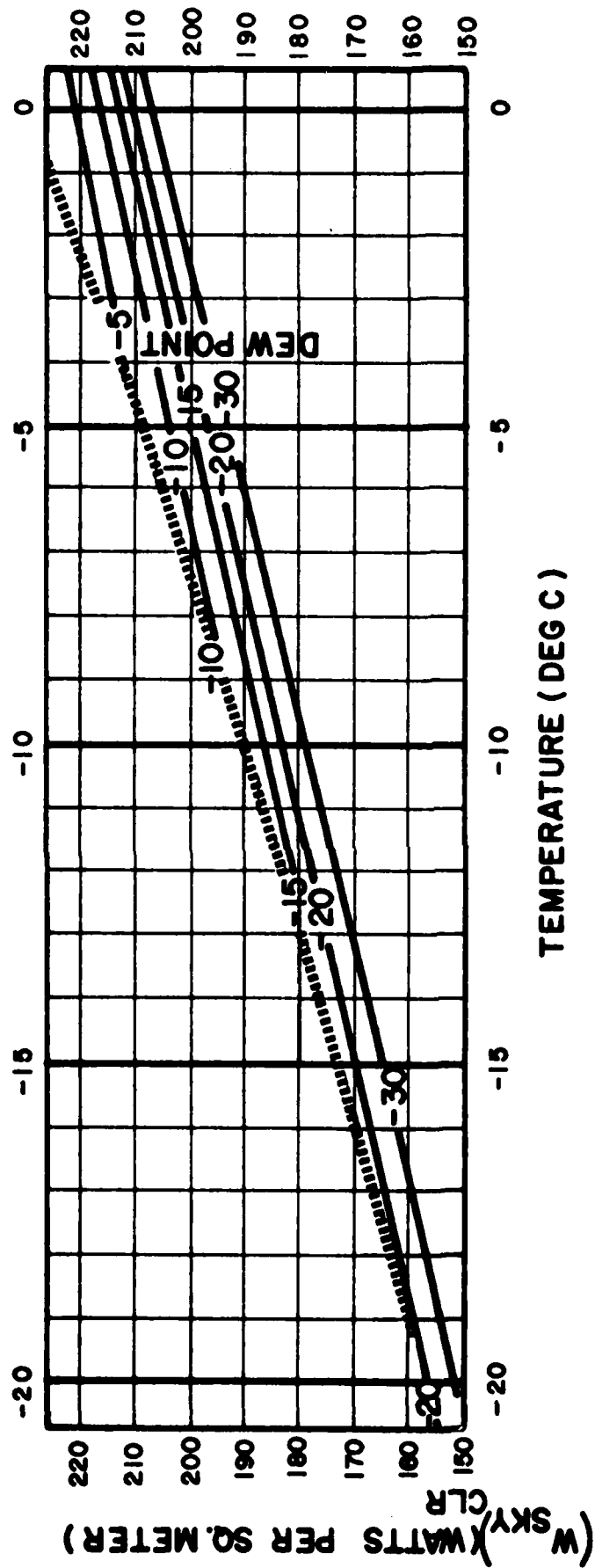


Fig. B-2; (Continued)
-20 °C to 0 °C

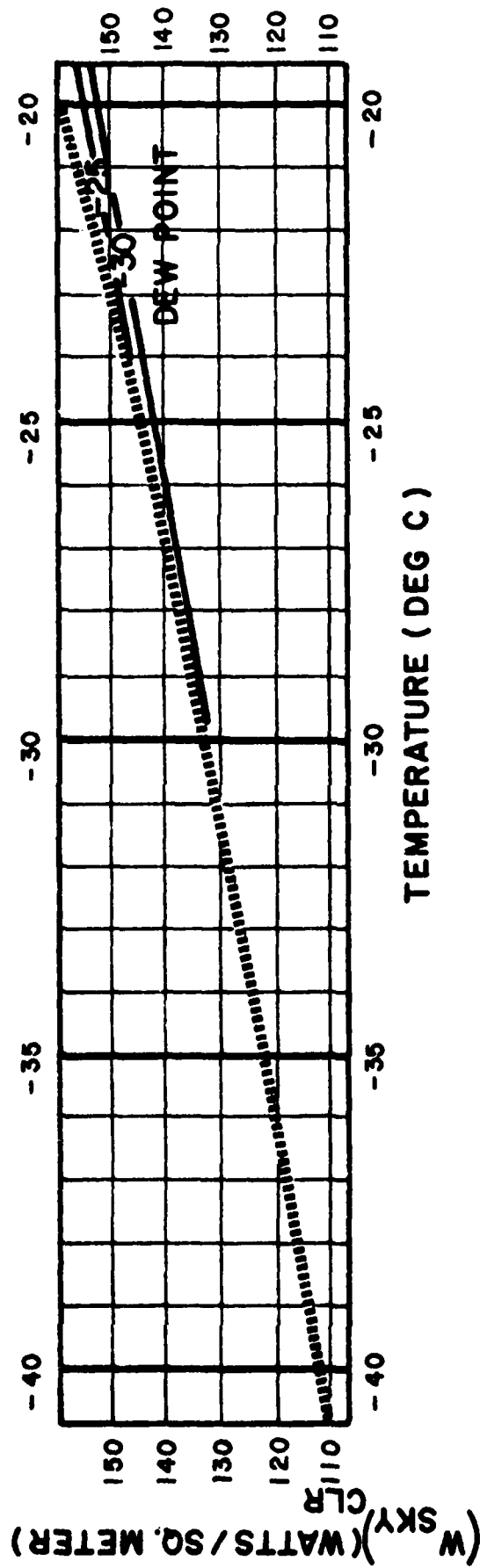


Fig. B-2. (Continued)
-40°C to -20°C

LOWEST CLOUD LEVEL

		Low			Middle			High		
		SCT	BKN	OVC	SCT	BKN	OVC	SCT	BKN	OVC
No Second Level		19	57	76	15	45	60	9	27	35
Second Cloud Level	SCT	31	61	76	—	—	—	—	—	—
	BKN	53	65	76	—	—	—	—	—	—
	OVC	65	72	76	—	—	—	—	—	—
HIGH	SCT	26	59	76	22	47	60	—	—	—
	BKN	39	61	76	35	49	60	—	—	—
	OVC	47	66	76	43	53	60	—	—	—

TABLE B-4. SKY RADIATION (W_{SKY}) CLOUD CORRECTION ($watts\ m^{-2}$)

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