

TABLE III
CALCULATED MODEL FIELDS AT SELECTED SOLAR ZENITH ANGLES

Z	Height (km)	Scale height (km)	Total number density (cm ⁻³)	Relative number density (O)	Relative number density (CO)	T (°K)	u or w ^a (m sec ⁻¹)
Solar zenith angle = 0°							
-8.55	100	3.73	1.14(15)	.0001	.0001	163.5	0.071
-7.20	105	3.78	2.95(14)	.0003	.0003	164.9	0.091
-5.95	110	4.18	7.59(13)	.0007	.0008	182.6	0.118
-4.77	115	4.28	2.30(13)	.0019	.0020	186.7	0.137
-3.59	120	4.21	7.21(12)	.0046	.0047	182.8	0.142
-2.42	125	4.34	2.18(12)	.0096	.0100	186.9	0.146
-1.30	130	4.58	6.83(11)	.0191	.0208	194.9	0.151
-0.24	135	4.86	2.31(11)	.0435	.0509	200.0	0.154
0.72	140	5.51	8.15(10)	.0856	.0942	216.1	0.172
1.55	145	6.45	3.21(10)	.1407	.1333	238.5	0.202
2.26	150	7.52	1.45(10)	.2066	.1633	260.6	0.237
2.88	155	8.58	7.38(9)	.2820	.1841	277.0	0.272
3.42	160	9.63	4.13(9)	.3642	.1959	287.8	0.307
3.90	165	10.68	2.48(9)	.4492	.1989	294.4	0.341
4.34	170	11.74	1.58(9)	.5324	.1940	298.5	0.376
4.75	175	12.77	1.04(9)	.6099	.1829	301.0	0.409
5.12	180	13.76	7.16(8)	.6790	.1676	302.4	0.441
5.47	185	14.65	5.04(8)	.7383	.1499	303.4	0.470
5.80	190	15.44	3.62(8)	.7879	.1315	303.9	0.496
6.11	195	16.10	2.64(8)	.8286	.1136	304.3	0.517
6.41	200	16.65	1.95(8)	.8616	.0970	304.4	0.535
6.71	205	17.09	1.45(8)	.8882	.0821	304.5	0.549
7.00	210	17.44	1.09(8)	.9096	.0689	304.5	0.560
Solar zenith angle = 60°							
-8.51	100	3.64	1.13(15)	.0001	.0001	159.6	33.9
-7.14	105	3.66	2.84(14)	.0003	.0004	160.1	56.3
-5.81	110	3.86	7.13(13)	.0007	.0007	168.8	79.6
-4.54	115	3.97	1.96(14)	.0019	.0020	173.2	102.0
-3.27	120	3.94	5.60(12)	.0050	.0051	170.8	114.0
-2.02	125	4.01	1.58(12)	.0111	.0117	172.3	115.0
-0.80	130	4.19	4.55(11)	.0241	.0277	176.6	113.0
0.34	135	4.65	1.36(11)	.0535	.0616	188.7	110.0
1.32	140	5.50	4.55(10)	.1005	.1013	211.9	111.0
2.14	145	6.56	1.78(10)	.1618	.1351	237.9	115.0
2.84	150	7.61	8.21(9)	.2356	.1607	257.5	120.0
3.45	155	8.61	4.26(9)	.3195	.1772	269.8	123.0
3.99	160	9.60	2.41(9)	.4100	.1848	277.0	126.0
4.48	165	10.62	1.46(9)	.5017	.1838	281.1	128.0
4.93	170	11.65	9.27(8)	.5890	.1753	283.4	130.0
5.33	175	12.66	6.15(8)	.6674	.1613	284.7	131.0
5.71	180	13.60	4.21(8)	.7345	.1442	285.4	132.0
6.06	185	14.43	2.95(8)	.7897	.1258	285.8	132.0
6.40	190	15.13	2.11(8)	.8341	.1078	286.1	133.0
6.72	195	15.69	1.53(8)	.8692	.0910	286.2	133.0
Solar zenith angle = 90°							
-8.50	100	3.65	1.11(15)	.0001	.0002	159.9	32.3
-7.08	105	3.40	2.89(14)	.0003	.0004	149.1	54.5

TABLE III—Continued

Z	Height (km)	Scale height (km)	Total number density (cm ⁻³)	Relative number density (O)	Relative number density (CO)	T (°K)	u or w ^a (m sec ⁻¹)
-5.56	110	3.24	6.66(13)	.0007	.0008	141.9	112.0
-4.04	115	3.36	1.41(13)	.0023	.0025	146.2	165.0
-2.58	120	3.46	3.19(12)	.0071	.0077	149.4	182.0
-1.14	125	3.51	7.63(11)	.0180	.0212	149.1	178.0
0.26	130	3.56	1.91(11)	.0454	.0515	146.1	173.0
1.63	135	3.86	4.76(10)	.1061	.0923	148.6	181.0
2.79	140	4.81	1.33(10)	.2044	.1287	168.7	197.0
3.71	145	5.94	4.80(9)	.3298	.1516	185.5	208.0
4.47	150	7.09	2.13(9)	.4649	.1578	195.2	215.0
5.11	155	8.22	1.09(9)	.5925	.1495	200.1	219.0
5.67	160	9.28	6.14(8)	.7008	.1317	202.4	222.0
6.18	165	10.19	3.68(8)	.7851	.1100	203.5	223.0
6.65	170	10.90	2.39(8)	.8471	.0885	203.9	224.0
Solar zenith angle = 120°							
-8.53	100	3.74	1.12(15)	.0002	.0005	163.9	18.1
-7.19	105	3.67	3.00(14)	.0008	.0010	160.5	22.0
-5.80	110	3.51	7.79(13)	.0014	.0016	153.1	55.6
-4.33	115	3.33	1.91(13)	.0040	.0043	144.5	86.1
-2.78	120	3.14	4.32(12)	.0118	.0129	134.9	92.4
-1.14	125	3.01	9.02(11)	.0311	.0306	126.1	82.6
0.51	130	3.09	1.76(11)	.0725	.0528	123.9	74.5
2.03	135	3.49	3.72(10)	.1690	.0807	127.7	75.2
3.34	140	4.16	9.82(9)	.3372	.1031	130.8	79.4
4.41	145	5.10	3.32(9)	.5445	.1062	131.9	82.3
5.30	150	6.12	1.37(9)	.7205	.0894	132.3	83.9
6.05	155	6.95	6.44(8)	.8383	.0661	132.4	94.7
6.74	160	7.49	3.24(8)	.9075	.0454	132.4	85.0
Solar zenith angle = 180°							
-8.56	100	3.71	1.16(15)	.0003	.0030	162.4	-0.023
-7.25	105	3.86	3.02(14)	.0024	.0037	168.0	-0.039
-5.90	110	3.58	8.55(13)	.0075	.0077	155.4	-0.073
-4.42	115	3.19	2.18(13)	.0156	.0135	137.4	-0.078
-2.76	120	2.91	4.65(12)	.0286	.0206	123.4	-0.066
-0.98	125	2.75	8.47(11)	.0523	.0269	114.3	-0.054
0.83	130	2.81	1.42(11)	.1060	.0353	111.2	-0.049
2.51	135	3.19	2.63(10)	.2475	.0490	112.1	-0.053
3.91	140	3.98	6.44(9)	.4870	.0568	112.8	-0.065
5.01	145	5.08	2.15(9)	.7184	.0494	112.9	-0.083
5.90	150	6.00	8.83(8)	.8612	.0384	113.0	-0.097
6.69	155	6.52	4.01(8)	.9317	.0221	113.0	-0.106

^a Last column gives *u* for $\theta = 60, 90, 120$, and *w* for $\theta = 0, 180$.