Table I
Geopotential Altitude, Metric Units

Geopotential Altitude,						de, Wetric Units	·		
Altit	ude	-	Femperatur	е		Pressure		Den	sity
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P _O	$ ho$ (kg/m 3)	ρ/ρ_{0}
-5000 -4950 -4900	-4996 -4946 -4896	320.650 320.325 320.000	47.500 47.175 46.850	320.650 320.325 320.000	1.7768 + 3 1.7674 1.7580	1.3327 • 3 1.3256 1.3186	1.7536 + 0 1.7443 1.7350	1.9305 • 0 1.9222 1.9139	1.5759 + 0 1.5691 1.5623
-4850	-4846	319.675	46.525	319.675	1.7486	1.3115	1.7257	1.9056	1.5556
-4800	-4796	319.350	46.200	319.350	1.7393	1.3046	1.7165	1.8974 1.8892	1.5489 1.5422
-4750	-4746	319.025	45.875	319.025	1.7300	1.2976 1.2907	1.7074 1.6983	1.8810	1.5355
-4700 -4650	-4697 -4647	318.700 318.375	45.550 45.225	318.700 318.375	1.7208 1.7116	1.2838	1.6892	1.8728	1.5289
-4600	-4597	318.050	44.900	318.050	1.7024	1.2769	1.6801	1.8647	1.5222
-4550	-4547	317.725	44.575	317.725	1.6933	1.2700	1.6711	1.8566	1.5156 1.5090 + 0
-4500	-4497	317.400	44.250 43.925	317.400 317.075	1.6842 + 3 1.6751	1.2632 + 3 1.2564	1.6622 • 0 1.6532	1.8486 + 0 1.8405	1.5090 + 0 1.5025
-4450 -4400	-4447 -4397	317.075 316.750	43.600	316.750	1.6661	1.2497	1.6443	1.8325	1.4959
-4350	-4347	316.425	43.275	316,425	1.6572	1.2430	1.6355	1.8245	1.4894
-4300	-4297	316.100	42.950	316.100	1.6482	1.2363	1.6267	1.8166 1.8086	1.4829 1.4764
-4250 -4200	-4247	315.775 315.450	42.625 42.300	315.775 315.450	1.6394 1.6305	1.2296 1.2230	1.6179 1.6092	1.8007	1.4700
-4200 -4150	-4197 -4147	315.125	41.975	315.125	1.6217	1.2164	1.6005	1.7928	1.4635
-4100	-4097	314.800	41.650	314.800	1.6129	1.2098	1.5918	1.7850	1.4571
-4050	-4047	314.475	41.325	314.475	1.6042	1.2032	1.5832	1.7771	1.4507
-4000	-3997	314.150	41.000	314.150	1.5955 + 3	1.1967 + 3	1.5746 + 0 1.5661	1.7693 • 0 1.7616	1.4444 + 0 1.4380
-3950 -3900	-3948 -3898	313.825 313.500	40.675 40.350	313.825 313.500	1.5868 1.5782	1.1902 1.1837	1.5576	1.7538	1.4317
-3900 -3850	-3848	313.300	40.025	313.175	1.5696	1.1773	1.5491	1.7461	1.4254
-3800	-3798	312.850	39.700	312.850	1.5611	1.1709	1.5407	1.7384	1.4191
-3750	-3748	312.525	39.375	312,525	1.5526	1.1645	1.5323	1.7307	1.4128
-3700	-3698	312.200	39.050	312.200	1.5441	1.1582 1.1519	1.5239 1.5156	1.7231 1.7154	1.4066 1.4004
-3650 -3600	-3648 -3598	311.875 311.550	38.725 38.400	311.875 311.550	1.5357 1.5273	1.1456	1.5073	1.7078	1.3942
-3550	-3548	311.225	38.075	311.225	1.5189	1.1393	1.4991	1.7003	1.3880
-3500	-3498	310.900	37.750	310.900	1.5106 + 3	1.1331 + 3	1.4909 + 0	1.6927 + 0	1.3818 + 0
-3450	-3448	310.575	37.425	310.575	1.5023	1.1268	1.4827 1.4746	1.6852 1.6777	1.3757 1.3696
-3400 -3350	-3398 -3348	310.250 309.925	37.100 36.775	310.250 309.925	1.4941 1.4859	1.1207 1.1145	1.4665	1.6703	1.3635
-3300	-3298	309.600	36.450	309.600	1.4777	1.1084	1.4584	1.6628	1.3574
-3250	-3248	309.275	36.125	309,275	1.4696	1.1023	1.4504	1.6554	1.3513
-3200	-3198	308.950	35.800	308.950	1.4615	1.0962	1.4424	1.6480 1.6406	1.3453 1.3393
-3150	-3148	308.625	35.475 35.150	308.625	1.4534 1.4454	1.0901 1.0841	1.4344 1.4265	1.6333	1.3333
-3100 -3050	-3098 -3049	308.300 307.975	34.825	308.300 307.975	1.4374	1.0781	1.4186	1.6260	1.3273
-3000	-2999	307.650	34.500 34.175	307.650 307.325	1.4295 + 3 1.4215	1.0722 + 3 1.0662	1.4108 + 0 1.4029	1.6187 + 0 1.6114	1.3214 + 0 1.3155
-2950 -2900	-2949 -2899	307.325 307.000	33.850	307.000	1.4136	1.0603	1.3952	1.6042	1.3095
-2850	-2849	306.675	33.525	306.675	1.4058	1.0544	1.3874	1.5970	1.3037
-2800	-2799	306.350	33.200	306,350	1.3980	1.0486	1.3797	1.5898	1.2978
-2750	-2749	306.025	32.875	306.025	1.3902	1.0427 1.0369	1.3720 1.3644	1.5826 1.5755	1.2919 1.2861
-2700 -2650	-2699 -2649	305.700 305.375	32.550 32.225	305.700 305.375	1.3825 1.3748	1.0311	1.3568	1.5684	1.2803
-2600	-2599	305.050	31.900	305.050	1,3671	1.0254	1.3492	1.5613	1.2745
-2550	-2549	304.725	31.575	304.725	1.3594	1.0197	1.3417	1.5542	1.2687
-2500	-2499	304.400	31.250	304.400	1.3518 + 3	1.0140 + 3	1.3342 + 0	1.5472 + 0	1.2630 + 0
-2450	-2449	304.075	30.925	304.075	1.3443	1.0083 1.0026	1.3267 1.3193	1.5401 1.5332	1.2573 1.2516
-2400	-2399 -2349	303.750 303.425	30.600 30.275	303.750 303.425	1.3367 1.3292	9.9705 + 2	1.3119	1.5262	1.2459
-2350 -2300	-2299		29.950	303.100	1.3218	9.9145	1.3045	1.5192	1.2402
-2250	-2249		29.625	302,775	1.3143	9.8587	1.2972	1.5123	1.2345
-2200	-2199	302.450	29.300	302,450	1.3069	9.8032	1.2899	1.5054	1.2289
-2150	-2149		28.975	302.125	1.2996	9.7480	1.2826 1.2753	1.4986 1.4917	1.2233 1.2177
-2100 -2050	-2099 -2 0 49		28.650 28.325	301.800 301.475	1.2922 1.2850	9.6930 9.6383	1.2681	1.4849	1.2121
-2000	-1999		28.000	301.150	1.2777 + 3	9.5838 + 2	1.2610 • 0	1.4781 + 0	1.2066 • 0
-1950	-1949		27.675		1.2705	9.5295	1.2538	1.4713 1.4645	1.2011 1.1955
-1900	-1899		27.350 27.025	300.500	1.2633	9.4755 9.4218	1.2467 1.2397	1.4578	1.1901
-1850 -1800	-1849 -1799		26.700		1.2561 1.2490	9.3683	1.2326	1.4511	1.1846
-1750	-1750		26.375		1.2419	9.3151	1.2256	1.4444	1.1791
-1700	-1700	299.200	26.050	299,200	1.2348	9.2621	1.2186	1.4378	1.1737
-1650	-1650		25.725		1.2278	9.2093	1.2117 1.2048	1.4311 1.4245	1.1683 1.1629
-1600 -1550	-1600 -1550		25.400 25.075		1.2208 1.2138	9.1568 9.1045	1.1979	1.4179	1.1575
-1500	-1500		24.750		1.2069 + 3	9.0525 + 2	1.1911 • 0	1.4114 + 0 1.4048	1.1521 + 0 1.1468
-1450	-1450		24.425		1.2000 1.1931	9.0007 8.9492	1.1843 1.1775	1.3983	1.1415
-1400	-1400 -1350		24.100 23.775		1.1862	8.8979	1.1707	1.3918	1.1362
-1350 -1300	-1300		23.450		1.1794	8.8468	1.1640	1.3853	1.1309
-1250	-1250	296.275	23.125	296,275	1.1727	8.7960	1.1573	1.3789	1.1256
-1200	-1200		22.800		1.1659	8.7454 8.6950	1.1507 1.1440	1.3725 1.3661	1.1204 1.1152
-1150	-1150 -1100		22.475 22.150		1.1592 1.1525	8.6449	1.1374	1.3597	1.1099
-1100 -1050	-1050				1.1459	8.5950	1.1309	1.3533	1.1048

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Table I Geometric Altitude, Metric Units

Alti	tude	7	emperatur	e		Pressure		Den	sity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}
-5000 -4950 -4900 -4850 -4800 -4750 -4750 -4650 -4650 -4550	-5004 -4954 -4904 -4854 -4804 -4754 -4703 -4653 -4603	320.676 320.350 320.025 319.699 319.374 319.048 318.723 318.397 318.072 317.746	47.526 47.200 46.875 46.549 46.224 45.898 45.573 45.247 44.922 44.596	320.676 320.350 320.025 319.699 319.374 319.048 318.723 318.397 318.072 317.746	1.7776 + 3 1.7681 1.7587 1.7493 1.7493 1.7400 1.7307 1.7214 1.7122 1.7030 1.6939	1.3333 · 3 1.3262 1.3191 1.3121 1.3051 1.2981 1.2911 1.2842 1.2773 1.2705	1.7543 • 0 1.7450 1.7357 1.7264 1.7172 1.7080 1.6989 1.6898 1.6807	1.9311 + 0 1.9228 1.9145 1.9062 1.8980 1.8898 1.8816 1.8734 1.8653 1.8572	1.5764 + 0 1.5696 1.5629 1.5561 1.5494 1.5427 1.5360 1.5293 1.5227 1.5160
-4500 -4450 -4400 -4350 -4300 -4250 -4200 -4150 -4100	-4503 -4453 -4403 -4353 -4303 -4253 -4203 -4153 -4103	317.421 317.095 316.770 316.444 316.119 315.793 315.468 315.143 314.817 314.492	44.271 43.945 43.620 43.294 42.969 42.643 42.318 41.993 41.667 41.342	317.421 317.095 316.770 316.444 316.119 315.793 315.468 315.143 314.817 314.492	1.6848 · 3 1.6757 1.6667 1.6577 1.6488 1.6399 1.6310 1.6222 1.6134 1.6046	1.2637 • 3 1.2569 1.2501 1.2434 1.2367 1.2300 1.2233 1.2167 1.2101 1.2036	1.6627 • 0 1.6538 1.6449 1.6360 1.6272 1.6184 1.6097 1.6010 1.5923 1.5837	1.8491 • 0 1.8410 1.8330 1.8250 1.8170 1.8091 1.8011 1.7933 1.7854 1.7775	1.5094 • 0 1.5029 1.4963 1.4898 1.4833 1.4768 1.4703 1.4639 1.4575 1.4511
-4000 -3950 -3900 -3850 -3850 -3750 -3750 -3650 -3650	-4003 -3952 -3902 -3852 -3802 -3752 -3702 -3652 -3602 -3552	314.166 313.841 313.516 313.190 312.865 312.539 312.214 311.889 311.563 311.238	41.016 40.691 40.366 40.040 39.715 39.389 39.064 38.739 38.413 38.088	314.166 313.841 313.516 313.190 312.865 312.539 312.214 311.889 311.563 311.238	1.5959 + 3 1.5873 1.5786 1.57700 1.5615 1.5530 1.5445 1.5360 1.5276 1.5193	1.1970 + 3 1.1905 1.1841 1.1776 1.1712 1.1648 1.1584 1.1521 1.1458 1.1395	1.5751 + 0 1.5665 1.5586 1.55495 1.5411 1.5327 1.5243 1.5160 1.5077 1.4994	1.7697 • 0 1.7619 1.7542 1.7464 1.7387 1.7311 1.7234 1.7158 1.7082 1.7006	1.4447 • 0 1.4383 1.4320 1.4257 1.4194 1.4131 1.4069 1.4006 1.3944 1.3882
-3500 -3450 -3400 -3350 -3300 -3250 -3200 -3150 -3100 -3050	-3502 -3452 -3402 -3352 -3302 -3252 -3202 -3152 -3102 -3051	310.913 310.587 310.262 309.936 309.611 309.286 308.960 308.635 308.310 307.985	37.763 37.437 37.112 36.786 36.461 36.136 35.810 35.485 35.160 34.835	310.913 310.587 310.262 309.936 309.611 309.286 308.960 308.635 308.310 307.985	1.5109 · 3 1.5027 1.4944 1.4862 1.4780 1.4699 1.4617 1.4537 1.4456 1.4376	1.1333 • 3 1.1271 1.1209 1.1147 1.1086 1.1025 1.0964 1.0903 1.0843 1.0783	1.4912 • 0 1.4830 1.4749 1.4667 1.4587 1.4506 1.4426 1.4347 1.4267 1.4188	1.6930 • 0 1.6855 1.6780 1.6705 1.6631 1.6556 1.6482 1.6409 1.6335 1.6262	1.3821 • 0 1.3759 1.3698 1.3637 1.3576 1.3515 1.3455 1.3395 1.3335 1.3275
-3000 -2950 -2900 -2850 -2800 -2750 -2700 -2650 -2650	-3001 -2951 -2901 -2851 -2801 -2751 -2701 -2651 -2601 -2551	307.659 307.334 307.009 306.683 306.358 306.033 305.707 305.382 305.057 304.732	34.509 34.184 33.859 33.533 33.208 32.883 32.557 32.232 31.907 31.582	307.659 307.334 307.009 306.683 306.358 306.033 305.707 305.382 305.057 304.732	1.4297 · 3 1.4217 1.4139 1.4060 1.3982 1.3904 1.3826 1.3749 1.3673 1.3596	1.0723 • 3 1.0664 1.0605 1.0546 1.0487 1.0429 1.0371 1.0313 1.0255	1.4110 • 0 1.4032 1.3954 1.3876 1.3799 1.3722 1.3646 1.3570 1.3494 1.3418	1.6189 + 0 1.6116 1.6044 1.5972 1.5990 1.5828 1.5756 1.5685 1.5614 1.5544	1.3216 • 0 1.3156 1.3097 1.3038 1.2979 1.2921 1.2862 1.2804 1.2746 1.2689
-2500 -2450 -2400 -2350 -2300 -2250 -2200 -2150 -2100 -2050	-2501 -2451 -2401 -2351 -2351 -2251 -2251 -2151 -2101 -2051	304.406 304.081 303.756 303.431 303.105 302.780 302.455 302.130 301.805 301.479	31.256 30.931 30.606 30.281 29.955 29.630 29.305 28.980 28.655 28.329	304.406 304.081 303.756 303.431 303.105 302.780 302.455 302.130 301.805 301.479	1.3520 · 3 1.3444 1.3369 1.3294 1.3219 1.3145 1.3071 1.2997 1.2924	1.0141 • 3 1.0084 1.0027 9.9714 • 2 9.9154 9.8596 9.8041 9.7488 9.6937 9.6390	1.3343 + 0 1.3268 1.3194 1.3120 1.3046 1.2973 1.2900 1.2827 1.2754 1.2682	1.5473 • 0 1.5403 1.55333 1.55263 1.5194 1.5124 1.5055 1.4986 1.4918	1.2631 • 0 1.2574 1.2517 1.2460 1.2403 1.2346 1.2290 1.2234 1.2178
-2000 -1950 -1900 -1850 -1800 -1750 -1700 -1650 -1650	-2001 -1951 -1901 -1851 -1801 -1750 -1700 -1650 -1600	301.154 300.829 300.504 300.179 299.853 299.528 299.203 298.878 298.553 298.227	28.004 27.679 27.354 27.029 26.703 26.378 26.053 25.728 25.403 25.077	301.154 300.829 300.504 300.179 299.853 299.528 299.203 298.878 298.553 298.227	1.2778 · 3 1.2705 1.2633 1.2562 1.2490 1.2419 1.2349 1.2278 1.2208	9.5845 • 2 9.5302 9.4762 9.4224 9.3689 9.3156 9.2625 9.2098 9.1572 9.1049	1.2611 · 0 1.2539 1.2468 1.2397 1.2327 1.2257 1.2187 1.2118 1.2049 1.1980	1.4782 • 0 1.4714 1.4666 1.4579 1.4512 1.4445 1.4378 1.4312 1.4246 1.4180	1.2067 + 0 1.2011 1.1956 1.1901 1.1846 1.1792 1.1737 1.1683 1.1629 1.1575
-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100	-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100	297.902 297.577 297.252 296.927 296.602 296.277 295.951 295.626 295.301	24.752 24.427 24.102 23.777 23.452 23.127 22.801 22.476 22.151 21.826	297.902 297.577 297.252 296.927 296.602 296.277 295.951 295.626 295.301 294.976	1.2069 · 3 1.2000 1.1931 1.1863 1.1795 1.1727 1.1659 1.1592 1.1592 1.1525	9.0529 • 2 9.0011 8.9495 8.88982 8.8471 8.7962 8.7456 8.6952 8.6451 8.5952	1-1911 • 0 1-1843 1-1775 1-1708 1-1640 1-1574 1-1507 1-1441 1-1375 1-1309	1.4114 • 0 1.4049 1.3984 1.3919 1.3854 1.3725 1.3661 1.3597	1.1522 + 0 1.1468 1.1415 1.1362 1.1309 1.1257 1.1204 1.1152 1.1100 1.1048

Table I
Geopotential Altitude, Metric Units

Alti	tude	-	Temperatui	·e	to the second of	Pressure		Dens	sity
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}
-1000 -950 -900 -850 -800 -750 -700 -650	-1000 -950 -900 -850 -800 -750 -700	294.650 294.325 294.000 293.675 293.350 293.025 292.700 292.375	21.500 21.175 20.850 20.525 20.200 19.875 19.550 19.225	294.650 294.325 294.000 293.675 293.350 293.025 292.700 292.375	1.1392 · 3 1.1327 1.1261 1.1196 1.1131 1.1066 1.1002 1.0938	8.5453 • 2 8.4959 8.4467 8.3978 8.3490 8.3005 8.2523 8.2042	1.1243 + 0 1.1178 1.1114 1.1049 1.0985 1.0921 1.0858 1.0795	1.3470 + 0 1.3407 1.3344 1.3281 1.3219 1.3157 1.3095 1.3033	1.0996 + 0 1.0944 1.0893 1.0842 1.0791 1.0740 1.0690 1.0639
-600 -550	-600 -550	292.050 291.725	18.900 18.575	292.050 291.725	1.0874 1.0810	8.1564 8.1088	1.0732 1.0669	1.2971 1.2910	1.0589 1.0539
-500 -450 -400 -350 -300 -250 -200 -150 -100	-500 -450 -400 -350 -300 -250 -250 -150 -100	291.400 291.075 290.750 290.425 290.100 289.775 289.450 289.125 288.800 288.475	18.250 17.925 17.600 17.275 16.950 16.625 16.300 15.975 15.650	291.400 291.075 290.750 290.425 290.100 289.775 289.450 289.125 288.800 288.475	1.0747 • 3 1.0684 1.0622 1.0560 1.0498 1.0436 1.0375 1.0313 1.0253	8.0614 • 2 8.0143 7.9674 7.9207 7.8742 7.8279 7.7819 7.7361 7.6905 7.6451	1.0607 • 0 1.0545 1.0483 1.0421 1.0360 1.0299 1.0179 1.0119 1.0119	1.2849 • 0 1.2788 1.2727 1.2667 1.2607 1.2547 1.2487 1.2427 1.2368 1.2309	1.0489 • 0 1.0439 1.0390 1.0340 1.0291 1.0242 1.0193 1.0145 1.0096
0	0	288.150	15.000	288.150	1.01325 + 3	7.60000 + 2	1.00000 + 0	1.2250 + 0	1.0000 • 0
50 100 150 200 250 300 350 400 450	50 100 150 200 250 300 350 400	287.825 287.500 287.175 286.850 286.525 286.525 285.875 285.875 285.550 285.225	14.675 14.350 14.025 13.700 13.375 13.050 12.725 12.400 12.075	287.825 287.500 287.175 286.850 286.525 286.200 285.875 285.550 285.225	1.0072 1.0012 9.9535 • 2 9.8945 9.8357 9.7772 9.7190 9.6611 9.6034	7.5550 7.5103 7.4558 7.4215 7.3774 7.3335 7.2898 7.2464 7.2031	9.9408 - 1 9.8820 9.8234 9.7651 9.7071 9.6494 9.5919 9.5347 9.4778	1.2191 1.2133 1.2075 1.2017 1.1959 1.1901 1.1844 1.1786 1.1729	9.9521 - 1 9.9043 9.8568 9.8094 9.7622 9.7151 9.6683 9.6216 9.5751
500 550 600 650 700 750 800 850 900	500 550 600 650 700 750 800 950	284.900 284.575 284.250 283.925 283.600 283.275 282.950 282.625 282.300 281.975	11.750 11.425 11.100 10.775 10.450 10.125 9.800 9.475 9.150 8.825	284.900 284.575 284.250 283.925 283.600 283.275 282.950 282.625 282.300 281.975	9.5460 • 2 9.4889 9.4321 9.3756 9.3193 9.2633 9.2076 9.1521 9.0970 9.0420	7.1601 • 2 7.1173 7.0747 7.0322 6.9900 6.9480 6.9062 6.8647 6.8233 6.7821	9.4212 - 1 9.3649 9.3088 9.2530 9.1974 9.1422 9.0872 9.0325 8.9780 8.9238	1.1673 • 0 1.1616 1.1560 1.1504 1.1448 1.1392 1.1336 1.1281 1.1226	9.5287 - 1 9.4826 9.4365 9.3907 9.3451 9.2996 9.2542 9.2091 9.1641 9.1193
1000 1050 1100 1150 1200 1250 1300 1350 1400	1000 1050 1100 1150 1200 1250 1300 1350 1400	281.650 281.325 281.000 280.675 280.350 280.025 279.700 279.050 279.050 278.725	8.500 8.175 7.850 7.525 7.200 6.875 6.550 6.255 5.900	281.650 281.325 281.000 280.675 280.350 280.025 279.700 279.375 279.050 278.725	8.9874 • 2 8.9330 8.8789 8.8251 8.7715 8.7182 8.6651 8.6124 8.5598 8.5076	6.7411 + 2 6.7003 6.6597 6.6193 6.5792 6.5392 6.4994 6.4598 6.4204 6.3812	8.8699 - 1 8.8162 8.7628 8.7697 8.6568 8.6042 8.5518 8.4997 8.4479 8.3963	1.1116 + 0 1.1062 1.1008 1.0954 1.0900 1.0846 1.0793 1.0739 1.0686 1.0633	9.0746 - 1 9.0302 8.9858 8.9417 8.8977 8.8539 8.8102 8.7668 8.7234 8.6803
1500 1550 1600 1650 1700 1750 1800 1850 1900	1500 1550 1600 1650 1700 1750 1851 1851 1901	278.400 278.075 277.750 277.425 277.100 276.775 276.450 276.125 275.800 275.475	5.250 4.925 4.600 4.275 3.950 3.625 3.300 2.975 2.650 2.325	278.400 278.075 277.750 277.425 277.100 276.775 276.450 276.125 275.800 275.475	8.4555 + 2 8.4038 8.3523 8.3011 8.2501 8.1993 8.1489 8.0986 8.0487 7.9989	6.3422 + 2 6.3034 6.2647 6.2263 6.1881 6.1500 6.1121 6.0745 6.0370 5.9997	8.3450 - 1 8.2939 8.2431 8.1925 8.1422 8.0921 8.0423 7.9927 7.99434 7.8943	1.0581 + 0 1.0528 1.0476 1.0424 1.0372 1.0320 1.0269 1.0218 1.0166	8.6373 - 1 8.5945 8.5518 8.5093 8.4669 8.4248 8.3827 8.3409 8.2992 8.2576
2000 2050 2100 2150 2200 2250 2300 2350 2400 2450	2001 2051 2101 2151 2201 2251 2351 2351 2401 2451	275.150 274.825 274.500 274.175 273.850 273.520 273.520 272.875 272.550 272.25	2.000 1.675 1.350 1.025 .700 .375 .050 275 600	275.150 274.825 274.500 274.175 273.850 273.525 273.200 272.875 272.550 272.225	7.9495 + 2 7.9002 7.8513 7.8025 7.7540 7.7058 7.6578 7.6100 7.5625 7.5152	5.9626 • 2 5.9257 5.8889 5.8524 5.8160 5.7798 5.77438 5.77438 5.76369	7.8455 - 1 7.7969 7.7486 7.7005 7.6526 7.6050 7.5577 7.5105 7.4036 7.4170	1.0065 + 0 1.0014 9.9641 - 1 9.9140 9.8641 9.8143 9.7648 9.7155 9.6663 9.6174	8.2162 - 1 8.1750 8.1340 8.0931 8.0523 8.0117 7.9713 7.9310 7.8909 7.8509
2500 2550 2600 2650 2750 2800 2850 2900 2950	2501 2551 2601 2651 2701 2751 2801 2851 2901	271.900 271.575 271.250 270.925 270.600 270.275 269.950 269.625 269.300 268.975	-1.250 -1.575 -1.900 -2.225 -2.550 -2.875 -3.200 -3.525 -3.850 -4.175	271.900 271.575 271.250 270.925 270.600 270.275 269.950 269.625 269.300 268.975	7.4682 + 2 7.4214 7.3748 7.3285 7.2824 7.2366 7.1910 7.1456 7.1004 7.0555	5.6016 + 2 5.5665 5.5316 5.4968 5.4663 5.4279 5.3936 5.3596 5.3257 5.2920	7.3705 - 1 7.3244 7.2784 7.2327 7.1872 7.1419 7.0969 7.0521 7.0076 6.9632	9.5686 - 1 9.5200 9.4716 9.4234 9.3754 9.3276 9.2799 9.2325 9.1852 9.1381	7.8111 - 1 7.7714 7.7319 7.6926 7.6534 7.6143 7.5755 7.5367 7.4981 7.4597

Table I
Geometric Altitude, Metric Units

					Geometric Altitud	de, Metric Units			
Altit	tude	1	Temperature			Pressure		Dens	ity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}
-1000 -950	-1000 -950	294.651 294.326	21.501 21.176	294.651 294.326	1.1393 + 3 1.1327	8.5455 + 2 8.4961	1.1244 • 0 1.1179	1.3470 + 0 1.3407 1.3344	1.0996 + 0 1.0945
-900 -850	-900 -850	294.001 293.676	20.851 20.526	294.001 293.676	1.1261 1.1196	8.4468 8.3979	1.1114 1.1049	1.3281	1.0893 1.0842
-800	-800	293.076	20.201	293.351	1.1131	8.3491	1.0985	1.3219	1.0791
-750	-750	293.026	19.876	293.026	1.1066	8.3006	1.0921	1.3157	1.0740
-700	-700	292.701	19.551	292.701	1.1002	8.2523	1.0858	1.3095	1.0690
-650	-650	292.375	19.225 18.900	292.375	1.0938	8.2043 8.1564	1.0795 1.0732	1.3033 1.2971	1.0639 1.0589
-600 -550	-600 -550	292.050 291.725	18.575	292.050 291.725	1.0874 1.0810	8.1088	1.0669	1.2910	1.0539
-500 -450	-500 -450	291.400 291.075	16.250 17.925	291.400 291.075	1.0747 + 3 1.0684	8.0615 + 2 8.0143	1.0607 + 0 1.0545	1.2849 + 0 1.2788	1.0489 • 6
-400	-400	290.750	17.600	290.750	1.0622	7.9674	1.0483	1.2727	1.0390
-350 -300	-350 -300	290.425 290.100	17.275 16.950	290.425 290.100	1.0560 1.0498	7.9207 7.8742	1.0422 1.0360	1.2667 1.2607	1.0340 1.0291
-250	-250	289.775	16.625	289.775	1.0436	7.8279	1.0299	1.2547	1.0242
-200	-200	289.450	16.300	289.450	1.0375	7.7819	1.0239	1.2487	1.0193
-150	-150	289.125	15.975	289,125	1.0314	7.7361	1.0179	1.2427	1.0145
-100 -50	-100 -50	288.800 288.475	15.650 15.325	288.800 288.475	1.0253 1.0192	7.6905 7.6451	1.0119 1.0059	1.2368 1.2309	1.0096 1.0048
0	0	288.150	15.000	288.150	1.01325 + 3	7.60000 + 2	1.00000 + 0	1.2250 + 0	1.0000 + 0
50	50	287.825	14.675	287.825	1.0072	7.5550	9.9408 - 1	1.2191	9.9521 - 1
100	100	287.500	14.350	287.500 287.175	1.0012 9.9535 + 2	7.5103	9.8820 9.8234	1.2133 1.2075	9.9 044 9.85 68
150 200	150 200	287.175 286.850	14.025 13.700	286.850	9.8945	7.4658 7.4215	9.7651	1.2017	9.8094
250	250	286.525	13.375	286.525	9.8357	7.3774	9.7071	1.1959	9.7622
300	300	286.200	13.050	286,200	9.7772	7.3335	9.6494	1.1901	9.7152
350	350	285.875	12.725	285.875	9.7190	7.2898	9.5919	1.1844	9.6683
400 450	400 450	285.550 285.225	12.400 12.075	285.550 285.225	9.6611 9.6034	7.2464 7.2032	9.5348 9.4779	1.1786 1.1730	9.6216 9.5751
500	500	284.900	11.750	284.900	9.5461 + 2	7.1601 + 2	9.4212 - 1	1.1673 + 0	9.5288 - 1
550	550 600	284.575 284.250	11.425 11.100	284.575	9.4890 9.4322	7.1173 7.0747	9.3649 9.3088	1.1616 1.1560	9.4826 9.4366
600 650	650	283.925	10.775	284.250 283.925	9.3756	7.0323	9.2530	1.1504	9.3908
700	700	283.601	10.451	283,601	9.3194	6.9901	9.1975	1.1448	9.3451
750	750	283.276	10.126	283,276	9.2634	6.9481	9.1423	1.1392	9.2996
800 850	800	282.951 282.626	9.801 9.476	282.951 282.626	9.2077 9.1523	6.9063 6.8648	9.0873 9.0326	1.1337 1.1281	9.2543 9.2092
900	850 900	282.301	9.151	282,301	9.0971	6.8234	8.9781	1.1226	9.1642
950	950	281.976	8.826	281.976	9.0422	6.7822	8.9240	1.1171	9.1194
1000 1050	1000 1050	281.651 281.326	8.501 8.176	281.651 281.326	8.9876 + 2 8.9332	6.7412 + 2 6.7005	8.8700 - 1 8.8164	1.1117 + 0 1.1062	9.0748 - 1 9.0303
1100	1100	281.001	7.851	281,001	8.8791	6.6599	8.7630	1.1008	8.9860
1150	1150	280.676	7.526	280.676	8.8253	6.6195	8.7099	1.0954	8.9419
1200	1200	280.351	7.201	280.351	8.7717	6.5793	8.6570	1.0900	8.8979 8.8541
1250 1300	1250 1300	280.027 279.702	6.877 6.552	280.027 279.702	8.7185 8.6654	6.5394 6.4996	8.6044 8.5521	1.0846 1.0793	8.8105
1350	1350	279.377	6.227	279.377	8.6127	6.4600	8.5000	1.0740	8.7670
1400 1450	1400 1450	279.052 278.727	5.902 5.577	279.052 278.727	8.5602 8.5079	6.4206 6.3814	8.4482 8.3966	1.0687 1.0634	8.7237 8.6806
1500	1500	278.402	5.252	278.402	8,4559 + 2	6.3424 • 2	8.3453 - 1	1.0581 + 0	8.6376 - 1
1550	1550		4.927 4.603	278.077	8.4042 8.3527	6.3036	8.2943 8.2435	1.0529	8.5948 8.5521
1600 1650	1600 1650	277.753 277.428	4.603 4.278	277.753 277.428	8.3527 8.3015	6.2650 6.2266	8.2435 8.1929	1.0476 1.0424	8.5096
1700	1700	277.103	3.953	277.103	8.2505	6.1884	8.1427	1.0372	8.4673
1750	1750	276.778	3.628	276,778	8.1998	6.1504	8.0926	1.0321	8.4252
1800	1799	276.453	3.303	276.453	8.1494	6.1125	8.0428 7.9933	1.0269 1.0218	8.3832 8.3413
1850 1900	1849 1899	276.128 275.804	2.978 2.654	276.128 275.804	8.0992 8.0492	6.0749 6.0374	7.9440	1.0218	8.2996
1950	1949		2.329	275.479	7.9995	6.0001	7.8949	1.0116	8.2581
2000	1999	275.154		275.154	7.9501 + 2 7.9009	5.9630 + 2 5.9261	7.8461 - 1 7.7976	1.0066 + 0 1.0015	8.2168 - 1 8.1756
2050 21 0 0	2049 2099	274.829 274.505		274.829 274.505	7.9009 7.8519	5.8894	7.7493	9.9648 - 1	8.1345
2150	2149		1.030		7.6032	5.8529	7.7012	9.9147	8.0936
2200	2199	273.855	•705	273.855	7.7548	5.8165	7.6534	9.8648	8.0529
2250	2249			273.530	7.7066	5.7804 5.7444	7.6058 7.5584	9.8151 9.7656	8.0124 7.9719
2300 2350	2299 2349		•055 ••269	273.205 272.881	7.6586 7.6109	5.7086	7.5113	9.7163	7.9317
2400 2450	2399 2449	272.556		272.556 272.231	7.5634 7.5161	5.6730 5.6375	7.4645 7.4178	9.6672 9.6183	7.8916 7.8517
2500	2499			271.906	7.4691 + 2	5.6023 + 2	7.3715 - 1	9.5695 - 1	7.8119 - 1
2550	2549	271.582	-1.568	271.582	7.4224	5.5672	7.3253	9.5210	7.7722
2600	2599	271.257	-1.893	271.257	7.3758	5.5323	7.2794	9.4726	7.7328
2650	2649	270.932	-2.218 -2.543	270.932	7.3295	5.4976	7.2337 7.1882	9.4245 9.3765	7.6934 7.6543
2700 2750	2699 2749			270.607 270.283	7.2835 7.2377	5.4631 5.4287	7.1430	9.3287	7.6153
2800	2799		-3.192	269.958	7.1921	5.3945	7.0980	9.2811	7.5764
2850	2849	269.633	-3.517	269,633	7.1467	5.3605	7.0533	9.2337	7.5377
2900	2899			269.309	7.1016	5.3266	7.0087	9.1865 9.1394	7.4991 7.4607
2950	2949	268.984	-4.166	268,984	7.0567	5.2930	6.9644	9.1394	7.4607

Table I Geopotential Altitude, Metric Units

		Temperature			opotential Attac			Density		
Altit	ude		Temperatui	e		Pressure		Della	sity	
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m $^{f 3}$)	$^{ ho/ ho}_{f 0}$	
3000 3050 3100	3001 3051 3102 3152	268.650 268.325 268.000 267.675	-4.500 -4.825 -5.150 -5.475	268.650 268.325 268.000 267.675	7.0108 + 2 6.9663 6.9221 6.8781	5.2585 + 2 5.2252 5.1920 5.1590	6.9191 - 1 6.8752 6.8316 6.7882	9.0912 - 1 9.0445 8.9980 8.9516	7.4214 - 1 7.3833 7.3453 7.3075	
3150 3200	3202	267.350	-5.800	267.350	6.8343	5.1262	6.7450	8.9055	7.2698	
3250	3252	267.025	-6.125 -6.450	267 .0 25 266 . 700	6.7908 6.7474	5.0935 5.0610	6.7020 6.6592	8.8595 8.8137	7.2322 7.1948	
3300 3350	3302 3352	266.700 266.375	-6.775	266.375	6.7043	5.0287	6.6167	8.7681	7.1576	
3400 3450	3402 3452	266.050 265.725	-7.100 -7.425	266.050 265.725	6.6615 6.6188	4.9965 4.9645	6.5743 6.5322	8.7226 8.6774	7.1205 7.0836	
3500	3502	265.400 265.075	-7.750 -8.075	265.400 265.075	6.5764 + 2 6.5341	4.9327 + 2 4.9010	6.4904 - 1 6.4487	8.6323 - 1 8.5874	7.0468 ~ 1 7.0101	
3550 3600	3552 3602	264.750	-8.400	264.750	6.4921	4.8695	6.4072	8.5427	6.9736	
3650	3652	264.425	-8.725	264.425	6.4504	4.8382	6.3660 6.3250	8.4981 8.4538	6.9372 6.9010	
3700 3750	3702 3752	264.100 263.775	-9.050 -9.375	264.100 263.775	6.4088 6.3675	4.8070 4.7760	6.2842	8.4096	6.8650	
3800	3802	263.450	-9.700	263,450	6.3263	4.7451	6.2436	8.3656	6.8290	
3850	3852	263.125	-10.025	263.125	6.2854	4.7144 4.6839	6.2032 6.1631	8.3217 8.2781	6.7933 6.7576	
3900 3950	3902 3952	262.800 262.475	-10.350 -10.675	262.800 262.475	6.2447 6.2042	4.6536	6.1231	8.2346	6.7221	
4000 4050	4003 4053	262.150 261.825	-11.000 -11.325	262.150 261.825	6.1640 · 2 6.1239	4.6233 • 2 4.5933	6.0834 - 1 6.0438	8.1913 + 1 8.1482	6.6868 - 1 6.6516	
4100	4103	261.500	-11.650	261.500	6.0841	4.5634	6.0045	8.1052	6.6165 6.5816	
4150	4153	261.175	-11.975	261.175	6.0444 6.0050	4.5337 4.5041	5.9654 5.9265	8.0624 8.0198	6.5468	
42 0 0 4250	4203 4253	260.850 260.525	-12.300 -12.625	260.850 260.525	5.9658	4.4747	5.8878	7.9774	6.5121	
4300	4303	260.200	-12.950	260.200	5.9268	4.4454	5.8493	7.9351	6.4776	
4350	4353	259.875	-13.275	259.875 259.550	5.8880 5.8494	4.4163 4.3874	5.8110 5.7729	7.8930 7.8511	6.4433 6.4 0 90	
4400 4450	4403 4453	259.550 259.225	-13.600 -13.925	259.225	5.8110	4.3586	5.7350	7.8093	6.3750	
4500 4550	4503 4553	258.900 258.575	-14.250 -14.575	258.900 258.575	5.7728 + 2 5.7348	4.3299 + 2 4.3014	5.6973 - 1 5.6598	7.7677 - 1 7.7263	6.3410 - 1 6.3072	
4600	4603	258.250	-14.900	258.250	5.6970	4.2731	5.6225	7.6851	6.2735	
4650	4653	257.925	-15.225	257.925	5.6594	4.2449	5.5854 5.5485	7.6440 7.6031	6.2400 6.2066	
4700 4750	4703 4754	257.600 257.275	-15.550 -15.875	257.600 257.275	5.6220 5.5849	4.2169 4.1890	5.5118	7.5624	6.1734	
4800	4804	256.950	-16.200	256.950	5.5479	4.1612	5.4753	7.5218	6.1402	
4850	4854	256.625	-16.525	256.625	5.5111	4.1337 4.1062	5.4390 5.4029	7.4814 7.4411	6.1073 6.0744	
4900 4950	4904 4954	256.300 255.975	-16.850 -17.175	256.300 255.975	5.4745 5.4381	4.0789	5.3670	7.4011	6.0417	
5000 5050	5004 5054	255.650 255.325	-17.500 -17.825	255,650 255,325	5.4019 + 2 5.3659	4.0518 + 2 4.0248	5.3313 - 1 5.2958	7.3612 - 1 7.3214	6.0091 - 1 5.9767	
5100	5104	255.000	-18.150	255.000	5.3301	3.9979	5.2604	7.2818	5.9444	
5150	5154	254.675	-18.475	254.675	5.2945 5.2591	3.9712 3.9447	5.2253 5.1903	7.2424 7.2032	5.9122 5.8801	
5200 5250	5204 5254	254.350 254.025	-18.800 -19.125	254.350 254.025	5.2239	3.9182	5.1556	7.1641	5.8482	
5300	5304	253.700	-19.450	253.700	5.1889	3.8920	5.1210	7.1252	5.8164	
5350 5400	5355 5405	253.375 253.050	-19.775 -20.100	253.375 253.050	5.1540 5.1194	3.8658 3.8398	5.0866 5.0524	7.0864 7.0478	5.7848 5.7533	
5450	5455	252.725	-20.425	252.725	5.0849	3.8140	5.0184	7.0093	5.7219	
5500 5550	5505 5555	252.400 252.075	-20.750 -21.075	252,400 252,075	5.0506 + 2 5.0165	3.7883 + 2 3.7627	4.9846 - 1 4.9509	6.9711 - 1 6.9329	5.6907 - 1 5.6595	
5600	5605	251.750	-21.400	251,750	4.9826	3 . 7373	4.9175	6.8950	5.6285	
5650	5655	251.425	-21.725	251.425	4.9489	3.7120 3.6868	4.8842 4.8511	6.8572 6.8195	5.5977 5.5670	
5700 5750	5705 5755		-22.050 -22.375	251.100 250.775	4.9154 4.8820	3.6618	4.8182	6.7820	5.5364	
5800	5805	250.450	-22.700	250.450	4.8489	3.6370	4.7855	6.7447	5.5059	
5850	5855				4.8159 4.7831	3.6122 3.5876	4.7529 4.7206	6.7075 6.6705	5.4755 5.4453	
5900 5950	5905 595 6			249.800 249.475	4.7505	3.5631	4.6884	6.6337	5.4152	
6000	6006 6056		-24.000 -24.325		4.7181 + 2 4.6858	3.5388 + 2 3.5146	4.6564 - 1 4.6245	6.5970 - 1 6.5604	5.3853 - 1 5.3554	
6050 61 0 0	6106				4.6537	3.4906	4.5929	6.5240	5.3257	
6150	6156	248.175	-24.975	248.175	4.6218	3.4666	4.5614	6.4878	5.2962 5.2667	
6200	62 9 6 6256		-25.300 -25.625	247.850 247.525	4.5901 4.5585	3.4428 3.4192	4.5301 4.4989	6.4517 6.4158	5.2374	
6250 6300	6306		-25.950		4.5272	3.3956	4.4680	6.3800	5.2082	
6350	6356	246.875	-26.275	246.875	4.4960	3.3722	4.4372 4.4066	6.3444 6.3089	5.1791 5.1501	
6400 6450	6406 6457				4.4650 4.4341	3.3490 3.3258	4.3761	6.2736	5.1213	
6500	6507			245.900 245.575	4.4034 + 2 4.3729	3.3028 + 2 3.2800	4.3459 - 1 4.3157	6.2384 - 1 6.2034	5.0926 - 1 5.0640	
6550 66 0 0	6557 66 0 7			245.250	4.3426	3.2572	4.2858	6.1686	5.0356	
6650	6657	244.925	-28.225	244.925	4.3124	3.2346	4.2560	6.1338	5.0072	
6700	6707 6757				4.2824 4.2526	3.2121 3.1897	4.2264 4.1970	6.0993 6.0649	4.9790 4.9509	
6750 6800	6757 6807				4.2230	3.1675	4.1677	6.0306	4.9229	
6850	6857	243.625	-29.525	243.625	4.1935	3.1454	4.1386 4.1097	5.9965 5.9625	4.8951 4.8674	
6900 6950	6907 6958			243,300 242,975	4.1642 4.1350	3.1234 3.1015	4.0809	5.9287	4.8397	
0730	3730		200113	,			•			

Table I Geometric Altitude, Metric Units

				*	Jeometric Aititu	de, metre onits				
Altii	tude			e		Pressure		Density		
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}	
3000 3050 3100	2999 3049 3098	268.659 268.335 268.010	-4.491 -4.815 -5.140	268.659 268.335 268.010	7.0121 + 2 6.9676 6.9234	5.2595 + 2 5.2261 5.1930	6.9204 - 1 6.8765 6.8329	9.0925 - 1 9.0459 8.9994	7.4225 - 1 7.3844 7.3464	
3150	3148	267.685	-5.465	267.685	6.8795	5.1600	6.7895	8.9531	7.3086	
3200 3250	3198 3248	267.360 267.036	-5.790 -6.114	267.360 267.036	6.8357 6.7922	5.1272 5.0946	6.7463 6.7034	8.9069 8.8610	7.2710 7.2335	
3300	3298	266.711	-6.439	266.711	6.7489	5.0621	6.6607	8.8152	7.1961	
3350	3348	266.386	-6.764	266.386	6.7059	5.0298	6.6182 6.5759	8.7697 8.7243	7.1589 7.1219	
3400 3450	3398 3448	266.062 265.737	-7.088 -7.413	266.062 265.737	6.6630 6.6204	4.9977 4.9657	6.5338	8.6791	7.0849	
3500 3550	3498 3548	265.413 265.088	-7.737 -8.062	265.413 265.088	6.5780 + 2 6.5358	4.9339 + 2 4.9022	6.4920 - 1 6.4503	8.6340 - 1 8.5892	7.0482 - 1 7.0116	
3600	3598	264.763	-8.387	264.763	6.4939	4.8708	6.4089	8.5445	6.9751	
3650 3700	3648 3698	264.439 264.114	-8.711 -9.036	264.439 264.114	6.4521 6.4106	4.8395 4.8083	6.3677 6.3268	8.5000 8.4557	6.9388 6.9026	
3750	3748	263.789	-9.361	263.789	6.3693	4.7773	6.2860	8.4115	6.8666	
3800	3798	263.465	-9.685	263,465	6.3282	4.7465	6.2454	8.3676	6.8307	
3850	3848	263.140 262.816	-10.010	263.140 262.816	6.2873 6.2467	4.7159 4.6854	6.2051 6.1650	8.3238 8.2802	6.7949 6.7593	
3900 3950	3898 3948	262.491	-10.334 -10.659	262.491	6.2062	4.6550	6.1251	8.2367	6.7239	
4000 4050	3997 4047	262.166 261.842	-10.984 -11.308	262.166 261.842	6.1660 + 2 6.1260	4.6249 + 2 4.5948	6.0854 - 1 6.0459	8.1935 - 1 8.1504	6.6885 - 1 6.6534	
4100	4097	261.517	-11.633	261.517	6.0862	4.5650	6.0066	8.1075	6.6183	
4150	4147	261.193	-11.957	261.193	6.0466	4.5353	5.9675 5.9286	8.0647 8.0222	6,5835 6,5487	
4200 4250	4197 4247	260.868 260.543	-12.282 -12.607	260.868 260.543	6.0072 5.9680	4.5057 4.4764	5.8900	7.9798	6.5141	
4300	4297	260.219	-12.931	260,219	5.9290	4.4471	5.8515	7.9376	6.4796	
4350 4400	4347 4397	259.894 259.570	-13,256 -13,580	259.894 259.570	5.8903 5.8517	4.4181 4.3891	5.8132 5.7752	7•8955 7•8536	6.4453 6.4111	
4450	4447	259.245	-13.905	259,245	5.8134	4.3604	5.7373	7.8119	6.3771	
4500 4550	4497 4547	258.921 258.596	-14.229 -14.554	258.921 258.596	5.7752 + 2 5.7373	4.3317 + 2 4.3033	5•6997 - 1 5•6622	7.7704 - 1 7.7290	6.3432 - 1 6.3094	
4600	4597	258.272	-14.878	258,272	5.6995	4.2750	5.6250	7.6878	6.2758	
4650	4647 4697	257.947 257.623	-15.203	257.947	5.6620	4.2468	5.5879	7.6468 7.6059	6.2423	
4700 4750	4746	257.298	-15.527 -15.852	257.623 257.298	5.6246 5.5875	4.2188 4.1910	5.5511 5.5144	7.5652	6.2089 6.1757	
4800	4796	256.974	-16.176	256,974	5.5506	4.1633	5.4780	7.5247	6.1426	
4850 4900	4846 4896	256.649 256.325	-16.501 -16.825	256.649 256.325	5.5138 5.4773	4.1357 4.1083	5.4417 5.4056	7.4844 7.4442	6.1097 6.0769	
4950	4946	256.000	-17.150	256.000	5.4409	4.0810	5.3698	7.4042	6.0442	
5000 5050	4996 5046	255.676 255.351	-17.474 -17.799	255.676 255.351	5.4048 + 2 5.3688	4.0539 + 2 4.0269	5.3341 - 1 5.2986	7.3643 - 1 7.3246	6.0117 - 1 5.9793	
5100	5096	255.027	-18.123	255.027	5.3331	4.0001	5.2633	7.2851	5.9470	
5150 5200	5146 5196	254.702 254.378	-18.448 -18.772	254.702 254.378	5.2975 5.2621	3.9734 3.9469	5.2282 5.1933	7.2457 7.2065	5.9149 5.8829	
5250	5246	254.053	-19.097	254.053	5.2269	3.9205	5.1586	7.1675	5.8510	
5300	5296	253.729	-19.421	253,729	5.1919	3.8943	5.1241	7.1286	5.8192	
5350 5400	5346 5395	253.404 253.080	-19.746 -20.070	253.404 253.080	5.1571 5.1225	3.8682 3.8422	5.0897 5.0556	7.0899 7.0513	5.7876 5.7562	
5450	5445	252.755	-20.395	252,755	5.0881	3.8164	5.0216	7.0129	5.7248	
5500 . 5550	5495 5545	252.431 252.106	-20.719 -21.044	252.431 252.106	5.0539 · 2 5.0198	3.7907 + 2 3.7652	4.9878 - 1 4.9542	6.9747 - 1 6.9366	5.6936 - 1 5.6625	
5600	5595	251.782	-21.368	251.782	4.9860	3.7398	4.9208	6.8987	5.6316	
5650 5700	5645 5695	251.458 251.133	-21.692 -22.017	251.458 251.133	4.9523 4.9188	3.7145 3.6894	4.8875 4.8545	6.8610 6.8234	5.6008 5.5701	
5750	5745	250.809	-22.341	250.809	4.8855	3.6644	4.8216	6.7859	5.5395	
5800	5795	250.484	-22.666	250.484	4.8524	3.6396	4.7889	6.7487	5.5091	
5850 5900	5845 5895	250.160 249.836	-22.990 -23.314	250.160 249.836	4.8194 4.7867	3.6149 3.5903	4.7564 4.7241	6.7115 6.6746	5.4788 5.4486	
5950	5944	249.511	-23.639	249.511	4.7541	3.5659	4.6919	6.6378	5.4186	
6000 6050	5994 6044	249.187 248.862	-23.963 -24.288	249.187 248.862	4.7217 + 2 4.6895	3.5416 • 2 3.5174	4.6600 - 1 4.6282	6.6011 - 1 6.5646	5.3887 - 1 5.3589	
6100	6094	248.538	-24.612	248.538	4.6575	3.4934	4.5966	6.5283	5.3292	
6150	6144	248.214	-24.936	248.214	4.6256	3.4695	4.5651	6.4921	5.2997	
6200 6250	6194 6244	247.889 247.565	-25.261 -25.585	247.889 247.565	4.5939 4.5624	3.4457 3.4221	4.5338 4.5027	6.4561 6.4202	5.2703 5.2410	
6300	6294	247.241	-25.909	247.241	4.5311	3.3986	4.4718	6.3845	5.2118	
6350 6400	6344 6394	246.916 246.592	-26.234 -26.558	246.916 246.592	4.4999 4.4689	3.3752 3.3520	4.4411 4.4105	6.3489 6.3135	5.1828 5.1539	
6450	6443	246.267	-26.883	246.267	4.4381	3.3289	4.3801	6.2782	5.1251	
6500 6550	6493 6543	245.943 245.619	-27.207 -27.531	245.943 245.619	4.4075 + 2 4.3770	3.3059 • 2 3.2830	4.3499 - 1 4.3198	6.2431 - 1 6.2081	5.0964 - 1 5.0679	
6600	6593	245.294	-27.856	245.294	4.3467	3.2603	4.2899	6.1733	5.0394	
6650	6643	244.970	-28.180	244.970	4.3166	3.2377	4.2602	6.1387	5.0112	
6700 6750	6693 6743	244.646 244.322	-28.504 -28.828	244.646 244.322	4.2867 4.2569	3.2153 3.1929	4.2306 4.2012	6.1042 6.0698	4.9830 4.9549	
6800	6793	243.997	-29.153	243.997	4.2273	3.1707	4.1720	6.0356	4.9270	
6850	6843	243.673	-29.477	243.673	4.1978	3.1486	4.1429 4.1140	6.0015 5.9676	4.8992 4.8715	
6900 6950	6893 6942	243.349 243.024	-29.801 -30.126	243.349 243.024	4.1685 4.1394	3.1267 3.1048	4.0853	5.9338	4.8439	
	3,76			J			· · · · · · ·	· • · •		

Table I
Geopotential Altitude, Metric Units

					opotential Attitu					
Alti	tude	-	Temperatur	e		Pressure		Dens	sity	
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	ρ (kg/m ³)	ρ/ρ_{0}	
7000 7050 7100 7150 7200 7250 7300 7350 7400 7450	7008 7058 7108 7158 7208 7258 7308 7369 7459	242.650 242.325 242.000 241.675 241.350 241.025 240.700 240.375 240.050 239.725	-30.500 -30.825 -31.150 -31.475 -31.800 -32.125 -32.450 -33.100 -33.425	242.650 242.325 242.000 241.675 241.350 241.025 240.700 240.375 240.050 239.725	4.1060 + 2 4.0772 4.0485 4.0200 3.9917 3.96355 3.9955 3.9077 3.8800	3.0798 • 2 3.0581 3.0366 3.0153 2.9940 2.9729 2.9519 2.9310 2.9102 2.8896	4.0523 - 1 4.0239 3.9956 3.9675 3.9395 3.9117 3.8841 3.8566 3.8293 3.8021	5.8950 - 1 5.8615 5.8281 5.7949 5.7618 5.7288 5.6960 5.6634 5.6308 5.5985	4.8123 - 1 4.7849 4.7576 4.7305 4.7035 4.6766 4.6498 4.6231 4.5966 4.5702	
7500 7550 7600 7650 7700 7750 7800 7850 7900 7950	7509 7559 7609 7659 7709 7759 7810 7810 7910	239.400 239.075 238.425 238.100 237.775 237.450 237.125 236.800 236.475	-33.750 -34.075 -34.400 -34.725 -35.050 -35.375 -35.370 -36.025 -36.350 -36.675	239.400 239.075 238.750 238.425 238.100 237.775 237.450 237.125 236.800 236.475	3.8251 + 2 3.7979 3.7708 3.7439 3.7172 3.6906 3.6641 3.6379 3.6117 3.5858	2.8690 + 2 2.8486 2.8283 2.8082 2.7881 2.7682 2.7483 2.7286 2.7090 2.6895	3.7751 - 1 3.7482 3.7215 3.6950 3.6686 3.6423 3.6162 3.5903 3.5645 3.5389	5.5662 - 1 5.5341 5.5022 5.4704 5.4387 5.4072 5.3758 5.3466 5.3135 5.2825	4.5439 - 1 4.5177 4.4916 4.4656 4.4398 4.4140 4.3884 4.3629 4.3375 4.3122	
8000 8050 8100 8150 8200 8250 8390 8350 8490 8450	8010 8060 8110 8160 8211 8261 8311 8361 8411 8461	236.150 235.825 235.500 235.175 234.850 234.525 234.200 233.875 233.550 233.225	-37.000 -37.325 -37.650 -37.975 -38.300 -38.950 -39.275 -39.600 -39.925	236.150 235.825 235.500 235.175 234.850 234.525 234.200 233.875 233.550 233.225	3,5599 • 2 3,5343 3,5087 3,4834 3,4581 3,4330 3,4081 3,3833 3,3587 3,3342	2.6702 • 2 2.6509 2.6318 2.6127 2.5938 2.5750 2.5563 2.5377 2.5192 2.5008	3.5134 - 1 3.4880 3.4628 3.4378 3.4129 3.3882 3.3625 3.3391 3.3148 3.2906	5.2517 - 1 5.2210 5.1904 5.1600 5.1297 5.0996 5.0696 5.0397 5.0100 4.9804	4.2871 - 1 4.2620 4.2371 4.2123 4.1875 4.1629 4.1384 4.1140 4.0898 4.0656	
8500 8550 8600 8650 8700 8750 8800 8850 8950	8511 8562 8612 8662 8712 8762 8812 8862 8912	232.900 232.575 232.250 231.925 231.600 231.275 230.950 230.625 230.300 229.975	-40.250 -40.575 -40.900 -41.225 -41.550 -41.875 -42.200 -42.525 -42.850 -43.175	232,900 232,575 232,250 231,925 231,600 231,275 230,950 230,625 230,300 229,975	3.3099 • 2 3.2856 3.2616 3.2377 3.2139 3.1903 3.1668 3.1434 3.1202 3.9971	2.4826 • 2 2.4644 2.4464 2.4284 2.4106 2.3929 2.3753 2.3577 2.3403 2.3230	3.2666 - 1 3.2427 3.2189 3.1953 3.1719 3.1485 3.1254 3.1023 3.0794 3.0566	4.9509 - 1 4.9216 4.8924 4.8633 4.8344 4.8055 4.7769 4.7483 4.7199 4.6916	4.0415 - 1 4.0176 3.9938 3.9700 3.9464 3.9229 3.8995 3.8762 3.8530 3.8299	
9000 9050 9100 9150 9200 9250 9350 9450	9013 9063 9113 9163 9213 9263 9314 9364 9414	229.325 229.000 228.675 228.350 228.025 227.700 227.375 227.050	-43.500 -43.825 -44.150 -44.475 -44.800 -45.125 -45.450 -46.100	229.650 229.325 229.000 228.675 228.350 228.025 227.700 227.375 227.050 226.725	3.0742 + 2 3.0514 3.0287 3.0062 2.9638 2.9616 2.9395 2.9175 2.8956 2.8739	2.3058 + 2 2.2887 2.2717 7.2548 2.2380 2.2213 2.2048 2.1883 2.1719 2.1556	3.0340 - 1 3.0115 2.9891 2.9669 2.9448 2.9228 2.9010 2.8793 2.8578 2.8363	4.6635 - 1 4.6355 4.6076 4.5798 4.5522 4.5527 4.4973 4.4770 4.4459	3.8069 - 1 3.7840 3.7613 3.7386 3.7186 3.6936 3.6712 3.66490 3.6268 3.6048	
9500 9550 9600 9650 9700 9750 9850 9850 9850 9950	9514 9564 9615 9665 9715 9865 9815 9865 9915	226.075 225.750 225.425 225.100 224.775 224.450 224.125 223.800	-47.725 -48.050 -48.375 -48.700 -49.025 -49.350	226.075 225.750 225.425 225.100 224.775 224.450 224.125 223.800	2.8523 + 2 2.8309 2.8095 2.7883 2.7673 2.7463 2.7255 2.7049 2.6883 2.6639	2.1394 • 2 2.1233 2.1073 2.0914 2.0756 2.0599 2.0443 2.0288 2.0134 1.9981	2.8150 - 1 2.7938 2.7728 2.7519 2.7311 2.7104 2.6899 2.6695 2.6492 2.6290	4.3890 - 1 4.3623 4.3356 4.3091 4.2827 4.2565 4.2304 4.2044 4.1785 4.1527	3.5829 - 1 3.5610 3.5393 3.5177 3.4961 3.4747 3.4534 3.4321 3.4110 3.3900	
10000 10050 10100 10150 10250 10250 10350 10400 10450	10016 10066 10116 10166 10216 10267 10317 10367 10417	222.825 222.500 222.175 221.850 221.525 221.200 220.875 220.550	-50.325 -50.650 -50.975 -51.300 -51.625 -51.950 -52.275	222.825 222.500 222.175 221.850 221.525 221.200 220.875	2.6436 + 2 2.6234 2.6034 2.5834 2.5636 2.5439 2.5244 2.5050 2.4856 2.4665	1.9828 + 2 1.9677 1.9527 1.9377 1.9229 1.9081 1.8934 1.8789 1.8644	2.6090 ~ 1 2.5891 2.5693 2.55496 2.5301 2.5107 2.4914 2.4722 2.4531 2.4342	4.1271 - 1 4.1015 4.0761 4.0509 4.0257 4.0007 3.9757 3.9509 3.9263 3.9017	3.3690 - 1 3.3482 3.3275 3.3068 3.2863 3.2659 3.2455 3.2253 3.2051 3.1851	
10500 10550 10600 10650 10700 10750 10800 10850 10900	10517 10568 10618 10668 10718 10718 10818 10818 10819	219.575 219.250 218.925 218.600 218.275 217.950 217.625	-53.575 -53.900 -54.225 -54.550 -54.675 -55.200 -55.525	218.600 218.275 217.950 217.625 217.300	2.4474 + 2 2.4284 2.4096 2.3909 2.3723 2.3538 2.3354 2.3172 2.2991 2.2811	1.8357 • 2 1.8215 1.8073 1.7793 1.7794 1.7655 1.7517 1.7380 1.7244 1.7109	2.4154 - 1 2.3967 2.3781 2.3596 2.3413 2.3230 2.3049 2.2869 2.2690 2.2512	3.8773 - 1 3.8529 3.8287 3.8046 3.7806 3.7568 3.7330 3.7094 3.6859 3.6625	3.1651 - 1 3.1452 3.1255 3.1058 3.0862 3.0668 3.0474 3.0281 3.0089 2.9898	

Table I
Geometric Altitude, Metric Units

				•	Jeometric Aititu	de, Metric Units		-	
Alti	tude	-	Femperatu <i>r</i>	e		Pressure		Dens	ity
Z (m)	H (m)	Т (К)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}
7000 7050 7100	6992 7042 7092	242.700 242.376 242.051	-30.450 -30.774 -31.099	242.700 242.376 242.051	4.1105 + 2 4.0817 4.0531	3.0831 + 2 3.0615 3.0400	4.0567 - 1 4.0283 4.0001	5.9002 - 1 5.8667 5.8334	4.8165 - 1 4.7891 4.7619
7150	7142	241.727	-31.423	241.727	4.0246	3.0187	3.9720	5.8002	4.7348
72 00 7250	7192 7242	241.403 241.079	-31.747 -32.071	241.403 241.079	3.9963 3.9682	2.9975 2.9764	3.9441 3.9163	5.7671 5.7343	4.7079 4.6810
7300	7292	240.754	-32.396	240.754	3.9402	2.9554	3.8887	5.7015	4.6543
7350	7342	240.430	-32.720	240,430	3.9124	2.9345	3.8612	5.6689	4.6277
7400 7450	7391 7441	24 0. 106 239.782	-33.044 -33.368	240.106 239.782	3.8847 3.8573	2.9138 2.8932	3.8339 3.8068	5.6364 5.6041	4.6012 4.5748
7500 7550	7491 7541	239 .45 7 239 . 133	-33.693 -34.017	239.457 239.133	3.8299 + 2 3.8027	2.8727 + 2 2.8523	3•7798 - 1 3•7530	5.5719 - 1 5.5399	4.5485 - 1 4.5224
7600	7591	238.809	-34.341	238.809	3.7757	2.8320	3.7263	5.5080	4.4963
7650 7700	7641 7691	238.485 238.161	-34.665 -34.989	238.485 238.161	3.7489 3.7221	2.8119 2.7918	3.6998 3.6735	5.4762 5.4446	4.4704 4.4446
7750	7741	237.836	-35.314	237.836	3.6956	2.7719	3.6473	5.4131	4.4189
7800	7790	237.512	-35.638	237.512	3.6692	2.7521	3.6212	5.3818	4.3933
7850 7900	7840 7890	237.188 236.864	-35.962 -36.286	237.188 236.864	3.6429 3.6168	2.7324 2.7128	3.5953 3.5695	5.3506 5.3196	4.3678 4.3425
7950	7940	236.540	-36.610	236.540	3.5909	2.6934	3.5439	5.2886	4.3173
8000 8050	7990 8040	236.215 235.891	-36.935 -37.259	236.215 235.891	3.5651 + 2 3.5395	2.6740 + 2 2.6548	3.5185 - 1 3.4932	5.2579 - 1 5.2272	4.2921 - 1 4.2671
8100	8090	235.567	-37.583	235.567	3.5140	2.6357	3.4680	5.1967	4.2422
8150 8200	8140 8189	235.243	-37.907 -38.231	235.243 234.919	3.4886 3.4634	2.6167 2.5978	3.4430 3.4182	5.1664 5.1361	4.2174 4.1928
8250	8239	234.595	-38.555	234,595	3.4384	2.5790	3.3934	5.1060	4.1682
8300 8350	8289 8339	234.270 233.946	-38.880	234.270	3.4135	2.5603	3.3689	5.0761	4.1437
840 0	8389	233.622	-39.204 -39.528	233.946 233.622	3.3888 3.3641	2.5418 2.5233	3.3444 3.3202	5.0462 5.0166	4.1194 4.0951
8450	8439	233.298	-39.852	233,298	3.3397	2.5050	3.2960	4.9870	4.0710
8500 8550	8489 8539	232.974 232.650	-40.176 -40.500	232.974 232.650	3.3154 + 2 3.2912	2.4867 + 2 2.4686	3.2720 - 1 3.2482	4.9576 - 1 4.9283	4.0470 - 1 4.0231
8600	8588	232.326	-40.824	232,326	3.2672	2.4506	3.2244	4.8991	3.9993
8650 8700	8638 8688	232.001 231.677	-41.149 -41.473	232.001 231.677	3.2433 3.2195	2.4326 2.4148	3.2009 3.1774	4.8701 4.8412	3.9756 3.9520
8750	8738	231.353	-41.797	231.353	3.1959	2.3971	3.1541	4.8125	3.9285
8800	8788	231.029	-42.121	231.029	3.1725	2.3795	3.1310	4.7838	3.9052
8850 8900	8838 8888	230.705 230.381	-42.445 -42.769	230.705 230.381	3.1492 3.1260	2.3620 2.3447	3.1080 3.0851	4.7553 4.7270	3.8819 3.8588
8950	8937	230.057	-43.093	230.057	3.1029	2.3274	3.0623	4.6987	3.8357
9000 9050	8987 9037	229.733 229.409	-43.417 -43.741	229.733 229.409	3.0800 + 2 3.0573	2.3102 · 2 2.2931	3.0397 - 1 3.0173	4.6706 - 1 4.6427	3.8128 - 1 3.7899
9100	9087	229.085	-44.065	229.085	3.0346	2.2761	2.9949	4.6148	3.7672
9150 9200	9137 9187	228.760 228.436	-44.390 -44.714	228.760 228.436	3.0121 2.9898	2.2593 2.2425	2.9727 2.9507	4.5871 4.5595	3.7446 3.7220
9250	9237	228.112	-45.038	228.112	2.9675	2.2258	2.9287	4.5320	3.6996
9300 9350	9286	227.788 227.464	-45.362 -45.686	227.788 227.464	2.9454 2.9235	2.2093 2.1928	2.9069 2.8853	4.5047 4.4775	3.6773
9400	9336 9386	227.140	-46.010	227.140	2.9235	2.1764	2.8637	4.4504	3.6551 3.6330
9450	9436	226.816	-46.334	226.816	2.8800	2.1601	2.8423	4.4234	3.6110
9500 9550	9486 9536	226.492 226.168	-46.658 -46.982	226.492	2.8584 + 2 2.8370	2.1440 + 2 2.1279	2.8210 - 1 2.7999	4.3966 - 1 4.3699	3.5891 - 1 3.5673
9600	9586	225.844	-47.306	226.168 225.844	2.8157	2.1119	2.7789	4.3433	3.5456
9650	9635	225.520	-47.630	225.520	2.7945	2.0961	2.7580	4.3169	3.5240
9700 9750	9685 9735	225.196 224.872	-47.954 -48.278	225,196 224,872	2.7735 2.7526	2.0803 2.0646	2.7372 2.7166	4.2905 4.2643	3.5025 3.4811
9800	9785	224.548	-48.602	224.548	2.7318	2.0490	2.6961	4.2382	3.4598
9850	9835	224.224	-48.926	224.224	2.7111	2.0335	2.6757	4.2123	3.4386
9900 995 0	9885 9934	223.900 223.576	-49.250 -49.574	223 . 900 223 . 576	2.6906 2.6702	2.0181 2.0028	2.6554 2.6353	4.1864 4.1607	3.4175 3.3965
10000	9984	223.252	-49.898 -50.222	223.252	2.6499 + 2	1.9876 + 2 1.9725	2.6153 - 1	4.1351 - 1	3.3756 - 1 3.3548
10050 10100	10034 10084	222.928	-50.222 -50.546	222.928 222.604	2.6298 2.6098	1.9725	2.5954 2.5756	4.1096 4.0843	3.3348 3.3341
10150	10134	222.280	-50.870	222,280	2.5899	1.9425	2.5560	4.0590	3.3135
10200 10250	10184 10233	221.956 221.632	-51.194 -51.518	221.956 221.632	2.5701 2.5504	1.9277 1.9130	2.5365 2.5171	4.0339 4.0089	3.2930 3.2726
10300	10283	221.308	-51.842	221.308	2.5309	1.8983	2.4978	3.9840	3.2523
10350	10333		-52.166	220.984	2.5115	1.8838	2.4596	3,9593 3,9346	3.2321
10400 10450	10383 10433	220.660 220.336	-52.490 -52.814	220.660 220.336	2.4922 2.4730	1.8693 1.8549	2.4596 2.4407	3.9346 3.9101	3.2119 3.1919
10500 10550	10483 10533	220.013 219.689	-53.137 -53.461	220.013 219.689	2.4540 + 2 2.4350	1.8406 + 2 1.8264	2.4219 - 1 2.4032	3.8857 - 1 3.8614	3.1720 - 1 3.1522
10600	10582		-53.785	219.365	2.4162	1.8123	2.3846	3.8372	3.1324
10650	10632	219.041	-54.109	219.041	2.3975	1.7983	2.3662	3.8132	3.1128
10700 10750	10682 10732	218.717 218.393	-54.433 -54.757	218.717 218.393	2.3790 2.3605	1.7844 1.7705	2•3479 2•3296	3.7892 3.7654	3.0933 3.0738
10800	10782	218.069	-55.081	218.069	2.3422	1.7568	2.3115	3.7417	3.0545
10850 10900	10832	217.745 217.421	-55.405 -55.729	217.745 217.421	2.3239 2.3058	1.7431 1.7295	2•2935 2•2757	3.7181 3.6946	3.0352 3.0160
10900	10881 10931	217.097	-55. <i>12</i> 9	217.421	2.3058 2.2878	1.7160	2.2579	3.6713	2.9970
							_	-	

Table I Geopotential Altitude, Metric Units

Alti	tude		Temperatu	re		Pressure		Dens	sity
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	ρ (kg/m 3)	ρ/ρ ₀
11000 11100 11200 11300 11400 11500 11600 11700 11800 11900	11019 11119 11220 11320 11420 11521 11621 11722 11822 11822	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	2.2632 · 2 2.2277 2.1929 2.1586 2.1248 2.0916 2.0588 2.0266 1.9949 1.9637	1.6975 • 2 1.6709 1.6448 1.6191 1.5937 1.5688 1.5442 1.5201 1.4963	2.2336 - 1 2.1986 2.1642 2.1642 2.0970 2.0642 2.0319 2.0001 1.9688 1.9380	3.6392 - 1 3.5822 3.5262 3.4710 3.4167 3.3633 3.3107 3.2589 3.2079 3.1577	2.9708 - 1 2.9243 2.8785 2.8335 2.7892 2.7455 2.7026 2.6603 2.6187 2.5777
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	12023 12123 12223 12324 12424 12525 12625 12725 12725 12826	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.9330 • 2 1.9027 1.8730 1.8437 1.8148 1.7864 1.7585 1.7310 1.7039 1.6772	1.4498 + 2 1.4272 1.4048 1.3829 1.3612 1.3399 1.3190 1.2983 1.2780	1.9077 - 1 1.8779 1.8485 1.8196 1.7911 1.7631 1.7355 1.7083 1.6816 1.6553	3.1083 - 1 3.0597 3.0118 2.9647 2.9183 2.8726 2.8277 2.7834 2.7399 2.6970	2.5374 - 1 2.4977 2.4586 2.4201 2.3823 2.3450 2.3083 2.2722 2.2366 2.2017
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	13027 13127 13227 13328 13428 13529 13629 13730 13830	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.6510 + 2 1.6252 1.5997 1.5747 1.5501 1.5258 1.5019 1.4784 1.4553	1.2383 • 2 1.2190 1.1999 1.1811 1.1626 1.1444 1.1265 1.1089 1.0916	1.6294 - 1 1.6039 1.5788 1.5541 1.5298 1.5059 1.4823 1.4591 1.4363 1.4138	2.6548 - 1 2.6133 2.5724 2.5322 2.4925 2.4536 2.4152 2.3774 2.3402 2.3036	2.1672 - 1 2.1333 2.0999 2.0671 2.0347 2.0029 1.9716 1.9407 1.9104 1.8805
14000 14100 14200 14300 14400 14500 14600 14700 14800	14031 14131 14232 14332 14433 14533 14634 14634 14835 14935	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.4101 • 2 1.3881 1.3663 1.3450 1.3239 1.3032 1.2828 1.2628 1.2628 1.2430	1.0577 + 2 1.0411 1.0248 1.0088 9.9306 + 1 9.7752 9.6223 9.4718 9.3236 9.1777	1.3917 - 1 1.3699 1.3485 1.3274 1.3066 1.2862 1.2660 1.2462 1.2267	2.2675 - 1 2.2321 2.1971 2.1628 2.1289 2.0956 2.0628 2.0306 1.9968 1.9675	1.8510 - 1 1.8221 1.7936 1.7655 1.7379 1.7107 1.6839 1.6576 1.6317
15000 15100 15200 15300 15400 15500 15600 15700 15800 15900	15035 15136 15236 15337 15437 15538 15638 15638 15739 15839	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.2044 • 2 1.1856 1.1670 1.1488 1.1308 1.1131 1.0957 1.0785 1.0617	9.0341 • 1 8.8928 8.7536 8.6167 8.4819 8.3492 8.2186 8.0900 7.9634 7.8388	1.1887 - 1 1.1701 1.1518 1.1337 1.1160 1.0985 1.0813 1.0644 1.0478	1.9367 - 1 1.9064 1.8766 1.8473 1.8183 1.7899 1.7619 1.7343 1.7072 1.6805	1.5810 - 1 1.5563 1.5319 1.5080 1.4844 1.4611 1.4383 1.4158 1.3936
16000 16100 16200 16300 16400 16500 16600 16700 16800	16040 16141 16241 16342 16543 16643 16744 16845	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.0287 · 2 1.0126 9.9680 · 1 9.8121 9.6586 9.5074 9.3587 9.2123 9.0682 8.9263	7.7162 + 1 7.5955 7.4766 7.3596 7.2445 7.1312 7.0196 6.9098 6.8017 6.6952	1.0152 - 1 9.9940 - 2 9.8377 9.6838 9.5323 9.3831 9.2363 9.0918 8.9496 8.8096	1.6542 - 1 1.6283 1.6028 1.5778 1.5531 1.5288 1.5049 1.4813 1.4581 1.4353	1.3504 - 1 1.3292 1.3084 1.2880 1.2678 1.2480 1.2285 1.2292 1.1903 1.1717
17000 17100 17200 17300 17400 17500 17600 17700 17800 17900	17046 17146 17247 17347 17448 17548 17649 17749 17850 17951	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	8.7866 • 1 8.6492 8.5138 8.3806 8.2495 8.1205 7.9934 7.8684 7.7452	6.5905 + 1 6.4874 6.3859 6.2860 6.1876 6.0908 5.9955 5.9017 5.8094 5.7185	8.6717 - 2 8.5361 8.4025 8.2710 8.1416 8.0143 7.8889 7.7655 7.6440	1.4129 - 1 1.3908 1.3690 1.3476 1.3265 1.3058 1.2853 1.2652 1.2454 1.2259	1.1534 - 1 1.1353 1.1176 1.1001 1.0829 1.0659 1.0492 1.0328 1.0167
18000 18100 18200 18300 18400 18500 18600 18700 18800	18051 18152 18252 18353 18453 18554 18655 18755 18856 18956	216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216,650 216,650 216,650 216,650 216,650 216,650 216,650 216,650 216,650	7.5048 • 1 7.3874 7.2718 7.1580 7.0460 6.9358 6.8273 6.7205 6.6153 6.5118	5.6290 + 1 5.5410 5.4543 5.3690 5.2850 5.2023 5.1209 5.0408 4.9619 4.8843	7.4067 - 2 7.2908 7.1767 7.0044 6.9539 6.8451 6.7380 6.6326 6.5288 6.4267	1.2068 - 1 1.1879 1.1693 1.1510 1.1330 1.1153 1.0978 1.0806 1.0637	9.8511 - 2 9.6970 9.5453 9.3959 9.2489 9.1042 8.9618 8.8216 8.6836 8.5477

Table I
Geometric Altitude, Metric Units

(Seometric Attitu	ide, Metric Units				
Alti	tude		Temperatur	re		Pressure		Dens	sity	
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_0	
11000 11100 11200 11300 11400 11500 11600 11700 11800	10981 11081 11180 11280 11380 11479 11579 11679 11778 11878	216.774 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.376 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.774 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	2.2699 + 2 2.2346 2.1997 2.1654 2.1317 2.0984 2.0657 2.0335 2.0018 1.9706	1.7026 + 2 1.6760 1.6499 1.6242 1.5739 1.5739 1.55494 1.5252 1.5015	2.2403 - 1 2.2053 2.1710 2.1371 2.1038 2.0710 2.0387 2.0069 1.9756 1.9448	3.6480 - 1 3.5932 3.5372 3.4820 3.4277 3.3743 3.3217 3.2699 3.2190 3.1688	2.9780 - 1 2.9332 2.8875 2.8425 2.7982 2.7545 2.7116 2.6693 2.6277 2.5868	
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	11977 12077 12177 12276 12376 12475 12575 12675 12774 12874	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.9399 • 2 1.9097 1.8799 1.8506 1.8218 1.7934 1.7654 1.7379 1.7108 1.6842	1.4550 • 2 1.4323 1.4100 1.3880 1.3664 1.3451 1.3242 1.3035 1.2832 1.2632	1.9145 - 1 1.8847 1.8553 1.8264 1.7979 1.7699 1.7423 1.7152 1.6884 1.6621	3.1194 - 1 3.0708 3.0229 2.9758 2.9294 2.8838 2.8388 2.7946 2.7510 2.7082	2.5464 - 1 2.5067 2.4677 2.4292 2.3914 2.3541 2.3174 2.2813 2.2457 2.2107	
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	12973 13073 13173 13272 13372 13471 13571 13671 13770 13870	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.6579 • 2 1.6321 1.6066 1.5816 1.5570 1.5327 1.5088 1.4853 1.4622 1.4394	1.2435 • 2 1.2241 1.2051 1.1863 1.1678 1.1496 1.1317 1.1141 1.0967	1.6362 - 1 1.6107 1.5856 1.5509 1.5366 1.5127 1.4891 1.4659 1.4431	2.6660 - 1 2.6244 2.5835 2.5433 2.5037 2.4646 2.4263 2.3885 2.3512 2.3146	2.1763 - 1 2.1424 2.1090 2.0761 2.0438 2.0120 1.9806 1.9498 1.9194 1.8895	
14000 14100 14200 14300 14400 14500 14600 14700 14800	13969 14069 14168 14268 14367 14467 14467 14666 14766	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.4170 • 2 1.3949 1.3732 1.3518 1.3307 1.3100 1.2896 1.2695 1.2498 1.2303	1.0628 • 2 1.0463 1.0300 1.0139 9.9817 • 1 9.8262 9.6732 9.5226 9.3743 9.2283	1.3985 - 1 1.3767 1.3552 1.3341 1.3133 1.2929 1.2727 1.2529 1.2734 1.2142	2.2786 - 1 2.2431 2.2081 2.1737 2.1399 2.1066 2.0737 2.0414 2.0097 1.9784	1.8601 - 1 1.8311 1.8026 1.7745 1.7468 1.7196 1.6929 1.6665 1.6405 1.6150	
15000 15100 15200 15300 15400 15500 15600 15700 15800 15900	14965 15064 15164 15263 15363 15462 15562 15661 15761 15860	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.2111 + 2 1.1923 1.1737 1.1554 1.11374 1.1197 1.1023 1.0851 1.0682 1.0516	9.0846 + 1 8.9431 8.8038 8.6668 8.5318 8.3990 8.2682 8.1395 8.0128 7.8880	1.1953 - 1 1.1767 1.1584 1.1403 1.1226 1.1051 1.0879 1.0709 1.0709 1.0543	1.9476 - 1 1.9172 1.8874 1.8580 1.8291 1.8006 1.7725 1.7449 1.7178	1.5898 - 1 1.5651 1.5407 1.5167 1.4931 1.4699 1.4470 1.4244 1.4023	
16000 16100 16200 16300 16400 16500 16600 16700 16800	15960 16059 16159 16258 16358 16457 16557 16656 16756	216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650	1.0352 + 2 1.0191 1.0033 9.8768 + 1 9.7231 9.5717 9.4227 9.2761 9.1317 8.9896	7.7652 • 1 7.6443 7.5253 7.4082 7.2929 7.1794 7.0676 6.9576 6.8493 6.7427	1.0217 - 1 1.0058 9.9018 - 2 9.7476 9.5959 9.4465 9.2995 9.1548 9.0123 8.8720	1.6647 - 1 1.6388 1.6133 1.5882 1.5635 1.5391 1.5152 1.4916 1.4684 1.4455	1.3589 - 1 1.3378 1.3170 1.2965 1.2763 1.2564 1.2369 1.2176 1.1987	
17000 17100 17200 17200 17300 17400 17500 17600 17700 17800 17900	17154 17253 17352	216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650	8.8497 • 1 8.7120 8.5764 8.4429 8.3115 8.1822 8.0549 7.9296 7.8062 7.6847	6.6378 • 1 6.5345 6.4328 6.3327 6.2342 6.1372 6.0417 5.9477 5.8551 5.7640	8.7340 - 2 8.5980 8.4642 8.3325 8.2029 8.0752 7.946 7.8259 7.7041 7.5843	1.4230 - 1 1.4009 1.3791 1.3576 1.3365 1.3157 1.2952 1.2751 1.2552 1.2357	1.1616 - 1 1.1436 1.1258 1.1083 1.0910 1.0740 1.0573 1.0409 1.0247	
18000 18100 18200 18300 18400 18500 18600 18700 18800 18900	18247 18347 18446 18546	216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650	7.5652 + 1 7.4475 7.3316 7.2176 7.1053 6.9948 6.8860 6.7789 6.6734 6.5696	5.6743 + 1 5.5861 5.4992 5.4136 5.3294 5.2465 5.1649 5.0845 5.0055 4.9276	7.4663 - 2 7.3501 7.2358 7.1232 7.0124 6.9033 6.7959 6.6902 6.5862 6.4837	1.2165 - 1 1.1975 1.1789 1.1606 1.1425 1.1248 1.1073 1.0900 1.0731	9.9304 - 2 9.7759 9.6238 9.4741 9.3267 9.1816 9.0388 8.8982 8.7598 8.6236	

Table I
Geopotential Altitude, Metric Units

					opotential Anti-	ide, wether onits			
Altit	tude		Femperatur	e		Pressure		Dens	ity
H (m)	Z (m)	т (к)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}
19000 19100 19200 19300 19400 19500 19600 19700 19800	19057 19158 19258 19359 19459 19560 19661 19761 19862 19962	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	6.4100 + 1 6.3097 6.2110 6.1138 6.0181 5.0240 5.8313 5.7401 5.6503 5.5619	4.8078 • 1 4.7326 4.6586 4.5857 4.5140 4.4433 4.3738 4.3054 4.2380 4.1717	6.3261 - 2 6.2272 6.1297 6.0338 5.9394 5.8465 5.7550 5.6650 5.5764 5.4891	1.0307 - 1 1.0146 9.9871 - 2 9.8309 9.6771 9.5257 9.3767 9.2300 9.0856 8.9434	8.4140 - 2 8.2823 8.1528 8.0252 7.8997 7.7761 7.6544 7.5347 7.4168 7.3007
20000 20100 20200 20300 20400 20500 20600 20700 20800 20900	20063 20164 20264 20365 20466 20566 20667 20768 20768	216.650 216.750 216.850 216.950 217.050 217.150 217.250 217.350 217.450 217.550	-56.500 -56.400 -56.300 -56.200 -56.100 -56.000 -55.900 -55.800 -55.600	216.650 216.750 216.850 216.850 217.050 217.150 217.250 217.350 217.450 217.550	5.4748 + 1 5.3892 5.3049 5.2220 5.1405 5.0602 4.9812 4.9035 4.8271 4.7519	4.1065 • 1 4.0422 3.9790 3.9168 3.8557 3.7955 3.7362 3.6779 3.6206 3.5642	5.4032 - 2 5.3187 5.2356 5.1538 5.0732 4.9940 4.9161 4.8394 4.7640 4.6897	8.8035 - 2 8.6618 8.5224 8.3854 8.2506 8.1180 7.9877 7.8595 7.7334 7.6093	7.1865 - 2 7.0708 6.9571 6.8452 6.7352 6.6270 6.5205 6.4159 6.3129 6.2117
21000 21100 21200 21300 21400 21500 21600 21700 21800 21900	21070 21170 21271 21372 21472 21573 21674 21774 21875 21976	217.650 217.750 217.850 217.950 218.050 218.150 218.250 218.350 218.450 218.550	-55.500 -55.400 -55.300 -55.200 -55.100 -55.000 -54.900 -54.700 -54.600	217.650 217.750 217.850 217.950 218.050 218.150 218.250 218.350 218.450 218.550	4.6778 + 1 4.6959 4.5333 4.4628 4.3934 4.3251 4.2579 4.1918 4.1268 4.0627	3.5087 • 1 3.4540 3.4003 3.3474 3.2953 3.2441 3.1937 3.1441 3.0953 3.0473	4.6167 - 2 4.5448 4.4740 4.4044 4.3360 4.2686 4.2023 4.1370 4.0728 4.0096	7.4874 - 2 7.3674 7.2494 7.1334 7.0192 6.9070 6.7965 6.6879 6.5811 6.4761	6.1121 - 2 6.0142 5.9179 5.8232 5.7300 5.6383 5.5482 5.4595 5.3724 5.2866
22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	22076 22177 22278 22379 22479 22580 22681 22781 22781 22883	218.650 218.750 218.850 218.950 219.050 219.150 219.250 219.350 219.350 219.550	-54.500 -54.300 -54.200 -54.100 -54.000 -53.900 -53.800 -53.600	218.650 218.750 218.850 218.950 219.050 219.150 219.250 219.350 219.450 219.550	3.9997 • 1 3.9377 3.8767 3.8167 3.7576 3.6995 3.6692 3.5860 3.5306 3.4760	3.0000 + 1 2.9535 2.9078 2.8627 2.8184 2.7748 2.77319 2.6897 2.6461 2.6072	3.9474 - 2 3.8862 3.8260 3.7668 3.7085 3.6511 3.5946 3.5391 3.4844 3.4306	6.3727 - 2 6.2711 6.1711 6.0728 5.9760 5.8809 5.7873 5.6953 5.6047 5.5156	5.2022 - 2 5.1193 5.0376 4.9574 4.8784 4.8007 4.7243 4.6492 4.5753 4.5026
23000 23100 23200 23300 23400 23500 23600 23700 23800 23900	23084 23184 23285 23386 23486 23587 23688 23789 23889	219.650 219.750 219.850 219.950 220.050 220.150 220.250 220.250 220.450 220.550	-53.500 -53.400 -53.300 -53.200 -53.100 -53.000 -52.900 -52.800 -52.600	219.650 219.750 219.850 219.850 220.050 220.150 220.250 220.350 220.450 220.550	3.4224 + 1 3.3696 3.3176 3.2665 3.2161 3.1666 3.1178 3.0699 3.0226 2.9762	2.5670 + 1 2.5274 2.4884 2.4500 2.4123 2.3751 2.3386 2.3026 2.2672 2.2323	3.3776 - 2 3.3255 3.2742 3.2237 3.1741 3.1252 3.0771 3.0297 2.9851 2.9373	5.4280 - 2 5.3418 5.2571 5.1737 5.0916 5.0109 4.9316 4.8355 4.7766	4.4310 - 2 4.3607 4.2915 4.2234 4.1564 4.0906 4.0258 3.9620 3.8993 3.8376
24000 24100 24200 24300 24400 24500 24600 24700 24800 24900	24091 24192 24292 24393 24494 24595 24696 24796 24897 24998	220.850 220.950 221.050 221.150 221.250 221.350 221.450	-52.500 -52.400 -52.300 -52.200 -52.100 -52.000 -51.900 -51.700 -51.600	220.650 220.750 220.850 220.950 221.050 221.250 221.250 221.350 221.450 221.550	2.9304 • 1 2.8854 2.8411 2.7975 2.7546 2.7124 2.6708 2.6299 2.5896 2.5500	2.1980 + 1 2.1642 2.1310 2.0983 2.0661 2.0344 2.0033 1.9726 1.9424 1.9126	2.8921 - 2 2.8477 2.8040 2.7609 2.7186 2.6359 2.5955 2.5955 2.5558	4.6267 - 2 4.5536 4.4817 4.4109 4.3413 4.2728 4.2054 4.1391 4.0739 4.0097	3.7769 - 2 3.7172 3.6585 3.66007 3.5439 3.4880 3.4330 3.3788 3.3256 3.2732
25000 25100 25200 25300 25400 25600 25700 25700 25900	25099 25200 25300 25401 25502 25603 25704 25804 25905 26006	221.750 221.850 221.950 222.050 222.150 222.250 222.350 222.450	-51.500 -51.400 -51.300 -51.200 -51.100 -51.000 -50.800 -50.700 -50.600	221.650 221.750 221.850 221.950 222.050 222.150 222.250 222.350 222.450 222.550	2.5110 • 1 2.4726 2.4348 2.3976 2.3610 2.3249 2.2895 2.2545 2.2202 2.1863	1.8834 + 1 1.8546 1.8262 1.7983 1.7709 1.7438 1.7172 1.6910 1.6653 1.6399	2.4781 - 2 2.4402 2.4029 2.3662 2.3301 2.2945 2.2595 2.2251 2.1911 2.1578	3.9466 - 2 3.8845 3.8234 3.7633 3.7041 3.6460 3.5887 3.5324 3.4770 3.4225	3.2217 - 2 3.1710 3.1211 3.0721 3.0238 2.9763 2.9296 2.8836 2.8383 2.7938
26000 26100 26200 26300 26400 26500 26600 26700 26800 26900	26813	222.750 222.850 222.950 223.050 223.150 223.250 223.350 223.450	-50.500 -50.400 -50.300 -50.200 -50.100 -50.000 -49.900 -49.800 -49.700	223.350 223.450	2.1530 • 1 2.1203 2.0880 2.08562 2.0250 1.9942 1.9639 1.9341 1.9047	1.6149 • 1 1.5903 1.5661 1.5423 1.5188 1.4958 1.4730 1.4507 1.4287	2.1249 - 2 2.0925 2.0607 2.0294 1.9985 1.9681 1.9382 1.9088 1.8798 1.8513	3.3688 - 2 3.3160 3.2641 3.2130 3.1628 3.1133 3.0646 3.0168 2.9697 2.9233	2.7501 - 2 2.7070 2.6646 2.6629 2.5819 2.5415 2.5018 2.4627 2.4242 2.3864

Table I Geometric Altitude, Metric Units

					Geometric Aititu	de, Metric Units	1			
Alti	tude		Temperatu	re		Pressure		Den	sity	
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	ρ (kg/m ³)	$^{ ho/ ho}_{f 0}$	
19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	18943 19043 19142 19242 19341 19440 19540 19639 19739 19838	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	6.4674 • 1 6.3669 6.2678 6.1704 6.0744 5.9799 5.8870 5.7954 5.7053 5.6166	4.8510 • 1 4.7755 4.7013 4.6281 4.5562 4.4853 4.4156 4.3469 4.2793 4.2128	6.3829 - 2 6.2836 6.1897 6.0897 5.9950 5.9017 5.8100 5.7196 5.6307 5.5431	1.0400 - 1 1.0238 1.0079 9.9219 - 2 9.7676 9.6157 9.4662 9.3190 9.1741 9.0314	8.4894 - 2 8.3574 8.2274 8.0995 7.9735 7.8495 7.7275 7.6073 7.4890 7.3726	
20000 20100 20200 20300 20400 20500 20600 20600 20800 20900	19937 20037 20136 20235 20335 20434 20533 20633 20633 20633	216.650 216.687 216.786 216.885 216.985 217.084 217.183 217.283 217.382 217.482	-56.500 -56.463 -56.364 -56.265 -56.165 -56.066 -55.967 -55.867 -55.768 -55.668	216.650 216.687 216.786 216.885 216.985 217.084 217.183 217.283 217.283 217.482	5.5293 • 1 5.4433 5.3587 5.2755 5.1130 5.0336 4.9556 4.8788 4.8033	4.1473 + 1 4.0828 4.0193 3.9569 3.8955 3.8350 3.7755 3.7170 3.6594 3.6027	5.4570 - 2 5.3721 5.2886 5.2065 5.1256 5.0461 4.9678 4.8908 4.8150 4.7404	8.8910 - 2 8.7513 8.6113 8.4737 8.3383 8.2052 8.0742 7.9454 7.8187	7.2580 - 2 7.1439 7.0297 6.9173 6.8068 6.6981 6.5912 6.4860 6.3826 6.2809	
21000 21100 21200 21300 21400 21500 21600 21700 21800 21900	20931 21030 21130 21229 21328 21428 21527 21626 21725 21825	217.581 217.680 217.780 217.879 217.978 218.078 218.177 218.276 218.375 218.475	-55.569 -55.470 -55.370 -55.271 -55.172 -55.072 -54.973 -54.874 -54.775	217.581 217.680 217.780 217.879 217.978 218.078 218.177 218.276 218.375 218.475	4.7289 • 1 4.6557 4.5837 4.5129 4.4431 4.3745 4.3070 4.2405 4.1751 4.1108	3.5469 • 1 3.4921 3.4381 3.3849 3.3326 3.2811 3.2305 3.1806 3.1316 3.0833	4.6671 - 2 4.5948 4.5238 4.4538 4.3850 4.3173 4.2507 4.1851 4.1205 4.0570	7.5715 - 2 7.4509 7.3324 7.2157 7.1010 6.9881 6.8771 6.7680 6.6606 6.5549	6.1808 - 2 6.0824 5.9856 5.8904 5.7967 5.7046 5.6140 5.5249 5.4372 5.3509	
22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	21924 22023 22123 22222 22321 22421 22520 22619 22719 22818	218.574 218.673 218.773 218.872 218.971 219.071 219.170 219.269 219.369 219.468	-54.576 -54.477 -54.377 -54.278 -54.179 -53.980 -53.881 -53.781 -53.682	218.574 218.673 218.773 218.872 218.971 219.071 219.170 219.269 219.369 219.468	4.0475 + 1 3.9851 3.9238 3.8634 3.8040 3.7455 3.6880 3.6314 3.5757 3.5208	3.0358 + 1 2.9891 2.9431 2.8978 2.8532 2.8532 2.4094 2.7662 2.7237 2.6819 2.6408	3.9945 - 2 3.9330 3.8725 3.8129 3.7543 3.6966 3.6398 3.5839 3.5289 3.4748	6.4510 - 2 6.3488 6.2482 6.1520 5.9563 5.8621 5.7695 5.6784 5.5888	5.2661 - 2 5.1827 5.1006 5.0198 4.9404 4.8623 4.7854 4.7098 4.6354 4.5622	
23000 23100 23200 23300 23400 23500 23600 23700 23800 23900	22917 23016 23116 23215 23314 23413 23513 23612 23711 23810	219.567 219.666 219.766 219.865 219.964 220.163 220.163 220.262 220.361 220.460	-53.583 -53.484 -53.384 -53.285 -53.186 -53.087 -52.987 -52.888 -52.789 -52.690	219.567 219.666 219.766 219.865 219.964 220.063 220.163 220.262 220.361 220.460	3.4668 • 1 3.4137 3.3614 3.3099 3.2593 3.2094 3.1604 3.1121 3.0645 3.0177	2.6003 + 1 2.5605 2.5212 2.4826 2.4446 2.4073 2.3705 2.3342 2.2986 2.2635	3.4215 - 2 3.3690 3.3174 3.2666 3.2167 3.1675 3.1190 3.0714 3.0245 2.9783	5.5006 - 2 5.4138 5.3285 5.2445 5.1620 5.0807 5.0807 5.0921 4.8448 4.7687	4.4903 - 2 4.4195 4.3498 4.2813 4.2138 4.1475 4.0823 4.0181 3.9549 3.8928	
24000 24100 24200 24300 24300 24500 24500 24600 24700 24800 24900	23910 24009 24108 24207 24307 24406 24505 24604 24704 24803	220.560 220.659 220.758 220.857 220.957 221.955 221.155 221.254 221.354 221.453	-52.590 -52.491 -52.392 -52.293 -52.193 -52.194 -51.995 -51.697	220.857 220.957 221.056 221.155 221.254 221.354	2.9717 + 1 2.9264 2.8818 2.8379 2.7946 2.7521 2.7102 2.6690 2.6284 2.5885	2.2289 • 1 2.1949 2.1615 2.1286 2.0961 2.0642 2.0328 2.0019 1.9715 1.9415	2.9328 - 2 2.8881 2.8441 2.8007 2.7581 2.7161 2.6748 2.6341 2.5940 2.5546	4.6938 - 2 4.6201 4.5476 4.4763 4.4062 4.3372 4.2693 4.2024 4.1367 4.0720	3.8317 - 2 3.7715 3.77124 3.6542 3.5549 3.5495 3.4851 3.4306 3.3769 3.3241	
25000 25100 25200 25300 25300 25500 25500 25600 25700 25800 25900	24902 25001 25100 25200 25299 25398 25497 25597 25696 25795	221.552 221.651 221.750 221.850 221.949 222.147 222.147 222.247 222.346 222.445	-51.598 -51.499 -51.400 -51.300 -51.201 -51.003 -50.903 -50.804 -50.705	221.552 221.651 221.750 221.850 221.949 222.048 222.147 222.247 222.346 222.445	2.5492 • 1 2.5105 2.4724 2.4349 2.3980 2.3617 2.3259 2.2907 2.2560 2.2219	1.9120 • 1 1.8830 1.8544 1.8263 1.7986 1.7714 1.7445 1.7181 1.6921 1.6666	2.5158 - 2 2.4776 2.4401 2.4031 2.3666 2.3308 2.2955 2.2607 2.2265 2.1929	4.0084 - 2 3.9458 3.8842 3.8236 3.7639 3.7052 3.6475 3.5907 3.5348 3.4798	3.2722 - 2 3.2210 3.1708 3.1213 3.0726 3.0247 2.9776 2.9312 2.8855 2.8406	
26000 26100 26200 26300 26400 26500 26500 26600 26700 26800 26900	25894 25993 26092 26192 26291 26390 26489 26588 26687 26787	222.742 222.842 222.941 223.040 223.139 223.238 223.337	-50.606 -50.507 -50.408 -50.308 -50.209 -50.011 -49.912 -49.813 -49.713	222.842 222.941 223.040 223.139 223.238	2.1883 • 1 2.1553 2.1227 2.0907 2.0591 2.0281 1.9975 1.9674 1.9378	1.6414 • 1 1.6166 1.5922 1.5661 1.5245 1.5212 1.4983 1.4757 1.4535	2.1597 - 2 2.1271 2.0950 2.0633 2.0322 2.0016 1.9714 1.9417 1.9125 1.8837	3.4257 - 2 3.3724 3.3200 3.2684 3.2177 3.1678 3.1186 3.0703 3.0227 2.9759	2.7965 - 2 2.7530 2.7102 2.6267 2.5859 2.5458 2.5064 2.4675 2.4293	

Table I Geopotential Altitude, Metric Units

Altit	ude	•	Temperatui	e		Pressure		Dens	sity
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	$\rho/\rho_{f 0}$
27000 27100 27200 27300 27400 27500 27600 27700 27800 27900	27115 27216 27317 27418 27519 27619 27720 27821 27922 28023	223.650 223.750 223.850 223.950 224.050 224.150 224.250 224.350 224.450 224.550	-49.500 -49.400 -49.300 -49.200 -49.100 -48.900 -48.800 -48.700 -48.600	223.650 223.750 223.850 223.950 224.050 224.150 224.250 224.350 224.450 224.550	1.8474 + 1 1.8194 1.7918 1.7647 1.7380 1.7117 1.6858 1.6603 1.6352 1.6106	1.3857 • 1 1.3647 1.3440 1.3236 1.3036 1.2839 1.2645 1.2453 1.2265 1.2080	1.8232 - 2 1.7956 1.7684 1.7416 1.7153 1.6893 1.6638 1.6386 1.6139	2.8777 - 2 2.8328 2.7886 2.7452 2.7024 2.6604 2.6190 2.5782 2.5381 2.4987	2.3491 - 2 2.3125 2.2764 2.2410 2.2061 2.1717 2.1379 2.1047 2.0720 2.0398
28000 28100 28200 28300 28400 28500 28600 28700 28800 28900	28124 28225 28326 28427 28527 28628 28729 28830 28931 29032	224.650 224.750 224.850 224.950 225.050 225.150 225.350 225.350 225.450 225.550	-48.500 -48.400 -48.300 -48.200 -48.100 -47.900 -47.800 -47.700	224.650 224.750 224.850 224.950 225.050 225.150 225.250 225.350 225.450 225.550	1.5862 • 1 1.5623 1.5387 1.5155 1.4927 1.4702 1.4481 1.4263 1.4048	1.1898 • 1 1.1718 1.1541 1.1367 1.1196 1.1027 1.0861 1.0698 1.0537	1.5655 - 2 1.5419 1.5186 1.4957 1.4732 1.4510 1.4291 1.4076 1.3865	2.4599 - 2 2.4217 2.3841 2.3471 2.3107 2.2749 2.2397 2.2050 2.1708 2.1373	2.0081 - 2 1.9769 1.9462 1.9160 1.8863 1.8571 1.8283 1.8000 1.7721
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	29133 29234 29335 29436 29537 29638 29738 29839 29940 30041	225.650 225.750 225.850 225.950 226.050 226.150 226.250 226.350 226.450 226.550	-47.500 -47.400 -47.300 -47.200 -47.100 -47.000 -46.900 -46.800 -46.700 -46.600	225.650 225.750 225.850 225.950 226.050 226.150 226.250 226.350 226.450 226.550	1.3629 + 1 1.3424 1.3223 1.3024 1.2829 1.2637 1.2447 1.2261 1.2077 1.1896	1.0223 + 1 1.0069 9.9182 + 0 9.7694 9.6228 9.4785 9.3364 9.1965 9.0588 8.9232	1.3451 - 2 1.3249 1.3050 1.2854 1.2661 1.2471 1.2284 1.2100 1.1919 1.1741	2.1042 - 2 2.0717 2.0397 2.0082 1.9772 1.9466 1.9166 1.8871 1.8580 1.8294	1.7177 - 2 1.66912 1.6650 1.6393 1.6140 1.5891 1.5646 1.55405 1.5167
30000 30100 30200 30300 30400 30500 30600 30700 30800 30900	30142 30243 30344 30445 30546 30647 30748 30849 30950 31051	226.650 226.750 226.850 226.950 227.050 227.150 227.250 227.350 227.450 227.550	-46.500 -46.400 -46.300 -46.200 -46.100 -45.900 -45.700 -45.600	226.650 226.750 226.850 226.950 227.050 227.150 227.250 227.350 227.450 227.550	1.1718 + 1 1.1543 1.1370 1.1200 1.1033 1.0868 1.0706 1.0546 1.0339 1.0234	8.7897 • 0 8.6582 8.5288 8.4013 8.2758 8.1522 8.0306 7.9108 7.7928 7.6767	1.1565 - 2 1.1392 1.1222 1.1054 1.0889 1.0726 1.0566 1.0408 1.0253	1.8012 - 2 1.7735 1.77462 1.77193 1.6929 1.6669 1.6413 1.6161 1.5913	1.4704 - 2 1.4477 1.4255 1.4035 1.3820 1.3607 1.3398 1.3193 1.2990 1.2791
31000 31100 31200 31300 31400 31500 31600 31700 31800 31900	31152 31253 31354 31455 31556 31657 31758 31859 31960 32061	227.650 227.750 227.850 227.950 228.050 228.150 228.250 228.350 228.450 228.550	-45.500 -45.400 -45.300 -45.200 -45.000 -44.900 -44.800 -44.600	227.650 227.750 227.850 227.950 228.050 228.150 228.250 228.350 228.450 228.550	1.0082 + 1 9.9321 + 0 9.7843 9.6387 9.4954 9.3542 9.2152 9.0783 8.9435 8.8108	7.5623 • 0 7.4497 7.3388 7.2296 7.1221 7.0162 6.9120 6.8093 6.7082 6.6086	9.9504 - 3 9.8022 9.6563 9.5127 9.3712 9.2319 9.0947 8.9596 8.8956	1.5429 - 2 1.5192 1.4960 1.4731 1.4505 1.4283 1.4065 1.3850 1.3638 1.3430	1.2595 - 2 1.2402 1.2212 1.2025 1.1841 1.1660 1.1481 1.1306 1.1133
32000 32200 32400 32600 32800 33000 33200 33400 33600 33800	32162 32364 32566 32768 32970 33172 33374 33576 33779	229.210 229.770 230.330 230.890 231.450 232.010 232.570 233.130	-44.500 -43.940 -43.380 -42.820 -42.260 -41.700 -41.140 -40.580 -40.580		8.6801 • 0 8.4249 8.1777 7.9384 7.7067 7.4622 7.2648 7.0542 6.8503 6.6526	6.5106 • 0 6.3192 6.1338 5.9543 5.7805 5.6121 5.4491 5.2911 5.1381 4.9899	8.5666 - 3 8.3147 8.0708 7.6346 7.6059 7.3844 7.1698 6.9620 6.7607 6.5656	1.3225 - 2 1.2805 1.2399 1.2007 1.1628 1.1262 1.0908 1.0567 1.0236 9.9173 - 3	1.0796 - 2 1.0453 1.0122 9.8014 - 3 9.4922 9.1935 8.9048 8.6259 8.3563 8.0958
34000 34200 34400 34600 35000 35200 35400 35600 35800	34183 34385 34587 34589 34992 35194 35396 35598 35801 36003	237.050 237.610 238.170 238.730	-38.900 -38.340 -37.780 -37.220 -36.660 -36.100 -35.540 -34.980 -34.420 -33.860	234.250 234.810 235.370 235.930 236.490 237.050 237.610 238.170 238.730 239.290	6.4612 • 0 6.2756 6.0959 5.9217 5.7528 5.5892 5.4306 5.2768 5.1277 4.9832	4.8463 + 0 4.7071 4.5723 4.4416 4.3150 4.1922 4.0732 3.9579 3.8461 3.7377	6.3767 - 3 6.1936 6.0162 5.6442 5.6776 5.5161 5.3595 5.2078 5.0607 4.9181	9.6089 - 3 9.3107 9.0225 8.7438 8.4744 8.2139 7.9620 7.7184 7.4828 7.2549	7.8440 - 3 7.6006 7.3653 7.1378 6.9179 6.7052 6.4996 6.3007 6.1084 5.9223
36000 36200 36400 36600 36800 37000 37200 37400 37600 37800	36205 36407 36610 36812 37014 37217 37419 37621 37824 38026	240.970 241.530 242.090	-33.300 -32.740 -32.180 -31.620 -31.060 -30.500 -29.940 -29.380 -28.820 -28.260	239.850 240.410 240.970 241.530 242.090 242.650 243.770 244.330 244.890	4.8431 + 0 4.7072 4.5755 4.4477 4.3238 4.2036 4.0070 3.9739 3.8642 3.7578	3.6326 + 0 3.5307 3.4319 3.3361 3.2431 3.1530 3.0655 2.9807 2.8984 2.8186	4.7798 ~ 3 4.6457 4.5157 4.3896 4.2673 4.1486 4.0336 3.9220 3.8137 3.7086	7.0344 - 3 6.0211 6.6148 6.4152 6.2220 6.0351 5.0542 5.6792 5.5097 5.3457	5.7424 - 3 5.5683 5.3999 5.2369 5.0792 4.9266 4.7790 4.6361 4.4977 4.3638

Table I
Geometric Altitude, Metric Units

					Jeometric Artico	de, Metric Units			
Alti	tude	-	Temperatur	e		Pressure		Dens	sity
Z (m)	H (m)	T (K)	t (°C)	т _м (к)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	$\rho/\rho_{f 0}$
27000 27100 27200 27300 27400 27500 27600 27700 27800 27900	26886 26985 27084 27183 27282 27382 27481 27580 27679 27778	223.536 223.635 223.734 223.833 223.932 224.032 224.131 224.230 224.329 224.428	-49.614 -49.515 -49.416 -49.317 -49.218 -49.019 -48.920 -48.821 -48.722	223.536 223.635 223.734 223.833 223.932 224.032 224.131 224.230 224.329 224.428	1.8799 + 1 1.8517 1.8238 1.7764 1.7695 1.7429 1.7168 1.6910 1.6657 1.6407	1.4100 + 1 1.3888 1.3680 1.3474 1.3272 1.3073 1.2877 1.2684 1.2493 1.2306	1.8553 - 2 1.8274 1.8000 1.7729 1.7463 1.7201 1.6943 1.6689 1.6439 1.6193	2.9298 - 2 2.8845 2.8399 2.7528 2.7528 2.7103 2.6684 2.6273 2.5867 2.5867	2.3917 - 2 2.3547 2.3183 2.2824 2.2472 2.2125 2.1783 2.1447 2.1116 2.0791
28000 28100 28200 28300 28300 28500 28500 28600 28700 28800 28900	27877 27976 28075 28175 28175 28274 28373 28472 28571 28670 28769	224.527 224.626 224.725 224.825 224.924 225.023 225.122 225.221 225.320 225.419	-48.623 -48.524 -48.425 -48.325 -48.226 -48.028 -47.929 -47.830 -47.731	224.527 224.626 224.725 224.825 224.924 225.023 225.122 225.221 225.320 225.419	1.6161 • 1 1.5920 1.5681 1.5447 1.5216 1.4989 1.4765 1.4545 1.4328	1.2122 + 1 1.1941 1.1762 1.1586 1.1413 1.1242 1.1075 1.0909 1.0747	1.5950 - 2 1.5711 1.5476 1.5245 1.5017 1.4793 1.4572 1.4354 1.4140 1.3930	2.5076 - 2 2.4690 2.4310 2.3936 2.3568 2.3206 2.2849 2.2498 2.2153 2.1813	2.0470 - 2 2.0155 1.9845 1.9540 1.9239 1.8643 1.8652 1.8366 1.8366
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	28868 28967 29066 29166 29265 29364 29463 29562 29661 29760	225.518 225.617 225.716 225.816 225.915 226.014 226.113 226.212 226.311 226.410	-47.632 -47.533 -47.434 -47.334 -47.235 -47.136 -47.037 -46.938 -46.839 -46.740	225.518 225.617 225.716 225.816 225.915 226.014 226.113 226.212 226.311 226.410	1.3904 • 1 1.3697 1.3493 1.3292 1.3094 1.2899 1.2708 1.2519 1.2333 1.2150	1.0429 • 1 1.0273 1.0120 9.9700 • 0 9.8217 9.6757 9.5319 9.3903 9.2509 9.1136	1.3722 - 2 1.3517 1.3316 1.3118 1.2923 1.2731 1.2542 1.2355 1.2172 1.1991	2.1478 - 2 2.1149 2.0825 2.0506 2.0192 1.9883 1.9579 1.9280 1.8986	1.7533 - 2 1.7265 1.7000 1.6740 1.6484 1.6231 1.5983 1.5739 1.55498
30000 30100 30200 30300 30400 30500 30600 30700 30800 30900	29859 29958 30057 30156 30255 30354 30453 30552 30651 30751	226.509 226.608 226.707 226.806 226.905 227.004 227.103 227.202 227.301 227.401	-46.641 -46.542 -46.443 -46.344 -46.245 -46.146 -46.047 -45.948 -45.849	226.509 226.608 226.707 226.806 226.905 227.004 227.103 227.202 227.301 227.401	1.1970 • 1 1.1792 1.1618 1.1445 1.1276 1.1109 1.0945 1.0783 1.0624 1.0467	8.9784 • 0 8.8453 8.7142 8.5851 8.4580 8.3329 8.2096 8.0882 7.9687 7.8510	1.1813 ~ 2 1.1638 1.1466 1.1296 1.1129 1.0964 1.0802 1.0642 1.0642 1.0485	1.8410 - 2 1.8129 1.7853 1.7581 1.7313 1.7049 1.6790 1.6534 1.6283	1.5029 - 2 1.4799 1.4574 1.4352 1.4133 1.3918 1.3706 1.3497 1.3292 1.3090
31000 31100 31200 31300 31400 31500 31600 31700 31800 31900	30850 30949 31048 31147 31246 31345 31444 31543 31642 31741	227.500 227.599 227.698 227.797 227.896 227.995 228.094 228.193 228.292 228.391	-45.650 -45.551 -45.452 -45.353 -45.254 -45.056 -44.957 -44.858 -44.759	227.500 227.599 227.698 227.797 227.896 227.995 228.094 228.193 228.292 228.391	1.0312 + 1 1.0160 1.0010 9.6629 + 0 9.7175 9.7744 9.4334 9.2946 9.1579 9.0232	7.7351 • 0 7.6209 7.5085 7.3978 7.2887 7.1814 7.0756 6.9715 6.6690 6.7680	1.0177 - 2 1.0027 9.8796 - 3 9.7339 9.5905 9.4492 9.3101 9.1730 9.0381 8.9052	1.5792 - 2 1.5552 1.55316 1.5083 1.4855 1.4629 1.4408 1.4190 1.3975	1.2891 - 2 1.2695 1.2503 1.2313 1.2126 1.1942 1.1761 1.1583 1.1408
32000 32200 32400 32600 32800 33000 33200 33400 33600 33800	31840 32038 32236 32434 32632 32830 33027 33225 33423 33621	228.490 228.756 229.310 229.864 230.419 230.973 231.527 232.081 232.635 233.189	-44.660 -44.394 -43.840 -43.286 -42.737 -41.623 -41.069 -40.515 -39.961	228.490 228.756 229.310 229.864 230.419 230.973 231.527 232.081 232.635 233.189	8.8906 + 0 8.6314 8.3802 8.1369 7.9013 7.6730 7.4519 7.2377 7.0301 6.8290	6.6685 * 0 6.4741 6.2857 6.1032 5.9265 5.7552 5.5894 5.4287 5.2730 5.1222	8.7743 - 3 8.5185 8.2706 8.0305 7.7980 7.5727 7.3545 7.1431 6.9382 6.7397	1.3555 - 2 1.3145 1.2731 1.2332 1.1946 1.1573 1.1213 1.0864 1.0528	1.1065 - 2 1.0730 1.0393 1.0067 9.7518 - 3 9.4474 9.1532 8.8668 8.5939 8.3282
34000 34200 34400 34600 35000 35200 35400 35600 35800	33819 34017 34215 34413 34611 34808 35006 35204 35402 35599	233.743 234.298 234.852 235.406 235.959 236.513 237.067 237.621 238.175 238.729	-39.407 -38.852 -38.298 -37.744 -37.191 -36.637 -36.083 -35.529 -34.975 -34.421	233.743 234.298 234.852 235.406 235.959 236.513 237.067 237.621 238.175 238.729	6.6341 + 0 6.4452 6.2621 6.0847 5.9127 5.7459 5.5842 5.4275 5.2755 5.1281	4.9760 + 0 4.8343 4.0970 4.55639 4.4348 4.3098 4.1885 4.0709 3.9569 3.8464	6.5473 - 3 6.3609 6.1802 6.0051 5.8353 5.6708 5.5112 5.3565 5.2065 5.0611	9.8874 - 3 9.5832 9.2890 9.0045 8.7295 8.4634 8.2061 7.9571 7.7163 7.4833	8.0714 - 3 7.8230 7.5829 7.3507 7.1261 6.9089 6.6988 6.4956 6.2990 6.1088
36000 36200 36400 36600 36800 37200 37200 37400 37600 37800	35797 35995 36193 36390 36588 36786 36984 37181 37379 37577	239.282 239.836 240.390 240.943 241.497 242.050 242.604 243.157 243.711 244.264	-33.868 -33.314 -32.760 -32.207 -31.653 -31.100 -30.546 -29.993 -29.439 -28.886	239.282 239.836 240.390 240.943 241.497 242.050 242.604 243.157 243.711 244.264	4.9852 + 0 4.8466 4.7121 4.5517 4.4552 4.3324 4.2134 4.2134 3.9857 3.8769	3.7392 • 0 3.6352 3.5344 3.4365 3.3416 3.2496 3.1603 3.0736 2.9895 2.9079	4.9200 - 3 4.7832 4.6505 4.5218 4.3969 4.2758 4.1583 4.0442 3.9336 3.8262	7,2579 - 3 7,0398 6,8288 6,6245 6,4268 6,2355 6,0503 5,8710 5,6974 5,5293	5.9248 - 3 5.7468 5.5745 5.4078 5.2464 5.0902 4.9390 4.7926 4.6509 4.5137

Table I
Geopotential Altitude, Metric Units

					opotential Artic			 	
Altit	tude		Temperatur	e		Pressure		Dens	ity
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	ρ (kg/m ³)	$ ho/ ho_{f 0}$
38000 38200 38400	38229 38431 38633 38836	245.450 246.010 246.570 247.130	-27.700 -27.140 -26.580 -26.020	245.450 246.010 246.570 247.130	3.6545 + 0 3.5543 3.4570 3.3626	2.7411 + 0 2.6659 2.5930 2.5222	3.6067 - 3 3.5078 3.4118 3.3187	5.1869 - 3 5.0332 4.8844 4.7402	4.2342 - 3 4.1087 3.9872 3.8696
38600 38800 39000	39038 39241	247.690 248.250	-25.460 -24.900	247.690 248.250	3.2711 3.1822	2.4535 2.3868	3.2283 3.1405	4.6007 4.4656	3.7557 3.6454
39200	39443	248.810	-24.340	248.810 249.370	3.0959 3.0121	2.3221 2.2592	3.0554 2.9727	4.3347 4.2079	3.5385 3.4350
39400 39600	39646 39848	249.370 249.930	-23.780 -23.220	249.930	2.9308	2.1982	2.8924	4.0852	3.3348
39800	40051	250.490	-22.660	250.490	2.8518	2.1390	2.8145	3.9662	3.2377
40000 40200	40253 40456	251.050 251.610	-22.100 -21.540	251.050 251.610	2.7752 + 0 2.7007	2.0815 · 0 2.0257	2.7389 - 3 2.6654	3.8510 - 3 3.7394	3.1437 - 3 3.0526
40400	40658	252.170	-20.980	252.170	2.6285	1.9715	2.5941	3.6312	2.9643
40600	40861	252.730	-20.420	252,730	2.5583	1.9188	2.5248 2.4575	3.5264 3.4249	2.8787 2.7958
40800 41000	41064 41266	253.290 253.850	-19.860 -19.300	253.290 253.850	2.4901 2.4239	1.8677 1.8181	2.3922	3.3265	2.7155
41200	41469	254.410	-18.740	254.410	2.3596	1.7698	2.3287	3.2311	2.6376
41400	41671	254.970	-18.180	254.970	2.2971	1.7230	2.2671 2.2072	3.1387 3.0491	2.5622 2.4890
41600 41800	41874 42077	255.530 256.090	-17.620 -17.060	255.530 256.090	2.2365 2.1775	1.6775 1.6333	2.1490	2.9622	2.4181
42000	42279	256.650	~16.500	256.650	2.1202 + 0 2.0646	1.5903 + 0 1.5486	2.0925 - 3 2.0376	2.8780 - 3 2.7964	2.3494 - 3 2.2828
42200 42400	42482 42685	257.210 257.770	-15.940 -15.380	257.210 257.770	2.0105	1.5080	1.9842	2.7172	2.2182
42600	42887	258.330	-14.820	258.330	1.9580	1.4686	1.9324	2.6405	2.1555
42800	43090	258.890 259.450	-14.260	258.890 259.450	1.9069	1.4303 1.3931	1.8820 1.8330	2.5661 2.4939	2.0948 2.0359
43000 43200	43293 43496	260.010	-13.700 -13.140	260.010	1.8573 1.8091	1.3569	1.7854	2.4239	1.9787
43400	43698	260.570	-12.580	260.570	1.7622	1.3218	1.7392	2.3561	1.9233
43600 43800	43901 44104	261.130 261.690	-12.020 -11.460	261.130 261.690	1.7167 1.6724	1.2876 1.2544	1.6942 1.6505	2.2902 2.2264	1.8696 1.8174
44000	44307	262.250	-10.900	262.250	1.6293 + 0	1.2221 + 0	1.6080 - 3	2.1644 - 3	1.7669 - 3
44200	44510	262.810	-10.340 -9.780	262.810	1.5875 1.5468	1.1907 1.1602	1.5667 1.5265	2.1043 2.0460	1.7178 1.6702
44400 44600	44712 44915	263.370 263.930	-9.220	263.370 263.930	1.5072	1.1305	1.4875	1.9894	1.6240
44800	45118	264.490	-8.660	264.490	1.4687	1.1016	1.4495	1.9346	1.5792
45000	45321	265.050	-8.100	265.050	1.4313	1.0735 1.0463	1.4126 1.3767	1.8813 1.8296	1.5357 1.4935
45200 45400	45524 45727	265.610 266.170	-7.540 -6.980	265.610 266.170	1.3949 1.3595	1.0197	1.3417	1.7794	1.4526
45600	45929 46132	266.730 267.290	-6.420 -5.860	266.730 267.290	1.3251 1.2916	9.9394 - 1 9.6883	1.3078 1.2747	1.7307 1.6835	1.4128 1.3743
45800 46000	46335	267.850	-5.300	267.850	1.2591 + 0	9.4440 - 1	1.2426 - 3	1.6376 - 3	1.3368 - 3
46200	46538	268.410	-4.740	268,410	1.2274	9.2064	1.2113	1.5931	1.3005
46400	46741	268.970	-4-180	268.970	1.1966	8.9752	1.1809 1.1513	1.5498 1.5079	1.2652 1.2309
46600 46800	46944 47147	269.530 270.490	-3.620 -3.060	269.530 270.090	1.1666	8.7503 8.5315	1.1225	1.4671	1.1976
47000	47350	270.650	-2.500	270.650	1.1090	8.3186	1.0945	1.4275	1.1653
47200	47553		-2.500	270.650	1.0814	8.1112	1.0672 1.0406	1.3919 1.3572	1.1363 1.1080
47400 47600	47756 47959	270.650 270.650	-2.500 -2.500	270.650 270.650	1.0544 1.0281	7.9090 7.7118	1.0147	1.3234	1.0803
47800	48162		-2.500	270,650	1.0025	7.5196	9.8942 - 4	1.2904	1.0534
48000	48365		-2.500 -2.500	270.650 270.650	9.7754 - 1 9.5317	7.3321 - 1 7.1493	9.6476 - 4 9.4071	1.2582 - 3 1.2269	1.0271 - 3 1.0015
48200 48400	48568 48771	270.650 270.650		270.650	9.2941	6.9711	9.1725	1.1963	9.7657 - 4
48600	48974	270.650	-2.500	270.650	9.0624	6.7973	8.9439	1.1665	9.5222
48800	49178		-2.500 -2.500	270.650 270.650	8.8365 8.6162	6.6279 6.4626	8.7209 8.5035	1.1374 1.1090	9.2848 9.0534
49000 49200	49381 49584	270.650	-2.500	270.650	8.4014	6.3015	8.2915	1.0814	8.8277
49400	49787	270.650	-2.500	270.650	8.1919	6.1444	8.0848	1.0544	8.6076
49600 498 0 0	49990 50193	270.650 270.650	-2.500 -2.500	270.650 270.650	7.9877 7.7886	5.9913 5.8419	7.8833 7.6867	1.0281 1.0025	8.3930 8.1838
50000	50396		-2.500	270.650	7.5944 - 1	5.6963 - 1	7.4951 - 4	9.7752 - 4	7.9798 - 4
50500	50904	270.650	-2.500	270.650	7.1299	5.3479 5.0208	7.0367 6.6063	9.1774 8.6160	7.4917 7.0335
51000 51500	51413 51921		-2.500 -3.900	270.650 269.250	6.6938 6.2834	5.0208 4.7129	6.6063 6.2012	8.1298	6.6366
52000	52429		-5.300	267.850	5.8962	4.4225	5.8191	7.6687	6.2601
52500	52937	266.450	-6.700	266.450	5.5310	4.1485 3.8903	5.4586 5.1188	7.2315 6.8171	5.9032 5.5650
53000 53500	53446 53954		-8.100 -9.500	265.050 263.650	5.1866 4.8621	3.6468	4.7985	6.4245	5.2445
54000 54500	54463 54971	262.250	-10.900	262.250 260.850	4.5563 4.2682	3.4175 3.2014	4.4967 4.2124	6.0525 5.7003	4.9408 4.6533
55000	55480			259.450	3.9969 - 1	2.9979 - 1	3.9447 - 4	5.3668 - 4	4.3811 - 4
55500	55989	258.050	-15.100	258.050	3.7416	2.8064	3.6927	5.0512	4.1235
56000	56498			256.650	3.5013	2.6262	3.4555	4.7526	3.8797 3.6491
56500 57000	57007 57516		-17.900 -19.300	255.250 253.850	3.2753 3.0627	2.4566 2.2972	3.2324 3.0226	4.4702 4.2031	3.4311
57500	58025	252.450	-20.700	252,450	2.8628	2.1473	2.8254	3.9506	3.2250
58000	58534	251.050	-22.100	251.050	2.6750	2.0064 1.8741	2.6401 2.4659	3.7121 3.4867	3.0303 2.8463
58500 59000	59043 59553			249.650 248.250	2.4986 2.3329	1.7498	2.3024	3.2738	2.6725
59500	60062			246.850	2.1774	1.6331	2.1489	3.0729	2.5085

Table I Geometric Altitude, Metric Units

Alti	tude		Temperatui	e	Pressure			Dens	sity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ_{0}
38000 38200 38400 38600 38800 39000 39200 39400 39600	37774 37972 38169 38367 38565 38762 38960 39157 39355 39552	244.818 245.371 245.924 246.478 247.031 247.584 248.137 248.690 249.243 249.797	-28.332 -27.779 -27.226 -26.672 -26.119 -25.566 -25.013 -24.460 -23.907 -23.353	244.818 245.371 245.924 246.478 247.031 247.584 248.137 248.690 249.243 249.797	3.7713 • 0 3.6689 3.5694 3.4729 3.3792 3.2882 3.1998 3.1141 3.0308 2.9499	2.6287 + 0 2.7519 2.6773 2.6049 2.5346 2.4663 2.4001 2.3357 2.2733 2.2126	3.7220 - 3 3.6209 3.5227 3.4275 3.3350 3.2452 3.1580 3.0734 2.9912 2.9114	5.3666 - 3 5.2090 5.0564 4.9086 4.7654 4.6268 4.4924 4.3623 4.2362 4.1141	4.3809 - 3 4.2522 4.1277 4.0070 3.8901 3.7769 3.6673 3.5611 3.4581 3.3584
40000 40200 40400 40600 40800 41200 41200 41400 41600 41800	39750 39947 40145 40342 40540 40737 40935 41132 41330 41527	250.350 250.903 251.456 252.008 252.561 253.114 253.667 254.220 254.773 255.325	-22.800 -22.247 -21.694 -21.142 -20.589 -20.036 -19.483 -18.930 -18.377 -17.825	250.350 250.903 251.456 252.008 252.561 253.114 253.667 254.220 254.773 255.325	2.8714 + 0 2.7951 2.7210 2.6491 2.5792 2.5113 2.4453 2.3812 2.3189 2.2584	2.1537 • 0 2.0965 2.0409 1.9870 1.9345 1.8836 1.8341 1.7861 1.7393	2.8338 - 3 2.7586 2.6855 2.6144 2.5455 2.4784 2.4133 2.3501 2.2886 2.2289	3.9957 - 3 3.8810 3.7698 3.6621 3.5576 3.4564 3.3583 3.2632 3.1709 3.0815	3.2618 - 3 3.1681 3.0774 2.9894 2.9042 2.8216 2.7415 2.6638 2.5885 2.5155
42000 42200 42400 42600 42800 43000 43200 43400 43600 43800	41724 41922 42119 42316 42514 42711 42908 43106 43303 43500	255.878 256.431 256.983 257.536 258.088 258.641 259.193 259.746 260.298 260.851	-17.272 -16.719 -16.167 -15.614 -15.062 -14.509 -13.957 -13.404 -12.852 -12.299	255.878 256.431 256.983 257.536 258.088 258.641 259.193 259.746 260.298 260.851	2.1996 + 0 2.1425 2.0869 2.0329 1.9805 1.9295 1.8799 1.8317 1.7848 1.7392	1.6498 • 0 1.6070 1.5653 1.5248 1.4855 1.4472 1.4100 1.3739 1.3387 1.3045	2.1709 - 3 2.1145 2.0596 2.0064 1.9546 1.9042 1.8553 1.8077 1.7615	2.9948 - 3 2.9107 2.8291 2.7500 2.6733 2.5989 2.5267 2.4567 2.3887 2.3228	2.4447 - 3 2.3761 2.3095 2.2449 2.1823 2.1216 2.0626 2.0055 1.9500 1.8962
44000 44200 44400 44600 44800 45000 45200 45400 45600 45800	43698 43895 44092 44289 44486 44684 45078 45275 45472	261.403 261.955 262.508 263.060 263.612 264.164 264.716 265.268 265.821 266.373	-11.747 -11.195 -10.642 -10.090 -9.538 -8.986 -8.434 -7.882 -7.329 -6.777	261.403 261.955 262.508 263.060 263.612 264.164 264.716 265.268 265.821 266.373	1.6949 • 0 1.6518 1.6099 1.5692 1.5295 1.4910 1.4535 1.4170	1.2713 + 0 1.2390 1.2075 1.1770 1.1472 1.1183 1.0902 1.0628 1.0362	1.6728 - 3 1.6302 1.5889 1.5486 1.5095 1.4715 1.4345 1.3984 1.3984	2.2589 - 3 2.1968 2.1366 2.0781 2.0214 1.9663 1.9128 1.8609 1.8106 1.7616	1.8440 - 3 1.77933 1.77441 1.6964 1.6501 1.5615 1.5191 1.4780 1.4381
46000 46200 46400 46600 46800 47000 47200 47400 47600 47800	45669 45867 46064 46261 46458 46655 46852 47049 47246 47443	266.925 267.477 268.028 268.580 269.132 269.684 270.236 270.650 270.650 270.650	-6.225 -5.673 -5.122 -4.570 -4.018 -3.466 -2.914 -2.500 -2.500	266.925 267.477 268.028 268.580 269.132 269.684 270.236 270.650 270.650	1.3134 • 0 1.2807 1.2489 1.2179 1.1878 1.1585 4.1299 1.1022 1.0751	9.8513 - 1 9.6061 9.3675 9.1354 8.9094 8.6895 8.4755 8.2671 8.0641 7.8660	1.2962 - 3 1.2639 1.2325 1.2020 1.1722 1.1433 1.1152 1.0877 1.0610	1.7142 - 3 1.6680 1.6233 1.5798 1.5375 1.4965 1.4567 1.4187 1.3839 1.3499	1.3993 - 3 1.3617 1.3251 1.2896 1.2551 1.2217 1.1891 1.1581 1.1297
48000 48200 48400 48600 48800 49000 49200 49400 49600 49800	48428 48625 48822 49019	270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650	1.0229 + 0 9.9783 - 1 9.7332 9.4942 9.2610 9.0336 8.6118 8.5955 8.3845 8.1786	7.6728 - 1 7.4843 7.3005 7.1212 6.9463 6.7758 6.6094 6.4471 6.2889 6.1345	1.0095 - 3 9.8478 - 4 9.6059 9.3700 9.1399 8.9155 8.6966 8.4831 8.2748 8.0717	1.3167 - 3 1.2844 1.2528 1.2221 1.1920 1.1628 1.1342 1.1064 1.0792 1.0527	1.0749 - 3 1.0485 1.0227 9.9760 - 4 9.77310 9.4920 9.2590 9.0317 8.8099 8.5937
50000 50500 51000 51500 52000 52500 53000 53500 54000 54500	50594 51086 51578 52070 52562 53053 53545	270.650 270.650 270.650 270.409 269.031 267.654 266.277 264.900	-2.500 -2.500 -2.500 -2.741 -4.119 -5.496 -6.873 -8.250	270.650 270.650 270.650 270.409 269.031 267.654 266.277 264.900 263.524	7.9779 - 1 7.4973 7.0458 6.6214 6.2214 5.8438 5.4873 5.1510 4.8337 4.5345	5.9839 - 1 5.6234 5.2847 4.9665 4.6664 4.3832 4.1158 3.8636 3.6256 3.4012	7.8735 - 4 7.3993 6.9536 6.5349 6.1401 5.7674 5.4156 5.0836 4.7705 4.4752	1.0269 - 3 9.6503 - 4 9.0690 8.5305 8.0562 7.6061 7.1791 6.7741 6.3901 6.0260	8.3827 - 4 7.8778 7.4033 6.9637 6.5765 6.2091 5.8605 5.5299 5.2164 4.9192
55000 55500 56000 56500 57000 57500 58500 58500 59500	55020 55511 56002 56493 56985 57476 57967 58457	258.019 256.644 255.268 253.893 252.518		259.395 258.019 256.644 255.268 253.893 252.518 251.144 249.769	4.2525 - 1 3.9866 3.7362 3.5003 3.2782 3.0691 2.8723 2.6872 2.5132 2.3496	3.1896 - 1 2.9902 2.8024 2.6254 2.4588 2.3020 2.1544 2.0156 1.8850 1.7623	4.1969 - 4 3.9345 3.6873 3.4545 3.2353 3.0289 2.8348 2.6521 2.4803 2.3189	5.6810 - 4 5.3541 5.0445 4.7513 4.4738 4.2112 3.9627 3.7276 3.5054 3.2953	4.6376 - 4 4.3707 4.1180 3.8786 3.6521 3.4377 3.2348 3.0430 2.8615 2.6900

Table I
Geopotential Altitude, Metric Units

				Ge	opotential Anna	ide, wettic Offics	·		
Altit	tude		Temperatu	e		Pressure		Dens	sity
H (m)	Z (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ ₀
60000	60572	245.450	-27.700	245.450	2.0314 - 1	1.5236 - 1	2.0048 - 4	2.8832 - 4	2.3536 - 4
60500	61081	244.050	-29.100	244.050	1.8944	1.4209	1.8697	2.7043	2.2076
61000	61591	242.650	-30.500	242,650	1.7660	1.3246	1.7429	2.5355 2.3764	2.0698 1.9399
61500	62101	241.250	-31.900	241.250	1.6456	1.2343 1.1497	1.6241 1.5128	2.3764 2.2264	1.6175
62000 62500	62611 63121	239.850 238.450	-33.300 -34.700	239.850 238.450	1.5328 1.4271	1.0704	1.4085	2.0851	1.7021
63000	63631	237.050	-36.100	237.050	1.3282	9.9627 - 2	1.3108	1.9520	1.5935
63500	64141	235.650	-37.500	235.650	1.2356	9.2681	1.2194	1.8267	1.4912
64000	64651	234.250	-38.900	234.250	1.1489	8.6181	1.1339	1.7087	1.3949
64500	65161	232.850	-40.300	232.850	1.0679	8.0103	1.0539	1.5978	1.3043
65000	65672	231.450	-41.700	231.450	9.9220 - 2	7.4421 - 2	9.7922 - 5	1.4934 - 4	1.2191 - 4
65500	66182	230.050	-43.100	230.050	9.2140	6.9111	9.0935	1.3953	1.1390
66000	66692	228.650	-44.500	228,650	8.5527	6.4150	8.4408	1.3031	1.0637
66500	67203	227.250	-45.900	227.250	7.9352	5.9519	7.8314	1.2165	9.9302 - 5
67000	67714	225.850	-47.300	225.850	7.3589	5.5196	7.2627	1.1351 1.0587	9.2661
67500	68224	224.450	-48.700	224.450	6.8212	5.1163 4.7403	6.7320 6.2372	9.8707 - 5	8.6427 8.0577
68000 68500	68735 69246	223.050 221.650	-50.100 -51.500	223.050 221.650	6.3199 5.8525	4.7403	5.7760	9.1985	7.5090
69000	69757	220.250	-52.900	220.250	5.4171	4.0632	5.3463	8.5683	6.9945
69500	70268	218.850	-54.300	218.850	5.0116	3.7590	4.9461	7.9776	6.5124
70000	70779	217.450	-55.700	217.450	4.6342 - 2	3.4759 - 2	4.5736 - 5	7.4243 - 5	6.0606 - 5
70500	71291	216.050	-57.100	216.050	4.2830	3.2125	4.2270	6.9061	5.6376
71000	71802	214.650	-58.500	214.650	3.9564	2.9675	3.9046	6.4211	5.2417
71500	72313	213.650	-59.500	213,650	3.6530	2.7400	3.6053	5.9566	4.8625
72000	72825	212.650	-60.500	212.650	3.3717	2.5290	3.3276	5.5237	4.5091
72500	73336	211.650	-61.500	211.650	3.1109	2.3333	3.0702	5.1205	4.1800
73000	73848	210.650	-62.500	210.650	2.8691	2.1520	2.8316 2.6105	4.7449 4.3954	3.8734 3.5881
73500 74000	74360 74872	209.650 208.650	-63.500 -64.500	209.650 208.650	2.6451 2.4377	1.9840 1.8284	2.4058	4.0701	3.3225
74500	75384	207.650	-65.500	207.650	2.2456	1.6843	2.2162	3.7675	3.0755
75000	75896	206.650	-66.500	206.650	2.0679 - 2	1.5510 - 2	2.0408 - 5	3.4861 - 5	2.8458 - 5
75500	76408	205.650	-67.500	205.650	1.9034	1.4277	1.8785	3.2245	2.6322
76000	76920	204.650	-68.500	204.650	1.7514	1.3136	1.7284	2.9813	2.4337
76500	77432	203.650	-69.500	203.650	1.6108	1.2082	1.5897	2.7555	2.2494
77000	77944	202.650	-70.500	202.650	1.4809	1.1107	1.4615	2.5458	2.0782
77500	78457	201.650	-71.500	201.650	1.3609	1.0207	1.3431	2.3511	1.9193
78000	78969	200.650	-72.500	200.650	1.2501	9.3766 - 3	1.2337	2.1705	1.7718
78500	79482	199.650	-73.500	199.650	1.1478	8.6096	1.1328	2.0029	1.6350
79000	79994	198.650	-74.500	198.650	1.0535	7.9019	1.0397	1.8475	1.5082 1.3906
79500	80507	197.650	-75.500	197.650	9.6649 - 3	7.2492	9,5385 - 6	1.7035	1.3900
80000	81020	196.650	-76.500	196.650	8.8627 - 3	6.6476 - 3	8.7468 - 6	1.5701 - 5	1.2817 - 5
80500	81533	195.650	-77.500	195.650	8.1236	6.0932	8.0173 7.3454	1.4465 1.3320	1.1808 1.0874
81000	82046	194.650 193.650	-78.500 -79.500	194.650 193.650	7.4427 6.8159	5.5825 5.1123	7•3454 6•7268	1.3320	1.0009
81500 82000	82559 83 07 2	192.650	-80.500	192.650	6.2390	4.6796	6.1574	1.1282	9.2098 - 6
82500	83585	191.650	-81.500	191.650	5.7083	4.2816	5.6336	1.0376	8.4704
83000	84098	190.650	-82.500	190.650	5.2203	3.9155	5.1520	9.5390 - 6	7.7869
83500	84611	189.650	-83.500	189.650	4.7718	3.5791	4.7094	8.7654	7.1554
84000	85125	188.650	-84.500	188.650	4.3598	3.2701	4.3027	8.0510	6.5722
84500	85638	187.650	-85.500	187.650	3.9814	2.9863	3.9293	7.3914	6.0338

Table I Geometric Altitude, Metric Units

69500 59930 225.667 -27.503 245.647 2.0916	Altii	tude	ד	Temperatur	e	Pressure			Dens	iity
69500 59930 225.667 -27.503 245.647 2.7503 245.647 2.0518 1.5366 2.0246 2.0242.74 -28.876 244.274 1.9157 1.4309 1.8067 2.7321 2.2303 61500 6092 242.900 244.274 1.9157 1.4309 1.8067 2.7321 2.2303 61500 60911 242.900 240.151 1.7683 1.3414 1.7650 2.5649 2.0938 62000 6161 241.527 -31.623 241.527 1.6068 1.2517 1.6067 2.4071 1.6050 62000 6161 241.527 -31.623 241.527 1.6068 1.2517 1.6067 2.4071 1.6050 62500 61891 240.151 2.309 240.151 1.5555 1.16068 1.2517 1.6070 2.4071 1.6050 62500 61891 240.151 2.309 240.151 1.5555 1.1607 1.1352 2.1178 1.7288 63500 62872 237.409 3.5741 237.409 1.3529 1.0168 1.3352 2.1178 1.7288 64500 63362 236.036 -37.114 236.036 1.2565 9.4551 -2 1.2441 1.8605 1.5188 64500 63362 236.036 -37.114 236.036 1.2565 9.4551 -2 1.2441 1.8605 1.5188 64500 63362 230.509 -242.031.032 1.0020 -1 81.1740 8.88059 1.1586 1.7429 1.4228 1.4029 1.402	Z (m)	H (m)	T (K)	t (°C)	т _м (к)	P (mb)	P (torr)	P/P ₀	ρ (kg/m ³)	ρ/ρ_{0}
61900 60420 244.274 -28.876 244.274 1.9157 1.4309 1.8007 2.7321 2.2303 6.1500 60911 242.00 -30.250 242.900 1.7883 1.3414 1.7650 2.5564 2.0938 6.2000 61401 241.527 -31.623 241.527 1.6688 1.2517 1.6470 2.4671 1.9650 6.2506 61801 240.154 -32.996 240.154 1.5567 1.1676 1.5565 2.2582 1.8688 6.2500 61801 240.154 -32.996 240.154 1.5567 1.1676 1.5565 2.2582 1.8688 6.2500 61801 240.154 -32.996 240.154 1.5567 1.1676 1.5565 2.2582 1.8688 6.2500 6.2342 231.780 231.780 1.3529 1.1686 1.1352 1.9853 1.6207 6.4000 63362 234.630 -37.114 236.036 1.2605 9.4551 -2 1.2441 1.8605 1.5188 6.4500 63852 234.664 -38.86 234.664 1.1740 8.8059 2.1586 1.7429 1.4953 1.6207 6.4000 63362 234.644 -38.86 234.664 1.1740 8.8059 2.1586 1.7429 1.4922 1.4022 6.4500 6.4500 6.4512 231.921 1.0170 7.46288 1.0070 7.46288 1.6070 6.4512 231.921 -41.222 231.921 1.0170 7.46288 1.0076 7.46288 1.6076 7.4628 1.6	60000									
61500 69911 222,900 -330,250 242,900 1,7883 1,3414 1,7550 2,5649 2,0938 62200 61801 224,1527 -31,623 241,527 1,16688 1,2517 1,6470 2,4071 1,9650 6250 61801 240,154 -32,996 240,154 1,5567 1,1676 1,5363 2,2582 1,184,344 63000 62362 238,781 1,4515 1,6416 1,4515 1,1781 1,7288 63000 62872 237,409 3,5741 237,409 1,5527 1,0186 1,4325 2,1178 1,7288 63000 62872 237,409 -35,741 237,409 1,5527 1,0186 1,4325 2,1178 1,7288 63000 63362 234,604 -33,141 237,409 1,5529 1,0186 1,4325 2,1781 1,1865 1,6886 64000 63362 234,664 -36,488 234,664 1,1740 9,4525 2 1,2741 1,1865 1,6886 6450 63852 234,664 -36,488 234,664 1,1740 9,4607 2 1,1586 1,1586 1,1586 1,1586 1,1586 6450 6452 231,921 -441,229 231,921 1,0170 7,6288 1,0037 1,1586 1,0037 1,15278 1,2472 65500 64832 231,921 -441,229 231,921 1,0170 7,6288 1,0037 7,15278 1,2479 1,15278 1,2472 65500 65811 229,178 4,4772 229,178 8,7967 6,1532 8,6886 1,0037 7,15278 1,2479 1,1586 1,0037 1,0										
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85500 84365 187.920 -85.230 187.920 4.0802 3.0604 4.0269 7.5641 6.1747										
	85500	84365	187.920	-85.230	187.920	4.0802	3.0604	4.0269	7.5641	6.1747

Table I Geometric Altitude, Metric Units

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Alti	tude		Temperature)		P	ressure			Den	sity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P	(torr)	P/P ₀		$ ho$ (kg/m 3)	ρ/ρ_0
86000 86500 87000 87500 88000 88500 89000 89500	84852 85339 85825 86312 86798 87285 87771 88257	186.87 186.87 186.87 186.87 186.87 186.87 186.87	-86.28 -86.28 -86.28 -86.28 -86.28 -86.28 -86.28	186.95 186.96 186.98 187.03 187.03 187.06 187.11	3.7338- 3 3.4163 3.1259 2.8602 2.6173 2.3951 2.1919 2.0060	2.5 2.3 2.1 1.9 1.7	006- 3 624 446 454 631 965 440	3.6850- 3.3716 3.0850 2.8228 2.5831 2.3638 2.1632 1.9797	5,	6.958- 6 6.366 5.824 5.328 4.875 4.460 4.081 3.734	5.680- 6 5.196 4.754 4.350 3.980 3.641 3.331
90000 90500 91000 91500 92000 92500 93000 93500 94000 94500	88744 89230 89716 90202 90688 91173 91659 92145 92630 93116	186.87 186.87 186.89 186.96 187.08 187.25 187.47 187.74	-86.28 -86.28 -86.26 -86.19 -86.07 -85.90 -85.68 -85.41	187.21 187.28 187.36 187.47 187.64 187.67 188.16 188.51 188.92 169.39	1.8359- 3 1.6804 1.5381 1.4078 1.2887 1.1798 1.0801 9.8896- 4 9.0560 8.2937	1.2 1.1 1.6 9.6 8.6 8.1 7.4	7771- 3 2604 5536 5560 6662- 4 490 014 1178 7925 2208	1.6584 1.5179 1.3894 1.2719 1.1643 1.0660	7	3.416- 6 3.126 2.860 2.616 2.393 2.188 2.000 1.828 1.670 1.526	2.789- 6 2.552 2.335 2.136 1.953 1.786 1.632 1.492 1.363 1.245
95000 95500 96000 96500 97500 98500 98500 99000	93601 94087 94572 95057 95542 96027 96512 96997 97482 97967	188.42 188.84 189.31 189.83 190.40 191.04 191.72 192.47 193.28 194.15	-84.73 -84.31 -83.84 -83.32 -82.75 -82.11 -81.43 -80.68 -79.87 -79.00	189.92 190.52 191.17 191.90 192.69 193.55 194.48 195.49 196.58	7.5966- 4 6.9592 6.3765 5.8439 5.3571 4.9122 4.5057 4.1342 3.7948 3.4846	5.4 4.5 4.6 3.6 3.1 2.8	979- 4 2199 1828 1833 1181 1844 1795 1009 1463	7.4973- 6.8682 6.2932 5.7675 5.2870 4.8480 4.4468 4.0802 3.7452 3.4390	7	1.393-6 1.273 1.162 1.061 9.685-7 8.842 8.071 7.367 6.725 6.139	1.137- 6 1.039 9.486- 7 8.660 7.906 7.218 6.588 6.014 5.490 5.011
100000 101000 102000 103000 104000 105000 106000 107000 108000	98451 99420 100389 101358 102326 103294 104261 105229 106196 107162	195.08 197.16 199.53 202.23 205.31 208.84 212.89 217.63 223.29 230.33	-78.07 -75.99 -73.62 -76.92 -67.84 -64.31 -60.26 -55.52 -49.86 -42.82	198.99 201.75 204.88 208.42 212.41 216.93 222.09 228.02 235.00 243.53	3.2011- 4 2.7192 2.3144 1.9742 1.6882 1.4477 1.2454 1.0751 9.3188- 5	2.0 1.0 1.0 1.0 9.0 8.0 6.0	4010- 4 0396 7359 4808 2663 0859 0411- 5 0642 9897	2.6837 2.2841 1.9484 1.6661 1.4288 1.2291	7 A	5.604- 7 4.695 3.935 3.300 2.769 2.325 1.954 1.643 1.381	4.575- 7 3.833 3.212 2.694 2.260 1.898 1.595 1.341 1.128 9.475- 8
110000 111000 112000 113000 114000 115000 116000 117000 118000	108129 109095 110061 111026 111992 112957 113921 114885 115849 116813	240.00 252.00 264.00 276.00 288.00 300.00 312.00 324.00 336.00	-33.15 -21.15 -9.15 2.85 14.85 26.85 38.85 50.85 62.85 74.85	254.93 268.91 283.06 297.17 311.40 325.69 340.04 354.43 368.88 383.37	7.1042- 5 6.2614 5.5547 4.9570 4.4473 4.0096 3.0312 3.3022 3.0144 2.7615	4.0 4.0 3.0 3.0 2.0 2.0 2.0	3286- 5 5965 1664 7180 3358 9075 7236 4768 2610 9713	7.0113- 6.1796 5.4821 4.8922 4.3892 3.9572 3.5837 3.2590 2.9750 2.7254	A	9.708-8 8.111 6.838 5.811 4.975 4.289 3.720 3.246 2.847 2.509	7.925-8 6.622 5.582 4.744 4.061 3.501 3.037 2.650 2.324 2.048
120000 121000 122000 123000 124000 125000 126000 127000 128000	117777 118740 119703 120665 121627 122589 123551 124512 125473 126434	360.00 371.89 383.55 394.99 406.22 417.23 428.04 438.64 449.04 459.25	86.85 98.74 110.40 121.84 133.07 144.08 155.49 175.89 186.10	397.91 412.38 426.66 440.74 454.64 468.35 481.89 495.26 508.46 521.49	2.5382- 5 2.3401 2.1635 2.0055 1.8635 1.7354 1.6194 1.5141 1.4183 1.3307	1.: 1.: 1.: 1.: 1.:	9038- 5 7552 6228 5043 3977 3016 2147 1357 0638 9810- 6	2.5050- 2.3095 2.1352 1.9793 1.8391 1.7127 1.5983 1.4943 1.3997	A	2.222- 8 1.977 1.767 1.585 1.428 1.291 1.171 1.065 9.717- 9 8.889	1.814- 8 1.614 1.442 1.294 1.054 9.557- 9 8.694 7.932 7.257
130000 131000 132000 132000 134000 135000 136000 137000 138000	127395 128355 129315 130274 131234 132193 133151 134110 135068 136026	469.27 479.09 488.74 498.20 507.48 516.59 525.53 534.29 542.90 551.34	196.12 205.94 215.59 225.05 234.33 243.44 252.38 261.14 269.75 278.19	534.36 547.08 559.64 572.06 584.32 596.44 608.42 620.25 631.95 643.51	1.2505- 5 1.1769 1.1092 1.0468 9.8907- 6 9.3568 8.8617 8.4018 7.9739 7.5751	8. 7. 7. 7. 6. 6.	3795- 6 8275 3196 8513 4187 0182 6468 3019 9809 6818	1.1615 1.0947 1.0331	8	8.152- 9 7.494 6.904 6.374 5.897 5.465 5.074 4.719 4.396 4.101	6.655- 9 6.118 5.636 5.204 4.814 4.461 4.145 3.852 3.588 3.348
140000 141000 142000 143000 144000 145000 146000 147000 148000	136983 137940 138897 139854 140810 141766 142722 143677 144633 145587	559.63 567.76 575.73 583.56 591.24 598.78 606.17 613.43 620.55 627.54	286.48 294.61 302.58 310.41 318.09 325.63 333.02 340.28 347.40 354.39	654.94 666.23 677.40 688.44 699.36 710.15 720.82 731.38 741.81 752.14	7.2028-6.8550 6.8559 6.2243 5.9380 5.6691 5.4162 5.1781 4.9538	5. 4. 4. 4. 4. 3. 3.	4026- 6 1416 8974 6686 4539 2522 0625 8839 7156	7.1087- 6.7653 6.4440 6.1429 5.8604 5.5950 5.3454 5.1104 4.8890 4.6801	9	3.831- 9 3.584 3.358 3.150 2.958 2.781 2.618 2.466 2.326 2.196	3.128- 9 2.926 2.741 2.571 2.415 2.270 2.137 2.013 1.899 1.793

Table I Geometric Altitude, Metric Units

Alti	tude		Temperature		ric Attitude, Wi	Pressure		De	nsity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	ρ/ρ ο
150000 151000 152000 153000 154000 156000 157000 158000 159000	146542 147496 148459 149404 159357 151311 152263 153216 154168 155120	634.39 641.12 647.72 654.20 660.56 666.80 672.92 678.93 684.83 690.61	361.24 367.97 374.57 381.05 387.41 393.65 399.77 405.78 411.68 417.46	762.35 772.45 782.44 792.32 802.10 811.77 821.34 830.81 840.18	4.5422- 6 4.3533 4.1746 4.0054 3.6451 3.6930 3.5487 3.4116 3.2813 3.1574	3.4070- 6 3.2653 3.1312 3.0043 2.8840 2.7700 2.6617 2.5589 2.4612 2.3683	4,4828- 4 4,2964 4,1200 3,9530 3,7948 3,6947 3,5023 3,3670 3,2384 3,1161	2.076- 9 1.963 1.859 1.761 1.670 1.585 1.505 1.431 1.361	1.694- 9 1.603 1.517 1.438 1.363 1.294 1.229 1.168 1.111
160000 161000 162000 163000 164000 165000 166000 167000 168000	156u72 157023 157974 158925 159875 160826 161775 162725 163674 164623	696.29 701.86 707.33 712.70 717.96 723.13 726.20 733.18 738.07 742.86	423.14 428.71 434.18 439.55 444.81 449.98 455.05 460.03 464.92 469.71	858.63 867.71 876.70 885.60 894.41 903-13 911.77 920.32 928.78 937.16	3.0395-6 2.9272 2.6201 2.7181 2.6207 2.5278 2.4390 2.3541 2.2730 2.1953	2.2798- 6 2.1956 2.1153 2.0387 1.9657 1.8960 1.8294 1.7657 1.7049	2,9997-9 2,8889 2,7833 2,6825 2,5864 2,4947 2,4071 2,3233 2,2432 2,1666	1.233- 9 1.175 1.121 1.069 1.021 9.750- 10 9.319 8.911 8.525 8.161	1.007- 9 9.593- 10 9.148 8.728 8.333 7.959 7.607 7.274 6.960 6.662
170000 171000 172000 173000 174000 175000 176000 177000 178000 179000	165572 166521 167469 168417 169364 170311 171258 172205 173151 174098	747.57 752.18 756.71 761.16 765.53 769.81 774.01 778.14 782.19 786.17	474.42 479.03 483.56 488.01 492.38 496.66 500.86 504.99 509.04 513.02	945.46 953.68 961.82 969.89 977.87 985.78 993.62 1001.38 1009.07 1016.69	2.1210-6 2.0499 1.9817 1.9164 1.8537 1.7336 1.7360 1.6806 1.6274	1.5909-6 1.5375 1.4864 1.4374 1.3994 1.3453 1.3021 1.2605 1.2206 1.1823	2.0933- 9 2.0231 1.9558 1.8913 1.8295 1.7702 1.7132 1.6586 1.6061	7.815-10 7.488 7.178 6.883 6.604 6.339 0.086 5.846 5.618	6.380- 10 6.113 5.859 5.619 5.391 5.174 4.966 4.773 4.586 4.409
1800Q0 181000 182000 183000 184000 185000 186000 187000 188000	175043 175989 176934 177879 178624 179768 180712 181656 182606 183543	790.07 793.89 797.65 601.34 804.96 808.51 812.00 815.42 818.78 822.08	516.92 520.74 524.50 528.19 531.81 535.36 538.85 542.27 545.63 548.93	1024.24 1031.72 1039.13 1046.47 1053.75 1066.96 1068.11 1075.19 1082.21 1089.17	1.5271-6 1.4799 1.4345 1.3907 1.3487 1.3081 1.2691 1.2315 1.1952 1.1603	1.1455- 6 1.1100 1.0759 1.0431 1.0116 9.8117- 7 9.5189 9.2368 8.9649 8.7028	1.5072- 9 1.4606 1.4157 1.3726 1.3310 1.2910 1.2525 1.2154 1.1796 1.1451	5.194- 10 4.997 4.809 4.630 4.459 4.295 4.139 3.990 3.847 3.711	4.240~ 10 4.079 3.926 3.779 3.640 3.506 3.379 3.257 3.141 3.029
19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	184486 185428 186371 187313 188255 189196 190137 191078 192019	825.31 828.49 831.61 834.67 837.67 840.62 843.51 846.35 849.14	552.16 558.46 558.46 561.52 564.52 567.47 570.36 573.20 575.99 578.72	1096.07 1102.90 1109.68 1116.40 1123.06 1129.67 1136.21 1142.71 1149.14	1.1266-6 1.0940 1.0627 1.0324 1.0031 9.7491-7 9.4763 9.2127 8.9580 8.7117	8.4499- 7 8.2060 7.9707 7.7435 7.5242 7.3124 7.1078 6.9101 6.7190 6.5343	1.1118-9 1.0797 1.0488 1.0189 9.9003-10 9.6216 9.3524 9.0922 8.8408 8.5978	3.581- 10 3.456 3.336 3.222 3.006 2.905 2.809 2.716 2.626	2.923- 10 2.821 2.723 2.630 2.540 2.454 2.372 2.293 2.217 2.144
20000 201000 202000 203000 204000 205000 206000 207000 208000 209000	193899 194839 195779 196718 197657 198595 199534 200472 201410 202347	854.56 857.20 859.78 862.32 864.82 867.26 869.67 872.02 874.34	581.41 584.05 586.63 589.17 591.67 594.11 596.52 598.87 601.19 603.46	1161.85 1168.13 1174.35 1180.52 1186.64 1192.71 1198.73 1204.70 1210.62 1216.49	8.4736- 7 8.2432 8.0204 7.8048 7.5962 7.3942 7.1986 7.0002 6.8257 6.6479	6.3557- 7 6.1829 6.0158 5.8541 5.6976 5.5461 5.3994 5.2573 5.1197	8.3628- 10 8.1355 7.9156 7.7028 7.4968 7.2975 7.1045 6.9175 6.7364 6.5610	2.541- 10 2.458 2.379 2.303 2.230 2.160 2.092 2.027 1.964 1.904	2.074- 10 2.007 1.942 1.880 1.820 1.763 1.708 1.655 1.603
210000 211000 212000 213000 214000 215000 216000 217000 218000 219000	203284 204221 205158 206094 207030 207966 208902 209837 210772 211706	878.84 881.03 883.18 885.29 887.36 889.39 891.39 893.35 895.27	605.69 607.88 610.03 612.14 614.21 616.24 620.20 622.12 624.01	1222.31 1228.09 1233.82 1239.50 1245.14 1250.73 1256.27 1261.77 1267.23 1272.65	6.4756- 7 6.3087 6.1468 5.9899 5.8377 5.6900 5.5468 5.4078 5.2729 5.1420	4.8571- 7 4.7319 4.6105 4.4928 4.3786 4.2679 4.1604 4.0562 3.9550 3.8568	6.3910- 10 6.2262 6.0664 5.9115 5.7613 5.6156 5.4743 5.3371 5.2040 5.0748	1.846- 10 1.790 1.736 1.683 1.633 1.585 1.538 1.493 1.450	1.507- 10 1.461 1.417 1.374 1.333 1.294 1.256 1.219 1.183 1.149
220000 221000 222000 223000 224000 225000 226000 227006 228000 229000	212641 213575 214509 215442 216375 217308 218241 219173 220105 221037	899.01 900.83 902.62 904.37 906.09 907.78 909.44 911.07 912.67 914.24	625.86 627.68 629.47 631.22 632.94 634.63 636.29 637.92 639.52 641.09	1278.02 1283.34 1288.63 1293.87 1299.07 1304.23 1309.35 1314.43 1319.47	5.0149-7 4.8915 4.7717 4.6553 4.5422 4.4324 4.3256 4.2219 4.1210 4.0230	3.7615- 7 3.6689 3.5791 3.4918 3.4069 3.3245 3.2445 3.1667 3.0910 3.0175	4.9494- 10 4.8276 4.7093 4.5944 4.4828 4.3744 4.2690 4.1666 4.0671 3.9704	1.367- 10 1.328 1.290 1.253 1.218 1.184 1.151 1.119 1.088	1.116- 10 1.084 1.053 1.023 9.943- 11 9.665 9.395 9.134 8.882 8.638

Table I
Geometric Altitude, Metric Units

Alti	tude		Temperatur	9		Pressure		De	nsity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	$\rho/ ho_{f 0}$
230000 231000 232000 233000 234000 235000 236000 237000 238000 239000	221969 222900 223831 224762 225692 226622 227552 228481 229411 230340	915.78 917.29 918.78 920.24 921.67 923.07 924.45 925.81 927.14 928.44	642.63 644.14 645.63 647.09 648.52 649.92 651.30 652.66 653.99 655.29	1329.43 1334.35 1339.23 1344.07 1348.87 1353.64 1358.37 1363.06 1367.71	3.9276- 7 3.8349 3.7448 3.6571 3.5718 3.4888 3.4080 3.3294 3.2529 3.1784	2.9460- 7 2.8764 2.8088 2.7430 2.6791 2.6168 2.5562 2.4973 2.4399 2.3840	3.8763- 10 3.7848 3.6958 3.6093 3.5251 3.4432 3.3634 3.2859 3.2103 3.1368	1.029- 10 1.001 9.741- 11 9.479 9.225 8.979 8.740 8.509 8.285 8.068	8.402- 11 8.173 7.952 7.738 7.530 7.329 7.135 6.946 6.764 6.586
240000 241000 242000 243000 244000 245000 246000 247000 248000 249000	231268 232197 233125 234953 234980 235908 236835 237761 238688 239614	929.73 930.98 932.22 933.43 934.62 935.79 936.94 938.07 939.18 940.26	656.58 657.83 659.07 660.28 661.47 662.64 663.79 664.92 666.03 667.11	1376.91 1381.46 1385.97 1390.45 1394.88 1394.29 1403.66 1407.99 1412.30 1416.56	3.1059- 7 3.0353 2.9665 2.8996 2.8343 2.7708 2.7089 2.6486 2.5898 2.5325	2.3296- 7 2.2767 2.2251 2.1749 2.1259 2.0783 2.0318 1.9866 1.9425 1.8995	3,0653-10 2,9956 2,9277 2,8616 2,7973 2,7346 2,6735 2,6139 2,5559 2,4994	7.858- 11 7.654 7.456 7.265 7.079 6.898 6.723 6.553 6.388 6.228	6.415-11 6.248 6.087 5.930 5.779 5.631 5.488 5.350 5.215 5.084
250000 251000 252000 253000 253000 255000 256000 257000 258000	240540 241466 242391 243316 244241 245165 246089 247013 247937 248860	941.33 942.38 943.41 944.42 945.41 946.38 947.34 948.28 949.20 950.10	668.18 669.23 670.26 671.27 672.26 673.23 674.19 675.13 676.05 676.95	1420.80 1425.00 1429.16 1433.30 1437.40 1441.47 1445.51 1449.51 1457.43	2.4767- 7 2.4222 2.3692 2.3175 2.2670 2.2178 2.1698 2.1230 2.0774 2.0328	1.8577- 7 1.8168 1.7770 1.7382 1.7004 1.6635 1.6275 1.5248	2.4443-10 2.3906 2.3382 2.2871 2.2374 2.1888 2.1415 2.0953 2.0502 2.0063	6.073-11 5.922 5.775 5.633 5.494 5.360 5.229 5.102 4.979 4.859	4.957- 11 4.834 4.714 4.598 4.485 4.375 4.269 4.105 4.064 3.967
260000 261000 262000 263000 264000 265000 266000 267000 268000 269000	249784 250706 251629 252551 253473 254395 255316 256237 257158 258079	950.99 951.86 952.72 953.56 954.39 955.20 955.99 956.78 957.54 958.30	677.84 678.71 679.57 680.41 681.24 682.05 682.84 683.63 684.39 685.15	1461-34 1465-22 1469-07 1472-89 1476-68 1480-44 1484-17 1487-87 1491-54	1.9894- 7 1.9470 1.9056 1.8652 1.8258 1.7874 1.7498 1.7131 1.6773	1.4922- 7 1.4604 1.4293 1.3990 1.3695 1.3406 1.3125 1.2850 1.2581	1.9634- 19 1.9215 1.8807 1.8408 1.8026 1.7640 1.7269 1.6907 1.6554 1.6209	4.742-11 4.629 4.519 4.412 4.307 4.206 4.107 4.011 3.918 3.827	3.871- 11 3.779 3.689 3.601 3.516 3.433 3.353 3.274 3.198 3.124
270000 271000 272000 273000 274000 275000 276000 277000 278000 279000	258949 259919 260839 261758 262678 263597 264515 265434 266352 267269	959.04 959.77 960.48 961.18 961.87 962.54 963.21 963.86 964.50 965.13	685.89 686.62 687.33 688.03 688.72 689.39 690.06 690.71 691.35	1498.80 1502.38 1505.94 1509.46 1512.96 1516.43 1519.88 1523.30 1526.68 1530.05	1.6083-7 1.5749 1.5424 1.5106 1.4795 1.4492 1.4195 1.3906 1.3623	1.2063-7 1.1813 1.1569 1.1330 1.1097 1.0870 1.0647 1.0430 1.0218	1.5872- 10 1.5543 1.5222 1.4908 1.4602 1.4302 1.4010 1.3724 1.3444	3.738-11 3.652 3.568 3.486 3.486 3.29 3.254 3.180 3.108 3.039	3.052-11 2.981 2.913 2.846 2.781 2.718 2.656 2.596 2.538 2.481
280000 281000 282000 283000 284000 285000 287000 288000 289000	268187 269104 270021 270938 271854 272771 273686 274602 275517 276432	965.75 966.35 966.95 967.53 968.11 968.67 969.22 969.77 970.30 970.83	692.60 693.20 693.80 694.38 694.96 695.52 690.07 696.62 697.15	1533.38 1536.69 1539.98 1543.23 1546.47 1552.85 1550.01 1559.14 1562.24	1.3076- 7 1.2811 1.2553 1.2301 1.2054 1.1813 1.1577 1.1346 1.1121 1.0900	9.8075- 8 9.6093 9.4156 9.2263 9.0412 8.8603 8.6834 8.5104 8.3413 8.1759	1.2905- 10 1.2644 1.2389 1.2146 1.1896 1.165H 1.1426 1.1199 1.0975	2.971- 11 2.994 2.840 2.777 2.715 2.656 2.597 2.540 2.485 2.431	2.425-11 2.371 2.318 2.267 2.217 2.168 2.120 2.074 2.028 1.984
290000 291000 292000 293000 294000 295000 296000 297000 298000	277347 278262 279176 280090 281004 281917 282830 283743 284656 285568	971.34 971.85 972.34 972.83 973.31 973.78 974.24 974.70 975.14	698.19 698.70 699.19 699.68 700.16 700.63 701.09 701.55 701.99	1565.32 1568.38 1571.41 1574.42 1577.41 1580.37 1583.31 1586.22 1589.12	1.0685- 7 1.0474 1.0267 1.0066 9.8682- 8 9.6751 9.4862 9.3014 9.1205 8.9436	8.0141- 8 7.8559 7.7012 7.5498 7.4018 7.2569 7.1152 6.9766 6.8410 6.7082	1.0545- 10 1.0337 1.0133 9.9340- 11 9.7392 9.5486 9.3622 9.1797 9.0013 8.8266	2.378- 11 2.326 2.276 2.227 2.179 2.133 2.087 2.043 1.999 1.957	1.941- 11 1.899 1.858 1.818 1.779 1.741 1.704 1.668 1.632 1.598
300000 302000 304000 306000 310000 312000 312000 316000 318000	286480 288303 290125 291946 293766 295585 297403 299220 301035 302850	976.01 976.84 977.65 978.43 979.18 979.90 980.60 981.28 981.93	702.86 703.69 704.50 705.28 706.03 706.75 707.45 708.13 708.78	1594.83 1600.46 1606.00 1611.46 1610.84 1622.13 1627.34 1632.47 1637.53 1642.51	8.7704- 8 8.4351 8.1139 7.8061 7.5112 7.2285 6.9574 6.6975 6.4482 6.2090	6.5783-8 6.3268 6.0859 5.8551 5.6338 5.4218 5.2185 5.0235 4.8365 4.6572	8.6557- 11 8.3248 8.0078 7.7040 7.4129 7.1339 6.8664 6.6099 6.3639 6.1278	1.916-11 1.636 1.760 1.688 1.618 1.552 1.489 1.429 1.372 1.317	1.564- 11 1.499 1.437 1.378 1.321 1.267 1.216 1.167 1.120

Table I
Geometric Altitude, Metric Units

Alti	tude	Temperature				Pressure		De	nsity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	$^{ ho/ ho}$ 0
320000 322000 324000 326000 328000 330000 332000 334000 336000 338000	304663 396476 308287 310097 311906 313714 315521 317327 319132 320935	983.16 983.74 984.31 984.85 985.37 985.88 986.37 986.84 987.29 987.73	710.01 710.59 711.16 711.70 712.22 712.73 713.22 713.69 714.14 714.58	1647.42 1652.76 1657.03 1661.73 1666.37 1670.94 1675.45 1679.90 1684.29 1688.62	5.9796- 8 5.7593 5.5480 5.3450 5.1502 4.9630 4.7833 4.6106 4.4447 4.2852	4.4850- 8 4.3199 4.1613 4.0091 3.8629 3.7226 3.5877 3.4582 3.3338 3.2142	5.9014-11 5.6840 5.4754 5.2751 5.0828 4.8981 4.7207 4.5503 4.3865 4.2292	1.264-11 1.214 1.166 1.121 1.077 1.035 9.946-12 9.561 9.193 8.841	1.032-11 9.913-12 9.521 9.147 8.789 8.447 8.119 7.805 7.505
340000 342000 344000 346000 348000 350000 352000 354000 356000 358000	322738 324539 326340 328139 329938 331735 333531 335326 337120 338913	988.15 988.56 988.96 989.34 989.70 990.06 990.73 991.05 991.35	715.00 715.41 715.81 716.19 716.55 716.91 717.25 717.58 717.90 718.20	1692.90 1697.13 1701.30 1705.42 1709.50 1713.53 1717.51 1721.46 1725.36 1729.22	4.1320-8 3.9846 3.8430 3.7068 3.5758 3.4498 3.3286 3.2120 3.0998 2.9918	3.0992-8 2.9867 2.8625 2.7803 2.6821 2.5876 2.4966 2.4092 2.3250 2.2440	4.0779-11 3.9325 3.7927 3.6583 3.5290 3.4047 3.2851 3.1700 3.0592 2.9526	8.503-12 8.179 7.869 7.572 7.014 6.751 6.500 6.259 6.027	6.941- 12 6.677 6.424 6.181 5.948 5.725 5.511 5.306 5.109 4.920
360000 362000 364000 366000 370000 372000 374000 376000 378000	340705 342496 344286 346074 347862 349648 351434 353218 355002 356784	991.65 991.94 992.21 992.48 992.74 992.98 993.22 993.46 993.68 993.89	718.50 718.79 719.06 719.33 719.59 719.83 720.07 720.31 720.53 720.74	1733.05 1736.84 1740.59 1744.32 1748.02 1751.68 1755.32 1758.94 1762.53	2.8878-8 2.7878 2.9915 2.5987 2.5994 2.4234 2.3405 2.2607 2.1839 2.1098	2.1661-8 2.0910 2.0188 1.9492 1.8822 1.8177 1.7556 1.6997 1.0380 1.5825	2,8501- 11 2,7513 2,6563 2,5647 2,4766 2,3917 2,3099 2,2312 2,1553 2,0822	5.805- 12 5.592 5.387 5.190 5.001 4.820 4.645 4.478 4.316 4.162	4.739- 12 4.565 4.397 4.237 4.083 3.934 3.792 3.655 3.524 3.397
380000 382000 384000 386000 388000 390000 392000 394000 396000 398000	358565 360346 362125 363903 365689 367456 369231 371005 372778 374549	994.10 994.30 994.50 994.68 994.86 995.21 995.21 995.37 995.53	720.95 721.15 721.35 721.53 721.71 721.89 722.06 722.22 722.38 722.53	1769.66 1773.19 1770.71 1780.22 1783.72 1787.20 1790.68 1794.15 1797.61 1801.08	2.0384-8 1.9696 1.9033 1.8394 1.7778 1.7184 1.6611 1.6659 1.5527	1.5289- 8 1.4773 1.4276 1.3797 1.3335 1.2889 1.2460 1.2045 1.1646 1.1261	2.0117- 11 1.9439 1.8784 1.8153 1.7545 1.6959 1.6394 1.5849 1.5324 1.4817	4.013- 12 3.870 3.732 3.599 3.472 3.350 3.232 3.118 3.009 2.904	3.276- 12 3.159 3.046 2.938 2.834 2.734 2.638 2.545 2.456 2.370
40000 402000 404000 406000 408000 410000 412000 414000 416000 418000	376320 378090 379858 381626 383392 385158 386922 388686 390448 392210	995.83 995.97 996.10 996.23 996.36 996.49 996.60 996.72 996.83 996.94	722.68 722.82 722.95 723.08 723.21 723.34 723.45 723.68 723.79	1804-54 1808-00 1811-47 1814-94 1818-41 1821-90 1825-39 1828-90 1832-42 1835-96	1.4518-8 1.4040 1.3579 1.3134 1.2705 1.2291 1.1891 1.1506 1.1133	1.0889-8 1.0531 1.0185 9.8514-9 9.5295 9.2189 8.9192 8.6299 8.3507 8.0812	1.4328- 11 1.3856 1.3401 1.2962 1.2539 1.2130 1.1736 1.1355 1.0968	2.803- 12 2.705 2.611 2.521 2.434 2.350 2.269 2.192 2.117 2.044	2.288- 12 2.208 2.132 2.058 1.987 1.918 1.853 1.789 1.728 1.669
42000 42200 42400 426000 428000 430000 432000 434000 436000 438000	393970 395729 397487 399245 401001 402756 404510 406263 408015 409766	997.04 997.14 997.24 997.33 997.42 997.59 997.59 997.75 997.75	723.89 723.99 724.09 724.18 724.27 724.35 724.44 724.52 724.60 724.67	1839.52 1843.09 1846.69 1850.31 1853.96 1857.63 1861.33 1865.67 1868.83 1872.64	1.0427-8 1.0092 9.7692-9 9.4570 9.1556 8.8645 8.5834 8.3119 8.0497 7.7964	7.8211- 9 7.5699 7.3275 7.0933 6.8673 6.6689 6.4381 6.2345 6.0378 5.8478	1.0291- 11 9.9605- 12 9.6414 9.3333 9.0359 8.7486 8.4712 8.2032 7.9444 7.6944	1.975- 12 1.908 1.843 1.781 1.720 1.662 1.606 1.553 1.501	1.612- 12 1.557 1.504 1.453 1.404 1.357 1.311 1.267 1.225
44000 44200 44400 44600 44800 45000 45200 45400 45600 45800	411516 413265 415013 416760 418505 420250 421994 423737 425478 427219	997.90 997.97 998.03 998.10 998.22 998.28 998.34 998.40 998.45	724.75 724.82 724.88 724.95 725.01 725.07 725.13 725.19 725.25	1876.48 1880.36 1884.28 1888.24 1892.25 1896.31 1900.42 1904.58 1908.79 1913.06	7.5517- 9 7.3153 7.0869 6.8662 6.6529 6.4468 6.2477 6.0552 5.8691 5.6893	5.6642- 9 5.4869 5.3156 5.1500 4.9901 4.8355 4.6861 4.5418 4.4022 4.2673	7.4529- 12 7.2196 6.9942 6.7764 6.5659 6.3625 6.1660 5.9760 5.7924 5.6149	1.402- 12 1.355 1.310 1.267 1.225 1.184 1.145 1.108 1.071	1.144- 12 1.106 1.070 1.034 9.998- 13 9.668 9.349 9.041 8.744 8.457
460000 462000 464000 466000 468000 470000 472000 474000 478000	428459 430698 432435 434172 435907 437642 439376 441108 442840 444570	998.50 998.55 998.60 998.65 998.67 998.73 998.78 998.82 998.86 998.89	725.35 725.40 725.45 725.50 725.54 725.58 725.63 725.67 725.71	1917.39 1921.77 1926.22 1930.74 1935.32 1939.97 1944.70 1949.50 1954.37	5.5155- 9 5.3474 5.1850 5.0279 4.6760 4.7292 4.58671 4.4498 4.3170 4.1885	4.1370- 9 4.0109 3.8891 3.7712 3.6573 3.5472 3.3406 3.3376 3.2380 3.1416	5,4434- 12 5,2775 5,1172 4,9621 4,8123 4,6673 4,5272 4,3916 4,2605 4,1337	1.002- 12 9.694- 13 9.377 9.072 8.777 8.492 8.217 7.952 7.695 7.447	8.180-13 7.913 7.655 7.406 7.165 6.932 6.708 6.491 6.282 6.079

Table I Geometric Altitude, Metric Units

Alti	tude	-	Temperature		ric Attitude, ivi	Pressure		De	nsity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	$\rho/ ho_{f 0}$
480000 482000 484000 486000 496000 492000 494000 496000 498000	446300 448028 449756 451462 453208 454932 456656 458378 460100 461820	998.93 998.97 999.00 999.03 999.07 999.10 999.13 999.15 999.18	725.78 725.82 725.85 725.88 725.92 725.95 725.98 726.00 726.03	1964.36 1969.47 1974.68 1979.97 1985.35 1990.83 1990.40 2002.07 2007.84 2013.71	4.0642- 9 3.9440 3.9153 3.1064 3.5011 3.3993 3.3007 3.2053 3.1129	3.0484- 9 2.9583 2.8711 2.7867 2.7051 2.6261 2.5497 2.4757 2.4041 2.3349	4.0111- 12 3.8925 3.7777 3.6667 3.5593 3.4554 3.3548 3.2575 3.1633 3.0722	7.208- 13 6.976 6.753 6.537 6.328 6.127 5.932 5.743 5.561 5.385	5.884- 13 5.695 5.513 5.336 5.166 5.001 4.842 4.688 4.540 4.396
500000 505000 510000 515000 520000 525000 535000 535000 545000	463540 467834 472122 476404 480679 484949 489212 493469 497719 501964	999.24 999.30 999.35 999.40 999.50 999.54 999.57 999.61	726.09 726.15 726.20 726.25 726.30 726.35 726.39 726.42 726.42	2019.69 2035.12 2051.27 2068.18 2085.90 2104.47 2123.94 2144.35 2165.75 2188.18	3.0236- 9 2.6125 2.6179 2.4385 2.729 2.1200 1.9789 1.6485 1.7281	2.2679- 9 2.1096 1.9636 1.8290 1.7048 1.5901 1.4843 1.3865 1.2962	2.9840- 12 2.7757 2.5837 2.4066 2.2431 2.0923 1.9530 1.8244 1.7055 1.5956	5.215- 13 4.814 4.446 4.107 3.509 3.509 3.246 3.003 2.780 2.574	4.257- 13 3.930 3.629 3.353 3.099 2.865 2.650 2.452 2.269 2.101
550000 555000 560000 565000 575000 575000 585000 595000	506202 510435 514661 518881 523095 527303 531505 535701 539890 544074	999.67 999.69 999.72 999.74 999.76 999.80 999.81 999.83	726.52 726.54 726.57 726.59 726.61 726.63 726.65 726.66 726.68 726.69	2211.73 2236.35 2262.18 2289.24 2317.58 2347.24 2376.28 2410.74 2444.66 2480.10	1.5137- 9 1.4184 1.3303 1.2486 1.1729 1.1028 1.0378 9.7752- 10 9.2155 8.6958	1.1354- 9 1.0639 9.9778- 10 9.3652 8.7978 8.2719 7.7843 7.3320 6.9122 6.5224	1.4939- 12 1.3999 1.3129 1.2323 1.1576 1.0884 1.0243 9.6473- 13 9.0950 8.5821	2.384- 13 2.210 2.049 1.900 1.763 1.637 1.520 1.413 1.313	1.946- 13 1.804 1.672 1.551 1.433 1.336 1.241 1.153 1.072 9.971- 14
60000 605000 610000 615000 620000 625000 635000 640000 645000	548252 552424 556549 560749 564903 569051 573193 577329 581459 585583	999.85 999.86 999.88 999.89 999.90 959.91 999.92 999.92	726.70 726.71 726.73 726.73 726.74 726.75 726.76 726.77 726.77	2517-10 2555-69 2595-92 2637-82 2681-43 2726-78 2773-89 2822-79 2873-49 2920-01	8.2130-10 7.7642 7.3468 6.9585 6.5969 6.2601 5.9461 5.6533 5.3801 5.1249	6.1602- 10 5.8236 5.5106 5.2193 4.9481 4.6954 4.4600 4.2404 4.0354 3.8440	8.1056- 13 7.6626 7.2507 6.8675 6.5106 6.1782 5.8684 5.5794 5.3097 5.0579	1.137- 13 1.058 9.859- 14 9.190 8.571 7.998 7.468 6.977 6.523 6.102	9.279- 14 8.640 8.048 7.502 6.996 6.529 6.096 5.695 5.325
650000 655000 660000 665000 670000 675000 680000 685000 690000 695000	589701 593814 597920 602021 606116 610205 614288 618365 622437 626503	999.93 999.94 999.95 999.95 999.96 999.96 999.97	726.78 726.79 726.80 726.80 726.81 726.81 726.81 726.82 726.82	2980.36 3036.53 3094.52 3154.32 3215.92 32179.29 3344.39 3411.19 3479.64 3549.69	4.8865- 10 4.6635 4.4549 4.2595 4.0765 3.9048 3.7438 3.5925 3.4504 3.3166	3.6651-10 3.4979 3.3414 3.1949 3.0576 2.9289 2.8081 2.6996 2.5880 2.4877	4.8226- 13 4.6025 4.3966 4.2038 4.0232 3.8538 3.6948 3.5455 3.4052 3.2733	5.712-14 5.350 5.015 4.704 4.416 4.148 3.900 3.669 3.454 3.255	4.663- 14 4.368 4.094 3.840 3.605 3.386 3.183 2.995 2.820 2.657
700000 705000 715000 715000 725000 735000 735000 746000	630563 634617 638666 642709 646746 650778 654803 658824 662838 666847	999.97 999.97 999.98 999.98 999.98 999.98 999.98 999.98	726.82 726.82 726.83 726.83 726.83 726.83 726.83 726.83 726.83	3621.27 3694.31 3768.74 3844.47 3921.41 3999.46 4078.53 4158.49 4239.25 4320.67	3.1908- 10 3.0722 2.9604 2.8549 2.7553 2.6611 2.5720 2.4877 2.4077 2.3319	2.3933-10 2.3043 2.2205 2.1414 2.0666 1.9960 1.9292 1.8659 1.8059	3.1491-13 3.0320 2.9217 2.8176 2.7193 2.6263 2.5384 2.4551 2.3762 2.3014	3.070- 14 2.897 2.736 2.587 2.448 2.318 2.197 2.084 1.979 1.880	2.506- 14 2.365 2.234 2.112 1.998 1.892 1.793 1.701 1.615 1.535
750000 755000 765000 765000 770000 775000 785000 790000 795000	670850 674848 678840 682626 686807 690782 694751 698715 702674 706627	999.99 999.99 999.99 999.99 999.99 999.99 999.99	726.84 726.84 726.84 726.84 726.84 726.84 726.84 726.84 726.84	4402.64 4485.04 4567.74 4650.61 4733.52 4816.36 4898.99 4981.29 5063.15 5144.44	2.2599- 10 2.1915 2.1265 2.0645 2.0656 1.9493 1.8957 1.8444 1.7954	1.6951- 10 1.6438 1.5950 1.5485 1.5043 1.4621 1.4219 1.3834 1.3467	2.2303- 13 2.1628 2.0987 2.0375 1.9793 1.9238 1.8709 1.8203 1.7719	1.788- 14 1.702 1.622 1.547 1.476 1.410 1.348 1.290 1.235	1.460- 14 1.390 1.324 1.262 1.205 1.151 1.100 1.053 1.008 9.666- 15
800000 805000 815000 825000 825000 835000 835000 840000	710574 714516 718452 722383 726309 730229 734143 738352 741956 745854	999.99 999.99 1000.00 1000.00 1000.00 1000.00 1000.00	726.84 726.84 726.85 726.85 726.85 726.85 726.85 726.85 726.85	5225.06 5304.89 5383.84 5461.80 5538.70 5614.45 5688.96 5762.18 5434.03	1.7036- 14 1.6606 1.6193 1.5797 1.5417 1.5051 1.4699 1.4360 1.4034	1.2778- 10 1.2456 1.2146 1.1849 1.1564 1.1289 1.1025 1.0771 1.0526 1.0290	1.6813-13 1.6389 1.5982 1.5591 1.5215 1.4854 1.4507 1.4172 1.3850 1.3539	1.136- 14 1.091 1.048 1.008 9.697- 15 9.339 9.001 8.682 8.380 8.094	9.272- 15 8.902 8.554 8.225 7.916 7.624 7.348 7.087 6.841 6.607

Table I Geometric Altitude, Metric Units

Alti	tude	-	Temperature	,		Pressure		Des	nsity
Z (m)	H (m)	T (K)	t (°C)	T _M (K)	P (mb)	P (torr)	P/P ₀	$ ho$ (kg/m 3)	$^{ ho/ ho}$ 0
850000	749747	1000.00	726.85	5973.45	1.3415- 10	1.0062- 10	1.3240- 13	7.824- 15	6.387- 15
85500n	753634	1000.00	726.85	6040.93	1.3122	9.8420- 11	1.2950	7.567	6.177
860000	757516	1000.00	726.85	6106.87	1.2838	9.6295	1.2670	7.324	5.978
865000	761393	1000.00	726.85	6171.24	1.2564	9.4240	1.2400	7.093	5.790
870000	765264	1000.00	726.85	6234.03	1.2299	9.2251	1.2138	6.873	5.611
875000	769130	1000.00	726.85	6295.22	1.2043	9.0327	1.1885	6.664	5.440
880000	772991	1000.00	726.85	6354.A1	1.1794	8.8463	1.1640	6.465	5.278
885000	776846	1000.00	726.85	6412.78	1.1553	8.6657	1.1402	6.276	5.123
890000	780696	1000.00	726.85	6469-15	1.1320	8.4905	1.1172	6.096	4.976
895000	784541	1000.00	726.85	6523.92	1.1093	8.3206	1.0948	5.924	4.836
			mar		1 4072 10	0 1554 11	1.0731- 13	5.759- 15	4.701- 15
900000	78838 0	1000.00	726.85	6577.11	1.0873- 10	8.1556- 11 7.9954	1.0520	5.602	4.573
905000	792214	1000.00	726.85	6628.72	1.0660		1.0316	5.452	4.451
910000	796043	1000.00	726.85	6678.78	1.0452	7.8398	1.0116	5.308	4.333
915000	799866	1000.00	726.85	6727.31	1.0250	7.6885	9.9229- 14	5.170	4.221
920000	803685	1000.00	726.85	6774.34	1.0054	7.5414	9.7345	5.038	4.113
925000	807498	1000.00	726.85	6819.90	9.8635- 11	7.3982			
930000	811305	1000.00	726.85	6864.02	9.6777	7.2589	9.5512	4.912 4.790	4.010 3.910
935000	815108	1000.00	726.85	6906.73	9.4968	7.1232	9.3727 9.1988	4.673	3.815
940000	818905 822697	1000.00	726.85 726.85	6948.07 6988.07	9.3207 9.1490	6.9911 6.8623	9.0293	4.561	3.723
945000	022071	1000.00	720.63	0700101	7.1470	0.0023	7.0273	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
950000	826484	1000.00	726.85	7026.78	8.9816- 11	6.7368- 11	8.8642- 14	4.453- 15	3.635- 19
955000	830266	1000.00	726.85	7064.22	8.8184	6.6143	8.7031	4.349	3.550
960000	834043	1000.00	726.85	7100.45	8.6592	6.4949	8.5460	4.248	3.468
965000	837814	1000.00	726.85	7135.49	8.5039	6.3784	8.3927	4.152	3.389
970000	841580	1000.00	726.85	7169.40	8.3523	6.2647	8.2431	4.058	3.313
975000	845342	1000.00	726.85	7202.21	8.2043	6.1537	8.0970	3.968	3.239
980000	849098	1000.00	726.85	7233.96	8.0597	6.0453	7.9543	3.881	3.168
985000	852849	1000.00	726.85	7264.68	7.9185	5.9393	7.8149	3.797	3.100
990000	856594	1000.00	726.85	7294.43	7.7805	5.8358	7.6788	3.716	3.033
995000	860335	1000.00	726.85	7323.24	7.6456	5.7347	7.5457	3.637	2.969
1000000	864071	1000.00	726.85	7351.15	7.5138- 11	5.6358- 11	7.4155- 14	3.561- 15	2.907- 1

