

Table 2. TEMPERATURE CORRECTION, Metric Units

To reduce the reading of the barometer to standard temperature

Temperature C	Observed Reading of the Barometer in Millimetres or Millibars												
	540	560	580	600	620	640	660	680	700	720	740	760	780
	ALL CORRECTIONS SUBTRACTIVE												
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	.09	.09	.09	.10	.10	.10	.11	.11	.11	.12	.12	.12	.13
2	.18	.18	.19	.20	.20	.21	.22	.22	.23	.24	.24	.25	.25
3	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35	.36	.37	.38
4	.35	.37	.38	.39	.40	.42	.43	.44	.46	.47	.48	.50	.51
5	0.44	0.46	0.47	0.49	0.51	0.52	0.54	0.56	0.57	0.59	0.60	0.62	0.64
6	.53	.55	.57	.59	.61	.63	.65	.67	.69	.71	.72	.74	.76
7	.62	.64	.66	.69	.71	.73	.75	.78	.80	.82	.85	.87	.89
8	.70	.73	.76	.78	.81	.84	.86	.89	.91	.94	.97	.99	1.02
9	.79	.82	.85	.88	.91	.94	.97	1.00	1.03	1.06	1.09	1.12	1.15
10	0.88	0.91	0.95	0.98	1.01	1.04	1.08	1.11	1.14	1.17	1.21	1.24	1.27
11	.97	1.00	1.04	1.08	1.11	1.15	1.18	1.22	1.26	1.29	1.33	1.36	1.40
12	1.06	1.10	1.13	1.17	1.21	1.25	1.29	1.33	1.37	1.41	1.45	1.49	1.53
13	1.14	1.19	1.23	1.27	1.31	1.36	1.40	1.44	1.48	1.53	1.57	1.61	1.65
14	1.23	1.28	1.32	1.37	1.41	1.46	1.51	1.55	1.60	1.64	1.69	1.73	1.78
15	1.32	1.37	1.42	1.47	1.52	1.56	1.61	1.66	1.71	1.76	1.81	1.86	1.91
16	1.41	1.46	1.51	1.56	1.62	1.67	1.72	1.77	1.82	1.88	1.93	1.98	2.03
17	1.50	1.55	1.61	1.66	1.72	1.77	1.83	1.88	1.94	1.99	2.05	2.10	2.16
18	1.58	1.64	1.70	1.76	1.82	1.88	1.93	1.99	2.05	2.11	2.17	2.23	2.29
19	1.67	1.73	1.79	1.86	1.92	1.98	2.04	2.10	2.17	2.23	2.29	2.35	2.41
20	1.76	1.82	1.89	1.95	2.02	2.08	2.15	2.21	2.28	2.34	2.41	2.47	2.54
21	1.85	1.91	1.98	2.05	2.12	2.19	2.26	2.32	2.39	2.46	2.53	2.60	2.67
22	1.93	2.01	2.08	2.15	2.22	2.29	2.36	2.43	2.51	2.58	2.65	2.72	2.79
23	2.02	2.10	2.17	2.25	2.32	2.40	2.47	2.54	2.62	2.69	2.77	2.84	2.92
24	2.11	2.19	2.26	2.34	2.42	2.50	2.58	2.66	2.73	2.81	2.89	2.97	3.05
25	2.20	2.28	2.36	2.44	2.52	2.60	2.68	2.77	2.85	2.93	3.01	3.09	3.17
26	2.28	2.37	2.45	2.54	2.62	2.71	2.79	2.88	2.96	3.04	3.13	3.21	3.30
27	2.37	2.46	2.55	2.63	2.72	2.81	2.90	2.99	3.07	3.16	3.25	3.34	3.42
28	2.46	2.55	2.64	2.73	2.82	2.91	3.00	3.10	3.19	3.28	3.37	3.46	3.55
29	2.55	2.64	2.73	2.83	2.92	3.02	3.11	3.21	3.30	3.39	3.49	3.58	3.68
30	2.63	2.73	2.83	2.93	3.02	3.12	3.22	3.32	3.41	3.51	3.61	3.71	3.80
31	2.72	2.82	2.92	3.02	3.12	3.22	3.32	3.43	3.53	3.63	3.73	3.83	3.93
32	2.81	2.91	3.02	3.12	3.22	3.33	3.43	3.54	3.64	3.74	3.85	3.95	4.05
33	2.89	3.00	3.11	3.22	3.32	3.43	3.54	3.64	3.75	3.86	3.97	4.07	4.18
34	2.98	3.09	3.20	3.31	3.42	3.53	3.64	3.75	3.87	3.98	4.09	4.20	4.31

Table 2 Continued. TEMPERATURE CORRECTION, Metric Units

To reduce the reading of the barometer to standard temperature

Temperature C	Observed Reading of the Barometer in Millimetres or Millibars												
	800	820	840	860	880	900	920	940	960	980	1000	1020	1040
	ALL CORRECTIONS SUBTRACTIVE												
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	.13	.13	.14	.14	.14	.15	.15	.15	.16	.16	.16	.17	.17
2	.26	.27	.27	.28	.29	.29	.30	.31	.31	.32	.33	.33	.34
3	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50	.51
4	.52	.54	.55	.56	.57	.59	.60	.61	.63	.64	.65	.67	.68
5	0.65	0.67	0.69	0.70	0.72	0.73	0.75	0.77	0.78	0.80	0.82	0.83	0.85
6	.78	.80	.82	.84	.86	.88	.90	.92	.94	.96	.98	1.00	1.02
7	.91	.94	.96	.98	1.01	1.03	1.05	1.07	1.10	1.12	1.14	1.17	1.19
8	1.04	1.07	1.10	1.12	1.15	1.17	1.20	1.23	1.25	1.28	1.31	1.33	1.36
9	1.17	1.20	1.23	1.26	1.29	1.32	1.35	1.38	1.41	1.44	1.47	1.50	1.53
10	1.30	1.34	1.37	1.40	1.44	1.47	1.50	1.53	1.57	1.60	1.63	1.66	1.70
11	1.44	1.47	1.51	1.54	1.58	1.61	1.65	1.69	1.72	1.76	1.79	1.83	1.87
12	1.57	1.60	1.64	1.68	1.72	1.76	1.80	1.84	1.88	1.92	1.96	2.00	2.03
13	1.70	1.74	1.78	1.82	1.86	1.91	1.95	1.99	2.03	2.08	2.12	2.16	2.20
14	1.83	1.87	1.92	1.96	2.01	2.05	2.10	2.14	2.19	2.24	2.28	2.33	2.37
15	1.96	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.44	2.49	2.54
16	2.09	2.14	2.19	2.24	2.29	2.35	2.40	2.45	2.50	2.55	2.61	2.66	2.71
17	2.22	2.27	2.33	2.38	2.44	2.49	2.55	2.60	2.66	2.71	2.77	2.82	2.88
18	2.35	2.40	2.46	2.52	2.58	2.64	2.70	2.76	2.81	2.87	2.93	2.99	3.05
19	2.48	2.54	2.60	2.66	2.72	2.78	2.85	2.91	2.97	3.03	3.09	3.16	3.22
20	2.60	2.67	2.74	2.80	2.87	2.93	3.00	3.06	3.13	3.19	3.26	3.32	3.39
21	2.73	2.80	2.87	2.94	3.01	3.08	3.14	3.21	3.28	3.35	3.42	3.49	3.56
22	2.86	2.94	3.01	3.08	3.15	3.22	3.29	3.37	3.44	3.51	3.58	3.65	3.72
23	2.99	3.07	3.14	3.22	3.29	3.37	3.44	3.52	3.59	3.67	3.74	3.82	3.89
24	3.12	3.20	3.28	3.36	3.44	3.51	3.59	3.67	3.75	3.83	3.90	3.98	4.06
25	3.25	3.33	3.42	3.50	3.58	3.66	3.74	3.82	3.90	3.99	4.07	4.15	4.23
26	3.38	3.47	3.55	3.64	3.72	3.81	3.89	3.97	4.06	4.14	4.23	4.31	4.40
27	3.51	3.60	3.69	3.78	3.86	3.95	4.04	4.13	4.21	4.30	4.39	4.48	4.57
28	3.64	3.73	3.82	3.91	4.01	4.10	4.19	4.28	4.37	4.46	4.55	4.64	4.73
29	3.77	3.87	3.96	4.05	4.15	4.24	4.34	4.43	4.53	4.62	4.71	4.81	4.90
30	3.90	4.00	4.10	4.19	4.29	4.39	4.49	4.58	4.68	4.78	4.88	4.97	5.07
31	4.03	4.13	4.23	4.33	4.43	4.53	4.63	4.73	4.84	4.94	5.04	5.14	5.24
32	4.16	4.26	4.37	4.47	4.57	4.68	4.78	4.89	4.99	5.09	5.20	5.30	5.41
33	4.29	4.40	4.50	4.61	4.72	4.82	4.93	5.04	5.15	5.25	5.36	5.47	5.57
34	4.42	4.53	4.64	4.75	4.86	4.97	5.08	5.19	5.30	5.41	5.52	5.63	5.74

Table 3. GRAVITY CORRECTION

To reduce the reading of the barometer to standard gravity

Latitude N or S	Height of the mercury column														
	Inches					Millimetres						Millibars			
	26	27	28	29	30	680	700	720	740	760	780	900	950	1000	1050
	LATITUDE 0° TO 45° THE CORRECTION IS TO BE SUBTRACTED														
	LATITUDE 46° TO 90° THE CORRECTION IS TO BE ADDED														
90°	+.067	+.070	+.073	+.075	+.078	+1.76	+1.82	+1.87	+1.92	+1.97	+2.02	+2.33	+2.46	+2.59	+2.72
88	.067	.070	.072	.075	.078	1.76	1.81	1.86	1.91	1.97	2.02	2.33	2.46	2.59	2.72
86	.067	.069	.072	.074	.077	1.75	1.80	1.85	1.90	1.95	2.00	2.31	2.44	2.57	2.70
84	.066	.068	.071	.074	.076	1.72	1.77	1.83	1.88	1.93	1.98	2.28	2.41	2.54	2.66
82	.065	.067	.070	.072	.075	1.69	1.74	1.79	1.84	1.89	1.94	2.24	2.37	2.49	2.62
80	+.063	+.066	+.068	+.071	+.073	+1.65	+1.70	+1.75	+1.80	+1.85	+1.90	+2.19	+2.31	+2.43	+2.56
78	.061	.064	.066	.069	.071	1.61	1.65	1.70	1.75	1.80	1.84	2.13	2.25	2.36	2.48
76	.059	.062	.064	.066	.068	1.55	1.60	1.64	1.69	1.74	1.78	2.05	2.17	2.28	2.40
74	.057	.059	.061	.064	.066	1.49	1.53	1.58	1.62	1.66	1.71	1.97	2.08	2.19	2.30
72	.054	.056	.058	.061	.063	1.42	1.46	1.50	1.54	1.59	1.63	1.88	1.98	2.09	2.19
70	+.051	+.053	+.055	+.057	+.059	+1.34	+1.38	+1.42	+1.46	+1.50	+1.54	+1.78	+1.87	+1.97	+2.07
68	.048	.050	.052	.054	.056	1.26	1.30	1.33	1.37	1.41	1.44	1.67	1.76	1.85	1.94
66	.045	.046	.048	.050	.052	1.17	1.20	1.24	1.27	1.31	1.34	1.55	1.63	1.72	1.80
64	.041	.043	.044	.046	.047	1.07	1.10	1.13	1.17	1.20	1.23	1.42	1.50	1.58	1.65
62	.037	.039	.040	.041	.043	0.97	1.00	1.03	1.06	1.08	1.11	1.28	1.36	1.43	1.50
60	+.033	+.034	+.036	+.037	+.038	+0.86	+0.89	+0.91	+0.94	+0.97	+0.99	+1.14	+1.21	+1.27	+1.33
58	.029	.030	.031	.032	.033	0.75	0.78	0.80	0.82	0.84	0.86	1.00	1.05	1.11	1.16
56	.024	.025	.026	.027	.028	0.64	0.66	0.68	0.69	0.71	0.73	0.84	0.89	0.94	0.99
54	.020	.021	.021	.022	.023	0.52	0.54	0.55	0.57	0.58	0.60	0.69	0.73	0.77	0.80
52	.015	.016	.016	.017	.018	0.40	0.41	0.42	0.44	0.45	0.46	0.53	0.56	0.59	0.62
50	+.011	+.011	+.011	+.012	+.012	+0.28	+0.29	+0.29	+0.30	+0.31	+0.32	+0.37	+0.39	+0.41	+0.43
48	.006	.006	.006	.007	.007	0.15	0.16	0.16	0.17	0.17	0.18	0.20	0.21	0.23	0.24
46	+.001	+.001	+.001	+.001	+.001	+0.03	+0.03	+0.03	+0.03	+0.03	+0.03	+0.04	+0.04	+0.04	+0.04
45	-.001	-.001	-.001	-.001	-.001	-0.03	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.05	-0.05	-0.05
44	.004	.004	.004	.004	.004	0.10	0.10	0.10	0.11	0.11	0.11	0.13	0.13	0.14	0.15
42	.008	.009	.009	.009	.010	0.22	0.23	0.23	0.24	0.25	0.25	0.29	0.31	0.33	0.34
40	-.013	-.014	-.014	-.015	-.015	-0.35	-0.36	-0.37	-0.38	-0.39	-0.40	-0.46	-0.48	-0.51	-0.53
38	.018	.019	.019	.020	.021	0.47	0.48	0.50	0.51	0.52	0.54	0.62	0.65	0.69	0.72
36	.022	.023	.024	.025	.026	0.59	0.61	0.62	0.64	0.66	0.67	0.78	0.82	0.86	0.91
34	.027	.028	.029	.030	.031	0.71	0.73	0.75	0.77	0.79	0.81	0.93	0.99	1.04	1.09
32	.031	.033	.034	.035	.036	0.82	0.84	0.87	0.89	0.92	0.94	1.08	1.14	1.20	1.27
30	-.036	-.037	-.038	-.040	-.041	-0.93	-0.96	-0.98	-1.01	-1.04	-1.07	-1.23	-1.30	-1.37	-1.44
28	.040	.041	.043	.044	.046	1.04	1.07	1.10	1.13	1.16	1.19	1.37	1.45	1.52	1.60
26	.043	.045	.047	.048	.050	1.14	1.17	1.20	1.24	1.27	1.30	1.50	1.59	1.67	1.75
24	.047	.049	.051	.053	.054	1.23	1.27	1.30	1.34	1.38	1.41	1.63	1.72	1.81	1.90
22	.051	.052	.054	.056	.058	1.32	1.36	1.40	1.44	1.48	1.52	1.75	1.85	1.94	2.04
20	-.054	-.056	-.058	-.060	-.062	-1.41	-1.45	-1.49	-1.53	-1.57	-1.61	-1.86	-1.96	-2.07	-2.17
18	.057	.059	.061	.063	.065	1.48	1.53	1.57	1.61	1.66	1.70	1.96	2.07	2.18	2.29
16	.059	.062	.064	.066	.068	1.55	1.60	1.64	1.69	1.73	1.78	2.05	2.17	2.28	2.40
14	.062	.064	.066	.069	.071	1.61	1.66	1.71	1.76	1.80	1.85	2.14	2.26	2.37	2.49
12	.064	.066	.069	.071	.074	1.67	1.72	1.77	1.82	1.87	1.91	2.21	2.33	2.45	2.58
10	-.066	-.068	-.071	-.073	-.076	-1.72	-1.77	-1.82	-1.87	-1.92	-1.97	-2.27	-2.40	-2.52	-2.65
8	.067	.070	.072	.075	.077	1.75	1.81	1.86	1.91	1.96	2.01	2.32	2.45	2.58	2.71
6	.068	.071	.073	.076	.079	1.78	1.84	1.89	1.94	1.99	2.05	2.36	2.49	2.62	2.76
4	.069	.072	.074	.077	.080	1.81	1.86	1.91	1.97	2.02	2.07	2.39	2.52	2.66	2.79
2	.070	.072	.075	.078	.080	1.82	1.87	1.93	1.98	2.03	2.09	2.41	2.54	2.67	2.81
0	-.070	-.072	-.075	-.078	-.080	-1.82	-1.88	-1.93	-1.98	-2.04	-2.09	-2.41	-2.55	-2.68	-2.82

Tables 1 thru 3 are condensed from the "Smithsonian Meteorological Tables", Sixth Revised Edition 1949, Fifth Reprint 1971; and are corrected for consistency with

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BAROMETRIC SEA LEVEL DIFFERENTIAL
BASED ON THE ICAO STANDARD ATMOSPHERE¹

Geopotential ² feet	Sea Level Correction ($p_0 - p$) ¹			Geopotential ² metres	Sea Level Correction ($p_0 - p$) ¹		
	in	mm	mb		in	mm	mb
0	0.000	0.00	0.00	0	0.000	0.00	0.00
10	0.011	0.27	0.37	10	0.035	0.90	1.20
20	0.022	0.55	0.73	20	0.071	1.80	2.40
30	0.032	0.82	1.10	30	0.106	2.70	3.60
40	0.043	1.10	1.46	40	0.142	3.60	4.80
50	0.054	1.37	1.83	50	0.177	4.49	5.99
60	0.065	1.65	2.20	60	0.212	5.39	7.19
70	0.076	1.92	2.56	70	0.247	6.29	8.38
80	0.086	2.19	2.93	80	0.283	7.18	9.57
90	0.097	2.47	3.29	90	0.318	8.07	10.77
100	0.108	2.74	3.66	100	0.353	8.97	11.96
200	0.216	5.48	7.33	200	0.703	17.85	23.80
300	0.323	8.20	10.94	300	1.049	26.65	35.52
400	0.430	10.92	14.56	400	1.392	35.36	47.14
500	0.537	13.63	18.17	500	1.732	43.99	58.64
600	0.643	16.33	21.78	600	2.068	52.53	70.03
700	0.749	19.03	25.37	700	2.401	60.99	81.31
800	0.855	21.72	28.95	800	2.731	69.37	92.49
900	0.960	24.39	32.52	900	3.058	77.67	103.55
1000	1.066	27.07	36.08	1000	3.381	85.89	114.51
2000	2.100	53.35	71.12	2000	6.446	163.74	218.30
3000	3.105	78.86	105.13	3000	9.218	234.14	312.17
4000	4.079	103.62	138.15	4000	11.719	297.66	396.85
5000	5.025	127.64	170.18				
6000	5.943	150.95	201.26				
7000	6.833	173.56	231.40				
8000	7.696	195.49	260.63				
9000	8.533	216.74	288.97				
10000	9.344	237.35	316.44				
11000	10.130	257.31	343.05				
12000	10.892	276.66	368.84				

1. MANUAL OF BAROMETRY (WBAN), Volume I, First Edition, U.S. Dept. of Commerce, Weather Bureau, Washington, D.C., 1963, p. 12. App.8.0.1-1. The actual correction depends on the temperature and humidity, see "hypso-metric equation" *ibid.* p. 7-2.
2. The geopotential of a position in the lower atmosphere is very nearly equal to the elevation above sea level, *ibid.* p. 8-4.