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METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR MARCH 1945

AEROLOGICAL OBSERVATIONS

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during March 1945*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Albany, N. Y. (86 m.)				Albuquerque, N. Mex. (1620 m.)				Apalachicola, Fla. (5 m.)				Atlanta, Ga. (200 m.)				Big Spring, Tex. (774 m.)				Bismarck, N. Dak. (505 m.)				Boise, Idaho (868 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,005	4.1	74	31	834	7.9	35	31	1,018	18.9	88	31	984	14.9	72	29	923	15.1	47	31	950	0.3	83	30	913	4.8	62
500	31	956	4.9	65					31	962	18.9	61	31	961	15.6	66												
1,000	31	899	3.1	65					31	907	16.4	53	31	906	13.8	60	29	899	15.9	41	31	893	1.5	65	30	898	5.1	56
1,500	31	844	0.6	64					31	855	13.3	51	30	853	11.1	57	29	847	12.1	36	31	839	−0.8	59	30	845	2.2	55
2,000	31	793	−1.7	55	31	796	6.3	36	31	805	10.8	41	30	803	8.7	54	29	798	10.1	35	31	788	−3.1	56	30	793	−1.7	61
2,500	31	745	−3.7	45	31	749	2.3	39	31	758	8.9	31	30	756	6.2	46	29	751	7.0	30	31	740	−5.8	62	30	745	−5.5	69
3,000	31	698	−5.8	43	31	703	−1.8	46	31	714	6.6	--	30	711	3.4	37	29	706	3.5	29	31	693	−8.8	63	30	698	−8.9	72
4,000	30	614	−10.9		31	620	−9.2	52	30	631	0.9		30	628	−2.0	36	29	622	−4.0	33	30	609	−14.1	58	29	613	−14.2	66
5,000	30	538	−17.3		29	544	−15.8		30	557	−4.8		30	553	−8.1	36	28	548	−10.9		30	533	−20.3	58	29	537	−20.5	59
6,000	30	470	−24.1		28	476	−22.7		30	489	−11.7		30	485	−14.5		28	480	−17.8		30	465	−26.9		29	468	−27.3	
7,000	30	409	−31.0		27	414	−29.7		30	429	−18.7		29	425	−22.0		28	420	−24.7		30	404	−34.8		29	407	−34.5	
8,000	30	355	−37.5		26	359	−36.4		30	374	−26.3		28	370	−29.5		27	365	−32.1		29	349	−42.3		28	352	−40.7	
9,000	30	306	−43.7		26	310	−43.1		27	325	−33.7		28	321	−36.8		26	316	−38.7		28	300	−48.6		28	303	−47.0	
10,000	29	263	−49.4		26	267	−48.7		26	282	−41.2		27	277	−43.7		26	273	−45.4		24	257	−52.3		25	260	−52.5	
11,000	29	226	−54.6		25	229	−52.5		25	242	−48.8		26	238	−49.9		25	234	−51.5		20	220	−52.6		23	223	−55.5	
12,000	28	193	−56.4		24	196	−54.5		22	208	−54.6		25	204	−53.9		24	200	−54.6		18	188	−52.8		17	190	−54.8	
13,000	23	164	−55.7		19	168	−54.6		20	178	−58.6		21	174	−57.0		22	171	−56.0		14	162	−51.1		14	162	−52.1	
14,000	15	141	−56.0		13	144	−57.0		13	152	−61.7		18	148	−61.0		20	146	−59.3		10	139	−49.8		9	139	−52.7	
15,000	8	121	−56.9		6	122	−59.7		10	129	−67.5		11	126	−63.3		14	124	−61.8		8	120	−51.3		5	120	−52.9	
16,000									8	110	−71.9						7	105	−64.2		5	103	−52.1					

Altitude (meters) m. s. l.	Brownsville, Tex. (6 m.)				Buffalo, N. Y. (221 m.)				Caribou, Maine (193 m.)				Charleston, S. C. (14 m.)				Denver, Colo. (1,616 m.)				Dodge City, Kans. (787 m.)				El Paso, Tex. (1,195 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,012	21.8	86	31	989	5.3	75	30	990	−3.1	82	30	1,018	15.6	85	31	832	4.8	45	31	920	7.6	59	31	878	14.1	26
500	31	956	19.7	78	31	956	5.9	66	30	953	−2.6	74	30	962	17.0	63												
1,000	31	902	19.0	54	31	899	3.7	63	30	894	−4.4	71	30	907	14.6	58					31	897	9.0	50				
1,500	31	851	17.1	47	31	846	1.7	55	30	839	−5.6	70	30	855	11.6	57					31	844	8.4	41	31	847	13.5	24
2,000	31	802	15.2	41	31	794	0.0	47	30	787	−7.0	69	30	805	9.3	47	31	793	4.2	39	31	794	5.8	35	31	798	9.7	26
2,500	31	756	13.0	23	31	746	−2.4	46	30	738	−8.5	61	30	758	6.8	42	31	746	0.8	40	31	747	2.1	34	31	751	5.7	30
3,000	31	712	10.2	21	31	700	−4.9	47	30	692	−10.4	57	30	712	4.0	39	31	700	−2.8	45	31	701	−1.4	35	31	706	2.1	31
4,000	30	630	2.4	24	30	616	−10.7	50	30	607	−15.4	58	30	629	−1.7	32	31	616	−10.6	52	31	618	−8.3	40	31	623	−5.1	
5,000	30	556	−5.4		30	540	−16.7		29	530	−21.8	61	29	554	−7.7		31	540	−18.1	58	31	542	−15.1	41	30	547	−11.7	
6,000	30	488	−12.7		29	472	−23.1		29	462	−28.4		29	486	−14.1		30	472	−25.5		31	474	−21.8		30	479	−18.9	
7,000	30	428	−20.5		28	411	−29.6		29	401	−35.0		29	426	−21.4		30	410	−33.0		31	413	−29.3		28	419	−26.0	
8,000	29	373	−28.0		28	357	−36.5		29	347	−42.4		28	371	−28.6		29	356	−40.2		31	358	−36.5		27	364	−33.1	
9,000	28	324	−35.6		24	309	−43.3		29	299	−49.1		28	322	−36.0		28	306	−47.0		30	310	−42.8		24	315	−40.0	
10,000	26	280	−43.0		20	266	−49.5		28	256	−53.3		27	278	−43.4		23	264	−51.6		29	267	−48.3		22	271	−46.3	
11,000	25	240	−50.5		18	228	−54.1		24	219	−54.2		23	240	−48.6		21	226	−54.2		27	229	−52.9		21	233	−51.5	
12,000	23	206	−57.0		13	194	−56.8		19	186	−52.3		19	206	−54.0		20	193	−56.1		25	196	−53.9		14	198	−53.2	
13,000	16	176	−59.7		12	166	−56.2		14	159	−51.8		9	176	−57.0		16	165	−55.3		21	167	−53.7		7	169	−53.1	
14,000	14	150	−62.8						6	137	−53.9						11	141	−58.2		15	143	−55.0					
15,000	11	127	−67.7														8	121	−60.8		11	123	−57.3					
16,000	5	109	−71.4																									

Altitude (meters) m. s. l.	Ely, Nev. (1,908 m.)				Glasgow, Mont. (648 m.)				Grand Junction, Colo. (1,414 m.)				Great Falls, Mont. (1,128 m.)				Greensboro, N. C. (273 m.)				Hatteras, N. C. (3 m.)				Havana, Cuba [1] (51 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	804	−2.5	79	31	934	0.9	69	30	854	5.8	52	30	881	2.6	52	30	986	12.0	75	31	1,019	12.3	86				
500																	30	960	13.0	65	31	961	13.8	66				
1,000					31	894	1.7	60									30	904	10.8	63	31	905	11.8	57				
1,500					31	840	−0.9	57	30	846	5.6	51	30	841	1.4	46	30	851	7.7	67	30	853	9.4	54				
2,000	31	796	−1.3	72	31	788	−3.8	57	30	795	2.7	51	30	790	−2.4	50	30	801	5.0	68	29	802	6.6	49				
2,500	31	747	−3.2	64	31	740	−7.0	60	30	747	−1.2	56	30	741	−6.2	58	30	753	2.5		29	755	4.2	39				
3,000	31	701	−6.9	70	31	693	−9.8	61	30	701	−5.2	63	30	695	−9.3	63	30	708	.3		29	709	1.7					
4,000	31	616	−12.8	59	31	609	−15.2	58	29	617	−12.4	66	30	610	−15.2	63	30	624	−4.6		29	626	−3.3					
5,000	31	539	−19.4		31	532	−21.2	53	29	540	−19.2		30	534	−21.2		29	549	−10.9		29	551	−9.3					
6,000	31	471	−27.1		29	464	−28.2		29	471	−26.1		30	465	−28.3		28	481	−17.5		28	483	−16.0					
7,000	31	408	−34.8		28	403	−35.6		29	409	−33.1		30	404	−35.9		27	421	−24.6		28	422	−23.4					
8,000	30	354	−42.5		28	348	−42.9		27	354	−40.6		30	349	−43.3		25	365	−32.2		28	368	−31.0					
9,000	29	304	−49.4		26	299	−49.6		25	306	−46.8		30	300	−49.8		24	316	−39.1		28	318	−38.7					
10,000	27	261	−54.4		24	256	−53.9		25	263	−51.8		27	257	−54.9		22	273	−46.2		28	275	−46.4					
11,000	23	224	−57.7		21	220	−55.5		23	225	−53.9		24	220	−57.4		21	234	−52.1		27	235	−53.2					
12,000	22	191	−59.1		18	188	−54.0		19	192	−54.3		19	187	−54.5		18	200	−55.9		22	201	−56.8					
13,000	18	163	−58.1		15	161	−52.6		14	165	−54.1		16	160	−52.8		16	171	−57.8		19	173	−58.5					
14,000	13	139	−58.1		11	138	−51.9		13	142	−55.4		11	137	−51.2		12	145	−59.9		14	147	−60.5					
15,000	6	119	−58.7		9	118	−51.6		8	121	−56.6		9	117	−50.4		8	124	−61.6		5	126	−64.6					
16,000					6	102	−51.9						6	100	−51.7													

See footnotes at end of table.

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during March 1945*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

Altitude (meters) m. s. l.	Huntington, W. Va. (172 m.)				International Falls, Minn. (343 m.)				Jackson, Miss. (97 m.)				Joliet, Ill. (178 m.)				Lake Charles, La. (5 m.)				Little Rock, Ark. (79 m.)				Louisville, Ky. (165 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	997	10.2	77	31	969	−0.7	75	31	1,005	16.5	77	31	993	7.1	81	29	1,015	18.7	84	31	1,006	14.3	79	31	997	11.8	71
500	31	959	12.2	65	31	950	−0.4	72	31	958	15.9	70	31	955	8.7	68	29	958	17.3	71	31	957	14.2	69	31	958	12.5	62
1,000	31	903	9.8	64	31	893	−2.2	69	31	903	13.6	63	31	898	6.6	67	29	904	15.8	59	31	902	12.1	66	31	902	9.6	63
1,500	31	850	6.5	64	31	838	−3.3	66	31	851	11.7	57	31	845	4.7	58	29	852	13.3	62	31	849	9.7	59	31	850	7.3	58
2,000	31	799	3.6	65	31	786	−5.3	64	31	802	9.6	49	31	794	2.7	47	29	802	10.9	56	31	799	7.4	53	31	799	4.7	55
2,500	31	752	1.0	51	31	738	−7.6	63	31	755	7.4	42	31	747	0.5	46	29	756	8.6	45	31	752	5.1	48	31	751	2.4	47
3,000	31	706	−0.9	42	31	691	−9.8	56	31	710	4.6	41	31	701	−2.4	44	29	711	6.4	35	31	707	2.5	44	31	706	−0.1	42
4,000	31	622	−5.8	44	31	607	−15.3	55	30	627	−1.1	37	31	618	−8.6	48	29	629	0.6	30	29	624	−3.4	37	31	623	−5.3	38
5,000	31	547	−12.2	----	31	531	−21.4	----	29	553	−7.6	----	29	542	−15.2	44	29	554	−6.5	----	29	549	−9.9	----	31	547	−11.4	----
6,000	31	479	−18.6	----	31	463	−28.1	----	29	485	−14.4	----	28	474	−21.8	----	28	487	−13.6	----	29	482	−17.2	----	31	480	−18.0	----
7,000	30	418	−25.6	----	29	402	−35.2	----	29	424	−21.9	----	28	413	−28.7	----	28	426	−20.8	----	29	421	−24.8	----	31	419	−24.8	----
8,000	30	363	−32.8	----	29	347	−42.4	----	28	369	−29.4	----	24	358	−36.2	----	27	372	−28.4	----	27	366	−32.4	----	28	364	−32.4	----
9,000	30	314	−40.2	----	29	299	−48.6	----	28	320	−36.8	----	22	310	−42.3	----	26	322	−35.6	----	27	316	−39.3	----	25	316	−39.7	----
10,000	30	271	−47.4	----	27	256	−52.6	----	28	277	−44.1	----	20	266	−49.2	----	24	279	−43.2	----	26	274	−46.2	----	24	272	−47.4	----
11,000	30	233	−53.5	----	23	220	−54.1	----	27	238	−50.9	----	16	228	−54.4	----	23	240	−50.4	----	26	235	−53.1	----	23	234	−53.9	----
12,000	27	199	−56.6	----	18	188	−52.7	----	26	203	−55.5	----	11	195	−53.9	----	19	205	−55.5	----	26	201	−56.4	----	23	200	−57.0	----
13,000	21	169	−56.9	----	11	160	−50.1	----	23	174	−57.6	----	11	167	−54.5	----	15	176	−59.6	----	24	171	−58.6	----	19	170	−58.3	----
14,000	17	145	−59.4	----	8	138	−50.8	----	20	148	−60.0	----	8	142	−56.9	----	9	150	−62.9	----	21	146	−60.8	----	14	146	−59.8	----
15,000	13	124	−62.7	----	5	118	−51.3	----	13	126	−63.5	----	----	----	----	----	5	127	−66.3	----	16	124	−64.0	----	8	124	−62.1	----
16,000	8	105	−63.3	----	----	----	----	----	8	107	−67.1	----	----	----	----	----	----	----	----	----	8	105	−66.4	----	----	----	----	----

Altitude (meters) m. s. l.	Mazatlan, Mexico (80 m.)				Medford, Oreg. (409 m.)				Merida, Mexico (27 m.)				Miami, Fla. (4 m.)				Nashville, Tenn. (180 m.)				North Platte, Nebr. (849 m.)				Oakland, Calif. (2 m.)			
Surface	31	1,005	18.8	82	28	968	7.1	74	27	1,010	27.6	58	31	1,020	21.3	80	31	996	14.4	70	30	912	4.6	64	31	1,017	11.0	73
500	31	957	21.2	38	28	958	6.8	72	27	957	24.4	58	31	963	19.5	77	31	958	13.1	64	----	----	----	----	31	958	7.7	70
1,000	31	904	20.6	28	28	901	3.4	76	27	904	21.3	62	31	909	16.6	68	31	903	10.9	60	30	895	6.1	55	31	902	4.6	67
1,500	31	853	18.4	26	28	847	0.0	83	27	854	18.0	63	31	857	14.7	50	31	851	8.4	58	30	842	5.0	49	31	847	1.9	60
2,000	31	804	15.3	23	28	795	−3.4	87	27	804	15.1	57	31	807	13.0	38	31	800	5.9	54	30	791	2.5	48	31	796	− .4	58
2,500	31	757	12.1	22	28	746	−6.7	85	27	758	12.5	44	31	760	10.9	----	31	753	3.4	43	30	744	− .4	46	31	748	−3.1	53
3,000	31	713	8.8	24	28	700	−9.1	78	27	714	10.5	----	31	716	8.6	----	31	707	.9	42	30	698	−4.2	49	31	701	−5.9	50
4,000	29	631	2.3	29	28	614	−14.3	66	27	633	4.3	----	31	634	2.4	----	30	624	− 4.0	----	30	615	−10.9	55	31	617	−11.8	49
5,000	29	557	−4.7	----	27	538	−19.6	63	27	559	−2.4	----	29	559	−3.8	----	30	548	−10.4	----	30	538	−17.9	----	31	540	−18.3	50
6,000	28	490	−11.8	----	25	470	−25.6	----	27	492	−9.1	----	29	492	−10.0	----	28	481	−17.2	----	30	470	−25.0	----	31	472	−24.5	----
7,000	27	429	−19.1	----	24	408	−32.9	----	26	432	−15.3	----	28	432	−17.1	----	27	420	−24.4	----	29	409	−32.5	----	30	410	−31.5	----
8,000	25	374	−26.5	----	21	354	−40.2	----	25	377	−23.1	----	27	377	−24.4	----	25	365	−31.9	----	28	354	−39.9	----	29	356	−38.1	----
9,000	24	325	−34.2	----	21	305	−47.6	----	25	328	−31.2	----	27	328	−32.0	----	25	316	−39.3	----	27	305	−45.9	----	27	307	−44.6	----
10,000	20	282	−41.8	----	21	261	−53.0	----	25	284	−38.8	----	26	284	−39.5	----	25	273	−46.6	----	27	262	−50.8	----	27	264	−50.5	----
11,000	11	243	−47.8	----	20	224	−57.0	----	23	245	−45.8	----	25	245	−46.7	----	25	234	−52.8	----	24	225	−54.0	----	26	226	−54.1	----
12,000	----	----	----	----	17	190	−56.9	----	21	211	−52.3	----	22	210	−53.0	----	24	200	−55.9	----	20	192	−54.6	----	21	193	−55.6	----
13,000	----	----	----	----	13	162	−54.7	----	14	180	−57.4	----	19	180	−58.2	----	21	171	−57.7	----	17	164	−54.5	----	11	164	−54.1	----
14,000	----	----	----	----	11	139	−54.6	----	10	154	−61.7	----	16	153	−63.1	----	10	145	−60.2	----	9	140	−53.9	----	8	140	−55.6	----
15,000	----	----	----	----	7	119	−56.5	----	5	133	−64.7	----	10	130	−68.4	----	6	124	−62.4	----	6	120	−54.7	----	----	----	----	----
16,000	----	----	----	----	5	102	−57.5	----	----	----	----	----	----	----	----	----	5	105	−64.3	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Ogden, Utah (1,355 m.)				Oklahoma City, Okla. (391 m.)				Omaha, Nebr. (308 m.)				Phoenix, Ariz. (339 m.)				Pittsburgh, Pa. (382 m.)				Portland, Maine (20 m.)				Rapid City, S. Dak. (981 m.)			
Surface	31	861	2.3	71	31	966	11.4	74	31	976	7.7	60	31	974	13.9	48	31	971	8.8	68	31	1,012	2.2	78	31	897	1.4	74
500	----	----	----	----	31	954	11.8	68	31	954	7.9	66	31	955	14.7	40	31	958	9.2	66	31	955	3.4	61	----	----	----	----
1,000	----	----	----	----	31	899	11.4	57	31	897	6.0	64	31	900	12.0	37	31	902	7.3	65	31	897	1.7	63	31	895	1.6	72
1,500	31	846	2.8	64	31	846	9.8	49	31	843	4.3	56	31	848	8.0	40	31	848	4.6	63	31	843	−0.2	68	31	842	2.2	54
2,000	31	794	−0.1	61	31	797	7.1	41	31	793	2.3	49	31	797	4.4	44	31	797	2.1	54	31	792	−1.8	58	31	790	−1.1	55
2,500	31	746	−4.0	68	31	750	4.2	40	31	745	−0.7	50	31	750	0.6	46	31	749	−0.3	54	31	744	−3.8	52	31	743	−4.1	58
3,000	31	700	−7.7	71	30	704	1.0	34	30	700	−4.2	49	31	704	−2.8	46	31	703	−2.7	49	31	697	−6.4	48	31	696	−6.8	59
4,000	31	615	−13.7	60	29	622	−5.1	----	30	616	−10.7	49	31	620	−8.9	48	29	619	−8.1	47	30	613	−11.4	43	31	612	−12.9	56
5,000	31	538	−19.9	----	29	546	−11.9	----	30	540	−16.9	48	31	544	−15.9	41	29	544	−14.0	50	30	537	−17.6	----	31	536	−19.8	45
6,000	31	469	−26.9	----	29	478	−19.1	----	30	472	−23.3	----	30	475	−22.9	----	29	476	−20.5	----	30	469	−24.4	----	31	468	−26.9	----
7,000	31	408	−34.5	----	28	418	−26.4	----	29	410	−31.0	----	30	414	−30.4	----	29	415	−27.5	----	30	408	−31.5	----	31	406	−34.6	----
8,000	31	352	−42.1	----	27	363	−33.6	----	29	355	−37.9	----	29	358	−37.6	----	29	360	−34.6	----	30	353	−38.8	----	31	351	−42.6	----
9,000	30	304	−48.4	----	26	314	−40.4	----	29	307	−43.9	----	27	309	−43.9	----	29	312	−41.6	----	28	304	−46.0	----	31	302	−49.3	----
10,000	30	261	−53.0	----	25	270	−47.3	----	28	264	−49.4	----	25	266	−49.1	----	29	268	−48.4	----	26	261	−50.7	----	29	259	−52.9	----
11,000	25	224	−55.5	----	24	232	−52.8	----	27	226	−52.9	----	25	228	−53.4	----	28	230	−54.3	----	23	225	−53.9	----	24	222	−53.9	----
12,000	16	192	−56.8	----	18	199	−56.9	----	24	194	−54.2	----	20	195	−54.6	----	27	196	−56.2	----	19	191	−54.5	----	15	190	−53.1	----
13,000	10	164	−54.2	----	17	170	−57.3	----	23	166	−53.7	----	18	167	−54.5	----	16	168	−55.3	----	17	164	−54.4	----	13	162	−51.7	----
14,000	8	140	−54.5	----	12	144	−58.6	----	20	142	−54.9	----	11	143	−56.3	----	11	144	−57.1	----	12	140	−55.3	----	12	139	−53.2	----
15,000	7	120	−55.5	----	5	123	−59.1	----	16	121	−56.2	----	8	122	−59.4	----	6	124	−60.1	----	6	120	−57.4	----	6	120	−53.8	----
16,000	----	----	----	----	5	105	−61.1	----	9	104	−58.5	----	7	104	−61.5	----	----	----	----	----	5	102	−57.7	----	----	----	----	----
17,000	----	----	----	----	----	----	----	----	5	89	−58.8	----	5	89	−63.3	----	----	----	----	----	----	----	----	----	----	----	----	----

See footnotes at end of table.

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during March 1945*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

Altitude (meters) m. s. l.	St. Louis, Mo. (171 m.)				St. Paul, Minn. (225 m.)				San Antonio, Tex. (240 m.)				San Juan, P. R. (15 m.)				Santa Maria, Calif. (71 m.)				Sault Ste. Marie, Mich. (221 m.)				Spokane, Wash. (598 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	994	11.2	71	30	984	4.2	76	28	985	19.3	72	31	1,016	23.7	75	31	1,009	9.5	82	28	987	−0.6	84	31	942	3.3	78
500	30	956	11.0	62	30	952	4.2	71	28	955	19.2	67	31	961	20.0	77	31	958	8.5	74	28	954	1.6	73	----	----	----	----
1,000	30	900	8.9	58	30	895	2.5	63	28	902	16.8	65	31	907	16.3	75	31	901	5.9	69	28	896	1.4	58	31	896	1.7	70
1,500	30	847	6.8	52	30	841	0.9	59	28	850	14.2	61	31	855	13.0	72	31	848	3.1	63	28	842	−1.0	58	31	842	−1.8	74
2,000	30	797	4.6	47	30	790	−1.6	56	28	801	12.3	50	31	805	11.4	50	31	797	0.8	57	28	790	−3.1	58	31	790	−5.3	80
2,500	30	749	2.4	46	30	742	−4.0	52	28	755	10.3	34	31	759	10.5	31	30	749	−1.4	48	28	742	−5.6	60	31	741	−8.5	78
3,000	30	704	−0.3	44	30	696	−6.7	47	28	710	7.6	26	31	714	8.7	----	30	703	−4.1	45	28	695	−8.1	53	31	694	−11.2	74
4,000	30	620	−6.2	41	30	611	−12.8	53	28	628	0.6	----	30	632	3.2	----	29	619	−10.0	39	28	611	−12.9	47	31	609	−16.4	----
5,000	28	545	−13.0	44	30	536	−19.1	----	28	554	−6.3	----	30	558	−3.1	----	28	542	−16.2	42	28	535	−19.6	----	31	532	−22.5	----
6,000	27	477	−19.9	----	30	467	−26.3	----	28	486	−13.6	----	30	491	−9.8	----	28	474	−23.4	----	28	467	−26.4	----	31	464	−28.9	----
7,000	26	416	−27.3	----	30	406	−33.9	----	28	426	−21.1	----	30	431	−17.1	----	28	412	−30.5	----	28	406	−33.8	----	31	402	−35.8	----
8,000	25	362	−34.1	----	27	351	−41.4	----	28	371	−28.5	----	30	376	−24.3	----	26	357	−37.5	----	28	350	−40.7	----	31	348	−43.2	----
9,000	25	313	−41.4	----	27	302	−47.7	----	28	322	−36.2	----	29	327	−31.3	----	24	309	−44.0	----	24	303	−46.9	----	31	299	−50.1	----
10,000	25	269	−48.8	----	26	260	−52.2	----	28	278	−43.8	----	29	284	−38.2	----	22	266	−50.4	----	20	261	−51.7	----	29	256	−55.3	----
11,000	23	231	−55.1	----	25	223	−54.6	----	28	239	−50.8	----	29	245	−45.4	----	19	228	−55.9	----	17	225	−54.7	----	24	219	−56.2	----
12,000	21	197	−56.6	----	24	190	−55.1	----	27	205	−56.3	----	27	210	−52.0	----	18	195	−58.2	----	16	193	−55.1	----	20	188	−54.8	----
13,000	16	168	−56.2	----	19	163	−53.4	----	25	174	−58.8	----	27	179	−58.6	----	12	166	−56.5	----	14	165	−53.3	----	17	160	−52.6	----
14,000	8	144	−56.1	----	13	140	−54.2	----	21	148	−61.2	----	25	153	−64.4	----	11	142	−57.4	----	13	141	−54.3	----	14	138	−53.2	----
15,000	----	----	----	----	8	120	−55.3	----	14	126	−65.3	----	22	130	−69.6	----	6	120	−57.8	----	9	121	−55.9	----	11	118	−52.6	----
16,000	----	----	----	----	8	103	−56.5	----	8	106	−68.9	----	9	110	−75.1	----	----	----	----	----	5	103	−57.2	----	7	101	−53.0	----

Altitude (meters) m. s. l.	Swan Island, W. I.[1] (10 m.)				Tacubaya, Mexico (2,306 m.)				Tampa, Fla.[2] (3 m.)				Tatoosh Island, Wash. (31 m.)				Toledo, Ohio (191 m.)				Washington, D. C. (25 m.)			
Surface	----	----	----	----	31	773	17.9	41	----	----	----	----	31	1,007	6.2	83	31	993	6.5	82	31	1,014	11.7	67
500	----	----	----	----	----	----	----	----	----	----	----	----	31	951	2.9	80	31	956	8.2	70	31	959	11.2	56
1,000	----	----	----	----	----	----	----	----	----	----	----	----	31	894	−0.4	78	31	900	6.2	66	31	903	8.9	57
1,500	----	----	----	----	----	----	----	----	----	----	----	----	31	840	−3.7	80	31	846	3.9	59	31	849	6.0	59
2,000	----	----	----	----	----	----	----	----	----	----	----	----	31	788	−6.8	76	31	795	1.7	53	31	798	3.6	58
2,500	----	----	----	----	31	755	16.7	40	----	----	----	----	31	739	−9.5	69	31	748	−0.4	50	31	751	0.8	54
3,000	----	----	----	----	31	712	13.1	42	----	----	----	----	31	692	−12.2	67	31	702	−2.9	49	30	705	−1.5	44
4,000	----	----	----	----	31	632	5.0	52	----	----	----	----	31	607	−17.4	62	30	618	−8.5	47	30	621	−6.6	37
5,000	----	----	----	----	31	558	−2.9	55	----	----	----	----	30	530	−23.7	----	29	542	−15.1	46	30	546	−12.7	----
6,000	----	----	----	----	30	491	−9.6	46	----	----	----	----	29	462	−30.3	----	29	474	−21.8	----	30	478	−19.4	----
7,000	----	----	----	----	29	431	−16.2	44	----	----	----	----	29	400	−37.1	----	28	414	−28.3	----	30	417	−26.2	----
8,000	----	----	----	----	29	376	−23.4	----	----	----	----	----	27	345	−44.6	----	27	359	−35.1	----	30	363	−33.4	----
9,000	----	----	----	----	29	327	−31.4	----	----	----	----	----	23	296	−50.5	----	27	310	−41.9	----	30	314	−40.6	----
10,000	----	----	----	----	29	284	−39.0	----	----	----	----	----	19	254	−53.8	----	26	267	−48.8	----	28	271	−47.5	----
11,000	----	----	----	----	29	245	−46.7	----	----	----	----	----	14	218	−53.4	----	26	229	−54.5	----	26	232	−53.4	----
12,000	----	----	----	----	19	210	−54.2	----	----	----	----	----	9	186	−51.5	----	25	196	−56.3	----	23	198	−56.4	----
13,000	----	----	----	----	9	180	−59.0	----	----	----	----	----	9	159	−50.7	----	19	168	−55.0	----	17	169	−57.6	----
14,000	----	----	----	----	----	----	----	----	----	----	----	----	7	137	−51.6	----	13	144	−57.2	----	12	144	−59.8	----
15,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	8	122	−58.9	----	5	123	−63.0	----

[1] Data not yet received.
[2] Insufficient observations.

NOTE.—All observations scheduled between 10 p. m. and midnight, E. S. T. (0300 and 0500, G. C. T.), except at Mazatlan and Merida, where they are taken near 9 p. m., E. S. T. (0200, G. C. T.).

"Number of observations" refers to pressure only. (In a few cases temperature or humidity data may be missing for one or more levels of some observations.) Relative humidity data are not published for levels having a corresponding mean temperature below −20° C.

All relative humidity observations are obtained by electric hygrometer and have been adjusted to compensate for the values occurring below the operating range of the humidity element. For explanation of the adjustment see article entitled "Curve Method for Obtaining Monthly Means of Relative Humidity", p. 241, MONTHLY WEATHER REVIEW, December 1944.

None of the means included in these tables are based on less than 15 surface or 5 standard level observations.

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.), during March 1945. Directions given in degrees from north* (N=360°, E=90°, S=180°, W=270°). *Velocities in meters per second*

Altitude (meters) m. s. l.	Abilene, Tex. (534 m.)			Albuquerque, N. Mex. (1,630 m.)			Atlanta, Ga. (299 m.)			Billings, Mont. (1,095 m.)			Bismarck, N. Dak. (512 m.)			Boise, Idaho (868 m.)			Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (132 m.)			Charleston, S. C. (16 m.)			Cincinnati, Ohio (152 m.)			Denver, Colo. (1,627 m.)			El Paso, Tex. (1,196 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	29	180	2.7	31	231	4.0	28	224	3.0	31	285	3.0	30	279	2.5	29	322	0.4	29	138	6.6	27	254	4.3	29	249	1.4	30	190	2.9	16	226	0.6	29	340	1.3	29	255	4.4
500	---	---	---	---	---	---	28	228	3.8	---	---	---	---	---	---	---	---	---	29	152	8.0	27	256	6.6	29	235	4.2	30	209	5.1	16	215	3.1	---	---	---	---	---	---
1,000	29	200	5.2	---	---	---	28	236	5.4	---	---	---	30	281	3.9	29	316	0.8	19	179	7.8	25	249	8.2	27	258	6.6	28	234	6.8	16	229	5.9	---	---	---	---	---	---
1,500	28	214	6.2	---	---	---	27	236	6.7	31	267	4.9	26	276	5.6	29	263	1.7	15	190	7.3	19	251	8.9	26	271	7.6	26	246	7.5	15	245	7.5	---	---	---	29	248	4.9
2,000	25	230	8.0	31	241	5.0	26	243	7.6	30	278	5.9	23	272	6.7	28	250	3.9	13	218	5.4	19	258	10.4	21	288	12.5	25	255	8.8	13	248	9.7	29	337	1.0	29	254	5.1
2,500	22	240	10.1	31	242	5.9	21	251	8.3	28	267	7.6	21	272	9.2	28	254	4.9	13	220	5.7	18	266	11.5	18	294	13.4	23	263	9.0	10	253	11.4	29	237	0.9	28	254	6.3
3,000	20	243	13.4	29	246	7.4	18	249	9.9	24	270	9.1	20	271	10.2	23	263	6.0	12	225	7.3	16	269	13.0	14	297	14.6	23	257	10.3	---	---	---	28	243	2.7	26	251	8.9
4,000	18	253	16.4	23	258	11.8	14	269	10.6	22	280	9.4	17	272	10.4	15	272	6.1	11	242	9.5	15	274	15.4	11	295	17.8	21	260	12.9	---	---	---	27	253	6.8	22	244	15.2
5,000	16	253	20.6	20	260	17.0	---	---	---	19	270	12.6	13	275	12.8	---	---	---	10	248	10.9	11	262	17.1	10	285	21.4	15	257	12.1	---	---	---	22	261	9.9	20	246	19.0
6,000	13	258	19.7	17	259	20.5	---	---	---	16	263	11.0	12	285	15.2	---	---	---	10	250	12.0	---	---	---	---	---	---	13	261	10.5	---	---	---	20	261	12.1	12	245	21.5
8,000	---	---	---	15	256	23.8	---	---	---	---	---	---	11	293	16.1	---	---	---	10	249	19.0	---	---	---	---	---	---	---	---	---	---	---	---	11	261	18.3	---	---	---
10,000	---	---	---	10	261	23.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Ely, Nev. (1,910 m.)			Grand Junction, Colo. (1,413 m.)			Greensboro, N. C. (271 m.)			Havre, Mont. (767 m.)			Jacksonville, Fla. (16 m.)			Joliet, Ill. (178 m.)			Las Vegas, Nev. (573 m.)			Little Rock, Ark. (88 m.)			Medford, Oreg. (410 m.)			Miami, Fla. (12 m.)			Mobile, Ala. (66 m.)			Nashville, Tenn. (194 m.)			New York, N. Y. (15 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	31	217	1.3	31	278	2.0	29	230	3.9	30	281	3.1	31	116	3.0	28	211	4.8	31	206	1.4	27	169	1.8	30	269	1.0	31	129	4.4	28	182	3.5	30	211	2.9	29	221	2.4
500	---	---	---	---	---	---	29	227	5.3	---	---	---	31	171	2.1	28	214	6.6	---	---	---	27	188	4.0	30	267	0.9	31	133	5.7	28	185	4.2	30	208	5.1	29	249	6.0
1,000	---	---	---	---	---	---	29	230	6.6	30	276	5.9	31	224	3.7	26	218	6.6	31	210	2.1	22	203	5.0	30	223	2.1	31	134	3.9	21	229	3.7	29	219	6.7	29	262	8.3
1,500	---	---	---	31	275	2.0	28	246	7.5	30	273	7.7	31	248	5.5	26	236	7.6	31	221	2.7	20	220	7.0	30	229	4.6	31	129	2.0	17	240	4.3	26	235	8.8	27	280	9.9
2,000	31	224	1.3	31	264	3.2	28	256	9.1	28	271	8.1	31	252	6.1	23	251	8.6	29	226	3.7	16	235	7.0	28	240	5.9	28	126	1.3	16	250	4.0	25	236	11.1	22	285	10.4
2,500	30	242	2.2	31	245	4.3	21	273	11.5	26	269	9.6	30	255	7.1	21	259	10.8	29	243	4.7	15	248	7.5	21	256	5.9	28	156	1.3	13	261	5.2	24	243	12.8	17	293	12.0
3,000	25	251	3.5	28	240	4.8	19	279	12.5	18	266	8.2	28	249	9.1	17	278	11.7	26	255	5.7	11	262	8.4	16	270	8.0	28	190	1.1	12	263	6.6	20	249	13.2	13	295	12.8
4,000	17	254	5.1	17	268	6.3	12	304	15.3	11	264	6.1	23	263	8.1	---	---	---	24	272	8.5	10	272	11.2	---	---	---	22	251	4.2	10	259	10.2	13	260	14.0	---	---	---
5,000	16	265	8.8	10	305	7.6	12	299	16.1	---	---	---	21	266	9.8	---	---	---	21	283	9.7	10	265	12.9	---	---	---	19	253	5.7	---	---	---	---	---	---	---	---	---
6,000	16	274	10.8	---	---	---	12	299	21.9	---	---	---	17	268	9.6	---	---	---	19	273	9.1	---	---	---	---	---	---	19	261	7.2	---	---	---	---	---	---	---	---	---
8,000	14	275	13.0	---	---	---	---	---	---	---	---	---	11	269	12.5	---	---	---	12	291	14.2	---	---	---	---	---	---	13	273	9.6	---	---	---	---	---	---	---	---	---
10,000	12	292	15.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11	267	10.0	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Oakland, Calif. (8 m.)			Oklahoma City, Okla. (396 m.)			Omaha, Nebr. (306 m.)			Phoenix, Ariz. (338 m.)			Rapid City, S. Dak. (982 m.)			St. Louis, Mo. (181 m.)			St. Paul, Minn. (225 m.)			San Antonio, Tex. (240 m.)			San Diego, Calif. (15 m.)			Saulte Ste. Marie, Mich. (225 m.)			Seattle, Wash. (16 m.)			Spokane, Wash. (603 m.)			Washington, D. C. (24 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	257	4.2	26	182	2.8	30	210	2.2	30	247	0.7	28	357	3.5	27	187	3.0	29	239	1.8	31	127	2.3	28	271	4.7	31	287	2.1	26	206	2.6	31	203	2.8	31	232	2.5
500	30	276	3.8	26	181	3.0	30	207	4.0	30	241	1.3	---	---	---	27	198	4.0	29	224	2.8	31	130	3.6	27	278	4.4	31	256	1.9	26	207	3.3	---	---	---	31	233	4.5
1,000	25	302	2.8	26	207	4.0	27	213	7.9	30	246	1.8	28	355	3.5	25	218	5.4	28	218	3.5	29	154	3.5	25	292	2.4	28	244	5.4	23	197	4.2	31	221	4.3	30	245	6.3
1,500	22	316	4.0	23	221	7.7	27	222	8.3	30	238	2.8	28	320	2.9	22	238	7.9	26	244	5.5	20	206	3.7	22	306	1.2	24	251	6.8	18	206	5.2	25	233	4.6	29	257	7.9
2,000	22	310	4.0	21	236	10.7	26	234	10.1	30	235	3.5	26	272	3.4	22	251	9.8	24	260	7.5	17	226	7.2	20	309	2.2	24	260	8.5	13	221	4.0	18	251	5.1	27	267	11.1
2,500	22	307	5.7	20	233	12.6	22	255	10.0	30	251	4.7	23	265	5.5	22	257	12.5	21	266	8.3	15	236	9.3	19	322	4.1	20	271	10.5	---	---	---	11	267	5.5	24	268	12.8
3,000	21	324	7.6	17	239	16.0	22	258	12.5	29	258	7.0	20	267	8.6	20	261	14.3	19	262	9.3	14	240	10.1	18	325	5.5	19	280	12.0	---	---	---	10	274	4.6	24	273	14.4
4,000	19	310	9.4	16	248	19.3	21	255	15.8	24	258	9.2	18	273	11.7	15	286	13.6	15	277	13.8	13	241	14.2	16	321	6.8	12	286	16.5	---	---	---	---	---	---	21	276	16.4
5,000	15	304	12.2	12	263	17.1	19	262	19.2	19	261	13.5	15	278	13.8	14	290	17.7	13	289	16.0	13	248	19.1	15	301	9.6	---	---	---	---	---	---	---	---	---	17	279	16.3
6,000	15	311	14.0	12	261	20.1	17	266	20.8	19	256	16.4	14	285	15.6	11	286	17.8	13	286	18.8	11	258	20.6	14	304	12.6	---	---	---	---	---	---	---	---	---	14	273	17.5
8,000	11	309	16.8	---	---	---	10	266	25.1	14	266	18.7	10	296	16.8	---	---	---	---	---	---	---	---	---	13	300	17.0	---	---	---	---	---	---	---	---	---	---	---	---
10,000	10	307	21.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11	288	20.6	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 3.—*Maximum free air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during March 1945*

Section	Surface to 2,500 meters (m. s. l.)					Above 2,500 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast [1]	44.6	N.	2,277	24	Portland, Maine	48.5	W.	5,000	18	Burlington, Vt.	82.5	W.	10,162	18	Portland, Maine.
East-Central [2]	45.9	WSW.	2,010	6	Knoxville, Tenn.	48.2	SW.	4,412	21	Hatteras, N. C.	72.0	W.	6,026	7	Greensboro, N. C.
Southeast [3]	34.0	WSW.	2,186	6	Charleston, S. C.	46.5	SW.	4,691 4,961	21	Charleston, S. C.	53.0	WSW.	11,793	24	Birmingham, Ala.
North-Central [4]	46.4	WSW.	2,262	28	Alpena, Mich.	46.5	W.	4,992	2	Marquette, Mich.	58.0	W.	5,712 5,205	2	Marquette, Mich.
Central [5]	45.0	SW.	2,385	1	Dodge City, Kans.	56.2	WNW.	5,000	6	Dodge City, Kans.	64.6	WNW.	5,475	6	Dodge City, Kans.
South-Central [6]	47.8	SW.	1,916	28	Tulsa, Okla.	49.3	SW.	4,631	5	Big Spring, Tex.	63.0	WSW.	11,159	3	Waco, Tex.
Northwest [7]	42.5	W.	2,477	10	Havre, Mont.	50.0	NNW.	5,000	28	Ellensburg, Wash.	66.0	WNW.	7,279	31	Burns, Oreg.
West-Central [8]	36.2	SSW.	2,350	17	Elko, Nev.	48.8	NNE.	4,676	29	Reno, Nev.	80.0	NW.	8,362	23	Oakland, Calif.
Southwest [9]	34.8	WNW.	2,368	25	El Paso, Tex.	51.0	WSW.	5,000	27	Raton, N. Mex.	93.0	W.	9,310	26	Albuquerque, N.Mex.

[1] Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.
[2] Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.
[3] South Carolina, Georgia, Florida, and Alabama.
[4] Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.
[5] Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.
[6] Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.
[7] Montana, Idaho, Washington, and Oregon.
[8] Wyoming, Colorado, Utah, northern Nevada, and northern California.
[9] Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.