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METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR APRIL 1948

AEROLOGICAL OBSERVATIONS

[For description of change in Table 1 and charts, see REVIEW, January 1946, p. 6]

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1948*

STATIONS AND MEAN SURFACE PRESSURES

Standard pressure surface (mb.)	Albany, N. Y. (1,008.0 mb.)				Albuquerque, N. Mex. (835.4 mb.)				Apalachicola, Fla. (1,018.2 mb.)				Atlanta, Ga. (984.2 mb.)				Auburn, Calif. (957.2 mb.)				Big Spring, Tex. (924.6 mb.)				Bismarck, N. Dak. (952.9 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	86	7.3	69	30	1,620	16.1	24	30	5	21.1	83	30	300	17.8	68	29	501	10.3	76	30	774	21.0	29	30	505	6.3	71
1,000	30	151	(*)	----	30	57	(*)	----	30	162	21.1	76	30	163	(*)	----	29	134	(*)	----	30	88	(*)	----	30	105	(*)	----
950	30	578	5.7	63	30	516	(*)	----	30	605	19.1	69	30	605	17.7	62	29	565	10.7	73	30	539	(*)	----	30	533	(*)	----
900	30	1,013	3.3	62	30	985	(*)	----	30	1,068	16.0	67	30	1,063	14.9	63	29	1,012	7.7	72	30	1,007	21.1	29	30	972	4.9	61
850	30	1,474	1.3	60	30	1,472	(*)	----	30	1,552	12.7	68	30	1,545	11.8	68	29	1,481	4.5	72	30	1,498	17.9	29	30	1,437	3.0	60
800	30	1,960	−.8	63	30	1,986	14.7	24	30	2,059	10.0	59	30	2,049	8.5	64	29	1,972	1.2	72	30	2,014	14.8	29	30	1,926	.7	56
750	30	2,481	−3.1	62	30	2,532	10.4	27	30	2,594	7.4	48	30	2,585	5.6	56	29	2,492	−2.0	69	30	2,558	10.7	32	30	2,447	−2.4	58
700	30	3,018	−5.8	58	30	3,097	5.7	33	30	3,157	4.6	43	30	3,142	2.8	43	29	3,033	−5.4	66	30	3,126	6.6	33	30	2,985	−5.8	59
650	30	3,603	−8.7	59	30	3,702	.6	39	30	3,760	1.0	35	30	3,741	−.4	----	29	3,614	−9.0	58	30	3,733	2.3	32	30	3,569	−9.4	56
600	30	4,212	−12.0	56	30	4,334	−4.6	47	30	4,396	−2.9	----	29	4,373	−4.0	----	29	4,227	−12.5	53	30	4,371	−2.5	36	30	4,176	−13.2	52
550	30	4,876	−15.9	59	30	5,013	−9.9	52	30	5,077	−7.5	----	29	5,054	−8.4	----	29	4,888	−16.5	53	30	5,054	−7.6	40	30	4,836	−17.7	53
500	29	5,580	−20.9	----	30	5,740	−15.5	53	30	5,815	−12.6	----	29	5,786	−13.3	----	29	5,596	−21.4	----	29	5,789	−12.9	39	29	5,540	−22.9	----
450	29	6,357	−25.8	----	30	6,533	−20.7	----	30	6,615	−18.2	----	29	6,587	−19.0	----	29	6,371	−26.5	----	29	6,589	−18.4	43	29	6,311	−28.4	----
400	29	7,195	−31.5	----	30	7,388	−26.7	----	30	7,478	−24.6	----	29	7,445	−25.6	----	28	7,207	−32.3	----	28	7,451	−25.0	----	29	7,138	−34.7	----
350	28	8,119	−38.7	----	30	8,336	−34.0	----	30	8,435	−32.1	----	29	8,398	−33.0	----	28	8,136	−39.0	----	28	8,407	−32.2	----	29	8,057	−41.2	----
300	28	9,160	−46.0	----	30	9,397	−42.1	----	30	9,504	−40.5	----	28	9,466	−41.4	----	27	9,170	−46.8	----	28	9,476	−40.1	----	29	9,088	−47.9	----
250	26	10,339	−53.3	----	30	10,605	−51.0	----	30	10,719	−50.2	----	28	10,678	−51.2	----	25	10,348	−53.9	----	28	10,696	−49.4	----	25	10,271	−53.9	----
200	22	11,759	−57.2	----	30	12,027	−58.7	----	30	12,143	−58.9	----	28	12,095	−60.1	----	23	11,757	−56.7	----	23	12,116	−57.9	----	23	11,703	−55.0	----
175	21	12,598	−56.8	----	29	12,867	−58.6	----	29	12,976	−60.8	----	28	12,928	−60.1	----	18	12,600	−55.4	----	17	12,949	−58.4	----	22	12,554	−53.4	----
150	13	13,534	−52.2	----	28	13,836	−58.9	----	28	13,930	−62.4	----	28	13,888	−60.5	----	16	13,578	−57.7	----	11	13,898	−57.3	----	21	13,541	−52.8	----
125	8	14,735	−53.6	----	24	14,977	−59.8	----	25	15,051	−65.6	----	27	15,019	−62.4	----	14	14,717	−57.4	----	9	15,027	−60.0	----	20	14,728	−53.5	----
100	----	------	------	----	16	16,358	−62.5	----	19	16,381	−69.1	----	19	16,384	−65.3	----	10	16,123	−58.5	----	9	16,407	−62.7	----	18	16,155	−55.3	----
80	----	------	------	----	7	17,728	−63.8	----	11	17,700	−67.9	----	12	17,732	−65.8	----	----	------	------	----	----	------	------	----	16	17,572	−57.1	----
60	----	------	------	----	----	------	------	----	8	19,436	−65.1	----	7	19,473	−63.1	----	----	------	------	----	----	------	------	----	7	19,440	−59.7	----

	Boise, Idaho (912.2 mb.)				Brownsville, Tex. (1,013.3 mb.)				Buffalo, N. Y. (991.4 mb.)				Caribou Maine (993.9 mb.)				Charleston, S. C. (1,018.3 mb.)				Ciudad Victoria, Mexico (971.1 mb.)				Columbia, Mo. (987.1 mb.)			
Surface	30	868	9.6	56	30	6	22.2	82	30	221	8.1	71	30	191	0.6	74	30	13	16.9	85	30	335	28.4	42	30	239	14.7	58
1,000	30	96	(*)	----	30	121	21.5	81	30	148	(*)	----	30	142	(*)	----	30	168	17.7	77	30	72	(*)	----	30	129	(*)	----
950	30	530	(*)	----	30	568	20.0	68	30	574	7.6	65	30	557	.0	60	30	611	16.5	66	30	529	26.5	44	30	567	14.6	52
900	30	980	10.0	50	30	1,031	19.1	47	30	1,016	5.4	60	30	985	−2.0	64	30	1,065	14.0	65	30	1,003	22.2	48	30	1,018	11.8	54
850	30	1,452	6.7	51	30	1,521	17.3	37	30	1,481	2.8	62	30	1,437	−4.4	67	30	1,546	11.4	57	30	1,496	18.1	54	30	1,494	9.6	55
800	30	1,947	2.7	57	30	2,036	14.8	32	30	1,970	.3	67	30	1,913	−6.2	64	30	2,050	8.6	53	30	2,012	14.3	58	30	1,995	7.1	52
750	30	2,470	−1.6	65	30	2,581	12.4	23	30	2,491	−2.6	68	30	2,422	−8.2	63	30	2,585	5.8	47	30	2,562	11.3	54	30	2,530	4.0	53
700	30	3,010	−6.0	69	30	3,153	9.1	22	30	3,030	−5.2	64	30	2,950	−10.3	62	30	3,143	2.5	45	30	3,129	8.8	42	30	3,081	.8	52
650	30	3,589	−10.2	69	30	3,762	5.0	----	30	3,616	−7.8	62	30	3,522	−12.9	58	30	3,741	−.9	41	30	3,741	4.8	38	30	3,674	−3.0	51
600	30	4,198	−14.6	70	30	4,410	.6	----	30	4,228	−10.9	58	30	4,125	−16.1	56	30	4,374	−4.4	38	29	4,385	.6	35	30	4,302	−7.4	52
550	30	4,851	−19.0	71	30	5,097	−4.6	----	30	4,898	−14.8	55	30	4,776	−19.9	54	30	5,052	−8.7	38	26	5,080	−4.2	----	30	4,977	−11.6	46
500	30	5,553	−24.0	----	30	5,843	−10.2	----	30	5,607	−19.4	53	30	5,475	−24.7	----	29	5,792	−13.7	----	26	5,823	−9.6	----	30	5,698	−16.6	45
450	30	6,314	−29.8	----	30	6,649	−16.4	----	30	6,389	−24.9	----	30	6,238	−29.8	----	29	6,589	−19.4	----	26	6,639	−15.3	----	29	6,497	−21.6	----
400	29	7,142	−35.7	----	30	7,520	−23.1	----	30	7,229	−30.9	----	30	7,064	−35.4	----	29	7,450	−25.9	----	26	7,509	−21.9	----	29	7,349	−27.9	----
350	29	8,057	−42.0	----	30	8,483	−30.5	----	30	8,162	−37.9	----	30	7,982	−41.3	----	29	8,403	−33.0	----	26	8,477	−29.4	----	28	8,294	−35.2	----
300	28	9,087	−48.6	----	30	9,558	−39.3	----	29	9,218	−45.3	----	30	9,015	−47.1	----	29	9,469	−41.3	----	26	9,559	−38.0	----	27	9,353	−42.9	----
250	27	10,268	−54.6	----	29	10,780	−49.0	----	27	10,422	−53.6	----	30	10,206	−52.0	----	29	10,681	−51.1	----	25	10,791	−47.3	----	27	10,558	−51.9	----
200	23	11,693	−55.3	----	29	12,217	−56.5	----	25	11,850	−59.0	----	29	11,634	−53.1	----	29	12,101	−60.0	----	----	------	------	----	23	11,973	−60.6	----
175	19	12,527	−53.0	----	28	13,055	−59.7	----	21	12,678	−57.6	----	25	12,483	−51.4	----	29	12,932	−60.7	----	----	------	------	----	20	12,799	−61.4	----
150	15	13,502	−51.0	----	26	14,014	−62.8	----	9	13,637	−56.5	----	21	13,488	−50.7	----	27	13,890	−61.3	----	----	------	------	----	16	13,759	−58.9	----
125	13	14,694	−53.3	----	18	15,144	−67.4	----	----	------	------	----	14	14,665	−51.4	----	25	15,023	−62.4	----	----	------	------	----	14	14,896	−59.3	----
100	11	16,109	−54.8	----	9	16,505	−71.6	----	----	------	------	----	6	16,133	−52.6	----	18	16,367	−64.7	----	----	------	------	----	12	16,296	−62.7	----
80	----	------	------	----	----	------	------	----	----	------	------	----	----	------	------	----	13	17,723	−65.7	----	----	------	------	----	7	17,685	−62.9	----
60	----	------	------	----	----	------	------	----	----	------	------	----	----	------	------	----	6	19,484	−64.6	----	----	------	------	----	----	------	------	----

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1948*—Continued

Standard pressure surface (mb.)	Dodge City, Kans. (922.6 mb.)				El Paso, Tex. (879.6 mb.)				Ely, Nev. (805.3 mb.)				Fort Worth, Tex. (989.3 mb.)				Glasgow, Mont. (935.4 mb.)				Grand Junction, Colo. (849.2 mb.)				Great Falls, Mont. (881.9 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	28	792	14.5	42	30	1,195	21.4	15	30	1,908	7.5	45	30	211	22.2	48	30	648	7.1	61	30	1,474	11.6	40	30	1,128	6.1	54
1,000	28	95	(*)	----	30	65	(*)	----	30	81	(*)	----	30	117	(*)	----	30	91	(*)	----	30	80	(*)	----	30	81	(*)	----
950	28	540	(*)	----	30	526	(*)	----	30	524	(*)	----	30	566	21.0	46	30	519	(*)	----	30	527	(*)	----	30	516	(*)	----
900	28	998	15.8	37	30	1,003	(*)	----	30	981	(*)	----	30	1,028	18.0	50	30	964	6.9	54	30	989	(*)	----	30	965	(*)	----
850	28	1,480	13.2	37	30	1,491	20.9	17	30	1,457	(*)	----	30	1,515	14.7	51	30	1,432	4.3	53	30	1,466	(*)	----	30	1,430	5.4	49
800	28	1,987	10.0	37	30	2,010	16.5	18	30	1,963	(*)	----	30	2,025	11.8	46	30	1,923	1.3	56	30	1,973	10.0	36	30	1,922	2.0	51
750	28	2,521	6.7	36	30	2,553	11.7	20	30	2,495	4.1	42	30	2,568	8.8	38	30	2,443	−2.3	59	30	2,506	5.6	40	30	2,441	−2.1	57
700	28	3,083	2.6	36	30	3,125	6.6	25	30	3,047	−.7	49	30	3,130	5.4	36	30	2,983	−6.2	62	30	3,064	.8	47	30	2,983	−6.5	64
650	28	3,677	−1.8	36	30	3,727	1.6	27	30	3,638	−5.8	55	29	3,739	1.3	32	30	3,561	−10.4	58	30	3,652	−4.2	55	30	3,562	−10.9	68
600	28	4,308	−6.2	39	30	4,366	−3.2	31	30	4,256	−10.9	60	29	4,371	−3.1	32	30	4,169	−14.6	57	30	4,279	−9.2	61	30	4,168	−15.5	69
550	28	4,982	−11.1	40	30	5,049	−8.0	33	30	4,921	−15.8	63	29	5,055	−7.9	32	30	4,822	−19.2	57	30	4,945	−14.0	64	30	4,818	−20.5	67
500	28	5,707	−16.1	40	30	5,781	−13.6	35	30	5,630	−20.9	----	29	5,787	−13.2	----	30	5,524	−24.2	----	30	5,663	−19.2	68	30	5,516	−25.6	----
450	28	6,498	−21.7	----	29	6,579	−19.4	----	30	6,407	−25.8	----	29	6,587	−19.2	----	30	6,287	−29.9	----	30	6,445	−24.5	----	29	6,267	−31.7	----
400	28	7,349	−28.1	----	28	7,443	−26.1	----	30	7,244	−31.4	----	29	7,447	−25.8	----	29	7,118	−36.0	----	30	7,286	−30.8	----	29	7,088	−37.7	----
350	28	8,293	−35.4	----	28	8,394	−33.4	----	30	8,176	−37.7	----	29	8,399	−33.3	----	29	8,032	−42.7	----	29	8,221	−37.4	----	29	7,995	−44.6	----
300	28	9,346	−43.9	----	27	9,456	−42.0	----	29	9,218	−45.8	----	29	9,461	−41.7	----	29	9,055	−49.9	----	29	9,267	−45.4	----	28	9,007	−50.9	----
250	27	10,551	−52.9	----	27	10,663	−52.1	----	27	10,405	−54.1	----	29	10,672	−50.9	----	27	10,236	−54.9	----	29	10,462	−53.1	----	27	10,177	−54.8	----
200	23	11,964	−60.5	----	26	12,074	−60.1	----	24	11,822	−58.3	----	28	12,090	−60.0	----	22	11,656	−54.8	----	29	11,879	−58.1	----	24	11,588	−54.0	----
175	15	12,768	−58.1	----	23	12,906	−60.4	----	23	12,667	−57.5	----	28	12,919	−60.9	----	16	12,507	−52.1	----	28	12,714	−57.2	----	22	12,444	−52.8	----
150	10	13,708	−56.2	----	21	13,858	−62.0	----	22	13,643	−57.1	----	28	13,877	−61.4	----	14	13,509	−51.6	----	25	13,689	−56.1	----	19	13,423	−51.8	----
125	9	14,837	−57.4	----	18	14,989	−64.5	----	20	14,790	−58.6	----	21	14,985	−62.7	----	11	14,693	−52.7	----	21	14,835	−56.5	----	15	14,589	−53.2	----
100	5	16,199	−60.9	----	12	16,323	−67.7	----	13	16,183	−60.8	----	14	16,354	−64.5	----	11	16,129	−54.7	----	14	16,243	−58.0	----	11	16,013	−54.5	----
80	----	----	----	----	7	17,676	−68.7	----	5	17,612	−61.3	----	10	17,718	−66.7	----	7	17,564	−56.3	----	6	17,563	−59.3	----	8	17,477	−55.0	----

Standard pressure surface (mb.)	Greensboro, N. C. (987.7 mb.)				Hatteras, N. C. (1,019.8 mb.)				Havana, Cuba [1] (----mb.)				Honolulu, T. H. (1,014.2 mb.)				Huntington, W. Va. (997.9 mb.)				International Falls, Minn. (973.8 mb.)				Joliet, Ill. (995.6 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	273	14.5	72	30	3	15.8	81	----	----	----	----	30	3	24.7	67	30	172	13.4	71	30	360	3.0	75	30	178	10.2	72
1,000	30	167	(*)	----	30	169	15.4	77	----	----	----	----	30	126	22.9	69	30	153	(*)	----	30	149	(*)	----	30	140	(*)	----
950	30	602	14.4	64	30	609	13.8	72	----	----	----	----	30	575	19.3	74	30	591	13.5	62	30	561	4.4	66	30	572	10.1	64
900	30	1,058	12.1	65	30	1,058	11.6	65	----	----	----	----	30	1,034	15.9	78	30	1,040	10.8	64	30	999	2.2	67	30	1,016	7.6	64
850	30	1,534	9.1	65	30	1,535	9.3	56	----	----	----	----	30	1,518	12.9	76	30	1,514	8.1	63	30	1,459	.3	63	30	1,485	5.6	57
800	30	2,034	6.4	57	30	2,035	7.0	51	----	----	----	----	30	2,026	11.1	57	30	2,013	5.3	63	30	1,942	−2.2	64	30	1,980	3.6	52
750	30	2,565	3.6	56	30	2,570	4.7	43	----	----	----	----	30	2,572	9.2	38	30	2,543	2.1	61	30	2,458	−4.6	63	30	2,505	.9	51
700	30	3,119	.6	55	30	3,123	1.6	44	----	----	----	----	30	3,133	7.1	32	30	3,091	−1.1	58	30	2,993	−7.7	61	30	3,053	−1.9	54
650	30	3,709	−3.0	52	28	3,718	−1.9	46	----	----	----	----	30	3,742	4.3	30	30	3,681	−4.6	53	30	3,570	−10.9	55	30	3,641	−5.6	52
600	30	4,339	−6.7	48	28	4,348	−6.0	47	----	----	----	----	30	4,387	.7	----	30	4,304	−8.3	50	30	4,177	−14.3	51	30	4,262	−9.6	47
550	29	5,016	−10.7	43	28	5,027	−10.3	44	----	----	----	----	30	5,078	−3.6	----	30	4,977	−12.4	49	30	4,835	−18.5	49	30	4,930	−14.0	47
500	29	5,744	−15.5	46	28	5,752	−15.2	42	----	----	----	----	30	5,827	−8.7	----	30	5,695	−17.5	52	30	5,536	−23.3	----	30	5,645	−18.9	----
450	29	6,534	−21.5	----	28	6,546	−20.6	----	----	----	----	----	30	6,641	−14.4	----	30	6,484	−22.8	----	30	6,305	−28.7	----	30	6,431	−24.5	----
400	29	7,386	−27.8	----	27	7,400	−26.5	----	----	----	----	----	30	7,517	−21.2	----	30	7,331	−28.8	----	29	7,127	−34.8	----	30	7,269	−30.5	----
350	29	8,331	−35.0	----	27	8,349	−33.9	----	----	----	----	----	30	8,487	−28.5	----	30	8,272	−36.1	----	29	8,046	−41.2	----	30	8,205	−37.1	----
300	27	9,391	−42.8	----	24	9,401	−42.3	----	----	----	----	----	30	9,573	−36.7	----	30	9,325	−44.2	----	29	9,079	−47.6	----	30	9,253	−44.8	----
250	26	10,600	−51.9	----	22	10,614	−50.8	----	----	----	----	----	30	10,811	−45.6	----	28	10,538	−52.8	----	28	10,257	−53.3	----	26	10,444	−52.8	----
200	24	12,010	−60.7	----	17	12,036	−58.0	----	----	----	----	----	30	12,268	−54.6	----	23	11,951	−60.2	----	25	11,682	−53.3	----	23	11,853	−58.2	----
175	22	12,836	−60.9	----	12	12,877	−58.8	----	----	----	----	----	28	13,117	−59.4	----	18	12,769	−60.3	----	25	12,544	−52.2	----	20	12,677	−58.2	----
150	21	13,795	−60.1	----	7	13,833	−59.1	----	----	----	----	----	28	14,070	−64.2	----	15	13,714	−58.5	----	22	13,537	−52.6	----	17	13,645	−56.8	----
125	19	14,921	−60.2	----	----	----	----	----	----	----	----	----	28	15,177	−67.2	----	10	14,887	−59.9	----	18	14,711	−52.9	----	13	14,790	−56.4	----
100	12	16,300	−63.2	----	----	----	----	----	----	----	----	----	27	16,512	−70.2	----	----	----	----	----	11	16,161	−53.8	----	7	16,197	−57.6	----
80	6	17,672	−63.5	----	----	----	----	----	----	----	----	----	25	17,836	−68.9	----	----	----	----	----	7	17,576	−55.1	----	----	----	----	----
60	----	----	----	----	----	----	----	----	----	----	----	----	19	19,581	−64.3	----	----	----	----	----	----	----	----	----	----	----	----
50	----	----	----	----	----	----	----	----	----	----	----	----	16	20,703	−60.8	----	----	----	----	----	----	----	----	----	----	----	----
40	----	----	----	----	----	----	----	----	----	----	----	----	12	22,112	−57.2	----	----	----	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Lake Charles, La. (1,016.3 mb.)				Lander, Wyo. (825.3 mb.)				Las Vegas, Nev. (944.3 mb.)				Little Rock, Ark. (1,006.9 mb.)				Mazatlan, Mexico (1,008.3 mb.)				Medford, Oreg. (966.6 mb.)				Merida, Mexico (1,010.9 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	29	5	19.9	84	30	1,696	6.4	46	30	574	20.2	22	30	79	18.2	68	30	14	24.7	75	30	401	8.7	71	30	27	27.4	66
1,000	29	145	20.9	77	30	83	(*)	----	30	74	(*)	----	30	137	18.9	63	30	86	24.0	70	30	118	(*)	----	30	123	26.5	67
950	29	591	18.6	70	30	522	(*)	----	30	524	(*)	----	30	581	18.1	56	30	542	24.5	41	30	548	8.3	68	30	576	23.3	67
900	29	1,051	15.7	65	30	979	(*)	----	30	987	18.3	----	30	1,039	15.0	57	30	1,008	23.0	35	30	989	5.0	71	30	1,046	20.7	62
850	29	1,535	13.7	53	30	1,451	(*)	----	30	1,472	14.2	----	30	1,521	12.0	56	30	1,504	20.4	34	30	1,452	1.4	76	30	1,538	17.7	63
800	29	2,044	11.5	41	30	1,952	6.4	39	30	1,979	9.9	28	30	2,026	9.2	55	30	2,025	17.2	33	30	1,937	−2.3	81	30	2,054	14.3	66
750	29	2,587	8.7	36	30	2,482	2.1	42	30	2,513	5.5	33	30	2,565	6.4	48	30	2,574	13.6	32	30	2,451	−5.9	83	30	2,599	10.8	61
700	29	3,148	6.3	----	30	3,030	−2.5	48	30	3,070	1.0	35	30	3,121	3.4	48	30	3,148	9.8	26	30	2,984	−9.3	77	30	3,168	7.4	47
650	28	3,755	2.6	----	30	3,616	−7.1	53	30	3,664	−3.4	37	30	3,718	−.3	46	30	3,760	5.3	28	30	3,558	−12.6	64	29	3,776	4.0	34
600	28	4,393	−1.6	----	30	4,232	−11.9	52	30	4,289	−8.0	40	30	4,354	−4.2	45	30	4,407	.3	34	29	4,162	−16.2	57	29	4,422	.4	----
550	28	5,080	−6.5	----	30	4,894	−16.8	52	30	4,960	−12.3	41	30	5,032	−8.7	42	30	5,098	−5.0	38	29	4,812	−20.4	56	29	5,112	−4.0	----
500	28	5,817	−11.9	----	30	5,600	−22.0	----	30	5,682	−17.0	44	30	5,766	−13.8	----	30	5,842	−10.2	37	29	5,511	−25.3	----	29	5,858	−8.8	----
450	28	6,622	−18.2	----	30	6,373	−27.7	----	30	6,469	−22.6	----	30	6,562	−19.2	----	30	6,652	−15.7	----	28	6,275	−30.4	----	29	6,671	−14.5	----
400	28	7,483	−24.7	----	30	7,203	−33.7	----	30	7,318	−29.1	----	30	7,424	−25.6	----	30	7,525	−22.0	----	28	7,100	−36.1	----	29	7,549	−21.1	----
350	28	8,441	−31.9	----	30	8,126	−40.3	----	29	8,253	−36.0	----	30	8,377	−32.8	----	30	8,494	−29.9	----	28	8,015	−42.0	----	29	8,520	−28.4	----
300	28	9,511	−40.5	----	30	9,161	−47.8	----	28	9,302	−44.4	----	30	9,444	−41.1	----	30	9,572	−38.6	----	28	9,044	−48.0	----	29	9,606	−36.6	----
250	28	10,726	−50.7	----	30	10,344	−54.4	----	27	10,501	−53.5	----	30	10,658	−50.4	----	27	10,801	−47.8	----	28	10,230	−53.3	----	28	10,847	−45.6	----
200	28	12,146	−60.3	----	29	11,758	−56.2	----	25	11,904	−59.4	----	29	12,082	−59.8	----	23	12,243	−56.6	----	28	11,658	−55.0	----	28	12,301	−55.5	----
175	28	12,975	−61.9	----	27	12,606	−55.6	----	22	12,723	−58.2	----	27	12,910	−61.9	----	15	13,109	−60.4	----	28	12,511	−54.1	----	26	13,143	−60.6	----
150	26	13,931	−63.0	----	24	13,571	−55.3	----	18	13,688	−57.3	----	24	13,861	−60.8	----	8	14,076	−63.4	----	28	13,500	−54.2	----	19	14,085	−66.0	----
125	25	15,045	−66.2	----	20	14,706	−56.6	----	15	14,835	−59.2	----	19	14,983	−60.9	----	6	15,202	−68.6	----	27	14,666	−55.1	----	6	15,183	−70.6	----
100	20	16,383	−68.9	----	15	16,099	−57.0	----	9	16,185	−61.2	----	14	16,344	−63.3	----	----	----	----	----	20	16,083	−56.8	----	----	----	----	----
80	12	17,722	−69.3	----	11	17,522	−58.9	----	7	17,544	−61.8	----	7	17,719	−64.8	----	----	----	----	----	12	17,512	−58.1	----	----	----	----	----

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1948*—Continued

Standard pressure surface (mb.)	Oklahoma City, Okla. (968.1 mb.)				Omaha, Nebr. (977.1 mb.)				Phoenix, Ariz. (972.0 mb.)				Pittsburgh, Pa. (973.3 mb.)				Portland, Maine (1,015.8 mb.)				Rapid City, S. Dak. (899.0 mb.)				St. Cloud, Minn. (976.2 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	391	17.9	54	30	308	14.6	58	30	339	22.4	25	30	382	10.9	68	30	20	4.0	74	30	980	7.9	66	30	317	7.6	69
1,000	30	110	(*)	----	30	111	(*)	----	30	89	(*)	----	30	153	(*)	----	30	149	5.1	68	30	83	(*)	----	30	117	(*)	----
950	30	554	18.9	49	30	547	13.6	54	30	543	24.0	21	30	587	10.0	67	30	570	4.5	61	30	520	(*)	----	30	545	7.8	61
900	30	1,014	16.3	51	30	999	11.3	55	30	1,007	20.2	21	30	1,031	8.0	65	30	1,005	2.7	64	30	973	(*)	----	30	985	5.7	58
850	30	1,499	13.7	50	30	1,474	8.5	54	30	1,496	16.0	24	30	1,501	5.1	66	30	1,465	.2	63	30	1,444	8.8	50	30	1,451	3.4	60
800	30	2,007	10.8	49	30	1,972	5.3	55	30	2,007	11.6	28	30	1,994	2.7	65	30	1,949	−2.1	63	30	1,943	5.4	53	30	1,941	.9	58
750	30	2,546	7.7	45	30	2,502	2.0	49	30	2,548	7.4	30	30	2,521	.1	63	30	2,464	−4.5	61	30	2,469	1.9	55	30	2,462	−1.6	56
700	30	3,107	3.9	41	30	3,050	−1.6	51	30	3,106	3.1	33	30	3,064	−3.0	56	30	3,000	−7.0	59	30	3,019	−2.1	58	30	3,004	−4.7	56
650	30	3,708	.1	35	30	3,643	−5.4	52	30	3,705	−.7	29	29	3,654	−6.0	51	30	3,578	−9.9	58	30	3,605	−6.4	61	30	3,585	−8.2	52
600	30	4,343	−4.2	34	30	4,260	−9.4	50	30	4,337	−4.8	----	29	4,272	−9.6	51	30	4,189	−13.5	54	30	4,224	−11.1	63	30	4,200	−12.5	49
550	29	5,022	−8.9	41	30	4,931	−13.9	47	30	5,018	−9.6	----	29	4,944	−13.7	48	29	4,843	−17.6	56	30	4,889	−15.8	60	30	4,862	−16.6	51
500	29	5,752	−14.3	41	30	5,646	−18.5	46	30	5,744	−14.9	----	29	5,658	−18.3	----	29	5,551	−22.1	----	30	5,597	−20.8	----	30	5,569	−21.5	----
450	28	6,548	−20.1	42	30	6,433	−23.9	----	30	6,543	−20.6	----	28	6,448	−24.0	----	28	6,319	−27.3	----	30	6,373	−26.4	----	30	6,343	−26.5	----
400	28	7,403	−26.8	----	30	7,273	−30.0	----	30	7,394	−27.1	----	28	7,290	−30.2	----	28	7,152	−33.3	----	30	7,208	−32.6	----	30	7,179	−32.3	----
350	28	8,351	−34.2	----	29	8,207	−37.1	----	29	8,340	−34.6	----	28	8,227	−37.1	----	28	8,077	−40.0	----	30	8,134	−39.4	----	29	8,110	−39.0	----
300	28	9,412	−42.1	----	29	9,254	−45.3	----	29	9,399	−43.0	----	28	9,274	−45.2	----	28	9,113	−46.7	----	30	9,173	−46.7	----	29	9,150	−46.2	----
250	25	10,631	−50.8	----	28	10,449	−53.9	----	29	10,603	−52.2	----	28	10,468	−53.6	----	28	10,306	−52.7	----	29	10,362	−53.0	----	28	10,345	−52.6	----
200	18	12,080	−60.4	----	27	11,861	−59.6	----	27	12,016	−59.4	----	27	11,876	−59.2	----	27	11,729	−55.4	----	29	11,788	−55.8	----	19	11,742	−54.4	----
175	11	12,909	−61.3	----	27	12,697	−58.9	----	26	12,850	−59.9	----	24	12,702	−59.0	----	25	12,562	−55.4	----	29	12,640	−54.6	----	15	12,597	−53.6	----
150	9	13,870	−59.6	----	26	13,673	−56.9	----	25	13,813	−59.7	----	20	13,666	−58.0	----	20	13,530	−53.9	----	23	13,595	−53.2	----	12	13,569	−51.5	----
125	8	15,012	−61.1	----	22	14,814	−58.8	----	23	14,949	−61.2	----	11	14,760	−56.8	----	17	14,684	−55.2	----	19	14,779	−54.4	----	12	14,750	−52.8	----
100	7	16,378	−63.2	----	16	16,215	−60.5	----	17	16,336	−63.6	----	8	16,152	−59.3	----	12	16,086	−55.5	----	9	16,173	−56.2	----	10	16,149	−53.7	----
80	5	17,734	−64.2	----	7	17,608	−60.9	----	11	17,699	−65.3	----	6	17,548	−59.3	----	----	----	----	----	6	17,561	−57.6	----	10	17,576	−55.2	----
60	----	----	----	----	5	19,394	−60.3	----	5	19,437	−63.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Miami, Fla. (1,017.6 mb.)				Nantucket, Mass. (1,017.9 mb.)				Nashville, Tenn. (996.9 mb.)				New Orleans, La. (1,017.7 mb.)				North Platte, Nebr. (913.4 mb.)				Oakland, Calif (1,016.7 mb.)				Ogden, Utah (861.6 mb.)			
Surface	30	4	22.9	78	29	14	5.3	80	30	180	17.4	64	29	2	20.3	81	30	849	12.7	49	30	6	12.3	73	30	1,355	9.1	54
1,000	30	156	22.3	76	29	159	6.3	73	30	152	(*)	—	29	153	20.8	77	30	75	(*)	—	30	144	11.0	74	30	99	(*)	----
950	30	605	19.3	78	29	585	6.2	63	30	593	15.8	62	29	598	18.5	70	30	521	(*)	—	30	576	8.4	76	30	537	(*)	----
900	30	1,065	16.4	78	29	1,022	3.9	59	30	1,048	13.1	63	29	1,059	15.8	64	30	973	13.7	46	30	1,016	6.4	74	30	991	(*)	----
850	30	1,550	13.5	74	29	1,485	2.1	59	30	1,527	10.3	60	29	1,542	13.2	55	30	1,453	11.2	42	30	1,483	4.3	62	30	1,467	9.4	47
800	30	2,059	11.3	58	29	1,972	.2	57	30	2,029	7.3	59	29	2,050	10.7	46	30	1,955	7.6	43	30	1,975	1.8	53	30	1,967	5.9	47
750	30	2,602	9.2	48	29	2,491	−2.0	55	30	2,565	4.6	52	29	2,592	8.3	34	30	2,486	3.8	46	30	2,503	−1.1	45	30	2,494	1.6	52
700	30	3,165	6.0	40	29	3,033	−4.5	48	30	3,118	1.5	46	29	3,153	5.8	----	30	3,040	−.3	49	30	3,040	−4.0	42	30	3,043	−2.9	58
650	30	3,772	2.5	40	29	3,617	−7.6	50	30	3,712	−2.0	45	29	3,758	2.3	----	30	3,631	−5.0	52	30	3,629	−7.3	----	30	3,626	−7.6	62
600	30	4,411	−1.3	36	29	4,233	−11.1	49	30	4,343	−5.7	41	29	4,397	−1.8	----	29	4,250	−9.9	54	30	4,241	−11.0	----	30	4,242	−12.5	69
550	30	5,099	−5.9	33	29	4,897	−14.8	46	30	5,018	−9.8	----	29	5,081	−6.5	----	29	4,918	−14.8	59	30	4,911	−14.9	----	30	4,901	−17.2	65
500	30	5,840	−10.8	----	29	5,610	−19.7	50	30	5,750	−14.5	----	29	5,821	−11.9	----	29	5,630	−19.9	55	29	5,621	−19.2	----	30	5,609	−22.2	----
450	30	6,648	−16.4	----	29	6,391	−24.7	----	30	6,547	−20.4	----	28	6,628	−17.8	----	29	6,411	−25.2	----	29	6,403	−24.4	----	30	6,382	−27.6	----
400	30	7,518	−22.9	----	28	7,228	−30.9	----	30	7,401	−26.7	----	27	7,497	−24.3	----	29	7,249	−31.2	----	29	7,246	−30.2	----	30	7,213	−33.0	----
350	30	8,482	−30.2	----	28	8,161	−37.2	----	28	8,349	−33.6	----	27	8,455	−31.7	----	28	8,186	−37.9	----	29	8,182	−37.4	----	30	8,140	−39.5	----
300	30	9,560	−38.2	----	28	9,211	−44.4	----	28	9,412	−41.7	----	26	9,529	−39.9	----	28	9,231	−45.6	----	29	9,229	−45.0	----	30	9,178	−46.9	----
250	29	10,783	−47.6	----	22	10,397	−51.6	----	26	10,623	−51.0	----	25	10,749	−49.9	----	28	10,422	−54.2	----	29	10,426	−52.9	----	28	10,370	−53.9	----
200	27	12,226	−56.2	----	17	11,837	−56.2	----	24	12,042	−59.6	----	25	12,176	−58.8	----	27	11,828	−59.7	----	29	11,844	−58.4	----	24	11,766	−57.4	----
175	27	13,068	−59.0	----	13	12,688	−56.4	----	24	12,874	−60.4	----	24	13,006	−60.8	----	27	12,666	−57.8	----	29	12,684	−57.3	----	22	12,615	−56.3	----
150	21	14,034	−62.4	----	9	13,664	−54.5	----	19	13,846	−58.6	----	23	13,963	−61.6	----	26	13,640	−57.0	----	28	13,667	−56.1	----	17	13,586	−54.1	----
125	18	15,151	−66.4	----	8	14,824	−56.6	----	14	14,986	−60.0	----	22	15,081	−64.1	----	21	14,791	−57.7	----	25	14,818	−56.7	----	12	14,713	−55.5	----
100	----	----	----	----	7	16,240	−57.9	----	8	16,348	−63.0	----	16	16,421	−67.4	----	16	16,172	−60.6	----	20	16,209	−58.1	----	9	16,144	−57.3	----
80	----	----	----	----	----	----	----	----	----	----	----	----	10	17,753	−67.6	----	12	17,554	−61.5	----	11	17,622	−60.0	----	----	----	----	----
60	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	7	19,319	−62.5	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	San Antonio, Tex. (985.8 mb.)				San Juan, P. R. (1,014.7 mb.)				Santa Maria, Calif. (1,009.3 mb.)				Sault Ste. Marie, Mich. (990.1 mb.)				Spokane, Wash. (927.1 mb.)				Swan Island, W. I. (1,013.6 mb.)				Tacubaya, Mexico (774.0 mb.)			
Surface	30	240	22.3	60	30	15	24.3	76	30	71	12.2	78	30	221	3.6	78	30	721	7.0	68	30	10	25.6	79	29	2,306	17.6	44
1,000	30	114	(*)	----	30	143	23.1	77	30	149	11.5	78	30	138	(*)	----	30	93	(*)	----	30	129	24.8	79	29	47	(*)	----
950	30	565	20.9	59	30	590	19.3	81	30	581	10.2	76	30	562	4.2	65	30	522	(*)	----	30	582	21.1	82	29	513	(*)	----
900	30	1,027	18.3	56	30	1,052	16.0	79	30	1,026	8.8	68	30	995	3.3	60	30	964	5.5	65	30	1,046	18.3	76	29	994	(*)	----
850	30	1,515	15.8	51	30	1,537	13.1	77	30	1,498	7.0	63	30	1,457	1.6	59	30	1,429	2.0	67	30	1,534	15.5	72	29	1,490	(*)	----
800	30	2,027	13.6	40	30	2,045	10.7	70	30	1,994	4.6	54	30	1,944	−.8	63	30	1,914	−1.9	73	30	2,047	12.7	64	29	2,021	(*)	----
750	30	2,573	10.9	32	30	2,588	9.4	47	30	2,522	1.9	45	30	2,465	−3.5	66	30	2,427	−5.5	74	30	2,596	10.1	52	29	2,576	15.6	43
700	30	3,140	7.7	30	30	3,152	7.3	34	30	3,071	−1.2	44	30	3,000	−6.1	65	30	2,962	−9.2	76	30	3,157	7.2	45	29	3,154	10.6	48
650	30	3,747	4.1	32	30	3,760	4.3	29	29	3,665	−4.2	----	30	3,583	−9.1	60	30	3,536	−13.2	73	30	3,769	4.1	37	29	3,767	5.4	54
600	29	4,392	−.7	33	30	4,405	.6	26	28	4,288	−8.0	----	30	4,193	−13.0	61	30	4,135	−17.5	70	30	4,411	.8	30	29	4,405	.1	63
550	29	5,079	−5.8	33	30	5,101	−3.3	26	28	4,962	−12.0	----	30	4,855	−17.2	57	30	4,783	−21.9	----	30	5,108	−3.1	----	29	5,106	−5.3	69
500	28	5,819	−11.4	35	30	5,846	−7.9	----	27	5,681	−16.4	----	29	5,556	−22.0	----	30	5,476	−26.8	----	30	5,853	−7.8	----	29	5,848	−10.4	60
450	28	6,626	−17.5	----	29	6,667	−13.3	----	27	6,477	−21.8	----	29	6,332	−27.2	----	30	6,234	−32.3	----	30	6,679	−13.1	----	29	6,661	−15.4	53
400	28	7,490	−24.2	----	29	7,543	−19.7	----	27	7,322	−27.8	----	29	7,164	−32.6	----	30	7,048	−38.6	----	29	7,554	−18.9	----	29	7,534	−21.1	----
350	28	8,449	−31.4	----	29	8,520	−26.6	----	27	8,267	−34.8	----	29	8,091	−38.9	----	30	7,952	−45.1	----	29	8,535	−25.8	----	26	8,502	−28.6	----
300	27	9,526	−39.3	----	29	9,615	−34.3	----	27	9,325	−42.9	----	29	9,133	−45.8	----	30	8,968	−50.7	----	29	9,633	−34.0	----	25	9,586	−37.3	----
250	26	10,744	−49.0	----	29	10,869	−43.4	----	25	10,535	−52.3	----	27	10,326	−52.5	----	29	10,151	−54.7	----	29	10,884	−43.7	----	22	10,824	−46.3	----
200	26	12,178	−57.8	----	29	12,334	−54.4	----	17	11,945	−60.1	----	21	11,757	−55.6	----	27	11,590	−53.9	----	29	12,348	−54.7	----	----	----	----	----
175	23	13,018	−59.3	----	27	13,174	−60.5	----	15	12,771	−60.8	----	18	12,614	−55.4	----	25	12,454	−52.8	----	28	13,189	−60.9	----	----	----	----	----
150	18	13,990	−61.3	----	23	14,120	−66.9	----	15	13,731	−59.4	----	18	13,597	−55.0	----	23	13,449	−52.4	----	26	14,139	−66.8	----	----	----	----	----
125	12	15,099	−63.6	----	12	15,198	−72.7	----	12	14,873	−59.5	----	14	14,766	−53.5	----	22	14,626	−53.2	----	11	15,255	−72.8	----	----	----	----	----
100	8	16,445	−66.8	----	----	----	----	----	8	16,268	−62.5	----	----	----	----	----	17	16,039	−53.9	----	10	16,556	−77.2	----	----	----	----	----
80	----	----	----	----	----	----	----	----	5	17,639	−63.0	----	----	----	----	----	15	17,462	−55.1	----	----	----	----	----	----	----	----	----
60	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	9	19,293	−55.9	----	----	----	----	----	----	----	----	----
50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	8	20,444	−55.6	----	----	----	----	----	----	----	----	----

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1948*—Continued

Standard pressure surface (mb.)	Tampa, Fla. (1,017.8 mb.)				Tatoosh Island, Wash. (1,008.8 mb.)				Toledo, Ohio (994.5 mb.)				Washington, D. C. (1,017.4 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	29	9	21.7	79	30	31	6.8	81	30	191	10.0	72	30	25	12.7	66
1,000	29	162	21.2	78	30	103	6.2	80	30	144	(*)	----	30	169	12.2	62
950	29	605	18.5	77	30	525	3.3	79	30	573	9.3	65	30	603	10.8	59
900	29	1,067	15.4	76	30	959	.5	78	30	1,017	6.9	64	30	1,014	9.0	60
850	29	1,550	12.4	75	30	1,415	−2.1	76	30	1,486	4.8	62	30	1,520	7.0	58
800	29	2,057	10.0	63	30	1,894	−5.1	75	30	1,978	2.4	60	30	2,017	4.9	57
750	29	2,597	7.9	44	30	2,403	−8.1	68	30	2,504	.2	50	30	2,548	2.1	58
700	29	3,158	4.8	38	30	2,932	−11.3	61	30	3,048	−2.6	51	30	3,095	−1.0	60
650	29	3,758	1.0	31	30	3,501	−14.9	54	30	3,637	−6.1	53	30	3,685	−4.7	57
600	29	4,397	−2.8	----	30	4,097	−18.8	49	30	4,256	−9.8	51	30	4,309	−7.8	50
550	29	5,080	−7.2	----	30	4,742	−23.4	----	30	4,925	−14.2	54	30	4,982	−12.0	47
500	29	5,818	−12.1	----	30	5,431	−28.1	----	30	5,640	−18.8	56	30	5,703	−16.8	42
450	29	6,620	−17.7	----	30	6,186	−33.0	----	30	6,424	−24.3	----	30	6,489	−22.2	----
400	29	7,486	−24.5	----	30	6,999	−38.6	----	30	7,267	−30.2	----	30	7,340	−28.6	----
350	29	8,444	−31.7	----	30	7,905	−44.0	----	30	8,203	−37.4	----	30	8,282	−35.9	----
300	28	9,512	−40.0	----	30	8,927	−48.9	----	28	9,249	−45.2	----	30	9,333	−44.3	----
250	26	10,734	−49.5	----	30	10,113	−52.2	----	28	10,444	−53.3	----	29	10,529	−53.2	----
200	26	12,164	−58.1	----	29	11,563	−51.8	----	24	11,870	−59.3	----	29	11,940	−59.9	----
175	26	12,999	−60.4	----	29	12,430	−50.8	----	22	12,699	−59.6	----	29	12,772	−59.8	----
150	26	13,953	−62.6	----	27	13,430	−50.9	----	18	13,663	−58.4	----	25	13,733	−58.4	----
125	26	15,066	−66.3	----	23	14,616	−51.1	----	13	14,802	−59.0	----	22	14,873	−59.9	----
100	19	16,402	−69.5	----	23	16,061	−52.4	----	7	16,143	−60.3	----	18	16,256	−61.4	----
80	14	17,730	−70.9	----	16	17,489	−52.8	----	----	----	----	----	10	17,646	−61.8	----
60	----	----	----	----	8	19,352	−52.6	----	----	----	----	----	5	19,432	−60.6	----

[1] Data not yet received.

(*) Temperature and relative humidity data for this level are not available or are available only for certain days. See note entitled "Change in Summarization of Radiosonde Data," p. 6, in the January 1946 issue of the MONTHLY WEATHER REVIEW.

NOTE.—All observations scheduled between 0300 and 0500, G. C. T., except at Ciudad Victoria, Mazatlan, and Merida, where they are taken near 0200, G. C. T. "Number of observations" refers to those of dynamic height only. (In a few cases temperature or humidity data may be missing for one or more standard pressure surfaces of some observations.) Relative humidity data are not published for standard pressure surfaces 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 observations at the surface or 5 observations at a standard pressure level.

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 2200 G. C. T., during April 1948. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Speeds in meters per second*

Altitude (meters) m. s. l.	Abilene, Tex. (534 m.)			Albuquerque, N. Mex. (1,627 m.)			Atlanta, Ga. (299 m.)			Billings, Mont. (1,095 m.)			Bismarck, N. Dak. (512 m.)			Boise, Idaho (868 m.)		
	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed
Surface	30	182	5.1	30	242	4.0	29	203	0.6	30	338	0.6	29	68	1.5	30	107	1.3
500	----	----	----	----	----	----	29	236	.7	----	----	----	----	----	----	----	----	----
1,000	30	182	5.7	----	----	----	29	240	1.6	----	----	----	28	144	.9	30	131	1.6
1,500	29	186	6.1	----	----	----	29	251	2.2	30	283	1.3	27	248	1.9	30	190	2.4
2,000	28	195	5.6	30	246	6.2	26	275	2.8	29	252	3.5	24	240	4.4	30	218	4.8
2,500	28	214	6.3	30	242	6.2	22	303	4.9	29	252	5.7	23	246	6.4	30	227	6.6
3,000	28	234	7.4	30	243	6.6	21	310	6.6	23	249	8.2	22	255	8.3	27	230	8.2
4,000	27	250	10.7	29	254	10.5	19	304	8.9	15	244	8.9	22	258	12.6	16	240	11.1
5,000	25	261	12.4	25	255	15.3	19	299	11.1	13	247	11.2	18	261	13.8	10	239	13.0
6,000	23	268	14.8	24	257	18.7	18	299	11.6	----	----	----	14	266	18.0	----	----	----
8,000	19	269	15.9	20	257	23.5	16	302	13.0	----	----	----	----	----	----	----	----	----
10,000	11	274	24.0	14	264	26.7	12	300	13.3	----	----	----	----	----	----	----	----	----
12,000	----	----	----	11	261	32.1	----	----	----	----	----	----	----	----	----	----	----	----
14,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (100 m.)			Charleston, S. C. (16 m.)			Cincinnati, Ohio (273 m.)			Denver, Colo. (1,618 m.)			El Paso, Tex. (1,198 m.)		
	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed
Surface	30	128	5.7	29	266	2.2	28	283	2.3	29	157	1.5	30	246	2.2	28	225	2.7	30	260	5.5
500	30	135	6.2	29	258	3.7	28	276	2.9	29	163	2.0	30	252	3.1	----	----	----	----	----	----
1,000	28	153	5.2	29	241	5.2	28	280	3.4	26	237	1.6	26	246	4.5	----	----	----	----	----	----
1,500	26	158	2.7	24	256	7.5	22	282	6.3	25	279	2.6	22	248	5.4	----	----	----	30	251	6.2
2,000	26	145	1.7	24	268	9.3	20	291	9.0	24	275	3.0	18	251	8.2	28	238	3.3	30	245	6.2
2,500	25	164	1.0	19	281	9.6	18	292	11.6	21	281	4.4	17	270	9.6	28	247	4.1	30	250	7.1
3,000	23	254	1.1	15	284	13.1	18	298	14.6	21	282	4.7	15	281	10.5	28	244	5.2	30	253	7.6
4,000	21	286	3.4	----	----	----	13	307	16.1	20	297	7.4	13	292	12.7	27	254	8.6	29	255	10.4
5,000	21	306	5.7	----	----	----	----	----	----	19	298	11.5	----	----	----	22	256	13.0	28	258	14.5
6,000	21	291	6.7	----	----	----	----	----	----	19	301	11.7	----	----	----	18	261	17.5	26	258	16.6
8,000	20	276	10.5	----	----	----	----	----	----	13	290	11.7	----	----	----	13	262	25.6	23	258	19.2
10,000	18	281	14.3	----	----	----	----	----	----	12	290	15.9	----	----	----	----	----	----	19	269	24.4
12,000	16	271	18.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	13	269	31.3
14,000	15	276	24.1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Ely, Nev. (1,910 m.)			Grand Junction, Colo. (1,475 m.)			Greensboro, N. C. (271 m.)			Havre, Mont. (767 m.)			Jacksonville, Fla. (16 m.)			Joliet, Ill. (178 m.)		
	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed
Surface	29	231	3.2	30	251	3.2	28	250	1.7	30	285	2.0	29	81	3.8	30	216	2.3
500	----	----	----	----	----	----	28	240	2.8	----	----	----	29	84	3.0	30	220	3.2
1,000	----	----	----	----	----	----	28	249	3.4	30	278	2.7	26	122	.9	30	226	4.7
1,500	----	----	----	30	254	3.5	27	263	3.5	29	256	3.2	24	214	1.4	25	239	8.4
2,000	29	198	4.7	30	243	4.6	25	286	5.8	26	255	6.6	22	258	2.9	21	248	10.6
2,500	29	216	5.7	29	234	5.5	23	298	7.5	23	260	8.2	20	277	4.1	16	266	11.6
3,000	29	219	5.6	27	231	7.4	23	295	8.8	20	253	8.9	18	288	6.5	13	272	11.5
4,000	23	228	8.1	25	230	9.7	21	288	10.3	16	251	11.7	15	273	7.4	----	----	----
5,000	18	253	11.8	23	244	14.3	20	292	13.5	13	245	12.8	11	269	7.2	----	----	----
6,000	11	265	16.2	19	250	21.0	16	300	12.9	10	247	17.0	10	271	10.0	----	----	----
8,000	----	----	----	13	252	25.7	10	308	14.6	----	----	----	----	----	----	----	----	----
10,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Las Vegas, Nev. (575 m.)			Little Rock, Ark. (88 m.)			Medford, Oreg. (416 m.)			Miami, Fla. (12 m.)			Mobile, Ala. (66 m.)			Nashville, Tenn. (194 m.)			New York, N. Y. (15 m.)		
	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed
Surface	30	214	4.2	29	176	1.8	30	210	0.4	30	89	3.6	29	154	1.7	30	244	1.3	27	249	1.4
500	----	----	----	29	186	3.2	30	199	.7	30	84	5.9	29	174	1.8	30	238	2.6	27	278	2.7
1,000	30	209	6.0	28	194	4.1	29	212	2.5	29	78	4.1	26	167	1.3	29	238	5.0	26	296	5.0
1,500	30	204	6.7	28	206	4.6	27	218	4.9	26	58	2.9	22	16	.7	27	241	4.8	26	304	7.1
2,000	29	212	7.6	27	227	4.9	24	218	6.9	25	47	2.3	19	356	2.4	25	261	5.4	21	307	10.0
2,500	29	227	7.2	25	254	5.6	16	212	9.0	20	43	2.8	17	353	3.7	21	279	5.4	17	208	9.8
3,000	29	246	7.6	25	258	7.2	13	213	10.1	18	359	3.8	17	335	4.1	21	276	7.0	14	312	10.1
4,000	27	253	11.6	22	280	9.0	13	224	11.2	15	340	4.7	14	310	4.9	18	280	8.9	10	315	11.8
5,000	24	247	14.6	20	285	12.4	12	232	13.7	12	332	6.2	12	286	4.1	14	293	13.7	----	----	----
6,000	21	258	17.8	17	286	14.6	----	----	----	10	326	8.2	11	280	6.4	12	296	15.9	----	----	----
8,000	15	265	23.9	16	283	19.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
10,000	11	265	25.1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 2200 G. C. T., during April 1948. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Speeds in meters per second*—Continued

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. Cloud, Minn. (318 m.)			San Antonio, Tex. (240 m.)			San Diego, Calif. (13 m.)			Sault Ste. Marie, Mich. (225 m.)			Seattle, Wash. (116 m.)			Spokane, Wash. (725 m.)			Washington, D. C. (24 m.)		
	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed
Surface	26	240	4.3	30	178	5.2	30	159	2.4	30	254	2.0	30	290	1.3	30	179	1.4	27	206	1.9	30	161	3.8	30	271	4.0	24	277	2.9	27	230	2.8	29	219	4.8	28	313	0.8
500	26	244	4.8	30	178	5.4	30	172	3.1	30	252	3.0	---	---	---	30	200	2.2	27	195	2.1	30	159	5.1	30	288	4.7	24	292	2.9	27	211	4.4	---	---	---	28	281	1.6
1,000	22	252	4.0	30	188	6.1	29	205	5.3	30	243	4.1	30	293	1.4	28	223	4.1	27	215	4.4	30	161	5.3	25	289	3.9	23	257	2.8	24	206	5.8	29	221	5.9	24	287	4.6
1,500	21	255	4.6	30	198	7.2	25	228	5.2	30	232	4.8	30	275	3.1	28	252	5.4	27	230	5.3	30	163	5.0	23	301	4.6	20	259	3.7	18	204	5.9	28	224	6.2	24	286	6.1
2,000	20	250	5.2	30	215	8.3	24	248	7.2	29	230	5.1	29	256	3.7	28	256	7.8	25	250	7.5	30	175	4.9	19	291	5.9	19	258	4.9	16	206	5.9	27	221	6.0	24	294	9.2
2,500	19	254	6.2	27	225	10.7	23	256	9.7	29	243	6.6	27	246	6.8	28	260	10.0	21	267	8.8	28	211	3.3	19	284	7.1	19	269	6.2	---	---	---	24	221	7.1	23	292	11.6
3,000	18	263	7.2	26	237	11.5	22	266	10.7	29	249	8.0	27	246	8.5	25	267	11.4	19	279	10.2	26	240	3.2	19	285	10.1	19	278	9.9	---	---	---	19	220	9.6	23	293	12.7
4,000	18	270	11.4	22	256	13.6	19	276	13.9	29	258	11.4	19	248	12.0	20	275	13.6	17	285	12.8	24	267	6.3	18	271	13.2	15	298	13.4	---	---	---	11	214	13.2	23	294	16.0
5,000	17	279	17.1	21	260	15.4	12	279	17.1	27	255	14.6	15	248	13.3	17	286	18.4	16	285	16.5	21	277	10.7	16	267	16.8	15	289	15.0	---	---	---	10	218	15.9	18	292	17.2
6,000	17	277	22.8	18	264	18.2	12	282	21.2	27	258	17.2	14	262	16.9	13	289	20.5	14	284	19.5	18	279	10.9	13	259	16.9	11	285	16.6	---	---	---	---	---	---	15	283	17.6
8,000	---	---	---	13	269	23.2	12	275	28.3	14	259	23.6	---	---	---	---	---	---	---	---	---	13	275	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 3.—*Free-air resultant winds based on rawin observations made near 0300 G. C. T., during April 1948. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Speeds in meters per second*

Altitude (meters) m. s. l.	Albuquerque, N. Mex. (1,636 m.)			Big Spring, Tex. (774 m.)			Bismarck, N. Dak. (505 m.)			Brownsville, Tex. (7 m.)			Caribou, Maine (191 m.)			Charleston, S. C. (13 m.)			Columbia, Mo. (237 m.)			Grand Junction, Colo. (1,473 m.)			Greensboro, N. C. (275 m.)			Hatteras, N. C. (3 m.)			International Falls, Minn. (360 m.)			Little Rock, Ark. (80 m.)			Miami, Fla. (12 m.)		
	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed	Observations	Direction	Speed
Surface	30	251	0.8	30	162	4.0	30	66	2.3	30	127	4.7	30	277	2.4	30	135	1.6	30	144	2.0	30	192	1.0	28	173	0.5	30	91	0.5	30	201	0.8	30	165	1.8	30	77	3.2
500	---	---	---	---	---	---	---	---	---	30	136	7.8	30	297	4.2	30	163	3.3	30	173	5.0	---	---	---	28	207	2.9	27	319	1.8	30	199	1.4	30	178	5.1	30	92	5.8
1,000	---	---	---	30	176	7.8	30	121	1.1	30	147	7.3	29	309	5.9	30	201	2.9	29	203	5.8	---	---	---	28	234	5.0	27	290	2.9	30	221	2.7	30	195	6.9	30	85	5.3
1,500	---	---	---	30	197	8.6	30	264	2.4	30	150	4.9	28	309	5.8	30	261	2.4	28	233	6.7	30	201	1.2	27	261	5.6	27	290	4.6	29	244	3.5	30	204	6.9	30	85	3.8
2,000	30	264	5.7	30	216	8.4	30	282	4.2	30	175	3.2	28	298	7.4	30	287	3.1	28	251	8.9	30	224	4.2	26	288	5.6	26	305	6.2	29	269	6.2	29	216	6.7	30	66	2.0
2,500	30	261	7.6	30	228	7.8	30	286	5.9	30	205	2.8	28	294	8.3	30	289	3.7	29	256	10.7	30	230	5.8	26	298	6.6	26	303	7.6	28	280	6.0	29	238	6.7	30	31	1.9
3,000	30	253	8.8	29	244	8.5	28	277	7.2	30	251	1.9	28	296	11.2	30	283	5.0	29	263	13.0	30	236	6.9	26	296	7.7	26	302	9.0	28	275	8.6	29	252	8.3	30	10	2.5
4,000	30	248	9.5	29	262	11.0	27	270	10.1	30	274	2.7	25	288	12.4	30	289	7.4	27	272	14.3	30	239	9.4	26	290	10.9	24	304	8.2	26	281	10.9	29	252	11.0	30	339	2.3
5,000	30	254	12.1	28	275	12.5	26	269	12.1	30	294	5.2	25	287	12.5	29	299	9.7	27	272	15.9	30	244	11.9	25	283	12.9	24	295	10.1	25	278	13.8	29	260	14.1	30	304	3.8
6,000	30	264	16.6	27	269	13.6	26	272	14.8	30	284	7.2	21	302	14.7	28	292	10.3	26	271	16.8	27	254	16.0	24	281	14.0	25	290	12.2	23	274	14.8	29	257	15.8	30	282	5.7
8,000	24	265	19.0	27	267	18.0	26	274	19.9	30	283	10.6	17	303	16.7	27	285	12.6	24	273	21.5	20	245	20.2	20	291	12.0	23	283	12.6	17	269	16.2	25	262	16.3	30	282	11.1
10,000	19	264	17.4	24	269	17.3	21	265	24.2	28	282	13.1	11	299	14.7	25	294	13.4	21	274	20.9	13	267	19.8	18	294	14.6	16	286	17.0	12	266	20.9	23	267	22.1	29	272	17.2
12,000	16	261	18.2	19	268	19.2	16	262	19.7	27	275	20.8	---	---	---	22	288	16.4	14	275	21.4	11	252	17.7	16	290	15.3	10	284	17.9	7	257	16.4	---	---	---	25	268	25.1
14,000	14	275	19.8	6	268	28.2	14	257	17.2	23	277	21.7	---	---	---	18	284	18.8	10	261	19.0	8	260	16.2	13	280	18.7	---	---	---	---	---	---	---	---	---	18	272	25.2
16,000	12	273	18.0	---	---	---	13	255	16.2	---	---	---	---	---	---	15	282	15.4	7	262	13.9	7	259	14.3	9	293	13.4	---	---	---	---	---	---	---	---	---	---	---	---
18,000	---	---	---	---	---	---	10	262	14.5	---	---	---	---	---	---	8	310	6.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Nantucket, Mass. (14 m.)			Nashville, Tenn. (177 m.)			New Orleans, La. (6 m.)			Oakland, Calif. (31 m.)			Oklahoma City, Okla. (392 m.)			Rapid City, S. Dak. (980 m.)			San Antonio, Tex. 242 m.)			San Juan, P. R. (28 m.)			St. Cloud, Minn. (318 m.)			Santa Maria, Calif. (72 m.)			Sault Ste. Marie, Mich. (224 m.)			Spokane, Wash. (601 m.)			Tatoosh Island, Wash. (33 m.)		
Surface	28	252	1.0	29	169	0.8	30	130	1.2	30	265	4.3	29	139	3.1	30	332	1.7	30	141	5.3	---	---	---	30	89	0.5	30	260	2.7	30	44	1.1	30	193	2.0	29	210	2.2
500	26	288	3.5	29	202	1.9	30	141	3.3	29	250	4.7	29	144	4.2	---	---	---	30	143	7.7	---	---	---	29	197	.6	30	289	2.3	30	91	1.1	---	---	---	29	207	3.2
1,000	26	325	4.2	27	243	3.4	30	131	2.4	29	238	5.8	28	182	6.3	30	334	1.7	30	158	7.3	---	---	---	29	227	2.0	30	283	2.2	30	226	2.9	30	208	5.0	28	201	4.2
1,500	26	324	6.7	27	254	5.5	30	138	2.0	29	233	6.1	28	206	7.3	30	288	1.4	30	175	4.9	---	---	---	29	258	4.6	30	268	2.6	30	248	5.4	30	220	5.9	28	202	5.3
2,000	27	311	7.4	26	268	5.0	30	185	1.2	30	241	7.3	27	234	7.9	30	271	3.4	30	174	3.6	---	---	---	29	260	7.4	30	272	4.1	30	266	5.7	30	232	6.9	28	201	5.6
2,500	28	298	9.5	26	276	6.8	30	216	1.2	30	243	9.0	27	242	9.9	29	265	5.3	30	214	3.2	---	---	---	28	266	9.4	30	266	7.4	29	277	6.9	30	235	7.8	28	208	6.0
3,000	28	296	11.3	25	283	7.3	30	237	3.2	30	252	11.3	27	252	10.5	29	271	8.2	30	244	4.2	---	---	---	27	276	10.6	30	269	10.2	29	286	8.2	30	233	9.2	28	217	6.1
4,000	27	286	14.8	24	281	10.5	29	267	5.1	29	258	15.4	27	264	11.3	29	269	10.9	30	272	5.8	---	---	---	26	270	11.4	29	271	14.5	29	284	12.5	30	233	11.8	27	214	7.3
5,000	26	292	17.8	22	272	13.0	28	276	7.9	26	257	17.2	27	267	12.5	29	264	12.9	29	268	8.0	---	---	---	24	273	14.1	27	265	17.5	27	290	13.2	30	240	13.8	27	216	9.4
6,000	25	284	18.8	20	273	13.6	27	283	9.3	22	254	19.4	26	272	14.0	29	271	15.1	28	268	10.2	---	---	---	23	278	16.3	23	259	19.0	26	279	14.3	25	249	14.0	25	214	11.3
8,000	21	281	23.5	16	262	14.2	27	287	13.2	16	248	20.6	26	271	18.4	29	262	17.8	27	275	15.0	---	---	---	20	272	20.4	20	267	25.0	23	275	18.4	19	230	16.2	21	228	7.9
10,000	14	277	25.6	11	269	14.4	23	289	15.9	9	247	18.6	23	269	23.3	28	260	23.4	25	274	18.0	---	---	---	19	272	25.9	8	264	23.4	20	278	25.7	14	263	12.0	18	253	8.7
12,000	6	286	21.8	8	287	19.6	---	---	---	9	267	23.3	15	280	23.1	24	260	21.4	20	276	19.1	---	---	---	5	250	18.5	---	---	---	13	277	19.7	13	259	13.4	17	257	9.8
14,000	---	---	---	6	286	25.5	---	---	---	5	256	17.1	5	266	20.6	15	259	19.2	12	272	20.5	---	---	---	---	---	---	---	---	---	9	291	14.8	10	262	13.6	16	259	11.2
16,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9	258	16.8	6	260	27.8	---	---	---	---	---	---	---	---	---	6	300	10.8	7	270	14.9	13	270	11.2