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METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR FEBRUARY 1947

AEROLOGICAL OBSERVATIONS

[For description of change in Table 1 and charts, see REVIEW, January 1946, p. 61

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 February 1947*

STATIONS AND MEAN SURFACE PRESSURES

Standard pressure surface (mb.)	Albany, N. Y. (998.6 mb.)				Albuquerque, N. Mex. (836.9 mb.)				Apalachicola, Fla. (1,018.3 mb.)				Atlanta, Ga. (982.0 mb.)				Auburn, Calif. (958.8 mb.)				Big Spring, Tex. (929.8 mb.)				Bismarck, N. Dak. (959.6 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	25	86	−6.5	73	28	1,620	7.4	31	28	5	9.8	69	28	300	3.0	55	28	501	9.6	82	28	774	5.3	44	28	505	−11.4	84
1,000	25	75	(*)	----	28	126	(*)	----	28	155	10.3	60	28	151	(*)	----	28	149	(*)	----	28	171	(*)	----	28	186	(*)	----
950	25	478	−8.3	73	28	565	(*)	----	28	583	8.6	52	28	571	2.8	51	28	582	10.7	76	28	595	(*)	----	28	585	−12.3	85
900	25	892	−10.7	77	28	1,018	(*)	----	28	1,026	6.8	48	28	1,004	.7	53	28	1,028	9.8	57	28	1,040	6.1	43	28	996	−11.6	81
850	25	1,329	−12.1	78	28	1,492	(*)	----	28	1,494	5.0	47	28	1,461	−1.2	49	28	1,501	7.5	54	28	1,506	4.3	43	28	1,434	−11.6	81
800	25	1,792	−13.3	74	28	1,990	6.1	32	28	1,987	3.1	45	28	1,943	−2.7	46	28	1,998	4.7	50	28	2,000	4.2	35	28	1,898	−12.7	73
750	25	2,288	−13.7	65	28	2,543	2.6	35	28	2,512	1.1	42	28	2,460	−4.3	38	28	2,525	1.4	50	28	2,528	2.7	32	28	2,395	−13.7	61
700	25	2,806	−15.8	66	28	3,068	−1.1	38	28	3,060	−1.5	----	28	2,995	−6.0	----	28	3,072	−2.0	46	28	3,079	−.4	32	28	2,913	−15.5	55
650	25	3,370	−18.4	66	28	3,656	−5.2	41	28	3,652	−4.3	----	28	3,578	−8.5	----	28	3,662	−5.8	42	28	3,671	−4.1	29	28	3,473	−17.9	48
600	25	3,957	−20.6	63	28	4,278	−9.5	46	28	4,273	−8.1	----	28	4,189	−12.0	----	28	4,280	−9.9	44	28	4,293	−8.5	----	28	4,064	−21.3	----
550	25	4,601	−24.2	----	28	4,944	−14.0	45	28	4,947	−11.9	----	28	4,852	−16.1	----	28	4,947	−14.1	49	27	4,962	−13.1	----	25	4,708	−24.6	----
500	24	5,278	−28.7	----	28	5,658	−19.0	40	27	5,069	−16.5	----	28	5,561	−20.4	----	28	5,662	−19.1	49	27	5,679	−18.1	----	24	5,390	−28.7	----
450	24	6,032	−33.7	----	28	6,437	−24.9	----	27	6,458	−21.7	----	27	6,343	−25.7	----	28	6,444	−24.7	----	26	6,462	−23.5	----	24	6,143	−33.2	----
400	24	6,844	−39.2	----	28	7,279	−31.1	----	27	7,311	−27.6	----	26	7,177	−31.4	----	28	7,284	−31.2	----	26	7,311	−29.7	----	24	6,956	−38.4	----
350	24	7,747	−45.2	----	28	8,212	−38.1	----	26	8,257	−34.5	----	25	8,105	−38.4	----	28	8,215	−38.7	----	25	8,242	−36.7	----	21	7,862	−44.2	----
300	24	8,763	−50.4	----	26	9,251	−46.1	----	24	9,319	−42.1	----	25	9,148	−45.5	----	28	9,254	−47.0	----	20	9,290	−43.9	----	19	8,903	−50.0	----
250	20	9,937	−53.7	----	21	10,453	−53.3	----	24	10,528	−50.3	----	25	10,343	−52.5	----	28	10,437	−55.8	----	17	10,493	−51.1	----	10	10,187	−55.0	----
200	18	11,352	−52.9	----	11	11,909	−60.4	----	23	11,966	−55.1	----	21	11,770	−55.0	----	22	11,834	−62.1	----	7	11,927	−52.5	----	----	----	----	----
175	13	12,190	−51.4	----	----	----	----	----	22	12,822	−58.1	----	18	12,604	−54.5	----	18	12,648	−60.4	----	5	12,782	−55.6	----	----	----	----	----
150	9	13,215	−49.9	----	----	----	----	----	17	13,769	−61.7	----	13	13,582	−55.1	----	11	13,633	−58.3	----	----	----	----	----	----	----	----	----
125	5	14,387	−50.6	----	----	----	----	----	10	14,867	−65.6	----	12	14,722	−58.0	----	11	14,775	−60.4	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Boise, Idaho (918.3 mb.)				Brownsville, Tex. (1,018.4 mb.)				Buffalo, N. Y. (983.3 mb.)				Caribou, Maine (978.3 mb.)				Charleston, S. C. (1,014.3 mb.)				Ciudad Victoria, Mexico (978.3 mb.)				Columbia, Mo. (991.6 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	27	868	3.3	72	28	6	13.2	81	28	221	−5.7	80	28	191	−8.7	91	28	14	5.8	60	28	335	16.7	53	28	239	−3.0	60
1,000	27	169	(*)	----	28	158	13.3	77	28	89	(*)	----	28	19	(*)	----	28	130	7.4	52	28	145	(*)	----	28	172	(*)	----
950	27	594	(*)	----	28	596	12.2	72	28	495	−7.3	79	28	419	−8.7	89	28	554	6.0	47	28	582	15.4	53	28	580	−4.5	61
900	27	1,032	4.6	66	28	1,042	11.0	63	28	909	−10.1	82	28	834	−10.3	90	28	993	3.5	50	28	1,041	12.4	58	28	1,001	−6.7	63
850	27	1,496	2.4	62	28	1,519	9.7	51	28	1,347	−12.6	84	28	1,274	−11.1	91	28	1,454	1.0	52	28	1,518	10.1	61	28	1,446	−7.7	58
800	27	1,984	−.1	62	28	2,021	8.4	47	28	1,808	−14.7	84	28	1,738	−12.4	87	28	1,939	−1.4	47	28	2,021	8.4	60	28	1,917	−8.1	52
750	27	2,499	−2.9	58	28	2,560	6.5	35	28	2,304	−15.6	71	28	2,233	−14.7	85	28	2,457	−3.4	39	28	2,559	6.3	58	28	2,424	−9.2	49
700	27	3,041	−6.0	59	28	3,116	3.8	30	28	2,815	−17.1	66	28	2,750	−16.6	78	28	2,996	−5.0	----	28	3,117	4.4	53	28	2,949	−11.4	50
650	27	3,619	−9.6	62	28	3,715	0.4	29	28	3,376	−19.6	64	28	3,309	−19.3	71	28	3,581	−7.6	----	27	3,716	1.2	43	28	3,519	−14.2	50
600	27	4,232	−13.4	58	28	4,351	−3.7	----	28	3,959	−22.1	----	28	3,896	−22.4	----	28	4,194	−11.0	----	26	4,357	−2.3	40	28	4,118	−17.4	46
550	27	4,891	−17.1	52	28	5,035	−8.1	----	27	4,599	−25.8	----	28	4,535	−26.3	----	27	4,866	−15.1	----	26	5,042	−6.2	41	27	4,763	−21.6	----
500	26	5,600	−22.0	----	28	5,767	−12.5	----	27	5,283	−29.4	----	27	5,217	−30.3	----	27	5,576	−19.3	----	26	5,783	−11.1	44	27	5,458	−25.7	----
450	26	6,372	−27.6	----	28	6,571	−17.6	----	27	6,037	−34.0	----	27	5,966	−85.2	----	27	6,356	−24.8	----	26	6,588	−16.1	42	25	6,229	−30.5	----
400	26	7,204	−33.7	----	28	7,437	−23.2	----	27	6,845	−39.3	----	24	6,783	−39.7	----	26	7,199	−30.8	----	26	7,464	−22.3	----	24	7,054	−35.9	----
350	26	8,126	−40.9	----	27	8,402	−29.9	----	27	7,747	−45.2	----	23	7,694	−45.3	----	25	8,130	−37.2	----	26	8,432	−29.6	----	24	7,969	−42.3	----
300	26	9,156	−49.1	----	26	9,482	−37.7	----	25	8,768	−50.5	----	20	8,695	−49.9	----	25	9,178	−44.6	----	24	9,511	−37.1	----	23	9,009	−49.1	----
250	26	10,327	−58.4	----	24	10,716	−45.8	----	23	9,950	−53.8	----	20	9,877	−52.9	----	23	10,393	−53.0	----	21	10,749	−45.5	----	17	10,228	−53.8	----
200	21	11,715	−64.4	----	16	12,176	−52.6	----	18	11,376	−53.3	----	10	11,342	−51.0	----	21	11,823	−54.7	----	10	12,186	−53.3	----	10	11,685	−57.6	----
175	16	12,517	−61.4	----	9	13,001	−56.5	----	13	12,268	−51.6	----	8	12,202	−50.0	----	16	12,672	−56.4	----	----	----	----	----	7	12,572	−58.7	----
150	11	13,447	−58.3	----	6	13,958	−60.1	----	12	13,263	−52.7	----	5	13,242	−48.9	----	13	13,629	−58.4	----	----	----	----	----	5	13,563	−56.4	----
125	10	14,583	−57.9	----	----	----	----	----	6	14,458	−51.9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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 February 1947*—Continued

Standard pressure surface (mb.)	Dodge City, Kans. (927.6 mb.)				El Paso, Tex. (881.8 mb.)				Ely, Nev. (809.0 mb.)				Fort Worth, Tex. (996.3 mb.)				Glasgow, Mont. (945.6 mb.)				Grand Junction, Colo. (853.4 mb.)				Great Falls, Mont. (890.0 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	787	−1.3	56	28	1,195	10.5	27	28	1,908	0.8	73	28	211	6.2	50	28	648	−11.9	80	28	1,474	2.0	67	27	1,128	−6.1	70
1,000	28	178	(*)	----	28	129	(*)	----	28	163	(*)	----	28	179	(*)	----	28	214	(*)	----	28	171	(*)	----	27	201	(*)	----
950	28	596	(*)	----	28	573	(*)	----	28	596	(*)	----	28	603	5.7	45	28	614	(*)	----	28	603	(*)	----	27	617	(*)	----
900	28	1,028	.5	51	28	1,029	(*)	----	28	1,040	(*)	----	28	1,041	3.1	49	28	1,026	−11.1	78	28	1,046	(*)	----	27	1,043	(*)	----
850	28	1,486	−1.1	49	28	1,502	11.2	26	28	1,506	(*)	----	28	1,502	1.6	49	28	1,464	−11.2	75	28	1,506	(*)	----	27	1,487	−6.2	69
800	28	1,967	−3.2	51	28	2,005	8.3	26	28	1,998	3.0	59	28	1,991	1.2	49	28	1,930	−10.9	74	28	1,995	1.2	51	27	1,960	−7.8	68
750	28	2,481	−5.2	54	28	2,539	5.0	26	28	2,523	0.5	55	28	2,513	−.6	46	28	2,429	−12.4	70	28	2,516	−1.8	57	27	2,465	−9.8	68
700	28	3,016	−6.9	49	28	3,093	.9	29	28	3,069	−3.5	60	28	3,059	−2.5	39	28	2,949	−14.8	65	28	3,058	−5.3	59	27	2,990	−12.1	63
650	28	3,596	−9.6	50	28	3,686	−3.3	32	28	3,655	−6.8	54	28	3,646	−5.9	36	28	3,513	−17.9	61	28	3,636	−9.0	57	27	3,560	−15.1	59
600	28	4,205	−13.6	49	28	4,311	−7.6	----	28	4,272	−10.6	47	28	4,265	−10.0	----	28	4,101	−21.1	----	28	4,250	−12.8	57	27	4,154	−18.7	57
550	28	4,862	−18.2	50	28	4,983	−12.2	----	28	4,935	−15.0	49	28	4,932	−14.4	----	28	4,741	−24.6	----	28	4,908	−17.3	54	27	4,801	−22.3	----
500	28	5,566	−22.8	----	28	5,704	−17.6	----	28	5,649	−20.1	53	26	5,645	−19.6	----	28	5,427	−28.4	----	26	5,613	−22.1	----	27	5,492	−26.9	----
450	28	6,334	−28.4	----	28	6,489	−23.3	----	28	6,427	−25.7	----	25	6,424	−25.4	----	27	6,185	−33.1	----	26	6,386	−27.4	----	27	6,247	−32.2	----
400	27	7,167	−34.4	----	28	7,336	−29.4	----	28	7,265	−32.0	----	25	7,265	−32.2	----	27	6,998	−38.8	----	26	7,216	−33.6	----	27	7,066	−37.8	----
350	26	8,092	−40.8	----	28	8,274	−36.6	----	28	8,194	−39.0	----	25	8,195	−38.5	----	26	7,898	−45.1	----	24	8,130	−40.6	----	27	7,973	−44.4	----
300	25	9,112	−48.4	----	28	9,324	−44.3	----	28	9,233	−47.2	----	21	9,229	−45.8	----	26	8,911	−51.9	----	22	9,177	−48.1	----	27	8,990	−51.6	----
250	23	10,302	−55.9	----	26	10,529	−52.1	----	28	10,414	−56.3	----	17	10,411	−52.8	----	22	10,096	−57.0	----	20	10,349	−56.1	----	25	10,159	−58.6	----
200	18	11,686	−58.3	----	17	11,958	−57.3	----	17	11,818	−61.3	----	9	11,873	−56.9	----	14	11,487	−59.5	----	12	11,720	−60.6	----	16	11,547	−61.0	----
175	14	12,512	−56.0	----	12	12,804	−57.3	----	9	12,638	−58.5	----	----	----	----	----	10	12,320	−56.9	----	10	12,543	−58.0	----	13	12,384	−57.0	----
150	9	13,481	−55.4	----	----	----	----	----	----	----	----	----	----	----	----	----	7	13,299	−55.3	----	6	13,518	−57.4	----	8	13,341	−56.5	----
125	5	14,649	−57.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	5	14,663	−59.3	----	----	----	----	----

Standard pressure surface (mb.)	Greensboro, N. C. (982.3 mb.)				Hatteras, N. C. (1,013.2 mb.)				Havana, Cuba (1,010.0 mb.)				Honolulu, T. H. (1,012.9 mb.)				Huntington, W. Va. (996.2 mb.)				International Falls, Minn. (975.3 mb.)				Joliet, Ill. (995.1 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	273	−0.6	57	27	3	5.2	69	26	50	20.0	78	28	3	24.2	64	28	172	−3.5	72	28	360	−14.9	82	28	178	−6.9	79
1,000	28	128	(*)	----	27	110	5.3	64	26	136	19.7	77	28	115	22.3	65	28	142	(*)	----	28	170	(*)	----	28	139	(*)	----
950	28	544	−.3	52	27	532	3.0	54	26	579	16.8	79	28	562	18.5	70	28	548	−5.4	70	28	561	−15.4	84	28	541	−8.9	78
900	28	971	−2.9	53	27	973	.4	52	26	1,036	13.7	80	28	1,020	14.7	73	28	969	−8.2	76	28	935	−16.7	88	28	956	−10.6	76
850	28	1,422	−5.0	54	27	1,419	−2.0	50	26	1,515	10.8	72	28	1,501	11.7	71	28	1,411	−10.2	76	28	1,395	−15.2	81	28	1,395	−11.0	70
800	28	1,897	−6.7	55	27	1,900	−4.1	48	26	2,020	9.5	52	28	2,008	10.6	45	28	1,876	−11.8	74	28	1,853	−15.0	73	28	1,860	−11.9	64
750	28	2,406	−8.8	49	27	2,412	−6.1	----	26	2,561	7.7	40	28	2,551	8.9	27	28	2,375	−13.4	62	28	2,342	−16.3	63	28	2,359	−13.5	59
700	28	2,932	−10.8	46	27	2,944	−8.2	----	26	3,120	4.7	42	28	3,112	6.6	----	28	2,892	−15.1	60	27	2,855	−18.6	62	28	2,874	−15.4	56
650	27	3,501	−13.7	40	27	3,524	−11.1	----	26	3,720	1.0	45	28	3,719	3.3	----	28	3,452	−17.3	56	27	3,410	−20.9	59	28	3,438	−18.2	54
600	27	4,101	−17.1	43	26	4,133	−14.1	----	26	4,361	−2.0	41	27	4,361	−.4	----	28	4,047	−20.3	56	27	3,993	−24.1	----	28	4,025	−21.4	----
550	27	4,751	−20.5	----	25	4,785	−18.2	----	26	5,049	−5.5	----	26	5,057	−4.4	----	28	4,686	−23.8	----	26	4,622	−27.7	----	28	4,666	−24.9	----
500	27	5,449	−24.5	----	25	5,488	−22.7	----	26	5,791	−9.6	----	24	5,799	−9.4	----	28	5,377	−27.9	----	25	5,308	−31.3	----	28	5,349	−29.2	----
450	26	6,210	−29.2	----	25	6,256	−28.2	----	26	6,600	−14.5	----	24	6,612	−15.5	----	28	6,131	−32.3	----	24	6,059	−35.7	----	28	6,101	−33.5	----
400	26	7,037	−34.7	----	25	7,088	−33.7	----	26	7,480	−20.2	----	23	7,480	−21.3	----	27	6,957	−37.7	----	23	6,869	−40.8	----	28	6,912	−39.3	----
350	26	7,956	−41.1	----	25	8,011	−40.1	----	25	8,453	−27.9	----	22	8,454	−27.6	----	25	7,872	−43.6	----	22	7,769	−46.8	----	27	7,805	−45.5	----
300	26	8,989	−47.6	----	25	9,048	−46.7	----	24	9,540	−36.6	----	21	9,550	−34.3	----	22	8,907	−49.0	----	20	8,774	−53.1	----	25	8,811	−50.7	----
250	25	10,179	−53.1	----	23	10,236	−53.2	----	24	10,776	−45.9	----	18	10,809	−42.6	----	22	10,091	−53.6	----	14	9,932	−57.6	----	23	10,002	−53.7	----
200	23	11,606	−55.1	----	18	11,638	−54.7	----	23	12,233	−54.6	----	14	12,305	−51.4	----	13	11,436	−52.0	----	----	----	----	----	16	11,455	−54.5	----
175	22	12,455	−54.6	----	12	12,479	−53.0	----	22	13,080	−59.9	----	7	13,151	−56.3	----	8	12,353	−53.6	----	----	----	----	----	10	12,296	−53.0	----
150	19	13,413	−54.9	----	11	13,476	−54.5	----	19	14,039	−65.2	----	----	----	----	----	5	13,282	−53.0	----	----	----	----	----	----	----	----	----
125	13	14,573	−56.3	----	----	----	----	----	8	15,113	−72.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Lake Charles, La. (1,020.1 mb.)				Lander, Wyo. (829.0 mb.)				Las Vegas, Nev. (949.1 mb.)				Little Rock, Ark. (1,011.4 mb.)				Mazatlan, Mexico (1,011.0 mb.)				Medford, Oreg. (970.4 mb.)				Merida, Mexico (1,013.2 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	28	5	8.0	72	28	1,696	−4.1	59	28	574	13.1	33	28	79	2.9	56	22	14	21.6	77	28	401	8.2	77	28	27	22.3	72
1,000	28	170	8.8	62	28	186	(*)	----	28	129	(*)	----	28	170	3.3	52	22	109	20.9	70	28	152	(*)	----	28	141	21.2	71
950	28	599	7.2	50	28	605	(*)	----	28	565	(*)	----	28	591	1.7	50	22	556	20.9	43	28	580	9.6	68	28	585	18.1	72
900	28	1,038	6.1	51	28	1,042	(*)	----	28	1,024	14.1	28	28	1,019	−.6	54	22	1,019	18.9	41	28	1,025	8.5	58	28	1,045	15.4	71
850	28	1,506	5.0	47	28	1,497	(*)	----	28	1,502	10.6	31	28	1,474	−2.5	56	22	1,507	16.1	35	28	1,495	5.7	56	28	1,528	12.4	71
800	28	1,998	4.2	45	28	1,977	−3.9	55	28	2,003	6.7	34	28	1,955	−3.3	53	22	2,019	12.7	29	28	1,989	2.6	56	28	2,035	10.1	66
750	28	2,528	2.2	44	28	2,489	−6.1	55	28	2,534	2.8	36	28	2,472	−4.5	47	22	2,564	9.0	31	28	2,512	−.4	55	28	2,575	8.1	63
700	28	3,077	−.6	42	28	3,022	−8.5	54	28	3,084	−.9	37	28	3,006	−6.6	45	22	3,124	5.3	----	28	3,057	−3.3	52	28	3,137	5.6	58
650	28	3,669	−4.4	40	28	3,597	−11.6	53	28	3,672	−4.9	38	28	3,588	−9.2	45	20	3,726	1.3	----	28	3,641	−6.9	48	27	3,743	2.7	50
600	28	4,291	−8.5	----	28	4,203	−15.2	54	28	4,295	−9.1	38	28	4,197	−12.5	45	20	4,366	−2.4	----	28	4,258	−10.9	52	26	4,382	−.6	42
550	28	4,964	−12.5	----	28	4,856	−18.9	49	28	4,961	−13.8	38	27	4,863	−16.2	----	17	5,052	−6.4	----	28	4,923	−15.2	55	26	5,073	−4.2	----
500	28	5,682	−17.6	----	28	5,559	−23.6	----	28	5,680	−19.0	----	27	5,569	−21.2	----	17	5,793	−11.4	----	28	5,635	−20.2	58	25	5,817	−8.8	----
450	28	6,474	−22.8	----	28	6,323	−29.2	----	28	6,457	−24.7	----	26	6,340	−27.1	----	17	6,597	−16.8	----	28	6,414	−25.8	----	25	6,632	−14.1	----
400	27	7,314	−28.6	----	27	7,152	−35.7	----	28	7,302	−30.9	----	26	7,172	−33.2	----	16	7,472	−22.4	----	28	7,249	−32.2	----	25	7,509	−20.6	----
350	27	8,257	−35.1	----	27	8,068	−42.1	----	28	8,234	−38.3	----	25	8,103	−39.5	----	9	8,431	−30.2	----	28	8,177	−39.5	----	25	8,482	−28.0	----
300	26	9,314	−42.4	----	24	9,101	−50.1	----	26	9,264	−46.4	----	22	9,141	−46.9	----	6	9,528	−37.7	----	28	9,213	−47.7	----	25	9,570	−36.4	----
250	25	10,527	−49.6	----	24	10,270	−58.0	----	25	10,455	−54.4	----	19	10,334	−54.7	----	5	10,764	−45.6	----	27	10,392	−56.8	----	24	10,807	−45.5	----
200	15	11,961	−53.5	----	18	11,682	−63.3	----	20	11,856	−58.0	----	7	11,686	−56.0	----	----	----	----	----	26	11,775	−64.1	----	20	12,263	−55.1	----
175	11	12,828	−54.5	----	10	12,548	−62.0	----	14	12,702	−56.1	----	----	----	----	----	----	----	----	----	23	12,586	−61.9	----	18	13,103	−60.5	----
150	----	----	----	----	5	13,468	−56.6	----	10	13,672	−56.6	----	----	----	----	----	----	----	----	----	15	13,542	−58.2	----	11	14,062	−65.1	----
125	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	8	14,685	−59.0	----	----	----	----	----

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 February 1947*—Continued

Standard pressure surface (mb.)	Miami, Fla. (1,016.9 mb.)				Nantucket, Mass. (1,004.7 mb.)				Nashville, Tenn. (997.1 mb.)				New Orleans, La. (1,019.6 mb.)				North Platte, Nebr. (920.5 mb.)				Oakland, Calif. (1,017.1 mb.)				Ogden, Utah (866.0 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	27	4	15.3	74	27	14	−1.1	71	28	180	0.0	62	28	2	9.5	64	28	849	−4.3	73	28	6	11.7	81	28	1,355	2.0	71
1,000	27	146	16.0	68	27	51	(*)	----	28	156	(*)	----	28	162	9.7	56	28	186	(*)	----	28	148	11.6	79	28	176	(*)	----
950	27	582	13.8	68	27	461	−3.3	66	28	571	−.9	57	28	593	7.8	52	28	599	(*)	----	28	578	10.6	70	28	606	(*)	----
900	27	1,035	11.5	58	27	886	−5.9	68	28	996	−3.4	58	28	1,013	6.0	50	28	1,026	−3.7	68	28	1,026	9.5	56	28	1,046	(*)	----
850	27	1,511	9.5	49	27	1,332	−7.5	65	28	1,446	−5.2	56	28	1,498	4.8	45	28	1,476	−5.1	60	28	1,499	7.4	44	28	1,506	3.3	60
800	27	2,012	7.8	42	27	1,803	−9.2	63	28	1,921	−6.6	56	28	1,991	3.9	43	28	1,951	−7.0	63	28	1,996	4.9	39	28	1,996	.8	56
750	27	2,542	5.5	----	27	2,303	−11.0	60	28	2,430	−8.3	56	28	2,521	1.9	43	28	2,460	−9.0	64	28	2,523	2.4	----	28	2,515	−2.7	59
700	27	3,103	2.7	----	27	2,828	−13.4	54	28	2,958	−10.0	54	28	3,068	−.8	41	28	2,985	−10.9	62	28	3,074	−.9	----	28	3,055	−6.1	59
650	27	3,699	−.3	----	27	3,393	−15.9	53	27	3,536	−12.3	53	28	3,662	−4.4	41	28	3,559	−13.8	60	28	3,662	−4.4	----	28	3,635	−9.4	57
600	27	4,335	−3.8	----	27	3,989	−18.8	52	25	4,136	−15.3	----	28	4,282	−8.3	----	28	4,155	−17.4	60	27	4,285	−8.6	----	27	4,243	−13.2	54
550	27	5,017	−7.7	----	27	4,629	−22.6	----	24	4,805	−18.7	----	27	4,957	−12.1	----	28	4,808	−21.2	----	26	4,961	−12.5	----	27	4,901	−17.5	54
500	27	5,753	−12.1	----	27	5,326	−26.9	----	24	5,504	−23.2	----	25	5,673	−16.5	----	28	5,500	−25.5	----	26	5,682	−17.5	----	27	5,607	−22.1	----
450	27	6,560	−16.7	----	27	6,079	−31.9	----	24	6,277	−28.0	----	24	6,462	−21.5	----	28	6,266	−30.7	----	26	6,468	−23.3	----	27	6,380	−27.5	----
400	27	7,429	−22.5	----	26	6,905	−37.2	----	24	7,104	−33.8	----	23	7,313	−27.1	----	26	7,079	−36.8	----	25	7,310	−29.8	----	27	7,211	−33.7	----
350	27	8,396	−29.3	----	25	7,812	−43.0	----	24	8,027	−40.2	----	22	8,270	−33.5	----	26	7,990	−43.4	----	24	8,248	−36.9	----	26	8,128	−40.9	----
300	27	9,478	−37.2	----	23	8,818	−48.3	----	24	9,063	−46.9	----	22	9,335	−40.9	----	26	9,010	−50.6	----	23	9,298	−44.9	----	26	9,159	−48.7	----
250	24	10,722	−45.7	----	22	10,015	−52.5	----	23	10,244	−53.7	----	21	10,556	−48.8	----	25	10,185	−56.7	----	22	10,485	−53.3	----	23	10,352	−56.9	----
200	24	12,179	−54.0	----	14	11,405	−52.2	----	21	11,659	−56.1	----	16	12,012	−53.6	----	22	11,551	−59.1	----	15	11,918	−59.3	----	17	11,738	−60.9	----
175	23	13,027	−57.9	----	12	12,231	−50.9	----	15	12,493	−54.2	----	5	12,876	−54.3	----	13	12,336	−55.4	----	12	12,769	−58.2	----	8	12,552	−57.1	----
150	19	13,991	−63.0	----	6	13,282	−51.8	----	12	13,468	−55.2	----	----	----	----	----	9	13,322	−54.0	----	7	13,712	−56.8	----	----	----	----	----
125	13	15,102	−68.1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Oklahoma City, Okla. (974.5 mb.)				Omaha, Nebr. (984.1 mb.)				Phoenix, Ariz. (974.5 mb.)				Pittsburgh, Pa. (966.9 mb.)				Portland, Maine (1,001.3 mb.)				Rapid City, S. Dak. (905.4 mb.)				St. Paul, Minn. (990.8 mb.)			
Surface	28	391	2.0	52	28	308	−4.9	72	28	339	15.0	42	28	382	−5.6	77	28	20	−4.3	69	28	980	−7.3	74	27	225	−8.9	78
1,000	28	180	(*)	----	28	181	(*)	----	28	118	(*)	----	28	118	(*)	----	28	30	(*)	----	28	193	(*)	----	27	153	(*)	----
950	28	595	2.3	48	28	586	−6.3	74	28	561	18.8	28	28	524	−6.3	76	28	438	−5.6	68	28	602	(*)	----	27	550	−10.9	82
900	28	1,032	1.0	47	28	1,006	−7.8	72	28	1,018	15.8	29	28	941	−9.1	78	28	855	−8.0	72	28	1,027	(*)	----	27	964	−11.9	80
850	28	1,489	−.6	47	28	1,449	−8.9	68	28	1,499	12.1	31	28	1,381	−11.1	79	28	1,297	−10.1	76	28	1,472	−6.7	68	27	1,401	−11.9	69
800	28	1,973	−1.5	46	28	1,918	−9.8	64	28	2,003	8.2	32	28	1,845	−12.4	66	28	1,763	−11.3	72	28	1,944	−8.5	68	27	1,864	−12.9	64
750	28	2,491	−3.0	44	28	2,418	−10.8	55	28	2,540	4.3	33	28	2,342	−14.4	63	28	2,262	−12.8	70	28	2,444	−10.5	64	27	2,361	−14.1	60
700	28	3,030	−5.2	43	28	2,943	−13.0	51	28	3,089	.6	28	28	2,857	−16.2	58	28	2,780	−15.0	67	28	2,971	−13.1	60	27	2,877	−16.0	57
650	28	3,611	−8.1	38	28	3,508	−15.5	49	28	3,684	−3.3	----	28	3,418	−18.1	62	28	3,341	−18.3	69	27	3,537	−16.1	58	27	3,439	−18.6	51
600	28	4,225	−12.0	----	28	4,105	−19.0	49	28	4,307	−7.8	----	28	4,007	−21.1	----	28	3,930	−21.4	----	27	4,131	−18.9	55	27	4,026	−21.8	----
550	28	4,889	−16.4	----	28	4,750	−22.8	----	28	4,981	−12.7	----	28	4,647	−24.7	----	28	4,567	−25.0	----	27	4,777	−22.3	----	27	4,663	−25.8	----
500	26	5,601	−20.8	----	28	5,442	−27.0	----	28	5,698	−17.9	----	28	5,332	−28.4	----	28	5,254	−29.0	----	27	5,470	−26.0	----	27	5,346	−30.2	----
450	25	6,376	−26.4	----	28	6,198	−31.8	----	28	6,485	−23.9	----	28	6,087	−33.1	----	28	6,006	−34.2	----	26	6,238	−30.7	----	27	6,096	−35.0	----
400	22	7,214	−32.4	----	28	7,019	−37.0	----	28	7,326	−30.1	----	28	6,899	−38.6	----	28	6,815	−39.3	----	26	7,059	−36.5	----	24	6,908	−39.5	----
350	18	8,129	−39.2	----	28	7,930	−43.2	----	28	8,264	−36.9	----	28	7,804	−44.2	----	28	7,717	−44.8	----	26	7,972	−42.9	----	24	7,810	−45.3	----
300	17	9,174	−46.7	----	28	8,954	−49.4	----	25	9,314	−44.6	----	27	8,832	−49.3	----	28	8,735	−50.2	----	24	9,001	−50.1	----	24	8,824	−51.7	----
250	13	10,343	−53.2	----	27	10,140	−54.9	----	21	10,524	−52.2	----	27	10,013	−53.4	----	27	9,914	−54.3	----	18	10,213	−56.8	----	24	9,991	−56.7	----
200	8	11,780	−55.7	----	18	11,520	−55.5	----	10	11,947	−57.6	----	24	11,442	−55.2	----	22	11,331	−53.9	----	7	11,667	−60.4	----	16	11,441	−58.9	----
175	5	12,669	−56.3	----	15	12,360	−53.8	----	6	12,813	−56.5	----	18	12,305	−54.0	----	17	12,180	−54.7	----	----	----	----	----	9	12,221	−54.7	----
150	----	----	----	----	9	13,332	−52.7	----	----	----	----	----	13	13,310	−53.6	----	13	13,196	−55.6	----	----	----	----	----	----	----	----	----
125	----	----	----	----	----	----	----	----	----	----	----	----	9	14,464	−55.9	----	6	14,410	−56.6	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	San Antonio, Tex. (992.0 mb.)				San Juan, P. R. (1,014.0 mb.)				Santa Maria, Calif. (1,009.1 mb.)				Sault Ste. Marie, Mich. (983.0 mb.)				Spokane, Wash. (949.1 mb.)				Swan Island, W. I. (1,013.6 mb.)				Tacubaya, Mexico (773.4 mb.)			
Surface	28	240	7.9	60	28	15	23.4	81	28	71	11.9	80	28	221	−9.5	81	28	598	2.3	71	28	10	24.0	78	28	2,306	15.2	48
1,000	28	173	(*)	----	28	136	22.7	82	28	147	11.9	76	28	87	(*)	----	28	172	(*)	----	28	128	23.5	78	28	61	(*)	----
950	28	597	8.6	55	28	585	19.9	84	28	582	11.6	63	28	489	−10.8	85	28	594	(*)	----	28	580	20.1	80	28	523	(*)	----
900	28	1,043	7.2	53	28	1,047	16.9	82	28	1,028	10.7	48	28	898	−13.0	87	28	1,027	1.3	64	28	1,040	17.0	77	28	998	(*)	----
850	28	1,513	6.3	51	28	1,534	14.4	77	28	1,502	8.5	42	28	1,332	−13.8	85	28	1,485	−1.2	63	28	1,526	14.3	76	28	1,491	(*)	----
800	28	2,009	5.5	45	27	2,044	11.8	71	28	2,000	5.9	36	28	1,793	−14.4	77	28	1,967	−3.2	60	28	2,036	11.7	71	28	2,020	(*)	----
750	28	2,538	3.6	36	27	2,586	9.2	60	28	2,531	3.1	27	28	2,287	−16.0	74	28	2,481	−5.7	62	28	2,579	9.1	65	28	2,569	13.4	50
700	28	3,092	1.1	32	27	3,152	7.1	43	28	3,081	.0	----	28	2,798	−18.1	70	28	3,013	−8.7	63	28	3,144	6.9	50	28	3,142	8.9	56
650	27	3,683	−2.7	----	27	3,760	4.4	----	28	3,671	−3.8	----	28	3,357	−20.5	68	28	3,590	−11.9	53	28	3,754	4.5	41	28	3,756	4.0	63
600	27	4,313	−6.8	----	27	4,406	1.7	----	28	4,297	−8.1	----	28	3,938	−23.4	----	28	4,193	−15.3	----	27	4,399	1.4	37	28	4,396	−.8	69
550	25	4,988	−11.3	----	27	5,103	−1.8	----	27	4,976	−12.0	----	28	4,574	−27.0	----	28	4,849	−19.2	----	27	5,092	−2.2	29	28	5,089	−4.6	50
500	25	5,710	−16.2	----	26	5,853	−6.6	----	27	5,696	−17.0	----	27	5,262	−30.8	----	28	5,547	−23.9	----	27	5,846	−6.9	----	28	5,831	−9.1	36
450	25	6,503	−21.4	----	25	6,674	−11.9	----	26	6,478	−23.0	----	27	6,016	−35.7	----	27	6,317	−29.4	----	27	6,666	−12.6	----	28	6,648	−14.2	----
400	25	7,353	−27.2	----	25	7,557	−18.5	----	26	7,326	−29.5	----	26	6,811	−41.0	----	27	7,141	−35.4	----	26	7,550	−19.0	----	28	7,524	−20.1	----
350	21	8,297	−34.2	----	25	8,538	−25.8	----	25	8,263	−36.5	----	25	7,720	−46.8	----	27	8,056	−42.3	----	26	8,531	−26.1	----	27	8,500	−27.2	----
300	20	9,360	−40.9	----	25	9,637	−33.6	----	24	9,314	−44.2	----	22	8,723	−52.6	----	25	9,089	−50.5	----	26	9,628	−34.1	----	24	9,595	−35.1	----
250	19	10,584	−49.0	----	24	10,897	−42.4	----	23	10,515	−51.9	----	17	9,907	−55.6	----	23	10,248	−59.0	----	23	10,878	−43.6	----	17	10,845	−44.0	----
200	17	12,021	−55.0	----	21	12,366	−53.3	----	19	11,916	−56.4	----	9	11,320	−55.3	----	13	11,615	−65.2	----	21	12,348	−53.8	----	5	12,298	−54.1	----
175	12	12,870	−57.2	----	20	13,215	−59.1	----	12	12,745	−56.6	----	6	12,208	−54.6	----	7	12,419	−62.7	----	17	13,191	−60.2	----	----	----	----	----
150	9	13,824	−59.9	----	14	14,161	−65.5	----	7	13,722	−57.7	----	----	----	----	----	5	13,391	−56.4	----	11	14,150	−67.0	----	----	----	----	----
125	----	----	----	----	8	15,287	−70.4	----	5	14,850	−60.7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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 February 1947*—Continued

Standard pressure surface (mb.)	Tampa, Fla. (1,017.0 mb.)				Tatoosh Island, Wash. (1,013.4 mb.)				Toledo, Ohio (990.6 mb.)				Washington, D. C. (1,010.3 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	28	9	11.8	79	28	31	7.2	84	28	191	−6.1	80	28	25	−0.9	56
1,000	28	149	12.4	73	28	140	6.6	78	28	118	(*)	----	28	107	−1.3	55
950	28	582	10.9	66	28	564	5.9	69	28	516	−7.4	80	28	516	−3.8	56
900	28	1,028	8.8	58	28	1,003	4.4	59	28	937	−9.7	81	28	939	−6.6	62
850	28	1,500	7.3	52	28	1,467	2.7	53	28	1,376	−11.6	80	28	1,383	−8.5	64
800	28	1,998	5.9	41	28	1,955	.4	55	28	1,840	−12.4	72	28	1,853	−9.5	61
750	28	2,527	3.4	41	28	2,474	−2.2	54	28	2,337	−13.7	68	28	2,354	−11.0	58
700	28	3,080	.4	42	28	3,016	−5.1	54	28	2,854	−15.8	66	28	2,878	−13.5	58
650	28	3,671	−2.6	40	28	3,597	−8.5	54	28	3,415	−18.4	64	28	3,443	−16.0	56
600	26	4,301	−6.0	----	27	4,216	−12.0	53	28	4,003	−21.5	----	28	4,039	−19.4	56
550	26	4,976	−9.8	----	26	4,888	−15.9	56	28	4,640	−25.3	----	28	4,681	−23.1	----
500	26	5,706	−14.2	----	25	5,595	−21.0	----	28	5,325	−29.5	----	28	5,373	−27.6	----
450	25	6,506	−19.2	----	23	6,382	−26.1	----	28	6,082	−34.3	----	28	6,129	−32.4	----
400	25	7,367	−24.9	----	21	7,219	−32.1	----	28	6,885	−39.5	----	28	6,946	−37.4	----
350	25	8,322	−32.0	----	20	8,143	−39.1	----	28	7,788	−45.4	----	28	7,856	−43.1	----
300	25	9,393	−39.5	----	16	9,184	−46.7	----	28	8,801	−50.8	----	28	8,881	−48.6	----
250	25	10,617	−47.5	----	12	10,371	−54.7	----	28	9,977	−54.2	----	27	10,059	−52.9	----
200	23	12,077	−54.3	----	5	11,777	−61.3	----	25	11,405	−55.1	----	25	11,468	−54.0	----
175	21	12,919	−57.9	----	----	----	----	----	22	12,240	−53.6	----	23	12,320	−53.2	----
150	18	13,892	−61.6	----	----	----	----	----	16	13,196	−52.8	----	21	13,307	−53.5	----
125	10	14,980	−66.7	----	----	----	----	----	7	14,325	−55.8	----	18	14,467	−54.8	----
100	----	----	----	----	----	----	----	----	----	----	----	----	11	15,907	−56.8	----

(*) 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 1 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.

LATE REPORT FOR MAZATLAN, MEXICO

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 January 1947*

STATION AND MEAN SURFACE PRESSURE

Standard pressure surface (mb.)	Mazatlan, Mexico (1,011.4 mb.)				Standard pressure surface (mb.)	Mazatlan, Mexico (1,011.4 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity		Number of observations	Dynamic height	Temperature	Relative humidity
Surface	31	14	20.3	76	600	28	4,357	−2.9	38
1,000	31	113	19.7	74	550	27	5,045	−6.8	42
950	31	558	18.9	61	500	26	5,780	−11.2	44
900	31	1,018	17.0	54	450	25	6,586	−16.1	47
850	31	1,503	14.1	47	400	23	7,459	−22.1	----
800	31	2,012	11.1	41	350	17	8,435	−29.4	----
750	31	2,552	8.0	43	300	12	9,496	−38.2	----
700	31	3,114	4.7	39	250	8	10,714	−47.3	----
650	29	3,719	1.0	39	200	5	12,207	−56.7	----

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.) during February 1947*
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.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	26	16	1.9	28	274	2.7	27	268	6.5	27	267	2.8	27	302	3.7	26	292	1.1
500							27	291	6.9									
1,000	26	347	1.5				26	289	7.7				25	303	5.1	26	280	1.4
1,500	24	316	2.9				26	289	8.7	27	264	5.3	22	301	7.2	25	302	1.9
2,000	23	307	5.5	28	288	2.8	23	293	13.0	26	287	8.2	16	300	9.8	25	292	3.0
2,500	21	292	9.0	28	282	5.1	23	292	17.7	26	296	9.8	14	302	12.1	25	304	4.8
3,000	20	290	10.7	27	288	7.2	21	286	18.8	23	296	11.2	12	304	13.0	22	292	6.7
4,000	18	290	12.5	26	299	9.7	17	283	23.6	20	314	12.2	11	309	16.7	21	299	9.2
5,000	18	292	14.7	23	292	12.6	12	286	21.0	15	311	16.6	10	303	16.2	17	305	13.7
6,000	17	288	17.1	23	291	16.7	10	285	24.4	12	309	17.1				16	307	15.6
8,000	10	303	16.8	16	291	18.6										10	303	18.4
10,000																		

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 (150 m.)			Denver, Colo. (1,627 m.)			El Paso, Tex. (1,198 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observation	Direction	Velocity
Surface	25	52	2.4	23	261	6.0	21	297	1.1	27	282	4.6	27	263	4.1	26	6	2.0	28	264	1.1
500	25	28	2.0	23	266	7.1	21	286	4.1	27	280	5.8	27	261	5.3						
1,000	22	327	1.9	14	270	7.2	21	282	8.0	27	280	7.3	23	261	6.3						
1,500	20	312	2.7				16	296	10.0	27	284	10.3	17	278	8.8				28	258	1.7
2,000	16	294	4.0				11	301	12.2	26	289	13.7	14	278	11.5	26	339	2.6	28	262	3.1
2,500	14	303	5.0				10	294	15.0	23	294	16.7	11	280	12.2	23	302	4.1	28	267	4.7
3,000	13	292	6.5							21	294	20.7				22	291	6.7	28	276	7.6
4,000	13	282	7.7							17	286	24.2				19	303	13.1	27	281	10.2
5,000	10	280	11.7							11	277	19.4				17	300	18.2	26	287	11.6
6,000	10	274	17.3							11	276	22.7				17	302	16.7	25	284	15.4
8,000	10	274	26.7													14	308	21.4	18	283	19.5
10,000																			10	291	30.2

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.)			Las Vegas, Nev. (575 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	27	162	0.2	28	312	3.4	26	283	4.0	25	305	1.7	26	278	2.7	27	289	5.2	28	133	0.9
500							26	279	5.6				26	281	5.5	27	283	6.6			
1,000							26	271	7.4	25	295	3.3	26	280	6.3	18	283	7.2	28	110	.8
1,500				28	311	3.5	26	275	10.0	24	279	8.6	26	283	8.5	15	294	9.4	28	319	.4
2,000	27	152	.1	28	300	2.6	25	284	13.4	22	284	8.8	21	283	12.8	12	290	11.3	28	275	1.7
2,500	27	255	1.5	28	262	4.0	23	290	15.7	19	295	10.6	20	285	17.2				28	287	3.1
3,000	26	278	2.7	28	264	5.8	22	288	19.0	16	303	10.6	16	290	18.6				27	280	4.0
4,000	25	296	5.4	25	292	8.1	18	278	21.8	12	302	12.0	13	285	25.0				26	288	5.6
5,000	19	305	7.4	19	292	11.8	10	278	20.4										26	288	8.7
6,000	18	310	9.8	14	293	14.8													23	284	11.5
8,000	15	310	14.3																19	292	12.4
10,000	13	314	16.4																11	301	16.7
12,000	10	300	21.9																		

Altitude (meters) m. s. l.	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	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	27	295	2.7	27	127	0.3	27	192	0.3	27	321	2.5	28	294	3.9	27	282	5.7
500	27	317	4.3	27	121	.4	27	300	2.4	27	324	3.0	28	288	4.1	27	289	7.4
1,000	26	289	5.3	27	150	1.9	27	302	3.3	27	312	4.3	28	285	5.1	25	288	9.3
1,500	25	293	7.9	26	188	2.0	26	295	6.4	27	300	8.0	21	285	6.1	24	295	12.0
2,000	24	304	11.7	26	207	2.3	25	292	8.7	26	297	11.7	18	291	10.8	18	288	13.6
2,500	24	303	13.7	26	247	2.2	24	284	11.3	23	290	15.0	15	288	14.3	15	285	13.3
3,000	24	297	17.8	21	321	3.5	24	277	14.3	20	289	16.8	14	289	15.5	14	291	16.1
4,000	22	290	20.4	19	321	5.2	22	274	19.5	13	286	21.8	12	288	21.2			
5,000	19	291	22.9	16	330	6.0	19	267	23.2				10	284	22.9			
6,000	13	285	26.7	13	301	6.5	16	269	28.2									
8,000							11	267	34.9									
10,000																		
12,000																		

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.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	26	225	3.1	27	325	3.1	27	321	3.6	28	222	0.8	27	329	6.0	27	288	4.8	27	301	5.5
500	26	185	1.1	27	331	3.0	27	313	4.0	28	222	1.0				27	291	7.6	27	307	6.6
1,000	23	156	.8	27	332	3.2	24	298	6.4	28	216	.7	27	328	6.2	25	292	8.3	24	314	6.9
1,500	20	211	1.0	26	315	5.3	15	281	8.4	28	225	.9	27	324	8.4	20	295	10.6	19	310	7.4
2,000	19	228	1.3	25	302	8.6	14	287	11.4	28	263	1.0	24	321	11.1	18	298	13.0	19	310	9.3
2,500	17	251	2.2	24	291	9.3	14	294	13.8	27	270	2.5	21	314	12.5	17	297	14.5	17	309	9.3
3,000	15	248	3.2	24	290	12.0	14	293	16.4	27	283	2.9	20	314	13.6	13	292	16.3	15	313	10.4
4,000	13	270	5.0	21	288	16.2	12	300	20.3	27	287	5.1	17	305	15.3	11	298	21.1	13	301	10.8
5,000				17	290	20.5	10	296	19.9	22	292	7.0	17	300	16.2				11	298	11.5
6,000				12	291	21.4				17	295	9.6									
8,000										12	301	12.1									

Altitude (meters) m. s. l.	San Antonio, Tex. (240 m.)			San Diego, Calif. (13 m.)			Sault Ste. Marie, Mich. (225 m.)			Seattle, Wash. (116 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
Surface	26	5	0.6	28	269	3.1	21	299	4.3	26	74	1.1	28	234	0.3	27	277	4.8
500	26	28	.7	28	288	2.4	21	305	5.9	26	162	2.3				27	277	8.1
1,000	26	314	1.2	28	274	1.6	17	309	4.9	23	174	3.2	28	211	1.5	27	281	9.4
1,500	24	308	2.8	26	297	1.2	14	315	5.9	20	203	2.6	27	236	2.9	25	285	11.7
2,000	22	281	6.2	24	334	1.9	11	304	7.6	17	213	2.8	24	265	3.6	23	289	13.9
2,500	22	280	7.8	24	311	2.2	10	298	5.7	16	247	2.6	23	285	4.3	21	288	15.6
3,000	22	285	8.7	23	304	3.8				12	236	.6	23	306	6.1	21	288	16.2
4,000	20	282	12.4	22	285	4.3				10	54	1.4	19	317	10.9	16	283	19.0
5,000	17	288	17.5	22	281	5.0							15	327	15.0	14	278	20.8
6,000	14	278	20.4	20	275	6.7							13	320	15.6			
8,000				16	277	9.0												

TABLE 3.—*Maximum free-air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during February 1947*

Section	Surface to 2,500 meters (m. s. l.)					2,501 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]	40.4	nw.	1,722	20	Caribou, Maine	71.0	w.	4,958	2	Nantucket, Mass	88.0	w.	10,237	20	Portland, Maine.
East-Central [2]	44.6	wnw.	1,824	23	Lynchburg, Va	57.3	wnw.	5,000	27	Hatteras, N. C	82.0	w.	9,843	26	Hatteras, N. C.
Southeast [3]	47.2	nw.	2,500	5	Atlanta, Ga	57.4	nw.	5,000	5	Atlanta, Ga	76.0	nw.	6,054	5	Atlanta, Ga.
North-Central [4]	38.1	nnw.	1,428	4	Duluth, Minn	50.1	nnw.	5,000	5	Madison, Wis	62.0	wnw.	8,705	16	Bismarck, N. Dak.
											62.0	nw.	8,677	2	Marquette, Mich.
Central [5]	46.9	wsw.	2,310	2	Wichita, Kans	57.0	nw.	4,436	4	Omaha, Nebr	68.0	w.	9,676	14	Springfield, Mo.
South-Central [6]	43.4	sw.	1,196	3	Tulsa, Okla	57.0	wnw.	4,090	4	Little Rock, Ark	78.0	w.	11,020	6	Brownsville, Tex.
Northwest [7]	45.2	nw.	2,500	6	Glasgow, Mont	55.9	nw.	4,505	6	Glasgow, Mont	86.0	n.	17,669	10	Great Falls, Mont.
West-Central [8]	39.3	w.	2,471	3	Rock Springs, Wyo	73.0	w.	3,767	2	Cheyenne, Wyo	94.0	w.	12,310	10	Oakland, Calif.
Southwest [9]	30.6	nw.	2,458	3	Roswell, N. Mex	42.6	nw.	4,377	7	Raton, N. Mex	94.0	w.	10,123	20	El Paso, Tex.

[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.