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METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR SEPTEMBER 1945

AEROLOGICAL OBSERVATIONS

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

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Albany, N. Y. (93 m.)				Albuquerque, N. Mex. (1,620 m.)				Apalachicola, Fla. (5 m.)				Atlanta, Ga. (300 m.)				Big Spring, Tex. (774 m.)				Bismarck, N. Dak. (505 m.)				Boise, Idaho (868 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	29	1,009	16.7	85	29	837	22.6	27	30	1,017	25.6	86	23	985	22.4	82	30	927	25.0	47	30	955	12.7	68	30	916	15.9	45
500	29	962	16.2	77	----	----	----	----	30	961	23.8	76	23	963	23.1	73	----	----	----	----	----	----	----	----	----	----	----	----
1,000	29	907	13.8	76	----	----	----	----	30	907	20.6	75	23	909	20.2	70	30	903	24.3	46	30	901	12.8	57	30	902	17.0	39
1,500	29	854	11.9	74	----	----	----	----	30	856	17.5	74	23	858	16.9	72	30	853	21.4	47	30	848	10.1	57	30	851	15.2	35
2,000	29	804	9.7	68	29	801	21.9	25	30	807	14.5	70	23	808	14.3	64	30	804	18.5	48	30	798	7.6	57	30	801	11.5	37
2,500	29	758	7.5	63	29	756	18.2	27	30	761	11.9	64	23	762	11.7	60	30	759	15.0	49	30	752	4.8	57	30	754	7.8	41
3,000	29	713	5.4	57	29	713	13.8	32	30	716	9.1	63	23	718	9.2	56	30	715	11.8	47	30	706	1.9	56	30	709	4.3	40
4,000	29	630	0.7	49	29	632	5.0	42	29	635	3.5	52	22	635	3.5	52	30	634	4.9	49	30	623	−4.1	58	30	627	−1.8	40
5,000	28	556	−4.7	46	28	558	−3.5	53	29	560	−2.0	50	22	561	−2.2	42	30	560	−2.0	45	29	548	−10.3	60	30	552	−8.3	40
6,000	28	489	−10.9	44	27	491	−10.5	45	29	493	−8.0	53	22	494	−8.1	----	30	493	−8.1	30	29	481	−17.1	53	30	484	−14.7	40
7,000	28	429	−17.3	----	27	431	−17.0	----	28	434	−14.1	49	22	434	−14.3	----	30	433	−14.4	----	29	420	−24.1	----	30	424	−21.6	----
8,000	28	374	−24.3	----	27	376	−24.2	----	28	379	−20.8	47	22	380	−21.2	----	29	379	−21.5	----	29	365	−31.3	----	30	369	−29.0	----
9,000	28	325	−31.4	----	27	327	−31.3	----	28	330	−27.7	----	21	330	−28.2	----	28	330	−28.5	----	28	316	−38.4	----	30	320	−36.5	----
10,000	28	282	−39.1	----	27	284	−38.5	----	28	287	−35.6	----	21	287	−35.9	----	28	287	−35.7	----	28	273	−44.8	----	30	277	−42.8	----
11,000	28	243	−46.9	----	27	244	−45.5	----	28	248	−43.7	----	21	248	−43.3	----	27	247	−42.9	----	28	235	−49.7	----	27	240	−48.1	----
12,000	27	209	−53.6	----	25	210	−51.3	----	28	213	−51.5	----	21	213	−50.5	----	24	213	−49.6	----	27	201	−53.0	----	26	205	−53.2	----
13,000	27	178	−59.5	----	23	180	−56.3	----	27	182	−58.7	----	21	182	−57.2	----	22	182	−55.6	----	25	172	−54.5	----	25	176	−56.8	----
14,000	22	152	−62.8	----	20	154	−60.9	----	22	155	−65.6	----	20	155	−63.0	----	18	156	−61.0	----	17	148	−56.5	----	19	151	−60.1	----
15,000	13	129	−64.7	----	13	131	−65.7	----	16	131	−69.7	----	14	132	−67.2	----	10	133	−67.2	----	15	127	−58.7	----	11	128	−61.0	----
16,000	7	109	−63.9	----	5	110	−67.8	----	9	111	−70.4	----	7	112	−70.0	----	----	----	----	----	8	108	−58.8	----	7	109	−63.9	----
17,000	----	----	----	----	----	----	----	----	----	----	----	----	5	95	−70.0	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Brownsville, Tex. (6 m.)				Buffalo, N. Y. (221 m.)				Burrwood, La. (2 m.)				Caribou, Maine (193 m.)				Charleston, S. C. (14 m.)				Clovis, N. Mex. (1,306 m.)				Denver, Colo. (1,616 m.)			
Surface	30	1,013	26.0	81	30	993	16.5	83	30	1,017	26.4	82	30	997	11.8	84	29	1,017	23.6	93	30	869	20.4	44	30	840	15.4	48
500	30	958	23.5	77	30	962	16.7	75	30	961	23.1	78	30	961	12.3	74	29	963	22.9	81	----	----	----	----	----	----	----	----
1,000	30	904	20.8	71	30	906	14.7	72	30	907	20.2	71	30	905	10.8	72	29	909	20.2	77	----	----	----	----	----	----	----	----
1,500	30	854	18.5	60	30	854	12.2	67	30	856	17.5	69	30	853	8.7	68	29	858	17.2	76	30	850	21.7	40	----	----	----	----
2,000	30	805	16.1	51	30	804	10.0	62	30	807	14.6	66	30	802	7.0	59	29	808	14.5	70	30	802	19.5	41	30	802	15.3	42
2,500	30	759	13.6	45	30	758	7.9	59	30	761	11.9	62	29	755	4.8	51	29	762	12.0	62	30	757	16.2	43	30	756	12.1	46
3,000	30	715	10.8	43	30	712	5.8	49	30	716	9.2	59	29	709	3.0	45	29	717	9.2	60	30	713	12.6	43	30	712	8.6	48
4,000	29	634	5.5	38	30	630	0.7	48	30	635	3.6	57	29	627	−2.0	47	29	636	3.7	55	30	632	4.5	50	30	630	2.1	52
5,000	28	560	−0.6	39	28	556	−4.8	43	30	560	−2.0	50	29	552	−7.5	47	28	561	−1.7	54	30	558	−2.8	51	29	556	−5.6	64
6,000	28	493	−7.0	42	27	489	−11.0	40	29	493	−8.0	49	29	484	−13.4	46	28	494	−7.4	50	30	491	−9.6	40	29	488	−12.7	52
7,000	28	434	−13.4	40	27	429	−17.6	----	28	433	−14.5	41	28	424	−20.1	43	28	434	−13.6	49	30	431	−16.0	38	29	428	−19.6	----
8,000	28	379	−20.2	----	26	375	−24.4	----	28	379	−21.4	----	28	370	−26.8	----	28	380	−20.6	47	30	377	−22.9	----	28	374	−26.8	----
9,000	28	330	−27.5	----	25	325	−31.4	----	28	330	−28.8	----	27	321	−33.9	----	28	331	−27.9	----	29	328	−30.4	----	28	324	−34.7	----
10,000	28	287	−34.9	----	23	282	−39.0	----	28	286	−36.5	----	27	278	−41.3	----	27	288	−35.6	----	29	284	−38.0	----	28	280	−42.0	----
11,000	28	248	−42.6	----	19	243	−46.3	----	28	247	−44.8	----	27	239	−48.7	----	25	248	−44.1	----	29	245	−44.9	----	28	242	−47.9	----
12,000	28	214	−50.0	----	14	209	−52.4	----	28	212	−52.8	----	26	205	−55.2	----	24	213	−52.0	----	28	211	−51.3	----	25	207	−52.5	----
13,000	28	183	−57.4	----	9	178	−57.2	----	24	182	−59.6	----	23	176	−59.3	----	23	182	−59.1	----	24	181	−56.9	----	22	177	−56.7	----
14,000	23	156	−64.0	----	5	152	−59.7	----	18	154	−65.9	----	17	149	−61.9	----	19	155	−64.8	----	16	154	−62.3	----	18	151	−60.8	----
15,000	17	132	−69.6	----	----	----	----	----	7	131	−69.3	----	9	126	−61.2	----	13	131	−69.5	----	8	132	−66.9	----	9	129	−62.0	----
16,000	----	----	----	----	----	----	----	----	----	----	----	----	5	107	−61.7	----	6	112	−69.8	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Dodge City, Kans. (787 m.)				El Paso, Tex. (1,195 m.)				Ely, Nev. (1,908 m.)				Fort Worth, Tex. (211 m.)				Glasgow, Mont. (648 m.)				Grand Junction, Colo. (1,414 m.)				Great Falls, Mont. (1,128 m.)			
Surface	30	924	19.6	54	29	881	25.8	33	30	811	13.6	43	30	990	25.8	56	30	939	12.2	58	25	857	20.2	33	29	888	13.1	50
500	----	----	----	----	----	----	----	----	----	----	----	----	30	959	24.9	56	----	----	----	----	----	----	----	----	----	----	----	----
1,000	30	902	20.2	51	----	----	----	----	----	----	----	----	30	905	22.1	58	30	901	12.7	50	----	----	----	----	----	----	----	----
1,500	30	851	18.4	50	29	851	24.9	33	----	----	----	----	30	854	19.0	57	30	848	10.1	51	25	848	21.2	28	29	850	11.7	46
2,000	30	802	16.1	47	29	803	21.1	35	30	802	15.0	39	30	805	15.9	54	30	798	7.0	53	25	800	18.7	26	29	800	8.3	49
2,500	30	757	13.8	42	29	758	17.1	39	30	757	13.1	38	30	759	13.6	46	30	751	3.6	56	25	755	14.4	30	29	753	4.7	54
3,000	30	712	10.4	41	29	714	13.1	44	30	712	8.9	43	30	715	10.9	43	30	706	0.4	60	25	710	10.0	36	29	708	1.1	58
4,000	30	631	3.1	42	29	633	4.8	52	30	630	1.2	49	30	634	4.4	41	30	622	−5.4	58	25	629	1.5	48	29	624	−5.7	59
5,000	30	557	−4.0	40	28	559	−1.9	45	29	555	−5.2	44	29	559	−2.3	41	30	547	−11.5	55	25	555	−6.1	56	28	548	−12.2	51
6,000	30	490	−10.7	34	27	492	−8.7	----	29	488	−11.8	----	29	492	−8.4	36	30	480	−17.8	53	24	487	−13.3	44	28	480	−18.5	46
7,000	30	430	−17.5	----	27	433	−14.9	----	29	428	−18.5	----	29	433	−14.9	----	30	419	−24.5	----	24	427	−20.0	----	28	419	−25.3	----
8,000	30	375	−24.6	----	26	378	−22.4	----	29	374	−25.6	----	28	378	−21.7	----	28	364	−31.7	----	24	372	−27.2	----	26	365	−32.0	----
9,000	29	326	−32.0	----	26	329	−29.7	----	27	326	−32.6	----	27	329	−29.1	----	28	315	−38.7	----	24	323	−35.2	----	25	316	−39.1	----
10,000	29	283	−39.0	----	25	286	−37.0	----	27	282	−40.2	----	26	286	−36.6	----	28	272	−44.6	----	24	279	−42.7	----	24	273	−45.0	----
11,000	29	244	−46.1	----	25	247	−44.3	----	27	243	−47.1	----	26	246	−44.1	----	27	234	−49.2	----	24	240	−48.0	----	24	235	−50.2	----
12,000	29	209	−52.4	----	24	212	−51.7	----	27	209	−52.3	----	26	212	−51.1	----	26	201	−51.6	----	22	206	−52.2	----	22	201	−54.3	----
13,000	25	179	−57.5	----	23	181	−58.1	----	25	179	−57.1	----	25	181	−57.4	----	23	173	−54.4	----	19	177	−55.6	----	19	172	−56.3	----
14,000	21	153	−62.2	----	18	154	−63.2	----	24	153	−61.9	----	17	154	−62.1	----	16	147	−54.2	----	13	152	−60.2	----	13	148	−58.2	----
15,000	17	130	−65.5	----	7	132	−68.8	----	15	130	−66.2	----	8	131	−67.6	----	8	126	−56.6	----	7	132	−66.3	----	----	----	----	----
16,000	7	110	−67.1	----	----	----	----	----	7	110	−67.8	----	----	----	----	----	----	----	----	----	6	112	−70.8	----	----	----	----	----

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

Altitude (meters) m. s. l.	Greensboro, N. C. (273 m.)				Hatteras, N. C. (3 m.)				Havana, Cuba (51 m.)				Huntington, W. Va. (172 m.)				International Falls, Minn. (343 m.)				Jackson, Miss.[1] (97 m.)				Joliet, Ill. (178 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	29	988	20.8	90	27	1,020	24.6	86	----	----	----	----	28	999	19.2	87	30	975	10.8	84	29	1,005	23.3	82	30	996	16.3	86
500	29	962	21.9	79	27	964	22.2	80	----	----	----	----	28	962	20.9	75	30	956	11.1	79	29	960	23.5	72	30	959	17.1	75
1,000	29	908	19.1	78	27	910	19.3	78	----	----	----	----	28	908	18.5	73	30	901	8.7	76	29	906	20.6	72	30	905	14.9	71
1,500	29	857	16.1	77	27	858	16.6	75	----	----	----	----	28	856	15.8	76	30	848	6.3	75	29	855	17.1	75	30	853	12.8	67
2,000	29	808	13.0	75	27	809	13.8	73	----	----	----	----	28	807	12.8	77	30	797	4.3	67	29	806	14.1	72	30	803	10.6	60
2,500	29	761	10.2	69	27	762	11.2	66	----	----	----	----	28	760	10.4	69	30	750	2.1	63	29	760	11.8	59	30	756	8.2	58
3,000	29	717	7.5	63	26	718	8.7	60	----	----	----	----	28	716	7.8	63	30	704	0.0	59	29	715	9.5	53	30	711	5.8	51
4,000	28	634	2.4	55	23	635	3.5	50	----	----	----	----	27	634	2.8	55	30	621	−5.5	57	29	634	4.1	44	29	629	0.2	46
5,000	27	559	−3.2	50	22	561	−1.6	44	----	----	----	----	27	559	−2.6	48	29	546	−11.5	54	29	560	−2.0	47	28	555	−5.3	----
6,000	27	492	−9.2	----	21	494	−7.4	----	----	----	----	----	27	492	−8.5	47	29	479	−17.8	54	29	493	−8.4	42	28	488	−11.5	----
7,000	27	432	−15.7	----	21	434	−13.9	----	----	----	----	----	27	433	−14.6	41	29	418	−24.5	----	28	433	−14.8	----	28	428	−17.9	----
8,000	27	377	−22.6	----	20	380	−21.0	----	----	----	----	----	26	378	−21.4	----	28	364	−31.0	----	28	378	−21.8	----	28	373	−25.3	----
9,000	26	328	−30.0	----	20	331	−28.6	----	----	----	----	----	26	329	−28.4	----	28	315	−38.4	----	27	329	−28.9	----	28	324	−32.7	----
10,000	26	285	−37.5	----	19	287	−36.0	----	----	----	----	----	26	286	−36.2	----	28	272	−44.8	----	26	286	−36.0	----	27	281	−39.6	----
11,000	26	246	−45.0	----	18	248	−43.7	----	----	----	----	----	26	247	−44.0	----	28	234	−49.9	----	25	247	−43.5	----	27	242	−46.4	----
12,000	26	211	−52.5	----	15	214	−51.6	----	----	----	----	----	26	212	−51.7	----	27	200	−53.0	----	24	212	−50.5	----	26	208	−52.4	----
13,000	24	180	−59.4	----	13	182	−59.3	----	----	----	----	----	25	181	−58.5	----	25	171	−54.0	----	24	182	−57.3	----	24	178	−56.4	----
14,000	22	154	−65.3	----	13	155	−65.3	----	----	----	----	----	23	154	−63.6	----	21	147	−55.8	----	21	155	−63.2	----	17	152	−59.6	----
15,000	17	130	−68.6	----	7	132	−68.9	----	----	----	----	----	19	131	−67.1	----	15	126	−57.5	----	18	132	−67.5	----	11	129	−60.8	----
16,000	13	110	−71.5	----	----	----	----	----	----	----	----	----	9	111	−67.7	----	11	108	−57.2	----	9	112	−69.6	----	5	110	−62.6	----
17,000	8	93	−71.6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Lake Charles, La. (5 m.)				Lander, Wyo. (1,632 m.)				Little Rock, Ark. (79 m.)				Louisville, Ky. (165 m.)				Mazatlan, Mexico (80 m.)				Medford, Oreg. (409 m.)				Merida, Mexico (27 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,015	24.4	88	30	838	11.0	63	30	1,007	21.9	85	30	998	20.4	80	30	1,002	28.2	81	30	968	20.7	40	30	1,010	26.0	82
500	30	960	23.6	73	----	----	----	----	30	960	22.6	68	30	960	20.8	72	30	956	25.4	74	30	959	21.0	40	30	957	24.0	79
1,000	30	906	20.5	71	----	----	----	----	30	906	19.7	67	30	907	18.2	72	30	903	23.0	70	30	904	18.8	40	30	904	21.1	77
1,500	30	855	17.7	68	----	----	----	----	30	855	16.6	66	30	855	15.3	70	30	853	20.5	67	30	852	15.3	43	30	853	18.0	71
2,000	30	806	15.2	59	30	801	12.0	49	29	806	14.1	62	30	806	12.6	67	30	804	17.8	65	30	804	12.0	46	30	804	15.1	72
2,500	30	760	12.7	52	30	755	9.1	48	29	760	11.7	54	30	759	10.1	58	30	758	15.1	63	30	757	9.3	42	30	759	12.4	68
3,000	30	716	10.2	47	30	710	5.4	52	29	715	9.1	51	30	715	7.4	54	30	714	12.0	62	30	712	6.4	37	30	714	9.9	64
4,000	30	634	4.6	39	30	628	−1.8	58	29	633	3.2	47	30	632	1.9	44	30	633	4.9	67	30	630	0.8	33	30	633	4.4	65
5,000	29	560	−1.0	34	30	553	−8.3	53	29	559	−3.0	42	30	558	−3.8	41	30	560	−1.4	63	30	555	−5.4	32	30	559	−1.3	64
6,000	29	494	−7.1	32	29	485	−15.0	49	29	492	−8.6	35	30	491	−9.8	----	27	493	−7.4	67	30	488	−11.6	----	30	492	−7.1	63
7,000	29	434	−13.5	34	29	424	−21.8	----	28	432	−15.0	39	30	431	−16.1	----	27	433	−13.3	58	30	428	−18.8	----	29	433	−13.4	67
8,000	29	380	−20.3	----	29	370	−29.0	----	28	378	−22.1	----	29	376	−23.5	----	27	379	−20.1	55	29	374	−26.6	----	29	378	−20.1	----
9,000	29	331	−27.5	----	29	320	−36.5	----	27	329	−29.3	----	29	327	−30.5	----	25	330	−27.6	----	27	324	−34.6	----	28	330	−27.4	----
10,000	29	288	−35.0	----	29	277	−43.4	----	27	286	−36.4	----	28	284	−37.9	----	24	287	−35.1	----	27	280	−42.3	----	27	287	−35.2	----
11,000	28	248	−42.7	----	29	238	−49.2	----	27	247	−43.3	----	28	244	−45.4	----	23	248	−43.3	----	27	241	−49.0	----	27	247	−43.5	----
12,000	28	214	−50.2	----	29	204	−53.5	----	27	212	−49.9	----	28	210	−52.5	----	22	213	−51.4	----	26	207	−54.0	----	27	213	−52.1	----
13,000	28	183	−57.4	----	27	175	−56.2	----	25	182	−56.0	----	25	180	−58.5	----	19	182	−59.3	----	24	177	−57.7	----	26	182	−60.5	----
14,000	25	158	−63.5	----	22	150	−58.8	----	15	156	−61.0	----	19	153	−63.2	----	17	154	−66.3	----	21	151	−60.1	----	21	154	−68.8	----
15,000	17	132	−69.1	----	10	128	−61.5	----	7	132	−65.7	----	10	130	−65.9	----	10	131	−72.4	----	13	128	−63.0	----	6	129	−75.9	----
16,000	----	----	----	----	6	110	−65.0	----	6	112	−67.7	----	5	111	−68.1	----	----	----	----	----	5	110	−61.0	----	----	----	----	----

Altitude (meters) m. s. l.	Miami, Fla. (4 m.)				Nashville, Tenn. (180 m.)				North Platte, Nebr. (849 m.)				Oakland, Calif. (2 m.)				Ogden, Utah (1,355 m.)				Oklahoma City, Okla. (391 m.)				Omaha, Nebr. (308 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,016	25.7	86	30	996	22.9	74	30	918	15.1	72	30	1,013	17.6	74	30	866	14.9	51	29	969	21.7	64	30	980	18.6	70
500	30	961	23.4	82	30	961	22.4	70	----	----	----	----	30	956	19.6	51	----	----	----	----	29	957	22.5	60	30	958	18.7	64
1,000	30	907	20.8	77	30	907	19.6	71	30	902	17.0	57	30	902	21.1	31	----	----	----	----	29	904	21.1	55	30	904	16.5	60
1,500	30	856	18.1	74	30	856	16.2	74	30	850	16.1	50	30	851	19.1	27	30	851	16.6	42	29	853	19.1	52	30	852	14.2	57
2,000	30	807	15.4	74	30	806	13.2	70	30	801	13.2	47	30	802	16.3	25	30	802	13.8	39	29	804	16.2	53	30	802	11.8	56
2,500	30	761	13.0	71	30	760	11.1	58	30	755	10.3	44	30	756	13.6	24	30	756	10.1	44	29	758	13.4	51	30	756	9.6	49
3,000	30	716	10.4	69	30	715	8.6	51	30	711	7.2	46	30	712	10.5	25	30	711	6.3	47	29	714	10.3	51	30	711	6.8	49
4,000	29	635	5.2	65	30	634	3.2	44	30	629	0.6	54	29	631	3.7	27	30	629	−0.7	50	28	633	3.7	49	30	629	0.6	47
5,000	29	562	−0.4	60	29	559	−2.8	46	30	554	−5.7	47	29	557	−3.1	----	30	554	−7.1	49	28	558	−3.0	45	30	555	−5.7	41
6,000	27	495	−5.9	56	29	492	−8.8	37	30	487	−12.1	41	29	490	−9.5	----	30	486	−13.9	51	28	491	−9.4	43	30	488	−12.1	32
7,000	25	435	−11.8	50	28	432	−15.4	----	30	427	−19.3	----	29	430	−16.4	----	30	426	−20.6	----	27	432	−15.8	----	30	427	−19.3	----
8,000	25	381	−18.4	50	28	378	−22.2	----	29	372	−26.8	----	29	376	−24.4	----	30	371	−27.8	----	26	377	−23.0	----	30	373	−26.2	----
9,000	25	332	−25.7	----	27	329	−29.5	----	28	323	−34.5	----	29	327	−32.2	----	29	322	−35.3	----	26	328	−29.9	----	30	324	−33.7	----
10,000	24	289	−33.5	----	27	285	−36.8	----	28	279	−42.3	----	28	283	−39.7	----	29	279	−42.8	----	26	284	−37.0	----	30	280	−41.0	----
11,000	24	250	−41.5	----	26	246	−44.4	----	27	241	−48.5	----	27	244	−46.5	----	28	239	−49.4	----	26	246	−43.9	----	30	242	−47.6	----
12,000	24	215	−49.7	----	26	212	−51.9	----	26	206	−53.6	----	27	209	−52.2	----	26	205	−53.4	----	26	211	−50.6	----	30	207	−53.0	----
13,000	23	184	−57.9	----	24	181	−58.6	----	24	176	−56.9	----	25	179	−56.6	----	21	176	−56.8	----	21	181	−55.7	----	26	177	−57.2	----
14,000	19	157	−64.8	----	17	155	−64.1	----	18	150	−60.2	----	18	154	−60.4	----	15	149	−59.9	----	19	155	−60.4	----	14	153	−60.4	----
15,000	9	133	−70.8	----	8	132	−67.1	----	9	128	−62.9	----	10	131	−62.9	----	9	125	−59.4	----	14	132	−64.6	----	8	130	−59.7	----
16,000	----	----	----	----	----	----	----	----	5	110	−66.6	----	6	111	−63.3	----	7	106	−59.9	----	8	112	−67.3	----	----	----	----	----
17,000	----	----	----	----	----	----	----	----	----	----	----	----	5	95	−63.2	----	5	90	−59.4	----	5	95	−67.9	----	----	----	----	----

See footnotes at end of table.

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

Altitude (meters) m. s. l.	Phoenix, Ariz. (339 m.)				Pittsburgh, Pa. (382 m.)				Portland, Maine (20 m.)				Rapid City, S. Dak. (981 m.)				St. Louis, Mo. (171 m.)				St. Paul, Minn. (225 m.)				San Antonio, Tex. (240 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	969	28.4	38	30	975	18.2	83	30	1,018	14.0	89	30	904	13.2	61	30	996	20.0	79	30	990	14.9	76	36	986	26.1	61
500	30	953	31.9	26	30	963	18.2	80	30	962	15.6	73	----	----	----	----	30	959	19.7	75	30	958	14.5	69	30	957	25.5	62
1,000	30	900	28.7	26	30	908	16.2	74	30	907	14.0	69	30	902	13.7	60	30	905	17.6	76	30	903	11.7	70	30	904	22.5	64
1,500	30	851	24.7	28	30	856	14.0	72	30	854	12.0	63	30	850	14.0	48	29	854	15.9	63	30	850	9.4	63	30	854	19.2	66
2,000	30	803	20.3	32	30	806	11.6	69	30	805	10.2	57	30	800	10.7	49	29	804	13.6	56	30	800	7.7	56	30	805	16.3	62
2,500	30	757	16.1	36	30	759	9.0	64	30	758	8.0	53	30	754	7.2	50	29	758	11.1	54	30	753	5.6	51	30	759	13.7	55
3,000	30	714	11.9	37	30	714	6.7	56	30	713	6.1	45	30	709	3.9	51	29	713	7.8	57	30	708	3.1	51	30	715	11.5	42
4,000	30	632	3.9	41	29	632	1.5	48	30	631	0.9	38	30	626	−2.7	52	29	632	1.5	53	29	626	−2.2	48	30	654	5.9	33
5,000	30	558	−2.7	35	28	558	−3.7	42	30	556	−4.8	41	29	551	−9.5	52	28	557	−4.7	55	29	551	−8.3	44	30	560	−0.5	31
6,000	30	491	−9.2	31	28	490	−9.8	41	30	489	−10.9	36	28	483	−16.1	45	28	490	−10.6	45	29	483	−15.0	----	30	494	−6.5	30
7,000	30	432	−15.8	----	28	431	−16.4	45	30	429	−17.1	38	26	423	−22.6	----	28	430	−17.3	----	29	423	−21.7	----	30	434	−13.2	----
8,000	30	377	−23.4	----	28	377	−23.0	----	30	375	−24.2	----	26	368	−29.7	----	28	375	−24.4	----	29	369	−28.6	----	29	379	−20.4	----
9,000	30	328	−31.1	----	28	328	−30.2	----	30	325	−31.5	----	26	319	−36.9	----	27	326	−31.6	----	29	320	−35.8	----	28	330	−27.4	----
10,000	30	284	−38.6	----	28	284	−37.4	----	30	282	−39.2	----	26	276	−43.9	----	24	283	−38.5	----	29	276	−43.2	----	27	287	−34.9	----
11,000	30	245	−45.8	----	28	245	−44.7	----	29	243	−47.0	----	26	237	−49.0	----	23	244	−45.5	----	29	238	−49.1	----	26	248	−42.1	----
12,000	30	210	−52.2	----	28	210	−51.5	----	29	208	−54.1	----	24	204	−52.6	----	22	210	−51.9	----	26	204	−53.9	----	26	214	−49.5	----
13,000	28	180	−57.7	----	27	180	−57.4	----	23	178	−59.6	----	20	175	−56.2	----	22	179	−57.4	----	22	175	−56.4	----	26	183	−56.4	----
14,000	25	154	−62.2	----	19	153	−61.8	----	22	152	−63.1	----	13	150	−59.1	----	18	153	−62.1	----	20	149	−58.1	----	22	156	−62.4	----
15,000	20	131	−66.9	----	18	130	−63.9	----	13	130	−65.5	----	7	129	−61.3	----	11	130	−65.7	----	16	127	−59.5	----	16	132	−68.1	----
16,000	10	110	−69.8	----	13	112	−64.7	----	6	110	−66.5	----	----	----	----	----	6	110	−67.2	----	13	108	−61.4	----	9	112	−71.0	----
17,000	----	----	----	----	6	95	−64.1	----	----	----	----	----	----	----	----	----	----	----	----	----	5	93	−63.5	----	----	----	----	----

Altitude (meters) m. s. l.	San Juan, P. R. (15 m.)				Santa Maria, Calif. (71 m.)				Sault Ste. Marie, Mich. (221 m.)				Spokane, Wash. (598 m.)				Swan Island, W. I.[2] (10 m.)				Tacubaya, Mexico (2,306 m.)				Tampa, Fla. (3 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	29	1,013	25.9	85	30	1,005	15.2	83	30	992	10.9	91	30	946	14.1	64	----	----	----	----	30	774	15.6	74	30	1,017	25.6	87
500	29	959	22.8	83	30	956	18.3	67	30	960	12.0	81	----	----	----	----	----	----	----	----	----	----	----	----	30	961	23.4	80
1,000	29	905	19.8	80	30	902	20.4	44	30	904	9.9	69	30	902	14.4	53	----	----	----	----	----	----	----	----	30	908	20.8	75
1,500	29	854	16.9	77	30	851	19.1	41	30	851	8.3	57	30	850	10.7	55	----	----	----	----	----	----	----	----	30	856	18.0	73
2,000	29	805	14.4	71	30	802	16.2	37	30	800	6.6	50	30	800	7.0	57	----	----	----	----	----	----	----	----	30	807	15.1	71
2,500	29	759	12.0	63	30	756	13.3	31	30	753	4.4	48	30	753	3.6	60	----	----	----	----	30	757	14.4	73	30	761	12.5	65
3,000	29	715	9.3	57	30	712	10.5	32	30	708	1.7	51	30	707	0.3	62	----	----	----	----	30	713	10.7	75	30	717	9.8	64
4,000	29	633	3.6	57	30	631	4.2	32	29	625	−3.0	49	30	624	−5.0	57	----	----	----	----	30	632	4.1	83	29	635	4.2	54
5,000	29	559	−2.0	52	30	557	−2.5	----	28	550	−8.7	53	30	548	−11.3	55	----	----	----	----	30	558	−2.0	84	29	561	−1.5	56
6,000	28	492	−7.9	60	30	490	−9.1	----	28	483	−14.4	45	30	481	−17.5	52	----	----	----	----	29	492	−7.4	78	29	494	−7.6	49
7,000	27	433	−14.3	66	30	430	−15.7	----	28	423	−21.0	----	30	420	−24.1	----	----	----	----	----	29	432	−13.2	72	29	434	−13.8	50
8,000	27	378	−21.2	----	29	376	−23.3	----	28	368	−28.1	----	30	366	−31.3	----	----	----	----	----	28	378	−19.8	69	27	379	−20.6	46
9,000	27	330	−28.5	----	28	327	−31.1	----	27	320	−35.7	----	30	316	−38.8	----	----	----	----	----	26	329	−26.7	----	27	331	−27.8	----
10,000	26	286	−36.3	----	28	284	−38.5	----	26	276	−43.4	----	30	273	−45.7	----	----	----	----	----	26	287	−34.1	----	26	287	−35.5	----
11,000	26	247	−44.6	----	27	244	−45.7	----	25	238	−49.0	----	29	235	−50.7	----	----	----	----	----	23	248	−42.3	----	26	248	−43.8	----
12,000	26	212	−52.9	----	27	210	−51.9	----	25	204	−54.0	----	28	201	−53.3	----	----	----	----	----	23	213	−50.6	----	26	213	−52.2	----
13,000	23	181	−60.0	----	26	179	−57.3	----	22	174	−56.3	----	21	173	−54.9	----	----	----	----	----	20	182	−58.9	----	26	182	−60.2	----
14,000	18	154	−65.8	----	25	153	−61.6	----	22	148	−58.6	----	17	148	−56.3	----	----	----	----	----	10	155	−66.0	----	23	155	−67.1	----
15,000	9	132	−69.7	----	21	130	−65.5	----	15	127	−59.5	----	9	127	−56.6	----	----	----	----	----	----	----	----	----	17	131	−72.6	----
16,000	6	111	−72.4	----	16	111	−68.3	----	11	108	−59.0	----	----	----	----	----	----	----	----	----	----	----	----	----	11	110	−73.2	----
17,000	----	----	----	----	6	94	−69.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Tatoosh Island, Wash. (31 m.)				Toledo, Ohio (191 m.)				Washington, D. C. (25 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,015	11.0	93	30	996	16.9	79	30	1,017	21.4	82
500	30	960	11.4	78	30	961	17.3	73	30	963	19.7	75
1,000	30	904	10.2	68	30	906	14.9	71	30	909	17.1	74
1,500	30	851	8.2	58	30	854	12.6	63	30	857	14.9	74
2,000	30	801	6.2	52	30	804	10.3	59	30	808	12.6	69
2,500	30	753	3.8	52	30	757	8.1	55	30	761	10.1	66
3,000	30	708	1.5	44	30	713	5.6	52	30	716	7.5	60
4,000	30	625	−4.1	44	30	630	0.4	46	30	634	2.2	53
5,000	30	550	−9.7	44	30	556	−5.1	45	30	559	−3.2	50
6,000	29	482	−16.3	42	29	488	−11.5	44	30	492	−9.1	44
7,000	28	421	−23.1	----	29	428	−17.9	----	30	432	−15.5	44
8,000	28	367	−30.7	----	29	373	−24.7	----	30	378	−22.8	----
9,000	27	318	−38.2	----	28	325	−31.9	----	30	329	−29.8	----
10,000	27	274	−44.8	----	28	282	−39.2	----	30	285	−37.3	----
11,000	25	236	−50.3	----	27	242	−46.0	----	30	246	−45.2	----
12,000	23	202	−53.6	----	27	208	−52.5	----	30	211	−52.9	----
13,000	19	173	−55.8	----	25	178	−57.6	----	28	180	−59.3	----
14,000	17	148	−56.8	----	23	152	−61.3	----	24	154	−64.4	----
15,000	8	126	−59.8	----	17	130	−62.3	----	12	131	−66.4	----
16,000	----	----	----	----	10	110	−62.8	----	7	111	−67.5	----
17,000	----	----	----	----	5	95	−65.1	----	6	93	−66.7	----

[1] Raobs discontinued Sept. 30, 1945.
[2] Data not received.

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

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

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

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

Raob data for Havana, Cuba, will appear in a later issue.

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

Altitude (meters) m. s. l.	Abilene, Tex. (538 m.)			Albuquerque, N. Mex (1,630 m.)			Atlanta, Ga. (299 m.)			Billings, Mont. (1,095 m.)			Bismarck, N. Dak. (512 m.)			Boise, Idaho (868 m.)			Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (132 m.)			Charleston, S. C. (16 m.)			Cincinnati, Ohio (152 m.)			Denver, Colo. (1,627 m.)			El Paso, Tex. (1,196 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	28	155	3.6	30	217	2.5	28	143	0.9	30	289	2.0	30	257	2.1	30	325	3.8	30	110	4.0	29	252	2.1	30	195	1.9	28	155	1.3	30	131	0.4	28	30	1.7	30	232	2.5
500	---	---	---	---	---	---	28	126	1.1	---	---	---	---	---	---	---	---	---	30	116	5.1	29	247	4.0	30	201	4.9	28	147	3.4	30	217	1.7	---	---	---	---	---	---
1,000	28	179	4.9	---	---	---	28	149	1.2	---	---	---	30	252	2.3	30	321	4.3	27	136	4.9	27	236	6.3	27	224	6.3	26	153	2.6	28	211	2.5	---	---	---	---	---	---
1,500	28	182	5.2	---	---	---	27	153	0.8	30	271	4.9	29	259	3.7	30	314	4.5	25	111	2.5	23	240	6.8	27	248	7.3	25	138	1.6	27	213	4.3	---	---	---	30	266	2.4
2,000	28	182	5.0	30	214	2.9	26	235	2.5	30	274	5.5	24	260	7.7	30	295	4.3	25	125	2.7	20	244	7.5	25	265	8.6	24	262	0.2	24	229	5.8	28	14	1.6	30	223	2.0
2,500	26	186	4.5	30	228	3.0	23	237	3.2	29	277	6.7	21	262	9.1	29	292	4.2	23	121	2.1	16	251	5.9	19	268	8.2	23	3	0.9	16	244	7.2	27	314	0.6	30	232	1.8
3,000	24	212	2.1	30	252	3.9	21	235	2.3	27	273	8.2	20	259	10.8	28	290	5.3	23	115	2.3	15	254	6.7	15	276	9.8	22	351	0.8	12	249	5.6	27	272	2.5	29	230	2.4
4,000	21	286	3.3	29	270	6.9	15	267	3.6	23	282	11.0	16	266	11.8	26	275	7.5	22	78	2.1	12	271	5.8	11	281	11.6	21	303	0.8	10	273	5.6	26	266	7.0	23	233	4.9
5,000	16	305	5.6	29	271	8.7	10	263	2.8	18	281	11.7	16	255	13.5	24	285	9.1	22	110	1.7	10	237	6.1	10	276	15.3	14	296	2.5	---	---	---	21	265	12.0	---	---	---
6,000	15	312	5.7	28	265	8.5	---	---	---	16	292	12.6	12	253	16.2	23	290	11.4	22	89	1.5	---	---	---	---	---	---	13	297	2.0	---	---	---	18	262	14.8	---	---	---
8,000	12	291	7.4	26	259	13.0	---	---	---	14	287	17.2	---	---	---	20	300	13.7	17	258	1.1	---	---	---	---	---	---	---	---	---	---	---	---	13	260	17.8	---	---	---
10,000	---	---	---	24	260	17.5	---	---	---	---	---	---	---	---	---	15	284	17.4	11	263	4.0	---	---	---	---	---	---	---	---	---	---	---	---	11	256	22.4	---	---	---
12,000	---	---	---	20	263	16.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14,000	---	---	---	16	283	14.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Ely, Nev. (1,910 m.)			Grand Junction, Colo. (1,413 m.)			Greensboro, N. C. (271 m.)			Havre, Mont. (767 m.)			Jacksonville, Fla. (16 m.)			Joliet, Ill. (178 m.)			Las Vegas, Nev. (573 m.)			Little Rock, Ark. (88 m.)			Medford, Oreg. (410 m.)			Miami, Fla. (12 m.)			Mobile, Ala. (66 m.)			Nashville, Tenn. (194 m.)			New York, N. Y. (15 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	319	1.8	27	313	2.4	25	200	0.6	27	278	3.0	29	100	3.3	26	140	1.5	30	198	1.3	29	201	1.1	30	319	1.5	28	107	3.7	27	165	1.4	30	209	1.8	27	195	1.6
500	---	---	---	---	---	---	25	198	1.2	---	---	---	29	111	4.4	26	160	2.1	---	---	---	29	225	1.4	30	325	1.4	28	113	6.5	27	156	2.1	30	206	2.3	27	235	2.3
1,000	---	---	---	---	---	---	25	210	2.5	27	280	4.5	28	116	3.2	23	188	3.2	30	206	2.2	26	223	2.2	30	326	1.9	27	116	6.3	25	118	1.9	30	213	2.3	26	259	3.2
1,500	---	---	---	27	308	2.9	23	239	2.2	27	278	5.3	27	140	1.8	19	238	4.4	30	209	2.4	25	238	2.5	30	310	1.4	26	104	5.8	23	108	1.9	29	206	3.2	26	249	3.9
2,000	30	306	1.8	27	294	3.9	21	261	2.3	24	278	6.0	25	117	1.7	15	259	4.1	30	225	2.6	22	261	2.1	30	287	1.0	24	102	4.7	17	204	0.7	27	206	4.2	26	265	6.2
2,500	30	280	2.5	27	277	3.7	19	258	2.9	19	276	7.7	23	123	2.4	14	272	6.8	30	235	3.6	20	210	1.3	28	328	1.3	24	92	4.9	15	210	1.3	27	210	4.6	23	265	6.4
3,000	30	265	3.6	27	265	5.6	17	265	4.4	13	276	7.5	19	142	1.8	12	275	7.1	30	240	4.8	18	246	0.6	27	318	3.0	22	98	5.3	13	225	1.4	23	232	4.4	19	261	7.0
4,000	28	248	4.1	25	247	6.9	16	287	5.5	---	---	---	17	211	1.5	---	---	---	30	259	4.7	14	306	1.4	23	312	6.0	16	110	4.7	11	277	2.2	18	228	7.1	13	263	5.6
5,000	24	275	6.5	22	257	7.8	16	276	6.5	---	---	---	14	236	3.4	---	---	---	29	265	4.9	11	254	7.6	20	320	6.8	12	110	4.4	---	---	---	14	254	8.1	11	270	6.7
6,000	22	285	9.6	18	276	10.7	15	273	6.8	---	---	---	13	236	3.7	---	---	---	29	280	6.1	---	---	---	19	319	6.5	10	108	4.5	---	---	---	12	260	9.2	---	---	---
8,000	18	291	10.4	14	273	12.7	13	246	6.6	---	---	---	---	---	---	---	---	---	24	289	8.0	---	---	---	11	283	6.5	---	---	---	---	---	---	---	---	---	---	---	---
10,000	16	298	16.1	---	---	---	12	265	9.9	---	---	---	---	---	---	---	---	---	19	297	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	15	269	16.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11	269	14.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Oakland, Calif. (8 m.)			Oklahoma City, Okla. (396 m.)			Omaha, Nebr. (306 m.)			Phoenix, Ariz. (338 m.)			Rapid City, S. Dak. (982 m.)			St. Louis, Mo. (181 m.)			St. Paul, Minn. (225 m.)			San Antonio, Tex. (240 m.)			San Diego, Calif. (15 m.)			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	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	284	5.1	26	173	4.7	30	87	0.7	30	246	1.0	29	338	1.8	24	133	1.3	30	190	1.4	30	140	2.8	30	289	4.2	27	304	2.1	27	270	1.6	30	251	2.0	29	156	1.8
500	30	299	4.1	26	171	5.2	30	154	0.7	30	242	1.8	---	---	---	24	168	2.5	30	205	1.7	30	144	3.5	30	290	3.7	27	282	2.2	27	296	1.2	---	---	---	29	194	1.9
1,000	29	320	2.4	26	176	6.0	27	179	2.4	30	242	2.9	29	338	1.9	23	219	3.8	29	214	2.7	29	148	4.3	28	268	1.4	25	247	3.3	26	347	0.6	30	252	2.8	28	240	2.3
1,500	29	343	2.4	25	189	7.3	26	209	4.4	30	232	2.8	29	302	2.3	22	226	5.6	25	215	3.9	28	149	4.1	27	186	1.2	24	260	5.1	22	208	0.8	30	248	3.9	25	250	2.7
2,000	29	338	2.0	25	198	7.9	24	220	6.7	30	215	2.1	28	273	3.7	16	276	4.5	21	227	4.9	28	160	3.0	25	169	2.2	20	268	7.0	18	238	1.4	25	252	5.3	22	260	4.8
2,500	29	347	1.9	25	216	7.2	24	234	7.9	30	211	2.5	27	266	5.4	15	296	5.4	19	250	4.7	27	161	2.3	24	171	2.4	17	272	8.8	16	289	2.0	22	270	6.0	21	265	7.6
3,000	29	338	2.1	24	235	6.8	22	235	9.3	30	225	2.7	23	272	6.8	14	284	6.5	15	255	4.7	23	98	0.5	24	174	2.7	16	269	9.1	15	290	3.0	19	263	5.1	20	262	9.1
4,000	29	324	2.8	21	261	8.9	22	254	9.9	30	236	3.6	22	272	10.3	14	289	7.9	13	275	8.6	20	22	1.7	21	234	2.3	14	268	11.8	13	295	6.9	18	274	6.4	14	265	11.3
5,000	28	304	4.8	17	268	9.4	18	262	12.0	29	238	5.0	21	269	11.6	13	289	11.0	10	281	10.9	20	311	2.3	20	268	3.7	13	264	13.8	13	292	8.9	15	309	8.0	10	271	8.9
6,000	26	305	6.0	15	286	8.1	14	289	11.0	27	233	6.6	17	269	13.3	11	297	13.4	---	---	---	16	277	3.2	20	275	5.8	12	268	16.8	11	287	11.0	13	294	10.3	---	---	---
8,000	16	279	5.8	---	---	---	---	---	---	25	259	6.7	11	255	19.6	---	---	---	---	---	---	---	---	---	17	284	6.2	---	---	---	---	---	---	---	---	---	---	---	---
10,000	13	264	10.7	---	---	---	---	---	---	24	273	11.5	---	---	---	---	---	---	---	---	---	---	---	---	13	256	11.6	---	---	---	---	---	---	---	---	---	---	---	---
12,000	11	263	12.0	---	---	---	---	---	---	20	269	11.9	---	---	---	---	---	---	---	---	---	---	---	---	11	260	17.1	---	---	---	---	---	---	---	---	---	---	---	---
14,000	---	---	---	---	---	---	---	---	---	13	253	11.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16,000	---	---	---	---	---	---	---	---	---	12	256	9.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

Section	Surface to 2,500 meters (m. s. l.)					Above 2,500 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast [1]	33.5	WSW.	2,482	15	Portland, Maine	50.8	NW.	4,783	17	Caribou, Maine	79.2	WNW.	16,571	6	Philipsburg, Pa.
East-Central [2]	30.0	SSW.	2,500	14	Chattanooga, Tenn	32.5	SSW.	2,638	14	Chattanooga, Tenn	39.6	W.	13,975	19	Lynchburg, Va.
Southeast [3]	28.6	E.	682	15	Miami, Fla	36.0	SSW.	2,988	14	Birmingham, Ala	33.8	NNW.	10,618	2	Birmingham, Ala.
North-Central [4]	48.8	WSW.	2,472	23	Williston, N. Dak	42.0	WSW.	5,000	27	International Falls, Minn.	60.0	W.	13,900	29	Sault Ste. Marie, Mich.
Central [5]	36.3	S.	1,420	16	Wichita, Kans	39.0	WNW.	4,000	9	North Platte, Nebr	68.8	WNW.	16,818	3	Goodland, Kans.
South-Central [6]	34.0	S.	1,008	19	Oklahoma City, Okla.	29.0	NNW.	3,304	14	Waco, Texas	62.0	WSW.	13,256	25	Big Spring, Tex.
Northwest [7]	32.5	NNW.	2,498	17	Tatoosh Is., Wash	42.2	NW.	4,292	17	Burns, Oreg	66.0	W.	13,386	9	Portland, Oreg.
West-Central [8]	47.0	S.	2,464	21	Salt Lake City, Utah	46.6	WNW.	3,407	16	Rock Springs, Wyo	64.6	SW.	9,388	22	Sheridan, Wyo.
Southwest [9]	31.0	S.	1,720	16	Roswell, N. Mex	37.8	SW.	3,873	21	Las Vegas, Nev	62.0	WNW.	10,065	29	Tucson, Ariz.

[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.