METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR SEPTEMBER 1944

[Climate and Crop Weather Division, W. A. Mattice, Acting in charge]

AEROLOGICAL OBSERVATIONS

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees Centigrade, and relative humidities in percent, obtained by radiosondes during September 1944*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Albany, N. Y. (86 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	28	1,007	14.3	89	28	838	20.5	44	30	1,015	25.6	84	28	982	21.6	80	30	927	23.0	57	30	955	13.0	77	30	915	18.1	44
500	28	959	14.8	75	----	----	----	----	30	959	23.8	75	28	960	21.9	73	----	----	----	----	----	----	----	----	----	----	----	----
1,000	28	904	12.0	73	----	----	----	----	30	906	20.5	75	28	906	19.2	72	30	903	22.3	54	30	901	13.5	59	30	901	20.0	36
1,500	28	851	9.2	69	----	----	----	----	30	855	17.4	72	28	855	15.9	71	30	853	19.0	56	30	849	10.2	60	30	851	17.0	35
2,000	28	801	6.7	68	28	802	19.1	41	30	806	14.6	65	28	806	13.0	67	30	804	16.0	51	30	799	7.2	56	30	801	13.2	37
2,500	28	754	4.4	64	28	756	15.6	44	30	760	12.1	58	28	759	10.4	57	30	758	13.2	46	30	751	4.7	47	30	754	9.1	41
3,000	28	708	2.0	55	28	713	11.7	47	30	716	9.5	58	28	714	7.8	52	30	714	10.0	45	30	706	1.7	46	30	710	5.4	45
4,000	27	625	−3.5	46	28	631	3.5	57	30	634	4.1	49	28	632	3.0	37	30	632	4.0	33	30	624	−4.0	45	30	628	−1.7	46
5,000	27	550	−8.6	36	28	558	−3.5	52	30	560	−1.4	50	28	558	−2.7	33	29	559	−1.9	31	30	549	−10.1	41	30	553	−8.5	43
6,000	26	483	−15.2	----	28	491	−10.3	48	30	493	−7.2	43	28	491	−8.9	32	29	492	−7.9	31	30	481	−16.6	43	30	485	−15.3	39
7,000	25	422	−22.4	----	28	430	−16.6	44	30	433	−13.4	39	27	431	−15.4	----	29	432	−14.1	----	30	421	−24.0	43	30	424	−22.3	36
8,000	25	368	−29.7	----	27	376	−23.6	----	30	379	−20.4	42	27	377	−22.3	----	29	378	−21.1	----	30	365	−31.7	43	30	369	−29.6	----
9,000	23	319	−37.0	----	27	326	−31.2	----	30	330	−27.7	44	26	328	−29.4	----	29	328	−28.5	----	30	316	−39.6	----	29	320	−37.1	----
10,000	23	275	−44.3	----	26	283	−38.4	----	30	287	−35.2	----	25	285	−36.5	----	29	286	−36.0	----	30	273	−47.3	----	29	277	−43.3	----
11,000	23	237	−50.1	----	26	244	−45.3	----	30	248	−42.9	----	25	246	−44.0	----	29	247	−43.7	----	28	234	−52.4	----	27	238	−48.8	----
12,000	22	202	−54.4	----	26	210	−51.4	----	27	213	−50.3	----	22	211	−51.1	----	28	212	−51.0	----	25	200	−54.5	----	25	204	−52.8	----
13,000	21	173	−56.9	----	24	179	−57.0	----	23	183	−57.1	----	20	181	−57.3	----	27	182	−58.1	----	20	172	−55.4	----	22	175	−55.5	----
14,000	15	147	−58.8	----	20	153	−62.5	----	11	156	−62.7	----	14	154	−62.9	----	16	154	−64.5	----	13	147	−56.4	----	16	149	−57.1	----
15,000	9	125	−60.6	----	8	130	−65.9	----	----	----	----	----	11	131	−67.6	----	8	131	−68.9	----	8	126	−58.5	----	9	126	−58.2	----
16,000	7	107	−61.6	----	----	----	----	----	----	----	----	----	7	111	−69.4	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Brownsville, Tex. (6 m.)				Buffalo, N. Y (221 m.)				Caribou, Maine (193 m.)				Charleston, S. C. (14 m.)				Denver, Colo. (1,616 m.)				Dodge City, Kans. (787 m.)				El Paso, Tex. (1,195 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1012	26.0	87	30	991	15.1	84	29	993	12.0	90	28	1,014	22.6	93	30	839	17.0	43	30	924	18.3	70	30	881	22.6	05
500	30	957	23.2	80	30	959	15.2	76	29	958	12.4	80	28	959	22.4	82	----	----	----	----	----	----	----	----	----	----	----	----
1,000	30	904	20.2	73	30	904	12.4	73	29	902	9.7	77	28	906	20.0	77	----	----	----	----	30	902	19.7	59	----	----	----	----
1,500	30	853	17.4	67	30	851	9.5	72	29	850	6.9	76	28	855	17.1	76	----	----	----	----	30	851	17.9	49	30	851	22.1	45
2,000	30	804	14.9	59	30	801	6.8	68	29	799	4.3	68	28	806	14.2	70	30	802	17.5	35	30	802	15.3	46	30	803	18.5	48
2,500	30	757	12.4	54	30	753	4.2	59	29	751	2.0	59	28	759	11.4	71	30	756	14.0	37	30	756	12.2	44	30	757	14.8	51
3,000	30	713	9.6	56	30	708	1.9	46	29	706	−0.5	52	28	715	8.7	67	30	712	9.9	41	30	712	9.0	44	30	714	11.2	53
4,000	30	632	4.2	50	30	625	−3.5	38	29	622	−5.6	40	28	633	3.3	62	30	630	2.4	48	30	630	2.0	42	30	632	4.1	53
5,000	29	558	−1.1	39	30	550	−9.4	34	29	547	−11.6	31	27	559	−1.9	60	30	556	−5.5	54	30	556	−4.7	41	30	559	−2.4	47
6,000	29	492	−6.8	35	30	482	−15.9	33	29	479	−18.5	37	26	492	−7.8	49	30	489	−12.6	43	29	489	−10.8	32	30	492	−8.2	38
7,000	29	432	−13.0	31	30	422	−23.0	36	29	418	−25.7	44	25	433	−13.9	51	30	428	−19.7	----	29	429	−17.6	----	30	432	−14.5	38
8,000	29	378	−19.9	30	30	367	−30.2	41	29	363	−32.9	----	25	378	−20.7	44	30	374	−27.0	----	29	374	−25.2	----	30	377	−21.2	----
9,000	29	329	−27.5	33	30	318	−37.4	----	29	315	−40.1	----	24	329	−27.7	45	29	324	−34.4	----	29	325	−32.6	----	30	328	−28.5	----
10,000	28	285	−35.2	----	30	275	−43.9	----	29	271	−46.0	----	24	286	−35.2	----	28	281	−41.7	----	28	282	−40.4	----	29	285	−36.0	----
11,000	28	247	−42.8	----	30	236	−49.3	----	29	233	−50.4	----	23	247	−42.7	----	27	242	−48.8	----	28	243	−47.6	----	28	246	−43.6	----
12,000	27	213	−50.4	----	29	202	−53.9	----	29	199	−53.2	----	19	212	−50.1	----	22	206	−54.3	----	26	208	−53.6	----	28	212	−50.9	----
13,000	25	182	−58.1	----	26	173	−55.7	----	26	171	−55.5	----	17	182	−57.7	----	16	176	−57.7	----	25	178	−58.1	----	27	182	−58.0	----
14,000	21	155	−65.6	----	20	149	−57.7	----	23	146	−57.1	----	12	154	−64.5	----	12	150	−60.3	----	21	151	−62.0	----	21	155	−64.0	----
15,000	9	132	−70.0	----	10	127	−58.8	----	11	124	−56.2	----	5	128	−69.9	----	----	----	----	----	8	129	−65.5	----	5	131	−66.5	----
16,000	----	----	----	----	----	----	----	----	6	106	−57.6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during September 1944*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Ely, Nev.[1] (1908 m.)				Glasgow, Mont. (648 m.)				Great Falls, Mont. (1128 m.)				Greensboro, N. C. (273 m.)				Hatteras, N. C. (3 m.)				Huntington, W. Va. (172 m.)				Int'l Falls, Minn. (343 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	28	810	14.9	26	30	939	14.9	55	30	887	15.2	47	29	986	18.8	86	30	1,016	22.9	88	30	997	16.6	88	30	974	11.6	85
500	----	----	----	----	----	----	----	----	----	----	----	----	29	960	19.6	75	30	960	21.0	77	30	960	18.6	68	30	956	12.4	77
1,000	----	----	----	----	30	901	14.8	48	----	----	----	----	29	906	16.8	73	30	906	18.2	73	30	905	15.6	66	30	901	9.6	76
1,500	----	----	----	----	30	849	11.3	51	30	849	13.8	41	29	855	13.7	75	30	854	15.2	71	30	854	12.0	69	30	848	6.8	75
2,000	28	801	16.4	26	30	799	7.7	54	30	800	10.1	44	29	805	10.6	78	30	805	12.6	69	30	804	8.9	73	30	797	4.4	69
2,500	28	755	15.2	26	30	752	4.4	54	30	752	6.3	50	29	758	8.2	66	30	758	10.3	62	30	756	6.8	61	30	750	2.5	56
3,000	28	712	11.4	26	30	707	1.3	55	30	708	2.7	56	29	713	5.9	57	30	714	7.8	54	30	712	4.7	47	30	705	0.2	55
4,000	28	630	3.3	27	30	624	−4.7	51	29	625	−4.0	57	29	630	0.6	55	30	632	2.4	49	30	629	−0.1	35	30	621	−5.1	50
5,000	28	556	−4.7	29	30	548	−10.7	46	29	550	−10.6	49	28	556	−4.8	43	29	558	−3.3	50	30	554	−5.9	31	29	546	−11.2	43
6,000	26	489	−11.5	31	30	481	−17.5	45	29	482	−17.7	44	28	489	−11.0	47	29	491	−9.1	53	30	487	−12.6	36	28	479	−18.1	43
7,000	25	429	−18.4	28	30	420	−25.0	41	29	421	−25.0	50	28	428	−17.7	42	29	431	−15.2	50	29	427	−18.8	----	28	418	−25.3	----
8,000	24	374	−25.8	28	30	365	−32.3	----	29	366	−31.9	----	28	374	−24.6	36	29	376	−22.1	53	29	372	−26.0	----	28	363	−32.8	----
9,000	22	325	−32.7	24	30	316	−39.9	----	29	317	−39.4	----	28	325	−31.9	----	28	327	−29.8	54	29	323	−33.1	----	26	314	−40.3	----
10,000	22	282	−40.1	----	30	272	−47.1	----	29	273	−46.4	----	28	282	−39.4	----	28	284	−37.3	57	29	280	−40.4	----	26	271	−46.8	----
11,000	19	244	−46.6	----	30	234	−53.1	----	29	235	−51.9	----	27	243	−47.0	----	28	245	−44.9	----	28	242	−47.1	----	24	233	−51.8	----
12,000	19	210	−52.1	----	29	200	−55.4	----	23	200	−54.4	----	26	208	−54.3	----	28	211	−52.5	----	26	207	−53.2	----	22	200	−53.7	----
13,000	15	180	−56.9	----	21	172	−55.8	----	18	172	−56.1	----	25	178	−60.4	----	26	180	−59.2	----	25	177	−58.4	----	17	171	−55.1	----
14,000	11	153	−61.2	----	16	147	−56.6	----	13	146	−57.9	----	17	151	−64.7	----	18	153	−64.2	----	14	152	−61.4	----	5	147	−56.4	----
15,000	7	129	−64.7	----	10	126	−58.2	----	----	----	----	----	9	129	−68.0	----	----	----	----	----	7	130	−65.0	----	5	125	−57.6	----

Altitude (meters) m. s. l.	Jackson, Miss. (97 m.)				Joliet, Ill. (178 m.)				Lake Charles, La. (5 m.)				Lakehurst, N. J.[1] (39 m.)				Little Rock, Ark. (79 m.)				Louisville, Ky. (165 m.)				Mazatlan, Mexico (80 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	1,004	23.4	77	30	995	16.1	84	30	1,014	24.5	86	26	1,014	17.9	82	30	1,006	22.7	77	30	997	18.3	84	25	1,001	27.2	83
500	29	958	22.8	69	30	958	17.9	68	30	959	23.6	74	26	960	17.4	74	30	959	23.2	65	30	960	20.0	69	25	955	24.7	80
1,000	29	905	19.3	72	30	904	14.4	70	30	905	20.3	75	26	906	14.4	70	30	905	19.5	71	30	906	16.4	70	25	902	22.5	72
1,500	29	854	16.2	70	30	852	11.8	67	30	855	17.1	71	26	854	11.8	64	30	854	16.5	64	30	854	13.2	68	25	852	19.9	67
2,000	29	805	13.7	64	30	802	9.0	60	30	805	14.4	64	26	804	9.7	51	30	805	13.7	61	30	804	10.8	57	25	804	17.4	60
2,500	29	758	11.1	57	30	754	6.5	50	30	759	11.7	56	26	757	7.1	46	30	758	11.3	49	30	757	8.5	47	25	758	14.9	56
3,000	29	714	8.8	44	30	710	3.9	46	30	715	9.5	45	26	712	4.4	46	30	714	8.6	45	30	713	6.2	39	25	714	11.7	56
4,000	29	632	3.0	41	30	627	−1.6	44	30	633	4.3	37	25	629	−0.5	36	30	632	3.0	30	30	630	0.8	32	22	633	5.1	61
5,000	29	558	−2.1	32	30	552	−7.6	44	30	560	−0.7	32	25	555	−6.3	42	30	558	−2.4	27	30	556	−5.1	32	19	559	−0.5	47
6,000	29	491	−8.3	33	30	485	−13.9	39	30	493	−6.9	31	25	487	−12.6	39	30	491	−9.0	30	30	489	−11.7	----	18	493	−5.9	38
7,000	29	431	−15.0	35	30	424	−20.8	46	30	433	−13.5	36	25	427	−19.3	39	30	431	−15.5	----	30	428	−18.3	----	16	433	−12.1	----
8,000	29	377	−21.7	36	30	370	−28.3	----	30	379	−20.4	----	23	372	−26.4	----	30	377	−22.5	----	28	374	−25.7	----	16	379	−18.6	----
9,000	29	328	−29.2	----	30	320	−36.1	----	30	330	−27.7	----	23	323	−33.7	----	30	328	−29.8	----	28	324	−33.1	----	15	331	−26.3	----
10,000	29	285	−36.5	----	30	277	−43.5	----	30	287	−35.1	----	23	280	−40.9	----	30	285	−36.9	----	28	281	−39.8	----	14	288	−34.1	----
11,000	29	246	−43.8	----	30	239	−49.2	----	29	247	−42.8	----	22	241	−47.2	----	30	246	−44.0	----	28	242	−46.7	----	12	248	−42.8	----
12,000	29	212	−51.2	----	27	204	−54.3	----	29	213	−50.5	----	21	207	−53.2	----	29	212	−50.7	----	27	208	−52.7	----	10	214	−49.7	----
13,000	28	181	−58.4	----	24	175	−57.3	----	25	183	−58.0	----	16	177	−58.1	----	28	181	−57.1	----	26	178	−57.5	----	7	183	−57.6	----
14,000	23	154	−64.5	----	15	150	−59.1	----	18	156	−64.5	----	10	151	−61.2	----	21	154	−62.6	----	17	151	−62.0	----	5	156	−65.4	----
15,000	19	131	−69.2	----	7	126	−59.4	----	13	132	−70.5	----	6	128	−62.5	----	14	130	−66.2	----	7	129	−63.4	----	----	----	----	----
16,000	5	110	−71.0	----	5	108	−59.0	----	5	112	−72.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during September 1944*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Medford, Oreg.[2] (409 m.)				Merida, Mexico (21 m.)				Miami, Fla. (4 m.)				Nashville, Tenn. (180 m.)				Norfolk, Va.[1] (4 m)				Oakland, Calif. (2 m.)				Ogden, Utah. (1,355 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	967	22.4	40	28	1,009	26.9	90	30	1,015	25.9	85	29	996	21.3	79	23	1,017	22.0	82	30	1,011	16.7	75	30	864	16.7	43
500	30	957	22.5	40	28	956	25.0	85	30	960	23.5	83	29	959	20.6	70	23	960	19.3	80	30	955	20.9	40	----	----	----	----
1,000	30	903	20.2	41	28	903	22.1	82	30	906	20.3	78	29	905	17.3	74	23	906	16.3	79	30	901	21.2	23	----	----	----	----
1,500	30	852	16.4	44	28	852	19.1	79	30	855	17.5	76	29	854	14.2	71	23	855	13.8	80	30	850	18.7	19	30	850	18.6	31
2,000	30	803	12.7	47	28	804	16.4	78	30	806	14.8	70	29	804	11.6	62	23	805	11.8	67	30	801	15.7	19	30	801	16.1	28
2,500	30	756	9.2	47	28	758	13.7	74	30	760	12.2	63	29	757	9.1	55	23	758	9.2	64	30	755	12.3	16	30	755	12.4	31
3,000	30	712	6.5	41	28	714	10.8	71	30	716	9.4	60	29	713	6.6	40	23	714	6.5	58	30	711	8.9	19	30	711	8.3	34
4,000	30	629	0.7	39	28	633	4.9	66	30	634	3.9	47	29	631	1.8	31	21	631	1.3	44	30	629	2.2	19	30	629	0.5	40
5,000	29	555	−5.3	36	28	559	−1.0	62	30	560	−1.5	39	29	556	−4.0	30	20	557	−4.1	44	30	555	−4.6	20	30	554	−6.6	41
6,000	28	488	−12.2	33	27	493	−6.9	60	30	493	−7.1	32	28	489	−10.4	----	20	490	−10.2	50	30	488	−11.3	----	30	487	−13.7	42
7,000	27	428	−19.4	32	27	433	−13.2	57	30	433	−13.4	29	28	429	−17.1	----	20	430	−16.8	56	30	428	−18.3	----	30	426	−20.7	----
8,000	26	374	−26.3	32	27	379	−19.9	56	30	379	−20.0	35	28	375	−24.2	----	11	375	−23.5	----	30	374	−25.7	----	30	371	−28.4	----
9,000	26	324	−34.2	31	26	329	−27.2	50	30	330	−27.2	37	26	326	−31.7	----	11	326	−30.7	----	30	324	−33.0	----	30	322	−36.0	----
10,000	25	281	−41.7	----	26	287	−35.2	46	30	287	−34.9	----	25	283	−39.2	----	10	283	−38.0	----	30	281	−40.4	----	30	278	−43.2	----
11,000	24	242	−48.3	----	26	248	−43.5	----	30	248	−42.7	----	24	244	−46.4	----	9	245	−45.3	----	30	242	−47.4	----	30	239	−49.8	----
12,000	24	207	−53.6	----	25	213	−52.0	----	30	213	−50.4	----	22	209	−52.9	----	7	210	−52.6	----	30	208	−53.4	----	30	205	−54.5	----
13,000	20	177	−57.5	----	25	182	−60.3	----	30	183	−57.7	----	19	179	−58.5	----	6	179	−59.5	----	29	177	−58.4	----	29	175	−58.1	----
14,000	13	152	−59.7	----	19	155	−67.4	----	28	156	−64.2	----	14	153	−63.3	----	----	----	----	----	27	151	−61.1	----	29	149	−61.0	----
15,000	7	130	−61.7	----	11	131	−73.4	----	15	132	−69.4	----	9	130	−65.4	----	----	----	----	----	26	128	−63.6	----	20	128	−63.3	----
16,000	----	----	----	----	----	----	----	----	5	113	−71.8	----	5	111	−67.3	----	----	----	----	----	15	109	−65.1	----	9	108	−64.1	----

Altitude (meters) m. s. l.	Oklahoma City, Okla. (391 m.)				Omaha, Nebr. (301 m.				Pensacola, Fla.[1] (24 m.)				Phoenix, Ariz. (339 m.)				Pittsburgh, Pa. (392 m.)				Portland, Maine[1] (20 m.)				Rapid City, S. Dak.[1] (981 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	21.2	69	30	979	18.3	79	18	1,016	26.1	81	30	969	28.1	42	29	971	16.9	78	28	1,014	13.1	92	----	----	----	----
500	30	957	21.8	63	30	957	18.4	72	18	962	23.6	80	30	951	30.2	31	29	959	17.1	73	28	958	14.6	79	----	----	----	----
1,000	30	904	19.7	59	30	903	16.1	68	18	909	20.5	79	30	899	26.9	31	29	904	14.6	70	28	903	12.4	74	----	----	----	----
1,500	30	853	17.4	52	30	851	13.5	62	18	858	17.1	81	30	849	22.9	35	29	853	11.4	69	28	851	9.8	72	----	----	----	----
2,000	30	804	15.0	47	30	802	10.9	61	18	808	14.2	75	30	801	18.8	40	29	803	8.4	68	28	801	7.1	69	----	----	----	----
2,500	30	757	12.0	45	30	755	8.3	58	18	762	11.7	65	30	756	14.9	42	29	755	6.1	58	28	754	5.0	63	----	----	----	----
3,000	30	713	8.9	41	30	710	5.8	54	18	718	9.6	58	30	712	11.0	44	29	710	4.0	47	28	708	2.6	59	----	----	----	----
4,000	30	631	2.7	39	30	628	−0.4	52	17	636	4.3	49	30	631	4.1	43	29	628	−0.7	36	26	626	−2.3	50	----	----	----	----
5,000	30	557	−3.2	41	29	558	−6.8	39	16	562	−1.8	38	30	557	−3.0	42	29	553	−6.5	33	25	551	−8.0	43	----	----	----	----
6,000	30	490	−9.5	33	29	486	−13.6	36	16	495	−7.4	----	30	490	−9.5	40	29	486	−12.8	30	25	484	−14.5	41	----	----	----	----
7,000	30	430	−16.3	37	29	425	−20.8	36	15	435	−13.7	----	30	430	−16.2	----	29	426	−19.3	----	24	424	−21.6	38	----	----	----	----
8,000	28	376	−23.3	42	28	370	−28.3	----	14	380	−21.2	----	30	376	−23.4	----	29	371	−26.9	----	24	369	−28.7	40	----	----	----	----
9,000	28	327	−30.6	----	28	321	−35.9	----	14	331	−29.0	----	30	327	−30.7	----	29	322	−34.1	----	24	320	−36.0	----	----	----	----	----
10,000	28	284	−38.1	----	28	278	−42.7	----	14	287	−36.3	----	30	284	−38.1	----	28	279	−41.2	----	23	277	−42.8	----	----	----	----	----
11,000	28	245	−45.2	----	26	239	−48.8	----	14	248	−43.6	----	30	244	−44.7	----	28	240	−47.6	----	21	238	−48.4	----	----	----	----	----
12,000	28	210	−51.7	----	26	205	−53.8	----	14	214	−50.5	----	29	210	−50.8	----	28	206	−53.2	----	18	204	−52.6	----	----	----	----	----
13,000	25	180	−57.7	----	24	175	−57.2	----	14	183	−57.7	----	27	180	−56.6	----	27	176	−57.5	----	17	174	−55.0	----	----	----	----	----
14,000	23	153	−62.5	----	20	149	−58.9	----	10	156	−64.3	----	25	154	−61.7	----	22	150	−60.5	----	11	148	−57.0	----	----	----	----	----
15,000	10	130	−65.9	----	12	127	−61.3	----	5	133	−68.0	----	19	130	−65.9	----	17	128	−62.4	----	5	126	−58.3	----	----	----	----	----
16,000	----	----	----	----	6	108	−62.2	----	----	----	----	----	9	111	−68.0	----	6	110	−64.7	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	St. Louis, Mo. (171 m.)				St. Paul, Minn. (225 m.)				San Antonio, Tex. (240 m.)				San Diego, Calif.[1] (19 m.)				San Juan, P. R. (15 m.)				Santa Maria, Calif. (71 m.)				S. S. Marie, Mich. (221 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	996	19.7	74	30	988	15.8	78	30	986	24.8	71	28	1,010	18.0	83	30	1,012	25.9	86	30	1,004	14.5	87	30	990	11.7	93
500	30	959	19.6	63	30	956	15.2	72	30	957	24.3	68	28	955	17.5	75	30	958	22.9	84	30	955	17.4	71	30	958	12.3	85
1,000	30	904	16.4	63	30	901	12.3	72	30	904	21.0	72	28	901	19.6	45	30	904	19.6	81	30	901	22.1	31	30	902	10.2	77
1,500	30	853	13.3	62	30	849	9.7	68	30	854	17.7	73	28	850	20.3	30	30	854	16.7	77	30	850	19.4	26	30	850	7.7	76
2,000	30	803	10.7	62	30	799	7.4	58	30	805	15.1	63	28	802	17.8	25	30	804	14.0	70	30	802	16.2	25	30	799	5.4	70
2,500	30	756	8.1	49	30	752	5.0	52	30	758	12.6	59	28	756	14.6	24	30	758	11.4	63	30	755	12.8	23	30	752	3.2	69
3,000	30	712	5.8	42	30	707	2.6	45	30	714	10.3	47	28	712	10.7	25	30	714	9.0	54	30	712	9.9	19	30	707	0.8	66
4,000	30	629	−0.2	37	29	624	−3.0	38	29	633	4.6	40	28	630	3.7	26	30	632	3.1	46	30	630	3.4	20	30	623	−4.7	61
5,000	30	554	−6.3	38	29	549	−9.3	39	29	560	−0.8	36	28	557	−2.7	22	29	558	−3.0	47	30	556	−3.8	----	29	548	−10.6	56
6,000	29	487	−12.6	34	29	482	−16.1	36	29	493	−6.3	32	28	490	−9.5	22	29	491	−8.6	37	30	489	−10.2	----	29	481	−17.0	50
7,000	29	427	−19.6	44	29	421	−23.3	34	29	433	−12.9	37	28	430	−16.4	----	29	431	−14.8	41	30	429	−17.5	----	29	420	−24.3	52
8,000	29	372	−27.0	43	29	366	−30.8	----	29	379	−19.7	----	24	375	−23.5	----	29	377	−21.9	34	30	374	−24.5	----	29	365	−31.8	54
9,000	29	322	−34.3	----	29	317	−38.8	----	28	330	−26.8	----	23	326	−31.3	----	29	328	−29.5	----	30	325	−32.1	----	29	316	−39.3	48
10,000	29	279	−41.0	----	29	274	−46.5	----	28	287	−34.4	----	23	283	−38.4	----	29	285	−37.5	----	29	282	−39.5	----	28	272	−46.3	----
11,000	27	241	−47.1	----	29	235	−52.5	----	28	248	−42.0	----	21	244	−45.4	----	28	246	−45.9	----	29	243	−46.8	----	27	234	−51.3	----
12,000	27	207	−53.1	----	29	201	−55.6	----	27	214	−49.6	----	17	210	−51.0	----	28	211	−54.2	----	29	209	−53.1	----	22	200	−52.8	----
13,000	26	177	−57.5	----	25	172	−56.2	----	24	183	−57.0	----	13	179	−57.3	----	28	180	−62.3	----	29	178	−58.3	----	16	172	−53.4	----
14,000	19	151	−60.8	----	23	146	−57.0	----	20	156	−63.2	----	10	153	−61.0	----	21	153	−68.8	----	24	152	−62.6	----	8	148	−55.3	----
15,000	13	128	−63.7	----	13	125	−57.3	----	13	132	−68.7	----	5	130	−65.6	----	7	129	−73.9	----	18	129	−66.2	----	6	125	−56.7	----
16,000	----	----	----	----	6	107	−60.1	----	7	112	−74.3	----	----	----	----	----	----	----	----	----	10	110	−68.6	----	----	----	----	----

TABLE 1.—*Mean free-air barometric pressure in millibars, temperatuae in degrees centigrade, and relative humidities in percent, obtained by radiosondes during September 1944*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Seattle, Wash.[1] (22 m.)				Spokane, Wash. (598 m.)				Swan Island, West Indies (10 m.)				Tacubaya, Mexico (2306 m.)				Tampa, Fla. (3 m.)				Tatoosh Island, Wash. (31 m.)				Toledo, Ohio (191 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	26	1,013	19.0	65	30	944	17.2	51	23	1,011	27.1	84	30	774	15.0	84	20	1,015	26.4	83	30	1,012	12.6	93	30	994	15.7	79
500	26	958	15.2	65	----	----	----	----	23	956	23.4	83	----	----	----	----	20	959	24.0	78	30	958	13.9	78	30	958	16.9	64
1,000	26	903	13.4	63	30	901	17.6	43	23	904	20.3	77	----	----	----	----	20	906	21.0	75	30	902	12.7	64	30	904	13.2	65
1,500	26	851	11.0	57	30	850	13.6	47	23	853	17.4	72	----	----	----	----	20	855	17.9	72	30	850	10.5	58	30	851	10.0	64
2,000	26	801	8.2	54	30	800	9.5	52	23	804	14.6	70	----	----	----	----	20	806	15.1	62	30	800	7.8	57	30	801	7.2	58
2,500	26	753	5.6	50	30	753	5.6	55	23	758	11.9	64	30	756	13.9	83	20	760	12.6	60	30	753	5.2	52	30	754	5.0	46
3,000	26	709	2.8	49	30	708	2.3	52	23	713	9.2	60	30	713	10.6	84	20	716	9.8	55	30	708	2.5	47	30	709	2.6	35
4,000	26	625	−3.1	44	29	625	−3.8	47	23	631	3.4	53	30	631	4.2	89	20	634	3.8	56	29	625	−3.5	44	30	626	−2.4	27
5,000	25	551	−9.1	40	29	550	−10.0	42	23	557	−2.6	56	30	558	−1.9	90	19	560	−1.8	50	29	550	−10.0	44	30	551	−8.2	30
6,000	25	484	−15.9	42	29	482	−16.5	36	23	491	−8.1	48	30	492	−7.0	74	19	493	−7.3	43	28	482	−16.4	45	30	484	−14.9	34
7,000	24	423	−23.5	47	29	421	−23.8	----	23	431	−14.0	41	30	432	−12.5	62	19	433	−13.8	42	28	421	−23.8	48	30	423	−21.9	34
8,000	24	368	−31.1	----	29	367	−31.6	----	23	377	−20.6	48	30	377	−19.3	62	17	379	−20.6	----	28	367	−31.4	43	30	368	−29.0	34
9,000	24	318	−38.6	----	29	317	−39.1	----	23	328	−27.6	----	30	329	−26.6	69	17	330	−27.9	----	28	317	−38.6	----	30	319	−36.2	----
10,000	23	274	−46.2	----	29	274	−45.7	----	23	285	−35.4	----	30	286	−34.3	68	16	287	−35.3	----	27	274	−45.0	----	30	276	−43.1	----
11,000	22	236	−52.3	----	28	236	−50.8	----	23	246	−43.7	----	30	247	−42.7	----	16	248	−43.0	----	25	236	−50.3	----	30	238	−49.2	----
12,000	22	202	−56.7	----	28	202	−54.5	----	23	212	−52.3	----	29	213	−51.4	----	15	213	−50.8	----	23	202	−54.2	----	29	204	−53.8	----
13,000	21	172	−57.8	----	26	173	−55.7	----	17	181	−60.2	----	24	182	−60.0	----	15	182	−58.2	----	20	173	−55.3	----	24	174	−56.9	----
14,000	19	146	−59.2	----	20	148	−57.0	----	10	154	−66.2	----	10	154	−68.2	----	11	155	−64.8	----	14	149	−58.4	----	17	149	−58.8	----
15,000	18	125	−59.4	----	11	126	−57.7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	8	127	−60.6	----
16,000	12	106	−58.6	----	7	107	−57.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	5	109	−61.9	----
17,000	7	91	−59.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
18,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Tongue Point, Oreg.[1] (21m.)				Washington, D. C. (25m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	25	1,017	15.5	85	30	1,014	20.3	78
500	25	962	15.2	73	30	960	18.3	71
1,000	25	906	13.4	63	30	906	15.6	71
1,500	25	854	10.8	58	30	854	12.6	72
2,000	25	804	8.2	53	30	804	9.9	67
2,500	25	756	5.5	46	30	757	7.0	64
3,000	25	711	2.9	42	30	712	5.0	53
4,000	24	627	−3.0	38	30	629	.2	52
5,000	24	552	−9.7	34	30	555	−5.4	48
6,000	24	485	−16.6	----	30	488	−11.6	46
7,000	24	423	−24.0	----	30	428	−18.3	44
8,000	21	369	−30.9	----	30	373	−25.5	48
9,000	21	319	−38.6	----	30	324	−32.8	----
10,000	21	276	−45.0	----	30	281	−39.9	----
11,000	17	238	−50.2	----	30	242	−46.6	----
12,000	16	204	−54.7	----	30	208	−53.1	----
13,000	14	175	−56.4	----	30	178	−58.6	----
14,000	13	150	−57.4	----	26	151	−62.5	----
15,000	11	128	−58.7	----	15	128	−65.5	----
16,000	8	109	−60.7	----	10	108	−66.2	----
17,000	----	----	----	----	7	91	−65.7	----

[1] U. S. Navy.
[2] Humidity data obtained by hair hygrometer, others using electric hygrometer.
[3] Insufficient observations.
[4] No observations taken.
[5] Data not received.

NOTE.—All observations taken near 11 p. m., E. S. T. except at Mazatlan and Merida where they are taken near 9 p. m.
"Number of Observations" refers to pressure only, as temperature and humidity data are sometimes missing for some observations at certain levels. Relative humidity data are not used in daily observations when the temperature is below −40.0°C.
None of the means included in these tables are based on less than 15 surface or 5 standard level observations.
Means for observations obtained by the electric hygrometer have been adjusted to compensate for the values occuring below the operating range of the humidity element.

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations made near 5 p. m. (75th meridian time) during September 1944. 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 (870 m.)			Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (132 m.)			Charleston, S. C. (17 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	30	123	3.6	29	195	2.0	26	28	1.1	29	286	1.0	30	112	0.4	30	328	4.1	30	86	4.1	29	256	2.6	29	248	1.2	26	135	0.4	30	248	1.1	30	60	2.7	30	135	1.5
500	----	----	----	----	----	----	26	11	1.1	----	----	----	----	----	----	----	----	----	30	89	4.7	29	247	2.8	29	214	3.0	26	155	1.7	30	248	2.4	----	----	----	----	----	----
1,000	30	158	3.3	----	----	----	26	293	1.1	----	----	----	29	297	0.8	30	322	3.9	29	87	3.7	27	251	4.1	28	234	5.2	23	204	1.6	30	251	2.3	----	----	----	----	----	----
1,500	28	165	3.5	----	----	----	25	287	0.9	29	272	2.5	28	280	1.6	30	294	2.7	27	98	2.7	22	246	4.8	25	244	5.4	23	247	2.3	28	266	3.4	----	----	----	30	138	2.0
2,000	27	178	3.4	29	196	2.6	22	287	1.6	29	287	3.2	23	252	4.0	30	271	2.6	25	87	2.8	22	257	6.1	24	250	6.2	23	283	3.0	25	275	3.7	30	53	2.6	30	146	1.3
2,500	26	181	3.8	29	204	2.2	20	300	2.3	29	289	4.7	20	274	5.3	29	274	2.5	22	106	1.9	18	259	6.7	18	251	6.7	19	270	4.2	20	274	5.1	30	71	1.6	29	155	1.7
3,000	24	201	3.3	29	221	2.5	18	301	2.7	27	275	6.1	17	279	7.8	29	275	3.2	21	106	2.2	17	275	8.6	14	250	4.4	18	257	5.1	18	274	4.9	30	215	0.2	29	180	1.7
4,000	23	257	2.9	24	262	3.8	13	301	5.0	25	277	7.9	17	279	11.3	27	287	4.8	18	120	2.4	10	285	9.3	11	278	5.2	15	264	6.8	11	294	9.2	29	271	5.2	22	238	3.5
5,000	23	262	3.7	22	269	5.2	10	289	7.6	20	281	8.8	14	281	13.9	24	274	6.7	16	140	1.7	----	----	----	11	272	6.5	10	251	5.6	----	----	----	28	276	8.3	14	246	4.2
6,000	20	270	4.8	21	262	6.4	----	----	----	18	290	10.2	11	290	12.8	23	273	8.1	13	186	1.1	----	----	----	----	----	----	----	----	----	----	----	----	27	274	9.8	13	247	5.9
8,000	18	263	10.5	18	262	13.1	----	----	----	14	304	10.3	10	288	14.5	18	278	12.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	22	265	16.1	----	----	----
10,000	14	276	13.9	14	265	15.6	----	----	----	12	300	12.0	----	----	----	11	275	15.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	18	263	17.8	----	----	----
12,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	12	265	23.9	----	----	----

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations made near 5 p. m. (75th meridian time) during September 1944. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Velocities in meters per second*—Continued

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. (15 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	282	1.8	30	307	2.3	29	284	0.2	30	270	2.9	30	100	2.6	30	210	1.6	30	170	1.1	29	168	0.5	29	306	1.5	30	124	2.3	25	127	0.7	29	352	1.3	25	197	1.1
500	---	---	---	---	---	---	29	254	0.4	---	---	---	30	105	2.3	30	239	2.7	---	---	---	29	183	0.7	29	311	1.6	30	99	4.1	25	119	0.9	29	322	1.1	25	249	1.7
1,000	---	---	---	---	---	---	27	261	1.7	30	261	3.4	30	136	1.7	30	231	3.3	30	175	1.9	29	209	0.4	29	324	1.8	30	94	3.1	23	64	0.4	29	284	1.4	23	295	2.5
1,500	---	---	---	30	299	2.7	26	269	0.3	30	262	4.2	29	208	1.4	28	249	5.4	30	187	2.3	29	265	0.9	29	295	0.7	28	87	1.9	19	51	1.7	28	262	2.0	22	294	3.2
2,000	30	278	1.8	30	276	3.5	22	274	5.1	29	263	5.6	27	234	2.9	24	248	7.3	30	204	2.4	25	257	1.9	29	219	0.9	25	83	1.8	16	33	2.2	24	241	2.4	21	285	4.5
2,500	30	282	1.7	30	267	3.1	18	276	6.4	26	273	6.7	24	241	4.1	20	257	8.0	30	228	2.9	23	269	3.5	27	189	1.4	23	99	1.7	11	334	2.0	24	259	3.5	18	279	5.9
3,000	30	259	2.4	30	266	3.8	16	274	7.4	22	277	7.5	23	257	3.4	18	278	8.6	30	244	3.1	21	275	3.5	26	245	1.2	22	96	2.4	---	---	---	24	263	4.9	14	281	5.4
4,000	29	239	3.3	26	265	5.6	14	270	8.9	17	283	7.8	19	253	3.4	12	293	13.3	30	239	4.4	19	274	5.1	23	233	3.6	22	99	1.4	---	---	---	19	276	7.7	10	284	5.0
5,000	28	265	5.7	20	288	5.1	11	268	10.7	11	283	6.2	15	274	2.9	---	---	---	28	239	4.7	17	286	7.1	21	229	3.6	22	102	2.4	---	---	---	15	279	7.4	---	---	---
6,000	27	270	7.1	14	285	7.4	10	263	11.9	---	---	---	13	273	2.3	---	---	---	28	251	5.0	13	289	8.6	20	244	2.7	21	77	3.2	---	---	---	12	292	8.6	---	---	---
8,000	23	271	8.7	---	---	---	---	---	---	---	---	---	10	286	3.1	---	---	---	25	261	6.9	---	---	---	16	261	6.0	15	74	4.9	---	---	---	---	---	---	---	---	---
10,000	19	277	11.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	23	262	11.5	---	---	---	14	266	11.2	12	82	8.3	---	---	---	---	---	---	---	---	---
12,000	13	286	11.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22	267	14.4	---	---	---	11	263	15.4	---	---	---	---	---	---	---	---	---	---	---	---
14,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	18	281	13.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Oakland, Calif. (8 m.)			Oklahoma City, Okla. (402 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. (12 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	286	4.4	27	190	2.5	30	189	1.4	30	232	0.7	30	360	1.2	28	222	1.3	30	216	1.3	30	99	1.9	15	254	3.5	30	308	0.5	29	251	1.9	30	249	2.6	29	41	0.4
500	30	307	3.7	27	190	2.6	30	188	1.9	30	222	0.9	---	---	---	28	225	1.6	30	240	1.9	30	116	2.2	15	294	2.0	30	67	0.1	29	217	1.7	---	---	---	29	287	0.8
1,000	30	340	3.2	27	182	3.1	29	196	3.3	30	183	1.4	30	1	1.1	28	220	2.3	26	238	2.8	28	115	2.3	---	---	---	25	236	2.7	23	236	2.3	30	235	3.5	26	261	2.4
1,500	30	330	3.8	26	188	4.2	28	215	4.6	30	164	1.7	30	333	1.8	27	236	2.9	24	247	3.4	28	116	2.0	---	---	---	23	250	4.6	23	232	3.1	30	238	3.7	25	257	3.7
2,000	30	334	3.4	25	214	4.0	26	249	5.5	30	142	1.7	30	292	2.3	26	262	4.2	20	254	6.7	27	147	1.8	---	---	---	20	257	5.9	21	235	3.0	28	246	4.8	21	280	4.8
2,500	30	323	2.9	25	236	4.4	25	264	7.0	30	144	1.3	27	266	4.9	24	275	5.1	17	267	8.1	25	150	1.6	---	---	---	16	264	5.1	21	252	3.4	25	257	4.7	19	283	6.6
3,000	30	319	2.2	25	255	4.3	25	273	7.3	29	94	0.9	26	271	7.4	23	278	5.4	15	275	8.5	21	215	1.3	---	---	---	13	276	6.7	20	263	4.6	22	278	3.4	18	282	9.1
4,000	29	302	2.3	24	261	5.3	19	278	8.1	29	149	0.8	25	278	10.2	18	287	7.2	11	285	11.1	17	256	2.9	---	---	---	---	---	---	16	276	5.1	20	270	5.1	16	289	11.0
5,000	27	290	3.7	22	284	7.3	16	279	9.9	25	184	0.7	20	277	11.4	17	281	9.1	11	279	13.8	14	291	2.8	---	---	---	---	---	---	14	262	5.1	19	275	6.4	10	279	12.3
6,000	26	287	4.5	22	282	10.0	12	277	9.7	22	238	3.9	17	283	12.2	16	282	12.0	10	281	14.2	11	288	6.1	---	---	---	---	---	---	---	---	---	19	286	6.9	---	---	---
8,000	24	286	6.3	---	---	---	---	---	---	21	244	6.6	12	290	13.7	12	283	15.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	15	285	8.7	---	---	---
10,000	19	301	11.9	---	---	---	---	---	---	20	244	11.5	---	---	---	11	280	20.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	13	272	11.3	---	---	---
12,000	12	281	10.6	---	---	---	---	---	---	18	249	17.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14,000	---	---	---	---	---	---	---	---	---	13	246	16.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 3.—*Maximum free air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during September 1944*

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]	32.1	W.	1,365	29	Boston, Mass.	46.2	W.	4,777	22	Point Judith, R. I.	76.2	W.	14,302	16	Portland, Maine.
East-Central [2]	31.0	NNE	1,949	14	Richmond, Va.	32.0	NNW	4,699	3	Washington, D. C.	62.4	WSW.	14,172	10	Huntington, W. Va.
Southeast [3]	26.4	SSE.	818	1	Charleston, S. C.	23.1	WSW.	4,788	14	Birmingham, Ala.	52.2	W.	22,486	5	Jacksonville, Fla.
North-Central [4]	37.0	SW.	1,873	17	Int. Falls, Minn.	35.0	NW.	5,000	21	St. Paul, Minn.	49.6	W.	12,705	2	St. Paul, Minn.
Central [5]	36.8	SW.	1,412	2	Dodge City, Kans.	31.0	WNW.	4,382	4	Indianapolis, Ind.	49.6	WSW.	11,901	28	Omaha, Nebr.
South-Central [6]	28.7	SSE.	1,134	2	Laredo, Tex.	24 0.	WSW.	2,946	3	Tulsa, Okla.	44.0	WSW.	8,989	29	Abilene, Tex.
Northwest [7]	35.8	W.	2,477	19	Havre, Mont.	40.0	WSW.	4,581	13	Ellensburg, Wash.	74.0	SW.	9,128	17	Great Falls, Mont.
West-Central [8]	33.2	S.	2,214	30	Grand Junction, Colo.	50.0	SSW.	4,339	21	Elko, Nev.	61.0	W.	11,200	1	Ely, Nev.
Southwest [9]	40.0	SSE.	2,500	20	Sandberg, Calif.	42.0	SSE.	2,662	20	Sandberg, Calif.	58.8	SW.	11,668	19	Santa Maria, Calif.

[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 Dkaota.
[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.