MONTHLY WEATHER REVIEW

Editor, EDGAR W. WOOLARD

VOL. 72, No. 2
W. B. No. 1406

FEBRUARY 1944

CLOSED APRIL 5, 1944
ISSUED MAY 5, 1944

METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR FEBRUARY 1944

[Climate and Crop Weather Division, J B. KINCER, in charge]

AEROLOGICAL OBSERVATIONS

NOTICE.—RAOB tabular data for January 1944 (table 1) are shown hereunder: those for February 1944 will be published in the March REVIEW.—EDITOR

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

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Albany, N. Y. (86 m.)				Albuquerque, N. Mex. (1620 m.)				Apalachicola, Fla. (5 m.)				Atlanta, Ga.[3] (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	31	1,008	−4.9	77	31	840	−0.2	65	31	1,021	11.0	82	31	986	5.8	74	31	931	4.9	69	31	957	−6.0	80	31	922	−3.9	82
500	31	957	−3.9	74					31	962	11.7	59	31	962	6.3	73												
1,000	31	898	−5.5	76					31	906	10.2	54	31	906	5.4	69	31	906	7.9	52	31	900	−3.1	76	31	907	−1.9	72
1,500	31	842	−6.7	67					31	854	8.9	44	31	852	4.6	64	31	853	6.7	42	31	844	−3.3	70	31	852	−1.8	52
2,000	31	790	−7.4	56	31	801	0.1	52	31	803	7.3	38	31	801	3.7	59	31	802	4.7	36	31	792	−5.0	64	31	800	−2.8	46
2,500	31	740	−9.2	51	31	753	−1.1	45	31	755	5.7	33	31	753	2.2	55	31	754	3.2	30	31	743	−7.4	60	31	751	−4.6	50
3,000	31	694	−11.3	45	31	706	−3.4	45	31	710	3.4	34	31	708	−0.1	54	31	708	0.6	28	31	696	−9.9	58	31	704	−6.9	49
4,000	31	608	−16.1	40	31	622	−9.0	42	30	627	−2.0	32	28	624	−5.7	53	31	624	−5.1	26	31	611	−15.1	53	31	619	−12.8	51
5,000	31	532	−22.3	41	31	546	−15.1	40	30	553	−7.7	34	28	549	−11.9	50	29	550	−11.5	34	30	534	−21.3	53	28	542	−19.1	52
6,000	31	464	−28.9	44	30	478	−22.0	34	30	485	−14.2	39	28	481	−18.1	48	28	482	−18.6	35	28	467	−28.5	53	27	473	−26.3	50
7,000	31	402	−35.3	49	30	416	−29.3	36	30	425	−21.2	44	28	419	−24.7	48	28	420	−26.2	38	25	405	−34.5	51	24	412	−33.0	50
8,000	31	348	−42.3		28	361	−36.2		30	370	−28.1	47	28	365	−32.0	49	28	365	−34.1	43	17	352	−40.8		20	357	−39.2	
9,000	31	299	−48.2		20	313	−42.8		30	321	−35.3	45	26	316	−39.4	51	27	315	−41.1		9	305	−46.4		16	307	−45.7	
10,000	29	256	−52.4		12	271	−49.2		29	278	−42.8		23	273	−46.1		21	272	−48.0		5	261	−52.1		14	265	−50.0	
11,000	27	220	−52.9		5	229	−55.0		23	239	−50.0		21	235	−52.2		10	233	−54.8						7	228	−54.5	
12,000	26	188	−52.3						20	204	−56.2		18	201	−57.4													
13,000	21	161	−52.6						18	174	−60.2		10	172	−58.5													
14,000	15	138	−55.1						10	148	−60.9																	
15,000	11	119	−55.6						5	126	−63.8																	
16,000	7	102	−57.6																									

Altitude (meters) m. s. l.	Brownsville, Tex. (6 m.)				Buffalo, N. Y. (221 m.)				Caribou, Maine (191 m.)				Charleston, S. C.[3] (14 m.)				Denver, Colo. (1,616 m.)				Detroit, Mich.[3] (217 m.)				Dodge City, Kans. (787 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,019	14.2	85	29	992	−2.0	77	31	991	−10.8	86	27	1,020	8.1	81	31	838	−3.9	62					31	928	−1.5	83
500	31	962	14.0	71	29	958	−2.7	74	31	953	−9.1	80	27	962	10.3	67												
1,000	31	906	12.5	60	29	899	−5.0	76	31	893	−9.3	71	27	905	8.0	66									31	904	2.6	64
1,500	31	854	10.8	51	29	844	−6.2	70	31	837	−10.4	62	27	852	6.3	61									31	850	3.1	40
2,000	31	804	9.8	34	29	791	−7.6	58	31	784	−11.4	55	27	801	4.3	58	31	799	0.1	44					31	798	1.3	33
2,500	31	756	7.7	26	29	742	−9.2	51	31	735	−12.9	45	27	753	2.5	51	31	750	−2.6	42					31	750	−0.9	35
3,000	31	712	5.3	23	29	695	−11.5	52	31	688	−15.3	46	27	708	0.3	50	31	704	−5.6	43					31	704	−3.5	37
4,000	31	629	−0.9	29	28	609	−16.7	49	31	602	−20.5	40	26	624	−4.7	49	31	619	−12.2	45					31	620	−9.0	39
5,000	31	554	−7.2	28	28	533	−22.7	49	31	525	−26.7	41	26	549	−11.1	49	31	542	−18.6	46					30	544	−15.6	37
6,000	31	487	−13.8	29	28	464	−29.2	46	31	456	−33.1	49	25	481	−17.6	50	31	474	−25.3	50					30	476	−22.8	39
7,000	31	426	−20.8	37	26	404	−35.3	41	25	396	−39.1		25	421	−24.3	50	30	412	−32.2	48					30	414	−30.0	37
8,000	31	371	−27.8	43	19	350	−40.7		20	342	−45.5		25	366	−31.2	46	27	356	−39.6						30	359	−37.4	43
9,000	30	322	−35.0	43	10	306	−45.2		19	293	−50.7		23	318	−38.5		23	308	−46.5						30	310	−44.9	
10,000	30	279	−42.3						17	251	−51.9		23	274	−45.6		9	269	−51.8						21	265	−52.5	
11,000	25	240	−50.0						12	214	−49.6		16	235	−52.2										20	226	−57.0	
12,000	9	205	−57.0						9	183	−50.7		9	200	−58.3										17	194	−58.0	
13,000													7	171	−59.8										16	166	−58.1	
14,000																									13	142	−58.8	
15,000																									8	121	−61.5	
16,000																									6	104	−63.3	

See footnotes at end of table.

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

Altitude (meters) m. s. l.	El Paso, Tex. (1,195 m.)				Ely, Nev.[2] (1,908 m.)				Glasgow, Mont. (648 m.)				Great Falls, Mont. (1,128 m.)				Greensboro, N. C. 273 m.)				Hatteras, N. C. 3 m.)				Huntington, W. Va. (172 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	885	4.3	49	30	811	−9.1	83	31	940	−5.2	73	31	886	0.9	43	31	989	2.2	83	29	1,020	5.8	88	26	1,001	−0.2	83
500																	31	961	4.4	67	29	960	6.1	59	26	961	2.0	70
1,000									31	900	0.1	60					31	904	3.4	56	29	904	5.4	54	26	903	0.4	58
1,500	31	854	7.3	38					31	845	−0.5	47	31	847	1.3	38	31	850	2.0	40	29	850	3.3	49	26	849	−1.2	55
2,000	31	802	5.0	36	30	802	−6.5	81	31	794	−3.4	52	31	795	−2.0	42	31	798	0.6	41	29	799	1.4	40	26	797	−2.8	45
2,500	31	754	2.5	38	30	752	−4.2	72	31	745	−6.5	55	31	746	−5.2	44	31	750	−1.3	40	29	750	−0.6	37	26	747	−4.1	38
3,000	31	709	0.0	35	30	706	−5.5	67	31	698	−9.3	53	31	700	−8.1	42	31	704	−3.5	35	29	705	−2.3	36	26	701	−5.9	34
4,000	31	625	−5.8	32	30	620	−10.9	61	31	613	−15.1	47	31	614	−13.8	38	31	620	−8.6	33	27	621	−7.9	34	26	617	−10.6	33
5,000	31	549	−12.3	30	30	544	−17.5	59	30	536	−21.0	49	30	538	−20.7	36	31	544	−15.0	37	27	545	−14.5	38	26	541	−17.0	35
6,000	31	481	−18.8	29	28	476	−24.0	54	30	468	−28.0	54	30	469	−27.8	38	31	476	−21.7	43	27	477	−21.1	44	26	473	−24.0	44
7,000	31	420	−26.3	32	27	413	−31.7	50	30	406	−35.1	58	30	407	−35.0		30	414	−28.8	49	27	416	−27.7	47	26	412	−31.2	51
8,000	30	365	−33.2	37	23	359	−38.6	37	29	350	−43.0		27	352	−41.5		30	359	−35.5		26	361	−34.3	53	25	357	−38.1	
9,000	26	316	−39.6		22	310	−44.6		28	302	−49.7		21	306	−47.2		30	310	−42.3		26	312	−41.3		25	308	−44.6	
10,000	18	275	−46.0		20	268	−50.7		27	259	−54.0		16	264	−52.8		30	267	−48.9		26	268	−48.4		24	265	−51.0	
11,000	5	236	−53.0		17	230	−56.2		22	222	−56.3						29	229	−54.6		26	230	−54.3		17	227	−55.9	
12,000					15	196	−57.5		18	190	−55.6						26	196	−58.1		24	197	−57.5		11	194	−57.0	
13,000					14	168	−57.6		7	160	−55.4						23	167	−58.4		23	168	−57.8		5	166	−55.4	
14,000					13	143	−58.4										22	142	−60.0		22	143	−59.6					
15,000					9	122	−60.7										18	121	−62.1		19	121	−61.9					
16,000					6	105	−63.2										12	103	−64.0		14	104	−64.7					
17,000																					10	88	−65.2					
18,000																					5	75	−65.9					

Altitude (meters) m. s. l.	International Falls, Minn. (343 m.)				Joliet, Ill. (178 m.)				Lake Charles, La. (5 m.)				Lakehurst, N. J.[1] (39 m.)				Little Rock, Ark (79 m.)				Louisville, Ky. (166 m.)				Mazatlan, Mex. (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	30	974	−8.6	82	31	999	−2.4	81	31	1021	9.6	86	23	1,014	−1.2	75	31	1,012	5.5	77	30	1,002	2.2	72	25	1,008	20.4	78
500	30	954	−7.9	77	31	959	−0.3	68	31	962	10.5	71	23	956	−1.9	68	31	962	6.4	56	30	962	2.5	64	25	960	20.9	41
1,000	30	896	−7.3	65	31	901	−1.7	61	31	906	9.0	62	22	898	−3.1	61	31	905	4.8	56	30	904	0.7	59	25	906	19.1	34
1,500	30	840	−7.1	59	31	846	−2.0	48	31	853	7.8	59	22	843	−4.0	56	31	852	3.6	54	30	850	0.2	49	25	854	16.1	30
2,000	30	787	−7.8	52	31	794	−3.7	43	31	802	6.3	49	22	791	−5.8	55	31	800	2.2	48	30	797	−1.0	42	25	805	12.5	28
2,500	30	738	−9.6	47	31	745	−5.6	42	31	755	4.2	43	22	742	−7.4	45	31	752	0.5	45	30	749	−2.7	36	25	758	9.9	28
3,000	30	692	−12.2	48	31	699	−7.5	36	31	710	1.7	39	21	696	−9.7	47	31	706	−1.3	38	30	703	−4.3	32	25	714	6.8	28
4,000	29	606	−17.6	47	31	614	−12.8	25	31	626	−4.1	31	21	610	−14.5	50	31	622	−6.6	36	28	618	−9.2	31	25	631	1.0	26
5,000	29	529	−24.1	38	31	538	−18.9	29	31	550	−10.5	31	20	535	−20.5	54	31	547	−13.1	38	28	543	−15.9	34	23	556	−5.7	23
6,000	29	461	−30.5		30	469	−25.3	32	31	482	−16.8	37	19	466	−27.4	57	31	479	−20.1	45	27	475	−22.7	44	23	489	−12.4	27
7,000	27	400	−37.4		29	408	−32.5	36	30	422	−23.5	42	18	404	−34.4		31	418	−27.3	45	25	414	−29.3	51	22	428	−19.2	40
8,000	21	346	−43.5		23	354	−39.2		30	367	−30.0	48	16	350	−41.3		31	362	−34.3	52	23	360	−36.2		20	373	−26.9	47
9,000	11	297	−48.6		17	306	−45.7		30	318	−37.1	52	16	302	−47.6		29	313	−41.6		15	312	−42.2		20	324	−34.1	
10,000	10	254	−53.2		8	267	−51.0		29	275	−43.8		15	258	−52.3		17	270	−47.8		5	268	−47.3		18	280	−42.3	
11,000	8	217	−53.2		5	231	−56.2		19	238	−50.5		14	222	−55.2										18	241	−50.0	
12,000	6	185	−50.3						12	203	−55.2		12	190	−56.1										18	206	−56.4	
13,000									7	173	−55.3		9	162	−57.0										18	176	−61.1	
14,000									5	149	−58.6		9	138	−57.7										18	149	−63.7	
15,000													6	118	−58.0										18	127	−66.6	
16,000																									14	108	−68.5	
17,000																									10	91	−69.6	

Altitude (meters) m. s. l.	Medford, Oreg.[2] (409 m.)				Miami, Fla.[3] (4 m.)				Nashville, Tenn. (180 m.)				Norfolk, Va.[1] (4 m.)				Oakland, Calif. (2 m.)				Ogden, Utah (1,355 m.)				Oklahoma City, Okla. (391 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	971	4.5	77	31	1,020	16.2	85	31	1,000	4.1	73	30	1,021	5.1	74	31	1,020	9.7	79	31	869	−7.3	90	29	975	3.1	84
500	31	960	4.9	75	31	963	15.7	80	31	962	5.1	58	30	960	4.6	61	31	960	9.0	66					29	961	5.1	74
1,000	31	903	4.5	65	31	908	13.4	74	31	905	3.4	53	30	903	3.4	53	31	904	6.9	57					29	905	5.2	47
1,500	31	849	2.4	62	31	855	11.1	68	31	850	2.5	47	30	850	1.7	48	31	851	4.5	55	31	854	−5.5	83	29	851	5.0	35
2,000	31	798	−0.4	62	31	805	10.0	51	31	799	1.3	44	29	798	0.0	37	31	799	2.0	49	31	801	−4.9	61	29	800	3.4	32
2,500	31	749	−3.2	62	31	758	8.2	41	31	751	−0.3	40	28	749	−1.6	28	31	751	−0.6	47	31	751	−6.2	57	29	752	1.4	28
3,000	31	703	−6.0	58	31	713	5.9	35	31	705	−2.0	41	28	703	−4.0	22	31	706	−3.1	45	31	704	−8.3	57	29	706	−0.9	28
4,000	30	618	−11.8	52	31	630	0.7	32	31	621	−7.5	40	28	619	−9.6	22	31	621	−9.2	42	31	618	−13.7	51	28	623	−6.5	31
5,000	30	542	−18.4	51	30	556	−4.8	30	31	546	−13.5	44	26	543	−16.2	34	30	545	−15.2	44	31	542	−19.7	44	25	547	−13.0	34
6,000	29	473	−25.1	49	30	489	−11.1	27	31	478	−20.7	48	24	475	−23.2	40	30	477	−22.1	46	31	472	−26.6	43	25	479	−20.1	38
7,000	29	411	−31.8	43	30	429	−18.3	27	31	416	−27.8	51	23	413	−30.3	58	29	415	−29.0	43	31	410	−34.1	39	25	418	−27.6	47
8,000	28	356	−39.3		29	374	−25.6	28	30	361	−34.7	53					29	360	−36.0		31	355	−41.4		24	362	−34.8	
9,000	27	307	−46.2		29	324	−33.5	29	30	312	−41.7						28	312	−43.0		29	305	−47.7		23	313	−42.6	
10,000	25	263	−52.2		28	281	−41.2		19	270	−49.0						27	268	−50.4		28	263	−52.4		17	270	−49.3	
11,000	23	225	−56.7		27	242	−49.1		8	234	−53.9						24	229	−56.2		27	226	−56.4		13	232	−55.9	
12,000	20	192	−57.1		27	207	−56.3										21	196	−57.6		25	192	−56.7		6	196	−56.3	
13,000	17	163	−56.5		25	177	−61.6										14	167	−59.0		24	164	−56.6					
14,000	12	140	−57.1		23	150	−65.4										12	143	−58.7		22	140	−57.8					
15,000	5	118	−55.0		21	127	−67.9										8	122	−61.0		17	119	−59.2					
16,000					13	108	−70.4										6	103	−62.2		12	102	−61.1					
17,000					9	92	−73.3																					

See footnotes at end of table.

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

Altitude (meters) m. s. l.	Omaha, Nebr. (301 m.)				Phoenix, Ariz. (339 m.)				Pittsburgh, Pa. (392 m.)				Portland, Maine [2] (20 m.)				Rapid City, S. Dak. (981 m.)				St. Louis, Mo. (171 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
Surface	30	985	−0.5	72	31	979	8.7	58	31	973	0.1	76	31	1,015	−6.0	83	31	904	−3.7	72	31	1,001	1.4	75
500	30	961	−0.2	66	31	961	12.8	39	31	960	0.3	74	31	955	−5.0	80					31	961	2.2	60
1,000	30	903	−0.2	54	31	905	11.0	33	31	902	−1.6	69	31	896	−6.2	77	31	902	−3.1	69	31	903	1.0	53
1,500	30	848	−0.8	44	31	852	7.8	35	31	846	−3.2	64	31	840	−7.1	70	31	848	−0.1	47	31	849	0.6	44
2,000	30	796	−2.3	38	31	801	4.5	38	31	794	−5.1	61	31	788	−8.4	66	31	796	−2.7	46	31	797	−1.2	41
2,500	30	747	−4.1	33	31	753	1.5	37	31	745	−6.6	53	31	738	−9.9	63	31	747	−5.5	45	31	748	−2.8	37
3,000	29	701	−6.5	33	31	708	−1.0	34	31	699	−8.4	42	31	692	−11.7	60	31	700	−8.0	43	31	702	−4.6	28
4,000	29	616	−12.3	40	31	624	−6.7	33	31	614	−13.1	38	30	606	−17.4	57	31	615	−13.8	41	28	618	−9.6	26
5,000	29	540	−18.5	40	31	548	−13.2	31	31	538	−18.6	39	30	530	−23.6	54	31	539	−20.3	42	28	542	−15.8	35
6,000	29	472	−25.7	41	31	480	−20.3	34	31	469	−25.5	43	29	461	−30.2	53	31	470	−27.1	47	24	475	−21.9	43
7,000	29	410	−33.0	44	31	418	−27.5	37	31	408	−32.3	44	29	400	−36.8	49	31	408	−34.1	51	23	414	−29.2	45
8,000	28	354	−40.2		31	363	−34.8		31	353	−39.3		21	345	−42.9		31	353	−41.7		23	359	−36.6	
9,000	24	306	−46.5		31	314	−42.1		28	305	−45.1		15	297	−48.7		26	305	−48.4		18	310	−43.2	
10,000	12	264	−51.9		31	270	−49.2		20	264	−51.2		10	254	−50.8		18	262	−54.6		10	269	−48.9	
11,000					31	232	−55.0		8	230	−56.3		7	218	−51.1		16	224	−58.4		5	233	−55.1	
12,000					30	198	−57.7						6	186	−50.6		9	191	−59.5					
13,000					29	169	−58.1										8	163	−59.4					
14,000					26	144	−59.8										6	140	−60.3					
15,000					25	123	−61.8																	
16,000					22	104	−63.5																	
17,000					10	89	−64.4																	

Altitude (meters) m. s. l.	St. Paul, Minn. (225 m.)				San Antonio, Tex. (242 m.)				San Diego, Calif.[1] (19 m.)				San Juan, P. R. (15 m.)				Santa Maria, Calif. (73 m.)				Sault Ste Marie, Mich.[2] (221 m.)				Seattle, Wash.[1] (22 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	992	−3.6	78	29	992	9.0	83	26	1,016	13.6	74	28	1,016	23.5	83	29	1,011	10.3	78	30	989	−4.1	88	15	1,014	5.9	74
500	30	958	−3.5	74	29	962	10.6	72	26	960	12.2	60	28	961	20.4	81	29	961	11.2	57	30	955	−4.9	87	15	957	5.0	61
1,000	30	899	−3.5	60	29	906	8.7	71	25	904	9.6	59	28	907	17.2	80	29	905	8.9	51	30	896	−6.4	83	15	900	2.1	59
1,500	30	844	−3.8	53	29	853	7.9	62	25	851	6.9	57	28	856	14.3	74	29	852	6.2	48	30	840	−7.7	78	15	846	−1.2	58
2,000	30	792	−5.7	50	29	802	6.4	46	25	801	4.4	52	28	806	11.9	62	29	800	3.7	40	30	788	−9.2	72	15	794	−3.6	57
2,500	30	742	−7.6	44	29	755	4.7	35	25	753	2.5	40	28	759	9.8	42	29	752	1.5	37	30	738	−11.0	67	14	746	−6.2	63
3,000	30	696	−9.7	40	29	710	2.2	35	24	708	−0.1	30	28	714	7.6	28	29	707	−0.8	33	30	691	−13.3	64	14	699	−9.1	64
4,000	30	610	−15.1	40	28	626	−3.5	32	23	624	−6.2	34	27	633	3.5		29	623	−6.7	29	29	605	−18.8	58	13	614	−15.3	62
5,000	30	535	−21.7	39	28	551	−9.9	28	20	549	−12.6	47	26	558	−2.4		27	548	−12.8	33	27	529	−25.0	54	12	537	−21.7	
6,000	29	466	−28.2	40	27	484	−16.3	31	19	480	−19.8	48	26	491	−8.7		27	480	−20.1	35	27	460	−31.9	51	11	468	−28.4	
7,000	27	404	−35.4		27	423	−23.4	39	17	420	−26.7		26	431	−15.6		27	418	−27.4	38	26	398	−38.7	45	10	408	−33.9	
8,000	25	350	−42.6		26	368	−30.2	48					26	377	−23.1		27	363	−34.9	41	20	346	−43.2		9	352	−42.1	
9,000	18	304	−47.9		26	319	−37.4						26	328	−30.4		26	314	−42.3		11	300	−48.1		7	302	−48.7	
10,000	8	263	−51.4		25	276	−44.5						24	284	−37.7		26	270	−49.3		7	259	−54.6		7	259	−55.1	
11,000					19	237	−52.3						23	245	−45.1		25	231	−55.0						6	222	−59.0	
12,000													22	211	−52.2		20	198	−57.9						6	189	−60.5	
13,000													22	180	−58.7		20	169	−58.2						5	160	−59.6	
14,000													18	153	−64.2		18	144	−59.8									
15,000													16	130	−68.4		18	122	−62.0									
16,000													14	111	−71.4		14	105	−63.6									
17,000													11	93	−74.6		10	89	−64.8									
18,000													7	78	−73.5		7	75	−64.7									

Altitude (meters) m. s. l.	Spokane, Wash. (598 m.)				Swan Island, West Indies (10 m.)				Tacubaya, Mex. (2,306 m.)				Tampa, Fla. (3 m.)				Tapachula, Mex. (115 m.)				Tatoosh Island, Wash. (31 m.)				Toledo, Ohio (191 m.)			
	Number of observations	Pressure	Temperature	Relativz humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature..	Relative humidity
Surface	31	949	−1.3	87	29	1,016	24.2	79	31	775	13.4	44	31	1,021	13.4	83	31	999	24.0	80	31	1,012	6.8	80	28	997	−1.6	81
500					29	961	20.6	82					31	963	13.7	66	31	956	23.2	68	31	955	5.3	69	28	959	−0.8	72
1,000	31	903	−0.1	72	29	907	17.1	81					31	907	11.9	58	31	903	20.9	63	31	898	2.1	72	28	901	−3.3	71
1,500	31	848	−1.5	58	29	855	14.2	77					31	855	10.1	48	31	852	18.0	68	31	844	−0.5	73	28	846	−4.0	63
2,000	31	796	−3.7	51	29	805	12.0	65					31	804	8.4	39	31	803	15.1	70	31	792	−2.8	65	28	793	−5.8	57
2,500	31	747	−6.2	49	29	758	10.2	52	31	757	12.7	43	31	757	6.7	27	31	757	12.8	62	31	744	−5.2	63	28	744	−7.3	44
3,000	31	701	−8.7	47	28	714	8.6	40	31	713	9.8	44	31	712	4.4	23	31	713	10.4	50	30	698	−7.9	60	28	698	−9.3	43
4,000	31	615	−14.5	51	26	632	4.3	19	31	631	2.3	53	31	629	−1.0	26	31	632	4.6	33	29	612	−13.7	53	28	612	−14.5	39
5,000	31	538	−20.4	50	25	558	−1.7	20	31	557	−4.2	43	31	554	−6.6	27	30	558	−1.3	26	29	537	−20.1	50	27	536	−20.7	38
6,000	31	470	−27.0	51	24	492	−7.6		31	490	−10.0	34	31	486	−12.9	29	30	492	−7.6	24	29	468	−26.7	51	27	468	−27.3	35
7,000	31	408	−34.2	51	24	432	−14.3		30	430	−16.5	32	31	426	−20.1	32	30	432	−14.4	25	28	407	−33.0	50	26	406	−34.0	
8,000	29	353	−40.3	57	23	378	−21.7		28	376	−23.2	35	31	371	−27.1	37	28	378	−21.8		28	352	−40.4		25	351	−41.1	
9,000	25	305	−47.0		21	328	−29.9		27	326	−31.1	38	31	322	−34.3		28	328	−29.6		28	304	−47.6		21	303	−48.1	
10,000	21	261	−52.6		20	286	−37.9		27	283	−39.1		31	279	−42.1		28	286	−37.8		26	261	−53.6		14	262	−52.9	
11,000	12	223	−57.6		19	246	−45.6		26	244	−47.3		30	240	−50.0		28	246	−46.0		22	223	−58.2		8	222	−55.3	
12,000					18	212	−53.0		24	209	−55.5		29	205	−57.5		26	211	−53.5		19	190	−57.5		6	188	−54.0	
13,000					17	181	−59.6		23	178	−61.8		28	175	−61.7		26	181	−60.3		15	162	−55.2		5	162	−54.2	
14,000					15	154	−64.5		20	152	−66.7		28	149	−64.0		22	154	−66.2		9	139	−55.6					
15,000					15	131	−68.8		17	128	−69.0		26	126	−66.9		13	130	−71.4		7	119	−56.4					
16,000					15	111	−71.7		15	109	−71.7		23	107	−69.2		12	110	−75.6									
17,000					12	93	−74.2		9	92	−73.2		21	91	−71.6		9	93	−77.8									
18,000					11	79	−75.7						14	77	−72.4		7	78	−78.1									
19,000					6	66	−73.9						5	65	−72.0		6	66	−77.3									

See footnotes at end of table.

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

Altitude (meters) m. s. l.	Stations and elevations in meters above sea level: Tongue Point, Oregon [1] (21 m.)				Washington, D. C. (25 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	15	1,016	6.4	75	31	1,018	2.0	72
500	15	958	5.0	61	31	960	1.5	69
1,000	15	902	2.1	61	31	902	−0.3	68
1,500	15	847	−0.5	63	31	848	−1.9	67
2,000	15	795	−3.1	55	31	796	−3.5	61
2,500	15	747	−5.8	49	31	746	−4.6	49
3,000	15	700	−8.4	46	31	700	−6.6	45
4,000	14	615	−14.3	44	28	615	−11.8	44
5,000	14	538	−21.1	45	28	539	−18.1	47
6,000	13	469	−27.9	56	28	471	−24.9	52
7,000	12	408	−34.0	62	28	410	−31.8	51
8,000	7	350	−44.3		28	355	−38.6	48
9,000	7	301	−51.5		28	306	−44.9	
10,000	7	257	−56.8		26	263	−50.4	
11,000	5	220	−57.1		18	226	−53.7	
12,000					12	193	−54.7	
13,000					9	165	−55.1	
14,000					5	142	−57.4	

[1] U. S. Navy.
[2] Humidity data obtained by hair hygrometer, stations not so indicated, using electric hygrometer.
[3] Station moved to Toledo, Ohio.

NOTE.—All observations were taken near 11 p. m., E. S. T.
"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° 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 occurring below the operating range of the humidity element.
Charts VIII, IX, X, and XI, for January data appeared in the January 1944 issue of the Monthly Weather Review.

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations made near 5 p. m. (75th meridian time) during February 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.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	25	205	1.3	29	240	3.2	22	264	3.4	25	258	4.0	28	279	0.4	27	113	0.9
500							22	263	3.7									
1,000	25	228	2.4				22	254	5.2				28	284	3.7	27	119	1.5
1,500	21	248	4.5				21	265	8.4	25	259	7.1	23	284	7.7	26	175	1.3
2,000	20	260	7.7	29	244	4.6	19	271	13.8	23	278	10.2	21	292	9.8	26	219	1.9
2,500	18	247	9.8	29	242	5.1	17	274	16.0	22	285	10.2	21	298	10.6	23	244	3.2
3,000	17	256	11.8	29	247	8.3	13	276	18.3	21	283	11.5	20	296	12.3	23	237	4.4
4,000	15	257	17.1	24	256	13.0	10	280	24.3	17	290	12.3	19	295	13.3	18	281	4.6
5,000	11	254	21.1	19	256	17.2				17	280	13.2	16	297	14.8	13	318	5.4
6,000				16	254	18.8				12	287	13.3	13	298	16.9			
8,000													11	290	15.5			

Altitude (meters) m. s. l.	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
Surface	27	136	4.4	25	249	3.9	28	235	1.2	24	277	1.6	28	248	1.6	28	10	0.8	28	252	4.6
500	27	159	3.6	25	247	5.8	28	227	3.7	24	257	4.7	28	256	3.7						
1,000	23	186	2.8	20	256	8.4	25	263	7.9	22	274	7.7	25	240	4.8						
1,500	19	216	0.7	11	280	8.9	22	272	11.5	21	287	11.5	22	256	8.6				28	260	4.3
2,000	17	220	3.3				17	284	14.0	19	289	14.5	14	262	13.3	28	312	0.9	28	257	6.5
2,500	16	226	6.3				13	291	15.6	19	291	16.7	13	266	16.9	26	260	2.2	26	241	8.2
3,000	13	220	7.7							18	284	17.1	11	272	18.1	23	268	4.7	25	245	10.8
4,000	12	230	11.1							15	286	21.6	10	279	21.4	22	268	9.6	23	250	16.1
5,000	10	239	13.4													20	262	13.7	19	254	18.3
6,000																20	263	15.7	14	256	22.9
8,000																13	254	25.0			

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.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	28	161	1.1	28	296	2.7	22	276	1.4	28	282	2.4	28	260	1.2	24	248	2.4
500							22	277	2.7				28	262	4.1	24	259	4.0
1,000							22	256	4.3	28	267	3.8	26	254	6.9	19	259	5.8
1,500				28	302	3.2	22	272	8.3	27	278	6.8	26	261	8.7	17	267	9.0
2,000	28	179	1.0	28	292	2.6	20	279	11.9	25	277	9.2	22	269	9.6	16	281	12.0
2,500	28	242	1.9	28	233	2.5	16	283	17.3	22	285	12.2	20	276	10.4	12	282	13.1
3,000	26	267	2.2	22	241	4.8	13	292	19.0	19	292	12.1	19	280	12.2	10	282	14.1
4,000	19	279	5.7	15	252	9.0	10	290	26.9	11	297	11.9	18	278	15.4			
5,000	16	254	6.8	10	265	10.4							14	281	18.6			
6,000	12	305	8.7										12	277	22.4			
8,000																		
10,000																		

Altitude (Meters) m. s. l.	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
Surface	28	99	1.4	24	246	1.0	27	306	0.8	29	143	3.6	26	228	1.6	27	240	1.6	25	311	5.4
500				24	231	1.7	27	298	0.9	29	148	2.9	26	226	2.9	27	243	3.7	25	294	5.9
1,000	28	144	1.0	23	268	3.1	27	205	0.7	28	212	1.8	18	245	3.3	23	249	5.5	22	300	8.8
1,500	27	224	0.9	22	277	5.0	27	228	2.8	27	241	2.2	16	274	5.1	19	273	8.9	20	299	11.9
2,000	25	254	1.5	19	281	8.9	27	247	3.2	26	279	2.8	12	286	6.0	16	281	9.9	17	292	14.7
2,500	23	255	2.4	18	277	12.3	23	277	3.7	26	272	3.6				13	288	13.9	13	300	16.0
3,000	20	259	3.0	17	279	15.6	17	338	4.7	25	275	5.2				13	290	16.9			
4,000	18	266	6.6	14	264	19.6	14	349	6.5	23	276	8.0				12	284	20.6			
5,000	16	270	9.0							21	276	11.4				11	287	23.8			
6,000	15	267	10.8							18	277	11.2				10	286	29.8			
8,000	10	310	13.5							14	283	12.7									
10,000										13	280	20.5									

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations made near 5 p. m. (75th meridian time) during February 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.	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	28	274	1.4	24	235	0.8	28	323	1.0	28	189	1.3	24	205	0.9	26	260	1.9	29	241	1.3	24	29	1.1	29	237	2.7	24	271	3.5	26	2	0.4	27	179	0.8	24	316	1.9
500	28	310	1.6	24	225	0.6	28	274	1.7	28	192	1.7	---	---	---	26	260	3.0	29	276	2.4	24	55	0.9	29	227	2.6	24	283	4.4	26	111	0.2	---	---	---	24	297	3.3
1,000	25	343	2.6	24	232	1.2	27	270	3.6	28	192	2.6	24	206	0.9	24	262	4.9	25	286	3.8	22	229	0.8	24	199	2.3	21	301	6.8	24	186	1.8	27	174	1.3	23	289	6.7
1,500	23	353	3.6	20	231	5.6	25	281	6.2	28	191	3.7	24	258	2.2	24	276	8.2	23	297	7.6	18	259	3.2	21	195	1.2	17	297	7.0	19	172	2.6	26	219	1.2	23	284	10.5
2,000	20	351	5.7	17	249	9.6	22	288	9.0	27	203	4.0	24	284	5.9	24	277	12.1	19	296	9.2	16	267	5.4	18	318	2.3	12	304	8.8	15	215	1.4	22	250	2.5	19	288	13.2
2,500	20	348	8.5	17	252	12.0	21	289	11.3	26	217	4.7	24	291	8.0	24	280	14.1	16	292	12.1	14	266	9.4	18	312	4.5	10	303	10.5	11	292	1.7	17	254	3.8	17	290	18.1
3,000	18	349	10.4	16	254	14.3	20	286	12.7	23	228	5.8	23	287	9.9	21	275	17.3	13	306	14.3	13	263	14.0	18	305	6.8	10	310	13.8	---	---	---	15	283	4.8	16	284	20.3
4,000	16	353	15.5	15	264	17.8	19	280	16.6	20	254	10.6	18	284	15.5	16	278	20.4	10	308	17.2	13	264	16.5	15	288	8.7	---	---	---	---	---	---	12	274	7.5	14	284	24.8
5,000	14	339	19.3	14	273	21.2	18	272	20.1	17	270	15.0	15	278	15.7	10	275	27.3	---	---	---	12	256	18.6	---	---	---	---	---	---	---	---	---	---	---	---	10	279	22.0
6,000	12	338	21.9	12	265	24.5	15	277	24.9	13	258	16.7	15	277	18.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

LATE REPORT FOR JANUARY 1944

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations during January 1944. Directions given in degrees. Velocities in meters per second*

Altitude (meters) m. s. l.	El Paso, Tex. (1,196 m.)			Greensboro, N. C. (271 m.)			Altitude (meters) m. s. l.	El Paso, Tex. (1,196 m.)			Greensboro, N. C. (271 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity		Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	31	272	1.7	27	280	2.1	2,500	29	263	4.3	24	283	11.0
500	---	---	---	27	284	3.1	3,000	27	272	6.0	21	278	12.3
1,000	---	---	---	25	270	4.7	4,000	22	270	9.7	20	273	17.1
1,500	31	272	1.9	25	284	6.2	5,000	21	266	10.8	16	278	18.8
2,000	29	271	3.6	25	294	8.6	6,000	19	264	13.2	11	284	20.9

TABLE 3.—*Maximum free-air wind velocities, (m. p. s.). For different sections of the United States based on pilot-balloon observations during February 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]	41.6	NW	2,500	24	Harrisburg, Pa	54.4	WNW	5,000	10	Caribou, Maine	76.0	WNW	7,940	19	Portland, Maine.
East-Central [2]	44.5	W	2,260	15	Norfolk, Va	50.2	NW	4,960	1	Norfolk, Va	76.8	W	10,759	9	Nashville, Tenn.
Southeast [3]	38.0	WSW	2,189	17	Atlanta, Ga	50.6	WNW	3,020	6	Birmingham, Ala	53.2	WNW	11,611	25	Jacksonville, Fla.
North-central [4]	46.0	SW	1,018	4	Milwaukee, Wis	49.2	WNW	4,092	9	Marquette, Mich	62.0	WNW	6,400	24	Alpena, Mich.
Central [5]	51.3	W	1,168	5	Joliet, Ill	49.0	W	4,856	5	St. Louis, Mo	68.0	W	6,603	20	Goodland, Kans.
South-Central [6]	42.0	WSW	2,092	21	Amarillo, Tex	46.8	NW	4,976	14	Tulsa, Okla	85.5	WSW	11,781	2	Big Spring, Tex.
Northwest [7]	38.8	NW	2,500	6	Glasgow, Mont	45.8	W	5,000	7	Great Falls, Mont	68.0	W	6,388	7	Great Falls, Mont.
West-Central [8]	39.5	WNW	2,489	4	Cheyenne, Wyo	66.0	NW	4,784	14	Sacramento, Calif	62.0	W	8,897	22	Denver, Colo.
Southwest [9]	34.8	WNW	1,563	9	Las Vegas, Nev	64.3	W	4,498	9	El Paso, Tex	75.3	SW	9,383	26	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.