METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR JANUARY 1945

[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 January 1945*

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	31	1,006	−11.0	72	31	838	3.6	51	31	1,020	10.8	79	31	984	5.0	70	31	930	7.1	65	31	958	−9.6	86	31	922	0.1	87
500	31	953	−11.4	77					31	961	10.6	59	31	960	5.3	62												
1,000	31	893	−12.5	78					31	905	9.5	45	31	903	3.5	61	31	904	8.2	55	31	899	−8.0	82	31	907	−0.2	84
1,500	31	836	−12.5	73					31	853	8.0	42	31	850	2.7	49	31	851	6.5	48	31	843	−7.6	72	31	852	−1.2	81
2,000	31	783	−13.3	69	31	800	2.4	50	30	802	6.5	36	30	798	1.7	40	31	801	4.4	42	31	790	−7.9	64	31	800	−2.0	72
2,500	31	733	−14.2	63	31	752	−0.3	49	30	754	4.7	33	29	750	0.1	40	31	752	1.7	41	31	741	−9.9	59	31	751	−3.8	63
3,000	31	686	−15.8	60	31	706	−3.4	53	30	709	2.3	34	29	705	−2.0	40	31	707	−0.6	34	31	694	−12.2	60	31	704	−6.5	63
4,000	30	600	−20.4	53	31	621	−9.1	43	30	626	−3.1		29	621	−7.2		31	623	−6.3		30	608	−17.0	54	31	619	−11.8	55
5,000	30	523	−26.4		31	545	−15.4	42	30	550	−9.6		29	545	−13.5		31	548	−12.7		30	532	−22.8		31	543	−18.0	59
6,000	29	455	−32.9		31	477	−22.0		29	483	−16.4		27	478	−19.9		30	479	−19.9		30	464	−29.2		31	474	−24.6	
7,000	29	393	−39.0		30	415	−29.0		28	422	−23.4		27	416	−27.3		30	418	−27.6		29	402	−35.7		31	412	−31.8	
8,000	29	339	−45.1		30	360	−36.7		28	367	−30.4		26	362	−34.7		30	363	−34.9		28	347	−43.2		30	357	−39.1	
9,000	29	291	−50.5		30	310	−44.5		25	318	−37.8		23	313	−41.7		29	313	−42.3		27	299	−49.9		24	308	−46.2	
10,000	29	250	−53.0		29	267	−51.5		22	274	−45.7		20	270	−49.2		29	270	−49.6		27	256	−56.5		20	265	−53.5	
11,000	23	214	−52.6		28	229	−56.3		19	235	−52.8		12	232	−55.5		27	231	−55.2		24	219	−59.5		16	227	−59.2	
12,000	21	183	−52.0		23	196	−57.9		18	201	−56.3		9	197	−58.2		24	198	−58.7		19	186	−58.9		10	193	−62.5	
13,000	17	156	−52.1		20	167	−58.4		12	171	−58.7		6	168	−58.7		24	168	−58.5		14	159	−57.8		5	165	−61.9	
14,000	11	133	−52.7		16	143	−59.5		11	146	−61.6						21	143	−59.5		6	136	−55.3					
15,000	8	114	−53.8		8	122	−61.3										7	122	−61.3									
16,000	5	98	−55.5														5	103	−64.2									

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.)			
Surface	30	1,018	16.0	90	29	991	−8.8	88	31	986	−12.8	92	31	1,017	6.9	85	31	837	−1.7	67	31	927	−1.4	77	31	883	7.7	48
500	30	961	15.2	79	29	955	−10.4	88	31	947	−13.4	91	31	959	8.0	66												
1,000	30	906	13.0	72	29	895	−11.7	87	31	888	−13.6	88	31	903	5.9	59					31	903	1.1	66				
1,500	30	854	11.2	67	29	839	−12.9	82	31	831	−13.6	82	31	849	3.5	59					31	849	1.1	58	31	852	9.2	41
2,000	30	804	9.6	60	29	785	−14.0	75	31	778	−14.5	76	31	798	2.2	42	31	798	−0.5	55	31	797	−0.5	54	31	800	6.2	41
2,500	30	757	7.5	50	29	735	−15.1	66	31	728	−15.9	72	31	750	0.9	35	31	749	−2.0	52	31	748	−2.5	48	31	753	3.3	42
3,000	30	712	5.0	43	29	688	−16.3	61	31	681	−17.6	67	31	705	−1.6	34	31	703	−5.2	52	31	703	−5.1	48	31	708	0.0	39
4,000	30	629	−1.6	49	29	601	−20.9	57	31	595	−22.2		29	621	−6.4		31	618	−11.6	54	31	618	−10.9	51	31	624	−6.2	34
5,000	30	554	−8.1	46	29	525	−26.4		29	518	−28.2		29	546	−12.3		31	542	−18.3	47	30	542	−16.8	53	31	548	−12.6	
6,000	28	487	−14.3	51	29	456	−32.8		28	450	−34.4		29	478	−18.9		31	473	−25.2		30	474	−23.4		31	480	−19.6	
7,000	28	426	−21.5		27	395	−40.0		28	389	−41.0		26	418	−26.0		31	412	−32.5		30	412	−30.5		31	419	−26.7	
8,000	27	371	−28.7		27	340	−46.3		28	334	−47.4		23	363	−32.5		30	356	−39.9		29	357	−37.7		31	364	−34.2	
9,000	27	322	−36.1		23	292	−51.2		28	287	−52.5		21	314	−40.0		27	306	−47.7		29	308	−45.4		31	314	−41.9	
10,000	27	278	−43.4		20	251	−55.1		28	246	−54.7		16	271	−46.8		25	263	−53.5		28	265	−52.5		31	271	−49.3	
11,000	25	239	−50.5		16	215	−55.5		24	210	−53.9		12	233	−51.9		20	225	−57.5		27	226	−57.4		31	232	−55.3	
12,000	25	205	−56.5		13	183	−52.7		18	180	−52.4		7	198	−56.5		14	191	−57.7		23	194	−58.5		30	198	−57.5	
13,000	21	174	−60.5		11	156	−52.4		15	154	−52.6		5	169	−56.2		7	163	−56.4		15	165	−58.8		27	169	−57.6	
14,000	18	148	−62.7		10	134	−53.7		9	132	−53.3										10	142	−60.3		21	144	−59.4	
15,000	10	126	−65.6		8	114	−54.4		5	113	−54.8														11	123	−61.7	
16,000																									8	104	−63.4	

Altitude (meters) m. s. l.	Ely, Nev. (1,908 m.)				Glasgow, Mont. (648 m.)				Grand Junction, Colo. (1,416 m.)				Great Falls, Mont. (1,128 m.)				Greensboro, N. C. (273 m.)				Hatteras, N. C. (3 m.)				Havana, Cuba [1] (51 m.)			
Surface	31	810	−5.0	81	31	941	−8.9	86	31	861	0.5	67	31	887	−2.2	66	31	986	1.4	76	27	1,018	5.4	79				
500																	31	958	1.8	66	27	958	4.8	67				
1,000					31	900	−6.0	81									31	901	0.1	64	27	901	2.7	60				
1,500					31	844	−4.7	66	31	853	1.2	64	31	847	−1.6	58	31	846	−1.8	60	27	847	0.6	58				
2,000	31	801	−3.0	73	31	792	−5.9	63	31	801	−0.2	62	31	795	−3.3	58	31	794	−3.4	54	27	795	−1.1	54				
2,500	31	753	−2.4	58	31	742	−8.3	65	31	752	−2.7	61	31	746	−5.9	60	31	745	−4.9	48	27	747	−2.9	49				
3,000	31	706	−5.2	57	31	696	−11.0	66	31	706	−5.4	60	31	699	−8.8	64	31	699	−7.0	46	27	701	−4.8	49				
4,000	31	621	−10.0	49	30	610	−16.5	56	31	620	−11.1	59	31	614	−14.4	60	30	615	−12.1	51	27	617	−9.7	42				
5,000	31	545	−16.4	47	28	534	−22.4		31	544	−17.3	53	31	537	−20.5		30	538	−17.6		25	541	−15.9					
6,000	31	476	−23.7		27	466	−29.0		31	475	−24.1		30	468	−27.3		29	470	−24.4		25	473	−22.5					
7,000	30	414	−31.0		27	403	−36.2		31	413	−31.7		29	406	−34.9		29	409	−31.6		22	412	−29.4					
8,000	29	360	−38.4		26	348	−43.4		30	358	−39.6		27	351	−42.9		26	354	−39.4		20	357	−36.2					
9,000	27	310	−46.5		25	300	−50.4		27	308	−46.5		27	302	−50.0		23	305	−46.7		18	308	−42.7					
10,000	22	266	−54.3		19	258	−55.7		26	266	−52.6		26	258	−55.8		19	263	−52.9		18	266	−49.2					
11,000	17	228	−59.1		12	221	−59.8		22	228	−57.1		24	222	−59.1		15	224	−56.0		17	228	−53.9					
12,000	10	195	−61.4		5	187	−59.4		16	193	−57.3		15	188	−58.9		13	191	−55.7		17	195	−56.4					
13,000									10	165	−57.5		11	161	−57.6		8	164	−56.9		12	166	−54.8					
14,000									7	141	−58.7						6	140	−59.6		6	144	−56.5					

See footnote 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 1945.*—Continued

Altitude (meters) m. s. l.	Huntington, W. Va. (172 m.)				Int'l Falls, Minn. (343 m.)				Jackson, Miss. (97 m.)				Joliet, Ill. (178 m.)				Lake Charles, La. (5 m.)				Little Rock, Ark. (79 m.)				Louisville, Ky. (165 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	1,000	−2.4	82	31	978	−14.5	89	31	1,008	7.2	75	30	999	−7.3	88	31	1,020	10.4	80	31	1,011	4.4	78	30	1,001	−2.0	80
500	31	959	−3.0	78	31	957	−14.9	88	31	960	7.0	69	30	958	−7.7	87	31	962	10.0	65	31	960	3.8	71	30	959	−2.4	77
1,000	31	900	−4.6	73	31	896	−15.9	84	31	904	5.9	58	30	899	−8.5	85	31	906	8.9	52	31	903	2.7	65	30	901	−3.3	74
1,500	31	845	−6.0	74	31	839	−15.4	75	31	850	5.0	49	30	843	−7.3	68	31	853	7.6	46	31	849	1.5	60	30	846	−4.0	69
2,000	31	792	−6.9	73	31	785	−15.0	73	31	799	3.3	47	30	790	−8.0	65	31	802	5.7	41	31	797	−0.4	54	30	793	−5.3	64
2,500	31	743	−8.6	67	31	735	−16.2	69	31	752	1.1	43	30	741	−10.0	67	31	754	3.5	40	31	749	−2.3	52	30	744	−7.2	61
3,000	31	696	−10.7	65	31	687	−17.9	64	31	706	−0.7	39	30	694	−12.1	66	31	709	1.0	41	31	703	−4.2	46	30	698	−9.4	61
4,000	31	611	−15.6	60	31	600	−22.5	----	31	622	−6.2	38	30	608	−16.5	47	31	626	−4.4	36	31	619	−9.3	41	29	612	−14.3	61
5,000	31	534	−21.0	----	30	524	−28.0	----	31	547	−12.3	38	30	532	−22.3	----	31	550	−10.7	----	31	543	−15.5	44	29	536	−19.4	60
6,000	31	466	−26.9	----	29	455	−34.6	----	31	479	−18.4	----	29	464	−28.5	----	31	482	−17.5	----	31	475	−22.0	----	29	468	−25.7	----
7,000	31	404	−34.0	----	28	394	−40.5	----	31	418	−25.5	----	27	402	−35.7	----	31	421	−24.7	----	31	414	−29.5	----	27	407	−32.7	----
8,000	31	350	−41.0	----	28	339	−46.7	----	30	363	−33.0	----	26	348	−42.8	----	30	366	−32.2	----	30	358	−36.7	----	26	352	−40.0	----
9,000	31	301	−47.3	----	27	291	−51.7	----	30	314	−40.3	----	25	299	−49.9	----	30	317	−39.7	----	29	309	−43.7	----	21	304	−46.8	----
10,000	31	258	−52.2	----	25	249	−55.2	----	29	271	−47.4	----	23	256	−54.4	----	27	273	−47.4	----	29	266	−50.7	----	15	262	−51.9	----
11,000	30	222	−54.3	----	14	213	−55.5	----	29	233	−53.8	----	18	218	−55.7	----	20	235	−54.0	----	28	228	−55.7	----	12	224	−55.2	----
12,000	29	190	−55.0	----	7	182	−55.8	----	29	199	−57.5	----	17	187	−55.9	----	10	201	−57.4	----	25	195	−58.1	----	6	189	−51.6	----
13,000	25	162	−55.5	----	5	156	−53.5	----	27	170	−58.6	----	8	158	−55.4	----	7	171	−60.1	----	22	165	−57.3	----	----	----	----	----
14,000	13	138	−56.4	----	----	----	----	----	23	145	−60.6	----	5	135	−55.6	----	----	----	----	----	15	141	−59.7	----	----	----	----	----
15,000	9	118	−57.9	----	----	----	----	----	16	123	−63.0	----	----	----	----	----	----	----	----	----	8	120	−61.5	----	----	----	----	----
16,000	----	----	----	----	----	----	----	----	9	105	−65.8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Mazatlan, Mexico (80 m.)				Medford, Oreg. (409 m.)				Merida, Mexico (27 m.)				Miami, Fla. (4 m.)				Nashville, Tenn. (180 m.)				North Platte, Nebr. (849 m.)				Oakland, Calif. (2 m.)			
Surface	31	1,007	20.5	80	30	974	4.7	85	26	1,015	22.7	74	31	1,019	16.6	83	31	998	1.9	80	26	919	−2.7	86	31	1,020	9.4	78
500	31	960	21.0	51	30	963	5.0	82	26	961	21.1	67	31	962	16.1	75	31	960	1.0	76	----	----	----	----	31	961	9.2	68
1,000	31	906	19.0	42	30	906	5.0	71	25	907	18.3	68	31	907	13.4	69	31	902	−0.8	74	26	902	−1.2	79	31	905	8.2	55
1,500	31	855	16.2	39	30	852	3.4	68	25	856	15.1	71	31	855	11.1	62	31	847	−1.5	65	26	848	−1.3	68	31	852	6.2	48
2,000	31	805	13.0	40	30	801	1.0	63	25	806	11.8	73	31	804	9.5	46	31	795	−2.8	59	26	795	−2.9	66	31	801	3.5	45
2,500	31	758	9.5	44	30	752	−1.6	59	25	759	9.3	54	31	757	7.3	42	31	746	−4.5	55	26	747	−4.9	61	31	753	0.5	45
3,000	31	714	6.2	46	30	706	−4.2	56	24	715	7.6	----	31	712	5.1	39	31	700	−6.8	54	26	700	−7.4	58	31	707	−2.5	46
4,000	30	631	−0.4	46	29	621	−10.4	56	21	632	3.1	----	30	629	−0.4	35	30	616	−11.2	46	26	615	−12.9	57	31	622	−8.7	49
5,000	29	556	−6.7	43	29	545	−16.9	54	15	558	−3.2	----	29	555	−6.1	----	30	540	−17.2	48	25	539	−18.8	51	31	546	−15.0	49
6,000	29	488	−13.7	40	28	476	−23.6	----	13	490	−10.2	----	29	487	−12.8	----	28	471	−24.3	----	25	470	−25.7	----	30	478	−21.3	----
7,000	29	427	−20.6	52	27	414	−30.9	----	12	430	−17.4	----	29	427	−19.7	----	27	410	−31.5	----	25	409	−33.1	----	29	417	−28.4	----
8,000	26	373	−27.8	----	26	359	−38.4	----	11	375	−24.9	----	28	372	−27.1	----	26	355	−38.8	----	25	354	−40.3	----	29	361	−36.0	----
9,000	25	323	−35.1	----	26	310	−46.1	----	8	326	−32.9	----	28	323	−34.6	----	25	306	−45.5	----	23	305	−47.3	----	27	312	−43.3	----
10,000	25	280	−42.8	----	25	266	−53.6	----	8	282	−41.1	----	28	280	−41.8	----	22	263	−51.4	----	19	262	−53.3	----	27	269	−50.5	----
11,000	23	241	−50.7	----	23	227	−59.2	----	8	243	−48.1	----	27	241	−49.0	----	18	225	−55.5	----	17	224	−57.6	----	23	231	−56.3	----
12,000	13	207	−56.9	----	21	194	−61.5	----	8	208	−54.6	----	25	206	−56.0	----	14	192	−55.4	----	15	191	−58.7	----	18	197	−58.9	----
13,000	6	176	−60.0	----	16	165	−60.6	----	7	178	−59.6	----	21	176	−61.0	----	11	164	−55.8	----	11	163	−57.8	----	9	168	−57.1	----
14,000	----	----	----	----	11	140	−58.5	----	5	151	−65.7	----	16	149	−64.2	----	7	139	−57.7	----	7	140	−59.3	----	6	143	−58.2	----
15,000	----	----	----	----	5	119	−60.5	----	----	----	----	----	10	126	−68.5	----	5	119	−59.4	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Ogden, Utah (1,355 m.)				Oklahoma City, Okla. (391 m.)				Omaha, Nebr. (308 m.)				Phoenix, Ariz. (339 m.)				Pittsburgh, Pa. (382 m.)				Portland, Maine (20 m.)				Rapid City, S. Dak. (981 m.)			
Surface	31	868	−0.7	79	31	974	3.0	77	31	984	−3.6	83	31	978	9.0	75	31	972	−6.1	83	31	1010	−9.7	75	31	903	−3.6	81
500	----	----	----	----	31	961	3.3	75	31	960	−4.2	83	31	959	12.3	56	31	958	−6.4	83	31	949	−9.4	70	----	----	----	----
1,000	----	----	----	----	31	904	2.9	64	31	901	−3.9	76	31	903	10.6	47	31	898	−8.0	78	31	890	−10.1	69	31	901	−3.2	79
1,500	31	852	0.6	71	31	850	2.9	55	31	846	−4.2	67	31	851	7.4	49	31	842	−9.3	77	31	834	−10.3	70	31	846	−1.6	63
2,000	31	800	−1.1	64	31	798	1.1	50	31	793	−5.5	61	31	800	4.0	49	31	789	−10.4	75	31	781	−11.7	67	31	795	−3.4	58
2,500	31	751	−4.1	66	31	750	−0.8	43	31	744	−7.5	60	31	752	0.7	47	31	739	−11.3	73	31	732	−13.2	64	31	746	−6.1	62
3,000	31	705	−6.5	63	31	704	−3.4	42	31	698	−9.7	62	31	706	−2.3	44	31	692	−12.9	72	31	685	−15.3	59	31	699	−8.8	67
4,000	31	620	−11.3	58	31	620	−8.7	42	31	612	−14.5	61	31	622	−8.5	45	31	607	−17.8	71	31	599	−20.3	58	31	614	−14.5	64
5,000	31	544	−17.1	51	29	545	−14.4	46	31	536	−20.0	56	30	546	−15.0	41	31	530	−23.4	----	31	523	−26.0	----	31	537	−20.5	53
6,000	31	475	−24.0	----	29	476	−21.2	----	31	468	−26.4	----	30	478	−21.7	----	30	462	−29.7	----	31	455	−32.5	----	31	468	−27.6	----
7,000	31	413	−31.2	----	29	415	−28.5	----	29	407	−33.6	----	30	416	−29.0	----	30	400	−35.8	----	29	394	−39.3	----	31	407	−35.0	----
8,000	31	358	−38.8	----	29	360	−36.0	----	28	352	−40.7	----	30	360	−36.6	----	26	346	−42.6	----	28	339	−45.6	----	30	351	−42.6	----
9,000	30	309	−46.0	----	27	311	−43.5	----	28	303	−47.4	----	30	311	−44.0	----	26	298	−48.4	----	25	292	−50.0	----	27	303	−49.6	----
10,000	30	265	−53.0	----	25	268	−50.5	----	27	260	−53.3	----	25	268	−50.3	----	25	256	−53.0	----	25	250	−52.4	----	24	260	−56.1	----
11,000	30	227	−58.7	----	24	229	−56.3	----	26	222	−57.6	----	19	230	−55.8	----	25	219	−55.6	----	19	215	−53.0	----	23	222	−60.2	----
12,000	29	194	−60.9	----	22	196	−59.0	----	19	191	−59.0	----	7	195	−58.0	----	21	187	−55.6	----	12	183	−51.9	----	16	190	−60.1	----
13,000	27	165	−59.0	----	19	167	−58.8	----	12	163	−57.8	----	----	----	----	----	15	160	−55.3	----	9	156	−52.4	----	12	161	−58.4	----
14,000	24	140	−58.6	----	13	142	−58.9	----	----	----	----	----	----	----	----	----	7	135	−55.3	----	8	134	−53.8	----	5	138	−59.6	----
15,000	18	120	−59.6	----	5	122	−62.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
16,000	9	101	−59.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
17,000	6	87	−58.8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

See footnote 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 1945.*—Continued

Altitude (meters) m. s. l.	St. Louis, Mo. (171 m.)				St. Paul, Minn. (225 m.)				San Antonio, Tex. (240 m.)				San Juan, P. R. (15 m.)				Santa Maria, Calif. (71 m.)				S. Ste. Marie, Mich. (221 m.)				Spokane, Wash. (598 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	1,000	−2.2	81	31	993	−10.1	84	31	992	10.2	77	31	1,015	22.9	82	31	1,011	9.7	78	31	991	−13.9	86	30	950	0.6	84
500	31	960	−3.4	81	31	958	−11.3	87	31	961	11.5	68	31	960	19.8	79	31	960	11.5	57	31	956	−13.2	82	----	----	----	----
1,000	31	901	−3.3	71	31	898	−12.3	87	31	906	9.9	66	31	906	16.4	77	31	905	9.5	49	31	895	−14.4	78	30	904	−0.8	84
1,500	31	846	−3.6	65	31	841	−10.8	75	31	853	8.2	60	31	854	13.5	73	31	852	6.7	47	31	838	−15.9	75	30	849	−2.8	83
2,000	31	794	−5.0	64	41	788	−11.0	67	31	803	6.1	53	31	804	11.4	58	31	801	4.0	40	31	783	−16.7	65	30	796	−3.2	70
2,500	31	744	−6.9	56	31	738	−12.2	61	31	755	4.0	46	31	758	9.8	40	31	753	1.4	34	31	733	−17.5	57	30	748	−5.1	63
3,000	31	698	−9.0	52	31	691	−14.0	55	31	710	1.7	38	31	713	8.0	32	31	707	−1.4	33	31	685	−19.2	57	30	701	−7.5	57
4,000	31	613	−13.9	50	31	605	−18.7	53	31	626	−4.0	----	29	631	3.3	----	30	624	−7.2	35	31	598	−24.0	----	30	616	−13.0	55
5,000	31	537	−19.4	48	31	529	−24.2	----	31	551	−10.4	----	23	558	−1.7	----	30	548	−14.0	39	31	521	−29.7	----	29	540	−18.5	49
6,000	31	468	−26.3	----	31	460	−30.2	----	30	483	−17.3	----	21	491	−8.4	----	29	479	−20.9	----	31	452	−35.8	----	29	471	−25.2	----
7,000	31	407	−33.5	----	31	399	−37.3	----	30	422	−24.6	----	20	431	−15.5	----	28	417	−28.5	----	31	390	−42.5	----	29	410	−32.6	----
8,000	29	351	−41.0	----	31	344	−44.3	----	28	367	−31.8	----	19	376	−22.9	----	28	362	−36.0	----	30	336	−49.0	----	28	355	−39.7	----
9,000	28	303	−47.9	----	30	296	−50.8	----	27	318	−39.1	----	17	327	−30.5	----	28	313	−43.5	----	29	288	−53.9	----	28	306	−47.2	----
10,000	24	260	−53.7	----	28	253	−56.1	----	27	274	−46.8	----	12	284	−37.9	----	27	269	−51.0	----	26	247	−55.7	----	28	262	−54.1	----
11,000	22	223	−57.4	----	27	217	−58.0	----	27	235	−54.1	----	11	246	−45.3	----	23	231	−55.9	----	22	212	−55.1	----	24	225	−58.7	----
12,000	18	190	−56.8	----	23	185	−57.8	----	23	201	−58.9	----	9	211	−52.6	----	19	197	−59.0	----	19	181	−53.9	----	19	191	−60.3	----
13,000	16	162	−56.2	----	21	157	−55.4	----	21	172	−59.5	----	6	180	−57.5	----	14	168	−60.9	----	13	154	−53.7	----	9	162	−57.1	----
14,000	13	138	−56.6	----	15	135	−55.8	----	16	146	−61.9	----	----	----	----	----	7	144	−61.4	----	6	132	−52.9	----	7	138	−56.3	----
15,000	6	117	−57.4	----	6	114	−56.2	----	13	124	−64.6	----	----	----	----	----	----	----	----	----	5	113	−53.5	----	----	----	----	----
16,000	----	----	----	----	----	----	----	----	7	105	−67.9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Swan Island, W. I.[1] (10 m.)				Tacubaya, Mexico (2,306 m.)				Tampa, Fla. (3 m.)				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	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	----	----	----	----	31	775	13.8	48	27	1,020	13.8	78	31	1,014	7.4	81	31	996	−8.5	87	31	1,016	−1.1	66
500	----	----	----	----	----	----	----	----	27	962	13.3	63	31	958	5.6	73	31	957	−8.6	85	31	957	−3.5	65
1,000	----	----	----	----	----	----	----	----	27	907	11.2	61	31	901	2.7	72	31	898	−9.3	82	31	898	−4.7	69
1,500	----	----	----	----	----	----	----	----	26	854	9.5	54	31	847	0.4	71	31	842	−10.0	77	31	843	−6.1	69
2,000	----	----	----	----	----	----	----	----	26	804	8.2	45	31	796	−1.8	65	31	788	−10.4	71	31	790	−7.4	65
2,500	----	----	----	----	31	756	12.9	48	26	756	6.3	----	31	747	−3.9	56	31	738	−11.8	70	31	741	−8.7	63
3,000	----	----	----	----	31	713	9.8	49	26	712	3.7	----	31	701	−5.9	49	31	692	−13.8	70	31	694	−10.8	58
4,000	----	----	----	----	31	631	2.0	59	26	628	−1.4	----	30	616	−11.4	46	31	605	−18.6	61	31	609	−16.1	56
5,000	----	----	----	----	31	557	−4.6	53	26	554	−7.7	----	30	540	−18.1	50	31	529	−24.7	----	31	533	−21.6	----
6,000	----	----	----	----	28	490	−10.5	39	26	486	−14.0	----	30	472	−25.0	----	31	460	−31.0	----	31	465	−28.2	----
7,000	----	----	----	----	28	430	−17.0	39	26	425	−20.7	----	30	410	−32.3	----	31	399	−37.4	----	31	403	−34.6	----
8,000	----	----	----	----	27	375	−24.1	----	25	371	−27.9	----	29	355	−39.9	----	30	344	−43.7	----	30	348	−41.4	----
9,000	----	----	----	----	27	326	−31.7	----	25	322	−35.7	----	24	307	−46.6	----	29	296	−49.7	----	27	300	−47.8	----
10,000	----	----	----	----	26	283	−39.3	----	24	278	−42.9	----	20	263	−53.9	----	27	254	−54.2	----	24	257	−52.7	----
11,000	----	----	----	----	25	244	−46.8	----	22	239	−50.0	----	12	226	−58.9	----	26	217	−55.3	----	23	221	−54.2	----
12,000	----	----	----	----	21	209	−54.1	----	18	205	−56.0	----	6	192	−61.7	----	22	186	−54.6	----	19	188	−53.6	----
13,000	----	----	----	----	14	179	−60.4	----	14	175	−60.5	----	----	----	----	----	16	159	−53.2	----	13	161	−53.8	----
14,000	----	----	----	----	6	152	−65.8	----	10	149	−62.2	----	----	----	----	----	11	136	−53.9	----	8	138	−54.7	----
15,000	----	----	----	----	----	----	----	----	6	126	−66.2	----	----	----	----	----	6	117	−54.0	----	5	119	−56.8	----

[1] Data not yet 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," page 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.

TABLE 2.—*Free-air resultant winds based on pilot-balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.) during January 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. (534 m.)			Albuquerque, N. Mex. (1,630 m.)			Atlanta, Ga. (299 m.)			Billings, Mont. (1,095 m.)			Bismarck, N. Dak. (512 m.)			Boise, Idaho (868 m.)			Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (132 m.)			Charleston, D. 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	168	0.5	31	296	1.8	27	288	4.3	29	234	3.5	27	305	3.1	27	277	0.5	27	107	2.3	23	293	2.9	27	274	1.3	29	265	1.1	26	300	1.2	30	338	1.6	31	260	1.6
500	---	---	---	---	---	---	27	289	5.1	---	---	---	---	---	---	---	---	---	27	121	2.9	23	279	3.7	27	268	3.0	29	274	2.9	26	256	3.0	---	---	---	---	---	---
1,000	28	246	2.0	---	---	---	25	287	5.1	---	---	---	26	312	6.5	27	248	0.1	22	169	2.1	18	288	6.1	25	290	6.7	27	275	4.9	19	271	6.5	---	---	---	---	---	---
1,500	27	254	4.4	---	---	---	25	295	8.9	29	260	9.1	21	315	8.6	27	246	0.9	18	215	1.9	13	296	7.0	19	296	9.7	26	287	8.0	19	281	9.0	---	---	---	31	262	1.6
2,000	25	267	7.5	31	300	1.4	22	294	11.9	29	283	10.5	18	310	11.1	21	280	3.6	17	261	4.5	11	300	10.5	15	294	13.0	22	284	11.5	16	296	12.5	30	318	2.0	31	259	2.7
2,500	25	269	9.7	29	302	3.4	20	290	14.2	28	290	10.9	16	316	14.2	19	280	7.2	15	268	6.4	10	303	13.2	15	296	14.1	21	277	14.5	14	292	15.6	29	305	4.2	31	267	5.0
3,000	24	271	11.9	28	301	5.8	18	288	16.7	28	293	10.5	15	314	16.4	17	286	7.8	15	259	8.3	---	---	---	12	293	16.3	21	274	16.5	13	289	18.3	29	293	5.9	29	265	6.6
4,000	23	272	14.2	23	296	9.1	16	282	22.6	22	306	12.1	13	317	17.5	14	286	9.4	14	274	11.9	---	---	---	10	294	19.6	14	276	23.3	---	---	---	25	308	8.8	25	259	10.1
5,000	21	275	15.4	21	286	11.3	15	286	26.8	18	303	10.6	12	322	20.2	---	---	---	13	266	13.7	---	---	---	10	297	22.7	11	268	24.5	---	---	---	25	313	10.8	18	259	10.4
6,000	20	274	18.2	20	288	13.6	15	284	30.0	17	304	11.2	---	---	---	---	---	---	12	266	17.3	---	---	---	---	---	---	---	---	---	---	---	---	24	318	12.1	---	---	---
8,000	12	301	18.1	17	286	13.9	---	---	---	12	333	9.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	14	318	15.2	---	---	---
10,000	---	---	---	14	300	16.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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	31	26	1.8	30	300	0.1	27	268	2.4	29	259	2.3	25	301	1.0	28	280	2.6	31	64	0.8	26	229	0.8	27	303	0.3	31	160	1.8	25	339	1.9	27	304	1.4	27	293	5.9
500	---	---	---	---	---	---	27	273	3.7	---	---	---	25	268	3.2	28	290	3.6	---	---	---	26	260	2.1	27	359	0.2	31	237	1.1	24	297	3.0	27	286	1.9	27	301	8.0
1,000	---	---	---	---	---	---	27	284	6.7	29	251	5.6	25	276	5.6	21	278	8.1	31	32	1.1	24	274	4.3	27	159	1.5	31	275	2.3	23	303	4.7	21	260	4.8	26	306	9.2
1,500	---	---	---	30	238	0.2	26	285	9.7	29	284	7.7	25	284	8.0	18	286	10.9	31	4	2.0	23	291	7.8	25	195	3.5	29	277	4.4	22	303	6.4	20	276	7.5	22	296	11.7
2,000	31	15	1.8	30	316	0.2	24	286	12.2	28	290	8.9	20	284	10.3	14	280	11.3	30	335	2.1	23	289	10.3	20	221	5.1	26	281	5.5	22	294	8.7	18	293	10.2	15	296	13.1
2,500	31	334	2.2	28	230	1.4	19	281	15.7	26	291	10.3	18	280	14.3	12	286	13.3	27	303	1.6	23	286	12.1	17	237	4.3	24	279	7.4	19	289	11.1	18	293	13.1	11	296	15.6
3,000	30	327	2.7	28	260	2.9	19	283	18.1	22	288	11.3	15	283	16.5	---	---	---	26	310	2.5	21	286	14.4	15	265	2.3	24	281	9.0	14	286	12.8	18	290	15.2	---	---	---
4,000	26	332	5.4	25	312	4.4	19	283	22.3	17	297	10.8	12	277	19.3	---	---	---	25	318	4.3	16	293	19.5	12	17	0.5	18	284	11.3	---	---	---	16	283	20.2	---	---	---
5,000	23	323	7.3	17	307	7.3	15	280	22.8	12	308	11.5	12	270	21.3	---	---	---	24	321	6.3	13	283	24.2	10	27	4.4	14	274	14.4	---	---	---	12	295	19.5	---	---	---
6,000	22	322	6.6	11	303	10.3	---	---	---	---	---	---	---	---	---	---	---	---	19	308	8.7	---	---	---	---	---	---	13	274	18.5	---	---	---	---	---	---	---	---	---
8,000	17	13	9.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	18	284	13.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10,000	14	357	7.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12	300	13.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12,000	13	307	14.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14,000	11	294	17.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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	240	1.3	23	318	2.5	28	331	1.7	31	175	0.2	30	345	2.8	28	298	1.6	28	297	1.8	30	29	0.7	29	262	2.1	28	300	0.5	28	192	1.4	27	237	0.7	25	309	3.3
500	30	35	1.3	23	313	2.3	28	312	2.2	31	241	0.1	---	---	---	28	283	2.7	28	287	2.7	30	61	0.5	29	283	1.4	28	261	1.1	28	205	3.8	---	---	---	25	293	6.0
1,000	28	14	2.5	23	296	2.9	21	315	6.1	31	106	0.8	30	342	2.8	24	283	6.1	21	302	6.1	28	213	1.5	27	292	0.3	23	318	3.0	26	212	5.0	27	200	3.3	24	295	8.5
1,500	26	354	3.6	20	288	6.0	20	317	9.5	31	148	0.9	30	315	5.6	20	291	9.5	18	308	9.8	22	257	3.4	26	52	1.5	17	333	4.6	21	224	4.8	17	228	4.9	23	296	11.6
2,000	25	333	2.8	18	288	9.7	16	310	13.6	29	203	0.4	28	301	8.2	20	291	13.4	17	309	12.3	19	271	6.5	25	10	1.3	15	326	6.1	17	224	4.7	---	---	---	20	298	15.5
2,500	25	329	3.0	17	290	10.6	15	308	15.1	28	264	1.8	25	301	10.3	17	292	13.7	16	313	14.1	19	276	7.3	22	10	1.6	14	317	9.4	15	237	5.6	---	---	---	15	298	17.2
3,000	24	332	4.1	17	289	12.0	14	311	14.8	28	272	2.5	25	308	12.2	14	295	14.9	13	310	17.6	19	272	9.8	22	344	2.9	13	310	11.1	15	246	5.9	---	---	---	13	296	19.1
4,000	23	328	3.9	16	283	14.6	10	320	19.9	23	301	3.6	15	322	9.8	13	297	19.6	---	---	---	15	279	14.2	21	310	4.1	12	316	13.8	14	262	5.5	---	---	---	11	289	23.6
5,000	21	325	4.6	15	291	19.0	---	---	---	21	304	5.7	14	323	11.6	12	288	22.2	---	---	---	15	280	16.8	19	298	6.3	---	---	---	---	---	---	---	---	---	---	---	---
6,000	21	333	9.0	10	284	18.8	---	---	---	18	289	7.2	12	323	15.3	---	---	---	---	---	---	14	273	21.9	17	292	9.0	---	---	---	---	---	---	---	---	---	---	---	---
8,000	17	323	14.3	---	---	---	---	---	---	16	295	11.6	---	---	---	---	---	---	---	---	---	---	---	---	12	289	10.3	---	---	---	---	---	---	---	---	---	---	---	---
10,000	11	334	13.0	---	---	---	---	---	---	12	294	9.6	---	---	---	---	---	---	---	---	---	---	---	---	10	301	14.9	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 3.—*Maximum free air wind velocities (m. p. s.), for different sections of the United States based on pilot balloon observations during January 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]	44.2	NW.	429	24	New York, N. Y.	57.6	WNW.	4,075	5	Buffalo, N. Y.	62.7	NW.	9,592	19	Portland, Maine.
East-Central [2]	52.8	NW.	1,821	24	Lynchburg, Va.	50.1	WSW.	3,090	21	Knoxville, Tenn.	75.0	WNW.	7,405	21	Knoxville, Tenn.
Southeast [3]	41.2	W.	818	23	Charleston, S. C.	45.0	WNW.	4,873	31	Birmingham, Ala.	85.0	WNW.	11,022	11	Charleston, S. C.
North-Central [4]	39.4	NW.	1,608	23	Duluth, Minn.	54.0	NNW.	4,080	24	S. Ste. Marie, Mich.	64.8	NW.	5,710	23	St. Paul, Minn.
Central [5]	40.8	N.	2,500	10	Wichita, Kans.	47.2	NW.	4,311	23	St. Louis, Mo.	64.0	WNW.	6,206	1	St. Louis, Mo.
South-Central [6]	37.9	WNW.	2,260	19	Lake Charles, La.	48.0	NW.	4,763	1	Little Rock, Ark.	65.0	WSW.	13,315	26	San Antonio, Tex.
Northwest [7]	37.9	WNW.	1,640	13	Glasgow, Mont.	56.0	W.	4,979	13	Great Falls, Mont.	78.8	NW.	9,655	8	Glasgow, Mont.
West-Central [8]	33.3	NW.	2,489	8	Cheyenne, Wyo.	45.5	NW.	3,716	8	Pueblo, Colo.	60.0	NW. NNW.	10,248 9,113/9,393	21 19	Oakland, Calif. Red Bluff, Calif.
Southwest [9]	26.4	WNW.	2,500	24	El Paso, Tex.	43.5	WNW.	4,915	21	Raton, N. Mex.	59.6	WNW.	9,638	20	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 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.

RIVER STAGES AND FLOODS

By C. R. JORDAN

PRECIPITATION was above normal during January in southern Texas, the central Great Plains, the Northeast, much of the Florida Peninsula, and a few scattered local areas. Rainfall was notably deficient over a large area from the Lake region southward over the Ohio Valley and in the area from Montana southwestward through California.

No severe or extensive flooding occurred during the month but light to moderate flooding was reported at widely scattered points throughout the country. Drought conditions continue in a large area from Arkansas to the Great Lakes with conditions particularly acute in Ohio and Indiana.

An above-normal snow cover has accumulated during the winter in Pennsylvania, New York, and New England and in some locations, the water on the ground in form of snow at the end of January was nearly as great and in some cases greater than the accumulation prior to the unprecedented floods of March 1936. Several periods of mild weather and moderate rainfall during February served to eliminate much of the snow cover in Pennsylvania and western and southern New York. Only minor flooding resulted in the upper Ohio River drainage and in portions of the Susquehanna Basin. The snow depths in northeastern New York and in central and northern New England decreased slightly in February but the density increased and in some instances there was an actual increase in water content.

The large accumulation of snow in the Northeast up to early in February resulted from a moderately above normal precipitation, but especially from persistent cold without thaw. The precipitation from November 1944 through January 1945, ranged from 102 percent in Pennsylvania to 114 percent of normal in New England. Temperatures on the other hand ranged from 2 to 4 degrees below normal. Reports indicate little or no frozen ground in the regions of heavy snow cover.

Average snow depths and water equivalents over representative basins on January 31 or early February

Basin	Average snow depth	Average water content
	Inches	*Inches*
Penobscot (headwaters)	30	7.00
Androscoggin (headwaters)	35	8.60
Saco (headwaters)	40	8.85
Merrimack (above Concord, N. H.)	28	5.00
Connecticut:		
(In valley area)	24–36	4 to 5
(In mountain areas)	30–60	6 to 8
Sacandaga	30	5.90
Lehigh	19	3.40
Susquehanna:		
(Above Towanda, Pa.)	17	4.40
(Below Towanda, Pa.)	16	3.50
Allegheny:		
(Above Warren, Pa.)	30	6.50
(Below Warren, Pa.)	22	4.00
Monongahela:		
(Above Morgantown, W. Va.)	5	1.00
(Below Morgantown, W. Va.)	12	2.50

Atlantic Slope Drainage.—There was some light overflow of the Pemigewassett River at Plymouth, N. H., on January 2 that resulted for the most part from backwater from an ice gorge below the gage. The Schuylkill River at Philadelphia, Pa.; the James River at Columbia, Va.; and the Roanoke River at Weldon and Williamston, N. C., exceeded flood stages slightly during the early part of the month. Overflow was very local and no damage was reported.