METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR MARCH 1942

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

AEROLOGICAL OBSERVATIONS

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees Centigrade, and relative humidities in percent, obtained by airplanes and radiosondes during March 1942*

Stations with elevations in meters above sea level

Altitude (meters) m. s. l.	Albuquerque, N. Mex. (1,620 m.)				Atlanta, Ga. (300 m.)				Bismarck, N. Dak. (505 m.)				Boise, Idaho (864 m.)				Brownsville, Tex. (6 m.)				Buffalo, N. Y. (221 miles)				Charleston, S. C. (14 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	835	6.8	31	31	980	9.5	74	31	952	−1.0	78	31	917	4.4	62					31	985	1.3	84	31	1,013	12.4	78
500					31	957	10.9	67													31	951	0.8	82	31	957	12.7	65
1,000					31	901	8.0	65	31	895	−1.5	75	31	902	5.4	57					31	894	−1.5	80	31	901	9.7	64
1,500					31	848	4.9	65	31	840	−3.4	74	31	848	3.1	52					31	839	−3.5	76	31	848	6.9	63
2,000	31	797	6.1	31	30	797	2.1	61	31	788	−5.5	72	31	797	−0.6	52					31	787	−5.3	71	31	798	4.8	59
2,500	31	749	2.3	32	30	749	0.5	50	31	740	−7.8	69	31	748	−4.4	52					31	738	−7.4	68	31	750	2.9	52
3,000	31	704	−1.5	33	30	704	−1.6	44	31	693	−10.7	67	31	702	−7.8	53					31	692	−9.4	65	31	705	0.3	50
4,000	31	620	−8.7	34	30	620	−6.3	39	30	608	−16.8	63	30	616	−13.9	53					30	607	−14.6	57	30	622	−5.1	46
5,000	31	544	−15.6	35	29	545	−12.5	39	30	532	−23.3	58	30	540	−20.5	53					30	532	−20.7	54	29	547	−11.5	45
6,000	30	476	−22.1	33	29	477	−19.2	39	29	463	−29.8	57	30	471	−27.1	52					30	464	−27.1	50	29	479	−18.2	44
7,000	29	414	−29.0	32	28	416	−26.0	37	28	401	−37.1	56	30	409	−34.4	51					28	403	−34.1	48	28	418	−25.4	45
8,000	29	360	−35.7	31	28	362	−33.4	38	28	347	−44.5		30	353	−41.8						27	348	−41.0		28	363	−32.3	44
9,000	28	310	−42.7		27	313	−40.5		28	298	−51.0		30	304	−49.1						26	300	−47.8		28	314	−39.4	42
10,000	28	267	−49.5		27	270	−47.1		28	255	−56.3		30	260	−55.5						25	258	−53.3		28	271	−46.4	
11,000	25	229	−55.1		26	232	−52.9		28	218	−58.3		29	223	−59.4						25	221	−56.1		27	233	−52.9	
12,000	22	196	−58.0		25	198	−56.6		28	186	−57.4		28	190	−60.3						25	188	−57.0		27	199	−57.0	
13,000	21	167	−58.4		23	169	−58.1		27	158	−55.2		23	162	−59.1						25	161	−55.6		26	169	−59.0	
14,000	18	142	−58.8		17	144	−59.6		27	136	−54.7		19	138	−57.5						25	137	−55.7		25	144	−60.6	
15,000	14	121	−59.8		16	122	−61.8		25	116	−54.9		17	117	−57.3						25	118	−56.5		21	123	−63.1	
16,000	12	103	−61.4		13	104	−63.5		21	99	−55.5		11	100	−57.5						19	100	−57.4		18	104	−65.7	
17,000	10	88	−63.3		9	88	−64.9		16	85	−56.2		7	85	−58.0						11	86	−58.6		13	88	−66.8	
18,000	5	74	−62.5		5	74	−65.6		5	73	−56.2										6	73	−57.6		7	75	−68.1	

Stations with elevations in meters above sea level

Altitude (meters) m. s. l.	Denver, Colo. (1,616 m.)				Detroit, Mich. (194 m.)				El Paso, Tex. (1,193 m.)				Ely, Nev. (1,908 m.)				Great Falls, Mont. (1,128 m.)				Huntington, W. Va. (172 m.)				Joliet, Ill. (178 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	31	834	0.9	61	31	986	1.9	81	31	880	11.8	33	31	807	−1.3	74	30	884	1.1	62	30	993	5.8	74	30	990	3.0	82
500					31	950	1.3	77													30	954	6.6	70	30	951	3.2	81
1,000					31	893	−0.1	75													30	897	3.8	67	30	894	0.9	80
1,500					31	838	−2.0	75	31	848	12.3	31					30	844	0.8	60	30	843	0.7	68	30	840	−1.6	74
2,000	31	795	2.1	58	31	787	−4.2	72	31	798	9.0	30	31	798	0.0	68	30	793	−2.4	58	30	792	−2.6	67	30	788	−3.8	69
2,500	31	747	−1.2	54	31	738	−6.6	69	31	751	5.0	30	31	750	−1.3	60	30	744	−6.1	58	30	743	−5.3	65	29	740	−5.9	63
3,000	31	701	−5.1	53	31	692	−9.0	65	31	706	1.6	30	31	704	−5.0	59	30	698	−9.6	59	30	697	−7.9	63	29	694	−8.8	63
4,000	31	616	−12.9	54	30	607	−14.7	58	31	623	−5.0	30	31	619	−11.7	57	30	612	−16.1	55	30	612	−13.4	57	28	609	−14.4	62
5,000	31	540	−19.3	54	29	532	−21.0	57	31	548	−11.5	29	31	543	−17.5	53	30	535	−22.7	52	30	537	−19.1	53	26	533	−20.3	59
6,000	31	472	−26.1	53	29	463	−27.6	56	31	480	−17.9	28	30	474	−24.4	51	30	466	−29.4	51	29	468	−25.7	51	26	465	−26.6	56
7,000	30	410	−33.2	52	28	402	−34.5	56	30	419	−25.0	28	29	412	−31.8	50	30	404	−36.7	50	29	407	−32.4	47	25	404	−33.9	55
8,000	30	354	−40.8		24	347	−41.9		30	364	−32.2	28	28	357	−39.1	50	30	349	−44.0		29	353	−39.4	45	24	349	−41.2	
9,000	29	305	−47.9		23	299	−48.3		30	315	−39.1	27	28	308	−46.5		30	300	−50.8		28	304	−45.9		24	301	−47.2	
10,000	28	261	−53.5		21	257	−53.1		30	272	−46.0		28	264	−52.9		29	257	−56.5		27	261	−51.4		23	258	−51.5	
11,000	28	224	−57.3		20	220	−55.9		30	233	−52.6		28	226	−58.0		29	220	−59.5		25	224	−55.0		22	221	−54.3	
12,000	28	191	−58.5		16	188	−56.6		30	200	−57.1		27	193	−59.7		29	187	−59.2		25	191	−56.6		21	189	−55.3	
13,000	26	163	−56.4		15	160	−55.6		30	170	−58.5		26	164	−58.9		27	159	−57.3		22	164	−56.5		21	162	−54.7	
14,000	24	139	−56.2		13	137	−55.1		30	145	−59.4		25	140	−58.6		23	136	−55.7		19	140	−56.8		21	138	−54.6	
15,000	14	118	−56.3		11	117	−55.4		28	123	−61.6		25	119	−58.9		21	116	−55.4		15	120	−57.9		19	118	−55.9	
16,000	11	101	−58.2		7	100	−56.7		25	105	−64.3		23	101	−60.4		17	99	−56.6		13	102	−59.3		17	101	−57.1	
17,000	9	86	−59.6						22	89	−66.6		18	86	−61.5		9	85	−57.4		9	87	−60.5		10	86	−57.6	
18,000	5	73	−60.3						13	76	−67.6		6	73	−61.2										5	74	−57.8	
19,000									7	64	−65.7																	

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees Centigrade, and relative humidities in percent obtained by airplanes and radiosondes during March 1942*—Continued

Stations with elevations in meters above sea level

Altitude (meters) m.s.l.	Lake Charles, La. (6 m.)				Lakehurst, N. J.[1] (39 m.)				Medford, Oreg. (401 m.)				Miami, Fla. (4 m.)				Nashville, Tenn. (180 m.)				Norfolk, Va.[1 2] (10 m.)				Oakland, Calif. (2 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	1,014	13.4	85	25	1,010	5.0	68	31	970	8.7	61	31	1,016	19.0	84	31	992	9.7	67	21	1,014	7.6	74	31	1,017	12.5	71
500	31	956	13.6	67	25	955	4.7	56	31	959	9.1	58	31	959	17.8	82	31	955	9.8	64	21	955	7.1	63	31	958	10.6	63
1,000	31	901	11.1	59	25	898	1.9	58	31	902	6.6	57	31	904	15.4	79	31	899	7.2	60	21	899	4.4	57	31	902	8.4	55
1,500	31	848	9.5	50	25	843	−0.4	56	31	848	3.0	63	31	853	13.5	70	31	845	3.8	59	21	845	1.7	55	31	849	5.9	51
2,000	30	798	7.5	46	25	792	−2.3	54	31	797	−0.6	65	31	803	11.5	59	31	795	0.6	55	21	794	−0.5	53	31	788	3.4	45
2,500	30	751	5.5	42	25	743	−4.0	49	31	748	−3.6	61	31	757	9.3	53	31	746	−1.8	52	21	745	−2.9	49	31	750	1.2	40
3,000	30	706	3.0	40	25	697	−6.5	45	31	702	−6.4	56	31	712	6.7	48	31	701	−4.4	50	21	700	−4.8	45	31	705	−1.8	38
4,000	30	624	−2.8	36	25	613	−12.3	39	31	617	−12.3	49	30	630	1.6	39	30	617	−9.4	50	21	615	−10.6	44	31	621	−7.9	37
5,000	29	549	−9.8	34	25	536	−18.7	37	31	541	−18.3	47	29	556	−4.2	37	28	541	−15.0	50	21	539	−16.3	42	30	545	−14.2	36
6,000	29	481	−16.6	31	25	468	−25.6	32	29	472	−25.3	44	28	489	−10.2	34	28	474	−21.1	48	5	471	−23.0	36	29	477	−21.3	35
7,000	29	420	−23.3	30	25	407	−32.8	28	29	411	−32.4	43	27	429	−17.2	33	27	413	−27.9	46	----	----	----	----	28	415	−28.7	34
8,000	29	366	−30.1	29	25	353	−39.4	----	29	355	−39.9	42	27	375	−24.1	32	27	358	−34.9	46	----	----	----	----	28	360	−35.9	33
9,000	27	317	−37.4	29	25	304	−45.4	----	29	306	−47.1	----	26	326	−31.2	32	27	310	−41.5	----	----	----	----	----	27	311	−43.4	----
10,000	25	274	−44.5	----	25	262	−50.9	----	29	263	−53.8	----	26	283	−38.3	32	26	267	−47.7	----	----	----	----	----	27	268	−50.4	----
11,000	23	235	−50.7	----	25	224	−54.3	----	29	225	−58.7	----	26	244	−45.0	----	25	229	−52.9	----	----	----	----	----	27	229	−56.2	----
12,000	21	201	−56.8	----	25	191	−56.1	----	29	192	−61.1	----	25	209	−51.1	----	24	196	−55.7	----	----	----	----	----	26	196	−59.8	----
13,000	20	171	−60.2	----	23	164	−56.2	----	29	163	−59.8	----	23	179	−56.5	----	24	167	−55.8	----	----	----	----	----	24	167	−60.0	----
14,000	17	145	−61.8	----	22	140	−56.4	----	28	139	−58.3	----	23	153	−61.1	----	24	143	−56.5	----	----	----	----	----	21	142	−58.6	----
15,000	17	123	−64.4	----	20	120	−57.5	----	25	119	−58.1	----	23	129	−65.7	----	21	122	−57.8	----	----	----	----	----	19	121	−58.9	----
16,000	15	105	−67.3	----	20	103	−58.8	----	19	101	−58.6	----	23	110	−70.1	----	18	104	−59.2	----	----	----	----	----	16	103	−61.0	----
17,000	13	88	−69.7	----	14	87	−59.7	----	17	86	−59.5	----	21	93	−73.2	----	15	89	−61.0	----	----	----	----	----	12	88	−62.2	----
18,000	5	74	−70.2	----	5	74	−60.3	----	14	73	−59.9	----	19	78	−74.4	----	11	75	−61.6	----	----	----	----	----	6	75	−63.2	----
19,000	----	----	----	----	----	----	----	----	----	----	----	----	11	65	−72.7	----	6	64	−60.7	----	----	----	----	----	----	----	----	----
20,000	----	----	----	----	----	----	----	----	----	----	----	----	6	54	−70.9	----	----	----	----	----	----	----	----	----	----	----	----	----

Stations with elevations in meters above sea level

Altitude (meters) m. s. l.	Oklahoma City, Okla. (391 m.)				Omaha, Nebr. (301 m.)				Pensacola, Fla.[1] (24 m.)				Phoenix, Ariz. (339 m.)				Portland, Maine, (20 m.)				St. Louis, Mo. (171 m.)				St. Paul, Minn. (225 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	966	8.8	56	31	976	2.9	79	16	1,015	14.6	77	31	973	13.8	39	31	1,008	0.6	80	31	992	6.4	71	31	983	1.6	77
500	31	954	10.4	53	31	952	3.4	73	16	959	12.9	64	31	955	18.0	35	31	950	−0.2	70	31	952	6.0	67	31	950	0.9	75
1,000	31	898	9.0	48	31	895	1.6	72	16	903	10.1	57	31	900	15.1	32	31	892	−2.8	67	31	896	3.8	64	31	893	−1.6	73
1,500	31	845	5.9	48	31	841	−1.0	71	16	851	8.7	46	31	848	11.1	32	31	837	−4.9	68	31	842	1.4	63	31	838	−4.3	72
2,000	31	795	3.0	47	31	790	−3.2	65	16	801	7.2	36	31	798	7.0	34	31	786	−6.3	64	31	791	−1.3	62	31	786	−6.2	69
2,500	31	747	0.3	43	31	741	−5.6	62	16	753	4.5	33	31	751	3.4	35	31	737	−8.4	60	31	743	−3.8	59	31	738	−8.2	66
3,000	31	702	−3.2	43	31	695	−8.3	59	16	708	1.8	32	31	706	0.2	34	31	690	−10.7	59	31	697	−6.4	58	31	691	−10.9	64
4,000	29	618	−9.6	42	30	610	−14.1	55	16	624	−4.0	34	30	622	−5.5	30	30	605	−15.6	58	31	612	−11.9	56	31	606	−16.5	60
5,000	29	542	−16.6	40	29	534	−20.6	52	12	549	−11.0	36	30	547	−11.7	29	29	529	−21.6	55	31	537	−18.3	54	30	530	−23.2	59
6,000	28	473	−23.3	39	28	466	−27.3	49	10	481	−17.6	38	28	479	−19.0	30	29	462	−28.4	53	31	469	−25.0	52	29	462	−29.5	59
7,000	27	412	−29.8	36	28	404	−34.9	48	10	420	−24.5	43	28	418	−26.2	30	29	400	−35.5	51	31	408	−31.9	51	28	400	−36.5	58
8,000	25	357	−37.0	36	28	350	−42.0	----	6	364	−31.3	----	27	364	−33.2	29	28	346	−42.2	----	31	353	−38.9	----	27	346	−44.0	----
9,000	25	308	−44.3	----	28	301	−48.8	----	5	316	−36.9	----	26	314	−40.4	----	28	298	−47.9	----	31	304	−45.5	----	25	297	−50.7	----
10,000	24	265	−50.4	----	28	258	−53.1	----	----	----	----	----	26	271	−47.3	----	27	256	−52.4	----	30	262	−50.9	----	24	254	−55.5	----
11,000	24	227	−54.8	----	28	221	−55.4	----	----	----	----	----	24	233	−53.2	----	26	219	−54.6	----	30	224	−55.1	----	24	218	−56.9	----
12,000	23	194	−56.9	----	26	189	−55.0	----	----	----	----	----	23	199	−58.1	----	26	187	−55.1	----	29	192	−55.8	----	22	186	−55.8	----
13,000	21	166	−57.7	----	25	162	−54.7	----	----	----	----	----	23	170	−59.8	----	24	160	−54.7	----	28	164	−55.6	----	20	158	−54.9	----
14,000	17	141	−57.6	----	24	138	−54.8	----	----	----	----	----	23	144	−60.1	----	16	137	−54.9	----	27	140	−55.4	----	17	136	−54.6	----
15,000	15	120	−58.8	----	19	118	−55.3	----	----	----	----	----	22	123	−61.9	----	15	117	−56.1	----	24	119	−56.5	----	16	116	−55.3	----
16,000	14	103	−60.6	----	17	101	−56.2	----	----	----	----	----	22	104	−63.6	----	10	100	−56.9	----	21	102	−58.0	----	13	99	−56.5	----
17,000	11	87	−62.1	----	10	86	−57.3	----	----	----	----	----	16	89	−64.3	----	----	----	----	----	13	87	−58.4	----	8	85	−56.9	----
18,000	8	74	−61.9	----	----	----	----	----	----	----	----	----	14	75	−64.6	----	----	----	----	----	10	74	−58.7	----	----	----	----	----
19,000	----	----	----	----	----	----	----	----	----	----	----	----	7	64	−64.3	----	----	----	----	----	----	----	----	----	----	----	----	----

See footnotes at end of table.

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees Centrigade, and relative humidities in percent, obtained by airplanes and radiosondes during March 1942*—Continued

Altitude (meters) m. s. l.	Stations with elevations in meters above sea level																							
	San Antonio, Tex. (175 m.)				San Diego, Calif.[1] (19 m.)				Sault Ste. Marie, Mich. (221 m.)				Seattle, Wash.[1] (27 m.)				Spokane, Wash. (598 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	994	14.8	58	28	1,013	13.9	75	30	984	−2.0	85	31	1,016	5.9	84	31	945	3.9	64	31	1,010	7.5	64
500	31	957	14.9	56	28	957	12.6	52	30	951	−2.0	83	31	959	4.5	79	----	----	----	----	31	953	5.6	63
1,000	31	902	13.2	50	28	901	11.2	41	30	892	−4.3	80	31	902	1.8	75	31	900	4.4	58	31	896	3.7	62
1,500	31	850	10.3	48	28	849	9.2	34	30	837	−5.4	74	31	847	−1.6	74	31	846	1.2	56	30	842	1.2	67
2,000	31	800	8.2	46	28	799	7.0	27	30	785	−6.9	70	31	795	−4.4	70	31	795	−2.6	57	30	791	−0.9	69
2,500	31	753	6.4	41	28	751	4.4	23	30	736	−8.9	68	31	746	−7.4	65	31	746	−6.5	56	30	743	−3.0	65
3,000	31	708	4.1	39	28	706	1.9	16	30	690	−11.6	67	31	699	−10.2	60	31	699	−9.8	56	30	697	−5.4	62
4,000	31	625	−2.3	35	27	623	−4.2	19	28	605	−16.5	65	31	613	−16.5	57	31	614	−16.2	55	30	613	−11.2	59
5,000	29	550	−8.8	35	27	548	−10.8	29	28	529	−22.6	63	31	536	−22.7	56	30	537	−23.0	54	30	537	−17.1	53
6,000	26	483	−15.7	36	26	480	−17.9	39	28	461	−29.0	59	31	467	−29.5	60	29	468	−29.6	52	29	470	−24.0	51
7,000	22	422	−22.7	35	26	419	−25.4	48	27	400	−36.4	59	31	405	−36.3	66	29	405	−36.3	51	28	408	−30.6	48
8,000	22	368	−29.5	34	13	364	−33.2	----	24	345	−44.1	----	31	350	−43.4	----	29	350	−43.3	----	27	354	−37.1	46
9,000	22	319	−36.7	34	13	315	−40.2	----	20	297	−50.8	----	30	301	−50.4	----	29	301	−49.8	----	27	305	−43.9	----
10,000	21	276	−43.8	----	11	272	−47.0	----	17	254	−55.4	----	27	257	−56.4	----	28	258	−55.3	----	27	262	−49.6	----
11,000	20	237	−50.8	----	10	234	−53.3	----	15	218	−55.6	----	24	220	−60.0	----	27	221	−58.6	----	25	225	−53.9	----
12,000	20	203	−56.0	----	8	198	−58.1	----	14	186	−55.1	----	21	187	−61.5	----	26	188	−59.7	----	25	192	−56.0	----
13,000	18	173	−60.1	----	5	168	−61.3	----	14	159	−54.3	----	16	159	−58.1	----	25	160	−61.5	----	23	164	−56.5	----
14,000	16	147	−62.1	----	----	----	----	----	8	136	−54.3	----	13	135	−55.7	----	24	137	−62.8	----	22	140	−57.0	----
15,000	14	125	−64.8	----	----	----	----	----	6	116	−54.3	----	7	115	−55.2	----	24	116	−62.3	----	21	119	−57.3	----
16,000	12	106	−68.1	----	----	----	----	----	----	----	----	----	5	98	−55.3	----	19	100	−62.0	----	15	101	−58.9	----
17,000	10	90	−70.9	----	----	----	----	----	----	----	----	----	----	----	----	----	17	85	−62.3	----	11	86	−59.7	----
18,000	8	76	−71.3	----	----	----	----	----	----	----	----	----	----	----	----	----	9	73	−62.5	----	10	74	−59.7	----
19,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	6	62	−60.7	----

Altitude (meters) m. s. l.	Stations with elevations in meters above sea level																							
	Anchorage, Alaska (42 m.)				Barrow, Alaska (6 m.)				Bethel, Alaska (7 m.)				Fairbanks, Alaska (156 m.)				Juneau, Alaska (49 m.)				Ketchikan, Alaska (26 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	997	−1.3	63	30	1,020	−27.6	90	31	1,002	−8.3	67	31	986	−7.1	57	31	1,003	2.0	73	28	1,007	4.4	77
500	31	941	−4.2	63	30	953	−23.6	91	31	941	−8.6	67	31	944	−8.5	61	31	948	−1.1	75	28	950	1.6	79
1,000	31	883	−6.8	65	30	890	−20.4	91	31	882	−9.5	62	31	885	−11.2	63	31	890	−4.8	76	26	893	−1.9	81
1,500	31	828	−10.3	69	30	832	−20.2	88	31	826	−11.6	58	31	829	−13.0	65	31	835	−8.2	79	26	838	−5.6	82
2,000	31	775	−13.4	71	30	777	−21.1	84	31	774	−14.3	55	31	776	−15.5	65	29	783	−11.1	81	26	785	−9.4	82
2,500	31	726	−16.2	70	30	726	−23.0	80	31	724	−17.2	53	31	726	−18.6	65	28	733	−14.4	80	26	736	−12.4	80
3,000	31	679	−19.7	69	30	678	−25.0	77	31	677	−20.0	52	31	678	−22.0	65	27	686	−17.9	78	26	689	−15.6	79
4,000	29	592	−26.4	67	30	590	−30.8	75	30	591	−26.1	51	30	591	−28.6	65	24	598	−25.1	73	26	602	−22.6	77
5,000	29	515	−33.4	65	30	512	−37.1	75	29	514	−32.5	51	29	513	−35.2	66	23	521	−32.3	68	25	524	−29.2	75
6,000	28	446	−39.7	64	30	442	−43.2	----	28	445	−38.7	52	28	444	−42.4	----	21	451	−39.1	57	22	455	−35.6	74
7,000	28	384	−46.0	----	30	380	−48.8	----	28	384	−44.5	----	28	381	−48.8	----	18	389	−45.4	----	18	393	−42.1	----
8,000	28	330	−49.9	----	30	326	−53.0	----	28	330	−48.7	----	28	327	−53.4	----	13	334	−48.7	----	15	338	−46.5	----
9,000	27	283	−52.5	----	28	279	−53.4	----	28	283	−50.6	----	27	280	−53.9	----	13	286	−49.3	----	13	291	−49.1	----
10,000	27	242	−52.9	----	27	239	−51.2	----	28	243	−50.9	----	26	240	−51.7	----	12	245	−48.9	----	13	249	−50.9	----
11,000	26	208	−52.2	----	26	205	−49.5	----	24	209	−50.5	----	25	206	−50.0	----	8	211	−48.6	----	13	214	−52.4	----
12,000	25	178	−50.8	----	18	176	−48.7	----	22	179	−48.8	----	25	177	−49.6	----	8	181	−47.9	----	10	183	−50.8	----
13,000	22	152	−50.6	----	13	151	−48.4	----	22	154	−48.7	----	23	152	−49.6	----	6	156	−47.1	----	7	157	−48.5	----
14,000	18	130	−50.6	----	9	129	−48.6	----	17	132	−48.6	----	19	130	−50.1	----	6	134	−46.5	----	----	----	----	----
15,000	18	112	−50.8	----	----	----	----	----	9	114	−48.8	----	17	112	−50.6	----	6	116	−47.0	----	----	----	----	----
16,000	14	95	−51.2	----	----	----	----	----	----	----	----	----	10	95	−51.1	----	5	99	−47.7	----	----	----	----	----
17,000	11	82	−51.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
18,000	6	70	−51.8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
19,000	5	60	−51.9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees Centigrade, and relative humidity in percent, obtained by airplanes and radiosondes during March 1942*—Continued

Altitude (meters) m. s. l.	Stations with elevations in meters above sea level: Nome- Alaska (14 m.) Number of observations	Pressure	Temperature	Relative humidity	San Juan, P. R. (15 m. Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,004	−11.4	72	31	1,014	24.0	83
500	30	943	−12.4	74	31	960	21.3	87
1,000	30	883	−12.3	71	31	906	18.1	85
1,500	30	827	−13.4	69	31	855	15.2	82
2,000	30	774	−15.7	66	31	805	12.7	75
2,500	30	724	−18.1	65	31	759	11.6	58
3,000	30	677	−20.7	63	31	714	9.7	48
4,000	30	590	−26.8	63	30	633	5.5	35
5,000	30	513	−33.1	62	30	560	0.5	29
6,000	30	444	−39.4	63	30	494	−5.9	27
7,000	30	383	−45.2	----	29	434	−12.7	26
8,000	29	330	−49.9	----	28	380	−19.8	25
9,000	28	283	−51.8	----	28	331	−27.1	25
10,000	27	242	−51.8	----	26	287	−34.3	25
11,000	26	208	−51.4	----	24	249	−41.5	----
12,000	25	178	−49.6	----	23	214	−49.0	----
13,000	23	153	−49.0	----	23	184	−56.6	----
14,000	19	132	−48.9	----	22	156	−64.6	----
15,000	18	113	−48.7	----	21	132	−72.3	----
16,000	12	97	−48.7	----	18	111	−78.4	----
17,000	7	84	−48.6	----	14	93	−82.6	----
18,000	----	------	------	----	12	78	−85.3	----
19,000	----	------	------	----	10	65	−84.1	----
20,000	----	------	------	----	6	54	−77.6	----

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Altitude (meters) m. s. l.	Stations with elevations in meters above sea level: Barrow, Alaska (6 m.) Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,016	−19.8	89
500	31	952	−14.2	88
1,000	31	891	−12.6	83
1,500	31	834	−13.1	77
2,000	31	781	−14.7	75
2,500	31	731	−17.0	73
3,000	31	683	−19.6	72
4,000	31	596	−25.5	67
5,000	31	519	−32.0	64
6,000	31	449	−38.5	62
7,000	31	388	−44.8	------
8,000	30	333	−50.0	------
9,000	29	286	−53.0	------
10,000	29	244	−54.2	------
11,000	27	209	−54.6	------
12,000	24	178	−54.7	------
13,000	20	152	−53.6	------
14,000	15	130	−54.0	------
15,000	9	110	−55.0	------
16,000	7	93	−55.8	------

[1] Navy stations.
[2] Makes airplane and radiosonde observations.

NOTES.—All observations taken at 11 p. m. 75th meridian time, except at Norfolk, Va., where they were taken near 7 a. m. 75th meridian time and at Seattle, Wash., where they were taken near 5 a. m. 75th meridian time.

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

Number of observations refers to pressure only, as temperature and humidity data are missing for some observations at certain levels, also, the humidity data are not used in daily observations when the temperature is below −40° C.

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 5 p. m. (75th meridian time) during March 1942. 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. (537 m.) Observations	Direction	Velocity	Albuquerque, N. Mex. (1,630 m.) Observations	Direction	Velocity	Atlanta, Ga. (299 m.) Observations	Direction	Velocity	Billings, Mont. (1,095 m.) Observations	Direction	Velocity	Bismarck, N. Dak. (512 m.) Observations	Direction	Velocity	Boise, Idaho (866 m.) Observations	Direction	Velocity
Surface	30	253	3.2	31	257	3.0	29	260	3.1	29	290	4.4	28	302	5.2	30	318	1.1
500	---	---	---	---	---	---	29	246	3.9	---	---	---	---	---	---	---	---	---
1,000	30	245	3.6	---	---	---	28	248	6.2	---	---	---	28	310	6.6	30	297	1.0
1,500	30	258	4.4	---	---	---	27	253	7.3	29	281	6.3	20	314	7.2	30	234	2.1
2,000	29	257	6.2	31	263	4.7	24	268	8.9	29	291	7.2	16	306	7.9	30	281	2.7
2,500	28	265	7.9	31	275	4.7	21	272	1.0	28	292	8.9	15	311	11.2	29	284	3.9
3,000	28	267	10.1	31	278	6.4	19	275	14.1	24	295	10.5	15	314	11.9	28	284	5.0
4,000	26	270	14.9	26	298	10.2	18	271	17.7	20	300	13.7	---	---	---	22	271	7.1
5,000	24	272	19.9	23	292	12.9	15	266	22.2	18	302	13.2	---	---	---	18	285	8.2
6,000	23	274	21.8	17	306	16.4	11	271	23.9	17	308	15.0	---	---	---	17	281	10.9
8,000	17	277	31.4	12	313	20.5	---	---	---	---	---	---	---	---	---	13	302	14.1
10,000	10	273	32.4	---	---	---	---	---	---	---	---	---	---	---	---	10	320	23.0

Altitude (meters) m. s. l.	Brownsville, Tex. (7 m.) Observations	Direction	Velocity	Buffalo, N. Y. (220 m.) Observations	Direction	Velocity	Burlington, Vt. (132 m.) Observations	Direction	Velocity	Charleston, S. C. (17 m.) Observations	Direction	Velocity	Chicago, Ill. (192 m.) Observations	Direction	Velocity	Cincinnati, Ohio (152 m.) Observations	Direction	Velocity	Denver, Colo. (1,627 m.) Observations	Direction	Velocity
Surface	31	120	2.1	24	241	3.6	29	279	1.2	28	226	2.5	28	271	3.0	28	233	3.0	29	7	0.6
500	31	120	2.2	24	236	6.3	29	261	3.0	28	230	5.4	28	257	4.4	28	237	5.4	---	---	---
1,000	30	308	1.2	19	240	9.4	28	252	4.7	28	243	6.9	23	258	6.1	28	230	7.2	---	---	---
1,500	28	300	3.1	11	207	6.4	25	259	5.0	28	261	8.0	22	253	8.0	24	243	9.1	---	---	---
2,000	25	291	4.5	10	214	5.9	18	274	5.5	25	263	10.4	17	263	9.1	19	254	11.5	29	339	1.1
2,500	25	274	6.2	---	---	---	12	280	10.5	25	259	12.4	16	257	10.8	11	273	10.0	28	287	2.8
3,000	21	269	9.6	---	---	---	---	---	---	23	257	14.5	11	271	15.3	---	---	---	28	285	5.6
4,000	16	267	13.4	---	---	---	---	---	---	21	259	17.2	---	---	---	---	---	---	24	301	11.1
5,000	15	268	17.2	---	---	---	---	---	---	16	267	18.5	---	---	---	---	---	---	20	313	15.6
6,000	14	275	21.9	---	---	---	---	---	---	14	268	23.4	---	---	---	---	---	---	17	314	17.8
8,000	10	274	31.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	13	308	26.5
10,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	El Paso, Tex. (1,196 m.) Observation	Direction	Velocity	Ely, Nev. (1,910 m.) Observation	Direction	Velocity	Grand Junction, Colo. (1,413 m.) Observation	Direction	Velocity	Greensboro, N. C. (271 m.) Observation	Direction	Velocity	Havre, Mont. (767 m.) Observation	Direction	Velocity	Jacksonville, Fla. (16 m.) Observation	Direction	Velocity
Surface	30	263	3.8	30	340	1.0	30	288	1.3	27	256	3.7	28	270	3.2	29	165	1.2
500	---	---	---	---	---	---	---	---	---	27	250	5.4	---	---	---	29	224	4.0
1,000	---	---	---	---	---	---	---	---	---	26	254	6.6	28	265	6.2	29	238	5.0
1,500	30	262	4.7	---	---	---	---	---	---	25	260	8.3	27	274	9.0	27	247	6.1
2,000	30	255	4.5	30	338	0.9	30	297	1.9	24	254	8.8	26	284	9.6	25	276	8.6
2,500	30	261	5.7	30	318	1.9	30	286	2.4	24	263	11.9	25	285	11.6	24	277	10.9
3,000	29	265	7.8	29	308	2.8	26	284	3.6	22	275	14.3	23	294	12.0	24	267	12.0
4,000	26	279	12.9	23	306	5.4	22	298	6.6	21	276	19.9	17	303	14.4	22	275	15.6
5,000	25	284	15.7	21	287	8.8	17	312	11.7	18	278	21.0	14	307	15.1	21	270	18.6
6,000	22	285	18.0	21	290	11.8	12	312	14.3	17	277	26.2	---	---	---	17	273	24.5
8,000	18	288	24.1	17	293	18.9	---	---	---	12	280	35.0	---	---	---	---	---	---
10,000	12	309	30.4	13	309	20.5	---	---	---	---	---	---	---	---	---	---	---	---
12,000	---	---	---	12	292	25.1	---	---	---	---	---	---	---	---	---	---	---	---
14,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Las Vegas, Nev. (570 m.) Observation	Direction	Velocity	Little Rock, Ark. (88 m.) Observation	Direction	Velocity	Medford, Oreg. (410 m.) Observation	Direction	Velocity	Miami Fla. (10 m.) Observation	Direction	Velocity	Minneapolis, Minn. (265 m.) Observation	Direction	Velocity	Mobile, Ala. (66 m.) Observation	Direction	Velocity	Nashville, Tenn. (194 m.) Observation	Direction	Velocity
Surface	31	46	1.8	30	260	2.3	31	313	1.3	30	114	1.7	28	312	0.9	25	287	1.0	30	242	2.8
500	---	---	---	30	271	3.1	31	307	1.2	30	150	2.8	28	269	1.0	25	251	1.5	30	236	5.4
1,000	31	58	0.8	29	258	5.2	31	256	1.1	28	215	2.0	24	241	1.3	23	269	1.6	27	237	6.0
1,500	31	297	0.7	29	258	7.8	31	216	2.3	28	259	4.1	22	266	3.6	22	281	2.5	25	248	6.8
2,000	31	271	2.0	28	266	9.0	31	226	2.7	22	271	6.2	16	297	4.7	19	289	7.1	18	264	8.6
2,500	31	269	3.5	26	258	10.8	27	235	2.8	20	268	7.3	13	294	7.6	17	286	8.9	15	272	10.6
3,000	31	285	4.7	22	266	12.1	18	237	3.7	19	265	8.5	11	305	10.1	16	285	10.6	13	273	12.8
4,000	29	307	8.2	16	288	16.1	16	267	5.0	17	276	10.8	10	293	11.3	16	277	16.3	13	276	14.1
5,000	27	304	11.6	10	298	18.4	15	290	7.0	15	272	13.6	10	291	14.7	10	272	21.8	---	---	---
6,000	24	302	14.5	---	---	---	11	316	11.7	14	267	18.3	---	---	---	---	---	---	---	---	---
8,000	19	295	18.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10,000	16	288	21.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12,000	11	283	26.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14,000	10	286	32.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 5 p. m. (75th meridian time) during March 1942. 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.	New York, N. Y. (15 m.)			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.)			San Antonio, Tex. (180 m.)			San Diego, Calif. (15 m.)			Sault St. Marie, Mich. (230 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	26	286	2.6	29	264	3.3	30	255	2.8	27	306	4.0	31	245	1.8	29	329	11.0	30	255	3.2	31	59	0.1	29	290	4.1	24	343	1.6	31	224	2.4	30	213	2.7	29	255	2.5
500	24	266	5.9	29	284	1.9	30	251	2.8	27	308	3.9	31	260	2.0	----	----	----	30	264	5.3	31	276	0.3	29	293	3.5	24	344	1.2	31	214	3.2	----	----	----	29	266	3.9
1,000	24	276	7.7	28	286	1.3	29	241	3.0	25	302	5.2	31	254	2.0	29	330	11.0	29	261	7.0	29	254	1.5	29	335	0.8	22	24	2.3	29	206	4.8	30	225	4.3	26	260	8.0
1,500	23	279	9.9	27	292	1.9	28	274	3.9	21	287	6.3	31	265	1.4	29	326	11.5	26	259	8.0	29	256	3.5	25	62	1.4	18	32	3.9	24	215	5.4	29	231	4.8	23	262	11.4
2,000	18	278	9.9	26	293	2.7	26	279	6.6	16	280	7.9	30	279	2.3	29	319	11.5	22	270	9.9	28	272	5.9	22	21	1.3	16	360	3.3	18	211	6.7	26	236	4.9	21	267	12.3
2,500	11	294	11.4	25	313	3.2	23	279	10.4	13	304	10.4	28	291	4.0	24	313	12.8	20	267	10.8	25	273	9.0	20	343	1.5	12	337	7.1	17	220	7.2	23	248	5.4	18	279	13.2
3,000	----	----	----	24	297	5.0	23	280	10.8	12	305	10.0	28	296	5.5	19	318	13.0	17	264	11.5	25	276	11.2	17	312	2.1	12	337	8.2	12	212	9.4	22	259	5.9	15	280	16.3
4,000	----	----	----	23	300	7.9	23	276	14.5	10	307	15.0	27	296	9.8	16	311	13.1	----	----	----	22	270	15.3	15	285	4.3	12	328	10.2	----	----	----	15	266	7.7	13	280	17.3
5,000	----	----	----	19	291	11.6	23	278	16.8	----	----	----	26	300	13.2	14	311	13.4	----	----	----	19	271	19.5	13	273	8.0	11	314	14.6	----	----	----	12	256	10.8	12	279	19.6
6,000	----	----	----	15	292	10.5	20	292	18.6	----	----	----	25	296	16.1	13	314	15.5	----	----	----	16	272	22.5	----	----	----	----	----	----	----	----	----	----	----	----	11	288	23.4
8,000	----	----	----	----	----	----	----	----	----	----	----	----	21	297	20.3	10	321	24.9	----	----	----	12	281	27.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
10,000	----	----	----	----	----	----	----	----	----	----	----	----	17	291	25.1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
12,000	----	----	----	----	----	----	----	----	----	----	----	----	11	283	31.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 3.—*Maximum free-air wind velocities (m. p. s.), for different sections of the United States, based on pilot-balloon observations during March 1942*

Section	Surface to 2,500 meters (m. s. l.)					Between 2,500 and 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	Stat on
Northeast [1]	41.7	W	620	10	Hartford, Conn	54.8	W	4,080	7	Portland, Maine	72.8	SW	8,620	18	Portland, Maine.
East-Central [2]	49.3	W	2,240	22	Huntington, W. Va.	50.6	WSW	3,860	9	Hatteras, N. C	74.0	WSW	7,280	17	Huntington, W. Va.
Southeast [3]	38.8	SW	2,320	8	Spartanburg, S. C	60.0	WNW	4,420	3	Jacksonville, Fla	67.5	WSW	11,600	6	Miami, Fla.
North-Central [4]	45.0	NW	1,780	6	Rapid City, S. Dak.	43.4	NNW	4,920	8	Bismarck, N. Dak	71.6	NNW	8,090	1	Rapid City, S. Dak.
Central [5]	44.6	SW	2,310	6	Springfield, Mo	58.0	NW	4,570	18	Sioux City, Iowa	72.1	WNW	10,710	13	Wichita, Kans.
South-Central [6]	37.4	N	1,770	4	Big Spring, Tex	43.5	NNW	3,310	2	Lake Charles, La	83.0	WSW	12,280	27	Abilene, Tex.
Northwest [7]	43.4	WSW	2,110	5	Great Falls, Mont	40.1	SW	5,000	22	Ellensburg, Wash	77.4	N	9,310	14	Tatoosh, Wash.
West-Central [8]	43.9	NW	2,500	27	Cheyenne, Wyo	55.4	NW	4,300	17	Cheyenne, Wyo	72.0	NW	12,400	16	Redding, Calif.
Southwest [9]	53.2	WNW	2,370	4	El Paso, Tex	63.0	N	4,440	6	Las Vegas, Nev	73.0	NW	13,090	5	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.

RIVER STAGES AND FLOODS

By BENNETT SWENSON

Precipitation during March was above normal in all of the Atlantic States, the East Gulf drainage, the Great Lakes Region, and in the Central-Northern States. Floods occurred in portions of New York and Pennsylvania, in the Southeastern States, southern Michigan, and in portions of the Ohio Basin. The floods were unusually severe in Michigan and in the Oconee and Ocumlgee Rivers in Georgia, where previous maximum stages were equaled or exceeded in some instances, otherwise the floods were mostly light to moderate.

St. Lawrence drainage.—Excessive flooding occurred in the streams of the lower Michigan Peninsula during March as the result of two storms and mild temperatures. On March 8–9, rains and heavy, melting snow caused rapidly rising river stages and some flooding from ice jams as the ice moved out. The high water continued until March 16, when additional heavy rains were general over this area. The heavy rains and rising temperatures, together with the remaining frost that left the ground, released great quantities of water into the already swollen streams and caused flooding in most of the rivers.

In the Grand River, stages approached, but did not equal, the high stages recorded in 1904. The crest stage reached at Grand Rapids, Mich., was 16.1 feet on March 20, with the lower sections of the city being inundated. The losses, confined principally to highways, and small dwellings in North Park and Comstock Park, were estimated at about $63,000.

The entire Saginaw River Basin was in flood with the highest stages of record being equaled or exceeded at some points. The peak stage of 19 feet at Vassar, Mich., on the Cass River, equaled the record stage in the flood of 1904.

The Maumee River system in northern Indiana and Ohio experienced two rises during March, but stages only slightly above flood stage were reached.

Heavy rains on March 16–17 caused severe local flooding in western New York. A report of the storm is given on page 61, in this REVIEW under the heading, "Severe Local Storms."

Atlantic Slope drainage.—A general rise occurred in the Susquehanna basin as the result of snow melt from a moderately heavy fall on the 3rd and 4th and light to moderate rain on the night of March 8–9. General flooding resulted in the upper basin down to, and including Towanda, Pa.

On the 16th–17th, heavy rains in the drainage above, and moderate rains below, Towanda produced a second flooding. In this case the overflow again was confined to