LATE REPORT FOR JANUARY 1945

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.	Swan Island, W. I. (10 m.) Number of observations	Pressure	Temperature	Relative humidity	Altitude (meters) m. s.	Swan Island, W. I. (10 m.) Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,016	24.1	79	7,000	31	431	−15.4	
500	31	960	20.6	81	8,000	31	377	−22.9	
1,000	31	906	17.3	75	9,000	31	328	−30.3	
1,500	31	854	14.5	67	10,000	31	284	−38.1	
2,000	31	805	12.1	57	11,000	31	245	−46.0	
2,500	31	758	9.8	55	12,000	31	211	−53.3	
3,000	31	714	8.7		13,000	30	180	−59.3	
4,000	31	632	4.1		14,000	23	154	−63.2	
5,000	31	558	−1.6		15,000	9	130	−68.1	
6,000	31	492	−8.2						

REVISED DATA FOR SWAN ISLAND, WEST INDIES

Raob temperature data for Swan Island, W. I., for the period September 1940 through November 1942, published in the MONTHLY WEATHER REVIEW, were too low in the upper levels due to a drift in the calibration of the radiosonde recorder. These data have accordingly been recomputed and the revised data are shown in the following tables.

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

MONTHS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m.s.l.	September, 1940 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	October, 1940 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	November, 1940 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	December, 1940 (10 m.) Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,010	27.0	86	30	1,011	26.1	82	28	1,012	25.6	83	31	1,012	25.6	80
500	30	955	24.1	85	30	956	23.6	84	28	958	23.1	83	31	957	22.8	82
1,000	30	902	21.3	82	30	904	20.3	85	28	904	20.0	84	31	904	20.0	82
1,500	30	852	18.6	79	30	853	17.6	82	28	853	16.9	78	31	853	17.1	79
2,000	30	803	16.1	77	30	804	15.2	83	28	804	14.4	73	31	804	14.6	73
2,500	30	757	13.9	73	30	758	13.4	79	28	758	12.1	68	31	758	12.5	63
3,000	30	713	11.5	69	30	714	11.1	73	28	714	9.7	60	31	714	9.8	57
4,000	30	633	6.1	66	28	633	6.1	66	28	633	5.4	53	30	633	4.8	43
5,000	29	560	0.0	69	28	560	0.0	61	26	559	0.0	44	30	559	−1.1	35
6,000	29	493	−5.5	67	28	494	−4.9	57	26	493	−6.0	38	30	492	−7.6	36
7,000	29	434	−11.2	66	28	434	−10.8	53	26	433	−12.3	35	30	432	−14.2	34
8,000	28	380	−16.9	64	28	380	−17.4	49	26	379	−18.6	33	30	378	−20.2	34
9,000	28	332	−23.6	62	28	331	−24.4	47	25	331	−25.1	32	30	329	−27.6	35
10,000	28	289	−31.0	60	27	288	−32.1	46	24	288	−32.9	30	30	286	−35.2	34
11,000	27	250	−39.2	61	27	250	−40.1	47	24	249	−40.9	27	30	248	−42.8	
12,000	27	216	−47.0		27	215	−47.8		23	215	−48.5		30	213	−50.0	
13,000	25	185	−54.3		27	184	−54.9		23	184	−55.9		30	182	−56.5	
14,000	25	158	−61.0		27	157	−62.0		23	157	−62.1		29	155	−62.0	
15,000	24	134	−66.9		26	133	−68.0		23	134	−67.1		29	132	−67.0	
16,000	24	114	−71.0		25	113	−72.2		21	113	−70.1		29	112	−71.1	
17,000	24	96	−72.1		24	95	−73.4		20	95	−71.8		28	94	−74.1	
18,000	21	81	−70.1		22	81	−71.0		18	80	−72.5		24	80	−74.3	
19,000	18	68	−66.6		17	68	−67.5		15	68	−69.3		20	67	−70.5	
20,000	12	58	−63.8		17	58	−63.8		14	58	−66.1		15	57	−65.6	
21,000	11	49	−61.0		14	49	−60.1		13	49	−64.0		10	48	−62.8	
22,000	5	42	−59.9		8	42	−59.8		9	42	−61.3		6	42	−60.2	
23,000									6	36	−60.0					

Altitude (meters) m.s.l.	January, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	February, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	March, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,014	24.4	80	28	1,013	24.5	78	31	1,013	24.8	76
500	31	959	21.4	83	28	957	20.9	86	31	958	21.1	83
1,000	31	905	18.2	80	28	904	18.0	83	31	904	18.0	79
1,500	31	854	15.3	75	28	852	15.2	77	31	853	15.7	68
2,000	31	804	12.8	70	28	803	13.0	71	31	804	14.0	60
2,500	31	758	11.1	64	28	757	11.6	59	31	757	11.9	56
3,000	31	714	8.7	56	28	712	9.8	49	31	713	9.8	50
4,000	30	632	4.4	40	28	631	4.8	35	31	632	5.6	40
5,000	30	559	−1.3	34	27	558	−0.6	30	31	559	−0.2	34
6,000	30	492	−7.9	33	27	491	−6.8	27	31	492	−6.7	29
7,000	30	432	−15.0	31	27	432	−13.5	25	31	432	−12.6	28
8,000	30	378	−21.3	30	27	378	−20.1	24	31	378	−19.3	27
9,000	30	328	−28.0	29	27	329	−27.1	23	31	330	−26.7	26
10,000	29	286	−34.7	28	27	286	−33.9	23	31	287	−33.7	25
11,000	29	247	−42.5		27	247	−41.6		29	248	−41.3	
12,000	29	213	−49.4		27	213	−48.9		29	214	−48.9	
13,000	29	182	−56.2		27	182	−56.2		29	183	−56.2	
14,000	29	155	−62.8		27	155	−63.4		28	156	−62.9	
15,000	28	132	−69.4		26	132	−70.2		26	133	−68.6	
16,000	28	111	−74.5		26	111	−76.4		26	112	−73.5	
17,000	27	94	−76.9		24	93	−78.6		24	94	−75.9	
18,000	26	79	−75.0		19	78	−74.6		21	80	−73.2	
19,000	20	67	−70.0		11	66	−69.3		17	67	−69.4	
20,000	16	57	−64.9		5	57	−66.8		13	57	−66.1	
21,000	7	48	−62.2						7	48	−63.2	
22,000									6	41	−60.5	
23,000												

Altitude (meters) m.s.l.	April, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	May, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	June, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	July, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,011	26.3	81	30	1,010	26.4	84	30	1,013	27.3	84	31	1,013	27.0	84
500	30	956	22.6	85	30	956	23.4	88	30	958	24.2	88	31	958	24.1	87
1,000	30	903	20.3	82	30	903	20.4	84	30	905	21.1	84	31	906	21.5	81
1,500	30	852	18.1	68	30	852	17.9	78	30	854	18.3	78	31	855	18.7	74
2,000	30	803	15.5	59	30	803	15.5	71	30	805	16.1	66	31	806	16.1	65
2,500	30	757	12.7	52	30	757	13.2	67	30	759	13.9	54	31	760	13.6	56
3,000	30	713	10.7	44	30	713	10.7	64	30	716	11.1	49	31	716	10.7	50
4,000	30	632	5.5	35	29	632	5.7	68	30	634	5.3	47	31	634	5.1	47
5,000	30	559	−0.4	33	28	559	0.2	67	30	561	−0.3	40	31	561	−0.6	45
6,000	30	492	−6.0	33	28	493	−5.8	63	29	494	−6.7	40	31	494	−6.9	46
7,000	30	433	−12.8	34	26	434	−11.9	58	29	434	−12.8	36	31	434	−13.0	46
8,000	30	379	−19.2	34	25	379	−18.1	56	29	380	−18.9	35	31	379	−18.8	44
9,000	30	330	−25.9	34	24	330	−25.2	55	27	331	−25.7	33	31	330	−25.7	40
10,000	30	287	−33.2	34	23	288	−32.5	53	27	288	−33.2	33	31	288	−33.1	38
11,000	30	248	−40.7		21	250	−40.3		27	249	−41.0		31	249	−40.8	
12,000	29	214	−48.0		21	216	−47.8		25	215	−48.4		30	214	−48.4	
13,000	29	184	−55.3		21	185	−55.8		23	185	−55.3		30	184	−55.9	
14,000	29	157	−61.8		21	157	−63.4		20	157	−62.2		30	157	−62.5	
15,000	29	133	−67.9		20	133	−69.2		20	134	−67.8		29	133	−67.4	
16,000	29	112	−72.2		19	113	−73.5		20	113	−71.3		28	113	−69.2	
17,000	27	95	−74.0		19	95	−75.3		18	95	−71.8		26	95	−69.1	
18,000	26	80	−72.4		14	80	−71.0		16	80	−68.8		24	81	−67.9	
19,000	21	68	−67.7		10	68	−66.0		16	69	−63.9		20	69	−64.5	
20,000	17	58	−63.8		5	57	−62.9		11	58	−59.4		16	58	−61.3	
21,000	12	49	−60.0										6	50	−59.8	
22,000	5	41	−58.6													

Altitude (meters) m.s.l.	August, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	September, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity	October, 1941 (10 m.) Number of observations	Pressure	Temperature	Relative humidity
Surface	31	1,013	27.1	84	31	1,010	27.8	82	31	1,012	27.1	83
500	31	958	24.3	87	31	956	24.6	88	31	958	24.1	90
1,000	31	905	21.6	80	31	903	21.9	82	31	905	21.3	84
1,500	31	854	18.8	75	31	852	19.2	78	31	854	18.6	76
2,000	31	806	16.2	71	31	804	16.7	72	31	805	16.1	73
2,500	31	759	13.6	66	31	758	14.1	69	31	759	13.5	70
3,000	31	716	10.9	61	31	714	11.3	65	31	715	11.0	65
4,000	31	634	4.8	60	30	633	5.9	60	31	634	5.9	61
5,000	30	560	−1.1	56	30	560	0.4	57	31	561	0.8	56
6,000	30	493	−6.9	52	29	494	−5.5	58	30	494	−4.7	52
7,000	30	434	−13.4	51	29	434	−11.2	56	30	435	−10.5	51
8,000	30	380	−19.6	50	28	380	−16.9	52	30	381	−16.5	47
9,000	30	331	−26.3	48	28	332	−23.4	48	30	333	−23.1	45
10,000	30	288	−33.8	48	28	289	−30.5	47	30	289	−30.2	44
11,000	30	249	−41.7		28	251	−37.8		29	251	−37.6	43
12,000	30	215	−49.4		28	217	−45.0		29	217	−45.1	
13,000	30	184	−56.8		28	186	−52.2		29	186	−52.8	
14,000	29	156	−63.7		27	159	−59.3		29	159	−60.3	
15,000	29	133	−68.7		27	135	−65.5		29	135	−67.3	
16,000	26	112	−70.9		26	114	−70.0		29	114	−72.9	
17,000	24	95	−71.0		25	97	−71.5		26	96	−75.8	
18,000	20	80	−69.1		22	82	−70.4		24	81	−76.9	
19,000	17	68	−66.3		17	69	−68.3		16	68	−75.3	
20,000	8	58	−64.3		10	58	−66.0		8	58	−71.0	
21,000												
22,000												

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

MONTHS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

Altitude (meters) m. s. l.	November 1941 (10 m.)				December 1941 (10 m.)				January 1942 (10 m.)				February 1942 (10 m.)				March 1942 (10 m.)				April 1942 (10 m.)				May 1942 (10 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,012	26.2	80	31	1,013	26.0	84	31	1,015	24.8	79	28	1,012	24.5	81	31	1,012	25.6	79	23	1,013	25.8	77	31	1,011	26.3	84
500	30	958	23.3	83	31	957	23.1	87	31	960	21.9	82	28	957	21.9	83	31	958	22.2	84	23	957	22.6	83	31	956	23.1	89
1,000	30	904	20.3	79	31	904	20.2	84	31	906	18.5	83	28	904	18.9	79	31	904	19.2	78	23	904	19.3	81	31	903	20.1	84
1,500	30	853	17.6	75	31	853	17.4	81	31	855	15.5	81	28	852	16.5	73	31	853	17.0	68	23	853	16.6	76	31	852	17.3	79
2,000	30	804	14.8	74	31	804	15.0	76	31	805	13.1	73	28	803	14.5	60	31	804	15.0	57	23	804	14.7	63	31	803	14.7	75
2,500	30	758	12.3	70	31	758	12.8	69	31	759	11.0	64	28	757	12.5	51	31	758	12.8	50	23	757	12.7	52	31	757	12.0	72
3,000	30	714	10.3	60	31	714	10.4	62	31	714	8.9	55	28	713	10.5	46	31	714	10.4	44	23	713	10.5	46	31	712	9.4	67
4,000	30	633	5.6	53	30	633	5.8	47	31	633	4.2	46	28	632	5.7	37	29	632	6.1	36	21	632	5.4	42	31	631	4.1	64
5,000	30	560	0.6	48	29	560	0.5	41	30	559	−0.6	38	28	559	0.4	28	29	559	0.8	31	21	559	0.4	41	31	558	−0.7	62
6,000	29	494	−5.0	45	28	494	−5.3	39	30	493	−7.0	32	28	493	−5.7	24	29	493	−5.6	28	19	493	−5.1	41	31	492	−6.0	54
7,000	29	434	−11.4	43	28	434	−11.6	38	29	433	−13.7	24	27	433	−12.4	22	29	434	−12.3	27	18	434	−11.9	36	31	432	−12.3	48
8,000	29	380	−17.7	41	28	380	−18.0	37	29	379	−19.8	20	26	379	−18.8	21	29	380	−19.1	26	18	380	−18.4	33	31	378	−19.3	46
9,000	29	331	−24.4	39	28	332	−25.3	37	28	330	−27.3	19	26	330	−26.4	20	27	331	−26.1	25	18	331	−25.8	32	31	330	−26.0	43
10,000	29	289	−31.3	38	27	289	−32.5	36	28	287	−34.4	18	25	288	−34.1	20	27	288	−33.2	25	18	288	−33.1	32	31	287	−33.4	----
11,000	28	250	−38.9	----	26	250	−39.8	----	28	248	−42.0	----	25	249	−41.2	----	27	249	−40.6	----	17	250	−40.6	----	31	248	−41.4	----
12,000	28	216	−46.1	----	26	215	−46.9	----	27	214	−49.0	----	25	214	−47.5	----	27	215	−47.9	----	17	216	−48.5	----	31	214	−49.0	----
13,000	27	185	−53.4	----	25	185	−53.7	----	27	183	−56.1	----	25	184	−53.9	----	27	184	−55.6	----	15	185	−55.8	----	31	183	−57.6	----
14,000	26	158	−60.4	----	25	158	−60.2	----	27	156	−62.1	----	25	157	−61.0	----	27	157	−63.3	----	14	158	−63.2	----	30	156	−66.0	----
15,000	26	135	−67.0	----	25	134	−65.9	----	25	133	−67.3	----	24	133	−68.6	----	26	133	−70.6	----	14	133	−70.3	----	30	132	−73.9	----
16,000	26	114	−72.1	----	24	114	−70.4	----	24	112	−72.4	----	24	112	−75.6	----	24	113	−76.5	----	13	112	−76.8	----	----	----	----	----
17,000	22	96	−75.6	----	18	96	−73.7	----	20	94	−77.0	----	23	94	−80.2	----	22	94	−81.4	----	12	94	−80.1	----	----	----	----	----
18,000	17	80	−77.4	----	17	81	−76.3	----	18	79	−79.7	----	18	79	−83.5	----	15	79	−82.5	----	8	80	−82.6	----	----	----	----	----
19,000	8	68	−77.8	----	7	68	−77.9	----	----	----	----	----	15	66	−82.9	----	9	66	−80.4	----	6	66	−80.7	----	----	----	----	----

	June, 1942 (10 m.)				July, 1942 (10 m.)				August, 1942 (10 m.)				September, 1942 (10 m.)				October 1942 (10 m.)				November 1942 (10 m.)			
Surface	30	1011	27.2	85	30	1014	27.0	85	28	1012	26.8	86	27	1011	26.7	86	21	1012	26.4	85	30	1011	25.8	80
500	30	957	23.9	88	30	959	23.2	89	28	957	22.9	90	27	956	23.3	90	21	957	23.5	87	30	956	22.4	85
1,000	30	904	21.0	82	30	906	20.1	85	28	904	19.9	86	27	903	20.5	85	21	904	20.6	84	30	903	19.1	86
1,500	30	853	18.4	77	30	855	17.5	77	28	853	16.9	81	27	853	17.7	80	21	853	17.5	84	30	852	16.6	81
2,000	30	804	15.9	72	30	806	14.7	71	28	804	14.1	77	27	804	15.0	77	21	804	14.6	83	30	803	14.0	77
2,500	30	858	13.5	66	30	759	12.3	65	28	758	11.7	73	27	758	12.6	71	21	758	12.1	79	30	757	11.8	71
3,000	30	714	10.9	61	30	716	9.6	60	28	714	9.0	70	27	714	9.9	69	21	714	9.8	71	30	713	9.8	61
4,000	28	633	4.9	62	30	634	4.0	57	26	632	3.5	67	26	632	4.6	68	21	632	5.1	56	30	632	4.8	52
5,000	28	559	−1.1	64	29	560	−1.6	57	26	559	−2.3	67	26	559	−0.8	70	21	559	−0.1	45	30	558	−0.6	49
6,000	28	493	−7.0	59	28	493	−7.7	56	26	492	−8.3	68	26	492	−6.5	71	21	493	−5.8	39	29	492	−6.3	43
7,000	27	433	−13.1	56	26	433	−14.1	55	26	432	−14.3	67	26	433	−12.4	67	21	433	−12.2	35	29	432	−13.0	40
8,000	27	379	−19.1	54	23	378	−20.2	53	26	377	−20.5	64	26	378	−19.4	66	21	378	−19.5	33	28	378	−20.0	39
9,000	27	330	−26.0	53	23	330	−27.1	52	26	329	−27.8	61	26	329	−26.4	65	21	330	−27.1	32	27	329	−27.2	39
10,000	27	287	−33.9	----	23	287	−34.7	----	25	286	−35.7	60	25	286	−34.0	62	21	287	−34.3	31	27	286	−34.7	38
11,000	27	248	−41.9	----	22	248	−42.5	----	24	247	−43.6	----	24	247	−42.2	----	21	248	−42.0	----	27	247	−42.4	----
12,000	27	214	−50.4	----	20	213	−50.8	----	23	212	−52.0	----	24	213	−50.7	----	18	214	−49.9	----	27	213	−50.4	----
13,000	27	183	−59.7	----	18	183	−58.7	----	21	181	−60.4	----	24	182	−59.8	----	18	183	−58.7	----	25	182	−58.5	----

Altitude (meters) m. s. l.	Year 1941 (10 m.)				Year 1942 (10 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	364	1,012	26.2	82	340	1,012	26.0	83
500	364	957	23.0	86	340	957	22.8	86
1,000	364	904	20.2	81	340	904	19.7	83
1,500	364	853	17.5	75	340	853	17.0	78
2,000	364	804	15.1	69	340	804	14.5	72
2,500	364	758	12.9	62	339	758	12.2	65
3,000	364	714	10.5	56	338	714	9.8	59
4,000	360	633	5.4	49	329	632	4.6	54
5,000	357	560	−0.2	45	326	559	−0.7	51
6,000	352	493	−6.1	43	322	493	−6.6	48
7,000	350	434	−12.5	41	316	433	−13.0	44
8,000	348	379	−18.7	39	310	378	−19.7	42

Altitude (meters) m. s. l.	Year 1941 (10 m.)				Year 1942 (10 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
9,000	345	331	−25.6	38	305	330	−26.8	41
10,000	342	288	−32.7	37	301	287	−34.3	----
11,000	335	249	−40.3	----	297	248	−42.0	----
12,000	331	215	−47.6	----	290	214	−49.8	----
13,000	327	184	−54.9	----	281	183	−57.8	----
14,000	320	157	−61.9	----	----	----	----	----
15,000	314	134	−67.9	----	----	----	----	----
16,000	307	113	−72.3	----	----	----	----	----
17,000	280	95	−74.1	----	----	----	----	----
18,000	246	80	−72.7	----	----	----	----	----
19,000	180	68	−69.7	----	----	----	----	----
20,000	109	58	−64.6	----	----	----	----	----

RIVER STAGES AND FLOODS

By C. R. JORDAN

Precipitation averaged above normal during February over most of the eastern half of the country except Florida, New England, and the Lakes region. It was particularly heavy in northeastern Texas, Oklahoma, and northwestern Missouri. Rainfall also averaged above normal in the far West.

There was some light overflow in Pennsylvania, New York, and New England that resulted from the melting of snow or from backwater from ice jams that accompanied the Spring break-ups. Moderately severe flooding occurred in the Central States from the Gulf of Mexico to North Dakota, and flooding was reported in California, Nevada, and Oregon.

Snow and ice conditions at the end of February had improved considerably in Pennsylvania and western and southern New York and to some extent in southern New England. A heavy snow cover was still present in Maine and in the headwater areas of the Merrimack, Connecticut, Hudson, Delaware, and Susquehanna Rivers.

A brief summary of the conditions as they existed at the end of February in individual basins is given below. The surveys of snow depth and water content represent the joint efforts of many cooperating agencies, public and private.