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REPRESENTATIVE TWELVE-HOUR DEWPOINTS
IN MAJOR U.S. STORMS EAST OF THE CONTINENTAL DIVIDE
(second edition)

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Preface to the second edition.

The primary purpose of the first revision of Report No. 25 is to add 181 storms to the original compilation of 331. In addition, some of the dewpoints and reference points originally listed have been revised. To increase the overall utility of the list of storms the locations of the isohyetal centers have been added.

Introduction

1. Inherent in the process of maximizing the precipitation of major storms of record is the "moisture adjustment" technique. The process of moisture adjustment is based upon the assumption that any change in the water-vapor content, alone, of the rain-producing air of a storm would produce a corresponding change in the depth of precipitation.

2. Four questions must be answered before the moisture adjustment can be made:

- (1) How is the moisture content of the rain-producing air to be measured?
- (2) What are the moisture-content values of the storms for which moisture adjustments are desired?
- (3) What is the highest possible moisture content of the rain-producing air of each storm?
- (4) What mathematical procedures are used in moisture adjustment?

The first, third, and fourth questions, as well as refinements concerning barrier corrections and storm transpositions, which are beyond the scope of this paper, are discussed in various Hydrometeorological Reports (No. 2, "Maximum possible precipitation over the Ohio River Basin above Pittsburgh, Pennsylvania"; No. 23, "Generalized estimates of maximum possible precipitation over the United States east of the 105th meridian"; etc.). The values requested in the second question, with a description of the method used to derive them, are presented in the following pages.

2.

The Representative Storm Dewpoint

3. In moisture adjustment, the observed storm-rainfall depths are multiplied by the ratio of the maximum possible to the observed moisture charge. Theoretical considerations, as well as the necessity for choice of a meteorological parameter available through all the years of storm-rainfall observation, led to selection of a surface dewpoint, reduced to 1000 millibars, as the best index of a storm's moisture charge.

4. In the majority of important storms, the surface air where the rain is falling is only a minor contributor to the precipitation. Usually, the surface layer is relatively cool and overrun by a potentially warmer and more moist air mass from which the rain is precipitated. Thus the representative dewpoint must be sought in the region where the rain-producing air has not yet left the surface, at some point upwind from the precipitation center.

5. The heaviest burst of precipitation in a storm, the result of a critical combination of storm mechanism and moisture charge, may or may not occur in direct association with the highest storm dewpoints. Since the moisture-adjustment technique prescribes that there must be no change in the relative magnitudes of the observed dewpoint sequence as the moisture charge is increased, only the highest storm dewpoints may be adjusted to the maximum possible. If any less-than-maximum storm dewpoint were adjusted to the maximum possible, a proportionate increase of the maximum storm dewpoint would raise it above the maximum possible.

6. Experience has shown that the adjustment factor obtained from the 12-hr maximum possible dewpoint and the 12-hr representative storm

dewpoint may be used in the adjustment of precipitation amounts for all durations. Thus the moisture-adjustment technique is primarily concerned only with a 12-hr representative storm dewpoint; except in rare circumstances, longer-duration storm dewpoints need not be taken into account.

Selection of the Representative Dewpoint

7. In the selection of the representative storm dewpoint, the rain area of each storm was defined and outlined on successive synoptic maps covering the storm period. The rain-producing air mass was identified and its trajectory retraced from the rainfall center to the nearest region where the air mass lay at the surface and where dewpoint observations were also available. This procedure has resulted in the representative dewpoints for the large majority of the storms being taken in tropical maritime air.

8. To minimize observational errors and local peculiarities, a selection of the representative dewpoint was made whenever possible from a group of stations rather than from a single station. Original station records furnished the dewpoint values for all observation times within the storm period. From these records the minimum temperatures for the same period were also obtained. After the collected data were reduced pseudo-adiabatically to 1000 mb to remove the effect of elevation differences between stations, average values of dewpoint and of minimum temperature for each observation time were obtained from appropriate stations within the group. For each 12-hr period the lowest dewpoint or the minimum temperature, whichever was lower, was tabulated; the highest value tabulated was then selected as the 12-hr representative storm dewpoint.

4.

9. The geometric center of the area bounded by the stations involved in the dewpoint determination was named the "dewpoint reference point". Because the reference point usually does not coincide with the position of an observation station, and since use of the representative dewpoints is nearly always associated with storm transposition, the location of each reference point has been defined in terms of range (in miles) and bearing (to 16 points of the compass) of the reference point with respect to the rainfall center.

10. The tabulation which follows lists, in chronological order, all storms east of the Continental Divide for which dewpoint data have been processed as of June 1949, together with the Corps of Engineers assignment numbers, the reduced 12-hr representative storm dewpoints ($^{\circ}\text{F}$), the ranges and bearings of the reference points from the rainfall centers, and the locations of the isohyetal centers.

REPRESENTATIVE TWELVE-HOUR DEWPOINTS
IN MAJOR U.S. STORMS EAST OF THE CONTINENTAL DIVIDE

5.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1867</u> Mar 1-7	-----	71	250 SSE of Otto, N. C.
<u>1869</u> Oct 3-5	WA 1-2	65	80 ESE of Canton, Conn.
<u>1875</u> Feb 23-25	-----	66	350 SW of Clingman's Dome, N. C.
Jul 25-Aug 3	OR 4-1	72	200 SW of Kenton, Ohio.
<u>1878</u> Sep 10-13	OR 9-19	71	250 SE of Jefferson, Ohio.
<u>1883</u> Jun 23-28	GL 3-6	67	150 SSE of Battle Creek, Mich.
Jul 20-26	GL 3-7	72	225 SE of Cresco, Iowa.
<u>1886</u> Mar 26-31	GM 1-1	61	200 SSW of Center, Ala.
Mar 26-Apr 1	-----	66	270 SSE of Pink Beds, N. C.
Jun 13-18	LMW 4-27	75	100 S of Alexandria, La.
<u>1887</u> Jul 27-31	SA 3-1	74	150 SE of Union Point, Ga.
<u>1889</u> May 30-Jun 1	SA 1-1	65	200 S of Wellsboro, Pa.

6.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1890</u>			
Jul 1-5	GL 1-2	69	250 SW of Constableville, N. Y.
Sep 8-13	GL 4-1	70	330 SSE of S.Canistota, N. Y.
<u>1891</u>			
Jun 23-28	MR 4-2	72	200 S of Larrabee, Iowa.
Dec 13-15	GL 2-7	55	410 SSE of Lincoln, Wis.
<u>1892</u>			
Jul 24-28	UMV 1-1	72	200 S of Minneapolis, Minn.
Aug 24-27	GL 1-3	70	270 S of North Hammond, N. Y.
<u>1893</u>			
Aug 24-29	GL 1-4	72	220 S of Lowville, N. Y.
Aug 26-28	SA 2-1	75	80 E of Manning, S. C.
Sep 6-10	LMV 3-2	71	100 E of Franklin, La.
<u>1894</u>			
Mar 17-20	LMV 1-1	67	120 SSE of Washington, Ark.
May 17-22	NA 1-4	64	50 W of Bridgeton, N. J.
May 29-Jun 1	MR 6-14	62	325 SE of Lake Moraine, Colo.
Sep 18-20	SA 1-13	67	250 SSW of Smith's Corner, Pa.
<u>1895</u>			
Oct 11-15	NA 1-5	60	100 ESE of Grosvenordale, Conn.
Dec 16-20	MR 1-1	59	260 S of Phillipsburg, Mo.
Dec 16-21	GL 2-8	51	350 SW of Three Rivers, Mich.
<u>1896</u>			
Jun 4-5	MR 4-3	68	250 SSE of Greeley Center, Nebr.
Sep 27-30	SA 1-19	71	240 SE of Bloomery, W. Va.
Dec 31-Jan 3	UMV 2-1	61	125 S of Pine Bluff, Ark.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1897</u>			
Mar 22-23	GM 1-5	70	135 WSW of Newton, Ala.
Jul 12-14	NA 1-6	70	70 SSE of Southington, Conn.
Jul 18-22	UMV 1-2	65	300 S of Lambert, Minn.
Jul 25-27	GL 4-5	72	300 SSE of Butternut, Wis.
Jul 26-29	NA 1-7A	70	200 SSW of Elizabeth, N. J.
Jul 26-29	NA 1-7B	70	70 ESE of Jewell, Md.
Dec 1-4	LMV 2-3	67	170 SE of Jackson, Miss.
<u>1898</u>			
May 2-6	SW 1-2	68	270 SE of Norman, Okla.
Jun 2-6	UMV 1-3	68	225 S of Pine River Dam, Minn.
Jul 6-7	MR 1-3A	74	80 SSW of Blanchard, Iowa.
Jul 7-8	MR 1-3B	74	120 SSW of Edgehill, Mo.
Aug 3-5	SA 1-4	74	200 SSW of Girardville, Pa.
Aug 15-17	-----	72	230 SW of Burlington, Iowa.
Sep 21-23	SA 2-3	69	100 SE of Patterson, N. C.
Sep 28-Oct 1	LMV 1-3A	69	210 SSE of Sikeston, Mo.
Sep 28-Oct 1	LMV 1-3B	75	160 W of Pensacola, Fla.
<u>1899</u>			
Jan 4-6	LMV 3-7	62	250 S of Canton, Miss.
Jun 11-13	UMV 1-4A	62	200 SW of Minnesota City, Minn.
Jun 13-14	UMV 1-4B	63	125 SE of Mason City, Iowa.
Jun 27-Jul 1	GM 3-4	75	125 S of Hearne, Tex.
Dec 8-11	LMV 2-4	64	125 SSE of Port Gibson, Miss.
<u>1900</u>			
Apr 15-18	LMV 2-5	66	180 SSW of Eutaw, Ala.
Apr 22-24	MR 5-10	58	450 ESE of Big Timber, Mont.
May 11-13	MR 5-11	58	320 ESE of Canyon Ferry, Mont.
Jul 1-6	UMV 1-5	73	360 SW of Wausaw, Wis.
Jul 14-17	MR 1-5	72	275 SE of Primghar, Iowa.
Sep 7-11	UMV 1-6	72	350 SSE of Elk Point, S. Dak.
Oct 27-30	UMV 1-7A	64	200 S of La Crosse, Wis.
Oct 30-Nov 1	UMV 1-7B	63	150 ESE of Lenox, Iowa.

8.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1901</u>			
May 18-23	SA 2-4	69	215 SSW of Dahlonega, Ga.
Jul 1-6	UMV 1-8	74	300 SSW of New Falden, Minn.
Sep 16-19	SA 2-5	74	180 E of Americus, Ga.
<u>1902</u>			
Feb 27-Mar 2	GM 1-10	63	200 SE of Union Springs, Ala.
Mar 25-29	LMW 2-7	66	280 SSE of Ripley, Miss.
May 19-20	MR 5-12	61	620 SE of Kipp, Mont.
Jul 3-10	GL 1-7	71	100 WSW of Angelica, N. Y.
Sep 20-24	MR 1-8	68	275 E of Wakecney, Kans.
Sep 24-27	SA 1-5	66	75 SW of Colora, Md.
<u>1903</u>			
May 25-31	MR 1-9	69	170 SE of Salina, Kans.
Jun 7-15	GL 4-8	68	90 S of Dover, N. J.
Jul 12	SA 1-6	70	35 SSW of Baltimore, Md.
Aug 19-20	GL 1-8	66	100 SSW of Wedgewood, N. Y.
Aug 24-28	MR 1-10	73	150 SW of Woodburn, Iowa.
Aug 25-30	GL 1-9	73	275 SW of Strongsville, Ohio.
Sep 6-10	MR 1-11	68	200 E of Burlington, Kans.
Sep 11-15	UMV 2-3	70	250 SE of Reed's Landing, Minn.
Sep 28-Oct 1	SW 1-4	71	150 SSE of Gainesville, Tex.
Oct 7-11	GL 4-9	62	100 ENE of Paterson, N. J.
<u>1904</u>			
Apr 19-26	MR 1-12	68	380 S of Nevada, Mo.
Jun 1-5	SW 1-5	74	275 S of Hartshorne, Okla.
Jul 4-9	OR 1-1	70	230 SW of Gratiot, Ohio.
Sep 12-15	NA 1-9	68	50 ESE of Friesburg, N. J.
Sep 26-30	SW 1-6	72	170 SSE of Rociada, N. Mex.
Oct 24-26	GM 3-11	62	200 SSE of Weatherford, Tex.
Dec 23-27	LMW 3-10	66	140 SSE of Liberty Hill, La.
<u>1905</u>			
Feb 11-13	SA 3-9	59	75 S of Putnam, Ga.
Jun 3-8	GL 2-12	70	200 SW of Medford, Wis.
Jun 9-10	UMV 2-5	70	150 S of Bonaparte, Iowa.
Jun 28-Jul 2	MR 1-16A	74	140 SSE of El Dorado, Kans.
Jun 28-Jul 2	MR 1-16B	74	120 SSE of Arkadelphia, Ark.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1905 (cont.)</u>			
Jul 18-21	SW 1-7A	72	420 S of Lockwood, Mo.
Jul 18-21	SW 1-7B	73	110 SE of Hartshorne, Okla.
Jul 21-25	GM 3-13	74	470 SE of Elk, N. Mex.
Aug 11-16	OR 1-3	72	160 SW of Delaware, Ohio.
Sep 12-19	UMV 2-18	68	260 SSW of Booneville, Mo.
Oct 16-19	UMV 2-6	70	350 SW of New Haven, Mo.
<u>1906</u>			
May 21-26	SA 4-9	73	275 SSE of Middleburg, Fla.
Jun 6-8	MR 5-13	64	600 SE of Warrick, Mont.
Aug 4-6	GM 3-14	74	250 SE of Knickerbocker, Tex.
Aug 4-8	SW 1-8	72	200 S of Paul's Valley, Okla.
Aug 8	UMV 1-10	70	250 SW of Milton, Wis.
Aug 21-25	MR 1-21B	73	125 SE of Hartington, Nebr.
Aug 22-26	MR 1-21A	73	70 S of Warsaw, Mo.
Aug 24	SA 1-20	74	100 SE of Guinea, Va.
Sep 16-18	SW 1-9	72	140 SW of Thurman, Iowa.
Nov 17-21	LMV 1-4	68	170 SSW of Austin, Miss.
<u>1907</u>			
Jan 1-3	LMV 1-5	66	85 SSE of Malvern, Ark.
Mar 9-14	OR 1-7	59	125 S of Cincinnati, Ohio
May 7-10	LMV 3-12	71	175 E of Lafayette, La.
May 28-31	LMV 3-13	73	55 ESE of Sugarland, Tex.
Jun 12-13	MR 4-10	72	600 SSE of Ft. Meade, S. Dak.
Jun 21-23	MR 5-14	61	400 SE of Choteau, Mont.
Jul 13-16	MR 1-23	70	150 S of Nemaha, Nebr.
<u>1908</u>			
May 21-25	SW 1-10A	74	400 SSE of Chattanooga, Okla.
May 21-25	SW 1-10B	75	180 SE of Sabinal, Tex.
Jun 3-5	MR 5-15	65	510 ESE of Evans, Mont.
Jun 4-10	MR 1-24	72	150 SW of Shawnee, Okla.
Jun 14-15	GL 1-10	66	20 S of North Rose, N. Y.
Jul 26-Aug 2	LMV 3-14	75	200 HNE of Franklin, La.
Jul 29-31	SA 5-23	74	75 E of Newbern, N. C.
Aug 23-28	SA 2-6	74	160 SE of Wade Mecum, N. C.
Sep 17-20	LMV 3-15	76	225 ESE of Cameron, La.
Oct 19-24	SW 1-11	66	200 SE of Meeker, Okla.

10.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1909</u>			
Apr 27-May 2	GL 2-14	62	400 S of Grayling, Mich.
May 24-28	LMV 2-9	72	225 SE of Shaccoe, Miss.
May 30-Jun 4	LMV 2-10	74	40 ENE of Pearlington, Miss.
Jun 2-5	GL 1-11A	66	150 S of Benton Ridge, Ohio.
Jun 2-5	GL 1-11B	66	150 SSE of Rome, Ohio.
Jun 29-Jul 3	SA 4-11	72	25 SE of Tarpon Springs, Fla.
Jul 4-7	UMV 2-8	73	90 SSW of Bethany, Mo.
Jul 18-23	UMV 1-11A	71	300 SSW of Beaulieu, Minn.
Jul 18-23	UMV 1-11B	70	275 SSW of Ironwood, Mich.
Sep 6-9	MR 1-28	71	240 S of Topeka, Kans.
Sep 19-22	LMV 3-16	76	100 SE of St. Francisville, La.
Nov 10-16	MR 1-29	62	250 ESE of Neosha, Mo.
<u>1910</u>			
Jun 6-10	MR 1-30	71	400 SSE of Booneville, Mo.
Aug 28-30	MR 4-12	70	120 SSE of Lincoln, Nebr.
Oct 3-6	OR 4-8	74	350 SSW of Golconda, Ill.
<u>1911</u>			
Feb 13-19	MR 2-1	61	275 E of Woodward, Okla.
Apr 12-15	LMV 1-8	65	180 SSE of Benton, Ark.
Jul 30-31	MR 2-2	70	70 SE of Richfield, Kans.
Aug 28-31	SA 3-11	74	100 S of St. George, Ga.
Sep 3-6	MR 5-18	61	600 SE of Knobles Ranch, Mont.
Oct 4-6	SW 2-30	67	350 SSE of Gladstone, Colo.
<u>1912</u>			
Mar 14-15	SA 2-7	64	275 S of Mt. Holly, N. C.
Apr 12-17	LMV 2-11	69	60 E of Pearl River, La.
May 19-22	GL 3-1	60	275 SW of Gladwin, Mich.
Jun 14-18	OR 8-16A	73	90 WSW of Fairfield, Ill.
Jun 14-18	OR 8-16B	71	250 WSW of Johnstown, Pa.
Jul 19-24	GL 2-29	73	250 SSW of Merrill, Wis.
Sep 22-25	SA 1-22A	71	175 SSE of Emmitsburg, Md.
Sep 22-25	SA 1-22B	75	265 S of Camden, S. C.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1913</u>			
Jan 10-12	LMV 1-9	64	180 SSE of Bee Branch, Ark.
Mar 23-27	OR 1-15	65	500 S of Bellfontaine, Ohio.
Jun 6-12	SW 1-14	68	340 SSE of Ft. Union, N. Mex.
Jul 12-15	OR 3-7	73	270 WSW of Toboso, Ohio.
Aug 8-10	GL 3-2	70	200 SSW of Bay City, Mich.
Aug 12	NA 2-12	68	340 WSW of Stroudsburg, Pa.
Aug 16-21	UMV 1-14A	73	260 SSE of New London, Minn.
Aug 16-21	UMV 1-14B	73	160 SSE of Worthington, Minn.
Sep 25-30	LMV 3-18	76	100 SSE of Sugartown, La.
Dec 1-5	GM 3-25	71	255 S of San Marcos, Tex.
<u>1914</u>			
Mar 24-28	LMV 3-19	62	210 ESE of Merryville, La.
Apr 24-28	GM 3-26	70	140 SW of Merryville, La.
Apr 29-May 2	SW 1-16	68	550 SE of Clayton, N. Mex.
May 10-12	GL 2-15	63	200 S of Adrian, Mich.
Jul 16	OR 2-16	71	140 WSW of Cambridge, Ohio.
Aug 31-Sep 1	GL 2-16	68	250 SW of Cooper, Mich.
Sep 6-10	MR 2-6A	70	150 S of Kansas City, Mo.
Sep 12-15	MR 2-6B	72	170 S of Bolivar, Mo.
Oct 13-16	SA 2-8	70	275 S of Mt. Mitchell, N. C.
<u>1915</u>			
Apr 22-26	GM 4-1	70	180 S of Austin, Tex.
May 25-29	MR 2-7	71	150 SW of Lexington, Mo.
Jun 1-5	MR 5-21	66	725 SE of Adel, Mont.
Jun 2-7	SW 2-24	71	140 S of Henrietta, Tex.
Jun 30-Jul 5	GL 4-11	68	350 S of Greene, N. Y.
Jul 7-9	GL 4-12	67	230 S of Mt. Gregor, N. Y.
Jul 11-16	MR 2-9	73	225 SE of Maryville, Mo.
Aug 1-3	SA 4-15	75	110 SE of St. Petersburg, Fla.
Aug 16-21	LMV 1-10	77	265 ESE of San Augustine, Tex.
Aug 21-22	SA 1-7	70	140 S of Gordon, Pa.
Sep 6-9	MR 2-11	70	100 S of Moran, Kans.
Sep 11-16	UMV 1-15	72	100 SW of Dodgeville, Wis.
Sep 28-30	LMV 2-13	75	30 S of Franklinton, La.

12.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1916</u>			
Jan 26-31	MR 2-13	63	310 SSW of Ironton, Mo.
Mar 21-27	GL 4-14	57	250 SSE of Washington, Iowa.
May 14-20	GL 1-15	64	250 S of York, N. Y.
Jun 2-5	GL 1-16	65	325 SW of Brockport, N. Y.
Jun 4-6	MR 2-12	67	170 SSE of Newkirk, Okla.
Jul 5-10	GM 1-19	76	75 WSW of Bonifay, Fla.
Jul 13-17	SA 2-9	74	225 S of Altapass, N. C.
Jul 13-17	SA 2-9A	74	110 ENE of Kingstree, S. C.
Jul 13-17	UMV 1-16	72	170 S of New Ulm, Minn.
Aug 10-16	UMV 2-9	72	250 SW of Louisiana, Mo.
<u>1917</u>			
Jan 4-5	UMV 3-3	61	235 SSE of Vincennes, Ind.
Mar 31-Apr 2	UMV 3-4	62	85 SSW of Dutton, Ark.
Jun 1-6	MR 2-16	64	200 SSE of Atlantic, Iowa.
Jul 21-23	GL 2-30	71	160 S of Viroqua, Wis.
Sep 14-16	SA 5-24	70	Hatteras, N. C.
<u>1918</u>			
Mar 12-15	OR 3-10	58	310 WSW of Holcomb, W. Va.
Mar 13-14	GL 2-17	58	250 SSE of Trowbridge, Mich.
May 9-13	LMV 1-11	68	300 S of Mt. Home, Ark.
May 22-23	UMV 3-5	68	265 S of Warrenton, Mo.
Jun 3-6	-----	69	190 SSE of Ames, Iowa.
Jul 14-15	MR 5-23	64	375 ESE of Pine Grove, Mont.
Aug 19-22	MR 4-16	68	220 SW of Mayville, N. Dak.
Oct 24-27	SA 2-10	67	125 S of Tryon, N. C.
Oct 27-31	SA 3-14	72	400 SW of Highlands, N. C.
Nov 6-8	MR 2-18	68	525 S of Neosha, Mo.
<u>1919</u>			
Mar 14-16	MR 2-19	60	225 SSW of St. Joseph, Mo.
Mar 15-17	LMV 1-12	67	260 SSW of Henderson, Tenn.
Apr 5-11	GL 2-19	54	250 SSE of Oconto, Wis.
May 2-4	MR 2-20	64	350 SSE of Conception, Mo.
May 30-Jun 4	MR 2-21	68	325 SSE of Corydon, Iowa.
Jul 16-25	SA 5-25	73	230 SSW of Callaville, Va.
Jul 18-21	GL 4-15	68	210 SE of Bangorville, Ohio.
Jul 18-23	NA 1-11	73	300 SSW of Boonton, N. J.
Aug 11-12	SA 2-11	72	190 SW of Gorge, N. C.
Aug 13-14	NA 1-12	66	75 SSW of Tuckerton, N. J.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1919 (cont.)</u>			
Sep 14-15	GM 5-15A	75	125 E of George West, Tex.
Sep 15-17	GM 5-15B	72	390 ESE of Meek, N. Mex.
Sep 16-19	MR 2-23	70	325 SE of Bruning, Nebr.
Sep 27-28	MR 5-24	41	450 ESE of Browning, Mont.
Oct 25-28	LMV 1-13A	70	125 SE of Steelville, Mo.
Oct 30-Nov 1	LMV 1-13B	67	150 SSE of Leitchfield, Ky.
Dec 6-10	GM 1-22	71	140 SSW of Selma, Ala.
<u>1920</u>			
Jan 21-24	OR 6-23	63	150 SE of Pontotoc, Miss.
May 10-13	MR 4-17	63	550 SE of Vale, S. Dak.
Jun 15-18	GL 1-18	69	200 SW of W. Newton, Pa.
Jul 16-17	MR 4-18	68	135 SSE of Oakdale, Nebr.
Aug 18	SA 1-8	66	50 SE of Lancaster, Pa.
Sep 5-7	UMV 3-7B	68	210 ESE of Alva, Okla.
Sep 6-9	UMV 3-7A	74	225 SW of Memphis, Tenn.
<u>1921</u>			
Mar 11-14	LMV 2-15	68	80 S of Magnolia, Miss.
Apr 14-16	MR 4-19	56	550 ESE of Fry's Ranch, Colo.
Apr 25-26	UMV 3-8	68	35 S of Marshall, Tex.
Jun 2-6	SW 1-23	67	400 SE of Penrose, Colo.
Jun 17-21	MR 4-21	71	500 ESE of Springbrook, Mont.
Sep 8-10	GM 4-12	77	250 S of Thrall, Tex.
Oct 29-Nov 2	OR 3-12	63	150 WSW of Marion, N. C.
Nov 16-19	SW 1-24	69	190 SW of Searcy, Ark.
<u>1922</u>			
Feb 19-23	GL 4-17	52	275 SW of West Branch, Mich.
Mar 23-25	MR 2-27	58	200 S of Strawn, Kans.
Apr 6-11	MR 2-28	(66	400 SSW of Warsaw, Mo.
		(68	400 SSW of Whitestown, Ind.
Apr 24-27	GM 4-15	73	340 SSE of Weatherford, Tex.
Jun 8-11	GL 2-21	70	130 SW of Wrightstown, Wis.
Jun 9-12	GL 1-19	71	255 SW of Syracuse, N. Y.
Jul 9-12	MR 2-29	72	250 SSE of Grant City, Mo.
Sep 1	UMV 3-9B	72	200 SSW of Jackson, Mo.
Sep 1-4	OR 1-27	73	100 SW of Oxford, Ohio.
Sep 2-3	UMV 3-9A	69	220 SW of Harrisonville, Mo.
Oct 9-10	SA 1-9	70	150 S of Baltimore, Md.
Nov 12-15	LMV 3-29	73	225 E of Lakeside, La.
Dec 27	UMV 3-10	57	250 SSW of Benton, Ill.

14.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1923</u>			
Jun 6-11	SW 1-25	70	290 SE of Wichita, Kans.
Jun 16-21	MR 5-25	72	530 SE of Hays, Mont.
Jul 27-Aug 1	SA 1-15	73	125 SSE of Orange, Va.
Sep 13-20	SW 1-26	73	185 SW of Smithville, Okla.
Sep 27-Oct 1	MR 4-23	68	550 SE of Savagoton, Wyo.
Sep 29-Oct 2	MR 3-1	68	135 ESE of Medicine Lodge, Kans.
Oct 11-16	SW 1-27A	65	366 ESE of Mangum, Okla.
Oct 11-16	SW 1-27B	73	160 SE of Austin, Tex.
<u>1924</u>			
May 7-12	SA 1-24	60	250 SE of Charlottesville, Va.
Jun 6-7	MR 4-28	62	400 SE of Beach, N. Dak.
Jun 24-29	GL 1-20	71	180 SW of Oberlin, Ohio.
Jul 11-14	MR 3-3	74	125 S of Ft. Scott, Kans.
Aug 3-6	GL 2-22	73	250 SW of West Bend, Wis.
Aug 18-20	UMV 4-11	72	160 SW of Galva, Ill.
Sep 13-17	SA 3-16	73	200 ENE of Apalachicola, Fla.
Sep 26-30	SA 3-17	73	90 ENE of Quitman, Ga.
Oct 4-11	SA 4-20	74	225 SSE of New Smyrna, Fla.
Dec 4-8	OR 4-18	67	320 SSW of Brownsville, Ky.
<u>1925</u>			
May 27-29	GM 4-21	70	315 SE of Eagle Pass, Tex.
Jun 14-18	MR 3-5	72	300 SW of Horton, Kans.
Aug 8	SA 1-10	67	250 WSW of Harrisburg, Pa.
Sep 10-15	SW 1-28	72	235 S of Walters, Okla.
Sep 11-16	GL 1-23	70	210 SW of Severance, N. Y.
Sep 20-22	MR 3-6	66	350 S of Lockwood, Mo.
Sep 23-26	SW 1-29	70	330 SE of Freeman Springs, Ark.
<u>1926</u>			
Mar 20-22	LMV 4-4	61	120 ESE of St. Francisville, La.
Jun 10-17	MR 3-7	68	200 SE of Lacona, Iowa.
Jul 7-8	MR 5-27	67	210 E of Utica, Mont.
Aug 15-21	UMV 2-10	70	300 SE of Willmar, Minn.
Aug 23-26	LMV 4-5	75	100 E of Donaldsonville, La.
Aug 31-Sep 5	MR 3-8	72	325 SE of Clarinda, Iowa.
Sep 2-5	SW 1-30	72	225 S of Columbus, Kans.
Sep 8-9	OR 4-22	69	200 SSW of Charleston, Ill.
Sep 11-16	SW 2-1	71	100 SE of Neosho Falls, Kans.
Sep 17-19	MR 4-24	70	175 SSE of Boyden, Iowa.
Sep 17-21	SA 4-23	75	120 ESE of Bay Minette, Ala.
Sep 25-30	SW 2-2	73	250 SE of Eufala, Okla.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1927</u>			
Feb 11-14	LMV 4-6	66	150 SE of Clinton, La.
Feb 28-Mar 1	LMV 4-7	63	200 SSE of Schriever, La.
Mar 11-13	LMV 1-14	65	150 SSE of Euttig, Ark.
Mar 18-20	MR 3-10A	62	250 S of Tusculumbia, Mo.
Mar 18-20	MR 3-10B	62	100 SE of Lutherville, Ark.
Apr 7-9	MR 3-11	66	175 SSE of Chanute, Kans.
Apr 12-16	LMV 4-8A	72	50 E of Pharr, La.
Apr 12-16	LMV 4-8B	68	400 SE of Marshall, Ark.
Apr 17-21	SW 2-4	66	260 SW of Jessieville, Ark.
May 5-9	MR 4-25	71	650 SSE of Bolvidere, S. Dak.
May 17-19	UMV 4-12	68	100 SW of Peoria, Ill.
May 17-24	MR 5-28	52	350 ESE of Waterton Park, Alberta
May 20-23	LMV 4-9	73	70 E of Kaplan, La.
May 25-31	MR 5-28A	58	275 ESE of Holter, Mont.
Jul 12-15	SW 2-5	72	225 SSW of Ardmore, Okla.
Jul 22-23	NA 1-16A	71	150 S of Lykens, Pa.
Jul 22-23	NA 1-16B	68	250 S of Phoenixville, Pa.
Aug 6-9	MR 3-12	72	225 SW of Caplinger Mills, Mo.
Sep 28-Oct 2	MR 3-14	72	175 SSW of Dutton, Ark.
Nov 2-7	NA 1-17	60	250 SSW of Kinsman Notch, N. H.
Dec 10-13	LMV 1-16	66	290 S of Ozark, Ark.
<u>1928</u>			
Jun 1-5	LMV 2-18	73	270 SW of Thomasville, Ala.
Jun 12-17	LMV 2-19	75	130 SSE of Crystal Spring, Miss.
Jun 16-21	MR 3-15	72	375 S of Mexico, Mo.
Jun 28-30	OR 7-10	72	500 SW of Clinton, Tenn.
Jul 5-8	UMV 1-18	71	320 SE of Berthold Agency, N. Dak
Jul 7-8	MR 3-16	72	440 SSE of Lincoln, Kans.
Jul 18-21	MR 3-17	73	175 S of Mt. Ayr, Iowa.
Jul 27-28	GL 4-21	70	80 S of High Falls, N. Y.
Aug 7-12	SA 4-24	75	50 SW of St. Cloud, Fla.
Aug 9-13	SA 2-12	75	190 S of Settle, N. C.
Aug 10-13	NA 1-18	74	225 SSE of Cheltenham, Md.
Aug 13-17	SA 2-13	74	110 S of Caesars Head, S. C.
Sep 4-7	SA 2-14	75	160 SW of Marion, S. C.
Sep 10-14	MR 3-19	71	350 SSW of Centerville, Iowa.
Sep 16-19	SA 2-15	74	200 S of Darlington, S. C.
Nov 15-17	MR 3-20	64	125 SSW of Iola, Kans.

16.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1929</u>			
Mar 11-16	LMV 2-20	67	75 S of Elba, Ala.
Mar 21-23	OR 7-15	68	270 SSE of Rock Island, Tenn.
Apr 18-21	MR 3-22	66	200 SSE of Holton, Kans.
May 10-14	MR 3-23	68	200 SE of Lawton, Okla.
May 25-30	GM 4-26	76	190 SSE of Kemly, Tex.
May 25-30	MR 4-27	68	500 SE of Sentinel Butte, Mont.
May 29-Jun 3	MR 3-25	69	250 S of Bethany, Mo.
Jun 6-7	MR 4-28	62	400 SE of Beach, N. Dak.
Jul 15-18	LMV 1-17	74	80 WSW of Woodville, Miss.
Aug 1-2	UMV 2-17	73	190 S of Toledo, Iowa.
Sep 5-9	LMV 4-13	75	90 E of Algiers, La.
Sep 23-28	SA 3-20	74	50 E of Glennville, Ga.
Sep 29-Oct 3	SA 3-23	74	200 E of Vernon, Fla.
Nov 11-15	GM 2-4	71	250 SSE of Helena, Ala.
<u>1930</u>			
Jan 6-11	LMV 2-22	60	190 SE of Arkadelphia, Ark.
May 6-11	LMV 2-23	71	220 SW of Swan Lake, Miss.
May 15-19	LMV 2-24	75	290 SE of Camden, Ark.
Jun 7-11	NA 1-19	62	160 SW of Springfield, Mass.
Jun 12-15	UMV 2-14	67	120 SW of Washington, Iowa.
Sep 13-15	MR 3-26	70	175 SSE of Holton, Kans.
Oct 9-12	SW 2-6	70	540 SE of Porter, N. Mex.
<u>1931</u>			
Jul 20-25	GL 1-27	72	250 SW of Conklingville, N. Y.
<u>1932</u>			
Jan 11-13	LMV 4-16	62	120 SE of Urania, La.
Jun 2-6	SW 2-7	70	250 S of Meeker, Okla.
Jun 2-6	SW 2-7A	70	500 SSE of Tribune, Kans.
Jun 30-Jul 2	GM 5-1	75	175 S of Kerrville, Tex.
Jul 3-8	OR 3-20	73	250 SW of Clay, W. Va.
Aug 1-3	OR 2-8	76	510 SW of Lexington, Ky.
Aug 15-17	SW 2-8	72	160 SSE of Enid, Okla.
Aug 30-Sep 5	GM 5-16A	76	340 S of Fairfield, Tex.
Sep 5-7	GM 5-16B	75	400 SE of Abilene, Tex.
Sep 16-17	NA 1-20	63	75 E of Westerly, R. I.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1932 (cont.)</u>			
Oct 4-6	NA 1-21	69	180 S of Elks Park, N. Y.
Oct 14-18	SA 5-11B	70	260 SE of Tuscaloosa, Ala.
Oct 15-18	SA 5-11A	71	210 SE of Rocky Mount, Va.
Nov 4-9	SA 4-28	75	50 SE of Canal Point, Fla.
Dec 8-14	GM 2-11	64	175 SE of Ridgburg, Miss.
Dec 21-24	SW 2-9	64	250 SE of Sulphur, Okla.
<u>1933</u>			
Apr 11-14	NA 1-23	61	660 SW of Durham, N. H.
Jun 28-29	UMV 2-15	70	175 S of Gorin, Mo.
Jul 22-27	LMV 2-26	76	190 SE of Logansport, La.
Jul 24	SA 1-11	70	100 S of Lakeville, Pa.
Aug 20-24	NA 1-24A	70	80 SE of Peekamoose, N. Y.
Aug 20-24	NA 1-24B	70	80 E of York, Pa.
Sep 3-8	SA 4-30	73	140 SE of Clermont, Fla.
Sep 14-18	NA 1-25	76	490 SW of Provincetown, Mass.
Dec 15-20	SW 2-10	66	210 S of Stuttgart, Ark.
<u>1934</u>			
Feb 27-Mar 4	LMV 4-19	65	250 E of De Ridder, La.
Apr 3-4	SW 2-11	64	250 SE of Cheyenne, Okla.
Jun 12-16	SA 5-1	77	50 SW of St. Leo, Fla.
Sep 5-9	SA 5-12	73	110 SW of Beaufort, N. C.
Sep 16-19	NA 1-26	70	70 E of Emmitsburg, Md.
Oct 16-18	MR 3-27	67	150 SSE of Sedan, Kans.
Nov 19-21	LMV 1-18	69	140 SW of Millry, Ala.
<u>1935</u>			
Jan 18-21	LMV 1-19	63	180 SSW of Hernando, Miss.
May 2-7	LMV 4-20	73	100 ESE of Melville, La.
May 16-20	LMV 4-21	73	85 S of Simmesport, La.
May 27-Jun 2	MR 3-28B	70	175 S of Chanute, Kans.
May 30-31	MR 3-28A	68	325 SSE of Hale, Colo.
May 31	GM 5-20	74	200 SE of D'Hanis, Tex.
Jun 10-15	GM 5-2	75	230 SE of Segovia, Tex.
Jun 12-18	SW 2-13	74	160 SSE of Waldron, Ark.
Jun 21-22	OR 5-5	70	180 SW of Greenville, Ky.
Jun 25-26	UMV 3-14	69	160 S of Clinton, Mo.
Jul 6-10	NA 1-27	71	220 SSE of Hector, N. Y.
Aug 6-7	OR 9-11	73	250 SW of Keene, Ohio.
Sep 2-6	SA 1-26	76	210 S of Easton, Md.
Sep 2-7	GM 5-3	75	300 SE of Ballinger, Tex.
Dec 5-8	GM 5-4	64	60 SE of Satsuma, Tex.

18.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1936</u>			
Feb 1-5	GM 2-18	63	125 S of Meridian, Miss.
Mar 11-13	NA 1-29A	55	650 SSE of Pinkham Notch, N. H.
Mar 16-21	SA 1-27	56	160 ESE of Romney, W. Va.
Mar 16-22	NA 1-29B	57	650 SSE of Pinkham Notch, N. H.
Apr 5-10	SA 3-21A	66	300 SSW of Washington, Ga.
Apr 5-10	SA 3-21B	69	50 S of Franklin, La.
May 22-28	GM 5-5	70	120 SSE of La Grange, Tex.
Jun 27-Jul 4	GM 5-6	78	100 SSE of Bebe, Tex.
Sep 14-18	GM 5-7	77	350 SSE of Broome, Tex.
Sep 25-28	GM 5-8	75	200 SE of Hillsboro, Tex.
<u>1937</u>			
Jan 20-25	OR 5-6	66	250 SE of Taylorsville, Ky.
Apr 24-28	SA 5-13	64	400 S of Clear Springs, Md.
May 26-30	GM 5-17	66	220 SE of Ragland, N. Mex.
Jun 11-13	MR 5-29	70	510 SSE of Circle, Mont.
Jun 16-22	GL 2-1	67	90 SW of Buffalo, N. Y.
Jul 10	OR 9-15	72	100 SW of Elm Grove, W. Va.
Jul 11-16	UMV 1-20	71	370 SSE of Baudette, Minn.
Aug 31-Sep 3	GL 3-5	72	240 SW of Wolverine, Mich.
Sep 6-10	SW 2-15A	73	140 SSE of Bentonville, Ark.
Sep 6-10	SW 2-15B	74	275 SSE of Cherokee, Okla.
Sep 30-Oct 4	LMV 4-22A	75	75 E of New Orleans, La.
Sep 30-Oct 4	LMV 4-22B	75	225 SE of Woodworth, La.
Oct 17-20	SA 5-14	69	210 SSE of Caesars Head, S. C.
<u>1938</u>			
Feb 9-14	GL 2-27	56	175 SW of Lansing, Mich.
Feb 14-19	SW 2-17	64	235 S of Calvin, Okla.
Mar 28-31	OR 5-8	64	230 SSW of Fords Ferry, Ky.
Apr 5-9	GM 2-25	69	190 SW of Lock #2, Ala.
May 17-20	MR 5-6	51	450 ENE of Big Timber, Mont.
May 30-31	MR 3-29	68	290 SE of Sharon Springs, Kans.
Jun 10-11	UMV 3-17	70	210 SW of Crystal City, Mo.
Jun 26-28	SA 1-14	72	200 SW of Odessa, Del.
Jun 29-Jul 1	GL 3-11	72	125 SW of Libertyville, Ill.
Jul 19-25	GM 5-10	75	240 SSE of Christoval, Tex.
Jul 28-Aug 2	OR 5-9	73	290 S of Mayfield, Ky.
Aug 12-15	LMV 4-23	76	50 S of Koll, La.
Aug 29-30	-----	72	190 SSW of Burnsville, Miss.
Aug 30-Sep 4	MR 5-8	71	180 SE of Loveland, Colo.
Sep 16-21	SA 5-16	74	120 SW of Belhaven, N. C.
Sep 17-22	NA 2-2	68	100 SW of Barre, Mass.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1939</u>			
Feb 2-3	-----	62	290 SSW of Deer Lodge, Tenn.
Mar 9-12	UMV 4-16	61	265 SW of Decatur, Ill.
May 25	-----	73	300 SSE of Lebanon, Va.
Jun 19-20	-----	70	300 SSE of Snyder, Tex.
Jul 4-5	-----	75	180 WSW of Redburn, Ky.
Aug 2-3	SA 5-28	72	180 WSW of Lebanon, Tenn.
Aug 19	NA 2-3	73	75 SW of Manahawkin, N. J.
Aug 21	NA 2-13	73	175 S of Baldwin, Maine.
Aug 25	UMV 3-19	71	260 SSW of St. Louis, Mo.
<u>1940</u>			
Jun 28-30	GM 5-11	77	200 SE of Engle, Tex.
Jun 30-Jul 2	LMV 4-25	75	190 S of Index, Ark.
Jul 25-27	LMV 2-22	75	250 S of Elgin, Iowa.
Aug 6-9	LMV 4-24	76	125 E of Miller Island, La.
Aug 10-17	SA 5-19A	75	180 SE of Keysville, Va.
Aug 10-17	SA 5-19B	76	300 SW of Swansboro, N. C.
Aug 10-17	SA 5-19C	75	170 NE of Buck Creek, N. C.
Aug 10-17	SA 5-19D	76	50 SW of Beaufort, S. C.
Sep 1	NA 2-4	72	50 SSW of Ewan, N. J.
Sep 2-6	SW 2-18	71	75 SSE of Hallet, Okla.
Nov 20-26	GM 5-13	70	125 E of Hempstead, Tex.
<u>1941</u>			
Apr 13-19	SW 2-19	67	240 S of Haskell, Okla.
May 20-25	GM 5-18	70	390 SE of Prairieview, N. Mex.
May 22	UMV 2-19	65	80 SW of Plainville, Ill.
May 27-30	LMV 4-28	73	50 SW of Jennings, La.
Aug 28-31	UMV 1-22	71	225 SSE of Hayward, Wis.
Sep 20-23	GM 5-19	72	50 SE of McColleum Ranch, N. Mex.
Sep 27-30	SW 3-1	69	375 SE of Tularosa, N. Mex.
		(76	170 SSE of Davis, Okla.
Sep 30-Oct 7	UMV 3-20	(69	120 SW of LaPorte, Ind.
		(74	250 SSW of McCredie, Mo.
Oct 17-22	SA 5-6	74	125 S of Trenton, Fla.
Oct 18-22	MR 6-2	67	300 SE of Lindsburg, Kans.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1942</u>			
Apr 13-17	SA 5-7	68	6 NE of Greenacres City, Fla.
Apr 16-21	SW 3-6	63	480 SE of Kenton, Okla.
May 19-23	NA 2-5	63	100 SSE of Mahanay City, Pa.
Jun 14-18	NA 2-11	70	75 SSW of Virginia Lake, Maine.
Jun 23-26	MR 6-1	71	250 S of Clifton Hill, Mo.
Jul 2-6	GM 5-12	76	175 SW of Santa Branch, Tex.
Jul 7-9	UMW 3-21	72	100 SW of St. Louis, Mo.
Jul 17-18	OR 9-23	74	200 W of Smethport, Pa.
Jul 29-30	UMW 2-28	73	150 S of Cedar Falls, Iowa.
Aug 1-2	UMW 2-20	74	110 SSW of McChesney Airport, Ill.
Aug 7-10	NA 2-8	74	170 ESE of Charlottesville, Va.
Aug 21-22	GL 3-18	72	300 SSW of Natchwood, Mich.
Aug 23-25	UMW 1-23	71	225 SSE of Woodville, Wis.
Oct 11-17	SA 1-28A	66	160 SE of Big Meadows, Va.
Oct 11-17	SA 1-28B	68	Hatteras, N. C.
Dec 26-28	UMW 3-22	65	260 SSW of Salem, Mo.
<u>1943</u>			
Mar 13-17	MR 6-11	52	800 SE of Dooley, Mont.
May 6-12	SW 2-20	70	225 SSE of Warner, Okla.
May 13-20	SW 2-21	71	60 ESE of Mounds, Okla.
Jun 3-4	MR 6-3	69	140 SSW of Ballard, Mo.
Jun 25-28	UMW 1-26	74	180 SW of Bellinger, Wis.
Jul 27-29	GM 5-21	76	100 E of Devers, Tex.
Aug 4-5	OR 3-30	74	30 SW of Glenville, W. Va.
Sep 3-4	SA 1-29	67	50 S of East Riverdale, Md.
Nov 6-7	GM 5-22	72	200 ESE of Lake Arthur, La.
<u>1944</u>			
Mar 26-31	MR 6-12	40	330 NW of Deadwood, S. Dak.
May 10-12	MR 6-13	63	110 S of Pierce, Nebr.
Jun 10-13	MR 6-15	70	125 SSE of Stanton, Nebr.
Jun 10-13	MR 6-15A	70	265 SSE of Turkey Ridge, S. Dak.
Jun 25-27	UMW 2-30	75	240 SW of Oxford Junction, Iowa.
Aug 1-2	MR 6-16	75	230 S of Bagnell, Mo.
Sep 18-19	SA 5-20	70	160 E of Coveseville, Va.

Storm Date	Assignment Number	Representative Storm Dewpoint	Reference Point
<u>1945</u>			
Jul 22-23	NA 2-17	72	100 S of Cedar Grove, N. J.
Aug 25-29	GM 5-23	75	50 S of Danevang, Tex.
Sep 15-18	SA 5-27	74	80 SSW of Rockingham, N. C.
<u>1946</u>			
Aug 11-18	MR 7-2A	74	140 S of Cole Camp, Mo.
Aug 11-18	MR 7-2B	74	225 S of Collinsville, Ill.
Oct 30-Nov 3	MR 7-5	66	180 SSW of Kaiser, Mo.
<u>1948</u>			
Jun 23-24	-----	74	220 SE of Del Rio, Tex.