No. III.

WAR DEPARTMENT WEATHER MAP.

SIGNAL SERVICE, U.S. ARMY.

DIVISION OF TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

Scale of Shades
Under 2 inches
From 2 to 4
" 4 " 6 "
6 " 8 "
Over 8 "

PRECIPITATION CHART FOR JULY, 1881.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. GEN. BVT. MAJ. GEN'L, CHIEF SIGNAL OFFICER, U. S. A.

AVERAGE PRECIPITATION FOR JULY.

DISTRICTS.	Average for July. For many years.	Average for July. For 1881.	Comparison July, 1881, with the average for many years.
	Inches.	Inches.	Inches.
New England	4.28	2.71	1.57 deficiency.
Middle Atlantic States	4.40	2.35	2.05 deficiency.
South Atlantic States	5.59	6.36	0.77 excess.
Florida Peninsula	5.44	7.26	1.82 excess.
Eastern Gulf States	5.19	3.03	2.16 deficiency.
Western Gulf States	4.21	3.53	0.68 deficiency.
Tennessee	4.33	1.93	2.40 deficiency.
Ohio Valley	5.37	2.69	2.68 deficiency.
Lower Lake Region	3.74	2.10	1.64 deficiency.
Upper Lake Region	3.52	3.64	0.12 excess.
Upper Mississippi Valley	4.58	4.69	0.11 excess.
Minnesota	3.45	1.72	1.73 deficiency.
Lower Missouri Valley	5.12	3.24	1.89 deficiency.
Upper Missouri Valley	2.71	2.20	0.51 deficiency.
North Pacific Coast Region	0.75	0.98	0.23 excess.
Middle Pacific Coast Region	0.01	Trace	Normal.
South Pacific Coast Region	0.05	0.05	Normal.

HEIGHTS OF RIVERS ABOVE LOW-WATER MARK, JULY, 1881.

STATIONS.	Danger point on gauge.	Highest water. Date.	Highest water. Height.	Lowest water. Date.	Lowest water. Height.
	ft. in.	July.	ft. in.	July.	ft. in.
RED RIVER.					
Shreveport	39 9	1	14 0	31	2 1
ARKANSAS.					
Little Rock	— —	2, 4	7 7	26, 27	1 2
MISSOURI.					
Yankton	20 0	1	10 2	31	6 0
Omaha	16 0	3	13 0	31	8 8
Leavenworth	21 0	2	16 0	30, 31	10 3
MISSISSIPPI.					
St. Paul	14 6	2, 3	8 8	31	4 6
La Crosse	18 0	1	6 5	31	3 0
Dubuque	21 10	1, 11, 12	9 9	20, 22, 31	6 9
Davenport	15 0	14, 15	7 11	22, 23	5 4
Keokuk	14 6	18	16 4	9	8 1
St. Louis	30 0	4	24 10	31	16 2
Cairo	40 0	5, 7	25 6	31	15 6
Memphis	34 0	1	20 6	18, 19	13 4
Vicksburg	41 0	1	31 11	25	15 4
*New Orleans	— 6	2	— 4 5	28, 29, 30	—10 10
OHIO.					
Pittsburgh	20 0	24	8 5	22	1 1
Cincinnati	50 0	1	11 6	14, 16	5 7
Louisville	24 0	1, 2, 3	6 10	18, 19	4 4
CUMBERLAND.					
Nashville	42 0	6	13 10	23, 24	1 6
TENNESSEE.					
Chattanooga	31 0	4, 5	3 7	31	1 2
MONONGAHELA.					
Morgantown	28 0	23	9 11	6, 7	0 6
Pittsburgh	29 0	24	8 5	22	1 1
SAVANNAH.					
Augusta	— —	2	6 3	25, 26	4 4
WILLAMETTE.					
Portland, Or.	[illegible]	[illegible]	17 3	21	9 10

*Below high water mark of 1874.