

U. S. DEPARTMENT OF AGRICULTURE  
WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

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# CLIMATOLOGICAL DATA

## TEXAS SECTION

SEPTEMBER, 1919

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BY

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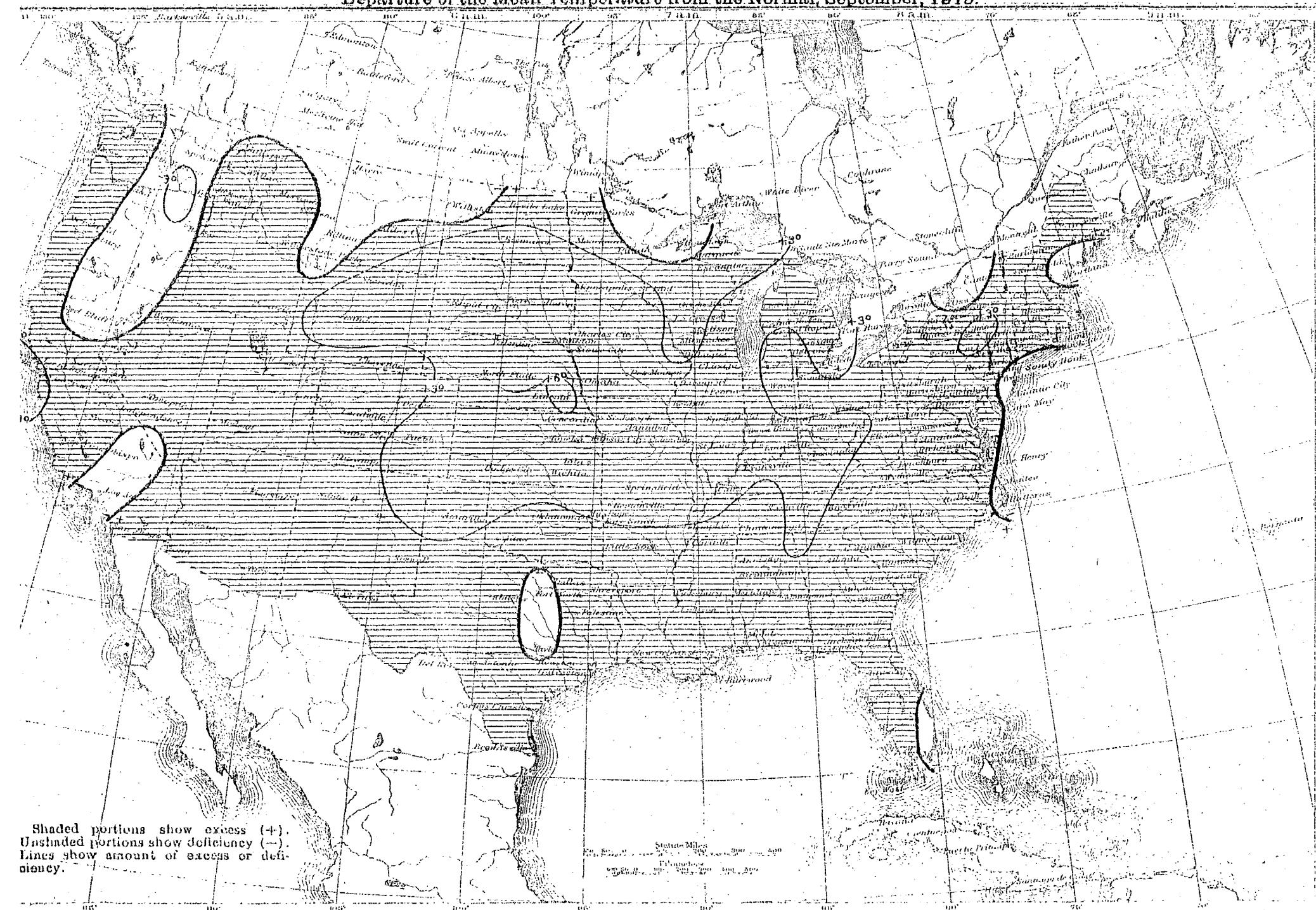
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HOUSTON, TEX.  
WEATHER BUREAU OFFICE

OCTOBER 23, 1919.

Departure of the Mean Temperature from the Normal, September, 1919.



















## Notes for daily precipitation tables. See pages 102, 103, and 104.

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at time of observation.

\*\*\* Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. \* Precipitation included in the next following measurement. † Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

†† Post-office addresses of these stations are as follows: Finley, Brownstown; Index, Texarkana; Ringo Crossing, Sulphur Bluff; Winfield (near), Mount Vernon; E. V. Ranch, Valentine; O'2 Ranch, Alpine; Highbank, Eloise; Long Lake, Monington; Fort Clark, Brackettville; Fort McIntosh, Laredo; Hill's Ranch, Austin; La Parra, Sarita; Laureles Ranch and Santa Gertrudes, Kingsville.

## Daily Evaporation (inches) and Wind Movement (miles) for September, 1919.

(See temperature and precipitation data in Climatological Tables, pages 101, 104, and 106.)

Stations.	Data.	Day of month.																													Monthly	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Hill's Ranch†.....	Evaporation...	.207	.214	.184	.201	.179	.269	.123	.049	.152	.079	.251	.193	.131	.374	.184	.155	.166	.218	.033	.170	.203	.164	.096	.122	.078	.102	.113	.152	.261	.057	4.830
	Floating pan...	.081	.337	.971	.242	.267	.083	.226	.028	.103	.050	.172	.264	.	.	.	.	.064	.003	.251	(*)	(*)	.	.173	.037	(*)	.065	.076	.119	.109	.	720
Laredo †.....	Wind movmt.	4	11	7	7	11	3	3	2	1	0	1	15	26	96	140	52	29	11	20	84	43	19	9	4	16	15	12	.	.	.	.
	Evaporation...	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Wind movmt.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

<sup>a</sup>, -.020; <sup>b</sup>, -.030; <sup>c</sup>, -.025. †Observations taken at 8 a. m. ††Observations taken at 7 a. m.

## MISCELLANEOUS PHENOMENA (WITH DATES).

**Thunderstorms** (number of stations reporting): 1st, 1; 4th, 6; 5th, 5; 6th, 1; 7th, 3; 8th, 1; 9th, 1; 11th, 4; 12th, 5; 14th, 1; 15th, 2; 16th, 2; 17th, 2; 18th, 1; 19th, 6; 20th, 8; 21st, 6; 22d, 4; 23d, 2; 24th, 1; 27th, 3; 30th, 1.

**Halos, Solar:** 3, 4, 13, 14, 16, and 20.

**Fog, Dense:** Palestine, 6; Flint, 6, 7, 28, 29; Houston, 9.

**Hail, Light** (no material damage): Fort Stockton, 27th.

## OBSERVER'S REMARKS.

**Haskell:** September has been an excellent month for all crops. There is a good season in the ground for plowing, but very few farmers have been plowing on account of being too busy gathering crops.

**Lubbock:** Excessive rains and high winds during the middle part of the month caused considerable damage to feedstuff. Unfavorable weather conditions have retarded all farm work, but at present there is the best season in the ground in several years. Range conditions are good.

**Denton:** The first part of the month was very favorable for cotton, but heavy rains during the latter part damaged the lint considerably and delayed picking.

**Colorado:** Unfavorable weather has considerably damaged crops in this section, but an enormous yield is expected.

**Rochelle:** Cotton in this vicinity is in good condition and the stalks are so heavily loaded that they are breaking down. All maize cut and shocked spoiled, but corn has been damaged but little.

**Sealy:** Storm on the 14th caused considerable damage to cotton and other crops in this section.

**Big Wells:** Storm on the 14th and 15th caused considerable damage to cotton. Ranges are in excellent condition.

**Eagle Pass:** One death resulted from the tropical storm that passed over this section on the 14th and 15th.

**Encinal:** The tropical storm, accompanied by high winds and excessive rain, damaged about two-thirds of the cotton crop.

**Falfurrias:** Storm of the 14th destroyed all cotton and feed crops, and also blew down all windmills.

**Flatonia:** No damage resulted from the storm on the 14th.

**Hondo:** Unfavorable weather retarded all farm operations. Cotton is in poor condition and corn was damaged by high water. Stock are in fine condition.

**Montell:** There was not much damage from the recent storm, except that windmills were blown down. Communication was cut off until the 27th.

**Pearciss:** Storm on the 14th destroyed all open cotton.

**Sabinal:** The storm on the 14th was very severe in this section. About half of the windmills were blown down and crops were damaged considerably.

**Uvalde:** The Gulf storm was very severe in this section and did considerable damage. On the 15th a tornado passed over the northern portion of the town and destroyed several houses and killed a large number of goats.

**Ricardo:** The storm of the 14th caused considerable damage to crops in this section.

## RIVER CONDITIONS.

Heavy rains attending and following the tropical storm caused serious floods in the Rio Grande and Nueces, Guadalupe and lower Colorado rivers, and a sharp rise in the Brazos. The Rio Grande was out of banks at Eagle Pass on the 17th and 18th and from the 22d to 24th; at Laredo on the 18th and 19th and 24th and 25th; at Rio Grande from the 16th to the 28th; and at Mission from the 21st to 30th. The Guadalupe was flooded at Gonzales on the 20th and from the 25th to 27th, and at Victoria from the 21st to the close of the month; and the Colorado at Austin on the 25th, and at Columbus from the 25th to 28th. Flood waters did considerable damage to unharvested crops, and delayed the starting of fall truck crops in the irrigated section of the lower Rio Grande Valley.

The following table shows the highest, lowest, and mean stages recorded at the various river stations during the month:

	Flood stage.	Highest.	Date.	Lowest.	Date.	Mean
<i>Rio Grande:</i>						
Eagle Pass .....	16	38.5	17	4.0	12	10.9
Laredo .....	27	33.0	19	4.2	14	10.2
Rio Grande .....	15	26.2	26	8.0	2	14.3
Mission .....	24	....	....	....	....	....
<i>Guadalupe:</i>						
Gonzales .....	22	27.1	26	2.9	14	10.4
Victoria .....	16	22.0	30	2.2	12	10.0
<i>Colorado:</i>						
Ballinger .....	28	8.0	22	0.8	13†	2.3
Marble Falls .....	18	18.7	24	2.4	14	5.6
Austin .....	18	18.4	25	1.3	14	4.5
Columbus .....	28	32.8	27	9.2	13†	14.9
<i>Brazos:</i>						
Brazos .....	22	4.3	25	0.9	13†	2.1
Kopperl .....	21	6.0	22	1.8	18†	3.0
Waco .....	27	25.8	20	6.1	19	9.4
Valley Junction .....	44	27.0	24	3.6	15†	7.5
Washington .....	45	31.9	24	3.2	15	14.4
Hempstead .....	40	17.4	27	2.1	20	6.4
Rosenberg .....	43	....	....	....	....	....
<i>Trinity:</i>						
Bridgeport .....	20	4.1	2	0.1	17†	1.7
Fort Worth .....	20	8.1	22	5.1	19	6.3
Dallas .....	25	17.4	23	4.7	19	7.6
Trinidad .....	28	20.8	24	4.0	17	7.9
Long Lake .....	40	16.6	2†	2.0	19†	6.0
Riverside .....	25	18.5	4	5.3	25	9.2
<i>Neches:</i>						
Rockland .....	20	2.4	7	0.2	20†	1.1
Beaumont .....	7	5.1	15	1.2	12	2.4
<i>Sabine:</i>						
Logansport, La .....	25	15.6	35	6.3	20	9.9
Bon Wier .....	20	7.7	5	4.5	30	5.6
Orange .....	4	3.9	15	0.4	1†	1.3

†Also on subsequent dates.

