CLIMATOLOGICAL DATA FOR JANUARY, 1911.

DISTRICT No. 8, TEXAS AND THE RIO GRANDE VALLEY.

BERNARD BUNNEMEYER, District Editor.

GENERAL SUMMARY.

The month of January was remarkably mild throughout the district, notwithstanding an unusually severe cold wave from the 1st to the 4th, which gave temperatures considerably below zero in the western half of the district, and from 11° to 13° below freezing on the Gulf coast. The precipitation was decidedly deficient in Texas and averaged slightly below the normal in New Mexico and Colorado. A considerable excess occurred over portions of the upper Rio Grande watershed, and the heaviest monthly amounts were reported from that section, while a slight excess occurred in the lower Rio Pecos Valley. So far as Texas is concerned, the month is the second driest January on record in the last 23 years, the driest being that of 1909. The shortage of moisture was, in general, greatest in the eastern portions of the district. While the precipitation was light, the per cent of relative humidity was high in many localities on account of frequent dense fogs at night and during the early morning hours. The average number of days with 0.01 inch or more of precipitation was 5 in Colorado, 4 in New Mexico, and 3 in Texas.

The greatest monthly precipitation in Colorado was 8.27 inches at Cumbres; in New Mexico, 4.59 inches at Batesman's Ranch, and in Texas, 3.06 inches at Beaumont. Of the last-named amount, 2.56 inches occurred in 24 consecutive hours on the 1st. There was practically no precipitation at 2 stations in Colorado, 3 in New Mexico, and 17 in Texas, while at 3 other stations in Colorado, 2 in New Mexico, and 6 in Texas the monthly amounts did not exceed 0.10 inch.

Much of the precipitation over the extreme upper reaches of the Rio Grande and Rio Pecos watersheds was in the form of snow, the heaviest monthly snowfall in Colorado being 50.8 inches at Cumbres, and in New Mexico 34.8 inches at Batesman's Ranch. There was very little snow in the central and southern portions of New Mexico or in Texas. The heaviest fall in the latter State was 1 inch at Fredericksburg and Kerrville.

TEMPERATURE.

The monthly mean temperature averaged from 6° to 10° above the normal, and the excess covered the entire district. The month opened with a cold wave which gave the severest weather of the season to date. By the 4th it had extended to Brownsville in extreme southern Texas, where the lowest temperature on that day was 11° below freezing. The cold wave was followed by rapidly rising temperature, and during the remainder of the month the weather continued warm with but very little interruption. The 30th and 31st were the warmest days of the month, and some of the highest temperatures ever recorded in the United States during January occurred on those days in portions of Texas. The diurnal range of temperature varied from about 10° on the upper Texas coast to about 37° in the extreme northern portion of the district.

The highest and lowest temperatures reported were: In Colorado, 62° at Saguache on the 31st and −37° at Hermit on the 2d; in New Mexico, 88° at Carlsbad on the 30th and −24° at Chama on the 2d; and in Texas, 95° at Encinal and Lampasas on the 30th, and at Dallas, Fairland, Grapevine, and Waxahachie on the 31st, and −8° at Mount Blanco and Plainview on the 3d. The local monthly means ranged from 23.5° to 30.4° in Colorado, from 25.6° to 52.4° in New Mexico, and from 47.0° to 66.8° in Texas.

PRECIPITATION.

The precipitation over the Rio Grande watershed was very nearly normal north of El Paso, but south of that station there was a large deficit which was most pronounced over the lower valley. The total for the watershed averaged 0.87 inch, which is slightly over twice the amount reported for the preceding month. Over a limited area in Colorado and northern New Mexico the precipitation was very heavy, with amounts ranging from 4 to 8 inches, while over the long stretch south of Mountainair, N. Mex., the average was less than 0.50 inch.

The precipitation over the Rio Pecos watershed was generally deficient, although a moderate excess occurred over limited areas in the southern portions of that drainage basin. There were only three stations in the extreme upper valley and one station in the lower valley with amounts exceeding 1 inch. The greatest was 1.20 inch at Windsors Ranch and at Harveys Upper Ranch. The total for the watershed averaged 0.41 inch, which exceeds the December amount by 0.17 inch.

A decided and general deficiency of precipitation occurred over the Texas drainage basins, the shortages ranging from 0.64 inch for the Colorado watershed to 2.44 inches for that of the Sabine. There were only five stations in widely separated localities with monthly amounts exceeding 1 inch, the greatest being 3.06 inches at Beaumont in the Neches Valley. The following are the average monthly amounts in inches for the various watersheds: Nueces, 0.46; San Antonio, 0.26; Guadalupe, 0.23; Lavaca, 0.36; Colorado, 0.39; Brazos, 0.40; Trinity, 0.40; Neches, 0.71; Sabine, 0.40; and coastal plains, 0.40. These amounts are less than 20 per cent of those reported for the preceding month.

RIVER CONDITIONS.

The streams of the district continued near low-water mark during the month, and there was but little change in their flow from that reported for December. The rivers east of the Brazos averaged slightly higher than in the previous month, which was due to the December rains in that section, while the rivers west of the Brazos were generally slightly lower. The rises in the Brazos at Waco and in the Trinity at Long Lake, which occurred near the close of December, had but little effect on the flow farther below, and the average stage of the water at some of the river stations on the Guadalupe, Colorado, Brazos, Trinity, Neches, and Sabine is the lowest on record for January.

SNOWFALL IN THE MOUNTAINS.

The accumulated depth of snow over the headwaters of the Rio Grande and Rio Pecos at the close of the month was considerably below the normal and much less than at the corresponding period of the previous year, and the outlook is not favorable. The following extracts from reports of Weather Bureau officials furnish special information on the snowfall conditions in these drainage basins:

Colorado.—During January, weather conditions were more favorable for the streams of the western than for the streams of the eastern slope. Over a small area on the upper reaches of the Rio Grande and its tributary, the Chama, which joins the trunk stream in north-central New Mexico, the precipitation during the month was in excess of the normal for January. Comparing the depth on the ground at the end of the month with that of a year ago, the average for the snow scales on the Rio Grande is 13 inches, which is 10 inches less than at the close of last January. Considerable drifting occurred. Although some very low temperatures were noted, high day temperatures were a feature, facilitating the settling of snow. Rain, an unusual thing in Colorado in January, even at low altitudes, was reported from a number of high level stations.—*F. H. Brandenburg, district forecaster.*

New Mexico.—The month of January was warm and comparatively dry. The districts east of the crest of the Sangre de Cristo Range, and thence southward, were much lacking in precipitation, and practically no snow occurred. West of this giant barrier good rains occurred quite generally, although little snow fell and the run-off was light, because of very dry soil and freedom from frost. The continued warmth practically dissipated the snow below the 8,000-foot level, while above that much less than usual remained and the outlook is not encouraging. It is, however, better than at the close of December west of the one hundred and fifth meridian, owing to the considerable excess of precipitation leaving more moisture in the soil. In the mountains of southern Colorado and in northern New Mexico the stored depth continues to be much less than normal and the outlook unfavorable, especially for the Rio Grande. The lower reaches of this stream were without snowfall during the month. Over the Rio Pecos and southeast watersheds very light precipitation occurred, and the stored depth is light indeed. Only the highest parts of the main range have snow and the depth there is small. Some snow remains at the headwaters of the Rio Pecos and Gallinas, but none or very little elsewhere over the southeast watersheds.—*C. E. Linney, section director.*

MISCELLANEOUS.

Alvin.—Tender varieties of citrus trees and vegetables were badly injured by the severe freeze of the 3d and 4th. Most of the trees and shrubs have commenced growing due to the warm weather during the last part of the month.

Bay City.—The month has been a long series of foggy nights and high relative humidity.

Big Springs.—A considerable number of damp nights, together with the light rainfall, has put moisture enough in the ground to give a fair season in the sandy land farms.

Hondo.—The continued dry, hot weather has been very bad for all farm, fruit, and truck interests. A good general rain is needed.

Galveston.—There was much dense fog during the month, with water dripping from roofs and walls and keeping clothing, beds, furniture, and other articles in damp condition.

San Ricardo.—The freeze of the 3d and 4th damaged cabbage severely. The loss was from 50 to 100 per cent, according to size and location. Other truck crops, except onions, were either killed or damaged.

Sealy.—Fruit trees were badly damaged by the cold wave of the 2d and 3d.

Sutherland Springs.—Ice formed to the thickness of 2 inches on ponds and ditches on the 3d and 4th, and there was much damage to vegetation.

THE COLD WAVE AND THE CITRUS INDUSTRY.

The cold wave, which swept in from the Canadian Northwest with the opening of the new year, was unusually severe in the Gulf States. On January 1 it extended well into the northern portion of the district. On the morning of the 2d its influence was felt on the Gulf coast, and the temperature fell rapidly throughout that day. The lowest temperature occurred on the 2d in the extreme northern portion of the district, on the 3d in the greater portions of New Mexico and Texas, and on the 4th in the lower Rio Grande Valley. The lowest recorded on the Gulf coast was 19° at Galveston, 21° at Corpus Christi, and 21° at Brownsville. For 50 or more consecutive hours, covering the entire 3d day of January and portions of the 2d and 4th, the temperature remained below freezing in the Gulf coast section of Texas. Warnings were issued on the 1st and again on the 2d, but, notwithstanding, the damage to truck crops, tender trees, vines, and other vegetation was great. It is estimated that from 75 to 90 per cent of the cabbage crop in the lower Rio Grande Valley was ruined. The sugar-cane crop also was badly frozen there and will require immediate milling. The total loss in that section alone is placed at $500,000. The main interest, however, centered in the citrus-fruit industry, which receives much attention in south Texas. Mr. Frank Putnam, editor of the Southwestern Farmer, estimates that at least $100,000,000 has been added to the market value of coast country lands in three years by the Satsuma orange and the Magnolia fig, and it is his opinion that the total loss is insignificant when compared to the total value of orchards and nursery stock that came through the freeze without suffering serious hurt. Mr. E. C. Green, who has charge of the South Texas Garden at Brownsville, Tex., made a personal investigation of the effect of this freeze upon the orange orchards and citrus trees generally, and his exhaustive report, from which the following is here reproduced, was read at a meeting of the Texas Orange Growers Union at Corpus Christi, Tex., on January 17:

During the trip of orchard inspection blocks of orange trees in nursery rows were examined, and in the case of navels and other round oranges and grape fruits the trees appeared to be killed to the stock. In the case of Satsumas the trees appeared to be killed to the little trunks or possibly within three or four inches of the bud. Taking the situation as a whole the citrus trees have withstood the cold remarkably well. It is true that at the time of the severe weather the trees were as fully dormant as they ever become and were in the very best condition to withstand cold. The Satsumas, as in the past, have withstood the cold admirably and fully justify the opinion of Mr. Tenney to the effect that "with the exception of occasional hard winters, this variety will prove generally hardy."

One of the interesting points observed in the inspection was that sweet seedlings appeared in most instances to have endured the cold

equally well with the Satsuma on trifoliata stock, and in view of the fact that through the orange section of Louisiana and Texas many old sweet seedlings bear evidence of having withstood the climate for years, more attention should be given to propagating sweet seedlings in an attempt to find some of special hardiness and at the same time possessing sufficiently good quality to make them marketable.

It is possible that the injury to nursery stock may be overestimated, but to the best of my belief the above report and opinion are conservative and accurate.

The matter of windbreaks and the method of planting trees and managing orchards with a view to protection from our worst enemy, cold weather, is one of the lines of investigation that the Department of Agriculture is conducting, with special reference to the citrus industry.

The following is taken from the January number of the Citrus Fruit Grower, of which Mr. Albert S. Leecraft is editor:

Storm signals were posted in the cities, and the papers heralded warning that a heavy drop in temperature would occur, but none anticipated the intensity of the blizzard or had the slightest conception that the mercury would drop 30° in a few hours. But such was the case, and the fruit-laden commercial orchards of the Houston-Galveston district and the vastly stocked nurseries of the orange belt of the Gulf coast country, which reaches from Louisiana to the lower Rio Grande Valley, were subjected to the mercy of the elements. Aside from means quickly resorted to, such as banking, smudging by bonfires and the use in some instances of a very inadequate number of orchard-heating devices by the large orchard men, little protection or aid was given the trees (even the orchard heaters could not accomplish their mission, due to the terrific velocity of the wind, which had full sway), for up to this time it has not been thought advisable to install windbreaks on the north sides of the orchards. In the past the orchardist, or most of them at least, have had the impression that wind breaks on the north would cause the sap to remain in the wood and defer the process of dormantation. This erroneous impression has been exploded and windbreaks will be installed before another season, which will greatly assist in the use of orchard heaters in controlling the temperature in case they are needed.

Much of the nursery stock of the big nurseries where sufficient help was available was quickly removed on the approach of the storm to packing sheds, and by means of heaters was saved from damage, but the bearing trees and the young trees that were aged to enter the fruit-producing period this coming season were out in the open, awaiting the thaw-out before the ultimate after effects of the freeze could be known. In fact it was fully 10 days or longer before the real damage could be ascertained and up to that time many were in doubt as to whether or not many of the trees were not killed outright.

When the truth is really known the trees will be materially benefited by the pruning that will be given them, and the shedding of leaves and the burning of them will destroy millions of insects that seek protection or deposit their eggs on the foliage during the winter months.

The value of the experience the fruit growers have had during this freeze can not be estimated, and much good will be accomplished from the knowledge they have acquired, and they will be greatly aided in their work of further developing the orange industry.

TABLE 1.—*Climatological data for January, 1911. District No. 8, Texas and Rio Grande Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Colorado.																				
Blanca	Costilla	7,865	2	27.4		60	30	− 15	2†	46	0.03		0.02	1.2	2	8	22	1	sw.	Dr. L. C. Audrain.
Cumbres	Conejos	10,015	4								8.27		1.52	50.8	12	8	8	15	sw.	Mrs. Ida M. Lively.
Garnett	Costilla	7,576	18	27.8	+11.2	60	29†	− 15	3	51	0.03	− 0.09	0.03	T.	1	14	16	1		Chas. Speiser.
Hermit	Hinsdale	9,843	1					− 37	2		1.07		0.52	21.3	8	5	10	16		Marion Mason.
La Veta Pass	Costilla	9,000	1								0.09		0.06	2.1	2	13	16	2	w.	Marine D. Wright.
Manassa	Conejos	7,700	5	30.0		58	30	− 18	3	44	T.		T.	T.	0	16	8	7	sw.	J. B. Chapman.
Platoro	do	9,675	3								4.43		1.41	37.5	10	14	10	7	sw.	Walter R. Hook.
Saguache	Saguache	7,740	19	30.4	+11.3	62	31	− 11	3	44	T.	− 0.19	T.	T.	0	15	3	13	w.	Eugene Williams.
San Luis	Costilla	7,794	20	30.4	+ 9.6	57	30	− 16	2†	44	0.23	− 0.19	0.17	0.6	2	12	13	6	sw.	P. B. Albright.
Wagon Wheel Gap E.S.	Mineral	9,235		23.5	+10.4	51	30	− 20	2	37	0.82	+ 0.16	0.36	10.3	9	14	8	9	nw.	U. S. Weather Bureau.
New Mexico.																				
Agricultural College	Dona Ana	3,863	48	46.3	+ 4.1	77	31	0	2	49	0.27	− 0.05	0.22	0.0	2	12	17	2	w.	N. M. Agricultural College.
Alamogordo (near)	Otero	4,338	10	50.3	+ 5.4	79	30	− 4	3	49	0.21	− 0.38	0.18	0.0	3	15	9	7	sw.	Geo. C. Bemis.
Alamogordo	do	4,320	2								0.16		0.16	0.0	1					Agent E. P. & S. W. R. R.
Alamos Ranch	Sandoval	7,800									0.83		0.40	T.	4	17	7	7	sw.	H. H. Brooks.
Albuquerque	Bernalillo	5,000	35								0.33	− 0.06	0.15	0.0	6	20	5	6	w.	Pitt Ross, C. E.
Ancho	Lincoln	6,112	2								0.31		0.15	0.1	3	5	16	10	sw.	Agent E. P. & S. W. R. R.
Artesia	Eddy	3,350	4	50.2		85	30	− 2	3	55	0.60		0.58	1.5	2	15	10	6	se.	Will Benson.
Aspen Grove Ranch	Rio Arriba	9,000	2								2.86		1.24	22.4	10	12	16	3		Junius D. Maupin.
Bateman's Ranch	do	8,900	2								4.59		1.80	34.8	8	16	6	9	w.	John W. Bateman.
Bluewater	Valencia	6,732	9	36.4		66	30	− 1	3	46	0.57		0.37	2.0	2	12	3	16	n.	Bluewater Development Co.
Boaz	Chaves	4,154	2	46.3		78	13†	− 14[e]	3	50	0.07		0.04	T.	2	18	8	5	w.	D. C. Savage.
Capitan	Lincoln	6,348	2								0.48		0.28	2.0	2	16	8	7	n.	Agent E. P. & S. W. R. R.
Carlsbad	Eddy	3,120	16	52.4	+ 7.2	88	30	0	3	61	0.54	+ 0.22	0.38	1.0	2	18	8	5	w.	U. S. Reclamation Service.
Carrizozo	Lincoln	5,429	3	42.9		70	30	4	3	39	T.		T.	0.0	0	24	6	1	sw.	Agent E. P. & S. W. R. R.
Carson Park	Taos	7,650									1.36		0.92	8.5	9					Lester S. Myers.
Chama	Rio Arriba	7,851	12	25.6	+ 0.9	51	31	− 24	2	44	3.04	+ 0.73	0.60	26.0	8	19	9	3	sw.	Frank C. Johnson.
Cloudcroft	Otero	8,650	8	37.2		64	25	− 5	2	28	0.20		0.20	T.	1	18	1	12	e.	Agent E. P. & S. W. R. R.
Corona	Lincoln	6,666	2								0.21		0.17	0.6	4	17	8	6	w.	Do.
Coyote	do	5,800	2								0.28		0.21	0.0	2	11	11	9	sw.	Do.
Cundiyo	Santa Fe	6,889	2								1.02		0.58	0.9	5	16	1	14	w.	Teofilo Vijil.
Demonstration Farm	San Miguel	6,800	2								0.12		0.12		1					Erb & Westerman.
Duran	Torrance	6,272	2								0.22		0.12	T.	2	14	14	3		Agent E. P. & S. W. R. R.
Elk (near)	Chaves	7,400	11																	Boyd Williams.
Escondido	Otero	4,014	2								0.29		0.29	0.0	1	12	13	6	w.	Agent E. P. & S. W. R. R.
Espanola	Rio Arriba	5,590	13	37.4	+ 6.5	66	31	1	3	42	0.34	+ 0.02	0.14	0.1	4	14	7	10	n.	Mrs. E. F. McBride.
Estancia	Torrance	6,140	6	37.9		65	31	− 4	2	42	1.57		0.73	5.5	5	13	9	9	e.	Agent N. M. Central R. R.
Fort Stanton	Lincoln	6,231	33	41.7	+ 6.1	76	16	− 2	3	48	0.15	− 0.35	0.06	0.1	3	20	9	2	w.	United States Sanitarium.
Fort Sumner	Guadalupe	3,960	3	44.5		78	11†	− 12	2†	53	0.30		0.15	1.5	3	25	4	2	sw.	F. A. Manzanares.
Gallinas	Lincoln	6,635	2								0.20		0.20	3.0	1	13	6	12	w.	Agent E. P. & S. W. R. R.
Gallinas Planting Sta.	San Miguel	7,500	4	38.2		61	15†	− 15	3	53	1.00		0.57	3.0	3	19	11	1	w.	U. S. Forest Service.
Glorieta Ranch	Socorro	5,700									1.10		0.61	0.0	6	10	11	10	sw.	Chas. M. Crossman.
Harvey's Upper Ranch	San Miguel	9,400	2								1.20		0.37	15.0	8	14	14	3	se.	Simon B. Warner.
Hillsboro	Sierra	5,224	13																	Dr. F. I. Givens.
Hodges	Taos	8,484	2								0.77		0.46	6.7	2	15	6	10	nw.	Austin Porter.
Hondo Reservoir	Chaves	3,904	2	48.8		84	30	− 3	3	51	0.10		0.10	1.0	1	20	4	7	w.	U. S. Reclamation Service.
Hope	Eddy	4,000	3																	A. W. Board.
Jemez Springs	Sandoval	6,100		37.9		60	30†	− 4	3	47	0.81					12	9	10	sw.	L. L. Shields.
Knowles (near)	Eddy	4,300	1	48.6		81	31	− 10	3	54	0.48		0.30	0.5	2	23	4	4	sw.	J. W. Mosley.
Laguna	Valencia	5,840	6	37.5[d]		67	30†	3	3	37	0.12		0.12	1.5	1	15	12	4	w.	Gus Weiss.
Lagunita	Guadalupe	4,500	6	42.0[d]		72	15†	− 10	3	46	0.20		0.18	0.5	2	23	4	4	w.	P. A. Turnbull.
Lake Valley	Sierra	5,412	6								0.64		0.46	0.0	5	17	13	1	sw.	Wm. P. Keil.
Las Vegas	San Miguel	6,384	24	40.6	+ 7.0	72	22	− 8	3	50	0.11	− 0.33	0.10	0.8	2	16	11	4	w.	N. M. Normal University.
Liston	Chaves	5,000	1								T.		T.	T.	0	25	2	4	sw.	H. G. Liston.
Los Lunas (near)	Valencia	4,900	21	39.2	+ 5.4	72	31	− 5	3	50	0.90	+ 0.24	0.30	T.	3	9	14	8		Richard Pohl.
Magdalena	Socorro	6,557	6	41.2		67	31	− 1	3	46	0.86		0.40	T.	4	10	15	6	sw.	Wm. Pender.
Mineral Hill	San Miguel	7,050	6								0.34		0.20	2.0	3	4	22	5	sw.	W. M. Nelson.
Monterey	Otero	4,436	2								0.23		0.20	0.0	2	23	4	4	w.	Agent E. P. & S. W. R. R.
Mountainair	Torrance	6,547	9	39.0		68	30	− 4	3	43	1.62		0.41	4.0	5	19	9	3	sw.	Mrs. J. W. Corbett.
Newman	Otero	3,989	2			77	13	4	3		0.18		0.18	0.0	1	23	2	6	ne.	Agent E. P. & S. W. R. R.
Noria	Dona Ana	4,114	2			76	31				0.68		0.25	0.0	4	17	8	6	w.	Do.
Orange	Otero	5,000	4																	Jas. Brownfield, jr.
Orogrande	do	4,171	2			76	31				0.32		0.20	0.0	2	14	9	8	w.	Agent E. P. & S. W. R. R.
Oscura	Lincoln	5,016	2								0.22		0.08	0.0	5					Eugene F. Jones.
Otis	Eddy	3,100	2								0.48		0.33	2.0	2	20	7	4	sw.	A. M. Hove.
Otto	Santa Fe	6,200	2								0.82		0.43	2.0	4					O. H. Johnson.
Pastura	Guadalupe	5,285	2								0.22		0.11	1.0	3	19	10	2	sw.	Agent E. P. & S. W. R. R.
Placitas (near)	Bernalillo	8,000		36.0		59	20	− 10	3	39	1.43		0.77	3.5	6	15	9	7	w.	Geo. C. Ellis.
Plainview	Chaves	4,300																		L. P. Adair.
Red River Canyon	Taos	8,956	3	29.4		58	28	− 22	3	52	1.07		0.53	12.0	3	21	8	2	e.	Mrs. L. R. Penn.
Rincon	Dona Ana	4,030	13	48.4	+ 6.4	80	29†	9	2†	51	0.19	− 0.23	0.19	0.0	1	10	9	12	w.	Chas. H. Raitt.
Rio Grande Dam	Sierra	4,265	13	46.8	+ 6.8	78	31	5	3	48	0.24	+ 0.01	0.24	0.0	1	25	1	5	sw.	U. S. Reclamation Service.
Rosedale	Socorro	6,910	6	40.2		63	20†	0	3	34	0.70		0.29	0.8	8	22	2	7	w.	W. H. Martin.
Roswell	Chaves	3,578	13	47.8	+ 8.6	83	31	− 3	3	56	0.14	− 0.39	0.11	0.5	3	10	12	9	s.	U. S. Weather Bureau.
San Marcial	Socorro	4,439	15																	Agent A., T. & S. F. R. R.
San Rafael	Valencia	6,509	7	38.3		70	30	− 4	3	53	T.	− 0.44	T.	T.	0	18	2	11	sw.	Dr. Chas. M. Grover.
Santa Fe	Santa Fe	7,013	38	34.4	+ 5.9	58	30	− 8	3	29	0.45	− 0.14	0.16	0.3	9	13	12	6	ne.	U. S. Weather Bureau.
Santa Fe Canyon	do	8,000	1								0.90		0.40	2.0	4	14	3	14	w.	C. Martinez.
Santa Rosa	Guadalupe	4,624	11	44.2		75	30	− 9	2	58	0.27	− 0.24	0.09	0.5	4	23	7	1	w.	John L. Chapman.
Socorro	Socorro	4,600	19	45.8	+ 8.0	76	16†	4	3	52	0.94	+ 0.46	0.24	0.0	8	21	8	2	ne.	J. J. Leeson.
Stanley	Santa Fe	6,317	2	33.2		62	22†	− 8	2	38	2.20		1.10		3	15	13	3	e.	Henry Winans.
Strauss	Dona Ana	4,080	12								0.36	+ 0.07	0.18	0.0	3	23	1	7		Agent So. Pac. R. R.
Swastika Ranch	Valencia	6,400	2																	Swastika S. & L. Co.
Taft	Guadalupe	5,000	1								0.18		0.12	0.0	2	10	17	4	w.	J. F. Nappier.
Tajique (near)	Torrance	6,900	1								1.40		0.60	5.0	5	9	14	8		U. S. Forest Service.
Taos	Taos	6,983	13	33.2	+ 5.7	59	30†	− 11	3	39	0.94	+ 0.09	0.24	0.8	8	16	9	6	w.	Alex Gusdorf.
Taos Canyon	do	8,959	2								1.92		0.73	9.4	9					L. Martinez.
Tecolote	Lincoln	6,539	2								0.23		0.23	2.0	1	29	0	2	w.	Agent E. P. & S. W. R. R.
Three Rivers	Otero	4,559	2								0.22		0.22	0.0	1	17	3	11		Do.
Tijeras Canyon	Bernalillo	6,214	1								1.40		0.54	3.0	7	15	7	9	sw.	U. S. Forest Service.
Torrance	Torrance	6,433	2								0.19		0.10	2.0	3	5	14	12	sw.	Agent E. P. & S. W. R. R.
Tres Piedras	Taos	8,076	6																	Edwin B. Seward.
Truchas	Rio Arriba	7,935	2	28.4		52	20	0	1†	39	0.90		0.70	T.	2					Ignacio Cordova.
Tularosa	Otero	4,436	3	48.8		74	31	3	3	37	0.22		0.18	0.0	5	13	18	0	sw.	Irby L. Fairless.
Vaughn	Guadalupe	5,952	2																	Agent E. P. & S. W. R. R.
Virsylvia	Taos	7,500	1			56	26	− 18	3		0.56		0.23	3.0	6	19	6	6	s.	Dr. I. N. Woodman.
Winsors	San Miguel	8,200	13	31.4	+ 4.0	56	30	− 19	2	42	1.20	− 0.03	0.41	4.0	7	12	6	13	w.	H. D. Winsor.

TABLE 1.—*Climatological data for January, 1911. District No. 8*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Texas.																				
Abilene	Taylor	1,738	26	51.5	+ 8.9	90	31	5	3	37	0.53	− 0.37	0.40	T.	2	10	6	15	s.	U. S. Weather Bureau.
Albany	Shackelford	1,429	17	50.8	+ 7.6	91	31	− 1	3	47	0.57	− 0.45	0.55	0.0	2	21	2	8	.....	N. L. Bartholomew.
Alvin	Brazoria	49	13	60.5	.....	81	14†	14	4	34	0.32	− 2.90	0.25	0.0	2	18	8	5	se.	Alvin Japanese Nursery.
Anahuac §	Chambers	23	2	.....	.....	.....	.....	.....	.....	.....	0.70	.....	0.36	0.0	3	.....	.....	.....	.....	B. H. Collins.
Antelope	Jack	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.52	.....	0.40	0.0	2	17	12	2	.....	Chas. C. Hawkins.
Austin	Travis	593	55	56.5	+ 7.4	84	30	12	3	41	0.15	− 1.87	0.07	0.1	4	15	7	9	se.	A. Deussen.
Ballinger	Runnels	1,637	15	.....	.....	.....	.....	.....	.....	.....	0.36	− 0.30	0.26	0.0	2	10	4	17	n.	E. M. Eubank.
Barstow	Ward	2,573	4	53.0	.....	89	31	− 4	3	61	1.02	.....	0.60	0.0	2	20	4	7	e.	Lee F. Freemam.
Bay City	Matagorda	53	1	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.30	0.0	1	15	4	12	s.	E. C. Quereau.
Beaumont	Jefferson	29	10	60.5	+ 6.3	82	30	15	3	36	3.06	+ 0.36	2.56	0.0	5	5	0	26	se.	John Bender.
Beeville	Bee	225	15	62.2	+ 7.0	88	21†	13	4	38	0.33	− 0.76	0.21	0.0	5	4	16	11	e.	L. E. Dickey.
Big Springs	Howard	2,396	13	52.1	.....	87	31	− 4	3	46	0.58	+ 0.19	0.42	0.0	3	15	6	10	s.	B. Reagan.
Blanco	Blanco	1,350	15	55.8	+ 7.0	81	12	9	3	48	0.70	− 0.39	0.37	0.1	3	8	18	5	s.	R. C. Crist.
Boerne	Kendall	1,412	19	59.2	+ 9.5	83	30	19	2	38	0.58	− 0.82	0.32	0.5	4	8	12	11	s.	F. W. Schweppe.
Booth	Fort Bend	81	10	.....	.....	.....	.....	.....	.....	.....	0.00	− 1.72	0.00	0.0	0	14	0	17	se.	T. R. Booth.
Bowie	Montague	1,113	16	51.1	+ 6.2	92	31	1	3	37	0.49	− 0.42	0.40	0.0	2	16	5	10	s.	Craig Anderson.
Brazoria	Brazoria	25	22	63.0	+ 8.4	83	14	12	4	44	0.36	− 3.65	0.15	0.0	5	24	3	4	s.	Mrs. M. A. Stevens.
Brazos	Palo Pinto	801	2	.....	.....	.....	.....	.....	.....	.....	0.15	.....	0.15	0.0	1	13	12	6	s.	Robt. E. Boyett.
Brenham	Washington	350	26	57.4	+ 5.8	84	30	14	3†	37	0.63	− 2.86	0.41	0.0	5	5	2	24	s.	Mrs. B. F. Sloan.
Bridgeport	Wise	754	2	.....	.....	.....	.....	.....	.....	.....	0.46	.....	0.46	0.0	1	14	6	11	s.	Claude Strange.
Brighton	Nueces	12	18	62.0	+ 4.2	79	1†	17	4	39	0.58	− 0.59	0.38	0.0	4	19	7	5	se.	G. H. Ritter.
Brownsville	Cameron	38	47	66.2	+ 7.1	82	15†	21	4	32	0.45	− 0.88	0.45	0.0	1	.....	.....	.....	s.	U. S. Weather Bureau.
Brownwood	Brown	1,342	19	52.6	+ 5.5	91	31	7	3	57	0.30	− 1.01	0.17	0.0	3	11	13	7	s.	Mrs. Pearl Smith.
Cameron	Milam	.....	3	56.4	.....	89	30	10	3†	46	0.44	.....	0.23	0.0	4	23	4	4	s.	J. E. Watts.
Carmona	Polk	330	3	58.9	.....	85	31	7	4	43	0.35	.....	0.30	T.	3	17	8	6	s.	M. S. Spitler.
Claytonville	Fisher	2,100	16	50.3	+ 5.9	87	31	1	3	43	0.79	+ 0.14	0.42	0.0	3	10	14	7	s.	Wm. Lanius.
Coleman	Coleman	1,710	17	53.8	+ 7.2	90	31	5	3	51	0.33	− 0.63	0.25	0.0	2	7	18	6	s.	J. E. Stevens.
College Station	Brazos	308	21	58.8	+ 7.6	86	30	12	3	48	0.31	− 3.23	0.18	0.0	4	12	13	6	s.	Prof. G. S. Fraps.
Colorado	Mitchell	2,066	17	48.4	+ 1.4	91	30	− 4	3	57	0.41	− 0.07	0.28	0.0	2	.....	.....	.....	s.	R. M. Webb.
Columbia	Brazoria	34	22	61.0	+ 7.1	80	31	10	4	45	0.55	− 2.87	0.50	0.0	2	5	19	7	s.	R. B. Loggins.
Columbus	Colorado	206	7	.....	.....	.....	.....	.....	.....	.....	0.44	.....	0.36	0.0	3	5	8	18	sw.	Mrs. Sophie Bridge.
Corpus Christi	Nueces	20	24	61.6	+ 8.1	84	30	21	3	34	0.24	− 2.01	0.14	0.0	3	8	13	10	se.	U. S. Weather Bureau.
Corsicana	Navarro	445	22	54.4	+ 7.2	88	31	8	3†	45	0.76	− 1.73	0.30	0.0	5	10	2	19	se.	D. H. Winn.
Crockett	Houston	350	7	58.4	.....	86	30	12	3†	45	0.59	.....	0.26	0.0	4	10	13	8	s.	A. M. Rencher.
Cuero	De Witt	177	21	61.8	+ 8.1	90	31	14	4	40	0.31	− 1.60	0.31	0.0	2	8	0	23	s.	H. R. Frobese.
Dallas	Dallas	466	22	53.1	+ 8.1	95	31	4	3	50	0.63	− 2.13	0.40	0.0	3	13	0	18	s.	G. A. Eisenlohr.
Danevang	Wharton	145	15	61.0	+ 6.9	83	27	14	4	38	0.00	− 2.80	0.00	0.0	0	19	5	7	se.	H. P. Hermansen.
Decatur	Wise	1,047	15	.....	.....	.....	.....	.....	.....	.....	0.20	− 1.17	0.20	0.0	1	11	17	3	.....	Ft. W. & D. C. Ry.
Del Rio	Valverde	952	5	57.0	+ 6.8	92	31	14	3	47	0.15	− 1.53	0.13	T.	3	8	14	9	e.	U. S. Weather Bureau.
Devine	Medina	653	1	60.8	.....	91	30	11	3	43	0.44	.....	0.18	0.0	4	20	0	11	se.	M. A. Keller.
Dialville	Cherokee	575	7	56.7	.....	83	30†	10	3	45	0.55	.....	0.30	T.	3	10	13	8	s.	J. M. B. McKnight.
Dilley	Frio	569	1	.....	.....	.....	.....	.....	.....	.....	0.75	.....	0.75	0.0	1	.....	.....	.....	.....	John W. Miller.
Dublin	Erath	1,466	15	52.7	+ 7.1	89	31	6	3	37	0.24	− 0.96	0.24	0.0	1	11	6	14	s.	John O. Shafer.
Duval	Travis	820	22	57.4	+ 6.2	87	29	12	3	42	0.28	− 1.28	0.19	0.2	3	20	4	7	s.	J. C. Edgar.
Eagle Pass	Maverick	800	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jos. Metcalfe.
Edna	Jackson	71	2	.....	.....	.....	.....	.....	.....	.....	0.20	.....	0.20	0.0	1	.....	.....	.....	.....	E. L. Faires.
El Paso	El Paso	3,762	32	49.6	+ 5.5	77	28	9	3	38	0.36	− 0.15	0.25	0.0	4	14	11	6	nw.	U. S. Weather Bureau.
Encinal	La Salle	558	3	62.1	.....	95	30	13	4	39	0.35	.....	0.27	0.0	2	14	10	7	se.	H. C. Braden.
Fairland	Burnet	1,000	22	56.9	+ 8.5	95	31	10	3	45	0.92	− 0.59	0.85	0.5	3	10	14	7	s.	R. L. Bush.
Falfurrias	Starr	.....	3	64.4	.....	92	30	10	4	45	0.35	.....	0.30	0.0	2	20	5	6	se.	W. A. Gardner.
Flatonia	Fayette	465	3	60.7	.....	86	30†	14	3†	44	0.38	.....	0.20	0.0	3	12	9	10	s.	Fred W. Laux.
Flint §	Smith	483	1	56.0	.....	87	31	9	3†	42	0.63	.....	0.31	T.	7	10	8	13	sw.	F. C. C. Carter.
Fort Clark	Kinney	1,050	40	58.4	+ 7.8	88	30†	9	2	40	0.36	− 0.45	0.35	0.0	2	11	14	6	se.	Post Hospital.
Fort McIntosh	Webb	460	43	65.2	+10.2	94	30†	17	4	47	0.18	− 0.62	0.18	0.0	1	17	7	7	e.	Do.
Fort Stockton	Pecos	3,050	14	55.2	+ 9.9	90	31	− 7	3	53	0.48	+ 0.10	0.33	T.	2	22	4	5	sw.	H. H. Butz.
Fort Worth	Tarrant	670	16	53.3	+ 9.0	93	31	4	3	42	0.21	− 0.72	0.18	0.0	4	7	17	7	s.	U. S. Weather Bureau.
Fredericksburg	Gillespie	1,742	22	54.8	+ 5.7	86	31	8	3	44	0.43	− 0.88	0.30	1.0	3	10	9	12	s.	Arthur Striegler.
Gainesville	Cooke	738	21	49.8	+ 5.3	91	31	3	3	41	0.53	− 1.04	0.41	0.0	3	.....	.....	.....	.....	J. L. Hickson.
Galveston	Galveston	69	40	59.0	+ 6.3	73	17	19	3	38	0.90	− 2.72	0.77	0.0	13	6	14	11	se.	U. S. Weather Bureau.
Gatesville	Coryell	795	7	55.5	.....	92	31	8	3	38	0.30	.....	0.20	0.0	2	19	11	1	.....	John Ryan.
Georgetown	Williamson	750	16	54.6	+ 5.2	89	30	10	4	52	0.41	− 1.19	0.18	T.	5	13	10	8	s.	Prof. R. F. Young.
Gonzales	Gonzales	299	6	.....	.....	.....	.....	.....	.....	.....	0.42	.....	0.24	0.0	4	5	2	24	s.	J. M. Johnson.
Gorham §	McLennan	444	2	55.0	.....	94	31	9	2	50	T.	.....	T.	0.0	0	11	10	10	s.	John Gorham.
Graham	Young	1,040	12	53.6	+10.2	94	31	4	3	46	0.56	− 0.25	0.46	0.0	2	20	3	8	s.	C. W. Johnson.
Grand Saline	Van Zandt	399	1	.....	.....	.....	.....	.....	.....	.....	0.08	.....	0.08	0.0	1	10	6	15	n.	F. E. Whittemore.
Grapevine	Tarrant	670	21	52.4s	+ 6.4	95	31	5	3	....	0.31	− 1.61	0.29	0.0	3	3f	15f	7f	s.	W. J. Crowley.
Greenville	Hunt	550	11	50.9	+ 5.1	90	31	5	3	38	0.39	− 1.14	0.15	0.0	3	11	0	20	s.	J. P. Regan.
Hallettsville	Lavaca	235	19	58.0	+ 5.3	83	30	16	4	34	0.51	− 1.40	0.25	0.0	4	16	7	8	s.	Dr. J. E. Lay.
Hamlin	Jones	1,685	.....	.....	.....	.....	.....	.....	.....	.....	0.60	.....	0.50	0.0	2	23	1	7	.....	W. S. Carruthers.
Harper	Gillespie	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.19	.....	0.19	0.0	1	14	0	17	.....	Christian Fritz.
Haskell	Haskell	1,553	16	47.8	+ 3.8	88	30	5	3	47	0.43	− 0.22	0.33	0.0	2	17	5	9	s.	P. D. Sanders.
Hebbronville	Duval	.....	4	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	Henry Edds.
Hempstead	Waller	254	7	.....	.....	.....	.....	.....	.....	.....	0.25	.....	0.25	0.0	1	10	0	21	s.	J. H. Hancock.
Henderson	Rusk	500	2	.....	.....	.....	.....	.....	.....	.....	0.71	.....	0.30	0.0	5	10	9	12	.....	M. Kangerga.
Hewitt	McLennan	664	16	.....	.....	.....	.....	.....	.....	.....	0.24	− 1.40	0.12	T.	3	.....	.....	.....	.....	I. H. Earle.
Hico	Hamilton	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.27	.....	0.15	0.0	4	20	4	7	n.	John A. Eakins.
Hillsboro	Hill	628	8	51.0	.....	82	17	7	3	44	1.23	.....	0.79	0.0	3	.....	.....	.....	.....	W. G. Escott.
Hondo	Medina	901	12	59.2	.....	80	15†	14	4	41	0.30	− 0.95	0.15	0.0	2	14	10	7	.....	H. E. Haass.
Houston	Harris	138	21	61.8	+ 8.9	84	30	16	3	35	0.18	− 3.68	0.10	0.0	7	4	15	12	se.	U. S. Weather Bureau.
Huntsville	Walker	400	27	54.7	+ 5.3	82	30	8	3	43	T.	− 3.87	T.	0.0	0	4	0	27	se.	W. Y. Barr.
Jayton	Kent	.....	1	.....	.....	.....	.....	.....	.....	.....	1.40	.....	1.20	0.0	3	18	2	11	w.	Wichita Valley Ry. Co.
Jewett	Leon	496	7	55.8	.....	88	30	9	3†	40	0.66	.....	0.30	0.0	3	24	3	4	s.	Earle Adkisson.
Junction	Kimble	1,645	8	52.2	.....	88	12	5	3	52	0.00	.....	0.00	0.0	0	17	3	11	.....	Judge John S. Durst.
Kaufman	Kaufman	448	12	54.5	+ 7.2	91	31	6	3	32	0.32	− 1.12	0.32	0.0	1	11	15	5	s.	B. J. Hubbard.
Keene	Johnson	940	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Industrial Academy.
Kerrville	Kerr	1,650	15	57.4	+ 8.1	90	31	12	5	46	0.10	− 0.96	0.10	1.0	1	8	0	23	s.	Mrs. F. Coleman.
Knickerbocker	Tom Green	2,050	7	54.2	.....	94	31	5	3	55	T.	.....	T.	T.	0	16	7	8	s.	Jos. Tweedy.
Kopperl	Bosque	576	14	.....	.....	.....	.....	.....	.....	.....	T.	− 1.15	T.	0.0	0	8	6	17	s.	T. A. Johnson.
Lagrange	Fayette	276	1	.....	.....	.....	.....	.....	.....	.....	0.38	.....	0.19	0.0	4	20	4	7	s.	August Hermes.
Lamesa	Dawson	2,500	1	.....	.....	.....	.....	.....	.....	.....	0.66	.....	0.46	0.0	2	.....	.....	.....	.....	S. D. Austin.

TABLE 1.—*Climatological data for January, 1911. District No. 8*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction	Observers.
Texas—Continued.																				
Lampasas	Lampasas	1,026	19	55.2	+ 7.3	95	30	10	3†	57	0.23	− 1.20	0.23	0.0	1	11	8	12	s.	Mrs. K. I. Webber.
La Parra	Cameron	38	9								1.00		1.00	0.0	1					Jno. G. Kenedy.
Laureles Ranch	Nueces	20	11								0.82	+ 0.12	0.68	0.0	2					Matt Cody.
Liberty	Liberty	38	7	61.5		85	30	12	4	42	0.35		0.35	0.0	1	5	15	11	s.	Mrs. Fannie Sneed.
Llano	Llano	1,040	20	56.2	+ 5.8	93	31	10	3†	49	T.	− 0.72	T.	0.0	0	22	8	1	e.	E. W. Torrence.
Llano Grande	Hidalgo	86	3	65.5		89[a]	29†	13	4	53	0.10		0.10	0.0	1	11	19	1	se.	M. D. Wardlow.
Long Lake	Anderson	229	6								0.28		0.10	0.0	4	9	2	20	n.	Geo. W. Ellis.
Longview	Gregg	336	25	54.6	+ 7.2	85	11†	10	3	44	0.45	− 3.73	0.12	T.	6	10	0	21	se.	C. A. Propst.
Lufkin	Angelina	325	4	58.2		86	30	9	4	53	0.30		0.17	T.	3	18	3	10	s.	T. A. King.
Luling	Caldwell	418	22	57.6	+ 6.4	85	30	11	4	35	0.31	− 1.47	0.22	0.0	3	7	4	20	s.	John Carter
Marathon	Brewster	4,043	1	51.8		81	31	− 3	3	40	0.50		0.30	0.0	2	24	4	3	s.	Rev. A. P. Willis.
Marble Falls	Burnet	771	3								1.90		1.90	T.	1					J. J. Faubion.
Marfa	Presidio		3								0.80		0.50	0.0	2					R. K. Colquitt.
Marshall	Harrison	375	2	56.1		84	31	11	3†	40	0.74		0.46	0.0	6	9[a]	21[a]	0[a]	s.	Lee Scott.
Matagorda	Matagorda	12	1								0.46		0.46	0.0	1	20	3	8	s.	W. E. McNabb.
Mexia	Limestone	537	7	53.4		87	30†	7	3	43	0.34		0.17	0.0	6	5	7	19	s.	Miss Josephine Newman.
Mission	Hidalgo	140	1	66.1		90	30	18	4	42	0.11		0.09	0.0	2	12	14	5	se.	L. H. Romig.
Mont Belvieu §	Chambers	65	1								0.29		0.15	0.0	4	11	10	10	se.	A. R. Shearer.
Mountain View	Pecos	2,900	1								0.54		0.28	0.0	3					Lucius W. Gosselin.
Mount Blanco	Crosby	2,750	22	47.7	+ 7.3	87	31	− 8	3	44	0.16	− 0.47	0.16	0.0	1	16	5	10	s.	H. C. Smith.
Nacogdoches	Nacogdoches	271	12	55.6	+ 8.0	84	31	10	4	39	T.	− 2.84	T.	0.0	0	5	1	25		Miss Hary Hofmann.
New Braunfels	Comal	720	22	57.2	+ 5.2	85	30	13	4	37	0.04	− 1.64	0.04	0.0	1	9	13	9	s.	J. Giesecke.
Palestine	Anderson	510	29	56.0	+ 9.5	84	30	9	3	35	0.48	− 3.39	0.34	T.	6	8	13	10	s.	U. S. Weather Bureau.
Panter	Hood	1,000	22								0.23	− 1.45	0.10	0.0	3					E. H. Snider.
Pearsall	Frio	629	1								1.03		0.45	0.0	3					Earnest De Vilbiss.
Pierce	Wharton	102	5	59.4		81	28†	11	4	54	0.00		0.00	0.0	0	14	14	3		R. B. Pointer.
Plainview	Hale	3,370	15	47.0		84	31	− 8	3	54	0.38	− 0.06	0.29	T.	3	14	11	6	sw.	J. F. Sander.
Port Lavaca	Calhoun	20	10	61.3	+ 5.6	81	13†	16	3	37	T.	− 1.27	T.	0.0	0	20	6	5	s.	J. H. Bickford.
Post City	Garza	2,700	1								0.43		0.34	0.0	2	24	2	5	sw.	W. L. Dodd.
Raymondville	Cameron										0.87		0.56	0.0	3	1[f]	20[f]	4[f]	se.	C. H. Pease.
Ricardo	Nueces	57	2	66.0*		89	30†	14	4	29[i]	0.42		0.15	0.0	5	14	11	6	s	Lindsay Waters.
Riverside	Walker	169	7								0.30		0.20	0.0	2	5	3	23	s.	Mrs. C. W. Higdon.
Robert Lee	Coke	1,850	12	51.6	+ 8.6	90	31	5	3	46	0.55	− 0.22	0.24	0.0	4	15	9	7	s.	H. D. Pearce.
Rockland	Tyler	136	7								0.46		0.30	0.0	2	6	4	21	s.	D. W. Bellamy.
Rockport	Aransas	12	10								0.36	− 1.57	0.20	0.0	3	20	2	9	se.	Mrs. G. B. Grewe.
Rossville	Atascosa	558	4	59.8		87	10	13	4	43	0.25		0.22	0.0	3	10	14	7	se.	W. F. M. Ross.
Runge	Karnes	308	16																	Reiffert & Frobese.
Sabinal	Uvalde	964	7	60.4		90	30†	14	3†	44	0.24		0.12	0.0	4	18	13	0	e.	Jas. Johnston.
Salado	Bell		1								0.44		0.39	0.0	2	18	7	6	s.	L. M. Crockett.
San Angelo	Tom Green	1,847	20	53.3	+ 9.3	91	31	5	3	44	0.17	− 0.53	0.13	T.	2	18	6	7	s.	Sam Crowther.
San Antonio	Bexar	701	26	59.1	+ 8.0	87	30	16	3	33	0.02	− 1.66	0.01	0.0	2	7	14	10	se.	U. S. Weather Bureau.
San Augustine	San Augustine	360	2	56.8		83	31	8	4	58	0.36		0.12	0.2	6	9	12	10		F. A. Wilson.
San Juanito	Hidalgo		2	66.8		92	30	15	4	39	0.10		0.06	0.0	2	6	4	21	se.	J. B. McAllen.
San Marcos	Hays	588	18	55.7	+ 4.6	85	30	13	4	40	0.00	− 1.43	0.00	0.0	0	10	0	21	s.	Miss L. C. Ford.
San Saba	San Saba	1,712	10	55.6	+ 6.6	95	31	6	3	49	0.17	− 0.42	0.06	0.0	4	16	8	7	s.	Jas. Burns.
Santa Gertrudes	Nueces		11								0.00	− 0.70	0.00	0.0	0					J. B. Wright, jr.
Sealy	Austin	201									0.22		0.14	T.	3	13	9	9	s.	O. H. Albert.
Somerville	Burleson	251	2								T.		T.	0.0	0	17	0	14	n.	W. A. Dolan.
Sonora	Sutton	2,200	8																	Mike Murphy.
Sugarland	Fort Bend	79	13																	Cunningham Sugar Co.
Sutherland Springs §	Wilson		1	61.4		85	28†	8	4	37	0.17		0.07	0.0	3	19	1	11	s.	W. A. Clark.
Taylor	Williamson	583	10	56.0	+ 8.5	88	30	11	3	37	0.20	− 2.62	0.09	T.	6	10	12	9	s.	U. S. Weather Bureau.
Temple	Bell	630	21	54.6	+ 7.7	85	30†	10	3	30	0.39	− 1.71	0.21	0.0	4	9	16	6		W. Goodrich Jones.
Theodore	Winkler		1								0.83		0.50	0.0	2					W. H. Gibbs.
Thurber	Erath		1								0.28		0.23	0.0	2					J. K. Ball.
Tilden	McMullen		5	61.8[f]		90[f]	11	9	4	48[f]	0.35		0.32	0.0	2	7[f]	6[f]	12[f]	se.	Wm. Kuykendall.
Tivoli	Refugio		1								0.00		0.00	0.0	0	8	16	7		W. H. Gisler.
Uvalde	Uvalde	937	3																	F. M. Getzendaner.
Valley Junction	Robertson	289	11								0.96	− 0.22	0.26	0.0	6	13	0	18	s.	T. M. Williams.
Victoria	Victoria	187	12	62.4	+ 6.1	87	21†	15	4	35	0.00	− 2.50	0.00	0.0	0	7	2	22	s.	C. C. Zirjacks.
Waco	McLennan	424	22	54.6	+ 6.2	90	30†	8	3	39	0.26	− 2.00	0.22	0.0	2	9	0	22	s.	E. H. Hall.
Waxahachie	Ellis	556	14	53.4	+ 7.6	95	31	5	3†	61	0.32	− 1.24	0.20	0.0	2	11	2	18	s.	C. D. Longserre.
Weatherford	Parker	864	22	51.4	+ 6.9	90	31	4	3	36	0.23	− 1.26	0.18	0.0	2	11	10	10	n.	Miss J. Stickfort.
Wharton	Wharton	105	9																	Mrs. F. M. Hughs.
Wills Point	Van Zandt	524	6	47.6		88	31	6	3	47	0.40		0.28	0.0	2	4	7	20	s.	W. W. Gibbard.
Zapata	Zapata	300	2	65.8		93	30†	13	4	40	0.24		0.13	0.0	2	9	15	7	se.	F. H. Earnest.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
[f] Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for January, 1911. District No. 8, Texas and Rio Grande Valley.*

Stations.	River basins.	Day of month.																															Total.
		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	
Colorado.																																	
Blanca	Rio Grande	.02									T.	.01											T.				T.						0.03
Cumbres	do	.38	.03								1.48	1.28	.11	T.			1.26	T.				.52	.50	.06		.52	.61			1.52			8.27
Garnett	do																					T.					.03						0.03
Hermit	do						T.				.09	.52		.04		T.	.23	T.			T.	.06	T.	T.		.09	T.		.01	.03			1.07
La Veta Pass	do										.06											.03											0.09
Manassa	do	T.									T.	T.																					T.
Platoro	do	.11									.67	1.41		.16			.48	T.				.18	.19			.48	.25			.50			4.43
Saguache	do											T.										T.				T.							T.
San Luis	do	.06									T.	.17																					0.23
Wagon Wheel Gap Exp. Sta.	do										.24	.14		T.		T.	.19	.05	T.			.04				.06	.02		.02			.06	0.82
New Mexico.																																	
Agricultural College	Rio Grande										.05														.22								0.27
Alamogordo (near)	do										T.							T.	.02					.18	.01								0.21
Alamogordo	do											T.												.16									0.16
Alamos Ranch	do	T.	T.								T.	.40	.16	.22				.05															0.83
Albuquerque	do										.02		.15					.11				.02		.01	T.		.02						0.33
Ancho	do	.01																	.15					.15									0.31
Artesia	Pecos																	.02						.58									0.60
Aspen Grove R'ch	Rio Grande										.23	1.24	.41	.19			.12						.21	.02		.29			.04	.11			2.86
Bateman's Ranch	do	.30									.35	1.80	.30	.42			.27	T.				.60		T.		T.	.55			T.	T.		4.59
Bluewater	do	.20															T.									.37							0.57
Boaz	Pecos																		.03					.04									0.07
Capitan	do																	.20						.28									0.48
Carlsbad	do																	.16						.38									0.54
Carrizozo	Rio Grande																		T.														T.
Carson Park	do	.12									*	*	*	.92				.10				*	.18			.04							1.36
Chama	do	.24									.50	.60	.14				T.	T.				.35				.16	.45			.60			3.04
Clouderoft	Pecos																							.20									0.20
Corona	do	.01												.01							.02						.17						0.21
Coyote	Rio Grande																	.21						.07									0.28
Cundiyo	do											.18	.09		.15				.58								.02						1.02
Demonstration F'm	Pecos												.12																				0.12
Duran	do	T.											T.	.10				T.						T.			.12						0.22
Elk	do																																
Escondido	Rio Grande												T.											.29									0.29
Espanola	do											.06	.14	.13				.01					T.				T.						0.34
Estancia	do												.42		.18		.12	.73								.12							1.57
Fort Stanton	Pecos	T.	T.	T.															.04					.05	.06								0.15
Fort Sumner	do	T.																.15						.12	T.	.03							0.30
Gallinas	do																							.20									0.20
Gallinas Pl'tg Sta	do	.57	.28									T.	.15					T.			T.												1.00
Glorieta Ranch	Rio Grande											T.	T.	.12	T.			.13	T.					.61	.11	.03	.10	T.					1.10
Harvey's Up'r Rch	Pecos	.08	.05		.17		T.							.19	.07					.37	.18	T.						.09					1.20
Hillsboro	Rio Grande																																
Hodges	do	T.										.31	.46											T.	T.								0.77
Hondo Reservior	Pecos																	T.						.10									0.10
Hope	do																																
Jemez Springs	Rio Grande																																‡0.81
Knowles	Pecos												T.						.30					.18									0.48
Laguna	Rio Grande	T.																	.12														0.12
Lagunita	Pecos	T.	T.															.02						.18									0.20
Lake Valley	Rio Grande										.03	.08	.02					.05						.46	T.								0.64
Las Vegas	Pecos	.01												.10				T.															0.11
Liston	Pecos																							T.									T.
Los Lunas (near)	Rio Grande	T.											.30					.30							.30								0.90
Magdalena	do	T.									T.		T.	.10				.40					T.	.15			.21						0.86
Mineral Hill	Pecos	.08			.06									.20																			0.34
Monterey	Rio Grande										T.	T.	T.					T.	.03					.20									0.23
Mountainair	do	T.									T.	.27	T.	.29				.41						.24			.41						1.62
Newman	do																					T.	.18										0.18
Noria	do										0.5	.15	.25											.23									0.68
Orange	do																																
Orogrande	do											T	T.					T.						.20	.12								0.32
Oscura	do											.02		.03				.08						.08	.01								0.22
Otis	Pecos																	T.	.15	T.				.33	T.								0.48
Otto	Rio Grande	.10										.19		.43				.10															0.82
Pastura	Pecos											T.						*	.11					.11									0.22
Placitas (near)	Rio Grande										.20	.16	T.	.77				.05				.20					.05						1.43
Plainview	Pecos																																
Red River Canyon	Rio Grande										.53	.27	.27																				1.07
Rincon	do										T.							T.						.19									0.19
Rio Grande Dam	do																	T.						.24									0.24
Rosedale	do	.02									T.	.02	T.	.03				.15	.02		T.		*	.29	.02		.15						0.70
Roswell	Pecos												T.					.02						.11		.01							0.14
San Marcial	Rio Grande																																
San Rafael	do										T.	T.	T.					T.				T.	T.			T.							T.
Santa Fe	do	T.	T.								.04	.08	.14	.06			T.	.03	.01			.02				.03	.04			T.			0.45
Santa Fe Canyon	do										T.	.10	.20	.40				.20				T.					T.						0.90
Santa Rosa	Pecos		.02										.09					.09						.07									0.27
Socorro	Rio Grande												.04	.10				.15						.20	.24	.06	.12	.03					0.94
Stanley	do											1.10	.90					.20															2.20
Strauss	do											.12												.18	.06								0.36
Swastika Ranch	do																																
Taft	Pecos																		.12					.06									0.18
Tajique (near)	Rio Grande												.60					.43			*	.33		.04									1.40
Taos	do	.02									.23	.24	.02	.16				.08				.14				.05							0.94
Taos Canyon	do	.08	T.								.40	.73	.24	.02		T.	T.	.05			*	.26		T.		.14	T.	T.					1.92
Tecolote	do																		.23														0.23
Three Rivers	do											T.												.22	T.								0.22
Tijeras Canyon	do	T.									.03	.12	*	.54				.30				.23		T.			.18						1.40
Torrance	Pecos	T.												.01				.10						T.			.08						0.19
Tres Piedros	Rio Grande																																
Truchos	do											.70		.20				T.															0.90
Tularosa	do													.01				.01	.01					.18		.01							0.22
Vaughn	Pecos																																
Virsylvia	Rio Grande	*	.23								.22	.07	.03						.01														0.56
Winsors	Pecos	.06									.19	.41	.22	.21				.06					.05				T.						1.20

TABLE 2.—*Daily precipitation for January, 1911. District No. 8*—Continued.

Stations.	River basins.	Day of month.																															Total
		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	
Texas.																																	
Abilene	Brazos		T.														T.	T.	.40					.13	T.				T.				0.53
Albany	do																		.55					.02	T.								0.57
Alvin	Coast																		T.				T.	.25	.07				T.				0.32
Anahuac	do												.36											.26	.08								0.70
Antelope	Trinity																		.40					.12									0.52
Austin	Colorado			T.															T.	.04				.07	.03	.01	T.						0.15
Ballinger ‖ ‖	do			T.																				.10	.26								0.36
Barstow	Pecos																		.42					.60									1.02
Bay City ‖ ‖	Colorado																		.30	T.				T.									0.30
Beaumont ‖ ‖	Neches	2.56																T.	.12					.28	.03				.07				3.06
Beeville ‖ ‖	Coast														T.				T.		.02			.03	.21	.05	T.		.02				0.33
Big Springs	Colorado																	T.	.42				T.	.15	.01			T.	T.				0.58
Blanco ‖ ‖	Guadalupe		T.	.01																.37					.32								0.70
Boerne	San Antonio		.05							T.									.20	.01	.32		T.					T.					0.58
Booth ‖ ‖	Brazos																																0.00
Bowie	Trinity																	.40						.09									0.49
Brazoria	Brazos	T.	T.															.15					.01	.04	.15	.01							0.36
Brazos ‖ ‖	do																			.15													0.15
Brenham ‖ ‖	do	T.		.03								.03						T.	.04		T.			T.	.41	.12				T.			0.63
Bridgeport ‖ ‖	Trinity																		.46	T.													0.46
Brighton	Coast																		.38				.08	.08	.04								0.58
Brownsville	Rio Grande	T.								T.							T.			.45				T.	T.								0.45
Brownwood ‖ ‖	Colorado																	T.	T.	.08				.05	.17								0.30
Cameron ‖ ‖	Brazos																		T.	.23	.08			T.	.11	.02							0.44
Carmona	Neches	.05	T.	T.																	T.		T.	.04	.26		T.						0.35
Claytonville	Brazos																		.35					.42	.02								0.79
Coleman	Colorado																	T.	.25					.08									0.33
College Station	Brazos		T.	T.														.03							.18	.05		.05					0.31
Colorado	Colorado																		.28					.13									0.41
Columbia	Brazos	T.																						.50	.05								0.55
Columbus ‖ ‖	Colorado	T.									.06										T.			T.	.36	.02		T.		T.			0.44
Corpus Christi	Coast																		.06	T.			T.	.10	.08			T.					0.24
Corsicana ‖ ‖	Trinity																	T.	.30	.20	.02			.06	.15	.03							0.76
Crockett	do	.08	T.																.08	.17			T.	T.	.26					T.			0.59
Cuero ‖ ‖	Guadalupe																									.23	.08						0.31
Dallas ‖ ‖	Trinity	.04																		.19					.40								0.63
Danevang	Coast																																0.00
Decatur	Trinity																								.20								0.20
Del Rio	Rio Grande		T.														T.		.13			.01						.01	T.				0.15
Devine	Nueces																		T.	.18	.06	T.	.08	.12	T.	T.	T.	T.					0.44
Dialville	Neches	.10	T.					T			T.					T.	T.	T.	T.	.15	T.		T.	.30		T.	T.	T.	T.	T.			0.55
Dilley	Nueces																	.75															0.75
Dublin ‖ ‖	Brazos																							T.	.24								0.24
Duval	Colorado		T.	.02										T.						.19			T.	.07		T.							0.28
Eagle Pass	Rio Grande																																
Edna	Lavaca											.20																					0.20
El Paso	Rio Grande											.05											.02	.23	.06								0.36
Encinal	Nueces																		.08	.27													0.35
Fairland	Colorado			.05															T.	.85	T.		.02	T.						T.			0.92
Falfurrias	Coast																		T.	.30				.05	T.								0.35
Flatonia	Guadalupe		T.														T.	T.	T.	T.				.20	.13			T.	.05				0.38
Flint	Neches	.05	T.	T.				T.						T.					.03	.07	T.			.14	.31	.02	.01						0.63
Fort Clark ‖ ‖	Rio Grande									T.								.35						T.		T.	.01						0.36
Fort McIntosh	do																			.18													0.18
Fort Stockton	Pecos	T.																T.	.33				T.	.15									0.48
Fort Worth	Trinity										T.						T.	T.	.17	.01			T.	.01	.02								0.21
Fredericksburg	Colorado		.10																	.30				T.	.03								0.43
Gainesville	Trinity																		.41	.02				.10									0.53
Galveston	Coast	.53				.01	T.		.03	.01	.02	.04	.01	.01	.02				T.			T.	.01	.05	.15				.01				0.90
Gatesville	Brazos																			.20			.10										0.30
Georgetown ‖ ‖	do			T.															.04	.16	T.				.18	.02	T.	.01					0.41
Gonzales ‖ ‖	Guadalupe																			.06					.24	.06		.06					0.42
Gorham ‖ ‖	Brazos																T.			T.					T.								T
Graham	do																		.40					.10									0.56
Grand Saline	Sabine										T.						T.	T.	T.	.08	T.	T.	T.	T.	T.	T.	T.	T.	T.				0.08
Grapevine	Trinity																	.01	.01					.29									0.31
Greenville ‖ ‖	Sabine	.12																T.		.15	T.				.12								0.39
Hallettsville	Lavaca										T.						T.		T				T.	.10	.25	.06		.10					0.51
Hamlin	Brazos																		.50					.10									0.60
Harper	Colorado																		.19	T.													0.19
Haskell ‖ ‖	Brazos																	T.	.33	T.					.10								0.43
Hebbronville	Coast																																0.00
Hempstead ‖ ‖	Brazos		T.				T.									T.		T.			T.	T.			.25	T.			T.				0.25
Henderson	Neches	.09									T.									.10				.30	.20			.02					0.71
Hewitt	Brazos			T.													T.		.12	.05				.07		T.							0.24
Hico	do																.01		.08					.15	.03								0.27
Hillsboro	do																		.79	.17					.27								1.23
Hondo	Nueces										T.								.15					.15									0.30
Houston	Coast	.01	T.						T.	T.	.01		T.			.02	.03	T.	T.				T.	.01	.05	.05			T.				0.18
Huntsville ‖ ‖	Trinity																								T.	T.							T.
Jayton	Brazos																1.20							.10				.10					1.40
Jewett ‖ ‖	Trinity																			.30	T.				.24		.12						0.66
Junction	Colorado																																0.00
Kaufman	Trinity																T.	T	T.						.32								0.32
Keene	Brazos																																
Kerrville ‖ ‖	Guadalupe			.10																													0.10
Knickerbocker	Colorado		T.															T.	T.					T.		T.	T.		T.				T.
Kopperl ‖ ‖	Brazos																		T.					T.	T.								T.
Lagrange	Colorado		T.															T.	T.					.19	.16		.02	.01	T.				0.38
Lamesa	do																	.46						.20									0.66
Lampasas ‖ ‖	Brazos																	.23						T.	T.								0.23
La Parra	Coast																							1.00									1.00
Laureles Ranch	do				.68					.14																							0.82
Liberty ‖ ‖	Trinity	.35	T.																T.					T.	T.	T.							0.35
Llano	Colorado		T.																T.	T.				T.									T.
Llano Grande ‖ ‖	Rio Grande																		T.				.10	T.									0.10
Long Lake ‖ ‖	Trinity																					.04			.08	.10			.06				0.28
Longview ‖ ‖	Sabine	.06		T.			.04														.08				.12	.11			.04				0.45
Lufkin	Neches	.06	T.																T.				T.	T.	T.	.17	.07						0.30
Luling ‖ ‖	Guadalupe																		T.					T.	.22	.05	.04						0.31
Marathon	Rio Grande																		.20					.30									0.50
Marble Falls ‖ ‖	Colorado			T.																1.90													1.90

TABLE 2.—*Daily precipitation for January, 1911. District No. 8*—Continued.

Stations.	River basins.	Day of month.																															Total.
		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	
Texas—Continued.																																	
Marfa	Rio Grande																	.30						.50									0.80
Marshall	Sabine	.02																	.13	.06				.03	.46	.04							0.74
Matagorda	Coast																							.46									0.46
Mexia‖	Brazos				.05														.01	.07				T.	.17	.03	T.	.01	T.				0.34
Mission‖	Rio Grande																			T.			.09		.02		T.						0.11
Mont Belvieu	Coast										.04								.15				T.			.06			.04				0.29
Mountain View	Pecos																	.06	.28					.20									0.54
Mount Blanco	Brazos																							T.	.16								0.16
Nacogdoches‖	Neches	T.																T.	T.	T.					T.	T.	T.						T.
New Braunfels	Gaudalupe																		.04														0.04
Palestine	Trinity	.05	T.	T.				T.						T.				T.	.01	.04	T.		T.	.23	.12	T.	T.	.03		T.			0.48
Panter	Brazos			T.											T.	T.	T.	.09	T.	T.			T.	.04	.10	T.			T.				0.23
Pearsall	Nueces																		.36	.45			.22										1.03
Pierce	Colorado																																0.00
Plainview	Brazos												T.						.29					.07			.02						0.38
Port Lavaca	Coast		T.																T.														T.
Post City	Brazos																		.34					.09	T.								0.43
Raymondville‖	Coast																			.56				.28	.03								0.87
Ricardo	....do												.03	.12				.05		.07				.15									0.42
Riverside‖	Trinity			T.																T.					.20	.10							0.30
Robert Lee‖	Colorado																		.24	.02				.19	.10								0.55
Rockland‖	Neches	.16																									.30						0.46
Rockport	Coast																		.20	.06			T.	.10									0.36
Rossville	Nueces																		T.	.22	.01	.02											0.25
Runge	San Antonio																																
Sabinal	Nueces																		T.		.12			.05	.04	.03							0.24
Salado	Brazos																		.39	.05													0.44
San Angelo	Colorado		T.															T.	.04				T.	.13	T.								0.17
San Antonio	San Antonio													T.			T.	T.	.01	T.				.01									0.02
San Augustine	Neches	.06	T.	.02															T.	.10			.04		.12	.02	T.						0.36
San Juanito	Coast																		.06	.04						T.							0.10
San Marcos‖	Guadalupe																																0.00
San Saba	Colorado																		.05	.06				.04	.02								0.17
Santa Gertrudes‖	Coast																																0.00
Sealy	Brazos		T.																T.	T.	T.		T.	.14	.01				.07				0.22
Somerville	....do																						T.	T.	T.								T.
Sonora	Rio Grande																																
Sugarland	Brazos																																
Sutherland Springs	San Antonio																.05							.07		.05							0.17
Taylor	Brazos							T.			T.							T.	.03	.06				.06	.03		.01	.01	T.				0.20
Temple‖	....do																			T.	T.	.21				.11	.04	.03					0.39
Theodore	Pecos																		.33				.50										0.83
Thurber	Brazos																		.23					.05									0.28
Tilden	Nueces																		T.	.32			.03										0.35
Tivoli‖	Guadalupe																																0.00
Uvalde	Nueces																																
Valley Junction‖	Brazos			.20															.06	.20					.20	.20	.10	T.					0.96
Victoria‖	Guadalupe																																0.00
Waco‖	Brazos																T.		.22	T.					.04								0.26
Waxahachie ‖	Trinity																			.20	T.			T.	.12	T.							0.32
Weatherford ‖	....do																	T.		.18					.05								0.23
Wharton ‖	Colorado																																
Wills Point	Sabine	T.																	T.	T.				.28	.12								0.40
Zapata	Rio Grande																			.11					.13	T.							0.24

TABLE 3.—*Maximum and minimum temperatures for January, 1911. District No. 8, Texas and Rio Grande Valley.*

Date.	Colorado.				New Mexico.																Texas.							
	Garnett.		San Luis.		Agricultural College.		Carlsbad.		Fort Stanton.		Mountain-air.		Rosedale.		Roswell.		Santa Fe.		Santa Rosa.		Abilene.		Big Springs.		Brownsville.		Corpus Christi.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	21	− 6	29	6	64	34	64	31	41	18	30	13	29	11	44	22	18	0	33	− 9	55	19	52	27	78	56	78	58
2....	14	− 3	14	−16	35	0	44	15	29	4	39	− 2	18	3	24	5	14	− 3	13	− 8	19	10	44	16	67	38	62	28
3....	22	−15	24	−16	34	5	36	0	18	− 2	39	− 4	30	0	35	− 3	21	− 8	35	11	29	5	36	− 4	42	28	36	21
4....	33	− 8	39	− 4	45	10	50	10	32	10	40	4	42	15	48	9	33	5	47	18	48	19	50	10	53	21	43	28
5....	43	− 1	45	1	50	16	70	9	48	8	51	12	53	19	66	10	35	11	54	28	60	27	63	21	63	33	48	35
6....	42	− 2	42	2	52	17	65	21	54	22	51	17	50	22	62	15	39	13	58	32	59	27	65	19	73	45	59	44
7....	43	1	41	2	53	15	72	25	56	19	52	32	56	24	68	21	43	16	59	32	68	39	70	28	77	57	78	54
8....	46	1	44	9	55	13	71	24	60	26	53	24	56	30	71	34	45	23	62	34	60	39	65	32	79	61	77	61
9....	52	1	46	14	70	28	76	25	60	14	55	24	56	29	68	20	46	20	64	36	70	33	75	36	80	64	66	57
10....	53	22	42	27	66	48	80	45	64	35	57	31	49	40	76	38	44	37	69	45	76	52	77	46	79	68	74	61
11....	49	29	37	30	60	45	81	56	66	50	61	38	54	39	75	57	47	38	68	41	80	59	83	51	80	67	76	67
12....	49	18	44	29	67	43	81	50	64	39	50	39	53	38	71	54	47	37	61	38	77	60	77	49	81	66	72	63
13....	52	19	47	32	69	34	78	45	64	39	53	33	55	39	71	43	48	32	64	38	74	59	72	58	79	64	72	62
14....	49	14	49	25	68	38	76	40	67	24	52	29	53	29	70	34	50	30	63	35	74	57	75	52	82	59	69	62
15....	53	19	52	25	72	29	79	41	69	30	49	33	58	35	76	39	55	33	74	36	74	48	75	45	82	59	72	62
16....	54	28	48	29	63	30	81	35	76	28	59	31	58	36	74	33	51	31	64	27	68	42	77	45	82	62	73	64
17....	46	8	44	19	66	40	74	44	67	30	48	28	48	37	52	38	41	30	40	23	62	33	68	34	81	61	70	65
18....	46	12	50	17	60	30	52	39	42	29	46	25	47	27	59	31	42	26	60	23	40	33	50	34	82	63	67	55
19....	49	5	51	12	62	21	60	34	55	15	48	24	53	26	65	25	50	27	68	10	60	34	73	35	72	61	66	54
20....	53	8	50	25	72	35	78	30	59	22	56	28	63	34	80	25	56	27	66	25	77	47	75	35	77	60	76	58
21....	47	21	45	29	74	45	78	57	68	39	58	36	58	45	79	43	45	33	65	25	65	35	80	44	78	67	81	64
22....	37	7	40	15	65	53	73	36	67	37	47	32	53	33	50	36	42	28	44	29	40	29	48	30	78	70	68	49
23....	40	3	44	12	67	45	45	32	55	27	44	25	41	32	39	32	42	26	38	35	39	35	39	32	74	49	53	48
24....	49	7	48	15	52	33	51	35	40	27	47	31	47	30	44	34	48	26	62	35	47	37	54	35	60	48	58	48
25....	51	12	39	22	59	42	65	49	58	29	47	36	46	33	59	36	48	28	64	36	59	44	66	49	80	55	63	55
26....	49	15	46	22	65	33	71	45	64	34	48	34	49	32	72	44	46	29	60	36	71	54	70	49	81	62	69	61
27....	51	15	47	20	68	36	73	40	60	29	54	29	47	30	66	32	46	27	60	38	72	54	70	42	78	62	69	65
28....	53	8	50	24	74	33	71	42	58	27	62	32	62	34	71	51	57	34	72	45	71	48	72	50	81	62	71	63
29....	60	28	54	39	73	37	83	49	70	30	61	38	63	41	81	41	57	38	68	45	80	58	82	52	82	62	79	67
30....	60	18	57	25	70	21	88	50	66	47	68	35	62	38	82	49	58	41	75	46	77	58	84	53	82	62	84	64
31....	60	14	55	29	77	33	86	41	73	37	67	35	63	40	83	36	57	31	74	47	90	58	87	52	80	65	79	65
Mns..	46.0	9.6	44.0	16.8	62.2	30.4	69.4	35.3	56.9	26.5	51.4	26.5	50.7	29.7	63.9	31.7	44.2	24.7	58.2	30.3	62.6	40.4	66.9	37.3	75.6	56.7	68.0	55.1

Date.	Texas.																											
	Del Rio.		El Paso.		Fort McIntosh.		Fort Stockton.		Fort Worth.		Galveston.		Hallettsville.		Houston.		Lufkin.		Palestine.		Plainview.		San Antonio.		Haskell.*		Taylor.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	71	32	43	31	80	38	69	32	63	21	72	60	69	55	73	56	71	43	67	39	54	20	74	52	35	35	68	38
2....	45	17	34	16	73	38	49	11	21	8	62	24	55	23	56	21	68	15	39	14	20	− 2	52	20	26	9	38	15
3....	37	14	35	9	41	20	39	− 7	29	4	33	19	30	17	32	16	24	12	22	9	38	− 8	34	16	27	5	27	11
4....	48	16	45	16	53	17	47	12	51	15	38	23	42	16	42	18	44	9	42	10	53	8	48	17	37	11	45	16
5....	56	18	50	20	60	30	72	19	62	30	49	34	52	24	55	31	57	19	55	28	61	21	53	28	57	17	54	24
6....	63	20	56	22	74	40	70	26	62	31	55	45	63	29	60	37	64	27	61	35	62	20	64	33	67	26	64	27
7....	74	40	57	24	83	46	72	55	68	37	66	55	73	49	76	52	73	50	69	50	65	28	74	43	65	31	74	46
8....	83	36	64	42	89	50	74	40	65	46	66	58	77	57	78	60	80	50	71	51	63	28	81	48	66	43	73	44
9....	79	36	68	32	88	54	82	41	64	37	67	58	74	45	78	48	70	50	66	45	69	15	76	47	75	28	72	39
10....	78	56	70	37	87	67	86	40	77	51	64	58	78	61	76	61	73	56	74	55	75	29	78	62	84	42	78	59
11....	80	60	66	53	88	65	81	54	83	67	69	61	79	68	80	65	80	66	78	66	76	50	82	64	78	50	81	66
12....	80	60	67	45	87	55	80	53	76	64	68	60	80	67	78	62	79	65	76	64	72	42	78	61	66	53	78	63
13....	78	61	69	49	85	64	80	55	76	61	66	59	77	59	78	62	76	56	72	58	69	45	77	62	73	58	76	60
14....	78	59	69	42	84	65	81	45	75	58	70	59	77	56	80	59	76	57	74	59	74	37	76	57	76	47	75	58
15....	75	55	71	43	85	61	77	43	77	47	66	58	78	64	77	58	69	53	70	56	80	44	76	61	54	46	75	58
16....	75	58	71	39	88	62	81	46	59	42	61	58	78	64	74	60	71	48	71	55	73	29	77	63	40	40	74	59
17....	73	54	63	44	87	61	69	40	58	36	73	61	64	48	78	60	77	57	68	46	65	30	76	52	40	32	71	41
18....	54	44	61	42	81	53	50	35	41	34	65	60	54	48	66	56	62	48	48	43	57	33	56	45	46	35	43	39
19....	65	45	61	35	71	45	71	32	48	38	63	56	58	52	73	56	53	45	49	43	65	26	56	47	60	31	50	42
20....	70	51	70	32	73	50	82	44	76	47	69	60	69	58	76	59	72	49	72	49	74	36	64	50	62	32	67	50
21....	81	47	73	50	93	55	83	50	66	37	70	64	82	62	81	62	84	63	81	46	68	34	78	50	50	50	81	45
22....	57	47	64	43	86	53	68	34	43	31	68	50	62	48	70	50	72	44	51	38	40	24	60	45	39	32	49	38
23....	51	45	46	38	68	39	44	33	41	39	51	47	48	45	50	46	50	40	45	40	36	28	46	42	51	35	43	39
24....	53	45	54	43	65	47	57	34	49	37	65	50	51	45	62	48	50	40	48	39	60	33	54	42	56	34	48	41
25....	59	45	59	41	75	57	75	35	68	47	65	62	71	50	75	60	75	47	65	48	73	33	66	49	63	37	65	48
26....	71	52	65	42	81	59	78	41	73	57	68	63	78	59	77	60	75	45	75	62	66	37	75	60	68	52	74	56
27....	71	54	70	42	84	51	75	42	80	62	70	63	79	66	78	64	77	63	76	64	70	32	79	65	56	48	76	64
28....	76	58	77	45	87	67	82	48	71	49	68	63	77	64	71	64	80	60	76	63	63	38	78	64	65	42	75	62
29....	82	56	73	43	88	65	85	45	84	61	72	63	80	65	81	64	81	62	78	64	80	48	82	64	86	42	81	60
30....	91	49	75	48	94	55	87	55	86	62	70	64	83	60	84	62	86	59	84	61	77	42	87	57	88	54	88	58
31....	92	51	76	43	94	47	90	54	93	63	70	64	82	62	82	61	83	58	84	62	84	50	85	56	.....	55	85	59
Mns..	69.2	44.5	62.0	37.1	79.7	50.8	72.1	38.3	64.0	42.6	63.8	54.2	64.9	51.2	70.9	52.8	69.4	47.0	64.7	47.2	63.9	30.0	69.1	49.1	58.5*	37.2	66.1	46.0

* Haskell substituted temporarily for Seymour on account of absence of observer from latter place.