

CLIMATOLOGICAL DATA

12

KANSAS SECTION

S. D. FLORA

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GENERAL SUMMARY

Outstanding features of this year were an unusual prevalence of dust storms during the early spring, disastrous floods in May and June, a severe drought and hot spell in July and August, and fall and early winter months that were wet and inclined to excessive cloudiness, except in the more western counties.

The average precipitation for the State was 28.47 inches, which is 1.64 inches above normal, 8.45 inches greater than the corresponding figure for 1934, and the greatest amount for any year since 1928. Almost half the total fall of the year, however, occurred in May and June. The first four months of the year were each deficient in moisture and July was the third driest month of the name on the State-wide record.

As a rule, the year's precipitation was above normal over the eastern half of the State and below over the western half, being generally the most deficient in the southwestern counties, though, even in that section, it was greater than during the year previous. The average for the eastern third was 41.59 inches; the middle third, 27.67 inches; and the western third, 15.29 inches. The greatest total for the year was 53.67 inches at Parsons and the least, 8.83 inches at Tribune, Greeley County. The average snowfall of the year was the least on record.

The average temperature, 55.9°, was 1.1° above normal and 2.6° lower than that of the year preceding. The highest recorded was 113° on July 10 at Phillipsburg which has been exceeded in only 9 of the 48 years preceding. The lowest was 19° below zero at St. Francis on January 21.

The first four months were fairly favorable for wheat in the eastern half of the State but generally unfavorable over the western half. Wet weather in May and June proved unfavorable for harvest.

Corn had a late and unsatisfactory start on account of cool weather in April and May and excessively wet soil in June. The hot, dry weather of July and the first 19 days of August proved disastrous to the crop in most sections. Pastures and forage crops also suffered greatly during this period.

Rains that began late in August and continued through September, except in some of the western counties, proved favorable for sowing wheat and gave the crop a good start, except in the western third where soil moisture was still deficient at the close of the year.

In the eastern third, especially the southeastern counties, the fall months were too wet for gathering forage crops and pasturing wheat.

Sixteen tornadoes occurred in the State during the year, which is the same number as in the previous year and two less than the 22-year average. Property damage totalled \$357,450. No lives were lost. Only two of these resulted in losses as great as \$100,000. The most destructive one struck Montgomery County on February 24 and crossed a part of Independence with a total property loss of \$150,000. The other occurred in Sumner County on June 2, with a loss of \$100,000, mostly to rural districts.

Eleven violent wind storms, not tornadoes, were reported, with a total property loss of \$105,400, but no loss of life. The most destructive of these swept over Cherokee County on August 12, causing damage estimated at \$50,000, which was mostly

to power and telephone lines and to buildings in Columbus.

Twenty six hailstorms or occurrences of heavy hail were reported. Loss from this cause was estimated at \$496,500. The

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COMPARATIVE ANNUAL DATA

Year	Temperature			Precipitation					Sky			
	State Mean	Highest	Lowest	Eastern Division	Middle Division	Western Division	State	Days with 0.1 inch or more	Snowfall (unmelted)	Clear days	Partly cloudy days	Cloudy days
1887	54.4	111	-32	27.99	22.06	20.06	23.37	.....	.....	.....	.....	.....
1888	53.6	110	-32	31.64	17.96	20.70	23.43	60	13.9	177	114	76
1889	53.6	108	-17	37.49	30.35	20.49	29.44	56	9.6	167	109	89
1890	54.8	113	-22	31.17	19.12	13.19	21.16	53	15.8	152	129	84
1891	53.0	108	-10	33.75	33.32	26.35	31.14	69	20.5	148	135	82
1892	52.6	111	-34	40.05	28.34	18.70	29.02	68	17.2	157	123	86
1893	53.7	114	-18	30.23	18.58	11.93	20.25	53	7.6	184	127	54
1894	54.7	114	-26	28.76	21.25	12.19	20.72	52	16.9	202	104	59
1895	53.2	110	-25	37.99	24.88	21.39	28.08	61	16.2	174	111	90
1896	55.8	114	-18	35.77	30.82	19.58	28.72	63	6.9	164	120	82
1897	55.1	113	-16	27.56	22.91	22.91	24.45	65	25.1	174	114	77
1898	54.2	110	-23	42.21	30.56	22.64	31.79	67	21.4	189	100	76
1899	54.1	110	-34	32.16	28.34	18.26	26.26	67	19.5	173	115	77
1900	55.8	110	-15	37.90	27.39	18.51	27.96	68	17.9	182	107	76
1901	55.4	112	-21	25.31	21.33	17.34	21.35	61	22.9	194	106	65
1902	54.1	112	-22	46.23	34.59	22.40	34.42	74	19.8	171	101	93
1903	53.4	110	-22	41.88	32.41	19.78	31.35	77	21.3	178	106	81
1904	54.2	104	-19	41.72	30.11	21.22	31.01	75	8.6	191	95	80
1905	53.5	112	-40	39.85	29.53	22.94	30.77	75	21.0	187	95	83
1906	54.4	105	-15	34.00	28.65	23.16	28.58	77	18.0	172	98	96
1907	54.9	109	-12	35.67	25.88	17.83	26.46	74	13.4	181	94	90
1908	55.8	110	-11	45.82	31.88	19.22	32.39	74	6.8	186	104	76
1909	54.4	114	-20	40.36	30.99	22.09	31.58	76	21.0	178	102	85
1910	55.7	111	-26	29.28	17.91	11.81	19.67	57	18.3	177	102	86
1911	56.1	116	-28	31.89	24.89	16.82	24.53	68	18.3	177	102	86
1912	52.9	111	-33	33.16	25.67	21.33	26.69	65	33.4	192	94	80
1913	55.5	116	-30	29.70	21.99	17.37	23.02	69	23.1	184	94	87
1914	55.8	111	-20	31.93	19.83	17.47	23.08	66	14.8	183	101	81
1915	53.7	105	-22	50.70	39.30	29.83	40.77	95	27.4	160	97	108
1916	54.1	109	-22	35.44	23.24	12.65	23.84	67	19.1	203	82	81
1917	53.2	112	-17	25.16	18.99	14.86	19.60	61	8.7	204	89	72
1918	55.2	115	-32	32.14	29.00	21.73	27.60	75	25.2	193	87	85
1919	53.9	111	-25	30.43	21.19	20.33	25.65	69	19.2	187	89	89
1920	54.5	110	-21	33.87	25.90	20.20	26.65	70	11.5	179	99	88
1921	57.6	111	-7	33.62	21.48	17.49	24.19	63	10.1	188	102	75
1922	55.8	113	-14	39.17	30.62	17.24	29.01	68	12.8	206	89	70
1923	54.9	113	-13	35.42	31.35	28.85	31.88	82	9.3	179	100	86
1924	53.0	111	-27	33.99	22.36	16.31	24.23	69	37.6	193	97	76
1925	55.6	112	-19	32.62	24.79	17.84	25.08	69	11.3	199	92	74
1926	55.2	112	-14	35.25	24.91	14.19	24.80	72	21.0	189	96	80
1927	55.0	106	-19	45.76	32.18	19.26	32.40	75	14.4	186	88	91
1928	55.2	105	-22	40.33	33.06	26.84	33.40	76	12.9	204	85	77
1929	53.2	110	-20	36.33	28.66	18.80	27.06	74	19.4	173	93	99
1930	55.5	114	-31	31.56	26.19	22.91	26.87	66	12.3	206	85	74
1931	57.4	113	-4	36.85	25.14	15.66	35.90	70	16.6	197	90	78
1932	54.7	110	-26	30.02	24.25	17.00	23.76	69	20.9	192	97	77
1933	57.8	116	-28	29.24	19.39	17.90	22.18	62	4.3	214	91	60
1934	58.5	119	-20	28.69	20.23	11.14	20.02	60	16.5	214	85	66
1935	55.9	113	-19	41.59	27.67	15.29	28.47	73	4.5	177	90	98
Period	54.8	119	-40	35.09	26.26	19.06	26.83	68	16.2	184	101	80

CLIMATOLOGICAL SUMMARY, 1935

Month	Temperature, in degrees Fahr.					Precipitation, in inches					Sky			
	Mean	Departure from the normal	Highest	Date	Lowest	Date	Total	Departure from the normal	Total snowfall (unmelted)	Days with 0.1 inch or more	Number of clear days	Number of partly cloudy days	Number of cloudy days	Prevailing direction of wind
January	35.0	+5.1	74	26	-19	21	0.61	-0.05	0.2	2	16	7	8	s.
February	38.8	+5.6	84	21	-10	26	0.79	-0.22	0.9	4	14	5	9	n.
March	51.0	+7.8	90	15	0	7	0.82	-0.62	1.1	4	14	9	8	s.
April	52.3	-2.4	90	14	20	7	1.73	-1.46	T.	5	11	8	11	s.
May	59.0	-4.7	98	11	27	5	7.08	+4.01	0.0	15	6	10	16	ne.
June	71.0	-2.7	104	9	38	7	5.08	+1.08	0.0	12	13	11	6	s.
July	84.3	+5.5	113	10	53	14	0.68	-2.56	0.0	2	25	5	1	s.
August	80.4	+2.9	112	11	43	30	2.95	-0.22	0.0	7	18	9	4	s.
September	69.1	-0.4	102	13	31	27	3.17	+0.36	0.1	5	21	4	5	s.
October	56.1	-0.9	91	12	17	24	2.88	+0.91	T.	7	14	8	9	s.
November	40.2	-3.1	75	8	3	11	2.31	+1.06	1.1	7	11	6	13	n.
December	33.8	+1.0	65	22	-3	27	0.27	-0.58	1.1	3	15	8	8	nw.
Year	55.9	+1.1	113	10	-19	21	28.47	+1.64	4.5	73	177	90	98	s.

† On other dates also.

Climatological Data for 1935

Stations	Counties	Elevation in ft.	Temperature, in degrees Fahr.						Precipitation, in inches						Sky			Observers				
			Length of record yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record yrs.	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snow-fall (un-melted)	No. days with 0.1 in. or more prepn.	Clear days		Part. cloudy days	Cloudy days	Prevailing direction of wind	
Eastern Division																						
Atchison	Atchison	973	45	54.3	105	Aug. 9	- 9	Jan. 21	45	33.17	9.58	May	0.36	Dec.	1.6	111	145	90	130	A. Lingenfelter, O.S.B		
Bazaar (near)	Chase	1,260	31		101	July 30	- 7		31	38.60	9.91	May	0.15	July	0.5					Mrs. T. H. McCabe		
Blue Rapids	Marshall	1,105							29	31.36	7.02	June	0.03	Jan.	4.7	79				Chas. S. Saville		
Burlington	Coffey	1,010	42	56.7	106	Aug. 11	- 6		42	42.84	9.54	May	0.32	July	0.8	77	149	89	127	Mabel M. Hunt		
Carbondale	Osage	1,078							14	42.04	11.82	May	0.08		1.7					W. A. Lowes, Jr.		
Centralia	Nemaha	1,256	26	53.5	106	9†	- 9		26	31.84	7.41	June	0.17	Jan.	4.0	96				A. E. Meyers		
Chanute	Neosho	1,940	31	57.8	106	11	- 4		31	37.29	17.29	May	0.30	July	0.2	85	153	93	119	Fletcher Maclary		
Coffeyville	Montgomery	744							7	46.70	9.22	May	0.90							Andrew Smith		
Columbus	Cherokee	598	45	57.3	103	9	- 3		45	50.49	13.25	May	0.23		2.2	117	123	86	156	O. E. Skinner		
Council Grove	Morris	1,234	26	55.6	107	9	- 7		26	38.88	8.20	May	0.11		2.3	80	115	150	160	A. H. Prater		
Elmdale	Chase	1,195							12	36.53	10.98	May	0.08							Mrs. R. S. Patterson		
Emmett	Pottawatomie	1,024							23	30.09	9.21	May	0.22		2.3	106				D. F. Miller		
Emporia	Lyon	1,138	54	55.5	107	11	- 8		55	43.84	9.30	May	0.25	Dec.	1.0	104	166	52	147	Wm. G. Thomas		
Eskridge	Wabaunsee	1,412	29	54.8	105	11	- 9		29	36.56	12.89	May	0.00	July	2.1	79	179	104	79	J. O. Warren		
Eureka (near)	Greenwood	1,079	39	56.7	107	11	- 6		39	37.77	11.59	May	0.23	Dec.	1.2	90	154	108	103	Ed. Knudsen		
Fort Scott	Bourbon	857	60	57.4	105	9†	- 4		60	52.87	11.28	May	0.26	July	10.1	116				E. A. Shaver		
Fredonia	Wilson	864	32	57.4	110	11	- 5		32	45.07	12.36	June	0.17		4.0	107	161	56	148	B. W. Holmes		
Garnett	Anderson	1,046							24	48.12	9.10	May	0.39		112	146	105	114		C. C. Blood		
Holton	Jackson	1,043							24	33.53	9.00	May	0.05	Mar.	0.9	100				W. E. Osterhold		
Horton (near)	Brown	1,188	46	54.4	105	9	- 10	Jan. 21	46	32.37	7.33	June	0.10		100					H. L. Lingo		
Howard	Elk	1,112							24	46.12	10.63	May	0.03	July	4.0	94	151	114	100	sw.	J. R. Kinsley	
Independence	Montgomery	800	60	58.4	109	8	- 3		64	40.04	9.45	June	0.03	July	2.0	112	140	54	171	F. L. Kenoyer		
Iola 1	Allen	963	31	57.3	102	9†	- 5		31	49.51	12.08	May	0.32	Dec.	5.2	115	98	128	139	sw.	U. S. Weather Bureau	
Iola 2	Allen	957							4	47.93	11.65	May	0.33							Roy D. Crawford		
Junction City	Geary	1,078							11	35.03	10.29	May	0.22	Jan.	4.5	90	152	124	89	sw.	L. W. Sargent	
Kansas City (Sub)	Johnson	890										May	0.36	Dec.						R. E. Lunt		
La Cygne	Linn	827							7	39.30	7.48	May	0.20	July	0.6	86	179	64	121	Mrs. Ida H. Dyer		
Lawrence	Douglas	1,018	67	55.8	105	Aug. 9	- 7		67	42.93	11.00	May	0.30	Dec.	1.7	112	127	103	135	s.	Prof. C. J. Posey	
Leavenworth	Leavenworth	913	81	55.8	102	July 28†	- 6		81	47.07	12.47	May	0.21		2.0	104	195	30	139	s.	M. R. Rhodes	
Lebo	Coffey	1,138	49	55.6	106	Aug. 7	- 7		49	40.98	9.60	May	0.07	July	1.3	95	155	105	104		L. J. Bowman	
LeRoy	Coffey	990							26	43.68	10.14	May	0.28	Dec.	1.9	95					F. W. Schmitt	
Lyndon (near)	Osage	1,006							12	43.11	14.09	May	0.02	July	2.0	83					H. E. Olson	
McFarland	Wabaunsee	1,025							17	37.98	11.65	Aug.	0.04		2.0	82					C. H. Fornash	
Manhattan	Riley	1,100	77	56.2	110	7†	- 7		77	37.71	8.79	May	0.04		5.5	102	187	72	106	n.	G. E. Raburn	
Neosho Rapids	Lyon	1,092							30	41.09	8.08	May	0.12		0.7	81					sw.	Jas. F. Irwin
Oketo	Marshall	1,231	27	54.0	112	9	- 9		27	35.88	10.04	May	0.22	Dec.	14.5	136	125	99	141		E. A. Church	
Olathe	Johnson	1,032	40	55.1	101	Aug. 9	- 7		40	49.29	16.07	May	0.33		2.7	101	154	79	132	nw.	J. T. Randall	
Osage City	Osage	1,081	37	55.7	107	July 31	- 8		37	44.92	13.33	June	0.13	July	1.5	113	130	131	104		M. E. Nichols	
Oswego	Labette	899	35						46	47.74	12.12	June	0.12		2.5	96					G. W. Albrecht	
Ottawa	Franklin	891	41	55.2	102	Aug. 9	- 7		41	39.76	9.10	May	0.56	Dec.	1.2	109					W. J. Sheldon	
Overbrook	Osage	1,100							8	39.59	12.25	May	0.02	July	3.3	116	136	96	133	s.	F. C. Butel	
Overbrook (near)	Douglas	1,100							14	43.65	12.55	May	0.34		2.7	99					Walter Schwarz	
Paola	Miami	865							29	44.05	11.56	May	0.23		2.4	103					C. W. Ricketts	
Parsons	Labette	898	11	58.6	108	11	- 3		11	53.67	17.08	June	0.01		1.0	87	136	125	104	sw.	Jas. M. Currihan	
Pittsburg	Crawford	934							22	43.89	13.77	May	0.26			94	94	137	127		W. F. Connor	
Pleasanton	Linn	862							33	42.34	5.44	May	0.37	Dec.	2.2	88	163	93	109		Samuel Tucker	
Pomona (near)	Franklin	1,000							14	37.23	11.51	May	0.05	July	1.0	93	166	52	145		Mrs. Dora A. Scovill	
Quenemo	Osage	941							23	39.32	10.70	May	0.23		64						W. T. Windett	
Randolph	Riley	1,052							18	36.14	7.29	Sept.	0.12	Jan.	4.7	89	198	58	109		F. J. Newman	
Reading	Lyon	1,079							16	41.07	11.04	May	0.21	Dec.	T.	84					E. M. Cross	
Sedan	Chautauqua	834	50	58.2	108	Aug. 7†	- 3		50	44.67	9.30	June	0.44	July	1.2	101	220	81	64	s.	A. B. Read	
Tonganoxie (near)	Leavenworth	829							5	46.08	11.10	May	0.28	Dec.	1.0	85	175	81	109	n.	D. F. Smith	
Topeka 1	Shawnee	926	49	55.7	108	11	- 7	Jan. 21	49	37.31	11.08	May	0.03	July	2.5	116	132	117	116	s.	U. S. Weather Bureau	
Topeka 2	Shawnee	908	1	56.1	108	July 28†	- 6		1	36.92	10.07	May	0.18		2.5	110					A. D. Robb	
Toronto	Woodson	1,040	38	57.3	106	Aug. 11	- 5		38	48.11	14.68	May	0.00		1.2	82	193	75	97	s.	M. A. Webb	
Valley Falls	Jefferson	913	36	55.5	108	9	- 9		36	42.10	12.90	May	0.33	Dec.		100					J. M. Piazek	
Vinland	Douglas	880							26	49.61	11.91	May	0.54		T.	78					A. Schick	
Wagstaff	Miami	975							1	45.93	13.57	May	0.45								S. A. Smith	
Walnut	Crawford	940							33	53.56	13.32	May	0.30	July	0.5						H. L. Holland	
Wamego	Pottawatomie	922	42	56.2	109	9	- 7		42	32.71	8.02	May	0.02	Jan.	1.0	89					B. A. Larson	
Wheaton	Pottawatomie	1,450							18	36.04	9.18	May	0.27	Jan.	6.9	86					Walter Kral	
Willard	Shawnee	917							7	34.90	10.71	May	0.00	July							I. S. Lauck	
Kansas City, Mo.		741	48	55.9	104	Aug. 9	- 6		48	33.86	9.99	May	0.25	Dec.	3.4	115	115	96	154	sw.	U. S. Weather Bureau	
St. Joseph, Mo.		957	27	54.2	104	Aug. 9	- 9		27	34.61	8.20	May	0.11	July	1.7	113	154	79	132	se.	U. S. Weather Bureau	
For the Division				56.0	112	9	- 10	Jan. 21		41.59	17.29	June	0.00	July	2.6	99	152	92	121	s.	U. S. Weather Bureau	
Middle Division																						
Alden	Rice	1,684	25	56.6	107	Aug. 7	- 8	Jan. 21	25	22.54	8.02	May	0.02	Dec.	2.8	85	188					

Climatological Data for 1935—Continued

Stations	Counties	Elevation in ft.	Temperature, in degrees Fabr.						Precipitation, in inches						Sky					Observers	
			Length of record yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record yrs.	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snow-fall (in. or more precipn.)	No. days with 0.1 in. or more precipn.	Clear days	Part. cloudy days	Cloudy days		Prevailing direction of wind
<i>Middle Division—Continued</i>																					
Hesston	Harvey	1,483																		Amos Gingerich	
Hoisington	Barton	1,880																		F. C. Eilgen	
Hudson	Stafford	1,867																		C. E. Durham	
Hutchinson	Reno	1,535	30	56.3	108	Aug. 11	-6	Jan. 21	45	38.59	34.02	0.12	Aug.	5.5	81	162	58	145		Mrs. E. F. Ploughe	
Kingman	Kingman	1,504																		L. G. Dale	
Kinsley	Edwards	2,171																		Mrs. C. G. Lewis	
Larned	Pawnee	2,090	50	56.6	107	July 11	-10	Jan. 21	50	22.86	8.21	0.02	Dec.	1.0	76	147	145	73		H. H. Wolcott	
Lincoln	Lincoln	1,374	23	56.2	111	Aug. 9†	-10	Jan. 21	23	24.14	6.69	0.02	May	3.5	67	122	120	123		R. W. Greene	
Lindsborg	McPherson	1,333																		A. J. Fredrickson	
Lyons	Rice	1,696																		H. L. Ramage	
McPherson	McPherson	1,495	39	56.9	109	Aug. 11	-8	Jan. 21	49	25.13	6.67	0.16	May	7.2	83					Ed. Haberlein, Jr.	
Marion	Marion	1,310																		Dr. P. J. Garrison	
Medicine Lodge	Barber	1,475	42	58.6	109	Aug. 11	-3	Jan. 21	42	26.84	11.95	0.19	July	2.0	64	185*	105*	73*		S. P. Garrison	
Medora	Reno	1,484																		A. M. Bear	
Minneapolis	Ottawa	1,259	45	55.7	108	July 11†	-8	Jan. 21	45	25.44	6.72	0.01	Jan.	3.6	79	199*	92*	72*		E. G. Sidener	
Mt. Hope	Sedgwick	1,410																		W. R. Ives	
Newton	Harvey	1,454	33	55.9	106	Aug. 11	-9	Jan. 21	33	33.37	12.21	0.20	May	0.7	98	141	90	134		E. W. Swim	
Norwich	Kingman	1,496	39	58.3	108	Aug. 11	-6	Jan. 21	39	32.12	10.43	0.08	July	3.2	78	204	87	74		J. A. Green	
Phillipsburg	Phillips	1,939	44	55.2	113	July 10	-11	Jan. 21	44	21.76	5.19	0.09	Jan.	9.0	87	159	87	119		Mrs. Lila A. Lane	
Plainville	Rooks	2,156	29	55.1	110	Aug. 11	-11	Jan. 21	29	25.78	7.36	0.07	July	8.5	89	152	41	72		Chas. Lambert	
Pratt	Pratt	1,880	40	57.6	108	July 11	-6	Jan. 21	40	23.45	9.02	0.07	T.	3.0	56					Chas. W. Pratt	
Russell	Russell	1,834	35	55.7	112	Aug. 11†	-11	Jan. 21	35	19.30	5.58	0.01	Jan.	4.3	62	57	244	64		C. W. Woolman	
Salina	Saline	1,227	51	57.3	111	Aug. 11	-7	Jan. 21	51	32.59	8.58	0.16	May	7.9	102	162	99	104		E. A. Laubergayer	
Sedgwick	Harvey	1,377																		Ernest Koch	
Smith Center	Smith	1,800	15																	A. E. Nelson	
Trousdale	Edwards	2,050																		H. L. Cudney	
Wellington	Sumner	1,228	38	58.1	111	Aug. 11	-5	Jan. 21	38	34.73	7.39	0.02	Dec.	1.7	59					L. H. Sarchet	
Wichita	Sedgwick	1,300	48	57.0	105	Aug. 11	-7	Jan. 21	48	36.23	11.22	0.25	May	1.5	98	131	93	141		U. S. Weather Bureau	
Winfield	Cowley	1,124	41	58.6	108	Aug. 11†	-4	Jan. 21	41	36.34	11.22	0.36	July	1.0	61	186*	52*	125*		M. B. Light	
For the Division				56.4	113	July 10	-12	Jan. 21		27.67	14.02	0.00	Jan.	4.3	76	171	94	100			
<i>Western Division</i>																					
Ashland	Clark	1,951	48	58.0	108	July 11	-7	Feb. 26	48	20.94	6.68	0.12	April	4.0	55	189	85	91		M. G. Stevenson	
Atwood	Rawlins	2,894	38																	A. H. Hilbert	
Bird City (near)	Cheyenne	3,449																		Henry Weaver	
Bucklin	Ford	2,418																		F. A. Gresham	
Cimarron	Gray	2,625	23	56.0	107	July 11†	-2	Feb. 26	23	16.60	5.69	0.13	April	3.5	217*	33*	110*			R. R. Cruisnbery	
Colby	Thomas	3,138	44	53.8	109	Aug. 11†	-16	Jan. 21	44	13.23	3.88	0.03	Jan.	13.5	58	230	71	64		J. B. Kuska	
Deerfield (near)	Kearny	2,622	61	56.0	106	July 11	-8	Jan. 21	61	13.45	4.32	0.03	Mar.	1.0	45					C. C. Butler	
Dodge City	Ford	2,522	41	54.5	112	July 11	-15	Jan. 21	41	15.09	4.40	0.01	April	4.0	73	179	97	89		U. S. Weather Bureau	
Dresden	Decatur	2,731	41	54.5	112	July 11†	-6	Jan. 21	41	14.09	5.05	0.01	Jan.	7.9	50	189	82	94		W. W. Wernetta	
Elkhart	Morton	3,595	11																	Fred Sutton	
Garden City	Finney	2,836	46	56.2	108	Aug. 11†	-10	Jan. 21	46	9.65	2.95	0.02	May	3.7	37	292*	39*	33*		Ralph T. Kersey	
Goodland	Sherman	3,891	28	53.9	106	Aug. 11†	-15	Jan. 21	28	14.26	3.41	0.02	Jan.	9.0	71	144	144	77		P. J. Horton	
Healy	Lane	2,850	34																	H. S. Jennison	
Hill City	Graham	2,134	27																	Alvin L. Law	
Hoxie	Sheridan	2,700	36	54.7	105	Aug. 11†	-15	Jan. 21	36	13.04	3.77	0.00	May		42	197	82	86		Nelson Long	
Hugoton	Stevens	3,100																		S. T. Townsend	
Jetmore	Hodgeman	2,268	33																	C. H. Guthrie	
Johnson	Stanton	3,276	19	57.1	110	Aug. 11	-10	Jan. 21	19	9.89	2.87	0.02	April	4.5	45	128	115	122		C. E. Van Meter	
Kalvesta	Finney																			T. L. Byler	
Kismet (near)	Seward																			Dale E. Beard	
Lakin	Kearny	2,933	45	56.0	108	July 11	-11	Jan. 21	45	12.52	3.65	0.03	April	10.1	42	151*	103*	106*		J. W. Sinclair	
Leoti	Wichita	3,300	32	54.7	107	Aug. 11	-17	Jan. 21	32	14.21	4.60	0.00	July	4.4	164*	124*	74*			L. E. Gorsuch	
Liberal	Seward	2,843	28	58.6	109	July 11	-4	Jan. 21	28	14.42	3.62	0.10	April	3.7	45	221	86	58		Chas. E. Wood	
Minneola	Clark	2,558																		R. L. Rogers	
Ness City	Ness	2,260																		Knox Barnd	
Norton (near)	Norton	2,340	44	53.8	111	Aug. 11†	-12	Jan. 21	44	16.94	4.92	0.05	Jan.	3.1	57	184†	81†	90†		Sim Steffel	
Oakley	Logan	3,049	16	54.0	107	Aug. 11†	-15	Jan. 21	16	15.92	2.0	0.02	Jan.	5.3	49	158*	142*	64*		Prof. F. H. Bailey	
Oberlin	Decatur	2,539	48	53.2	106	Aug. 11†	-16	Jan. 21	48	15.11	4.27	0.00	May	8.8	67	205	114	46		E. W. Coldren	
Plains	Meade	2,766	18																	P. S. Dahl	
Quinter	Gove	2,664	6	53.5	107	Aug. 11†	-14	Jan. 21	9	25.32	10.13	0.02	Jan.	6.7	64	232	78	55		H. R. Tuttle	
Richfield	Morton	3,88																		C. C. Wilson	
St. Francis	Cheyenne	3,285	27	53.5	109	July 11	-8	Jan. 21	27	20.09	6.95	0.02	April	9.5	71	182	102	81		J. E. Uplinger	
Scott City	Scott	2,971	29	54.9	107	Aug. 11	-14	Jan. 21	29	15.54	5.05	0.06	Dec.	10.5	57	191†	102†	69†		Douglas Baker	
Scott City (near)	Scott	2,971																		B. E. Hale	
Sharon Springs	Wallace	3,440	6																	Gust A. Nelson	
Sublette	Haskell	2,911	22	56.1	107	July 11†	-6	Jan. 21	22	12.01	3.30	0.00	April	7.2	61	190†	85†	67†		Lloyd Van Metre	
Syracuse	Hamilton	3,227																		Henry Boltz	
Tribune	Greeley	3,612	36	53.3	104	Aug. 11†	-18	Jan. 21	36	8.82	2.61	0.08	April	3.7	187	145	33			T. B. Stinson	
Ulysses	Grant	3,050	37	56.4	106	Aug. 11	-9	Jan. 21	37	11.79	3.07	0.00	April	3.5	41	229*	76*	53*		Mrs. H. F. McCall	
Wakeeney	Trego	2,456	52	54.6	108	July 11†	-13	Jan. 21	52	23.93	7.85	0.00	Jan.	13.0	58	225	58	72		A. S. Peacock	

Monthly and Annual Mean Temperatures for the Year, 1935, with Departures from the Normal

Table with columns for Stations, January, February, March, April, May, June, July, August, September, October, November, December, and Annual. Each month column contains Temp. and Dept. values. The table lists numerous stations across three divisions: Eastern, Middle, and Western.

Monthly and Annual Mean Temperatures for the Year, 1935, with Departures from the Normal—Continued

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual				
	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.	Temp.	Dept.			
<i>Western Division—Continued</i>																													
Jetmore.....	39.2 ^a	+ 8.7	40.7	+ 6.6	52.3	+ 8.8	53.2 ^a	- 0.4	60.0	- 2.9	.....	.....	36.0 ^a	+ 6.9	82.4	+ 4.8	71.2 ^b	+ 1.2	56.0 ^b	- 0.9	40.6 ^b	- 2.9	36.0	+ 4.0	.....	.....	.....	.....
Johnson.....	38.6	+ 8.8	39.8	+ 4.0	50.6	+ 7.6	53.7	+ 0.5	58.8	- 4.0	75.0	+ 1.6	83.7	+ 4.7	81.2	+ 4.2	69.4	0.0	58.2	+ 1.9	40.2	- 2.0	35.6	+ 3.1	57.1	+ 2.4	.....	.....
Lakin.....	35.7	+ 5.8	40.2	+ 6.5	50.5	+ 6.6	53.0 ^b	- 0.5	58.5 ^a	- 4.5	73.6	+ 0.8	82.8	+ 4.9	77.8 ^a	+ 0.9	68.4	+ 0.1	57.2	+ 1.8	39.2	- 3.2	34.8	+ 3.6	56.0	+ 1.9	.....	.....
Leoti.....	36.1	+ 8.7	38.2	+ 5.0	48.0 ^b	+ 8.5	51.5 ^b	+ 0.4	56.0	- 4.8	70.7	- 0.3	82.8	+ 5.6	79.3	+ 3.6	67.2	- 0.0	54.8	+ 0.9	37.8	- 2.8	33.9	+ 4.7	54.7	+ 2.3	.....	.....
Liberal.....	42.2	+ 9.1	43.0	+ 5.6	53.8	+ 8.0	53.3	- 1.5	58.3	- 5.3	74.7	- 0.1	85.0	+ 5.0	81.8	+ 3.7	70.6	- 0.6	59.5 ^a	+ 1.1	43.4	- 2.0	37.8 ^b	+ 3.3	58.6	+ 2.1	.....	.....
Norton (near).....	33.9	+ 6.9	37.0	+ 5.5	47.5	+ 6.9	49.6	- 2.0	54.8	- 6.3	68.7	- 3.0	85.1	+ 7.5	79.4	+ 3.4	67.4 ^a	- 0.2	52.2	- 2.5	36.4	- 4.8	33.2	+ 4.0	53.8	+ 1.2	.....	.....
Oakley.....	36.0	+ 7.3	38.4 ^a	+ 3.1	47.3	+ 6.5	49.1	- 2.8	55.2	- 5.7	69.5	- 1.8	82.5	+ 5.2	78.8	+ 3.5	67.5	+ 0.4	54.0 ^a	- 1.2	36.4	- 4.7	33.3	+ 2.2	54.0	+ 0.9	.....	.....
Oberlin.....	33.4	+ 6.5	36.3	+ 5.2	46.4	+ 6.0	49.2	- 2.1	54.6 ^a	- 6.4	70.4	- 1.2	82.8	+ 5.0	78.4	+ 2.8	66.8	+ 0.1	51.8	- 1.8	35.8 ^a	- 4.5	32.4	+ 3.8	53.2	+ 0.9	.....	.....
Quinter.....	32.3	+ 3.8	36.8	+ 3.0	46.8	+ 4.7	48.8	- 3.0	55.0	- 6.8	69.0	- 3.0	83.2	+ 5.4	79.8	+ 4.3	68.1	+ 1.8	53.5	- 1.0	35.4	- 5.6	33.3	+ 2.9	53.5	+ 0.6	.....	.....
Richfield.....	39.0	+ 8.5	38.3 ^a	+ 3.4	49.8 ^a	+ 7.1	52.0 ^b	- 1.3	56.6 ^b	- 6.0	74.4	+ 1.6	84.1	+ 5.6	81.2	+ 4.7
St. Francis.....	32.3	+ 5.0	37.6	+ 4.8	45.6	+ 5.5	48.9	- 1.2	54.8	- 4.9	69.4	- 0.8	83.4	+ 7.0	77.9	+ 3.9	66.2	+ 0.7	53.6 ^a	+ 0.5	37.8	- 2.6	34.6 ^b	+ 6.3	53.5	+ 1.9	.....	.....
Scott City.....	35.5 ^b	+ 6.2	38.3	+ 3.7	48.4	+ 6.7	51.0 ^a	- 1.3	56.2	- 5.1	70.6	- 1.8	82.4	+ 4.7	79.8	+ 3.7	68.2	+ 0.1	55.6	+ 0.2	38.3	- 4.0	34.2	+ 3.3	54.9	+ 1.3	.....	.....
Sublette.....	39.1 ^b	+ 8.4	39.6	+ 5.3	50.4	+ 7.0	52.5	- 0.4	57.6	- 4.5	72.8	- 0.6	83.0	+ 3.9	79.7	+ 2.8	67.2	- 2.6	57.9	+ 1.6	40.3	- 2.9	34.0	+ 2.9	54.9	+ 1.4	.....	.....
Tribune.....	35.6	+ 8.6	36.4	+ 5.3	45.6	+ 6.5	49.2	- 0.9	54.4	- 5.7	69.8	- 0.8	81.0	+ 5.0	77.4	+ 3.1	66.1	+ 0.3	53.5	+ 0.3	36.5	- 3.6	33.2	+ 3.9	53.3	+ 1.6	.....	.....
Ulysses.....	38.6	+ 7.9	39.6	+ 5.7	50.6	+ 7.2	53.8 ^a	+ 0.1	57.8	- 5.5	73.4	+ 0.1	82.0	+ 3.6	80.2 ^a	+ 2.7	68.6	- 0.8	57.7 ^a	+ 1.3	40.2	- 2.4	34.6	+ 2.9	56.4	+ 1.8	.....	.....
Wakeoney.....	35.0	+ 5.1	38.6	+ 5.7	49.2	+ 7.2	50.3	- 2.7	56.3	- 5.8	63.8	- 3.5	83.6	+ 5.6	80.0	+ 2.8	68.1	- 0.6	53.3	- 2.7	37.5 ^a	- 5.2	35.1	+ 3.8	54.6	+ 0.7	.....	.....
For the Division.....	36.6	+ 6.9	38.7	+ 6.0	49.2	+ 7.6	51.4	- 1.4	56.7	- 5.4	71.2	- 1.2	83.6	+ 5.6	79.9	+ 3.5	68.2	+ 0.1	55.2	- 0.1	38.5	- 3.0	34.3	+ 2.7	55.3	+ 1.0	.....	.....
For the State.....	35.0	+ 5.1	38.8	+ 5.6	51.0	+ 7.8	52.3	- 2.4	59.0	- 4.7	71.0	- 2.7	84.3	+ 5.5	80.4	+ 2.9	69.1	- 0.4	56.1	- 0.9	40.2	- 3.1	33.8	+ 1.0	55.9	+ 1.1	.....	.....

† Evaporation station. The normal may be found by adding the departure when minus (-) or subtracting when plus (+).

KILLING FROSTS

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
<i>Eastern Division</i>					
Athol.....	April 16	Oct. 6	Clay Center.....	April 15	Oct. 23
Bazaar.....	.. 15	.. 23	Coldwater.....	.. 12	.. 23
Burlington.....	.. 15	.. 24	Concordia.....	.. 15	.. 24
Carbondale.....	.. 15	.. 6	Eldorado.....	.. 15	.. 23
Centralia.....	April 30	.. 6	Ellsworth.....	.. 15	.. 23
Chanute.....	.. 15	.. 24	Florence.....	.. 15	.. 23
Coffeyville.....	.. 15	.. 23	Greensburg.....	.. 12	.. 23
Columbus.....	April 15	Nov. 5	Hanover.....	.. 19	.. 23
Council Grove.....	.. 13	Oct. 23	Hays.....	.. 19	.. 23
Emmett.....	.. 15	.. 6	Herington.....	.. 15	.. 24
Emporia.....	.. 15	.. 24	Hutchinson.....	April 15	.. 24
Esbridge.....	.. 15	.. 23	Larned.....	.. 19	.. 24
Eureka.....	April 15	Oct. 23	Lincoln.....	.. 19	.. 24
Fort Scott.....	.. 15	.. 24	McPherson.....	.. 19	.. 24
Fredonia.....	.. 15	.. 23	Marion.....	.. 15	.. 23
Garnett.....	.. 15	.. 6	Medicine Lodge.....	April 15	Nov. 1
Horton.....	.. 15	Oct. 6	Minneapolis.....	.. 19	Oct. 23
Horton*.....	April 30	.. 6	Newton.....	.. 15	.. 24
Howard.....	.. 13	Nov. 5	Norwich.....	.. 8	Nov. 1
Independence.....	.. 15	Oct. 24	Phillipsburg.....	April 19	Oct. 10
Iola.....	.. 15	.. 23	Plainville.....	.. 15	.. 10
Junction City.....	.. 15	.. 23	Pratt.....	.. 12	Oct. 31
LaCygne.....	.. 15	.. 24	Russell.....	.. 19	.. 24
Lawrence.....	.. 16	.. 6	Salina.....	April 15	Oct. 23
Leavenworth.....	.. 16	.. 6	Wellington.....	.. 13	Nov. 1
Lebo.....	April 15	Oct. 24	Wichita.....	March 17	.. 1
Manhattan.....	.. 15	.. 24	Winfield.....	April 13	.. 1
Oketo.....	.. 16	.. 6	<i>Western Division</i>		
Olathe.....	.. 16	.. 6	Ashland.....	April 13	Oct. 31
Osage City.....	.. 16	.. 6	Atwood.....	.. 18	.. 10
Ottawa.....	.. 16	.. 6	Bird City.....	.. 10	.. 10
Overbrook.....	.. 15	.. 6	Cimarron.....	April 27	.. 10
Paola.....	.. 16	.. 6	Colby.....	.. 19	.. 10
Parsons.....	.. 16	Nov. 5	Deerfield*.....	.. 19	.. 31
Pittsburg.....	.. 16	.. 6	Dodge City.....	April 7	.. 31
Pleasanton.....	April 15	Oct. 23	Dresden.....	.. 19	Oct. 10
Pomona.....	.. 16	.. 6	Garden City.....	.. 29	.. 10
Randolph.....	.. 16	.. 23	Goodland.....	.. 19	.. 10
Reading.....	.. 16	.. 24	Healy.....	.. 19	.. 10
Sedan.....	.. 13	Nov. 1	Hill City.....	.. 19	Oct. 10
Topeka.....	.. 16	Oct. 6	Hoxie.....	April 19	.. 10
Toronto.....	.. 15	.. 24	Hugoton.....	.. 10	.. 31
Valley Falls.....	.. 19	.. 6	Jetmore.....	.. 12	.. 24
Vinland.....	.. 16	.. 6	Johnson.....	.. 29	.. 31
Walnut.....	.. 16	.. 6	Kaivesta.....	.. 10	Oct. 10
Wamego.....	April 15	Oct. 24	Kismet*.....	.. 12	.. 23
Wheaton.....	.. 8	Oct. 6	Lakin.....	April 25	.. 31
Kansas City, Mo.....	.. 15	.. 6	Leoti.....	.. 20	.. 10
St. Joseph, Mo.....	.. 16	.. 6	Liberal.....	.. 13	Oct. 23
<i>Middle Division</i>					
Alden.....	April 15	Oct. 24	Minneola.....	.. 15	.. 31
Alton.....	.. 15	.. 10	Norton.....	April 15	.. 10
Anthony.....	April 13	Nov. 1	Oakley.....	.. 19	.. 10
Arkansas City.....	.. 15	.. 10	Oberlin.....	.. 19	Oct. 10
Augusta.....	.. 15	.. 10	Quinter.....	.. 19	.. 10
Belleville.....	.. 19	Oct. 6	Richfield.....	.. 27	.. 31
Beloit.....	.. 19	.. 6	St. Francis.....	.. 15	Oct. 10
Bennington.....	.. 19	.. 23	Scott City.....	.. 19	.. 10
Bison*.....	.. 19	.. 23	Sublette.....	April 10	Oct. 10
Burr Oak*.....	.. 19	.. 23	Syracuse.....	.. 12	.. 23
Chapman.....	.. 15	.. 24	Tribune.....	.. 27	.. 10
..... (near)	.. 15	.. 24	Ulysses.....	.. 29	.. 10
.....	.. 15	.. 24	Wakeoney.....	.. 15	Oct. 23

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two outstanding hailstorms of the year occurred in June. The first, on June 20, originated in Washington County and passed diagonally across most of Marshall County, accompanied by a high wind that was very destructive in Frankfort. Hail damage from this storm was placed at \$110,000. The other occurred in Cheyenne County on June 25, with damage, chiefly to crops, estimated at \$108,000. In some parts of its path hail stones drifted to depths of 4 to 5 feet.

Every stream of importance in the State overflowed at some time during May or June and minor overflows occurred in some of the other months. The total flood damage along the basins of the principal streams was estimated at \$8,599,525 and ten lives were lost.

Damage by drainage basins was reported as follows: Republican, \$2,823,100; Kansas, \$2,131,100; Neosho, \$936,650; Osage (Marais des Cynes), \$723,600; Smoky Hill, \$718,800; Solomon, \$508,575; Verdigris, \$333,000; Arkansas, \$172,600; Blue, \$141,100; Cottonwood, \$101,000; and Marmaton, \$10,000. The major portion of this damage was to highways, bridges, and prospective crops.

The outstanding flood of the year was along the Republican River. The fast moving and disastrous crest of this flood reached Cheyenne County, in the northwest corner of the State, on the early morning of May 31, causing a loss of \$368,000 and the death of four persons in that County alone. After causing immense damage in Nebraska, this crest recrossed the Kansas-Nebraska line above Concordia on the night of June 1-2 and by the evening of June 3 had passed into the Kansas River near Junction City. All existing high water records were broken by the following crest stages: Guide Rock, Nebr., 24.0 feet; Scandia, Kans., 17.8 feet; Concordia, 17.05 feet; and Clay Center, 25.70 feet. All bridges along the Republican in Kansas were either washed away or greatly damaged.

The crest of this flood connected very closely at Manhattan with a crest from the Blue River and resulted in a stage at that place approximately two feet lower than the crest of the 1903 high water mark, the highest on record there. At Wamego and Topeka the crest closely approached the 1908 high water marks but it flattened out noticeably as it approached the lower reaches of the Kansas River.

Beloit, on the Solomon River, reached the record breaking stage of 34.50 feet on June 3 and, altogether, registered eight overflows of varying magnitude.

Continued on page 104

Monthly and Annual Precipitation for the Year, 1935, with Departures from the Normal

Table with columns for Stations, months (January-December), and Annual. Each month has two sub-columns for Precipitation and Departure. The table lists numerous stations across different divisions (Eastern, Middle, Western) and provides their respective precipitation and departure values for 1935 compared to the normal.

Monthly and Annual Precipitation for the Year, 1935, with Departures from the Normal—Continued

Table with columns for Stations, months (January-December), and Annual. Rows include Middle Division (Kingman, Kinsley, Larned, Lincoln, Lindsborg, Lyons, McPherson, Marion, Medicine Lodge, Medora, Minneapolis, Mt. Hope, Newton, Norwich, Phillipsburg, Plainville, Pratt, Russell, Salina, Sedgewick, Smith Center, Trousdale, Wellington, Wichita, Winfield, For the Div.), Western Division (Ashland, Atwood, Bird City, Bucklin, Cimarron, Colby, Deerfield, Dodge City, Dresden, Elkhart, Garden City, Goodland, Healy, Hill City, Hoxie, Hugoton, Joplin, Johnson, Kalvesta, Kismet, Lakin, Leoti, Liberal, Minneola, Ness City, Norton, Oakley, Oberlin, Plains, Quinter, Richfield, St. Francis, Scott City, Scott City, Sharon Springs, Sublette, Syracuse, Tribune, Wickenburg, Wakeeney, For the Div., For the State).

T. Indicates a trace, or less than 0.005 inch. The normal may be found by adding the departure when minus (-) or subtracting when plus (+). † Evaporation station. * Interpolated.

MONTHLY AMOUNTS OF EVAPORATION—INCHES—AND WIND MOVEMENT—MILES—DURING THE YEAR

Table with columns for Stations, Data, and months (Jan.-Dec.). Rows include Tribune (Evaporation, Wind movement) and Tribune (Evaporation, Wind movement).

