



**2024 Dryland Indigo 229 Bio-Fungicide (*Kosakonia cowanii* strain SYM00028)
and Indigo WT29 Endophyte (*Cladosporium tenuissimum*) Trial - Lonestar Gin**

**Eric Eyster Farm
Custer City, OK**

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Summary

In 2019, a cotton variety testing program was established as a new service created by Windstar Inc. affiliated gins. These gins are working together to support a Cotton Agronomics Manager position. One of the components of this program is to work with local producers to scientifically evaluate varieties in a commercial on-farm setting from planting through ginning. These unique replicated trials are planted and harvested with the grower's commercial equipment. Each variety's round modules are combined across all replicates and then ginned and classed separately in an extremely detailed manner. Purging and weighing any remnant bale from the press is also performed for each variety. All lint samples from each variety's commercial bales are then classed by the USDA-AMS classing office. This detailed ginning and classing management of all round modules for each variety is key to the success of this program and to the best of our knowledge is without peer in the U.S. ginning industry.

At this site in 2024, a product trial consisting of three treatments including 1) Indigo 229 bio-fungicide (*Kosakonia cowanii* strain SYM00028, a bacterial species), 2) Indigo WT29 (*Cladosporium tenuissimum*, a fungal species) and 3) an untreated control. The variety planted was PhytoGen 415 W3FE, lot number BOS1N5GN8X, with seed treatment code FMNOC2ASB. The fungicide seed treatment on the planting seed was Trio. The Indigo 229 and WT29 products were extra material from Barry Evans' lots, which were put in refrigerator upon arrival at Kress, TX. Products were kept in cooler during transferal to Mtn. Park, OK, which were then placed in a refrigerator. Products were transferred to cooler under ice. At the appropriate time, the products were removed from the ice chest and properly applied to the seed. The products are both hopper box treatments and these were applied at the field site using a stirring stick and a large tub for each treatment. The labeled rates of Indigo 229 and WT29 were applied to an appropriate amount of planting seed per label directions, which was then mixed in the tubs. After application, the treated seed was immediately planted in the trial. The three treatments (Indigo 229 treated, Indigo WT29 treated and untreated control) were randomly assigned to experimental units and three pairs or replicates were utilized, which resulted in a scientifically valid field-scale applied research trial. Each individual plot was 16 rows wide with half-mile long rows.

Relatively good moisture conditions prevailed at the site during the early spring, and continued until early July. The trial was planted May 27 and escaped hail and wind events typically

associated with spring thunderstorms. Good early-season growing conditions and outstanding vigor resulted in an average emergence of about 98% of the seed planted (30,000 seed/acre) when stand count observations were performed on June 20. Minimal seedling disease was noted. A total of 54 days from planting to first bloom (July 20) was noted in this trial. This indicates a fairly rapid rate of development based on calendar days. This is attributed to good root health, and warm May and June growing conditions. Once the crop reached the bloom stage, its progression was excellent through the end of July, but extremely high oppressive temperatures in conjunction with low rainfall resulted in extreme moisture stress by the middle of August. This stress continued into October. Plants and bolls were severely stressed by lack of moisture and high temperatures. This resulted in significantly reduced yield, fiber with short staple, and lower than normal micronaire. Substantial late season pre-harvest rainfall likely impacted the color and leaf grades in the trial.

Harvest results indicated that no statistically significant differences were observed for lint and seed yields. Lint yields ranged from a high of 326 lb/acre (Indigo WT29 treated) to a low of 316 lb/acre (Indigo 229 treated), and averaged 321 lb/acre (Table 1). Average Loan value for treatments from commercially ginned and classed bales varied from a high of \$0.4499/lb (Indigo WT29 treated) to a low of \$0.4371/lb (Indigo 229 treated). Overall Loan value for the trial across all treatments was \$0.4441/lb. When including lint Loan value on a per acre basis and net gin credit (defined as seed credit minus ginning expense), no statistically significant differences were found among treatments for net value/acre.

Table 2 presents in-season data including stand establishment percentage, vigor, nodes above white flower (NAWF) on one observation date, and plant height on two observation dates. Final plant heights were not different statistically.

Table 3 provides the USDA-AMS classing results from each commercial bale for each variety and the variety averages. Averages indicate that color grades exhibited significant color and were predominantly 43 across treatments. Leaf grades ranged from about 3 to 4. Staple ranged from about 33.5 (untreated control and Indigo 229 treated) to 34.0 32nds inch (Indigo WT29 treated). Micronaire averages were good for all treatments and were about 3.90. No bark contamination was noted in commercial bales. Fiber strength ranged from 28.3 to 30.6 g/tex, and uniformity ranged from 79.0 to 79.7%.

Disclaimer: Readers should realize that results from one trial do not represent conclusive evidence that the same response would occur where conditions vary. Multi-site and multi-year data are always best. For this trial, good scientific techniques were used and the results are presented to indicate what actually occurred in the trial. Context of the environment, overall growing season impact, management techniques, and trial methodology used are important and must be considered.

Site Information and Methods

Elevation: 1790 ft

Previous crop: Wheat and failed double crop grain sorghum

Tillage system: No-till

Planted: May 27

Replicates: 3 replicates in a randomized complete block design

Plot width: 16-row plots

Plot length: Trial was planted in ~2,600 ft long rows

Seeding rate: 30,000 seed/acre

Days from planting to first bloom: 54 (July 20)

Row spacing: 30-inch rows

Rainfall (inches) by month:

April 1 - 0.2, April 9 - 0.3

May 4 - 0.2, May 5 - 0.5, May 6 - 1.7, May 12 - 0.5, May 13 - 0.7, May 19 - 0.5,

May 28 - 0.7

June 3 - 1.0, June 16 - 0.4, June 18 - 0.4

July 3 - 0.1, July 6 - 0.5, July 7 - 2.0, July 17 - 0.4, July 20 - 0.3

Aug 20 - 0.6

Sep 22 - 0.8, Sep 23 - 0.2

Oct 8 - 0.1

Herbicide management – products, rates, and dates of application:

April 3 – 24 oz/acre Roundup, 8 oz/acre 2,4D LV6, 4 oz/acre Banvel, 2 oz/acre Valor

May 28 - 28 oz/acre paraquat, 24 oz/acre diuron

June 13 - 32 oz/acre Liberty, 12 oz/acre Clethodim

July 6 - 12 oz/acre Clethodim, 24 oz/acre Enlist One

July 19 - 32 oz/acre Liberty

Nitrogen fertility rates, dates, and application methods:

July 19 - 1 gallon/acre Coron Foliar

Other fertility (phosphate, potash, micronutrients) application rates, dates, and application methods:

50 lb/acre DAP (18-46-0) + 10 lb/acre Micosync ZN with drill previous wheat crop

5 lb/acre Gainer 20-20-20 foliar July 6

Insecticide products, application rates and dates:

June 13 – 8 oz/acre Acephate

July 19 - 2 oz/acre Imidicloprid

Plant growth regulator products, application rates, and dates:

July 6 - 6 oz/acre Mepex

July 19 - 12 oz/acre Mepex

Harvest aid products, application rates and dates:

No harvest aids were applied

Harvesting: November 26 using an 8-row John Deere CS690, a full round of the half-mile rows was harvested for each 16-row plot. Round modules were weighed using the integral CS690 handler scale, and round modules were weighed by treatment at the Lonestar Gin.

Commercial ginning: Round modules for all 3 reps of each treatment were staged together (1 per plot, with 3 reps = 3 total per treatment) and commercially ginned separately by Lonestar Gin. Commercial ginning included: cleaning module feeder, clearing gin stream, dumping seed rolls, and purging remnant bale in press. This process was initiated before the first treatment module was ginned and then repeated for each treatment module in the trial.

Remnants were ejected from the bale press and weighed, but not sampled for USDA-AMS classing. Only data from commercial bales are included in classing data for each treatment.

Lint value: Table 1 is based on CCC Loan value from commercial ginning and USDA-AMS classing results.

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Acknowledgements

Lonestar Gin would like to thank Eric Eyster for committing equipment, land, and time to conduct and manage the trial. Gratitude is expressed to Indigo Ag for providing trial products, and to Windstar Inc. for support. Detailed ginning was performed by Carey McKinney and the Lonestar Gin crew and a big thank you is extended to this hard-working group.



Table 1. Harvest results for the dryland Indigo trial, Eric Eyster Farm, Custer City, OK, 2024.

Treatment	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Net value
lb/acre	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----	
WT 29 endophyte	36.7	48.1	889	326	427	0.4499	147	18	165 a
Control	36.3	49.2	883	320	434	0.4453	143	19	162 a
229 biofungicide	35.5	48.7	890	316	433	0.4371	138	18	157 a
Test average	36.2	48.7	887	321	431	0.4441	143	18	161
CV, %	--	--	6.3	6.3	6.4	--	6.3	7.0	6.6
OSL	--	--	0.9857	0.8474	0.9473	--	0.5462	0.6489	0.6740
LSD	--	--	NS	NS	NS	--	NS	NS	NS

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.65/cwt commercial ginning cost.

\$235/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

Net value is defined as gross loan value/acre plus net gin credit.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 2. Plant observation results from the dryland Indigo trial, Eric Eyster Farm, Custer City, OK, 2024.

Treatment	Final population	Stand establishment	Vigor	Nodes above white flower	Plant height	
				Mid bloom	Pre bloom	Mid bloom
	plants/acre 20-Jun	% 20-Jun	1-5 visual scale, 5 best 20-Jun	count 2-Aug	inches 17-Jul	2-Aug
Control	29,331	97.7	4.0	3.8	19.1	21.5
229 biofungicide	29,040	96.8	4.0	4.1	19.5	21.0
WT 29 endophyte	29,621	98.7	4.0	4.3	18.8	21.2
Test average	29,331	97.7	4.0	4.1	19.1	21.2
CV, %	1.2	1.2	--	11.7	5.4	4.5
OSL	0.2500	0.2500	--	0.5357	0.6974	0.8433
LSD	NS	NS	--	NS	NS	NS

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.



Table 3. Commercial classing data for the dryland Indigo trial, Eric Eyster Farm, Custer City, OK, 2024.

Treatment and Bale Number	Color Grade-Quadrant grade-quadrant	Color digit 1	Color digit 2	Leaf grade	Staple 32nds inch	Micronaire units	Extraneous matter	Remarks --	Strength g/tex	Rd %	+b %	Trash % area	Uniformity %	Length 100ths inch	Loan rate cents/lb
Control															
2147167	42-1	4	2	4	34	3.8	.	.	31.6	71.9	9.6	5.0	79.5	107	48.80
2147168	43-1	4	3	4	34	3.8	.	.	31.6	69.2	10.2	4.0	79.5	107	45.10
2147169	43-1	4	3	4	33	4.0	.	.	27.7	68.7	10.3	5.0	80.2	104	42.15
2147170	43-1	4	3	4	33	3.9	.	.	31.5	67.9	10.4	5.0	79.5	104	42.05
Average	--	4.0	2.8	4.0	33.5	3.88	0/4 bales	level 1 bark	30.6	69.4	10.1	4.8	79.7	105.5	44.53
229 biofungicide treated															
2147171	43-1	4	3	3	33	3.9	.	.	28.1	69.3	10.5	3	78.7	103	42.45
2147172	43-1	4	3	3	33	3.9	.	.	28.1	68.5	10.5	4	78.7	103	42.45
2147173	43-1	4	3	3	34	3.9	.	.	28.9	68.8	10.2	4	79.2	105	45.20
2147174	43-1	4	3	4	34	3.9	.	.	28.0	69.2	10.2	5	79.4	105	44.75
Average	--	4.0	3.0	3.3	33.5	3.90	0/4 bales	level 1 bark	28.3	69.0	10.4	4.0	79.0	104.0	43.71
WT 29 endophyte treated															
2147175	43-1	4	3	3	34	3.9	.	.	30.2	68.9	10.2	4	79.8	107	45.40
2147176	43-1	4	3	4	34	3.9	.	.	30.2	69.0	10.1	5	79.8	107	44.95
2147177	43-2	4	3	4	34	3.9	.	.	29.2	68.2	10.1	4	79.4	105	44.80
2147178	43-1	4	3	4	34	3.9	.	.	29.8	69.0	10.1	4	79.9	106	44.80
Average	--	4.0	3.0	3.8	34.0	3.90	0/4 bales	level 1 bark	29.9	68.8	10.1	4.3	79.7	106.3	44.99



Table 4. Mean commercial classing data across all bales by treatment for the dryland Indigo trial, Eric Eyster Farm, Custer City, OK, 2024.

Treatment	Color	Color	Leaf	Staple	Micronaire	Extraneous	Remarks	Strength	Rd	+b	Trash	Uniformity	Length	Loan rate
	digit 1	digit 2	grade	32nds inch	units	matter	--	g/tex	%	%	% area	%	100ths inch	cents/lb
Control	4.0	2.8	4.0	33.5	3.88	0/4 bales	level 1 bark	30.6	69.4	10.1	4.8	79.7	105.5	44.53
229 biofungicide treated	4.0	3.0	3.3	33.5	3.90	0/4 bales	level 1 bark	28.3	69.0	10.4	4.0	79.0	104.0	43.71
WT29 endophyte treated	4.0	3.0	3.8	34.0	3.90	0/4 bales	level 1 bark	29.9	68.8	10.1	4.3	79.7	106.3	44.99
Mean	4.0	2.9	3.7	33.7	3.89	.	.	29.6	69.1	10.2	4.3	79.5	105.3	44.41



Appendix

**Weatherford Oklahoma Mesonet Station
April through November 2024 weather data.**



MESONET CLIMATOLOGICAL DATA SUMMARY										April 2024		Time Zone: Midnight-Midnight CST								
(WEAT) Weatherford										Nearest City: 4.0 WSW Weatherford				County: Custer						
Latitude: 35-30-29										Longitude: 98-46-30				Elevation: 1765 feet						
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX		SOD	BARE	MAX	MIN
1	71	48	63.6	60.6	5	0	98	64	90	0.15	27.79	29.64	S	10.7	43.7	6.81	59.7	62.1	65	59
2	61	40	48.9	36.1	15	0	94	31	64	0.00	28.05	29.91	NNW	16.2	36.0	20.67	56.7	55.2	60	51
3	67	39	53.5	30.0	12	0	76	26	43	0.00	28.10	29.96	NNW	11.8	29.2	24.97	54.4	54.3	63	47
4	70	41	56.0	37.8	10	0	80	35	52	0.00	28.09	29.95	E	10.1	20.3	24.90	55.6	57.8	68	49
5	84	49	65.0	41.0	0	2	62	19	44	0.00	28.05	29.91	SE	16.0	31.6	24.88	58.1	61.9	72	53
6	80	51	64.6	36.6	0	1	60	16	39	0.00	27.86	29.70	WSW	22.3	50.4	23.27	60.2	64.4	71	59
7	72	42	57.5	22.2	8	0	45	14	27	0.00	27.91	29.76	SW	13.9	30.3	26.11	58.8	61.7	71	53
8	68	38	55.4	34.8	12	0	71	32	46	0.12	28.00	29.86	NE	13.5	26.5	18.00	58.1	59.4	65	54
9	59	49	53.3	42.5	11	0	85	55	67	0.22	28.02	29.88	NE	15.8	35.7	4.81	56.2	54.6	59	53
10	71	48	57.8	39.8	6	0	82	28	54	0.00	28.00	29.86	NNE	13.4	35.0	19.32	55.1	55.1	61	51
11	68	47	57.3	29.8	7	0	64	20	38	0.00	28.22	30.08	N	13.5	32.4	26.16	55.8	57.1	65	50
12	77	45	62.4	42.6	4	0	75	33	50	0.00	28.25	30.12	SSW	13.3	35.6	25.85	57.3	60.5	70	52
13	81	54	67.1	50.8	0	2	80	35	58	0.00	28.12	29.99	S	18.5	35.8	25.70	60.3	64.8	73	57
14	91	57	72.2	54.3	0	9	94	23	59	0.00	28.00	29.85	S	13.7	24.8	25.59	62.7	68.6	78	60
15	77	62	68.7	65.1	0	5	99	73	89	0.00	27.87	29.72	SSE	17.7	44.6	12.51	64.9	68.7	72	65
16	83*	52*	69.2*	44.7*	0*	3*	93*	17*	48*	0.00*	27.87*	29.72*	WSW*	15.6*	39.0*	NA	65.3*	69.3*	76*	62*
17	88	55	72.0	56.1	0	7	94	24	61	0.00	28.00	29.86	SSE	15.7	32.2	25.16	65.6	70.1	78	62
18	70	46	59.4	50.9	7	0	96	57	74	0.00	28.12	29.98	NE	19.3	38.7	19.18	66.6	68.6	73	63
19	60	41	52.0	34.0	14	0	89	28	54	0.00	28.31	30.18	NE	13.2	31.5	20.18	62.3	61.1	66	56
20	59	45	52.8	31.2	13	0	57	37	44	0.00	28.38	30.25	NE	16.5	33.6	13.70	60.7	60.1	63	57
21	63	42	50.3	32.0	13	0	72	35	51	0.00	28.45	30.33	NNE	9.6	20.8	24.11	59.5	60.3	69	54
22	72	39	57.3	42.0	9	0	86	38	59	0.00	28.19	30.06	S	18.1	40.7	27.37	60.3	61.5	69	54
23	83*	53*	65.9*	50.6*	0*	3*	81*	37*	60*	0.00*	28.04*	29.90*	S *	16.2*	33.5*	NA	62.3*	66.6*	76*	59*
24	77	56	65.5	55.4	0	2	92	48	71	0.01	28.20	30.07	SE	13.1	28.1	15.03	64.1	67.2	71	63
25	81	65	71.6	64.9	0	8	95	59	80	0.00	27.96	29.81	S	19.7	38.2	12.96	65.7	69.3	73	66
26	85	61	73.3	48.9	0	8	92	17	50	0.00	27.75	29.60	SW	18.4	39.7	28.05	67.4	72.0	79	66
27	77	61	70.3	64.9	0	4	93	66	83	0.11	27.82	29.67	S	19.3	43.0	6.45	67.8	69.7	72	67
28	76	54	64.2	51.5	0	0	93	36	66	0.00	27.94	29.79	W	9.4	28.7	23.13	66.8	68.9	78	62
29	83	49	66.9	48.7	0	1	84	26	56	0.00	28.03	29.89	SE	10.9	23.2	27.57	67.5	70.5	80	62
30	91	61	72.7	63.6	0	11	96	41	75	0.08	27.94	29.79	SSE	18.5	35.3	23.31	69.5	72.9	80	67
	75*	50*	62.2*	45.4*	<- Monthly Averages ->						28.04*	29.90*	S *	15.1*	50.4*	20.56*	61.5*	63.8*	71*	58*
Temperature - Highest: 91* Lowest: 38*							Degree Days - Total HDD: 146* Total CDD: 65*					Number of Days With: Tmax ≥ 90: 2* Rainfall ≥ 0.01 inch: 6* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 4* Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 28* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 22*								
Rainfall: Monthly Total: 0.69* in. Greatest 24 Hr: 0.22* in.							Humidity - Highest: 99* Lowest: 14*													

MESONET CLIMATOLOGICAL DATA SUMMARY (WEAT) Weatherford Latitude: 35-30-29										May 2024 Nearest City: 4.0 WSW Weatherford Longitude: 98-46-30					Time Zone: Midnight-Midnight CST County: Custer Elevation: 1765 feet					
DAY	TEMPERATURE (F) MAX MIN AVG DEWPT				DEG DAYS HDD CDD		HUMIDITY (%) MAX MIN AVG			RAIN (in)	PRESSURE (in) STN MSL		WIND SPEED (mph) DIR AVG MAX			SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD BARE MAX MIN			
1	80	62	70.6	61.8	0	6	93	60	74	0.00	27.93	29.78	SSE	21.0	44.6	17.41	69.4	71.0	76	67
2	76	60	67.7	60.0	0	3	96	61	77	0.04	27.92	29.77	NE	12.8	49.5	14.46	69.0	70.5	75	66
3	82	58	67.4	59.4	0	5	91	53	76	0.00	28.03	29.89	NE	13.0	43.4	20.27	68.7	71.0	78	65
4	69	55	60.6	55.4	3	0	97	70	83	0.54	28.12	29.98	NNE	14.1	31.1	9.89	67.9	66.5	73	63
5	75	56	63.3	58.5	0	1	98	59	86	0.16	28.07	29.93	SE	10.6	23.4	16.57	65.7	65.1	71	61
6	84	62	72.0	64.4	0	8	99	32	79	0.00	27.79	29.63	S	19.4	43.6	16.01	67.9	68.0	73	64
7	82	49	67.8	38.5	0	0	72	17	38	0.00	27.77	29.62	SSE	13.1	30.0	29.90	68.6	68.6	78	59
8	80	56	68.4	49.3	0	3	96	29	54	0.00	27.75	29.60	N	11.3	31.4	29.20	69.2	71.4	81	64
9	79	51	66.1	40.8	0	0	70	20	43	0.00	28.06	29.92	NE	13.8	30.0	26.68	68.9	70.5	78	63
10	77	55	65.8	46.8	0	1	72	34	52	0.00	28.22	30.09	NNE	10.2	25.0	27.58	68.6	70.9	80	63
11	78	56	65.4	51.8	0	2	89	34	64	0.01	28.14	30.01	NW	5.6	20.0	15.71	68.9	69.5	75	64
12	71	54	60.7	56.9	2	0	98	62	88	1.13	27.99	29.85	SE	11.4	38.4	11.11	66.8	64.5	67	63
13	73	52	62.7	54.8	2	0	99	48	78	0.30	27.93	29.78	NW	8.2	35.6	21.58	64.9	64.5	69	60
14	82	51	67.3	54.2	0	1	96	38	66	0.00	27.97	29.83	SE	6.4	15.9	28.54	66.0	66.5	75	59
15	85	62	72.2	59.2	0	8	89	43	65	0.02	27.93	29.78	SSE	13.4	38.1	20.66	69.8	68.1	73	64
16	78	61	67.8	58.2	0	4	96	46	73	0.58	27.96	29.82	SSE	8.1	21.3	19.96	70.2	68.5	74	64
17	82	59	70.2	59.0	0	6	92	44	70	0.00	27.93	29.78	SSE	6.9	17.2	25.90	70.5	69.5	77	63
18	91	63	75.7	60.7	0	12	90	33	64	0.00	28.00	29.85	SE	11.4	23.7	29.38	72.8	71.4	79	65
19	91	66	77.7	65.9	0	14	91	46	69	0.00	27.97	29.83	SSE	19.8	45.3	25.89	74.9	74.0	82	68
20	94	70	80.0	66.9	0	17	88	40	67	0.00	27.87	29.72	SSE	19.5	37.8	28.89	76.2	77.3	86	70
21	88	66	77.7	57.1	0	12	89	21	56	0.00	27.86	29.71	ENE	13.8	29.3	29.69	77.3	79.2	88	73
22	80	58	68.9	52.3	0	4	84	35	58	0.00	28.03	29.89	NE	15.7	36.6	26.81	75.7	76.1	83	71
23	81	57	69.7	64.3	0	4	97	45	84	0.00	27.90	29.75	SSE	11.8	38.7	7.55	73.5	71.4	74	69
24	83	59	72.8	50.6	0	6	96	23	51	0.00	27.92	29.77	NNE	13.5	35.7	29.33	73.8	75.0	83	69
25	91	54	72.3	60.2	0	7	97	39	68	0.08	27.87	29.72	SSE	14.5	63.4	25.20	74.2	74.4	83	66
26	90	67	78.0	55.1	0	14	98	19	54	0.00	27.83	29.68	WNW	13.3	32.3	30.20	75.4	77.9	86	71
27	93	59	79.0	48.0	0	11	79	15	39	0.00	28.10	29.97	ESE	8.3	21.1	29.93	76.1	79.2	90	70
28	84	64	72.7	58.8	0	9	91	32	64	0.17	28.21	30.08	E	12.4	37.0	21.25	76.7	77.6	81	74
29	85	63	73.5	60.5	0	9	92	41	67	0.00	28.21	30.07	SE	8.7	20.9	24.84	75.2	76.8	86	69
30	83	64	71.2	62.9	0	9	97	43	77	0.07	28.08	29.94	SE	10.4	29.7	14.12	75.4	75.5	81	72
31	81	64	71.2	62.5	0	7	97	51	76	0.00	28.09	29.95	ENE	7.7	19.9	26.30	75.0	77.4	87	70
	82	59	70.2	56.6	<- Monthly Averages ->						27.98	29.84	SSE	12.3	63.4	22.61	71.4	71.9	79	66
Temperature - Highest: 94 Lowest: 49							Degree Days - Total HDD: 8 Total CDD: 184					Number of Days With: Tmax ≥ 90: 6 Rainfall ≥ 0.01 inch: 11 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 6 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 23 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 19								
Rainfall: Monthly Total: 3.10 in. Greatest 24 Hr: 1.13 in.							Humidity - Highest: 99 Lowest: 15													

MESONET CLIMATOLOGICAL DATA SUMMARY (WEAT) Weatherford Latitude: 35-30-29										June 2024 Nearest City: 4.0 WSW Weatherford Longitude: 98-46-30				Time Zone: Midnight-Midnight CST County: Custer Elevation: 1765 feet						
DAY	TEMPERATURE (F) MAX MIN AVG DEWPT				DEG DAYS HDD CDD		HUMIDITY (%) MAX MIN AVG			RAIN (in)	PRESSURE (in) STN MSL		WIND SPEED (mph) DIR AVG MAX			SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD BARE MAX MIN			
1	90	65	75.9	62.8	0	12	93	37	67	0.00	28.10	29.96	SSE	7.7	21.9	24.78	76.8	80.4	90	72
2	82	63	70.8	62.6	0	8	94	48	77	0.07	28.02	29.88	SSE	12.2	31.0	12.95	76.3	76.1	81	72
3	82	62	71.6	65.9	0	7	97	61	83	0.35	27.87	29.72	SE	12.4	36.3	18.42	74.5	73.9	78	70
4	91	67	77.4	69.9	0	14	96	57	79	0.00	27.78	29.63	SSE	11.3	28.5	17.84	75.7	76.7	85	71
5	92	65	78.3	60.4	0	14	93	28	59	0.00	27.98	29.84	NNE	8.8	19.9	29.64	78.1	81.7	92	72
6	97	67	82.9	60.4	0	17	78	25	50	0.00	28.04	29.90	SSW	10.7	25.9	26.33	79.9	83.6	92	75
7	98	74	85.3	66.3	0	21	67	39	54	0.00	28.02	29.88	S	15.1	34.1	26.74	81.6	85.4	93	78
8	102	76	88.1	61.3	0	24	68	18	44	0.00	27.94	29.80	SSW	16.3	32.6	26.41	82.8	86.4	94	80
9	88	69	77.9	63.6	0	14	79	47	62	0.09	28.08	29.94	NE	14.6	30.3	24.93	82.6	84.2	91	80
10	86	62	73.6	56.8	0	9	86	28	59	0.00	28.13	29.99	ENE	11.6	24.9	23.04	79.0	79.4	86	73
11	85	65	74.7	61.6	0	10	91	48	65	0.03	28.12	29.98	SE	8.6	20.5	20.37	78.7	80.0	86	74
12	91	64	78.2	65.0	0	13	98	41	67	0.00	28.12	29.98	S	10.6	26.1	29.04	79.6	82.3	91	74
13	98	69	83.3	65.9	0	18	95	32	60	0.00	28.09	29.95	S	13.8	39.3	29.49	82.0	85.1	94	77
14	98	68	84.1	60.9	0	18	72	24	48	0.00	28.12	29.98	S	8.1	21.1	28.43	83.8	87.2	96	79
15	96	70	82.9	64.4	0	18	86	31	57	0.00	28.04	29.90	S	13.7	30.0	25.60	84.7	86.5	93	81
16	96	71	82.5	67.7	0	18	94	40	64	0.12	27.96	29.81	S	17.6	35.8	24.63	84.1	85.4	92	79
17	95	72	83.7	66.7	0	18	81	41	58	0.00	27.91	29.76	SSE	21.9	39.6	27.39	83.4	85.7	93	79
18	88	74	80.6	68.0	0	16	82	52	66	0.00	27.95	29.80	S	23.7	43.4	13.93	82.9	83.3	86	80
19	90	65	77.0	65.4	0	13	96	40	70	0.15	28.24	30.11	SE	12.2	29.9	20.13	80.8	81.5	87	76
20	88	69	78.8	65.7	0	13	87	43	66	0.00	28.33	30.20	SSE	8.5	17.1	16.01	80.5	82.0	87	77
21	95	74	83.2	66.0	0	19	84	33	59	0.00	28.26	30.13	SSE	12.7	26.8	24.18	81.6	84.7	93	78
22	99	73	86.3	65.5	0	21	83	32	53	0.00	28.13	29.99	S	15.5	35.0	26.82	83.6	86.9	94	80
23	105	76	89.5	62.7	0	25	69	21	44	0.00	28.07	29.93	SSW	8.5	21.1	29.08	85.3	89.7	99	82
24	101	77	88.8	63.6	0	24	65	27	45	0.00	28.05	29.91	S	13.7	31.1	26.38	87.7	90.9	97	85
25	103	77	89.6	67.8	0	25	74	31	51	0.00	28.01	29.86	S	15.7	31.6	26.78	88.0	90.1	97	84
26	106	76	90.0	68.5	0	26	81	22	53	0.00	28.02	29.87	ENE	13.0	27.7	28.39	88.9	91.5	99	85
27	99	76	86.4	70.1	0	22	77	39	60	0.00	28.01	29.87	SSE	14.7	31.9	26.79	89.5	91.2	97	86
28	106	78	91.3	65.3	0	27	83	17	49	0.00	27.87	29.72	SSE	19.3	38.5	27.53	89.7	90.9	97	85
29	104	80	90.9	66.7	0	27	72	27	47	0.00	28.08	29.94	S	13.4	32.4	25.41	90.3	92.0	99	86
30	95	78	85.3	72.3	0	21	81	49	66	0.00	28.26	30.13	ESE	14.2	26.9	25.31	90.1	90.7	95	86
	95	71	82.3	65.0	<- Monthly Averages ->						28.05	29.91	S	13.3	43.4	24.43	82.8	84.8	92	79
Temperature - Highest: 106 Lowest: 62							Degree Days - Total HDD: 0 Total CDD: 533					Number of Days With: Tmax ≥ 90: 23 Rainfall ≥ 0.01 inch: 6 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 3 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 24 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 16								
Rainfall: Monthly Total: 0.81 in. Greatest 24 Hr: 0.35 in.							Humidity - Highest: 98 Lowest: 17													

MESONET CLIMATOLOGICAL DATA SUMMARY										July 2024			Time Zone: Midnight-Midnight CST							
(WEAT) Weatherford										Nearest City: 4.0 WSW Weatherford							County: Custer			
Latitude: 35-30-29										Longitude: 98-46-30							Elevation: 1765 feet			
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX		SOD	BARE	MAX	MIN
1	102	77	90.1	65.2	0	25	77	25	48	0.00	28.12	29.98	S	16.3	32.8	28.40	89.7	90.7	97	85
2	103	78	91.3	62.8	0	26	61	24	40	0.00	28.00	29.85	SSW	18.3	37.2	28.00	90.3	91.0	97	85
3	101	75	86.2	66.3	0	23	83	27	54	0.06	28.06	29.92	SSE	9.5	26.5	18.99	89.5	88.9	94	84
4	103	77	85.5	67.4	0	25	77	31	56	0.03	28.07	29.93	NNE	11.8	32.1	18.66	88.3	88.3	94	84
5	83	63	72.4	60.4	0	8	91	35	68	0.63	28.21	30.08	E	10.4	40.3	16.30	83.6	79.3	87	75
6	91	64	78.3	59.7	0	12	88	32	57	0.00	28.16	30.03	S	8.1	27.2	29.40	80.9	80.3	92	70
7	86	64	72.0	67.3	0	10	97	52	86	0.77	28.09	29.95	ENE	11.7	26.0	10.84	80.9	78.2	84	75
8	88	67	76.7	63.9	0	12	96	41	68	0.10	28.13	30.00	NNE	8.9	26.5	24.26	78.2	76.9	82	72
9	92*	65*	78.6*	58.4*	0*	14*	87*	25*	55*	0.00*	28.14*	30.00*	N *	7.3*	22.7*	NA	79.2*	79.0*	88*	71*
10	96*	68*	82.7*	59.2*	0*	17*	85*	23*	49*	0.00*	28.17*	30.03*	SE *	8.8*	23.1*	NA	82.2*	83.3*	94*	74*
11	102	69	85.4	61.4	0	21	83	25	48	0.00	28.13	30.00	S	10.9	28.2	26.66	84.4	85.9	95	78
12	100	74	86.2	62.3	0	22	69	28	48	0.00	28.16	30.02	S	15.2	31.8	27.74	85.5	87.1	95	80
13	98	72	84.7	64.8	0	20	83	27	55	0.00	28.22	30.09	S	13.6	25.6	27.53	86.1	87.4	95	81
14	101	74	87.2	64.9	0	23	79	27	51	0.00	28.16	30.02	S	14.9	31.7	27.21	86.7	87.9	95	81
15	104	74	89.2	64.0	0	24	69	26	46	0.00	28.05	29.91	S	15.8	34.7	27.41	87.1	88.5	95	82
16	104	72	86.6	64.4	0	23	87	25	50	0.05	28.02	29.88	S	11.4	40.9	16.79	87.0	87.9	94	84
17	88	70	77.7	67.4	0	14	92	46	72	0.19	28.20	30.07	NE	10.7	32.2	20.25	84.5	83.4	89	78
18	89	66	78.0	61.2	0	13	88	36	59	0.00	28.28	30.15	ENE	9.5	21.7	25.60	83.0	83.6	91	76
19	91	68	78.8	57.6	0	15	71	34	50	0.00	28.24	30.10	ESE	9.5	18.9	24.96	83.3	84.5	93	77
20	94	69	78.8	63.2	0	17	84	35	61	0.03	28.17	30.04	SSE	10.4	27.3	24.08	84.1	85.2	93	78
21	83	68	74.7	66.0	0	10	96	54	75	0.00	28.20	30.07	NNE	10.7	23.5	17.98	83.6	83.4	87	80
22	87	64	75.3	61.0	0	11	96	38	64	0.00	28.20	30.07	ENE	8.6	24.0	23.19	82.1	82.2	89	76
23	91	64	78.4	60.4	0	12	84	37	56	0.00	28.21	30.08	ESE	6.7	24.3	21.77	82.5	83.1	90	77
24	94	69	81.6	61.4	0	17	83	32	53	0.00	28.28	30.15	SE	7.9	20.3	21.93	83.4	84.5	91	78
25	93	70	82.0	62.1	0	17	80	29	54	0.00	28.28	30.15	SE	7.8	20.6	25.73	84.5	85.8	93	79
26	91	69	80.3	64.0	0	15	88	37	60	0.00	28.18	30.05	SE	10.1	23.0	23.89	85.3	85.8	92	80
27	94	68	80.2	64.4	0	16	96	33	62	0.00	28.09	29.95	SSE	12.9	30.9	23.79	85.1	85.0	91	79
28	99	72	85.1	64.4	0	20	86	28	54	0.00	28.04	29.90	SSE	18.4	37.7	26.64	85.5	86.0	92	80
29	102	75	88.0	67.5	0	24	85	29	54	0.00	28.05	29.91	S	19.4	36.0	27.10	86.3	87.4	94	82
30	102	76	88.6	65.6	0	24	72	29	49	0.00	28.03	29.88	S	19.0	35.1	27.22	87.2	88.4	94	83
31	103	78	89.7	67.4	0	25	73	28	50	0.00	28.04	29.90	S	17.9	32.6	26.76	87.9	89.1	95	84
	95*	70*	82.3*	63.4*	<- Monthly Averages ->						28.14*	30.01*	S *	12.0*	40.9*	23.76*	84.8*	85.1*	92*	79*
Temperature - Highest: 104* Lowest: 63*							Degree Days - Total HDD: 0* Total CDD: 553*					Number of Days With: Tmax ≥ 90: 24* Rainfall ≥ 0.01 inch: 8* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 4* Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 20* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 14*								
Rainfall: Monthly Total: 1.86* in. Greatest 24 Hr: 0.77* in.							Humidity - Highest: 97* Lowest: 23*													

MESONET CLIMATOLOGICAL DATA SUMMARY										August 2024				Time Zone: Midnight-Midnight CST						
(WEAT) Weatherford										Nearest City: 4.0 WSW Weatherford				County: Custer						
Latitude: 35-30-29										Longitude: 98-46-30				Elevation: 1765 feet						
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX		SOD	BARE	MAX	MIN
1	106	78	91.4	65.1	0	27	68	27	44	0.00	28.16	30.02	SSE	13.2	26.0	22.84	88.7	90.3	97	85
2	96	75	83.0	64.5	0	20	83	34	56	0.00	28.27	30.14	E	11.6	34.6	21.28	88.8	89.0	94	85
3	99	68	84.0	56.8	0	18	72	23	43	0.00	28.20	30.07	ENE	7.5	25.8	26.22	87.4	87.8	95	81
4	98	71	85.9	57.4	0	19	63	26	40	0.00	28.17	30.04	SE	7.4	22.5	26.17	88.1	89.0	96	83
5	99	72	86.3	58.4	0	21	64	21	42	0.00	28.18	30.05	S	10.4	27.7	26.62	88.6	89.2	96	83
6	105	73	89.3	58.2	0	24	62	20	38	0.00	28.16	30.03	S	9.8	22.3	26.40	89.0	90.0	97	83
7	107	72	89.9	60.8	0	25	75	20	41	0.00	28.06	29.92	SSE	10.2	25.5	25.72	90.0	91.1	98	85
8	96	76	86.1	62.7	0	21	69	32	46	0.00	28.09	29.95	NE	14.2	35.4	24.12	90.1	90.3	95	86
9	78	63	70.8	59.0	0	5	93	47	68	0.30	28.30	30.18	NE	14.2	28.6	14.35	86.4	82.7	89	78
10	77	57	66.3	59.3	0	2	96	59	79	0.41	28.32	30.19	ENE	11.4	23.9	10.60	79.0	74.2	77	70
11	89	65	76.9	68.5	0	12	92	56	77	0.00	28.16	30.03	SE	16.9	30.9	16.66	77.8	76.6	84	72
12	100	73	85.6	69.0	0	21	91	28	62	0.00	28.11	29.98	SSE	12.2	24.1	25.51	81.9	84.4	94	76
13	103	75	88.1	66.0	0	24	80	27	51	0.00	28.12	29.98	SSE	13.5	26.9	24.59	85.2	88.0	96	81
14	104	78	90.0	64.9	0	26	69	26	46	0.00	28.08	29.94	S	16.3	29.9	25.74	86.4	89.1	96	83
15	103	77	87.6	65.2	0	25	73	27	50	0.00	28.07	29.93	S	10.4	29.0	21.05	87.4	90.0	97	84
16	107	74	87.8	64.6	0	25	84	22	51	0.00	28.09	29.95	SSW	9.6	38.0	22.15	87.2	89.1	96	83
17	106	77	91.3	65.6	0	27	70	20	46	0.00	28.09	29.95	S	10.8	21.7	25.71	87.9	90.5	98	84
18	109	76	92.6	59.2	0	28	70	15	38	0.00	28.11	29.97	SSW	11.4	26.0	26.11	89.2	91.8	99	85
19	107	77	89.2	61.4	0	27	81	14	43	0.00	28.14	30.00	E	10.8	25.2	25.43	89.1	91.4	99	85
20	98	71	82.6	69.0	0	19	91	36	67	0.00	28.19	30.06	E	11.5	22.2	23.48	89.1	90.1	96	85
21	98	72	82.9	66.7	0	20	85	35	61	0.00	28.17	30.03	ESE	14.2	28.9	24.21	88.7	89.2	95	84
22	95	73	82.4	63.2	0	19	70	35	54	0.00	28.14	30.00	SE	15.6	32.2	21.86	88.0	87.8	93	83
23	110	74	90.5	64.0	0	27	80	16	47	0.00	28.09	29.96	SSE	15.1	31.3	24.05	87.9	89.0	96	83
24	109	77	91.9	64.4	0	28	70	20	44	0.00	28.14	30.00	S	15.0	33.5	23.04	89.3	91.0	97	85
25	102	77	89.4	63.5	0	25	66	27	44	0.00	28.23	30.10	SSE	13.1	27.0	24.04	89.7	90.9	96	86
26	99	74	86.6	61.9	0	22	62	29	45	0.00	28.27	30.14	SE	9.8	23.2	22.72	89.4	90.1	96	85
27	97	71	84.2	60.3	0	19	66	29	46	0.00	28.24	30.11	S	9.2	26.8	21.23	88.8	88.9	94	84
28	98	73	85.1	61.9	0	20	75	27	48	0.00	28.19	30.05	S	11.6	26.0	23.27	88.2	88.4	94	83
29	98	74	85.5	62.9	0	21	72	29	49	0.00	28.15	30.02	S	13.5	29.0	22.09	88.2	88.4	93	84
30	85	68	75.9	64.2	0	12	88	50	68	0.00	28.24	30.11	NNE	12.0	25.4	19.19	87.3	86.5	90	83
31	89	70	77.5	64.0	0	14	88	40	66	0.00	28.23	30.10	NNE	10.4	22.6	20.97	85.6	84.9	90	81
	99	73	85.0	63.0	<- Monthly Averages ->						28.17	30.03	S	12.0	38.0	22.82	87.4	88.0	94	82
Temperature - Highest: 110 Lowest: 57							Degree Days - Total HDD: 0 Total CDD: 642					Number of Days With: Tmax ≥ 90: 26 Rainfall ≥ 0.01 inch: 2 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 2 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 25 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 7								
Rainfall: Monthly Total: 0.71 in. Greatest 24 Hr: 0.41 in.							Humidity - Highest: 96 Lowest: 14													

MESONET CLIMATOLOGICAL DATA SUMMARY (WEAT) Weatherford Latitude: 35-30-29										September 2024 Nearest City: 4.0 WSW Weatherford Longitude: 98-46-30				Time Zone: Midnight-Midnight CST County: Custer Elevation: 1765 feet						
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX		SOD	BARE	MAX	MIN
1	91	70	79.6	61.8	0	16	86	33	58	0.00	28.24	30.11	NE	11.6	29.0	21.72	85.2	84.8	90	81
2	86	67	74.9	52.6	0	11	68	26	48	0.00	28.29	30.16	NE	12.2	24.1	15.05	83.8	82.2	85	79
3	88	66	75.1	58.2	0	12	82	33	57	0.00	28.27	30.14	SSE	7.8	20.2	19.36	82.6	82.1	88	77
4	85	68	75.7	63.2	0	11	85	42	67	0.00	28.29	30.16	SSE	6.3	18.9	13.97	83.7	82.7	86	79
5	92	68	79.4	60.9	0	15	89	32	57	0.00	28.30	30.17	NNE	6.1	25.3	21.97	83.2	83.5	90	78
6	89	68	76.6	57.5	0	13	80	26	55	0.00	28.31	30.18	NE	14.1	28.3	20.34	83.3	83.1	87	79
7	83	60	70.6	48.3	0	7	66	30	47	0.00	28.31	30.19	ENE	9.4	23.0	22.94	81.3	80.6	86	75
8	87	59	72.9	46.7	0	8	59	27	41	0.00	28.27	30.14	SE	9.4	18.6	22.69	80.8	80.4	87	74
9	91	59	74.2	46.0	0	10	67	21	40	0.00	28.24	30.11	SSE	11.0	27.0	22.75	81.0	80.5	87	75
10	90	57	73.8	40.3	0	8	59	15	33	0.00	28.14	30.00	SE	11.1	21.6	23.38	80.4	79.7	86	74
11	90	61	75.9	49.1	0	11	77	20	41	0.00	28.06	29.92	SE	10.3	24.1	23.21	80.4	80.1	87	74
12	90	62	75.2	58.0	0	11	92	29	60	0.00	28.03	29.89	SSE	9.6	22.9	22.05	81.4	81.3	87	76
13	96	65	79.9	56.5	0	16	69	28	47	0.00	28.01	29.87	SE	13.5	25.1	21.88	82.0	82.0	88	76
14	99	71	83.4	59.9	0	20	61	28	46	0.00	28.04	29.90	ESE	15.8	29.8	19.53	83.0	83.3	88	79
15	96	71	81.5	64.5	0	18	78	39	58	0.00	28.10	29.96	SE	13.4	27.0	18.21	84.1	84.3	89	80
16	93	69	80.3	63.4	0	16	82	40	58	0.00	28.13	29.99	SE	12.1	24.1	20.20	84.4	84.3	90	79
17	92	66	78.8	62.5	0	14	85	36	60	0.00	28.08	29.94	SSE	12.7	24.1	20.40	84.2	83.6	88	79
18	98	69	82.2	63.1	0	19	88	26	57	0.00	27.99	29.85	SSE	16.8	37.9	20.22	84.0	83.5	88	79
19	102	73	87.0	64.5	0	23	75	27	50	0.00	27.98	29.84	S	15.2	32.7	19.48	84.5	84.9	90	80
20	102	79	87.9	62.5	0	26	61	20	45	0.00	28.00	29.85	SSW	13.4	35.7	15.91	85.4	85.8	90	82
21	98	68	82.7	62.6	0	18	90	26	54	0.00	28.02	29.88	S	14.2	39.5	19.11	85.3	85.3	90	81
22	70	57	63.6	62.0	1	0	97	90	94	1.17	28.11	29.98	NNE	15.3	31.1	2.77	81.1	75.4	85	68
23	76	56	63.9	52.8	0	1	96	37	70	0.02	28.12	29.98	N	7.0	20.1	20.59	72.1	69.4	75	65
24	90	59	71.1	59.5	0	9	89	34	70	0.00	28.04	29.90	SW	11.9	30.8	18.25	71.8	70.9	78	65
25	84	57	69.1	52.7	0	5	94	27	62	0.00	28.15	30.02	NNE	8.3	20.8	20.93	72.8	72.9	80	66
26	84	59	70.9	49.7	0	7	70	28	50	0.00	28.11	29.98	E	5.3	14.1	20.77	72.7	73.6	82	66
27	86	57	71.3	51.6	0	6	83	28	53	0.00	28.08	29.94	NNE	7.7	23.1	20.64	73.0	74.3	82	67
28	88	58	72.9	50.4	0	8	78	23	49	0.00	28.16	30.02	NNE	10.1	27.3	20.72	73.1	74.5	81	68
29	88	60	74.0	50.3	0	9	72	23	47	0.00	28.17	30.04	N	6.7	19.1	20.42	73.5	75.3	83	69
30	93	63	77.3	48.8	0	13	63	18	40	0.00	28.12	29.98	SE	6.8	17.2	20.14	74.1	76.1	84	69
	90	64	76.1	56.0	<- Monthly Averages ->						28.14	30.00	SE	10.8	39.5	19.65	80.3	80.0	86	75
Temperature - Highest: 102 Lowest: 56							Degree Days - Total HDD: 1 Total CDD: 361					Number of Days With: Tmax ≥ 90: 17 Rainfall ≥ 0.01 inch: 2 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 1 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 18 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 6								
Rainfall: Monthly Total: 1.19 in. Greatest 24 Hr: 1.17 in.							Humidity - Highest: 97 Lowest: 15													

MESONET CLIMATOLOGICAL DATA SUMMARY										October 2024			Time Zone: Midnight-Midnight CST							
(WEAT) Weatherford										Nearest City: 4.0 WSW Weatherford			County: Custer							
Latitude: 35-30-29										Longitude: 98-46-30			Elevation: 1765 feet							
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX		SOD	BARE	MAX	MIN
1	79	57	68.7	39.0	0	3	62	22	35	0.00	28.33	30.21	NE	15.4	38.7	19.09	73.5	74.8	79	71
2	90	53	71.7	42.7	0	6	58	22	37	0.00	28.16	30.02	S	13.1	29.4	19.37	71.2	72.7	79	66
3	96	64	77.8	52.2	0	15	71	17	46	0.00	28.06	29.92	S	13.6	26.7	19.32	73.1	75.7	82	70
4	89	61	74.8	52.9	0	10	82	27	49	0.00	28.25	30.12	E	7.6	16.4	19.03	74.5	76.8	83	71
5	92	63	76.0	51.5	0	12	71	21	46	0.00	28.20	30.07	S	11.9	27.6	19.05	74.9	76.9	83	71
6	90	64	75.7	52.9	0	12	71	26	48	0.00	28.25	30.12	S	9.0	19.2	18.33	75.0	77.0	84	71
7	84	59	71.6	40.3	0	7	44	20	33	0.00	28.25	30.12	ENE	11.0	19.7	18.02	74.8	76.2	82	71
8	91	60	74.7	46.0	0	10	57	25	37	0.00	28.14	30.01	SE	11.2	25.4	17.76	74.2	75.8	82	70
9	91	63	75.5	54.0	0	12	86	25	50	0.07	28.14	30.00	SSE	13.0	26.6	16.38	74.4	76.2	82	71
10	90	64	75.6	52.0	0	12	69	26	45	0.01	28.17	30.04	SE	12.9	28.5	15.67	73.9	75.4	81	71
11	92	61	75.7	49.7	0	11	61	21	43	0.00	28.21	30.08	SE	13.6	22.7	17.72	73.9	76.0	82	71
12	96	61	77.2	48.8	0	14	71	14	42	0.00	28.13	30.00	SSE	9.6	21.9	17.74	74.5	76.8	83	71
13	84	63	71.4	39.9	0	9	60	14	35	0.00	28.24	30.11	NE	18.2	41.5	15.22	73.8	74.9	78	72
14	75	49	61.7	27.3	3	0	42	15	28	0.00	28.33	30.21	NE	11.5	27.9	17.05	70.8	71.2	76	66
15	78*	46*	61.5*	32.1*	3*	0*	51*	20*	34*	0.00*	28.27*	30.14*	NE *	17.1*	39.0*	13.98*	68.9*	69.1*	73*	66*
16	64	33	49.1	21.9	17	0	66	16	37	0.00	28.50	30.39	NE	10.4	19.0	18.35	65.2	64.0	69	59
17	72	43	57.0	30.0	7	0	53	24	37	0.00	28.29	30.16	S	17.7	36.7	16.82	63.3	62.9	68	58
18	78	50	62.9	37.8	1	0	49	27	40	0.00	28.29	30.16	SSE	17.0	33.6	12.87	64.2	64.9	69	61
19	79	58	66.3	44.3	0	4	55	38	45	0.00	28.45	30.33	SSE	13.6	25.4	16.24	66.7	68.7	74	65
20	81	51	64.9	43.8	0	1	62	31	47	0.00	28.43	30.31	SSE	12.1	22.2	16.47	67.0	68.2	74	63
21	84	54	69.0	48.9	0	4	66	37	50	0.00	28.21	30.08	SSE	17.9	41.3	13.35	67.5	68.7	73	64
22	89	56	72.2	44.0	0	7	77	15	42	0.00	28.17	30.04	S	6.8	18.6	16.81	68.6	70.8	77	65
23	84	59	71.2	56.3	0	7	92	36	62	0.00	28.22	30.09	NNE	10.0	18.1	16.11	69.7	72.0	77	68
24	92	60	75.2	52.2	0	11	84	23	49	0.00	28.04	29.90	SSE	17.1	42.8	15.64	70.3	72.2	77	68
25	73	54	63.2	42.8	1	0	62	37	48	0.00	28.30	30.18	NNE	16.8	38.7	15.66	69.9	70.6	74	67
26	72	47	57.9	32.1	6	0	58	24	39	0.00	28.44	30.32	NE	12.4	23.3	15.89	66.7	66.6	71	63
27	83	48	66.1	45.9	0	0	71	32	49	0.00	28.27	30.14	SE	12.4	27.4	14.56	65.7	66.5	72	61
28	92	65	75.6	51.1	0	13	75	19	47	0.00	28.02	29.88	S	24.0	43.9	14.56	68.5	70.5	75	67
29	86	68	75.8	58.2	0	12	81	36	56	0.00	27.95	29.80	S	30.2	52.3	12.40	70.4	72.1	75	69
30	86	50	70.0	59.8	0	3	90	41	72	0.18	28.00	29.85	S	22.0	58.4	8.18	71.5	72.0	75	66
31	63	41	50.2	40.8	13	0	93	41	72	0.00	28.26	30.13	E	8.4	17.3	15.70	65.4	61.7	66	57
	84*	56*	68.9*	44.9*	<- Monthly Averages ->						28.22*	30.09*	S *	14.1*	58.4*	16.24*	70.4*	71.5*	77*	67*
Temperature - Highest: 96*							Degree Days - Total HDD: 51*					Number of Days With: Tmax ≥ 90: 11* Rainfall ≥ 0.01 inch: 3* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 1* Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 26* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 11*								
Lowest: 33*							Total CDD: 195*													
Rainfall: Monthly Total: 0.26* in.							Humidity - Highest: 93*													
Greatest 24 Hr: 0.18* in.							Lowest: 14*													

MESONET CLIMATOLOGICAL DATA SUMMARY (WEAT) Weatherford Latitude: 35-30-29										November 2024 Nearest City: 4.0 WSW Weatherford Longitude: 98-46-30					Time Zone: Midnight-Midnight CST County: Custer Elevation: 1765 feet					
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX		SOD	BARE	MAX	MIN
1	73	46	58.8	47.3	5	0	87	39	68	0.00	28.25	30.12	SE	12.2	20.8	14.11	61.9	61.0	68	55
2	63	59	60.7	59.4	4	0	98	87	96	3.01	28.12	29.99	SSE	11.8	34.9	1.81	63.4	62.9	65	61
3	68	58	61.7	59.9	2	0	99	75	94	0.44	27.84	29.69	SSE	13.2	54.5	3.82	62.5	62.0	64	61
4	63	53	58.6	56.2	7	0	99	74	92	0.54	27.86	29.71	NE	8.9	24.9	5.51	62.1	61.1	63	59
5	61	46	52.5	45.0	11	0	98	48	77	0.00	27.97	29.82	NW	9.7	24.7	13.92	59.5	58.2	62	55
6	67	46	54.8	46.9	8	0	91	53	76	0.00	28.10	29.96	SE	13.0	24.9	14.58	57.8	56.3	61	53
7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.10*	NA	NA	NE *	NA	34.3*	NA	NA	NA	NA	NA
8	62	43	52.1	50.5	12	0	99	79	94	1.93	28.09	29.95	NE	18.0	33.8	1.66	56.5	55.5	58	53
9	63	39	49.9	41.6	14	0	96	45	75	0.00	28.07	29.93	SSW	13.0	31.2	14.57	53.7	51.8	56	47
10	69	41	54.5	42.9	10	0	95	36	68	0.00	28.16	30.03	SSW	4.7	10.7	14.24	53.3	53.4	60	48
11	72	46	58.9	45.2	6	0	84	35	62	0.00	28.20	30.07	SSE	4.7	10.8	14.05	54.4	55.4	62	50
12	69	50	59.5	48.5	6	0	82	51	67	0.00	28.08	29.94	SSE	15.8	30.8	12.75	55.8	56.2	60	52
13	64	42	55.3	42.4	12	0	89	40	63	0.00	28.12	29.98	NW	15.8	37.3	13.85	56.4	55.5	58	51
14	65	36	50.9	37.5	14	0	88	38	62	0.00	28.22	30.09	S	9.3	24.0	14.00	53.0	50.6	56	45
15	68	44	54.6	38.9	9	0	75	37	57	0.00	28.10	29.96	SSE	15.8	31.1	13.79	53.0	51.5	56	47
16	68	49	58.1	49.1	6	0	89	60	72	0.00	27.94	29.79	SSE	18.7	34.9	12.51	54.2	53.7	58	50
17	62	54	58.1	56.5	7	0	99	87	95	0.30	27.97	29.83	SSE	8.7	23.4	3.25	56.6	56.9	59	55
18	63	51	57.1	54.8	8	0	100	81	92	1.00	27.63	29.46	S	16.7	45.4	3.73	58.2	58.1	59	55
19	60	37	50.3	38.3	17	0	95	44	65	0.00	28.00	29.85	N	12.0	33.5	13.29	54.7	52.8	56	49
20	56	31	43.1	24.5	21	0	85	19	53	0.00	28.41	30.29	WNW	8.5	23.9	13.47	50.3	46.9	51	43
21	57	37	45.2	27.8	18	0	72	28	53	0.00	28.37	30.25	NE	8.2	24.6	13.09	48.0	45.7	51	42
22	60	40	48.3	33.2	15	0	73	38	56	0.00	28.30	30.17	SSE	7.4	17.6	12.99	47.9	46.7	53	42
23	66	41	53.2	42.0	11	0	83	50	66	0.00	28.06	29.92	S	15.7	30.2	12.77	49.2	48.9	54	44
24	72	49	59.3	47.0	5	0	92	37	67	0.00	27.87	29.72	S	17.2	31.0	12.65	52.0	52.9	57	50
25	49	34	40.8	31.4	24	0	89	45	70	0.00	28.33	30.20	N	17.7	39.9	9.17	50.8	48.3	53	44
26	53	29	41.0	29.0	24	0	80	45	63	0.00	28.22	30.09	SSE	11.7	27.0	11.66	46.7	43.4	47	40
27	52	35	45.7	37.7	21	0	86	50	74	0.00	27.96	29.82	N	14.9	35.7	7.10	47.6	46.1	49	45
28	48	29	37.1	25.5	27	0	87	34	64	0.00	28.36	30.24	NNE	8.8	28.6	12.54	45.9	43.1	47	40
29	51	29	38.6	26.1	25	0	82	39	62	0.00	28.41	30.29	S	11.3	25.2	12.21	43.9	41.4	45	39
30	57	31	40.9	28.9	21	0	86	37	65	0.00	28.29	30.16	S	11.8	22.8	12.41	43.5	41.5	46	38
	62*	42*	51.7*	41.9*	<- Monthly Averages ->						28.11*	29.98*	SSE*	12.3*	54.5*	10.88*	53.5*	52.3*	56*	49*
Temperature - Highest: 73* Lowest: 29*							Degree Days - Total HDD: 373* Total CDD: 0*					Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 7* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 7* Tmin ≤ 32: 5* Avg Wind Speed ≥ 10 mph: 19* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 15*								
Rainfall: Monthly Total: 8.32* in. Greatest 24 Hr: 3.01* in.							Humidity - Highest: 100* Lowest: 19*													