

APPENDIX K: METEOROLOGICAL RECORD

This appendix provides the meteorological data on the individual test days for the New Mexico State University (NMSU) and Kansas State University (KSU) test sites. The meteorological data is obtained from Weather Underground (<https://www.wunderground.com>).

NMSU Test Site, Las Cruces, NM

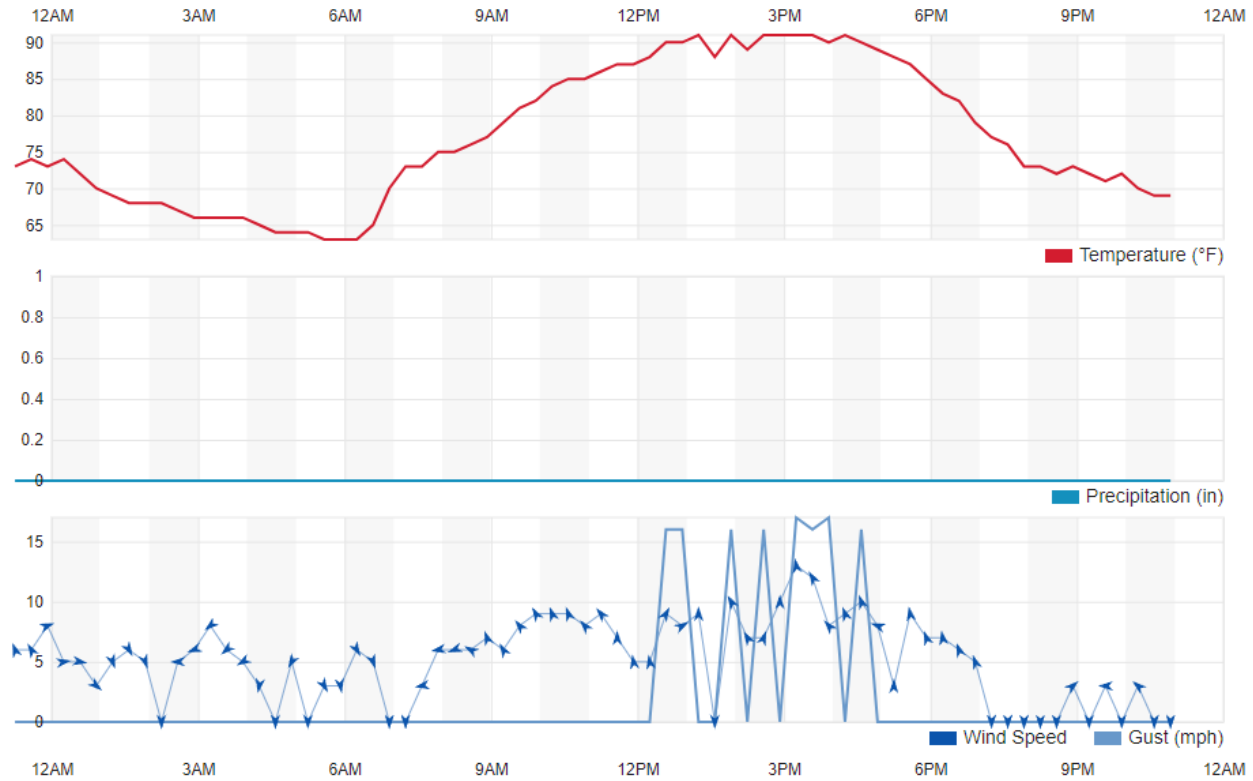


Figure 1. NMSU Day 1: September 21, 2022.

Table 1. Meteorological Conditions for September 1, 2022.

Dew Point (°F)		
Average	High	Low
51.08	61	37
Sea Level Pressure (in)		
Average	25.62	
Astronomy		
	Rise	Set
Actual Time	6:56 AM	7:07 PM
Civil Twilight	6:31 AM	7:31 PM
Nautical Twilight	6:02 AM	8:00 PM
Astronomical Twilight	5:34 AM	8:29 PM
Moon: waning crescent	2:41 AM	5:11 PM

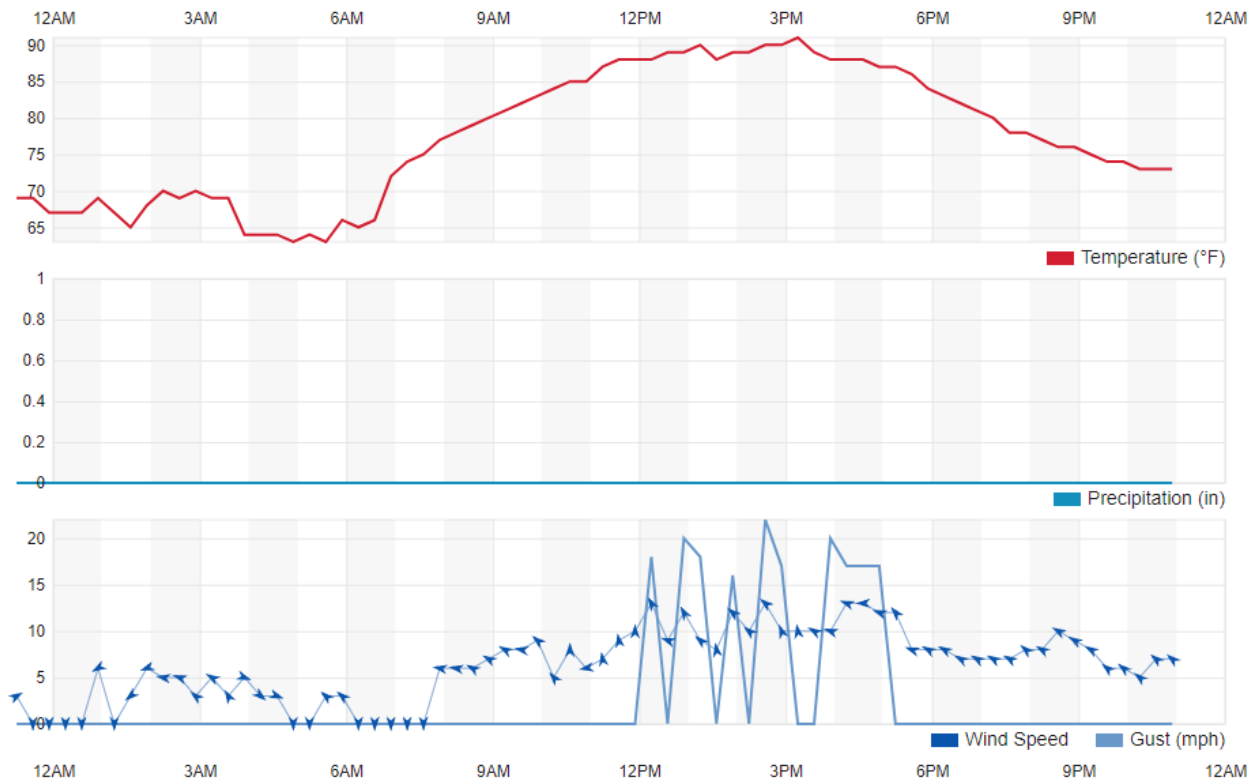


Figure 2. NMSU Day 2: September 22, 2022

Table 2. Meteorological Conditions for September 22, 2022.

Dew Point (°F)		
Average	High	Low
48.31	51	43
Sea Level Pressure (in)		
Average	25.64	
Astronomy		
	Rise	Set
Actual Time	6:56 AM	7:05 PM
Civil Twilight	6:32 AM	7:30 PM
Nautical Twilight	6:03 AM	7:58 PM
Astronomical Twilight	5:34 AM	8:27 PM
Moon: waning crescent	3:41 AM	5:45 PM

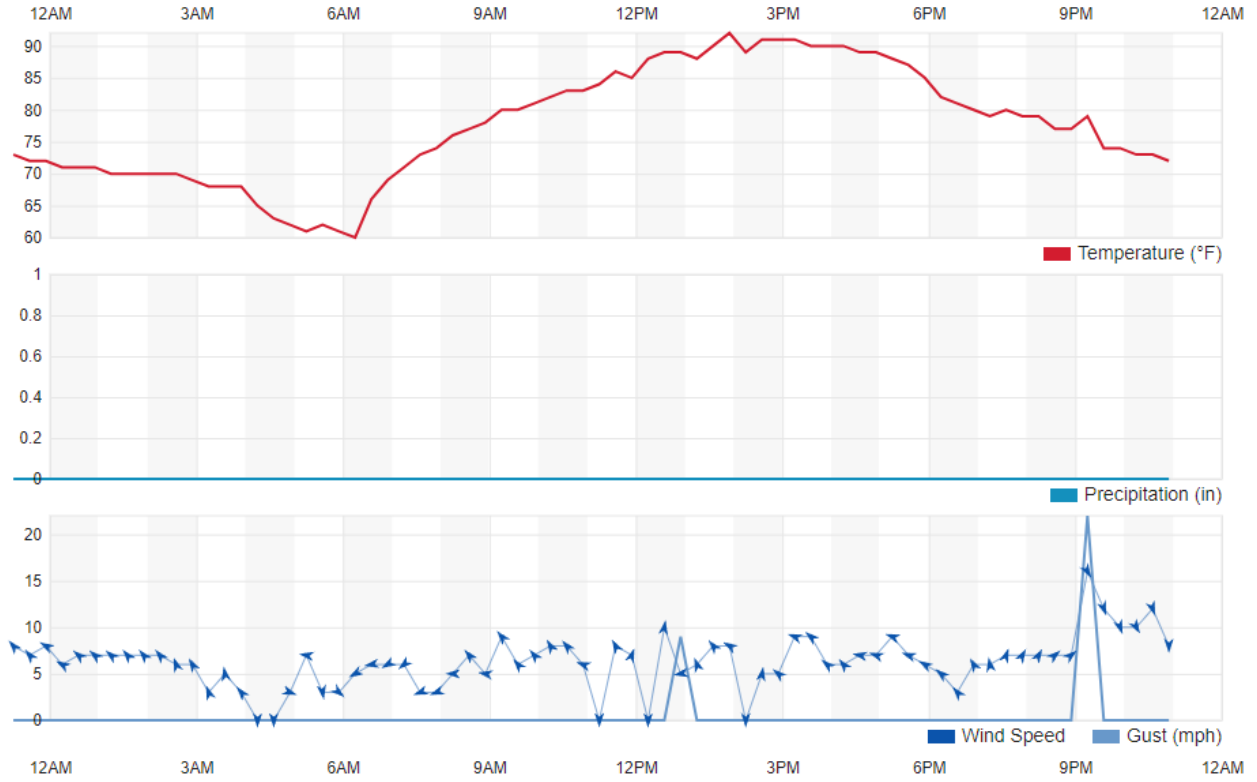


Figure 3. NMSU Day 3: September 23, 2022.

Table 3. Meteorological Conditions for September 23, 2022.

Dew Point (°F)		
Average	High	Low
45.07	52	39
Sea Level Pressure (in)		
Average	25.63	
Astronomy		
	Rise	Set
Actual Time	6:57 AM	7:04 PM
Civil Twilight	6:32 AM	7:28 PM
Nautical Twilight	6:04 AM	7:57 PM
Astronomical Twilight	5:35 AM	8:26 PM
Moon: waning crescent	4:39 AM	6:16 PM

KSU Test Site, Gypsum, KS

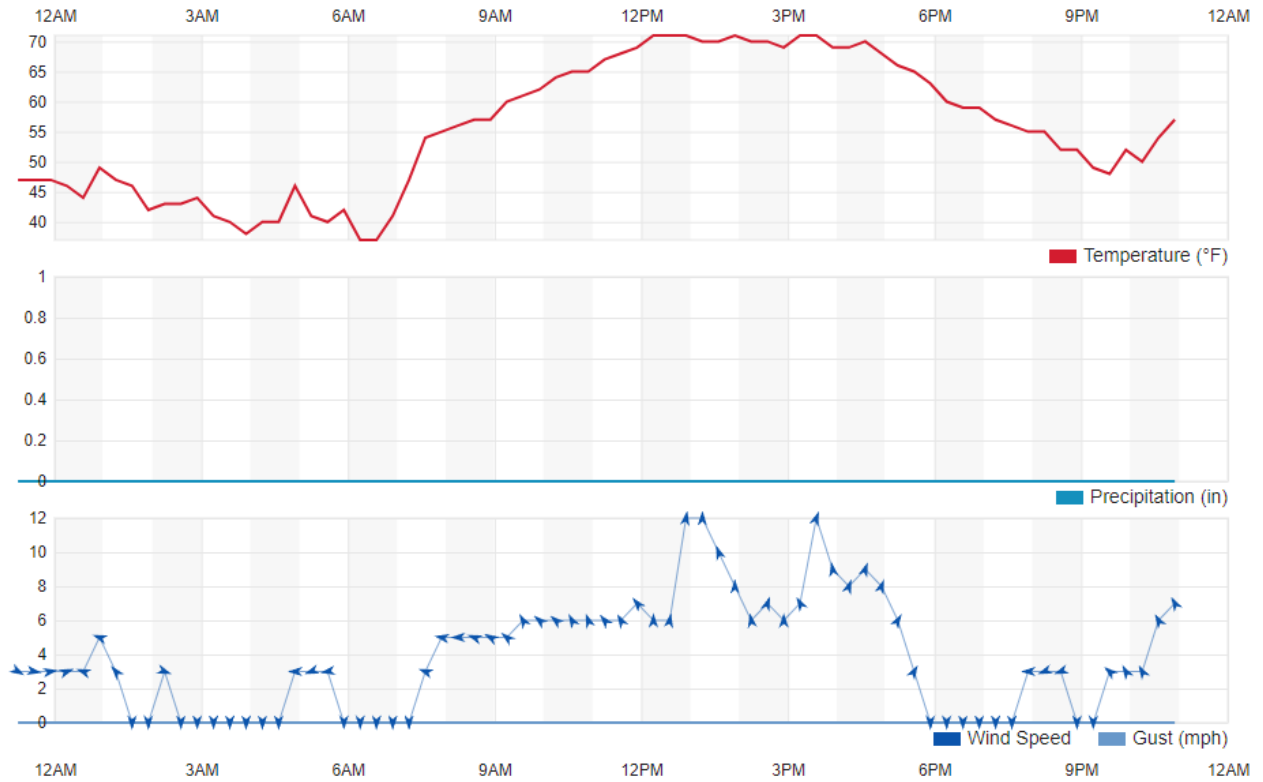


Figure 4. KSU Day 1: November 1, 2022.

Table 4. Meterological Conditions for November 1, 2022.

Dew Point (°F)		
Average	High	Low
28.1	31	25
Sea Level Pressure (in)		
Average	25.64	
Astronomy		
	Rise	Set
Actual Time	7:25 AM	6:18 PM
Civil Twilight	7:00 AM	6:43 PM
Nautical Twilight	6:31 AM	7:12 PM
Astronomical Twilight	6:02 AM	7:41 PM
Moon: waning crescent	2:44 PM	12:11 AM

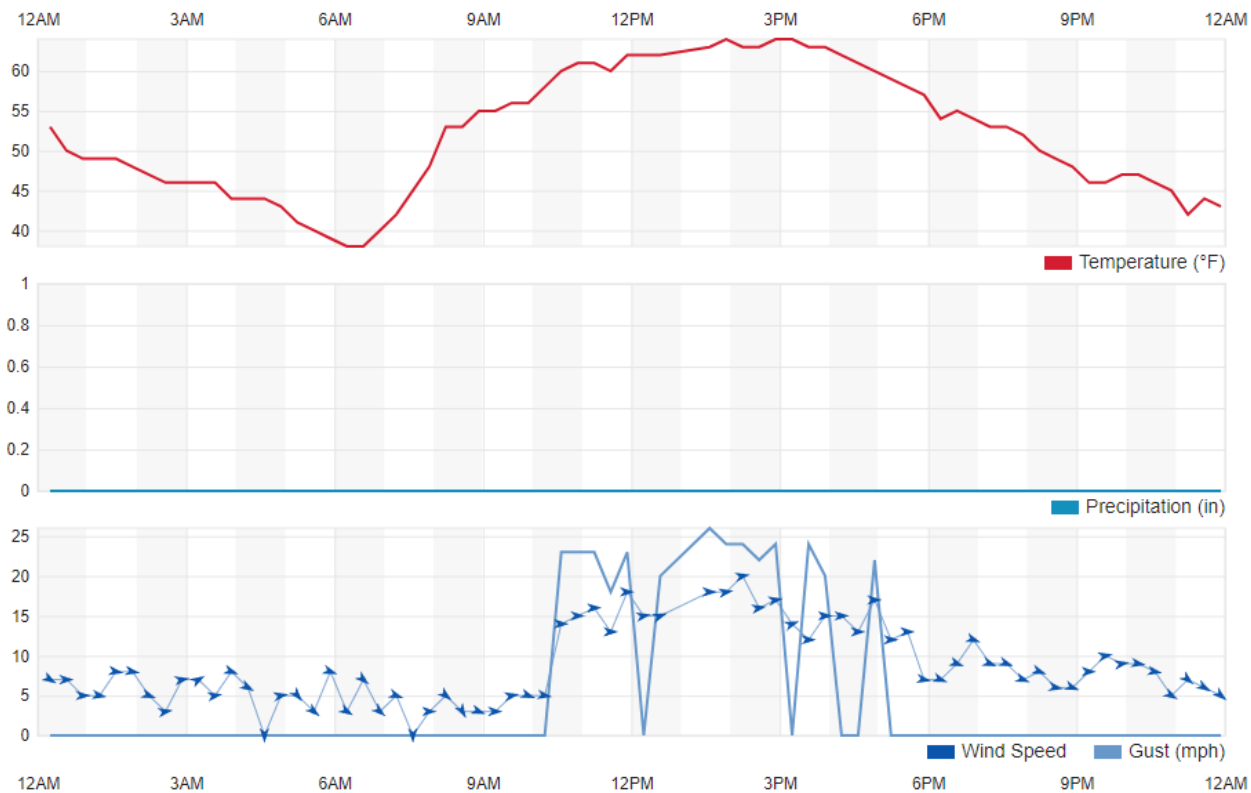


Figure 5. KSU Day 2: November 10, 2022.

Table 5. Meteorological Conditions for November 10, 2022.

Dew Point (°F)		
Average	High	Low
30.84	35	27
Sea Level Pressure (in)		
Average	25.53	
Astronomy		
	Rise	Set
Actual Time	6:33 AM	5:11 PM
Civil Twilight	6:07 AM	5:37 PM
Nautical Twilight	5:38 AM	6:06 PM
Astronomical Twilight	5:09 AM	6:35 PM
Moon: waning crescent	6:44 PM	8:43 AM

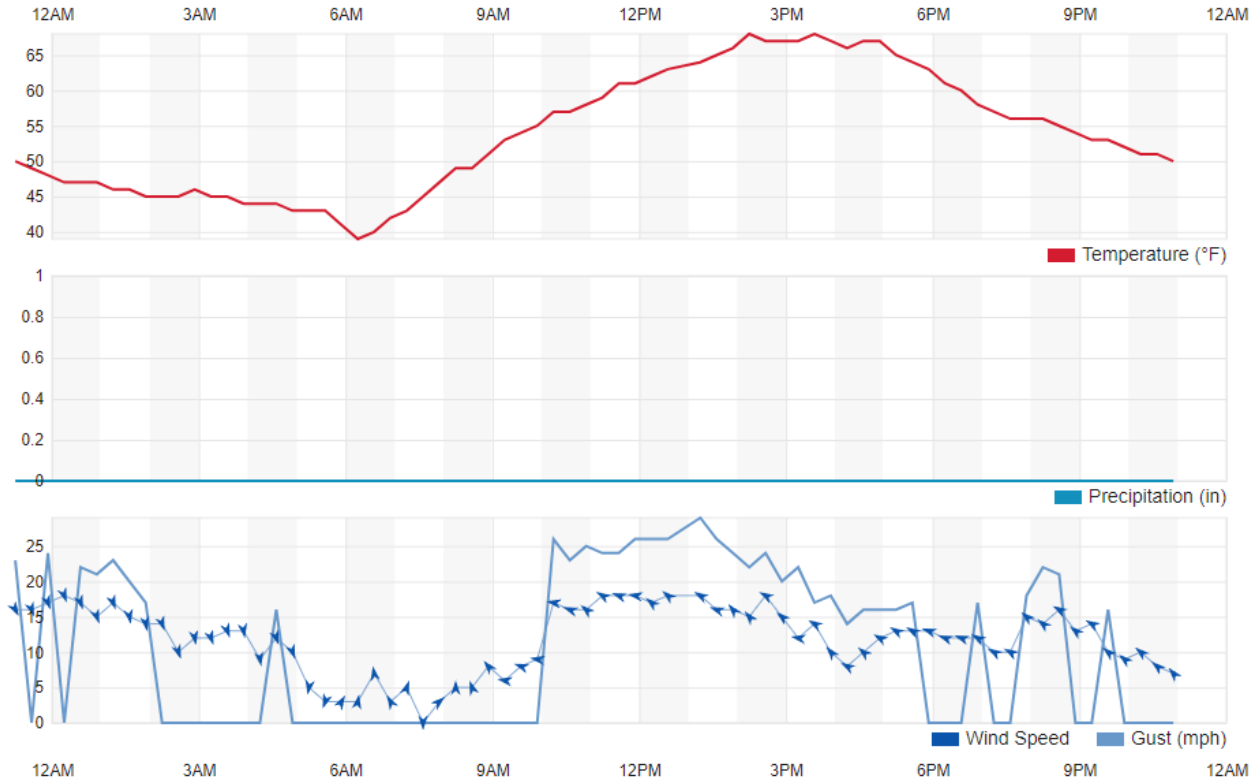


Figure 6. KSU Day 3: March 28, 2023.

Table 6. Meteorological Conditions for March 28, 2023.

Dew Point (°F)		
Average	High	Low
9.07	19	-1
Sea Level Pressure (in)		
Average	25.76	
Astronomy		
	Rise	Set
Actual Time	7:02 AM	7:24 PM
Civil Twilight	6:37 AM	7:49 PM
Nautical Twilight	6:08 AM	8:18 PM
Astronomical Twilight	5:39 AM	8:47 PM
Moon: waning crescent	11:43 AM	1:56 AM

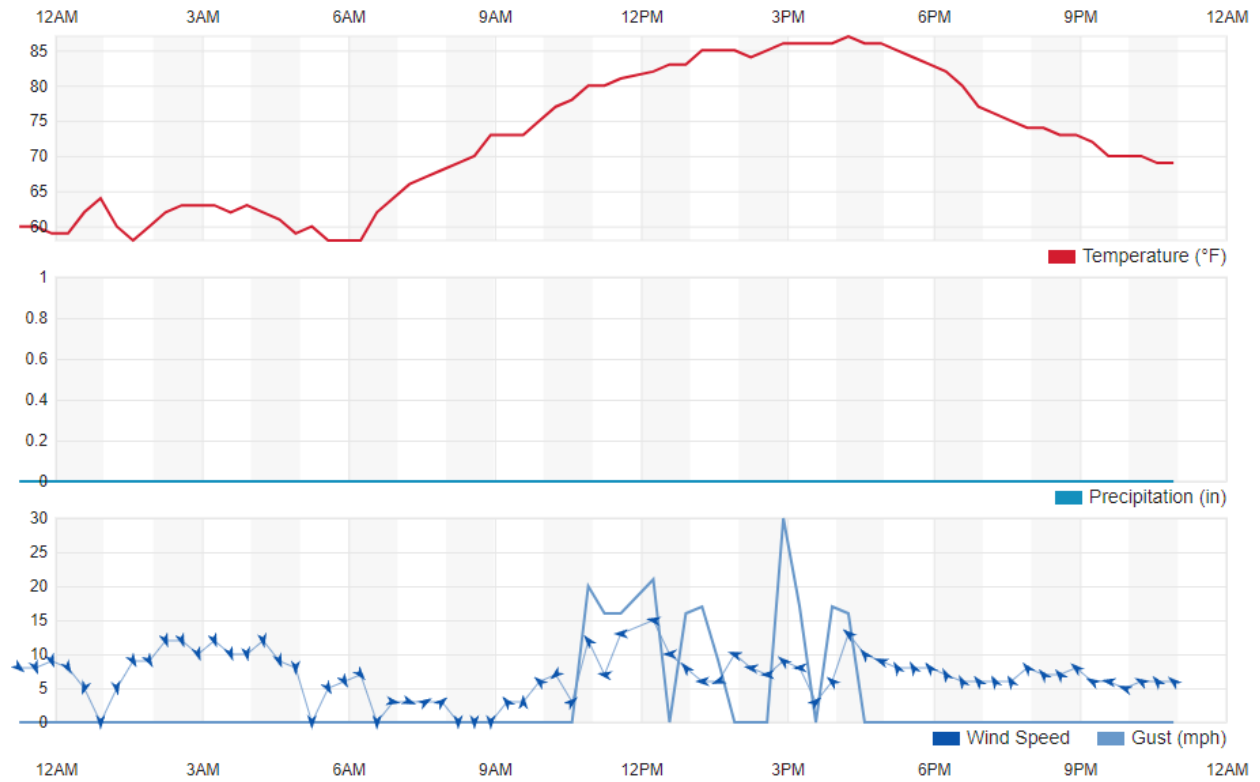


Figure 7. KSU Day 4: April 10, 2023.

Table 7. Meteorological Conditions for April 10, 2023.

Dew Point (°F)		
Average	High	Low
29.99	47	16
Sea Level Pressure (in)		
Average	25.74	
Astronomy		
	Rise	Set
Actual Time	6:45 AM	7:33 PM
Civil Twilight	6:20 AM	7:58 PM
Nautical Twilight	5:50 AM	8:28 PM
Astronomical Twilight	5:20 AM	8:58 PM
Moon: waning crescent	-	9:34 AM

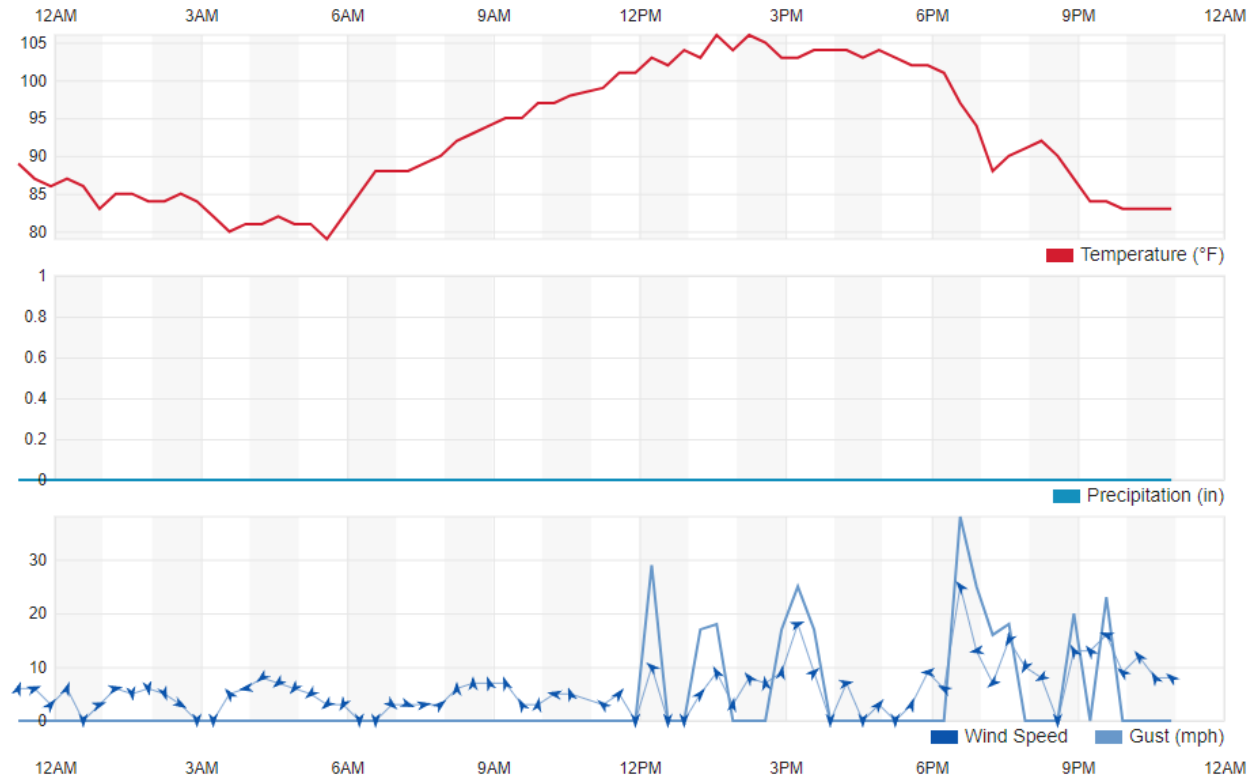


Figure 8. KSU Day 5: July 10, 2023.

Table 8. Meteorological Conditions for July 10, 2023.

Dew Point (°F)		
Average	High	Low
48.06	56	39
Sea Level Pressure (in)		
Average	25.59	
Astronomy		
	Rise	Set
Actual Time	6:09 AM	8:18 PM
Civil Twilight	5:41 AM	8:46 PM
Nautical Twilight	5:07 AM	9:20 PM
Astronomical Twilight	4:30 AM	9:56 PM
Moon: waning crescent	12:55 AM	2:03 PM

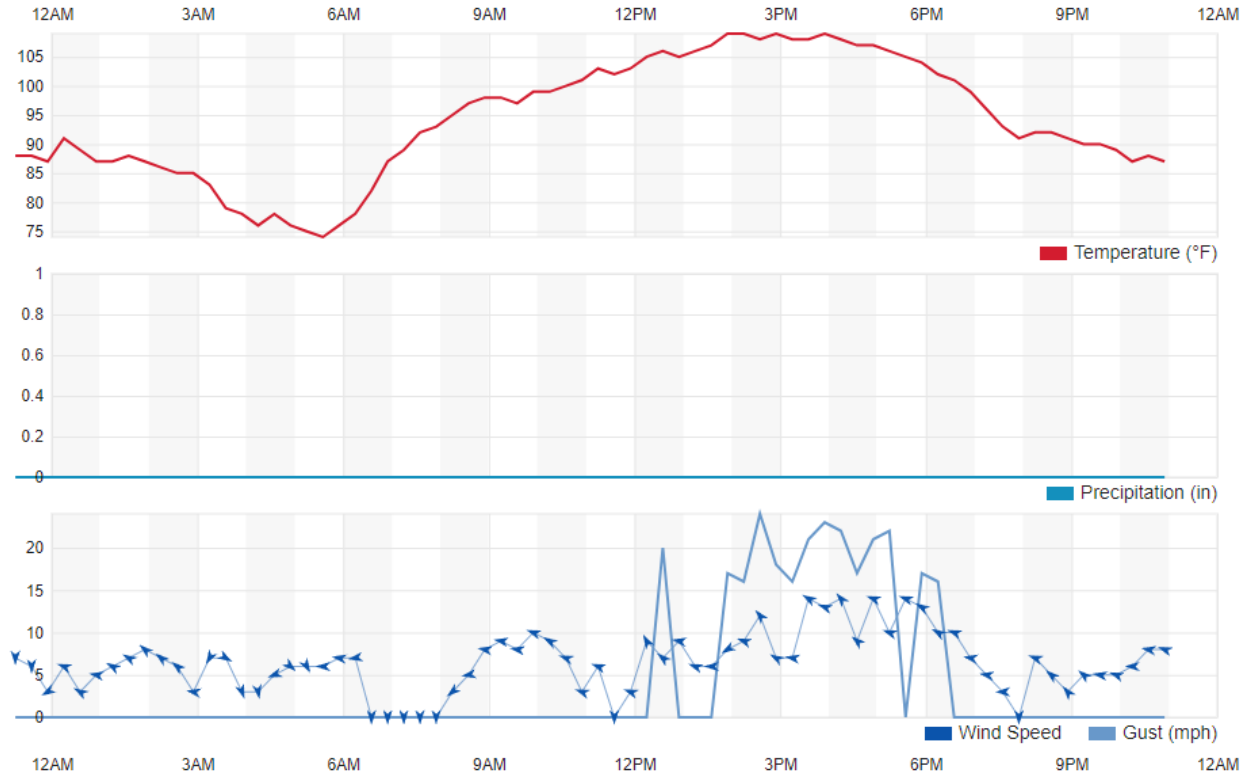


Figure 9. KSU Day 6: July 20, 2023.

Table 9. Meteorological Conditions for July 20, 2023.

Dew Point (°F)		
Average	High	Low
35.85	42	30
Sea Level Pressure (in)		
Average	25.62	
Astronomy		
	Rise	Set
Actual Time	6:15 AM	8:14 PM
Civil Twilight	5:47 AM	8:41 PM
Nautical Twilight	5:14 AM	9:15 PM
Astronomical Twilight	4:38 AM	9:50 PM
Moon: waning crescent	8:43 AM	10:21 PM

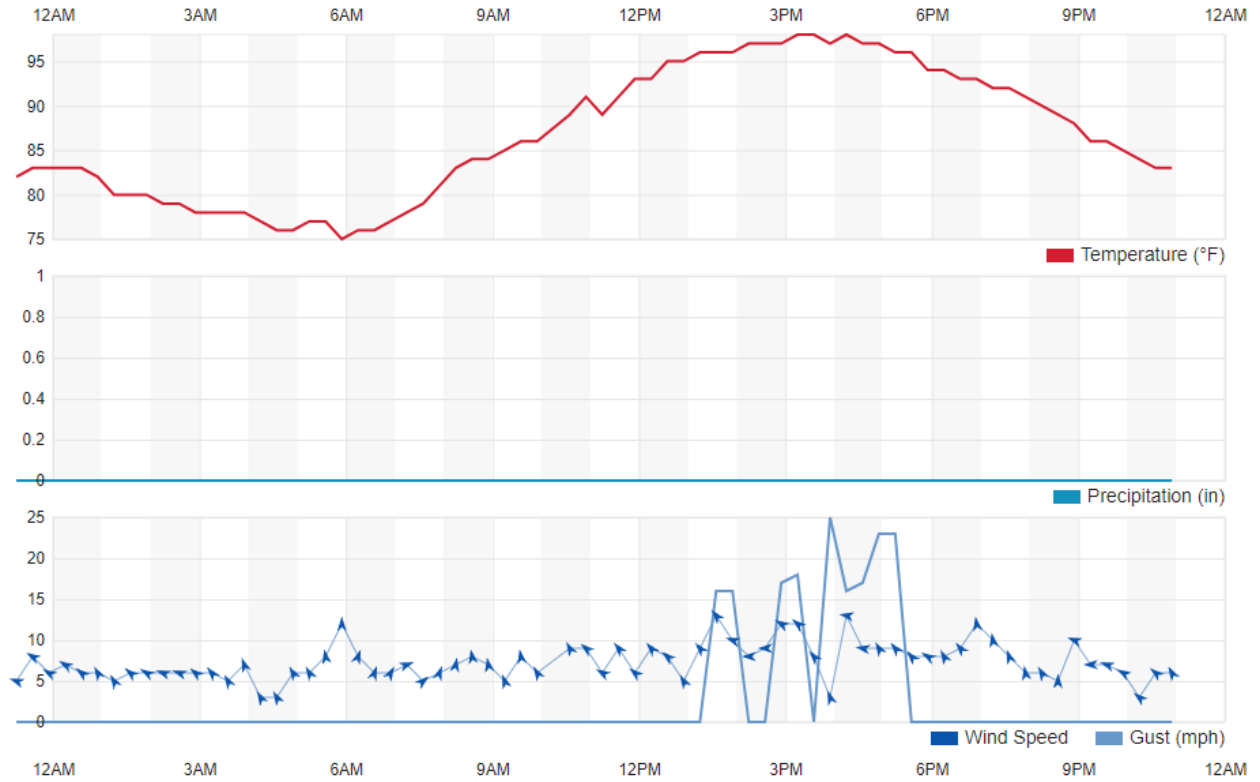


Figure 10. KSU Day 78: July 31, 2023.

Table 10. Meteorological Conditions for July 31, 2023.

Dew Point (°F)		
Average	High	Low
48.28	53	44
Sea Level Pressure (in)		
Average	25.69	
Astronomy		
	Rise	Set
Actual Time	6:22 AM	8:07 PM
Civil Twilight	5:55 AM	8:34 PM
Nautical Twilight	5:23 AM	9:06 PM
Astronomical Twilight	4:48 AM	9:40 PM
Moon: waning crescent	7:48 PM	4:42 AM

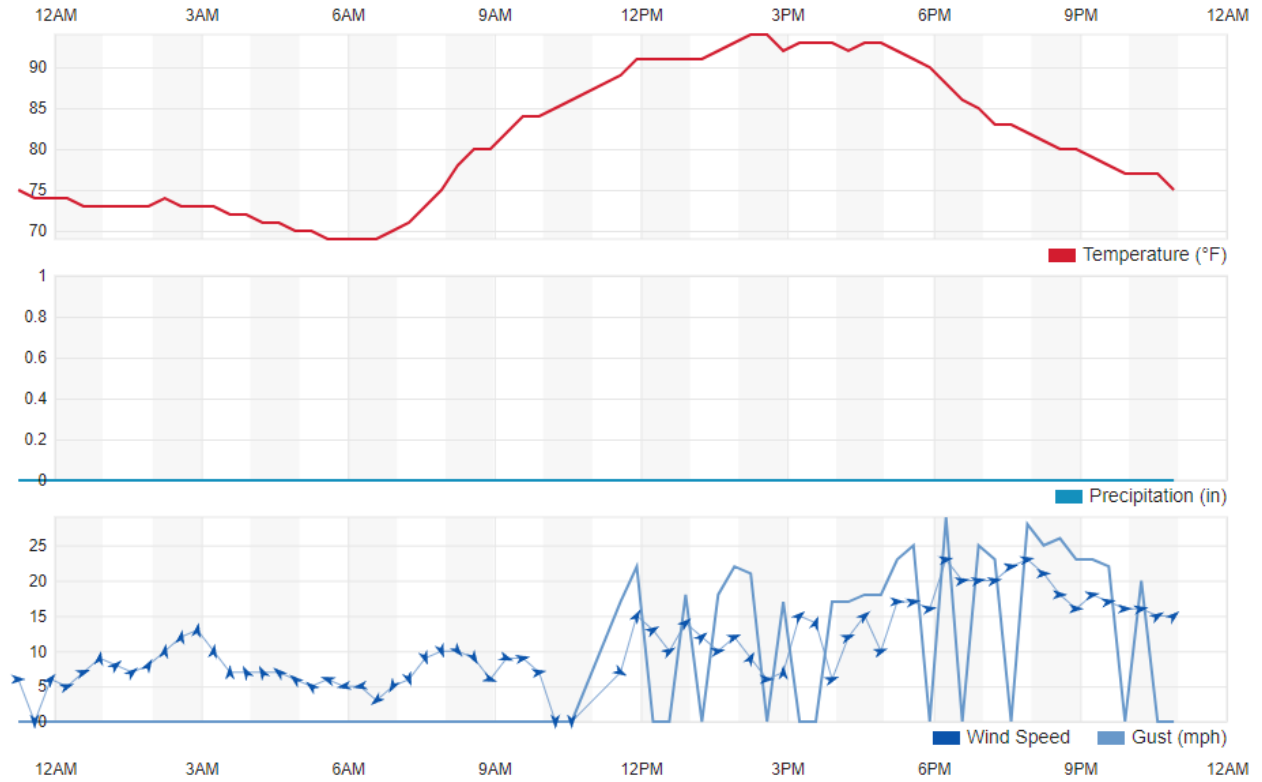


Figure 11. KSU Day 8: August 11, 2023.

Table 11. Meteorological Conditions for August 11, 2023.

Dew Point (°F)		
Average	High	Low
52.63	58	47
Sea Level Pressure (in)		
Average	25.61	
Astronomy		
	Rise	Set
Actual Time	6:29 AM	7:57 PM
Civil Twilight	6:03 AM	8:23 PM
Nautical Twilight	5:32 AM	8:55 PM
Astronomical Twilight	4:59 AM	9:27 PM
Moon: waning crescent	1:59 AM	5:05 PM