

## **Eglin Air Force Base and Duke Field Climate Summary August 2023**

**Mr. David Biggar  
Staff Meteorologist, 96th Weather Squadron**

August of 2023 was an unprecedented hot month for much of the southern United States and Florida, including for Eglin AFB (KVPS) and Duke Field (KEGI). For our area, August was a particularly warm month. August of 2023 was the all-time hottest month on record (for any month) since the KVPS records started in 1940. There were three new daily maximum temperature records set, and two daily maximum temperature records tied for KVPS in August of 2023. For KEGI (with its much smaller historical climatology data base) there was a phenomenal amount of new daily maximum temperature records set or tied during August of 2023, with twelve new daily maximum temperature records set, and four maximum temperature records tied during the month.

For KVPS, August of 2023 had a mean daily temperature of 85.8 deg F (29.9 deg C) which was 4.8 deg F above the normal of 81 deg F for the 10-year KVPS climatology period from 2013 to 2022. The average daily temperature of 29.9 deg C (85.8 deg F) was the warmest month for any month on record at KVPS dating back to 1940. After August of 2023, the next hottest months for KVPS were August of 1954 (29.5 deg C/85.1 deg F), August of 1951 (29.4 deg C /84.9 deg F), July of 1957 (29.2 deg C/84.6 deg F) and June of 1952 (29.1 deg C/84.4 deg F). August of 2023 was also an abnormally dry month for Eglin AFB, with a total of 2.85" of rain which was 4.05" below the normal August rainfall of 6.9". August of 2023 was the 8th driest August on record for KVPS, dating back to 1940. Of the 2.85" of rainfall recorded at KVPS in August, a total of 2.01" occurred on one day (5 August). There were only 10 days with thunder reported during the month, compared to the normal amount of TS days for August of 19 days.

Duke Field (KEGI) had a daily mean temperature of 85.3 deg F (29.6 deg C). As was the case in both June and July, we had more total rainfall during the month at KEGI compared to KVPS, but August of 2023 was unusually dry at both locations. At KEGI there was a total of 3.52" of rainfall during the month, compared to the 2.85" of rainfall during the month at KVPS. Note

that we don't know exactly how much precipitation occurred at KEGI on 5 or 6 August 2023. There was thunderstorm activity at KEGI on both the 5 and 6 August dates, but there were outages with the KEGI weather observation system during portions of the days on 5, 6, 7 August, and portions of the days on 19, 20, and 21 August. Therefore, the precipitation totals at both KVPS and KEGI involved some estimation on several of the dates, as noted above, and there were also estimations of daily maximum and minimum temperatures on those dates as noted on the attached KEGI file. There was a total of 11 thunderstorm days reported at KEGI, which was one day more than the total number of thunderstorm days recorded at KVPS during the month.

#### Daily Records:

There were many new maximum daily temperature records set or tied during the month, especially at KEGI. There were no daily minimum temperatures tied or set during the month, and no daily precipitation records tied or set during the month at either KVPS or KEGI.

#### Eglin AFB (KVPS):

##### Daily Maximum Temperature Records

4th: 99 deg F (previous record of 98 deg F set in 1951)

20th: 97 deg F (tied previous record from 2005 and 1972)

23rd: 100 deg F (previous record of 98 deg F set in 2014)

26th: 103 deg F (previous record of 99 deg F set in 2011); Note that this was the second warmest day ever recorded at KVPS in August, and the fourth warmest day ever recorded at KVPS. The warmest temperature ever recorded in August at KVPS since 1940 was 104 deg F on August 5, 1947.

27th: 98 deg F (tied previous record set in 2011 and 1995).

Duke Field, with its much smaller historical database compared to Eglin AFB, generally ties or sets many more daily temperature and precipitation records than Eglin AFB. During August of 2023, KEGI had an amazing number of daily maximum temperature records tied or set during the month, with twelve new daily maximum temperature records set and four

daily maximum temperature records tied.

#### Daily Temperature Records for Duke Field:

##### Maximum Temperature Records:

- 2nd: 98 deg F (previous record of 96 deg F set in 1990)
- 4th: 100 deg F (previous record of 97 deg F set in 1972)
- 6th: 97 deg F (tied record set in 1980)
- 10th: 97 deg F (previous record of 95 deg F set in 2011)
- 11th: 96 deg F (previous record of 95 deg F set in 1983)
- 12th: 100 deg F (tied record set in 1972)
- 13th: 96 deg F (previous record of 95 deg F set in 2019)
- 14th: 97 deg F (previous record of 96 deg F set in 1990)
- 15th: 99 deg F (previous record of 96 deg F set in 1990)
- 18th: 97 deg F (tied record set in 2011)
- 19th: 98 deg F (previous record of 97 deg F set in 2018)
- 21st: 98 deg F (tied previous record set in 1983)
- 23rd: 100 deg F (previous record of 99 deg F set in 2011)
- 25th: 100 deg F (previous record of 97 deg F set in 2011)
- 26th: 101 deg F (previous record of 100 deg F set in 2011)
- 27th: 101 deg F (previous record of 99 deg F set in 2011)

In summary, August of 2023 was an extraordinarily warm month and an unseasonably dry month, with all-time record heat, including the hottest month ever recorded at KVPS and numerous new daily maximum temperature records set at KVPS and especially at KEGI.