

Eglin Air Force Base and Duke Field Climate Summary July 2023

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For KVPS, July was an abnormally warm month with an average daily mean temperature of 83.1 deg F (28.4 deg C), which is 2.1 deg F above the recent 2012 to 2021 ten-year temperature climatology period. Daily mean temperatures generally stayed above normal throughout the month, except for a few brief periods from 11 to 14 July and 23 and 24 July when the daily mean temperatures were normal to slightly below normal. Overall, dating back to when the KVPS records began in 1940, July of 2023 ranks in a tie (with 1966, 1969, and 1993) as the 18th warmest July on record in the past 84 years. Despite the above normal heat during the month, there was frequent thunderstorm activity, with 16 days of thunder reported during the month (below the normal of 20 days of thunder per month). The total precipitation for the month was 7.84", which was slightly above the long term normal of 7.5" for the month. Most of the rainfall during the month occurred between 5 and 16 July, with some additional, mostly light amounts of rainfall between the 22nd and 30th of July. Due to the continued periodic problems with the precipitation accumulation sensor at KVPS during the first ten days of the month, the exact rainfall totals each day at KVPS on the 5th, 7th, 9th, and 10th were estimated, based on some available KVPS rainfall on portions of those dates, and based on comparisons of nearby daily rainfall totals from the closest RAWS weather observation sites to KVPS (at test sites B71 and A3). Unlike June of 2023, the July thunderstorm activity generally stayed below severe limits, although a peak wind of 44 knots occurred at KVPS with thunderstorm activity on the 30th of the month.

For Duke Field (KEGI), we had a daily mean temperature of 83.3 deg F (28.5 deg C). As was the case in June, we had more total rainfall during the month at KEGI compared to KVPS. At KEGI there was a total of 10.40" of rainfall during the month, compared to the 7.84" of rainfall during the month at KVPS. Note that we don't know exactly how much precipitation occurred at KEGI on 3, 4, or 15 July 2023. There was rainfall activity at KEGI on both the 4 and 15 July dates, but there were outages with the KEGI weather observation system on portions of both the 3rd and 4th of July, and on the 15th and 16th of July. Therefore, the precipitation totals at both KVPS and KEGI involved some estimation on several of the dates, as noted above. There was a total of 13 thunderstorm days reported at KEGI, which was three days less than the total number of thunderstorm days recorded at KVPS during the month. Also please note that the maximum temperature at KEGI for 3 July and both the maximum and minimum temperatures at KEGI for 4 July

were estimated due to partial temperature data unavailability on those dates. Data from the nearest RAWS data from test sites B70 and C64 was used to help fill in the temperature and precipitation gaps on 3, 4, and 15 July.

Daily Records:

Eglin AFB didn't have any new daily maximum temperature or minimum records, or daily precipitation records tied or set during the month.

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 July of 2023, KEGI set one new daily precipitation record and tied or broke three daily maximum temperature records during the month. There were no daily minimum temperature records tied or set during the month at KEGI.

Daily Temperature Records for Duke Field:

Maximum Temperature Records:

1st: 99 deg F (previous record 97 deg F from 1972)
25th: 95 deg F (tied the previous record from 2012)
27th: 97 deg F (tied previous record from 1982)

Daily Precipitation records:

14th: 2.51" broke the previous record of 1.89" set in 2018.