

AUGUST WEATHER SUMMARY

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After the record-setting heat of the latter part of July, August proved to be a quiet month in terms of weather. No temperature or rainfall records were tied or broken at either Bakersfield or Fresno, and the mean temperatures for both cities for the month were less than a degree off normal; Fresno was +0.2 degree, and Bakersfield was -0.9 degree. Fresno hit triple-digit temperatures a mere four times in August, and Bakersfield, only three times.

August began with an upper-level trough over California. This trough turned the surface flow onshore, bringing marine air into the San Joaquin Valley and keeping temperatures near to slightly below normal. The trough also triggered the development of afternoon cumulus clouds over the Southern Sierra Nevada crest. A few cumulus developed into isolated thunderstorms during the afternoon and early evening of the 4th.

An upper-level ridge over the desert southwest began building into California on August 8th, bringing a short-lived warming trend. The change in temperatures was quite rapid, with the lowest temperatures of the month for Fresno and Bakersfield observed on the morning of the 8th—Bakersfield with a low of 62, and Fresno with a low of 60 (also on the 1st)—followed by the hottest temperatures of the month for both cities on the 10th (the first day of triple-digit heat in August for these cities, with Bakersfield hitting 102, and Fresno, 104).

The warm weather was short lived, as an upper-level trough developed off the California coast. A series of short-wave moved through the trough, reaching central California every other day, bringing further pushes of marine air into the San Joaquin Valley.

A closed low developed in the main trough on the 18th, and was located west of Point Conception. A vorticity maximum rotating around this low triggered convection over parts of the Coastal Range, with a few showers and thunderstorms drifting into western Fresno and western Merced counties during the late afternoon and early evening of the 18th.

The trough lifted northeast into northern California on August 19th, but another trough quickly followed, reaching the coast on the 20th. This trough quickly moved through the region, but did deepen the marine layer enough for another push of marine air through the Sacramento Delta. An upper-level ridge built into California behind the trough, bringing warmer temperatures, but also upper-level moisture wrapping around the ridge from former Hurricane Hector. Other than the high clouds, the main impact of the ridge was a return of triple-digit heat to the San Joaquin Valley, with both Fresno and Bakersfield reaching 100+ on the 23rd. As with the earlier episode of triple-digit weather, these warm temperatures were short lived, as another upper-level trough moved into the region on the 25th, weakening the ridge and dropping temperatures to near normal. As the marine layer deepened on the night of August 25th-26th, it began spilling through the Pacheco Pass.

This caused a brief period of gusts to around 35 mph over the San Luis Reservoir during the early morning of the 26th, with the gusts subsiding by sunrise.

The trough was followed by another weak ridge that moved into California on the 26th, warming temperatures to a few degrees above normal. Fresno hit 100 for the fourth, and last, time in August on the 28th. Another trough reached central California on August 29th. As with most of the August systems, this trough was only over the region for a day, then lifted northeast as the ridge rebuilt into the state. The ridge brought not only warming to the central California interior, but also a slight increase in mid-level moisture. This increase in moisture triggered the development of cumulus over the Southern Sierra Nevada crest on the afternoons of August 30th and 31st, with a thunderstorm developing near the Tioga Pass during the late afternoon of the 31st.