SEPTEMBER 2007 WEATHER SUMMARY

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A strong ridge of high pressure aloft lingered over California and the Desert Southwest the first 3 days of the month, keeping the central and southern San Joaquin Valley under triple-digit heat. A monsoonal flow triggered thunderstorms over the mountains and the Kern county deserts, and one thunderstorm near Rosamond on September 1st spawned a tornado that moved through the town; a National Weather Service storm survey rated the tornado at EF0 on the new Enhanced Fujita scale. As the thunderstorm collapsed, it generated high winds that knocked down several power poles and created areas of blowing dust. Other thunderstorms in the same complex dropped ½-inch hail on the town of Boron in the southeastern corner of Kern County, generated a wind gust measured at 83 mph at the Mojave Air and Spaceport, and caused flash flooding in the vicinity of Mojave and California City.

An upper-level low-pressure trough dropping out of the Gulf of Alaska weakened the ridge, dropping temperatures around 12 degrees on September 4th, as the surface flow turned onshore and a deep layer of marine air flooded the San Joaquin Valley. Temperatures remained near normal through September 12th, and no triple-digit temperatures were recorded at either Bakersfield or Fresno after the 3rd.

Another upper-level trough brought a push of cool, dry air to the region on September 13th. Relative humidities dropped into the single digits in the higher elevations of the Southern Sierra Nevada in Tulare and Kern Counties.

The first winter storm of the season moved into central California on September 20th. At least two inches of snow fell on Tioga Pass, and thunderstorms developed over the central and southern San Joaquin Valley, lingering into the late evening.

Immediately behind this storm was a second system. An upper-level low dropped down the coast on the 21st, and moved inland over southern California the next day. This low triggered another thunderstorm outbreak, with hail up to 0.88 inch in diameter falling in eastern Kings County during the afternoon of September 22nd, and 0.75-inch hail falling west of Squaw Valley in Fresno County near the foothills. Flash flooding occurred in eastern Kings County, central Fresno County, and north-central Tulare County, with scattered reports of road flooding and minor mud/debris flows elsewhere in the central and southern San Joaquin Valley.

An upper-level ridge of high pressure moved over central California behind the storm, with the central and southern San Joaquin Valley warming to around 90 on September 26th and 27th. A fast-moving, dry, cold trough reached California on the 28th, with San Joaquin Valley temperatures plunging into the lower to mid 70s. As this trough exited the region, temperatures warmed back to near normal at the close of the month.