DECEMBER WEATHER SUMMARY

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A strong surface high over Idaho brought an unseasonably cold Canadian airmass to California in the wake of a late-November storm. December began with another night of below-freezing temperatures, as low temperatures across much of the central and southern San Joaquin Valley bottomed out between 27 and 28 degrees on the morning of December 1st, and were only a few degrees warmer the next morning.

A potent Pacific storm approached California on the 8th. Strong southeast winds developed in the central and southern San Joaquin Valley ahead of the cold front, raising areas of blowing dust with visibilities falling below 100 feet at times. The winds also brought strong warming to the region, with Bakersfield reaching a high of 81, and Fresno hitting 77; both were record highs for December 8th. The 77 at Fresno also was the highest temperature ever recorded in the city during December.

The storm itself brought heavy snowfall to the Southern Sierra Nevada, with nearly 2 feet of new snow at Poison Ridge, and 13 inches as far south as Giant Forest. A zonal flow set up over California behind the storm, with an upper-level short-wave trough moving through the region of the 12th, bringing light precipitation to the northern parts of the Hanford warning/forecast area.

The next storm arrived on December 16th, exactly one week after its processor. Although it looked weaker over central California on satellite loops, snowfall from this storm was appreciable, with amounts ranged from 5 inches at Tuolumne Meadows in Yosemite National Park, to 11 inches at Lodgepole, in Sequoia National Park.

Cold, dry air moved into central California behind the storm, bringing another round of sub-freezing temperatures to the central and southern San Joaquin Valley. Temperatures on the morning of December 18th dropped into the mid 20s in some parts of the Valley. Temperatures moderated only slights the next few days, with Valley lows in the 27-31-degree range through the morning of the 21st.

Another winter storm reached central California on December 22nd, bringing up to 16 inches of new snow to the southern Sierra Nevada, with the heaviest snow north of Kings Canyon, although Lodgepole recorded 7 inches of new snow. Thick clouds settled into the foothills of the Southern Sierra Nevada, and the north slopes of the Tehachapi Mountains, created areas of dense fog. The low clouds and fog pushed into the Tehachapi Pass and the Grapevine, affecting travel on Highway 58 and Interstate 5 through the mountains.

High pressure behind the storm combined with a moist low-level airmass to bring several days of dense fog to the central and southern San Joaquin Valley, including the first part of the Christmas weekend.

A Pacific storm moved into the central California interior the day after Christmas. Although snowfall rates were light, the storm lasted nearly two days, and storm-total snowfall amounts reached as high as 19 inches.

A very tight surface-pressure gradient developed over the Indian Wells Valley behind the storm, triggering north to northeast winds that gusted to 63 mph at Ridgecrest. Cold air settled into the San Joaquin Valley behind the storm, bringing a final round of mid to upper 20s to the coldest parts of the central and southern San Joaquin Valley for the last three mornings of the month.