

Storm Data and Unusual Weather Phenomena - November 2021

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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CALIFORNIA, South Central

(CA-Z300) WEST SIDE MOUNTAINS NORTH OF HIGHWAY 198, (CA-Z301) LOS BANOS-DOS PALOS, (CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z303) PLANADA-LEGRAND-SNELLING, (CA-Z304) COALINGA - AVENAL, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z308) WEST SIDE MOUNTAINS SOUTH OF HIGHWAY 198, (CA-Z309) BUTTONWILLOW- LOST HILLS - I5, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z313) BUENA VISTA, (CA-Z314) BAKERSFIELD, (CA-Z315) SOUTHEAST SAN JOAQUIN VALLEY, (CA-Z316) SOUTH END SAN JOAQUIN VALLEY, (CA-Z317) MARIPOSA - MADERA FOOTHILLS, (CA-Z318) MARIPOSA - MADERA LOWER SIERRA, (CA-Z319) FRESNO - TULARE FOOTHILLS, (CA-Z320) FRESNO - TULARE LOWER SIERRA, (CA-Z321) SOUTH END SIERRA FOOTHILLS, (CA-Z322) SOUTH END OF THE LOWER SIERRA, (CA-Z323) YOSEMITE NP OUTSIDE OF THE VALLEY, (CA-Z324) YOSEMITE VALLEY, (CA-Z325) SAN JOAQUIN RIVER CANYON, (CA-Z326) UPPER SAN JOAQUIN RIVER, (CA-Z327) KAISER TO RODGERS RIDGE, (CA-Z328) KINGS CANYON NP, (CA-Z329) GRANT GROVE AREA, (CA-Z330) SEQUOIA NP, (CA-Z331) SOUTH END OF THE UPPER SIERRA, (CA-Z332) KERN RIVER VALLEY, (CA-Z333) PIUTE - WALKER PASS (BASIN?), (CA-Z334) TEHACHAPI, (CA-Z335) GRAPEVINE, (CA-Z336) FRAZIER MOUNTAIN COMMUNITIES, (CA-Z337) INDIAN WELLS VALLEY, (CA-Z338) MOJAVE DESERT SLOPE(S), (CA-Z339) MOJAVE DESERT

11/01/21 00:00 PST	0	Drought
11/30/21 23:59 PST	0	

Nearly all of the central California Interior remained classified as being in an exceptional drought by the end of November, 2021 due to a long term precipitation deficit. As of November 30, 2021, the impacted area has received less than 50% of normal precipitation since July 1, 2020.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z307) FRESNO - CLOVIS, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY

11/03/21 02:15 PST	0	Dense Fog
11/03/21 10:15 PST	0	

High pressure strengthened over central California on November 2. This resulted in clear skies and light winds prevailing over the San Joaquin Valley through the morning of November 3. With inversion conditions and residual low level moisture present, area of dense fog formed in the valley overnight. The coverage of dense fog was significant enough to result in several school districts opening late or delaying bus service. The fog persisted in a few locations until late morning before mixing out and giving way to a mostly sunny afternoon.

(CA-Z334) TEHACHAPI

11/05/21 07:15 PST	0	Dense Fog
11/05/21 08:35 PST	0	

A weak cold front pushed through central California during the afternoon of November 4. Behind the front, upslope clouds persisted overnight and through the morning of November 5 along the Sierra foothills and the valley facing slopes of the Tehachapi Mountains. Some of the upslope moisture banked up in the Tehachapi area resulting in a short period (between an hour and an hour and a half) of dense fog which resulted in visibility lowering to below 1000 feet in Tehachapi. The fog lifted into a low cloud deck then mixed out by late morning.

(CA-Z323) YOSEMITE NP OUTSIDE OF THE VALLEY, (CA-Z326) UPPER SAN JOAQUIN RIVER, (CA-Z327) KAISER TO RODGERS RIDGE, (CA-Z328) KINGS CANYON NP, (CA-Z330) SEQUOIA NP

11/08/21 22:00 PST	0	Winter Weather
11/09/21 13:00 PST	0	

(CA-Z331) SOUTH END OF THE UPPER SIERRA, (CA-Z334) TEHACHAPI, (CA-Z338) MOJAVE DESERT SLOPE(S)

11/09/21 01:10 PST	0	High Wind (MAX 61 kt)
11/09/21 13:14 PST	0	

A large upper trough that was associated with a deep upper low that dropped out of the Gulf of Alaska on November 7 before pushing through southwestern Canada on November 8 and 9 pushed a moist cold front through central California between the evening of November 8 and the early afternoon of November 9. This system brought between three quarters of an inch to an inch and a quarter of liquid precipitation to the Yosemite Park area. Further south in the Sierra Nevada Nevada and Madera and Fresno Counties, several stations measured between a half inch and an inch of liquid precipitation while the Sierra foothills generally picked up between half an inch and an inch of rain north of Kings Canyon. South of Kings Canyon, several stations measured between a quarter inch and a half inch of liquid precipitation. The snow level was around 7500 feet for much of this event and several SNOTELS above 7500 feet picked up an estimated 4 to 6 inches of new snow. Most of the San Joaquin Valley picked up between one and three tenths of an inch of rainfall with locally higher amounts being reported in the Fresno area. Rainfall amounts in Kern County were generally a tenth of an inch or less. This storm also produced a period of increased winds over the Kern County Mountains and Deserts on November 9 with several locations reporting brief gusts exceeding 40 mph and a few low impact indicator sites briefly exceeding 60 mph. The precipitation

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moved out of the area by early afternoon on November 9 and the winds diminished later in the afternoon as the frontal system moved out of the area.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY	11/10/21 02:35 PST	0	0	Dense Fog
	11/10/21 09:55 PST	0	0	

Following the departure of the upper trough that was responsible for the precipitation across much of the area on November 8 and 9, high pressure build into California on November 10 resulting in clear skies and light winds across the San Joaquin Valley. With abundant low level moisture and inversion conditions, areas of dense fog formed in the San Joaquin Valley east of Interstate 5 by sunrise and persisted until late morning when it lifted into a low cloud deck before dissipating by early afternoon.

(CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY	11/11/21 00:05 PST	0	0	Dense Fog
	11/11/21 08:20 PST	0	0	

High pressure continued to strengthen over California during the morning of November 11. With another night of clear skies and light winds across the San Joaquin Valley, an area of dense fog formed overnight south of Fresno and north of Bakersfield impacting travel on State Routes 99, 43 and 198. The fog lifted into a low cloud deck after sunrise and dissipated by late morning.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY	11/12/21 01:00 PST	0	0	Dense Fog
	11/12/21 08:19 PST	0	0	

A strong ridge of high pressure persisted over central California during the evening of November 11 and the morning of November 12. Clear skies and light winds once again prevailed across the San Joaquin Valley. Dense fog formed overnight impacting travel on State Routes 99, 41, 43, 180, and 198 and also resulted in several school districts either opening late or cancelling or delaying bus service. The fog lifted into a low cloud deck after sunrise and dissipated by late morning.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY	11/12/21 20:55 PST	0	0	Dense Fog
	11/13/21 12:10 PST	0	0	

A strong ridge of high pressure remained dominant over central California during the evening of November 12 and the morning of November 13. Clear skies and light winds once again prevailed across the San Joaquin Valley. Dense fog formed during the evening north of Fresno and spread southward overnight impacting travel on State Routes 99, 41, 43, 180, and 198. The fog lifted into a low cloud deck by late morning which persisted all day at some locations.

(CA-Z301) LOS BANOS-DOS PALOS, (CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z309) BUTTONWILLOW- LOST HILLS - I5, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z314) BAKERSFIELD	11/13/21 18:05 PST	0	0	Dense Fog
	11/14/21 11:55 PST	0	0	

A strong ridge of high pressure remained dominant over central California during the evening of November 13 and the morning of November 14. Light winds once again prevailed across the San Joaquin Valley. Dense fog formed during the evening in the center portion of the valley and spread outward overnight impacting travel on Interstate 5 as well as on State Routes 99, 41, 43, 46, 152, 168, 180, and 198. The fog lifted into a low cloud deck by late morning which persisted all day at some locations.

(CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z309) BUTTONWILLOW- LOST HILLS - I5, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z314) BAKERSFIELD	11/14/21 17:45 PST	0	0	Dense Fog
	11/15/21 11:07 PST	0	0	

A strong ridge of high pressure remained dominant over central California during the evening of November 14 and the morning of November 15. Light winds once again prevailed across the San Joaquin Valley. Dense fog once again formed during the evening in the center portion of the valley and spread outward overnight impacting travel on State Routes 99, 41, 43, 46, 168, 180, and 198. The fog lifted into a low cloud deck by late morning which persisted until late afternoon at some locations.

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(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z314) BAKERSFIELD				
	11/15/21 19:35 PST		0	Dense Fog
	11/16/21 02:25 PST		0	

Areas of dense fog reformed in the San Joaquin Valley during the evening of November 15. However, as a cold front dropped south through the area during the early morning of November 16 the fog lifted into a low cloud deck and visibility improved.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY				
	11/18/21 02:30 PST		0	Dense Fog
	11/18/21 09:40 PST		0	

High pressure rebuilt into central California on November 17. Clear skies, light winds and inversion conditions over the San Joaquin Valley followed on the morning of November 18 and reduced visibility to below 500 feet across much of the valley north of Kern County. The dense fog resulted in several school districts either opening late or cancelling bus service. The fog lifted into a low cloud deck by late morning which dissipated by early afternoon.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY				
	11/19/21 02:55 PST		0	Dense Fog
	11/19/21 12:15 PST		0	

High pressure remained in place over central California on November 18. Clear skies, light winds and inversion conditions prevailed over the San Joaquin Valley resulted in areas of dense fog reforming during the morning of November 19. Several school districts in the valley either opened late or cancelled bus service. The fog lifted into a low cloud deck by late morning which dissipated by early afternoon.

(CA-Z312) VISALIA - PORTERVILLE - REEDLEY				
	11/20/21 06:40 PST		0	Dense Fog
	11/20/21 09:15 PST		0	

An weak upper trough dropped through central California during the evening of November 19 and the morning of November 20. This resulted in fog lifting into a low cloud deck shortly after developing in the San Joaquin Valley during the morning of November 20. Some dense fog did impact SR 99 during the morning of November 20 between Kingsburg and Tulare, but the fog had lifted by late morning and skies cleared out throughout the valley during the afternoon.

(CA-Z301) LOS BANOS-DOS PALOS, (CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z309) BUTTONWILLOW- LOST HILLS - I5, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z314) BAKERSFIELD, (CA-Z334) TEHACHAPI				
	11/20/21 18:35 PST		0	Dense Fog
	11/21/21 11:05 PST		0	

Low level upslope resulted in dense fog forming in the Tehachapi area during the evening of November 20. An offshore wind developed and resulted in downslope winds which dissipated the fog by late evening. Meanwhile, clear skies, light winds and inversion conditions resulted in widespread dense fog forming in the San Joaquin Valley during the evening of November 20 into the early morning of November 21. The fog persisted over a widespread area until late morning when it lifted into a low clouds deck which eroded during the early afternoon.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z314) BAKERSFIELD				
	11/21/21 22:40 PST		80K	Dense Fog
	11/22/21 12:35 PST		0	

Another night of clear skies, light winds and inversion conditions resulted in widespread dense fog forming in the San Joaquin Valley during the evening of November 21 into the early morning of November 22. The fog persisted over a widespread area until late morning when it lifted into a low clouds deck which eroded during the afternoon. The fog resulted in at least three major vehicular accidents in the San Joaquin Valley during the morning of November 22.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY				
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	11/22/21 16:45 PST		0	Dense Fog
	11/23/21 11:40 PST		0	

Areas of dense fog reformed in the center portion of the San Joaquin Valley during the afternoon of November 22. With skies becoming clear and light wind prevailing over the valley, the fog became more extensive overnight and spread across the valley and became widespread. The fog lifted into a low cloud deck during the late morning and completely dissipated by early afternoon.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z307) FRESNO - CLOVIS, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z334) TEHACHAPI

11/24/21 00:25 PST	0	Dense Fog
11/24/21 09:20 PST	0	

Although a weak cold frontal passage occurred over central California on November 23, the lower levels remained very stable and skies cleared out during the evening. With clear skies prevailing overnight and light winds prevailing in the San Joaquin Valley, areas of dense fog formed in the center of the valley. The fog dissipated by late morning. Dense fog also was present in the Tehachapi area during the morning commute period as a result of low level upslope flow; however, the fog lifted out by late morning.

(CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY

11/25/21 00:10 PST	0	Dense Fog
11/25/21 10:25 PST	0	

High pressure rebuild off the California coast on Thanksgiving morning. This kept skies mainly clear across the San Joaquin Valley overnight. With light winds and inversion conditions present, areas of dense fog formed in the center portion of the valley once again impacting travel mainly along the SR 99 corridor from Visalia to Turlock. The fog dissipated by late morning giving way to a sunny afternoon across the valley.

(CA-Z311) HANFORD - CORCORAN - LEMOORE

11/26/21 07:05 PST	0	Dense Fog
11/26/21 07:45 PST	0	

With high pressure building back inland into central California, another morning of dense fog was anticipated for much of the San Joaquin Valley. However, drier air had pushed into the valley the day before which resulted in a chilly and frosty morning across much of the San Joaquin Valley. Dense fog was confined to a narrow strip near Hanford which formed around sunrise and dissipated around an hour later.