Dramatic Weather Swings Are Headed To California. Here's what to expect in June

The curling of the jet stream — an atmospheric stream of **fast-moving air with speeds over 100 mph** that travels thousands of miles — over the Pacific Ocean has triggered recent shifts in California's spring weather patterns. Californians have seen leaps from snowmelt-inducing **heat waves** in the Sierra Nevada to marine layer clouds that stretch from the Bay Area to Sacramento. Temperature and humidity swings should become more dramatic across the Bay Area and most of California in June as the transition to El Niño continues to shift the balance of wind patterns in the atmosphere.

Transition to El Niño

The air off the California coast has been ripe with moisture since mid-May as weak areas of low pressure skim the waters over the central Pacific Ocean and unload drizzles, fog and below-average temperatures to San Francisco and Los Angeles. It's likely that the California coast will experience the arrival of more low-pressure systems in a normal process colloquially known as June Gloom.

Sea-surface temperatures in the eastern equatorial Pacific Ocean have soared over the past several months — as much as 5 degrees Fahrenheit higher than usual. The slow transition toward El Nino in the eastern equatorial Pacific Ocean could lead to changes in prevailing **wind patterns in the jet stream of the atmosphere**. It's still a bit early to tell.

Warmer waters across the eastern equatorial Pacific can sometimes lead to more low-pressure systems forming over the west coast of the Americas and result in wet weather in Southern California, and during some El Niño years, Northern California. As sea-surface temperatures in the eastern equatorial Pacific continue to warm, the odds of these low-pressure systems **bringing drizzles and even light rain** to California in June could also increase.

June's recurring weather systems

Extended simulations of the European weather model suggest that most of these weak low-pressure systems will travel from the central Pacific Ocean toward Point Conception. In Southern California, residents can expect a **long spell of clouds and fog** in the L.A. Basin, with only a handful of days with sunshine between the periods of below-average, cloudy days. In Northern California, it gets a little complicated.

These fog-enabling and **drizzle-making** areas of low pressure could wobble between Northern and Southern California over the course of June. And like a loose hose flinging around, the guiding rush of winds between Japan and California could reel in more areas of low-pressure than usual by the middle of the month toward San Francisco for a time before tilting back toward Los Angeles. The Bay Area's inland valleys could experience swings between warm, dry days to **unusually cold**, **foggy days** — similar to May's temperature and humidity swings but potentially more sudden. Long-range simulations on the European weather model indicate that there could be a mix of weather patterns, with days of warm, dry ridges of high pressure— especially in the inland valleys — followed by days of cold, misty troughs of low pressure.

The Climate Prediction Center says temperatures in Northern California could be above or below average, with above-average rainfall. Any Bay Area rain would likely be drizzles and brief light bursts embedded in marine clouds that roll up to the coast. Accumulations would be trace amounts to a few hundredths of an inch.

Whether the El Niño manages to develop between June and the end of the summer is still an open question. Changes to the jet stream's flow in the air over California could be more firmly tied back to warming conditions out of the equatorial eastern Pacific later in the season during fall and winter months. That said, weather models still predict that rounds of moist low-pressure systems will help crank up some of the marine layer conditions along the coastline.

Overall, it's shaping up to be a roller-coaster of temperatures and humidity for much of the Golden State in June.