

March 1st, 2024

Abrupt California Snowstorms: A Changing Landscape

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Last week a multiple day long snow storm hit the Sierra Nevada mountains of California burying the mountains in up to 10 feet of snow. As well as this, wind speeds reached almost 200 mph: in comparison, that is equivalent to a category 5 hurricane's wind speed. This has caused power outages across the state, leaving highways unusable and many who didn't evacuate in time trapped. Many ski resorts are stuck under all of the snow, making this not only a climate disaster but a resulting humanitarian struggle.

After multiple days the snow has finally slowed, but due to extremely low temperatures, the snow will not melt, leaving many without power for an unknown time. Interstate 80 in California, which reaches about 70 miles in length, is one of the multiple highways closed due to the relentless snowfall, making it hard for first responders to help the ones stranded in the snow. Many were stuck in their cars for multiple hours on Friday when the snow and wind were at their heaviest. As of Monday, the roads are starting to reopen to passenger vehicles, and semi trailers later Monday afternoon. Multiple ski resorts have been snowed in and are closed until crews will be able to dig out the resorts. In total, resorts reported 39 inches of snow in the 24 hour period of Sunday to Monday. Others reported around 100 inches in the same time span.

But what caused these record snow storms in California? Due to the warmer sea surface on the California coast, this has increased precipitation in many storms in the area. The main cause of this rise in water temperature can be traced back to the cause of humans. Our constant use of greenhouse gasses (which in large part result from planes, cars, and use of nonrenewable resources) has caused the overall global temperature to climb, bringing ocean temperatures with them; however, one aspect of this may actually be beneficial to California, as the state is very prone to droughts and the snow has brought up the water levels impressively. There is believed to be a second smaller storm set to hit this Wednesday.

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