**El Niño rains for dry California but scientists fear for coral reefs**

Data suggests this giant climatic event could be the strongest on record, meaning rains for drought-stricken California and a worsening of the coral die-off

The giant El Niño climatic event is set to bring rain to drought-stricken California by January, but is likely to exacerbate a widespread die-off of corals in the ocean, new data suggests.

The relentless warming trend highlighted by the new data also shows the world has just experienced its warmest October on record.

Climate scientists believe the current El Niño event, a periodic climatic condition concentrated in the Pacific Ocean but affecting the whole globe, will be among the three strongest on record and may even eclipse the peak El Niño of 1997-98. Weekly temperature readings by the National Oceanic and Atmospheric Administration of an area of the Pacific off the coast of Peru show temperatures were 5.4F above the long-term average for the week of 11 November, higher than the comparable period in 1997.

The National Oceanic and Atmospheric Administration (Noaa) considers a three-month period to be statistically significant and 2015 is in second place for the August to October period. But as El Niño reaches its peak over the coming month, the record 1997 event could be toppled.

“We expect this year to peak in the top three, with 1997 and 1982, but is too early to say where it falls,” said Tom DiLiberto, a meteorologist at [Noaa’s climate prediction center](https://www.climate.gov/). “But regardless of where it is ranked, this has been a significant event, we are seeing impacts across the globe already.”

During El Niño events, which occur every two to seven years, winds over the tropical Pacific Ocean weaken and the sea surface warms. This triggers a range of different consequences across the world, with drier conditions in Asia and Australia, which have helped fuel disastrous forest fires in Indonesia, and more rain for parts of North America.

El Niño is set to accentuate warming caused by the accumulation of greenhouse gases due to human activity. [New data](http://data.giss.nasa.gov/gistemp/tabledata_v3/GLB.Ts+dSST.txt) released by Nasa shows that the world has just had its warmest ever October, with temperatures nearly 2F above the long-term average set between 1951 and 1980. This huge monthly temperature anomaly, one of the largest on record, further bolsters the near-certainty that 2015 will be the world’s warmest year on record.

The northern stretch of the US, from Maine to Oregon, is set to experience above-average temperatures this winter, Noaa said, but El Niño will bring relief for [California’s drought, which has lasted for four years](http://www.theguardian.com/us-news/2015/apr/07/california-drought-spring-storm). The area around Los Angeles will have around a 60% chance of above-normal precipitation.

California has already seen the impact of El Niño in different forms – warmer waters recently carried hordes of tiny pelagic red crabs from the coast of Mexico to California, where they washed up on several beaches, turning them red. There has also been an increase in shark sightings, with the warmer water allowing young sharks to travel hundreds of miles further north than usual.

“The southern portion of California is most likely to see rain [from January] until March,” DiLiberto said. “The question is how far north that rainfall will reach. It’s certainly a lot to ask one year’s rain to break a four-year drought. If we did see that volume of rain to bust the drought, we’d certainly see enough for flooding and landslides.

“We will see warmth across the US. There are significant downsides to El Niño – the cyclone season in the central and eastern Pacific has been one for the record books - but it will be a good thing for people who don’t like getting too cold in the winter here.”

The prospect of a record El Niño is a grim one for the world’s coral reefs, however, after [scientists confirmed](http://www.theguardian.com/environment/2015/oct/08/worlds-oceans-facing-biggest-coral-die-off-in-history-scientists-warn) that the third-ever worldwide bleaching event is under way. High underwater temperatures over the past year have caused corals to whiten and die off in oceans around the world, with 38% of the planet’s coral expected to be affected.

Prolonged high temperatures cause corals to reject their plant partners, crucial for their growth, causing them to turn snow white. If the warm temperatures do not abate, the coral will die.

With the El Niño event driving ocean temperatures further upwards, the coral die-off in 2016 could be particularly severe. This presents a perilous situation for the vast number of fish and crustaceans that rely upon coral reefs for food and shelter – despite corals covering just 0.1% of the ocean’s floor they nurture 25% of the world’s marine species.

VOCABULARY

drought- Siccità

drought-stricken Colpita dalla siccità

relentless senza soste

Bolsters :rinforza , supporta

Stretch fascia, striscia

Triggers innesca

is set to experience si prepara a ricevere;

to bust fare esplodere

downsides lati negativi

grim cupo triste

shelter rifugio protezione

QUESTIONS

1. What will the consequences of the next El Nino be?
2. What do you know about the strongest El Nino on record?
3. How strong will the next El Nino be according to scientists?
4. What is the difference in the effects of El Nino in Asia and Australia and North America?
5. Which effects has El Nino on animal life along the coasts of California and text?
6. How will next winter in the US be ?
7. How will next El Nino affect coral bleeching?
8. What will happen to animal life on coral reefs?
9. Which data support the view that 2015 will be the warmest year ever?
10. What can you say about the probability of rain around Los Angeles?
11. What will the risk for southern California be if the rainfall increases?