WEATHER CLIMATE WATER

WORLD METEOROLOGICAL ORGANIZATION

El Niño/La Niña Update

MAY 2026

Current Situation and Outlook

As of mid-May 2026, sea surface temperature anomalies are increasing across the central-eastern equatorial Pacific, indicating an ongoing warming pattern that may support El Niño development. The latest seasonal forecasts from WMO Global Producing Centres indicate a pronounced shift toward El Niño conditions, with probabilities reaching 80% for June–August 2026, while the likelihood of ENSO-neutral conditions has diminished to 20%. For July–September, August-October and September-November, El Niño conditions are forecast to remain dominant, with probabilities consistently near or above 90%, whereas ENSO-neutral conditions persist at only around 10%. The redevelopment of La Niña remains unlikely in the extended outlook. National Meteorological and Hydrological Services (NMHSs) will closely monitor changes in the state of ENSO over the coming months and provide updated outlooks as needed.

In April, the Niño 3.4 sea surface temperature (SST) anomaly was +0.47°C, while the February–April seasonal average anomaly was +0.1°C. The OISST v2 dataset indicates that the SST anomaly in the traditional Niño 3.4 index during the recent weeks (late April to mid-May; 22 April–13 May) ranged between +0.8°C and +0.9°C. In addition, the Relative Oceanic Niño Index (RONI),[1] defined as the Niño-3.4 SST anomaly relative to the tropical mean anomaly, also indicates warming across the central-eastern equatorial Pacific. Although anomalies in the RONI framework remain somewhat weaker (around 0.5°C less) than those in the traditional Niño-3.4 index, the recent evolution of the index is likewise consistent with developing El Niño conditions. These increasing surface anomalies are being supported by anomalously warm subsurface conditions across the tropical Pacific. Subsurface temperatures exceeding +6°C above average extend across large portions of the equatorial Pacific, providing a substantial reservoir of heat that is contributing to the observed surface warming. This warming is consistent with the passage of a downwelling Kelvin wave initiated by westerly wind anomalies during March 2026. Meanwhile, the Southern Oscillation Index recorded a value of −11.2 in April 2026, with the most recent 30-day values remaining within the El Niño range. Recent outgoing longwave radiation data indicate near-normal cloudiness around the International Date Line, following the decline of La Niña, consistent with the increasing SSTs. Collectively, these oceanic and atmospheric indicators suggest that El Niño conditions are developing across the equatorial Pacific.

WMO Global Producing Centres for Seasonal Prediction routinely issue global-scale climate forecasts for the coming months, using dynamical models initialized with recent observations. The latest forecasts and expert assessments indicate an 80% probability of El Niño conditions developing in the central–eastern equatorial Pacific during June–August 2026, compared with a 20% likelihood of ENSO-neutral conditions. Thereafter, El Niño is expected to remain through the overlapping July–September, August–October, and September–November 2026 seasons, with probabilities increasing to around 90%. The likelihood of ENSO-neutral conditions declines to near

[1] For further information, please refer to the WMO note on RONI: WMO-note_ONI_RONI_Briefing_April2026.pdf

10% while probabilities of La Niña redeveloping remain negligible. Overall, both model guidance and expert assessment indicate a very high likelihood of El Niño development during June–August 2026, with confidence remaining high through Northern Hemisphere autumn. Forecasts suggest gradual strengthening of El Niño conditions, potentially reaching at least moderate intensity, with the possibility of a strong event. Forecasts issued at this time of year should be interpreted with caution due to the boreal spring predictability barrier, typically occurring between February and May.

It is important to note that El Niño and La Niña are not the only factors that drive global and regional climate patterns, and further that the magnitudes of ENSO indicators do not directly correspond to the magnitudes of their impacts. At the regional level, seasonal outlooks need to assess the relative effects of both the ENSO state and other locally-relevant climate drivers. Regionally and locally applicable information is made available via regional and national seasonal climate outlooks, such as those produced by WMO Regional Climate Centres (RCCs), Regional Climate Outlook Forums (RCOFs) and National Meteorological and Hydrological Services (NMHSs).

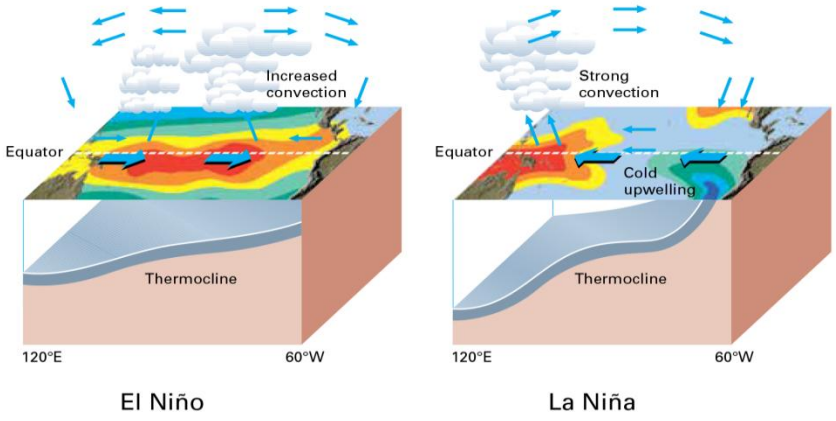
In summary

- As of mid-May 2026, sea surface temperature anomalies across the tropical Pacific continue to increase.
- Model predictions and expert assessments indicate that El Niño conditions are very likely to emerge during June–August 2026, with probabilities reaching 80%, while the likelihood of ENSO-neutral conditions is estimated at around 20%.
- For the remaining forecast period (July-September, August-October and September-November), El Niño is predicted to become firmly established, with probabilities rising to around 90%, while the likelihood of ENSO-neutral conditions drops to 10%.
- Redevelopment of La Niña is unlikely throughout the entire forecast period.

The state of ENSO will continue to be carefully monitored by WMO Members and partners. More detailed interpretations of the implications for regional climate variability will be carried out routinely by the climate forecasting community over the coming months and will be made available through the NMHSs.

- For the latest Global Seasonal Climate Update (GSCU) based on WMO Global Producing Centres for Seasonal Prediction, please visit: https://www.wmolc.org/gscuBoard/list.
- An archive of all WMO El Niño/La Niña Updates issued so far, including this one, is available here.

El Niño/La Niña Background



Typical circulation patterns during El Niño/La Niña (Source: WMO, 2003, "Climate into the 21st Century").

Climate Patterns in the Pacific

Research conducted over recent decades has shed considerable light on the important role played by interactions between the atmosphere and ocean in the tropical belt of the Pacific Ocean in altering global weather and climate patterns. During El Niño events, sea surface temperatures in the central and eastern tropical Pacific Ocean become substantially warmer than normal. In contrast, during La Niña events, the sea surface temperatures in these regions become colder than normal. These temperature changes are strongly linked to major climate fluctuations around the globe and, once initiated, such events can last for 12 months or more. The strong El Niño event of 1997–1998 was followed by a prolonged La Niña phase that extended from mid-1998 to early 2001. El Niño/La Niña events change the likelihood of particular climate patterns around the globe, but the outcomes of each event are never exactly the same. Furthermore, while there is generally a relationship between the global impacts of an El Niño/La Niña event and its intensity, there is always potential for an event to generate serious impacts in some regions irrespective of its intensity.

Forecasting and Monitoring the El Niño/La Niña Phenomenon

The forecasting of Pacific Ocean developments is undertaken in a number of ways. Complex dynamical models project the evolution of the tropical Pacific Ocean from its currently observed state. Statistical forecast models can

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also capture some of the precursors of such developments. Expert analysis of the current situation adds further value, especially in interpreting the implications of the evolving situation below the ocean surface. All forecast methods try to incorporate the effects of ocean-atmosphere interactions within the climate system. The meteorological and oceanographic data that allow El Niño and La Niña episodes to be monitored and forecast are drawn from national and international observing systems. The exchange and processing of the data are carried out under programmes coordinated by the WMO.

WMO El Niño/La Niña Update

The WMO El Niño/La Niña Update is prepared on a quasi-regular basis (approximately every three months) through a collaborative effort between WMO and the International Research Institute for Climate and Society (IRI). It is based on contributions from the leading centres around the world monitoring and predicting this phenomenon and expert consensus facilitated by WMO and IRI.

For more information on the Update and related aspects, please visit: https://wmo.int/publication-series/el-ninola-nina-updates.