ENSO Transition Alert

From La Niña Fade to Neutral Dominance

WMO Global Climate Assessment • February 2026

CRITICAL CLIMATE SHIFT UNDERWAY

Weak La Niña conditions are rapidly fading as tropical Pacific indicators signal transition toward ENSO-neutral state

CONTEXT

Sea surface temperatures and atmospheric patterns show clear departure from La Niña baseline, creating uncertainty for global weather systems through mid-2026

March-May 2026 Probability Assessment

60%

ENSO-NEUTRAL

dominant

30%

LA NIÑA CONTINUATION

declining

10%

EL NIÑO DEVELOPMENT

emerging

Seasonal Forecast Breakdown

Period	Scenario	Probability	Confidence
Mar-May 2026	ENSO-Neutral	60%	Moderate
Mar-May 2026	La Niña	30%	Low
Mar-May 2026	El Niño	10%	Very Low

WMO Global Producing Centres consensus forecast

Forecast Uncertainty Indicators

Model Agreement **65%**

Ensemble Spread **85%**

SST Variability **75%**

Pacific Ocean-Atmosphere Interactions

- Sea surface temperatures shifting from La Niña cooling patterns
- Atmospheric circulation responding to oceanic thermal changes
- Trade wind patterns weakening across tropical Pacific belt

- Walker circulation showing signs of neutral configuration
- Thermocline depth adjustments indicating ENSO state transition
- Equatorial upwelling patterns returning to baseline conditions

EXPERT ASSESSMENT

“El Niño and La Niña are not the only factors that drive global and regional climate patterns, and the magnitudes of ENSO indicators do not directly correspond to the magnitudes of their impacts.”

> — World Meteorological Organization Climate Assessment

AGRICULTURAL SYSTEM DISRUPTION WARNING

ENSO transitions create crop planning chaos for farmers, destabilize global agricultural systems, and drive food prices beyond reach for vulnerable populations worldwide

Cascading Consequences

- Extreme weather events intensify during ENSO transitions
- Millions face displacement from crop failures and disasters
- Coastal communities prepare for storm pattern changes
- Food-insecure populations confront affordability collapse
- Regional climate patterns shift unpredictably
- Agricultural planning becomes increasingly uncertain

Regional Impact Scenarios

Pacific Rim

Coastal storm patterns shift

- Typhoon intensity changes
- Monsoon timing disruption
- Fisheries productivity impacts

Americas

Agricultural zones face uncertainty

- Drought risk in western regions
- Flooding potential increases
- Crop yield variability

Global South

Food security vulnerabilities

- Price volatility acceleration
- Supply chain disruptions
- Humanitarian crisis potential

Critical Monitoring Parameters

- Tropical Pacific sea surface temperature anomalies
- Atmospheric pressure differentials across Pacific basin
- Trade wind strength and directional consistency
- Ocean subsurface temperature profile changes
- Precipitation pattern shifts in key indicator regions
- Model ensemble convergence and divergence trends

Forecast Limitations

Substantial uncertainty exists in current projections due to widespread disagreement among tropical Pacific sea surface temperature forecasts across models and ensemble members

Sources & References

- World Meteorological Organization (WMO) Global Producing Centres - ENSO Forecast Consensus, February 2026
- WMO El Niño/La Niña Updates - https://wmo.int/publication-series/el-ninola-nina-updates
- WMO Climate into the 21st Century - Typical Circulation Patterns During El Niño/La Niña (2003)
- Tropical Pacific Sea Surface Temperature Analysis - Multi-model Ensemble Assessment
- Regional Climate Impact Assessment - ENSO Transition Consequences Analysis