WESTERN REGION TECHNICAL ATTACHMENT
NO. 87-47
November 24, 1987

SPECIAL CLIMATE SUMMARY ON ENSO

The following technical attachment provides an update on the El Nino Southern Oscillation event that is currently in progress. All signals normally associated with such events continue to be present and at about the same strength as in recent months. For information on the impacts of this ENSO on mid-latitude circulation patterns, forecasters should refer to recent previous Western Region tech attachments such as NOs. 87-31, 87-20, 87-11, and 87-02.

SPECIAL CLIMATE SUMMARY

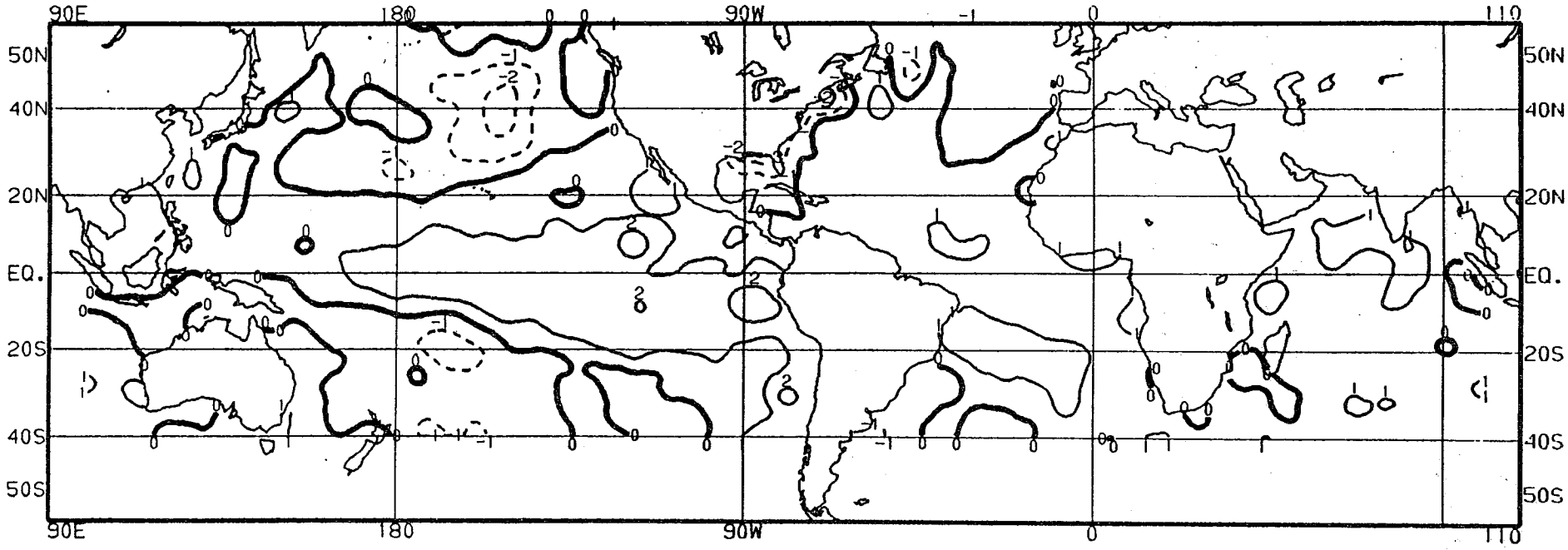
EL NIÑO SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC ADVISORY 11/87
issued by
The Climate Analysis Center, NMC
National Weather Service, NOAA
November 10, 1987

Sea surface temperatures in the central equatorial Pacific remained between 1 and 2°C above normal during October. There has been very little change in the sea surface temperature anomalies in this region during the last nine months. Anomalously strong atmospheric convection continued in the vicinity of the warmest water and equatorial low level easterlies remained weaker than normal throughout the central and eastern Pacific.

At upper tropospheric levels equatorial easterly anomalies prevailed associated with anticyclonic circulation anomalies both north and south of the equator. This pattern has been persistent over the last eight months. The subtropical westerlies on the poleward sides of the anomalous anticyclonic circulation centers were stronger than normal, with the largest anomalies being observed in the South Pacific.

The sea level pressure anomaly decreased at Darwin and remained relatively unchanged at Tahiti in October. As a result, the Southern Oscillation Index (October value -0.7) rose for the second consecutive month.

The ocean general circulation model being run in a diagnostic mode at CAC indicates that for mid-September to mid-October the thermocline continued anomalously shallow in the west and anomalously deep in the east equatorial Pacific. The depth anomalies are only slightly less than those observed in September.



Anomalous Sea Surface Temperatures (°C)

October 1987