



**Western Region Technical Attachment  
No. 91-28  
July 23, 1991**

**EL NINO/SOUTHERN OSCILLATION (ENSO)  
DIAGNOSTIC ADVISORY 91/4**

**CLIMATE ANALYSIS CENTER/NMC**

*[Editor's Note: This following Technical Attachment is a Diagnostic Advisory on the El Nino/Southern Oscillation (ENSO) situation, issued by the Climatic Analysis Center of NMC.]*

Most atmospheric and oceanic indices indicate that a warm episode is in progress. During the last few months, sea surface temperature (SST) anomalies have increased throughout the equatorial Pacific from 160°W eastward to 90°W (Fig. 1b). At the same time the 28°C isotherm has advanced eastward to its most eastward position since the 1986-87 warm episode (Fig. 1a). Also during the last few months, the Southern Oscillation Index (SOI) has averaged around -1 (Fig. 2). In addition, the low-level easterlies have been weaker throughout the equatorial Pacific during both May and June. These indices together with statistical and model forecasts are consistent in indicating the development of a warm episode.

However, two features, which generally accompany warm episodes, are lacking. Convection in the central equatorial Pacific and SSTs along the west coast of South America have been near normal.

The evolution of the anomaly patterns in the tropical Pacific will continue to be closely monitored, especially with regards to further increases in SST anomalies and to the development of strongly enhanced convection in the equatorial Pacific. The next Advisory will be issued when significant further developments are observed.

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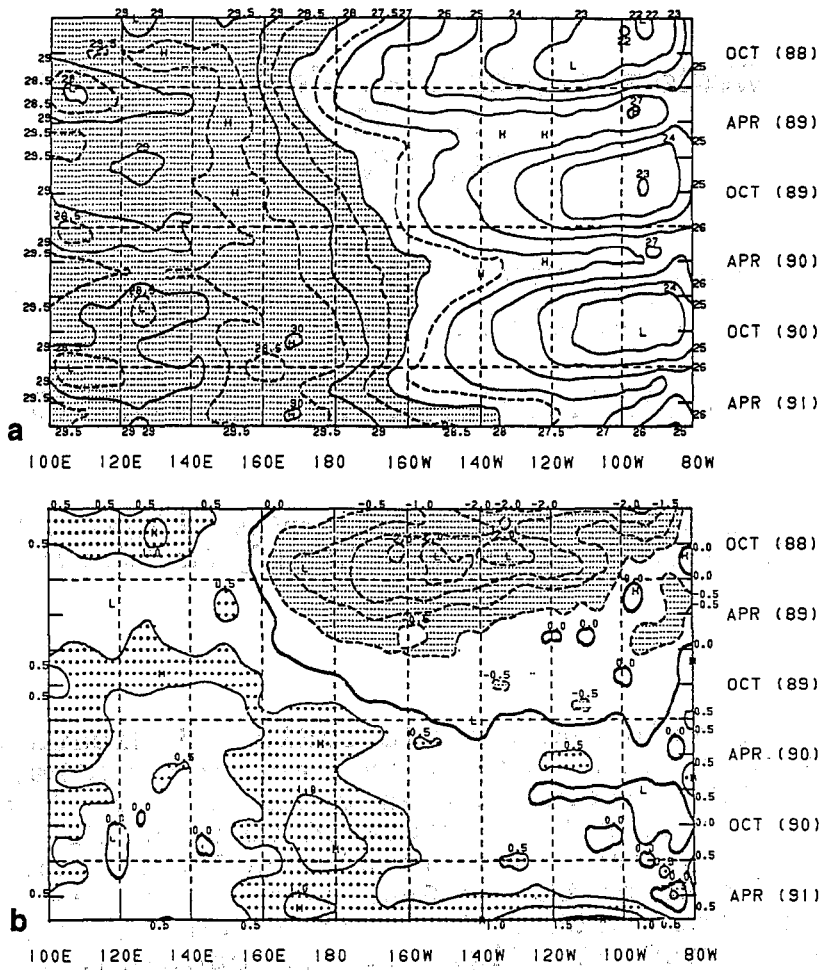


FIGURE 1 Time-longitude section of monthly sea surface temperature, a) mean and b) anomalous, for 5°N-5°S. Contour interval is 1°C and 0.5°C, respectively. SST values greater than 28°C and anomalies less than -0.5°C are shaded. Stippled areas indicate anomaly values greater than 0.5°C. Anomalies are computed based on the COADS/ICE climatology.

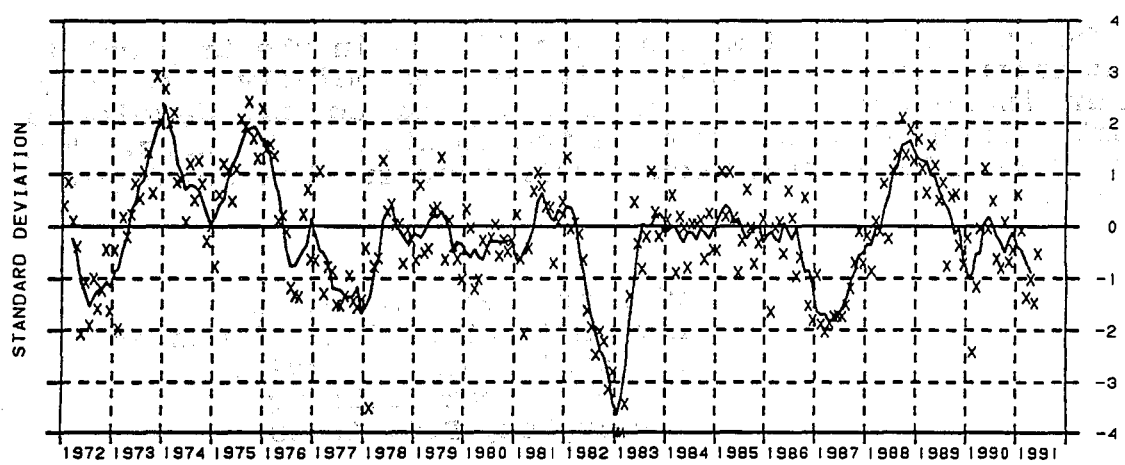


FIGURE 2 Five-month running mean of the difference between the standardized sea level pressure anomalies at Tahiti and Darwin (Tahiti-Darwin). Values are standardized by the mean annual standard deviation. Crosses are individual monthly means.