



**Western Region Technical Attachment  
No. 95-02  
February 7, 1995**

**EL NIÑO/SOUTHERN OSCILLATION (ENSO)  
DIAGNOSTIC ADVISORY 95/1**

**CLIMATE ANALYSIS CENTER/NMC  
Issued January 11, 1995**

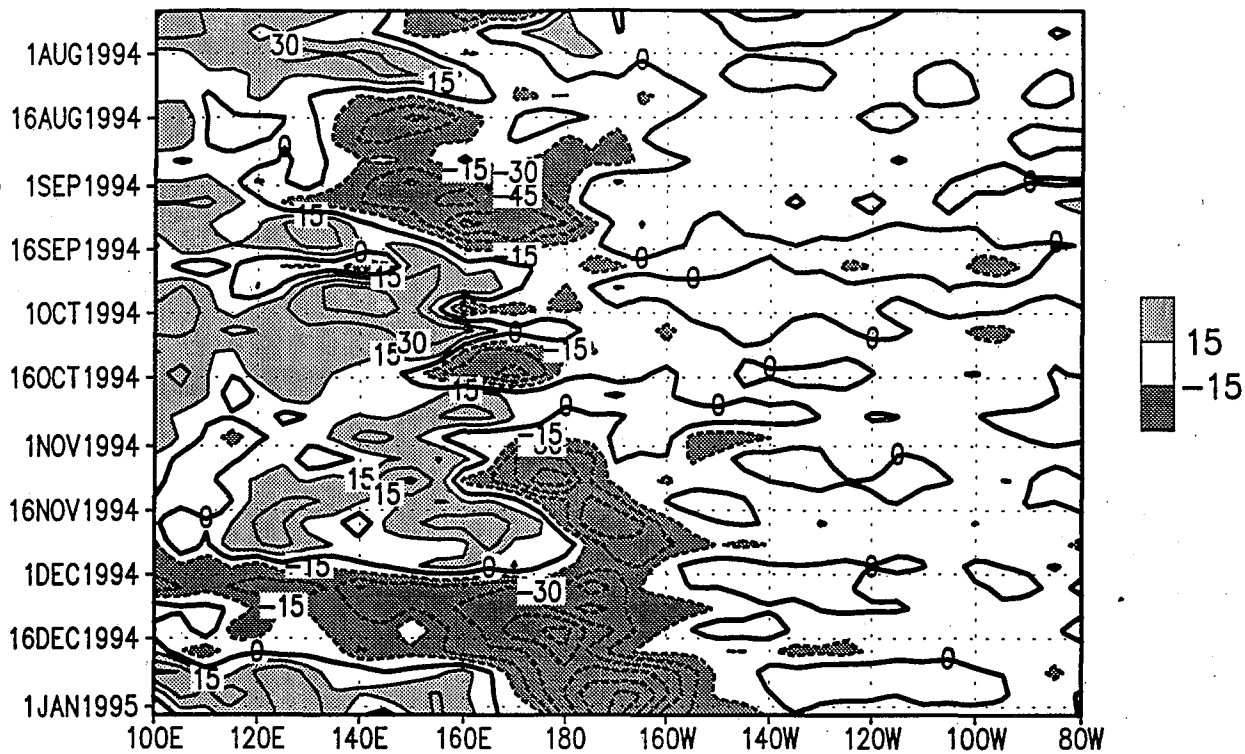
*[Editor's Note: This following Technical Attachment is a Diagnostic Advisory on the El Niño/Southern Oscillation (ENSO) situation, issued by the Climatic Analysis Center of NMC.]*

Atmospheric and oceanic features during December are consistent with the development of mature warm (El Niño/Southern Oscillation - ENSO) episode conditions in the tropical Pacific. During the month, convection increased over the central equatorial Pacific, and low-level equatorial westerly anomalies strengthened in the vicinity of the date line (Fig. 1). Equatorial Pacific sea surface temperature (SST) anomalies increased slightly during December from the date line eastward to the South American coast, and remained more than 1.0°C above normal throughout this region (Fig. 2). The largest anomalies (greater than 2.0°C) were again found just to the east of the date line. Subsurface temperature anomalies in the thermocline increased east of 120°W and decreased west of 130°W, as the thermocline slope decreased in the central equatorial Pacific.

The Southern Oscillation Index (SOI) was strongly negative during December primarily due to the large positive sea level pressure anomalies over Australia. The five-month running mean of the SOI has remained near -1.5 since May (Fig. 3).

The latest predictions for SST anomalies in the equatorial central Pacific show mixed signals. However, 1) the development of persistent strongly enhanced convection in the central equatorial Pacific, 2) the persistence of strong low-level equatorial westerly anomalies near the date line, 3) the continued increase in SST anomalies east of the date line, and 4) the continuation of a strongly negative SOI indicate the likelihood of continued and possibly strengthening warm episode conditions in the tropical Pacific during the next three months.

# pentad OLR anomalies



# 850-mb pentad u anomalies

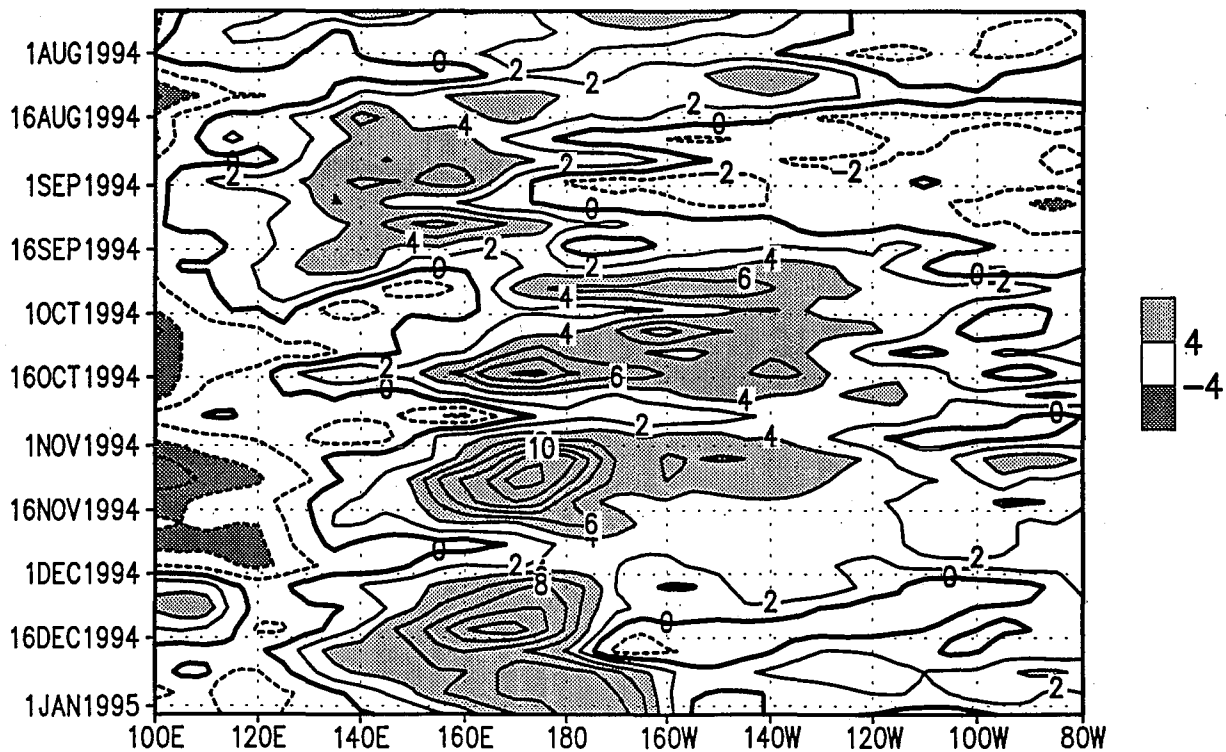


FIGURE 1. Time-longitude section of pentad OLR and 850-mb zonal wind anomalies for 5°N-5°S. Contour intervals are 15 Wm<sup>-2</sup> and 2 ms<sup>-1</sup>, respectively. Negative values are indicated by dashed contours.

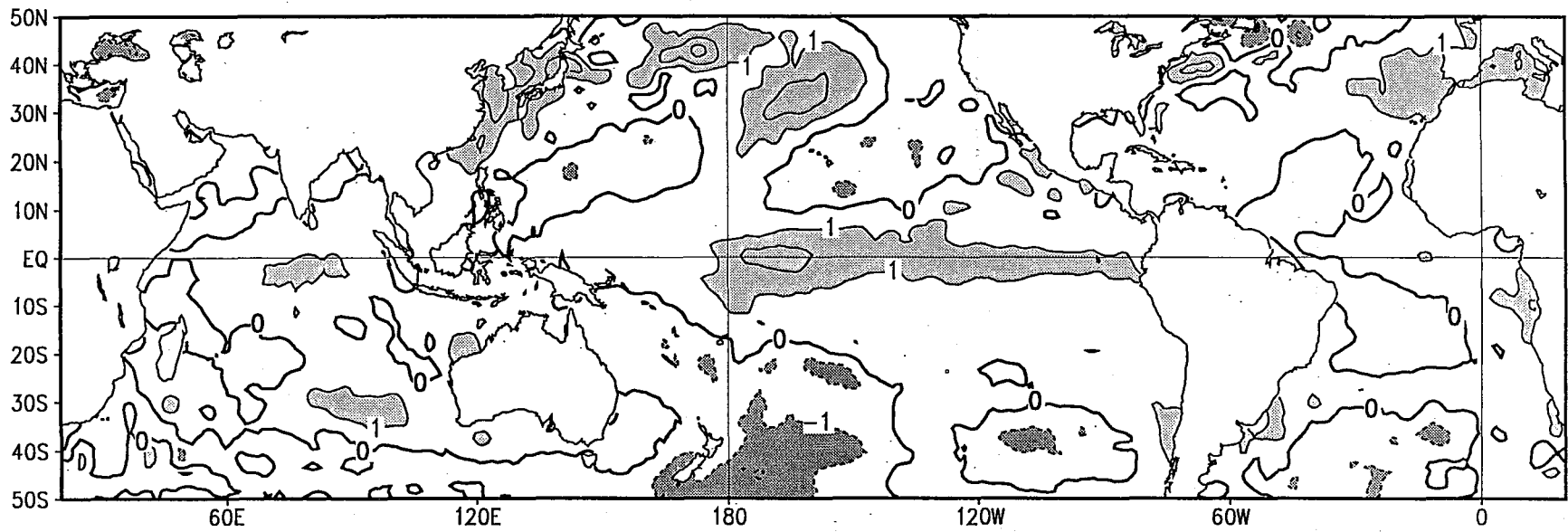


FIGURE 2. Sea surface temperature anomalies for DEC 1994. Contour interval is 1°C. Negative anomalies are indicated by dashed contours.

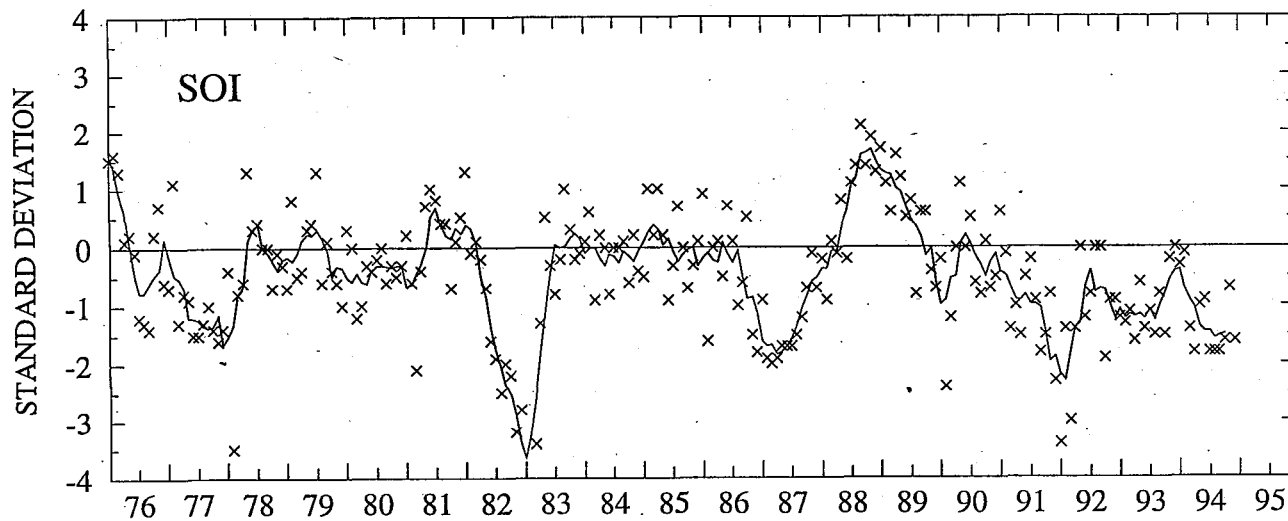


FIGURE 3. Five-month running mean of the Southern Oscillation Index (SOI). Individual monthly values are indicated by "x"s.