

Western Region Technical Attachment No. 92-25 July 21, 1992

EL NINO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC ADVISORY 92/7

CLIMATE ANALYSIS CENTER/NMC

[Editor's Note: This following Technical Attachment is the last Diagnostic Advisory on the current El Nino/Southern Oscillation (ENSO) situation.]

The rapid decrease in SST anomalies in the equatorial eastern Pacific since mid-May indicates that the 1991/92 warm episode is in its final stages. As surface easterlies strengthened, equatorial upwelling intensified throughout the eastern Pacific, leading to a rapid decrease in positive SST anomalies. Enhanced convection continued in the equatorial central Pacific during June. However, this activity was disorganized and was weaker than observed in recent months.

The rapid decrease in equatorial SST anomalies is similar to that which occurred during 1988 as the 1988/89 cold episode developed in the tropical Pacific. Since the thermocline is shallower than normal throughout the equatorial Pacific, an increase in the strength of the equatorial easterlies during the next several weeks would tend to accelerate the upwelling process and result in a further decrease in SST anomalies. In June, the easterlies throughout the equatorial Pacific were stronger than observed in recent months, but remained weaker than normal.

The forecasts available from the Cane and Zebiak model indicate a return to near normal sea surface temperatures in the eastern equatorial Pacific within the next two seasons. The statistical forecasts from the CCA model indicate a similar, although somewhat slower, trend.

Since atmospheric and oceanic conditions indicate that the warm phase of the Southern Oscillation is abating, this will be the last advisory concerning the 1991/92 warm (ENSO) episode.