

Western Region Technical Attachment No. 92-17 April 28, 1992

EL NINO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC ADVISORY 92/04

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.)

Mature phase warm episode (ENSO) conditions continued in the tropical Pacific during March. Enhanced equatorial convection was observed in the central and eastern Pacific, and weaker than normal convection was over the Philippines, northern Australia, and portions of Indonesia. Low-level equatorial westerly anomalies prevailed in the central Pacific, and an anomalous anticyclonic couplet was observed in the upper troposphere straddling the equator in the same region.

Anomalous oceanic features observed in March, such as the deeper (shallower) than normal thermocline in the eastern (western) equatorial Pacific and above (below) normal sea level in the eastern (western) tropical Pacific, are also characteristic of the mature phase of warm (ENSO) episodes. The rather large temperature anomalies, both surface and subsurface along the west coast of South America, indicate that the present El Nino is stronger than that observed during 1986-87. Given the magnitude of the anomalies and the fact that March-April is the period when SSTs reach the peak in the annual cycle in that region, it is likely that El Nino conditions will continue for the next few months.

For the central equatorial Pacific, both statistical and numerical model forecasts indicate above normal SSTs for the next several months. A continuation of above normal SSTs in that region for the next two seasons favors enhanced convection, which could adversely affect the development of the Southeast Asian/Indian monsoon.