

**No. 9-2007 MONTHLY PACIFIC ENSO DISCUSSION FOR MICRONESIA
AND AMERICAN SAMOA**

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The Pacific ENSO Applications Center (PEAC) disseminated its third quarter 2007 newsletter (refer to <http://www.soest.hawaii.edu/MET/Enso.html>). The fourth quarter newsletter is being prepared. The Climate Prediction Center (CPC) stated the following in its September 6, 2007 *ENSO Diagnostic Discussion* (<http://www.cpc.ncep.noaa.gov>): **“La Niña conditions will further develop during the next 3 months.”** In addition, the CPC noted: “During August 2007, negative sea surface temperature (SST) anomalies in the eastern equatorial Pacific expanded westward, and now extend from the coast of South America to the date line (180°). SSTs remained cooler than 0.5°C below average throughout August east of the date line and warmer than average west of the date line. In addition, below-average upper-ocean heat content in the west-central equatorial Pacific, stronger than average low-level easterly winds in the west-central equatorial Pacific, and suppressed convection along most of the equatorial Pacific were observed.

Nearly all of the latest climate forecast models predict a continued pattern of below-average equatorial SSTs in the central Pacific during the remainder of the year. The dynamic forecast models suggest the continuing development of La Niña conditions during the next few months. Likewise, several of the statistical models are predicting a continuation of La Niña conditions through the end of the year. CPC concludes: “Therefore, current atmospheric conditions (stronger than average easterlies over the west-central Pacific) and observed oceanic trends indicate that La Niña conditions will further develop and possibly strengthen during the next 3 months.”

Weak La Niña conditions are consistent with the observed atmospheric patterns in the western North Pacific. For example, tropical cyclone activity to-date has been below normal and displaced to the north and west. Likewise, monsoon activity has been constrained to the western part of the basin and the monsoon trough has been reverse-oriented (oriented from the northeast to the southwest). Rainfall activity has shown high month-to-month variability, a typical characteristic of weak La Niña conditions.

The South Pacific Convergence Zone shifted west of the Samoa region, bringing lower than normal rainfall. However, rainfall over the Samoa area for the next few months should be average to slightly above average. Trade winds should continue to dominate the flow in eastern Micronesia (Pohnpei and eastward), and keep rainfall average to slightly below average. Monsoon and storm activity will be more prevalent in western Micronesia, and these areas will see average to slightly above average rainfall. Chuuk and the Marianas will have near average rainfall, with high month-to-month variability. The easterly trade winds will keep sea levels above normal for the next few months in the western Pacific and in the Samoa region.

PREPARED BY NOAA’S NATIONAL WEATHER SERVICE
Coordinated with the Climate Prediction Center and the Pacific ENSO Applications Center.