

CLIMATE ALERT BULLETIN BAC 240

CPPS

SUMMARIZED VERSION

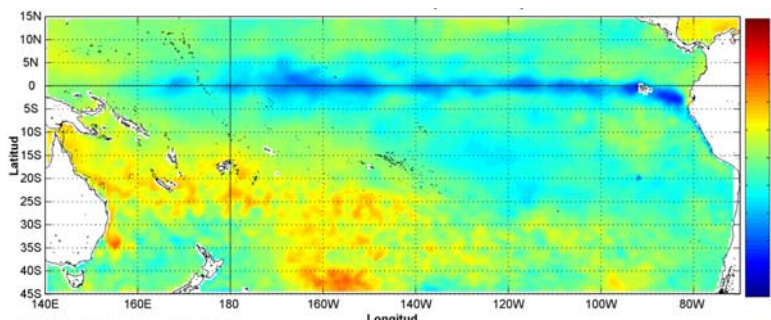
SEPTEMBER 2010

In the coming month, it is anticipated that cold conditions of sea and air temperature will persist with negative anomalies around 1°C, as a consequence of the influence of the Humboldt cold current and the intensification of the southwest trade winds.

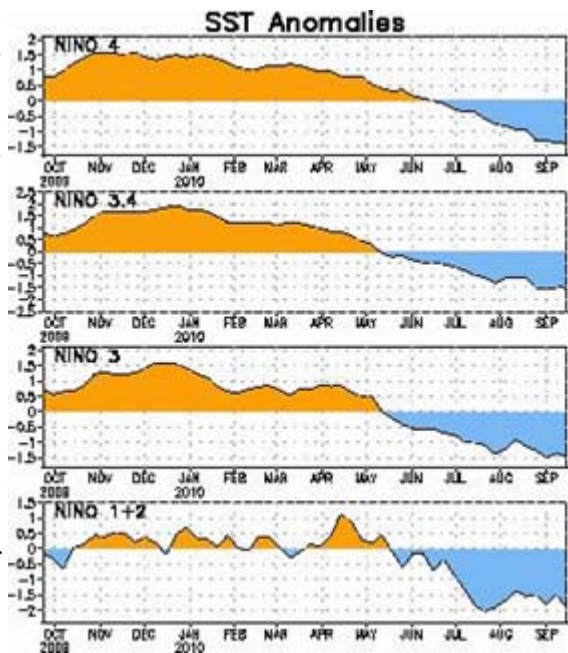
During September, the sea surface temperature (SST) in the equatorial zone of the Pacific maintained negative anomalies of at least 1°C; however conditions of neutrality were observed in some places along the South American continental edge. The temperature in the sea subsurface layers of the Equatorial Pacific band maintained negative anomalies of up to 6°C centered around 100 m of depth and at longitude 140°W.

The monitoring of SST in the coastal stations of Colombia, Ecuador, Peru and Chile indicates that conditions of a cold event prevail with negative anomalies in most of the stations. However, it is necessary to indicate that off the coast of Ecuador cold conditions have not been recorded, even positive anomalies of SST of the order of 1.8 °C have appeared.

Throughout September, the mean sea level (MSL) in the Equatorial Pacific band was below average; in the last week of the month the MSL was up to 20 cm below its average around longitude 140°W. At the coastal stations of the CPPS countries MSL negative anomalies prevailed; along the Chilean coast negative anomalies predominated (between 9,5 and 19,6 cm); in Peru and Ecuador the negative anomalies were smaller than 3 cm. In some localities of Chile and Peru the MSL registered neutral values.



SEA SURFACE TEMPERATURE ANOMALIES
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SEA SURFACE TEMPERATURE ANOMALIES
FOR EL NIÑO REGIONS

The SST in the geographic zones of El Niño monitoring stayed at least 1.4°C below the climatologic averages for each area. In the last week of September the negative anomalies were: in El Niño region 4 located in the Western Pacific 1.4°C; in regions Niño3.4 and 3 of the Central Pacific 1.8°C and 1.3°C respectively and Niño region 1+2 in the Eastern Pacific 1.5°C.



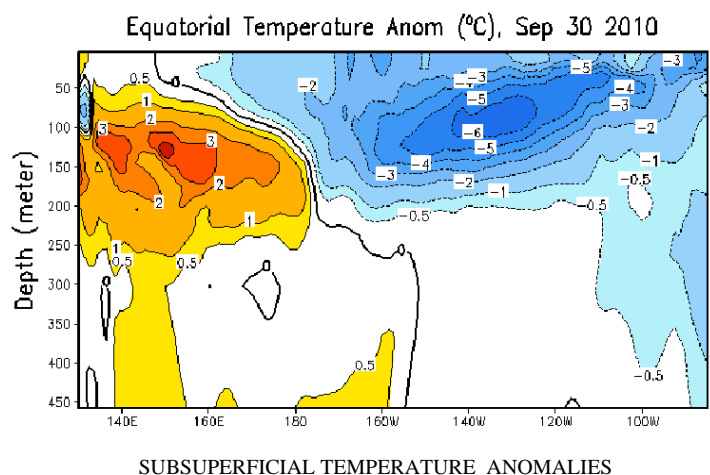
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The air temperature appeared variable; in Peru and Chile negative anomalies prevailed; in Ecuador positive anomalies were more usual.

The precipitations were low in Ecuador, Peru and Chile; nevertheless in Colombia rains were intense and they were between 40 and 70% over the monthly average.

In September the Intertropical Convergence Zone (ITCZ) was of weak/moderate intensity, centered at latitude 10°N in the form of an elongated band with dispersed cores.

The South Oscillation Index (SOI) was of +2.6. The standardized anomalies of pressure at sea level were of +3.2 in Papeete (Tahiti) and -1.1 in Darwin (Australia).



Perspective for the next weeks

GLOBAL

Taking into account the prognoses of several numerical models, the uprisings realized by diverse organizations, and the pursuit and analysis of the behavior of the oceanic and atmospheric indicators, it is expected that the oceanic conditions of a cold event (La Niña) will persist.

REGIONAL

Considering the pursuit of the ocean-atmospheric conditions in the South East Pacific Ocean carried out by the ERFEN Program (integrated by National Committees ERFEN of Chile, Colombia, Ecuador and Peru) and coordinated by the CPPS, it is expected that for the next month the sea surface temperature and the mean sea level will show values below the historical climatologic values, associated to the current La Niña event, that is rapidly developing in the Central Equatorial Pacific.

Institutions that collaborate in this bulletin:



EDITED IN THE OCEANOGRAPHIC INSTITUTE OF THE NAVY OF ECUADOR

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