

CLIMATE ALERT BULLETIN BAC 241

CPPS

SUMMARIZED VERSION

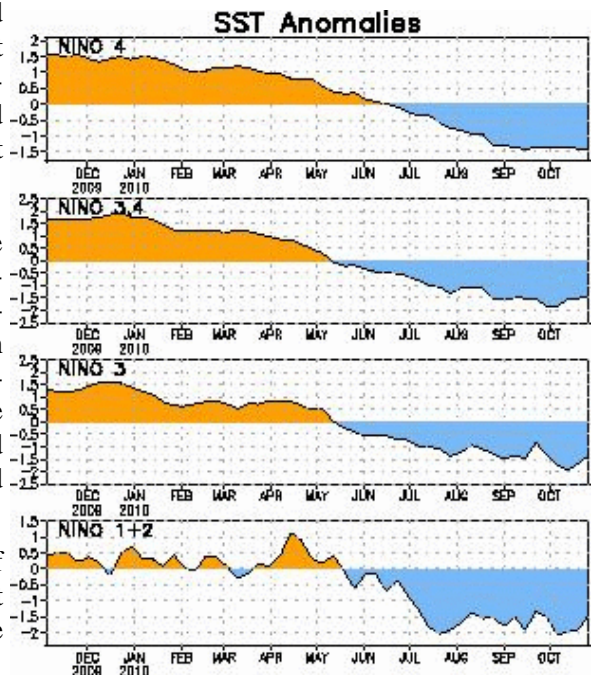
OCTOBER 2010

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.

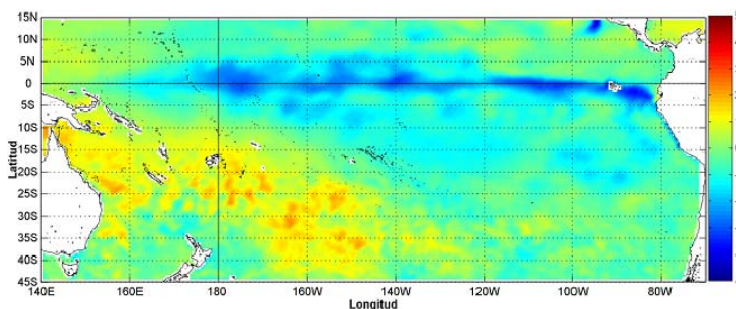
During September, the sea surface temperature (SST) in the equatorial zone of the Pacific maintained negative anomalies of at least 1°C; however conditions of neutrality were observed in some places along the South American continental edge. The temperature in the sea subsurface layers of the Equatorial 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



GHRSTI0STIA L4 UKMO/NASA/JPL/PO.DAAC
Anomalías de Temperatura según Levitus/WOA-2005. Mes de definición: October
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SEA SURFACE TEMPERATURE ANOMALIES

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.



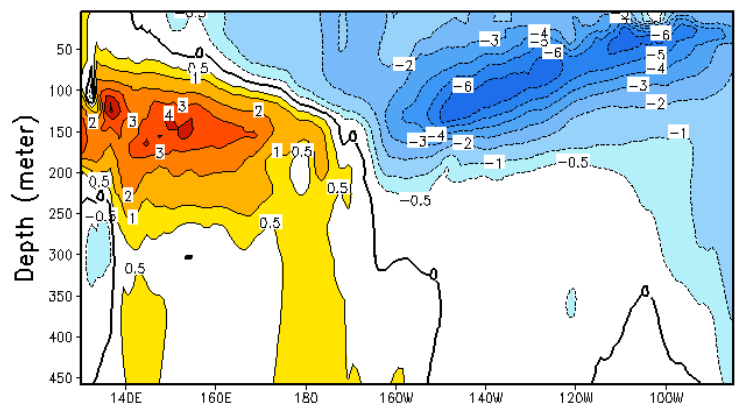
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In reference to the air temperature (AT), in Ecuador, only Esmeraldas (0.9°C) had positive anomalies. At the rest of the stations in Ecuador and at the coastal stations of Perú and Chile, the negative anomalies prevailed with a maximum of 2.1 °C, in Paita (Perú).

In Colombia the precipitation was variable in its intensity, with values slightly over the climatologic average in the north and deficits in the south and center of the country. In Ecuador and Chile, the recorded rain was below the normal, with deficit of up to 130 mm in San Lorenzo, Ecuador. In Peru, no significant precipitations were reported, which is a behavior in agreement with the seasonality.

The standardized anomalies of pressure at sea level, decreased in Papeete (Tahiti) and increased in Darwin (Australia), showed values of 1.6 y -1.3 respectively, as a result the Southern Oscillation Index (SOI) was positive (1.8), as in before months.

Equatorial Temperature Anom (°C), Oct 30 2010



SUBSURFICIAL TEMPERATURE ANOMALIES

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 will persist with weak and moderate characteristics.

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 cold event will begin a steady attenuation and the SST, AT and MSL will have a tendency to normal values.

Institutions that collaborate in this bulletin:



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