COMISIÓN PERMANENTE DEL PACÍFICO SUR

CLIMATE ALERT BULLETIN (BAC)

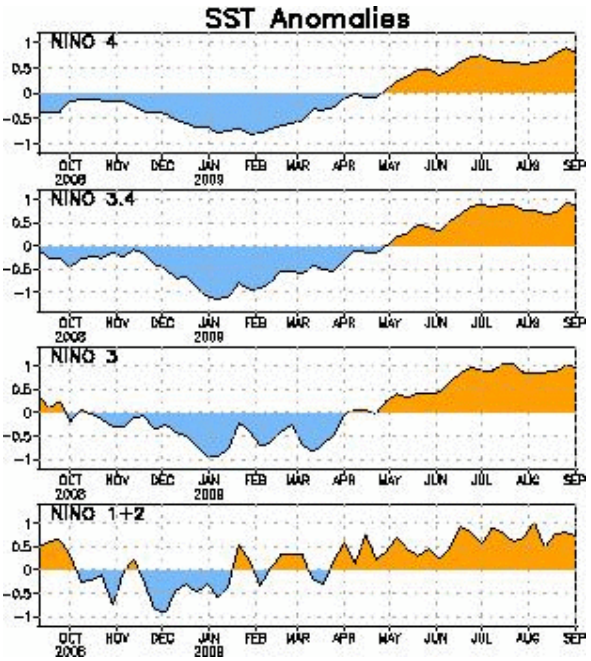
CPPS

SUMMARIZED VERSION

AUGUST 2009 BAC 227

During August the Pacific Ocean continued the process of development of an event El Niño, in spite of being observed a slight reduction of the Sea Surface Temperature in the area of the Central Pacific, exhibiting positive anomalies between 1 and 1. 5ºC; on the other hand in the sector of the Southeast Pacific, next to the coast, values next to the normal one were observed, even with presence of negative anomalies next to the North and Central coast of Chile.

The anomaly of the Sea Surface Temperature in the El Niño regions during the last week of August presented the following values: in the region of the Western Pacific (El Niño Region 4) it was of 0. 8ºC; in the Central Pacific (El Niño Region 3. 4) the anomaly stayed in 0. 9ºC and; in the region of the Eastern Pacific (El Niño Region 1+2) it was increased to 0. 7ºC.



SEA SURFACE TEMPERATURE ANOMALIES FOR EL NIÑO REGIONS

At subsurface level between 80 and 200 ms of depth, the positive anomalies of the Sea Temperature continued present (until 3ºC), that approximately from 120ºW towards the east, they have reached the surface of the sea. In this occasion it is possible to observe, in the Eastern edge of the Pacific, between 50 and 100m of depth, a slight reduction of the temperature with negative anomalies of -0. 5ºC.

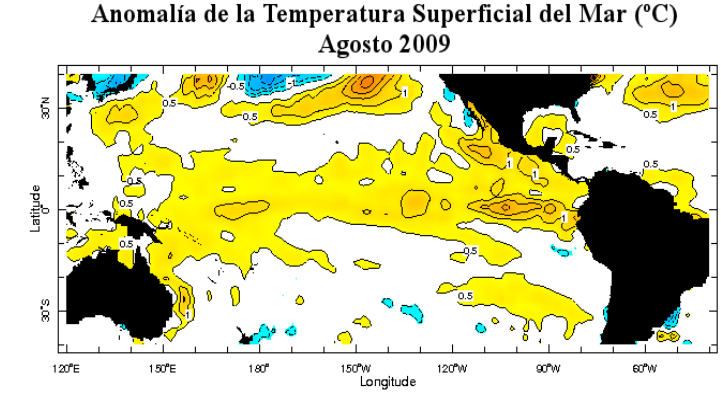
The Mean Sea Level in the Southeast Pacific during the month, presented tendency towards values by above of its normal patterns. The anomalies in the North and Central zones of the Peruvian coast were superiors to the 10 cm; and inferiors to this value in the South zone. In the case of Chile, the level of the sea presented slight positive anomalies between 0.5 and 3.1 cm.

The Index of Oscillation of the South during the month passed to the negative phase with a value of -0. 7.

The Intertropical Convergence Zone stayed during the month around 7ºN, exerting greater influence on the zone of Central America. In the region of the South East Pacific the surface winds appeared of the South and South-east; as far as the wind speed it was oscillating around the normal values of the month.

Taking into account the present thermal behavior from the Equatorial Pacific Ocean, as well as the more excellent models of numerical simulation, are anticipated that during the next month the increase of temperature of waters of the Tropical Pacific Ocean stays; whereas in the Eastern edge of the Pacific Ocean, the tendency will be to present values around the normal ones.

The results of the majority of the models of numerical simulation continue indicating to the development of conditions El Niño in the sector of the Central Pacific, that could reach its maximum development during the first trimester of the 2010; at the moment, the intensity of the event cannot be established, nor which would be their effects on the region of the South East Pacific.



SEA SURFACE TEMPERATURE ANOMALIES, AUGUST 2009

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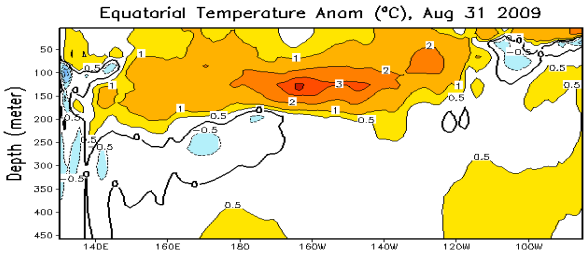
At subsurface level in the Equatorial Pacific in 160ºW, a warm nucleus of until 3.0ºC located between 100 and 150 ms of depth is observed. In this occasion in the Eastern edge, between 50 and 100m a small cold nucleus with anomalies of -0.5ºC was observed, probably as a result of the entrance of cold waters of the south towards the region.



SUBSUPERFICIAL TEMPERATURE ANOMALIES AUGUST 2009

The Mean Sea Level (MSL) in the Southeastern Pacific continued with the tendency previously observed when presenting values on its normal values. In Peru the anomalies of the MSL in the zone between Talara and Chimbote were superiors to the 10.0 cm, the minimum anomaly appeared in the stations of Callao, San Juan and Mollendo with 8.0 cm and the maximum anomaly occurred in the stations of Paita, Lobos de Afuera and Chimbote with 13.0 cm. In Chile the Sea Level was characterized to present one slight tendency to the increase, with positive anomalies in the stations of Arica with 3. 1 cm, Caldera with 0.5 cm and Talcahuano with 2.1 cm.; nevertheless the stations of Antofagasta, Coquimbo and Valparaiso still maintain negative anomalies with values near -4.0 cm.

During the month the surface winds, in the region of the South East Pacific, predominated of the south and southeast, with speeds that fluctuated around their climatologic average.

Perspective for the next weeks

GLOBAL

Taking into account the predictions from several numerical models, as well as the behavior of the main oceanic and atmospheric indicators, it is esteemed that during the next month in the Central Pacific will continue the development of an event El Niño. Consequently, the positive anomalies of the SST (TSM) will be present, equal way at Subsurface Level will persist the heating that at the moment covers all the Equatorial Pacific region.

REGIONAL

In agreement with the pursuit of the ocean-atmospheric conditions in the Southeast Pacific Ocean executed by Program ERFEN (integrated by National Committees ERFEN of Colombia, Chile, Ecuador and Peru) and coordinated by the CPPS; it is anticipated for September of 2009 that as much the values of Sea Surface Temperature as those of Air Temperature will stay fluctuating around the normal thing or slightly on the normal thing. Despite previous, it is esteemed that the present heating of waters of the Tropical Pacific Ocean not yet will exert a significant influence on the region of the South East Pacific, taking in to account that the event El Niño is in its phase of beginning and could reach its maximum development during the first trimester of the next year, reason why is recommendable to maintain a careful pursuit of the evolution

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