



CLIMATE ALERT BULLETIN (BAC)

CPPS

SUMMARIZED VERSION

SEPTEMBER 2009

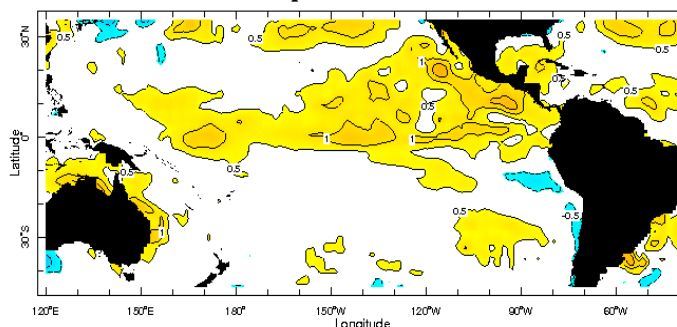
BAC 228

During September great part of the Central Equatorial Pacific maintained the increase of the Sea Temperature observed from April, with anomalies of to 1, 0°C; nevertheless it is necessary to mention that next to the coast of South America an evident reduction of the Sea Temperature at surface as much as subsurface level appeared, especially during the second fortnight of the month. This tendency to reduce the Sea Temperature next to the coast of South America had noticed from the previous month, with presence even of slight negative anomalies. The anomaly of the Sea Surface Temperature in the “El Niño” regions during the last week of September presented the following values; in the Western Pacific (“El Niño” Region 4) stayed in 0.8°C; in the Central Pacific (“El Niño” Region 3.4) the anomaly was reduced to 0.7°C; in the Eastern Pacific (“El Niño” Region 3), it was of 0.6°C; and in the coastal Pacific (“El Niño” Region 1+2) by second consecutive week a negative anomaly was observed with -0.3°C.

The Intertropical Convergence Zone stayed during most part of the month around 7°N, exerting greater influence on the zone of Central America. In the region of the Southeastern Pacific the surface winds appeared of the South and the South-east; as far as the speed the tendency was observed to present positive anomalies between 0.3 and 1.0 m/s. Taking into account the present thermal behavior from the Equatorial Pacific Ocean, as well as the more excellent models of numerical simulation it is anticipated during the next month that stays the increase of temperature of waters of the Tropical Pacific Ocean; whereas in the Eastern edge of the Pacific Ocean, it continues the tendency to present values around the normal.

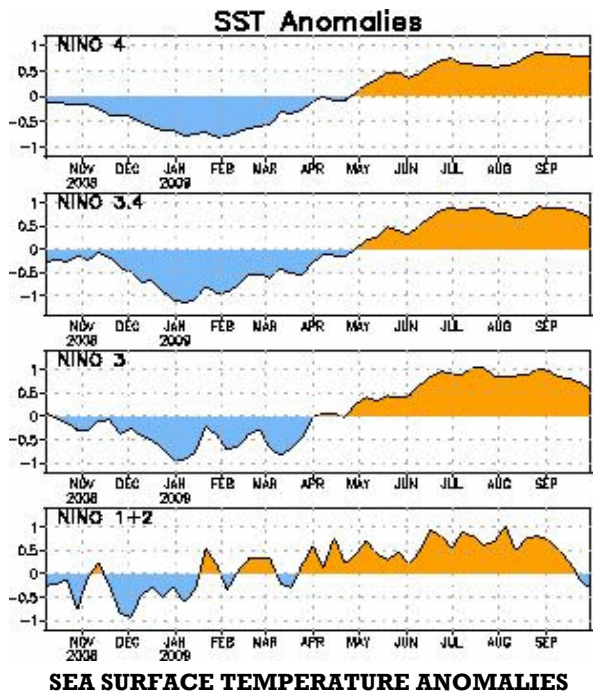
The results of the majority of the models of numerical simulation remain indicating to development of El Niño conditions in the sector of the Central Pacific that could reach its maximum development during the period December 2009 - February 2010.

**Anomalía de la Temperatura Superficial del Mar (°C)
Septiembre 2009**



Sep 2009

**SEA SURFACE TEMPERATURE
ANOMALIES, SEPTEMBER 2009**



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

Nevertheless, analyzing the present state of the oceanographic conditions in the Eastern Pacific, except Colombia that indicates that the effects of the present El Niño phenomenon have become well-known in the behavior of the air temperature and in the totals of rain registered in most of the country presenting clear skies and warm time, still in the rest of the coastal Region of the South East Pacific are not observed majors signals of the warm event and apparently this one would not have significant consequences for the region.

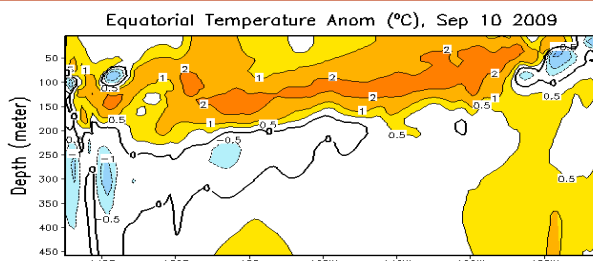


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At Subsurface level between 50 and 150 ms of depth, in the Central Pacific the positive anomalies of the Sea Temperature continued present (until 3.0°C). Like in the previous month it was possible to observe in the Eastern edge of the Pacific, from the surface to 100m of depth, the presence of negative anomalies of -0.5°C; in addition the existence of a nucleus with negative anomalies of until -1.0°C located below 100m of depth in 140°W was noticed.

The Mean Sea Level in the South East Pacific during the month presented tendency towards values by above of its normal patterns in front of the coasts of Ecuador and Peru and below its normal in the coast of Chile. In the coasts of Peru the positive anomalies continued present registering a variation average of +/- 2.0 cm, with respect to the previous month. The minimum anomaly appeared in the station of San Juan (5.0 cm) and the maximum anomaly in the station of Lobos de Afuera (13.0 cm). In the coast of Chile the level of the sea returns to present negative anomalies, in particular the stations of the North zone (Antofagasta and Caldera) registering negative anomalies of the order of -5.0 cm, whereas the Center – South zone located between Coquimbo and Talcahuano with negative anomalies of the order of -10.0 cm.

In September, the South Oscillation Index (SOI) again passed to positive values reached in this occasion the value of 0.3, as results from the negative value of the anomaly of pressure present in Darwin (- 0.6) and in Tahiti without presence of significant anomaly (0.0).



SUBSURFICIAL TEMPERATURE ANOMALIES
SEPTEMBER 2009

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 is predicted that will continue the oceanographic and atmospheric conditions in the Tropical Pacific, own of the development of an “El Niño” event in the region of the Eastern Equatorial Pacific ocean between weak and moderate magnitude which could reach its maximum development during the first trimester (quarter) of next year. Consequently the positive anomalies of the SST will be present and of equal way at subsurface level the heating of the sea will persist, mainly in the region of the Central Equatorial Pacific; reason why it is recommendable to maintain a careful pursuit of the evolution as well as its future repercussions on the climate of the region of the Southeast Pacific.

REGIONAL

According with the pursuit of the ocean-atmospheric conditions in the Southeast Pacific Ocean, performed by the Program ERFEN (integrated by National Committees ERFEN of Colombia, Chile, Ecuador and Peru) and coordinated by the CPPS, for October it is anticipated that in the sector of the Southeast Pacific the values as much of the Sea Surface Temperature as the Air stay fluctuating around the normal and that the present heating of waters presents in the Central Pacific, does not exert major influences on the region of the Southeast Pacific. At the moment, in the Region of the Southeast Pacific conditions considered like neutral exist with the exception of Colombia that has reported an increase of the temperature of the air as well as a noticeable rain deficit. These scarce influences of the warm event on the Region could be subject to action of trade winds over the Region as a result of the on going escalation of the South Pacific anticyclone.

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