



# CLIMATE ALERT BULLETIN (BAC)

**CPPS**

**SUMMARIZED VERSION**

**JUNE 2009**

**BAC 225**

June was characterized to maintain the increase of the Sea Surface Temperature of the Sea throughout the Equatorial Pacific, showing in this occasion anomalies of 1 to 2°C. In the area of the South east Pacific next to the coast of Colombia, Ecuador and Peru increasing of the positive anomalies was observed whereas Chile even reports negative values.

The anomaly of the Sea Surface Temperature in the El Niño regions during the last week of June presented the following values; in the region of the Western Pacific (El Niño Region 4) it was of 0.7°C; in the Central Pacific (El Niño Region 3.4) the anomaly was of 0.9°C and; in the region of the Eastern Pacific (El Niño Region 1+2) it was of 0.8°C.

At subsurface level between 80 and 200 ms of depth the presence of positive thermal anomalies stayed (until 3°C), that approximately from 120°W towards the east, they have reached the Sea Surface. One stays in the Eastern Edge of the Pacific, the small water cell with negative anomaly (-0.5°C) located to about 60 ms of depth.

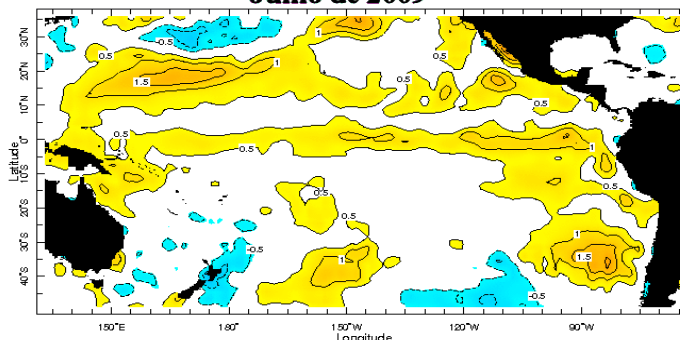
The Mean Sea Level in the South east Pacific presented tendency towards values by on its normal patterns during the month, the anomalies in the North and Central zones of the Peruvian coast were superiors to the 10 cm; whereas in Chile, the Sea Level presented negative anomalies in all the stations of monitoring.

The Index of Oscillation of the South continued in the negative phase by second consecutive month, reaching a value of -0.3.

The Intertropical Convergence Zone stayed during most of the month between 6 and 8°N with strong convective activity, on the North of Colombia and Centro America.

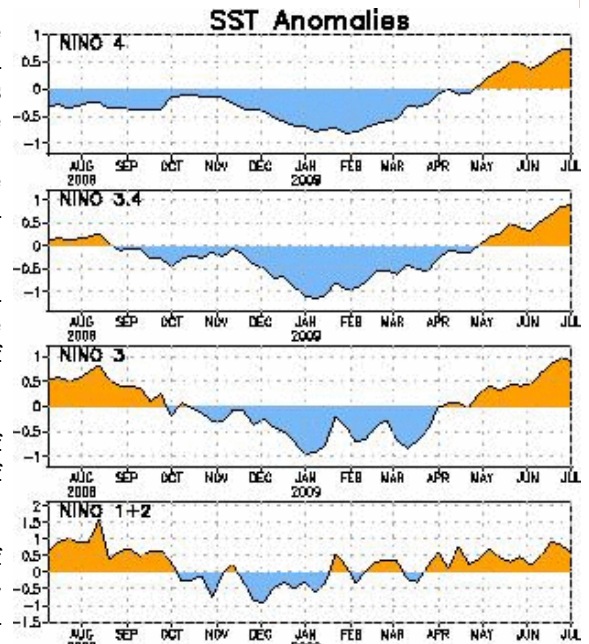
In the region of the South East Pacific the surface winds appeared of the South and South East;

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



Jun 2009

**SEA SURFACE TEMPERATURE  
ANOMALIES, JUNE 2009**



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

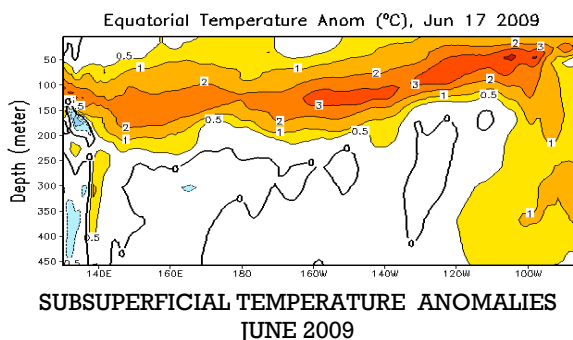
with respect to the speed, positive and negative anomalies of ±1.6 m/s appeared.

Taking into account the present thermal behaviour from the Equatorial Pacific Ocean, as well as the more important models of numerical simulation are anticipated for the next month, stay the heating of waters of the Tropical Pacific Ocean; while in the Eastern edge of the Pacific Ocean, the tendency still will be to present values around its normal condition.



An wide subsurface warm band, located in the Equatorial Pacific Ocean between 80 and 250 ms of depth, that reaches the surface from 150°W towards the coastal edge of South America appears with positive anomalies of until 3, 0°C.

The Mean Sea Level (NMM -MSL) in the South East Pacific continued with the tendency to present values by on its normal patterns. Throughout the Peruvian coast the positive anomalies prevailed, the minimum anomaly appeared in the station of San Juan (+6. 0 cm) and the maximum anomaly in the station of Lobos de Afuera (+17. 0 cm). In Chile the Sea Level presented negative anomalies in all the stations of monitoring; only Caldera and Valparaiso registered values near the historical average. The Index of Oscillation of South (IOS) like the previous month presented negative values, being this time -0. 3.



The central axis of the Intertropical Convergence Zone (ZCIT - ITCZ) in the Eastern sector of the Pacific stayed between 6° and 8°N with strong convective activity, as a result of the interaction with a system of low pressure that appeared in the centre of the Caribbean Sea which induced own atmospheric circulations for the rain generation.

## Perspective for the next weeks

### GLOBAL

Taking into account the predictions from several numerical models, as well as the behaviour of the main oceanic and atmospheric indicators, it is esteemed that during the next month in the Equatorial Pacific will continue present positive anomalies of the SST, staying the tendency to the increase. At subsurface level the heating will persist that at the moment covers the entire Equatorial Pacific region.

The oceanographic conditions present in the Tropical Pacific indicate the end of the ENSO-neutral conditions, being necessary to maintain a careful pursuit of the evolution and its future repercussions on the climate of the South East Pacific region and the west of South America.

### REGIONAL

In agreement with the pursuit of the ocean-atmospheric conditions in the South East 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 July 2009 that in the sector of the South East Pacific will appear a slight increase of the anomalies of the Sea Surface Temperature and Air Surface Temperature.

Institutions that collaborate in this bulletin:

:   
**COLOMBIA**  
IDEAM  
CCCP

  
**ECUADOR**  
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**PERU**  
DHN

  
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