



CLIMATE ALERT BULLETIN (BAC)

CPPS

SEPTEMBER 2007

BAC 204

SUMMARIZED VERSION

In September continued the cooling of the Equatorial Pacific Ocean, observed in all "El Niño" regions; being more intense in the Eastern edge, decreasing the negative thermal anomalies towards the western sector of the Pacific.

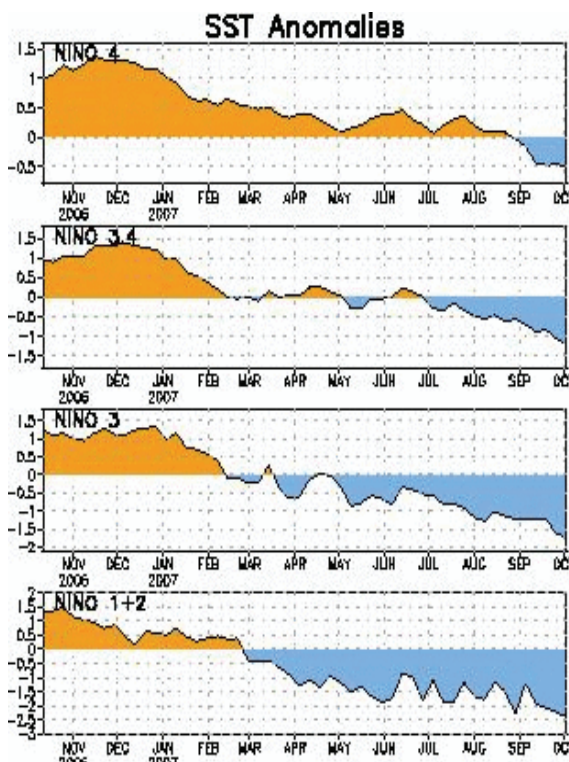
The temperature of the sea during the last week of September exhibited anomalies about $-0,5^{\circ}\text{C}$ in the Western Pacific, $-1,7^{\circ}\text{C}$ for the Central Pacific and $-2,4^{\circ}\text{C}$ in the Eastern Pacific, staying could conditions for the Equatorial Pacific.

As far as surface winds, stayed in the region of the Southeastern Pacific the predominance of winds from south and Southeastern, with speeds fluctuating around the normal range for the date.

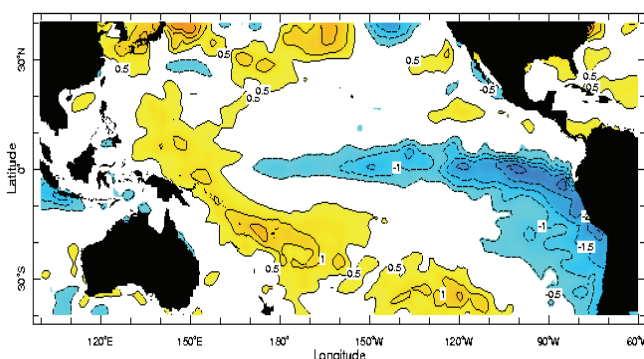
The Southern Oscillation Index, as in the previous month, presented slightly positive values again, being in this occasion of 0,2.

During this month, the mean sea level in the Southeastern Pacific, was characterized to fluctuate closely in the coasts of Ecuador and Peru around its normal patterns for the month; in Chile the negative anomalies stayed, with fluctuations between $-6,4$ cm (Caldera and Valparaiso) to $-9,1$ cm (Antofagasta).

Taking into account the present thermal behaviour of the Equatorial Pacific Ocean, as well as results of several numerical models, are anticipated that, during the next month in the Eastern and Central sector of the Pacific, temperature of the sea would stay below its normal value, showing the presence of an event La Niña.



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



Sep 2007

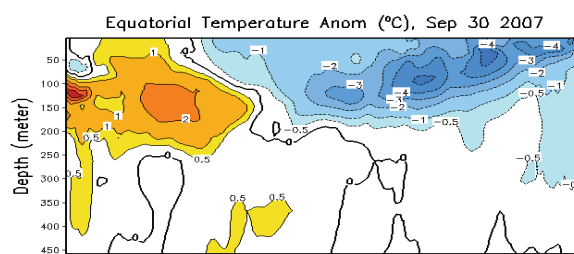
**SEA SURFACE TEMPERATURE
ANOMALIES, SEPTEMBER 2007**

The Southern Oscillation Index (SOI) continuous in the positive phase, with a value of 0,2. With respect to the atmospheric pressure anomalies of Tahiti and Darwin reached values of $-0,1$ and $-0,4$ respectively.

The Intertropical Convergence Zone (ITCZ-ZCIT), in the Eastern Pacific Ocean, appeared like a cloudy band, with its central axis located around 8°N , with presence of active convective cells that exerted his greater influence on the Central America Region, North of Colombia and the Caribbean.



At subsurface level, the behaviour of the thermal structure during September in the Eastern Equatorial Pacific was enough similar to that in the previous month, presenting negative anomalies until $-3,0^{\circ}\text{C}$ that reached the level of the 150 m. as far as 170°W , disappearing the small warm water cell observed by the end of the previous month in the Eastern edge. On the other hand, the body water with positive anomalies ($1,0^{\circ}\text{C}$) present in the Western margin of the Pacific, stayed at the level of 200 m, moving towards the East, near the date line in the Pacific.



SUBSUPERFICIAL TEMPERATURE ANOMALIES

Perspective for the next weeks

GLOBAL

Taking into account the present predictions from several numerical models, as well as the behaviour of the main oceanic and atmospheric indicators is considered that the Equatorial Pacific during the next weeks would continue presenting cold conditions, particularly in the region of the Eastern and coastal Equatorial Pacific.

REGIONAL

In agreement with the pursuit of the ocean-atmospheric conditions in the Southeastern Pacific Ocean, executed by Program ERFEN (integrated by National Committees ERFEN of Chile, Colombia, Ecuador and Peru), and coordinated by the CPPS, it is anticipated that during the next month it will continue the cooling of the SST in the Eastern and coastal Equatorial Pacific, showing the presence of an event La Niña, in the same way the air temperature, will present values below its normal, particularly from the coasts of Chile to the south of Ecuador.

With respect to the MSL it would also continue fluctuating around its average value, with certain tendency to maintain the negative anomalies, particularly in front of Chile. With respect to rains, they will slightly present a deficit distribution for the time, in the pacific coast of Colombia and north coast of Ecuador; whereas for the rest of the region the tendency of precipitations is to stay below the normal, especially in the central and south coast of Chile.

Institutions that collaborate in this bulletin:



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