



# CLIMATE ALERT BULLETIN (BAC)

value.

**CPPS**

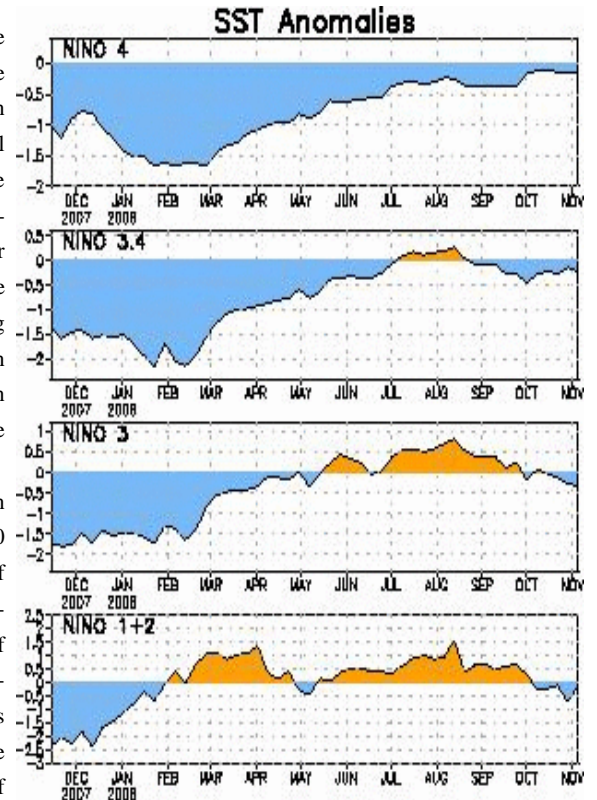
**SUMMARIZED VERSION**

**OCTOBER 2008**

**BAC 217**

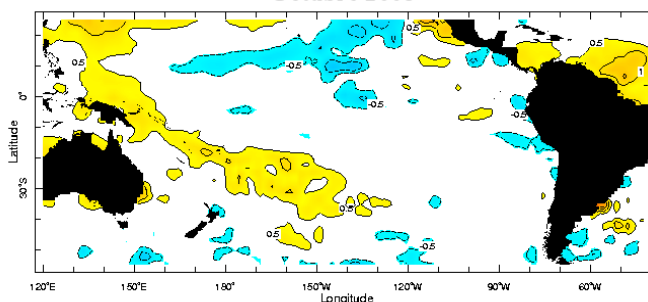
In October, "ENSO neutral conditions" continued in the Equatorial Pacific Ocean, where Sea Surface Temperature was near its average value and presented in this occasion negative anomalies in all "El Niño" regions, included in "El Niño" region 1+2 where until last month registered positive values; this behaviour of Equatorial Pacific tending to present Values below the average, would stay until present year ends. During last week of October, anomaly of Sea Surface Temperature in the "El Niño" regions presented following values; in the region of Western Pacific ("El Niño" Region 4) it was of  $-0.2^{\circ}\text{C}$ ; in the Central Pacific ("El Niño" Region 3.4) the anomaly was of  $-0.1^{\circ}\text{C}$  and; in the region of the Eastern Pacific ("El Niño" Region 1+2), it was of  $-0.8^{\circ}\text{C}$ .

At Subsurface level, "the presence" of a thermal dipole in the Central Equatorial Pacific stays, located between 100 and 200 ms of depth; the warm nucleus with anomalies of  $+3.0^{\circ}\text{C}$  located to west of the line of date and the cold nucleus, with anomalies of  $-3.0^{\circ}\text{C}$ , located to east of the line of date. In past weeks it was possible to observe a slight displacement of the warm nucleus towards east, nevertheless during second half of October notices a reduction of the speed of progress, of this warm nucleus, towards coasts of South America. The Mean Sea Level in the South eastern Pacific during this month presented tendency towards values below its normal patterns. Throughout Peruvian coast, it registered in average a reduction of around 3.0 cm with respect to previous month. In front of Chile behaviour of Sea Level, maintained negative tendency observed in the previous months (August and September), with negative anomalies that fluctuated between  $-6.0$  cm (Caldera) and  $-10.1$ cm (Valparaiso). The Index of Oscillation of the South continuous in the positive phase, although in this occasion underwent a slight reduction with respect to previous month, being of 1.3 its value in this opportunity. The Intertropical Convergence Zone stayed to north of the normal position for the time (between



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

**Anomalía de la Temperatura Superficial del Mar ( $^{\circ}\text{C}$ )  
Octubre 2008**



Oct 2008

**SEA SURFACE TEMPERATURE  
ANOMALIES, OCTOBER 2008**

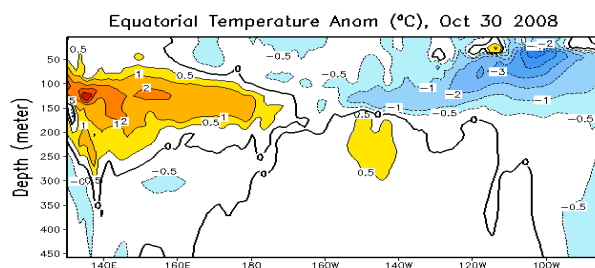
8 and  $10^{\circ}\text{N}$ ) and with convective activity towards Eastern edge of the Pacific Ocean. In the region of the South eastern Pacific surface winds appeared with South South-east direction and speed in this occasion was a little more intense, predominating the **positive anomalies** between enters  $0.4$  m/s and  $1.7$  m/s. Taking into account present Equatorial Pacific Ocean's thermal behaviour, as well as several models of numerical simulation are anticipated that during next month Sea Surface Temperature in the Eastern sector of the Equatorial Pacific Ocean will remain slightly under its normal



## CLIMATE ALERT BULLETIN (BAC)

The Sea Surface Temperature (SST) reached negative values of anomalies for all “El Niño” regions. The monthly anomaly of the SST for October in the “El Niño” regions stayed in negative values; in “El Niño” region 1+2 too, in this region until the previous month positive values had occurred: In the region of the Western Pacific (“El Niño” Region 4) it happened of -0.4 to -0.1°C, in the Central Pacific (“El Niño” Region 3.4) the anomaly happened of -0.2 to -0.3°C; in the region of the Eastern Pacific (“El Niño” Region 1+2) the anomalies happened of 0.7 to -0.15°C.

The subsurface thermal structure of the Equatorial Pacific was characterized by the presence of a thermal dipole with the warm nucleus of 3.0°C located to the west of the line of date and the cold nucleus of -4.0°C located to the east of the line of date. Both nuclei are located around 150m of depth (In the Eastern edge of the Pacific). The Mean Sea Level (MSL) in the South eastern Pacific presented tendency to values below its normal Patterns; In front of the coasts of Peru and Chile Level of the Sea continued presenting negative anomalies between -3.0 and -9.0 cm. The Index of Oscillation of South (IOS) like in the previous month, it continued in his positive phase and in this occasion the value was 1.3.



SUBSURFICIAL TEMPERATURE ANOMALIES  
OCTOBER 2008

### Perspective for the next weeks

#### GLOBAL

Taking into account the predictions from several numerical models, as well as the behaviour of the main oceanic indicators and atmospheric, it is estimated that will continue present during the negative anomalies of the SST, during the next month, to a large extent of the Equatorial Pacific. Of equal way, at subsurface level, the permanence of the present thermal structure is expected.

#### REGIONAL

In agreement with the pursuit of the ocean-atmospheric conditions in the South eastern Pacific Ocean, executed by Program ERFEN (integrated by National Committees ERFEN of Chile, Colombia, Ecuador and Peru), and coordinated by the CPPS, it will not take place major changes in the surface and subsurface thermal structure in the sector of the Eastern Pacific, for the next month, hoping that the temperature of the air as the one of the sea, they slightly stay below his average value, conserving the tendency to present negative anomalies.

Institutions that collaborate in this bulletin:

:   
**COLOMBIA**  
IDEAM  
CCCP

  
**ECUADOR**  
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