



CLIMATE ALERT BULLETIN (BAC)

CPPS

SUMMARIZED VERSION

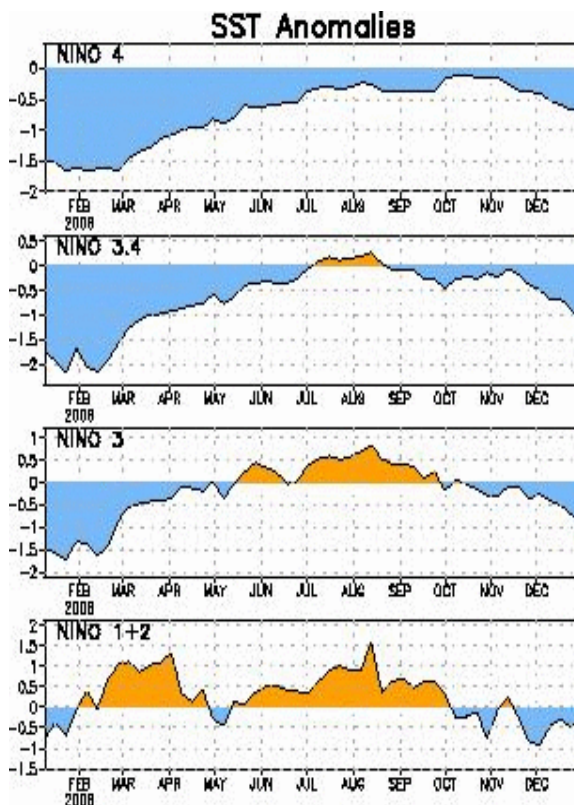
DECEMBER 2009

BAC 219

In December, Equatorial Pacific Ocean exhibited conditions still considered like of “ENSO – neutral conditions”, even though Sea Surface Temperature exhibited a generalized cooling in the Equatorial Pacific that could be in a rise “La Niña”, with anomalies between -0, 4 and -0, 7 °C. In certain areas of Central Equatorial Pacific was observed a greater cooling with respect to the previous month; It is estimated that present behaviour of the Equatorial Pacific will continue more by some weeks.

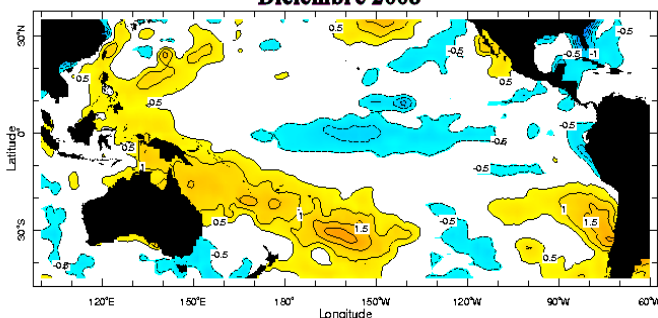
During last week of December, anomaly of Sea Surface Temperature in “El Niño” regions presented the following values; in the region of Western Pacific (“El Niño” Region 4) it was of -0, 7°C; in the Central Pacific (“El Niño” Region 3, 4) the anomaly was of -1, 1°C and; in the region of the Eastern Pacific (“El Niño” Region 1+2), it was of -0, 3°C.

At subsurface level in December Equatorial Pacific Ocean continued showing thermal dipole of anomalies, located between 100 and 200 ms of depth. In this occasion, an increase of thermal anomalies is seen, where the warm nucleus located to the west of the line of date presented anomalies of +3, 0°C; whereas the cold nucleus, located in the Eastern Pacific, presented an increase of the negative anomaly of -4, 0°C and until -5, 0°C occasionally, continuing with tendency observed in previous months. The Mean Sea Level in the South eastern Pacific during this month presented tendency to values slightly below to its normal patterns. In the coast of Ecuador, it was slightly superior to the normal one of this month in 3, 0 cm. In Peru, negative anomalies predominated, with exception of the northern station Talara that presented an anomaly of +1, 0 cm; in front of Chile majority of stations presented negative anomalies between -10, 1 cm (Caldera) and -2, 1 cm (Coquimbo). The Index of Oscillation of the South continue in the positive phase, in this occasion maintained by second consecutive month a value of +1, 5. The central axis of the Intertropical Convergence Zone stayed between 6 and 8°N, with weak convective activity. In the region of the South eastern Pacific surface winds appeared with South South-east direction, and as far as speed, negative anomalies predominated, that fluctuated around -0, 5 m/s.



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

**Anomalia de la Temperatura superficial del Mar (°C)
Diciembre 2008**



**SEA SURFACE TEMPERATURE
ANOMALIES, DECEMBER 2008**

Taking into account present thermal behaviour from Equatorial Pacific Ocean, as well as several models of numerical simulation, are anticipated that during next month value of Sea Surface Temperature in the Eastern sector of the Equatorial Pacific Ocean will continue under its normal value.



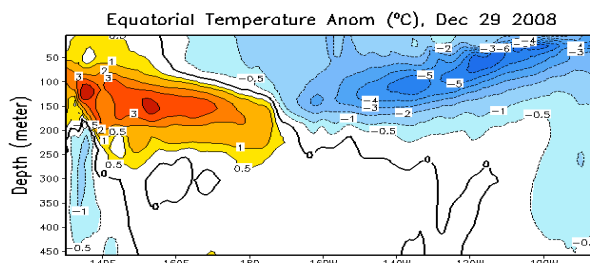
CLIMATE ALERT BULLETIN (BAC)

At subsurface level, between 100 and 200 ms of depth, the Equatorial Pacific Ocean maintains presence of a warm nucleus of 3.0°C located to the west of the line of date and a cold nucleus which has until -5.0°C located in the Eastern Central Equatorial Pacific; during this month fortification of both nuclei was well-known, especially the cold nucleus.

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 1.5.

The Central Axis of the Intertropical Convergence Zone (ITCZ) appeared in the Eastern sector of the Pacific between 6 and 8°N with variable convective activity with direct affectation to Central America and Colombia.

The surface winds, in the region of the South eastern Pacific, they appeared predominantly of the south and south-east, with speeds that were slightly under average value between -0.4 and -1.0 m/s.



SUBSURFICIAL TEMPERATURE ANOMALIES
DECEMBER 2008

Perspective for the next weeks

GLOBAL

Taking into account predictions from several numerical models, as well as behaviour of the main oceanic and atmospheric indicators, it is esteemed that during next month to a large extent of Equatorial Pacific, will stay negative anomalies of SST associated to oceanic cooling, that according to some models of prognosis, could intensify predicting (even) a return of “La Niña”. In the same way, at subsurface level the permanence of present thermal structure is expected.

REGIONAL

In agreement with 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, are anticipated that negative anomalies of SST stay; for January is not expected substantial changes in the superficial and subsuperficial thermal structure for the sector of the Eastern Pacific, hoping in addition that temperature of the air in front of the coast of the South Eastern Pacific appears slightly on its average value.

Institutions that collaborate in this bulletin:



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