



CLIMATE ALERT BULLETIN (BAC)

CPPS

SUMMARIZED VERSION

APRIL 2010

BAC 235

From the analysis of global and regional information allows us to expect that in the next month the air and sea surface temperature conditions will gradually tend to normality, staying sea surface temperature slightly warmer off the coast of Colombia and Ecuador. With regard to precipitations, it is anticipated that the rain will continue, especially in the coastal areas of Colombia and Ecuador, but with lower intensity and frequency.

During April, the Tropical Pacific coastal region presented typical conditions of a weak El Niño event. Nevertheless, air temperature, sea surface temperature and sea level variables had shown a tendency to neutral values.

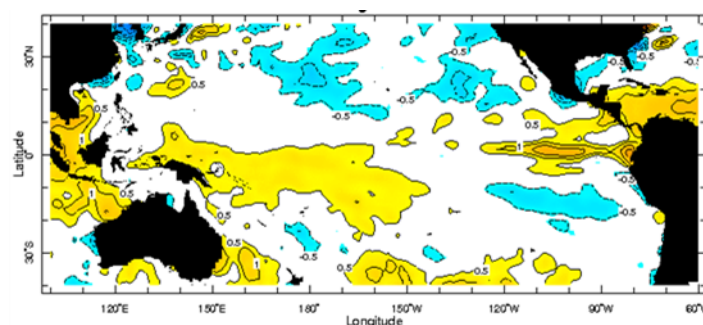
The Sea Surface Temperature stayed with positive values in most of the stations of Ecuador and Peru, while in Chile the stations recorded temperatures were below normal. During this month, an increase of sea surface temperature was detected off the west coast of tropical South America.

The air temperature (AT) variability along the coastal stations of the region was not uniform; in Ecuador almost all the coastal stations showed positive anomalies of AT; while in Peru, the anomalies were negative anomalies.

The Intertropical Convergence Zone (ICTZ) appeared like a latitudinal band centered around 6° N, maintaining an intense activity which caused heavy precipitations along the coast of Ecuador.

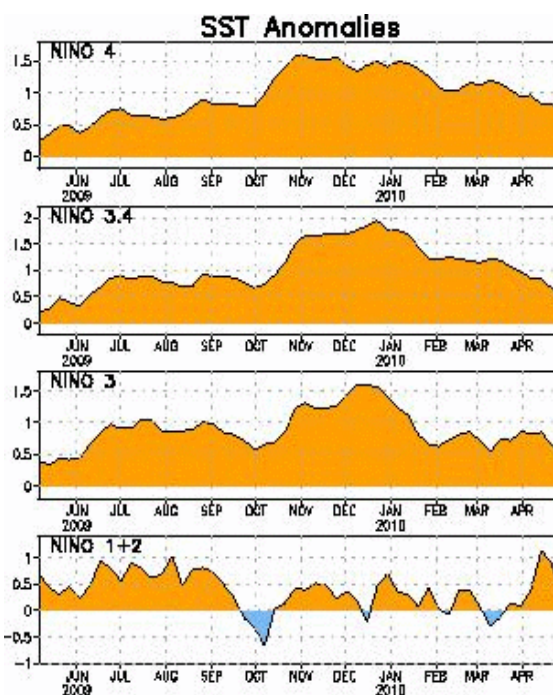
In the South East Pacific Region, south winds predominated with average magnitudes between 3 and 3.5 m/s.

In all geographic zones of El Niño monitoring event, the sea surface temperature anomalies were positive, with values of + 0.8, +0.7, + 0.7 and 0.6 °C, in regions El Niño 4, El Niño 3.4, El Niño 3 and 1+2 respectively.



2-8 May 2010

SEA SURFACE TEMPERATURE ANOMALIES, APRIL 2010



SEA SURFACE TEMPERATURE ANOMALIES FOR EL NIÑO REGIONS

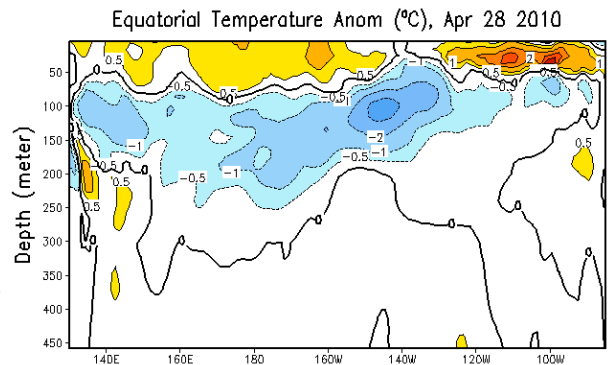
At Subsurface level, positive anomalies predominated in the Eastern and Western part of the Pacific in the first 50 ms of the water column. Below this depth and down to 250 m negative anomalies predominated.

The Southern Oscillation Index (SOI) presented a positive value of 1.2 in contrast to the tendency of the previous months.



At Subsurface level the values of sea temperature maintained a behavior similar to the previous month, with deepening of isotherms of 15 and 20°C, in the Eastern side of the Pacific (90°W), which demonstrates a slight heating in this site. The temperature anomalies were positive in sectors located in the Eastern and Western part of the Pacific over 50 ms of depth; whereas between 50 and 250 ms negative anomalies of temperature of the sea predominated with a maximum value equal to -2.5 °C.

The Mean Sea Level in the equatorial Pacific maintained values near its neutral value in the area between 5° N and 5° S; southward of this strip positive anomalies with a nucleus of 10 cm were observed, centered at 135°W. In the coastal stations of Ecuador and Peru positive anomalies of sea level decreased presenting the maximum value in La Libertad with 10 cm and the minimum in Talara with 1 cm. In Chile positive anomalies were reported in all stations.



SUBSUPERFICIAL TEMPERATURE ANOMALIES

Perspective for the next weeks

GLOBAL

Taking into account the prognoses of several numerical models, the uprisings realized by many organizations and the pursuit and analysis of the behavior of oceanic and atmospheric indicators, it is anticipated that the weak El Niño event conditions in our region finalize in the next month. Consequently, the sea temperature and the sea level anomalies will tend to neutral values.

Considering the pursuit of the ocean-atmospheric conditions in the South east Pacific Ocean carried out by the ERFEN Program (integrated by National Committees ERFEN of Chile, Colombia, Ecuador and Peru) and coordinated by the CPPS, it is anticipated that for the next month in the South East margin of the Pacific ocean, the sea surface temperature will decrease according to seasonal values. However, slightly positive anomalies of sea and air temperature will persist, especially off the coast of Ecuador and Colombia.

Institutions that collaborate in this bulletin:

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