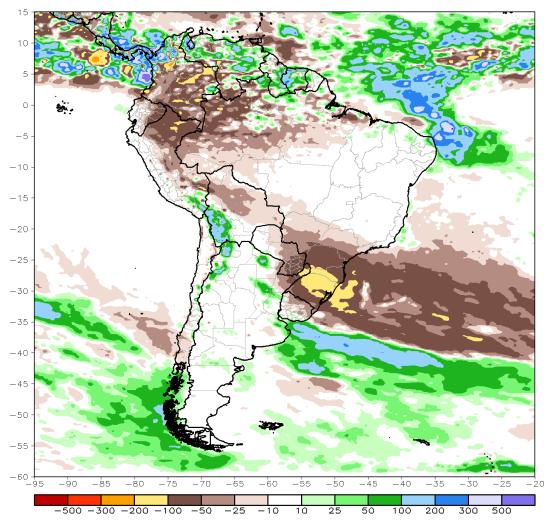
Bulletin July 2017 – Tropical Meteorology

By A.C.V. Freitas and L. B. M. Pires

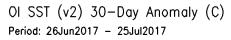
During this month, dry conditions prevailed over the Amazon region, especially the northwest portion. The dry conditions also are seen over the greater part of Colombia, northern Peru and eastern Ecuador. The Intertropical Convergence Zone (ITCZ) system is very active over the tropical western Atlantic and eastern Pacific. This observed rainfall pattern characterizes the South American winter monsoon season.

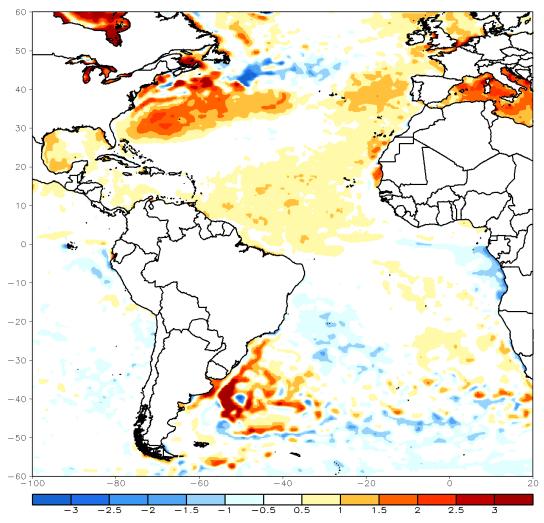
CMORPH 1-Month Total Rainfall Anomaly (mm) Period: 01Jul2017 - 25Jul2017



Source: http://www.cpc.ncep.noaa.gov/products/international/cmorph_Jul2017-Jul2017 sam anom.gif

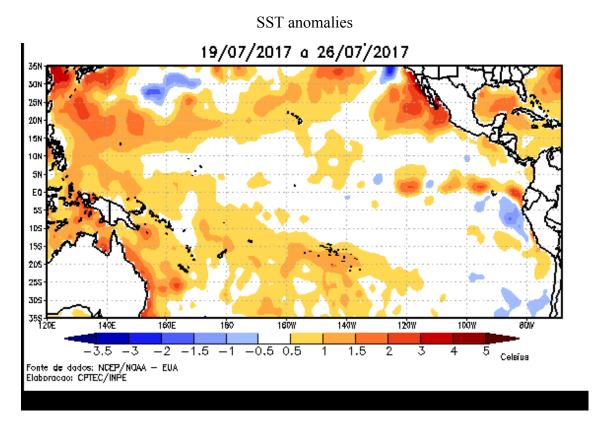
The Sea Surface Temperature (SST) anomalies over the tropical Atlantic close to South America from 26 June to 25 July are positive but weaker.





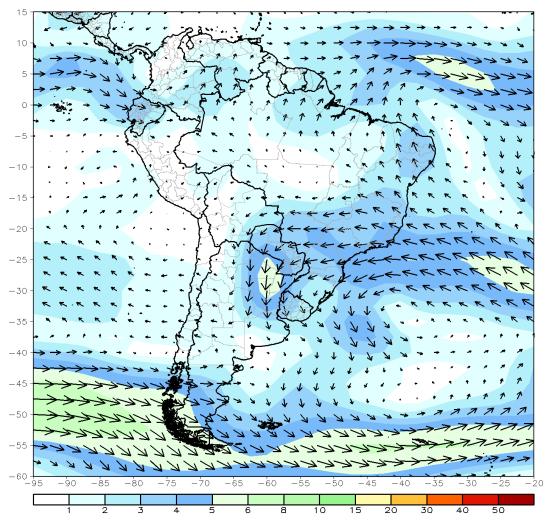
Source: http://www.cpc.ncep.noaa.gov/products/international/oisst/oisst_30day_atl_anom.gif

In the tropical Pacific region, the Nino 3.4 index still indicates neutral conditions for this month.



Source: http://enos.cptec.inpe.br/

The 30-day mean vector wind anomaly at 850 hPa shows a pattern of westerly low level wind anomalies along the equator with southwesterly anomalies towards the Venezuela and North Atlantic, especially over the eastern Amazon portion. This is consistent with the reduced precipitation observed as the humidity is being transported from the Amazon region to the North Atlantic and Venezuela. The wind anomalies in this period also are consistent with the South American winter monsoon pattern.



CDAS 850mb 30-Day Mean Vector Wind Anomaly (m/s) Period: 25Jun2017 - 24Jul2017

Source: http://www.cpc.ncep.noaa.gov/products/international/cdas/cdas_30day_sam_850wind_a nom.gif