Enfermedad de las Manchas Blancas (EMB)

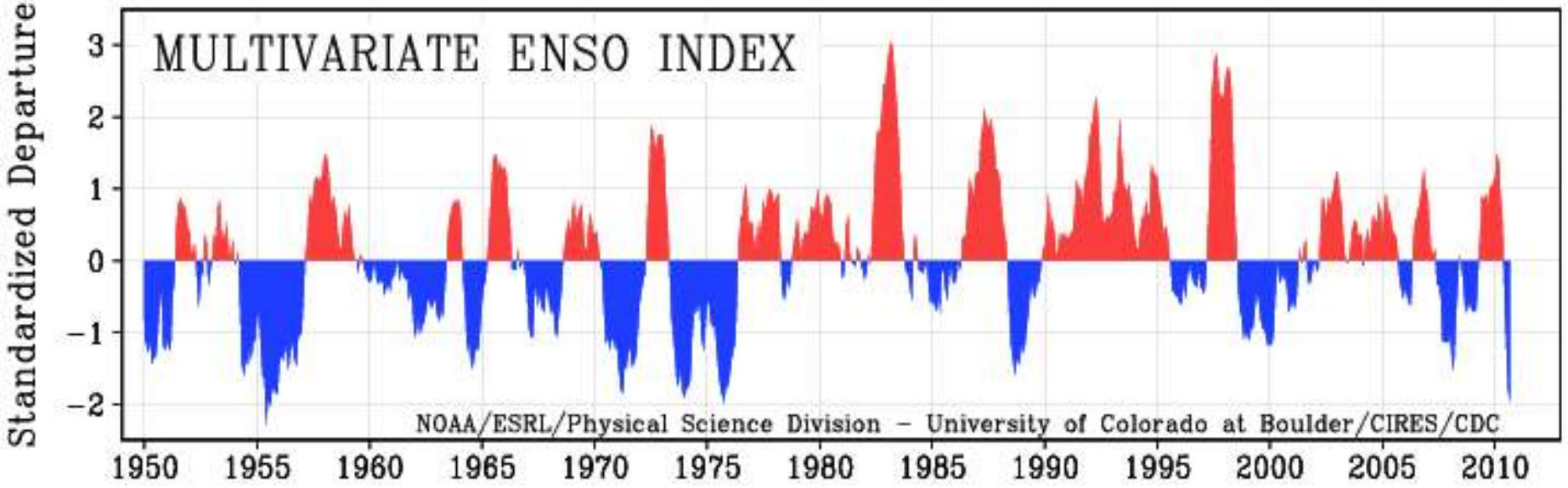
White Spot Disease (WSD)

Actualización del diagnóstico ambiental
Octubre 2010

Perspectivas al 2011

Climate Diagnostic Bulletin

http://www.cpc.noaa.gov/products/CDB/index.shtml



Last update: 7 October 2010

http://www.esrl.noaa.gov/psd/people/klaus.wolter/MEI/

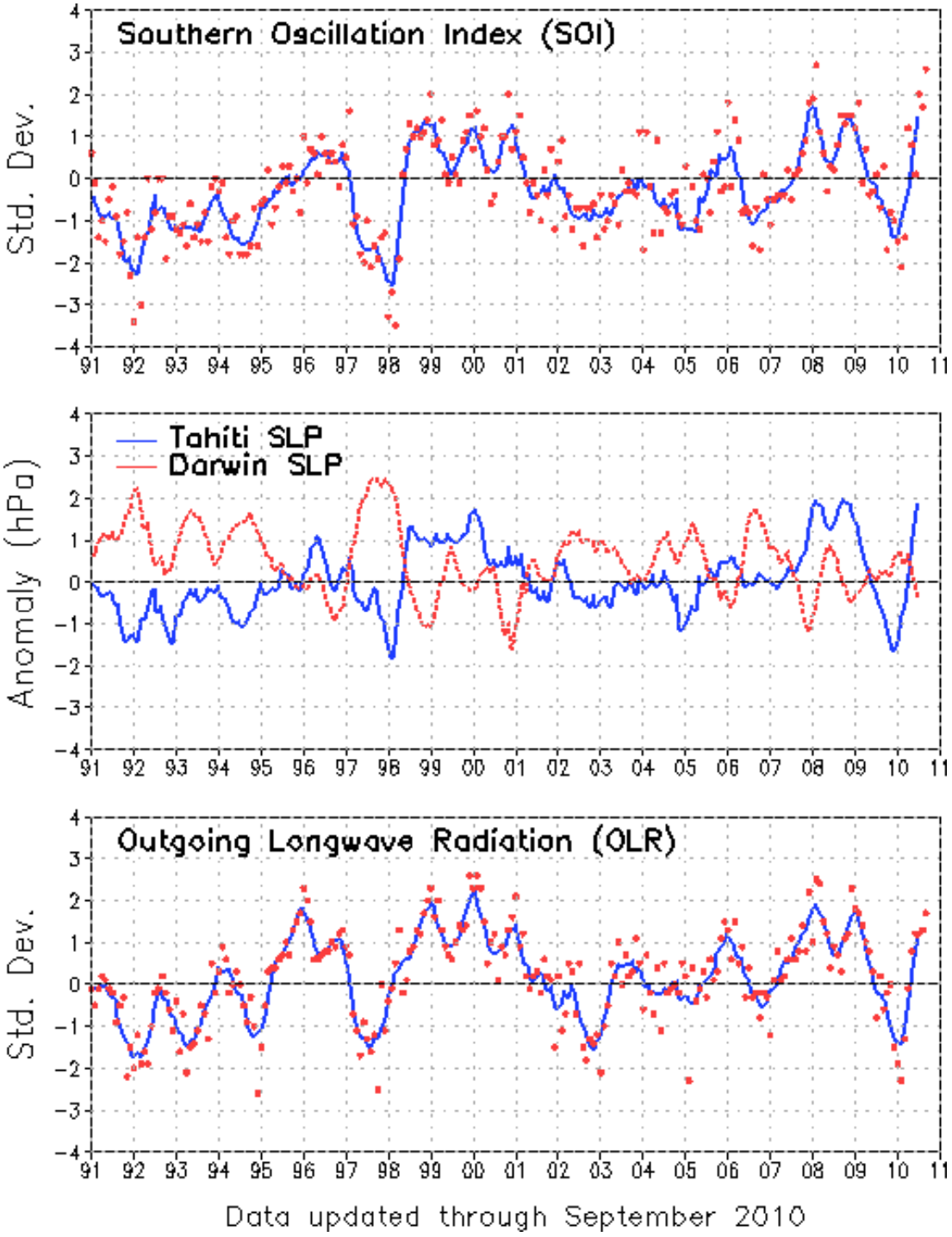
ENSO

El Índice de Oscilación del Sur / El Niño (ENSO) es el fenómeno de acoplamiento océano atmósfera más importante relacionado con la variabilidad climática a una escala de tiempo interanual.

El Índice ENSO multivariado integra seis variables observadas en el Pacífico Tropical.

P	Presión a nivel del mar
U y V	Componentes meridional y zonal de los vientos de superficie
S	Temperatura superficial del mar
A	Temperatura superficial del aire
C	Fracción de nubosidad en el cielo

El Niño/Southern Oscillation (ENSO) is the most important coupled ocean-atmosphere phenomenon to cause global climate variability on interannual time scales. Here we attempt to monitor ENSO by basing the Multivariate ENSO Index (MEI) on the six main observed variables over the tropical Pacific. These six variables are: sea-level pressure (P), zonal (U) and meridional (V) components of the surface wind, sea surface temperature (S), surface air temperature (A), and total cloudiness fraction of the sky (C). These observations have been collected and published in COADS for many years.

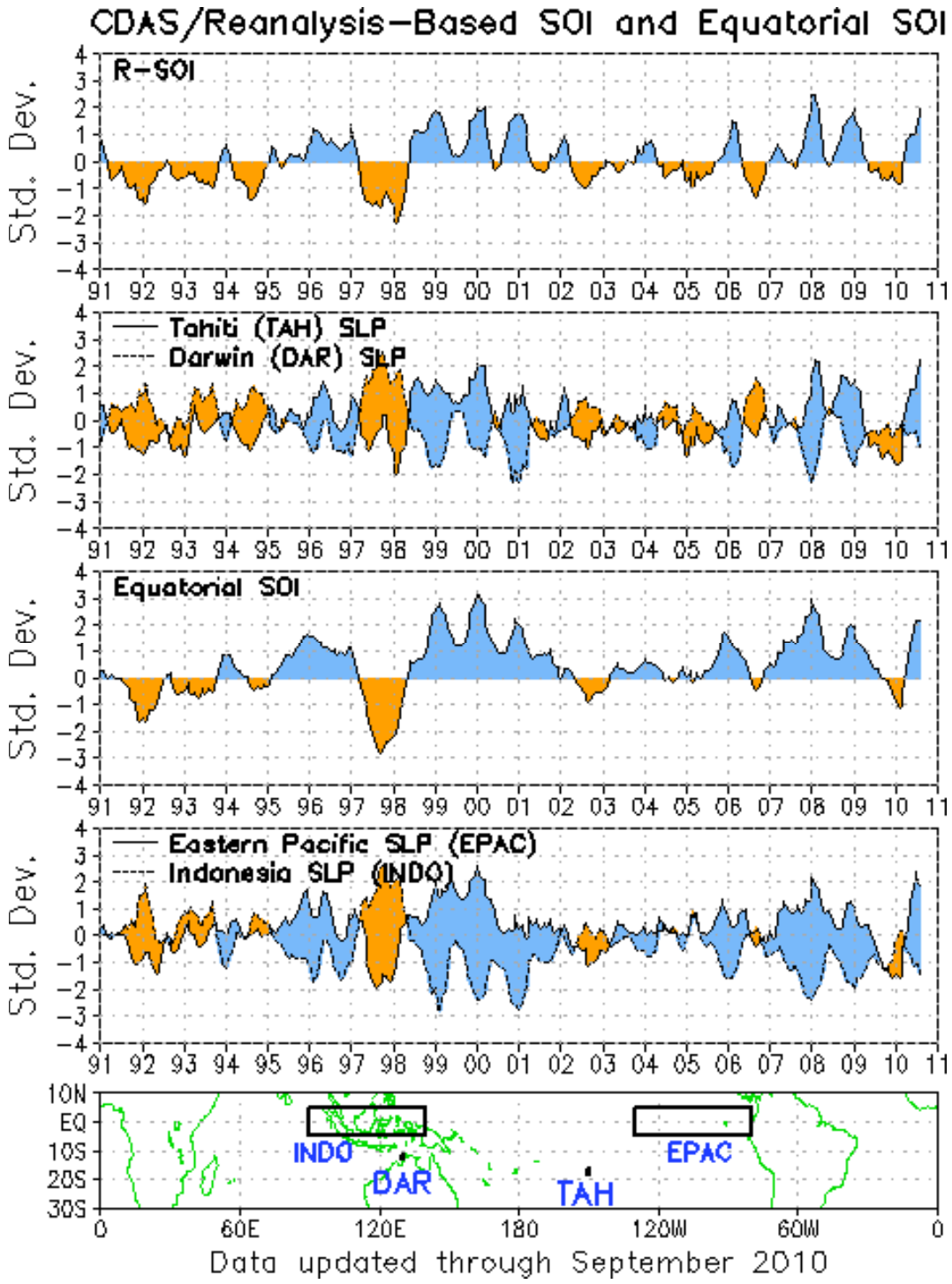


SOI, Tahiti and Darwin SLP and OLR Anomalies

SEPTEMBER 2010

FIGURE T1. Five-month running mean of the Southern Oscillation Index (SOI) (top), sea-level pressure anomaly (hPa) at Darwin and Tahiti (middle), and outgoing longwave radiation anomaly (OLR) averaged over the area 5N-5S, 160E-160W (bottom). Anomalies in the top and middle panels are departures from the 1951-1980 base period means and are normalized by the mean annual standard deviation. Anomalies in the bottom panel are departures from the 1979-1995 base period means. Individual monthly values are indicated by "x"s in the top and bottom panels. The x-axis labels are centered on July.

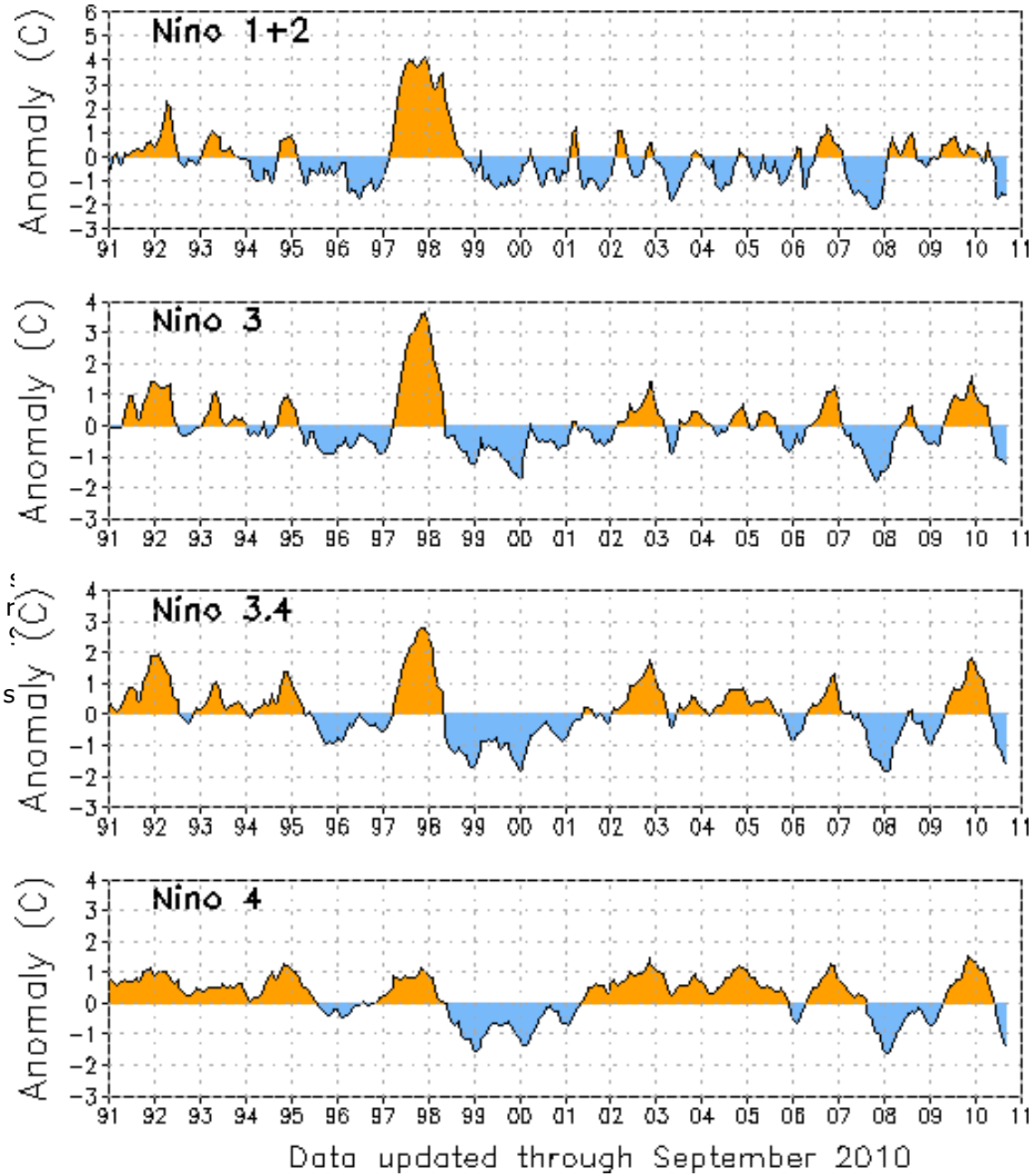
http://www.cpc.noaa.gov/products/CDB/Tropics/figt1.shtml



SEPTEMBER 2010

FIGURE T2. Three-month running mean of a CDAS/Reanalysis-derived (a) Southern Oscillation Index (RSOI), (b) standardized pressure anomalies near Tahiti (solid) and Darwin (dashed), (c) an equatorial SOI ([EPAC] - [INDO]), and (d) standardized equatorial pressure anomalies for (EPAC) (solid) and (INDO) (dashed). Anomalies are departures from the 1979-1995 base period means and are normalized by the mean annual standard deviation. The equatorial SOI is calculated as the normalized difference between the standardized anomalies averaged between 5N-5S, 80W-130W (EPAC) and 5N-5S, 90E-140E (INDO).

http://www.cpc.noaa.gov/products/CDB/Tropics/figt2.shtml



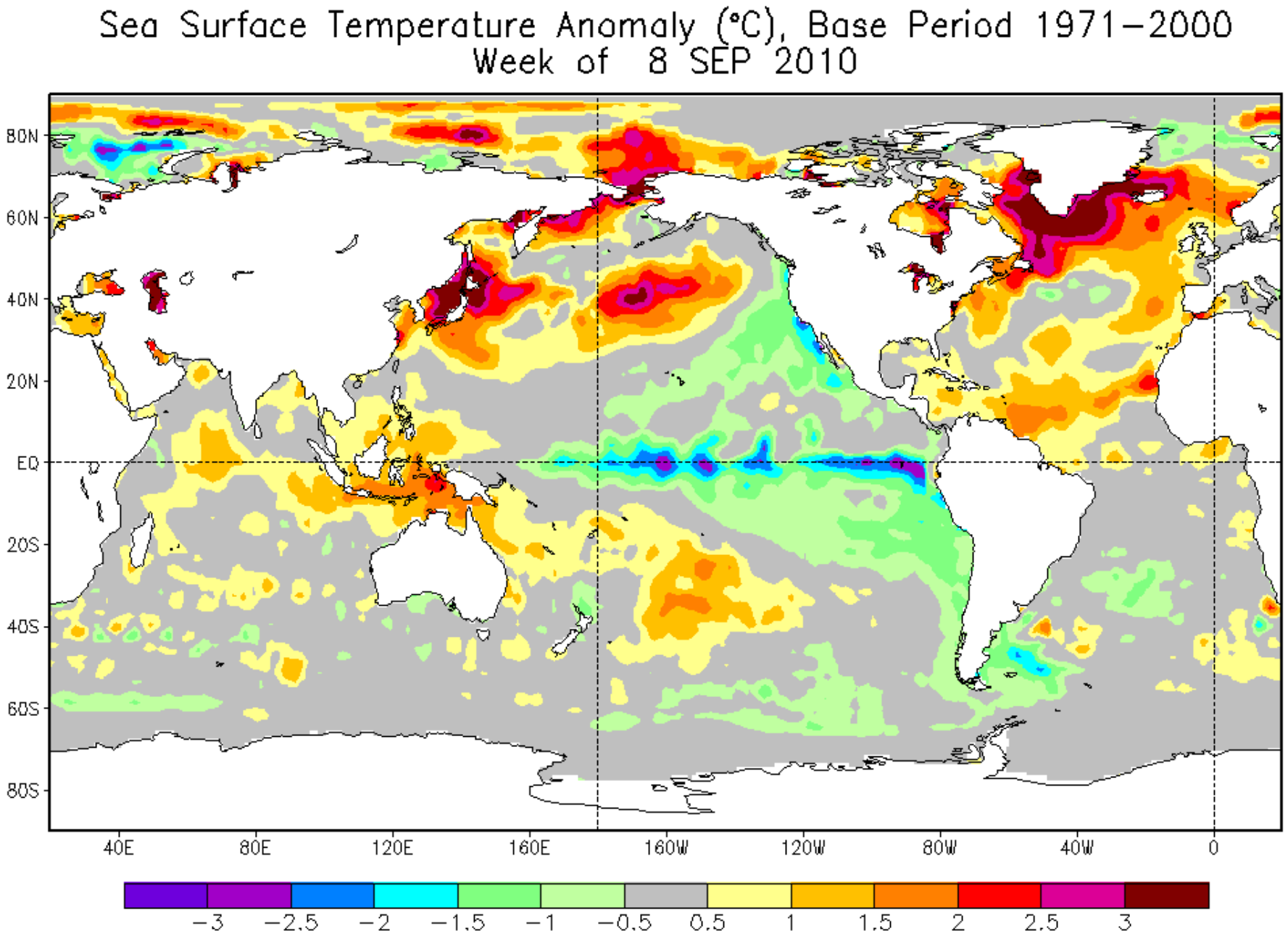
Weekly Niño 1+2 (0-10°South)(90°West-80°West)

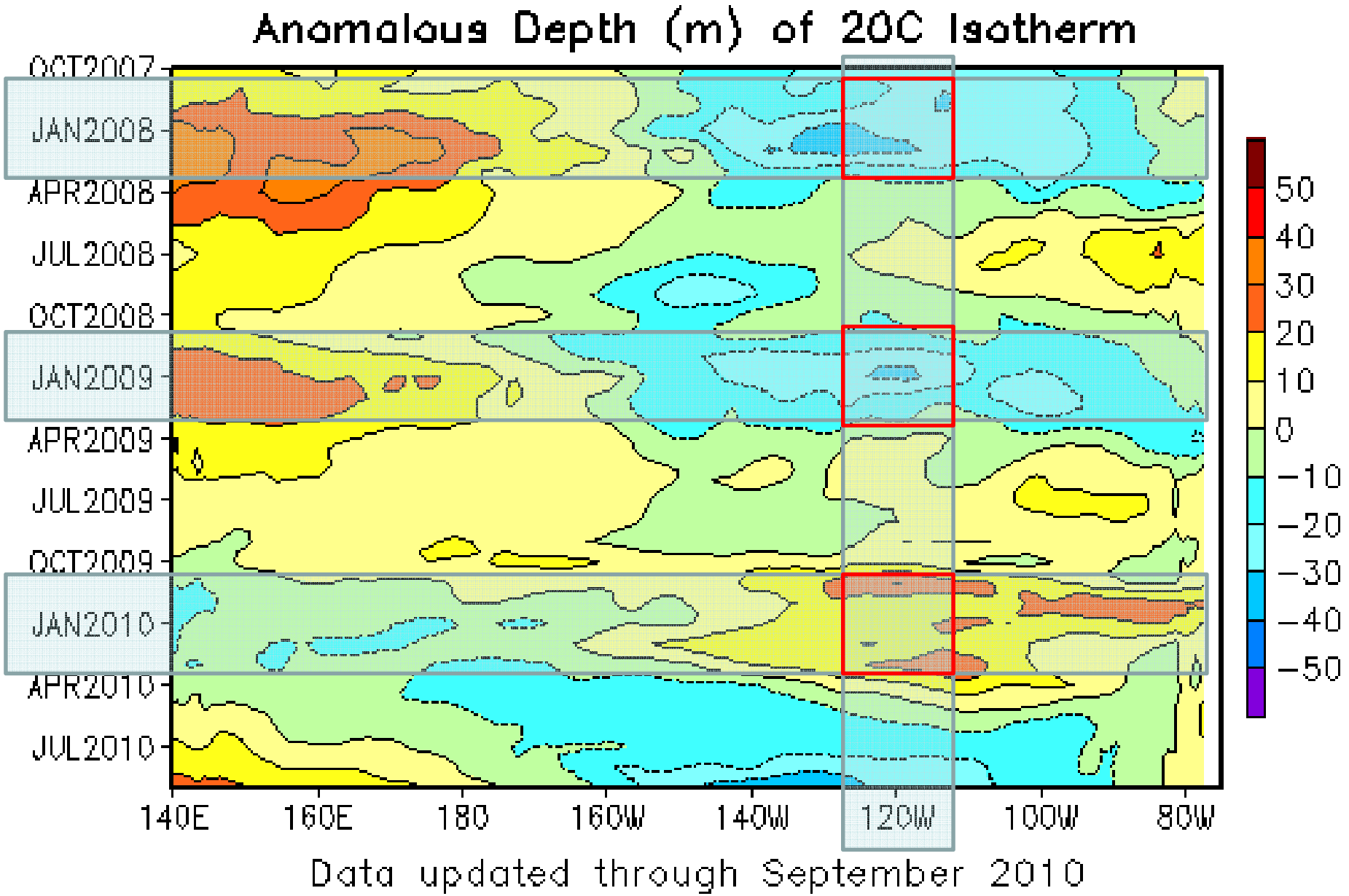
Niño 3 (5°North-5°South)(150°West-90°West)

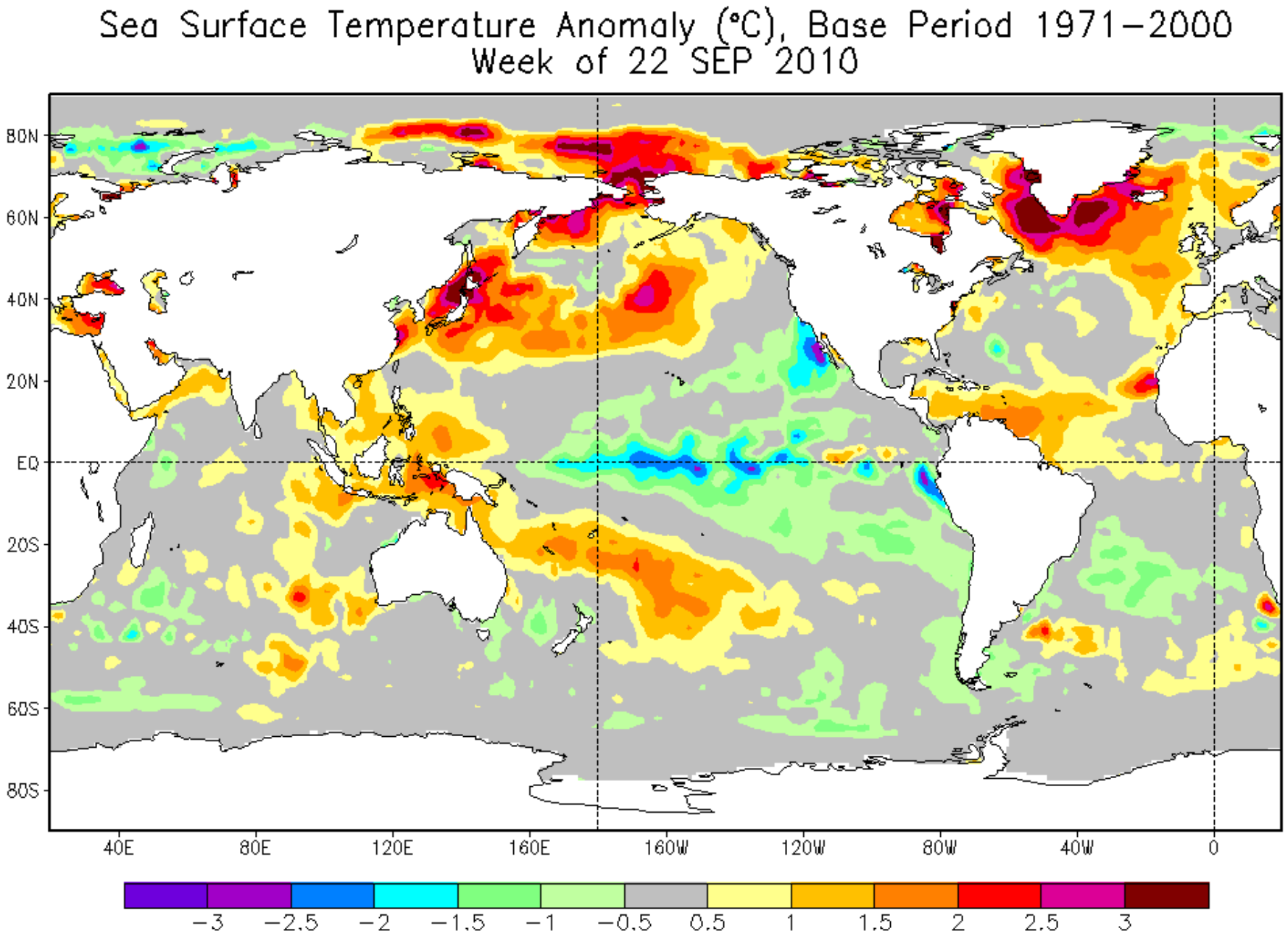
Niño 3.4 (5°North-5°South)(170-120°West):

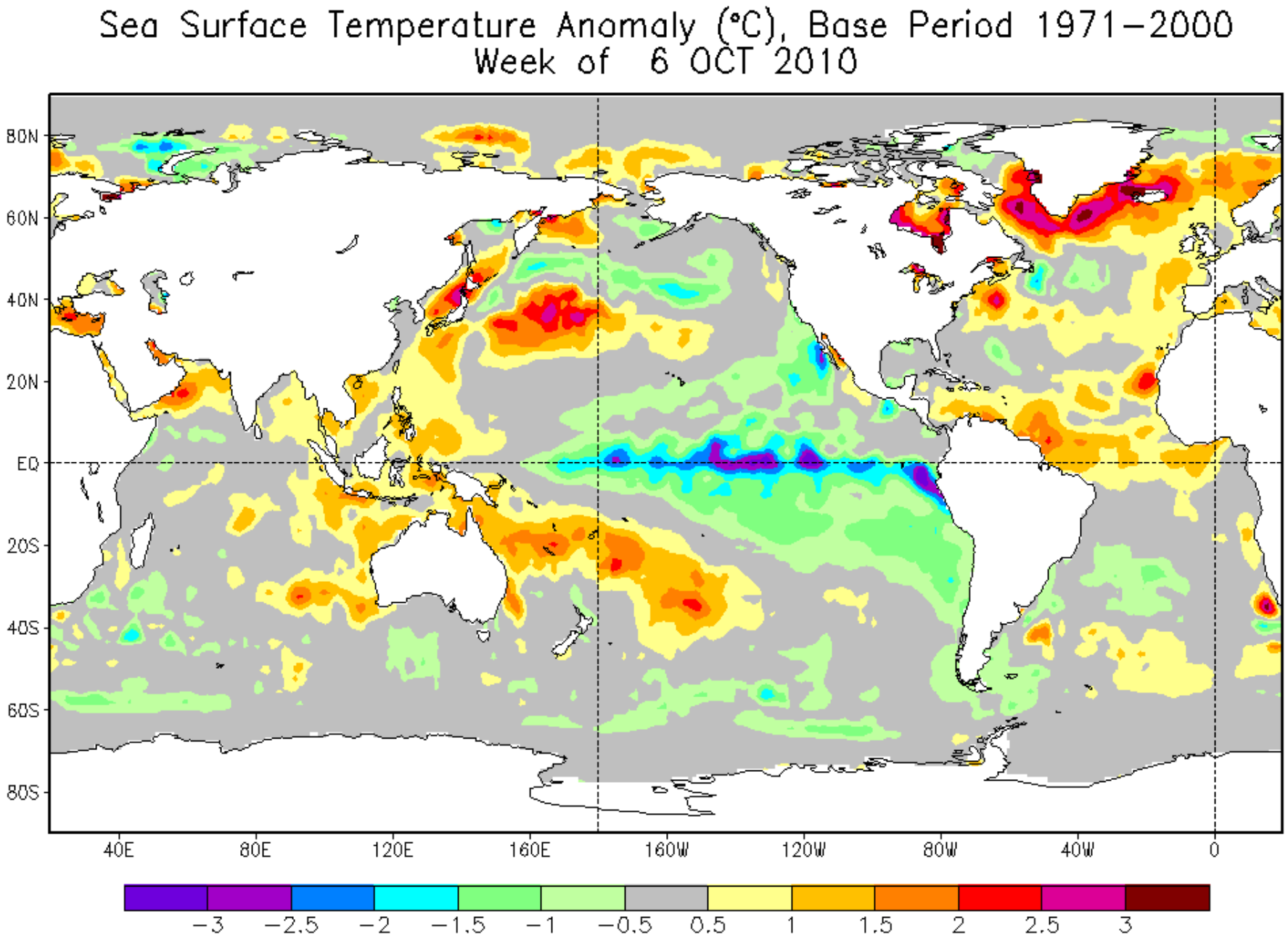
Niño 4 (5°North-5°South) (160°East-150°West)

http://www.cpc.noaa.gov/products/CDB/Tropics/figt5.shtml

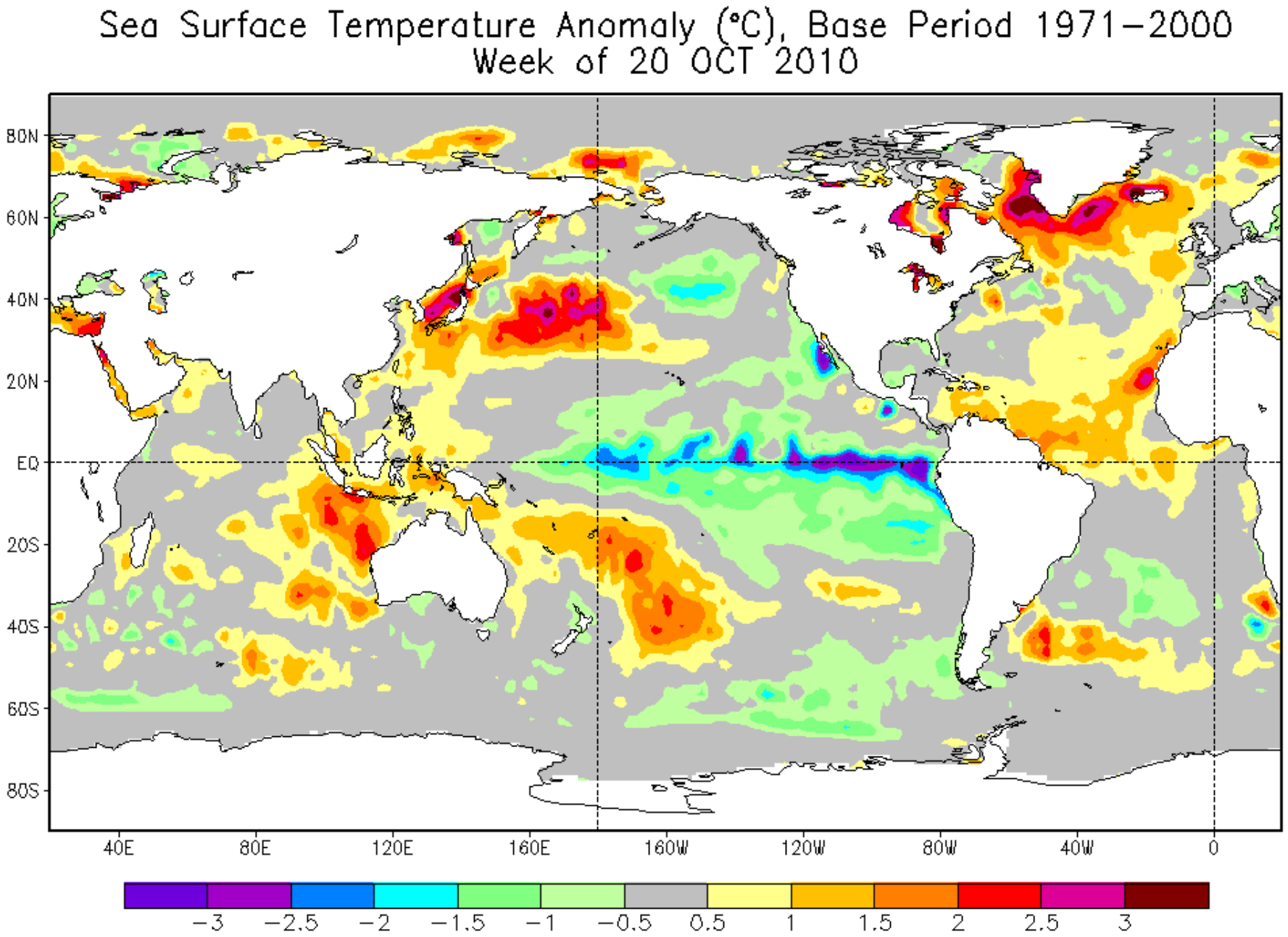

Sea Surface Temperature Anomaly (°C), Base Period 1971–2000
Week of 8 SEP 2010
80N
60N
40N
20N
EQ
20S
40S
60S
80S
40E
80E
120E
160E
160W
120W
80W
40W
0
−3
−2.5
−2
−1.5
−1
−0.5
0.5
1
1.5
2
2.5
3


Anomalous Depth (m) of 20C Isotherm
OCT2007
JAN2008
APR2008
JUL2008
OCT2008
JAN2009
APR2009
JUL2009
OCT2009
JAN2010
APR2010
JUL2010
140E
160E
180
160W
140W
120W
100W
80W
50
40
30
20
10
0
−10
−20
−30
−40
−50
Data updated through September 2010

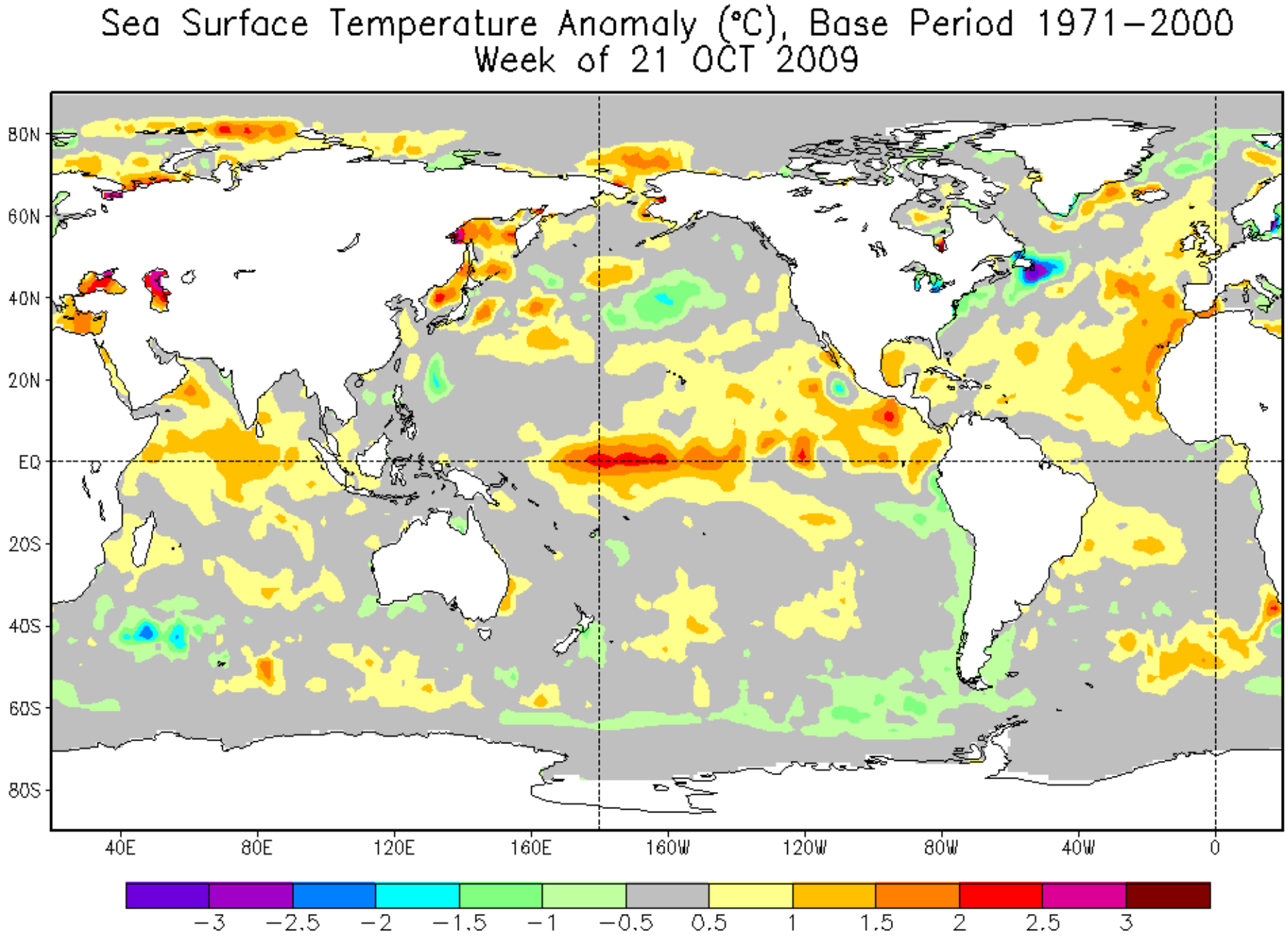

Sea Surface Temperature Anomaly (°C), Base Period 1971–2000
Week of 22 SEP 2010
80N
60N
40N
20N
EQ
20S
40S
60S
80S
40E
80E
120E
160E
160W
120W
80W
40W
0
−3
−2.5
−2
−1.5
−1
−0.5
0.5
1
1.5
2
2.5
3



http://lwf.ncdc.noaa.gov/oa/climate/research/sst/weekly-sst.php#maps

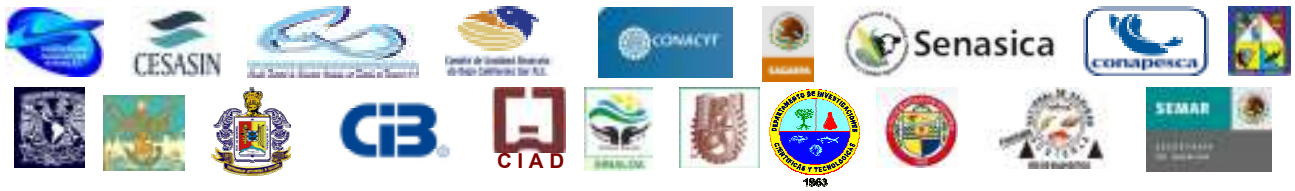


http://lwf.ncdc.noaa.gov/oa/climate/research/sst/weekly-sst.php#maps


Sea Surface Temperature Anomaly (°C), Base Period 1971–2000
Week of 21 OCT 2009
80N
60N
40N
20N
EQ
20S
40S
60S
80S
40E
80E
120E
160E
160W
120W
80W
40W
0
−3
−2.5
−2
−1.5
−1
−0.5
0.5
1
1.5
2
2.5
3

Temperaturas últimos tres meses

http://www.cpc.noaa.gov/products/analysis_monitoring/enso_update/sstanim.shtml



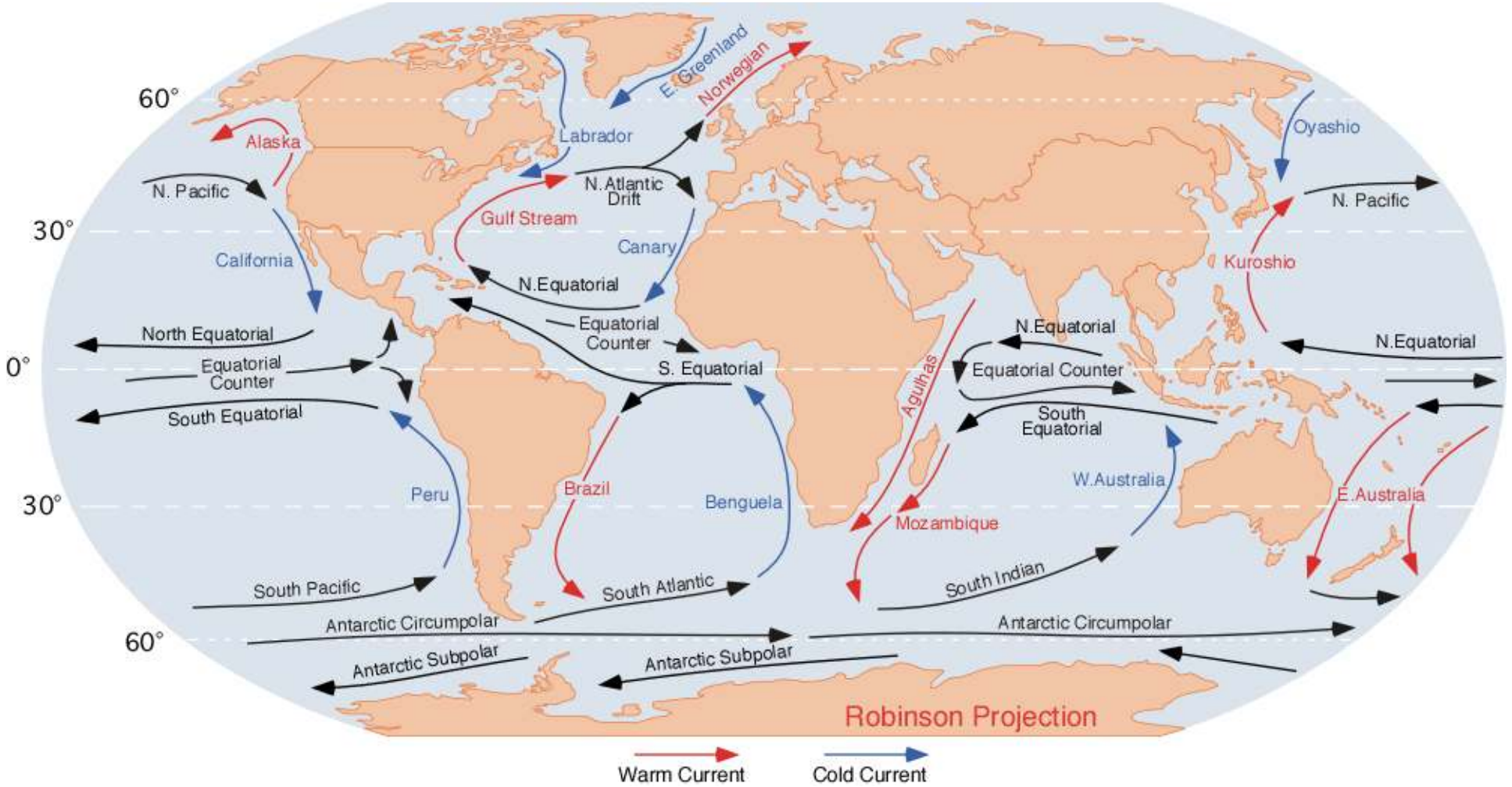
Gracias

PISA

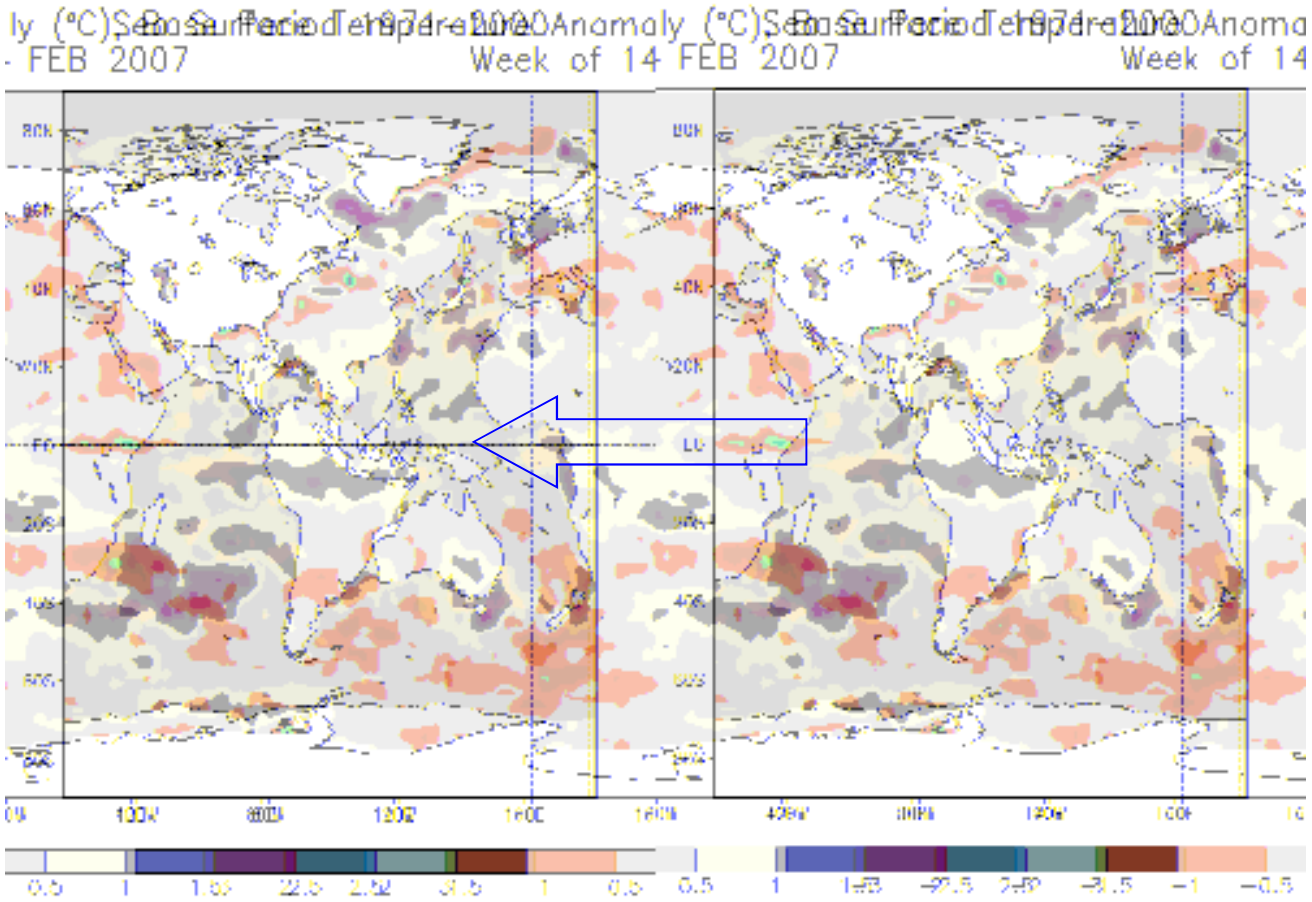
AERI

Diagnóstico climático del Golfo de California Durante el Vacío Sanitario 2009-2010

Corrientes Marinas superficiales



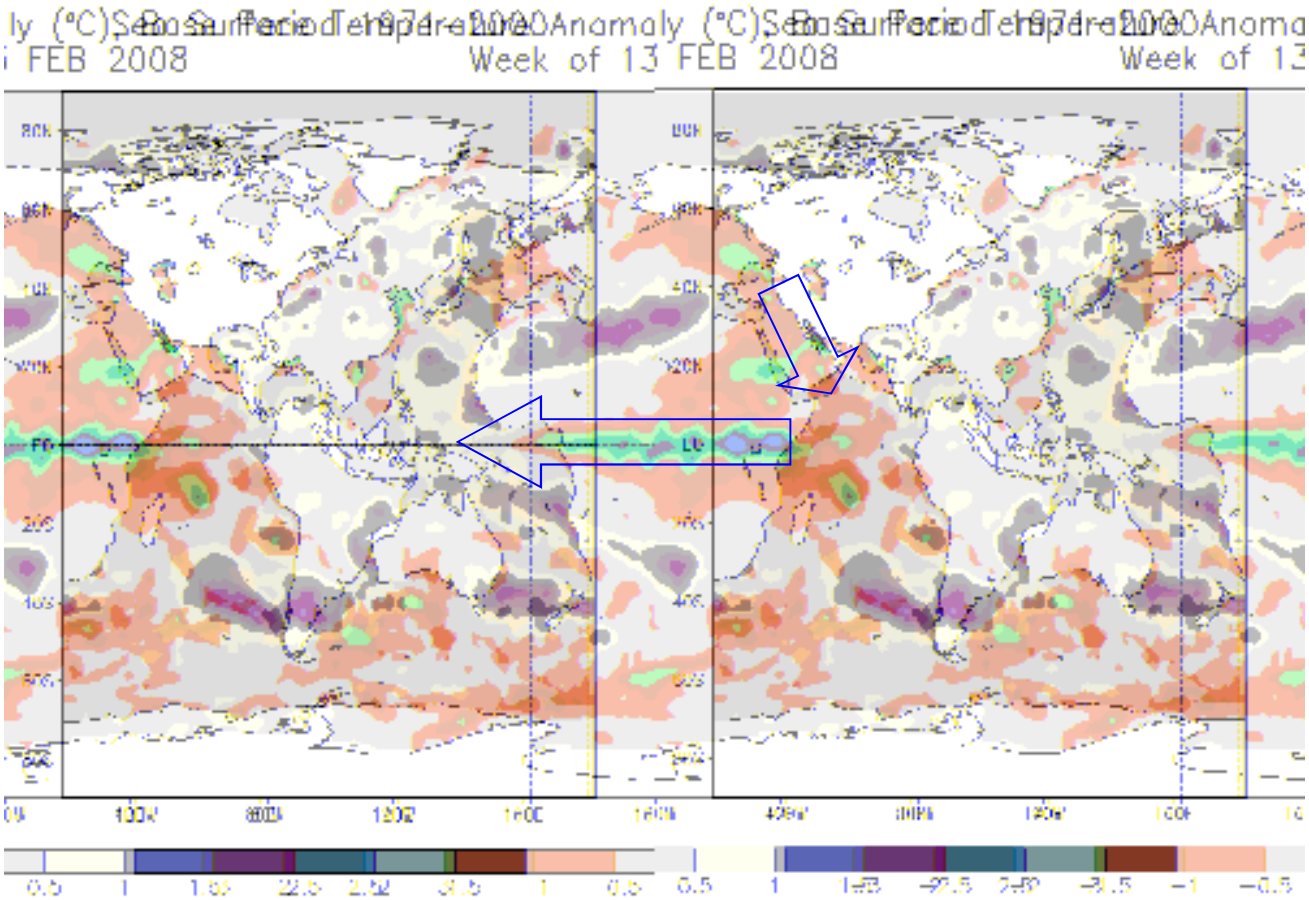
.http://www.physicalgeography.net/fundamentals/8q_1.html



Presión Atmosférica
Parte Oriental

<

Presión Atmosférica
Parte occidental



Presión Atmosférica
Parte Oriental

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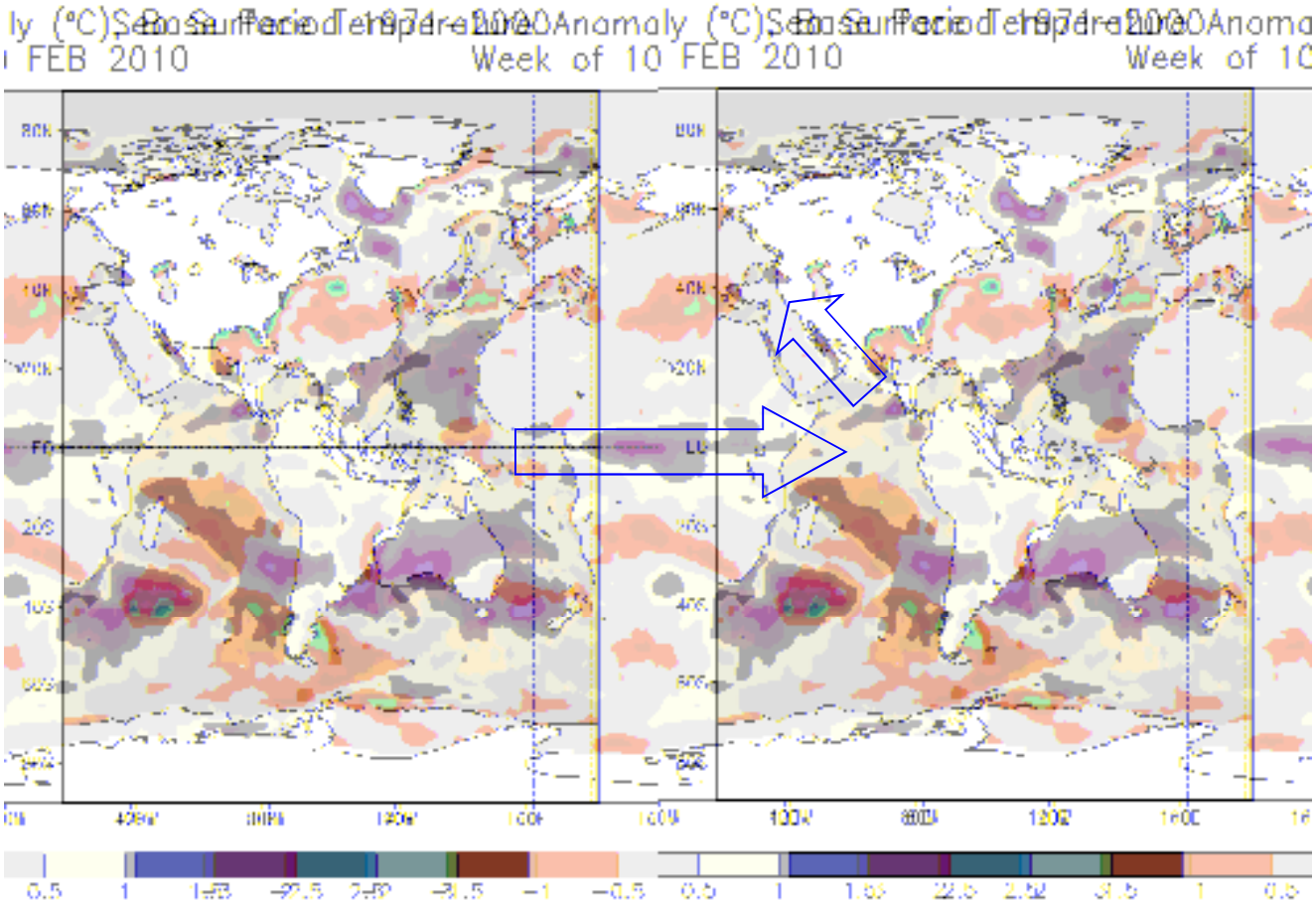
Presión Atmosférica
Parte occidental



Presión Atmosférica
Parte Oriental

>

Presión Atmosférica
Parte occidental

http://www.cgd.ucar.edu/cas/

http://www.cgd.ucar.edu/cas/catalog/climind/soi.html

Southern Oscillation Index (SOI)

Click here to download data files.

The Southern Oscillation Index (SOI) presented below is computed using monthly mean sea level pressure anomalies at Tahiti (T) and Darwin (D). The SOI [T-D] is an optimal index that combines the Southern Oscillation into one series. The SOI noise [T+D] series is a measure of small scale and/or transient phenomena that are not part of the large scale Southern Oscillation. These SOI values are similar to those calculated by the Climate Prediction Center in that they have been derived using normalization factors derived from monthly values.

The SOI values prior to 1935 should be used with caution. There are questions regarding the consistency and quality of the Tahiti pressure values prior to 1935.

The smoothed curves below were created using a a filter which effectively removes fluctuations with periods of less than 8 months but includes all others. At 24 months 80% of the variance is retained. The smooth curve denoted by a thick black line is that produced using a decadal filter over thge original monthly values.

As noted above, the SOI presented here are derived using monthly values as was done in Trenberth (MWR, 1984). However, Trenberth notes that better signal-to-noise ratios may be obtained by using normalization factors based upon annual means. To view figures and to download data derived using this approach, click here.

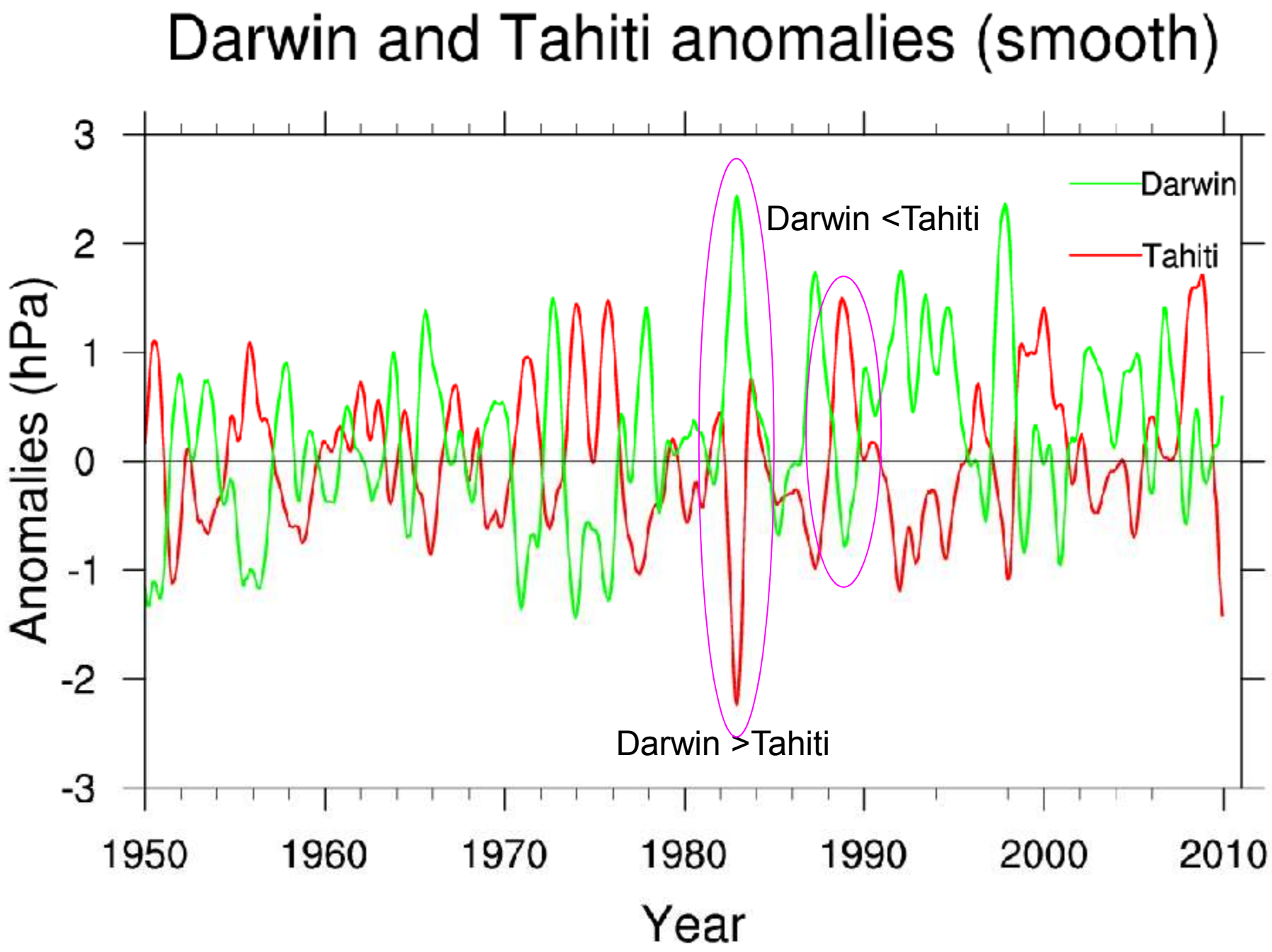
Relevant publications:

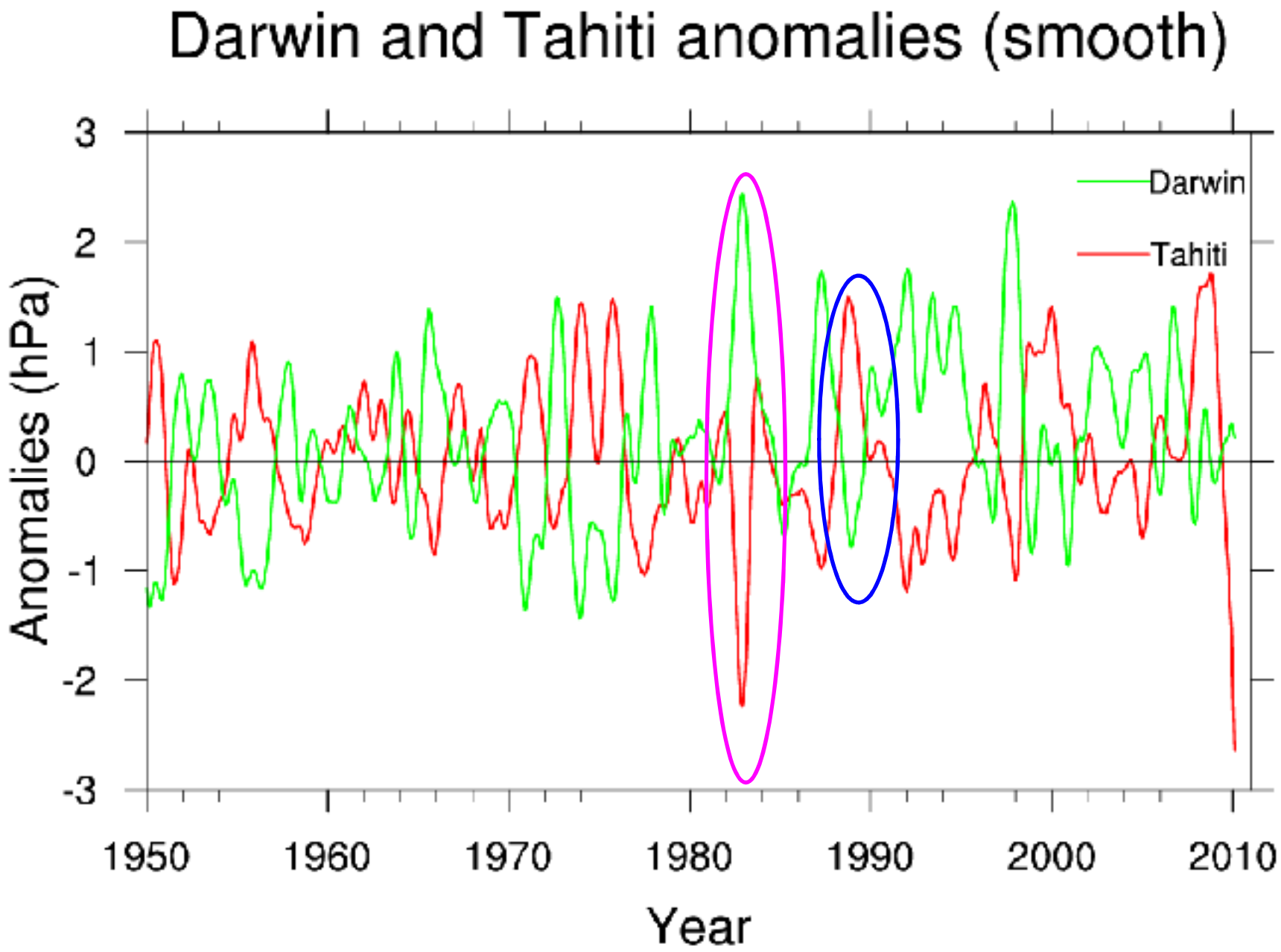
Trenberth (1984), "Signal versus Noise in the Southern Oscillation" *Monthly Weather Review* **112**:326-332

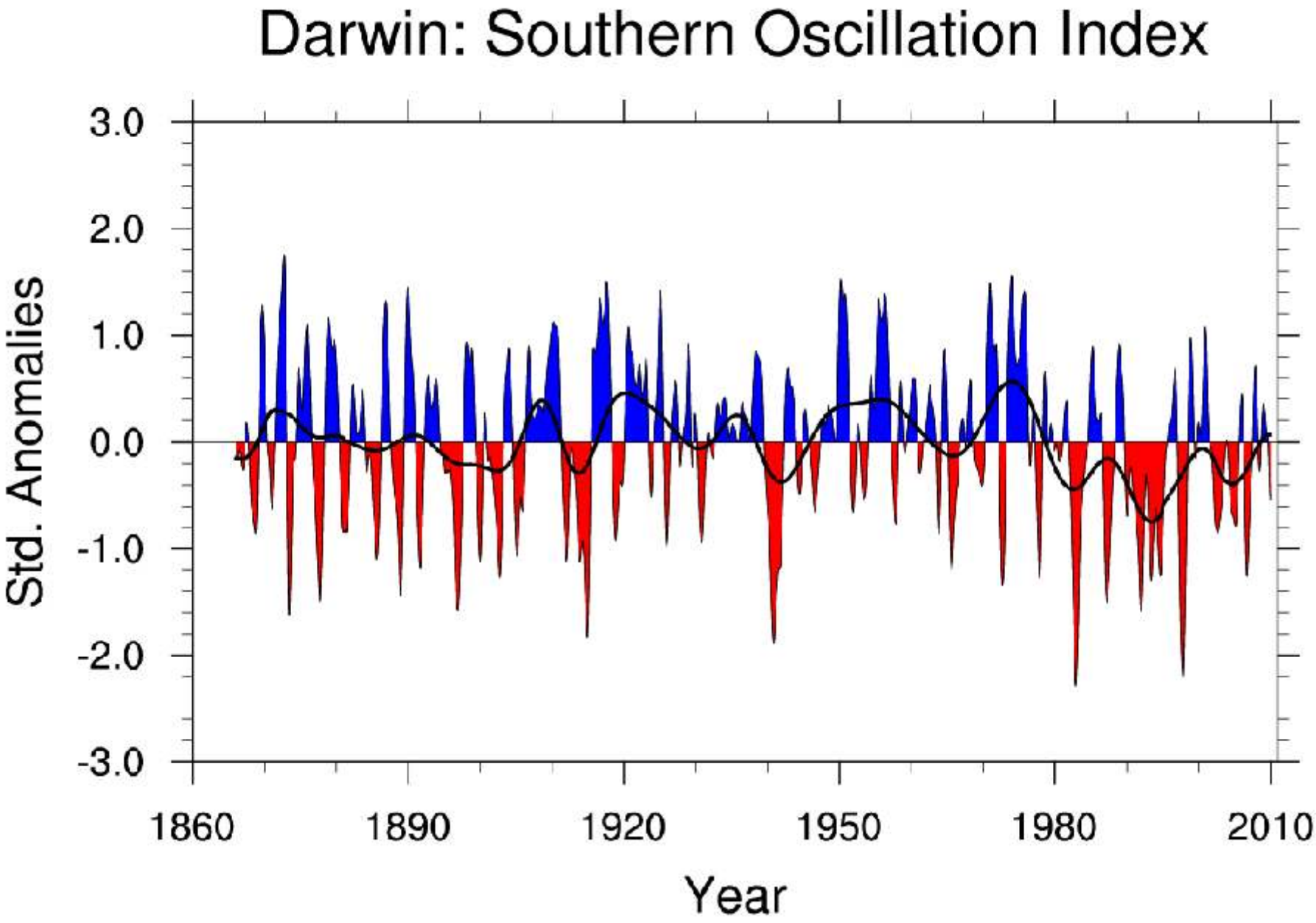
Trenberth, K.E. and T.J. Hoar (1996): "The 1990-1995 El Nino-Southern Oscillation Event Longest on Record", *Geophysical Research Letters* **23**:57-60

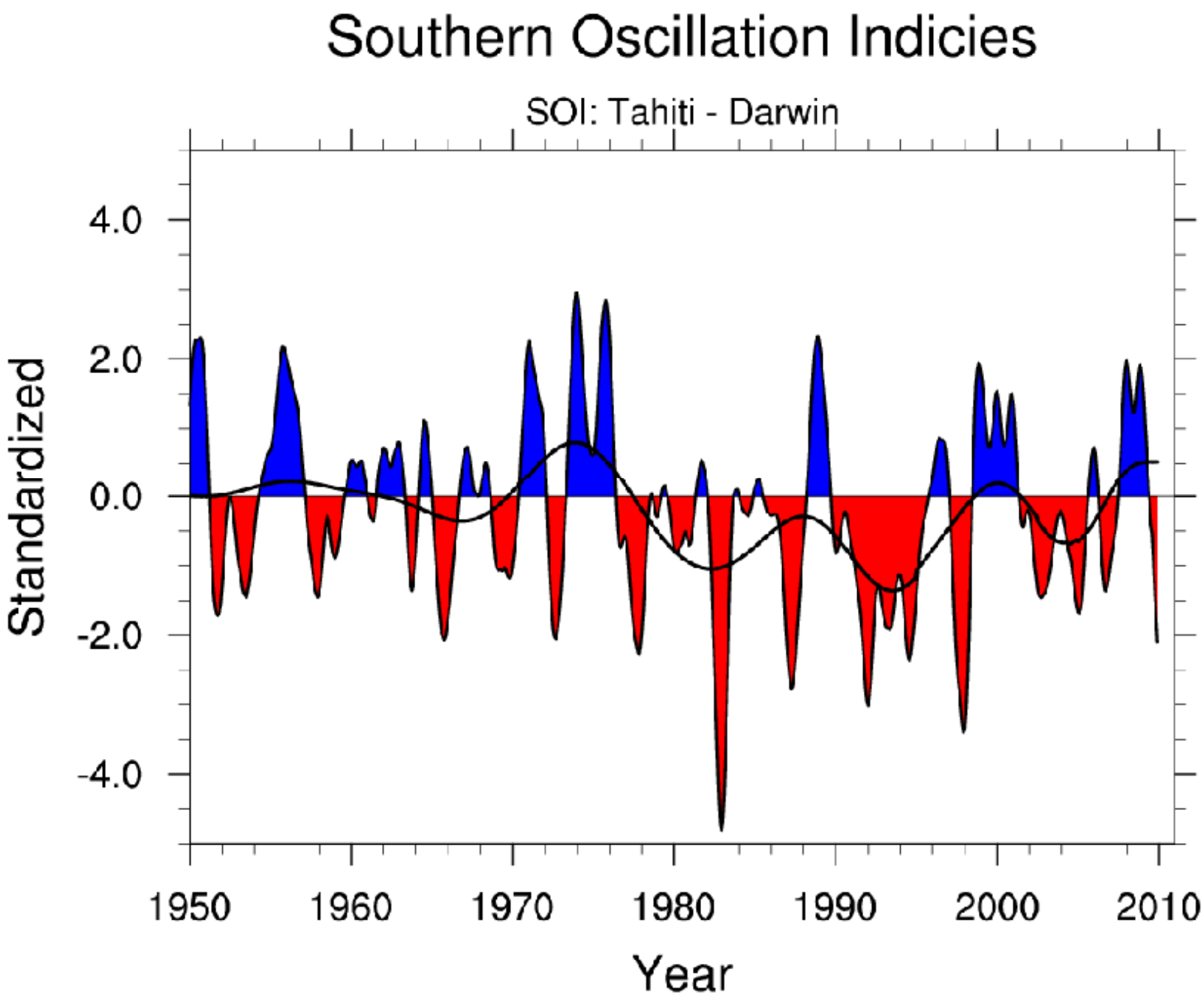
Ropelewski, C.F., and P.D. Jones (1987): "An Extension of the Tahiti-Darwin Southern Oscillation Index", *Monthly Weather Review"* **115**:2161-2165

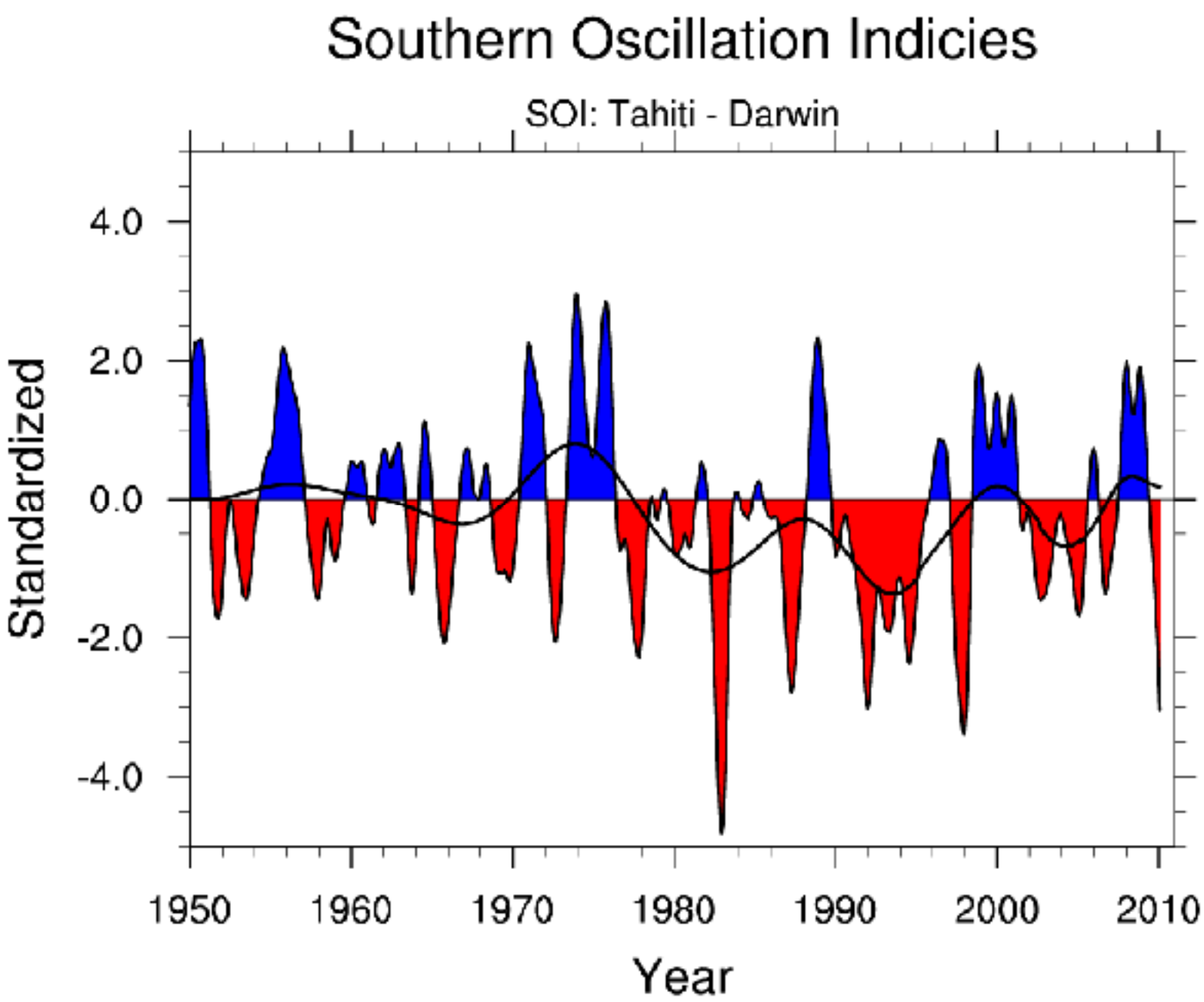
http://www.cgd.ucar.edu/cas/catalog/climind/soi.html

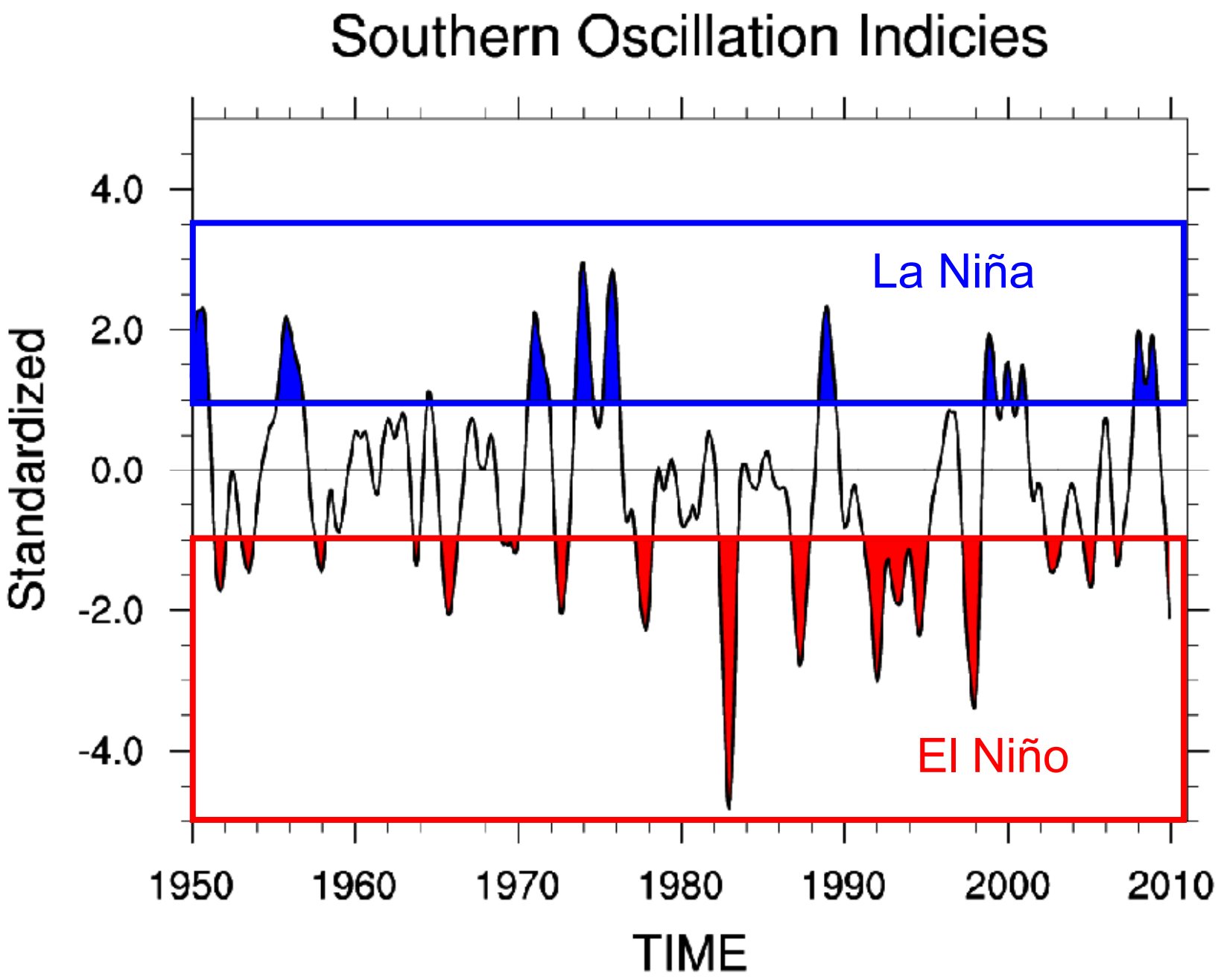

Darwin and Tahiti anomalies (smooth)
Darwin
Tahiti
Darwin <Tahiti
Darwin >Tahiti
Anomalies (hPa)
3
2
1
0
-1
-2
-3
1950
1960
1970
1980
1990
2000
2010
Year

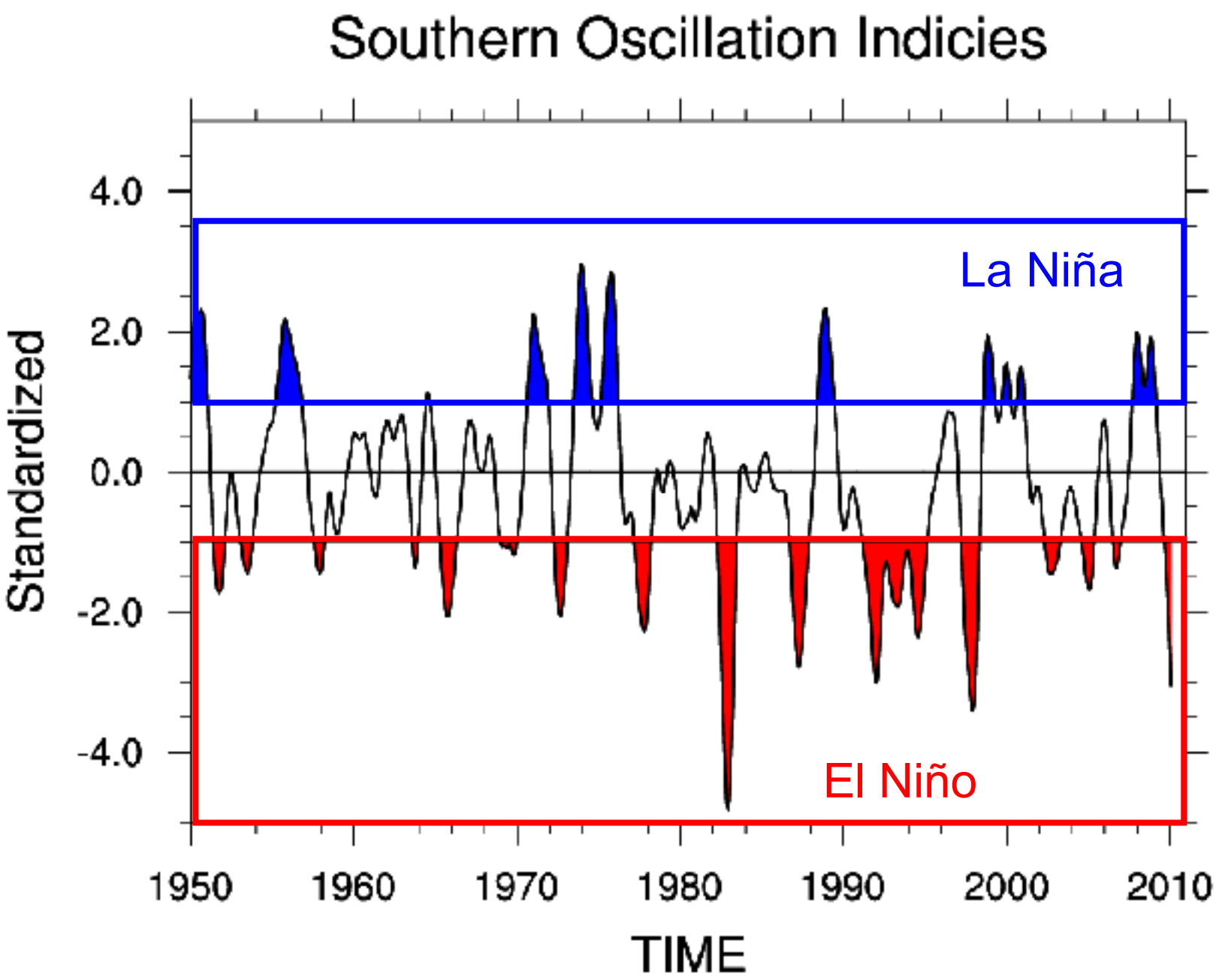

Darwin and Tahiti anomalies (smooth)
Darwin
Tahiti
Anomalies (hPa)
3
2
1
0
-1
-2
-3
1950
1960
1970
1980
1990
2000
2010
Year


Darwin: Southern Oscillation Index
Std. Anomalies
3.0
2.0
1.0
0.0
-1.0
-2.0
-3.0
1860
1890
1920
1950
1980
2010
Year


Southern Oscillation Indicies
SOI: Tahiti - Darwin
Standardized
4.0
2.0
0.0
-2.0
-4.0
1950
1960
1970
1980
1990
2000
2010
Year


Southern Oscillation Indicies
SOI: Tahiti - Darwin
Standardized
4.0
2.0
0.0
-2.0
-4.0
1950
1960
1970
1980
1990
2000
2010
Year


Southern Oscillation Indicies
Standardized
4.0
2.0
0.0
-2.0
-4.0
La Niña
El Niño
1950
1960
1970
1980
1990
2000
2010
TIME


Southern Oscillation Indicies
Standardized
4.0
2.0
0.0
-2.0
-4.0
La Niña
El Niño
1950
1960
1970
1980
1990
2000
2010
TIME

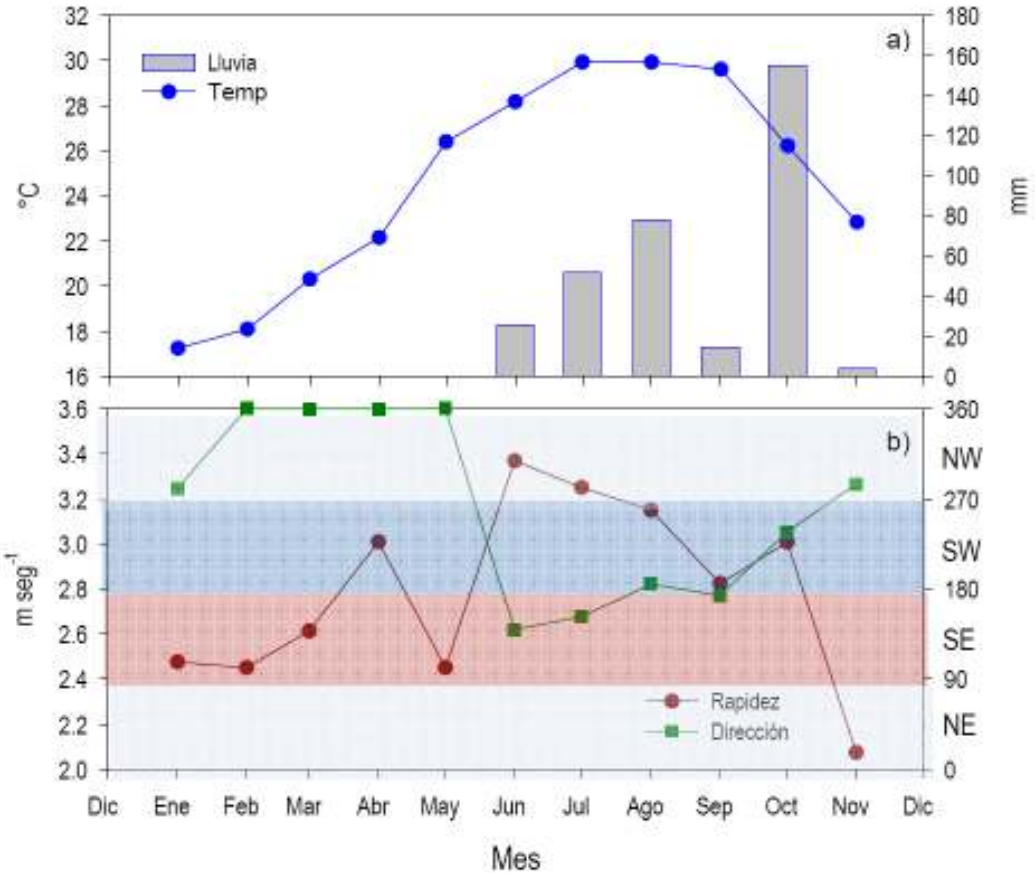


Figura 3. Valores mensuales de a) temperatura ambiental promedio (° C), precipitación (mm), y b) rapidez (m s^{-1}) y dirección de vientos dominantes en la estación meteorológica de El Tortugo, Guasave, durante el periodo Enero-Noviembre de 2009. Las bandas de color muestran las regiones de dirección del viento. NE= Noreste, SE=Sureste, SW=Suroeste, NW=Noroeste.