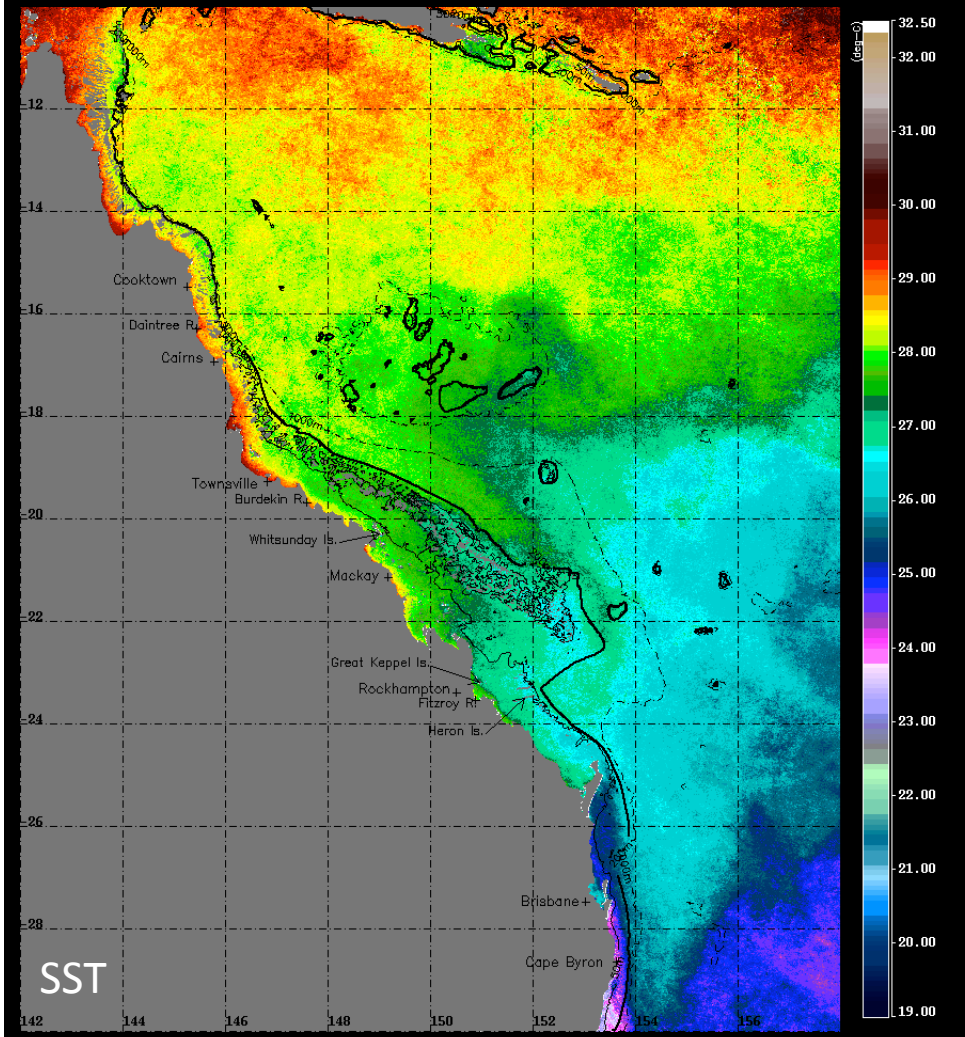
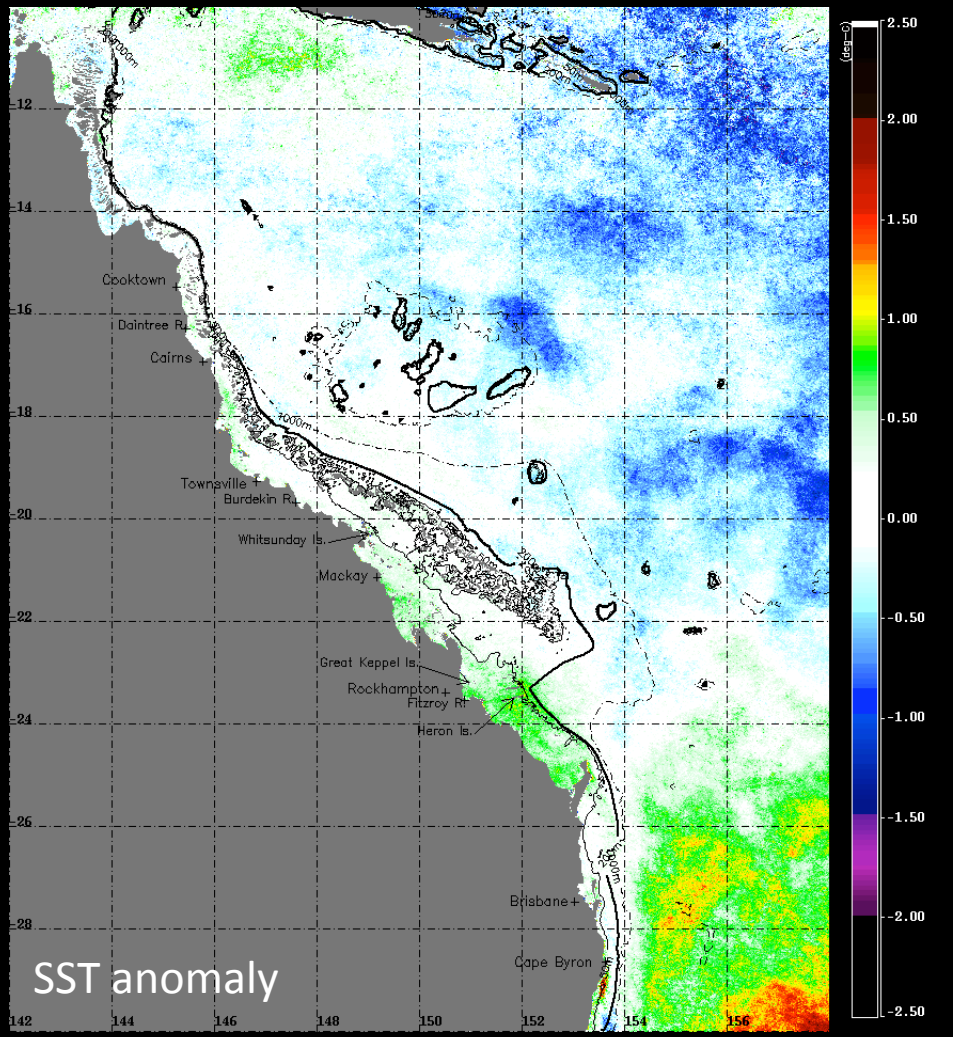
Modis SST (day+night): December 2009

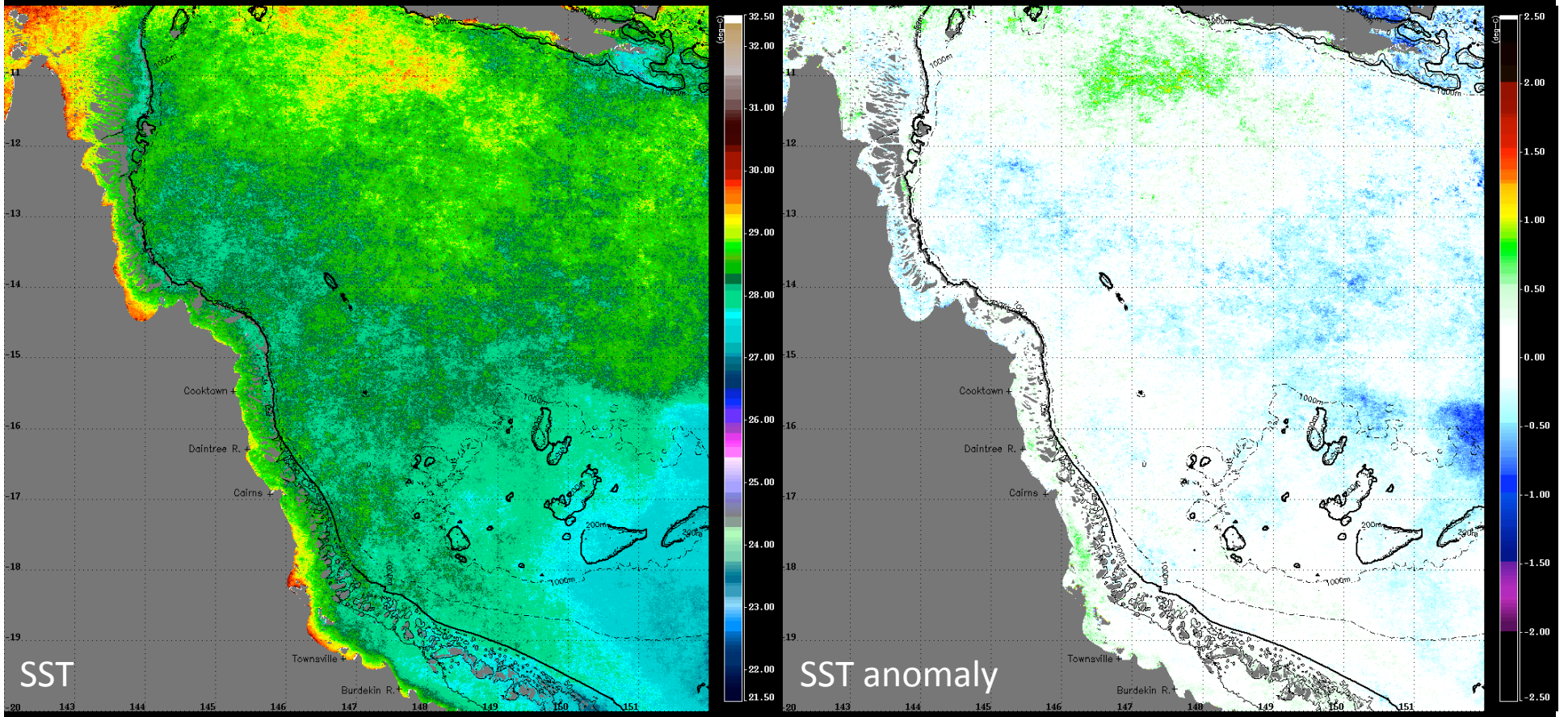




Note:

- Mostly average conditions for the whole GBR
- Slightly positive anomalies around Heron Island

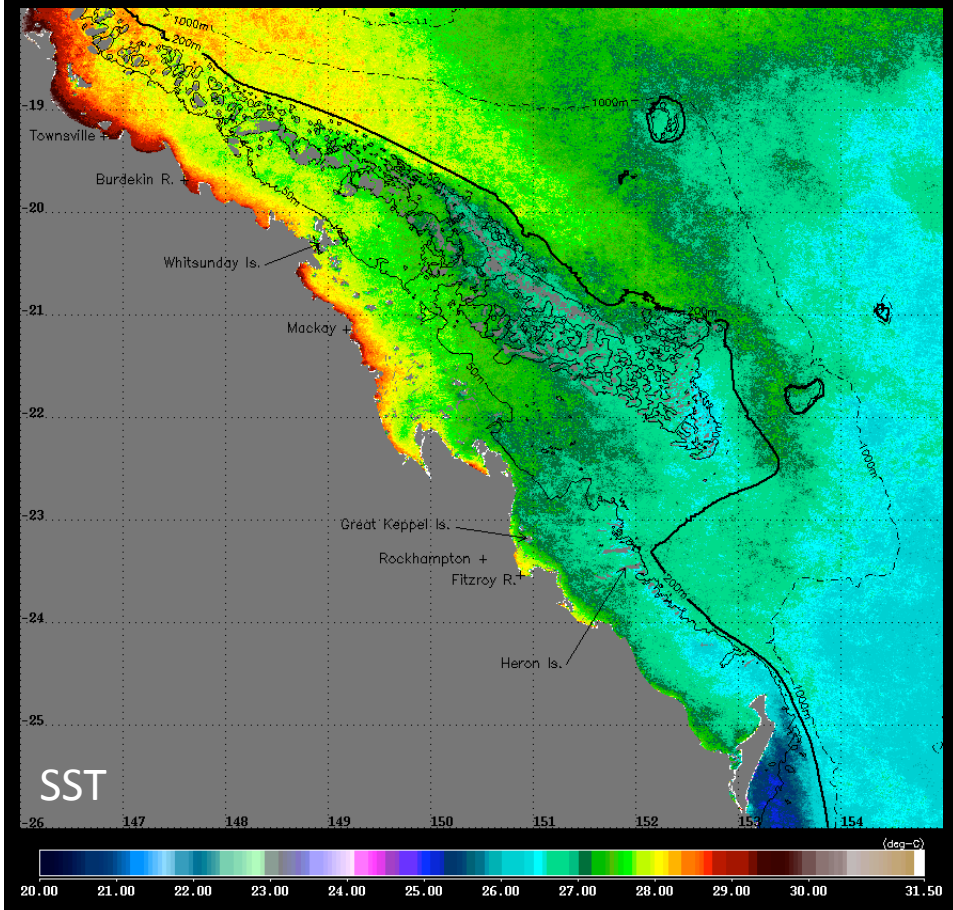
Northern GBR SST: December 2009

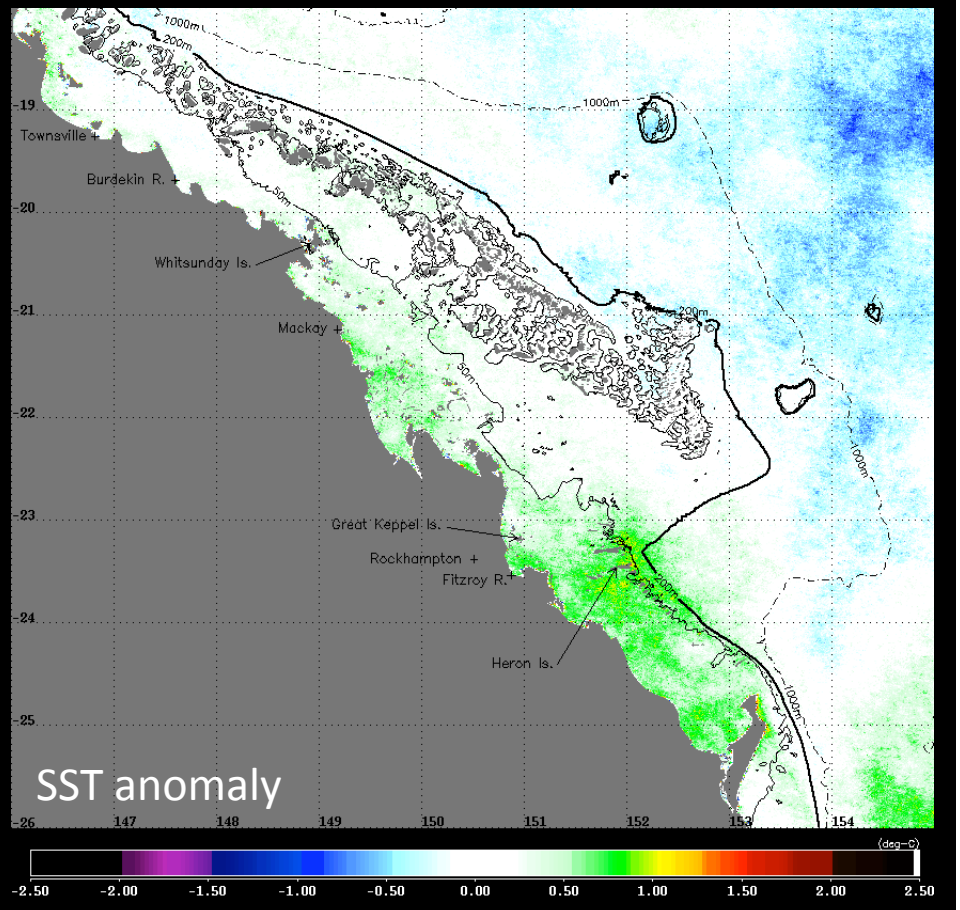


Note:

- Mostly average conditions for the N-GBR for this time of the year.

Southern GBR SST: December 2009

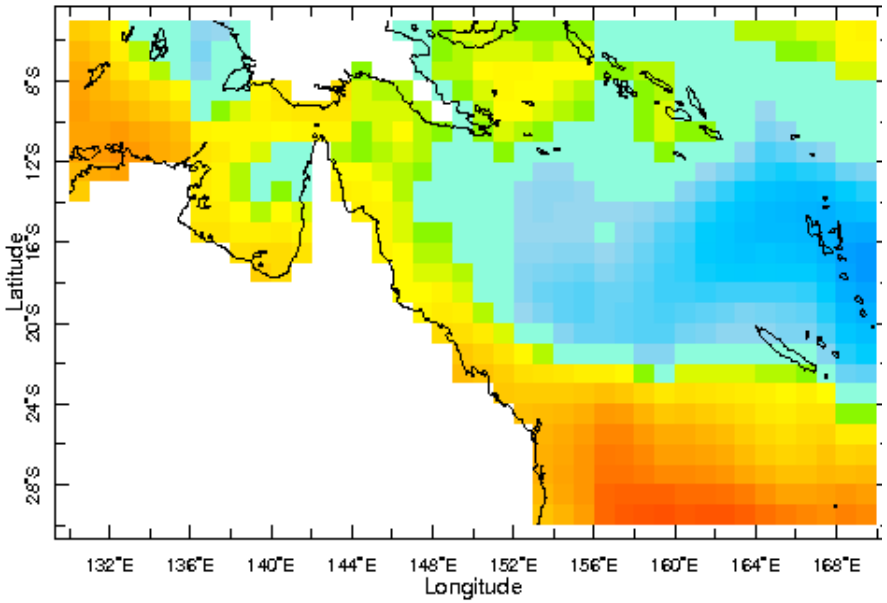


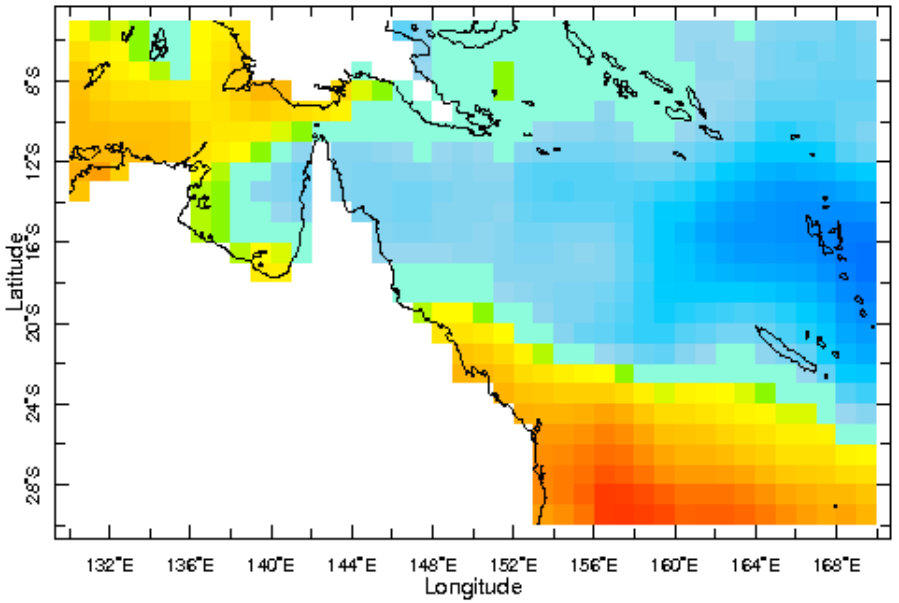


Note:

- Mostly average conditions for the S-GBR, except the area around Heron Island where the SST anomaly is slightly positive.

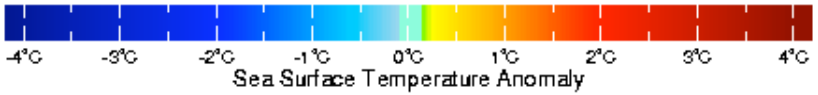
NOAA NCEP EMC CMB GLOBAL Reyn_SmithOIv2 weekly ssta: Sea Surface Temperature Anomaly data





06 - 12 Dec 2009

13 – 19 Dec 2009

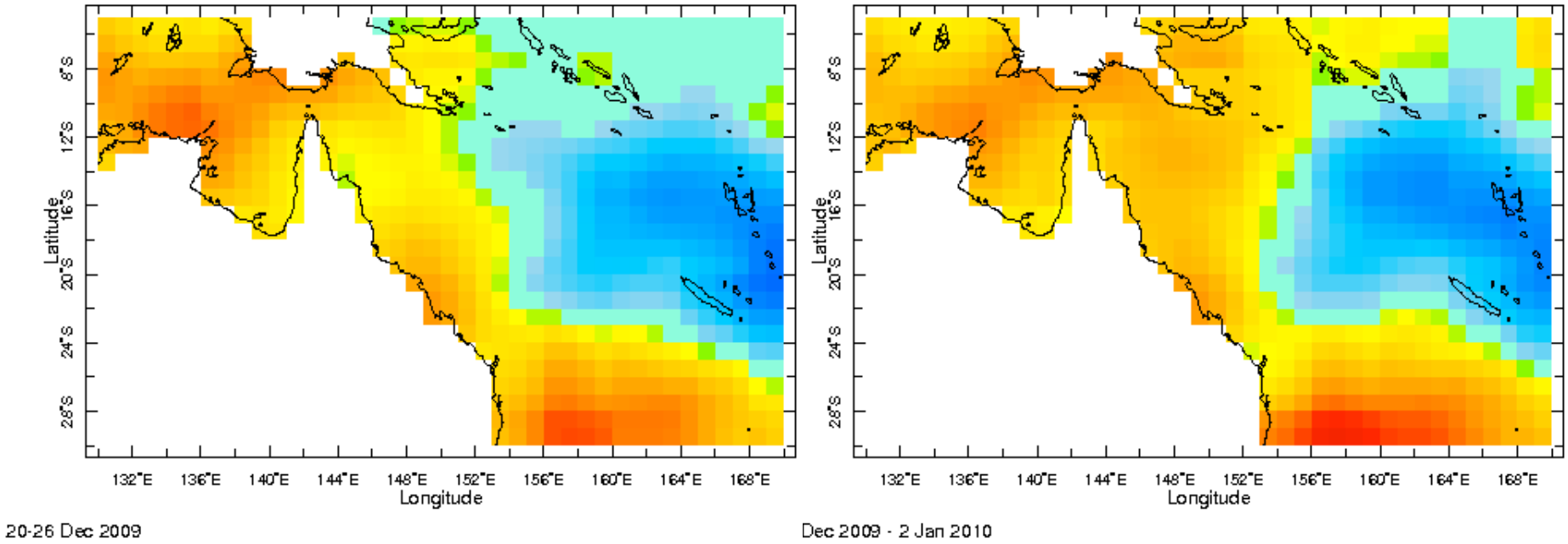


Note:

- Coincident with MODIS monthly SST, NOAA Reynolds SST anomaly product shows close to average conditions for most of the GBR.

http://iridl.ldeo.columbia.edu/SOURCES/.NOAA/.NCEP/.EMC/.CMB/.GLOBAL/.Reyn_SmithOIv2/.weekly/.ssta/

NOAA NCEP EMC CMB GLOBAL Reyn_SmithOIv2 weekly ssta: Sea Surface Temperature Anomaly data



20 – 26 Dec 2009

27 Dec – 02 Jan 2010

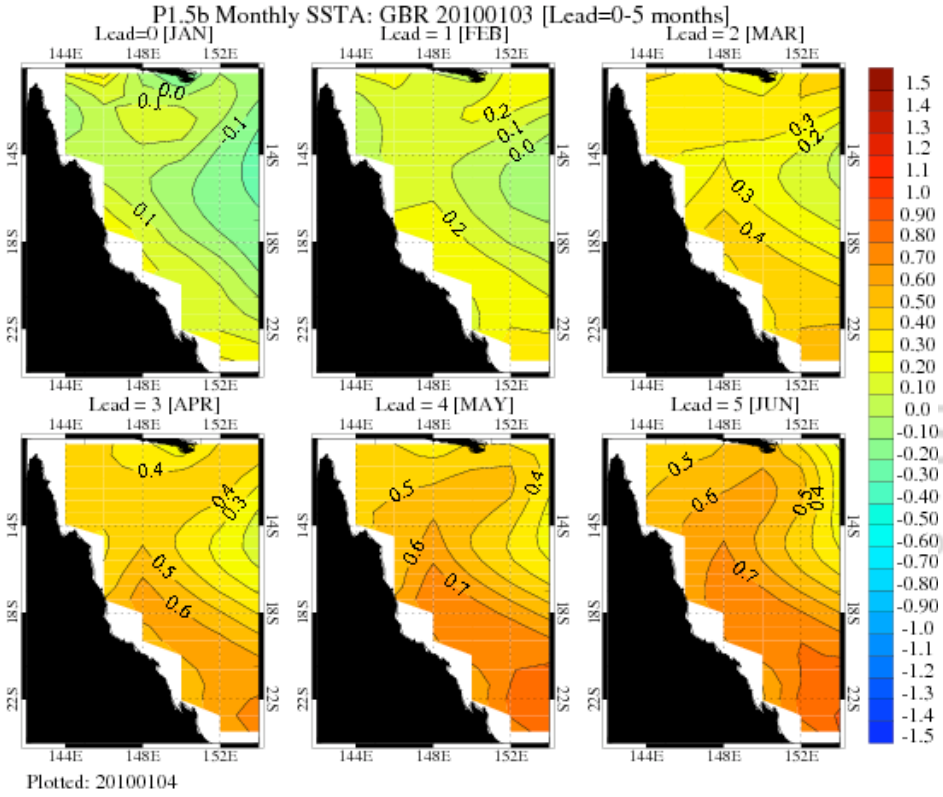
Note:

- By the end of the month NOAA Reynolds SST anomaly product shows a shift towards positive anomalies over the GBR.

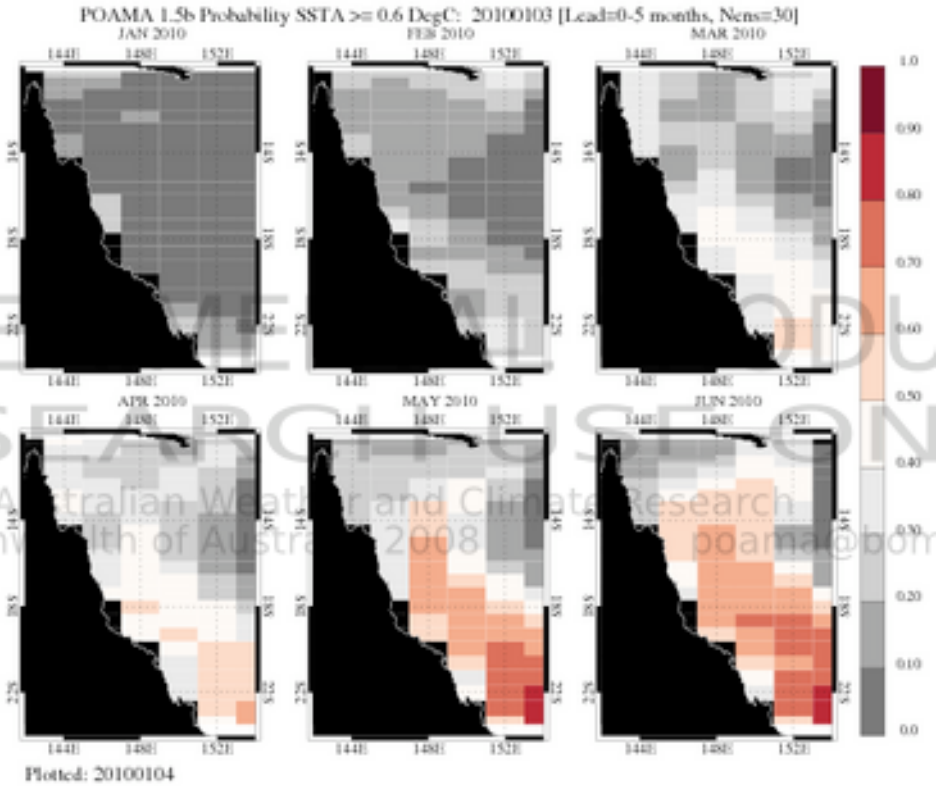
http://iridl.ldeo.columbia.edu/SOURCES/.NOAA/.NCEP/.EMC/.CMB/.GLOBAL/.Reyn_SmithOIv2/.weekly/.ssta/

Experimental Great Barrier Reef SST Anomaly Forecasts (POAMA)

POAMA SST anomalies forecast for the following 6 months.



New POAMA product highlighting the probability of SST anomalies greater than 0.6 deg C for the following 6 months.



Note:

- POAMA predicts close to average SST for January and February (expected lower SST anomalies for February than the previous forecast)
- Only from May, temperatures are expected to be 0.5 Deg C above average for the majority of the GBR.

http://poama.bom.gov.au/experimental/poama15/sp_gbr.htm

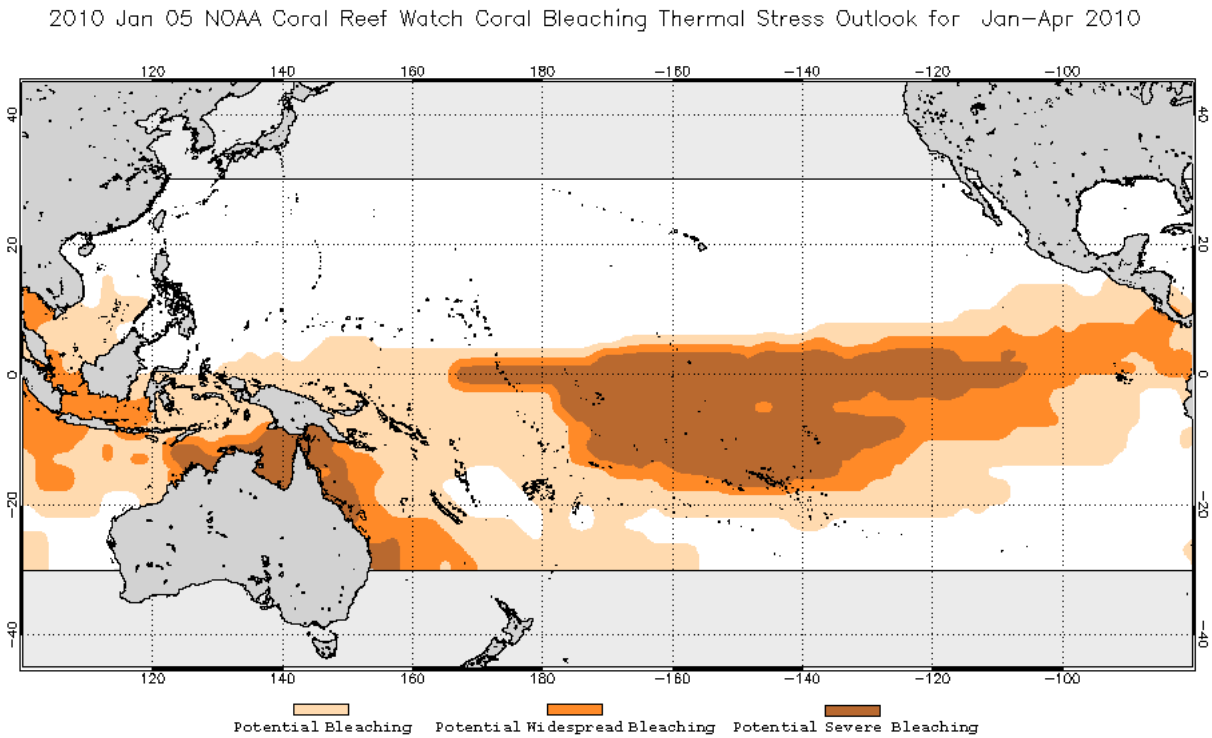
UQ_ OceanSpace group

NOAA Coral Reef Watch

Seasonal Coral Bleaching Thermal Stress Outlook

(Experimental product, 2x2 degree spatial resolution)

Outlook for January to April 2010

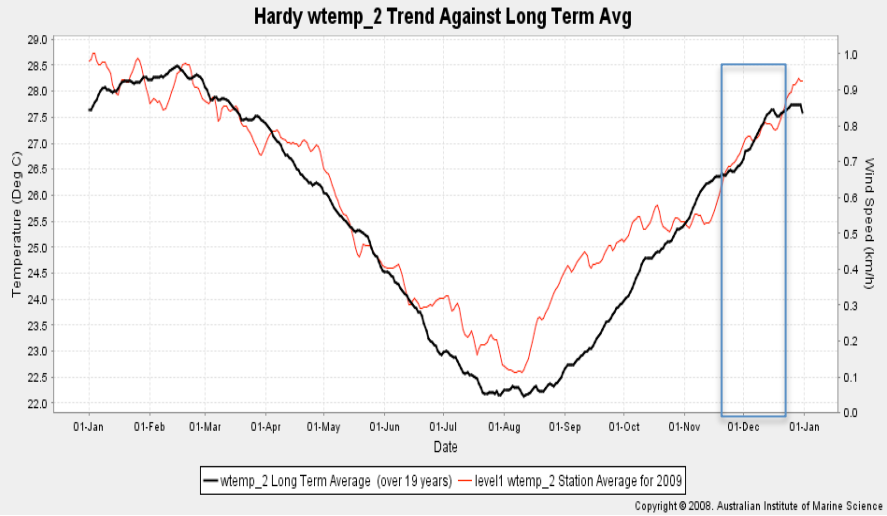


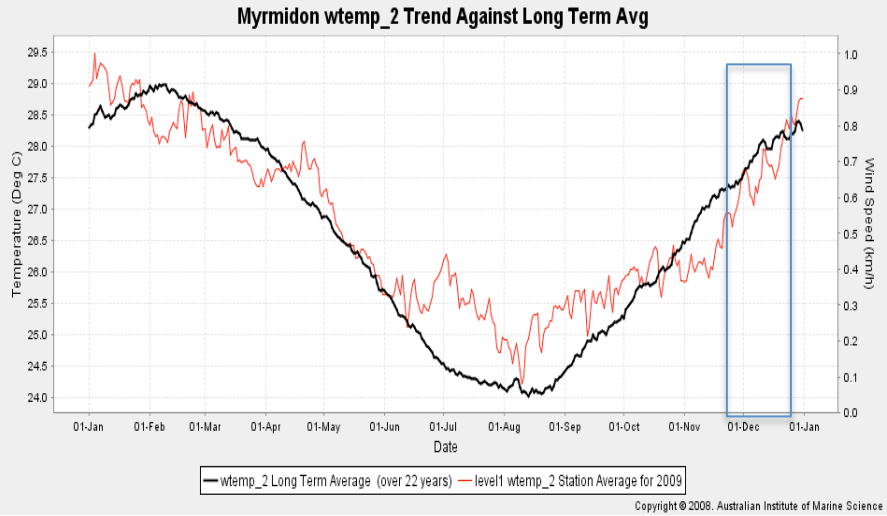
Note:

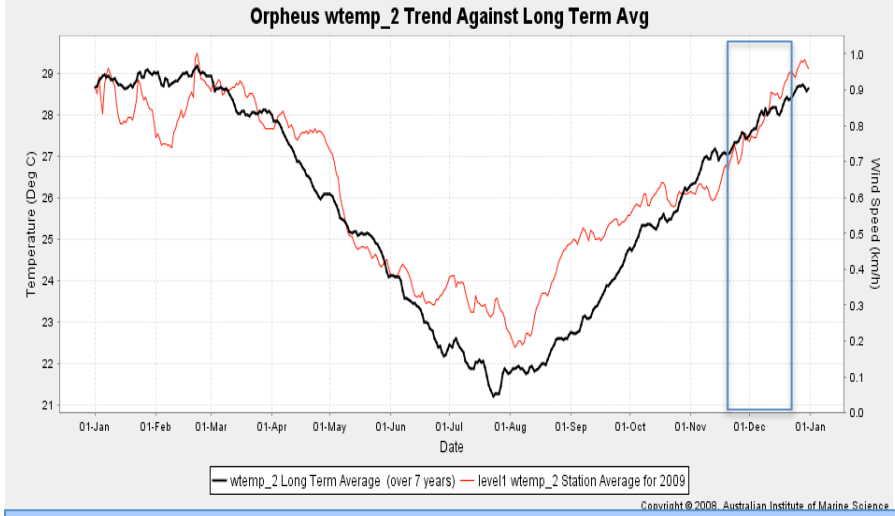
- In contrast to other model predictions, the NOAA thermal stress Outlook for December to March continues to predict potential widespread (or even severe) bleaching on the GBR.

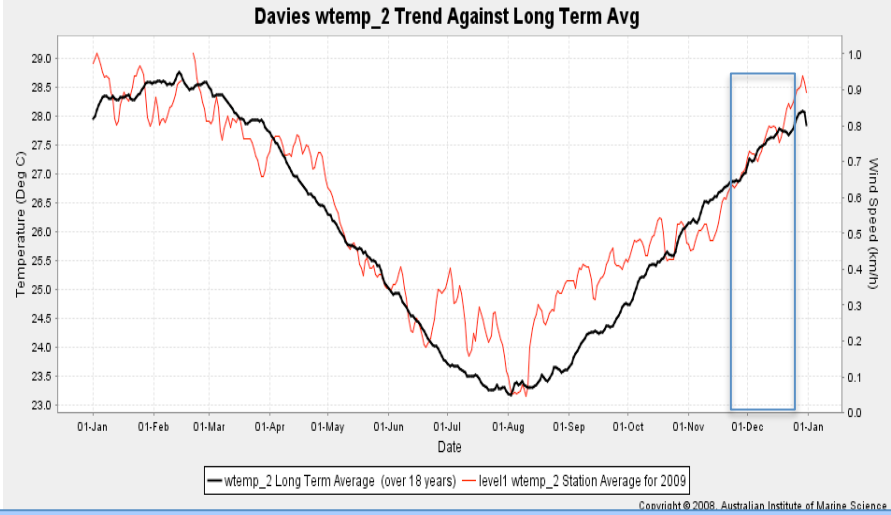
http://coralreefwatch.noaa.gov/satellite/bleachingoutlook/

Weather Observing System: AIMS Data Centre





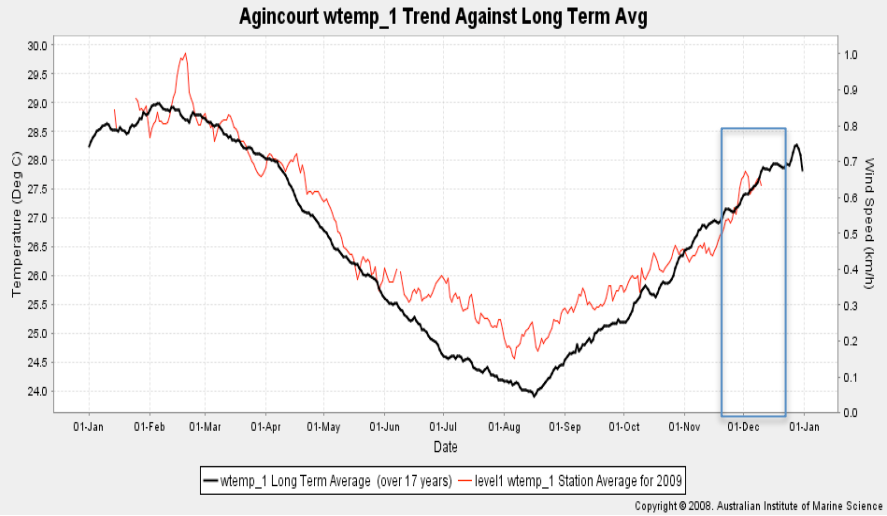


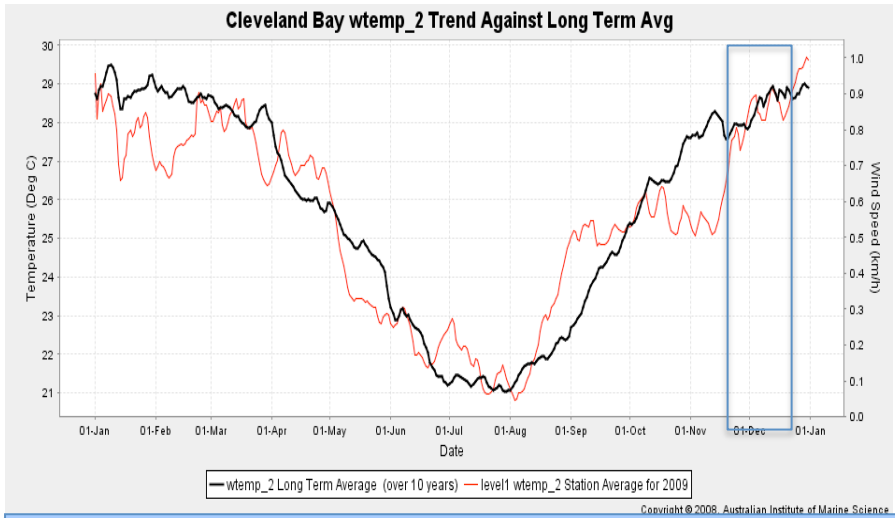


Note:

- The AIMS in-situ data also shows close to average conditions for December.

Weather Observing System: AIMS Data Centre



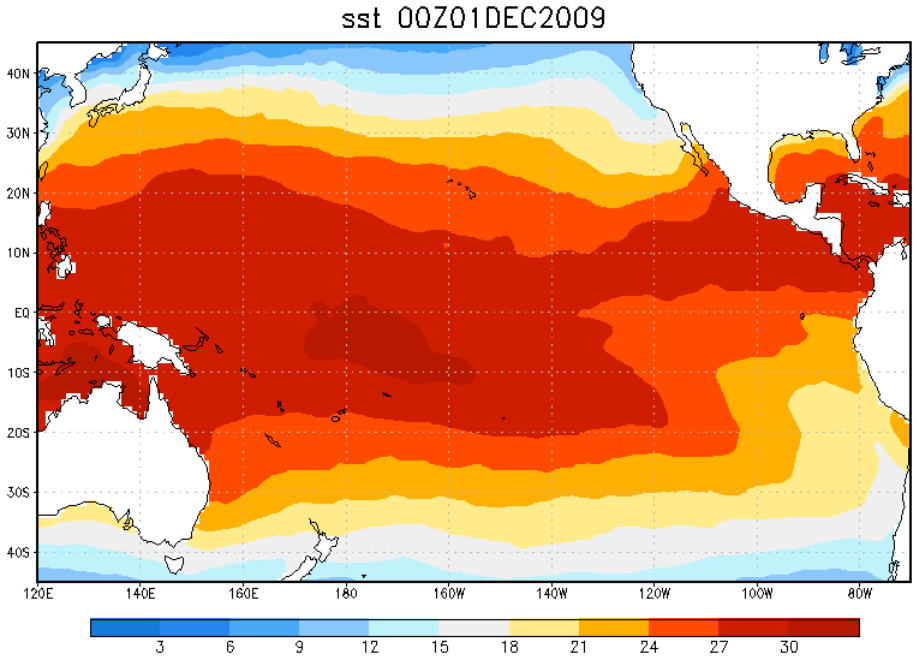


Note:

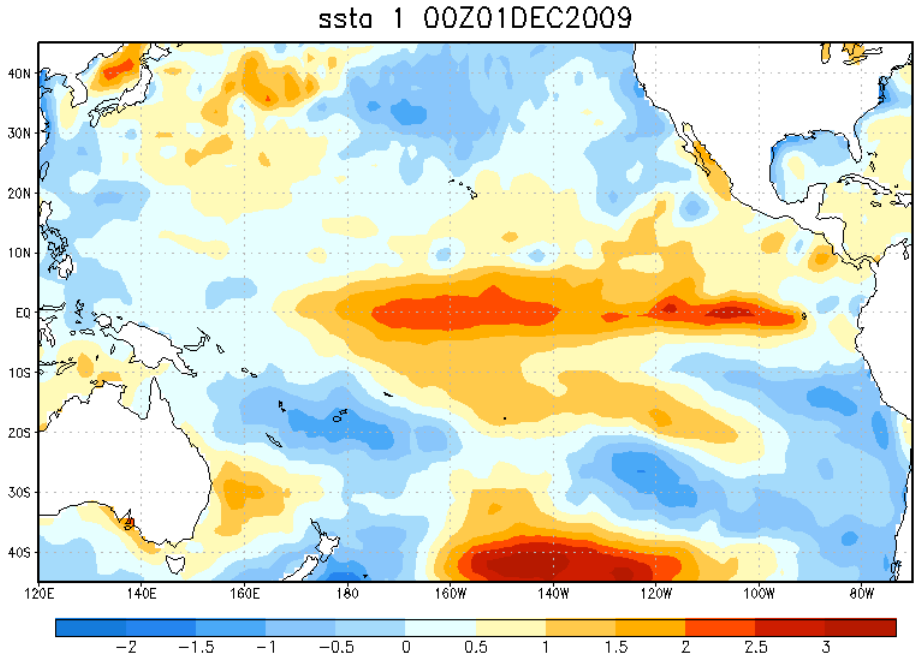
- The AIMS in-situ data also shows close to average conditions for December.

NOAA Optimum Interpolation Sea Surface Temperature Analysis:

OI SST: DECEMBER 2009



OI SST ANOMALY: DECEMBER 2009

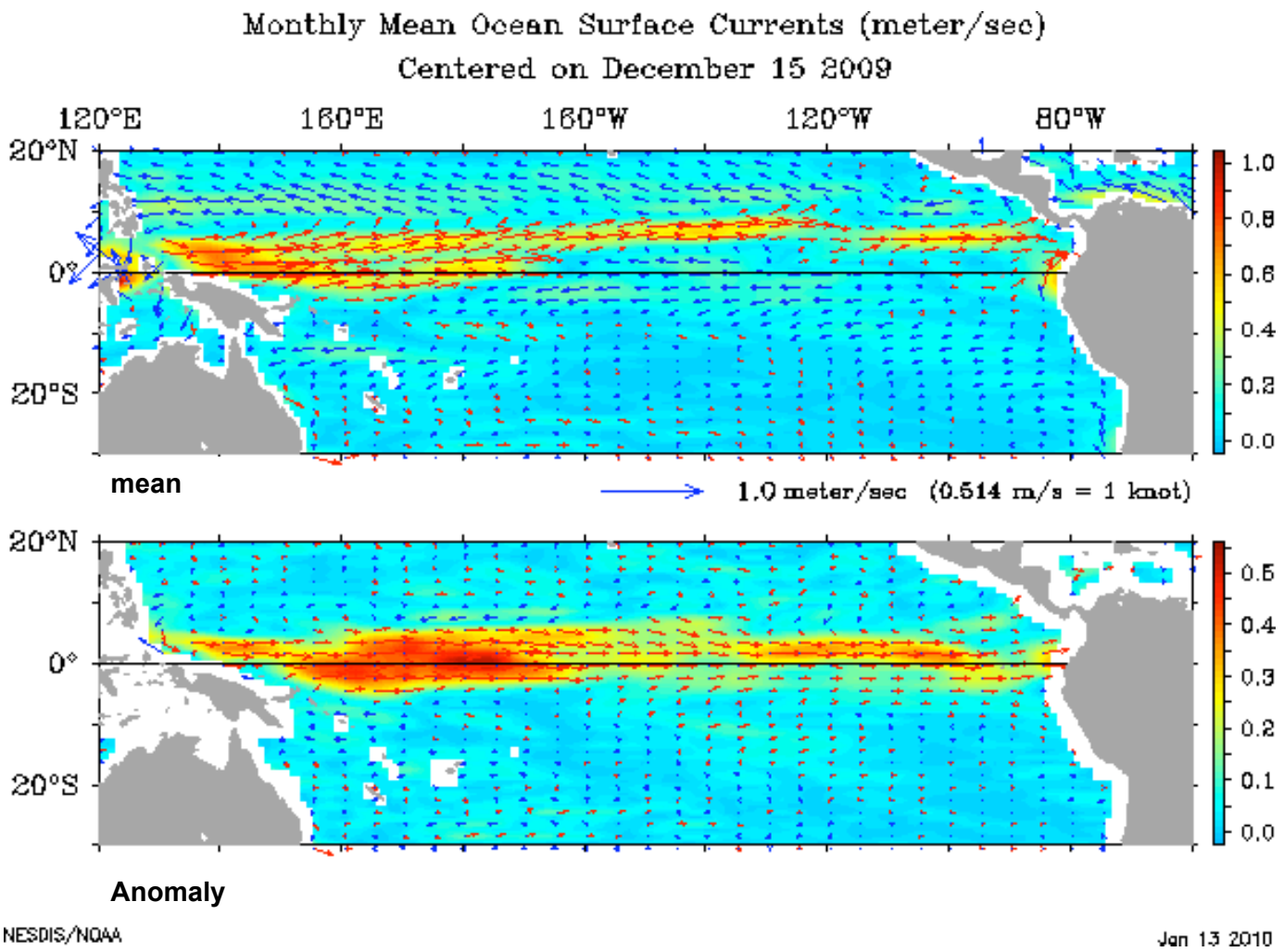


Note:

• Sea surface temperatures are 1.0ºC - 3.0ºC above-average across much of the central and east-central equatorial Pacific, clearly indicative of an El Niño pattern.

http://www.emc.ncep.noaa.gov/research/cmb/sst_analysis/

OSCAR: Ocean Surface Current Analysis - Real time

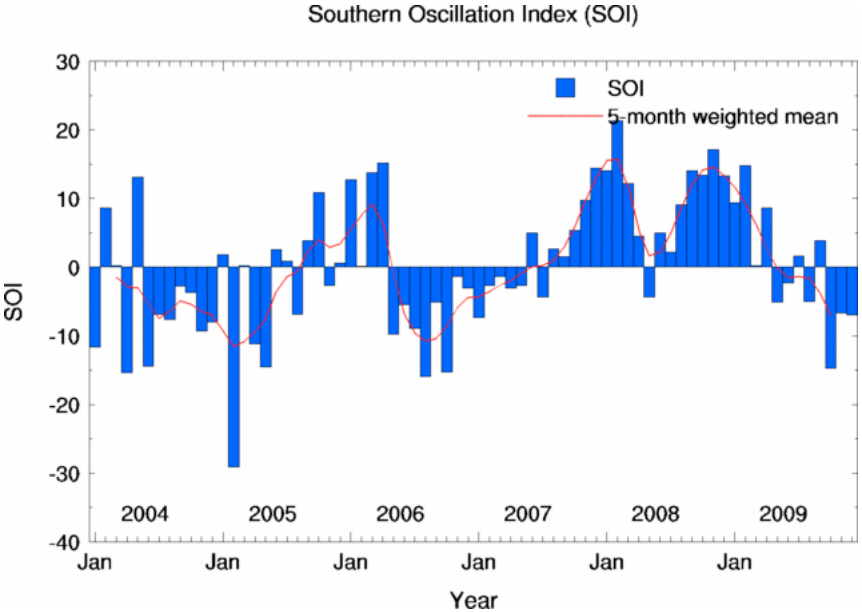


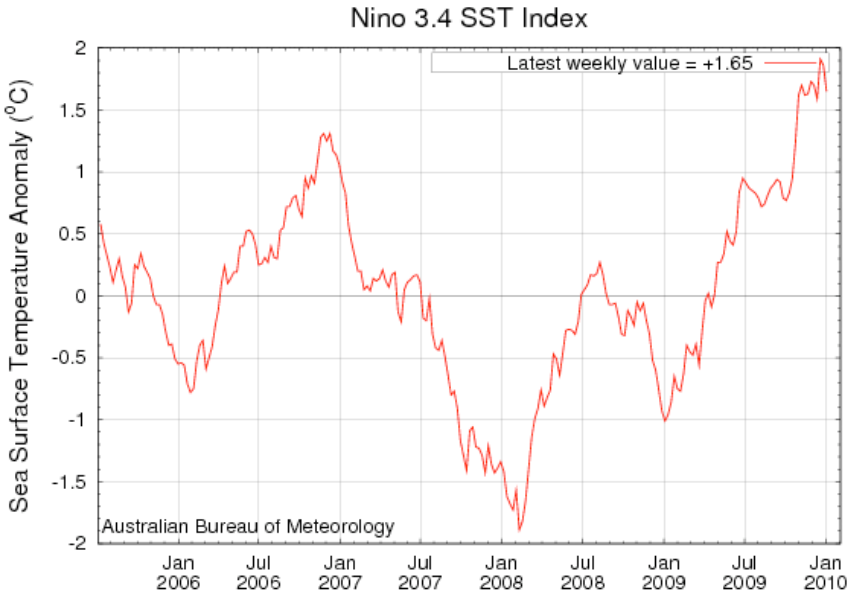
Note:

- The SEC shows an anomalous eastward flow across the entire equatorial Pacific. This pattern is characteristic of an El Niño event.

http://www.oscar.noaa.gov/datadisplay/

ENSO index





Negative SOI = El Niño

Positive Nino 3.4 index= El Niño

Note:

- Both indices still show an El Niño event.
- Although models continue to disagree on the eventual peak of El Niño, the EL Niño conditions are expected to last through at least the Northern Hemisphere spring 2009/10 (the majority of models indicate at least a moderate strength El Niño through January-February-March 2010).