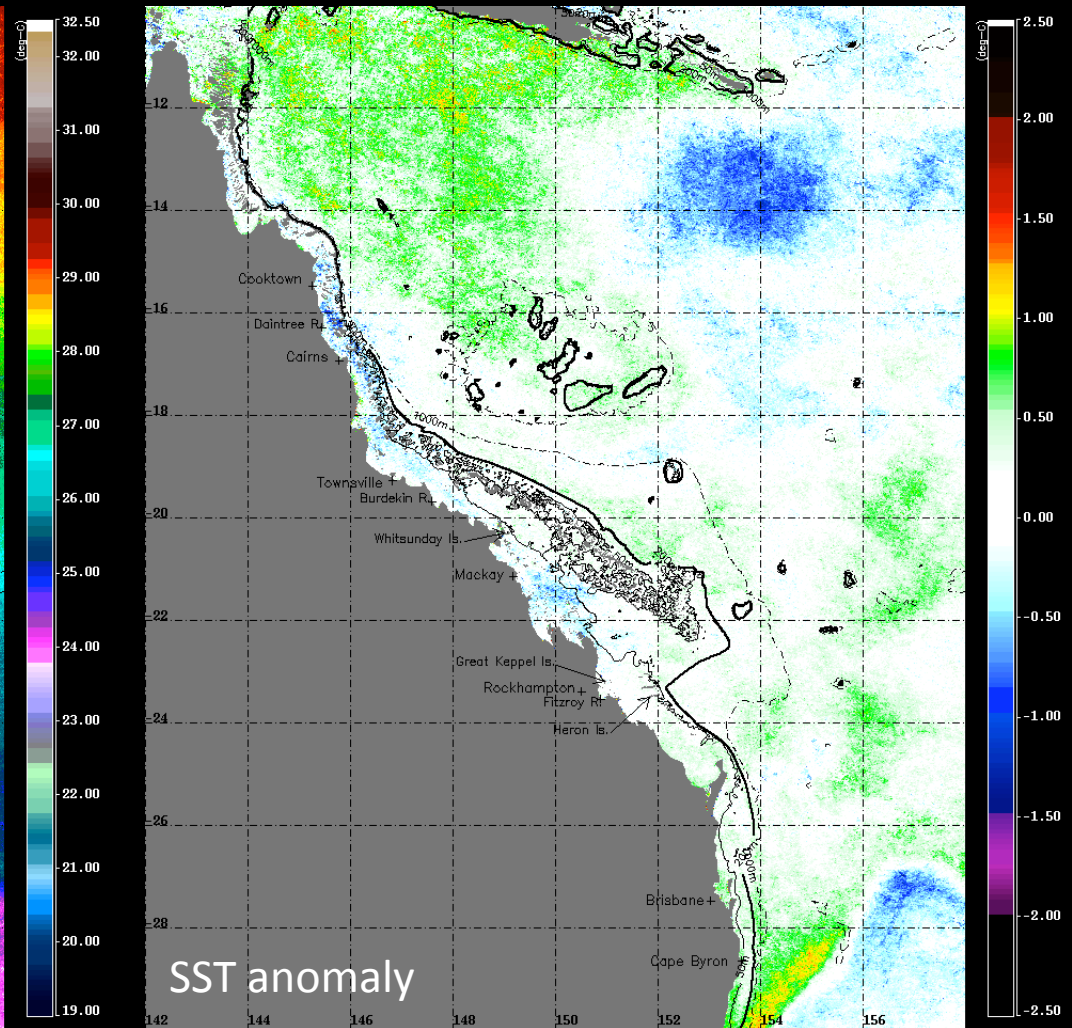
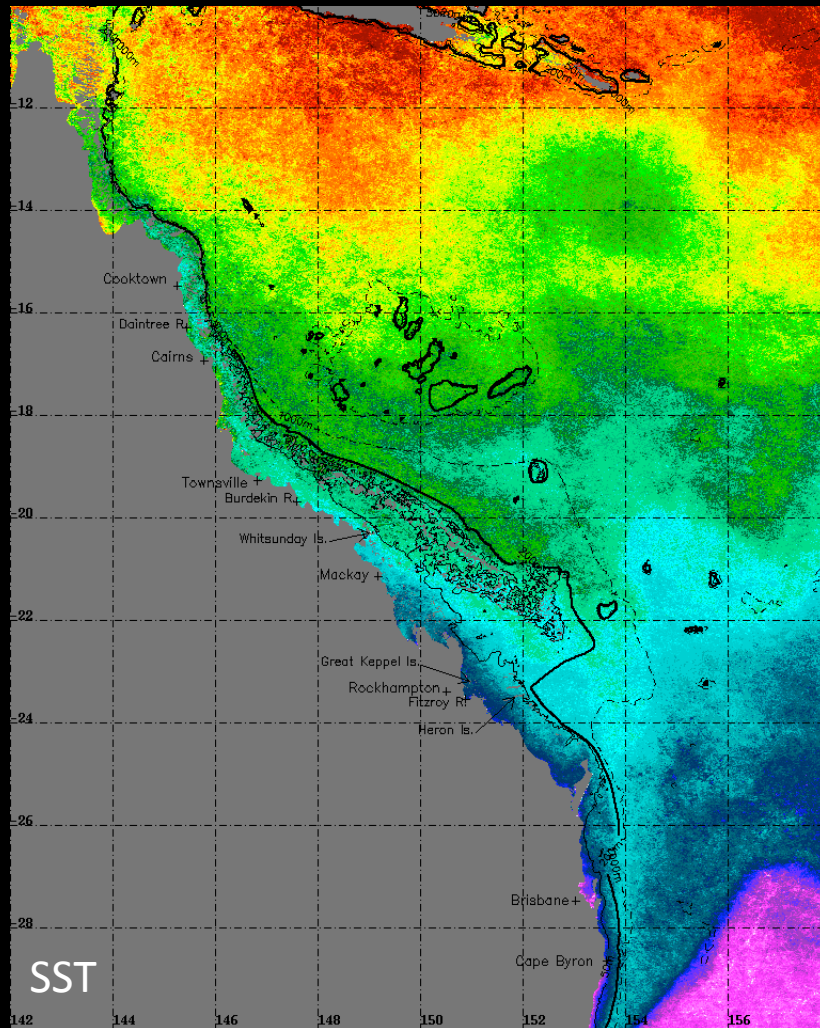


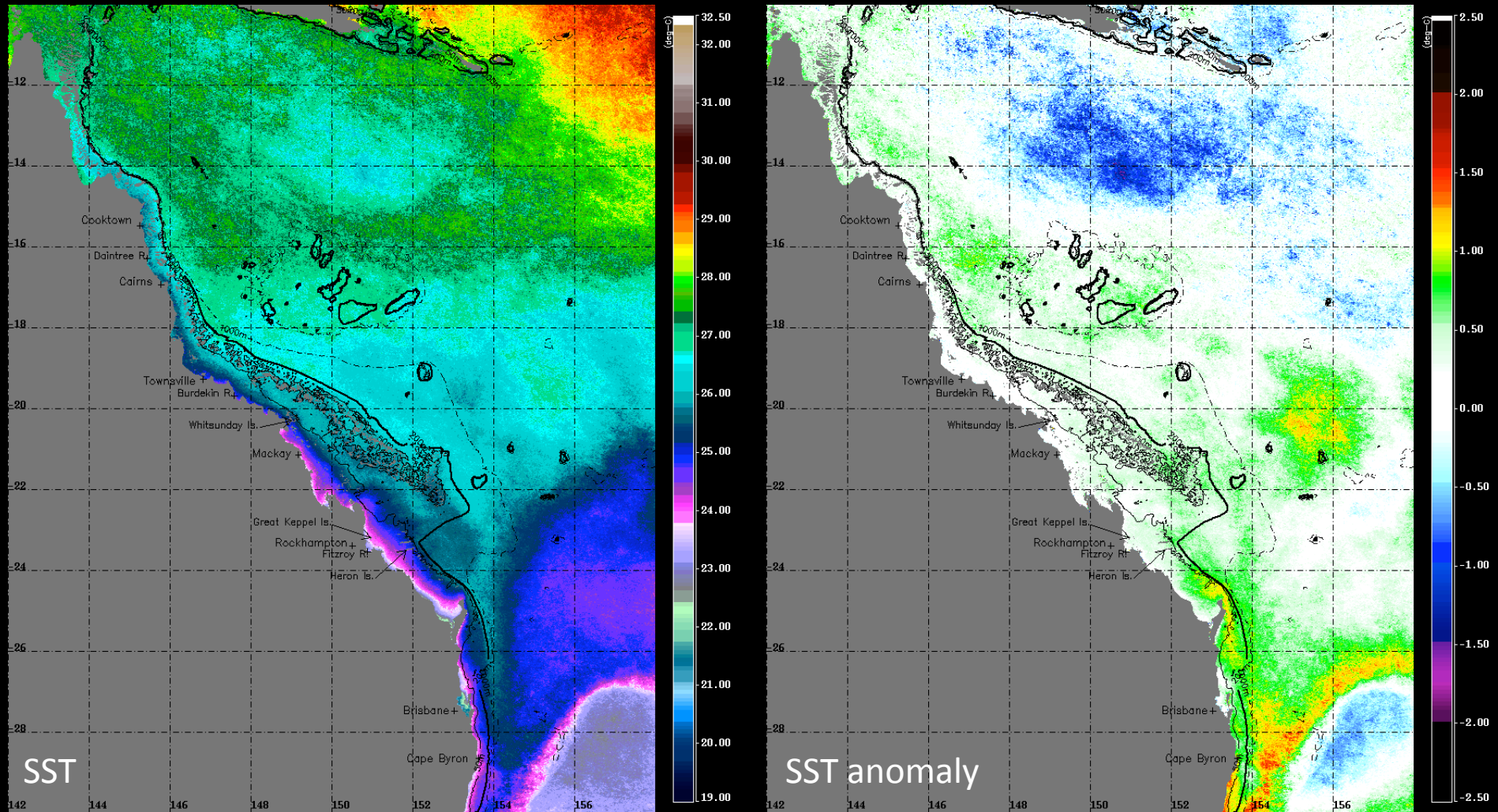
# Modis SST (day+night): April 2010



## Note:

- Close to average conditions for most of the GBR.
- The strong anomalies presented in March (both positive anomalies over N\_GBR and negative anomalies over the Coral Sea) have dissipated during the month of April

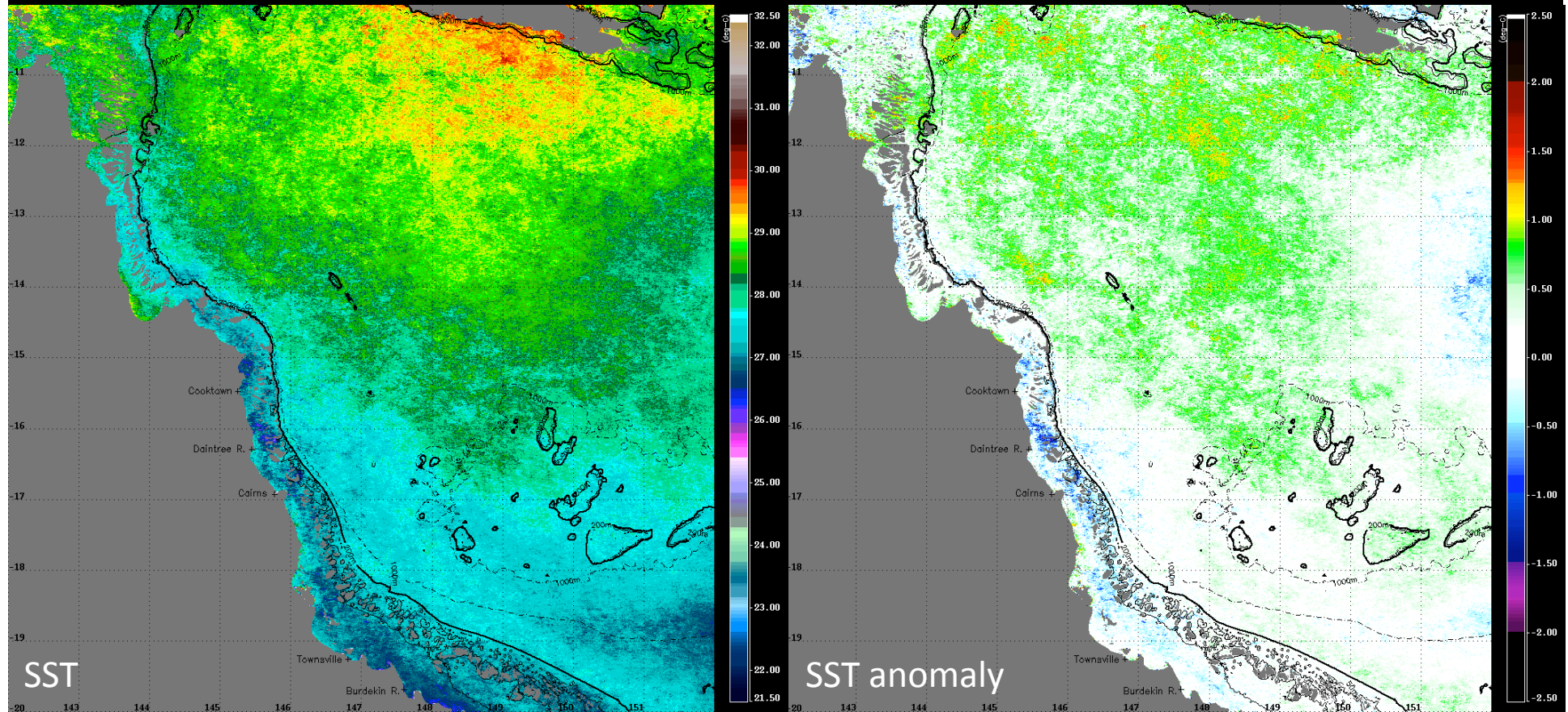
# Modis SST (day+night): May 2010



Note:

- Mostly average conditions over the GBR in May except for warm waters south of the Capricorn Bunker group. A cool anomaly in the Coral Sea.
- Warm anomalies south of Heron Is & a strong front offshore of Byron

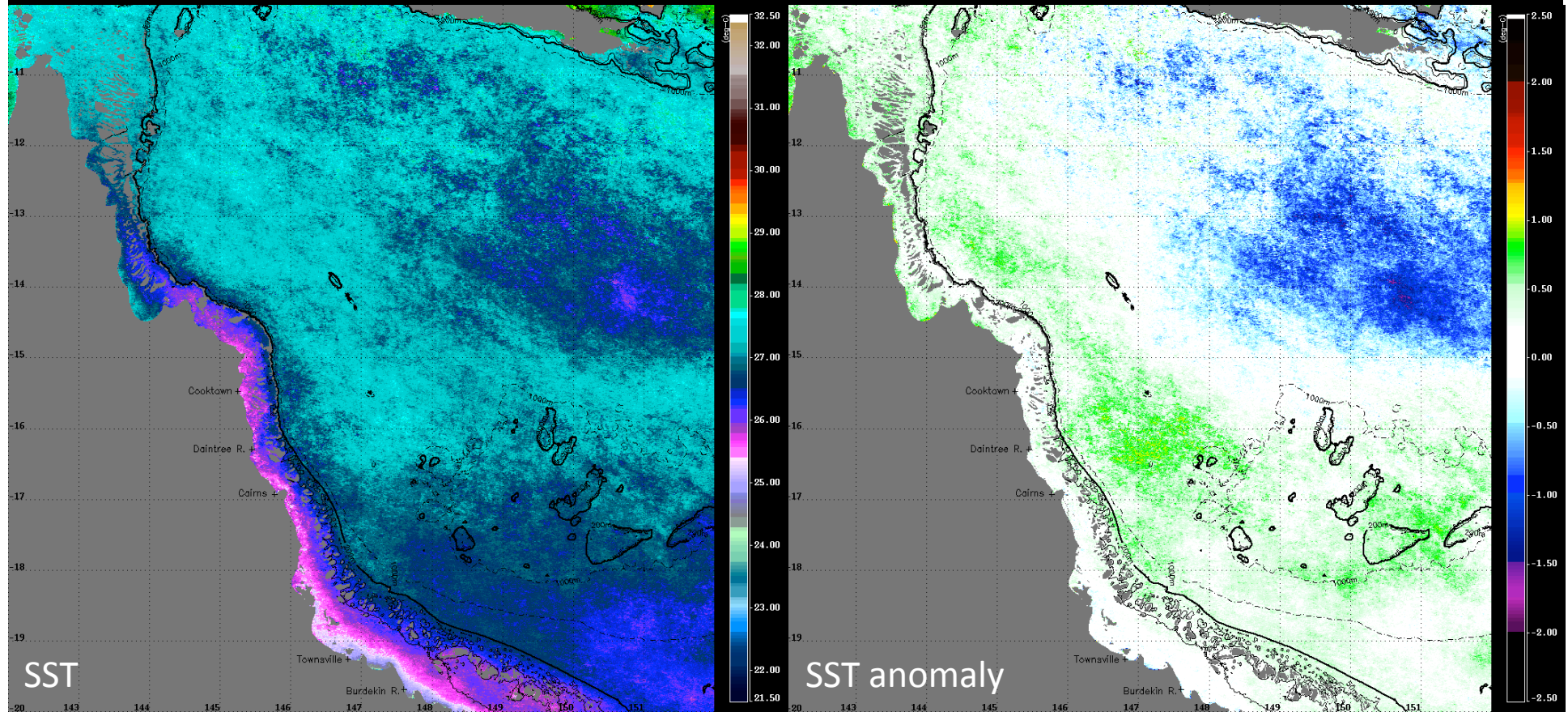
# Northern GBR SST: April 2010



Note:

- The strong positive anomalies present in March dissipated during the month of April

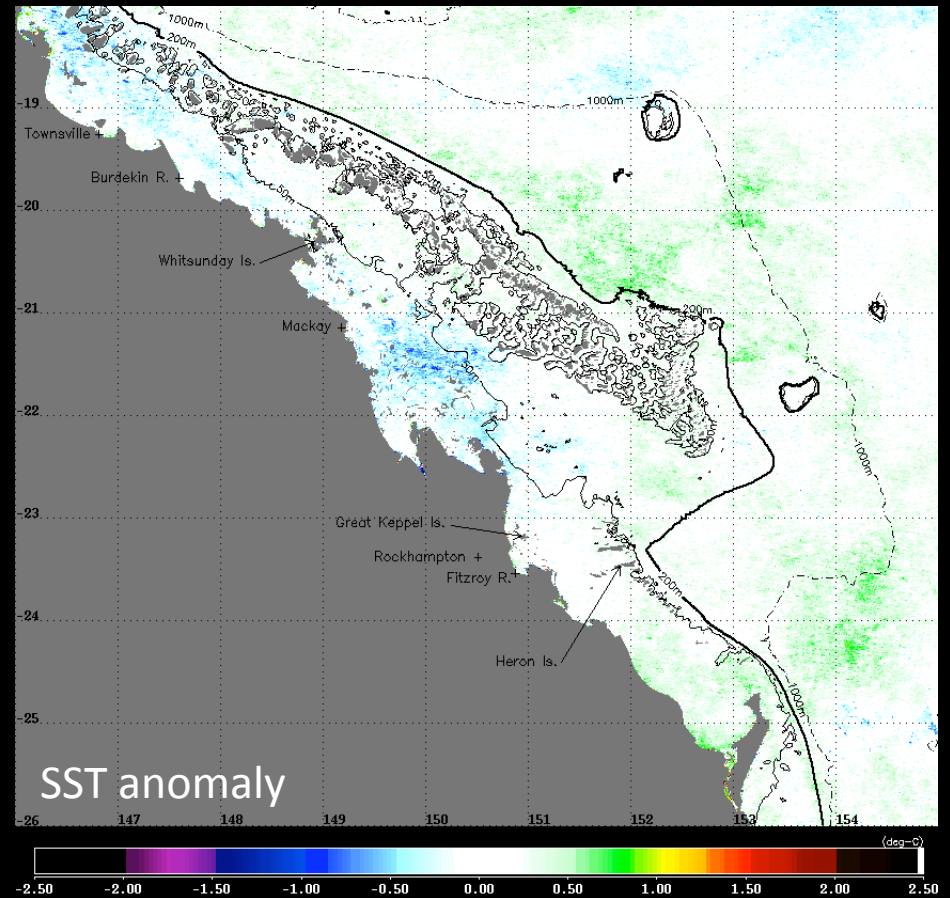
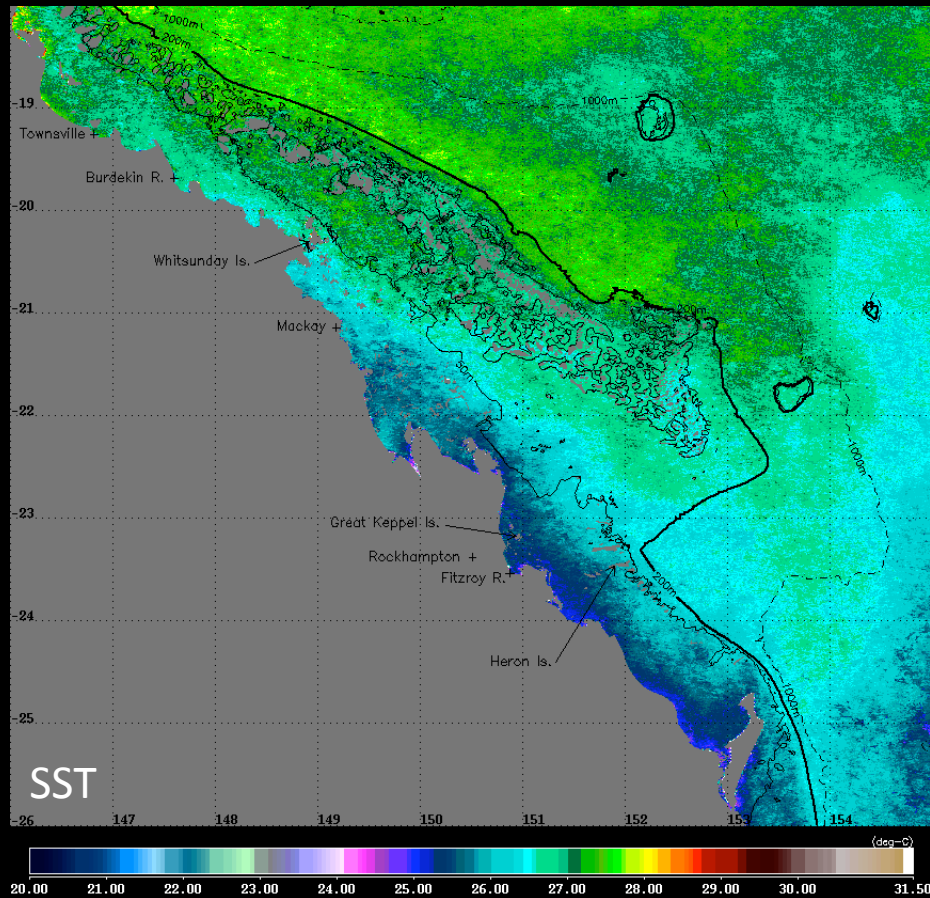
# Northern GBR SST: May 2010



Note:

- Mostly average conditions in May except for a cool area in the Coral Sea

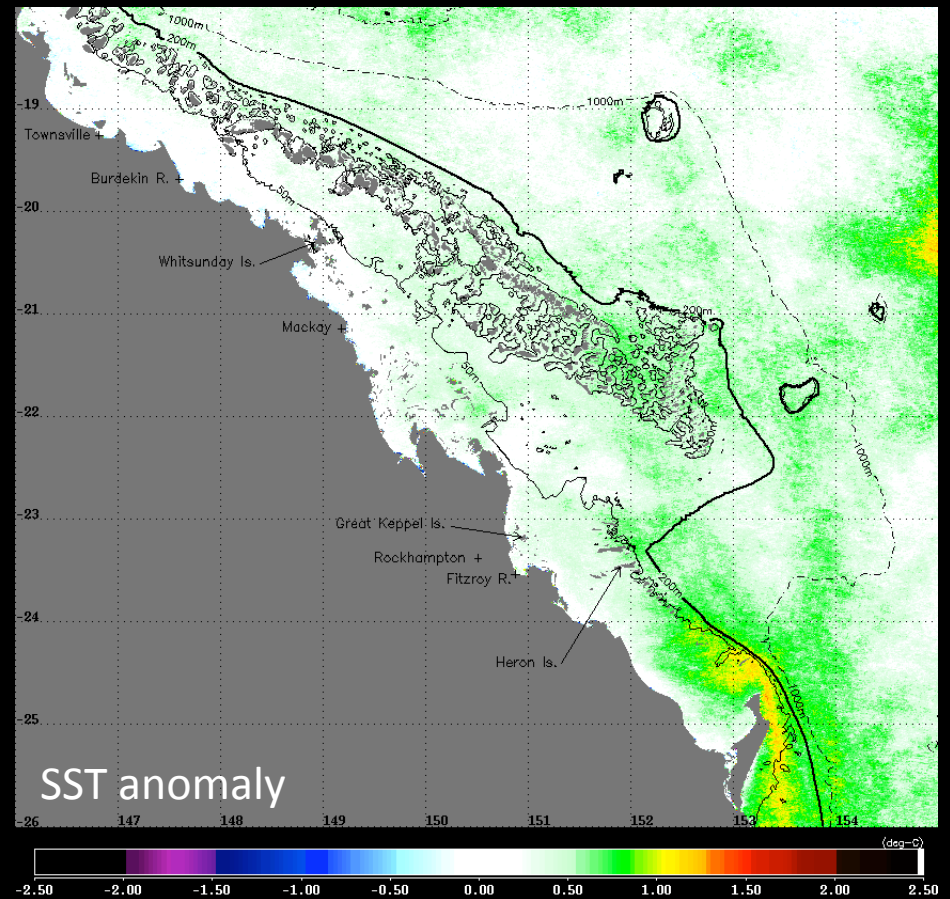
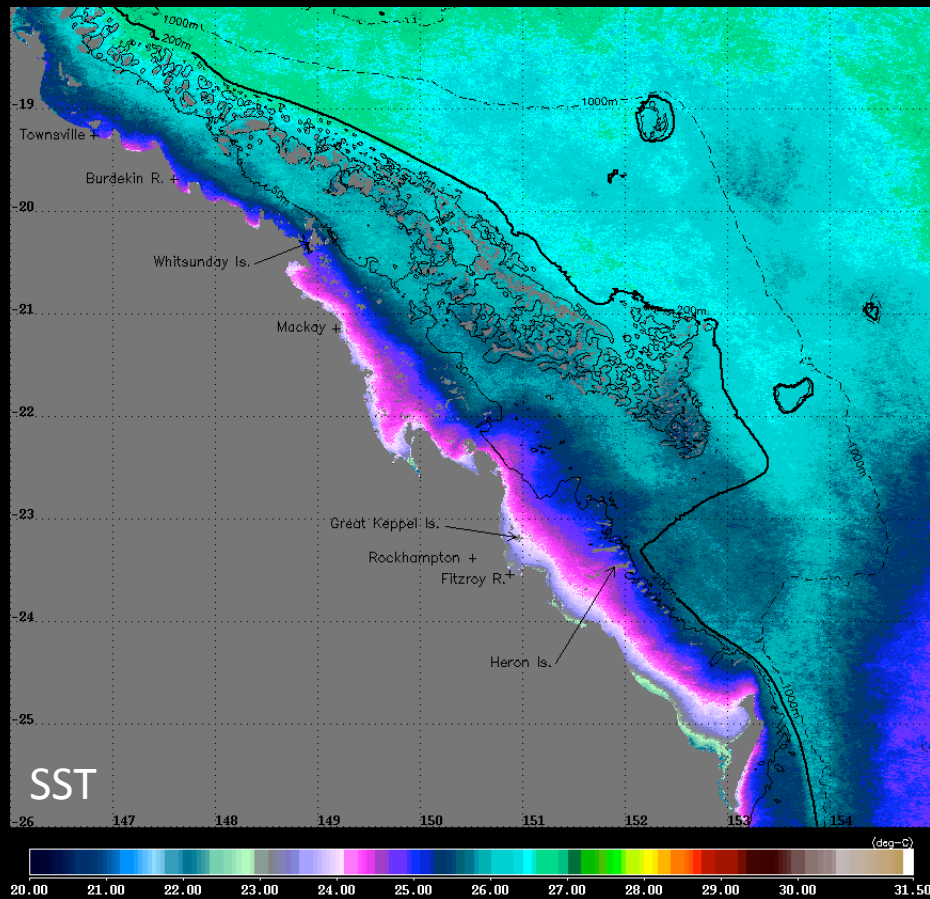
# Southern GBR SST: April 2010



Note:

- Mostly average conditions for the S-GBR in April

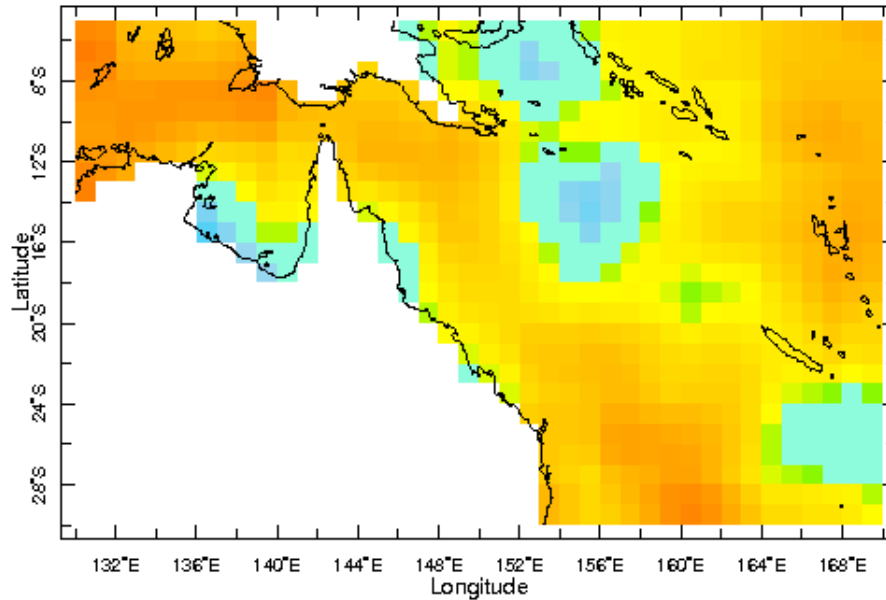
# Southern GBR SST: May 2010



## Note:

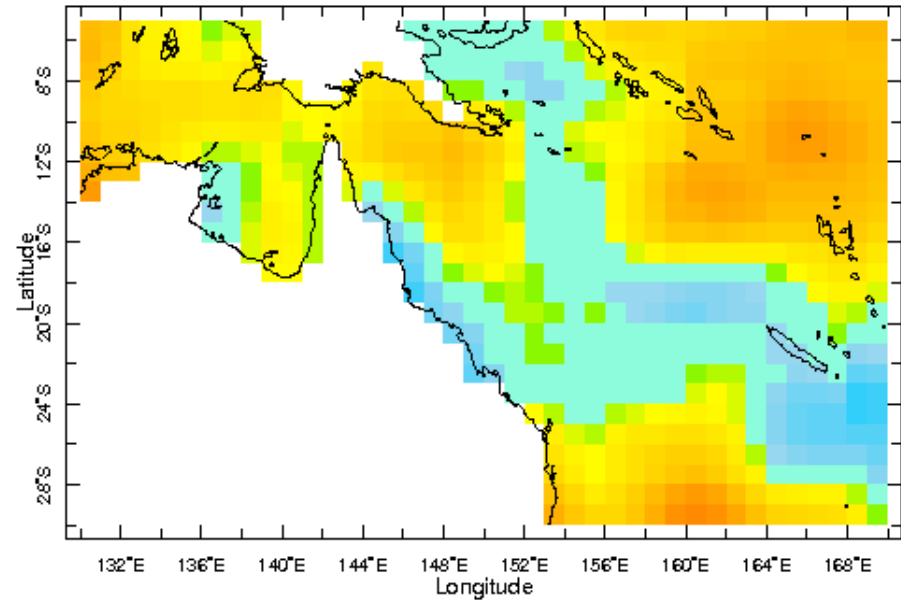
- Mostly average conditions for the S-GBR also in May, with the exception of positive anomalies in the waters south of the Capricorn Bunker group.

# NOAA NCEP EMC CMB GLOBAL Reyn\_SmithOlv2 weekly ssta: Sea Surface Temperature Anomaly data



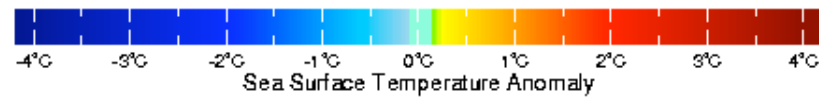
11-17 Apr 2010

10 – 17 Apr 2010



24 Apr 2010

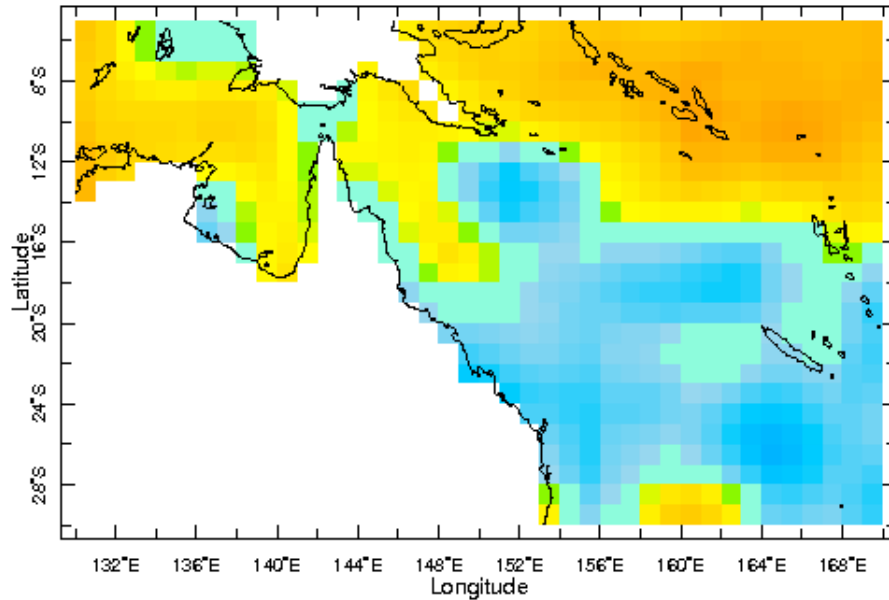
18 – 24 Apr 2010



## Note:

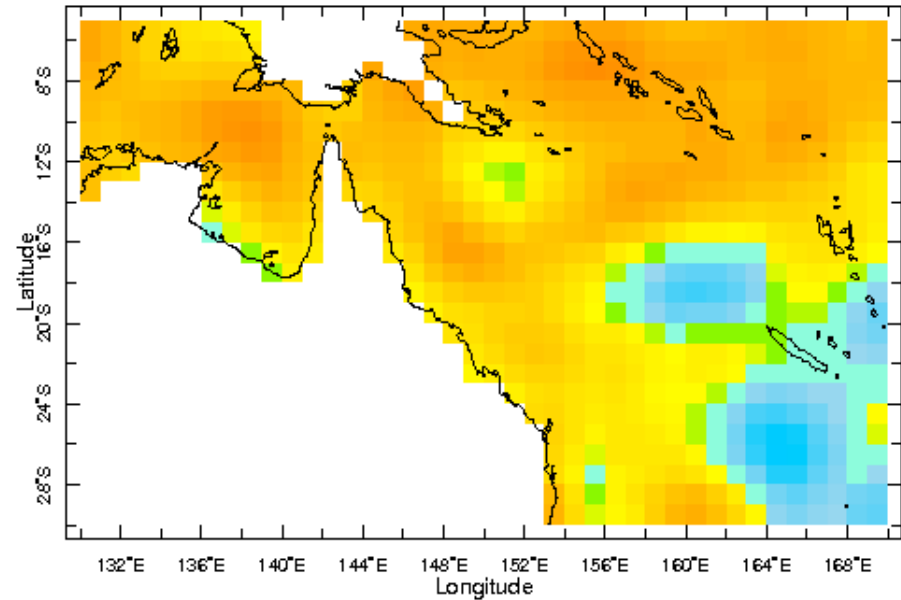
- Coincident with the MODIS SST data, the NOAA SST anomaly product shows that the strong anomalies dissipate through the month of April

# NOAA NCEP EMC CMB GLOBAL Reyn\_SmithOlv2 weekly ssta: Sea Surface Temperature Anomaly data



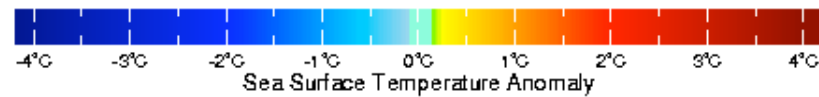
9-15 May 2010

09 – 15 May 2010



22 May 2010

16 – 22 May



Note:

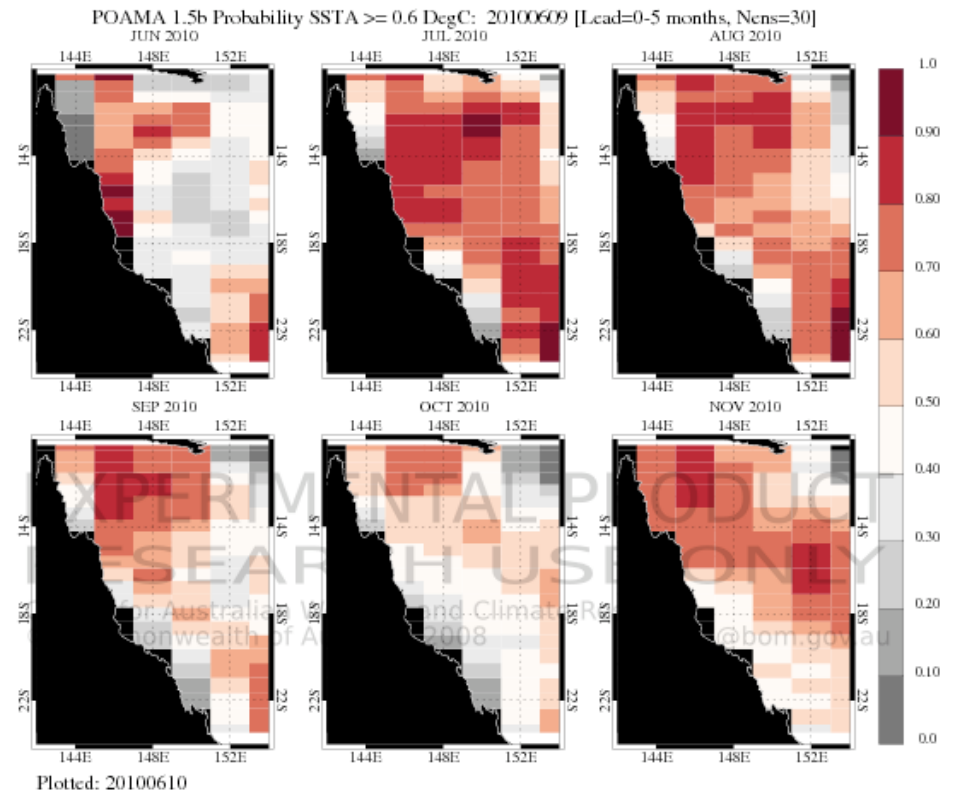
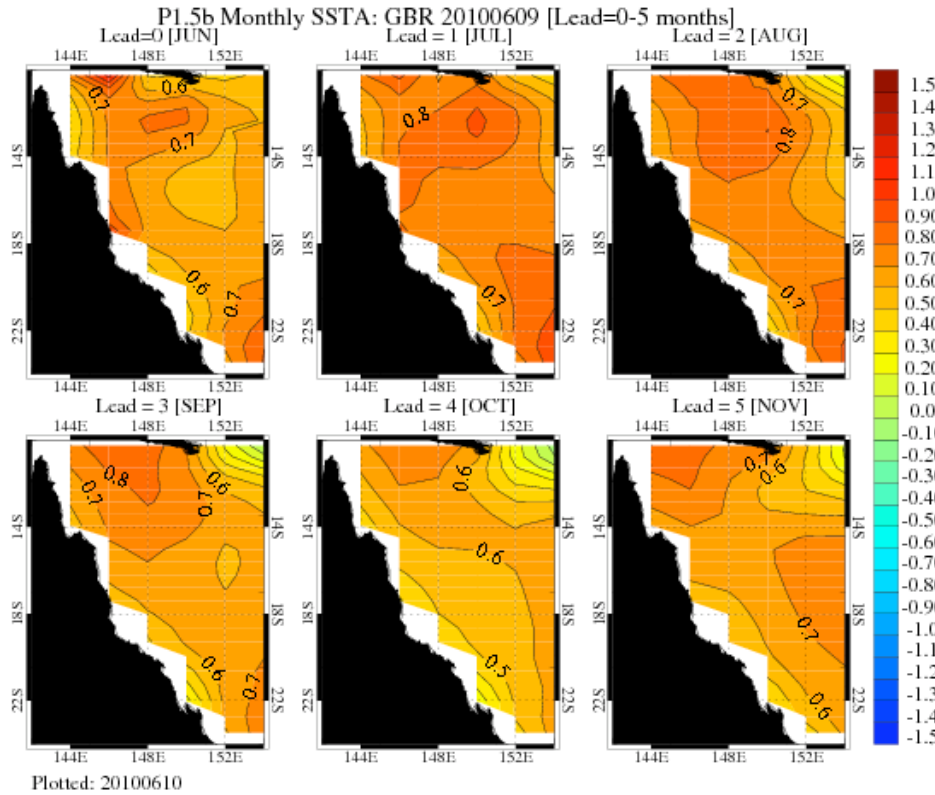
- NOAA SST anomaly product shows SSTA close to zero for the first half of May that become more positive on the second half.



# 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:

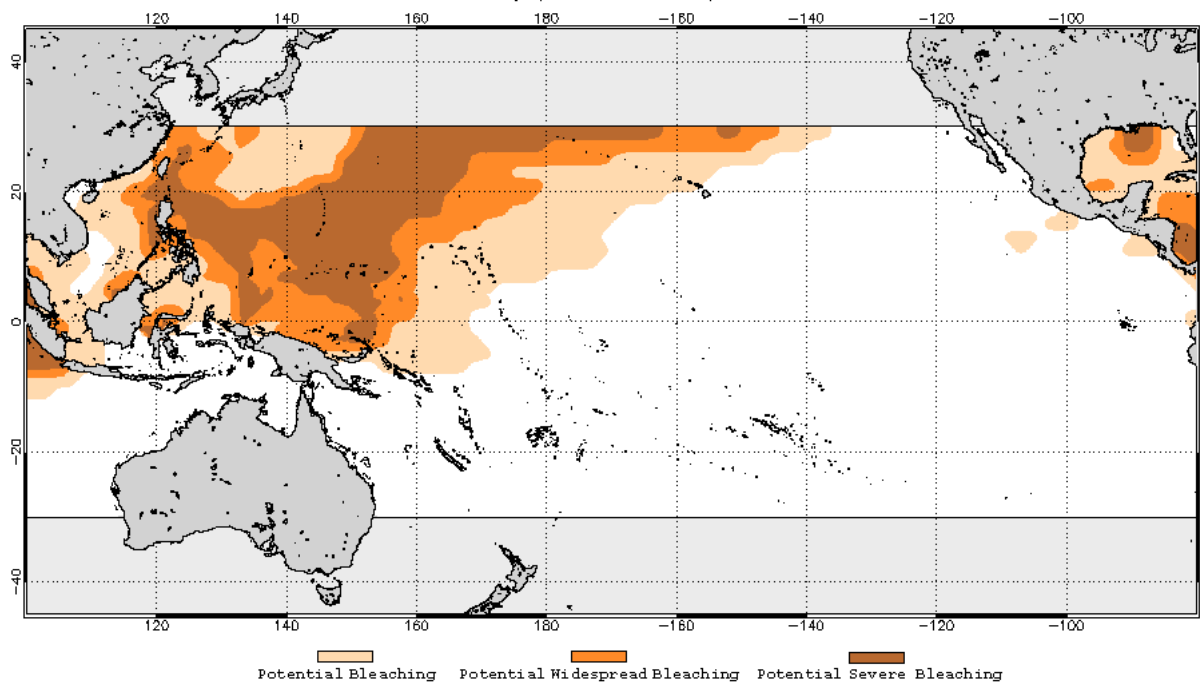
- POAMA forecast of SST has change to predict higher positive SST anomalies for the months July to September.

# NOAA Coral Reef Watch

## Seasonal Coral Bleaching Thermal Stress Outlook (Experimental product, 2x2 degree spatial resolution)

### Outlook for June to September 2010

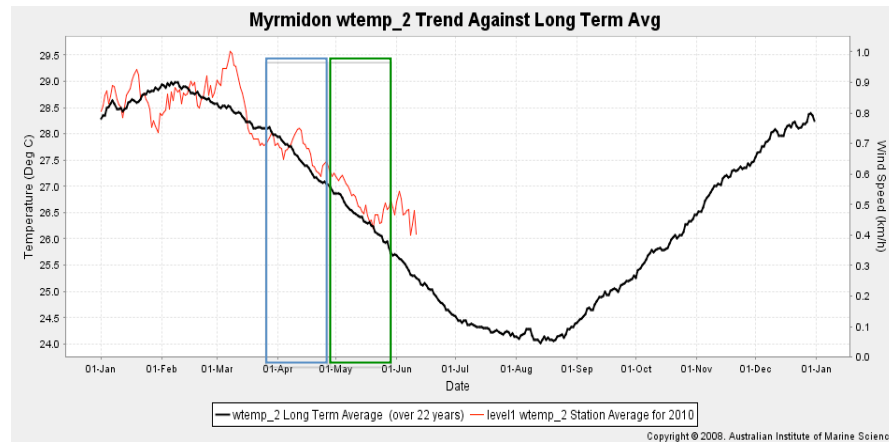
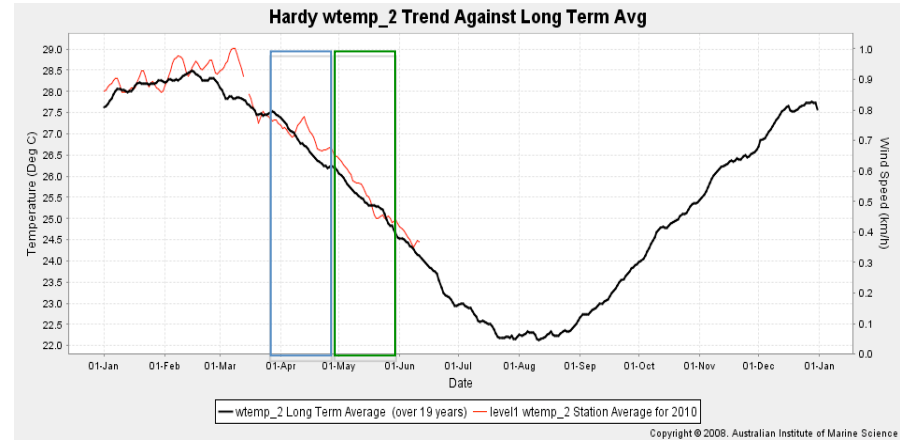
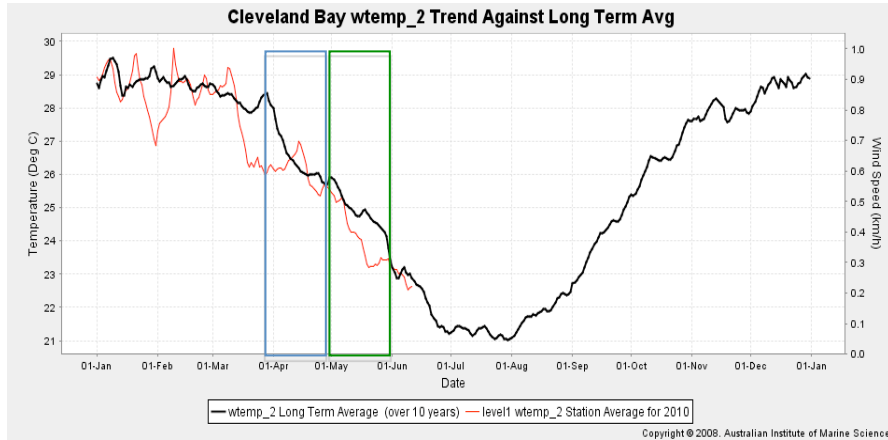
2010 Jun 08 NOAA Coral Reef Watch Coral Bleaching Thermal Stress Outlook for Jun-Sep 2010  
(Experimental Product)



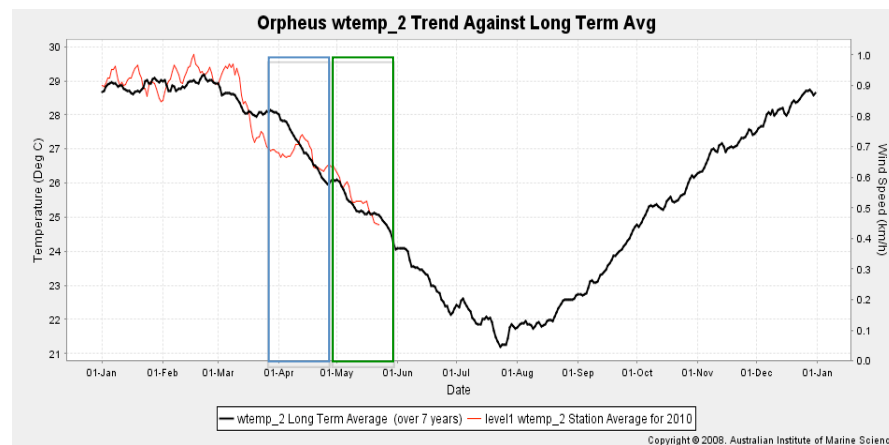
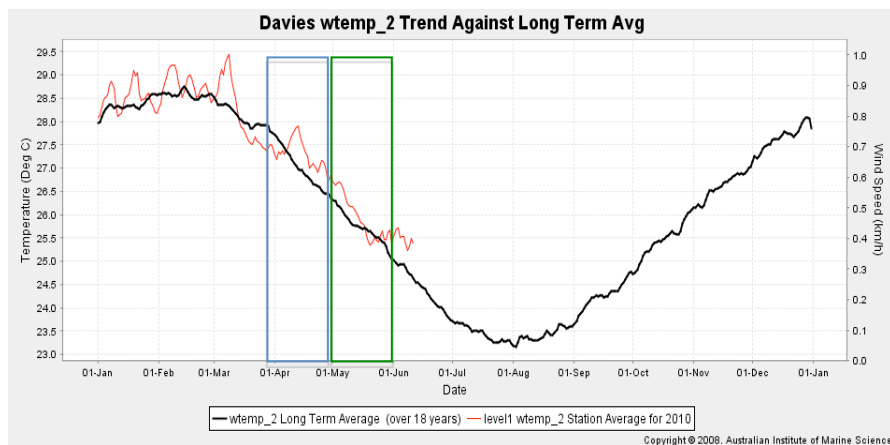
**Note:**

- NOAA thermal stress Outlook for April to July show no risk of bleaching for winter along the GBR.

# Weather Observing System: AIMS Data Centre



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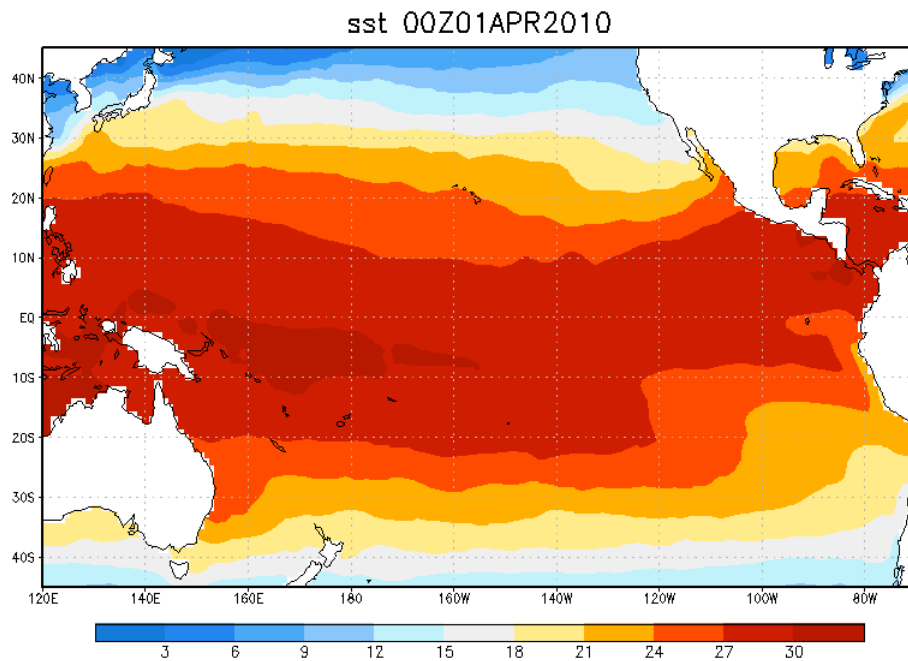


## Note:

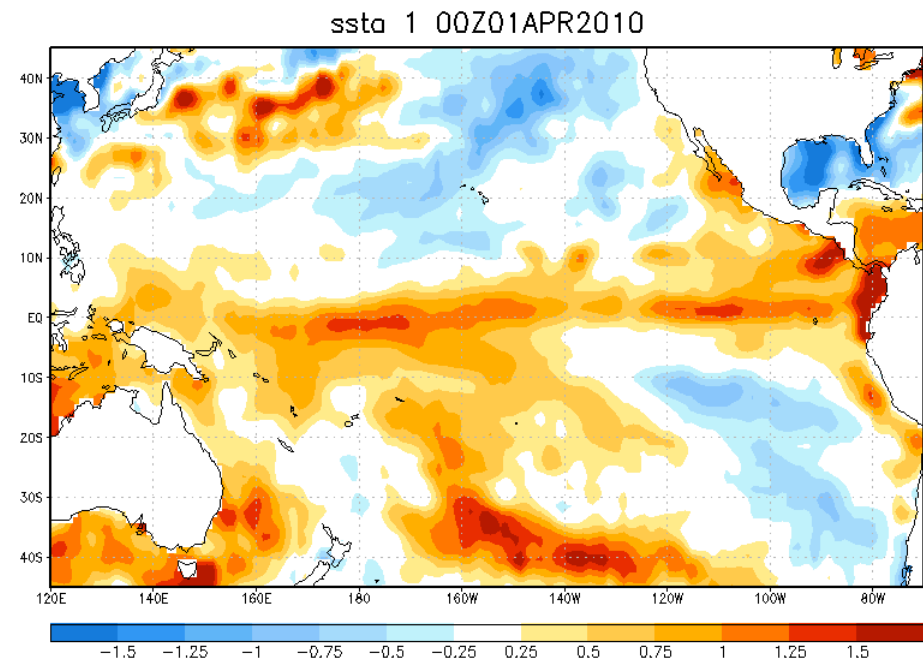
- AIMS in situ data shows mostly average SST for this time of the year.
- Cleveland Bay present lower than average temperatures for May

# NOAA Optimum Interpolation Sea Surface Temperature Analysis:

OI SST: APRIL 2010



OI SST ANOMALY: APRIL 2010

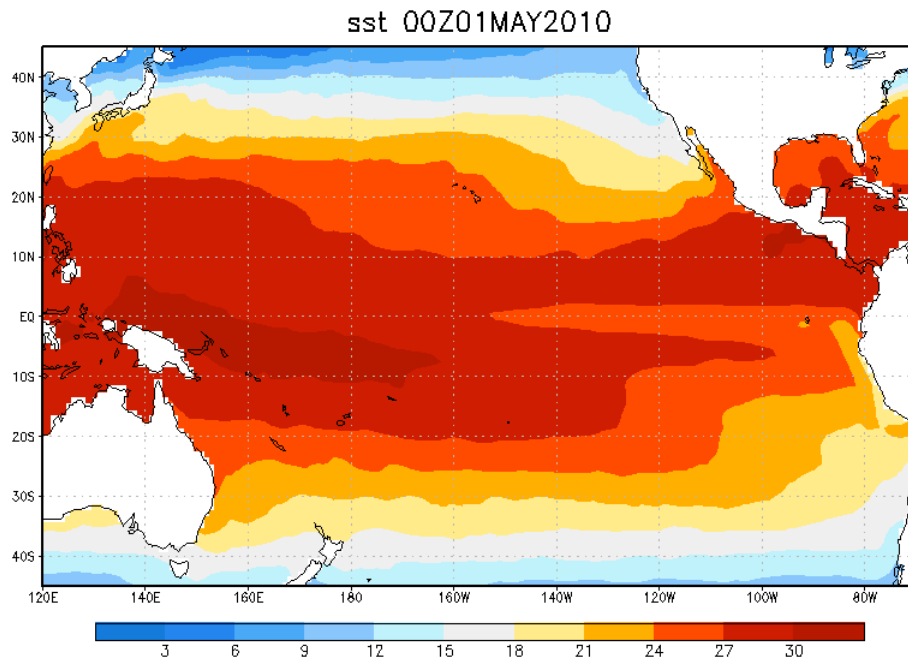


**Note:**

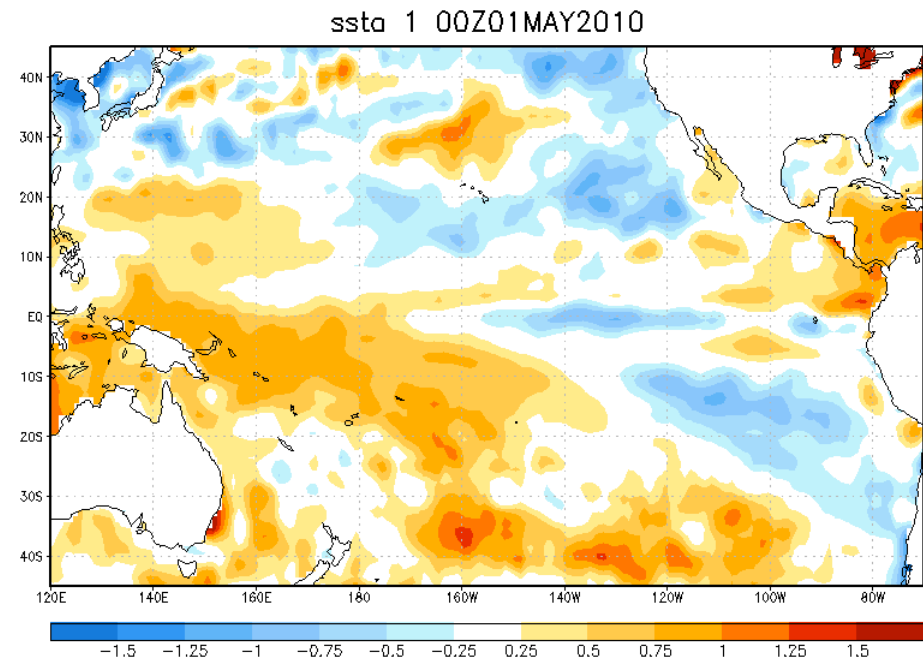
- El Niño-like conditions started to dissipate in April, as the SST anomalies weaken over the equatorial Pacific.

# NOAA Optimum Interpolation Sea Surface Temperature Analysis:

OI SST: MAY 2010



OI SST ANOMALY: MAY 2010

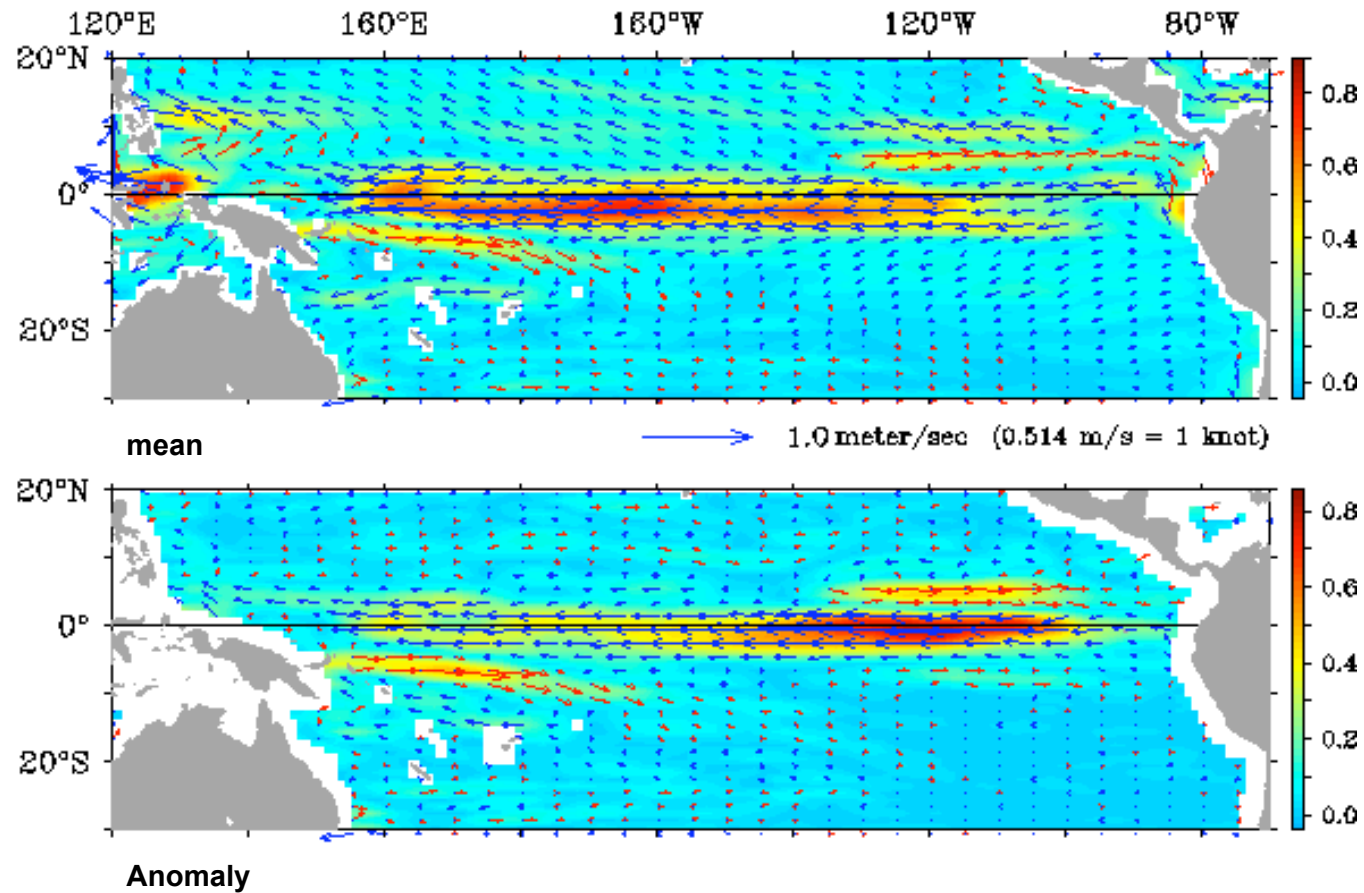


**Note:**

- During May the positive SST anomalies continues to decrease across the equatorial Pacific Ocean with negative SST anomalies now apparent over the eastern half of the Pacific.

# OSCAR: Ocean Surface Current Analysis - Real time

APRIL 2010: monthly mean vs anomaly



NESDIS/NOAA

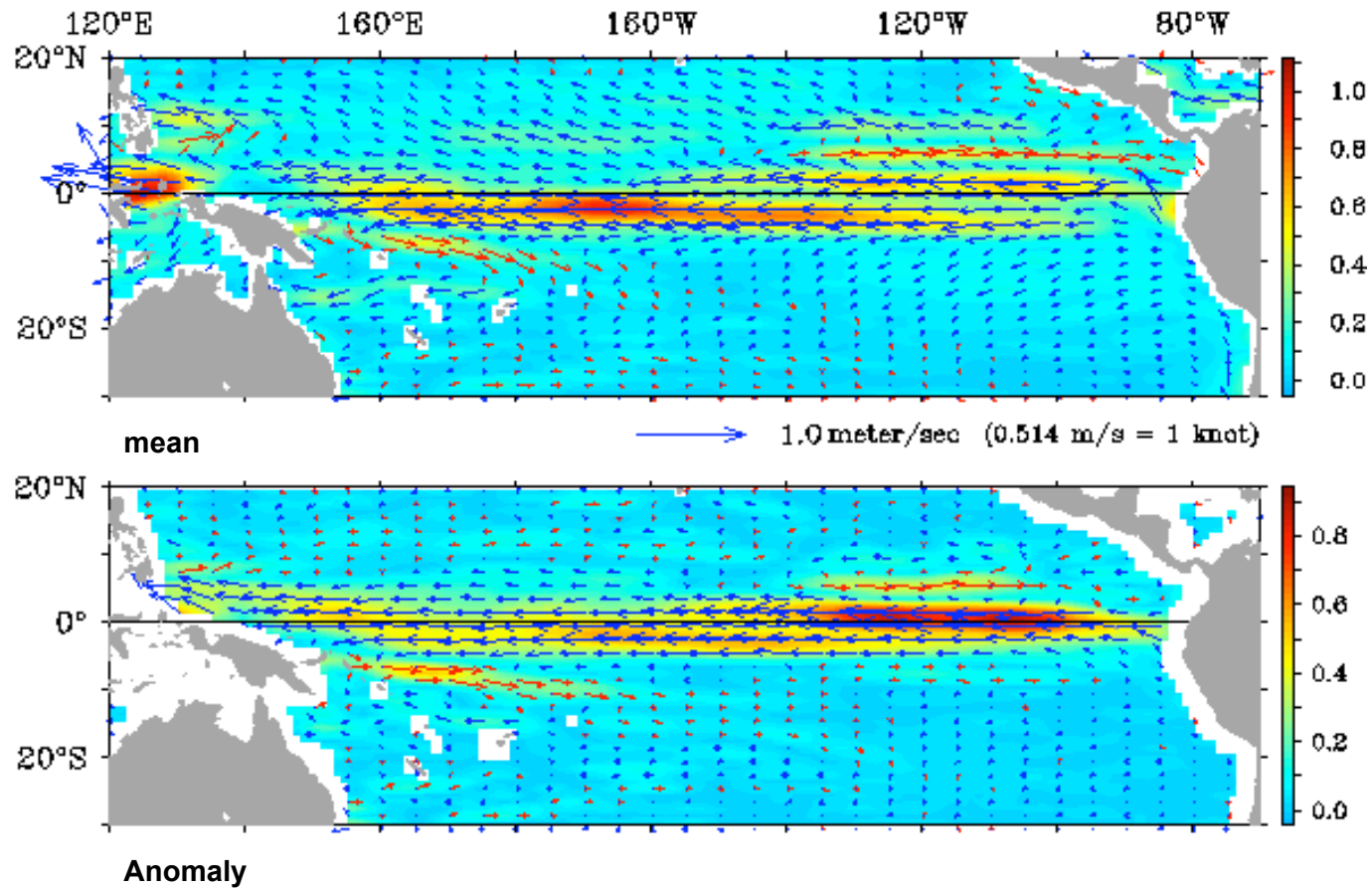
Jun 11 2010

## Note:

- In April, the anomalies present over the last months (that characterize an El Niño event) dissipated, with a strong westward South Equatorial Current present over the equator

# OSCAR: Ocean Surface Current Analysis - Real time

MAY 2010: monthly mean vs anomaly



NESDIS/NOAA

Jun 11 2010

Note:

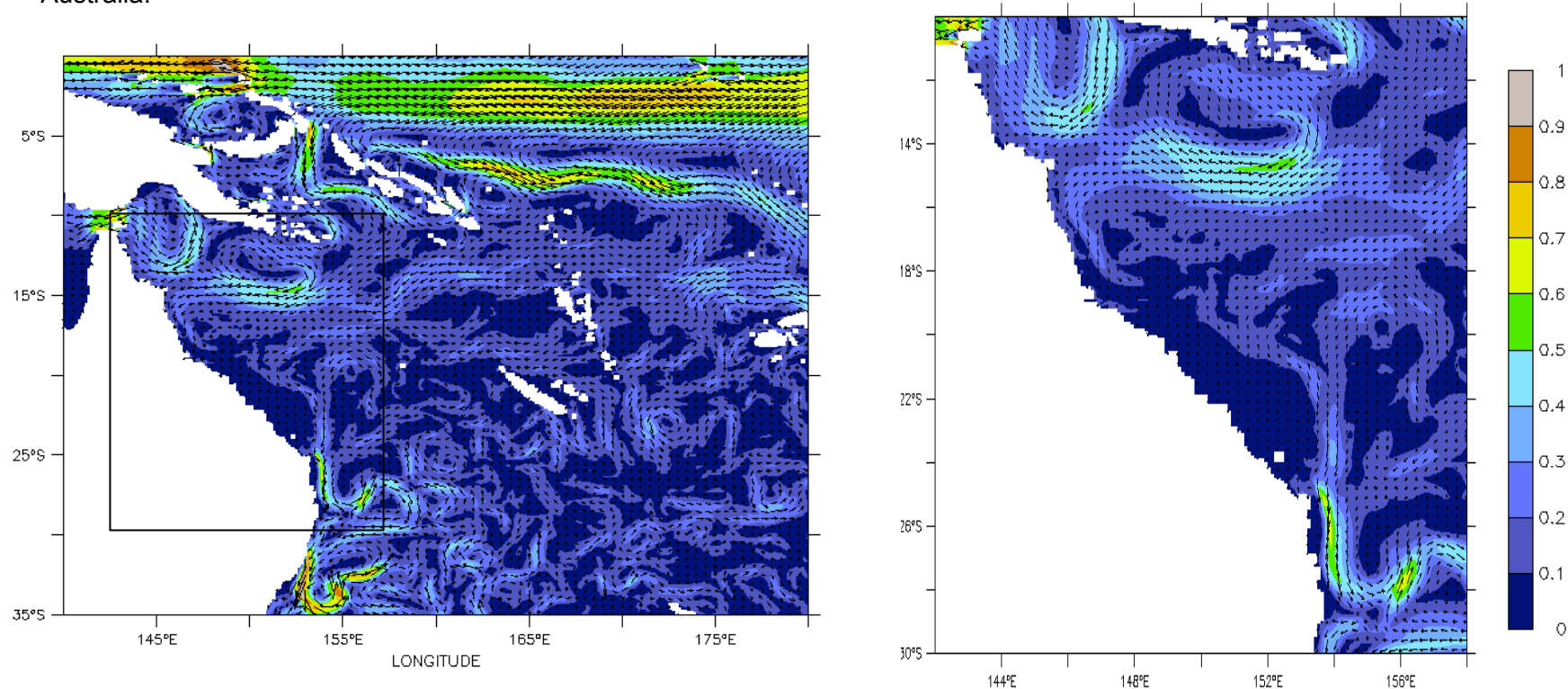
- Strong westward SEC flow continues in May: we have ENSO neutral conditions.



# OceanMAPS 15m Depth-Average Currents

## MAY 2010

**OceanMAPS** Ocean Modeling, Analysis and Prediction System was developed at CSIRO Marine and Atmospheric Research and the Bureau of Meteorology, is part of the **Bluelink** project and produces routine forecast of ocean conditions around Australia.



Behind Real Time analysis  
15 m Depth-Averaged Currents (m/s).

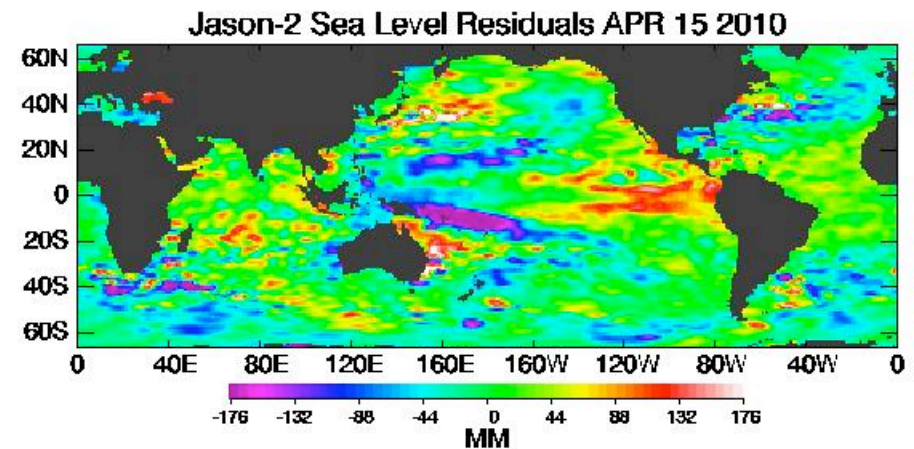
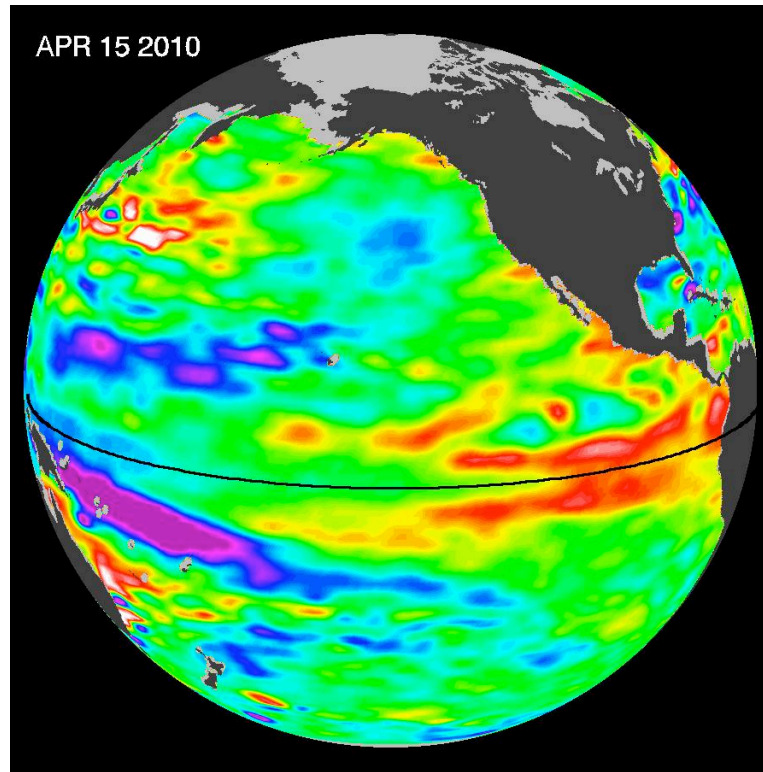
**Note:**

- Strong South Equatorial Current (SEC) inflow with a bifurcation at 14 deg S. A strong recirculation is present in the Gulf of Papua.
- The East Australian current is tracking the continental shelf break and gains strength with contributions from various zonal jets of the SEC – being most intense just to the south of The Capricorn Bunker Group.

(comments provided by Craig Steinberg and Richard Brinkman - AIMS)

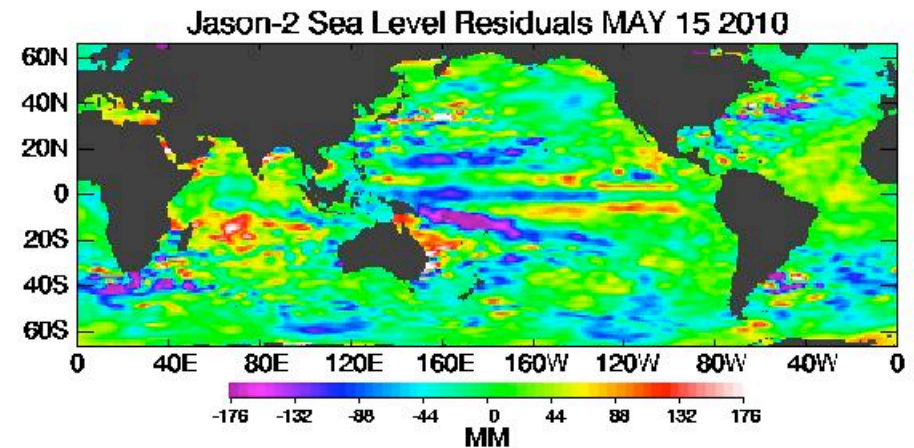
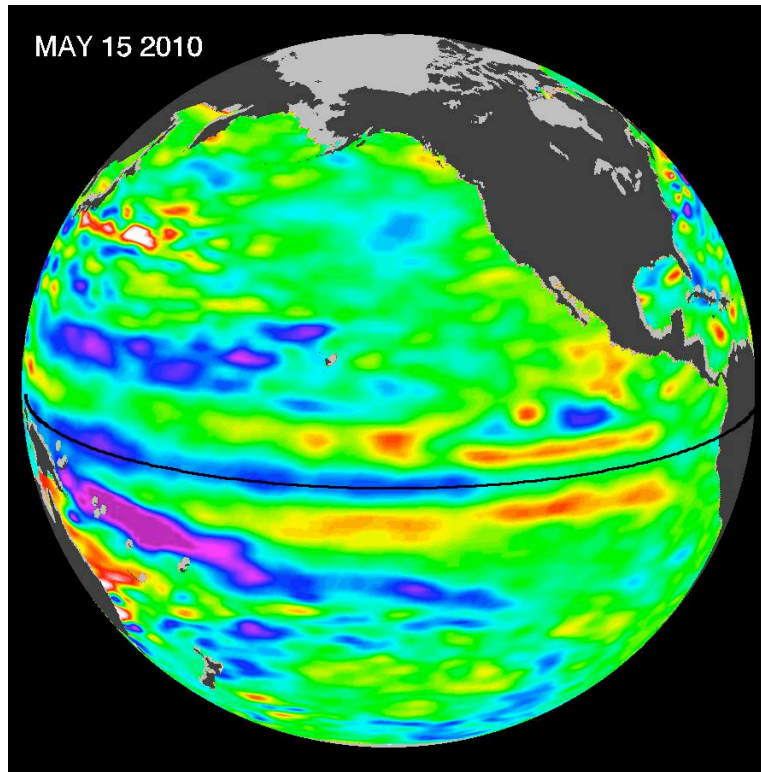
# Sea surface height anomalies from Ocean Surface Topography: Jason-1 and Jason-2 (NASA/French)

10-day data cycle centered around APRIL, 2009.



# Sea surface height anomalies from Ocean Surface Topography: Jason-1 and Jason-2 (NASA/French)

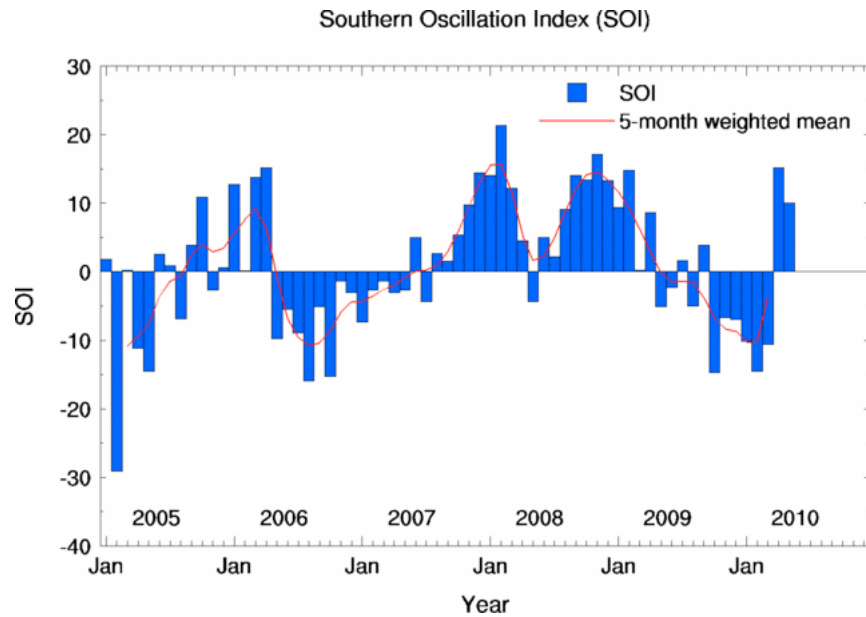
10-day data cycle centered around MAY, 2009.



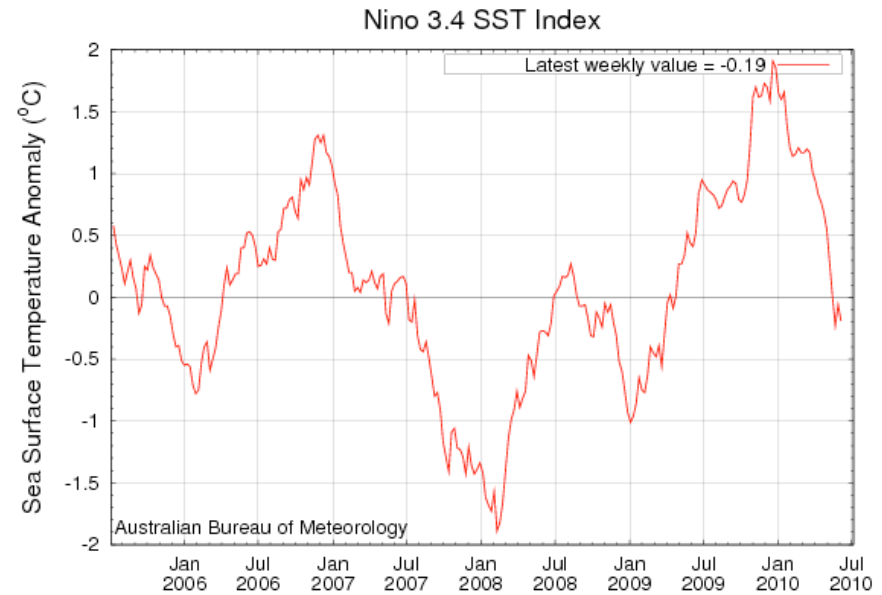
Note:

- The positive SSH anomalies presented over the east equatorial Pacific dissipated during May, associated with a strong SEC and the relaxation of El Niño conditions.

# ENSO index



Negative SOI = El Niño



Positive Nino 3.4 index= El Niño

Note:

- The ENSO indices show a dismiss of the El Niño.
- *“The majority of models predict ENSO-neutral conditions through early 2011... However, over the last several months, a growing number of models, including the NCEP Climate Forecast System (CFS), indicate the onset of La Niña conditions during June-August 2010.”*-excerpt from **El Niño/Southern Oscillation (ENSO) diagnostic discussion, issued by Climate Prediction Center/NCEP/NWS 3 June 2010**