

POAMA Products



- Ocean and atmosphere products available
- Hindcast data set 1980-2006
- Real-time forecasts generated daily
- Weekly to seasonal forecasts
- Ocean temperature, currents, winds, SL
- Indexes e.g. NINO, IOD, SOI
- <http://poama.bom.gov.au>

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Possible Applications

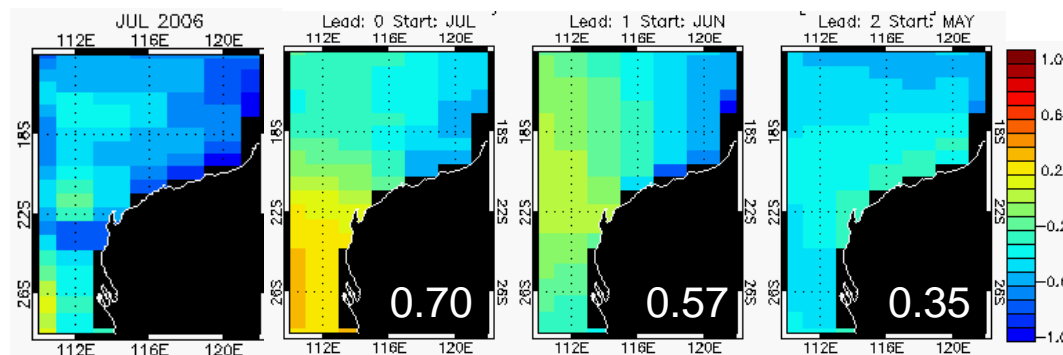
- Ningaloo Reef protection
- Seabird conservation
- Fisheries management
- Rock lobster recruitment?
- Whale migration?
- Oil & gas applications?
- ???



Ningaloo Reef



- Winter bleaching event in 2006 due to cold anomalies & low sea level
- Model predicted low winter SSTA
- Sea level forecasts available
- Allows focused monitoring of bleaching events



Ningaloo: 2006 winter bleaching event



Courtesy of Elvidge et al., 2004

Seabirds



- Correlation between SST & mean laying date of Little Penguins at Phillip Island
- POAMA SST forecasts to drive statistical model
- Allows for the planning of management activities e.g. banding chicks, monitoring
- Penguin Island colonies?
- Other seabirds?



Dann, P., Chambers, L.E. 2009. Climate change and Little Penguins.
A report for the Western Port Greenhouse Alliance.



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Fisheries



- Current research into prediction of Southern Bluefin Tuna habitat, using POAMA temperature forecasts and a statistical habitat model
- Western Australia applications?
 - Forecasts of physical drivers of fishery production for management e.g. SST, currents, mixed layer depth
 - Links to Leeuwin Current strength?
 - West Rock Lobster recruitment?

