



Australian Government
Bureau of Meteorology

Bureau of Meteorology bathymetry and forecasts

Nov 2018

Andy Taylor
Bureau of Meteorology

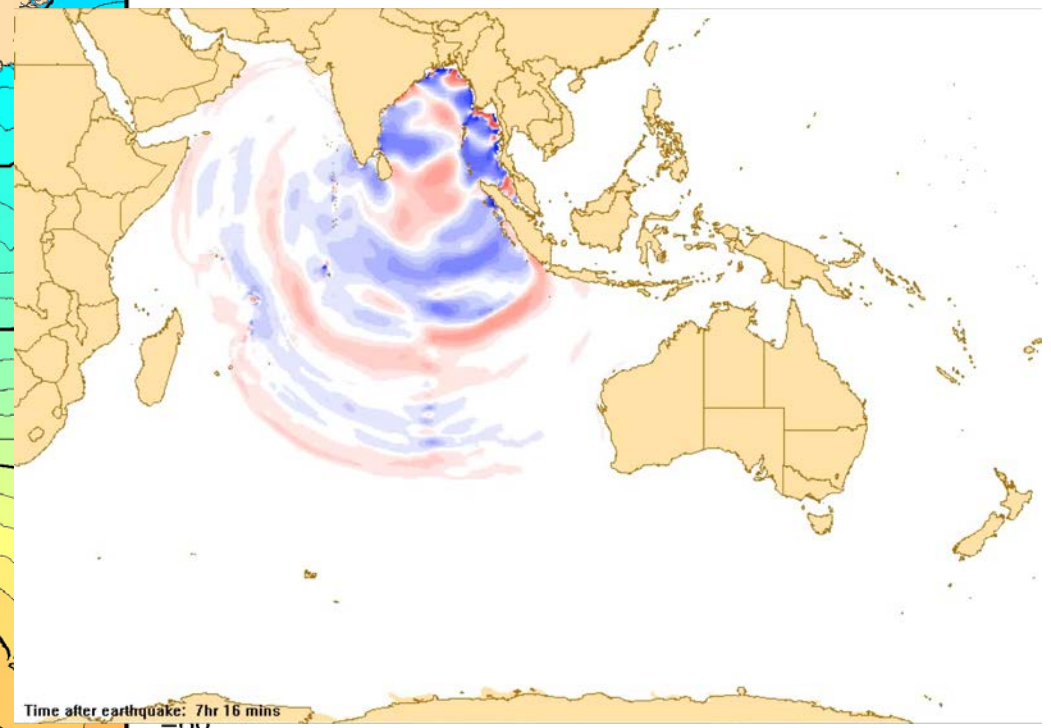
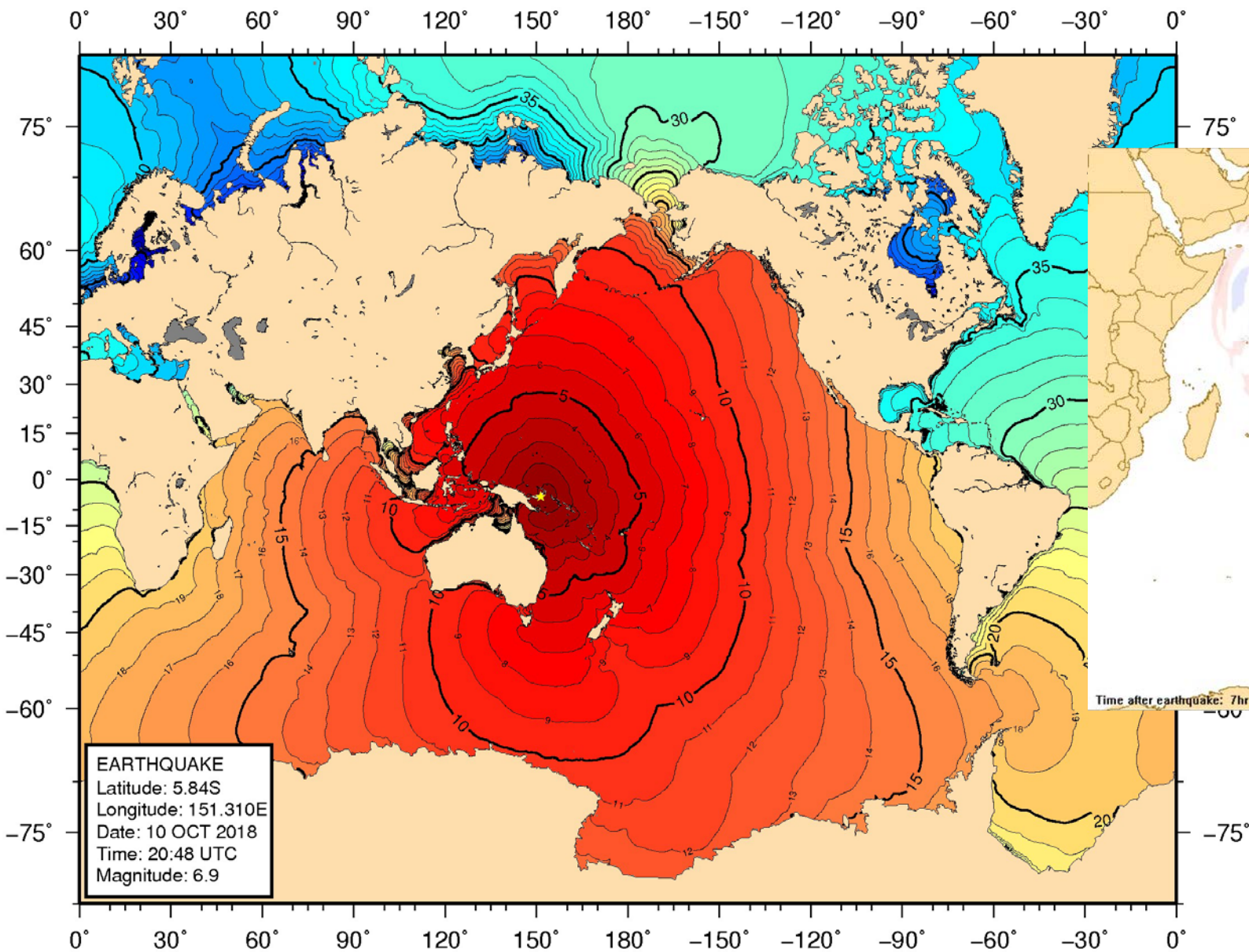
A map of the Indian Ocean showing operational ocean forecasts. The map features a color scale on the right side, ranging from blue (low values) to red (high values). The ocean surface is depicted with a grid of arrows indicating current directions and strengths. The map covers the region from approximately 10°S to 45°S and 60°E to 120°E. The text 'Operational ocean forecasts' is overlaid in a cyan box at the top right.

Operational ocean forecasts

- BoM does not produce bathymetry
- BoM does produce various ocean forecasts
- increasing coastal and shelf applications
- custom processing at model development phase
- managed on model-per-model basis

Estimated Tsunami Travel Time (Hours)

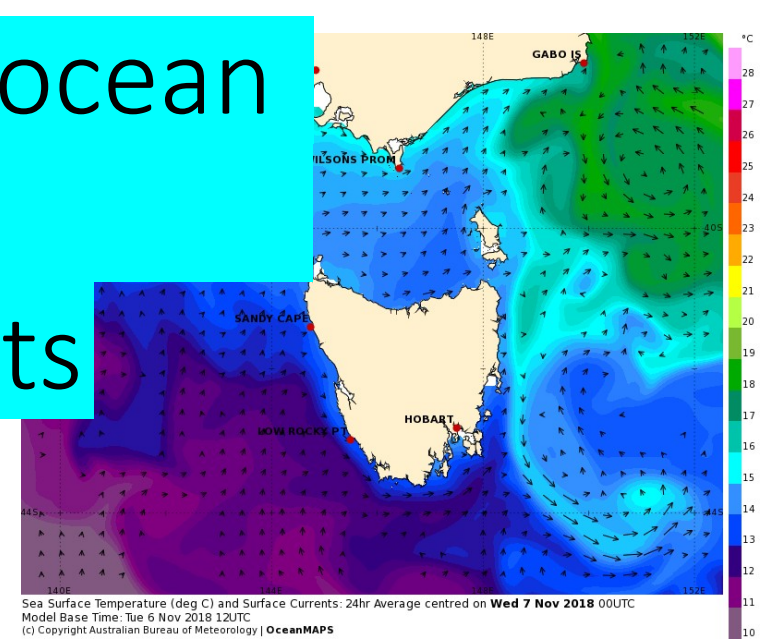
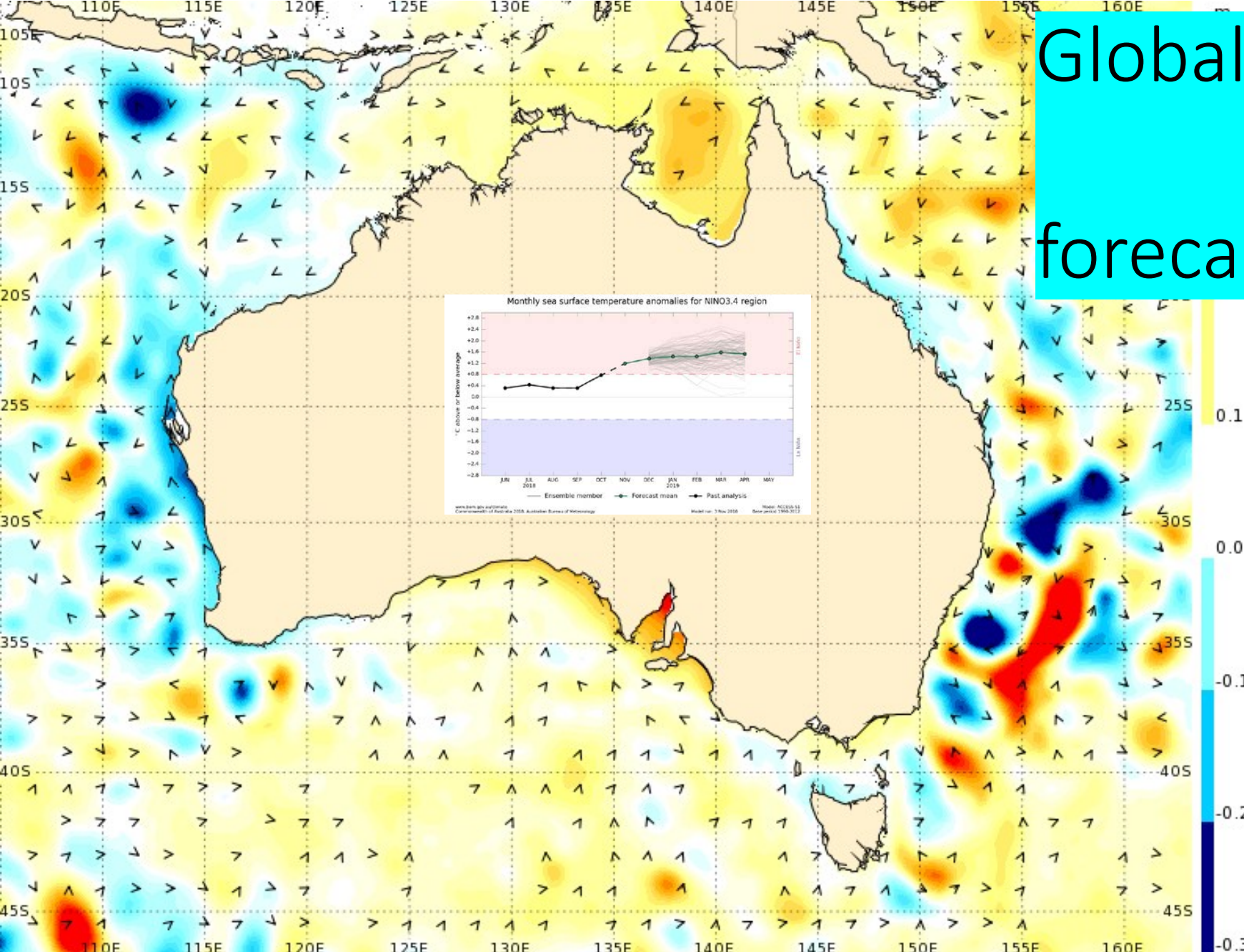
Tsunami warnings



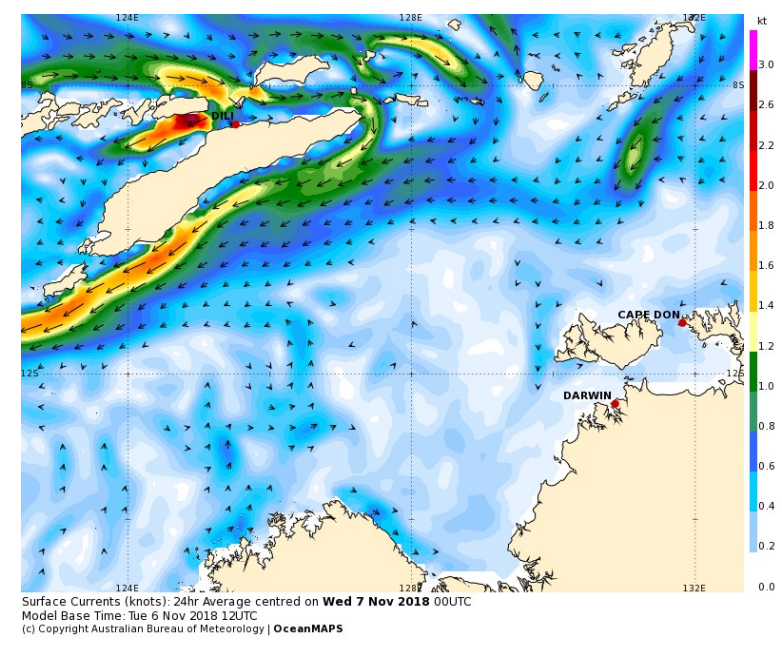
EARTHQUAKE
Latitude: 5.84S
Longitude: 151.310E
Date: 10 OCT 2018
Time: 20:48 UTC
Magnitude: 6.9

Time after earthquake: 7hr 16 mins

Global ocean forecasts



Sea Surface Temperature (deg C) and Surface Currents: 24hr Average centred on **Wed 7 Nov 2018 00UTC**
Model Base Time: Tue 6 Nov 2018 12UTC
(c) Copyright Australian Bureau of Meteorology | OceanMAPS



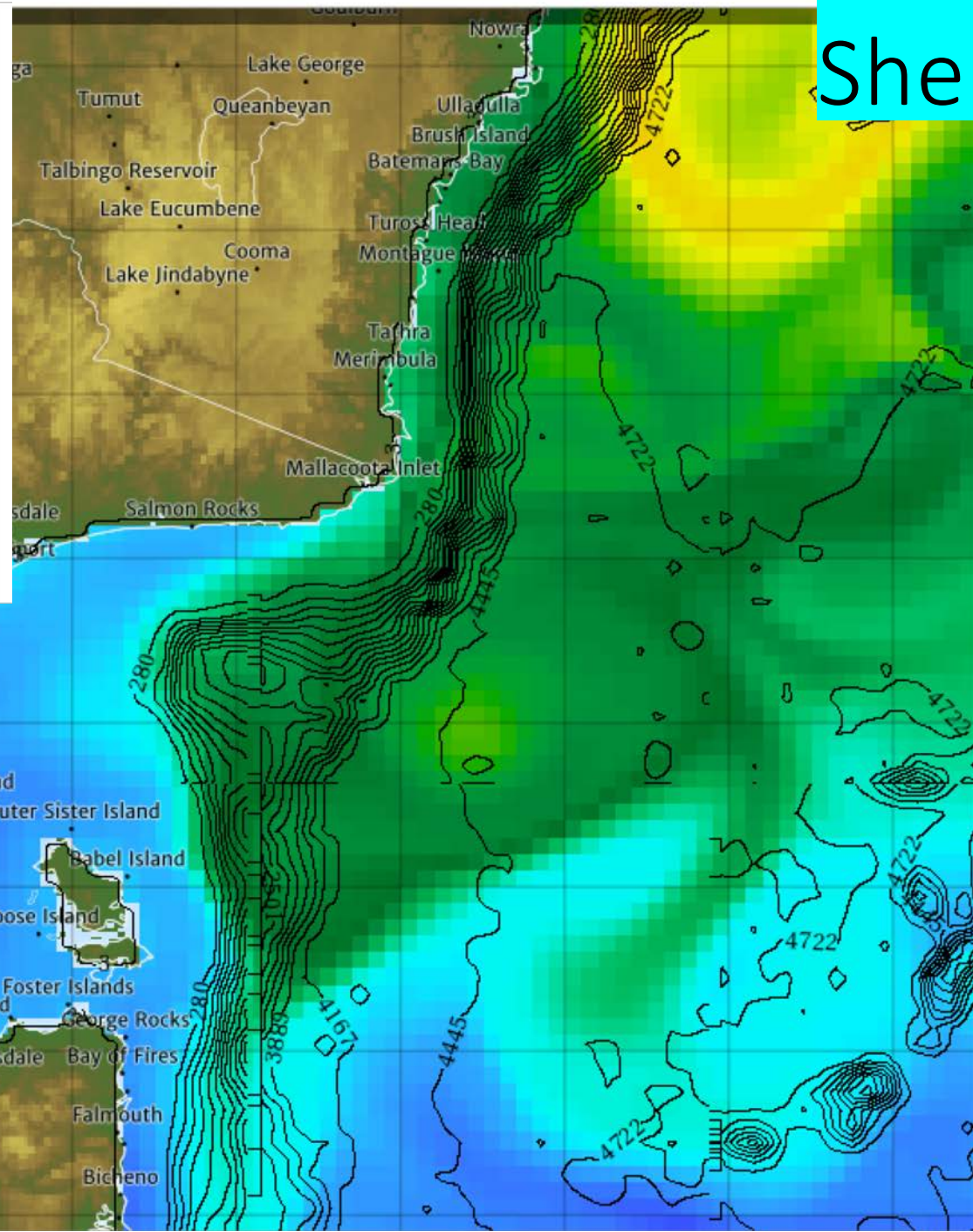
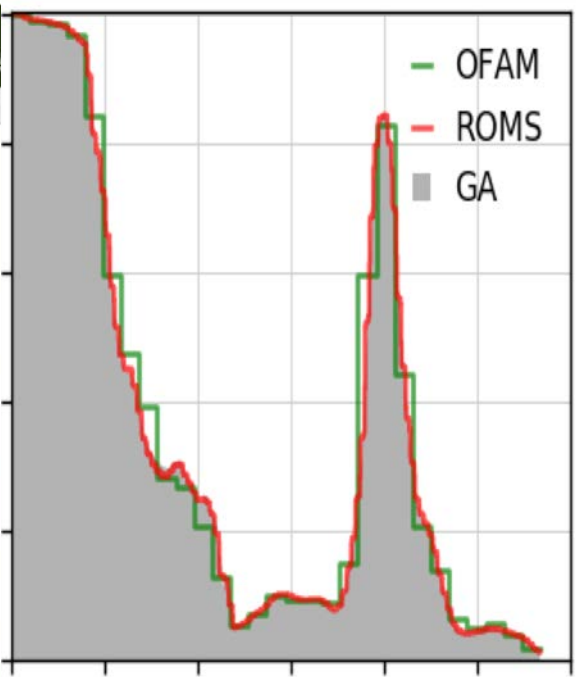
Surface Currents (knots): 24hr Average centred on **Wed 7 Nov 2018 00UTC**
Model Base Time: Tue 6 Nov 2018 12UTC
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Sea Level Anomaly (m) and Surface Currents: 24hr Average centred on **Wed 7 Nov 2018 00UTC**

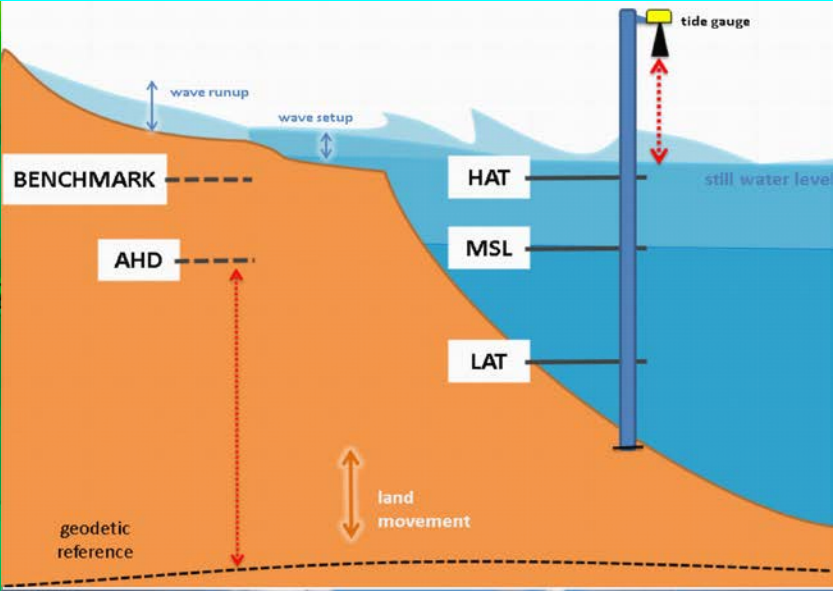
Model Base Time: Tue 6 Nov 2018 12UTC

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21/10/2018

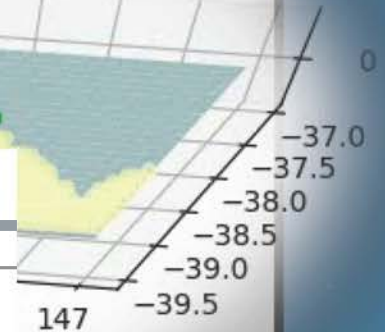


Shelf seas and coastal



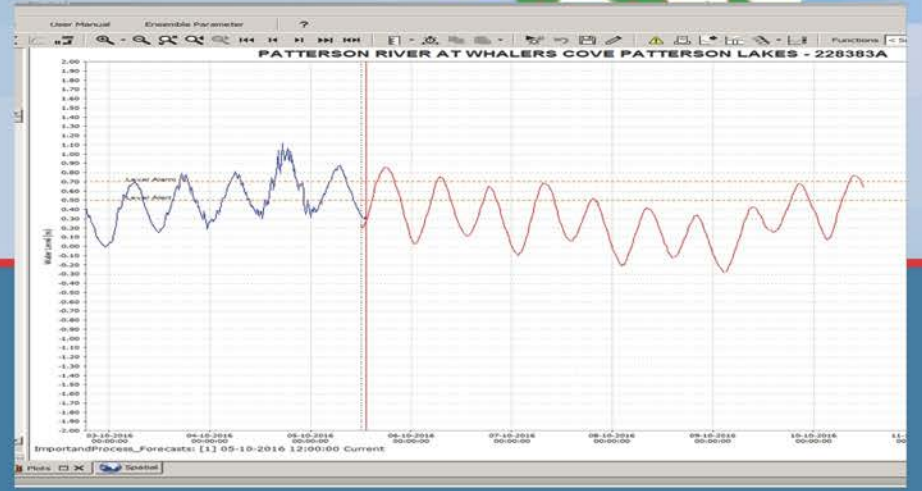
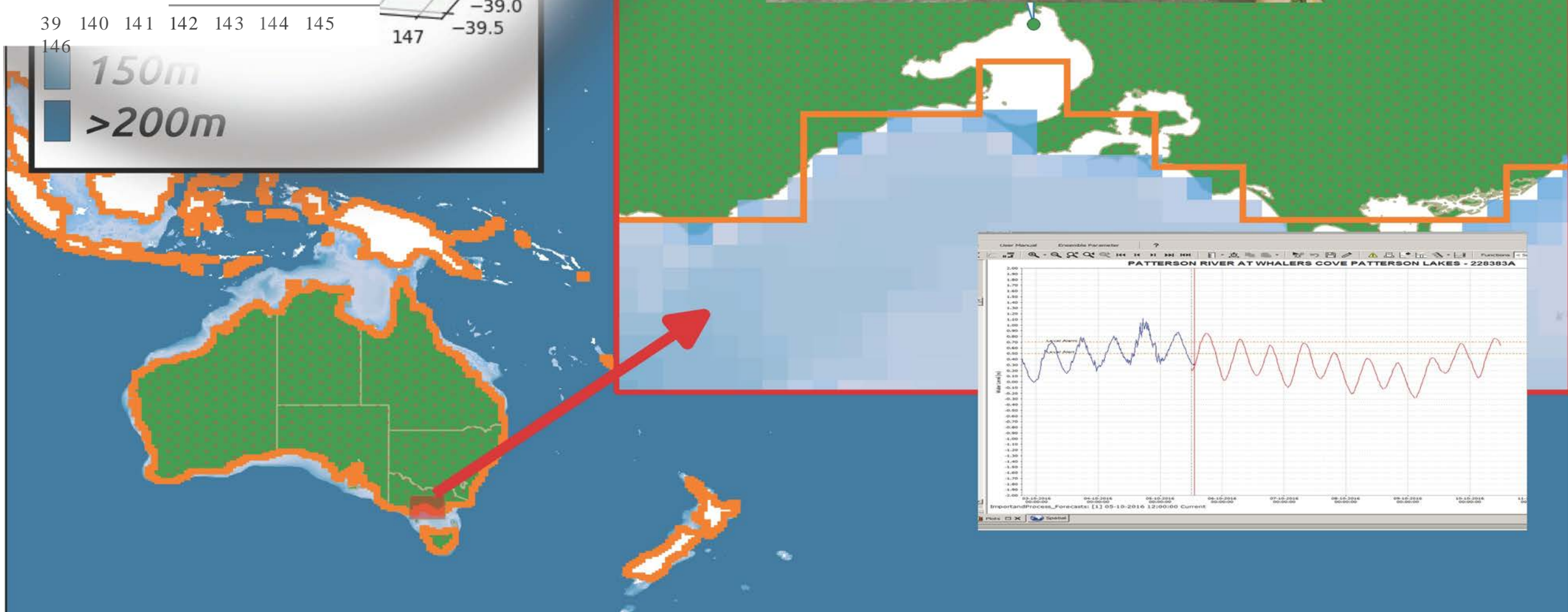
Hour = 000

East

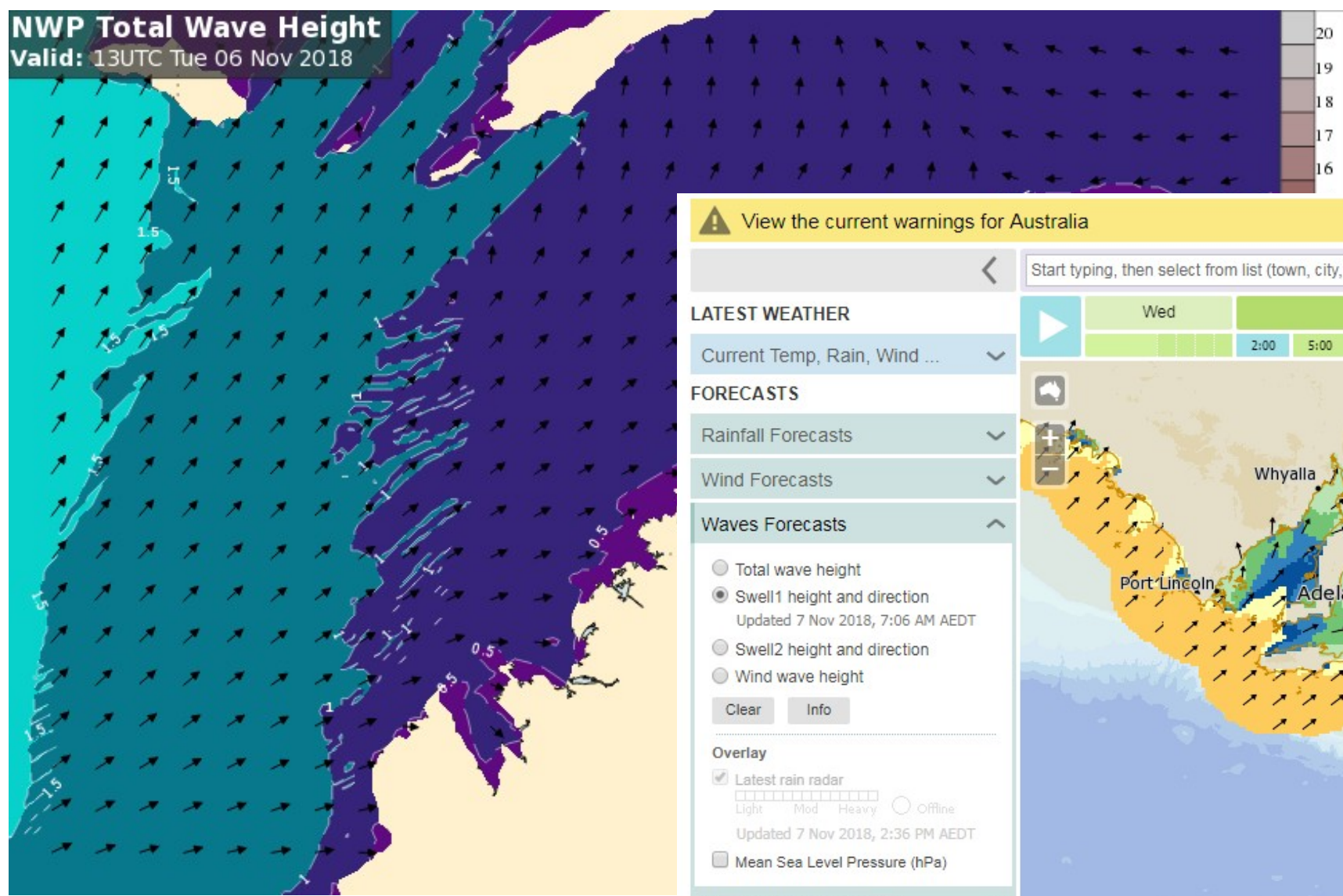


39 140 141 142 143 144 145

146
150m
>200m



NWP Total Wave Height
Valid: 13UTC Tue 06 Nov 2018



Marine waves

View the current warnings for Australia

Start typing, then select from list (town, city, postcode or lat/lon) Time zone: AEDT

LATEST WEATHER
Current Temp, Rain, Wind ...

FORECASTS
Rainfall Forecasts
Wind Forecasts
Waves Forecasts

Total wave height
 Swell1 height and direction
Updated 7 Nov 2018, 7:06 AM AEDT
 Swell2 height and direction
 Wind wave height

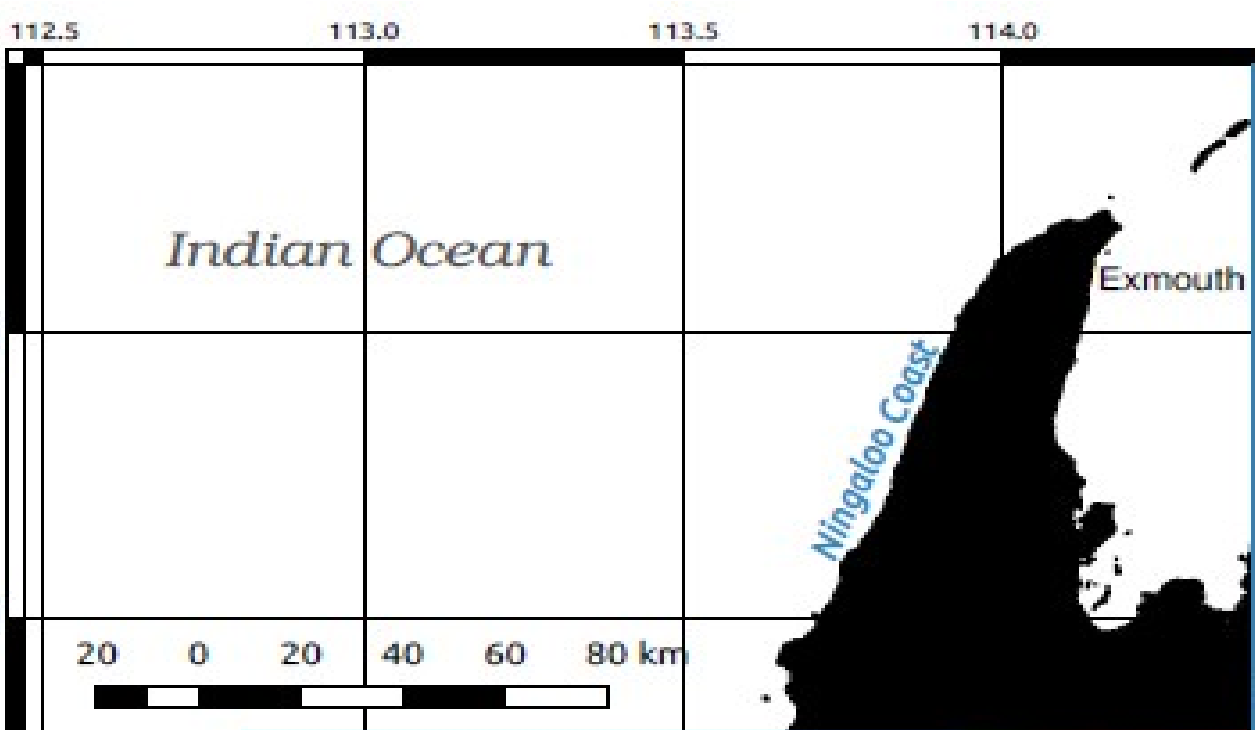
Overlay
 Latest rain radar
Light Mod Heavy Offline
Updated 7 Nov 2018, 2:36 PM AEDT
 Mean Sea Level Pressure (hPa)

Temperature Forecasts
Storms, Snow, Fog, Frost ...
Humidity Forecasts
UV Index Forecasts

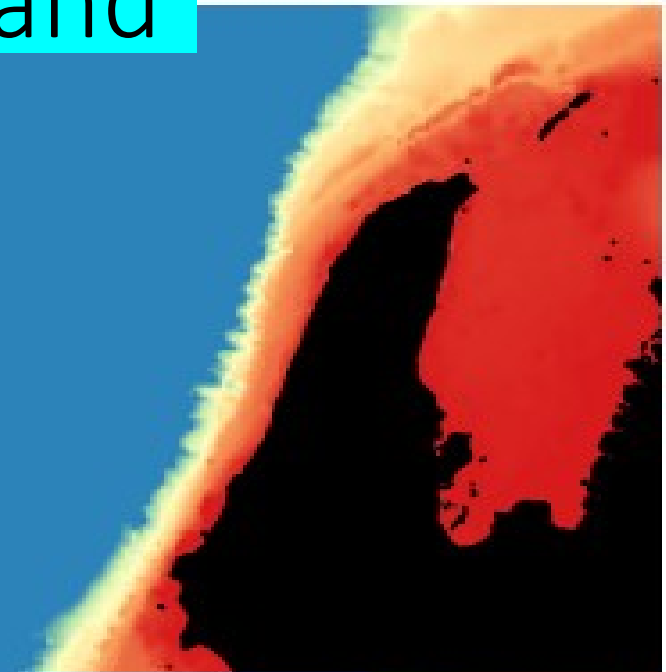
LEGEND
Swell1 Height (m)
11 +
8 - 11
5 - 8
3 - 5
2 - 3
1.5 - 2
1 - 1.5
0.5 - 1
0 - 0.5
no data

This figure is a map of Australia showing Swell1 Height (m) with a color-coded legend. The legend indicates wave height ranges: 11+ (purple), 8-11 (red), 5-8 (orange), 3-5 (yellow), 2-3 (light yellow), 1.5-2 (dark blue), 1-1.5 (medium blue), 0.5-1 (light blue), 0-0.5 (green), and no data (grey). The map shows wave heights across the Australian coastline, with higher swells (orange and red) in the southern and western regions. Major cities labeled include Broken Hill, Whyalla, Port Lincoln, Adelaide, Renmark, Mildura, Mount Barker, Swan Hill, Horsham, Melbourne, Geelong, Warrnambool, Colac, Wonthaggi, Smithton, Burnie, Ulverstone, Queenstown, Strahan, Hobart, and others. A weather interface is overlaid on the map, including a search bar, a date selector for Thursday, 8 November 2018, and various forecast categories like Latest Weather, Forecasts, and Overlays.

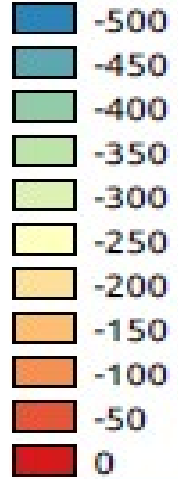
Features and feedback



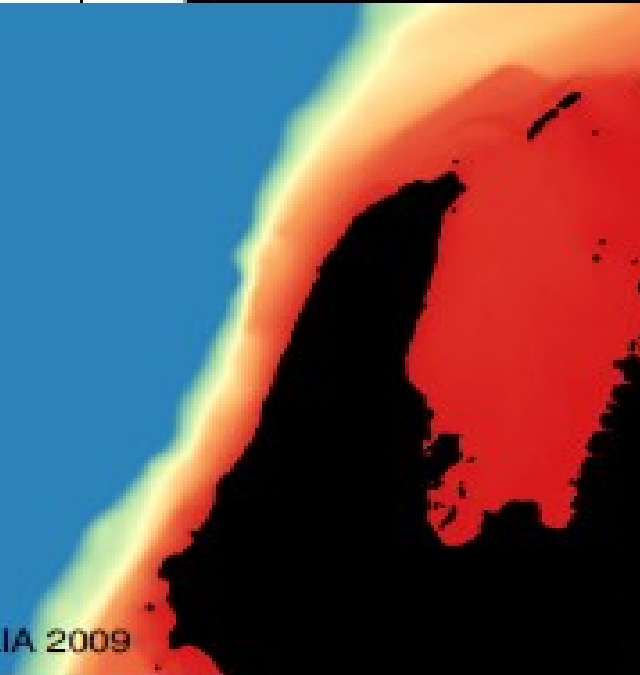
TOPO30 2014



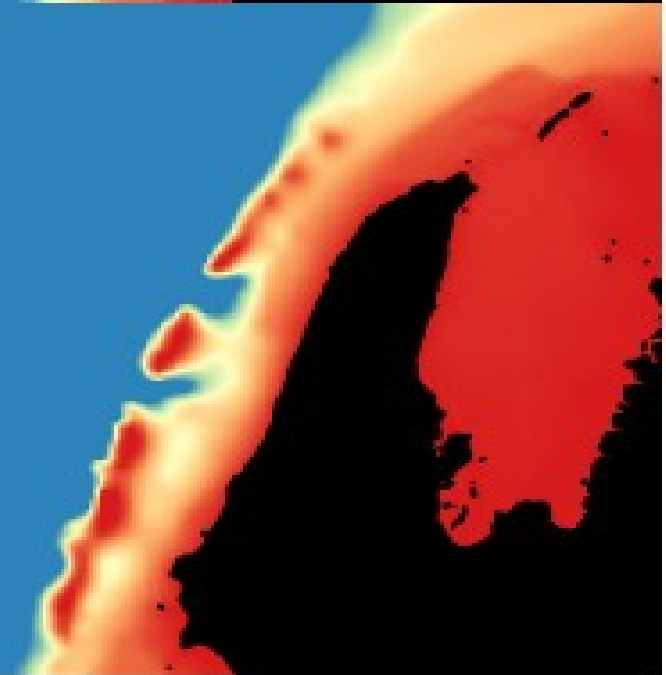
Bathymetry



GEOSCIENCE AUSTRALIA 2009



GEBCO 2014



Custom grid development processes



Many sources

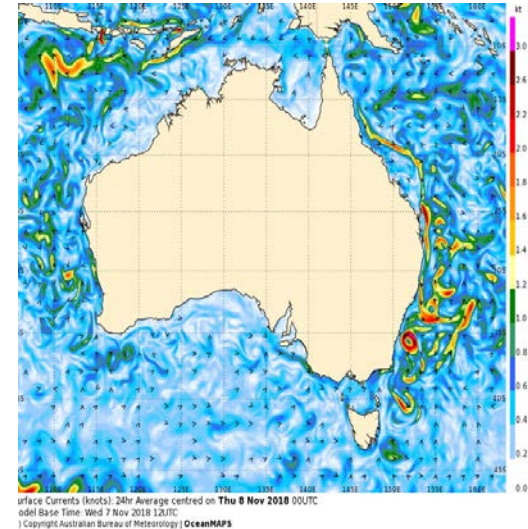


Bathy data

Selection
Modification
Alignment
Smoothing

Model grids

Development



forecast grid

Static in operations



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<http://www.bom.gov.au/>

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