

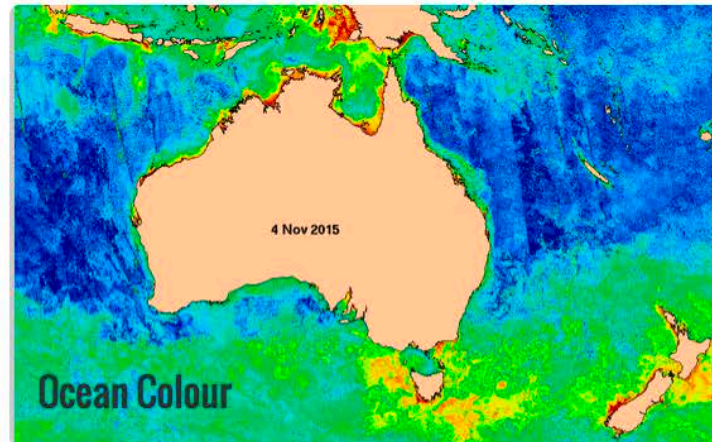
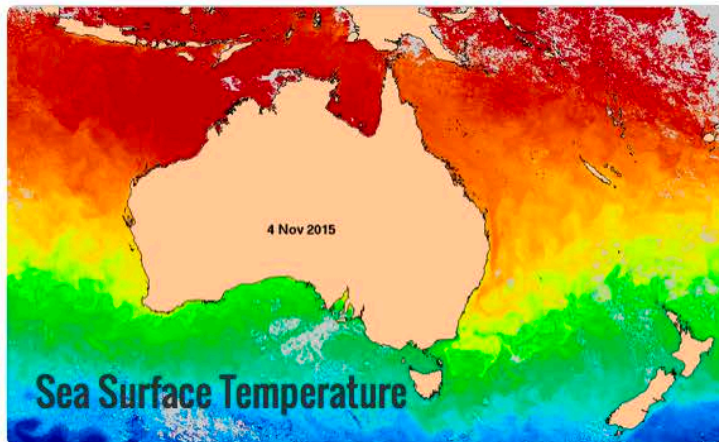
IMOS OceanCurrent

Madeleine Cahill, David Griffin
and Roger Scott

November 2015

OCEANS AND ATMOSPHERE
www.csiro.au

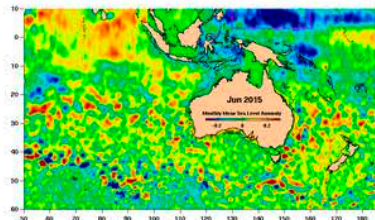




Ocean News

Sea level in the western equatorial Pacific drops dramatically

15 July, 2015



The month-average of sea level north of New Guinea has dropped to levels not seen since the 'super El Niño' of 1997/1998. An El Niño event occurs when sea surface temperatures in the central and eastern Pacific become sufficiently warm that the atmospheric circulation shifts resulting in weaker equatorial trade winds. Low sea levels north of New Guinea (a result of weak equatorial trade winds) are strongly correlated with Niño3.4, the El Niño index that relates best to Australian climate. [\[more\]](#)

[Follow El Niño with SLA](#)

[Monthly Mean Anomalies](#)

[Animations](#)

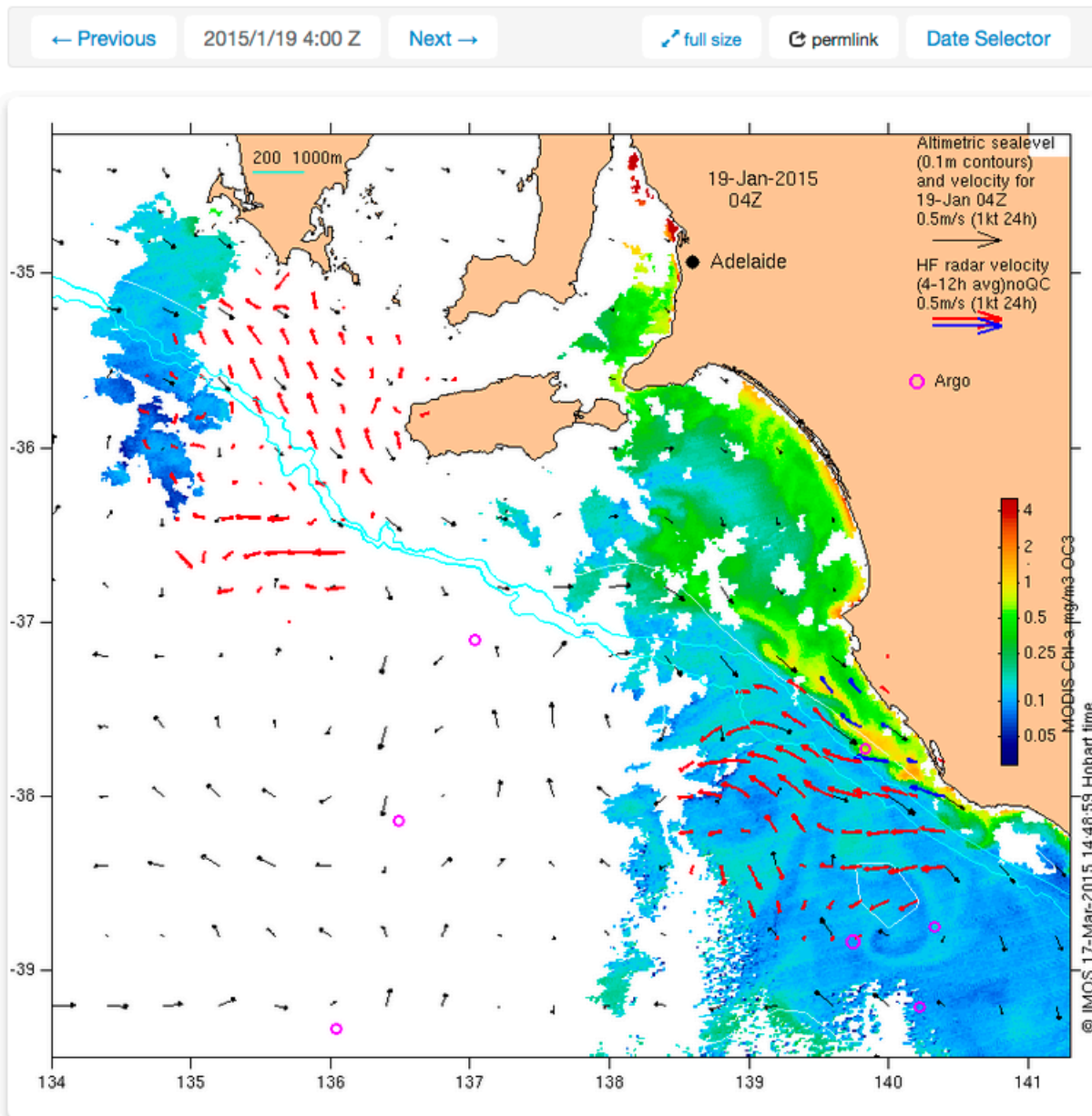
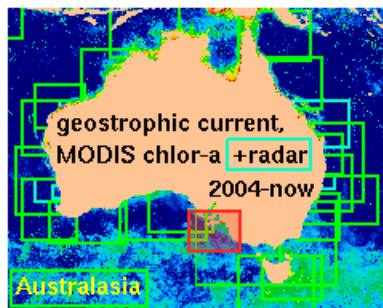
[Google Earth View](#)

[Argo](#)

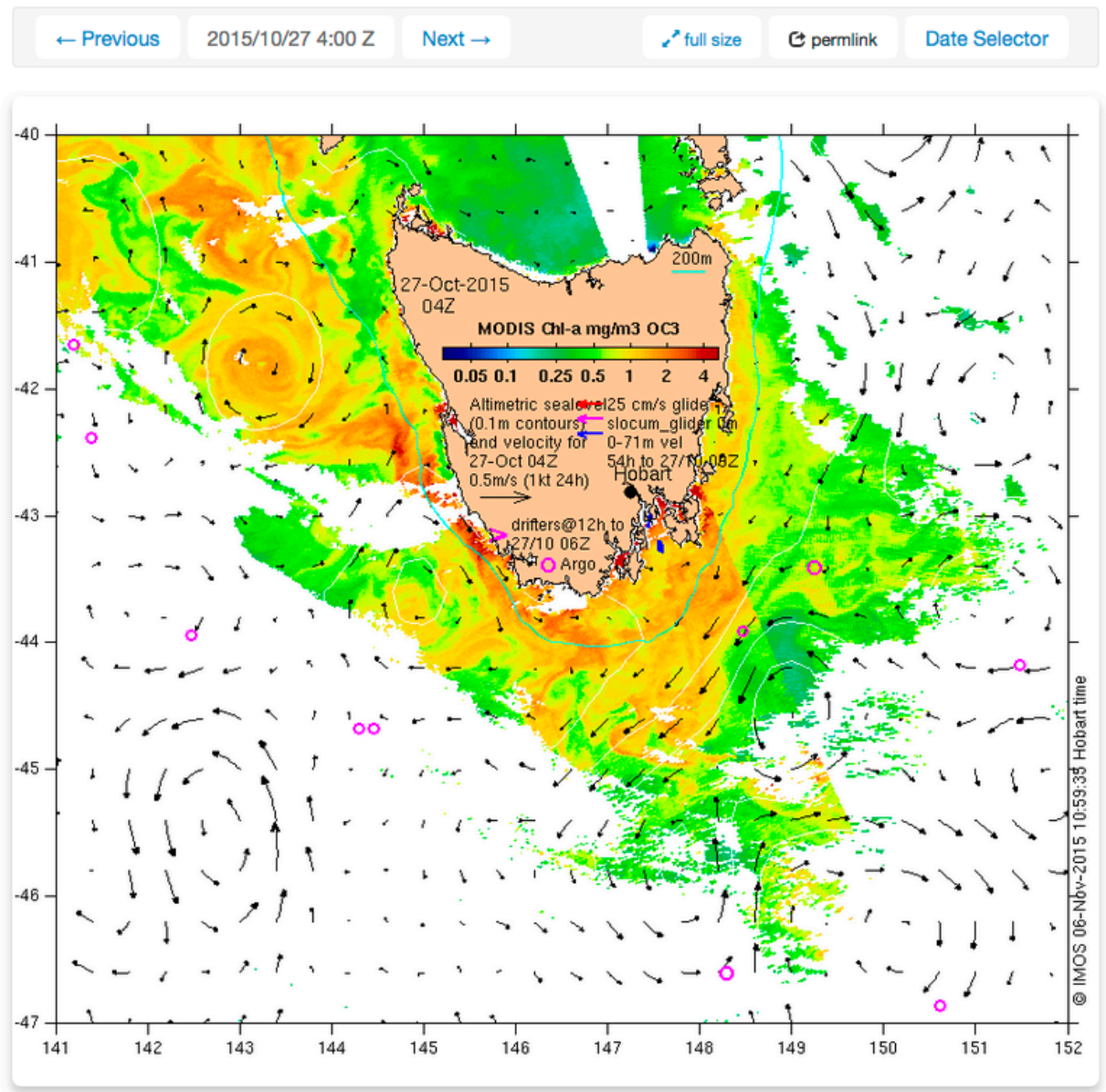
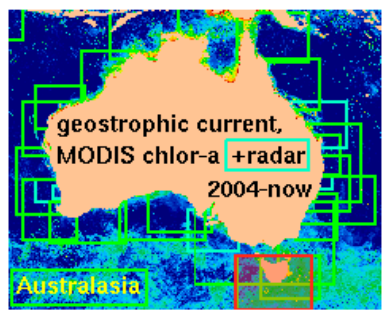
[Current Meters](#)

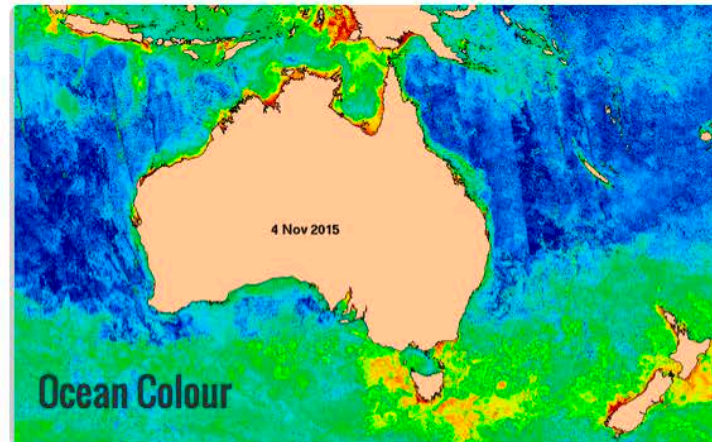
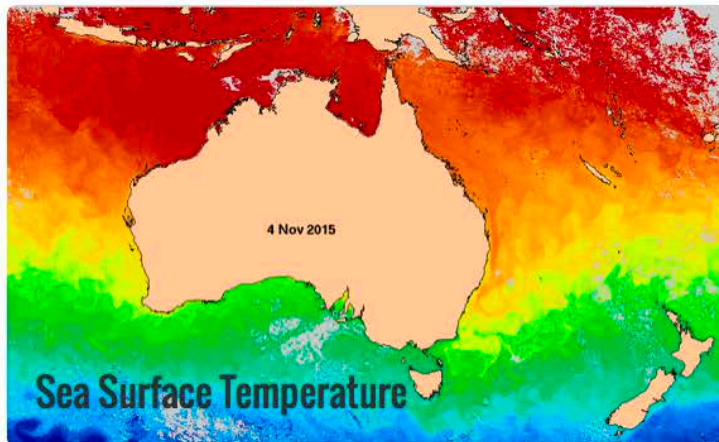
[Gliders](#)

Ocean Colour



Ocean Colour

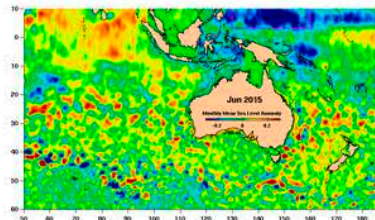




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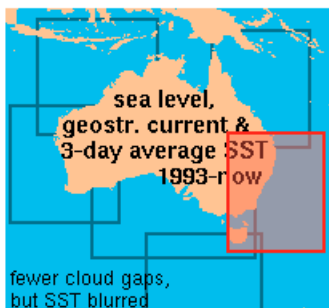
[Current Meters](#)

[Gliders](#)

Sea Surface Temperature maps

Detailed images

State regions



Australia region

← Previous

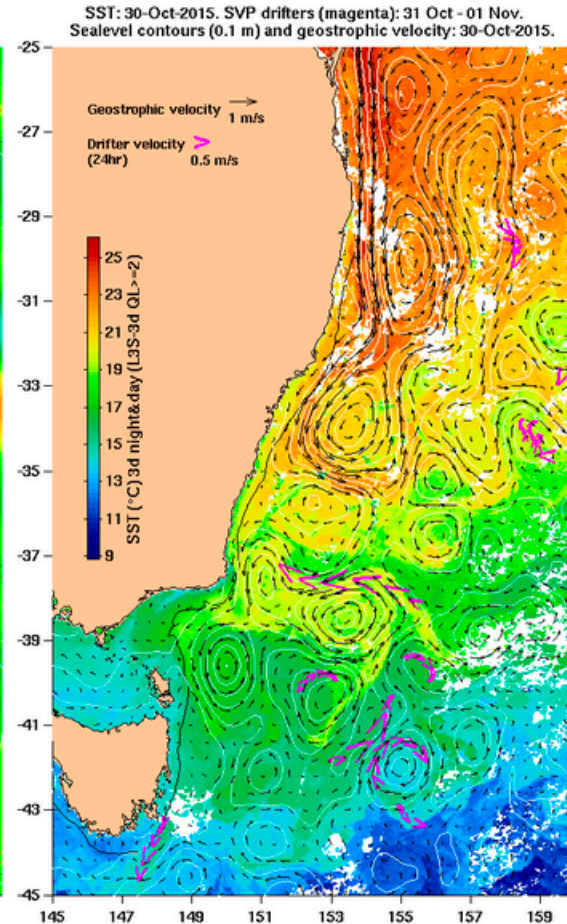
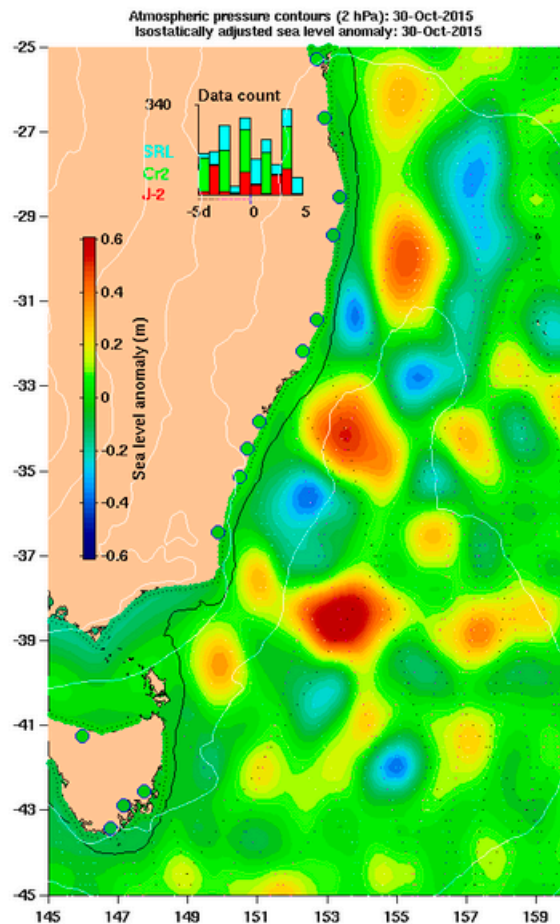
2015/10/30

Next →

full size

permlink

Date Selector



© IMOS 04-Nov-2015 09:32 Hobart Time

Argo

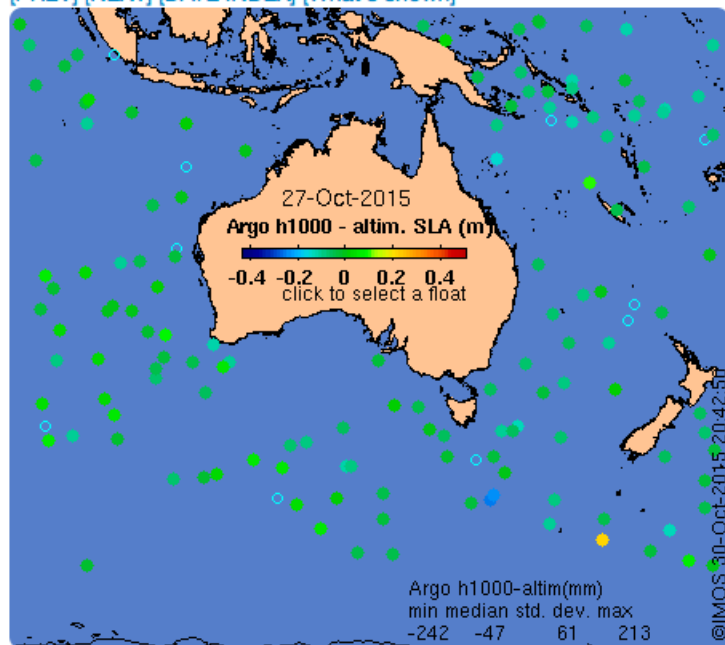
Current Meters

Gliders

Argo profiles in the Australian region

Temperature and salinity down to 2000m

[\[PREV\]](#) [\[NEXT\]](#) [\[DATE INDEX\]](#) [\[What's shown\]](#)



Click on the map below or choose a [\[WMO number\]](#) to see the temperature and salinity data from the selected float compared with satellite-adjusted climatology.

Depending on your settings, your browser may or may not open these links in a separate window.

If nothing seems to open, try right-click/open-in-new-window

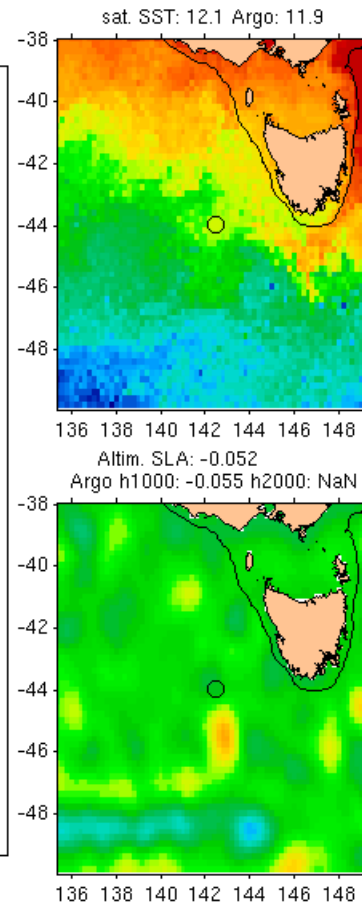
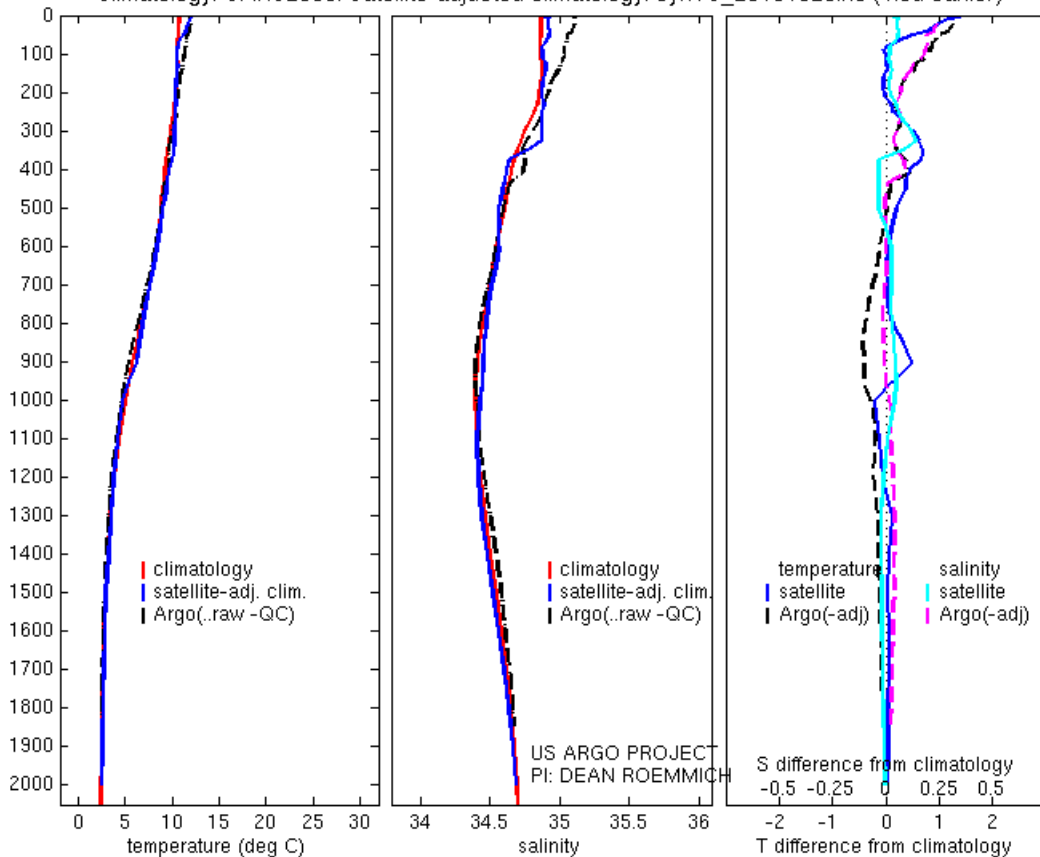
If you've found this information useful, see something wrong, or have a suggestion, please let us know. All feedback is very welcome. For help and information about this site please contact

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[PREV] [NEXT] [DATE INDEX] [WHAT'S SHOWN]

Argo profile: AO 5903811_147 24-Oct-2015 20151025_166 43.945S 142.477E
 Climatology: CARS2009. Satellite-adjusted climatology: synTS_20151023.nc (1.5d earlier)



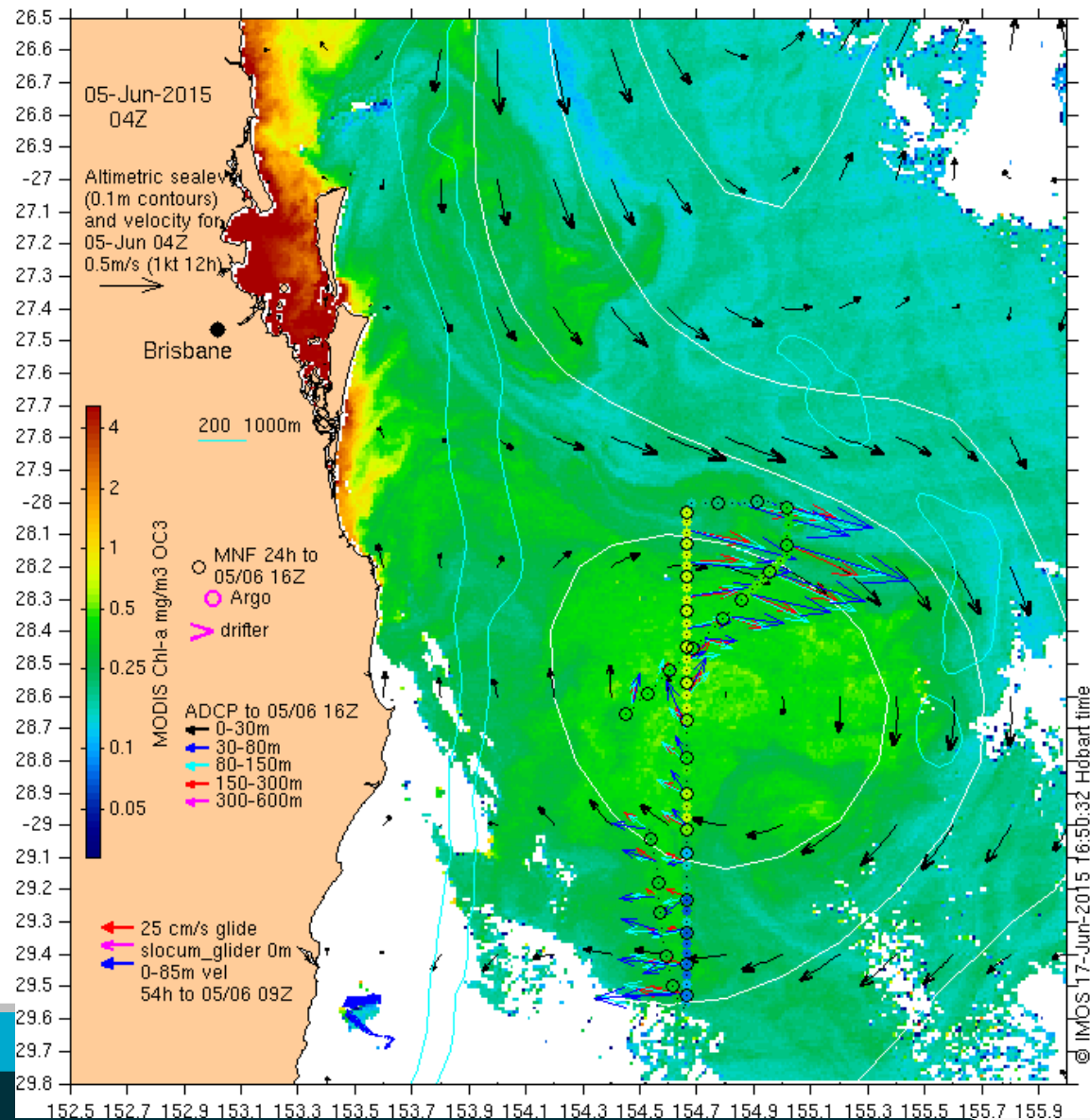
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NRT Application – guiding the Investigator to a small eddy

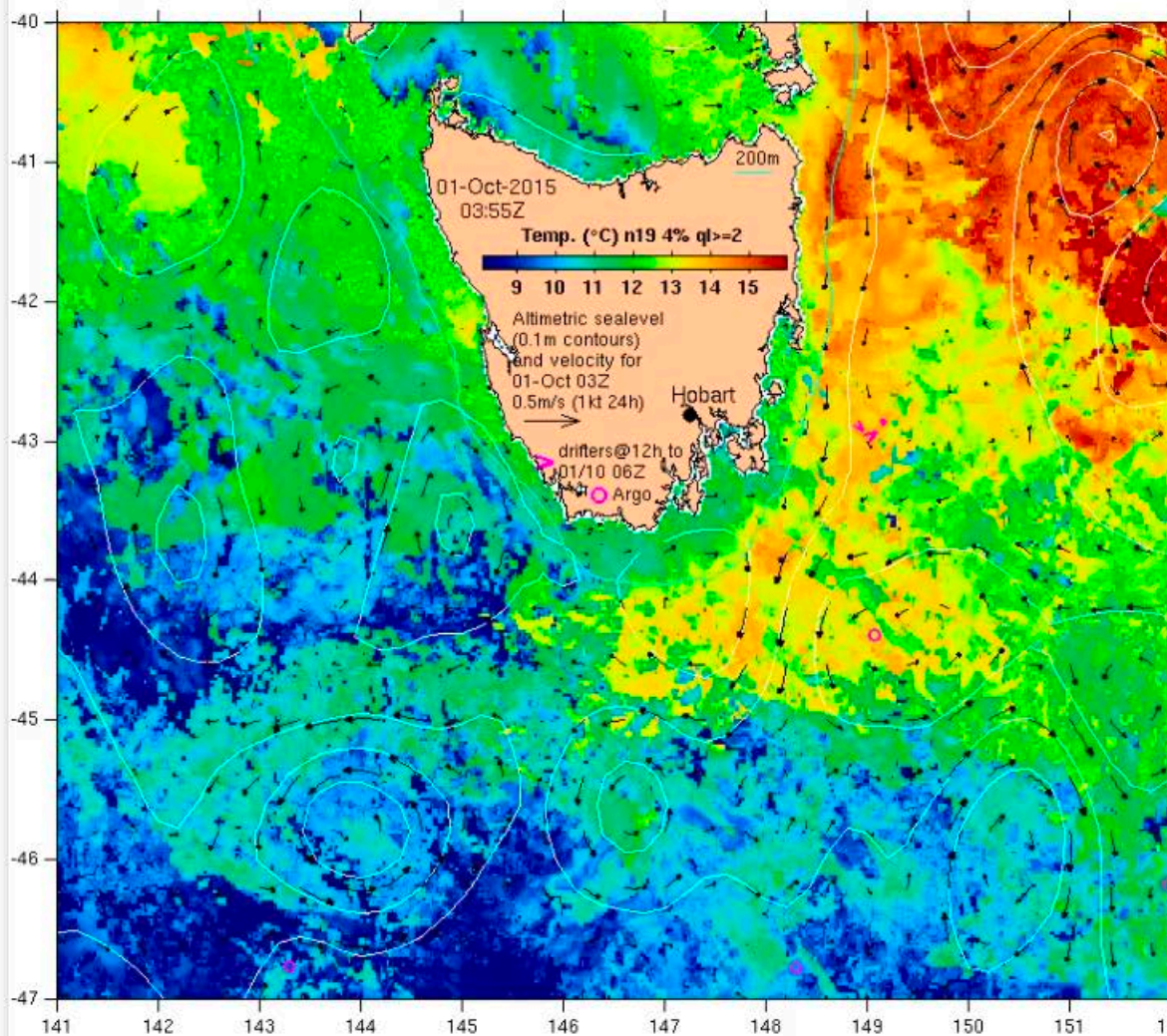
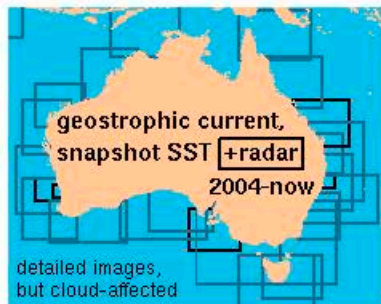
- The PI on RV Investigator used the SST images to guide the ship to features for sampling – this mesoscale cold-core eddy which can be seen in the colour image as well
- the ship's ADCP velocities on this image showing surface currents of ~ 0.8 m/s compared to the geostrophic estimates of < 0.5 m/s
- They also were able to find and sample a much more elusive Freddy-frontal eddy: small, energetic interface between shelf and ocean waters



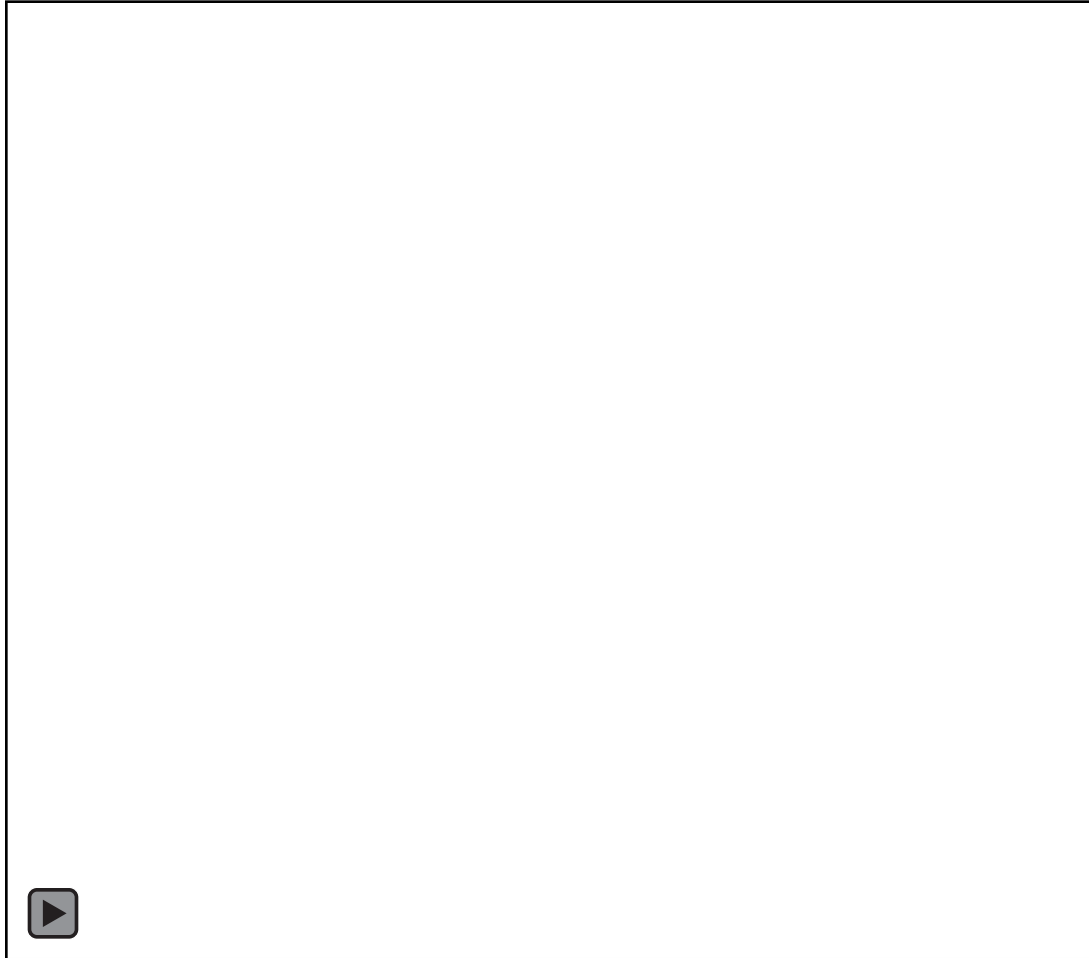
- Sea Surface Temperature
- Ocean Colour
- Animations
- Monthly Mean Anomalies

[permlink](#)

[Date Selector](#)



**you can download an animation
see what water your glider was sampling**

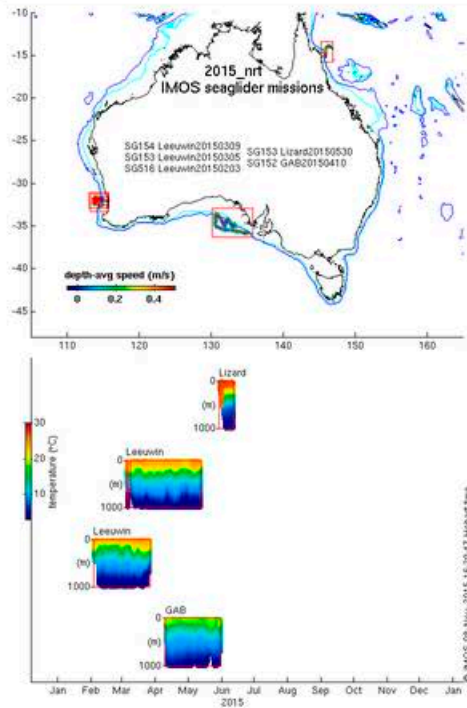


- Argo
- Current Meters
- Gliders

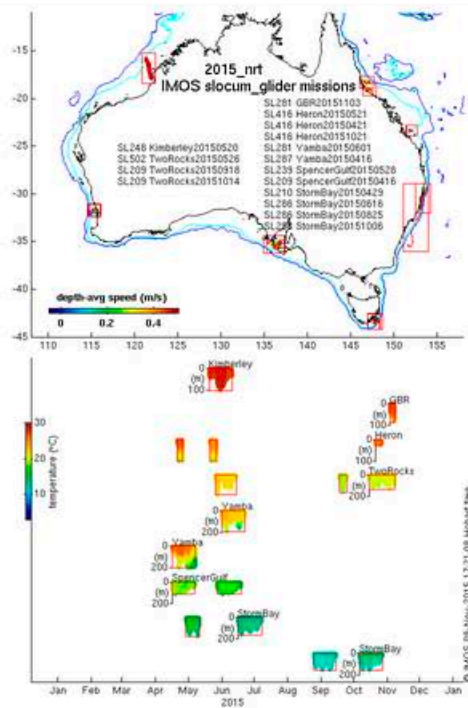
Gliders

[Explanations, revision history, issues, highlights]. The IMOS ANFOG data shown here was read directly from the IMOS data server into Matlab.

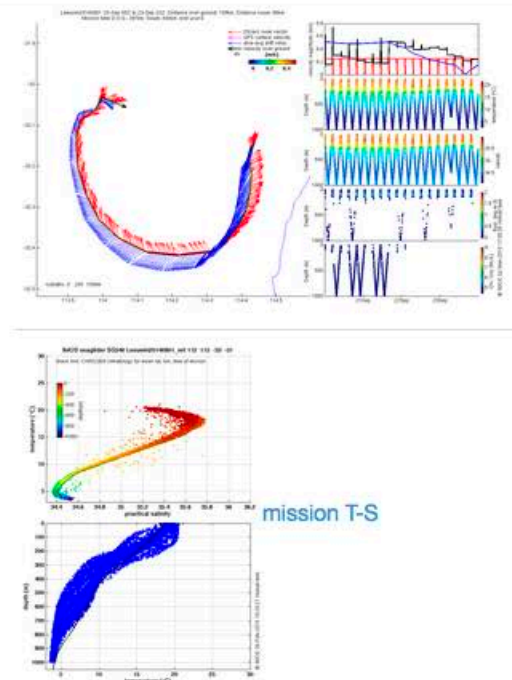
Sea Glider index



Slocum Glider index



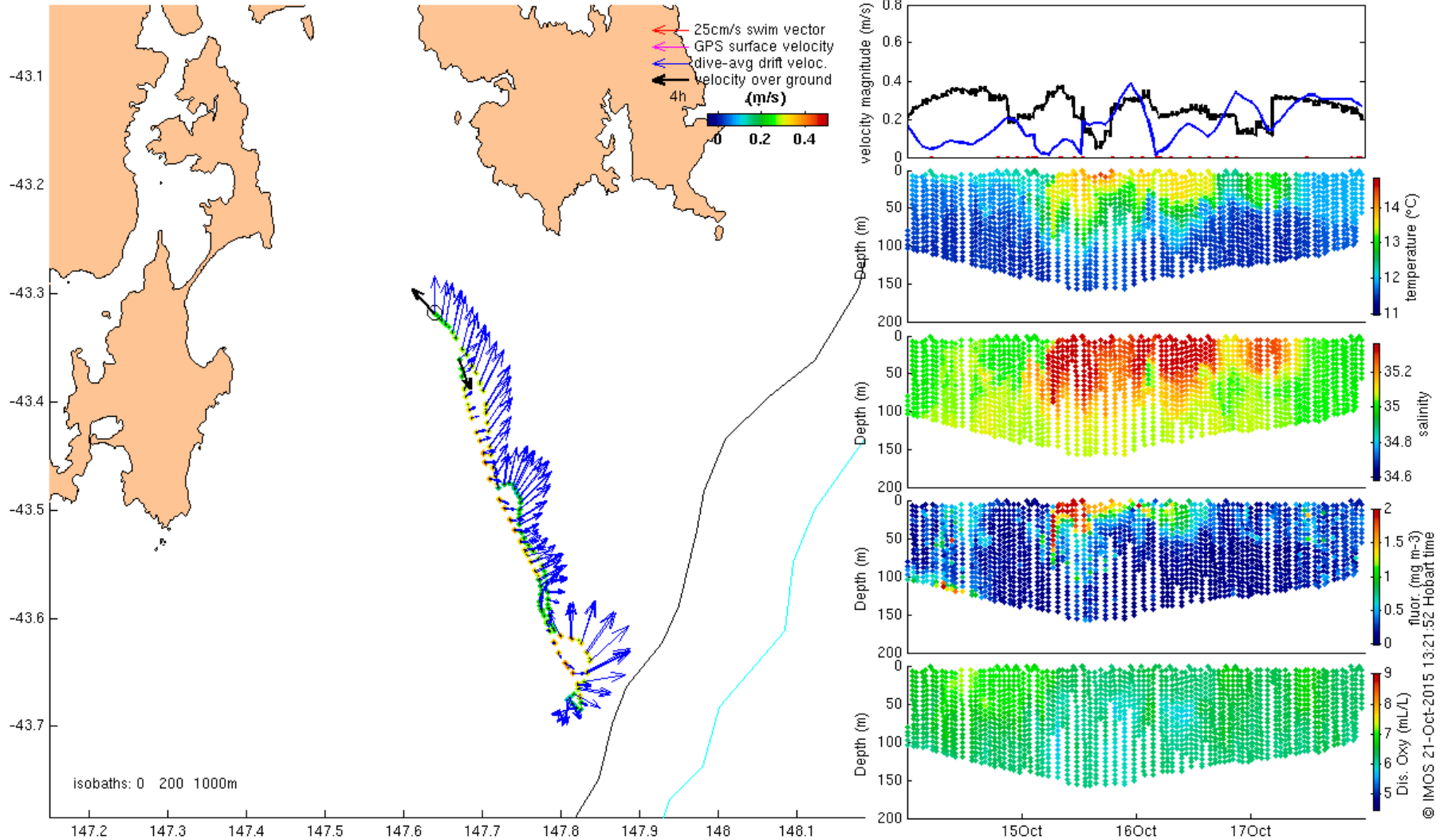
(example) mission data

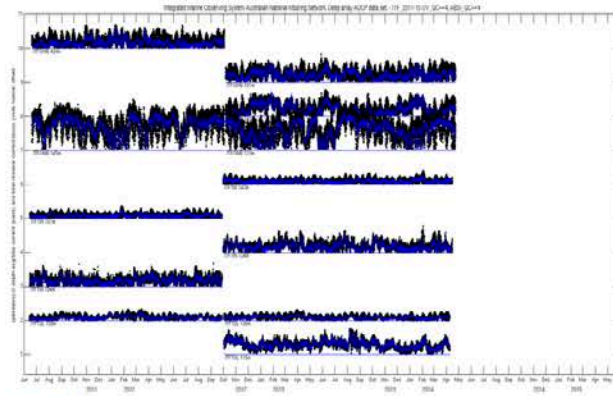
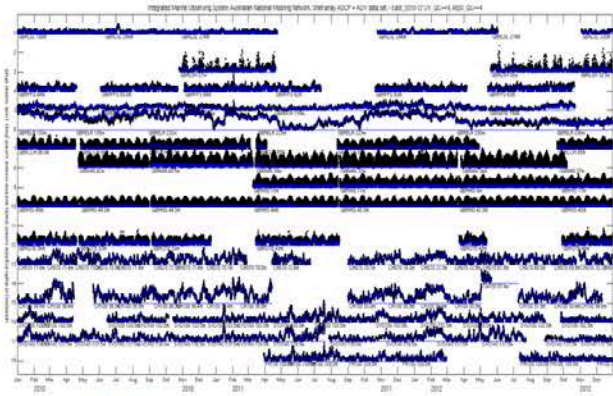


i	date	lat	lon	length	length	T-S	details	glider	vverr	vuerr	nrot	campaign name
	launched	°S	°E	days	km			type	cm/s	cm/s		
1	30-May-2015	14.57	146.12	13	227	T-S	4-day anim	sg	30	17	1	Lizard20150530
2	10-Apr-2015	34.65	132.98	51	1415	T-S	4-day anim	sg	11	13	0	GAB20150410
3	09-Mar-2015	32.01	114.44	65	1488	T-S	4-day anim	sg	12	21	0	Leeuwin20150309
4	05-Mar-2015	32.04	114.95	1	24	T-S	4-day anim	sg	12	18	0	Leeuwin20150305
5	09-Feb-2015	32.07	114.5	50	1444	T-S	4-day anim	sg	10	10	0	Leeuwin20150209

[PREV] [NEXT] [DATE INDEX]

StormBay20151006 14-Oct 00Z to 17-Oct 23Z. Distance over ground: 88km. Distance swum: 86km.
Mission total D.O.G.: 273km. Swum: 259km. nrot ucur:0



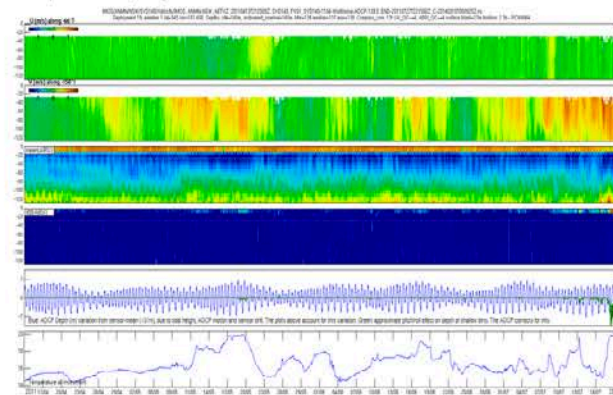
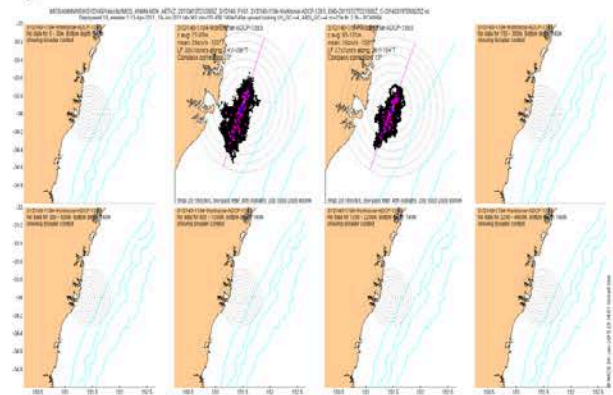


Use the [text index](#) or the calendar above to see both:

1) multi-depth-layer map views of the velocity (with and without tides),
e.g.:

[text index](#)

2) depth-time plots of velocity (resolved along subtidal major and minor axes), backscatter, depth and temperature, e.g.:



Updates

2 Feb 2015 Many new (especially ITF, KIM and PIL arrays) and/or re-processed (especially NRSKAI) ANMN data added. The updated [\[time index\]](#) page shows the magnitude of tidal residual currents after timing errors in a few data sets have been corrected.

29 Jan 2015 Tidal analysis has now been performed on all the ANMN velocity data (using the excellent [uTide](#) package). Summaries of the analyses have been added to the [details](#)

Thank you for your attention

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E madeleine.cahill@csiro.au

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