

New Zealand Drifting Buoy Programme

DBCP - 2014

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Outline

- Drifting Buoy programme
- Drifters current location
- Drifter lifetimes
- Island Moored Drifters
- Deployment Options
- Drifter Behaviour - Tasman Sea.

MetService Drifting Buoy Programme - Objectives

- To provide quality real-time marine data for NZ Forecasting Operations.
- Maintain Network of 10 Drifting Buoys.
- Monitor accuracy and location of drifters.
- Provide data internationally for input to Global Forecasting Models and for Climatological and Research applications.

MetService Drifting Buoy Programme

2013 – 2014

Deployed 8 SVPB – Operational – 9 (10 current)

2014 – 2015

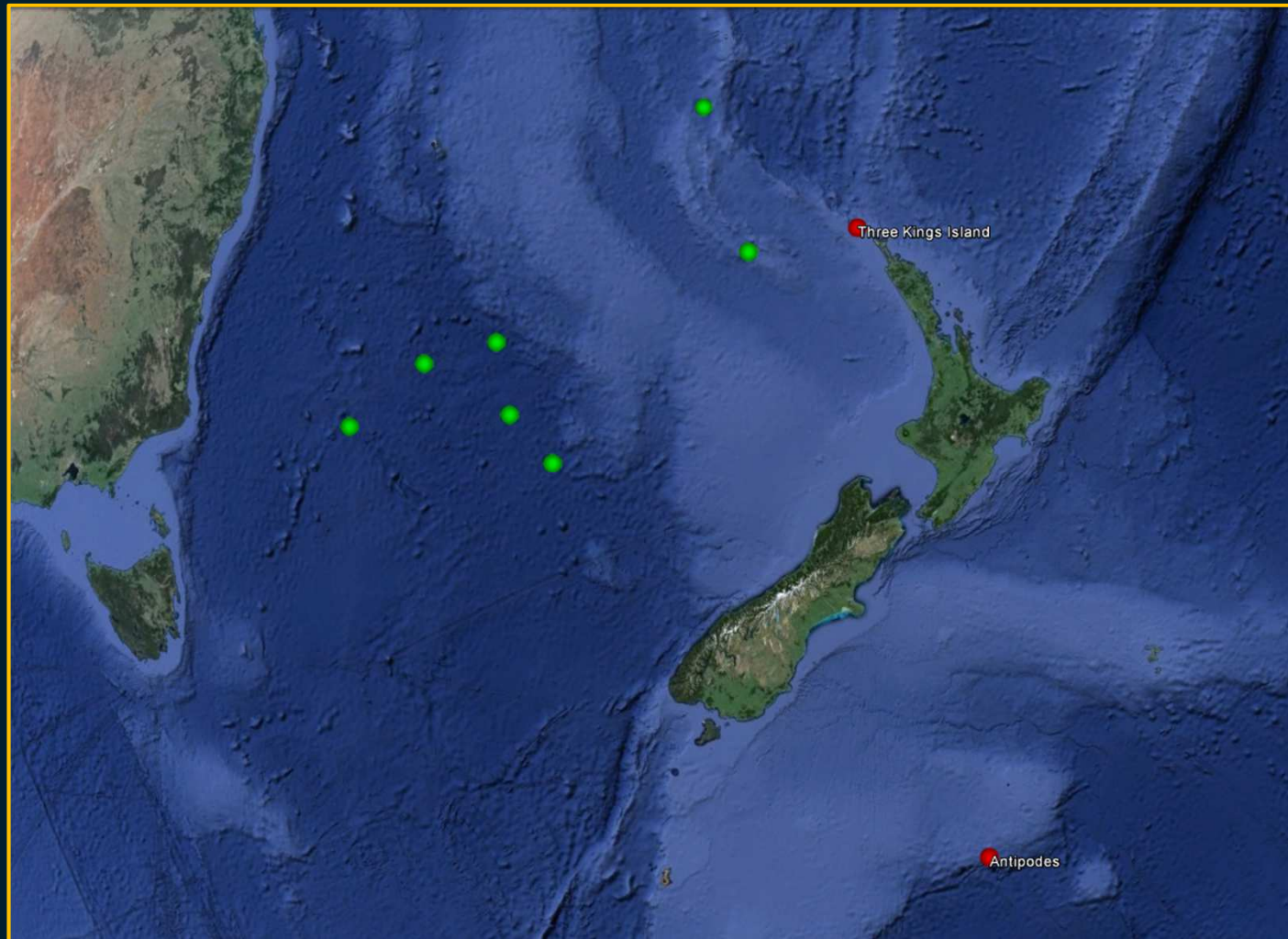
MetService – 5 SVPB

MetService Barometer Upgrades – NOAA – 10 SVPB

MetService deployments for GDP – NOAA – 10 SVPB

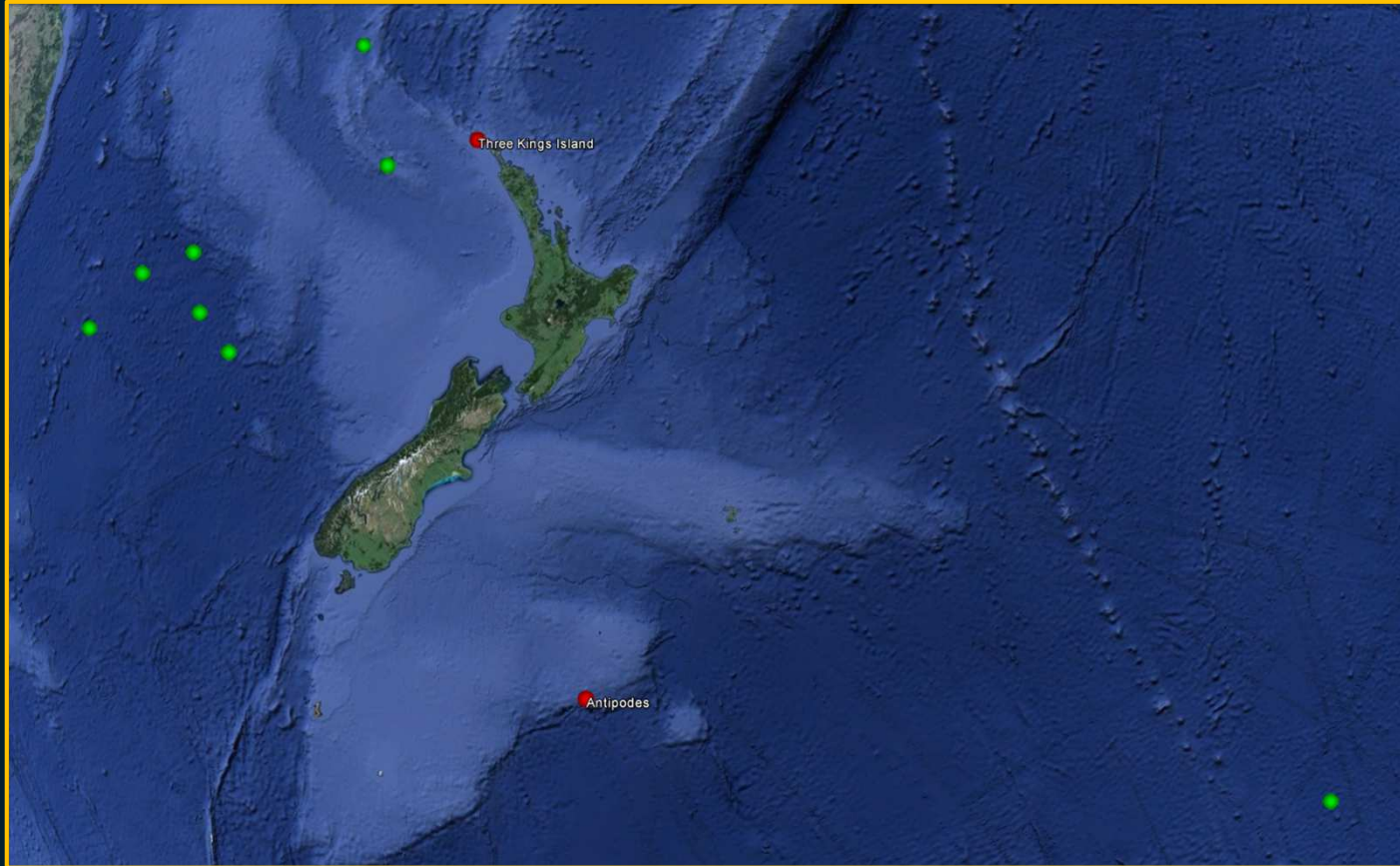
MetService Drifting Buoy - Locations

Tasman Sea — October 2014



MetService Drifting Buoy - Locations

All — October 2014



MetService Drifting Buoy Programme - Lifetimes

Marlin Yug – Argos

Still going – Deployed June 2012 – 28 months

Marlin Yug - Argos – redeployed after 1 year in storage.

pressure sensor fail with a total of about 11 months of active life.

Marlin Yug - Argos – beached after over 18 months in remote area.

Battery failure possibly due to heat on sheltered rocky beach.

MetOcean - Iridium Moored on Antipodes

23 Months until buried by landslide a month before a planned replacement and redeployment.

MetService Drifting Buoy Programme – Island Moored

Currently have 2 SVBP : only sends AP to GTS.
Cut off drogue – Hauling up hills and helicopter.
Replace every 2 years on annual trip.
Redeployment on return after replacement – SST to GTS.



Why?

Cheap version of an AWS.
Easy to transport and install.
Complies with Conservation Dept.
Handles the Weather.



(NZ MetService does not have any Ocean moored or Met Tsunami buoys)

MetService Drifter Programme – Deployment Ships

ANL BENALLA – Trans Tasman

Travels every 3 weeks.

Wellington to Melbourne



RNZN WELLINGTON – Sub Antarctic

Travels once a year.

Sub-Antarctic Island for Annual MetService equipment servicing



OOSTERDAM – Southern Tasman

Travels twice a year.

South of South Island to Tasmania



MetService Drifter Programme – Deployment

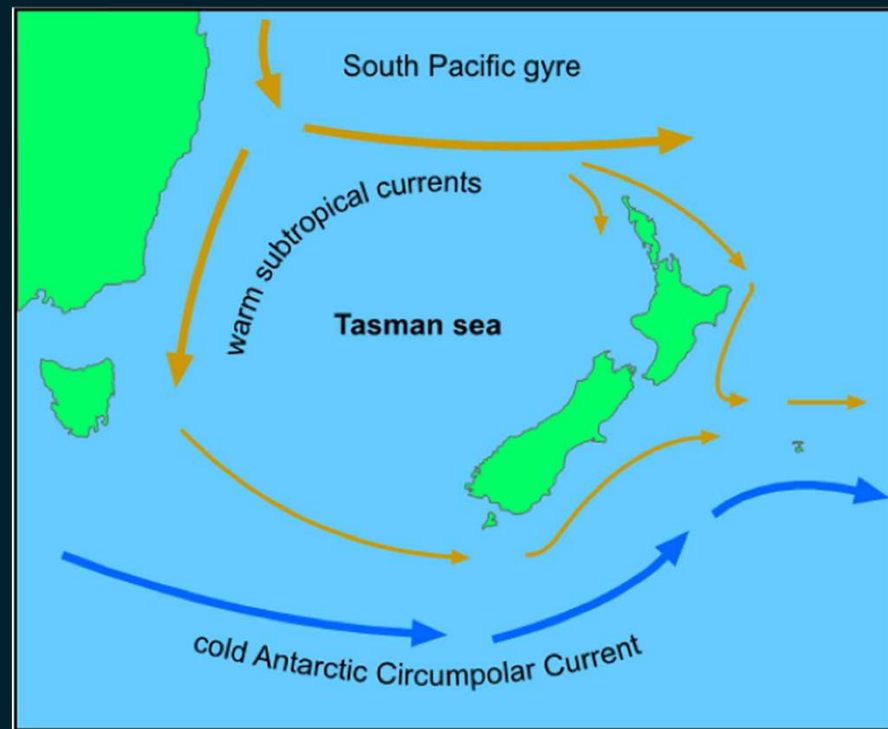
Oosterdam – February 2014 – The Human Face



If it wasn't for them we wouldn't be here.!

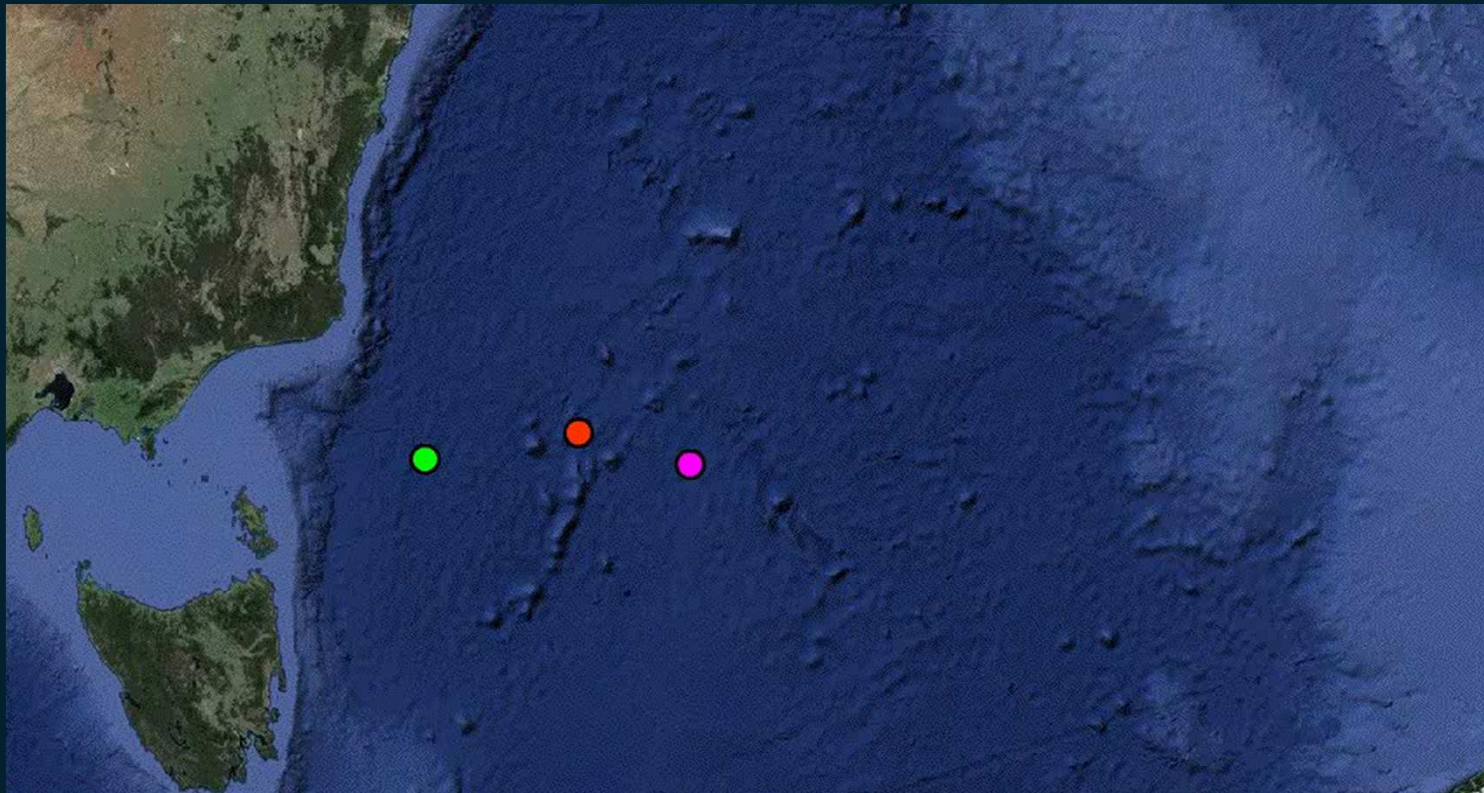
Drifter Behaviour – Where do you deploy them and where do they go?

- No instructions of where to deploy just a verbal note mentioning as far South as you can get and close but not too close to Tasmania
- No idea of where they go and their behaviour.
- Only had this current picture regarding currents:



MetService Drifter Programme – Animation

- MetService Drifting Buoys – Tasman Sea – November 2013 – June 2014
- Only 3 out of the 7 – track only – does not show speed variability.
- 6+ Months in 30 seconds.



Thank you....!