

June 16-25, 2014  
RV Tangaroa (NIWA)  
Wellington to Auckland  
Joint N.Z./U.S./Aus voyage  
Total steaming: 4 days  
Total station time: 4 days  
P. Sutton, NIWA

### Objectives:

- (1) Compare CTD measurements of the SBE 61 CTD to the SBE 35 and SBE 9/11 to confirm SBE 61 (early model) performance.
- (2) Deploy prototype Deep Argo floats in 5600 m water depth

## **Temperature:**

Deep ocean static accuracy will be determined by comparison with the SBE 35 arranged “head to head” with the SBE 61 at appropriate (20 mins) water sample stops.

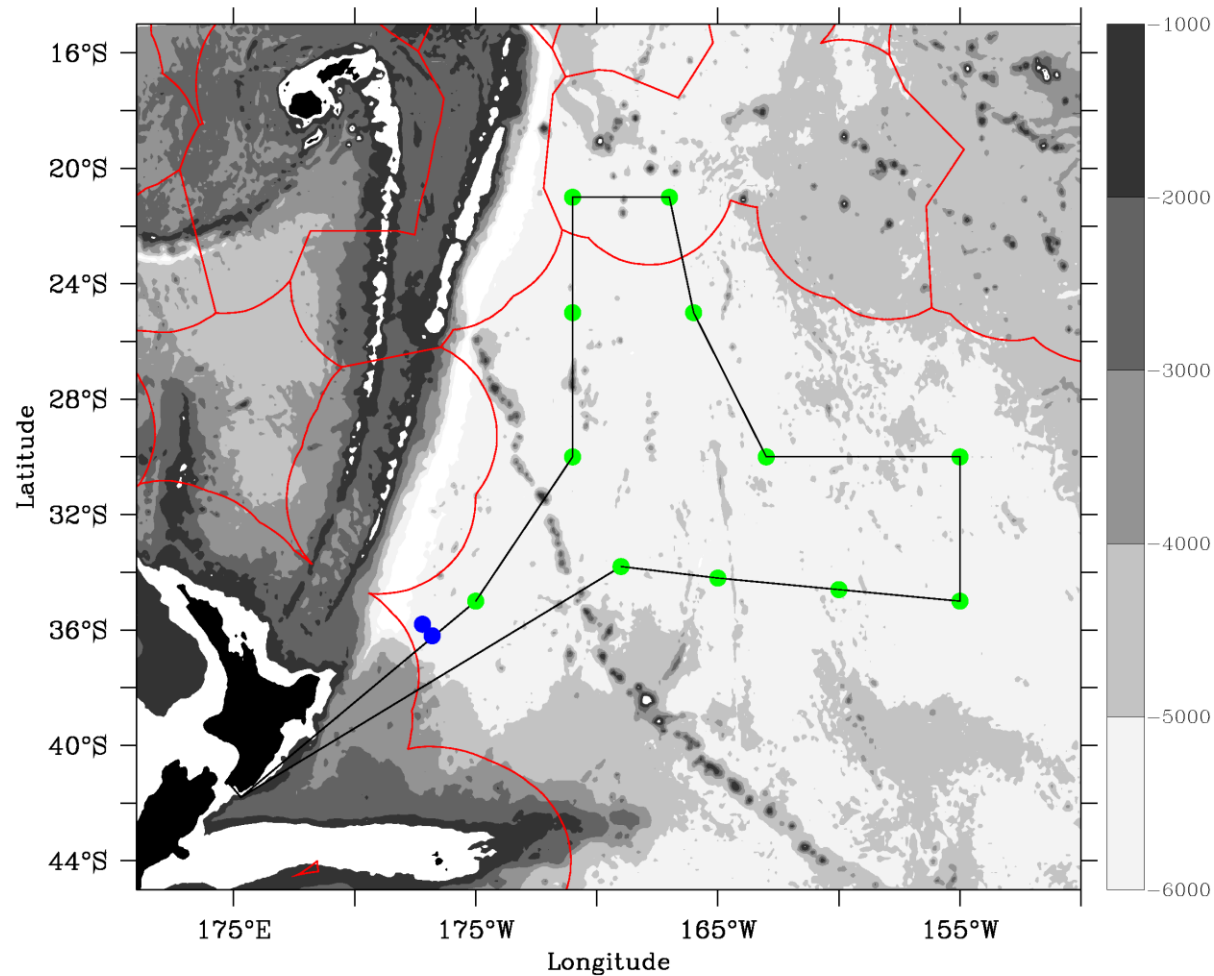
## **Conductivity:**

The accuracy of lab cell compressibility measurement will be determined by comparing SBE 61 conductivity with a specially constructed SBE 4 with known compressibility.

An experiment will also be fielded to measure the thermal mass of the conductivity cell and propose correction coefficients appropriate to the SBE 61.

## **Pressure:**

Pressure will be compared to the Digiquartz for both accuracy and response to temperature.



A possible regional pilot array of 12 floats to be deployed ~mid-2015.

2014 prototype deployments could be recovered after 1 year of rapid cycling for recalibration.