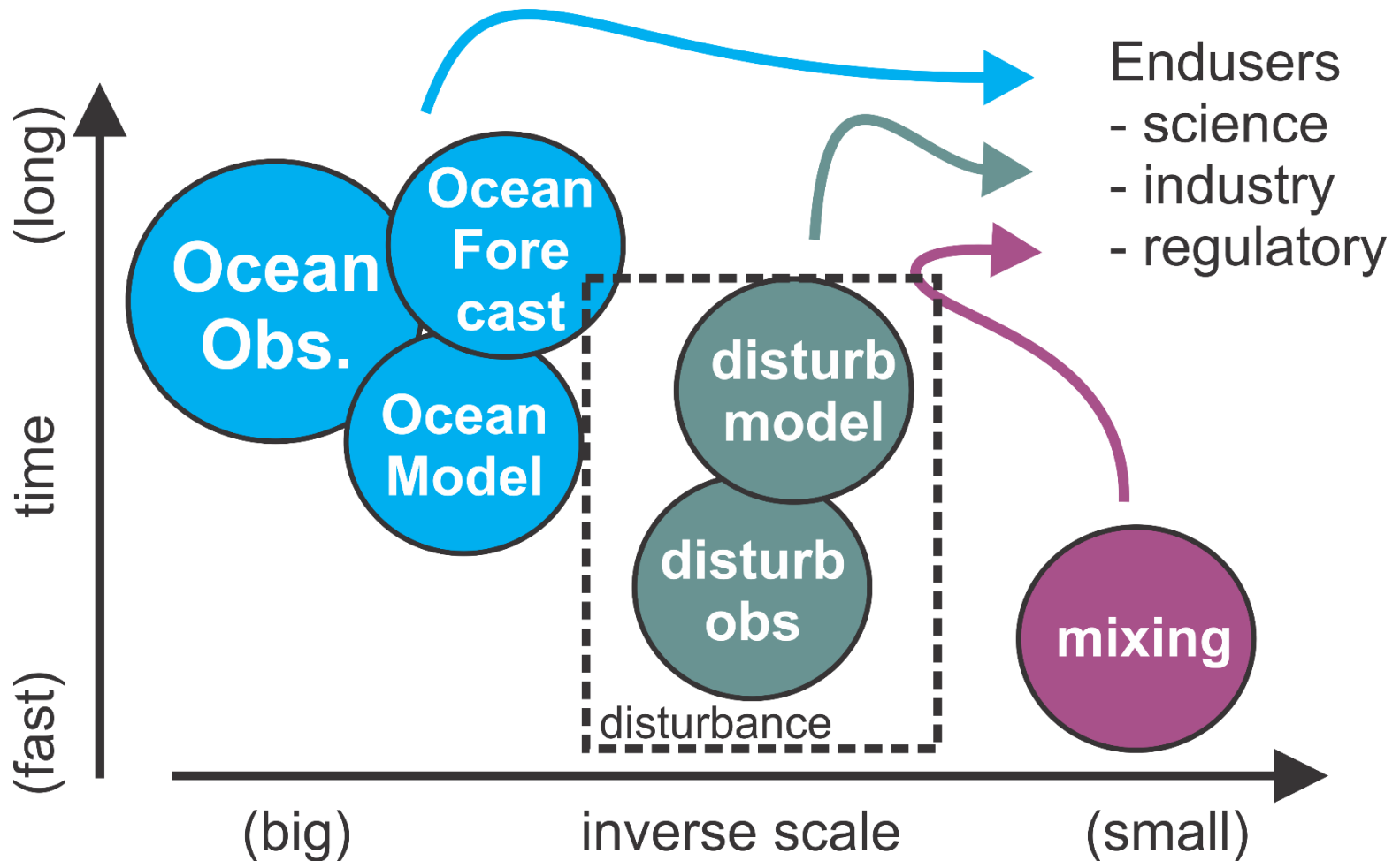


## 4.2.2: Stressor Footprints & Dynamics

### Craig Stevens

# Getting from observing systems, through models, to endusers



# NZ “Best Team”

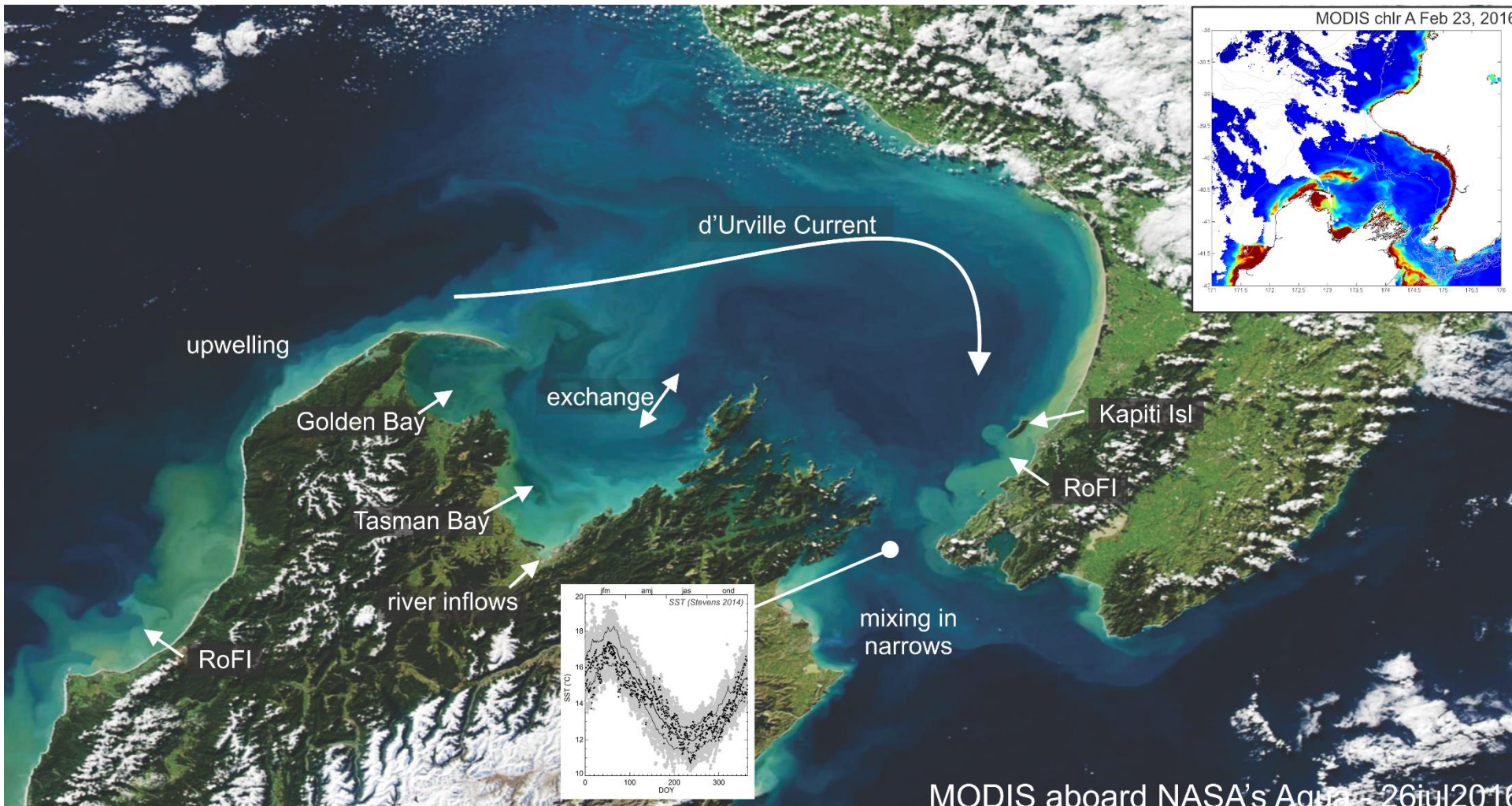
Best team – NIWA,  
Cawthron, MetOcean,  
Otago\*

Available info – datasets,  
models, situation, gaps

Alignment – NIWA C&O,  
vessels, gliders, ROMS  
(EEZ & Near-field) etc.



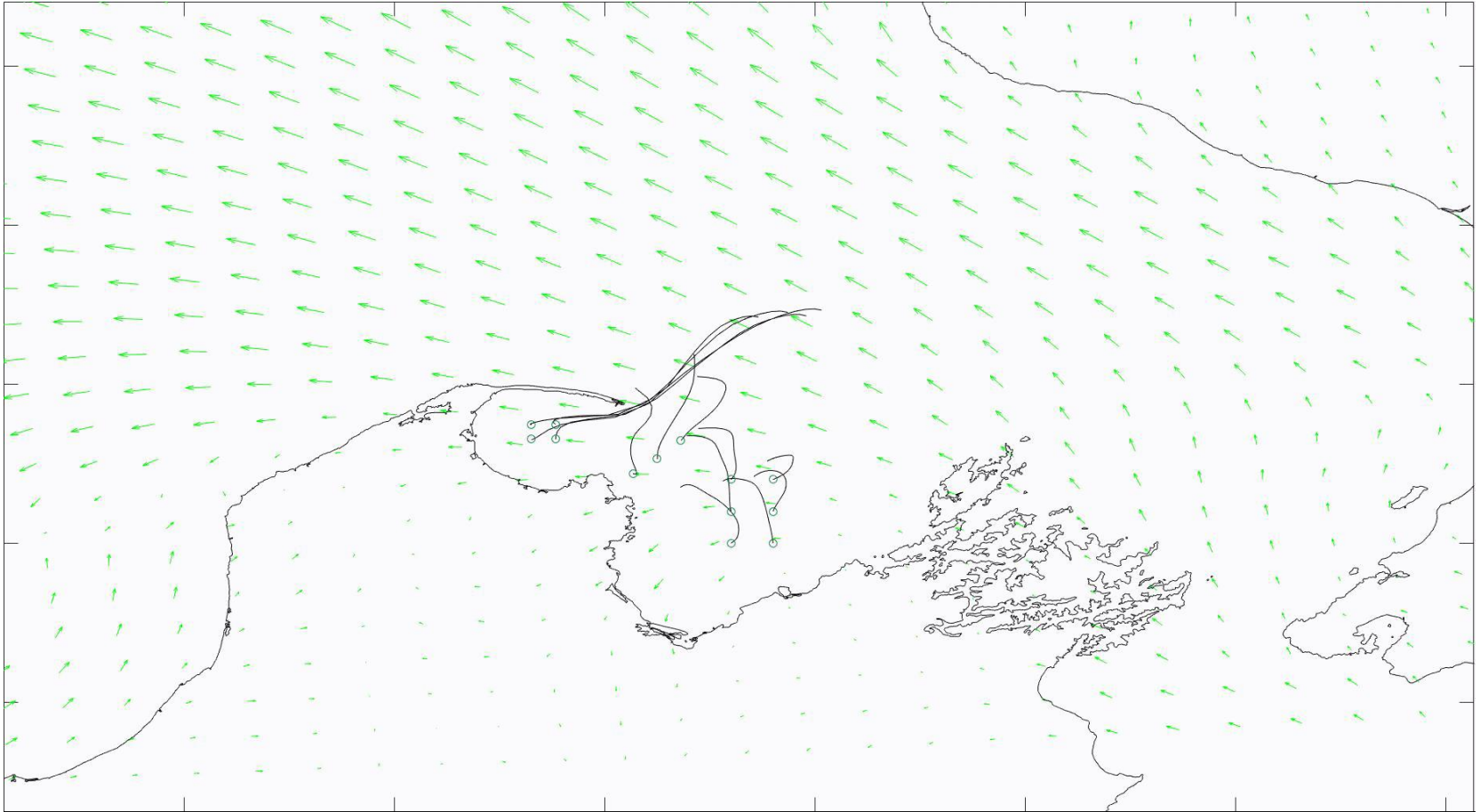
# The Focal Region and its Dynamics



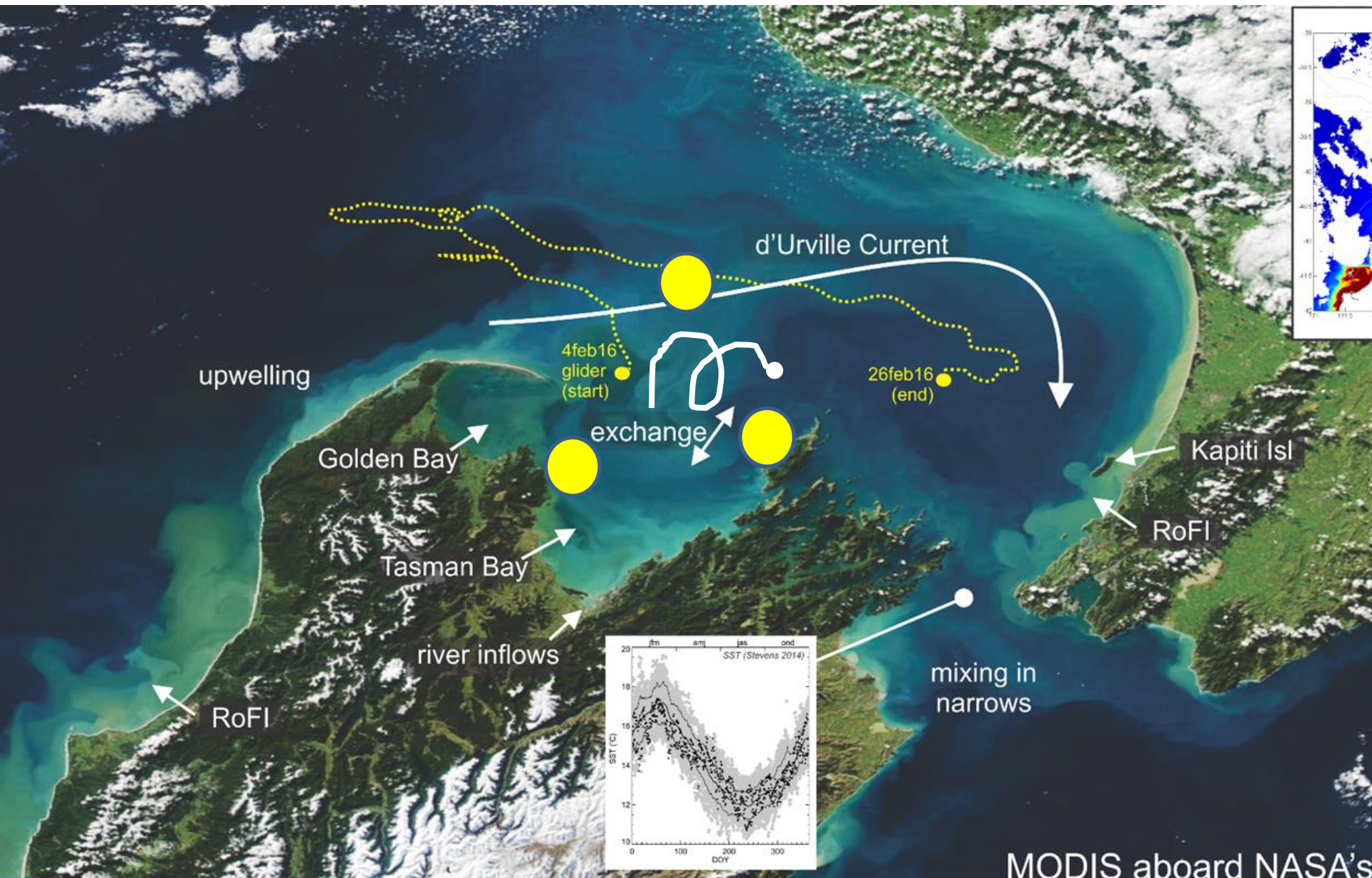
MODIS aboard NASA's Aqua 26 Jul 2016

# Simulations

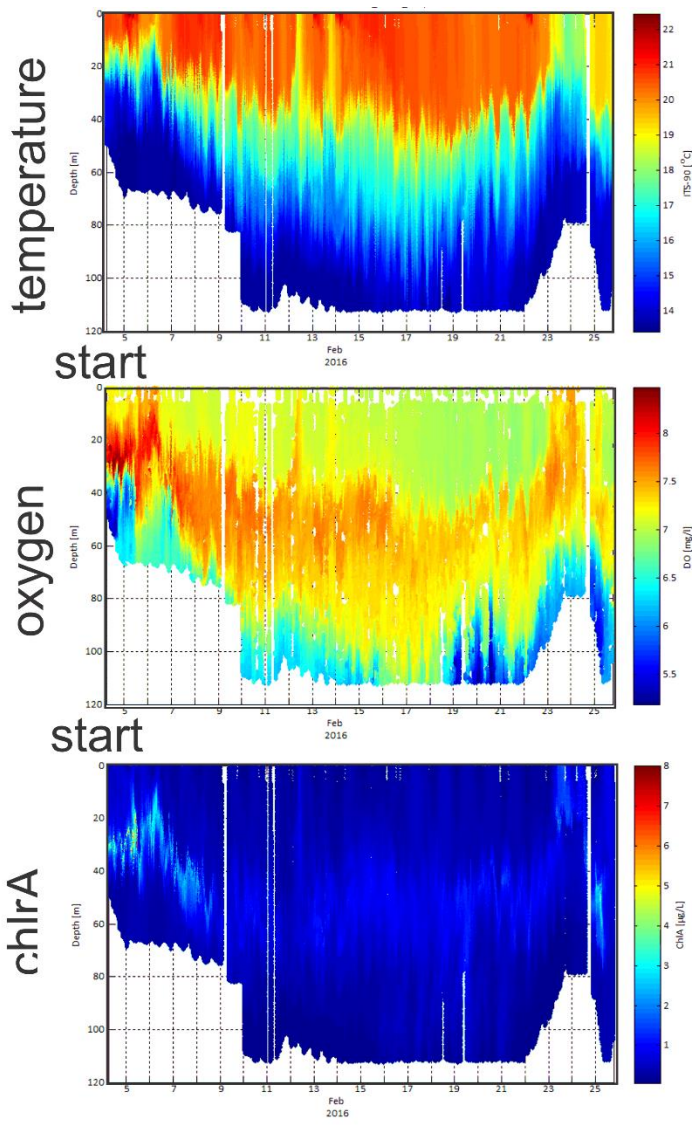
Steve Chiswell



# Observations are Everything

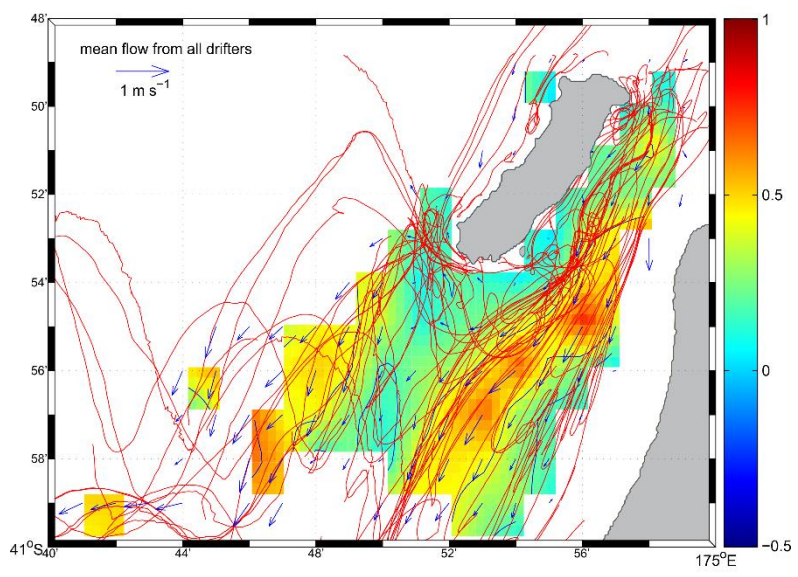


Joe O'Callaghan

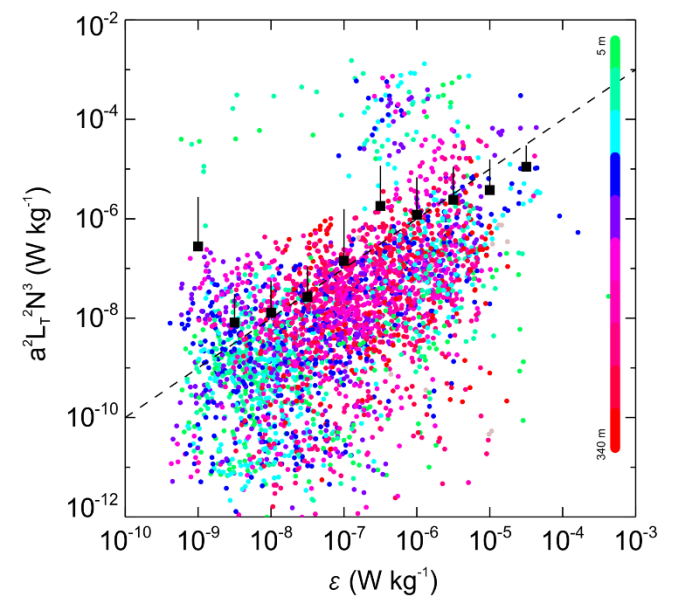


Glider Transect Data - Feb. 2016 - showing shoaling thermocline, low DO intrusions and possible upwelling signatures. See glider track on main image.

Steve Chiswell



Drifter synthesis from south of Kapiti Island (Chiswell & Stevens 2010).

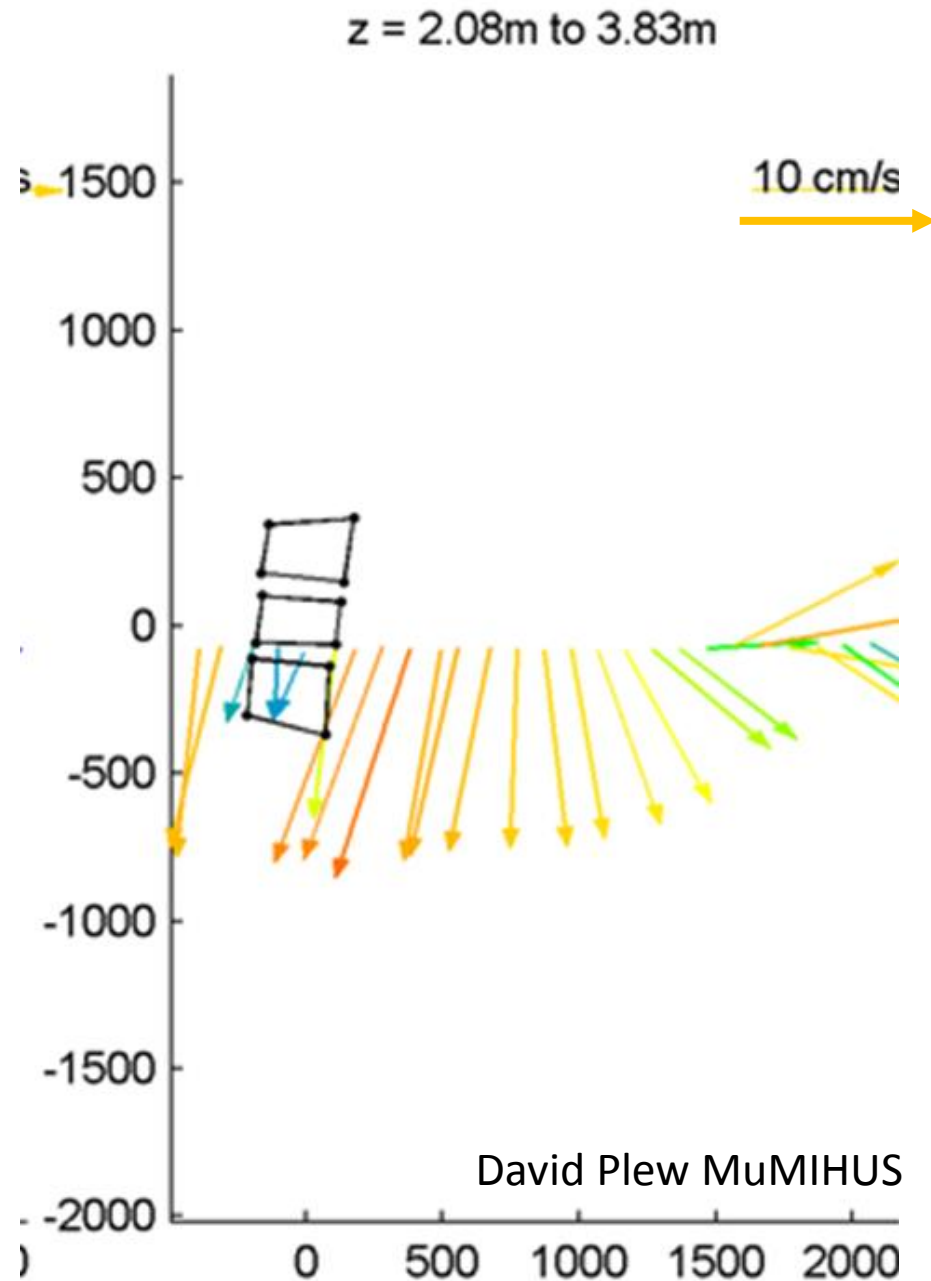


Craig Stevens

Turbulent kinetic energy dissipation rate from the centre of Cook

# Supporting the Mission: Meaningful Footprints

- Get Topography “right”
- Get background flows “right” (including stratification)
- Get activity impact “right”

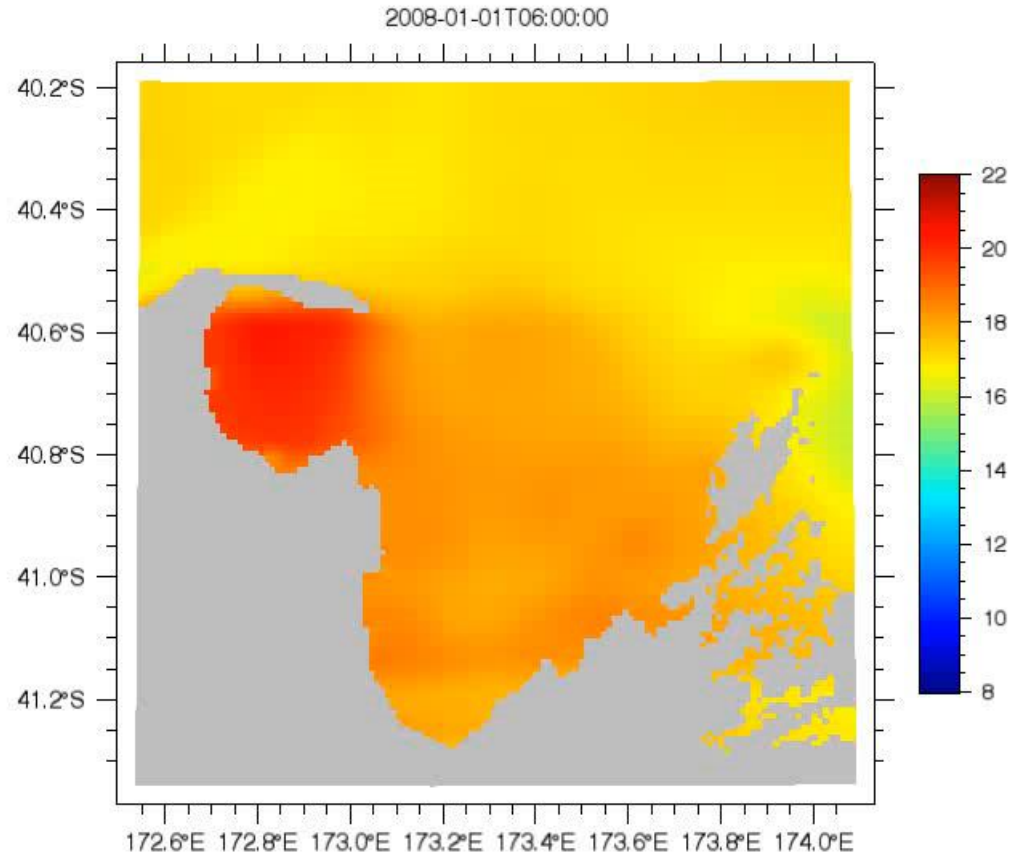




# Products

Mark Hadfield

MetaData  
Model “Hindcast”  
Glider Surveys  
Baseline Timeseries  
FootPrint Support  
Papers &  
presentations  
Outreach



# Best Team

Joe O'Callaghan, Steve Chiswell, Ross Vennell, Ben Knight, Peter McComb, Dave Johnson, Dave Plew, Mark Hadfield, Graham Rickard, Helen MacDonald, Mike Brewer, Brett Grant, Fiona Elliott, Erik Behrens.

Aligned: NIWA C&O SSIF.

