

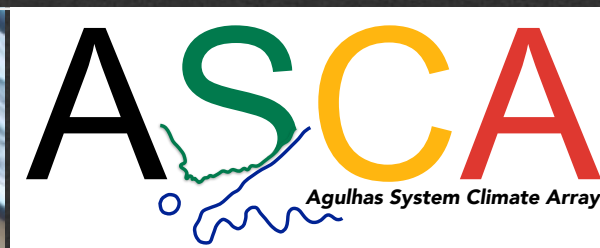
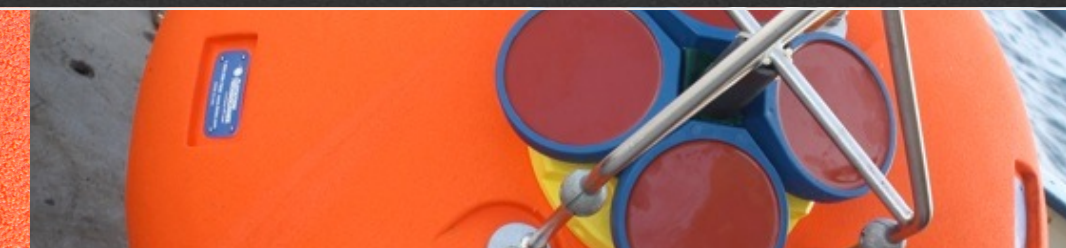
# Status and Plans for observations in the subtropical and southwestern Indian Ocean

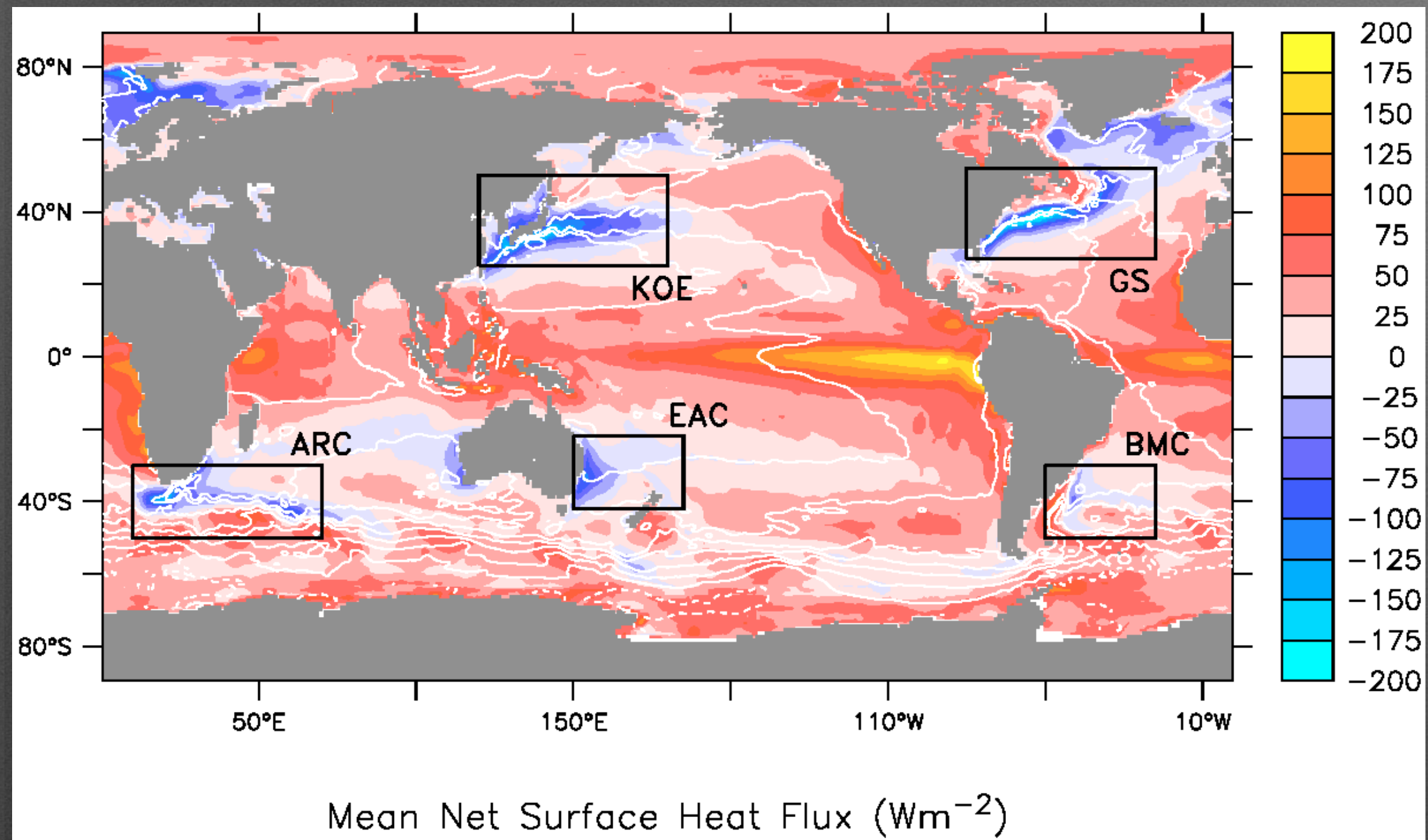
Lisa Beal

Rosenstiel School of Marine and Atmospheric Science, University of Miami

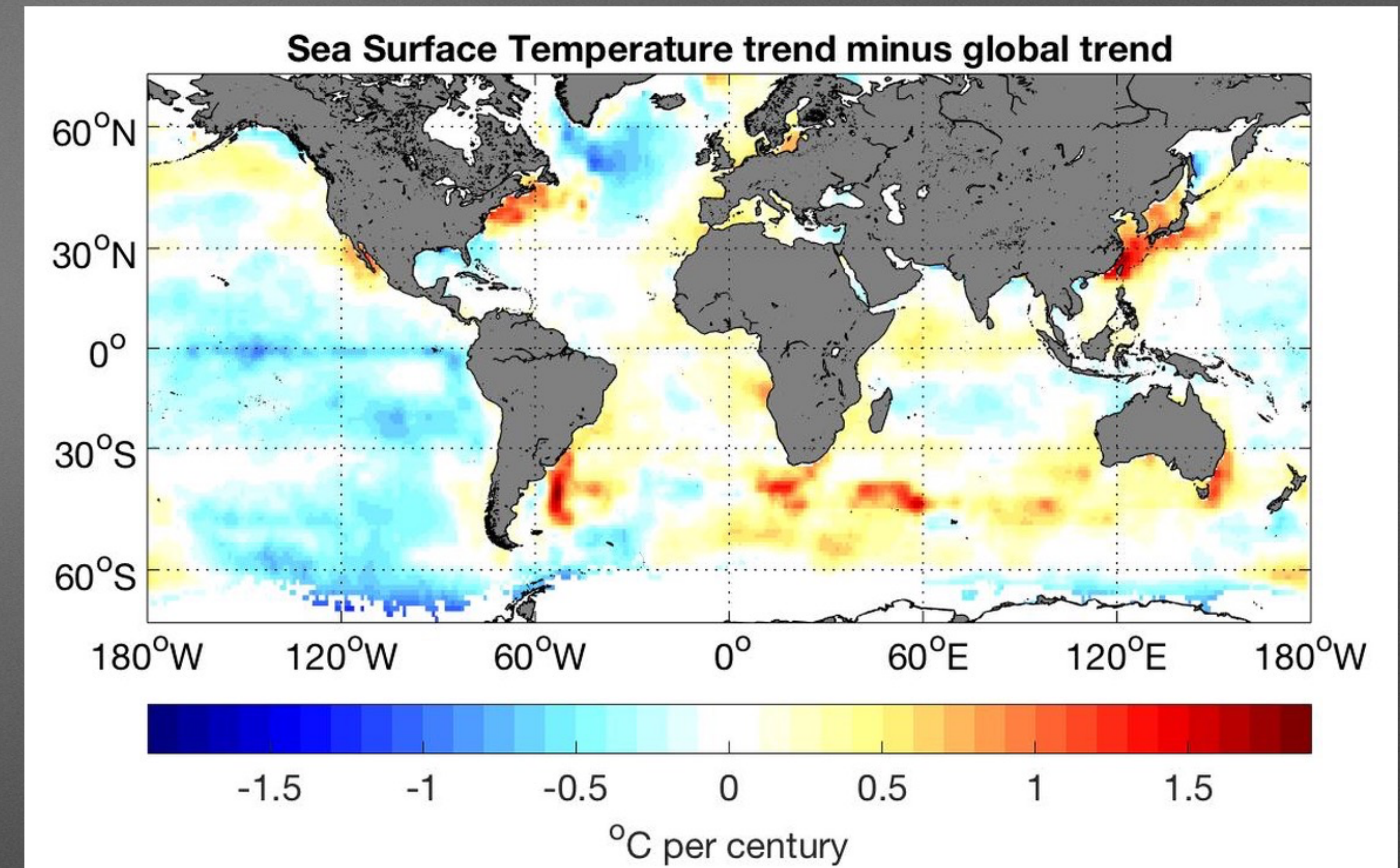
Lisa Beal, IIOE-2 Workshop Sept 2017

Rosenstiel School of Marine and Atmospheric Science, University of Miami

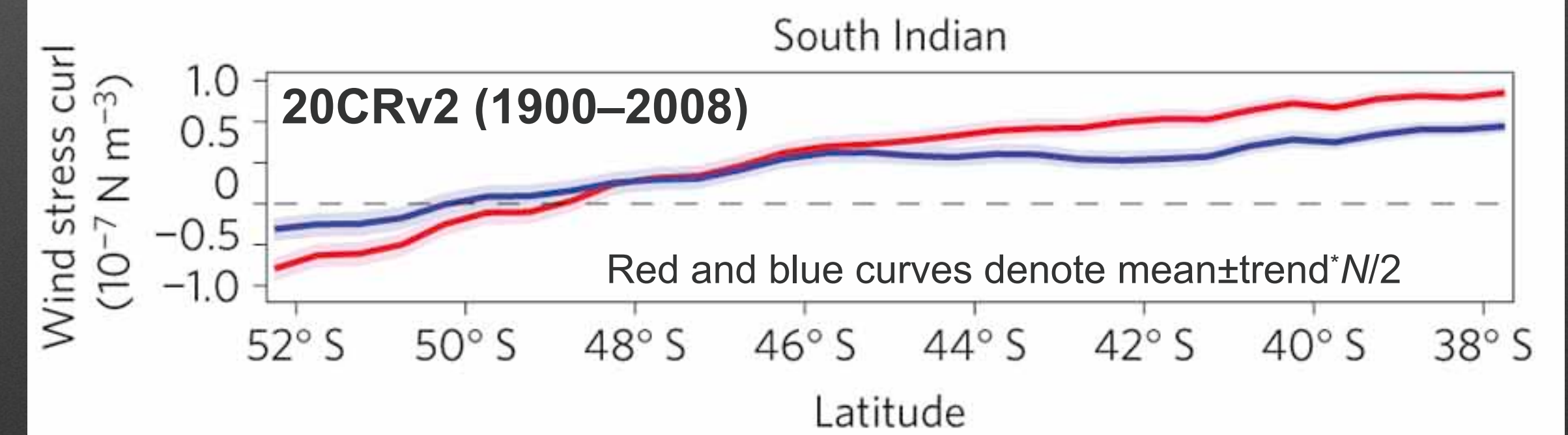
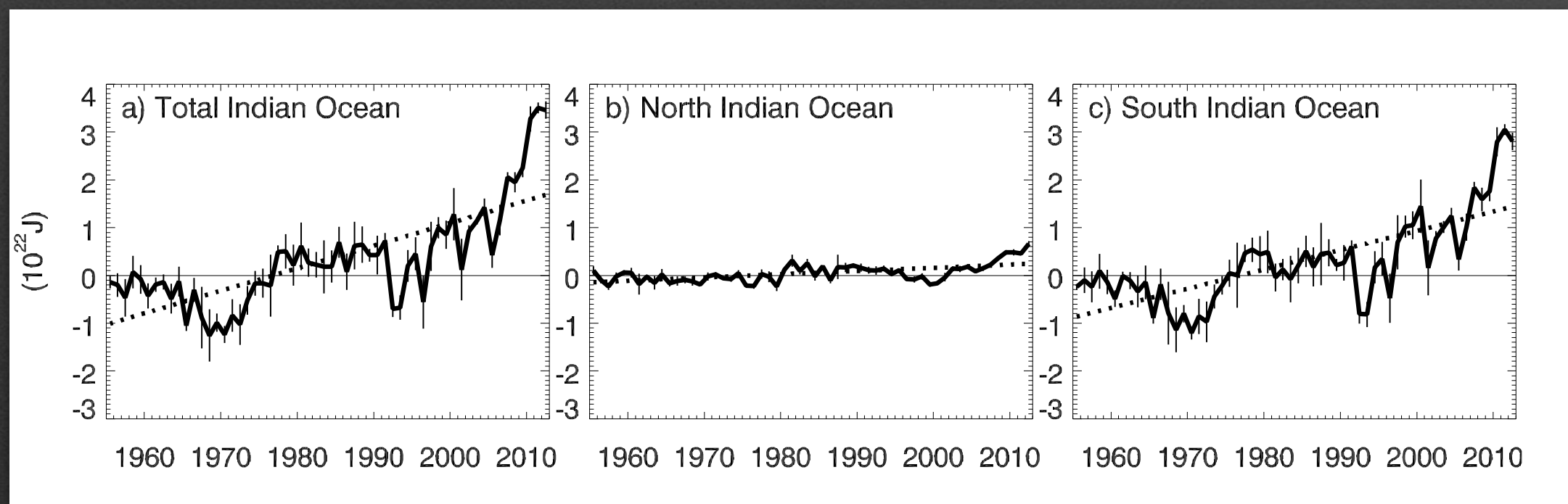




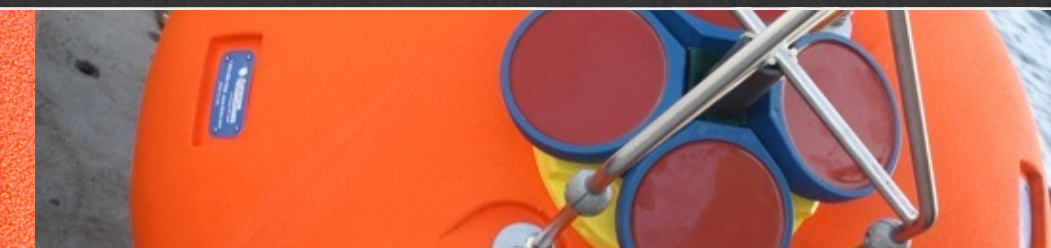
Courtesy, Cronin



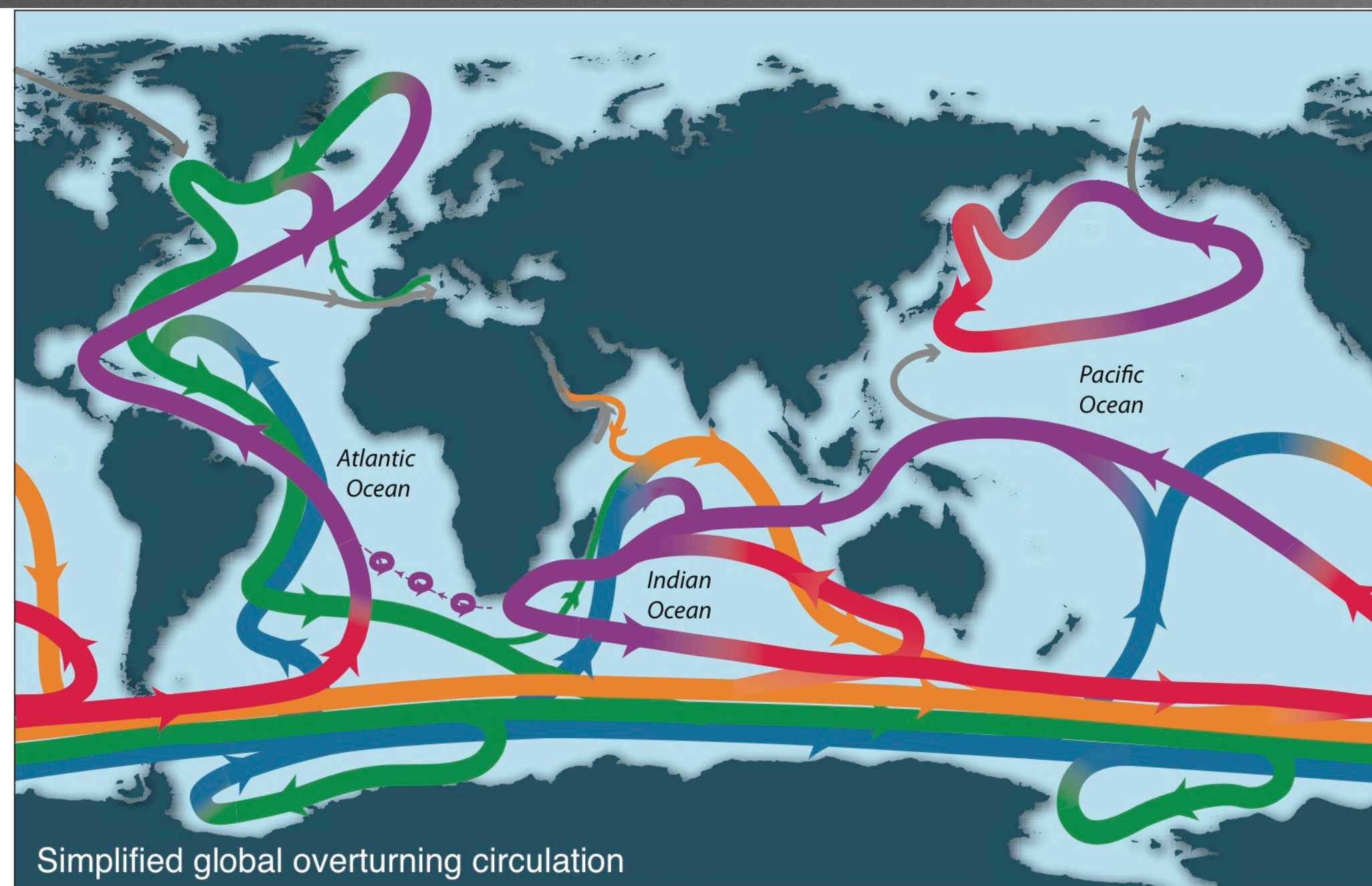
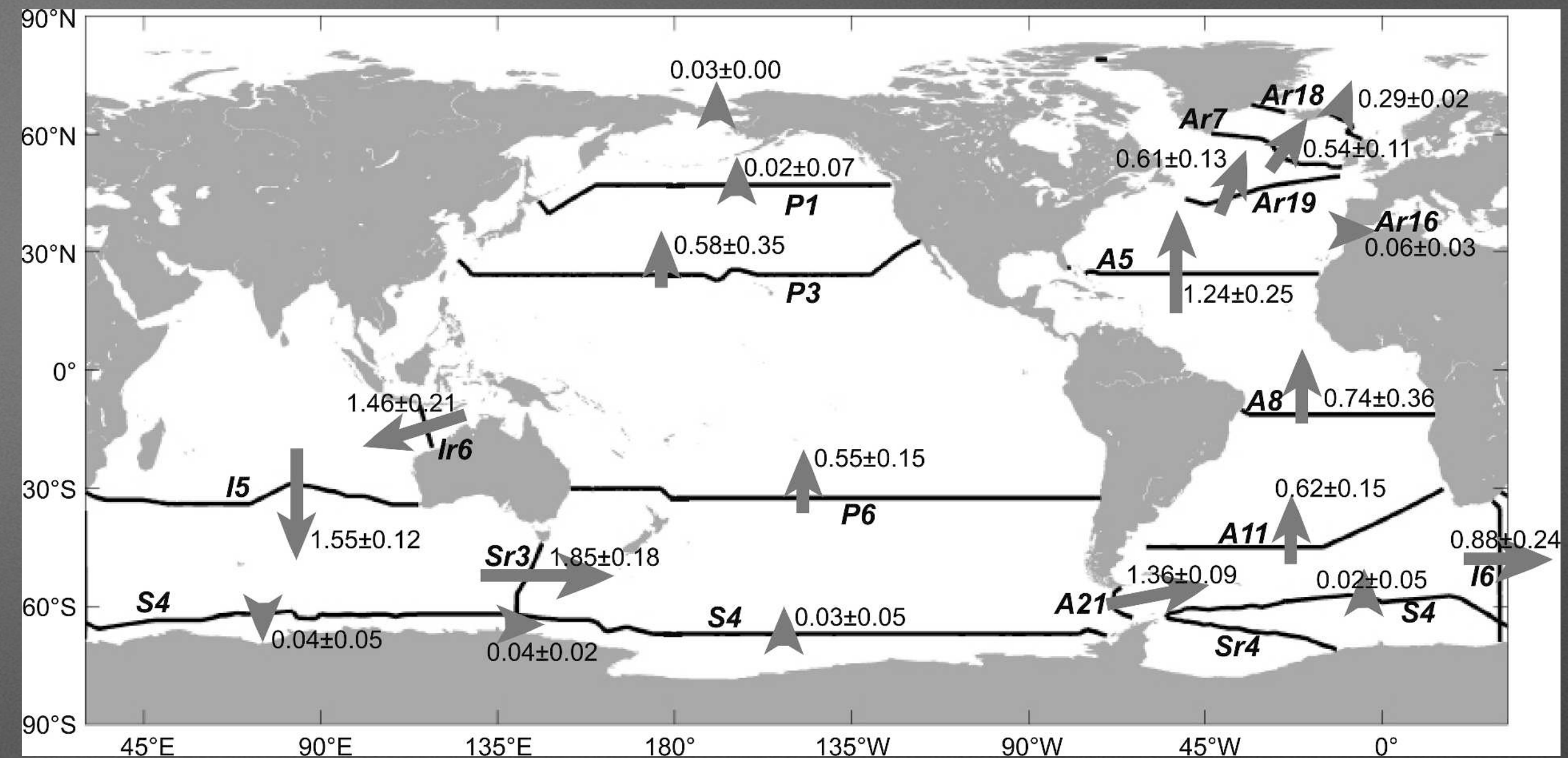
Heat content 0-700 m. Levitus et al, 2009



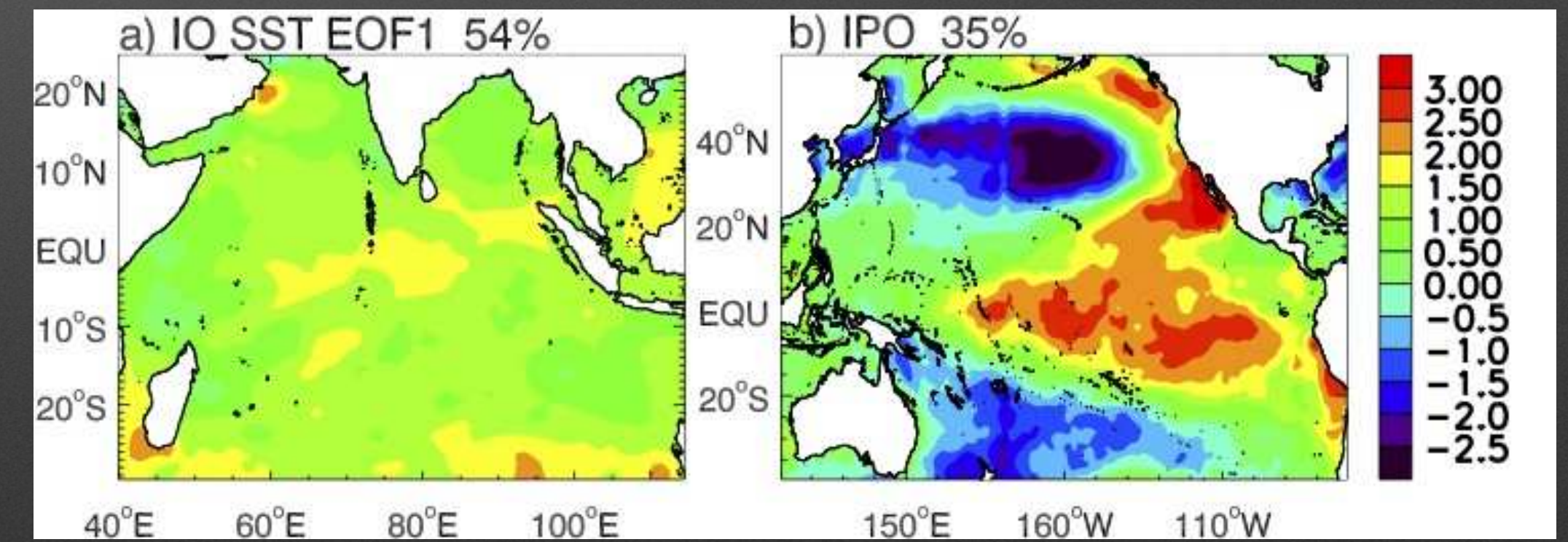
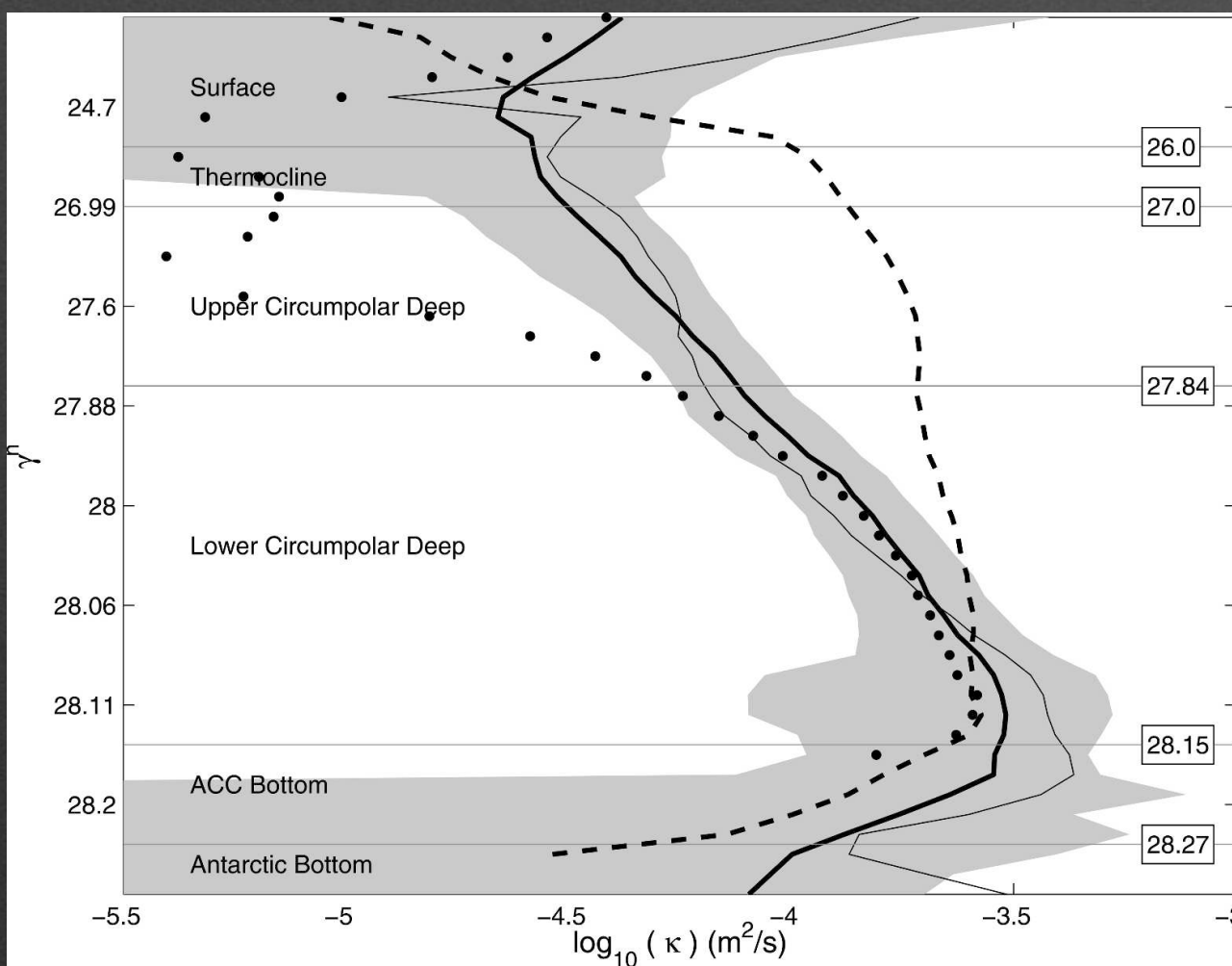
Wu et al, 2012



Lumpkin & Speer, 2007



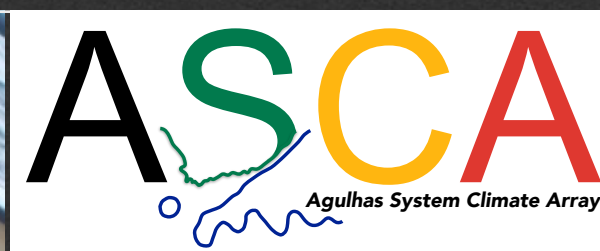
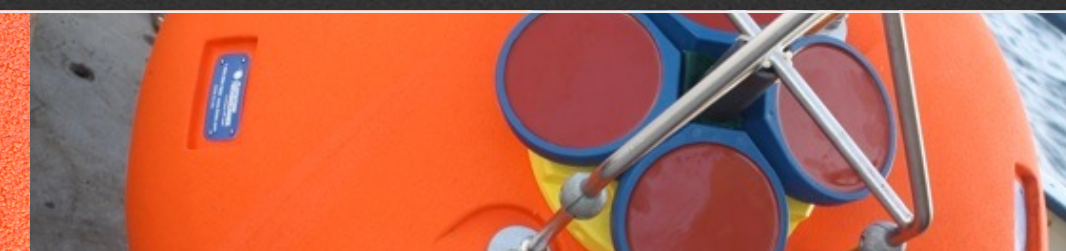
Talley, 2013



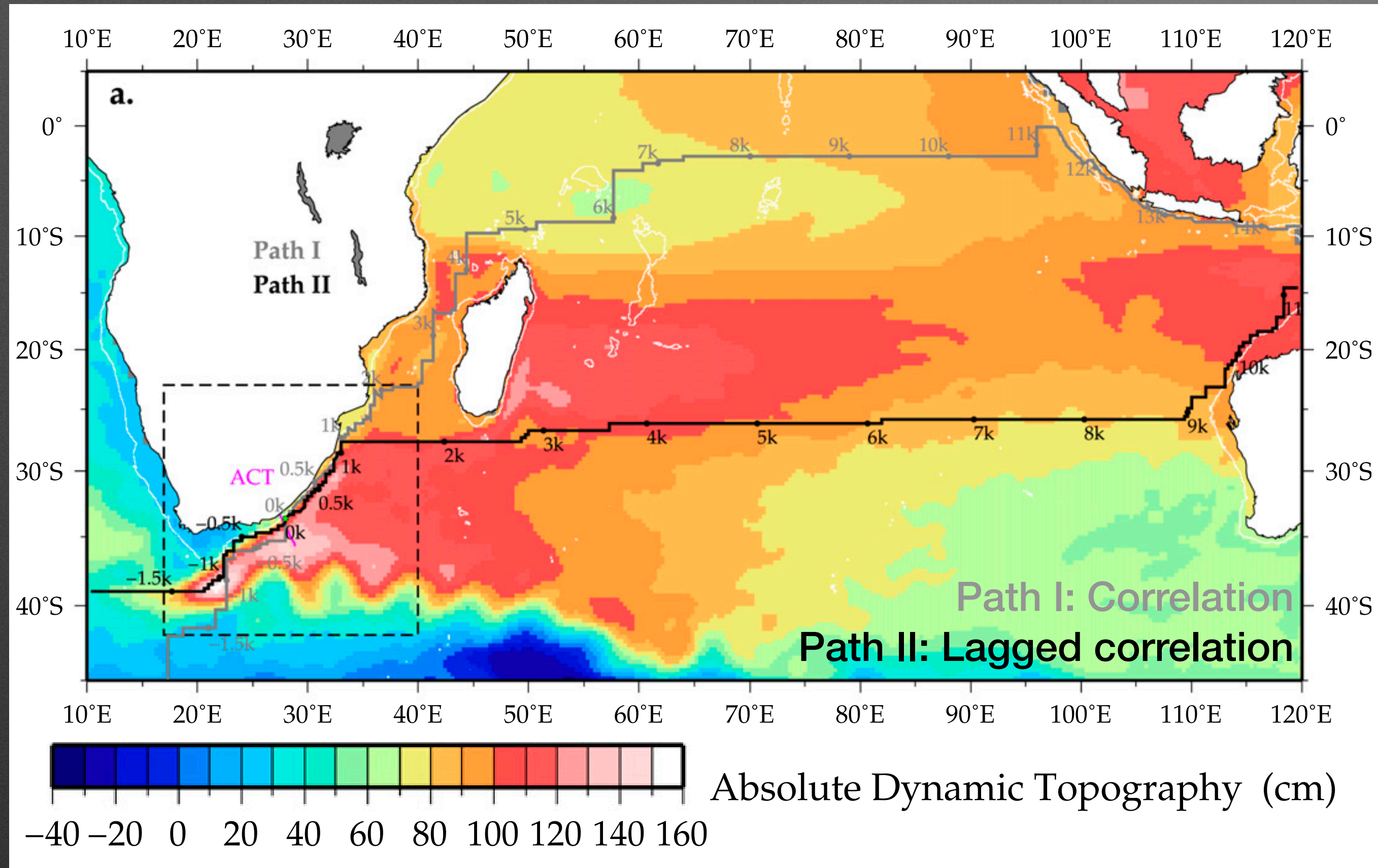
Han et al, 2014

Lumpkin & Speer, 2007

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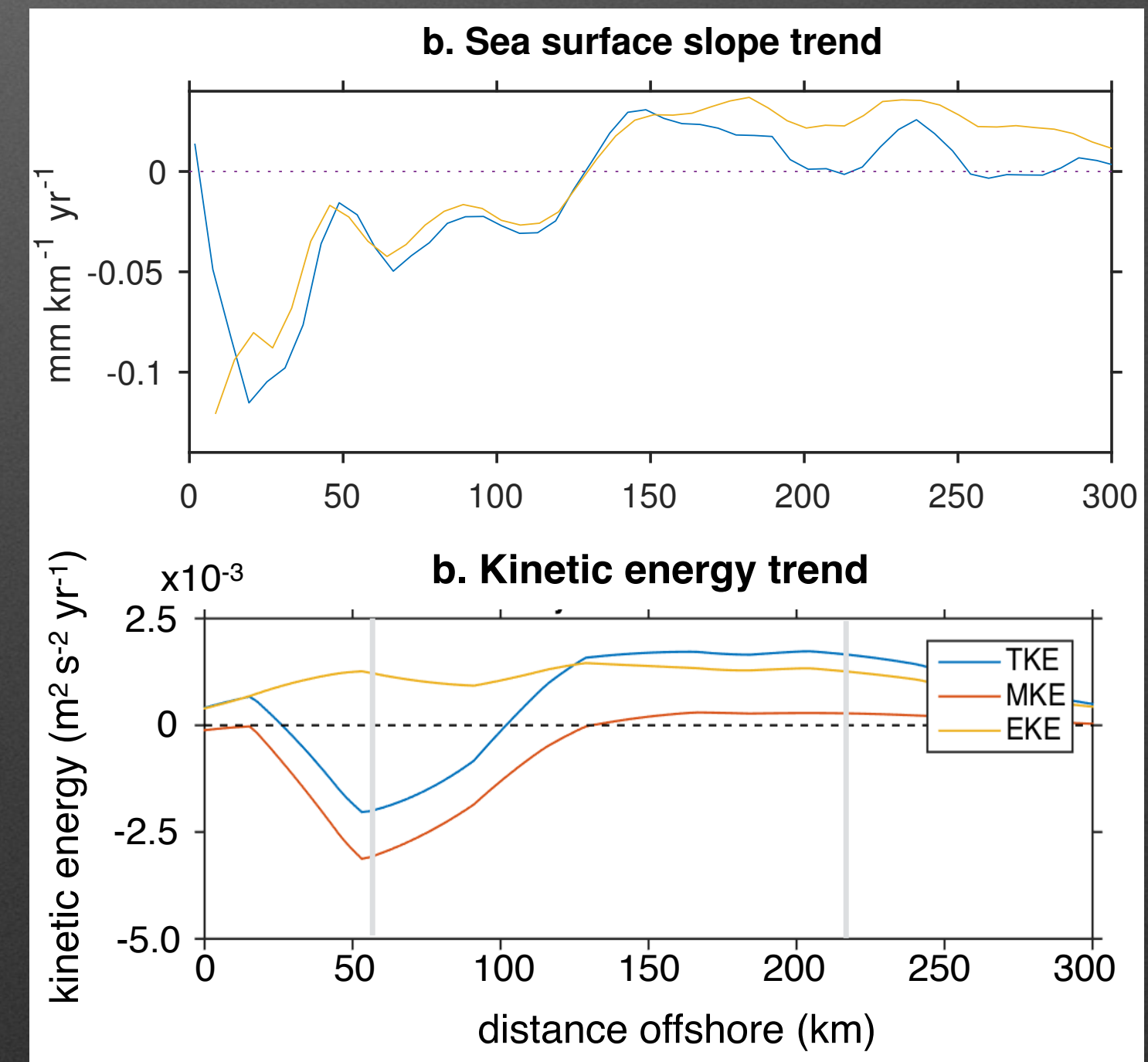
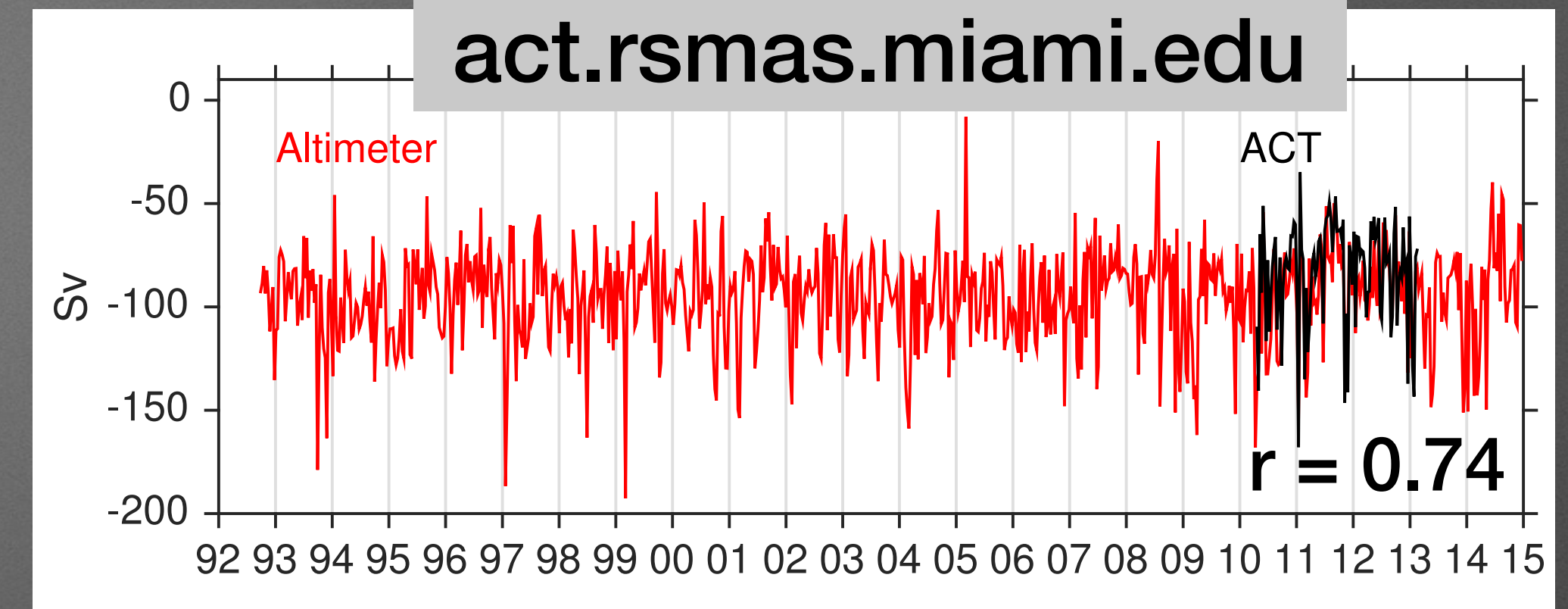


Anomalies in southwest IO linked upstream to tropics, ITF, IOD and ENSO and downstream to super gyre and SAM



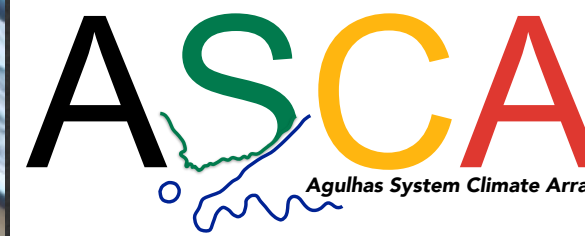
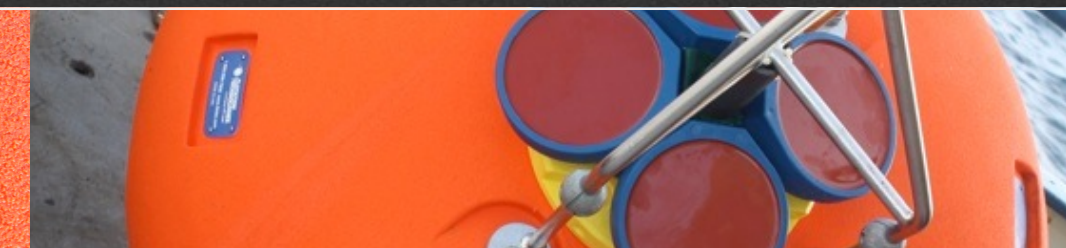
Elipot & Beal, JPO (2015)

Agulhas Current broadening not strengthening, related to increase of EKE

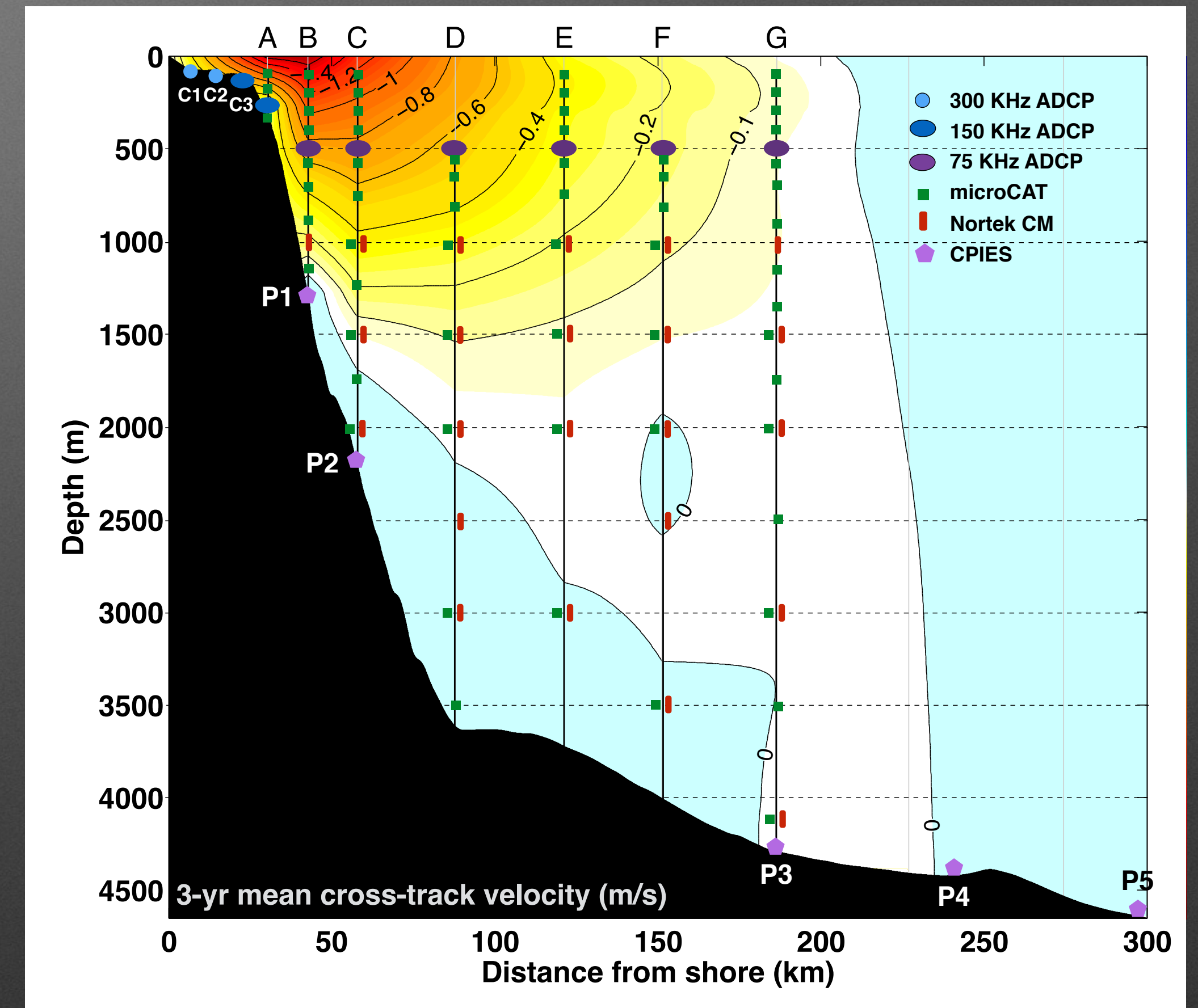
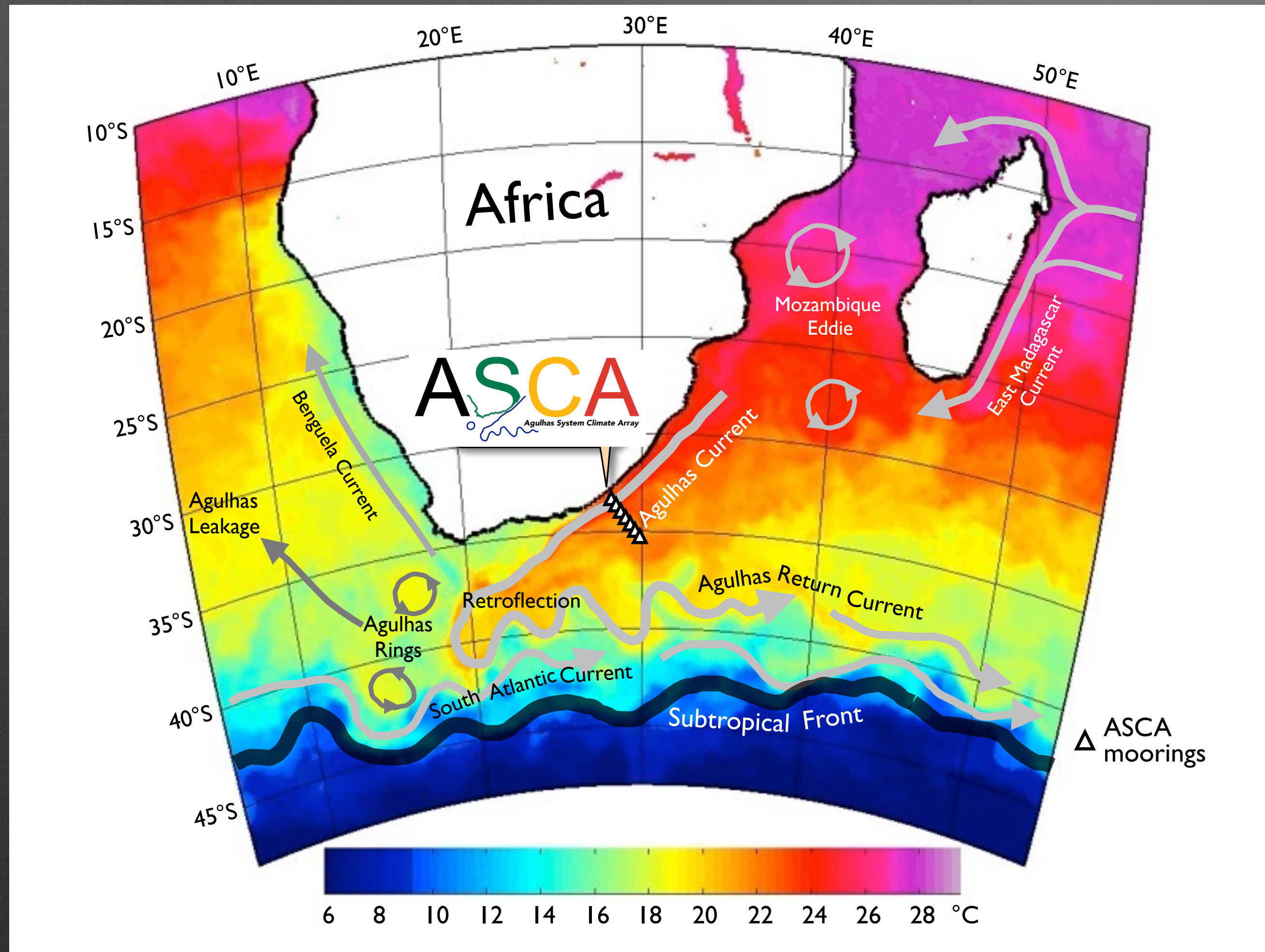


Beal & Elipot, Nature (2017)

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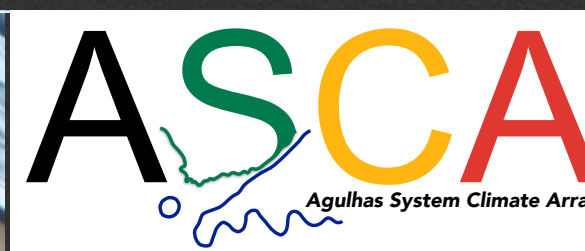
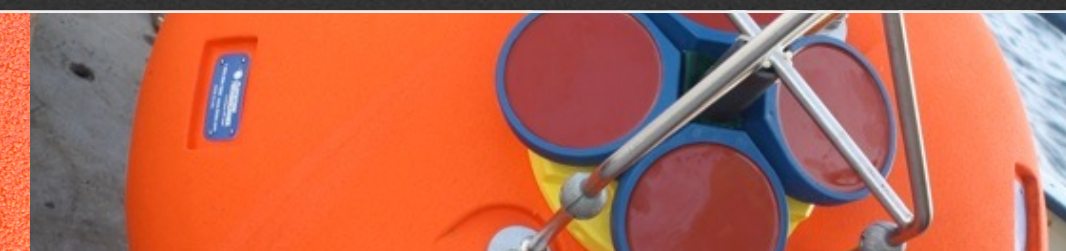


# Agulhas System Climate Array: South African-US-(Dutch?) collaboration for sustained observations of the Agulhas Current, since 2016



Beal et al., JPO (2015)

Lisa Beal, IIOE-2 Workshop Sept 2017  
Rosenstiel School of Marine and Atmospheric Science, University of Miami

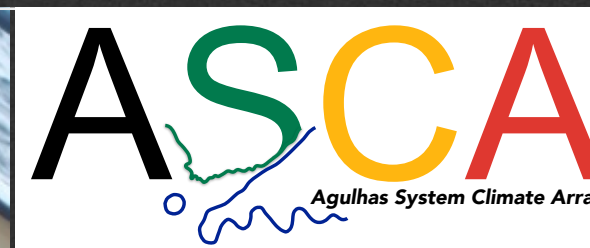
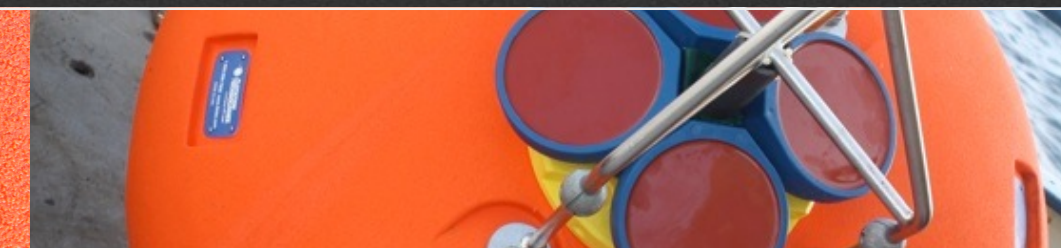
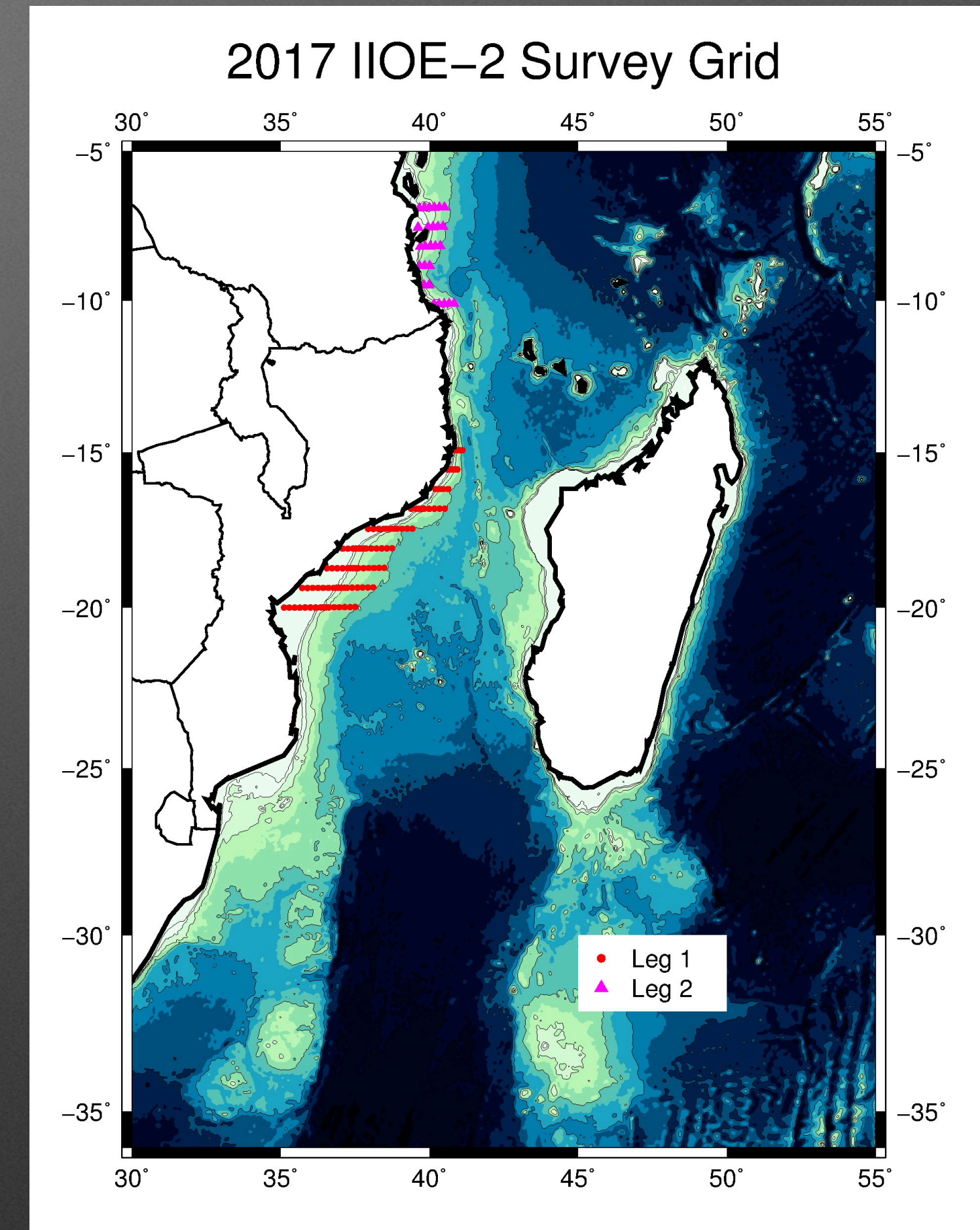


# African Coelacanth Ecosystem Programme: South Africa. 2015-2018

## IIOE-2 South Africa, Nov 2017

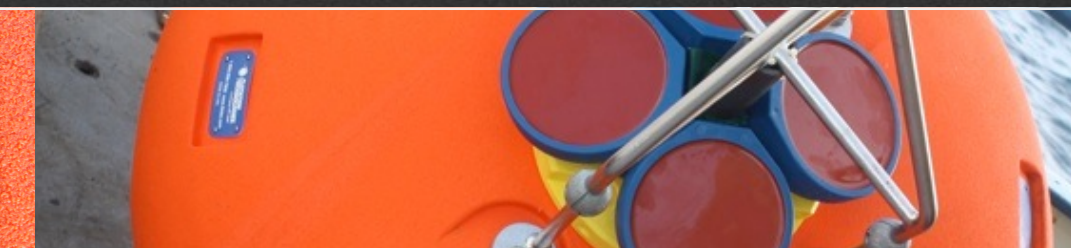
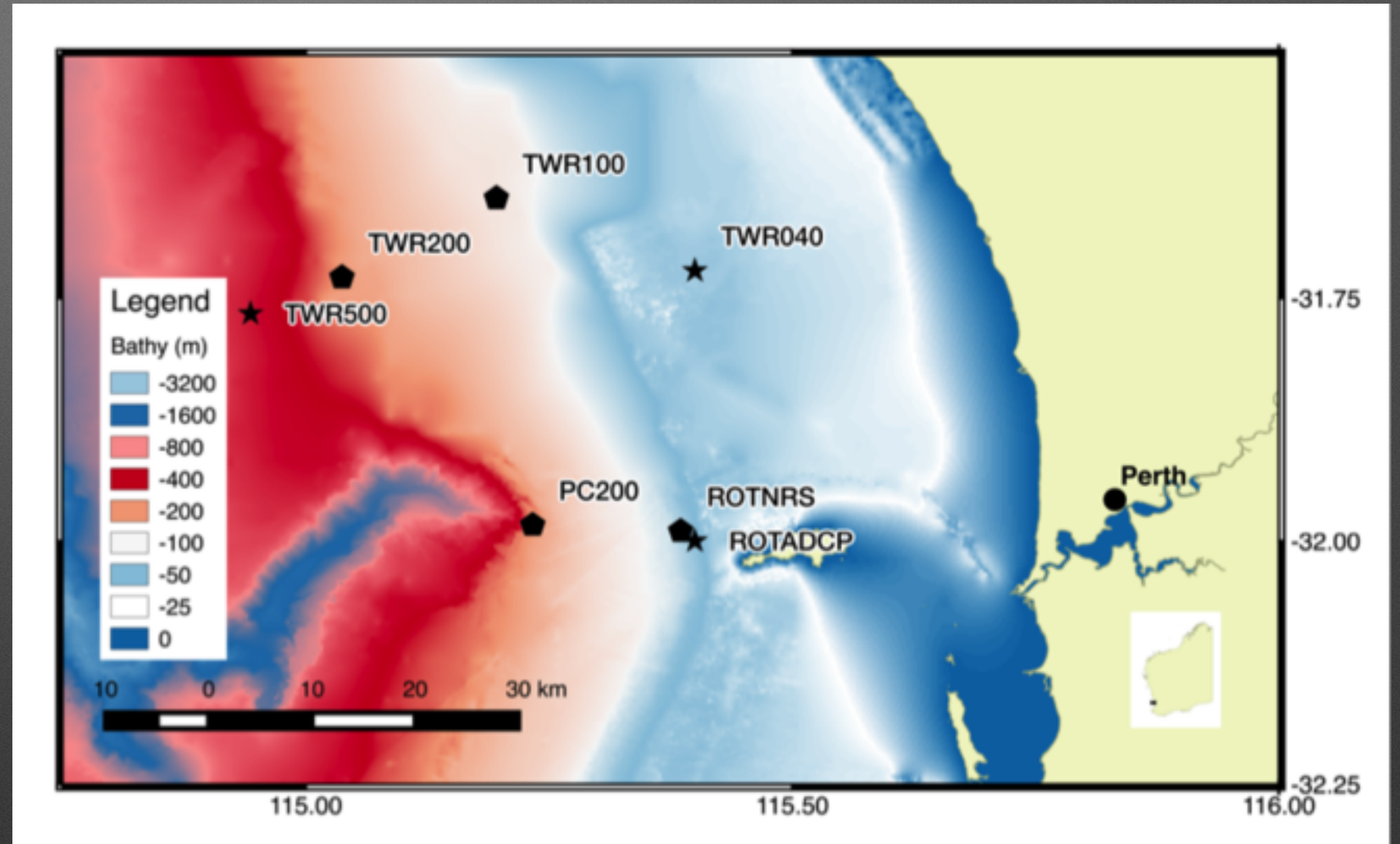


- Agulhas Current and shelf region: biodiversity, larval dispersal, benthic ecosystems, cross-stream exchange
- Annual cruises of about one month



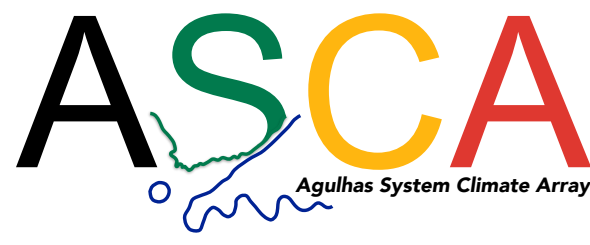
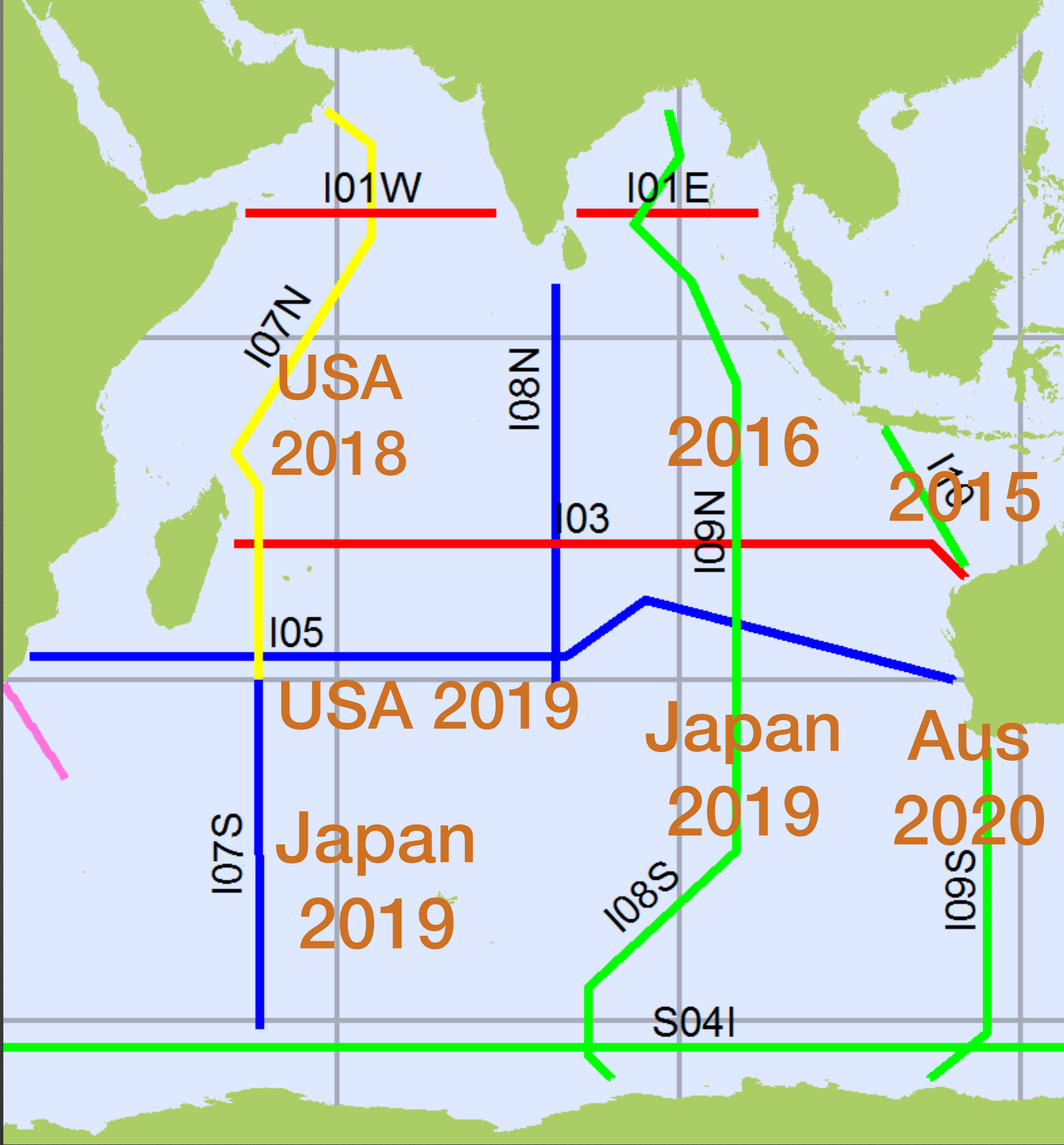
# Leeuwin Current array: Australia (IMOS)

- Since 2008
- Measures along and cross-stream variability
- ADCPs, thermistors, BGC sensors
- Gliders, coastal radar



# GO-SHIP: Japan, USA, Australia

- 15 1987, 2002, 2009, 2019





# Future Plans: How do we capture variability of subtropical gyre and heat budget?

