



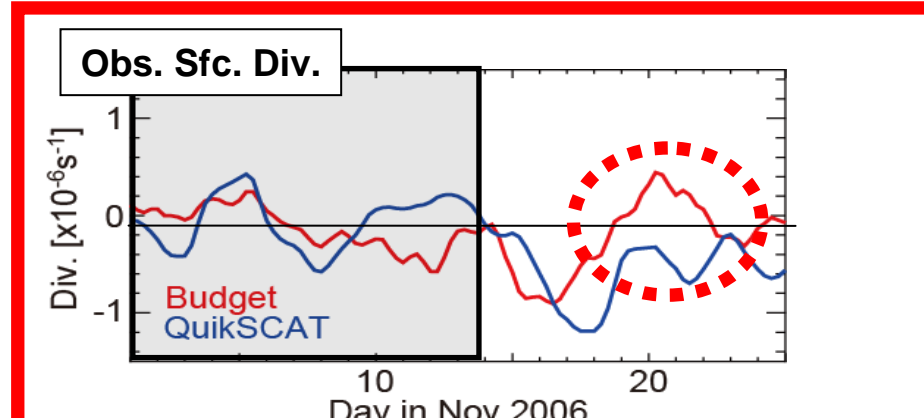
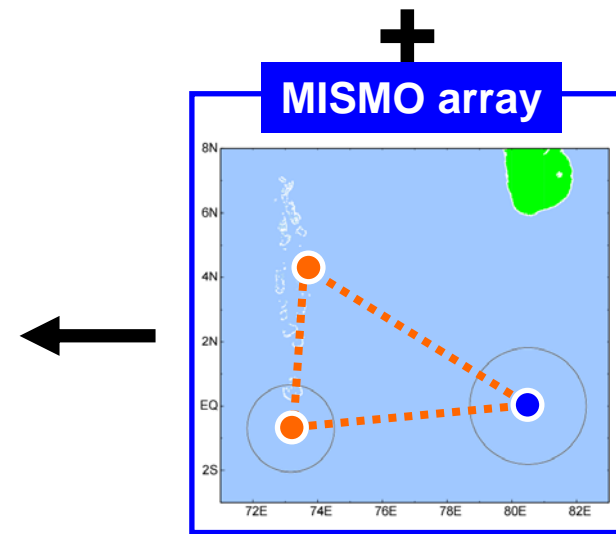
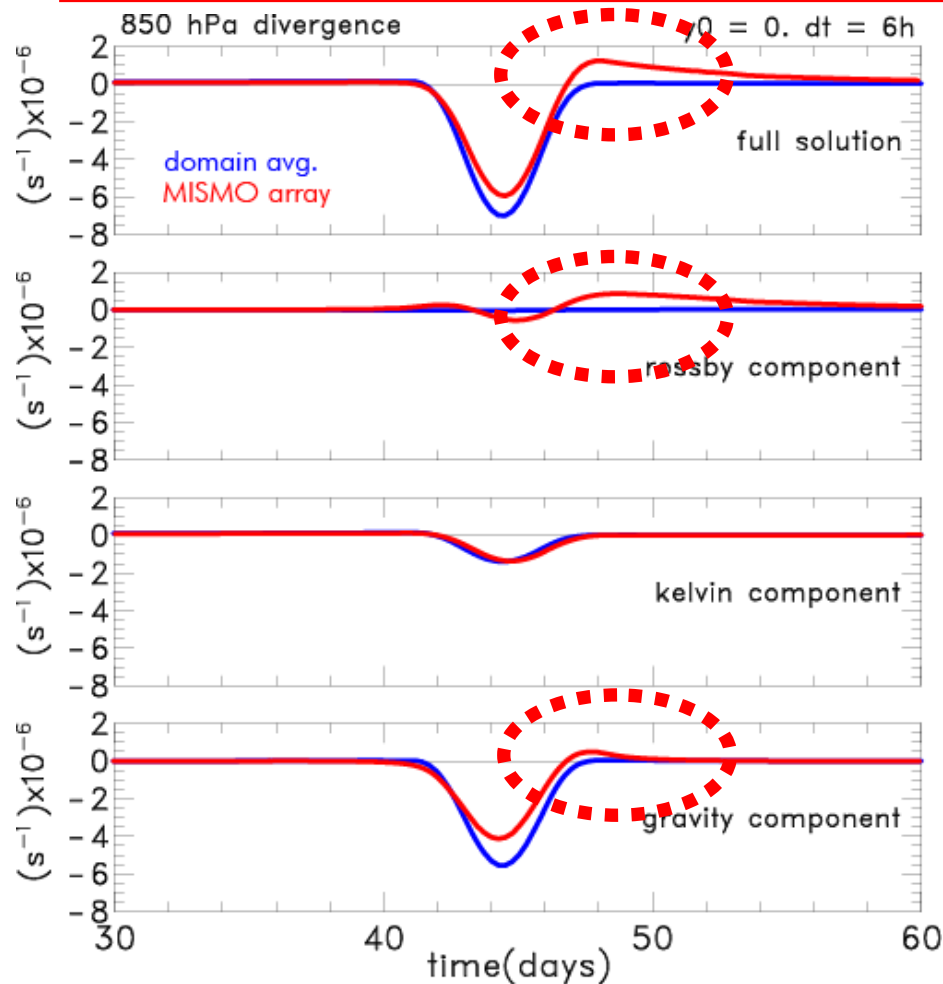
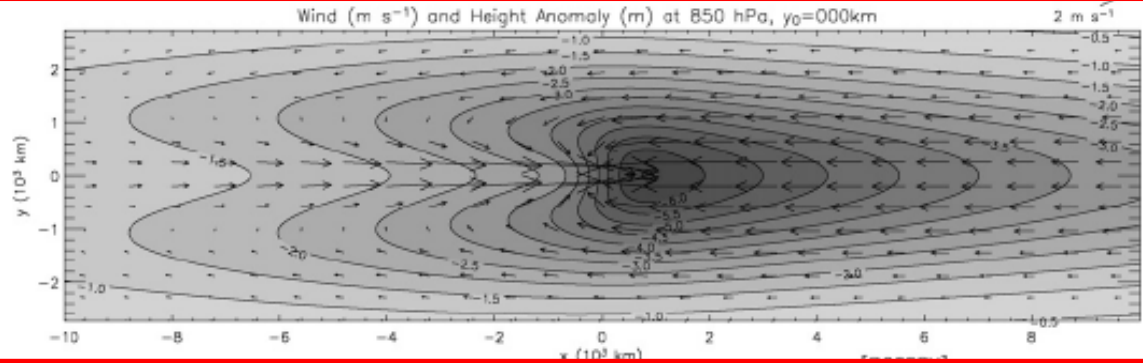
*Sounding Array Design
Strategy*

*Masaki Katsumata (JAMSTEC)
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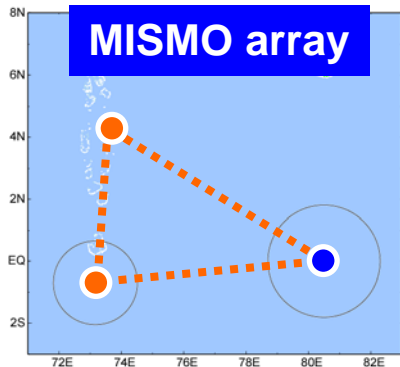
- ❑ *Lessons learned from MISMO*
- ❑ *Optimal array configurations to capture equatorial wave divergence field*
- ❑ *Possible array configurations for CINDY2011/DYNAMO*

Simulating budget analyses

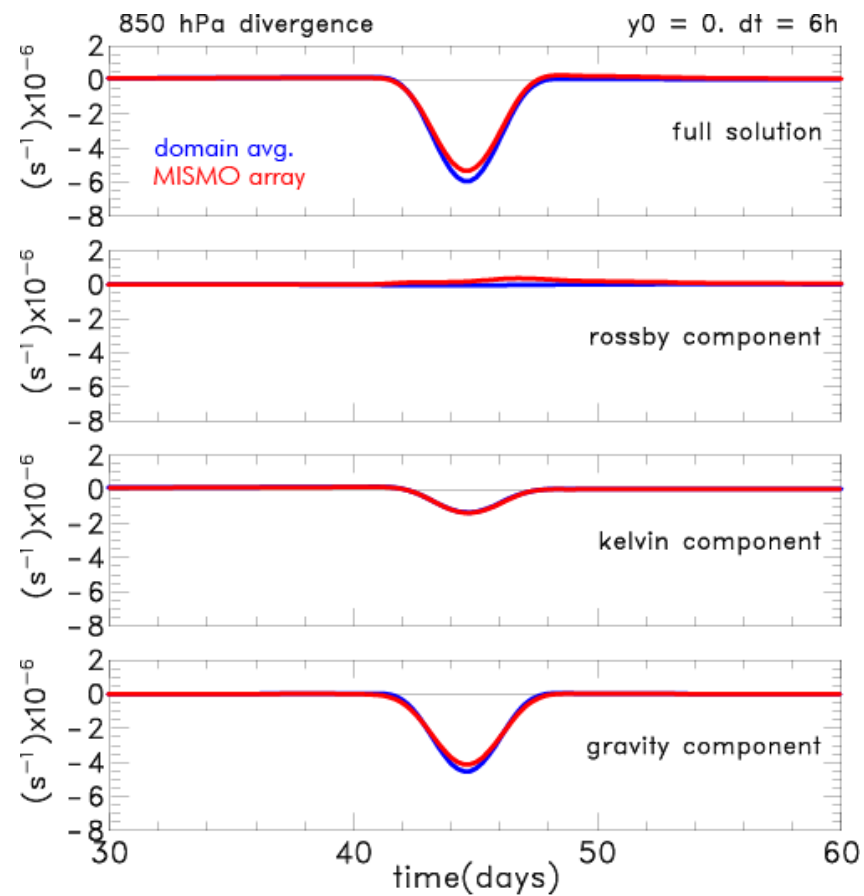
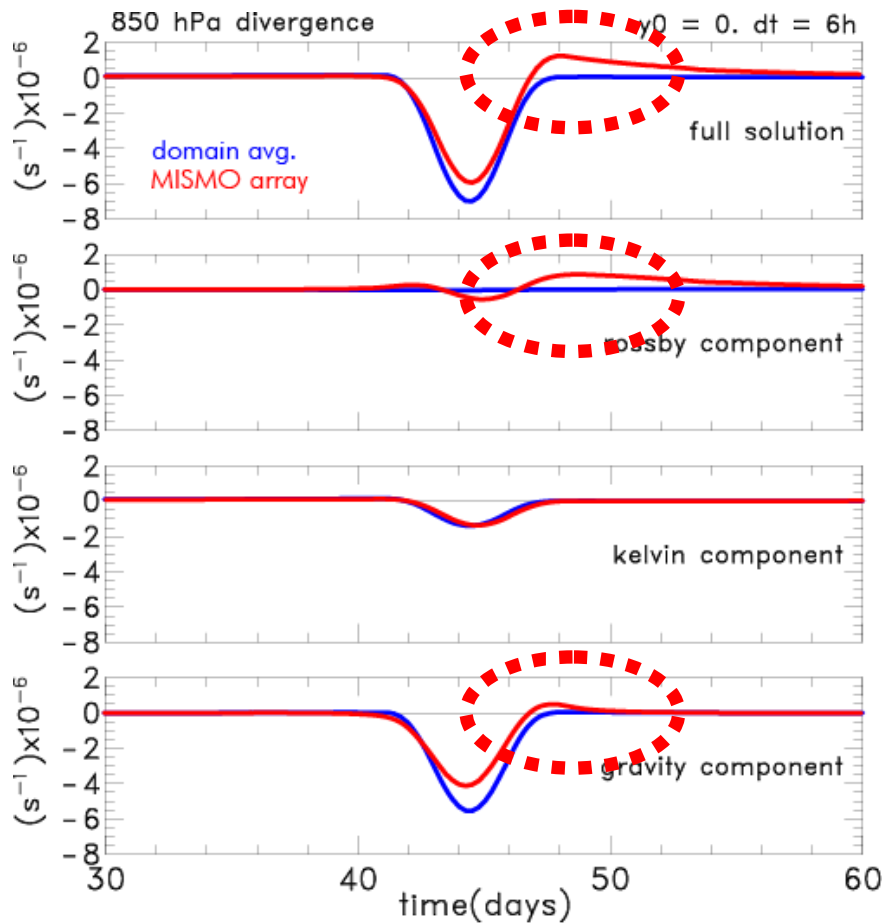
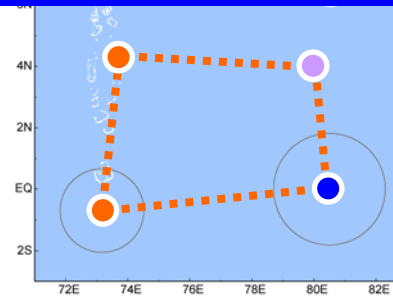
Theoretical Wind Field
with TOGA/COARE-like heating
(Schubert and Masarik 2006)



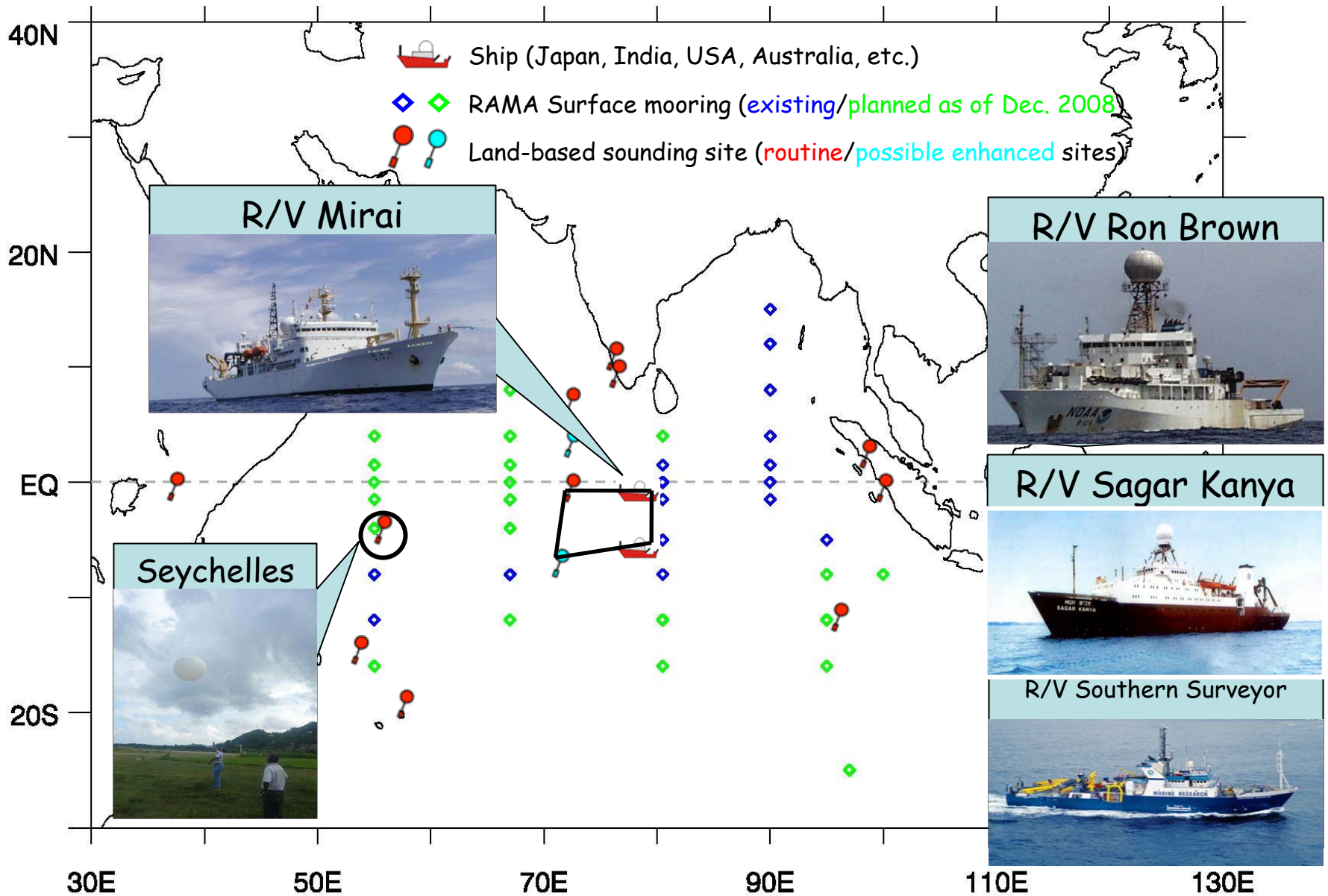
Possible Improvement



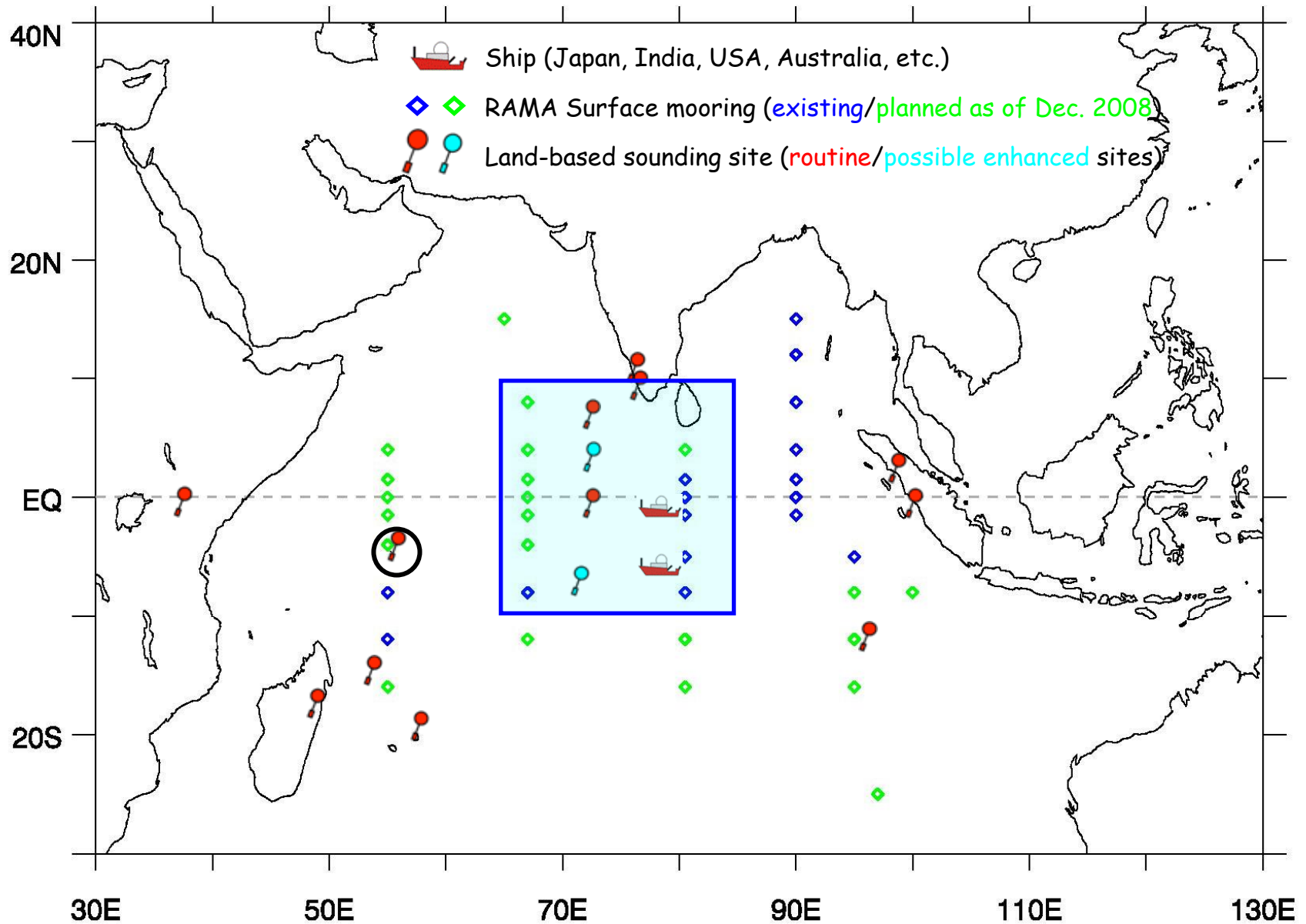
MISMO array +1 (Rectangular)



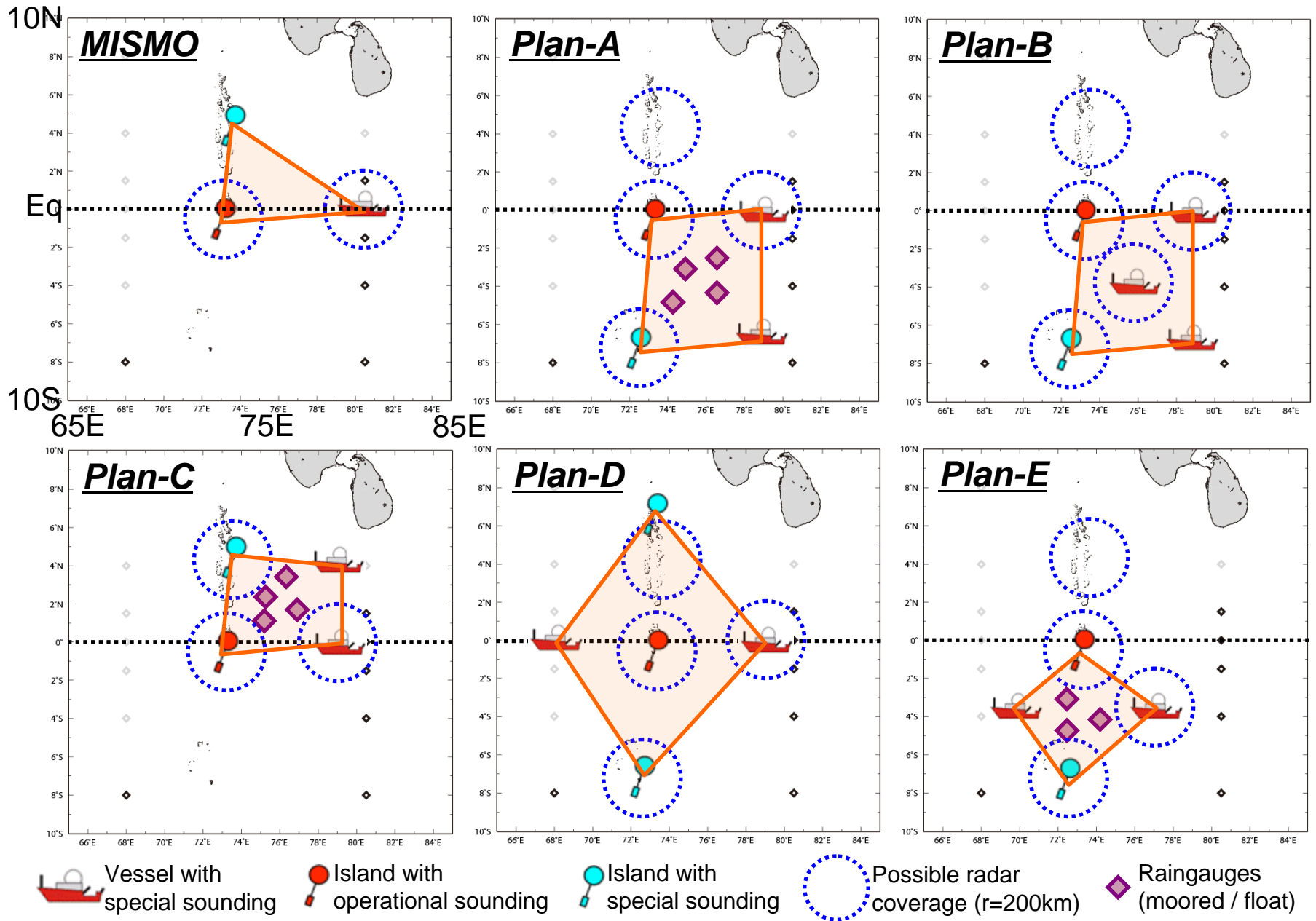
Large-area map for Indian Ocean

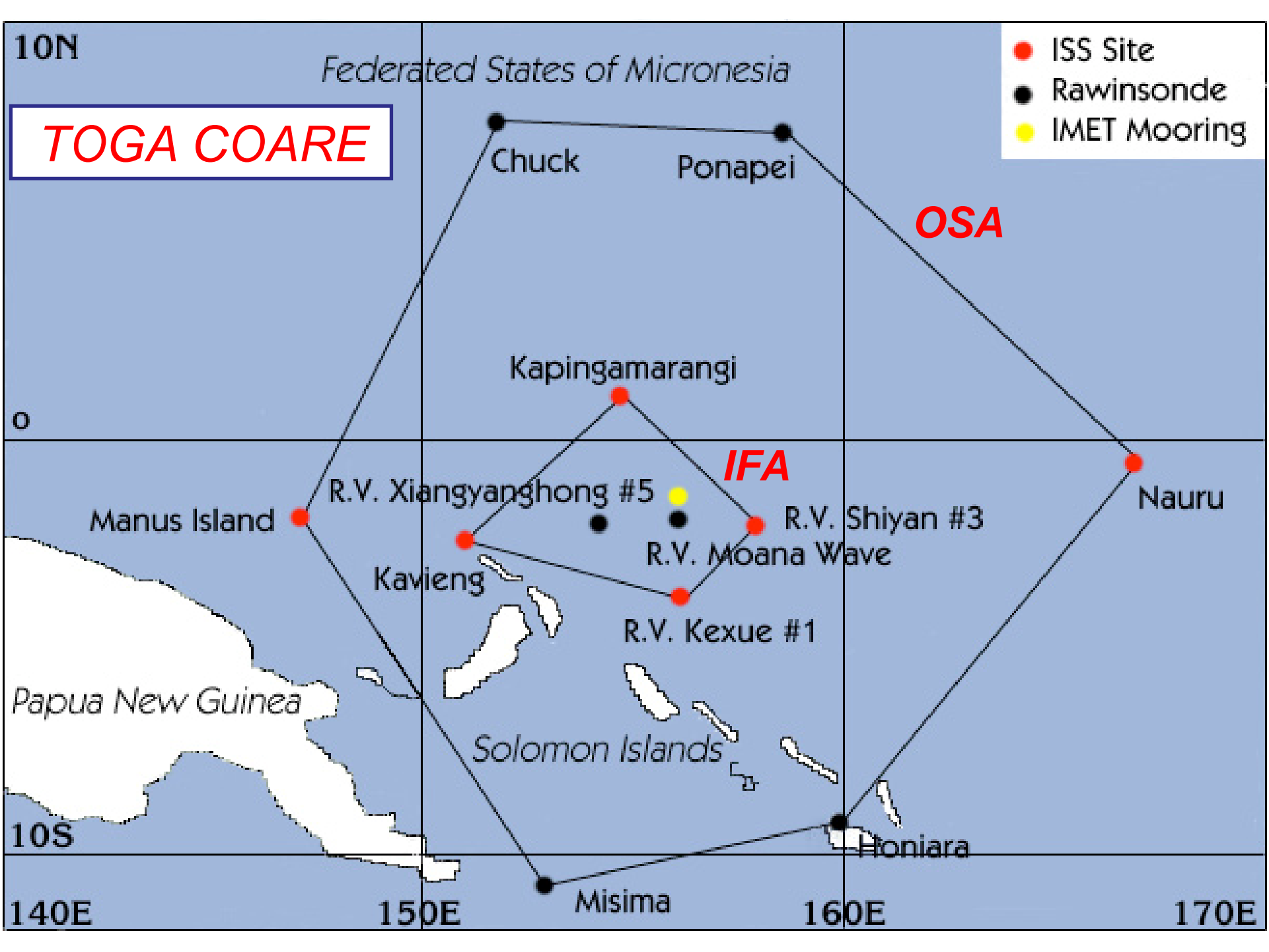


Large-area map for Indian Ocean

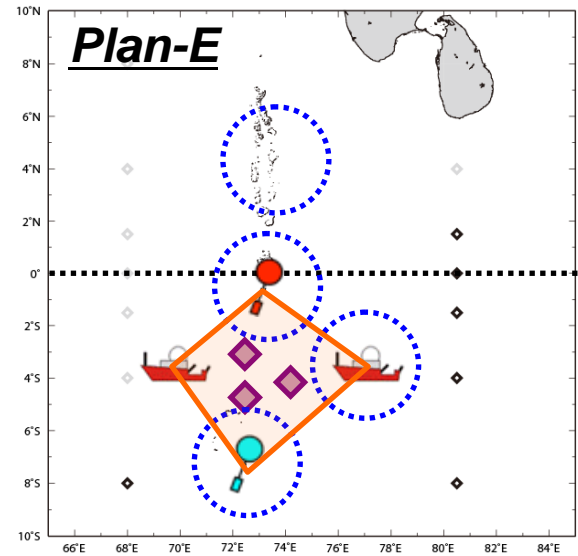
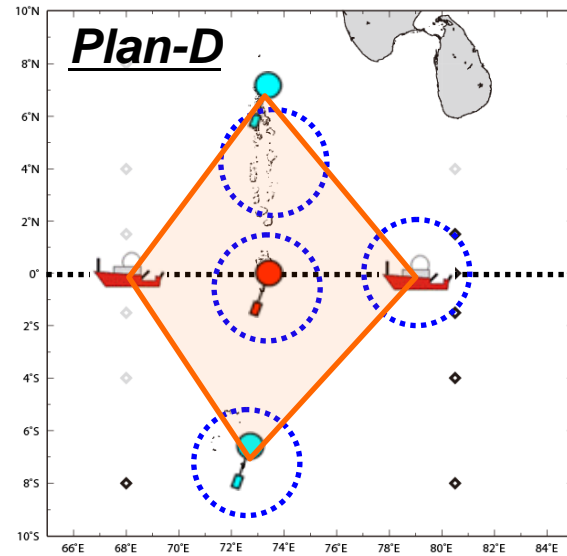
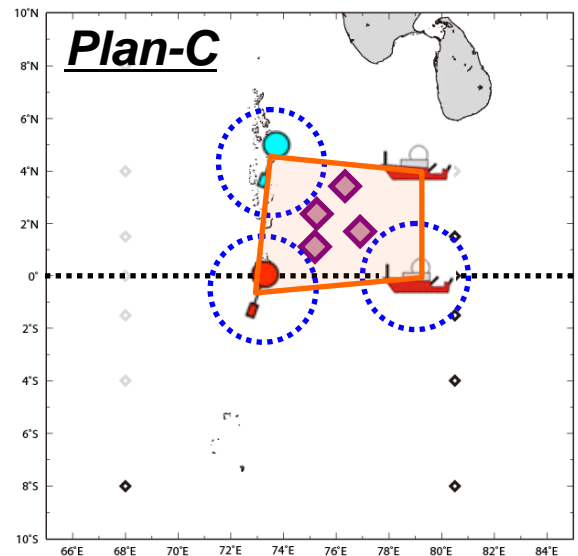
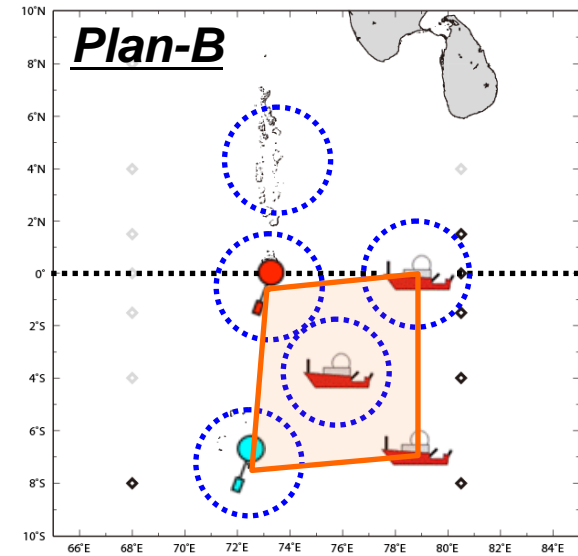
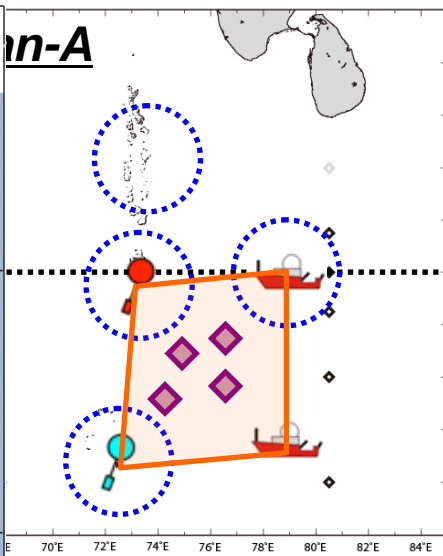
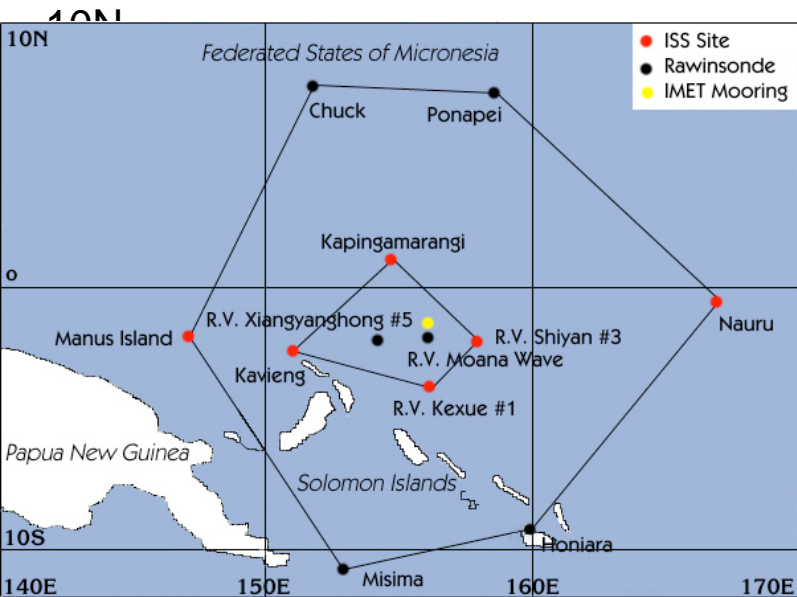







Examples of sounding array





Examples of sounding array



-  Vessel with special sounding
-  Island with operational sounding
-  Island with special sounding
-  Possible radar coverage (r=200km)
-  Raingauges (moored / float)

Array Options

- Plans A,B,E are centered near 4°S, near center of precipitation variance
- Plans C,D extend north of equator and include Malé, Maldives
- Plans A,C,D,E include staggered deployment of 4 ships, hence longer overall experiment duration
- Plan B has three ships in array, one at center; hence shorter array duration
- All plans have some form of rainfall measurements in array interior (although incomplete) to assist in constraining budgets
- Plan E is closest to size of COARE IFA