Regional enhancements

2. Equatorial Pacific

Motivation: ENSO observation/prediction

The present Argo array captures about 90% of the variance in TAO/TRITON 100m equatorial T on timescales > 10 days.

However, for intraseasonal variability (30 – 100 days), the present Argo array captures only 70 -80% of the variance.

Given longstanding vandalism problems with moorings in the eastern Pacific, and the recent degradation in TAO/TRITON, we investigate the efficiency of an enhanced Argo in the equatorial waveguide.
Deployment plan for 41 equatorial Pacific floats, SV Investigator

As of 19 March 2014, 34 floats deployed, 7 remaining
Pacific Expeditions’ SV Investigator deploying 48 Argo floats, Jan-Mar 2014, on a voyage of > 17,000 km from San Diego to 0°N 100°W to 0°N 155°E to Australia.

- 20 floats in the forward cabin
- 28 floats in the main saloon

Loading complete – San Diego harbor

A deployment on the equator

ENSO forecast centers (e.g. NCEP) have already noted the impact of additional Argo floats
NOAA CPC Global Ocean Data Assimilation System: Present equatorial temperature anomaly. Argo is the dominant global data source.

An El Niño this year?