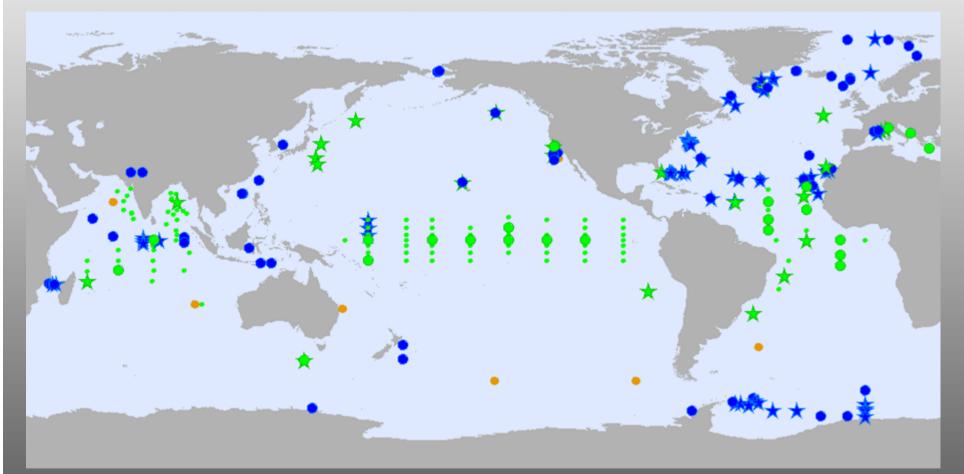


# Update for GSOP and the pan-CLIVAR meeting 2014

#### **Uwe Send and Bob Weller, co-chairs**



Approximate network status from last year

## organizational update

- Seoul 2013: Steering Committee and Data Management Team meeting, over 30 member participants plus local guests/observers
- updating network information and maps, defining requirements, metrics, improving data flow (large data additions from BATS/HOT, Jamstec, AWI, India)
- Korea (KIOST, SNU, KOPRI) became a major contributor to OceanSITES:
  - sites in Japan Sea, western equatorial Pacific, Amundsen Sea, Udintsev Fracture Zone, and future TIPEX sites
  - active member in Data Management Team
  - contributes significantly to deep (microcat) observing network
  - considering contribution to Project Office funding
- also first and new participation from Taiwan and China
- participation and interaction with Global Ocean Acidification Programme
- next meeting Recife 2014, side-by-side with PIRATA/TAV meeting

Three points for GSOP/pan-CLIVAR....

### **1. OceanSITES contribution to the Deep Ocean Observing System**

The GOOS Framework for Ocean Observing (FOO) is developing a Deep Ocean Observing System (DOOS) as a GOOS pilot project. OceanSITES can make a quick contribution to this.

#### **OceanSITES can make use of existing platforms for deep obs to**

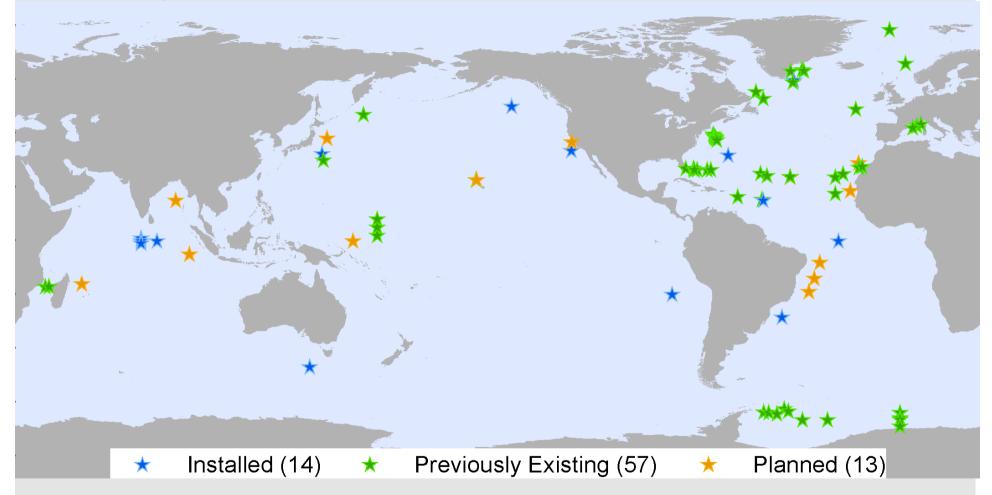
- reduce cost
- speed up implementation
- study all timescales
- provide reference data other autonomous systems
- work with vendors on autonomous sensor improvement

#### **Early implementation**

- initial focus is on T/S
- 50 locations already had deep T/S sensors, but uneven coverage and data QC
- challenge to add ~50 more to get more even distribution
- PI's are adding deep sensors to existing moorings
- pool of donated instruments can be used to implement new sites in coordination with the DOOS
- working on QC and with Seabird on sensor development

## 1. OceanSITES contribution to the Deep Ocean Observing System

Blue/orange: PI contributions in response to OceanSITES call (approx. 30)



Donations for matching pool: approx 40 microcats so far

**Question:** should oxygen be added to a subset of T/S sensors (\$4k extra) ??

Timeseries with high temporal resolution at limited set of discrete locations are difficult to assimilate into models.

Better may be to withhold them and use them for validation of model output, products, and for model development.

Closer engagement between OceanSITES and modelling/assimilation community would benefit both.

## 3. OceanSITES and Biophysical Interactions of Upwelling Systems

OceanSITES can make contributions to the CLIVAR focus "biophysical interactions and dynamics of upwelling systems".

The high time resolution is useful in studying responses to physical forcing (and how these change under climate variability).

Some sites already measure physical and biogeochemical variables in equatorial and coastal upwelling regions. Others can be enhanced.

Clear "tasking" from CLIVAR would help implementation...