NOAA and TPOS-2020

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TPOS contributes to all of NOAA’s strategic goals, and across its range of missions from research to services.
NOAA’s Contributions Towards the Global Ocean System
Status against the GCOS Implementation Plan and JCOMM targets

NOAA supports about half of the global in-situ ocean observing system.
Support for TAO Moorings

- For many years (well over 20), NOAA has sustained the development and maintenance of the TAO array.
- This support has included ship time and servicing costs of the 55 US moorings as well as for numerous NOAA, US, and international projects that use TAO moorings as platforms for critical research projects.
- The development of alternative technical and operational strategies, along with international support, are needed to continue TAO at historical levels of data return.
Part III. Adequacy of the Existing TPOS to Deliver on NOAA Requirements for Critical Variables

- TPOS addresses many of NOAA’s requirements for operational forecasting and research.
- NOAA’s views on adequacy are well-represented in the TPOS-2020 Whitepapers and presentations.
Part V: Expected NOAA TPOS Five-Year Plan Resource Investments

NOAA anticipates continued support of Tropical Pacific Ocean Observing in these areas:

- Global in-situ observing arrays (e.g. Argo, TAO, Global Drifter Program, Oceansites, GOSHIP, etc)
- Exploring and testing new observing technologies
- Scientific and technical expertise
- Coordination of global ocean observing (e.g. OOPC, JCOMM)
- Research vessel resources
Technical Expertise

• NOAA employs and supports a large number of scientists, students, technicians, and other experts in pursuit of ocean observing, research, modeling/forecasting, and provision of useful information to policy- and decision-makers
• NOAA has a track record of openly sharing its knowledge and skills to increase the capabilities of others interested in ocean observing
Observing Instrumentation, Equipment, (Where?, Parameters?, When?)

- NOAA’s contributions to TPOS can be monitored through the many web sites, GTS, etc that provide data and information.
- NOAA has begun a few feasibility studies:
  1) seeding equatorial Pacific with additional next-generation Argo floats,
  2) underwater gliders in the eastern Tropical Pacific
  3) Surface wavegliders and other autonomous technologies
- Additional technological advances in mooring technologies (e.g. a refreshed TAO buoy design, a prawler mechanism for ocean profiling in upper 500m, and a lower-profile PICO mooring) are also under development.
- NDBC has initiated a counter-vandalism program to address vandalism on TAO buoys.
NOAA Research Vessels Planned for the Tropical Pacific Ocean During the Next Five Years

- The prospect for new and/or additional NOAA ships to help in the Tropical Pacific is unknown at this time
- Potential ship services NOAA could explore:
  - International Research Vessel Fleets
  - Commercially Contracted Ships
  - US National Academic Research Fleet
I don't like this slide ... I don't think we should discuss the specifics of RHB or NOAA Fleet 5yrs plan at TPOS. Suggest taking this slide out.
shannonm, 1/22/2014
Part VI: Potential Opportunities for TPOS-2020 Resource-Sharing Partnerships

- NOAA has a strong record of successful international partnerships for in-situ ocean observing
  - TAO, PIRATA, RAMA
  - Indian Ocean Resource Forum
- NOAA is seeking to enhance current partnerships and add new partnerships that facilitate exchange of technical training for ship time and other mutually beneficial exchanges.
- NOAA supports WMO technical exchanges via the Regional Marine Instrumentation Center
Recommendations Forward

- TPOS is vital to NOAA’s mission
- NOAA encourages a TPOS strategy that considers the contributions of any/all platforms aimed at addressing key scientific, operational, and ultimately societal-driven needs
- Such a strategy should be forward-looking and strategic in nature (e.g. set the vision, near-term plans, and long-term needs for the decade ahead)
- Develop a mechanism for governance of TPOS which reflects this strategic nature, is inclusive, encourages dialogue amongst all stakeholders – especially those with emerging interests and capabilities, and fosters improved coordination of resourcing amongst its sponsors and stakeholders
Thank You For Your Attention