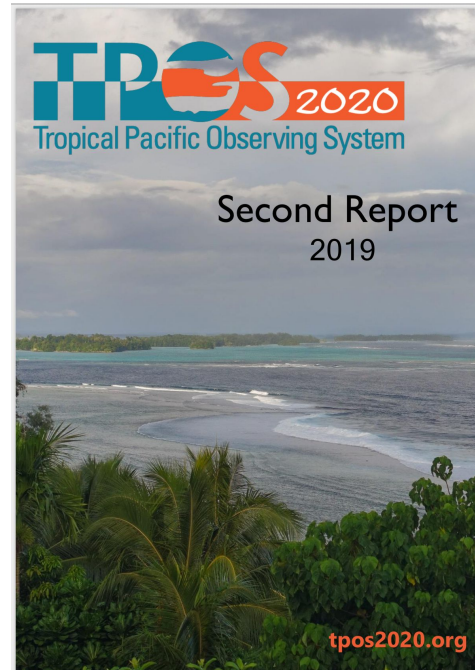


Tropical Pacific Observing System 2020 at GOOS SC 10-2

TPOS 2020 formed in 2014 as a quasi-independent, self-organized project, with a dashed-line connection to GOOS.

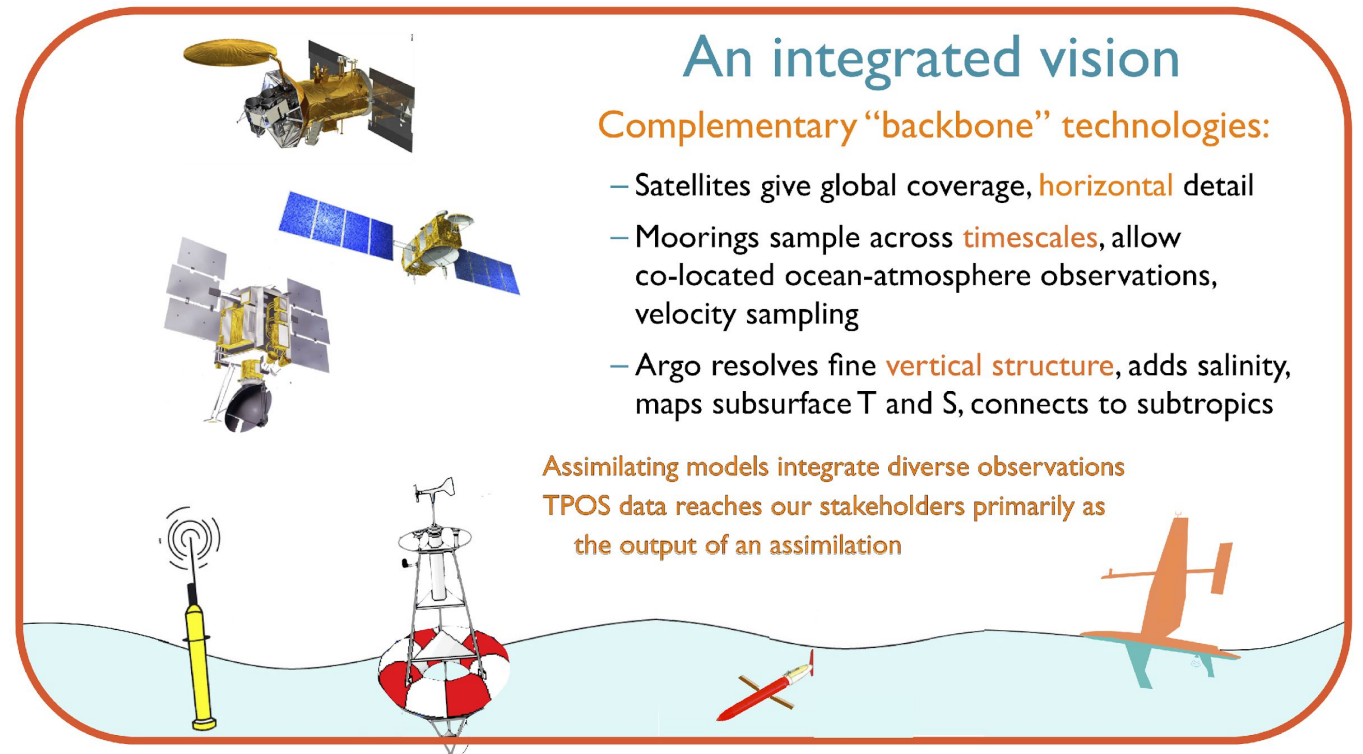
We published 3 reports that have been influential in the research community, and among agencies supporting work in the tropical Pacific.



Note: Final!

TPOS 2020 key recommendations

- Refocus the moored arrays on their unique strengths (mixed layer and surface fluxes)
- Double Argo density in the region
- Incorporate BGC sampling (carbon, nutrients, ..., ecosystems?)
- Integrate the eastern and western boundary regions (more on this later)
- Models and DA are fundamental



TPOS 2020 results

Moored arrays

- TAO will omit 12/55 present sites, but gain 8 sites in new locations, more capabilities.
NOAA is investing heavily in rebuilding the TAO moored array:
 - new sensors, revising the onboard processing and transmission to handle the new data
 - initial deployments of the new systems beginning in mid-2022
- China deploying a new “Ding” array in the west. Initial deployment (4 sites) January 2021.

Argo

28 new Chinese Argo floats deployed, U.S. Argo deployments also increasing
(we are now close to the doubling)
Strong emphasis on BGC-Argo

Model/DA development

NOAA will maintain both the present and the new system for an overlap of 3 years,
will collaborate with ECMWF (and probably JMA, others) to run parallel DA on both systems

TPOS 2020 endorsed as a [WIGOS Pre-operational Regional Pilot](#) (2018).

This has provided us entrée to Met Services (Japan, China, Peru, ...)

TPOS 2020 issues for GOOS, future governance

- 1) Promote and support data interoperability, discovery and transparency standards
- 2) Work with WMO/GOOS expert panels to:
 - (a) support TPOS multi-disciplinarity (BGC including modeling, connection to circulation)
 - (b) strengthen systematic connections between observing and model/DA communities
- 3) Use GOOS intergovernmental mechanisms to advance international observing cooperation, critical especially in the eastern and western boundary regions: EEZs, data sharing
(Major barriers prevented our success in this goal)

Future TPOS governance
(now being formed)

