Workshop Goals

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Bridging Sustained Observations & Data Assimilation for TPOS 2020

BOULDER, CO | MAY 1-3, 2018



US CLIVAR / TPOS 2020 Workshop Goals

Objectives:

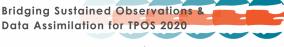
Foster the communication and collaboration among the observational, modeling, and data assimilation
communities.

Identify feasible and fundable recommendations, including process studies, that would advance the
development of model parameterizations and data assimilation techniques so the tropical Pacific observing
system can meet the needs of monitoring, prediction, and research for the next decades.

Goals:

Communicate and discuss the TPOS 2020 operati	onal requireme	ents for predicting	g atmosphere-ocean
conditions on timescales from hours to centuries	(with a primar	ry focus on subsea	sonal to decadal);

- Identify the key observations (including new platforms) to obtain the Essential Ocean Variables necessary to constrain numerical ocean and coupled Earth system models, and to promote advancement of data assimilation systems;
- Define and develop *in situ* process studies that would point most clearly to particular model improvements, and specify the path to those improvements, beginning with those identified in the TPOS 2020 First Report;
- ☐ Identify and define the modeling and data assimilation research needed to meet the observational goals defined by TPOS 2020; and
- ☐ Facilitate collaboration to design, conduct and evaluate observing system simulation experiments (OSSEs).







US CLIVAR / TPOS 2020 Workshop Goals

Outcomes:

Interaction and information exchange that will help shape the TPOS 2020 effort
Workshop participants provide input for new directions that will lead to improved monitoring and modeling of the TPOS system and its role in understanding Pacific variability.
Workshop report with specific recommendations, including for integration into OceanObs19 strategic plans, to address the workshop objectives. These will define key analyses to be performed by the community, potential in situ process studies, and modeling studies in the Pacific.
Participant input to help inform the TPOS 2020 Steering Committee and Task Teams in their development of the second TPOS 2020 report.
Variations edition or journal article capturing the workshop highlights and recommendations





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Contributed Posters

This afternoon, 3:30 PM

Just a sampling...

Persistence of tropical SSTs in Climate Models

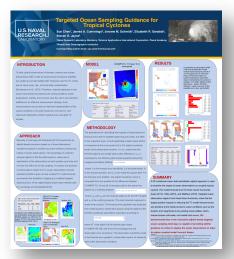
Simulating ENSO SSTA with moored buoy and scatterometer winds

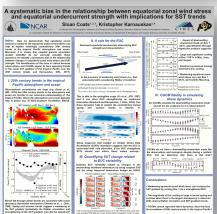
Long Term Observations of Tropical Precipitation for Model Development and Improvement

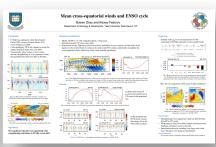
Toward evaluating the Tropical Pacific Observing System using ocean state estimates covering 2010—2013

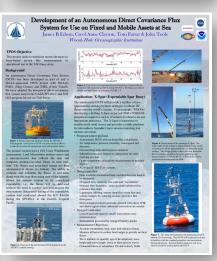
Impact of Aquarius and SMAP Sea Surface Salinity
Observations on Seasonal Predictions of the 2015 El Nino

Upgrades to the operational ocean monitoring system at the Climate Prediction Center











Up Next

Overview of today:

- √ Welcome, perspectives, goals
- ☐ Morning plenary: 3 talks & > 1 hour discussion
- ☐ Lunch
- ☐ Afternoon plenary: 4 talks & > 1 hour discussion
- ☐ Poster session and reception 3:30–6:00 PM

Gokhan Danabasoglu (NCAR): Model Biases in the Tropical Pacific Ocean



