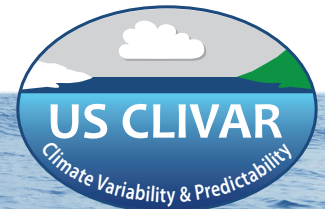


Welcome and Breakout Charge

Kris Karnauskas

**Bridging Sustained Observations &
Data Assimilation for TPOS 2020**

BOULDER, CO | MAY 1-3, 2018



09:00	Morning Breakout Sessions		
09:00	Welcome and charge for breakouts	Kris Karnauskas, U. Colorado–Boulder	
09:30	Breakout 1: The design and conduct of OSSEs	Facilitators: Sue Chen & Bruce Cornuelle	3131
09:30	Breakout 2: Process studies for model improvements	Facilitators: Maria Flatau & LuAnne Thompson	North Bay
09:30	Breakout 3: Phenomena ripe for adaptive ocean observing technologies	Facilitators: Meghan Cronin & Steve Penny	Center Bay
10:30	Break		
11:00	Breakout 1: The design and conduct of OSSEs		3131
11:00	Breakout 2: Process studies for model improvements		North Bay
11:00	Breakout 3: Phenomena ripe for adaptive ocean observing technologies		Center Bay
12:00	Lunch		
13:00	Afternoon Breakout Sessions		
13:00	Breakout 4: Key observations to obtain the Essential Ocean Variables necessary to constrain models	Facilitators: Neville Smith & Janet Sprintall	North Bay
13:00	Breakout 5: Initial modeling and data assimilation studies needed to refine the observational goals as defined by TPOS 2020	Facilitators: Sam Stevenson & Aneesh Subramanian	Center Bay
13:00	Breakout 6: Building observations for process-oriented climate model diagnostics and intercomparison	Facilitators: Samson Hagos & Yassir Eddebbar	3131
14:30	Break		
15:00	Breakout 4: Key observations to obtain the Essential Ocean Variables necessary to constrain models		North Bay
15:00	Breakout 5: Initial modeling and data assimilation studies needed to refine the observational goals as defined by TPOS 2020		Center Bay
15:00	Breakout 6: Building observations for process-oriented climate model diagnostics and intercomparison		3131
16:30	Breakout session recap and discussion		
17:00	Adjourn		

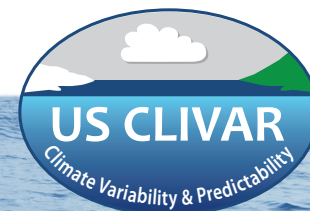
Pick 2 out of 3

Facilitators staying put

Pick 2 out of 3

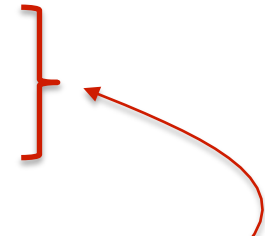
Facilitators staying put

This 30 min slot mainly for setting Thurs AM agenda...

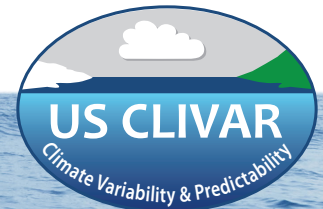


Thursday, May 3, 2018

Time	Agenda	Presenter	Presentation
08:00	Registration and continental breakfast		
08:30	Discussions & next steps		
08:30	Discussion on breakout sessions 1, 5, & 6 (modeling centric)		
10:00	Break		
10:30	Discussion on breakout sessions 2, 3, & 4 (observing centric)		
12:00	Workshop adjourns Scientific Organizing Committee meets		



Plenary style discussions, 30 minutes per breakout topic
Discussions led by breakout session facilitators
Begin with one slide summarizing major themes and/or recommendations

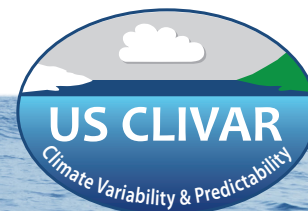


TPOS 2020 Clarification

Billy Kessler

**Bridging Sustained Observations &
Data Assimilation for TPOS 2020**

BOULDER, CO | MAY 1-3, 2018



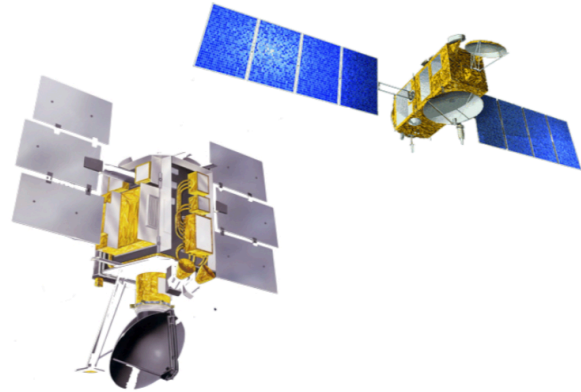
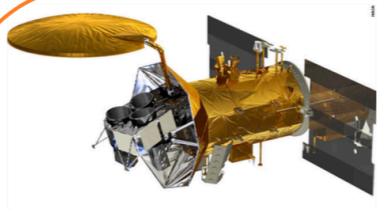
An integrated vision

Complementary “backbone” technologies:

- Satellites give global coverage, **horizontal** detail
- Moorings sample across **timescales**, allow co-located ocean-atmosphere observations, velocity sampling
- Argo resolves fine **vertical structure**, adds salinity, maps subsurface T and S, connects to subtropics

Assimilating models integrate diverse observations.

- Integration adds value to the backbone combination.
- Process studies needed to clarify tricky pieces.



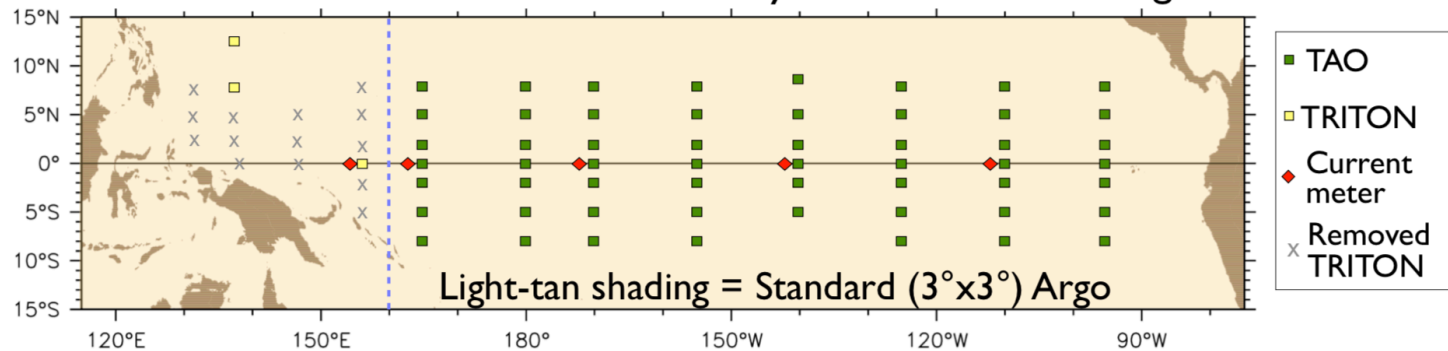
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Tropical Pacific Observing System 2020

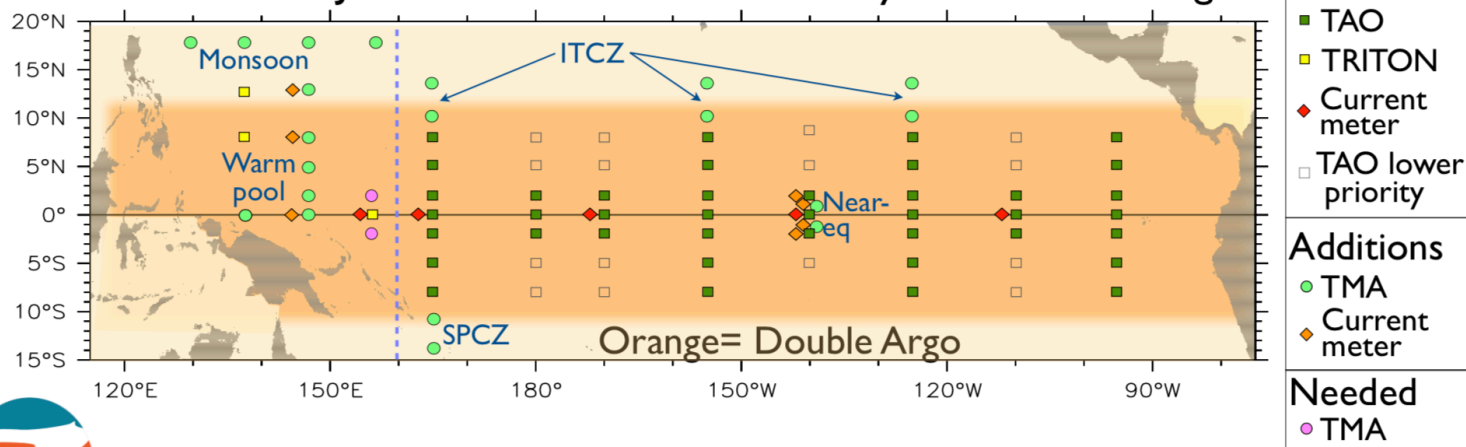
Rethought in situ Backbone arrays

Reduced need for grid of moorings. Regime focus, highly-instrumented sites. Use moorings where their special capabilities are needed (all flux-enhanced).

Present/historical TAO-TRITON array ... and $3^\circ \times 3^\circ$ core Argo



Future TAO + JAMSTEC + SOA moored arrays ... and $2^\circ \times 2^\circ$ Argo



Tropical Pacific Observing System 2020

2

