2013 U.S. CLIVAR Summit
July 9-11, 2013
Annapolis, Maryland

Meeting Objectives & Outcomes

Bob Weller, SSC Chair
Main Objectives for Summit

• Context – provide update on U.S. and International CLIVAR programs and plans

• Cross-panel Interaction – foster dialogue among panels on common or joint topics

• Panel Business – review progress and identify gaps and opportunities

• Implementation Planning – identify action items to progress on new Science Plan goals and research challenges
Agenda

• Tues, Jul 9 (Orientation and Context)
  – U.S. CLIVAR Overview
  – Draft Science Plan Update
  – International CLIVAR Update
  – U.S. Agency Engagement
  – Research Challenges and ST/WG Reports
  – Inter-panel Interaction
    ** Summit Reception from 6:30-8:00pm **

• Wed, July 10 (Panel Business)
  – Charge to Panels – “back to basics”
  – Implementation Action Items
  – Panel Breakouts

• Thurs, July 11 (Implementation Actions)
  – Panel Summaries and Action Items
  – Cross-panel Action Items
  – National Climate Assessment
  – SSC meeting meeting through Friday
Process Study Model Improvement (PSMI) Panel Breakout

- Guide and assess use of process research and obs campaigns to improve parameterization and model development (CPTs)
  - 3 current CPTs (Ruiyun Sun, Lou St. Laurent, Meibing Jin)
  - Successes, pitfalls, lessons

- Review and coordinate U.S. plans for process studies
  - KESS (written)
  - CLIMODE (written)
  - VOCALS (written)
  - GO Amazon (written)
  - DYNAMO (Augustin Vintzileos)
  - DIMES (Lou St. Laurent)

- Further develop and consider new process studies
  - Calwater2/ACAPEX (Ruby Leung)
  - LatMIX (Tamay Ozgokmen)
  - ASIRI/Bay of Bengal (Bob Weller)
  - SAMOC (Igor Kamenkovitch)
  - OSNAP & NA Bloom2 (Baylor Fox-Kemper)
Phenomena, Observations and Synthesis (POS) Panel Breakout

– Observations, Science and Society
  • IOOS & FOO (Eric Lindstrom)
  • Observable modes of climate variability (Art Miller)
  • Extremes (Matt Barlow)

– Reanalyses and Surface Fluxes (Joint with PPAI)

– Role of Satellite Observations
  • Polar climate (Xiangdong Zhang)
  • Sea level (Don Chambers)
  • Satellite observations, subsurface sensing, and continuity (Xiao-Hai Yan)
  • Water cycle missions (Jared Entin)
  • Integrated water cycle workshop (Ruby Leung)
  • Obs4MIPS (Duane Waliser)

– Tropical Variability and Observations
  • Measurements needs for tropical Pacific (Antonietta Capotondi)
  • Upper ocean processes, global drifter program and tropical moored arrays (Rick Lumpkin)
  • TAO observing system experiments (Yan Xue)
Predictability, Predictions and Applications Interface (PPAI) Panel Breakout

- **State Estimation and Prediction**
  - Session Goals (*Arun Kumar and Bruce Anderson*)
  - NOAA MAPP activities and Task Force (*Annarita Mariotti*)
  - Joint Session with POS on Reanalysis and Surface Fluxes

- **Communication and Decision Support**
  - Session Goals (*Bruce Anderson and Arun Kumar*)
  - Status of NMME (*Jin Huang*)
  - Role of CLIVAR & Decision Making (*Lisa Goddard*)
  - Role of CLIVAR Science and Service (*Robin O’Malley*)
  - Applications Process Teams (*Gregg Garfin*)
Joint POS/PPAI Session

- Reanalysis and Surface Fluxes
  - Ocean synthesis and surface flux analysis workshop (Arun Kumar)
  - Ocean reanalysis intercomparison workshop (Jim Carton)
  - Links with land surface (Alexander Gershunov)
  - Coupled ocean-atmosphere-ice reanalyses (Dimitris Menemenlis)
  - Initialization of seasonal predictions (Yan Xue)
  - Needs and next steps (Michael Bosilovich)
Anticipated Outcomes

• Evaluation of status, gaps, and opportunities

• Specific recommendations and actions items regarding:
  – AMOC Science Team and 8 Working Groups
  – Observing and data systems
  – Reanalyses and ocean state estimation
  – Process studies from field phase through synthesis
  – Successes and lessons from CPTs
  – Coordinated prediction and projection efforts
  – Contributing to the National Climate Assessment

• Identification of cross-panel implementation activities