RUSALCA 2004

Science Review and Planning Meeting

Meeting Goals

- ✓ Exchange scientific results and information among participating scientists
- ✓ Confirm expected and identify new data interrelationships
- ✓ Place science results in NOAA program context and identify performance measures
- ✓ Look toward the future

NOAA’s Strategic Goal

- NOAA is a mission agency with 4 strategic goals
- RUSALCA is supported through NOAA’s climate goal

Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond

NOAA's Climate Goal is Implemented Through Five Program Areas

- Climate Observations and Analysis

  To develop climate-quality observations, and associated data ingest, archiving, and dissemination systems, and through analysis develop beneficial information

  – RUSALCA
- Climate Forcing
- Climate Predictions
- Climate and Ecosystems
- Decision Support

Climate Observations and Analysis

- Document the state of the climate system
- Support climate analyses and forecasts
- Detect change in key climate variables

➢ Requires long-term climate-quality data

➢ Adherence to GCOS Climate Monitoring Principles

Judging RUSALCA

- Performance to be assessed through a set of “performance measures”
- PMs exist at several levels from NOAA-level to specific project-level
- Project PMs are “rolled up” into NOAA PMs
- RUSALCA PMs are generated by the program, and must clearly relate to NOAA PMs

RUSALCA PMs (Draft)

1. Quantify flux of fresh water, heat and nutrients through the Bering Strait
   - a. Milestone – Annually deploy and recover flux moorings in western Bering Strait
   - b. Milestone – Produce annually updated status of Bering Strait fluxes and assessment of potential impacts on the Arctic Ocean (ideally in association with the eastern Bering Strait science team)

RUSALCA PMs (Draft)

2. Characterize ocean “climate” in regions of projected rapid change e.g., Northern Bering Sea, Chukchi Sea
   a. Milestone – Establish initial baseline, including assembly of historical instrumental and paleo-data, from which to assess future change
   b. Milestone – Conduct periodic survey of key variables to develop climatology
   c. Milestone – Prepare periodic assessment of state of ocean climate

RUSALCA PMs (Draft)

3. Detect and analyze ecosystem response to climate change in sensitive areas, e.g., NBS, CS
    a. Milestone – Establish initial baseline, including assembly of historical data, from which to assess future change
    b. Milestone – Deploy biophysical mooring network and conduct intensive ship-based physical and biological observations in Northern Bering and Chukchi Seas
    c. Milestone – Produce annual data report, and interdisciplinary assessments at three- to four-year intervals
    d. Milestone – Develop climate-ecosystem indicator variables that could be tested throughout the Arctic Ocean and adjacent seas.

PM Next Steps

- Review results from 2004 cruise in context of draft RUSALCA performance measures
- Update performance measures
- Identify optimal schedules for product delivery