

NOAA's Climate Mission Goal

Outcomes

- us cutvas

- A predictive understanding of the global climate system on time scales of weeks to decades with quantified uncertainties sufficient for making informed and reasoned decisions.
 Climate-sensitive sectors and the climate-literate public
- effectively incorporating NOAA's climate products into their plans and decisions.
- These outcomes require incremental, annual expansion of the observing system, focused research to understand key climate processes, improved modeling capabilities, and the development and delivery of climate information services.

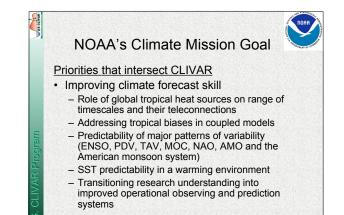
http://www.spo.noaa.gov/noaastratplanning.htm

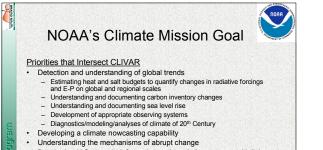
NOAA's Climate Mission Goal

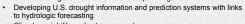
Performance Objectives

US CLIVAR

- Describe and understand the state of the climate system through integrated observations, analysis and data stewardship.
- Improve climate predictive capability from weeks to decades, with an increased range of applicability for management and policy decisions.
- Reduce uncertainty in climate projections through timely information on the forcing and feedbacks contributing to changes in the Earth's climate.
- Understand and predict the consequences of climate variability and change on marine ecosystems.
- Increase number and use of climate products and services to enhance public and private sector decision making.







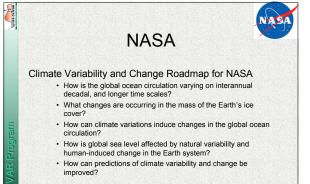
- Climate variability and extreme events
- Applications water resources, fisheries, air quality

Intangibles

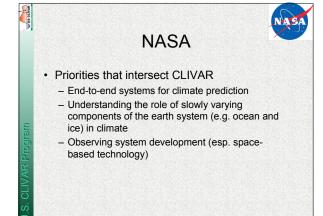
How to engage and provide value

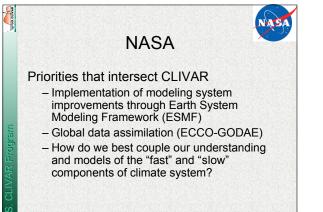
us cutvas

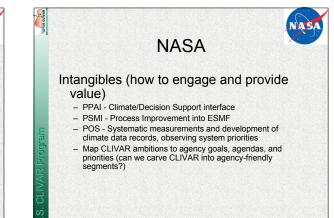
- Sponsor coordinated simulation and forecasting studies to extend predictive capabilities (e.g., ENSO, PDV, TAV, MOC, AMV, NAO, monsoons, abrupt change, etc.)
- Assist in development of distributed data bases for such studies to provide access to the broad user communities Coordinate and lead the development of strategic plans for the evaluation of the ocean observing system
- Aid in development of strategic plans for areas of focus of interest to NOAA and synthesis reports summarizing progress after research is accomplished Work with NOAA to develop appropriate milestones and performance metrics
- Link with other science communities (e.g., WCRP, IGBP, GCOS)
- Brief Congress and the Administration on CLIVAR science and applications

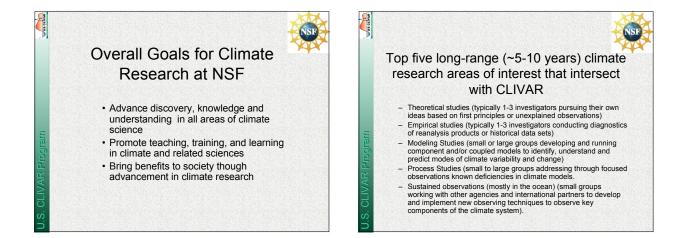


(http://science.hq.nasa.gov/strategy/roadmaps/climate.html)









Top high-priority scientific areas where NSF envisions strong US CLIVAR involvement over the next 1-5 years

- Process understanding
- New observing techniques
- Quantification of climate information uncertainties
- Diagnostics and model improvement and evaluation (Component and coupled models)
- Unified modeling approach: weather-interannualdecadal time scales
- High resolution climate models; "cloud resolving", "eddy resolving", Regional Climate Models, downscaling/upscaling, in general

nso

Intangibles: What are practical actions and activities that U.S. CLIVAR and its panels should consider to improve its value to NSF and to the research community?

- Identify a (small) set of critically important questions and the facilities and research required to address them. These need not be new, as long as they are critically important to CCSP issues and limited not by ideas but by resources.
- U.S. CLIVAR should provide feedback on long-range scientific priorities Briefings to NSF Management to highlight CLIVAR achievements and new opportunities _
- Always strive to represent the broader climate research community

Summary

· There is a need for activities that address short-term to long-term goals in climate research

US CLIVAR

Note the wide breadth of research areas, e.g. predictability, prediction, need to develop understanding, as well as practical capabilities, strategic planning and establishing priorities