

January 2006
U.S. CLIVAR News-gram

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CALENDAR of UPCOMING EVENTS (for more information - www.usclivar.org/calendar.html)

January 2006:

- 21-26: 1st iLEAPS Science Conference
30-Feb3: AMS Annual Meeting
31: U.S. CLIVAR Town Hall Meeting at AMS

February 2006:

- 1: U.S. CLIVAR Committee Meeting
13-16: CLIVAR WGSIP Meeting
15-17: CLIVAR Pacific Panel Meeting
20-24: AGU Ocean Sciences Meeting
23: U.S. CLIVAR Salinity Session at Ocean Sciences

March 2006:

13-18: 2nd ARGO Science Meeting
21-24: Climate Prediction Applications Science Workshop
27-29: Workshop on Tropical Cyclones and Climate
27-31: DOE ARM Meeting

Research Opportunities and Call for Papers

1. NASA Research Opportunities in Space and Earth Sciences

"Research Opportunities in Space and Earth Sciences" (NNH05ZDA001N) will be posted on its home page Web site at <http://nspires.nasaprs.com/> (select "Solicitations" then "Open Solicitations" then "NNH05ZDA001N" then "Program Elements" then "Advanced Information Systems Technology").

This amendment establishes a new program element in Appendix A.33 entitled "Advanced Information Systems Technology." This new program element solicits proposals for development of selected key technologies to enable an evolution of distributed Earth system sensors and processing components into sensor webs. This AIST program solicitation will concentrate on the architecture (i.e., the design, structure, and behavior) and development of system building blocks leading to autonomous sensor webs. Scenarios are required to show the relevancy of the proposed technology to the objectives of NASA Earth science. During the course of the technology development, the awardees will be required to participate in ESTO-sponsored sensor web technology workshops to advance information sharing on components and concepts. Notices of Intent to propose are due January 17, 2006, and proposals are due March 17, 2006.

2. NASA National Leadership Computing System Resources

Proposal Submission Deadline: Monday, **16 January 2006**
The complete Call for Proposals is available online at:
http://www.nas.nasa.gov/Users/Accounts/pi_NLCS.html

Questions about the proposal procedure should be directed to:
Tsengdar Lee
NASA Headquarters
Phone: 202-358-0860
E-mail: tsengdar.j.lee@nasa.gov

As a commitment to continued U.S. leadership in high-end scientific and technical computing and computational modeling, and in response to the recommendations of the Federal High-End Computing Revitalization Task Force (HECRTF), NASA is extending access to its premier high-end computing system, called Columbia, to include research from outside of existing NASA projects.

Four of Columbia's nodes have been linked to form a unique 2048-processor shared

memory environment, currently the world's largest single-system-image configuration, referred to as NASA's National Leadership Computing System (NLCS).

Scientists and engineers are invited to request large allocations of time and storage on the NLCS. Applicants must present evidence that they can make effective use of the shared memory architecture and a major fraction of the processors. Four and a half million processor hours are being made available through the Call for Proposals for the year 1 March 2006 to 28 February 2007.

3. NASA Earth System Science Fellowships

NASA announces graduate student fellowships for persons pursuing Master of Science (M.Sc.) or Doctoral (Ph.D.) degrees in Earth System Science and related disciplines. The purpose of NASA's Earth System Science (ESS) Fellowship Program is to ensure continued training of interdisciplinary scientists to support the study of the Earth as a system. NASA places particular emphasis on the applicant's ability and interest in pursuing academic training and research using observations and measurements from NASA's Earth orbiting satellites, and in developing inter- or cross-disciplinary research about the Earth system that is not currently emphasized in the research and development portfolio of NASA's Science Mission Directorate (SMD).

Students intending to apply to the ESS Fellowship Program are encouraged to consult with their advisors and seek their guidance and review of the research proposal which is a major part of the application; however, the proposals must be written by the student applicants.

Proposed research may stem from atmospheric chemistry and physics, ocean biology and physics, ecosystem dynamics, hydrology, cryospheric processes, geology, geophysics, engineering, and computing or information science. Specific research, whether relating to observations, process studies, modeling, and/or analysis, should emphasize the use of remote sensing and be relevant to NASA's objectives in Earth Science.

The maximum amount of award is \$24,000/annum. The fellowship may be used to defray student's stipend, living and educational expenses, travel expenses to scientific conferences, research supplies (other than equipment), tuition, and fees. For the 2006/2007 academic year, NASA expects to award up to 50 new ESS fellowships.

Submission Deadlines

Deadline for receipt NEW applications: 4:30 p.m., EST February 1, 2006

Deadline for receipt of RENEWAL applications: 4:30 p.m., EDT, March 15, 2006

4. NSF Synthesis of Arctic System Science (NSF 06-523)

National Science Foundation (NSF), Office of Polar Programs, Arctic System Science (ARCSS) Program

This solicitation is for research that synthesizes our understanding of the arctic system. The arctic system is a set of interconnected and interacting physical, biological, and human components and processes in the northern region influenced by the existence of perennial ice (sea ice, ice sheets, glaciers, permafrost, etc.). Research efforts supported will build on and integrate the wealth of existing data and knowledge to advance our understanding of the behavior of the arctic system or key subsets of the system and to understand the role it plays in the global system and society.

ARCSS issued a solicitation in 2005 for proposals on synthesis. This solicitation seeks additional proposals to undertake this synthesis and complement the research underway under awards that were made in 2005 (http://www.arcus.org/ARCSS/synthesis_projects.html). This call for proposals is timely because the pace of arctic change has accelerated; an integrated system understanding is now essential to establish a scientific basis for predicting environmental change and — most importantly— for supporting decision-making processes in society and formulating policy options.

For the full program solicitation, see the NSF website at:
http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06523
Full Proposal Deadline: Friday, **24 March 2006**

5. NSF Carbon in Water Systems

Full Proposal Deadline Date: March 15, 2006

This solicitation continues some activities of the Biocomplexity in the Environment (BE) initiative, and in particular aspects of the programs Coupled Biogeochemical Cycles, Integrated Carbon Cycle Research, Biogeosciences, and Water Cycle Research. These previous solicitations were aimed at increasing our fundamental understanding of links among the physical, chemical, geological, hydrologic, atmospheric, and biological processes that comprise the Earth's natural systems. This solicitation is more limited in scope, but continues the central BE theme of interrelationships by focusing on enhanced understanding of carbon and water cycle processes related to Earth's hydrosphere, atmosphere, geosphere, and biosphere, as well as exchanges among these different reservoirs.

For background, interested proposers may wish to examine examples of recent scientific reports on the Carbon Cycle (for example www.carboncyclescience.gov/planning.html), Water Cycle (for example www.usgcrp.gov/usgcrp/Library/watercycle/wcsgreport2001/default.htm), and Climate Change (for example www.climatescience.gov). However, this solicitation does not cover all the topics addressed in these reports.

Additional information can be found at
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13651&org=GEO&from=home

Position Announcements

6. Staff Scientist – International CLIVAR Project Office

James Rennell Division, National Oceanography Centre, Southampton

A scientist is required to join an international team that provides support for the international activities of the World Climate Research Program's study on Climate Variability and predictability (CLIVAR). The post involves work with teams of leading international scientists, involved in atmospheric, oceanic and climate modeling and climate change detection. These are working towards the development and implementation of CLIVAR's program of research on phenomena ranging from monsoons and El-Niños to human impacts on climate with focus on the oceans' role in decadal-scale climate variability.

The successful applicant should have a Masters degree or PhD in Meteorology, Oceanography or Climate Science. A broad awareness of how the climate system works and specialist knowledge in a relevant area of the physical sciences is important as is experience of atmosphere, ocean or coupled modeling. You should have excellent communication skills, spoken and written, and have experience of using computer packages (e.g. Word, Excel, Adobe Illustrator). This position will involve short periods of overseas travel.

The post is initially available for a period of 17 months and the salary will be in the range £23,457 - £28,850 per annum, depending on qualifications and experience.

Further information regarding this position may be obtained from our Website: <http://www.clivar.org/recent/jobs/jobs.htm> or Email: icpo@noc.soton.ac.uk

An application form and further particulars may be obtained from the Human Resources Department (E), University of Southampton, Highfield, Southampton, SO17 1BJ, Tel: 023 8059 2750, e-mail: recruit@soton.ac.uk or minicom: 023 8059 5595, alternatively visit our website at <http://www.jobs.soton.ac.uk>. Closing date for applications is 6 January 2006. Please quote reference number 05E0364.

7. Postdoctoral Scholar Position - Physical Oceanography and Polar Processes Jet Propulsion Laboratory (JPL) California Institute of Technology

The California Institute of Technology, Postdoctoral Scholars Program at the Jet Propulsion Laboratory (JPL) invites applications for a postdoctoral research position in physical oceanography and polar processes. The position will involve analysis of high-latitude satellite data and high-resolution global-ocean and sea-ice data syntheses from the ECCO2 project (<http://ecco2.org/>) in order to study interactions of ocean circulation with atmosphere and sea-ice processes.

A Ph.D. in physical oceanography, applied physics, or related fields is required. Experience with high latitude observations and processes is desirable. The position is open immediately and appointment is contingent upon completion of Ph.D. The start date is flexible, but preferably no later than 1 May 2006. The annual starting salary for a recent Ph.D. is approximately \$52,000 USD and can vary somewhat according to the applicant's qualifications.

For more information, please contact:

Dimitris Menemenlis

E-mail: menemenlis@jpl.nasa.gov

8. IFM-GEOMAR Professor in Physical Oceanography

Immediately available.

The research interests of the applicant should focus on process related observational physical oceanography. A focus might include processes relevant for ocean dynamics and mixing, transfer of properties and substances, and/or modern observational technology. Close collaborations within the Research Division and multidisciplinary cooperation with other research groups in Kiel are expected.

9. IFM-GEOMAR Full Professor in Theoretical Physical Oceanography

*** starting date of April 1st, 2007**

The research interests of the applicant should focus on the theoretical basis of ocean dynamics. Research applications will involve complex ocean circulation models that describe processes on all timescales including global and regional energy and property transports, and might use novel mathematical methods, data assimilation, and stress interactions with modern or paleo observations. Close collaborations within the Research Division and multidisciplinary cooperation with other research groups in Kiel are expected.

Qualifications:

A successful applicant will pursue outstanding and internationally recognized research in physical oceanography and is expected to fully participate in the educational program of physical oceanography. The position is part of the Research Division *Ocean Circulation and Climate Dynamics*.

Habilitation or equivalent scientific qualifications are required. The applicant is expected to teach physical oceanography at both the undergraduate and graduate level. Many of the lectures will be given in English.

Applications should be received until **January 15th, 2006** and addressed to the Dean of the Faculty of Natural Sciences and Mathematics of the Christian-Albrechts-University in Kiel, Olshausenstr. 40, 24098 Kiel, Germany

ANNOUNCEMENTS

- **Request for Input - NSF Strategic Plan FY 2006-2011**

Comment Deadline: Friday, 20 January 2006

Comments can be submitted online at:

<http://www.nsf.gov/about/performance/input.cfm>

The National Science Foundation is asking for your input at the start of the process to draft the next NSF Strategic Plan. Feedback from the science and engineering community is very important and views from the community will be incorporated into the new plan.

The current plan

(http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf04201) is meant to guide NSF and stakeholders in a way that is responsive to the science and engineering community that NSF serves. The Strategic Plan for FY 2006-2011 will continue to do this through communicating NSF's strategic goals, objectives, priorities and strategies over this time period. To meet the requirements of the Government Performance and Results Act, the plan will also discuss the relationship of this entire framework to annual performance goals in the NSF budget. The Strategic Plan will be consistent with the priorities and strategies being drafted in the National Science Board 2020 Vision for the National Science Foundation. Your comments are requested by January 20, 2006 through the website at: <http://www.nsf.gov/about/performance/input.cfm>.

In particular, NSF requests comments on the following questions to assist in developing the new plan:

Does NSF's current Strategic Plan effectively communicate NSF's roles and responsibilities as part of the science and engineering (S&E) community? If not, what is lacking and how can the next plan be improved?

What broad characteristics of the near- and long-term environment for S&E research and education should NSF consider and address in its next Strategic Plan?

In addition to direct community input, the NSF Advisory Committees will provide guidance throughout the process. There will be another opportunity for direct community input once a draft plan is completed. The final version of the Strategic Plan must be sent to Congress and the Office of Management and Budget by September 30, 2006.

- **Invitation to Comment on Draft Prospectuses for CCSP Synthesis and Assessment Products 1.3, 4.1, 5.1, and 5.3**

You are invited to provide comments on the prospectuses for four Climate Change Science Program (CCSP) Synthesis and Assessment Products:

1.3 Reanalysis of Historical Climate Data for Key Atmospheric Features:

Implications for Attribution of Causes of Observed Change

4.1 Coastal Elevation and Sensitivity to Sea-Level Rise

5.1 Uses and Limitations of Observations, Data, Forecasts, and Other Projections in Decision Support for Selected Sectors and Regions

5.3 Decision Support Experiments and Evaluations Using Seasonal to Interannual Forecasts and Observational Data

These are four of the 21 synthesis and assessment products that will be prepared by the CCSP. The Climate Change Science Program coordinates and directs U.S. research efforts in the areas of climate and global change. The Program completed and released a Strategic Plan in July 2003 to guide its activities. More information about the CCSP can be found in the "Strategic Plan for the U.S. Climate Change Science Program". (<<http://www.climate-science.gov/Library/stratplan2003/>>). The Strategic Plan commits the program to prepare synthesis and assessment products to support informed discussion and decisionmaking regarding climate variability and change. The first set of products is described in the strategic plan.

Comments are due by **30 January 2006**. All comments submitted by that time will be thoroughly evaluated and, if appropriate, incorporated in the final prospectuses, which will be posted on the CCSP website when finalized. The comments submitted will be collated and posted on the CCSP website as well. The final prospectuses will include the agreed timetables, which will highlight opportunities for further public engagement. To ensure that your comments are routed correctly, please submit them to the e-mail address described in the instructions for formatting and submitting comments. These instructions have been customized for each product and are available through the internet links listed below:

For Product 1.3 (Reanalysis):

<http://www.climate-science.gov/Library/sap/sap1-3/default.htm> For Product 4.1 (Sea Level):

<http://www.climate-science.gov/Library/sap/sap4-1/default.htm> For Product 5.1 (Observations):

<http://www.climate-science.gov/Library/sap/sap5-1/default.htm> For Product 5.3 (Seasonal):

<http://www.climate-science.gov/Library/sap/sap5-3/default.htm>

To begin the review of one of these products, follow the appropriate link to download the instructions and the prospectus. We appreciate your participation and constructive comments.

The completed Prospectus for Product 2.1, Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations and Review of Integrated Scenario Development and Application, which (along with public comments submitted on an earlier draft), can be found at <<http://www.climate-science.gov/Library/sap/sap2-1/default.htm>>.

Meetings and Workshops

10. U.S. CLIVAR Town Hall Meeting

One of the core objectives of CLIVAR is predictability and predictions, e.g. characterizing elements of the coupled climate system that are predictable, identifying sources of predictability, and improving capabilities to predict climate variability on

seasonal and longer time scales. CLIVAR recognizes that a critical measure of success in its research program is a transferal of insight and knowledge to routine production of climate forecasts, information and products. These forecasts and climate products have inherent value to decision makers.

Thus, the U.S. CLIVAR will discuss their upcoming plans at an AMS Town Hall Meeting 31 January 2006. The newly reorganized U.S. CLIVAR is structured around three central themes: (1) Prediction, Predictability and Applications Interface (2) Process Studies and Model Improvement, and (3) Phenomena, Observations and Synthesis. Each theme has a newly constituted panel that will be helping lead, coordinate, and recommend efforts and activities that address several CLIVAR goals as well as CCSP milestones. During this Town Hall meeting, co-chairs from each panel will present their goals, steps towards achieving those goals, and how the scientific community can become involved in U.S. CLIVAR. A discussion will follow.

11. 20 Years of Nonlinear Dynamics in Geosciences June 11-16, 2006, Rhodes, Greece

The purpose of this conference is to bring together scientists from the atmospheric sciences, hydrology, geology, and other areas of Geosciences to discuss the advances made and the future directions of nonlinear dynamics. Topics will include predictability, ensemble prediction, nonlinear prediction, nonlinear time series analysis, low-dimensional chaos, error growth in the models, nonlinear modeling, fractals and multifractals, bifurcation, and other aspects of nonlinear science. Submission of abstracts from all areas of Geosciences is welcome. For more information or to register and submit abstracts please visit <http://www.aegeanconferences.org>. We would like to invite you to participate in this exciting meeting. Please note that the cost of the accommodation package is 1290 Euro and includes registration, hotel accommodations at the Hilton resort in Rhodes, all meals (breakfast and lunches at the hotel, dinners at selected restaurants in the island), and an island tour. We sincerely hope that you will be able to participate. If you need further information, or if you have any comments or suggestions, please do not hesitate to contact us. The meeting is endorsed by the American Meteorological Society (AMS) and the European Geosciences Union (EGU).

If you intent to participate we urge you to pre-register. At this stage this is very important. Pre-registering guides us with the planning and the logistics of the conference. Pre-registration does not require paying now. Payment is due March 15. The number of participants is limited to 150.