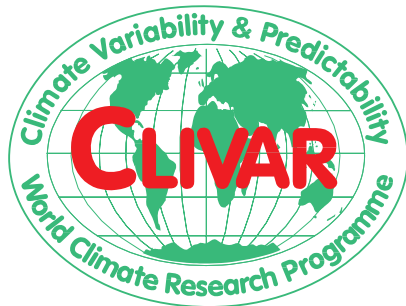


WCRP REPORT

World Climate Research Programme



Project Report

Report of the 10th Session of the CLIVAR VAMOS
Panel

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Executive Summary

The tenth session of the WCRP/CLIVAR VAMOS Panel (VPM10) was hosted by the Department of Geophysics of the Universidad de Chile, in Santiago, Chile, 2-5 April 2007, with joint support from WCRP, NOAA Office of Global Programs and US CLIVAR. The presentations given by the meeting participants are available at the meeting webpage http://www.clivar.org/organization/vamos/Meetings/vpm10_meet.htm. VPM10 consisted of MESA, LPB, NAME, VOCALS sessions and a special session on Major Accomplishments and Plans to celebrate the 10th Anniversary of VAMOS. A two-day VOCALS workshop within VPM-10 was held on April 3-4 at the same venue. The session celebrating the major accomplishments of VAMOS during its first 10 years included presentations on a “Unified View of the American Monsoons”, “VOCALS Progress and Plans”, “MESA Progress and Plans” and “NAME Progress and Plans”. The VAMOS panel stressed the need for improved coordination and understanding of a ‘Unified’ view of the North and South American monsoon systems. This view should also integrate emerging studies into the influence of the intra-Americas seas on climate in the Americas. The panel reviewed the progress of the VAMOS science components, and in particular of the VOCAL Workshop (scientific planning both for Coastal and Rex, initial stages of field logistical planning, revision of VOCALS coastal plan, implications for modelers and Rex). VAMOS panel received the newly revised IASCLIP Science and Implementation Plan, and requested a review of the plan and feedback to the IASCLIP working group. As requested by the Modeling Group for VAMOS the panel should circulate the draft modeling plan to the VAMOS community for additional advice on implementation and subsequently that the panel should forward the modeling plan to CLIVAR SSG for approval.

List of actions and statements

Science and Data

- Recommend addition of “NAME climate indices” to NAME milestones
- Review IASCLIP Science and Implementation Plan and provide feedback to IASCLIP working group (co-chairs; VAMOS Panel)
- Seek VAMOS Panel endorsement of IASCLIP as 4th VAMOS Science component (co-chairs) and forward recommendation to CLIVAR SSG (co-chairs)
- Circulate Draft Modeling Plan to VAMOS Community for additional advice on implementation (co-chairs, VAMOS Panel) and forward Modeling Plan to CLIVAR SSG for approval (co-chairs)
- Adopt the data exchange guidelines proposed by Steve Williams as a policy for VAMOS (VAMOS Panel) and inform the CLIVAR SSG (co-chairs)

Reports / Publications

- Endorse NAME SWG effort (Gochis and Higgins) to organize Issue of CLIVAR Exchanges following AGU / SWG-9 in Acapulco, MX (May 2007)
- Endorse publication of “NAME Science and Implementation Plan” and “NAME Modeling and Data Assimilation” White Paper (Gochis, Ereno)
- Endorse publication of “MESA Science and Implementation Plan” (Marengo, Ereno)
- Prepare VPM10 Workshop Report (introduction, short summaries of each session, links to powerpoint presentations, list of VPM10 Action items) (Ereno, session chairs, co-chairs)

- Identify the theme and authors for 4th issue of VAMOS NEWSLETTER (co-chairs)

Membership Issues

- Endorse the NAME SWG FY07 rotation, reorganized VOCALS SWG and reorganized MESA SWG (co-chairs, VAMOS Panel).
- Finalize selection of VAMOS Panel co-chair to replace Higgins (Marengo, VAMOS Panel).
- Forward recommendations for VAMOS Panel FY07 Rotation to CLIVAR SSG for approval (VAMOS co-chairs). Include a short bio for each of the new panel members (co-chairs) .

Meetings

- Work with RSMAS on venue, dates and focus of VPM11 (co-chairs)

VAMOS 10th Anniversary: Major Accomplishments and Plans (Higgins)

A session celebrating the major accomplishments of VAMOS during its first 10 years was held on the first morning of the Tenth Annual Meeting of the VAMOS Panel (VPM10). The session kicked off with a presentation focused on a "[Unified View of the American Monsoons](#)". Dave Gochis and Jose Marengo alternately discussed common features of the North and South American monsoon systems with emphasis on basic features, context within the annual cycle, and variability on timescales from diurnal to interannual. Gochis and Marengo also emphasized lessons learned from the NAME 2004 and SALLJEX field campaigns. The presentation was an extension of the original paper by Vera et al. (2006) on the same subject.

Rob Wood shared "[VOCALS Progress and Plans](#)" as a prelude to the VOCALS REx Workshop to follow on days 2 and 3 of VPM10. Wood discussed the nature of the bias that coupled climate model simulations exhibit in the SEP and the model developments that are necessary to reduce or eliminate these errors. Rob also discussed VOCALS science issues, VOCALS modeling and some details of VOCALS REx, including science goals, timeline and progress to date.

Jose Marengo and Dave Gochis gave similar presentations on "[MESA Progress and Plans](#)" and "[NAME Progress and Plans](#)", respectively. In each case the authors provided summaries of recent accomplishments, including field data sets, publications, meetings, and milestones. Key science results and insights extracted from recent publications were also highlighted, including the diurnal cycle, heavy precipitation and the modes of interannual variability.

Several presentations regarding NAME-related research and programmatic activities were made to the VAMOS group. The principal NAME accomplishments during 2006 include:

- 22 papers are now in press within a special issue of the J. Climate on NAME. A next generation of post-field campaign research is now working its way through peer review
- 4 NAME-specific sessions have been planned for the spring AGU/UGM Assembly in May in Acapulco, MX. The 9th NAME Science Working Group (SWG) meeting will be held in conjunction with the joint AGU/UGM Assembly
- NAME has submitted a summary article to U.S. CLIVAR-*Variations* for publication during April, 2007
- The 8th Meeting of the NAME SWG was held in Tucson, Arizona and hosed over 40 participants. The meeting report from this meeting as well as links to all presentations are available through the NAME website
- 2006 NAME membership rotation was completed with the rotation and appointment of 4 new members. David Gochis assumed the chair of the NAME SWG following Wayne Higgins.
- Several new synthesis datasets (radar, SST, atmospheric analyses) from the 2004 NAME field campaign are now available through the NAME website
- NAMAP-II the second NAME model assessment project has documented measured improvements in the ability of global models to simulate the seasonal cycle of the monsoon (more results are forthcoming)

The VAMOS panel repeatedly stressed the need for improved coordination and understanding of a 'Unified' view of the North and South American monsoon systems. Such a view should be developed within the context of the annual cycle as regions of moisture transport and convective precipitation evolve with the seasons. This view should also integrate emerging studies into the influence of the intra-America seas on climate in the Americas. Of particular note, both the North and South American monsoon research groups need to emphasize the role of seasonal heating and circulation patterns as mechanisms for driving moisture transport out of the tropics within both the time mean warm season circulation and intra-seasonal transients.

Science presentations of the North American Monsoon made at the VAMOS Panel Meeting included:

- [A unified view of the North and South American monsoon systems](#) (J. Marengo and D. Gochis)
- [Hydrologic Applications of the North American Monsoon](#) (D. Gochis)
- [Impact of tropical cyclones from 2004 and 2006 on northwestern Mexico](#) (L. Farfan)

- [Variability of extreme precipitation in the core of the North American Monsoon](#) (T. Cavazos)
- [A dipole in the warm pools of the Caribbean and Tropical East Pacific](#) (A. Douglas)

2007 program activities for NAME will be focused on the following:

- Development of a NAME Forecast Forum which will aim to collect North American Monsoon forecasts, track monsoon behavior and develop periodic outlooks
- Continue with a North American Monsoon observing system design
- Organize a special issue of the International CLIVAR Exchanges on NAME highlighting results presented at the 2007 AGU/UGM Joint Assembly
- Promote the need for robust research on climate change implications on the North American Monsoon

Ben Kirtman joined VPM10 by phone to provide an update on the “[VAMOS Integrated Modeling Plan](#)”. Ben emphasized that the basic content of the plan (including science themes and cross-cuts) is in good shape, but that the plan is in need of additional review by the VAMOS Panel with attention to activities that move the plan towards implementation. The VAMOS Session at the WCRP Workshop on Seasonal Prediction, in Barcelona, Spain (4-8 June 2007) is an important step in that direction.

10th VAMOS Panel Meeting Executive Session

The VAMOS Panel Executive Session was attended by 11 of the 13 panel members (J. Amador, H. Berbery, T. Busalacchi, L. Farfan, R. Garreaud, D. Gochis, L. Goddard, W. Higgins, J. Marengo, C. Saulo and R. Wood (for R. Mechoso)). Panel members J. P. Boulanger and D. Gutzler were not in attendance. Representatives and program managers from NCPO (J. Huang), U.S. CLIVAR (D. Legler), NSF (W. Robinson), UCAR/EOL (J. Meitin, K. Sawyer, S. Williams), WCRP (C. Ereno) and VAMOS Panel nominee T. Cavazos were also in attendance.

The session began with brief reviews of the VAMOS science components (NAME, MESA, VOCALS). Dave Gochis (NAME chair) emphasized new NAME activities, including NAM regional climate observing system design, the NAM Forecast Forum, the NAME SWG-9 Meeting (Acapulco, MX, May 24 in conjunction with Joint AGU/UGM assembly) and a CLIVAR Exchanges Special Issue. Dave also reviewed the NAME program milestones and requested that NAME add a milestone to “develop NAME climate indices”. Jose Marengo (MESA Chair) reviewed the MESA milestones and updated the panel on the reorganized MESA SWG. Rob Wood emphasized progress that had been made during the VOCALS Workshop (scientific planning both for Coastal and Rex, initial stages of field logistical planning, revision of VOCALS coastal plan, implications for modelers and Rex). Some discussion of merging REx and Coastal under a single program also occurred. Rob also emphasized upcoming VOCALS planning workshops (Modeling (May 18-20) and REx (June 11-12)) and the US PI proposal review to be coordinated by NSF ATM. Dave, Jose and Rob all asked the VAMOS Panel to endorse changes in membership to their respective SWG’s.

Jorge Amador, who presented the newly revised IASCLIP Science and Implementation Plan, asked the panel to review the plan and to provide feedback to the IASCLIP working group. On behalf of the IASCLIP working group, he also asked the VAMOS panel to endorse IASCLIP as a 4th VAMOS Science component and to forward that recommendation to the CLIVAR SSG for approval.

Wayne Higgins reviewed the requests of the “Modeling Group for VAMOS”, that the VAMOS Panel should circulate the draft modeling plan to the VAMOS community for additional advice on implementation and subsequently that the panel should forward the modeling plan to CLIVAR SSG for approval.

Steve Williams introduced a proposal for “VAMOS Data Exchange Guidelines” and asked the Panel to adopt these guidelines as a VAMOS policy. The VAMOS Panel unanimously agreed to the policy.

Wayne Higgins briefly reviewed Tony Busalacchi’s “take home message” from the JSC-28 meeting. In particular, Tony recommended that the panel articulate the VAMOS “legacy” to the JSC, including how VAMOS has influenced / changed the research agenda, and how VAMOS will strengthen ties with Permanent Representatives, stakeholders and the operational community.

Carlos Ereno briefly reviewed the status of the 3rd VAMOS Newsletter (due out shortly) and reminded the panel that the central theme and authors for the 4th Newsletter are due. Carlos also reviewed the format of the VPM10 meeting report, which will be shorter than previous reports with an overview summary, brief reviews of each session, and links to meeting presentations.

Wayne Higgins and Jose Marengo carried out the 2007 VAMOS Panel membership rotation. Wayne Higgins will rotate off as VAMOS co-chair and VAMOS Panel member following VPM10. Hugo Berbery will replace Wayne Higgins as VAMOS co-chair. Teresa Cavazos will become a VAMOS Panel member replacing Wayne Higgins. Rene Garreaud will remain on the VAMOS Panel for one additional 3-year term. Dave Gutzler will continue for another year as US CLIVAR representative. Tony Busalacchi will continue for another year as CLIVAR SSG and JSC representative. The VAMOS Panel will request SSG approval for the 2007 membership rotation.

The next annual meeting of the VAMOS Panel (VPM-11) was discussed. A proposal to hold the next meeting in Miami/RSMAS, with emphasis on advancing IASCLIP was discussed. RSMAS has graciously agreed to host the meeting, and the panel is moving forward with the proposal.

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Annex B: Tenth Annual Meeting of the WCRP/CLIVAR/VAMOS Panel (VPM10) VOCALS Workshop

Monday, April 2, 2007 – Morning Session – Plenary
Chair: R. Garreaud

- 8:30 am Welcome
- Dr. Jose Marengo and Dr. Wayne Higgins - VAMOS Co-Chairs
- Dr. Patricio Aceituno - University of Chile
8:40 am [VAMOS Chair's Report](#) - J. Marengo and W. Higgins
9:10 am [VAMOS Project Office/VAMOS Database](#) - S. Williams / J. Meiting
9:30 am *Anniversary Break*

Monday, April 2, 2007 - Special Morning Session
Chair: W. Higgins

"VAMOS 10th Anniversary: Major Accomplishments and Plans"

- 10:00 am [Unified View of the American Monsoons](#) - J. Marengo and D. Gochis
10:30 am [VOCALS Progress and Plans](#) - R. Wood
11:00 am [MESA Progress and Plans](#) - J. Marengo
11:30 am [NAME Progress and Plans](#) - D. Gochis
12:00 pm [VAMOS Modeling Plan](#) - B. Kirtman (*by phone*)
12:30 pm *Lunch*

Monday, April 2, 2007 - Afternoon Session - Plenary
Chair: W. Robinson

- 1:50 pm [WCRP Report](#) - T. Busalacchi
2:10 pm [CLIVAR ICPO](#) - C. Ereno
2:30 pm [IASCLIP Program](#) - J. Amador

Monday, April 2, 2007 - Afternoon Session - MESA and LPB
Chair: C. Saulo

- 2:50 pm [MESA Modeling Activities](#) - C. Saulo
3:10 pm [LPB RHP Status Report](#) - H. Berbery
3:30 pm [LPB PLATEX](#) - M.A. Silva Dias
3:50 pm *Break*

Monday, April 2, 2007 - Afternoon Session - NAME
Chair: L. Farfan

- 4:20 pm [Hydrologic Applications](#) - D. Gochis
4:40 pm [Impact of tropical cyclones from 2004 and 2006 on northwestern Mexico](#) - L. Farfan
5:00 pm [Variability of extreme precipitation in the core of the North American Monsoon](#) - T. Cavazos
5:20 pm [A Dipole in the Warm Pools of the Caribbean and Tropical East Pacific: Joint Influences Governing the Predictability of Seasonal Rainfall Regimes in Mexico and Basin Wide Tropical Cyclone Activity](#) - A. Douglas
5:40 pm *Adjourn*
6:00 pm *Reception offered by the University of Chile*
-

Tuesday, April 3, 2007 - Morning Session - VOCALS Workshop at VPM10

Chair: R. Wood

- 9:00 am [The VOCALS Program](#) - R. Wood
9:20 am [VOCALS REx Oceanography](#) - R. Weller
9:40 am [VOCALS REx Aerosol-Cloud-Precipitation](#) - B. Albrecht
10:00 am [VOCALS REx Chemistry](#) - B. Huebert
10:20 am *Break*

10:50 am [Coastal Program Science Goals](#) - J. Rutllant
11:10 am [Peru Coastal Component](#) - C. Grados
11:30 am [Coastal Meteorology/modelling](#) - R. Garreaud
11:50 am [Coastal Oceanography Goals](#) - O. Pizarro
12:10 pm [Coastal Aerosols / Biogeochemistry](#) - L. Gallardo
12:30 pm *Lunch*

Tuesday, April 3, 2007 - Afternoon Session - VOCALS Workshop at VPM10

- 2:00 pm [The agencies' role](#) - W. Robinson
2:30 pm Breakout on Coastal Meteorology/Aerosols/Biogeochemistry [Garreaud, Wood, Albrecht, Huebert, Fairall, Gallardo, Rutllant, Muñoz, Carrasco, Cornejo Cordova,...]
2:30 pm Breakout on Coastal oceanography [Paulson, Pizarro, Hormazabal, Dever, Weller,.....]
6:00 pm *Adjourn*

Wednesday, April 4, 2007 - Morning Session, VOCALS Workshop at VPM10

- 9:00 am [Data policy and management for VOCALS](#) - S. Williams
9:20 am Reports from breakouts, and discussion of Coastal Program Science Goals
10:00 am Breakout on shipborne observations [All oceanographers + Rutllant]
10:00 am Breakout on airborne observations [All meteorologist]
11:30 am General Discussion: Plans, meetings, etc
12:30 pm *VOCALS Workshop ends*

Wednesday, April 4, 2007 - Afternoon

- 13:30 pm ½ Day Trip to Chilean Coast (Optional)

Thursday, April 5, 2007 - Morning Session, VAMOS Panel Executive Session
Chairs: W. Higgins and J. Marengo

- 8:30 am [VAMOS Panel Executive Session](#) (W. Higgins & J. Marengo)
[NAME review of progress and issues/actions for VAMOS Panel](#) (D. Gochis)
[VOCALS outcome of workshop and next steps](#) (R. Wood)
12:00 pm *VPM10 ends*

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