



Project Report

11th Session of the CLIVAR VAMOS Panel

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Executive Summary

The 11th Session of the CLIVAR VAMOS Panel (VPM11) was held on 25-28 March 2008, in Miami, Florida, USA, and hosted by the NOAA Atlantic Oceanographic and Meteorological Laboratory with joint support from WCRP, NOAA/CPPA and US CLIVAR. The presentations given by the meeting participants are available at the meeting webpage

(http://www.clivar.org/organization/vamos/Meetings/VPM11_meet.php). The meeting consisted of IASCLIP, NAME, MESA sessions, and special cross-cutting sessions to further integrate activities within the science groups as well as with other CLIVAR and US CLIVAR Panels. Cross-cutting themes included (a) ocean and land sources of predictability, and (b) extremes (droughts and floods). After a discussion on the coordination of activities of the VAMOS groups and other CLIVAR and WCRP and given that US CLIVAR is already working on droughts and that South America has expressed a strong interest in extremes (precipitation and temperature), the panel dedided to establish a VAMOS Task Force on extremes in the Americas. The panel also reviewed the VAMOS modeling plan and, considered it was an excellent opportunity to contribute to the Monsoon cross-cutting theme as identified by WCRP. The plan was submitted to CLIVAR and WCRP as a potential contribution of VAMOS to the WCRP TFSP and WGSIP.

List of actions and statements

1. VOCALS issues

a. The Panel approved the new membership of the science working group as presented by its Chair, Roberto Mechoso. Carlos will inform CLIVAR on this item.

The VAMOS Panel recommends that ex-officio members be considered to foster international collaboration (for example, aerosols, up-welling, operational centers activities)

b. The Panel approved Roberto Mechoso's request to carry out, on behalf of VAMOS, a first round of contacts in order to assess the interest of the international community in the formation of a Working Group on Coastal Upwelling Regions of the World (which would be outside VAMOS but benefiting activities of VOCALS or IASCLIP). This activity will be closely coordinated with the VAMOS co chairs.

2. IASCLIP proposed Implementation Plan

- a. The panel was satisfied with the IASCLIP presentations requesting to become a new science component of VAMOS and consequently will submit it to the CLIVAR SSG for approval consideration. Carlos will implement this recommendation.
- b. IASCLIP will need to consider Roberto Mechoso's comments on the Atlantic Multidecadal Oscillation (AMO) and clarify the needs and plans for the Field Campaign as well as the monitoring activities and their duration. It is recognized that the field campaign gives will give a good perspective of the need of observations along IAS region.
- c. Science steering group will be formed and submitted to the panel by e-mail

3. Review of NAME progress

- NAME had its SWG-10 Executive Session. They will work on a *synthesis document* to be submitted to CLIVAR and other organizations.
- NAME will be working with IASCLIP on transition of research from one to the other.
- NAME Plans a final conference to summarize its achievements.
- Work on transition to operations and forecasting centers will be one of the final activities.

4. Review of MESA progress

- Need of an archive of MESA related articles and publications
- The MESA group expressed their interest in disseminating the achievements in ACC research in the region. Consequently, the preparation of a white paper is proposed (see 7. Stament on ACC) on the VAMOS interests in ACC. Once that document is ready and disseminated, the panel will consider the possibility of gathering materials for a CLIVAR Exchanges special issue on the ACC in the American Monsoons Region. -All MESA group decided to work on a special paper on updates on MESA since Vera et al (2006), including new studies that have surfaced in the past few years.
- -As a synthesis step for SALLJEX, it was decided that the SWG will take advantage of the SALLJEX data and will work on 2-3 integrative multi-author papers on SALLJEX and other meteorological phenomena (cold fronts, MCCs) that occurred during the field experiment in 2003.

With involvement of the respective groups, Jose Marengo for MESA, and Hugo Berbery and Assunçao Silva Dias for LPB will agree on the ways that MESA can contribute to the CLIVAR/GEWEX LPB Project, and the correct wording for the inclusion of PLATEX references in the MESA Scientific Plan.

5. Task Force on extremes in the Americas

WCRP has established Extremes as one of its cross-cutting themes and has requested the panels to become involved in the initiative. Given that US CLIVAR is already working on droughts and South America has expressed a strong interest in extremes (precipitation and temperature), it is recommended to form a *VAMOS Task Force* charged with the following:

- -Provide a definition that will take into account space and time scales of the extremes (e.g. seasonal)
- -How can VAMOS contribute to this WCRP effort?
- -Identify droughts and diagnostic studies of extremes.
- -describe the extremes in the VAMOS region.
- -Determine the priority research areas
- -Prepare by 20-June-2008 a 2-3 page document reporting the outcome of the discussions.

(Consider: Processes that represent a significant shift in climate, in a seasonal time scale. Also a shift in the distribution function; for example impacts of ENSO in South America are stronger on the extreme tails than on the monthly or seasonal totals of precipitation; we have to take advantage of the group that is working in US and get benefit for the entire VAMOS region.)

Task Force:

David Gochis, **Lisa Goddard**, Kingtse Mo, Hugo Berbery, Siegfried Schubert, Jose Marengo, **Jean-Philippe Boulanger**, Claudia Tebaldi, Anjie Seth (in bold the co-chairs of the group)

6. VAMOS Modeling Plan

The document is considered an excellent opportunity to contribute to the Monsoon cross-cutting theme as identified by WCRP. The VAMOS panel members are requested to provide specific inputs (use track changes) in one month time. With the reviews of the panel, the writers of the document are requested to add the priorities, which should be added in an Executive Summary.

It is recognized that the Modeling Plan needs to add recommendations to the science components and add the links to other working groups like TFSP and WGSIP.

It is recommended that the VAMOS modeling group members are identified in the document, as well as a list of all those that contributed to the document.

The implementation plan presented by Vasu Misra will require revision by the author and be resubmitted to VAMOS. Concerns were expressed in the feasibility of the proposed simulations and overlap with TFSP, in which case coordination with that group is required.

The VAMOS modeling plan will be submitted to CLIVAR and WCRP as a potential contribution of VAMOS to the WCRP TFSP/WGSIP Seasonal Prediction Experiments

7. Statement on ACC

A small WG will prepare a white paper to very briefly summarize the current status of the ACC related research along the Americas, identifying the most relevant scientific questions that need to be addressed. If it's possible it could also suggest a group of milestones for VAMOS. The white paper should be short and focused. September 30 2008 is the suggested deadline for a first draft.

Members: Tereza Cavazos, Dave Gochis, Jose Marengo, Jean-Philippe Boulanger, Carolina Vera.

8. Next issue of VAMOS newsletter,

- The theme of the next issue will be "cross-cutting activities within VAMOS, linking the American Monsoons."
- Funding: It was decided to reduce the number of mailed issues and promote the dissemination of the electronic version to significantly reduce the postal costs. Still, a hard copy will continue to be mailed to institutions without proper access to electronic versions.

9. Requested input to the WCRP International Monsoon Study (IMS)

- The chairs will request clarification and an update after the JSC meeting and will send the IMS document for input.
- Posters of VAMOS activities will be prepared and sent to the Pan-WCRP Monsoon meeting in Beijing. [At least Carlos Ereño will be there to put them up.]

10. Next VAMOS meeting

It was proposed to have the meeting somewhere in Central America or the Caribbean to facilitate the inclusion of scientists from less developed countries into IASCLIP activities. Possible Venues: Yucatán (MX), Panama, Costa Rica, Jamaica.

Although VAMOS is planning to switch to an 18-month interval for its meetings, after discussion of the location, timing and objectives it was decided to aim for a date in May 2009 (14 months) to avoid the hurricane season.

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Annex B: Eleventh Annual Meeting of the CLIVAR/VAMOS Panel (VPM11)

Tuesday, March 25, 2008 - Morning Session, Plenary

Chair: Hugo Berbery

8:30 am Welcome

- Dave Enfield, local focal point
- Bob Atlas, AOML Director
- H. Berbery/J. Marengo, VAMOS Co-Chairs

8:40 am VAMOS Chairs' Report	J. Marengo
0.00 am VOCALS Progress and Plans	D. Maalaasa

9:00 am VOCALS Progress and Plans
9:30 am MESA Progress and Plans
9:50 am NAME Progress and Plans
10:10 am LPB RHP Status Report

R. Mechoso
J. Marengo
D. Gochis

10:30 - 10:50 Break

Tuesday, March 25, 2008 - Morning Session, Plenary

Chair: Jose Marengo

10:50 am <u>CLIVAR ICPO</u>	C. Ereno
11:10 am <u>US CLIVAR</u>	David Legler
11:30 am VAMOS Modeling Plan	Ben Kirtman
11:50 am VAMOS Project Office/VAMOS Database	J. Meitin/S. William
12:10 pm VAMOS to the future: cross-cutting themes and	
links to other CLIVAR and WCRP groups	Hugo Berbery
12:20 nm Lunah	,

12:30 pm *Lunch*

FIRST EXECUTIVE SESSION DURING LUNCH

(a) VOCALS membership, (b) Discussion on Cross cutting themes

Tuesday, March 25, 2008 - Afternoon Session, Plenary - IASCLIP Chair: Chidong Zhang

2:00 pm Intro and science plan overview	Dave Enfield
2:30 pm Model assessment and improvement strategy	Ben Kirtman
2:50 pm Precip vs. model comparison, MSD	Brian Mapes
3:10 – 3:30 pm <i>Afternoon break</i>	_

3:30 pm Impact of the Atlantic Warm pool on Summer Climate and

Atlantic Hurricanes	Chunzai Wang
3:50 pm Regional applications & outreach	Lisa Goddard
4:10 pm Tropical cyclones, hurricanes and IAS climate	Jason Dunion

4:30 pm- 6:00 pm General discussion on IASCLIP 6:00 pm *Adjourn*

Wednesday, March 26, 2008 - Morning Session, Plenary - Cross-cutting themes Modeling and predictability

Chair: Celeste Saulo

8:30 am - Monsoon Prediction	Jae Schemm	
8:50 am - Predictability of the North American Climate	Marty Hoerling	
9:10 am - The role of Oceans in the South American Predictabil	lity Paulo Nobre	
9:30 am - Predictability from land conditions	Paul Dirmeyer	
9:50 am - Challenges in numerical modeling of the VAMOS region R. Mechoso		
10:10 10:30 am Rroak		

10:10 – 10:30 am *Break*

10:30 am - Regional Climate Modeling in South America	a Rene Garreaud
10:50 am Regional Climate Modeling in North America	a Kingtse Mo
11:10 am - Atlantic Variability	Jim Carton and S. Grodsky
11:30 am - Thorpex – VAMOS common interests	Pedro Silva Dias
11:50 pm ACC studies in South America	Jose Marengo
12:10 pm ACC studies in North America	Tereza Cavazos
10.00	

12:30 pm Lunch

Wednesday, March 26, 2008 - Afternoon Session, Plenary - Cross-cutting themes Extremes (floods and droughts)

Chair: Dave Gochis

1:30 pm - Droughts Martin Hoerling
1:50 pm - Extremes and Climate Change Claudia Tebaldi
2:10 pm - Seasonal Prediction Assessment Vasu Misra
2:30 pm - 3:20 pm General Discussion on integrating science from different groups
3:20 - 3:40 pm Afternoon break

Wednesday, March 26, 2008 - Afternoon Session, Plenary - Cross-cutting themes

3:40 – 6:00 pm Plenary discussion on VAMOS contributions to CLIVAR and WCRP activities through cross-cutting themes 6:00 pm *Adjourn*

Thursday, March 27, 2008 - Morning Session, Plenary - Cross-cutting themes Cont. Chair:

 $8:30 \text{ am} - \underline{\text{Floods}}$ Dennis Lettenmaier $8:50 \text{ am} - \underline{\text{CLARIS-LPB}}$ Jean-Philippe Boulanger

Interactions among science groups (Led by chairs of science groups)

9:10 am – NAME – IASCLIP
9:40 am – NAME – MESA collaborations
10:10 am – 10:30 am *Break*10:30 am – VOCALS – MESA collaborations
11:10 am – MESA – WAVES – IASCLIP
11:50 am – VAMOS – WCRP/TFSP and CLIVAR/WGSIP
12:10 pm – Report on cross-cutting themes
12:30 pm *Lunch*D. Gochis/D. Enfield
J. Marengo/D. Gochis

R. Garreaud/J. Marengo
P. Nobre/D. Enfield/J. Marengo
Ben Kirtman

Thursday, March 27, 2008 - Afternoon Session

-Parallel - NAME

- a. Continue Synthesis of emerging NAM scientific and prediction findings
- b. Review and refine the NAME Forecast Forum activities and products
- c. Finalize the NAME regional climate observing system design

-Parallel - MESA

- a. Scientific issues on SAMS predictability
- b. Implementation of indices as metrics for monsoons for monitoring and prediction of SAMS components
- c. Model developments and bias reductions in global coupled models and regional models and applications for seasonal forecasts, with emphasis on extremes -VAMOS modeling plan and VAMOS-strategy for seasonal climate prediction
- d. Impacts of climate change in water resources in the region
- e. Update the Science and Implementation Plan
- f. Planning of future studies using SALLJEX data and other data available (observations, models, remote sensing data)

-Parallel - IASCLIP

4:30 pm – 6:00 pm NAME Executive meeting 4:30 pm – 6:00 pm MESA Executive meeting

Meeting ends for non-VAMOS Panel members

Friday, March 28, 2008 - Morning Session, VAMOS Panel Executive Session

- VOCALS issues
- IASCLIP proposed Implementation Plan
- WG on extremes in the Americas
- VAMOS Modeling Plan
- Review of NAME progress
- Review of MESA progress
- Next issue of VAMOS newsletter, funding and themes
- Requested input to the WCRP International Monsoon Study (IMS)
- Issues/actions for VAMOS Panel

12:00 pm VPM11 ends

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