



## **Project Report**

# 12<sup>th</sup> Session of the CLIVAR VAMOS Panel

San Juan, Puerto Rico, USA 3-5 June 2009

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## **Executive Summary**

The 12th Session of the CLIVAR VAMOS Panel (VPM12) was held on 3-5 June 2009, in San Juan, Puerto Rico, USA, and hosted by the Department of Physics of the University of Puerto Rico and the PR Space Grant Consortium from NASA with joint support from WCRP, NOAA/CPPA and US CLIVAR. The presentations given by the meeting participants are available at the meeting webpage (<a href="http://www.clivar.org/organization/vamos/Meetings/VPM12\_meet.php">http://www.clivar.org/organization/vamos/Meetings/VPM12\_meet.php</a>). The meeting focused on the progress of the VAMOS projects, particularly the VOCALS Regional Experiment, LPB, MESA, and IASCLIP. The panel also addressed the contribution to the cross-cutting themes and other WCRP programs, such as GEWEX as well as IGBP programs and activities. In particular, progress has been evaluated of the VAMOS modeling group, of the recently established VAMOS Extremes WG, and of the group that is analyzing the current status of the ACC related research along the Americas. Following SSG16 recommendations there was discussion on the coordination of activities of the VAMOS groups and other CLIVAR and WCRP components. Linkages with WGSIP, WGCM and the WCRP/WWRP Task Force were also explored. The VAMOS panel meeting was preceded by an IASCLIP workshop, which was held on 2-3 June at the same venue.

List of actions and statements

#### - IASCLIP Plans

After receiving a summary of the progress of the IASCLIP project during the last year, which included an overview of the project (David Enfield), modeling and prediction (Vasu Misra, Sang-Ki Lee), observation (Michael Douglas), and training and education activities (Lisa Goddard), the panel made the following general recommendation to the project chair (David Enfield):

- There are numerous local and regional processes important to the IAS climate that are not fully understood (e.g. structure and variability of the Caribbean LLJ, moisture transport across southern Mexico and Central America, influence of island convection on the IAS climate). The IASCLIP community was encouraged to proceed with the development of a coordinated field observing effort that is tightly linked to fundamental uncertainties in current model simulations. They were further encouraged to develop a clear implementation plan for a coordinated field research and modeling effort as was done with SALLJEX, NAME and VOCALS.
- There is a need to expand the group involved in the project to include a diversity of institutions and key scientists from other countries in the region. The involvement of Meteorological Offices is highly desirable.
- For the next phase the panel recommends that a co-chair be appointed, who will help the chair to increase the level of participation in and support to the project.

An IASCLIP website was created: <a href="http://www.eol.ucar.edu/projects/iasclip/">http://www.eol.ucar.edu/projects/iasclip/</a>

Dave Enfield expressed satisfaction for the continuous support of the panel to the project, and informed he intended to step down as chair of the project ending 2011.

Actions:

- The panel asked Dave Enfield to propose names of potential co-chairs for IASCLIP no later than mid August as well as names of people in the region that may become involved in the science planning and implementation of the project.
- The panel requested that Dave Enfield ask for input from IASCLIP SWG on the comments and recommendations received in relation to the IASCLIP project.
- Dave Enfield to inform the panel in 6 months on how the Panel comments on the IASCLIP plan have been addressed

#### VOCALS REx

Rene Garreaud updated the panel on the activities carried out during the past regional VOCALS experiment, October – November 2008, which included the participation of a group of 19 International Universities, 15 Research Labs, and 6 Operational Centers. The VOCALS data sets are in place at <a href="http://data.eol.ucar.edu/master\_list/project=VOCALS">http://data.eol.ucar.edu/master\_list/project=VOCALS</a>, and the group will meet in Seattle, Washington, USA, July 12-14, 2009

#### Action:

The panel encourages VOCALS Science WG to disseminate the initial results of VOCALS REx taking advantage of CLIVAR and VAMOS publications.

#### VAMOS Future and Priorities

#### VAMOS and ACC

Tereza Cavazos and Jose Marengo reported on the VAMOS ACC working group activities during 2008-2009 and the ACC challenges in the American Monsoon region.

#### Action:

The VAMOS ACC WG will seek to engage other groups working on regional climate change like NARCCAP (North American Regional Climate Change Assessment Program) to develop collaborative approaches to science relevant to the Americas.

#### - VAMOS and Extremes

The panel received a briefing on the VAMOS Extremes WG presented by Lisa Goddard. After reviewing the progress of different extreme activities along the Americas and proposing a VAMOS perspective on this issue, she expressed the need to reconsider the leadership of the Working Group.

#### Actions:

The panel will look for possible candidates directly involved in the study of extreme to chair the Working Group.

Following a recommendation from SSG16, the panel encouraged the VAMOS Extreme WG to consider the use of indices and indicators of climate variability and change as defined by the CLIVAR/CCI/JCOMM Expert Team on Climate Change Detection and Indices (ETCCDI), see http://www.clivar.org/organization/etccdi/indices.php

## VAMOS Modeling

Celeste Saulo updated the panel on the VAMOS modeling plan, as well as on the progress in the modeling aspects and accomplishments of the different VAMOS programs, NAME, MESA, SALLJ Field Experiment (2002-2003), and VOCALS.

#### Action:

The panel commended the Modeling WG for their work and encouraged them to advance into the implementation of their plan as for example through the WGSIP activities.

## - VAMOS interaction with WCRP/WWRP MJO Task Force, WGSIP & WGCM

The panel received a report on plans for a WCRP/WWRP MJO Task Force (building on the successful US CLIVAR MJO Working Group) and an update on the Year of Tropical Convection (YOTC) project by Duane Waliser. The VAMOS panel also received a report from Celeste Saulo on VAMOS and WGSIP.

#### Actions:

Celeste Saulo will prepare a summary of the VAMOS modeling plan for the information of the WCRP/WWRP MJO Task Force. The panel will recommend a liaison person to represent VAMOS on MJO TF activities.

Celeste Saulo, with the help of Carlos Ereno, is encouraged to coordinate a joint one day workshop on Seasonal to Interannual Prediction on the American Monsoon Region with WGSIP as part of the next VAMOS Panel meeting (see below also).

## - Decadal predictability

The panel received a briefing from Lisa Goddard on the activities of the US CLIVAR WG on Decadal Predictability. The panel recognized the importance of surveying the different decadal prediction research activities being carried out in the Americas that are relevant to VAMOS.

#### Action:

Panel co-chairs to explore the rationale for establishing a Task Force or Working Group in VAMOS focused on decadal predictability research in the Americas, with the objective to coordinate and promote those efforts, and eventually serve as liaison with other CLIVAR/WCRP related activities.

## - Initiative in Outreach, Capacity Building, and Education

The panel discussed and updated the information on training and education activities in the different VAMOS projects. It was recognised that each component has encouraged capacity building actions and that there is no need to have a group (or an initiative) to coordinate them. The VAMOS listserv was also recognized as an efficient way to distribute and promote information on VAMOS related activities as well as opportunities for the VAMOS community.

The Panel agrees that Capacity Building has to consider the regional characteristics. The panel has to be sure that projects for endorsement include appropriate training and education activities

## Action:

Carlos Ereno is encouraged to continue distributing information and announcements to the VAMOS community through the listserv.

Organisers of future workshops and panel meetings are encouraged to seek to involve local students in them.

## - CLIVAR Imperatives

Hugo Berbery described the Imperatives for CLIVAR, i.e. those activities and/or plans that "must" be continued and/or implemented over the next 5+ years because they are of highest scientific importance with a high likelihood of success. He highlighted and provided details on those imperatives that are most relevant to VAMOS.

#### Action:

Hugo Berbery will distribute the information on the CLIVAR imperatives to the panel.

## - Next issue of VAMOS newsletter, funding and themes

Carlos Ereno reported on the status of the VAMOS newsletter. Starting with the 5th issue (2009) the VAMOS Newsletter has appeared as a supplement of CLIVAR Exchanges for the printed version, a limited number of which will continue to be sent to institutions that are registered on the VAMOS mailing list. Full VAMOS newsletter issues will still remain available in digital form in the VAMOS web site.

The panel thanked the ICPO for helping to print and distribute the 5th issue, and agreed on the benefit of publishing the VAMOS newsletter as a supplement of CLIVAR Exchanges. The panel also discussed different alternatives for the focus of the next issue of the newsletter

#### Actions:

The co-chairs and Carlos Ereno will work with the ICPO to try to continue printing the VAMOS newsletter yearly as a supplement of CLIVAR Exchanges.

The main topic for the next issue will be VOCALS REx with complementary articles such one on Land-Atmosphere Interactions in the NAME experiment by Enrique Vivoni

## - NEXT VAMOS panel meeting

The panel considered the offer of Carlos Ereno to organize the next VAMOS panel meeting in Buenos Aires, Argentina, 28-30 July 2010, in conjunction with the WGSIP meeting, and a WCRP training activity on SIP. Celeste Saulo and Carlos Ereno were requested to coordinate a one-day joint workshop on Seasonal to Interannual Prediction on the American Monsoon Region with the WGSIP.

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## Annex B: Twelfth Annual Meeting of the CLIVAR/VAMOS Panel (VPM12)

## Wednesday, June 3, 2009 - Morning Session, Plenary - Reports

Chair: Jose Marengo, Hugo Berbery

#### 8:45 am Welcome

- Rafael Mendez, local focal point
- H. Berbery/J. Marengo, VAMOS Co-Chairs

9:00 am	VAMOS Chairs' Report	H. Berbery/J. Marengo

9:20 am CLIVAR ICPO C. Ereno
9:40 am US CLIVAR David Legler

10:00 - 10:20 am *Break* 

## Wednesday, June 3, 2009 - Morning Session - IASCLIP

Chair: Kingtse Mo

10:20 – 12:30 pm
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1) Overview D. 1	Enfield
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2) Modeling & Prediction V. Misra / Sang-Ki Lee

3) Observations
4) Applications and Capacity Building
L. Goddard

5) Predictability of North American summer circulation

and precipitation at decadal timescale Qi Hu

## 12:30 pm *Lunch*

## Wednesday, June 3, 2009 - Afternoon Session, Plenary - Reports

Chair: Dave Gochis

1:50 pm	Climate Prediction Program for the Americas (CPPA)	
	J	Jin Huang
2:10 pm	World Climate Research Programme	(WCRP)
		Fony Busalacchi
2:30 pm	International Geosphere-Biosphere Pro	ogramme (IGBP)
	(	Carlos Nobre
2:50 pm	VOCALS Progress and Plans	R.Garreaud/R. Mechoso

## 3:10 – 3:30 pm *Afternoon break*

## Wednesday, June 3, 2009 - Afternoon Session, Plenary – Reports (cont.)

Chair: Rene Garreaud

3:30 am	NAME Legacy	D. Gochis
3:50 pm	MESA Progress and Plans	J. Marengo
4:10 pm	LPB RHP Status Report	H. Berbery
4:30 pm	Modeling in VAMOS	C. Saulo
4:50 pm	VAMOS Extremes	L. Goddard

5:10 pm VAMOS ACC T. Cavazos/J. Marengo

5:30 -6:00 General discussion on implementation of cross-cut activities

6:00 pm Adjourn

7:00 – 9:00 pm *No-host dinner* 

## Thursday, June 4, 2009 - Morning Session, Plenary - Reports (end)

Chair: Celeste Saulo

9:00 am <u>Database for VOCALS Field Campaign</u> J. Meitin/S. Williams

9:20 am <u>VAMOS Education and Outreach</u> Luis Farfan

9:40 am The North American Regional Climate Change Assessment Program (NARCCAP)

R. Arritt

# Thursday, June 4, 2009 - Morning Session, Plenary - Climate across the Americas Chair: Lisa Goddard

10:00 am - Land-atmosphere interactions and water balances for major basins of the Americas

Alan Betts

10:20 am - WGSIP and VAMOS Celeste Saulo

10:40 - 11:10 am *Break* 

11:10 am - Inter-hemispheric influence of the Atlantic warm pool on the southeast

Pacific Sang-Ki Lee

11:30 am - MJO WG and/or WCRP/WWRP Project on Reproduction and Prediction of

Monsoon Intra-Seasonal Oscillation Duane Waliser

12:10 pm- Extremes in North America Kingtse Mo

12:30 pm *Lunch* 

# Thursday, June 4, 2009 - Afternoon Session, Plenary - Climate across the Americas Chair: Jose Marengo

2:00 pm - <u>US CLIVAR WG on Decadal Predictability</u> Lisa Goddard 2:20 pm - <u>Climate research network in Brazil</u> Carlos Nobre 2:50 pm - Satellite precipitation estimates for the Americas Phil Arkin

3:10 pm - Land-Atmophere Interactions and Hydrologic Response in the NAME experiment:

<u>2004-2008</u> E. Vivoni

3:30 – 3:50 pm *Afternoon break* 

3:50 – 4:30 pm General Discussion on VAMOS and the Climate across the Americas activities.

## 4:30 pm *Meeting ends for non-VAMOS Panel members*

## Thursday, June 4, 2009 - Afternoon Session, VAMOS Panel Executive Session

4:30 - 6:30 pm

- IASCLIP Plans
- CLIVAR Imperatives
- VAMOS Future and Priorities
  - WG on Extremes
  - WG on ACC
  - VAMOS Modeling and interactions with WGSIP and WGCM
  - Initiative in Outreach, Capacity Building, and Education
- Next issue of VAMOS newsletter, funding and themes
- VAMOS panel membership
- Next VAMOS meeting

6:30 pm *VPM12 ends* 

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