

VAMOS Support Center and Data Archives

Sponsored by the NOAA Climate Program Office under CPPA

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12th VAMOS Panel Meeting - San Juan, PR



VAMOS Project Office

Meeting Support

- La Plata Basin U.S. Science Meeting (May 2008)
- VOCALS “All-Hands” Meeting (Nov 2008)
- VOCALS SWG Meeting (Arica, Chile- Nov 2008)



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VAMOS Project Office

Web Support

- Provided Web and Teleconferencing capabilities
- Revised La Plata Basin, NAME and VOCALS websites
- Developed IASCLiP web site & mail lists
- Updated bibliographies for past projects



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VOCALS-REx



- Established VOCALS Regional Experiment (REx) Project Office
- Conducted monthly teleconferences with VOCALS-REX planning groups.
- Led multiagency site survey team to Chile (June 2008)
 - met with Arica airport authorities
 - met with Iquique airport authorities
 - visited Univ Arturo Pratt Marine Sciences
 - negotiated group lodging
 - negotiated group rental cars



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VOCALS-REx



- Provided Shipping and Logistical Support
- Prepared VOCALS-REx Operations Plan
- Presentation to IMARPE Directorate
(Peru, May 2008)
- Met with Peruvian Civil Aviation



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VOCALS-REx



Shipping

Air freight

Surface

Customs

Assistance for all aircraft groups

Local Storage

Documentation

Translations

Hazmat

Lodging, Rental Cars

Security Credentials (> 140 people)



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VOCALS-REx

Arica Operations Center



Forecast Support

(MeteoChile weather briefers)

Aircraft Coordination (Arica & Iquique operations)

- flight tracking & chat

On-site Logistics and Shipping Coordination

Network Administration

- dedicated network
- professional-grade firewall
- adequate power converters and transformers
- secondary access point at airport



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VOCALS-REx

Arica Operations Center



Field Catalog

- real time radiosonde to GTS (R/V Brown, GAUS, Paposo land site)
- provided 15-minute GOES-10 imagery over S America
- received reports and products from the *R/V Brown* on a daily basis
- first time photo albums into the catalog
- first time interactive COSMIC sounding maps/SkewTs
- provided QuikSCAT winds customized for the VOCALS domain
- 825,000 products, 58 GB in field catalog

Data Server

- aircraft data exchange



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VOCALS-REx Aircraft Operations

NSF/NCAR C-130	120 hrs (18 consecutive night operations)
DoE Battelle G-1	70 hrs
FAAM BAe-146	65 hrs
NERC Dornier	50 hrs
CIRPAS Twin Otter	100 hrs



VOCALS-REx

Education and Outreach



In-Field Instruments Talks

NCAR *Windows to the Universe*

~20 participating scientists
Multiple "*Postcards from the Field*"

Local and National Media

Several institutional press releases,
departmental newsletters/web articles
Multiple local newspaper articles
Local television reports
National newspaper articles (Chile)
multiple newspaper/magazines (Peru)



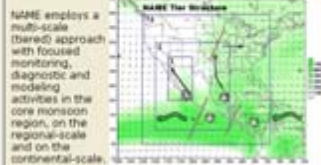


What's New?

NOAA/NWS North American Monsoon Tracker (Tucson NWSFO) Web Page
 NOAA/CPC American Monsoon Monitoring
 CLIVAR Exchanges - North American Monsoon Experiment: NAME
 Final Report for the 10th NAME Science Working Group Meeting 27 March 2006, Miami, Florida USA
 Report to the 11th NAMOS Panel 25 March 2005, Miami, Florida USA
 NAME Forecast Forum Work Plan (Version 4 - Draft)

NAME Project Description

The North American Monsoon Experiment (NAME) is an internationally coordinated, joint CLIVAR-GEWEX process study aimed at determining the sources and limits of predictability of warm season precipitation over North America, with emphasis on time scales ranging from seasonal-to-interannual. It focuses on observing and understanding the key components of the North American monsoon system and their variability within the context of the evolving land surface-atmosphere-ocean annual cycle. It seeks to improve understanding of the key physical processes that must be parameterized for improved simulation with dynamical models.



NAME employs a multi-scale (nested) approach with focused monitoring, diagnostic and modeling activities in the core monsoon region, on the regional-scale and on the continental-scale.

NAME is part of the CLIVAR/NAMOS program, US CLIVAR Pan American research, and the Climate Prediction Project for the Americas (CPPA).

Scientific Objectives

The scientific objectives of NAME are to promote a better understanding and more realistic simulation of: The evolution of the North American monsoon system and its variability; The response of the warm season atmospheric circulation and precipitation patterns over North America to slowly varying, potentially predictable surface boundary conditions; Feedbacks between land surface processes and precipitation on seasonal-to-interannual time scales; The diurnal heating cycle and its relationship to the seasonally varying mean climate; and Intra-seasonal aspects of the monsoon.

Field Study in 2004

For more information about the NAME 2004 field activities see the following links:

- NAME Field Catalog
- NAME Field Observations
- NAME Field Operations Plan
- NAME Field Instrumentation Map Server
- NAME Short Range Forecasts
- NAME Seasonal Climate Prediction

NAME Media

NAME in the News
 Name Video Library
 Education Information
 NCAR/UCP "In The Field" News Releases
 NCAR Communications

Data Access

Master List of All NAME Data Sets

NAME Field Catalog
 Data Policy
 Dataset Documentation Guidelines
 Data Submission Instructions
 NAME Data Management Home Page
 NAME Field Instrumentation Map Server

Publications

NAME Publications

NAME Modeling



Monitoring

NOAA/CPC American Monsoon Monitoring
 NOAA/NWS North American Monsoon Tracker (Tucson NWSFO)
 NOAA/CPC Global Monsoon Monitoring

Meetings

Meetings and Presentations

Documents

NAME Documentation

People



Mailing Lists

General NAME Mailing Lists

Related Links



(All images courtesy Dave Gochis.)

NAME Sponsored By:



NAME Endorsed By:



NAME Project Web Page

<http://www.eol.ucar.edu/projects/name>

NAME Archive Statistics

- Total Archive Datasets: 200
- Total Archive Size: 889 GB
- Total Archive Files: 1,101,241
- Total Number of Orders: 9,747

52% .edu

21% .gov

14% .com

13% others

- Unique E-mail Orders: 1,200

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NAME Reprocessed Sounding status

- CSU has provided humidity corrected high resolution soundings for all Tier 1 sites for the complete 4 month period (June - September)
- All sites had a **daytime** heating **dry bias** correction
- The SMN sites and R/V Altair also had a cumulative distribution function correction applied that attempts to adjust the statistical properties of questionable humidity data from one site to that of good data from a nearby site
- NCAR/EOL will replace the uncorrected data currently in the NAME archive with the humidity-corrected soundings. Also, the NAME high resolution and 5-mb sounding composite data sets will be reprocessed



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NAME Bibliography



NAME Publication References

[\(How to Submit Publication References to this List\)](#)

[Special Issues, etc.](#), [Publications](#), [Conference Proceedings](#), [Other citation Links](#)

Special Issues, etc.

[Back to Top](#)

- [CLIVAR Exchanges - North American Monsoon Experiment: NAME](#)
- [NAME Modeling and Data Assimilation White Paper](#)
- [NAME Science and Implementation Plan](#)
 - [References from NAME Science and Implementation Plan](#)
- [North American Monsoon Model Assessment Project \(NAMAP\)](#)
- ["Report to the Nation" on the North American Monsoon](#)
- [Special Issue of the Journal of Climate on NAME \(Volume 20, Issue 9, May 2007\)](#)

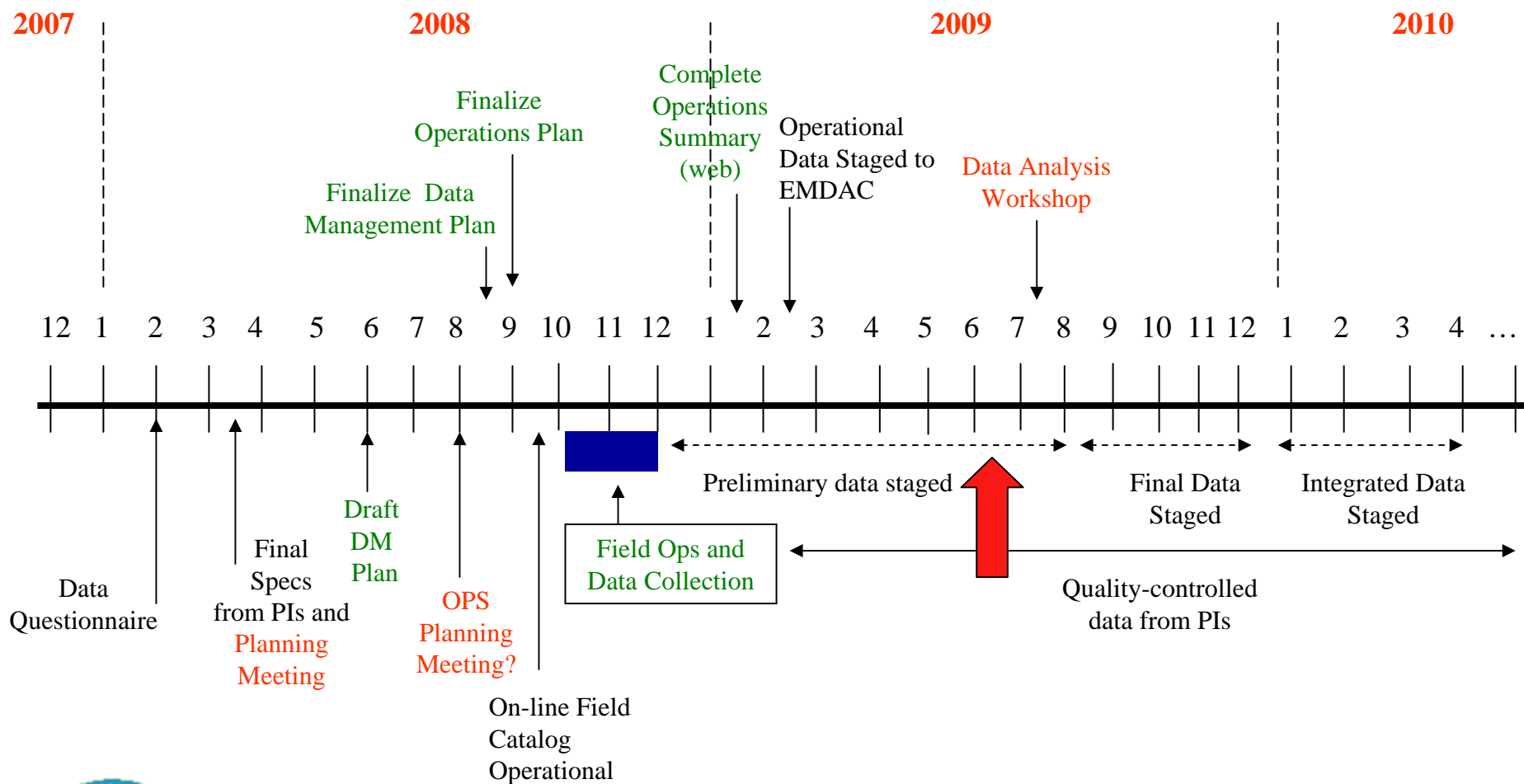
Publications [A-D](#), [E-H](#), [I-L](#), [M-P](#), [Q-T](#), [U-Z](#)

[Back to Top](#)

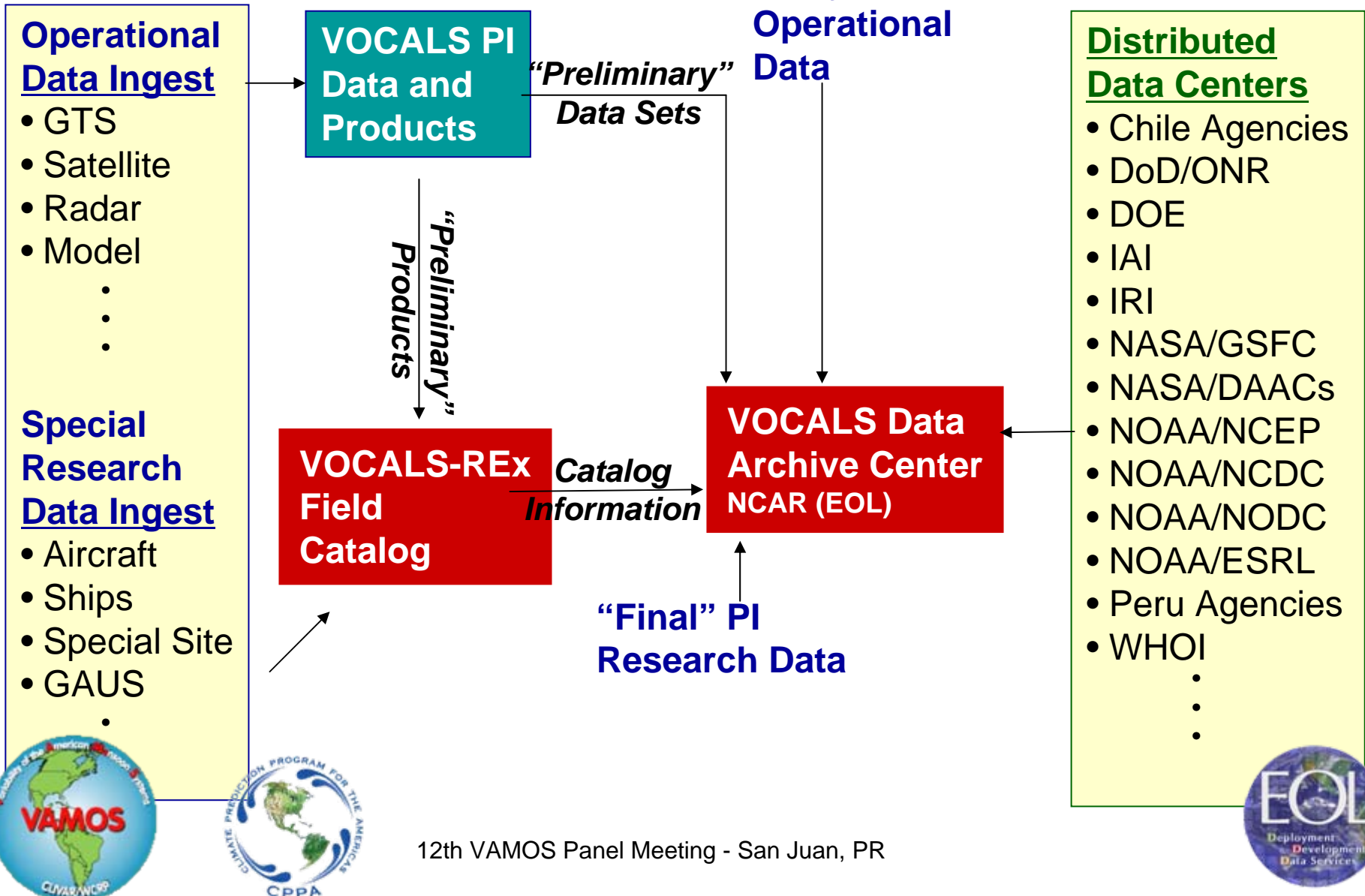
- [Bordoni, S., P. E. Ciesielski, R. H. Johnson, B. D. McNoldy, and B. Stevens, 2004: The low-level circulation of the North American Monsoon as revealed by QuikSCAT. *Geo. Res. Let.*, 31, L10109, doi:10.1029/2004GL020009.](#)
- [Bosilovich, M. G., Y. C. Sud, S. D. Schubert, and G. K. Walker. Numerical simulation of the large-scale North American](#)



VOCALS-REx Data Management Timeline



VOCALS-REx Data Flow



VOCALS Master List



DATA BY CATEGORY

- Aircraft
- Ancillary
- Hydrology
- Land Based
- Model
- Oceanography
- Photography
- Radar
- Radiation
- Satellite
- Ship Based
- Upper Air

DATA BY SITE

- Antofagasta, Chile
- Arica, Chile
- Galapagos
- Iquique, Chile
- Papos, Chile
- Paranal, Chile
- St. Felix Is., Chile

[Back to VOCALS](#)

Email comments & questions to codiac@ucar.edu

Land Based: Precipitation

GPCP Global Daily 1-Degree Combination Data [NASA]	2003-06-03	
GPCP Global Daily Merged Precipitation Analyses Imagery [NASA]	2003-06-03	
GPCP Global Monthly 1-Degree Combination Data [NASA]	2003-06-03	
GPCP Global Monthly Merged Precipitation Analyses Climatology Data [NASA]	2003-06-03	
GPCP Global Monthly Merged Precipitation Analyses Imagery [NASA]	2003-06-03	
GPCP Global Pentad (5-Day) Precipitation Analysis [NASA]	2003-06-03	
NCEP/CPC Global CMAP Precipitation Analyses	2003-06-03	
NCEP/CPC Global CMORPH Precipitation Analyses	2003-06-03	
TRMM Real-Time Rainfall Analyses (3-H) [NASA]	2003-06-03	

<http://www.eol.ucar.edu/projects/vocals/>

Model

ECMWF Global Grids [NCAR/SCD]	2003-05-29	
ECMWF Global Profiles [NCAR/EOL]	2009-02-18	
ECMWF Global T399 Forecast Products [NCAR/EOL]		
ECMWF Global T799 Forecast Products [NCAR/EOL]	2009-02-12	
ECMWF Ocean Products Imagery [NCAR/EOL]		
ECMWF WRF T799 0.22deg Resolution Analysis [Gadian/Leeds University]		
EDC 30 Arc-Second Elevation Data [EDC]		
FLEXPART Model ESRL 25KM Forecast Product [NCAR/EOL]		





VOCALS-REx Field Catalog



October-November 2008

- Catalog Home
- Daily Reports
- Operational Products
- Model/Forecast Products
- Research Products
- Missions
- Tools & Links

Boulder: Mon, June 1, 1:17 PM UTC: Mon, June 1, 20:17 Z **Arica, Chile:** Mon, June 1, 5:17 PM

Quick Links:

- Facilities Status
- Operations Plan of the Day
- Weather Discussion



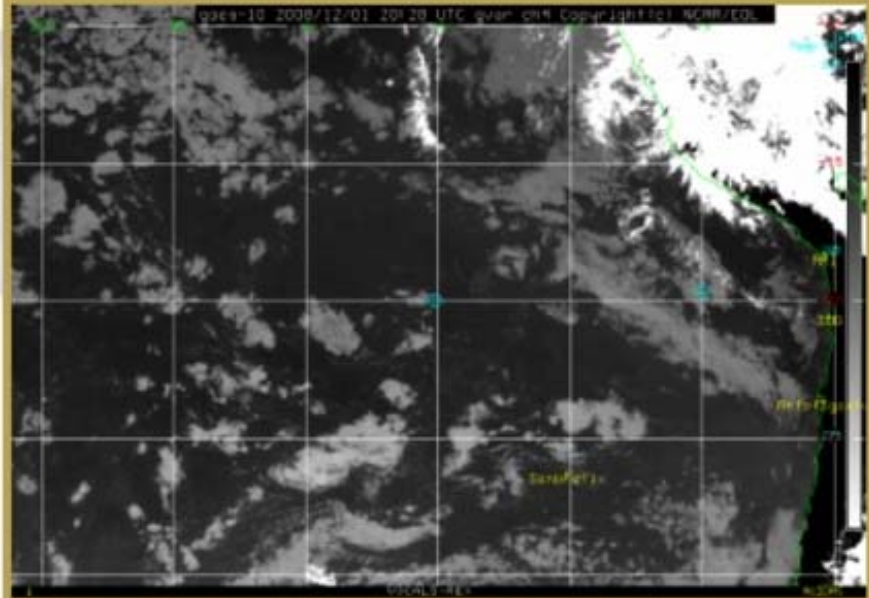
- Real-Time VOCALS kml
- Ops center kml

(Download KML first,
right-mouse click
then open in GoogleEarth)

X-Chat instant access



Current Loop



Additional Satellite Imagery:

- Latest 4 hours Visible
- Latest 4 hours Ch4-Ch2 Diff

General Information:

- All-Hands Science Meeting
- Windows to the Universe
- The Alternative Guide to Arica
- Information from Peru:

- VOCALS-Rex Peru
- National Weather Service
- IMARPE web site

Data Archive access:

- VOCALS Master List



Comments



VOCALS-REx Field Catalog

October-November 2008



<http://catalog.eol.ucar.edu/vocals/>

- **Reports/Summaries (Status, Mission, and Operations)**
588 documents and 280 image files (0.32 GB)
- **Research Platform Products (Aircraft, Surface, Lidar, Upper Air)**
1,532 image files (0.44 GB)
- **Operational Products (Satellite, Surface, Radar, Upper Air)**
146,683 image files (30 GB)
- **Model Output Imagery (Analysis and Forecast Fields)**
675,811 image files (28 GB)
- **TOTALS: 826,056 Files (58.86 GB)**



VOCALS REx Data Management Activities



- Continue to populate the Master List as datasets are submitted to the archive (over 400 expected)
- Add publication citations and documents to archive
- Complete moving field catalog imagery into archive
- Upper air sounding processing and “composite” generation (common format with uniform QA/QC)
- Create C-130 aircraft “merged” dataset (flight parameter and PI data) at consistent temporal resolution
- Create combined multi-aircraft common parameter dataset in a consistent format



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La Plata Basin Regional Hydroclimate Project



VAMOS Web Support

Description

- CLIVAR/VAMOS and GEWEX/GHP identified the Rio La Plata Basin as a climate-hydrology system with components that are potentially predictable with useful skill from seasons in advance, and whose variability has important impacts on human activities.
- LPB provides a framework for integration of regional projects leading to improved predictions of the climate and hydrology system, and the coordination of those projects at the highest international level (WMO/WCRP)
- LPB can act as an advocacy group to agencies that provide funding for science projects and the strengthening of the scientific infrastructure.
- LPB aims to enhance the scientific infrastructure in the region.

What's New
<p>NEW Update on the La Plata Basin Framework Agreement <i>Clarín Newspaper, Buenos Aires, (in Spanish)</i> Satellite remote sensing applied to the balance <i>Postgraduate course at the University of Buenos Aires</i> CLARIS LPB Kick Off Meeting 10-13 November 2008, Buenos Aires, Argentina</p>
Meetings
Workshops and Meetings
Documentation
Links to Documents Official Logos
Contributing Projects
Regionally-Supported Programs CLARIS - LPB Web Site

What's New?

1st IASCLIP Planning Workshop
 1-2 June 2009: University of Puerto Rico, Rio Piedras, PR

VAMOS Calendar

Overview

A Prospectus for the Intra-Americas Study of Climate Processes program.

To achieve its goals, IASCLIP:

- improved model simulations
- provide detailed and targeted observations
- designed to complement a suite of enhanced

Data Access

VAMOS Data Archives

Modeling

IASCLIP Modeling Plan

Meetings

Meetings and Presentations

<http://www.eol.ucar.edu/projects/vamos/>



Data Access
La Plata Basin Data Management page at NCAR/EOL G.I.S. Mapserver
Publications
Climate Change in the La Plata Basin (additional list of Publications will be added at a later date)
Other Links



IASCLIP Logos

People

IASCLIP Scientific Steering Committee

Mailing Lists

General IASCLIP Mailing Lists



Mailing Lists
 Centro de Previsão de Tempo e Estudos Climáticos (Brazil)
 Servicio Meteorológico Nacional (Argentina)
 International Research Institute for Climate & Society
 CLARIS-LPB
 Inter-American Institute for Global Change Research
 Centro de Investigaciones del Mar y la Atmósfera (Argentina)
 Comité Intergubernamental Coordinador de los Países de la Cuenca del Plata

Last update 4 Mar 2009

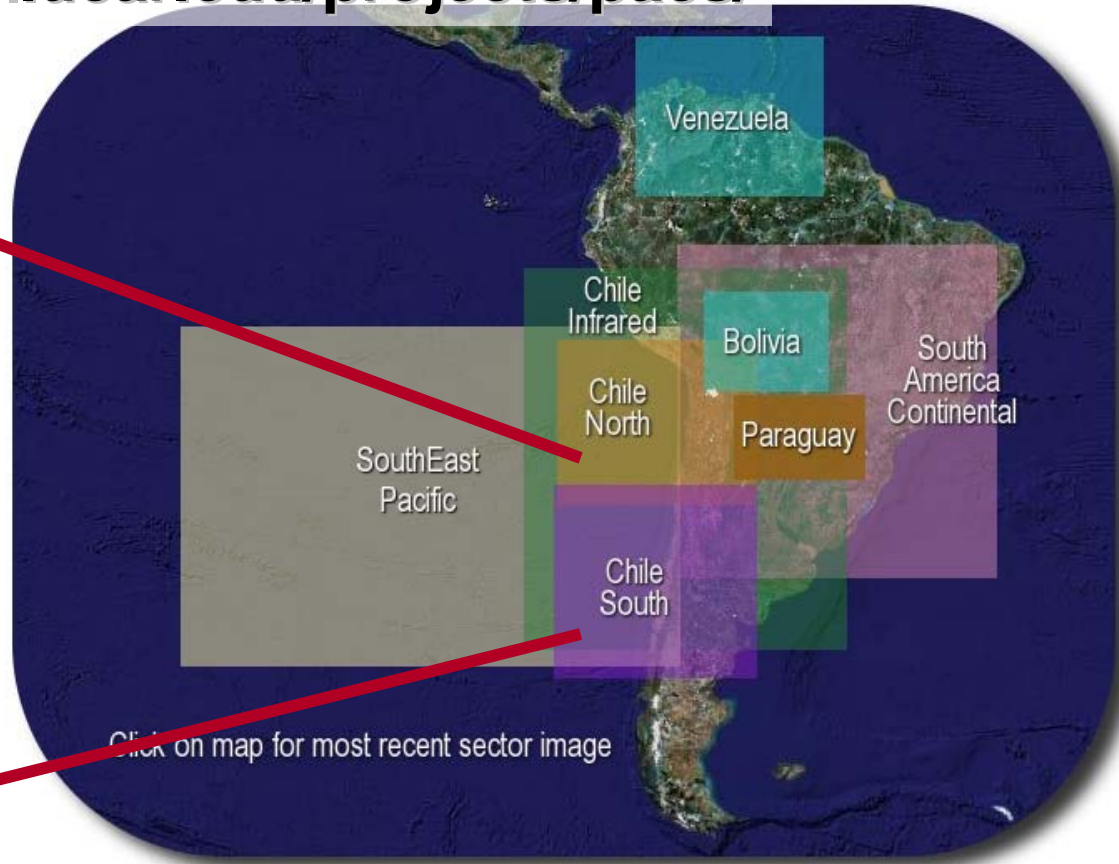
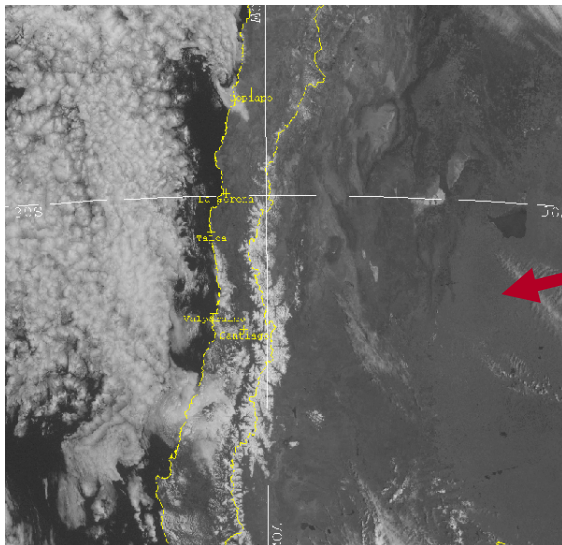
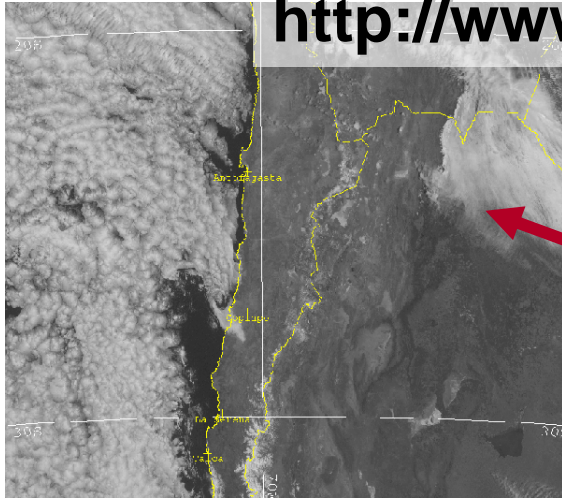
E-mail Comments

PR



South American Satellite Sectors

<http://www.eol.ucar.edu/projects/pacs/>



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GAPP (GEWEX Americas Prediction Project)

Data Management Home Page

Data Access

Hydrometeorological Networks in the United States
Science and Implementation Plan (2004)
Project Home Page (NOAA/OGP)



PACS (Pan American Climate Studies)

Data Access

PACS Project Home Page
Data Management Home Page (JOSS)
Project Home Page (NOAA/OGP)

<http://www.eol.ucar.edu/projects/cppa/dm>

NAME (North American Monsoon Experiment)

Data Management Home Page

Data Access

2004 Field Catalog
2003 Field Catalog
Science and Implementation Plan
Field Operations Plan
Data Management Plan
Project Home Page (UCAR/JOSS)



MESA (Monsoon Experiment South America)

Project Home Page (UCAR/JOSS)



EPIC (Eastern Pacific Investigations of Climate)

Data Management Home Page

Data Access

Field Catalog
Implementation Plan
Field Operations Plan
Implementation Plan (word)
Project Home Page (UCAR/JOSS)
Project Home Page (New Mexico Tech)



Climate Prediction Project for the Americas (CPPA)

Data Management



SALLJEX (South American Low Level Jet Experiment)

Data Management Home Page

Data Access

Field Catalog
Data Management Plan
Science and Implementation Plan (2000)
Field Operations Plan
Project Home Page (UCAR/JOSS)



VOCALS (VAMOS Ocean-Cloud-Atmosphere-Land Study)

Data Management Home Page

Data Access

Science and Implementation Plan (2001)
Project Home Page (UCAR/JOSS)



LPB (La Plata Basin)

Data Management Home Page

Data Access

Data Management Plan
Climatology and Hydrology of the La Plata Basin (2001)
Project Home Page (UCAR/JOSS)



CEOP (Coordinated Enhanced Observing Period)

Data Management Home Page

EOP-3 and EOP-4 Data Access

EOP-1 Data Access

Phase-I Implementation Plan (2001)
Project Home Page (Univ of Tokyo)



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