VLab Report of Activities for Supporting Agencies

The Questions in this form should be answered based on the VLab activities of your Institution for the period from January to December 2015.

About the Institution

1. Please select your Institution from the list below. *

United States National Oceanic and Atmospheric Administration's Environmental Satellite Data and Information Service - NOAA/NESDIS ▼

2. Please select from the list below the Centre(s) of Excellence (CoEs) you directly support. *

Please select all options that are relevant.

- ☑ Argentina
- ☐ Australia
- ☑ Barbados
- ☑ Brazil
- ☐ China - Beijing
- ☐ China - Nanjing
- ☑ Costa Rica
- ☐ Kenya
- ☐ Morocco
- ☐ Niger
- ☐ Oman
- ☐ Republic of Korea
- ☐ Russian Federation
- ☐ South Africa

3. What were the major achievements in supporting VLab CoE(s) during this reporting period? *

The NOAA/NCEP/WPC International Tropical and South America Desks trained 19 visitors. The visitors spend 4 months at the desk and came from Antigua-Barbuda, Argentina, Barbados, Brazil, Chile, Dominican Republic, Ecuador, Jamica, Paraguay, Peru, Saint Lucia, Suriname, and Trinidad-Tobago.

The Regional Focus Group of the Americas and Caribbean conducted 12 monthly bilingual (English/Spanish) weather briefings. Twenty eight countries outside the US participated: Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Dominica, Ecuador, El Salvador, Germany, Grenada, Haiti, Honduras, Nigeria, Panama, Paraguay, Peru, Saint Kitts and Nevis, South Africa, Spain, Suriname, Trinidad and Tobago, Uruguay, Venezuela, and the US.   The number of countries participating each month ranged between 9 and 16 (average 12); and the number of participants each month ranged between 19 and 63 (average 32).

In support of GEONETCast activities, a NOAA/WMO Train the Trainers GEONETCast workshop was held 25-26 April 2015 prior to the NOAA Satellite Conference (27 April – 1 May 2015). The workshop focused on the many aspects of GNC-A, including software packages to view and do simple manipulations with the data. The participants came from Argentina, Barbados, Belize, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Ecuador, Geneva, Honduras, Mexico, Peru, St. Lucia, SUrinam, Trinidad-Tobago, and the US. The report from the workshop can be found here on p 89 (APPENDIX J): http://satelliteconferences.noaa.gov/2015/doc/NSC2015_Final_Report.pdf
NOAA also hosted the meeting of the Coordination Group on Satellite Data Requirements for Regions III and IV. The group greatly aids in identifying and synthesizing user needs for satellite data, products and associated training, and assists in effective user-provider dialogue towards meeting these requirements.
NOAA and CIRA provided travel support to attend the Train the Trainers GEONETCast Workshop, the SDR meeting, and the NOAA Satellite Conference, (25 April - 1 May 2015). NOAA funded 21 people to attend the workshop, SDR meeting, and conference.

NOAA through CIRA continues to provide funding and support for the VLab Technical Support Officer.

A McIDAS-V software training workshop was held in San Jose, Costa Rica, 4-8 May 2015. There were 13 participants from Barbados, Guatemala, Honduras, El Salvador, Costa Rica and Panama

A Regional Technical Training Workshop on the Emergency Managers Weather Information Network (EMWIN) system was held for both English speakers (25-27 May 2015) and Spanish speakers (28-30 May 2015) in Bridgetown, Barbados. There were a total of 32 participants from Aruba, Barbados, Colombia, Costa Rica, Guatemala, Guyana, Monsterrat, Nicaragua, Puerto Rico, St. Lucia, St. Vincent-Grenadines, Trinidad-Tobago, and Venezuela.

Training Workshop entitled 'Tropical Desk' was conducted at the Mexico Weather Service (Servicio Meteorológico Nacional SMN) and directed to 31 forecasters.. It focused on Forecasting Techniques with emphasis on tropical cyclones and other types of Severe Weather.

4. What were the main difficulties in supporting VLab CoE(s) during this reporting period? *

Not enough time and people resources.

5. Does this institution have a webpage dedicated to explain its involvement and support to VLab (as indicated in the document "VLab Expectations from Satellite Operators)? *

◉ Yes

○ No

If "Yes" was selected from the question above, please provide the URL to access the webpage

http://rammb.cira.colostate.edu/training/rmtc/

About Training

6. Is any kind of Learning Management System used by your institution to conduce training activities? *

○ Moodle

○ Edmond

○ ConnectEDU

○ Learning Management System is not used

◉ Other: Commerce Learn Center LMS supported by Oracle

7. Can the CoE(s) supported by your institution request to use your Learning Management System in their VLab training events? *

○ Yes

○ No

◉ Learning Management System is not used

Please use the space below to provide any additional comments regarding Question 7 *

NOAA uses a Learning Management System that is not available to persons outside the Federal Government. COMET tracks user activity through their MetEd site.

8. Is any kind of Online Conferencing System used by your institution to conduce training activities? *

○ Saba Centra

○ Blackboard Collaborate

◉ GoTo (Webinar, Meeting)

○ Cisco Webex

○ Online Conferencing System is not used

○ Other: _____

9. Can the CoE(s) supported by your institution request to use your Online Conferencing System in their VLab training events? *

◉ Yes

○ No

○ Online Conferencing System is not used

Please use the space below to provide any additional comments regarding Question 9 *

NOAA via CIRA uses GoToWebinar and VISITview to conduct training activities. Both these software packages are already being used to support VLab training activities such as the regional focus group sessions. The VISITview software is free for use. NOAA via CIRA pays for the GoToWebinar license and coordinates and schedules this service for the CoEs for the monthly focus group sessions. However, NOAA cannot offer free access for others to use GoToWebinar on their own at this time. CIRA can work with CoEs to schedule special event weeks.

10. Please list any training resource your institution has developed over this reporting period *

For each Training Resource please include: 1)Title of Training Resource, 2) Type of resource (e.g. text book, video, Moodle course, PowerPoint slides, recorded lecture, etc) and 3) Availability of resource (can be shared, institutional use only).

WMO Americas and Caribbean Focus Group; recorded sessions (monthly for January 2015 through December 2015); can be shared.
http://rammb.cira.colostate.edu/training/rmtc/fg_recording.asp

Sessions from Next Generation of Satellites Event week
http://www.wmo-sat.info/vlab/next-generation-of-satelliles/
GOES-R challenges and opportunities: Liaison perspectives from NOAA's Aviation Weather Center; recorded lecture; can be shared.
Training resources from the US and access to data and imagery: ways to find them in the acronym soup; recorded lecture; can be shared.
JPSS and beyond: Liaison perspectives from NOAA's Center for Weather and Climate

Prediction. Presenter: Michael Folmer, ESSIC and CICS at NOAA CWCP; recorded lecture; can be shared.

Getting the Most out of COMET Satellite Training Resources via MetEd; recorded lecture; can be shared.

VISIT lessons - all are video and can be shared
http://rammb.cira.colostate.edu/training/visit/training_sessions/
Introduction to NCC DNB VIIRS imagery in AWIPS; video; can be shared.
Applications of RSO Satellite Imagery for Winter Storms; video; can be shared.
A Brief Introduction to Social Science: A course for physical scientists; video; can be shared.
Use of VIIRS imagery for Tropical Cyclone Forecasting; video; can be shared
NUCAPS Soundings in AWIPS; video; can be shared.
Can total lightning help with warnings for non-supercell tornadoes?; video; can be shared.
Tracking the Elevated Mixed Layer with a new GOES-R Water Vapor Band; video; can be shared.

Resources on COMET/METED are combined video, lesson text, and media gallery; can be shared
https://www.meted.ucar.edu
Spanish
Análisis de la intensidad de los ciclones tropicales
Aplicaciones satelitales multiespectrales: observación del ciclo de vida de los incendios en zonas despobladas, 2a edición
Introducción a la hidrografía
Guía de referencia para sistemas de alerta temprana de crecidas repentinas
Identificación satelital de estructuras: cintas transportadoras
Ecuación omega cuasigeostrófica
Ecuación de la vorticidad cuasigeostrófica
Estimación de la precipitación: medición
Identificación satelital de estructuras: ciclogénesis
Identificación satelital de estructuras: inferir tres dimensiones en imágenes de vapor de agua
Fundamentos de teledetección en el visible e infrarrojo
Sistemas convectivos de mesoescala tropicales

English
Gridded Products in the NWS National Blend of Global Models
Enroute Icing
Introduction to Climatology for the Tropical Pacific Islands

Extreme High Swell Events on the Moroccan Atlantic Coast

Forecasting Heavy Rains and Landslides in Eastern Africa

Introduction to the NWS National Blend of Global Models

Satellite-Derived Climatology Products for Monitoring Convection Over West and Central Africa

Use of Probabilistic Guidance in Local Tropical Cyclone Wind Forecasting

Using ASCAT Wind and Other Data in Marine Forecasting

HYSPLIT Applications for Emergency Decision Support, 2nd Edition

Introduction to Tropical Meteorology, 2nd Edition: Chapter 6 Vertical Transport

Tropical Cyclone Forecast Uncertainty

Ship-based Sea and Lake Ice Observing

Using Scatterometer Wind and Altimeter Wave Estimates in Marine Forecasting

Introduction to Meteorological Charting

Use of Probabilistic Surge Guidance in Local Storm Surge Forecasting

Determining the Onset and Risk of Tropical Cyclone Winds

Understanding Marine Customers, 2nd Edition

Forecasting Tropical Cyclone Storm Surge

NWP Essentials: Data Assimilation

NWP Essentials: Model Physics

NWP Essentials: NWP and Forecasting

NWP Essentials: Precipitation and Clouds

NWP Essentials: Structure and Dynamics

Storm Surge and Datums

Assessing NWP with Water Vapour Imagery

Introduction to Tropical Cyclone Storm Surge

Marine Weather Services Incident Response and Decision Support

Microwave Remote Sensing: Land and Ocean Surface Applications, 2nd Edition

Advanced Himawari Imager (AHI): What's Different from the GOES-R Advanced Baseline Imager (ABI)

11. What sort of training resources would your institution be interested in borrowing from other satellite operators, CoEs or training programmes, to adapt and reuse? *

If your institution is not interested in adapting and reusing training resources, please indicate reasons.

Anything applicable to user needs.

About VLab collaboration

12. Is this institution working closely together with the sponsored CoE(s) in VLab training activities? *

◉ Yes

◯ No

Please comment on the answer above and, if applicable, suggest ways to improve collaboration *

We are more directly involved with CoEs Barbados, Costa Rica, and Brazil. We could do more with the CoE Argentina. Argentina has been very active in WMO training activities recently, and we can build on their expertise in the future, particularly with the launch of GOES-R and related training.

13. Do you maintain regular contact with the other VLab Supporting Satellite Operators/Agencies to discuss data access and format issues as well as training needs to improve the use of satellite data and products? *

◉ Yes

◯ No

Please comment on the answer above and, if applicable, suggest ways to improve collaboration *

In the past year, the GEONETCast workshop, SDR meeting, and NOAA Satellite conference 25 April - 1 May 2015 brought all the partners together. The WMO SDR group aids immensly in addressing data access issues. We plan on continuing these efforts in the future. This workshop/conference venue occurs every 2 years.

14. What sort of support would you like to receive from other

14. What sort of support would you like to receive from other Supporting Satellite Operators/Agencies, CoEs, WMO Space Programme, VLab Co-chairs and TSO? *

Technical support for development of tutorials and training to use freeware (McIDAS-V, ILWIS, GDAL)
Clones of the TSO :)

15. What sort of support could you offer to other Supporting Satellite Operators/Agencies, CoEs and WMO Space Programme? *

This could be any kind of support. For example: collaborate in RFG sessions organised by other CoEs, organise joint training events in a particular subject, or any other support/collaboration you think the CoE could offer.

During this next year, I see the calendar filling up with the launch of 2 new satellites (GOES-R and JPSS-1), so we'll be plenty busy in developing and organizing training on these efforts. We could offer support to CoEs to training events focused on these two topics.

Training Events organised in 2015

Please prepare a table containing all training events organised by your institution during this reporting period.
If you have submitted your events to the VLab Online Calendar, all you need to do is to download your report (CSV/Excel spreadsheet) directly from there. If the institution had conducted other training events considered as part of its VLab activities, that for some reason were not submitted to the Online Calendar, please add them to the spreadsheet downloaded from the Online Calendar.
In the case the institution has not submitted the training events to the Online Calendar, please prepare a table or spreadsheet (Excel or word) containing the data as indicated in the figure below.

The table/spreadsheet containing the training events organised by the institution in 2015 should be sent to the VLab TSO by email at luveeck@gmail.com

Example of Table of Events

Date	Title of Event	Location	WMO Region	Host	Type (online, classroom, blended, RFG)	Language	Number of trainees	Country of origin of trainees

*

☑ By selecting this option I confirm that a table/spreadsheet containing the information about training events organised by this institution (as requested above) will be sent by email to the VLab TSO by the 30th of April 2016 (at the latest).

Training supported by NOAA in 2015

Dates	Title of Event	Location	WMO Region	Host	Type	Language	Number of participants	Countries/Islands
25-26 April 2015	WMO/NOAA Train the Trainer (TtT) Workshop on Satellite Data Access, Application, and GEONETCast Americas for WMO RA III/IV members	College Park, Maryland, USA	III, IV	WMO and NOAA	classroom	English and Spanish	37	(16):Argentina, Barbados, Belize, Brazil, Canada,Chile, Colombia, Costa Rica, Ecuador,El Salvador, Honduras, Mexico, Peru, St. Lucia, Surinam, Trinidad and Tobago
4-8 May 2015	McIDAS-V training workshop	San Jose, Costa Rica	IV	NOAA and UCAR	classroom	Spanish and English	13	6: Barbados, Guatemala, Honduras, El Salvador, Costa Rica and Panama
25-27 May 2015	Regional Technical Training Workshop on the Emergency Managers Weather Information Network (EMWIN) system (English session)	Bridgetown, Barbados	IV	NOAA and United Nations?	classroom	English	22	8: Aruba, St. Lucia, San Vincent & the Grenadines, Trinidad & Tobago, Barbados, Guyana, Monsterrat, Puerto Rico
28-30 May 2015	Regional Technical Training Workshop on the Emergency Managers Weather Information Network (EMWIN) system (Spanish session)	Bridgetown, Barbados	IV	NOAA and United Nations?	classroom	Spanish	10	6: Guatemala, Costa Rica, Venezuela, Nicaragua, Barbados, Colombia
24 August - 9 October 2015	WMO RA-I Basic Hydrologic Sciences for the African Region		I	WMO and COMET	online	?	32	Ethiopia, Ghana, Gambia, Kenya, Liberia, Nigeria, Sudan, Sierra Leone, South Sudan, Uganda, Zambia

Date	Title	Location	Region	Organizer	Format	Language	Participants	Countries
14-25 September	KMA-COMET Olympic Forecaster Training Course	Boulder, CO	II	KMA and COMET	classroom	English	12	Korea
9-20 November	KMA Wx Analysis Course	Boulder, CO	II	KMA and COMET	classroom	English	12	Korea
16-20 November 2015	'Tropical Desk' Training Workshop on forecasting techniques with emphasis on tropical cyclones and other types of severe weather in Mexico	Mexico City, Mexico	IV	Servicio Meteoroló gico Nacional (SMN) and NOAA	classroom	Spanish	31	Mexico
7-11 Sept 2015	CALMet XI	Seoul, Korea	All	KMA	classroom	English	36	Argentina, Brazil, Canada, China, Croatia, Eatonia, Germany, Indonesia, Malaysia, ,Russian Federation, South Africa, Switzerland, The Netherlands, Uganda, United Kingdom, USA
22-0 January 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean		III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	29	Bahamas, Barbados, Belize, Brazil, Colombia, Costa Rica, Dominica, Haiti, Honduras, Peru, and Saint Kitts & Nevis

5-0 February 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	31	Bahamas, Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Germany, Haiti, Panama, Peru
31-0 March 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	19	Bahamas, Barbados, Brazil, Colombia, Costa Rica,El Salvador, Haiti, Honduras, Panama, Peru, Uruguay
16-0 April 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	21	Bahamas, Barbados, Brazil, Cayman Islands, Colombia, Costa Rica,El Salvador, Grenada, Haiti, Nigeria, Peru, St. Kitts& Nevis
28-0 May 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	27	Belize, Brazil, Colombia, Costa Rica, El Salvador, Haiti, Honduras, Peru, Uruguay
25-0 June 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	31	Barbados, Belize, Brazil, Colombia, Costa Rica,El Salvador, Grenada, Haiti, Honduras, South Africa, Trinidad & Tobago
23-0 July 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	21	Belize, Bolivia, Colombia, Ecuador, El Salvador, Haiti, Peru, Suriname, and Trinidad & Tobago

27-0 August 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	31	Argentina, Barbados, Bolivia, Brazil, Colombia, Costa Rica, El Salvador, Grenada, Haiti, Peru, Saint Kitts & Nevis, and Trinidad & Tobago
10-0 September 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	63	Argentina, Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador,Haiti, Honduras, Panama, Peru, Trinidad & Tobago, Uruguay, Venezuela
28-0 October 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	40	Bahamas, Barbados, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Haiti, Paraguay, Peru, Spain, Suriname, Trinidad & Tobago, and Uruguay
24-0 November 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	33	Bolivia, Brazil, Chile, Colombia, Costa Rica, El Salvador, Haiti, Honduras,Peru, Spain, Trinidad & Tobago, and Uruguay

10-0 December 2015	WMO Virtual Laboratory Regional Focus Group of the Americas and Caribbean	III, IV	CIRA, VLab Costa Rica, CIMH	online	English and Spanish	33	Argentina, Bolivia, Brazil,Colombia, Costa Rica, Ecuador, El Salvador, Germany, Haiti, Honduras, Peru, and Uruguay