Satellite User Readiness through Training: VISIT, SHyMet, WMO VLab, and Liaisons

Bernadette Connell

1 Cooperative Institute for Research in the Atmosphere
2 Cooperative Institute for Meteorological Satellite Studies
3 NWS/OAA/CLO/Forecast Decision Training Division
4 NOAA/NWS/NCEP/WPC International Desks
5 WMO Virtual Lab for Education and Training in Satellite Meteorology

AMS 97 January 2017
What are the best training resources to prepare you for new satellites?

That depends on

• What type of user you are
• What level user you are
Who are the users?

National & International

• Focus: National Weather Services ★
• Training is also applicable to:
  – Other trainers
  – Academia
  – Weather Enthusiasts
  – Managers (Public and Private)
  – Media / General Public
NOAA National Weather Service - Users

122 Weather Forecast Offices
13 River Forecast Offices
22 Center Weather Service Units
International Users

From more than 36 countries
What are the main training challenges?

- Adapting and presenting information for all audiences.
- Providing hands-on learning.
- Keep materials simple and short.
Virtual Institute for Satellite Integration Training
Launched in 1998

Mission: To accelerate the transfer of research results from atmospheric remote sensing into NWS operations

Method: Distance education techniques: teletraining and online modules

Focus: Applications / Single topics

http://rammb.cira.colostate.edu/visit/
Satellite Hydrology and Meteorology

**COURSES** dedicated to operational satellite meteorology

Intern / Forecaster / Severe Weather / Tropical

**New** this past year:

*Satellite Foundation Course for GOES-R/16 (SatFC-G)*

**On the horizon:**

*Satellite Foundation Course for JPSS (SatFC-J)*

http://rammb.cira.colostate.edu/shymet/
Additional Focus

http://rammb.cira.colostate.edu/visit/

Blogs

- VISIT Home
- Training Sessions
- Training Calendar
- Blog Sites
- VISIT Satellite Chat
- VISIT Satellite Help Desk
- The VISIT Program
- VISIT Contributors
- VISIT FAQ
- Links / Tutorials
- RAMSDIS Online
Additional Focus

The “Super” Lake-Effect Event of 19-21 Nov 2016 across Western/Central NY

Michael L. Jurewicz, Sr.
NOAA/NWS, Binghamton, NY
VISIT Satellite Chat
15 December 2016

Synoptic Support + Significant Upstream Lake Connectivity

07z, 21 Nov 2016
14z, 21 Nov 2016

VISIT Satellite Chat
15 December 2016

http://rammb.cira.colostate.edu/visit/
Additional Focus

New last week:
Virtual Office Hours

NWS VLab Help desk

http://rammb.cira.colostate.edu/visit/
Liaisons

• Assess user needs
• Develop and promote directed training
  – National Hurricane Center
  – JPSS Program
  – GOES-R Proving Ground activities with local offices
• Gather feedback
• Promote dialogue and exchanges between the researcher and forecaster.
WMO Virtual Laboratory for Education and Training in Satellite Meteorology

A worldwide collaborative network connecting training Centres of Excellence (CoEs) and Satellite Operators

**Mission:** To improve the utilization of data and products from meteorological and environmental satellites.

Designated Technical Support Officer: Luciane Veeck
Monthly Regional Focus Group Weather Discussions for the Americas and the Caribbean

CIRA + NCEP + CIMH + UCR = VLab

Collaboration

http://rammb.cira.colostate.edu/training/rmtc/focusgroup.asp
Monthly Regional Focus Group Weather Discussions for the Americas and the Caribbean

http://rammb.cira.colostate.edu/training/rmtc/focusgroup.asp
RFG Survey: Length of Participation

- Greater than 10 years: 22%
- 6-10 years: 19%
- 1-2 years: 13%
- 3-5 years: 35%
- Less than 1 year: 11%

46 Responses
Participating in the RFG helps the participant to:

- Identify atmospheric and surface features in satellite imagery more readily (89%)
- Feel more confident about the interpretation of satellite images (78%)
- Investigate new ways in which satellite data may assist in their occupation (76%)
- Keep up to date with new satellite products available (74%)

46 Responses
## Calendar of Events

This online Calendar of Events shows the upcoming training events, workshops, conferences and online sessions organised by VLab Members and partner Programmes. The Calendar is continuously updated, so make sure to revisit this page frequently.

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Location</th>
<th>Initiative</th>
<th>CoE involv.</th>
<th>Type</th>
<th>Language</th>
<th>Attendance</th>
<th>Contact</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>27/01/2017</td>
<td>Weather Briefing Online, 27th of January at 12 UTC</td>
<td>Online</td>
<td>EUMeTrain</td>
<td></td>
<td>Online course</td>
<td>English</td>
<td>Open</td>
<td>Marko Blaskovic</td>
<td><a href="#">Marko Blaskovic</a></td>
</tr>
<tr>
<td>14/02/2017</td>
<td>RFG of Central and South America and the Caribbean - 16:00 UTC</td>
<td>Online</td>
<td>VLab</td>
<td>Argentina, Barbados, Brazil, Costa Rica</td>
<td>Online Weather discussion</td>
<td>English, Spanish</td>
<td>Open</td>
<td>Bernie Connell</td>
<td><a href="#">Bernie Connell</a></td>
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<tr>
<td>21/02/2017</td>
<td>Overview of the Global Disaster Alert and Coordination System (GDACS)</td>
<td>Online</td>
<td>NASA-ARSET</td>
<td></td>
<td>Online course</td>
<td>English</td>
<td>Open</td>
<td>ARSET</td>
<td><a href="#">ARSET</a></td>
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<tr>
<td>09/03/2017</td>
<td>RFG of Central and South America and the Caribbean - 16:00 UTC</td>
<td>Online</td>
<td>VLab</td>
<td>Argentina, Barbados, Brazil, Costa Rica</td>
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<td><a href="#">Bernie Connell</a></td>
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<tr>
<td>14/03/2017 - 16/03/2017</td>
<td>Baltic+ 2017 Training Course</td>
<td>Vilnius, Lithuania</td>
<td>Other</td>
<td></td>
<td>Blended course</td>
<td>English</td>
<td>Open</td>
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Observational Needs

• Geostationary hyperspectral sounder
  – To continue to advance our understanding of remote sensing and to provide more frequent atmospheric profile information to drive weather forecast models.

• Geostationary day-night band
  – To extend the benefits of visible image viewing to the night for improved identification of surface and cloud features.

• Promote citizen weather observations and reports – human judgement in the process is valuable.
Some things to think about for new satellites

• If you don’t see a training resource on a topic of interest, enquire about it.
• It’s not obvious until it’s been pointed out.
• No question is too small to ask.
• I’m looking forward to high spatial resolution (0.5 km visible!) imagery on GOES-16. Are you?

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