



The WMO/CGMS  
Virtual Laboratory (VLab)  
for Education and Training in Satellite Meteorology

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# What is the VLab ?

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- The VLab is a worldwide collaborative network of training centres called « Centres of Excellence » (CoEs) and satellite operators
- To improve the utilisation of data and products from meteorological and environmental satellites
- Established in 2000 by WMO and the Coordination Group for Meteorological Satellites (CGMS)



# The VLab network



- Argentina (Buenos Aires and Cordoba)
- Australia (Melbourne)
- Barbados (Bridgetown)
- Brazil (Cachoeira Paulista)
- China (Beijing and Nanjing)
- Costa Rica (San Jose)
- Kenya (Nairobi)
- Niger (Niamey)
- Oman (Muscat)
- Republic of South Korea (Jincheon)
- Russian Federation (Moscow and St. Petersburg)
- South Africa (Pretoria)



VLAB LINKS BETWEEN COES AND THEIR SUPPORTING SATELLITE OPERATORS



# VLab strategic goals



- ❑ To provide training on meteorological and environmental satellite systems, data, products and applications through the CoEs;
- ❑ To strengthen each CoE's regional training activities.
- ❑ To foster the development of applications for societal benefit at the local level by the NMHS.



TRAINING EVENT IN THE COE REPUBLIC OF KOREA



# Key points of the VLab strategy

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- Partnership between space agencies and training centres;
- Covering all WMO Regions and official languages;
- Sharing training resources: Virtual Resource Library, supported by Environmental Satellite Resource Center (UCAR COMET programme)
- Classroom, distance and Blended learning courses;
- Regional Focus Groups (RFG);
- Event Weeks: e.g., Aviation week Caribbean 30 April – 4 May 2012
- Common tools for distant learning and course management



# VLab Training Topics



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- Initial focus on use of satellites for nowcasting and short-range weather forecasting
  
  - Evolving into using satellites for wide range of meteorological, climate and environmental applications:
    - Marine forecasting, marine applications
  
    - Aeronautical meteorology
  
    - Climate applications
  
    - Sand and dust storm detection
  
    - Volcanic ash detection
  
    - Other matters depending on regional priorities

# SAND and DUST: EUMETSAT Dust Week



Map showing the countries that participated in the fourth session of the Dust Event Week

- In the Framework of the VLab activities a virtual Dust Week Event was organised
- 20 organisations world wide participated at this very successful event

## Expert lecturers:

- Thomas Lee (NRL, USA)
- Herve Le Gléau (Meteo France)
- Humaid Albadi (Oman)
- Carlos Perez (NASA-GISS and IRI, USA)
- Nuno Moreira (Portugal)
- Jose Prieto, HansPeter Roesli and Jochen Kerkmann (EUM)



# VLab Facts 2011



- Monthly online “Regional Focus Group” meetings by VLab Centres of Excellence
- 65 courses in the year 2010/2011
- >2000 participants
- Involving all 6 WMO Regions and 7 languages: English, French, Spanish, Portuguese, Russian, Arabic and Chinese
- VLab web site: <http://vlab.wmo.int>
- Common calendar of training events
- Newsletter





# VLab Management



- ❑ The VLab Management Group reports to WMO and CGMS;
- ❑ Virtual meetings : 3 times a year
- ❑ Face to face meetings: every 2 years

TWO CO-CHAIRS, CURRENTLY:

- KATHY-ANN CAESAR, CIMH, BARBADOS;
- VOLKER GÄRTNER, EUMETSAT

TECHNICAL SUPPORT OFFICER:

- LUCIANE VEECK

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VLMG-5 MEETING, BEIJING, 2010



# Want to learn more about the VLab?



- VLab central website
- <http://vlab.wmo.int>

