



WMO-CGMS Virtual Laboratory for education and training in satellite meteorology

Who are we?

Scan to learn
more about VLab



Centres of Excellence

The 13 Centres of Excellence (CoEs) for training in Satellite Meteorology are distributed within the six WMO Regional Associations.



Satellite Agencies

Eight satellite operators sponsor VLab CoEs: CMA, CONAE, EUMETSAT, INPE, JMA, KMA, NOAA, and ROSHYDROMET.



Established in 2000 by the World Meteorological Organization (WMO) and the Coordination Group for Meteorological Satellites (CGMS), the Virtual Laboratory for Training and Education in Satellite Meteorology (VLab) is a global network of specialised training centres and meteorological satellite operators working together to improve the utilisation of data and products from meteorological and environmental satellites.

Our Mission

To improve weather, water, climate and related environmental services by enabling WMO Members to utilise satellite data

What we do

We provide training, promoting the interdisciplinary application of satellite data. We share knowledge, experience, methods, and tools related to access and usage of satellite data, especially in support of WMO Members that have limited resources.

Some of the Challenges we experienced over the years, and the solutions we explored - which were particularly useful in 2020 - are shared below

The audience we attend

Mainly operational meteorologists, those performing the duties of analysis, diagnosis, prognosis and forecasting of the weather. As we are an international network, the coordination of our collaborations is done online.



VLab is a Global Network of Training Providers

How do we make it sustainable?

1. Co-Chairs representing the two main stakeholders

- Satellite Operators
- Training Centres of Excellence

2. Technical Support Officer

- Having a central point of contact for the Network, ensuring communication and coordination of tasks.

3. Trust Fund

- Having a Trust Fund to collect contributions to support the network

Challenge

- Coordinating training to be provided.

Solutions tried

- Having a leading entity;
- Contracting a support officer;
- Building on values such as diversity, inclusivity and trust.



Benefits observed

- Networking is kept alive and communication active;
- Effective coordination of efforts;
- Increased collaboration to provide national and regional training.



Competency-based training

How have we been implementing it?

1. Consider the Skills in the training development plan

- Identify the Skills that will be addressed
- State the Skills in the course description

2. Add it to certificates

- State the Skills addressed by courses in the back of certificates.

3. Link the training to the existing competency framework

- In Calendar announcements
- In the Library of training resources

Challenge

- Reaching wide adoption of the Satellite Skills in training.

Solution tried

- Awareness campaign to inform trainers and professionals (e.g. operational meteorologists).



Reported Benefits

- Skills helped Trainers to write clearer learning objectives for courses;
- Skills helped professionals to identify gaps in their skill sets.



Continuous Professional Development

Are we doing a good job?

1. Promoting initiatives

- Regional Focus Groups
- Thematic events
- Internships
- Regional Workshops
- Hackathons

2. Training of Trainers

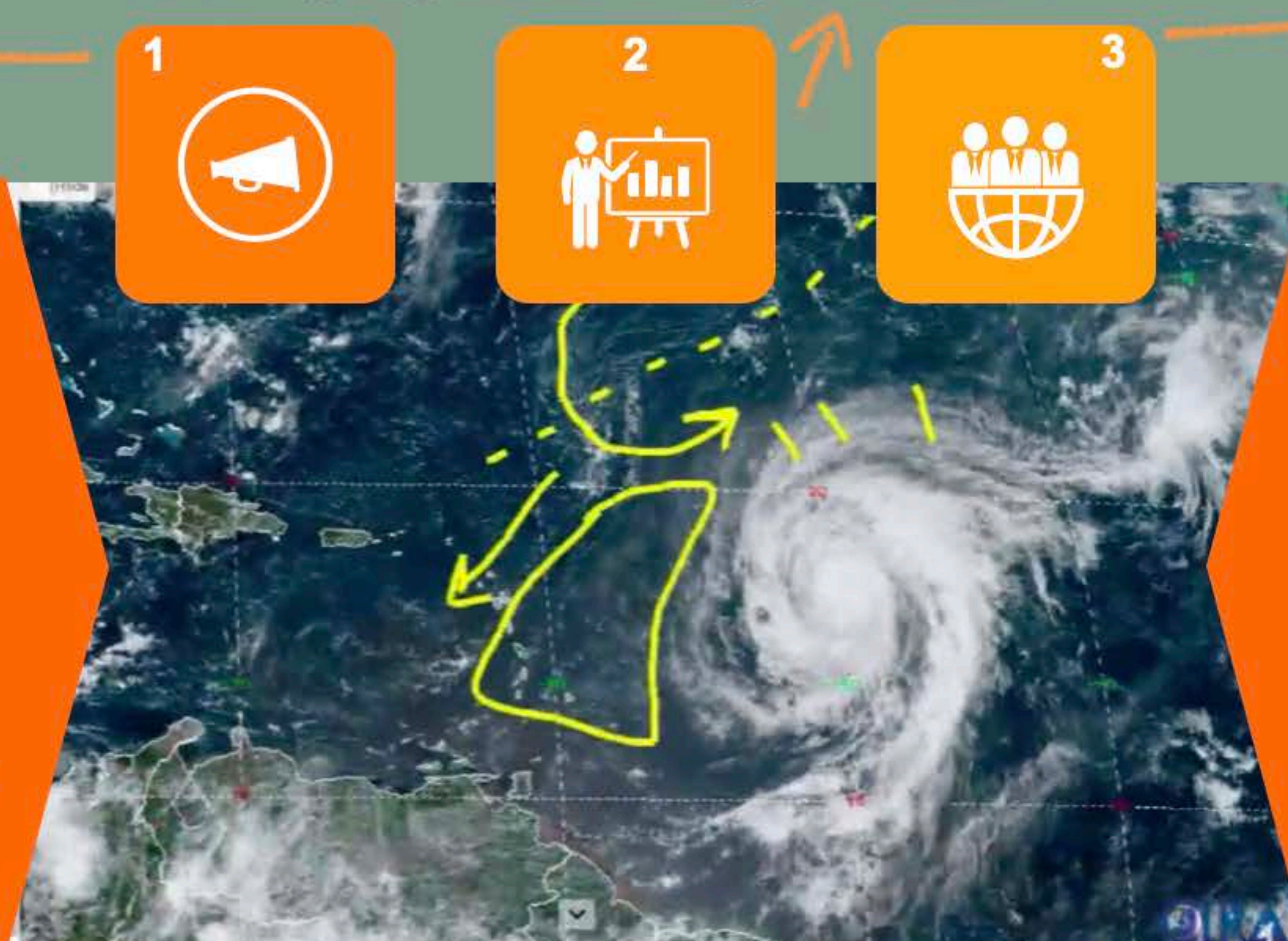
- Adopting WMO Education & Training guidelines
- Acquiring formal certification in Education
- Offering regional training of trainers

3. Global Campus

- Sharing good examples of training and innovations

Challenges

- Maintaining up to date knowledge and skills of operational personnel and trainers;
- Raising awareness of cutting edge developments in satellite meteorology.



Solutions tried

- Working closely with subject matter experts;
- Fostering communities of practice;
- Encouraging sharing of training resources.



Digital Badges

How do we intend to explore this possibility?

1. Introduce the idea to VLab Members

- Explain how it works
- Discuss advantages and workload involved

2. Procure partners

- Procure partners to participate in a Pilot

3. Provide Guidance and support

- Provide guidelines for implementation
- Support initial set up and testing

Implementation Challenges

- Getting training providers onboard;
- Informing users how to benefit from sharing their badges (and how to do it).



Benefits foreseen

- Provision of verifiable records of learning;
- Possibility to share records in various platforms;
- Sharing of records are controlled by learners.