



# CIMH

Caribbean Institute for Meteorology & Hydrology



## Barbados CoE Report VLMG-8



**Kathy-Ann Caesar**  
**Chief Meteorologist**

# Virtual Achievements 2013 - 2014

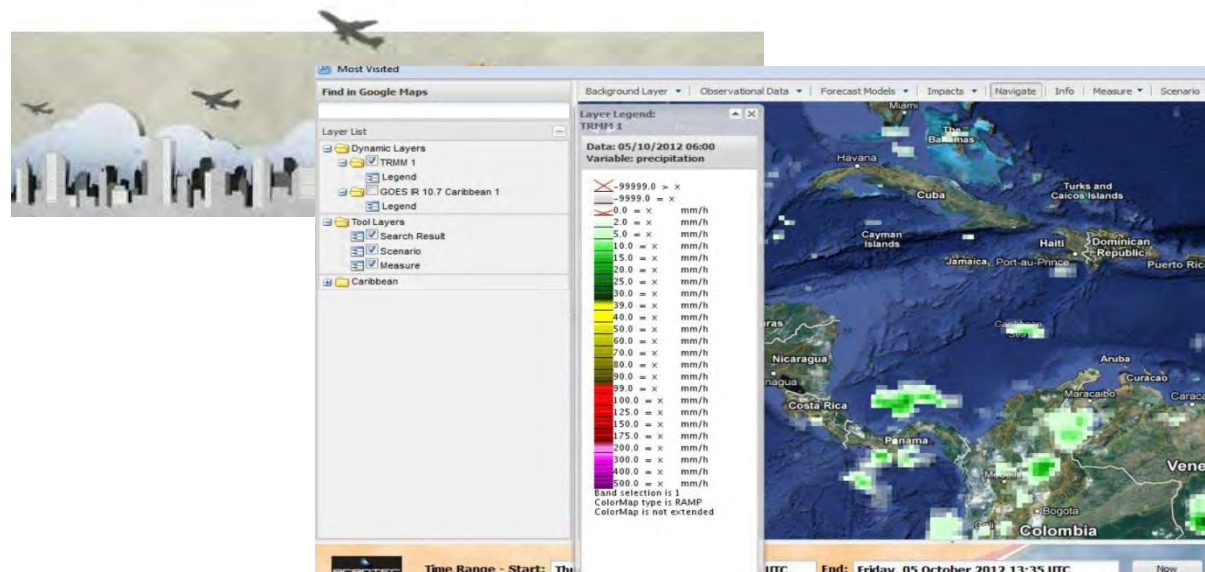
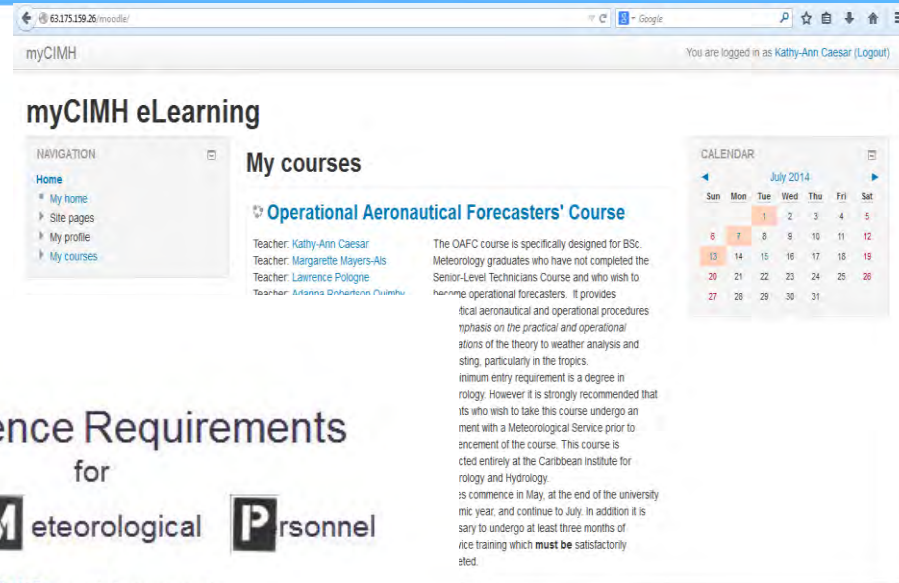
## CIMH goes Virtual

- AeroCPD Online Course;
- myCIMH Moodle Site
- Virtual Round Table on Aeronautical Competence Requirements;
- Weather briefings using the Dewetra Platform;

### Competence Requirements for

**A**eronautical **M**eteorological **P**ersonnel

2013 and beyond



# Caribbean Weather Discussions

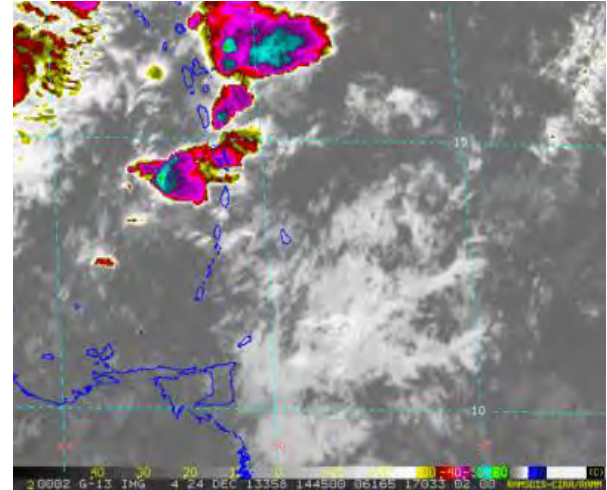
## Caribbean Weather Discussion;

Monthly weather discussions  
for Caribbean

Teaching and Continuous  
Professional Development

### Special events:

- Onset and progress of tropical storms;
- Introduction of new products; e.g. GOES R
- Special events Disaster Mitigation



# Virtual Round Table

## Virtual Round Table on Competence Requirements for Aeronautical Meteorological Personnel

### English Version

Presented by Kathy-Ann Caesar and Adanna Robertson-Quimby (CIMH, VLab Barbados)



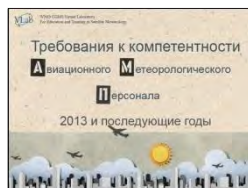
Márcia Costa  
Brazil



Vilma Castro  
Costa Rica



Hamidou Hama  
ASECNA



Kate Chumak  
Roshydromet

**An idea born during VLMG-6...**

Event:	VRT - English
Date:	27 March 2013
Initiative:	VLab
Registered:	103
Attended live:	34 connections
Played the recorded session*:	20

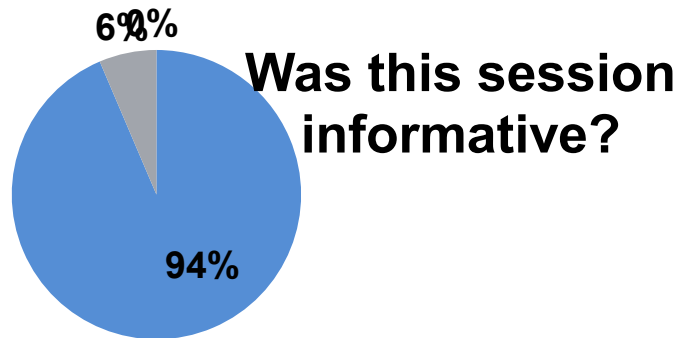
Resources available at VLab website

<http://www.wmo-sat.info/vlab/virtual-table/>

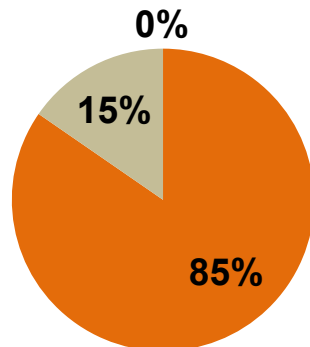


# Virtual Round Table on Competence Requirements for Aeronautical Meteorological Personnel

## Valuable information collected



**Did the presentation clarify any of the questions you had prior to the event?**

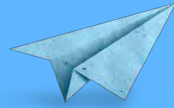


## Countries Reached by the VRT so far



Special thanks to  
Lu Ceeck and Maja Kuna  
Ian Lisk, Jeff Wilson and Herbert

# Total



Total		Countries	WMO RA	Map
Registered	302	73	All	Map-Green
Attended (connections)	90	47	I, II, III, IV, VI	Map-Blue



# Comments from VRT

Most of it was new as I have only begun this process and came across the round table information the day before the event.

The presentation clarified some questions, but I will have many more

I however appreciate the emphasis of the Competence Requirements for Aero Met personnel and timelines set for implementation.

That the AMO does not necessarily need a qualification certificate only documented competency standard.

A very useful, well done presentation

I could utilize when delivering this information further in neighboring organizations

# Aeronautical Continuing Professional Development Blended Learning Course

Designed by CIMH- RMTC and CoE

To provide a CPD course for aeronautical forecasters which provides the training and tools to aid and maintain the WMO recommended competencies standards.

After 3 years – 37 forecasters have taken the course  
29 successfully

Writing Effective TAFs in the Caribbean

ET\* Program



Creative Commons: agnib75/lover

myCIMH

You are logged in as Kathy-Ann Caesar (Logout)

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      - CIMH Aeronautical Continuing Professional Developm...**
        - Unit 1
        - Unit 2
        - Unit 3
        - Unit 4
        - Unit 5
      - Senior Level Meteorological Technicians Course
      - OAFIC 05
      - EM/LMT: General Meteorology
      - METE3400

Course categories: Meteorology / CIMH Aeronautical Continuing Professional Development Course

### CIMH Aeronautical Continuing Professional Development Course for Aeronautical forecasters

The goal of this course is to provide material, course work and techniques to aid Aeronautical forecasters to meet the recommended WMO Commission on Aeronautical Meteorology (CAeM) Competencies. The Aeronautical Forecaster Competencies must be met by December, 2013. These defined competencies describe much of the knowledge and skills also identified as critical outcomes of the Basic Instructional Package for Meteorologists (BIP-M), and which becomes a mandatory requirement for aeronautical personnel in 2016.

By the end of this course, graduates should be able to:

1. Demonstrate an understanding of tropical meteorology and its complexities;
2. Use satellite imagery to identify and diagnose various tropical systems;
3. Interpret radar imagery in the tropics including Doppler imagery;
4. Utilize mesoscale NWP model outputs in the forecast process; and
5. Apply their knowledge and relevant tools to operational aeronautical duties.

By completing this course, participants will ensure they are competent within the field of aeronautical meteorology, as recommended by WMO Annex II. Participants will also learn how to use tools that will aid with achieving WMO EC-LXII (2010) approved Aeronautical Meteorological Personnel Competence Standards for an Aeronautical Meteorological Forecaster



# Need for CPD Training

New WMO competency standards;

Forecasters in the Caribbean will need to be assessed and can be provided the tools in the continuing professional development course;

- Noted lack of adherence to WMO regulations in TAF, METAR and SIGMET preparations

Not a lot of time available for training

Deadline approaching to demonstrate competency (Nov 2013)

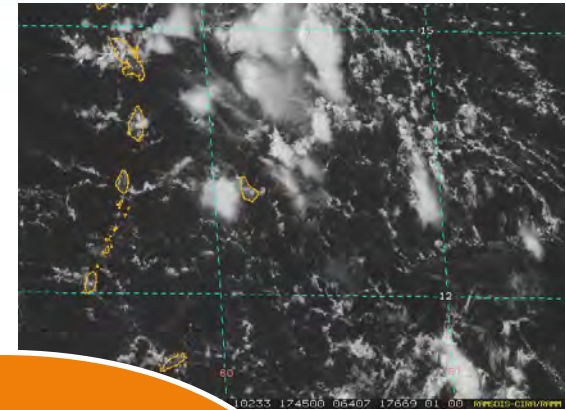
# AeroCPD UNITS



1. Review of  
Tropical  
Meteorology  
Fundamental

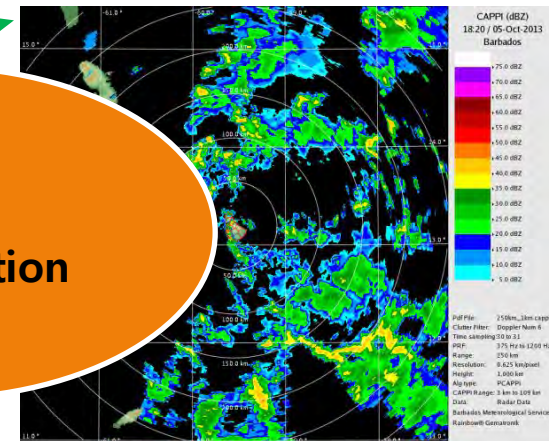
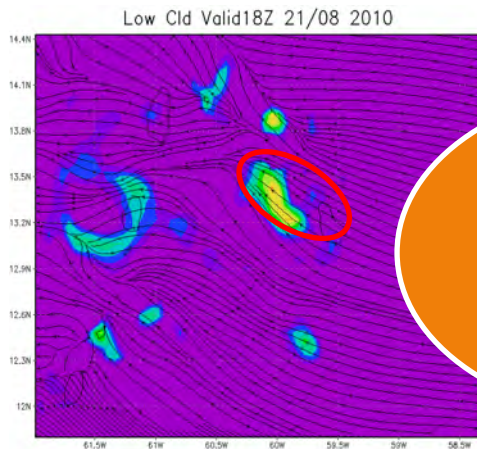
Operational  
Aeronautical  
Meteorology

Satellite  
Interpretation



Mesoscale  
applications of  
NWP

Radar  
Interpretation



# AeroCPD Course Set Up

Lectures, modules and assignments done by participants in their own time

- Facilitated using **Moodle**
- **COMET; VisitView**

## New modules :

- Radar -US NWS Warning Decision Training Branch lectures;
- Writing the Perfect TAF – Caribbean

## Live synchronous sessions

- Discussion and direct application of material
- Elluminate voffice

## Assessments

- Exercise questions
- Project papers
- COMET quizzes
- Participation

Recordings of the live sessions provide asynchronous participation

# Hydrology Online course

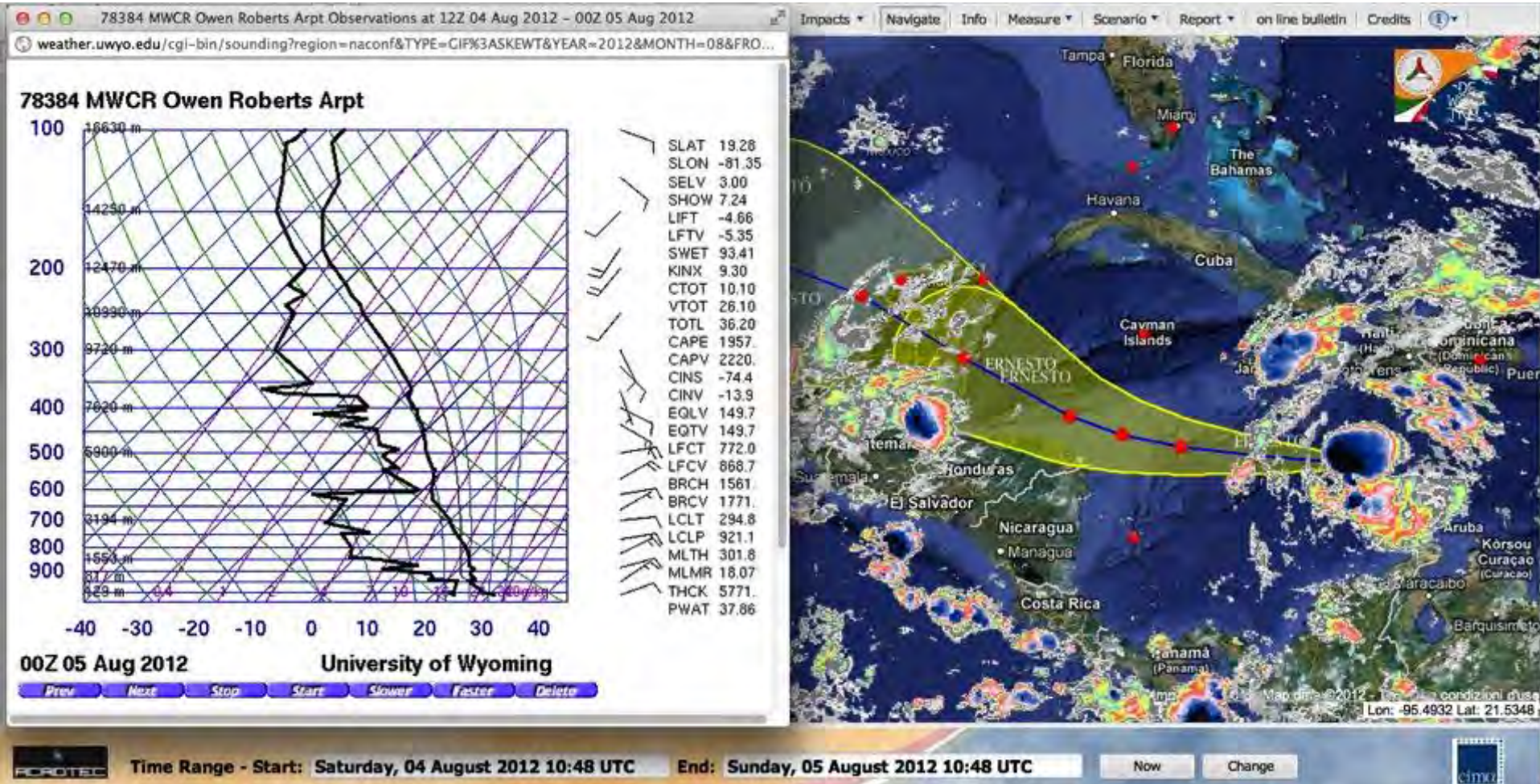
- Environmental Impacts to Hydrological Systems
- Flood Plain Mapping
- September 2012 to 2013;
- CIMH project with WMO and COMET support;
- Participants from Carriacou, Grenada, Dominica, St. Lucia



# Disaster Management Weather Briefing - Dewetra

- The Caribbean Dewetra Platform –
  - a real-time data and information integrated system
  - It allows for the combination of data, forecast tools, procedures and expertise;
  - provides decision makers with high resolution and up-to-date information of the expected and observed risk and vulnerability.

# TS Ernesto : Cayman Islands Sounding 00UTC, 5 August 2012

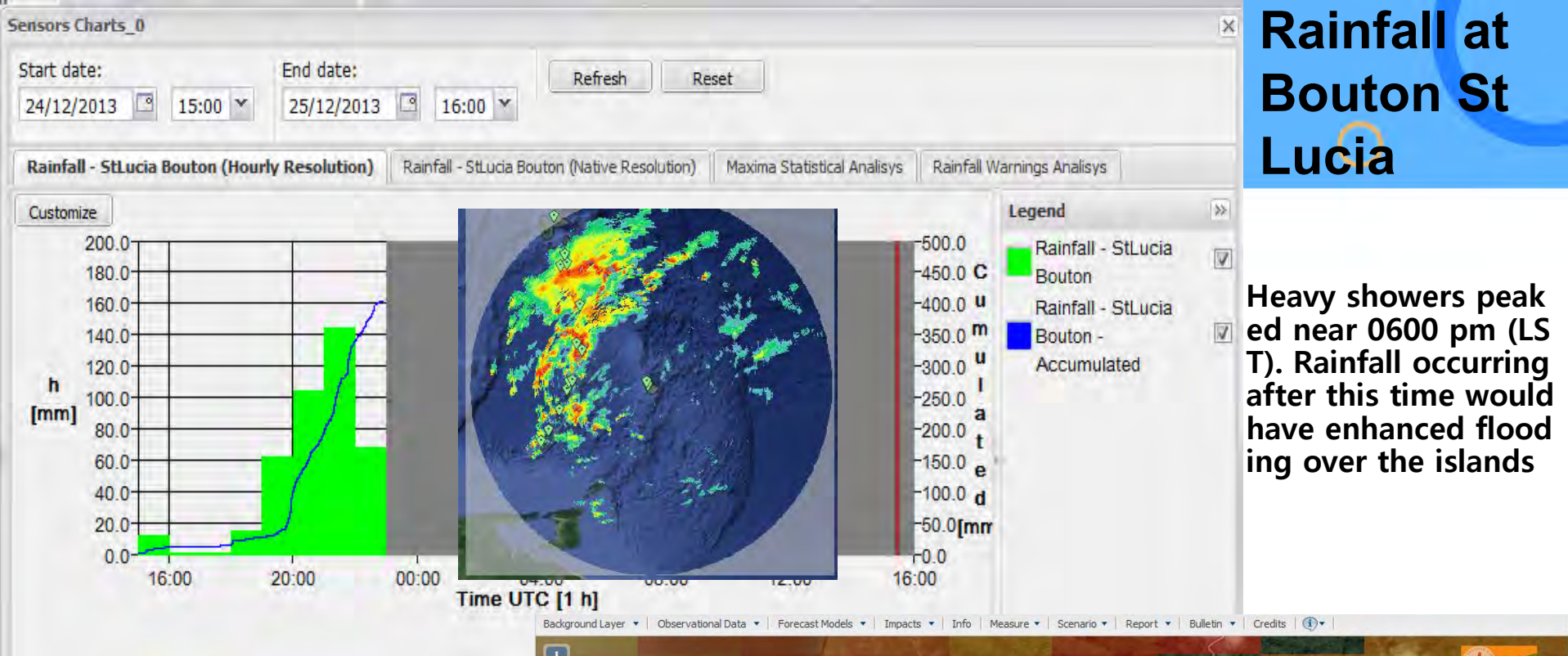




# DEWETRA – Real time data

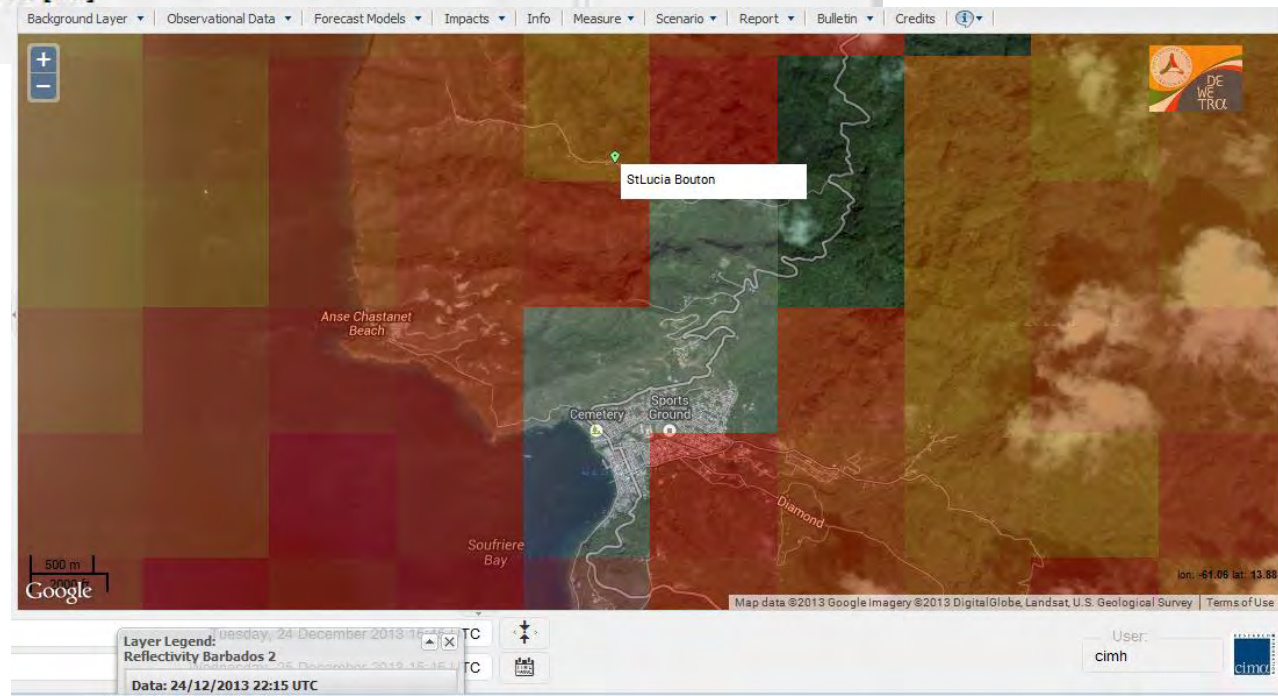
## Real-time georeferenced data





Insert shows heaviest showers over to the east and south of Bouton are at 2215 UTC. 140 mm of rainfall was recorded at the time; and an Estimated 6 inches of rainfall in one hour – **catastrophic**.

Radar image zoomed over Southern St Lucia - The red pixels indicates the areas of heavier isolated showers.







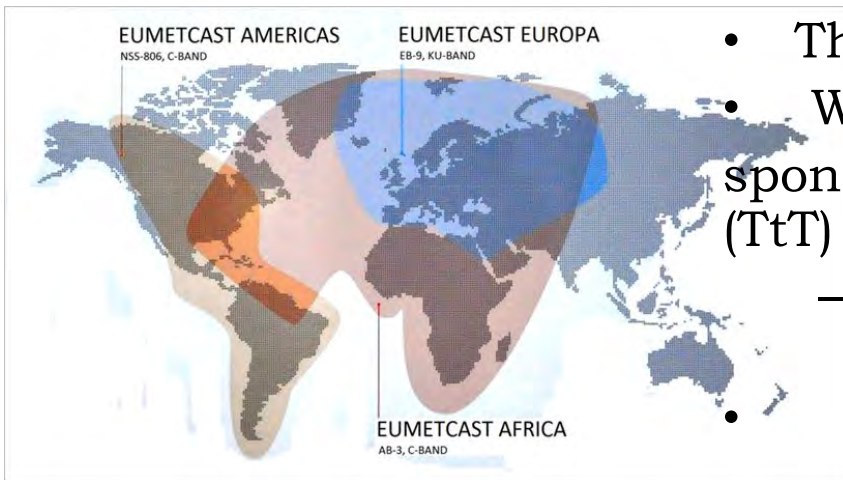
# **WMO-NOAA Train the Trainers Workshop on GEONETCast and Related Systems**



**April 6 – 7, 2013  
College Park, Maryland**



# WMO/NOAA Train the Trainer (TtT) Workshop



- The WMO/CGMS VLab,
- WMO Space Programme and NOAA - sponsored the **WMO/NOAA Train the Trainer (TtT)** Workshop for WMO RA III/IV members.
  - *Held the weekend prior to the NOAA Satellite Conference (8-12 April 2013)*

- Introduction, operations and capabilities of the **GEONETCast (GNC)**;
- Disaster mitigation products and the importance of GNC as a risk-reducing global data access system;
- Training Channel and Transfer of training material via GNC,
- Reviewing regional requirements documentation and the need for better integration of regional dissemination systems;
- System demonstrations.

# Regional Concerns and Training Needs

WMO RA III and IV operational users of satellite data from GOES and other systems require:

- Low-cost, operational and sustained data dissemination system built on GNC-A and EUMETCast Platform
- Arrangements for cost-sharing, e.g. of **bandwidth fees**.

The different needs and skills of satellite data users should be taken into account

Appropriate training is as important as getting hold of data itself.

Training should in particular involve preparing users from the Region for GOES-R.

# Barbados CoE

## 2014 and beyond

- Virtual Round Table on *The Use of Satellite Data in monitoring Climate Change and variability.*
- Virtual course for **Meteorology for CAPE Level Geography Teachers**
- Retool AeroCPD to address to 2016 deadline
- Need to encourage new participation in RFG
- Continue to support VLab Events
- Use of the discussion format to aid Disaster Preparedness efforts



**THANK YOU**

