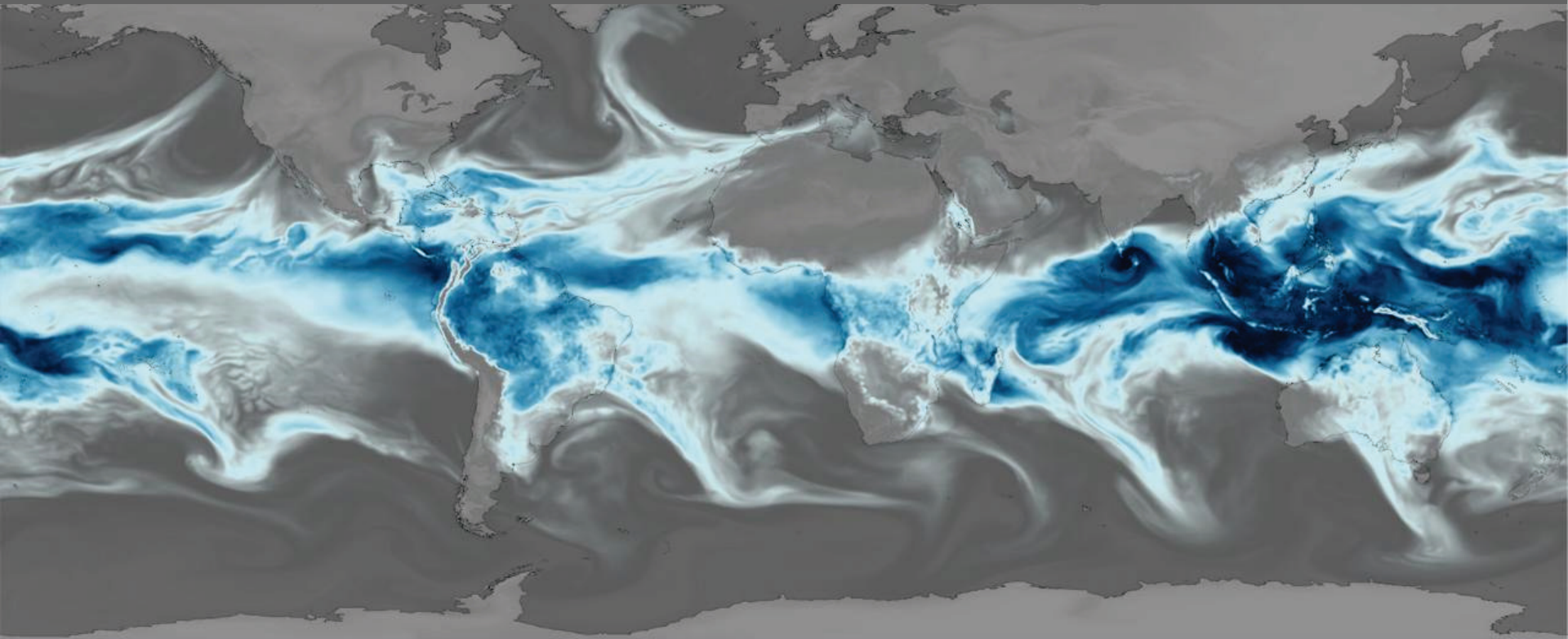




## Overview of COMET and MetEd

Paul Kucera | Fall 2018



- THE NEED -

COMET has been a world-wide leader in support of education and training for geosciences for the past 28 years



# The COMET Program:

## Advancing geoscience workforce expertise worldwide

*Our focus areas:*

Training & Education	Capacity Development	Outreach
Designing scientifically accurate, effective instruction in multiple languages for various audiences	Helping developing nations improve observation and weather forecasting through various initiatives	Funding partnerships between researchers and operational scientists

*Our sponsors:*





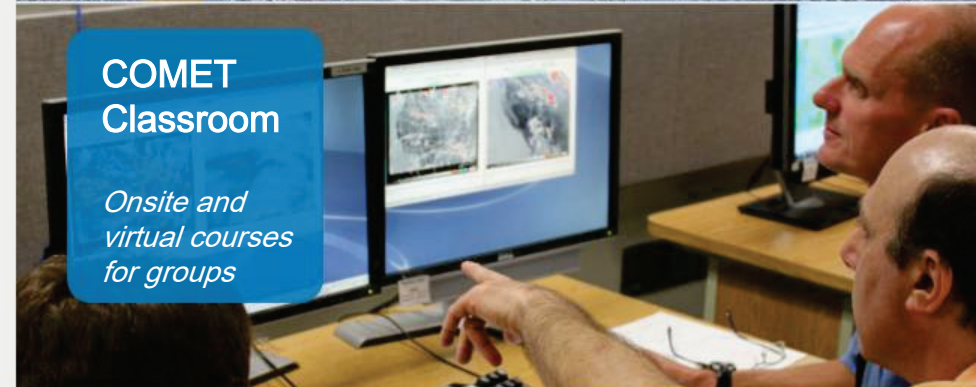
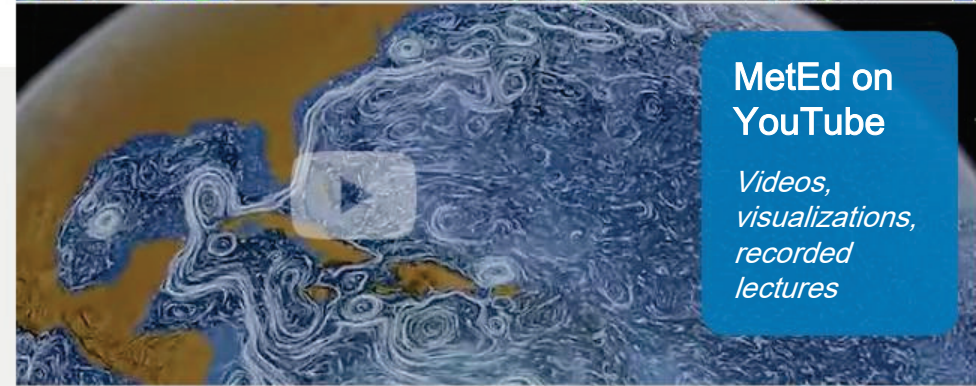
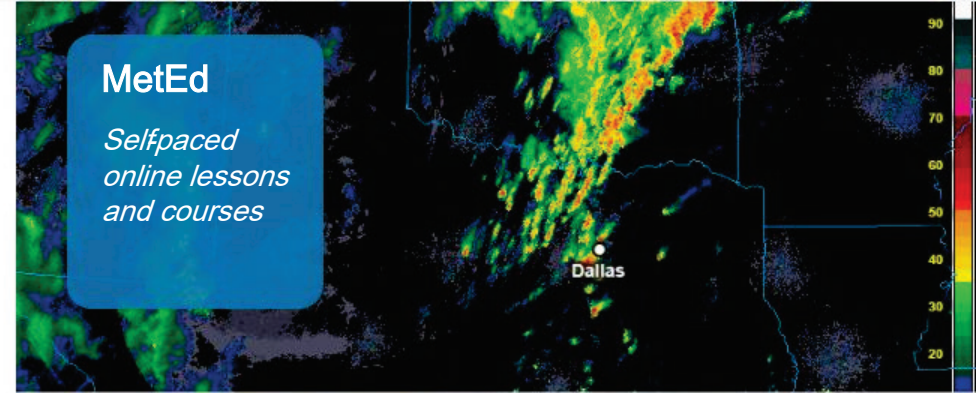
A photograph of a man and a woman in a computer lab or training center. The man, in the foreground, is wearing a grey hoodie with green stripes on the sleeves and is holding a blue pen, looking towards the woman. The woman is wearing a black top and a blue patterned scarf, looking back at him. They are sitting at a desk with a computer mouse, keyboard, and a black mug with the 'COMET' logo. In the background, other people are working at computers, and a microphone is visible on the desk.

## TRAINING & EDUCATION

## COMET is a world leader in geosciences training

### Offering competency -based e-learning, blended learning and classroom learning

- Case-based and conceptual lessons
- Simulated event-based scenarios
- Video-based instruction
- Lecture recordings
- Live webinars
- Web-based distance learning courses
- Residence courses
- Instructional design services
- Multimedia/web production services
- Translation services for multiple languages



# MetEd

450+ lessons, 20+ topics.

500K+ registered users.

Learn at your own pace online.

[www.meted.ucar.edu](http://www.meted.ucar.edu)



**What can  
you learn  
on MetEd?**



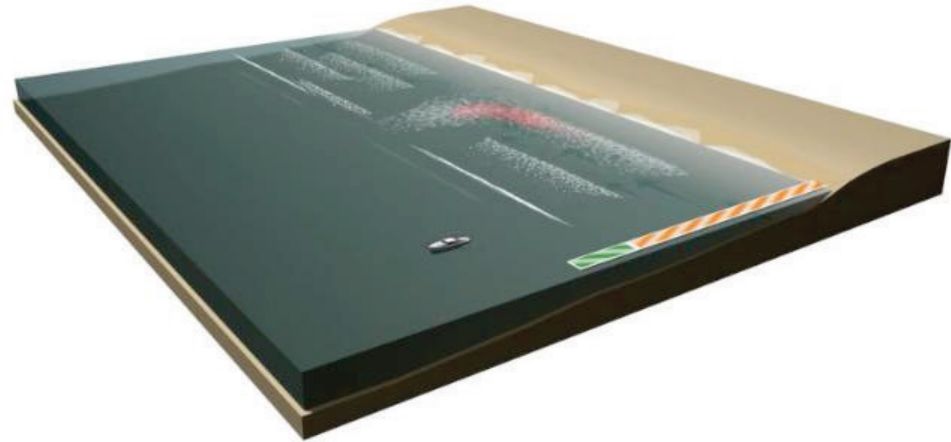


## Met 101: Introduction to the World's Oceans

**Learn to:**  
Summarize the factors involved in creating wind waves, swell, and tides.

[View animation](#)

### Formation of Rip Currents



©The COMET Program



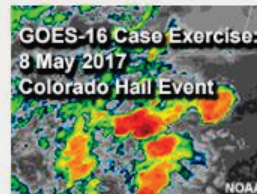
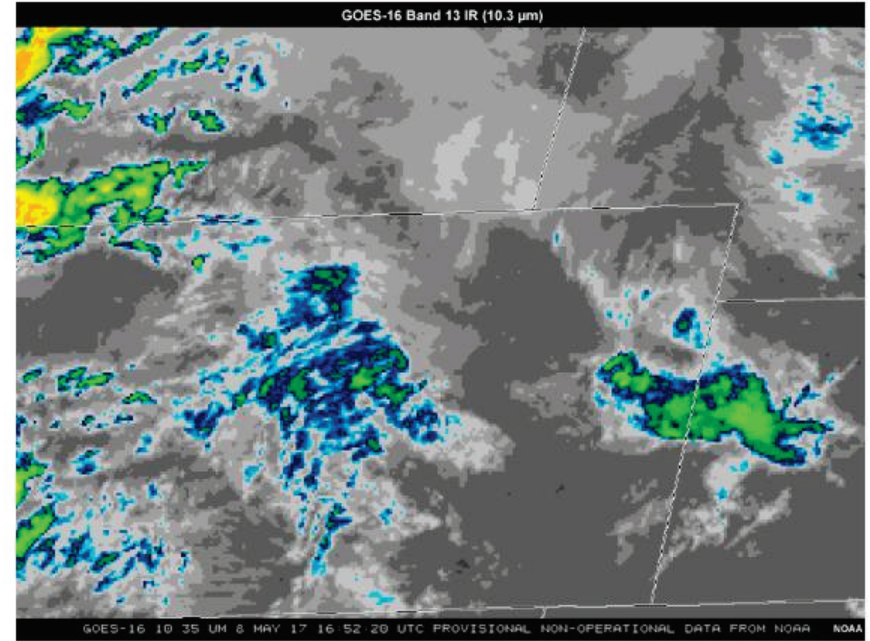
What can  
you learn  
on MetEd?



## GOES-16 Case Exercise: 8 May 2017 Colorado Hail Event

### Learn to:

Identify common convective  
development and intensity  
signatures on longwave IR  
and visible satellite imagery.

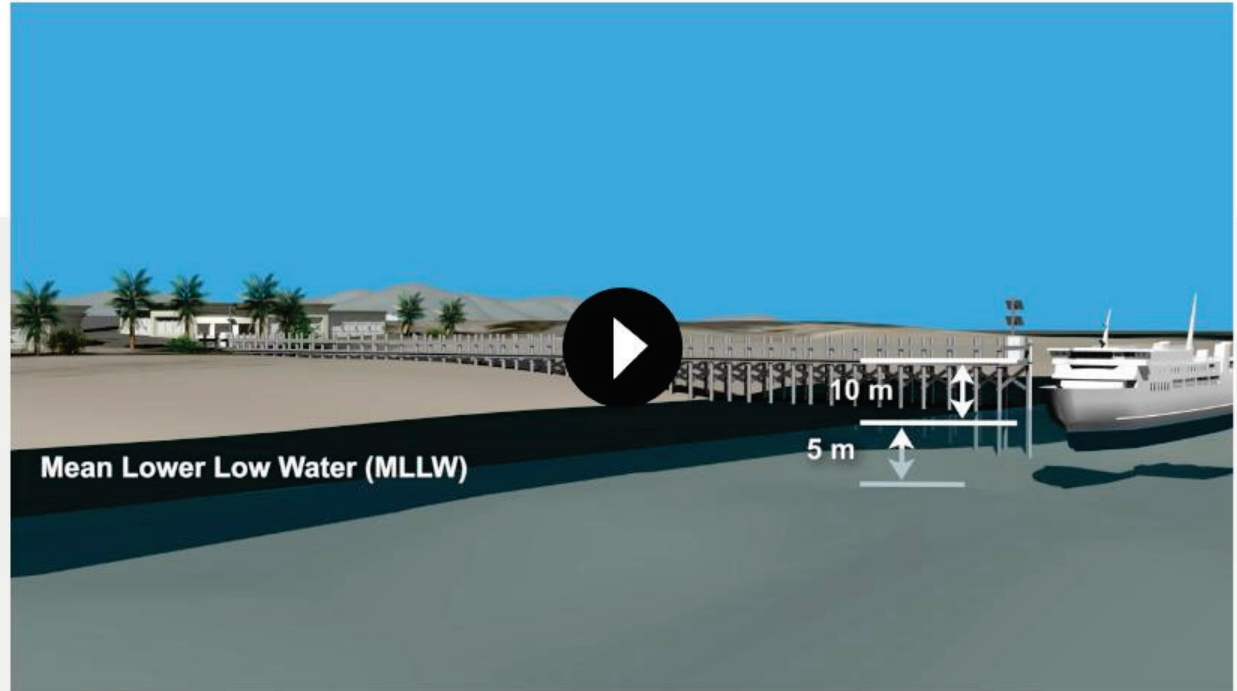




## COMET YouTube

### Short on time?

Try our YouTube channel short videos, process visualizations, and recorded lectures.



[youtube.com/user/cometmeted](https://youtube.com/user/cometmeted)

## Blended learning

Extend learning with our virtual and residence courses.

We deliver hands-on training customized to your organization's needs. Courses are hosted at our UCAR facilities in Boulder, CO, or broadcast via COMET's Virtual Classroom.

[courses.comet.ucar.edu](https://courses.comet.ucar.edu)



## CAPACITY DEVELOPMENT





## COMET / IEPAS

IEPAS projects aim to improve rural and remote communication of meteorological information.



### 3D-Printed Automatic Weather Station (3D-PAWS)

Expanding surface observations in remote areas

- Inexpensive, reliable stations with 3D-printed components
- Measurements: pressure, temperature, relative humidity, wind speed and direction, precipitation, light
- Run on Raspberry Pi single board computers
- Transmit surface observations in real-time to centralized data servers

[www.iepas.ucar.edu](http://www.iepas.ucar.edu)

## COMET / IEPAS

IEPAS projects aim to improve rural and remote communication of meteorological information.



### Weather Ready Nations (WRNs)

#### Supporting impact-based forecasting in Barbados and Central America

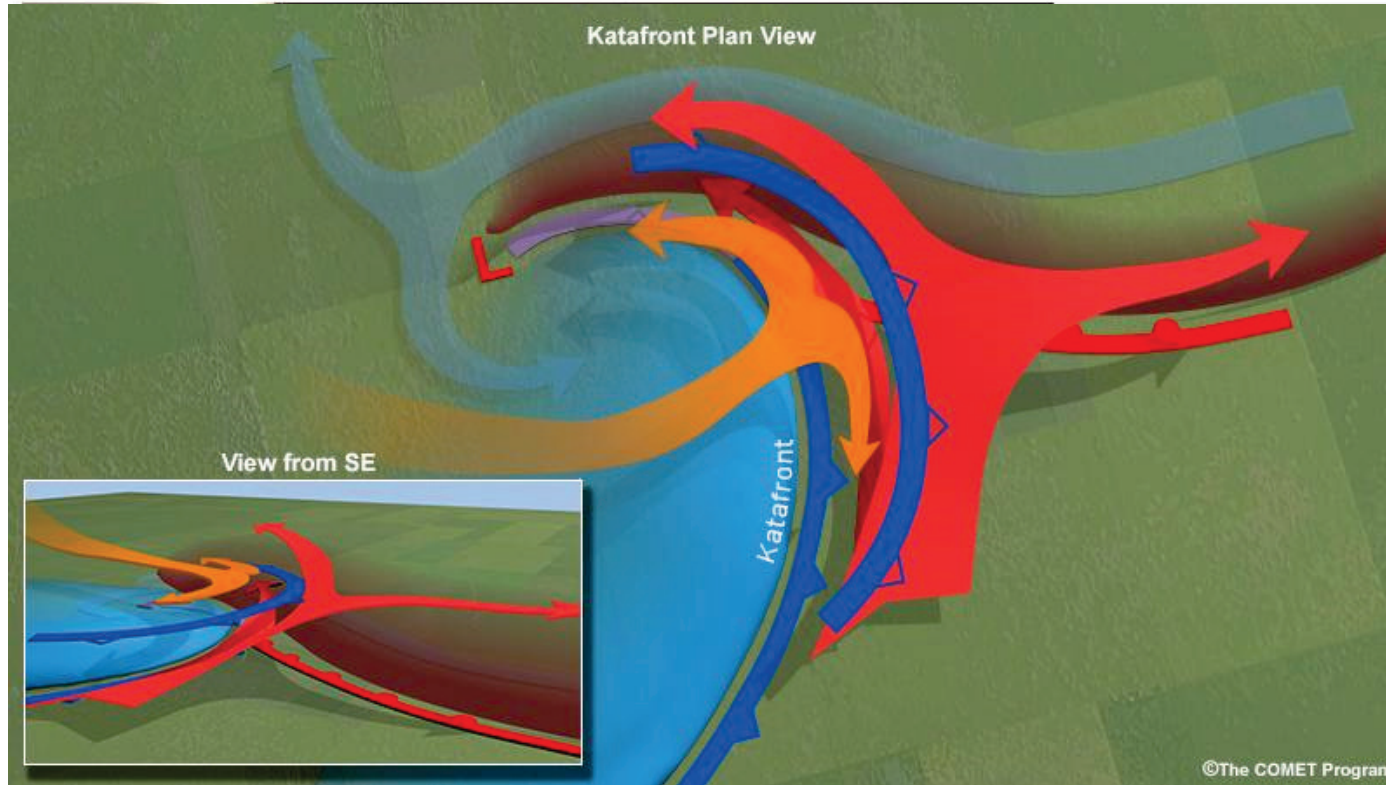
- Pilot project's partners: CIMH in Barbados, COMET, and the Hydrologic Research Center
- Training workshops in Barbados, Costa Rica, El Salvador, Guatemala
- Forecasts stress potential impacts to better prepare local communities for extreme weather, water and climate events

[www.iepas.ucar.edu](http://www.iepas.ucar.edu)

- FUTURE WORK -

# INNOVATION

New ideas and ways forward



**Virtual and  
Augmented Reality**  
Taking 3D visualization  
to the next level

**Educational Games**  
Incorporating games into  
lessons

**Tailored lessons**  
Using the pretest to tailor  
learning

**Lab Support**  
Synoptic lab package



- IN CLOSING -

We are here to help!

Contact us:

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[info@comet.ucar.edu](mailto:info@comet.ucar.edu)

Visit us online:

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[meted.ucar.edu](http://meted.ucar.edu)

