

# Weather and Water Go Hand in Hand: Education and Outreach at the Caribbean Institute for Meteorology and Hydrology

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## Overview

Outreach activities at the Caribbean Institute for Meteorology and Hydrology (CIMH) in Barbados center on its annual summer school camps and on encouraging students to pursue hydrology, meteorology and related atmospheric sciences as a career.

The annual summer school that was launched in 2007 focused solely on hydrology. In 2008 and 2009, the program offered concurrent meteorology and hydrology activities. Participants had to choose between the two, but they came together for lectures on common topics and for off-site field trips. In 2010, the coordinators organized a combined meteorology and hydrology program and adopted the name "Weather and Water Summer Camp."

## Weather and Water Summer Camp

The Weather and Water Summer Camp is based on a four (4) week Hydrological and Meteorological Observer's course. It targets secondary school students aged 14 years and older and is also open to teachers and trainers at secondary and tertiary level institutions. Topics include:

- Weather instruments and observations
- The hydrological cycle
- Global and tropical weather systems
- Electronics in Earth sciences
- Water quality testing
- Agrometeorology
- Seasonal and daily rainfall and temperatures
- Measuring and estimating evapotranspiration
- Scalar analysis
- Satellite and radar imagery
- Features on weather charts and forecasting techniques
- Disaster management
- Climate change

## Career Showcases

CIMH participates in the annual Barbados Association of Guidance Counselors (BAGC) National Career Showcase and makes presentations on request at various high schools across the island.



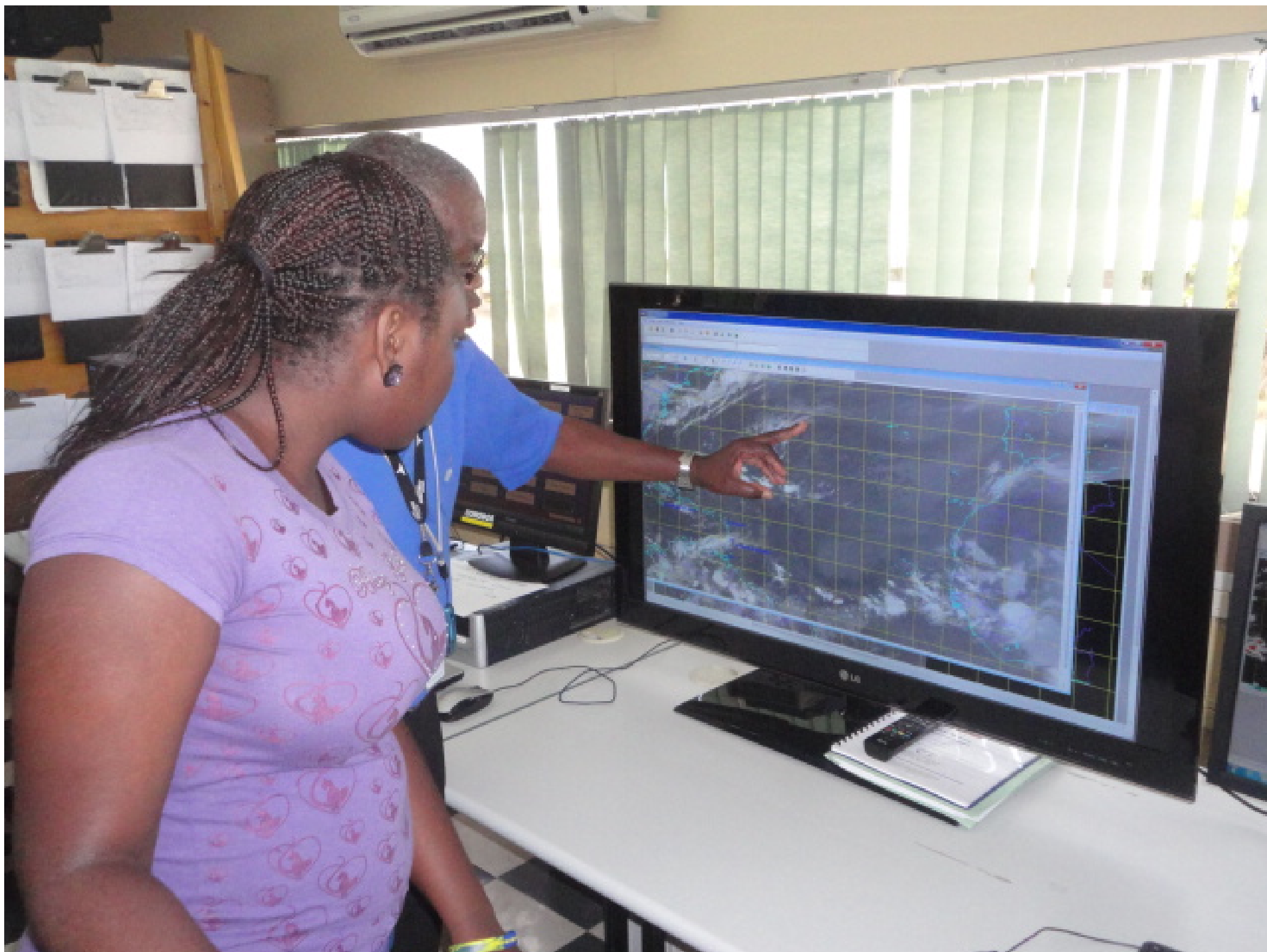
Summer camp activity: soil testing



Summer camp activity: weather balloon launch



Summer camp field trip to Barbados Meteorological Services



## Discussion

The camps, as well as all CIMH outreach and educational activities for youth, aim to stimulate interest in pursuing a career in hydrology, meteorology and other related fields.

These efforts are bearing fruit. During academic year 2013-2014, 40% of Barbadian students enrolled as meteorology majors at the University of the West Indies, Cave Hill Campus, had either participated in the CIMH Weather and Water Summer Camp and/or benefited from a career showcase or other CIMH outreach activity.

Summer camp field trips with Coastal Zone Management Unit examining coastal features (top) and cleaning up Sargassum seaweed from the beach (bottom).



Summer camp field trip to Ionics Freshwater Limited desalination plant



## Moving forward

CIMH will continue to fulfill its mandate by raising awareness of meteorology, hydrology and climatology in schools and general public. The demand for persons with such expertise is increasing as the region implements climate change adaptation strategies.

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