

ENHANCING CLIMATE MONITORING AND DATA COLLECTION ACROSS THE CARIBBEAN

150 MARINE AND TERRESTRIAL-MONITORING DEVICES INSTALLED AND OTHERS TO COME.



ECUADOR Quite

Caribbean Community Climate Change Centre



LIDAR

As part of its continuing commitment to improving the data collection capability in the region, The Caribbean Community Climate Change Centre (CCCCC) with the help of USAID has acquired an airborne LiDAR system.

This system is now accessible to regional organisations and governments for the collection of bathymetric data maps, which is important for scientists to learn more about the effects of climate change on the environment; alerting them to ongoing and potential beach erosion, sea-level rise, and subsidence (land sinking). Scientists also use bathymetric data to create hydrodynamic models.

The cost of these surveys can be debilitating for small countries, therefore the addition of the LiDAR to the Centre's arsenal of data collection devices will reduce the cost of access and boost their availability to access the critical information they need to inform their decision-making.

The use of the airborne LiDAR is the result of a collaboration with Maya Island Air (MIA), a locally-owned Belizean airline company. The Caribbean Development Bank and the Government of Italy also provided financial support for the system as well for a region-wide exercise to map some 10,000 square miles of vulnerable coastal areas.



The Coral Reef Early Warning Systems (CREWS) and Sea-Level Stations provide Caribbean scientists and researchers with marine data that allow them to monitor reef health, sea temperature changes, winds (speed and gusts), barometric pressure, precipitation, photo-synthetically active/available radiation (PAR, light), air temperature, and salinity. Other instruments may be added to extend the capacity of the network.

The Automatic Weather Stations' (AWS) which includes Hydro-metrological, Agro-meteorological stations provide a collection of critical data to support climate services and climate change modelling in the region, by improving the monitoring and collection of environmental variables including temperature, relative humidity, solar radiation, atmospheric pressure and rainfall.

The systems are critical tools for building resilience, providing data to support climate and climate change science and information to aid decision-makers with the successful implementation of climate change adaptation strategies across the Caribbean.

CREW STATIONS

AUS-AID - 1 EU GCCA - 5 USAID - 5 NEW for 2020 EU GCCA - 4 AWS: HYDRO MET:
EU GCCA - 55 GREECE - 10
USAID - 50 SPACC - 2
UNITAR - 11
MACC - 12
NEW for 2020- EU-GCCA+