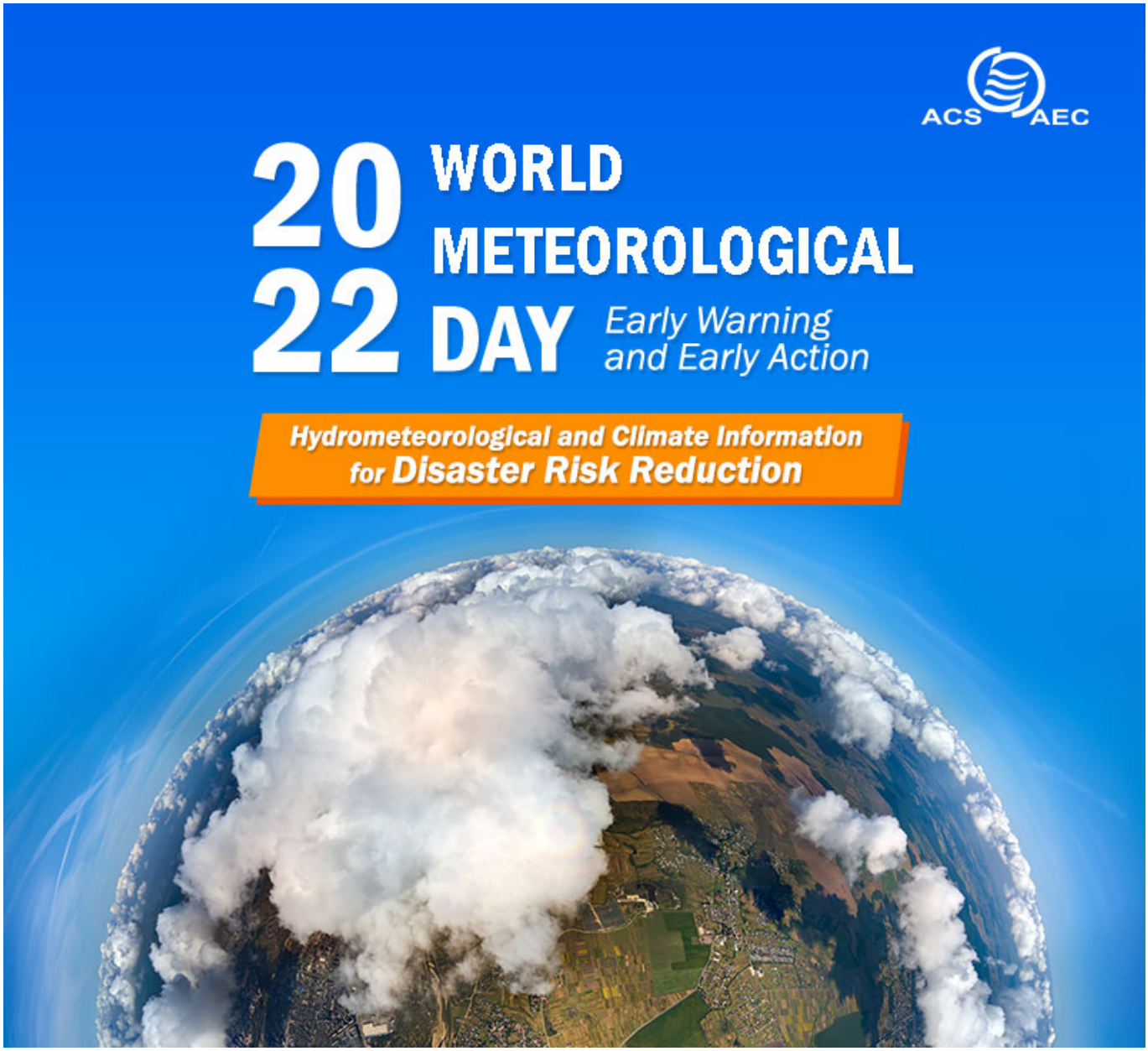
World Meteorological Day 2022: Early Warning and Early Action. Hydrometeorological and Climate Information for Disaster Risk Reduction.



Climate change has resulted in more frequent and intense hydrometeorological events such as storms, floods and droughts in many regions of the world. In the Greater Caribbean, this poses a serious threat to human wellbeing, as social life and economies are inextricably linked to the climate. Most communities in the region are built along the coastlines and sectors such as agriculture, fisheries, tourism and energy depend on specific climatic conditions in order to thrive. Over the last decade, countries in the region have been severely impacted by hydrometeorological hazards, which resulted in extensive human and economic losses. These loses are projected to increase, as the climate crisis worsens. Greater access to hydrometeorological and climate information is critically important to transform early warning into early action in the Greater Caribbean region.

Between 2012 and 2022, approximately 17,287 lives were lost as a result of storms and floods in the Greater Caribbean[1]. During that same period storms, floods, droughts and extreme temperature accounted for USD$ 806,993,076 in damages[2]. In 2017, Dominica and Barbuda were both ravaged by Hurricanes Maria and Irma respectively, the worst storms to hit these islands in their entire

history. Furthermore, in 2020, Nicaragua and Honduras were both adversely affected by Hurricanes Eta and Iota, which made landfall in the same region and left a trail of destruction in their wake. Widespread drought in the Greater Caribbean in 2020 also disrupted inland shipping routes, reduced crop yields and worsened food security in many areas[3].

If the region is to become more resilient against climate-configured disasters, there must be greater investment in early warning data infrastructure. Assessments of early warning systems across the region have revealed significant gaps in data infrastructure including poor data collection methods, insufficient hazard data and limited technical capacity to accurately interpret and process data[4]. These gaps in data infrastructure result in limited risk knowledge at the institutional level, which negatively upon detection and forecasting. Subsequently, this impedes early warning and response capability at the community level.

The Greater Caribbean region is on the frontline of the climate crisis and cannot afford to be left behind in the race towards a resilient world. Multi-hazard, impact-based early warning systems which alert people not just to what the weather will be, but to what it will do is of critical importance. Greater collaboration among regional and international stakeholders is essential towards this end; this includes, but is not limited to the harmonisation of disaster and climate risk efforts to identify synergies and maximise scarce resources.

The ACS through its Plan of Action 2022 to 2028 is actively seeking to mobilise regional and international partnerships to improve the region’s early warning systems and provide greater access to disaster risk information to those who need it most. Together, we must take timely and strategic action, to ensure that we build a climate resilient region. Happy World Meteorological Day!

[1] D. Guha-Sapir, R. Below, Ph. Hoyois - EM-DAT: The CRED/OFDA International Disaster Database – www.emdat.be – Université Catholique de Louvain – Brussels – Belgium.

[2] D. Guha-Sapir, R. Below, Ph. Hoyois - EM-DAT: The CRED/OFDA International Disaster Database – www.emdat.be – Université Catholique de Louvain – Brussels – Belgium.

[3] World Meteorological Organisation (WMO), 2021, State of the Climate in Latin America and the Caribbean 2020, WMO: Geneva.

[4] WMO, 2018, Caribbean 2017 Hurricane Season: An Evidence-Based Assessment of the Early Warning System, WMO: Geneva. Collymore, J, 2020, Final Model National Multi-Hazard Early Warning Systems (MHEWS) Policy, CDEMA: Bridgetown. Collymore, J, 2016, Early Warning Systems in the Caribbean: A Desk Review.