





#### Climate change in the Caribbean – strengthening the science to services interface

Chris Hewitt

Head of International Climate Services, Met Office, UK

Professor of Climate Science, University of Southern Queensland, Australia





# Workshop Sponsors and collaborators



- This workshop is part of the Met Office Commonwealth Heads of Government Meeting (CHOGM) Climate Service Demonstrator project
- WMO Climate Risk and Early Warning Systems (CREWS) funded workshop
- We are here due to the considerable organisation and collaboration from CIMH
- Collaborations from all of the below, and all of you, have made this possible







#### CHOGM – Climate Service Demonstrator Project Background





#### Background

- Draw on and improve existing capability to develop climate services with and for Commonwealth nations
- Support climate knowledge, adaptation, resilience and economic prosperity.
- Work collaboratively to create links between Commonwealth countries in co-producing climate services.
- Launched by the UK Universities Minister, April 2018-2020





#### Focus

Small Island States are some of the most at risk to climate change.

Kiribati

#### Focusing on:

- 1. Caribbean
- 2. Pacific







# Requirements

- Gathered at CariCOF Nov. 2018
- And UWI Frontiers of Science Royal Society even on Climate change in Caribbean Mar'19
- And this workshop!
- Focus on long-term climate change
- National and regional information, communication
  and coordination
- Better understand climate impacts
- Sea level rise as one priority (there are others) provide a SLR tool for the Caribbean region to complement Commonwealth Marine Economies programme <u>CME</u>



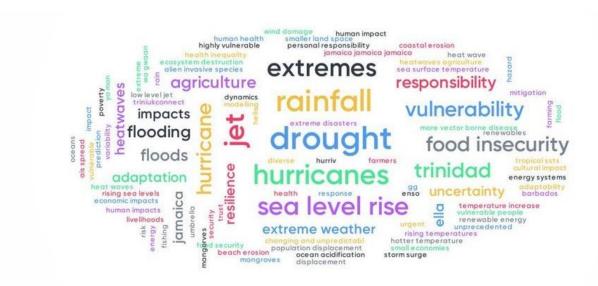


#### Workshop Aims & Objectives



#### Workshop Aims

- 1. Raise awareness of risks to the Caribbean arising from climate change, utilising the latest climate science
- 2. Identify available climate services for the Caribbean, on climate change timescale
- 3. Tailor a Caribbean sea level rise tool, to better inform decision-making
- 4. Co-develop good practice for communicating climate risk at a national scale



Climate change in Caribbean word cloud produced by UWI-Royal society meeting participants, March 2019



#### **Anticipated Outcomes**

- 1. Identify hazards to focus on in IPCC Atlas for Caribbean and encourage contributions/reviewers from Caribbean scientists to AR6.
- 2. Explore under Global Framework for Climate Services effectiveness of having a *Regional Climate Forum*.
- 3. Explore opportunities and gather requirements to continue this climate service work in the Caribbean after the project ends
- 4. Establish requirements of a sea level rise tool for the Caribbean







#### **Disseminating Materials**

- Disseminate key outputs from the project for the Caribbean region.
- Includes preliminary findings from sea level rise projections and communication examples and academic research.
- All materials will be uploaded to:

https://www.metoffice.gov.uk/services/cli mate/international/commonwealthclimate-services-demonstrator



Commonwealth Climate Services demonstrator



The Commonwealth Climate Services Demonstrator is a trial project that is pulling through existing Met Office capability to have additional benefit to Commonwealth outcome

At the Commonwealth Heads of Government (CHOGN) meeting in Loncon in Ap 2018, the LK universities Monder announced the development of the Commonwealth Climate Services Demonstrator, led by the Met Office, a world leading extinctive on complex scence and dimate services. China services are



#### Workshop Timetable

# Met Office Day 1 – Morning Plenary

Timing	Activity	Lead
9.00 - 9.30	Welcome, introduction & overview	British High Commission Port of Spain Prof Chris Hewitt, Met Office Dr David Farrell, CIMH
9.30 - 10.30	Climate change Science Overview talks	Dr Richard Jones, Met Office Prof Michael Taylor, UWI
10.30 - 11.00	Break	
11.00 -12.00	Climate change Science Overview talks - Caribbean impacts	Dr Ulric Trotz, Caribbean Community Climate Change Centre Dr Deborah Villarroel-Lamb, UWI
12.00 - 12.30	Climate Science to Services	Prof Chris Hewitt, Met Office Adrian Trotman, CIMH
12.30 - 13.30	Lunch	



### Day 1- Afternoon Discussions

Timing	Activity ?	Lead
12.30 - 13.30	Lunch	
13.30 15.00	Discussion: Communicating Climate Risk	Chair: Dr Jane Strachan, Met Office
	Plenary, then smaller discussion groups	
15.00 - 15.30	Break	
15.30- 17.00	Break out group One: Co-development of	Chair: Dr Mike Sanderson, Met Office
	Caribbean Sea Level Rise Tool	
		Chair: Dr Richard Jones, Met Office
	Break out group Two: Future Climate change	
	impacts	
19.00	Reception	



Day 2

Timing	Activity	Lead
9.00-9.20	Recap of Day 1	Dr Jane Strachan, Met Office
9.20- 10.50	Break out group Two: Co-development of Caribbean Sea Level Rise Tool	Chair: Dr Mike Sanderson, Met Office
	Break out group One: Future Climate change impacts	Chair: Dr Richard Jones, Met Office
10.50 - 11.10	Break	
11.10-11.30	Feedback from Break out groups 2 and 3	Chair: Dr Richard Jones, Met Office
11.30 -12.30	Plenary Discussion - Expert panel question time – bringing together climate change science into services for Caribbean decision- making	Plenary Speakers Chair: Dr Jane Strachan, Met Office
12.30 - 12.45	Next steps, outputs and close	Chair: Dr Chris Hewitt, Met Office
12.45 - 14.00	Lunch & Close	



#### **Session intentions**

- To be as interactive and collaborative as possible.
- To encourage engagement with climate change science in the region
- All questions are welcome, however if there isn't time in the session they can be addressed in the panel questions on day 2, or can be discussed with individuals.
- To demonstrate examples of science and ongoing work, as opposed to presenting definitive outcomes or best practices.
- Sticking to time! There will be a session chair, they will try to keep us on track.
- To be as collaborative and engaging as possible, all ideas are welcome.



## For Further project information:

Rebecca.Osborne@metoffice.gov.uk

Or

https://www.metoffice.gov.uk/services/climate/international/commonwealth-climateservices-demonstrator