

CariCOF 2015 Wet Season - seasonal forecast training workshop Gros Islet, St. Lucia

27th – 30th May, 2015

Pre-CariCOF Training Workshop Report

The 2015 Wet/Hurricane Season pre-CariCOF forecasters' training was held from May 27th till May 30th in Gros Islet, St. Lucia, ahead of the Forum held on June 1-2.

Days 1 and 2 Contextualising seasonal precipitation outlooks with sub-seasonal information

The first two days of the training were set out to help climate forecasters across the region better contextualize the national and regional seasonal precipitation outlooks. This was done through the training in the provision of sub-seasonal information to augment the outlooks, namely forecasting wet days and wet spells frequency shifts compared to the long-term average.

In order to make such forecasts (using the CPT), forecasters brought daily rainfall data from at least one station in their country to make their analyses. That marked the first time that daily data were used in a seasonal forecast and, though not required, led to the forecasters' decision to share the daily data used in the workshop within the framework of CariCOF. The use of such data spearheaded efforts to develop a set of potentially innovative climate outlook products. By the end of the second day of the training, the forecasters had been taught:

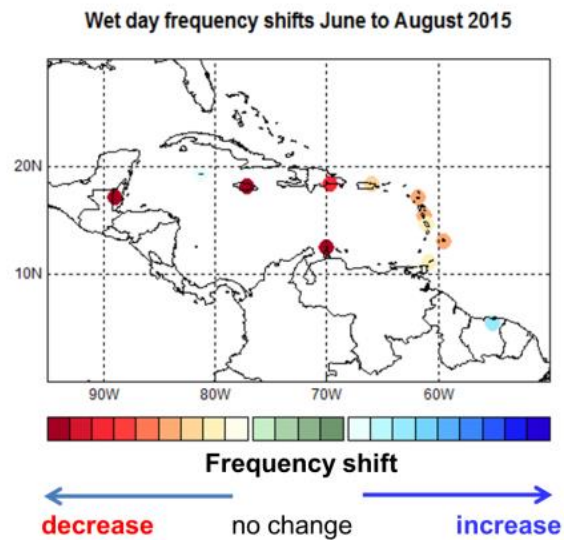
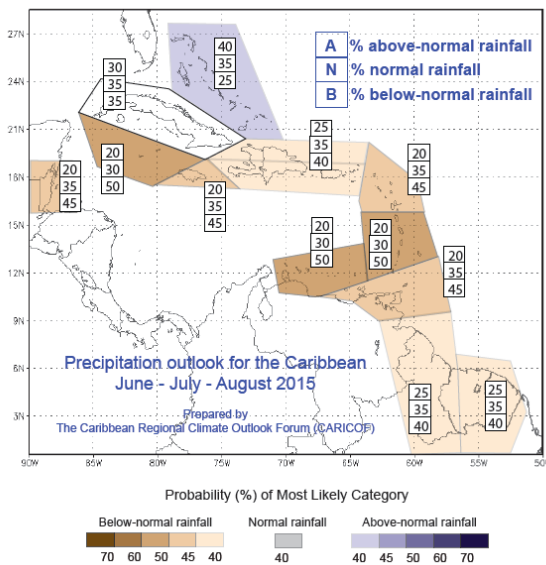
1. How to prepare their daily rainfall data (as opposed to the usual seasonal or monthly data) for ingestion into the CPT by converting the data from daily rainfall totals to monthly wet days proportions;
2. How to make tailored forecasts of the frequency of wet days within a season and how the forecasts relate to the historic record;
3. How to present forecasted wet day frequency shifts within a season differently given one, a few or many stations;
4. How to convert their daily rainfall totals to monthly wet spells numbers.

The national and regional experimental wet days outlooks were generated during the training.

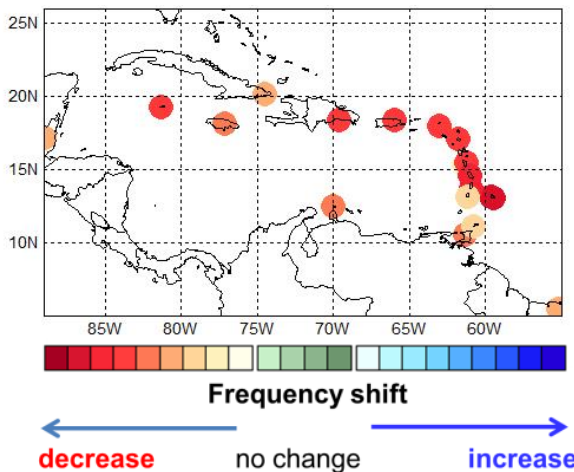


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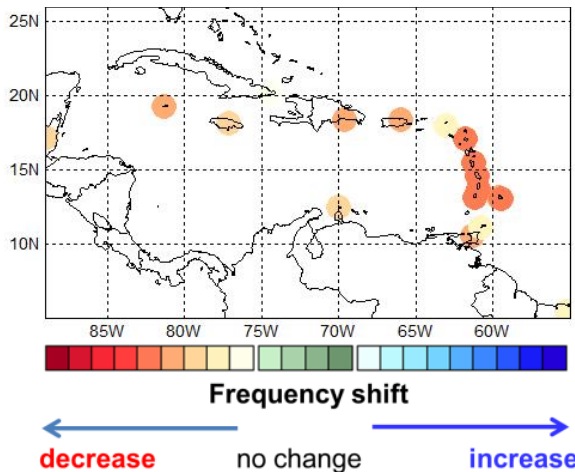
Upon completion, the experimental wet days outlook marked the fulfillment of the first sub-seasonal forecasting training activity in support of improved interpretation, contextualization and communication of the seasonal precipitation outlooks. As a result, the message stored in the outlooks in terms of flood potential became apparent. For the June to August 2015 season forecast, for instance, the combination of (1) below-normal to normal rainfall with (2) fewer wet days, (3) fewer wet spells, and (4) fewer very wet spells, meant a substantial reduction in the expected flood potential for the first half of the wet/hurricane season compared to average. See figures below.



JJA 2015 frequency of 7-day wet spells



JJA 2015 frequency of 7-day very wet spells



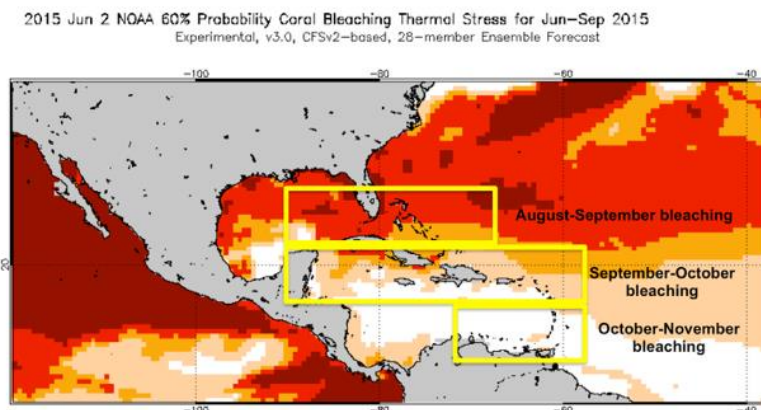
Day 3 Towards a Caribbean Coral Reef Watch

On the third day of the training, trainers from NOAA’s Global Coral Reef Watch delivered training modules in the science behind coral reef bleaching, the methodology behind bleach monitoring and forecasting and the Global Coral Reef Watch products. In a regional effort to develop and provide climate services for the marine and coastal environment, the purpose of this training was to enable the Caribbean to produce its own, regional Coral Reef Watch. Therefore, a discussion followed during which the concept of the “Caribbean Coral Reef Watch” was introduced and elaborated on. After that discussion, the trainers and trainees conceptualised a first mock-up bulletin, to be filled in with the latest information relevant to the region.

Post-CariCOF Forum, a prototype Caribbean Coral Reef Watch bulletin was released. This publication was the first of a series to be published each month between June and December. The bulletin publications are to be coordinated by CIMH in partnership with the Global Coral Reef Watch. The prototype bulletin consists of several parts:

- 1) Notable Observations of coral bleaching around the world
- 2) Current model outlook of bleaching alert levels for the next few months
- 3) Current coral bleaching conditions in the world
- 4) Breakdown of bleaching alert area and outlook
- 5) A side bar on local current and forecast conditions

The figure below shows the coral bleaching alert levels in the Caribbean for the months of June through September 2015.





Appendix - Agenda

Day 1: Wednesday May 27th, 2015 – Forecasting rainfall and extreme rainfall occurrence in a season

- 09:00 - 09:10 Welcome – Opening Remarks
- 09:10 - 09:40 CariCOF and seasonal forecasting in CPT – progress and workshop goals
- 09:40 - 10:10 Roundtable discussion: sharing feedback and lessons learnt from our users on tailored outlook products – what works and where are the gaps?
- 10:10 - 10:30 *Break*
- 10:30 - 11:30 Roundtable discussion: producing seasonal climate outlooks - feasibility, risks, mitigation
- 11:30 - 12:15 Adding context to rainfall outlooks – forecasting rainfall and extreme rainfall occurrence in CPT
- 12:15 - 01:30 *Lunch (provided)*
- 01:30 - 03:15 Forecasting rainfall and extreme rainfall occurrence – daily records preparation
- 03:15 - 03:30 *Break*
- 03:30 - 05:00 Forecasting rainfall and extreme rainfall occurrence – daily records preparation, downloads, and experiments
- 05:00 Day's conclusion



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Day 2: Thursday May 28th, 2015 – Contextualising rainfall outlooks

- 9:00 - 10:15 Preparing the CariCOF 2015 wet season outlook – CPT experiments on rainfall and extreme rainfall occurrence
- 10:15 - 10:30 *Break*
- 10:30 - 12:15 Preparing the CariCOF 2015 wet season outlook – presenting rainfall and extreme rainfall occurrence outlook
- 12:15 - 01:30 *Lunch (provided)*
- 01:30 - 02:30 Roundtable discussion - Towards a regional standard in presenting contextualised rainfall outlooks
- 02:30 – 3:15 Finalising the contextualised national rainfall outlooks
- 03:15 - 03:30 *Break*
- 03:30 - 04:00 Next steps – suggested plan for rolling out automation, tailoring and communication of the CariCOF outlooks under the USAID-BRCCC and WMO-GFCS projects
- 04:00 - 05:00 Roundtable discussion – automation, tailoring and communication
- 05:00 Day’s conclusion



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Day 3: Friday May 29th, 2015 – NOAA Coral Reef Watch

- 09:00 - 10:15 Introduction to coral bleaching
- 10:15 - 10:30 *Break*
- 10:30 - 12:30 Coral Reef Watch bleaching products
- 12:30 - 01:45 *Lunch (provided)*
- 01:45 - 03:15 Coral Bleaching products in CariCOF
- 03:15 - 03:30 *Break*
- 03:30 - 05:00 Thoughts on the Future and wrap-up
- 05:00 Day's conclusion





Day 4: Saturday May 30th, 2015 – Finalising the CariCOF wet/hurricane season 2015 climate outlook

- 09:00 - 10:15 Preparing the CariCOF 2015 wet/hurricane season climate outlook – compiling the contextualised national and regional rainfall outlooks
- 10:15 - 10:30 *Break*
- 10:30 - 12:15 Preparing the CariCOF 2015 wet/hurricane season climate outlook – finalising the regional consensus rainfall, temperature and drought alert outlook
- 12:15 - 01:30 *Lunch (provided)*
- 01:30 Workshop conclusion



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