



Caribbean Regional Technical Workshop on CCRIF Models

Session 6: Update of the Feasibility Study for the Integration of Ground Data into the CCRIF XSR Model

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CARIBBEAN REGIONAL RESILIENCE BUILDING FACILITY



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- The project main objective was to confirm the feasibility of ground data integration, organizing a historical database, and designing a platform to be integrated in the XSR model framework as additional source of rainfall estimates
- The Project Component 1A was dedicated to interactions with the hydro-meteorological agencies of the Caribbean and Central American countries and to identify general data availability and conditions
- The feasibility evaluation was performed considering 20 countries (mainly, Caribbean), cases with more complete metadata and data samples available
- A common database concept was designed for Historical and Near Real-Time integration and the coherence between components was eased.

Main Points & Next Steps (cont.)

- Rainfall data and/or Metadata from 11 countries were integrated into the database/platform as well as their measurement station metadata, with a total of 447 stations.
- For Historical database integration (Component 1B), a total of 86 stations from 9 countries were integrated. From these, only 22 stations fulfilled with the reviewed XSR model requirements for historical data.
- For Near real-time database (Component 2), were integrated stations from agencies with an API available, independently of whether they were selected for historical database integration or not. Stations operated by CIMH and National Meteorological Service of Belize (NMS) were integrated into this component.
- The feasibility evaluation pointed to a review of integration requirements. From the data inventory consolidated, insufficient extension and consistency of historical data (some areas with stations installed more recently) and absence of near real-time transmission infrastructure (API – FTP) were identified. The direct integration of ground rainfall data to XSR model framework as designed was not feasible. It will require the definition of an adapted XSR model data integration strategy by CCRIF.
- There is also opportunity to support the implementation of near real-time transmission infrastructure (API – FTP) in countries where it is missing.

Main Points & Next Steps (cont.)

- Follow-up engagement with countries to ensure platform operation sustainability
- Investments and support infrastructure implementation: There is opportunity to support the implementation of near real-time transmission infrastructure (API – FTP) on some countries identified during the study.
- Follow up to access historical data
- The integration of ground data into the XSR model is not going to be immediately, considering that CCRIF recently release a new version of the Excess Rainfall Model, XSR 3.0.