



Intra-ACP Climate Services and Related Applications Caribbean Programme

Project Update December 2024

"Latest Updates on Climate Services and Research Across the Caribbean"



Introduction

The Intra-ACP Climate Services and Related Applications (ClimSA) Caribbean Programme aims to strengthen climate services across the Caribbean region by improving the delivery and application of climate-related information. This update highlights the latest activities from the project's inception in 2022 to December 2024, showcasing the strides made in several key outcomes.

Outcome 1: Interaction Between Users, Researchers and Providers Structured

Supporting Climate Services in the Caribbean

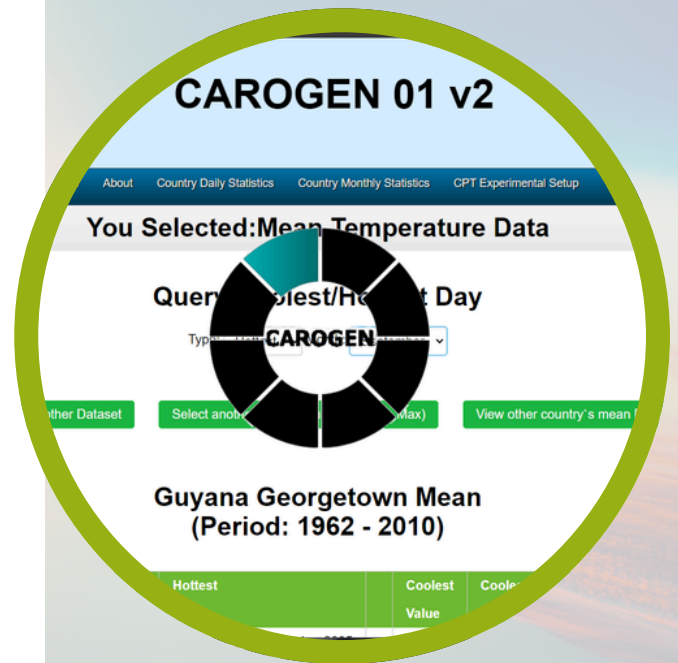
ClimSA continues to support National Climate Outlook Forums (NCOFs) and the Caribbean Climate Outlook Forum (CariCOF) to boost climate adaptation and disaster risk reduction. Dominica launched its first NCOF in December 2023 and held a second session in June 2024, with Jamaica soon following suit after its initial consultation on climate services in June. A user impact assessment will also begin soon, led by the program's incoming social scientist, to better understand user needs and enhance climate services.



Outcome 2: Provision of Climate Services at Regional and National Levels

Modernizing Climate Prediction Tools

ClimSA has initiated a major overhaul of the CAROGEN system, a critical tool for producing climate forecasts. The project focuses on migrating the outdated Linux-based Climate Predictability Tool (CPT) to a Python-based version, known as PyCPT. This migration will enhance the generation of seasonal forecasts for climate phenomena such as drought, heatwaves, and floods. Additionally, the system architecture is being upgraded to an API format, ensuring seamless integration with other data systems.



Enhancing Digital Access to Climate Information

A consulting team is currently working on redesigning the websites of the Caribbean Institute for Meteorology and Hydrology (CIMH) and the Caribbean Regional Climate Centre (RCC). This upgrade will ensure that the websites are user-friendly, visually appealing, and capable of hosting a wide range of interactive tools. The improvements will support enhanced data accessibility for both stakeholders and the general public, making critical weather and climate information easily available.



Outcome 2: Provision of Climate Services at Regional and National Levels



Heat Stress Forecasting System for Poultry and Livestock

A new heat stress forecasting system is being developed to assist livestock farmers across the Caribbean. The system focuses on predicting heat stress impacts on livestock critical to the region's agricultural economies. Through workshops and training, this forecasting tool will empower farmers to protect livestock from extreme heat.

Optimizing Data Integration and Security

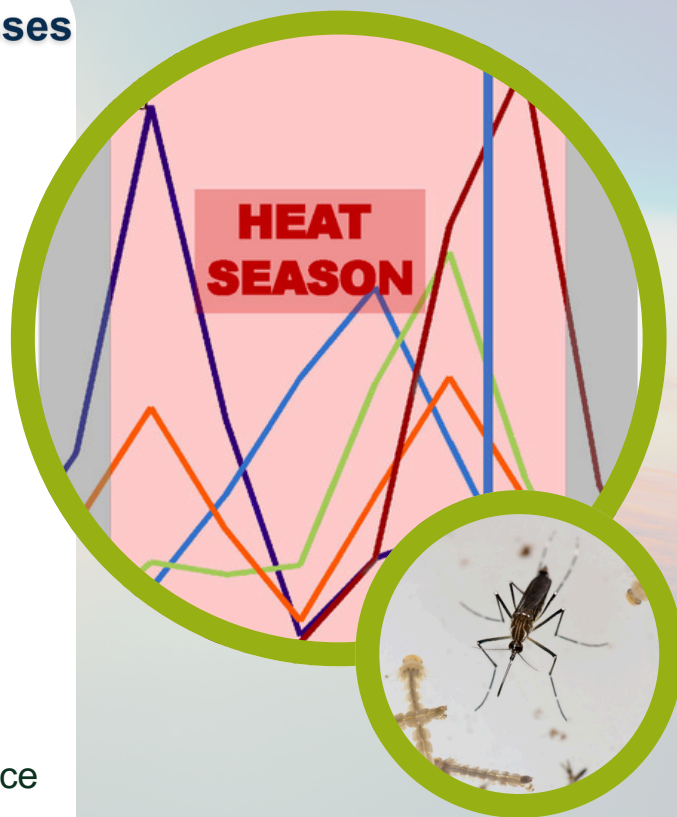
ClimSA is enhancing its customized climate data management system, focusing on improving quality control, security, and integration with other hydrological databases. New features, such as the ability to generate summary statistics and reports, will help ensure that data is accurate and actionable. By expanding data ingestion capabilities and enhancing backup functionality, the project aims to secure CIMH's ability to handle increasing amounts of climate data.



Outcome 2: Provision of Climate Services at Regional and National Levels

Understanding Heat-Related Illnesses and Vector-Borne Diseases

Two ongoing research initiatives are addressing the risks posed by climate variability. The first focuses on refining models that predict heat-related illnesses, improving forecasts of extreme heat conditions that pose health risks. The second initiative targets vector-borne diseases such as dengue, with a pilot project in Dominica aimed at predicting disease outbreaks based on climate patterns. This model will eventually be expanded to Jamaica and Guyana, improving public health resilience in the face of a changing climate.



Empowering Regional Climate Practitioners

ClimSA convened a workshop in November 2024 in Saint Lucia to train staff from CIMH and NMHSs on the Climate Station 2.0 system. This new system will improve the collection and analysis of climate data, enabling more accurate forecasts. Participants gained hands-on experience, improving their ability to serve key sectors such as agriculture and disaster management.

Outcome 3: Access to Climate Information is improved

Dust Monitoring and AWS Equipment Installation

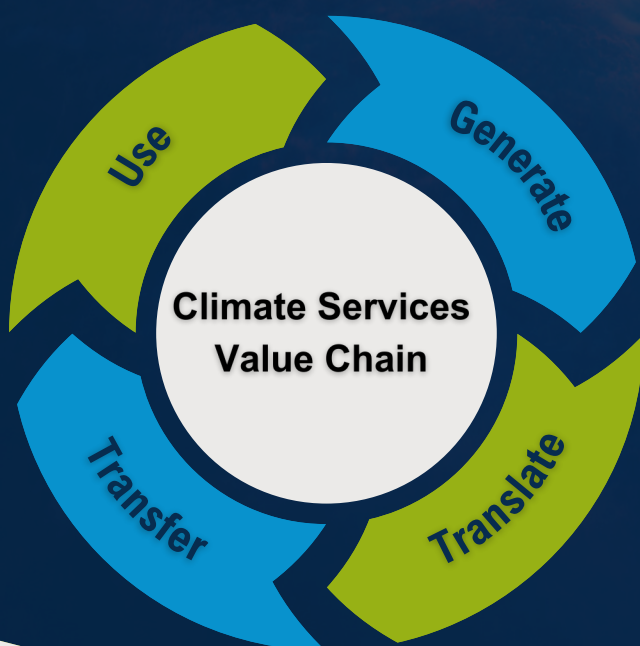
Efforts to improve access to climate and health related information have been bolstered through the acquisition and operationalization of dust monitoring and Automated Weather Station (AWS) equipment. Dust monitoring is now active, ensuring real-time tracking of air quality. AWS systems are on their way to Dominica, Guyana, and Jamaica to enhance localized climate data access. This expansion of monitoring tools supports accurate, timely climate insights crucial for environmental planning and disaster response.



Outcome 4: Capacity to Generate and Apply Climate Information and Products Enhanced

Enhanced Capacity for Climate Information Application

To boost the region's capacity to generate and utilize climate information effectively, ClimSA has commissioned a consultancy to develop a comprehensive capacity-building plan, that will establish guidelines for strengthening climate services across the region. Formalized with the CIMH to ensure stakeholders are well-equipped to understand and apply climate data to sector-specific needs, this plan will ultimately support improved, responsive climate services tailored to Caribbean communities.



Outcome 5: Mainstreaming Climate Services into Policy

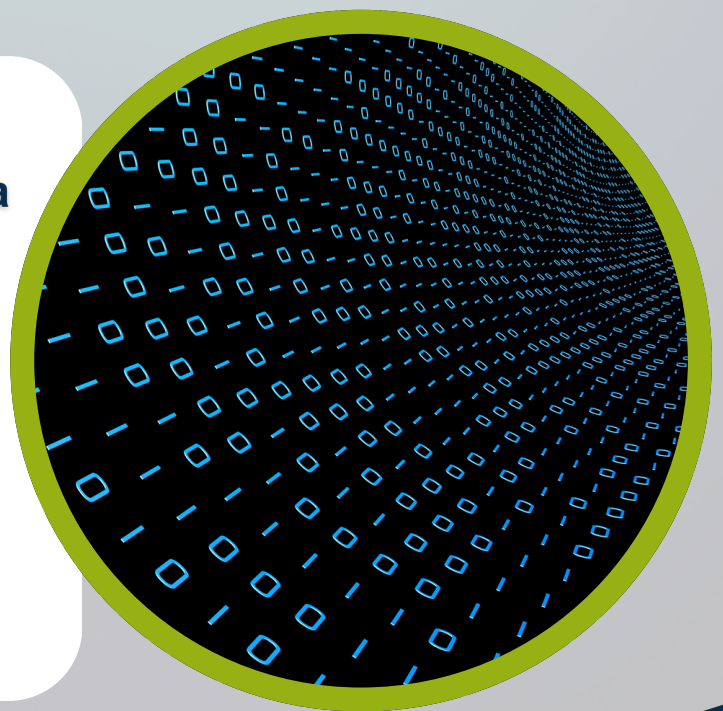


Enhancing Public Awareness of Climate Services

ClimSA has commissioned a consultancy to support the design of tailored communication campaigns aimed at increasing the awareness and use of climate services by policy-makers in Dominica, Guyana, and Jamaica. The first step involves conducting Knowledge, Attitude, and Perception (KAP) studies in the focus countries. The findings will inform campaigns that make climate information accessible, actionable, and culturally relevant to each country.

Archival and Digitization of the Meteorological and Climate Data

ClimSA has initiated data rescue projects in Dominica and Jamaica aimed at digitizing historical climate data. This initiative, which commenced in Dominica in November 2024 and will begin in Jamaica in January 2025, will ensure the preservation of valuable data, enabling future climate research and forecasting.



Conclusion

From May 2022 to the present, the Intra-ACP ClimSA Caribbean Programme has made significant progress in strengthening climate services in the region. With a continued focus on capacity building, stakeholder engagement, and data enhancement, the project is well-positioned to further support climate resilience and adaptation efforts across the Caribbean.



The ClimSA programme is an initiative of the Organisation of African, Caribbean, and Pacific States (OACPS), implemented through funding provided by the European Union.