

ABSTRACT

Developing a Caribbean Climate Interactive Database (CCID)

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Arising out of an AIACC (Assessment of Impacts and Adaptation to Climate Change) sponsored project investigating the link between climate and the incidence of dengue in the Caribbean, have been a realization that a number of deficiencies with respect to access and use of Caribbean climate data. This study outlines the process of conceptualizing and developing "CCID" – the Caribbean Climate Interactive Database. Considerations in developing CCID were: (i) The need to store large quantities of historical climate data on a variety of temporal and spatial scales. The AIACC project requires the storage of maximum and minimum temperatures and rainfall data in both station and gridded format and on timescales ranging from daily to yearly. (ii) The need for easy and quick retrieval of subsets of the larger database as specified by technical and non-technical users through a web interface. (iii) The need for simple statistical manipulations of the data (e.g. calculation of anomalies with respect to climatological means, correlations between selected time series, etc.). (iv) The ability to easily update the database as new data becomes available. Given the above considerations, five modules were designed and constructed: A User Interface; Data Storage and Retrieval; Visualisation; Statistics; and Data Update, as well as the protocols to interact between them. This study details the design of each module and the supporting protocols, and describes the beta version of CCID.