WISE 2013 ABSTRACT

METHODOLOGY FOR THE CONSTRUCTION OF TIME SERIES OF SINTHETIC WAVE PARAMETERS ALONG THE COLOMBIAN CARIBBEAN COAST

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Primary ocean information available in Colombian territorial waters (buoys, visual data and satellite data, among other sources) is currently insufficient to carry out a spatial and temporal description of the marine conditions that may ultimately influence any human intervention in coastal areas. Therefore, resources that have been compiled over various decades need to be applied to reconstruct a historical wave database for Colombia that combines the advantages of each data source mentioned above with the results from numerical models. The aim is to provide all professionals involved in coastal work with the necessary information to create designs and make decisions with greater reliability.

In this study, the knowledge of two Colombian research groups based in the city of Medellin, OCEANICOS from the *Universidad Nacional de Colombia* and GICI from the *Universidad de Medellín*, were combined and conjugated through the construction of wave parameter series along the Caribbean coast that represent the overall behavior of the ocean (both average and extreme). The results were stored in a free consultation website that will help researchers and engineers develop all types of coastal projects on the Colombian Caribbean coast.