

Real Time Data Web Pages of the "Tides and Inflows in the Mangroves of the Everglades" Research Project

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Abstract: The Tides and Inflows in the Mangroves of the Everglades (TIME) project of the U. S. Geological Survey (USGS) South Florida Ecosystem Program is a joint research effort to investigate the interacting effects of freshwater inflows and tidal forces in and along the mangrove ecotone of south Florida. To support this project, a website: <http://time.er.usgs.gov> has been created. The purposes of the website are to provide an efficient mechanism for scientists collaborating on the TIME project to share data and information and to disseminate findings to other researchers. The TIME database currently contains provisional data from 61 stations in and around Everglades National Park that report stage, rain, wind direction, and/or wind speed. The National Park Service operates a majority of the 61 stations and cooperatively shares the data, while the USGS operates the remaining stations. The data in the TIME website are stored in Network Common Data Form (NetCDF) and are in strict compliance with the Pacific Marine Environmental Laboratory's EPIC and NetCDF conventions. Scripts, written in perl and MATLAB, enable dissemination of data via the TIME website in text files or as graphs that can be viewed online or downloaded in postscript format. The data files and the graphs are customized to user specifications through the web interface. Data can be downloaded in customized segments or for the entire period of record, typically from late-1998 to present. JavaScript is used in individual web pages and form actions to accommodate different kinds of time-series data, to provide expandability, and to make the website easier to navigate.