Data and Products Thu Mar 28 11:10:09 HST 2024

Name	Pacific Sea Level Extremes Scenario Products
Capability Area	- Understanding Climate Variability and Change
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	- Central North Pacific - Western North Pacific - South Pacific - Pacific Basin
Products/Physical	- Products - Physical - Outloooks (monthly to annual) - Impacts - Flooding/Inundation - Eroison - Spatial Scale - Location/Site - Time Scale - Future - Methodology - Model/Statistical - Oceanic (e.g., Water Temperature, Salinity, Acidity, Sea Level, Wave Height)
Sectors	- Public Health and Safety - Community Planning and Development

Description	The objective of this effort is to advance best practices pertaining to the formulation of probabilistic Sea Level Rise (SLR)/coastal inundation scenarios for specific locations in the Pacific Islands. The goal is to provide information to planners, managers, and other decision-makers that affords them an opportunity to appropriately address risks from elevated water levels. For sea levels (excluding run-up), extreme value analysis of sea level station records based on the Generalized Extreme Value (GEV) or modified Peak Over Threshold (POT) distributions may currently represent the best attempt to move beyond relatively simplistic SLR/coastal inundation scenarios based on global rate of change projections. However, the tendency has been to assume that the observations are stationary (are not time dependent). Recognizing a changing climate, this effort is building upon the work of recent investigators that have employed other types of statistical or numerical analysis that, for example allow the GEV parameters to be temporal functions (linear, quadratic, exponential, and periodic) or covariates. The appeal of such advanced statistical and numerical techniques it that they may provide a means to generate information that reflects a more nuanced – tailored to the site and situation – portrait of vulnerability of Pacific Islands to risks associated with SLR/coastal inundation.
Url	http://www.pacificstormsclimatology.org/
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