Data and Products Fri Mar 29 01:15:18 HST 2024

Name	21st Century High-Resolution Climate Projections for Guam and American Samoa
Capability Area	- Understanding Climate Variability and Change
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	- Western North Pacific - CNMI - Guam - South Pacific - American Samoa
Products/Physical	- Products - Physical - Outloooks (monthly to annual) - Impacts - Drought - Spatial Scale - Location/Site - Time Scale - Future - Methodology - Model/Dynamical - Projections (intrannual to multi-decadal) - Atmospheric (e.g., Air Temperature, Rainfall, Wind Speed and Direction)
Sectors	- Fresh Water Resources - Community Planning and Development - Agriculture and Fisheries - Ecosystems

Description	A high-resolution atmospheric model will be used to dynamically downscale the results of CMIP5 global coupled models to project the anticipated 21st century changes in rainfall, surface temperature, surface wind and surface radiative fluxes over the Mariana Islands and American Samoa. Projections for mean changes and changes in extreme events will be produced at about 1 km horizontal resolution over the islands of Guam and Tutuila, and 3 km resolution over the archipelagos. This work will build on efforts at fine resolution modeling of Hawaii climate and climate change. Detailed high resolution climate modeling results used to drive hydrological or ecosystem models will be saved and made publicly available. FY 12 start. 3 year timeline.
Url	https://nccwsc.usgs.gov/display-project/5006f8a0e4b0abf7ce733fbd/50118ddce4b0d78fd4e59ba3
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