PACIFIC CLIMATE INFORMATION SYSTEM

Data and Products Thu Mar 28 23:01:16 HST 2024

Name	Geophysical Fluid Dynamics Laboratory (GFDL)
Capability Area	- Understanding Climate Variability and Change - Understanding Climate Impacts and Informing Adaptation
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- Central North Pacific - Western North Pacific - South Pacific - Pacific Basin - Global
Data/Physical	- Data - Physical - Model Results - Reanalysis Products - Atmospheric (e.g., Air Temperature, Rainfall, Wind Speed and Direction) - Oceanic (e.g., Water Temperature, Salinity, Acidity, Sea Level, Wave Height)

Products/Physical	- Products - Physical - Hindcasts (climatologies) - Outloooks (monthly to annual) - Impacts - Drought - Flooding/Inundation - Spatial Scale - Region/Nation - Time Scale - Future - Methodology - Obs/In-situ - Obs/Remote - Model/Statistical - Model/Dynamical - Projections (intrannual to multi-decadal) - Applications, including Visualization and Decision Support Tools - Atmospheric (e.g., Air Temperature, Rainfall, Wind Speed and Direction) - Oceanic (e.g., Water Temperature, Salinity, Acidity, Sea Level, Wave Height)
Sectors	- Public Health and Safety - Fresh Water Resources - Community Planning and Development - Agriculture and Fisheries - Ecosystems
Description	The GFDL develops and uses mathematical models and computer simulations to improve our understanding and prediction of the behavior of the atmosphere, the oceans, and climate. Since 1955 GFDL has set the agenda for much of the world research on the modeling of global climate change and has played a significant role in the World Meteorological Organization, the Intergovernmental Panel on Climate Change assessments, and the U.S. Climate Change Science Program. The CM2.x models have become the workhorse model for GFDL climate research. They are being applied to topics focusing on decadal to centennial time scale issues, as well as to seasonal to inter-annual problems, such as El Nino research and experimental forecasts. Public data sets from GFDL are made available through the GFDL Data Portal.
Url	http://www.gfdl.noaa.gov/
Lead Agencies	NOAA/OAR
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