Projects and ActivitiesThu Mar 28 10:50:28 HST 2024

Name	Severe Weather Forecasting and Disaster Risk Reduction Demonstration Project (SWFDDP)
Capability Area: Variability/Changes	- Understanding Climate Variability and Change - Observing Systems, Data Stewardship, Data Services - Operational Products and Services - Research/Development - Training and Capacity Building, Education, Outreach
ECV	- Surface (e.g., temp, precip, wind) - Upper-Air
Timeframe	- Seasonal (outlook)
Capability Area: Impacts/Adaptations	- Understanding Climate Impacts and Informing Adaptation - Climate Impacts - Historical Observations (hindcasts/climatologies) - Projections (modeling and downscaling) - Climate Adaptation - Training and Capacity Building, Education, Outreach - Best Practices/Guidance - Policies and Legislation - Assessment and Evaluation
Status	- Ongoing
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- South Pacific - American Samoa - Fiji - French Polynesia - New Zealand - Samoa - Solomon Islands - Tonga - Vanuatu

Description	As Numerical Weather Prediction (NWP) and Ensemble Prediction Systems (EPS) improve, many NMHSs, especially those of developing countries, seek similar benefits to meteorological services. In particular, for the provision of advisories and warnings of severe weather events with increased lead-times, already being realized by other (mainly developed) countries. The Severe Weather Forecasting Demonstration Project (SWFDP) was set up under the WMO Commission of Basic Systems (CBS) to facilitate improved access to, training in the interpretation of, and use of existing NWP/EPS products by forecasters in developing countries. The SWFDDP in the Southwest Pacific contributes directly to day-to-day public weather forecasting and the forecasting of severe and high-impact weather phenomena, over a five day period.
Objectives/Outcomes	The main objectives of the Severe Weather Forecasting and Disaster risk reduction Demonstration Project “SWFDDP” in South Pacific Islands (also known as the SWFDDP – WMO Regional Association V) are: (1) to improve weather forecasting and warning services for eight Pacific Islands National Meteorological Services (NMS) (the Cook Islands, Kiribati, Fiji, Niue, Samoa, Solomon Islands and Vanuatu), with support from Australia (RSMC Darwin) and New Zealand (RSMC Wellington); and (2) the effective communication and use of severe weather forecasts and warnings to the public, in particular Disaster Management Offices, in order to fully realize the full value of the investment in improving the forecasting process. Key outcomes: (1) Protection of life and property; (2) Contribute to the monitoring and understanding of extreme weather events under a warming world in the tropical South West Pacific; and (3) Validation of Global Producing Centers (GPCs) prediction models.
Lead Agencies	RMSC Wellington (MetService NZ Ltd)
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Partnering Agencies	NMS's of the eight Pacific Islands participating countries, World Meteorological Organization (WMO)
Projected Timelines	Ongoing
Feedback/Evaluation	A Project Steering Committee (RSC) made up of representatives from each of the participating countries/organizations was set up prior to the start of the project. A pilot phase, involving only four Pacific Island NMSs (Samoa, Fiji, Vanuatu and Solomons), began in November 2009 prior to moving the project to a full phase (started in November 2010). A project implementation plan was developed and endorsed by the RSC. The RSC has met twice during the course of the project to review progress and evaluate its success.