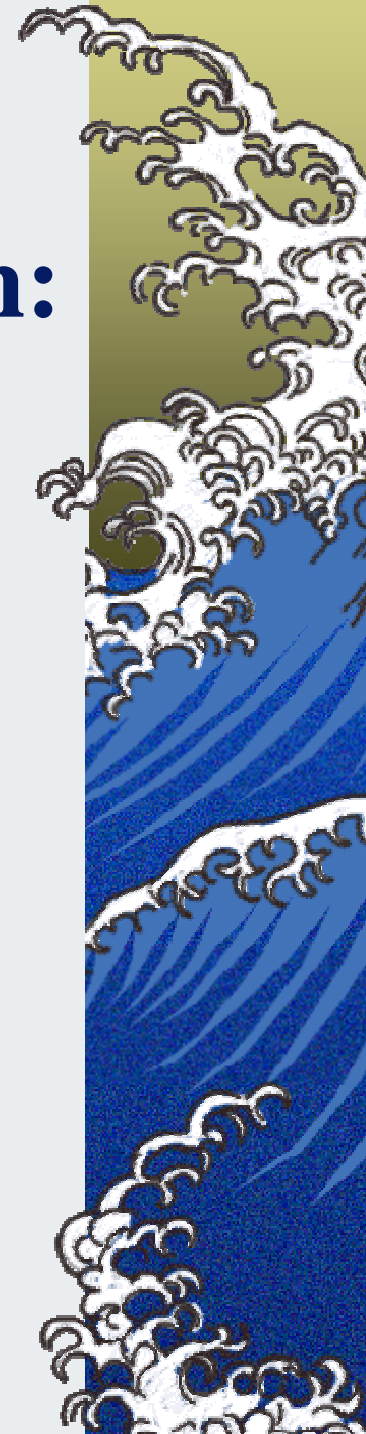


# **Emergence of a Pacific Climate Information System: Lessons Learned & Future Plans**

**Eileen L. Shea, East-West Center  
and  
James Weyman, NWS Pacific Region**

**CPASW, March 22, 2006**



**EL NIÑO IS HERE**

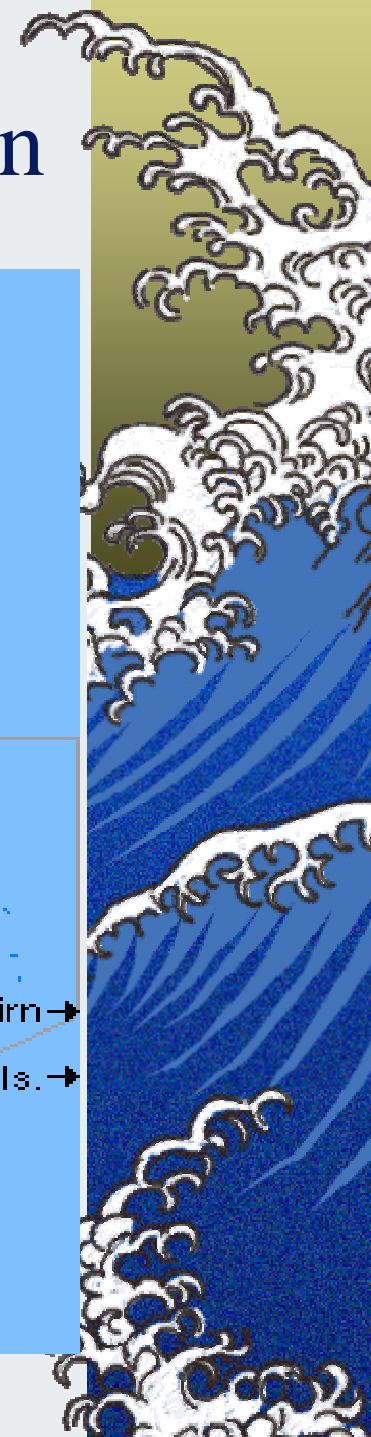
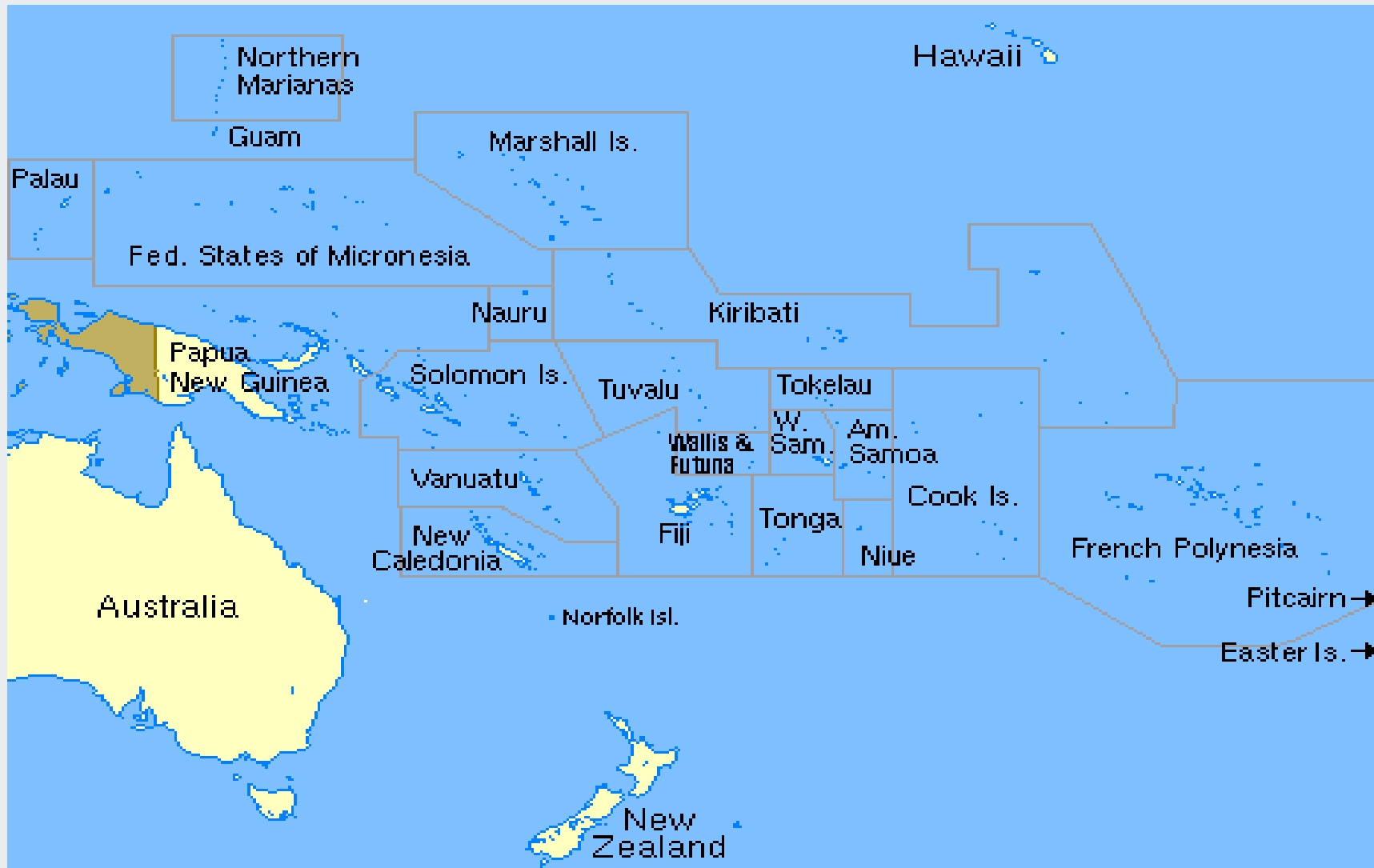
**KASORTIK OODORHNGKI PIHL**

**CONSERVE WATER**

**PIHL EN MOUR**



# Climate Forecasting in the Pacific Region



# PEAC Established August 1994

## Pacific ENSO Applications Center

Pacific El Niño-Southern Oscillation (ENSO) Applications Center Pilot Projects:



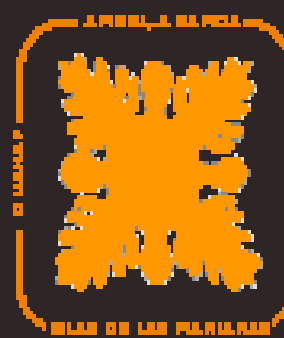
NOAA



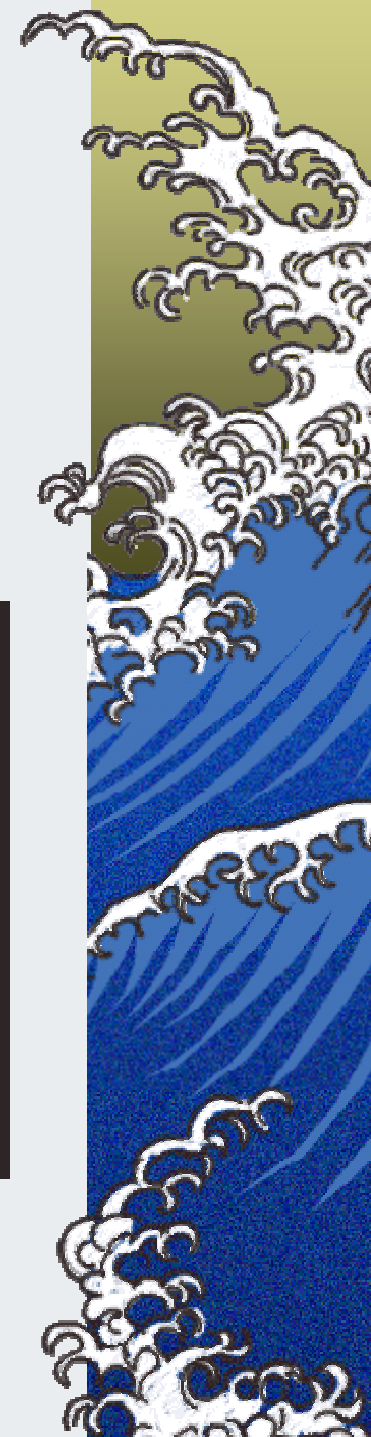
UOg/VERI



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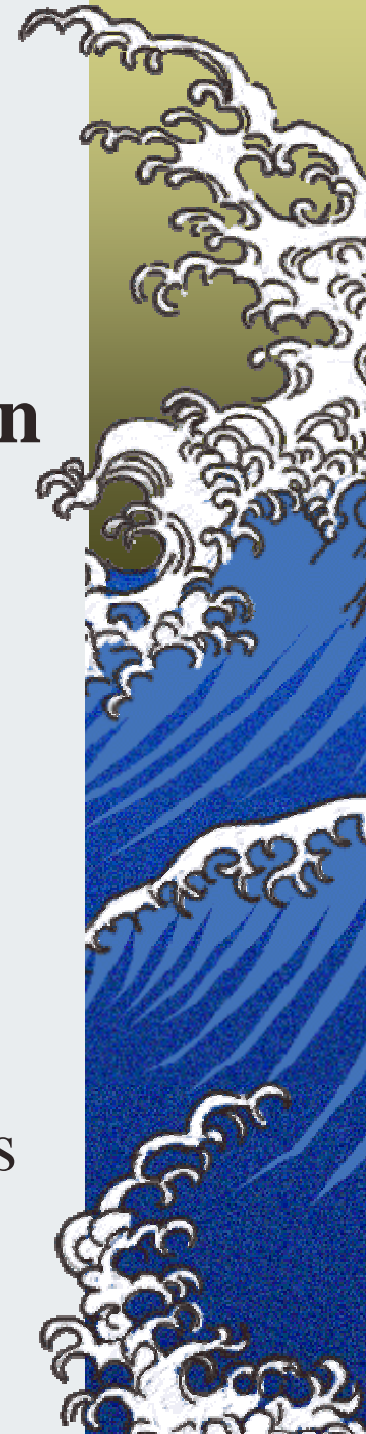


FEDC



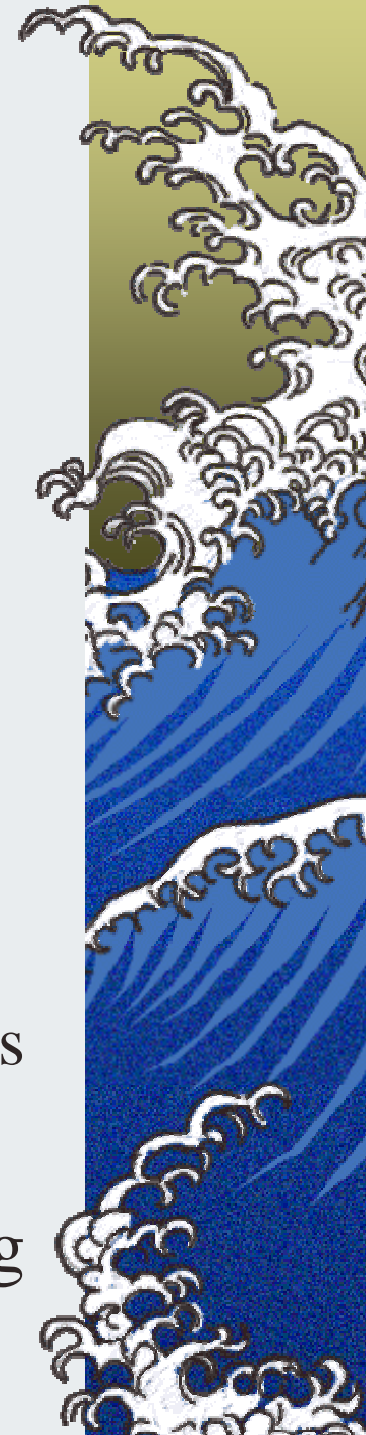
# Some Lessons Learned for Climate Information Services

- ▶ Focus on **integrated climate-society system**
- ▶ **Decision-makers interested in information on a continuum of timescales:**
  - ▶ Addressing today's problems
  - ▶ Planning for the future
- ▶ **Early & continuous partnership with users essential:**
  - ▶ Shared learning & joint problem-solving
  - ▶ Outreach & dialogue programs as priority activities
  - ▶ Building trust & credibility a long-term endeavor



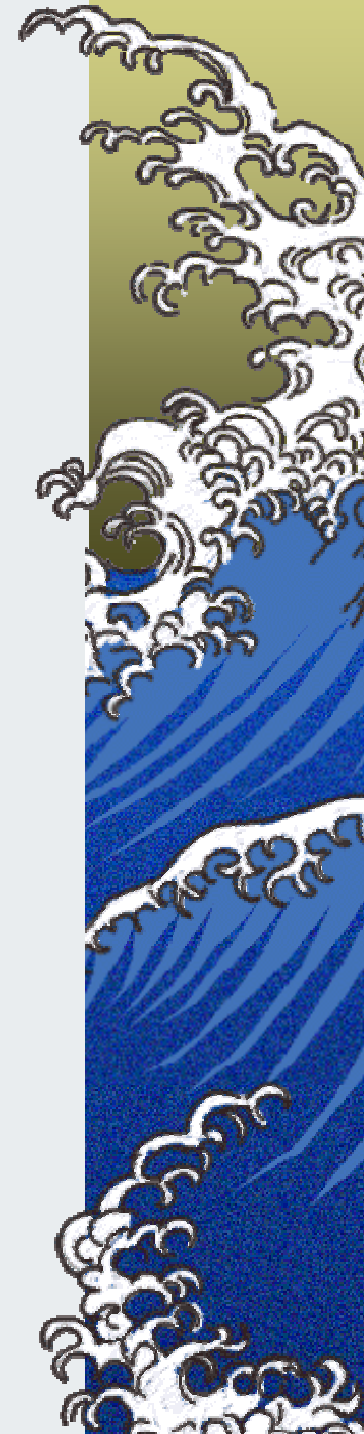
# Some Lessons Learned for Climate Information Services

- ▲ **Collaborative, participatory process** with users:
  - ▲ Continuous, interactive dialogue
  - ▲ Co-production of knowledge
  - ▲ Document and share experiences
- ▲ **Problem-focused approach:**
  - ▲ Understand place, context, history and decision making process;
  - ▲ Useful & usable information responsive to user needs
  - ▲ Continuum of timescales
  - ▲ *Climate information system* vs. event forecasting



# Some Lessons Learned for Climate Information Services

- ▲ **Address both process *and* products:**
  - ▲ Integrated program of observations, monitoring, forecasting, assessment, education and applications – *with continuous evaluation and adjustment*
- ▲ **Build on existing systems, institutions, programs, relationships & networks:**
  - ▲ Recognize the vital role of trusted information brokers
  - ▲ Partnerships between science & operations





# Evolution of a Pacific Climate Information System

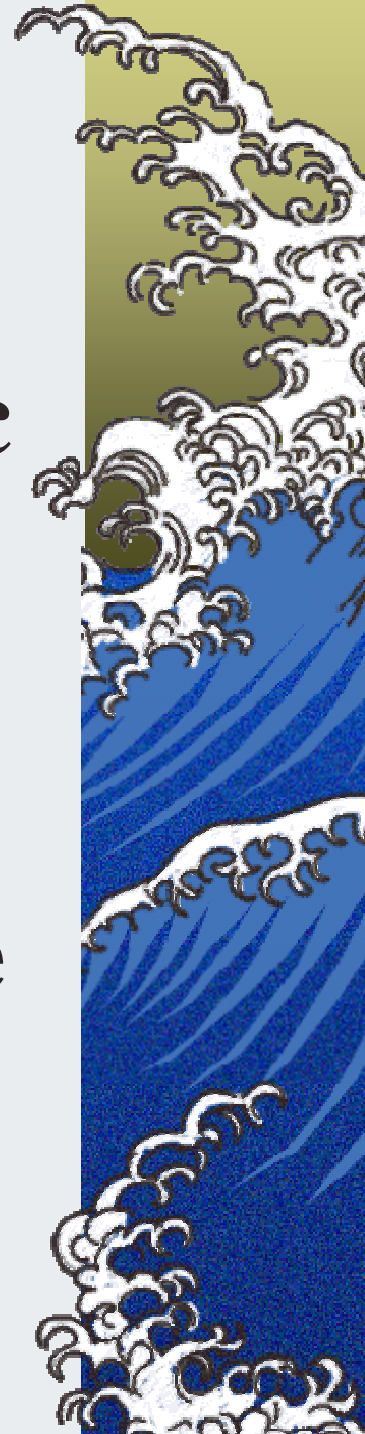
- ▲ 1997-1998 El Niño demonstrated needs & forecast value
- ▲ 1999 Meeting of Pacific Regional Meteorological Service Directors -- General agreement on PaCIS vision, goal and objectives
- ▲ Discussions among likely partners:
  - ▲ Initiation of monthly forecast calls
  - ▲ Planning for WMO Oceania Regional Climate Centre
- ▲ NWS Climate Services Division Activities
- ▲ PEAC First Decade Review
- ▲ Related Regional Activities:
  - ▲ PI-GCOS
  - ▲ PRiMO
  - ▲ NOAA IDEA Center





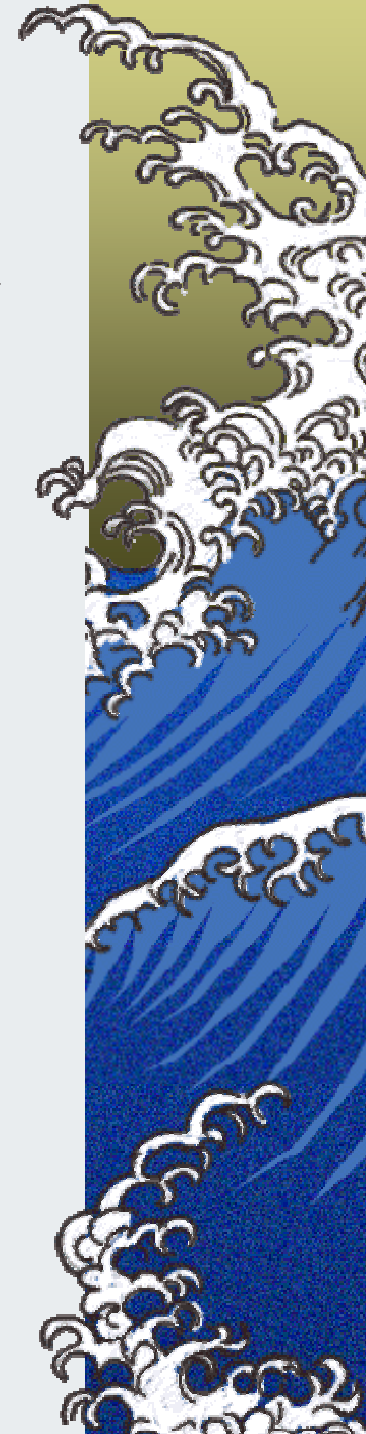
# PaCIS Vision

**Resilient and sustainable Pacific communities using climate information to manage risks and support practical decision-making in the context of climate variability and change.**



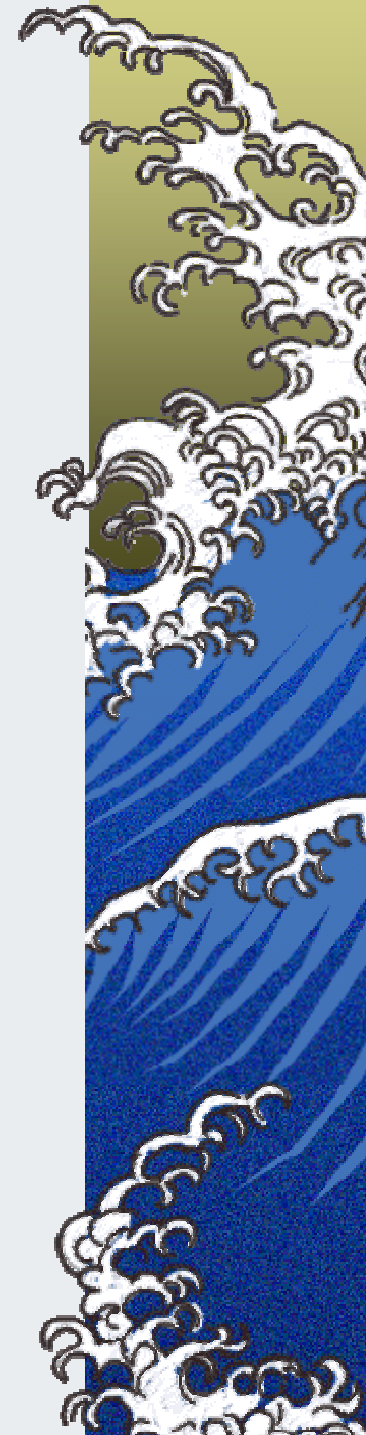
# PaCIS Mission

- ▶ Clarify climate information needs and guide monitoring, research, forecasting and assessment
- ▶ Provide access to critical data, research and new climate information products and services
- ▶ Translate research and assessment results into useful and usable climate information



# PaCIS Mission

- ▶ Interpret global and regional climate forecasts for local applications
- ▶ Enhance regional and local capabilities to manage risks and support sustainable development in the context of climate variability and change
- ▶ Enhance collaboration among national, regional and international institutions and programs



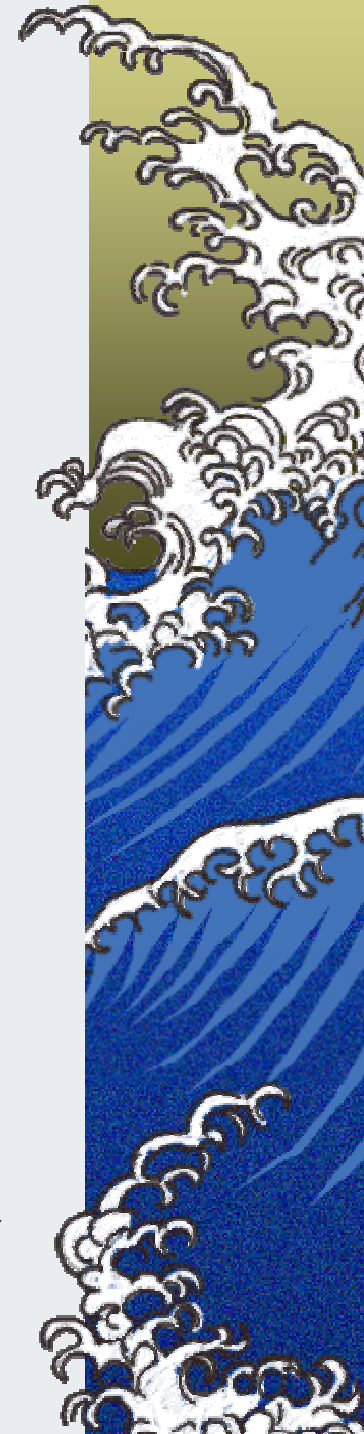
# PaCIS Program Elements

## ▲ **Education, Outreach and User Information:**

- ▲ User dialogue and feedback
- ▲ Educational materials
- ▲ WSO's as local experts/coordinators in partnership with experts in key sectors

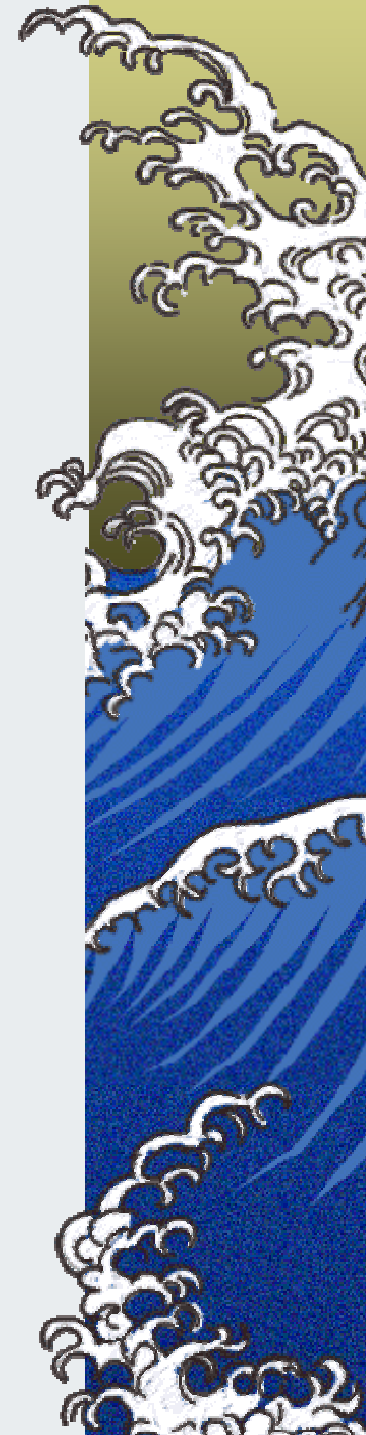
## ▲ **Operational Products and Services:**

- ▲ Develop and evaluate PaCIS services
  - ▲ Regional climate services testbed
- ▲ Cross-regional coordination
- ▲ Support regional observations and data management systems (e.g., PI-GCOS, PI-GOOS, PacIOOS)



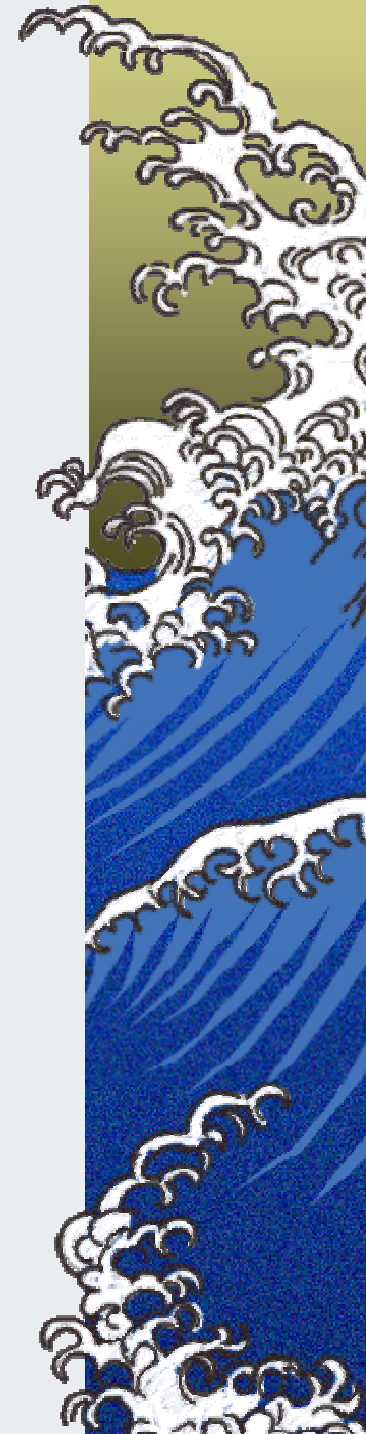
# PaCIS Program Elements

- ▶ **Research and assessment to enhance resilience:**
  - ▶ Regional downscaling and local applications
  - ▶ Enhanced understanding of nature and consequences of climate variability and change with a *focus on extreme events*
  - ▶ Support for regional vulnerability assessment and adaptation programs



# Emergence of PaCIS: Next Steps and Timeline

- ▶ Prepare *Draft* Implementation Plan (Spring 2006)
- ▶ Convene Regional Steering Committee and Working Groups (Summer 2006)
  - ▶ Education, Outreach, User Needs
  - ▶ Operational Products and Services
  - ▶ Research and Assessment
- ▶ Steering Committee & Working Groups complete Initial Implementation Plan (Fall 2006)
  - ▶ Living document with routine evaluation & revision





# Sustainable Development



Observations, science & information services

Engagement  
Empowerment

Individual, Institutional,  
Community Capacity Building

Education  
& Training  
Equipment  
(tools & technology)