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Professor of Climate Change and Director

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USP

- Established 1968
- Premier provider of tertiary education in the Pacific region
- Jointly owned by governments of 12 Pacific Island countries
- International centre of excellence for teaching, research consulting and training on all aspects of Pacific culture, environment and human resource development needs

Picture: www.best-masters.com

USP 2013 - 2018 Strategic Plan

The overarching themes of the University's activities are:

Human Security and Sustainable Development.

- based on the Pacific's needs, USP outlines Learning and Teaching, Research and Regional and Community Engagement to focus on several areas, one of which is:

Environment, Sustainable Development and Climate Change

PaCE-SD

Founded in 2001, we have established ourselves as a *Centre of Excellence* for Environment and Sustainable Development in the Pacific region

PACE-SD Vision

- Excellence in sustainable development for Pacific Islands people

Mission:

- Empowering Pacific Island people in learning and knowledge creation through effective partnerships

PaCE-SD Thematic Areas

- Postgraduate Training
- Research
- Community Engagement
- Capacity Building
- Communication

6 C's of Climate Change Resilience



- Collaboration
- Community
- Conduct
- Culture
- Conservation
- Commitment

Tuvalu



AusAID Enhancing Climate Change Adaptation (ECCA) Project

- 12 Communities since 2010
- Implement climate change adaptation measures in an integrated manner to vulnerable sectors and internalize climate change adaptation in rural communities of Fiji

Future Climate Leaders : Building a Community of Expertise

- 90 PG Diploma Students
- 30 MSc Students
- 8 PhD Students



- Capacity for the Pacific Islands Region
- Postgraduate Degrees in Climate Change : PGdip, MSc, PhD
- Course Development

Climate Leaders: PaCE-SD students and staff



PaCE-SD Graduates

GARETH QUITY

Lecturer for the new Diploma in
Climate Change, Solomon Islands
National University



KILIFI O'BRIEN

Assistant Secretary - Ministry of
Home Affairs of the Government of
Tuvalu



SAINIVALATI S. NAVOTI

Now: G77 lead negotiator
Formerly AOSIS Lead Negotiator
Permanent Mission of Nauru –NY
Former Director Political and Treaties
at Fiji Foreign Affairs



MARY TAHU

Pursuing further studies in Trinidad
and Tobago

OLAI ULUDONG

AOSIS Climate Change Lead
Negotiator Permanent Mission of
Nauru, New York



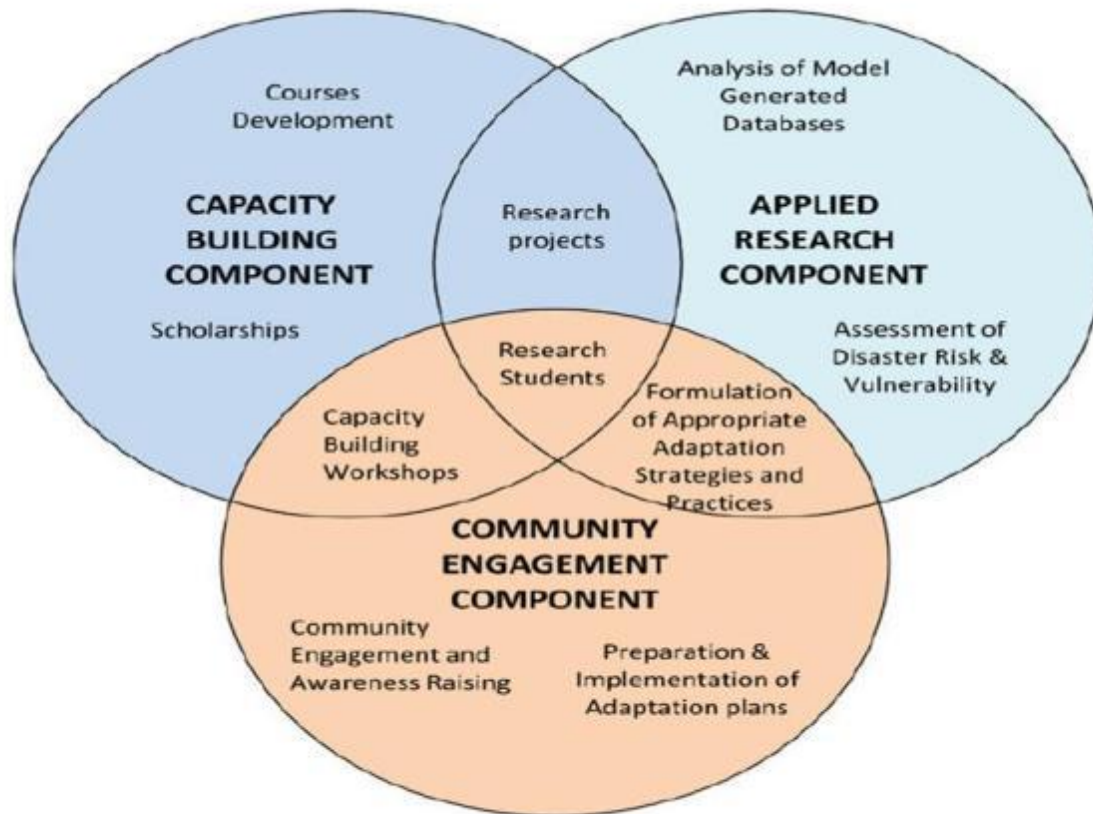
EUROPEAN UNION

USP- EU Global Climate Change Alliance Project - USP EU GCCA

- Challenges: Vulnerable small island countries with the least capacity to react and adapt to climate change impacts.
- Response: USP European Union Global Climate Change Alliance project, 40 communities, 15 countries, 4 years, 3 components, 8 million euros.
- 15 Pacific ACP Countries:
 - **Melanesia:** Fiji, Papua New Guinea, Vanuatu, Solomon Islands
 - **Micronesia:** Marshall Islands, Federated States of Micronesia, Nauru, Kiribati, Palau
 - **Polynesia:** Tuvalu, Cook Islands, Samoa, Tonga, Niue, East Timor



EUROPEAN UNION



The three components of the EU-GCCA project and their interactions

USAID - The Coastal Community Adaptation Project (C-CAP)

- 5 year plan
- 12 Pacific Island nations
- More than 90 communities
- Energy, Environment and Climate Change
- Through C-CAP, USAID will help build the resilience of vulnerable coastal communities in the Pacific region



EUROPEAN UNION



PACIFIC CENTRE FOR
ENVIRONMENT AND
SUSTAINABLE DEVELOPMENT



European Consortium for Pacific Studies

Pacific Islands People and Climate Change Symposium

10-12 December 2013

The University of the South Pacific

Suva, Fiji

<http://www.pacific-studies.eu/>

ECOPAS (European Consortium for Pacific Studies) is a multidisciplinary project designed to provide coordination and support to research and policy communities on issues connected to climate change and related processes in the Pacific Islands region, in order to define better options for sustainable development.

Key Points

- Carbon dioxide emissions continue to increase faster than ever
- We, the Pacific Island countries, have provided a global carbon service to the planet by absorbing the emitted carbon dioxide into our oceans
- Yet, we are the countries most vulnerable to climate change

Ways forward

- Understand the Climate Science to anticipate the risks and plan for a resilient future:

Build Capacity

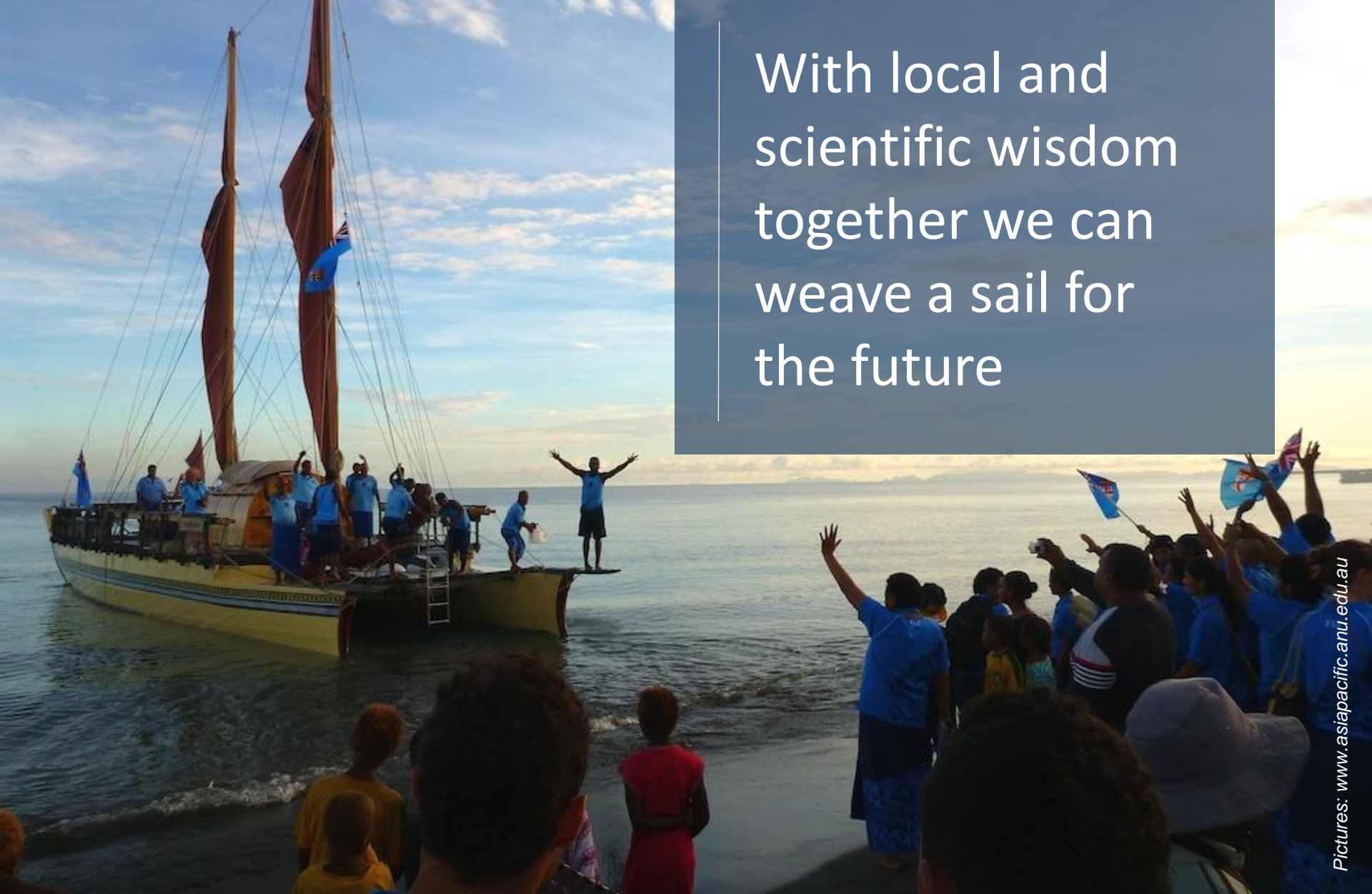
- Develop our own Pacific understanding of Climate Science. We need:

Pacific Islands Climate Scientists


- Focus needs to be:

Increasing Community Resilience

With local and
scientific wisdom
together we can
weave a sail for
the future

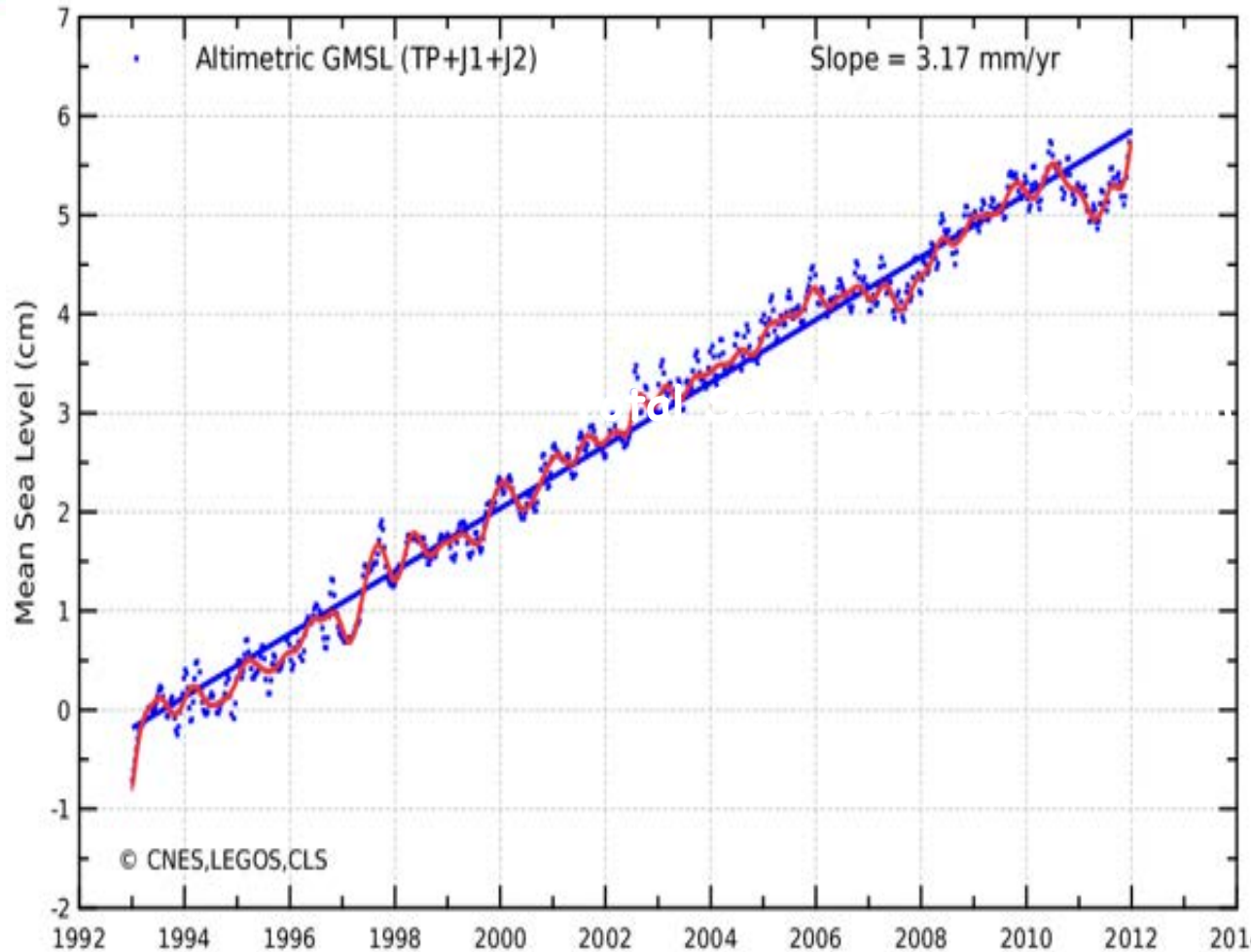


Pictures: www.asiapacific.anu.edu.au



Vinaka Vakalevu
Merci beaucoup

Sea level is rising:
from ocean expansion (60%)
And melting glaciers (40%)



**Total Sea level rise to
date globally since
1850:
20 cm**

**Total Sea Level rise to
come by 2100: 50-200
cm**

**Since Rio in 1992
Global sea level has
risen:
5.5 cm**

Regional Mean Sea Level Rise

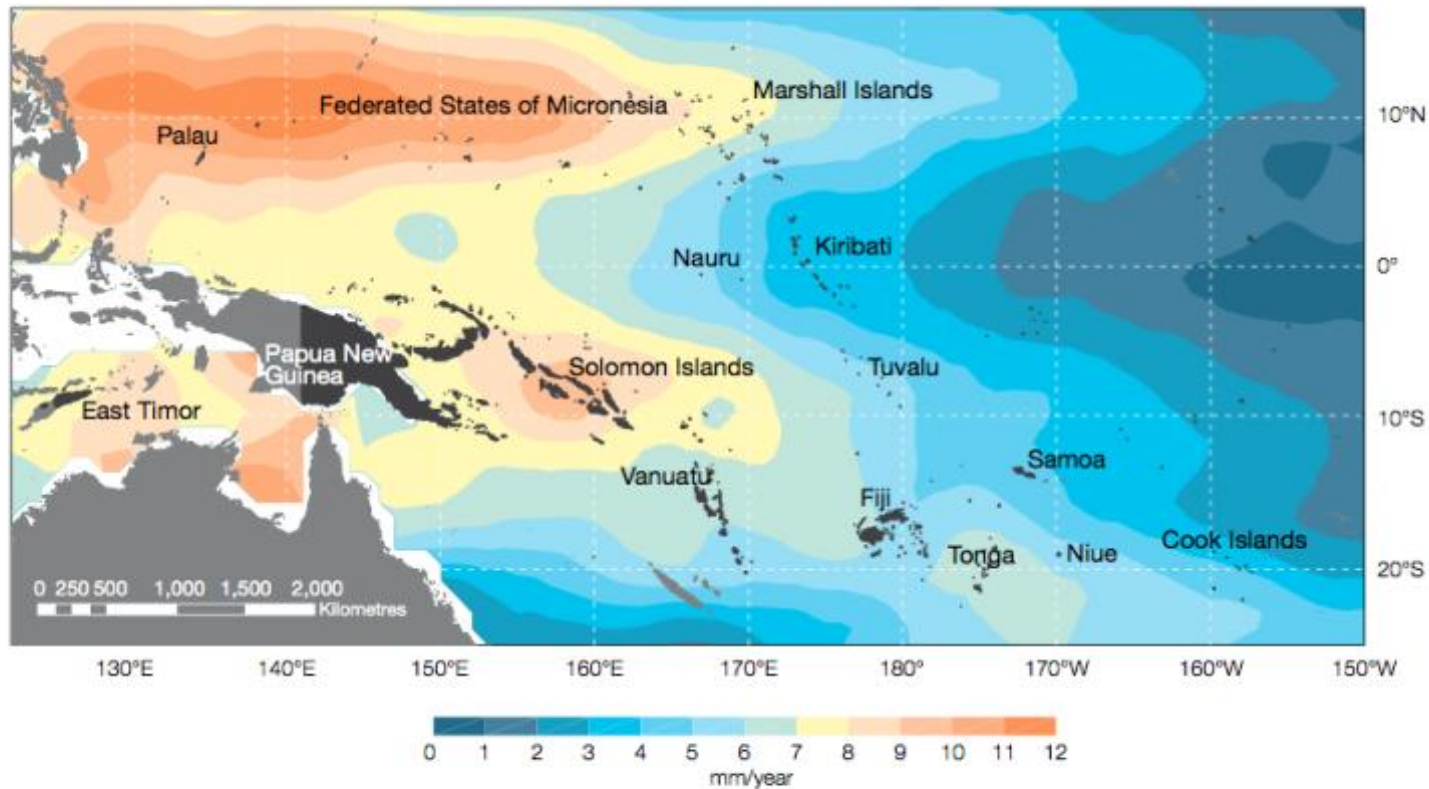


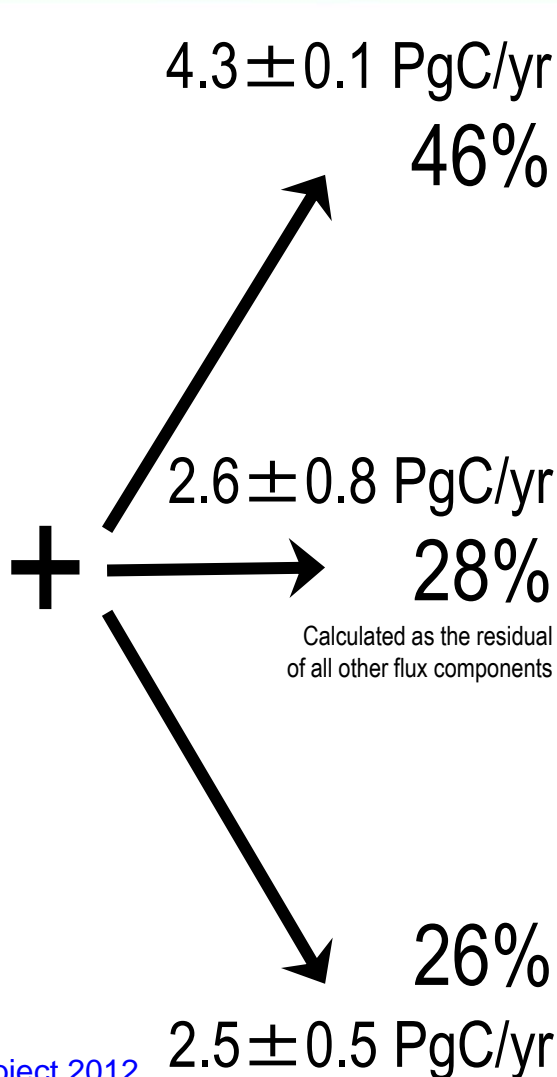
Figure 3.23: The regional distribution of sea-level rise measured by satellite altimeters from January 1993 through December 2009.

Fate of Anthropogenic CO₂ Emissions (2002-2011 average)

8.3 ± 0.4 PgC/yr 90%



1.0 ± 0.5 PgC/yr 10%

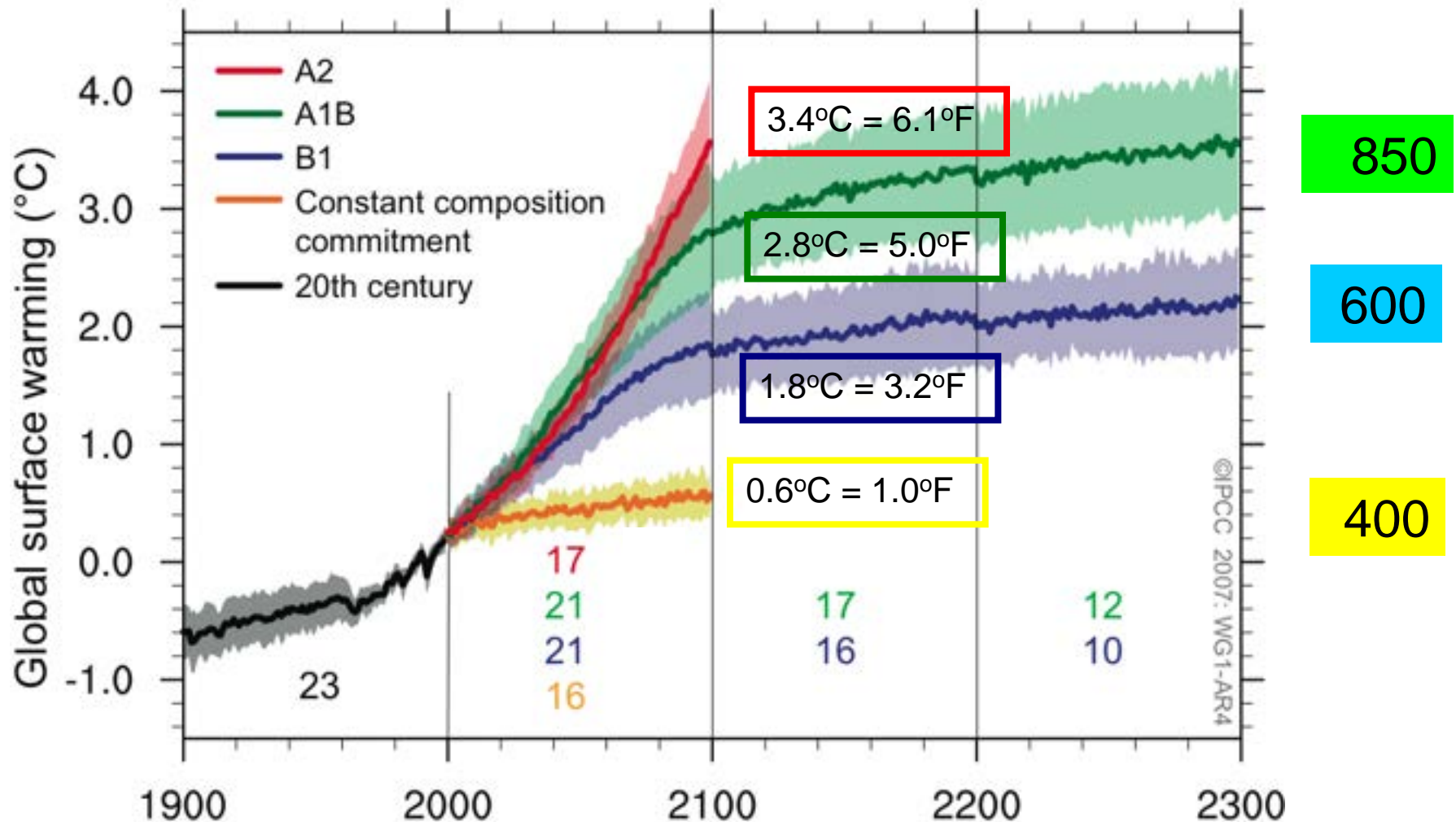


What's in the pipeline and what could come?

Warming to Date: 0.8°C (1.3°F)

Additional warming: 0.6°C (1°F)

Warming will increase if Greenhouse Gases increase.



Community Work



Preparing for Tropical Cyclones



“First of all, you have to close the shutters, and you have to accumulate food and water, clean water. If you have a gas stove, we keep it ready. Need light, torch, radio and enough kerosene. We cut down big trees near our house. With our food, what we do with cassava we make stems short and also yaqona cut down low. Very little damage to our plantation because as soon as hear warning (for Cyclone Thomas), he (husband) runs to plantation to cut it down. Here in Taveuni, we have wild food too to eat.” (pers. comm, wife Nasalesele Village High Chief - 68 years old)

Preparing for Tropical Cyclones



Turaga ni Koro ('village headman'; 43 years old) illustrates where to 'cut' the root crops when preparing for a cyclone event to minimise damage to the root crop and preserve the roots.

iTaukei- understanding climate change in Fiji

- **‘Draki veisau or Draki veiveisau or Veiveisau ni Draki’** literally means that the climate changes. The assumption is that it would return to its previous stage.
- **‘Toki ni Draki’** –a total shift in climate which also affects everything related to climate
- **‘Veisau Tudei ni Draki’**- a permanent change in the weather and climate and everything related to it

from the USP Student Climate Change Forum

Climate Service Tools

- Improved Tropical Cyclone/ Typhoon forecasting and delivery of information, including storm surge forecasts.
- Quantification and mapping of the impacts sea level rise and sea level projections-next IPCC projections will likely be 0.5-2 m.
- Weather, Drought, Rainfall and Fine Scale Climate Projections are much needed at country and community level throughout the Pacific Islands