Integrating Climate Change Adaptation and Disaster Risk Management to Protect Health and Build Resilience in Pacific Islands

20-25 May 2018

Introductory Remarks
John Katzenberger
Mission:

To further the understanding of Earth systems and global environmental change in service of society
Place-based research in support of resource managers and governments
Health Related Thread

Remote Sensing, Environmental Change, & Human Health
1991

Global Change and Natural Hazards
1996

Health Impacts from Climate Change: The Importance of Public Health Partnerships
2016

Integrating Climate Change Adaptation and Disaster Risk Management to Protect Health and Build Resilience in Pacific Islands
2018
Recent Publications

**Understanding the Causes and Consequences of Polar Amplification (2017)**

**Getting Near Zero: Decarbonizing the Last 20% (2016)**
Davis, S. J., N. S. Lewis, and K. Caldeira (2017), Achieving a near-zero carbon emissions energy system. *Eos*. and:

**Decadal Climate Prediction: Improving Our Understanding of Processes and Mechanisms to Make Better Predictions (2015)**
and:
Recent publications (cont.)

Impact Relevance and Usability of High Resolution Climate Modeling and Datasets (2015)

Risk and Resilience in the Face of Global Change (2015)

Frontiers of Global Change Science (2014)
Upcoming Workshops

• Innovating Global Fruit and Vegetable Food Systems to Help Bring Sustainable Nutrition Security
  July 30 to August 03, 2018

• Drought on Subseasonal to Seasonal Timescales: Water and Food Security
  September 9-14, 2018

• Decarbonizing the Industrial Sector
  November 11-16, 2018
Interdisciplinary & Transdisciplinary Workshops

- Coverage across breadth of global change
- Typically 20-30 people over 5 days
- Leadership from research community
Future Topics for AGCI
(Thursday working lunch)

• Title
• Potential co-chairs
• Description
• Relevance
• Disciplines needed
• Possible funding sources
Recent Funding

+ Other private foundations & contributors
Special Thanks
Outputs

• Peer-reviewed publications
  – Syntheses, blueprints, perspectives, reports
Outputs

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  – Syntheses, blueprints, perspectives, reports

• Resources for practice and implementation
Outputs

• Peer-reviewed publications
  – Syntheses, blueprints, perspectives, reports
• Resources for practice and implementation
• Web-based video and presentations

www.agci.org/workshops
Outcomes

• New knowledge and understanding
• Strengthened capacity for collaborative and interdisciplinary research
• Empowered ambassadors for global change research
• Informal input to larger frameworks (USGCRP, IPCC, etc.)
Recent workshop topics

• Climate change & health
• Risk management & resilience
• Remote sensing, integrated assessment, and adaptation
• Usability of high resolution climate modeling
• Decadal climate prediction
Science Advisory Board

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Dr. Donald J. Wuebbles
University of Illinois
Proposed future workshop topics

1. Causes and Consequences of Polar Amplification (Doug Smith, James Screen, and Clara Deser)
2. Actionable Social Sciences for Global Change (Michael Bernstein)
3. Climate Change Threats to Health in Small Island Nations (Henry Diaz)
4. Lessons and Implications of Paleocene-Eocene Thermal Maximum (PETM) (Chi-Jen Yang)
5. Energy Transitions (Jerry Meehl)
6. Emissions Reductions to Achieve Co-Benefits for Climate and Air Quality (Claire Granier)
7. Environmental & Climate Refugees (Yochanan Kushnir)
8. Getting Comfortable with Uncertainty (Susi Moser)
9. Integrating Social Sciences into the Study of Global Change (David Victor)
10. Earth System Model Evaluation (Veronika Eyring, Peter Cox, and Peter Gleckler)

(Session proposer)
Thank you!

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Motivating Challenges

Difficulty in understanding Earth systems amid boundaries – institutional, organizational, cultural, & cognitive

Meehl et al. 2014
Motivating Challenges

Fractured interface between science and practice

Production of useful information

Information needs and potential for adoption

Interaction efforts, retailing, value adding and customization improve usability

Usable information

Lemos, Kirchhoff and Ramparasad, 2012
Motivating Challenges

Demand for solutions that help stay within planetary boundaries & raise the social foundation

Raworth 2012