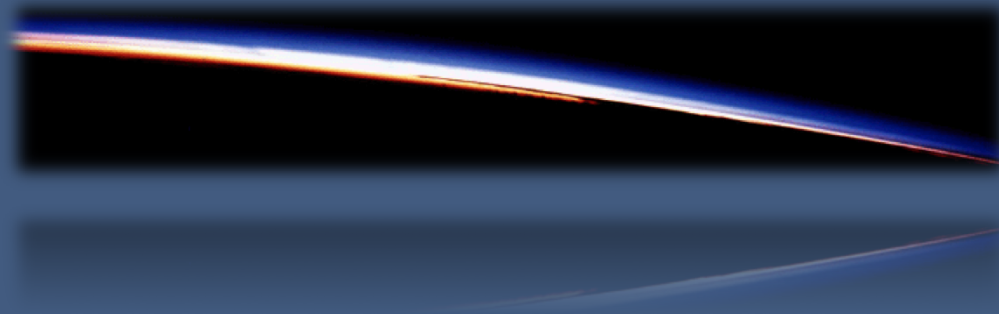


Integrating Climate Change Adaptation and Disaster Risk Management to Protect Health and Build Resilience in Pacific Islands

20-25 May 2018

Introductory Remarks
John Katzenberger



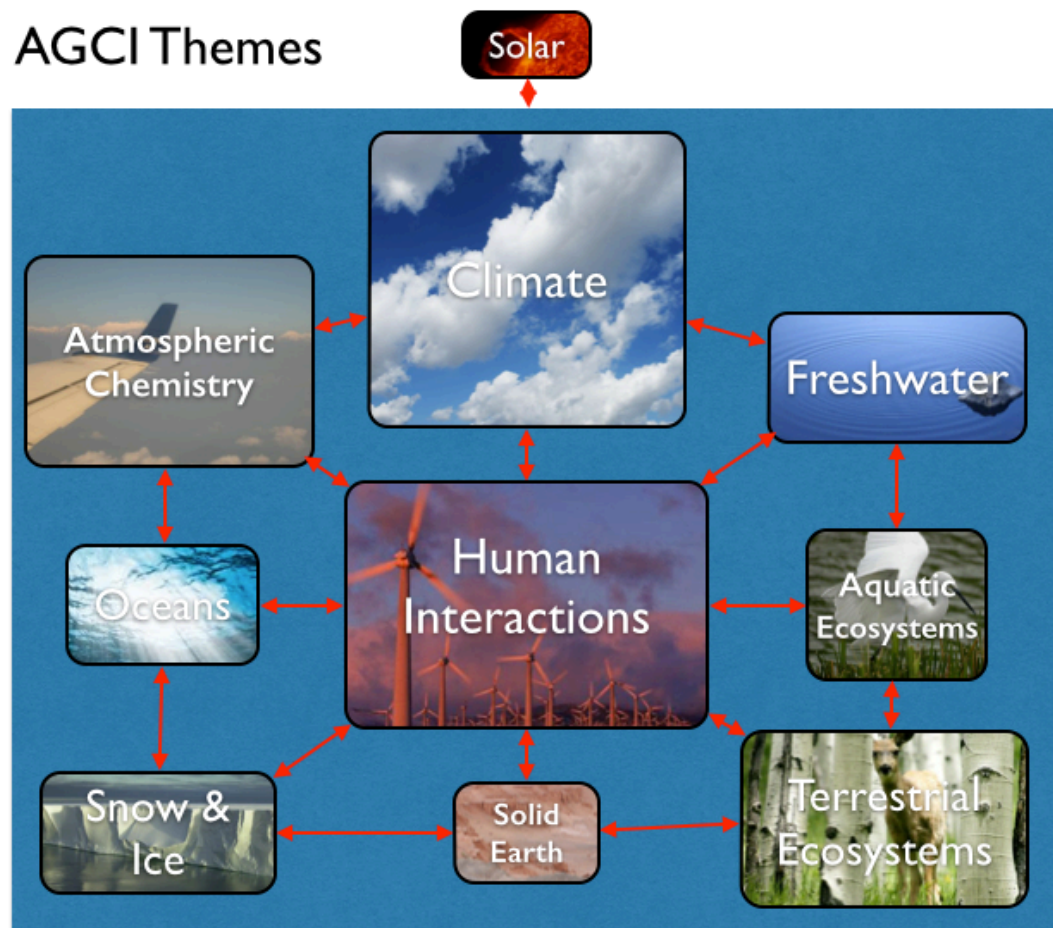


Mission:

*To further the understanding of Earth
systems and global environmental change
in service of society*



AGCI Themes



Our work



Workshops



Research & Consulting



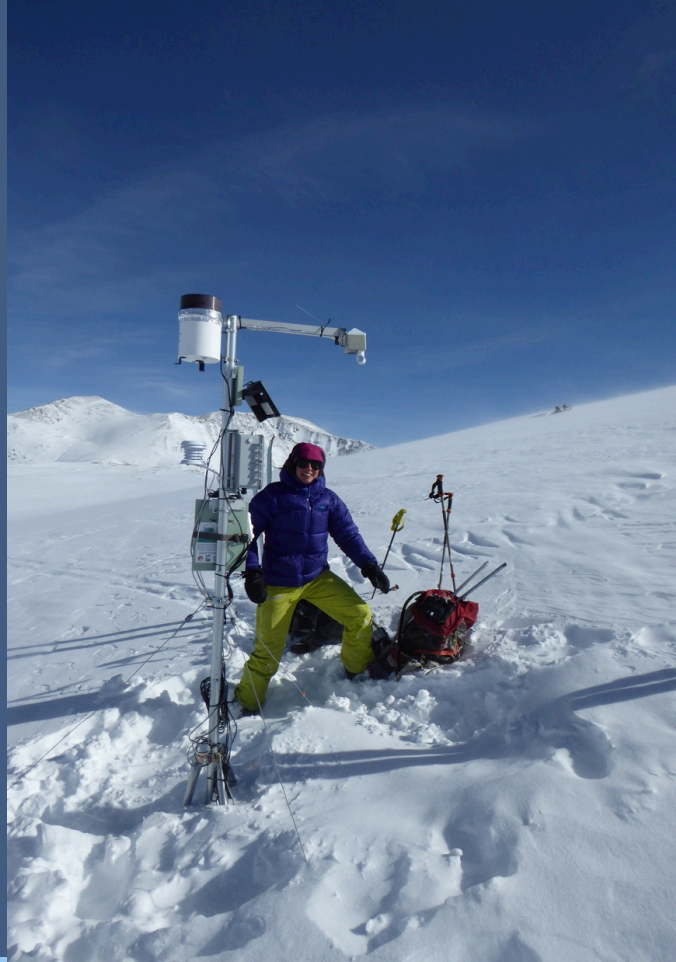
Education & Public Outreach



Sponsored Programs



Place-based research in
support local 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)

Screen, J.A., C. Deser, D. M. Smith, X. Zhang, R. Blackport, P.J. Kushner, T. Oudar, K. E. McCusker and L. Sunn (2018), Consistency and discrepancy in the atmospheric response to Arctic sea-ice loss across climate models. ***Nature Geoscience***.

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:

Davis, S.J., et al. (in press, 2018) Providing energy services without net addition of carbon dioxide to the atmosphere. ***Science***.

Decadal Climate Prediction: Improving Our Understanding of Processes and Mechanisms to Make Better Predictions (2015)

Boer, George J., Gerald A. Meehl, and Doug M. Smith (2015), Toward Improving Decadal Climate Predictions. ***Eos*** meeting report.

and:

Boer, G., et al (2016) Decadal Climate Prediction Project (DCPP) contribution to CMiP6. ***Geoscientific Model Development***.



Recent publications (cont.)

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

Jones, A., K. Calvin, and J.-F. Lamarque (2016), Climate modeling with decision makers in mind, *Eos*.

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

Linkov, I., et al. (2018), Tiered Approach to Resilience Assessment. *Risk Analysis*.

Frontiers of Global Change Science (2014)

Meehl, G.A. and R. Moss (2016) .Aspen Global Change Institute: 25 Years of Interdisciplinary Global Change Science. *Bulletin of the American Meteorological Society*.



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

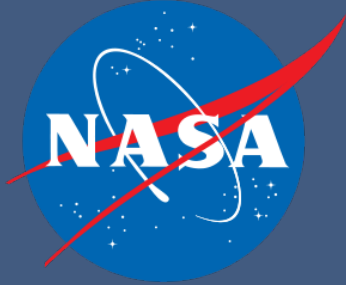


Future Topics for AGCI (Thursday working lunch)

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



Recent Funding



+ Other private foundations & contributors



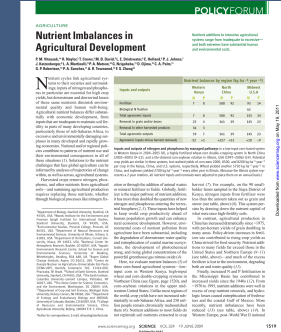
Special Thanks





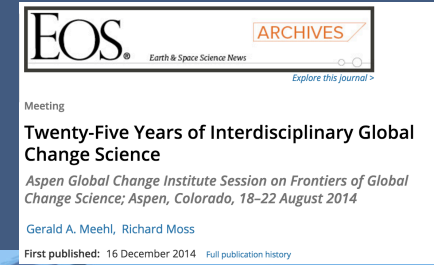
Outputs

- Peer-reviewed publications
 - Syntheses, blueprints, perspectives, reports



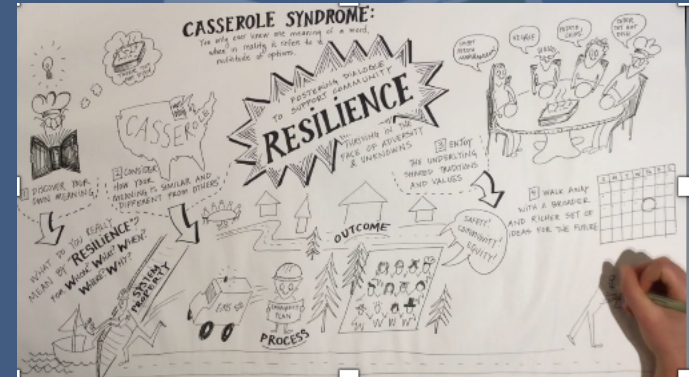
Assessing Impacts of Climate Change on Food Security Worldwide

AgMIP Workshop on Coordinated Global and Regional Integrated Assessments of Climate Change and Food Security; Aspen, Colorado, 13–18 September 2015



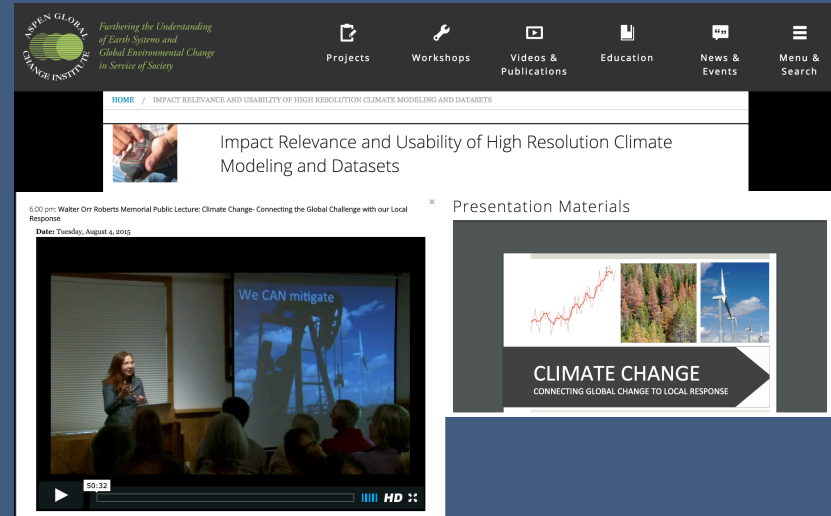
Outputs

- Peer-reviewed publications
 - Syntheses, blueprints, perspectives, reports
- Resources for practice and implementation



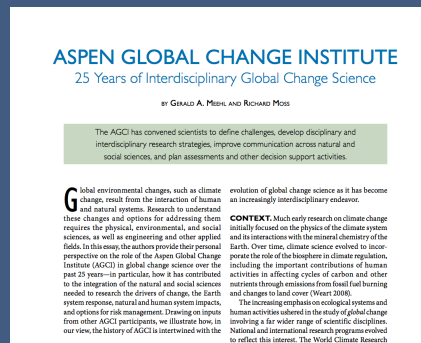
Outputs

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



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.)



Jerry Meehl

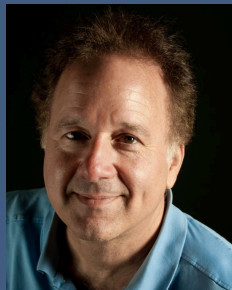


Richard Moss

Recent workshop topics

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





Dr. Ken Caldeira
Carnegie Institution
for Science

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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!

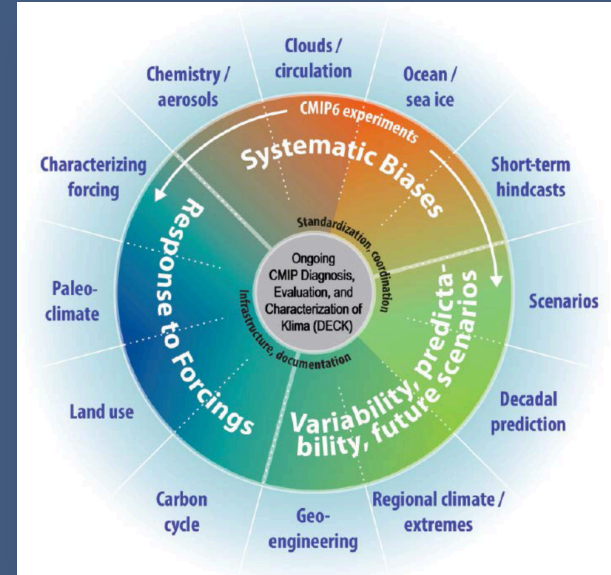
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Motivating Challenges

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

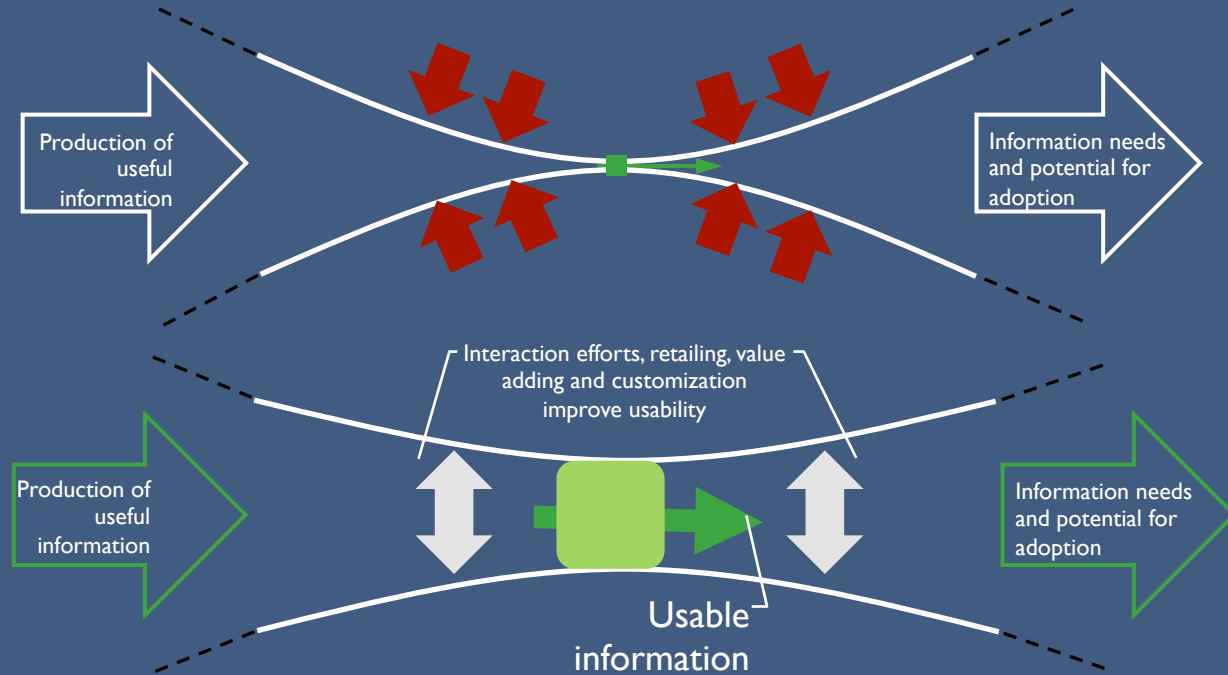


Meehl et al. 2014



Motivating Challenges

Fractured interface
between science and
practice



Lemos, Kirchhoff and Ramparasad, 2012



Motivating Challenges

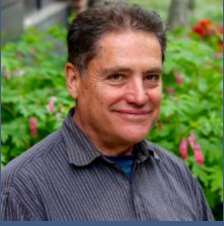
Demand for solutions
that help stay within
planetary boundaries &
raise the social foundation



Raworth 2012



AGCI Staff



John Katzenberger
Executive Director



James Arnott
Associate Director



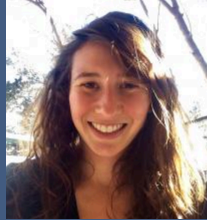
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AGCI

