

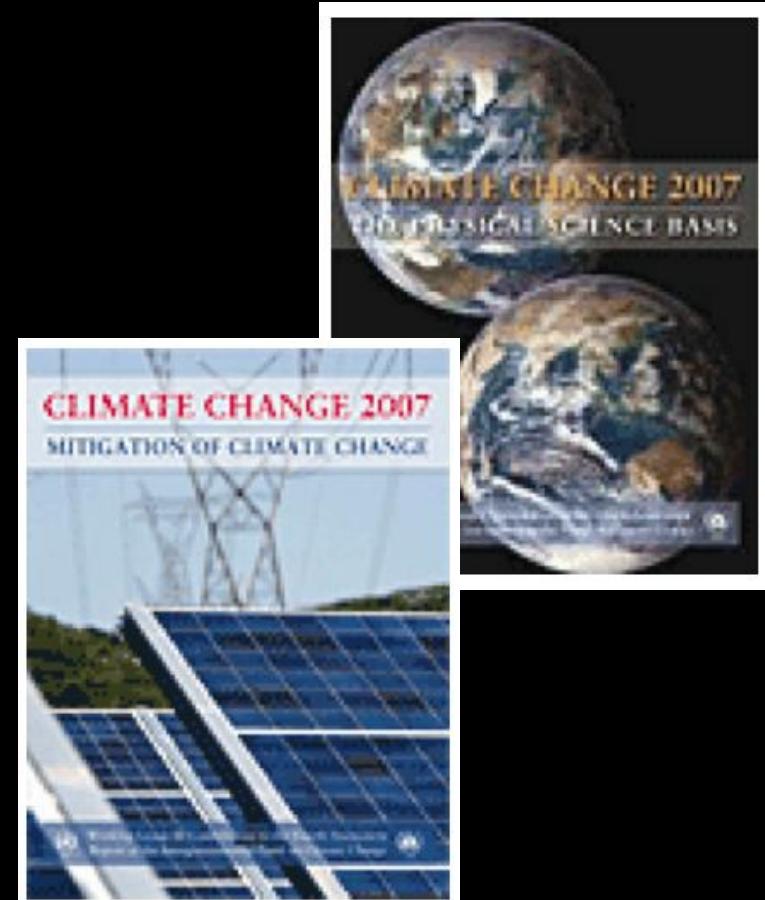
# The Intergovernmental Panel on Climate Change (IPCC), international science diplomacy, and the challenge of climate change in the 21st century.



Jonathan Overpeck, The University of Arizona

*Overview of talk:*

- (1) *The rise of use-inspired climate science*
- (2) *Quick overview of the IPCC*
- (3) *Clear evidence that the IPCC works*
- (4) *Why diplomacy is intrinsic to the IPCC, and visa versa*



# First, an important disclaimer...

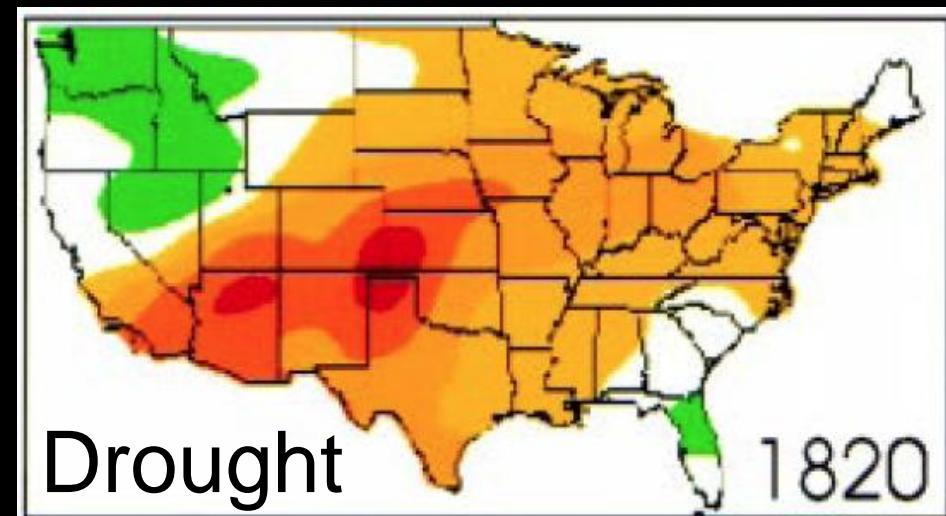
It's key to remember that the IPCC is an *intergovernmental organization*, and that the scientists who help carry out IPCC tasks (e.g., the assessments) do not speak for the IPCC.

Thus, I'm speaking for myself - as a scientist who has been involved with the IPCC for a number of years, and in a number of capacities.

# Second, a little history...

*Back in the day...*

It was all about basic research, e.g., understanding how the climate system worked because we were curious...



(Woodhouse and Overpeck, 1998; after Cook et al., 1996)

# History (continued)...

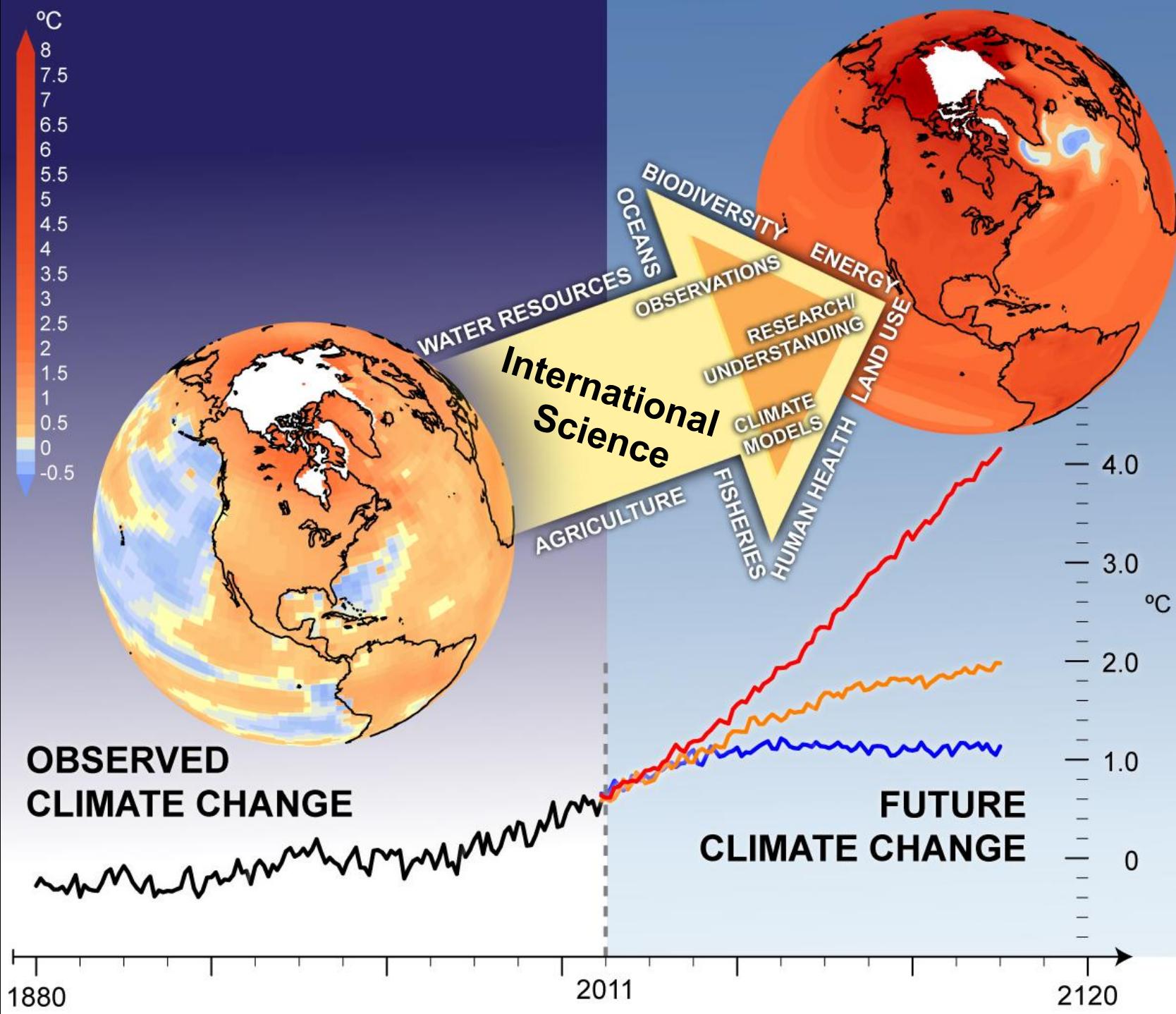
Then came *the realization* that...

- 1) there was *predictability* in the climate system
- 2) decision-makers could use knowledge about both *climate variability and climate change* – both natural and human caused
- 3) the challenges and benefits of climate knowledge became recognized as *global*, and...

# History (continued)...

...*an urgency* was developing for climate science to provide knowledge, answers and choices for decision-makers around the globe

*By definition, climate science became intrinsically diplomatic*



after Overpeck, Meehl, Easterling and Bony,  
*Science*, February 2011

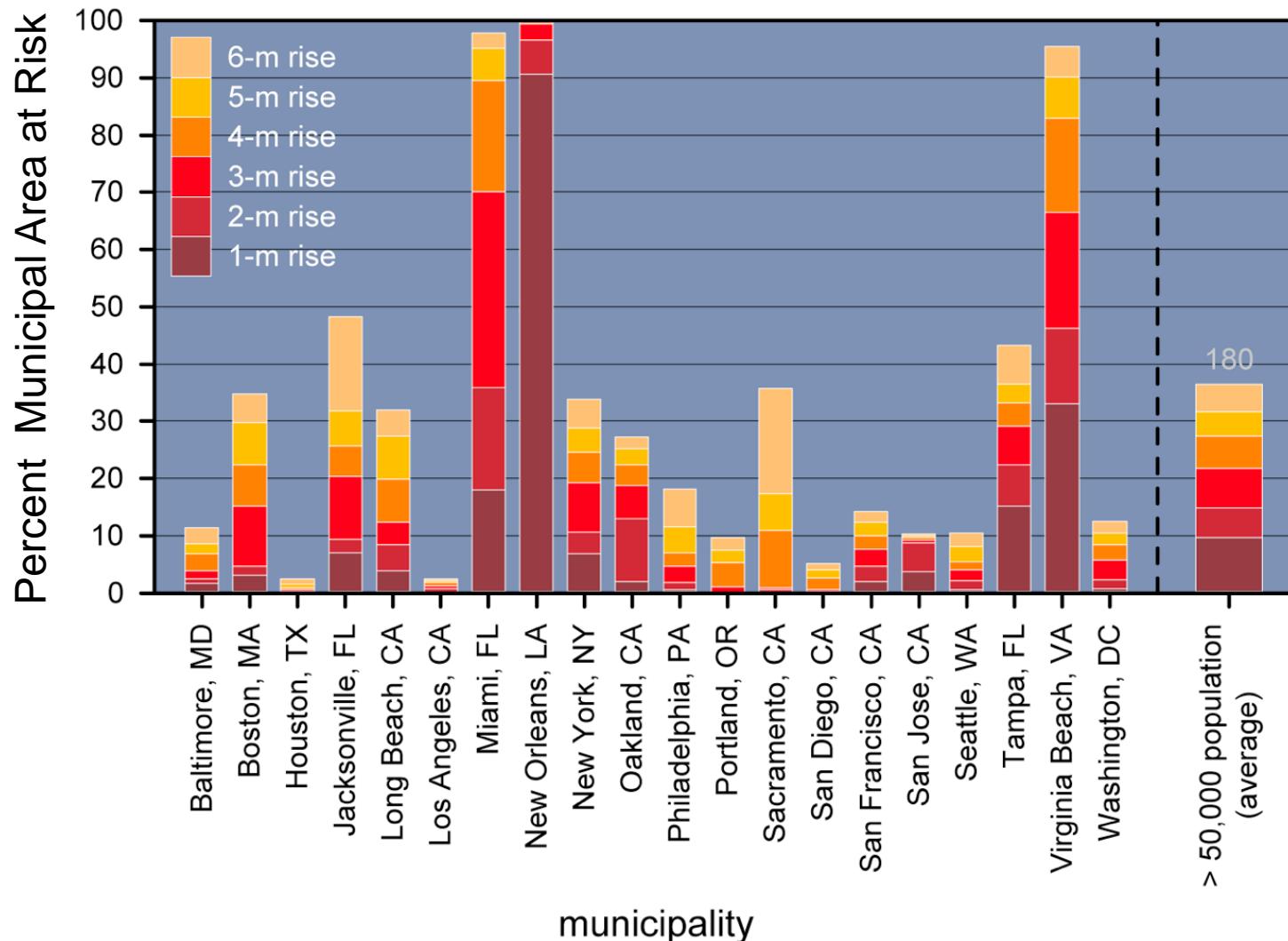
# The birth of the IPCC...

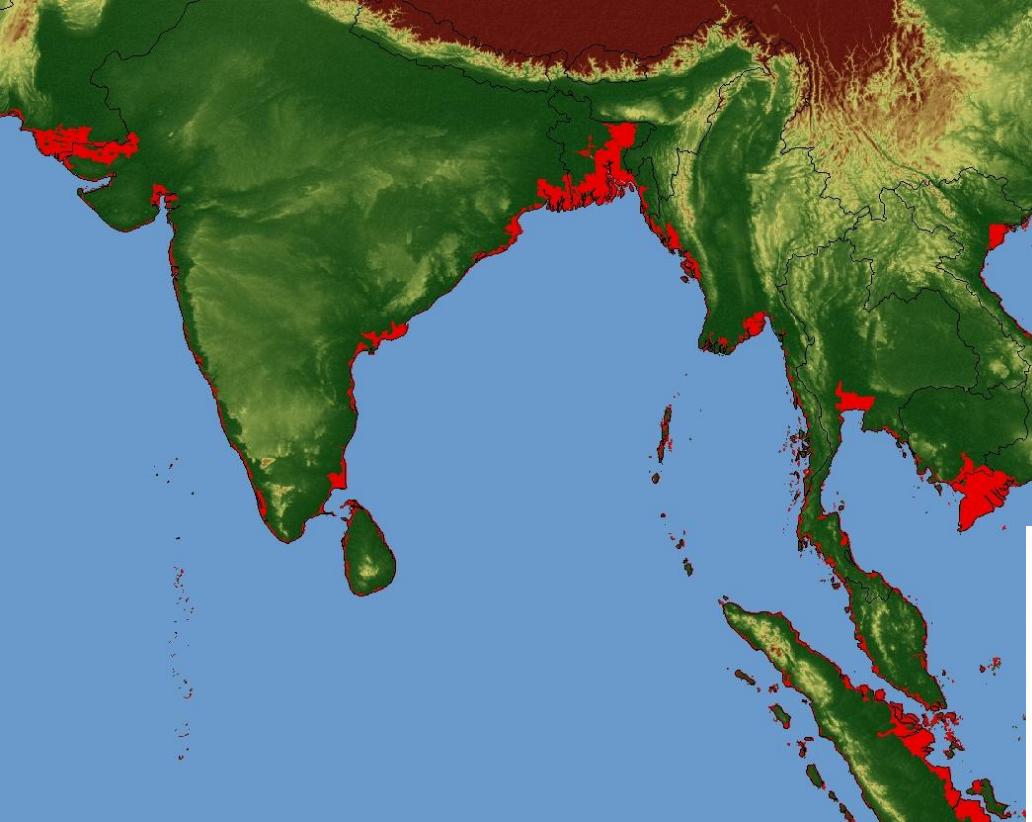
- Born of diplomacy: The Intergovernmental Panel on Climate Change (IPCC) was created in 1988; first report 1990
- Set up by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) to provide the governments of the world with a clear scientific view of what is happening to the world's climate

# UN Framework Convention on Climate Change (UNFCCC)

- International treaty on climate change, formulated at the 1992 “Earth Summit” in Rio, 186 countries, ratified by the US in 1992
- Ultimate (Article 2) Objective:
  - “Stabilization of greenhouse gas concentrations at a level that would **prevent dangerous anthropogenic interference with the climate system**”
  - Achieve within a time frame “sufficient to **allow ecosystems to adapt naturally, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner**”

# Latest Sea Level Projections Suggest up to ONE Meter per Century is Possible

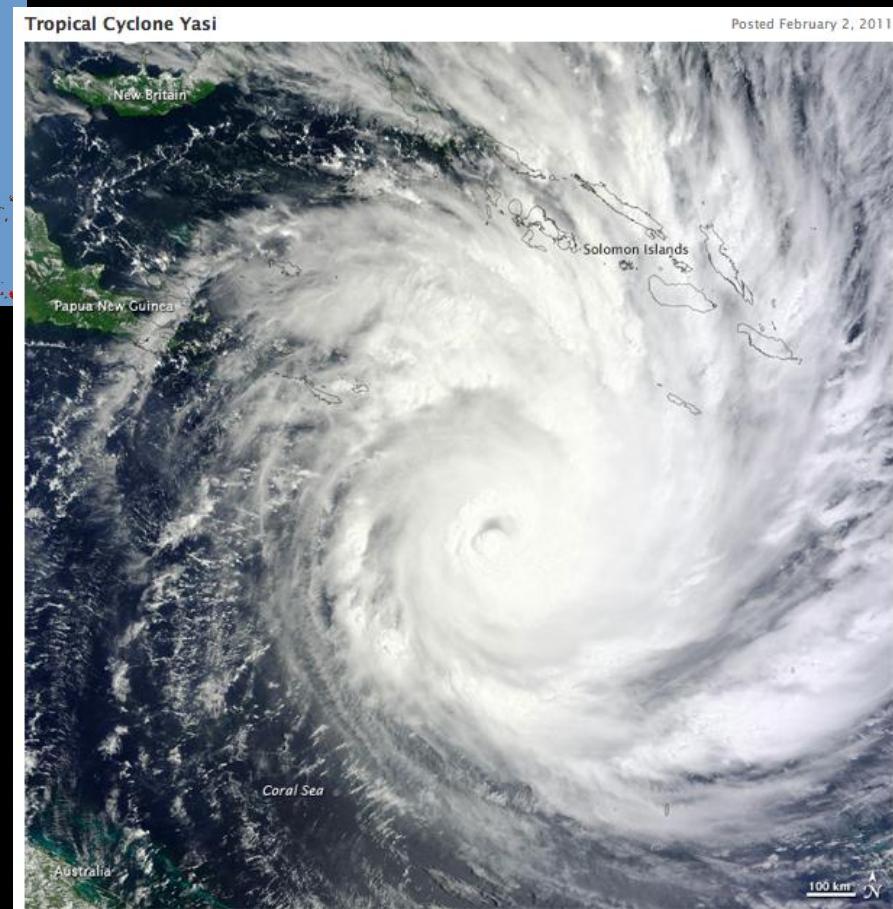




*Climate Change Is  
A Global Challenge*

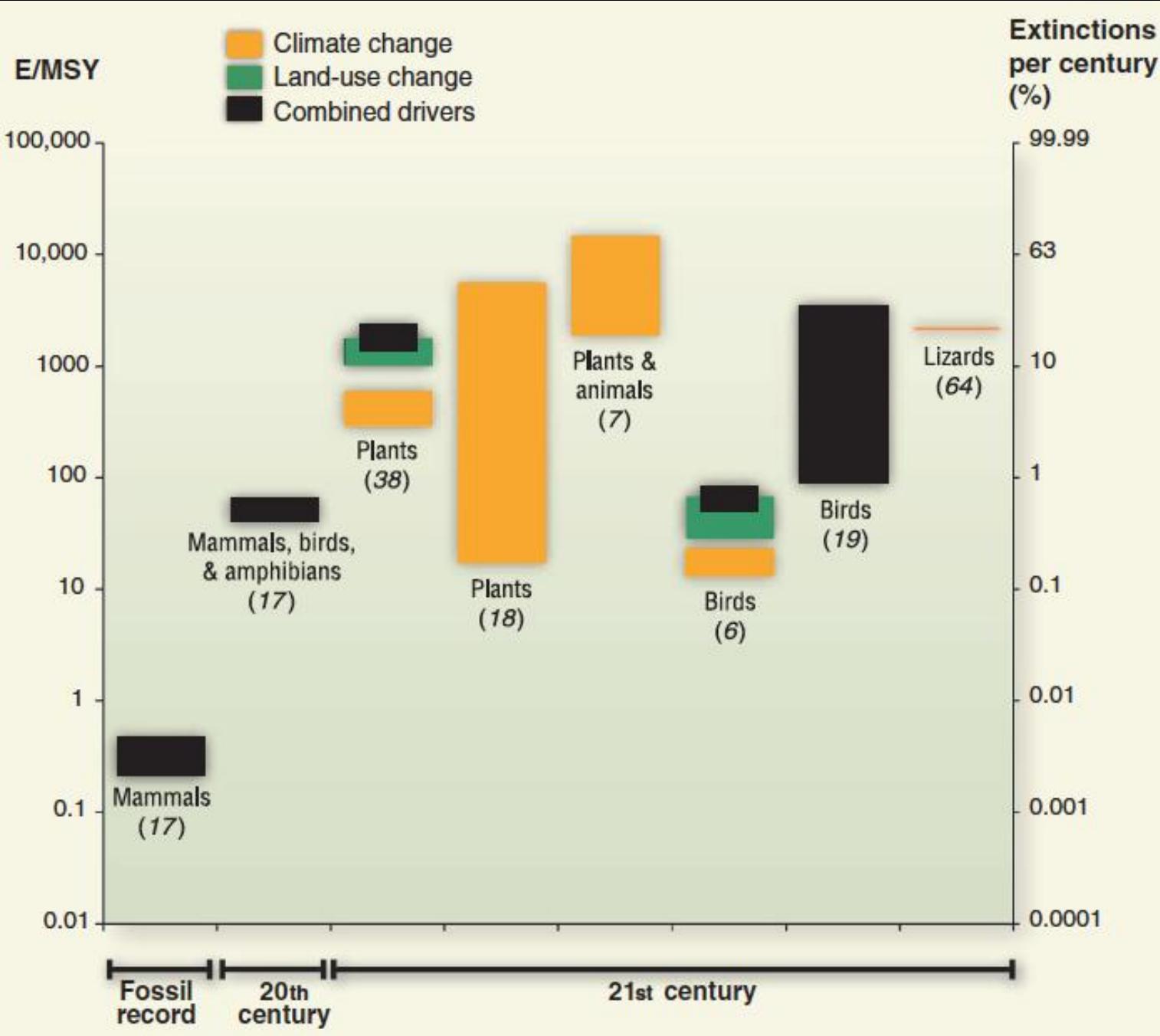
**+6 meter sea level rise**  
(Weiss and Overpeck, unpub.)

**Topical Cyclone Yasi**  
(NASA, February 2, 2011)

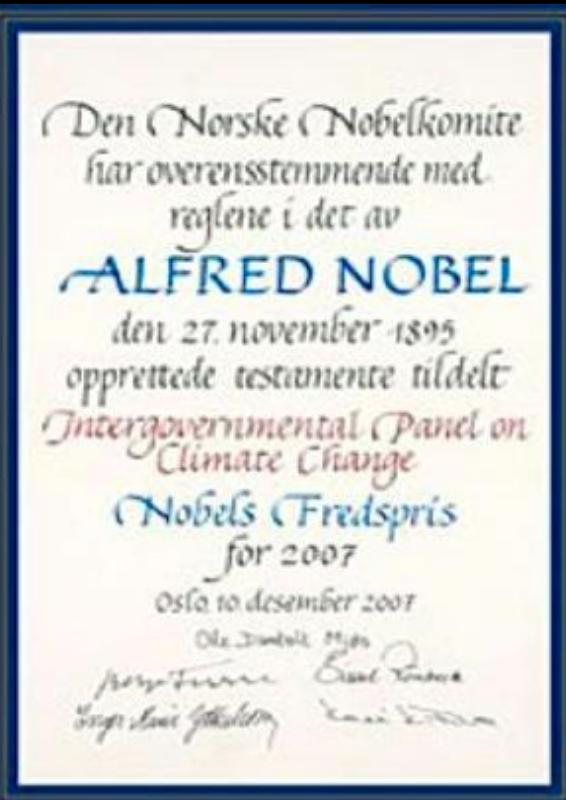


# Past and Projected Estimated Extinction Rates

(Pereira *et al.*, *Science*, December, 2010)



# So, what is the IPCC?



# The IPCC is...

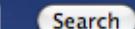
- The IPCC is a scientific body – literally 1000's of scientists participate in a process that strives to be comprehensive, objective, open and transparent
- It assesses the most recent scientific, technical and socio-economic information; it does not carry out research; it is not policy prescriptive

# Read all about it...



**ipcc**  
INTERGOVERNMENTAL PANEL ON Climate change

WMO UNEP

Languages  IPCC web pages   

**Home**

**Organization**

Structure

**Procedures**

History

Secretariat and TSUs

Working Groups / Task Force

Activities

Calendar of Meetings

Meeting Documentation

News and Outreach

Publications and Data

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IPCC Scholarship Programme

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## PROCEDURES

### Principles and Procedures of the IPCC

Comprehensiveness, objectivity, openness and transparency: these are the principles governing IPCC work. All major decisions about the organization and its work are taken by the Panel during the Plenary Sessions.

The Panel has established clear procedures for all main activities of the organization: "[Principles Governing IPCC Work](#)" and its Appendices A, B and C. Appendix A is about the "Procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of IPCC Reports". Appendix B covers "Financial Procedures for the Intergovernmental Panel on Climate Change" and Appendix C contains the "Rules of Procedures for the Election of the IPCC Bureau and any Task Force Bureau".

**I Principles Governing IPCC Work (PDF)**

[English](#) - [Arabic](#) - [Chinese](#) - [French](#) - [Russian](#) - [Spanish](#)

**I Appendix A to the Principles Governing IPCC Work - Procedures for the preparation, review, acceptance, adoption, approval and publication of IPCC Reports (PDF)**

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**I Appendix B to the Principles Governing IPCC Work - Financial Procedures for the Intergovernmental Panel on Climate Change (IPCC) (PDF)**

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**I Appendix C to the Principles Governing IPCC Work - Rules of Procedures for the Election of the IPCC Bureau and any Task Force Bureau (PDF)**

[English](#)

# Evidence that the IPCC does work

- ✓ The governments of the world are very engaged
  - they approve the process, the foci and the report structure
  - they review, question, approve and use the reports
- ✓ Results widely used well beyond policy
- ✓ Scientists volunteer their time over & over
- ✓ When problems emerge, the process learns and corrects

# The IPCC and *science* diplomacy

- The IPCC promotes the required international scientific collaboration, e.g.,
  - climate change is a global problem
  - expertise is not all in one country
  - data are not all in one country
- The IPCC promotes capacity building and international collaboration of equals
  - via funding to enable participation
  - via other special programs – e.g., education scholarships, library access
  - via a philosophy that everyone is equal

# The IPCC and *political* diplomacy

- ◆ The IPCC provides the scientific understanding and consensus needed for effective international agreements
- ◆ The IPCC scientific community promotes the diversity of national expertise needed to enable effective international negotiation and buy-in
- ◆ The IPCC scientific community also builds the needed capacity for national- to local-scale climate change adaptation and mitigation, (including the effective use of development funds)

Bottom-line:

The IPCC has been a scientific success, as well as a diplomatic success



*Thanks...*