Climate Change and Human Rights

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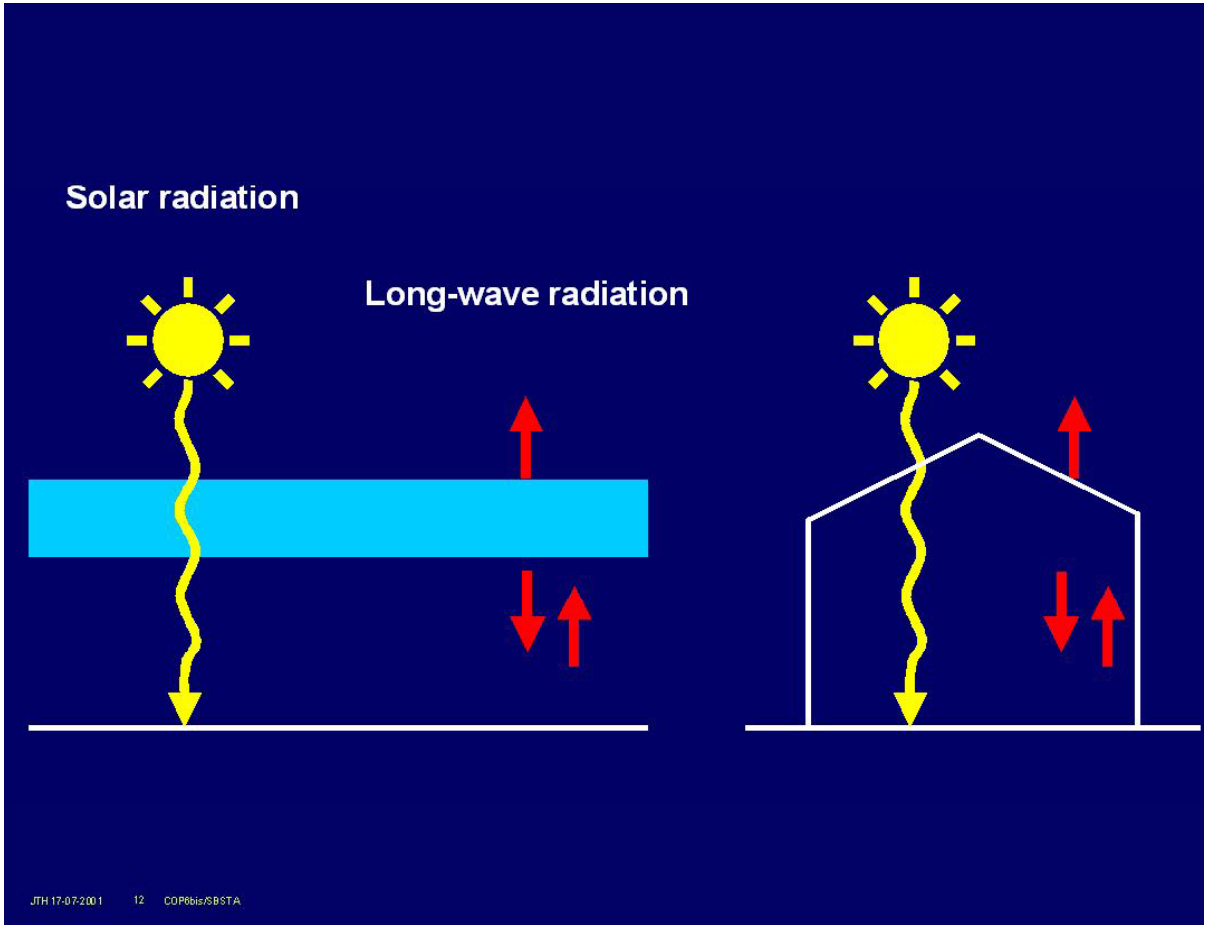
February 12, 2010

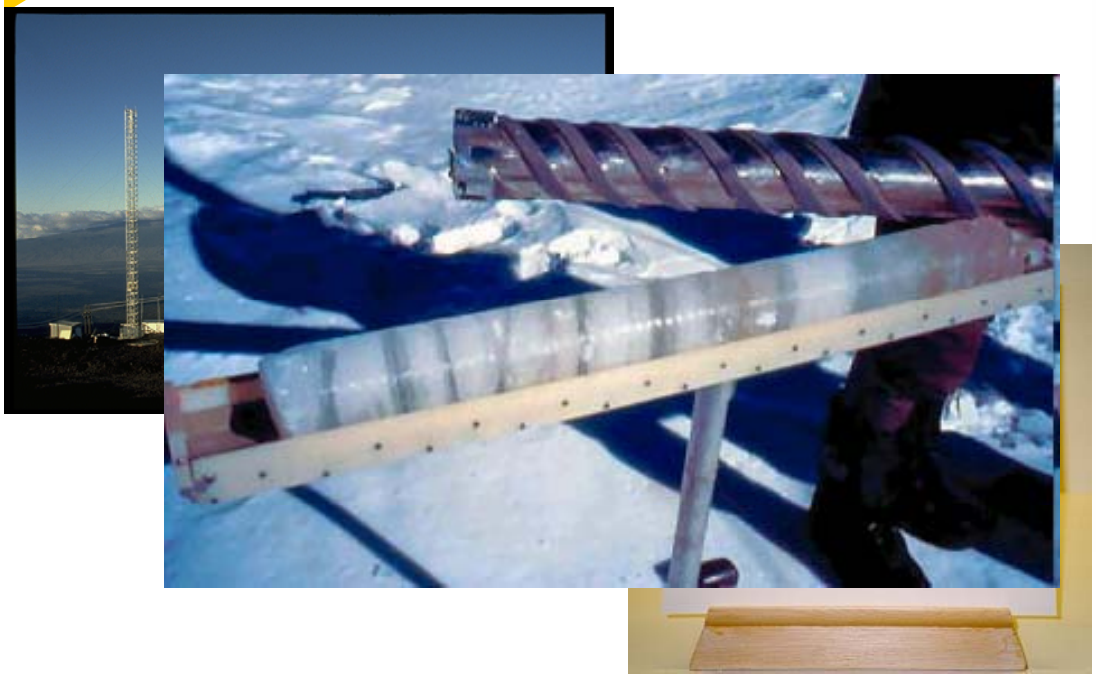
Greenhouse Effect

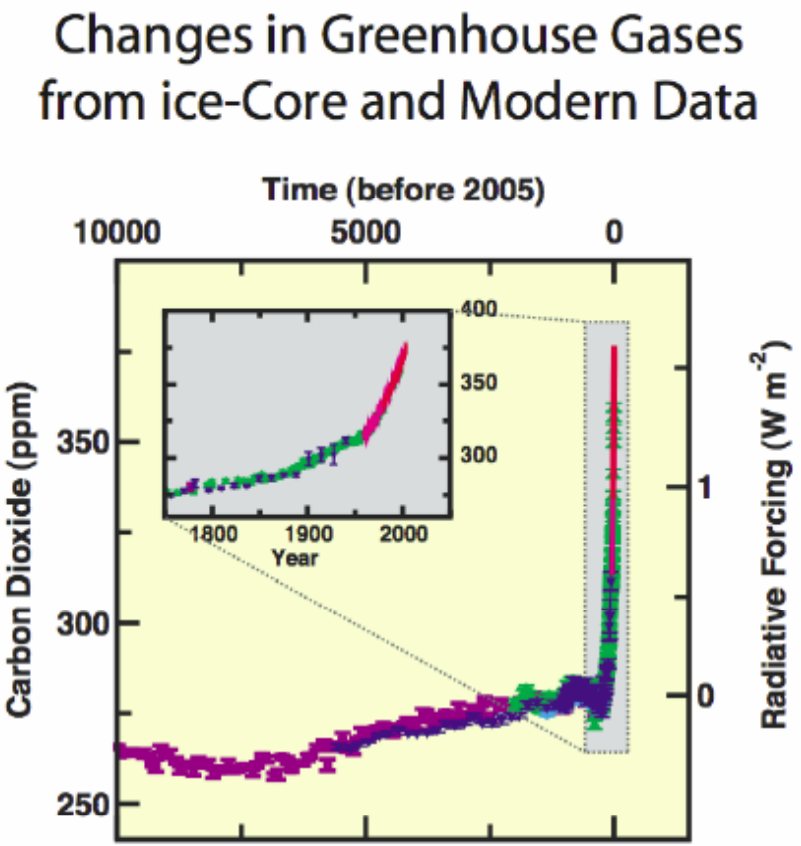


Svante Arrhenius
(1859-1927)

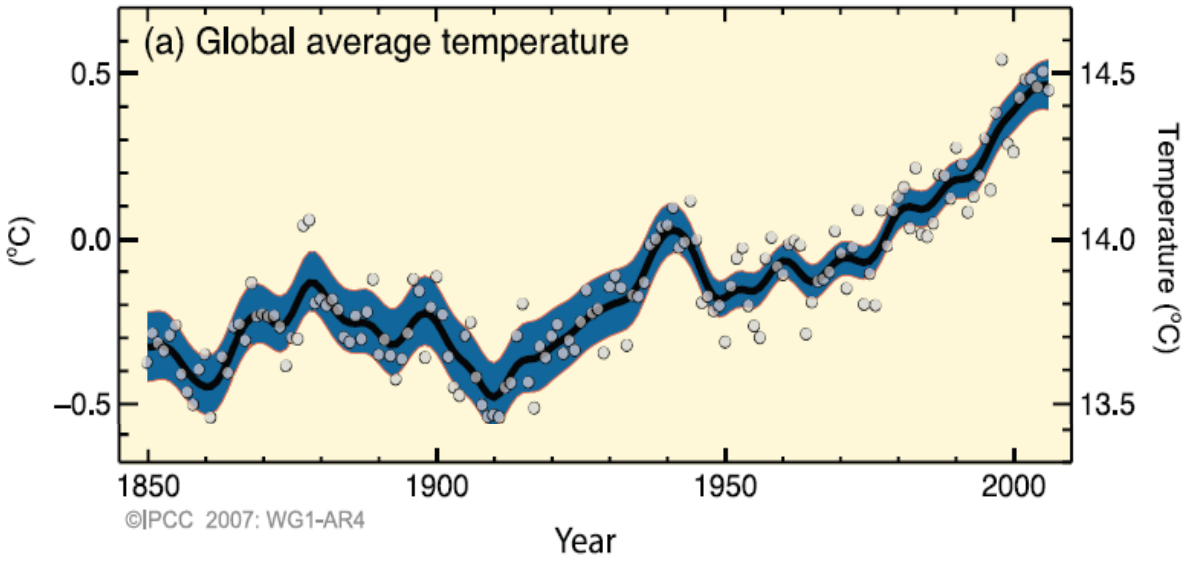
GHG Concentrations Increasing

Atmospheric concentrations of CO2 have increased from 280 ppm in pre-industrial times to 387 ppm in 2007, the highest in 650,000 years



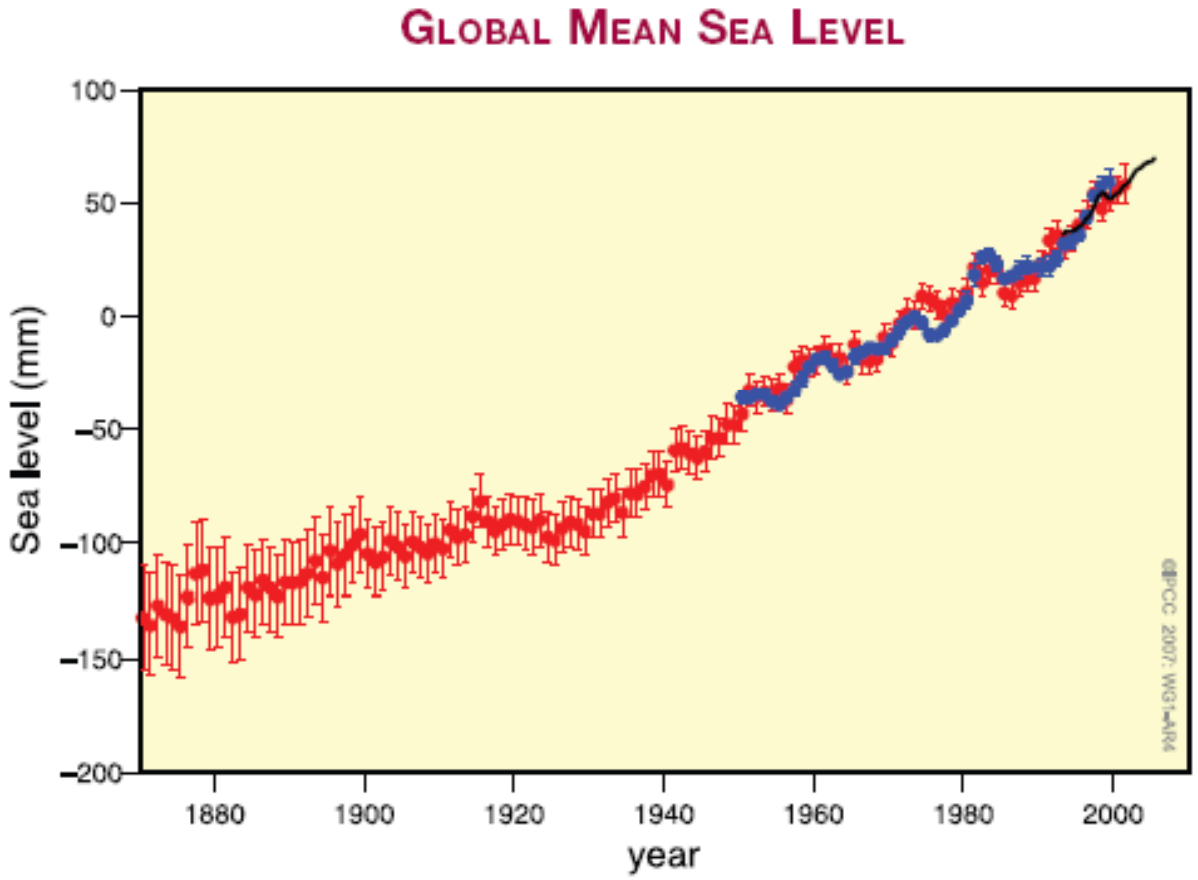


The Earth Is Warming



- IPCC 2007
  - "Warming of the climate system is unequivocal"
    - Eleven of the last twelve years (1995–2006) rank among the 12 warmest years in the instrumental record of global surface temperature (since 1850)
  - "Most of the observed increase in globally averaged temperature since the mid-20th century is *very likely* [i.e., >90% probability] due to the observed increase in anthropogenic greenhouse gas concentrations."

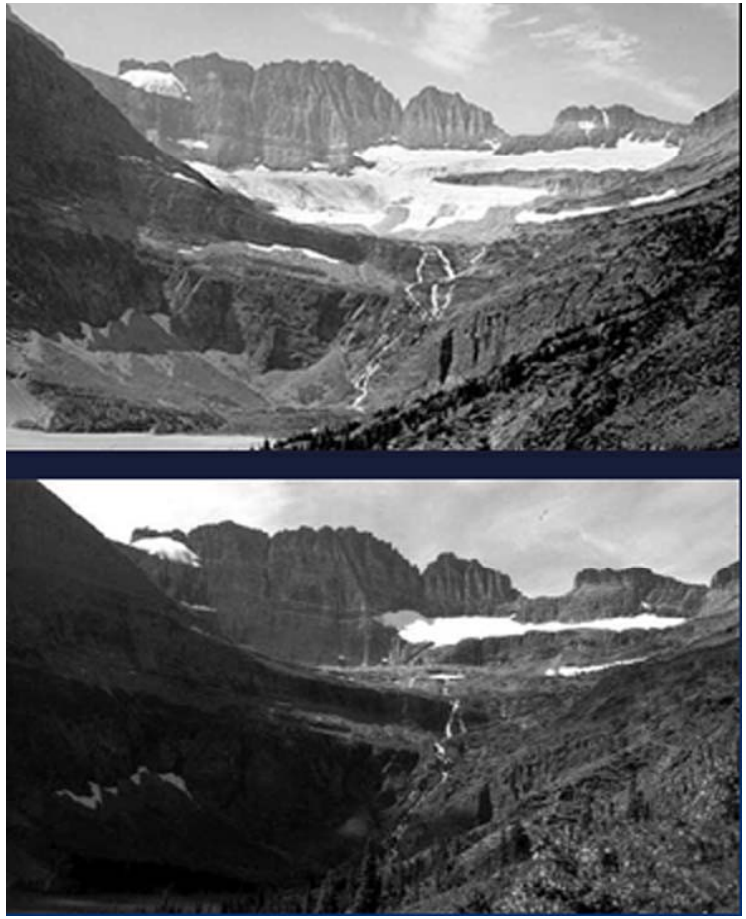
Sea Levels Are Rising



Glaciers Are Retreating

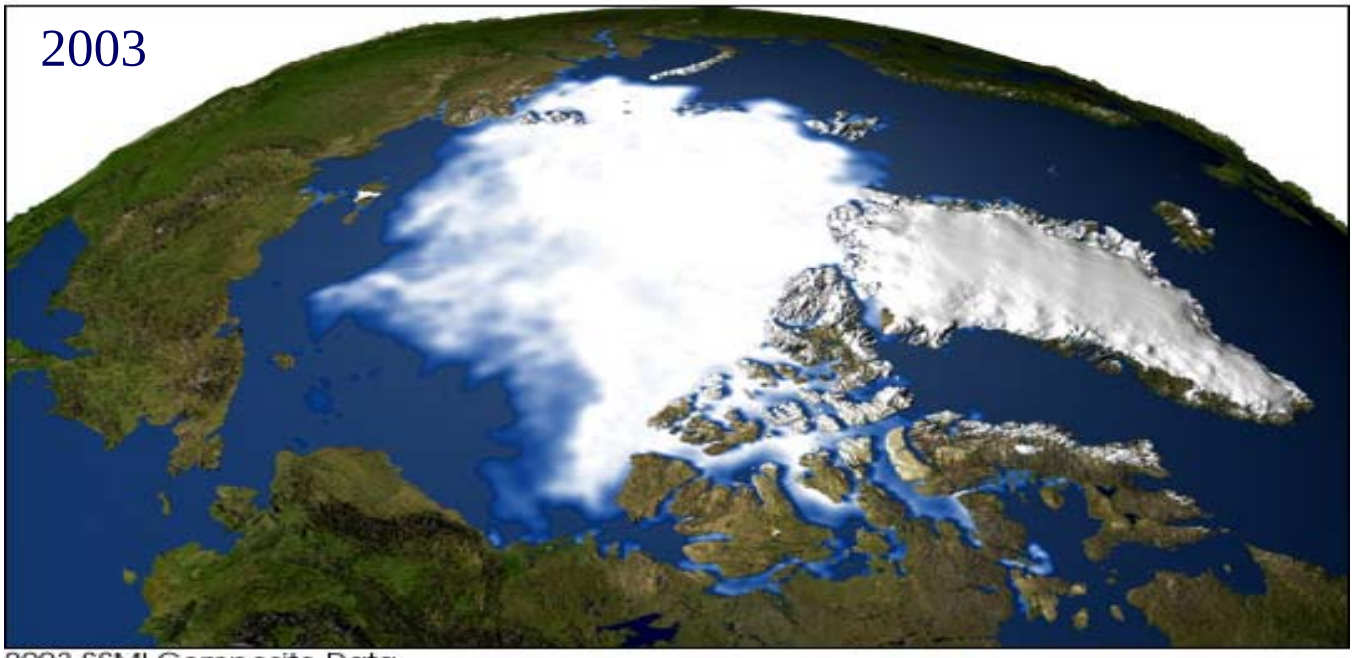
Posterze Glacier, Austria
1987-2004

Grinnell Glacier, Glacier National Park,
1910-1997



Arctic sea ice is thinning

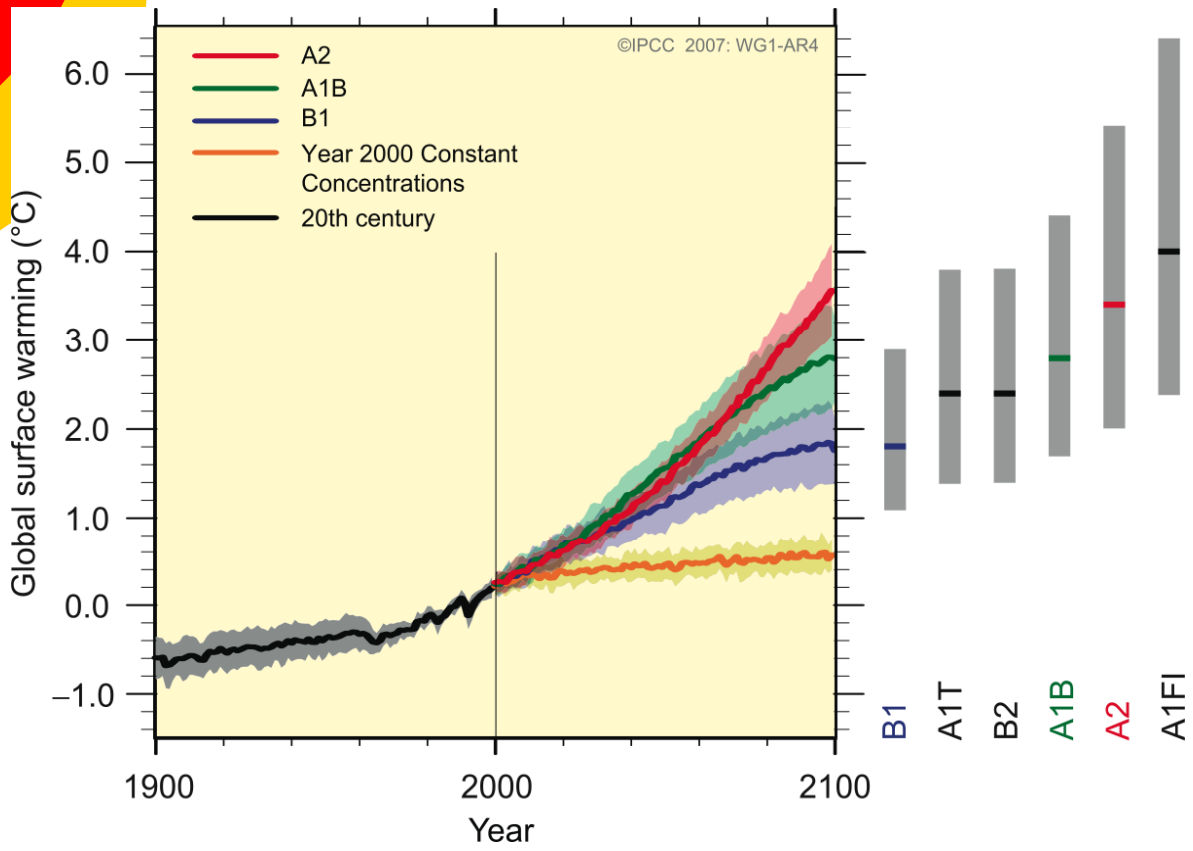
1979 SSMI Composite Data



2003 SSMI Composite Data

According to NASA study, Arctic sea ice has been decreasing at a rate of 9% per decade since 1970s

… And the Future Looks Even Warmer

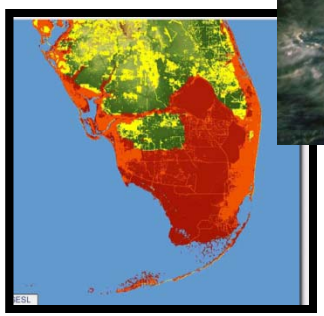


IPCC Fourth Assessment Report (2007): "Anthropogenic warming and sea-level rise would continue for centuries due to the timescales associated with climate processes and feedbacks, even if greenhouse gas concentrations were stabilized."

Effects of climate change

GHG emissions → Temperature change → Physical effects:
- Sea-level rise
- Extreme weather events (storms)
- Precipitation / drought
- Melting of glaciers

→ Human effects
- Agriculture
- Health
- Coastal areas
- Access to water

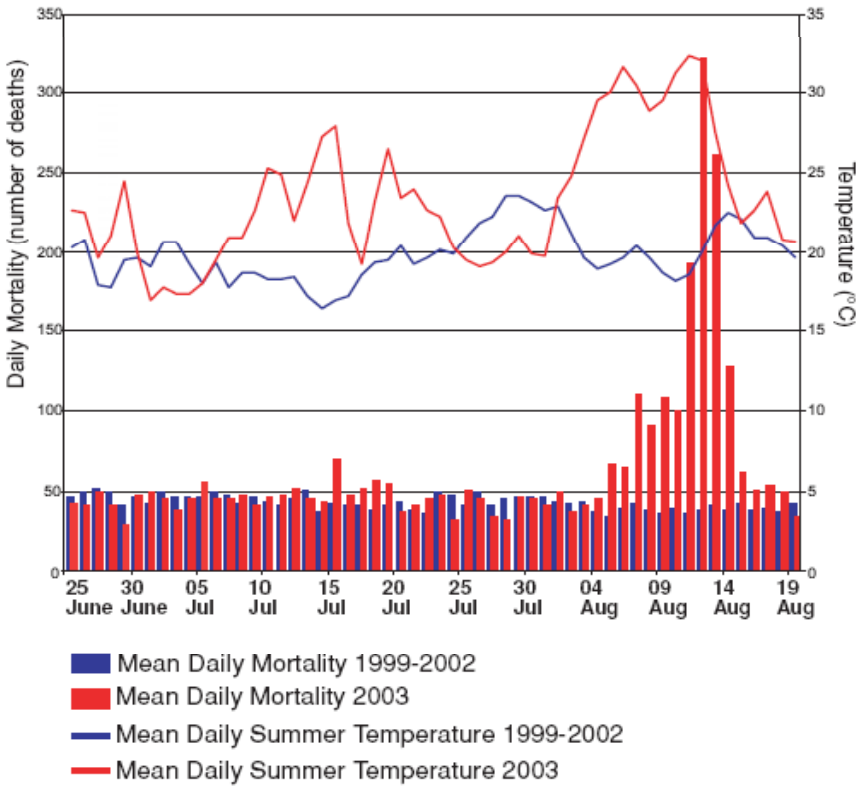


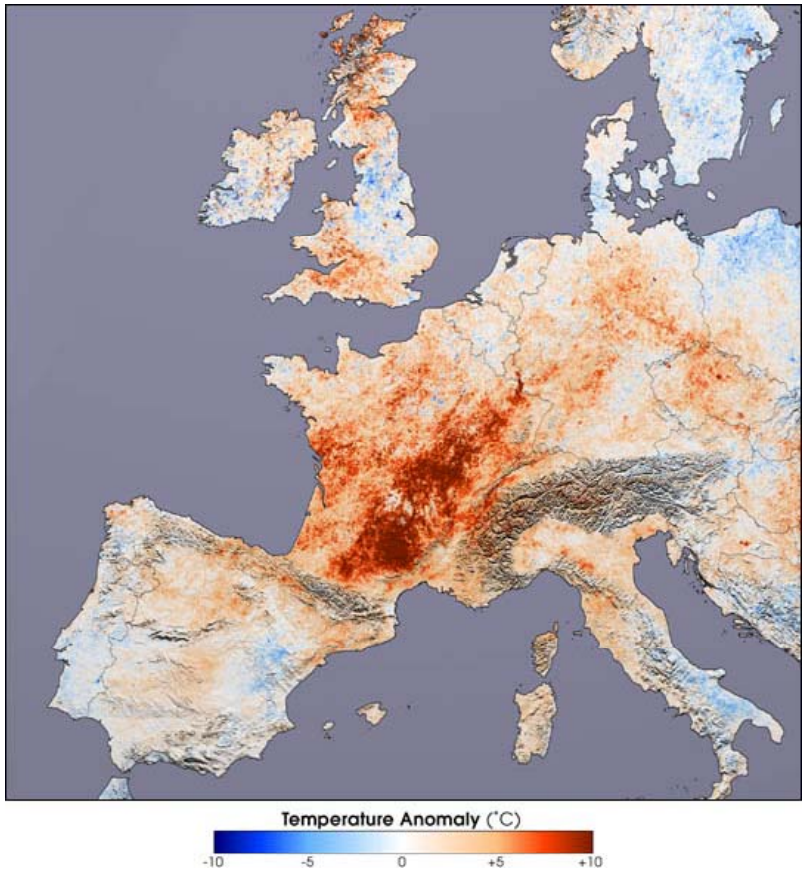
Some Regions Impacted More than Others….

- Africa “one of the most vulnerable continents”
  - 75-200 million people exposed to water stress by 2020
  - Agricultural production “severely compromised”
- Small islands: erosion, storm surges
- Asian mega-deltas: Risk of flooding
- Poor communities especially vulnerable due to limited adaptive capacity

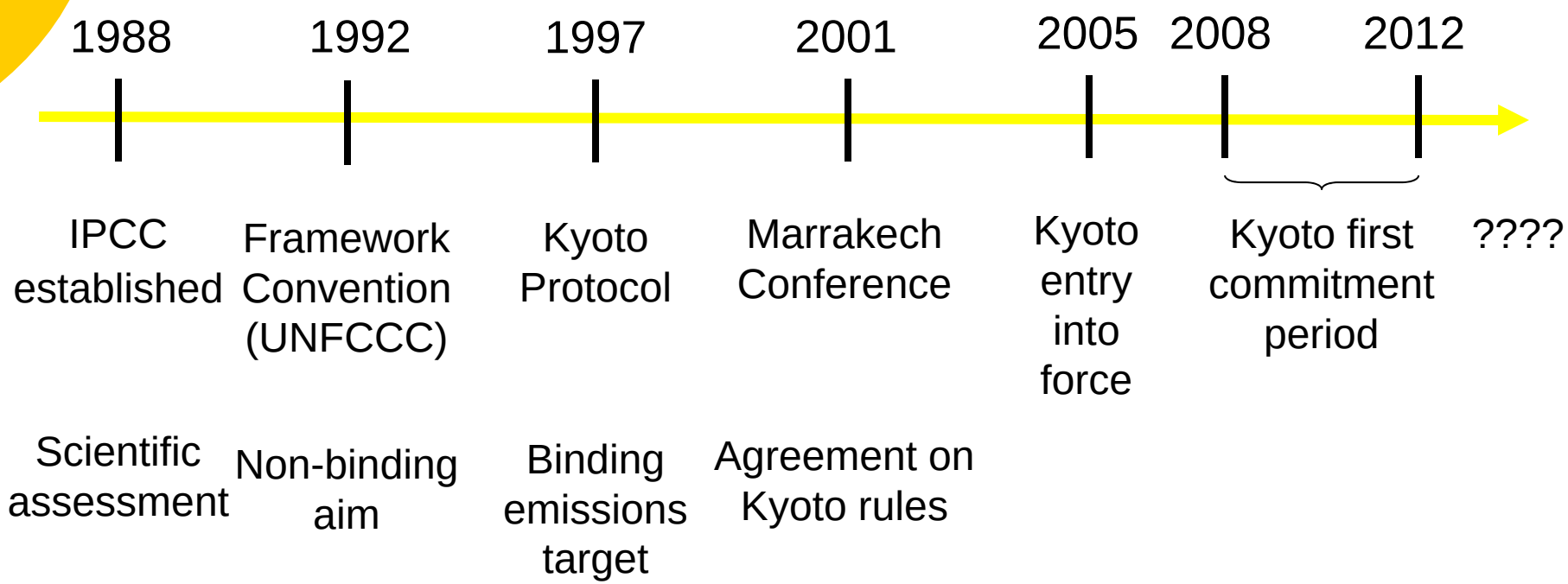
… But Even Rich Societies Vulnerable

Heat wave in Europe in 2003 claimed 35,000 lives





Development of the International Climate Change Regime

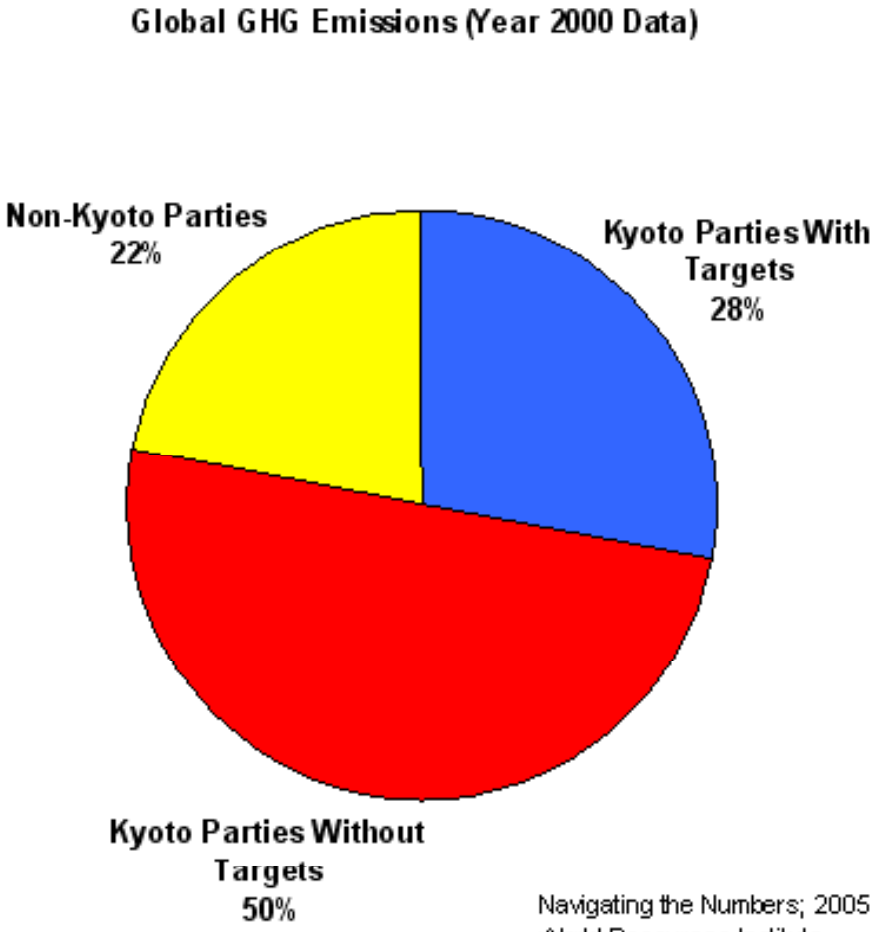


Framework Convention/Protocol Approach

- Framework Convention/Protocol approach allows states to proceed incrementally
- Framework Convention adopted in 1992
  - Establishes general system of governance, but no binding targets
- Kyoto Protocol, 1997
  - Developed (Annex I) countries: Binding economy-wide emission targets for 2008-2012 “commitment period”

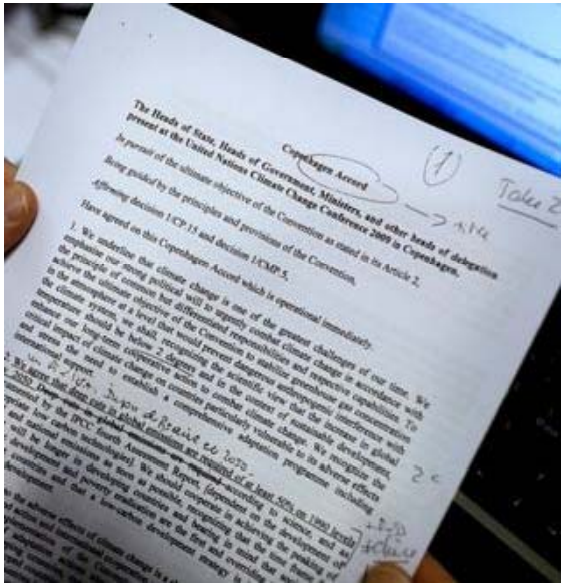
Where are we now?

- Kyoto Protocol came into force in 2005
- But….
  - Kyoto targets cover only about ¼ of global emissions
  - Kyoto first commitment period ends in 2012



Navigating the Numbers; 2005
World Resources Institute
Year 2000 GHG data

Copenhagen Accord



- Political not legal agreement
- Aspirational goal:
  - Limit temperature increase to 2° C
  - Review by 2015
- Process for recording mitigation pledges
- Significant new financial assistance
- MRV: international consultation and analysis

Ways of analyzing climate change problem

- Political:
  - Prisoners' dilemma analysis
  - Domestic politics
- Economic
  - Market failures / externalities
  - Cost-benefit analysis
- Ethical
  - Equity

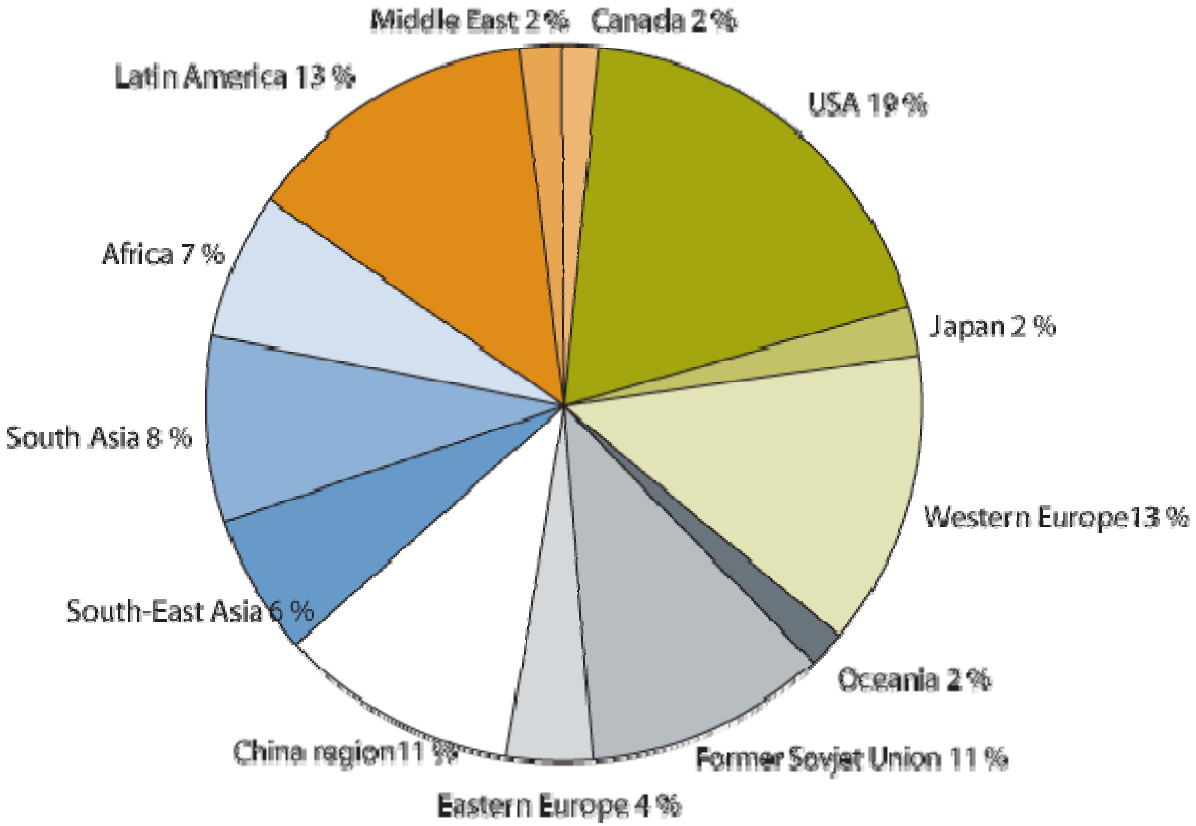
Equity and climate change

- Mitigation: how should burdens be distributed?
  - Allocation of emission reductions?
  - Who should pay?
- Impacts
  - Financial assistance for adaptation
  - Compensation for damages – “carbon debt”

Allocation of emissions

- Historical responsibility
- Current capacities
- Equal entitlements

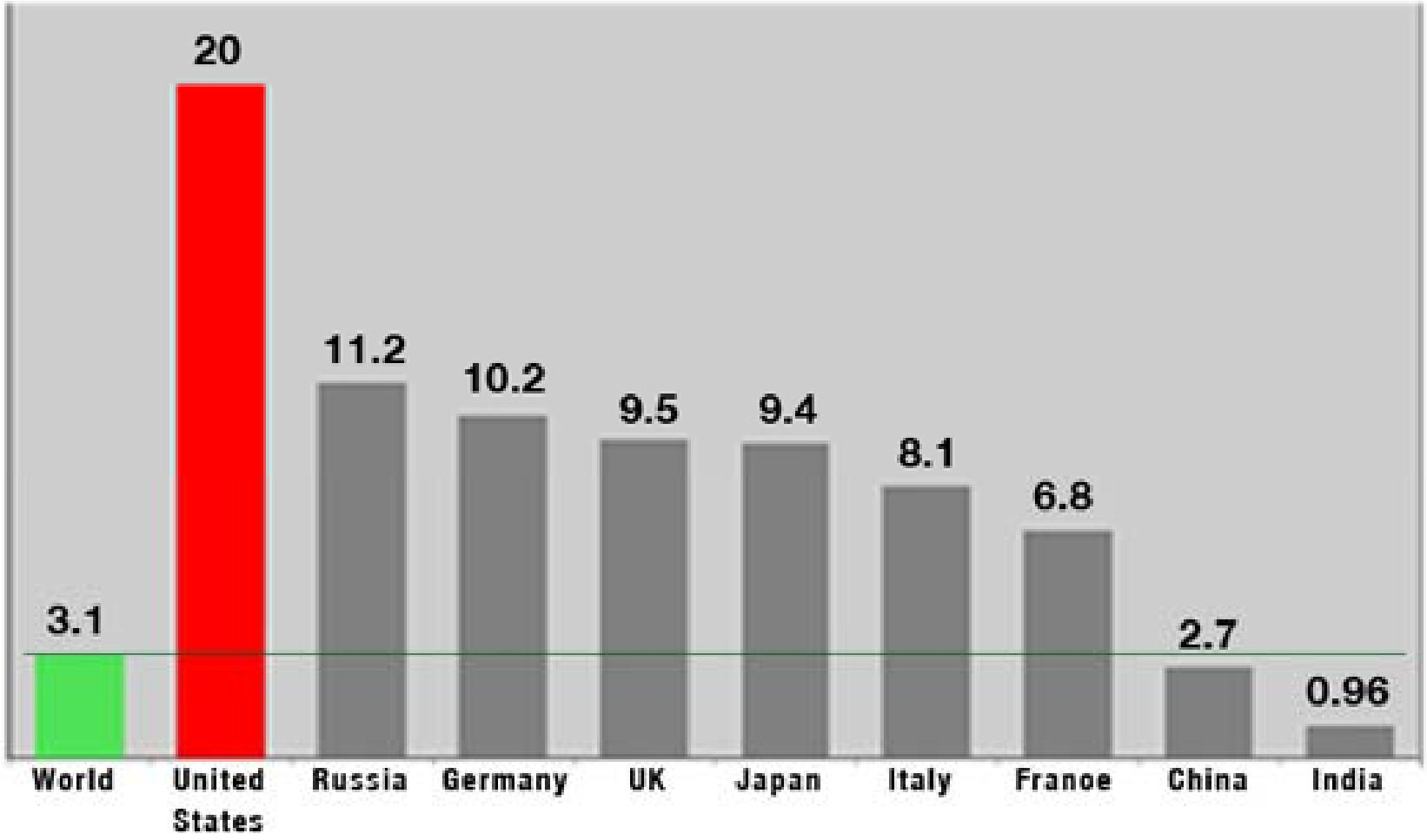
Historical Contributions to Global Warming, 1890-2000



Contributions to global warming in year 2000 based on the "Kyoto gas" emissions in the period 1890 - 2000. Source: CICERO 2006

Comparing Emissions per Capita

in tons of Carbon Dioxide



Source: Energy Information Administration
International Energy Annual 2003

Ways of analyzing climate change problem

- Political:
  - Prisoners' dilemma analysis
  - Domestic politics
- Economic
  - Market failures / externalities
  - Cost-benefit analysis
- Ethical
  - Equity
- Human rights?

Climate change and human rights

- How would we analyze climate change from human rights perspective?
- What does human rights analysis add?
- What are limits/problems?

Human rights analysis of climate change

- How does climate change affect human rights?
- What human rights are involved?
- What are the correlative duties?
  - Duty to respect?
  - Duty to protect?
  - Duty to fulfill?
- Who owes these duties?

What would human rights perspective add?

- Consciousness raising:
  - Greater public awareness of human costs of climate change?
  - Greater appreciation of ethical issues
- Higher priority for emissions reductions vis a vis other policy goals
- Legal procedures / remedies

Potential problems with human rights approach

- Uncertainties about causation of particular events/harms?
- Difficulties of assessing responsibility -- collective vs. individual responsibility?
  - Individual states can't solve
- Makes compromises, negotiated outcomes more difficult?