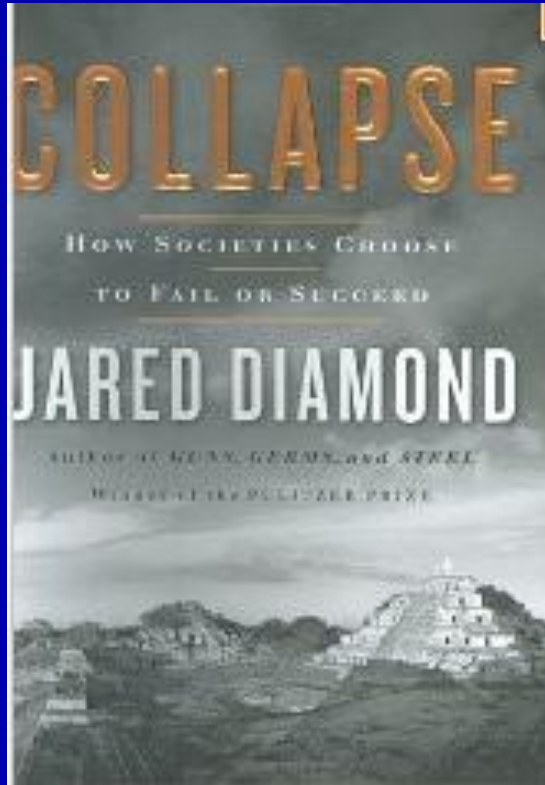
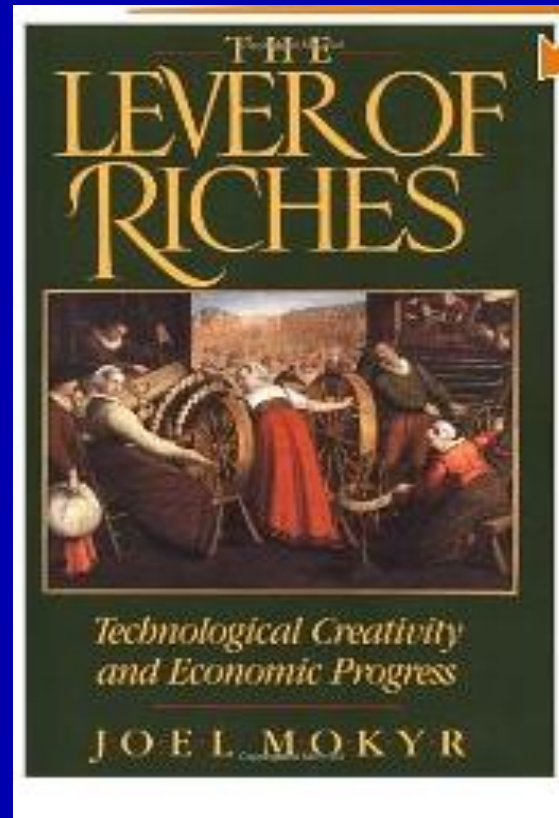


Earth as a Home for Humanity in the Future



How Societies
Choose to Fail or
Succeed



Technological
Creativity and
Economic Progress

Natural resources (water,
energy, minerals, land,
climate)

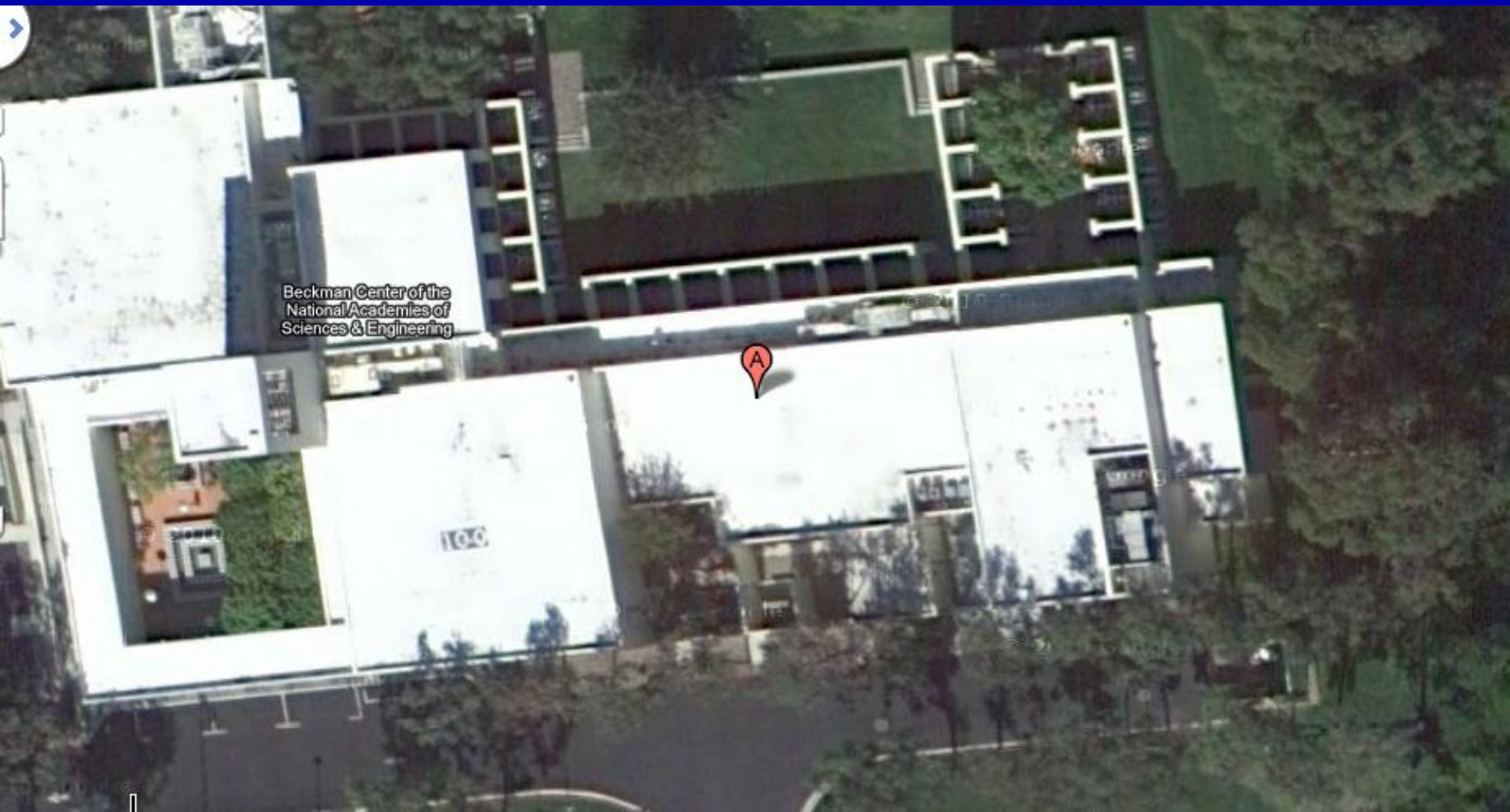
Human and environmental
health

Myopic decisions in face of
short term hardship

Political, governance, and
economic institutions

Technological change,
know-how, spirit of
inquiry and the institutions
that enable, allow, and
foster spirit of inquiry



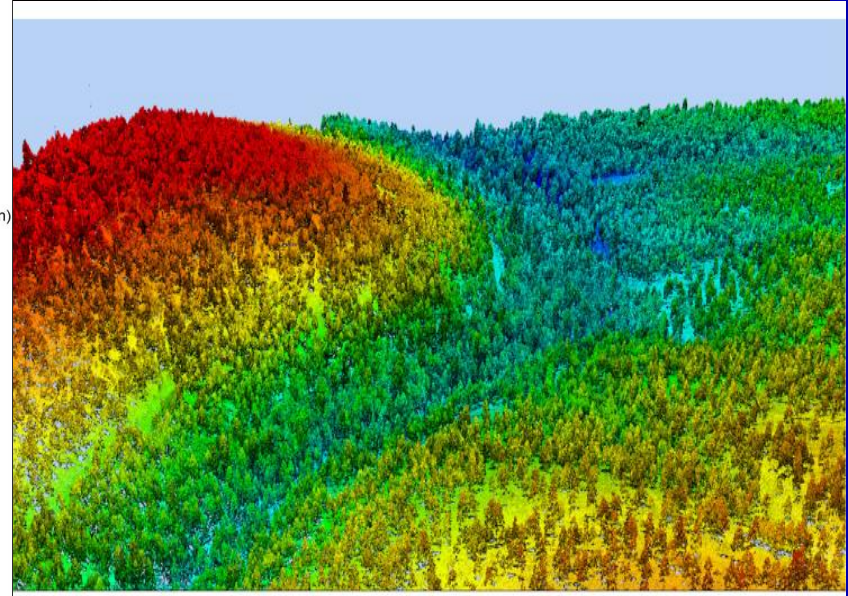
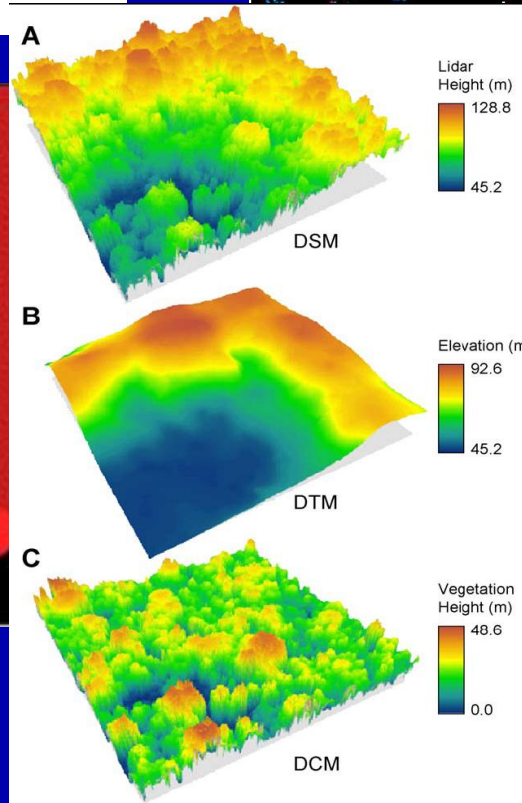
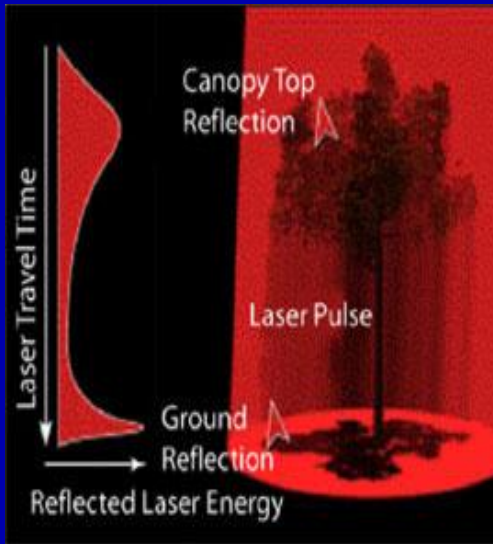
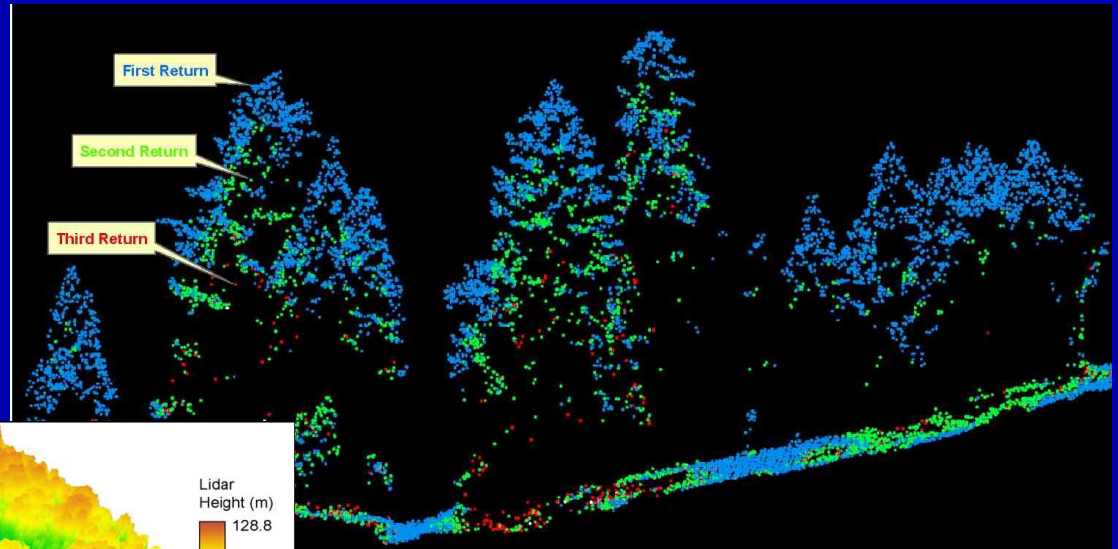
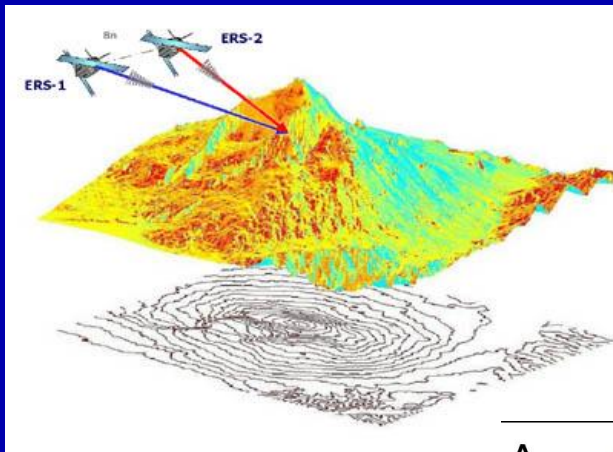




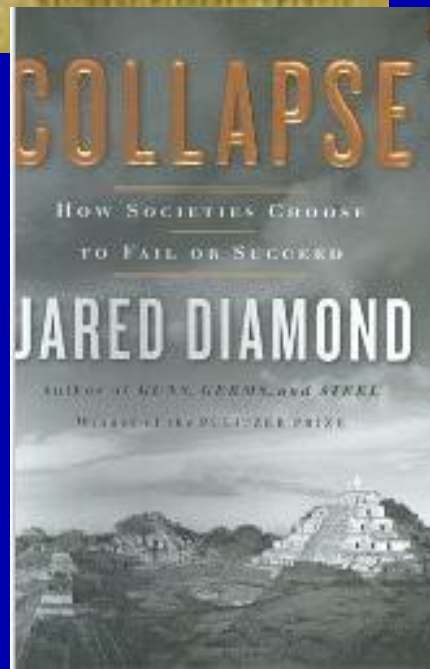
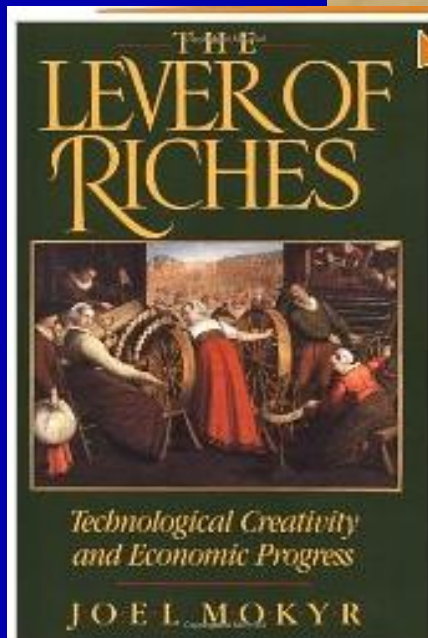
October 31, 2001

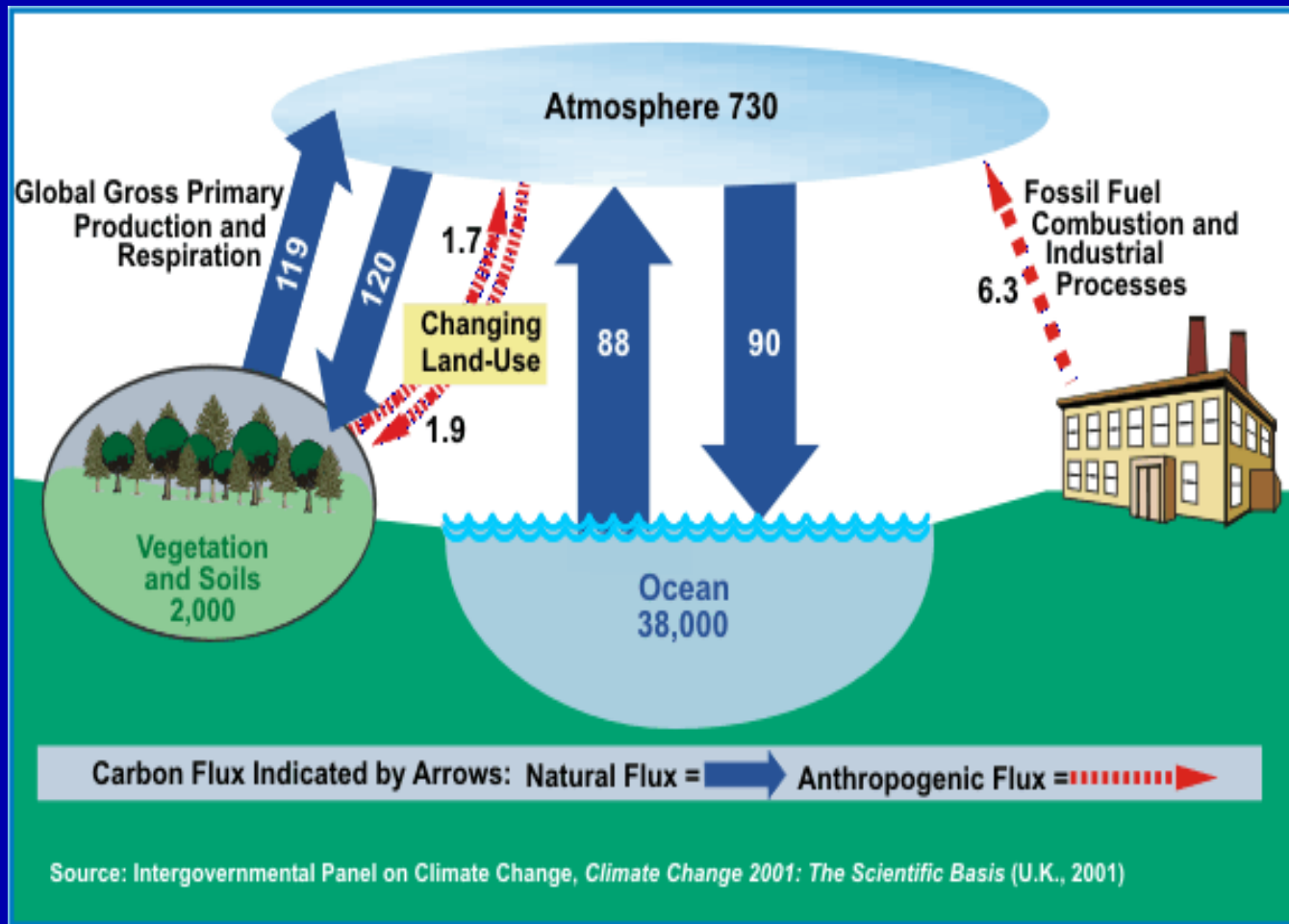


August 21, 1990



“Just as the invention of the mirror allowed humans to see their own image with clarity for the first time, we can now see ourselves for the first time living on and altering a dynamic planet. We have barely seen the beginnings” (NRC 2007)

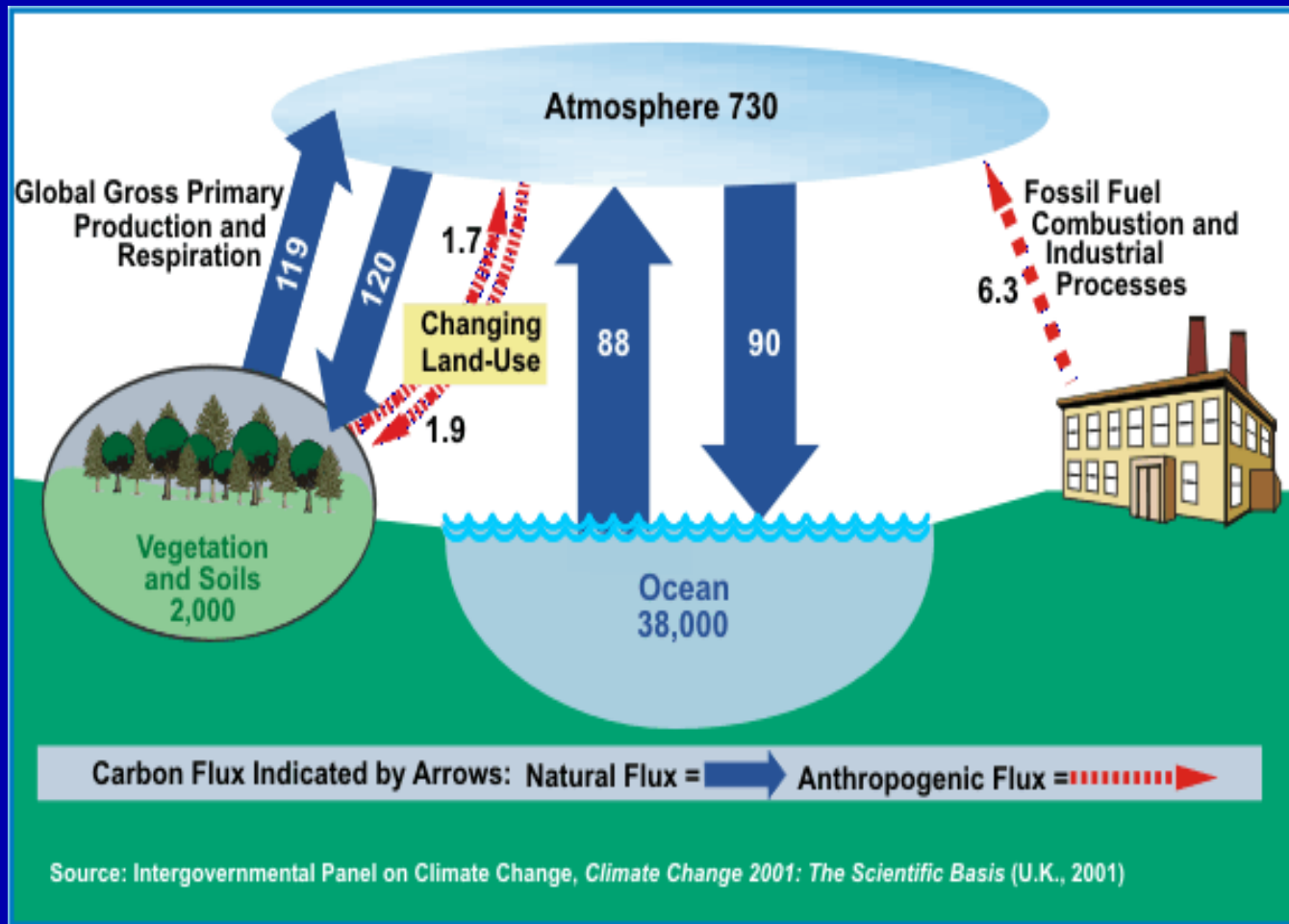




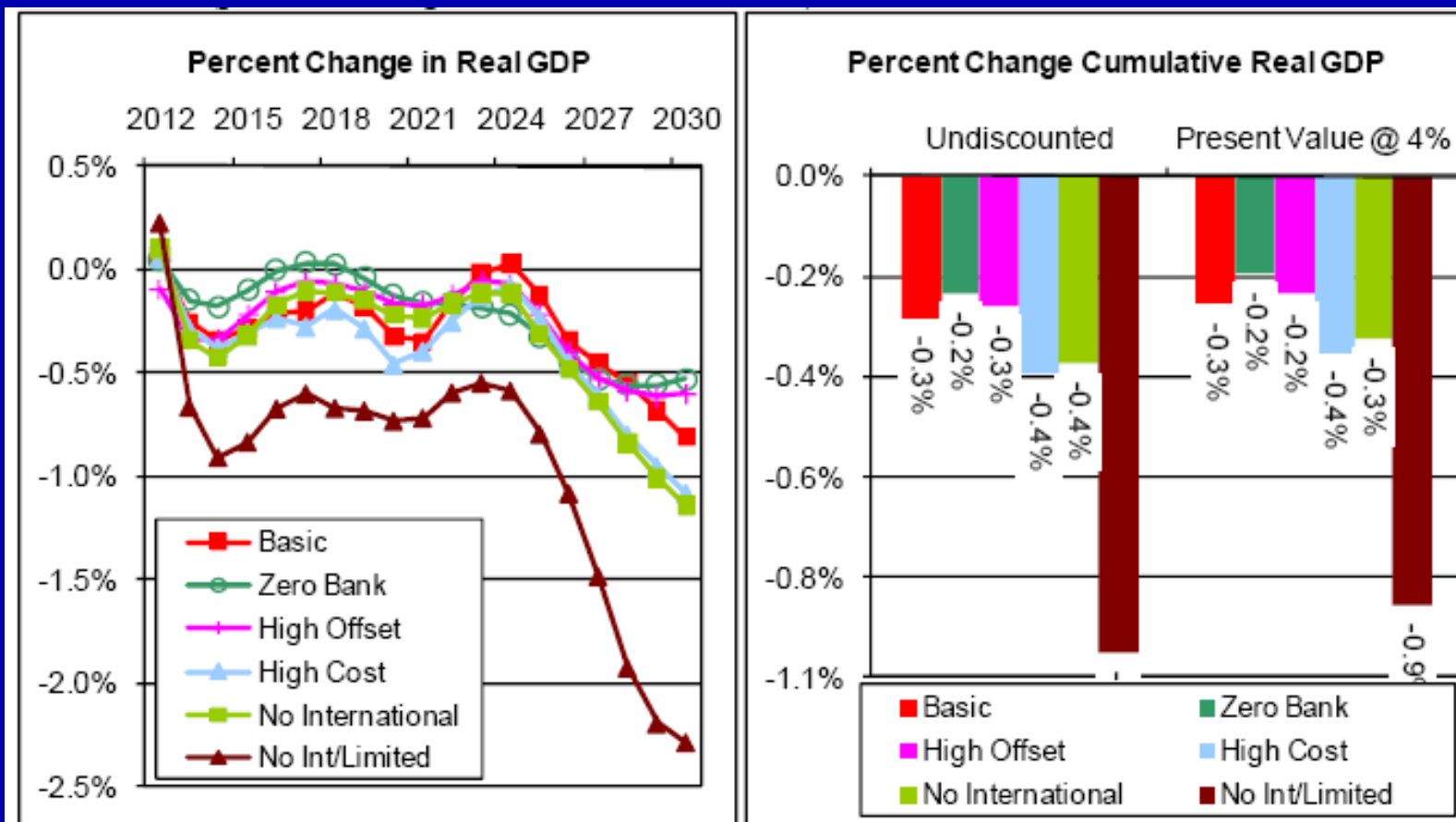


EU ETS Price Development





Economic costs of policies to manage climate: projected changes in national GDP



Source: National Energy Modeling System runs, STIMULUS.D041409A, HR2454CAP.D072909A, HR2454NOBNK.D072909A, HR2454HIOFF.D072909A, HR2454HC.D072909A, HR2454NOINT.D072909A, and HR2454NIBIV.D072909A.

- Cumulative change in GDP ranges from -0.2% (\$432 billion in 2000 dollars) to -0.9% (\$1,897 billion in 2000 dollars)

Source: EIA, 2009



United Nations



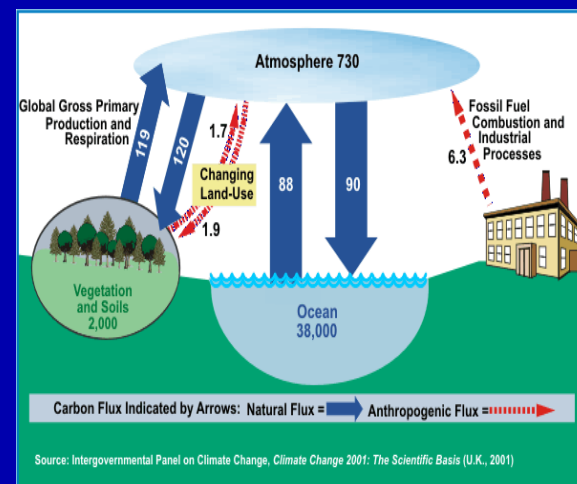
Framework Convention on Climate Change

ADVANCE VERSION

FAO/UNFCCC/2010/14

Distr.: General
13 August 2010

Original: English



Ad Hoc Working Group on Long-term Cooperative Action
under the Convention

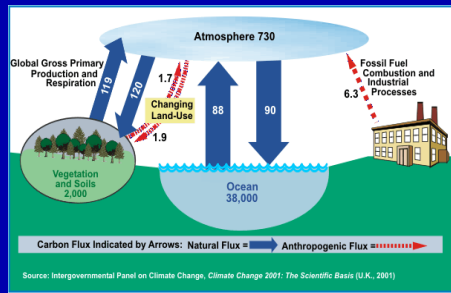
Twelfth session

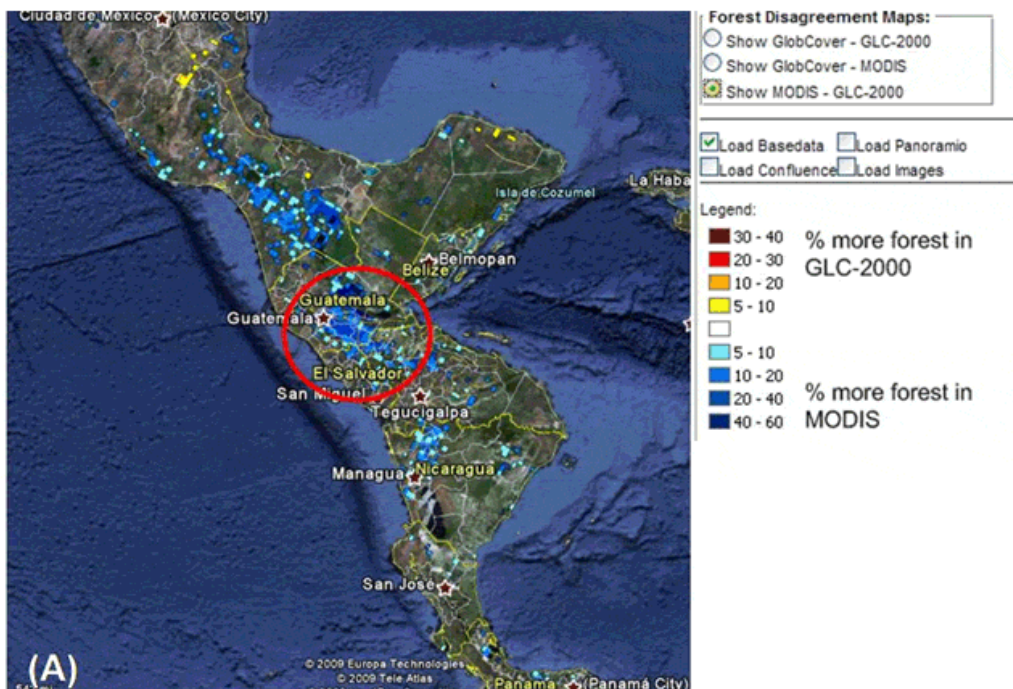
Tianjin, 4–9 October 2010

Item X of the provisional agenda

Negotiating text

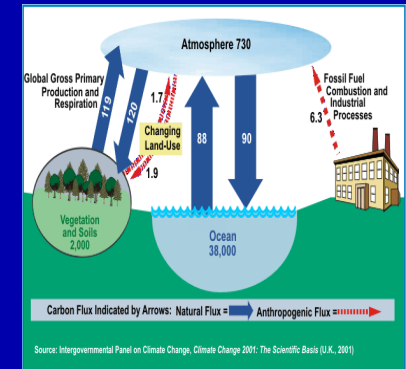
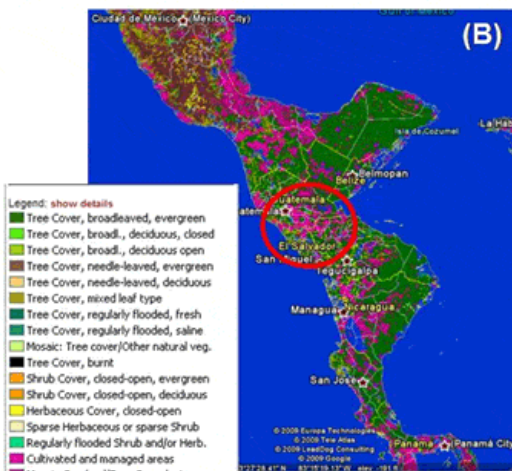
10. [Requests the Subsidiary Body for Scientific and Technological Advice, at its [xx] session, to develop, as necessary, modalities for [measuring, reporting and verifying] anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, forest carbon stocks and forest area changes resulting from the implementation of activities referred to in paragraph 3 above[, and consistent with any guidance for measuring, reporting and verification of nationally appropriate mitigation actions by developing country Parties agreed by the Conference of the Parties], taking into account methodological guidance in accordance with decision 4/CP.15, for adoption by the Conference of the Parties at its [xx] session.]





GLC2000

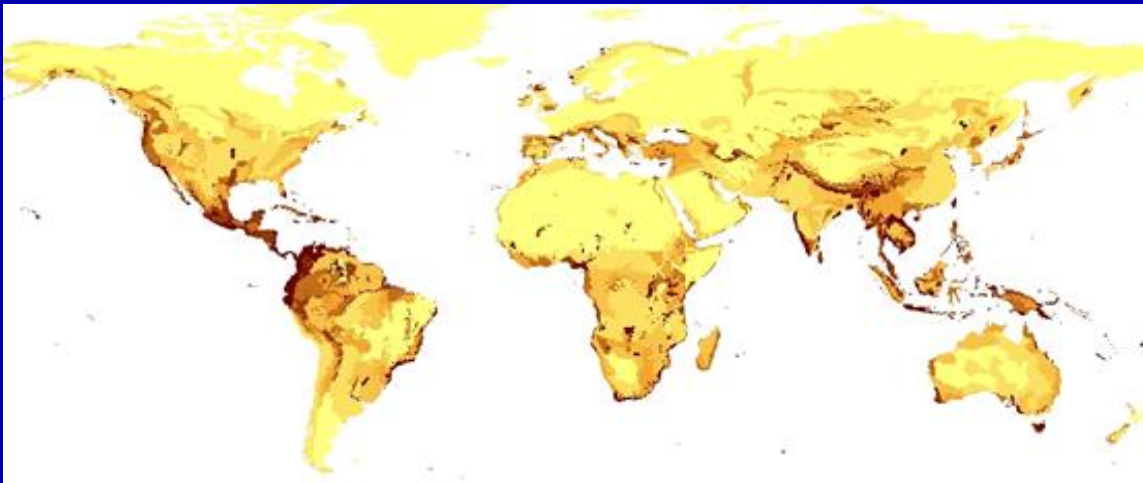
MODIS



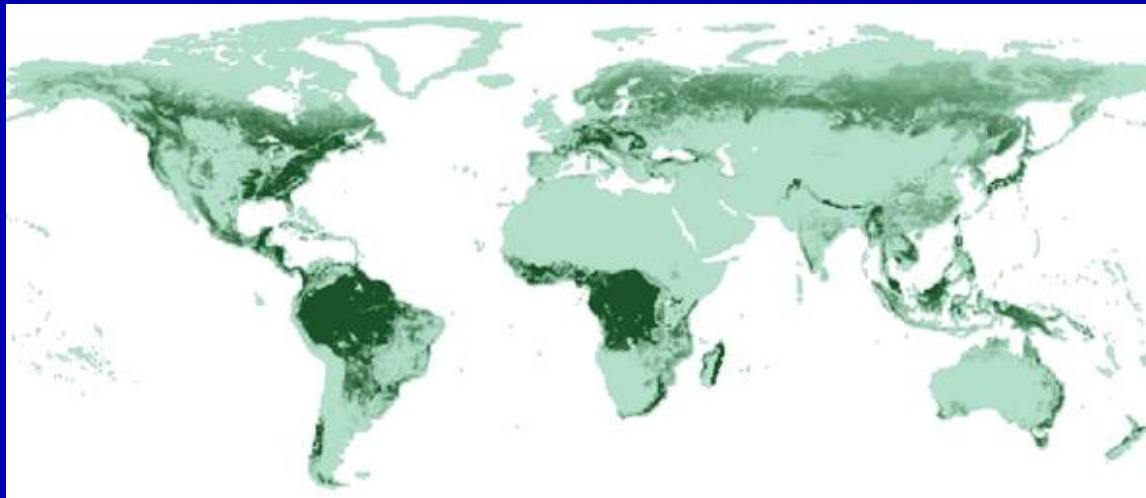
Forest cover from Mexico to Panama: discrepancies between measures

Sources: Geo-WIKI, 2009;
Waggoner, 2009

Back Up Slides



Species richness (number of mammal species per km², by ecological region, using IUCN data)



Estimated above ground carbon (tons of carbon/ha)

Source: Siikamäki 2009