The International Geosphere - Biosphere Programme

GLOBAL CHANGE
IGBP

Role and Objective of IGBP

IGBP is an international scientific research programme on global change. Its objective is:

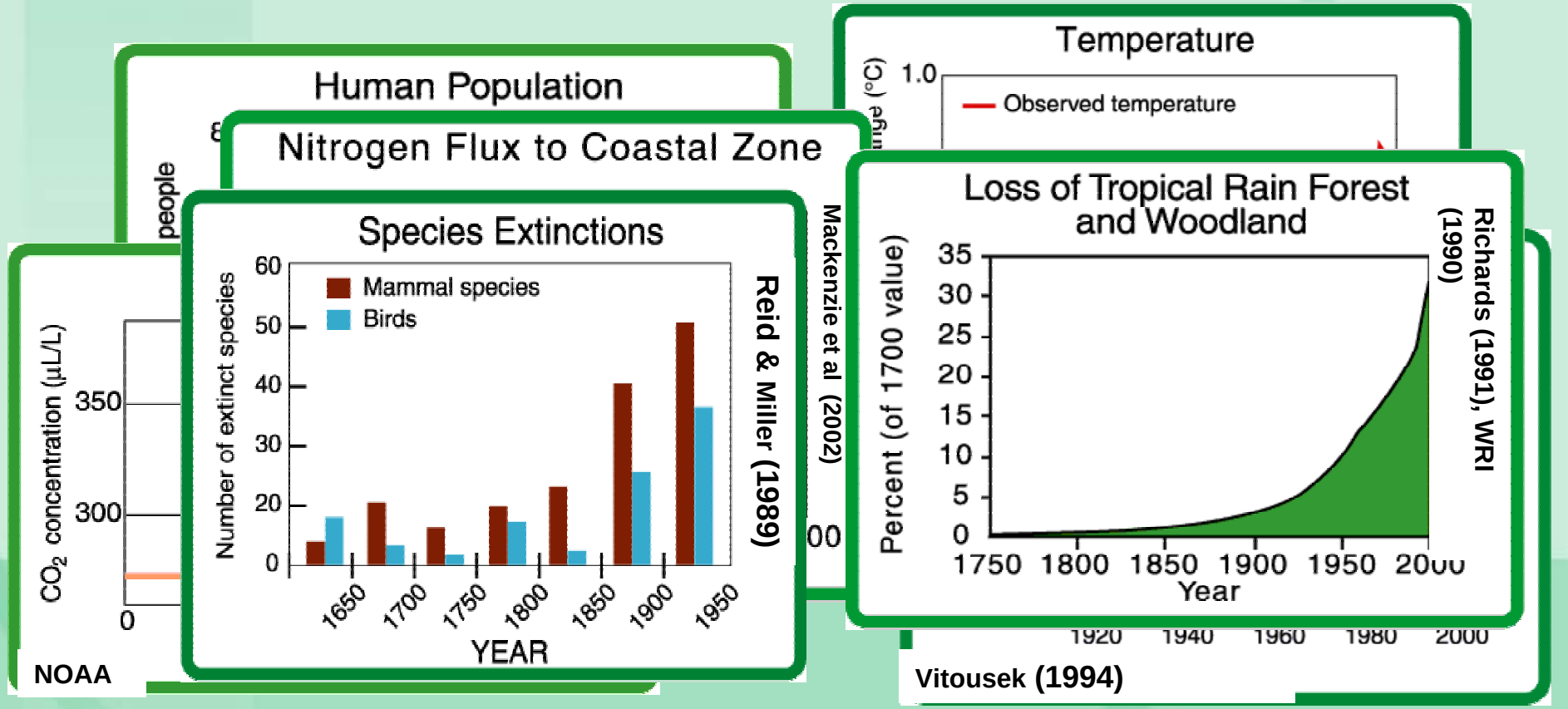
- to describe and understand Earth System dynamics,
- focusing on the interactive biological, chemical and physical processes,
- the changes that are occurring in these dynamics,
- and the role of human activities in these changes.

GLOBAL IGBP CHANGE

What is Global Change?

- Global Change is more than Global Climate Change
- It has natural PLUS human/social dimensions
- A constellation of changes, many global in domain

For example, we see large changes in:



Products

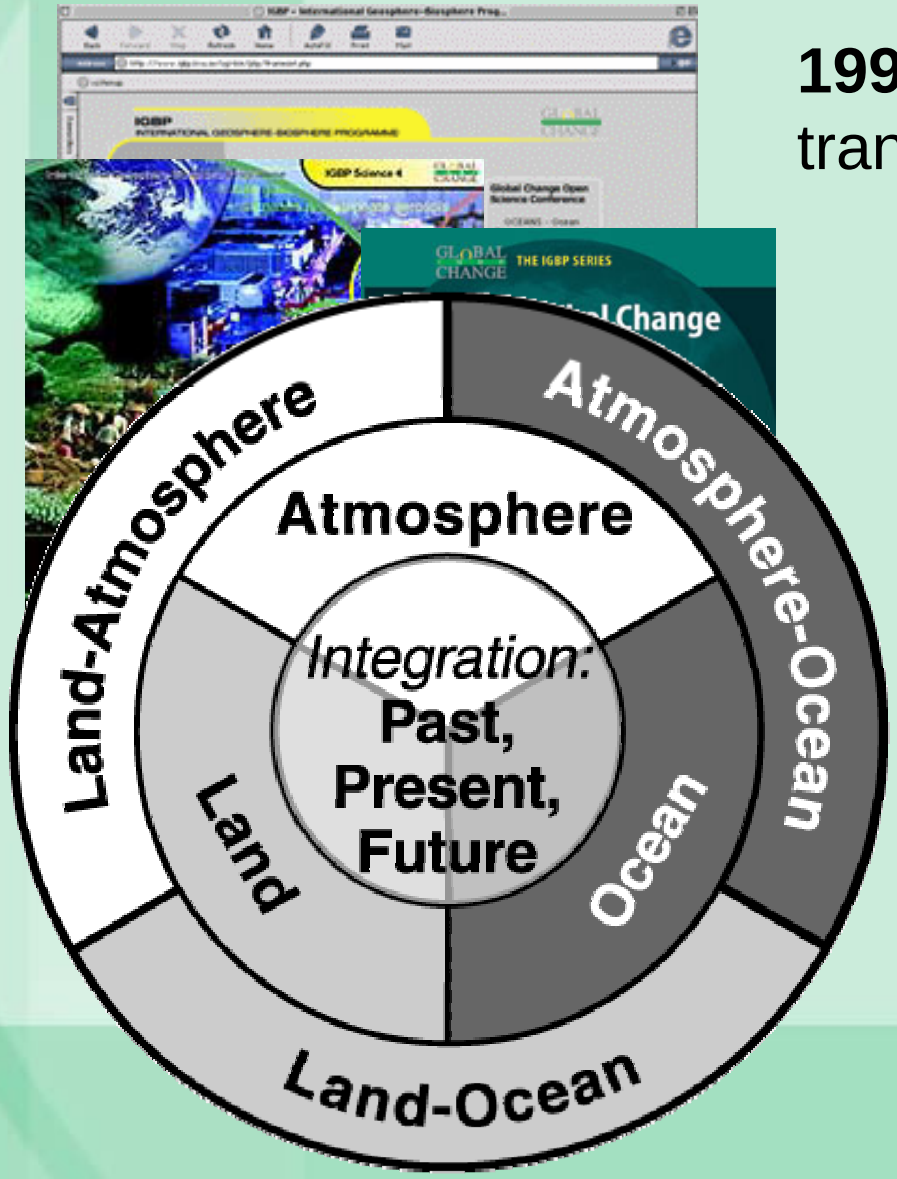
- Synthesis papers
- Journal special issues
- Books (e.g., IGBP Series)
- Science Plans

- Quarterly Newsletter
- Science Series
- Annual Report
- IGBP & project brochures
- IGBP Directory
- Website
- PowerPoint presentations
- Press releases, events

www.igbp.net

GLOBAL IGBP CHANGE

The New IGBP

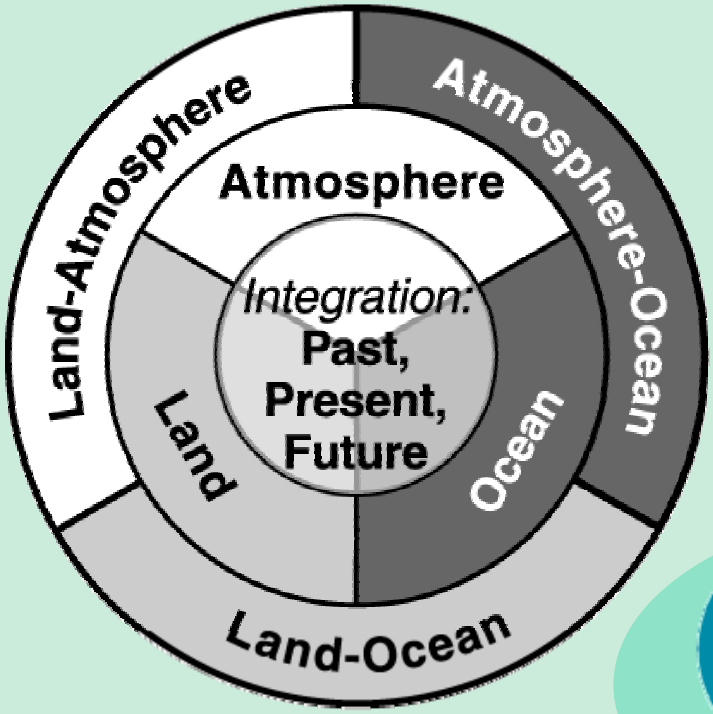


1999-2003: synthesis project, transition, and restructure

2004: new questions and structure, with a focus on:

- biogeochemical sciences with relevance to issues of societal concern
- interdisciplinarity and integration
- Earth System context

GLOBAL IGBP CHANGE



IGAC
INTERNATIONAL GLOBAL ATMOSPHERIC CHEMISTRY

CACGP

iLEAPS

WCRP Climate

CACGP

solas
surface.ocean lower.atmosphere.study

International Council for Science
Scientific Committee on Oceanic Research

PAGES
PAST GLOBAL CHANGES

IGBP
GAIM

AIMES

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GLOBEC

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LOICZ
IGBP

GLOBAL
IGBP
CHANGE

News from the 20th IGBP Scientific Committee Meeting

- New science plans approved for
  - Global Land Project (GLP), Integrated Marine Biogeochemistry and Ecosystem Research (IMBER), International Global Atmospheric Chemistry (IGAC), Integrated Land Ecosystem-Atmosphere Processes Study (iLEAPS), Land-Ocean Interactions in the Coastal Zone (LOICZ)
- New Fast-Track Initiative on
  - Learning about future ocean acidification from past changes
- Analysis, Integration and Modeling of the Earth System (AIMES) project well on its way

IGBP-CEOP/IGWCO
Data & Other Potential Collaborations

- IGBP requires integrated hydromet information on *global* land surface, atmosphere, coastal zone, open oceans, cryosphere:
  - Variables controlling land/aquatic productivity, habitat/fisheries, lateral fluxes of water & constituents, land-atmosphere-ocean exchanges of water, energy, trace gases
- Purpose: cal/val of models and synthesis
- Value to CEOP/IGWCO:
  - Help achieve an integrated picture of a cycle (i.e. H20) central to functioning of Earth System; establish benchmarks to assess ongoing changes to the hydrosphere