

PAGES science contributions to the AR5



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What is PAGES?

PAGES (Past Global Changes) is the IGBP core project that addresses past changes in the Earth System in a quantitative and process-oriented way in order to improve projections of future climate, environment and sustainability.

PAGES promotes integrative science that focuses on the reconstruction, analysis and modeling of past natural and anthropogenic changes of the climate and the environment. Associated integrative research includes high-resolution time series, spatially dense mapping and modeling of past states of the Earth System, multi-proxy reconstructions, and transient and ensemble model runs.

Why Paleoscience?

Past global change research shows us that what has happened can happen.

In addition, paleoscience provides:

- A long-term (natural) context for recent changes.
- Data to assess the roles of natural climate variability and anthropogenic forcing in global change.
- Testbed scenarios for aspects of the present and near future climate and environment.
- The only way to assess processes that act on timescales longer than the instrumental record.
- Scenarios as case studies for the sensitivity and operation of the Earth System.
- Paleodata as benchmarks to assess model skill.
- A quantitative understanding of Earth System processes through modeling paleo-scenarios.

What does PAGES deliver?

- Research results that address the major scientific issues in paleoscience.
- Closing of knowledge gaps described in the Fourth IPCC Assessment Report.
- Support of innovative scientific approaches and new data acquisition in areas that will lead to a better understanding of the Earth System.
- Development of standardized reference datasets.
- Synthesis and dissemination of paleoscience research results.
- Establishment of an interdisciplinary and internationally inclusive paleoscience research framework.
- Integration of paleoscience into other global change research agendas.

