



SUMMARY OF IGCP 2016

IN GLOBAL CHANGE THEME

FEBRUARY 2017

The theme “Global Change: Evidence from the Geologic Record” studies the abundant evidence for global physical, chemical, biological, and astronomical changes that have affected Earth over geological timescales. This information can be used to enhance geological correlations and interpretations in deep time, and also provide a critical background for understanding the mechanisms and effects of present and possible future global change on our planet.

Global Change is an exceptionally active theme, with 12 projects in 2016:

- IGCP 587 – The Ediacaran (Vendian) Puzzle
- IGCP 591 – Early- to Mid-Paleozoic Revolution
- IGCP 596 – Mid-Paleozoic Climate and Biodiversity
- IGCP 608 – Asia-Pacific Cretaceous Ecosystems
- IGCP 609 – Cretaceous Sea Level Changes
- IGCP 610 – Caspian to the Mediterranean
- IGCP 624 – OneGeology
- IGCP 630 – Permian-Triassic Climatic Extremes and Life
- IGCP 632 – Continental Crises of the Jurassic
- IGCP 639 – Sea Level Changes from Minutes to Millennia
- IGCP 650 – Pamir High Elevation International Geophysical Expedition
- IGCP 653 – Great Ordovician Biodiversification Event

The seventy-six leaders of these 12 projects hail from 31 countries located on every inhabited continent.

Participants in Global Change projects average 33% females (range 20--48%), 37% students and new researchers (range 16-80%), and 38% from developing countries (range 14-46%). Some of these ratios could be improved.

There are excellent collaborations with IUGS, principally through the subcommissions of the International Committee on Stratigraphy.

There are excellent collaborations with UNESCO, principally through the Global Geoparks program. IGCP project 587 played a significant role in establishing a UNESCO World Heritage Site (Mistaken Point) based on geological features of outstanding universal value.

Many projects engaged in public outreach through public talks, interviews with the media, and/or briefings to policy makers (to varying degrees as appropriate to the subject matter).

Projects produced numerous scientific papers in international journals. Two IGCP projects in Global Change (IGCP 608 and 630) each generated more than 100 refereed scientific papers that included multiple publications in *Geology*, *PNAS*, and journals in the *Nature*-publishing group.

Most projects in global Change had two or more meetings in 2016, and these meetings took two general forms. Most projects had at least one meeting specific to the project, commonly centered on a field trip and/or workshop and used for illustration, discussion, education, and capacity building within the project. Most projects had at least one meeting at a major conference (e.g. EGU, GSA, AGU, Goldschmidt) that provided a showcase for the scientific contributions of the project and a chance for integration and dialogue with other subdisciplines in geoscience. The International Geologic Congress met in Cape Town in August 2016, and many projects took advantage of this to sponsor special sessions and/or field trips at this global geological interchange.

Five projects in Global Change (IGCP 587, 591, 596, 624, 650) completed their terms at the end of 2016, and two new projects (IGCP 652, 655) will start in 2017.