

Strengthening International Cooperation in Mathematical Geosciences

The principal goal of the project is to promote international cooperation in mathematical geosciences across geophysics, geodesy, geology, and geochemistry. In particular, the project aims to strengthen scientific collaboration between IUGG and the International Association for Mathematical Geosciences (IAMG).

The project will provide scientific expertise to support and strengthen the implementation of:

- (i) the United Nations 2030 Agenda for Sustainable Development;
- (ii) the Sendai Framework for Disaster Risk Reduction 2015-2030;
- (iii) the Paris Agreement on Climate Change 2015-2030;
- (iv) the United Nations Decade of Ocean Science for Sustainable Development 2021-2030;
- (v) the United Nations International Decade of Sciences for Sustainable Development 2024–2033; and
- (vi) the ISC Strategic Framework 2025–2028 (particularly in a part related to strengthening digital technologies).

Specific aims of the project are:

- To strengthen collaboration between mathematicians, computer scientists, statisticians and geoscientists.
- To link quantitative geoscientific knowledge with policymaking and public engagement, enhancing societal trust in science and accelerating implementation of UN agendas related to climate change, disaster risk reduction, and sustainability.
- To advance science education, particularly in less-affluent countries, through the development of a digital library of mathematical, computational, and statistical tools.