

International Association of Geodesy - Sub-Commission 3.4: Cryospheric Deformation (joint with IACS)

Annual Report 2023-2024 to IACS

At the IUGG meeting, a joint symposium JG01 on “Interactions of the Solid Earth With Ice Sheets and Sea Level” was organized by the IAG (International Association of Geodesy) sub-commission 3.4 on “Cryospheric deformation”, the IAG joint study group 3.1 on “Geodetic, seismic and geodynamic constraints on Glacial Isostatic Adjustment” and the “Earth-Ice-Sea level” sub-committee from the SCAR (Scientific Committee on Antarctic Research) scientific research program INSTANT (Instabilities and Thresholds in Antarctica). The symposium invited contributions using observations of mass changes in the cryosphere and oceans, and their interaction with solid Earth deformation, showing the influence of glacial isostatic adjustment on paleo and modern observations of sea level or ice sheet behavior, discussing seismicity induced by ice-mass and sea-level changes, as well as presentations highlighting geophysical studies of the rheology of the solid Earth in the context of sea-level and ice-sheet studies.

Furthermore, the chairs of the joint sub-commission were involved in the organization of the 2023 ICCC workshop on Geodesy for Climate (<https://iccc.iag-aig.org/iccc-workshops/ws23>) and the preparations of the 2025 Glacial Isostatic Adjustment Workshop.