

Data Assimilation and Inverse Problems in Geophysical Sciences

The main goal of the project is to produce a synthesis of important theoretical methods in data assimilation and inverse problems, data analyses and interpretations, and various applications relevant to major disciplines of the Union as well as to societal needs. This project will contribute to (i) the implementation actions for the IUGG Strategic Plan (2016-2023) in part 2 “Encourage closer cooperation between the IUGG groups” and part 7 “Promote fundamental research and education in the geosciences”; (ii) the Action Plan of the International Science Council (Domain Two: “The Digital Revolution”); and (iii) to the 2022 International Year of Basic Sciences for Development (IYBSD2022), an initiative of ISC unions and endorsed by ISC and UNESCO. The proposed project will provide a scientific background for an implementation of sustainable development goals (http://www.iugg.org/policy/IUGG_SDGs_AIZ.pdf). Moreover, the project contributes to science education, especially in less-affluent countries.