



IAG Scientific Assembly 2025: Geodesy for a changing environment

Symposium H02: Northeast Italy with Focus on the Po Plain – Impacts of Changing Climate on the Region

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The Po plain is a rapidly subsiding sedimentary basin surrounded by the Alps and Apennines chains. This area is of great importance for Italy's economy by hosting nearly 40% of the country productive activities. Subsidence in this region is due to the superposition of natural and anthropogenic processes. Landslides are common phenomena in the northern Apennines; they are an ever present threat causing major damages to infrastructures and altering also the landscape significantly. The Northern Adriatic region is characterized by a fragile coastal environment with many low-lying systems like deltas, lagoons, wetlands, plains, and coastal cities such as Venice and Ravenna. The Po River delta is one of the major deltaic systems in the Mediterranean Sea. Due to the combination of subsidence, coastal erosion and sea-level rise, the coastal zone is exposed to an increasing high risk of inundation. We welcome presentations highlighting and discussing fingerprints of climate change on the region environment using geodetic measurements, both space and terrestrial as well as geophysical, geological, hydrological, and climatic data among others. Outcomes of modelling studies are also invited. The session supports the development of the activities of the IAG Inter-Commission Committee on "Geodesy for Climate Research".