FINAL WORKSHOP

27th February 2026, h. 11:00-16:00 CET | *online*

Register here → http://tinyurl.com/SubRISK

Land subsidence-induced risk to urban environments: present-day baseline and future scenarios

OBJECTIVES This international workshop aims to stimulate the scientific discussion on data, methods and perspectives on using satellite InSAR and other geospatial data on urban settlements, geology, hydrogeology and population to gather insights into land subsidence-induced risk to urban infrastructure and the resulting socio-economic impacts. The event features several international experts who will share their experiences on implementing risk assessment workflows and advanced modeling in major cities and countries of Europe and beyond, plus SubRISK+ lead scientists who will illustrate the project methodologies and key results.

SCIENTIFIC PROGRAMME

11:00 – 11:10 **Opening and welcome**
SubRISK+ team | CNR-ISAC, IUSS, UNIPD

11:10 – 12:10 **Differential land subsidence-induced risk**

11:10 *Present-day differential land subsidence risk in the metropolitan cities of Italy*
Dr **Francesca Cigna** | CNR-ISAC, Rome, Italy

11:25 *Urban land subsidence and differential settlement hazards to infrastructure across major U.S. cities*
Prof **Leonard Ohenhen** | University of California, Irvine, California, USA

11:40 *Beyond measuring coastal subsidence: bridging observation, attribution, and risk for resilient infrastructure and communities*
Prof **Manoochehr Shirzaei** | Virginia Tech, Blacksburg, Virginia, USA

11:55 *From aquifers to salt to coal: some lessons on land subsidence and its socio-environmental impacts*
Prof **Mahdi Motagh** | GFZ Helmholtz Centre for Geosciences, Potsdam, Germany

12:10 – 12:55 **Mapping, understanding and socio-economic and environmental impacts of land subsidence**

12:10 *Investigating land subsidence drivers and socio-economic exposure to differential land subsidence in the Emilia-Romagna Region, Italy*
Dr **Roberta Bonì** | IUSS, Pavia, Italy

12:25 *Flood risk and financial impacts of projected subsidence in the Spring Creek watershed, Southeast Texas, USA*
Dr **Ashley Greuter** | Harris-Galveston Subsidence District, Friendswood, Texas, USA

12:40 *The future of sinking coastal cities in Java*
Dr **Alessandro Novellino** | British Geological Survey, Keyworth, UK

12:55 – 14:00 *Lunch break*

14:00 – 15:00 Land subsidence modeling

14:00 *Assimilation of piezometric records and InSAR data to model land subsidence in Bologna, Italy*
Prof **Pietro Teatini** | UNIPD, Padua, Italy

14:15 *The importance of hydrogeological models in land subsidence simulations*
Prof **Shih-Jung Wang** | National Central University, Taoyuan City, Taiwan

14:30 *Integrating neural network, InSAR and field measurements to model land subsidence evolution in the Beijing plain*
Prof **Zhu Lin** | Capital Normal University, Beijing, China

14:45 *Subsidence and building damage: a model chain*
Dr **Thibault Candela** | TNO, Utrecht, The Netherlands

15:00 – 15:45 Land subsidence future scenarios

15:00 *Projected land subsidence risk under climate change and groundwater withdrawal scenarios in the metropolitan cities of Italy*
Dr **Roberta Paranunzio** | CNR-ISAC, Rome, Italy

15:15 *Global land subsidence: Impact of climate extremes and human activities*
Prof **Laurie S. Huning** | California State University, Long Beach, California, USA

15:30 *Subsidence & sinkholes: Perspectives and current research at Uni Leipzig*
Dr **Djamil Al-Halbouni** | University of Leipzig, Leipzig, Germany

15:45 – 16:00 Closing remarks
SubRISK+ team | CNR-ISAC, IUSS, UNIPD