Introductory Webinar: Earth Observations for Disaster Risk Assessment & Resilience

Tuesdays & Thursdays, August 6-15, 2019

10:00-12:00 EDT (UTC-4) or 15:00-17:00 EDT (UTC-4)

According to a UN report, between 1998 and 2017, the U.S. alone lost $944.8 billion USD from disasters. Between 1878 and 2017, losses from extreme weather events rose by 251 percent. It is critical to develop disaster management strategies to reduce and mitigate disaster risks. A major factor in regional risk assessment is the evaluating the vulnerability of lives and property to disasters. Environmental information about disasters, their spatial impact, and their temporal evolution can plan an important role as well.

This webinar series will focus on Earth observation (EO) data useful for disaster risk assessment.

Part One: NASA Remote Sensing and Socioeconomic Data for Disaster Risk Assessment

Attendees will learn basic concepts and definitions in disaster risk management. Attendees will also learn about the types of satellites and socioeconomic data available through NASA for disaster risk management.

Part Two: Assessing the Risk of Floods and Cyclones Using NASA Data

Attendees will learn a methodology for analyzing remote sensing and socioeconomic data to assess flood and cyclone risk. Examples will be shown for an urban area (Houston, TX, USA) and a country (Mozambique). These case studies will use both historical and forecast data.

Part Three: Disaster Risk Assessment Case Studies Using Remote Sensing Data

This will cover two case studies for using remote sensing data. One on how New York state is using NASA data for heat wave risk assessment, another on the freely available online tools from the World Resources Institute for visualizing NASA remote sensing and socioeconomic data.

Part Four: Operational Application of Remote Sensing for Disaster Management

The Pacific Disaster Center will describe the data, applications, and strategies they use for disaster risk reduction, response, and relief operations.

ARSET empowers the global community through remote sensing training.

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