

Monitoring Urban Floods Using Remote Sensing

July 25 - August 1, 2018

According to the UNDP, by 2050 two thirds of the world's population is likely to live in cities. Urban flooding is already a major risk for cities. Increasing impervious surface area, inadequate storm water drainage, and aging infrastructure all contribute. As a result, growing urban populations will face a greater risk of flooding from extreme weather events. This webinar series will focus on the components of urban flooding that satellite data can track:

- extreme precipitation
- flooding
- waterlogged and ponded surfaces

Using satellite data allows individuals and organizations to develop better plans for handling floods. This can include developing better early warning techniques, better plans for rescue and relief, and more effective long-term infrastructure planning.

Session One, July 25

This session will provide an overview of causes and risks associated with urban flooding. It will also go through data needs for flood management (before, during, and after flooding) and how to use remote sensing to monitor precipitation.

Session Two, August 1

This session will look at examples of SAR-based urban flood monitoring and examples of LIDAR data for urban floodplain detection. Attendees will also learn about Landsat-based urban data, SRTM terrain data, socioeconomic data, and flood mapping tools.



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