Mapping Technologies During Hurricane Harvey

Julia Moline, Federal Emergency Management Agency

In August 2017, Hurricane Harvey caused record-setting flooding in Texas, resulting in \$6B in losses, displacement of over 30,000 people, and generating as much as 300 million cubic yards of debris. MIT Lincoln Lab acted quickly and deployed airborne LIDAR technology, conducting flyovers and developing detailed impact assessments and debris estimates over a wide area in a matter of weeks. The estimates were within 2% of US Army Corps of Engineers ground estimates, and were 30% more accurate than traditional ground estimates. This session will discuss the use of LIDAR technology after Hurricane Harvey in Texas and explore additional disaster applications, including preliminary damage assessments, site inspections, and infrastructure status reporting. It will address potential implementation challenges and discuss the steps necessary to revolutionize the way FEMA and our partners assess damages and delivery assistance.