

Hurricane Devastation Mapping and Modelling

I-SiTE Studio software, a product of Maptek Pty (Australia), was recently used by a team of engineers and researchers sponsored by the US National Science Foundation to map structural and geotechnical damage to levees and waterways in New Orleans, caused by Hurricane Katrina in August 2005.

Scanning was carried out on 10 different sites where levees had failed, and highly detailed 3D models were generated to assist with analysis and reconstruction. More than 180 scans were recorded over 5 days.

The objective of the laser scanning was to obtain precise measurements of the ground surface to map soil displacements at each levee site, the non-uniformity of levee height freeboard, depth of erosion where scour occurred, and distress in structures at incipient failure.

The laser mapping was conducted by researchers from the United States Geological Survey (USGS). At each levee site, the topographical surroundings were imaged on 13 or more individual scans. The investigators used I-SiTE Studio software to collect the scan point-cloud data and post process multiple scans into georeferenced solid surfaces.

<https://www.gim-international.com/content/news/hurricane-devastation-mapping-and-modelling>
