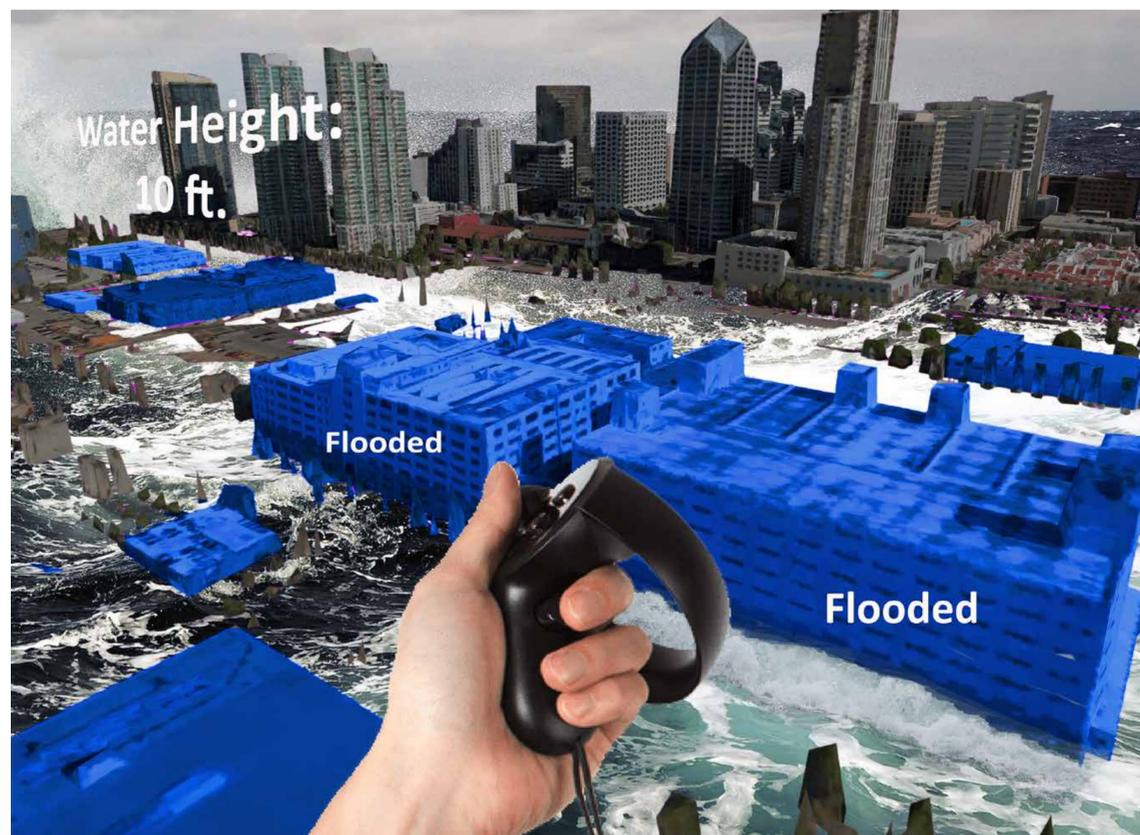
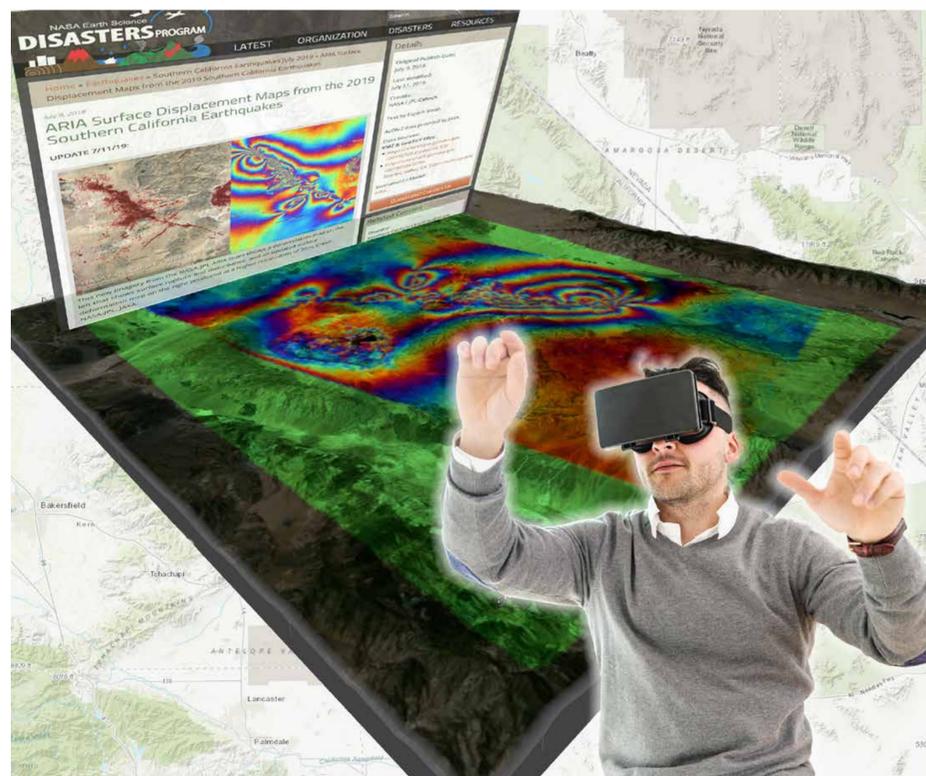




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The project team created an interface to the NASA Disaster Applications GIS portal hosted at the NASA Center for Climate Simulation (NCCS). In an intuitive way for users to visualize flooding dynamically, simulated flooding is overlaid on land surfaces using realistic water textures. This interactive tool shows the potential impacts of severe flooding, as well as the capacity to visualize other Earth data such as hurricanes, fires, landslides, floods, and volcanic eruptions. *Adam Silcott, NASA HQ/Navteca*



Shortly after the Ridgecrest, CA, 7.1 earthquake, the project team ingested InSAR radar data showing surface displacement at the epicenter into the VR visualization. By accessing the NCCS-hosted NASA Disaster Applications GIS portal in real time, the VR framework proved to be agile and dynamic. This type of immersive visualization may help data users—from decision makers to emergency response teams—better understand and prepare for future disaster events. *Adam Silcott, NASA HQ/Navteca*

## Virtual World, Real Understanding: Using Virtual Reality to Visualize Earth Data

The NASA Applied Sciences Disaster Applications Group and Navteca are researching virtual reality (VR) for scientific visualization of Earth data. The team explored VR for interacting with the Disaster Applications web portal and developed the ability to ingest new datasets in near-real time. The end user can order and view data through a custom VR interface displaying 3D city and terrain models and global maps. This tool is also scalable to many types of disasters and extreme weather events. Interactive visualizations using VR can yield better understanding and communication of Earth data to a variety of end users—from scientists to decision makers—and enhance decision-making tools for disaster planning, recovery, and resilience.



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