



NOAA Collects and Distributes Emergency Response Imagery

NOAA's National Geodetic Survey (NGS)

acquires and rapidly disseminates a variety of spatially-referenced remote-sensing datasets to support homeland security and emergency response requirements. NOAA has used **high-resolution digital cameras, film-based aerial camera systems, lidar, and thermal and hyperspectral imagers** to obtain the imagery.

These images assisted with response and recovery efforts along coastlines impacted by numerous major hurricanes dating back to Hurricane Isabel in 2003 and including Hurricane Katrina in 2005 and Hurricanes Isaac and Sandy in 2012. In its largest response effort following Hurricane Sandy, NOAA collected more than 12,000 aerial images of the hardest hit areas in New Jersey and New York. In addition to responding to natural disasters, NOAA has provided response support in the wake of human-induced disasters, such as the Deepwater Horizon oil spill in 2010. **These images were made available to emergency personnel and the public on the NGS website** (https://geodesy.noaa.gov/storm_archive/storms/index.shtml). Several commercial sources have incorporated the aerial imagery into internet-based map servers, to provide search capabilities based on street addresses, city names, and points of interest.

NOAA plans to continue to acquire remotely sensed data to **support homeland security and emergency response requirements** and provide tools, technology, and expertise to assist emergency response efforts by:

- **aiding** emergency managers to develop recovery strategies,



Belmar, NJ, before and after Hurricane Sandy, 2012. "Before" (top), courtesy Google Earth. "After," NGS.

- **assessing** damage by comparing before- and after-event imagery, and
- **allowing** those displaced to see images of their homes and neighborhoods.

These data are also used to integrate remote sensing technologies into NOAA programs, such as coastal mapping.

For more information, contact NGS:

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Emergency
Response