

# Supporting Earthquake Emergency Operations with Satellite Images



Just hours after the recent earthquake struck in Italy, European Space Imaging and its long-term partner Planetek Italia sprang into action to support disaster relief efforts, being the first to supply very-high-resolution satellite imagery to emergency services and the media. The imagery was captured by the WorldView-2 satellite over the affected region, showing the extent of the damage caused. The high-resolution imagery was immediately made available to the Italian emergency services.

The earthquake hit at around 3:30 a.m. on 24 August 2016, some 100km northeast of Rome. The earthquake of magnitude 6.2 severely damaged several towns and killed hundreds of people in central Italy. The towns of Amatrice, Accumoli, Pescara del Tronto and Arquata del Tronto have been completely devastated.

Early in the morning of 24 August, Planetek Italia asked European Space Imaging, Europe's leading provider of very-high-resolution satellite imagery, to collect imagery of affected areas through its local ground station. A few hours after the earthquake, around 10:20 a.m. UTC, European Space Imaging acquired and provided the first image of Amatrice, Italy, in 40cm resolution.

Planetek Italia is a major supplier of satellite imagery and mapping services in Italy. In the case of the earthquake they supplied the first imagery to emergency services.

## Recognising changes

The ability of satellites to collect images over large areas, the view from above of the areas affected by an emergency and the comparison with previous images helps to quickly recognise the changes, and understand where to address first aid, said Giovanni Sylos Labini, CEO of Planetek Italia.

As the leading supplier of very high-resolution satellite imagery in their region European Space Imaging knows the importance of making imagery available quickly.

When a catastrophe happens in Europe, European Space Imaging can react quickly. Their dedicated staff give highest priority to support disaster relief efforts in a fast and pragmatic way. The company is happy to help when they can, stated Michaela Neumann, director of sales and marketing of the company.

## OpenStreetMap

The image was provided to the Humanitarian OpenStreetMap Team (HOT) and has been made available to anyone who wants to contribute to the detection and mapping of buildings and infrastructures damaged and destroyed. This activity will provide updated information of great support to Institutions and emergency services during the emergency and after.

The European Union immediately alerted the Copernicus EMS team, which is providing the Italian Civil Protection damage assessment satellite maps for the affected area, based on European Copernicus Sentinel satellites.

If you wish to contribute:

- Go to the [Humanitarian OpenStreetMap Team](http://osmit-tm.wmflabs.org/project/13) (HOT) website <http://osmit-tm.wmflabs.org/project/13>
- [Download](#) Worldview-2 satellite high resolution dataset of Amatrice collected 24 August (zip 134 Mb - licence CC-BY-NC)