MONITORING THE ENVIRONMENT



assessment:
valutazione
aimed at: mirato a
extensively:
ampiamente
humanitarian aid:
aiuti umanitari
overview: quadro
generale

Aerial photography is used extensively in civilian applications such as natural disasters, environmental studies, land use and planning, mineral and geotechnical research. An example can be the satellite and aerial images which reveal the level of destruction following central Italy's earthquake in August 2016. The maps were produced by the Copernicus Emergency Management Service (EMS), at request of the Italian Civil Protection to support a preliminary assessment of the damage. The Copernicus Emergency Management Service (EMS) is the European operational mapping service aimed at providing civil protection authorities and humanitarian aid agencies with appropriate and relevant satellite information in emergency contexts, such as natural and man-made disasters, as well as humanitarian conflicts.

This is an abstract:

Date: Tuesday, August 30, 2016

Over the weekend, the European Commission has published accurate maps of the damage caused by the catastrophic earthquake that hit central Italy on 24 August. Following a request of the Italian Civil Protection, the service was activated few hours after the event and the first maps were available less than 24 h. from the occurrence of the earthquake; a larger set of maps produced in the following days provided accurate identification of the affected zones. The areas worst hit are 100 km. north-east of Rome, especially the villages of Amatrice, Accumoli, Arquata del Tronto and Pescara del Tronto.

Vertical Component

The most affected villages were covered first with satellite imagery on the very day of the disaster. More than 50 post-disaster maps were produced. The maps show the overview of the most affected areas and provide basic statistics on the damage grade on buildings and infrastructure. In addition to the Italian Civil Protection, the maps were used by several news portals to inform about the extent of the damage.

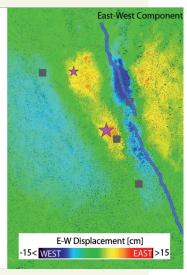
Pescara del Tronto

Accumoli

Amatrice

Vertical Displacement [cm]

-30<



Map of Central Italy's earthquake (2016)

1 Namer the following questions.

- 1. Where can civilian applications make use of aerial photography?
- **2.** Can you mention an example?
- 3. Who requested the maps to Copernicus Emergency Management Service?
- **4.** What does this organisation provide?
- **5.** When were the first maps of the disaster available?
- **6.** What areas were hit by the earthquake?
- 7. How many post-disaster maps were produced and what did they show?
- 8. Who used the maps in addition to the Italian Civil Protection?



