

This service summarizes current satellite mapping activities of interest to GDACS stakeholders. It is issued weekly and based on contributions from map-producing entities and GDACS partners.

Satellite mapping overview

As of 09 February 2015

Africa

Mozambique and Malawi floods – GLIDE number: FL20150112MOZ

Mozambique and Malawi have received heavy rainfall since late December 2014. The International Charter for Space and Major Disasters was activated by the Malawi Department of Disaster Management Affairs on 08 January 2015. UNITAR-UNOSAT and the Dartmouth Flood Observatory continue to monitor the situation and recently released maps of the latest flooding. UNITAR-UNOSAT analysis of satellite imagery acquired 04 February 2015 and 30 January 2015 revealed ongoing flooding within the Caia, Chemba, Mopeia, Mutarara and Morrumbala Districts of Mozambique, as well as along the Shire River in the Nsanje District of southern Malawi. Flood waters receded by approximately 11% between 30 January 2015 and 04 February 2015. The Dartmouth Flood Observatory's analysis of recent satellite imagery confirms that flooding has continued in southern Malawi and northern Mozambique within the past 14 days. The UNITAR-UNOSAT map product is available for download as a PDF on its website. Accompanying data in shapefile and ESRI geodatabase format are also accessible through UNITAR-UNOSAT product links. The Dartmouth Flood Observatory website provides for online viewing of its map product as well as download in GeoTIFF, JPEG, PDF, and KMZ file formats.

Sources: UNITAR-UNOSAT, Dartmouth Flood Observatory

Links: <http://www.unitar.org/unosat/maps/MOZ>

<http://floodobservatory.colorado.edu/Version3/2015Malawi4219.html>

Europe

Greece floods – GLIDE number: EMSR117*

Torrential rainfall at the end of January 2015 caused flooding in western Greece. The Arachthos, Acheron, Kalamas and Louros Rivers overflowed and residents of villages located within the Arachthos River delta were evacuated. In response to this event, the Copernicus Emergency Management Service produced reference and delineation maps of Epirus for the Greek Directorate for Emergency Planning and Response. The Copernicus Emergency Management Service analyzed satellite imagery acquired 02 February 2015 and identified 5,086 hectares of flooded areas within the Epirus region. Approximately 108 inhabitants, 12.3 hectares of settlements, 13.8 hectares of quarries, 30 kilometers of roadways and one bridge were directly affected by the flooding. Map products are available in JPEG, PDF and TIFF formats as well as a downloadable zipped vector

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package on the Copernicus Emergency Management Service website. Data can also be accessed in GeoTIFF, GeoPDF, GeoJPEG and vector (shapefile and KML) formats.

Source: Copernicus Emergency Management Service

Link: <http://emergency.copernicus.eu/mapping/list-of-components/EMSR117>

Spain floods – GLIDE number: EMSR118*

As a result of heavy rainfall that began on 31 January 2015, Spain’s Ebro River Basin was flooded and many villages in Zaragoza Province were impacted. In an effort to aid Disaster Response Authorities, the Copernicus Emergency Management Service produced reference and delineation maps for floods in Zaragoza and Trespaderne. Analysis of satellite imagery acquired 02, 03 and 04 February 2015 revealed a total of 4,023.82 hectares of flooded area in Zaragoza and 467 hectares in Trespaderne. Approximately 14,671 inhabitants, 6.57 hectares of settlements, 2.34 kilometers of roads and railways, 1.1 hectares of quarry, and 4,453.21 hectares of cropland, woodland and scrubland were affected in Zaragoza. In Trespaderne, 2 inhabitants, 0.6 hectares of settlements, 12.8 kilometers of roads and railways, 1 bridge, 5.7 hectares of quarry, and 454.4 hectares of woodland, cropland and scrubland were impacted by the flooding. Map products are available in JPEG, PDF and TIFF formats as well as a downloadable zipped vector package on the Copernicus Emergency Management Service website. Data can also be accessed in GeoTIFF, GeoPDF, GeoJPEG and vector (shapefile and KML) formats.

Source: Copernicus Emergency Management Service

Link: <http://emergency.copernicus.eu/mapping/list-of-components/EMSR118>

Middle East

Iraq complex emergency – GLIDE number: CE20140613IRQ

Ongoing violence in Iraq has caused significant structural damage to some of the country’s cities. UNITAR-UNOSAT recently published two damage assessments for the cities of Jalawla and Zumar, located in the Diyala and Nineveh Governorates. Analysis of satellite imagery acquired 20 January 2015 and 23 June 2014 revealed a total of 1,771 affected structures in Jalawla. Approximately 395 of these were destroyed, 678 severely damaged, and 698 moderately damaged. Using satellite imagery from 02 January 2015 and 08 January 2014, UNITAR-UNOSAT identified a total of 308 affected structures in Zumar. Of these structures, 98 were destroyed, 134 severely damaged, and 76 moderately damaged. These damage assessments are available for download as PDFs on the UNITAR-UNOSAT website. Accompanying data in shapefile and ESRI geodatabase format can also be accessed through UNITAR-UNOSAT’s product links.

Source: UNITAR-UNOSAT

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Link: <http://www.unitar.org/unosat/maps/IRQ>

Oceania

Australia bushfire – GLIDE number: TBD

In early February 2015, southwestern Australia experienced two large bushfires which occurred east of Northcliffe and in the Lane Poole Conservation Reserve near Boddington. The NASA Earth Observatory acquired satellite imagery of the fires burning on 04 February 2015. In a subsequent map product, the NASA Earth Observatory outlined hot spots where the satellite sensor detected surface temperatures typically associated with fire. Roughly 13 hot spots were identified and smoke plumes from the bushfires were visible moving in a southern direction. As of 04 February 2015, approximately 61,000 hectares of land had been burned by the bushfire near Northcliffe. This map product is available for online viewing and download in JPEG format on the NASA Earth Observatory website.

Source: NASA Earth Observatory

Link: <http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=85225&eocn=home&eoci=nh>

This summary is compiled by the GDACS mapping & satellite imagery coordination mechanism, operated by the UNITAR Operational Satellite Applications Programme (UNOSAT).

When referring to this summary, please credit: GDACS, UNITAR-UNOSAT.

For comments, questions and to submit information on satellite image derived products, please contact: maps@gdacs.org

Sources indicate satellite analysis production entities and imagery providers. The products referenced in this summary are based on remote satellite imagery and may not be validated in the field prior to release, in which case findings are based only on what is observed in the satellite imagery.

**Not an official GLIDE number, as event has no entry in GLIDE database, but used by GDACS for seamless information integration.*