

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 23 November 2015

Africa

Egypt aircraft crash – GLIDE number: TBD

A Russian airliner carrying 224 passengers and crew crashed in the Egyptian Sinai Peninsula on 31 October 2015. The International Charter on Space and Major Disasters was activated the same day by Roscosmos/EMERCOM. Roscosmos has since published three monitoring maps of the crash site which is undergoing an investigation by Russian and Egyptian teams. Satellite imagery of the site was acquired on 01, 02 and 04 November 2015. As of 01 November 2015 five areas with debris were identified, one of which contained the majority of wreckage. Vehicles from EMERCOM were also visible near the main crash site. On 02 November 2015, an additional area of potential debris less than one kilometer northeast of the main site was found. A larger EMERCOM camp as well as transport vehicles and structures from a few task groups were also observed. By 04 November 2015 the EMERCOM camp had expanded and was surrounded by defensive embankments. Defensive embankments were visible around a site of potential debris as well. Officials anticipate that a full investigation of the crash will take several months to complete. Map products are available for online viewing and download in JPEG format on the International Charter on Space and Major Disasters website.

Sources: International Charter on Space and Major Disasters, Roscosmos

Link: <https://www.disasterscharter.org/web/guest/-/other-in-egypt>

Somalia floods – GLIDE number: FL-2015-000145-SOM

In late October 2015, flash floods affected thousands of people residing in low lying areas of southern and central Somalia. UNITAR-UNOSAT continues to monitor the situation in collaboration with IGAD/ICPAC and FAO SWALIM. It recently produced a map of probable standing waters from rainfall over the Shabelle Hoose region of Somalia. Analysis of satellite imagery acquired 16 November 2015 and 25 January 2015 revealed a total affected area of 2,790 hectares in the districts of Qoryooley, Kurtunwaarey, Marka, Baraawe and Sablaale. Due to the characteristics of satellite data used in the analysis, the exact limit of flood water is uncertain. Detected water bodies likely reflect an underestimation of all flood-affected areas within the map extent. This map product is available for download as a PDF on the UNITAR-UNOSAT website. Accompanying data in ESRI shapefile and geodatabase format is also accessible there.

Source: UNITAR-UNOSAT

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

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.

Middle East

Iraq floods – GLIDE number: FL-2015-000153-IRQ

Eastern Iraq recently experienced flooding as a result of torrential rainfall from 28 to 30 October 2015. On 01 November 2015 a state of emergency was declared by the Iraqi Prime Minister. The International Charter on Space and Major Disasters was activated by the USGS on behalf of the Ministry of Science and Technology on 05 November 2015, and project management was assumed by Integração. The Brazilian National Risk and Disaster Management Center (CENAD) produced a map of flooded areas in the city of Kut, Wasit Province, Iraq. Satellite imagery acquired 07 November 2015 was analyzed and many potentially flooded areas were identified within and near the city. It is possible that numerous agricultural lands north of the city were impacted and a temporary lake appears to have formed there as well. It is estimated that at least 84,000 people residing mainly in the Baghdad and Anbar governorates were displaced by this event. This map product is available for online viewing and download in JPEG format on the International Charter on Space and Major Disasters website.

Sources: International Charter on Space and Major Disasters, CENAD

Link: <https://www.disasterscharter.org/web/guest/-/flood-in-iraq>

Oceania

Australia bush fires – GLIDE number: TBD

Intense bush fires reportedly sparked by lightning in mid-November 2015 burned through parts of Western Australia lately. The coastal town of Esperance, located 720 kilometers southeast of Perth, experienced the most extreme blazes. The NASA Earth Observatory acquired 17 November 2015 satellite imagery of this event and produced an overview map. As of 17 November 2015, smoke plumes from fires burning north and northwest of Esperance were visible. The smoke moved in a southeast direction and in one case extended over part of the Indian Ocean. According to Western Australia's Department of Fire and Emergency Services, the bush fires burned 133,000 hectares of land, destroyed two homes, and damaged power lines. A news report from 18 November 2015 also indicated that four people had been killed by the fires. By 22 November 2015 the alert level for several major bushfires in Western Australia had been downgraded. This map product is available for online viewing or download in GeoTIFF and JPEG format on the NASA Earth Observatory website.

Source: NASA Earth Observatory

Link: <http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=87021&eocn=home&eoci=nh>

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.

South America

Brazil dam collapse – GLIDE number: TBD

On 05 November 2015, two iron ore tailing dams storing waste materials collapsed in the Minas Gerais State of Brazil. As a result of this incident, a flood of liquid waste was released into some neighboring districts. The International Charter on Space and Major Disasters was activated on 05 November 2015 at the request of Brazilian Disaster and Risk Management, and project management assumed by Integração. CENAD released new maps of the aftermath in affected areas downstream of the accident. Using satellite imagery acquired 10, 11 and 12 November 2015 flood waters and mudflow were identified in the districts of Bento Rodrigues and Paracatu de Baixo, as well as in the city of Barra Longa. Areas which appeared to have been impacted most significantly were situated along the Carmo and Gualaxo do Norte rivers. Inset pictures of parts of Paracatu de Baixo and Barra Longa show populated areas covered in muddy flood waters. According to the Minas Gerais State Civil Defence, as of 16 November 2015 there were 11 people killed, 12 missing, and 504 homeless. Map products are available for online viewing and download in JPEG format on the International Charter on Space and Major Disasters website.

Sources: International Charter on Space and Major Disasters, CENAD

Link: <https://www.disasterscharter.org/web/guest/-/other-in-brazil>

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.*