

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 February 2015

Africa

Somalia complex emergency – GLIDE number: CE20130710SOM

In 2011 Somalia experienced extreme food insecurity and famine in some of the country's southern regions. Sustained humanitarian intervention has helped to mitigate this crisis over the past few years. At the request of the World Food Program, in support of the United Nations Humanitarian Air Service, UNITAR-UNOSAT recently published five maps of Somali airfields. Satellite imagery acquired 04 and 30 January 2015, as well as 20 December 2014, 20 April 2014, and 16 January 2013 was used to illustrate the Bosaso, Hargeisa, Beledweyne, Garowe and Xuddur airfields. The Bosaso airfield has two runways that measure approximately 1 and 1.7 kilometers. The lengths of the the Hargeisa, Beledweyne, Garowe, and Xuddur airfield runways are 4.2, 2.1, 2.4, and 1.4 kilometers respectively. Map products are available for download as PDFs on the UNITAR-UNOSAT website.

Source: UNITAR/UNOSAT

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

South Sudan complex emergency – GLIDE number: CE20131218SSD

As a result of escalating violence in South Sudan during December 2013, over 30,000 civilians sought refuge in United Nations facilities. UNITAR-UNOSAT has monitored the progression of this situation and recently released a map of IDP shelters in the UN House Compound in Juba, South Sudan. Using satellite imagery from 15 February 2015, UNITAR-UNOSAT identified a total of 2,910 shelters, as well as 85 infrastructure and support buildings within four IDP Protection of Civilian areas that occupy 16 hectares. This map product is available for download as a PDF on the UNITAR-UNOSAT website. Accompanying data in shapefile and ESRI geodatabase format are also accessible through UNITAR-UNOSAT's product links.

Source: UNITAR-UNOSAT

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

Asia

Kamchatka Peninsula volcano – GLIDE number: TBD

Located on the Kamchatka Peninsula of Russia, Klyuchevskaya is one of the most active volcanoes in the world. The NASA Earth Observatory acquired satellite imagery from 19 February 2015 which shows an eruption at Klyuchevskaya. According to the Kamchatkan Volcanic Eruption Response

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Team, fresh lava, rock bombs, and ash plumes resulted from the eruption. In mid-February 2015 the volcano's ash plume rose up to 8 kilometers high. As of 19 February 2015, the ash plume was still visible being carried in a southeasterly direction by local winds. Map products are available for online viewing and 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=85328>

Kuril Islands volcano – GLIDE number: TBD

Following seven years of inactivity, the Chikurachi volcano erupted on 16 February 2015. Located on Paramushir Island, south of Kamchatka, Chikurachi stands 1,816 meters above the western Pacific Ocean. The NASA Earth Observatory acquired satellite imagery of the volcano's eruption on 16, 17 and 18 February 2015. On 16 February 2015 the highest plume was observed rising up to 7.5 kilometers and winds moved the ash 275 kilometers in a westward direction. Although the eruption continued on 17 and 18 February 2015, the height of the ash plume did not extend higher than 4.5 kilometers. As of 18 February 2015, the winds had changed and carried the ash eastwards. Map products are available for online viewing and 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=85321&eocn=home&eoci=nh>

Middle East

Iraq complex emergency – GLIDE number: CE20140613IRQ

Ongoing violence in Iraq has caused significant structural damage to some of the country's towns and cities. UNITAR-UNOSAT recently published a damage assessment for the town of Baiji, located in the Salah ad Din Governorate. Analysis of satellite imagery acquired 28 December 2014 and 06 April 2014 revealed a total of 206 affected structures. Approximately 81 of these were destroyed, 68 severely damaged, and 57 moderately damaged. This damage assessment is available for download as a PDF 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

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

Syria complex emergency – GLIDE number: CE20130604SYR

As a result of conflict in Syria, many citizens fled the country in search of refuge. Jordan's Al Za'atari refugee camp in Mafraq Governorate hosts many Syrian refugees and was affected by a winter

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storm between 19 and 21 February 2015. REACH recently released a map of storm affected areas within Al Za’atari as of 21 February 2015. In coordination with the UNHCR, UNICEF, ACTED, IRD, NRC, and Oxfam, REACH identified damaged shelters, repaired shelters, blocked roads and access points, downed electrical lines, flooded areas, flooded camp facilities, and muddy areas. Satellite imagery collected 11 November 2014 and camp facility data were also incorporated into the map. This product is available for online viewing and download as a PDF on the REACH website.

Source: REACH

Link: http://www.reachresourcecentre.info/system/files/resource-documents/reach_jor_map_zaatari_janastormaffectedareassaturday_21feb2015_a1.pdf

Oceania

Australia cyclones – GLIDE number: TBD

On 19 February 2015, two severe tropical cyclones named Marcia and Lam made landfall over the northeast and northcentral coasts of Australia. Marcia and Lam were initially classified as Category Five and Category Four storms on the Saffir-Simpson Scale. Damage from powerful winds and flooding caused by heavy rainfall resulted. The International Charter for Space and Major Disasters was subsequently activated on 20 February 2015 by Geoscience Australia. The NASA Earth Observatory recently acquired satellite imagery of the cyclones on 19 February 2015 and published a map. At the time of landfall, Marcia released winds greater than 205 kilometers per hour and Lam’s estimated wind speeds reached approximately 165 kilometers per hour. Water and power were lost in many areas affected by Lam and 50,000 homes in Queensland were left without power following Marcia. Both Marcia and Lam have since dissipated and been downgraded. The 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=85335&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.*