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 19 October 2015

Africa

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, Central Equatoria, South Sudan. Using satellite imagery acquired 25 September 2015, UNITAR-UNOSAT identified 89 hectares of occupied Protection of Civilian (PoC) areas. A total of 8,214 shelters as well as 239 infrastructure and support buildings were located within these areas. Additionally, all shelters present in PoC area number two on 22 August 2015 had been removed and relocated by 25 September 2015 as part of reorganizational efforts in the UN House Compound. 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 through UNITAR-UNOSAT's product links.

Source: UNITAR-UNOSAT

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

Asia

Philippines typhoon – GLIDE number: TC-2015-000143-PHL

On 18 October 2015 Typhoon Koppu made landfall over the island of Luzon in the northern Philippines. Designated a Category 4 cyclone at the time, Koppu brought heavy rainfall and strong winds of up to 240 kilometers per hour. National authorities have expressed concern over the risk of flash floods, mudslides and landslides, as well as structural damage, and a storm surge within the next few days. The Copernicus Emergency Management Service used 18 October 2015 satellite imagery to produce delineation maps of the situation in Bambang and Casiguran Sound. According to the maps, significant amounts of flooding occurred within the vicinity of Bambang and Nagtipunan, as well as along the Casiguran Sound coastline. It is possible that some areas of the country may receive up to one meter of rain by 21 October 2015. Map products are available for download in TIFF, PDF, and JPEG formats on the Copernicus Emergency Management Service website. Accompanying zipped vector packages are also provided on this website.

Source: Copernicus Emergency Management Service

Link: http://emergency.copernicus.eu/mapping/list-of-components/EMSR143

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.

Europe

Croatia floods – GLIDE number: EMSR142*

Due to substantial rainfall on 15 October 2015, the Karlovac area of Croatia experienced flooding. In an effort to aid Croatia's Civil Protection Center, the Copernicus Emergency Management Service published delineation maps of the situation in Karlovac. Analysis of satellite imagery acquired 17 and 18 October 2015 revealed many flood affected areas along the Kupa, Utinja, Glina, Sava, Odra, Zirovec, Trepca, and Korana rivers. As of 18 October 2015, 5,172 inhabitants and a total area of 9,516.2 hectares had been affected by the flooding. The floods affected numerous buildings and roads, particularly in the southern Croatia county of Sibenik-Knin. As of 17 and 18 October 2015, maximum water levels were expected to occur in the Sisak area of the Kupa – Sava basin. By next week, it is estimated that the excess water will flow downstream from Sisak towards Jasenovac, Slavonski Brod and Zupanja. Map products are available for download in TIFF, PDF, and JPEG formats on the Copernicus Emergency Management Service website. Accompanying zipped vector packages are also provided on this website.

Source: Copernicus Emergency Management Service

Link: http://emergency.copernicus.eu/mapping/list-of-components/EMSR142

Italy floods – GLIDE number: EMSR141*

On 14 October 2015, heavy rainfall caused severe floods and landslides in the Benevento and Caserta provinces of Italy. In support of the Italian Civil Protection Department, the Copernicus Emergency Management Service used 17 October 2015 satellite imagery to produce several grading and delineation maps of the situation in different localities. The city of Caiazzo in Caserta remained unaffected by this event, however, analysis of Capua, Castel Volturno and Telese revealed approximately 265 hectares of flooded area, 168 affected inhabitants, 191 hectares of impacted land use, 15 hectares of affected settlements and 1.8 kilometers of affected transportation routes. Map products are available for download in TIFF, PDF, and JPEG formats on the Copernicus Emergency Management Service website. Accompanying zipped vector packages are also provided on this website.

Source: Copernicus Emergency Management Service

Link: http://emergency.copernicus.eu/mapping/list-of-components/EMSR141

Middle East

Yemen complex emergency – GLIDE number: CE20150402YEM

Ongoing conflict in Yemen has caused parts of the country to suffer from significant damage and destruction. UNITAR-UNOSAT, in partnership with UNDP Yemen, recently released an updated

damage assessment for the city of Sana'a. Using satellite imagery acquired 10 and 23 September 2015, as well as 15 May 2015, UNITAR-UNOSAT identified a total of 652 affected structures. Approximately 283 of these were impacted as of 10 and 23 September 2015, with 54 destroyed, 94 severely damaged, and 135 moderately damaged. Previously, using the 15 May 2015 satellite image, UNITAR-UNOSAT had located 369 affected structures, of which 60 were destroyed, 72 severely damaged, and 237 moderately damaged. Additionally, 8 impact craters and 16 areas with significant amounts of debris were observed in September 2015. A total of 7 medical facilities were identified within 100 meters of damaged and destroyed buildings, and it is possible that these facilities also sustained some damage. Notably, as of 10 and 23 September 2015, significant reconstruction of structures damaged as of 15 May 2015 was visible across the examined area. This damage assessment is available for download as a PDF on the UNITAR-UNOSAT website. Accompanying data in ESRI shapefile and geodatabase format is also provided.

Source: UNITAR-UNOSAT

Link: http://www.unitar.org/unosat/maps/YEM

North America

United States wildfires – GLIDE number: WF-2015-000103-USA

In 2015 more than 8.8 million acres of land burned as a result of wildfires in the United States. This figure represents approximately 3 million more than the normal amount at this time of the season. Currently, dozens of large wildfires continue to burn across the western part of the country. The NASA Earth Observatory acquired 04 October 2015 satellite imagery and released two overview maps of fires in northeast Oregon and southeast Washington, collectively referred to as the grizzly bear complex. These fires were caused by lightning on 13 August 2015. As of 04 October 2015 the fires had burned through tens of thousands of acres of terrain comprised of canyons and basaltic ridges. In the maps, smoke plumes are visible drifting from some active fires situated in stream valleys to the north of the Wenaha River. Large burn scars and unburned vegetated areas can be seen as well. According to firefighting authorities, the fire has mainly been fuelled by timber, grass, brush, and logging slash. By 08 October 2015, the fires had burned through 82,659 acres. 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=86755&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.

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.*