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 30 March 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 an IDP camp at the UNMISS Protection of Civilian (PoC) area adjacent to the UNMISS base in Bentiu, Unity State, South Sudan. Analysis of satellite imagery acquired 07 March 2015 revealed a total of 9,713 structures. Approximately 9,515 of these were classified as tent shelters and 198 as administrative buildings. In addition to these maps, REACH recently published a map of facilities for PoC areas in Malakal, Upper Nile State and several address system maps for twelve blocks of a new PoC in Bor, Jonglei State. PoC facilities in Malakal include camp coordination, health and education, WASH, PoC structures, gates, and planned extensions. The UNITAR-UNOSAT map product is available for download as a PDF on its website. Accompanying data in shapefile and ESRI geodatabase format is accessible through UNITAR-UNOSAT's product links. REACH map products are also available for download as PDFs on its website.

Sources: UNITAR-UNOSAT, REACH

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

http://www.reachresourcecentre.info/advanced-search?name_list[]=SS&field_document_type_tid[]=4

Asia

Kamchatka Peninsula volcano – GLIDE number: TBD

Located on the Kamchatka Peninsula of Russia, Shiveluch is one of the region's largest and most active volcanoes. The NASA Earth Observatory acquired satellite imagery of eruptive activity on 23 March 2015 and produced an overview map. As of this date, a plume of ash was visible emanating from the volcano's mouth and moved with the wind in a northerly direction. The NASA Earth Observatory obtained another satellite image of the volcano on 26 March 2015. The ash fall continued, though shifting winds caused it to travel south and southeast of the volcano. This map product is available for online viewing and download in KML, GeoTIFF, and JPEG formats on the NASA Earth Observatory website.

Source: NASA Earth Observatory

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Link: http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=85576&eocn=home&eoci=nh

Middle East

Iraq complex emergency – GLIDE number: CE20140613IRQ

Ongoing violence in Iraq has caused a significant movement of IDPs within the country. REACH recently released updated general infrastructure maps for six IDP camps located in the Duhok, Sulaymaniyah, and Ninewa Governorates. Satellite imagery was incorporated into these maps of the Shariya, Arbat, Bardarash, Dawudiya, Deir Aboun, and Rwanga IDP Camps. The general infrastructure depicted in the maps includes offices, schools, clinics, community and service areas, markets, etc. Additional maps of tent density and reported cases of Leishmaniasis in Arbat Camp, as well as the distance from tents to men and women's latrines in Shariya Camp were also published. Map products are available for online viewing and download as PDFs on the REACH website.

Source: REACH

Link: http://www.reachresourcecentre.info/advanced-search?name_list[]=IQ&field_document_type_tid[]=4

Oceania

Vanuatu tropical cyclone – GLIDE number: TC-2015-000023-VUT

On 14 March 2015 tropical cyclone Pam made landfall over the island nation of Vanuatu. Classified as a Category Five storm at the time, winds reached up to 300 kilometers per hour and caused widespread damage and destruction. In anticipation of storm, the International Charter for Space and Major Disasters was activated on 12 March 2015 by UNITAR-UNOSAT on behalf of UNOCHA. UNITAR-UNOSAT recently published a map of potentially damaged zones in Epi Island, Shefa Province, Vanuatu. Using satellite imagery acquired 17 March 2015, UNITAR-UNOSAT identified numerous zones with potential damage. UNITAR-UNOSAT estimates that a total of approximately 5,000 buildings are located within these zones. It is likely that 80% of these buildings are residential, 10% commercial, and 10% public. The Remote Sensing Technology Center of the Japanese Aerospace Exploration Agency (JAXA) also released maps of the aftermath in Efate Island and Tanna Island. Analysis of satellite imagery from 21 March 2015, 24 January 2015, and 15 November 2014 revealed potentially damaged buildings and vegetation loss in Tanna Island, as well as potentially damaged buildings and possible flooding in Efate Island. Satellite imagery analysis for this event has also been provided by the Copernicus Emergency Management Service, but there are no further updates since the last satellite mapping overview. UNITAR-UNOSAT's map product is available for download as a PDF on its website. Accompanying data in shapefile and ESRI geodatabase format are also accessible. JAXA map products are available for online viewing and PDF download on the International Charter for Space and Major Disasters website.

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.

Sources: UNITAR-UNOSAT, JAXA, International Charter for Space and Major Disasters, Copernicus Emergency Management Service

Links: http://www.unitar.org/unosat/maps/VUT

https://www.disasterscharter.org/web/guest/-/cyclone-in-vanuatu

http://emergency.copernicus.eu/mapping/list-of-components/EMSR121

South America

Chile volcano – GLIDE number: TBD

One of Chile's most active volcanoes, Villarrica, erupted on 03 March 2015 and necessitated the evacuation of thousands of residents from the nearby towns of Pucon and Panguipulli. The International Charter for Space and Major Disasters was activated the same day by Chile's National Emergency Office of the Interior Minister (ONEMI). The Natural Resources Information Center (CIREN) of Chile recently produced a map of the volcano before and after the eruption using satellite imagery acquired 10 March 2015 and 22 February 2015. While the volcano was covered with snow prior to the eruption, burn scars were visible primarily to the north and east of the volcano's mouth following this event. This map is available for online viewing and download in JPEG format on the International Charter for Space and Major Disasters website.

Source: International Charter for Space and Major Disasters

Link: https://www.disasterscharter.org/web/guest/-/volcano-in-ch-19

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.*