

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 May 2018

Africa

Djibouti tropical cyclone and floods – UNOSAT number: TC20180520DJI

Tropical cyclone Sagar-18 made landfall in Somalia on 19 May 2018, causing heavy rainfall and flash floods across Djibouti. The most affected areas are Djibouti city and the suburb of Balbala. According to authorities, up to 30.000 people have been impacted by the storm, with several arterial roads, schools and community centres flooded. The international Space Charter has been triggered by UNOSAT on behalf of UNOCHA.

Source: UNITAR-UNOSAT & International Charter Space & Major Disasters

Links:

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

<https://disasterscharter.org/web/guest/-/flood-in-djibouti-activation-572->

Somalia floods – GLIDE number: FF-2018-000041-SOM

Since April 2018, heavy rainfall affected the southern part of Somalia inducing flooding along the Juba and Shebelle River. UNITAR-UNOSAT has released: a spatial analysis of the satellite-detected flood water extent and potentially affected population by flooding in the district of Baardheere (Gedo Region), Saakow and Bu'aale (Middle Juba region) and Diinsor (Bay region); a spatial analysis of the satellite-detected flood water extent and a building damage assessment over the town of Belet Weyne.

Source: UNITAR-UNOSAT

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

Kenya floods – GLIDE number: FF-2018000030-KEN

Since March 2018, heavy rainfall affected the eastern part of Kenya causing floods, flash floods and casualties. UNITAR-UNOSAT has released spatial analysis of the satellite-detected flood water extent and potentially affected population by flooding in the counties of Tana river, Wajir and Garissa.

Source: UNITAR-UNOSAT

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

Ethiopia floods – GLIDE number: FF- 2018-000042-ETH

Since April 2018 heavy rainfall affected the southern part of Ethiopia inducing flooding along the Shebelle river. UNITAR-UNOSAT has released spatial analysis of the satellite-detected flood water extent and potentially affected population by flooding in the Somali region.

Source: UNITAR-UNOSAT

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

Middle East

Oman & Yemen tropical cyclone

The tropical cyclone Mekunu-18 formed in the Arabian Sea on 22 May 2018 and it is expected to intensify in the coming days, following a north to northwest track. Forecasts indicate a possible landfall on the Arabian Peninsula between 25 and 26 May 2018.

Source: ReliefWeb

Link: <https://reliefweb.int/map/yemen/tropical-cyclone-two-warning-n1>

Europe

Finland floods – Copernicus number: EMSR284

Floods are expected in the Lapland, Finland, due to snow melt, warm temperatures and intermittent rains. The floods are estimated to possibly affect residential areas in Tornio.

Source: Copernicus EMS

Link: <http://emergency.copernicus.eu/mapping/list-of-components/EMSR284>

Norway floods – Copernicus number: EMSR283

Following an exceptional winter in term of snowfall amount, Norway is facing an ongoing spring flood in the region north of Oslo, due to snow melt and high temperatures during the first week of May 2018.

Source: Copernicus EMS

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Link: <http://emergency.copernicus.eu/mapping/list-of-components/EMSR283>

Americas

Hawaii volcano eruption and earthquake – GLIDE number: VO-2018-000044-VUT

Kīlauea Volcano on Hawaii’s Big Island erupted on 4 May 2018, destroying 35 buildings and forcing 2000 people to evacuate from their homes. In some areas lava erupted reached 70 m of height and in the East Rift Zone of the volcano 12 fissures and volcanic vents opened. On the same day, the island experienced also an earthquake of magnitude 6.9, followed by several aftershocks.

Source: International Charter Space & Major Disasters

Link: <https://disasterscharter.org/web/guest/-/volcano-in-united-states-activation-571->

Caribbean algae bloom – Copernicus number: EMSR282

In the beginning of May 2018 Antilles Islands faced a phenomenon of sargasse algae bloom, with algae invasion particularly on the shores of Guadeloupe, Saint Martin, Saint Barthélemy and Martinique. The consequences of this phenomenon are considered disastrous in terms of environment, health and economy.

Source: Copernicus EMS

Link: <http://emergency.copernicus.eu/mapping/list-of-components/EMSR282>

Canada spring flooding

In April and May 2018, combined conditions of snow melt and heavy rainfall produced historic flooding along the St. John River, in New Brunswick (east coast of Canada). Water levels along some parts of the river reached or exceeded the levels measured during the flooding of spring 2008, the worst one in the region since 1973.

Source: NASA Earth Observatory

Link: <https://earthobservatory.nasa.gov/NaturalHazards/view.php?id=92125>

Chile subtropical cyclone

An extremely rare cyclone formed in early May 2018 about 160 kilometers (100 miles) off the coast of Chile. Typically this area are not affected by cyclones because sea surface temperatures (SSTs) in the southeastern Pacific Ocean are usually too cold (oceanographic upwelling process). Despite colder ocean waters, the cyclone could still form due to favourable atmospheric conditions, with wind speeds similar to a weak tropical storm.

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Source: NASA Earth Observatory

Link: <https://earthobservatory.nasa.gov/NaturalHazards/view.php?id=92137>

Asia

Siberia fires

A dry and warm winter has set up the conditions for a difficult wildfire season in 2018 in Russia. Between seven and 13 May 2018, almost 700 fires were beaten back in 40 different territories. Amur Oblast region in Siberia is the most affected areas and has so far experienced more fires per month this year than any other since 2008. A spike in atmospheric carbon dioxide levels and aerosols has been observed since the fires started.

Source: NASA Earth Observatory

Link: <https://earthobservatory.nasa.gov/NaturalHazards/view.php?id=92165>

Sri Lanka floods – GLIDE number: FL-2018-000060-LKA

Monsoon rains started in Sri Lanka, killing eight people and affecting eight districts across the country. Because of weather conditions, some roads are closed, power supplies have been interrupted in many areas and many people have already been displaced. 'Red alert' flood warnings and landslide warnings have been issued in several districts.

Source: International Charter Space & Major Disasters

Link: <https://disasterscharter.org/web/guest/-/flood-in-sri-lanka-activation-573->

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

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