



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.

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# Satellite mapping overview

As of 4 May 2017

### Caribbean

#### Haiti flood - GLIDE number: FL-2017-000043-HTI

Extreme rains, from the 20th to the 23rd of April 2017, have resulted in flash floods in the south of Haiti. UNITAR-UNOSAT published several analysis such as a "Population Exposure to Heavy Rains in Haiti" by means of the estimated precipitation accumulation data from the Global Precipitation Measurement (GPM) and the population data derived from WorldPop. According to the results, approximately 10.2 million people in Haiti may have been exposed to precipitation anomalies (more than 54 mm of precipitation compared to the daily average of 4.4 mm) over five days. Only in the Sud Department approximately 750,000 people are possibly affected.

Another publication, "Satellite Detected Water Extent in Cavaillon Commune, Sud Department Haiti", notified that the observed standing waters mainly affected agricultural fields and about 6km of roads that are potentially damage. This analysis was performed with a Sentinel-1 satellite image acquired on the 26 April 2017 and a Radarsat-2 image acquired on the 17 May 2016. The publication "Satellite Detected Surface Waters Extent in Les Cayes and Cavaillon Communes, Sud Department, Haiti" also reported that the standing waters mainly affected the agricultural fields and 9km of roads with a water increase of about 460%. This analysis was performed with a Sentinel-1 satellite image acquired on the 26 April 2017 and a Radarsat-2 image acquired on the 17 May 2016.

UNITAR-UNOSAT also published the "Satellite detected surface waters extent and evolution in Les Cayes and Cavaillon Communes, Sud Department, Haiti" report. The analysis was achieved with a Radarsat-2 image from the 28 April 2017 and a Sentinel-1 satellite image from the 26 April 2017. The results showed that the waters receded from about ~68% in mainly agricultural lands from the 26 to the 28 April 2017.

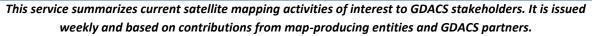
Meanwhile, REACH reported the accessibility situation around the costal commune of Port-Salut after the heavy rain event. The recorded damage includeed a destroyed main bridge, three non-accessible roads and several affected road or passages.

OCHA published the "Haïti: Inondations dans le Sud Rapport de situation No.1 (25 avril 2017)". In this document the flooding situation was presented but also evaluated in terms of needs and humanitarian response.

Sources: UNITAR-UNOSAT, OCHA AND REACH

Links: <a href="http://www.unitar.org/unosat/maps/HTI">http://www.unitar.org/unosat/maps/HTI</a>

Global Disaster Alert and Coordination System



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http://www.reachresourcecentre.info/system/files/resourcedocuments/reach haiti sud accessibility 20170424 a4 en 1.pdf

http://reliefweb.int/report/haiti/ha-ti-inondations-dans-le-sud-rapport-de-situation-no1-25-avril-2017

## Dominican Republic flood - UNOSAT Activation number: FL20170425DOM

The European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations published the "Haiti and Dominican Republic - Severe Weather - ECHO Daily Map | 27/04/2017". The report explains the heavy rain situation over the island. Regarding the Dominican Republic, 77 communities are without communication and about 88 000 people are currently displaced. The alerts are mostly over flash flooding, raise in river levels and landslides. On the other hand, UNOSAT published the water and/or saturated wet soil extent in the Villa Riva Municipality and surroundings on May 4, 2017 with a Spot-6 image from May 2, 2017. The map illustrated the location of about 2,500 hectares of standing waters; yet, the floods in the area mainly affected agricultural fields.

Source: European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations and UNOSAT

Link: <a href="http://reliefweb.int/map/haiti/haiti-and-dominican-republic-severe-weather-echo-daily-map-27042017">http://reliefweb.int/map/haiti/haiti-and-dominican-republic-severe-weather-echo-daily-map-27042017</a>

http://www.unitar.org/unosat/node/44/2590?utm\_source=unosat-unitar&utm\_medium=rss&utm\_campaign=maps

**South America** 





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# Argentina flood-GLIDE number: FL-2017-000039-ARG

A flooding emergency caused by heavy rains is still taking place in Northern Province of Santiago del Estero, Argentina. Accordingly, the Argentina National Space Activities Commission (CONAE) has recently published a water extent map from the 22 April 2017 and a water extent monitoring from the 10 to the 27 April 2017. They have also reported that about 80% of the city of Rivadavia may have been destroyed by floods and mudslides including the transport infrastructure. In the Río Hondo reservoir a yellow alert for overflowing is still ongoing.

Sources: CONAE and Disaster Charter

Link:

https://www.disasterscharter.org/image/journal/article.jpg?img\_id=549546&t=1493278533066

https://www.disasterscharter.org/image/journal/article.jpg?img\_id=556279&t=1493708101162

This summary is compiled by the GDACS mapping & satellite imagery coordination mechanism, operated by the UNITAR Operational Satellite Applications Programme (UNOSAT).

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For comments, questions and to submit information on satellite image derived products, please contact: maps@qdacs.org

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