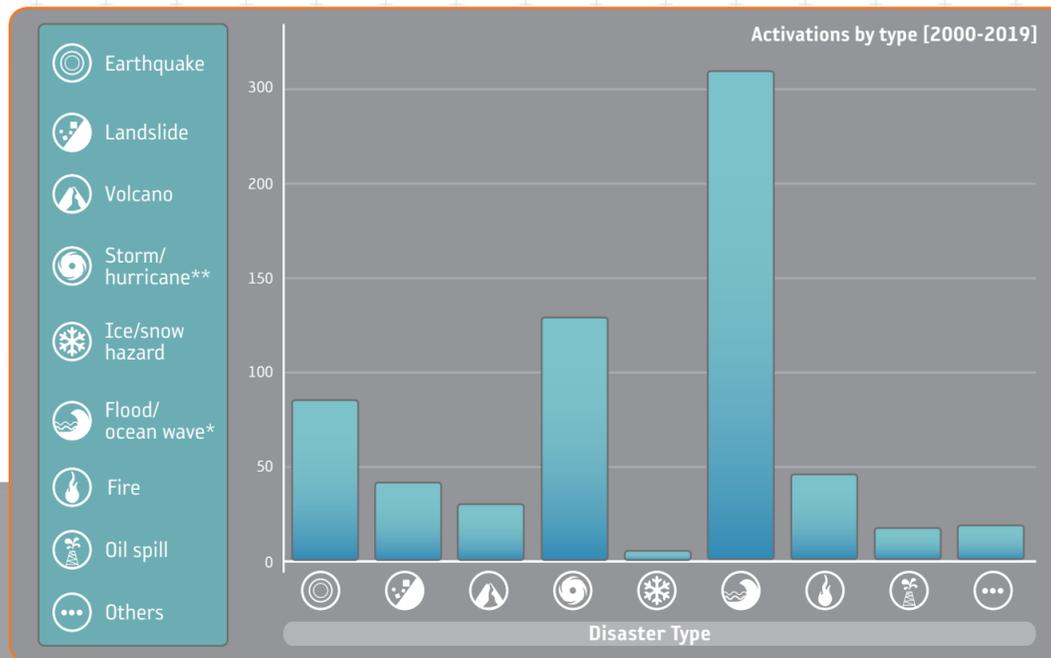


THE REGISTRATION PROCESS – NEW USERS

- ✓ The process starts by completing a **registration form** available on the Charter website.
<https://disasterscharter.org/web/guest/how-to-register-as-a-user>.
- ✓ The registration form, together with a cover letter of the user organization, should be sent by e-mail to the Charter Executive Secretariat (ExecutiveSecretariat@disasterscharter.org), which coordinates Charter operations.
- ✓ The request is processed by the Charter members who may ask for additional clarification or information.
- ✓ The final acceptance of a national user is subject to approval and written notification via official letter by the Charter Board, the policy body of the Charter.
- ✓ New users are asked to sign a document specifying certain procedures and contacts for Charter activation requests. This is necessary to ensure adherence to Charter rules and to avoid loss of time and resources during emergencies.
- ✓ To complete the process, the candidate undergoes a simple exercise to simulate the steps of a Charter activation. This process will validate the ability of national authorities to access and use Charter assets for disaster response, in accordance with Charter operational procedures.

Charter members are also interested in learning about other organizations, in the same country as the national entity, with the capacity to analyze and use satellite data for emergency mapping. These organisations could become recipients of data in the instance of an activation in the country in order to support with the creation of Value Added Products the caller.

A country which does not have a disaster management authority equipped to meet the Charter's essential criteria given above, can get support from the Charter using the mechanisms explained in p.2.



More detailed information is available on <https://disasterscharter.org/web/guest/how-the-charter-works>
For further inquiries please contact ExecutiveSecretariat@disasterscharter.org

The Charter is a worldwide collaboration among space agencies to make satellite data available for the benefit of disaster management authorities during the response phase of an emergency.

Today, 17 agencies worldwide participate in the Charter:

- European Space Agency, ESA
- Centre national d'études spatiales, France, CNES
- Canadian Space Agency, CSA
- US National Oceanic and Atmospheric Administration, NOAA
- Comisión Nacional de Actividades Espaciales, Argentina, CONAE
- Indian Space Research Organization, ISRO
- Japan Aerospace Exploration Agency, JAXA
- United States Geological Survey, USGS
- UK Space Agency, UKSA and Disaster Monitoring Constellation International Imaging Ltd., DMCii
- China National Space Administration, CNSA
- German Aerospace Center, DLR
- Korea Aerospace Research Institute, KARI
- Instituto Nacional de Pesquisas Espaciais, Brazil, INPE
- European Organisation for the Exploitation of Meteorological Satellites, EUMETSAT
- State Space Corporation, ROSCOSMOS
- Bolivarian Agency for Space Activities, ABAE
- United Arabs Emirates Space Agency, UAESA and Mohammed Bin Rashid Space Center, MBRSC



THE INTERNATIONAL CHARTER 'SPACE AND MAJOR DISASTERS' Charter Universal Access



1 WHAT IS THE INTERNATIONAL CHARTER?

The Charter is a worldwide collaboration among space agencies to make satellite data available for the benefit of disaster management authorities during the response phase of an emergency.

The Charter is unique in being able to mobilize space agencies around the world and benefit from their expertise and satellites through a single access point that operates 24 hours a day, 7 days a week at no cost to the user.

Successfully operating since November 2000, the Charter has brought space assets into action for many natural and technological disasters including floods, hurricanes, tsunamis, earthquakes, landslides, forest fires, volcanic eruptions, ice jams, and oil spills. Since its inception, the Charter has been activated in response to over 600 major disasters in more than 125 countries, including the 2004 Asian tsunami, the 2008 cyclone Nargis in Myanmar, the 2010 earthquake in Haiti, the 2013 super typhoon Haiyan in the Philippines, the 2015 earthquake in Nepal, the 2017 hurricane Irma and Maria in the Caribbean and US, the 2018 earthquake and tsunami in Indonesia and the 2019 large flood in Mozambique.

2 WHO USES THE CHARTER?

The Charter can be activated by a predefined list of appointed users, known as 'Authorized Users'(AUs). AUs are able to request Charter support for emergencies in their own country, or in a country with which they cooperate for disaster relief.

Before 2012, AUs were typically disaster management authorities from countries of Charter member agencies. However, the Charter members felt that user access to the Charter should be improved. Therefore, the principle of Universal Access was adopted. Since then, the Charter has been working with partners, such as UNOOSA/UN-SPIDER, UNITAR/UNOSAT, and the Group on Earth Observations (GEO) to raise awareness of the Charter and its Universal Access Initiative. This initiative allows national disaster management authorities from any countries to become Charter AUs – see section 5. In addition, the Charter cooperates with Sentinel Asia, a regional network for Earth observation-based emergency response in 28 countries. Sentinel Asia's partner, the Asian Disaster Reduction Centre can submit Charter activation requests on behalf of Sentinel Asia users.

2012 ONWARDS: UNIVERSAL ACCESS

Building on a decade of success in making satellite data available to designated users for disaster response, the Charter has opened its doors even wider since 2012. By adopting the principle of Universal Access, the Charter is further strengthening its contribution to disaster management worldwide.

Map showing the 65 countries with direct access to the Charter in September 2019. Today Universal Access allows national users to directly submit emergency requests as Authorized Users.



3 WHAT DOES THE CHARTER PROVIDE?

Although the Charter's mandate is limited to supplying satellite data quickly and at no cost, the Charter members may also provide crisis mapping and damage assessment. For each disaster type, the Charter has identified the satellite sensors and their options to be used to obtain the most useful data. For instance, optical images are well suited for damage-mapping - medium-resolution (~10m) for a snapshot of overall effects, with higher-resolution acquisitions depicting damage to road networks or even individual buildings. Imaging radar has an all-weather capability and is particularly adapted to key hazards types, such as floods, oil spills and landslides, to name a few.

It is also possible to compare archived data with newly acquired data to prepare damage assessment products which offer further views of how the landscape and infrastructure have been affected. This information can be used to provide key mapping products for areas that are difficult to access, helping to identify zones where aid is most needed.

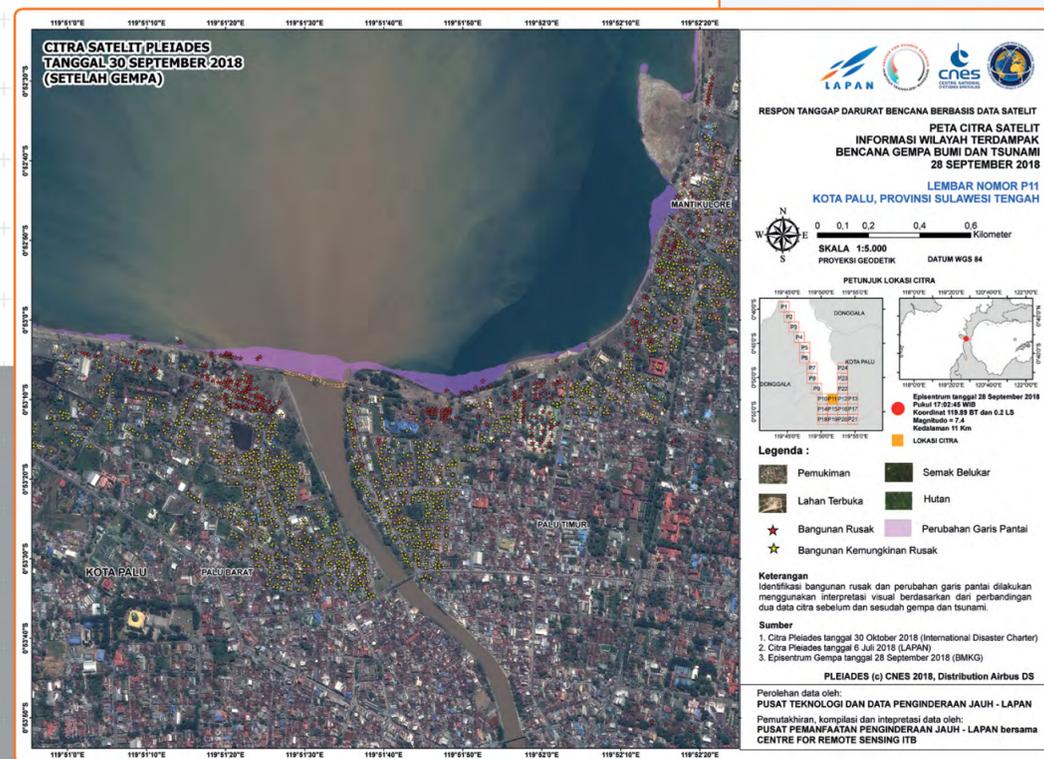
For each Charter activation, a Project Manager (PM) is designated by the Charter members to coordinate the production of satellite derived information. The PM regularly communicates with the end user to ensure adequate support and service.

When a disaster strikes, timeliness is crucial. Through the Charter, acquisition of satellite data over disaster areas can be prioritised, making sure that the necessary information is rapidly disseminated to the team responsible for emergency response.

Earthquake and Tsunami in Indonesia

Damage assessment in Kota Palu, Sulawesi Province, 28 September 2018.

Source: Pleiades images acquired on 30 October 2018 and 6 July 2018. Copyright © CNES 2018, Distribution Airbus DS. Map produced by LAPAN, Indonesia



4 WHAT IS UNIVERSAL ACCESS?

Charter members, conscious of the need to improve Charter access globally, have adopted the principle of Universal Access: any national disaster management authority will be able to submit requests to the Charter for emergency response. With the status of AU a user organisations is granted the permanent privilege to submit direct requests to the International Charter so as to get satellite observations for emergency response in the specific context of a major disaster. Proper procedures will have to be followed, but the affected country will not have to be a Charter member.

A registration process is available for national authorities to express interest in becoming Authorized Users of the Charter. In addition, procedures to activate the Charter in case of major disaster will be explained and tested with the new users.

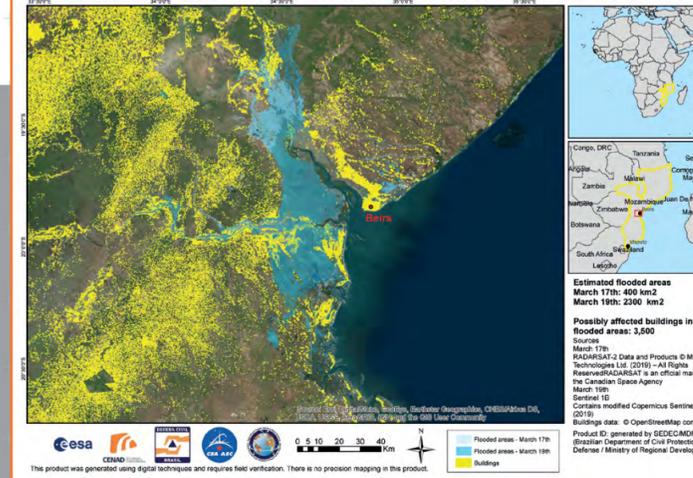
5 WHAT CONDITIONS APPLY?

The following criteria must be met by an entity requesting to become a new user:

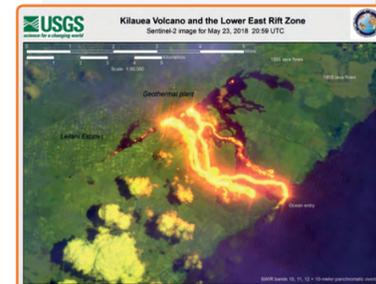
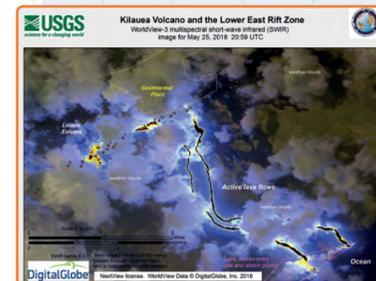
- The entity must be a national disaster management authority or its delegated agency in that country
- The entity must have the capacity to download and utilize maps
- The entity must be able to submit and pursue its activation requests in English

The entity or its delegated agency should have a national mandate to coordinate emergency response measures in the respective country. The material provided by the Charter could be either remotely sensed imagery or derived information products such as crisis or damage assessment maps. The basic information to be provided during an activation request includes: date and time of disaster occurrence, affected area with geographic coordinates (Latitude/Longitude), type of hazard, and name of the contact person for any communication with the Charter.

Flooded areas in Sofala province of Mozambique - Cyclone IDA1 - March 19th, 2019



Basic conditions have been established to ensure that all user organisations authorised to trigger the Charter are able to make effective use of the Charter's resources.



Kilauea Volcano

WorldView-3 Short-wave infrared (SWIR) image acquired on the 25 May 2018

Source: WorldView Data © DigitalGlobe, inc 2018

Sentinel-2 Short-wave infrared (SWIR) image acquired on 23 May 2018

Contains modified Copernicus Sentinel data (2018)

Flood in Mozambique

Flooded areas in pale blue, affected buildings in yellow Cyclone IDA1, March 19

Sources: Radarsat-2 (17 March 2019)

Sentinel-1 (19 March 2019).

Copyright: RADARSAT-2 Data and Products © Maxar Technologies Ltd. (2019) – All Rights Reserved. RADARSAT is an official mark of the Canadian Space Agency