International Charter
‚Space and Major Disasters‘

Satellite-based support for disasters worldwide

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History

Following UNISPACE III in 1999, the International Charter 'Space and Major Disasters' was established by the Space Agencies of Europe (ESA), France (CNES), and Canada (CSA).

The Charter was declared operational as of November 2000.

Purpose and scope

The Charter supports with space-based data and information emergency response after major disasters, such as

- Sudden natural events: storms, floods, landslides, fires, earthquakes, volcanic eruptions etc.
- Man-made events: large industrial accidents and oil spills

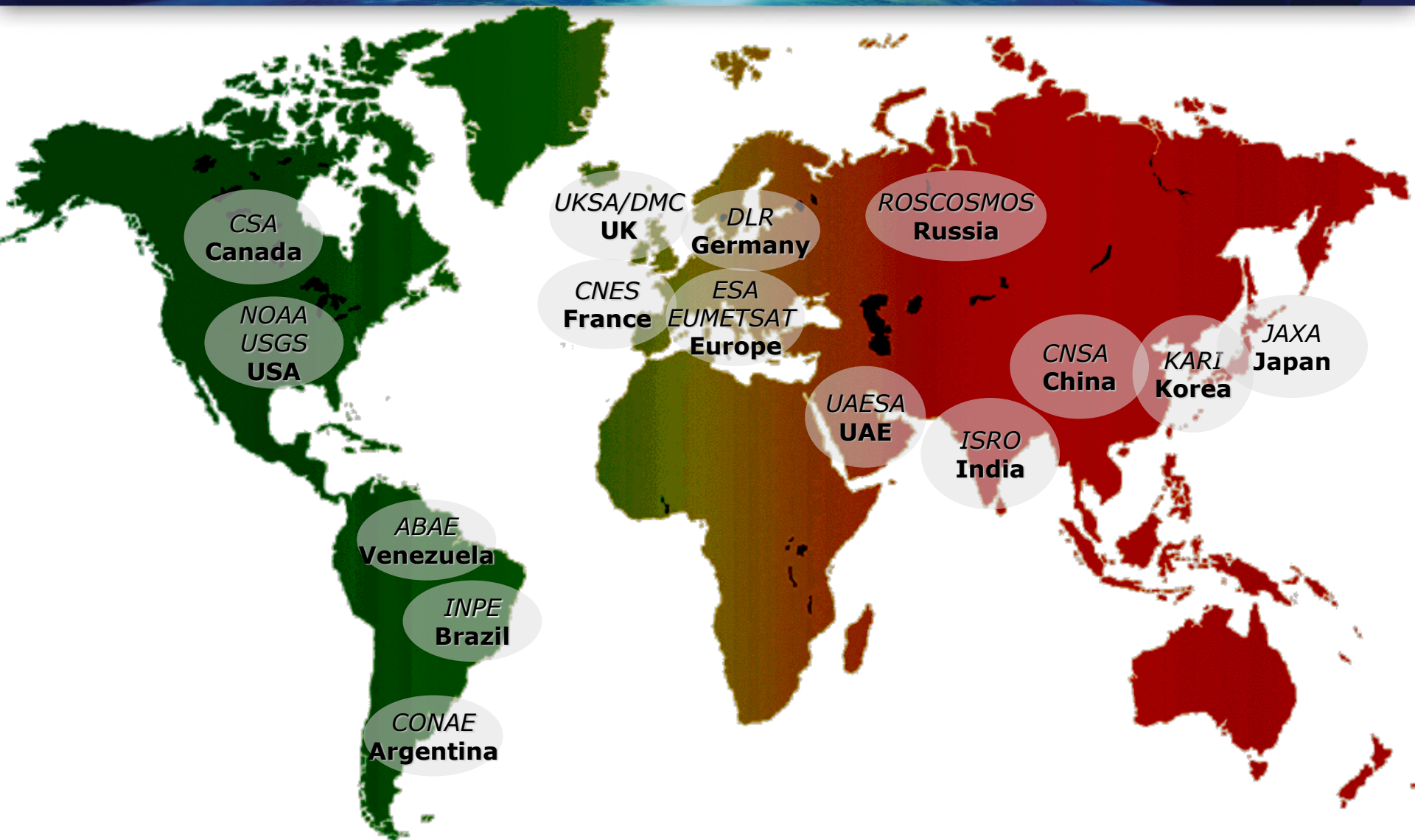
The Charter does not cover emergencies caused by armed conflicts.



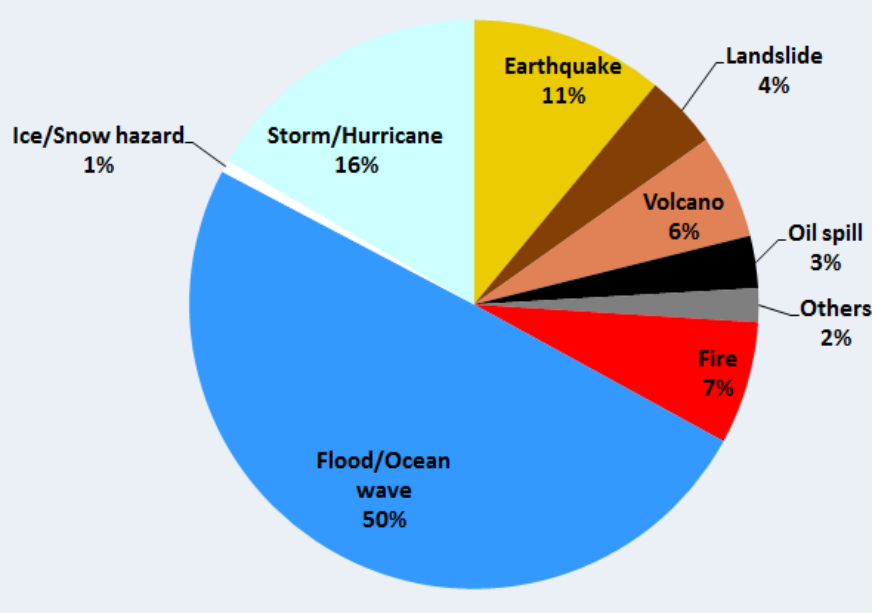


The Charter is available 24/7. When activated it executes priority tasking of numerous Earth-observing satellite missions in a rapid fashion and provides images and/or derived products.

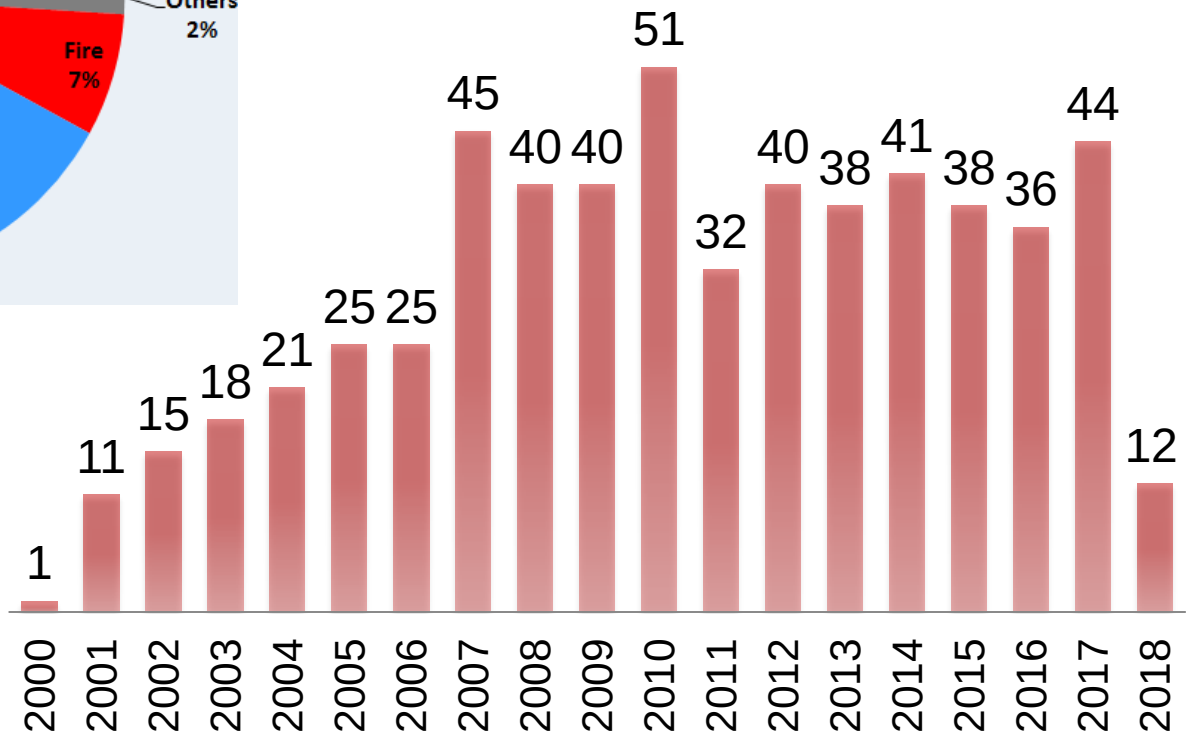
Success in 2000 – 2018: Growth in Membership



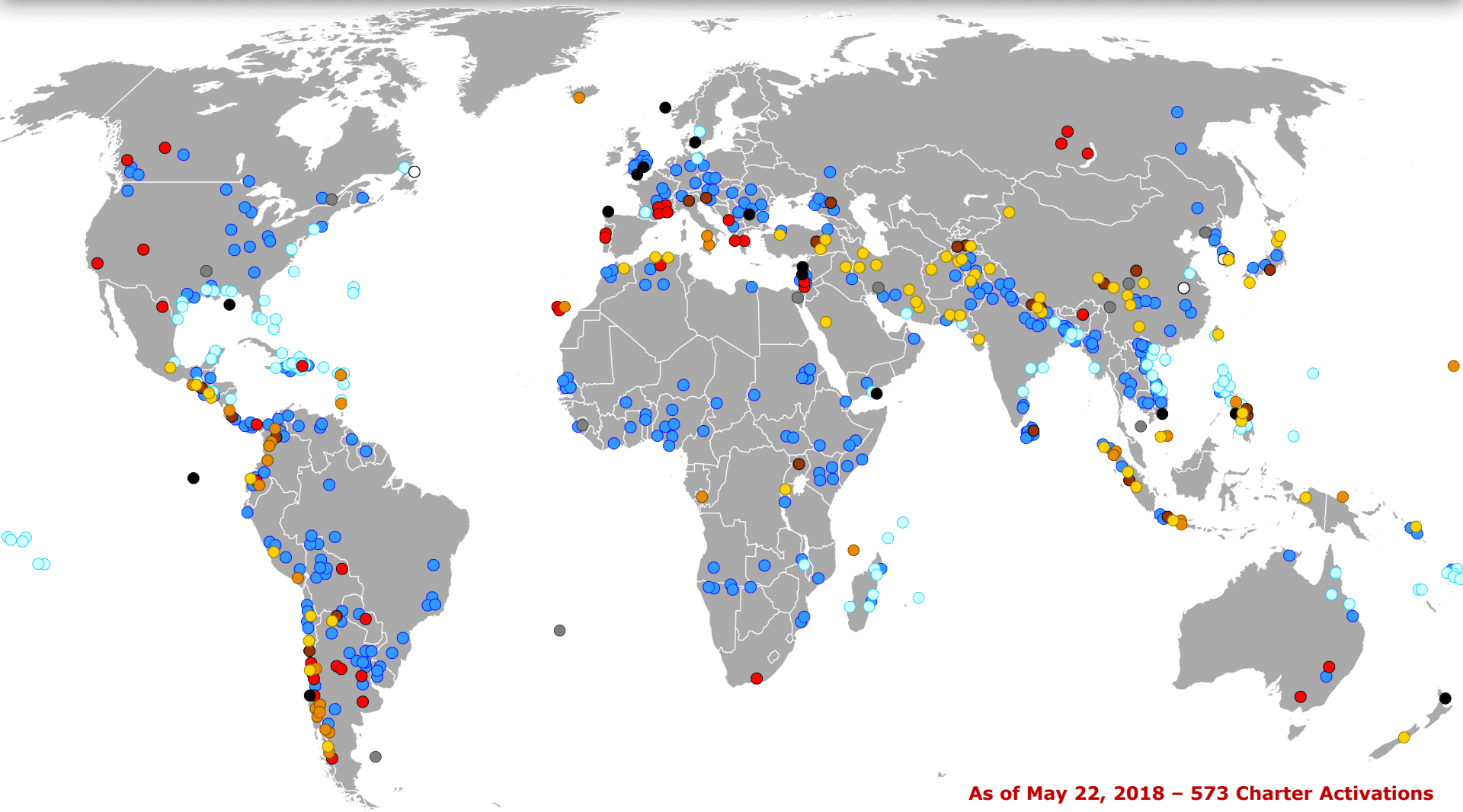
Success in 2000 – 2018: Activation Statistics



Activation statistics as of May 22, 2018



Success in 2000 – 2018:
Support to disaster response in more than 120 countries



As of May 22, 2018 – 573 Charter Activations

Legend: Earthquake · Landslide · Volcano · Storm/hurricane · Flood/ocean wave · Ice/snow hazard · Fire · Oil spill · Other

Success in 2000 – 2018:
Authorized Users in 60 countries

The Charter works with Authorized Users – these entities are able to directly trigger a Charter activation.

Success in 2000 – 2018: Additional Access Mechanisms

In addition, there are agreements with entities allowed to use/trigger the Charter in certain cases:

- UNOOSA
- UNITAR/UNOSAT
- ADRC (Sentinel Asia)
- EC-ERCC / Copernicus Emergency Management Service

Universal Access

Any national disaster management authority can become a Charter User!

The following conditions apply:

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

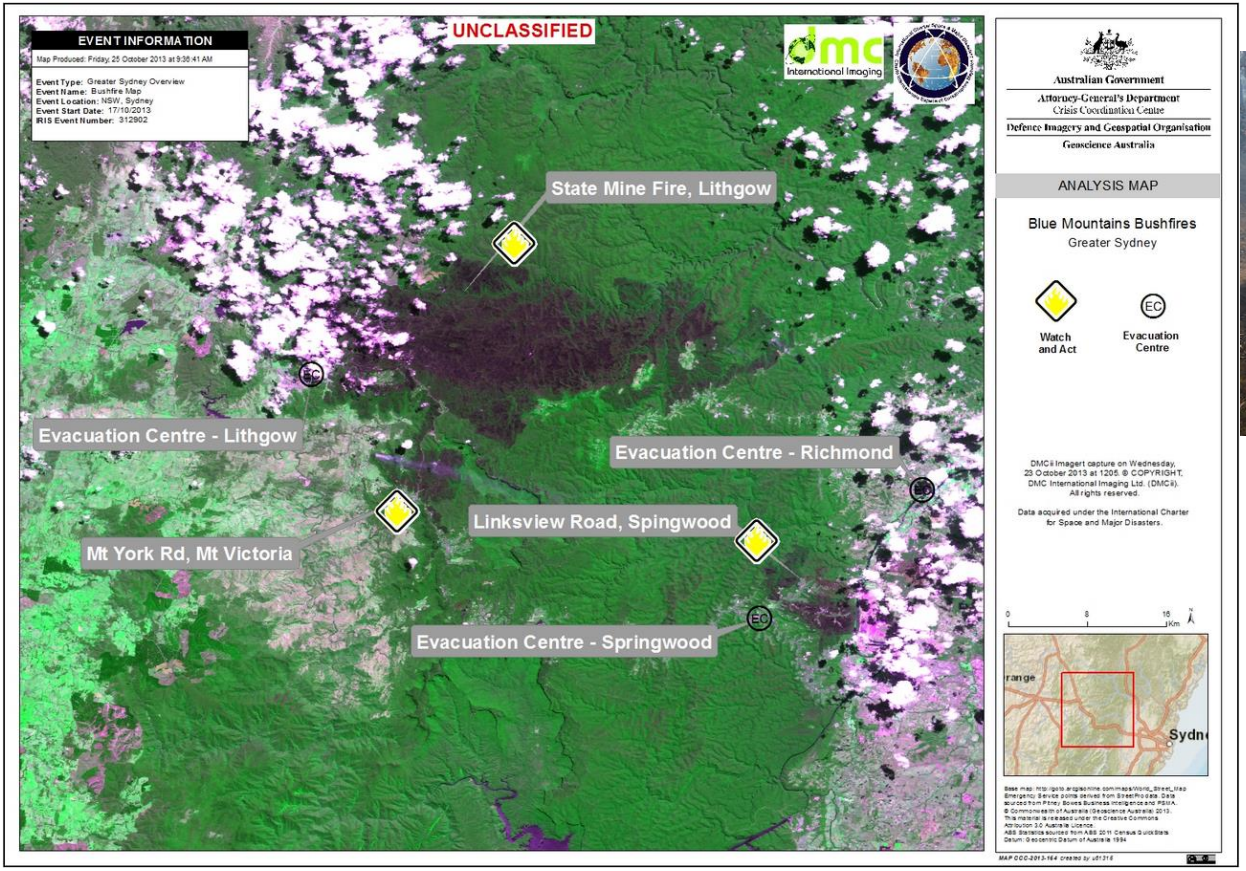
An official letter of the organisation and a filled Registration Form (available at https://disasterscharter.org) needs to be sent to ExecutiveSecretariat@disasterscharter.org.

Becoming an Authorized User does not happen from one day to the next, but involves an assessment by the Charter members as well as a training and simulation exercise.

Examples: Australia

Geoscience Australia (as delegate of Emergency Management Australia) became an Authorized User in 2013.

The Charter was activated in 2013 due to almost 100 wildfires raging across New South Wales.



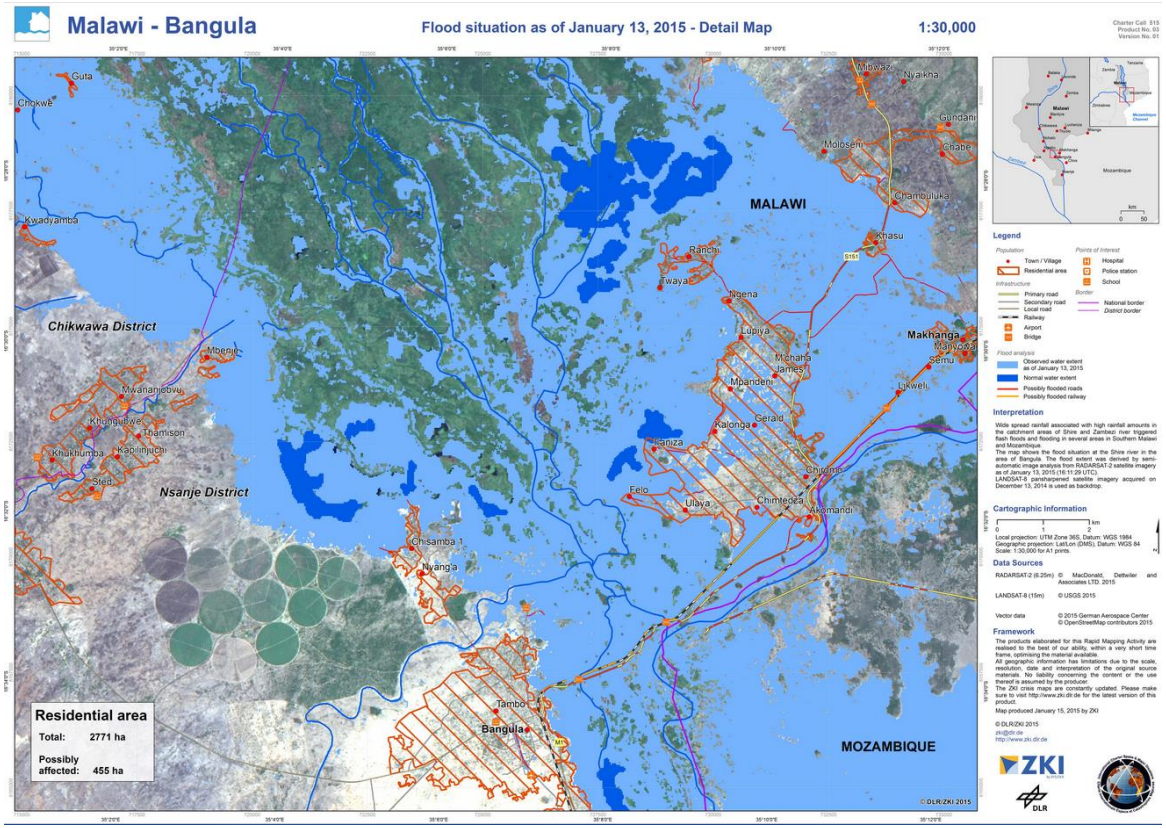
Resident stands in front of his 1958 bus after fighting a fire at the historic township Newnes Junction north of Lithgow.

Source: AAP

Examples: Malawi

Malawi's Department of Disaster Management Affairs became an Authorized User in 2014.

It activated the Charter in 2015 due to major flooding impacting half of the country.



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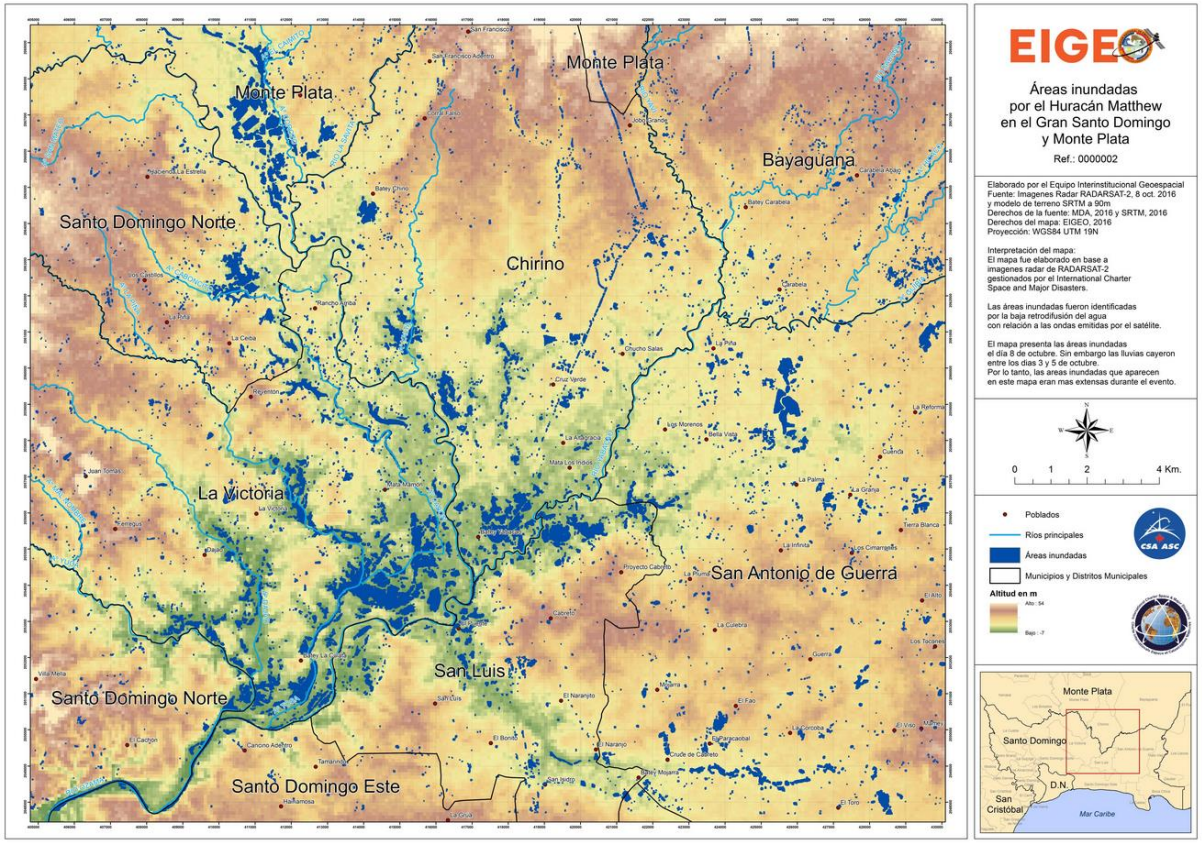
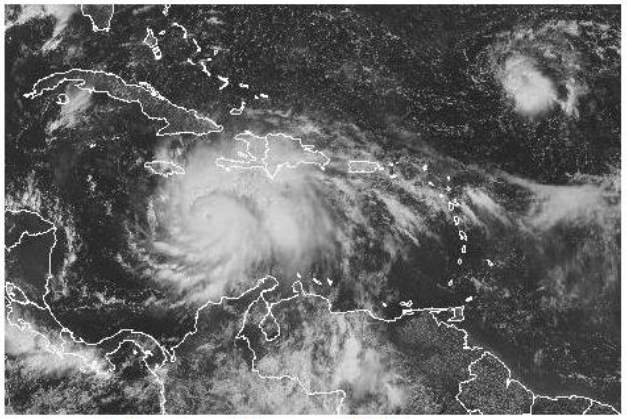
Left: map based on RADARSAT-2 and LANDSAT imagery

Examples: Dominican Republic

The National Commission of Emergencies and Civil Protection (CNE) of the Dominican Republic became an Authorized User in 2015 and activated the Charter in 2016 due to flooding caused by Hurricane Matthew.





Hurricane Matthew imaged from space (NOAA)

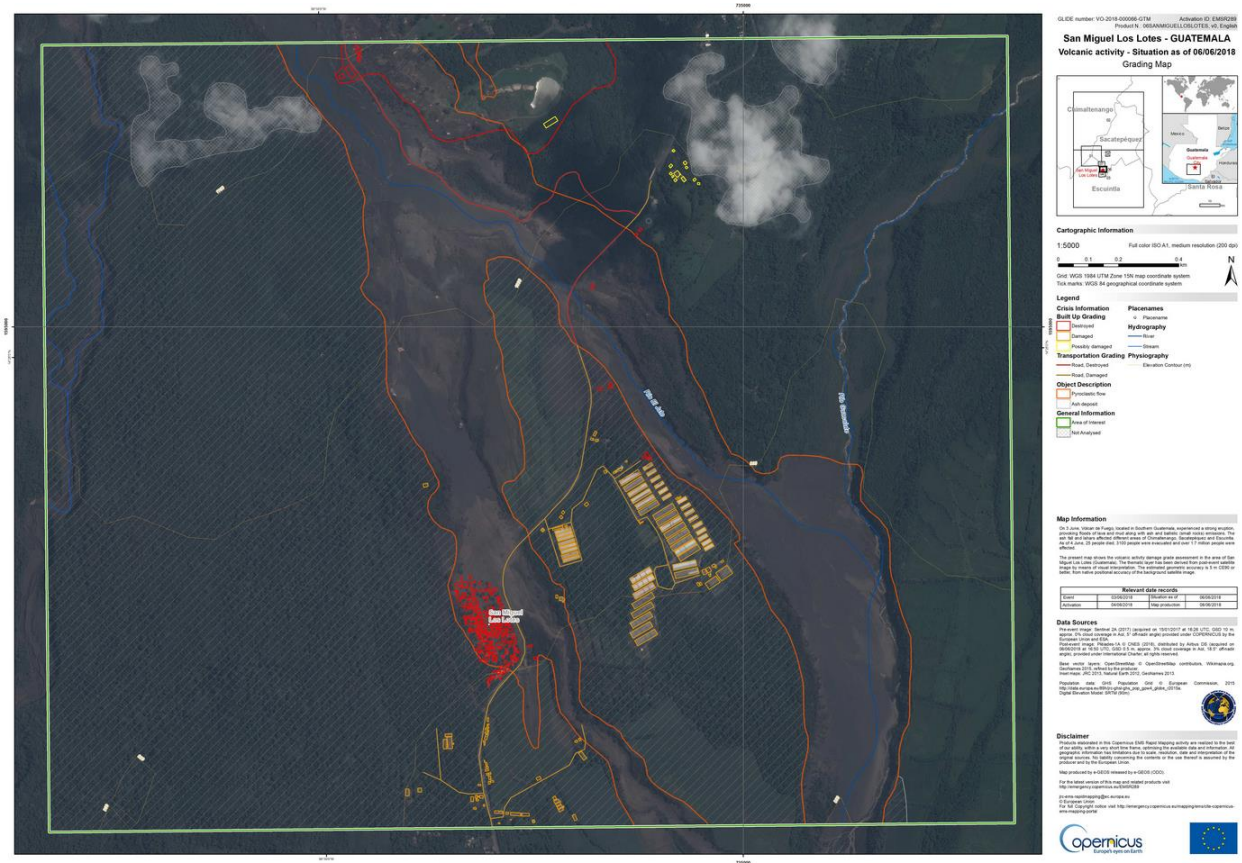
A flood in Santo Domingo, capital of the Dominican Republic
Photograph: Erika Santelices/AFP/Getty Images

Examples: Guatemala

The National Coordinating Agency for Disaster Reduction (CONRED) of Guatemala became an Authorized User in 2016.

The Charter was activated in 2018 due to the eruption of Fuego Volcano.

Top: Pyroclastic flow on the flank of Fuego volcano. © AFP



Left:
This map, produced by Copernicus EMS based on Pleiades data provided by the Int. Charter, shows damage information (buildings, roads) as well as the extent of the pyroclastic flow.

Copernicus
Europe's eyes on Earth

Conclusions / Societal benefit achieved by the Charter

- The International Charter Space and Major Disasters is a rush-mode mechanism supporting emergency response by providing quick access to satellite data and/or derived products.
- The Charter has grown much between UNISPACE III and UNISPACE+50, covering almost 600 emergencies caused by disasters in more than 120 countries.
- Universal Access encourages disaster management authorities from all countries to become Authorised Users after training.
- The Charter encourages in-country capacities to act as "Project Managers" and "Value Adders" (producers of satellite-based maps)
- It is the intention of the Charter members to help save lives, property, infrastructure, and the environment in cases of major disasters worldwide.
- In fruitful collaboration with UNOOSA/UN-SPIDER, UNITAR/UNOSAT, Sentinel Asia, and the Copernicus Emergency Management Service, the Charter intends to help filling the gap between space faring and space emerging nations.

Find the Charter at

https://disasterscharter.org

https://twitter.com/disastersChart

and meet us in the UNISPACE Exhibition Hall