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Issue 1

New Members strengthen the International Charter 'Space and Major Disasters' to improve future disaster support efforts

Brasil's National Institute for Space Research (INPE), under the Brazilian Ministry of Science, Technology and Innovation, and the Korea Aerospace Research Institute (KARI), part of their Ministry of Education, Science and Technology (MEST), have become the newest members of the International Charter 'Space and Major Disasters' (The Charter).

The Charter is a joint initiative for providing emergency response satellite data free of charge to those affected by disasters anywhere in the world. Charter members put space technology at the service of authorities in the event of a major disaster, providing earth observation data of the affected areas to assist rescue and disaster management efforts. Each member agency has demonstrated a commitment to use space technology to serve humankind when it is in most need of assistance - when disasters of both natural and human origins strike world's communities or wreak havoc on the environment.

Charter and KARI representatives at the KARI signing ceremony



Credits: KARI

KARI President Dr. Seungjo Kim signed the Charter on 7 July and said, "We are proud to have KARI join other agencies around the world in supporting the Disaster Charter, particularly since the Charter has recently proven the relevance of space in alleviating human suffering caused by natural and technological disasters," said KARI President Dr. Seungjo Kim.

Recent Activations

- [Flood in Ghana](#)
- [Volcano in Chile](#)
- [Eathquake in Turkey](#)
- [Flood in El Salvador](#)
- [Floods in Vietnam](#)

Events

- 8 November 2011 - INPE Signing Ceremony Sao Paolo, Brasil

Charter Members

- [European Space Agency \(ESA\)](#)
- [Centre national d'etudes spatiales \(CNES\)](#)
- [Canadian Space Agency \(CSA\)](#)
- [Indian Space Research Organisation \(ISRO\)](#)
- [National Oceanic and Atmospheric Administration \(NOAA\)](#)
- [Argentina's Comision Nacional de Actividades Espaciales \(CONAE\)](#)
- [Brasil's National Institute for Space Research \(INPE\)](#)
- [Japan Aerospace Exploration Agency \(JAXA\)](#)
- [Korean Aerospace Research Institute \(KARI\)](#)
- [US Geological Survey \(USGS\)](#)
- [DMC International Imaging \(DMCii\)](#)
- [China National Space Administration \(CNSA\)](#)
- [German Aerospace Centre \(DLR\)](#)

*international
collaboration aiding
and assisting*

Dr. Alice Bunn, then chair of Charter, from the UK Space Agency, said, “The Charter represents some of the best of human ingenuity and cooperation. We are extremely pleased to welcome KARI as a full member of the Charter, and to recognize their commitment and dedication to the welfare of those countries most affected by major disasters.”

KARI sent the formal letter of intent to participate in the Charter last year and the Board of the Charter approved the application unanimously earlier this year. KARI will provide data from the Korea Multi-Purpose Satellite (KOMPSAT-2) as a part of the International Charter activities.

“The Charter is an excellent example of international cooperation in the field of natural disasters, as it has recently been demonstrated in connection with the tsunami in Japan and severe snow on east coast of Korea,” Director of Satellite Operations & Applications Division, Dr Yongsik Chun commented after the ceremony.

The INPE signing ceremony



Credit: International Charter

INPE became a signatory of the Charter on 9 November, becoming the second Latin American signatory of the Charter along with CONAE of Argentina.

“Brazil has already benefited from the extensive support of the Charter members in January 2011 when a major flood killed over 800 people and displaced thousands more near Rio de Janeiro,” said Gilberto Câmara, Director of INPE.

As the Charter’s newest member, INPE will collaborate with international counterparts in providing data from its CBERS Earth-observing satellite series. CBERS has launched three satellites since 1999, and the fourth satellite in the series is scheduled for launch in late 2012. Images from these satellites have already been used to monitor deforestation and fire control in the Amazon region, water resources, urban growth and agriculture.



Canadian Space Agency (CSA) takes over chairmanship of International Charter 'Space and Major Disasters'

At the Executive Secretariat meeting on 5 October 2011, the UK Space Agency handed over the Chair of the International Charter to the Canadian Space Agency (CSA).

Over the previous six months the UK led the effort to ensure maximum benefit from space-based disaster response and played a leading role in improving access to the Charter, enabling any country to draw upon its data. Other successes include the facilitation of EUMETSAT joining the Charter and progress in reaching an agreement between the Charter and the GMES Emergency Management Service.

During the UK's six month chairmanship there has been ten Charter calls and nine Charter activations. These include the fires in Alberta Canada; floods in Columbia; eruption of the Puyehue volcano in Chile/Argentina; landslides in Seoul and Chuncheon; flooding in Niigata, Japan; Hurricane Irene in the USA; floods in Nigeria; floods in the Shikoku and Kinki regions of Japan and an earthquake in India.

The Canadian Space Agency was one of the first members of the International Charter and last held the chair from April to October 2008. They will hold the chair until April 2012, when they will hand over to the Japanese Aerospace Exploration Agency (JAXA).



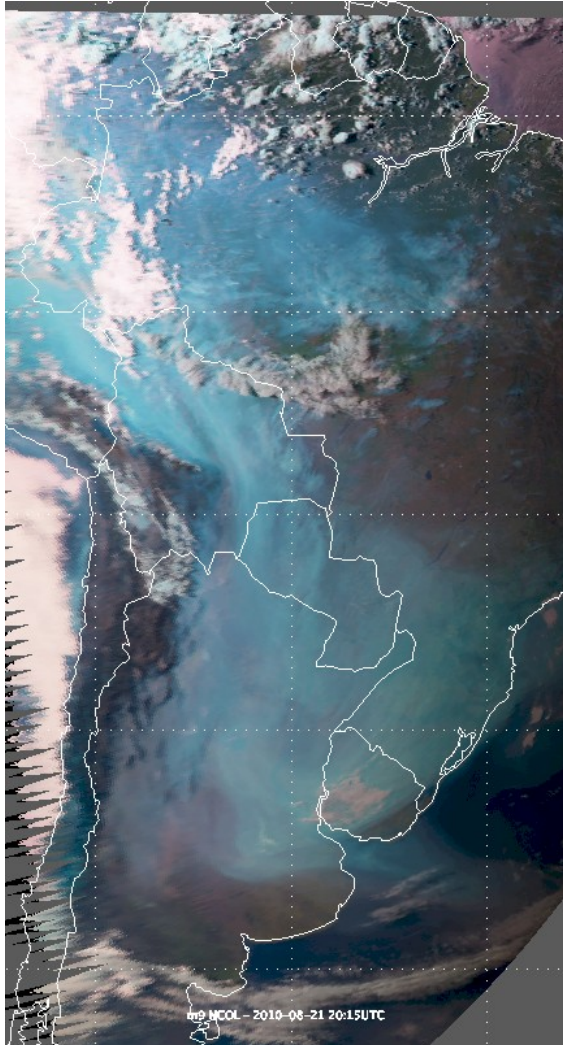
Credit: UK-DMC2 Imaging Ltd. 2011

This image taken by the UK-DMC 2 satellite shows the damage caused by a wildfire which broke out in Arizona at the end of June. The fire has destroyed a huge area of US national forest, forcing thousands of people to evacuate. Smoke from the burning pine forests was seen in the neighbouring states of New Mexico and Colorado.

Charter In the News

- [Kari joins International Charter 'Space and Major Disasters'](#)
- [UK hands over Charter chairmanship to Canada](#)
- [INPE joins International Charter 'Space and Major Disasters'](#)

EUMETSAT starting down the road to joining Charter



At the October Board meeting, the Charter Board approved a proposal from EUMETSAT to join the Charter.

This proposal highlights potential contributions from EUMETSAT, including the EUMETCast data distribution system for emergency response.

EUMETSAT is the European operational satellite agency for monitoring weather, climate and the environment. It operates a constellation of meteorological satellites, monitoring the atmosphere and ocean and land surfaces to deliver weather and climate-related satellite data, images and products. This information is supplied to the National Meteorological Services of the organisation's participating countries across Europe, as well as being shared with other users worldwide.

The frequent, highly reliable data and images delivered by the EUMETSAT satellites help to enhance and safeguard the daily lives of European citizens. They aid meteorologists in identifying and monitoring the development of potentially dangerous weather situations and in issuing timely forecasts and warnings to emergency services and local authorities, helping to mitigate the effects of severe weather and protecting human life and property.

There will be a final decision expected from the EUMETSAT Council at the end of November 2011.

Credit: EUMETSAT, Met-9 2010

Charter – Member Profile

■ [Canadian Space Agency](#)

The CSA has been a major contributor of satellite images for the International Charter 'Space and Major Disasters' since its operations began in November 2000. First with RADARSAT-1, and then with the addition of RADARSAT-2, the CSA has consistently and rapidly responded to Charter emergency requests with radar image data, which can be acquired day and night, in all weather conditions – a huge advantage in the Charter's time-sensitive efforts to mitigate the effects of disasters on human life and property.



In the past six months alone, the CSA has fulfilled Charter emergency imagery requests covering the eruption of Mount Merapi in Indonesia, Hurricane Tomas in Haiti and Severe Tropical Cyclone Yasi in Australia, flooding in Colombia, Venezuela, Panama, Australia, Brazil, Mozambique and Namibia, and an earthquake in New Zealand, as well as the devastating earthquake and tsunami which pummelled Japan. The image data provided have been new acquisitions, as well as images drawn from the now extensive RADARSAT archive, which have been used in the detection of changes wrought by these disasters in the affected areas.