AOGEO and China GEO support disaster emergency for developing countries

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Group on Earth Observations (GEO)

105 Member states

3 Engagement Priorities

132 Participating Organizations

8 Societal Benefit Areas
What is the CDDR?

- Initiated by ChinaGEO in 2016, the ChinaGEO Disaster Data Response Mechanism (CDDR) is responsible for coordinating the provision of Chinese high-resolution satellite data and disaster analysis products to disaster-affected countries.
National Cooperation Network

Meteorological Satellites
National Satellite Meteorological Center
FY-3B/3C/3D: polar orbit satellites; FY-2H/4A: stationary orbit satellites;

Gaofen Satellites
China Center for Resources Satellite Data and Application
GF-1/2: optical satellites; GF-3: SAR satellite; GF-4: geostationary satellite;

Ziyuan-3 Satellite
Land Satellite Remote Sensing Application center
MUX: 5.8m, NAD: 2.1m, DLC: 3.5m

TripleSat Satellites
Twenty First Century Aerospace Technology Co., Ltd.
<1m high-resolution imagery products;

JiLin-1 Optical/Video/Multispectral Satellites
Chang Guang Satellite Technology Co. Ltd.
<0.92m high-resolution imagery products;

SuperView-1 Optical Satellites
SpaceWill Info. Co., Ltd.
four 0.5m optical satellites, 12km swath width and 2 days revisit time;
Activities for disaster response
Iran-Iraq Earthquakes Emergency Response

CDIR launched hours after Iran earthquake at Nov 12 of 2017, and 570 images from 18 satellites were observed and shared within one week.

AOls requested by UNOSAT at Nov 16, 2017

coverage observing for all A0ls after one day only

Data Providers

<table>
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<tr>
<th>Data Provider</th>
<th>Satellite</th>
<th>Sensor</th>
<th>Spatial Resolution</th>
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<tr>
<td>National Satellite Meteorological Center</td>
<td>FY3B</td>
<td>MERSI</td>
<td>25m/1000m</td>
</tr>
<tr>
<td></td>
<td>FY3C</td>
<td>VIRR</td>
<td>166m</td>
</tr>
<tr>
<td>China Centre for Resources Satellite Data and Application</td>
<td>GF-2</td>
<td>PMS</td>
<td>1m/8m</td>
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<tr>
<td></td>
<td>GF-3</td>
<td>SAR</td>
<td>6m</td>
</tr>
<tr>
<td></td>
<td>ZY3C</td>
<td>PMS</td>
<td>10m</td>
</tr>
<tr>
<td>Twenty First Century Aeronautical Technology Co. Ltd</td>
<td>BJ-2</td>
<td>PMS</td>
<td>0.8m/3.2m</td>
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<tr>
<td>Chong Chuang Satellite Technology Co. Ltd</td>
<td>JL-101A</td>
<td>PMS</td>
<td>0.7m/2.55m</td>
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<tr>
<td></td>
<td>JL-103B</td>
<td>MS</td>
<td>1.0m</td>
</tr>
<tr>
<td>Beijing Space View Technology Co. Ltd</td>
<td>SuperView-1</td>
<td>PMS</td>
<td>0.5m/2m</td>
</tr>
<tr>
<td>Satellite Surveying and Mapping Application Center</td>
<td>ZY3</td>
<td>MUX</td>
<td>0.8m</td>
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September 2017 Mexico Earthquake Response

The purpose of this case study is to better understand the Global Partnership for Sustainable Development Data’s (GPSSD) contribution to and the impact of the call for satellite data to respond to the September 19, 2017 earthquake in Mexico.

The contents for this study include direct inputs via questionnaires and key informant interviews with representatives from Open Data Office of the President of Mexico, the European Space Agency, Humanitarian OpenStreetMap Team (HOTOSM), ChinaGEOS, and the GPSSD Secretariat, as well as secondary information gathered through reports and documents noted in the annex.
What users feedback?

AOGEOS facilitates global data sharing for disaster response

Under the coordination of AOGEOS, GEO’s regional initiative in Asia-Oceania, a new mode of international disaster emergency cooperation is gradually being established. This data sharing for disasters is expected to become an important supplement for other international disaster cooperation mechanisms, and has already proven valuable in several cases over the last few years.

In 2017, over 126 Gigabytes (GB) of data collected.
Conclusion

- Based on the GEO Data Sharing Principles, the CDDR is establishing an international cooperation network on disaster data response;

- The obvious advantage of CDDR is the FAIR concepts (Fast, Accessible, Interoperable and Reusable);

- The CDDR has been regarded as a complement of the inter-governmental disaster reduction under the Sendai framework.

- The CDDR is successful in China, the next step will be implemented in AOGEOSS.
Thank you for your attention