

**** November 2020 News from Sentinel Asia Project Office ****

- * - * - * - * - * - * - * - * - * - * - * - * - * - * - *

Topics:

1. [News] Emergency Observation of Disasters Occurring in November 2020
2. Events
3. How to send Emergency Observation Request
4. Using Sentinel Asia Operation System, OPTEMIS

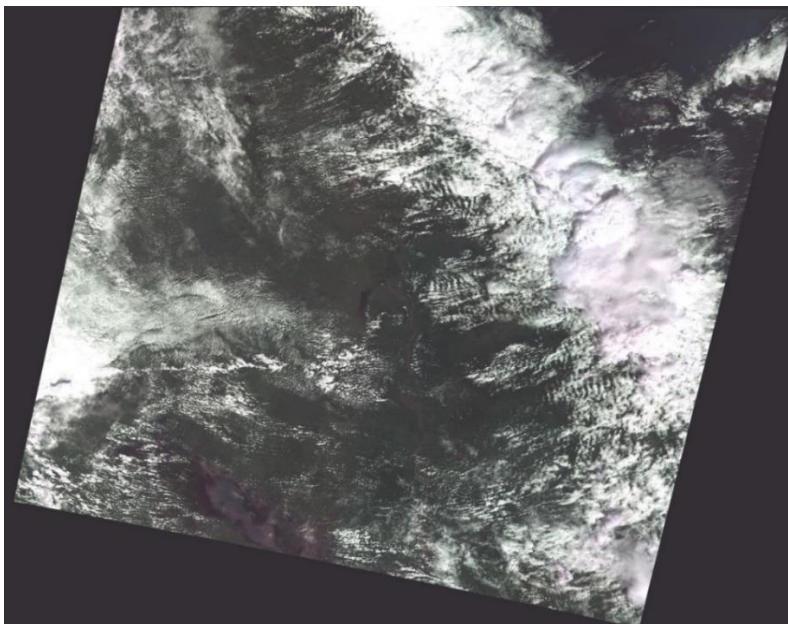
- * - * - * - * - * - * - * - * - * - * - * - * - * - * - *

1. [News] Emergency Observation of Disasters Occurring in November 2020. (as of 27 November)

(1) Flood, Landslide and Storm in Vietnam

Flood, Landslide and Storm occurred in Vietnam on October 29th. According to the National Center for Hydrometeorological Forecasting (NCHMF), the storm “Molave” with strong wind (level 12-15) moved from 350 km northeast of Song Tu Tay Island to 240 km east from the coast of the provinces (Quang Nam, Phu Yen) on October 27-28th. The Department of National Remote Sensing - Ministry of Natural Resources and Environment (MONRE), Vietnam made an Emergency Observation Request (EOR) to Sentinel Asia for the disaster on October 27th prior to the landing. Among Data Provider Nodes (DPNs), Indian Space Research Organization (ISRO) provided their observation data. The information on the latest response by Sentinel Asia is available from the following link.

<https://sentinel-asia.org/EO/article20201027VN.html>



Satellite image (RESOURCESAT-2) after the event provided by ISRO

(2) Flood in Cambodia

Flood occurred in Cambodia on October 17th. Cambodia's National Committee for Disaster Management reported that flood had affected over 240,000 people in 71 districts among 19 out of 25 provinces and autonomous regions. At least 20 people had lost their lives. The affected provinces are: Banteay Meanchey, Oddar Meanchey, Battambang, Kampong Chhnang, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Mondulhiri, Pailin, Pursat, Preah Sihanouk, Preah Vihear, Stung Treng, Svay Rieng, Siem Reap and Takeo provinces, and the autonomous municipality and capital, Phnom Penh. Almost 60,000 houses were damaged, and over 26,000 people from nearly 8,000 families evacuated. Thousands of hectares of rice and other crops were also damaged. The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) on behalf of National Committee for Disaster Management (NCDM) made an EOR to Sentinel Asia for this disaster on October 30th. Among DPNs, Centre for Remote Imaging, Sensing and Processing (CRISP), Geo-Informatics and Space Technology Development Agency (GISTDA), ISRO, Japan Aerospace Exploration Agency (JAXA), and National Applied Research Laboratories (NARL) provided their observation data. Among Data Analysis Nodes (DANs), Asian Institute of Technology (AIT), Mohammed Bin Rashid Space Centre (MBRSC), UN World Food Programme (WFP), and Yamaguchi University provided their VAPs. One thing worthwhile mentioning here is that WFP, who had joined JPT as a DAN member shortly before this EOR, made and provided for the first time its product. This significant achievement will be highlighted in more detail in the interview section of the next month's Sentinel Asia newsletter.. The information on the latest response by Sentinel Asia is available from the following link.

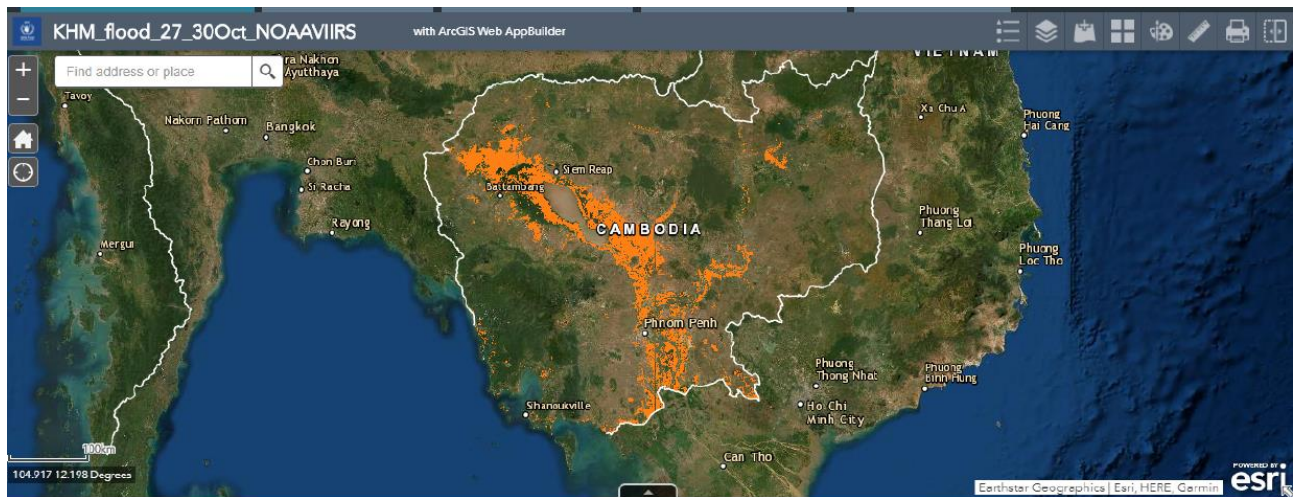
<https://sentinel-asia.org/EO/article20201017KH.html>



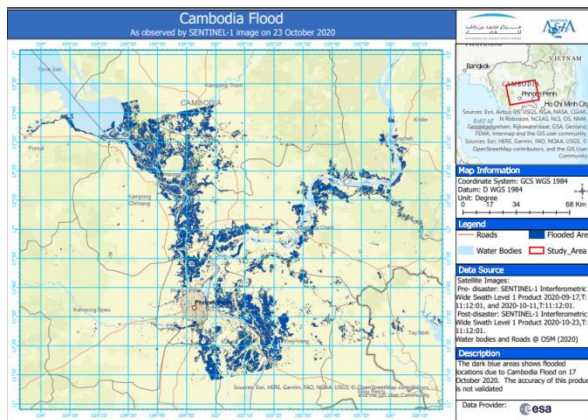
Satellite image (TeLEOS-1) after the event provided by CRISP



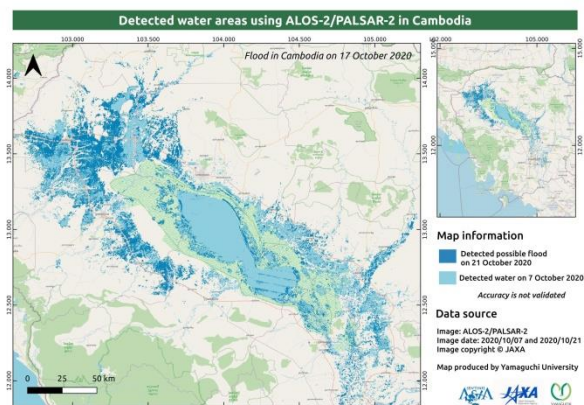
Satellite image (THEOS-1) after the event provided by GISTDA



Product by WFP



Product by MBRSC



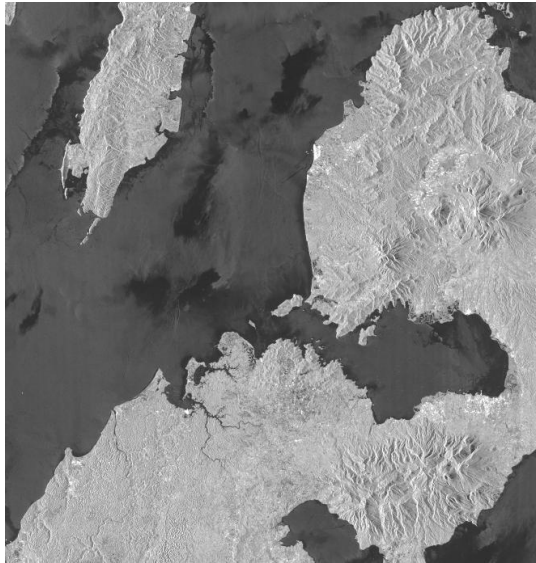
Product by Yamaguchi University

(3) Typhoon GONI in Philippines

The Typhoon named “GONI” occurred in the Philippines on November 1st. Typhoon GONI made landfall in the Philippines with maximum sustained wind of 225km/h at 04:50 local time on November 1st (19:50 UTC, October 31st). According to the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) after making landfall over the municipality of Tiwi, GONI moved West with the same maximum speed of 225 km/h and increased gustiness from 280 km/h to 310 km/h. AHA Centre and the Philippine Institute of Volcanology and Seismology (PHIVOLCS) made an EOR to Sentinel Asia for the disaster. This EOR was escalated to the International Disaster Charter. PHIVOLCS assumed the role of Project Manager (PM). Among DPNs, GISTDA, ISRO, JAXA, and NARL provided their observation data. Among DANs, AIT, Earth Observatory of Singapore (EOS), Mohammed Bin Rashid Space Centre (MBRSC), and Yamaguchi University provided their VAPs. Also, Manila Observatory (MO) made detailed analyses incorporating information provided by local authorities and published its report. The information

on the latest response by Sentinel Asia is available from the following link:

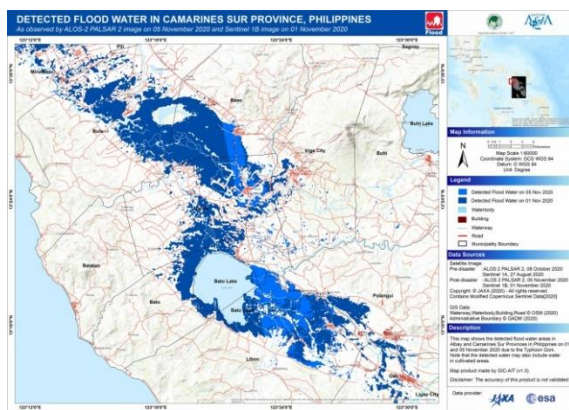
<https://sentinel-asia.org/EO/article20201101PH.html>



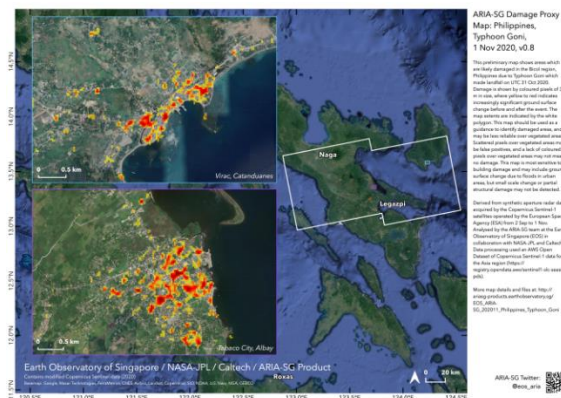
Satellite image (ALOS-2) before the event provided by JAXA



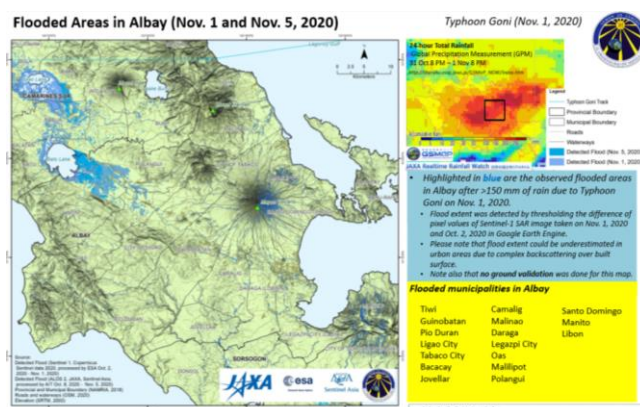
Satellite image (ALOS-2) after the event provided by JAXA



Product by AIT



Product by EOS



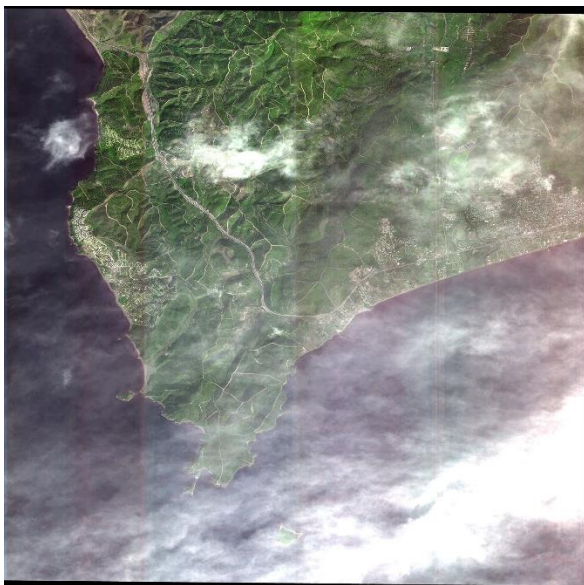
Report by MO

(4) Earthquake in Turkey

Earthquake and Tsunami occurred in Turkey on October 30th. At least 27 people were killed in Turkey and Greece when a powerful earthquake hit the Aegean Sea, sending buildings crashing down and triggering what authorities have called a "mini tsunami". Officials said 25 people were killed in coastal areas in Turkey's west, while two teenagers -- a boy and a girl -- died on the Greek island of Samos after a wall collapsed on them. In Turkey, at least 20 buildings in the city of Izmir alone were destroyed, Mayor Tunc Soyer told CNN Turk. At least 804 people had been injured in Turkey, said the country's disaster agency. Dozens were saved by rescue teams using diggers and helicopters to search for survivors. A total of 470 aftershocks had been recorded, 35 of which were over 4.0 magnitude, the agency added. Search and rescue operations remained under way in eight buildings, while operations had been completed in nine other buildings, the disaster agency said. (News link to CNN: <https://edition.cnn.com/2020/10/30/europe/earthquake-greece-turkey-aegean-intl/index.html>)

ADRC on behalf of the Disaster and Emergency Management Authority (AFAD) made an EOR to Sentinel Asia for the disaster on November 2nd. Among DPNs, GISTDA, ISRO, JAXA, MBRSC, and NARL provided their observation data. Among DANs, AIT, EOS and MBRSC provided their VAPs. The information on the latest response by Sentinel Asia is available from the following link.

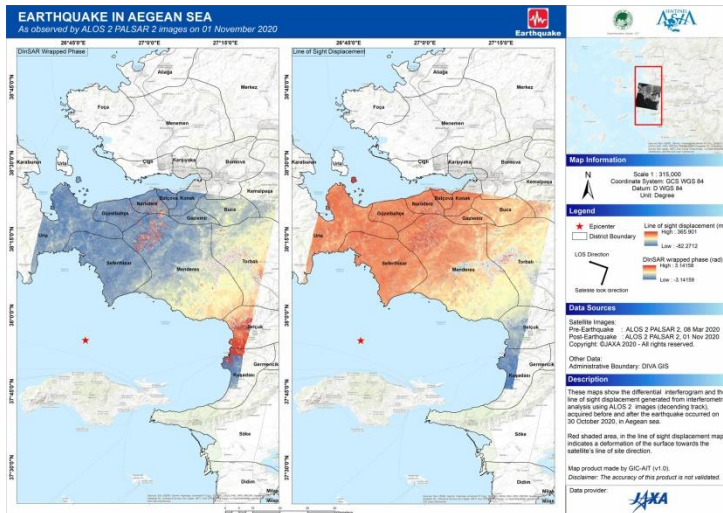
<https://sentinel-asia.org/EO/article20201030TR.html>



Satellite image (Cartosat-2E) after the event provided by ISRO



Satellite image (KhalifaSat) after the event provided by MBRSC

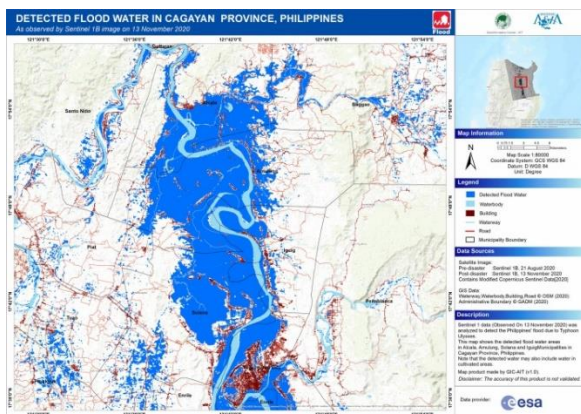


Product by AIT

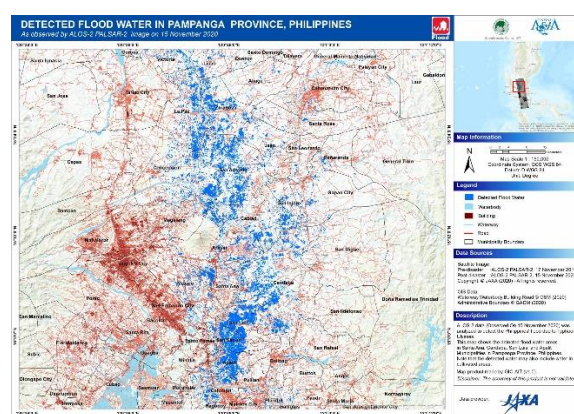
(5) Flood and Storm in Philippines

Flood and Storm occurred in Philippines on November 11th. CNN Philippines reported hundreds of residents were forced to flee their homes on November 12th as water in Marikina River steadily rose, moving closer to the peak level during the onslaught of Tropical Storm Ondoy in 2009. At 10:33 a.m., the water level rose to 22 meters, one meter below the 23 meters above sea level reached when Ondoy battered the country 11 years ago and left Marikina City submerged in floodwater for days. Residents near the river were forced to evacuate when the water rose to 18 meters due to nonstop rains brought by Typhoon “Ulysses” starting from November 11th. The local government also deployed rescue boats to extricate stranded residents. MO made an EOR to Sentinel Asia for the disaster on November 12th, also PHIVOLCS on November 15th. This EOR was escalated to the International Disaster Charter. AIT assumed the role of PM. Among DPNs, ISRO and JAXA provided their observation data. Among DPNs, AIT, ISRO, MBRSC, MO and WFP provided their VAPs. The information on the latest response by Sentinel Asia is available from the following link.

<https://sentinel-asia.org/EO/article20201111PH.html>



Product by AIT

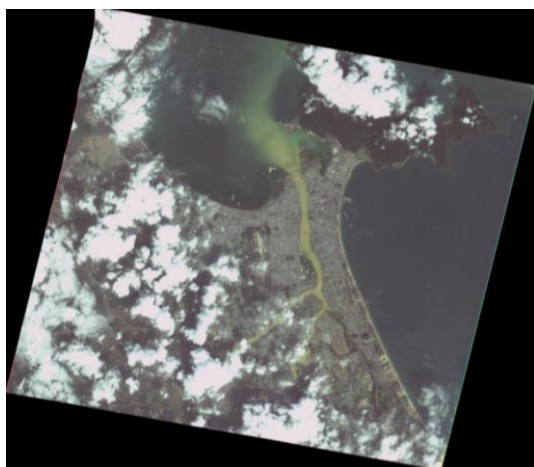


Product by AIT

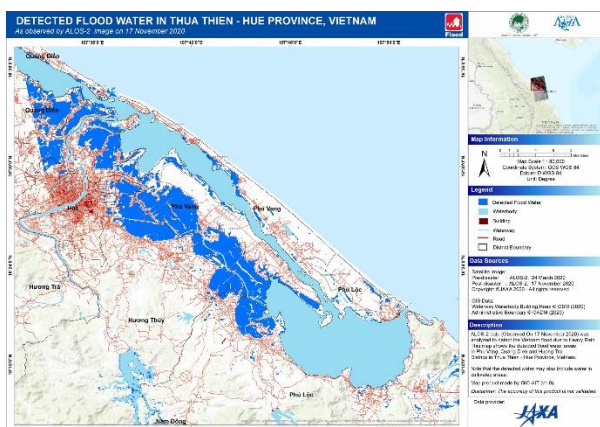
(6) Flood, Landslide, Storm in Vietnam

Flood, Landslide and Storm occurred on November 15th in Vietnam. Vietnam Meteorological Agency said that from this afternoon through the night of November 15th, it rained 200-300mm in provinces from Ha Tinh to Quang Nam. According to the disaster response scenario, the typhoon was level 13-15. ADRC on behalf of MONRE made an EOR to Sentinel Asia for the disaster on November 13th. Among DPNs, ISRO, JAXA, and NARL provided their observation data. Among DANs, AIT and MBRSC provided their VAPs. The information on the latest response by Sentinel Asia is available from the following link.

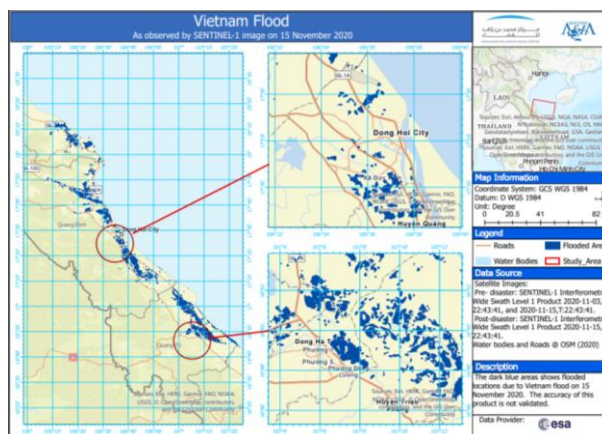
<https://sentinel-asia.org/EO/article20201115VN.html>



Satellite image (Formosat-5) after the event provided by NARL



Product by AIT



Product by MBRSC

2. [Events]

Japan Aerospace Exploration Agency (JAXA)

Ochanomizu Sola City, 4-6 Kandasurugadai, Chiyoda-ku, Tokyo 101-8008 Japan

E-mail: Z-SENTINEL.ASIA@ml.jaxa.jp

TEL: +81-3-6435-6785

FAX: +81-3-5777-1580