# Emergency Observation Request Activities Report

3rd Joint Project Team Meeting for Sentinel Asia STEP-3
(JPTM2016), Colombo, Sri Lanka

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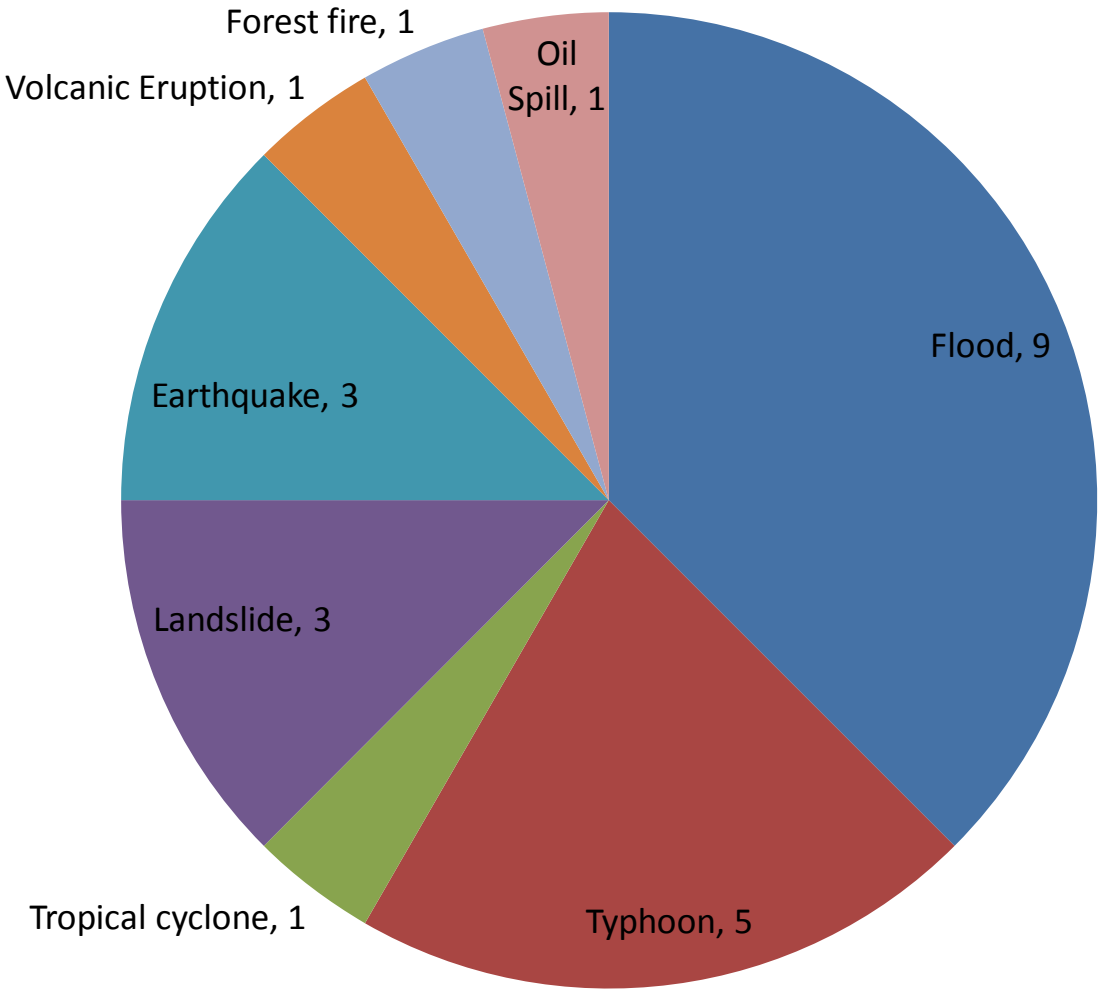
# Status of Emergency Observation

## Emergency Observation Request in 2015

| No | Occurence Date | Country | Type |
|---|---|---|---|
| 1 | 8-Feb-15 | Indonesia | Flood |
| 2 | 27-Feb-15 | Vietnam | Oil Spill |
| 3 | 13-Mar-15 | Vanuatu | Tropical Cyclone |
| 4 | 25-Apr-15 | Nepal | Earthquake |
| 5 | 12-May-15 | Nepal | Earthquake |
| 6 | 24-May-15 | Nepal | Land Slide |
| 7 | 29-May-15 | Japan | Volcanic Eruption |
| 8 | 10-Jun-15 | Nepal | Flood |
| 9 | 28-Jun-15 | Bhutan | Flood |
| 10 | 16-Jul-15 | Myanmar | Flood |
| 11 | 28-Jul-15 | Vietnam | Flood |
| 12 | 28-Jul-15 | Pakistan | Flood |
| 13 | 20-Jul-15 | Tajikistan | Landslide |
| 14 | 6-Aug-15 | Myanmar | Landslide |
| 15 | 7-Aug-15 | Taiwan | Typhoon |
| 16 | 4-Sep-15 | Bangladesh | Flood |
| 17 | 9-Sep-15 | Japan | Typhoon |
| 18 | 28-Sep-15 | Taiwan | Typhoon |
| 19 | 30-Sep-15 | Sri Lanka | Flood |
| 20 | 2015/1/2<br>2015/10/7* | Indonesia | Forest Fire |
| 21 | 18-Oct-15 | Philippines | Typhoon |
| 22 | 26-Oct-15 | Pakistan | Earthquake |
| 23 | 1-Dec-15 | India | Flood |
| 24 | 14-Dec-15 | Philippines | Typhoon |
| | *SA activated date | | |

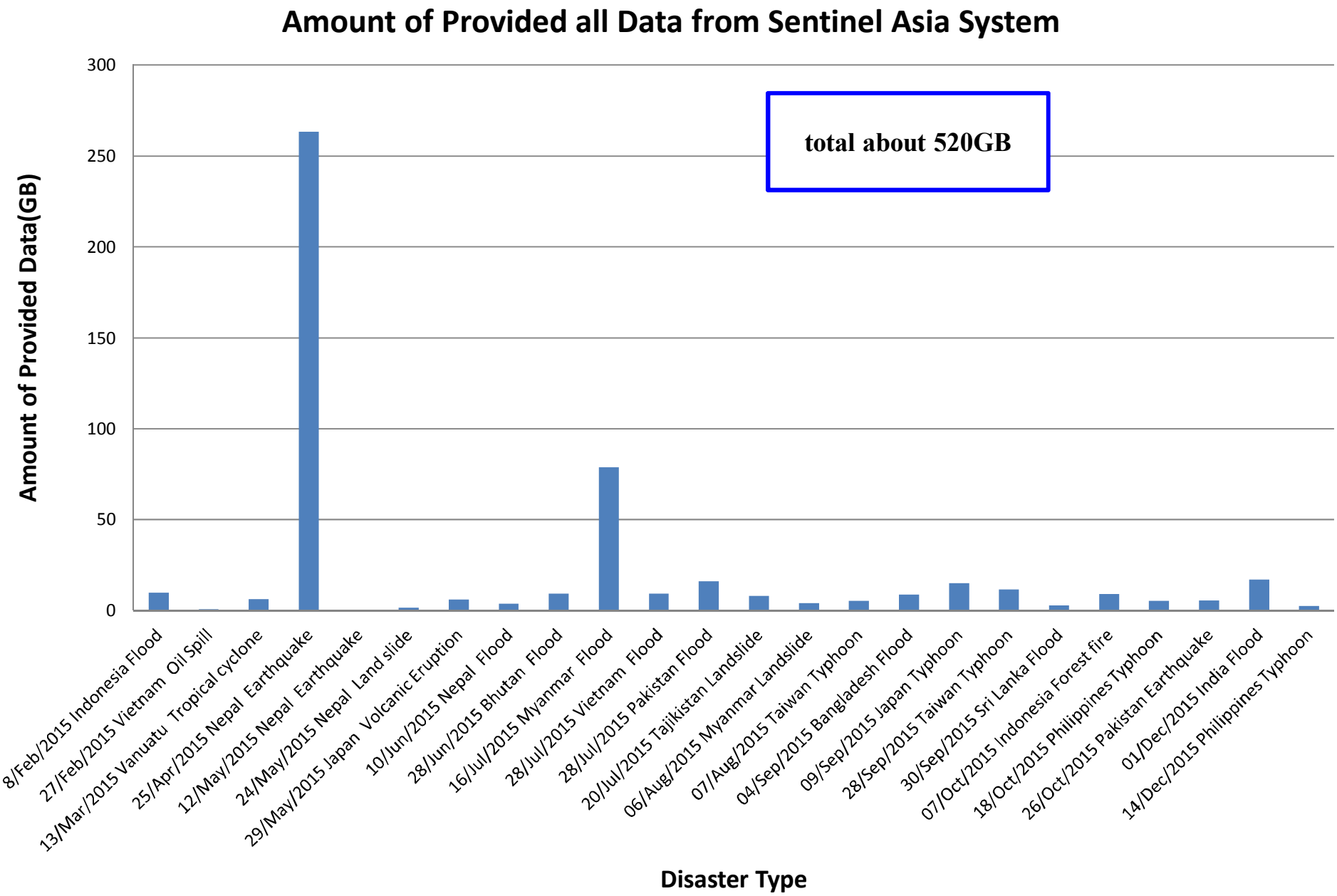
# Status of Emergency Observation

## Ratio of Occurred Disaster in 2015

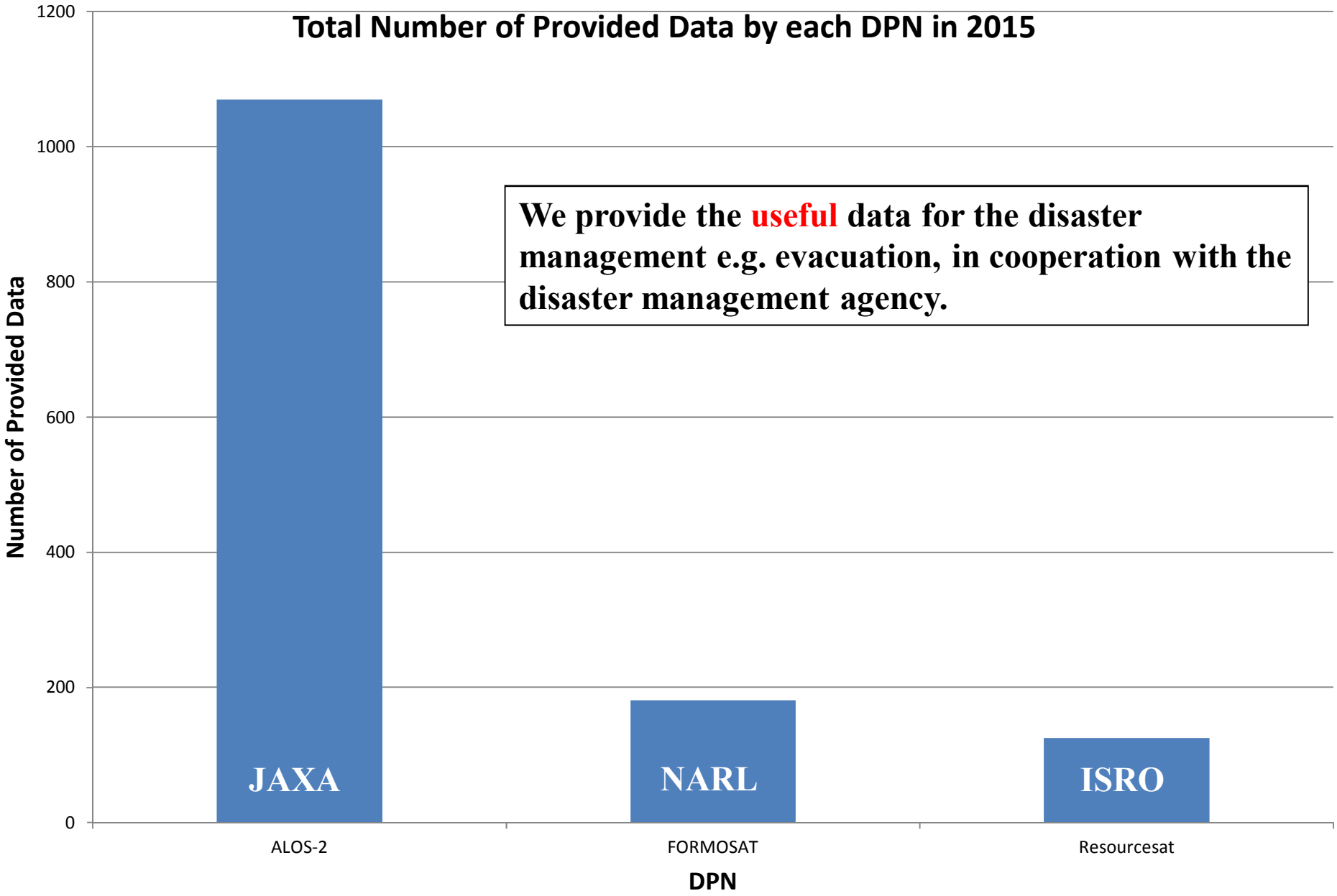



**More than 70% is the disaster related to the water.**
**We must make best effort to mitigate the disaster in cooperation with you, and new Water related Disaster WG.**

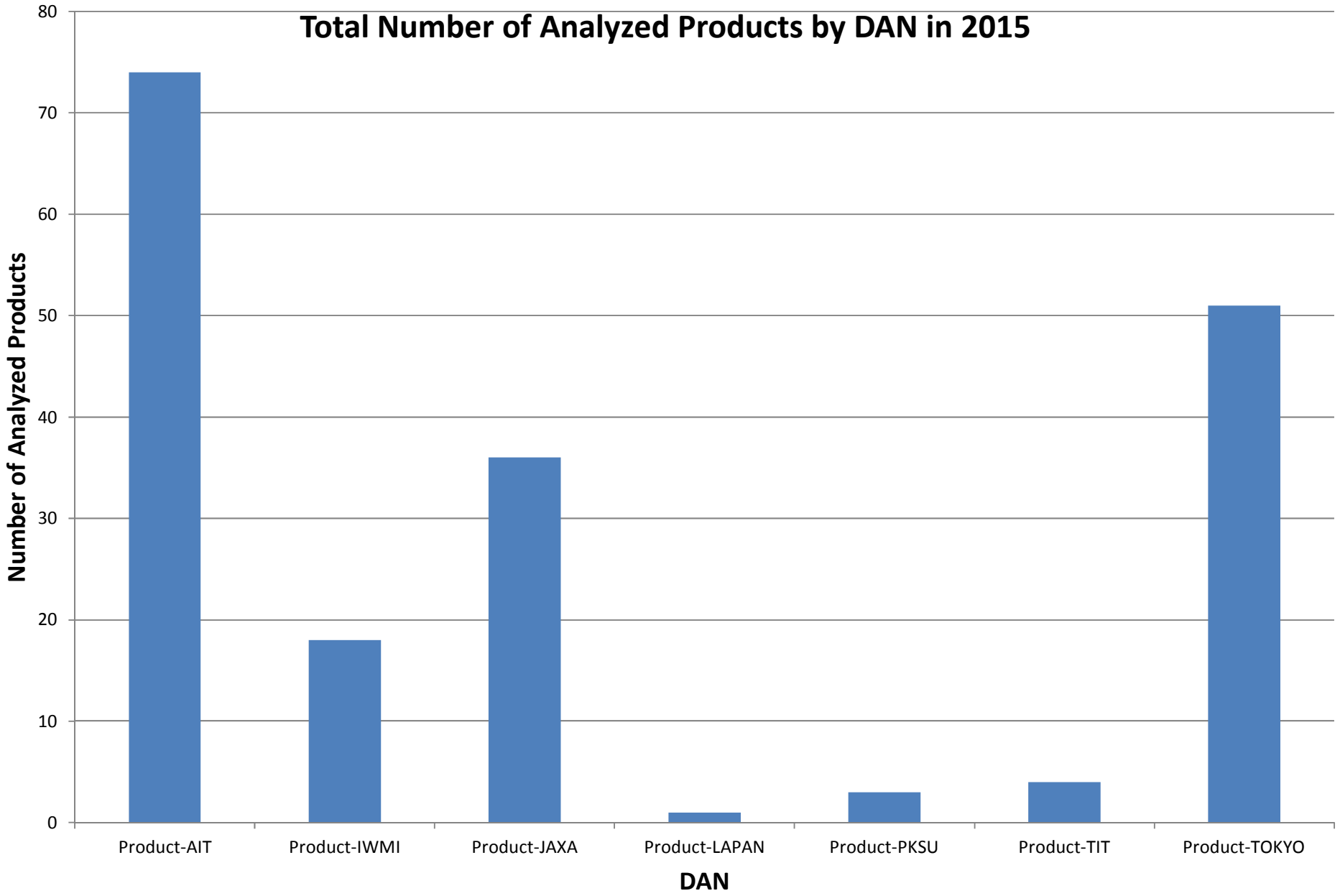
# Status of Emergency Observation



# Status of Emergency Observation

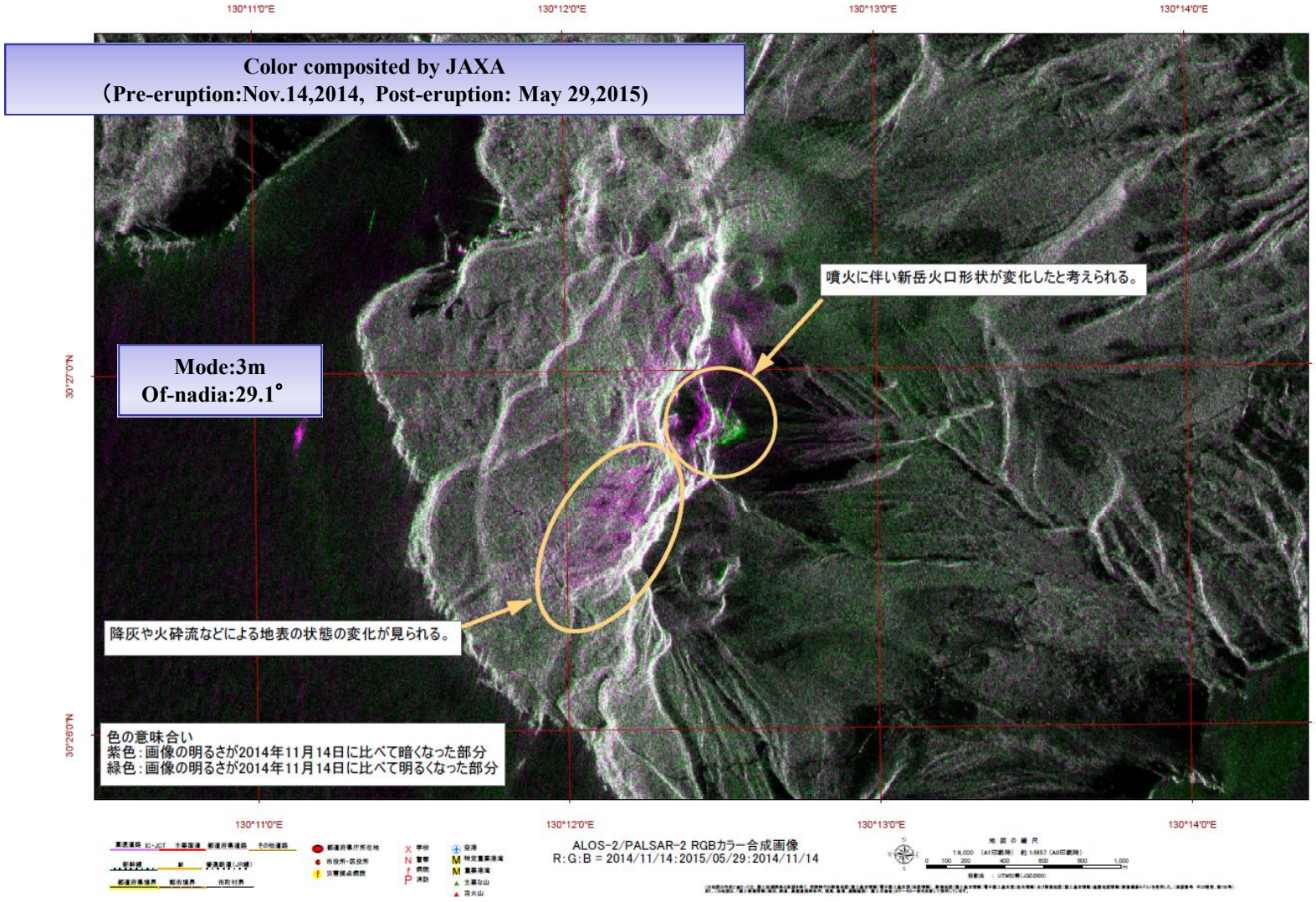


# Status of Emergency Observation



# Emergency Observation of Kuchinoerabu Island Volcano

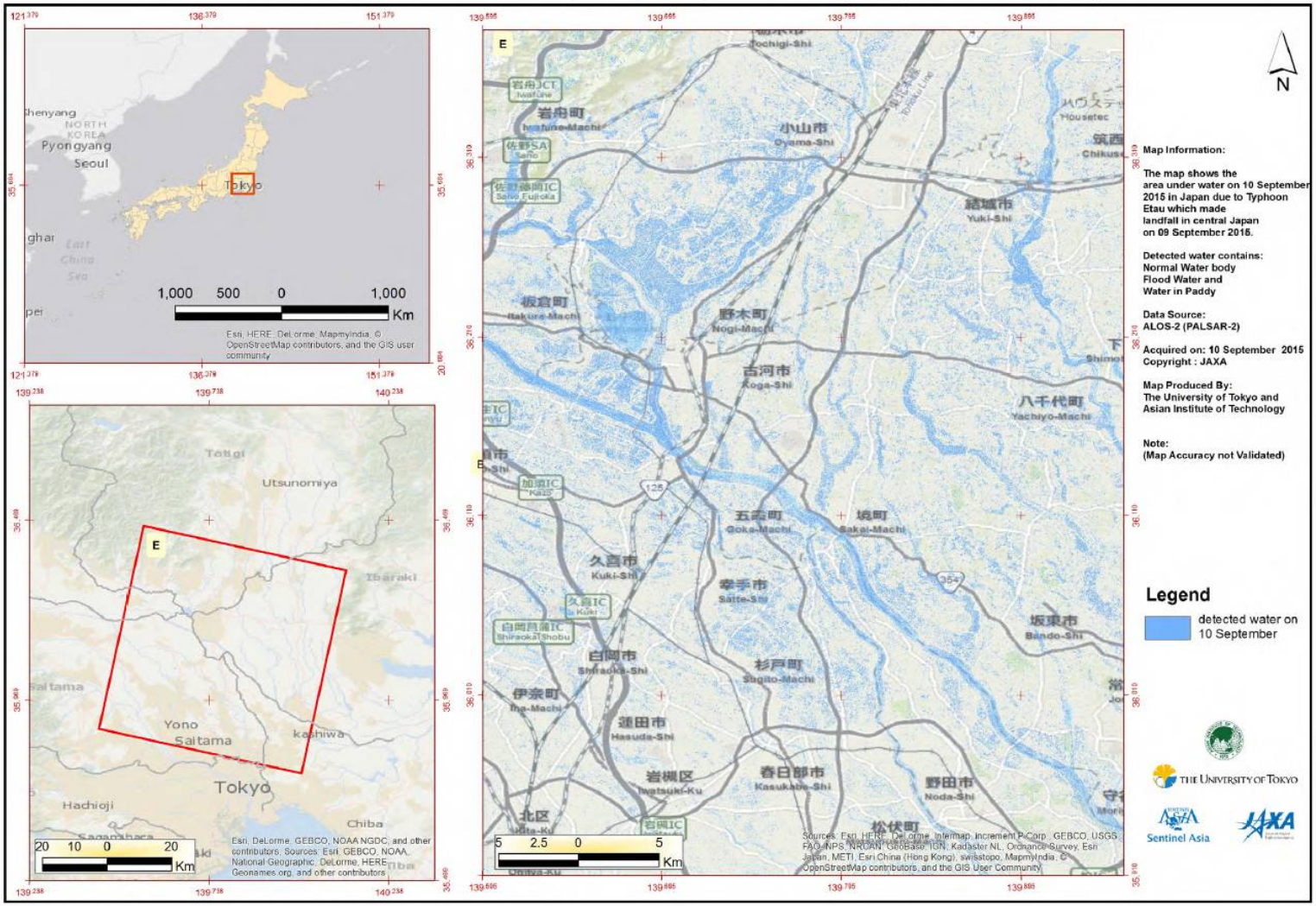
**The eruption occurred at Kuchinoerabu Island Volcano at 9:59 AM on 29 May, 2015. Emergency observation was done at 12:53 PM. The analysis results were reported at the CCPVE(Coordination Committee for Prediction of Volcanic Eruption) meeting held on the next day, used to confirm the crater change and the effect of ash fall and pyroclastic flow.**



# Emergency Observation of Kinu River Flood (ALOS-2)

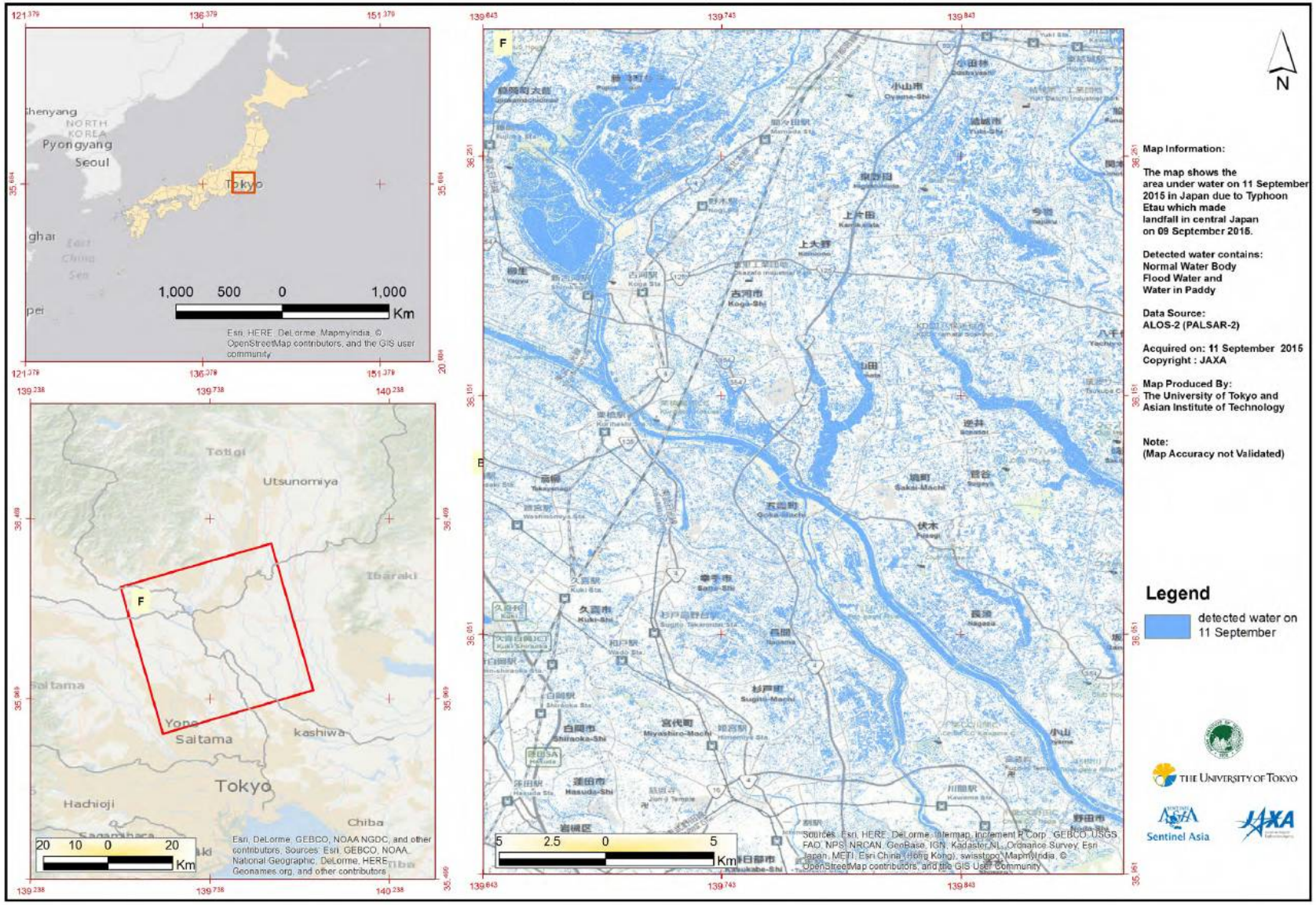
**Due to heavy rain caused by Typhoon on 18 Sep., 2015, flood occurred along Kinu river. Ministry of Land, Infrastructure, Transport and Tourism confirmed the inundated area and operated the drain pump vehicles according to the ALOS-2 data, Optical Satellite data and aerial image photographed.**

**Area Under Water, Detected by ALOS-2 (PALSAR-2), Sept. 10, 2015, Japan**



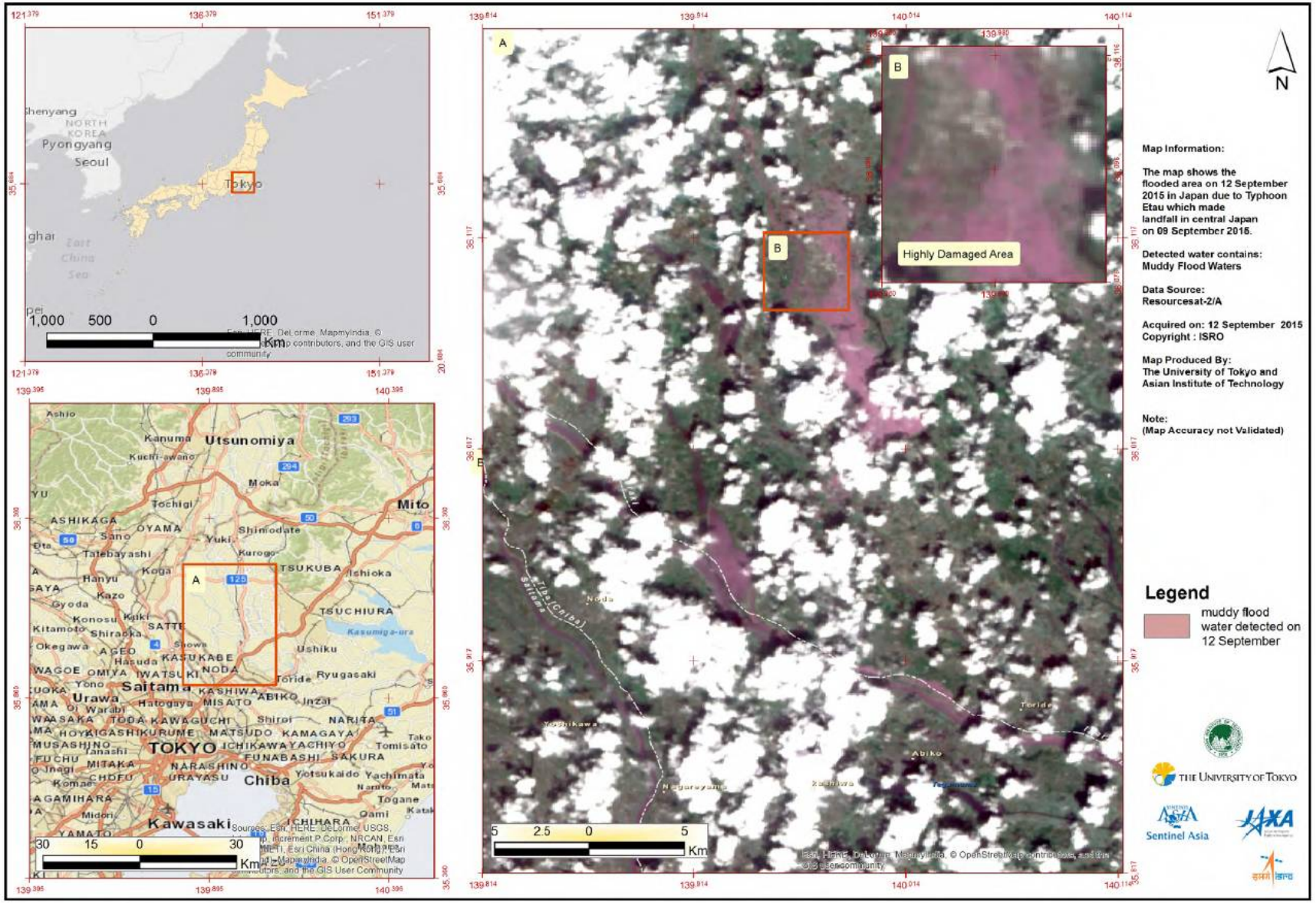
# Emergency Observation of Kinu River Flood (ALOS-2)

## Area Under Water, Detected by ALOS-2 (PALSAR-2), Sept. 11, 2015, Japan



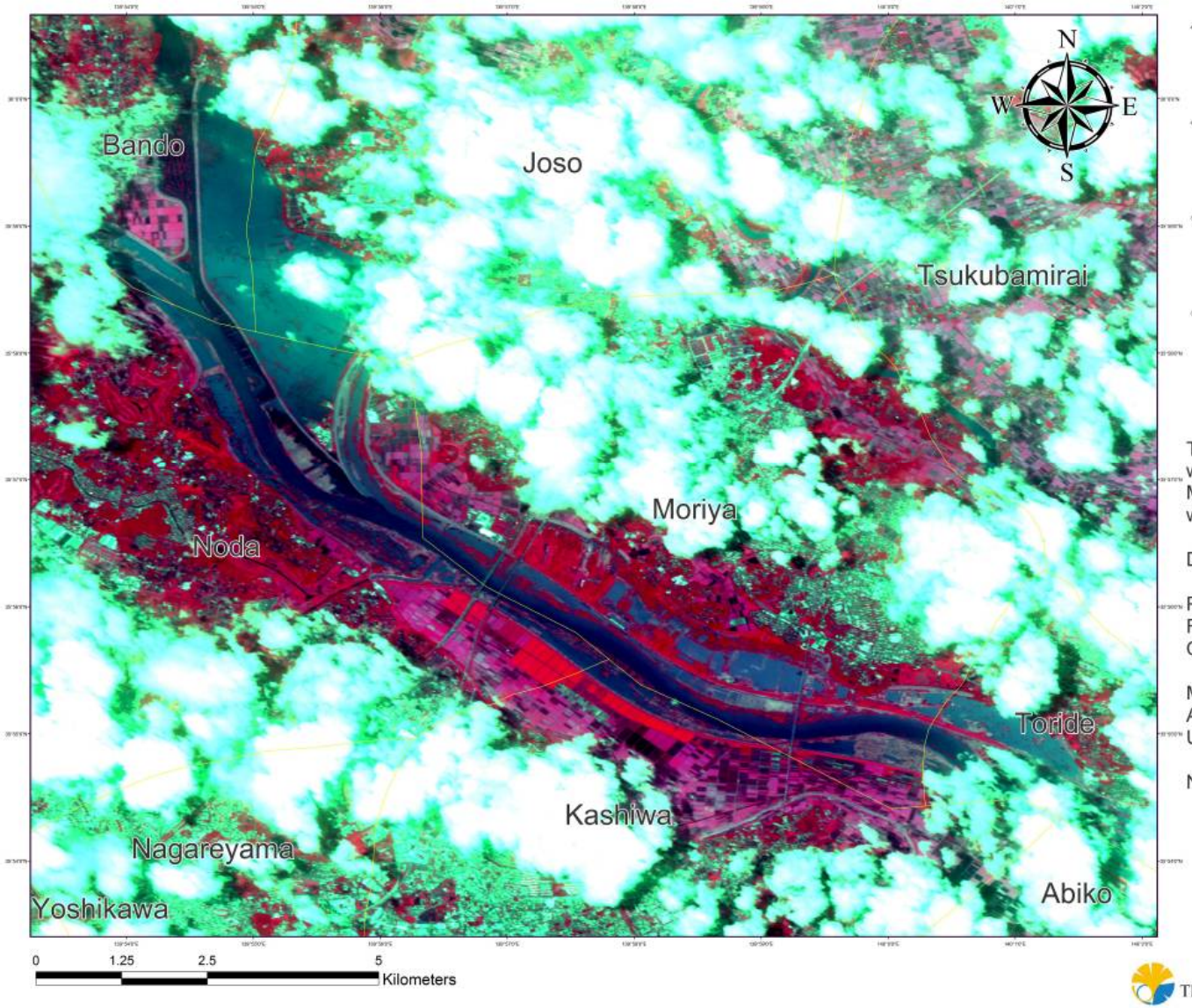
# Emergency Observation of Kinu River Flood (Resourcesat)

## Area Under Water, Detected by Resourcesat-2/A Sept. 12, 2015, Japan



# Emergency Observation of Kinu River Flood (FORMOSAT)

## Flood Inundated Area, Japan on 12 September 2015 by FORMOSAT





### MAP INFORMATION

The image is False Colour Composite with Band 4,3,2 of FORMOSAT.
Map shows flood inundated area, rivers and water bodies in blue colour.

Data Source:

Post Disaster image:
FORMOSAT acquired on 12 September 2015
Copyright NSPO (2015)

Map Produced by:
Asian Institute of Technology and University of Tokyo

Note: Map Accuracy not Validated

NSPO

Sentinel Asia

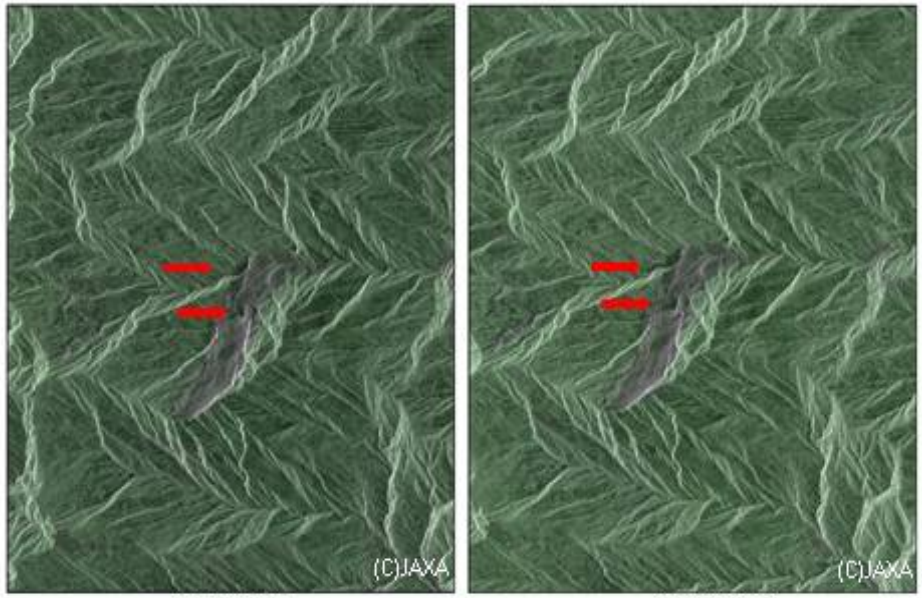
THE UNIVERSITY OF TOKYO

# Emergency Observation of Myanmar Landslide (ALOS-2)

**Due to heavy rain in Myanmar in August, 2015, lots of landslides were occurred. The first emergency observation was executed to detect landslides. The analysis detected more than 52 landslides and 3 landslide dams.**

**The second observation was executed to check status of these landslide dams. The analysis showed the extension of 2 dams and burst of the other dam.**

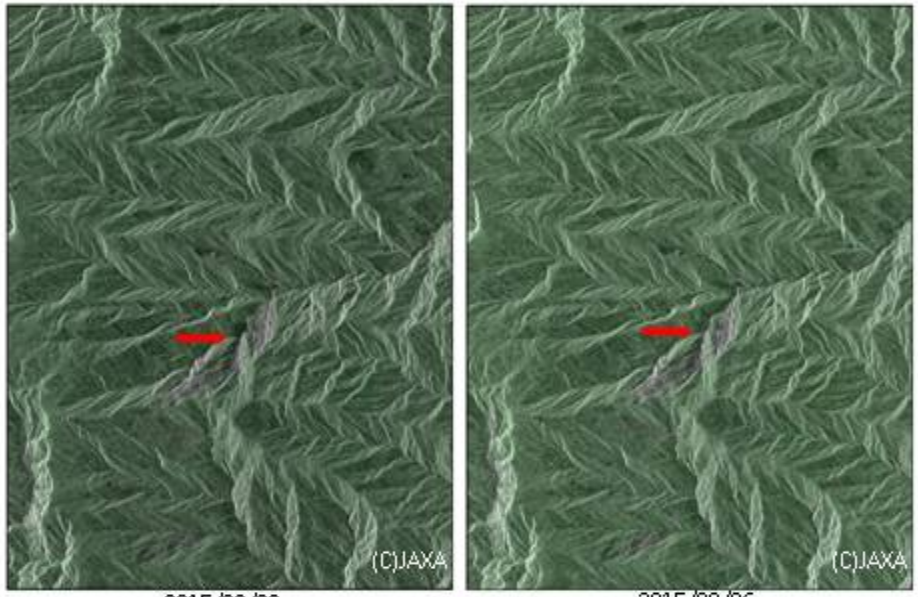
Extension of landslide dam observed by PALSAR-2




2015/08/09 2015/09/06

・The situation of1st landslide
・The storage of natural dam is still increasing

Burst of landslide dam observed by PALSAR-2




2015/08/09 2015/09/06

・The situation of2nd landslide dam
・The natural dam was bursted

# Conclusion

**We appreciate JPT members' contribution to Sentinel Asia.**

1) **We provided and received the satellite data and analyzed products which were used for disaster management in each country as well as Japan.**

2) **We provide the useful data for disaster management in cooperation with the disaster management agency.**

# Backup

# Emergency Observation Request in 2015