

GISTDA 2016 DPN REPORT

7th – 8th March 2017, Sentinel Asia Node Meeting, JPTM Meeting

Teansiri Moolchan, Environmental and Disaster Division, GISTDA

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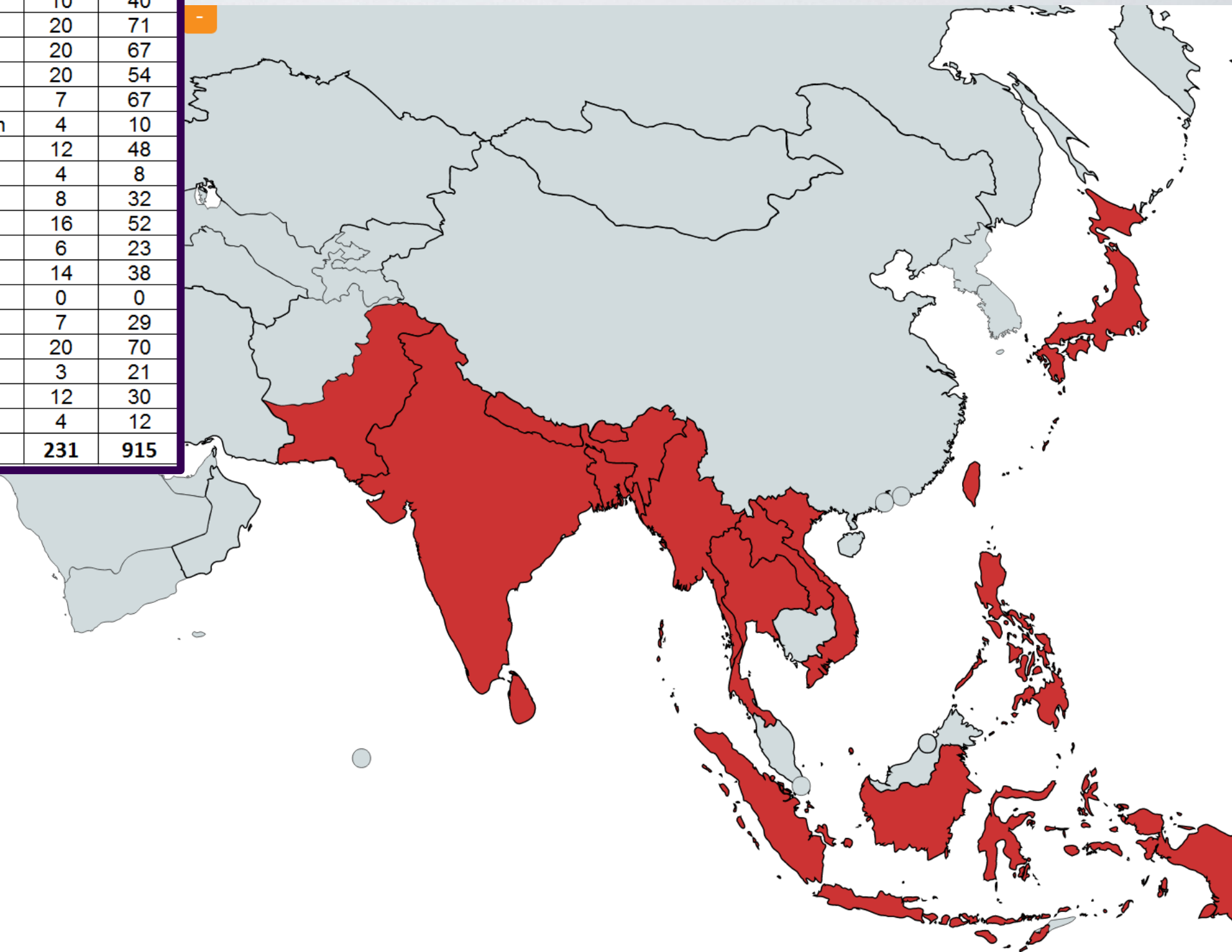
GISTDA DPN SUMMARIZE REPORT FOR SENTINEL ASIA

YEAR 2016

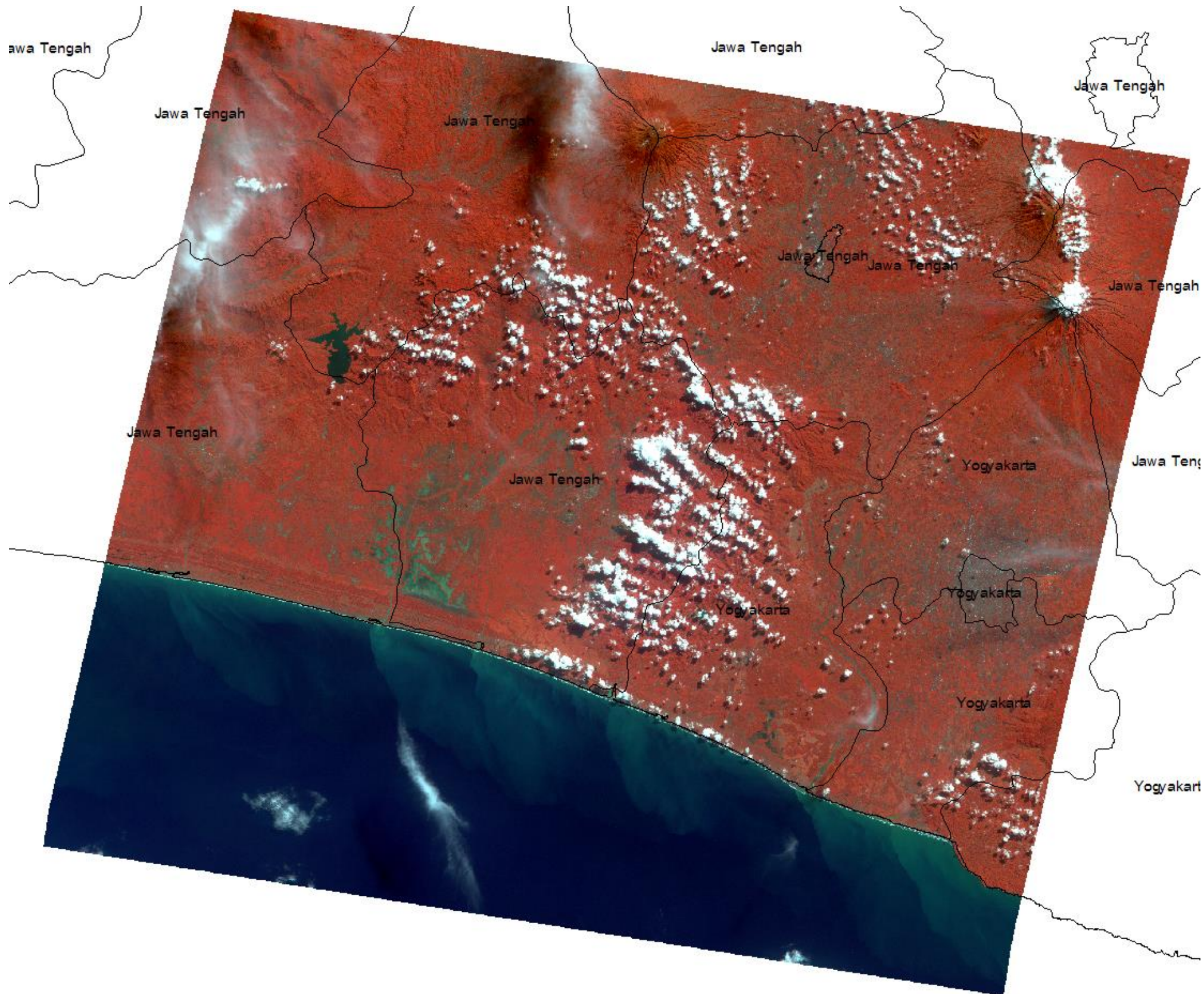
Fact and Figures	
Delivered satellite data	25
Countries With Disasters	14
kind of disaster	7
Number of Multispectral Images	231
Number of Panchromatic Images	915
Mapping data	2

Time	During	Country	Disaster	MSS	PAN
1	09/02/2016	Taiwan	Earth Quake	10	34
2	26/02/2016	FIJI	Cycyone Winston	6	70
3	29/02/2016	Fiji	Cycyone Winston	8	72
4	15/03/2016	Indonesia	Flood	4	14
5	16/03/2016	Indonesia	Flood	6	16
6	04/04/2016	Philippines	Forest fire	6	17
7	04/04/2016	Taiwan	oil spill	4	20
8	11/04/2016	Pakistan	Landslide	10	40
9	18/04/2016	Japan	Earthquak	20	71
10	19/05/2016	Sri Lanka	Flood	20	67
11	22/05/2016	Sri Lanka	Flood	20	54
12	25/05/2016	Bangladesh	Flood	7	67
13	27/05/2016	Indonesia	Volcano eruption	4	10
14	27/06/2016	Indonesia	Landslide	12	48
15	11/07/2016	Nepal	Flood	4	8
16	11/07/2016	Taiwan	Typhoon	8	32
17	04/08/2016	Bangladesh	Flood	16	52
18	05/08/2016	Bhutan	Flood	6	23
19	11/08/2016	MMR	Flood	14	38
20	26/08/2016	MMR	Erthquake	0	0
21	26/08/2016	LAOS	Flood	7	29
22	29/08/2016	INDIA	Flood	20	70
23	29/09/2016	Indonesia	Flood	3	21
24	19/10/2016	Vietnam	Flood	12	30
25	30/12/2016	Philippine	Flood	4	12
รวม		14 ประเทศ	7 ภัยพิบัติ	231	915

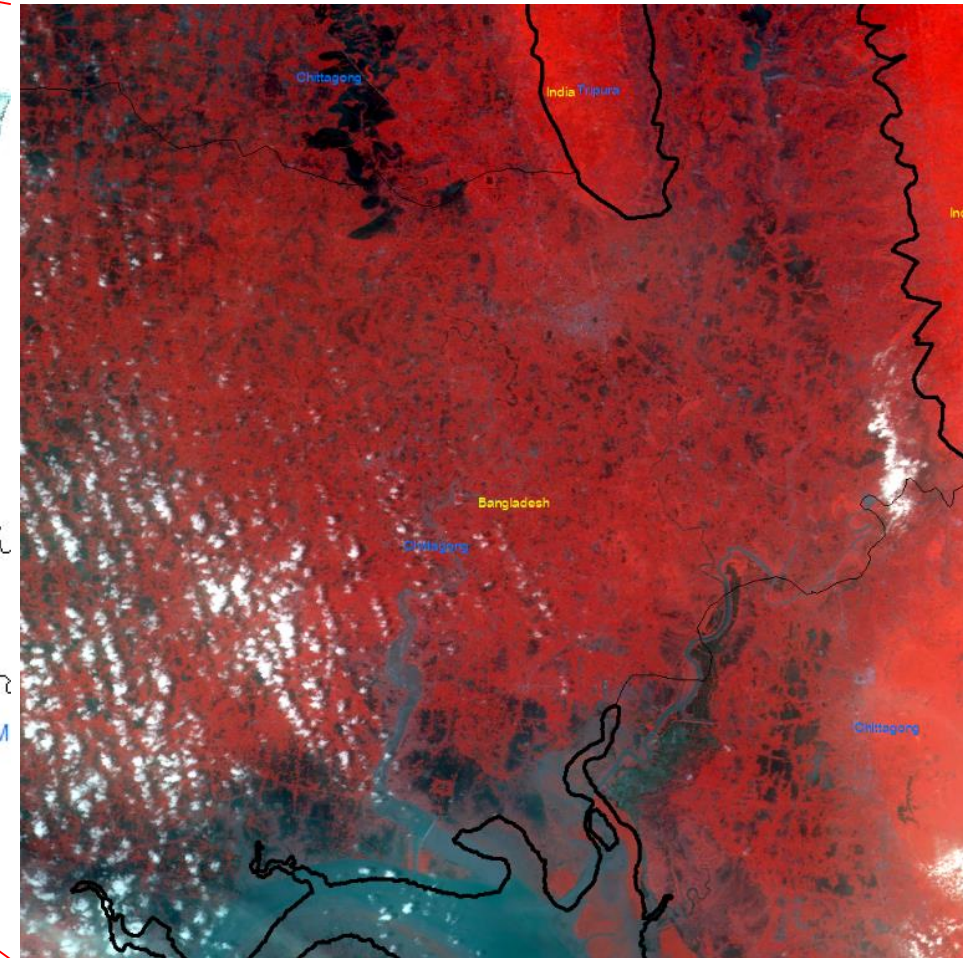
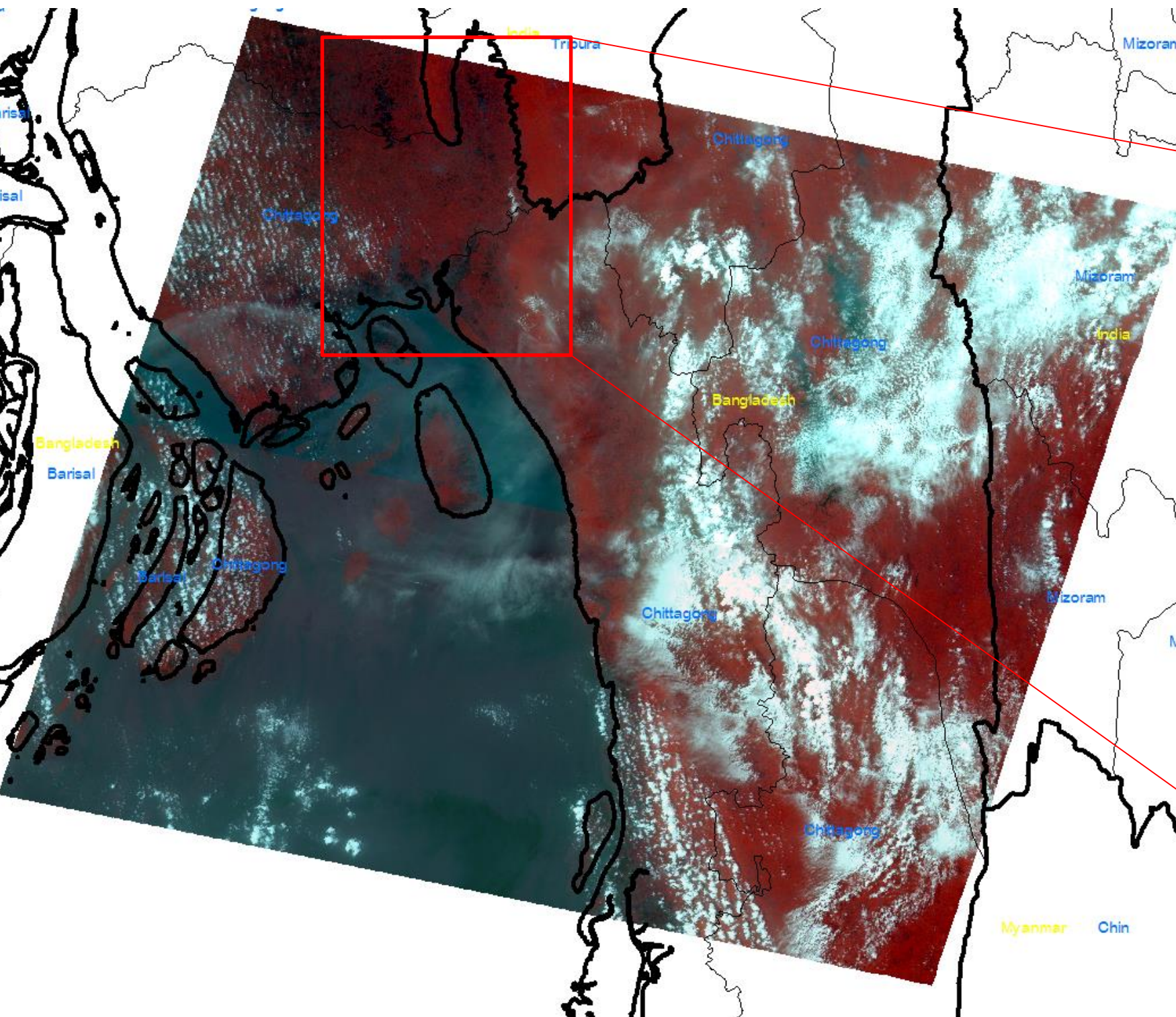
- Images from THEOS was provided for 25 requests among 14 countries.
- Average time from Request to standard product delivery is around 3 days.

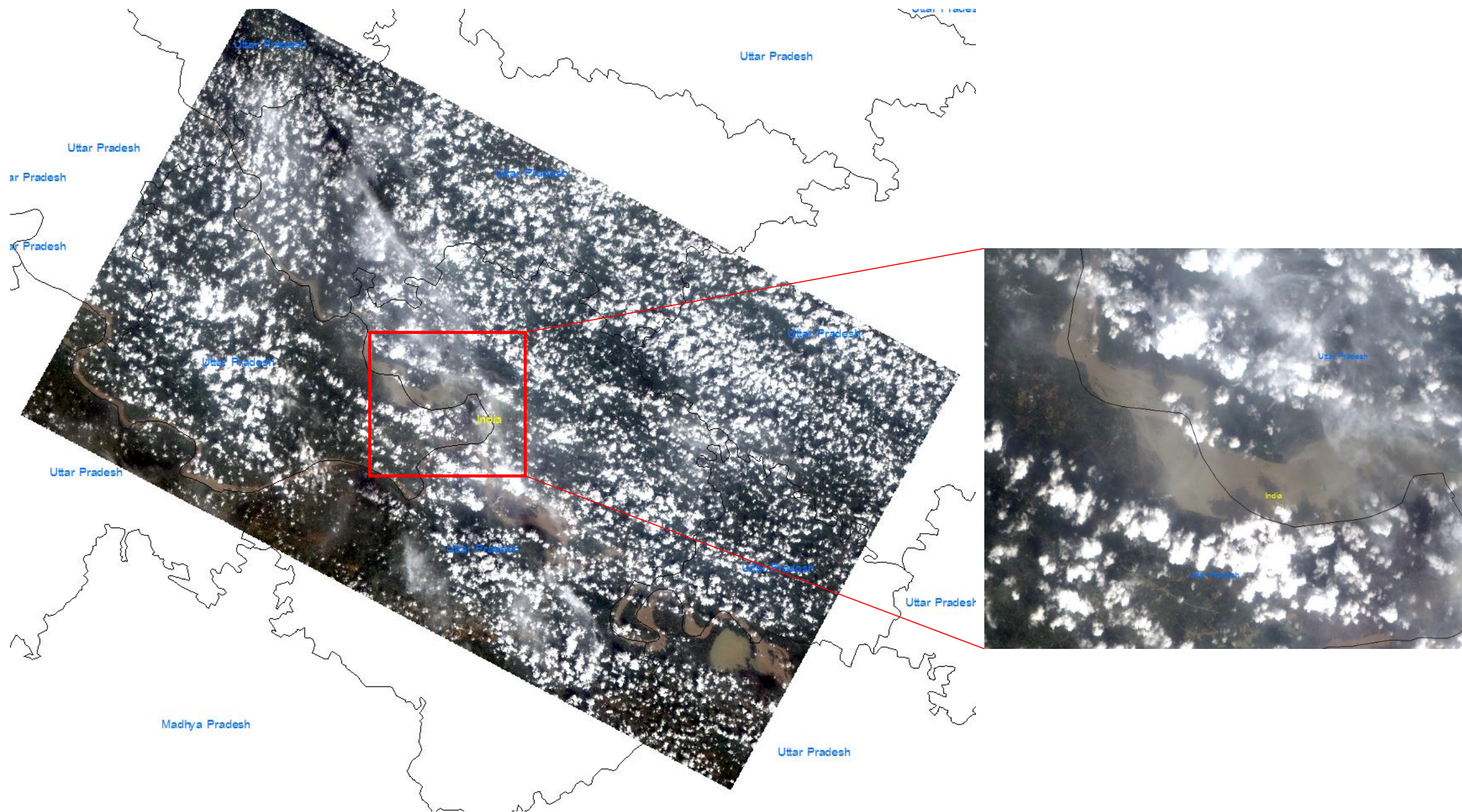


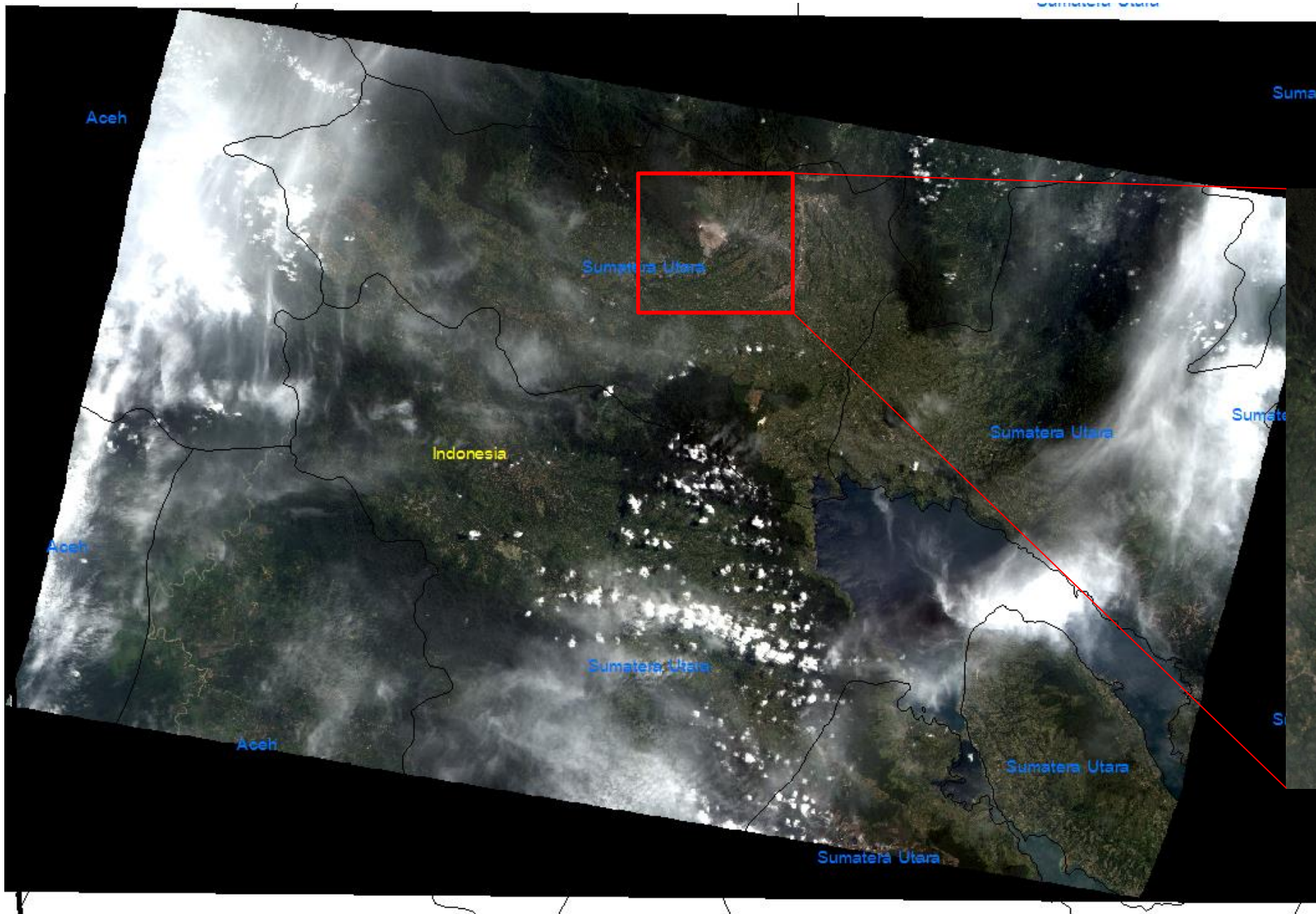
Landslide in Indonesia

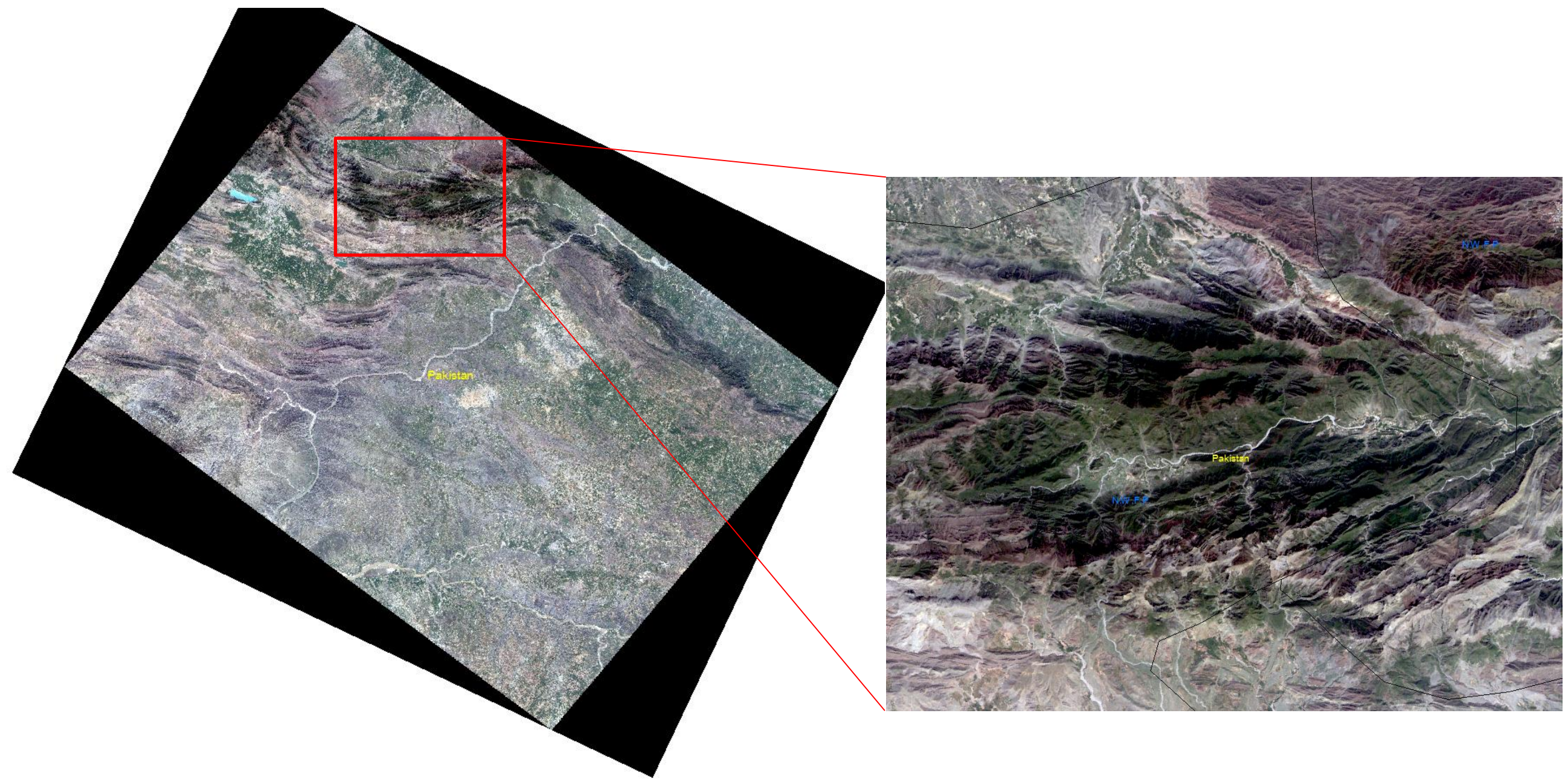


Flood in Bangladesh

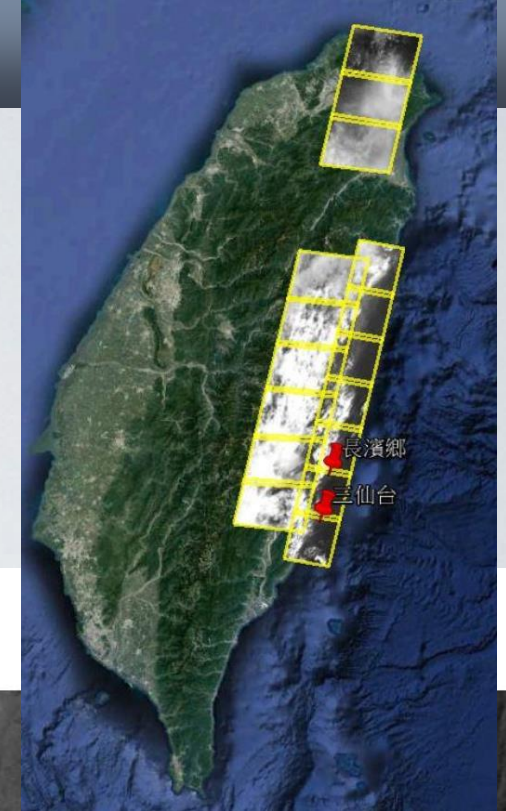








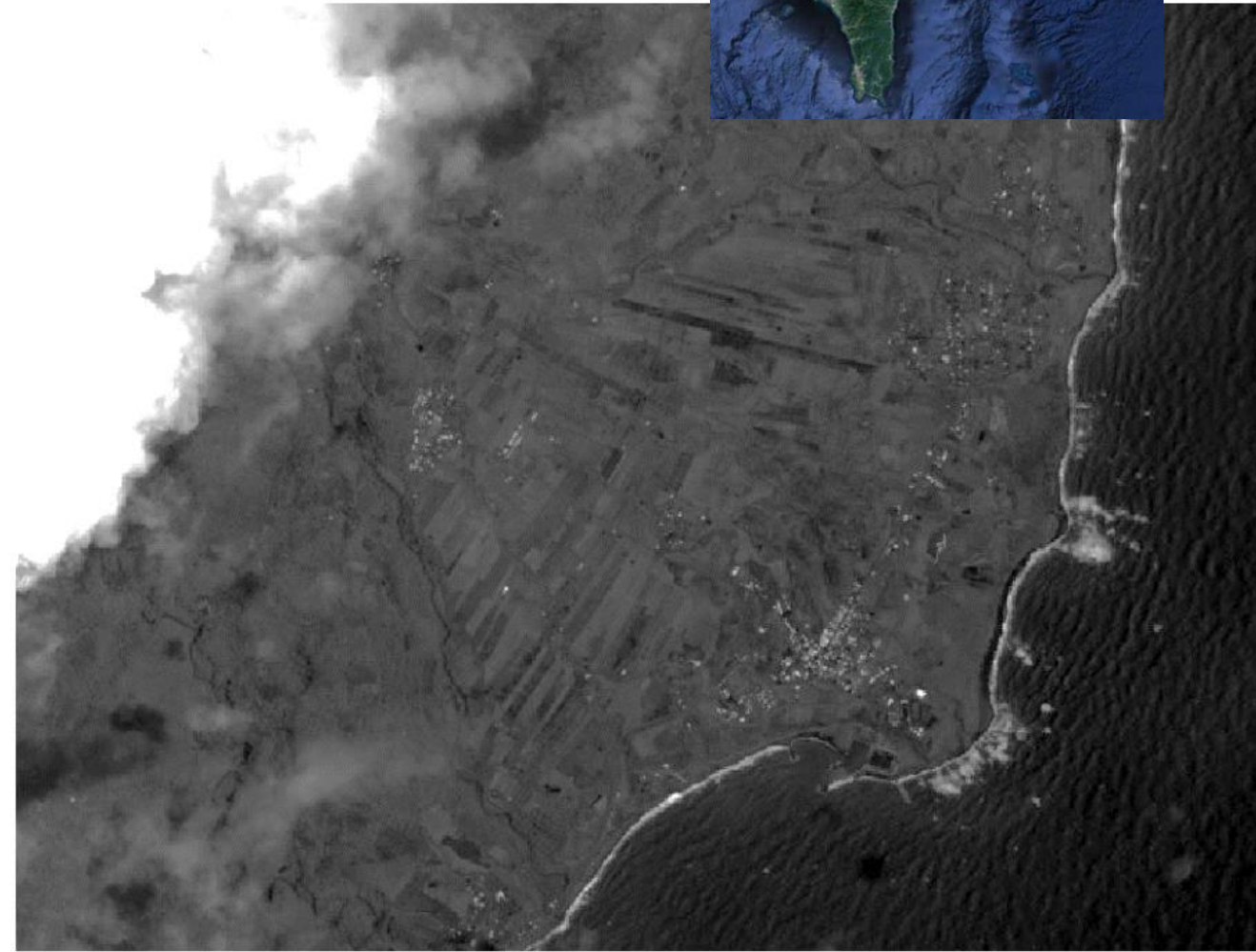
Nepartark Typhoon, Taiwan (July 2016)



Before Disaster



After Disaster



20151202 FORMOSAT-2 Archive Image

20160710 THEOS Image

Nepartark Typhoon, Taiwan (July 2016)

Taitung, Hualian (Flash flood in Hsiukuluan river, Yuli big bridge)

Before Disaster



After Disaster



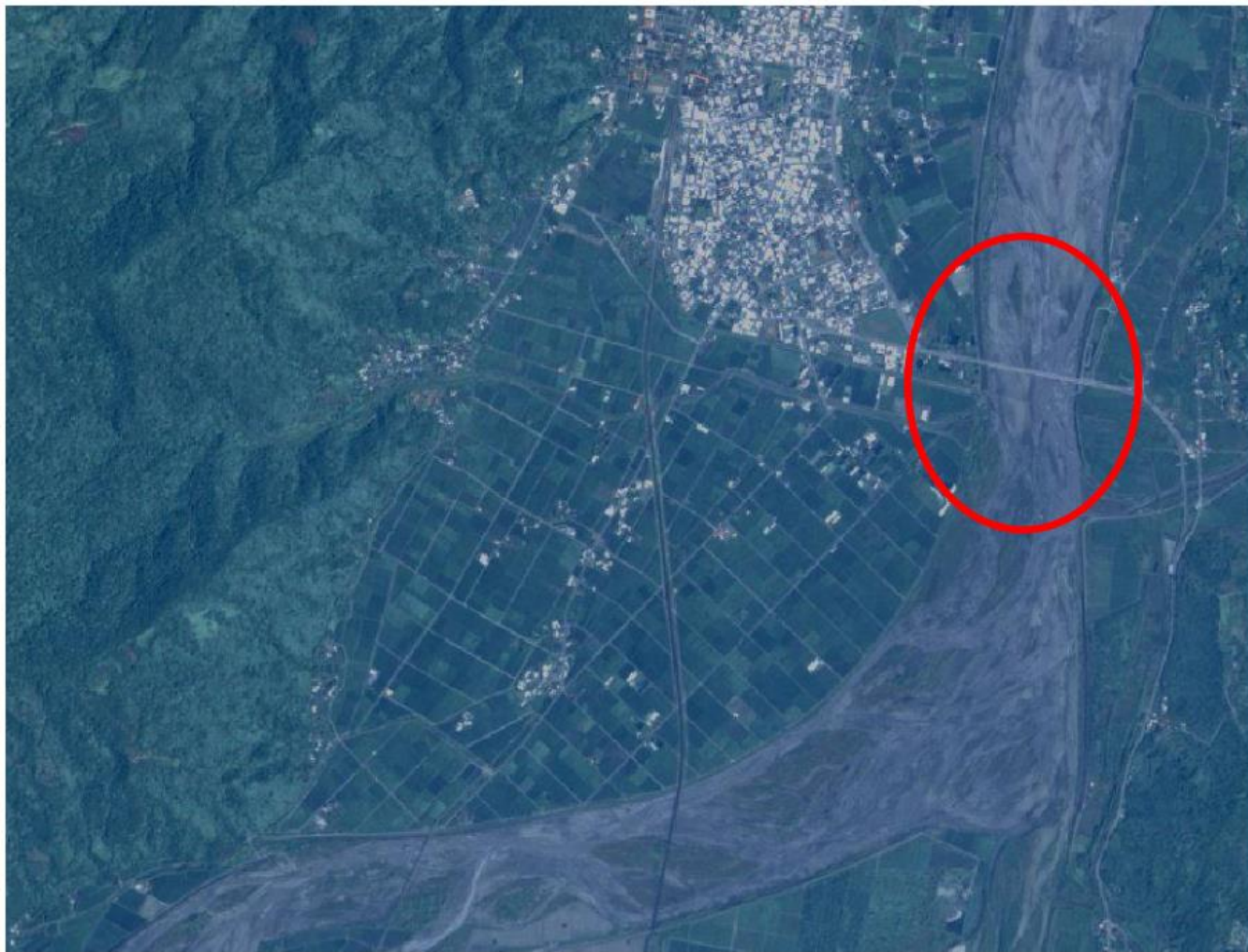
20160416 FORMOSAT-2 Archive Image

20160713 THEOS Image

Nepartark Typhoon, Taiwan (July 2016)

Taitung, Hualian (Flash flood in Hsiukuluan river, Yuli big bridge)

Before Disaster



20160416 FORMOSAT-2 Archive Image

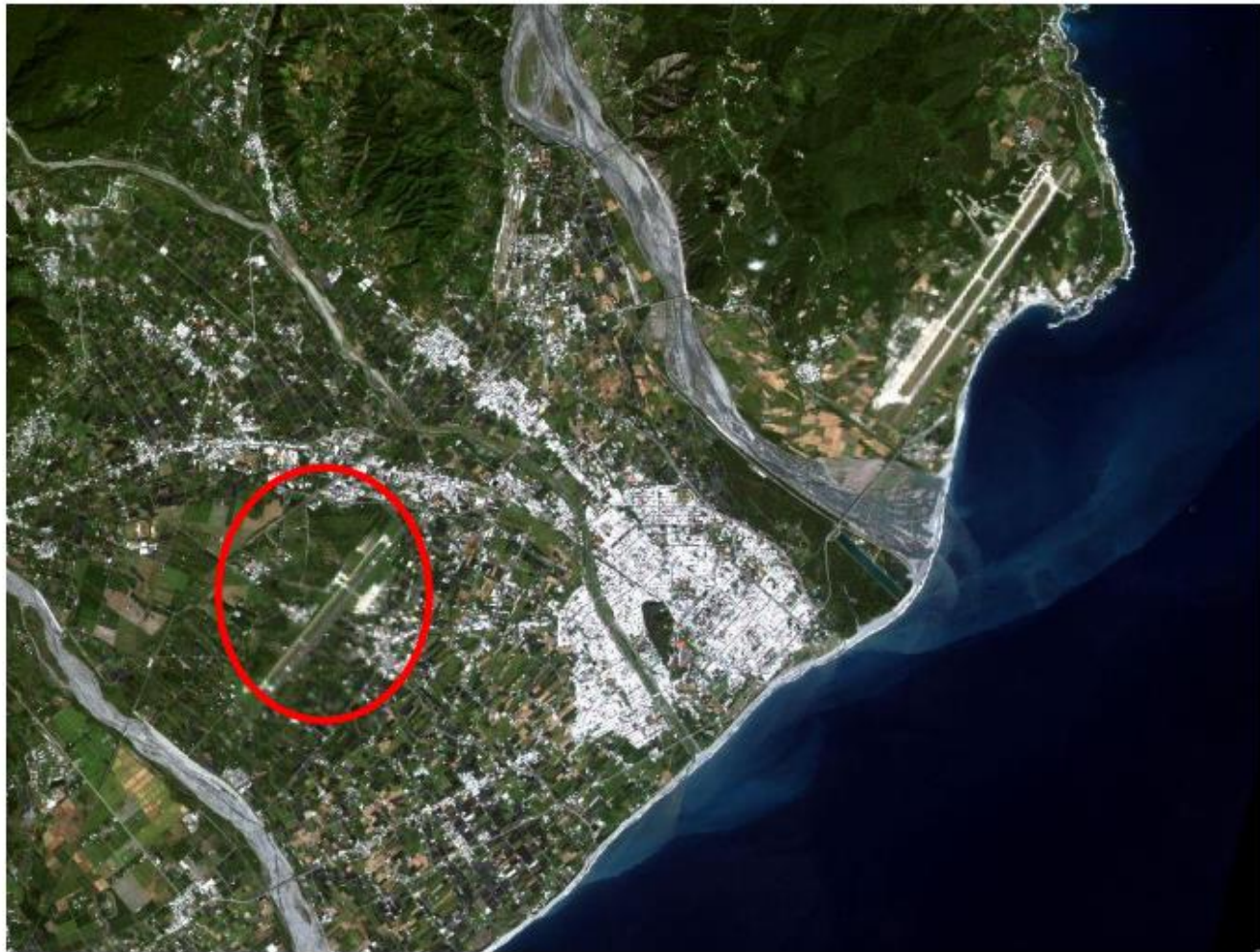
After Disaster



20160713 THEOS Image

Nepartark Typhoon, Taiwan (July 2016) Taitung, Hualian (downtown and airport)

Before Disaster



20151116 FORMOSAT-2 Archive Image

After Disaster



20160713 THEOS Image

Nepartark Typhoon, Taiwan (July 2016)



NAR Labs 國家實驗研究院
國家太空中心
National Space Organization

20160708 Nepartak Typhoon damage detection
by THEOS-1 image

Image Credit: Sentinel Asia

Analyzed: NSPO IPS

NAR Labs

0708尼伯特颱風取像 2016.07.10

尼伯特颱風在2016年7月8日凌晨5時從臺東縣太麻里鄉登陸，於當日下午2時從臺南市將軍區出海。而中央氣象局在7月6日先後發佈海/陸上颱風警報，所挾帶的強烈風雨使陸上警報持續至7月9日下午才解除所有警報。

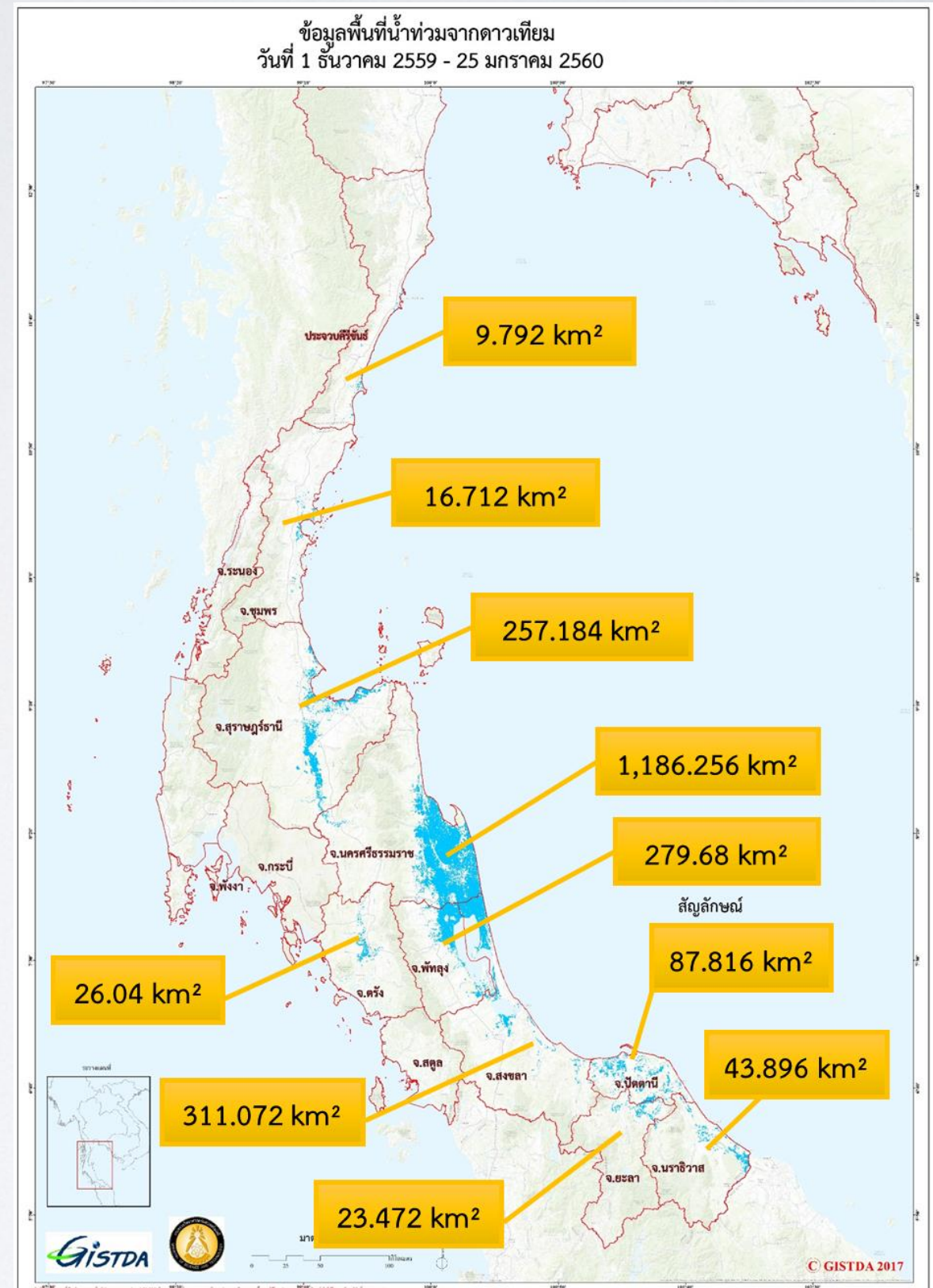
財團法人國家實驗研究院國家太空中心取得7月10日對事件範圍進行台灣東部影像初步判釋。

SUMMARIZE OF THAILAND FLOOD DISASTER

DURING 1 DEC 2016 - 25 JAN 2017

The approximate affected area:

2,240 km²

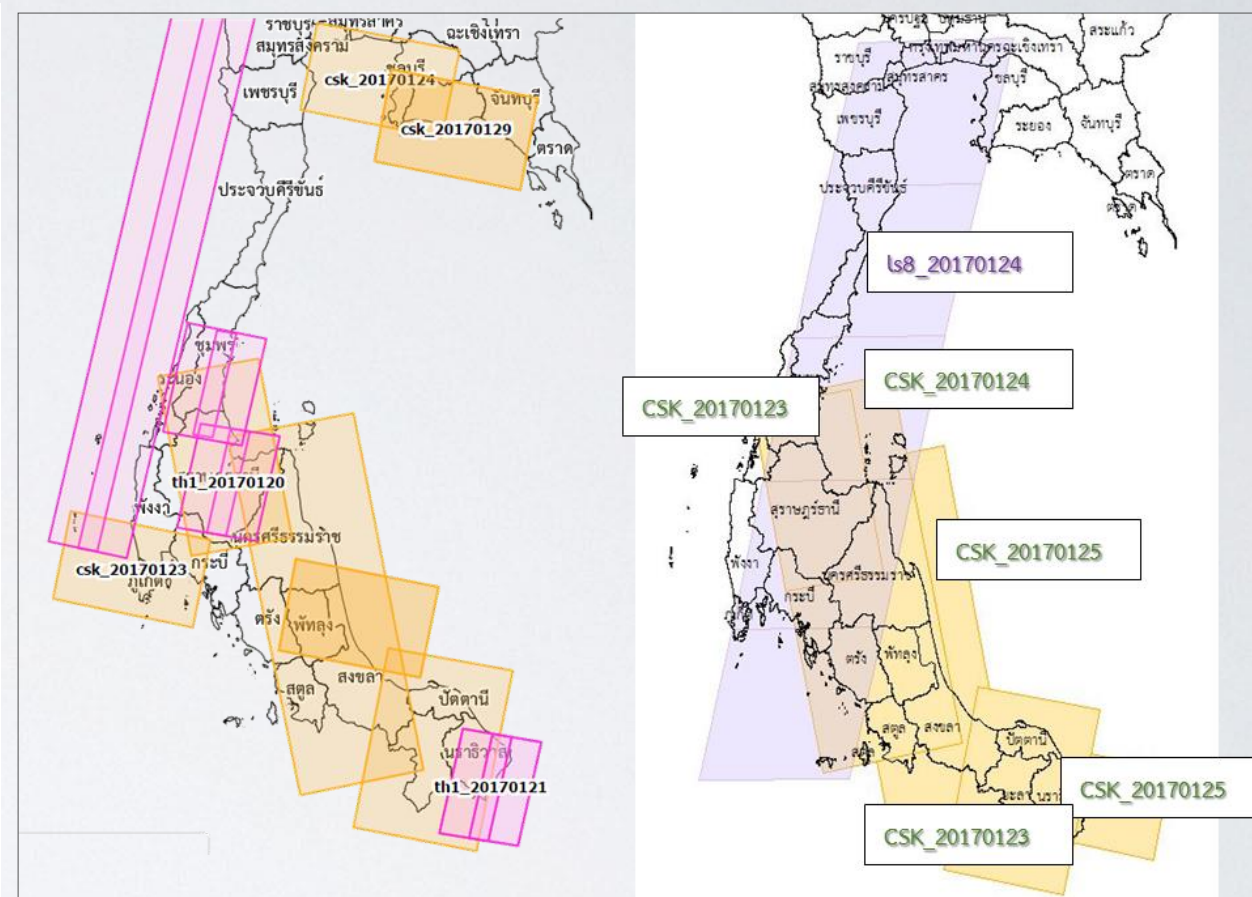
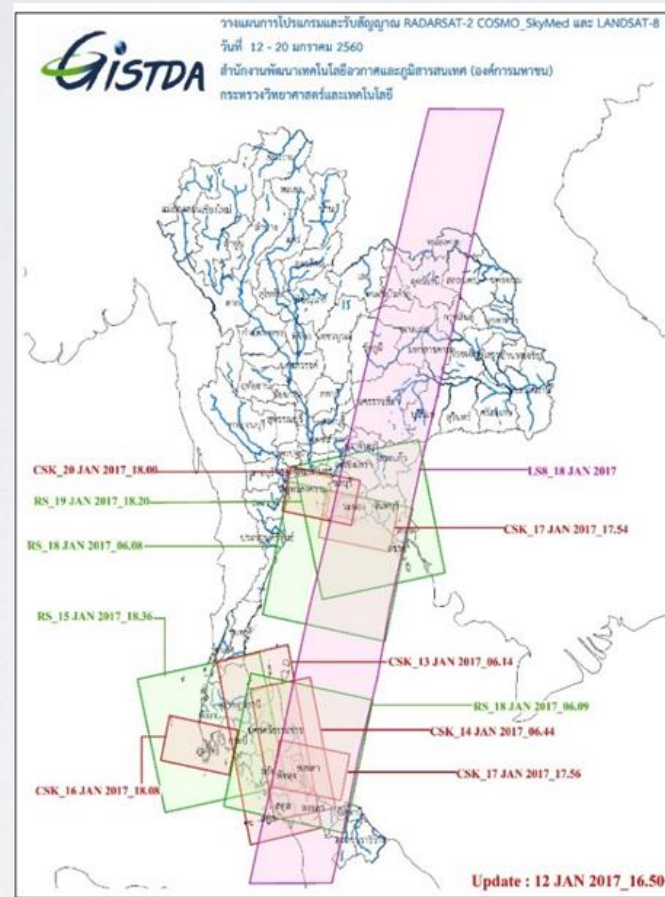
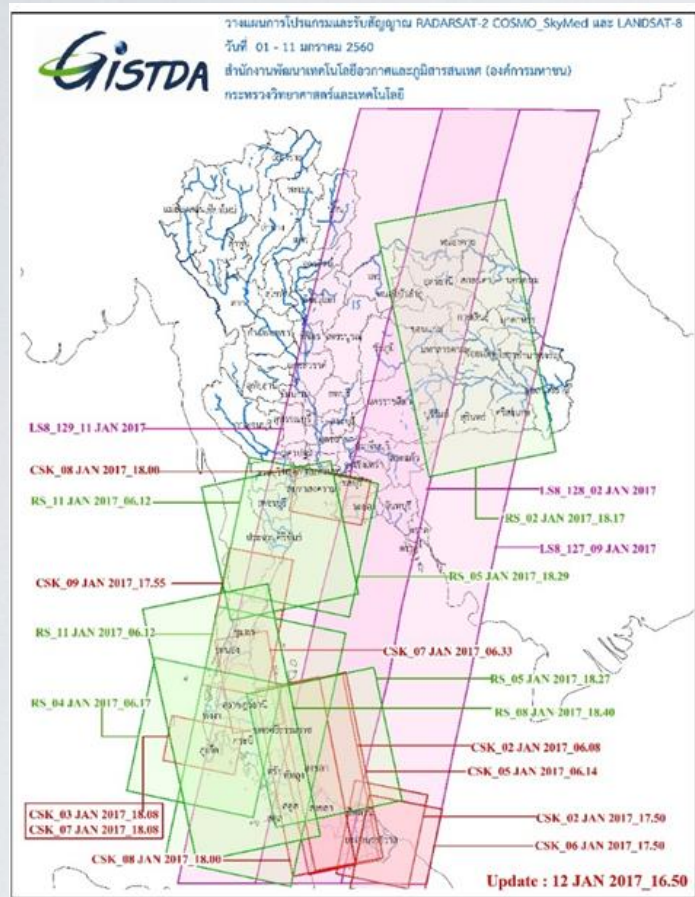


THE RECEIVING SATELLITE PROGRAM TO MONITORING THE FLOOD IN SOUTH OF THAILAND

1 – 11 JAN 2017

12 – 20 JAN 2017

20 – 25 JAN 2017



WIDESPREAD FLOODING IN THAILAND'S SOUTH

The example data from the Sentinel ASIA Project

Secure | <https://sentinel.tksk.jaxa.jp/sentinel2/thumbnailEmob.jsp?emobRequestDetail>

Emergency Obs. Request Information

Emergency Obs. ID: ERTHGS000016
 Disaster Type: Flood Country: Thailand
 Occurrence Date (UTC): Date 06/Jan/2017 Time 00:00 GLIDE Number: FL-2017-000004-THA
 ADRC URL: http://www.adrc.asia/view_disaster_en.php?Lang=en&Key=2162&NationCode=7648

Escalation to the Charter, Space and Major Disasters

Request to escalate this EO to the Charter

Disaster Situation

Widespread flooding in Thailand's south has killed 21 people, hit rubber production in the region and shut down infrastructure, officials said on Monday, as the military government increased aid to flood-affected areas. (source: reuters)

Satellite Images(Before Disaster)

ALOS(Jpeg)



ALOS-2 PALSAR-2... 18/Feb/2016 17:30

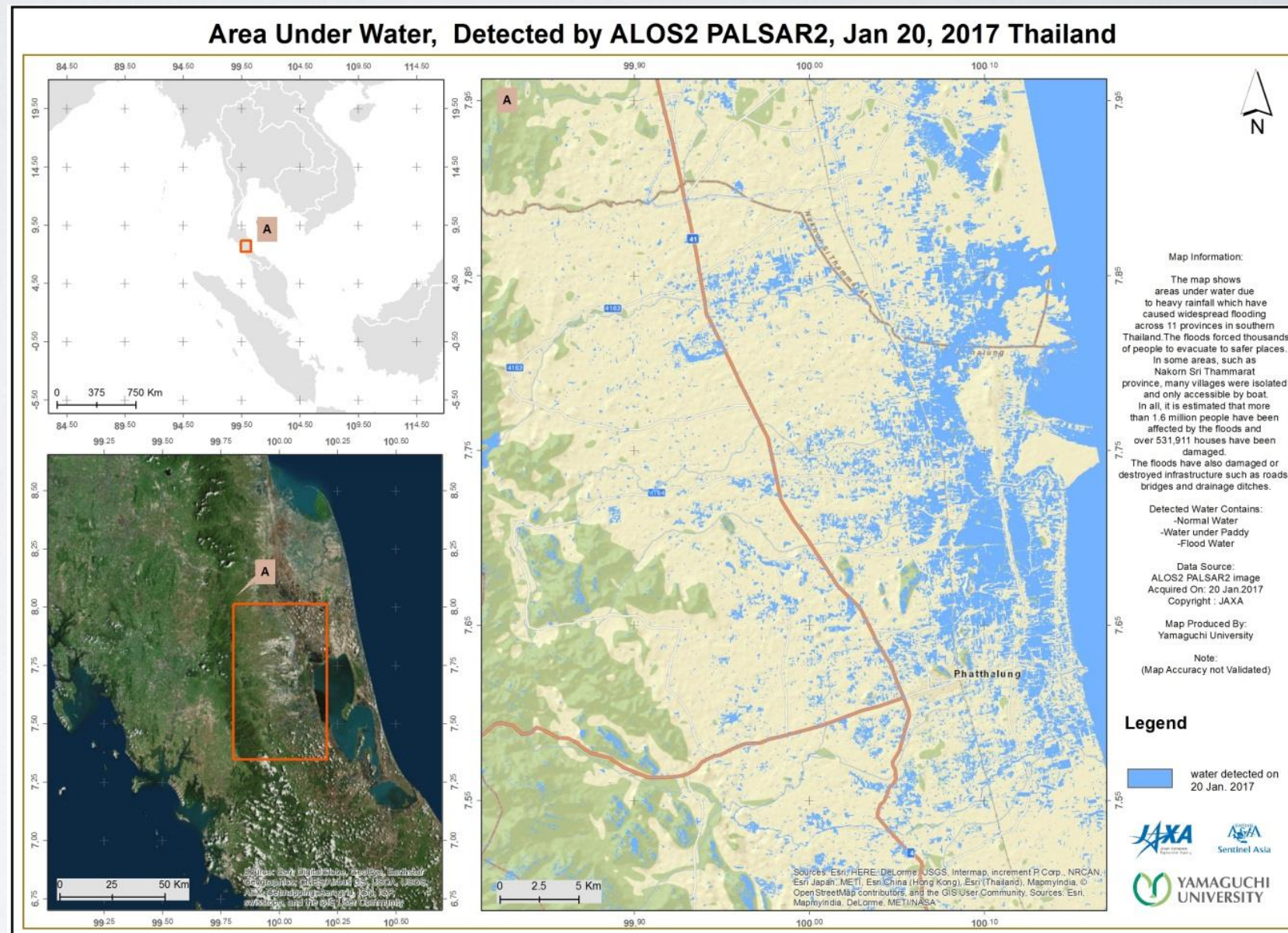
Satellite Images(After Disaster)

ALOS(Jpeg)



ALOS-2 PALSAR-2... 19/Jan/2017 17:30

Product



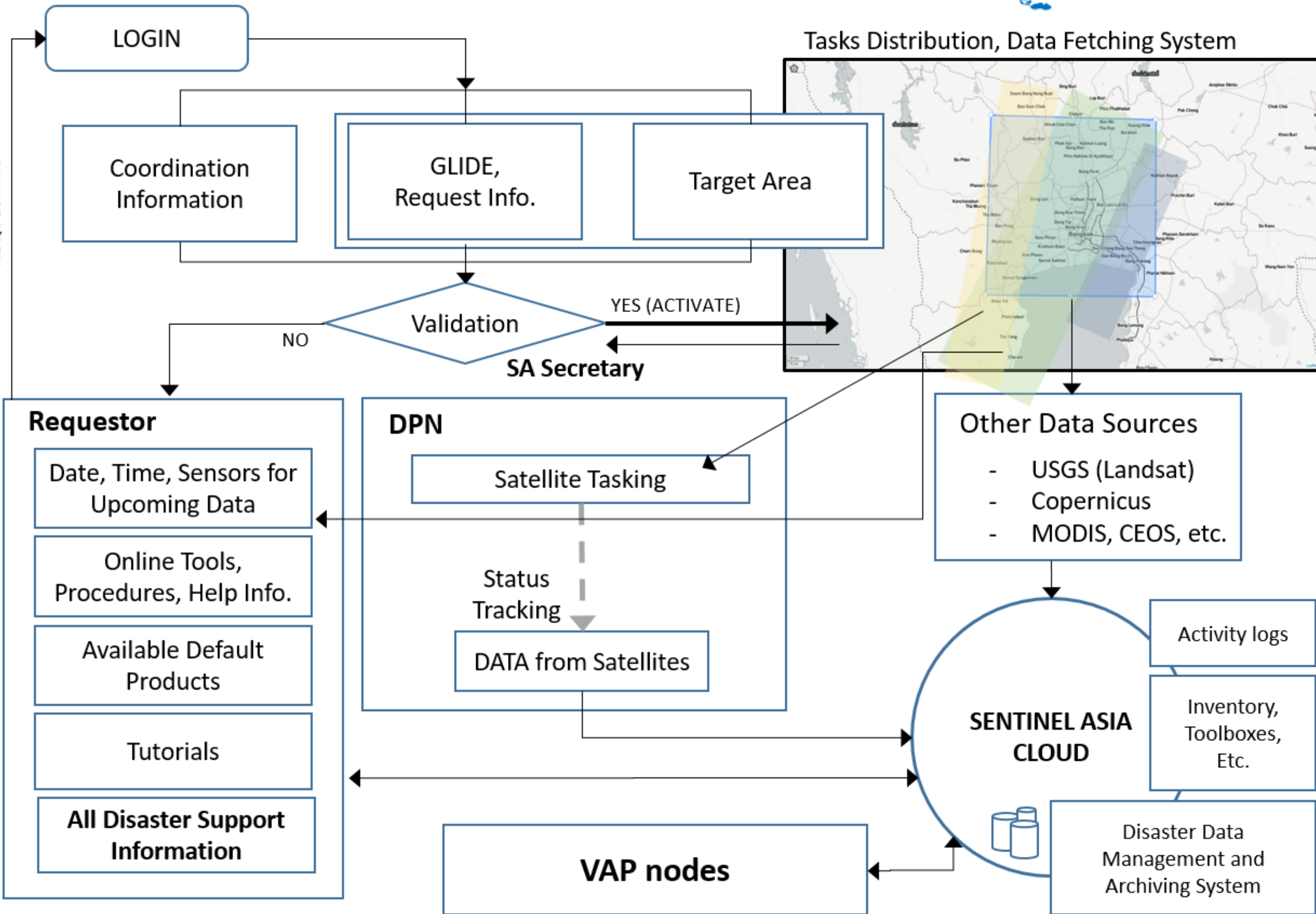
Conclusion and Perspectives

- GISTDA is willingly to continue supporting Sentinel Asia as a DPN.
- GISTDA would like to propose, contribute and collaborate with SA members to improve and develop Sentinel Asia mechanisms to foster and promote the cooperation in accordance with the plan of SA.
- GISTDA would like to thanks SA community for their support during the flooding disaster in 2016.



DATA PROVISION - ONLINE SERVICES FRAMEWORK

REQUESTING



QPTMIS Satellite Acquisition Feasibility Daily Acquisition Plan Project Tracking Satellite Usage Replanning Manage Project Logout v.1.0

เลือกใช้งาน
Select Project
AECL_2017

MARKER LOCATION
13.736717 100.523186

AECL_2017
20%
Completed 70/265

ข้อมูลโครงการ

- 📍 ระบุตำแหน่งของดาวเทียมที่จะใช้
- 📅 ระบุวันที่ของดาวเทียมที่จะใช้
- 📅 ระบุวันที่ของดาวเทียมที่จะใช้

Orbit	Datetime	Roll Max
คลิกที่นี่เพื่อดูรายละเอียดของ Orbit (ดูว่าดาวเทียมไหน)		

QPTMIS Satellite Acquisition Feasibility Daily Acquisition Plan Project Tracking Satellite Usage Replanning Manage Project Logout v.1.0

SELECT DATE
20/01/2017 21/01/2017
Generate

MARKER LOCATION
16.425300523464035 103.20556640625003

OPTICAL
 TERRA
 AQUA
 TRISOS
 LANDSAT 8
 DEIMOS 2

SAR
 CSK 1
 CSK 2
 RADARSAT 2

PASS

- TERRA**
20/01/17 - 04:25:00 (UTC)
20/01/17 - 11:25:00 (UTC+07:00)
- AQUA**
20/01/17 - 05:53:00 (UTC)
20/01/17 - 12:53:00 (UTC+07:00)
- CSK 2**
19/01/17 - 22:59:00 (UTC)
20/01/17 - 05:59:00 (UTC+07:00)
- THEOS**
20/01/17 - 03:25:00 (UTC)

QPTMIS Satellite Acquisition Feasibility Daily Acquisition Plan Project Tracking Satellite Usage Replanning Manage Project Logout v.1.0