

Standard Operation Procedure (SOP) for smooth EOR

9th Joint Project Team Meeting for Sentinel Asia STEP-3 (JPTM2024)

5-7 October 2024

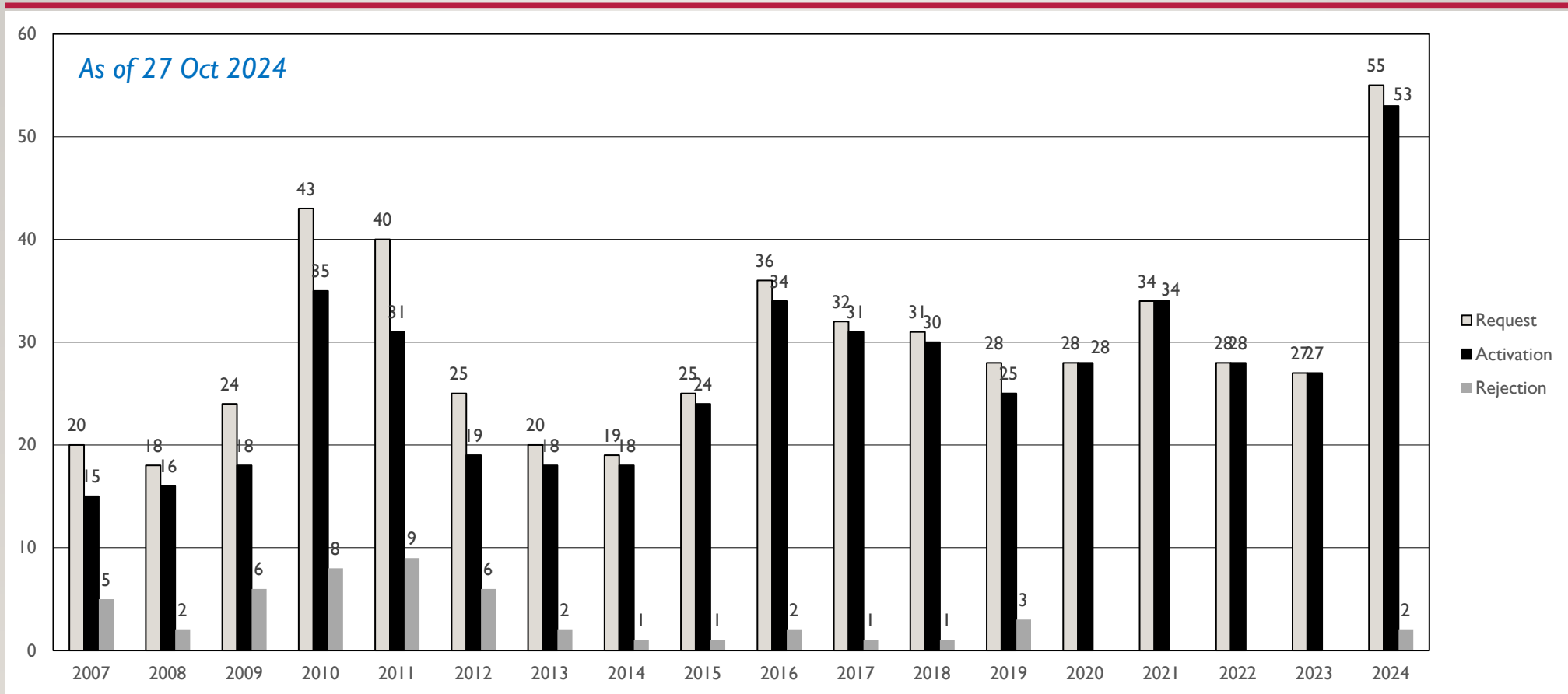
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1. Trend of Past EORs
2. Good Practices
3. Promotion of the Standard Operation Procedure (SOP) for EOR
4. Conclusion

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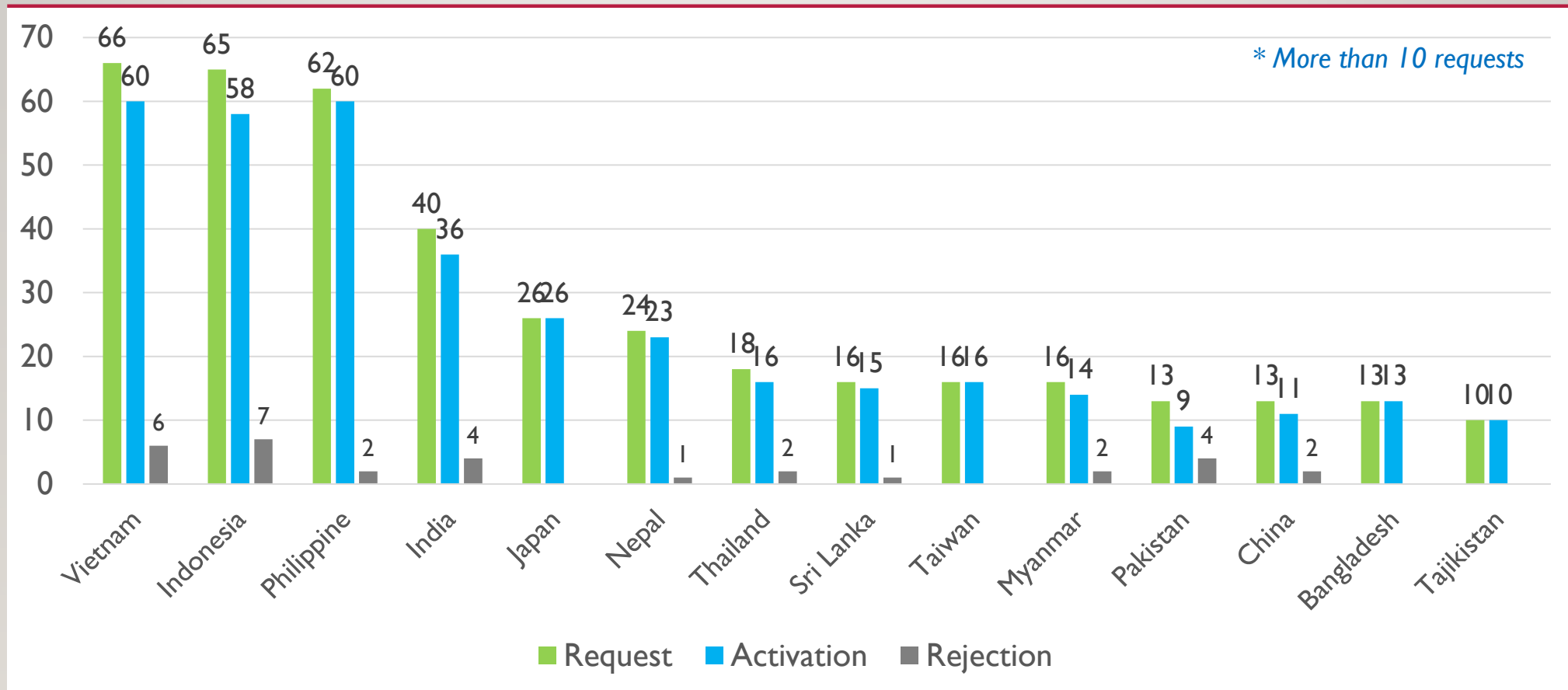
NUMBER OF REQUESTS, ACTIVATIONS AND REJECTIONS FOR EOR (2007-2024)



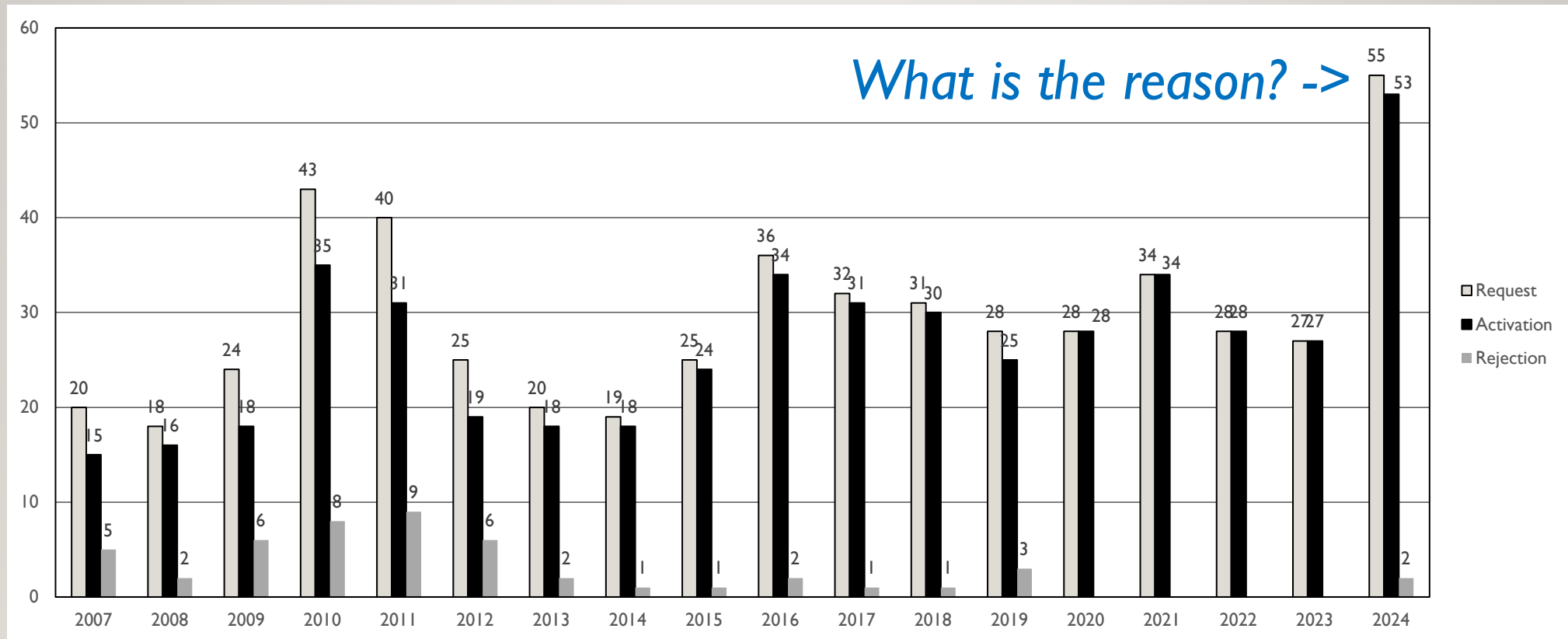
TYPE OF REQUESTS, ACTIVATIONS AND REJECTIONS FOR EOR (2007-2023)

	Number of Request	Number of Activation	Number of Rejection	Activation/Request (%)
Flood	238	226	12	95.0%
Earthquake	65	60	5	92.3%
Typhoon / Storm	42	40	2	95.2%
Landslide	32	27	5	84.4%
Volcano	26	23	3	88.5%
Cyclone	26	22	4	84.6%
Forest Fire	19	9	10	47.4%
Oil Spill	8	6	2	75.0%
Others	22	18	4	81.8%
Total	478	431	47	

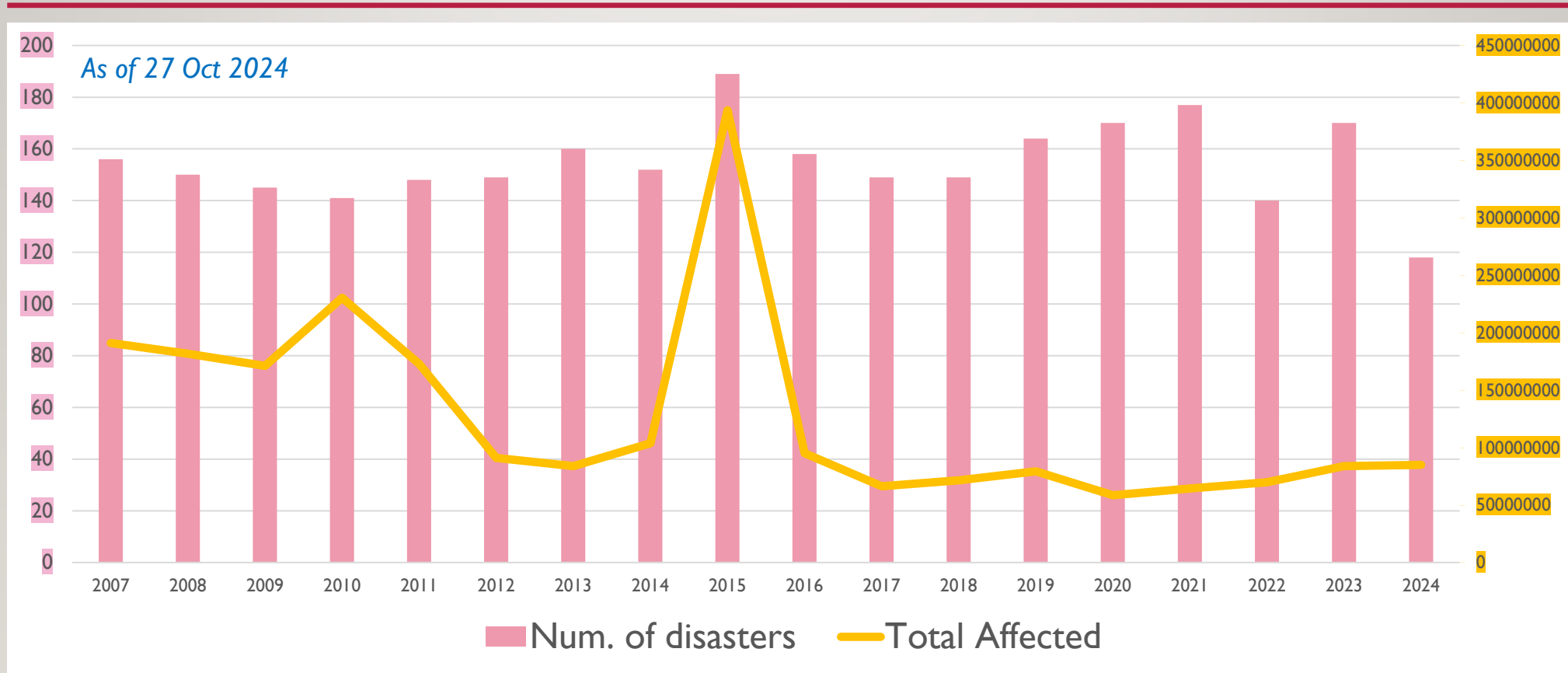
NUMBER OF REQUESTS, ACTIVATIONS AND REJECTIONS FOR EOR BY COUNTRY (2007-2023)



NUMBER OF REQUESTS, ACTIVATIONS AND REJECTIONS FOR EOR (2007-2024)



NUMBER OF OCCURRED DISASTERS AND TOTAL AFFECTED PEOPLE (2007-2024)



Its common year in 2024...increased SA member's awareness?

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- 2. Good Practices**
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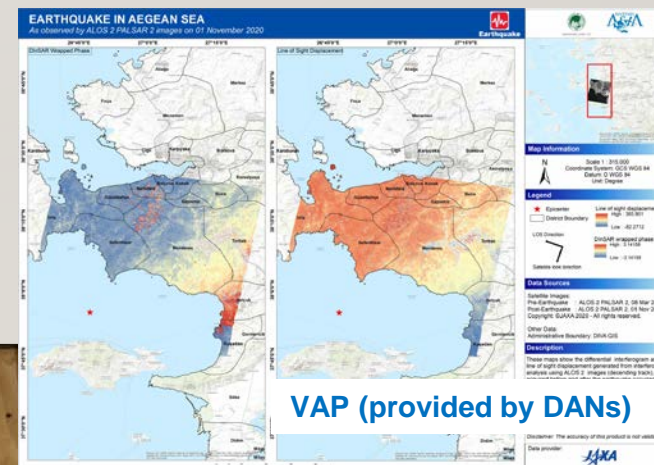
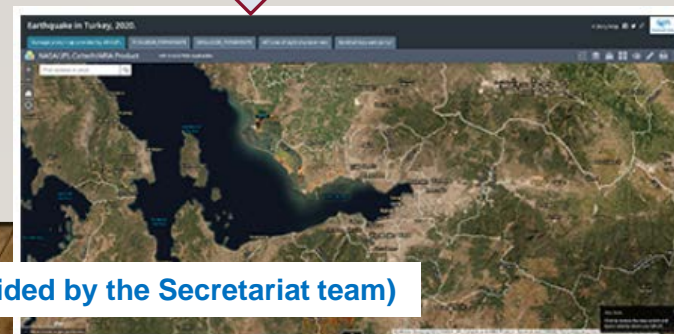
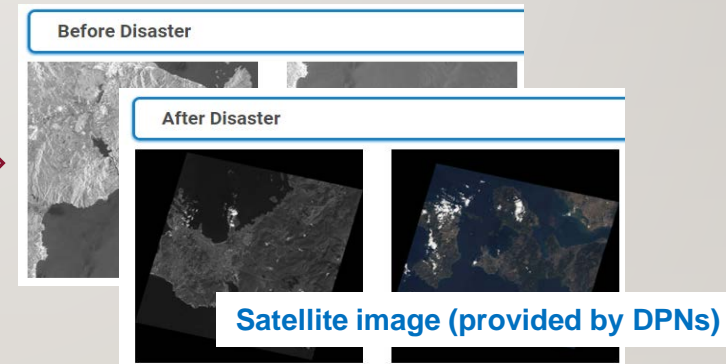

EMERGENCY OBSERVATION REQUEST (EOR)

JPT members and ADRC member organizations are entitled to make emergency observation requests (EORs) to Sentinel Asia. DPN, DAN, and the Secretariat team support to provide a data-sets.

2020-10-30
Turkey Earthquake on 30 October, 2020

Emergency Obs. Request Information

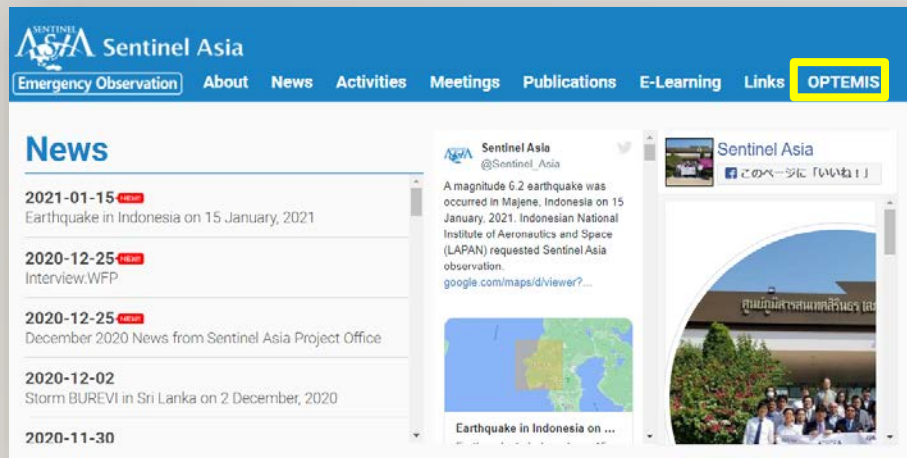
Disaster Type: Earthquake, Tsunami
Country: Turkey
Occurrence Date (UTC): 30 October, 2020
SA activation Date(UTC): 30 October, 2020
Requester: Disaster and Emergency Management Presidency (AFAD)
Escalation to the International Charter: No
GLIDE Number:



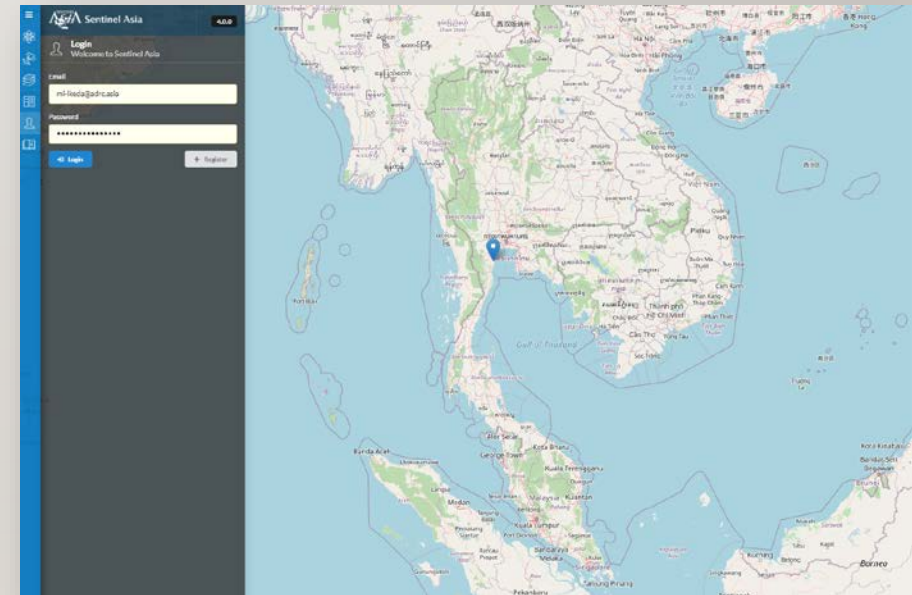
WHAT IS “OPTEMIS”

The new system for EOR, named “OPTEMIS”, was developed by the collaboration of JAXA, GISTDA, and NARL started its operation on 28 October 2019. “OPTEMIS” enable easy-registration for making EOR.

[How to access]



SA Website (<https://sentinel-asia.org/index.html>)

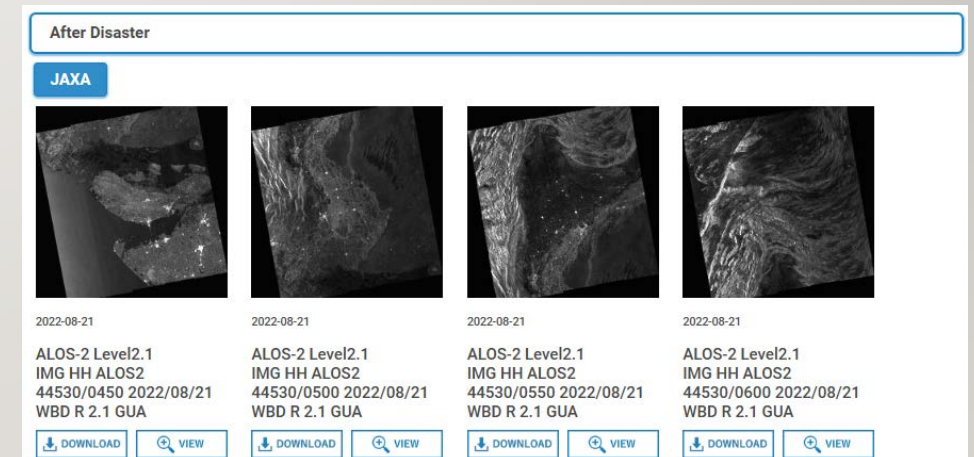
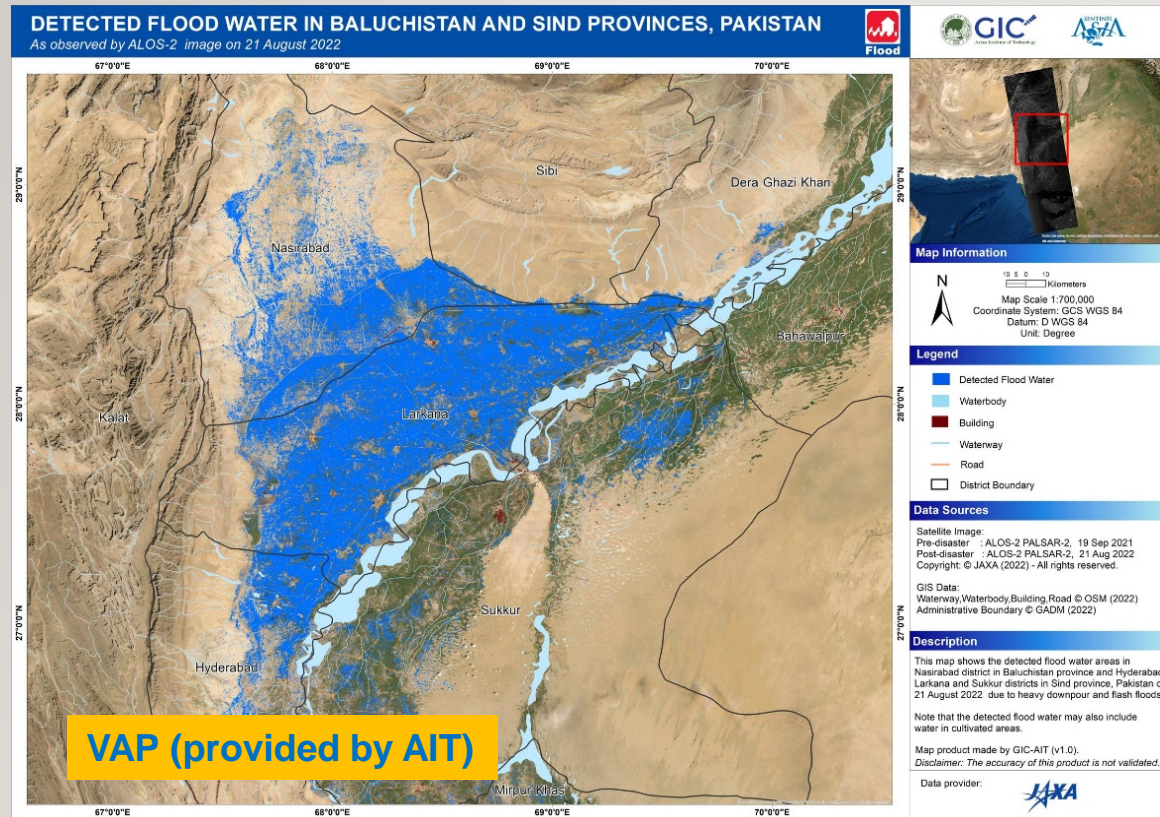


OPTEMIS (<https://optemis.sentinel-asia.org/>)

EOR: Good Practice I

Flood in Pakistan (August 2022)

[EOR Requestor] Provincial Disaster Management Authority (PDMA) in Pakistan and ADRC

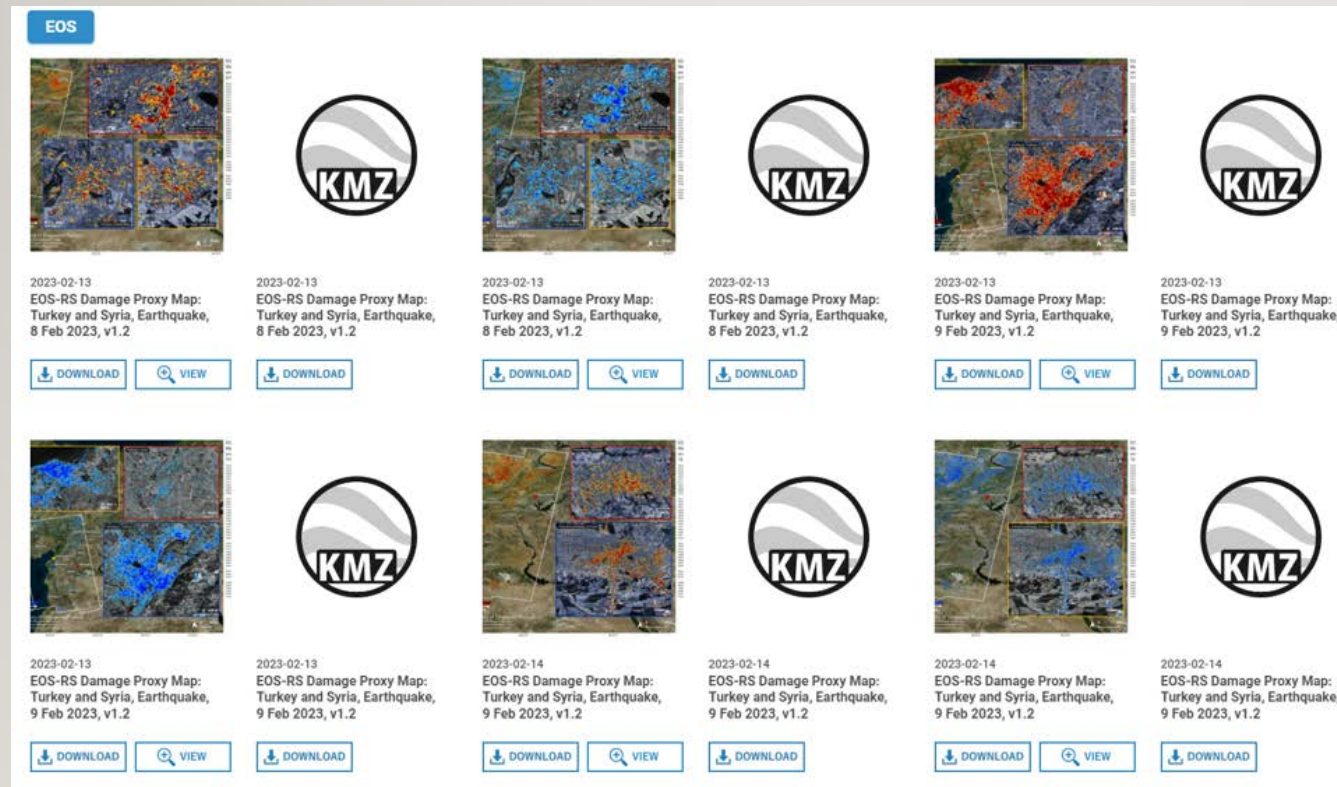


PDMA as requester of this EOR used provided data for emergency response activity, sharing with other DRR organizations, and making report for sharing information.

EOR: Good Practice 2

Türkiye-Syria Earthquakes (February 2023)

[EOR Requestor] Disaster and Emergency Management Authority (AFAD)



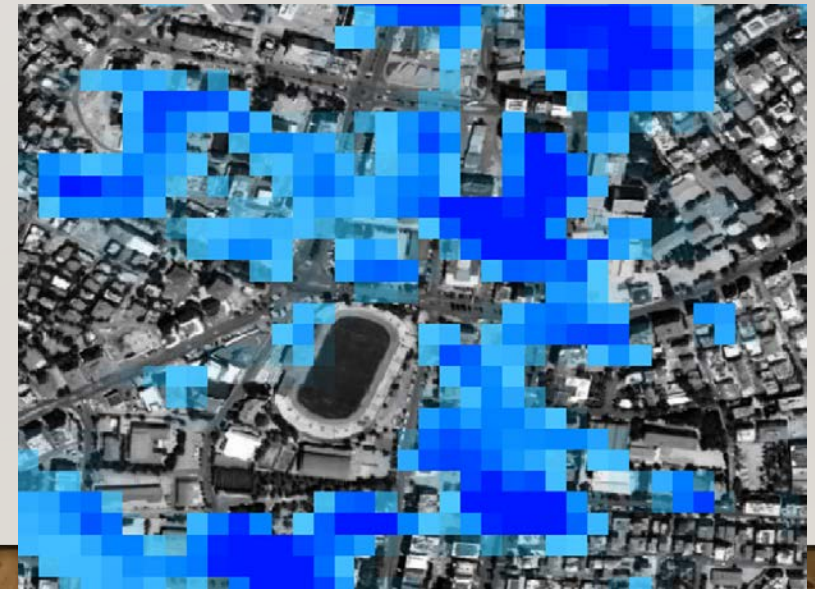
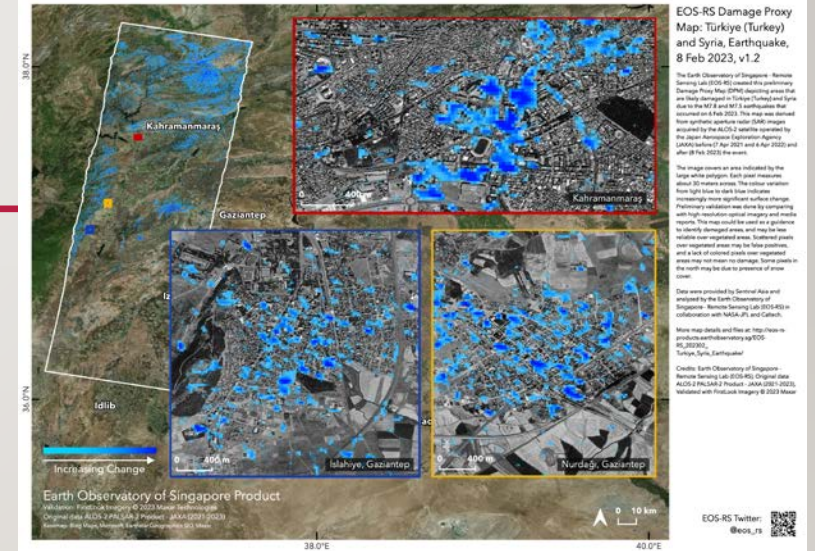
Satellite imageries of the 2023 Earthquakes in Turkey can be viewed and downloaded on the Sentinel Asia website.

*** 71 products (analyzed map) and 107 satellite images are provided by Sentinel Asia members (as of 20 December 2023)**

Actual



Satellite image analysis



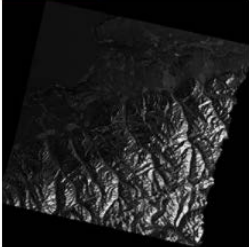
EOR: Good Practice 3

Landslide in Kyrgyzstan (December 2019)

[EOR Requestor] Central-Asian Institute for Applied Geosciences (CAIAG)

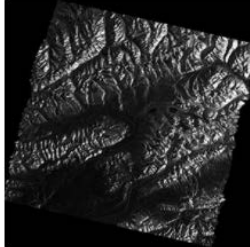
After Disaster

JAXA



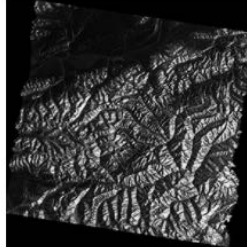
2019-12-15
ALOS-2 PALSAR-2,
Dec. 15, 2019

[DOWNLOAD](#) [VIEW](#)



2019-05-05
ALOS-2 PALSAR-2,
May 5, 2019

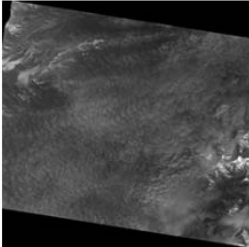
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2019-05-05
ALOS-2 PALSAR-2,
May 5, 2019

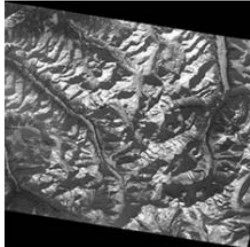
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GISTDA



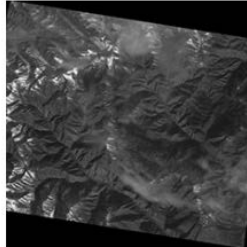
2019-12-12
THEOS 1 SCENE level 2A
PAN, Dec. 12, 2019

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2019-12-12
THEOS 1 SCENE level 2A
PAN, Dec. 12, 2019

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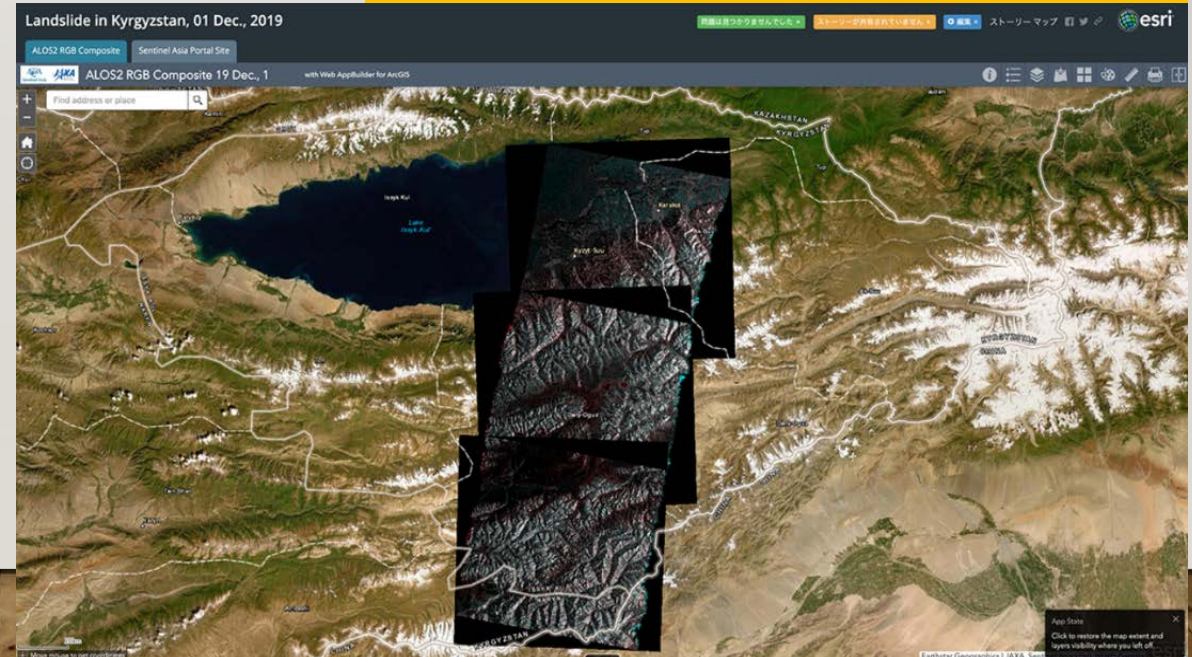


2019-12-12
THEOS 1 SCENE level 2A
PAN, Dec. 12, 2019

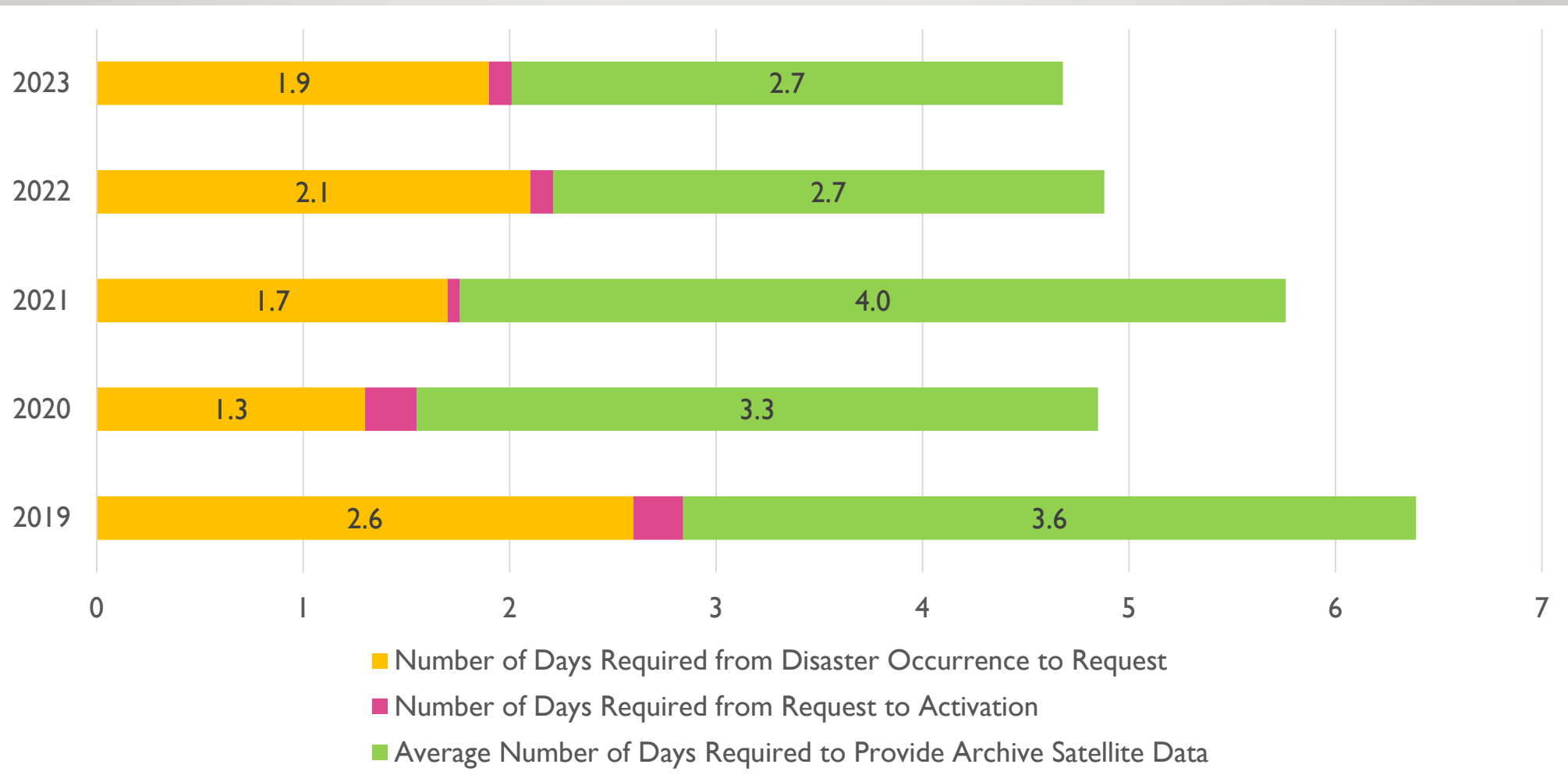
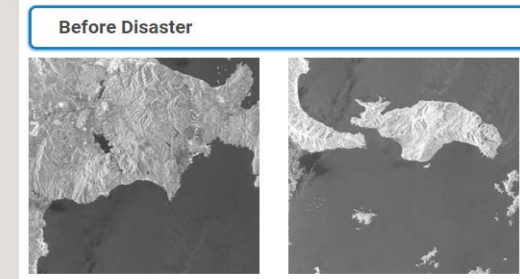
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Satellite image (provided by DPNs)

WEB-GIS (provided by the Secretariat team)

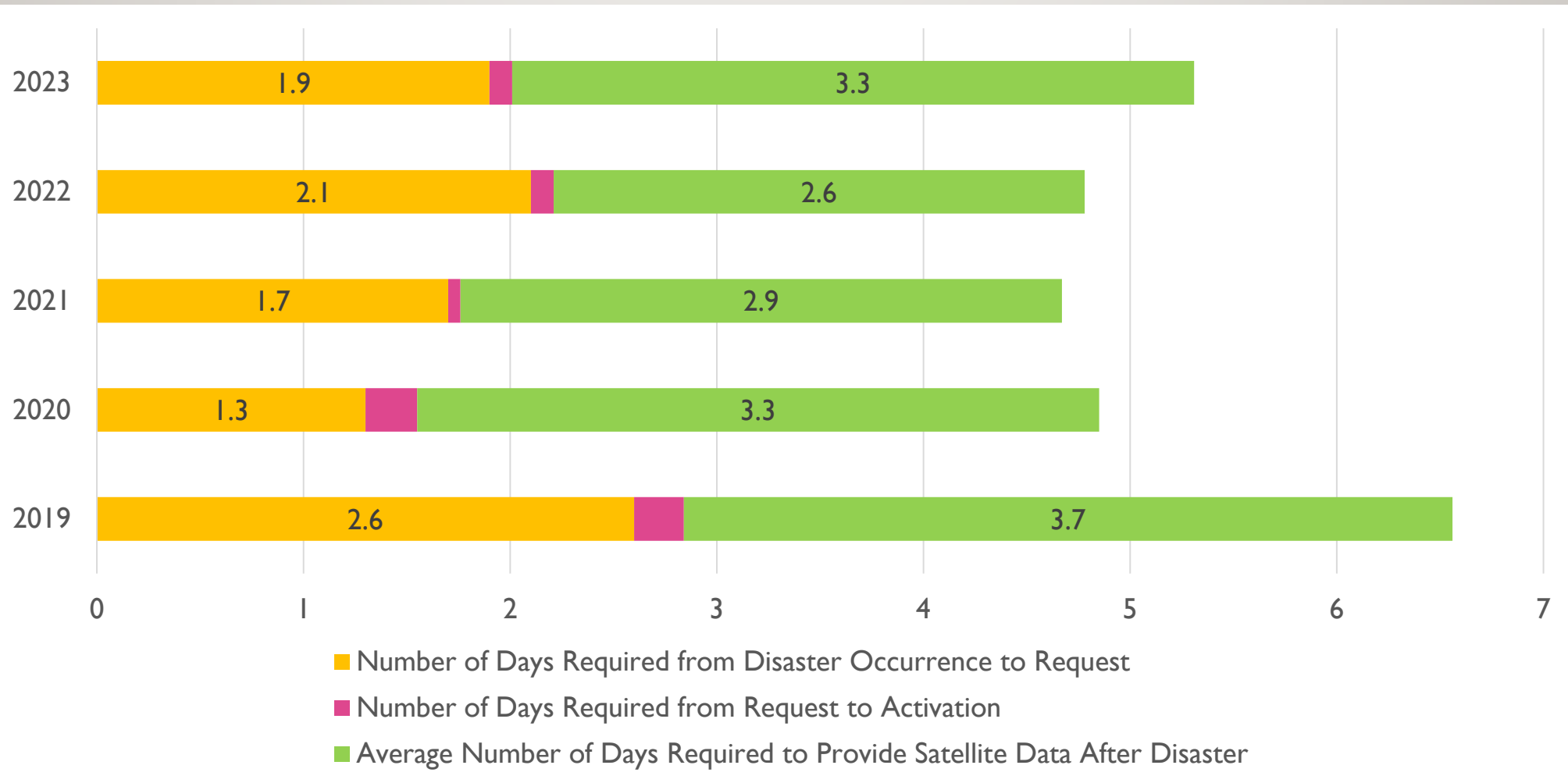
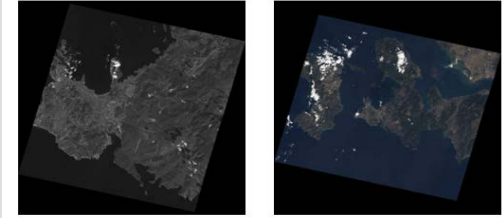


HOW MANY DAYS DO WE NEED TO PROVIDE “ARCHIVE DATA”

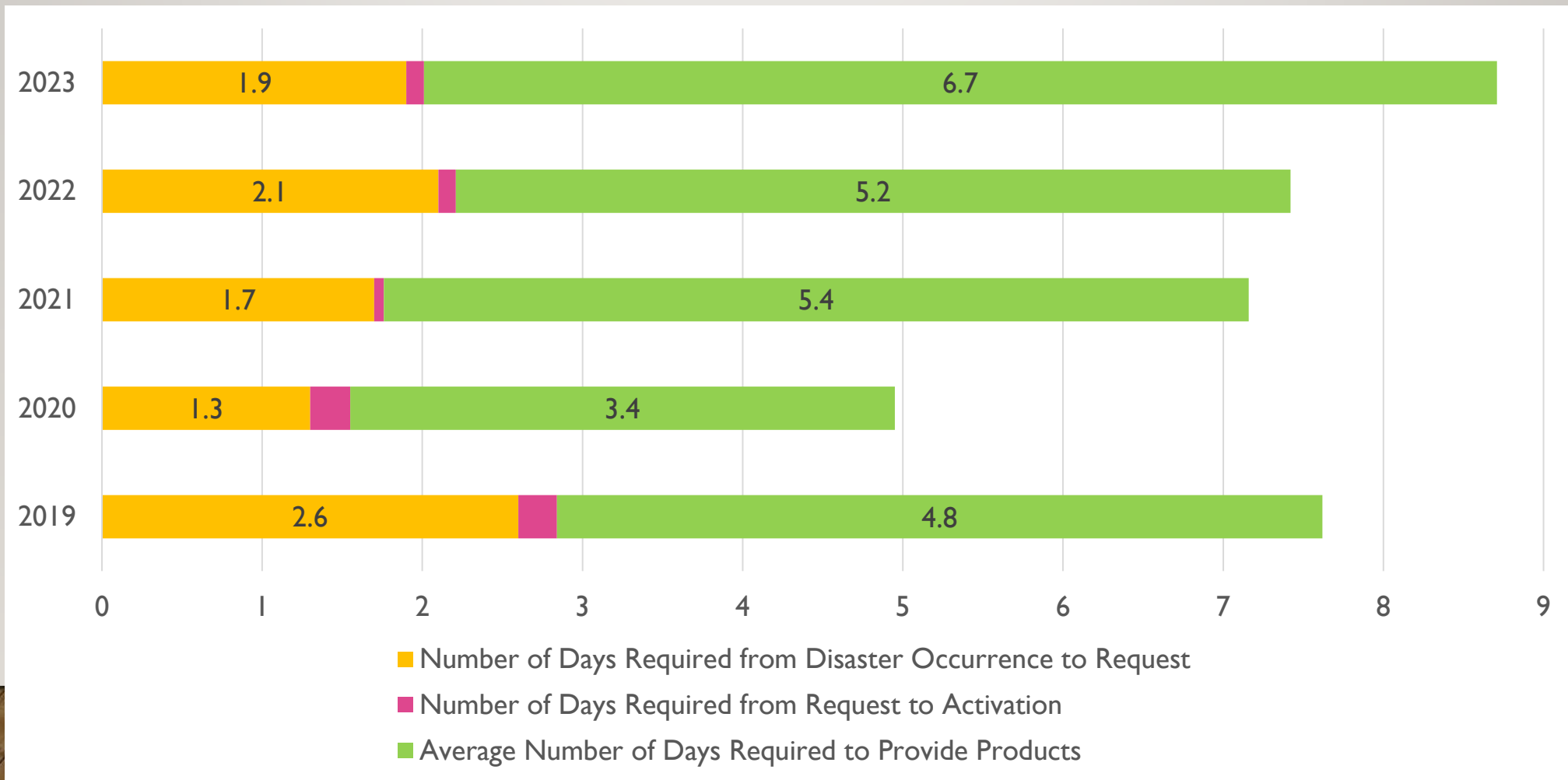
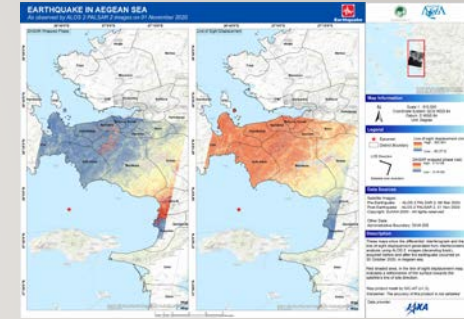


HOW MANY DAYS DO WE NEED TO PROVIDE “SATELLITE IMAGE AFTER DISASTER”

After Disaster



HOW MANY DAYS DO WE NEED TO PROVIDE “VAP”

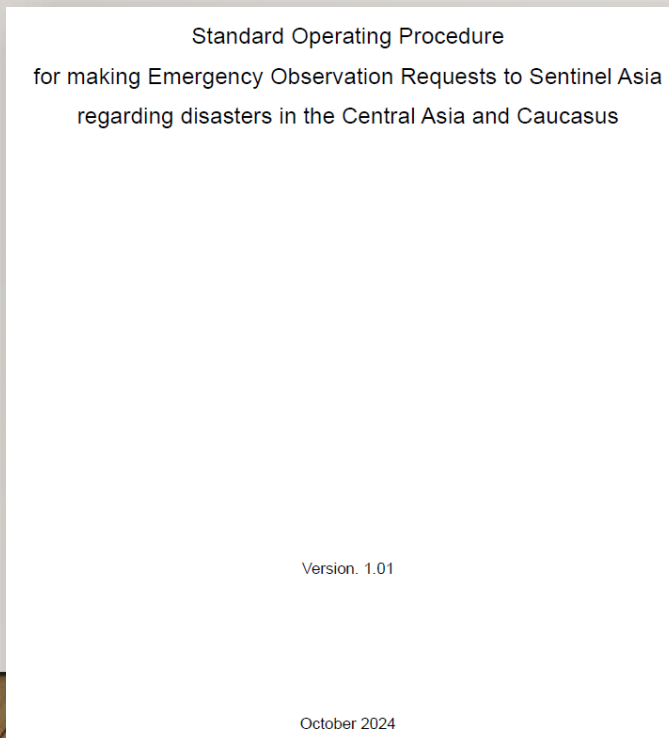


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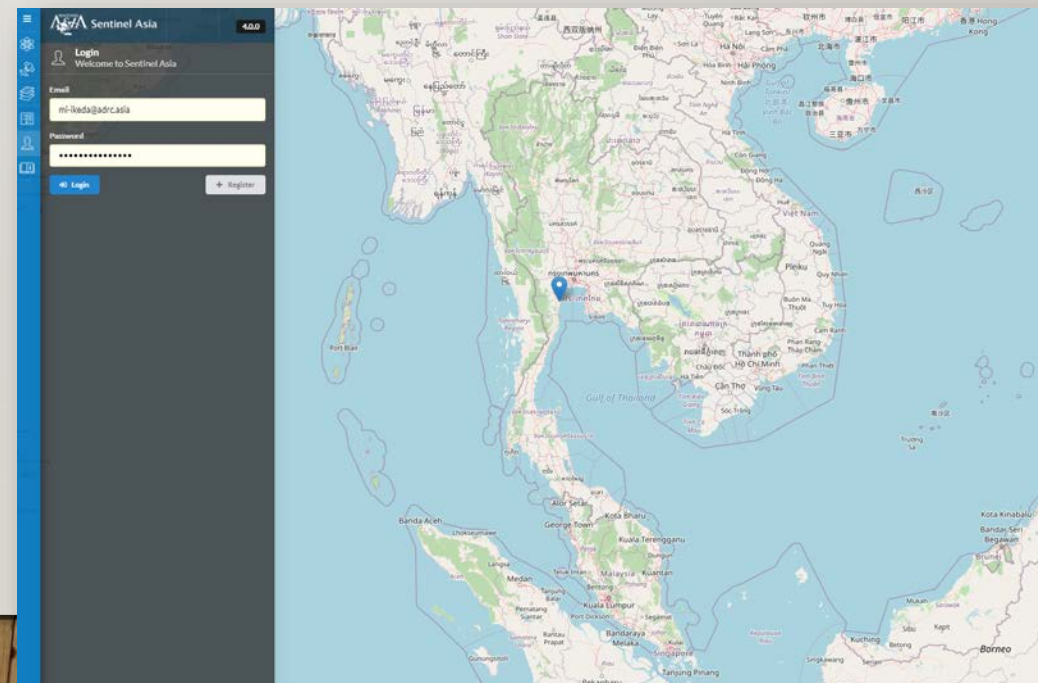
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2. Good Practices
- 3. Promotion of the Standard Operation Procedure (SOP) for EOR**
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STANDARD OPERATION PROCEDURE (SOP) FOR “OPTEMIS”

SOP is aimed at contributing to practical and effective disaster management activities through collaboration in CAC by making EORs to Sentinel Asia as promptly and timely as possible.



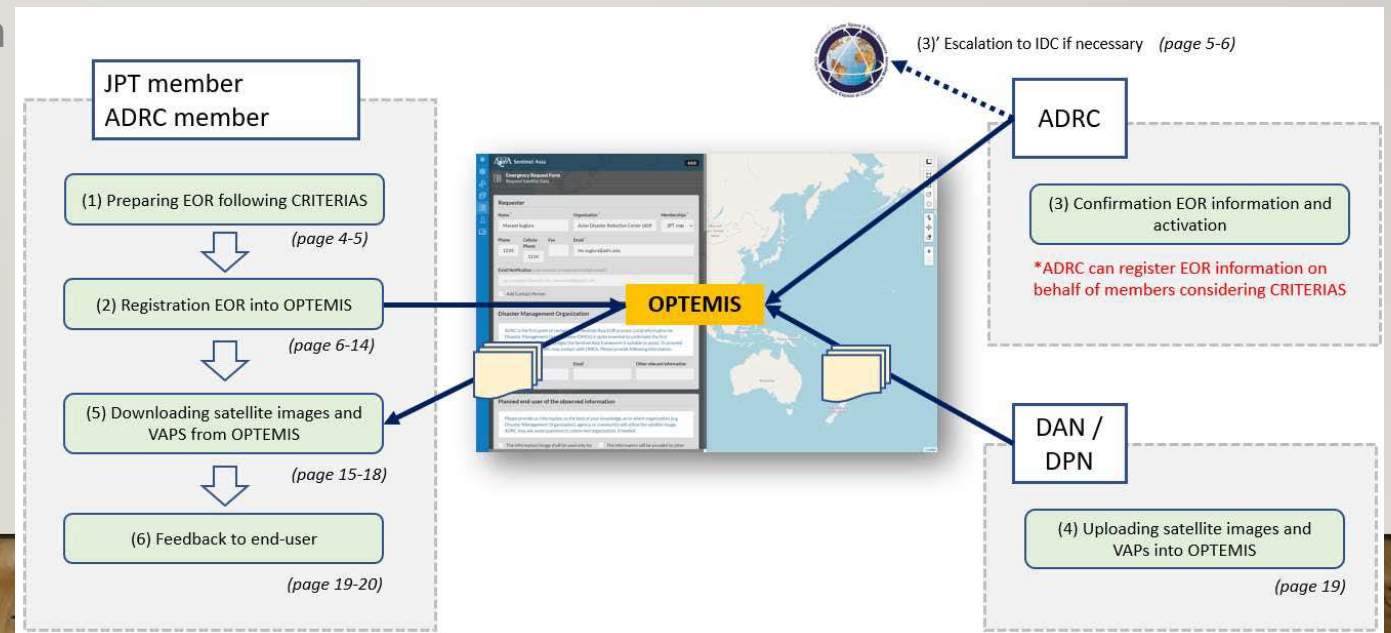
OPTEMIS (<https://optemis.sentinel-asia.org/>)



CONTENTS OF SOP

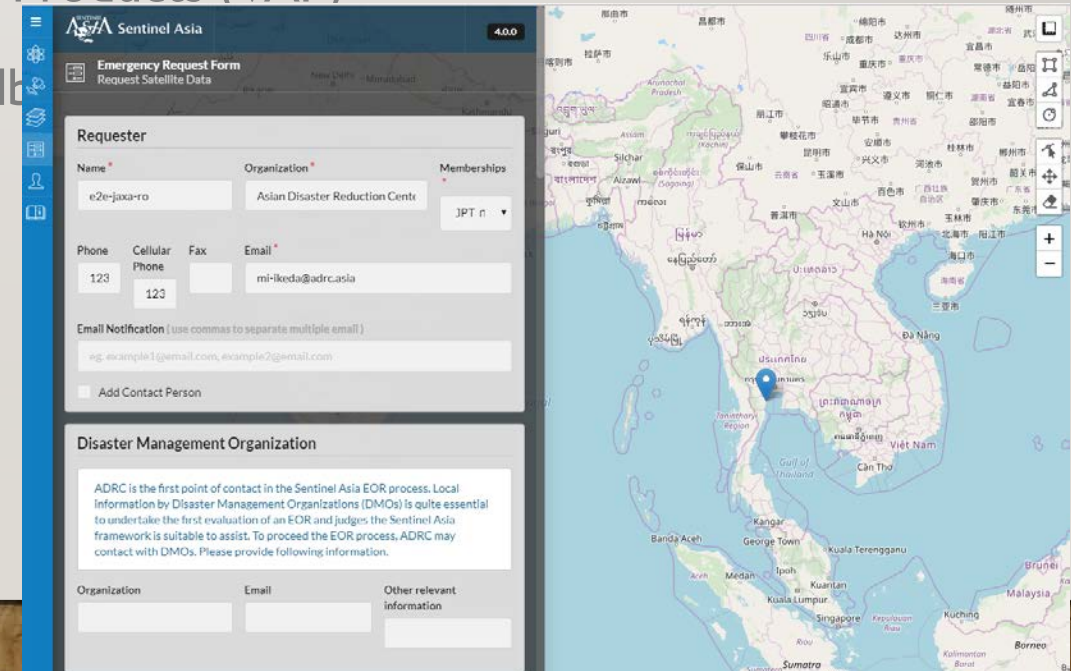
I. Preface

2. Preparing and Submitting EOR (compulsory action)
3. Use of Satellite Images and Value-Added Products (VAP)
4. Providing Disaster Information



CONTENTS OF SOP

1. Preface
2. **Preparing and Submitting EOR (compulsory action)**
3. Use of Satellite Images and Value-Added Products (VAP)
4. Providing Disaster Information and Feedback



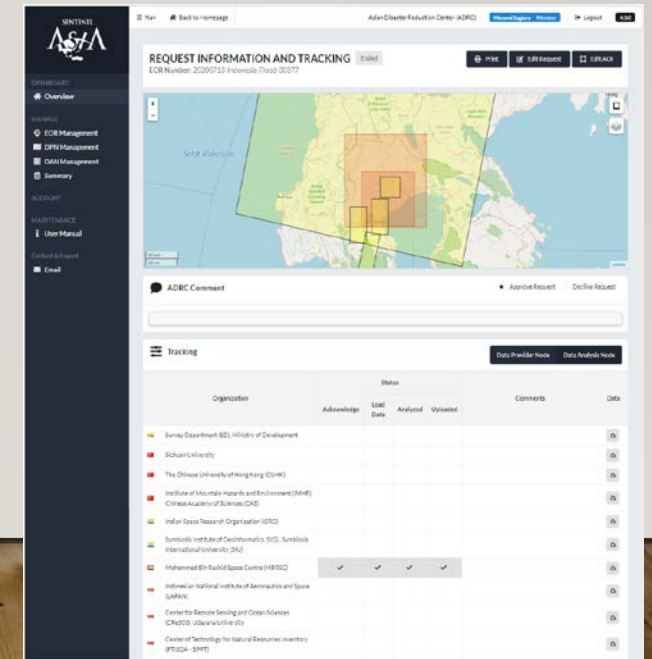
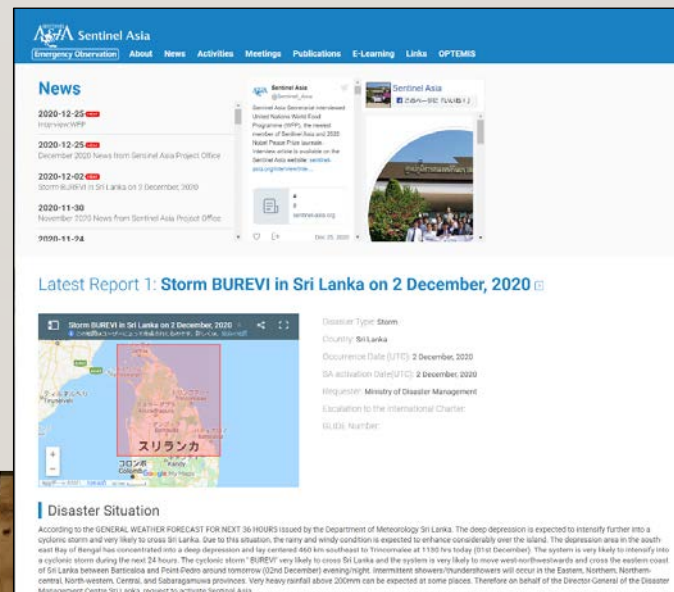
The image displays the Sentinel Asia Emergency Request Form (EOR) interface, which is used for requesting satellite data. The form is titled "Emergency Request Form" and "Request Satellite Data". It includes a sidebar with navigation icons and a main content area with the following sections:

- Requester**
 - Name ***: e2e-jaxa-ro
 - Organization ***: Asian Disaster Reduction Centre
 - Memberships**: JPT n
 - Phone**: 123
 - Cellular Phone**: 123
 - Fax**:
 - Email ***: mi-ikeda@adrc.asia
 - Email Notification** (use commas to separate multiple email): eg. example1@gmail.com, example2@gmail.com
 - ☐ Add Contact Person
- Disaster Management Organization**
 - ADRC is the first point of contact in the Sentinel Asia EOR process. Local Information by Disaster Management Organizations (DMOs) is quite essential to undertake the first evaluation of an EOR and judges the Sentinel Asia framework is suitable to assist. To proceed the EOR process, ADRC may contact with DMOs. Please provide following information.
 - Organization**:
 - Email**:
 - Other relevant information**:

On the right side of the form, there is a map of Southeast Asia with a blue location pin over the Gulf of Thailand region. The map shows various countries and cities, including Thailand, Vietnam, Cambodia, Laos, and parts of Myanmar and Malaysia.

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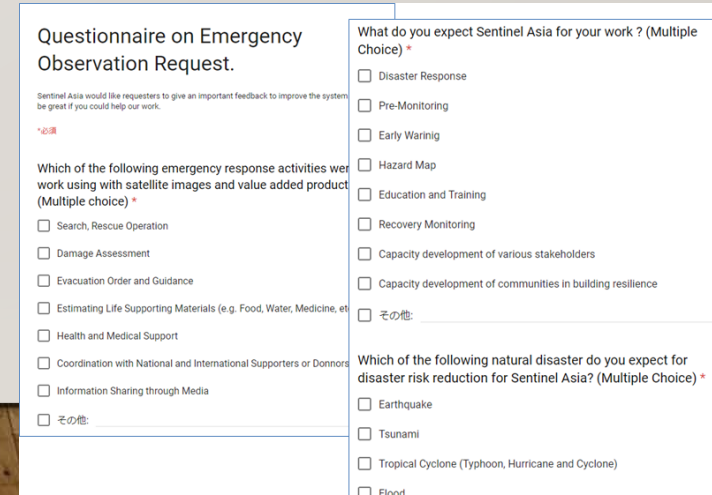


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3. Use of Satellite Images and Value-Added Products (VAP)
4. **Providing Disaster Information and Feedbacks**



The screenshot shows the main interface of the GIC Disaster Survey mobile app. At the top, there is a logo for the Asian Institute of Technology (AIT) and the text "GIC Disaster Survey". Below this, a paragraph explains the purpose of the app: "The mobile app is developed to collect information on current disasters and its impact to important objects, properties, and infrastructures. The collected information will be useful for disaster response and post-disaster activities, including for the satellite-based disaster mapping Sentinel Asia." A prompt asks the user to "Please complete the following survey regarding disaster occurring in your area." At the bottom, there are two input fields: "Date/Time*" with a calendar icon and the date "2/4/2021", and a time field showing "08:21 AM".



The screenshot shows a questionnaire titled "Questionnaire on Emergency Observation Request." It includes a sub-header "Sentinel Asia would like requesters to give an important feedback to improve the system be great if you could help our work." and a red asterisk indicating a compulsory question. The first question is "Which of the following emergency response activities were you working with using satellite images and value added products? (Multiple choice) *". It lists several options with checkboxes: Search, Rescue Operation; Damage Assessment; Evacuation Order and Guidance; Estimating Life Supporting Materials (e.g. Food, Water, Medicine, etc.); Health and Medical Support; Coordination with National and International Supporters or Donors; Information Sharing through Media; and その他 (Others). The second question is "What do you expect Sentinel Asia for your work? (Multiple Choice) *". It lists several options with checkboxes: Disaster Response; Pre-Monitoring; Early Warning; Hazard Map; Education and Training; Recovery Monitoring; Capacity development of various stakeholders; Capacity development of communities in building resilience; and その他 (Others). The third question is "Which of the following natural disaster do you expect for disaster risk reduction for Sentinel Asia? (Multiple Choice) *". It lists several options with checkboxes: Earthquake; Tsunami; Tropical Cyclone (Typhoon, Hurricane and Cyclone); and Flood.

PROMOTING SOP FOR SA MEMBERS

Target country/region	Collaboration organizations	Established and revised
Myanmar	DMH, DDM, MIMU, (AHA Centre)	March 2021
Thailand	GISTDA, DDPM, ADPC, (AHA Centre)	March 2021
Vietnam	MARD, MONRE, VAST, (AHA Centre)	March 2021
Central Asia and Caucasus	CAIAG, Ministry of Emergency Situations (Kyrgyz Republic) Committee of Emergency Situations and Civil Defense (Tajikistan) Ministry of Emergency Situations (Uzbekistan)	February 2022 October 2024
Cambodia	National Committee for Disaster Management (NCDM)	February 2022
Lao PDR	Ministry of Labour and Social Welfare	February 2022
Pacific Island Countries	National Disaster Management Office (Fiji) National Disaster Management Office (Solomon Islands) Secretariat of the Pacific Community (SPC/SOPAC)	February 2022 January 2025
Nepal	DHM, NDRRMC, MoHA, ICIMOD	November 2023
Türkiye	AFAD, METU	December 2023 January 2025

Workshop in Nepal (Nov 2023)



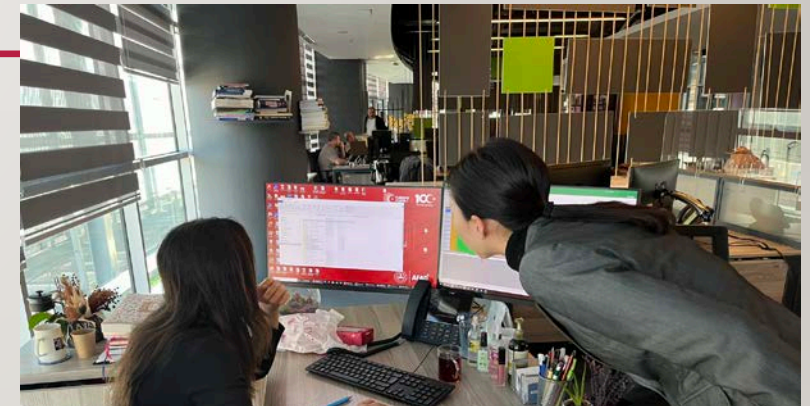
Interview at DHM, ICIMOD, and NDRRMA (before WS)



Workshop in Türkiye (Dec 2023)



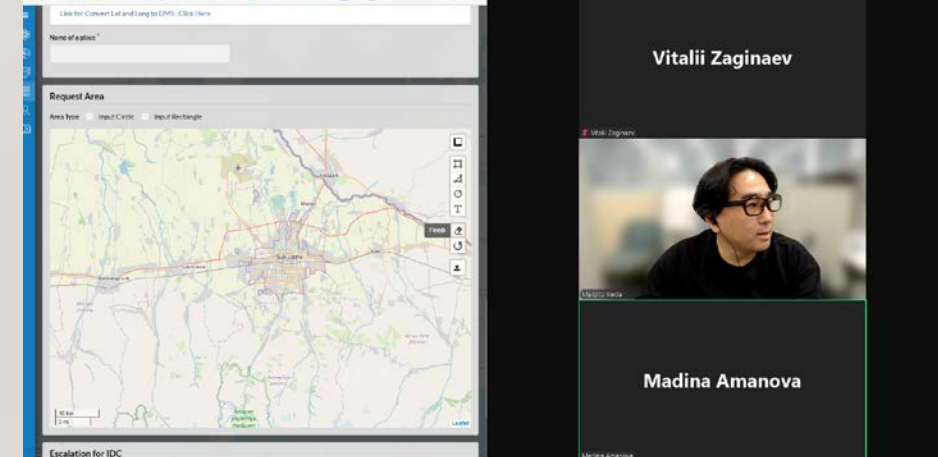
Interview at AFAD and METU (before WS)



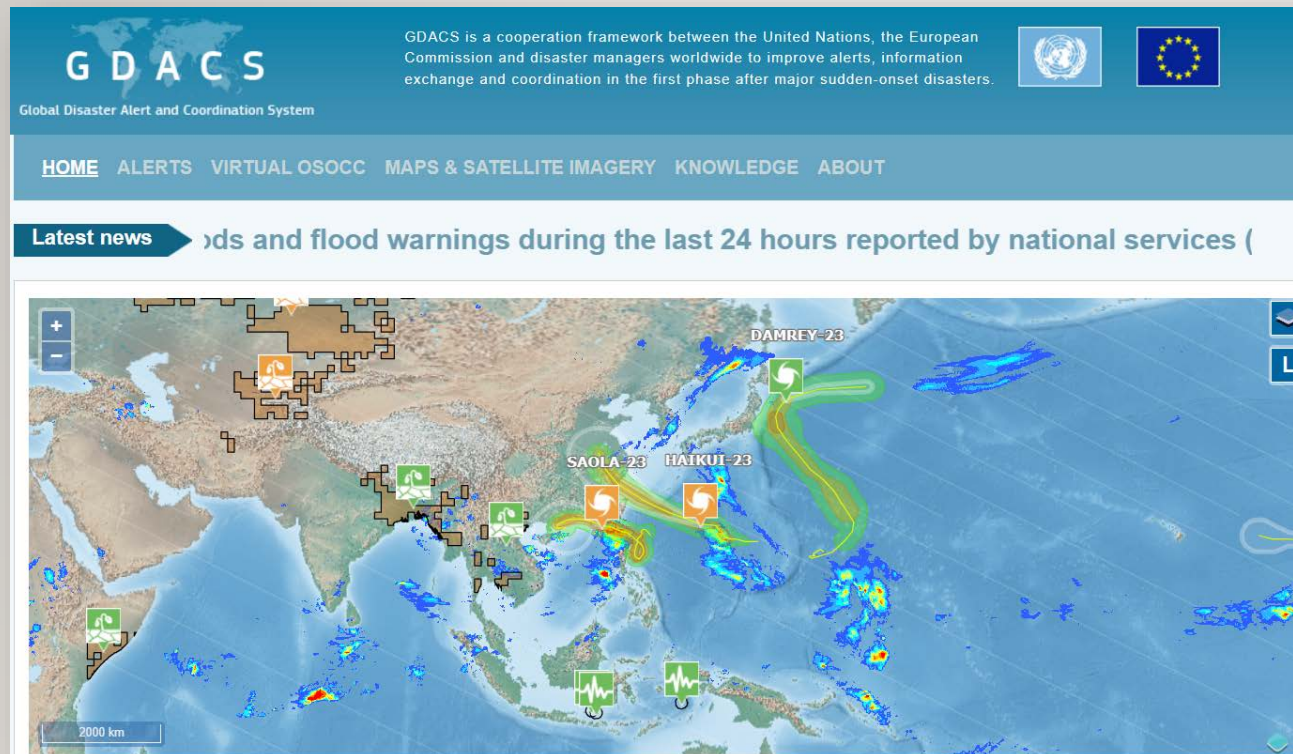
Workshop in Kirgizstan (Oct 2024)



Interview at MoES and CAIAG



HOW TO BE SHORTEN A TIME FOR MAKING EOR? (TRIGGER)



GDACS is a cooperation framework between the United Nations, the European Commission and disaster managers worldwide to improve alerts, information exchange and coordination in the first phase after major sudden-onset disasters.

ADRC refers to make an EOR when we receive a **red-alert** from GDACS.

HOW TO BE SHORTEN A TIME FOR MAKING EOR? (TRIGGER)

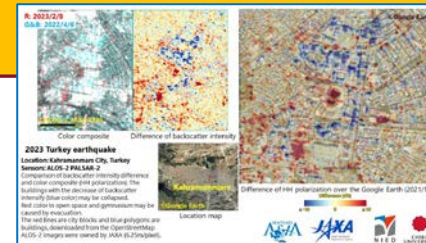
ADRC registers EOR on behalf of you. Please accept that **ADRC will make an EOR unless explicit rejection is expressed within 2 hours of the contact by ADRC.**

ADRC contact to ask you about activation.



Large-scale Disaster occurrence
(e.g., Red-alert from GDACS)

ADRC will make a EOR on behalf of you, if you don't have any rejection.



Provided data will be shared to you

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CONCLUSION

- SA received 478 requests and 431 were activated from 2007 to 2023.
- Many EOR has been submitted from Indonesia, Philippines, and Vietnam such as ASEAN countries.
- The number of EOR in 2024 is higher than usual. One of reason could be due to increased awareness of SA members.
- It requires a time for receiving an EOR after disaster occurrence.
- SOP is one of solution for above issue. And secretariat has been promoting SOP for SA members. (ADRC makes an EOR on behalf of SA members following a Red-alert of GDACS)