

# **Training Workshop I: How to activate Sentinel Asia and escalate to the International Disaster Charter (IDC)**

**Trend of past requests and steps to make smooth EORs**

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10th Joint Project Team Meeting for Sentinel Asia (JPTM2025)

10-12, February 2026

Makoto IKEDA, Asian Disaster Reduction Center

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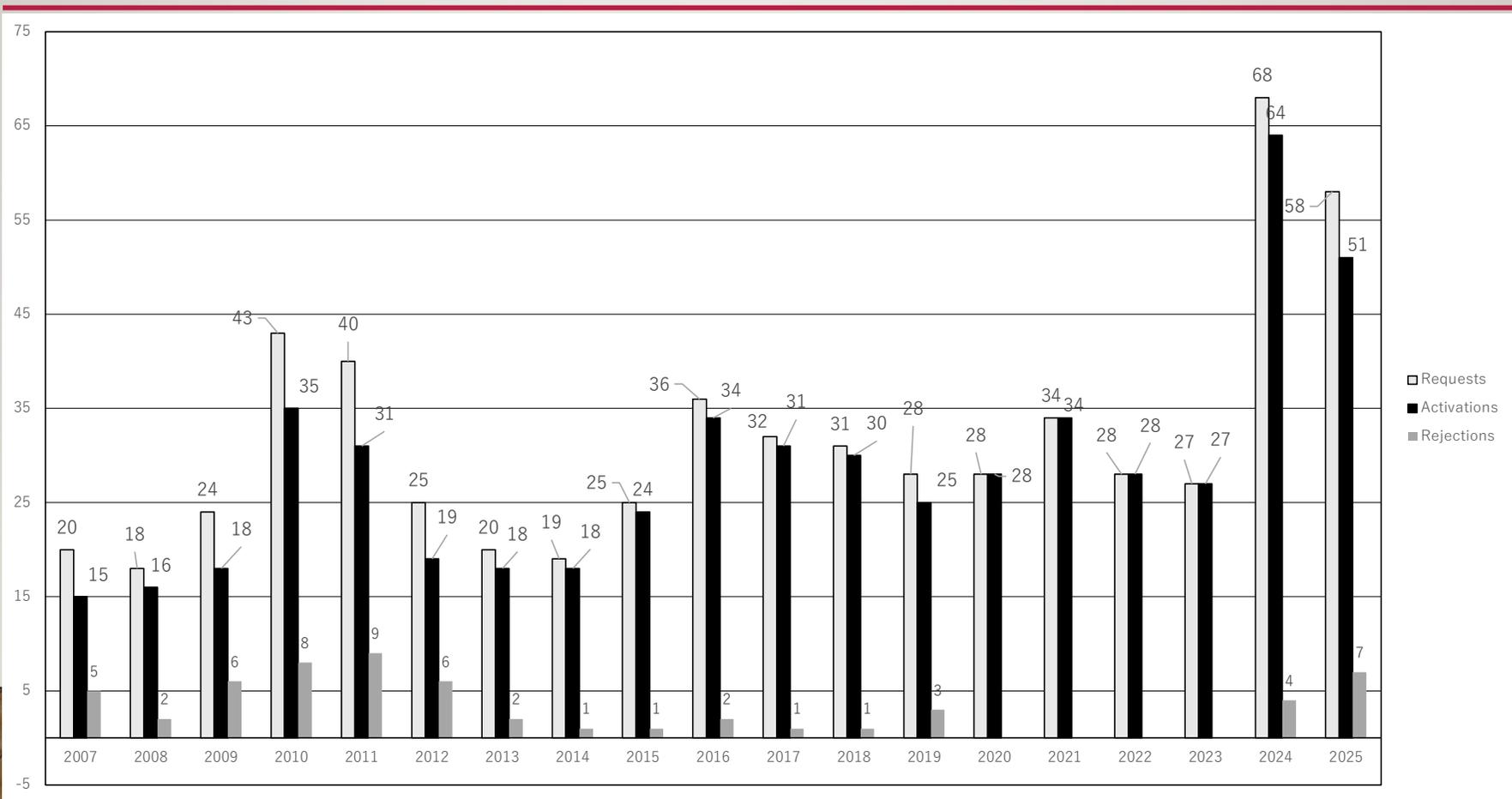
1. Trend of Past EORs
2. Good Practices (2024)
3. Demonstration: How to activate Sentinel Asia and escalate to the International Disaster Charter (IDC)

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1. Trend of Past EORs
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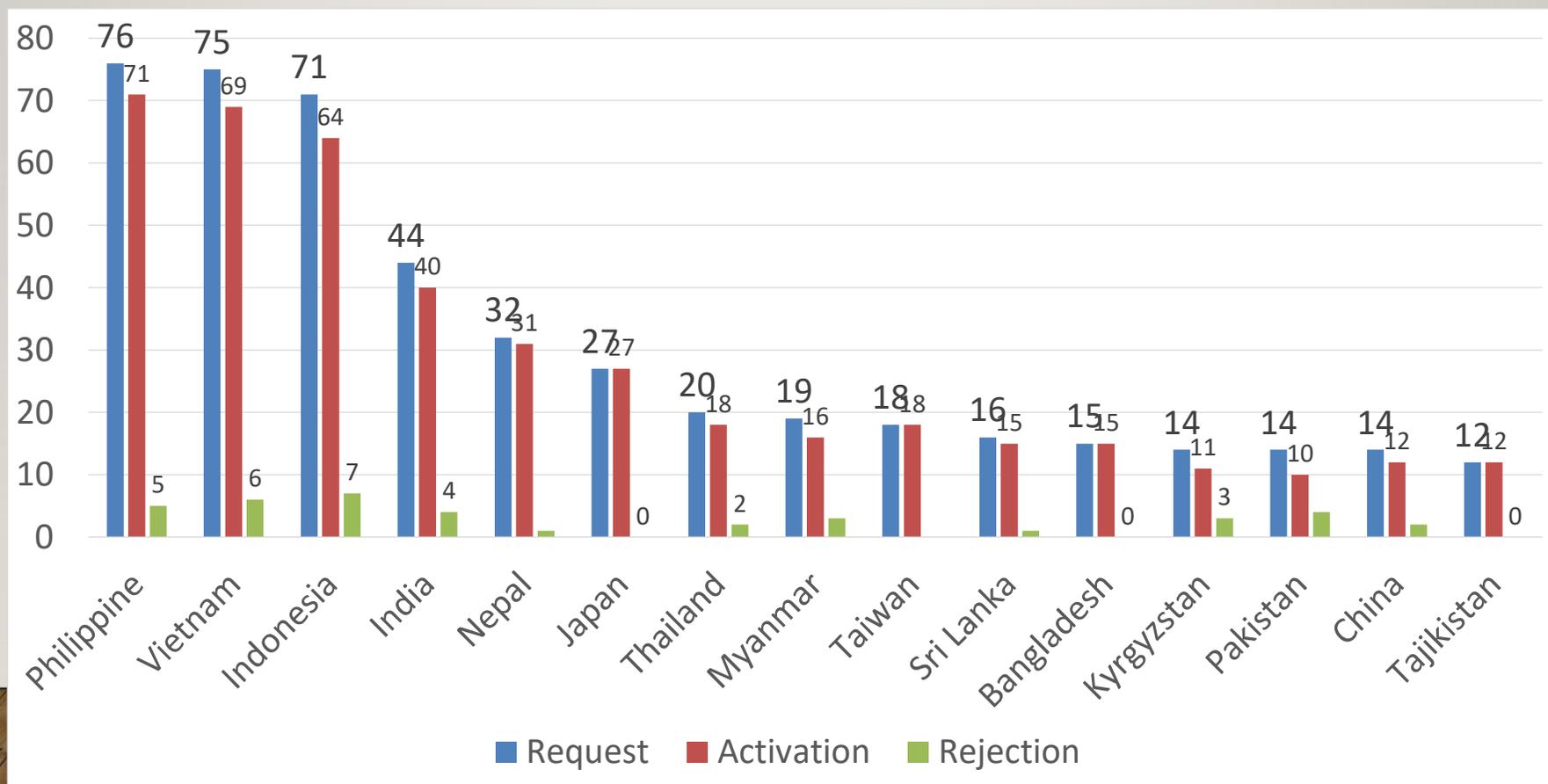
# NUMBER OF REQUESTS, ACTIVATIONS AND REJECTIONS FOR EOR (2007-2025)



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

	Number of Requests	Number of Activations	Number of Rejections	Activations/Requests (%)
Flood	274	259	15	94.5%
Earthquake	69	64	5	92.8%
Typhoon	46	44	2	95.7%
Landslide	35	30	5	85.7%
Volcano	29	26	3	89.7%
Cyclone	28	24	4	85.7%
Forest Fire	19	9	10	47.4%
Oil Spill	9	7	2	77.8%
Others	37	32	5	86.5%
<b>Total</b>	<b>546</b>	<b>495</b>	<b>51</b>	

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



## IDC ESCALATION VIA SENTINEL ASIA (2024)

Activation Number	Country	Disaster Type	Activation Date	Requester	Project Manager
479	Japan	Earthquake	2-Jan-24	ADRC on behalf of JAXA	Yamaguchi University
484	Indonesia	Volcanic Eruption	19-Apr-24	ADRC on behalf of BRIN	BRIN
489	Indonesia	Landslide	12-May-24	ADRC on behalf of BRIN	BRIN
490	Indonesia	other (flash flood)	14-May-24	ADRC on behalf of BRIN	BRIN
495	Kyrgyzstan	other (mudflow)	25-Jun-24	ADRC on behalf of CAIAG	AIT
501	Nepal	Flood	8-Jul-24	ADRC on behalf of DHM	ICIMOD
511	Kyrgyzstan	other (mudflow)	25-Jul-24	ADRC on behalf of CAIAG	UNITAR
512	Philippines	Oil spill	25-Jul-24	ADRC on behalf of PhilSA	PhilSA

Activation Number	Country	Disaster Type	Activation Date	Requester	Project Manager
517	Nepal	other (GLOF)	16-Aug-24	ADRC on behalf of DHM	ICIMOD
518	Kyrgyzstan	other (mudflow)	20-Aug-24	ADRC on behalf of CAIAG	AIT
526	Vietnam	Typhoon	4-Sep-24	ADRC on behalf of MONRE	MONRE
527	Myanmar	Flood	12-Sep-24	ADRC on behalf of MIMU	UNOSAT
531	Nepal	Flood	29-Sep-24	ADRC on behalf of DHM	ICIMOD
534	Philippines	Flood	23-Oct-24	ADRC on behalf of PAGASA	PhilSA
540	Indonesia	Volcanic Eruption	5-Nov-24	ADRC on behalf of BRIN	BRIN
544	Indonesia	other (complex disaster)	6-Dec-24	ADRC on behalf of BRIN	BRIN

16 out of 64 EORs (corresponding to 25.0%) were referred to IDC via Sentinel Asia in 2024.

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1. Trend of Past EORs
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# EOR: Good Practice I

## Noto Peninsula Earthquake in Japan (January 2024)

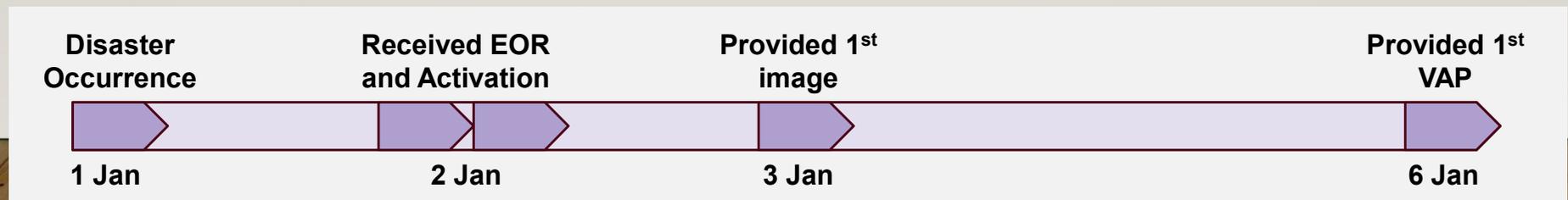
[EOR Requestor] Asian Disaster Reduction Center (ADRC) \*discussed with SA Secretariat

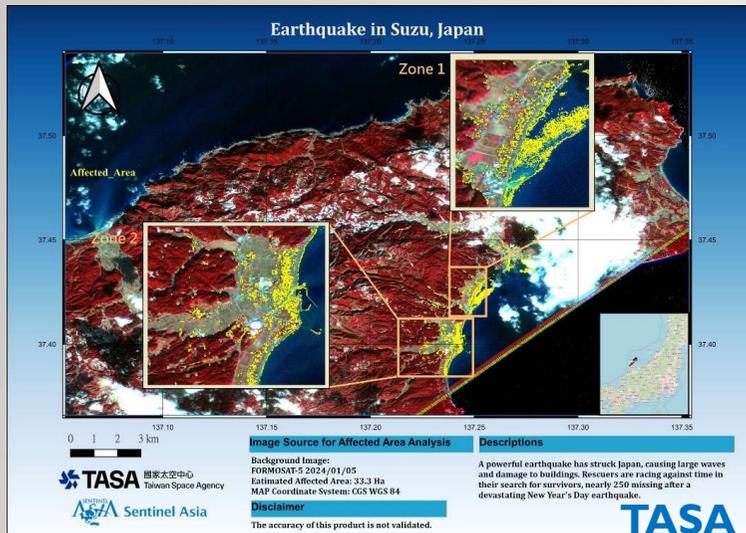


<https://www.yomiuri.co.jp/pluralphoto/20240114-OYT1I50127/>

**The 2024 Noto Peninsula Earthquake struck on January 1, 2024, at 16:10 JST, with its epicentre located about seven kilometres northwest of Suzu City in Ishikawa Prefecture. The earthquake registered a magnitude of Mw 7.5 (USGS).**

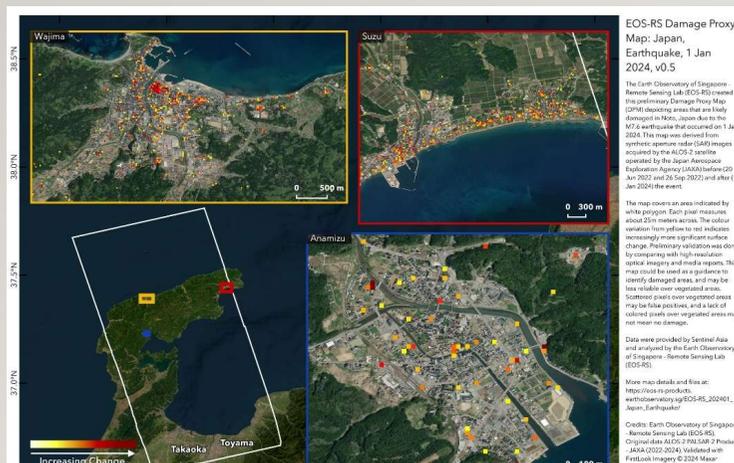
The disaster caused severe damage, resulting in more than 700 confirmed deaths, 1,400 injuries, and two people reported missing according to a report of the cabinet office of Japan.





## Noto Peninsula Earthquake in Japan (January 2024)

- 39 satellite images were provided by ISRO, JAXA, TASA, and MBRSC
- 18 VAPs were provided by AIT, EOS, MBRSC, and TASA
- JAXA provided a Web-GIS service
- Satellite images and VAPs were provided to the Government of Japan, to grasp the disaster situation.



# EOR: Good Practice 2

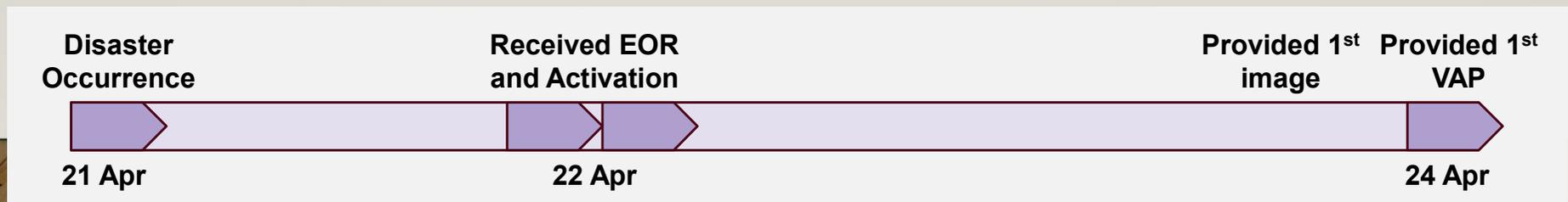
## GLOF at Birendra Lake in Nepal (April 2024)

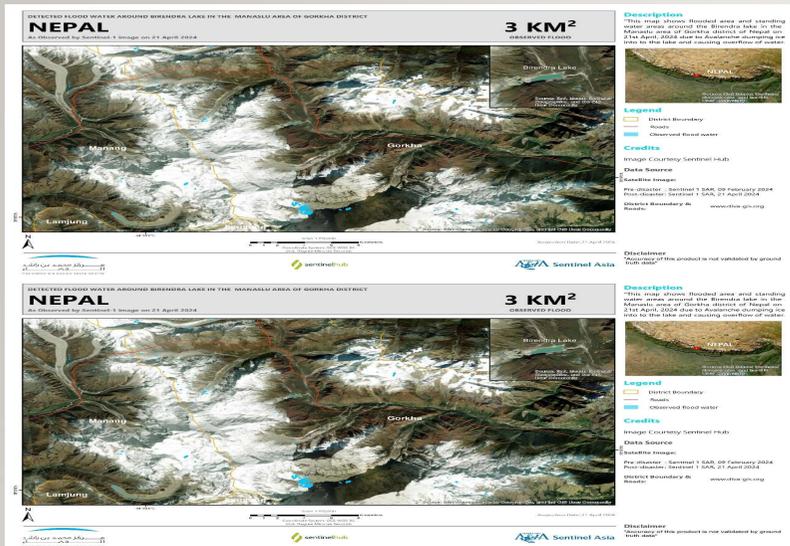
[EOR Requestor] Department of Hydrology and Meteorology (DHM), Ministry of Energy, Water Resources and Irrigation



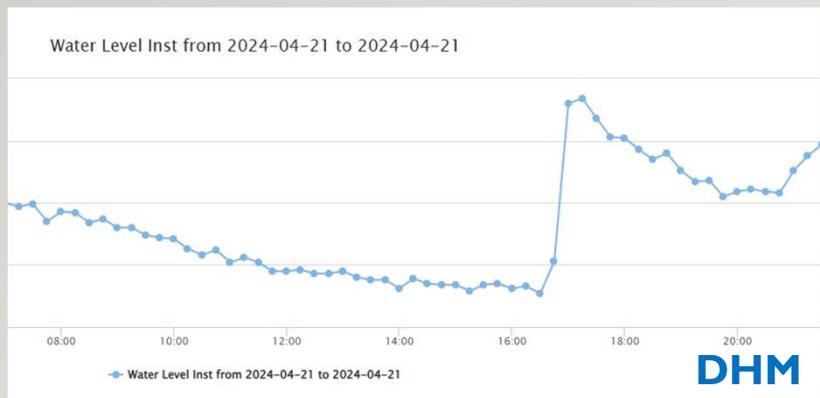
**On 21 April 2024, an unusual flood occurred at Birendra Tal in west-central Nepal's Gorkha District** when a massive ice avalanche, caused by the calving of ice from the snout of the Manaslu Glacier (8,163 m asl), plunged into the lake and generated a displacement wave that released water into the Budhi Gandaki River, without breaching or significantly damaging the moraine dam.

<https://www.icimod.org/success-stories/influencing-national-programmes-on-glofs/> \*just image





**MBRSC**



## GLOF at Birendra Lake in Nepal (April 2024)

- 3 satellite images were provided by ISRO, JAXA, and TASA
- 3 VAPs were provided by JAXA and MBRSC
- JAXA provided a Web-GIS service
- DHM utilized the provided satellite images and VAPs for internal discussions on the causes and effects of the outburst flood, for documentation, research assessment, and record keeping for future reference, while also using the information during meetings and discussions with other related DMO such as NDRRMA, ICIMOD.

# EOR: Good Practice 3

## Lewotobi Laki-laki Volcano Eruption in Indonesia (November 2024)

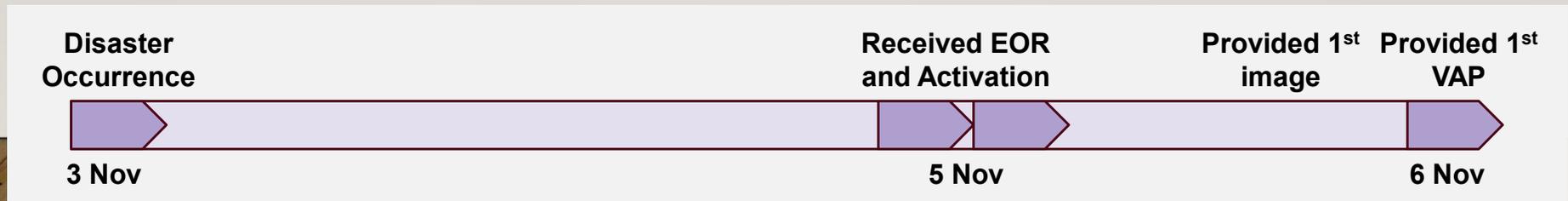
[EOR Requestor] ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

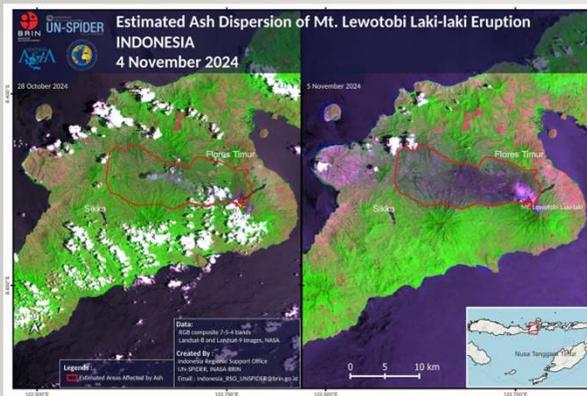


<https://mainichi.jp/english/articles/20241109/p2g/00m/0in/002000c>

**Mount Lewotobi Laki-Laki in Indonesia experienced explosive eruptions in November 2024. A significant event on November 3** involved the expulsion of volcanic materials, including hot lava, rocks, and ash, impacting nearby villages and causing at least 10 fatalities.

Authorities declared a state of emergency, elevated the alert level, and facilitated the evacuation of thousands. Ash plumes from the eruptions led to disruptions in air travel. Aid was provided by government and humanitarian organizations, and recovery efforts are underway.





## Lewotobi Laki-laki Volcano Eruption in Indonesia (November 2024)

- 17 satellite images were provided by CRISP, GISTDA, ISRO, and JAXA
- 9 VAPs were provided by AIT, BRIN, EOS, and MBRSC
- JAXA provided a Web-GIS service
- AHA Centre shared this information to BNPB as national disaster management organization in Indonesia.
- BNPB included Sentinel Asia's activities in its report “DATA BENCANA INDONESIA 2024”.



BRIN

BNPB

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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.

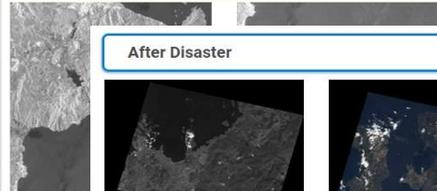
2020-10-30  
**Turkey Earthquake on 30 October, 2020**

Emergency Obs. Request Information

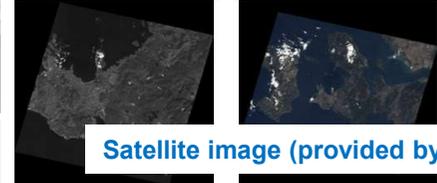


Disaster Type: Earthquake, Tsunami  
Country: Turkey  
Occurrence Date (UTC): 30 October, 2020  
SA activation Date(UTC): 30 October, 2020  
Requester: Disaster and Emergency Management Presidency (AFAD)  
Escalation to the International Charter: No  
GLIDE Number:

Before Disaster

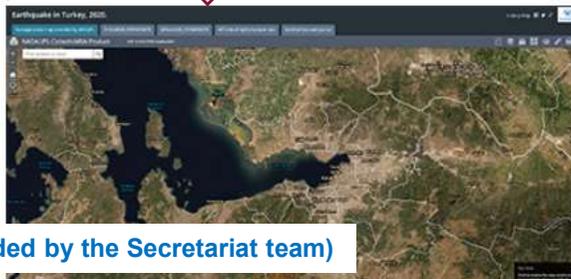


After Disaster



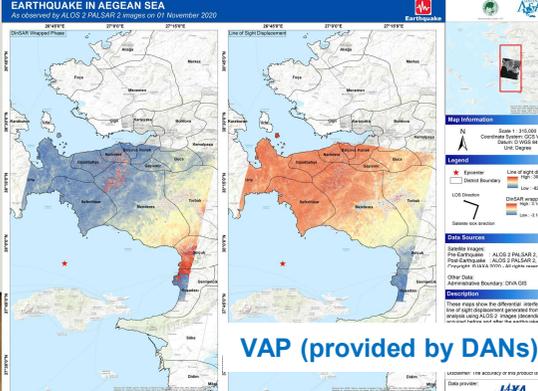
Satellite image (provided by DPNs)

Earthquake in Turkey, 2020



WEB-GIS (provided by the Secretariat team)

EARTHQUAKE IN AEGEAN SEA

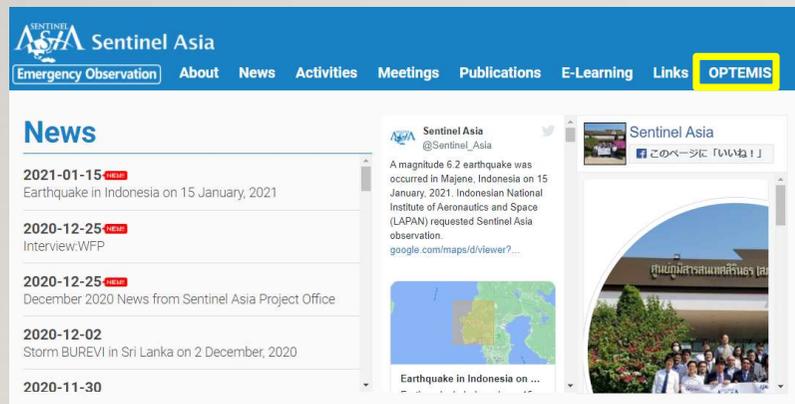


VAP (provided by DANs)

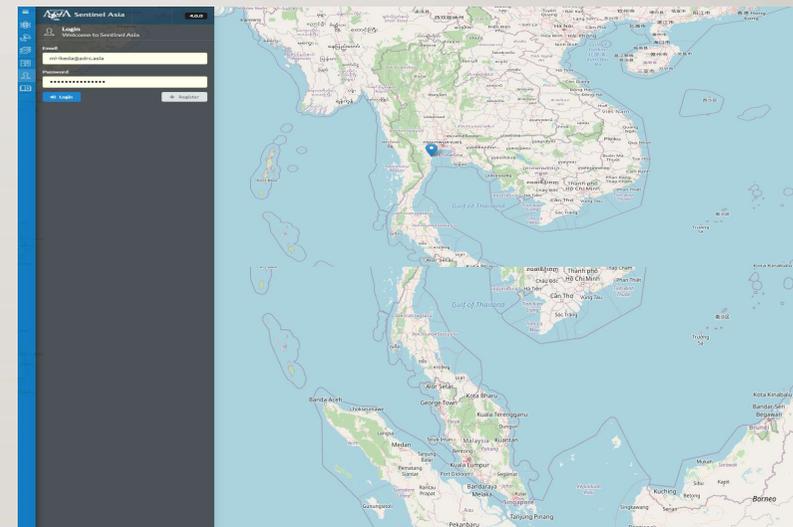
# WHAT IS “OPTEMIS”

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/>)

# STANDARD OPERATION PROCEDURE (SOP) FOR “OPTEMIS”

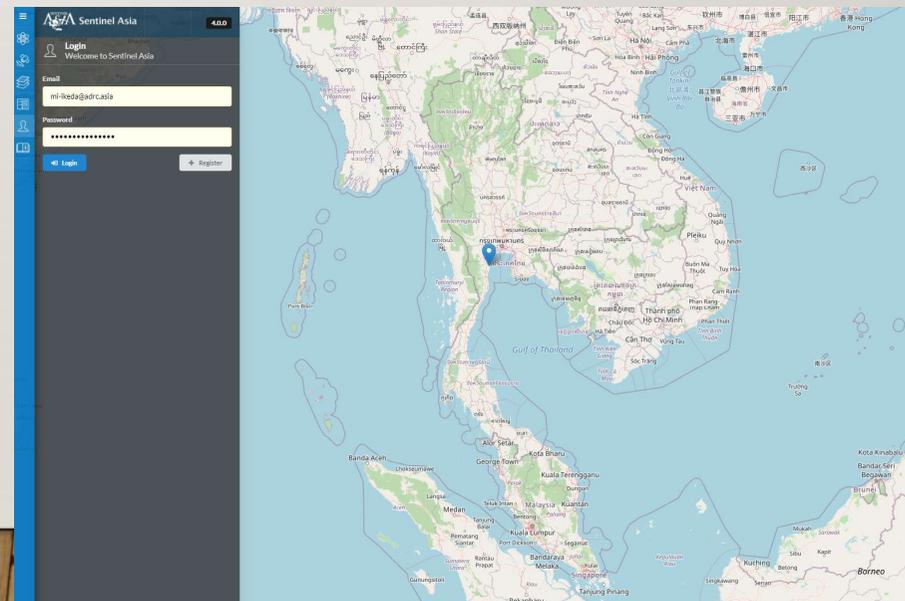
**SOP is aimed at contributing to practical and effective disaster management activities through collaboration by making EORs to Sentinel Asia as promptly and timely as possible.**

Standard Operating Procedure  
for making Emergency Observation Requests to Sentinel Asia  
regarding disasters in the Central Asia and Caucasus

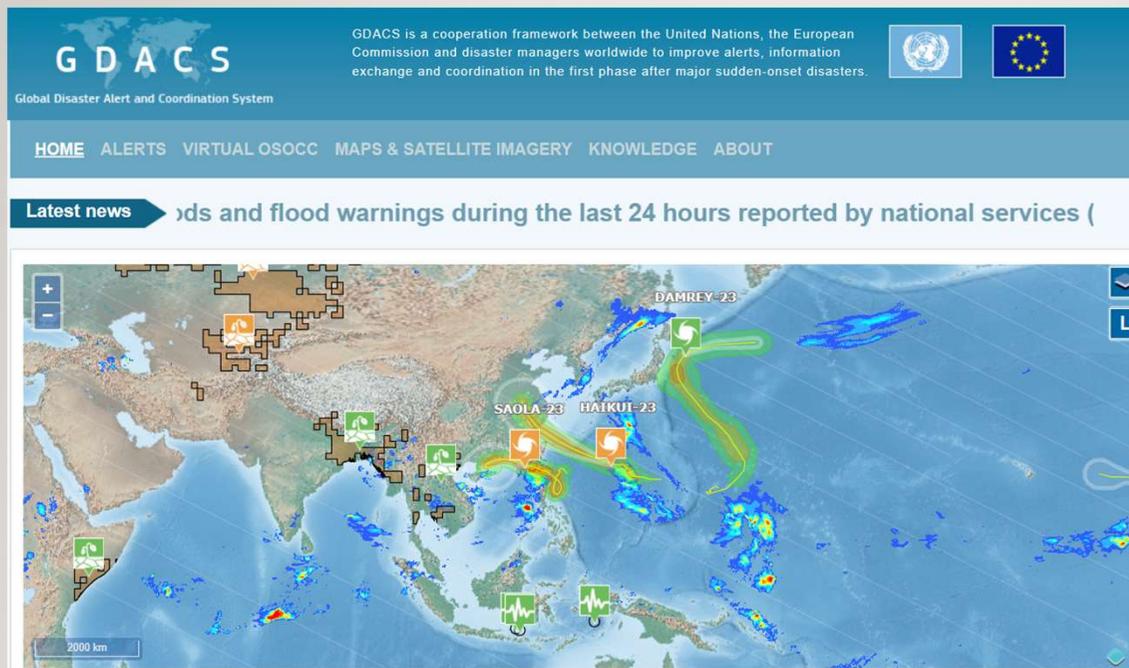
Version. 1.01

October 2024

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



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



The screenshot shows the GDACS website interface. At the top, the logo "GDACS" is displayed with the text "Global Disaster Alert and Coordination System" below it. To the right, there is a description: "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." Below this are the logos for the United Nations and the European Union. A navigation menu includes "HOME", "ALERTS", "VIRTUAL OSOCC", "MAPS & SATELLITE IMAGERY", "KNOWLEDGE", and "ABOUT". A "Latest news" section features a headline: "Tropical cyclones and flood warnings during the last 24 hours reported by national services (". Below the news is a map of the Pacific region showing typhoon tracks and alerts. Specific typhoons labeled include SAOLA-23, HAIKUI-23, and DAMREY-23. The map includes a scale bar for 2000 km and various interactive icons.

**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)

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1. Earthquake: **GDACS** uses original formula by using many factors including **MMI** ([https://www.gdacs.org/Knowledge/models\\_eq.aspx](https://www.gdacs.org/Knowledge/models_eq.aspx))

2. Flood: **GDACS** uses number of affected peoples ([https://www.gdacs.org/Knowledge/models\\_fl.aspx](https://www.gdacs.org/Knowledge/models_fl.aspx))

3. Tropical cyclones: **Saffir-Simpson Hurricane Wind Scale (SSHS)** ([https://gdacs.org/Knowledge/models\\_tc.aspx](https://gdacs.org/Knowledge/models_tc.aspx))

4. Volcano: **Volcanic Ash Advisory Centres (VAACs)** ([https://gdacs.org/Knowledge/models\\_vo.aspx](https://gdacs.org/Knowledge/models_vo.aspx))



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

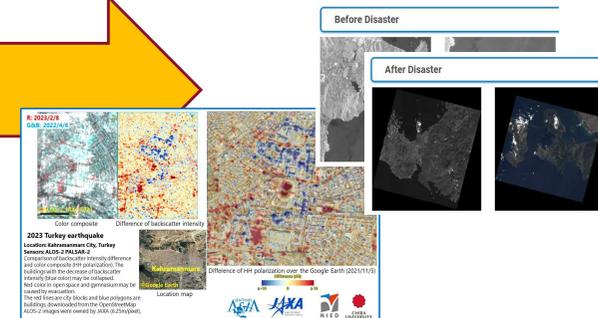
ADRC registers EOR on behalf of you. Please accept that **ADRC will make an EOR unless explicit rejection is expressed within 2 hours of the contact by ADRC.**

ADRC contact to ask you about activation.

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



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



Provided data will be shared to you

# PROMOTING SOP FOR SA MEMBERS

Country / Region	Collaboration organization	Established and revised
Myanmar	DMH, DDM, MIMU, AHA Centre	2021
Thailand	GISTDA, DDPM, ADPC, AHA Centre	2021
Vietnam	MARD, MONRE, VAST, AHA Centre	2021
Cambodia	NCDM	2022
Lao PDR	Ministry of Labour and Social Welfare	2022
Nepal	DHM, NDRRMC, MoHA, ICIMOD	2023
Central Asia and Caucasus	CAIAG, MES	2022, 2024
Pacific Island Countries	SPC, NDRMOs (Fiji, Tonga, Samoa, Solomon)	2022, 2025, 2025
Türkiye	AFAD, METU	2023, 2025

Türkiye



Nepal



Kyrgyz



Pacific island countries



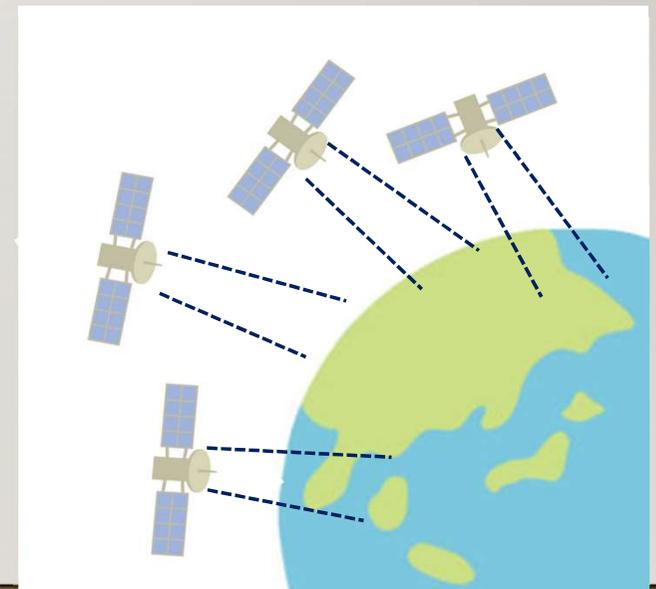
# DEMONSTRATION: OPTEMIS

The screenshot displays the OPTEMIS web portal interface, which is divided into several sections for data entry. On the left, there are two identical forms for 'Requester' and 'Disaster Management Organization' information, including fields for Name, Address, Phone, Email, and Organization. Below these are sections for 'Planned end user of the observed information', 'Purpose of the Request' (with radio buttons for Emergency Response, Situation Confirmation, Disaster Activity, Evacuation Activity, and Other), and 'Type of Disaster' (with radio buttons for Flood, Landslide, Storm, Forest Fire, Volcano, Earthquake, Ice Hazard, Tsunami, and Other). On the right, there is an 'Occurrence' section with 'Date & Time (UTC)' and 'Country' fields, a 'Details New Score' section, a 'Necessity for Additional Observation' section with radio buttons for Necessary, Not necessary, and Don't know, and a 'Request Area' section. The 'Request Area' section includes a 'Name of place' field and a map interface with 'Area Type', 'Input Circle', and 'Input Rectangle' options. The map shows a geographical area with various locations and a scale bar.

- Requestor
- Disaster Management Organization
- Planned end-user of the observed information
- Purpose of the Request
- Type of Disaster
- Analysis requirement for damages
- Request for Data Analysis Node
- Time limit for information to be uploaded on the SA WEB-portal
- Occurrence
- Necessity for Additional Observation
- Request Area (Place of Name)
- Request Area (AOI: Area of Interest)
- Escalation for IDC

# CONSIDERATION:

Need a deep consideration for making request to SA EOR & IDC

A screenshot of an "Emergency Request Form" for satellite data. The form includes fields for "Organization" (Aslan Disaster Reduction Center (ADRC)), "Memberships" (JPT member), "Cellular Phone" (807826255), "Fax" (818036580), and "Email" (mi-ikeda@adrc.asia). There is also an "Email Notification" field with the address sarequest@adrc.asia and an "Add Contact Person" checkbox. The OPTEMIS logo is visible in the bottom right corner.A screenshot of a "Call Details Dashboard" for a "Tmp Call (new)". The dashboard shows the date and time of the call: "06-Feb-2026" and "13:03". The COS-2 logo is visible in the bottom right corner.

# CONSIDERATION: **OPTEMIS**

Need your contact information for smooth communication

**Emergency Request Form**  
Request Satellite Data

**Requester**

Name \* Makoto Ikeda Organization \* Asian Disaster Reduction Center (ADRC) Memberships \* JPT member ▼

Phone 807826255 Cellular Phone 818036580 Fax Email \* mi-ikeda@adrc.asia

Email Notification ( use commas to separate multiple email ) sarequest@adrc.asia

Add Contact Person

Please show your mobile number for smooth communication. It will be helpful if we can use **WhatsApp**.

Please show your active e-mail information for smooth communication.

# CONSIDERATION: OPTEMIS

## Need a detail news source for confirming your request

**Occurrence**

Date & Time (UTC) \* Country \*

2024-01-01 16:00 Japan

**Details, News Source**

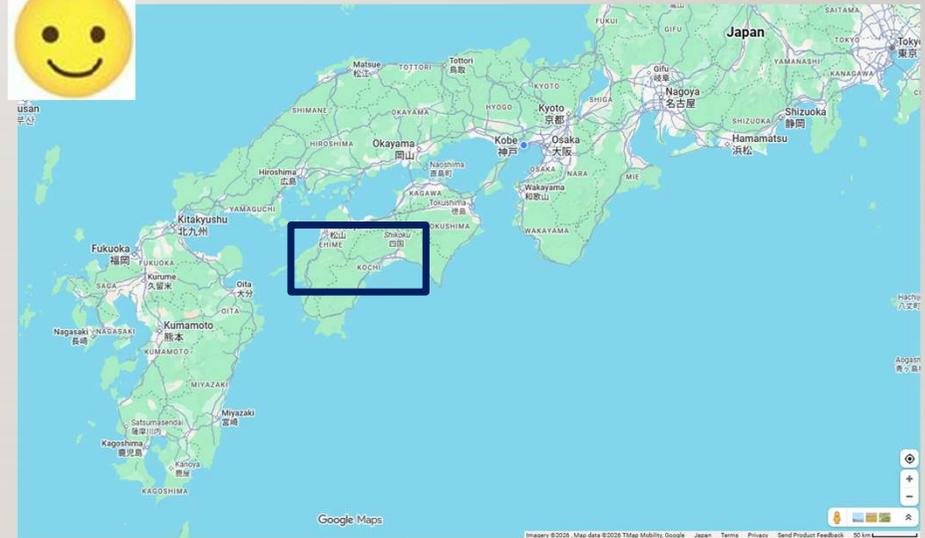
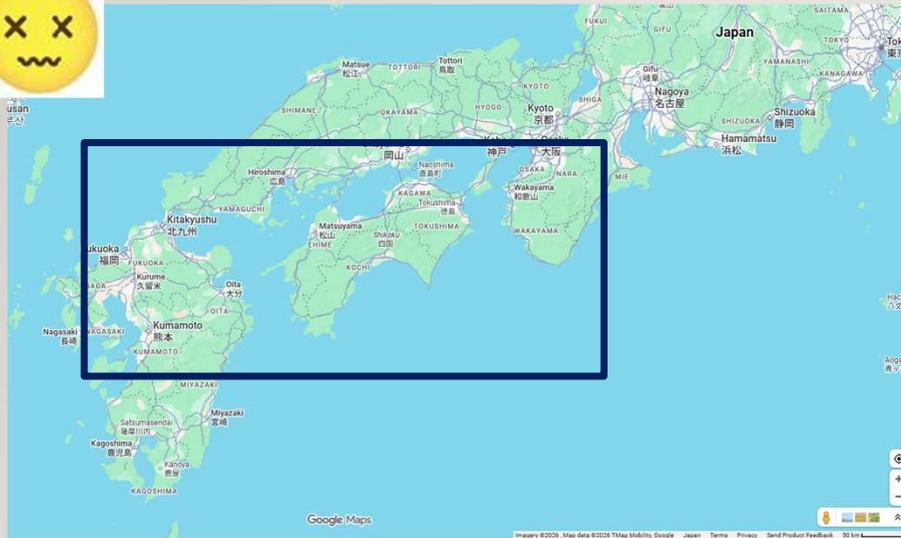
The Noto Peninsula Earthquake occurred on January 1, 2024, in Ishikawa Prefecture, central Japan. The main shock had a magnitude of 7.6 (Japan Meteorological Agency scale) and struck at a shallow depth, causing intense ground shaking across the Noto Peninsula. The earthquake triggered large-scale building collapses, fires, landslides, and widespread infrastructure damage, particularly in coastal and mountainous communities. A tsunami warning was issued shortly after the quake, and small tsunami waves were observed along parts of the Sea of Japan coast.

<https://www.tokyo-np.co.jp/article/431103>  
[https://www.gsi.go.jp/BOUSAI/20240101\\_noto\\_earthquake.html](https://www.gsi.go.jp/BOUSAI/20240101_noto_earthquake.html)

Please show a brief explanation about your requested disaster. And it will be very helpful, if you can show several internet news with URL links.

# CONSIDERATION: OPTEMIS

Need a clear AOI (Area of Interests)



Please narrow down AOI as possible as you can

# CONSIDERATION: OPTEMIS

Need a clear AOI (Area of Interests)



SENTINEL ASIA  
EMERGENCY OBSERVATION REQUEST (FOR FORM 1/1)

Your name: **Message Box**

Your organiza

Your phone

Your cellular

Your fax

Your E-mail

Other E-mail:

Priorities of 3 AOIs are as follow:

First, Left AOI (around Miyazaki Pref.)

Second, Middle AOI (around Kochi Pref.)

Third, Right AOI (around Wakayama Pref.)

Please mention about priorities if you request several AOIs

# CONSIDERATION: OPTEMIS

## Need a clear AOI (Area of Interests)



SENTINEL ASIA  
EMERGENCY OBSERVATION REQUEST (FOR) FORM (1/1)

**Message Box**

Your name  
Your organiza  
Your phone  
Your cellular  
Your fax  
Your E-mail  
Other E-mail:

Priorities of 3 AOIs are as follow:

- First, Left AOI (around Miyazaki Pref.)
- Second, Middle AOI (around Kochi Pref.)
- Third, Right AOI (around Wakayama Pref.)

*(A few days have passed...)*

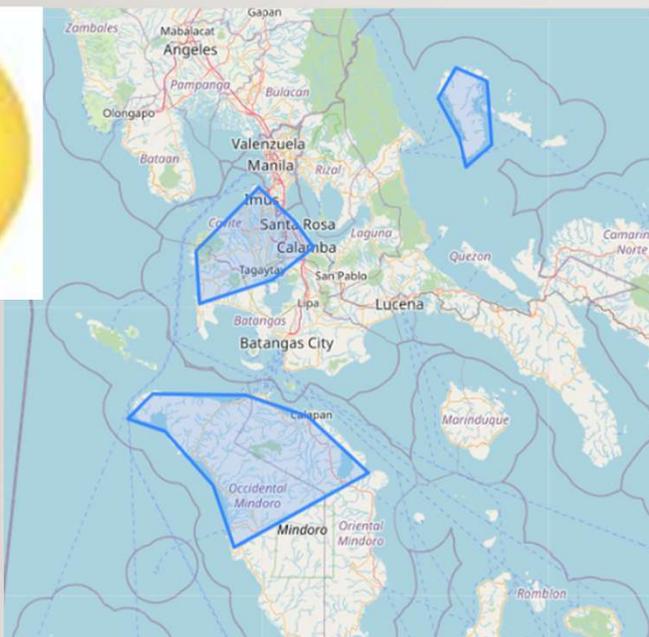
**Message Box**

**Added one AOI (around Tokushima Pref.)**

**Please update it if you have an additional AOI after disaster.**

# CONSIDERATION: OPTEMIS

Need a clear AOI (Area of Interests) \*for IDC



SENTINEL ASIA  
EMERGENCY OBSERVATION REQUEST (EOR) FORM (1/1)  
Requester (your name and organization)

Your name

Your organization

Your phone

Your cellular

Your fax

Your E-mail

Other E-mail(s) for

## Message Box

Priorities of 3 AOIs are as follow:

- First, Top AOI (around Pulong)
- Second, Middle AOI (around Trece Martires)
- Third, Bottom AOI (around North Mindoro)

Please mention about priorities if you make several AOIs

# CONCLUSIONS

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- **Num. of EOR is getting increase, and escalation to the IDC is also.**
  - ✓ All JPT member will start to support you after submitting your EOR.
- **Suggestions for making EOR;**
  - ✓ Please narrow down your requested AOI as possible as you can.
  - ✓ When you show several AOI, please mention priorities
  - ✓ Detail disaster information is important.

**Good quality EOR is helpful for all JPT member and expect contribution for end-users.**