Tsunami Mitigation and Standard Operating Procedures in the Philippines

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PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY
PHILIPPINES

Department of Science and Technology
Philippine Institute of Volcanology and Seismology

PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY

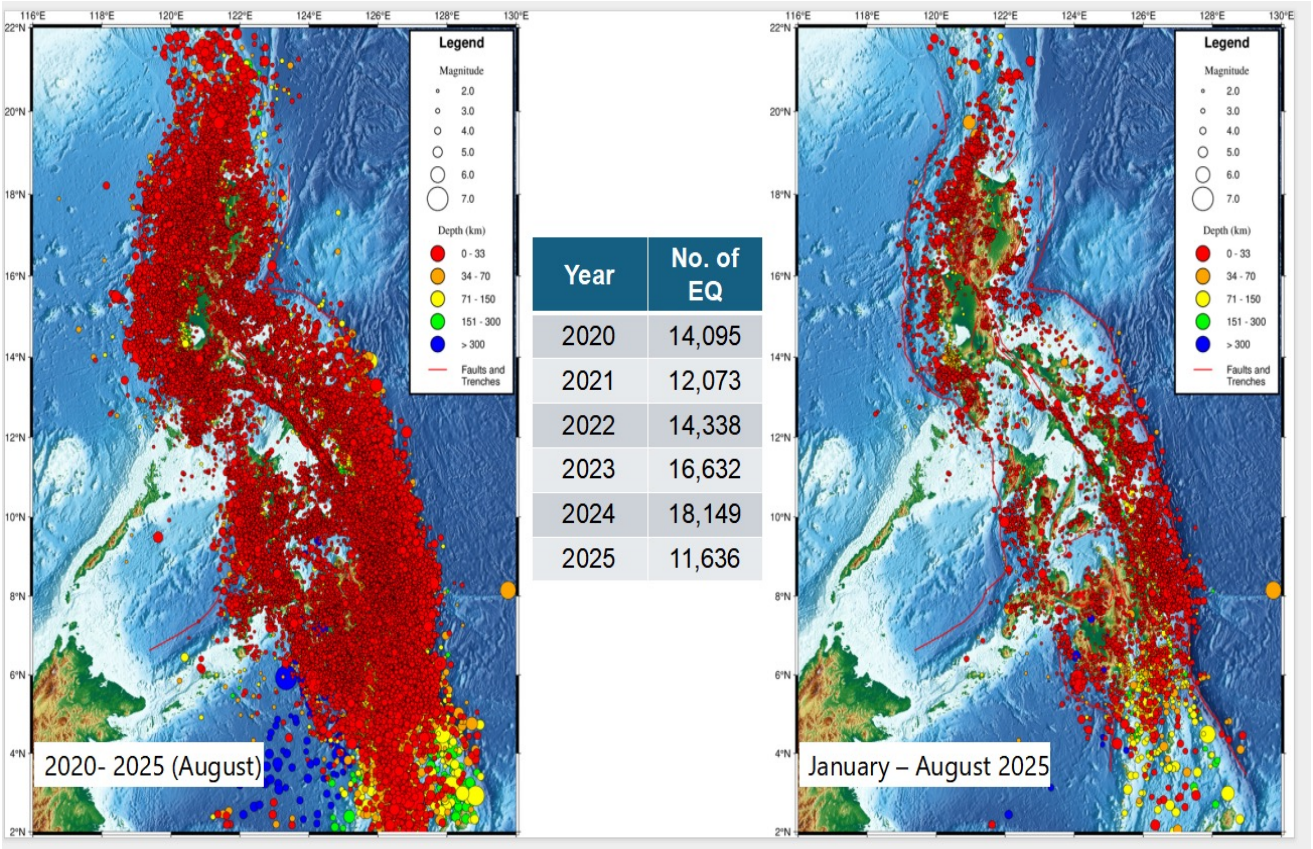
- Seismological Observation and Earthquake Prediction Division
- Volcano Monitoring and Eruption Prediction Division
- Geology and Geophysics Research and Development Division
- Geologic Disaster Awareness and Preparedness Division
- Finance and Administrative Division

- National Earthquake Monitoring and Information System
- National Tsunami Monitoring and Early Warning System
- Earthquake Hazard and Risk Assessment
- Earthquake Generation Potential of Active Faults and Trenches
- Volcano, Earthquake and Tsunami Disaster Preparedness and Risk Reduction

DATA RECEIVING CENTER

- Real-time earthquake record
- Local Sea Level Station
- HYDRA and ATHENA
- SEISCOMP
- Seismic Waveform Inversion by Fourier Transform (SWIFT)
- Earthquake and Tsunami Alerting Module (ETAM)
- Tsunami Early Warning System

PHILIPPINE SEISMICITY



Year	No. of EQ
2020	14,095
2021	12,073
2022	14,338
2023	16,632
2024	18,149
2025	11,636

~an average of 30 earthquakes recorded per day

~100-150 felt earthquakes per year

~100 destructive earthquakes for past 400 years

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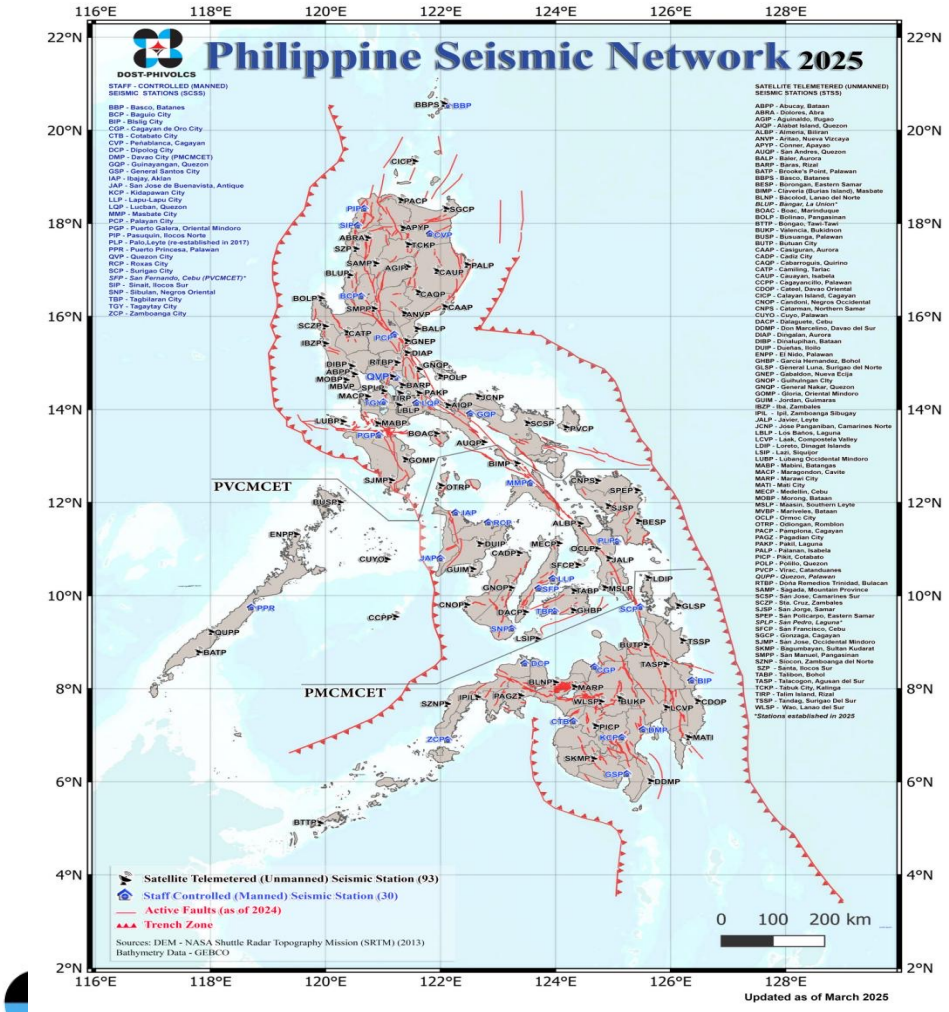
Philippine Seismic Network



125 Seismic Station
- 88 Satellite-Telemetered
- 30 Seismic Staff Station
- 07 Volcano Observatories

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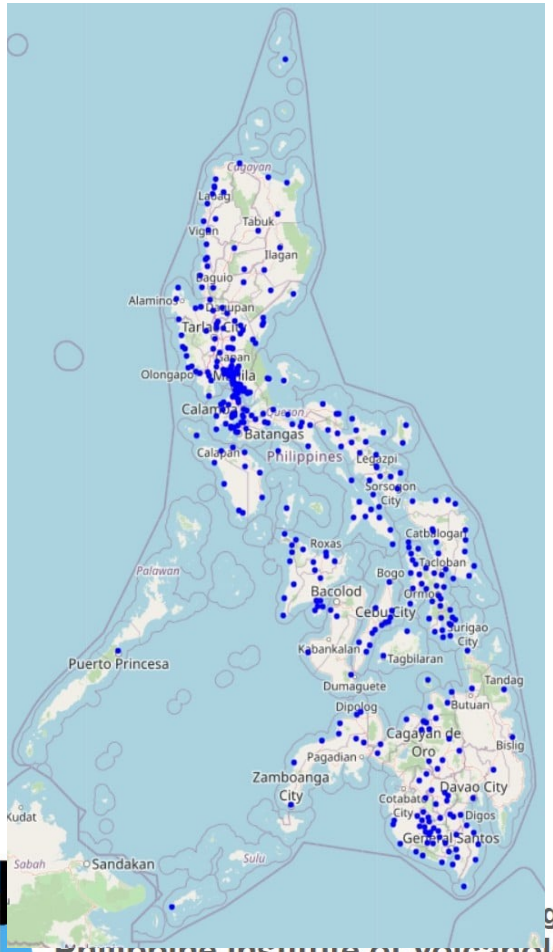
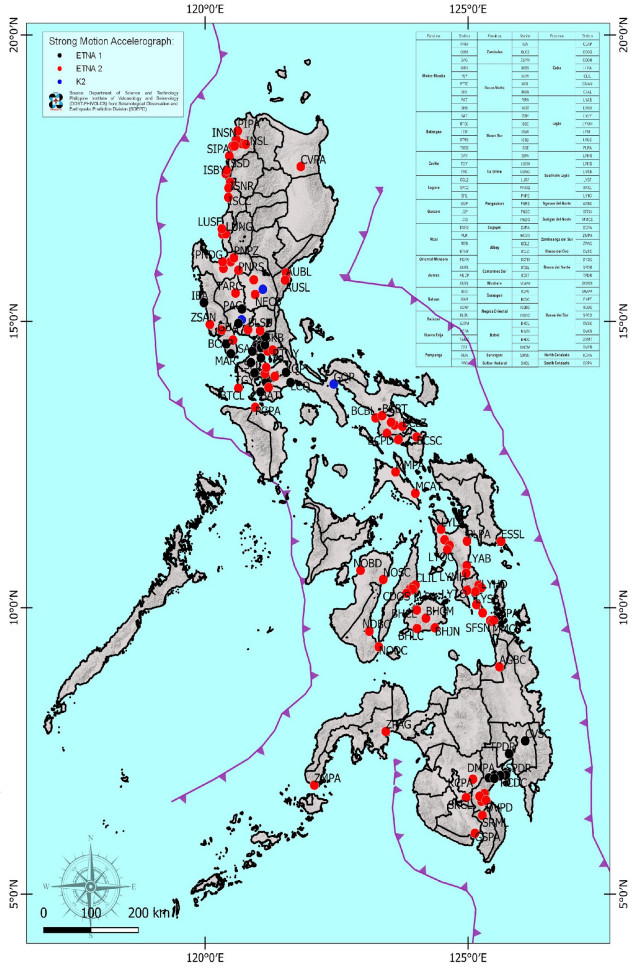
PHILIPPINE EARTHQUAKE INTENSITY METER NETWORK (365)

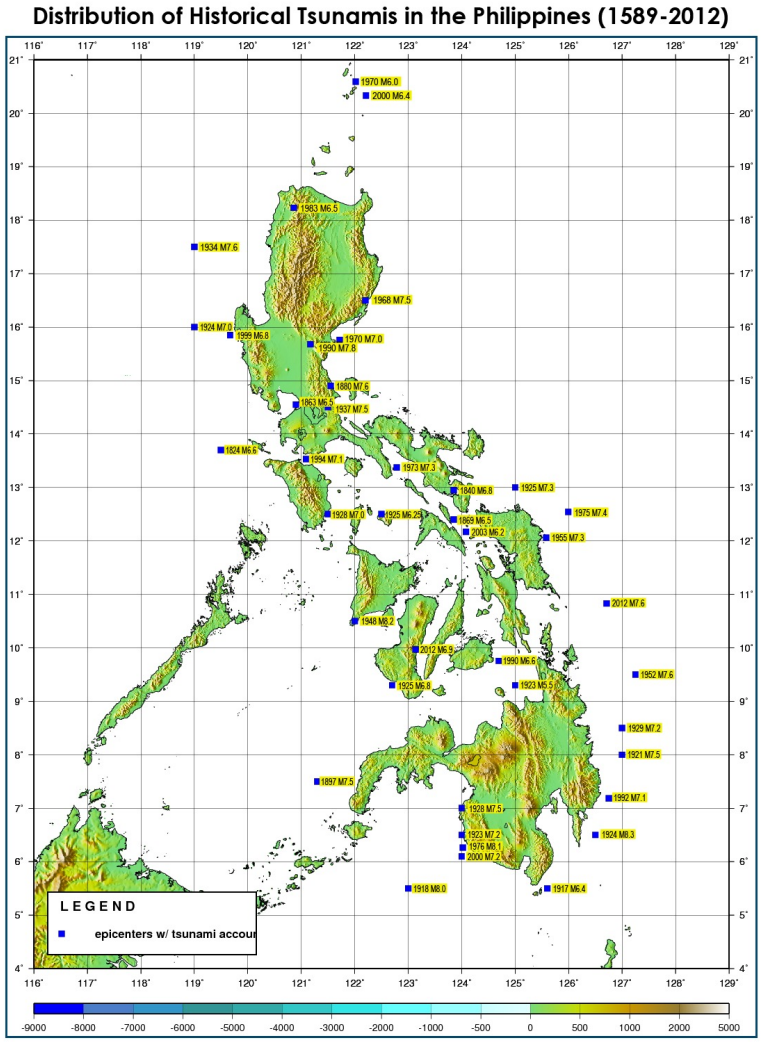


PHIVOLCS Earthquake Intensity Scale (PEIS)

I. Scarcely Perceptible
II. Slightly Felt
III. Weak
IV. Moderately Strong
V. Strong
VI. Very Strong
VII. Destructive
VIII. Very Destructive
IX. Devastating
X. Completely Devastating

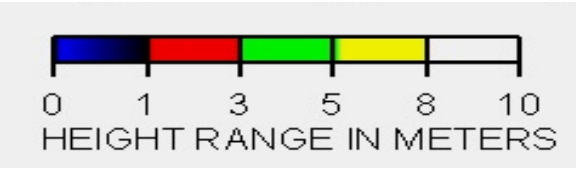
STRONG MOTION NETWORK DEVELOPMENT AND MANAGEMENT (126)





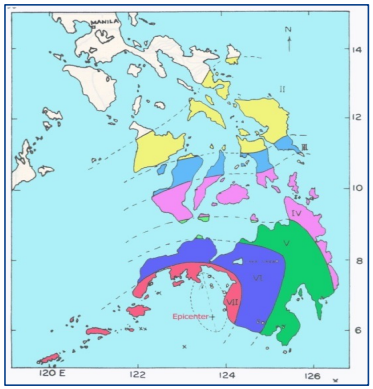
Tsunami in the Philippines

- ~ 40 tsunamis for past 400 yrs
- ~ arrival typically 2-30 min
- ~ 10 million people exposed to tsunami hazard



- Epicenter of tsunamigenic earthquake

17 AUG 1976 M8.1 MORO GULF EARTHQUAKE AND TSUNAMI



Village inundated by tsunami

- 12:11AM, Shallow depth (<33 km)
- First tsunami wave reported within 2 to 5 minutes of the main shock
- Series of waves (~3- 7 waves reported), 1-5 minutes apart
- Tsunami height up to 9 meters
- Maximum inundation inland – 2 km
- Death ~6000
- Injury ~8000
- Rendered homeless ~90,000
- Damage PhP400 million (1976 value)

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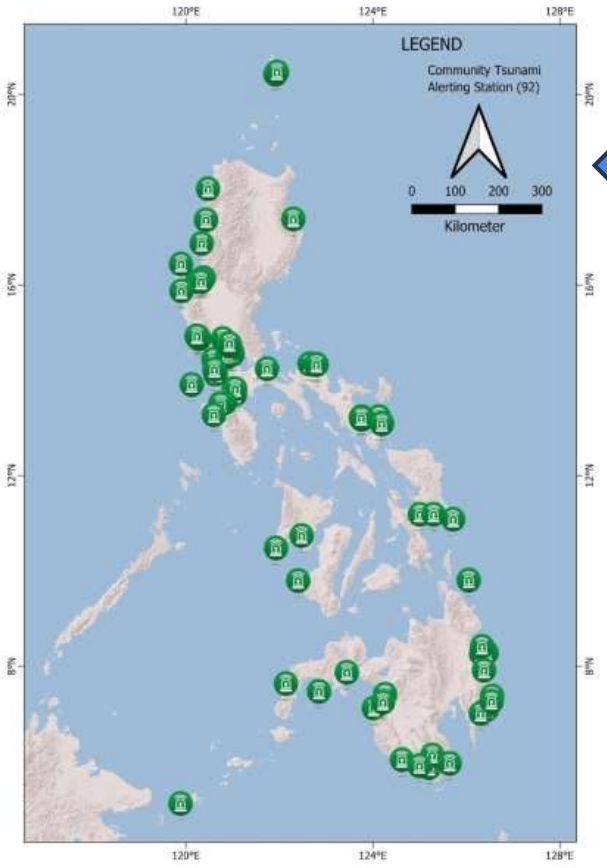
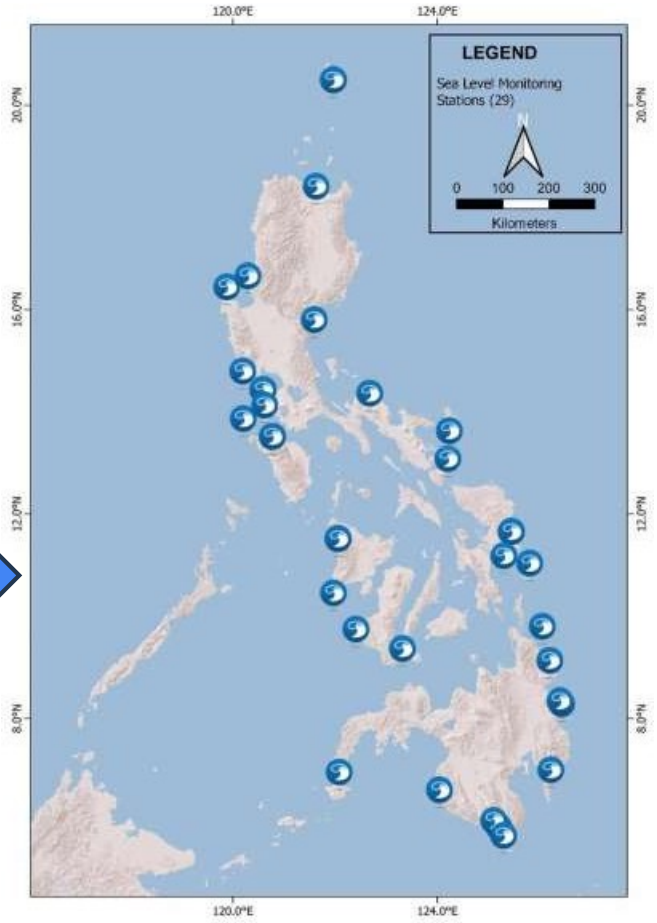
LOCAL TSUNAMI MONITORING NETWORK



TeWS Alerting Stations (94)

Sea Level Monitoring Stations (29)
(PHIVOLCS-GIA 10)
(PHIVOLCS-JICA 19)



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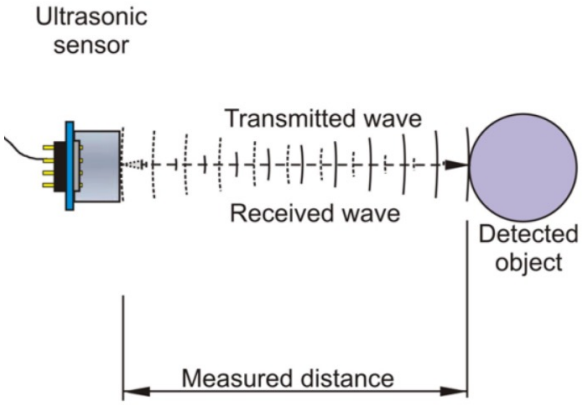
SEA-LEVEL MONITORING STATION FOR TSUNAMI DETECTION

ULTRASONIC SENSOR
- measures the distance to the sea surface using ultrasonic sound waves



316 Stainless Cylindrical

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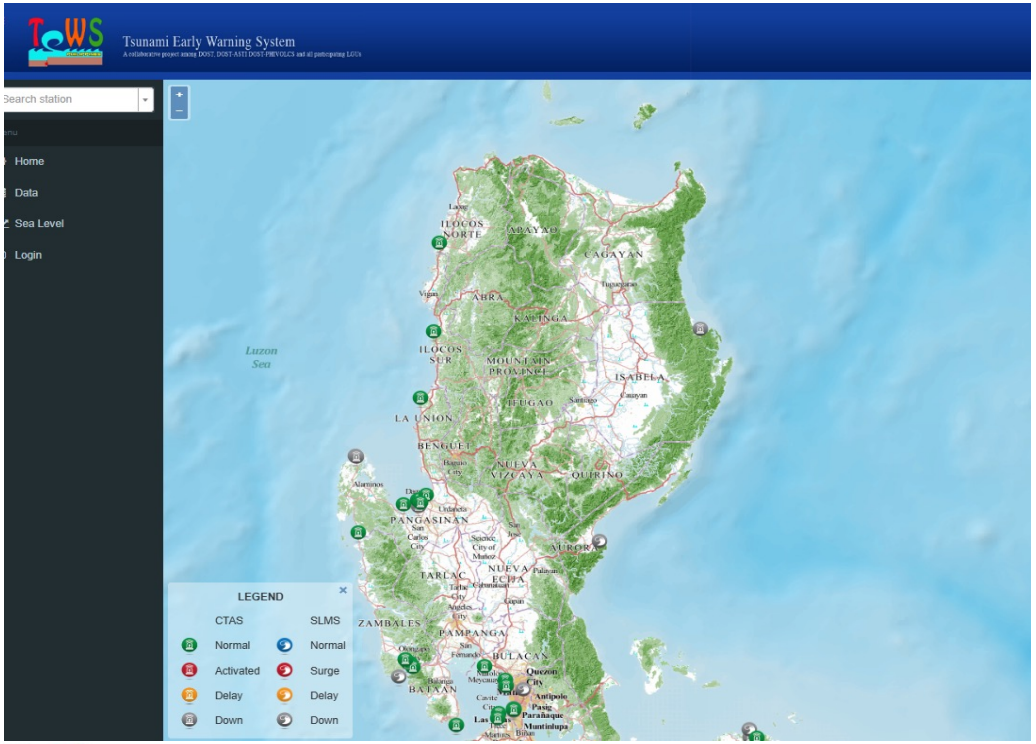
LOCAL TSUNAMI MONITORING AND EARLY WARNING NETWORK

COMMUNITY TSUNAMI ALERTING STATION (CTAS)



JOVELLAR, TARRAGONA
DAVAO ORIENTAL

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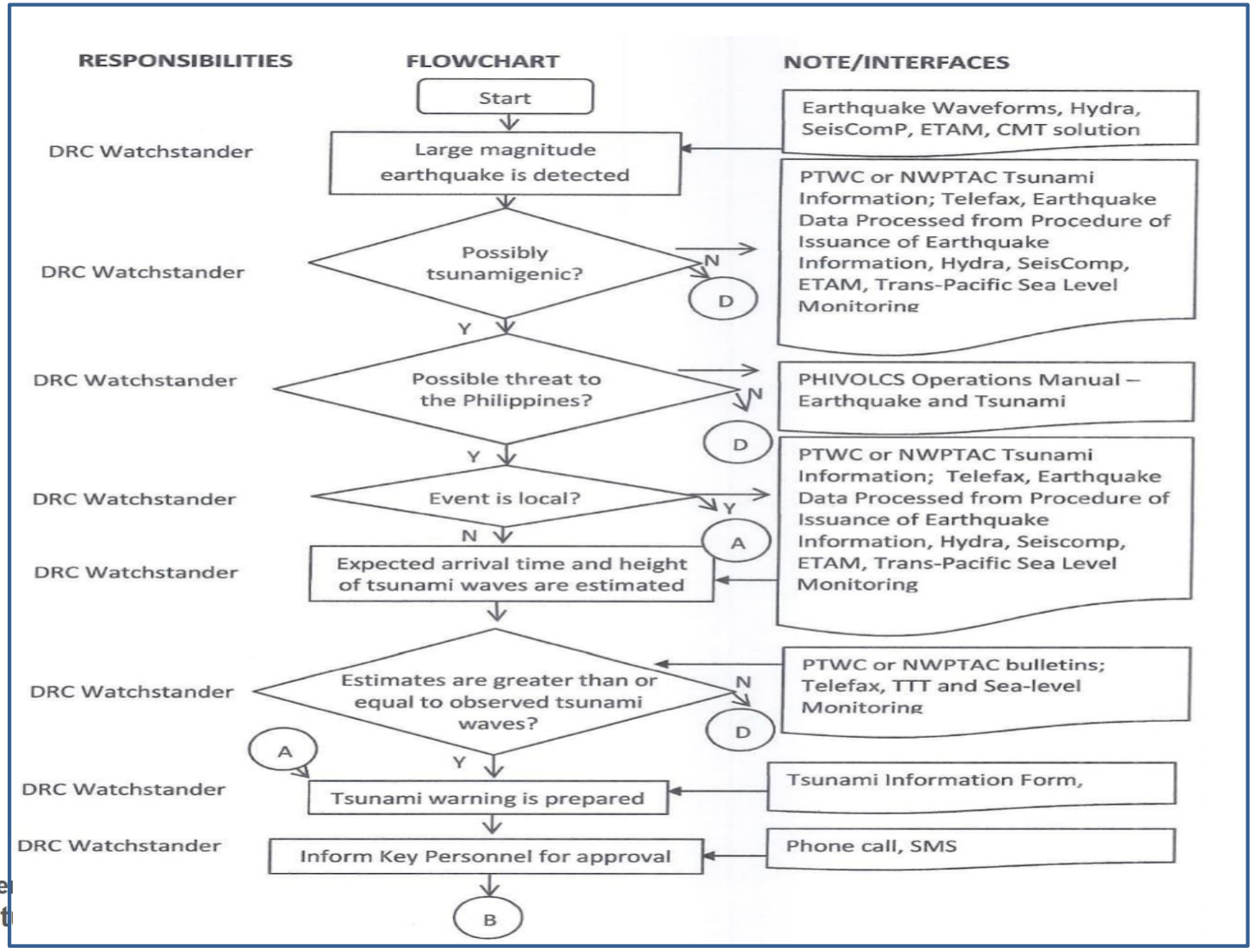
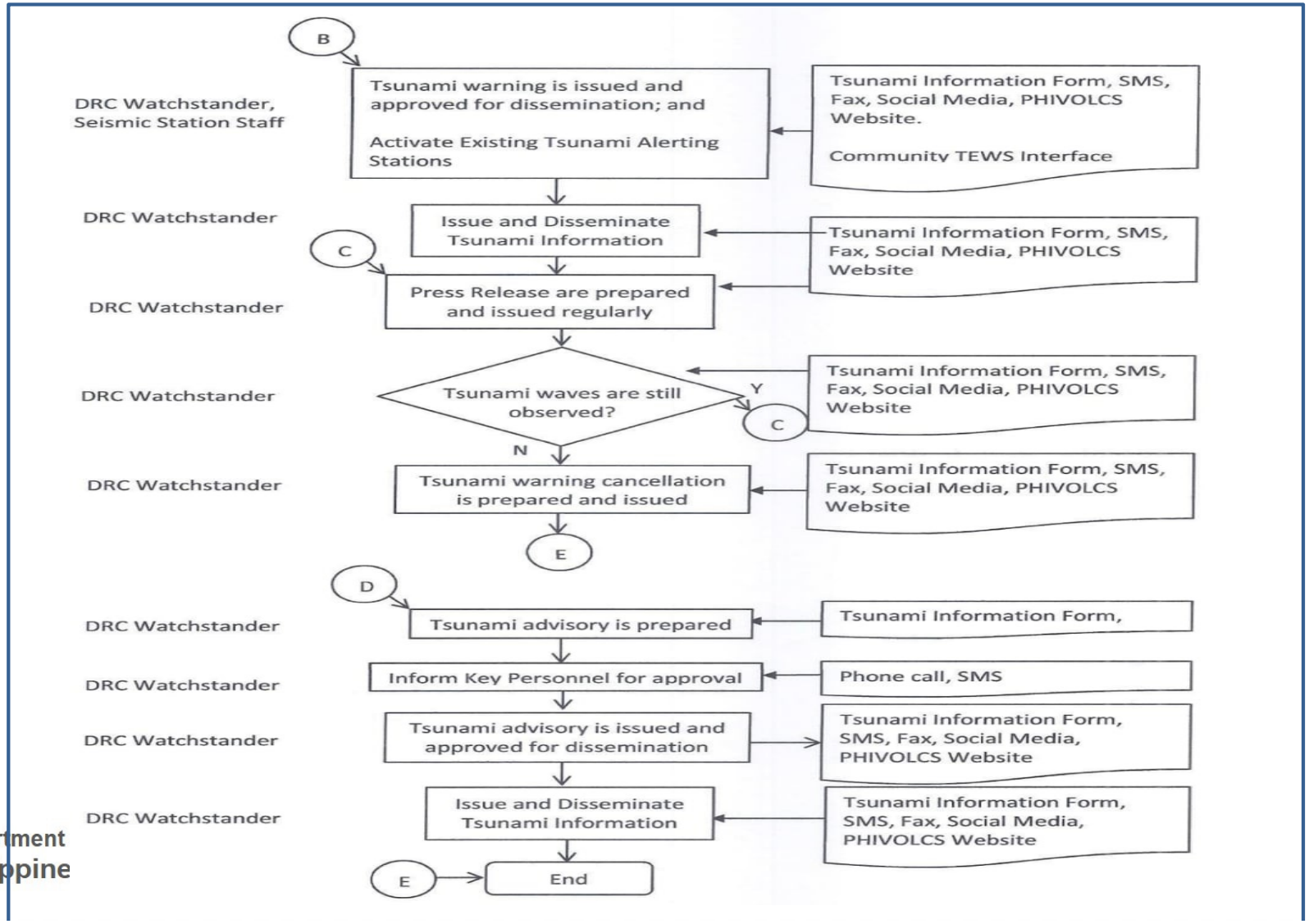
STANDARD OPERATING PROCEDURES

TSUNAMI FLOW CHART





Department
Philippine

SOP FOR LOCAL TSUNAMI

PHILIPPINE TSUNAMI INFORMATION

Philippine Tsunami Information	Threat to the Philippines
Advisory: No Tsunami Threat	1. There is no tsunami generated 2. There is a tsunami generated but will not reach the PH
Advisory: Sea-Level Change Monitoring	PHIVOLCS will monitor sea-level changes and provide updates
Advisory: Minor Sea-Level Disturbance	Wave heights with < 1 meter
Advisory: Tsunami Warning	Wave heights with 1 meter and above

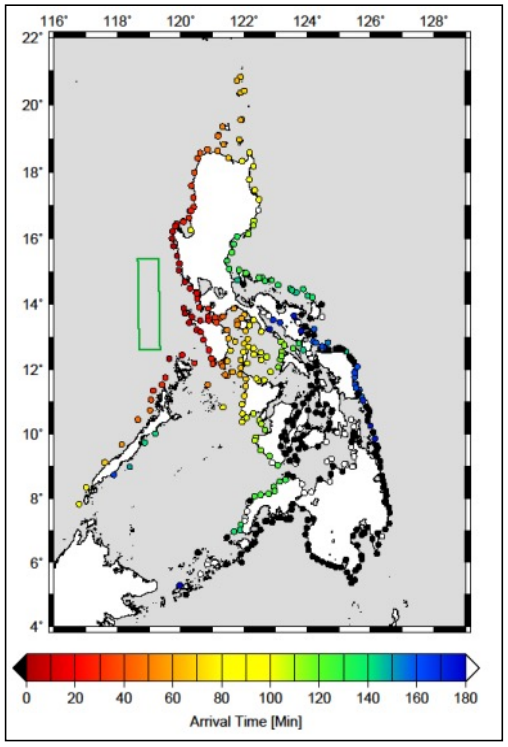
TYPES OF TSUNAMI IN THE PHILIPPINES

Type	Source	Lead time earthquake to tsunami	Warning mechanism
LOCAL	trench or fault in Philippine region, usually less than 200 km from shoreline	2 – 5 minutes to 1 hour	Community-based Must know natural signs such as - **moderate to intense shaking in coastal area** **- rapid sea level drop or rise** **- unusual sound**
DISTANT Regional or Trans-Pacific	trench or fault outside the Philippine region (ex. Japan, Hawaii, Chile)	1 – 24 hours	International Centers and PHIVOLCS

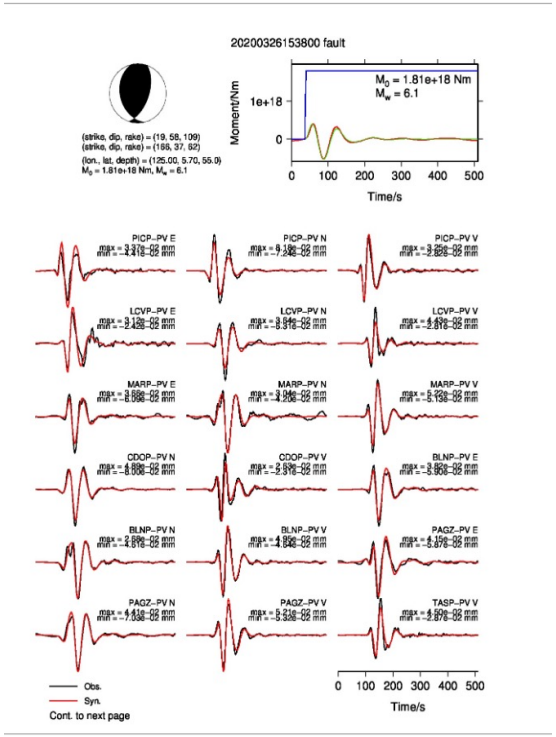
TSUNAMI THRESHOLD (LOCAL)

Source	Location	Parameters	Templates
Local (Δ =100 km)	Metro Manila Region (Manila Trench)	6.5 ≤ M < 7.0 D ≤ 10 km	Sea Level Change Monitoring
		7.0 ≤ M < 7.5 D ≤ 20 km 7.5 ≤ M < 8.0 D ≤ 60 km M ≥ 8.0 and D 0≤ 80 km	Tsunami Warning
	All other areas offshore Philippines	6.5 ≤ M < 7.0 D ≤ 10 km 7.0 ≤ M < 7.5 D ≤ 20 km 7.5 ≤ M < 8.0 D ≤ 60 km M ≥ 8.0 and D ≤ 80 km	Tsunami Warning
		M < 6.5	Earthquake Bulletin

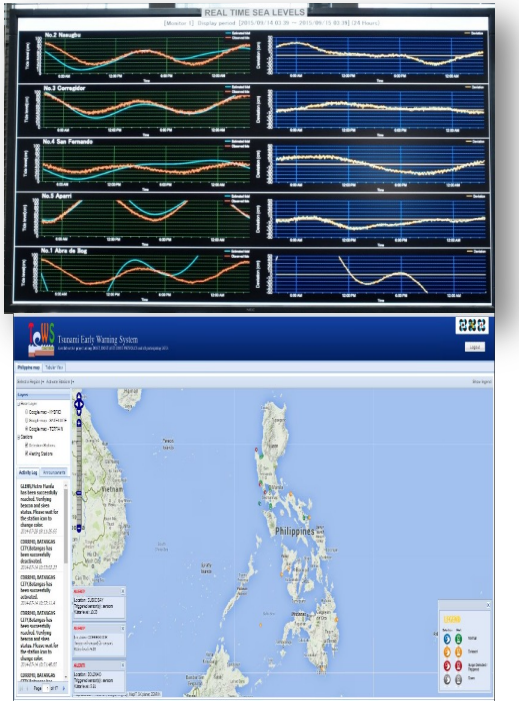
DECISION SUPPORT TOOLS (Local Tsunami)



TSUNAMI DATABASE



SWIFT



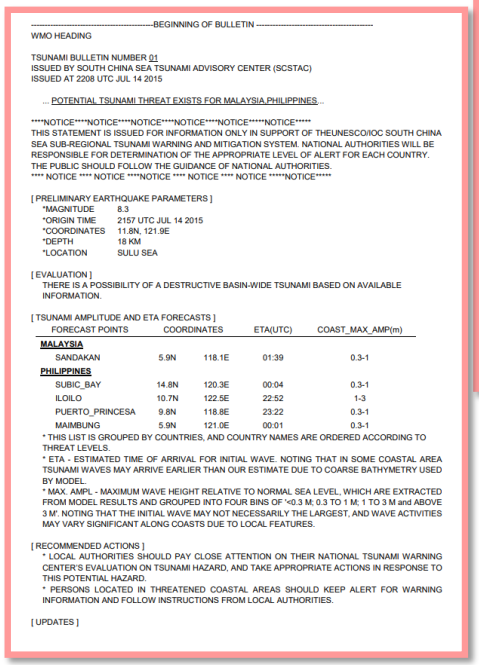
SEA-LEVEL

SOP FOR DISTANT TSUNAMI

INTERNATIONAL TSUNAMI WARNING CENTERS (PTWC/ NWPTAC/ SCSTAC)

TEXT PRODUCTS

- Tsunami Information
  - Evaluation/ Recommendation
  - Estimated Time of Arrival
  - Tsunami Threat Forecast
- Promptly issued
- Available online (Official Websites)
- Receive through fax, email



----------BEGINNING OF BULLETIN ----------
WMO HEADING

TSUNAMI BULLETIN NUMBER 01
ISSUED BY SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC)
ISSUED AT 2208 UTC JUL 14 2015

... POTENTIAL TSUNAMI THREAT EXISTS FOR MALAYSIA,PHILIPPINES ...

****NOTICE****NOTICE****NOTICE****NOTICE****NOTICE*****NOTICE*****
THIS STATEMENT IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THEUNESCO/IOC SOUTH CHINA SEA SUB-REGIONAL TSUNAMI WARNING AND MITIGATION SYSTEM. NATIONAL AUTHORITIES WILL BE RESPONSIBLE FOR DETERMINATION OF THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY. THE PUBLIC SHOULD FOLLOW THE GUIDANCE OF NATIONAL AUTHORITIES.
**** NOTICE **** NOTICE ****NOTICE **** NOTICE **** NOTICE *****NOTICE*****

[PRELIMINARY EARTHQUAKE PARAMETERS]
*MAGNITUDE 8.3
*ORIGIN TIME 2157 UTC JUL 14 2015
*COORDINATES 11.8N, 121.9E
*DEPTH 18 KM
*LOCATION SULU SEA

[EVALUATION]
THERE IS A POSSIBILITY OF A DESTRUCTIVE BASIN-WIDE TSUNAMI BASED ON AVAILABLE INFORMATION.

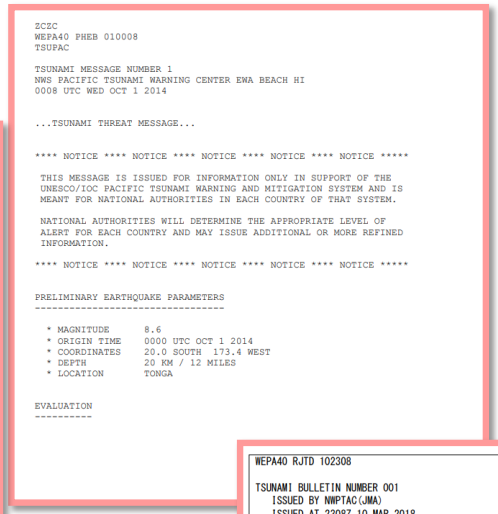
[TSUNAMI AMPLITUDE AND ETA FORECASTS]

FORECAST POINTS	COORDINATES		ETA(UTC)	COAST_MAX_AMP(m)
MALAYSIA				
SANDAKAN	5.9N	118.1E	01:39	0.3-1
PHILIPPINES				
SUBIC_BAY	14.8N	120.3E	00:04	0.3-1
ILOILO	10.7N	122.5E	22:52	1-3
PUERTO_PRINCESA	9.8N	118.8E	23:22	0.3-1
MAIMBUNG	5.9N	121.0E	00:01	0.3-1

* THIS LIST IS GROUPED BY COUNTRIES, AND COUNTRY NAMES ARE ORDERED ACCORDING TO THREAT LEVELS.
* ETA - ESTIMATED TIME OF ARRIVAL FOR INITIAL WAVE. NOTING THAT IN SOME COASTAL AREA TSUNAMI WAVES MAY ARRIVE EARLIER THAN OUR ESTIMATE DUE TO COARSE BATHYMETRY USED BY MODEL.
* MAX. AMPL - MAXIMUM WAVE HEIGHT RELATIVE TO NORMAL SEA LEVEL, WHICH ARE EXTRACTED FROM MODEL RESULTS AND GROUPED INTO FOUR BINS OF '<0.3 M; 0.3 TO 1 M; 1 TO 3 M and ABOVE 3 M'. NOTING THAT THE INITIAL WAVE MAY NOT NECESSARILY THE LARGEST, AND WAVE ACTIVITIES MAY VARY SIGNIFICANT ALONG COASTS DUE TO LOCAL FEATURES.

[RECOMMENDED ACTIONS]
* LOCAL AUTHORITIES SHOULD PAY CLOSE ATTENTION ON THEIR NATIONAL TSUNAMI WARNING CENTER'S EVALUATION ON TSUNAMI HAZARD, AND TAKE APPROPRIATE ACTIONS IN RESPONSE TO THIS POTENTIAL HAZARD.
* PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD KEEP ALERT FOR WARNING INFORMATION AND FOLLOW INSTRUCTIONS FROM LOCAL AUTHORITIES.

[UPDATES]



ZCZC
WEPA40 PHEB 010008
TSUPAC

TSUNAMI MESSAGE NUMBER 1
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0008 UTC WED OCT 1 2014

...TSUNAMI THREAT MESSAGE...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE *****

THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC PACIFIC TSUNAMI WARNING AND MITIGATION SYSTEM AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE *****

PRELIMINARY EARTHQUAKE PARAMETERS
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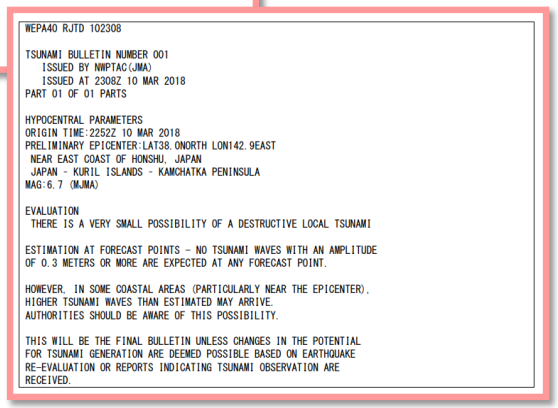
* MAGNITUDE 8.6
* ORIGIN TIME 0000 UTC OCT 1 2014
* COORDINATES 20.0 SOUTH 173.4 WEST
* DEPTH 20 KM / 12 MILES
* LOCATION TONGA

EVALUATION



WEPA40 RJTD 102308

TSUNAMI BULLETIN NUMBER 001
ISSUED BY NWPTAC(JMA)
ISSUED AT 2308Z 10 MAR 2018
PART 01 OF 01 PARTS

HYPOCENTRAL PARAMETERS
ORIGIN TIME:2252Z 10 MAR 2018
PRELIMINARY EPICENTER:LAT38.0NORTH LON142.9EAST
NEAR EAST COAST OF HONSHU, JAPAN
JAPAN - KURIL ISLANDS - KAMCHATKA PENINSULA
MAG:6.7 (MJMA)

EVALUATION
THERE IS A VERY SMALL POSSIBILITY OF A DESTRUCTIVE LOCAL TSUNAMI

ESTIMATION AT FORECAST POINTS - NO TSUNAMI WAVES WITH AN AMPLITUDE OF 0.3 METERS OR MORE ARE EXPECTED AT ANY FORECAST POINT.

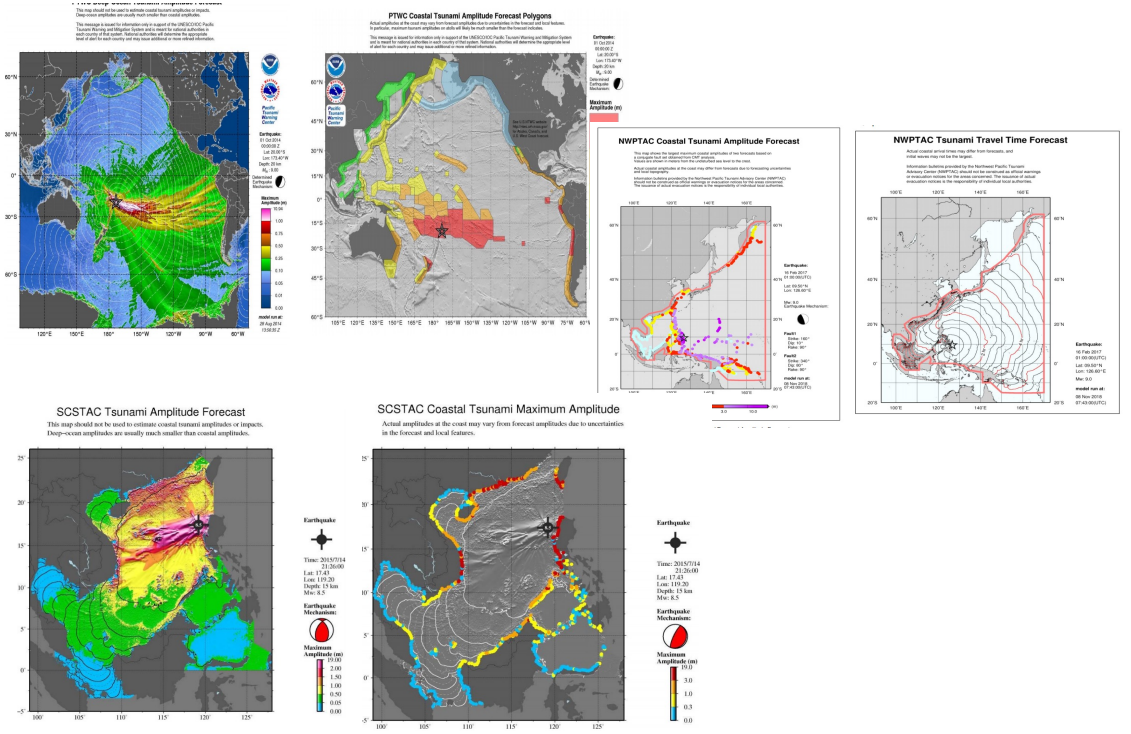
HOWEVER, IN SOME COASTAL AREAS (PARTICULARLY NEAR THE EPICENTER), HIGHER TSUNAMI WAVES THAN ESTIMATED MAY ARRIVE.
AUTHORITIES SHOULD BE AWARE OF THIS POSSIBILITY.

THIS WILL BE THE FINAL BULLETIN UNLESS CHANGES IN THE POTENTIAL FOR TSUNAMI GENERATION ARE DEEMED POSSIBLE BASED ON EARTHQUAKE RE-EVALUATION OR REPORTS INDICATING TSUNAMI OBSERVATION ARE RECEIVED.

INTERNATIONAL TSUNAMI WARNING CENTERS

GRAPHICAL PRODUCTS

- Tsunami Modelling results
  - Deep Ocean Amplitude Forecast
  - Tsunami Travel Time Forecasts
  - Coastal Tsunami Amplitude Forecast
  - Forecast Polygons
- Available ~ 30 mins after the event
- Only tsunami National Contacts and Tsunami Warning Focal Points (BCB, ICN, SOEPD)



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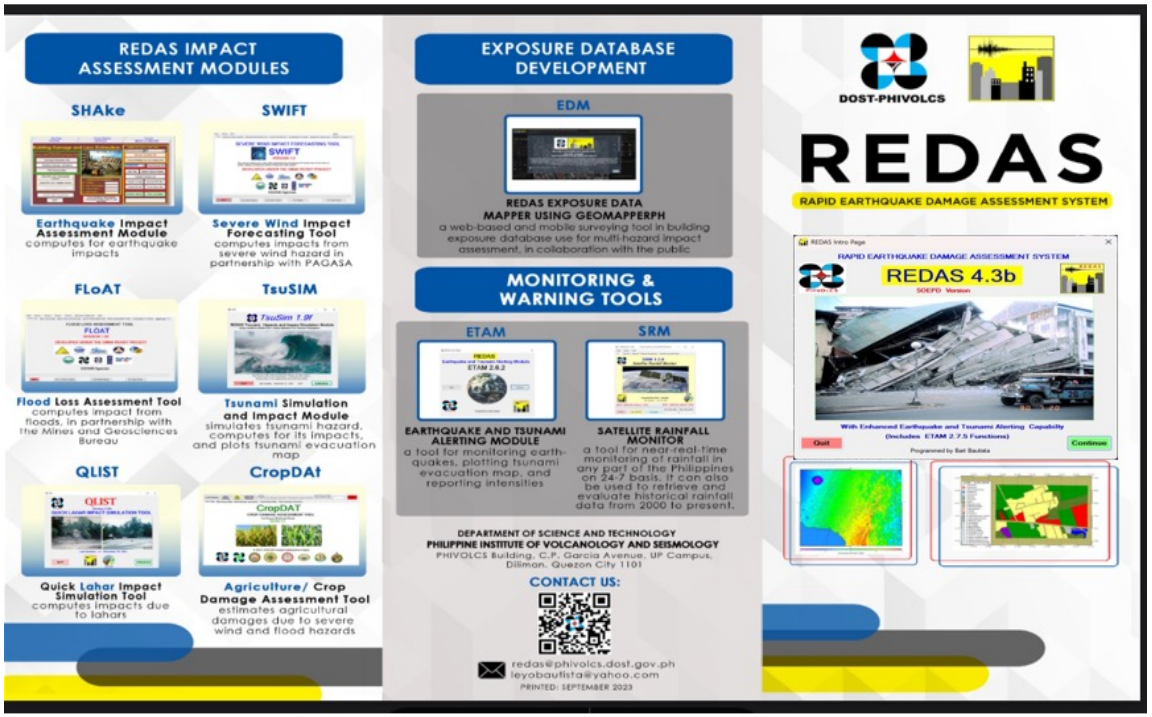
TSUNAMI THRESHOLD (Regional)

Source	Location	Parameters	Templates
Regional (Δ = 1000 km)	Taiwan (local – Batanes – add'l forecast zone) Ryukyu, Japan; Sulawesi, Indonesia; Mariana Islands	M < 7.0 D ≥ 100 km	No Tsunami Threat
		7.0 ≤ M < 7.5 D ≤ 100 km	Sea Level Change Monitoring
		M ≥ 7.5 D ≤ 100 km	Tsunami Warning

TSUNAMI THRESHOLD (DISTANT)

Source	Location	Parameters	Templates
Teleseismic (Δ > 1000 km)	Japan; Kurile Islands; Aleutian Islands, Cascadia; Chile	M < 8.0 D ≤ 100 km	No Tsunami Threat
		M ≥ 8.0 D ≤ 100 km No confirmed tsunami	Sea Level Change Monitoring
		M ≥ 8.0 D ≤ 100 km With confirmed tsunami wave heights < 1 m	Minor Sea Level Disturbance
		M ≥ 8.0 D ≤ 100 km With confirmed tsunami wave heights ≥ 1 m	Tsunami Warning

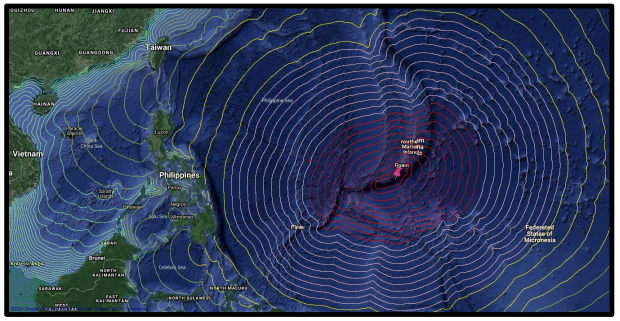
Rapid Earthquake Damage Assessment System (REDAS)



Seismic Hazard and Assessment-

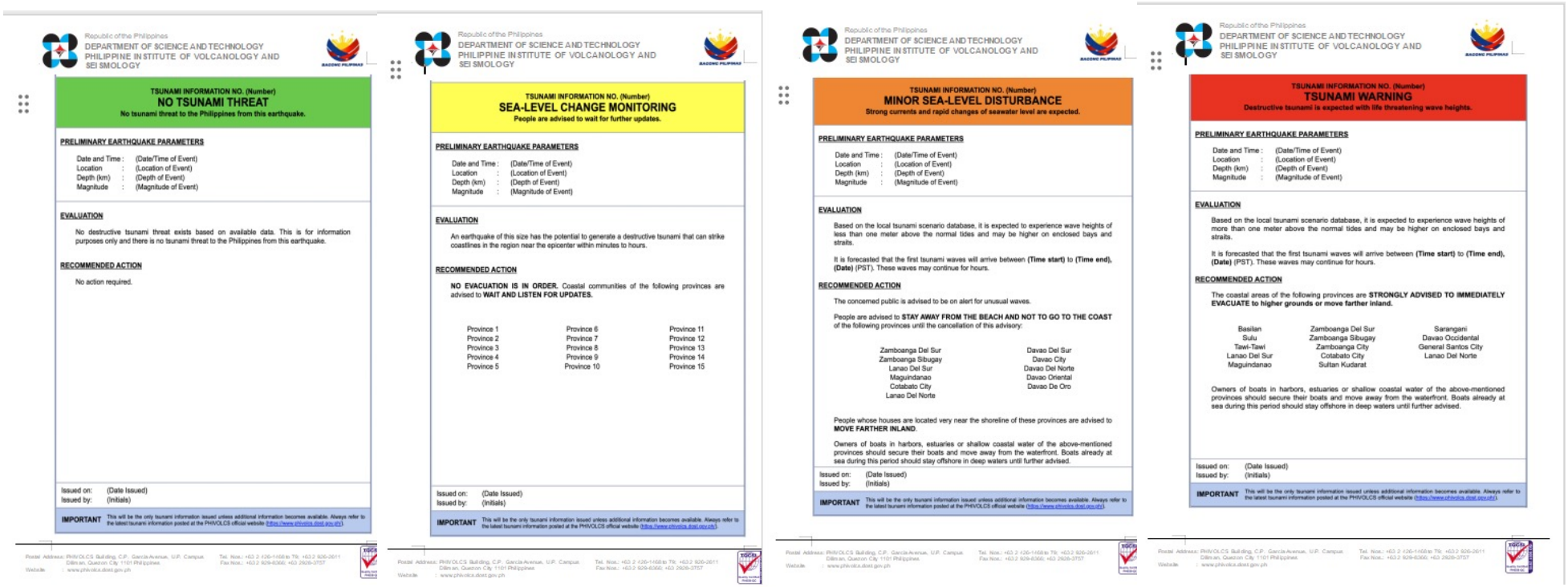
Tsunami Simulation (TsuSIM)

- Wave height
- Inundation



Tsunami Arrival Monitoring of a M9.3 Earthquake along the Southern Mariana Segment

TSUNAMI TEMPLATES



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TSUNAMI INFORMATION NO. (Number)
NO TSUNAMI THREAT
No tsunami threat to the Philippines from this earthquake.

PRELIMINARY EARTHQUAKE PARAMETERS

Date and Time : (Date/Time of Event)
Location : (Location of Event)
Depth (km) : (Depth of Event)
Magnitude : (Magnitude of Event)

EVALUATION

No destructive tsunami threat exists based on available data. This is for information purposes only and there is no tsunami threat to the Philippines from this earthquake.

RECOMMENDED ACTION

No action required.

Issued on: (Date Issued)
Issued by: (Initials)

IMPORTANT This will be the only tsunami information issued unless additional information becomes available. Always refer to the latest tsunami information posted at the PHIVOLCS official website (https://www.phivolcs.dost.gov.ph/).

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TSUNAMI INFORMATION NO. (Number)
SEA-LEVEL CHANGE MONITORING
People are advised to wait for further updates.

PRELIMINARY EARTHQUAKE PARAMETERS

Date and Time : (Date/Time of Event)
Location : (Location of Event)
Depth (km) : (Depth of Event)
Magnitude : (Magnitude of Event)

EVALUATION

An earthquake of this size has the potential to generate a destructive tsunami that can strike coastlines in the region near the epicenter within minutes to hours.

RECOMMENDED ACTION

NO EVACUATION IS IN ORDER. Coastal communities of the following provinces are advised to **WAIT AND LISTEN FOR UPDATES.**

Province 1	Province 6	Province 11
Province 2	Province 7	Province 12
Province 3	Province 8	Province 13
Province 4	Province 9	Province 14
Province 5	Province 10	Province 15

Issued on: (Date Issued)
Issued by: (Initials)

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TSUNAMI INFORMATION NO. (Number)
MINOR SEA-LEVEL DISTURBANCE
Strong currents and rapid changes of seawater level are expected.

PRELIMINARY EARTHQUAKE PARAMETERS

Date and Time : (Date/Time of Event)
Location : (Location of Event)
Depth (km) : (Depth of Event)
Magnitude : (Magnitude of Event)

EVALUATION

Based on the local tsunami scenario database, it is expected to experience wave heights of less than one meter above the normal tides and may be higher on enclosed bays and straits.

It is forecasted that the first tsunami waves will arrive between **(Time start)** to **(Time end), (Date)** (PST). These waves may continue for hours.

RECOMMENDED ACTION

The concerned public is advised to be on alert for unusual waves.

People are advised to **STAY AWAY FROM THE BEACH AND NOT TO GO TO THE COAST** of the following provinces until the cancellation of this advisory:

Zamboanga Del Sur	Davao Del Sur
Zamboanga Sibugay	Davao City
Lanao Del Sur	Davao Del Norte
Maguindanao	Davao Oriental
Cotabato City	Davao De Oro
Lanao Del Norte	

People whose houses are located very near the shoreline of these provinces are advised to **MOVE FARTHER INLAND.**

Owners of boats in harbors, estuaries or shallow coastal water of the above-mentioned provinces should secure their boats and move away from the waterfront. Boats already at sea during this period should stay offshore in deep waters until further advised.

Issued on: (Date Issued)
Issued by: (Initials)

IMPORTANT This will be the only tsunami information issued unless additional information becomes available. Always refer to the latest tsunami information posted at the PHIVOLCS official website (https://www.phivolcs.dost.gov.ph/).

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TSUNAMI INFORMATION NO. (Number)
TSUNAMI WARNING
Destructive tsunami is expected with life threatening wave heights.

PRELIMINARY EARTHQUAKE PARAMETERS

Date and Time : (Date/Time of Event)
Location : (Location of Event)
Depth (km) : (Depth of Event)
Magnitude : (Magnitude of Event)

EVALUATION

Based on the local tsunami scenario database, it is expected to experience wave heights of more than one meter above the normal tides and may be higher on enclosed bays and straits.

It is forecasted that the first tsunami waves will arrive between **(Time start)** to **(Time end), (Date)** (PST). These waves may continue for hours.

RECOMMENDED ACTION

The coastal areas of the following provinces are **STRONGLY ADVISED TO IMMEDIATELY EVACUATE to higher grounds or move farther inland.**

Basilan	Zamboanga Del Sur	Sarangani
Sulu	Zamboanga Sibugay	Davao Occidental
Tawi-Tawi	Zamboanga City	General Santos City
Lanao Del Sur	Cotabato City	Lanao Del Norte
Maguindanao	Sultan Kudarat	

Owners of boats in harbors, estuaries or shallow coastal water of the above-mentioned provinces should secure their boats and move away from the waterfront. Boats already at sea during this period should stay offshore in deep waters until further advised.

Issued on: (Date Issued)
Issued by: (Initials)

IMPORTANT This will be the only tsunami information issued unless additional information becomes available. Always refer to the latest tsunami information posted at the PHIVOLCS official website (https://www.phivolcs.dost.gov.ph/).

TSUNAMI WEBSITE

https://tsunami.phivolcs.dost.gov.ph/

PHIVOLCS TSUNAMI INFORMATION

Latest Earthquake Event Earthquake Events for the year

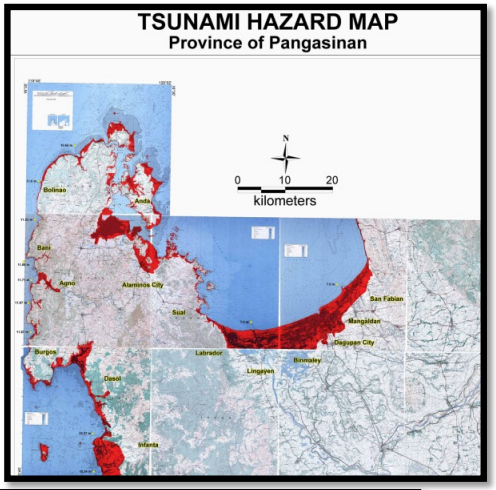
Search:

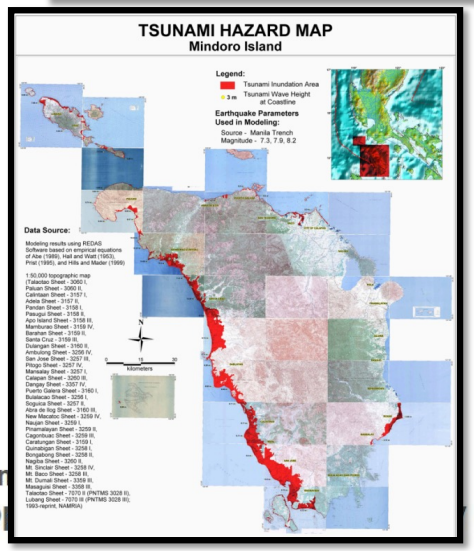
Date and Time(PST)	Latitude	Longitude	Depth	Magnitude	Location	Advisory
09 Sep 2025 - 05:48 AM	21.10°S	173.80°E	010	6.8	Vanuatu Region	Tsunami Information # 1
22 Aug 2025 - 10:16 AM	60.19°S	61.82°W	011	7.5	Southern Drake Passage	Tsunami Information # 1
03 Aug 2025 - 01:38 PM	50.50°N	157.80°E	041	7.0	Kuril Islands	Tsunami Information # 1
30 Jul 2025 - 07:25 AM	52.20°N	160.00°E	074	8.7	Off The East Coast Of Kamchatka Russia	Tsunami Information # 3 Tsunami Information # 2

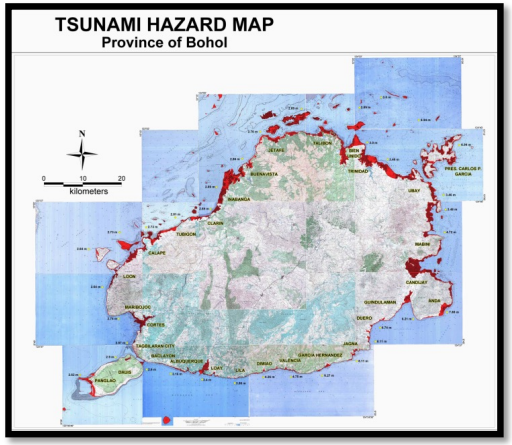
Depart
Philip

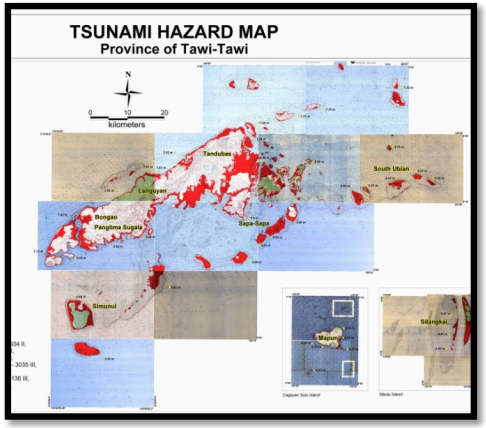
TSUNAMI MITIGATION EFFORTS

TSUNAMI HAZARD MAPPING

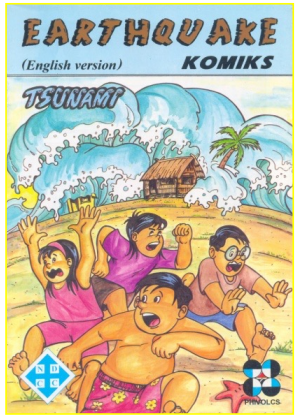


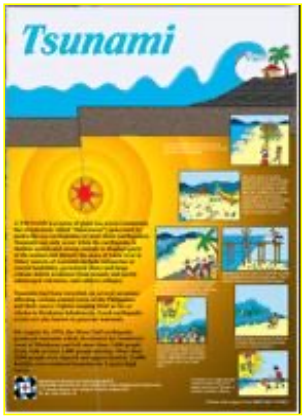


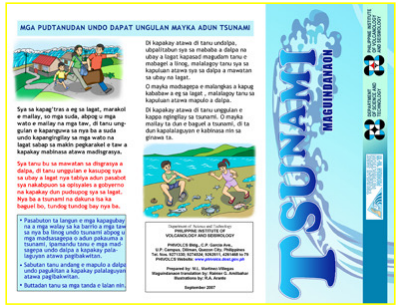


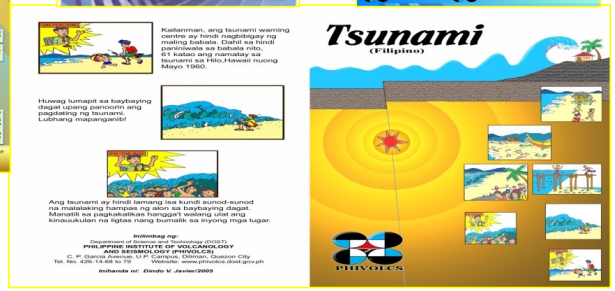


Tsunami Information Materials









Department of Science and Technology
Philippine Institute of Volcanology and Seismology

IEC Campaign Workshop on Tsunami Evacuation and Integration of the Community Alerting station and Tsunami Early Warning system (TEWS Philippines)

- lectures conducted earthquake basics and tsunami

- Identifying safe areas
- evacuation routes

Department of Science and Technology
Philippine Institute of Volcanology and Seismology

NATIONWIDE SIMULTANEOUS EARTHQUAKE DRILL
Observance of World Tsunami Awareness Day

KAMCHATKA, RUSSIA 8.8 MAGNITUDE EARTHQUAKE

Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY
PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY

BAGONG PILIPINAS

TSUNAMI INFORMATION NO. 1

NO TSUNAMI THREAT

PRELIMINARY EARTHQUAKE PARAMETERS

Date and Time	:	30 Jul 2025 - 07:25:00 AM
Location	:	52.2°N, 160.0°E - Off The East Coast Of Kamchatka Russia
Depth (km)	:	074
Magnitude	:	8.0

EVALUATION

No destructive tsunami threat exists based on available data. This is for information purposes only and there is no tsunami threat to the Philippines from this earthquake.

RECOMMENDED ACTION

No action required.

Issued on: 30 Jul 2025 - 07:42:13 AM
Issued by: KMG/JMLA/NBA/DVC

IMPORTANT This will be the only tsunami information issued unless additional information becomes available. Always refer to the latest tsunami information posted at the PHIVOLCS official website (https://www.phivolcs.dost.gov.ph/).

Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY
PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY

BAGONG PILIPINAS

TSUNAMI INFORMATION NO. 2

ADVISORY: MINOR SEA-LEVEL DISTURBANCE

RELIMINARY EARTHQUAKE PARAMETERS

Date and Time	:	30 Jul 2025 - 07:25:00 AM
Location	:	52.2°N, 160.0°E - Off The East Coast Of Kamchatka, Russia
Depth (km)	:	074
Magnitude	:	8.7

VALUATION

Based on the revised magnitude calculations and tsunami wave models in the Pacific Tsunami Warning Center, coastal areas in the Philippines fronting the Pacific ocean are expected to experience tsunami wave height of less than one (1) meter. The first tsunami waves are expected to arrive between **01:20 PM** to **02:40 PM, 30 Jul 2025** (PST). It may not be the largest and these waves may continue for hours.

ECOMMENDED ACTION

The concerned public is advised to be on alert for unusual waves. People are also advised to **STAY AWAY FROM THE BEACH AND NOT TO GO TO THE COAST** of the following provinces until the cancellation of this advisory:

Batanes Group of Islands	Albay	Dinagat Islands
Cagayan	Sorsogon	Surigao del Norte
Isabela	Catanduanes	Surigao del Sur
Aurora	Northern Samar	Davao del Norte
Quezon	Eastern Samar	Davao Oriental
Camarines Norte	Leyte	Davao Occidental
Camarines Sur	Southern Leyte	Davao del Sur
		Davao de Oro

People whose houses are located very near the shoreline of these provinces are advised to **MOVE FARTHER INLAND.**

Owners of boats in harbors, estuaries or shallow coastal water of the above-mentioned provinces should secure their boats and move away from the waterfront. Boats already at sea during this period should stay offshore in deep waters until further advised.

ssued on: 30 Jul 2025 - 09:22:38 AM
ssued by: KMG/JMLA/NBA/DVC

MPORTANT This will be the only tsunami information issued unless additional information becomes available. Always refer to the latest tsunami information posted at the PHIVOLCS official website (https://www.phivolcs.dost.gov.ph/).

Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY
PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY

Tsunami Information No.: 3
Date issued: July 30, 2025
Time issued: 04:40 PM

Cancellation of Tsunami Advisory
for 30 July 2025 Magnitude 8.7 Kamchatka, Russia Earthquake

A great earthquake occurred off the East Coast of Kamchatka, Russia on **30 July 2025** at 0
AM Philippine Standard Time (PST), located at **52.2°N, 160.0°E** with depth of **74 km** a
magnitude of 8.7. DOST-PHIVOLCS issued a Tsunami Advisory for Minor Sea L
Disturbance to the coastal communities of the provinces of:

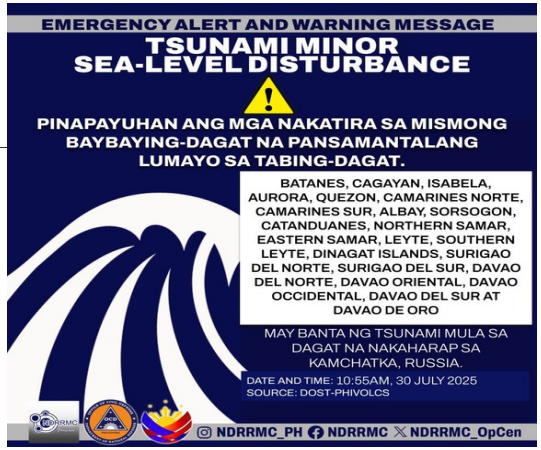
Batanes Group of Islands	Albay	Dinagat Islands
Cagayan	Sorsogon	Surigao del Norte
Isabela	Catanduanes	Surigao del Sur
Aurora	Northern Samar	Davao del Norte
Quezon	Eastern Samar	Davao Oriental
Camarines Norte	Leyte	Davao Occidental
Camarines Sur	Southern Leyte	Davao del Sur
		Davao de Oro

Based on available data from our sea level monitoring stations facing the Philippine Sea
significant sea level disturbances nor destructive tsunami waves have been recorded s
the 07:25 AM earthquake up until this cancellation.

With this, **any effects due to minor sea level disturbances have largely passed, therefore, DOST-PHIVOLCS has now cancelled the recommendations issued for event.**

This will be the final tsunami information issued for this event.

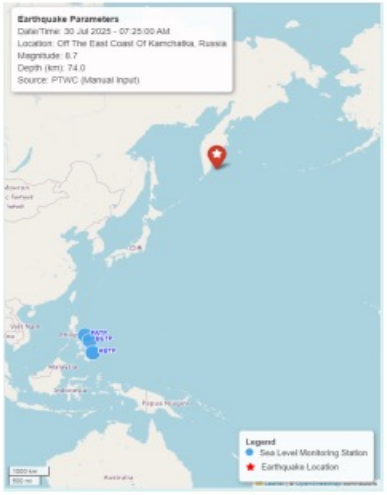
DOST-PHIVO
MFGA/JSO/RG



KAMCHATKA, RUSSIA
MAGNITUDE 8.8 EARTHQUAKE

Preliminary Earthquake Parameters:

Date and Time:	30 Jul 2025 - 07:25:00 AM
Location:	Off the East Coast of Kamchatka, Russia
Magnitude:	8.7
Depth (km):	74
Source:	PTWC

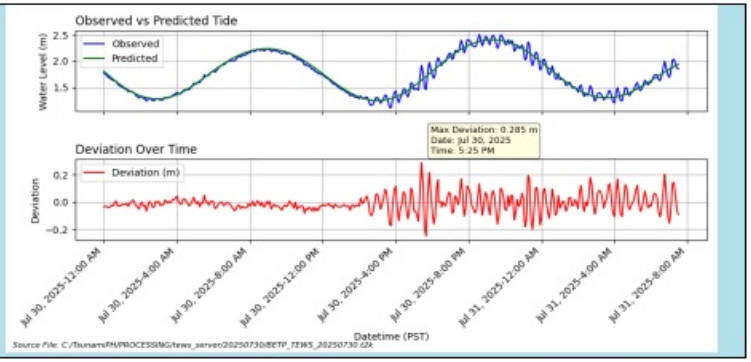


Peak Wave Height:

No.	Location	Height (m)	Date/Time (PST)
1	BORONGAN EASTERN SAMAR	0.285	30 Jul 2025 05:25 PM
2	PRIETO DIAZ ALBAY GULF SLMS	0.075	30 Jul 2025 07:45 PM
3	HINATUAN-BISLIG BAY SLMS	0.116	30 Jul 2025 04:55 PM
4	BISLIG CITY SURIGAO DEL SUR SLMS	0.125	30 Jul 2025 05:13 PM

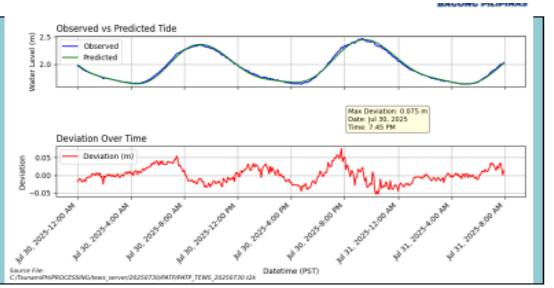
Sea Level Data Detailed Information:

No.:	1
Station Location:	BORONGAN EASTERN SAMAR (BETP)
Tsunami Amplitude (m):	0.285 m (30 Jul 2025 05:25 PM)
Data Source:	TEWS Server
Processed by:	RGA
Date/Time:	July 31, 2025 08:01AM
Remarks:	

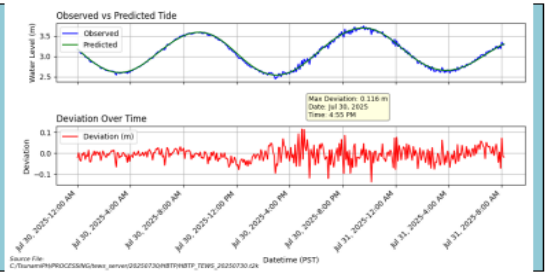


ACTUAL SEA-LEVEL DATA RECORD
PHIVOLCS SEA-LEVEL STATION

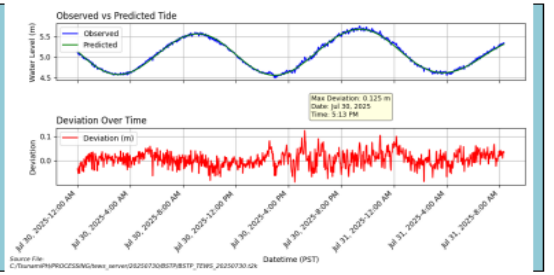
No.:	2
Station Location:	PRIETO DIAZ ALBAY GULF SLMS (PATP)
Tsunami Amplitude (m):	0.075 m (30 Jul 2025 07:45 PM)
Data Source:	TEWS Server
Processed by:	RGA
Date/Time:	July 31, 2025 08:19AM
Remarks:	



No.:	3
Station Location:	HINATUAN-BISLIG BAY SLMS (HBTP)
Tsunami Amplitude (m):	0.116 m (30 Jul 2025 04:55 PM)
Data Source:	TEWS Server
Processed by:	RGA
Date/Time:	July 31, 2025 08:19AM
Remarks:	



No.:	4
Station Location:	BISLIG CITY SURIGAO DEL SUR SLMS (BSTP)
Tsunami Amplitude (m):	0.125 m (30 Jul 2025 05:13 PM)
Data Source:	TEWS Server
Processed by:	RGA
Date/Time:	July 31, 2025 08:25AM
Remarks:	



PLANS FOR TSUNAMI READY

- Information education campaign to raise awareness among Local Government Units (LGUs) about the Tsunami Ready Project.

- Encourage and motivate their active participation in the Tsunami Ready Recognition Programme

THANK YOU

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