

**Twelfth Meeting of the ICG/PTWS Regional Working Group
on Tsunami Warning and Mitigation System in the South China Sea Region,
7-8 November 2024, Jakarta, Indonesia**

Tsunami Service Providers' Products and Messages User Guide of SCSTAC

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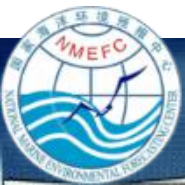
Background and Area of Service

The Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS) took the establishment of the SCS Tsunami Warning and Mitigation System.

The SCS Tsunami advisory products are issued when SCSTAC detects a major earthquake with moment magnitude 6.0 or greater in its Area of Service (AoS), which consists of the main body of the SCS, the Sulu Sea and the Celebes Sea.



SCSTAC Area of Service



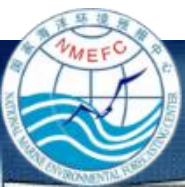
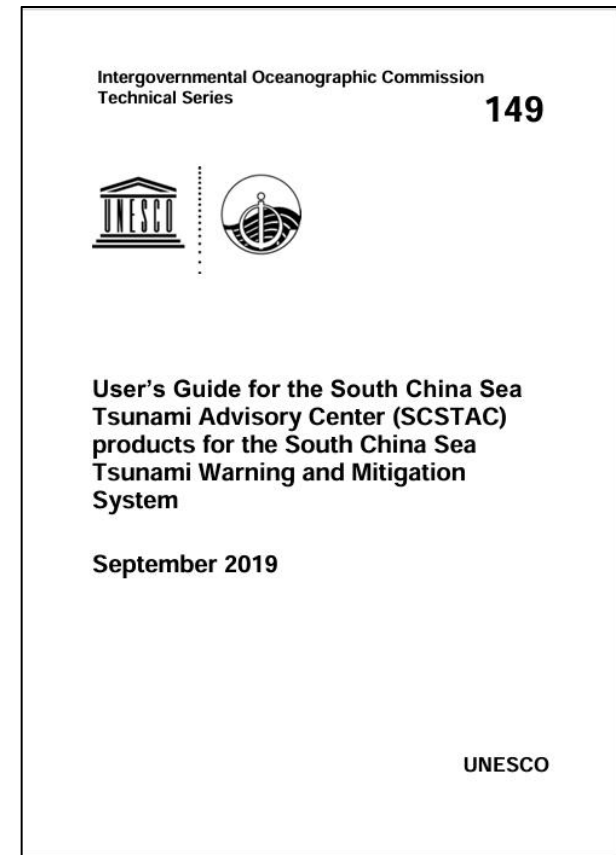
South China Sea Tsunami Advisory Center

The South China Sea Tsunami Advisory Center (<http://scstac.oceanguide.org.cn>) has been in full operation since November 5th, 2019. SCSTAC provides tsunami services for Nine Member States of the SCS region include **Brunei, Cambodia, China, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam** (in alphabetic order).



User Guide Publication in 2019

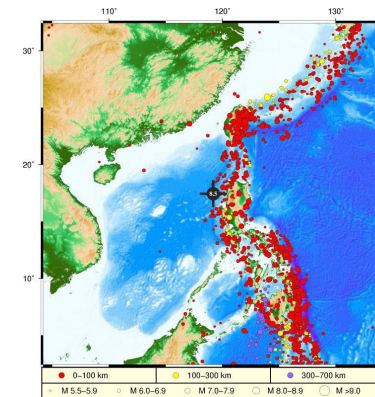
- ICG/PTWS-WG-SCS-VIII Agrees to accept the document “Tsunami Advisory Products for the South China Sea Regional Tsunami Warning and Mitigation System” as an official publication within the IOC Technical Series upon endorsement of the IOC Assembly;
- The ICG agreed to accept the document “User’s Guide for the South China Sea Tsunami Advisory Center (SCSTAC) products for the South China Sea Tsunami Warning and Mitigation System” as an official publication within the IOC Technical Series upon endorsement of the IOC Assembly to be held in June 2019, decided to commence the full operation of SCSTAC on 5 November 2019, and approved Recommendation ICG/PTWS-XXVIII.4.
- IOC Technical series 149
- Publication in 2019



Current content structure of user's guide

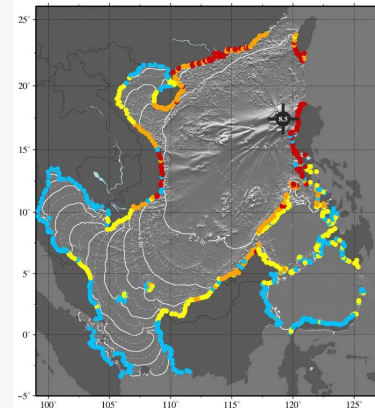
- ✓ 1. OVERVIEW
 - 1.1 BACKGROUND
 - 1.2 AREA OF SERVICE
 - 1.3 BULLETIN TYPES AND CRITERIA
 - 1.4 IMPLEMENTATION TIMELINE
 - 1.5 DISSEMINATION OF PRODUCTS
- ✓ 2. TSUNAMI SCENARIO DATABASE, FORECAST MODEL AND DECISION SUPPORT SYSTEM
 - 2.1 DESCRIPTION OF TSUNAMI SCENARIO DATABASE
 - 2.2 DESCRIPTION OF REAL-TIME TSUNAMI FORECAST MODEL
 - 2.3 INTERPRETATION OF DATABASE AND MODEL RESULTS
 - 2.4 DECISION SUPPORT SYSTEM
- ✓ 3. DESCRIPTION OF PRODUCTS
 - 3.1 DEFINITION OF GEOGRAPHIC AREAS
 - 3.2 COASTAL FORECAST POINTS
 - 3.3 TEXT MESSAGE
 - 3.4 TSUNAMI ENERGY MAP
 - 3.5 COASTAL FORECAST MAP
- ✓ 4. TSUNAMI SCENARIOS AND PRODUCT SAMPLES
 - 4.1 MANILA TRENCH
 - 4.2 SULU SEA
- ANNEX I
- > PRODUCTS TEMPLATES
- ANNEX II
- LIST OF COASTAL FORECASTING POINTS FOR ETA AND AMPLITUDE

Graphic Products



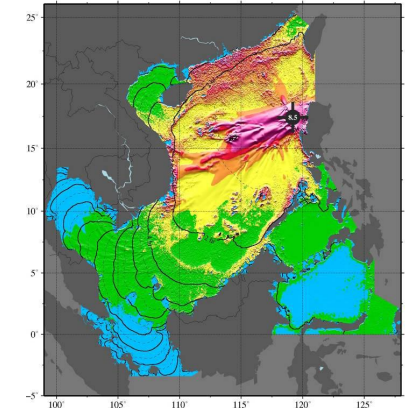
SCSTAC Coastal Tsunami Maximum Amplitude

Actual amplitudes at the coast may vary from forecast amplitudes due to uncertainties in the forecast and local features.

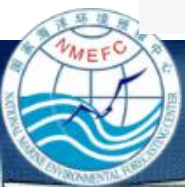


SCSTAC Tsunami Amplitude Forecast

This map should not be used to estimate coastal tsunami amplitudes or impacts. Deep-ocean amplitudes are usually much smaller than coastal amplitudes.



Earthquake
Time: 2015/7/14
21:26:00
Lat: 17.43
Lon: 119.20
Depth: 15 km
Mw: 8.5
Earthquake
Mechanism:
Maximum
Amplitude (m)
19.00
2.00
1.50
1.00
0.50
0.05
0.00



Common TSP Users Guide Structure

PTWS WG2 Task Team of TSPs proposed Common TSP Users Guide Structure, PTWS-SC has agreed to edit/revise each TSP Users' Guide according to the common structures.

Common PTWS TSP Users' Guide Table of Contents

1. Overview

- 1.1. Background
- 1.2. Area of Service
- 1.3. Earthquake Source Zone
- 1.4. Tsunami Hazard

2. Operations

- 2.1. TSP Facility
- 2.2. Operational Tools and Procedures

3. Products

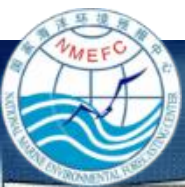
- 3.1. Product Types and Criteria
- 3.2. Product Content

4. Dissemination

- 4.1. Methodologies
- 4.2. Communication Testing
- 4.3. Contact Information

ANNEXES

- I. Example Products
- II. Forecast Points
- III. Observation Sites



Timeline for editing Users' Guide

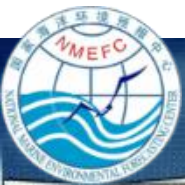
April 2024
ICG/PTWS XXXI-

April 2024
ICG/PTWS XXXI-
Session
*Report on progress
status from each TSP
Possibly finalized*

March 2024 PTWS-SC
*Confirmation of the
schedule for editing*

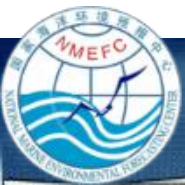


September 2024
PTWS-SC
*Report on progress
status from each TSP*



Editing/Revision Work

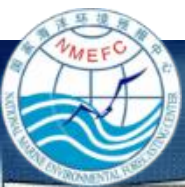
- Edit TSP Users' Guide of SCSTAC refer to the common structure
- Add the discription of the update status of tsunami warning system;
- Add the discription of the BSCSTAC
- Add or delete the focal points dependent on the requirements of Memeber States;

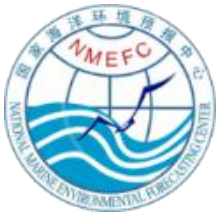


Editing/Revision Work

<ul style="list-style-type: none"> 1.OVERVIEW <ul style="list-style-type: none"> 1.1.BACKGROUND 1.2.AREA OF SERVICE 1.3.EARTHQUAKE SOURCE ZONE 1.4.TSUNAMI HAZARD 2.OPERATIONS <ul style="list-style-type: none"> 2.1.TSP FACILITY 2.2.OPERATIONAL TOOLS AND PROCEDURES 3.PRODUCTS <ul style="list-style-type: none"> 3.1 PRODUCT TYPES AND CRITERIA 3.2 PRODUCT CONTENT <ul style="list-style-type: none"> 1. COASTAL FORECAST POINTS 2. TEXT MESSAGE 3. TSUNAMI ENERGY MAP 4. COASTAL FORECAST MAP 4.DISSEMINATION <ul style="list-style-type: none"> 4.1 METHODOLOGIES 4.2 COMMUNICATION TESTING 4.3 CONTACT INFORMATION 5.ANNEXS <ul style="list-style-type: none"> ANNEX I EXAMPLE PRODUCTS <ul style="list-style-type: none"> ANNEX II FORECAST POINTS ANNEX III OBSERVATION SITES 	<p>Page(i)</p> <p>TABLE OF CONTENT</p> <p>1.OVERVIEW..... 1</p> <p>1.1.BACKGROUND..... 1</p> <p>1.2.AREA OF SERVICE..... 1</p> <p>1.3.EARTHQUAKE SOURCE ZONE..... 2</p> <p>1.4.TSUNAMI HAZARD..... 3</p> <p>2.OPERATIONS..... 3</p> <p>2.1.TSP FACILITY..... 3</p> <p>2.2.OPERATIONAL TOOLS AND PROCEDURES..... 5</p> <p>3.PRODUCTS..... 6</p> <p>3.1 PRODUCT TYPES AND CRITERIA..... 6</p> <p>3.2 PRODUCT CONTENT..... 8</p> <p>1.COASTAL FORECAST POINTS..... 8</p> <p>2.TEXT MESSAGE..... 8</p> <p>3.TSUNAMI ENERGY MAP..... 8</p> <p>4.COASTAL FORECAST MAP..... 8</p> <p>4.DISSEMINATION..... 8</p> <p>4.1 METHODOLOGIES..... 8</p> <p>4.2 COMMUNICATION TESTING..... 9</p> <p>4.3 CONTACT INFORMATION..... 9</p> <p>5.ANNEXS..... 11</p> <p>ANNEX I..... 11</p> <p>EXAMPLE PRODUCTS..... 11</p> <p>A.1 TSUNAMI INFORMATION (EARTHQUAKE MAGNITUDE 6.0-6.4)..... 5</p>	<ul style="list-style-type: none"> 1.2 AREA OF SER 1.3 BULLETIN TY 1.4 IMPLEMENTA 1.5 DISSEMINATI 2 TSUNAMI SCEN MODEL AND DECISION SU 2.1 DESCRIPTION DATABASE 5 2.2 DESCRIPTION FORECAST MODEL 2.3 INTERPRETA MODEL RESULTS 2.4 DECISION SU 3 DESCRIPTION C 3.1 DEFINITION C 3.2 COASTAL FOI 3.3 TEXT MESSA 3.4 TSUNAMI ENE 3.5 COASTAL FOI 4 TSUNAMI SCE SAMPLES 11 4.1 MANILA TREN 4.2 SULU SEA 11 ANNEXES 1 PRODUCTS TEI A.1 TSUNAMI INF MAGNITUDE 6.0-6.4 A.2 TSUNAMI LINE
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We aim to complete the revisions by the end of 2024, after that SCS Member States will be consulted on the Common TSP Users Guide of SCSTAC by Chair of SCS-WG.





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Thank you for your attention !
