

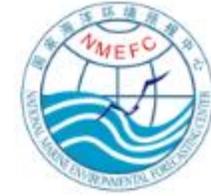
Report from Backup South China Sea Tsunami Advisory Center (Hong Kong)

Queenie Lam
Hong Kong Observatory
18 November 2025





南中國海區域海嘯預警中心備份中心(香港) Backup South China Sea Tsunami Advisory Center (Hong Kong)



- BSCSTAC officially launched on 29 March 2023 is operating round-the-clock:
 - **Hot Standby** for SCSTAC on normal days
 - **Scheduled activation** for a certain period during cool season as pre-agreed with SCSTAC at least three months before the activation date.
- Response to Earthquakes within AoS:
 - Follow SOP to prepare advisory products
 - Record products for internal evaluation
- Watchstander conducts system check twice a day to ensure system availability

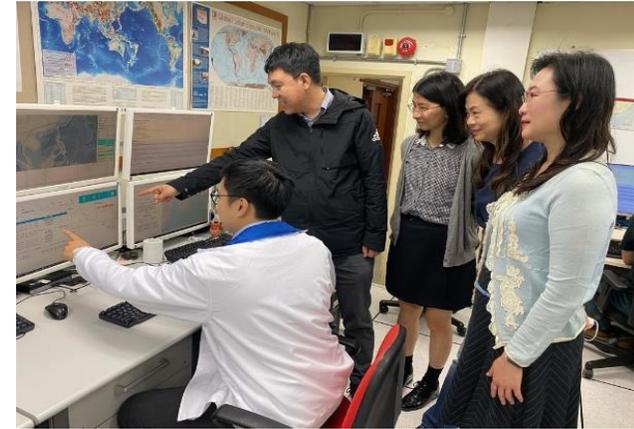


The First Scheduled Activation of BSCSTAC

(11 - 22 December 2023)

The Second Scheduled Activation of BSCSTAC

(09 - 20 December 2024)



- Communication tests were performed before the scheduled operation
- Switchover procedure laid down at ICG/PTWS-WG-SCS-X was followed. Messages were issued:
 - by BSCSTAC about one week before the scheduled activation via email
 - by BSCSTAC upon the scheduled activation of BSCSTAC via email, fax and GTS
 - by SCSTAC at the end of scheduled operation via email, fax and GTS
- No event triggered the BSCSTAC to issue tsunami bulletins during the past scheduled activation periods

SCSTAC_Notification of activation

WESS31 VHHH 110200

ISSUED BY BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (HONG KONG) (BSCSTAC) AT 0200 UTC DEC 11 2023.

THIS IS FOR INFORMATION ONLY THAT THE BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (HONG KONG) (BSCSTAC) WILL OPERATE STARTING FROM 0200 UTC DEC 11 2023 TO 0200 UTC DEC 22 2023 INCLUSIVE IN PLACE OF THE SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC).

IN CASE OF QUESTIONS, PLEASE CONTACT SCSTAC (EMAIL: TSU@NMEFC.CN) OR BSCSTAC (EMAIL: INFO-BSCSTAC@HKO.GOV.HK).

SCSTAC_Notification

WESS31 BBJ 220200

ISSUED BY SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC)

ISSUED AT 0200Z 22 DEC 2023

THIS IS FOR INFORMATION ONLY THAT THE SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC) WILL RESUME OPERATION SINCE 0200 UTC DEC 22 2023 IN PLACE OF THE BACKUP SOUTH CHINA SEA ADVISORY CENTER (HONGKONG)(BSCSTAC).

Key Performance Indicators of BSCSTAC in hot standby operation and during scheduled activation since its official launch on 29 March 2023 (up to 31 October 2025)

Key Performance Indicators of SCSTAC	Target Values of SCSTAC Operations	Performance of BSCSTAC in hot standby
Elapsed time from earthquake to issuance of initial tsunami products with preliminary earthquake parameters	Within 12 minutes	9.9 minutes
Probability of detection of earthquakes with $M_w \geq 6.0$	100%	100%
Accuracy ¹ of preliminary earthquake parameters on hypocenter location/magnitude/depth	0.3° / 0.3 / 30 km	0.15° / 0.2 / 30 km
Accuracy of the Estimated Time of Arrival (ETA) and amplitudes of the tsunamis actually triggered	Within 10% of Travel Time	No event with forecast $\geq 0.3\text{m}$ tsunami occurred
Percentage of Member States that receive products issued by BSCSTAC	100%	Products not issued to member states in hot standby mode; No event occurred during past scheduled activation periods
Percentage of time the BSCSTAC is operating and able to respond to a tsunami event	100%	100%
Regular communication tests	Twice a year	Once by BSCSTAC in 2024

1 Measured by mean absolute difference as compared with USGS final PDE (Preliminary Determination of Epicenters)

SeisComP focal mechanism solution used by BSCSTAC as compared with that published by USGS

(29/3/2023 - 31/10/2025)

Event Datetime (UTC)	2023-04-21 10:21	2023-06-15 02:19	2023-09-09 14:43	2023-09-11 12:51	2023-09-12 11:03	2024-01-08 20:48	2024-04-02 23:58	2024-04-09 09:48
SeisComP Moment Tensor								
USGS Moment Tensor								

SeisComP focal mechanism solution used by BSCSTAC as compared with that published by USGS

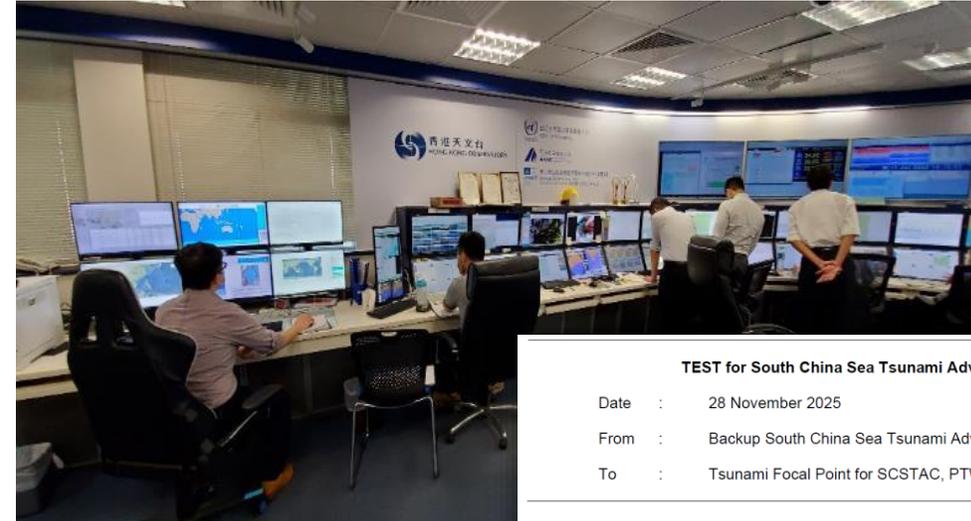
(29/3/2023 - 31/10/2025)

Event Datetime (UTC)	2024-04-22 18:26	2024-07-11 02:13	2024-09-23 19:51	2025-01-20 16:17	2025-06-11 11:00	2025-06-27 23:07	2025-07-23 20:50
SeisComP Moment Tensor							
USGS Moment Tensor							

Upcoming: The Third Scheduled Activation of BSCSTAC

(11 - 24 December 2025)

- The **2025 scheduled activation** is scheduled for **02 UTC 11 December - 02 UTC 24 December**
- The communication test will be conducted at **0600 UTC on 28 November 2025**
- An email notification of the test was sent on 17 November 2025
- Switchover messages will be issued:
 - by BSCSTAC upon the scheduled activation of BSCSTAC via email and GTS
 - by SCSTAC at the end of scheduled operation via email and GTS



TEST for South China Sea Tsunami Advisory

Date : 28 November 2025
From : Backup South China Sea Tsunami Advisory Center (Hong Kong)
To : Tsunami Focal Point for SCSTAC, PTWC, JMA (NWPTAC)

WESS31 VHHH 280600

BSCSTAC COMMUNICATION TEST

ISSUED BY BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (HONG KONG)

ISSUED AT 0600Z 28 NOV 2025

THIS IS A TEST BULLETIN.

THIS IS A TEST TO VERIFY COMMUNICATION LINKS AND DETERMINE TRANSMISSION TIMES INVOLVED IN THE DISSEMINATION OF OPERATIONAL TSUNAMI ADVISORY PRODUCTS FROM THE BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER TO DESIGNATED 24-HOUR TSUNAMI WARNING FOCAL POINTS OF THE SOUTH CHINA SEA TSUNAMI WARNING AND MITIGATION SYSTEM.

RECIPIENTS ARE REQUESTED TO RESPOND TO THE BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (HONG KONG).

PLEASE RESPOND BY EMAIL TO INFO-BSCSTAC@HKO.GOV.HK.

THANK YOU FOR YOUR PARTICIPATION IN THIS COMMUNICATION TEST.

NNNN



香港天文台
HONG KONG OBSERVATORY

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