

Backup South China Sea Tsunami Advisory Center (BSCSTAC)

Johnny K. C. Cheung



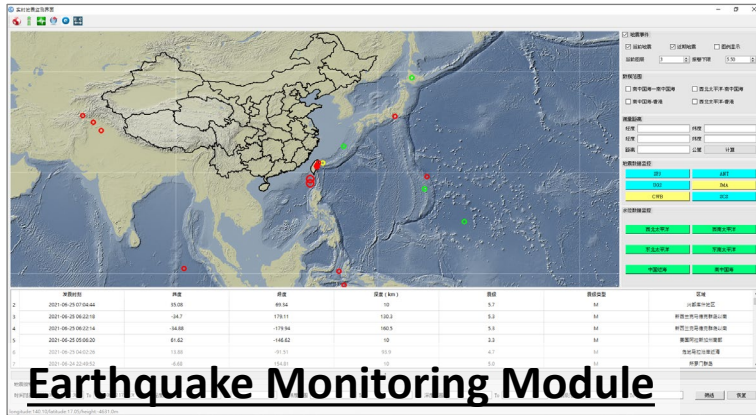
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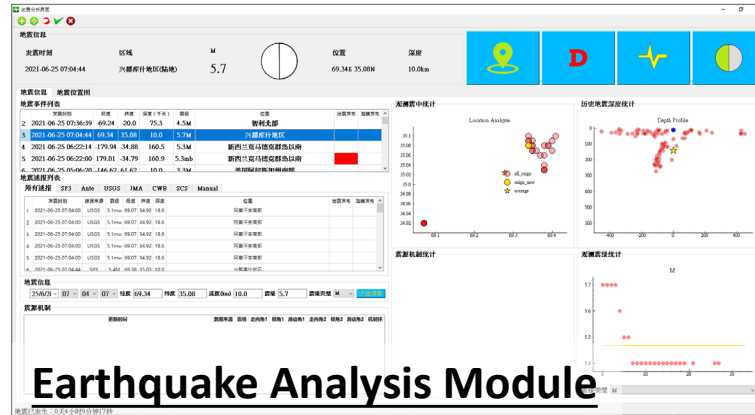
Background

- ICG/PTWS Regional Working Group on Tsunami Warning and Mitigation System in the South China Sea Region (Meeting on 27-28 August 2020)
 - Working with Hong Kong Observatory (HKO) to build backup capability
- The backup SCSTAC (BSCSTAC) will be operated at Central Forecasting Centre (CFO) at HKO Headquarters – manned round the clock by Duty Officers; also responsible for global earthquake monitoring and local tsunami warning
- Scheduled activation of BSCSTAC during the cool season every year

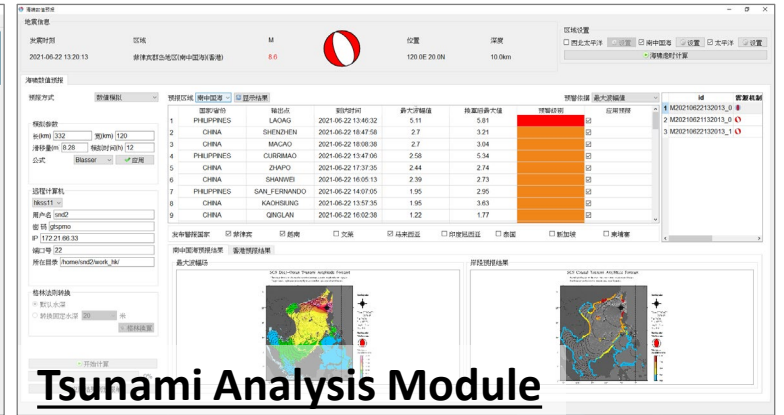
BSCSTAC Decision Support System



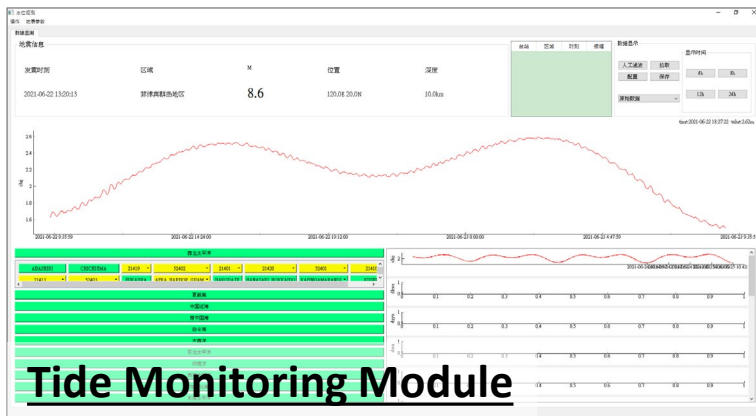
Earthquake Monitoring Module



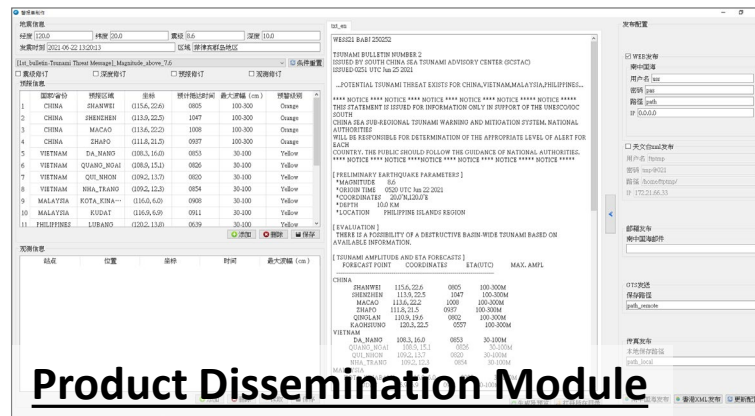
Earthquake Analysis Module



Tsunami Analysis Module



Tide Monitoring Module



Product Dissemination Module

- Adapted from SCSTAC
- Full graphical UI
- Real time seismic and water-level monitoring
- GPU-accelerated COMCOT
- Auto preparation and dissemination of products

BSCSTAC Product Dissemination Channels

Approach	Services
GTS	Text Message Heading: WESS31 VHHH Name of Bulletin: Backup South China Sea Tsunami Advisory Center's Tsunami Advisory Bulletins
Website	Text Message for public and Graphical products for authorised users (provided via backup website hosted by HKO)
Facsimile	Text Message for NTWCs and TWFPs
Email	Text and Graphical products for NTWCs and TWFPs

BSCSTAC Website

Domain name: bscstac.hko.gov.hk (hosted by HKO, domain name to be confirmed)



香港天文台
HONG KONG OBSERVATORY

Backup South China Sea Tsunami Advisory Center (Hong Kong)

2021-08-17 01:44:24 (UTC) [NTWC Login / Register](#)

[RSS](#)

- Home
- Recent Events
- Tsunami Service
- Latest News
- Tsunami Education
- SCSTAC
- FAQ
- LINK
- Historical Events

No Current Tsunami Information or Threat in Effect within the SCS Region !

Latest Event Details



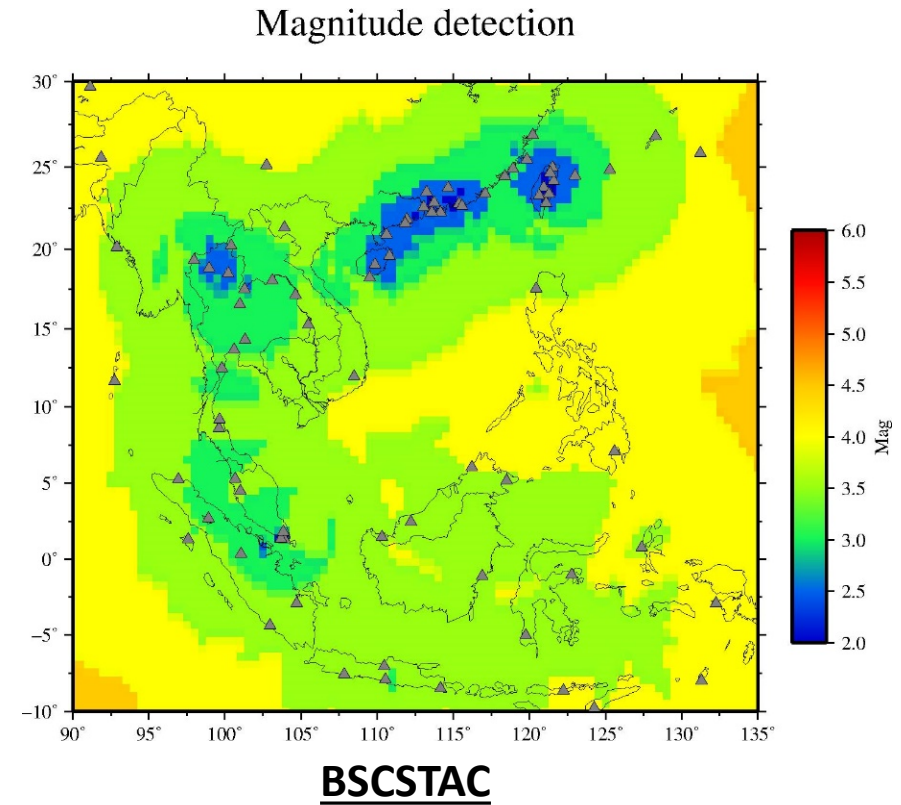
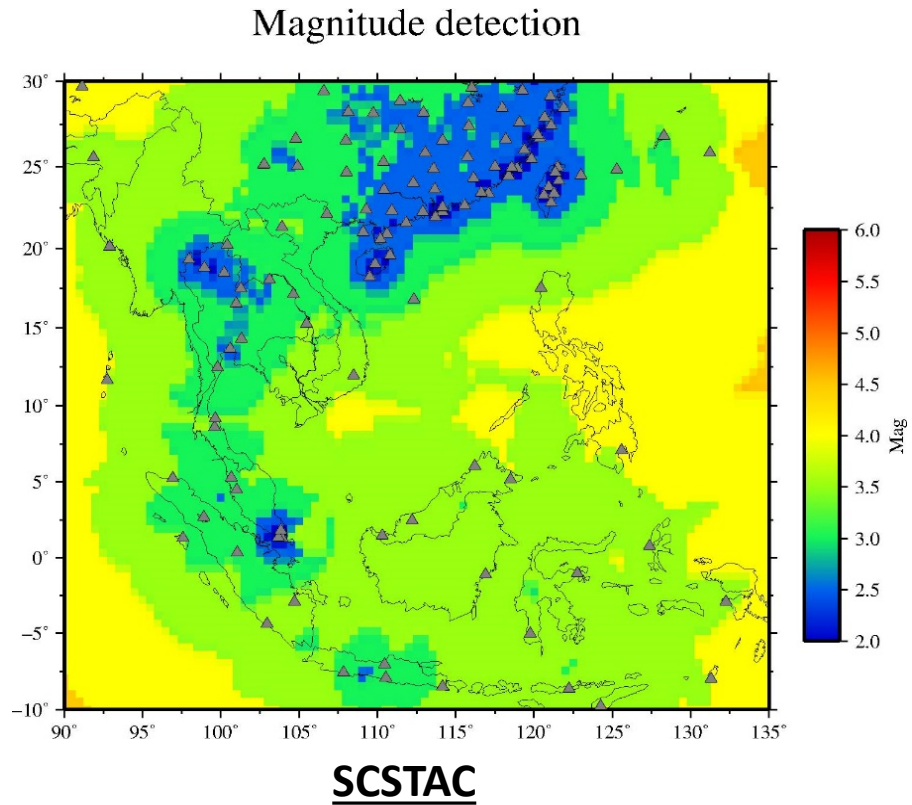
Tsunami Threat

Earthquake: **Magnitude: 7.7** **Depth: 15.0KM**
Origin Time: 2021-07-21 01:00:00(UTC) **Lat: 15.33°N Lon:119.68°E**
Location: LUZON, PHILIPPINES [Detail...](#)

Events List

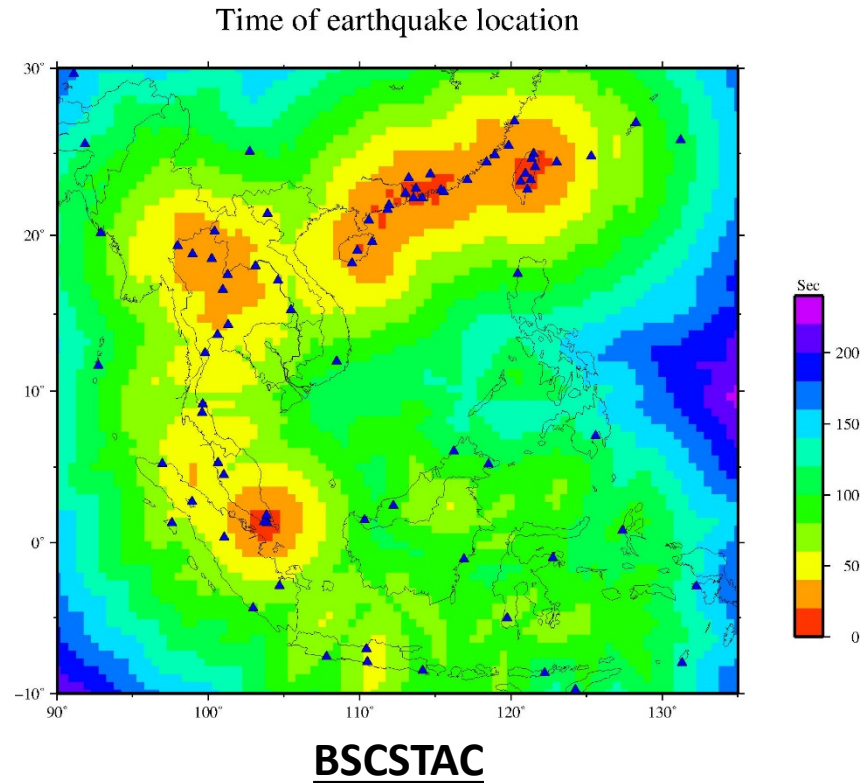
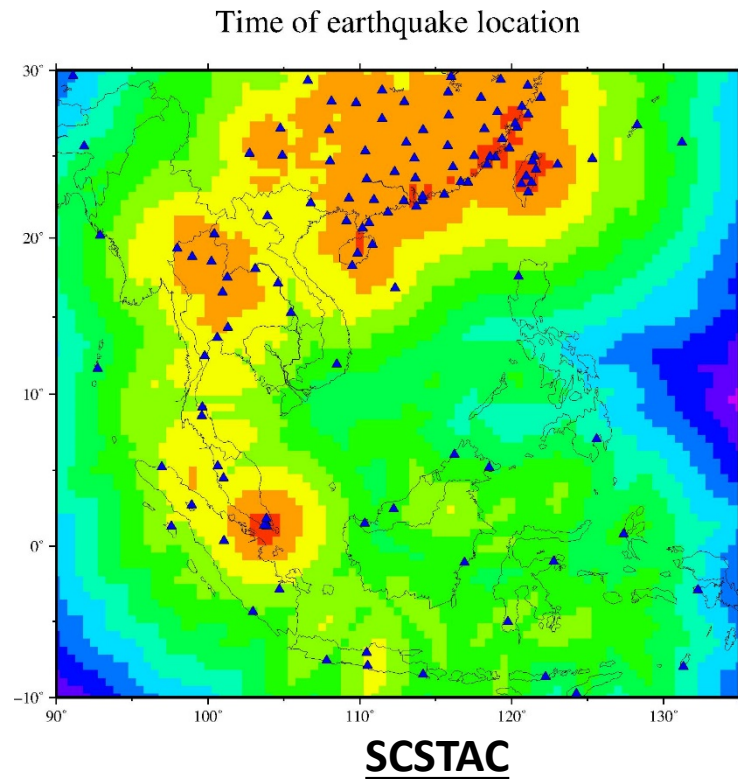
No	Mag	Origin (UTC)	Depth (km)	Lon (°)	Lat (°)	Location	Message
1	7.7	2021-07-21 01:00:00	15.0	119.68°E	15.33°N	LUZON, PHILIPPINES	Detail..
2	6.7	2021-07-21 00:00:00	15.0	119.68°E	15.23°N	LUZON, PHILIPPINES	Detail..
3	6.1	2021-07-10 00:43:00	70.0	126.78°E	3.19°N	TALAUD ISLANDS, INDONESIA	Detail..
4	6.2	2021-06-03 10:09:00	15.0	126.33°E	0.40°N	NORTHERN MOLUCCA SEA	Detail..
5	6.1	2021-04-18 14:14:00	5.0	121.57°E	23.80°N	TAIWAN REGION	Detail..
6	6.2	2021-04-10 09:30:00	314.0	124.77°E	4.19°N	TALAUD ISLANDS, INDONESIA	Detail..
7	6.0	2021-02-07 04:22:00	20.0	125.26°E	6.84°N	MINDANAO, PHILIPPINES	Detail..
8	6.5	2020-12-24 23:43:00	90.0	120.52°E	13.92°N	LUZON, PHILIPPINES	Detail..
9	6.4	2020-12-15 23:22:00	15.0	125.51°E	5.28°N	MINDANAO, PHILIPPINES	Detail..
10	6.4	2020-09-06 15:23:00	98.2	125.97°E	6.36°N	MINDANAO, PHILIPPINES	Detail..

BSCSTAC Capability Building



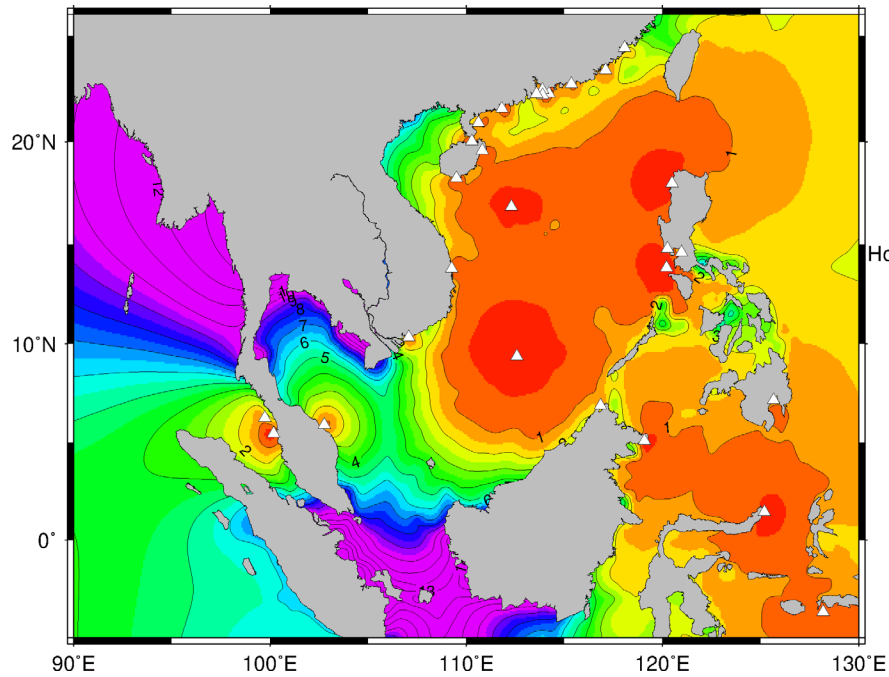
- Similar magnitude detection capability in South China Sea

BSCSTAC Capability Building

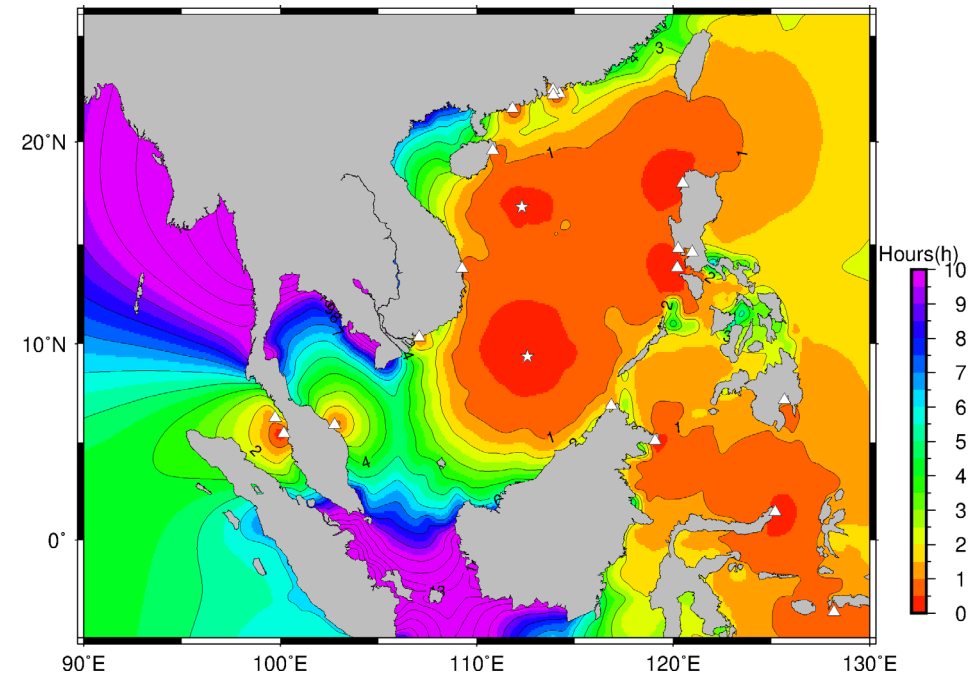


- Similar earthquake location capability in South China Sea
- Detection time within ~ 100s

BSCSTAC Capability Building



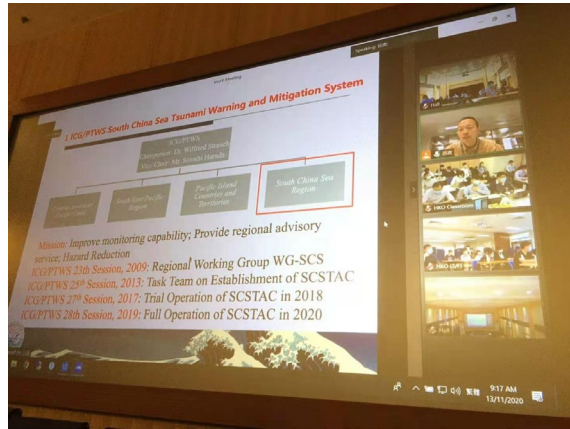
SCSTAC



BSCSTAC

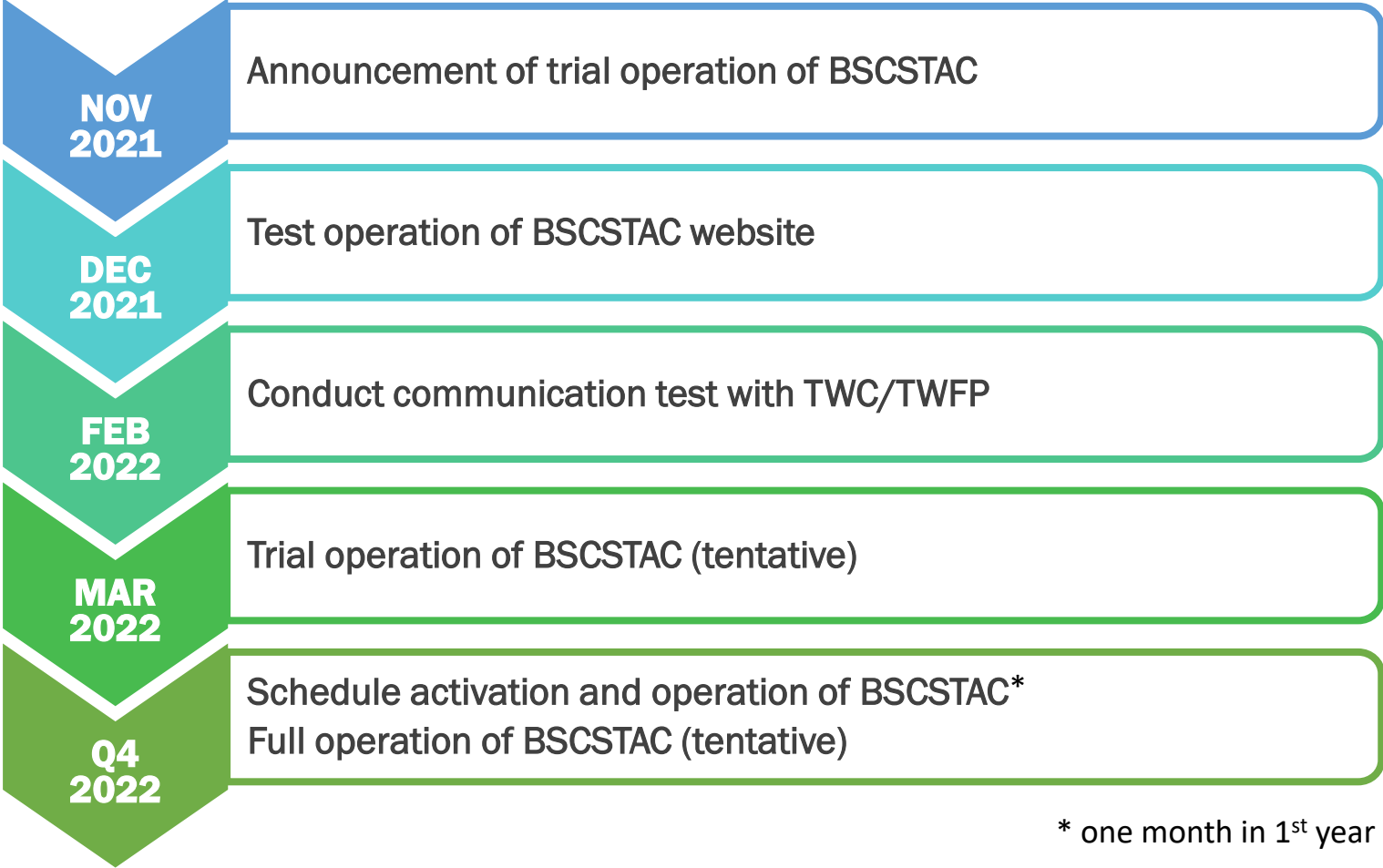
- Similar tsunami detecting capability in South China Sea

BSCSTAC Capability Building



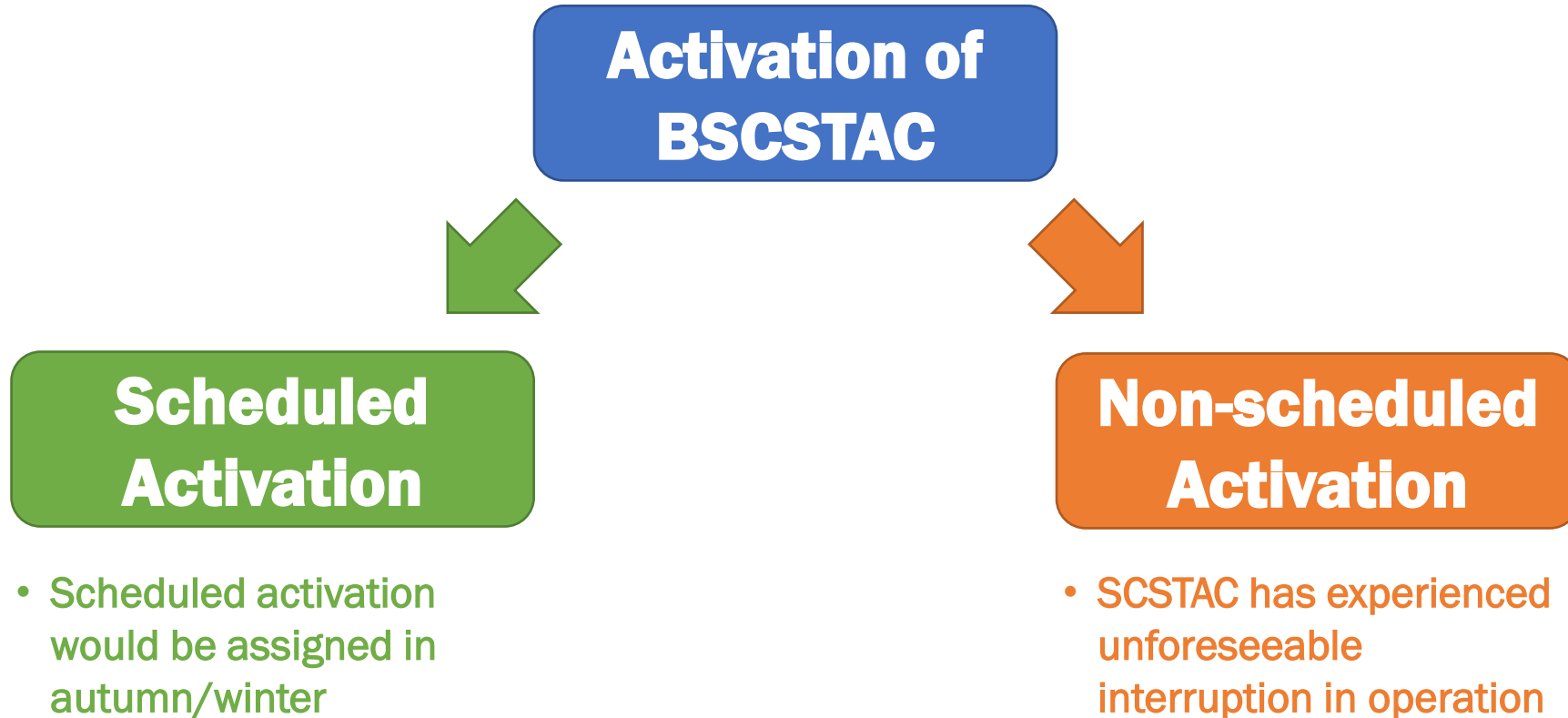
- 2 days' remote training conducted by SCSTAC in Nov 2020 to strengthen HKO's capability on earthquake monitoring and tsunami warning

Tentative Implementation Programme



* one month in 1st year

Activation Message



Activation Message (Scheduled Activation)

Issue one week before scheduled activation via email:

ISSUED BY SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC)
ISSUED AT HHMM UTC MM DD YYYY



THIS STATEMENT IS ISSUED TO INFORM THAT THE SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC) WILL BE SHUTTING DOWN TEMPORARILY BEWTEEN HHMM UTC MM DD YYYY AND HHMM UTC MM DD YYYY DUE TO (REASON) .

THE BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (BSCSTAC) IN HONG KONG WILL BE PROVIDING SERVICES. TSUNAMI BULLETIN WITHIN THE MENTIONED PERIOD WILL BE ISSUED BY BSCSTAC. MORE DETAILED TSUNAMI INFORMATION CAN BE FOUND AT WEBSITE WWW.BSCSTAC.HKO.GOV.HK.

IN CASE OF ANY QUESTION, PLEASE CONTACT BSCSTAC. (TEL: +852 XXXXXXXX; EMAIL: XXXXXX@HKO.GOV.HK)

Activation Message (Scheduled Activation)

Issue upon the activation of BSCSTAC under scheduled activation via email, fax, and GTS:

ISSUED BY BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (BSCSTAC) 
ISSUED AT HHMM UTC MM DD YYYY

THIS STATEMENT IS ISSUED FOR THE NOTIFICATION OF ACTIVATION OF THE BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (BSCSTAC) STARTING FROM NOW UNTIL HHMM UTC MM DD YYYY.

TSUNAMI BULLETIN WITHIN THE MENTIONED TIME WILL BE ISSUED BY BSCSTAC. MORE DETAILED TSUNAMI INFORMATION CAN BE FOUND AT WEBSITE WWW.BSCSTAC.HKO.GOV.HK.

IN CASE OF ANY QUESTION, PLEASE CONTACT BSCSTAC. (TEL: +852 XXXXXXXX; EMAIL: XXXXXX@HKO.GOV.HK)

Activation Message (Non-scheduled Activation)

Issue upon the activation of BSCSTAC under non-scheduled activation via email, fax, and GTS:

ISSUED BY BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (BSCSTAC) 

ISSUED AT HHMM UTC MM DD YYYY

THIS STATEMENT IS ISSUED TO INFORM THAT THE SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (SCSTAC) WILL BE SHUTTING DOWN TEMPORARILY BEWTEEN HHMM UTC MM DD YYYY AND HHMM UTC MM DD YYYY DUE TO (REASON) .

THE BACKUP SOUTH CHINA SEA TSUNAMI ADVISORY CENTER (BSCSTAC) IN HONG KONG WILL BE PROVIDING SERVICES. TSUNAMI BULLETIN WITHIN THE MENTIONED PERIOD WILL BE ISSUED BY BSCSTAC. MORE DETAILED TSUNAMI INFORMATION CAN BE FOUND AT WEBSITE WWW.BSCSTAC.HKO.GOV.HK.

IN CASE OF ANY QUESTION, PLEASE CONTACT BSCSTAC. (TEL: +852 XXXXXXXX; EMAIL: XXXXXX@HKO.GOV.HK)

Decisions, Recommendations & Actions
Trial and Full Operation of
Backup South China Sea Tsunami Advisory Center (Hong Kong)

1. Commence **trial operation** of BSCSTAC (Hong Kong) in the **first quarter of 2022**, with specific date to be decided by SCSTAC and announced by the IOC Secretariat to WG-SCS Member States through Circular Letter
2. BSCSTAC (Hong Kong) to conduct a **communication test** with WG-SCS Member States at least **one month before commencement of trial operation**, with specific date to be decided by SCSTAC and announced by the IOC Secretariat to WG-SCS Member States through Circular Letter at least 30 days in advance
3. Commence **full operation** of BSCSTAC (Hong Kong) **upon satisfactory performance** in the trial operation period, with specific date to be decided by SCSTAC and announced by the IOC Secretariat to WG-SCS Member States through Circular Letter

Questions?