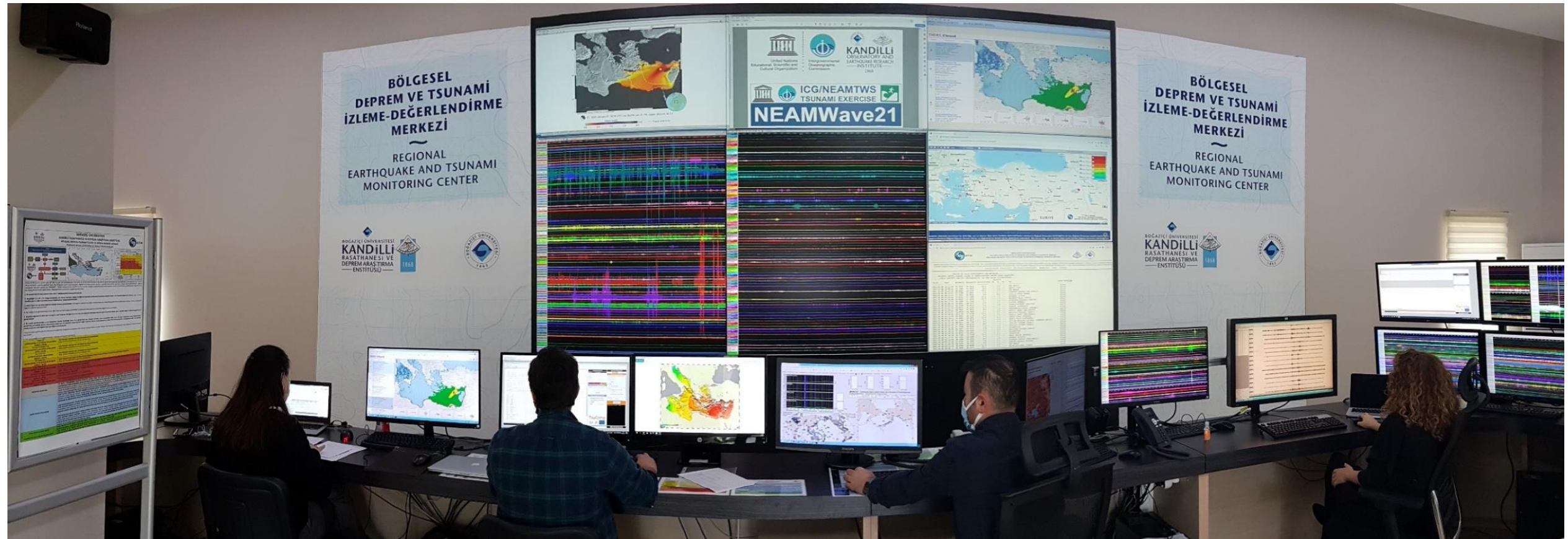


KOERI NTWC and TSP

NEAMTWS Experts Meeting Implementing NEAMTWS 2030 Strategy Opportunities and Actions
28-30 November 2022



10th Anniversary of KOERI & WTAD ACTIVITIES:

4th November 2022 - Tsunami Drill
@Büyükçekmece (CoastWAVE Pilot
District)

Tsunami Exercise Evaluation Meeting


5th November 2022 - Workshop

KOERI

Gebze Technical University,

Middle East Technical University

T.C.
BOGAZICI UNIVERSITY
KANDILLI OBSERVATORY AND EARTHQUAKE RESEARCH INSTITUTE



KANDILLI
OBSERVATORY AND
EARTHQUAKE RESEARCH
INSTITUTE
1868

REPORT OF NOVEMBER 4, 2022 TSUNAMI EXERCISE IN ISTANBUL
in the frame of

NOVEMBER 5 WORLD TSUNAMI AWARENESS DAY
AND
10TH ANNIVERSARY OF KOERI REGIONAL EARTHQUAKE AND TSUNAMI
MONITORING CENTER

Prepared by
*Musavver Didem Cambaz⁽¹⁾, Fatih Turhan⁽¹⁾, Ceren Özer Sözdinler⁽²⁾,
Ahmet Cevdet Yalçınler⁽³⁾, Doğan Kalafat⁽¹⁾, Haluk Özener⁽¹⁾*

(1) Bogazici University Kandilli Observatory and Earthquake Research Institute
(2) Gebze Technical University Department of Civil Engineering
(3) Middle East Technical University Department of Civil Engineering Ocean Engineering
Research Center

EVENT INFORMATION

This tsunami exercise aims to implement and evaluate tsunami hazard in the Marmara Sea by playing an earthquake scenario lying offshore Prince Islands. The parameters used for the earthquake scenario (referring to Latcharote et al. 2016) are given in Table1.

Table 1: The fault parameters of earthquake scenario used in the tsunami exercise
(Latcharote et al. 2016)

Lat	Lon	Depth	Mw	Strike	Dip	Rake	Slip (m)	Length (km)	Width (km)
40.80 N	29.07 E	10 km	7.2	117	67	-120	4.3	40	15

SUMMARY OF KOERI TSUNAMI EXERCISE MESSAGES

TITLE	CONTENT	TIME
TSUNAMI EXERCISE MESSAGE NUMBER 001	1. Earthquake Parameters (M7.2) 2. Wave Arrival Times at FP 3. Level of Alert at FP	T0 + 07'
TSUNAMI EXERCISE MESSAGE NUMBER 002	1. Earthquake Parameters 2. First validated Wave Arrival (TG verification) SL readings at t09 YALOVA (0.43m), t16 TUZLA (0.79m),	T0 + 20'
TSUNAMI EXERCISE MESSAGE NUMBER 003	1. Earthquake Parameters 2. Second validated Wave Arrival (TG verification) SL readings at t34 BCEKM (0.74m), Updated SL reading at TUZLA (1.23m)	T0 + 40'
TSUNAMI EXERCISE MESSAGE NUMBER 004	1. Earthquake Parameters 2. Third validated Wave Arrival (TG verification) SL readings at t72 TEKIRDAG M.EREGLI (0.14m), t86 ASYAP (0.13m)	T0 + 95'
TSUNAMI EXERCISE MESSAGE NUMBER 005	1. Earthquake Parameters 2. Fourth validated Wave Arrival (TG verification) SL readings at t131 BALIKESIR ERDEK (0.25m), Updated SL reading at ASYAP (0.21m)	T0 + 135'
TSUNAMI EXERCISE MESSAGE NUMBER 006	1. Earthquake Parameters 2. Fifth validated Wave Arrival – Arrival of maximum values (TG verification) Updated SL reading at BCEKM (1.04m)	T0 + 160'
TSUNAMI EXERCISE MESSAGE NUMBER 007	1. End of Tsunami Alert	T0 + 180'

10th Anniversary of KOERI & WTAD ACTIVITIES:

4th November 2022 - Tsunami Drill Exercise

@Büyükkemece (Coastwave Pilot District)

First Tsunami Evacuation in Türkiye.

Coordinated by KOERI, with the collaboration and contribution of GTU & METU (earthquake scenario), AFAD (CPA), Istanbul Metropolitan Municipality (evacuation).



10th Anniversary of KOERI & WTAD ACTIVITIES: 5th November 2022

Tsunami Drill - Evaluation Meeting

CoastWAVE Project Pilot District: Büyükçekmece

KOERI, AFAD

Istanbul Metropolitan Municipality

Gebze Technical University,

Middle East Technical University,

Istanbul Provincial Police Department,

Istanbul Gendarmerie Commander,

... , almost 15 institutes/agencies

contributed to the tsunami drill

& evaluation meeting.



10th Anniversary of KOERI & WTAD ACTIVITIES: 5th November 2022

Tsunami Early Warning & Risk Mitigation - Workshop

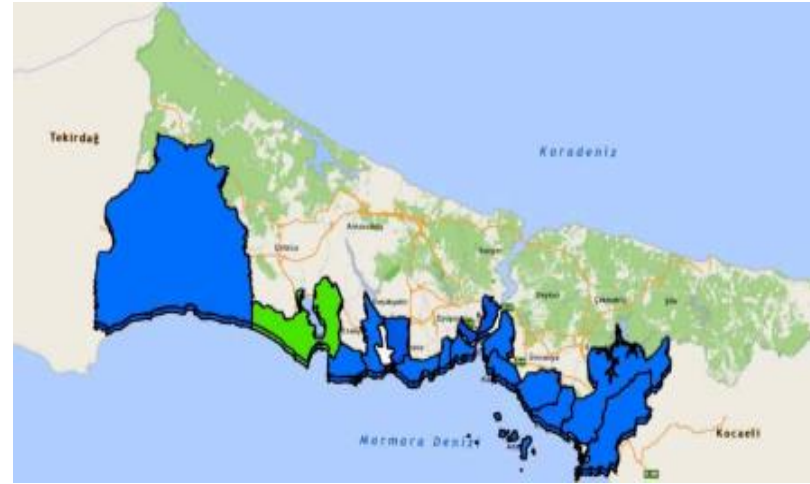
**KOERI
UNESCO/IOC
EC-JRC,
IMM, AFAD,
Middle East Technical University
Gebze Technical University
Yıldız Technical University
General Directorate of Mapping
Office of Navigational Hydrography and Oceanography**





Tsunami Information Board and Tsunami Evacuation Route signage in Istanbul:

130/130 information board,
437/640 signage installed by
Istanbul Metropolitan Municipality, IMM



Operations (Disseminated Messages)

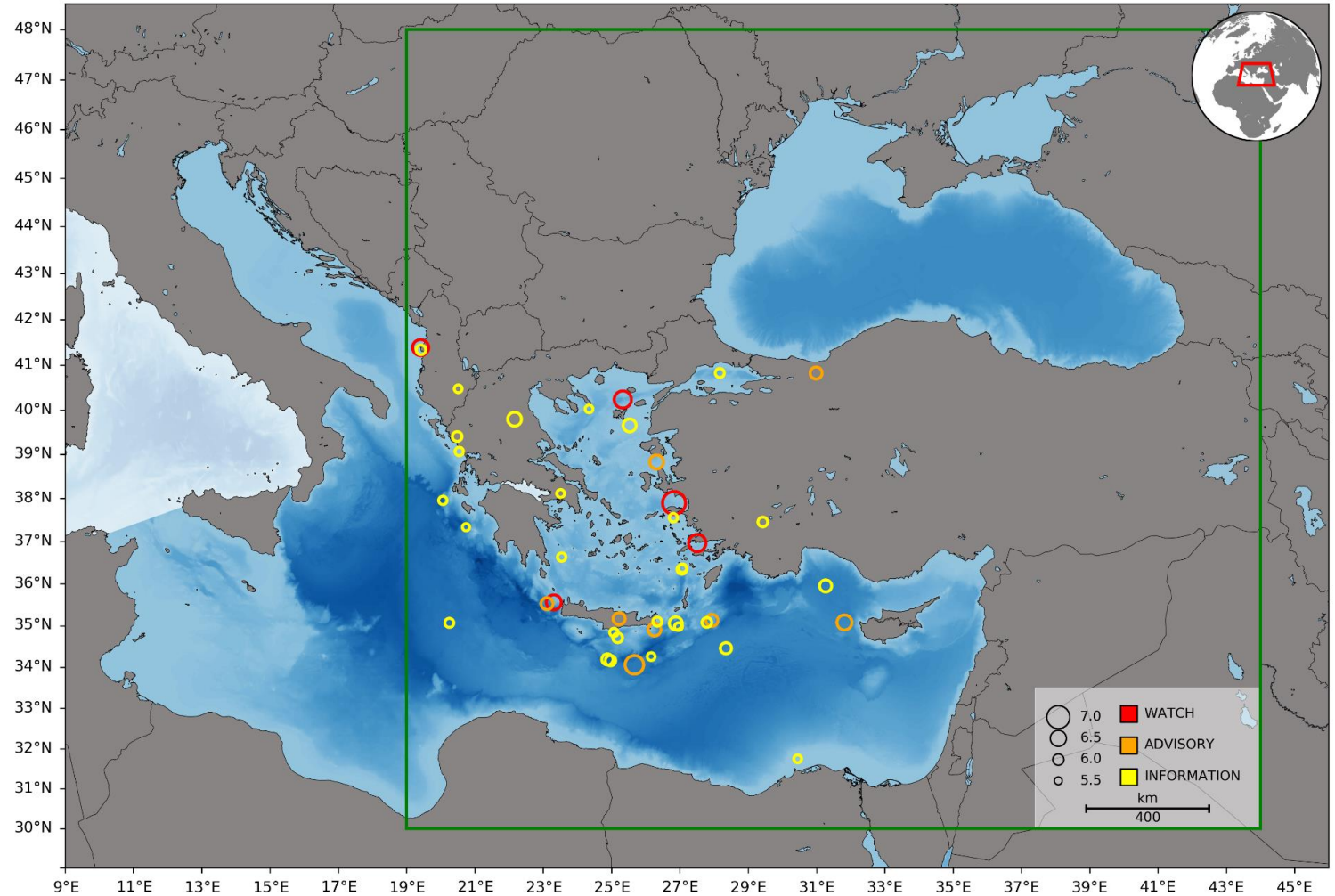
42 Alert Messages since 2012

5 Watch, 8 Advisory , 29 Information

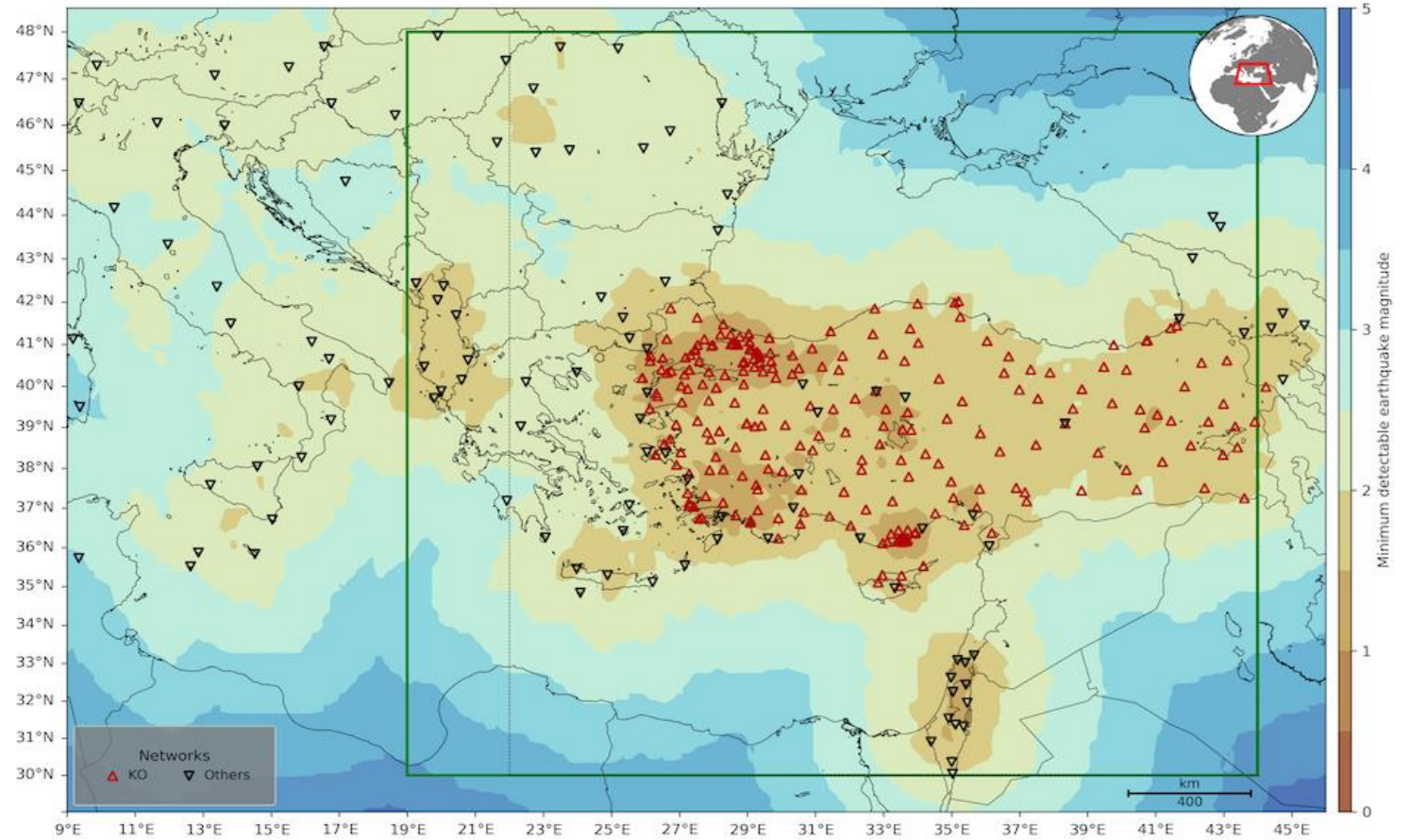
8 Messages in 2021,

6 Messages in 2022

(including 23.11.2022 Düzce Earthquake)

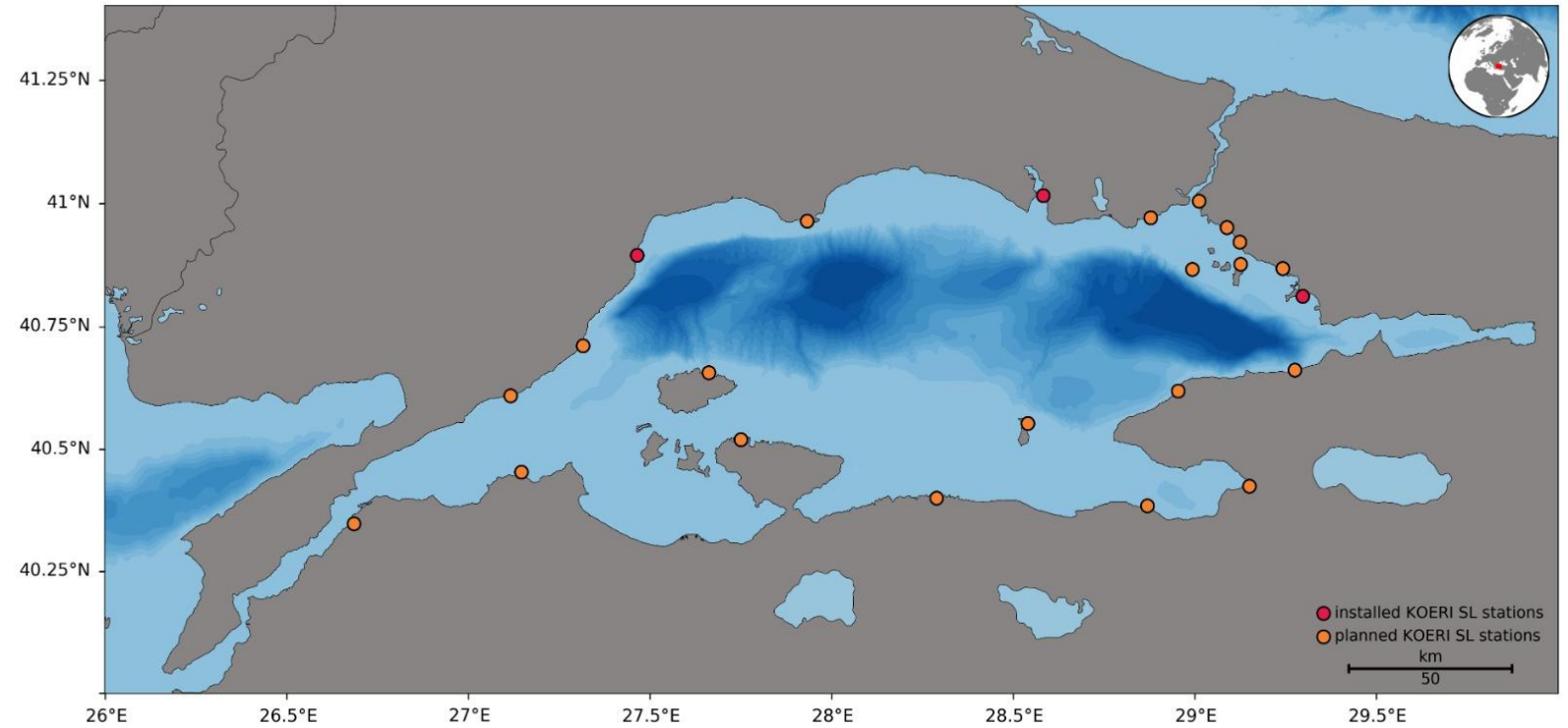


260 Seismic Sensors (BB, SM, SP)
Including (22 co-located vel & acc)



27 Sea Level Stations (Türkiye)

20 planned new sea level stations
(Marmara Sea)



Thank you for your attention!