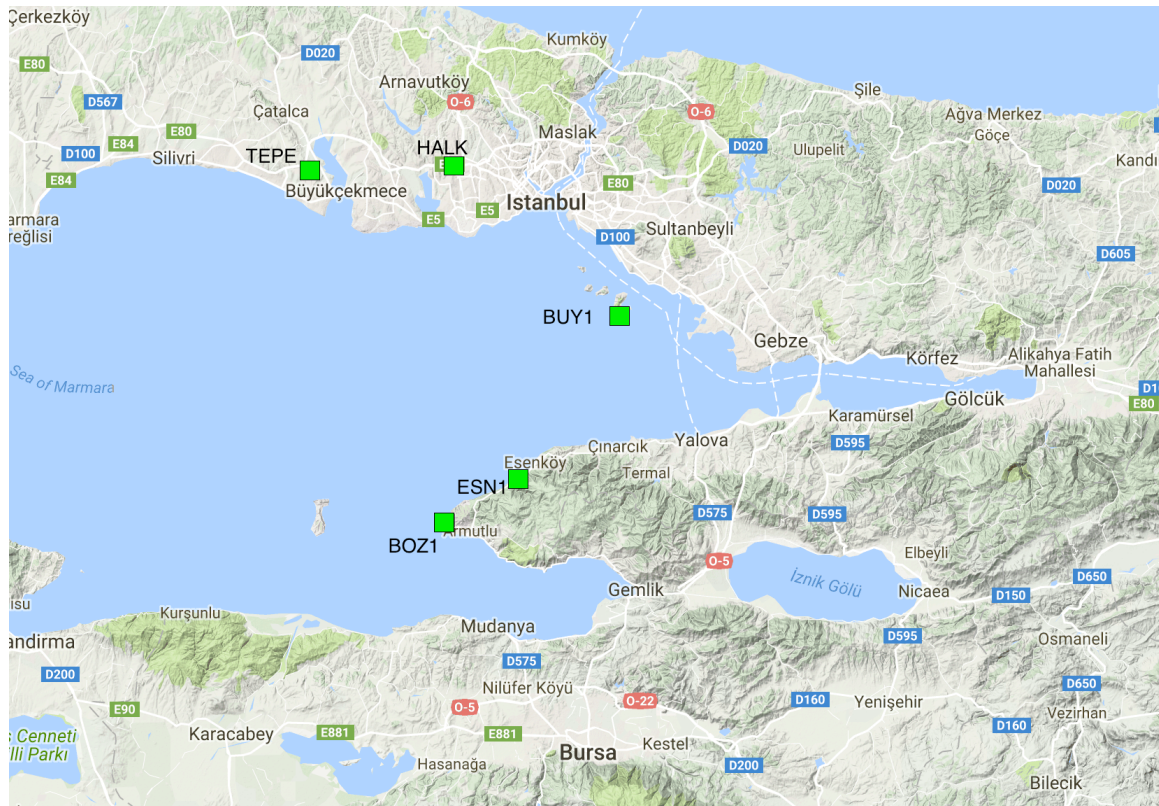


## Station Notes for ESN1, marmaesn1btr2015

Latitude:	40.5963 N(WGS 84)
Longitude:	28.9223 W (WGS 84)
Elevation:	2 m
Install Depth: <sup>1</sup>	62.5 m
Orientations: <sup>2</sup>	CH0=243, CH1=183, CH2=123, CH3=93
Install Date:	2015 October 5th
GTSM Technologies #:	US91
Executive Process Software:	Version 1.14
Logger Software:	Version 2.01.0
Home Page:	<a href="http://www.unavco.org/instrumentation/networks/status/pbo/overview/ESN1">http://www.unavco.org/instrumentation/networks/status/pbo/overview/ESN1</a>
Notes Last Updated:	November 27, 2016

<sup>1</sup>Install depth is from the top of the casing to the bottom of the strainmeter.

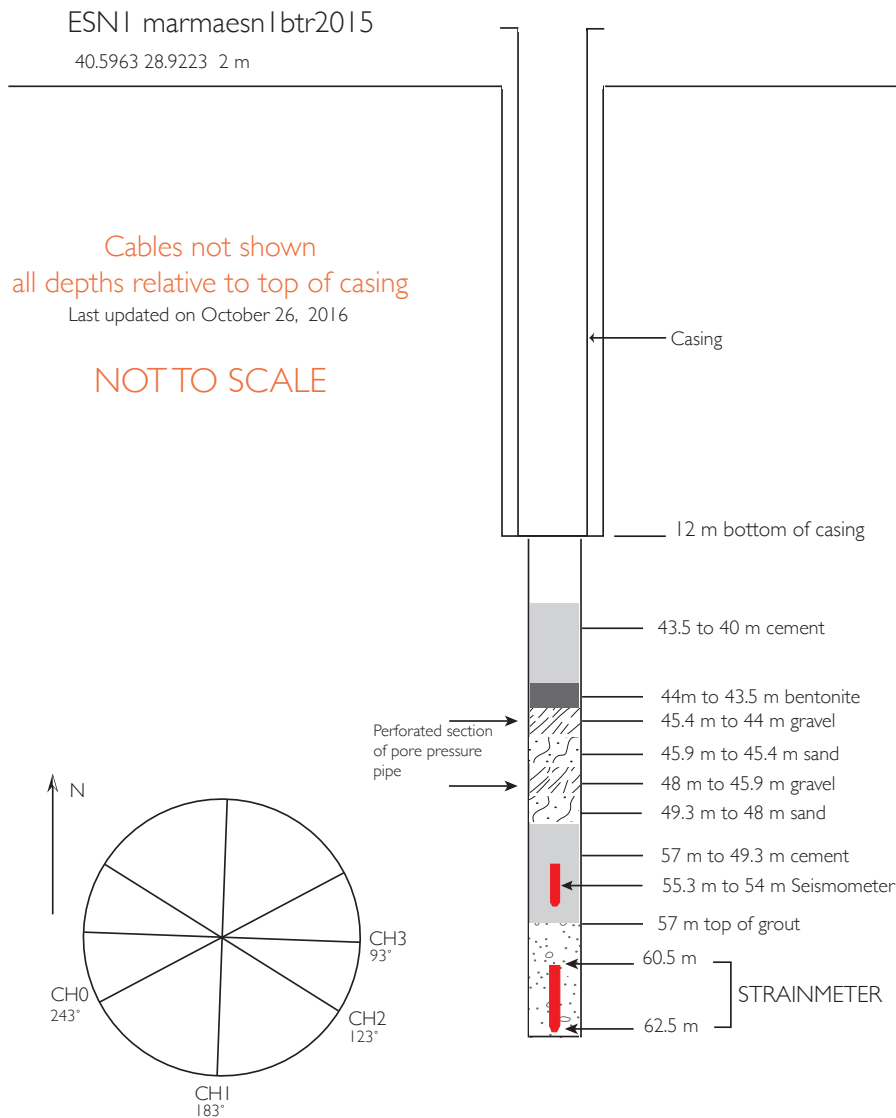
<sup>2</sup>Orientations are in degrees East of North.



Location of ESN1

### Instrumentation at Strainmeter

Instrument	Units	Bottle/ASCII Scale Factor	SEED Scale Factor
Pore Pressure	Hecto Pascals		
GTSM Barometer	Kilopascals	1.0	0.0001
Rain Gauge	Millimeters/hour	1.0	0.252
Down hole Temperature Sensor	Degrees Celsius	1.0	0.0001
Logger Temperature Sensor	Degrees Celsius	1.0	0.0001
Setra Barometer	Hecto Pascals	None Installed	



## **1. Installation notes**

GTSM US91 was installed at 62.5 m (205 ft) at 13:00 UTC on October 5, 2015, with help from GM drillers as well as Digidem and Kubra from GFZ. Station name is ESN1.

Install details.

Borehole prep:

Measured hole at 64.1 m with dump bailer. Target zone was 63 m to 50 m. Drillers added gravel to bring hole up to 62.9 m. Still get good trip with dump bailer.

Grout:

Mixed 8 buckets MF1206 with 52 L drinking water. 1.72 gal/ba. Batch number 2D5049416

Mixed for 10 minutes after last water added, almost no clumping.

T=0 stop mixing

Install:

Strainmeter was running during installation

T=8 min Deliver grout to bottom

T=12 min US91 instrument was lowered by hand

T=19 min Bottom 0.5m earlier than expected, tie off there.

T=27 min Strainmeter responding normally, call install a success.

Compass:

X: 1.368 - 2.586 range. 2.359 actual

Y: 1.264 - 2.787 range. 1.720 actual

Actual numbers are from about an hour after install, will check again today and update if they changed at all.

## **2. General Information**

- This station is part of the GONAF network in Turkey.

## **3. Strainmeter Maintenance**

- September 9, 2016 – Wade Johnson visited the site to install a new battery charger and run the bird dog on the seismometer.