

Station Description Sheet **BUTO**

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2. Geographical Information / Geomorphology
3. Geological Information
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1. GENERAL INFORMATION



Photo 1: Outside view of the hosting building

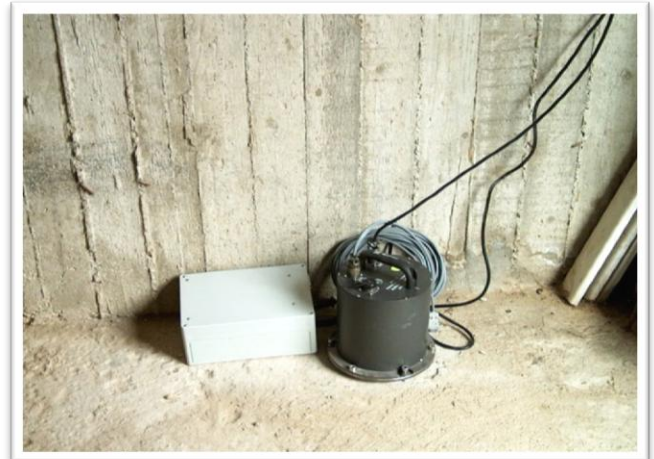


Photo 2: Inside of the BUT0 station

Station Code: BUT0

Network: Euroseis

Instrumentation: Check the up-to-date EUROSEISTEST stations history file at <http://euroseisdb.civil.auth.gr/stations>

Power supply: AC

Housing: in the basement of a 2-storey house in Stivos village

2. GEOGRAPHICAL INFORMATION / GEOMORPHOLOGY



Figure 1: Location map of BUT0 station

Location: in the Mygdonian basin, in Stivos village

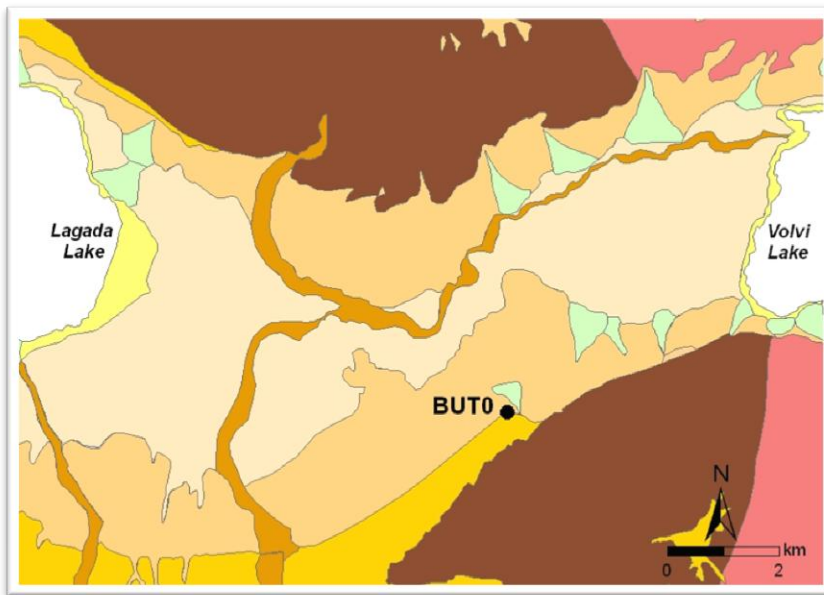
Elevation (from sea level): 118 m

Station coordinates: 23.299805⁰E / 40.652342⁰N

Projection system: WGS84

Site morphology: Valley edge (south edge)

3. GEOLOGICAL INFORMATION



Legend

- Holocene**
 - Lacustrine sediments
 - River deposits/torrent beds
 - Valley deposits
- Pleistocene**
 - Lacustrine sediments
 - Terrestrial (river and flood) red beds
- Quaternary**
 - Alluvial fans
- Alpine formations**
 - Two-mica and biotite granite
 - Two-mica gneiss

Figure 2: Geological map of the central Mygdonian basin

Surface geology (from geological map): on Pleistocene terrestrial (river and flood) red beds

Reference for geological map: Geological map of Greece - Scale 1:50000, Map Sheets of "Thermi" and "Zagliverion", (IGME, 1978)

Boreholes (with core description) in the proximity of the station: not known

4. GEOTECHNICAL SITE CHARACTERIZATION

Geotechnical site characterization data for station BUT0 include:

1. Cone penetration test (EUROSEISRISK project reports, 2002 – 2005).

Data are available in ascii format in:

http://euroseisdb.civil.auth.gr/uploads/station/geotechnical/1/Site_characterization_geotechnical_BUT0.txt

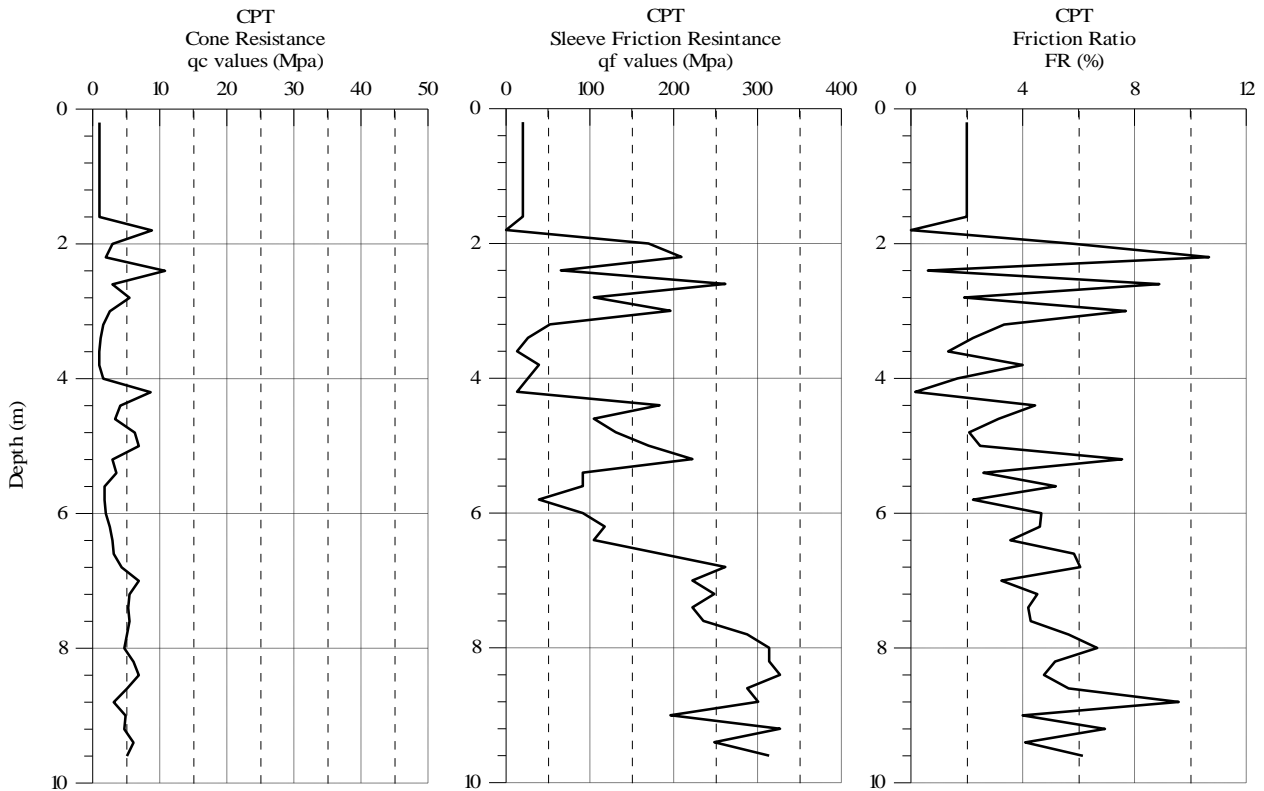


Figure 3: Geotechnical data at station BUT0

5. GEOPHYSICAL SITE CHARACTERIZATION

No data available.

6. SITE RESPONSE

Site response data for station BUT0 include:

1. Horizontal-to-vertical spectral ratios (HVSr) / applied on single station noise measurements (Raptakis et al., 2005)

Data are available in ascii format in:

http://euroseisdb.civil.auth.gr/uploads/station/response/1/Site_response_BUT0.txt

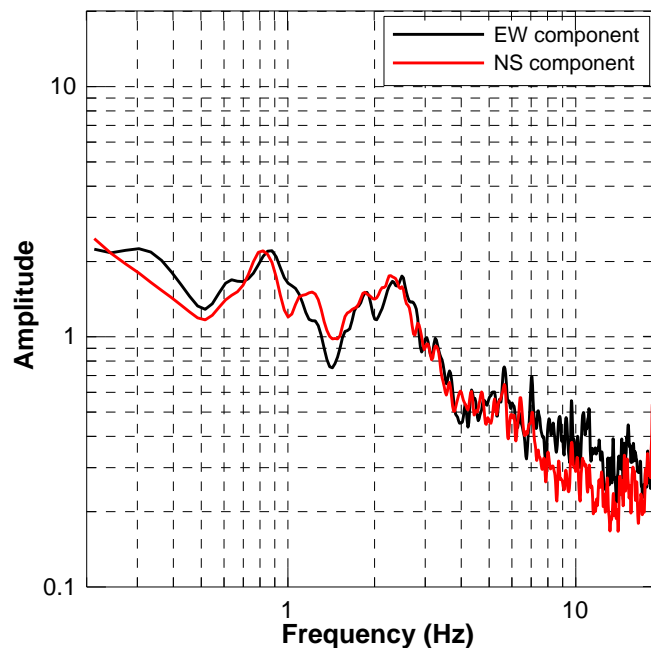


Figure 4: Horizontal-to-Vertical Spectral Ratios (HVSr) for the two horizontal components at station BUT0. Ratios are based on single station noise measurements.

7. REFERENCES

EUROSEISRISK Project Reports, 2002–2005. (*Available in PDF upon request*)

IGME (1978). Geological map of Greece - Scale 1:50.000, Map Sheets of "Thermi" and "Zagliverion".

Raptakis D., M. Manakou, F.-J. Chavez-Garcia, K. Makra and K. Pitilakis, 2005. 3D configuration of Mygdonian basin and preliminary estimate of its site response. *Soil Dynamics and Earthquake Engineering*, Vol. 25, pp. 871-887.