Station Description Sheet

W02

1. GENERAL INFORMATION

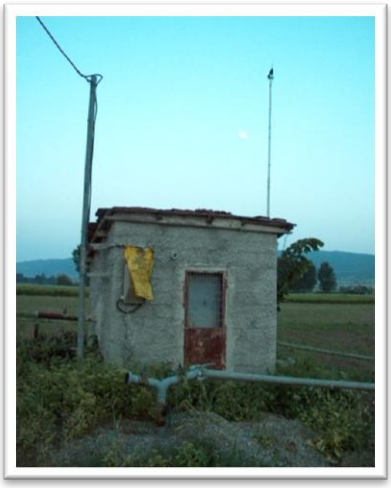

Photo 1: Outside view of the hosting shelter

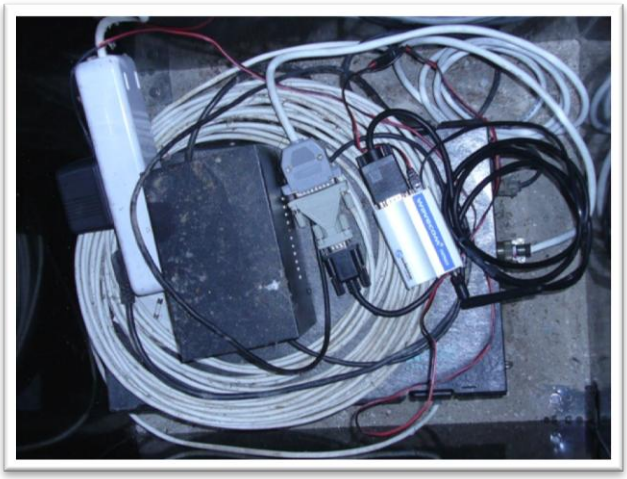

Photo 2: Inside of the W02 installation box

Station Code: W02
Network: Euroseis
Instrumentation: Check the up-to-date EUROSEISTEST stations history file at http://euroseisdb.civil.auth.gr/stations
Power supply: AC
Housing: in a water pump house in the western part of the Mygdonian basin

2. GEOGRAPHICAL INFORMATION / GEOMORPHOLOGY

Figure 1: Location map of W02 station

Location: in the Mygdonian basin
Elevation (from sea level): 69 m
Station coordinates: 23.260065^{0}E / 40.661088^{0}N
Projection system: WGS84
Site morphology: Valley center (west part of the valley)

3. GEOLOGICAL INFORMATION

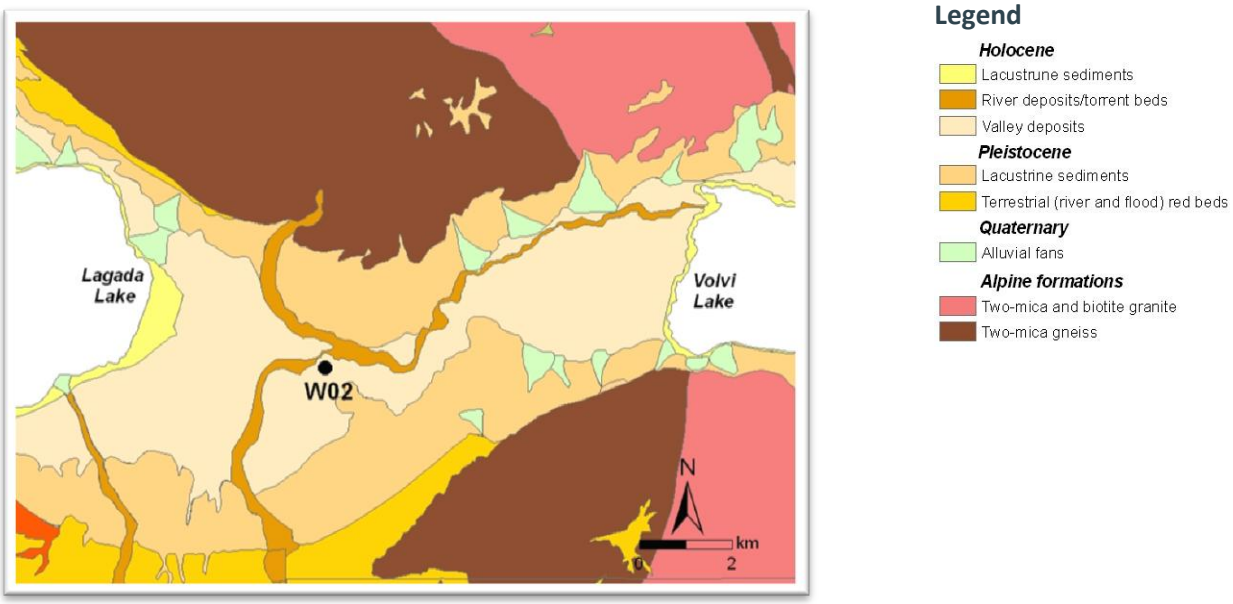

Figure 2: Geological map of the central Mygdonian basin

Surface geology (from geological map): on Holocene valley deposits
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 W02 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/25/Site_characterization_geotechnical_W02.txt

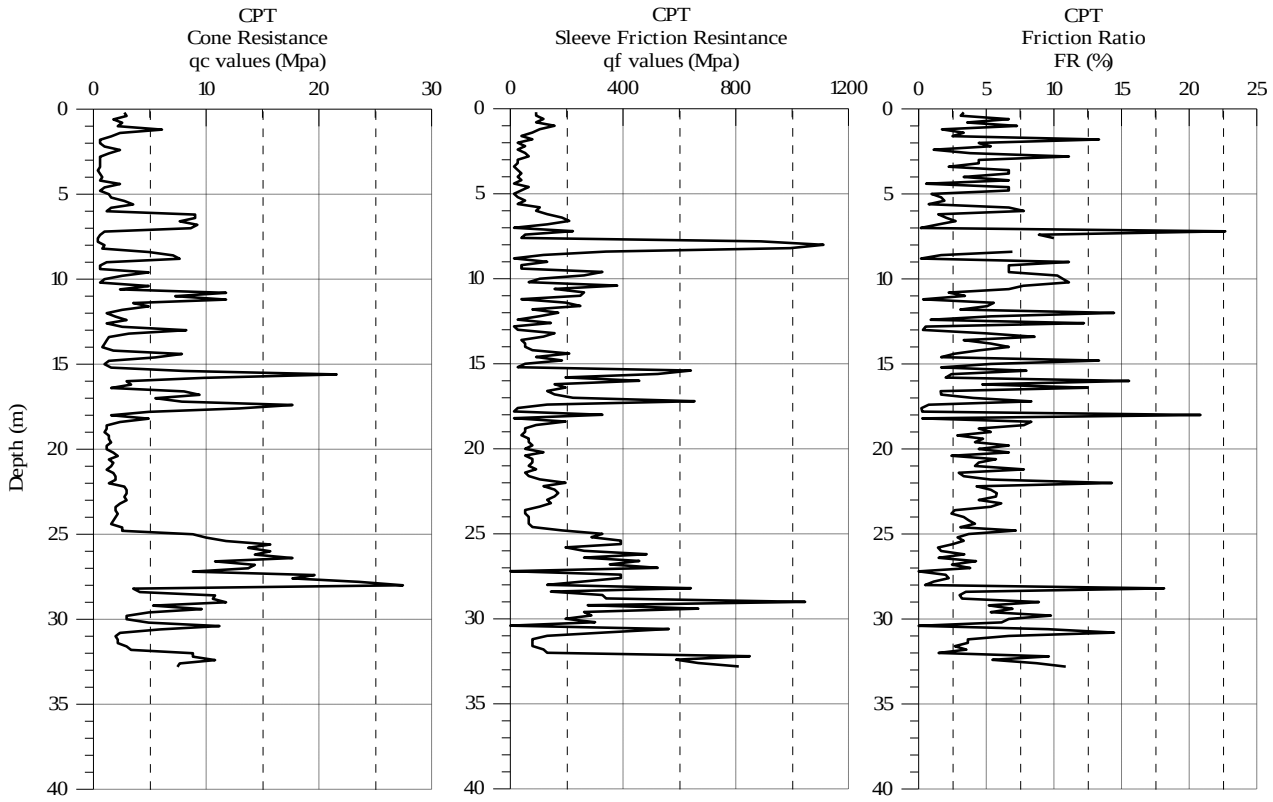

Figure 3: Geotechnical data at station W02

5. GEOPHYSICAL SITE CHARACTERIZATION

Geophysical site characterization data for station W02 include:

1. Shear wave velocity values (Vs) / determined by array SPAC microtremor measurements (Manakou et al., 2010)

Data are available in ascii format in:
http://euroseisdb.civil.auth.gr/uploads/station/geophysical/25/Site_characterization_geophysical_W02.txt

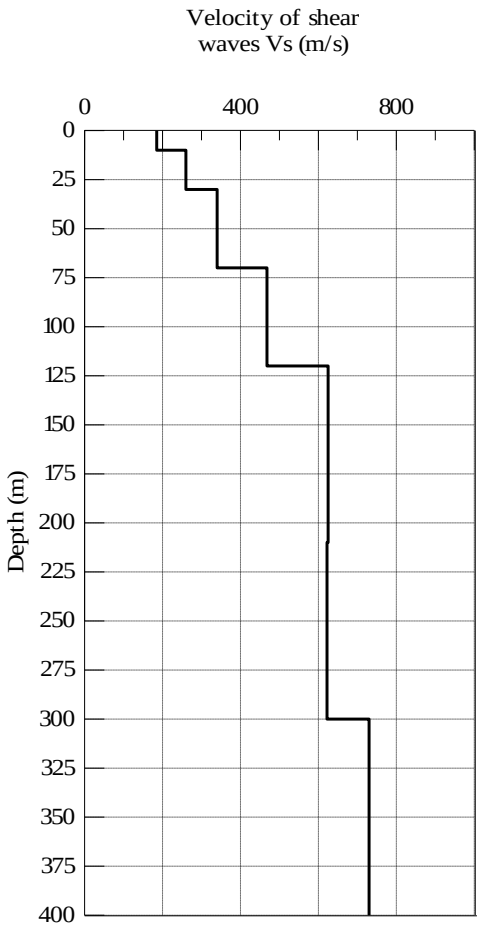

Figure 4: Shear wave velocity values at station W02

6. SITE RESPONSE

Site response data for station W02 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/25/Site_response_W02.txt

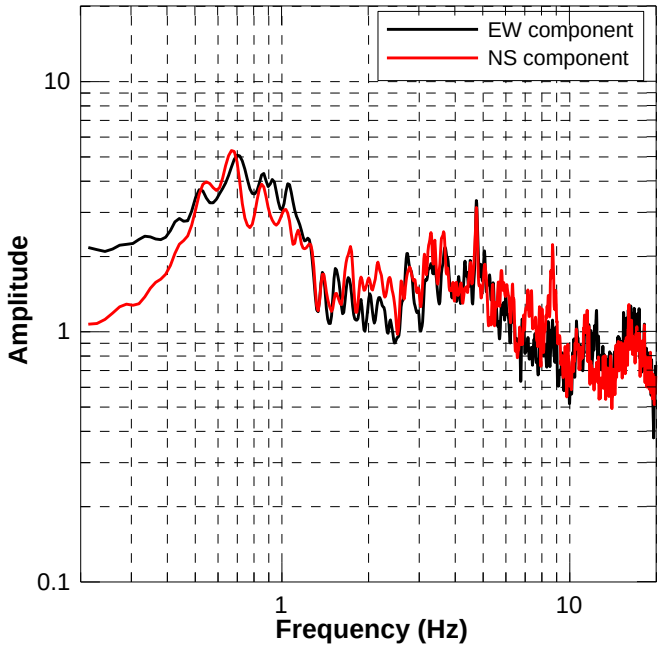

Figure 5: Horizontal-to-Vertical Spectral Ratios (HVSR) for the two horizontal components at station W02. Ratios are based on single station noise measurements

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".

Manakou M., D. Raptakis, F. J. Chavez-Garcia, P. Apostolidis and K. Pitilakis, 2010. 3D soil structure of the Mygdonian basin for site response analysis. Soil Dynamics and Earthquake Engineering, Vol. 30, pp. 1198-1211.

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.