Geophysical Research Abstracts Vol. 14, EGU2012-1062, 2012 EGU General Assembly 2012 © Author(s) 2011



On comparisons between Shear Wave Velocities and Soil-Water Content

F. Ozcep (1), S. Karabulut (1), and T. Ozcep (2)

(1) Istanbul University, Geophysics, Istanbul, Turkey (ferozcep@istanbul.edu.tr), (2) Ministry of National Education, Sirinevler Primary School, Sirinevler Istanbul, Turkey.

The theoretical analysis shows that it is possible to obtain water content, by measuring the shear waves velocity. The comparisons about correlation between shear wave velocities (Vs) and soil-water content, soils from Yalova city in Turkey are presented. The evaluation variables for this system are shear wave velocities (in the field) and the water content (in the geotechnical laboratory) measurements. The output variable is to comparisons the water content of soils in situ by seismic shear wave velocity measurements. This work is presented a practical experimental data for measuring the water content in geotechnical soils by means of seismic waves.