

Are Groundwater Level Changes Might be Linked With Kutahya and Eskisehir Earthquakes?

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Many studies have investigated for possible relationship between groundwater level changes and earthquakes. Eskisehir, selected for study area, is located between Aegean-Western Anatolian block where the extensional regime is present and the snistrial strike-slip fault zone, with a normal component, belonging to Central Anatolian Block on which the compressional forces are effective.

Electronic divers installed by DSI (State Hydraulic Works) are measuring groundwater level changes in the 30 wells around the Eskisehir Region. The study was targeted to compare water level fluctuations with the seismic events occurred in the Eskisehir Region. Groundwater levels were measured by two hours interval for about the three months. Meteorological parameters (temperature, barometric pressure, rain and humidity) and water level changes in the wells were compared to investigate a possible effect of earthquakes.

This study presents very primitive results and it shows some probably anomalies because of earthquakes were observed. Longtime observations should be done to be able to obtain more reliable results.

Keywords: Water level, earthquake, Eskisehir.