

Roeloffs, E.A., Nelms, D.L., Sheets, R.A., Widespread groundwater-level offsets caused by the M_w5.8 Mineral, Virginia, earthquake of August 23, 2011

Description of text files in GSA Data Repository:

The text files contain the USGS station numbers of the wells shown in Fig. 1 of the paper, which can be used to access the groundwater-level data discussed here from the USGS website.

The map in Figure 1 of the paper is bounded by the latitudes 34°N to 43.5°N and by the longitudes 72°E to 84.5°E. It includes all of the states of North Carolina, Virginia, Pennsylvania, Ohio, West Virginia, New Jersey, and Delaware, and parts of the states of South Carolina, New York, Connecticut, Massachusetts, and Vermont. Figure 1 includes all monitoring wells in the USGS NWIS database bounded by those coordinates and sampled at intervals of 1 hour or more frequently. The hydrographs of all wells in the figure for which data are available at the time of the August 23, 2011 M_w5.8 Mineral, VA earthquake were examined for changes possibly related to the earthquake. Some wells outside of this area were examined and exhibited no changes.

The file Mineral20110823DataSites.txt is a pure text file listing the USGS station numbers of all 476 wells in Figure 1 for which data are available for the time of the earthquake.

The file Mineral20110823NODataSites.txt lists the station numbers of 38 wells for which no data are available at the time of the earthquake.

The site numbers in either file can be used to plot and/or download the groundwater-level data. The URL to access the data is http://nwis.waterdata.usgs.gov/nwis/uv/?referred_module=gw (last accessed April 25, 2014)

After entering one or more site numbers, choose the parameter "Depth to water level, ft below land surface".

Additional options can be chosen to specify the time period of interest and to choose provide either a plot or numerical data values; help with these options is available on the site itself.