

USGS response to FOIA request

A FIOA request was made regarding acquisition of nearby seismic data for the September 8, (251) 1994 plane crash in Western Pennsylvania.

At the time of the plane crash the nearest seismic station was operated by the USGS (US.MCWV) as a part of the United States National Seismograph Network in Mont Chateau, West Virginia, USA (Latitude: 39.66 Longitude: -79.85 Elevation: 280m).

The following data have been recovered from the legacy VMS optical drive system in the original NSN binary format and converted to the modern standard mini-seed. Three-component broadband triggered data, recorded at 40 samples/second (BHE, BHN, BHZ) and continuous long-period data, recorded at 1 sample/second (LHE, LHN, LHZ) are available for September 8, (251) 1994 in the following data files.

Data files:

94_251_MCWV_BHN_00.dat.seed

94_251_MCWV_LHN_00.dat.seed

94_251_MCWV_BHE_00.dat.seed

94_251_MCWV_LHE_00.dat.seed

94_251_MCWV_BHZ_00.dat.seed

94_251_MCWV_LHZ_00.dat.seed

Preliminary analysis suggests that there are no triggers and/or signal due to the plane crash. Refer to the following figures for a discussion of the data analysis.

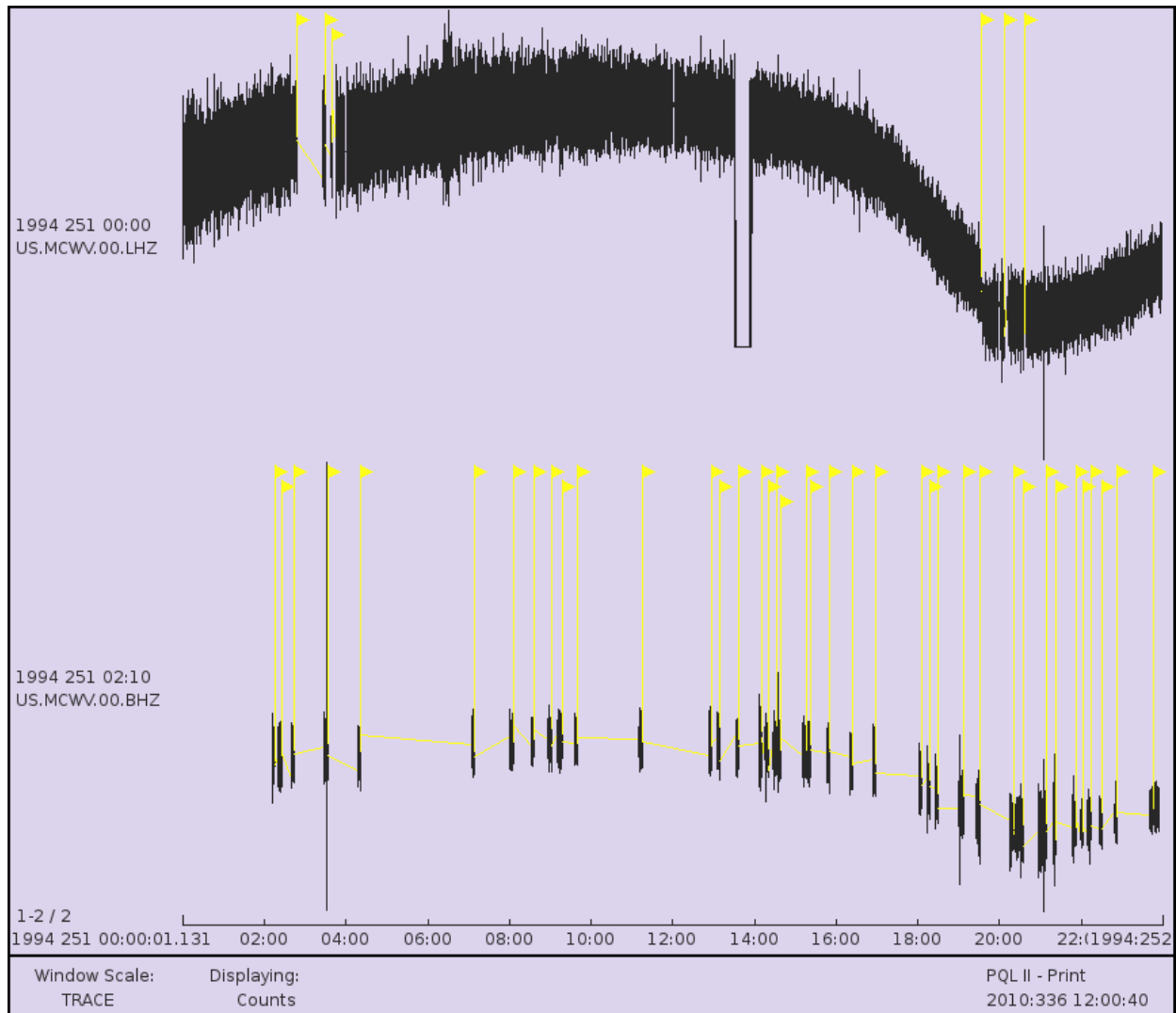


Figure 1: September 8, (251) 1994 full day view of both vertical components of motion (BHZ, LHZ). The upper trace, labeled US.MCWV.00.LHZ, is continuously recorded at 1 sample/sec. The lower trace, labeled US.MCWV.00.BHZ, is triggered and recorded at 40 samples/second and will record higher frequency energy with high fidelity. In 1994 higher sample rate data (i.e. BHZ) was recorded in a triggered mode due to limitations in telemetry bandwidth and digitizer memory. Trigger parameters were chosen to detect the P-wave of both local and distant earthquakes however, false triggers often occur due to nearby noise sources such as cars, generators and heavy machinery. Yellow flags mark the beginning of gaps due to mid-trigger intervals and/or telemetry outages.

Note that time is UTC.

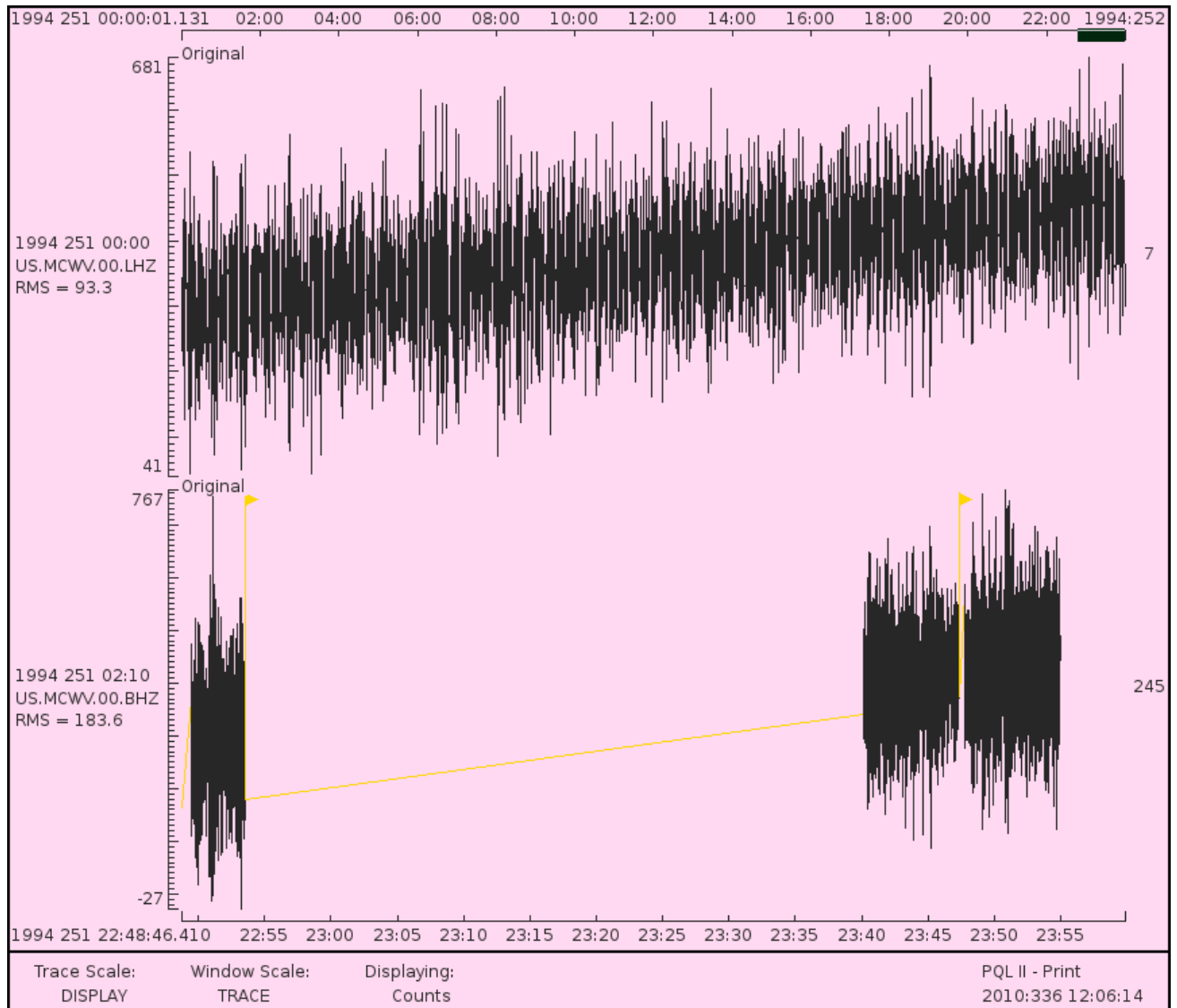


Figure 2: September 8, (251) 1994 UTC Hour 23:00 view of both vertical components of motion (BHZ, LHZ). As is evident in this figure, the BHZ channel (lower trace) did not trigger at the time of the plane crash. The continuously recorded LHZ channel (upper trace) did record through the time of the crash however, there is no clear signal that can be discriminated from the background ambient noise.

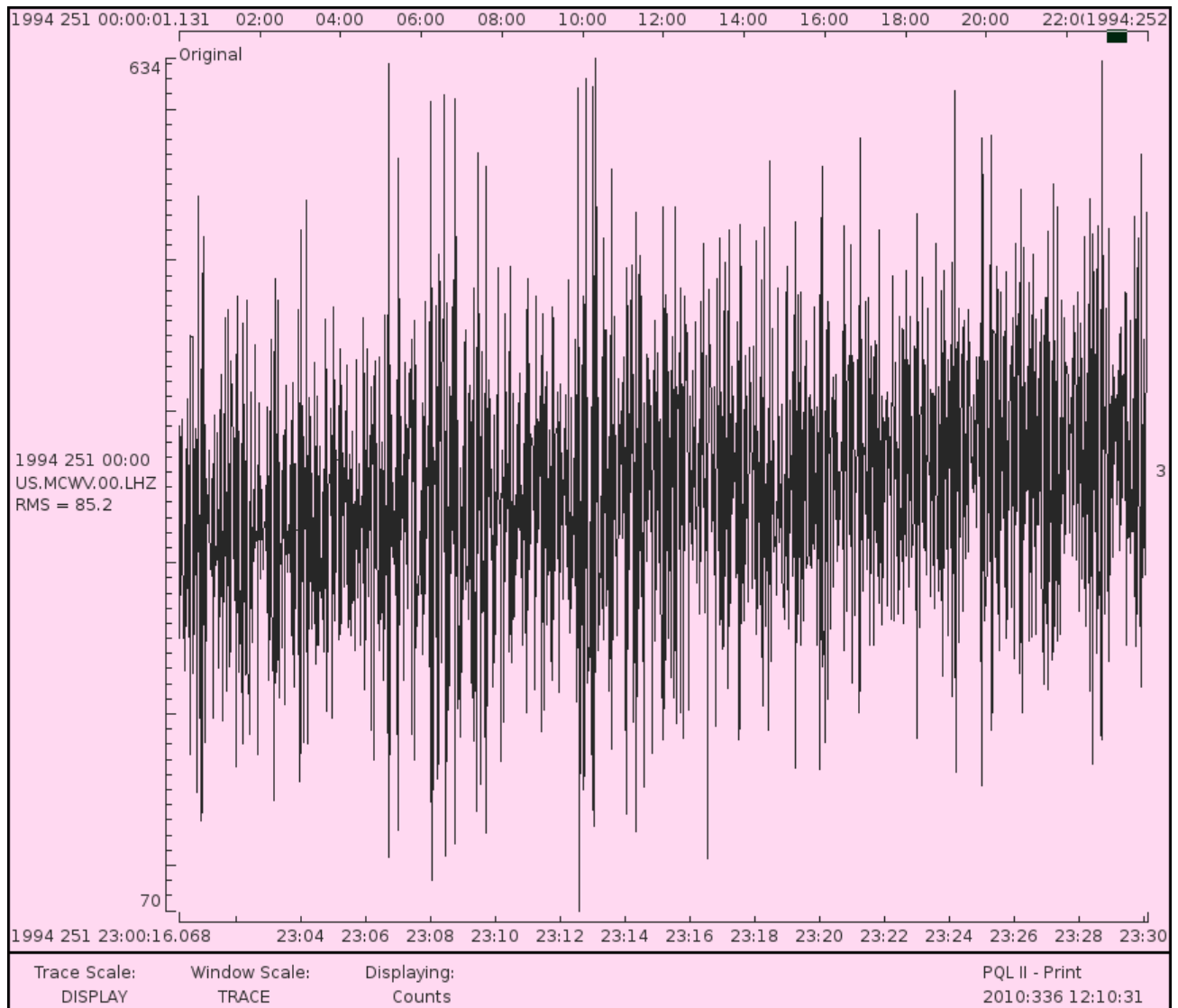


Figure 3: September 8, (251) 1994 UTC Hour 23:00 – 23:30 view of the continuous long-period vertical component of motion (LHZ). When zoomed in further, the continuously recorded LHZ channel (upper trace) displays no clear signal that can be discriminated from the background ambient noise.