The Central United States Seismic Observatory

and the Kentucky Vertical Strong-Motion Network

Figure 2. Photograph of site at VSAS

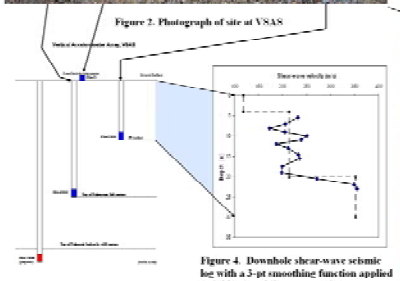


Figure 3. Geometry of VSAS

Figure 4. Downhole shear-wave seismic log with a 3-pt smoothing function applied (solid line) and the average shear wave interval velocity (dashed line). Data were acquired with a 3-component, 14 Hz geophone.

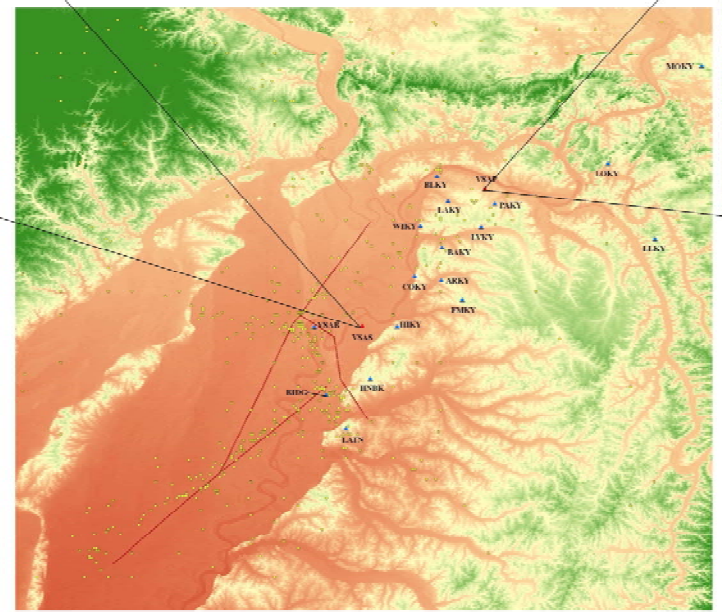


Figure 1. Location map of a portion of the Kentucky Seismic and Strong-Motion Network (solid triangles) near the New Madrid Seismic Zone. Two vertical strong motion arrays (VSAP, VSAS) are highlighted in red. Data from VSAP and VSAS are presented with this poster. Earthquake epicenters occurring near the New Madrid Seismic Zone are illustrated as yellow circles (courtesy USGS NEIC). Earthquake magnitudes of less than 2.0Md are not shown. Earthquake epicenters prior to 1975 are not shown. Faults associated with the New Madrid Seismic Zone are illustrated as dashed lines.

Figure 6. Photograph of site at VSAP

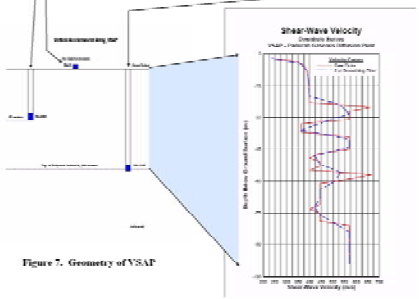
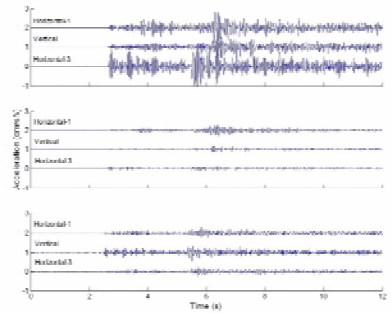


Figure 7. Geometry of VSAP

Figure 8. Downhole shear-wave seismic log with a 2-pt smoothing function applied (blue, dashed line) and the raw shear-wave interval velocity (red, solid line). Data were acquired with a 3-component, 14 Hz geophone.

Figure 5. Recordings from the October 21, 2004 earthquake (Md2.5) near Tiptonville, Tennessee at the vertical strong-motion array, VSAS. (A) - surface, (B) - 30 meters deep, (C) - 260 meters deep.



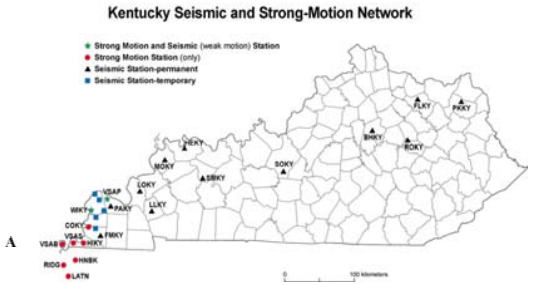


Figure 10. The Kentucky Seismic and Strong-Motion Network

Figure 9. Recordings from the October 21, 2004 earthquake (Md2.5) near Tiptonville, Tennessee at the vertical strong-motion array, VSAP. (A) - surface, (B) - 11 meters deep, (C) - 100 meters deep.