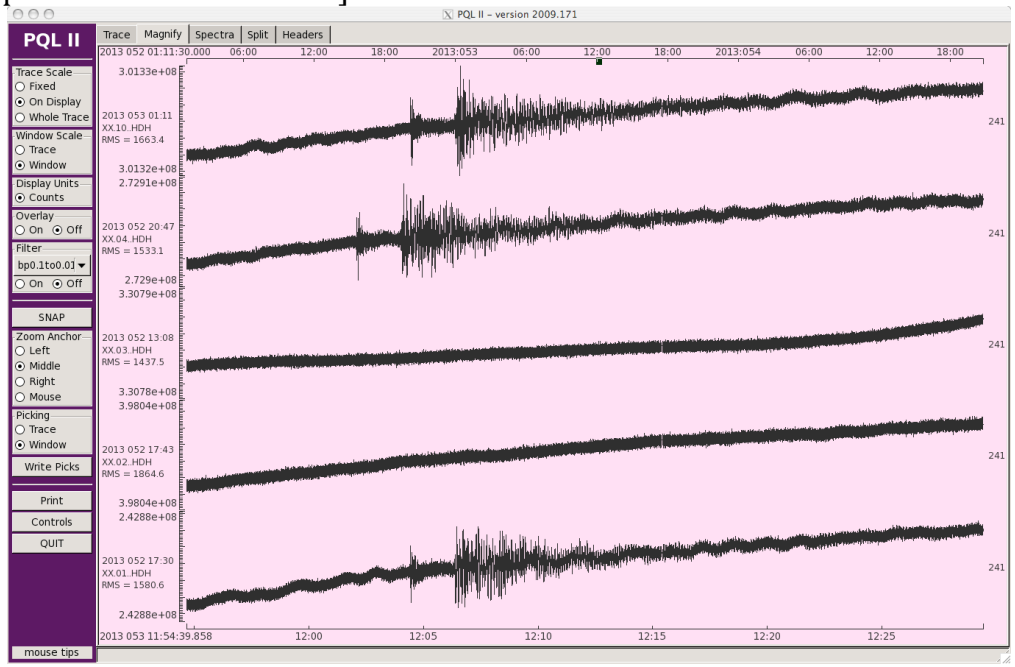
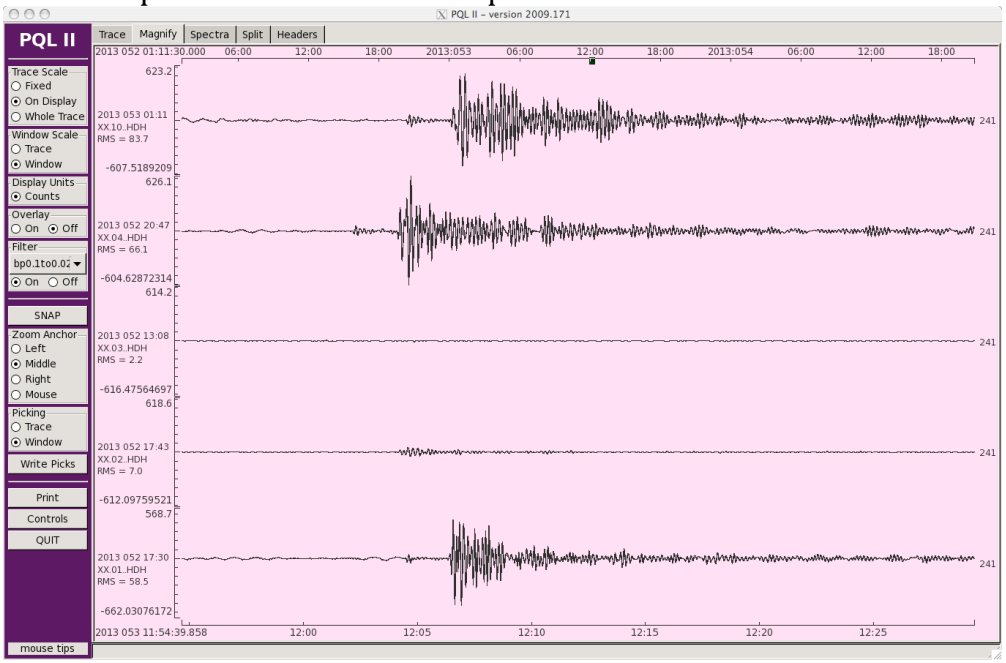
Finally, I examined the effect of the apparent change in response of APGs 2 and 3 on signals from a distant earthquake. The following figures show that signals from the earthquake are attenuated on APGs 2 and 3 compared to signals on the other 3 APGs.

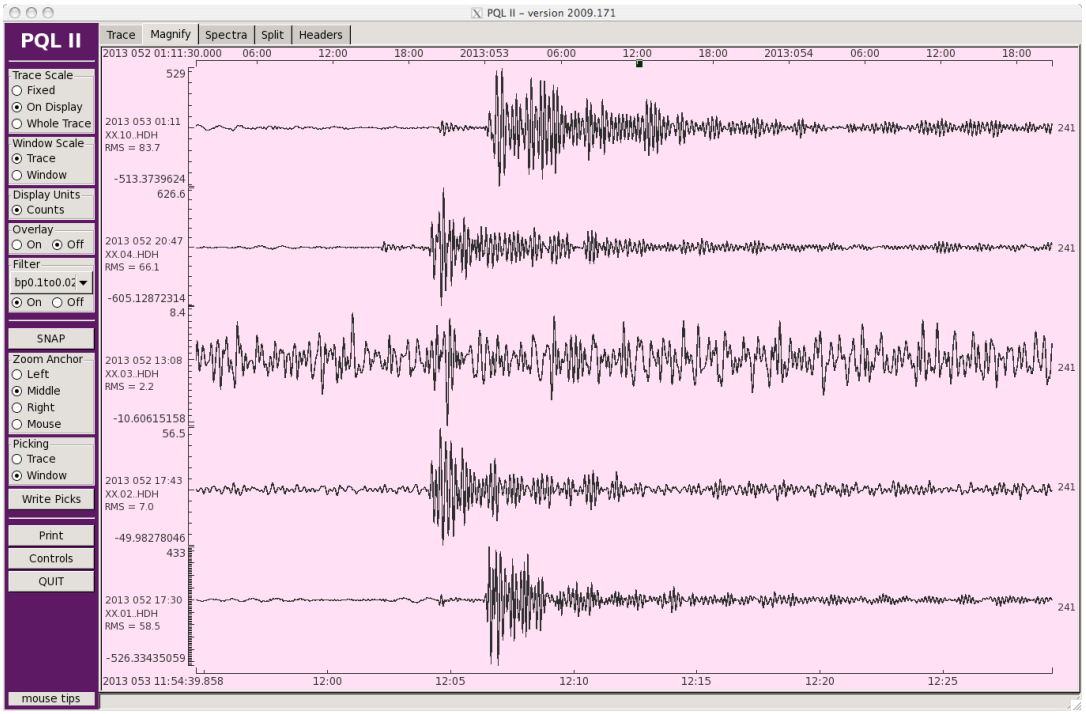
This figure shows unfiltered data from each APG for a deep earthquake beneath Columbia. P and S waves are clear on APGs 1, 4 and 10. The earthquake is not visible on APG 2 and 3. [Large arrival time differences among sites are due to timing problems with the APGs.]



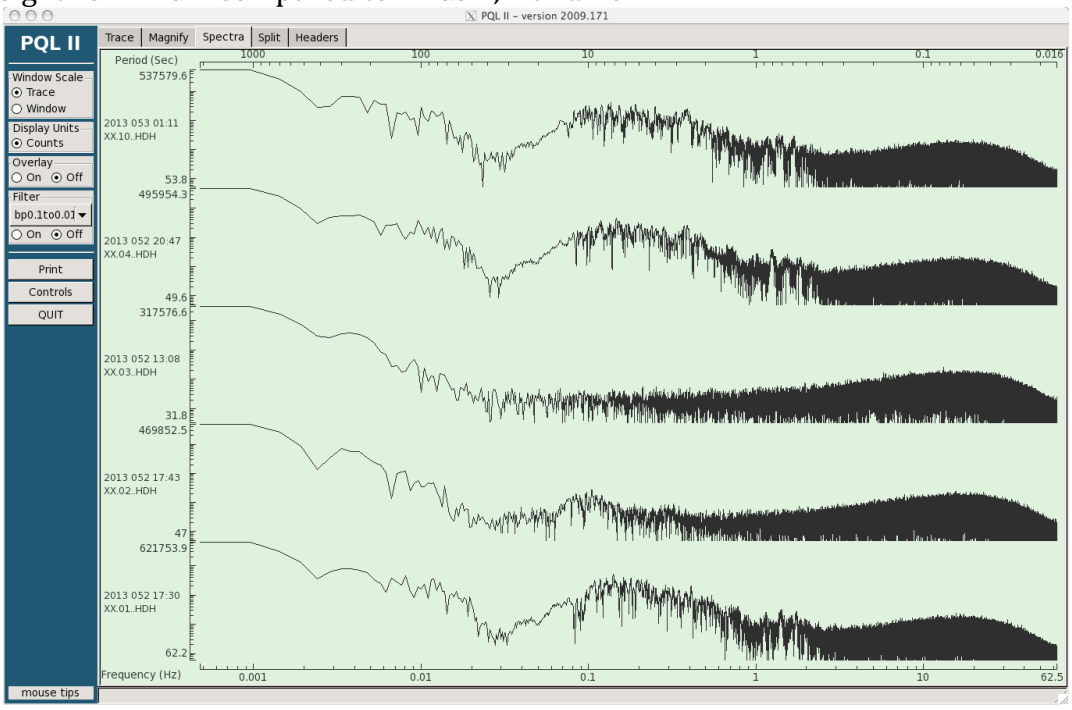
These are the same data as above but filtered to pass 0.02 go 0.1 Hz. Again, all traces are plotted with the same amplitude scale.



This plot shows the same data as in the figure above, but with each trace scaled to the maximum amplitude in that trace. The S wave is clearly visible on APG 2 and is arguably visible with S/N of ~1 on APG 3. The P wave is not observed on either 2 or 3.



This figure shows the amplitude spectrun for this time window on each APG. Note the apparent absence of signal from the earthquake on APG 3 and the attenuated signal on APG 2 compared to APGs 1, 4 and 10.



This figure shows the amplitude spectrum for each of the 5 APGs for a 24 hour time window that includes the earthquake shown above. The typical microseism peak and 50 s hump are seen on APGs 1 , 4 and 10. They are not present on APG 3. On APG 2, the microseismic peak is not present and the 50 s hump is attenuated.