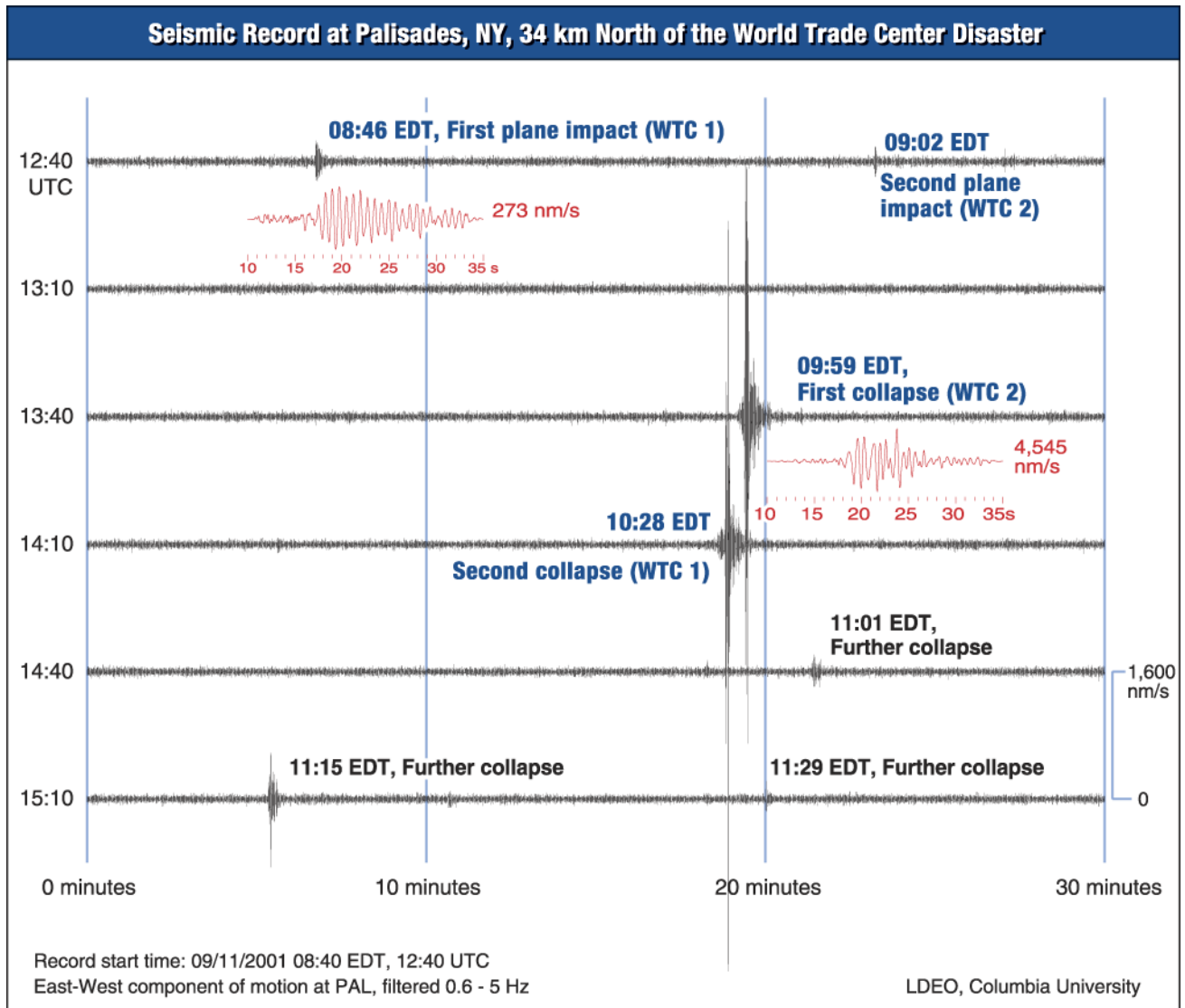




*Figure 1-8 Seismic recordings on east-west component at Palisades, NY, for events at WTC on September 11, 2001, distance 34 km. Three hours of continuous data are shown starting at 08:40 EDT (12:40 UTC). The two largest signals were generated by the collapses of towers 1 and 2. Expanded views of first impact and first collapse are shown in red. The amplitude of the seismic signal is in nanometers per second (nm/s), and the peak amplitude of the ground motion at this station reached to 4,545 nm/s for the first collapse. Note the relatively periodic motions for impacts 1 and 2.*

Structural engineers acted as guides through the site, providing descriptions of structures and offering judgment on the stability of structures and debris. They provided warnings of potential hazards and assisted with choosing crane and other equipment locations and installations. Assisting the LZA team, structural engineers worked in four teams staffed by SEAoNY members. In the first 30 days after the attack, more than 10,000 engineer hours, or 1-1/2 engineer-years per week, were expended by these teams.

DDC was also asked on September 14 to rapidly assess the condition of the more than 400 buildings in lower Manhattan suspected of being damaged by the collapse of the WTC towers. It appeared that the zone of damage was significant and that many buildings may have received debris or vibration damage. The potentially hazardous conditions would make the area unsafe for rescue and removal personnel. DDC and LZA assigned this task to SEAoNY. These systematic building inspections were organized, coordinated, and