An Overview of the Albuquerque Seismological Laboratory and Recent Advances in Seismic Instrumentation

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The Albuquerque Seismological Laboratory (ASL) was established in 1961 in one of the seismically quietest regions in the country in order to test seismometers for what is now the U.S. Geological Survey (USGS). In the subsequent decades, that mission has expanded to include the operation and management of the Global Seismographic Network, the Advanced National Seismic System, and numerous regional and aftershock networks. Data from these networks are utilized by the USGS to rapidly characterize earthquakes both within the United States and across the globe. In this presentation, we will provide a brief overview of ASL and present some of our work quantifying the performance of recently developed seismic instrumentation. We will present results on sensors which enable unique observations of ground motion such as rotational seismometers developed by Applied Technology Associates in Albuquerque, as well as new low-cost instruments such as the Fairfield Nodal Z-land sensors and Raspberry Shake seismographs.