Use of Large-N/Unaliased Wavefield in Seismic Reflection Exploration

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One definition of a Large-N seismic experiment is where the recorded wavefield is unaliased. Earthquake seismology with sparse instrument spacing generally has an aliased wavefield and relies on waveforms for analyses. Contrast that with exploration seismology where the predominant exploration tool is the seismic reflection method that primarily relies on unaliased wavefields for proper reflection imaging. This presentation will discuss survey design considerations and data processing methods used in the active source seismic reflection methods that pertain to wavefield analyses.