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## Paper to Pixels: Lessons Learnt from Creating and Using the NELD Repository

The Nuclear Explosion Legacy Data (NELD) Repository was designed and built to store analog scanned and digitized data in a format consistent with the CTBTO PrepCom database. It follows and extends the CSS/IMS formats for the time series data and station metadata. NELD repository includes over 2,000 scanned seismic recordings but can be easily extended to a digital waveform repository. Scanned data cover over 300 nuclear explosions detonated in test sites around the world and recorded at over 60 European stations in Austria, Bulgaria, Republic of Moldova and Romania. The repository is supported by a database including information about the event, station, equipment and analog recording. Valuable experience was gained on procedures for data selection and scanning, and for collecting, organizing and storing the metadata information needed for successful usage of legacy data. Digitization software packages openly available were tested on some of the scans. All scanned data and metadata are stored in the Nuclear Explosion Legacy Data (NELD) repository designed by Leidos, with similar structure as the IDC database and are ready to be shared with the community.

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