

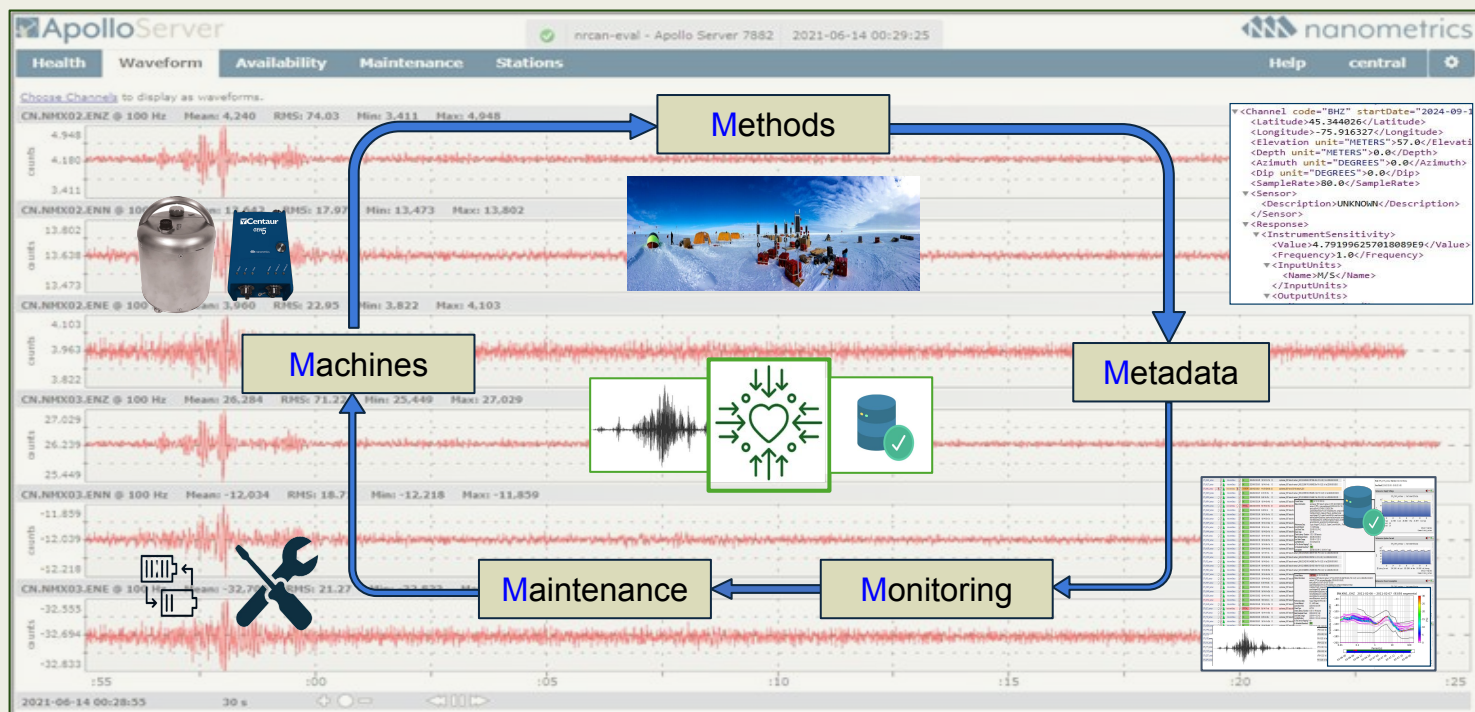
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For data generated by [seismic] monitoring networks to serve the intended purpose, they must be sufficiently accurate and precise, in order for signal processing and analysis to generate trustworthy results.

This poster focuses on five elements, which are critical to augmenting [seismic] station's quality, reliability, and overall performance over its lifetime.

The five "M's" mnemonic is used to emphasize the importance of: **M**achines, **M**ethods, **M**etadata, **M**onitoring, and **M**aintenance, detailing each element's direct influence on the end-to-end station accuracy, precision, and operation.



- ▶ We discuss in detail what "Machine" quality entails, including the key measures of instrument accuracy, precision, and consistency, and how quality is achieved, calibrated, certified and documented.
- ▶ We elaborate on the nature of proper "Methods" (installation and operation) and the various types of station quality impairments that can be introduced by installation deficiencies.
- ▶ Finally, we touch upon the importance of station metadata, monitoring regimes, and scheduled maintenance on meeting and sustaining stations' operational objectives.