

: A Software for Calibration Against a Reference

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The International Monitoring Systems (IMS) draft operational manuals for waveform stations require that IMS stations be calibrated regularly. Since 2012, the Provisional Technical Secretariat (PTS) had relied mostly on electrical calibration to meet that requirement. However electrical calibration has inherent challenges (no traceability, integration and sustainment issues, high operating costs, etc.). A part of the geophysical community, including station operators, has started performing regular calibrations by comparison against a co-located reference. This method allows a more systematic and centralized approach to calibration. Over the past few years, it has been increasingly used at IMS stations, particularly infrasound ones. In this context, the PTS is developing tools to support this alternative approach. We present CalxPy, a web-application developed at the PTS for the calibration of geophysical systems by comparison. With CalxPy, one can calculate, store, and display the response of a system for a given period, or track the evolution of the response against time or environmental variables. CalxPy allows the reporting of calibration results in IMS2.0 format. CalxPy supports the Initial calibration and on-site yearly calibration processes, as well as data quality control. CalxPy can be deployed in the IDC pipeline and in NDC-in-a-box.

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Promotional text

CalxPy: A software for calibration against a reference.

Oral preference format

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