

The Calibration of IMS Seismic and Hydroacoustic T-Phase Stations

The purpose of the Seismic and Hydroacoustic T-Phase Stations calibration activity is the verification of the stability of calibration parameters and instrument responses over time against reference values established at the certification/revalidation time. The calibration process implements the workflow and associated reporting of the calibration activity at each particular station. Regardless of the type of equipment, the relative calibration process has to be the same and should rely on the comparison of an on-site measured system response against a reference established at the time when the station has been certified or when revalidation has been completed. However, technical implementation of calibration procedures, parameters of the calibration signals and the methodology used to evaluate the results are different and depend on the equipment characteristics, available calibration software and any other arrangements. We present the results of the calibration activities performed at IMS Seismic and Hydroacoustic T-phase stations in 2016. Calibration activities were initiated at 149 seismic stations of the International Monitoring System (IMS) (42 primary stations and 107 auxiliary stations). Of these 122 stations (39 primary stations and 83 auxiliary stations) were calibrated. The second scheduled calibration of all 5 certified IMS Hydroacoustic T-phase stations was successfully conducted in 2016.

Primary author: OTSUKA, Riyo (CTBTO IDC/OPS/MFO)

Presenter: OTSUKA, Riyo (CTBTO IDC/OPS/MFO)

Track Classification: 3. Advances in sensors, networks and processing