

Calibration of IMS infrasound stations

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Calibration activities for infrasound stations of the International Monitoring System (IMS) are a requirement of the Operational Manual for Infrasound Monitoring and the International Exchange of Infrasound Data. Until 2011, significant technical and scientific challenges prevented full compliance with these requirements. This included the absence of available techniques to characterize responses in operational conditions. To address these challenges, the PTS coordinates the development of a detailed infrasound technology roadmap, and works together with the scientific, metrology, and sensor manufacturing communities. This collaboration led to the deployment of calibration capabilities at infrasound stations of the IMS, starting with a first station in 2015. This presentation illustrates the Scheduled Calibration process as currently defined at the PTS for infrasound stations, past progress, and current challenges. As of 2022, calibration capabilities have been rolled out successfully at 34% of the certified infrasound IMS stations (18 stations). A dedicated software (CalxPy) was also designed to support the calibration process for all stations having calibration capability in a centralized manner in Vienna. These calibration results are reported since 2019 to Member States.

E-mail

yacine.sid.ahmed@ctbto.org

Promotional text

First presentation of infrasound calibration results computed and interpreted in a centralized manner in Vienna to a wider audience.

Oral preference format

in-person

Primary author: SID AHMED, Yacine (CTBTO Preparatory Commission)

Co-authors: Mr KRAMER, Alfred (CTBTO Preparatory Commission); Mr DOURY, Benoit (CTBTO Preparatory Commission); Ms KETATA, Ichrak (CTBTO Preparatory Commission)

Presenter: SID AHMED, Yacine (CTBTO Preparatory Commission)

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