

High-resolution analysis of spatio-temporal ambient noise variations across the IMS infrasound network



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- Ambient noise conditions at infrasound stations are **highly variable** by location (e.g., vegetation, WNRS) as well as season and daytime.
- A high temporal resolution of ambient infrasound noise characterization is crucial for assessing the detection probability of explosions.
- For a realistic estimate of the station noise statistics, we computed power spectral densities for continuous records at all elements of the 53 IMS stations that were operational in 2019–2024.
- Hourly noise calculations are useful for the assessment of the detection capability of the IMS network at high temporal resolution towards (near-)real time (see O4.1-407).
- Find out more about the spatio-temporal comparison of the IMS infrasound stations' noise at P3.5-855!







