SnT 2025 CTBT: SCIENCE AND TECHNOLOGY CONFERENCE
8 SEPTEMBER ONLINE DAY
9 TO 12 SEPTEMBER AT HOFBURG PALACE, VIENNA & ONLINE

Incoherent Seismic Array Processing Using Kurtosis: A Case Study from the Grane oilfield

LIGHTNING TALK

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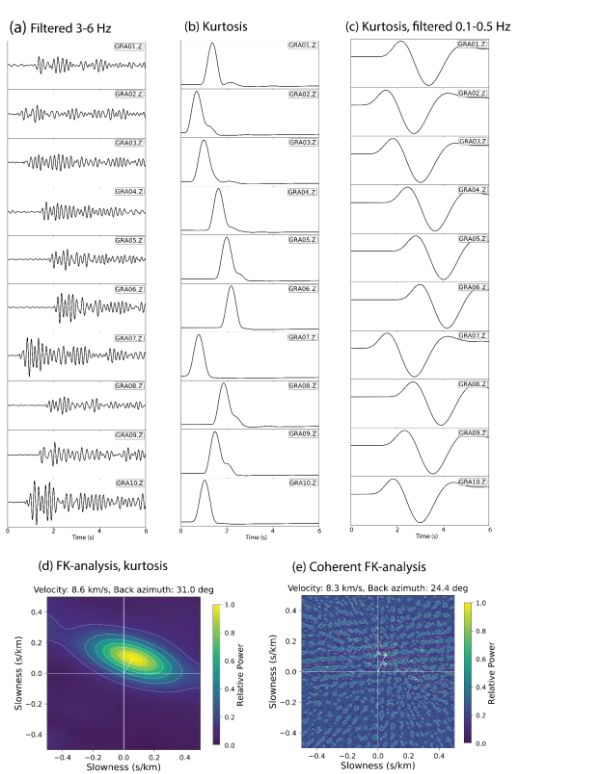
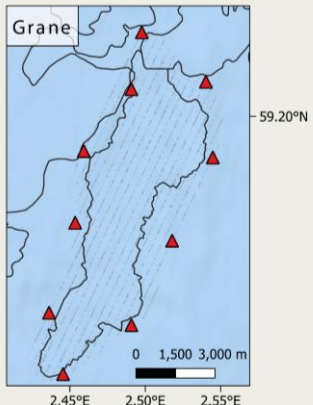
P1.2-368





- **Challenge:** Offshore array with few widely spaced sensors → weak coherence
- **Idea:** Use a kurtosis-based function to recover signal coherence before frequency wavenumber (FK) analysis
- **Method:** Apply bandpass filtering + kurtosis stacking → clearer back azimuth and slowness estimates
- **Result:** Improved event locations for the North Sea.
- **Impact:** Works not only at Grane, but also for other sensors with low inter-station coherence (e.g., the IMS MJAR array in Japan)
- **Join us:** Curious? See how kurtosis enhances coherence and FK analysis in an offshore setting → visit our poster

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