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

Analysis of Data from Seismic Monitoring Network around Syowa Station, Antarctica

LIGHTNING TALK

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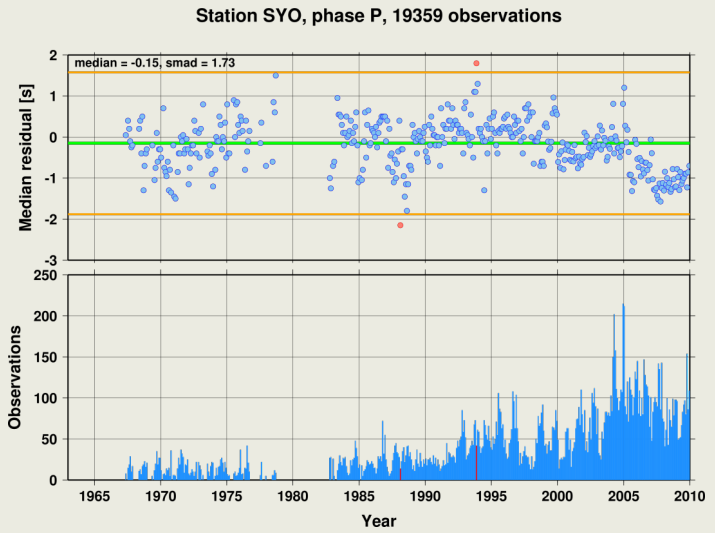
P3.5-038

- Come over to see our poster if you would like to find out more about:

- Phase identifying procedure for teleseismic events at Syowa Station (69.0° S, 39.6° E; SYO), East Antarctica have been carried out since 1967 after the International Geophysical Year (IGY; 1957-1958).
- Arrival times of teleseismic phases, P, PKP, PP, S, SKS have been reported to the International Seismological Centre (ISC) since 1967 and published by "JARE Data Reports" from NIPR.
- Characteristics of detected events, magnitude dependency, spatial distributions, seasonal variations, together with classification by focal depth are demonstrated.
- Besides the natural increase in number for occurrence of teleseismic events on the globe, a technical advance in observing system and station infrastructure, as well as the improvement of procedure for reading seismic phases, could be efficiently combined to produce the increase in detection number in last few decades.
- Variations in teleseismic detectability for longer terms may possibly by associate with meteorological environment and sea-ice spreading area around the Antarctic continent (Iwata and Kanao, Polar Science, 2015).

- Recorded teleseismic and local seismic signals have sufficient quality for many analyses on dynamics and structure of the Earth's as viewed from Antarctica.
- Continuously recorded data are applied not only to lithospheric studies but to deep interiors, as contribution to FDSN from high southern latitude.



Time variations in travel-time residuals for P-waves at SYO (in totally 19,359 observations) reporting to the ISC.

NiPR National Institute of Polar Research