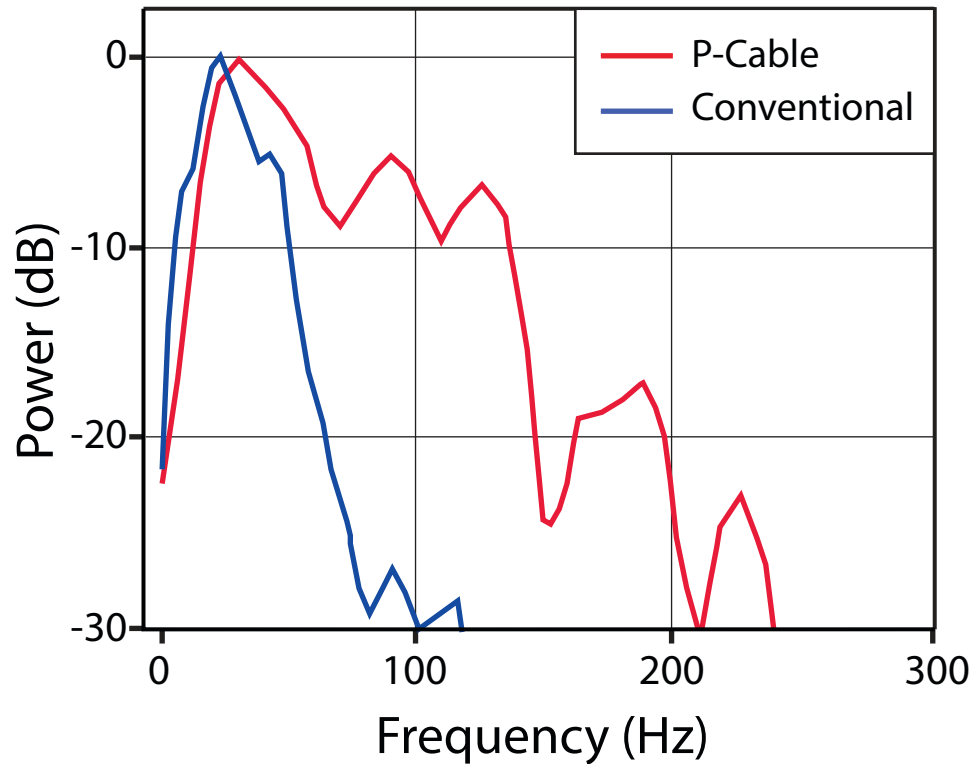


Power spectrum



f (Hz)	v (m/s)	λ (m)	λ/4 (m)
30	2900	97.0	24.0
50	2900	58.0	15.0
100	2900	29.0	7.3
150	2900	19.0	4.8
200	2900	15.0	3.8

Electronic Supplement 1. Power spectrum showing the dominant frequencies for P-Cable data (red) and conventional seismic data (blue). The power spectrum represents the waves that were extracted from the seismic data used in the 1D synthetic seismic modelling, highlighting the implication for the seismic resolution. The different frequencies have considerable impact on the seismic resolution. The table includes the corresponding vertical and horizontal seismic resolution, $\lambda/4$ (post-migration Fresnel zone), for typical frequencies for conventional seismic data, 30–50 Hz, and high-resolution P-Cable data up to at least 200 Hz at -20 dB level. The average velocity, 2900 m/s, for the Kolje Fm in the Apollo (7324/2–1) and Atlantis (7325/1–1) and dominant frequency is used in the calculation of resolution.