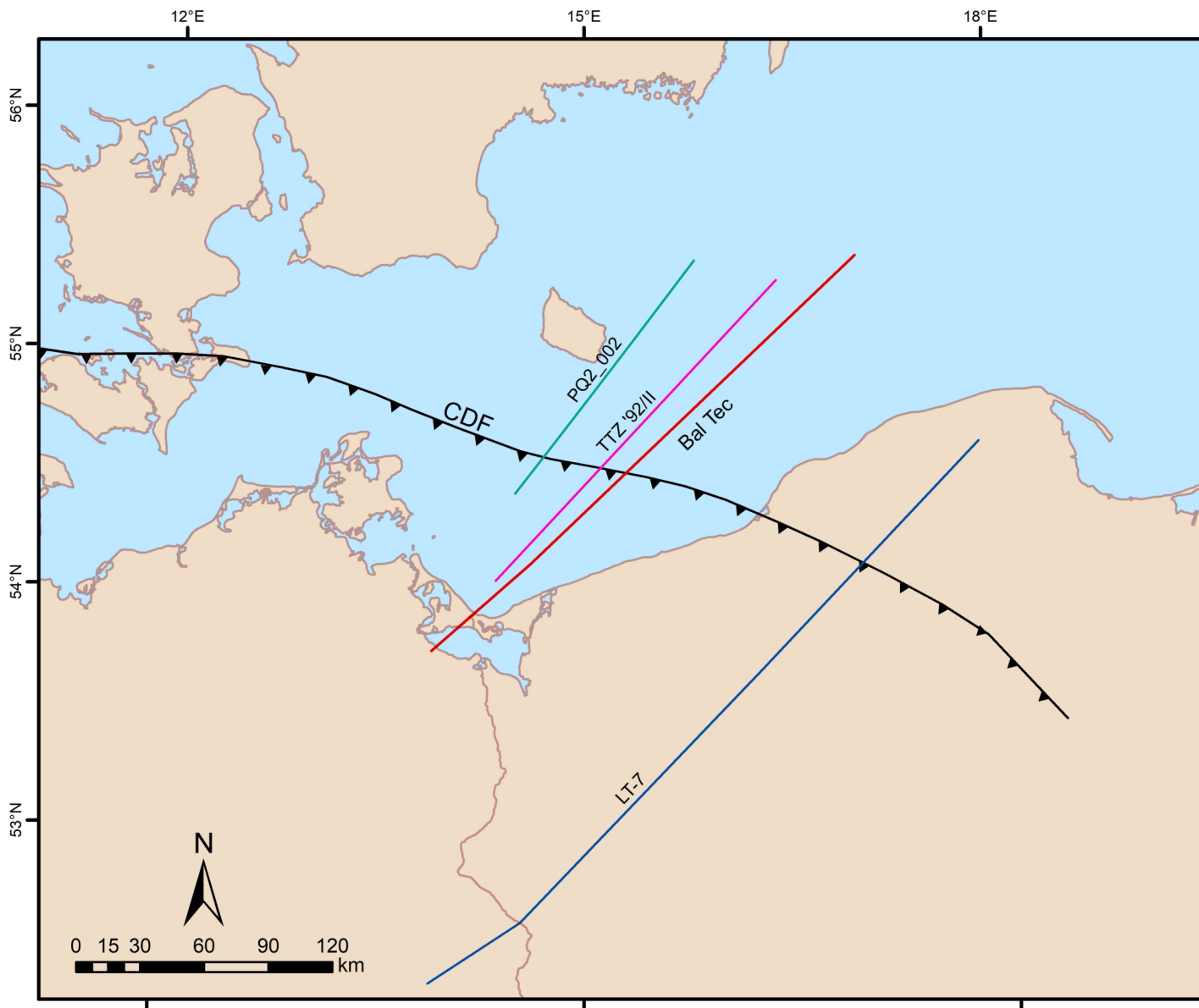


**Seismic refraction profiles from the southern Baltic Sea
and onshore Poland**

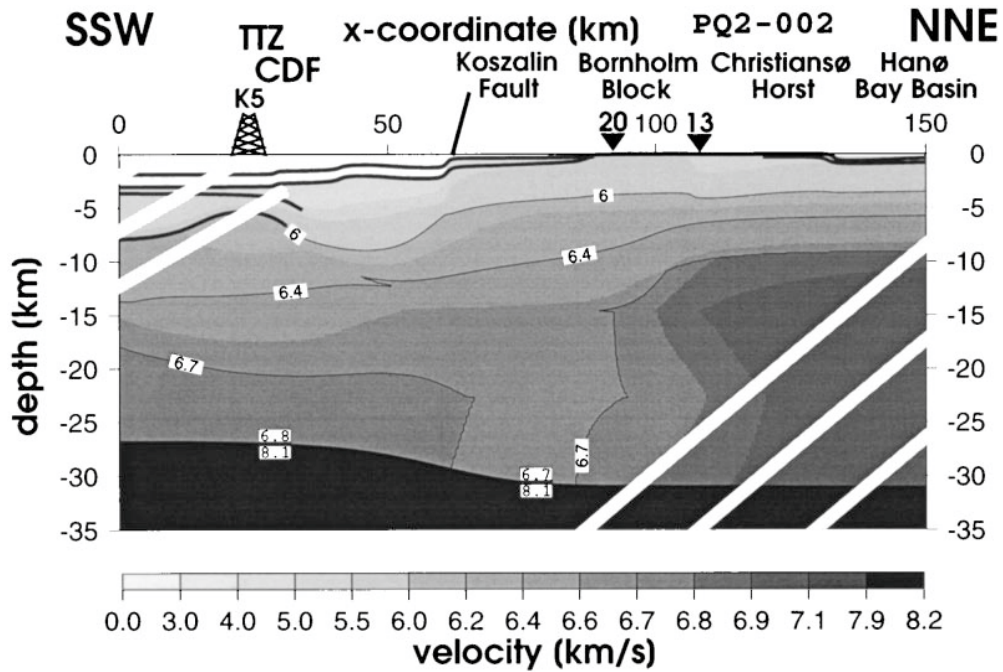
Location map



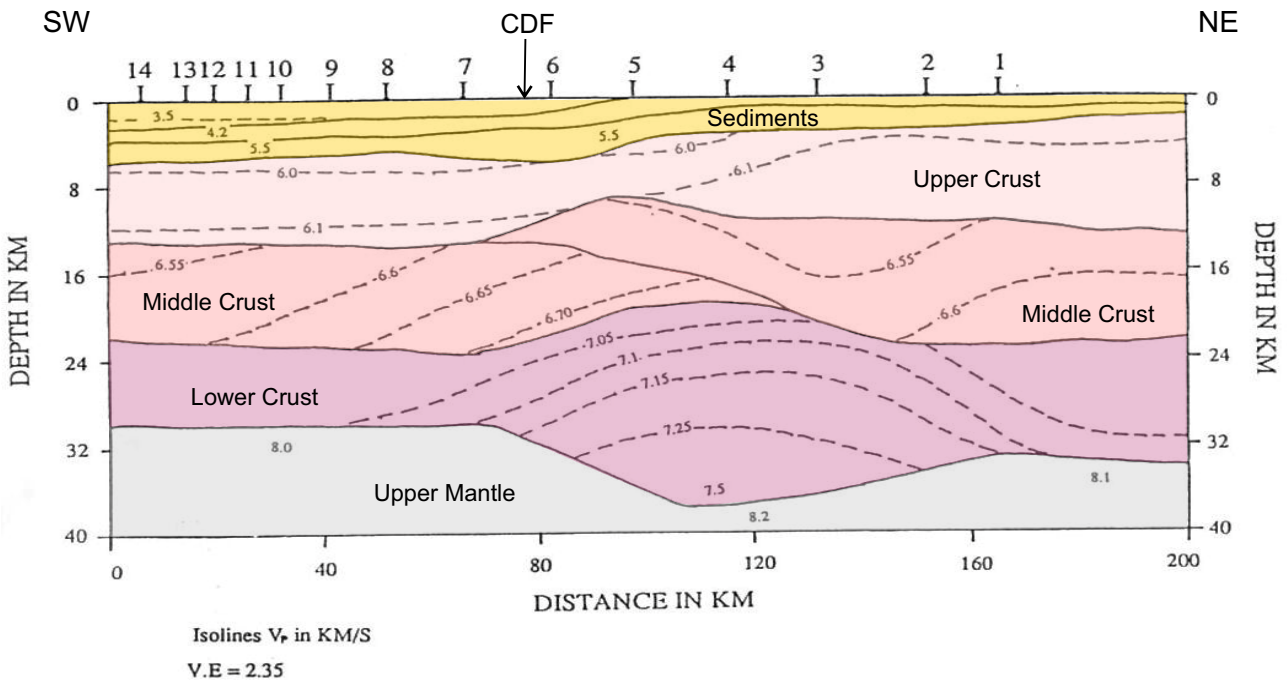
Seismic refraction profiles PQ-2 (Bleibinhaus et al., 1999) and TTZ'92/II (Makris and Wang, 1994) from the southern Baltic Sea and LT-7 (Guterch et al., 1994) from onshore Poland.

BalTec profile - this study: red thick line.

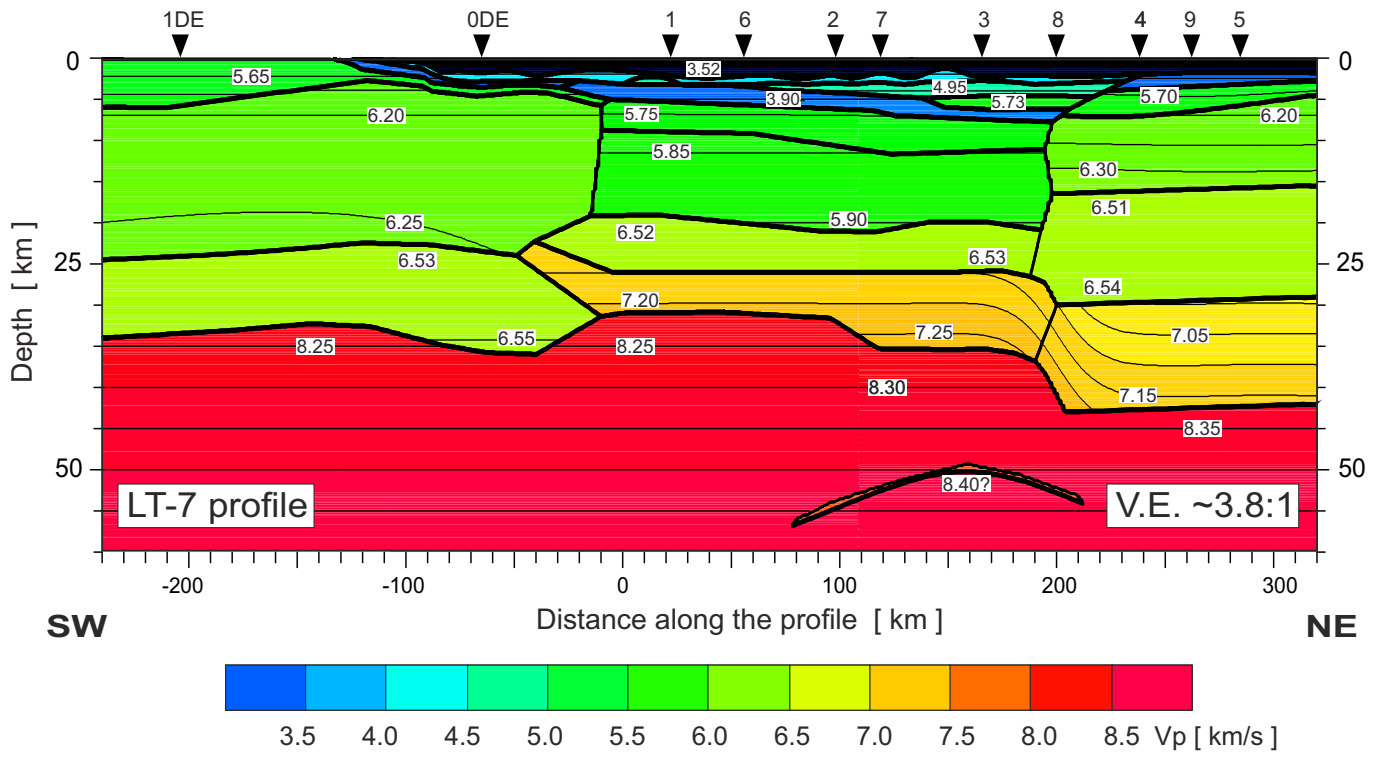
CDF - Caledonian Deformation Front after Berthelsen (1992) and Józwiak (2013).



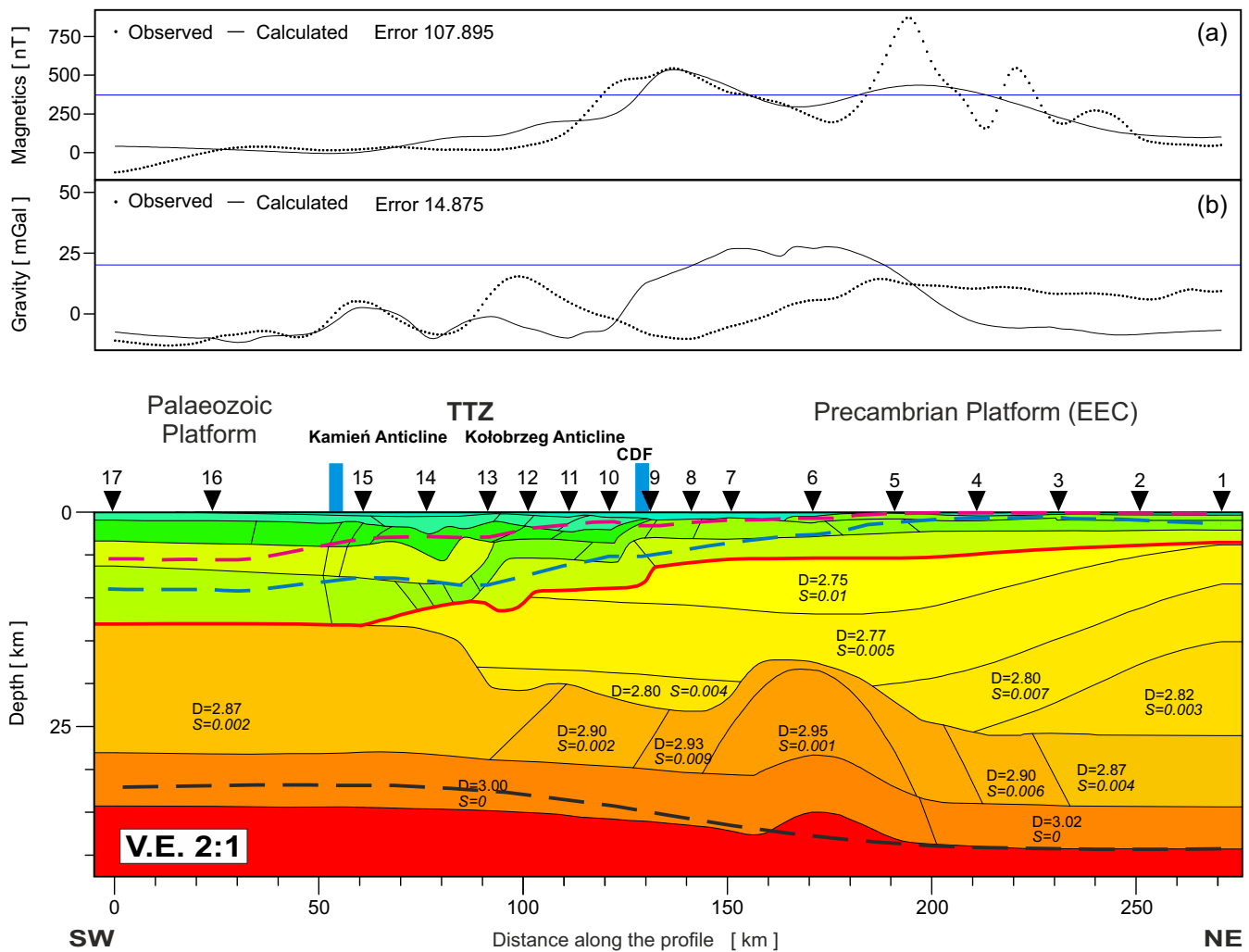
Cross section of the 3D-velocity model along PQ2-002 profile after Bleibinhaus et al. (1999). Hatched areas indicate that no rays have travelled through that part of the model. Thin lines are isolines and thick lines mark discontinuities greater than 0.2 km/s. Kinks in the isolines (e.g. 6.4 km/s at km 50 in PQ2-002) are caused by the modelling method and are not constrained by the data.



Velocity-depth model for profile TTZ'92/II after Makris and Wang (1994). CDF - Caledonian Deformation Front



Crustal P-wave velocity model along the LT-7 profile (V_p , km/s) modified after Guterch et al. (1994).



Two-dimensional gravity and magnetic model for the BalTec profile – the same as shown in Figure 7. CDF – Caledonian Deformation Front, TTZ - Teisseyre – Tornquist Zone. Thick blue lines show the range of the TTZ. Dashed lines show horizons from Maystrenko and Scheck-Wenderoth (2013): black – Moho, blue - top basement, and purple - top pre-Permian.

Horizons by Maystrenko and Scheck-Wenderoth (2013) are smoother due to a gridding algorithm. Their top of basement clearly correlates with the top of lower Palaeozoic.

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