

NOTES TO THE SEISMIC CRUSTAL DATABASE EUNASEIS FOR EUROPE, GREENLAND AND THE NORTH ATLANTICS

by Artemieva I.M. and Thybo H., Tectonophysics, 2013

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Reference:

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The database may be used for non-commercial purposes (e.g. research and education), but cannot be incorporated, in part or in whole, into any other database without written permission from the authors.

EUNASEIS:

Data sources: point seismic data (seismic profiles digitized with lateral step of <50km and seismic Receiver Functions), see suppl. details below. For details regarding data quality, model resolution, digitizing strategy, use of non-seismic data (e.g. forced COT along the Atlantic margins), see the original article.

The database is provided on a 2 deg x 2 deg grid, but it is constrained by interpolation of point data on a 4 deg x 4 deg grid saved on a 2x2 deg grid. The 4 deg interpolation radius allows for covering “white spots”, thus providing continuous regional data coverage.

Since the crust often has short-wavelength, high-amplitude variations, the model should be treated with caution in regions with no seismic data or with sharp change in crustal properties (see map of data coverage).

This version of the database is particularly good for those interested in large-scale crustal structure, e.g. to introduce crustal correction to different types of geophysical or geodynamic models.