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Short presentation

I am interested in computational seismology, focusing on imaging the seismic structure of the Earth's interior. Besides being a fan of the geophysical inverse problems, I use observations of seismic waves to apply different techniques, in particular tomography, receiver function imaging, moment tensor inversion, and relocation analyses, in addition to shear wave splitting techniques.

Publications

Southern Africa crustal anisotropy reveals coupled crust-mantle evolution for over 2 billion years

Thybo, H., Youssof, Mohammad & Artemieva, I., 29 Nov 2019, In: Nature Communications. 10, 1, p. 1 10 p., 5445.

Crustal and upper mantle seismic structure of Russia from teleseismic receiver functions

Youssof, Mohammad, Thybo, H., Artemieva, I. & Vinnik, L., 2016, In: Geophysical Research Abstracts. 18, 1 p., EGU2016-16341.

Thickness and composition of the crust in southern Africa.

Youssof, Mohammad, Thybo, H. & Artemieva, I., 2016, *35th Int. Geological Congress*. 1 p. 4422

Velocity Structures underneath NRIL seismic station, Russia: Imaging the difference between the Siberian Craton and the West Siberian Basin

Youssof, Mohammad, Thybo, H., Artemieva, I. & Vinnik, L., 2016, *Eos Trans. AGU*. AGU, Vol. 96. p. 1 199453

Crustal and upper mantle structure of Siberia from teleseismic receiver functions

Youssof, Mohammad, Thybo, H., Artemieva, I., Vinnik, L. & Oreshin, S., Apr 2015, In: Geophysical Research Abstracts. 17, 1 p., 6035.

Strong crustal seismic anisotropy in the Kalahari Craton based on Receiver Functions

Thybo, H., Youssof, Mohammad & Artemieva, I., Apr 2015, In: Geophysical Research Abstracts. 17, 1 p., 8916.

Upper mantle seismic structure beneath southwest Africa from finite-frequency P- and S-wave tomography

Youssof, Mohammad, Yuan, X., Tilmann, F., Heit, B., Weber, M., Jokat, W., Geissler, W., Laske, G., Eken, T. & Lushetile, B., Apr 2015, In: Geophysical Research Abstracts. 17, 1 p., 13898.

Upper mantle structure beneath southern African cratons from seismic finite-frequency P- and S-body wave tomography

Youssof, Mohammad, Thybo, H., Artemieva, I. M. & Levander, A., 2015, In: Earth and Planetary Science Letters. 420, p. 174-186 13 p.

Strong seismic anisotropy in the crust of southern African cratons

Thybo, H., Youssof, Mohammad & Artemieva, I., Dec 2014, In: EOS Trans. AGU. S23E-04.

Teleseismic receiver functions imaging of Siberia

Youssof, Mohammad, Thybo, H. & Artemieva, I., Dec 2014, In: TRANSACTIONS-AMERICAN GEOPHYSICAL UNION. 94, 1 p., S51B-4462.

EVOLUTION OF SOUTHERN AFRICAN CRATONS BASED ON SEISMIC IMAGING

Thybo, H., Youssof, Mohammad & Artemieva, I., Oct 2014, In: Geological Society of America. Abstracts with Programs. 46, 6, p. 43-43

Seismic Structure of Southern African Cratons: A study based on teleseismic receiver functions and finite-frequency tomography

Youssof, Mohammad, Artemieva, I., Levander, A. & Thybo, H., Apr 2014, In: Geophysical Research Abstracts. 16, 1 p., 10884.

Moho depth and crustal composition in Southern Africa

Youssof, Mohammad, Thybo, H., Artemieva, I. & Levander, A., 2013, In: Tectonophysics. 609, p. 267-287 21 p.

Seismic imaging of Southern African cratons: based on teleseismic receiver function and finite-frequency tomography

Youssof, Mohammad, 2013, Department of Geosciences and Natural Resource Management, Faculty of Science, University of Copenhagen. 130 p.

Seismic structure of the crust and lithospheric mantle of the southern African cratonic region

Youssof, Mohammad, Thybo, H., Artemieva, I. & Levander, A., 2013, In: TRANSACTIONS-AMERICAN GEOPHYSICAL UNION. 94

Seismic velocity structure and anisotropy in southern African lithosphere terranes

Youssof, Mohammad, Thybo, H., Levander, A. & Artemieva, I., 2013, In: Geophysical Research Abstracts. 15, 1 p.

Investigating the translation of Earth's inner core

Day, E. A., Cormier, V. F., Geballe, Z. M., Youssof, Mohammad & Yue, H., Dec 2012, In: Eos Trans. AGU, Fall Meet. Suppl.. 93, 52, D133A-2423.

The crust and mantle beneath the Siberian provinces: a preliminary model based on new receiver function analysis

Youssof, Mohammad, Artemieva, I., Thybo, H. & Frassetto, A., Apr 2012, In: Geophysical Research Letters. 14, EGU2012-8870.

High-resolution imaging of the Kaapvaal Craton using P and S wave receiver functions and P- and S- finite frequency tomography

Youssof, Mohammad, Thybo, H., Levander, A. & Artemieva, I., 2012, In: TRANSACTIONS-AMERICAN GEOPHYSICAL UNION. 93, 1 p., 1492831, T23C-2680.

Why is the Kaapvaal different from other cratons?

Youssof, Mohammad, Thybo, H., Levander, A. & Artemieva, I., 2012, In: Geophysical Research Abstracts. 14, 1 p.

Combined teleseismic imaging of the structure of southern African cratons using P-receiver functions and P-and S-finite-frequency tomography

Youssof, Mohammad, Thybo, H., Levander, A., Yuan, X. & Bezada, M., Dec 2011, In: Eos Trans. AGU, Fall Meet. Suppl.. 92, 51, T32A-06.

Structure and extent of the southern African cratons: Integrated images from receiver functions and teleseismic tomography.

Youssof, Mohammad, Levander, A., Bezada, M. & Thybo, H., Apr 2011, In: Geophysical Research Abstracts. 13, EGU2011-5071.

The extent of the Cratonic keel underneath the Southern African region: A 3D image using Finite-Frequency Tomography

Youssof, Mohammad, Bezada, M., Thybo, H. & Levander, A., Dec 2010, In: Eos Trans. AGU, Fall Meet. Suppl.. 91, 51, D121A-1950.

PdS and SdP Receiver Functions Image of the Lithosphere underneath the Southern African Regions

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