# East Yilgarn Moho, 2021

by

RE Murdie and H Yuan 1,2

## **Abstract**

East Yilgarn Moho, 2021 digital data layer is a depth contour map of the Mohorovičíć (Moho) discontinuity between the crust and mantle as determined from seismological methods (Fig. 1). The map is based on the AuSREM model (Salmon et al., 2012) at half degree-gridded intervals with additional data from the Yilgarn Craton – Officer Basin – Musgrave Province (Neumann, 2013) and the northeastern Yilgarn deep crustal seismic reflection lines (Goleby et al., 2003). Receiver function data is from passive seismic deployments (Reading et al., 2003).

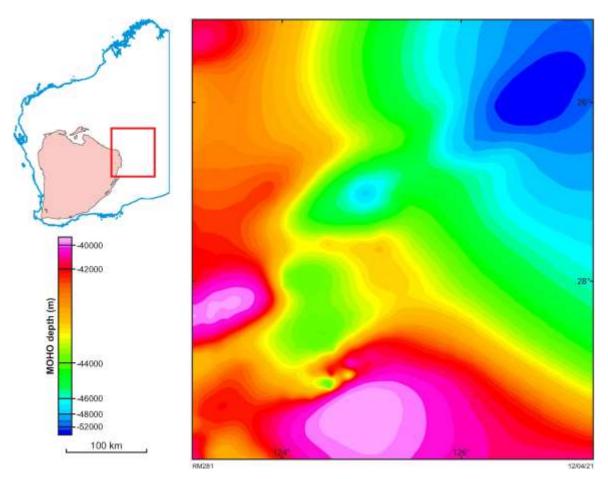


Figure 1. East Yilgarn Moho, 2021 digital data layer

<sup>1</sup> ARC Centre of Excellence for Core to Crust Fluid Systems, Macquarie University, Balaclava Road, North Ryde NSW 2019

<sup>2</sup> Centre of Exploration Targeting, The University of Western Australia, Stirling Highway, Crawley WA 6009

## How to access

The data layer is best accessed using **GeoVIEW.WA**. This online interactive mapping system allows data to be viewed and searched together with other datasets, including Geological Survey of Western Australia and Geoscience Australia geochronology data, geological maps and mineral exploration datasets. The **East Yilgarn Moho, 2021** digital data layer is also available as a free download from the **Data and Software Centre** via Datasets — Statewide spatial datasets — Geology — East Yilgarn Moho, 2021, as ESRI shapefiles and MapInfo TAB files.

#### References

Goleby, BR, Blewett, RS, Groenewald, PB, Cassidy, KF, Champion, DC, Jones, LEA, Korsch, RJ, Shevchenko, S and Apak, SN 2003, The 2001 northeastern Yilgarn deep seismic reflection survey: Geoscience Australia, Record 2003/28, 144p.

Neumann, NL (editor) 2013, Yilgarn Craton – Officer Basin – Musgrave Province seismic and MT workshop: Geoscience Australia, Record 2013/28, 210p.

Reading, AM, Kennett, BLN and Dentith, MC 2003, Seismic structure of the Yilgarn Craton, Western Australia: Australian Journal of Earth Sciences, v. 50, no. 3, p. 427–438, doi:10.1046/j.1440-0952.2003.01000.x.

Salmon, M, Kennett, BLN and Saygin, E 2012, Australian Seismological Reference Model (AuSREM): Crustal component: Geophysical Journal International, v. 192, p. 190–206.

### **Recommended reference**

Murdie, RE and Yuan, H 2021, East Yilgarn Moho, 2021: Geological Survey of Western Australia, digital data layer, <a href="https://www.dmirs.wa.gov.au/geoview">www.dmirs.wa.gov.au/geoview</a>.





#### Disclaimer

This product uses information from various sources. The Department of Mines, Industry Regulation and Safety (DMIRS) and the State cannot guarantee the accuracy, currency or completeness of the information. Neither the department nor the State of Western Australia nor any employee or agent of the department shall be responsible or liable for any loss, damage or injury arising from the use of or reliance on any information, data or advice (including incomplete, out of date, incorrect, inaccurate or misleading information, data or advice) expressed or implied in, or coming from, this publication or incorporated into it by reference, by any person whosoever.



© State of Western Australia (Department of Mines, Industry Regulation and Safety) 2021

With the exception of the Western Australian Coat of Arms and other logos, and where otherwise noted, these data are provided under a Creative Commons Attribution 4.0 International Licence. (http://creativecommons.org/licenses/by/4.0/legalcode)