In-situ calcite U–Pb geochronology of carbonate and clastic sedimentary rocks from the Canning Basin, Western Australia

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Received 3 August 2022; accepted 18 December 2022
Editorial handling: Anita Andrew

SUPPLEMENTAL DATA

Australian Journal of Earth Sciences (2023), *70*(3), https://doi.org/10.1080/08120099.2023.2161635

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Supplemental data

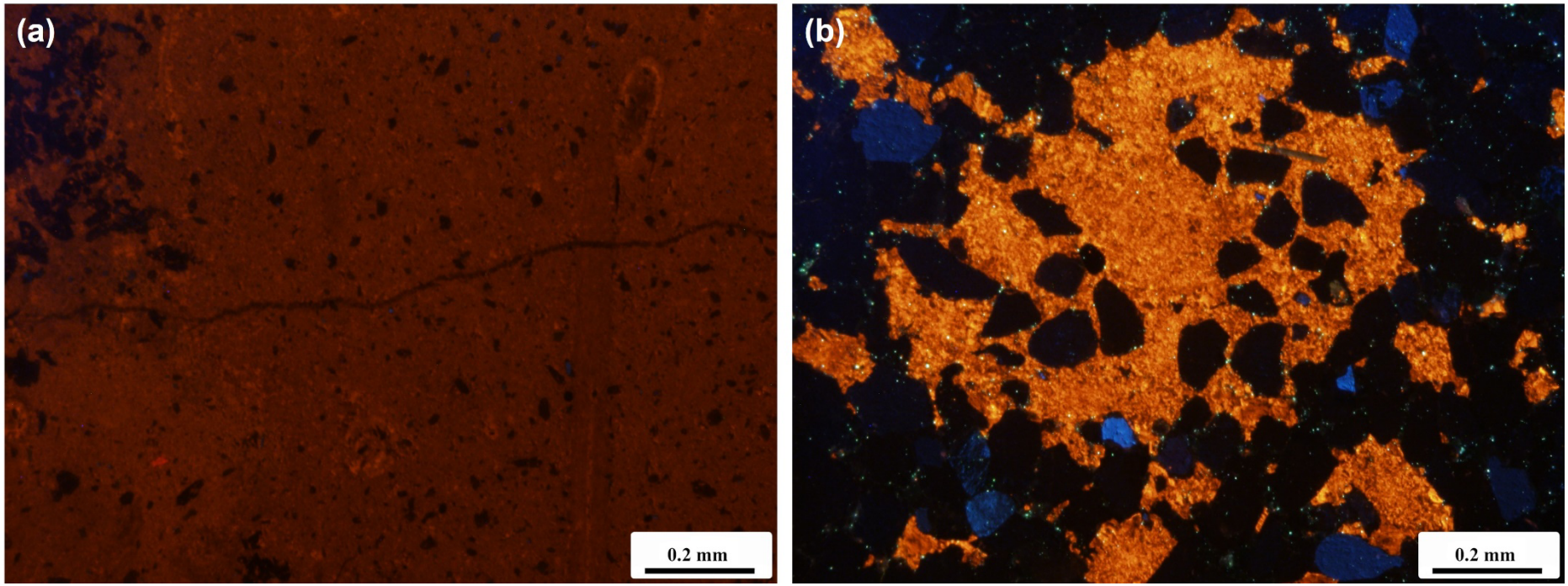
Figure S1. Cathodoluminescence (CL) petrography indicates relatively uniform luminescence for calcite in the studied samples: (a) limestone sample 221488, and (b) sandstone sample 221815.

Figure S2. TIMA automated mineralogy results showing grain size distribution of minerals in limestone sample 221488 and sandstone sample 221815: (a) calcic-plagioclase (anorthite), (b) orthoclase, and (c) quartz.

Figure S3. Tera-Wasserburg concordia plots showing the *in-situ* calcite U–Pb dating results of three comparative analytical sessions for limestone sample 221488: (a) Trial #1, (b) Trial #2, and (c) Trial #3.

Table S1. *In-situ* calcite U–Pb isotopic data for the carbonate and sandstone core samples from the Olympic 1 well in the Canning Basin, Western Australia. (Excel workbook)

Table S2. *In-situ* calcite U–Pb isotopic data from three comparative analytical sessions for limestone sample 221488. (Excel workbook)



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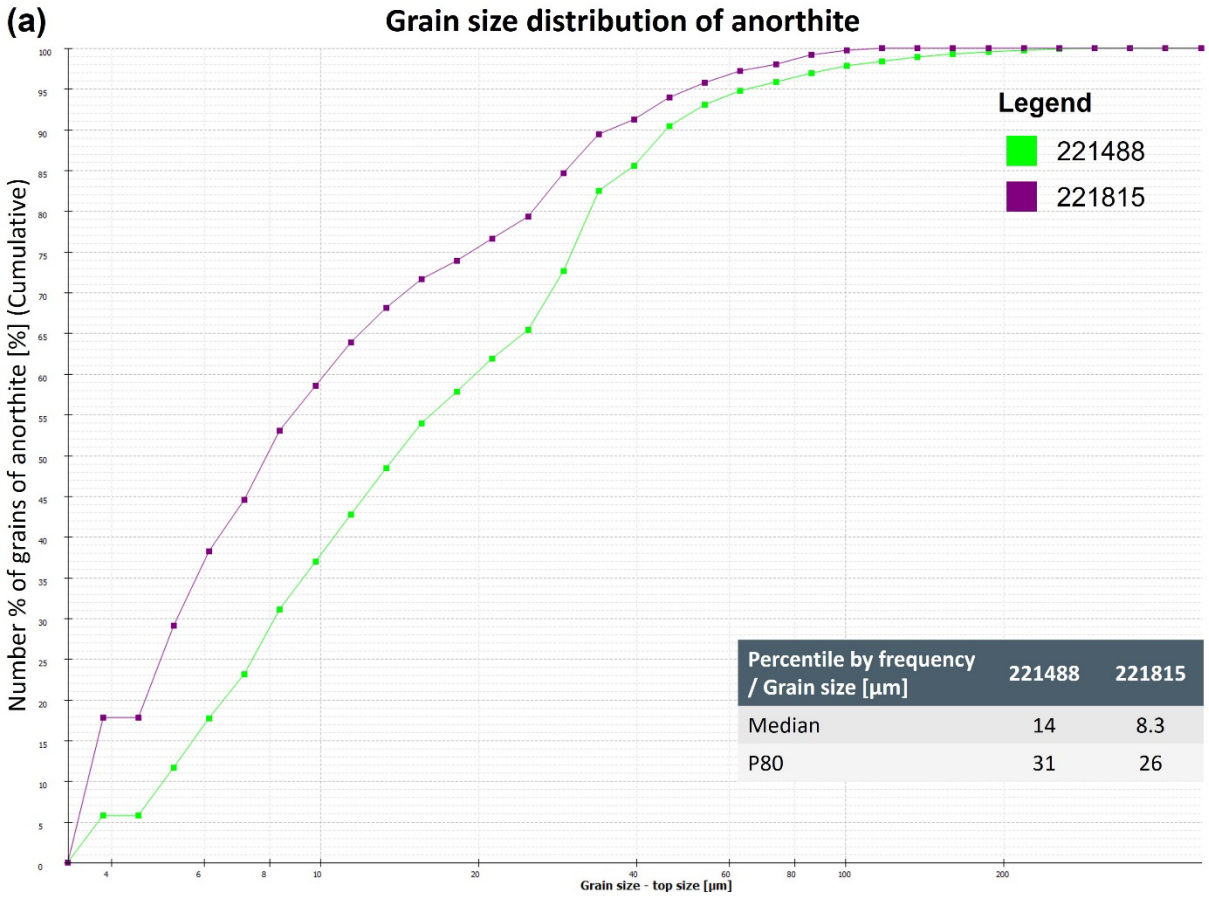
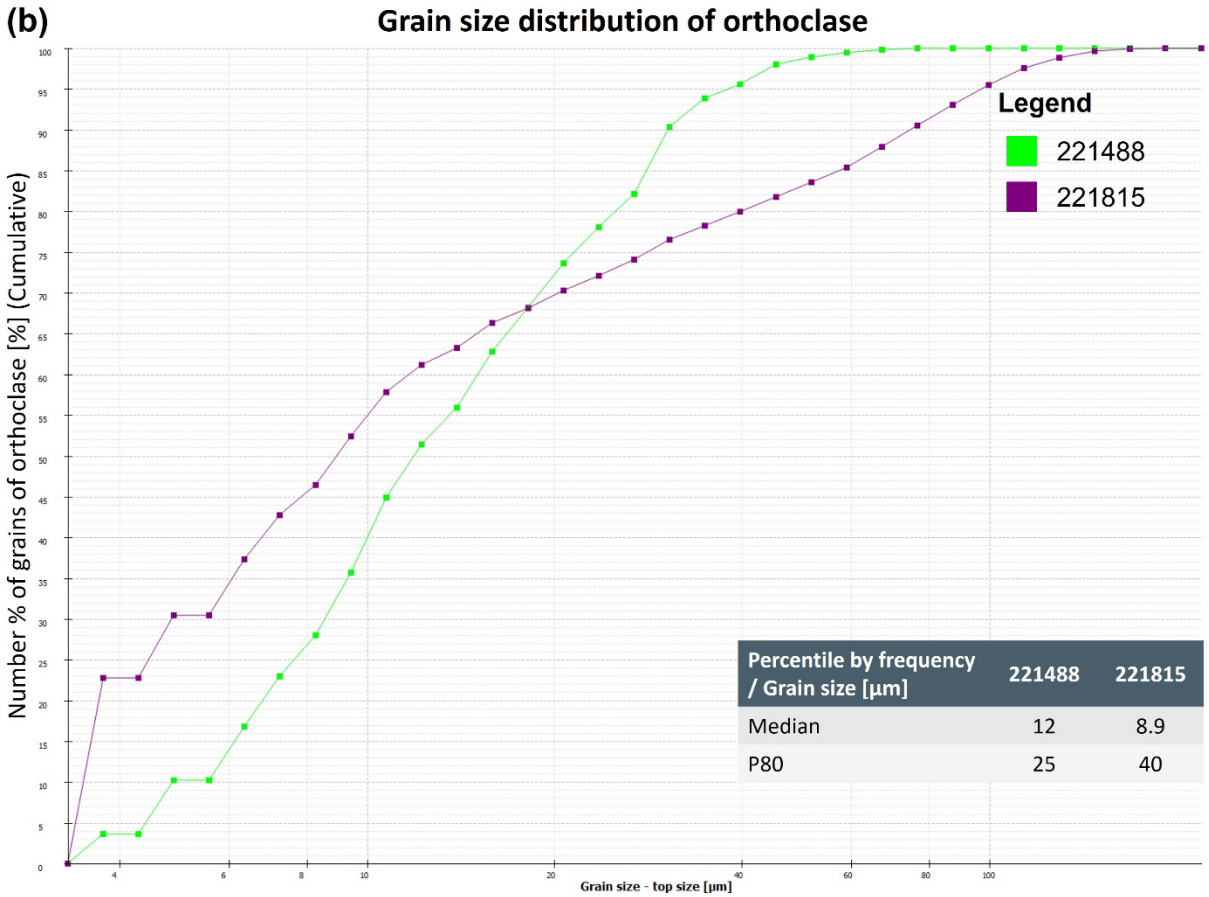
(a)

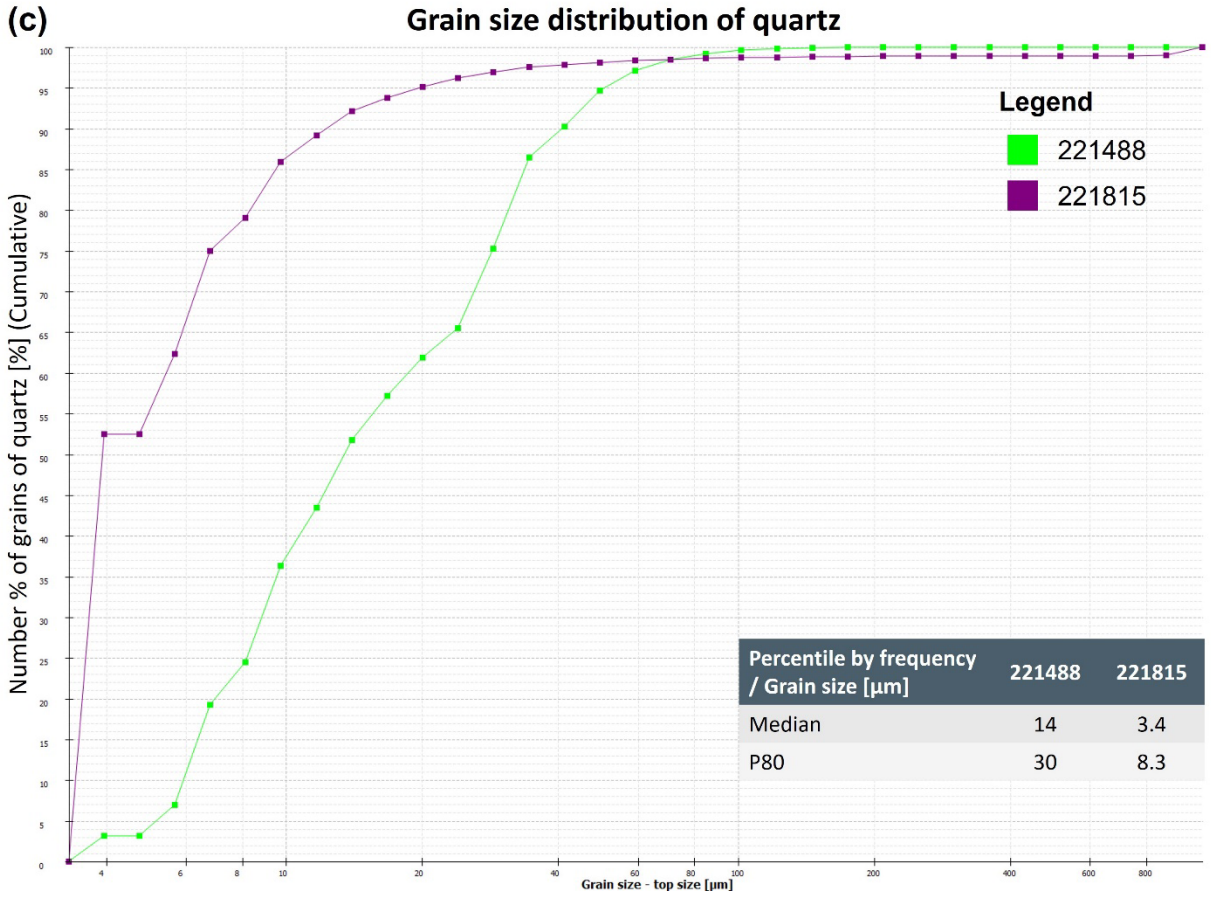


Percentile by frequency / Grain size [µm]	221488	221815
Median	14	8.3
P80	31	26

(b)



Percentile by frequency / Grain size [µm]	221488	221815
Median	12	8.9
P80	25	40



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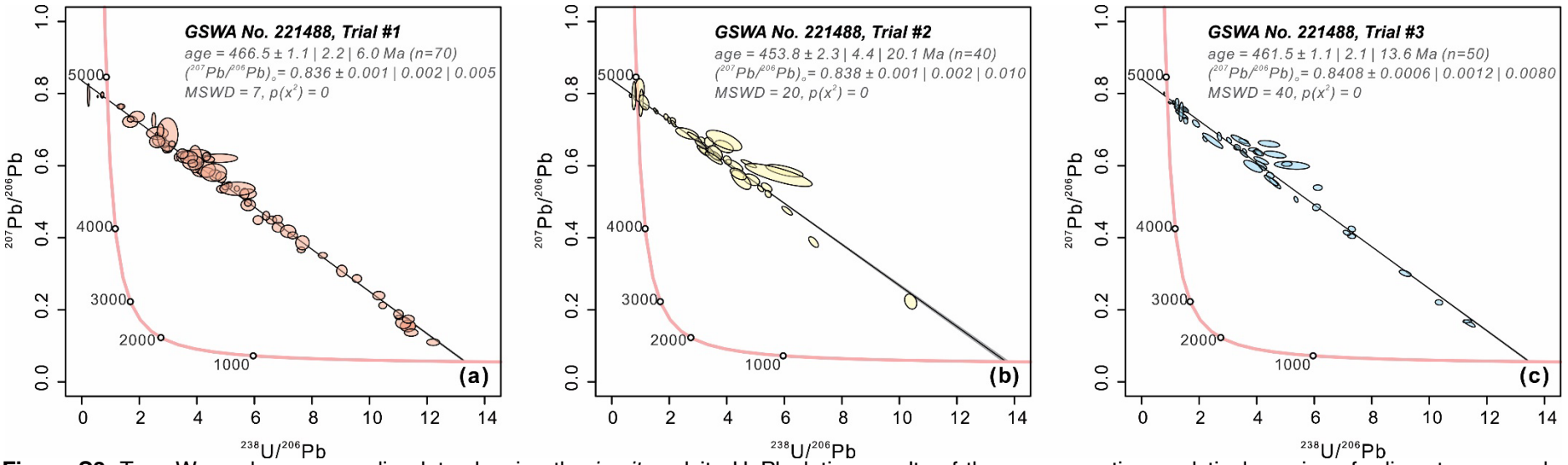

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