

Interactive comment on “Global whole-rock geochemical database compilation” by Matthew Gard et al.

Anonymous Referee #2

Received and published: 26 May 2019

Gard and coauthors present a curated database of (primarily) whole-rock elemental and isotopic analyses. This work fills a useful niche between domain-specific manual compilations and large but less-curated online repositories such as EarthChem.

I particularly applaud the authors for ensuring that it is relatively easy to download the full dataset and bibliography in open formats – in this case, csv and bib. There is one minor issue here though that I would request the authors consider addressing: right now, it would not be easy for a user without significant database experience to figure out, e.g., which age corresponds with which sample metadata, or elemental composition, or so on, for any of the ten individual tables provided. The simplest way to address this would be to provide a flat csv of the *entire* dataset. While this would weigh in at perhaps 1 GB, it would be sparse and highly amenable to compression (e.g.,

C1

gzip, for a standard and open option). A similar dataset I have worked with compresses to a relatively manageable 160 MB when treated in such a manner.

Finally (though I suspect this may have already been done) since it is not immediately clear from the text, I would echo the request from Prof. Condie’s review, to indicate the isotopic dating method and (critically!) uncertainty for samples with newly-attributed ages.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2019-50>, 2019.

C2