

Interactive comment on “OCTOPUS: An Open Cosmogenic Isotope and Luminescence Database” by Alexandru T. Codilean et al.

G. Balco (Referee)

balcs@bgc.org

Received and published: 9 June 2018

Tibi, that is an interesting point that no one has reviewed the actual data set itself. Frankly, it did not occur to me to do that, for two reasons.

First, of course, for the most part the observational data themselves are not new contributions and have already been reviewed and published elsewhere. We are only relying on you to correctly reproduce them.

Then, second, my entire conception of a database project of this sort is that its core function is to compile and serve the raw observational data, that is, locations, Be-10 concentrations, association of the sample with a particular stream channel, etc., that will not change over time. The calculated erosion rates are a moving target, because

Printer-friendly version

Discussion paper



erosion-rate calculation methods, production rate estimates, etc., will presumably continue to improve over time, as will DEMs, geologic maps, and other data useful for interpreting the observations as erosion rates. Thus, to me the calculated erosion rates are somewhat ephemeral, not really part of the "database" per se, and any inaccuracy there will presumably be corrected in some future recalculation. In the exposure-age database projects I have put together, the exposure ages themselves are not actually recorded anywhere – they are dynamically calculated online from the observational data when required by the web server.

So that's the explanation for the fact that I have not gotten into detailed checking of the data and/or the erosion rate calculations. And I reiterate my point from the review – if you provide direct, granular access to data reports on each sample/published data set via the web interface, data checking will take care of itself because of the incentive for authors of source papers and others interested in synoptic analysis to verify for themselves that the data they are interested in are correctly represented.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2018-32>, 2018.

[Printer-friendly version](#)[Discussion paper](#)