

Paul Melillo

Critical Review of Geologic Writing

Geology 371

Review of: “Temporally and Spatially Uniform Rates of Erosion in the Southern Appalachian Great Smoky Mountains” by Ari Matmom

The paper in review is about a study conducted studying ^{10}Be measurement from fluvial sediments sample from eight Great Smoky Mountain drainages. The results from this study imply that spatially homogeneous sediment generation at $73 \pm 13 \text{ tons km}^{-2} \text{ yr}^{-1}$, equivalent to bedrock erosion at $27 \pm 5 \text{ m My}^{-1}$. These results support rates from previous studies in the area. On the contrary, unroofing rates during the Paleozoic orogeny events that formant the mountain range suggests higher integrated erosion rates. The rates found suggest that

This paper was very well written and contained a large amount of information to support the conclusions drawn from this study. The quality of the data in this paper is good. The interpretations in the paper were present with supporting evidence and flowed nicely thought the paper. Both the writing and illustrations were present in a clear and concise way, with the illustrations incorporated well to support the writing.

I recommended this paper for submission to GEOLOGY, after a few corrections are made. The methods section could be expanded giving more detail about how measurements were taken from the sediments. I feel that the end of the implications could be expanded and that the ending could be more conclusive.

1. It seems that you are not purposing the big idea question in the abstract. You talk about “results suggesting homogeneous sediments generation” but that does not read like the point of your paper at this point, you might want to change the word suggest.
2. This is a very awkward sentence.

3. Expand your method to give more information on how the sediments were used in your calculations
4. Long sentence, should be broken into two sentences.
5. The end leaves the reader hanging, it's almost like you are ending with a questions. Try to fix the last sentence to end with a strong statement about you study.