

***Interactive comment on “Native American lithic procurement along the international border in the boot heel region of southwestern New Mexico” by K. E. Zeigler et al.***

**F. Arakawa (Referee)**

farakawa@crowcanyon.org

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Solid Earth Discuss: Native American lithic procurement along the international border in the boot heel region of southwestern New Mexico

K.E. Zeigler, C. Hughes, A. Kurota, and P. Hogan

General/Overall:

Zeigler et al's manuscript is a very informative paper, and it provides a great deal of information about geology, lithology, and raw material types in the southwestern New Mexico. If this manuscript is a general geological paper, it will be published as it is. But,

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since this manuscript should focus on human-earth interaction, these authors need to explore human behavior and sociopolitical organization in their manuscript. In other words, these authors need to discuss how these different procurement patterns tell us about behaviors of prehistoric people and their settlement/subsistence patterns. Thus, I recommend this manuscript as “accepted with minor revisions.” To be published in this journal, these authors should discuss the following issues:

1. Explain why they used the minimum-distance and straight-line analysis and consider energy expenditure. In other words, it is important to consider some physiological aspects, such as slope and aspects in the landscape. You probably cited my dissertation (Arakawa 2006) for justifying the use of the minimum-distance, but you still need to explain why the straight-line analysis is valid.

2. In the summary, it is crucial to discuss what these toolstone procurement patterns through time tell us about human behaviors and sociopolitical organization (see above).

Technical: In Abstract, I think that “human-Earth” should be “human-earth.”

In 2.2, it will be very helpful if you could provide a table that includes time, period, subsistence pattern, and presence/absence of pottery.

In 3.4, I believe that the word “per cent” should be one word.

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