

Interactive comment on “Precipitation changes in the South American Altiplano since 1300 AD reconstructed by tree-rings” by M. S. Morales et al.

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This is a well-conceived and well-written paper that gives us information about an area strongly influenced by both marine (ENSO) and terrestrial (Amazon Basin moist air mass incursions) influences. This hi-res reconstruction adds to our knowledge of an area with no previous hi-res paleoclimatic information. I have several questions about the paper, however.

Why is the paleoclimatic information cut off at 1300 when the authors indicate they had 75 more years of data? They indicate they are using an EPS of 0.85 as justification for the cutoff. Even if the period before 1300 has a lower EPS, they are still discarding valuable paleoclimatic information. The 0.85 EPS "standard" is completely arbitrary and discarding data because the EPS is lower than 0.85 is completely unjustified logi-

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cally. They could analyze this period separately in a paragraph and extend Fig. 4.

The paper indicates correlations with climate in year t with growth in years $t+1$, $t+2$ and $t+3$. It is logical that soil moisture will influence growth in future years, but why not in year t ? This is the only instance that I can remember where present tree growth is not influenced by present climate. Are the authors sure about the phenology of these trees? Could the Schulman shift create this illogical relationship?

Although the paper is well-written, it needs considerable editorial revision to standardize the English as follows:

Everywhere - "rainfalls" S/B "rainfall" - it is never plural

Abstract, l.18 - eliminate "up"

p.3, l.12 - "yields" S/B "yield"; l.24 - no need to capitalize, italicize or use quote marks for "llamas"

l.26 - "resource" S/B "resources"

p.4, l.1 - "represent" S/B "represents"; l.11 - "rapidly" S/B "rapid"

p.5, l.8 - delete "contribute to"; l.22 - insert comma after "America"; l.24 - "features" S/B "feature"

p.6, l.1 - "occur" S/B "occurs"

p.8, l.8 - "1968" S/B "1996"; The reference S/B:

Stokes, M. A. and Smiley, T. L.: An introduction to tree-ring dating, University of Arizona Press, Tucson, 1996. (Originally published by the University of Chicago Press, Chicago, 1968.)

p.9, l.24 - "1976" S/B ""2001"; The reference S/B:

Fritts, H. C.: Tree rings and climate. Blackburn Press, Caldwell, New Jersey, 2001. (Originally published by Academic Press, London, 1976.)

Note: Only the first word in the Stokes and Smiley reference was capitalized, but all words in the Fritts reference were capitalized, an inconsistency.

There are many other relatively minor editorial changes needed, which I would be happy to furnish directly to the authors if they desire.

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