

Interactive comment on “Little ice age advance and retreat of Glaciar Jorge Montt, Chilean Patagonia, recorded in maps, air photographs and dendrochronology” by A. Rivera et al.

A. Rivera et al.

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Received and published: 5 December 2011

Responses to the Reviewer:

Thanks a lot for your detailed analysis of the manuscript. It has been extremely useful to address your comments and add your corrections. We think the paper has improved a lot. Please see the new version of the paper in the supplement file.

In general, we have accepted all your English corrections.

Also, we have added the suggested discussion of results, considering alternative references.

Interactive
Comment

We have explained in more detail what we understand by the LIA in the region. As you correctly pointed out, we were talking about something else, but now we clarified that we are referring to the two main advances during the LIA widely recognized in Patagonia. We have detailed and defined more accurately these concepts.

The 1898 position is, in our point of view, coincident with the maximum advance of the glacier during the LIA, based upon the presence of a submarine arcuate terminal moraine at this location. Certainly, the glacier could have advanced further north before 1898, but the bathymetry of the area indicate, that the more likely position was coincident with the submarine moraine. We have no date for the maximum advance, but from the geomorphological point of view, we think 1898 must be the more likely maximum position.

We have explained in more detail the dendrochronology aspect of the paper, indicating the number of trees, radii etc, used in our analysis, Also, we have explained in more detail de implications and uncertainties of the 14C dates.

All the figures with minor problems detected by the reviewer (letter sizes, dates of satellite images, resolution of maps, etc.) were improved.

Please let us know if there is anything else we need to add, or if you think we forgot something.

Please also note the supplement to this comment:

<http://www.clim-past-discuss.net/7/C1964/2011/cpd-7-C1964-2011-supplement.pdf>

Interactive comment on Clim. Past Discuss., 7, 3131, 2011.

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