

## ***Interactive comment on “Climate changes since the mid-Holocene in the Middle Atlas, Morocco” by M. Nourelbait et al.***

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In this paper Nourelbait et al. carried out a multiproxy study on a 6000-year long core from the Middle Atlas. Climate was then reconstructed using a transfer function. An aridity trend and some environmental changes are observed.

I don't have any problems with the science and the interpretations/conclusions coming from this study but I suggest some minor changes that should be addressed before publication:

-The English needs to be checked and improved by a native English speaker – there are too many mistakes and the grammar could be better.

-There is a very interesting change observed in the pollen at ca. 3750 cal yr BP with the

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expansion of Cedrus but this vegetation change seems to start earlier on, around 4 ka, with a decrease in Pinus and decreasing estimations of temperature (Fig. 3). Could that also be related with the globally detected 4.2-4 ka cold/arid event? This event has been previously identified in the western Mediterranean (i.e., Jiménez-Moreno & Anderson, 2012) so it would be worth adding some discussion about it.

-It seems reasonable to suggest the hypothesis about an increase in seasonality triggering the Cedrus expansion since 3700 cal yr BP in the area but it looks like the authors are not very sure about it. . . This could be tested checking the environmental factors controlling Cedrus occurrences at Present, which I am sure has previously been done by ecologists in the area.

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