

Response to the Editor

For easier reading, we have reproduced the Editor's comments (in black and italic) and give our responses in blue.

The four referee reports (and one short comment basically duplicating one of the referee comments) received for your manuscript are overall positive. They also provide constructive comments, all of which I ask you to address in a response and in a revised manuscript.

The most critical aspect, raised by Referee 3, is the interpretation of the sediment core data as a record of salinity and monsoon intensity and as varying synchronously with Greenland temperatures. Since the validity of interpretation of these data is the basis for your hypothesis to be tested with model simulations, it is important that you present and interpret the data in a way that they are defensible if scrutinized in detail. This might imply to be less definitive about the interpretation of the record. An additional strategy could be that the teleconnection hypothesis is based less strongly on that one record.

Dear Editor,

In the new version of this manuscript, we have indeed been less definitive about the interpretation of the record and clarified that the model experiments were performed to understand the mechanism of connection between the North Atlantic/Greenland area that is suggested from the record. We have also responded to all the reviewers' comments, which were very helpful in clarifying the manuscript and improving it.