**Climate
of the Past
Discussions**

Interactive comment on "Multiscale regression model to infer historical temperatures in a central Mediterranean sub-regional area" *by* N. Diodato et al.

Anonymous Referee #2

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The paper entitle "Multiscale regression model to infer historical temperatures in a central Mediterranean sub-regional area" by N. Diodato, G. Bellocchi, C. Bertolin, and D. Camuffo, tackle an ambitious scientific issue regarding the reconstruction of the past climate variability at regional scale applying a multiscale regression model on the historical data set. The paper analyze in particular the mean temperatures in the southern region of the Mediterranean area focusing on the seasonal time scale.

After a long a complex reading of the paper my conclusion is to reject the paper in the present form, however to be honest the paper is so confused that for me it was very hard to evaluate it in more accurate and precise manner and therefore is up to the

Editor the final decision.

In my opinion the first reason of that confusion, came from what the authors intend for "modeling", in particular "regional model" and so on , in the climate community this word is related to "numerical/analytical model" and not in some thing that seem much more a statistical algorithm, which physical meaning is very mysterious.

The second general comments is related to the data, i.e. 68 data set, that are also very sparse in time and the number that, if I understood well, are real 68 data and not 68 records (?), moreover looking at Tab.1a seem to me that the category of the anomalies is quite arbitrary and definitively the number is real insufficient for any statistical analysis and therefore put at risk all the results of the paper.

I suggest to the authors to be more clear on the origin and on the physical meaning of the equations 1 to 4 and mainly on the quantitative relevance of the data set and in general to rewrite all paper in significant way.

Interactive comment on Clim. Past Discuss., 6, 2625, 2010.