

## ***Interactive comment on “An inkling of the relation between the monofractality of temperatures and pressure anomalies” by A. Delière and S. Nicolay***

**Anonymous Referee #2**

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Technical remarks:

-line 9 p. 1341: if the formula stated holds, what is the point of using the WLM rather than standard wavelet coefficients?

-line 10 p. 1341: what is meant by “the right choice of  $\psi$ ” ?

-the formula line 16 p. 1341 is not clear to me: on which coefficients is the sup take?

-line 20 p. 1341: what is meant by “gives a good approximation”? such loose statements can be misleading. There are mathematical examples where the two quantities are very wide apart. Preferably, I would suggest either to drop this statement and only mention the linear case, which is the only one relevant here, and where the situation is totally under control; the other option is to go in details and state explicitly what is

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known to hold.

-p1344 line 5: I assume that LRC means “long range correlations”? if so, state it explicitly

-p1344 line 7-8: I am quite surprised by this assertion, since DFA often is presented as supplying an alternative way to perform multifractal analysis. Can you be a little more precise here?

Methodological comments:

My main concerns are the statements lines 16-20 of page 1342: Concerning lines 16-17, I am not aware of any similar statement in the two books quoted (Mallat and Daubechies). I may have missed a point, but, if this result is indeed true, the authors should refer to a precise result, not just vaguely to two books. The second statement (lines 18-20) does not seem to follow from the first one, and no reference is given. The numerical experiments backing these results certainly are nice, but one verification on one example is not sufficient to back a general statement: They are, at best, illustrative. Since these arguments are the starting point of the whole method proposed, these concerns should be answered in a precise way.

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