

Interactive comment on “Nonstationary time series prediction combined with slow feature analysis” by G. Wang and X. Chen

Anonymous Referee #2

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I found the paper by Wang and Chen potentially interesting. The authors propose a novel method for predicting non-stationary time series using the Slow Feature Analysis (SFA) approach. The paper is well written and concise. The only weakness of this paper is that the authors fail to demonstrate that the methodology they propose performs better than other competing forecasting methodologies. In fact, the authors simply compare the performance of a model based on a predicted driving forces with one based on the stationary assumption. Evidently, the former outperforms the latter. I suggest the authors to make an additional comparison with other methodologies also because from their figures 2 and 4 the forcing model works better for just a very few steps, just 1-4 steps. This result may be important, but it is not well explained in the paper why it may be important. Without a proper discussion of the finding, readers may find it modest.

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Detailed comments:

Does the paper contain new and significant results? See the above comment. It may need some update.

Is the paper of an international standard? See the above comment. It would be more interesting if its physical meaning and relevance is better argued in comparison with alternative techniques.

Is the presentation clear and concise? yes, but equation 4 needs to be better explained. Why there is a "*" in the W coefficients? How do the authors calculate the coefficients?

Does the paper put the obtained results into context, with relevant references? See the above comment. It may need some update.

Is the length of the paper appropriate? yes

Is the text fluent and precise? yes

Are the title and the abstract pertinent and understandable to a wide audience? yes

Are all figures necessary, and of appropriate quality? yes

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