

Interactive comment on “On the nonlinear and Solar-forced nature of the Chandler wobble in the Earth’s pole motion” by Dmitry M. Sonechkin et al.

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All of these are right. But, external periodicities affect the systems additively in both of your examples. In contrast, external periodicities act multiplicatively in the case of the Pole motion. It can be seen if the fully nonlinear Euler’s system is transformed into a system consisting of a cubic nonlinear oscillator (like the Dueffing oscillator) with a regulator. External periodicities affect the regulator, and only then the regulator changes the momentary frequency of the oscillator to be equal to the Chandlerian frequency. A preliminary consideration of this matter has been given in my old paper (2001) in Russian. Now, I add several sentences about this into the corrected text of my paper under discussion.

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Interactive comment on Nonlin. Processes Geophys. Discuss., <https://doi.org/10.5194/npg-2019-12>, 2019.

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