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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Item 1 I took the frequency (C-A-R)/(A+R) from Gross (2015) as an illustration only. It is not the aim of my paper to discuss what is the exact value of this FREQUENCY. Therefore, I just exclude this mention from the text.

Item 2 Certainly, the way indicated by the reviewer1 is possible to use. But I prefer to use another possible way via asymptotic expansion of the nonlinear Euler equation solution. I change the motivation of this indicated that, according to my knowledge nobody used the first way, at least in a geophysics yet. So the use the Jakoby functions is a way to uncertainty (no experience exists).

Item 3 Eq. (5) is added in the subsequent consideration in my text (external influences

on the system are considered (Eq. (8) and the next ones). In order to better motivate my choice I include into the text another representation of the nonlinear Euler system in the form of the cubic nonlinear oscillators (Dueffing's oscillators).. This representation is possible because the bare Euler system admits the existence of several first integrals. Under actions of external influences these integrals lose their time-invariability, and two first order ODEs must be added to depict the time evolution of the quantities. It is just "toy-model" asked by reviewer1. It already has been published by me, but in Russian only. This toy-model reveals that the external influences affect the Euler frequency. As a result, the Euler frequency varies in time in harmony with reality, but not constant as usually supposed.

Item 4 Of course, the topic of a possible influence of the solar activity on the polar motion is separate from the discussion of the Chandler wobble nonlinearity problem. It can be subject of another investigation. Unfortunately, I am afraid that I shall not be able to conduct such an investigation (because of my age). Therefore I write about this topic in this paper to stimulate younger researchers to develop this idea.

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