Nonlin. Processes Geophys. Discuss.,
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Nonlinear Processes in Geophysics
Discussions
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Interactive comment on "Asymptotes of the nonlinear transfer and wave spectrum in the frame of the kinetic equation solution" *by* Vladislav G. Polnikov et al.

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Round 2

The reviewer is thankful to the authors for prompt reply. Unfortunately, this reply does not contain answers to specific questions that impedes fruitful discussion. In the round 2 report I would like to focus on just two specific points of the previous review.

P2L9. The authors' use of the Crawford et al. (1980) non-symmetric kernels makes the corresponding version of the kinetic equation (KE) non-conservative. All the conservation laws (energy, action, momentum) cannot be derived from this authors' version

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Discussion paper

of the kinetic equation!!! Hence, asymptotic solutions (24, 25) cannot be obtained. Hence, further discussion of “Correspondence between numerical and analytical results” (sect. 3.3) makes no sense. The reviewer considers this remark as a solid proof to reject the paper.

The paper Fig.2b reproduced in this report shows a ‘power-law fit’ of authors’ results. This fit is unconvincing in reviewer’s opinion because it depends essentially on choice of low- and high-frequency cutoffs. The dependence in log-log coordinates is far from a linear fit (see figure below), i.e. it is far from a power-law approximation in authentic linear axes. The authors have no right to discuss power-law dependencies in this case. This is an additional proof of low quality of the study and a solid reason to reject the paper.

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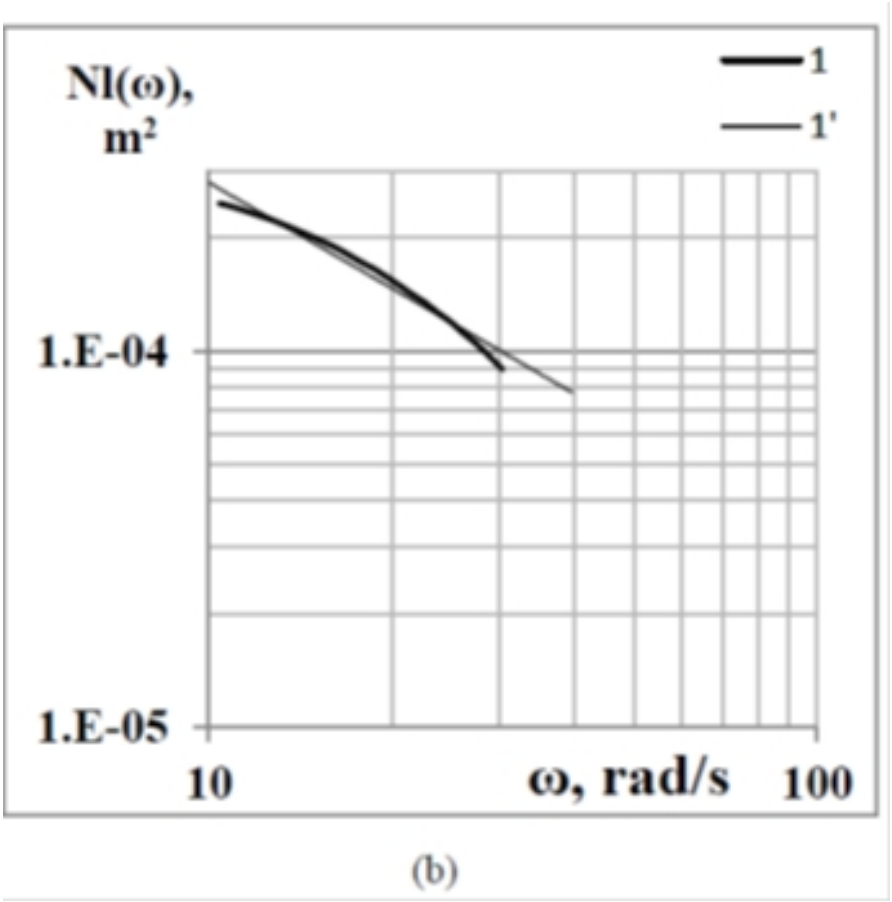

Fig. 1.