Hydrology and
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Discussions

# *Interactive comment on* "An opportunity of application of excess factor in hydrology" *by* V. Kovalenko et al.

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The commentary E. Shevnina indicates, that in this paper excess coefficient is proposed as an alternative to beta-test. So she asks the question: how to use the excess coefficient to analyze the solutions of the instability in the model (4) for the first three moments?

Answer. The paper is not proposing an alternative to beta-test, but offer the opportunity to use a practical analog. Excess coefficient reflects the impact of instability in the form of raising distributional tails. This fact, in this paper is illustrated in Figure 1. As greater the intensity of internal noise, even include in beta-test, then tail becomes heavier. Beta- test is more general characteristic than excess coefficient. It determines

the stability of the each moments all, even included the fourth, on which the excess coefficient is depended. The meaning on this paper, leads to illustrate the possibility of using the excess (kurtosis) coefficient in series of observations in a few decades, when its values start to stabilize.

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