

The report on the paper
“Modified KdV equation for Rossby-Khantadze
waves in a sheared zonal flow
of the ionospheric E-layers”

The paper addresses the problem of propagation of nonlinear Rossby waves in the presence of zonal flow and magnetic field. The authors used the reductive perturbation method to derive the mKdV equation describing these waves. Previously this equation has been already derived, however in the absence of magnetic field. Hence, potentially, the paper can be published. However it needs a very substantial improvement.

Minor comments

1. In Abstract the authors write “in a weakly ionospheric plasma”. I guess it should be “in a weakly conducting ionospheric plasma”.
2. In Sect. 2, define n and μ_0 .
3. The sentence after Eq. (5) does not make very much sense.
4. The right term is not “apostrophe” but “prime”.

My main concern is English. Sometimes it is so poor that it is even difficult to understand what the authors wanted to say. I suggest that the authors look for help of somebody with good command in English.

Summarising, I thin that the paper needs a serious revision.