

Interactive comment on “Ion’s association in soil and vadose zone of Azov-Black sea region” by A. A. Batukaev et al.

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The authors proposed the new opportunities for quantitative characterization the mass transfer of substances, in particular the transfer of carbon compounds – an essential element of the biosphere. It should be emphasized that proposed approach can be productively extrapolated to the inaccessible by direct analytical measurements scope of highly concentrated solutions, migrating in the soil and the vadose zone. Disadvantages: 1. The authors haven’t shown convincingly enough to what extend the method of modeling is adequate to the range of high concentrations of soil and saturation zone water solution. This is important because, at the moment, such solution is not available to direct analytical determination due to the impossibility of solution’s extraction from dispersed system without disrupting their structures and linkages with soil solid and gaseous systems in situ. 2. The authors note that their model is efficient in a range of

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ionic strength of from 0.05 to 0.5, but do not justify enough both, the specified range, and the approach to its destination. After minor revision the article can be published.

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