

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

F. Lisetsky (Referee)

liset@bsu.edu.ru

Received and published: 28 January 2016

The authors have shown the role of the association of ions in water solution as a driving force for mass transfer, particularly carbonates, in soil and saturated zone. It seems that this approach has the future.

There are comments:

1. In addition to the processes disclosed in the article, no less important has untouched by authors the lateral transfer of substance in landscapes and watersheds basins. The article does not reflect this important aspect of the dynamics of matter in the biosphere. On this basis, authors should indicate whether the broader perspective of the approach developed.

C1

2. An important motive of the peer-reviewed article – the dynamics of the composition of the solution in relation to moisture of soil, vadose zone, saturation zone. According to the authors, a transfer of substances is noticeable even at the very low soil moisture. However, this fact is not disclosed. Authors should examine their data and theoretical generalizations in terms of formation in considered disperse systems, not only the solid stream of mass transfer, but also the micro-basins of the solution.

Revised article may be published,

Faithfully yours, Prof. Fedor Lisetsky

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-3, 2016.

C2