Interactive comment on “Nighttime O(\(^1\)D) distributions in the mesopause region derived from SABER data” by Mikhail Yu. Kulikov and Mikhail V. Belikovich

Mykhaylo Grygalashvyly

gryga@iap-kborn.de

Received and published: 6 April 2020

I consider this paper as HIGHLY SIGNIFICANT! The O(1D) distributions in nighttime mesosphere-mesopause region is characterized by lack of knowledge currently. For present time this is THE BEST retrieving of given constituent at given region and time. The introduction is informative. The analysis and conclusions of the paper are reasonable. Obtained information is scientifically valuable because it necessary for correct interpretation the Atmospheric band observations and understanding several other chemical processes. The methods and approaches are correct (for present day the retrieving via Fytterer et al. (2019) model is a best way). I found this paper enjoyable to
I recommend it for publication in Annales Geophysicae as it is.

Dr. M. Grygalashvily