## **Author response**

We have resolved the following two issues in the final version of the manuscript:

- Eq. 1: The viewing and azimuth angles are defined in the text, but are not included in Eq. 1., where I expect that I and R depend on both angles.

The dependence on mu, mu0, phi and phi\_0 is now mentioned in Eq. 1, in both the I and the R.

- Line 148: explain acronym ATBD.

We have added the meaning of the acronym ATBD:

"... can be found in the Algorithm Theoretical Baseline Document (ATBD) ..."