Dear Editor,

Please allow us to change the specified range (just given as a rough value) to which the aerosol products can be computed by correcting the overlap effects via the so called overlap function.

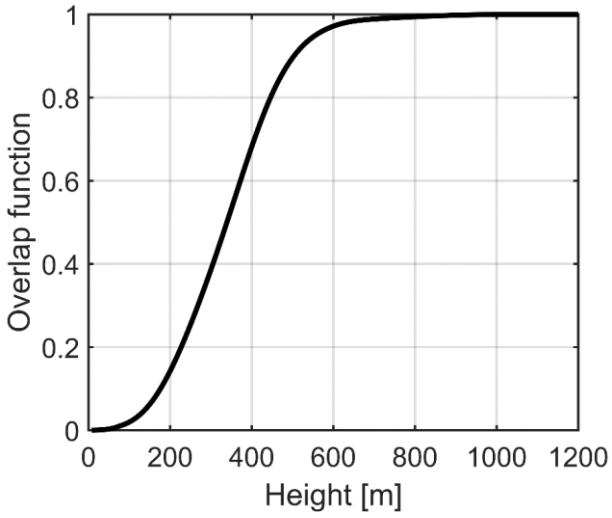
In page 4, line 6, please change:

The overlap of the laser beam with the receiver FOV is incomplete for heights below about 1 km above ground level (a.g.l.) and allows for accurate aerosol and cloud profiling for heights above about 500 m a.g.l. only (after the correction of the overlap effects).

By:
The overlap of the laser beam with the receiver FOV is incomplete for heights below about 800 m above ground level (a.g.l.) and allows for accurate aerosol and cloud profiling for heights above about 400 m a.g.l. only (after the correction of the overlap effects).

Explanation:

For our long term products we are currently using a mean overlap function (experimentally determined) as shown below. Here we see that the full overlap is practically reached at about 800 m and we correct the signal only down to half of this range (400 meters), so that errors in the overlap function carry very little impact on the final product, i.e. the aerosol extinction coefficient. 400 meters is a fair compromise to achieve accurate aerosol products. Again, we do not aim to provide a very accurate value, but 400 is just more accurate.



Thanks in advance.