Responses to Anonymous Referee #2

We would like to thank the reviewer for his/her time, thoughtful insights and helpful comments. A point-by-point response to each of the reviewers concerns is listed below. The reviewers comments are shown in bold italics, while the authors' response is indented and displayed in regular type.

Section 3.2 has to be carefully revised as for me it is not convincing that any reasonable value for the imaginary part of the refractive index can be given based on the presented method. Including a measurement that is sensitive to the particle absorption is essential to retrieve the imaginary part of the refractive index, especially in case of weakly absorbing aerosols. Although the authors are aware of this problem - as it is indicated by two sentences in Sec. 3.2 and in the Conclusions - they give imaginary parts of the refractive index for the case studies in Table 2. This is misleading to the reader, who might take these values as approved in his own work. I recommend to remove any values of the imaginary part of the refractive index from the paper.

The authors believe that the GRASP/PI-Neph retrieval has meaningful sensitivity to absorption but we acknowledge that sensitivity to the imaginary part of the refractive index is likely lower than that of other variables. In order to ensure that potential readers are not mislead we have removed the imaginary values from Table 2 as suggested by the reviewer. We have left the imaginary values retrieved in the salt and PSL cases, but we have modified the corresponding text to better clarify that the accuracy of these products has not been sufficiently evaluated.

The sentence originally beginning on line 25 of page 9,
"These values are indicative of moderate absorption and are slightly larger than values found in the existing literature, which suggests very little absorption ($k < 10^{-7}$) for all three of the solutions measured."

was changed to,
"These values are indicative of moderate absorption but are larger than more established values found in the existing literature, which suggests very little absorption ($k < 10^{-7}$) for all three of the solutions measured."

The sentence originally beginning on line 15 of page 10,
"The retrieved imaginary part of the refractive index for these spheres was on the order of 10^{-3} for all three wavelengths, slightly higher than the previously reported values of around 4×10^{-4}."

was changed to,
"The retrieved imaginary part of the refractive index for these spheres was on the order of 10^{-3} for all three wavelengths, slightly higher than the values of around 4×10^{-4} that have been reported by more sensitive techniques."