

P1, L14: should this be simply  $\Phi_j$  instead of  $\Phi_{j;}$ ?

P2, L2: insert a comma after "consequence"

P2, L8 and L14: replace "e.g.:" with "e.g., "

P2, L9 and L25: remove "e.g." or place a comma after it (please do similar comma insertions after other instances of "e.g." in the remaining text; most grammar guides appear to require it)

P2, L26: I would replace "handy" with "physical meaningful"

P3, L26: "appears corroborated" -> "appears to be corroborated" or simple "is corroborated"

P3, L27: insert a comma after "comparison"

P4, L17: replace the colon after "done" by a period.

P4, L30: insert a comma after "In fact"

P4, L4 and elsewhere in the text: I was initially quite confused by your notation of  $\lambda_{0,l}$  and  $\lambda_{0,s}$  because I thought that subscript "l" (letter l) is actually "1" (number one). I would insert a note that stating that subscripts s, m, and l stand for short, medium, and long wavelength, respectively (I am guessing it is the case).

P5, L1: I would be more explicit about what is meant by "its neglect". Perhaps replace it by "the neglect of the line structure"?

P5, L9: "still has" -> "still have users"

P5, L29: "we will fix" -> "we fixed"

Eq (5): I would replace subscript "l" with "1" since there is only one term there.

P7, L28: remove extra period.

P8, L1: insert a comma after "Figure 3"

P8, L23: remove extra period.

P9, L3: insert a comma after "addition"

P9, L4: "chemist" should be plural

P10, L11: "That means: Only" -> "This means that only"

P10, L12: you already used constant "c" for the coefficient of determination. Perhaps it is best to use "c" for the speed of light, and another letter for the coefficient of determination.

P10, L18: you cannot claim these are "significant improvements" since one parametrization is compared to another one. It is better to call it a "significant change"

P10, L22: replace the colon after " $\Phi_{\text{tot}}$ " by a period.

P10, L27: "both, JPL and IUPAC (2006), treat" -> "both JPL and IUPAC (2006) treat" (remove two commas)

P11, L9: replace the colon after "advantageous" by a period.

P11, L18: insert subtitle "Acknowledgements" before this line