

ANSWER to Editor's comment. L. Wald, 4 July 2014

Thank you for your careful reading of the revised document and for the suggestions. Please, find below our answers.

1) P. 3, l. 10 and P.4, l. 2: Make c in K_c and P_c a lower index.

Done

2) P. 3, ll. 20 and 25: write " P_x is a set of variables" because it is not "the set of variables" (there are more and it is not unique).

Done

3) P. 7, l. 14: $v(K_c)$ and $v(K_{cb})$ must be defined (I assume they are variances but it could be total variation as well). The phrase "very small" should be made more precise. Very small in comparison to what?

Actually, $v(K_c)$ and $v(K_{cb})$ were defined two sentences above as follows: "For each triplet $(\theta_s, \rho_g, P_{cloud})$, the variances $v(K_c)$ and $v(K_{cb})$ are computed over the 20 values K_c and K_{cb} ."

We have precised "very small". The sentence is now "... $v(K_c)$ and $v(K_{cb})$ are very small with respect to the squared mean values of K_c and K_{cb} for each triplet $(\theta_s, \rho_g, P_{cloud})$, meaning..."

4) Page 10 and Caption of Figure 4: "Relative median" is sloppy language. What you have is the median of the relative quantities $rRM(\dots)$, please say so!

We have rewritten as follows:

"The median and percentiles 5% (P5) and 95% (P95) of $RM(v(K_c))$ for all corresponding couples (ρ_g, τ_c) for a given θ_s are computed and drawn in Fig. 3 for water cloud (left) and ice cloud (right) as a function of θ_s . They are also expressed relative to the corresponding mean K_c (Fig. 4) and are called relative median and relative P95."

and Caption in Fig. 4 is now:

"Median (star) and percentiles 5% and 95% of $RM(v(K_c))$ relative to the corresponding mean K_c for all couples (ρ_g, τ_c) as a function of θ_s for water cloud (left) and ice cloud (right)."

instead of "Relative median (star) and percentiles 5% and 95% of $RM(v(K_c))$ for all couples (ρ_g, τ_c) as a function of θ_s for water cloud (left) and ice cloud (right)."