1. $\beta \neq 0$ just seems to produce a different sample through stricter QC. The authors show that when the calculations with $\beta = 0$ are compared with $\beta \neq 0$ for the same sample, the statistical results are the same. I think the reader needs to understand Why the sample numbers are different for $\beta = 0$ and $\beta \neq 0$.

We have analyzed our algorithm and found a mistake in the estimation of the determination of the shadow border for $\beta \neq 0$. After the correction of the mistake, the number of samples for different values of β is no longer that different. Still, the first statement of the reviewer remains correct. CT2A does improve the statistics by using a stricter QC, as explained below.

2. What specific QC criteria in the processing is leading to this difference? If $\beta \neq 0$ is actually better than $\beta = 0$, wouldn't this be expected to produce better statistics when computed for the same sample?

The CT2A algorithm results in a better estimate of the shadow border, discriminating weaker pieces of the ray manifold.

3. Do these results justify an operational processing change from $\beta = 0$ to $\beta \neq 0$?

This question is beyond the scope of this paper. Implementing any changes in the operational processing, or in production is a hard decision, especially, when the improvement in accuracy is achieved by the reduction of the penetration depth, which is considered to be a very important characteristic of any data processing system. In any event, such a decision must inevitably be preceded by an impact study.