

## Reply to the specific comments of Reviewer 2

**Fig 5 could be suppressed I think and this (rather trivial) result only mentioned in a paragraph.**

We think this result to not be trivial, unless one has a rationale to expect so.

**Given the existence of the above mentioned Ignaccolo and De Michele (2010) and the existence of the companion paper (part 2) in which the main concept and result of part 1 (i.e. the distribution of skewness for the Darwin data set and its relative stationarity between the Convective and stratiform data sets) are reported again, I don't really see the interest (for the readers, I mean) of splitting the present results in 2 papers that are, in my view, quite redundant. I would like the authors to convince me on that point. I believe the present results could be compacted and integrated together with part 2 in a paper that discuss DSD skewness distribution and its variability both among geographical zone and rainfall type.**

The rationale for the splitting are

- 1) The first manuscript has 5 figures and 1 table, the second 7 figures and 1 table. Also eliminating the common part (text section 2.2 of manuscript) an unique manuscript would be quite large.
- 2) The scope of the first paper is more to present the methodology and applying to a case already studied by us. In this way we can refer to already established results to validate our methodology and prove the existence of a common distribution. For the orographic data set there is not such a previous manuscript to refer to.
- 3) To address the property of orographic precipitation we must introduce 5 more parameters (kurtosis and 4 more) which are not necessary in the stratiform and convective case. This in an unnecessary complication if one is interested in stratiform and convective precipitation and the reader is then presented a more simple short paper with less information to digest in one shot.
- 4) We think that too many new results and new methods in one single paper will not improve the reader experience
- 5) Your suggestion of presenting results on the variability both among geographical zone and rainfall type is very interesting, and we intend to pursue it. We think this will best served using data from more locations (6-8 instead of just two), and once the methodology for each type of precipitation are well illustrated in single case studies, which is exactly what the two manuscripts intend to do.