

Response to editor's comments

- the style of referencing should be consistent. ACP uses e.g. (authors, year; next authors, year). You follow this style in many places but not on p. 4 line 23 and in some other places. Please check.
- "et al." needs a dot, is currently missing on, e.g., p. 4 line 14 and p. 7 line 25.
- please rephrase the new sentence on p. 4 line 16: "East Asia lee of the TB" and "North American downstream" sound strange to me.
- p. 5 line 27: is "15 May" in the bracket for North America correct? It is not consistent with "the entire months of May ..." in line 9.
- p. 7 line 21: please use a consistent notation for times. Here you use just 00 UTC, in other places 00:00 UTC.
- the list of references is more or less in AMS style. Note that ACP uses a rather different style (check in a recent paper). Please adjust the style of the references.

For such an interesting study I find it worth to invest a bit more in the readability of the figures, e.g.:

- Fig. 1 and in some other figures: no units are given for the color bar
- Fig. 1 b,d and many other figures: axis labels and color bar labels are very small (I can hardly read them!)
- Fig. 3: it is really a detail, but your labels "(a) 00 UTC" are very close the panels, which does not look nice. Again all labels are too tiny
- Fig. 5c: line legend: please use a readable font!
- similar with all other figures, in particular Figs. 9 and 14.
- Fig. 10: would it be worth to multiply SR1/SR2 values by 100 to not get so many disturbing zeros?

Reply: *Thanks to editor. All the comments and recommendations are accepted. The technical corrections have been changed in the text and the figures have been replotted according to the comments and uploaded on line.*