

The article has been revised thoroughly by the authors. There were three minor reviews on this. The authors have carefully attended all the points. The only concern at this stage is the technical corrections. Kindly go through the text a few times and check for any errors, to enhance the quality of the presentation of the science discussed herein. Here are some suggestions, but not complete. Please make sure that you attend these suggestions before submitting the final version. I recommend publication of the article after the technical corrections.

The line numbers follow the manuscript in the **Author response file**.

L 182: "Monsoon Inversion (MI) over Arabian Sea is one of the important characteristics ..."

L184: "five years ...of temperature and water vapour measurements obtained from ..."

L210: level of temperature inversion?

L215: more effect of what on MI?

L217: spells of Monsoons?

L222: 1970-80s (no apostrophe)

L 240: as it moves

L 242-243: opposite to the boundary of ...

L 246: over the Indian main land

L 253: density? You mean frequency of the measurements...If yes, please state that.

L 263-264: Please rephrase the sentence, as there are other ways / parameters that could also be used for explaining subsidence and convection (in addition to winds).

L 271, 280, 462, 604: There are a number of "viz" in this article, which sometimes breaks the flow of the sentence. Kindly replace that word with appropriate synonym in other places.

L 274-275: "...comparing the results", not discrepancies, as the latter is what you infer from the comparisons.

L 283: "a short description of IS"?

L 286-290: This sentence can be written at L 269, after "...2200 km". It is a nadir looking instrument and the vertical resolution can be coarse. The product may be available in interpolated grids, but the resolution can be different. So please be sure about the resolution.

L 308: "reference" is the appropriate word here.

L 325: delete "in the present study". It's a waffle here.

L 327: "In this study, we use the data from surface to 600 hPa, which ..."

L 328-329: Plz. write something like, "We use data from 2009 onwards to compare with other data sets". It is also good to state the last available year for the data (e.g. 2013).

L 339: repetivity or frequency

L 343: "and moves to eastern ..."

L 344: "MIs presence..". This is what you have abbreviated earlier.

L 348: "and also in ..."

L 349: "the temperature difference"

L 350: "so is a positive quantity.... " and "between 6 and 7" or "ranging from 6 to 7". Please write either of this.

L 357-358; Please rephrase the sentence. You have measurements from the FGGE experiment and you have derived or observed the MI features from those measurements.

L 358: Delete bracket part for T, as you have already used this earlier in the text.

L 365: You have not stated this in the abstract, if you are "redefining MI" here

L 386: "However, to provide a margin of error.."

L 393: "70%, as shown in Fig...."

L 404: "... bad profiles and are discarded."

L 419: passes or overpasses?

L 422: "used only a section of these data sets"

L 435: "To show the efficiency and strength of currently available satellite measurements to delineate features of MI over AS..."

L 455: "forms/appears around" instead of "start forming"

L 458: "difference IS significant" or use just predominant

L 466: "MI is found"

L 475-476: ".....coast, but the normalis restored towards the Indian Coast"

L 503: "data show"

L 504-505: Plz. write something like, "However, this feature is not observed or pronounced in the ERA-interim data"

L 516, ", with EAS values being lower" or similar wordings.

L 523-524: You may rephrase it, as it confuses "mesoscale monsoon features" with "activity of monsoon"

L 527: "Gadgil and "

L 531: a comma before "provided" would make it more legible

L 539: Plz. Use another word for patchy such as discontinuous or incoherent

L 540: You mean the amplitude of the Delta T is larger in the ERI? Plz. specify the period of "monsoon break spells"

L 541: "ERA-interim (or ERI) data show"

L 581: You may not call this as an artifact or a problem of the model, as the model is designed for such a work. Please rephrase this.

L 583-584: Please rephrase this sentence

L594: "We have also analysed and compared the Delta T observed by..... The analysis suggests that these two data sets cannot be merged/combined to study.....".

L660: monsoon break spells? Please state the time period too, to make it clear.

L 662-663: "These features are also observed in the ERI data, but are restricted to some parts of AS....."

L 686: References: et al. should be replaced with all author names (e.g. L 679, 686, 688, etc.)

L 692: Das, P. K.

L 708: B. M.

L 713, 716: Plz. be consistent for "Curr. Sci."

L 755: "measured by radiosonde during MONEX experiment,"

L 761: "Figure 3. Base"

L 763: The full stop must be after the sentence (after the bracket here).

L 768, 771, 772: It is a bit confusing to use same as (a) and (b) and (c) and (d), etc.. Please write detailed figure captions with minimum "same as". Thank you.