Response to Anonymous Referee #2

We thank the referee for his/her constructive comments and useful suggestions for improving the presentation. Below, we quote each comment, followed by our response.

- "The authors argue that the dust aerosols, depending on the phase of ENSO, can act to either enhance or suppress precipitation. The authors need to present figures and an analysis of moisture convergence, net radiation at the surface and top of the atmosphere, vertical velocity, stability, etc, comparing NODUST and DUST during El Nino and La Nina years. If the authors are right, then dust should have a significant impact on the moisture budget and dynamics and we should be able to see this. Presenting these results will help bolster confidence in the model and the author's proposed mechanisms."

  The other referee made a similar comment, and (in hindsight) we agree that the analysis of the mechanism wasn't adequate in the discussion paper. Our revised analysis makes it clear that the mechanism is related to changes in moisture transport induced by the radiative forcing of dust over the oceans to the east of Australia. Please see our response to Referee #1, including the figure that is reproduced there, for further details.

- "To fit this analysis in, the authors can probably excise some of the current figures or condense them to a brief sentence or two in the manuscript. Specifically, I suggest the following changes:"

  - "Eliminate Figure 1"

    Done.

  - "Show just the regression coefficients and combine Figures 6 and 7."

    After some thought, we decided to retain the correlations as well as the regressions, as it is common practice to show both in studies of Australian rainfall variability. However, we condensed the former Figures 6, 7 and 8 by combining them into one figure.

  - "Isn't Figure 8 the same as Figure 7? I not, it may be labelled wrong. Regardless, this figure could also be merged with 6 and 7."

    No: Figure 6 was based on observations, Figure 7 on the DUST run, and Figure 8 on the NODUST run. As mentioned above, we have combined them into one figure.

  - "Figure 13 is probably not necessary."

Agreed, and we removed this from the revised version. We also shortened the paper by removing some other figures that showed vertical cross-sections of dust concentration and radiative heating, since these are not essential for explaining the revised mechanism.

- "A personal style preference: I think the final paragraph of the introduction is really unnecessary. The paper is well written enough without the need for a superfluous table of contents."

  Thank you for suggesting that the paper is well written. This is a good point, since the reader can always skip forward to look at the section headings if need be, so we deleted this paragraph.