Interactive comment on "The response of tropical precipitation to Earth's precession: The role of fluxes and vertical stability", *reply to referee 1*

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- 1. General Comments: The authors thank you for your time and inputs.
- 2. *Comment:* Title: fluxes is too general, suggest "energy fluxes" replace fluxes

Reply: Thank you for the suggestion. We will modify the title to include "energy fluxes".

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- 3. Comment: The structures of current manuscript needs to improve and arrange as follows: First part is Introduction, and second part is Model description, and experiments design, methodology. The third part is results shows. Conclusions and discussion appear last part. However, the authors should move most of (maybe all) the formulas in section 2 with a quite clear description. Please re-organize this part.

10 *Reply*: We will move all the equations to section 2, and explain the equations in more detail.

4. *Comment:* Table 1 and Table 2 are not very beautiful.

- 15 5. *Comment:* All the title of Figurexx is not correct in your figure captions, because one more Arabic number "1" need to remove.
 - *Reply:* This was due to a LaTeX error, which had been fixed in the uploaded version of the discussion paper.
 - 6. *Comment:* give a regression line for Figure 13 and Figure 14 and then merge into one plot.
- 20 **Reply:** Figure 3 and 4 in the discussion paper show the dependence of (P-E) on energy fluxes and stability of the

Reply: We will make better tables for the revised manuscript.



Figure 1. This figure shows the dependence of (P-E) on, (a) Q_{div} (which is sum of all the energy fluxes into the atmosphere) and (b), GMS. The scatter is for three regions: Central India (15°N-25°N; 73°E-83°E), Bay of Bengal (10°N-20°N; 85°E-95°E) and Africa (5°N-15°N; 20°W-25E°). The months JJA have been taken separately. (P-E) is directly proportional to Q_{div} .

atmosphere. Your point is well taken, and the two figures have been combined. (P-E) being a non-linear function of stability, the regression line is not being shown for the scatter of (P-E) and GMS.

7. *Comment:* All the Figures needs to make it more beautiful.

Reply: We will improve all the figures for the revised manuscript.

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