

MR3252: Tropical Meteorology

Paper Summary for Derbyshire et al. (2004): Please answer the following questions with as much detail as possible. Your answers may be in paragraph form or list form as appropriate.

1. What were the authors' primary research questions and/or hypotheses?
2. What motivated the authors to conduct this study?
3. How did the authors execute this research? What data did they use? What models, if any, did that they run? How did they use these data and models? In other words, what was the experimental design?
4. What were the article's central conclusions? How did they relate to the primary research questions and/or hypotheses? (i.e., If possible, match a conclusions or set of conclusions to each research questions and/or hypothesis.) In your answer, include at a minimum details about the relationship between free tropospheric humidity and updraft mass flux.

5. What are some potential key limitations in this study, including those that were explicitly mentioned in the article?

6. Why is moist convection sensitive to environmental humidity?