

## **MR3252: Tropical Meteorology**

Paper Summary for Holloway and Neelin (2010): 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. What is column water vapor?
4. 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?



9. What cloud-scale process are the authors trying to parameterize by controlling mixing profiles?

10. Attempt to describe the results of the paper in terms of a “tipping point” or “criticality” past which deep convection can occur, but below which deep convection is inhibited. What are three processes that the authors attribute to favoring convection passing this tipping point?