

Interactive comment on “Radio occultation bending angle anomalies during tropical cyclones” by R. Biondi et al.

Anonymous Referee #1

Received and published: 6 April 2011

general comments:

The authors tried to explore the possible relation between radio occultation bending angle anomaly in the tropopause and tropical cyclones. The preliminary results are interesting, but I think more work can be done to make the work more convincing. I would like to suggest revision of the work before publication.

1. Did the "raw" bending angle or "optimal" one was used in the study? The latter combines climatology to smooth out "noises" and might not be good for the extreme events like tropical cyclones.
2. tropical cyclone intensity varies a lot and so its impact on the tropopause may depend on its intensity. The author might consider to do the analyses in terms of

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different TC categories, and the correlation might be more clear. I leave this for the authors to consider.

3. Page 1377 end of the Section4: The comparison of Fig. 5 and Fig.6 is not convincing. Considering make a climatology without any of the TCs and then compare with Fig. 5 may give more clean comparison.
4. Section 5: The single case of RAOB comparison with bending angle is not convincing. Is it possible to do the comparison using all of the cases, such as anomaly correlation between RAOB and bending angle? also, for the comparison, it may be better to avoid using the RAOB in the TC core/rainbands, which may have strong convective scale noise. For example, it may be better to ignore the RAOB within 150km of the TC centers.

Minor comments:

1. Fig.3: reduce the x-axis scale range to -5 to 15 may give better details. .

Interactive comment on Atmos. Meas. Tech. Discuss., 4, 1371, 2011.