

Comments on the paper “Comparison of meteor radar and TIDI winds in the Brazilian equatorial region” by Ana Roberta Paulino, Delis Otildes Rodrigues, Igo Paulino, Lourivaldo Mota Lima, Ricardo Arlen Buriti, Paulo Prado Batista, Aaron Ridley, and Chen Wu.

The theme of the study is relevant to the journal. However, I believe that results of the data analysis can be significantly more informative, and the study requires additional efforts. I think it will not take a lot of time.

#### Detail comments

Abstract. The authors write in the abstract that they use a grid of  $\pm 5$  degrees. However, the reader may find in the Introduction, that a grid of  $\pm 10$  was used.

1. Fig.5-6. The comparison shows a large difference between MR and TIDI winds. Therefore, a question arises about the method of the comparison. I would like to repeat a part of my previous comments about the TIDI data processing. It is unclear: how the authors deal with gaps, how the authors deal with wind seasonal changes and long-term wind oscillations. Wind speeds at different LT hours were taken from different days. Therefore, planetary waves or strong prevailing wind changing will create additional short-term variability. The MR data allow to check this effect, the MR wind can be taken at LT hours of the TIDI winds. Also, there is a limit for large MR winds to remove unphysically large values. Did the authors use any limit values for the TIDI winds? Perhaps it is better to provide a comparison between prevailing winds, diurnal and semidiurnal tides.
2. Ln 130. Unclear statement: “Maybe the presence of the small oscillations oscillations during some days could modulate the observed diurnal tide phase.” Why can’t large oscillations modulate the tidal phase?
3. Fig. 1 Indeed, the TIDI wind profiles are not instantaneous. There is need of about 2 minutes to obtain LOS wind velocity.
4. Fig 7-8. Please, show the seasonal wind changes for all available heights.

Table 1. Fig.7-8 show the seasonal wind changes, but the reader can find the parameters in Table 1 for the whole year 2006. It seems reasonable to present the parameters for different seasons.

#### Summary.

The authors state that “there are qualitative agreements with the meteor wind calculations. However, the meteor radar calculations for each month is smoother compared to the TIDI ones”. The agreement seems to be much worse. This is also an important result. In light of my comment 1, I propose a different formulation.