Geosci. Model Dev. Discuss., 6, C1585–C1586, 2013
www.geosci-model-dev-discuss.net/6/C1585/2013/

Geoscientific Model Development
Discussions
Open Access

Interactive comment on "Using the UM dynamical cores to reproduce idealised 3-D flows" *by* N. J. Mayne et al.

N. J. Mayne et al.

nathan@astro.ex.ac.uk

Received and published: 4 October 2013

I General Comments

We thank the referee for useful comments which we have addressed in a revised version of the paper which will be submitted.

II Specifics

1. We have altered the text to explain, at the first instance of use, the meaning of each of the approximations we use.

2. Agreed, this sentence and reference is weak. We have replaced it with a mention of the work of Tokano et al (2013), where the effect of simplifications to the dynamical

Full Screen / Esc
Printer-friendly Version
Interactive Discussion
Discussion Paper

equations is shown to be significant for Titan.

3. We have added text referencing this work in Section 1.

4. We have included a more detailed description of how the polar wind is defined. We have also included a schematic to aid visualisation.

5. In this case, practically, the CFL condition is only set by the dynamics.

6. We have added text to Section 2.2, explaining the general concept of polar filters.

Interactive comment on Geosci. Model Dev. Discuss., 6, 3681, 2013.