



Interactive comment on “The FAMOUS climate model (versions XFXWB and XFHCC): description update to version XDBUA” by R. S. Smith

Anonymous Referee #2

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This paper aims to describe the improvements achieved in the FAMOUS version XFXWB (looks like a model invented version name not something human) which is the version used in CMIP5-EMIC intercomparison exercise.

Indeed, this paper fits very well with the purpose of GMD. The authors could have been more precise (less qualitative) more quantitative on the results they obtained with this new version.

For instance “a better-conserved water budget and additional cooling in some high latitude areas,” seems a bit

Introduction

Whereas I agree not to repeat the description of previous version already published, I
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strongly believe this introduction should include the weak points this new version aims to improve

2 - Technical change

For sure XFXWB solution (to cap the winds below the instability threshold) is not satisfying; therefore the XFHCC is much more interesting because it tries to deal with more physical parameterisation

Detail Line 4 beginning of page 2 is not it

It away by instability rather stability that the authors mean?

This part is well described.

The most important features that indeed increase the stability of XFXWB versus XDBUA is completely correlated with the threshold correction on Wind speed.

An important point is that this improvement remains for XFHCC

3 - Climatology

The results obtained for XFXWB, despite many error corrections are not drastically different from XDBUA.

On the other hand results described for XFHCC are more interesting. Nevertheless the authors should point more clearly the caveats with real climatology

Whereas the paper is accurately written and clear and fits well with GMD editing policy I'm a little be frustrated by the lack of comparison with real climatologies that would help to better appreciate the progress achieved.

Nevertheless, this remains very minor. The paper after accounting for these minor corrections may be published in GMD;