**Geoscientific
Model Development
Discussions**

Interactive comment on "Coupled atmosphere-wildland fire modeling with WRF-Fire version 3.3" *by* J. Mandel et al.

J. Mandel et al.

jan.mandel@gmail.com

Differences from WRF 3.3 release

We have compared the files we had submitted for the WRF 3.3 release and based the Discussions paper on, with the version in the release. A detailed analysis of the changes, with links to specific lines in the code, can be viewed at

http://www.openwfm.org/wiki/Changes_in_WRF-Fire_3.3_release, or

http://ccm.ucdenver.edu/wiki/Changes_in_WRF-Fire_3.3_release.

We have found only one change of consequence, the wind reduction factors were removed in the release. This change effectively limits the applicability of the code in the

release to problems using only one fuel category. At that time, we were interpolating the wind vertically from the ideal vertical logarithmic wind profile to the same height over the whole domain, as described in the Discussions paper, and different fuels require either different interpolation heights or different wind reduction factors (which are derived from the same vertical interpolation). When the first WRF level is above 6.096m, as is often the case, the use of the wind reduction factors and the logarithmic interpolation to different heights for different fuels are mathematically equivalent.

We intend to update the paper to a more recent version of the code, note that the version distributed with the WRF 3.3 release contains a subset of the features, and modify the title appropriately.