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5, S4502–S4503, 2005

Interactive Comment

Interactive comment on "Global estimation of burned area using MODIS active fire observations" *by* L. Giglio et al.

L. Giglio et al.

Received and published: 16 December 2005

We thank the reviewer for his or her helpful suggestions and kind remarks. We will make all of the changes suggested in points 1-5 and 7. Regarding point 6 ("...this last factor would lead to an opposite effect."), our thinking was that the smaller burns present in our 500-m burned area maps, but potentially absent from the 1-km GBA2000 and GLOBSCAR data sets, would show better agreement with the small clusters of active fire pixels associated with these small burn scars. An implicit assumption within this scenario is that the number of small burns is relatively large, so that the Terra MODIS sensor has a good chance of observing at least some of the active fires which created the burns. The assumption is generally satisfied in Africa, South America, Central America, and Asia. However, for regions having only a few small, sparsely-



located fires (e.g., the northeastern United States), the reviewer's point is applicable. In this scenario it is much less likely that the active fires associated with the small burn scars will have been observed by the MODIS sensor, and a lower correlation between burned area and active fire counts should be expected. Of the two scenarios, the former is usually more common, and the higher spatial resolution of our burned area maps will most likely yield a net improvement in correlation. Nevertheless, we will add text qualifying our original statement.

Interactive comment on Atmos. Chem. Phys. Discuss., 5, 11091, 2005.

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