



## *Corrigendum to*

# “A process-based fire parameterization of intermediate complexity in a Dynamic Global Vegetation Model” published in *Biogeosciences*, 9, 2761–2780, 2012

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In the above mentioned paper some errors occurred, which should be corrected as follows.

(1) Equation (4) should be  $I_n = \gamma \psi I_1$ . Ignition efficiency of cloud-to-ground lightning  $\gamma = 0.25$  (Latham and Schlieter, 1989; Latham and Williams, 2001; <http://www.wfas.net/index.php/lightning-efficiency-fire-potential--danger-33>; Thonicke et al., 2010) was missing from original Eq. (4) as well as from most fire models mentioned in Li et al. (2012).

(2) We also revise Fig. 1: we get regridded 2001–2009 T62 fire counts product from MODIS 0.5° 8-day Active Fire Counts Product (<ftp://fuoco.geog.umd.edu>) instead of from MODIS 1° Monthly Active Fire Counts Product (Giglio et al., 2006). In Li et al. (2012), we erroneously multiplied the regridded data by 4. As a result,  $\alpha$  in Eqs. (5) and (A2) was 4 times the correct value. We now change  $\alpha$  to  $9.72 \times 10^{-4}$  count person<sup>-1</sup> mon<sup>-1</sup>.

(3)  $u_{\max}$  in Eq. (14) should be doubled. In Arora and Boer (2005),  $g(0) = 0.1$  was twice the correct value 0.05 (see our Eq. 17). To simulate burned area reasonably, Arora and Boer (2005) assumed the average maximum fire spread rate  $u_{\max}$  to be less than half of observed maximum fire spread rates. We incorrectly used this assumption from Arora and Boer (2005) although we used  $g(0) = 0.05$ .

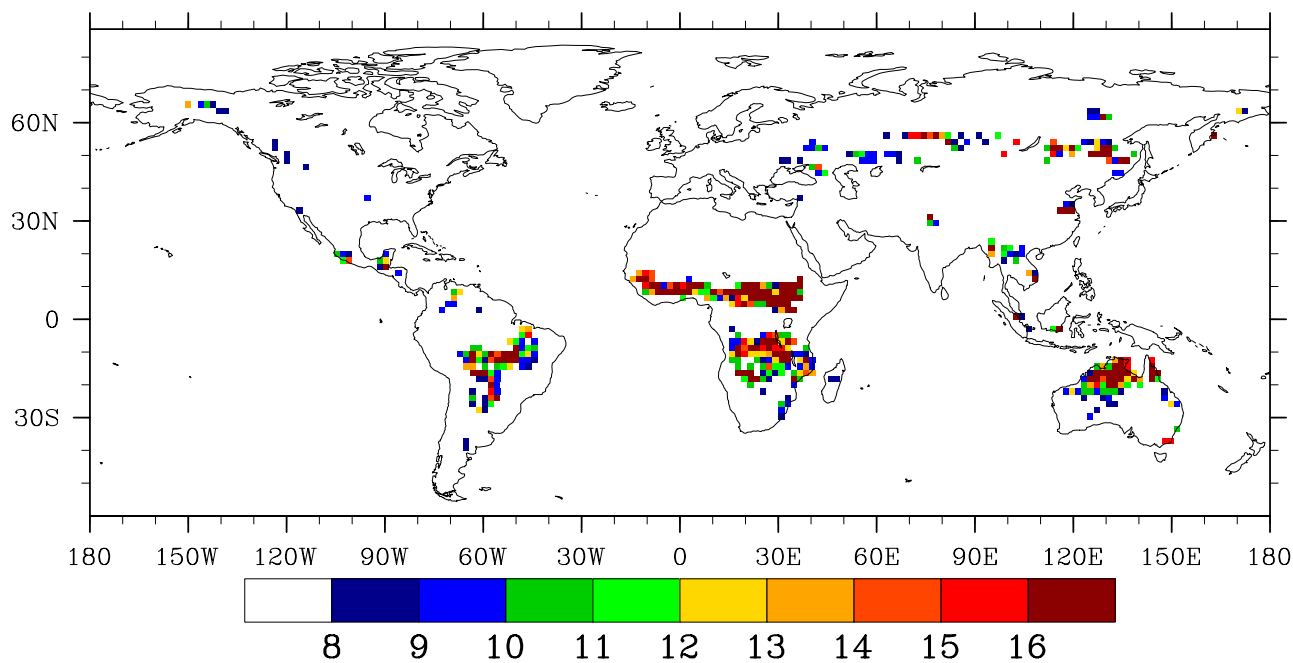
In Eq. (1), the first error ( $\gamma$ ) and the second error ( $\alpha$ ) make  $N_f$  1/4 of what it was; and the third error ( $u_{\max}$ ) makes  $a$  four times of what it was. These errors compensate each other exactly in Eq. (1), so the results remain unaffected.

(4) A typo in the last sentence, Paragraph 3, Appendix A,  $I_a$  should be  $I_n$ .

### **New references:**

Latham, D. J. and Schlieter, J. A.: Ignition probabilities of Wildland Fuels Based on Simulated Lightning Discharges, Intermountain Research Station, Ogden, UT, Research Paper INT-411, 16, 1989.

Latham, D. and Williams, E.: Lightning and Forest Fires, in: Forest Fires, Behavior and Ecological Effects, edited by: Johnson, E. A. and Miyanishi, K., Academic Press, San Diego, 376–418, 2001.



**Fig. 1.** MODIS 8-day active fire counts ( $\text{count (1000 km}^2)^{-1} 8 \text{ d}^{-1}$ ) in the peak 8-day of each year averaged over 2001–2009.  $1000 \text{ km}^2$  are representative area set by CTEM-FIRE. Regions where value  $> 8 \text{ count (1000 km}^2)^{-1} 8 \text{ d}^{-1}$  represent regions of more than 1 count  $(1000 \text{ km}^2)^{-1} \text{ d}^{-1}$ .