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Discussions

Interactive comment on "Parameter-induced uncertainty quantification of soil N₂O, NO and CO₂ emission from Höglwald spruce forest (Germany) using the LandscapeDNDC model" *by* K.-H. Rahn et al.

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P. 5252, L. 24ff: Note that LandscapeDNDC has been published only in Haas et al. (accepted, note that the title has been changed) and Werner et al. (accepted, see reference below). The other references are misleading and refer to various model predecessors (PNET-N-DNDC, MoBiLE). I suggest only referring to Haas and Werner here but describing the Model history briefly in the beginning of the next section.

P. 5253, L12ff: According to the note before I suggest the alternative formulation:

"The LandscapeDNDC model applied in this study can be seen as a derivate of the DNDC model family (Li et al. 1992, Li et al. 2000) and a direct descendent of the MoBiLE model framework (Grote et al. 2009), developed at IMK-FU Garmisch-Partenkirchen, Germany. Compared with its predecessors it offers a flexible initialization of vegetation and soil properties and efficient multi-site calculations that ease regional applications as well as sensitivity and uncertainty studies.

LandscapeDNDC includes a description of vegetation development for agricultural sites (orginal DNDC model, Li et al. 1992) as well as forest sites (PnET-N, Li et al. 2000, Butterbach-Bahl et al. 2001; PSIM, Grote 2007, Grote et al. 2011). Ecosystem heat transfer, water balance, as well as belowground- carbon and nitrogen processes are described independent from vegetation type (Grote et al. 2009, Holst et al. 2010, Chirinda et al. 2011).

Each module includes parameters derived from physiological, physical, and chemical principles derived from field and laboratory observations. In this study . . ."

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Interactive comment on Biogeosciences Discuss., 9, 5249, 2012.