

## ***Interactive comment on “Nitric oxide and nitrous oxide emission from Hungarian forest soils; link with atmospheric N-deposition” by L. Horváth et al.***

**L. Horváth et al.**

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Response to Anonymous Referee 3

Referee mentioned: Hungarian sites are characterised by cold and humid winters and dry and hot summers, and surprising that N<sub>2</sub>O emissions are about one order of magnitude higher than the NO emission. Really, in dry soils the NO emission is dominant, comparing to N<sub>2</sub>O. According to numerous investigations there is an optimum water content for NO, generally below 50. The climate at the two stations is not really dry. The yearly precipitation amount is between 700–800 mm. In 2002 and 2003 we detected 890 and 626 mm/yr, respectively. The measured mean soil volumetric water content at 20 cm were 0.24–0.25 v/v, with the saturation rate of 0.35. It means, average SWC was above 50As to the other driver for soil emission, there is significant positive correlation between the emission rate of N<sub>2</sub>O and the soil temperature. In the second version,

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to be submitted to BG, these phenomena will be explained in details. Second remark:  
whether 20

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Interactive comment on Biogeosciences Discussions, 2, 703, 2005.

**BGD**

2, S543–S544, 2005

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