Interactive comment on “Lightning-produced NO\textsubscript{x} during the Northern Australian monsoon; results from the ACTIVE campaign” by L. Labrador et al.

Anonymous Referee #1

Received and published: 8 May 2009

This manuscript clearly argues that in the Northern Australian monsoon the NO\textsubscript{x} mixing ratio outside clouds is comparable to that inside clouds and that this high outside clouds value is due to the accretion of NO\textsubscript{x} produced by lightning at distances far away.

The paper is well written and the conclusions are firmly based.

One major comment: in the abstract it is said that the high out-cloud values as measured in the Monsoon period contrast with the pre-monsoon period, where the high NO\textsubscript{x} values occur mainly in the vicinity of storms. However, in the main text I cannot find the basis for this conclusion. So either the main text should be extended on this point (or did I miss it?), or this point should be omitted in the abstract.

Minor point: abstract, line 6: ‘723 and 984’ should be ‘984 and 723’
Interactive comment on Atmos. Chem. Phys. Discuss., 9, 10647, 2009.