

Review of Labrador et al. ACPD paper, "Lightning-produced NO_x during the Northern Australian monsoon; results from the ACTIVE campaign"

This manuscript is a very nice summary of the ACTIVE NO_x measurements during the monsoon period in the region near Darwin, Australia. It demonstrates that the upper troposphere in this region under monsoon conditions has a large accumulation of NO_x from lightning from a multitude of storms occurring on a daily basis, despite the fact that the individual storms are not large lightning producers. Data of this type demonstrating this phenomenon have not previously been documented in the literature. Therefore, this paper should be published after taking into account the suggested minor revisions listed below:

p. 10648, line 17: here and many other places in the manuscript the word "accretion" is used. I think the word "accumulation" would be better.

p. 10648, line 26: LNO_x is more standard notation in the literature than is LtNO_x.

p. 10649, line 22: another paper from STEP demonstrating the impact of LNO_x is Pickering et al. (1993).

p. 10651, line 8: what is cps?

p. 10652, line 5: eliminate the word "return". Just refer to them as strokes. There really is not a return stroke for IC flashes.

p. 10656, line 23:of the storm 5 times (transects 3, 4, 6, 7, 8) , which resulted in

p. 10656, lines 25 and 28: use "composite average" rather than "total average"

p. 10658, lines 5 and 8: change 980 and 720 to 984 and 723 to be consistent with values on p. 10656 and in the abstract.

p. 10659, lines 8-9: need to demonstrate this fact!! Maybe show LINET maps for each of the prior 5 days? Need to demonstrate more convincingly that the trajectories encountered frequent convection and lightning over the 5 days.

p. 10660, lines 2-3: ...in the anvil outflow regions of individual electrically-active storm. The process described here is most likely one of accumulation of LNO_x from multiple storms through.....

p. 10661, line 14: PBL rather than TTL?

Figure 6: What times are these images for relative to the sampling time and relative to what point on the trajectories?