Observations of NOx, peroxy nitrate and alkyl nitrate during OP3 campaign in the Borneo rain forest: diurnal cycles and the role in ozone production

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Peroxy nitrate ($\sum$PNs) and alkyl nitrate ($\sum$ANs) are the main reservoirs of NOx and their measurement can accurately determine the chemical processes that regulate the concentrations of NOx and then ozone. Previous observations in environments dominated by biogenic emissions have shown that alkyl nitrate is a significant fraction of the NOy. This presentation discusses the observations during the OP3 campaign made in the forest of Borneo in Malaysia in order to study the role of alkyl nitrate and peroxy nitrate in the NOy budget and how they influence the formation of ozone at low concentrations of NOx and anthropogenic VOC but at high levels of biogenic VOC.