**Et-001** Room: C513 Time: June 7 9:00-9:15

Redistribution of reactive nitrogen in the Arctic lower stratosphere in the winter of 1999-2000

# Makoto Koike[1], Yutaka Kondo[2], Nobuyuki Takegawa[3]

[1] EPS, Univ. of Tokyo, [2] STEL, Nagoya Univ, [3] STEL

We measured total reactive nitrogen (NOy) in the Arctic lower stratosphere from the NASA DC-8 aircraft during the SOLVE-THESEO campaign in the winter of 1999-2000. The NOy-N2O correlation was similar between the December and January deployments. During the March deployment NOy values were slightly, however, systematically higher as compared to those observed during the previous deployments, although a tight correlation between NOy and N2O was still seen. Because of the record low temperature, intensive denitrification was observed at 16-21.5 km. Redistribution due to gravitational sedimentation of PSC particles and evaporation at lower altitudes was considered to be responsible to the observed increase in the NOy level.

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