

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



AAS021-24

Room:102

Time:May 23 16:00-16:15

Diurnal variation of ClO observed with SMILES

Yu Onodera^{1*}, Tomohiro Sato³, Philippe Baron², YASUKO KASAI², Eric Dupuy², Kazuyuki Kita¹, Joachim Urban⁴, Donal Murtagh⁴, Nathaniel Livesey⁵

¹Ibaraki University, ²NICT, ³Tokyo Institute of Technology, ⁴Chalmers U. of Technology, ⁵NASA/JPL

A new generation of super-sensitive submillimeter-wave receivers, employing SIS (Superconductor-Insulator- Superconductor) technology, will provide new opportunities for precise remote sensing observation of minor constituents in the atmosphere. SMILES had been launched at 11/09/2009, and installed on the Japanese Experiment Module (JEM) in the International Space Station (ISS). SMILES is a collaboration project between NICT and JAXA.

SMILES has observed the diurnal observation of ClO, HOCl, HO₂, and HCl from October 12, 2009 to April 21, 2010. We will present 1) the result of the evaluation of ClO data quality, including inter-comparison between other satellites measurements and error analysis, and 2) the first simultaneous observations of ClO, HOCl, HO₂, and HCl.