

AAS020-24

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ゾンデデータとの比較による SMILES レベル 2 オゾンデータの検証 Validation of the SMILES Level2 ozone data by using ozonesonde measurements

今井 弘二^{1*}, 藤原 正智², 鈴木 睦³, 眞子 直弘³, 佐野 琢己³, 塩谷 雅人⁴, 光田 千紘⁵, 高橋 千賀子⁵
Koji Imai^{1*}, Masatomo Fujiwara², Makoto Suzuki³, Naohiro Manago³, Takuki Sano³, Masato Shiotani⁴, Chihiro Mitsuda⁵,
Chikako Takahashi⁵

¹ 株式会社とめ研究所, ² 北海道大学 大学院地球環境科学研究所, ³ 宇宙航空研究開発機構, ⁴ 京都大学生存圏研究所, ⁵ 富士通エフ・アイ・ピー株式会社

¹TOME R&D Inc., ²Faculty of Environmental Earth Science,, ³JAXA, ⁴RISH, Kyoto Univ., ⁵Fujitsu FIP Corporation

To demonstrate the high sensitivity of 4-K cooled sub-mm limb sounders and to monitor global distributions of the stratospheric trace gases, the Japan Aerospace eXploration Agency (JAXA) launched the Superconducting Submillimeter-Wave Limb-Emission Sounder (SMILES) instrument to the International Space Station (ISS) in 2009 using the H-II Transfer Vehicle (HTV). SMILES has been transferred to normal operation phase on 6th November, 2009. Currently, level 2 (L2) data products of the SMILES measurements has been evaluated.

Here we show the early validation results of the SMILES L2 ozone measurements using worldwide ozonesonde sounding net work data (SOWER, SHADOZ, WOUDC). SMILES L2 ozone data in the lower stratosphere are validated using near-coincident ozone measurements by analysing volume mixing ratio profiles. The average values of the mean relative differences are consistent within the margin of error.

キーワード: SMILES, オゾンゾンデ

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