**[Sample Abstract] Recent progress of GOSAT project and preparation for GOSAT-2 at National Institute for Environmental Studies (NIES)**

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GOSAT (Greenhouse Gases Observing Satellite) and GOSAT-2 are jointly promoted by Ministry of the Environment, JAXA (Japan Aerospace Exploration Agency), and NIES (National Institute for Environmental Studies). GOSAT has been operating for more than nine years since its launch. GOSAT-2 will be launched in FY2018. NIES is responsible for generation, archiving, validation, and distribution of higher level standard and research products of GOSAT and GOSAT-2. GOSAT's standard products such as FTS SWIR level 2 CO2/CH4/H2O column amount products (V02.72, April 2009–present), FTS TIR level 2 CO2/CH4 profile products (V01.20, April 2009–May 2014), and level 4A CO2/CH4 flux products (CO2: V02.05, June 2009–October 2015; CH4: V01.03, June 2009–September 2013) are freely available from GDAS (GOSAT Data Archive Service). A new version of level 4A CH4 product (V01.04, June 2009–September 2015) will be available soon. GOSAT-2's standard and research products similar to those of GOSAT will be generated by G2DPS (GOSAT-2 Data Processing System) and available from a dedicate website, GOSAT-2 Product Archive. For validation of GOSAT-2 products, several new ground-based measurement stations, such as a TCCON (Total Carbon Column Observing Network) station in Philippines, a SIF (Solar Induced Fluorescence) station in Shiga, Japan, and an urban air in-situ measurement and sampling station implemented in Tokyo Skytree, are established. GOSAT RAs (Research Announcements) were issued eleven times in 2008–2017. GOSAT RA PIs (Principal Investigators) have several privileges such as access to GOSAT standard products earlier than general users, access to research products and other technical information, and a right to submit FTS observation requests. In total, more than 120 joint research contracts with scientists from more than twenty countries were concluded under GOSAT RA framework. GOSAT Series RA will be issued.

Key words: GOSAT; GOSAT-2; TCCON