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Statement

"Contribution to the Paris Agreement using space-based GHG monitoring"

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Ministry of the Environment, Japan, Japan Aerospace Exploration Agency, and National Institute for Environmental Studies jointly developed and are operating Greenhouse gases observing satellite, GOSAT, since January 2009. GOSAT globally measures the column concentrations of two major greenhouse gases, carbon dioxide and methane, from the altitude of 666 km. To maintain the data continuity, Japan will launch GOSAT's successor, GOSAT-2, in FY2018.

GOSAT data can be used to map the enhancements of greenhouse gases concentrations due to anthropogenic emissions from large cities, industrial areas, mining areas, and other emission sources. And such enhancements can be quantitatively compared to those derived from greenhouse gas emission inventories and atmospheric transport models.

Space-based greenhouse gases monitoring such as GOSAT, the United States OCO-2, and Chinese TanSat, has a potential to be a new tool for independent and transparent verification of national greenhouse gas emission inventories. We believe it will be a useful contribution to implementation of the Paris Agreement.

We are willing to work together with scientists and inventory compilers in developed and developing countries to establish methodologies for such satellite data applications in the near future.