GOSAT-GW (Global Observing SATellite for Greenhouse gases and Water cycle)

TANSO-3 (Total Anthropogenic and Natural emissions mapping SpectrOmeter-3)

Project: NIES, funded by MoE-Japan Development: JAXA, Mitsubishi Expected Launch: FY2023 (Apr 2023 – Mar 2024) Lifetime: 7 yrs Orbital altitude: 666 km Sensor: grating imaging spectrometer Band: VIS, NIR 0.7, SWIR 1.6 um Species: CO_2 , CH_4 , NO_2 Swath: 911 km/90 km Spatial resolution: 10 km/1-3 km Global coverage: 3 days Local time: 13:30

Toward Global Stocktake 2023/2028:

- Monitoring of global-mean atmospheric column of GHGs, on monthly basis
- Evaluation of national inventories of anthropogenic emissions of GHGs
- Identification of large point sources

NO₂ Team:

- Joint NIES-JAMSTEC-NICT project (NIESalgorithm, JAMSTEC-validation, NICT-data processing) – H. Tanimoto, Y. Kanaya, Y. Kasai
- NIES-JAMSTEC-JAXA collaboration on aircraft obs., power plants, modeling, etc. – A. Kuze
- NIES's CC-AQ program for 2021-2025



