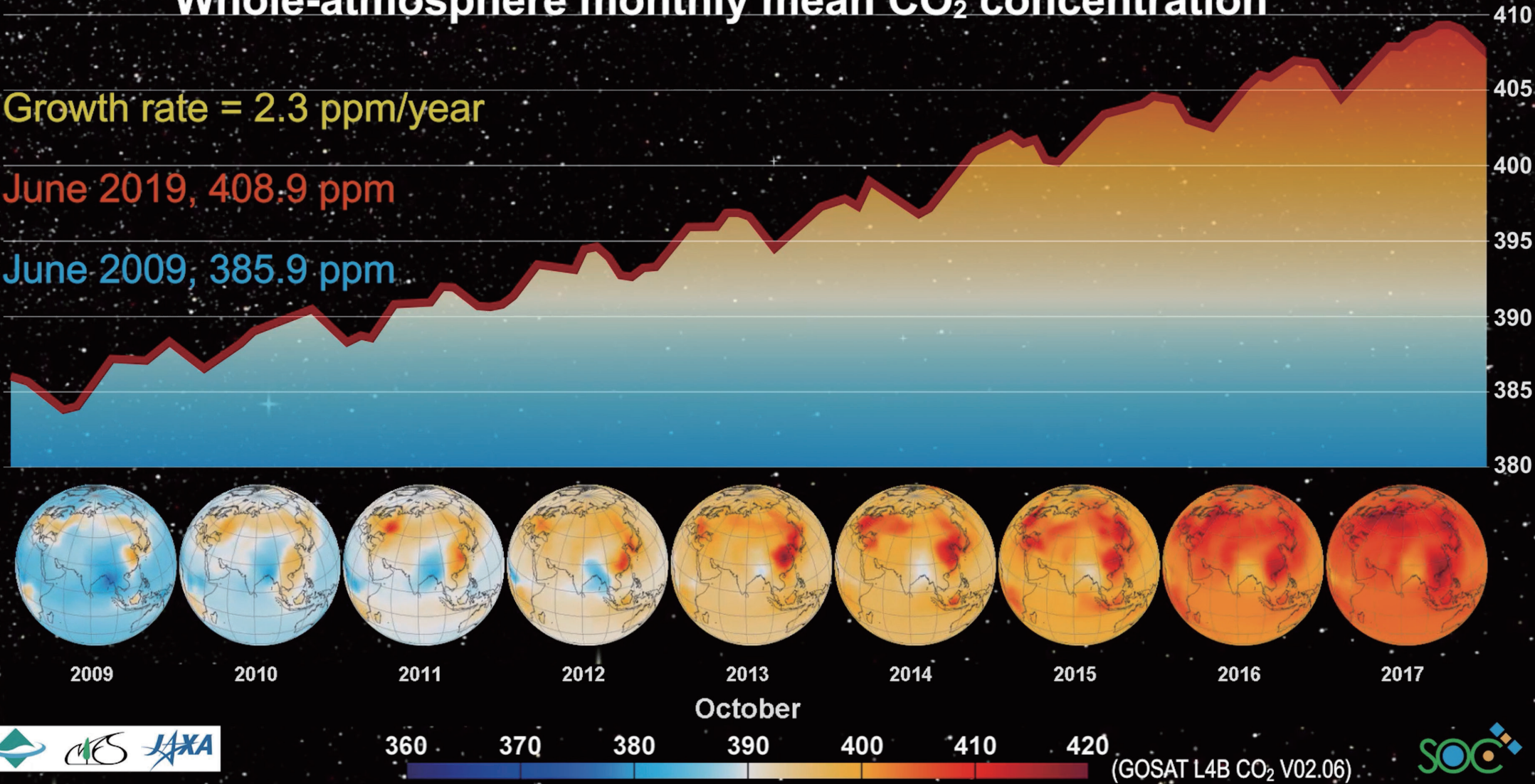


Whole-atmosphere monthly mean CO₂ concentration

Growth rate = 2.3 ppm/year

June 2019, 408.9 ppm

June 2009, 385.9 ppm



The upper plot shows the whole-atmosphere monthly mean CO₂ concentration derived from GOSAT data from June 2009 through August 2019. The globes under the plot show global simulations of CO₂ concentration at Earth's surface derived from GOSAT data that were acquired in every October from 2009 to 2017.

GOSAT Series Measures CO₂, CH₄, CO, and Aerosols from Space

Greenhouse gases Observing SATellite 2 (GOSAT-2) “IBUKI-2” was successfully launched on October 29, 2018 by the H-IIA Launch Vehicle No. 40 from the JAXA Tanegashima Space Center, Japan. It is the successor to GOSAT “IBUKI” launched in 2009. GOSAT and GOSAT-2 are joint projects by the Ministry of the Environment (MOE), the National Institute for Environmental Studies (NIES) and the Japan Aerospace Exploration Agency (JAXA).

In April 2016, the Satellite Observation Center (SOC) was established as a responsible organization for the “Satellite Observation Research Project” under the Fourth NIES Five-Year Plan (FY2016–FY2020). This research project includes Greenhouse gases Observing SATellite (GOSAT) “IBUKI” Project, GOSAT-2 Project and Global Observing SATellite for Greenhouse gases and Water cycle (GOSAT-GW) Preparation Team.

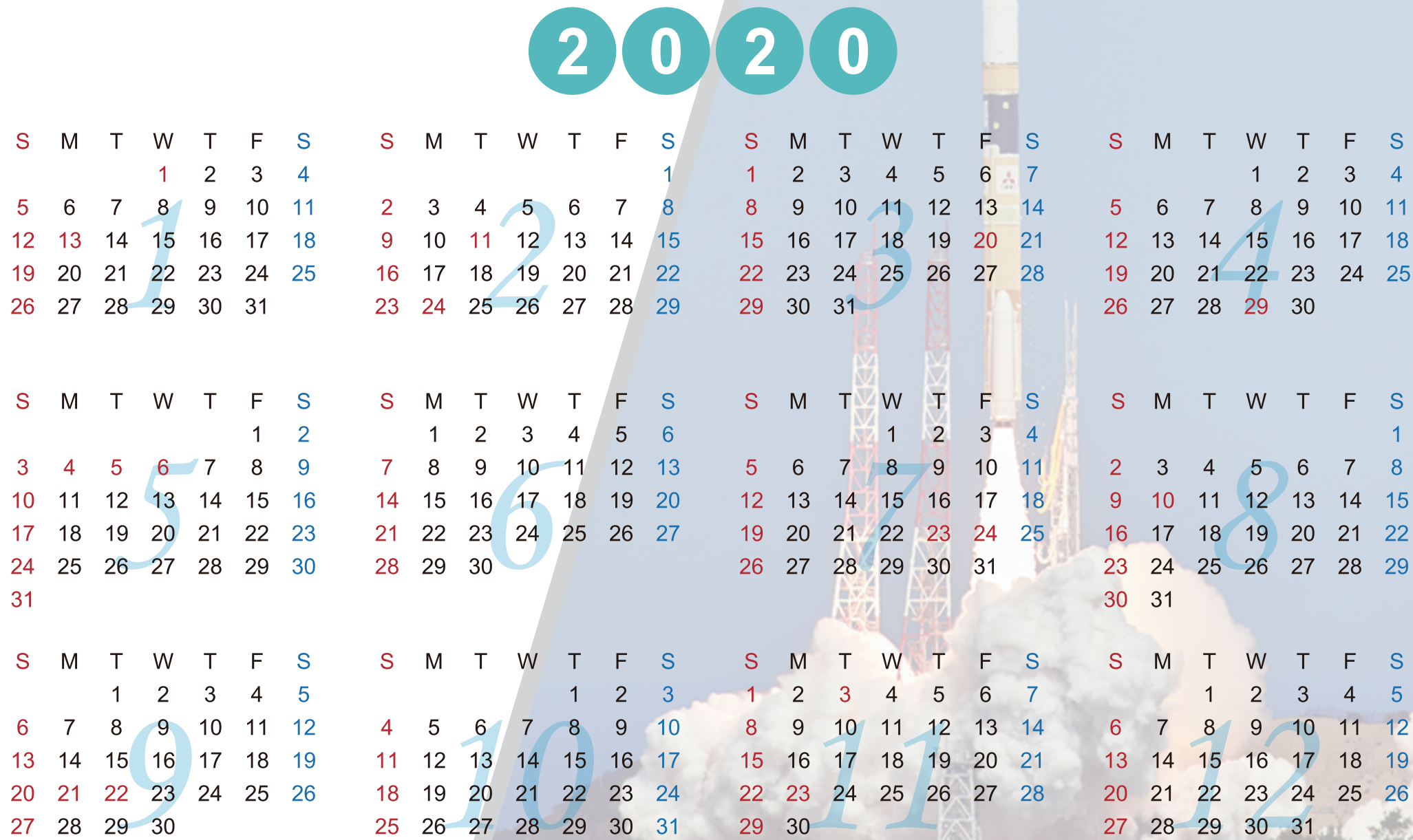


Photo: Seiji Narita (NIES)