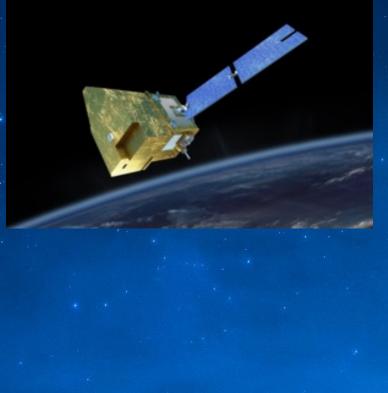


Key capabilities for carbon emission monitoring

- Unique city-scanning observing mode that will allow us, for the first time, to map CO2 emissions across cities
- 2. Internationally agreed standards will allow interoperability between sensors and confidence in the derived emissions estimates.
- 3. Provides continuity of the atmospheric CO2 record across the world, particularly the tropics, before launch of CO2M and other sensors
- 4. Complements data collected by CO2 sensors
- 5. Enhances data-driven capability to quantify UK CO2 fluxes

MicroCarb Expected to launch 2024-2026







Relationship with other carbon missions & programmes

- Solar Induced Fluorescence (SIF) retrievals will complement data collected by ESA FLEX (launch 2025)
- 2. TRUTHS will provide benchmarked radiometric calibration reducing sensor to sensor bias
- 3. UK Greenhouse Gas Emissions Measurement and Modelling Advancement (**GEMMA**) Programme measurements will underpin Calibration/Validation activities in the UK
- 4. Will improve capability to help set the UK on a path towards development of new UK-led GHG missions