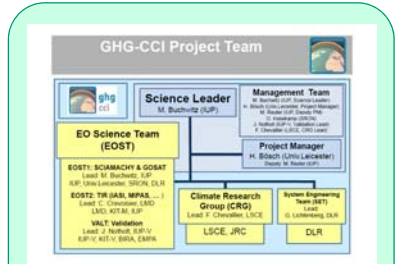


- A project to deliver the Essential Climate Variable (ECV) „Greenhouse Gases“ (GHG) -

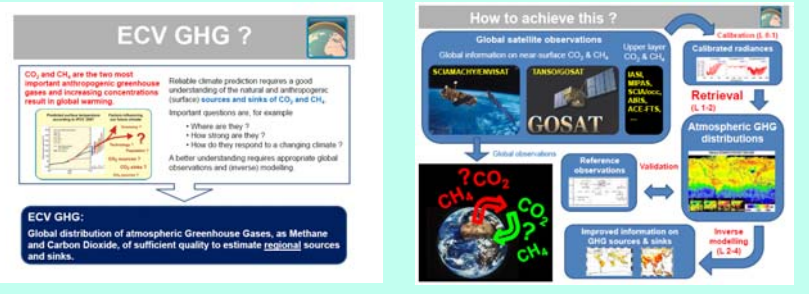


## GHG-CCI project team

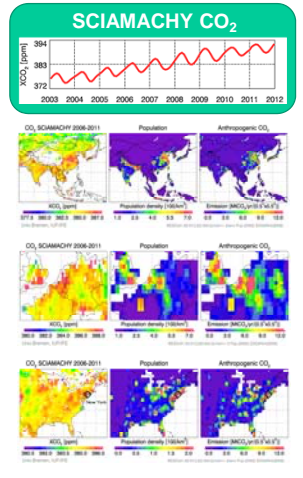


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## GHG-CCI project overview

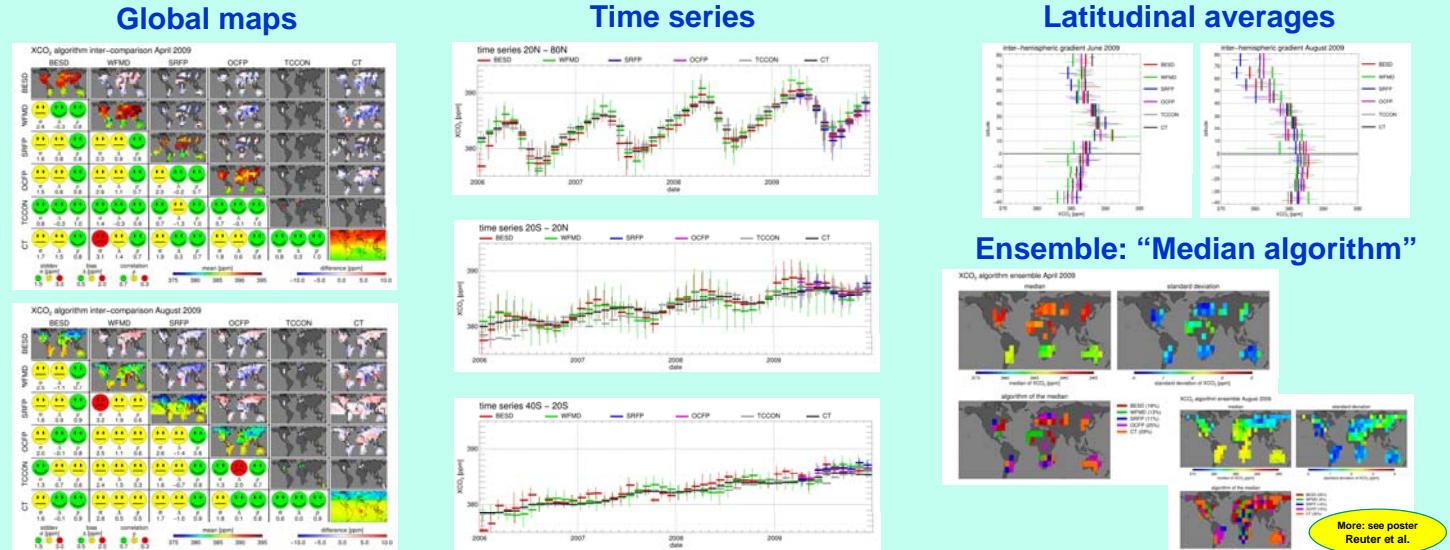


- GHG-CCI Goal:** To deliver global atmospheric CO<sub>2</sub> and CH<sub>4</sub> information needed for a better understanding of regional GHG surface fluxes (sources & sinks)
  - Core products:** XCO<sub>2</sub> and XCH<sub>4</sub> from SCIAMACHY/ENVISAT & TANSO-FTS/GOSAT
  - Approach:** Several algorithms to be improved & evaluated during 2-year "Round Robin" phase
  - ECV generation:** In year 3 using selected best algorithm(s)
  - Activities:** User requirements definition, algorithm improvements, calibration improvements, validation, other sensors (e.g., IASI, MIPAS, ...)
- GHG-CCI is linked with & complementary to MACC
- 



## Preliminary results from ongoing inter-comparison: XCO<sub>2</sub>

The GHG-CCI satellite derived data products (here: XCO<sub>2</sub> from SCIAMACHY and GOSAT) are inter-compared and compared to reference data (here: TCCON) and global models (here: CarbonTracker). The goal of this ongoing activity is to identify which algorithms to use for generating the GHG-CCI ECV data product. An option is to use an „Ensemble approach“, i.e., multiple algorithms / data products which can be used in various ways, e.g., for generating a „median product“.



Algorithms: **SCIAMACHY** (IUP, Univ.Bremen): BESD, WFMD; **GOSAT**: SRFP (SRON/KIT), OCFP (Univ.Leicester) - **Other**: CT=CarbonTracker

**Interested ? Please visit [www.esa-ghg-cci.org](http://www.esa-ghg-cci.org)**

More: see poster Reuter et al.