

Multi-constituent satellite data

(NO₂, O₃, CO, HNO₃)

OMI

SCIAMACHY

TES

MOPITT

MLS

Multi-model data assimilation (EnKF + 4 CTMs)

GEOS-Chem

AGCM-CHASER

MIROC-Chem

MIROC-Chem-H

Multi-model integration

Integrated reanalyses

Reanalysis uncertainty