

Model	Institute	Forward model type	Horizontal (nested) resolution	Vertical resolution	Meteorology	Inverse method	Key references
GEOS-Chem	U. Edinburgh	E	$2^\circ \times 2.5^\circ$ ( $0.25^\circ \times 0.3125^\circ$ )	47 levels (surface to 0.01 hPa)	NASA GEOS-5	EnKF	Feng et al. (2009, 2011, 2017)
MOZART	U. Bristol	E	$2.5^\circ \times 1.9^\circ$	56 levels (surface to 1.65 hPa)	NASA GEOS-5	4D-Var	Emmons et al. (2010)
TOMCAT	U. Leeds	E	$1.125^\circ \times 1.125^\circ$	60 levels (surface to 0.1 hPa)	ECMWF ERA Interim	4D-Var	Wilson et al. (2014); McNorton et al. (2016); Monks et al. (2017)
NAME	Met Office/ U. Bristol	L	1.5 km over UK domain	60 levels (surface to 29 km)	Met. Office	Bayesian inference	Manning et al. (2011); Ganesan et al. (2015)