

Model	Status of deposition scheme	Reference	Land cover classes	Reference
CAMCHEM	Wesely, updated	Walmsley et al., 1996 Wesely and Hicks, 2000	Desert, Ice and ocean; Needleleaf evergreen temperate tree; Needleleaf evergreen boreal tree; Needleleaf deciduous temperate tree; Broadleaf evergreen tropical tree; Broadleaf evergreen temperate tree; Broadleaf deciduous tropical tree; Broadleaf deciduous temperate tree; Broadleaf deciduous boreal tree; Broadleaf evergreen shrub; Broadleaf deciduous temperate shrub; Broadleaf deciduous boreal shrub; C3 arctic grass; C3 non-arctic grass; C4 grass; Corn; Wheat	See the main model citation
CHASER-v03	Wesely, updated	Updates not specified	Includes tropical forest	See the main model citation
FRSGC/UCI-v01	Wesely, updated	Updates not specified	Water, Desert, Snow and ice, Deciduous forest, Coniferous forest, Tropical forest, Tundra, Grass, Crop	See the main model citation
GEMAQ-EC	Wesely, updated	Updates not specified	Includes snow cover	See the main model citation
GEOSChem-v07	Wesely, updated	Wang et al., 1998	Snow/Ice; Deciduous forest; Coniferous forest; Agricultural land; Shrub/grassland; Amazon forest; Tundra, Desert; Wetland; Urban; Water. Olson land cover data (1992 data set--74 ICCs, 2001 data set--96 LCCs) is mapped to the 11 LCCs described by Wesely et al., (1989). Further information is available at: http://acmg.seas.harvard.edu/geos/	See the main model citation
GISS-PUCCINI	Wesely	Updates not specified	Forest, Tropical forest, Woodland, Shrubland, Grassland, Tundra, Desert, Cultivation	Chin et al., 1996, Matthews et al., 1983
GMI-v02f	Wesely, updated	Wang et al., 1998		
INCA-vSSz	Wesely, updated	Updates not specified	Evergreen needleleaf forest; Evergreen broadleaf forest; Deciduous needleleaf forest; Deciduous broadleaf forest; Mixed forest; Woodlands; Wooded grasslands/shrublands; Closed bushlands or shrublands; Open Shrublands; Grasses; Croplands	DeFries et al., 1998
LLNL-IMPACT-T5a	Wesely, updated	Wang et al., 1998	Snow/Ice; Deciduous forest; Coniferous forest; Agricultural land; Shrub/grassland; Amazon forest; Tundra; Desert; Wetland; Urban; Water; Tropical	See the main model citation

			forests; Tundra	
MOZARTGFDL-v2	Wesely, updated	Updates not specified	Evergreen needleleaf forest; Evergreen broadleaf forest; Deciduous needleleaf forest; Deciduous broadleaf forest; Mixed forest; Woodlands; Wooded grasslands/shrublands; Closed bushlands or shrublands; Open Shrublands; Grasses; Croplands	See the main model citation
STOC-HadAM3-v01			Water; Urban; Snow/Ice; Bare soil; Deciduous forest; Coniferous forest; C3 grass; C4 grass; Shrub	See the main model citation
STOCHEM-v02			Water; Urban; Snow/Ice; Bare soil; Deciduous forest; Coniferous forest; C3 grass; C4 grass; Shrub	See the main model citation
TM5-JRC-cy2-ipcc-v1	Wesely, updated	Ganzeveld et al., 1995, http://tm.knmi.nl/index.php/Main_Page	Snow and Ice, Water, Soil, Vegetation	See the main model citation
ULAQ-v02				
UM-CAM-v01	Hough	Zeng et al., 2008	Water, Forest, Grass/Shrub, Soil, Snow/Ice	Land type is defined by the model calculated roughness length.

Notes on this table:

1. We have tried to locate information on the dry deposition scheme used in each model, details if it has been updated and in what way, as well as the land cover scheme used in the model.
2. Where it was given in the main reference for each model (see Table 1 in the main publication), a citation for the deposition scheme updates has been provided
3. Where it was given in the main reference for each model (see Table 1 in the main publication), a citation for the land cover classification has been provided.
4. We were not able to find or locate definitive information about the deposition scheme or the land cover used in the ULAQ model.
5. Not all models provided definitive information about the LAI scheme used. Generally these models used either a satellite derived data set, a

prescribed LAI data set or LAI that is calculated as a function of ecosystem type.

Additional References

Chin et al., 1996,

DeFries1998

Ganzeveld et al., 1995,

Matthews et al., 1983

Walmsley et al., 1996

Wang, Y., D. J. Jacob, and J. A. Logan (1998), Global simulation of tropospheric O₃-NO_x -hydrocarbon chemistry: 1. Model formulation, J. Geophys. Res., 103(D9), 10713-10725, doi:10.1029/98JD00158.

Wesely, M. L. and Hicks, B. B.: A review of the current status of knowledge on dry deposition, Atmos. Environ., 34, 2261—2282, doi:10.1016/S1352-2310(99)00467-7, 2000.

Zeng et al., 2008