Chemistry Mechanism	Family	Cases	Years	Metfields	Spatial resolution	Lightning	Biomass burning source	Isoprene emission	Ship Emission	Other emission	Fast J option	Number of species	Date completed	Code Version	CVS tag	Details	System information	Results location (relative to gmidata2/)		
Combo	**Aura4 (re-run)**		2004 -early 2007	geos4das	2x2.5	Dale 2008 - ap1.2 MOD: Continental fix	GFEDv2 year-specific with diurnal variation; Yevich biofuel	Guenther et al. 2006, no scaling	T	Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix	fast_JX	124	in production		on discover	H2 fix included; ilat fix in condense routine; ESMF in code	discover	dirac: users/mrdamon/aura4-ReRun		
	Aura4 spinup		2004 (3X)	geos4das	2x2.5		GFEDv2 year-specific; Yevich biofuel	old Harvard	T		fast_JX	124					discover	dirac: output/gmic/aura4/spinup		
	Aura4 (first run)		2004 -2006	geos4das	2x2.5	Dale 2008 - ap1.2	GFEDv2 year-specific with diurnal variation; Yevich biofuel	Guenther et al. 2006, no scaling	T	Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix	fast_JX	124	3/9/08	2.16.0	NewProcess_for_Restart_and_SpcCon_OutFiles_v2	H2 fix included; ilat fix in condense routine; ESMF in code	discover	dirac: output/gmic/aura4		
		aura4Spinup2	2004 -?			Dale 2006 - ap1.0 (mod)				Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others); adjust Nox			1/18/08	2.0.0.b5	Aura2ReRun_AfterNewNOxBranch	new Nox profile; updated coefficients; correct emissions; new aerosol dust data				
		aura4Spinup3	2004 -3			Dale 2006 - ap1.0 (mod)				Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix			1/18/08	2.0.0.b5	Aura2ReRun_AfterNewNOxBranch	new Nox profile; updated coefficients; updated emission file from spinup 2; new aerosol dust data				
	Aura4 no Indonesian wildfires		7/2006 - 12/2006	geos4das	2x2.5	Dale 2008 - ap1.2	GFEDv2 year-specific with diurnal variation; Yevich biofuel	Guenther et al. 2006, no scaling	T	No Indonesian wildfires; Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix	fast_JX	124	3/29/08	2.16.0	NewProcess_for_Restart_and_SpcCon_OutFiles_v2	H2 fix included; ilat fix in condense routine; ESMF in code	discover	dirac: users/mrdamon/aura4-NoIndo		
	Aura4 no NO from lightning		2004-2006	geos4das	2x2.5	none	GFEDv2 year-specific with diurnal variation; Yevich biofuel	Guenther et al. 2006, no scaling	T	Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix	fast_JX	124	3/28/06	2.16.0	NewProcess_for_Restart_and_SpcCon_OutFiles_v2	H2 fix included; ilat fix in condense routine; ESMF in code	discover	dirac: users/mrdamon/aura4-Dale/noLightNO		
	Aura4 with old vertical profile		2004-2005	geos4das	2x2.5	Dale 2008 0 ap1.2 (mod)	GFEDv2 year-specific with diurnal variation; Yevich biofuel	Guenther et al. 2006, no scaling	T	Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix	fast_JX	124	3/28/06		on discover	H2 fix included; ilat fix in condense routine; ESMF in code; partionnox replaced in lightning	discover	dirac: users/mrdamon/aura4-Dale/oldPartNOx		
	Aura4 read NO from lightning from file only		2004 -2005	geos4das	2x2.5	read NO from lighting from file only	GFEDv2 year-specific with diurnal variation; Yevich biofuel	Guenther et al. 2006, no scaling	T	Aura harvard ship - adjust Nox; - Hourly NOx fossil fuel variation; - MEGAN emissions; - Chinese seasonality of emissions from Streets; - 2004-5 GFEDv2 boreal emissions bug fix	fast_JX	124	3/28/06	2.16.0	NewProcess_for_Restart_and_SpcCon_OutFiles_v2	H2 fix included; ilat fix in condense routine; ESMF in code	discover	dirac: users/mrdamon/aura4-Dale/readLightFile		
Combo	**Aura3**		2004-2006	geos4das	2x2.5	Dale 2006 - ap1.0	GFEDv2 year-specific; Yevich biofuel	Guenther et al. 1995, no scaling	T	Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others)	fast_JX	124	9/16/07				discover	dirac: output/gmic/aura3		
		aura3 1/2004 - 5/2005	1/2004 - 5/2005										9/16/07	2.0.0.b3	Aura2ReRun_1_2004_5_2005	surface hourly O3; wrong year of emissions during spinup		dirac: output/gmic/aura3		
		aura3 6/2005 - 12/2005	6/2005 - 12/2005										9/16/07	2.0.0.b6	Aura2ReRun_6_2005_12_2006	first 8 levels of hourly O3;wrong year of emissions during spinup		dirac: output/gmic/aura3/2005		
		aura3 (05 aerDust) 1/2006 - 12/2006	1/2006 - 12/2006										9/16/07	2.0.0.b6	Aura2ReRun_6_2005_12_2006	first 8 levels of hourly O3; 2005 aerosol dust;wrong year of emissions during spinup		dirac: output/gmic/aura3/2006_aerDust05		
		aura3 (06 aerDust) 1/2006 - 12/2006	1/2006 - 12/2006										10/16/07	2.0.0.b6	Aura2ReRun_6_2005_12_2006	first 8 levels of hourly O3; 2006 aerosol dust;wrong year of emissions during spinup		dirac: output/gmic/aura3/2006		
Combo	**Aura3 new NOx profile**	aura3NewNOx	2004-2005		2x2.5	Dale 2006 - ap1.0 new NOx	GFEDv2 year-specific	old Harvard	T	Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others)	fast_JX	124		2.0.0.b1	After_HO2rxn_NewLightning_v2_AuraRunsCodeBranch	new Nox profile, gmic_ap1.0HO2Aura2 base, problem with spinup;wrong year of emissions during spinup	discover	dirac: users/mrdamon/aura3NewNOx/		
		DAS metfields		geos4das									10/22/07							
		fcst metfields		fcst									not started							
Combo	**Aura3 ap1.1**		2004-2006	geos4das	2x2.5	Dale 2007 - ap.1.1	GFEDv2 year-specific	old Harvard	T	Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others)	fast_JX	124	12/18/07	2.0.0.b7	Aura2ReRun_ap1_1Branch	ap1.1 lightning	discover	dirac: users/mrdamon/auraAp1.1		
Combo	**Aura2**		2001 & 2004-2006	geos4das	2x2.5	nox from file		old Harvard	T	2001 htap SR1 SR2	fast_JX	124	2/26/07		Fix_for_CodeReadyForAuraRun			dirac: output/gmic/aura2		
Combo	**fvgcm combo**	1/1994 - 12/1998	1994-1998	geos4gcm	2x2.5	Dale 2006 - ap1.0	Harvard 1980-1990	old Harvard	T	fossil fuel & biofuel Harvard 1995	fast_JX	124	9/30/07	2.0.0.b2	AuraRunsCodeBranch_ap1_0HO2AuraFvgcm		discover	dirac: output/gmic/fvgcm/ap1_0HO2Aura2Fvgcm		
		1/1994 - 12/1994														surface hourly O3		dirac: output/gmic/fvgcm/ap1_0HO2Aura2Fvgcm		
		1/1995 - 12/1998														first 8 levels of hourly O3				
Troposphere	**htap**																			
Troposphere	**incremental**																			
Troposphere	**lightnin**				2x2.5			old Harvard									discover			
		gmic_ap1.0LightDAS	2004-2005	geos4das		Dale 2006 - ap1.0	GFEDv2 year-specific		T	2004 Aura harvard ship	fast_JX	85	7/6/07	2.0.1.b1	Lightning_Branch_DAS_ap1_0			dirac: output/gmic/lightning/DAS/gmic_ap1.0LightDAS		
		gmic_ap1.0LightFvgcm	1994-1996	geos4gcm		Dale 2006 - ap1.0	GFEDv2 year-specific		F	detail seasonal CO ship NO fvgcm climatology is not year specific	fast_JX	85		2.0.1.b4	Lightning_Branch_fvgcm_ap1_0			dirac: output/gmic/lightning/fvgcm/gmic_ap1.0LightFvgcm		
		gmic_defaultLightDAS	2004-2005	geos4das		nox from file								2.0.1.b2	Lightning_Branch_DAS_default_fix			dirac: output/gmic/lightning/DAS/gmic_defaultLightDAS		
		gmic_deafultLightFvgcm	1994-1996	geos4gcm		nox from file								2.0.1.b3	Lightning_Branch_fvgcm_default			dirac: output/gmic/lightning/fvgcm/gmic_defaultLightFvgcm		
Troposphere	**lighting suite (November 2007)**			geos4das	2x2.5			old Harvard		Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others)	fast_JX	85				Updated emission and aerosol dust files	discover			
		no NO from lightning	2004(2X) - 2006			none							haulted	2.0.1	Lightning_Branch_DAS_ap1_0Branch	coefficients (2001, 2004, 05) three hour timestep		dirac: users/mrdamon/Trop-no-NOLight-new		
		default lightnino (from file)	2004(2X) - 2006			nox from file							haulted	2.0.1	Lightning_Branch_DAS_ap1_0Branch	three hour timestep		dirac: users/mrdamon/Trop-nox-file-new		
		new lightnino ap1.0 -spinup	2004(2X)			Dale 2006							11/6/07	2.0.1	Lightning_Branch_DAS_ap1_0Branch	coefficients (2001, 2004, 05) three hour timestep		dirac: users/mrdamon/Trop-new-nnrfile-new		
		new lightnino ap1.1 - spinup	2004(2X)			Dale 2007 - ap1.1							haulted		on discover:/discover/nobackup/mrdamon/GMI_source/Lightn ino/Trop-new-ap1.1	ap.1.1 lightning scheme coefficients (2001, 2004, 05, 06) one hour time step				
		new lightning ap1.1 - production	2005-2006			Dale 2007 - ap1.1							not started			ap.1.1 lightning scheme same coefficients (2001, 2004, 05, 06)				
		Pickering et al 1998 lightning	2004(2X) - 2006			Pickering 1998							not started			Pickering lightning with 2001, 2004-2006 coefficients				
	Runs below the red line have errors																			
Combo	**aura3 rerun no NOx lightning**	aura3NoNOx	2004-2005	geos4das	2x2.5	nox from file!!	GFEDv2 year-specific	old Harvard	T	Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others)	fast_JX	124	10/23/07	2.0.0.b6	Aura2ReRun_6_2005_12_2006	no NO from lightning; gmic_ap1.0HO2Aura2 base, problem with spinup;wrong year of emissions during spinup	discover	dirac: users/mrdamon/aura3NoNOx		
Troposphere	**no NO from lightning**		2004-2005	geos4das	2x2.5	nox from file!!!!	GFEDv2 year-specific	old Harvard	T	Aura harvard ship - 2000-1 fossil fuel emissions (EDGAR+others)	fast_JX	85	10/1707	2.0.1.b1	Lightning_Branch_DAS_ap1_0		discover	dirac: users/mrdamon/trop_no_NO_Light		