

Summary of Sources and Sinks Working Group Discussion

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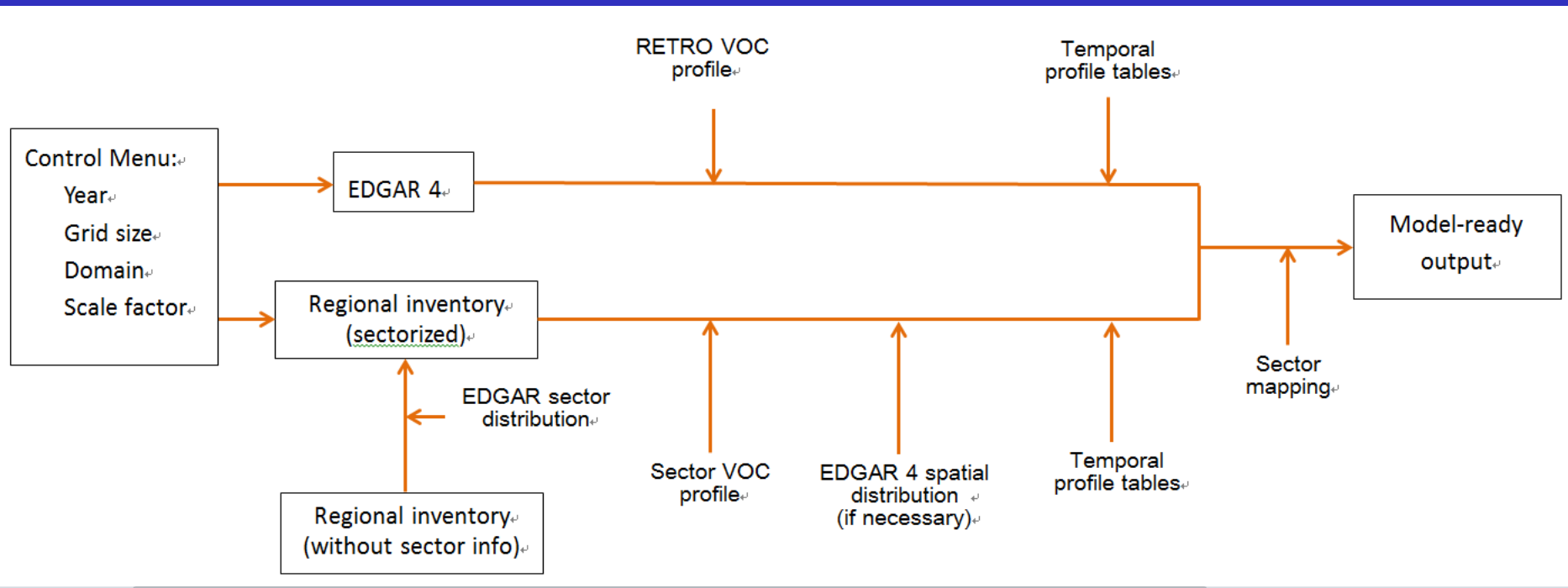
Excellent Progress Since IGC4

Version	Description	Contact
<u>v9-01-01</u>	<u>Updated lightning parameterization</u>	L. Murray, Harvard
<u>v9-01-01</u>	<u>Updated volcanic SO2 emissions</u>	J. Fisher, Harvard
<u>v9-01-01</u>	<u>Updated scavenging algorithms</u>	H. Amos, B. Corbitt, Q. Wang Harvard
<u>v8-03-02</u>	<u>Updated CO2 Emissions</u>	R. Nassar, Environ Canada
<u>v8-03-01</u>	<u>Anthropogenic scale factors to 2006</u>	A. van Donkelaar, Dalhousie
<u>v8-03-01</u>	EMEP emissions extended to 2007 and seasonality	A. van Donkelaar, Dalhousie
<u>v8-03-01</u>	Emissions for Nested NA/EU Simulations	A. van Donkelaar, Dalhousie
<u>v8-03-01</u>	Emissions for Global 1 x 1.25 simulation capability	L. Lamsal, prev. Dalhousie
<u>v8-03-01</u>	MEGAN speciated biogenic emissions used in SOA	H. Pye, prev. Caltech
<u>v8-02-04</u>	<u>EPA/NEI2005 regional emissions inventory for North America</u>	P. Le Sager, prev. Harvard, A. van Donkelaar , Dalhousie
<u>v8-02-04</u>	<u>MEGAN v2.1 biogenic emissions</u>	M. Barkley, Edinburgh
<u>v8-02-03</u>	<u>ICOADS ship emissions</u>	C. Lee, Dalhousie
<u>v8-02-03</u>	<u>Updated OTD/LIS redistribution factors for GEOS-5</u>	L. Murray, Harvard
<u>v8-02-02</u>	<u>BOND inventory for BC and OC with monthly var</u>	E. Leibensperger, Harvard

A Few Remaining IGC4 Priorities & More Are Forthcoming

Version	Description	Contact
v9-01-02	Update to GFED3 biomass burning	Prasad Kasibhatla, Duke
v9-01-02	FAA/AEDT aircraft emissions inventory	Steven Barrett et al (MIT)
v9-01-02	Anthropogenic VOCs	Dylan Millet, UMN
v9-01-02 or v9-01-03	Update soil NOx emissions	Rynda Hudman, Berkeley
v9-01-02	Seasonality for Streets NH3 emissions over Asia	Jenny Fisher, Harvard

Anthropogenic Emission Pre-processor



Development Needs

Model development	Development group	Priority level	Readiness
Unified emissions preprocessor	Qiang Zhang	High	Medium
Update to EDGAR4	Qiang Zhang	Medium	High
Update Asian Emissions	Qiang Zhang	Medium	Medium
Update diurnal variation from NEI	Rynda Hudman	High	High
Satellite-based NOx emission trend	Lok Lamsal	High	High
Emissions for 0.25 nested	Yuxuan Wang, A. van Donkelaar	Medium	Medium
Update to ship plume emissions	Geert Vinken	Medium	Medium
Interannual lightning	Lee Murray	Medium	Medium
Dry deposition for sea-salt	Lyatt Jaegle	Medium	Medium
PBAP	Colette Heald	Low	High

Related Developments Covered in Other Working Groups

Covered in aerosol group:

- Cold T wet scavenging, size-dependent washout update, Qiaoqiao Wang

Covered in carbon group:

Updated CO₂ sources

Updated acetone

Other Issues

- Address inconsistency in input/output (Matthew Cooper, Prasad Kasibhatla)
- Update wiki to note issue in regriding (Ray Nassar)

Research Projects Discussed

- Mechanistic lightning (Lee Murray, Bill Koshak)
- Fire injection heights: research project (Maria Val Martin)
- Update DMS emissions (Eric Sofen?)
- Examine issues in NH₃ code (Daven Henze?, Raluca Ellis?)

Discussed in aerosol WG

Consistency of dust & sea-salt emissions across met products, Jeff Pierce?

Related: Consistency of temperature dependent emissions

soil NO_x: Rynda Hudman; Isoprene: Michael Barkley

Please Update (Add and Remove) Research Projects on Wiki