

# AEROCOM

## New Data Protocol and Selected Comparisons

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# AeroCom output processing

*so far 8 models have delivered netCDF format data*

## Current procedure

- *data are averaged with nco scripts*
- *variables are renamed to « Aerocom » - names*
- *data are preprocessed in idl*  
*(units, species split, column integration etc)*
- *data are plotted in idl and converted to \*.png*
- *images are transferred to IPSL web server*
- *interactive website uses Perl scripts*  
*to look up available species and parameters per model*

**PRELIMINARY RESULTS!! DO NOT CITE NOR USE WITHOUT ASKING MODEL AUTHORS**

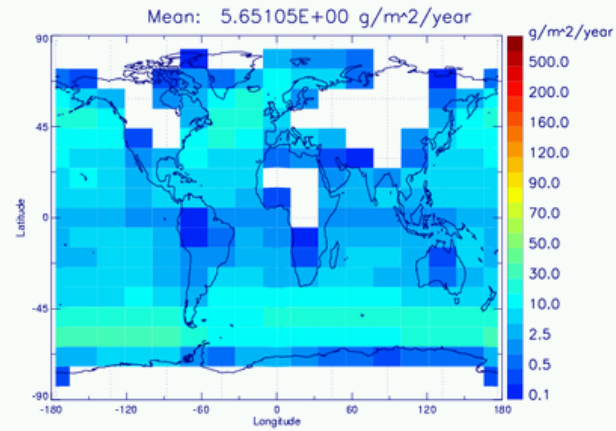
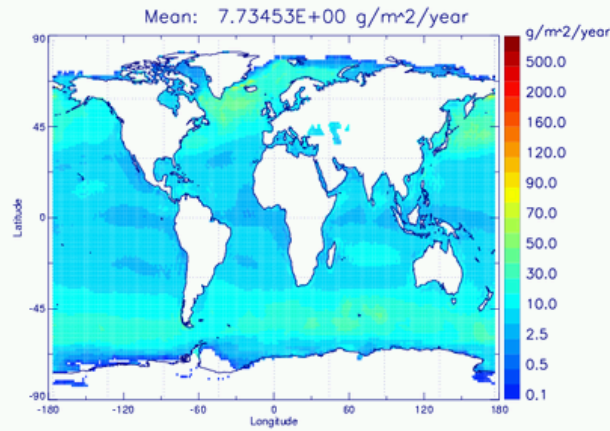
**HELP**

AEROCOM simulation results / Comparison among models / data -----> launch NEW query with changed parameters

KYU 2000 Takemura SS EMI ULAQ CLIM Pitari/Montanaro SS EMI

**KYU - SS - EMI**

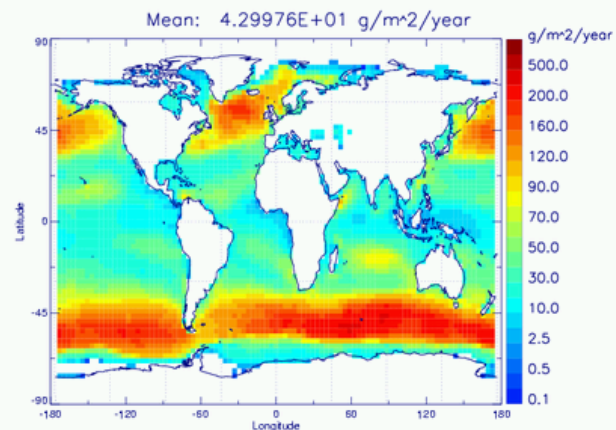
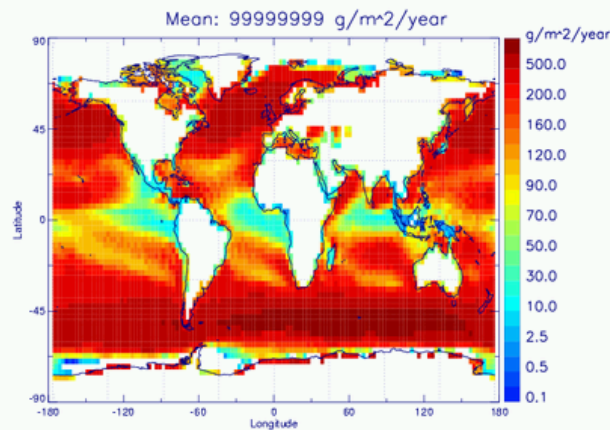
**ULAQ - SS - EMI**



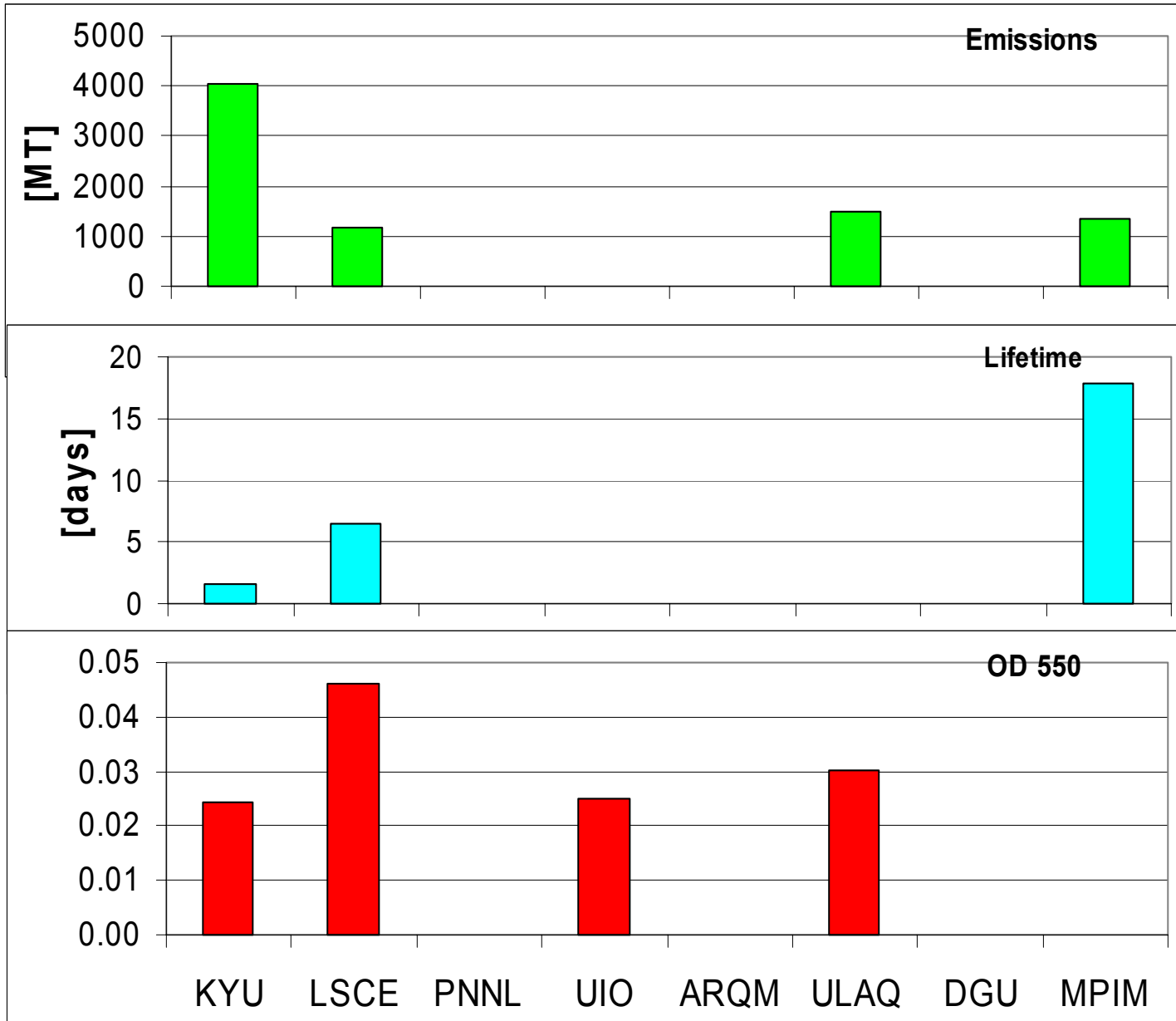
ARQM CLIM? Gong SS EMI LMDzT 2000 Schulz/Balkanski/Textor SS EMI

**ARQM - SS - EMI**

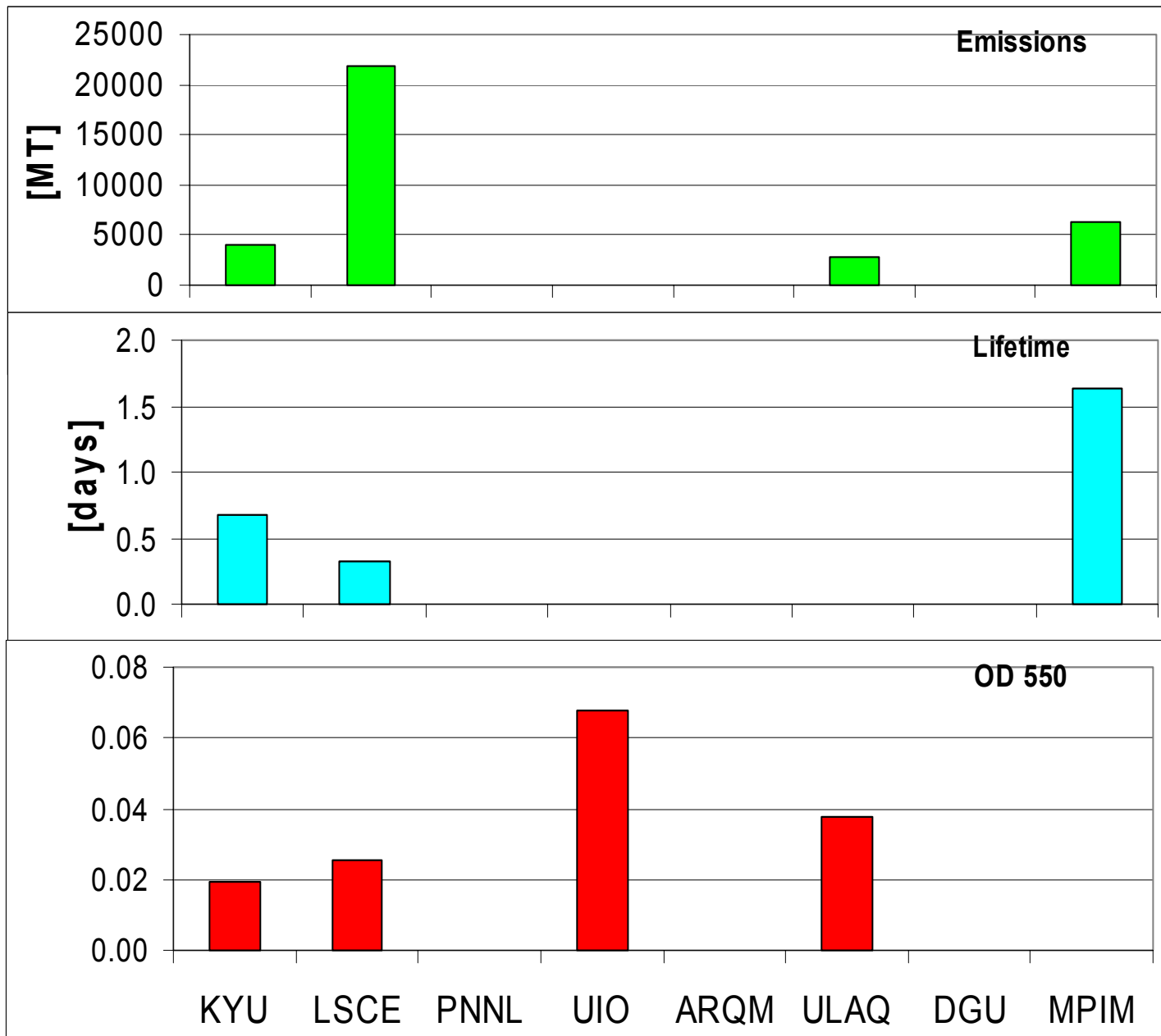
**LSCE - SS - EMI**



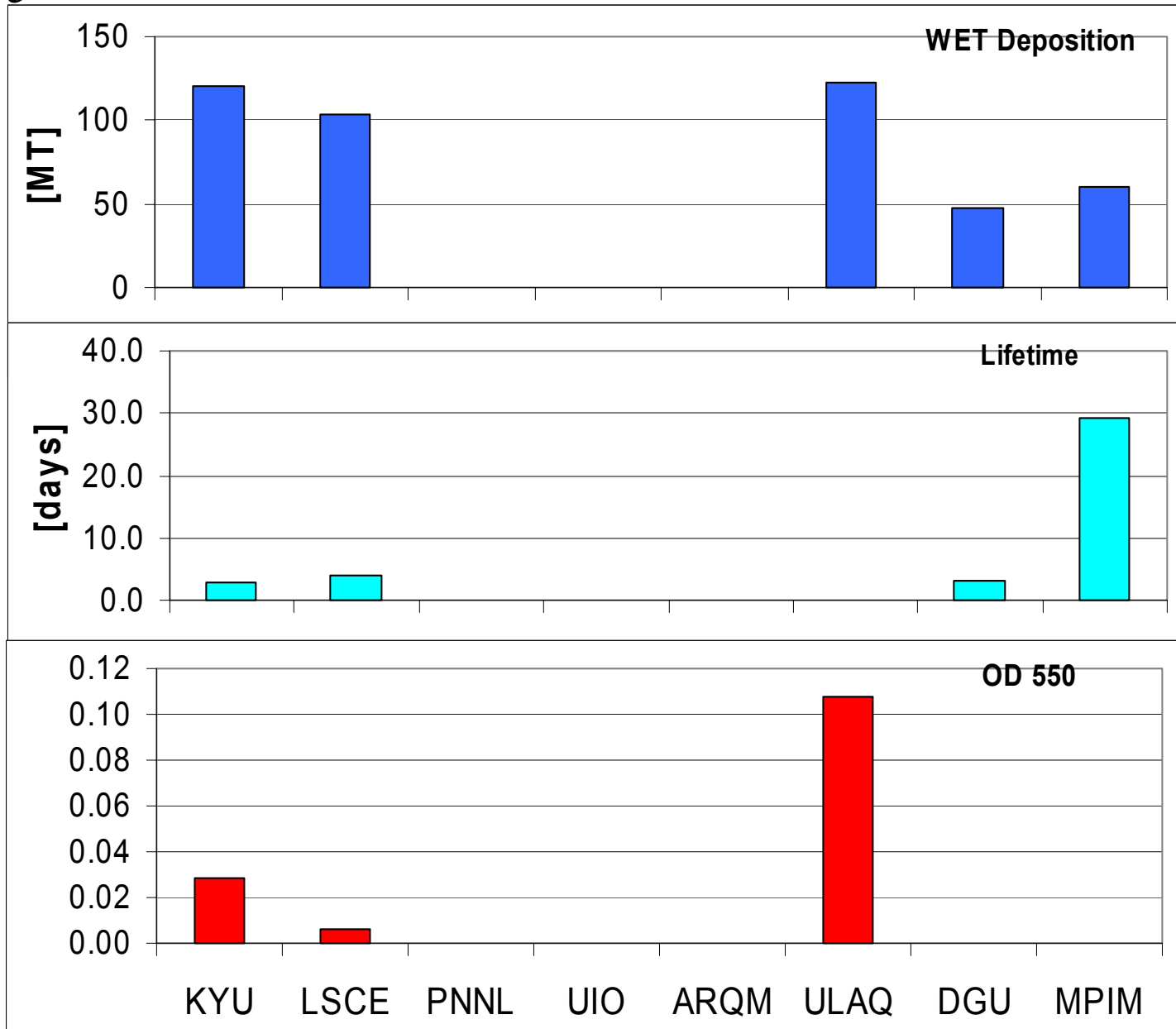
# DUST



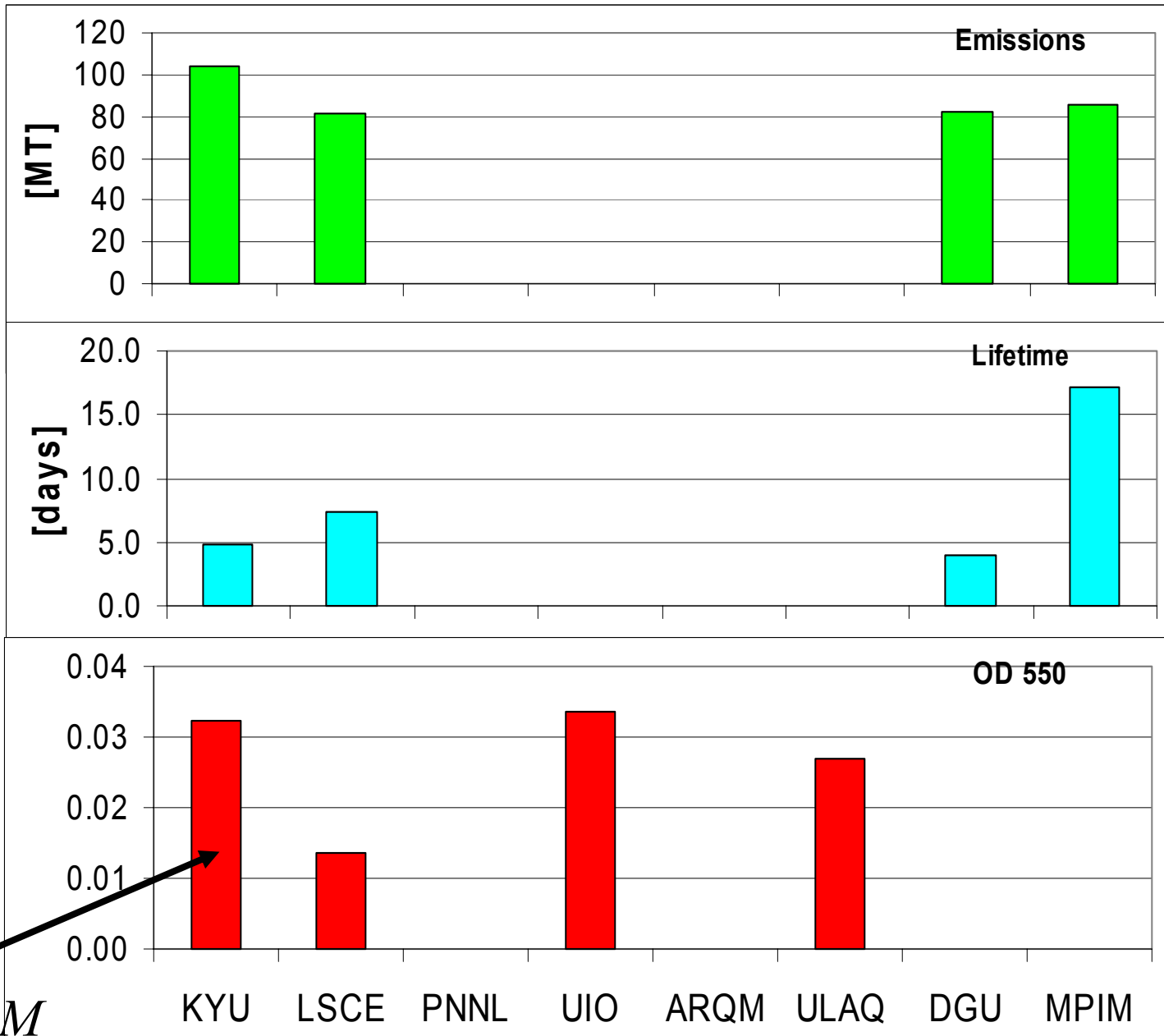
# Sea Salt



# Sulphate

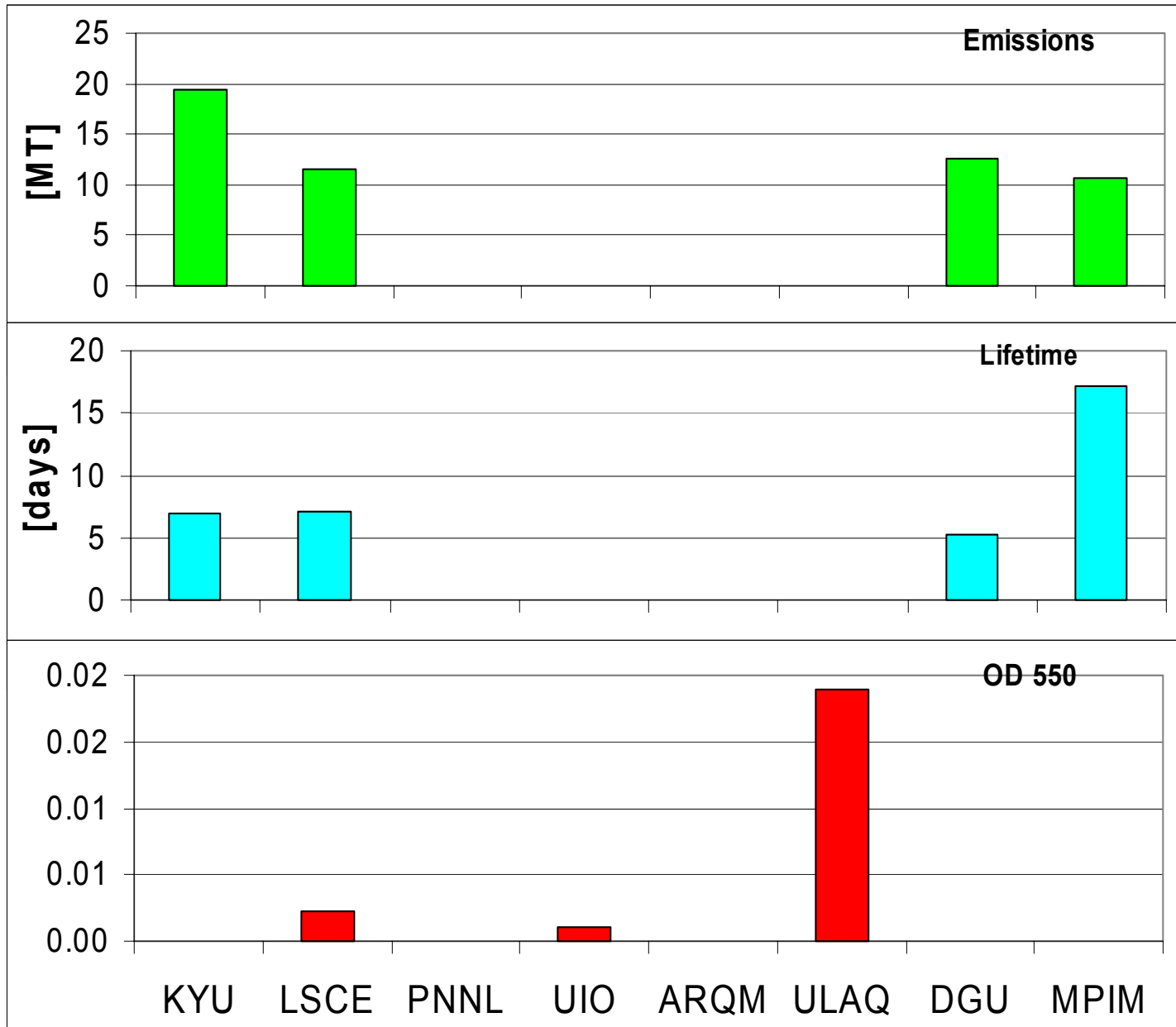


# Particulate Organic Matter



*BC+POM*

# Black Carbon





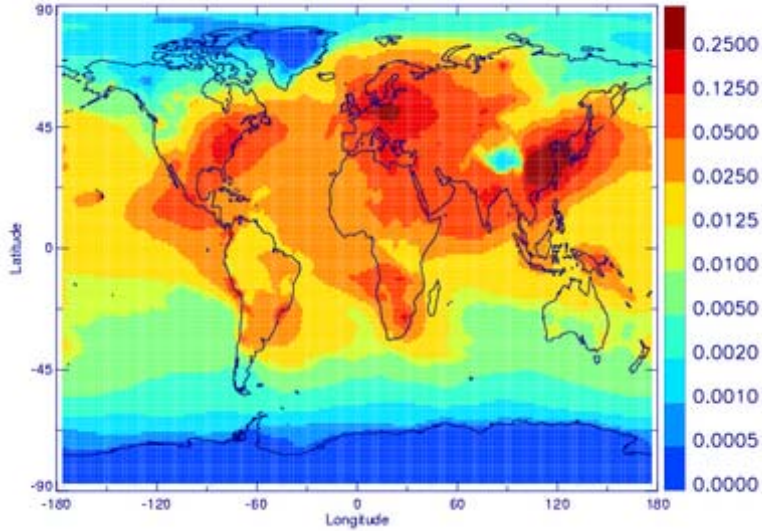
*Daily (local noon?)*

*versus*

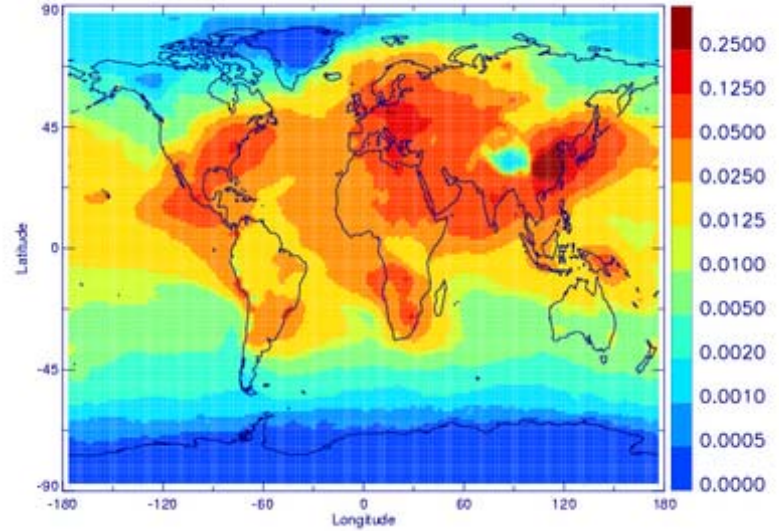
*Monthly Mean*

*Sulfate OD 550 KYU*

Mean:  $3.42703E-02$

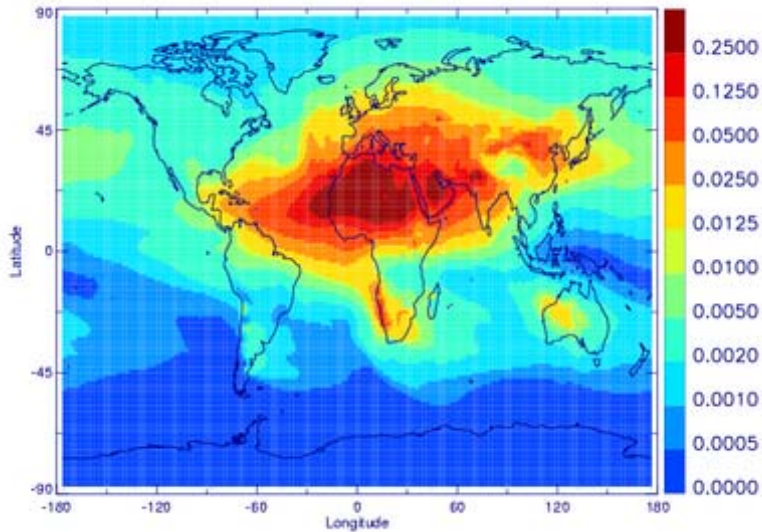


Mean:  $2.83083E-02$

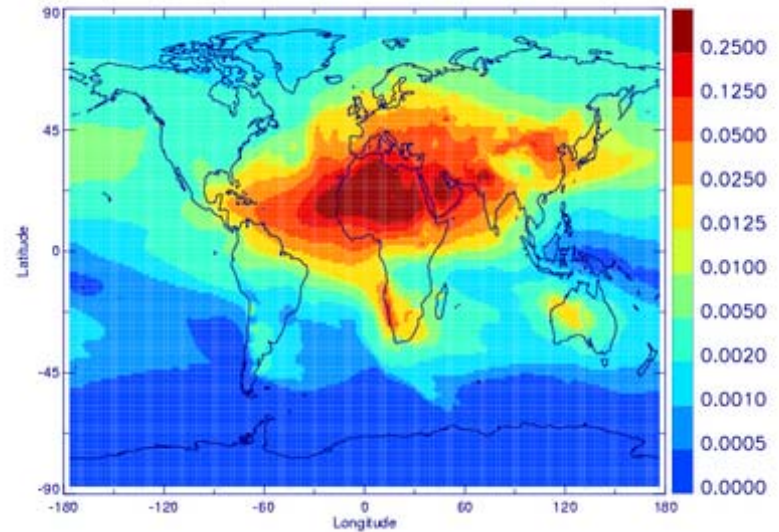


*Dust KYU*

Mean:  $2.43965E-02$

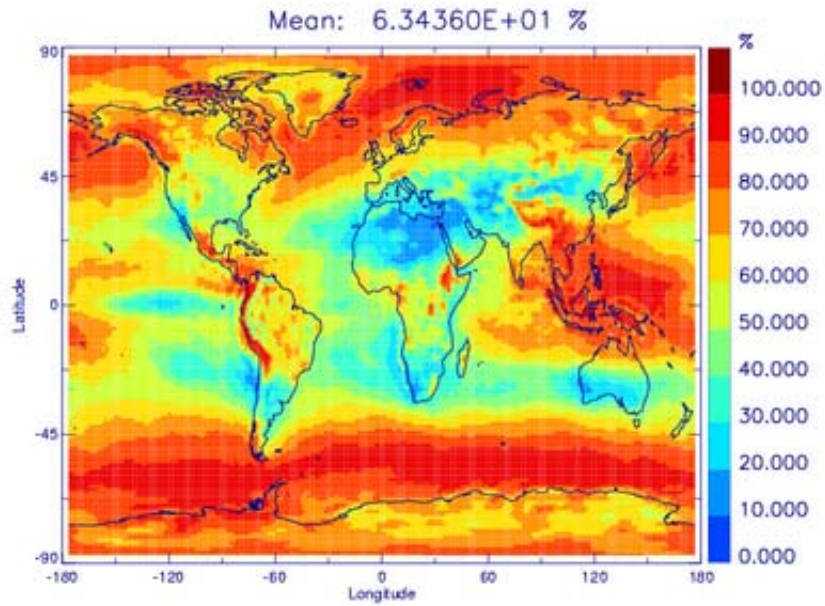


Mean:  $2.44586E-02$

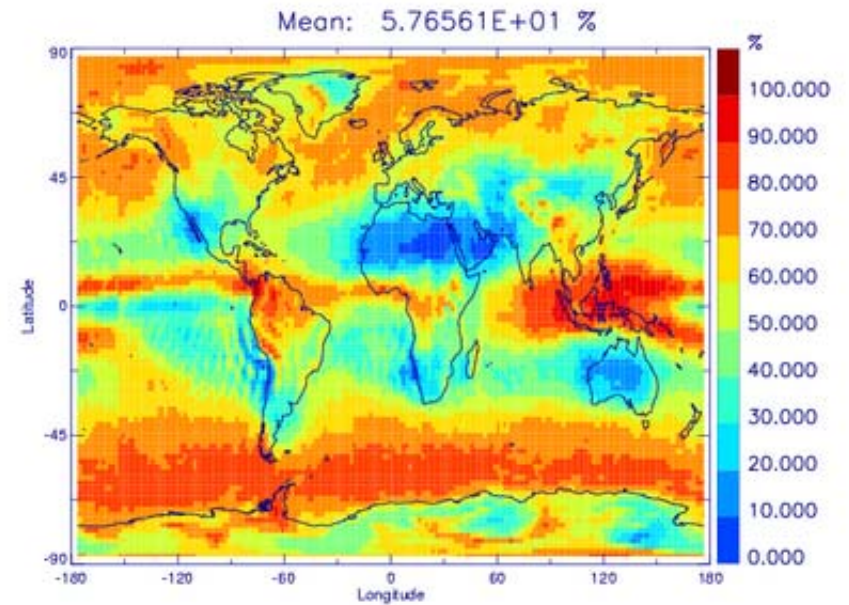


# Cloud cover

*KYU*



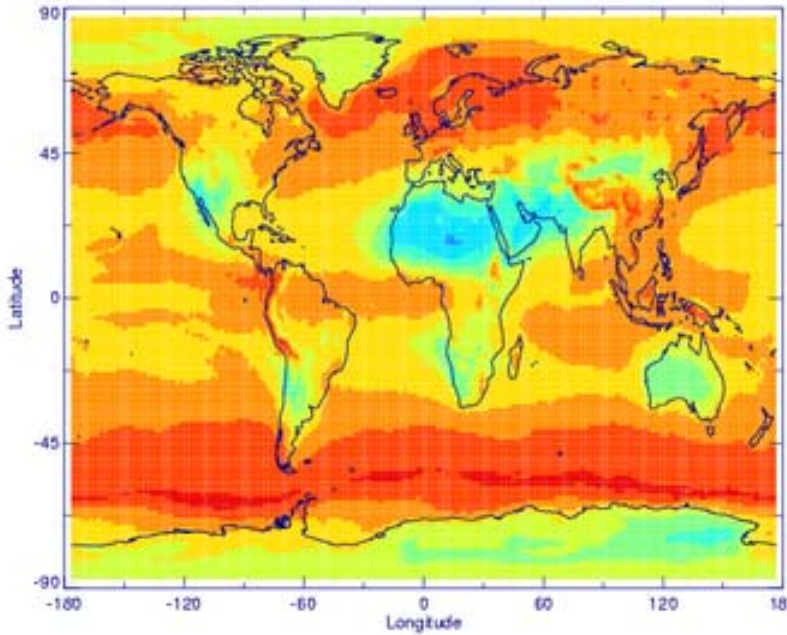
*UIO*



# Relative Humidity from daily output

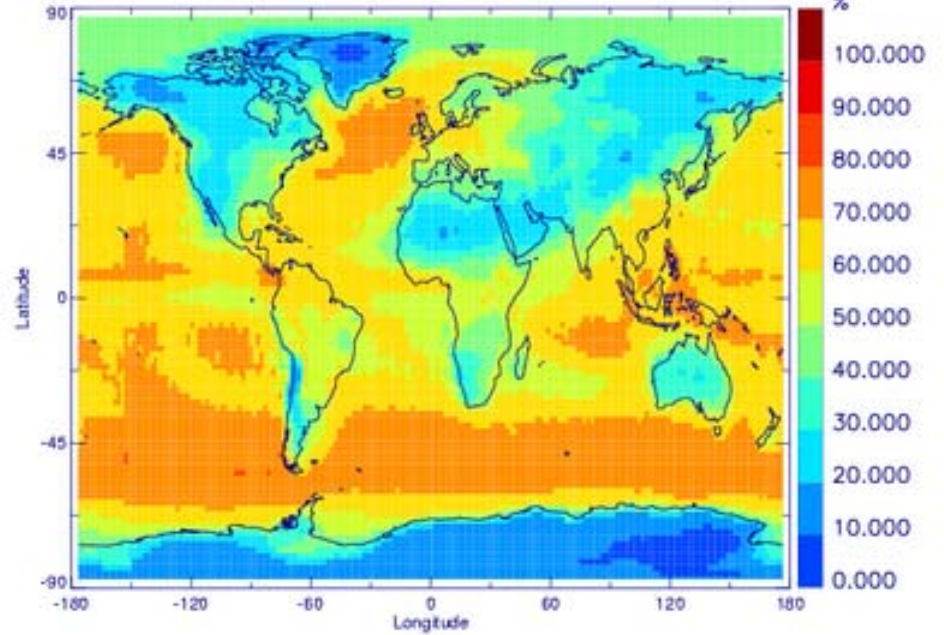
*KYU*

Mean: 6.88054E+01 %



*UIO*

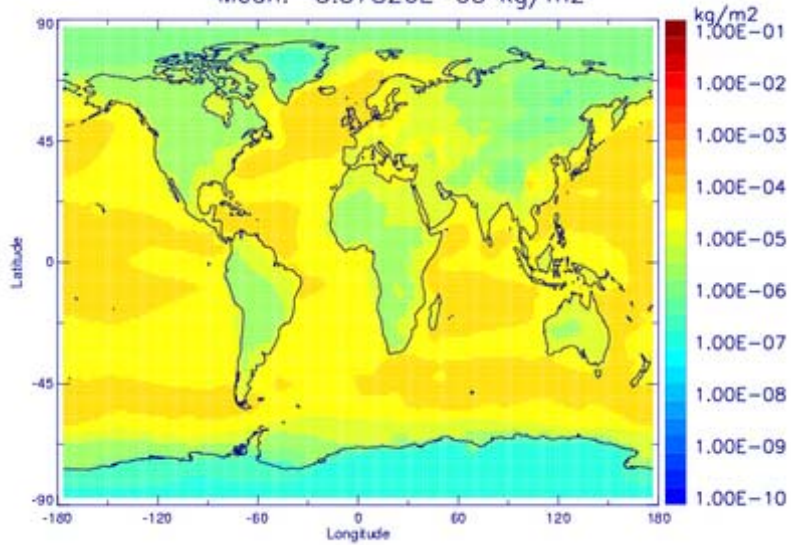
Mean: 5.72757E+01 %



# Aerosol water mass

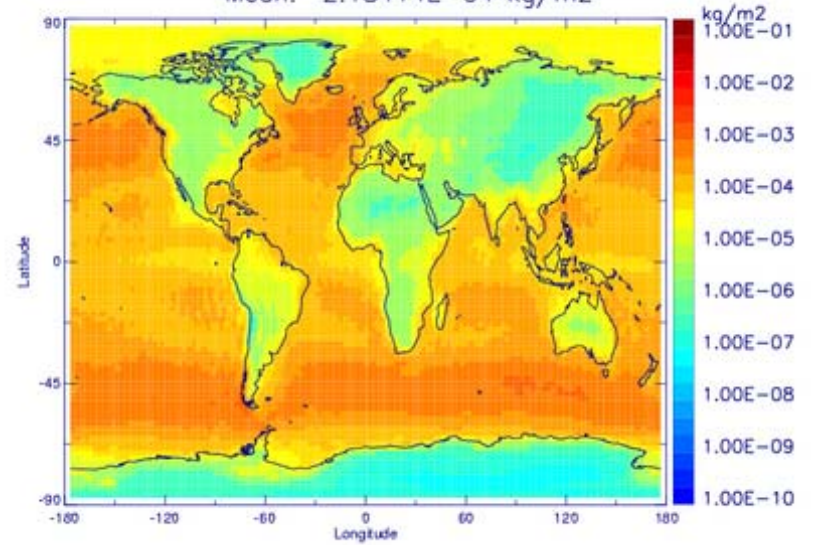
*KYU*

Mean:  $3.57826\text{E}-05$  kg/m<sup>2</sup>



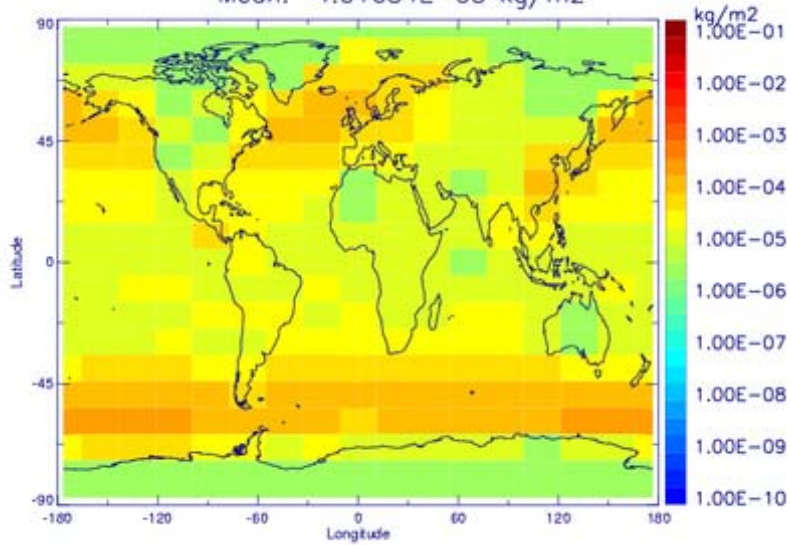
*UIO*

Mean:  $2.18414\text{E}-04$  kg/m<sup>2</sup>



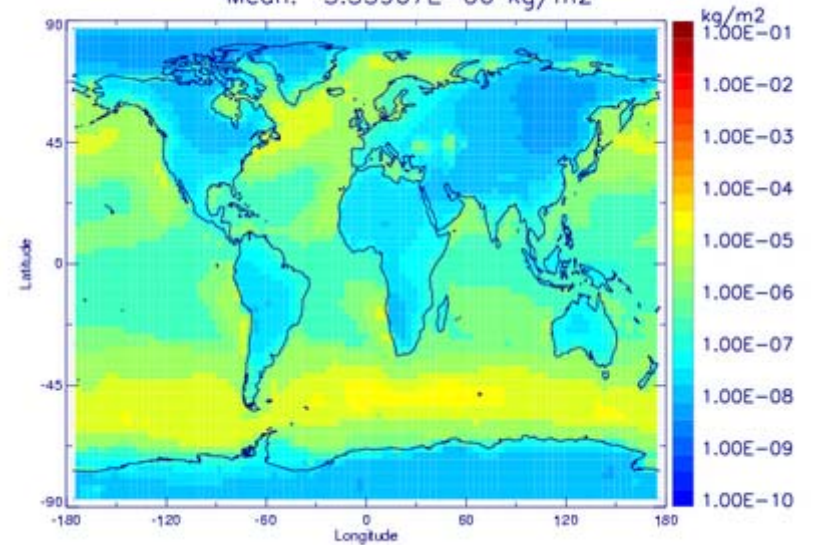
*ULAQ*

Mean:  $4.01634\text{E}-05$  kg/m<sup>2</sup>



*LSCE*

Mean:  $3.33907\text{E}-06$  kg/m<sup>2</sup>



*surface aerosol composition and opt. parameters  
at selected surface sites will be added to the AEROCOM-protocoll  
for the year 2000 simulations*

Profile Output of LMDz-INCA year 2000  
Aerosol composition, optical paramaters  
(*preliminary collection of aerosol sites  
Guibert&Schulz for EU CREATE project*)

*AEROCOM  
-regional comp.  
-point comp.*

