



AER requirements for wild fires and biomass burning emissions

Olivier Boucher

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One of the objectives of the AER breakout session is to define a roadmap for emissions...

=> Breakout session on emission on Wednesday morning.

=> Liaison with GEMS-GRG and GHG is needed.

=> Need for another interim meeting?

Short-term requirements



- Chemical species
 - black carbon
 - organic carbon (or organic matter)
- 2003 / 2004 emissions to start with
- Daily to 10-day resolution
(scaling to fire counts products?)
- No major requirement in terms of spatial resolution
- Injection function
(models + MISR & GLAS plume observations)
- Challenge for data assimilation

- Sub-daily emission variability
- Investigate fire radiative energy products
 - Radiance MIR + linear relationship =>
 - Fire radiative power + radiative heat yield ==>
 - Biomass burning rate + emission factor ==>
 - Amount of emission
- Pre-operational system
 - robustness
 - NRT availability of current data
 - long-term availability for data (resilience)
- Input from source inversion studies may help