



# AER requirements for wild fires and biomass burning emissions

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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

# Medium-term requirements



- 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