

Objectives of This Workshop

- **Monday – Tuesday**
 - Review the state of science regarding air pollution transport across North America and the Northern Hemisphere
 - Primarily to inform the NAS/NRC Study
 - Taking stock of the work of the TF HTAP and other cooperative efforts
- **Wednesday – Friday**
 - Plan future cooperative analyses under the TF HTAP and AC&C

TF HTAP and AC&C

- 2 Cooperative Analysis Efforts
- Different Target Audiences:
 - TF HTAP: Assessment Report by June 2010
 - AC&C: IPCC AR5
- Similar Timelines
- Many of the Same Participants
- Same and Related Scientific Questions
- Opportunities to Leverage Resources and Existing Infrastructure and Approaches

Topics for Discussion

Common Analysis Areas

- Hindcast (AC&C 1)
- Process and Tracer Studies (AC&C 2, HTAP TP)
- Future Scenarios (AC&C 4, HTAP)
- Event Simulation & Intensive Campaigns (HTAP ES)
- Impacts on Air Quality (HTAP SR, ...)

Common Needs

- Observational Databases (NILU, NASA, IGAC Asia, ...)
- Emissions Inventories and Projections
- Modeling Data Servers (Juelich, AEROCOM, ...)
- Collaboration Tools (HTAP Wiki, Listservers)
- Analysis and Processing Tools

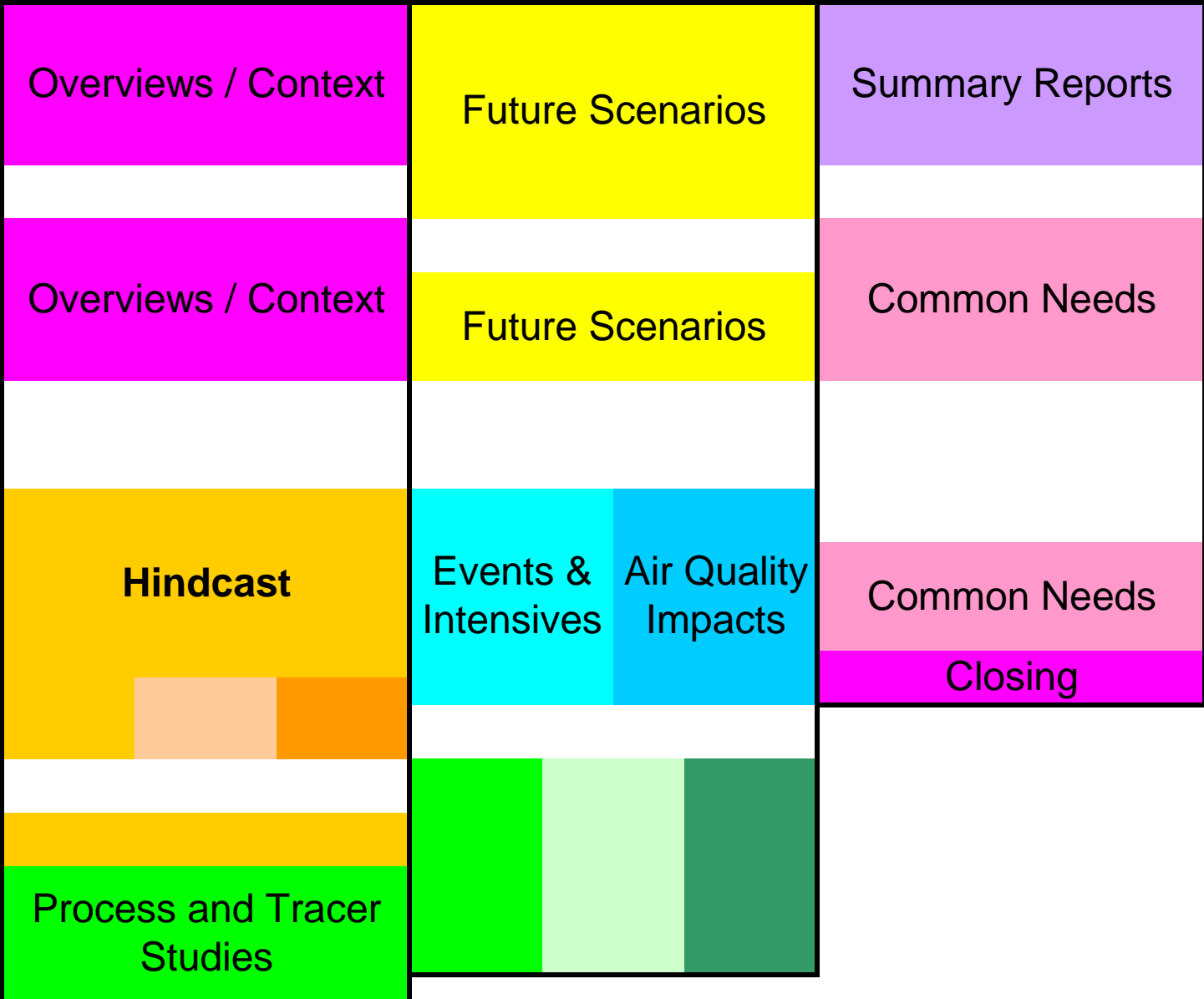
Time

Wednesday

Thursday

Friday

8:30 AM
8:45 AM
9:00 AM
9:15 AM
9:30 AM
9:45 AM
10:00 AM
10:15 AM
10:30 AM
10:45 AM
11:00 AM
11:15 AM
11:30 AM
11:45 AM
12:00 PM
12:15 PM
12:30 PM
12:45 PM
1:00 PM
1:15 PM
1:30 PM
1:45 PM
2:00 PM
2:15 PM
2:30 PM
2:45 PM
3:00 PM
3:15 PM
3:30 PM
3:45 PM
4:00 PM
4:15 PM
4:30 PM
4:45 PM
5:00 PM
5:15 PM
5:30 PM
5:45 PM
6:00 PM



Questions for Each Session

- What specific science questions are we trying to address?
- Can we use existing (HTAP, ...) simulations?
- What new simulations/outputs/analyses are needed?
- What observations and emissions data will be needed?
- Are current infrastructure and tools sufficient?
- What are the next steps and critical milestones? By when?
- Who is going to take the lead?
 - Step 1: Circulate detailed experiment/activity descriptions, desired output,
 - Other roles: Preparing inputs, processing outputs, performing analyses.

By Friday morning, we need a plan.

Some Policy Relevant Issues for *HTAP 2010*

- “Triangulate” spatial/temporal patterns of transport and apportionment of observed concentrations/deposition
- What are the observed trends in transport and can we explain them?
- Express S/R in terms of Air Quality Objectives (and Health, Ecosystem, Agriculture, Climate Impacts, Local Control)
- Characterize Interannual Variability in S/R Relationships
- Identify Contributions of Specific Source Categories
 - e.g., shipping and aviation, dust, biomass burning
- Characterize Sub-Continental S/R. Which receptor areas are impacted more? Which source regions are more influential? Link to regional modeling, divide regions.
- Characterize Tropical and Sub-Tropical Transport Boundaries
- How Different Might the Future Be? What is the Potential for Control?
- Describe Uncertainty and Confidence Levels in a Consistent Manner
 - especially across O₃, aerosol, Hg, POPs
 - Across emissions, observations, transport and transformation processes