

Mid Continent Intensive Workshop: Synthesis of Inversion and Inventory Data

February 23-24, 2010

Lory Student Center, Room 213-214,
Colorado State University, Fort Collins, CO

Host: Stephen Ogle (phone: 970-491-7662, email: ogle@nrel.colostate.edu)

Objective: The Mid-Continent Intensive is a regional scale study intended to improve estimation CO₂ fluxes at larger scales, and advance our understanding of the mechanisms driving the patterns. A major milestone in this effort is to compile and reconcile estimates from inversions and inventories, and this workshop will review progress, discuss issues and solutions, and develop a coordination plan for the next steps in this synthesis effort.

Schedule:

Tuesday February 23

Review of Progress Towards Compilation of 2007 Inversions and Inventory

- 8:30-9:00 Introductions and overview of workshop goals
- 9:00-9:20 State of Inversions– Andrew Schuh (Colorado State University)
- 9:20-9:40 Fine Scale Ring 2 Inversions - Thomas Lauvaux (Penn State University)
- 9:40-10:00 Plans for Carbontracker Inversions for MCI Study
– Arlyn Andrews/Gabrielle Petron (NOAA-Boulder)
- 10:00-10:25 Break (Coffee, Tea and Snack)
- 10:25-10:40 Current status of Lagrangian Particle Modeling (Inversions) – Marek Uliasz (Colorado State University)
- 10:45-11:00 Preliminary Inversion results for 2004
- Sharon Gourdji (University of Michigan)
- 11:00-11:30 State of Inventory-Stephen Ogle (Colorado State University) and Tristram West (Oak Ridge National Laboratories)
- 11:30-11:45 MAST-DC - Bob Cook (Oak Ridge National Laboratories)
- 11:45-12:05 Discussion
- 12:05-1:30 Lunch

Break-Out Groups: Data Streams, Modeling Issues, and Solutions

1:30-1:50 Questions from Morning Sessions and Charge to Break-Outs

Concurrent Break-Outs

2:00-5:00 BOG I: Atmospheric Data Streams and Inversions

Moderator: Arlyn Andrews

Discussion Topics:

Uncertainty

Transport

Comparing Inversions

Combining Inversions

Other Topics?

2:00-5:00 BOG II: Inventory

Moderator: Stephen Ogle

Discussion Topics:

Present and Discuss each Contribution

Uncertainty

Gaps in CO₂ Emission Sources (and sinks)

Combining Data into Single Inventory

Comparison to Measurements

Other Topics?

7:00 Dinner at Coopersmiths Restaurant

Wednesday, February 24

8:30-9:00 Report from BOG and Discussion: Inversions

9:00-9:30 Report from BOG and Discussion: Inventory

Comparing and Reconciling Inventory and Inversion Results

9:30-10:00 State of State-Space Modeling (Combining Inventory and Inversions) -
Dan Cooley and F. Jay Breidt (Colorado State University)

10:00-10:25 Break (Coffee, Tea and Snack)

10:25-10:50 Discussion about State-Space Modeling

10:50-12:00 Time-line and Publications:

- Where are we with results? And when do we hope to complete? What are the expected deliverables for project?

- Earliest time frame for initial overview paper? And what is absolutely needed for results?
- Any changes to assumed “more in depth” papers from last workshop based upon new info?

12:00-1:30 Lunch

Break-Out Groups: Planning for 2010 Work

Concurrent Break-Outs

- 1:30-3:30 BOG I: Comparing and Quantitatively Reconciling the Inventory and Inversions
 Moderator: Dan Cooley
Discussion Topics:
 Spatial and Temporal Scale
 Dealing with gaps in data
 Evaluating Mechanisms/Sources
- 1:30-3:30 BOG II: Inversions
 Moderator: Andrew Schuh
 Continue Discussion from Day 1
- 3:30-4:00 Final Discussion - Next Steps
- 4:00-4:30 MCI Project Principle Investigators' Meeting