INFLUX Workshop Agenda

February 11 & 12, 2014

NOAA/ESRL Boulder CO

David Skaggs Research Center

325 Broadway

Each presenter/group to outline (as appropriate for your effort)

major research questions you are addressing,

existing data and data base status and future data collection plans,

publications to date and plans,

modeling system status and plans for development, runs, and

needs for collaboration and integration in future research plans.

All are welcome to identify:

any gaps that you perceive in the current project / research work.

opportunities for proposal / add-ons to the core INFLUX effort

existing “add-on” projects – status of new INFLUX projects

By the end of this workshop, we should have a good update of all of these topics. As appropriate (publications, data) we should get these reported right away (as the meeting is taking place?) to the INFLUX web site.

All sessions are planned to leave ½ of the available time for discussion.

**Tuesday, February 11**

8:00-8:30 Arrive at the gate for security clearance.

Meeting room: GC402, basement

8:30-9 Bagels and fruit, coffee and tea.

9:00 **Introduction/Logistics** (Karion)

9:10 **Overview:**

What are the major questions of INFLUX? What have we addressed to date? What are the goals for this workshop? (Davis) – 5 min

9:20 **Aircraft measurements and analyses**:

Whole city budgets (Shepson and Cambaliza) – 10 min

Large point sources (via wall flights) (Shepson and Cambaliza) – 5 min

Flask measurements from aircraft (Turnbull) – 5 min

Eddy covariance flights (Shepson and Salmon) – 5 min

Future plans (Shepson, Cambaliza, Salmon, Turnbull) – 10 min

Background flights

Model evaluation / urban ABL flights

Additional whole city budget work – changes? Needs?

Additional airborne flask work

10:30 **Break** – 15 min

10:45 **Ground-based, long-term measurements and analyses:**

Tower continuous measurements (Miles) – 10 min

Tower flask measurements (Turnbull, Karion) – 10 min

CO isotope analyses (Vimont) – 5 min

Tower eddy covariance flux measurements (Sarmiento) – 5 min

Doppler lidar (Hardesty and Brewer) – 5 min

12:00 **Lunch break**. Informal discussions.

1:00 **Modeling and inversion systems and results:**

Penn State regional inversion system (Lauvaux and Davis) – 15 min

Land surface model analyses (Sarmiento) – 5 min

Adapting the inversion system to biogenic vs. anthropogenic CO2 (Wu) – 5 min

Biological CO2 modeling system (Lopez-Coto) – 5 min

Large eddy simulation of measurement height/location impacts (Prasad) – 10 min

2:30 **Break**.

2:45 **Bottom-up emissions estimates**.

Hestia system (Patarasuk) – 10 min

Methane point sources using plume dispersion (Cambaliza and Prasad) – 10 min

3:30 **Synthesis discussions**

Gather discussion topics.

Start discussions.

Identify any additional topics that should be covered on Wednesday.

5:00 **Close** discussions for the day.

**Wednesday, February 12**

~8:30 Arrive at the gate for security clearance.

Meeting room: Classroom, basement.

8:30-9. Bagels and fruit, coffee and tea.

9:00 **New projects**.

NOAA multi-species source attribution project (Turnbull and Lauvaux) – 15 min

Report from the NCSE workshop (Shepson and Whetstone and Davis) – 5 min

9:30 **Continued synthesis discussions**

Continue the discussion agenda created Tuesday afternoon.

Additional presentations initiated by discussions from Tuesday.

12:00 **Wrap up discussions / action items**.

1:00 **Adjourn**.

Attendees registered to date:

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| Natasha Miles | PSU |
| Ken Davis | PSU |
| Kai Wu | PSU |
| Daniel Sarmiento | PSU |
| Thomas Lauvaux | PSU |
| Scott Richardson | PSU |
| Paul Shepson | Purdue |
| Maria Cambaliza | Purdue |
| Olivia Salmon | Purdue |
| Isaac Vimont | CU |
| James Whetsone | NIST |
| Israel Lopez-Coto | NIST |
| Bill Callahan | Earth Networks |
| Mike Hardesty | CIRES/NOAA |
| Alan Brewer | CIRES/NOAA |
| Jocelyn Turnbull | CIRES/NOAA |
| Colm Sweeney | CIRES/NOAA |
| Anna Karion | CIRES/NOAA |
| Aditya Choukulkar | CIRES/NOAA |
| Thomas Rieutord | CIRES/NOAA |
| Risa Patarasuk | ASU |
| Kuldeep Prasad | NIST |