Terrestrial Ecosystem Sciences PI Meeting

April 23-24, 2012
Renaissance Dupont Circle, Washington, DC

Agenda (April 11)

Monday, April 23, 2012

7:00 – 8:30 am **Registration and Breakfast** (Lobby)

8:30 – 10:00 am **Welcome and Introductory Comments** (New Hampshire Ballroom)

- 8:30 – 8:40 Welcome; Dan Stover (DOE)
- 8:40 – 8:55 State of the Office of Biological and Environmental Research (BER); Sharlene Weatherwax (DOE)
- 8:55 – 9:10 Climate and Environmental Sciences Division - Strategic Vision; Gary Geernaert (DOE)
- 9:10 – 9:25 Biological Systems Science Division - Carbon Cycle Research; Joe Graber (DOE)
- 9:25 – 9:40 Environmental Molecular Science Laboratory; Nancy Hess (Pacific Northwest National Laboratory)
- 9:40 – 10:00 TES program philosophy; Mike Kuperberg (DOE)

10:00 – 10:15 am **Break** (Lobby)

10:15 – 11:45 am **Invited Plenary Speakers** (New Hampshire Ballroom)

- 10:15 – 11:00 Changing land metabolic activity as seen from atmospheric records; Ralph Keeling (Scripps Institute of Oceanography)
- 11:00 – 11:45 Process science and large-scale coupled models; Peter Thornton (Oak Ridge National Laboratory)

11:45 –2:00 pm **Breakout Sessions**

- 11:45 – 12:00 Guidance; Mike Kuperberg (New Hampshire Ballroom)
- 12:00 – 2:00 Working Lunch in Breakout Sessions
  - Group A – Belowground Processes (Potomac Room)
  - Group B – Terrestrial Interfaces (Mt Vernon Room)
  - Group C – Modeling-Experiment Integration (DuPont Room)

2:00 – 3:30 pm **Research Interaction Time** (Break in the Lobby)

3:30 – 5:30 pm **Poster Session** (City Center Ballroom)

6:00 – 8:00 pm **AmeriFlux Evening Session**(New Hampshire Ballroom)

Tuesday, April 24, 2012

7:00 – 8:00 am **Breakfast** (Lobby)

8:00 – 9:10 am **Welcome and Comments** (New Hampshire Ballroom)

8:00 – 8:10	Welcome; Mike Kuperberg
8:10 – 9:10	Breakout Session Out-brief; Discussion Leaders

9:10 – 11:30 pm **Invited Oral Presentations** (New Hampshire Ballroom)

9:10 – 9:25	FACE – synthesis and questions for the future; Adrien Finzi (Boston University)
9:25 – 9:40	Julie Jastrow (Argonne National Laboratory)
9:40 – 9:55	Long-term C flux patterns in an undisturbed Coniferous forest and relationship to a changing climate; David Hollinger (US Forest Service)
9:55 – 10:10	Improving the representation of drought stress, urban metabolism, and fire emissions in climate carbon models; James Ehleringer (University of Utah)

10:10 – 10:30 **Break** (Lobby)

10:30 – 10:45	Pacific Northwest Forests – a decade of carbon cycle science; Beverly Law (Oregon State University)
10:45 – 11:00	Linking new process understanding to ecosystem models; Margaret Torn (Lawrence Berkeley National Laboratory)
11:00 – 11:15	Climate-induced changes in dryland biota: implications for future carbon and energy balances; Sasha Reed (US Geological Survey)
11:15 – 11:30	Workshop Report: Scaling Root Processes: Global Impacts; Roser Matamala (Argonne National Laboratory)

11:30 –2:00 pm **Poster Session and Working Lunch** (City Center Ballroom)

2:00 – 4:30 pm **Special Invited Presentations** (New Hampshire Ballroom)

2:00 – 2:30	National Climate Assessment; Jerry Melillo (Marine Biological Laboratory)
2:30 – 2:50	NGEE-Arctic Update; Stan Wullschleger (Oak Ridge National Laboratory)
2:50 – 3:10	GoAMAZON 2014; Jeff Chambers (Lawrence Berkeley National Laboratory)

3:10 – 3:25 pm **Break** (Lobby)

3:25 – 3:45	SPRUCE project Update; Paul Hanson (Oak Ridge National Laboratory)
3:45 – 4:05	Survival and mortality during drought in piñon-juniper woodlands; (Nate McDowell, Los Alamos National Laboratory)
4:05 – 4:25	Carbon Cycle Science Report; Gyami Shrestha, Carbon Cycle Science Program

4:30 – 5:00 pm **Closing** Dan Stover and Mike Kuperberg

Breakout Sessions

Group A – Belowground Processes – Examine the state of the science and near-term research needs to advance our predictive understanding and representation of critical belowground processes in models. This breakout group will evaluate the latest advances in this area and identify critical areas requiring additional research focus. (Group Leaders - TBD)

Group B – Terrestrial Interfaces – Examine the state of the science and near-term research needs to represent the terrestrial – urban, terrestrial – aquatic, and terrestrial - atmospheric interfaces in process models and a robust predictive understanding. This breakout group will identify critical interfacial opportunities and challenges in the context of terrestrial ecosystems. (Group Leaders - TBD)

Group C – Modeling-Experiment Integration – Integrated experiment-modeling approaches are important to evaluate our understanding of Earth systems and to improve their representations in models. This breakout will evaluate opportunities for such collaboration and suggest topics of high priority. (Group Leaders - TBD)