

Flux-measurement based process studies

09.00 – 09.15

Interannual variation in net ecosystem productivity of Canadian forests as affected by regional weather patterns - a Fluxnet-Canada synthesis

Robert Grant (Edmonton/CA), Alan Barr (Saskatoon/CA), Andy Black (Vancouver/CA), Hank Margolis (Quebec City/CA), Alison Dunn (Worcester/US), Juha Metsaranta (Victoria/AUS), Shusen Wang (Ottawa/CA)

09.15 – 09.30

What causes El Niño -induced CO₂ anomalies?: A data-driven synthesis of flux tower and satellite observations

Christopher A. Williams, Christopher R. Schwalm (Worcester/US), Kevin Schaefer (Boulder/US), G. James Collatz (Greenbelt/US), Ian Baker (Fort Collins/US)

09.30 – 09.45

In search of biotic and non-biotic drivers of NEP in forest ecosystem - or: Why is a decade of CO₂ exchange measurements not enough?

Danilo Dragoni (Bloomington/US), Hans Peter Schmid (Garmisch-Partenkirchen/DE), Sue Grimmond (London/UK), James C. Randolph, Craig Wayson (Bloomington/US)

09.45 – 10.00

Carbon balance of a crop rotation cycle: overview of a 4 year investigation.

Christine Moureaux, Bernard Bodson, Delphine Dufranne, Bernard Heinesch, Marie Suleau, Julien Hoyaux, Françoise Vancutsem, MarcAubinet (Gembloux/F)

10.00 – 10.15

Interannual variability in Net Ecosystem Exchange: is it deterministic, chaotic, or random?

Bart Kruijt, Cor Jacobs, Eddy Moors, Jan Elbers (Wageningen/NL), Celso Von Randow (Cachoeira Paulista/BRA), Scott Saleska (Tucson/US), Dennis Baldocchi (Tucson, Berkeley/US)

10.15 – 10.30

A multiscale analysis of the influence of GPP on soil CO₂ efflux: a wavelet coherence approach

Rodrigo Vargas, Dennis Baldocchi (Berkeley/US)

11.00 – 11.15

A new global harmonized eddy covariance data set of CO₂ and energy exchange from FLUXNET: overview, uncertainties, limitations and robust patterns

Markus Reichstein (Jena/DE), Dario Papale (Viterbo/IT), Dennis Baldocchi (California/US), Andrew Richardson (Durham/US), Rodrigo Vargas (California/US), Alan Barr (Saskatoon/CA), Gitta Lasslop (Jena/DE), Dave Hollinger (Durham/US), William Munger (Cambridge/UK)

11.15 – 11.30

Global Patterns of Light use Efficiency for Ecosystem gross carbon uptake: a FLUXNET Synthesis

Enrico Tomelleri, Markus Reichstein, Christian Beer (Jena/DE), Dario Papale (Viterbo/IT)

Key processes in ecosystems

11.30 – 11.45

Review of time lag between photosynthesis and CO₂ efflux from soil

Yakov Kuzyakov (Bayreuth/DE), Olga Gavrichkova (Porano/IT)

11.45 – 12.00

The footprint of temperature changes in the temperate and boreal forest carbon balance

Shilong Piao (Beijing/CN), Pierre Friedlingstein, Philippe Ciais, Philippe Peylin (Paris/F), Biao Zhu (Paris/F, Santa Cruz/US), Markus Reichstein (Jena/US)

12.00 – 12.15

Carbon Dioxide and Methane Fluxes during a Large-Scale Water Table Manipulation Experiment in the Arctic Tundra at Barrow, Alaska

Walter Oechel (San Diego/US), Donatella Zona (Davis/US), Faustine Mercer, Cove Studevart (San Diego/US), John Kochendorfer (Oak Ridge/US), George Burba (Lincoln/US), Anatoly Salyuk (Vladivostok/RUS), David Lipson (San Diego/US), Steve Oberbauer (Miami/US), Paulo Olivas (Miami/US)

12.15 – 12.30

How does nitrogen fertilization affect soil respiration?

Wouter Dieleman, Ivan Janssens, Sebastiaan Luysaert (Wilrijk/BE)

12.30 – 12.45

Constraining the diffuse radiation impact on annual plant productivity with the CO₂ seasonal cycle

Alon Angert (Jerusalem/IL)

12.45 – 13.00

IMPACT OF CHANGES IN DIFFUSE RADIATION ON THE GLOBAL LAND CARBON SINK

Lina Mercado (Wallingford/US), Nicolas Bellouin (Exeter/UK), Stephen Sitch (Leeds/UK), Olivier Boucher (Exeter/UK), Chris Huntingford (Wallingford/US), Martin Wild (Zurich/CH), Peter M. Cox (Exeter/UK)