

Tropics

09.00 – 09.15

Climate-fire feedbacks in tropical ecosystems: Insight from a 12-year satellite time series of global fires

James Randerson (Irvine/GB), Guido van der Werf (Amsterdam/NL), Michael Tosca, Fuu-Ming Kai, Yang Chen, Mingquan Mu (Irvine/GB), Louis Giglio, Douglas Morton, G. James Collatz (Greenbelt/US), Prasad Kasibhatla (Durham/US), Ruth DeFries (New York/US)

09.15 – 09.30

The seasonal behaviour of carbon fluxes in the Amazon: fusion of FLUXNET data and the ORCHIDEE model

Hans Verbeeck (Gent/BE), Philippe Peylin, Cédric Bacour, Philippe Ciais (Gif sur Yvette/F)

09.30 – 09.45

Seasonal, interannual and decadal variability of the sea-to-air CO₂ fluxes in the tropical Pacific and Atlantic Ocea

Xiujun Wang, Raghu Murtugudde, Antonio Busalacchi (College Park/US)

09.45 – 10.00

Physical and biogeochemical influences on the oceanic CO₂ system revealed by the first 20 years of the Hawaii Ocean Time-series

John Dore (Bozeman/US), Roger Lukas, Daniel Sadler, Matthew Church, David Karl (Honolulu/US)

High latitudes

11.30 – 11.45

An Analysis of the Carbon Balance of the Arctic Basin from 1997 to 2006

Dave McGuire, Daniel Hayes (Fairbanks/US), David Kicklighter (Woods Hole/US), Manfredi Manizza (Cambridge/US), Qianlai Zhuang, Min Chen (West Lafayette/US), Mick Follows (Cambridge/US), Kevin Gurney (West Lafayette/US), James McClelland (Port Aransas/US), Jerry Melillo, Bruce Peterson (Woods Hole/US), Ronald Prinn (Cambridge/US)

11.45 – 12.00

The carbon cycle of Arctic Fennoscandia: Assimilating multi-scale observations into ecological models

Mathew Williams, Paul Stoy (Edinburgh/UK), Robert Baxter (Durham/UK), Mathias Disney (London/UK), Jon Evans (Wallingford/UK), Ben Fletcher (Sheffield/UK), Jemma Gornall (Durham/UK), Richard Harding (Wallingford/UK), Iain Hartley (Stirling/UK), Tim Hill, John Moncrieff (Edinburgh/UK), Gareth Phoenix, Victoria Pope (Sheffield/UK), Rafa Poyatos (Durham/UK), Ana Prieto-Blanco (London/UK), Lorna Street, Tom Wade (Edinburgh/UK), Phil Wookey (Stirling/UK)

12.00 – 12.15

Permafrost thaw stimulates old carbon release and alters net carbon exchange from tundra

Edward Schuur, Jason Vogel, Kathryn Crummer, Hanna Lee (Gainesville/US), James Sickman (Riverside/US), Tom Osetrkamp (Fairbanks/US)

12.15 – 12.30

Modeling and quantifying the contemporary CO₂ sink of the Arctic Ocean (1996-2007)

Manfredi Manizza, Michael Follows, Stephanie Dutkiewicz, Christopher Hill (Cambridge/US), Dimitris Menemenlis (Pasadena/US), Robert Key (Princeton/US)

Global processes and key feedbacks

14.30 – 14.45

The potential of marine biogeochemical processes to feedback to atmospheric CO₂.

Marion Gehlen, Leif G. Andersen, Richard J. Bellerby, Jorgen Bendtsen, Laurent Bopp, Lei Chou, Jean-Pierre Gattuso, Richard J. Geider, Christoph Heinze, Fortunat Joos, Julie LaRoche, Christopher M. Moore, Ulf Riebesell, Joachim Segschneider, Dieter A. Wolf-Gladrow (Gif-sur-Yvette/FR)

14.45 – 15.00

Large scale response of the marine biological carbon pumps to high CO₂ as inferred from global sediment modeling

Christoph Heinze (Bergen/NO)

15.00 – 15.15

Monitoring the Global Cycles of Carbonyl Sulfide and CO₂: A Possible New Window on the Carbon Cycle.

Joe Berry, Elliott Campbell (Stanford,Merced/US)

15.15 – 15.30

Using the age of microbially respired carbon to indicate the capacity for ecosystem carbon storage and changes in soil carbon cycling

Susan Trumbore (Jena/DE), Claudia Czimczik, Nicole Nowinski, Xiaomei XU, Matthew Khosh, Francesca Hopkins (Jena/DE, Irvine/US), James Randerson (Irvine/US)

Regional budget studies

17.00 – 17.15

Towards well-constrained continental flux estimates: Progress in the North American Carbon Program

Kenneth Davis (University Park/US), Simone Alin (Seattle/US), Paula Coble (Tampa Bay/US), Robert Cook (Oak Ridge/US), Scott Denning (Fort Collins/US), Peter Griffith (Greenbelt/US), Andrew Jacobson (Boulder/US), Deborah Huntzinger (Ann Arbor/US), Anthony King, Wilfred Post, Peter Thornton (Oak Ridge/US), Stephen Ogle (Fort Collins/US), Andrew Richardson, Linda Heath (Durham/US), Kevin Schaefer (Boulder/US), Steven Wofsy (Cambridge/US), Alan Barr (Saksatoon/CA), Werner Kurz (Victoria/CA), Daniel Ricciuto (Oak Ridge/US)

17.15 – 17.30

How well can we infer hourly fossil fuel CO₂ using high-precision 14C and quasi-continuous CO observations?

Felix Robert Vogel, Bernd Kromer, Ingeborg Levin (Heidelberg/DE), Christoph Gerbig, Axel Steinhof (Jena/DE)

17.30 – 17.45

Attenuation of low frequency underwater sound absorption due to ocean acidification

Tatjana Ilyina, Richard Zeebe (Honolulu/US), Peter Brewer (Moss Landing/US)

17.45 – 18.00

Air-sea CO₂ flux in the North Atlantic in 2004 through 2006 estimated by the neural network

Maciej Telszewski, Ute Schuster, Andy J. Watson, Dorothee C.E. Bakker (Norwich/US), Melchior González-Dávila, Magdalena Santana-Casiano (Las Palmas/ES), Truls Johannessen, Are Olsen (Bergen/NO), Arne Körtzinger, Tobias Steinhoff, Douglas W.R. Wallace (Kiel/DE), Heike Lüger, Rik Wanninkhof (Miami/US), X.A. Padin, Aida Rios (Vigo/ES)