

PRELIMINARY PROGRAMME

Thursday 15 June, 2017

10:00 – 10:30: Registration and coffee

Introduction to HYPI project

Chair: Reinhart Ceulemans, University of Antwerp

10:30 – 10:45 Welcome and introduction to HYPI project by Reinhart Ceulemans (University of Antwerp, Belgium)

10:45 – 11:00 STEREO III programme: an overview by Jean-Christophe Schyns or Joost Vandenabeele (BELSPO, STEREO programme officers)

Session 1 – Plant BVOCs

11:00 – 11:30 Josep Peñuelas (CREAF, Spain): The HYPI hypothesis: the Photochemical Reflectance Index as a proxy of plant isoprene emissions

11:30 – 12:00 Ülo Niinemets (Estonian University of Life Sciences, Estonia): Ecophysiological responses quantified by BVOC's

12:00 – 12:30 Crist Amelynck (BIRA, Belgium): BVOC exchanges from maize at ecosystem and leaf level

12:30 – 14:00 *Lunch and poster viewing*

14:00 – 14:20 Miguel Portillo Estrada (University of Antwerp, Belgium): Contribution of volatile organic compound emissions to the ecosystem carbon cycle in a poplar short-rotation coppice plantation

14:20 – 14:40 Pauline Buysse (INRA-AgroParisTech, France): Dynamics of VOC fluxes measured by eddy-covariance with a PTR-Qi-TOF-MS over a mature wheat crop near Paris

14:40 – 15:10 Carlo Calfapietra (CNR, Italy): From leaf to canopy and above: airborne measurements of BVOCs at various heights

15:20 – 16:00 *Coffee break*

Session 2 – Monitoring BVOC emissions by proximal remote sensing

Chair: Josep Penuelas (CREAF, Barcelona)

16:00 – 16:30 Manuela Balzarolo (University of Antwerp, Belgium): Monitoring isoprene emissions using hyperspectral remote sensing data

16:30 – 16:45 Luc Bertels (VITO, Belgium): Hyperspectral camera for monitoring isoprene emission at canopy level

16:45 – 17:00 Yasmin Vanbrabant (University of Leuven, Belgium): Radiative transfer models for upscaling in-situ leaf traits

17:00 – 17:30 Angela Harris (Univ. of Manchester, UK): The opportunistic hypothesis and the photochemical reflectance index: Opportunities for proximal monitoring of isoprene emissions

18:30 *Social dinner at Grand Cafe Horta*

Friday 16 June, 2017

Session 3 – Measuring BVOC fluxes: in situ vs. remote sensing determinations

Chair: Reinhart Ceulemans (University of Antwerp, Belgium)

9:30 – 10:00 Roger Seco (University of California, Irvine): Canopy-level isoprenoid fluxes under drought conditions

10:00 – 10:30 Iolanda Filella (CREAF, Spain): Satellite PRI as an estimator of isoprene emissions in a temperate deciduous forest

10:30 – 11:00 Federico Magnani (University of Bologna, Italy): Solar-induced chlorophyll fluorescence as a probe of photosynthetic processes: from leaf to satellite

11:00 – 11:30 *Coffee break*

11:30 – 12:00 Isabelle De Smedt (BIRA, Belgium): A new HCHO satellite product developed within the Quality Assurance For Essential Climate Variables (QA4ECV) project

12:00 – 12:30 Jean-Francois Muller (BIRA, Belgium): Biogenic volatile organic compound emissions: what can we learn from spaceborne HCHO data?

12:30 – 13:30 *Lunch and poster viewing*

13:30 – 13:50 Letizia Abis (Sorbonne Universités, France): Organic waste effect on VOC soil emissions

13:50 – 14:10 Berhal Chadi (University of Liège, Belgium): First Characterization of the Volatile Organic Compounds Emitted by Banana Plants (Musa sp.)

Session 4 – Global and regional modelling of BVOC emissions

Chair: Jean-Francois Muller (BIRA, Brussels, Belgium)

14:10 – 14:40 Alex Guenther (University of California, Irvine): Missing compounds, unrepresented processes, and a next generation biogenic organic emission model

14:40 – 15:20 Coffee break

15:20 – 15:40 Katerina Sindelarova (University of Prague): Model-based global BVOC emission estimates and their variability

15:40 – 16:00 Jing Tang (University of Copenhagen, Denmark): Evaluating processes impacting global isoprene and monoterpene emissions in LPJ-GUESS, based on MODIS and FLUXNET data

16:00 – 16:15 Concluding statements

16:15 End of the meeting