1st DAISY Workshop

Department of Plant and Environmental Sciences, University of Copenhagen
Thorvaldsensvej 40, 1871 Frederiksberg C, Copenhagen
Room: Auditorium A2-11.01-CPSC1 (entrance also from Bülowsvej 21, look for Corridor / Opgang 6)

(5th November 2021)

We are pleased to announce the 1st DAISY workshop, which will take place at the University of Copenhagen on the 5th of November 2021. The workshop aims at bringing together scientists working with Daisy from universities, the public sector and the industry. It will be a one-day event with many interesting oral and poster presentations covering different dimensions of Daisy and modelling the agro-ecological systems in general. A detailed program and a preliminary list of participants is attached.

More specifically the main goals of this workshop are the following:

- Discuss recent and future directions on process implementation into Daisy,
- Discuss main challenges in modelling the Soil-Plant-Atmosphere System with Daisy,
- Discuss different ways to do data-model integration and how to perform calculations in HPC.

We are very much looking forward to seeing you in Copenhagen,

The Daisy team.

Friday 5th of November			
Session	**Time**	**Title**	**By / Remark**
	9:00-10:00	Poster installation	
	9:30-10:00	Welcome Coffee	
Intro	10:00 – 10:15	Welcome to University of Copenhagen	Merete Elisabeth Styczen, UCPH
	10:15-10:30	Recent developments	Merete Elisabeth Styczen, UCPH
	10:30-10:45	Future Perspectives	Efstathios Diamantopoulos, UCPH
Session I A	**Process implementation in soil-plant-atmosphere system modeling**		
20 minutes presentation and 5 minutes discussions	10:45 – 11:10	Modelling dynamic interactions between soil structure and soil organic matter storage (Keynote)	Katharina Meurer, SLU
12 min presentations and 3 min discussions	11:10 – 11:25	A comparison between different reference evapotranspiration methods as implemented in Daisy	Simon Fiil Svane, UCPH
	11:25 – 11:40	Modelling the fate of natural toxins with Daisy	Daniel Bernando Garcia Jorgensen, UCPH
	11:40– 12:00	Implementation and validation of a new mulch module in Daisy	Jeanne Vuaille, UCPH
	12:00-13:00	*Lunch*	
	13:00-13:15	Does macropore flow in no-till systems flush or bypass mobile soil nitrogen after harvest?	Jorge Frederico Miranda Vélez, AU
Session I B	**System modelling with Daisy**		
12 min presentations and 3 min discussions	13:15 – 13:30	Pesticide modelling in a regulatory context	Signe Bonde Rasmussen, Danish EPA
	13:30 – 13:45	Crop Modelling and Parameterization – How important is this?	Iris Vogeler, AU
	13:45 – 14:00	The effect of application time on pesticide leaching shortly after application	Maja Holbak, UCPH
	14:15 – 14:30	Modelling the fate of nitrogen in artificially drained sandy loam soils	Saghar Khodadad Motarjemi, AU

	14:30 – 14:45	Assessing and mitigating nitrate leaching from Danish cropping systems using the Daisy model	Muhammad Adil Rashid, UCPH
	14:45-15:00	Process-based simulation of growth and regrowth of perennial plants with the Daisy model	Kiril Manevski, AU
	15:00 – 15:30	*Coffee & Cake break*	
Session II	Soil and Crop System Model-Data Fusion		
12 min presentations and 3 min discussions	15:30 – 15:45	Perspectives in using DAISY to investigate practical challenges concerning the use of nitrogen in agriculture	Leif Knudsen, SEGES
	15:45 – 16:00	Precision Agriculture: We can't measure it – Why don't you model it?	Jacob Glerup Gyldengren, AU
	16:00 – 16:15	High-Resolution Soil Moisture Mapping using Sentinel-1, Sentinel-2, and Daisy Model.	Onur Yüzügüllü, Agricircle
	16:30-16:45	A simulation of variable rate nitrogen application in winter wheat with soil and sensor information - An economic feasibility study	Michael Friis Pedersen, UCPH
	16:45-17:00	Running Daisy on HPC-A Java wrapper	Jacob Nordfalk, DTU
	Posters for coffee break discussions		
Each presenter presents his/her poster in 3 min, followed by 5 minutes Q&A	17:00-17:30	Nitrogen Sensor for Soil Sustainability	Birger Andersen, DTU
		Implementing an FMIS with Daisy	Ian Bridgwood, DTU
		Performing simulation modelling in the classroom: students enact the Daisy model	Kiril Manevski, AU
		Is crop model DAISY able to simulate drought stress?	Eva Pohankova, MU
		How does current and future climate depending agronomic management impact the yield risk of cereal cropping systems?	Janna Macholdt, Uni Giessen
	Social Dinner at 19:00		

Preliminary list of participants:

Name	e-mail	institution	Country
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