
VIRTUAL FOREST TWINS BASED ON MARTELOSCOPE POINT CLOUD DATA

VIRTUALFORESTS TRANS-NATIONAL PROJECT MEETING, EBERSWALDE

Participants will acquire knowledge, skills and abilities related to terrestrial-based remote sensing technologies, 3D stand visualization, virtualization and growth simulation software, and related analytical pipelines.

Dates:

7-8 June 2023

Time:

From 13:00 CET on Wed. 7th June until 18:00 on Thurs. 8th June

Format:

In-person (the event will be held in English)

Location:

Eberswalde University for Sustainable Development (HNEE) – Forest Campus.
Alfred-Möller- Str. 1, 16225 Eberswalde, Germany.

Speakers/Trainers:

Prof. Dr. Jan-Peter Mund, Dr. Kevin Beiler, Iman Bajalan, Ramazan Bulbul,
Stefan Reder, Nguyen Duc Viet

Programme:

Wednesday (7.6.23) – Peer-to-Peer Training: Creation of Virtual Forest Twins				
Session	Topic	Time	Activity description	Location
	Welcome Reception	12:00-13:00	Greeting and sign-in	TBD
1.1	Meeting Introduction	13:00-14:00	Introductions; explain meeting agenda and objectives	Forest campus Building 11, room 11.212
1.2	Data Provision & Preparation	14:00-15:00	A brief introduction to data formats to be used during training exercises, and provision of example data (i.e. forest plot Orthophotos, 360 Panoramas, 3D Point cloud and other inventory data). A preview of the expected results will be presented.	Forest campus Building 11, room 11.212
1.3	Data entry in DSS & stand rendering/ simulation	15:00-16:00	General introduction to field data collection using RS, data entry into DSS, and rendering of digital forest twin	Forest campus Building 11, room 11.212
Coffee break 15 mins				
1.4	VFTs creation	16:15-17:30	Methodology to create a Virtual Forest Tour, incl. techniques and key points for the proper capture of photographs and creation of 360 Panoramas, and example publication on VR-easy platform	Forest campus Building 11, room 11.212
End of Practical Training – Day 1				
	Dinner	18:00-20:00	Group Dinner	TBD

Thursday (8.6.23) – Peer-to-Peer Training: Creation of Virtual Forest Twins				
Session	Topic	Time	Activity description	Location
	Field excursion	8:45	Meet in front of Building 11 on HNEE Forest Campus for field excursion to marteloscope site.	Entrance Building 11 HNEE Forest Campus
2.1	Field work in marteloscope site	9:30 – 12:00	360 panorama photo capture, and point cloud data collection using UAV and (terrestrial) personal laser scanner	Marteloscope “Möllergrab”
Lunch				
2.2	3D point cloud data Processing (Part 1)	13:30 – 14:45	Methods, work- flows, tools and packages to pre-process and process the 3D point cloud data; hands-on work	Forest campus Building 11, room 11.212
Coffee break 15 min.				
2.3	3D point cloud data Processing (Part 2)	15:00 – 17:00	Methods, work- flows, tools and packages to pre-process and process the 3D point cloud data; Extraction of tree biometric data from point cloud; Hands-on work.	Forest campus Building 11, room 11.212
2.4	Results & reflection	17:00 – 18:00	Presentation of workshop results, discussion and preparation for multiplier event	Forest campus Building 11, room 11.212
End of Practical Training – Day 2				
