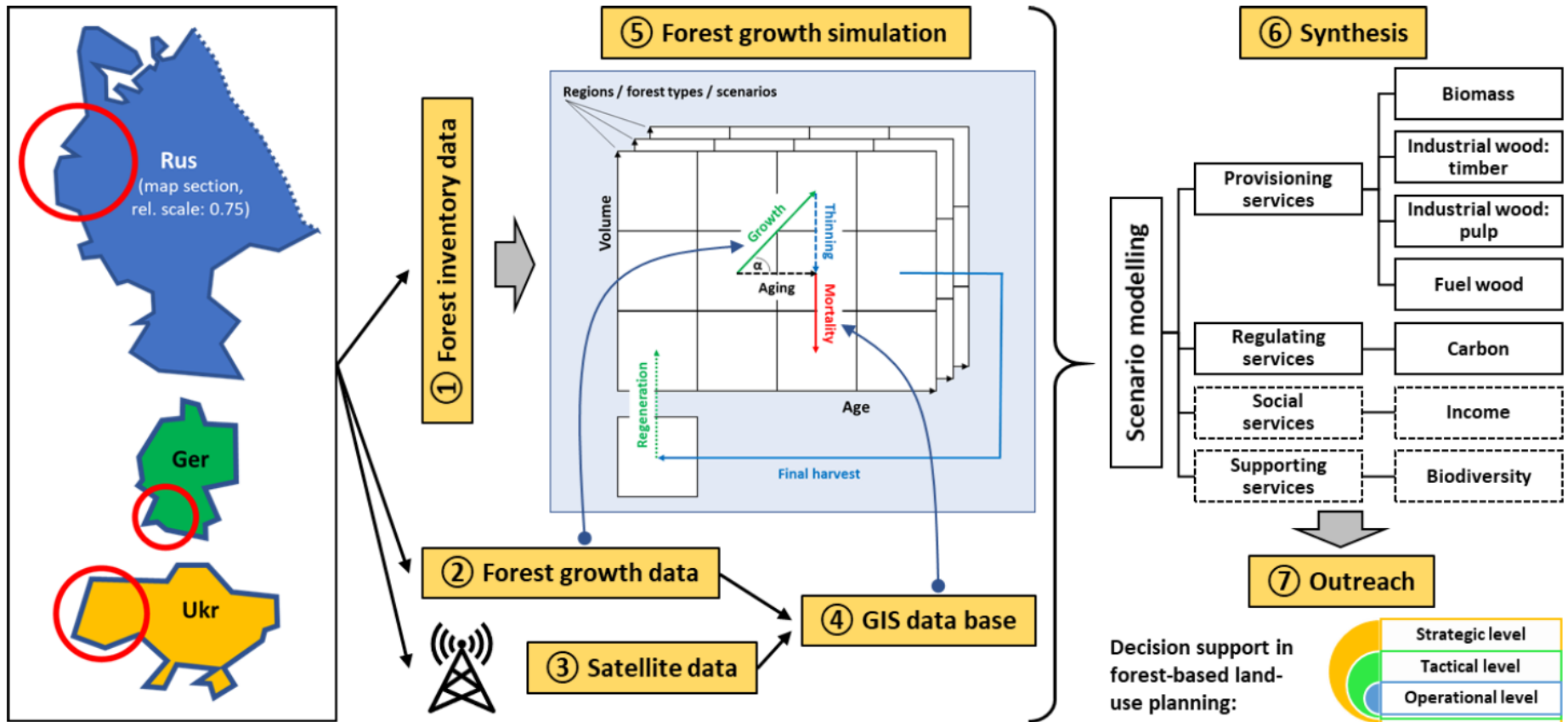


SURGE Pro Kick-Off Meeting

Christian Vonderach
Uni Freiburg / FVA BW

10.03.2021

TOP 4: Working Packages



TOP 4: Working Packages

WP 0: Project coordination (ALU)

Project coordination, incl. administration, budgeting, reporting, public relations/project website (English, Ukrainian, Russian, German), time schedule development and control, meetings.

Work package milestones (MS):

- MS 0-1 Project website (due: month 4)
- MS 0-1 Project workshop (due: month 9)
- MS 0-3 Project symposium (due: month 32)
- MS 0-4 Research stays of P2 and P3 at P1 (due: in 2022).

TOP 4: Working Packages

WP 1: Forest inventory database (SFTU)

Compilation of a forest inventory database, incl. collection of data, data quality control, data preprocessing, preparation for EFISCEN format.

Work package milestones (MS):

- MS 1-1 Common template for data collection development (due: month 2)
- MS 1-2 Inventory data collection (due: month 8)
- MS 1-3 Data quality control, validation and verification (due: month 9)
- MS 1-4 Data transformation for EFISCEN model implementation (due: month 12).

TOP 4: Working Packages

WP 2: Growth database (UNFU)

Growth database, incl. collection of field data, data quality control, data preprocessing, compilation of database.

Work package milestones (MS):

- MS 2-1 Developing methodology of field work with definition of sampling design including number of sample plots and sample trees for increment core sampling in the different regions (due: month 6)
- MS 2-2 Collection of growth data from all participants and for all regions of investigation (due: month 16)
- MS 2-3 Growth data quality control (due: month 18)
- MS 2-4 Compilation of database of growth data, including sample plots and tree-ring measurements (due: month 20)
- MS 2-5 Data preprocessing (duration: 2 months, due: month 22)
- MS 2-6 Compilation of elaborated database (due: month 24)

TOP 4: Working Packages

WP 3: Satellite database (UNFU)

Satellite database (collection of data, data quality, data preprocessing, compilation of database).

Work package milestones (MS):

- MS 3-1 Monitoring of existing images from different satellites (Landsat, MODIS and Sentinel-2) on USGS Earthexplorer Hub for 5-year periods and download of files according to their quality for all regions (due: month 10)
- MS 3-2 Quality assessment of images (due: month 12)
- MS 3-3 Preprocessing images (layer stacking, atmospheric correction etc.) depending on satellite features and relief (due: month 16)
- MS 3-4 Forming of NDVI (EVI) images (due: month 18)
- MS 3-5 Interpretation of images using available algorithms for spruce stands detection using field sample plots (due: month 22)
- MS 3-6 Change detection on thematic maps for 5-year periods (due: month 24).

TOP 4: Working Packages

WP 4: GIS database (SFTU)

GIS database and analysis

Work package milestones (MS):

- MS 4-1 Architecture of multilayer GIS development (due: month 10)
- MS 4-2 Gathering, validation and control of the remote sensing and ground base georeferenced data (due: month 20)
- MS 4-3 Retrospective data analysis on temperature gradients (due: month 29)
- MS 4-4 Extrapolations and projections (due: month 32)

TOP 4: Working Packages

WP 5: Growth simulation (FVA)

Modification of the EFISCEN model, incl. regionalization, parameterization, modification of growth functions for Norway spruce, scenario development, model runs / projections. Model validation and model comparison (WEHAM).

Work package milestones (MS):

- MS 5-1 Compilation and preparation of data from the NFIs according to the requirements of EFISCEN (together with WP1) (due: month 12)
- MS 5-2 Calibration of EFISCEN growth model for Norway spruce in Baden-Württemberg (together with WP2) (due: month 24)
- MS 5-3 Joint scenario development (due: month 24)
- MS 5-4 Validation: comparison of EFISCEN results with WEHAM (due: month 24)
- MS 5-5 Joint analysis and interpretation of EFISCEN results in the three regions (due: month 28).

TOP 4: Working Packages

WP 6: Synthesis (ALU)

Synthesis (results, conclusions, discussion, scientific data management, report, publications).

Work package milestones (MS):

- MS 6-1 Literature study on functional relationships between forest structures and forest functions (due: month 32)
- MS 6-2 Assessment of implications of scenario outputs on provisioning, regulating, social and supporting services (due: month 34).

TOP 4: Working Packages

WP 7: Outreach (SFTU & UNFU)

Outreach (knowledge transfer through stakeholder participation, vertical (transdisciplinary) integration, training, demonstration plots, leaflets).

Work package milestones (MS):

- MS 7-1 Spreading results of project (seminars, conferences, publications etc.)
- MS 7-2 Preparation of educational modules (due: month 34)
- MS 7-3 Scientific trainings (attached to project workshop (month 9) and project symposium (month 32)).

TOP 4: Working Packages

WP	Main objective	Leader	2021												2022												2023											
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
			F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J
0	Project coordination	ALU	Website				Workshop				Report				Research Stay FR						Report				Symposium						Report							
1	Forest Inventory database	SFTU	Data Template				Inventory Data				Validation				Data for EFISCEN																							
2	Growth database	UNFU	Field Methodology				Growth Data				check	DB	prep	DB	Relations																							
3	Satellite database	UNFU	Images				check	reprocessing				NDVI and detection change																										
4	GIS database	SFTU	GIS				data acquisition				temperature gradients				projections																							
5	Growth simulation	FVA	EFISCEN setup				calibration				interpretation				Results																							
			Joint Scenario Development				Validation against WEHAM																															
6	Synthesis	ALU	Literature study				Synthesis																															
7	Outreach	UNFU/ SFTU	educational modules				aterial																															

TOP 3: Webpage (WP 0)

- www.surge-pro.eu & www.surge-pro.uni-freiburg.de
- multilingual webpage (promised)
- regularly updated
- project presentation
- results & further material
- are there any requirements or ideas?

- need logo & support on translation later on
- static webpage (hugo) / wordpress

TOP 3: Data Transfer (WP 0)

- possible via BWSync&Share
- <https://bwsyncandshare.kit.edu>
- personal invitation to the service follows
 - name and email-address required
 - follow instructions in email and set a password
 - accept terms of service
 - no log out button: close browser to log out
 - preferred language can be set
 - Data Sharing Agreement?

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TOP 3: Miscellaneous (WP 0)

- jointly edited annual project reports required
- final project report expected promptly after completion
- regular meetings via Video Calls every second month?
- relevant literature to be collected on BWSync&Share?

Thank you!