

D430.1 Demonstration – Summary Maps & Databases

EUFODOS – Improved Information of Forest Structure and Damages

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Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services):	RE
RE spec	Restricted to	
CP / LV	Document status is: completed or living	CP
CO	Confidential, only for members of the consortium (including the Commission Services)	

ISSUE RECORD

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1. Summary

The work package WP430 focuses on the production of the FDS (Forest Downstream Services) for the areas selected and agreed upon by the SPs (service providers) of the consortium together with their individual users. Once in project phase 1 and once in project phase 2, each of the SPs is obligated to generate demonstration products for their specific test sites, deliver the associated maps and data bases and the associated technical report including the technical product descriptions.

The detailed technical descriptions and results presentation of the generated demonstration products is contained in the document "D430.2 Report on Demonstration Products for Project Phase 1 including Technical Specifications". The online presentation of the demo-products is currently being implemented within WP620.1-Service Network Web-Portal.

Most of the service providers were able to deliver the planned products. In some instances, no demonstration products could be delivered because:

1. Either a natural phenomenon whose effects are content of the product itself did not occur in the test area of the user, e.g. storm, insect calamity or forest disease
2. Or the processing of the data/generation of the products took longer than expected and has not been finished so far.

In the first instance, the bottleneck could be mitigated by generating an alternative or substitute product in the designated test area, or an alternative test area was selected for demonstration purposes. In the second instance, the delayed delivery of the product was modified in the SLA or agreed upon with the user in another manner.

The next chapters outline the most important components of the Work Package 430.1: The overview of all test sites and their spatial distribution in Europe, short descriptions of the individual test sites, and a summarizing table of the delivered demonstration products.

2. Overview of Test Sites

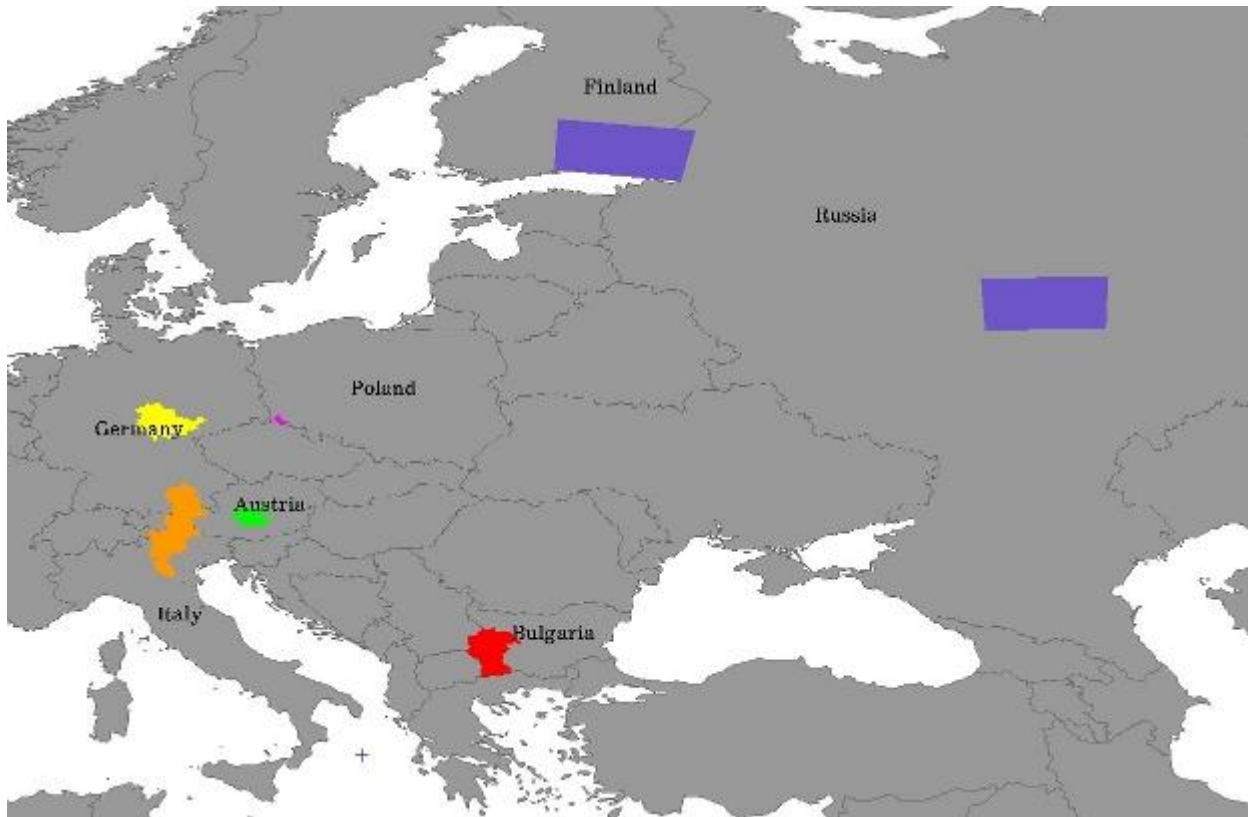
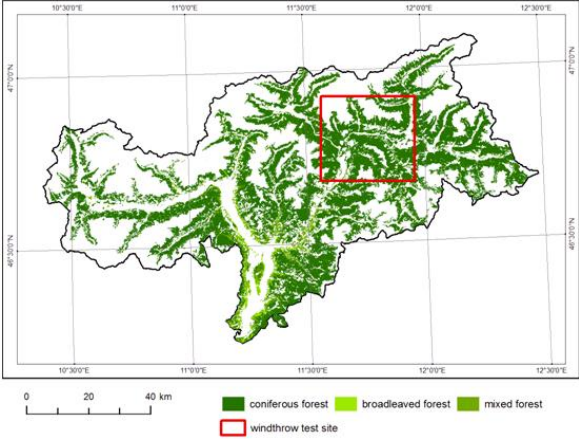
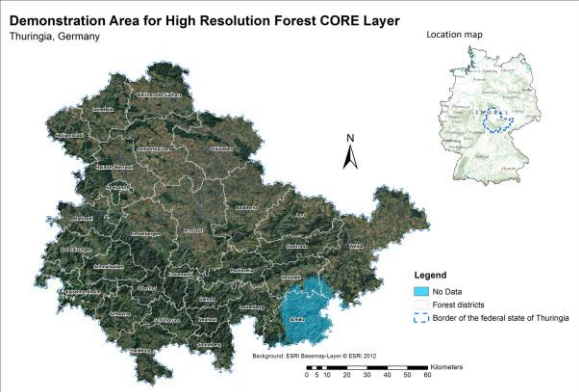
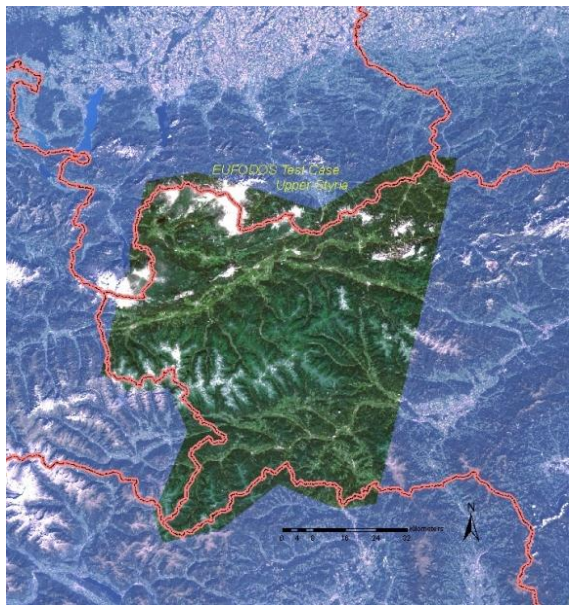




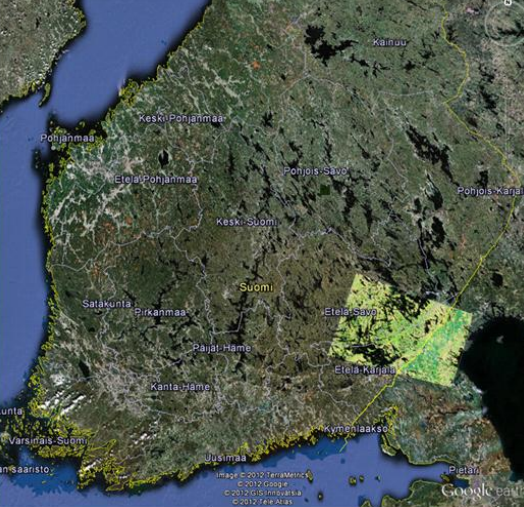
Figure 1: EUFODOS test sites. VTT (purple, test sites Finland and Russia), RapidEye (pink, test site Poland), GAF/ALU-FR (yellow, test site Thuringia; orange, test site Munich area / Germany), EURAC (orange, test site Verona area / Italy), JR (green, test site Styria; orange, test site Innsbruck area / Austria), ReSAC (red, test site Bulgaria).

3. Individual Test Sites

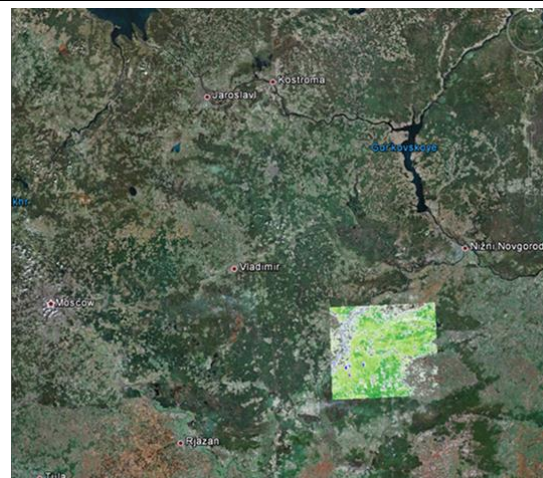
Service Provider	Geographic Coverage	Description
<p>EURAC</p>		<p>Test Site: North-eastern part of South Tyrol Area: 827 km² (30.4 km x 27.2 km)</p>
<p>GAF AG / ALU-FR</p>		<p>Test Site: Thuringia Area: 16171 km²</p>

<p>Joanneum Research</p>		<p>Test Case Area in Province of Styria: ~5.900 km² Test Site Hohentauern: 250km²</p>
<p>RapidEye AG</p>		<p>Test Site: Świeradów Zdroj / Szklarska Poręba (red polygon), situated in the Sudety mountains of the country triangle Area: 668 km²</p>
<p>RapidEye AG</p>		<p>Alternative Test Site for Storm Damage Mapping Demonstration: Saxony</p>

		<p>Area: 1250 km²</p>
<p>ReSAC</p>		<p>Test Site 1: Western Bulgaria-DGS Tran Area: 1400 km²</p>

<p>ReSAC</p>		<p>Test Site 2: South West Bulgaria, West Rhodope Mountain</p>
<p>VTT</p>		<p>Test Site: Finland Area: 22 500 km²</p>

VTT



Test Site: Russia
Area: 7 960 km²

4. Overview of generated demonstration products

Table 1: Overview of generated demonstration products, project phase 1

SP	PNR	Test area	Product	Comment
GAF	C-01	several	HR Forest Core Layer (based on Image 2009): Tree Cover Density (0 – 100%)	had to be processed in addition, (necessary base product)
GAF	C-02	several	HR Forest Core Layer (based on Image 2009): Forest Types (20m resolution 10% minimum Tree Cover Density)	had to be processed in addition, (necessary base product)
GAF	P-02	Thuringia	Storm Damage Assessment	Modified products since no storm but other damage types occurred GAF: Detection of snow damage
GAF	P-03	Thuringia	Insect Infested Damage Assessment (class: trees infected by bark beetle)	GAF: A map with dominant spruce stands in Thuringia will be produced based on Image 2009 as base input to the assessment of insect infested damages. No major insect infested damages occurred in Summer 2011 over Thuringia.
JR	P-01	Styria	RapidEye Ortho-Image Map	Accomplished
JR	P-02	Styria	Functional Forest Parameters	Accomplished
VTT	P-01	Finland	Stem Volume Map by Tree Species groups (pine, spruce, broadleaved trees) using Spot equivalent data	IRS P6 26 July 2010 Cloudy Haziness Striping
VTT	P-02	Russia	Stem Volume Map by Tree Species groups (pine, spruce, broadleaved trees) using Spot equivalent data	

EURAC	P-02		Damage Maps	<ul style="list-style-type: none"> • Windfall event map (Line 2, High resolution data – Landsat) • Windfall event map (Line 3, Very high resolution data – RapidEye)
EURAC	P-03		After Event Monitoring	Larch pest infestations maps (Line 1, Low resolution data – MODIS)
ReSAC	P-01		Forest Area Map	
ReSAC	P-03		Forest Density Map	
ReSAC	P-05		Forest Damage Maps	
RapidEye	P-01		Time Series of Custom RapidEye Ortho Image Maps	To be contained in the SLA
RapidEye	P-02		Forest Area Map	To be contained in the SLA
RapidEye	P-03		Forest Damage Map of Windfall Areas	Alternative test area for demonstration: Storm Saxony
RapidEye	P-04		Forest Vitality Maps	Accomplished