



## Deliverable Summary Report: D1.3

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**Date and version:** 2019.05.12 (v1.0)  
**Work Package:** WP 1 – 'Satellite data and derived product'  
**Deliverable name:** D1.3 – 'Novel products developed for surface parameterization at the micro-scale'  
**Deliverable status:** Completed

### Deliverable description

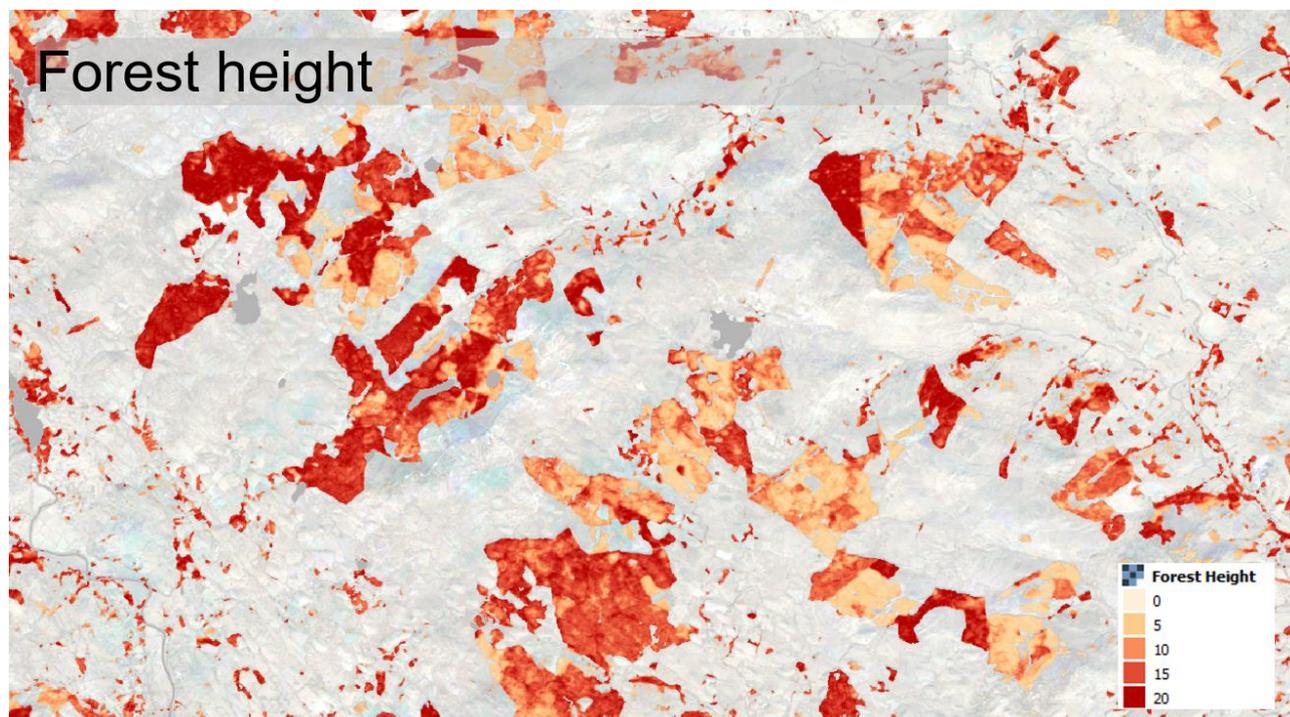
The purpose of this deliverable is to develop novel products for surface parameterization of wind models at the microscale level. A new forest height and forest density model has been developed.

### Activities and tasks completed

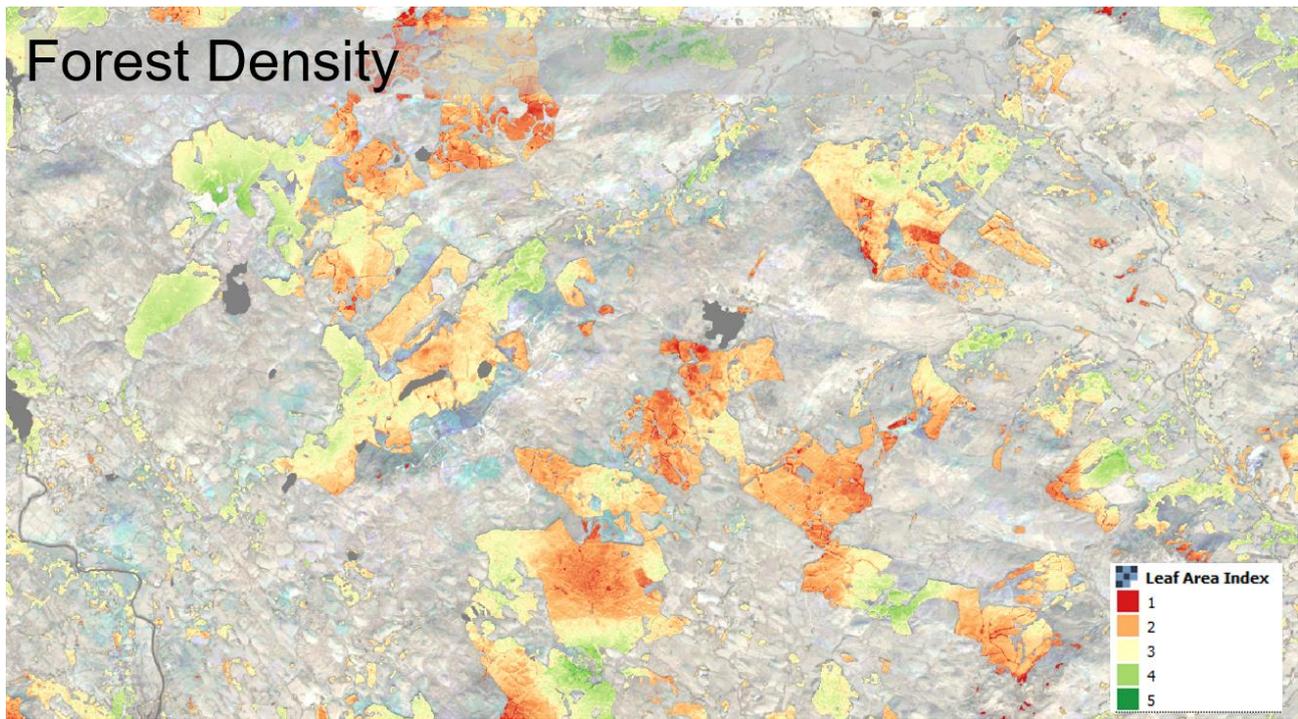
DHI GRAS has in dialogue with DTU developed a forest height and density model processing chain that uses Copernicus optical and radar satellite imagery and canopy height samples from satellite LIDAR missions. The method is based on machine learning and is used to predict forest heights and density. The density determination is done from a regression model of targeted satellite data.

The method is semi-automated and is available for any site in the World.

### Deliverables and outcomes



Forest height illustrated for Dumfries, Scotland using Sentinel data.



Forest density illustrated for Dumfries, Scotland using Sentinel data.