# Assessment of Aboveground Carbon (AGC) Stock using Airborne LiDAR and Very High Resolution Satellite Data

Objective: Integration of airborne LiDAR and Very High resolution data for Above Ground Carbon assessment
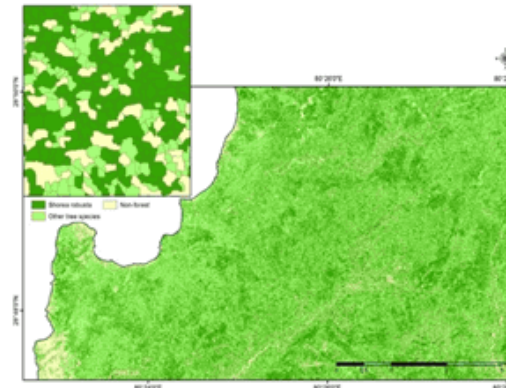
Approach:

- Estimation of tree height using LiDAR data using DTM and Canopy Height Model
- Correlating tree height and dbh, dbh and crown cover and crown cover vs. above ground biomass
- Carbon Assessment from biomass
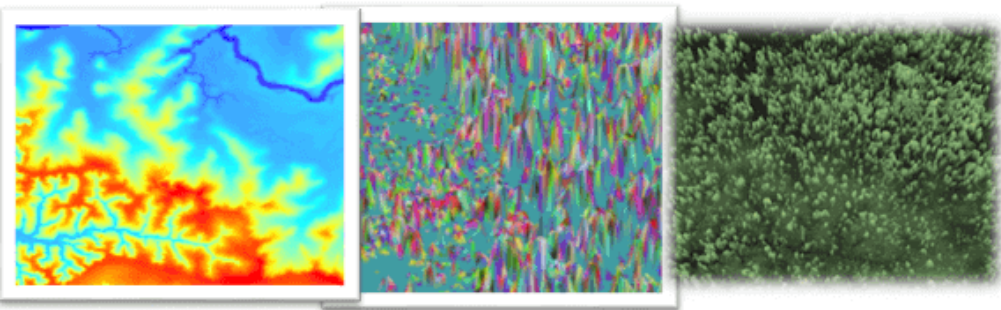
AGC distribution

Digital Terrain Model   Canopy Height Model (CHM)   Digital Surface Model (DSM)

Segmentation

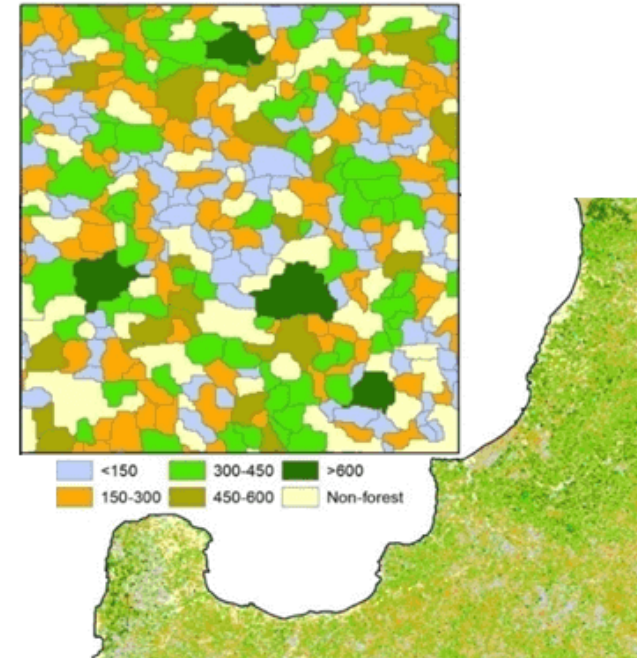|		
<150	300-450	>600
150-300	450-600	Non-forest
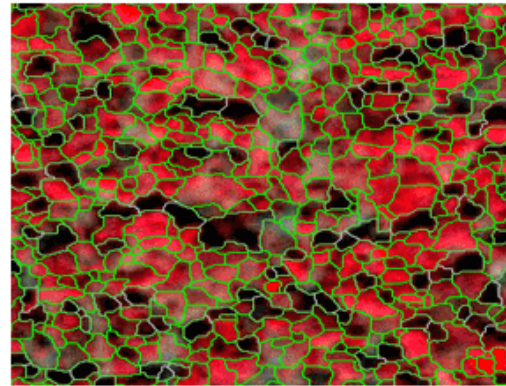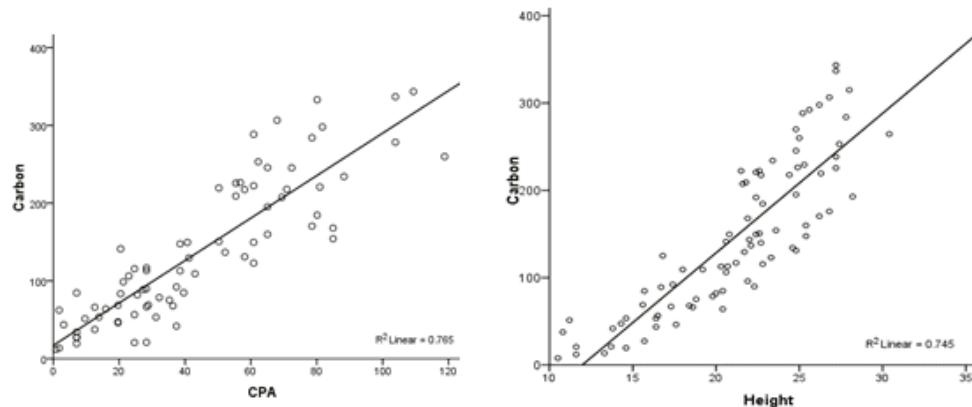
Classification

Predicted AGC from integration of LiDAR and WorldView-2 data with an accuracy of 71.2%.