



Grant Agreement 823805 MAIL H2020 MSCA RISE 2018

MLs classification in Carbon sequestration capacity groups part 2: European scale



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CSC Groups mapping at European level

Different approach from pilot site level

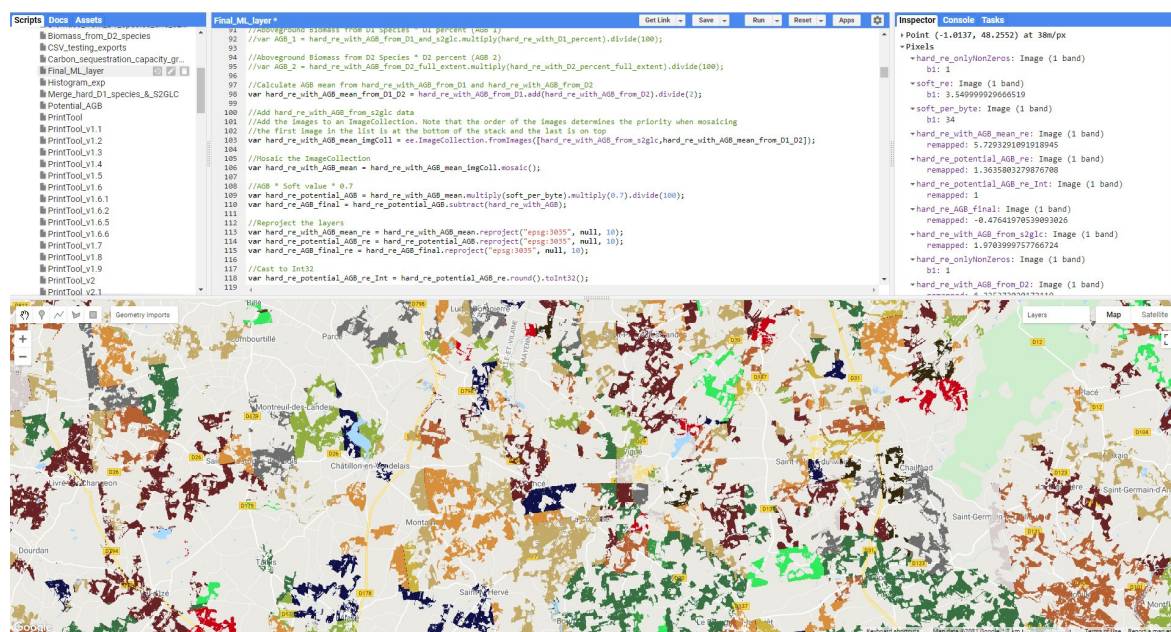
Decisive factors

- Extent of study area
- Task's implementation time frame

Methodology based on multicriteria GIS analysis

Google Earth Engine

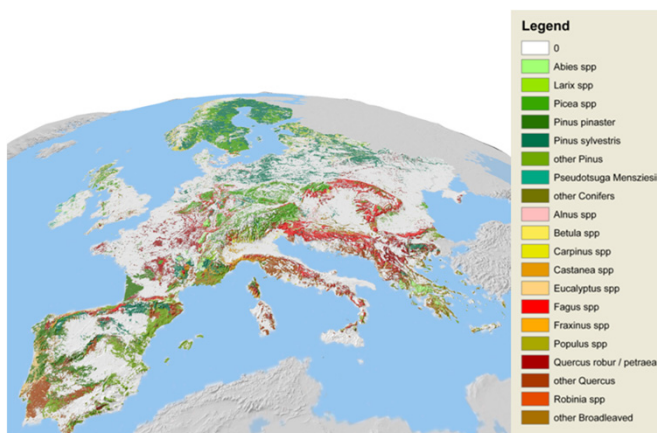
- High performance
- Compatibility with **MAIL** geoportal
- Tool for Decision Support System



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Dataset selection

Tree species in Europe according to European Forest Institute (EFI)



(Source: <https://www.efi.int/knowledge/maps/treespecies>)

- 20 Tree species rasters with percentage share of the respective tree species from land area
- 1x1 Km resolution

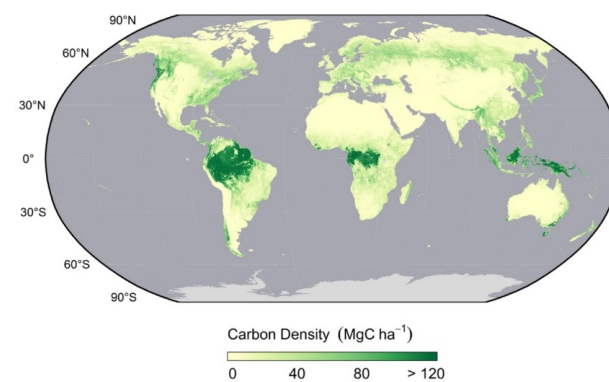
S2GLC Land Cover Map of Europe 2017



(Source: <https://s2glc.cbk.waw.pl>)

- Broadleaf and Coniferous tree cover
- 10x10 m resolution

Global Aboveground and Belowground Biomass Carbon Density Maps

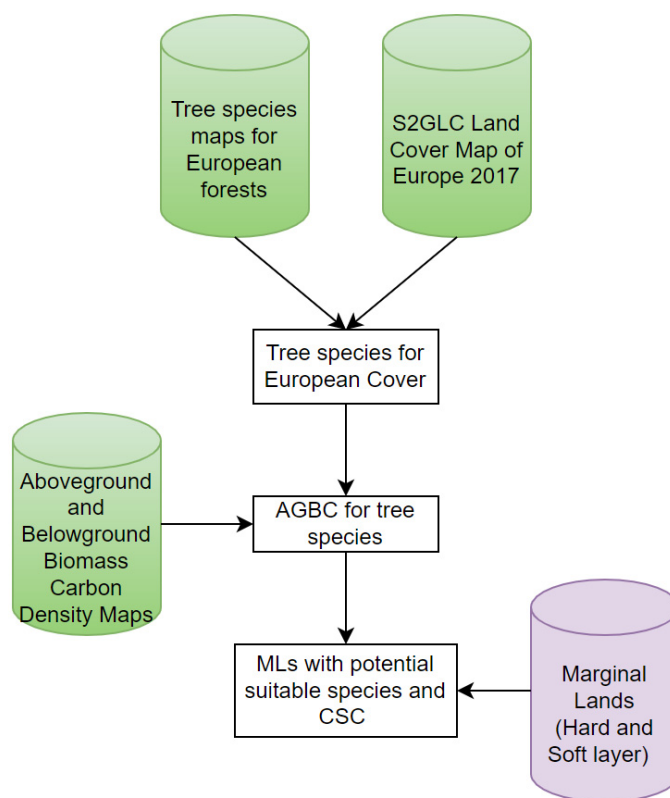


(Source: <https://daac.ornl.gov>)

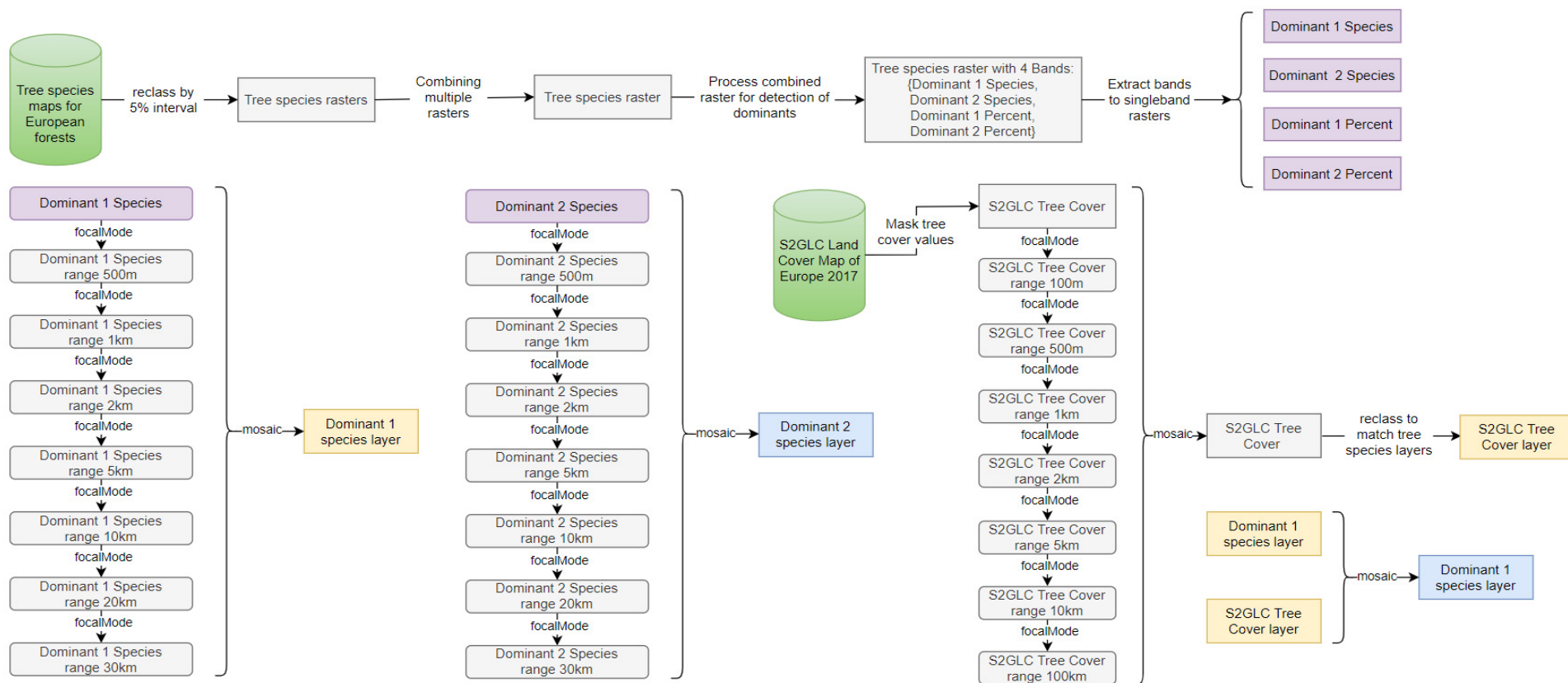
- Aboveground and belowground biomass carbon density for the year 2010
- 300 m resolution

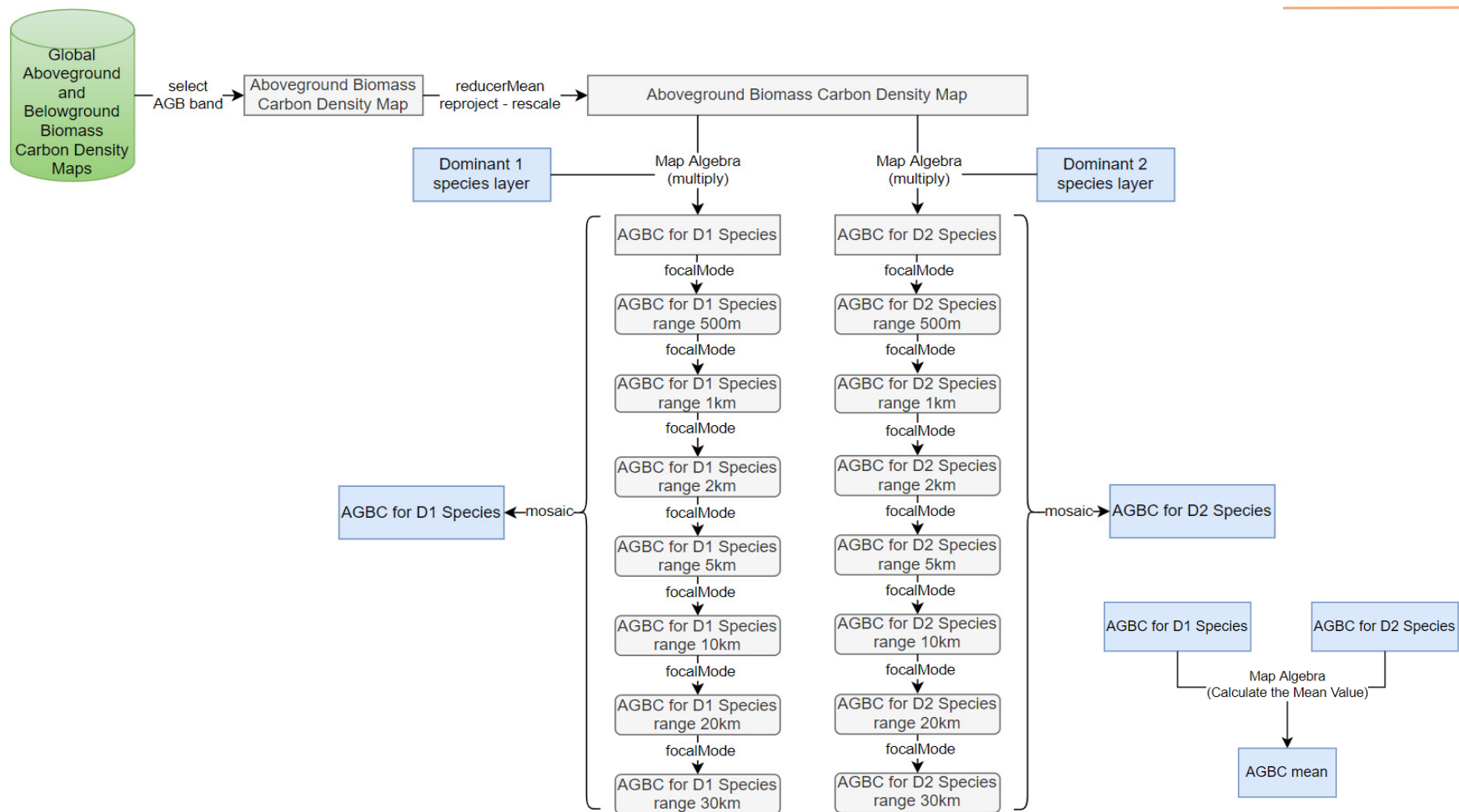


Methodology



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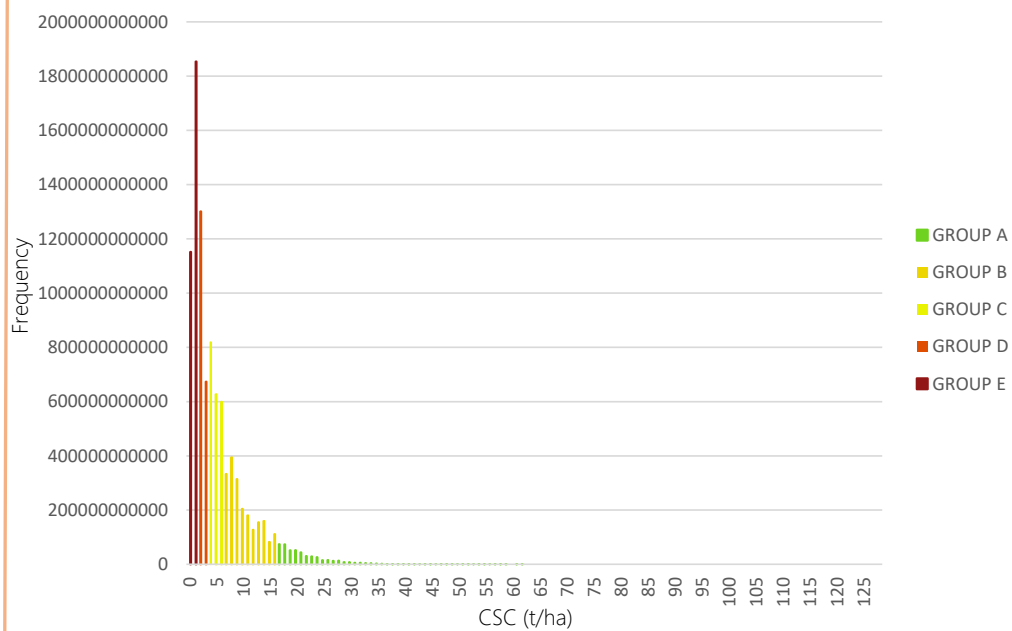
Estimating Carbon Sequestration Capacity (CSC)

$\text{AGBC mean} \times \text{Productivity value (soft layer value) of MLs} \times \text{Weight factor 70\%}$

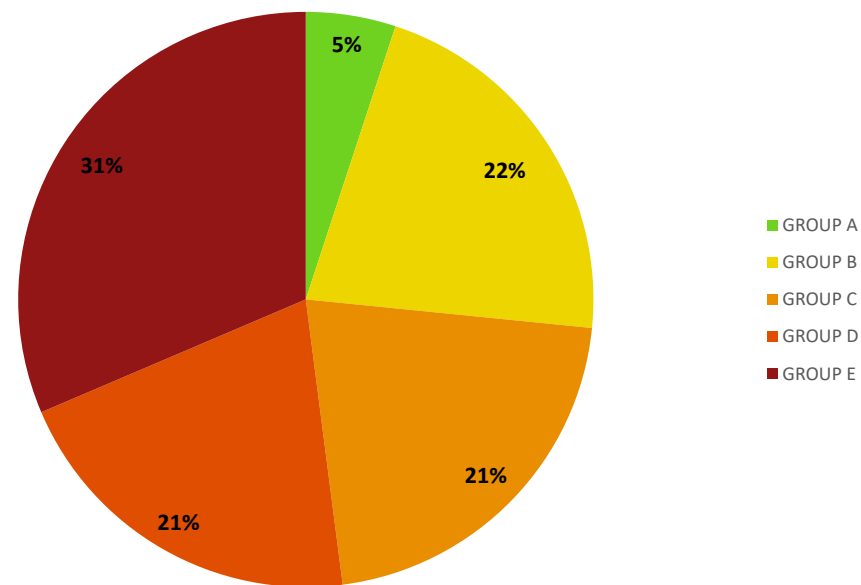


Classification into CSC groups

Histogram of CSC values for European cover

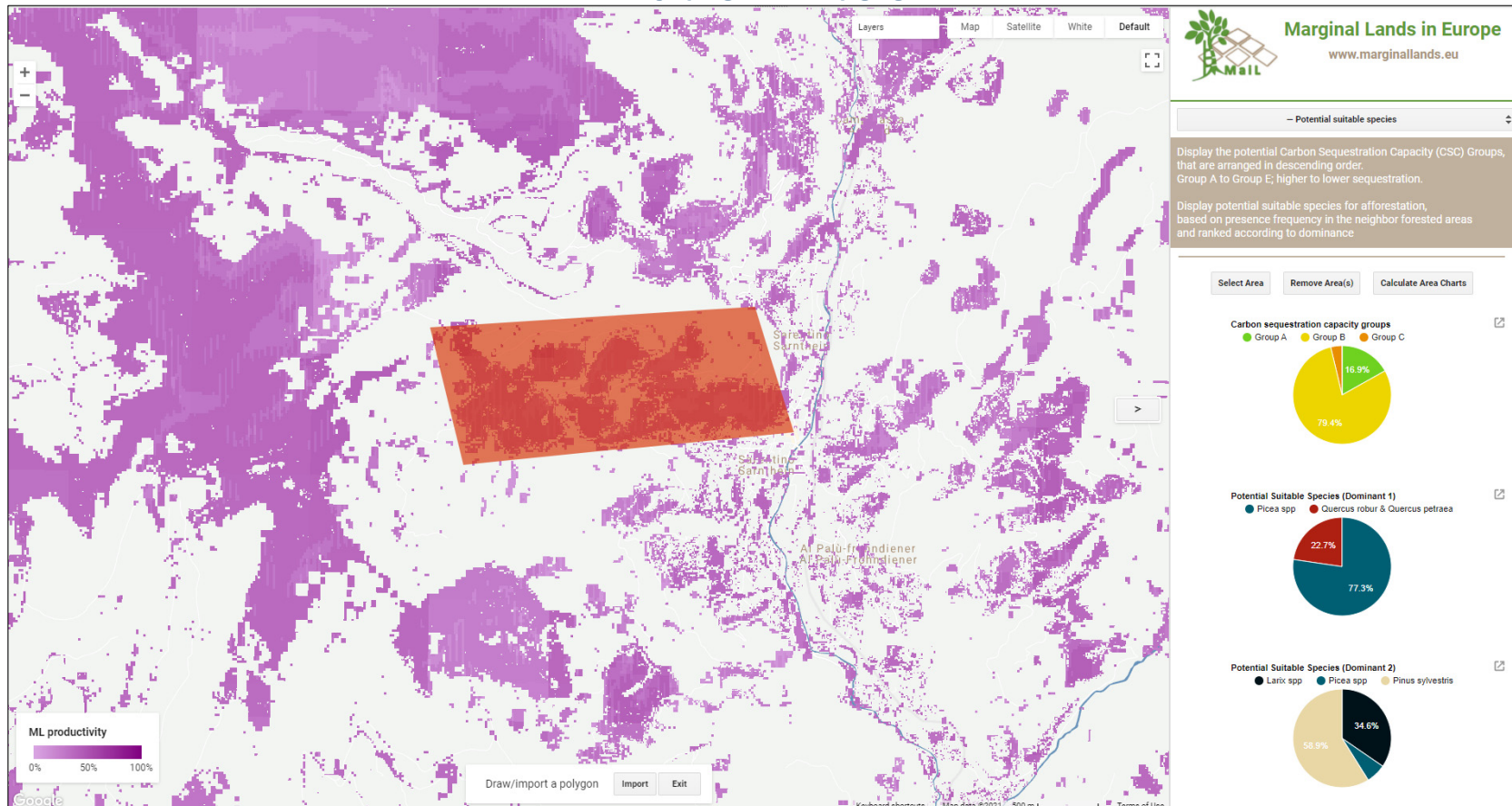


Groups' distribution in percentages for European cover





Platform tool



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Thank you for your attention!



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