P19: Vegetation height estimation

Maturity score	
Mean: 2.5	**STD:** 0.65

Constraints and limitations

- Cloud presence
- High cost of VHR satellite imagery
- The machine learning models are limited to regions with similar vegetation characteristics where it was trained.
- Uncertainty related to machine learning models

Relevant user needs

UN37: Projection of risk to portfolio assets into the future.

R&D gaps

- Lack of time series ground truth data (Light Detection and Ranging (LIDAR))

Potential improvements drivers

- Provide training datasets for different vegetation types over different regions in the world

Utilisation level review

Utilisation score	
Mean: 2.40	**STD:** 0.49

No utilisation

Low utilisation

- The use of the Global Ecosystem Dynamics Investigation (GEDI) sensor to assess carbon capture in standing/planted forests which are part of an offset mechanism.
- Unawareness of the existence of commercial EO products with better specifications

Medium utilisation

Higher cost of using the best available commercial EO product

High utilisation

Critical gaps related to relevant user needs

Guideline gap

UN37: Projection of risk to portfolio assets into the future