

FORESTRY

Terra Tech implements a comprehensive monitoring of forest resources and provides systematic assessment of forest change dynamics:

- mapping forest resources
- detection, monitoring and oversight of illegal clearings
- identification of forest species and forest constitution by age, estimation of timber stands
- detection of forest fires, forecast of emergency development
- tracking harmful processes (plantation destruction, windfalls, snowbreaks, pests, diseases)
- accounting results of natural and artificial forest regeneration.

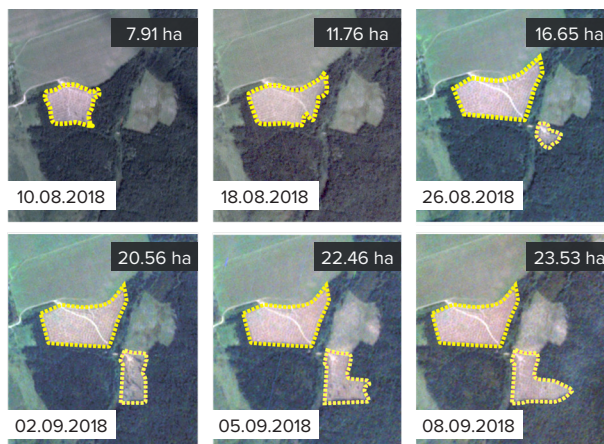




Deforestation

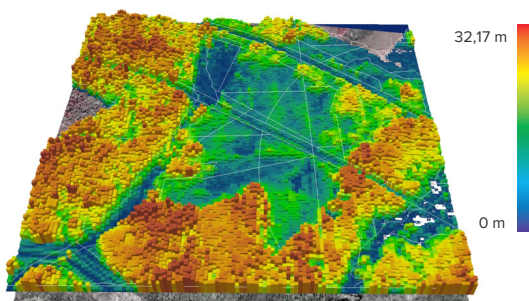
Monitoring can be implemented with high frequency (every 36 hours) with an automated detection of deforestation, its type and legitimacy:

- determination of logging area boundaries
- comparison of actually logged areas with officially determined boundaries
- estimation of logged area size, assessment of performed work quality.

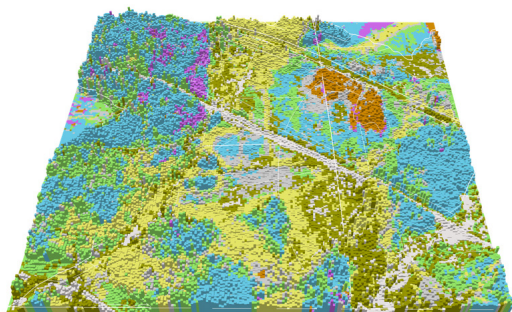


Dynamics of illegal deforestation

Digital elevation model:
forest height



Digital elevation model:
forest species



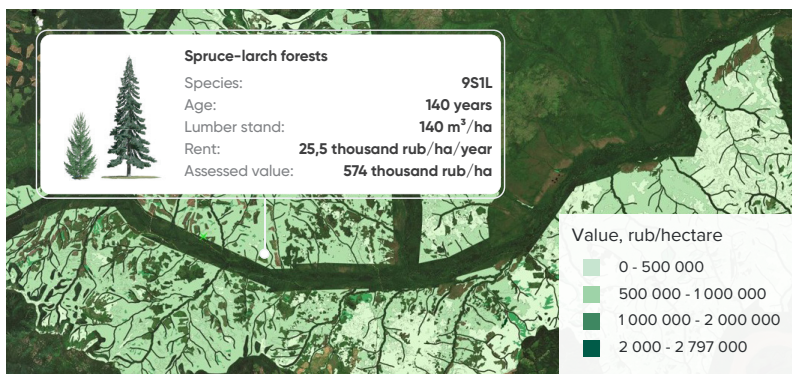
- Pine
- Spruce
- Birch
- Alder
- Aspen



Investment evaluation

For the purpose of investment management in forest and timber industries a comprehensive assessment of forest resource conditions is implemented in a four-day period:

- determination of forest species, height and age, estimation of timber stands
- assessment of logging availability and infrastructure
- selection of woodland in accordance with preset criteria
- estimation of business prospects in a forest area.



Forest pathology

Distant examination for forest pathology is conducted during a four-day period to identify dead standing and damaged trees. The results of such forest pathology research are verified on the basis of terrain data.

- windfalls
- pests
- drying

Automated detection of windfall areas

