

# **ForestHQ**

## **Experiences with open-source components**

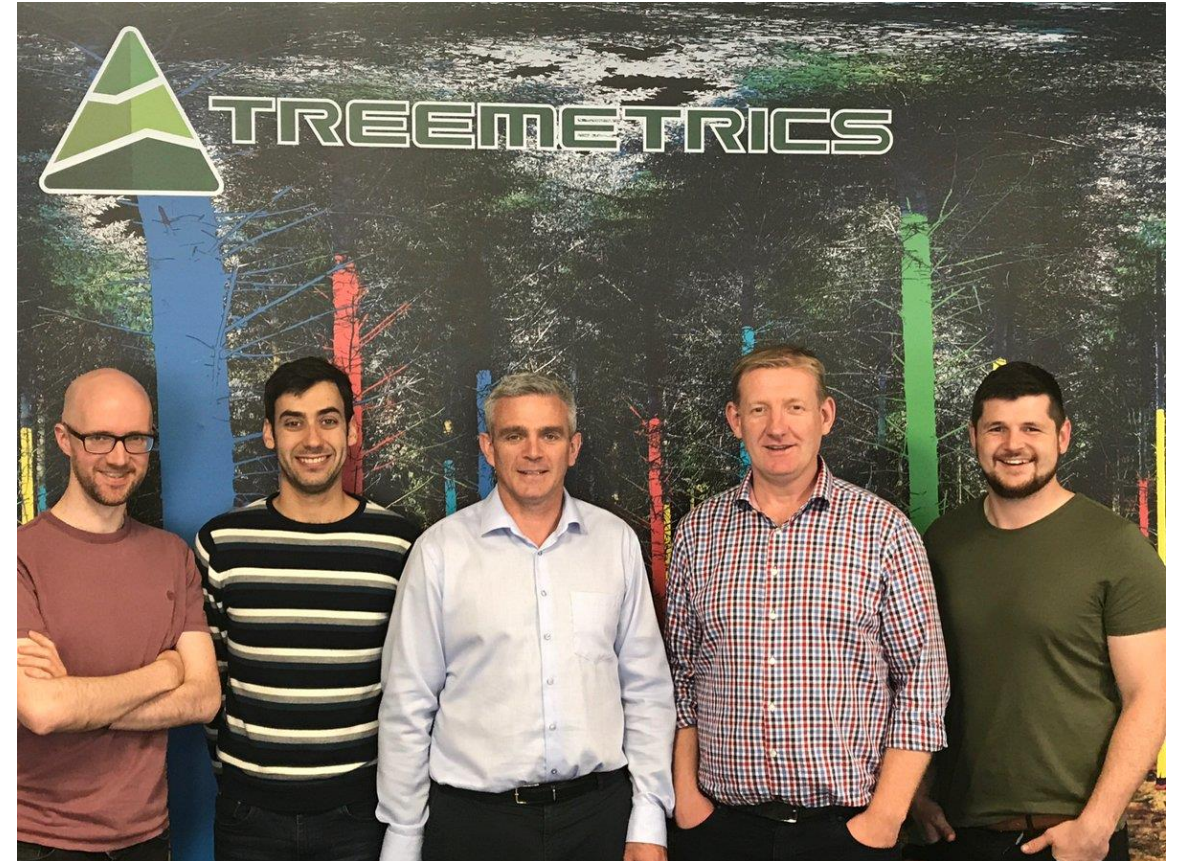
**Alex Poveda**





# What we do?

- Development of solutions for forestry sector
- Multidisciplinary team
  - IT team
  - Forestry Team
  - GIS experts
- Target Customers:
  - Big Forestry Companies
  - Small Forestry companies



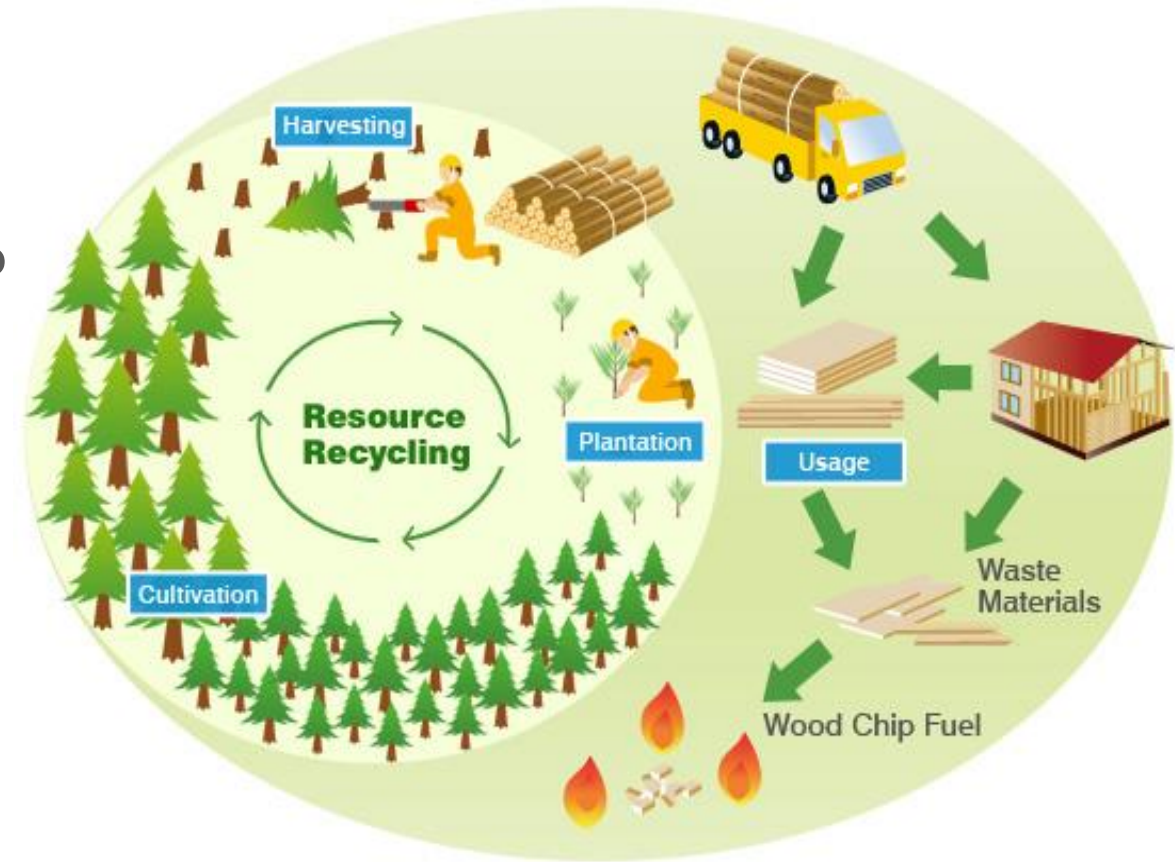
# Why?

Need to manage the forest efficiently

- How much timber do I have?
- How much timber do I need?
- Am I cutting enough/to much timber?

Need to manage the forest **MORE** efficiently

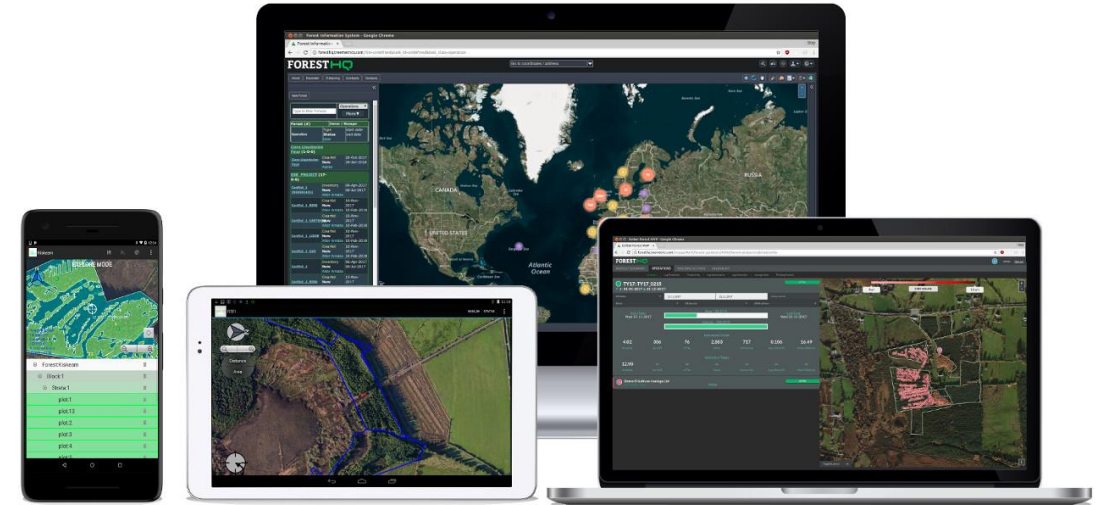
- Where is my timber?
- How much timber am I cutting?
- What type of timber am I cutting?



# Our System: ForestHQ



- Online platform
- All information spatially referenced
- Collection of spatial data from mobile devices
- Editing mapping tools
- Remote sensing analysis



# Open-Source Architecture

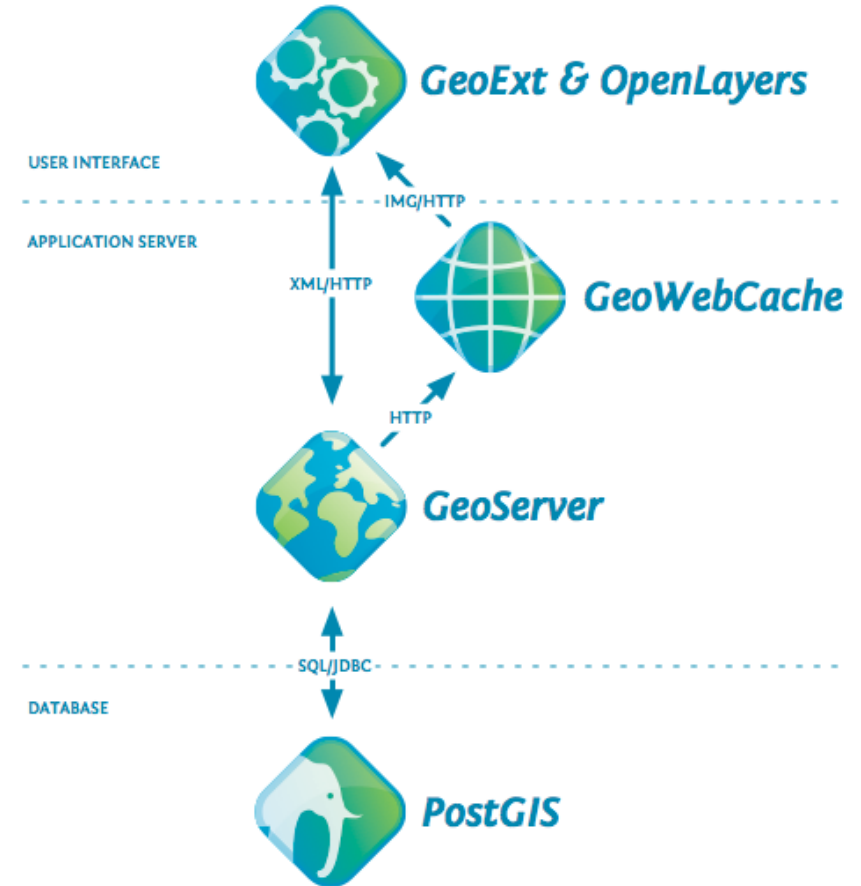
- Standard web service architecture
- Combination with other sources: Rails, Ember, etc

## Why open source?

- Flexibility: create specific tools

Simple customised tools have a big impact in the users.

- Geospatial standards
- Integration with client's systems





# Forest Measurement. What do we try to solve?



## 1. Standing Forest Measurement

- Traditionally very manual intensive
- Starting to use remote sensing
- Based on averages



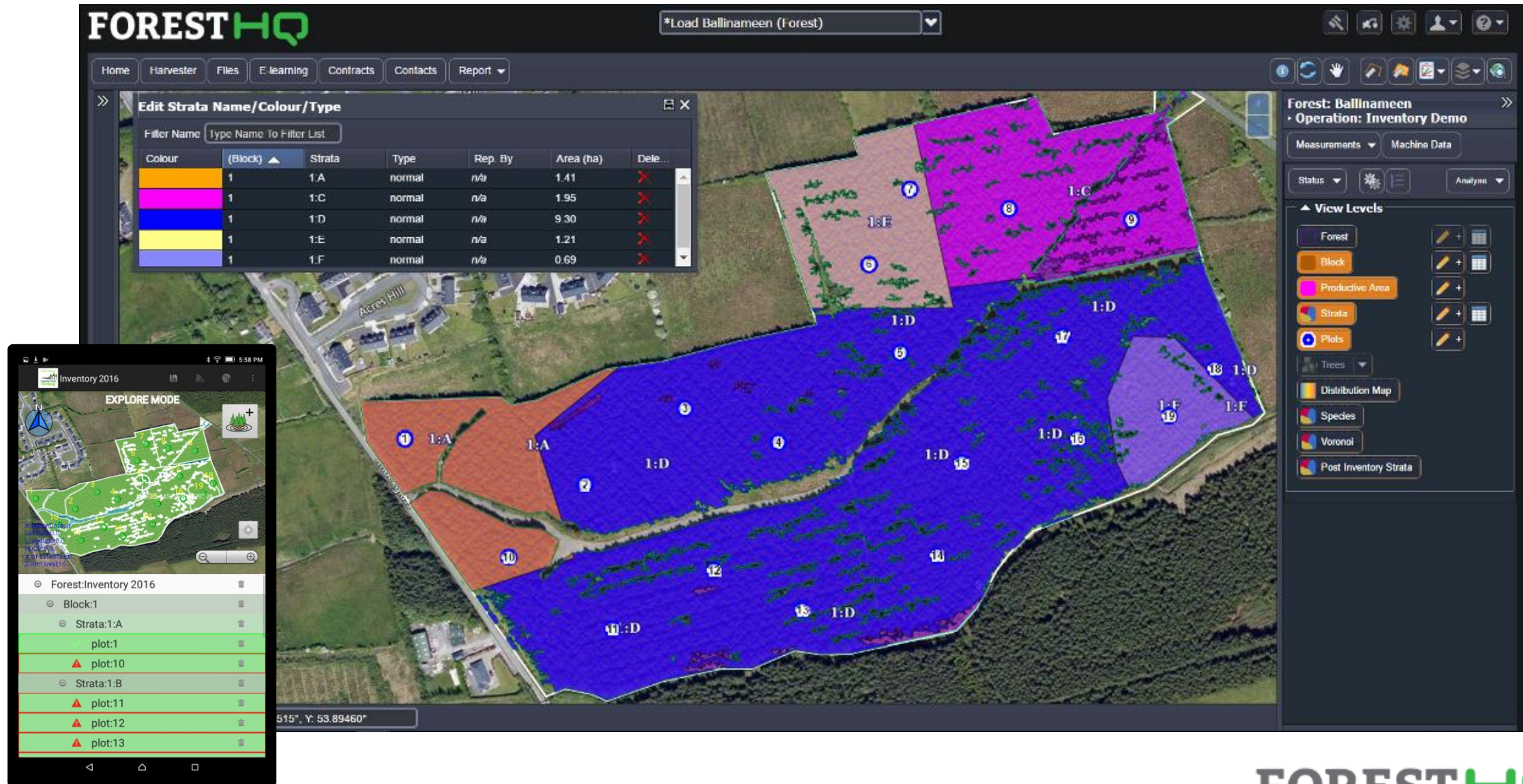
## Our solution:

- Mapping and planning
- Field inventory app. to collect data
- Remote sensing analysis
- Spatial distribution of the results





# Forest Measurement. What do we try to solve?



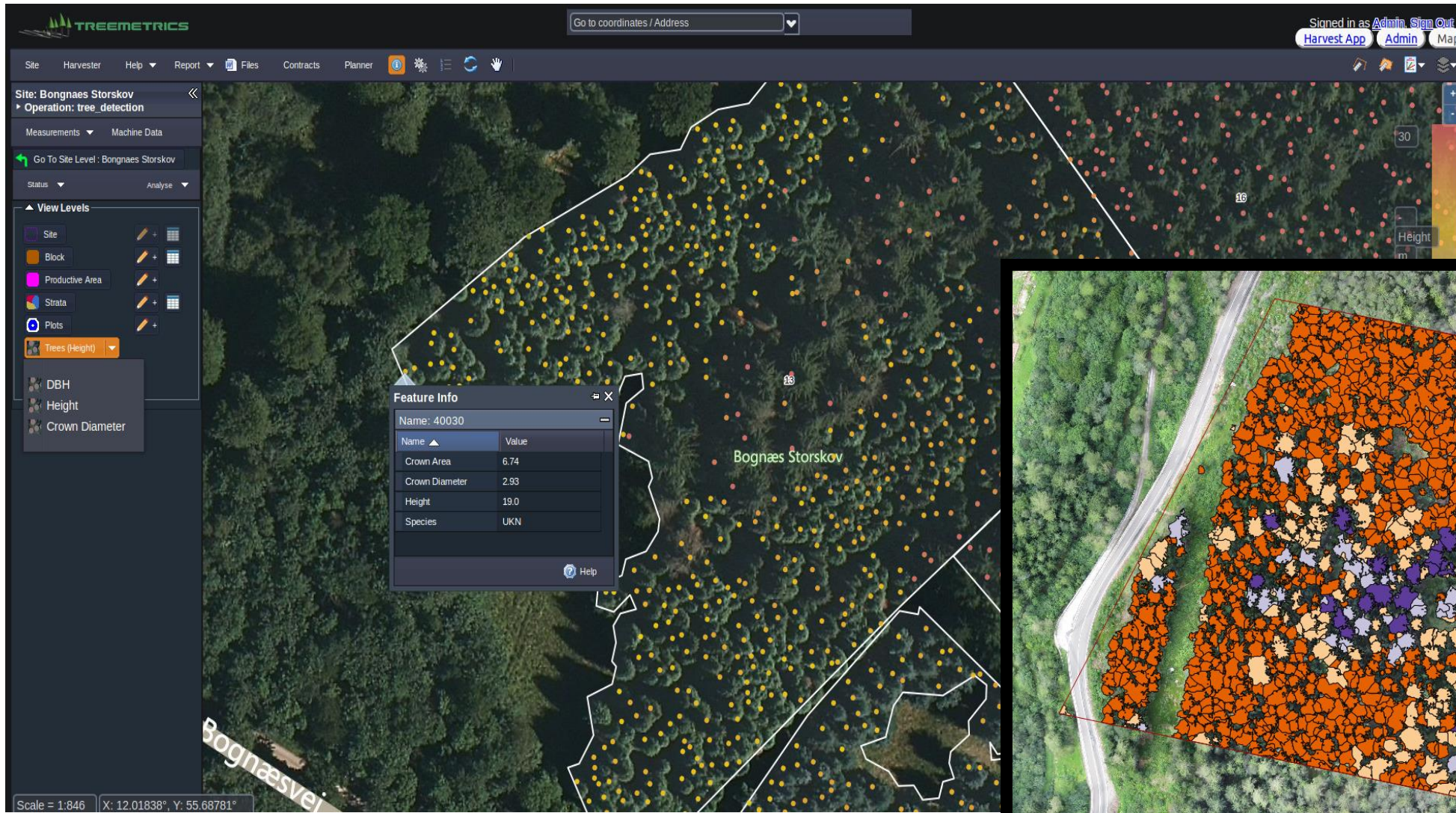


# Forest Measurement. What do we try to solve?





# Forest Measurement. What do we try to solve?





# Harvesting Monitoring. What do we try to solve?



## 2. Harvesting Monitoring

- Reduce use of the machine data
- Manual road-side log count
- Uncertainty of type logs cut

Our solution includes:

- On-board navigation system
- Position of the machine
- Real-time satellite connection
- Number of logs and log types



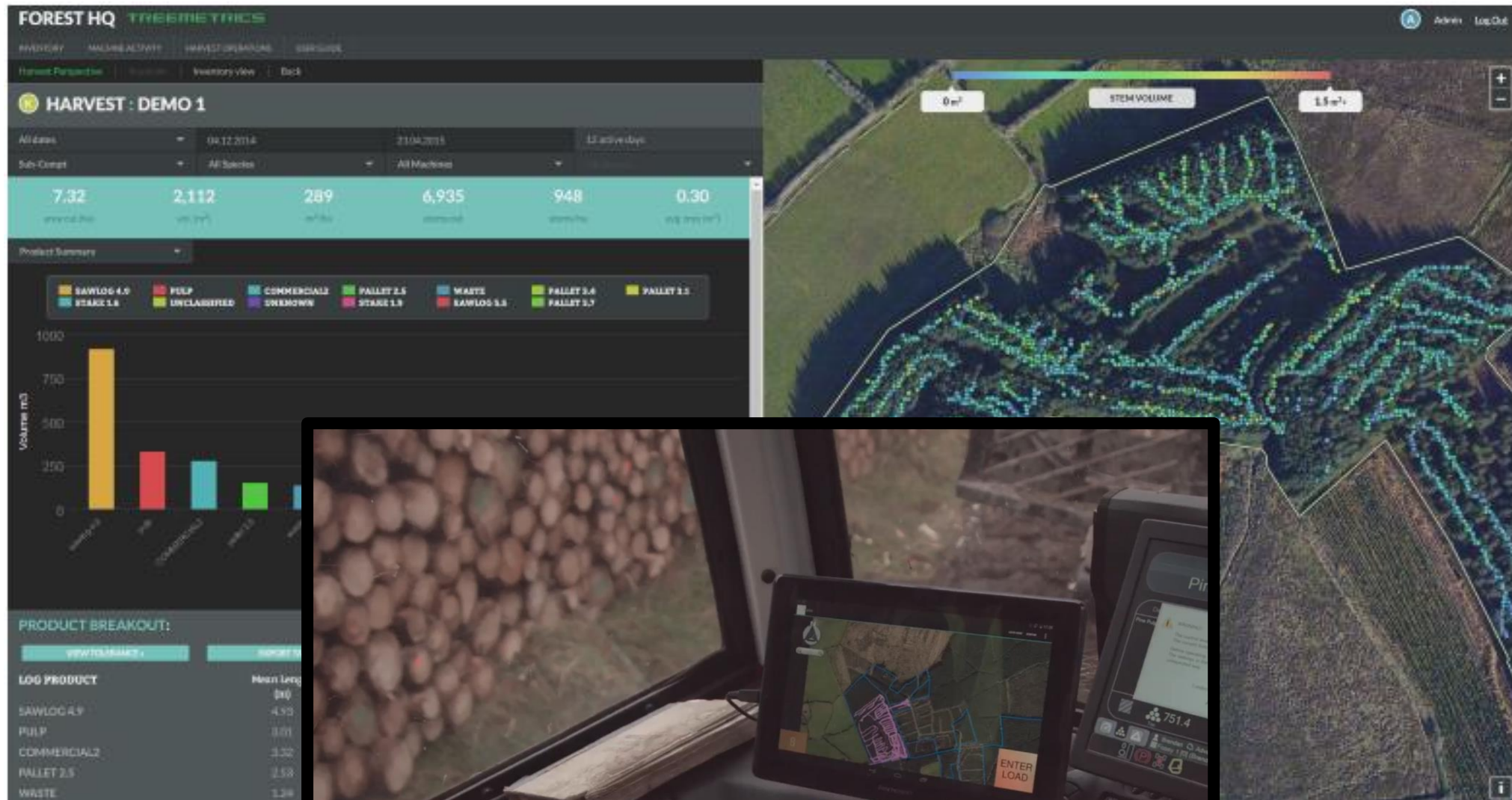
John, How many logs did you cut there?



Let me think,  
1, 2, 3, 4 ...



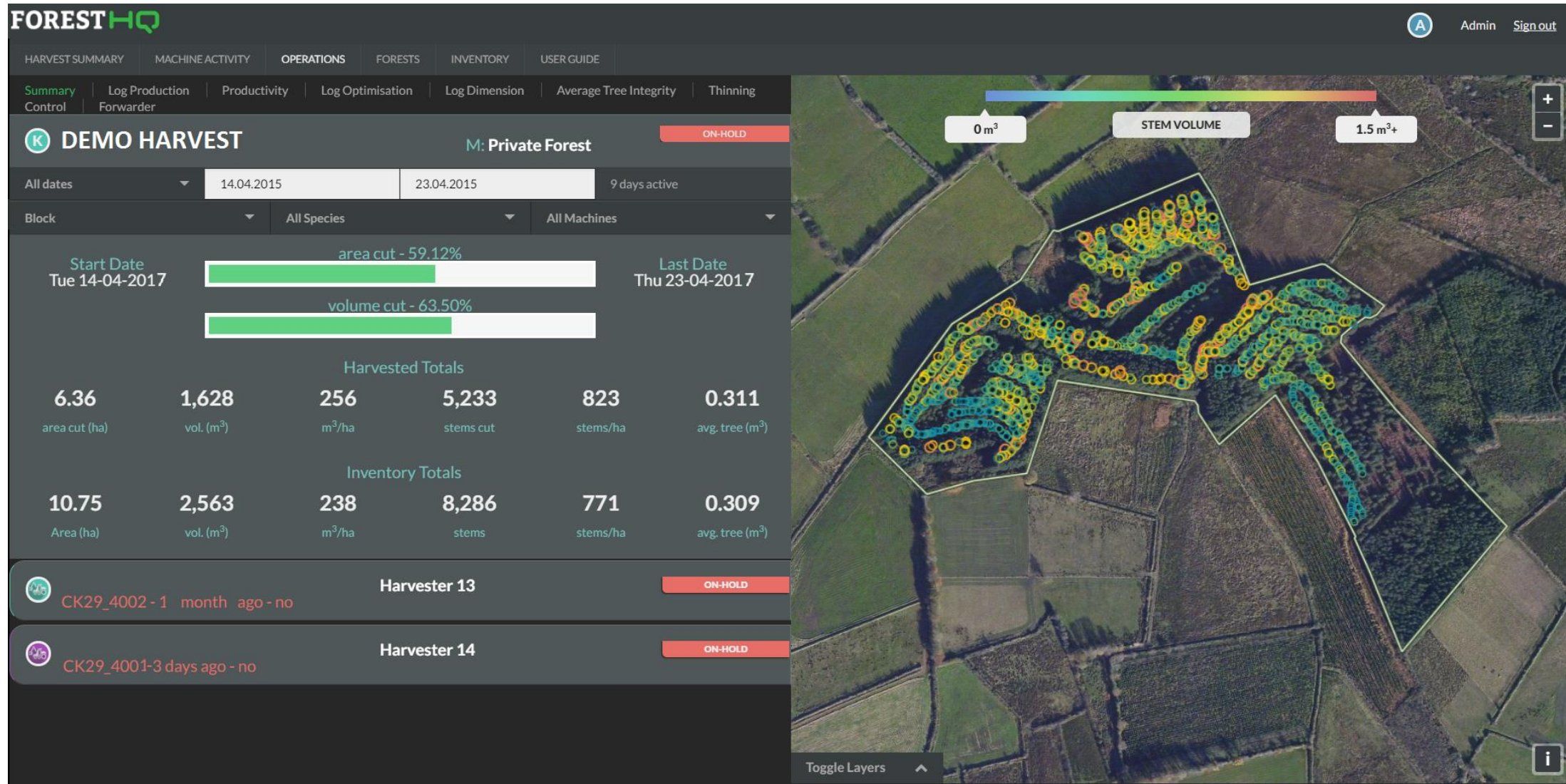
# Harvesting Monitoring. What do we try to solve?



FORESTHQ



# Harvesting Monitoring. What do we try to solve?





# Thank You

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