



# Satmodo – Timber Harvesting Technology

Forest Innovation Workshop - 26<sup>th</sup> April 2018

# 1. Background



## DEVELOPMENT

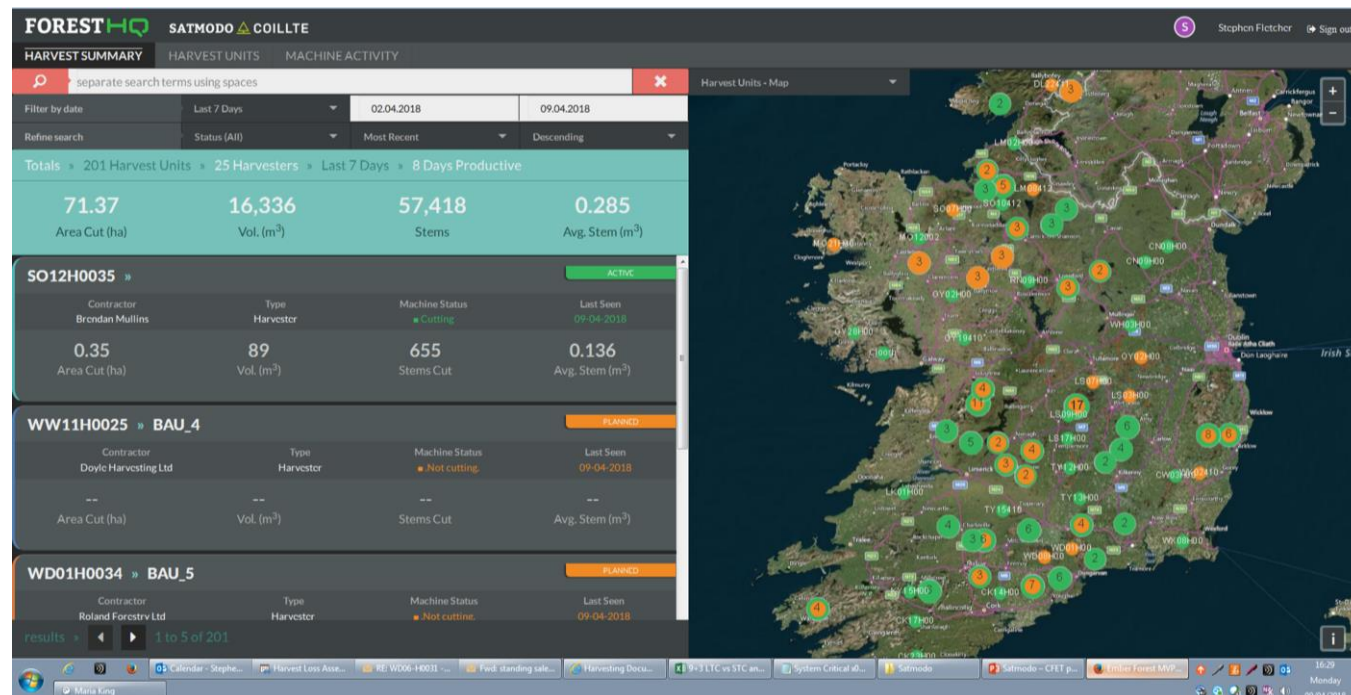
- **Single Telemetry Platform**
- **Partner – Treemetrics & European Space Agency**

## MACHINE

- **Onboard Tablet & Display**
- **Integrated with Harvester Data**
- **Satellite Based Comms**

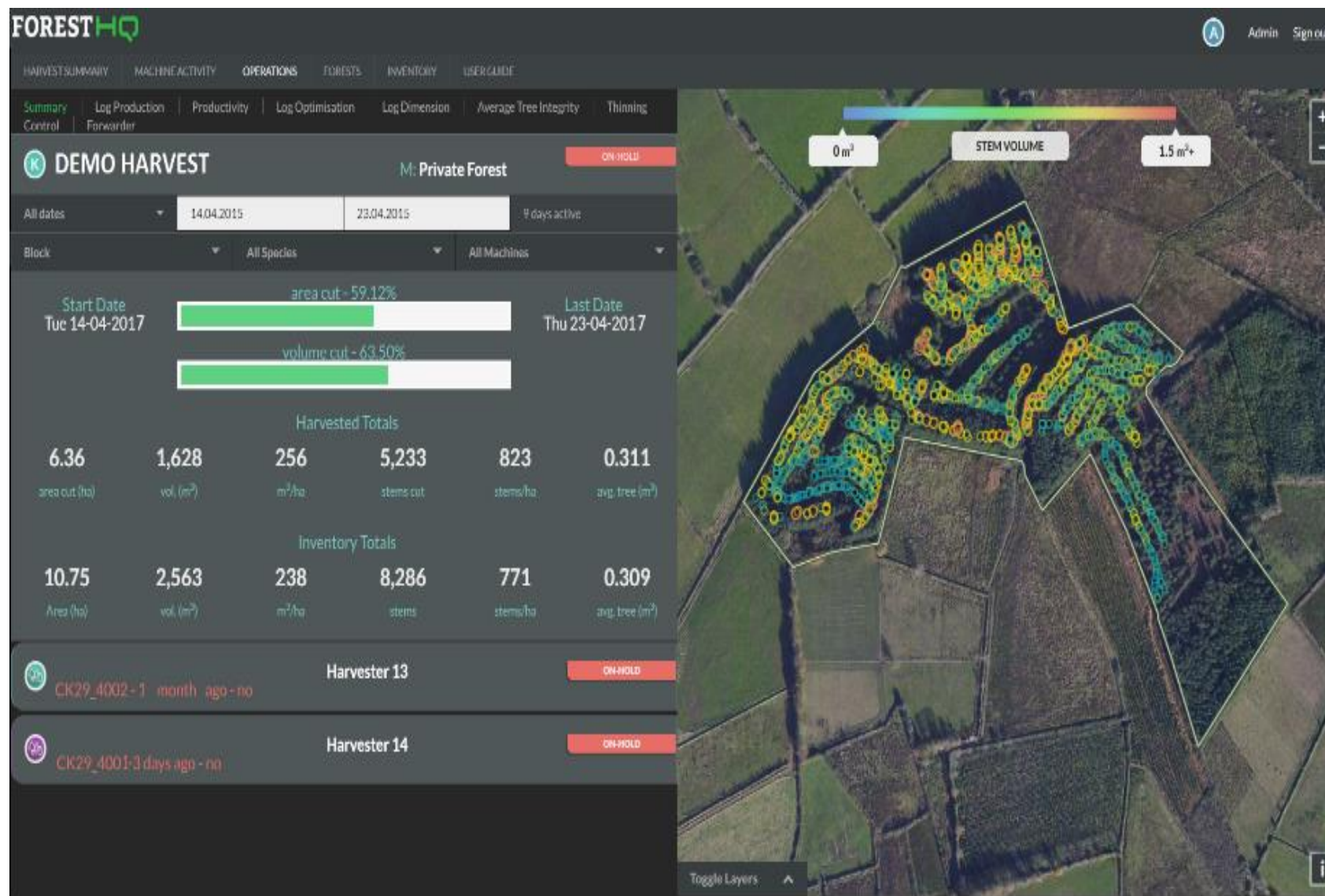
## OFFICE

- **Real Time Data**
- **Data Analytics**
- **Informed Decisions & Alerts**



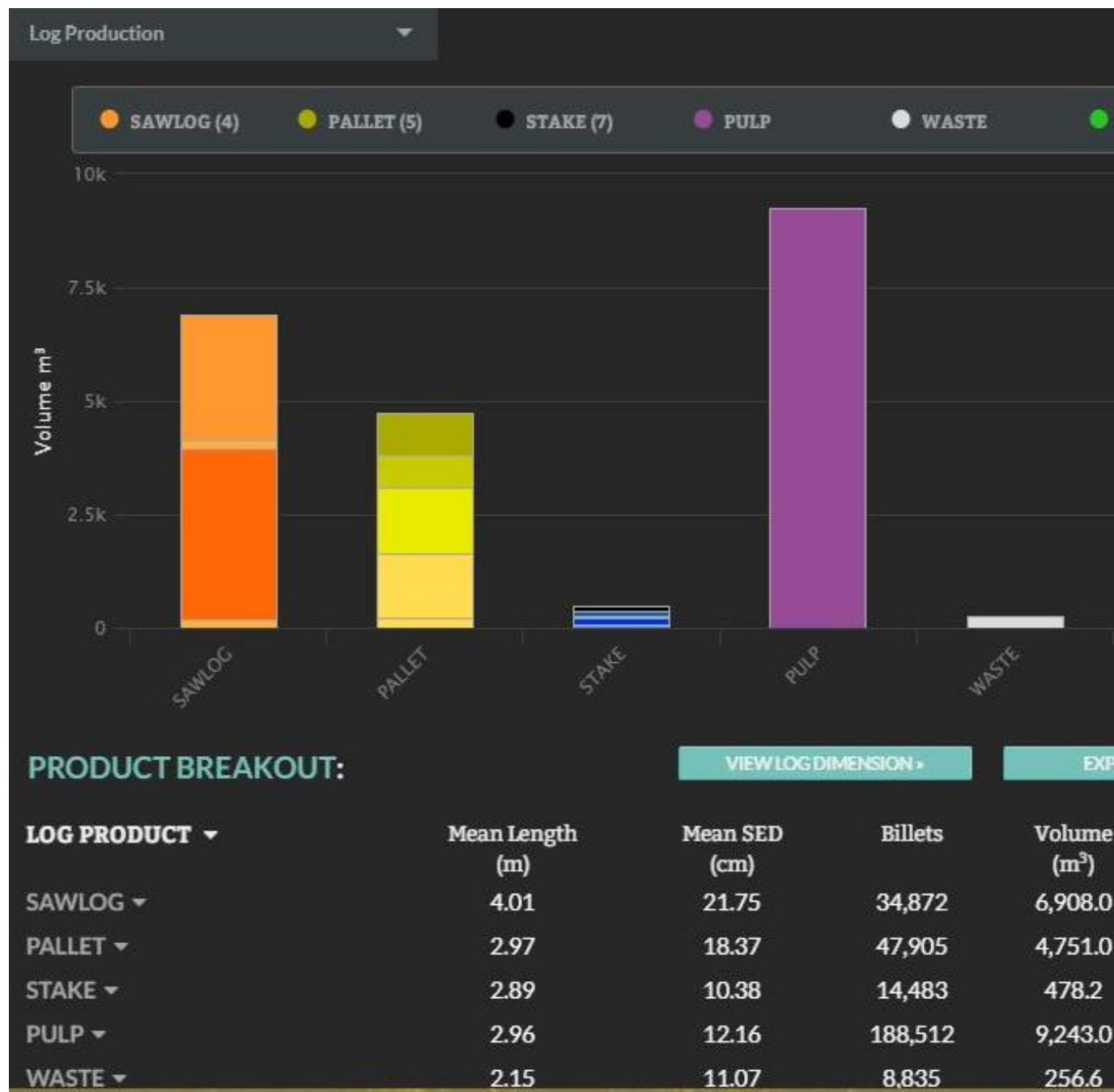


## 2. Site Management



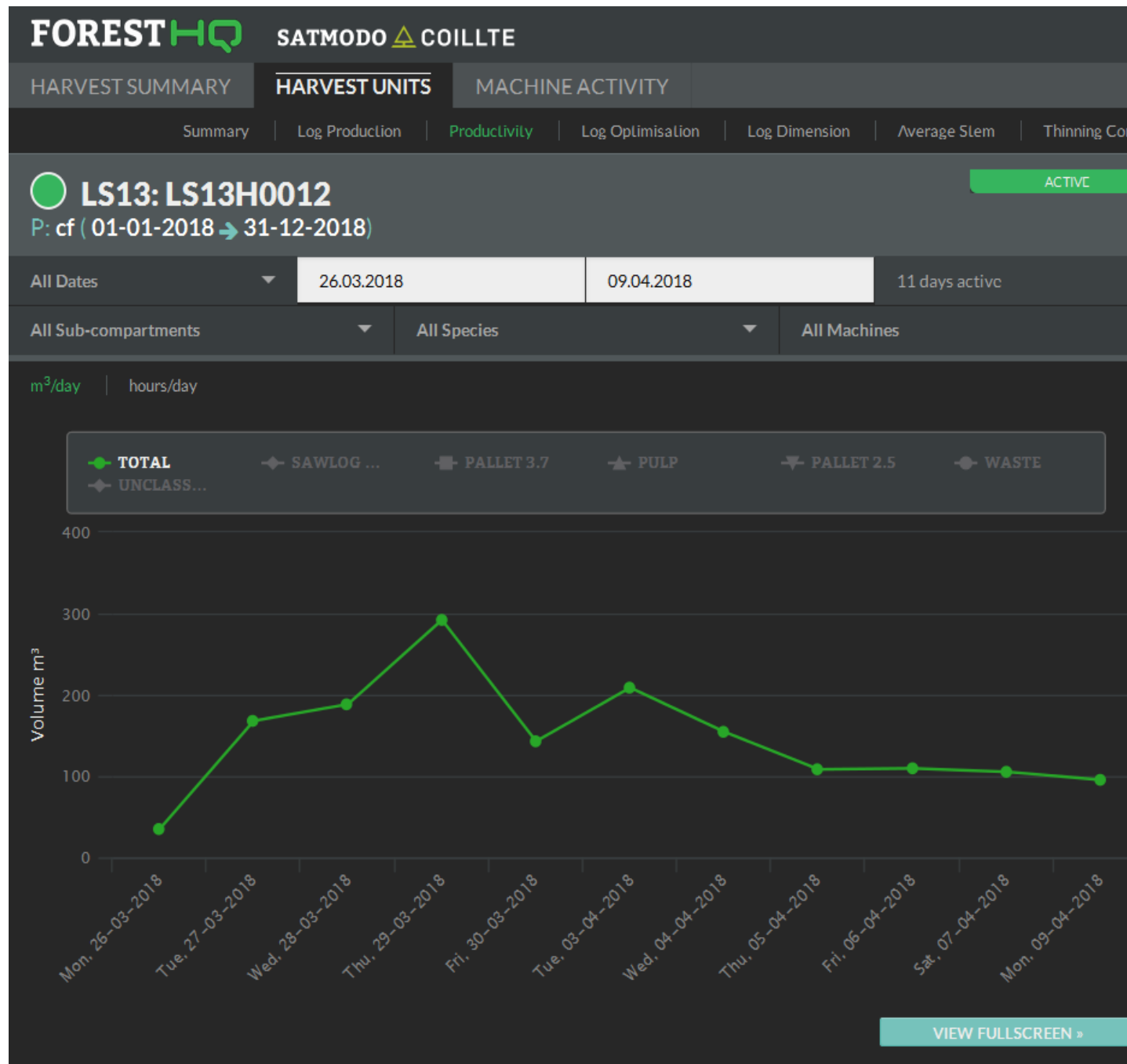
- **Desktop Management**
- **Progress at a Glance**
- **Location of Machines**
- **Alerts & Issues**
- **Ask the Right Questions**

# 3. Production



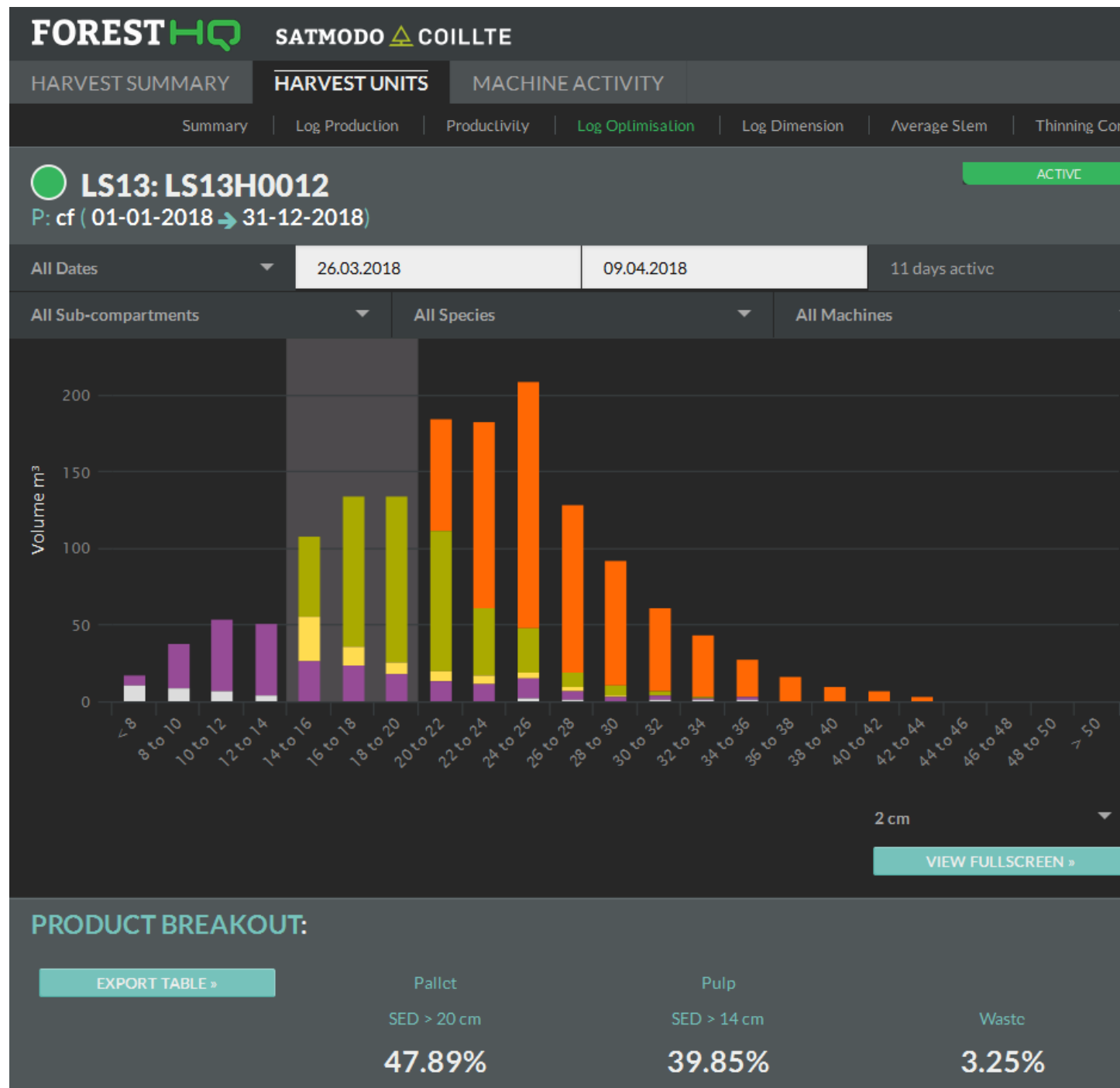
- **Live Production Data**
- **Order Fulfilment**
- **Forwarder Management**
- **Stock Measurement**
- **Platform – All Machines!**

# 4. Productivity



- **Machine Utilisation**
- **Daily Productivity**
- **Driver Working Time**
- **Fuel & Distance**
- **Cost & Efficiency**

# 5. Value Optimisation



- **Control Cutting Instruction**
- **Monitor Sawlog Downgrade**
- **Identify Optimal Products**
- **Drive ‘Bucking to Value’**

# 6. Thinning Control

FOREST

HQ

SATMODO

COILLTE

HARVEST SUMMARY

HARVEST UNITS

MACHINE ACTIVITY

Summary

Log Production

Productivity

Log Optimisation

Log Dimension

Average Stem

Thinning Control

LS13: LS13H0012

P: cf ( 01-01-2018 → 31-12-2018)

ACTIVE

All Dates

26.03.2018

09.04.2018

11 days active

All Sub-compartments

All Species

All Machines

Thinning Control

SUB-COMPA...	Inventory	Stems (#/ha)	DBH (cm)	Volume (m³/ha)	Thinning	Stems (#/ha)	DBH (cm)	Volume (m³/ha)
78096S_2	Pre-thinning	---	---	---	Thinning Target*	---	---	---
	Post-thinning*	---	---	---	Actual Removal	667	24.84	345
78096S_1_1	Pre-thinning	---	---	---	Thinning Target*	---	---	---
	Post-thinning*	---	---	---	Actual Removal	602	23.89	263

- **Constant Monitoring**
- **Tree Size & Stems Removed**
- **Improved Silviculture**
- **Post-Thin Inventory**
- **Post-Thin Map**

## 7. Benefits



**Increased Value Recovery (€500k)**



**Reduced Workload & Overhead Cost (€420k)**



**Improved Compliance (Safety & Environment)**



# Questions

