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NORWEGIAN INSTITUTE OF
BIOECONOMY RESEARCH

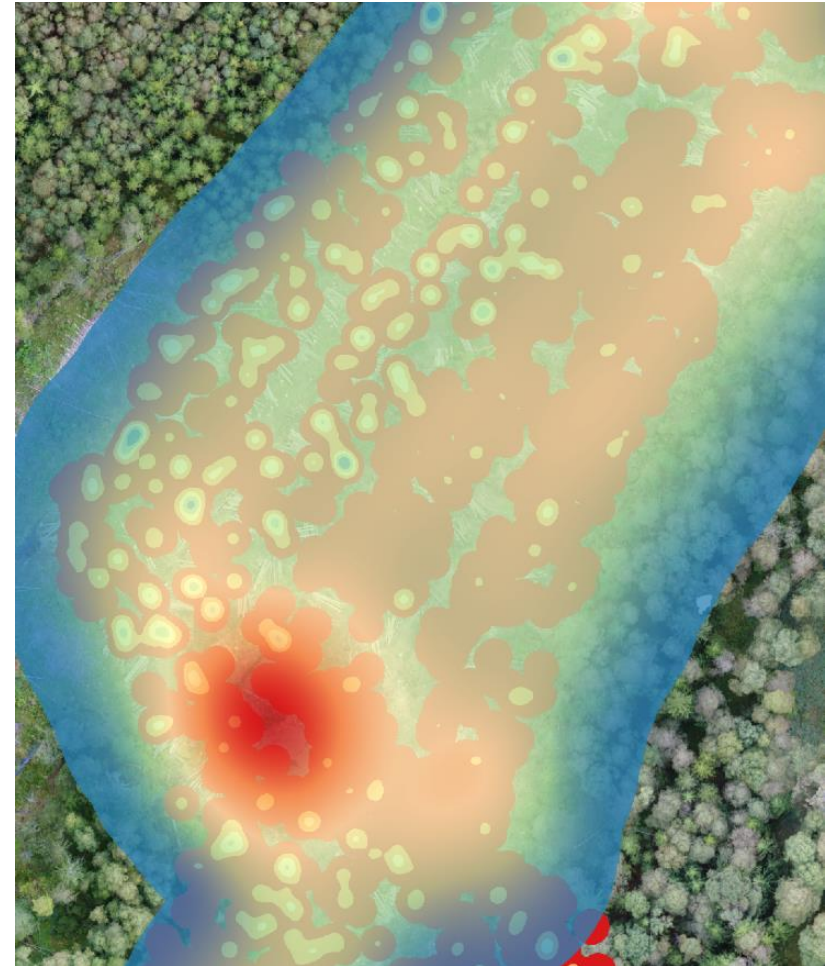
Harvester position data how precise is it ?

Bruce Talbot

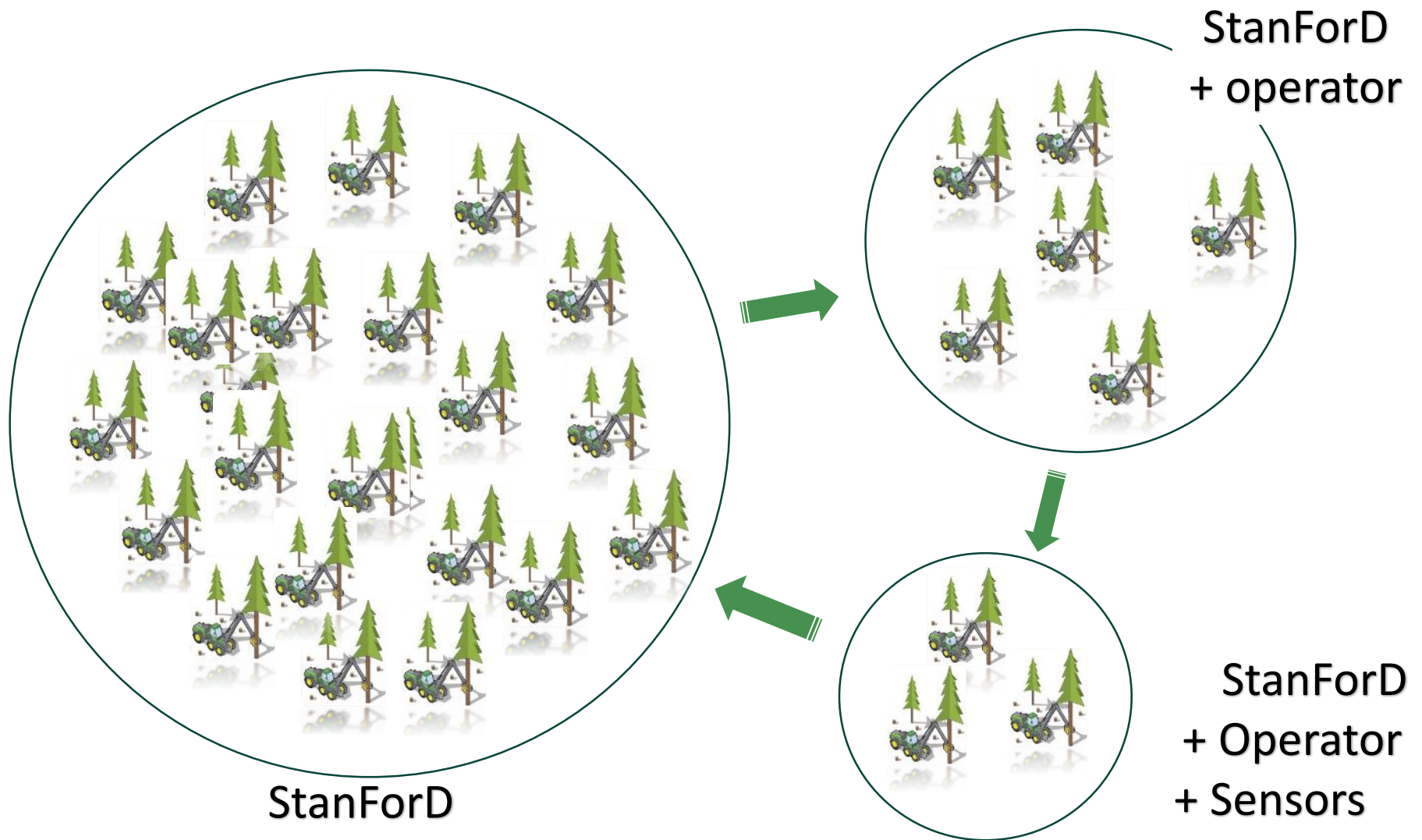
Division for Forestry and Forest Resources

Motivation

- Big data implies automated data capture
- Harvesting head calibration provides estimate of accuracy, but estimates of associated positional accuracy are limited
- Estimation of accuracy need in mapping location of rot in the stand



PRECISION Data collection strategy

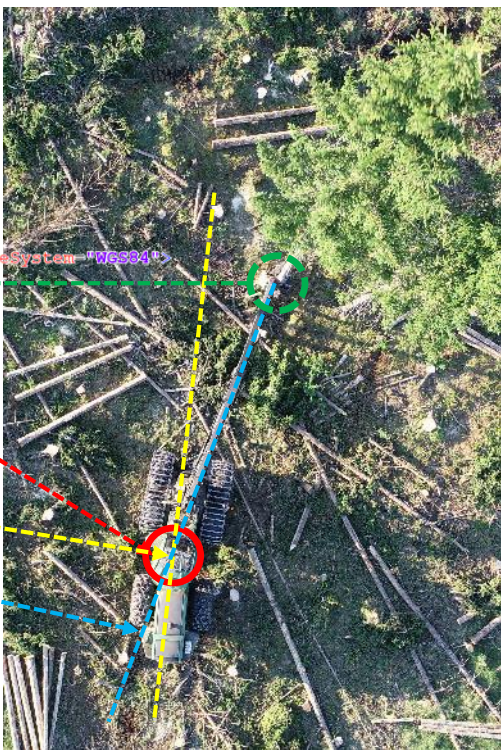


Improve base machine position for calculating head position estimate

change.log 931test.hpr

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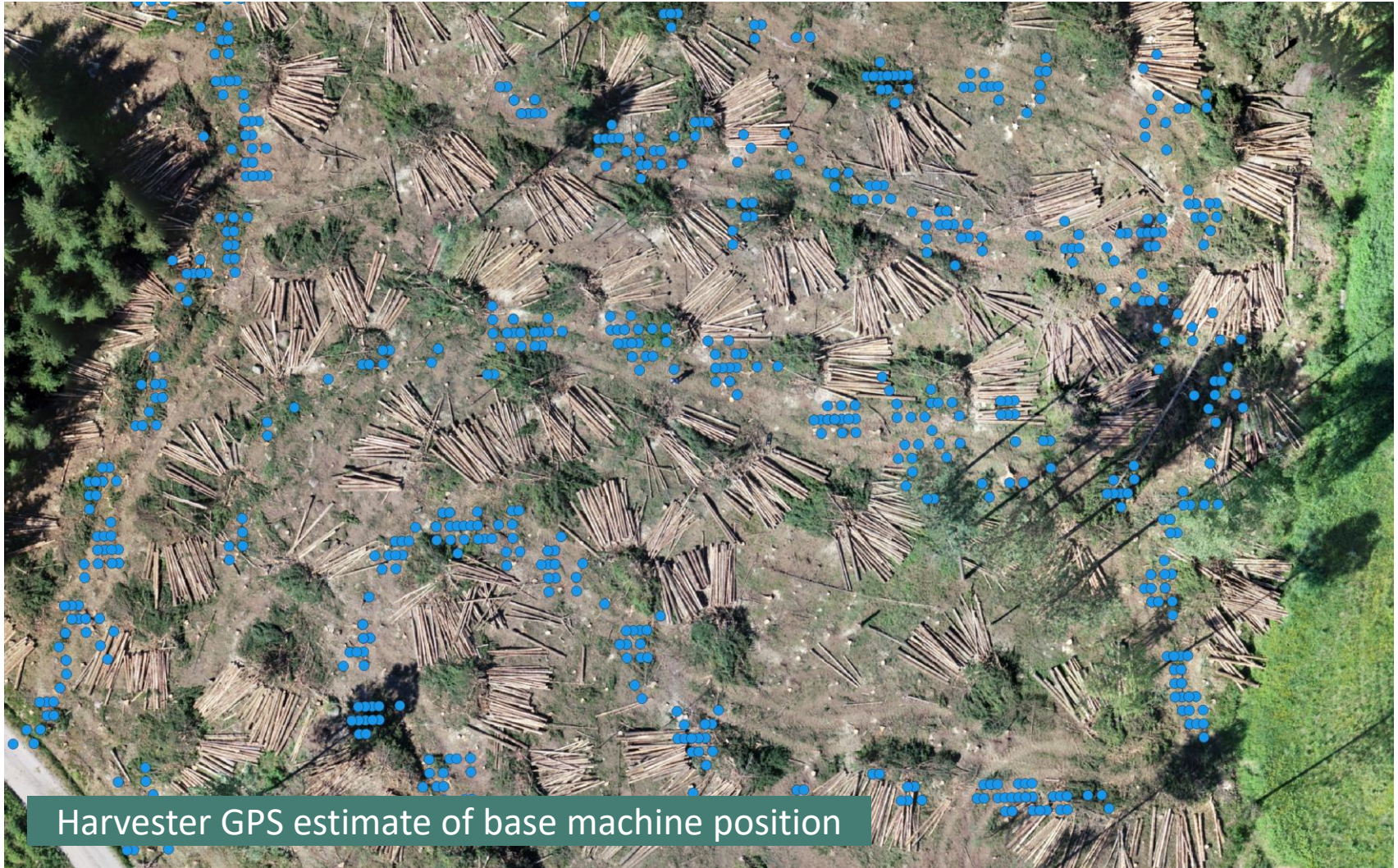
Comparison with RTK GNSS



- Topcon GR5 with SIM card for real-time correction
- Comparison 1: Standard GPS vs centreline
- Comparison 2: Standard GPS vs RTK

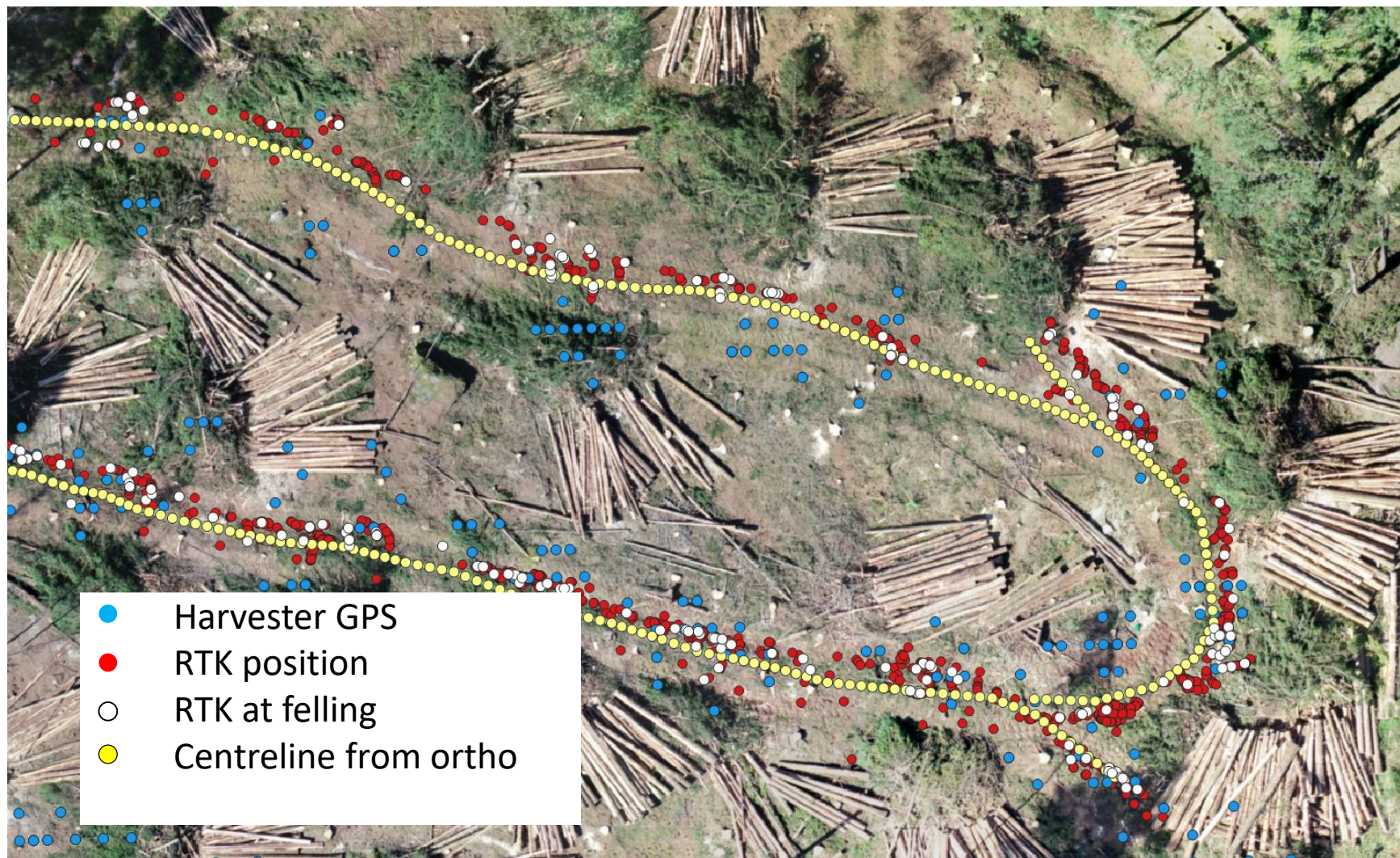


Field evaluation

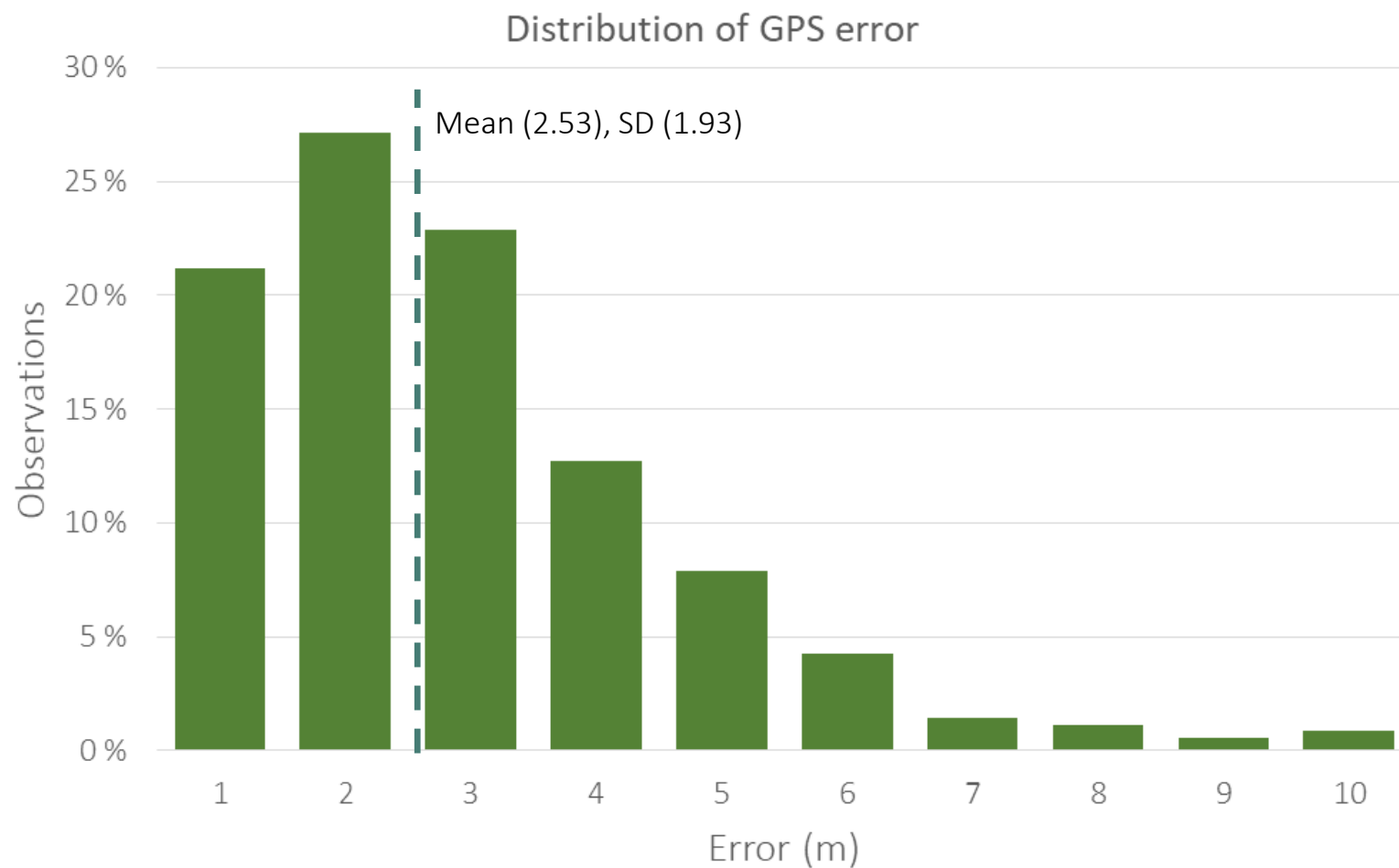


Harvester GPS estimate of base machine position

Field evaluation

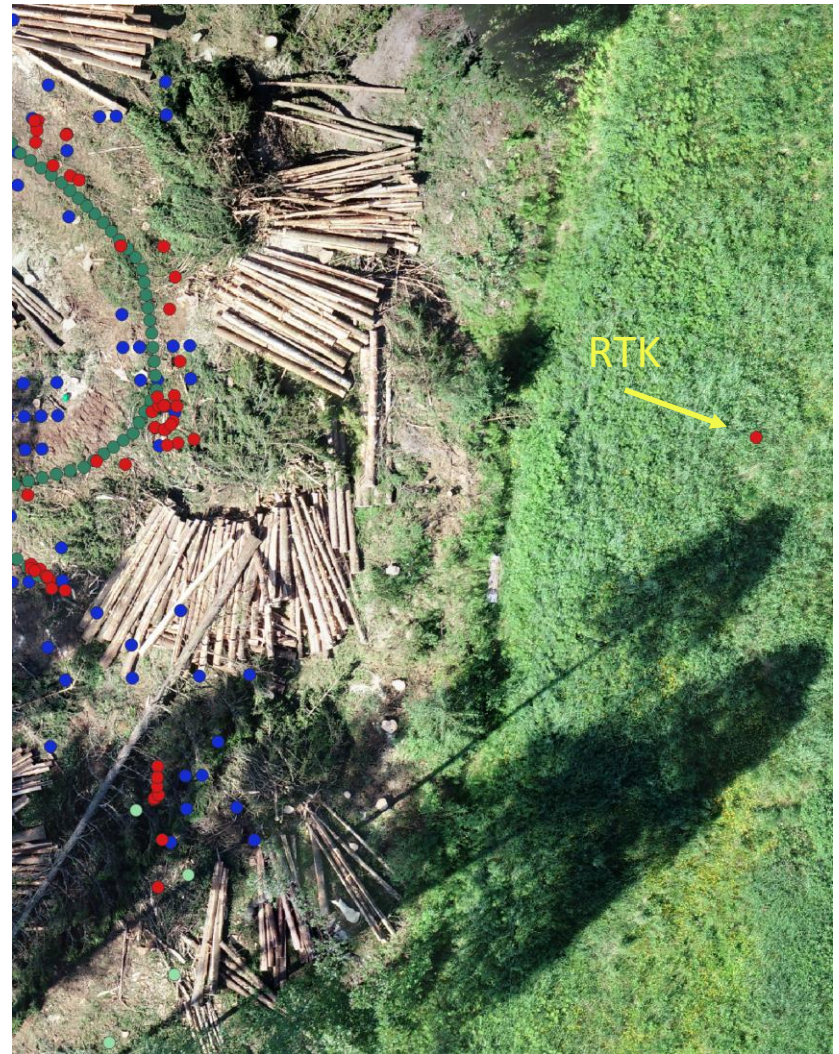


Results



Discussion

- Estimates were much more precise than expected – possibly due to stand and stand aspect
- Visible machine trail on orthophoto provides a good reference for adjusting estimates
- Longer term testing in varying topography needed to provide reliable estimates





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Acknowledgements

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