Wireless Treetap

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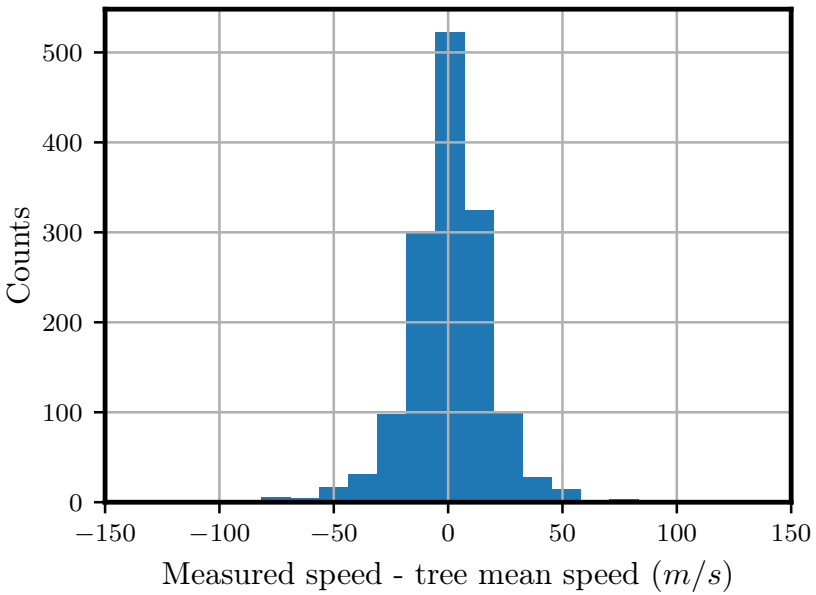
Field trial

- The system was tested on 144 *Pinus radiata* clones of age 5 years in Rotu forest (Northland).
- Each tree was measured on two sides with both old and new Treetap devices.
- RPBC also performed resonance and resistograph measurements on the trees.

Results

Pros

- System functioned for ≈5 hours of sampling.
- Use of smartphone was beneficial.
- System is about the same speed to use as old Treetap.



Results

Cons

- Some minor connection issues and occasional app crashes.
- Probe length is an issue.
- Devices probably need a carry case.
- Robustness is the greatest concern. After ≈1500 taps we have
  - Cracking around clear plastic.
  - PCB popped out of grub screws.

Conclusions

- The system works well in a small scale trial.
- Not robust enough yet for commercial use.
- Two clear options to get this system to a field-usable state...
  1. Continue development of the probe case.
  2. Go back to a wired system.