

Watch those trees grow!

Detecting tree growth and drought responses in European forests



Trees move every day. Trees shrink during the day when internal water reservoirs are depleted, during the night trees grow as the water reservoirs are refilled.

This daily fluctuation is **the tree's heartbeat**. It provides a unique insight in the **amount of carbon stored** by the tree and the **tree water status**. Over time tree sensors have been developed to measure these fluctuations: **dendrometers**. Today different types of dendrometers are deployed all over Europe. **But do all sensors detect the same variations?**

During this MSc thesis we will **test and compare different dendrometers in controlled and real life conditions**.



What you see is
what you get?

We test dendrometers in **controlled climate conditions**. Is the sensor output what we would expect?



Equipping
forest trees

Trees are equipped with different dendrometers in the field. **Do signals deviate under real life conditions?**



Trees all
over Europe

Different dendrometers are deployed all over Europe. What are the **implication of our results for the international network?**