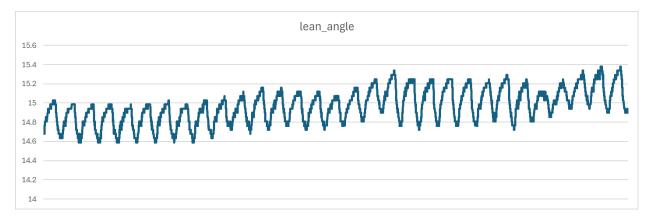


How you can use the accelerometer data to monitor trees for risk assessment, in particular real-time monitoring during dynamic load conditions.

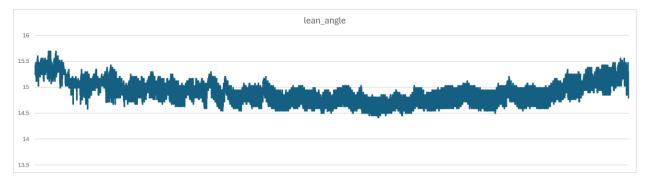
The ePlant TreeTag system is taking measurements every 5 minutes, and uploading the data to our server every 20 minutes. So, you get a very real-time view of what is happening at any moment. In the midst of a storm event, you could actively monitor the trees and see if any are moving in such a way that is significantly different than normal and take action accordingly.

The best way to show you this is the actual underlying data. Below is a random tree from one of our existing deployments in CA -- it happens to be an almond orchard -- which has been very steady. What is missing from these illustrations are the X/Y coordinates, but the top one is for one month vs the bottom is almost a year, so you can see the variation that occurs over time, with greater lean when the sun is lower in the sky during winter months.

Here is how much this tree "swayed" (change in lean) during Oct 2024:



And, here is a longer time series, showing all the measurements for this same tree for all of 2024, year to date. :



As you can see, you can easily establish a baseline expectation from the data, even over just the last few weeks, it has a clear "range" that is normal and expected, and not a cause for concern. So, if you were in the midst of a storm, you could quickly take the last few weeks for your trees, take a look at them, and quickly determine if any were swaying more than usual.