Here are a few initial steps for error checking and getting data ready for further analyses. First start with 2017 data, since this is probably the most complete.

1. Plot the 15-minute sap flux (Fd, g/m2/s) by time for each probe and tree. Each tree will have two probes. In addition, two trees in each plot will have a third probe labeled "deep". This will help you see how the probes are behaving over time and relative to each other. The deep probe should have a lower sap flux than the outer probes. Plotting the data over time will also help identify "gaps" where there is no data or bad data. These gaps will need to be filled on a probe-by-probe basis (more on gap filling later). There is a lot of data and plotting the data for each probe for the entire year would be a mess. I suggest breaking it down into weekly graphs. This will increase the resolution of the data and help you see problem areas.
2. Calculate sapwood cross-sectional area for the outer 20 mm of sapwood. I sent a file (Reynolds diameters) with tree diameters measured periodically in 2017. You will need to compute daily tree diameters. The easiest way to do this (for now) is to linearly interpolate between days. The diameters include the bark and need to be adjusted. Assume for now that bark is 15mm thick. There may be clone and tree size differences in bark thickness that you can correct later. Calculate sapwood area for the entire stem and for 20mm increments (0-20, 20-40, 40-60, ..., where 0 is the outer sapwood surface).
3. Calculate sap flow (Et, transpiration) as the product of sap flux and the sapwood cross-sectional area of the tree at the location of the probe. First, average the 15-minute sap flux data for the outer two probes and then multiply by the outer 20 mm cross-sectional area. This will give Et in g/s (g/m2/s \*m2=g/s) for the out 20mm of sapwood.
4. This value is only for the outer 20mm of sapwood. Sapflux decreases with depth into the stem. We can estimate the decline in sapflux using the data from the deep probes. Calculate sapflow for the deep probe as in step 3, but now using sapwood area for the 20-40mm depth. We can estimate sapflow for depths >40mm using a Gaussian function assuming peak sapflux occurs in the outer 20 mm of sapwood. I have attached a paper explaining this approach. This function can then be used to estimate sapflow for depths >20 mm in all of the trees. Ram may have other suggestions.
5. Sum sapflow for each 20 mm section across the sapwood to get Et for the entire stem cross-section. Then multiply each 15-minute Et reading by 900s (Et per 15 minutes) and then sum over the day (or when PAR>0). This will give you Et per tree per day. It will be a big number, so divide by 1000 to get kg H2O/day. Typical values should range between 10 and 70 Kg/day.
6. Once you have daily Et, you can start looking at clone and spacing effects, calculate canopy stomatal conductance, and examine relationship with environmental variables.