



Sap Flow: Infrastructure and Data Handling

PINEMAP 2013 Annual Meeting Field Tour
Tier III site, Taliaferro County, GA

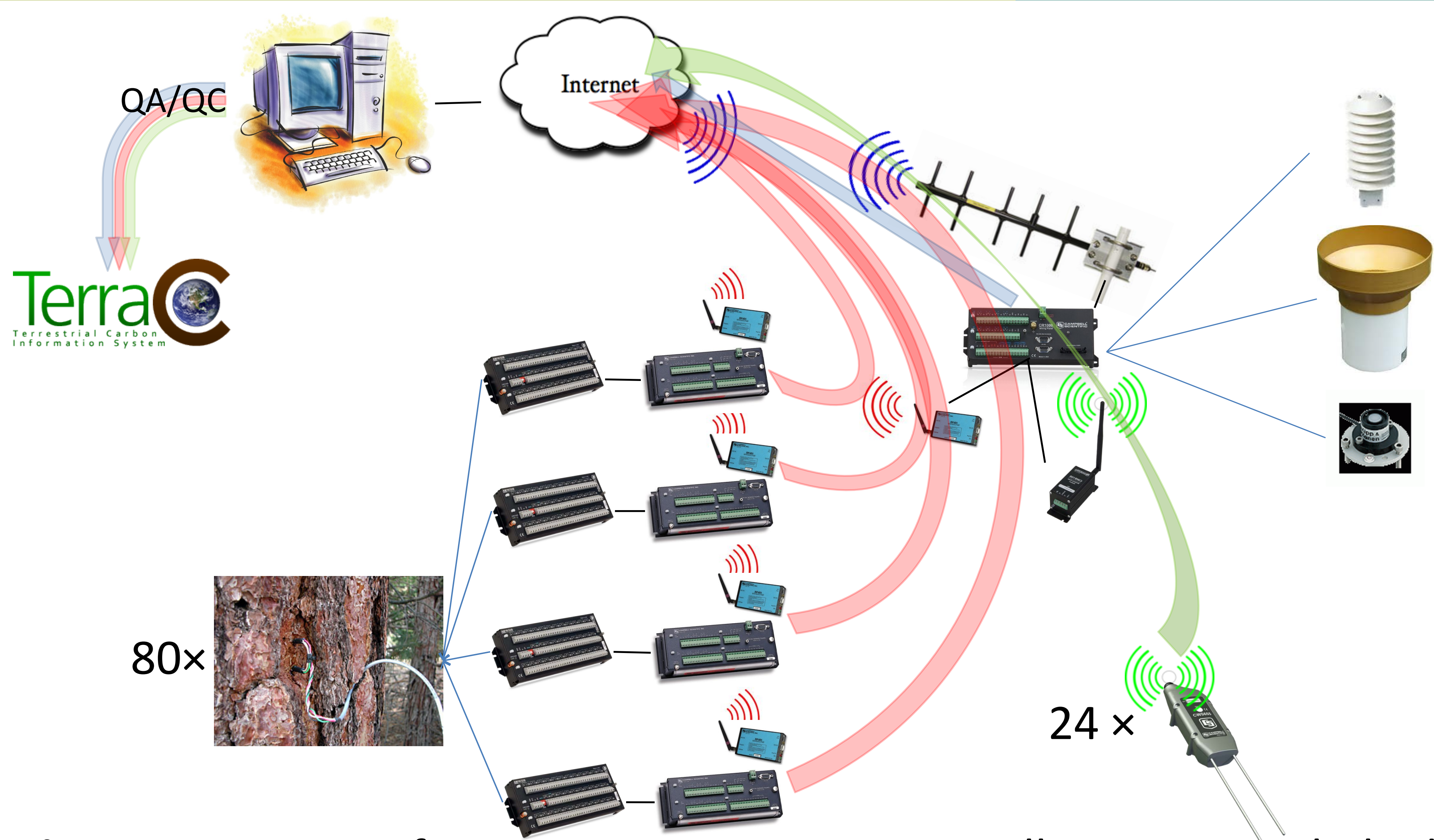


Figure 1. Sensor infrastructure at Tier III sites. All sensors are linked through phone and radio communication to the central monitoring system and downloaded daily. Reports and alarms of sensor malfunction are posted on the web and e-mailed to site personnel.

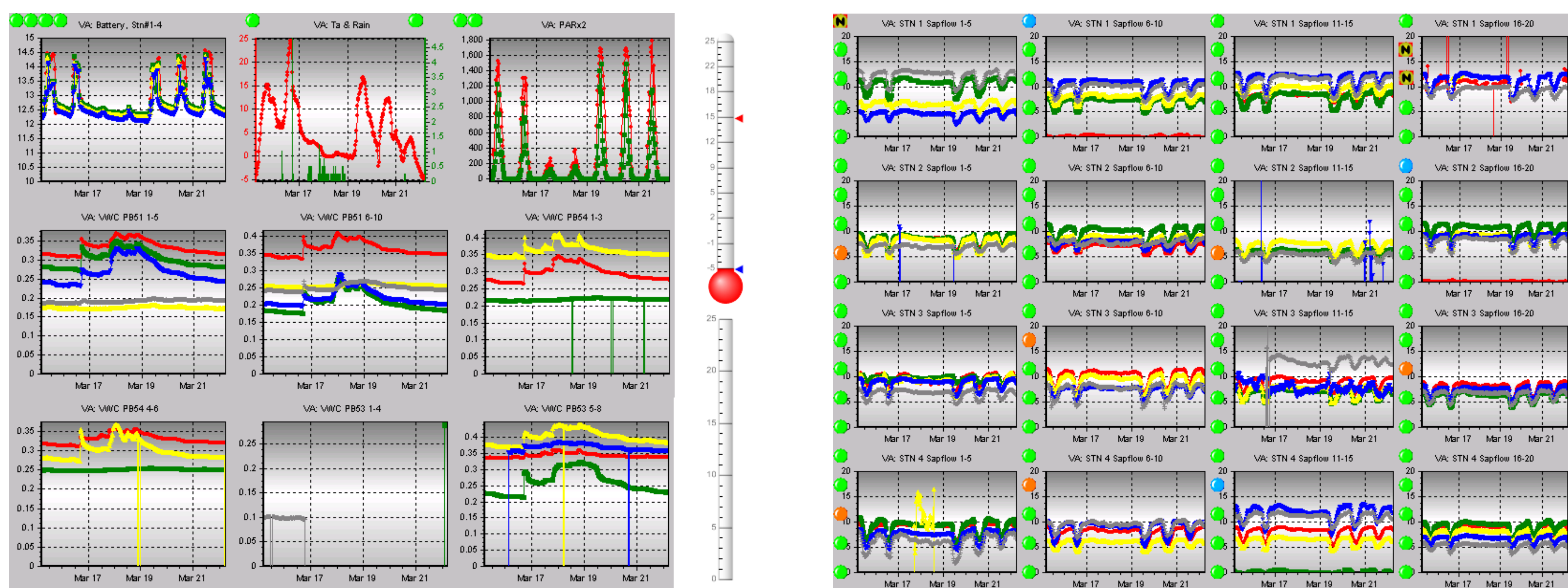


Figure 2. A set of sample reports (VA Tier III site). Key parameters are graphed for the past week. Alarm 'lights' indicate the condition and error type of each sap flow probe.

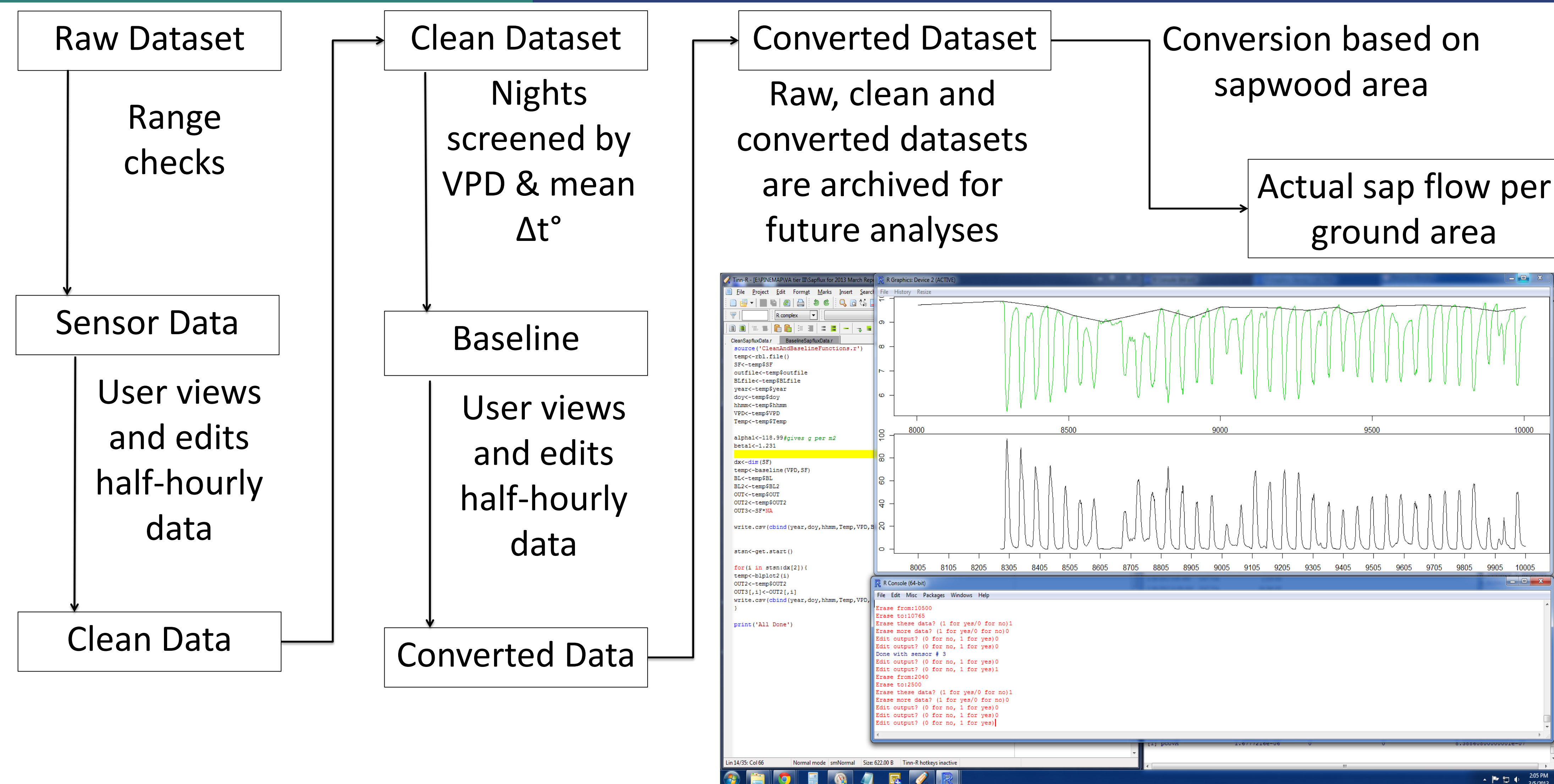


Figure 3. Flow diagram of key steps in sap flow data processing, and a screen capture of the R software (written by E. Ward, NCSU) used to baseline the data.

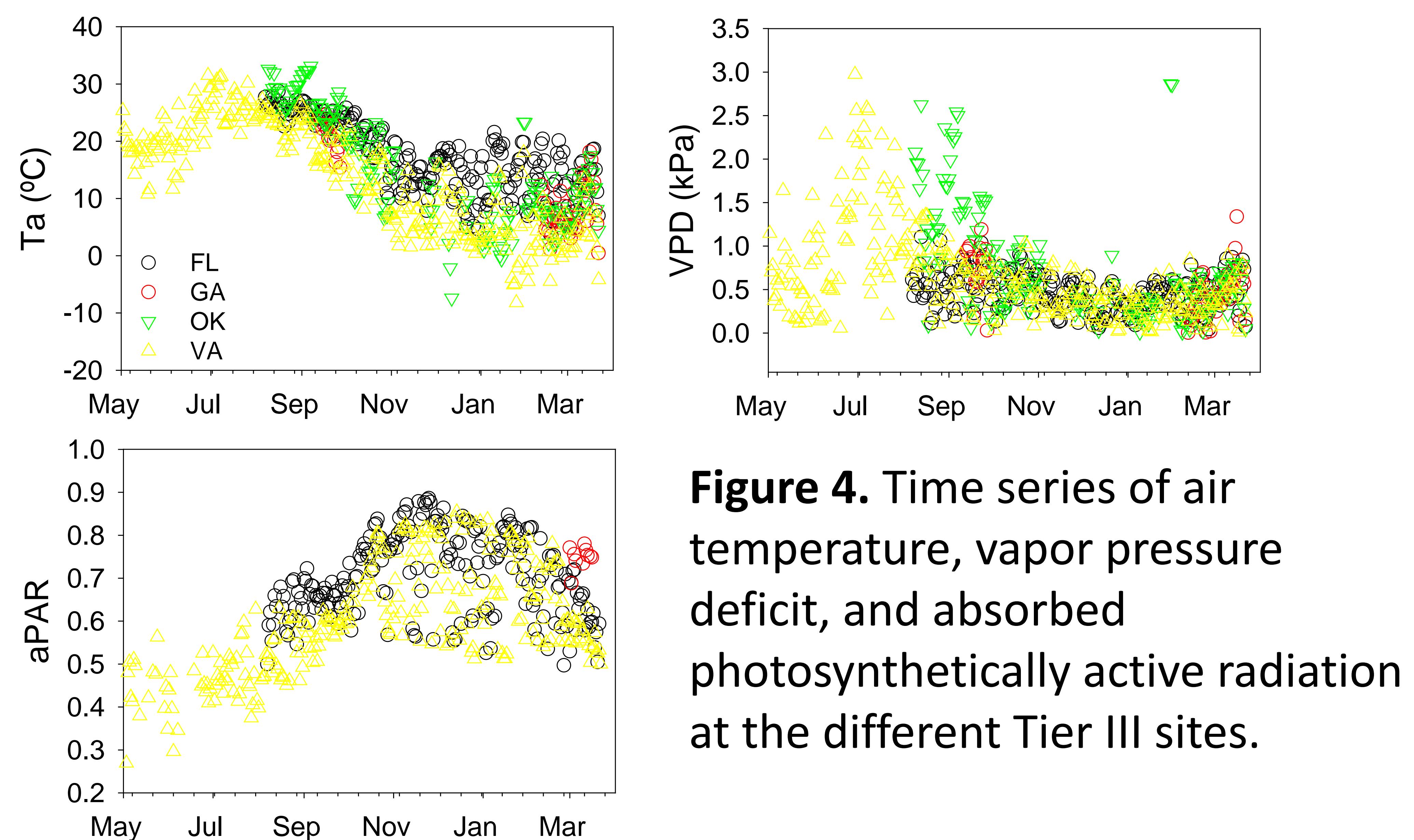


Figure 4. Time series of air temperature, vapor pressure deficit, and absorbed photosynthetically active radiation at the different Tier III sites.