



AIMS

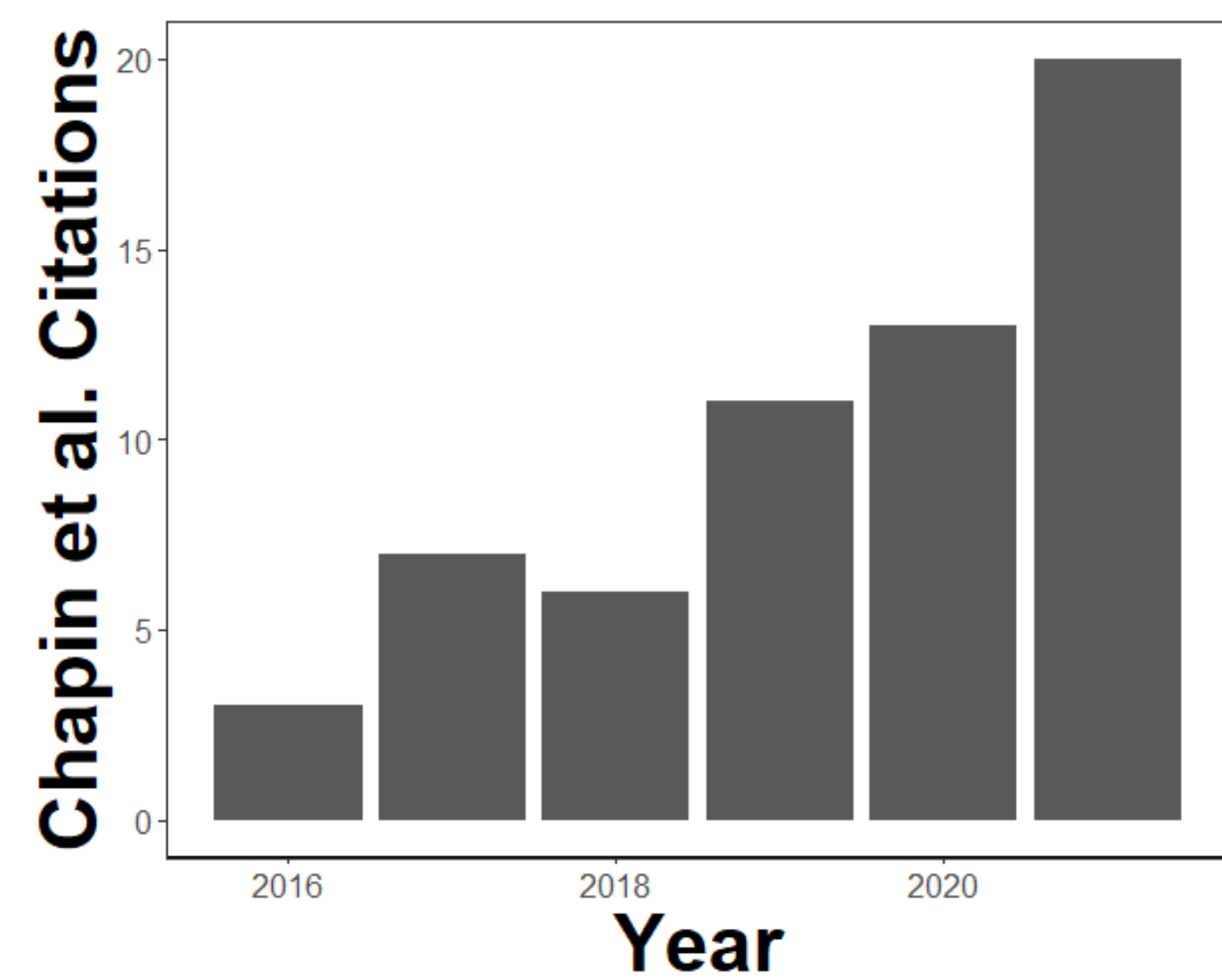
STICr: An open-source package and workflow for processing and analyzing stream intermittency data



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Stream intermittency (STIC) loggers

- Extent of non-perennial streams continues to increase
- High spatiotemporal records of flow intermittency are crucial going forward
- Chapin et al. (2014) created Stream Temperature, Intermittency, and Conductivity (STIC) by modifying light data logger to record water presence/absence

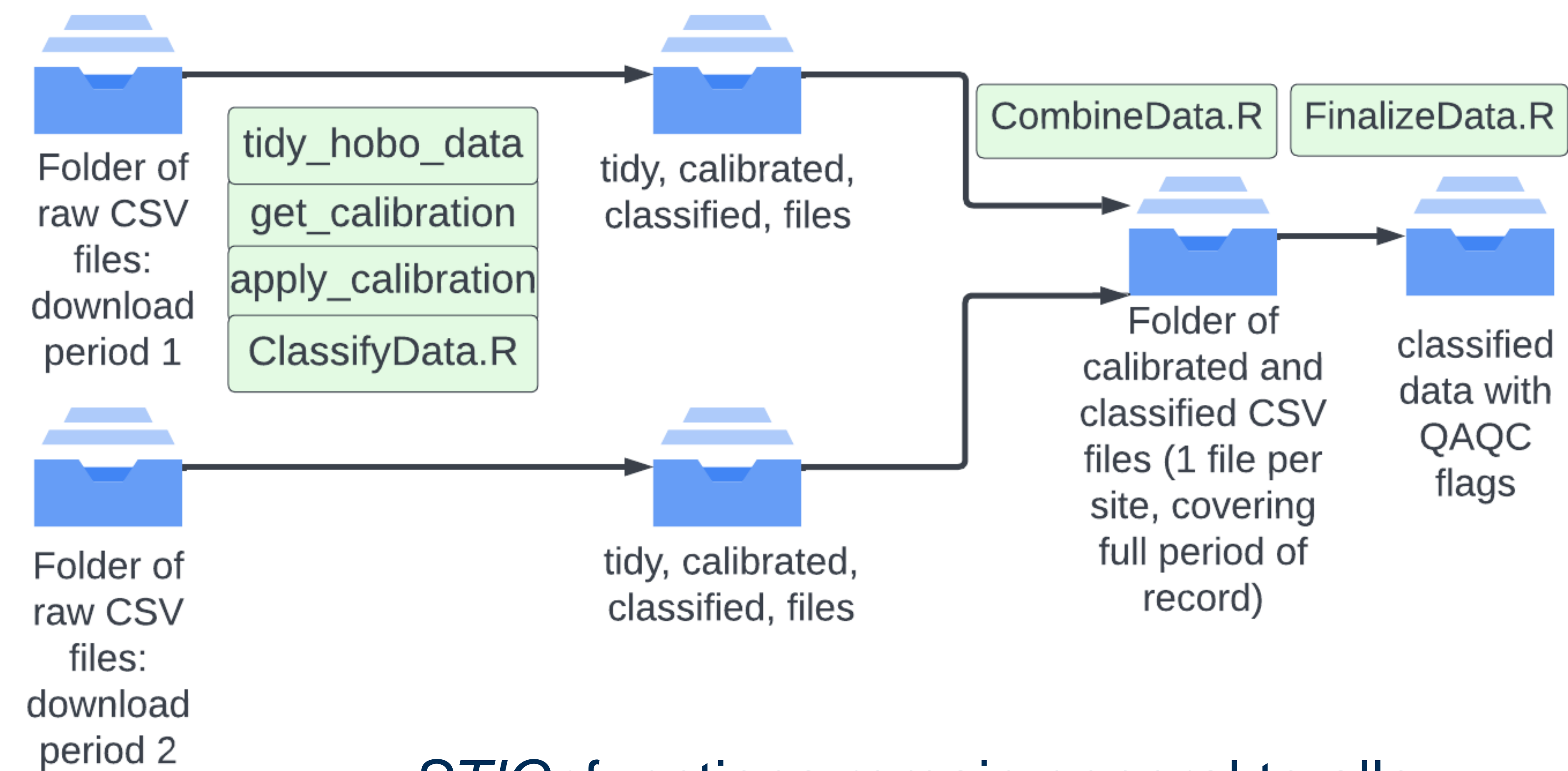


Key package objectives

Create reproducible foundation for STIC processing:

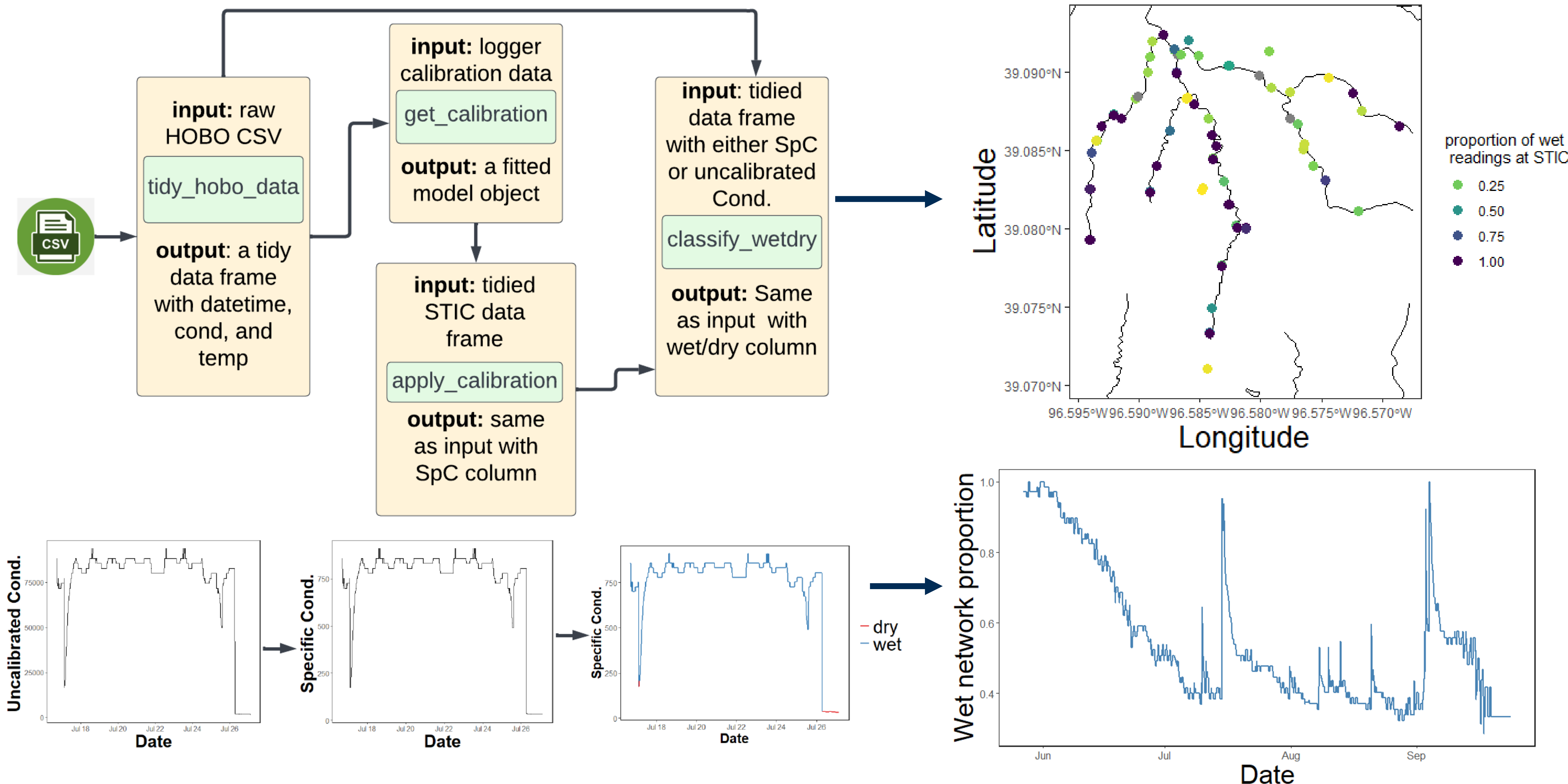
- (1) "Tidy" the raw data files
- (2) Convert raw conductivity measured by the sensors into specific conductivity (SpC)
- (3) Generate binary "wet/dry" data, indicating the presence or absence of water at the sensor at each timestep

Use of package functions in a reproducible project workflow



- *STICr* functions remain general to allow incorporation into project specific workflows
- For the AIMS project, records from over 200 loggers must be organized and processed for a multiyear period
- Focus on inter-site and region comparability
- Project specific naming and QAQC conventions

STICr package description and examples



Future package development goals

- *STICr* package is first step, but functionality can be expanded
- Create additional classification options for the *classify_wetdry* function
- Add functions that include plotting functionality
- Add functions that generate summary statistics for both individual loggers and groups of loggers

Acknowledgements

This work was supported by the National Science Foundation under EPSCoR grant #2019603. We appreciate feedback on *STICr* code and use from Naomi Anderson, Charlie Bond, Sarah Godsey, and Thane Kindred.