| Shell scripting control layer | Set environment variables and paths | Fetch processing repository updates | Spawn parallel R child processes for each site | Monitor processes for completion | Build air.utah.edu static components | Push static web components to webserver |
|-------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------|-----------------------------------------|
| | | | | | | |
| Source R global dependencies and configurations | Set working directory | Load external libraries | Load functions from /src | Load config files from /config | | |
| <u> </u> | | | | | | |
| Initialize processing | Create site specific lock file to indicate active processing | Check if bad data file has been modified since last run | Ensure raw, qaqc, calibrated directory structure exists | Sync new data to raw data archive | | |
| | | | | | | |
| QAQC new data | Adapt columns to common conventions | Apply manual QAQC definitions from bad data files | Apply automated QAQC definitions | Save to qaqc data archive | | |
| | | | | | | |
| Calibrate new data | Read in necessary files for bracketing new data calibrations | Apply calibrations to atmospheric measurements | Apply pseudo- calibrations to reference measurements as diagnostic | Save to calibrated data archive | | |
| | | | | | | |
| End processing | Remove lock file to signify completion | | | | | |