## Downsizer Automation

* Write an R script that automates the copying, pasting, formatting, transposing, row and column deletion for the output CSV generated by Downsizer; generate a list of the individual actions and convert each action to a line of R code

## Automating the RAWS Download

1. Pick a station to download data from
   1. Select *Daily Summary Time Series* option in left pane
   2. Raws stations:
      1. Hawkeye: <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCHAW>
         1. Download temp and precip
      2. Lyons Valley: <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCLYO>
         1. Download temp and precip
      3. Santa Rosa: <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCSRS>
         1. Download temp only
      4. Boonville: <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCBOO>
         1. Download precip only
2. [RAWS USA Climate Archive State Selection Map (dri.edu)](https://raws.dri.edu/)
3. Save RAWS weather station links in [Raws\_Stations.CSV](https://cawaterboards.sharepoint.com/DWR/SDA/Shared%20Documents/DWRAT_DataScraping/InputData/Raws_Stations.csv)
4. Repurpose your RSelenium scripts to download the Raws station data one at a time
   1. Learn how to download data from a static webpage
   2. Repurpose this R script that relies on Rvest for your weather stations:
      1. "C:\Users\palemi\OneDrive - Water Boards\SDS\Request 001 - DWRAT Automation\Scripts\scraper\_jb\_mo.R"

## Automating the CIMIS downloads

1. Separate temperature and precipitation stations
2. <http://ipm.ucanr.edu/WEATHER/index.html>
3. CIMIS stations
   1. Hopland FS #85 is out of service, so we fill in the data with -999
   2. Windsor #103, just precipitation
   3. Sanel Valley #106, just temperature
   4. Santa Rosa #86, just temperature

**I added these subfolders to the original RR\_PRMS folder provided by Muhanned**

* Folder for RAW raws data: C:\RR\_PRMS\PRMS\input\data\_file\_prep\downsizer\_raw\_data
* Folder for CIMIS raw data: C:\RR\_PRMS\PRMS\input\data\_file\_prep\CIMIS\_raw\_data

**Folder setup for Automation Attempt**

* First, run the model completely manually in the RR\_PRMS folder
* Create a separate top-level folder in the C Drive, RR\_PRMS\_Test for your automation attempts with R

## Automating the Temperature Forecast Downloads

|  |  |
| --- | --- |
| Station | URL |
| HEAC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=HEAC1> |
| UKAC1 | [CNRFC - Weather - Temperatures - Basin Temperature Plots - UKAC1 (noaa.gov)](https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=UKAC1) |
| CDLC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=CDLC1> |
| LSEC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=LSEC1> |
| BSCC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=BSCC1> |
| LAMC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=LAMC1> |
| SKPC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=SKPC1> |
| SSAC1 | <https://www.cnrfc.noaa.gov/temperaturePlots_hc.php?id=SSAC1> |

## Automating the Precipitation Forecast Downloads

<https://www.cnrfc.noaa.gov/data/cnrfc_qpf.csv>