**Looking at Water Standards of Finished Reactor**

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When looking at water standards for a reactor:

* First reduce the reactor you want to look at
* Then you can look at pdf and csv files for each water standard that was run:
  + R--\_4box\_WaterStd.pdf --- you can look at each water standard for this reactor
    - Questions to ask when looking at this pdf:
      * Does the mean of each water standard look good or is it off?
      * Are there a lot of outliers with this water standard?
  + stdSummary\_box.pdf --- you can look at how the water standards have changed over time/changed within in reactor
    - Questions to ask when looking at this pdf:
      * Have the water standards changed with this reactor compared to the previous reactors and the mean values created?
      * Should this water be run more/less often on future reactors
  + R--\_corData\_basic.csv/R--\_summaryStd\_linear (whichever you choose to use for the data reduction would be better to look at) --- you can look at the D17O and d18O for each sample/standard run, look into why standards on this reactor are off, or why they are going great
    - Questions to ask when looking at this pdf:
      * Is the d18O between reps consistent?
        + If not, can you tell why? (might be helpful to refer to lab notebooks, or look in the raw excel spreadsheet - did the standards/samples change through the reactor lifetime?)
      * Is the D17O between reps consistent?
        + If not, can you tell why? (might be helpful to refer to lab notebooks, or look in the raw excel spreadsheet - did the standards/samples change through the reactor lifetime?)

Things that can be improved:

* We could make a csv file that gives the averages of the samples/standards within that reactor. (We have one that compiles all the reactors and gives an average for each sample/standard, but it would be nice to have one for each reactor as well).
* The box and whisker plots would list the mean value for each sample
* Could make a pdf like the stdSummary\_box.pdf but instead of all of the different standards, it only contains the water standards to clean the pdf up a little bit and make it more digestible to read