

**COAT DATA MINING OF THE  
LTMS AVERAGE REFERENCE DATA FILE  
&  
11 TEST MATRIX OPERATIONAL DATA  
FILE**

**Condensed Summary (plus one new slide)**

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# OBSERVATIONS FROM THE DATA

Removed many slides telling us less.

Two labs did report very similar MicroMotion RTD temperatures yet had very different Yi results.

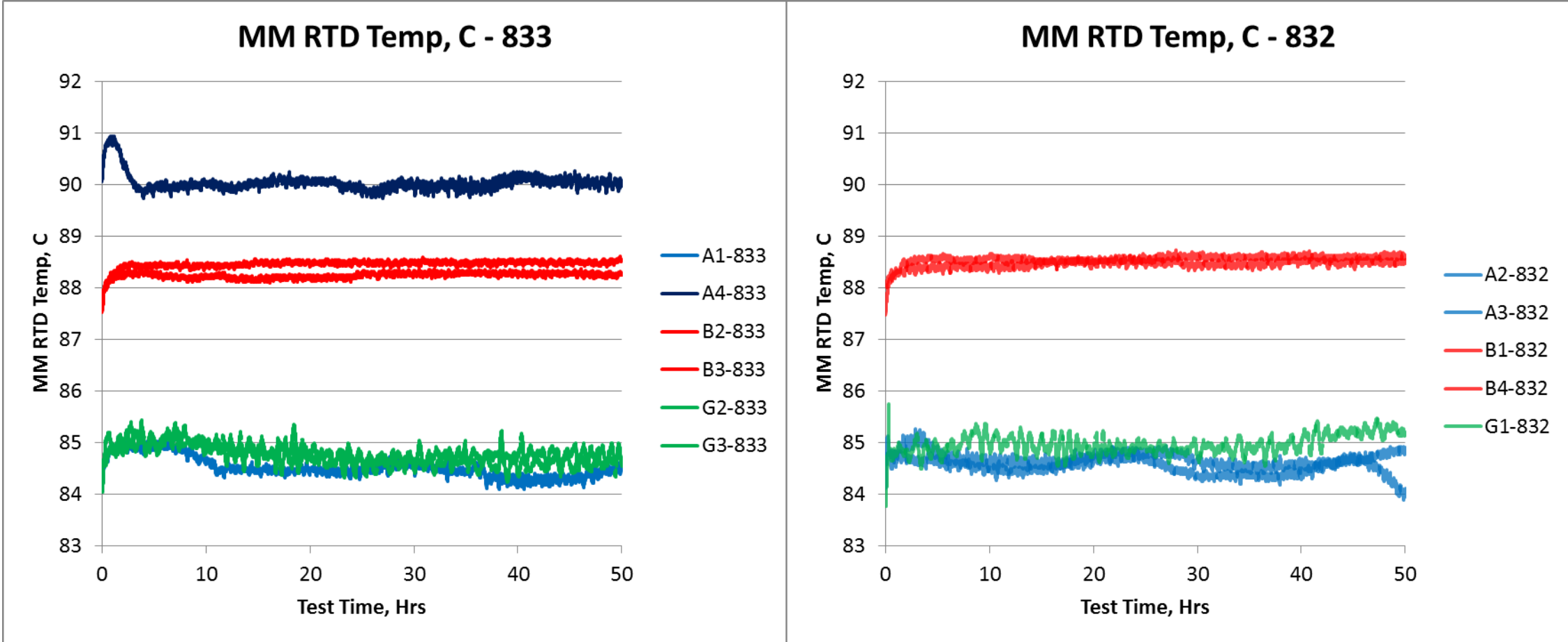
Controller positions and MM Sample Pressure Delta still important.

Noticed groups of similar controller positions within a lab over time.

A new relationship became apparent:

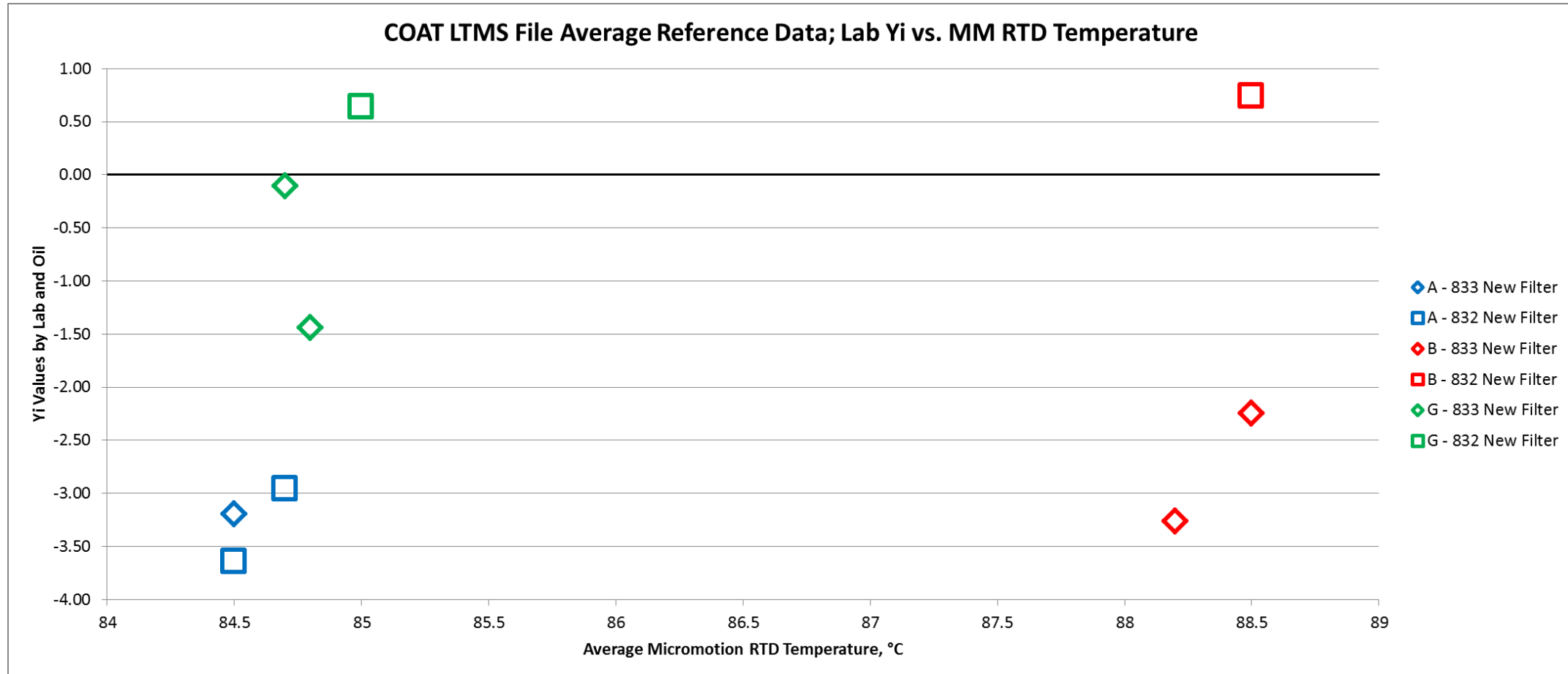
- Pressure Controller Position vs. Micropump Controller Position

# MICROMOTION INTERNAL TUBE TEMPERATURE BY RUN OVER TEST HOURS

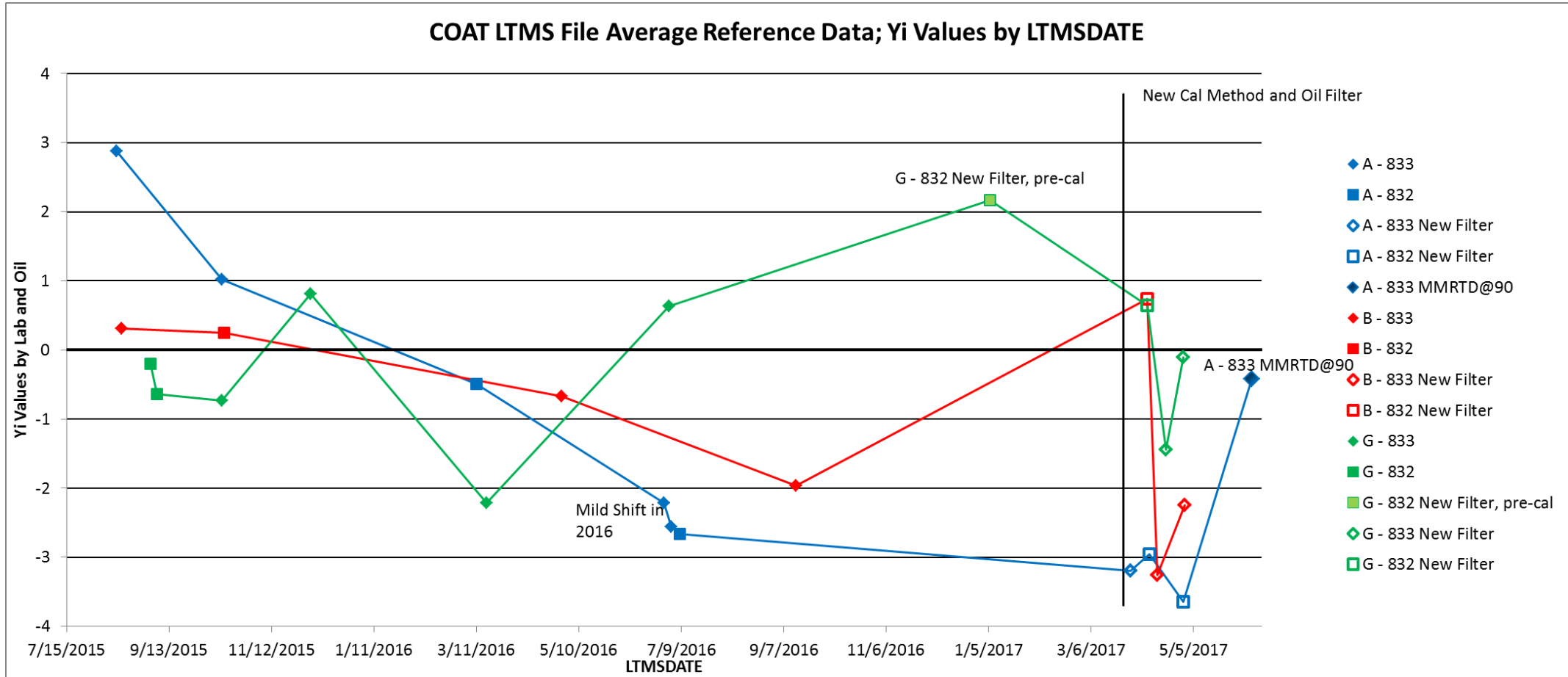




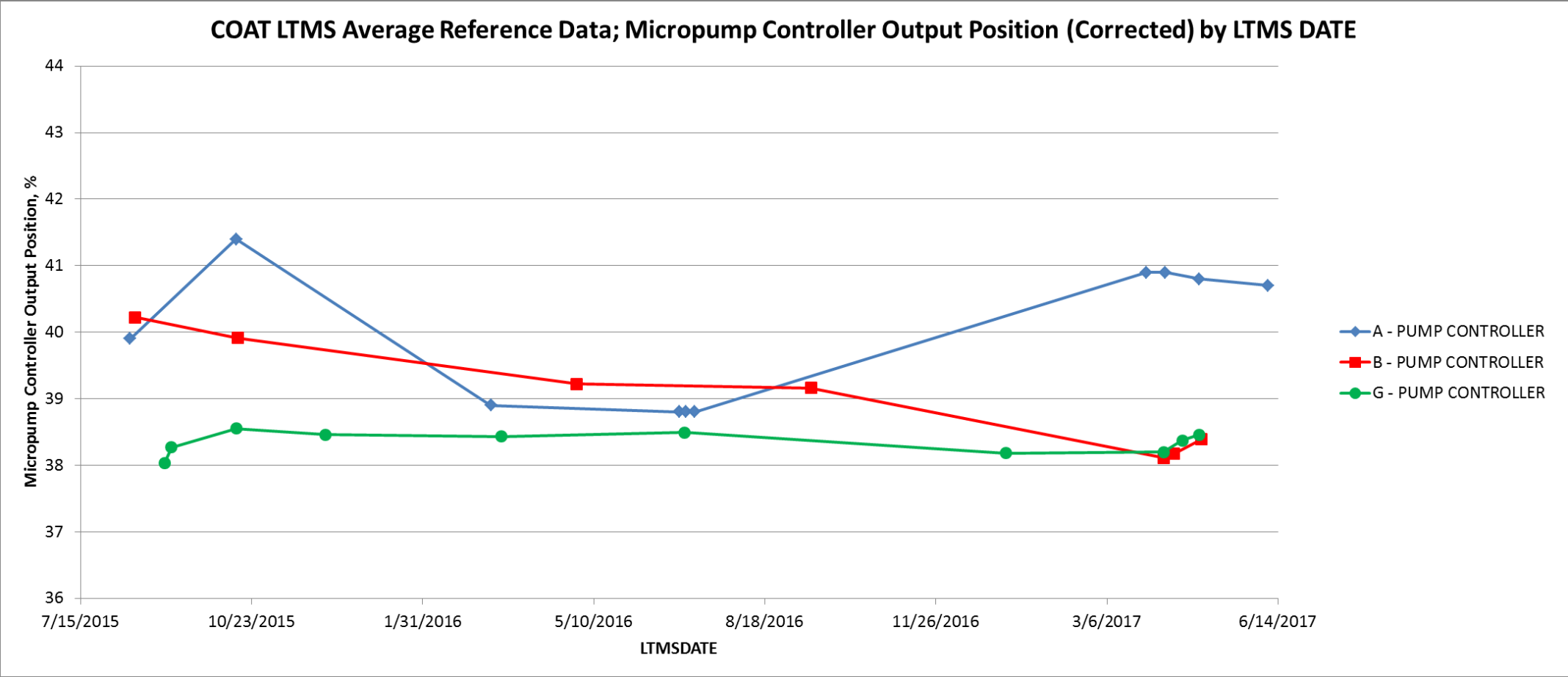
# LAB YI VALUES PLOTTED AGAINST AVERAGE MICROMOTION TUBE TEMPERATURE FOR FIRST 9 TESTS WITH NEW FILTER AND CAL METHOD. 2 LABS HAD VERY SIMILAR MM RTD VALUES WITH VERY DIFFERENT YI VALUES.



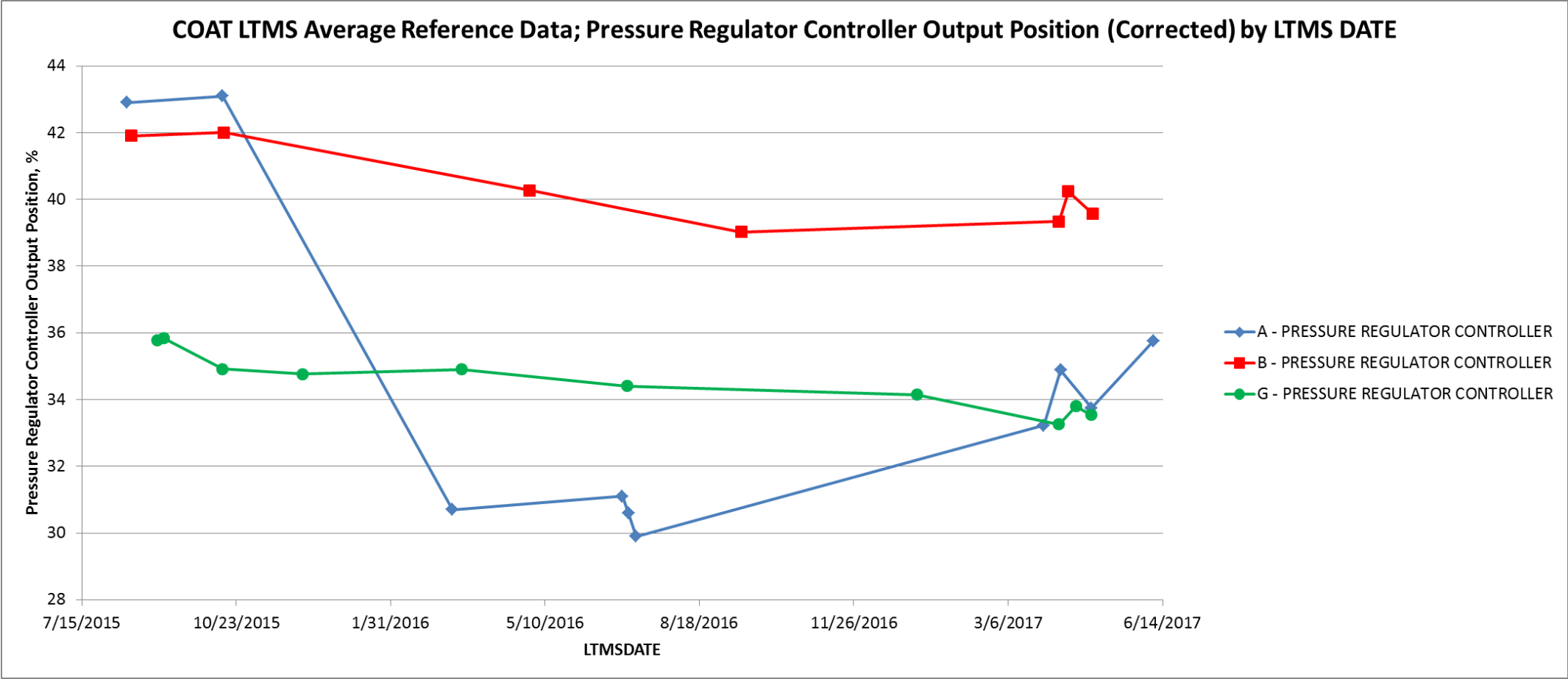
# LAB YI RESULTS PLOTTED OVER TIME (LTMSDATE) PLOTTED BY LAB, OIL, NEW FILTER AND CAL METHOD



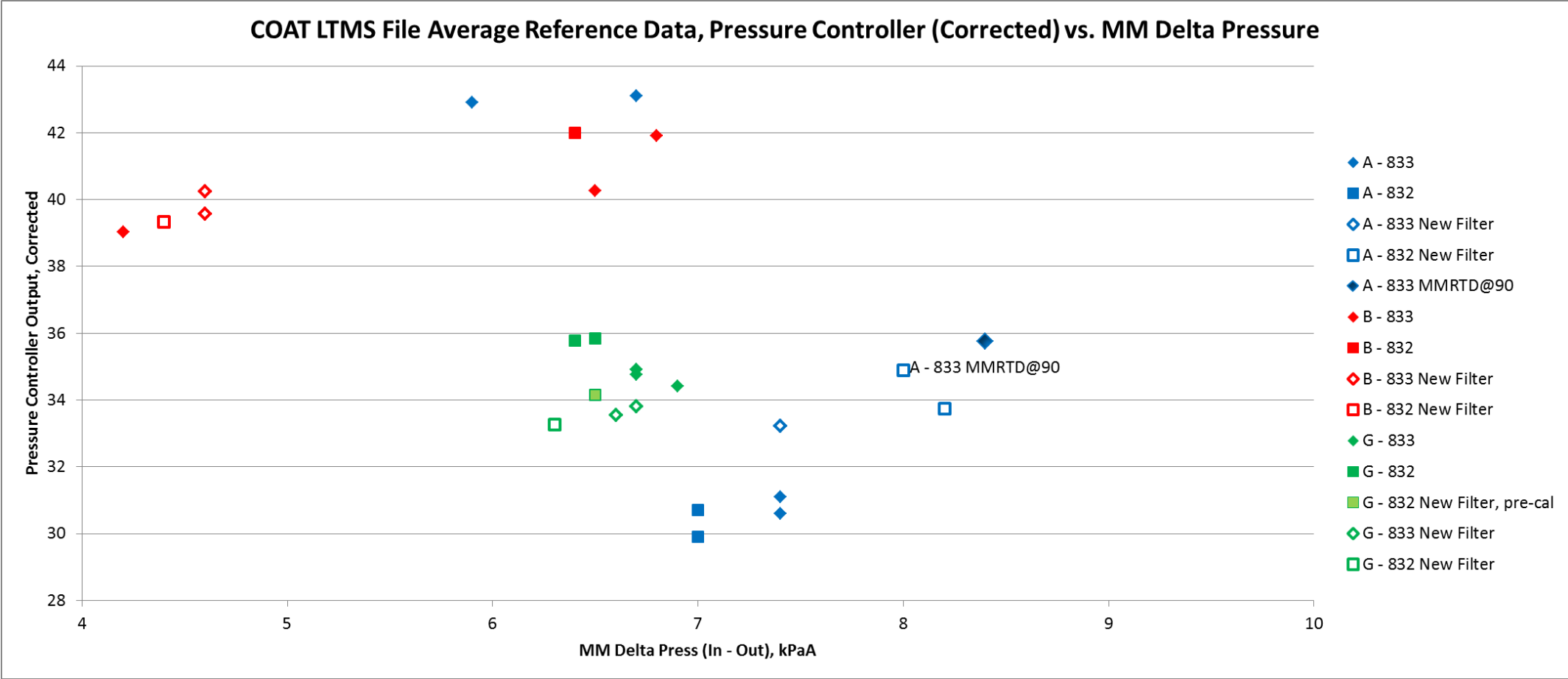
# AVERAGE CORRECTED MICROPUMP CONTROLLER POSITION BY LTMS DATE



# AVERAGE CORRECTED PRESSURE CONTROLLER POSITION BY LTMS DATE

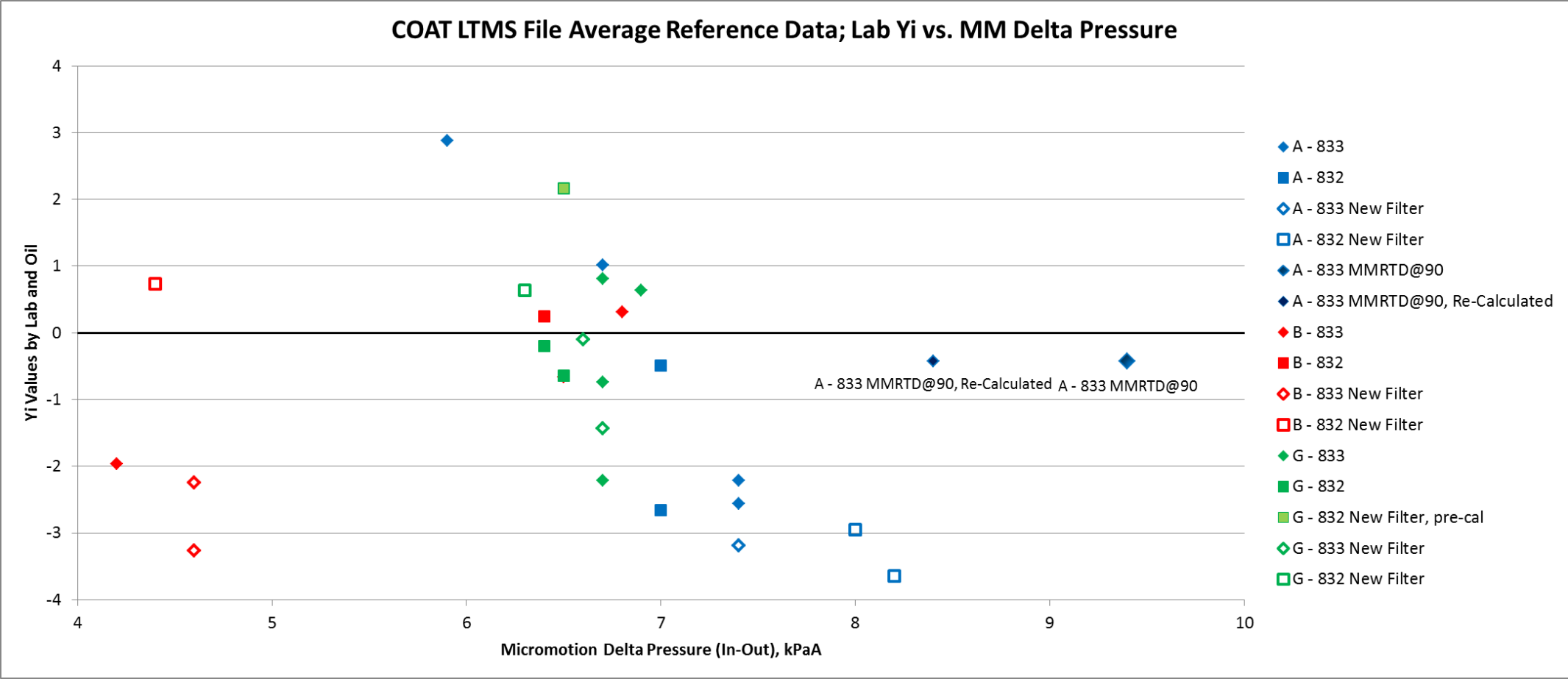


# AVERAGE CORRECTED PRESSURE CONTROLLER POSITION VS. CALCULATED MM SAMPLE DELTA PRESSURE.

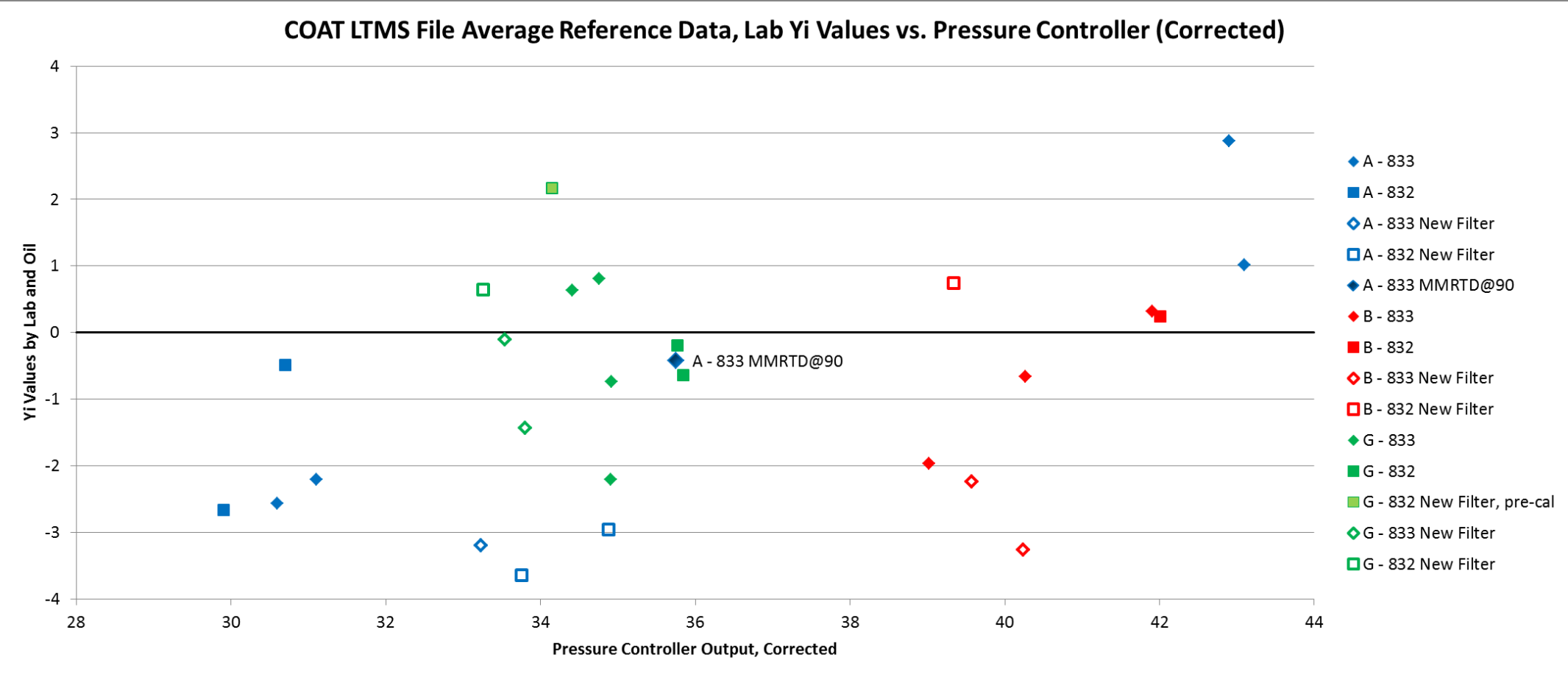




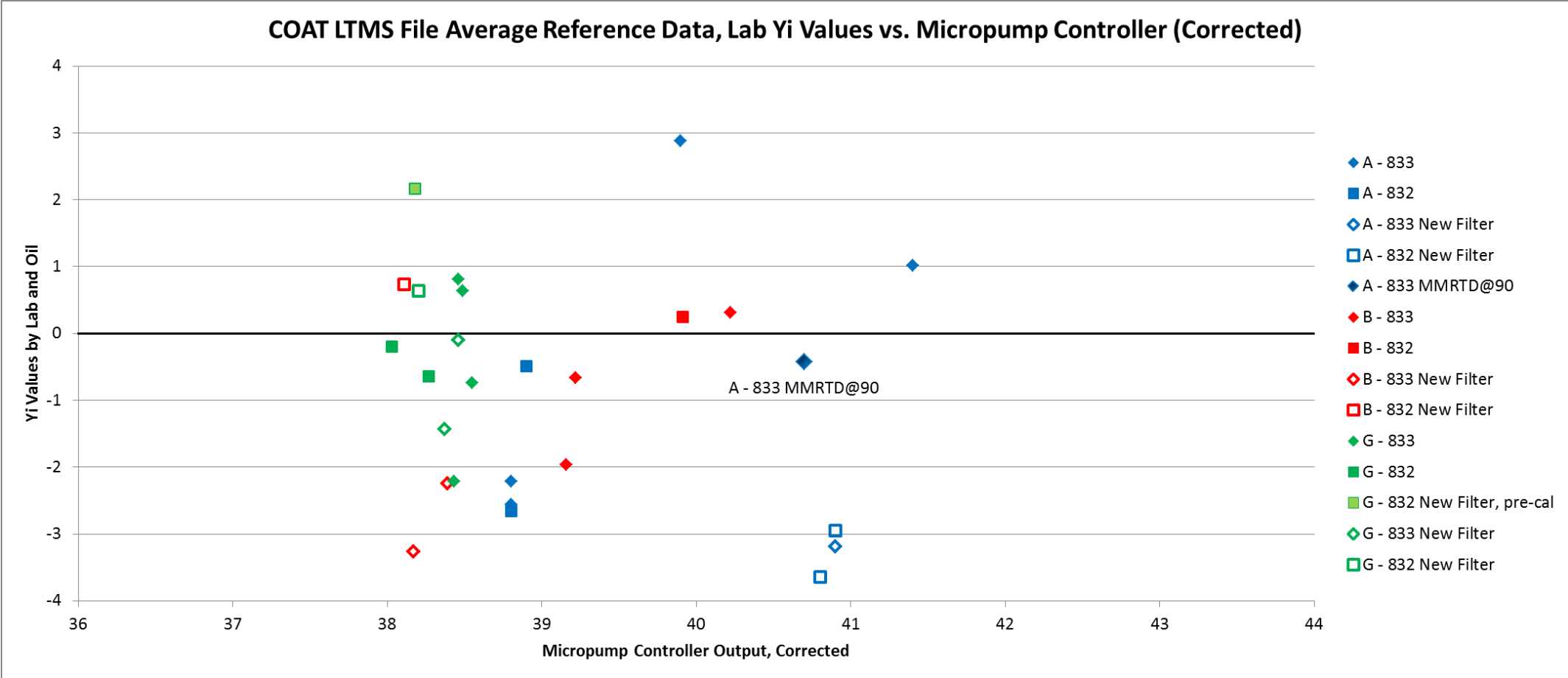
# LAB YI VALUES PLOTTED AGAINST CALCULATED AVERAGE MM SAMPLE DELTA PRESSURE.



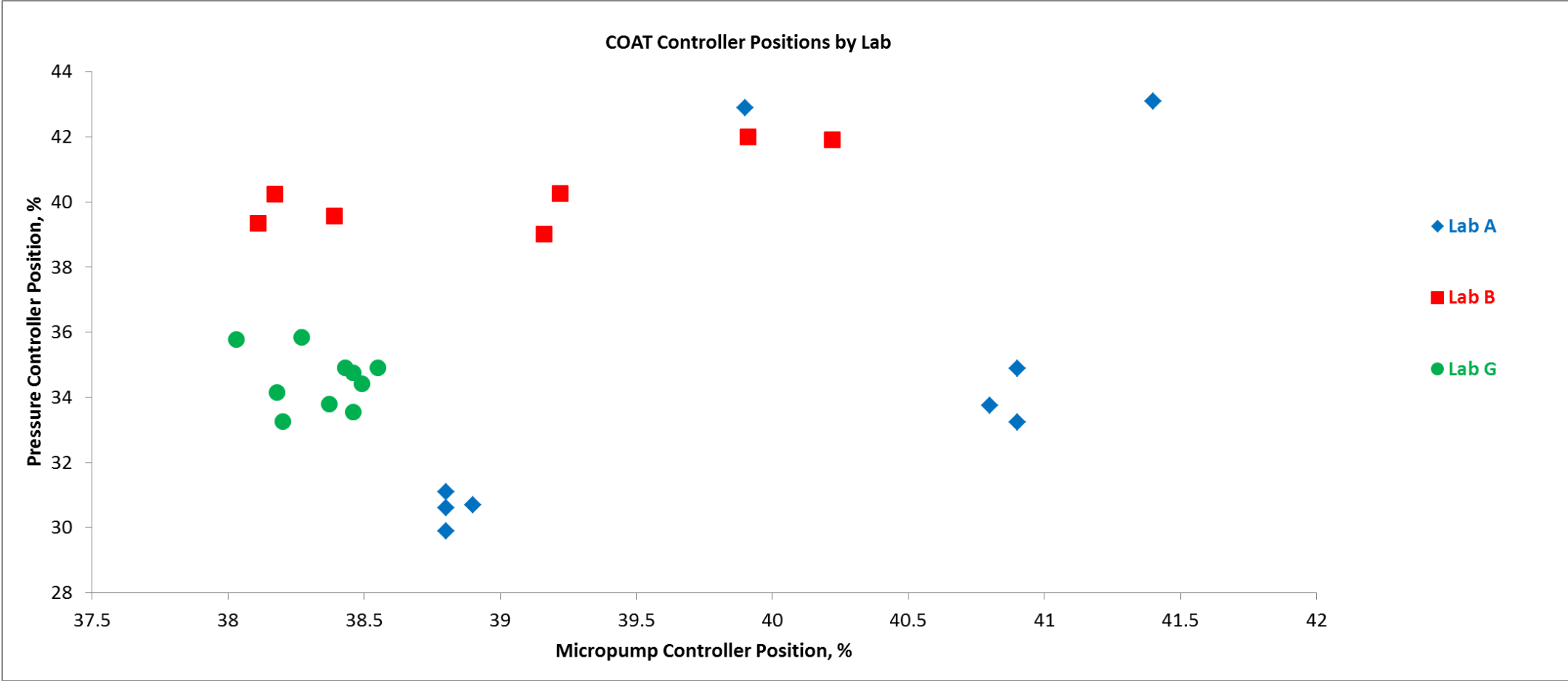
# LAB YI VALUES PLOTTED AGAINST CORRECTED AVERAGE PRESSURE CONTROLLER POSITION.



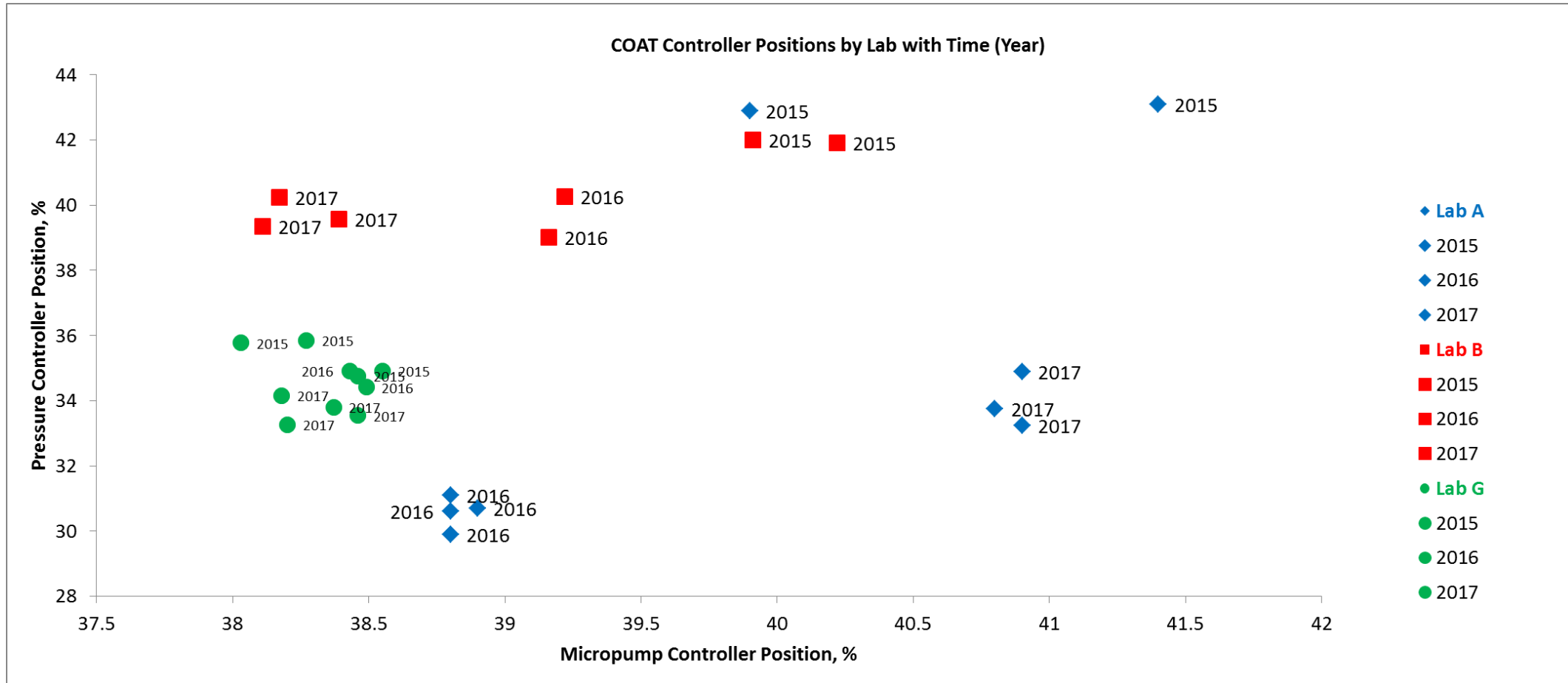
# LAB YI VALUES PLOTTED AGAINST CORRECTED AVERAGE MICROPUMP CONTROLLER POSITION.



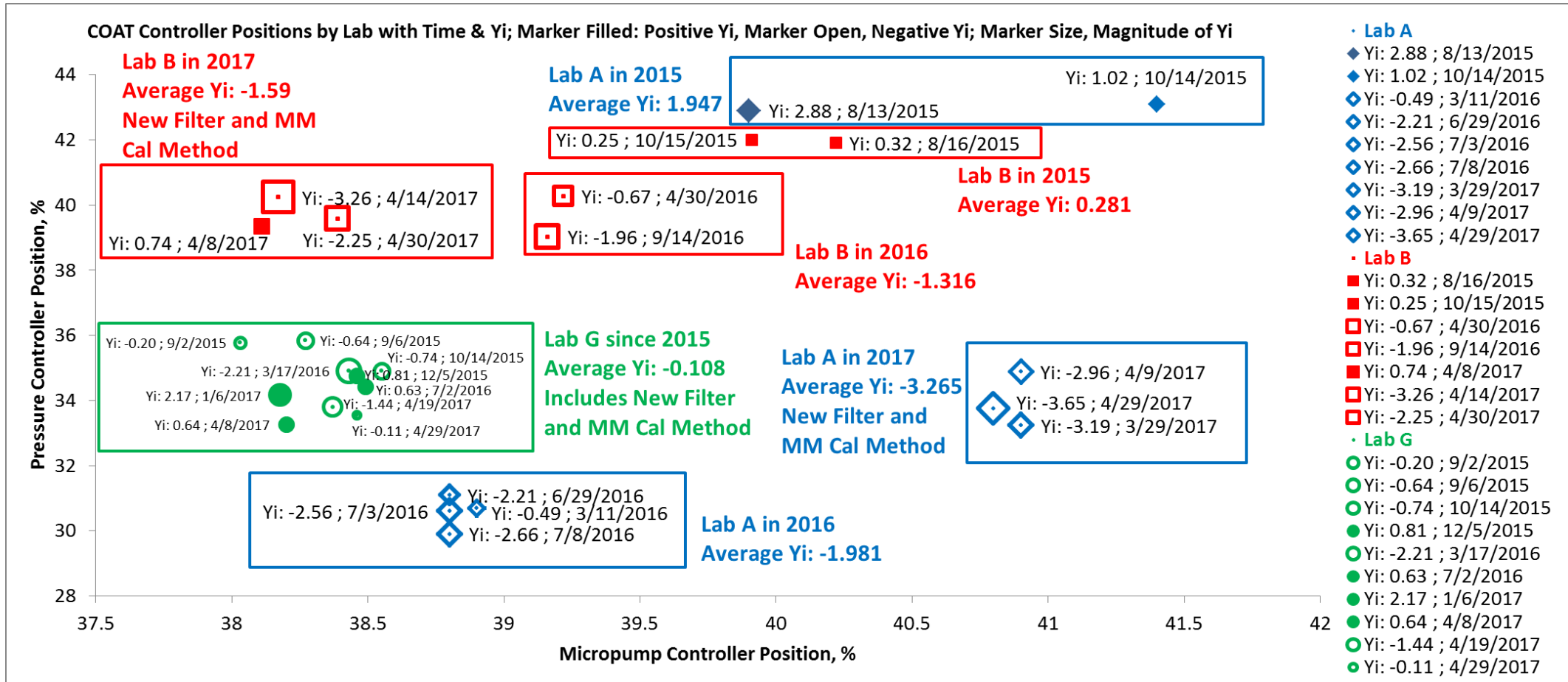
# LAB PRESSURE CONTROLLER POSITION VALUES PLOTTED AGAINST LAB MICROPUMP CONTROLLER POSITION. (INTERESTING GROUPS)



# LAB PRESSURE CONTROLLER POSITION VALUES PLOTTED AGAINST LAB MICROPUMP CONTROLLER POSITION. GROUPS LINE UP BY YEAR.



# LAB PRESSURE CONTROLLER POSITION VALUES PLOTTED AGAINST LAB MICROPUMP CONTROLLER POSITION. ADD LTMSDATE AND YI.



# SUMMARY COMMENTS



## Summary Comments:

- Task Group needs to understand and manage existing set-up before adding additional changes.
  - Task Group knows controller position is important.
  - Without improved controls on existing set-up, change could happen again.
- Within lab repeatability and across lab reproducibility deteriorating.
- Improved precision should be the goal.

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