

# Update: Thermal Imaging long term measurements

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IOWA STATE UNIVERSITY  
ISU WEEKLY STAVE QA MEETING  
JANUARY 12, 2018

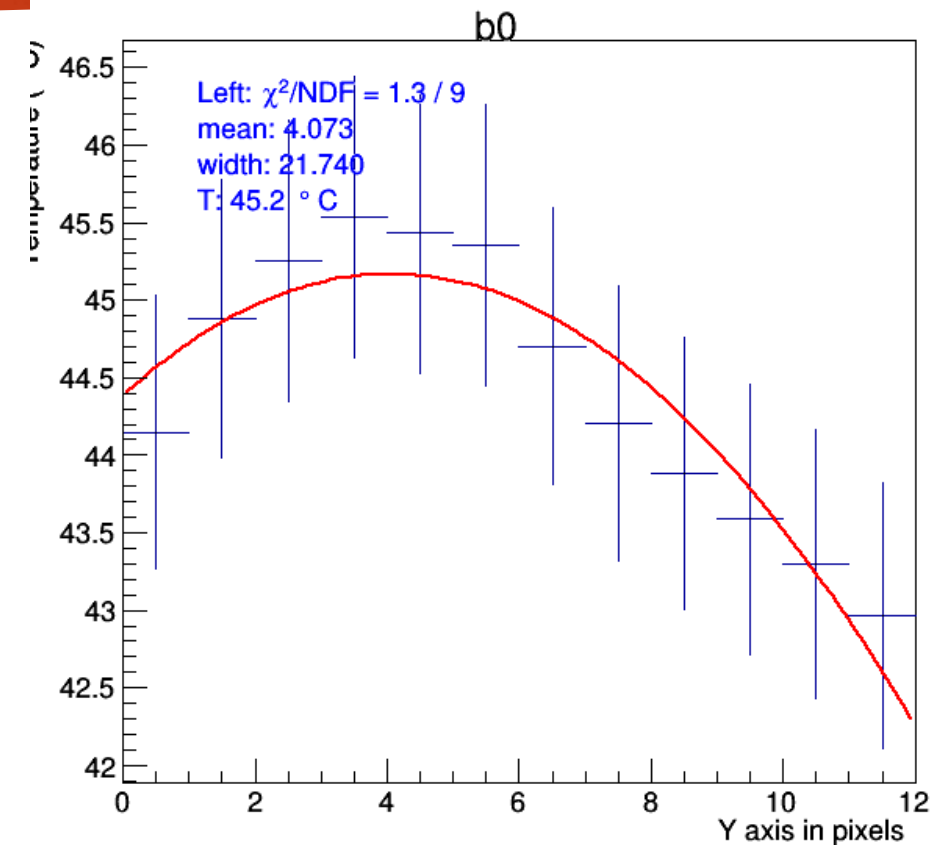


# Motivation

- ▶ These are some preliminary results looking at Stave2R thermal measurements both before and after the 100 room to low temperature cycles.

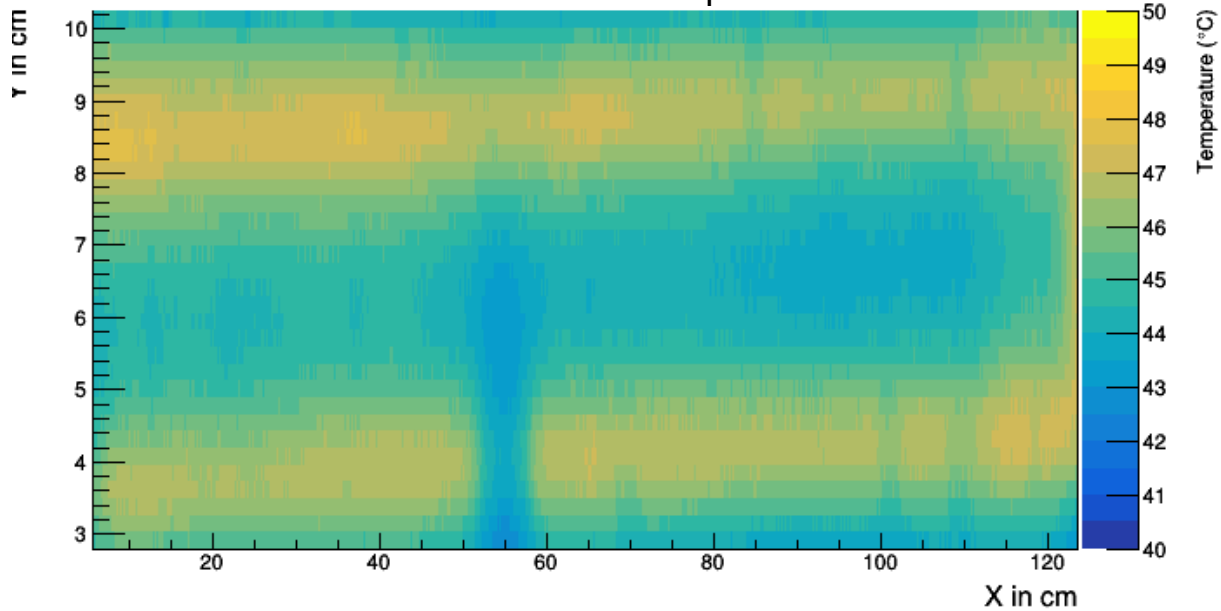
# What was done

- ▶ Using the AtIStaveQAInfraRedAnalysis code sequence files were converted from 200 frames to a single averaged frame and then the maximum temperature along the pipe was found as a function of the length of the stave.
- ▶ In finding the maximum temperature along the pipe a fit is performed on the temperature data perpendicular to the pipe. The mean and width of this fit is then taken as a function of the length of the stave as well.
- ▶ These values are then compared between the before and after measurements.

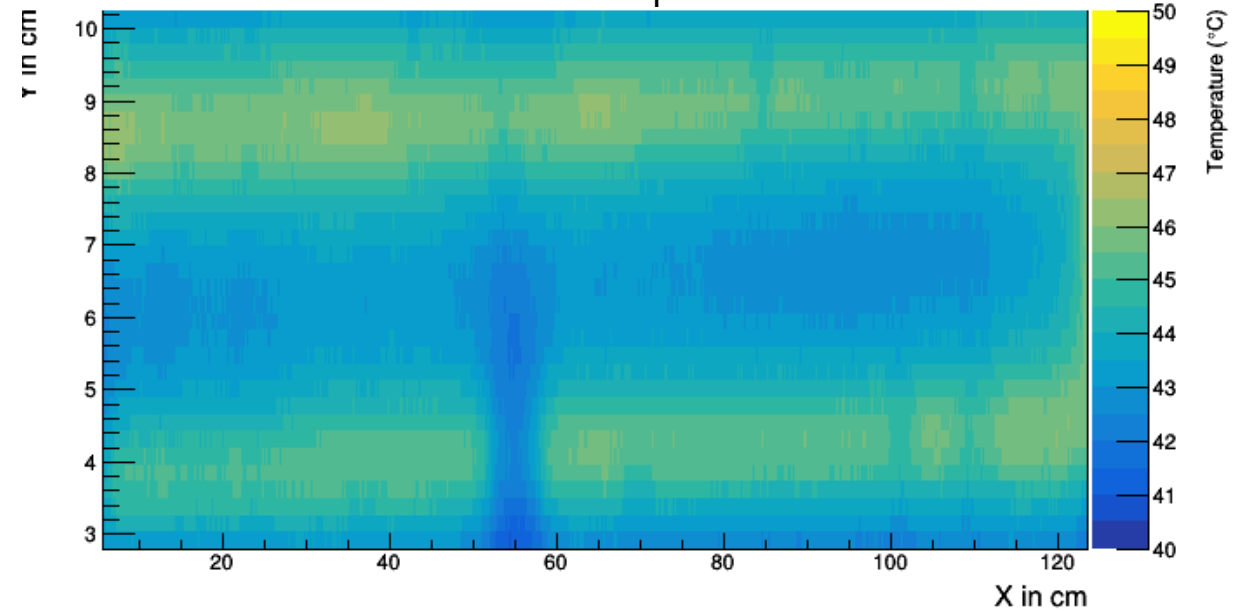


# Stave 2R L-Side Temperature Map

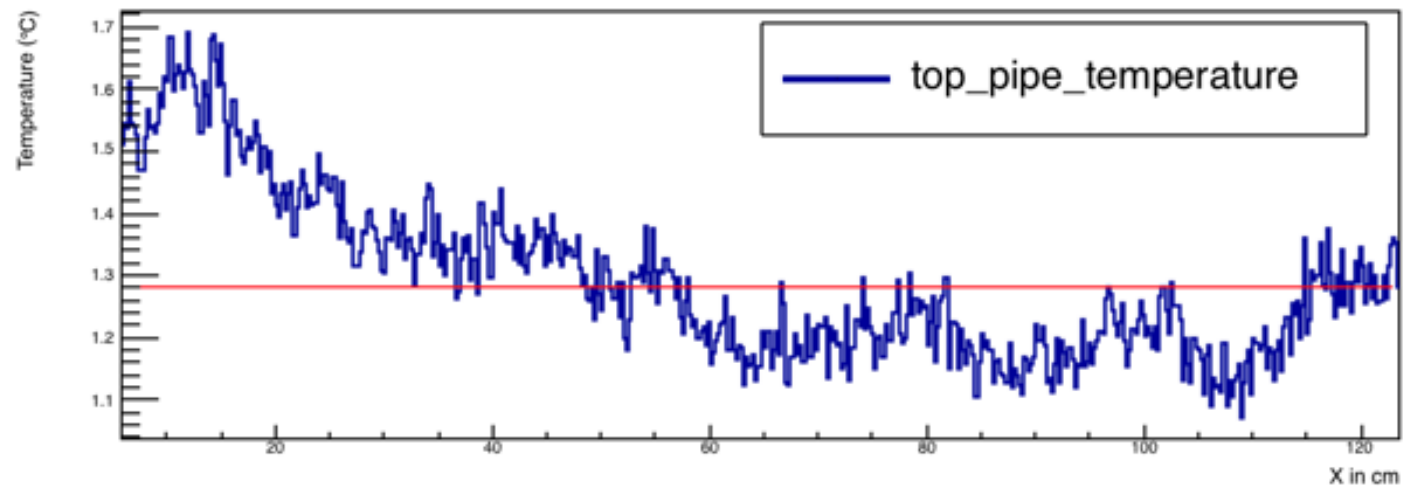
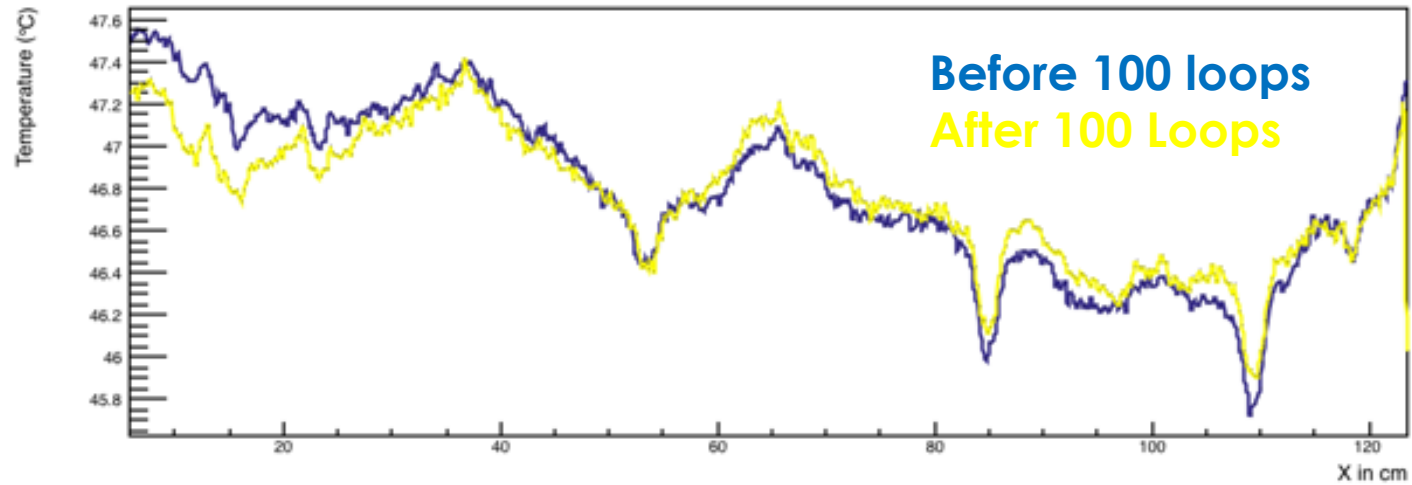
Before 100 loops



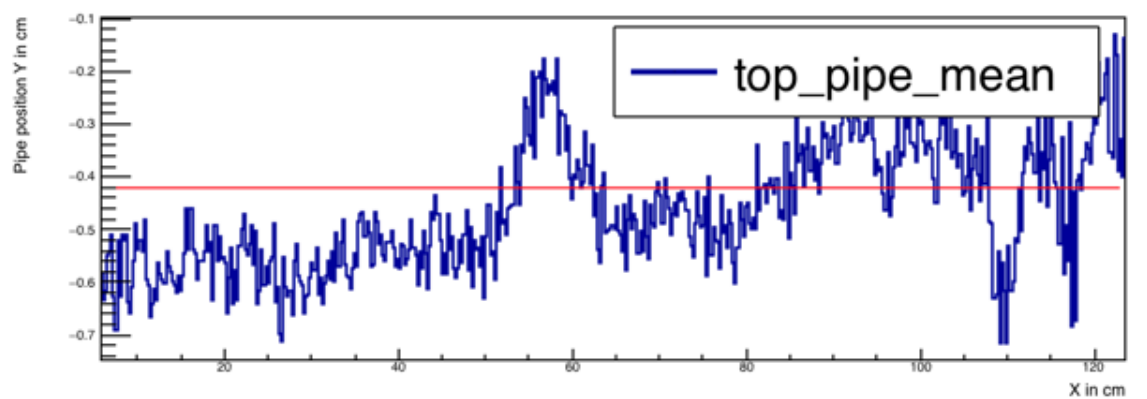
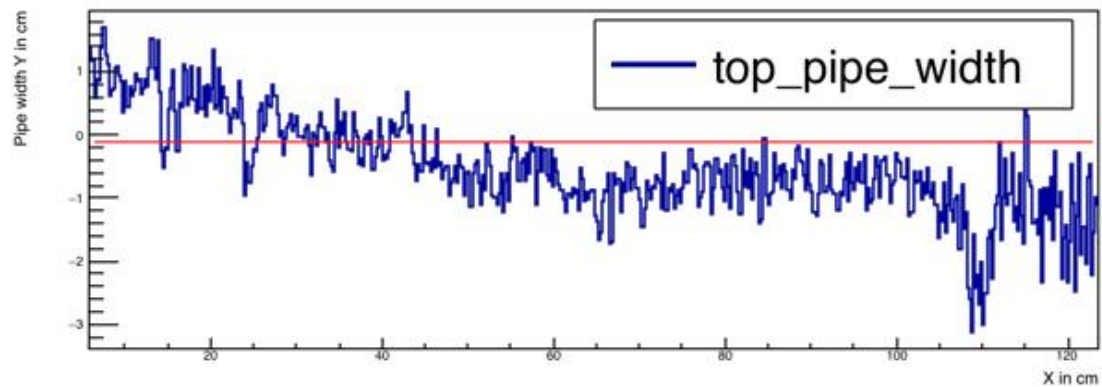
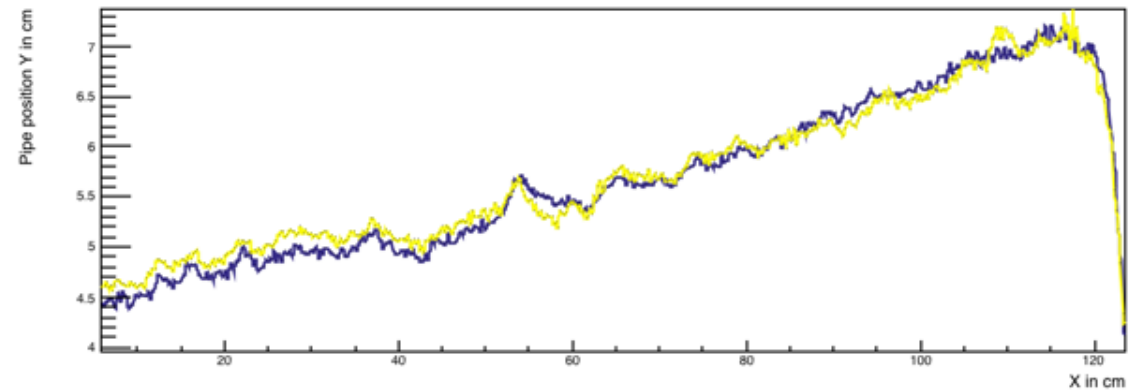
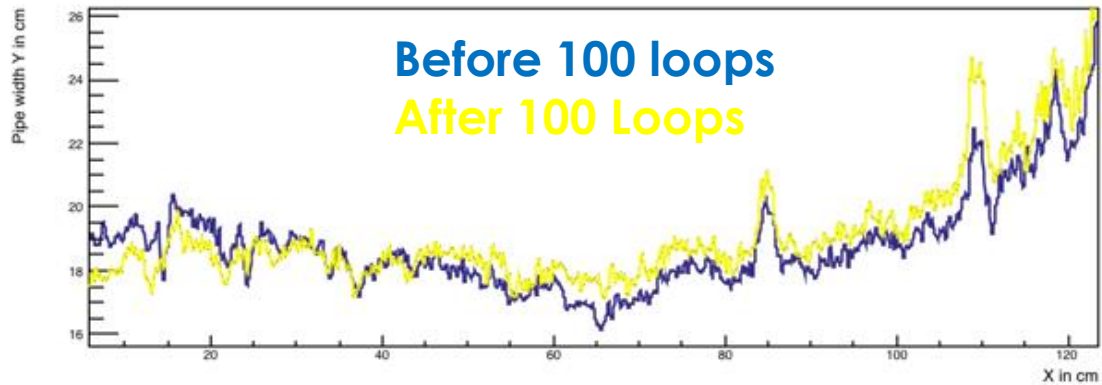
After 100 loops



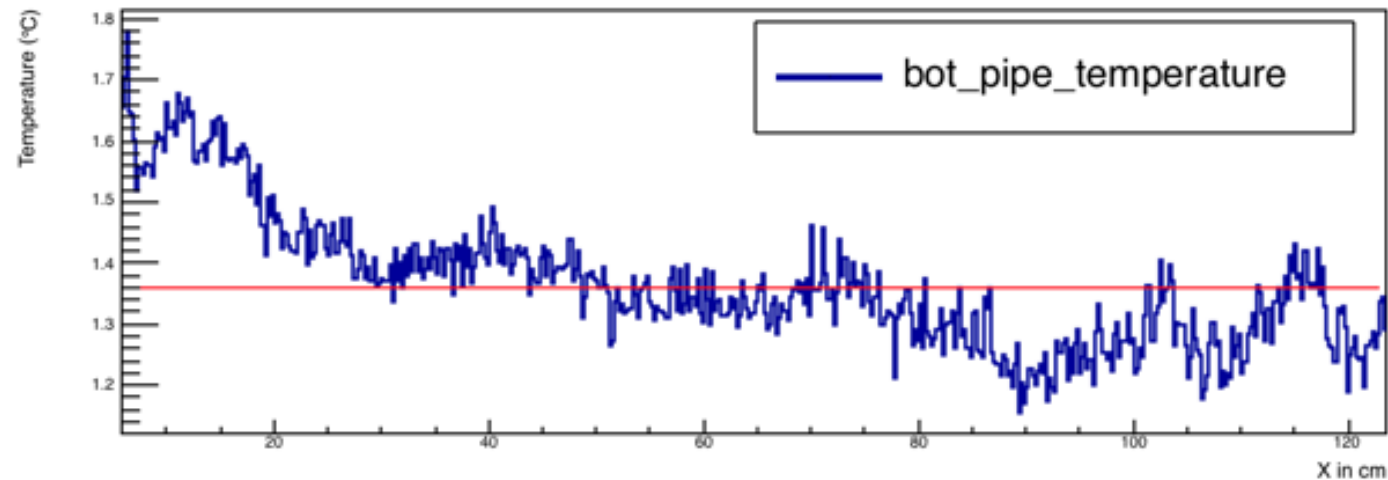
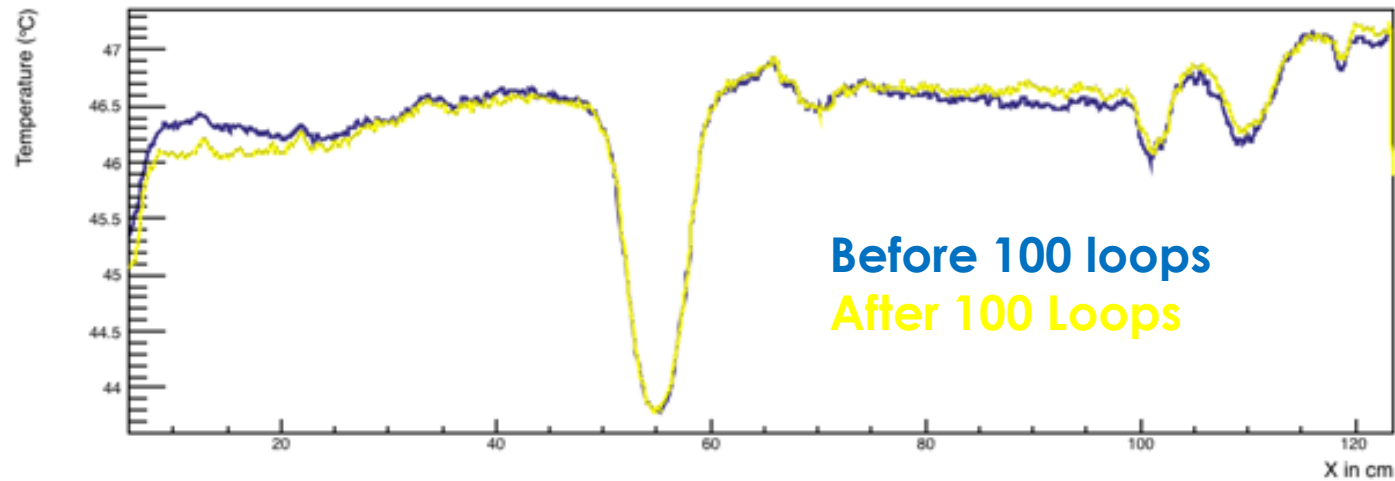
# Stave 2R L-Side: Top Pipe Temperature



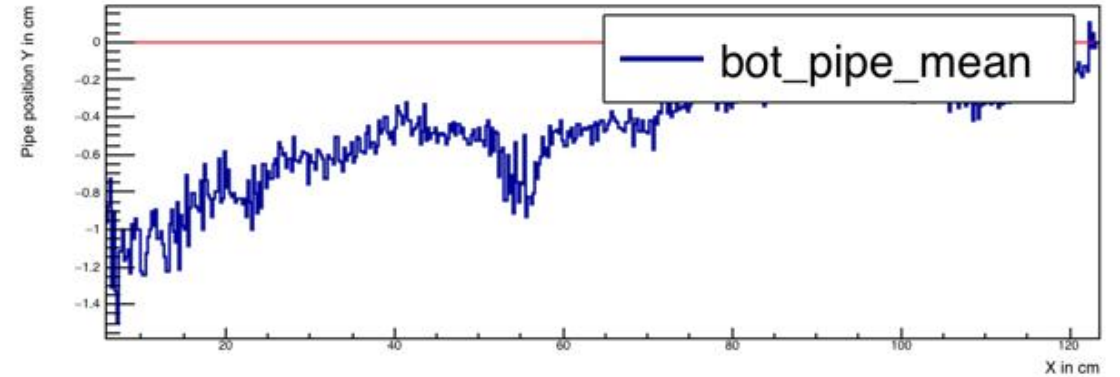
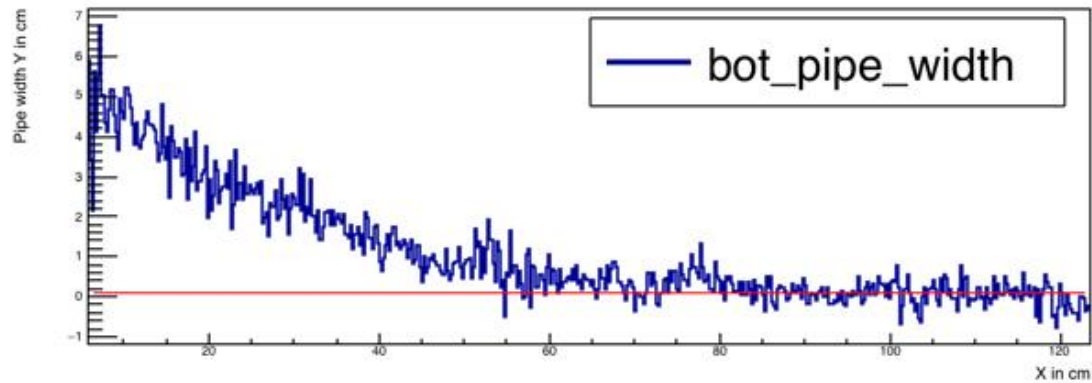
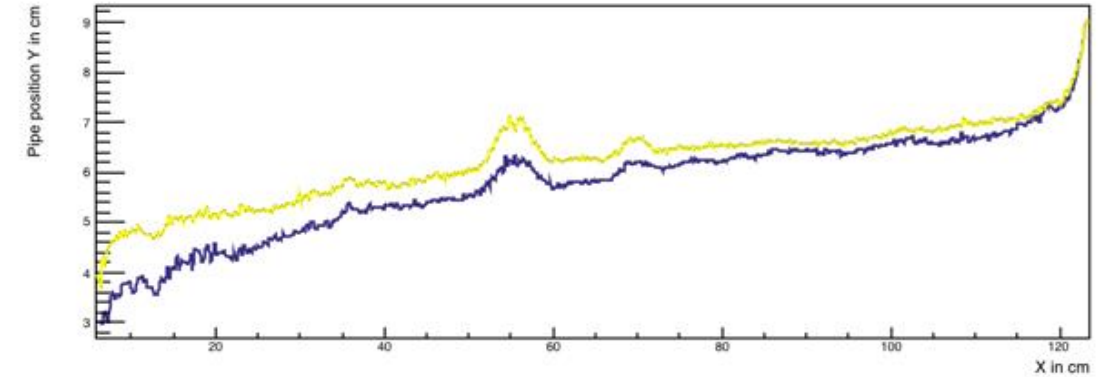
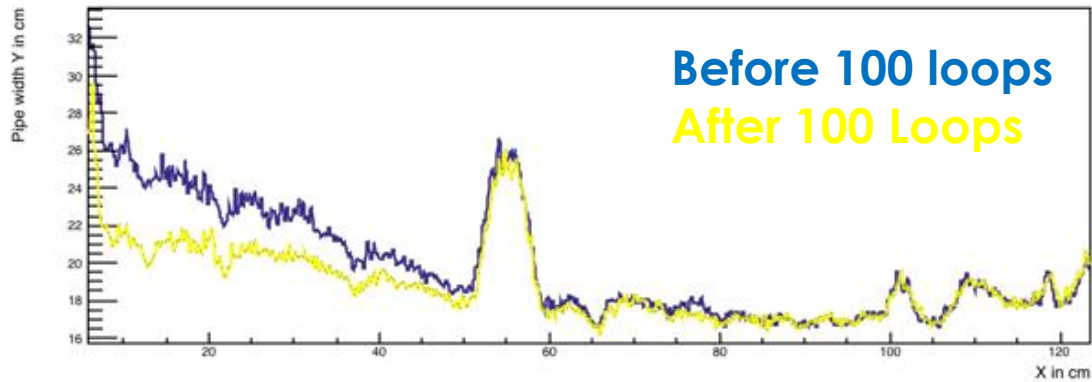
# Stave 2R L-Side: Top Pipe Info



# Stave 2R L-Side: Bottom Pipe Temperature



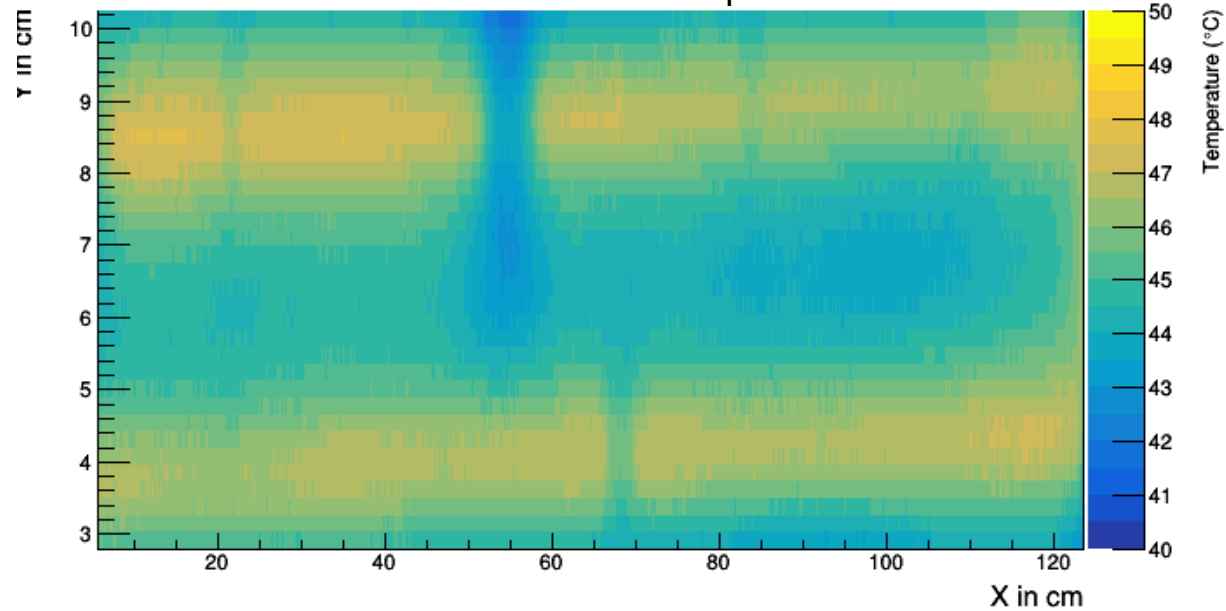
# Stave 2R L-Side: Bottom Pipe Info



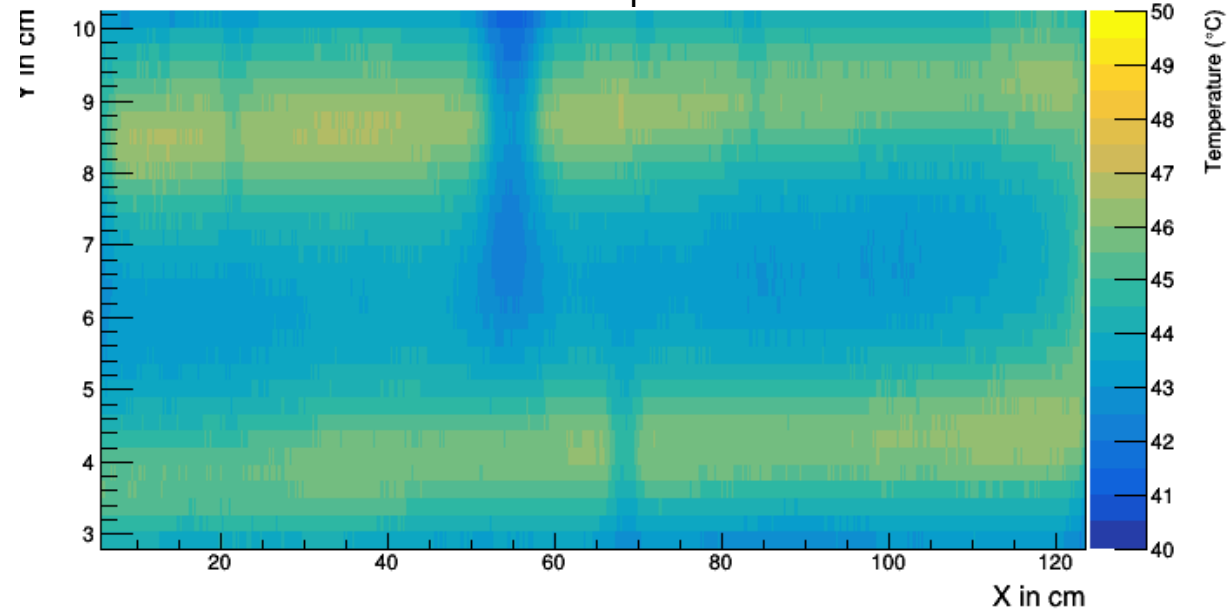


# Stave 2R J-Side Temperature Map

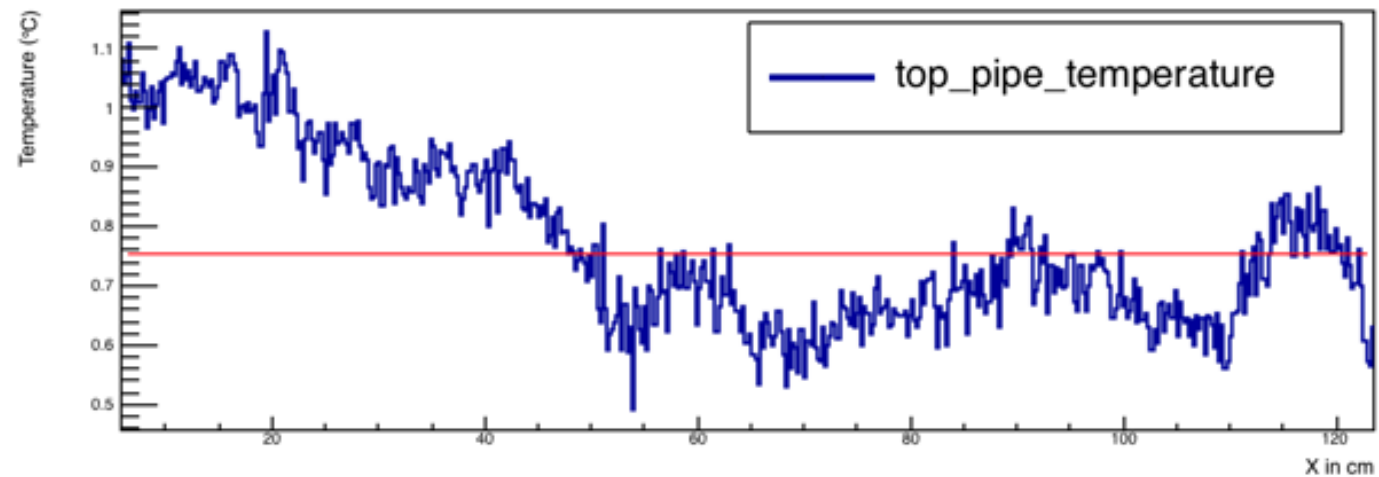
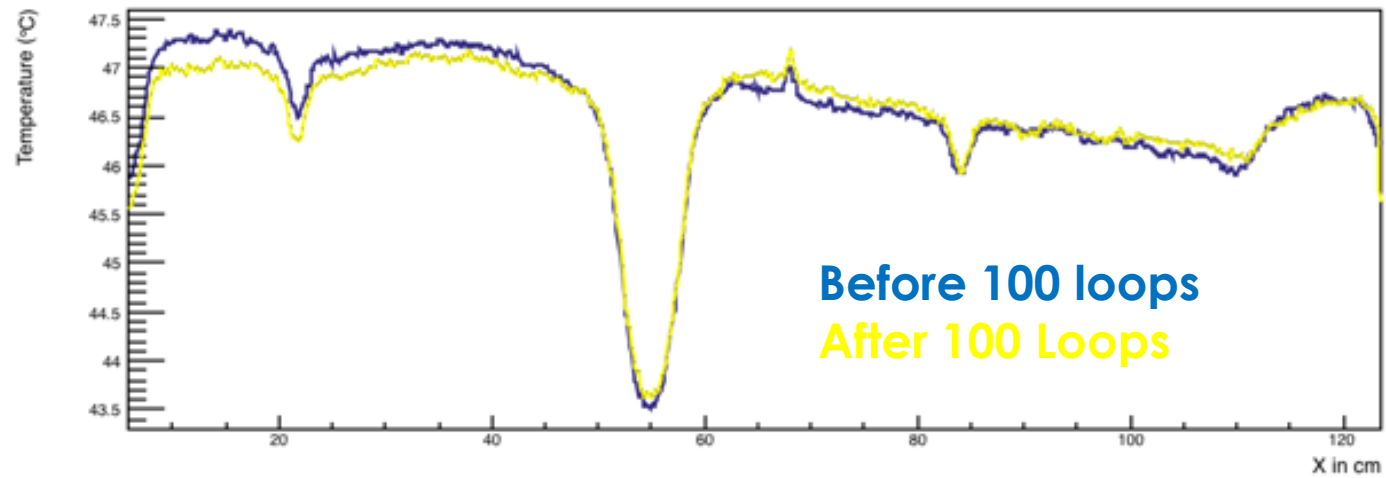
Before 100 loops



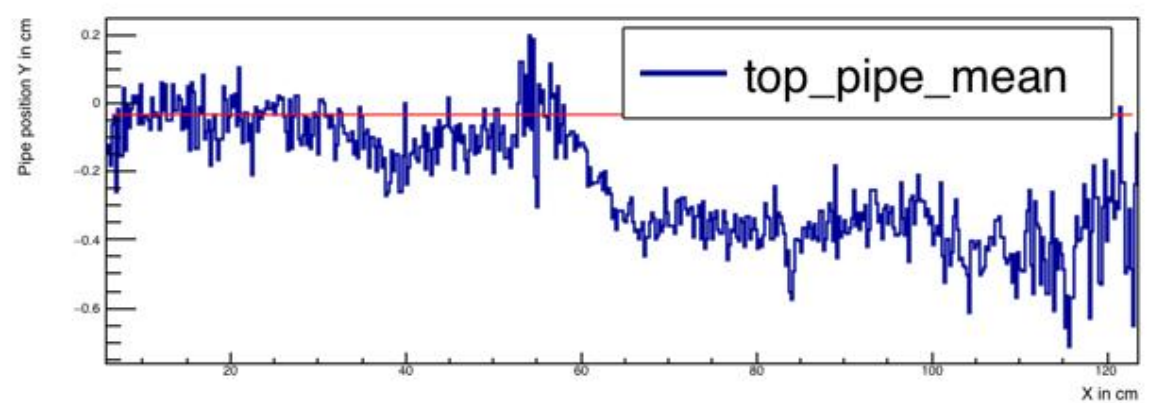
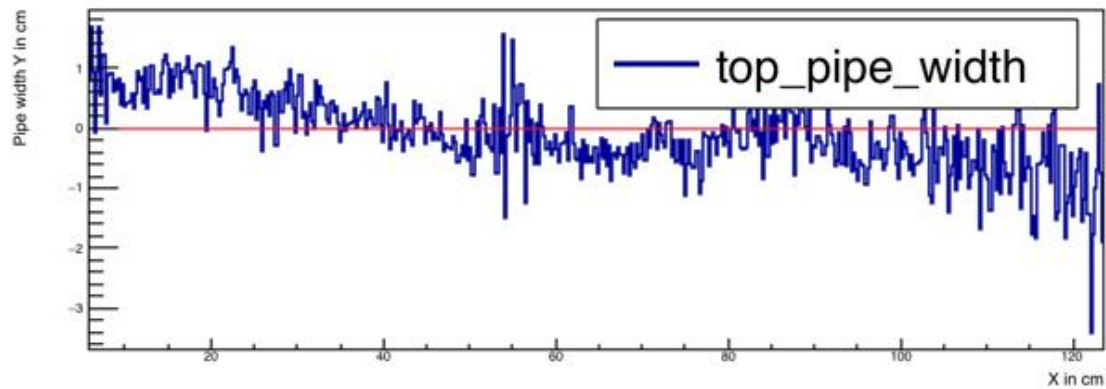
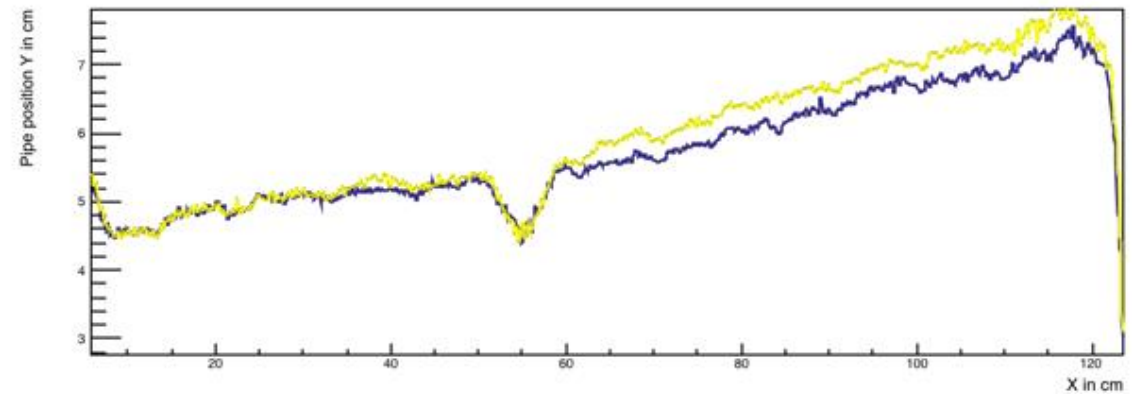
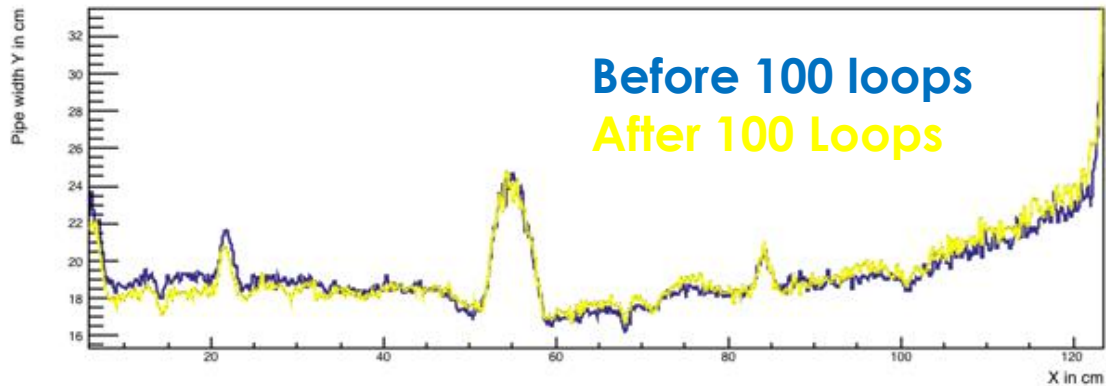
After 100 loops



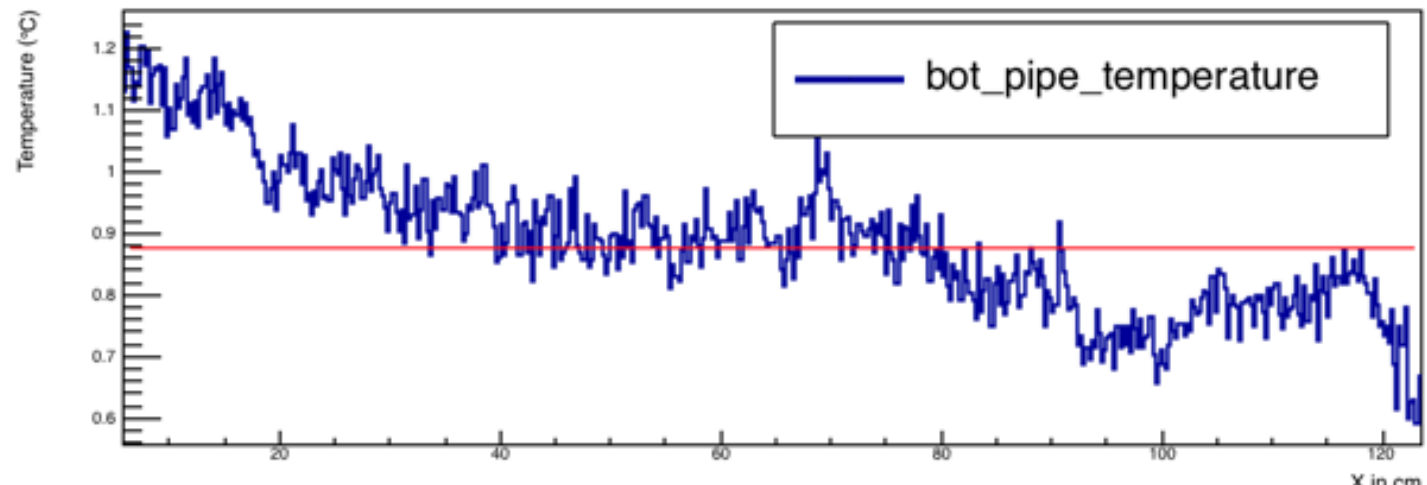
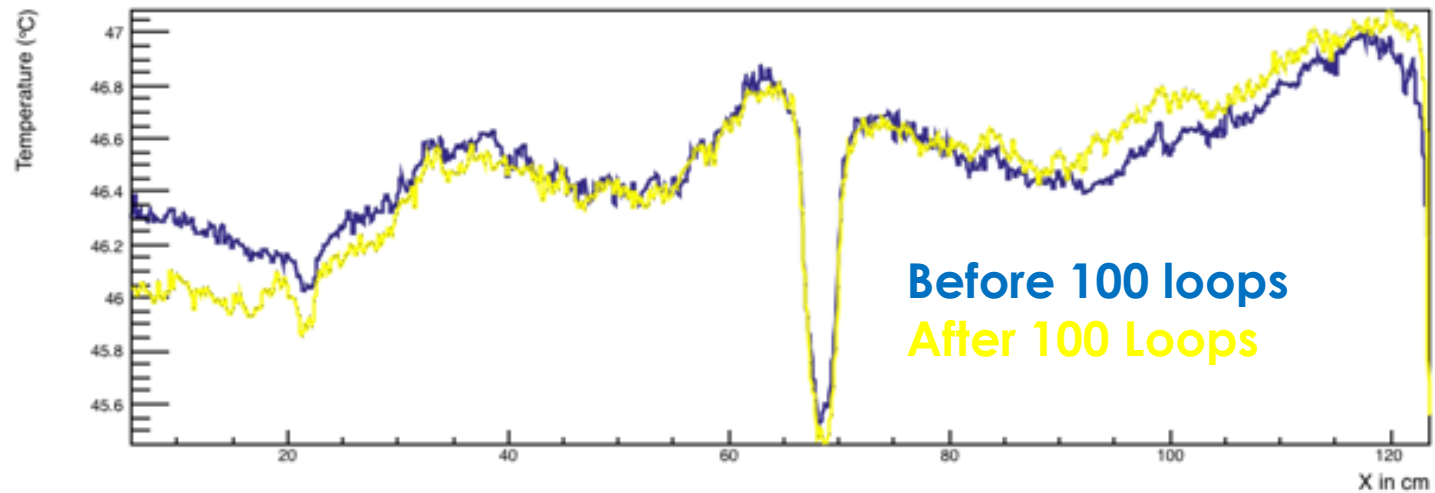
# Stave 2R J-Side: Top Pipe Temperature



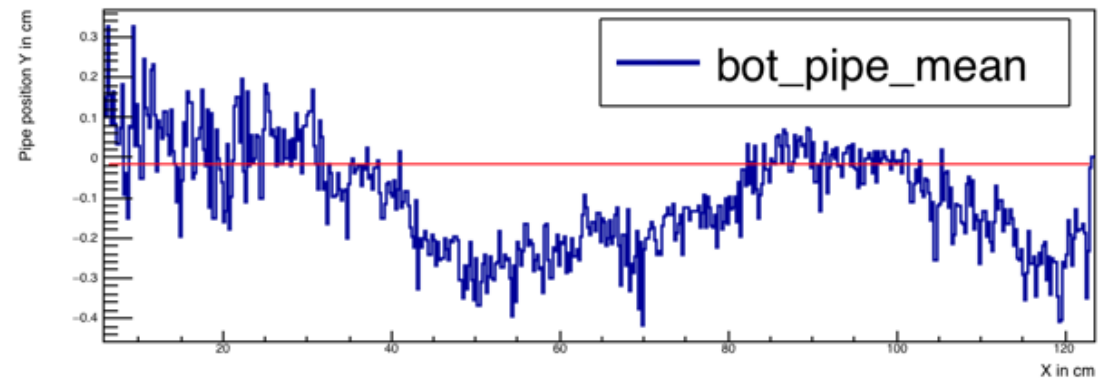
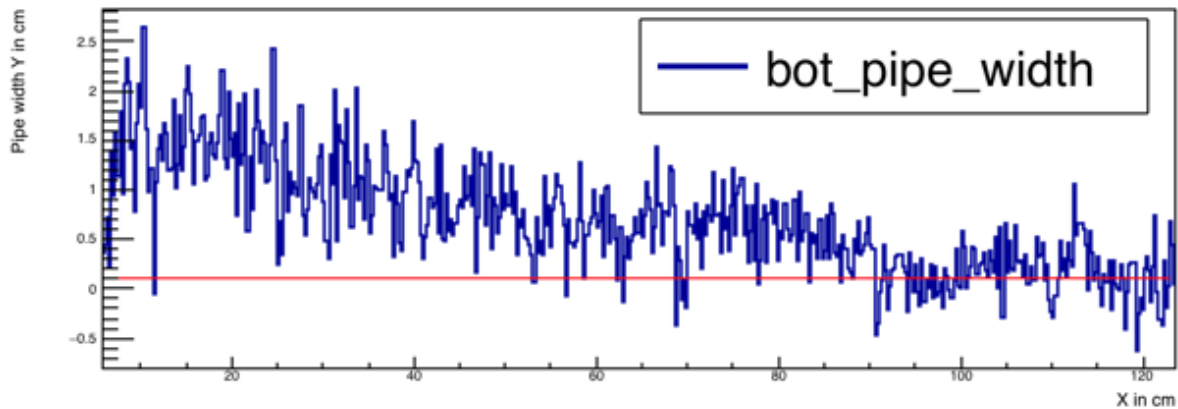
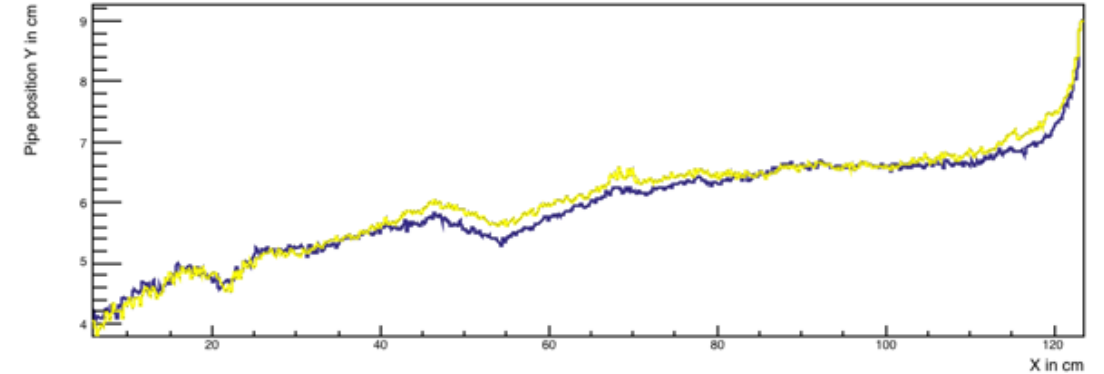
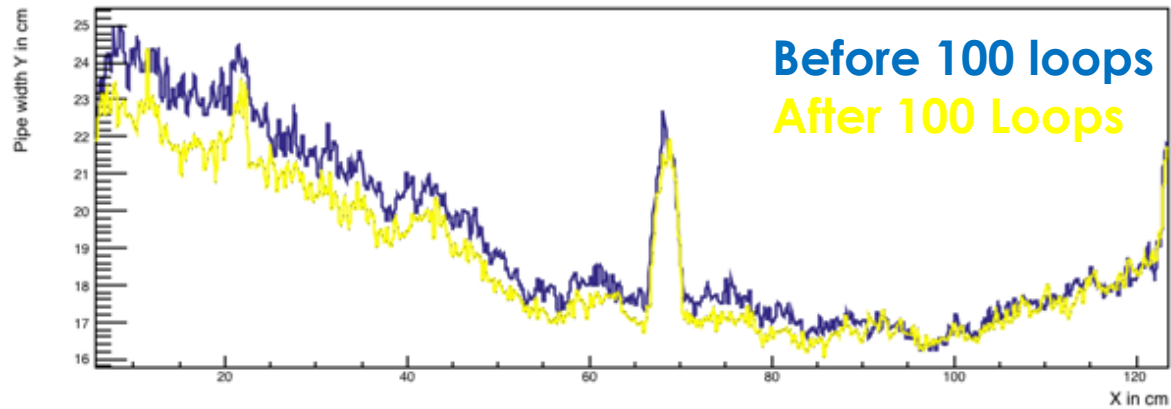
# Stave 2R J-Side: Top Pipe Info



# Stave 2R J-Side: Bottom Pipe Temperature



# Stave 2R J-Side: Bottom Pipe Info





# Backup Slides