Update: Thermal Imaging long term measurements

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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 AtlStaveQAInfraRedAnalysis 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

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Before 100 loops After 100 loops ш сш Temperature (°C) ê ature X in cm X in cm

Stave 2R L-Side: Top Pipe Temperature





Stave 2R L-Side: Top Pipe Info



6

X in cm

X in cm

Stave 2R L-Side: Bottom Pipe Temperature





8

Stave 2R L-Side: Bottom Pipe Info





Stave 2R J-Side Temperature Map

Before 100 loops ် X in cm

Y IN CM



Stave 2R J-Side: Top Pipe Temperature

10



47.5

47 46.5

44 43.5



Before 100 loops

120

X in cm

After 100 Loops

Temperature (°C)

11

Stave 2R J-Side: Top Pipe Info





Stave 2R J-Side: Bottom Pipe Temperature

46.8 Before 100 loops After 100 Loops 45.8 45.6 120 X in cm



emperature (°C)

13

X in cm

X in cm

Stave 2R J-Side: Bottom Pipe Info





Backup Slides