

Weekly Monitoring

FROM 09/06 TO 19/06

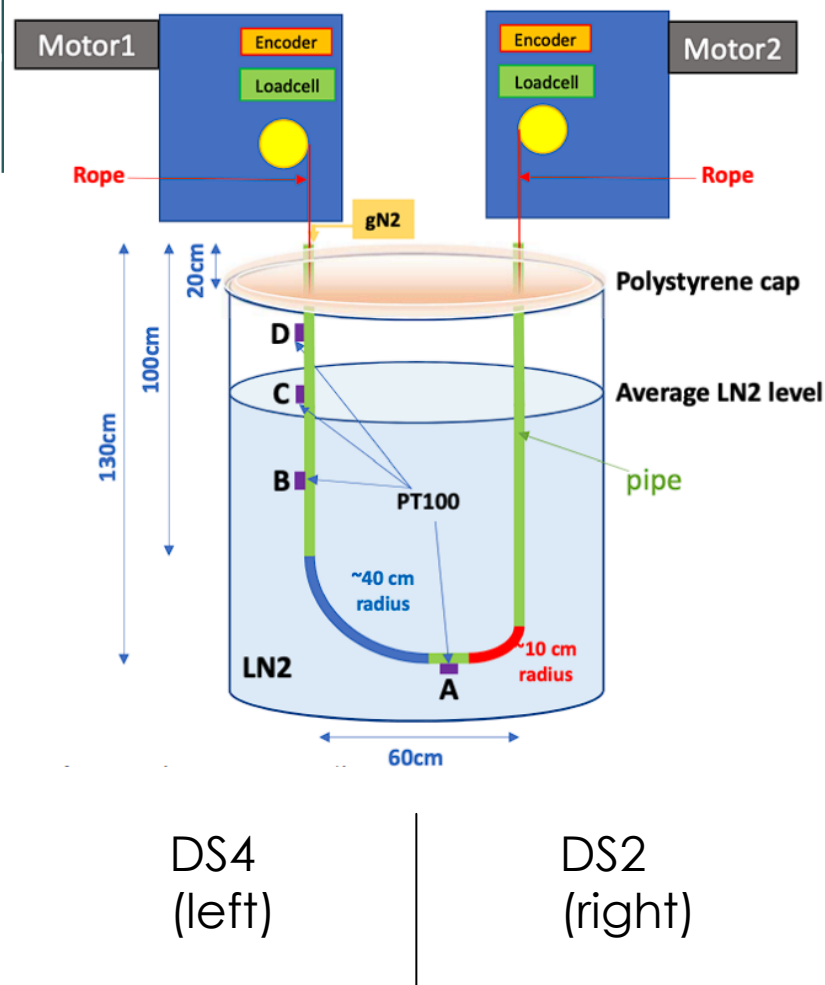
LUCAS

Summary :

2

e	Hour	Ice	°C	Tension	%LN2	gN2 flow (L/h)	Voltage	Current
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2

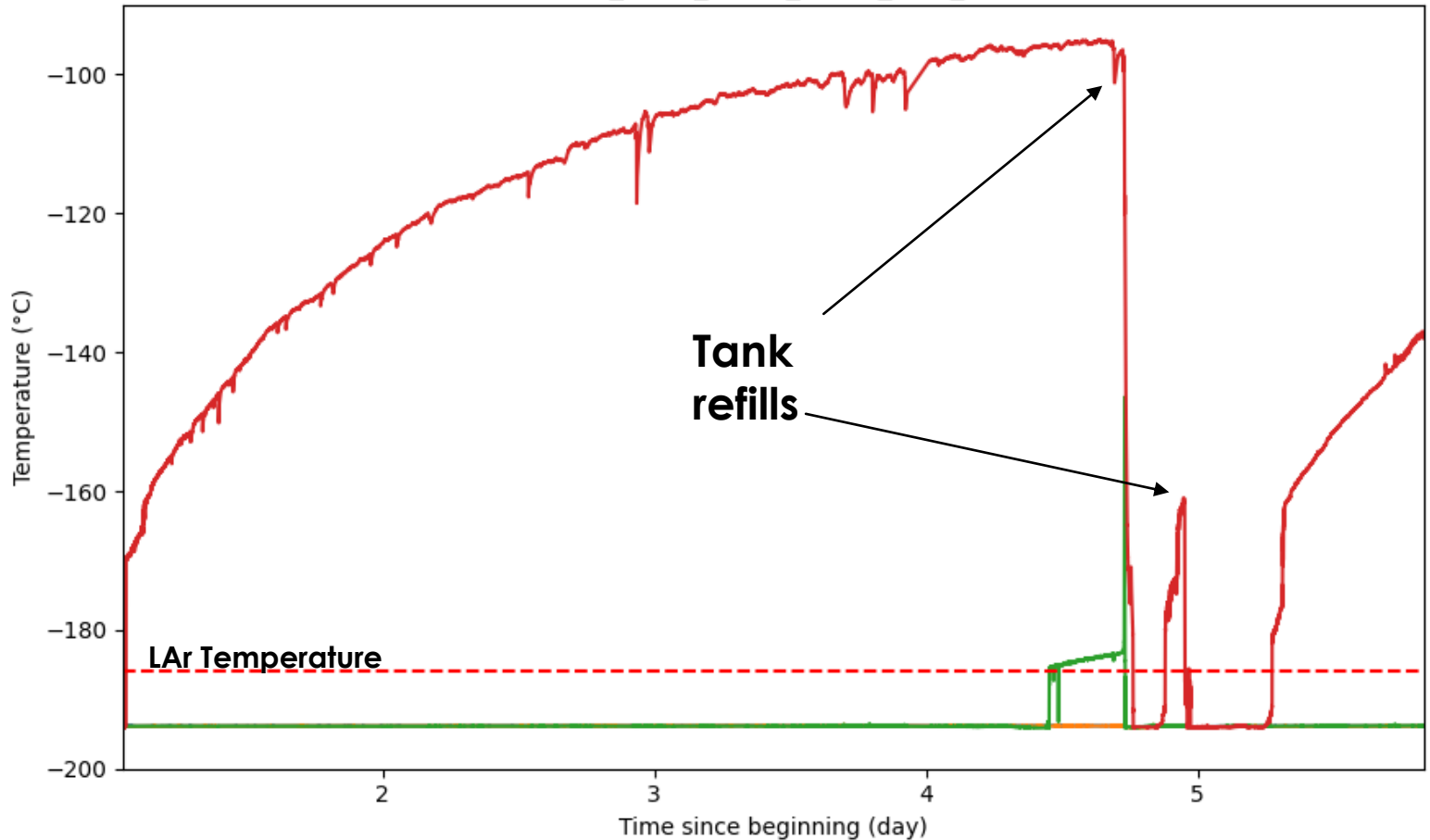
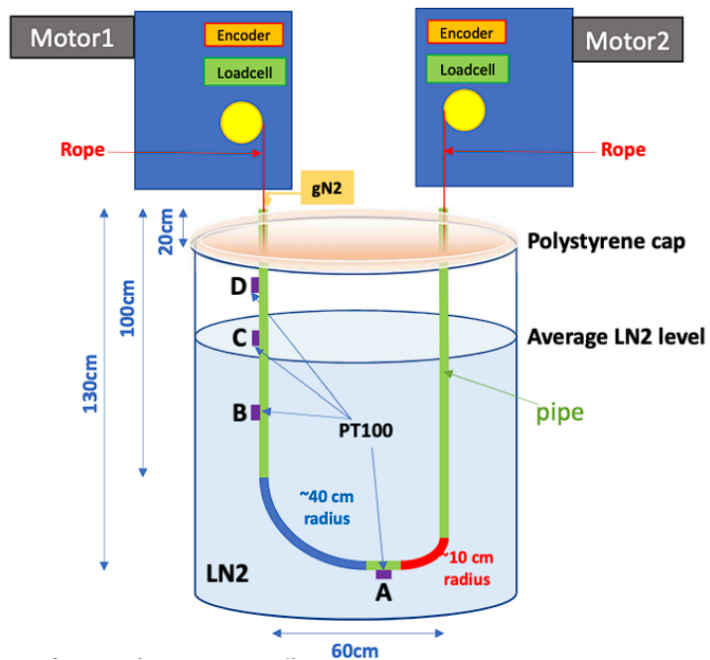
[illegible]

Temperature changes since Friday 6PM

File begins at: 2023-06-08 16:52:18
File finishes at: 2023-06-14 12:54:10

temperature_since_friday_18:00_final_data32.txt

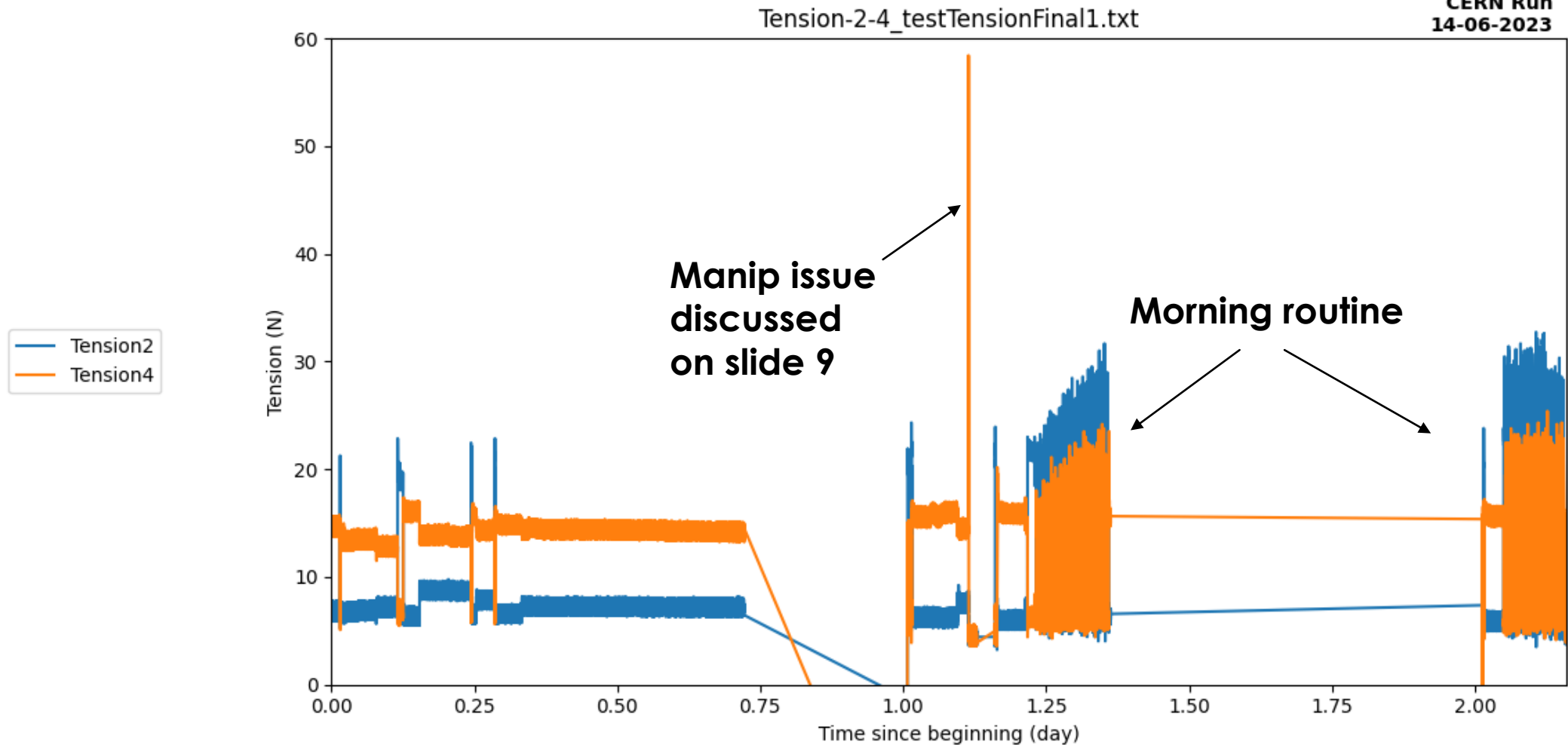
CERN Run
14-06-2023



Tension changes since Monday 9AM

File begins at: 2023-06-12 09:02:17
File finishes at: 2023-06-14 12:52:13

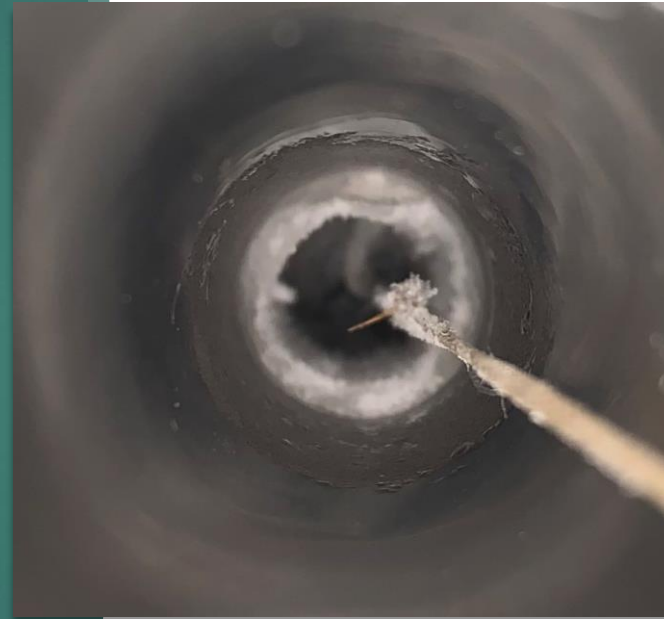
CERN Run
14-06-2023



Commentaries :

Friday - 06/09 18:00

- Peter and Pascal was there, no other commentary needed.



*Picture from
the top of the
left tube*



*Picture from
the top of the
right tube*

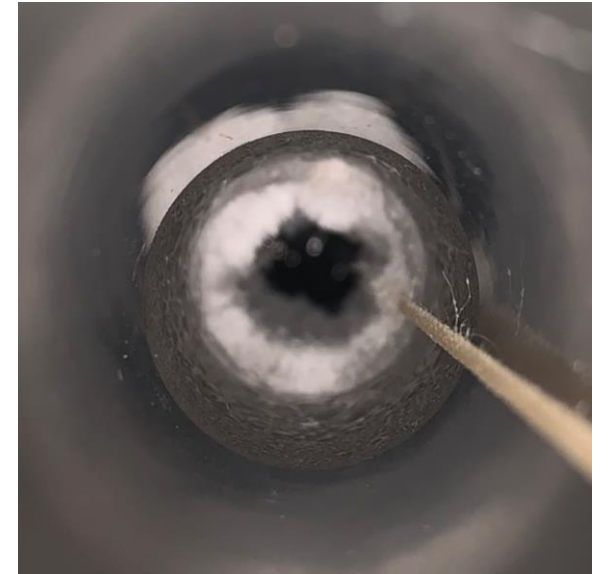
Commentaries :

Saturday - 06/10 14:31

- Seems to have LN2 at the bottom of the tube : might prevent ice formation ? Need to check tension inside.
- I thought ice was blocking the source, but by checking tension it seems fine.
- Every other parameter seems fine.
- Cryo level dropped by 5% in 20h. So ~6%/day ? I'll check on Sunday
- Monitoring for motors stopped around 2AM (on Saturday). I had to put it back on.



*Picture from
the top of the
left tube*



*Picture from
the top of the
right tube*

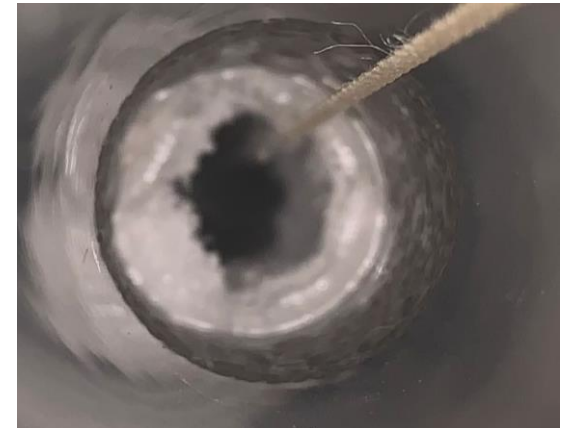
Commentaries :

Sunday - 06/11 14:53

- Monitoring stopped again at 6:45 AM. 16h 16min from the start. It was ~15h yesterday. The program seems to stop around those time (15h after starting).
- By forgetting to put the lid on the left tube, the plastic cap blocked the pulley and stop the movement. Fixed it by relax, putting rope back on pulley then locate and move it back to its position.
- 6% less LN2 in the tank. So, it seems 6%/day.
- Liquid air inside tube, around 50cm from the top (position 570).
- Every other parameters seems fine



*Picture from
the top of the
left tube*



*Picture from
the top of the
right tube*

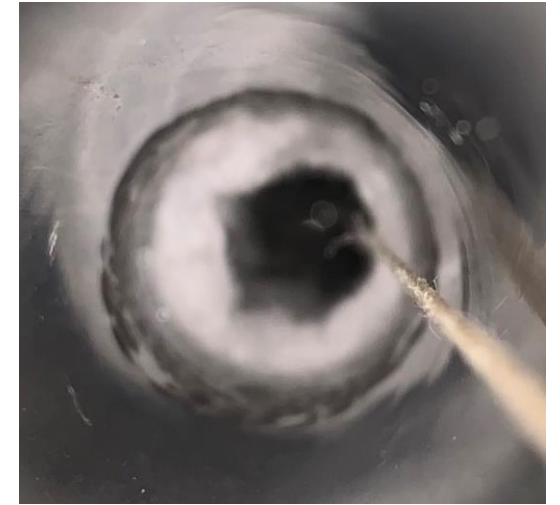
Commentaries :

Monday - 06/12 09:10

- Monitoring stopped again at 4:44 AM.
- 5% less LN2 in the tank. So, it seems 6.6%/day.
- When flushing with Laetitia (put gN2 at 250 and block air exit on left side), some liquid was seen on the right side.
- Every other parameters seems fine



*Picture from
the top of the
left tube*



*Picture from
the top of the
right tube*

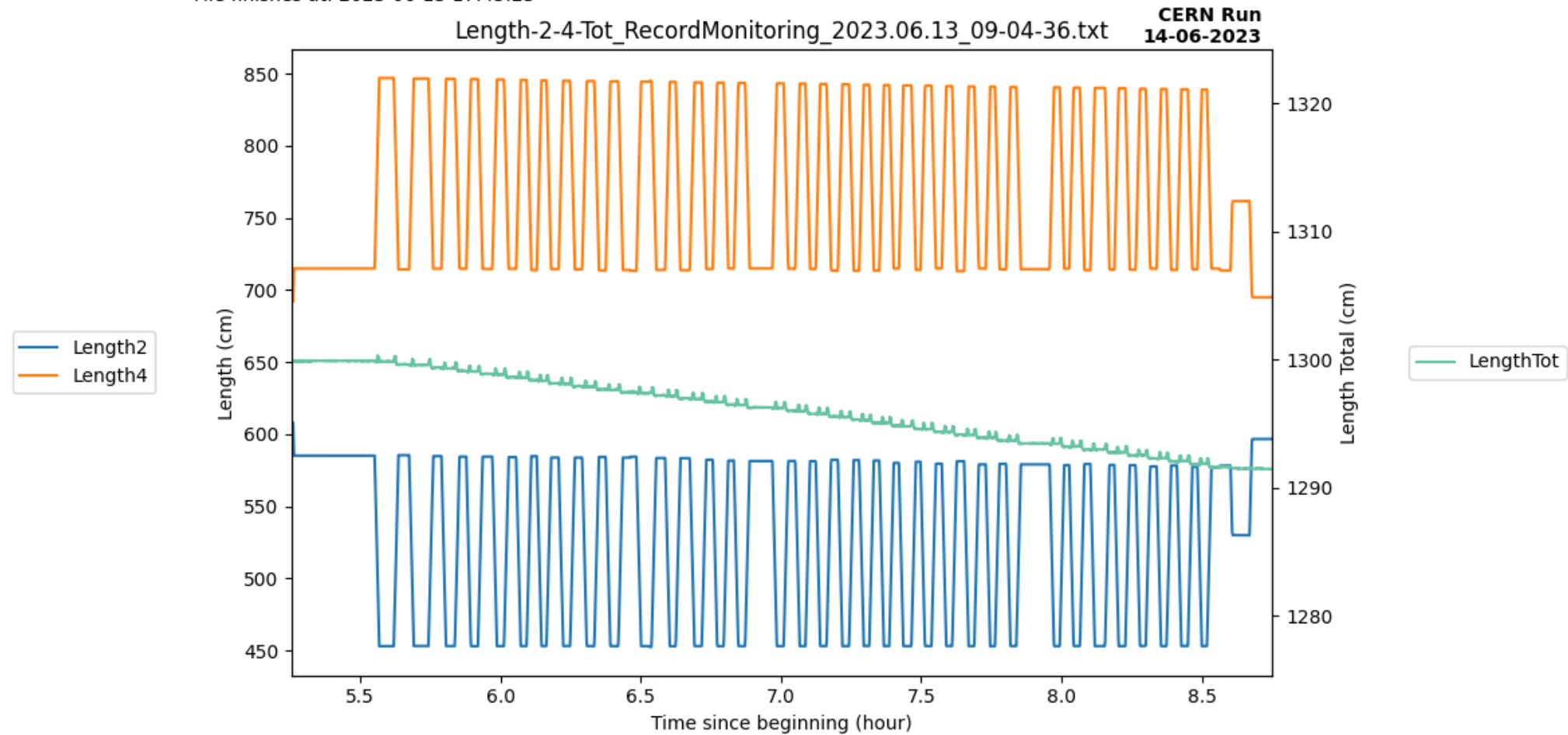
Commentaries :

Tuesday - 06/13

- Monitoring stopped again at 2:27 AM.
- When putting the source at the hot garage, the gN2 tube was stuck. Tension rose at 60N. Relax then take off plastic cap. Shorten the gN2 pipe inside tube (more than 10cm was inside).
- Some ice seems to have formed into the left tube (DS4). Maybe too much manipulation (to take pictures, to measure LN2 inside the tube ...) increased humidity.
- I started the morning program from Marie's slides. Took 3 hours to complete. Forgot to take the last data to check the drift (I restarted the program before, so data unusable).
- Laetitia filled the tank almost completely.

Length on “Morning Routine” 13/06

File begins at: 2023-06-13 09:00:15
File finishes at: 2023-06-13 17:45:23

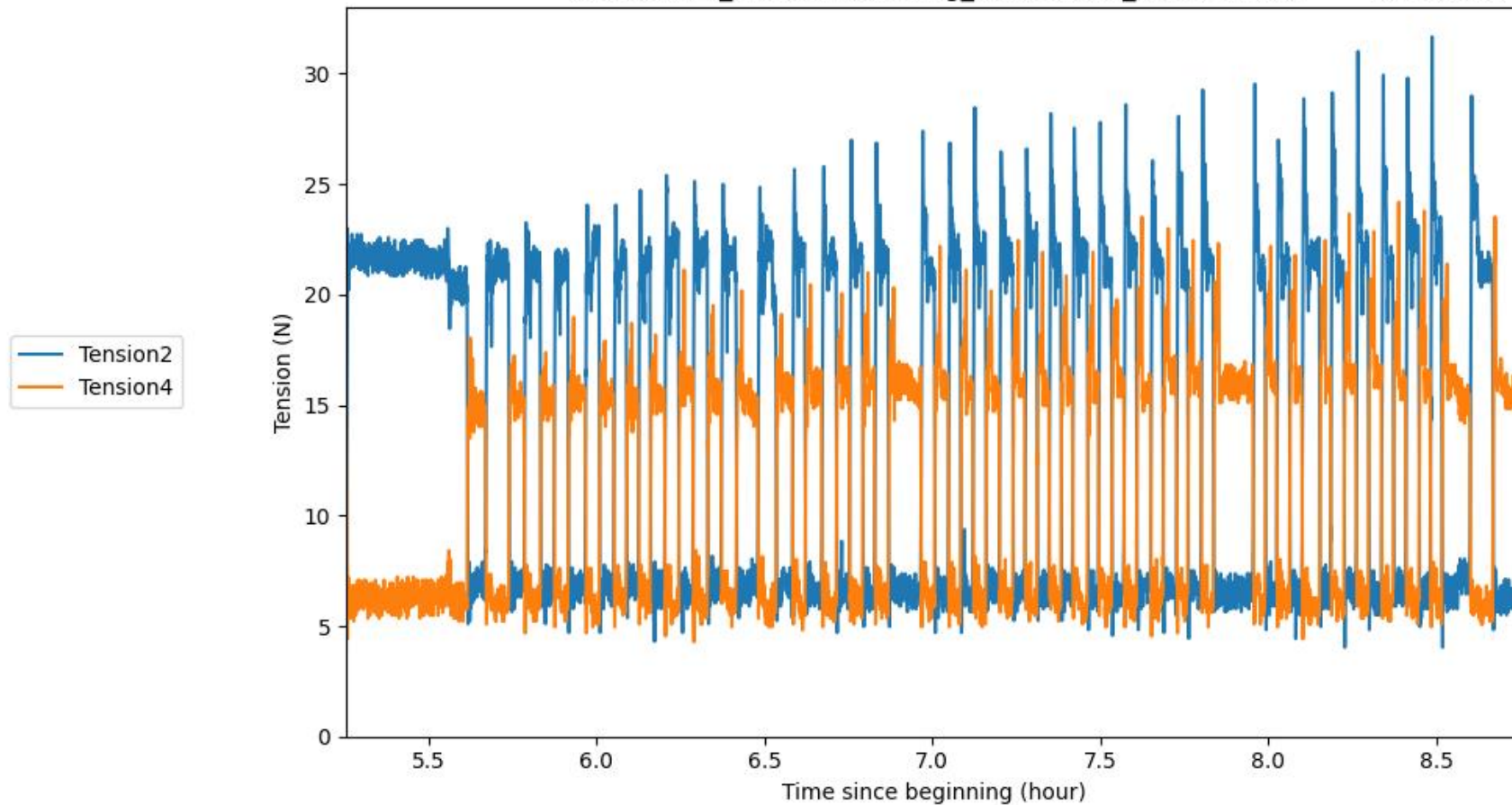


Tension on “Morning Routine” 13/06

File begins at: 2023-06-13 09:00:15
File finishes at: 2023-06-13 17:45:23

Tension-2-4_RecordMonitoring_2023.06.13_09-04-36.txt

CERN Run
14-06-2023



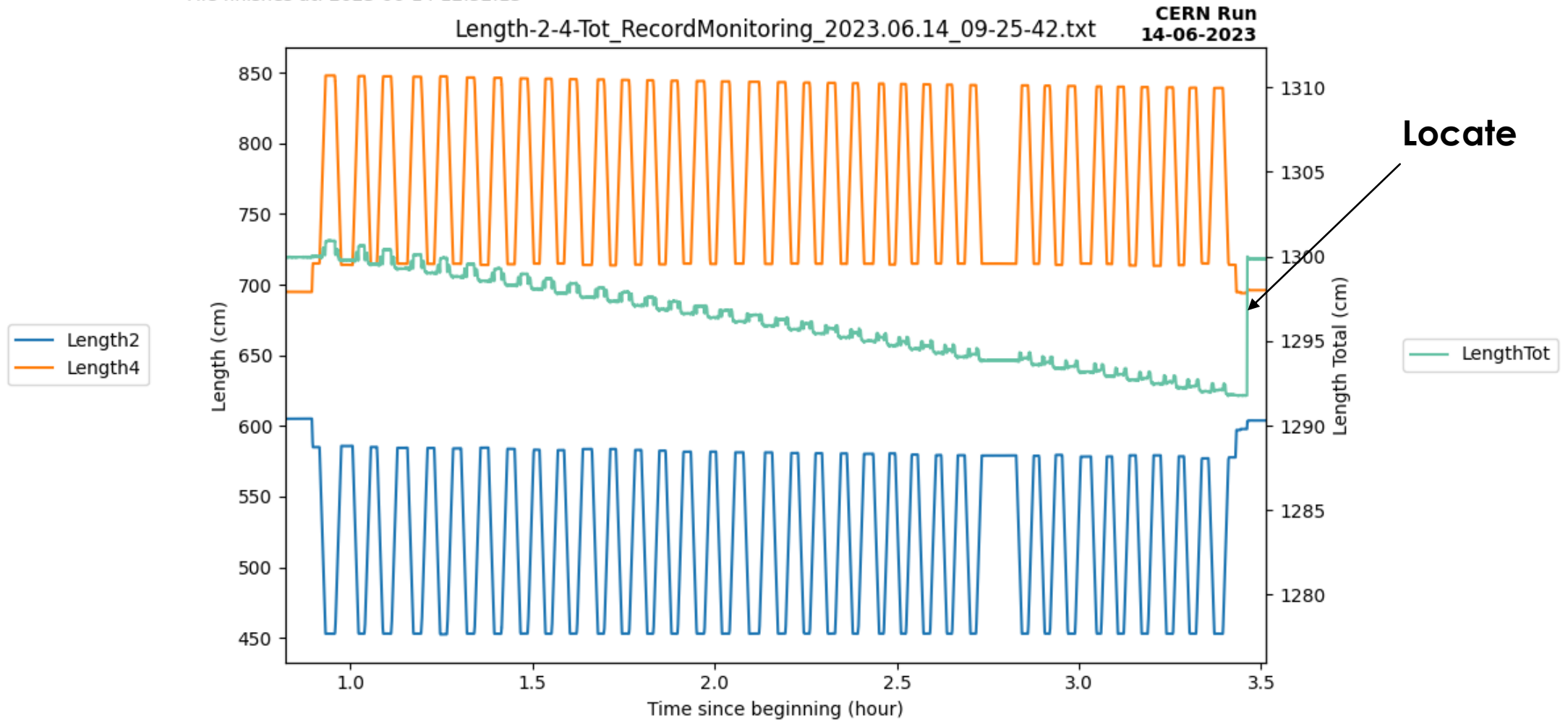
Commentaries :

Wednesday - 06/14

- Pression from battery outside : 150 bar. Need to talk again with Laetitia but seemed ok to her yesterday.
- Seems like there is the same amount of ice in both sides. Maybe too much opening of the tube and humidity went inside.
- I'll be checking the ice formation only twice a day to prevent humidity getting inside.
- Morning routine went fine. Took 2h30. Tension went to 30 for DS2 (sometimes 27, sometimes 32). Around 20 for DS4. Maybe need to talk about this together because it's kinda high for DS2.

Length on “Morning Routine” 14/06

File begins at: 2023-06-14 09:21:20
File finishes at: 2023-06-14 12:52:13

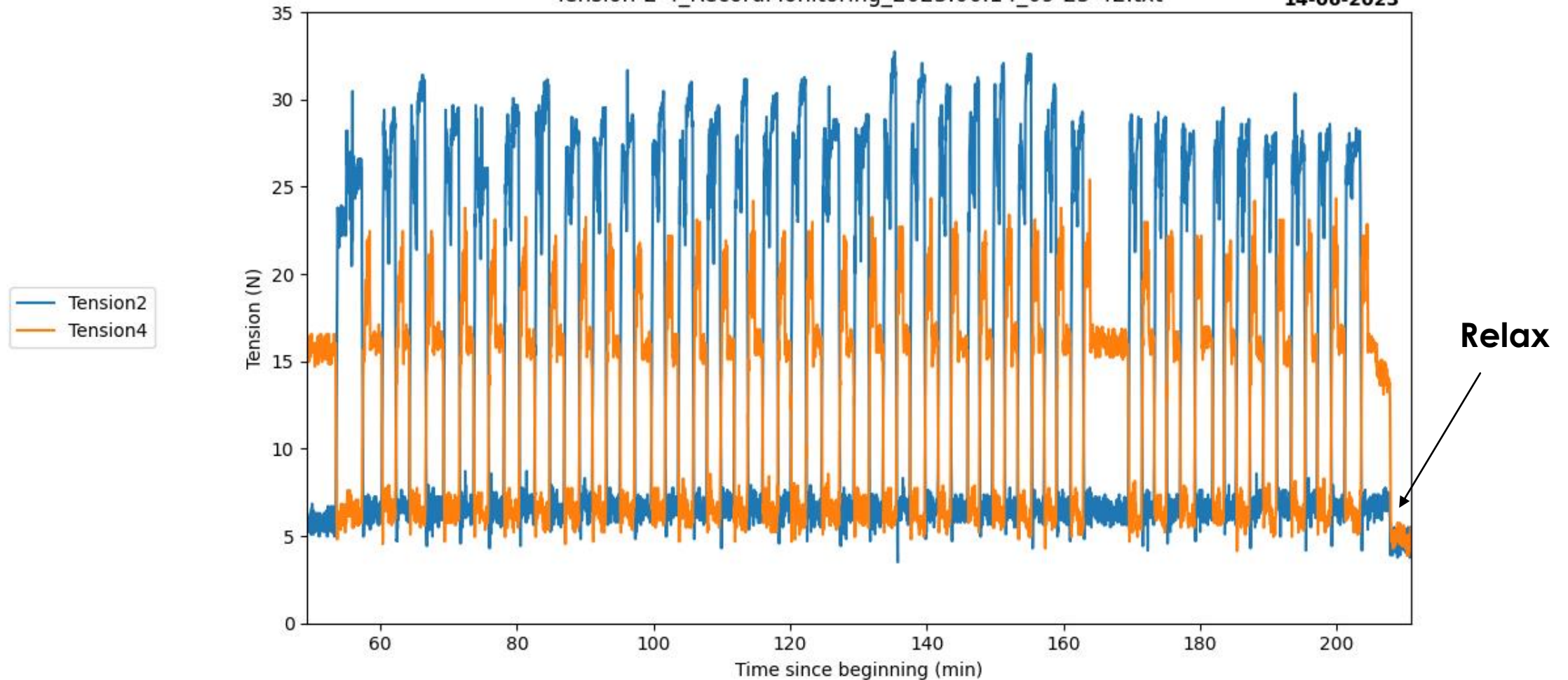


Tension on “Morning Routine” 14/06

File begins at: 2023-06-14 09:21:20
File finishes at: 2023-06-14 12:52:13

Tension-2-4_RecordMonitoring_2023.06.14_09-25-42.txt

CERN Run
14-06-2023



Flushing LN2 at 250L/h to see effect on ice :

15

Time	12/06/2023 11:00	12:00	12:50	14:00	15:05
Right Side (DS2)					
Left Side (DS4)					
T shaped gN2 pipe	NO	NO	NO	YES	YES
gN2 Total flow	250L/h, right side	250L/h, right side	250L/h, right side	250L/h split in both sides	250L/h split in both sides
LN2 in tube	56cm from top -> position 564				55cm from top -> position 565
%LN2 in tank	81%	~ 80%	~ 80%	~ 80%	~ 80%

Pictures are cropped to be visible so do not pay attention on sizes, more on shapes.

Flushing LN2 at 250L/h to see effect on ice :

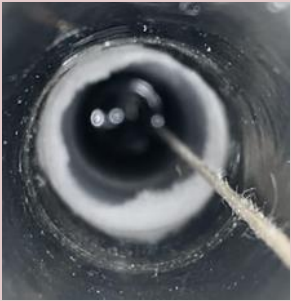







16

Time	16:00	17:00	13/06/2023 9:00	11:25	13:00
Right Side (DS2)					
Left Side (DS4)					
T shaped gN2 pipe	YES	YES	YES	YES	YES
gN2 Total flow	250L/h	250L/h	250L/h	250L/h	250L/h
LN2 in tube	56cm from top -> position 564				58 from top -> position 562
% LN2 in tank	~ 80%	~ 80%	75%	~98%	98.4%

Pictures are cropped to be visible so do not pay attention on sizes, more on shapes.

Flushing LN2 at 250L/h to see effect on ice :

17

Time	14:14	15:30	17:30	9:30	
Right Side (DS2)					
Left Side (DS4)					
T shaped gN2 pipe	YES	YES	YES	YES	
gN2 Total flow	250L/h	250L/h	120L/h	120L/h	
LN2 in tube		54cm so position 566	52 so position 568		
% LN2 in tank	98%	97,5%	99%	95%	

Pictures are cropped to be visible so do not pay attention on sizes, more on shapes.