Activity 4.1: *Temperature Data*

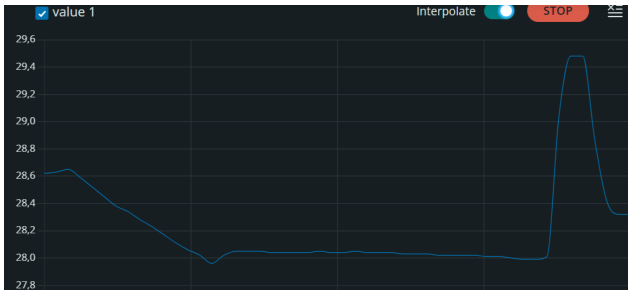
Team #3344

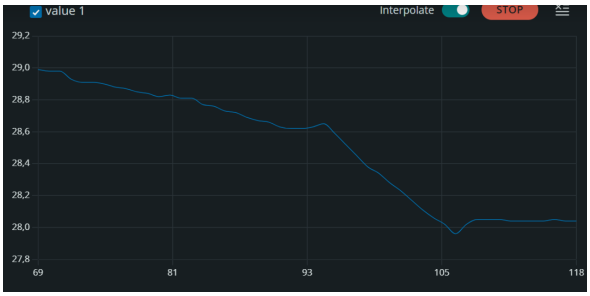
Task 1: Prepare the LunaSat for Data Collection

- ☑ ~~Put the LunaSat on the table in a spot with no direct sunlight and without a large heat source nearby~~
- ☑ ~~Connect the LunaSat to the FTDI and laptop~~
- ☑ ~~Select the correct board, processor and port~~
- ☑ ~~Load the "Temperature_Basic_Example" file onto your LunaSat~~
- ☑ ~~Upload the code~~
- ☑ ~~Enable the serial plotter~~

Task 2: Analyze the Results

Do the values you see make sense? How do you know?
Yes, we check the temperature with the other temperature sensors.
Results are valid because while we were "heating" the sensor the temperature was rising and decreasing during cooling.





What's the temperature of the room (in Celsius)? 27.2 C

Task 3: Heat Source

- ☑ ~~Locate the temperature sensor on the LunaSat~~
- ☑ ~~***Gently*** place your finger covering the whole sensor and keep it there for approximately 30 seconds~~

How does the behavior of the serial plotter change? The temperature was slowly rising

What's the temperature of the room (in Celsius)? 31.2 C

Take your finger off the sensor and observe the serial plotter again. How does its behavior change now? Does it go back to before you covered the sensor? The temperature was rapidly decreasing

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What's the temperature of the room (in Celsius)? 27.3

Task 4: Vary Heat Sources On the Sensor

Test out the different heat sources below and record your findings.

Heat Source	Max Temperature	Time to Reach Max Temp
Lamp/Laptop	34 C	50 s
Sun	32.1 C	120 s
Warm your hands	33.5 C	3s

Task 5 (Optional): Vary Cold Sources On the Sensor

Test out the different cold sources below and record your findings. ***Make sure all materials are completely dry before touching the LunaSat.***

Cold Source	Min Temperature	Time to Reach Min Temp
Fridge/Freezer		
Outside	It is hot today	
Icy Hands	29 C	2s
Cold Pack		