AM2301 Test for spikes in data

Tests at home from 06.04.2022 to 07.04.2022
Test cases:

1) Normal measuring, taking values when possible, no interrupts, error when not possible. Code: amtest1.py
2) Measuring as in MaMBA configuration, without interrupts, Limits broken = 1. Code: amtest2.py
3) Measuring as in MaMBA configuration, with interrupts. Code: amtest3.py

Test case	Start	End	Spikes expected	Spikes in Data	Test completed	Test file
1)	10:37 – 06.04.2022	13:37 – 06.04.2022	No	No	Yes	log_220406_1.txt
2)	13:51 – 06.04.2022	15:51 – 06.04.2022	No	No	Yes	log_220406_2.txt
3)	17:59 – 06.04.2022	20:59 – 06.04.2022	Yes	No	Yes	log_220406_3.txt
3)	9:30 – 07.04.2022	13:23 – 07.04.2022	No	No	Yes	log_220407_1.txt
3)	9:30 – 07.04.2022	14:30 – 07.04.2022	No	No	Yes	log_220407_2.txt
3)	9:30 – 07.04.2022	16:20 – 07.04.2022	No	No	Yes	log_220407_3.txt
3)	9:30 – 07.04.2022	18:55 – 07.04.2022	No	No	Yes	log_220407_4.txt

When executing proc.py (python3 proc.py) put in the relevan test file to see the data displayed.

Tests at ZARM starting from 08.04.2022

The same main.py on the Sensorboard as in 3) resulted in spikes after not even an hour.

Following changes in:

- main.py to old version, no exception will be catched here.
- am2301.py so that calling a the measurement function will try to take a measurement form the am2301, if that reading is successful, the values are returned. If not, same thing is tried three times. If there was not successful reading in those three, the occurring exception will be reraised.

Those changed still resulted in spikes.

The next change was the atomic execution of the lora callback function, which still resulted in spikes.

Next the callback function for lora is changed. Now it only sets a boolean indicating that a message is received and the message itself. At the start of the infinite loop the boolean is reviewed and if it is true the message will be processed. That ...