

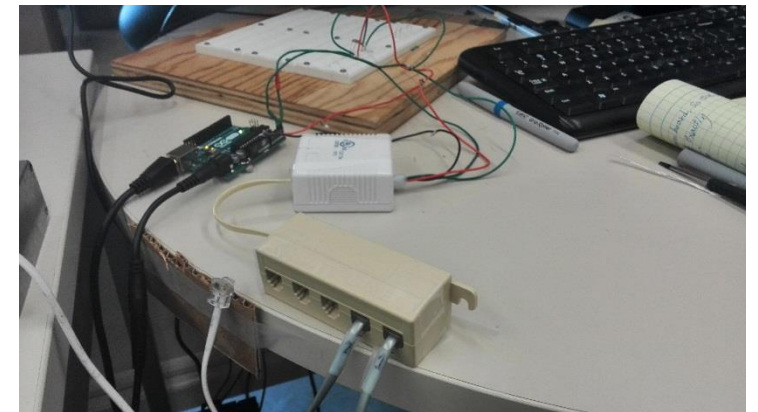
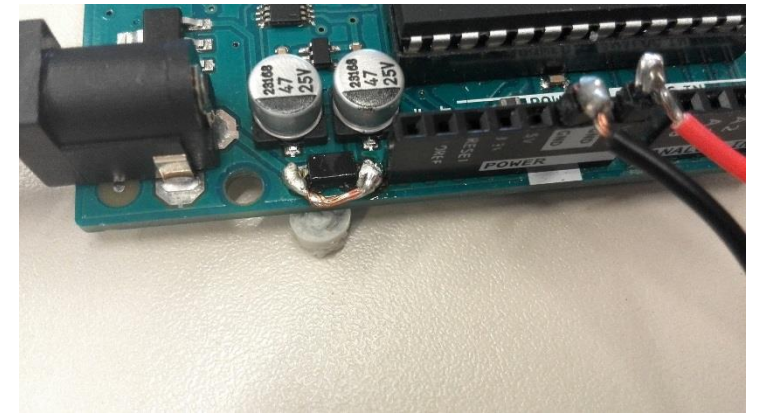
# Leak test progress

July 10<sup>th</sup> UMN

Yan Ke

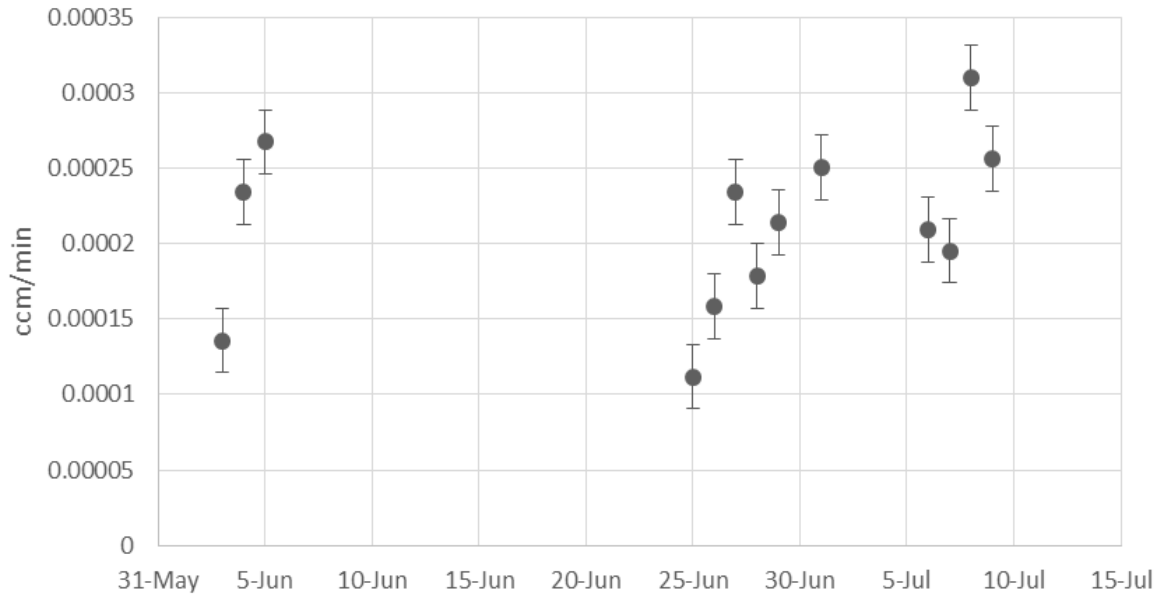
# Apparatus Progress

- 3D printing part is ready:
- Voltage problem due to Arduino chip has been solved
- New splitter has been set up.
- New Arduino code:
  - No fixed time delay in program. Can take data accurately.
  - Will not keep waiting for one sensor.

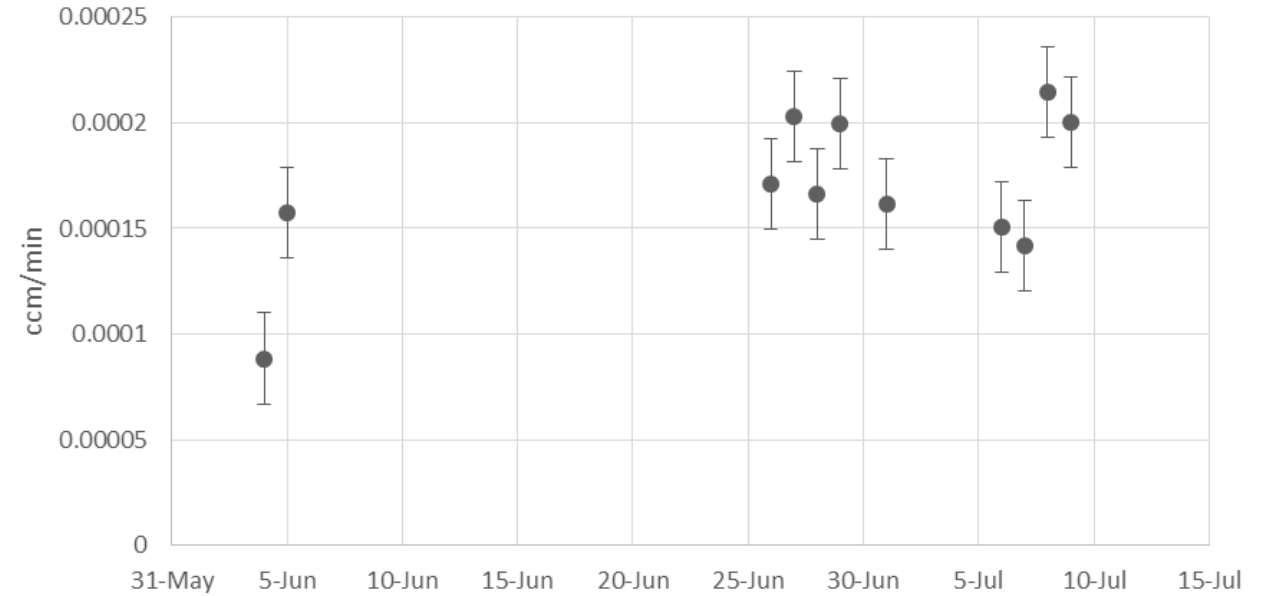


# Leak test Progress

st00132 (Leak rate vs. Date)



st00134 (Leak Rate vs. Date)



The memory thing did not occur again

# Problem

- Phone wire problem: All of the phone wires should be similar when running multiple sensors. -Hajime
- Uncertainty calculated by RMS is very similar to LSQ, still smaller than what it should be.

start	slope	uncertain<LSQ>	uncertain<RMS>
0	2.75	1.51	1.50
90	3.69	1.40	1.40
180	4.87	1.63	1.63
270	3.34	1.45	1.45
360	-2.58	1.56	1.56
450	-0.75	1.65	1.65
540	1.19	1.45	1.46
630	-0.62	1.59	1.60
720	3.75	1.57	1.57
810	2.10	1.45	1.45
Over all:	2.18	0.04	0.04