

Status report

3/22/2019

Tokyo University of Science

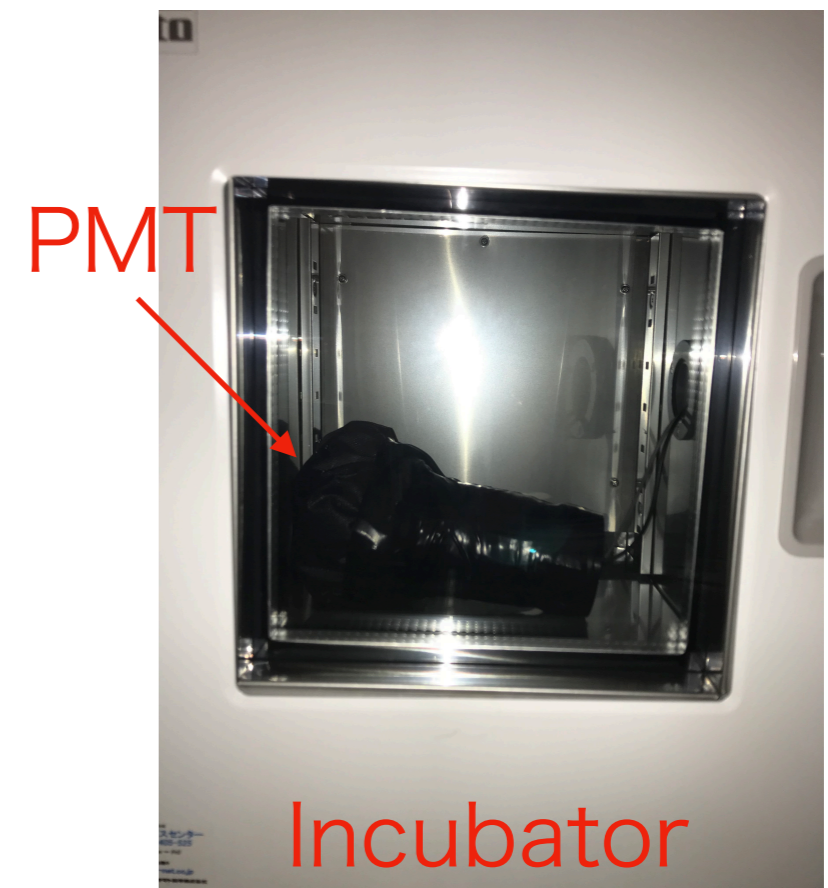
Michitaka Inomoto

What I have done

- Measured temperature dependence of dark current rate with an incubator.
- Measurement temperature range is from 13 °C to 21 °C.



Incubator



Incubator

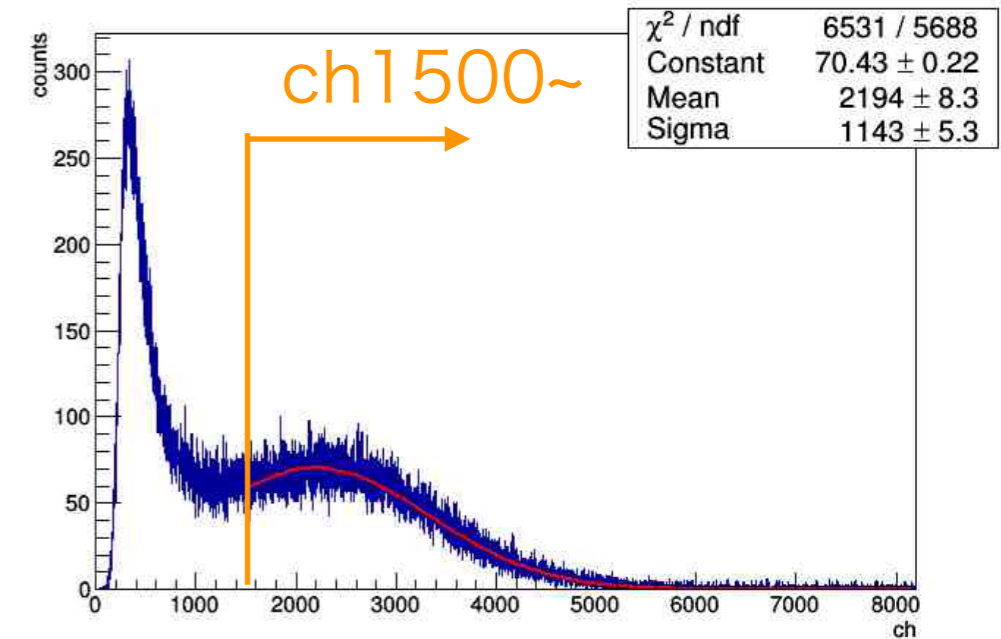
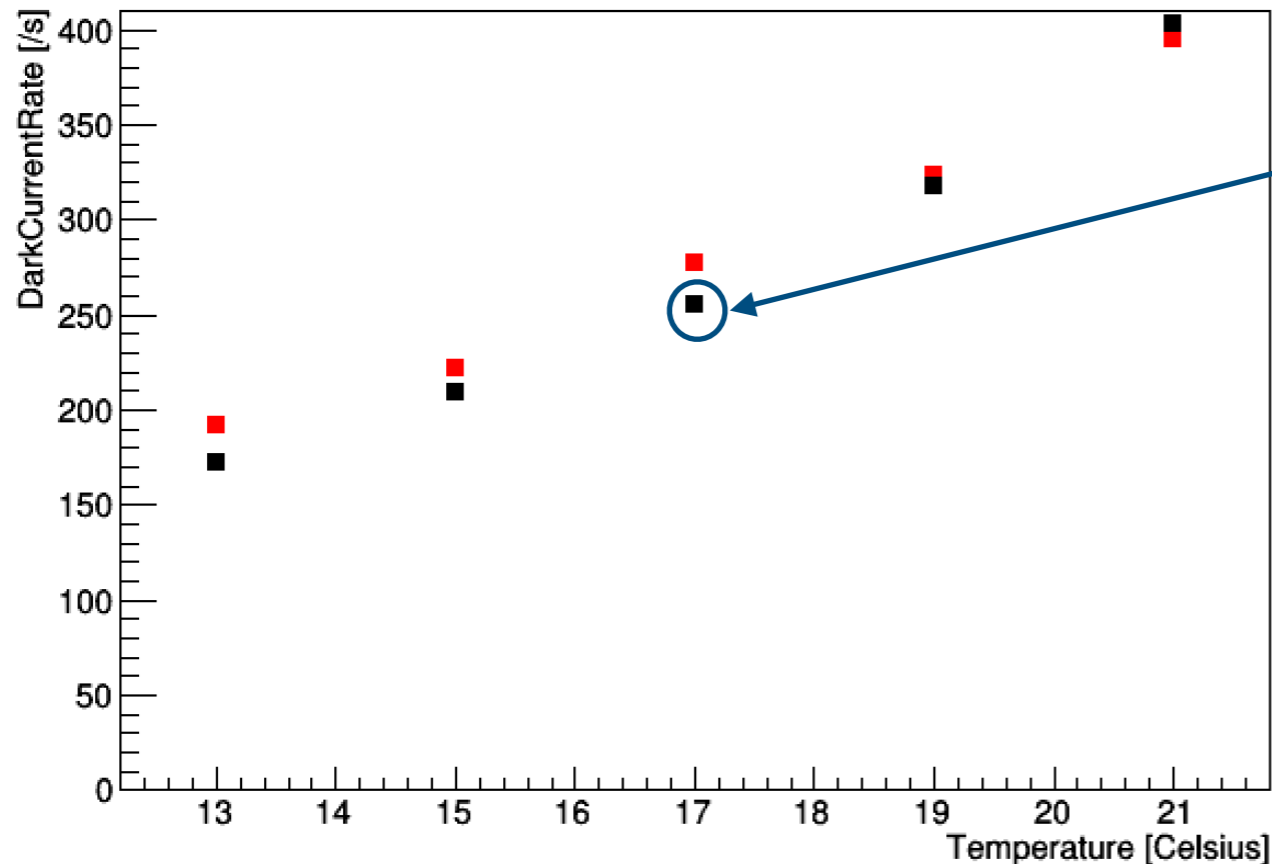
Temperature dependence of dark rate

“Dark Current Rate” is defined as follows:

$$\text{Dark Current Rate} = \frac{\text{the number of PMT's signals}}{\text{Real Time (600 s)}}$$

“the number of PMT's signals” is the counts above the threshold.

DarkCurrentRate



1st time: 3/12/2019 10:34~15:24

2nd time: 3/12/2019 15:24~18:32

Next

- Check the temperature dependence of another PMT.
- See the rate after keeping the PMT in the incubator for a few day.