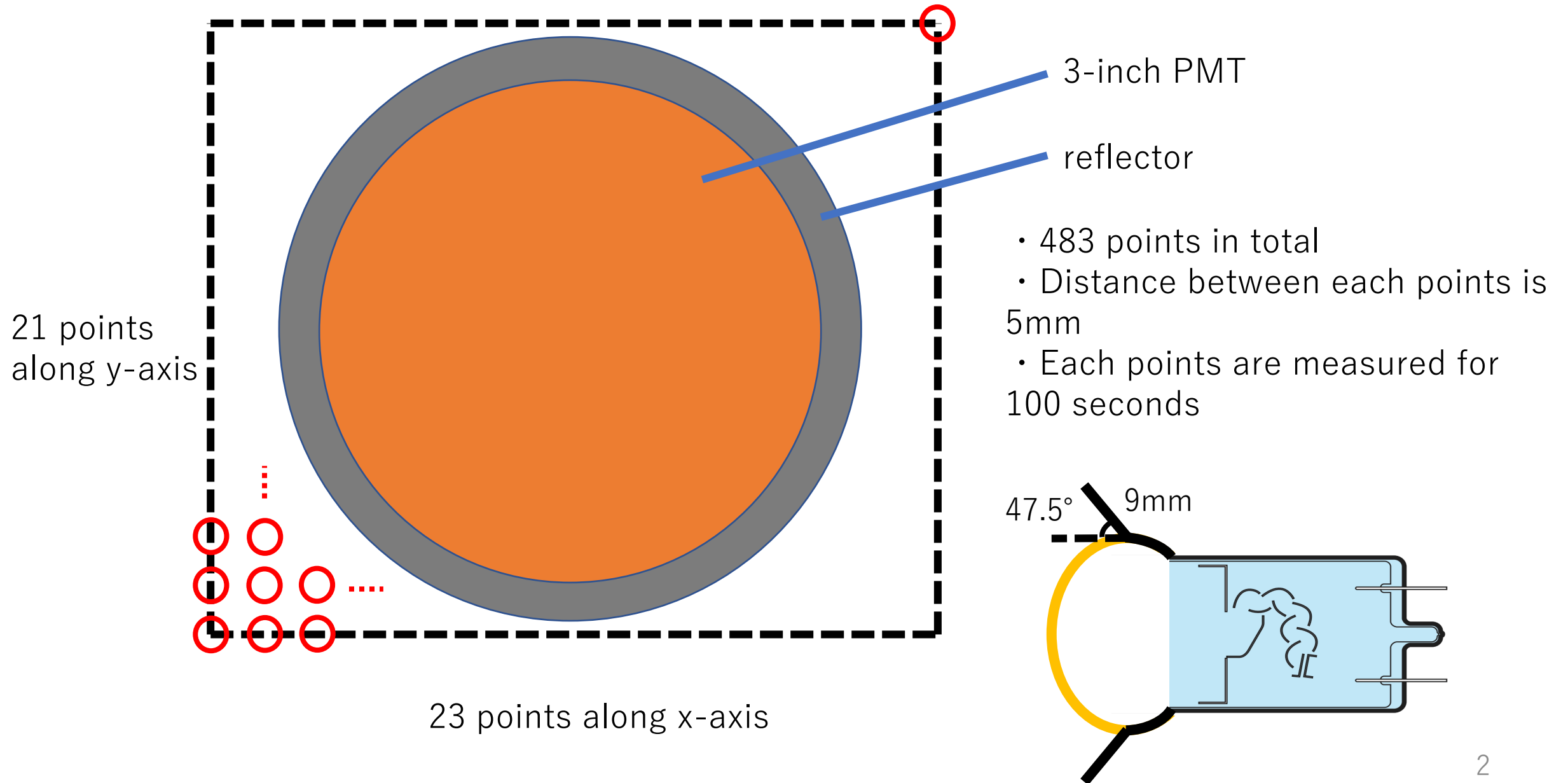


Status Report

Isao Sashima
Nov. 13 , 2020
mPMT meeting

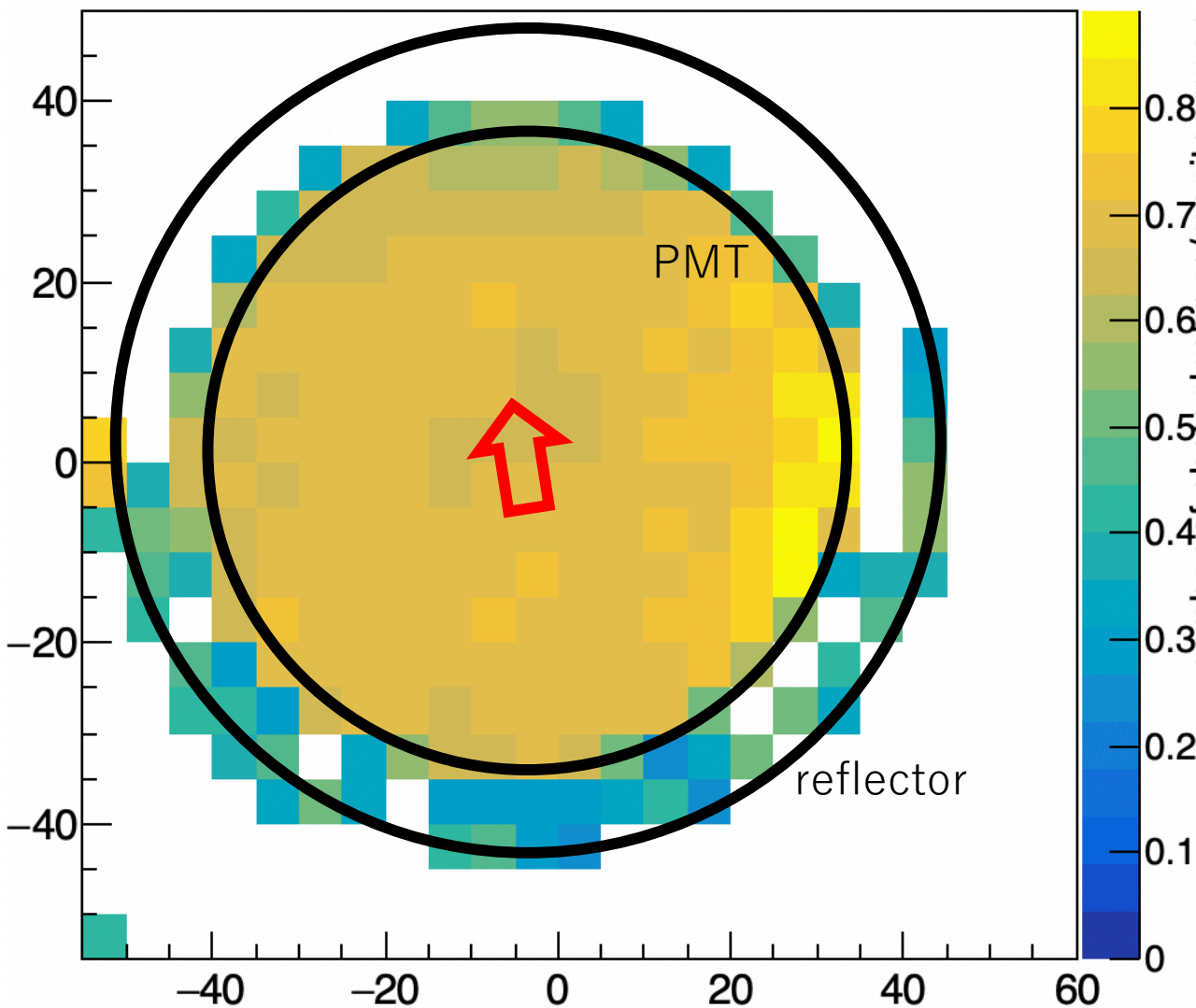
- expanded the measurement area and increased the granularity



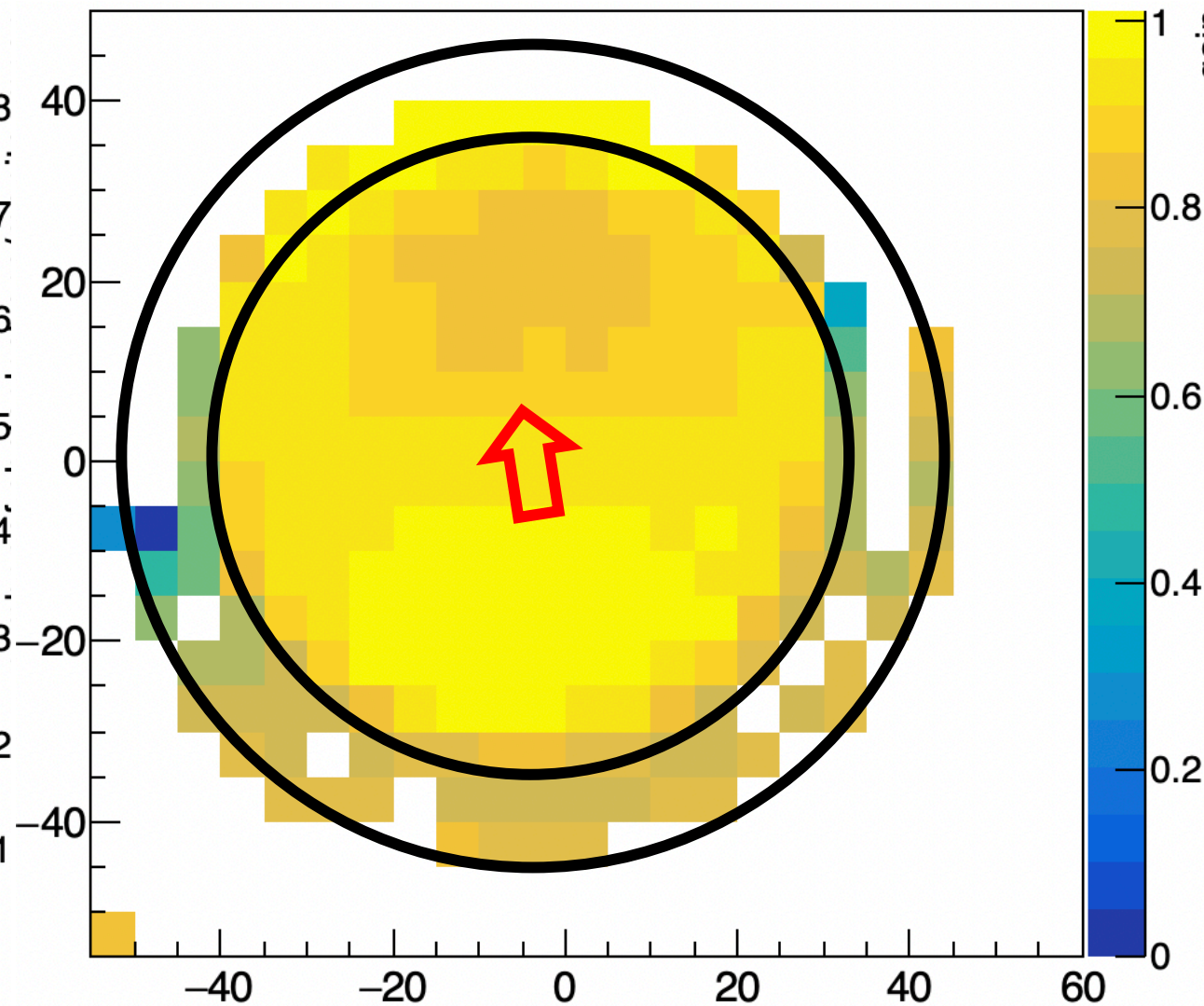
with 47.5° , 9mm reflector , 483 points

 the direction from the first dynode to the second dynode

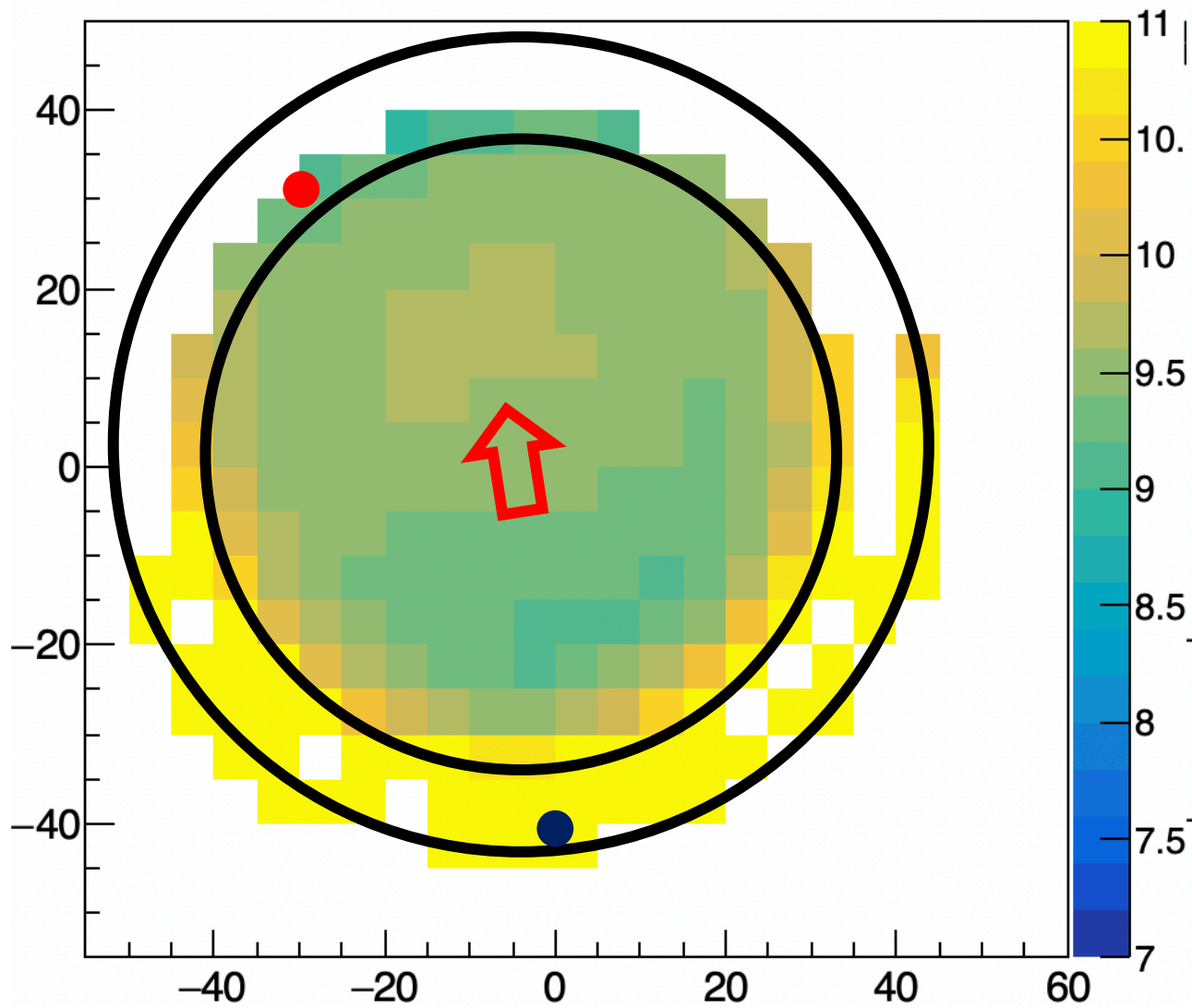
efficiency



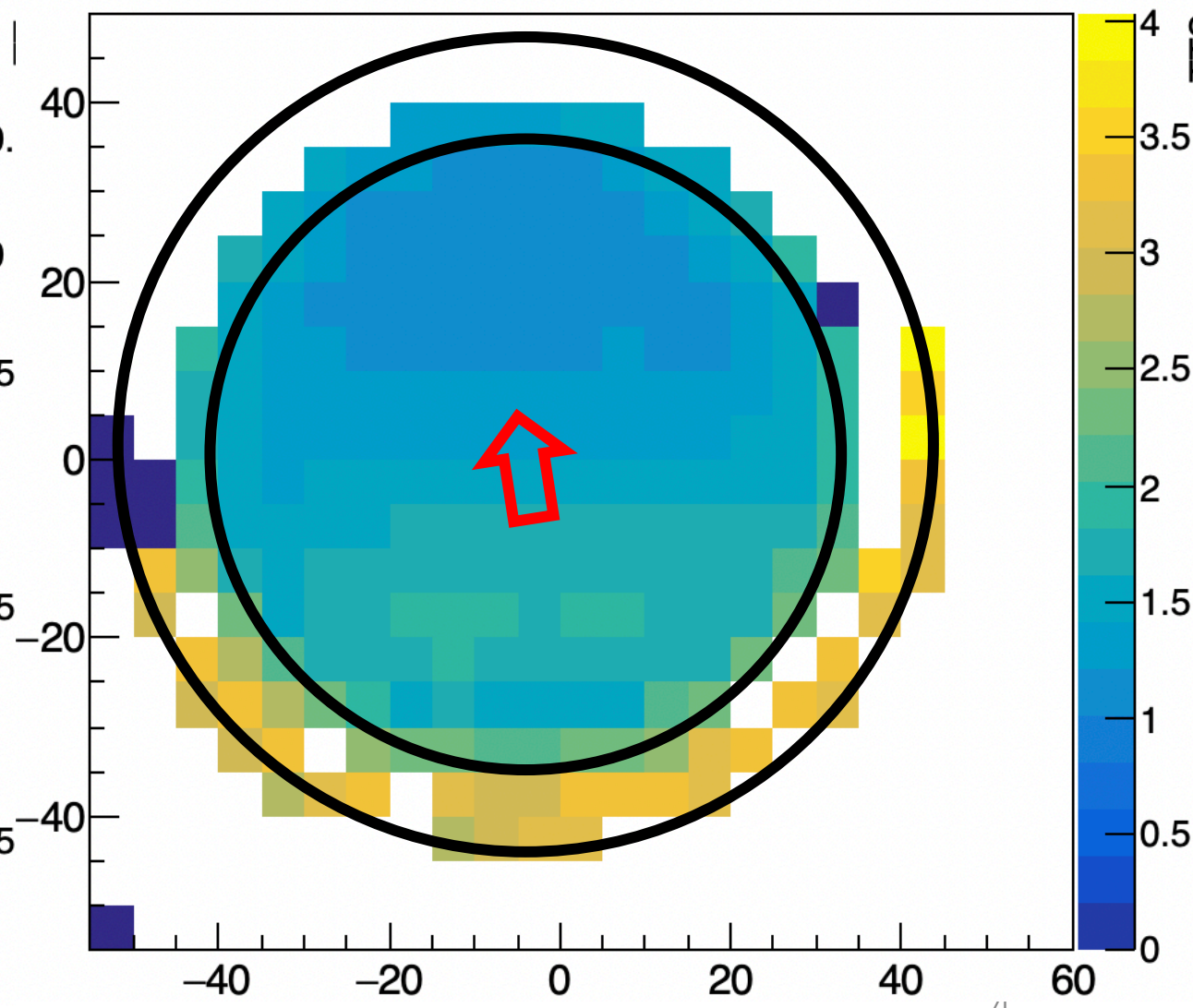
gain



TT



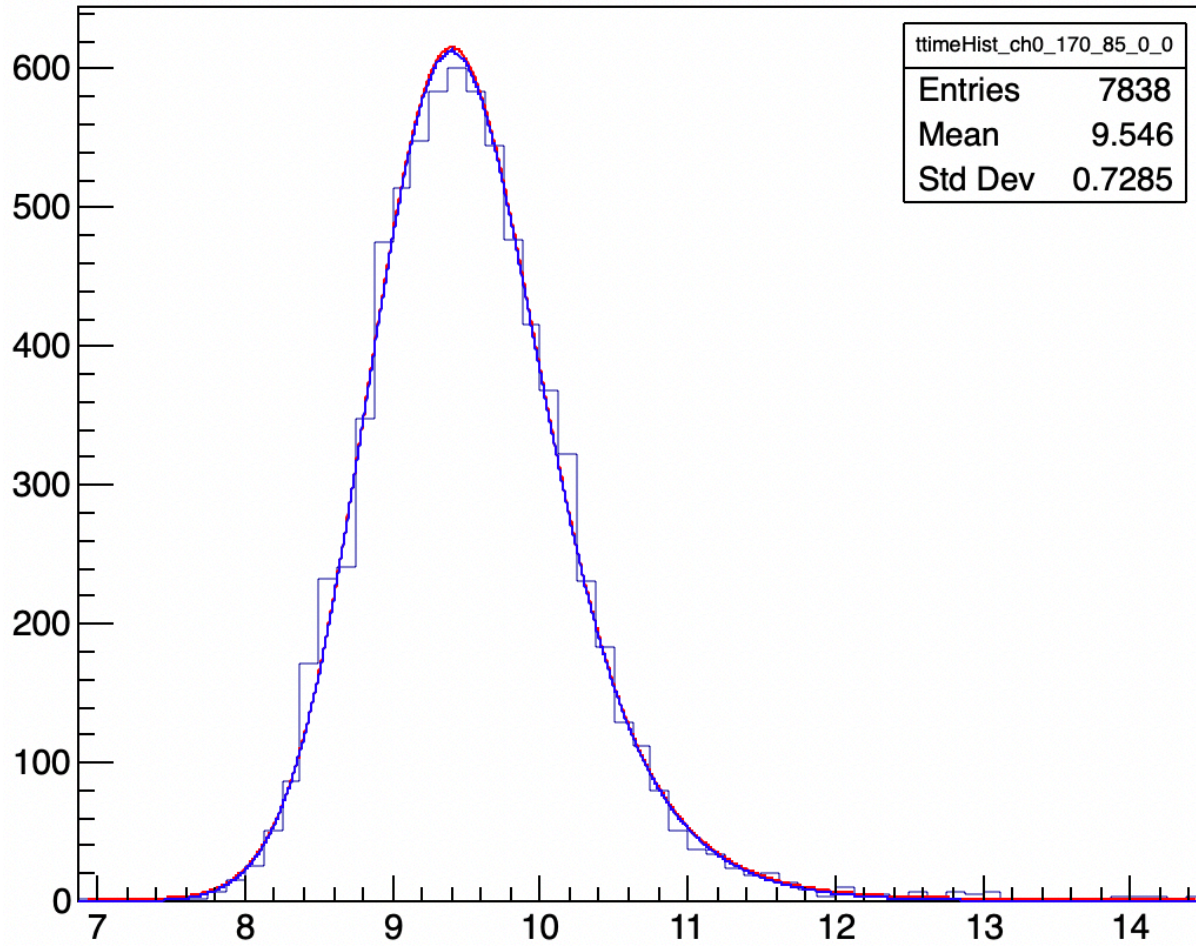
TTS



large difference between the upper part and lower part of the reflector

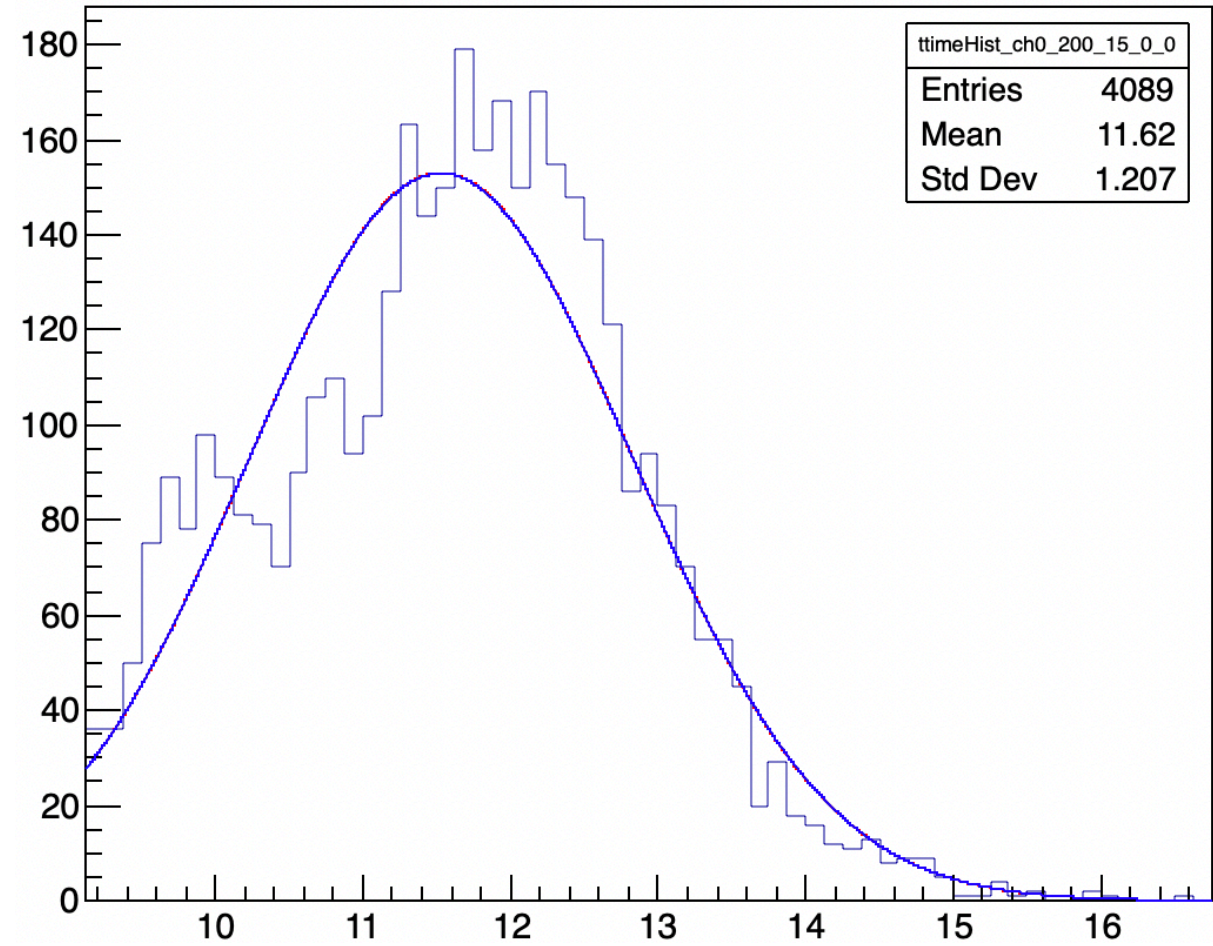
→ different number of entries

● upper part(-30,30) = (170,85)



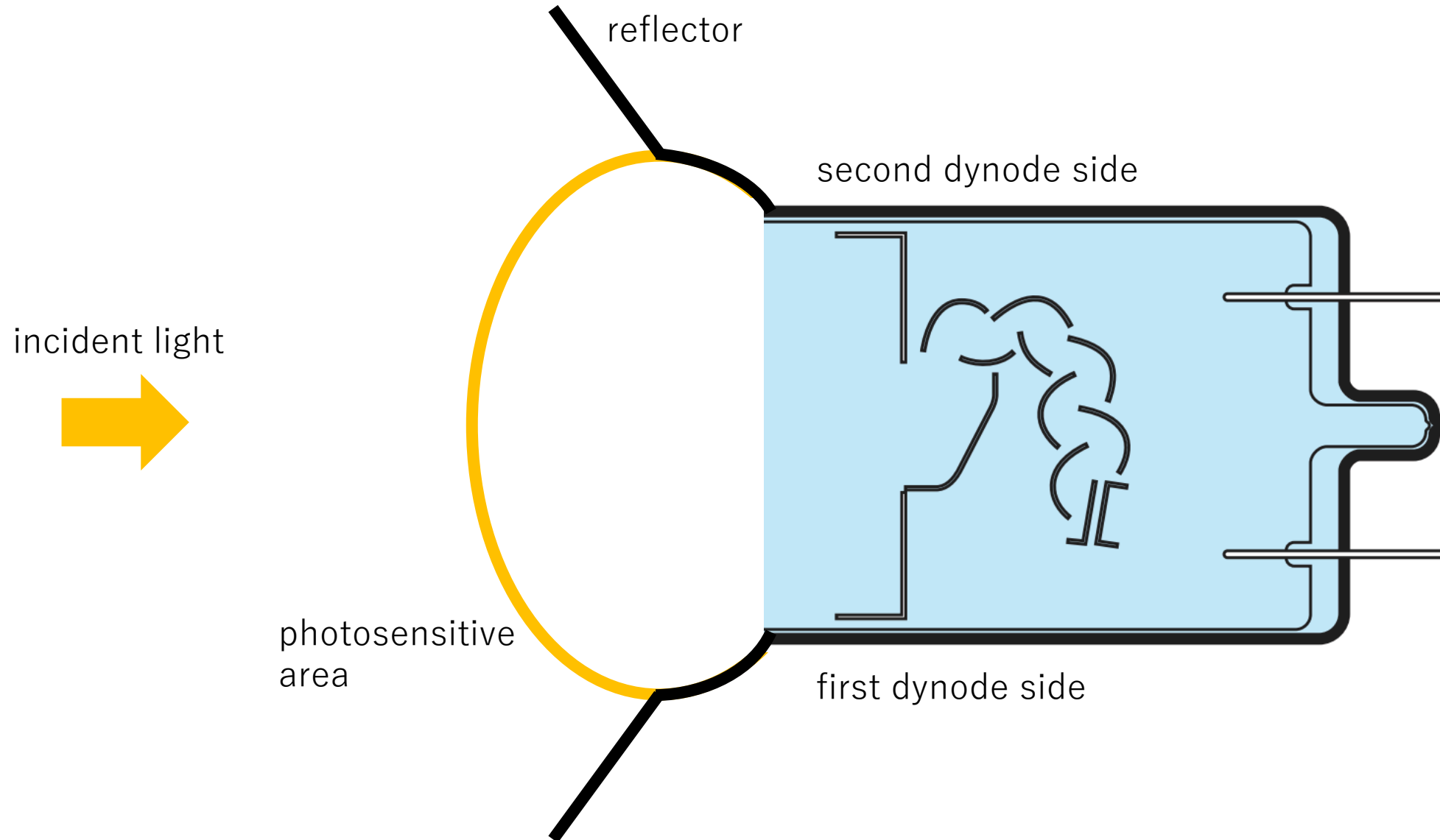
second dynode side

● lower part(0,-40) = (200,15)



first dynode side

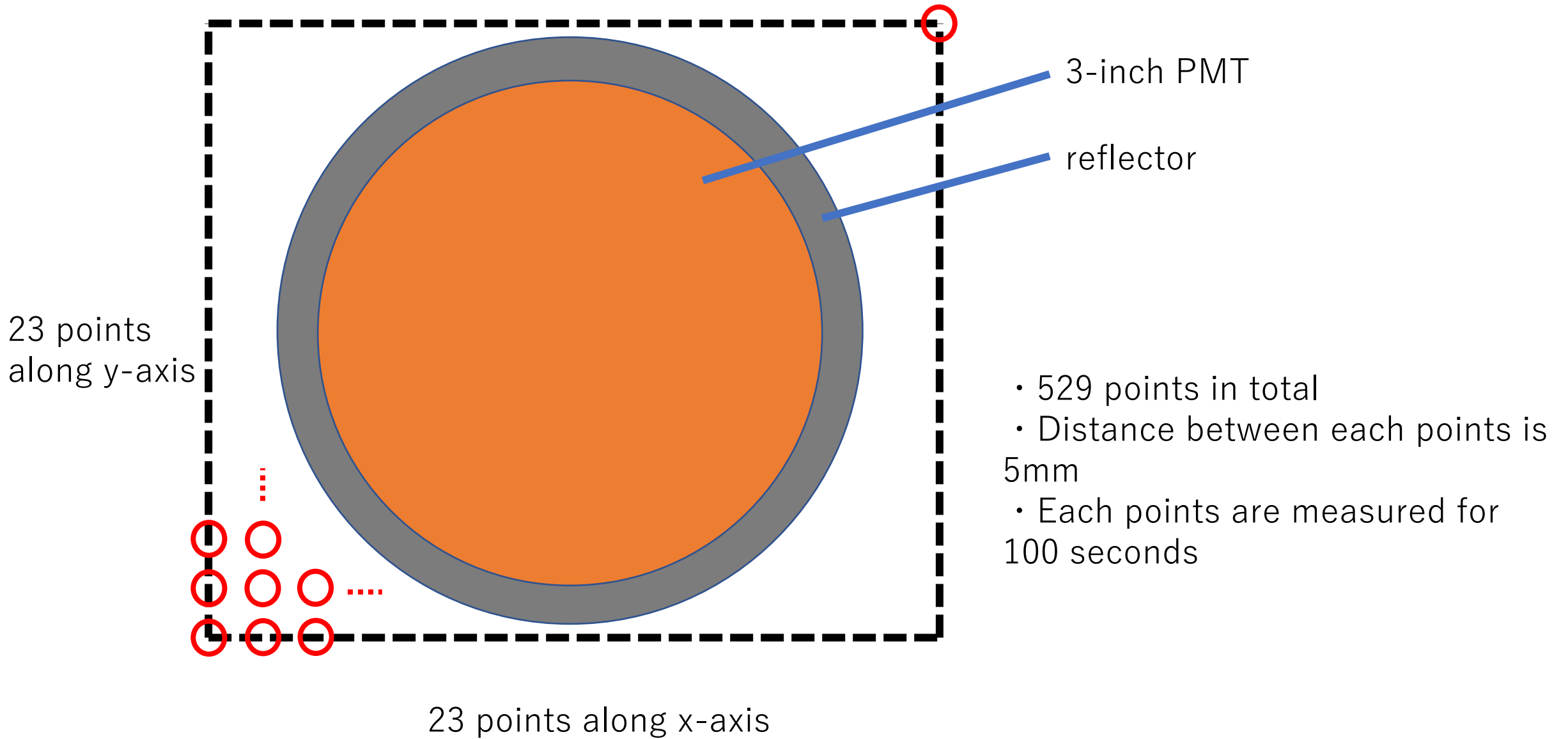
- As in the case without the reflector, suspected that there is a correlation with the position of the dynode.



To do

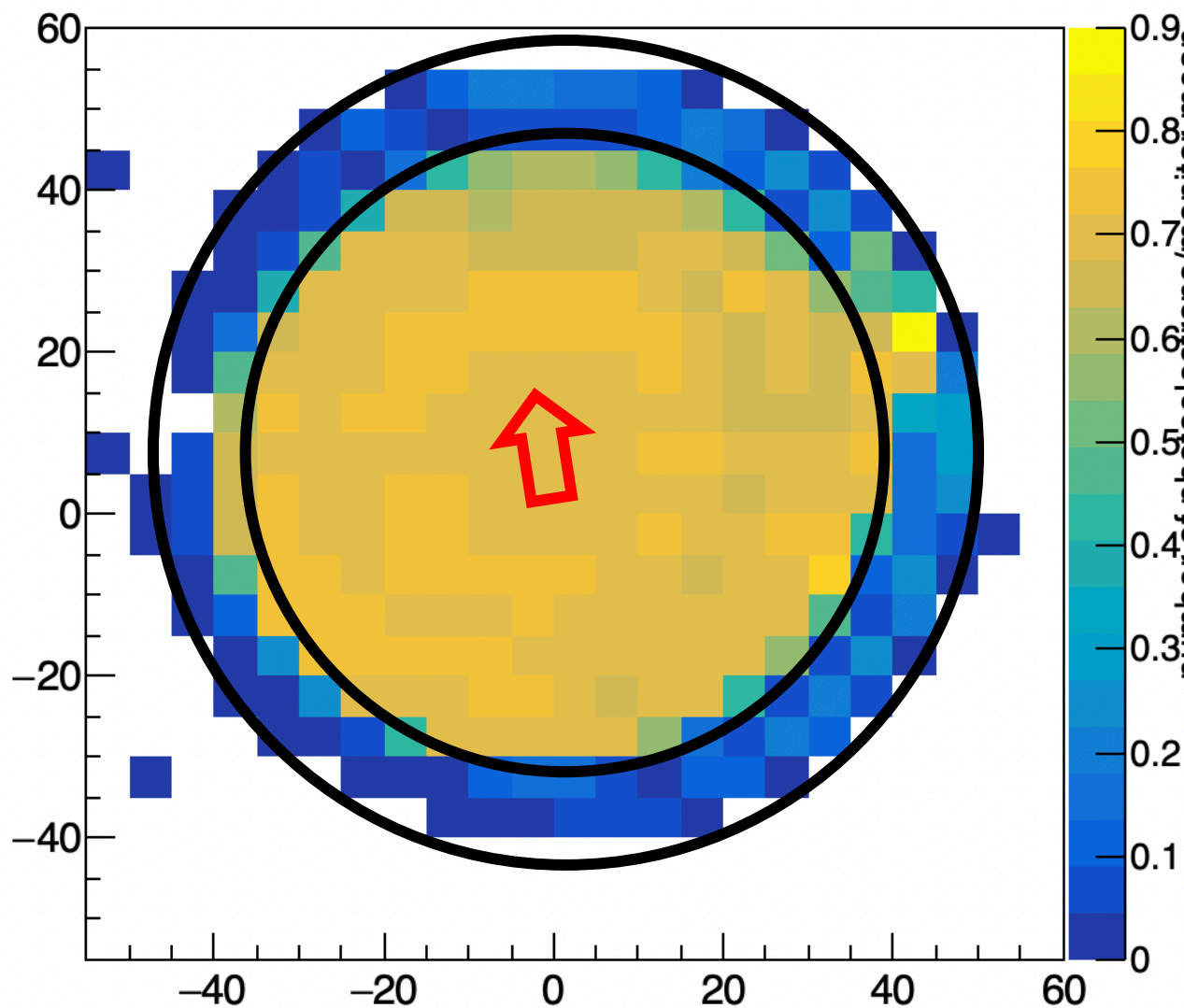
- consider the relationship between TT values and position.
- using 3D printer, make the maximum length of reflector that the PMTs don't overlap each other with angle I'm using now. (47.5° and 51°)
- using the new reflector, examine how much light increases.

Backup



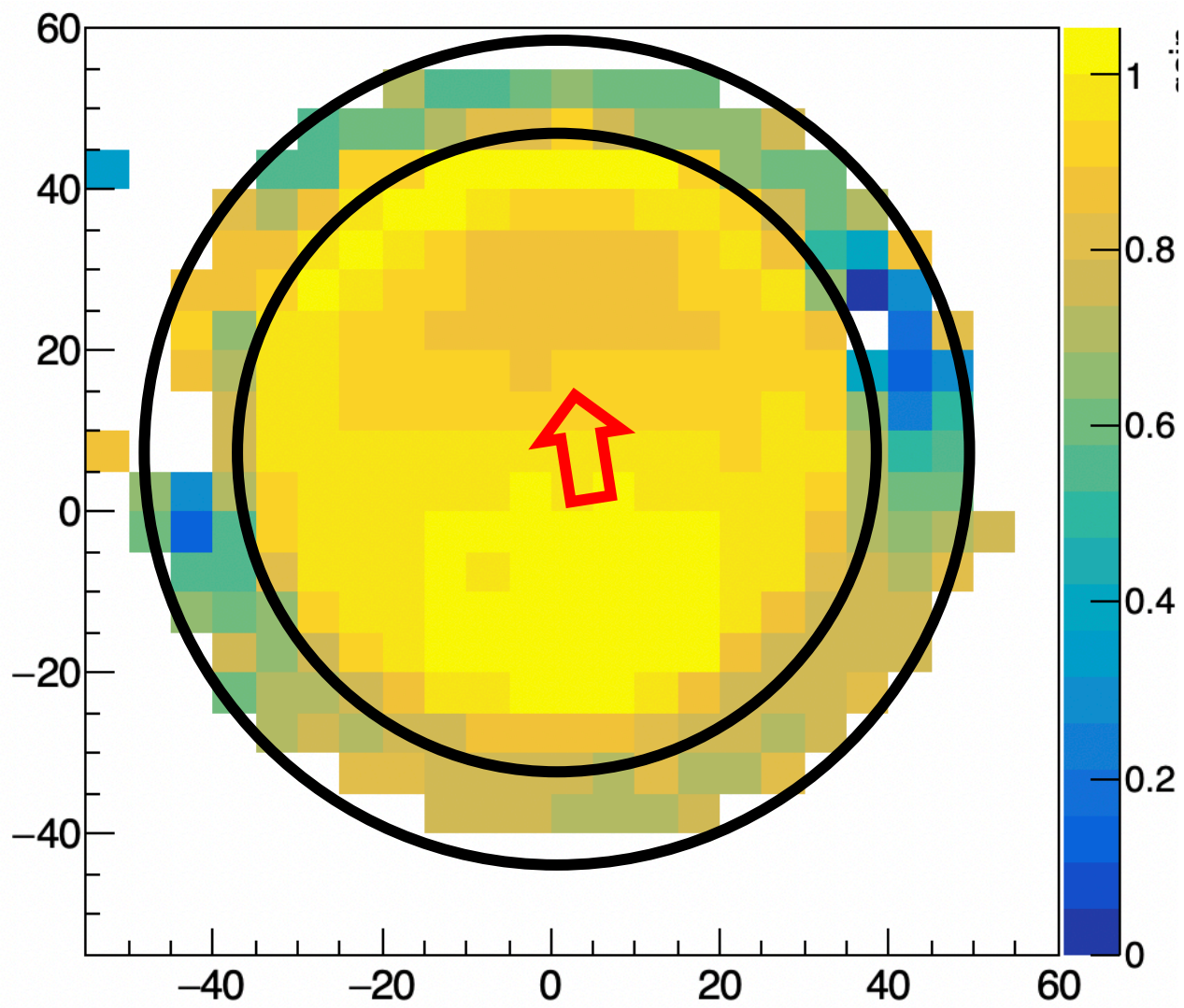
with 51° , 9mm reflector , 529 points

efficiency

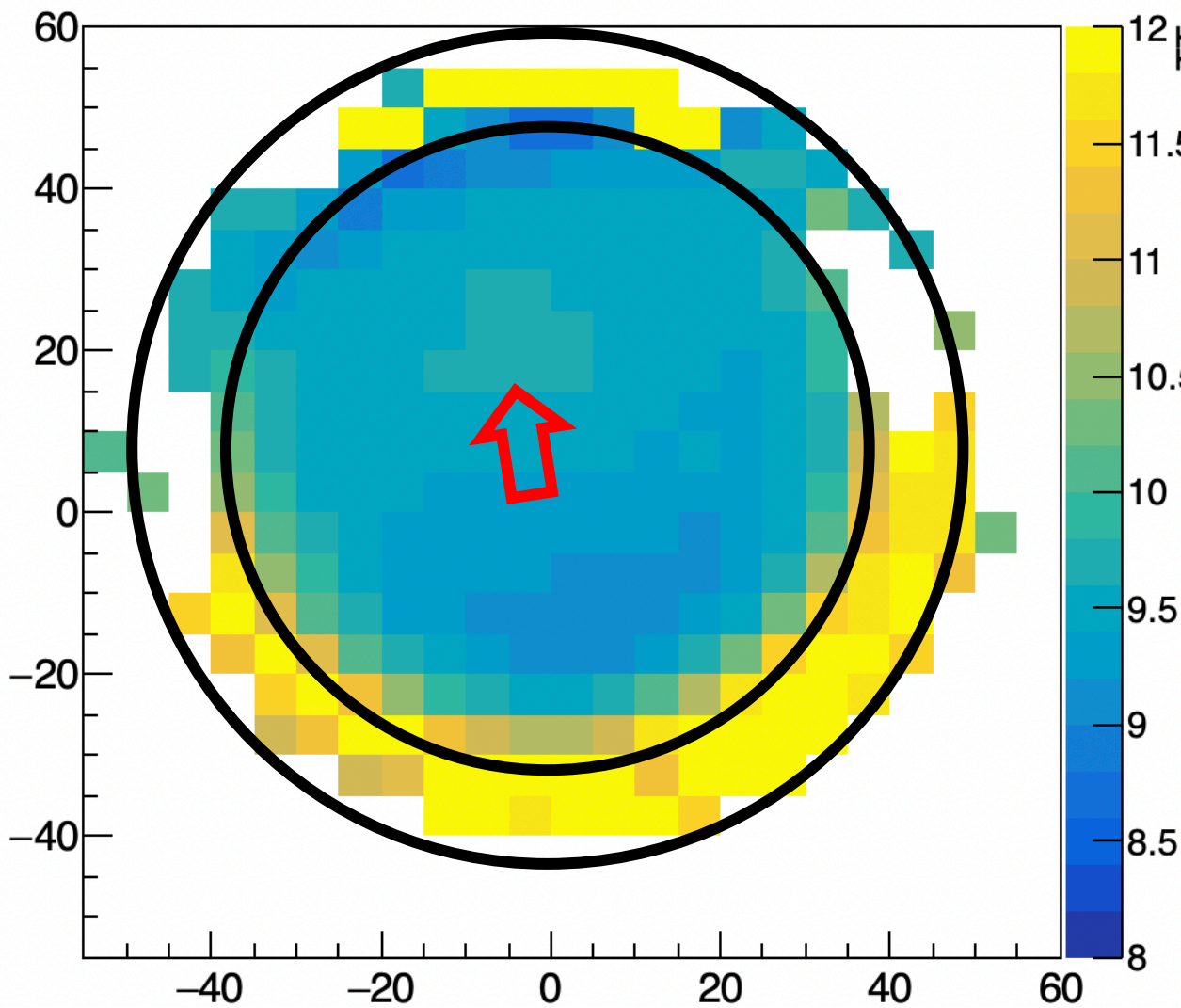


 the direction from the first dynode to the second dynode

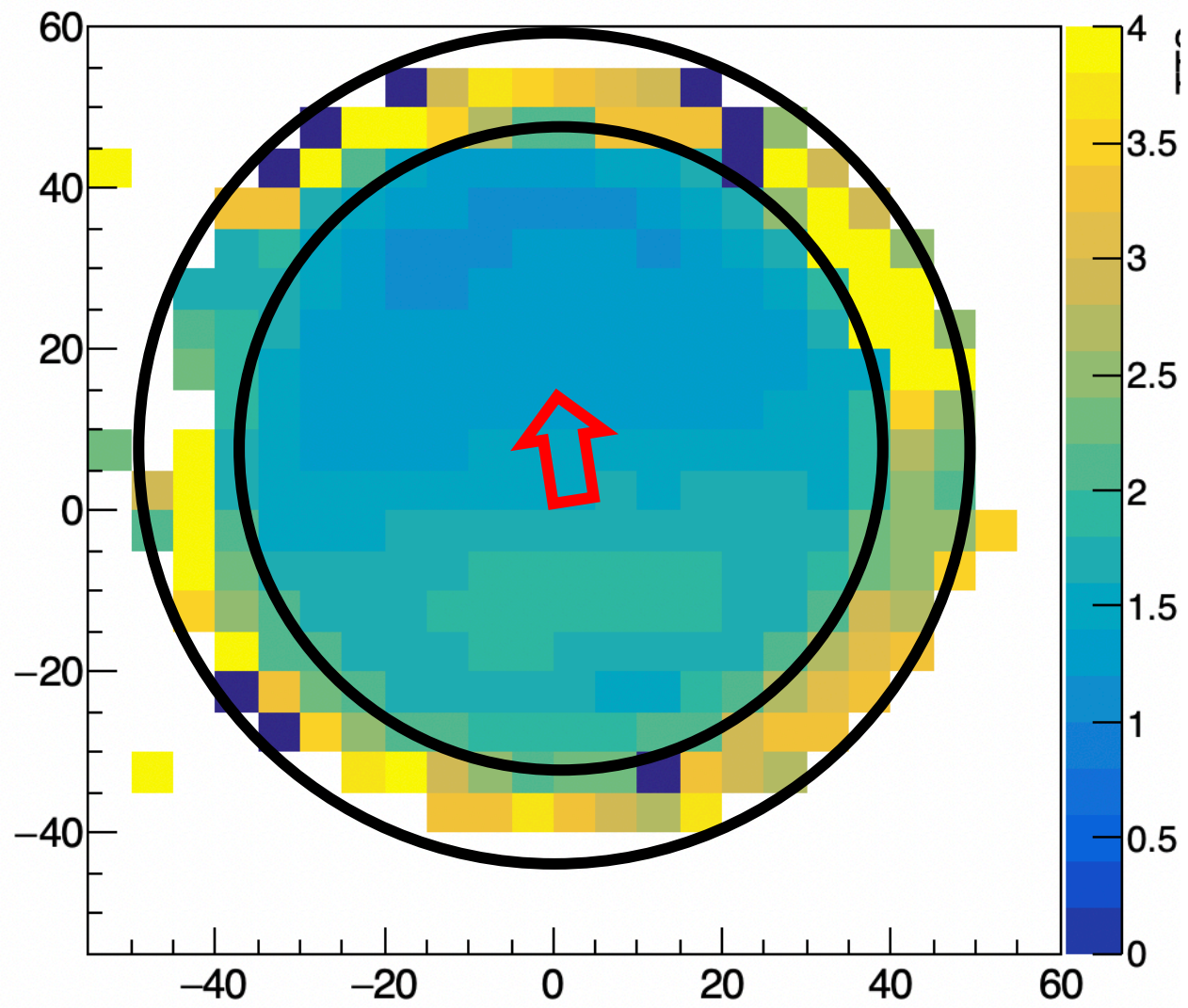
gain



TT

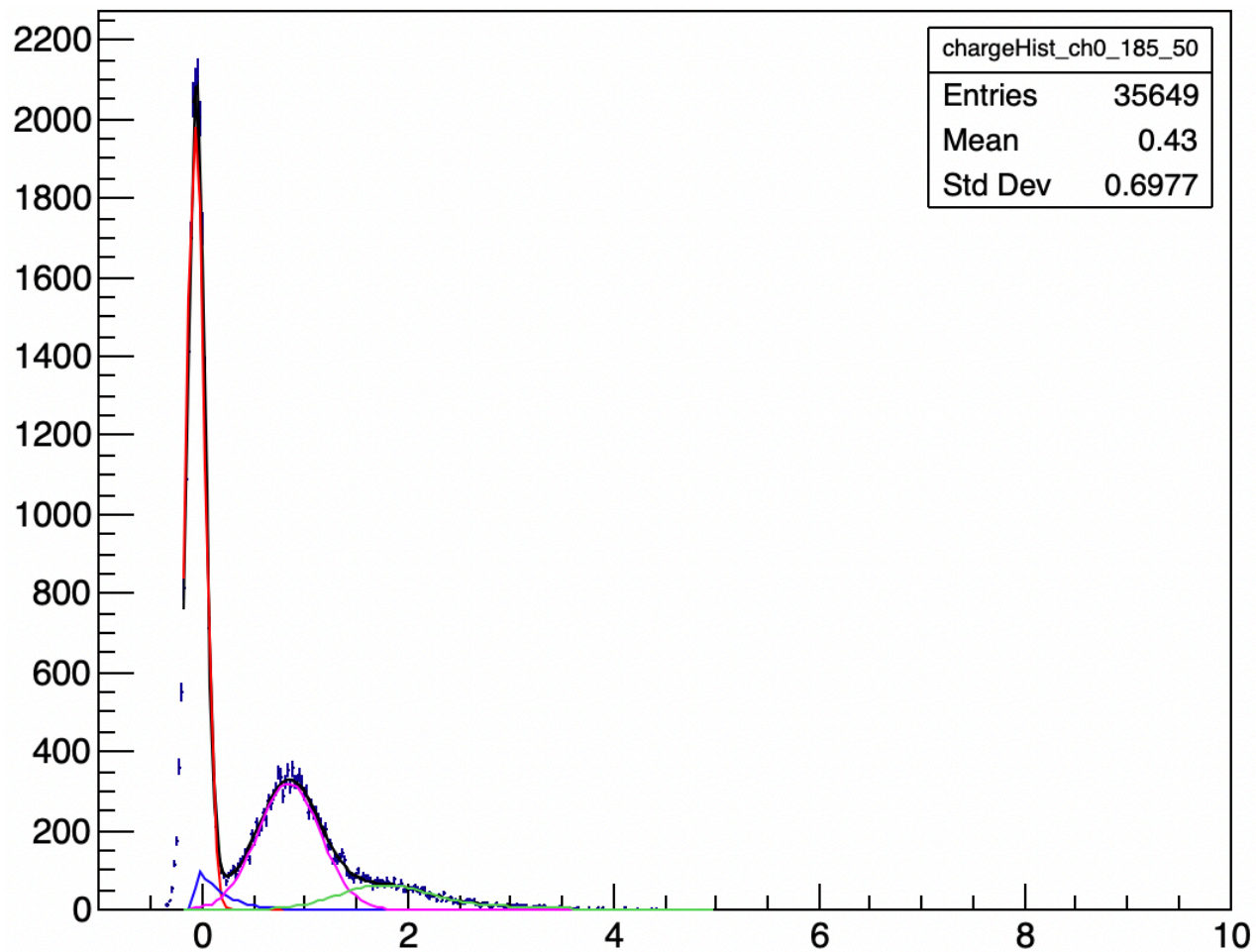


TTS



with 47.5° , 9mm reflector

charge histogram at the PMT part (-15,-5)



charge histogram at the reflector part (0,-40)

