

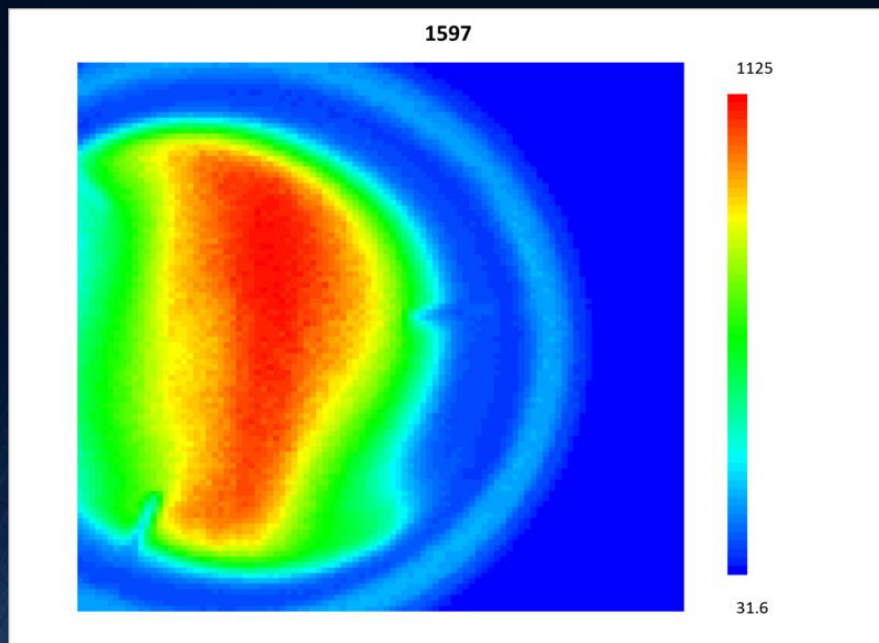
PMT Scan Update

The background features a dark blue gradient on the left, transitioning into a complex, glowing blue structure on the right. This structure consists of numerous thin, parallel lines that curve and spiral inward, creating a sense of depth and movement, similar to a tunnel or a data stream visualization.

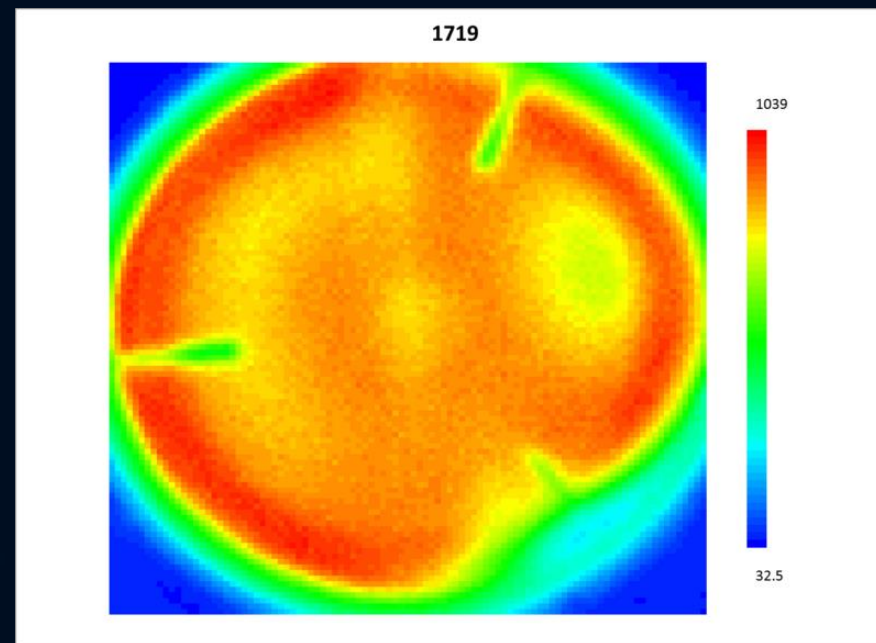
Problematic base

- Was not distributing high voltage across PMT
- Upon changing bases, the XP_{4572/B/D1} worked as it had before
- Need to test the XP_{4500/B} PMT today

XP4572/B/D1

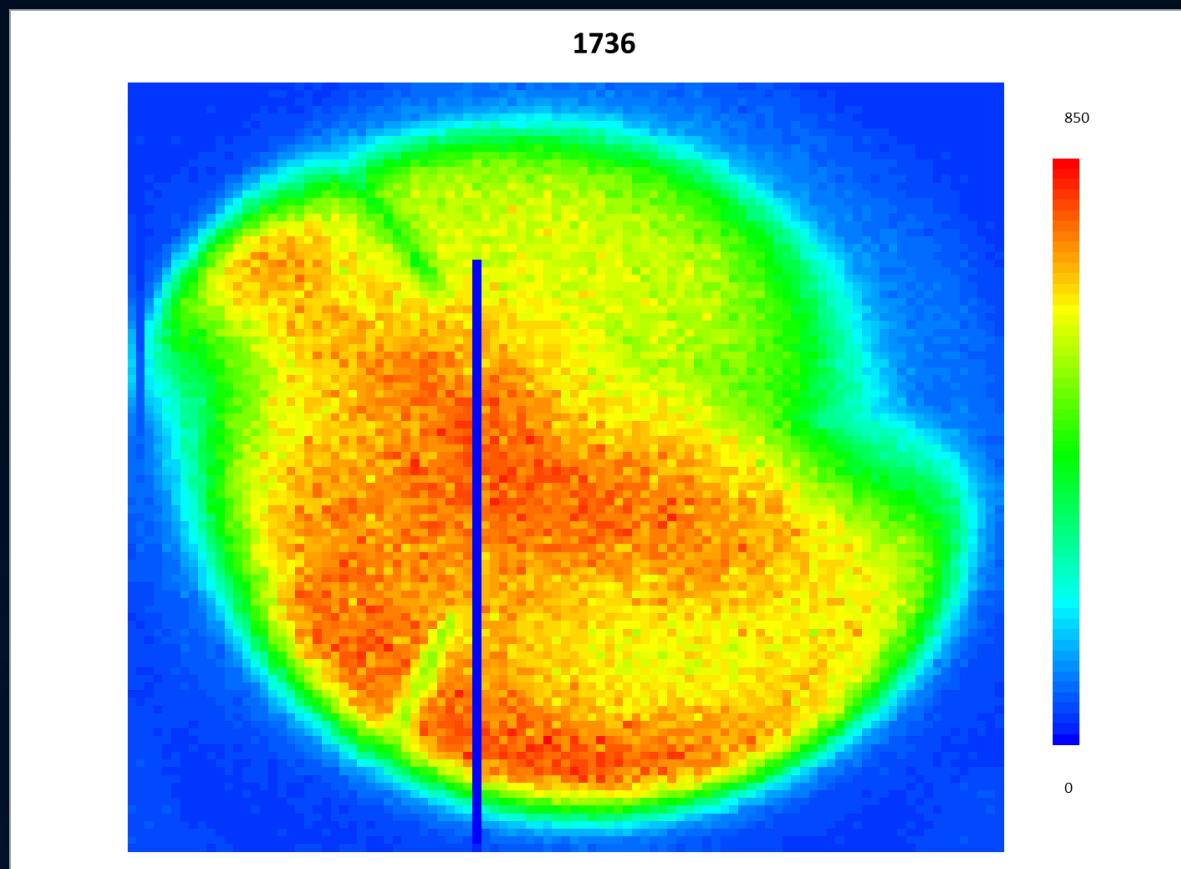


Before base change



After base change

Scan of XP4500/B



Operator error, rather than any defect in the PMT led to the blue line down the center.

Support to hold PMT



Styrofoam from a shipment fit the PMT shape perfectly, and with a minor adjustment by removing the front face, it should keep the PMT in the same spot every trial.

Scale of graph

- The Lecroy analog digital convertor has a scale of 1 count to 0.25 pC
<http://www.fnal.gov/projects/ckm/jlab/2249a-spec.htm>
- The step length of the motor is actually 0.0025 mm per step, rather than 1.8 degrees
- This means that the resolution of the contour plots of the PMTs is 1.125 mm
- The total area of the scans are therefore 110 mm x 110 mm approximately, which is a bit lower than the 120 mm effective area on the largest of CUA's PMTs and the UVA PMT.

Updates on graphs

- I will begin to update all the graphs I have created, adding in the correct scales and dimensions
- Also need to look at PMT gain

