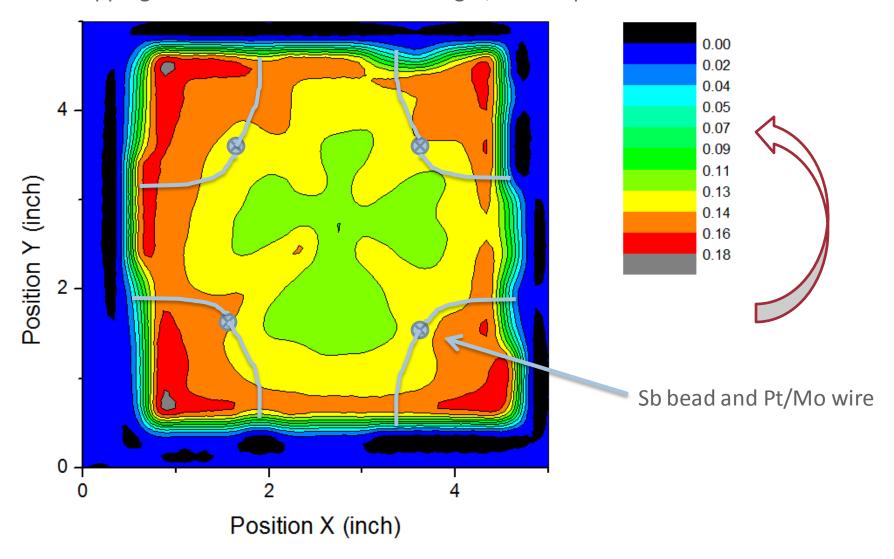


## **Cathode Recesiation Test**



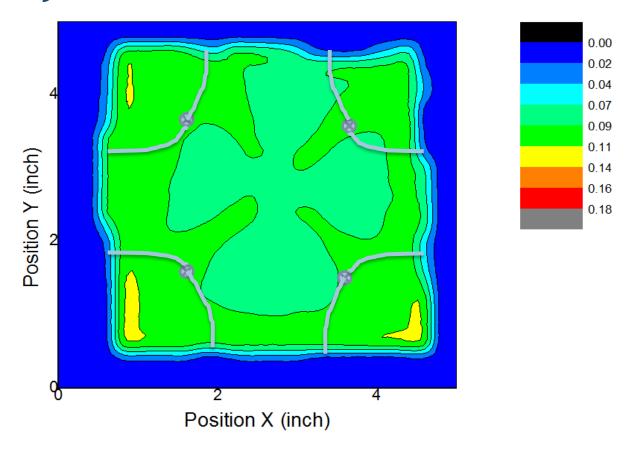
# Chalice cathode deposition #6 Map

The QE mapping is obtained at 350 nm wavelength, scan step size: 0.2 inch



QE between 8% at center and 18% at corners.

#### QE Map 1 day after re-cesiation



- > The recesiation is done without sealing the chalice, so chalice is still under pumping.
- > QE map is measured 1 day after recesiation, QE is between 7% and 12%.
- ➤ Since the QE (after recesiation) is measured 1 day after the recesiation process, not sure if the QE drop is really due to recesiation process or due to cathode self-decay.
- For next cathode, the QE will be measured right before and after recesiation to verify the result.

## **QE Change Map**

#### Define:

 $QE\ Drop = \ QE\ (before\ recesiation) - \ QE\ (after\ recesiation)$ QE (before recesiation) - QE (after recesiation) QE Drop Percentage = QE (before recesiation) 0.00 0.06 0.01 0.13 0.02 0.19 0.03 0.25 0.04 0.31 0.05 Position Y (inch) Position Y (inch) 0.38 0.06 0.07 0.50 0.08 Position X (inch) Position X (inch)

**QE Drop Map** 

**QE Drop Percentage Map** 

## Summary

- The recesiation is done without sealing the chalice, so chalice is still under vacuum pumping.
- ➤ QE map is measured 1 day after recesiation, QE is between 7% and 12%.
- Since the QE (after recesiation) is measured 1 day after the recesiation process, not sure if the QE drop is really due to recesiation process or due to cathode selfdecay.
- For next cathode, the QE will be measured right before and after recesiation to verify the result. Ensure if it is due to recesiation process or due to cathode self-decay..