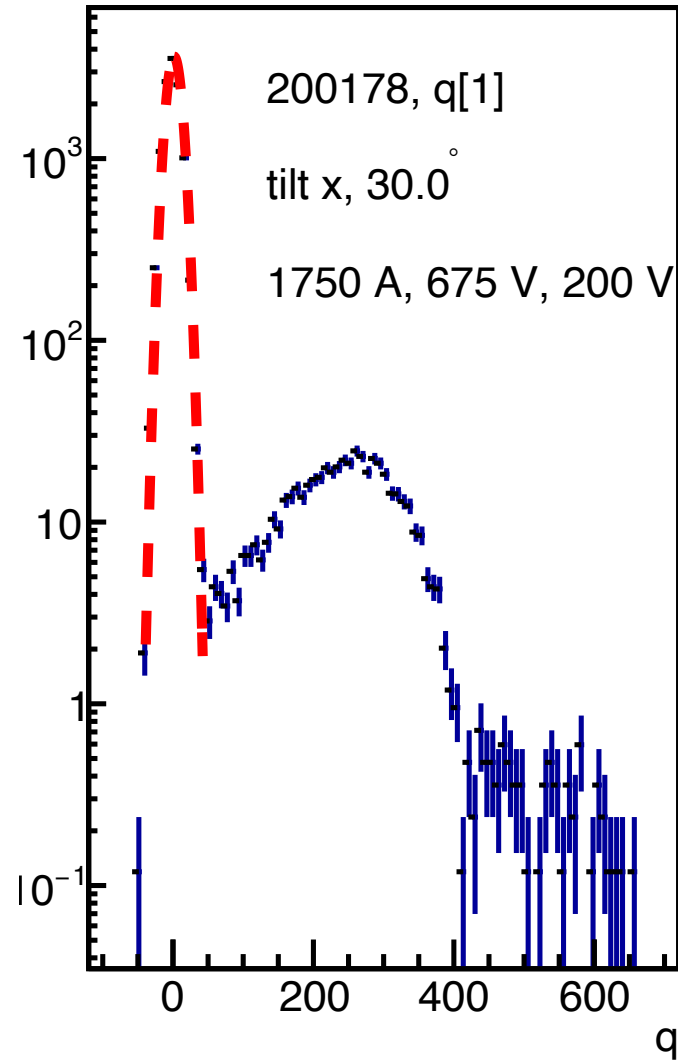


An Overlook of the B-field Test Data

Cheuk-Ping Wong

12-17-2025

Update Mean Charge Extraction

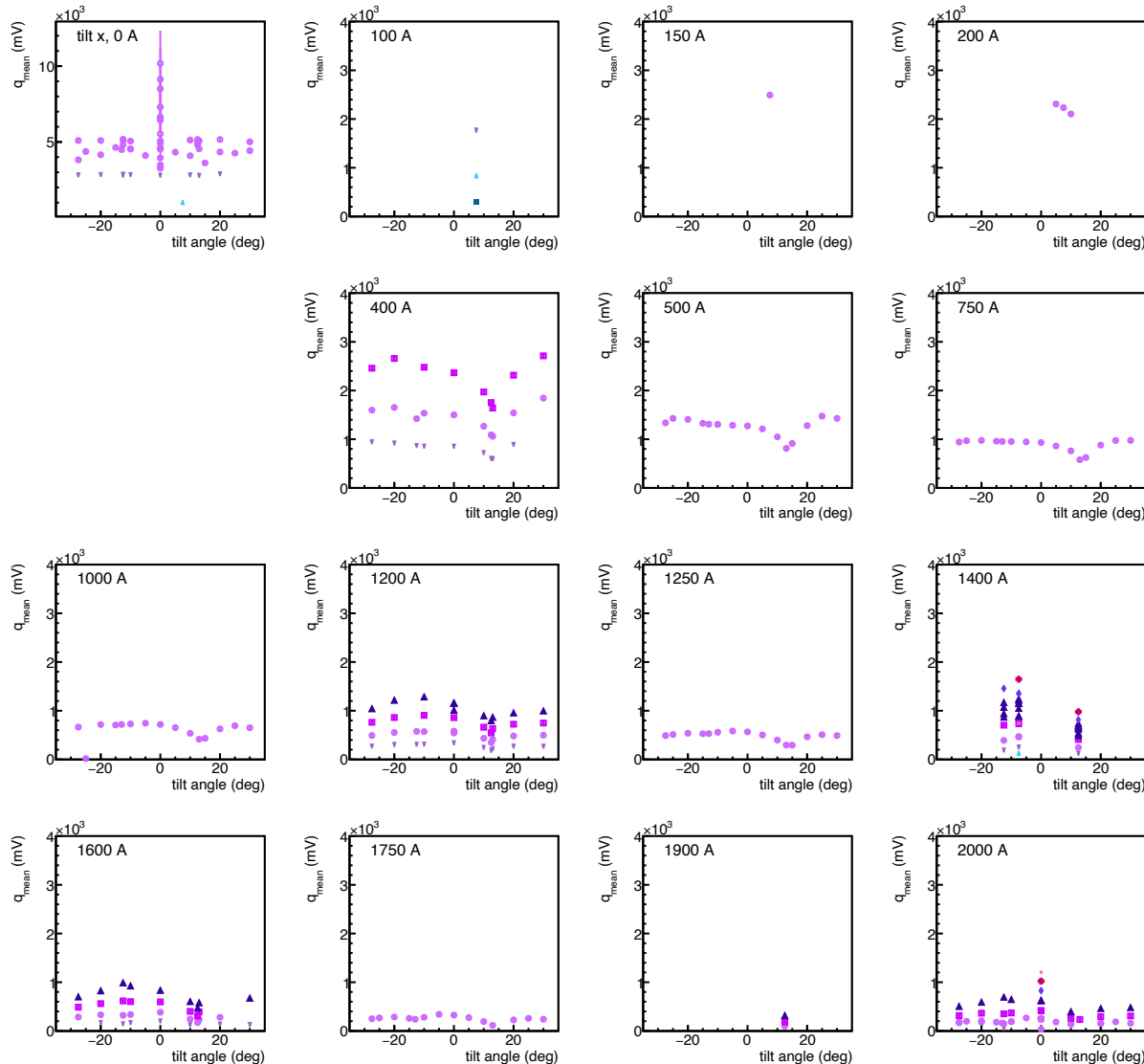


- Fit the pedestal
- Chop off the pedestal with a 4-sigma cut
- Mean charge=Histo->GetMean()

Mean Charge vs Tilt Angle

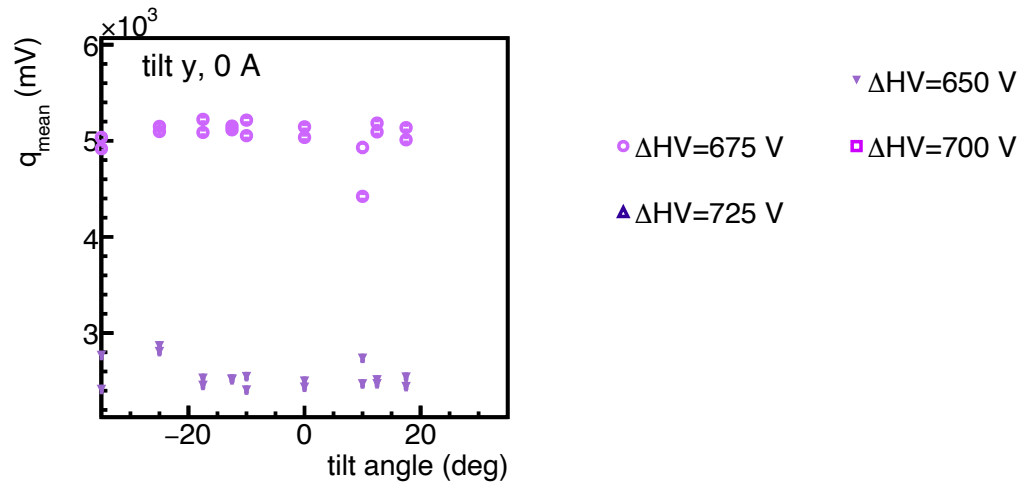
Mean Charge vs Tilt Angle w.r.t. x axis, field “Up”

- $\Delta HV=575$ V
- $\Delta HV=600$ V
- $\Delta HV=625$ V
- $\Delta HV=650$ V
- $\Delta HV=675$ V
- $\Delta HV=700$ V
- $\Delta HV=725$ V
- $\Delta HV=750$ V
- $\Delta HV=775$ V
- $\Delta HV=800$ V
- $\Delta HV=825$ V
- $\Delta HV=850$ V

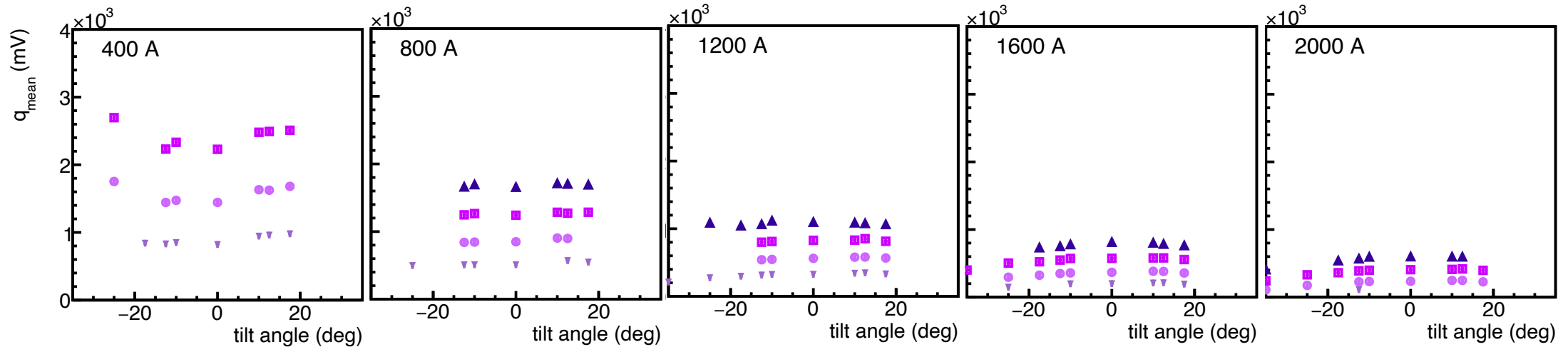


- No new data yet
- Less jumpy with the updated mean charge extraction

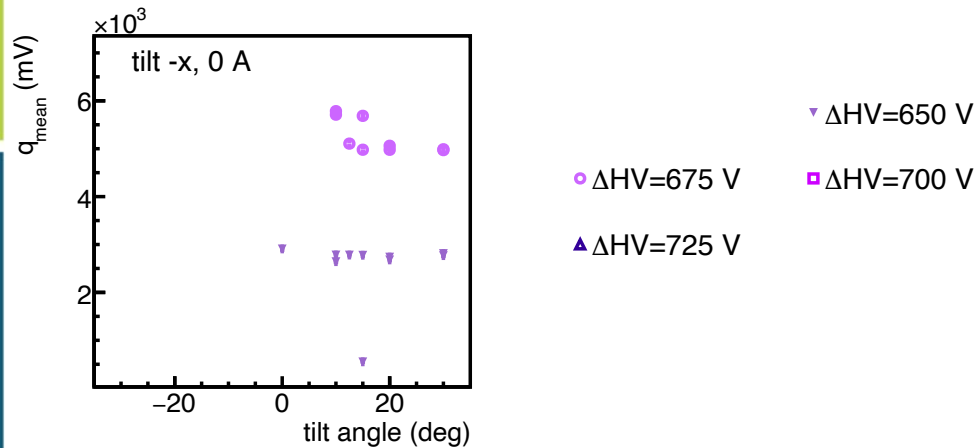
Mean Charge vs Tilt Angle w.r.t. y axis, field “Up”



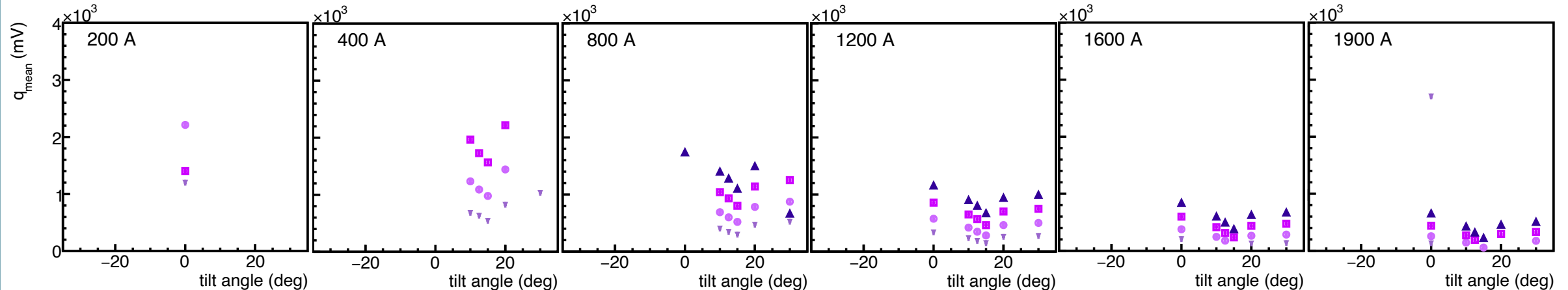
- No new data
- Less jumpy with the updated mean charge extraction



Mean Charge vs Tilt Angle w.r.t. x axis, field “Down”

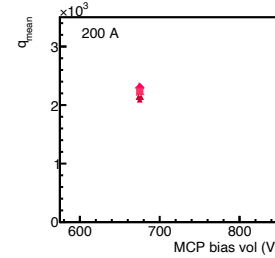
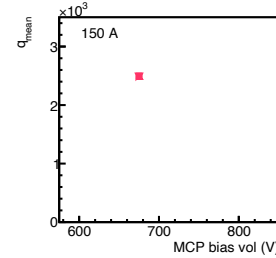
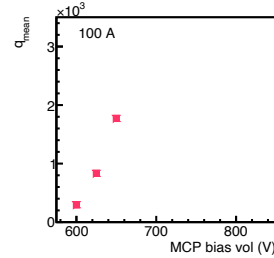
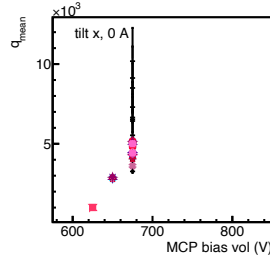
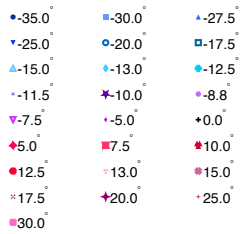


- **NEW!!**
- More to come
- Similar dip as in the field up setting

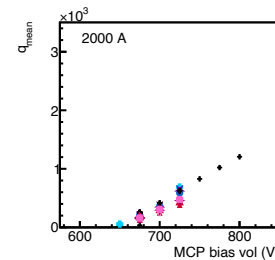
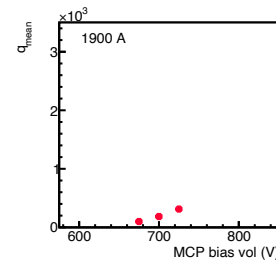
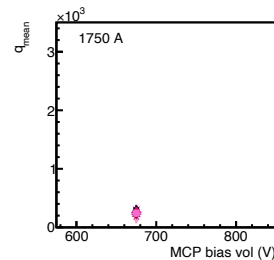
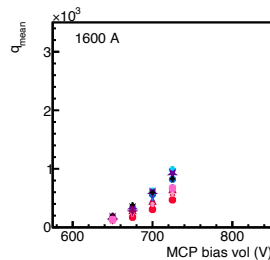
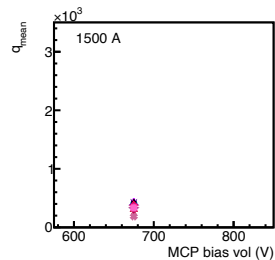
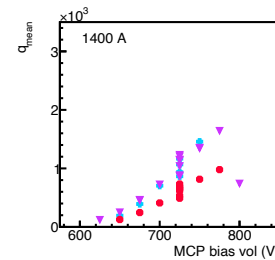
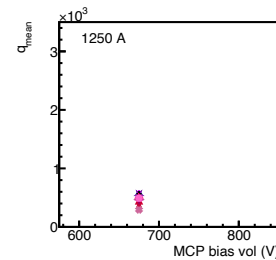
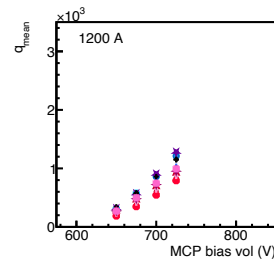
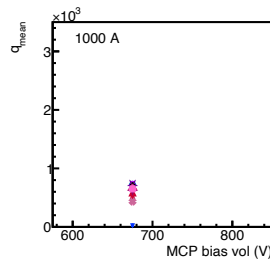
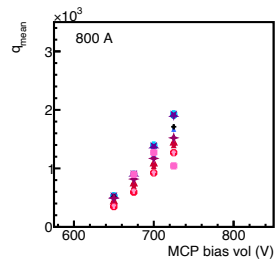
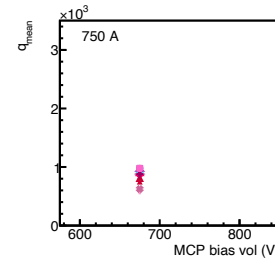
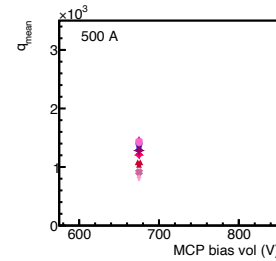
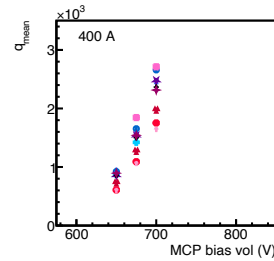
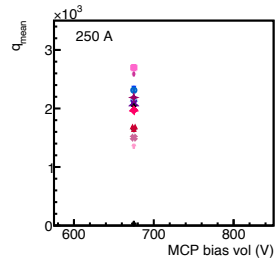


Mean Charge vs MCP Voltage

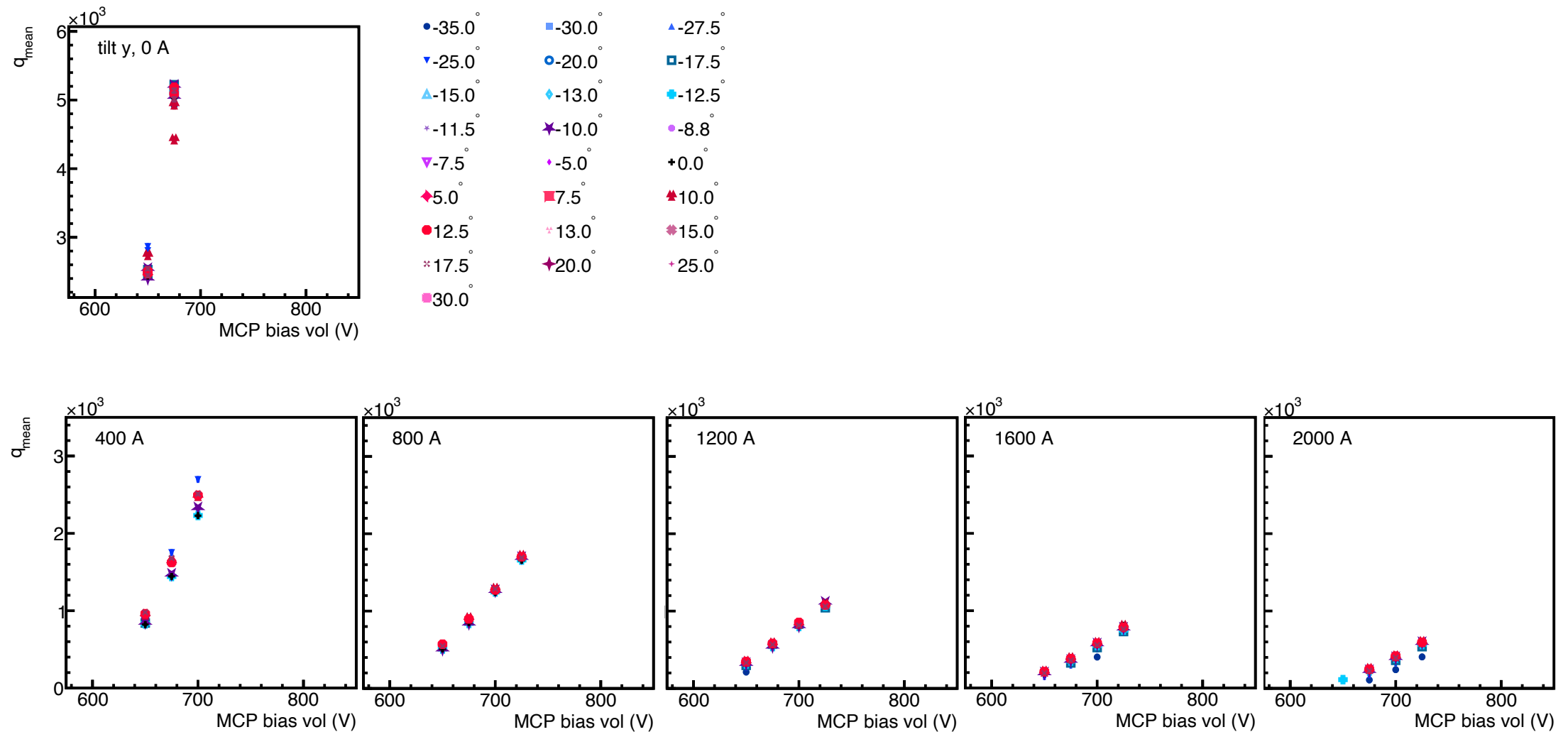
Mean Charge vs MCP HV, Tilt x axis, Field “Up”



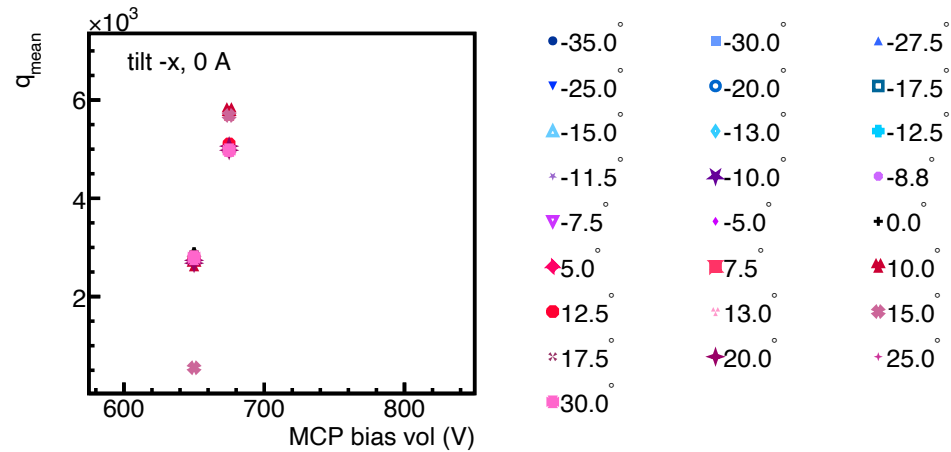
I don't see any difference than the last update



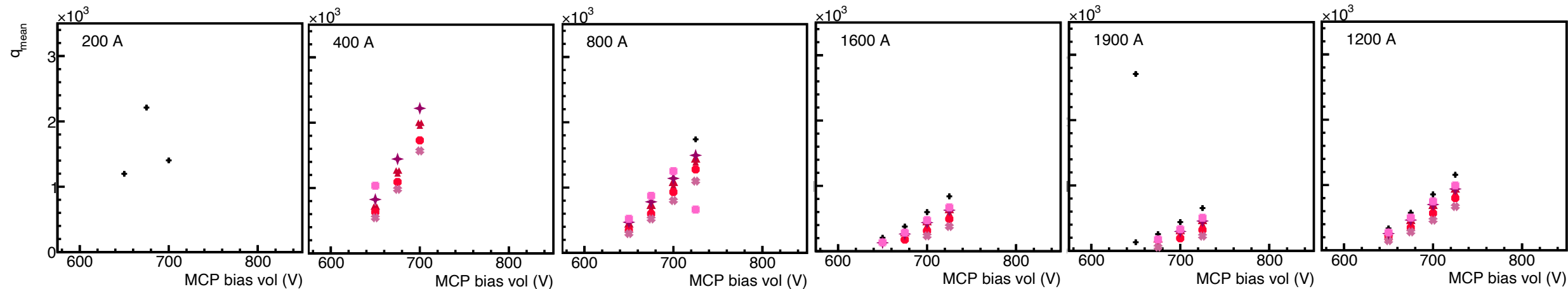
Mean Charge vs MCP HV, Tilt y axis, Field “Up”



Mean Charge vs MCP HV, Tilt x Axis, Field “Down”

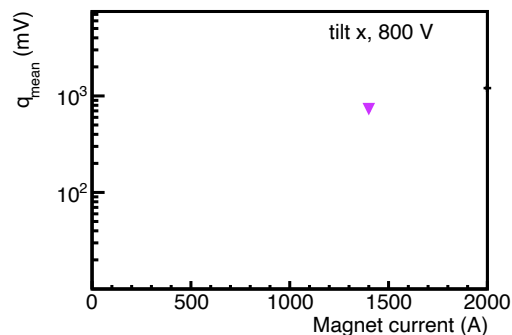
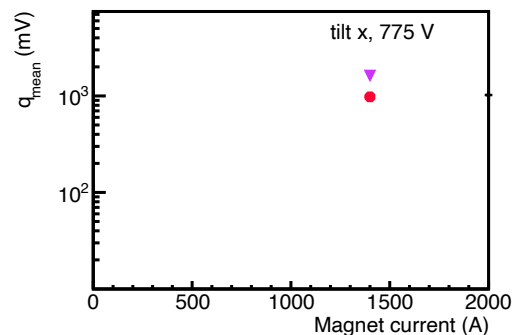
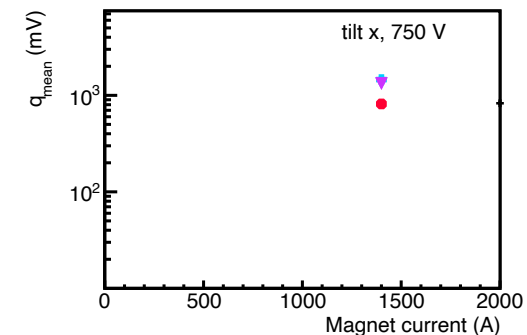
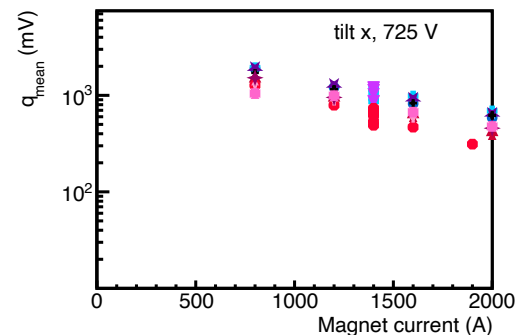
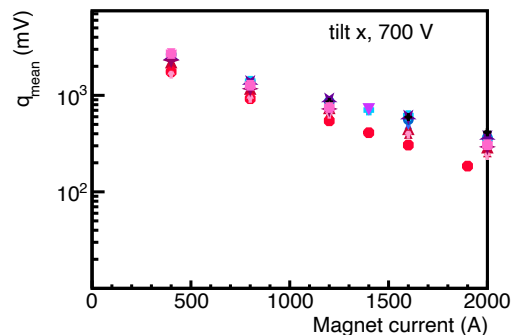
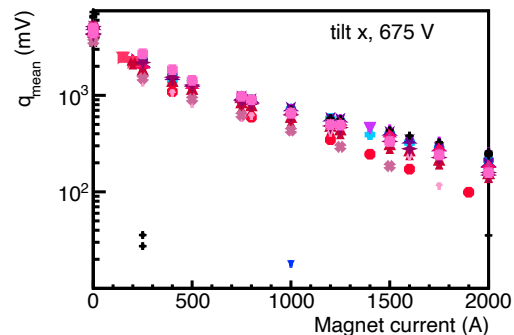
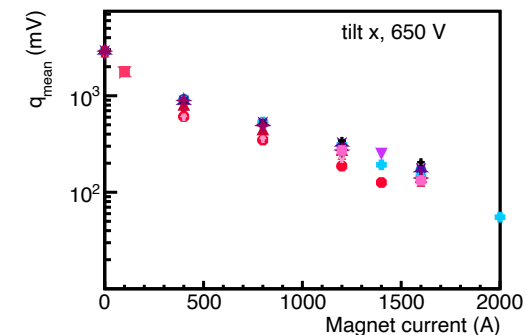
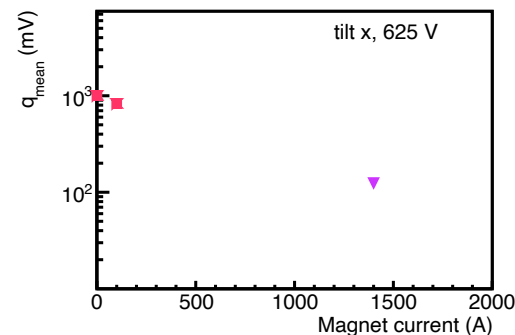
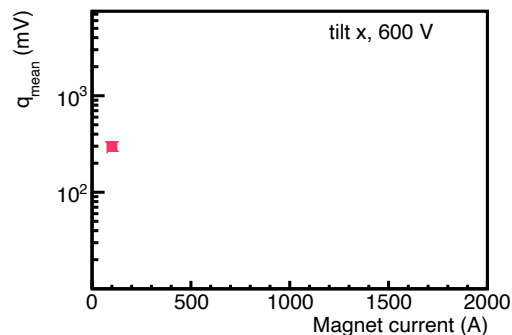
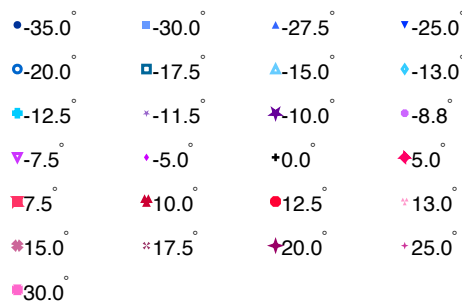


- **NEW!!**
- More to come

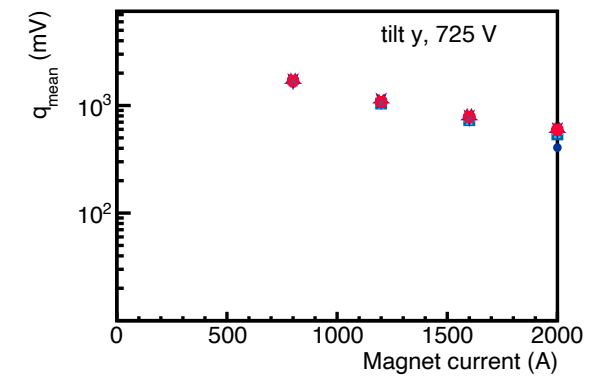
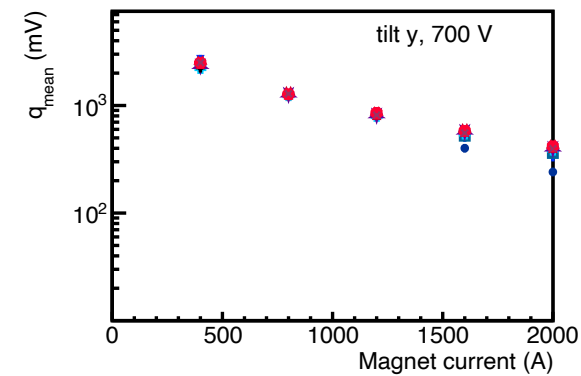
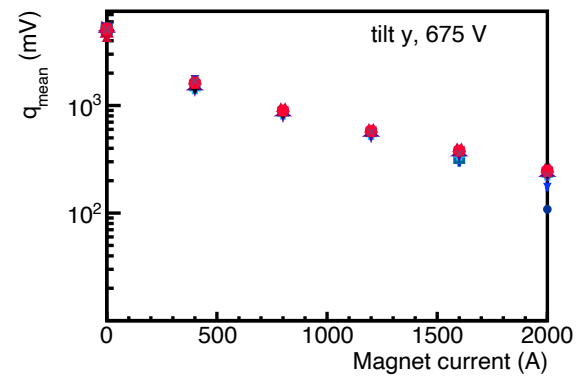
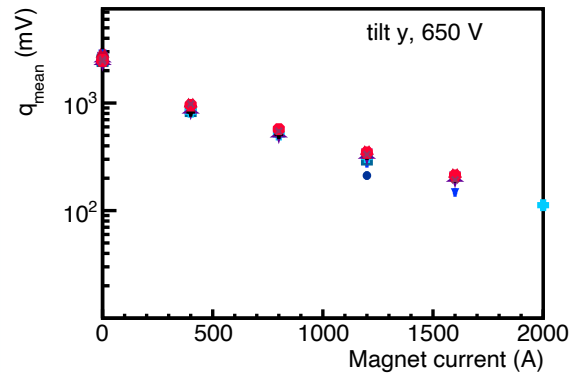
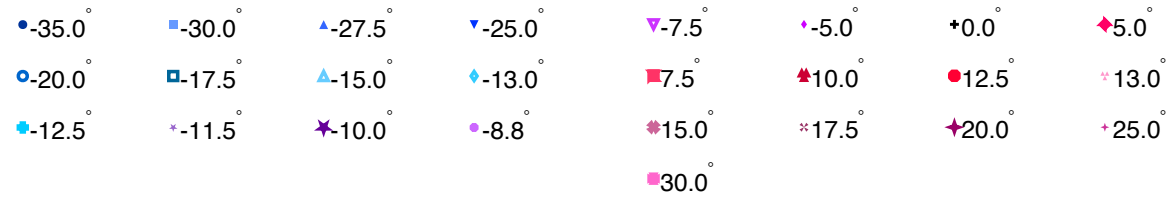


Mean Charge vs Magnet Current

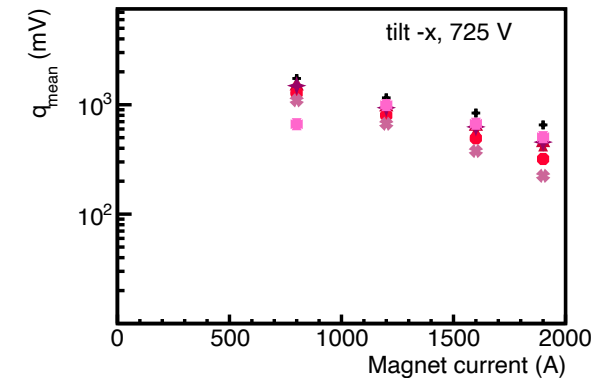
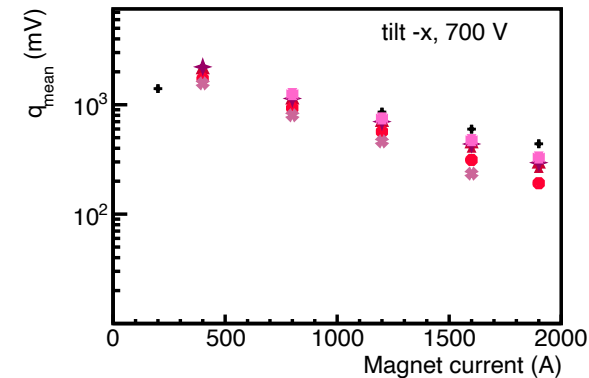
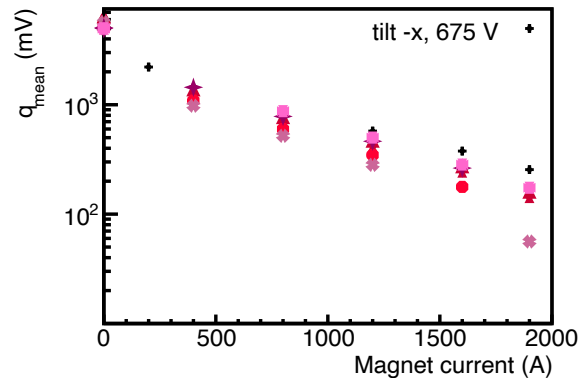
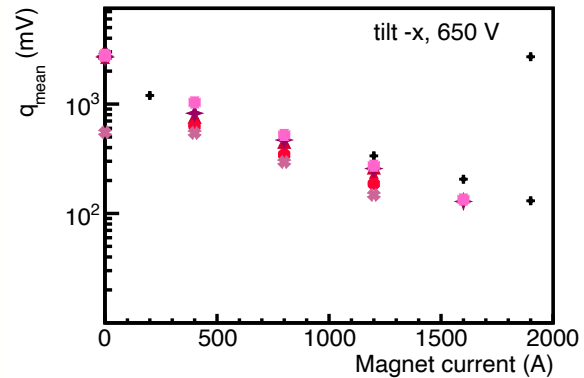
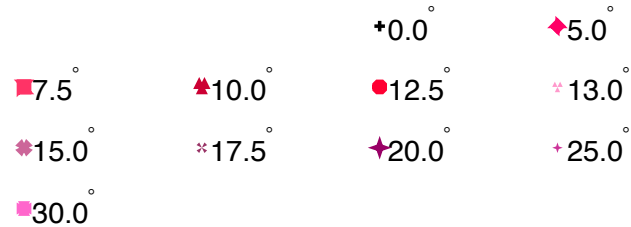
Mean Charge vs Mag. Current, Tilt x axis, Field “Up”



Mean Charge vs Mag. Current, Tilt y axis, Field “Up”



Mean Charge vs Mag. Current, Tilt x axis, Field “Down”



To-do

- Finishing up the run database
- Compare gain before and after magnet field on
- Normalize gain with 0 field data
- A more sophisticated pedestal measurements and subtractions