
Subject: Re: FRS Calibration Issue

Posted by [SMilne](#) on Mon, 22 Sep 2014 17:50:27 GMT

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Hi Liliana!

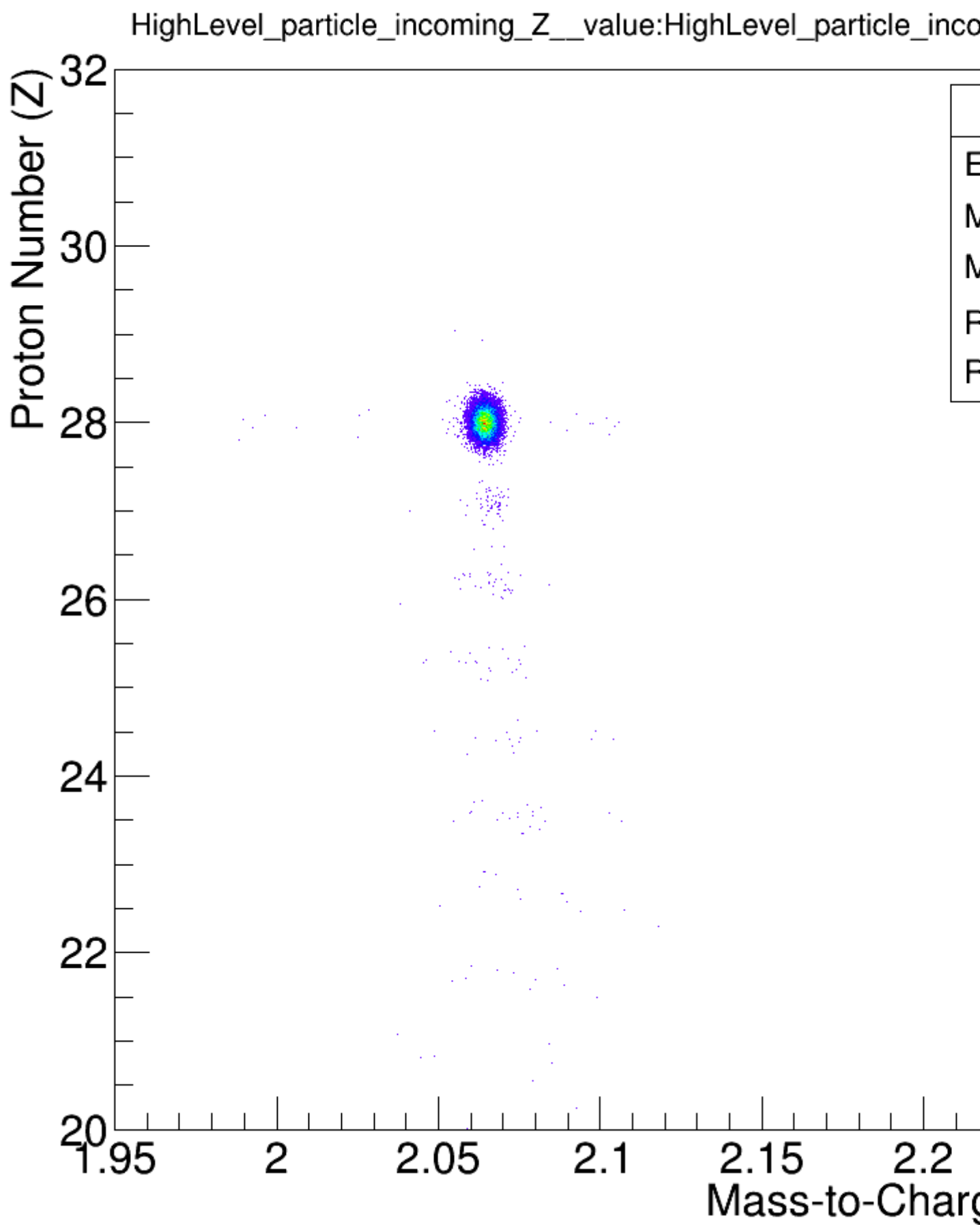
Thank you very much for your detailed response! So I had a play around with calibrating them Brho values, but it seems they pretty much were fine as they were and only had a very small change on my A/Q value. However, something which had more of an impact was the fact I had been (possibly incorrectly?) including degrader material offsets in my LISE simulations. Not including these, and re-calibrating the TOF, beta and MUSIC seems to give me better results. I'm currently getting between 2.065 and 2.067 A/Q now for my 58Ni calibration points, compared to the 2.071 expected, see below for example.

I did as you suggested and added these lines to the code, as well as for Sc41. I only performed a rough calibration (just to test it) since I don't currently have Go4 installed and I'm just using root and don't know how to fit a straight line to these plots. So, I drew a straight line manually in ROOT which seemed about right for the trends in both graphs and then extracted the coefficients for the TOFsystem.cal file. Below I've attached my uncalibrated plots (just so I know they are OK, one seems very flat?) and then the FRS PID using the scintillator positions which you can compare with the PID above using the TPCs. How does everything seem to you?

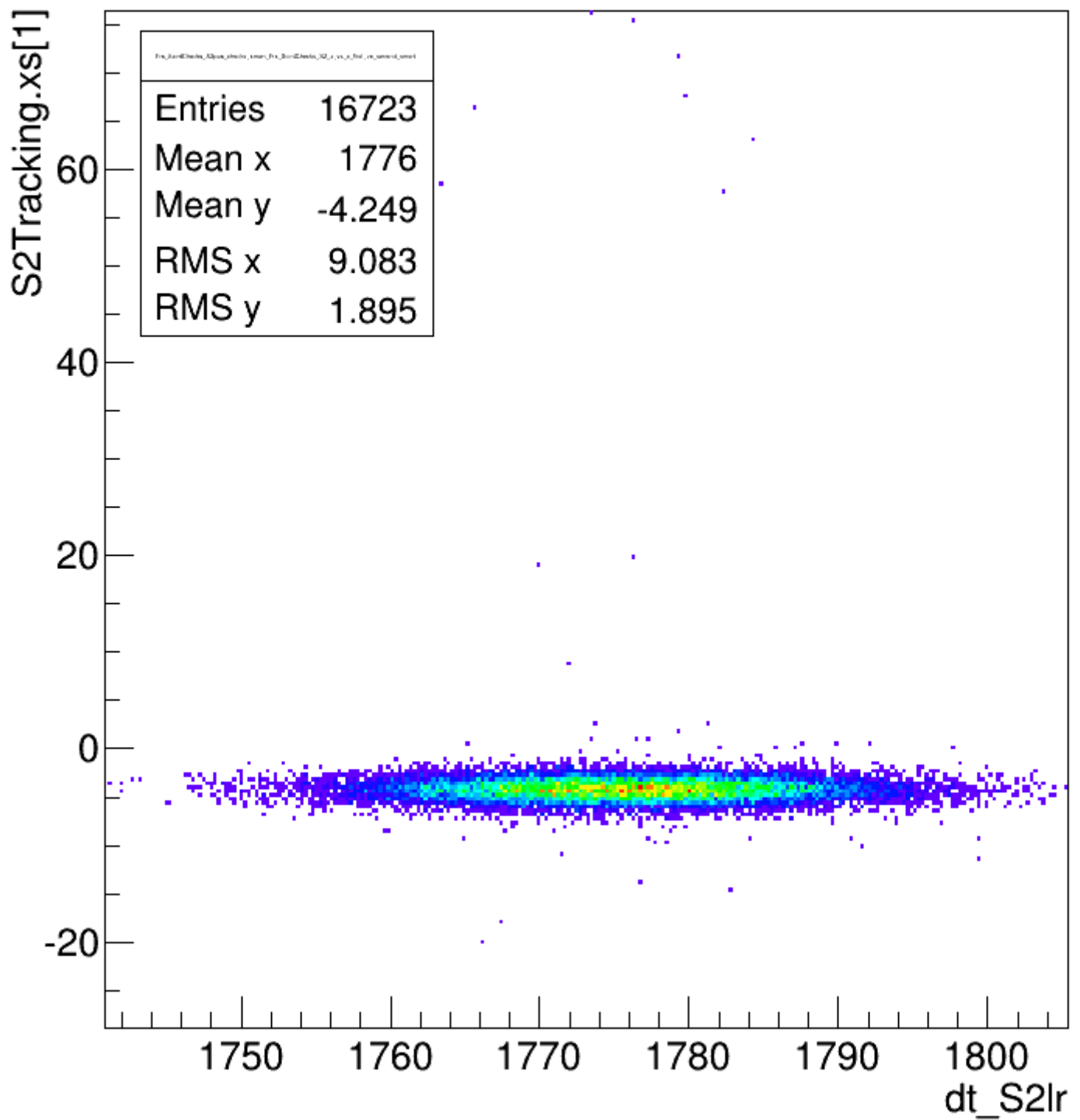
Many thanks,
Scott

File Attachments

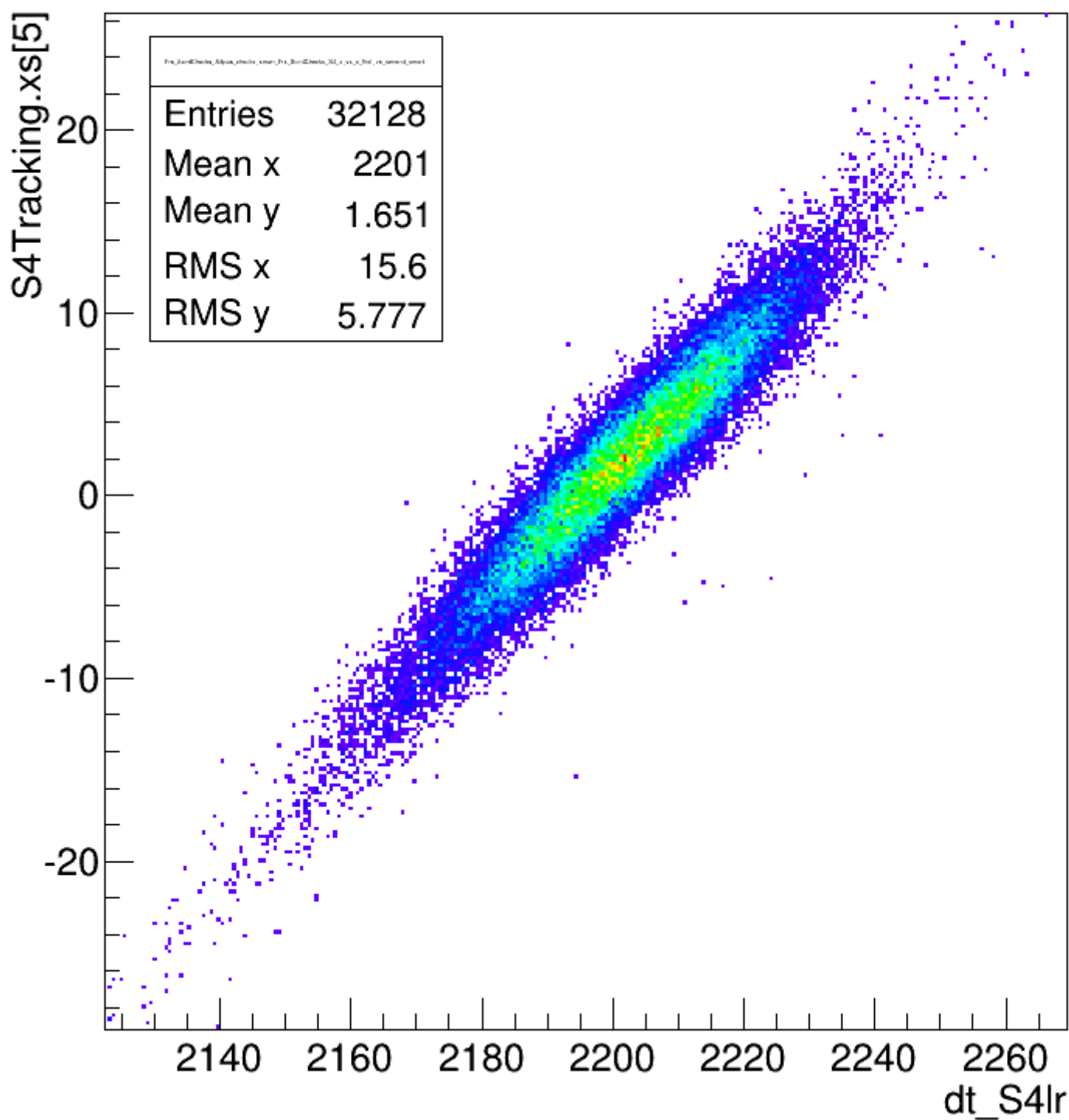
1) [58Ni-Cal1-TPC.png](#), downloaded 1161 times



2) [Sc21-PosCal.png](#), downloaded 1111 times

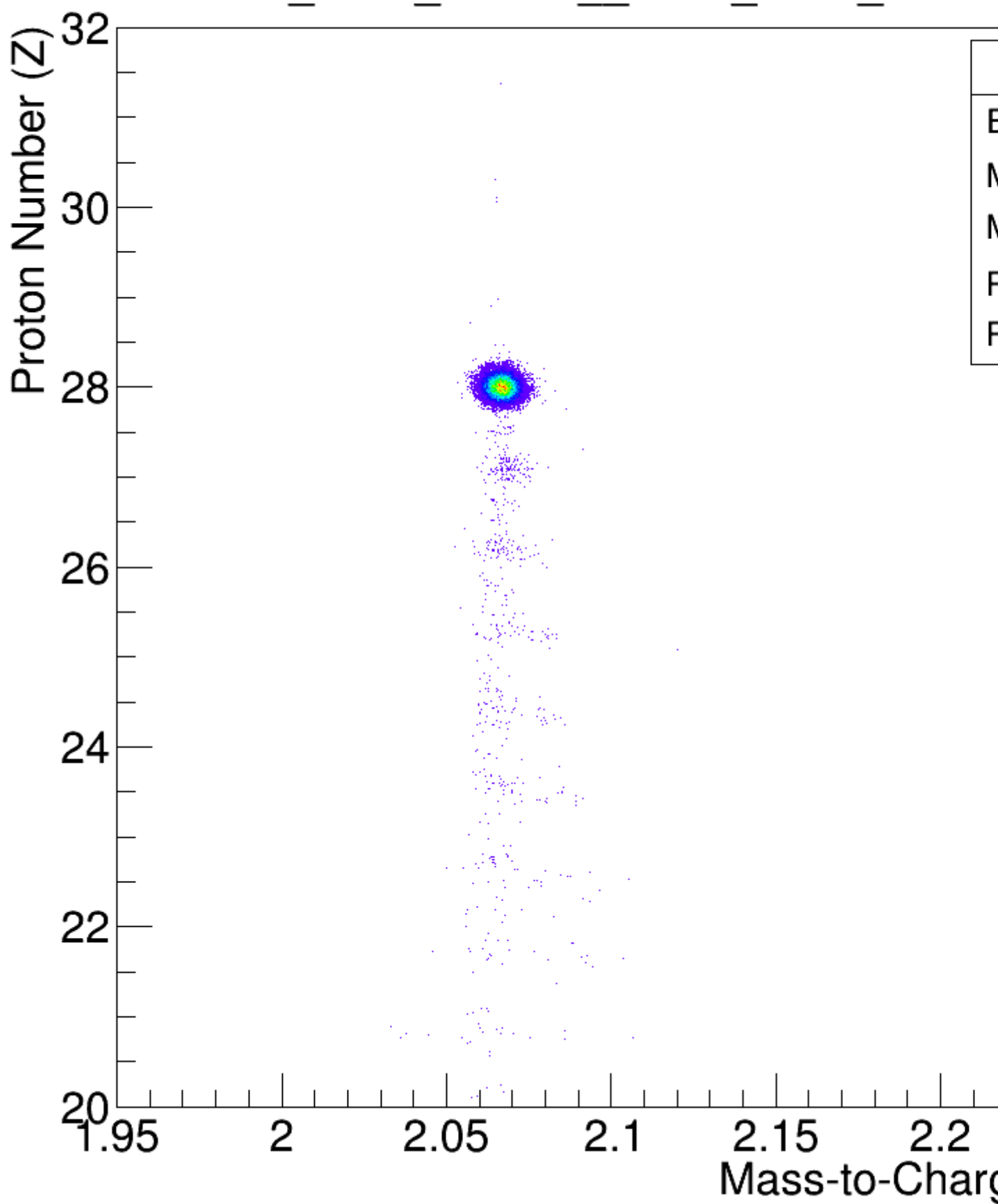


3) [Sc41-PosCal.png](#), downloaded 1064 times



4) [58Ni-Call-Sci.png](#), downloaded 1118 times

Frs_FrsId_SciPos__Z:Frs_FrsId_SciPo



5) [FRScalibration2.gnumeric](#), downloaded 418 times
