



The Cockcroft Institute
of Accelerator Science and Technology



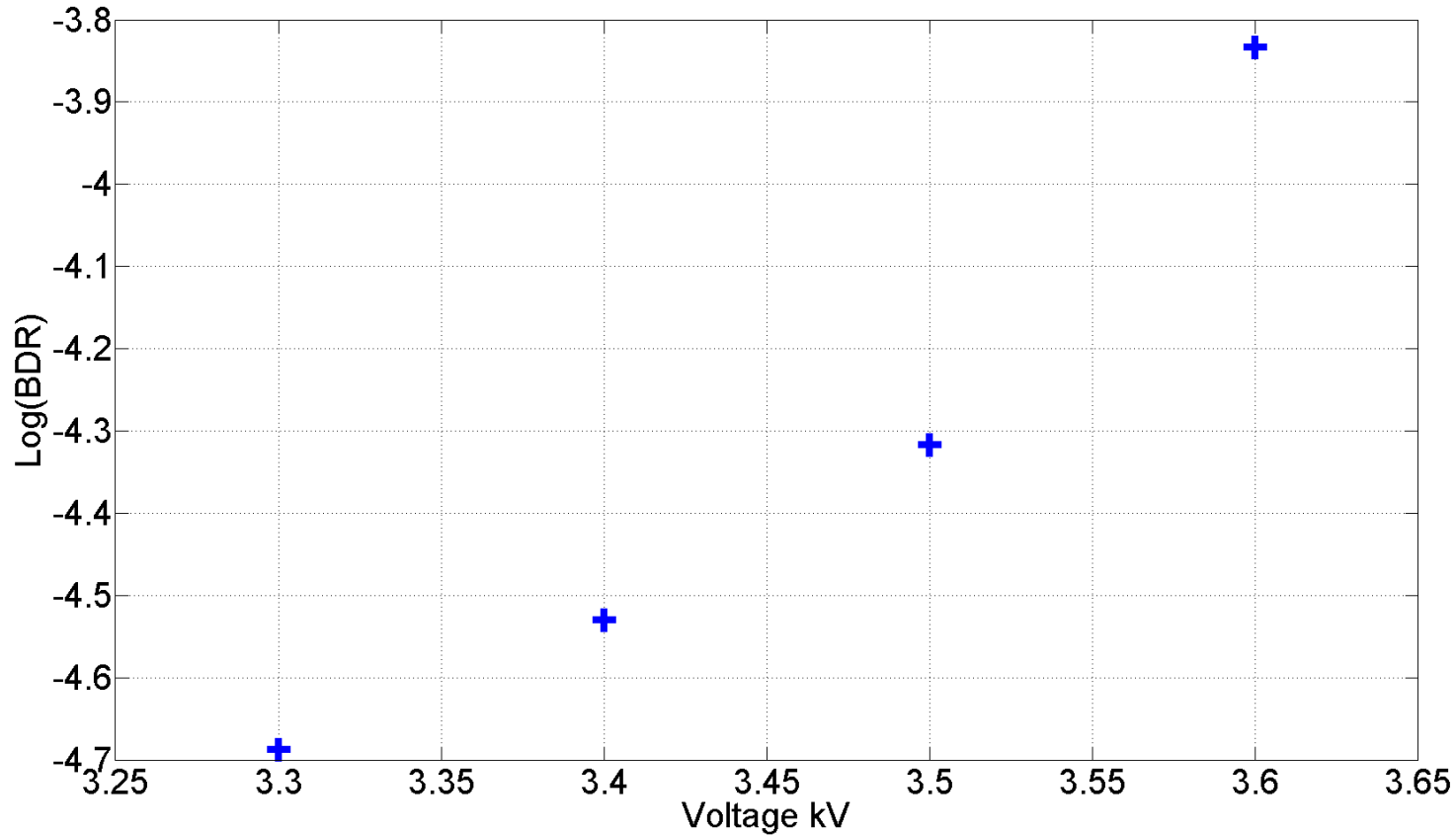
System I Update

Overview

- No new data, (almost) no new analysis, but productive week (really!)
- Together with Anders Korsback measured the size of the current charging pulse in every situation imaginable!
- Found and fixed the issue which had been causing all the gap measurement problems. (A ball bearing had fallen out)
- Ordered almost all the parts necessary for a coax-switch box. (Accept stepper motor for which I am awaiting a quote).
- Helped Will Vollenberg to remove the old pumping group and gauges from system 1 and replaced with a newer one.
- Over the weekend I started a bakeout.
- The power tripped and the system vented with the bakeout still running (the main valve does not close automatically at the moment). I restarted this morning and the pressure is currently $5.6\text{E-}7$ mbar and the temperature is 105 deg C.

BDR vs. E

BDR vs. E 20um 1kHz



Voltage	#Bds
3300V	398
3400V	972
3500V	396
3600V	140

Outlook

- Restart gap dependence measurements, hopefully the results will now make more sense.
- Fix small problem with controlling the main valve on the system.
- Continue analysis, especially interested in time dependence.