

ZEUS STATUS
HERA Coordination Meeting
Sept. 9, 2003

ZEUS Detector is ready for data taking

- CTD – more than 5800 post-amplifiers modified to increase gain by factor 2
Compensates the reduced gain due to operation at 95% HV
Final calibration and adjustment of thresholds is ongoing

Bake out

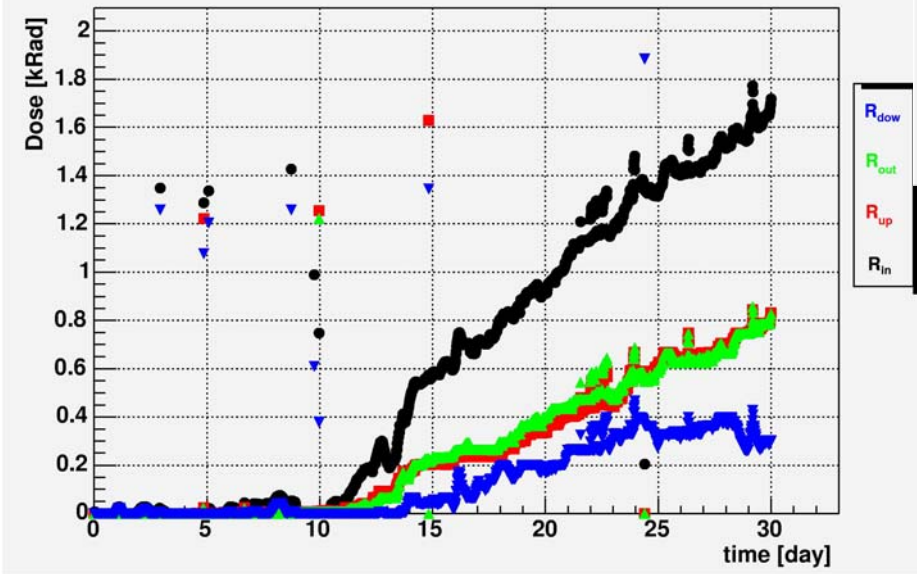
- **Radiation is a bit on the high side**
Planned radiation budget 0.1Krad/day – currently about 0.15 Krad/day
- Vacuum improvement – discussed in detail last Friday
SL – significant improvement
SR – much less significant – in particular at 3.6m high pressure with beam
Experience from 2002, final judgment possible only after ~2 weeks running at 27.5 GeV
- Measured beam pipe temperature should not go much beyond 50°C
Max. temperature is not clear, thermal stress, cooling pipes are glued...

Radiation History

Fast readout not yet possible

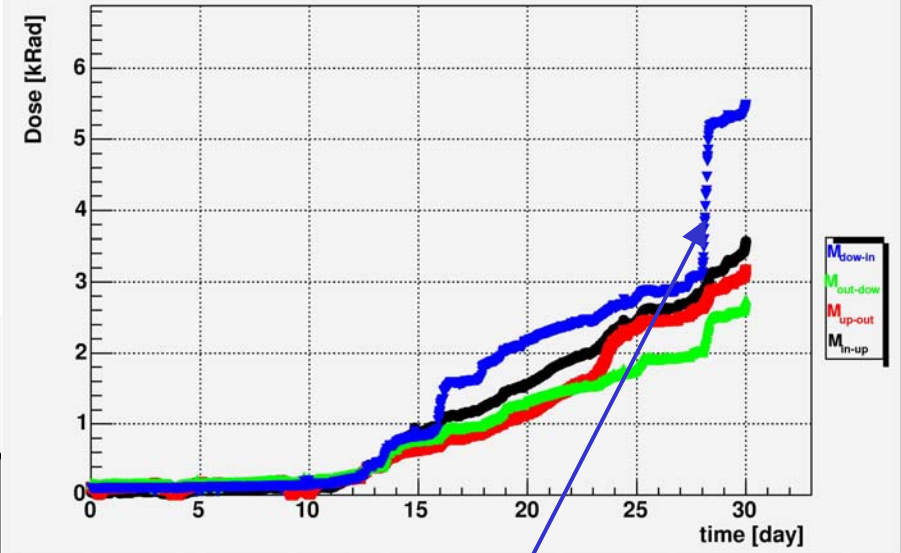
-1.3m, behind c5a, outside MVD

RadFET dose (REAR=-1.3 m) - t₀=Sat Aug 9 15:51:05 2003



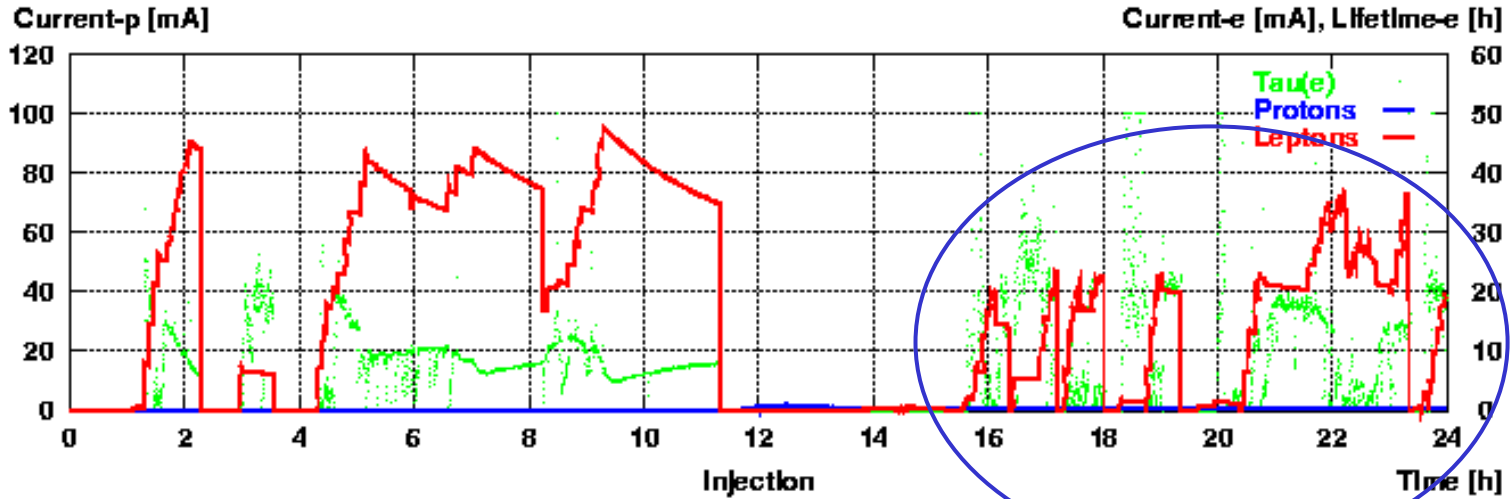
-0.6m, inside MVD volume

RadFET dose (MVD=-0.6 m) - t₀=Sat Aug 9 15:51:05 2003

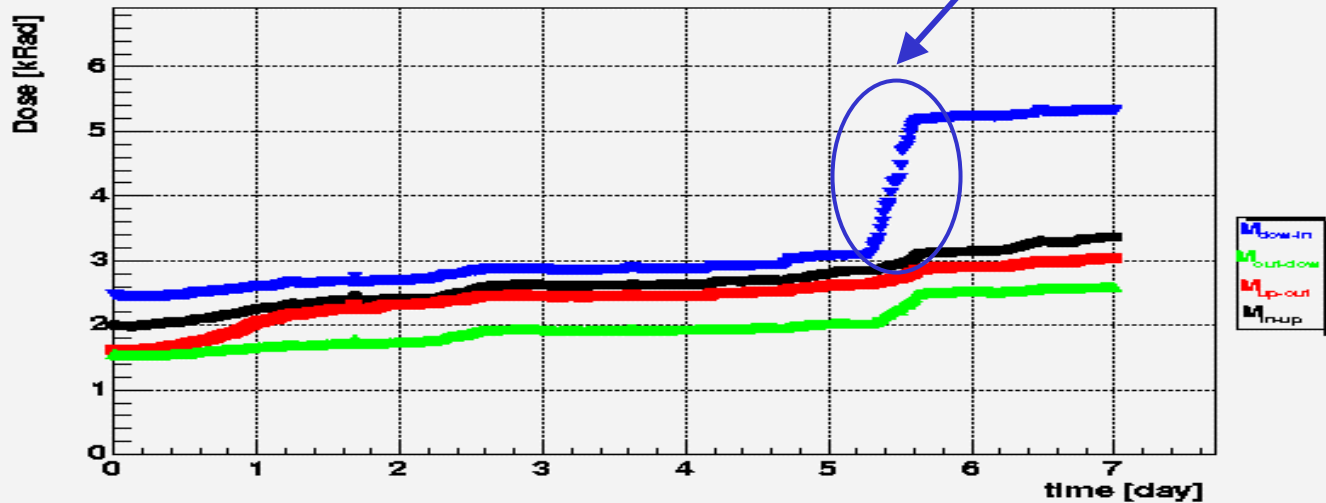


2 Krad incident on Saturday 5.9,
continuous problems over 5 hours

HERA on Saturday September 06 2003
 p:0.6[mA] -1.0[h] 920[GeV] e+:19.4[mA] 18.7[h] 12.0[GeV]

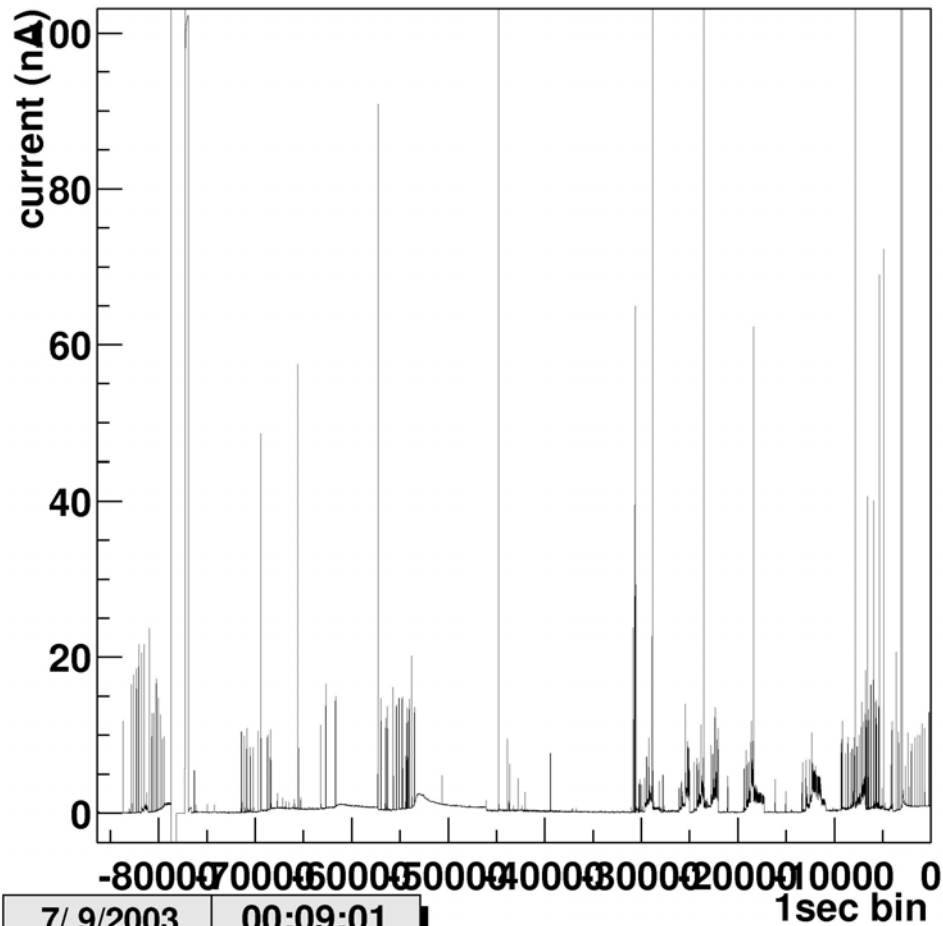


RadFET dose (MVD=0.6 m) - t Mon Sep 1 08:48:46 2003



The Radiation Monitor Diodes must be taken seriously

/hist_mvd_radmon//2015:diode (ped. corrected) 15



Warning threshold: 10nA
Peaks above 50nA indicate something is wrong...

Reasonable injection does not cause spikes of 100nA.