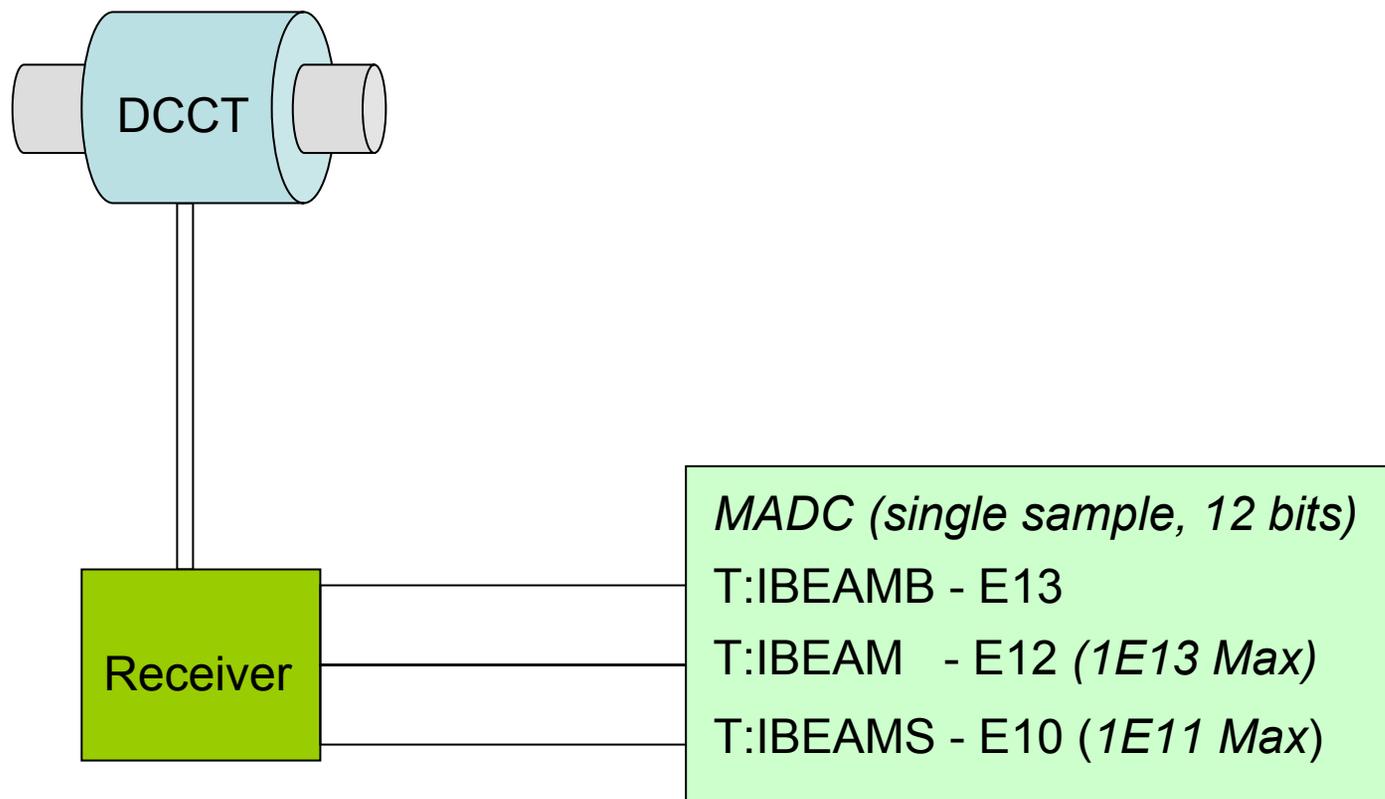
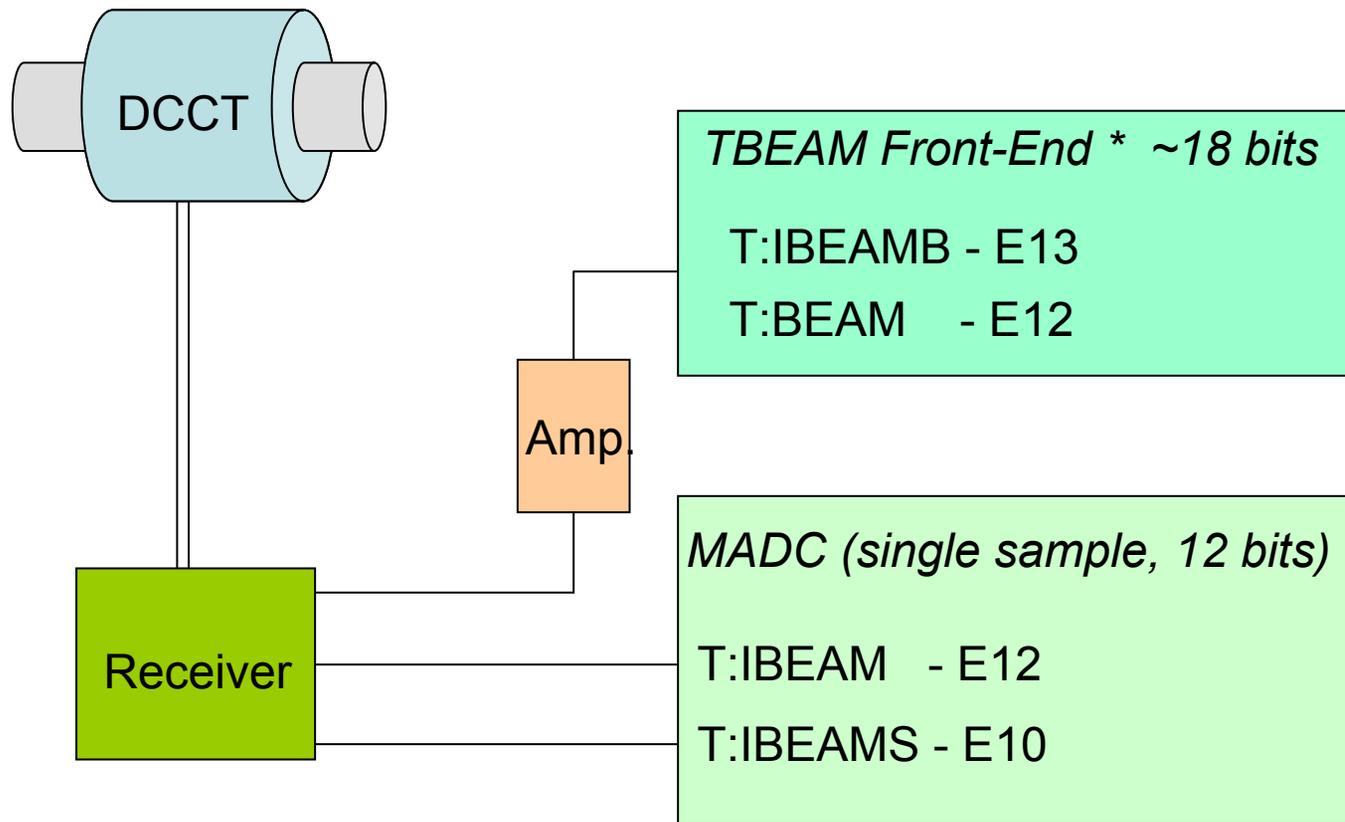


TeVatron DCCT variables - before ~ Feb15 2004



TeVatron DCCT variables - after ~ Feb15 2004



* see Beams Doc 1256

On July 23rd there were failures in both the Receiver box and the Amp. module.

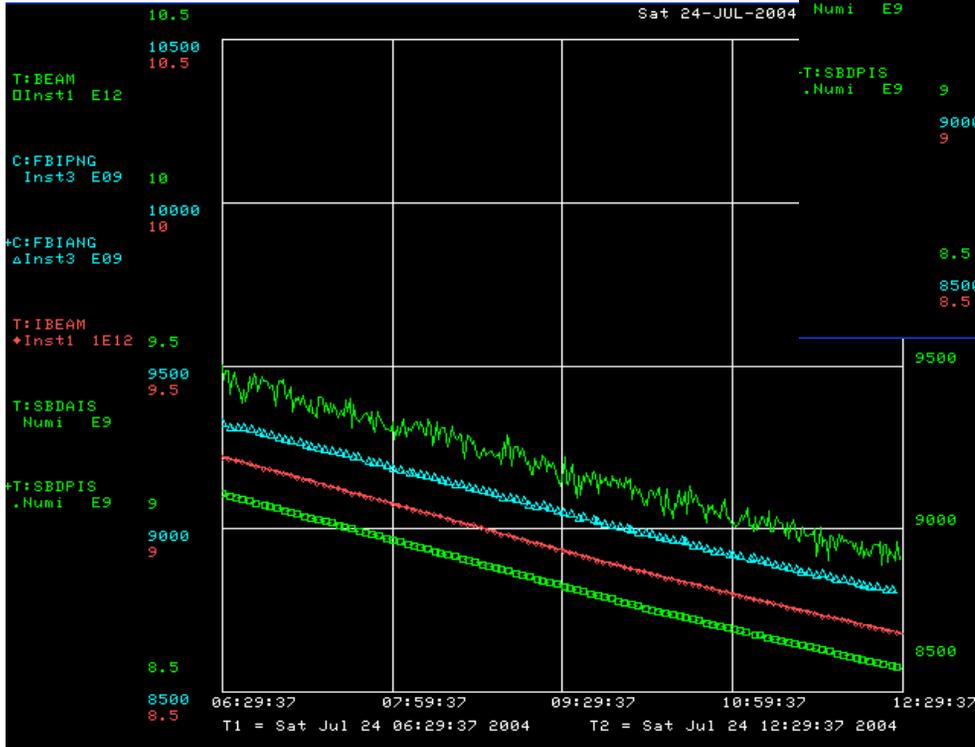
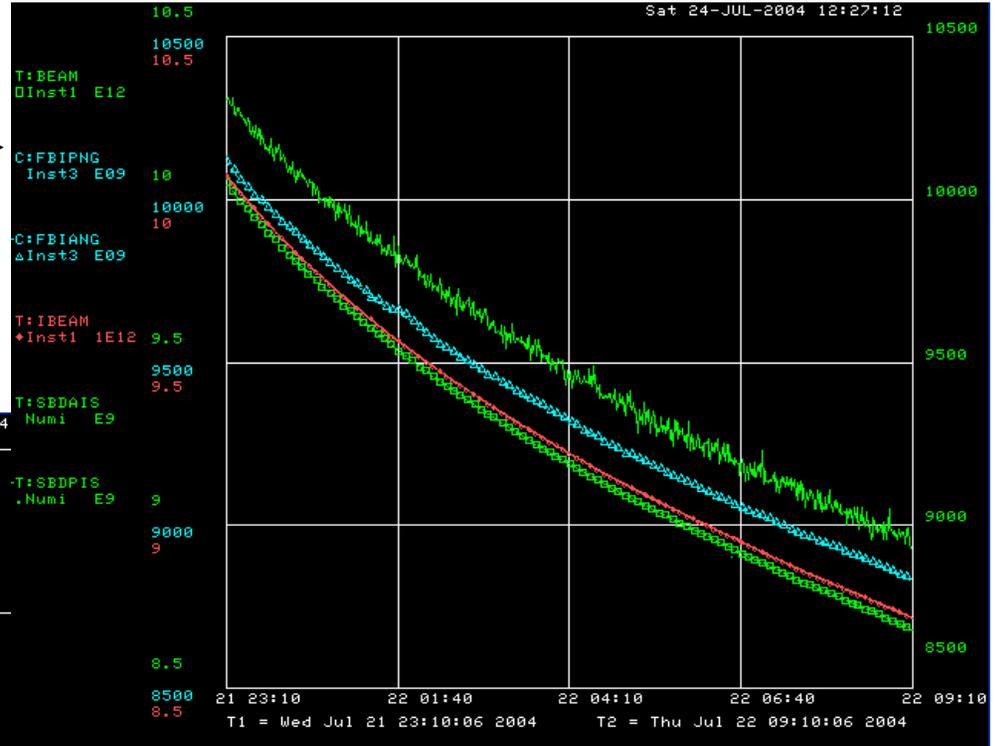
- The Receiver box failure **was not** expected to affect the signal gain.
- The Amp. Module was replaced with a newer version. This change of Amp. Module **was** expected to change the gain of the signal into the Front-End system.

We (Aisha Ibrahim, Dallas Heikkinen and I) did a calibration of the DCCT which showed that the gain of the Front-End system had changed by -31% (ie the number to be used in the Front-end program to convert a measured voltage to number of particles in the beam should be changed by -31%). This reflects the different gains of the original and the new Amp. module. The calibration process also allowed us to check the scale factors for the MADC readings. The MADC readings per the calibration were ~1.2% high.

We entered the -31% change on 7/23 but not the -1.2% change for the MADC readings.

TeVatron DCCT variables from July 23 to July 28

T:IBEAM (MADC) (red), and
T:BEAM (Front-end) (green)
as of July 22 (before failures)

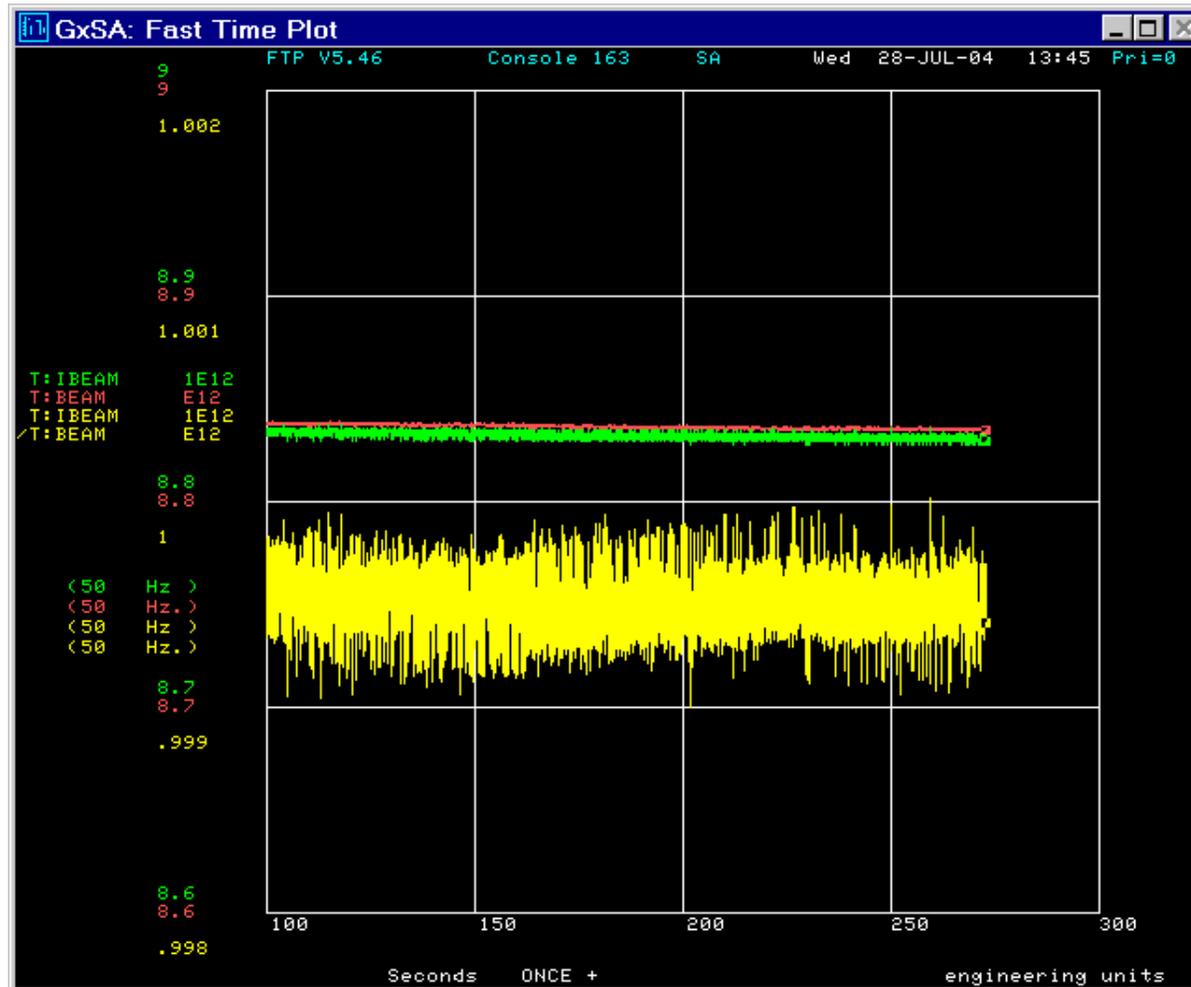


T:IBEAM (red), T:BEAM (green)
after gain change for Front-End
(July 23)

Note that T:BEAM is now ~1%
lower than T:IBEAM until...

TeVatron DCCT variables from July 28 2004

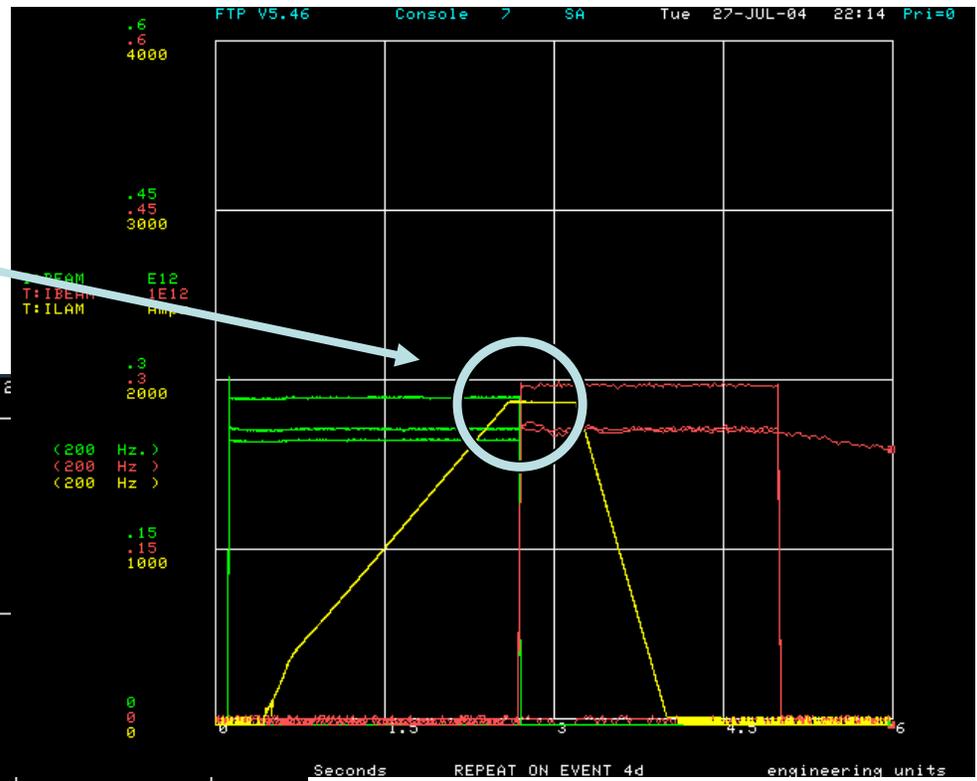
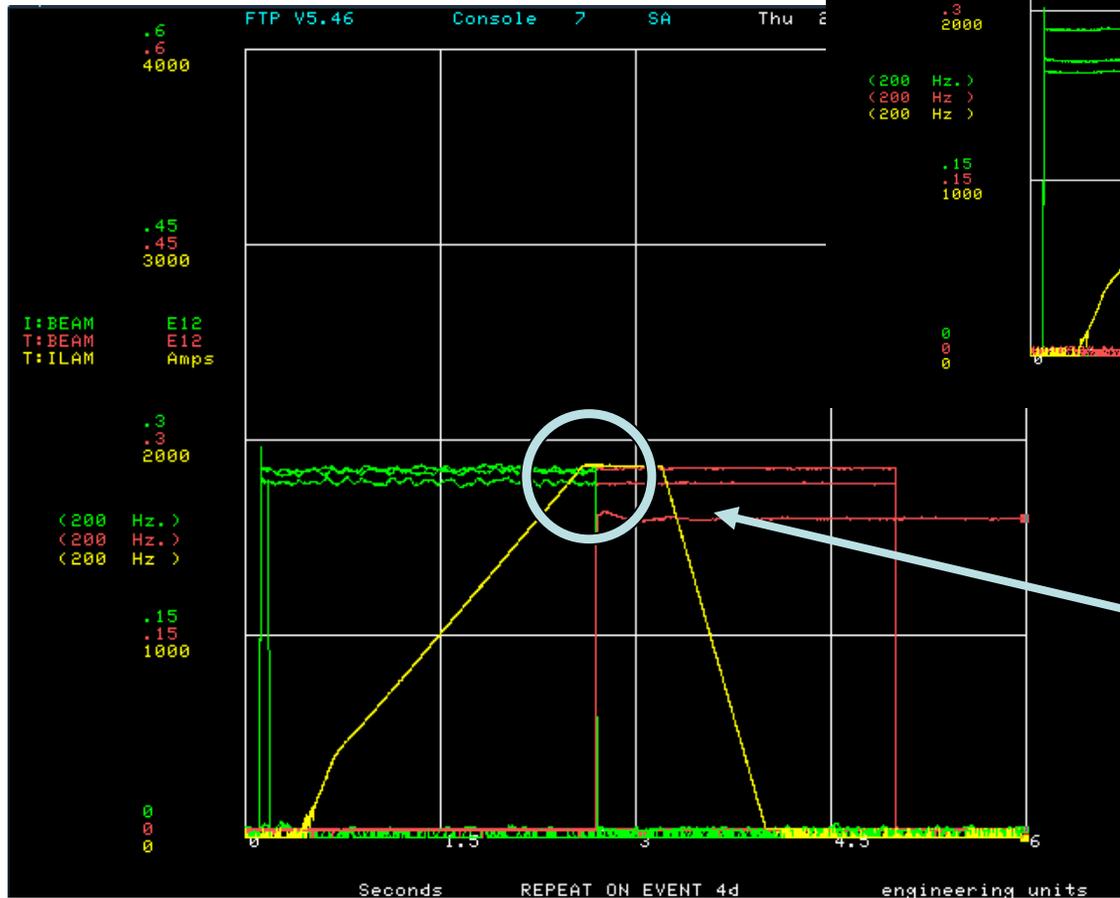
MADC (T:IBEAM) (green)& Front-End (T:BEAM) (red) after putting in calibrations for both MADC and Front-End. Values are the same to $< 0.1\%$



per T. Meyer

TeVatron & MI DCCT comparison

MI to TeV transfer before
TeV DCCT calibration
(note the apparent intensity increase)



MI to TeV transfer after
TeV DCCT calibration
(intensities ~ equal)