

SPS horizontal orbit correctors

- 5 corrector magnets in sextant 1 were tested by A. Beuret *et al.*
- All 3 magnets giving too small deflections (calibration significantly smaller than 1) show signs of inter-turn shorts.



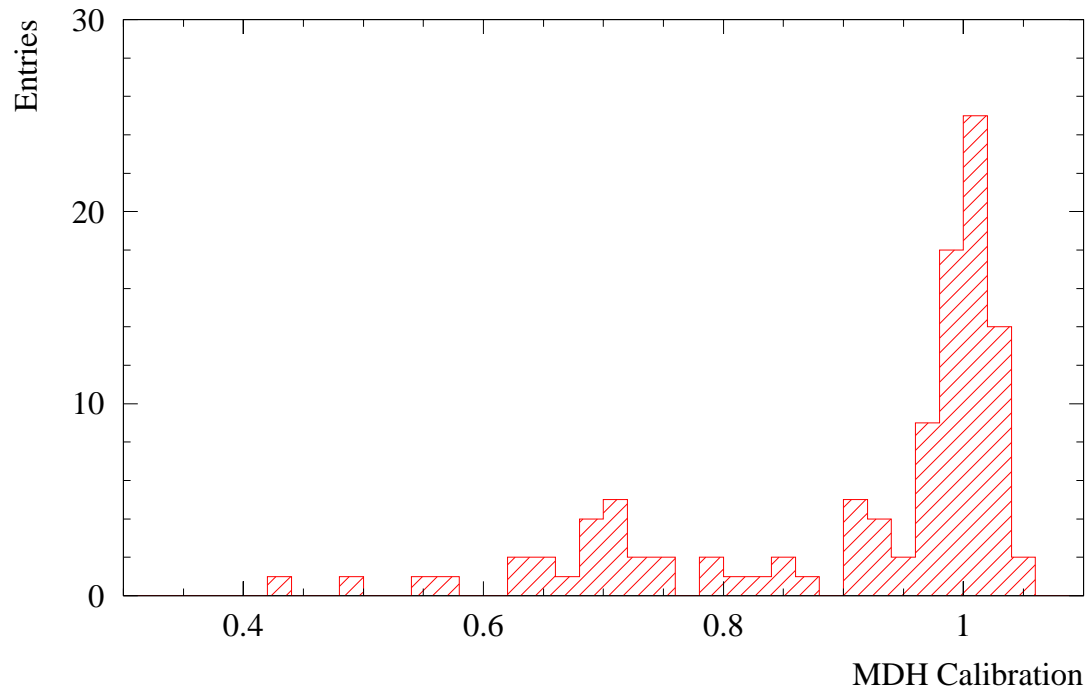
The magnets are damaged !

Magnet #	R (Ω)	Calibration	PO test result
102	11.1	1.02	OK
104	9.8	0.74	Inter-turn short
106	9.7	0.70	Inter-turn short
108	11.4	1.00	OK
110	9.5	0.48	Inter-turn short

Horizontal corrector data

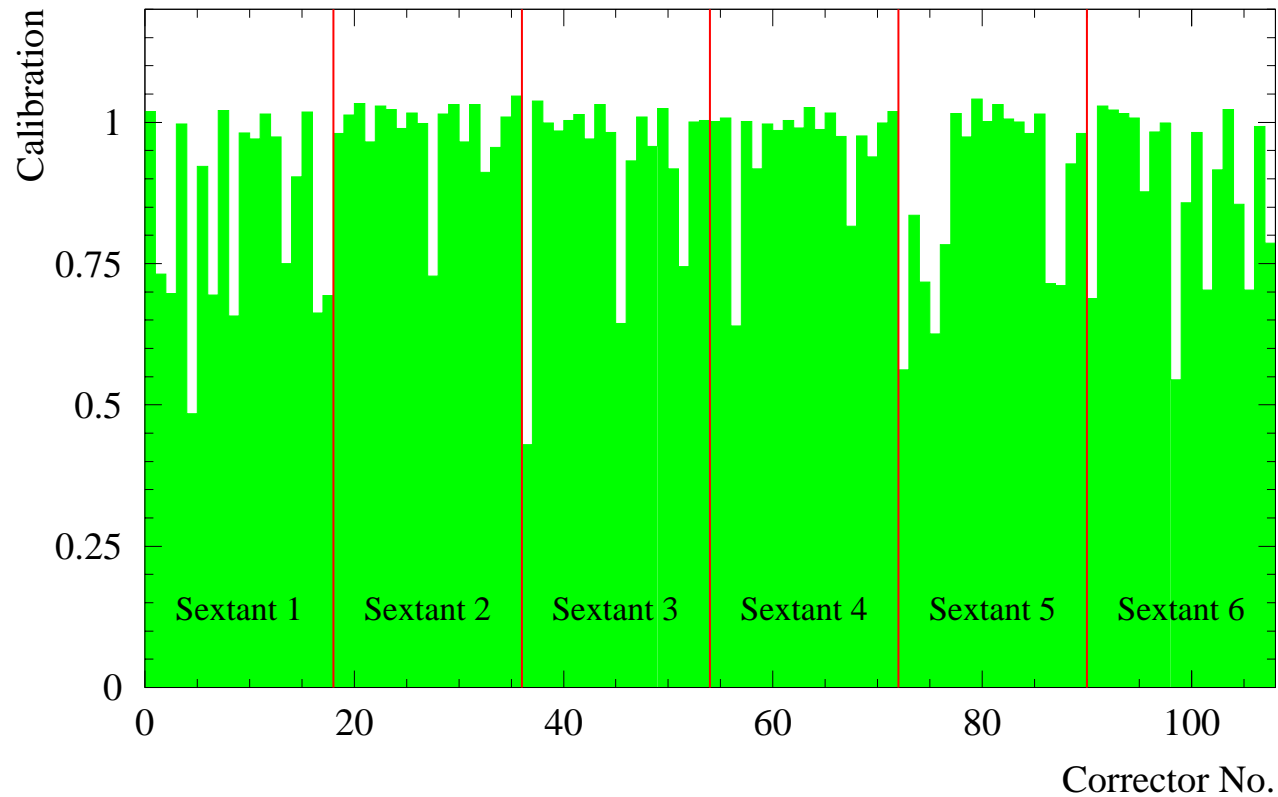
- Full statistics on all 108 orbit correctors.
- Confirms earlier results on a sub-sample.
- ~30% of the correctors give less than 90% is requested kick.

Not 'trivial' to correct, effect depends on the dynamics (ramp rates...)



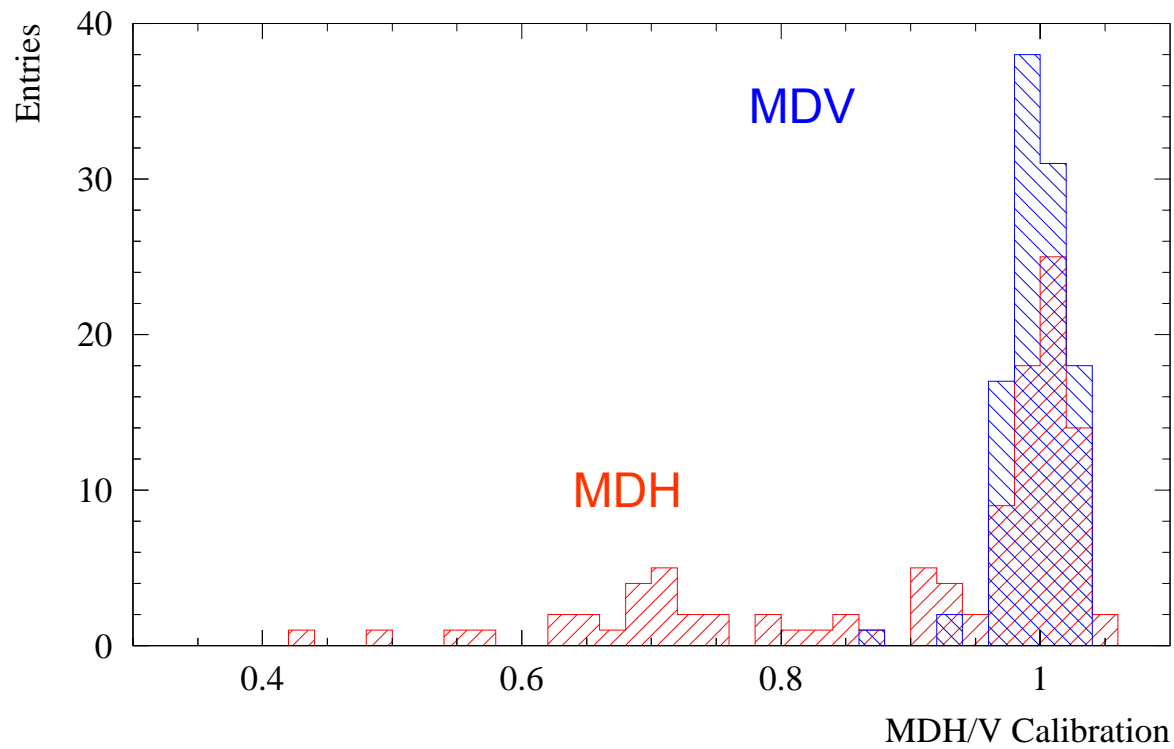
Horizontal corrector distribution

Distribution over the ring : some sextant are 'almost' unaffected...



Vertical corrector data

- Full statistics on all 108 vertical orbit correctors.
- Confirms that we have no problem with them....
but there is a small structure on the MDV calibration...



Vertical corrector distribution

- Regular pattern with amplitude of $\pm 2.5\%$, identical in all sextants.
- No clue about its origin (not a fit-bias due to β -beating).

