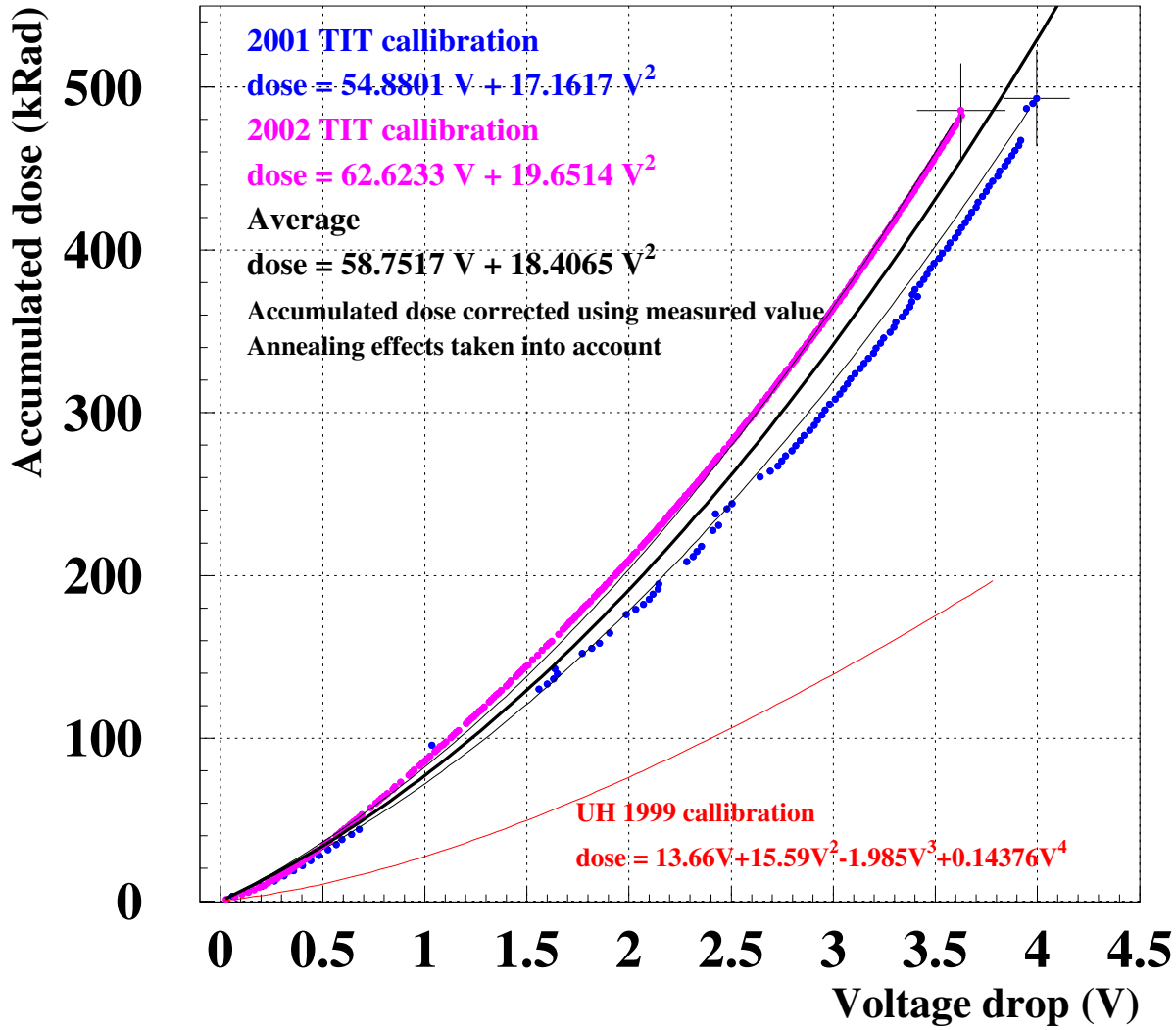
SVD 1.4 and SVD 2.0 radiation monitors

(S.Stanič for the monitoring group)

- SVD 1.4 - after the RadFET calibration with ^{60}Co and comercial dosimeters at TIT, we are confident that the actual dose received by SVD 1.4 is about a factor of 2 larger than the number presently claimed.

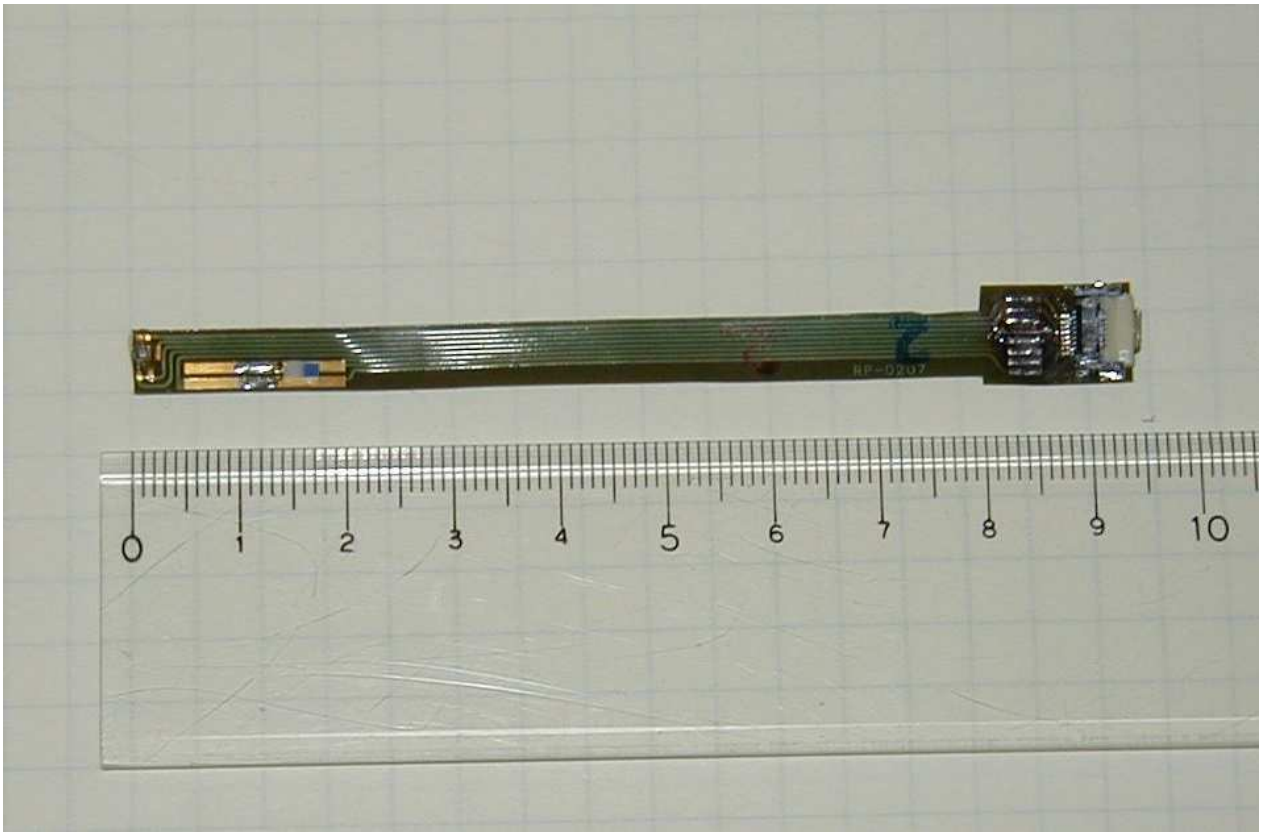


Scenarios for SVD 1.4

- keep the present calibration curve for the rest of SVD 1.4 lifetime. Advantage: people are used to certain rates "as a rule of the thumb". Disadvantage: Although the panels say "dose in Rad" the dose is actually displayed in some arbitrary units. Even if old calibration curve is used for internal use and daily runing, we believe that the correct numbers should be used in papers/reports.
- change the calibration with 2002/09/02 so that displayed values will show actual acumulated dose in Rads. Disadvantage: numerical values will change for about a factor of 2, which might be confusing.

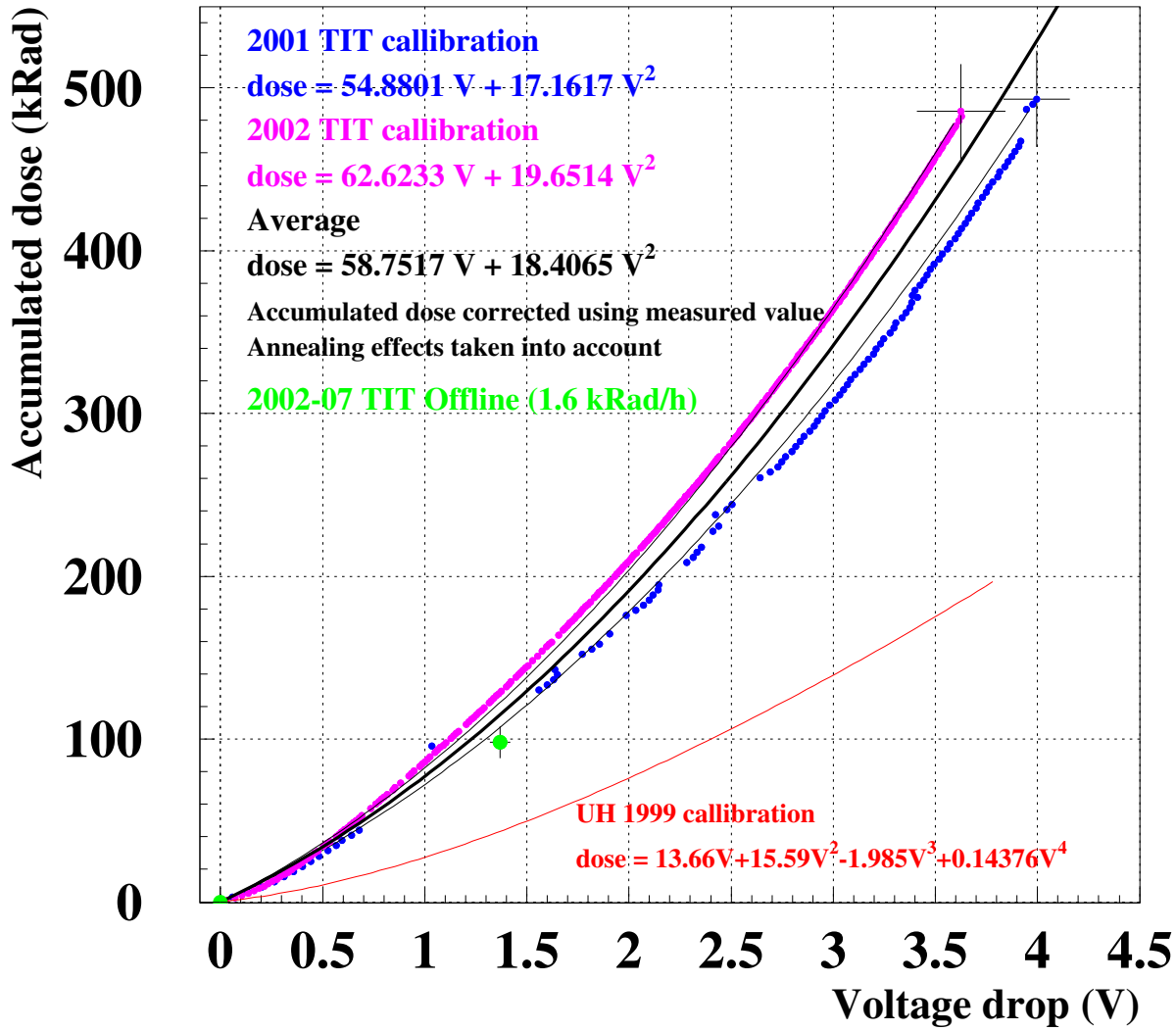
SVD 2.0

- In first layer of SVD 2.0 we need 6 monitor hybrids (two sets of PIN+RadFET+PT100 each), which will be mounted on beam-pipe. 6 fully working monitors are at hand.
- In layers 2 and 3, we need 12 small monitor hybrids (RadFET+PT100 each). 14 fully working monitors are at hand.



- SVD 2.0 - RadFET irradiation at low dose rate (1.6kRad/h) up to 500kRad without online readout is currently in progress at TIT. Another experiment at high dose rate (80kRad/h) up to 2 Mrad with online readout is scheduled for 2002/08/29.

  Calibration is done with comercial dosimeters and TIT source activity data.



- First point of SVD 2.0 low-rate irradiation shows response similar to that of SVD 1.4 RadFETs

- SVD 2.0 dose calibration should be finished by mid September 2002.