



linfit up: $ax + o$

$$\chi^2 = 0.011$$

$$\chi^2_{red} = 0.003$$

$$a = 0.25154199 \pm 0.000389 \text{ (0.15\%)} \text{ (init= 1)}$$

$$o = 0 \text{ (fixed)}$$

linfit down: $ax + o$

$$\chi^2 = 0.025$$

$$\chi^2_{red} = 0.006$$

$$a = 0.25223542 \pm 0.000749 \text{ (0.30\%)} \text{ (init= 1)}$$

$$o = 0.18639011 \pm 0.056675 \text{ (30.41\%)} \text{ (init= 1)}$$

model up: $ax + bx^3 + cx^5 + o$

$$\chi^2 = 0.047$$

$$\chi^2_{red} = 0.004$$

$$a = 0.24946690 \pm 0.000795 \text{ (0.32\%)} \text{ (init= 1)}$$

$$b = 4.6257\text{e-}07 \pm 6.91\text{e-}08 \text{ (14.93\%)} \text{ (init= 0)}$$

$$c = -2.2964\text{e-}11 \pm 1.37\text{e-}12 \text{ (5.96\%)} \text{ (init= 0)}$$

$$o = 0 \text{ (fixed)}$$

model down: $ax + bx^3 + cx^5 + o$

$$\chi^2 = 0.056$$

$$\chi^2_{red} = 0.006$$

$$a = 0.25034473 \pm 0.001499 \text{ (0.60\%)} \text{ (init= 1)}$$

$$b = 5.5002\text{e-}07 \pm 9.46\text{e-}08 \text{ (17.20\%)} \text{ (init= 0)}$$

$$c = -2.6273\text{e-}11 \pm 1.75\text{e-}12 \text{ (6.65\%)} \text{ (init= 0)}$$

$$o = 0.18687230 \pm 0.062999 \text{ (33.71\%)} \text{ (init= 0)}$$

Estimation of hysteresis effect at 50 amps:

$$\text{linfit: } \Delta G = 0.221062 \quad (\sim 0.435585\%)$$

$$\text{model: } \Delta G = 0.240661 \quad (\sim 0.475829\%)$$