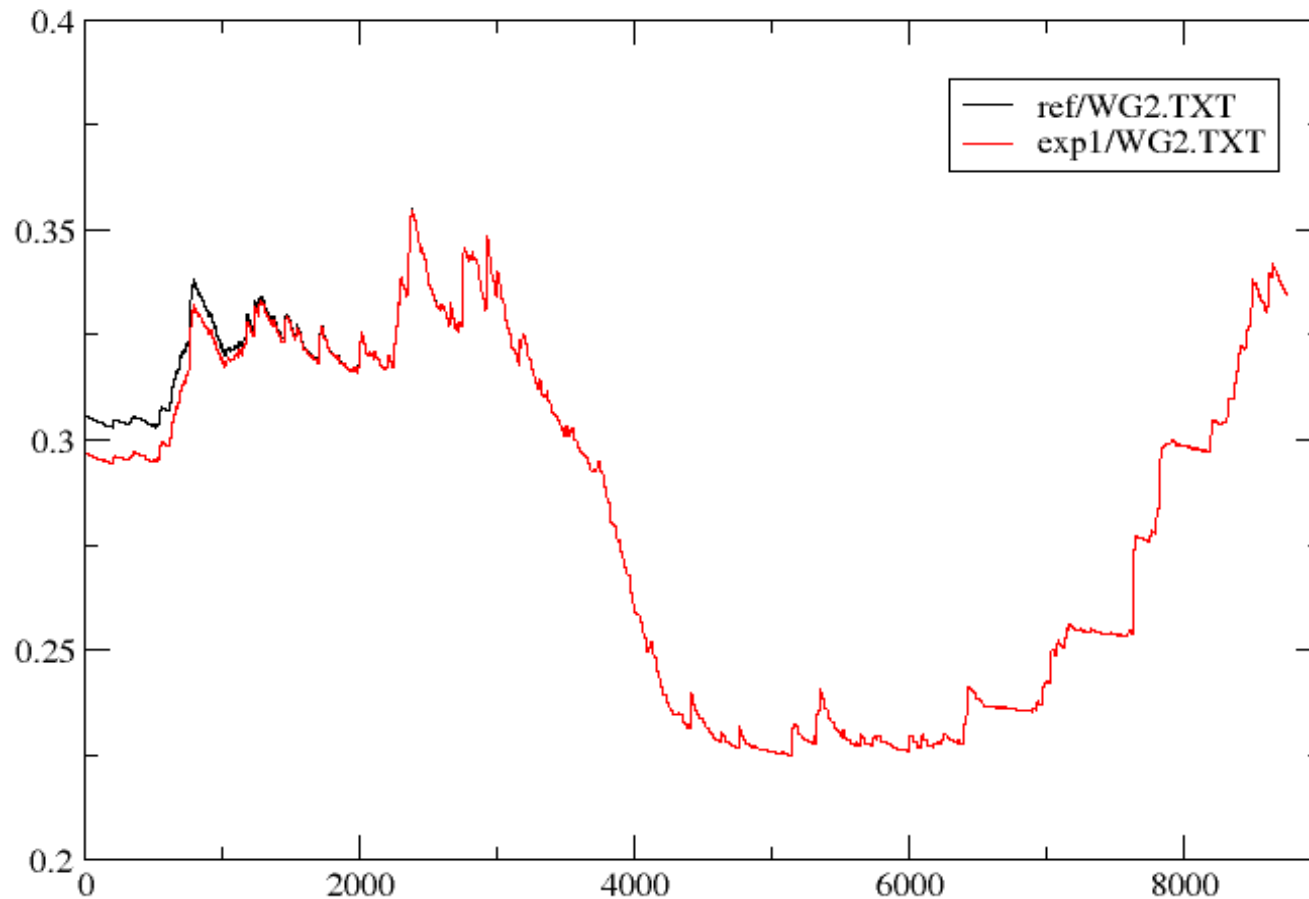


TP Isba
Campaign
Hapex Mobilhy
South West of France, 1986

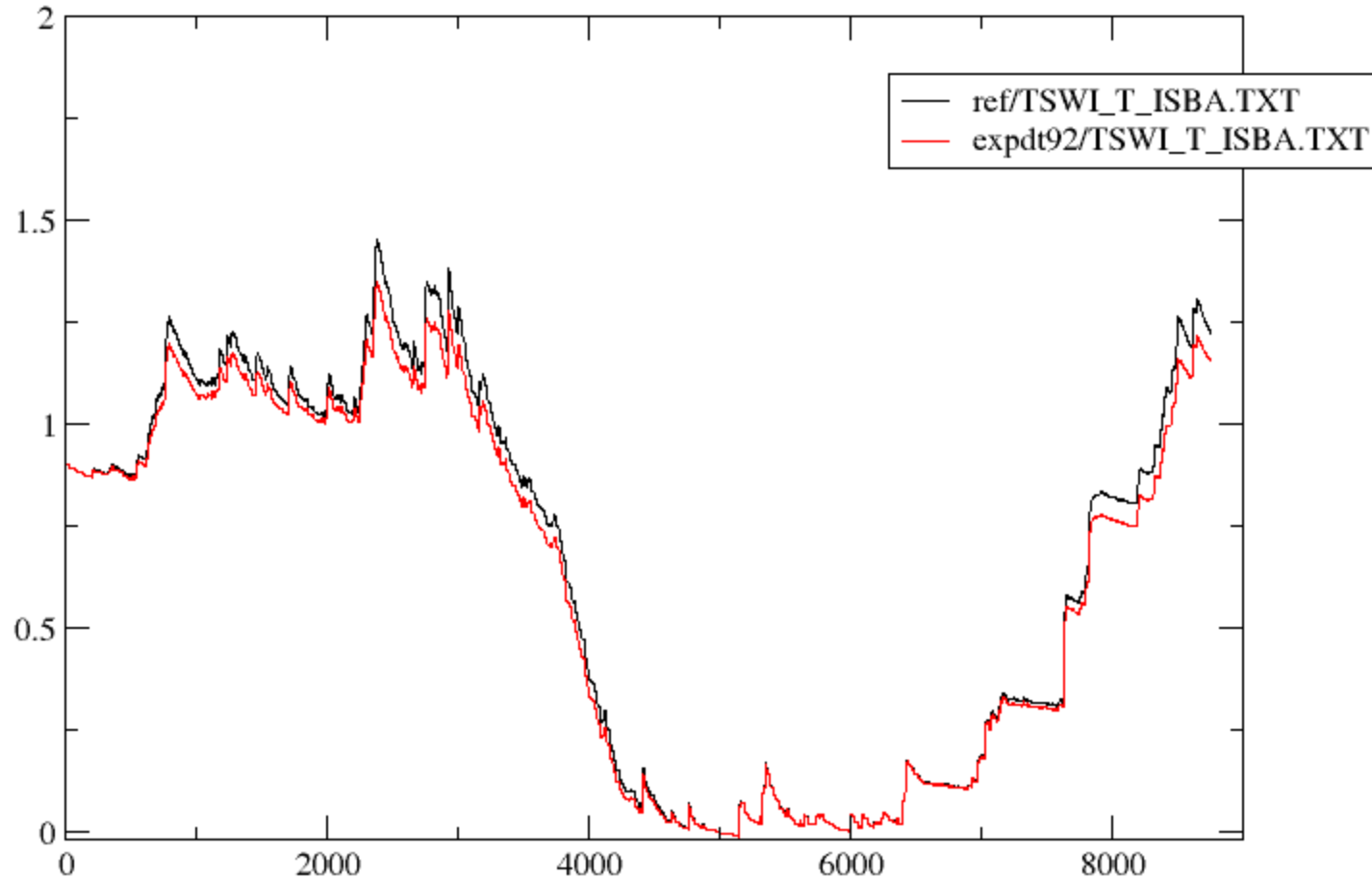
Perturbation -10% on SWI

Go back to the reference after 1 month and a half



Comparison with the DT92 (VIC) subgrid runoff

Subgrid runoff : a part of the grid is saturated infiltration is not possible on this part : runoff is increased



Runoff « standard » and subgrid (VIC)

Standard : runoff if $W > W_{sat}$

Subgrid : (VIC, Duemesnil et Todini, 1992) : a part of the grid is saturated
infiltration is not possible on this part

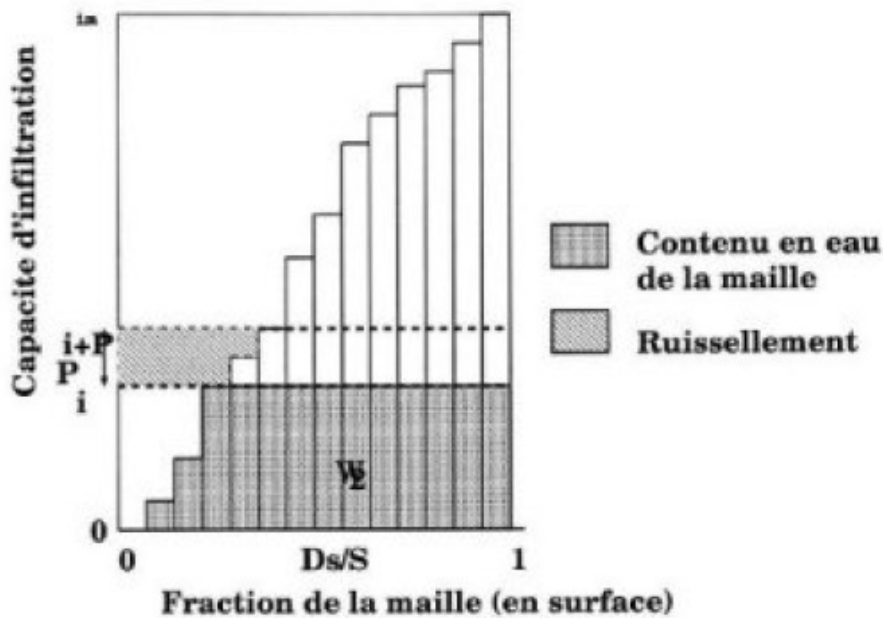


FIGURE 2.4 – Principe du schéma de ruissellement sous-maille

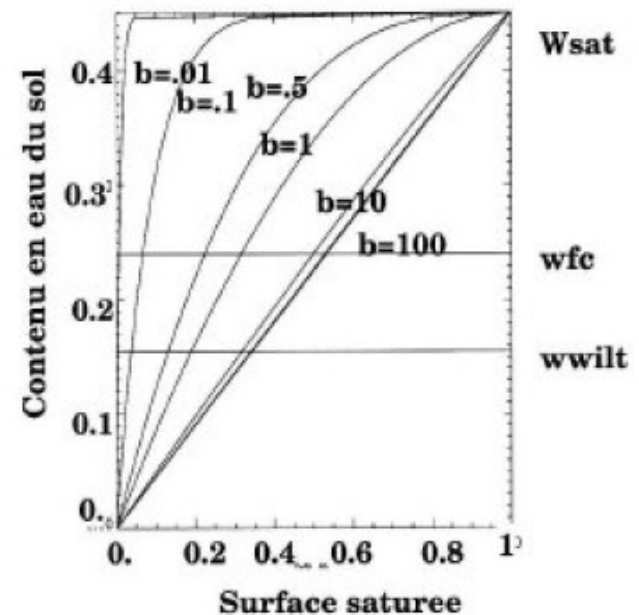
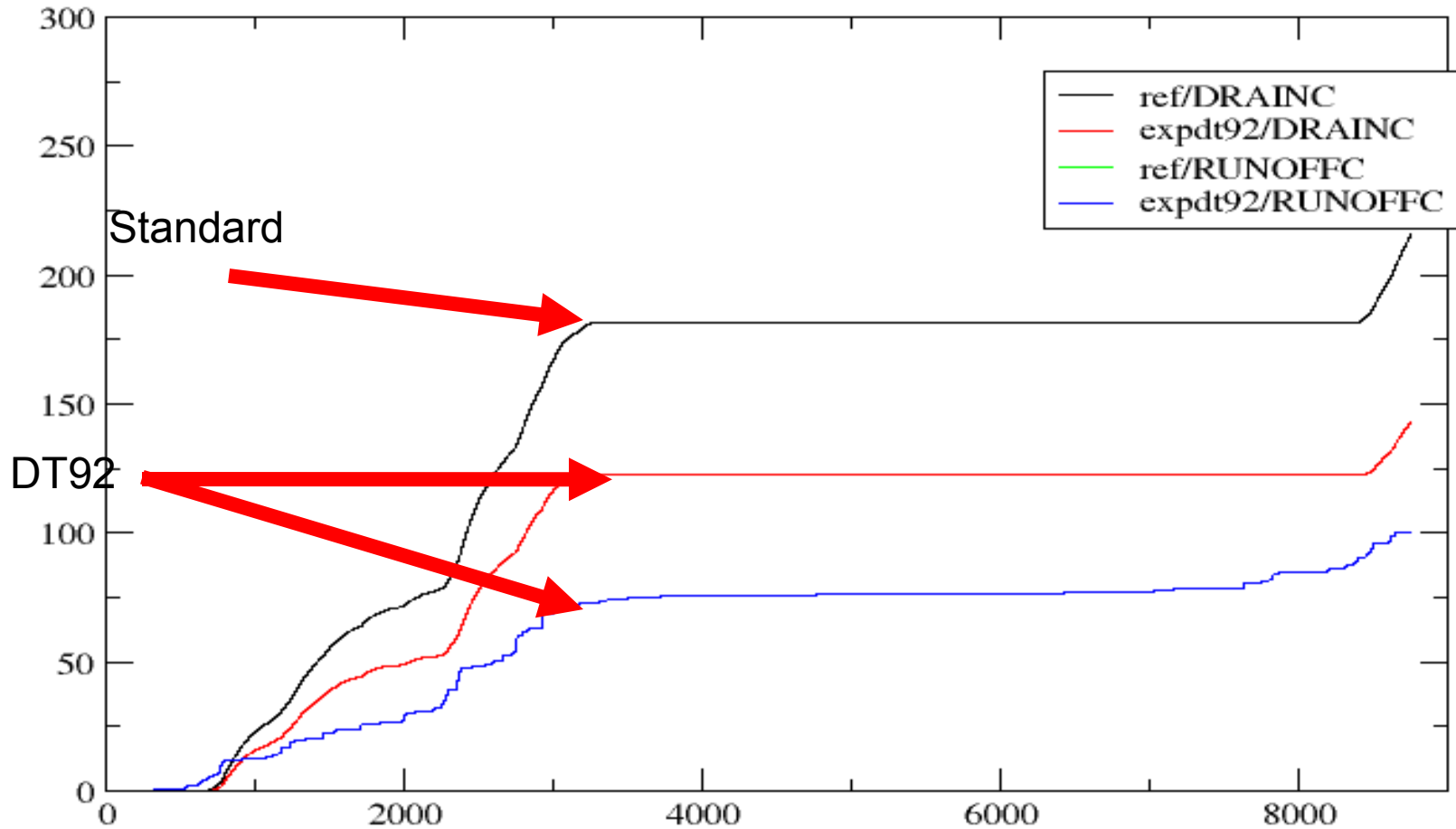


FIGURE 2.5 – Variation de la fraction de la maille saturée en fonction du contenu en eau et du paramètre de courbure b

Impact sur runoff and drainage

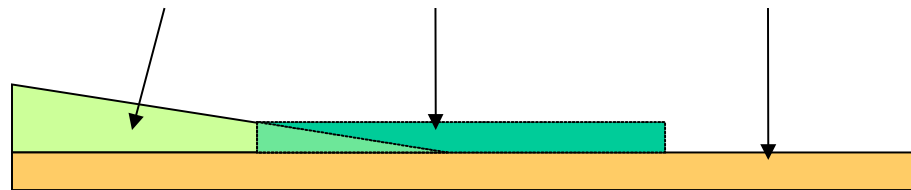


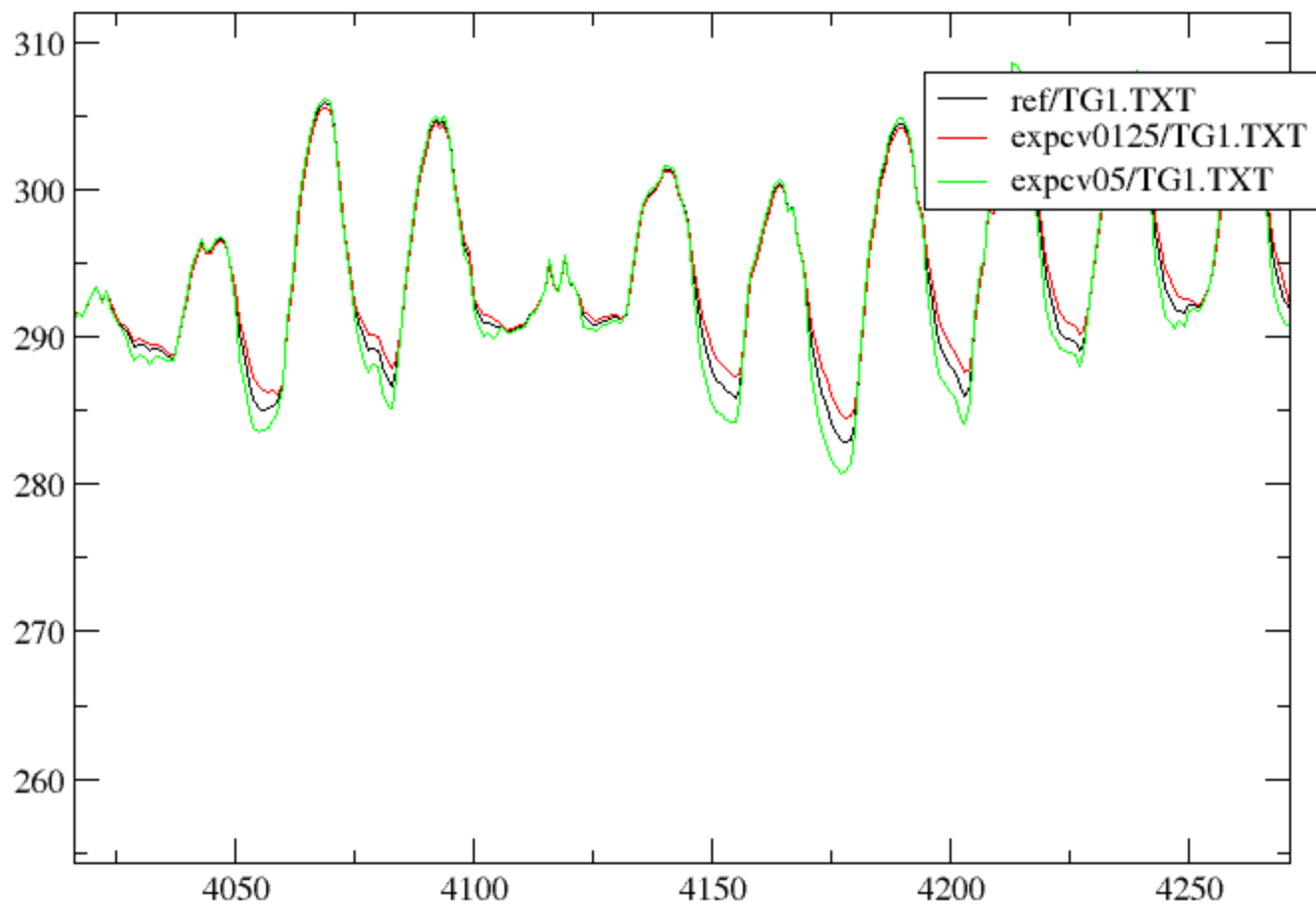
Impact of Cv

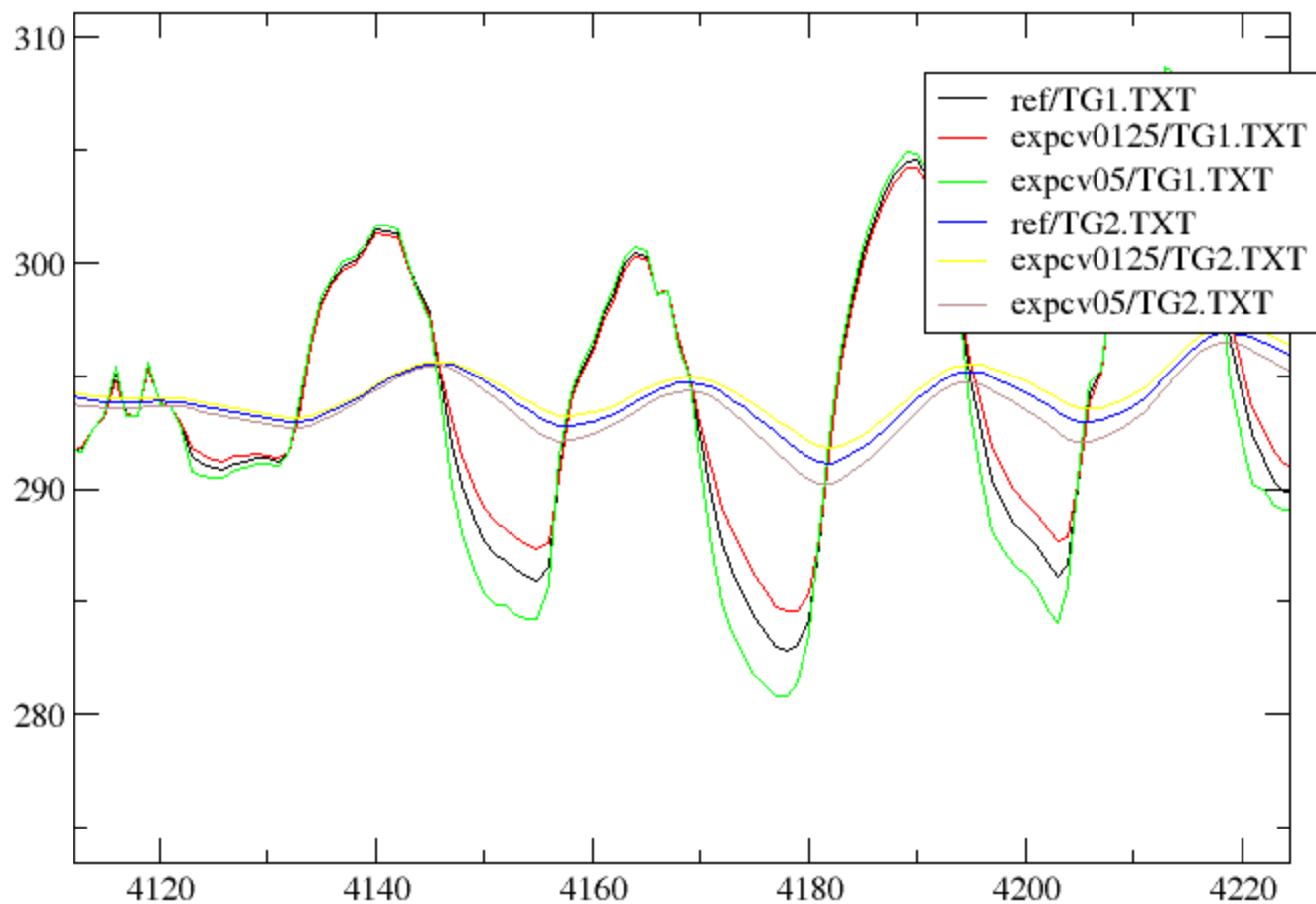
$$\frac{\partial T_s}{\partial t} = C_T (R_n - H - LE) - \frac{2\pi}{\tau} (T_s - T_2)$$

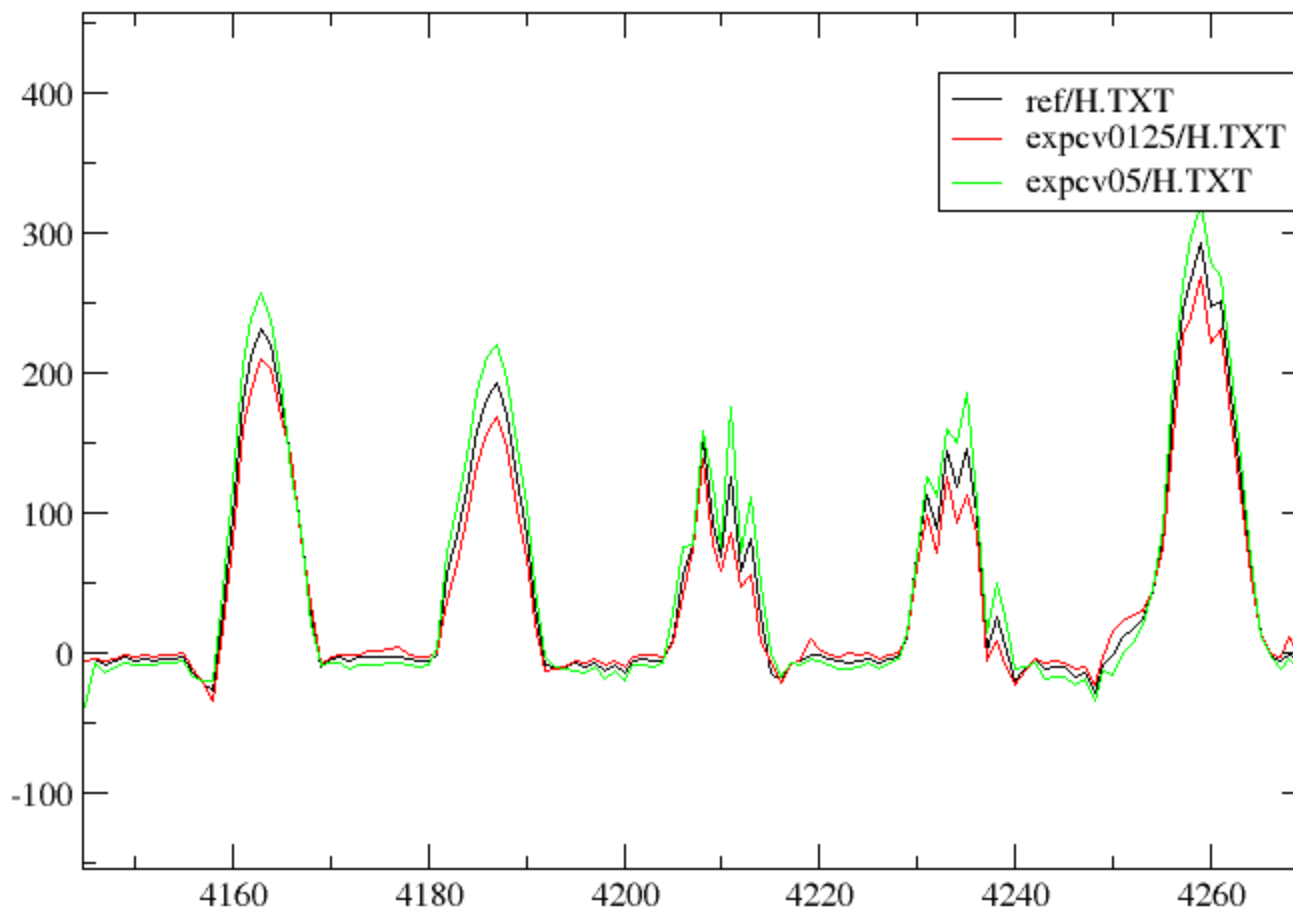
$$\frac{\partial T_2}{\partial t} = \frac{1}{\tau} (T_s - T_2)$$

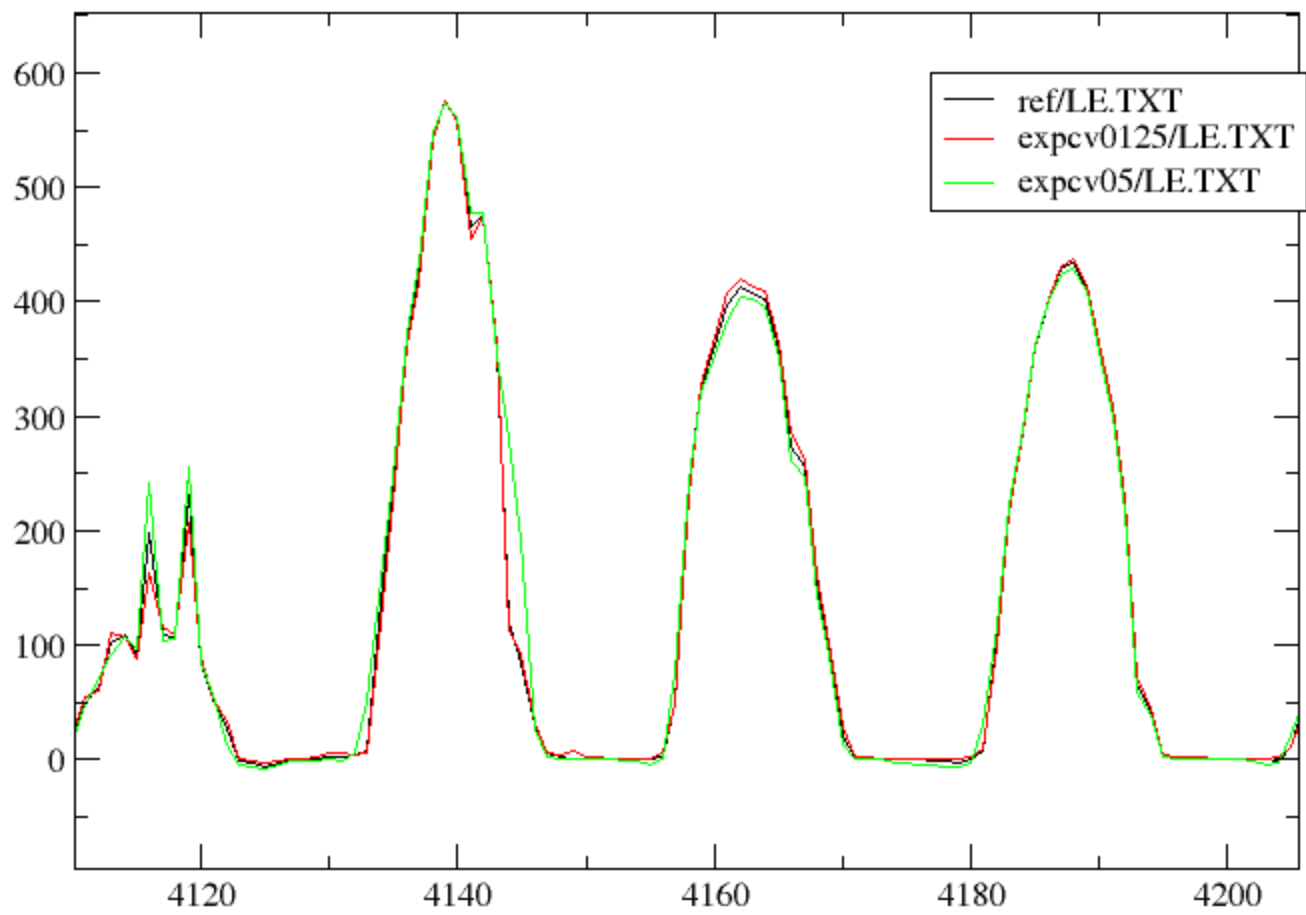
Coefficient d'inertie :
$$C_T = 1 / \left[\frac{veg(1 - p_{snv})}{C_v} + \frac{p_{sn}}{C_n} + \frac{(1 - veg)(1 - p_{sng})}{C_g} \right]$$











TP Isba

« snow »

Neige : col de Porte 1996/97

ISBA : DIF (multilayer)

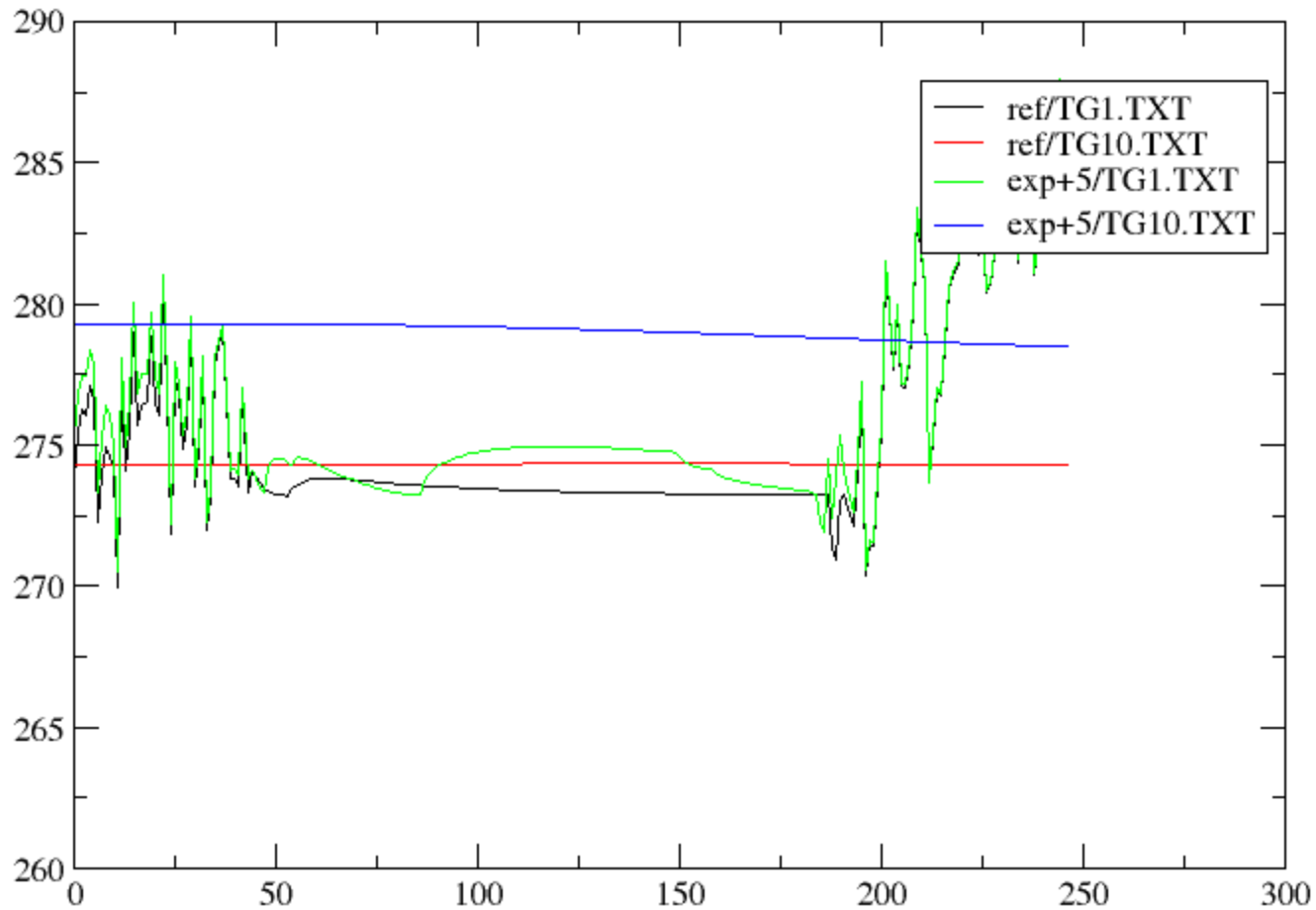
VEG=1

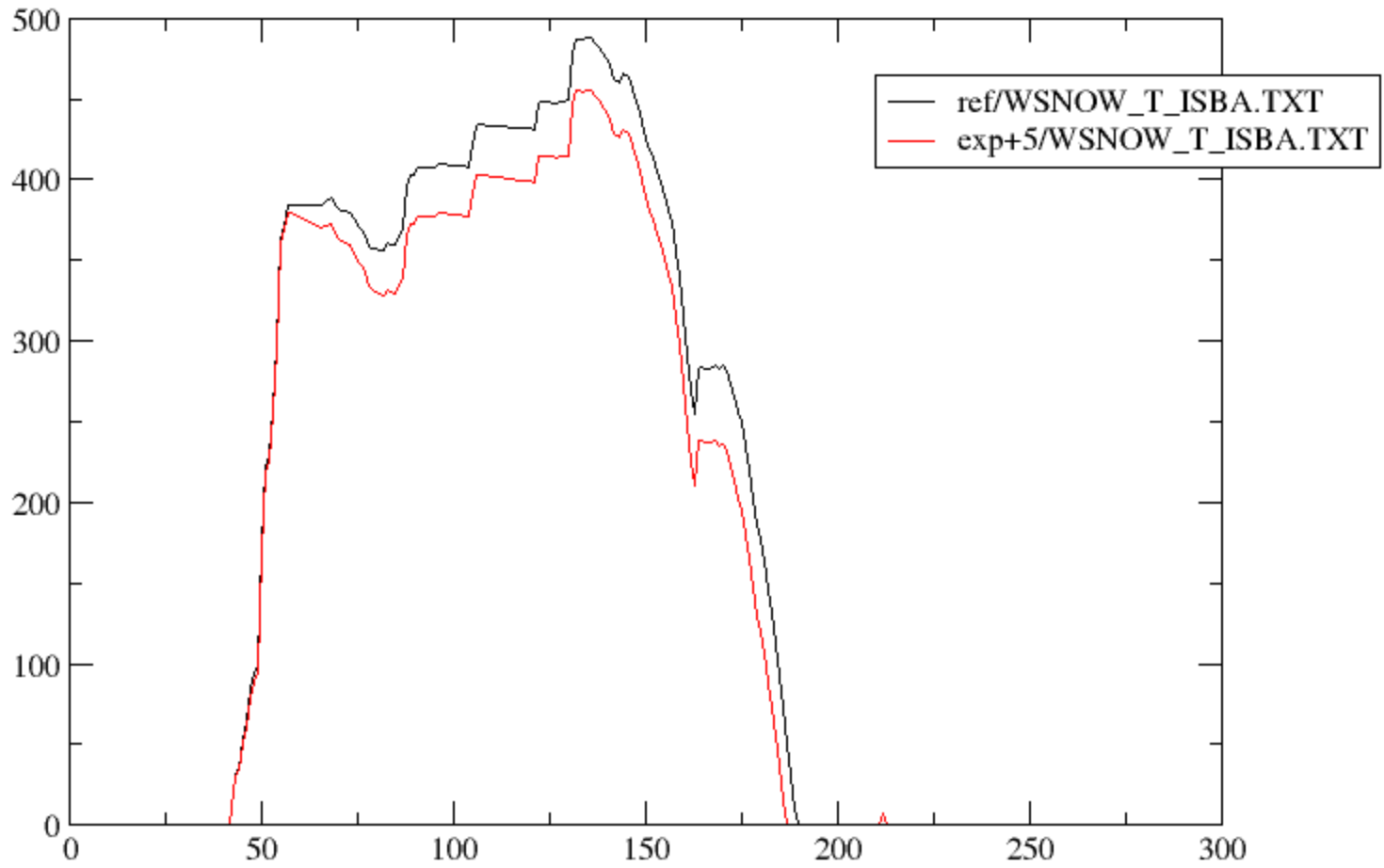
10 soil layers (-> 10m)

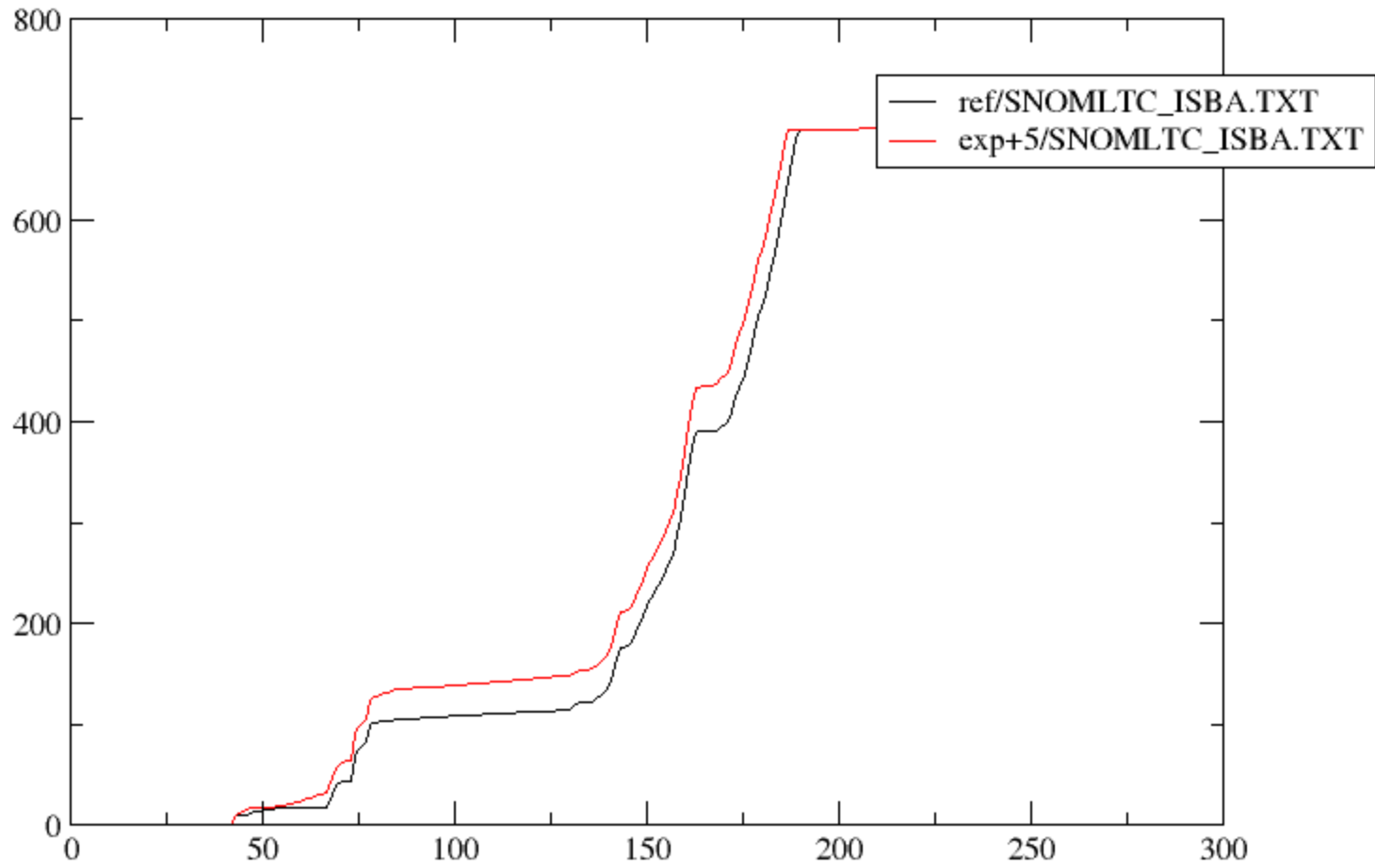
root depth = 60 cm (5 couches)

snow scheme : CROCUS (10 couches)

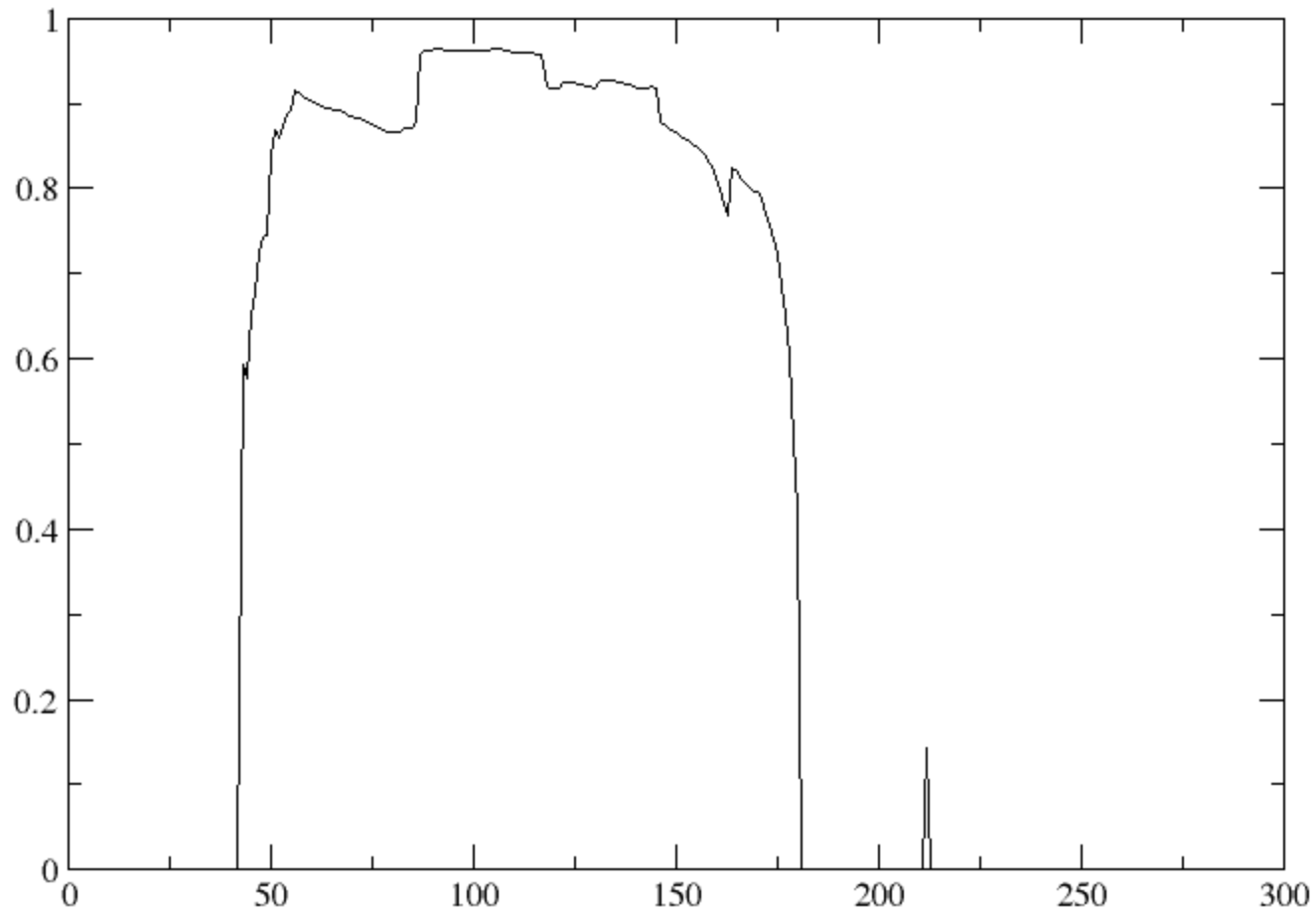
Expé +5K

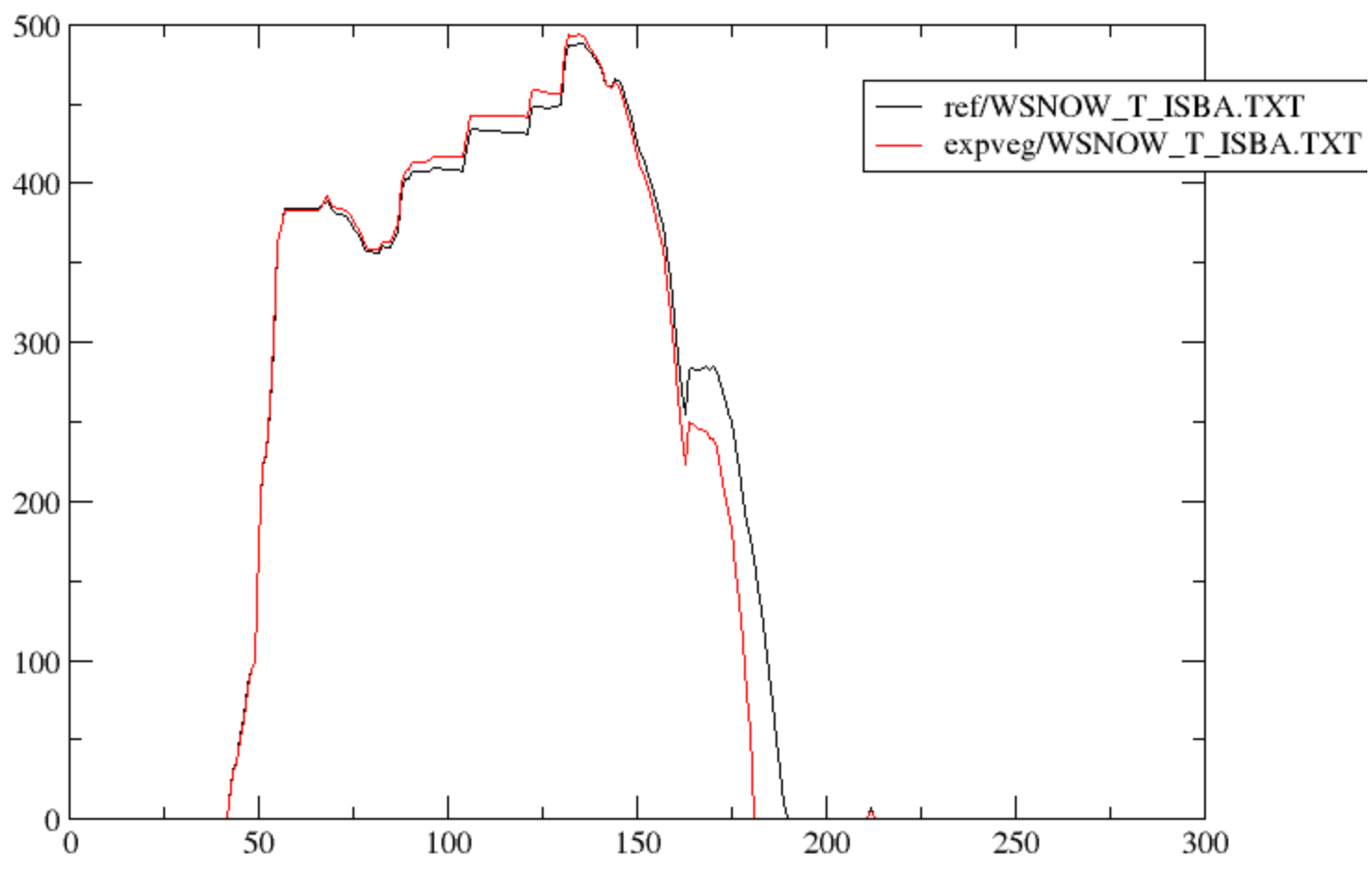


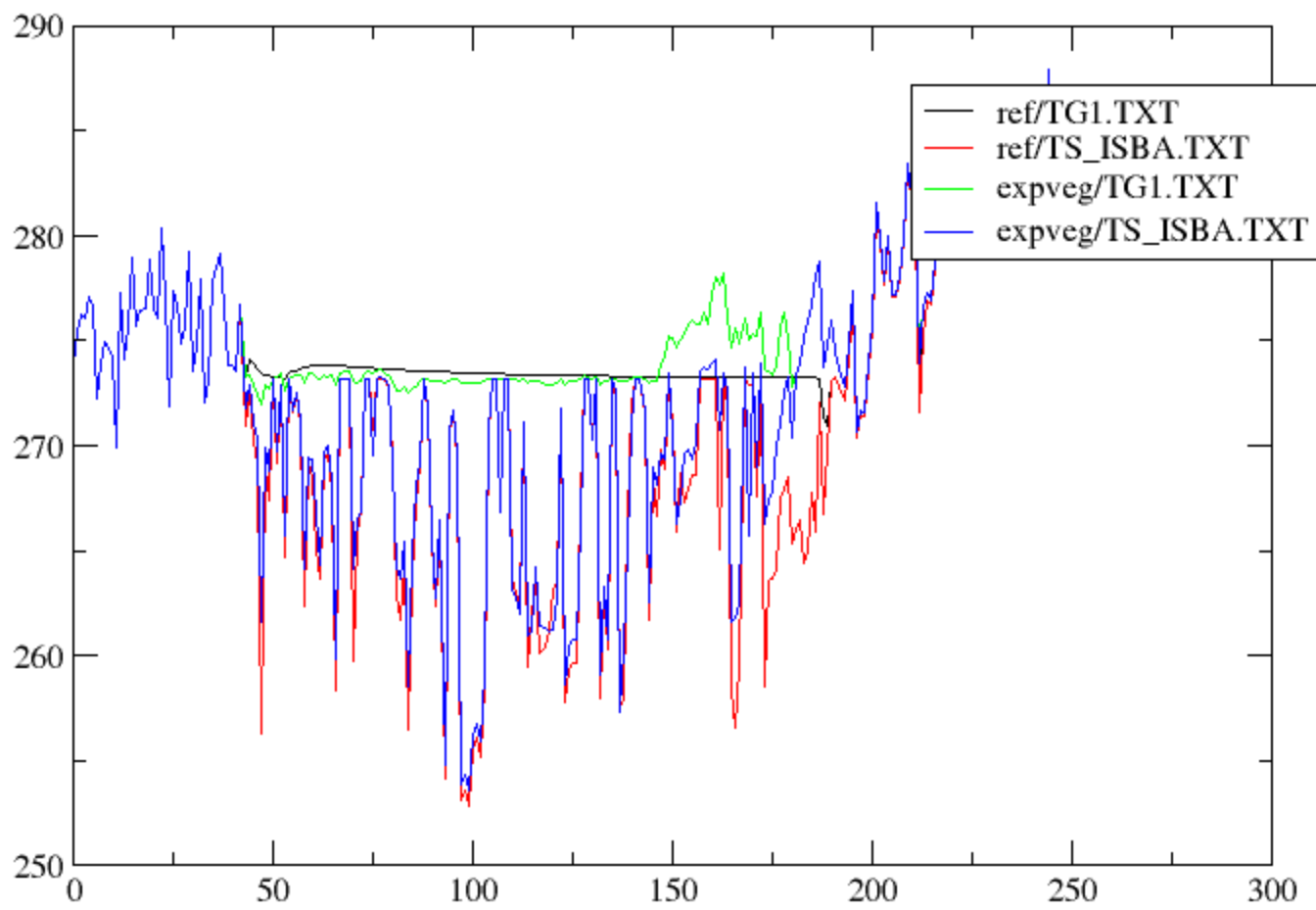




Expe vegetation







Comparison with D95

