Col de Porte, France (2010-10 - 2011-05) TCZE_REF_TSNB_REF TCZE_REF_TSNB_OP1 TCZE_REF_TSNB_OP2 TCZE_REF_TSNB_OP3 TCZE_REF_TSNB_OP4 TCZE_REF_TSNB_OP5 Obs (auto) Obs (man) SD > 10 cm 8.0 (a) 0.1 Snow Depth [m] 0.4 0.5 0 0.05 0 -0.05 -0.1 Snow Density [kg m⁻³] 800 -100 | (**d**) (c) 50 0 -50 -100 Surface temperature [°C] 20 (e) (f) 10 0 -10 0.5 -20 Snow temperature [°C] 0 (g) 2 (h) -5 -7.5 Bottom snow temp [°C] (i) (j) 0.5 0 -0.5 0.4 Soil Temp at 10 cm [°C] (k) 0 5 -0.2 -0.4 Soil Temp at 20 cm [°C] 15 **(m)** 0.4 0.2 0 5 -0.2 -0.4 0.4 Soil Temp at 50 cm [°C] (o) (p) 0.2 0 -0.20 -0.4 2010-10₇ 2010-12 - 2010-11-2011-01 2011-02 ME RMSE 2011-03 2011-04 2011-05 time