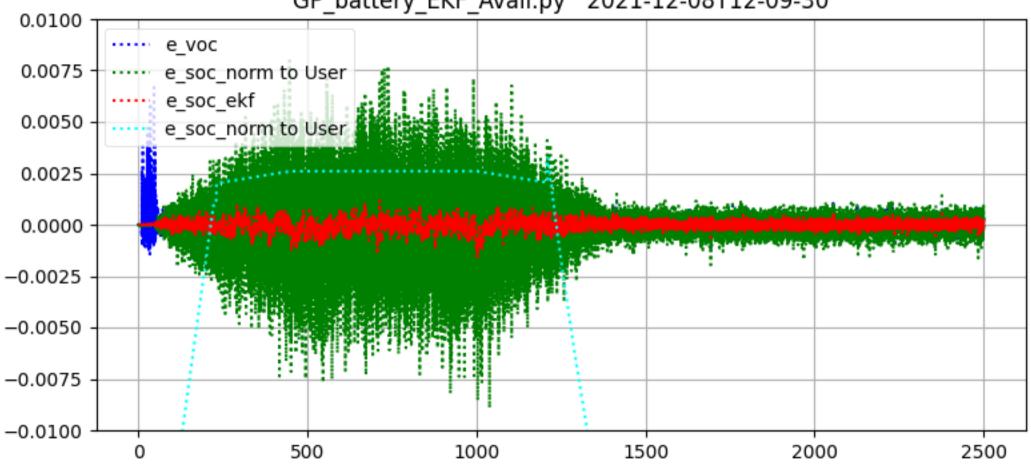
GP battery EKF Avail.py 2021-12-08T12-09-30 1.00 current demand, A SOC 25 0.98 SOC norm 0 I Rct -250.96 I C dif :lsRodif 500 1000 1500 500 1000 2000 2500 500 Vb Pow in 14 Vc 0 · Vd 12 Voc -5002000 500 1000 1500 2500 500 1000 1500 2000 2500 14.25 0.05 Vbc_dot voc vs soc norm Vcd_dot 14.00 0.00 -0.0513.75 500 1000 1500 2000 2500 0.96 0.97 0.98 0.99 1.00 0

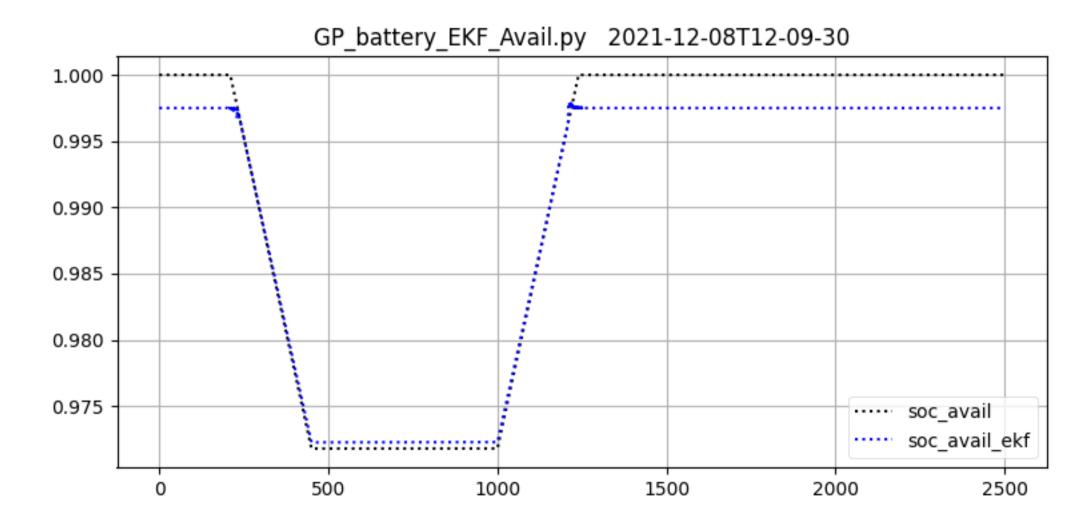
GP_battery_EKF_Avail.py 2021-12-08T12-09-30 1.00 25 0 SOC norm ib 0.95 SOC norm ekf i batt -25actual voc 500 1000 1500 500 1000 2000 2500 16 voc dyn meas 1.00 voc filtered state SOC norm 14 post soc norm filtered 0.95 x soc norm filtered v batt 12 500 2000 1500 1000 1500 1000 2000 2500 0.01 0.010 e soc ekf e voc 0.00 0.005 e soc norm to User K (belief state / belief meas) 0.000 -0.01500 1000 1500 2000 2500 500 1000 1500 2000 2500

GP_battery_EKF_Avail.py 2021-12-08T12-09-30 1.00 -14.25 -0.00 0.98 14.00 hx ekf x ekf _{13.75} -0.05 ····· z ekf y ekf 0.96 1**⁄e**−5 1000 1000 2000 2000 1000 2000 1.05 2 40 ····· Fx ekf 1.00 20 H ekf P ekf 0.95 0 0 1e−7 1000 2000 1000 2000 1000 2000 0,010 + Bu ekf 3.8 0.005 K ekf 3.6 0.000 0 1000 2000 0 1000 2000

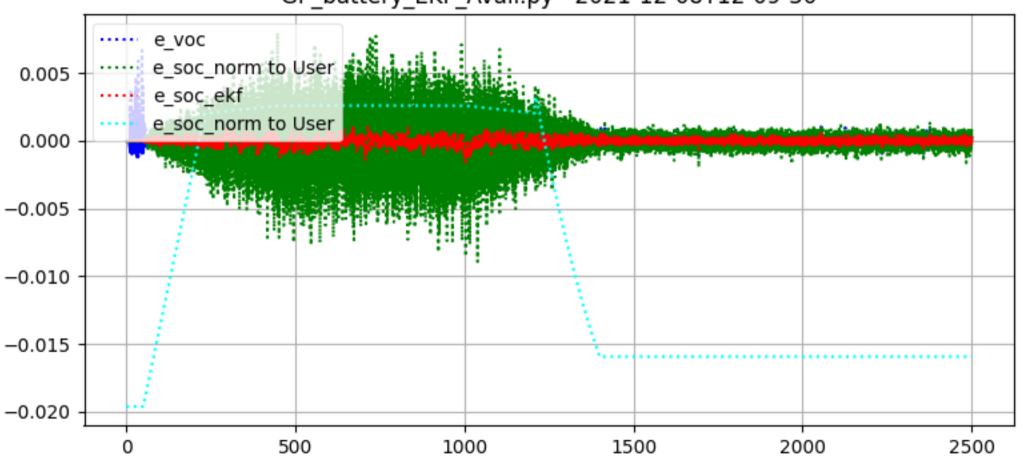
GP_battery_EKF_Avail.py 2021-12-08T12-09-30 1.00 14.3 14.2 0.99 14.1 0.98 14.0 0.97 13.9 0.96 10.00 13.8 voc_dyn 0.95 SOC 13.7 vbat solved soc solved 0 500 1000 1500 2000 2500 500 1000 1500 2000 2500

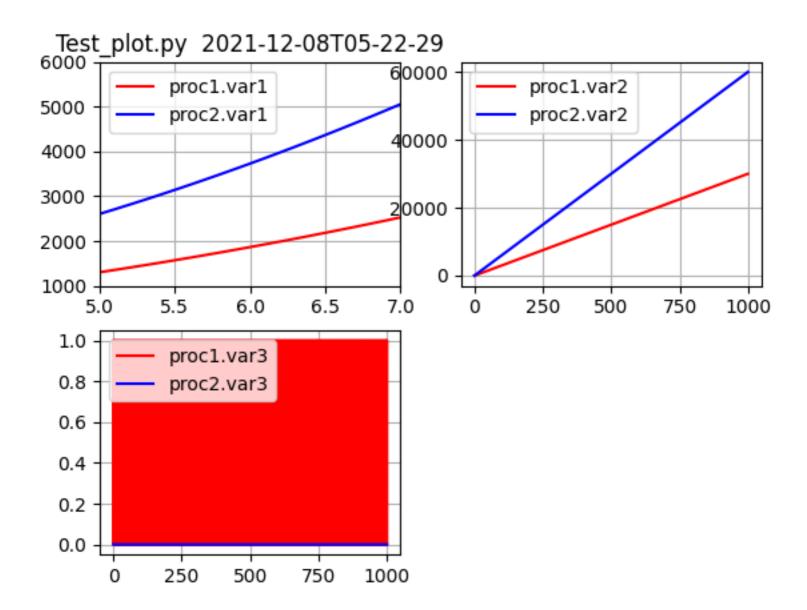
GP_battery_EKF_Avail.py 2021-12-08T12-09-30





GP_battery_EKF_Avail.py 2021-12-08T12-09-30





Test₁p₈ot.py 2021-12-08T05-22-29 60000 proc1.var1 proc1.var2 proc2.var1 proc2.var2 1.0 40000 0.5 20000 0.0 0 250 250 1000 500 750 500 750 1000 1.0 proc1.var3 0.8 proc2.var3 0.6 0.4 -0.2 0.0

0

250

500

750

1000