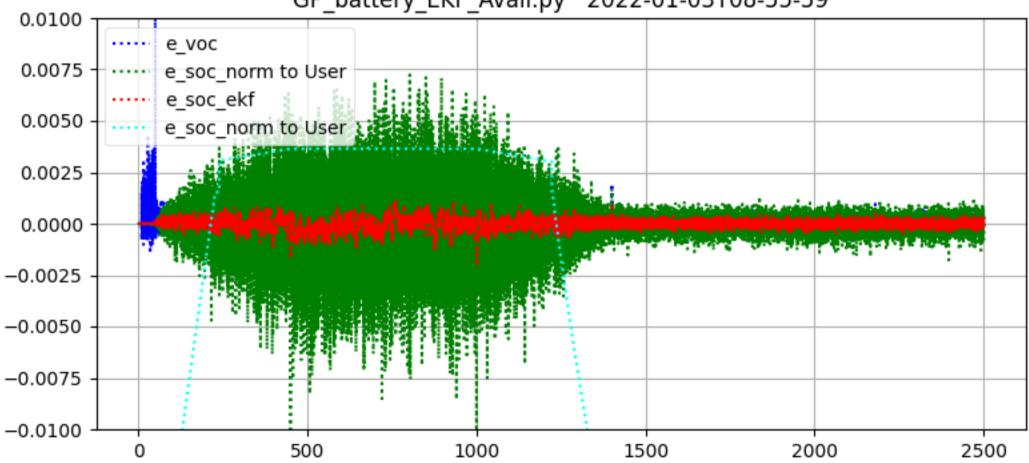
GP battery EKF Avail.py 2022-01-03T08-55-59 1.00 current demand, A SOC 25 0.98 SOC norm 0 I Rct -250.96 I C dif :lsRodif 500 1000 1500 500 1000 2000 2500 500 ٧b Pow in 14 Vc 0 · Vd 12 Voc -5002000 2000 500 1000 1500 2500 500 1000 1500 2500 14.25 Vbc_dot voc vs soc norm Vcd_dot 14.00 0 13.75 -1500 1000 1500 2000 2500 0.96 0.97 0.98 0.99 1.00 0

GP_battery_EKF_Avail.py 2022-01-03T08-55-59 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 v batt x soc norm filtered 12 500 1500 1000 1500 2000 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 2022-01-03T08-55-59 1.00 -14.25 0.98 0.0 hx ekf 14.00 x ekf 13.75 ···· z ekf ····· v ekf 0.96 **⊢**0.1 1**⁄**e−5 1000 1000 2000 2000 1000 2000 1.05 2 ····· Fx ekf 40 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 2022-01-03T08-55-59 1.00 14.3 0.99 14.2 0.98 -14.1 0.97 14.0 0.96 . St. Hill Lin 13.9 0.95 13.8 0.94 13.7 voc_dyn SOC 0.93 13.6 vbat solved soc solved 0 500 1000 1500 2000 2500 500 1000 1500 2000 2500

GP_battery_EKF_Avail.py 2022-01-03T08-55-59



GP_battery_EKF_Avail.py 2022-01-03T08-55-59 1.000 0.995 0.990 0.985 0.980 0.975 soc_avail ····· soc_avail_ekf

1000

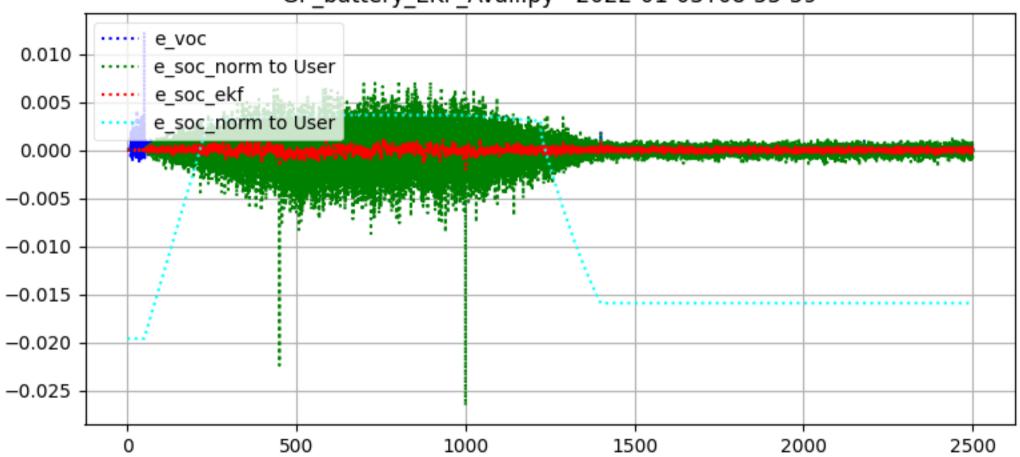
500

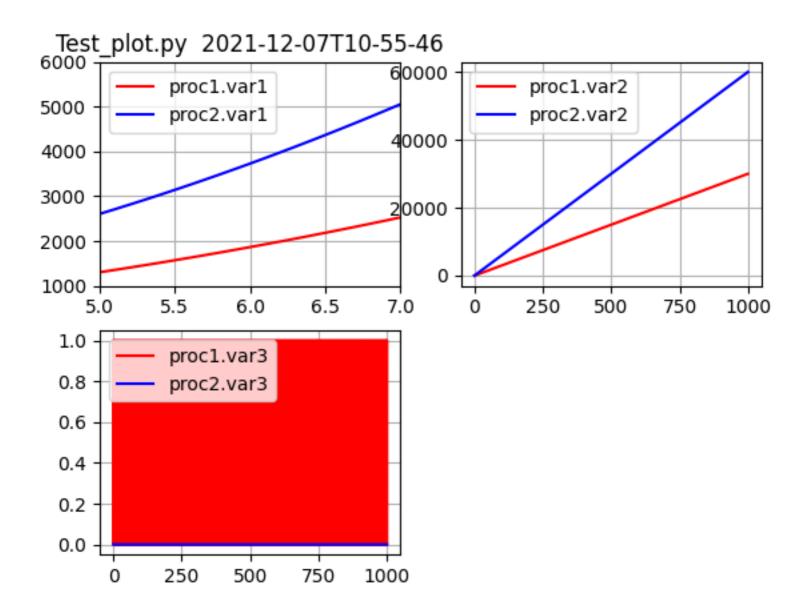
1500

2000

2500

GP_battery_EKF_Avail.py 2022-01-03T08-55-59





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