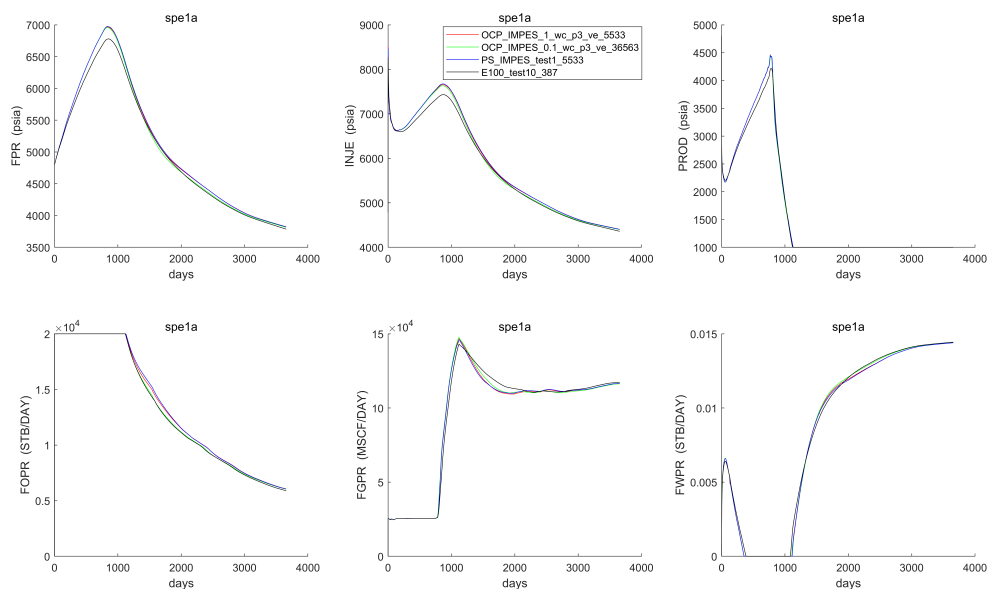


SPE1A



PS_IMPES_1

TMARCH
0.1 1 0.1 5 0.3 0.3 300 0.2 0.3 0.001

Final time: 3655.5 Days
Total time steps: 5533
Total nonlin steps: 5533
Total linear steps: 8828
Linear solver time: 0.932773s
Simulation time: 2.44659s

OCP_IMPES_1

0.1 1 0.1

Final time: 3655.5 Days
Total linear steps: 20877
Linear solve time: 1.3341s
Total time steps: 5533
Simulation time: 1.85616s

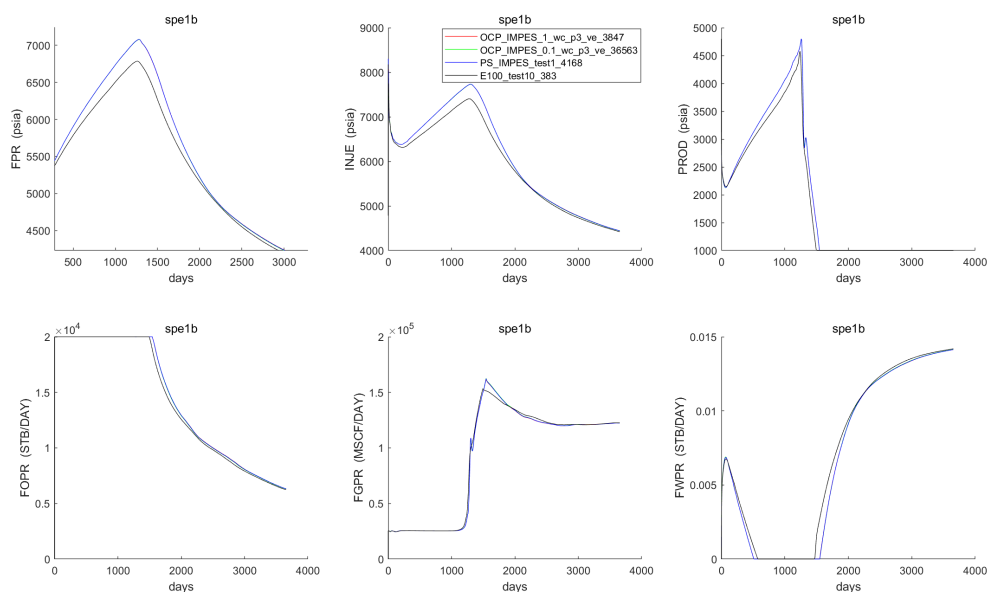
OCP_IMPES_0.1

0.1 0.1 0.1

Final time: 3655.5 Days
Total linear steps: 109617
Linear solve time: 6.53836s

Total time steps: 36563
Simulation time: 9.98476s

SPE1B



IMPES

TMARCH

0.1 1 0.1 5 0.3 0.3 300 0.2 0.3 0.001

Final time: 3655.5 Days
Total time steps: 4168
Total nonlin steps: 4168
Total linear steps: 7601
Linear solver time: 0.824397s
Simulation time: 1.99241s

OCP_IMPES_1

0.1 1 0.1

Final time: 3655.5 Days
Total linear steps: 15348
Linear solve time: 1.00494s
Total time steps: 3847
Simulation time: 1.37295s

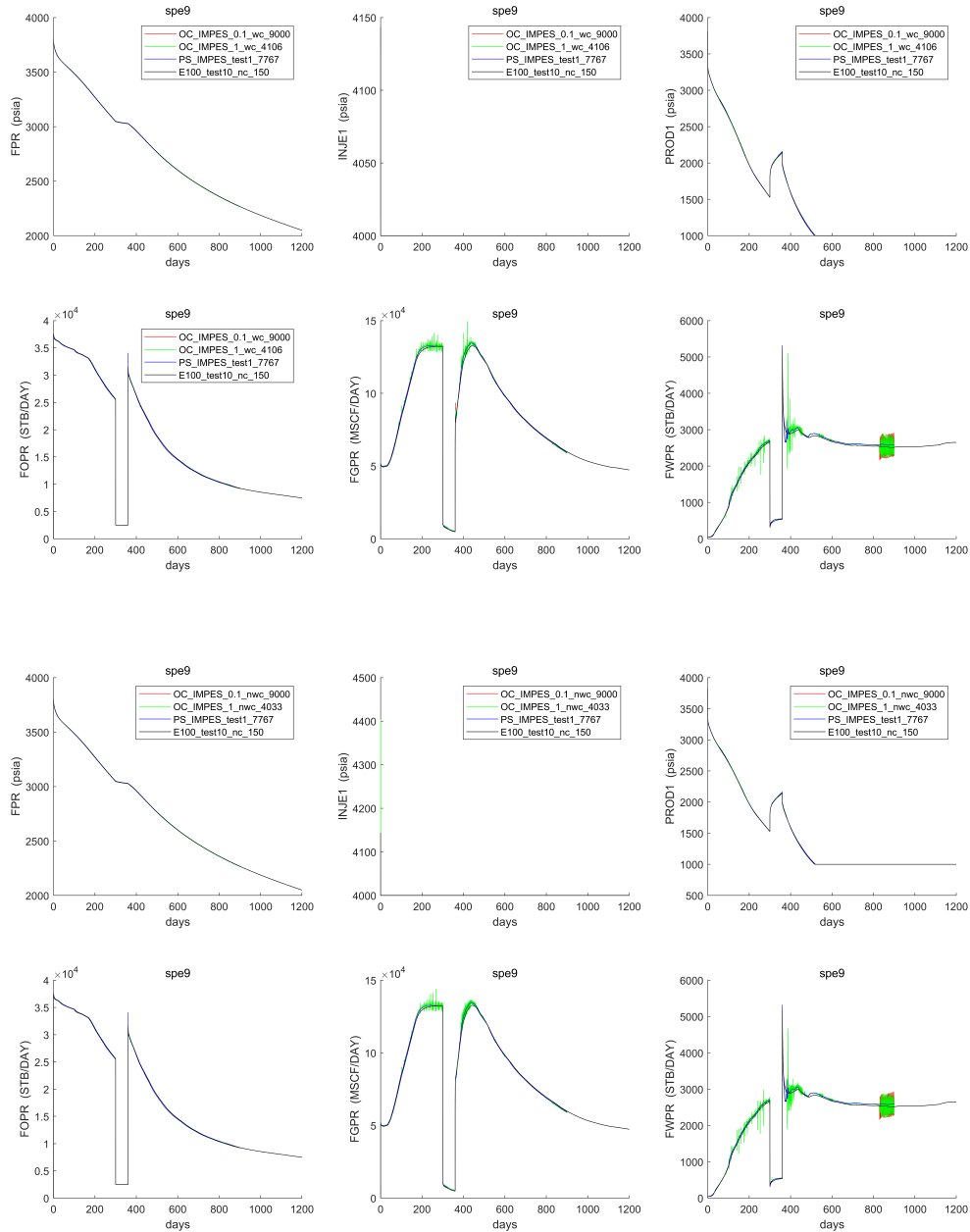
OCP_IMPES_0.1

0.1 10.1 0.1

Final time: 3655.5 Days
Total linear steps: 109444

Linear solve time: 5.81064s
Total time steps: 36563
simulation time: 9.15255s

SPE9



PS_IMPES_1

TMARCH
0.1 1 0.1 5 0.3 0.3 300 0.3 0.3 0.001

Summary

Final time: 900 Days
Total time steps: 7767
Total nonlin steps: 7767
Total linear steps: 12465
Linear solver time: 57.9099s
Simulation time: 276.62s

OC_IMPES_1_wc

Final time: 900 Days
Total linear steps: 16808
Linear solve time: 48.808s
Total time steps: 4106
Simulation time: 63.845s

OC_IMPES_0.1_wc with well control

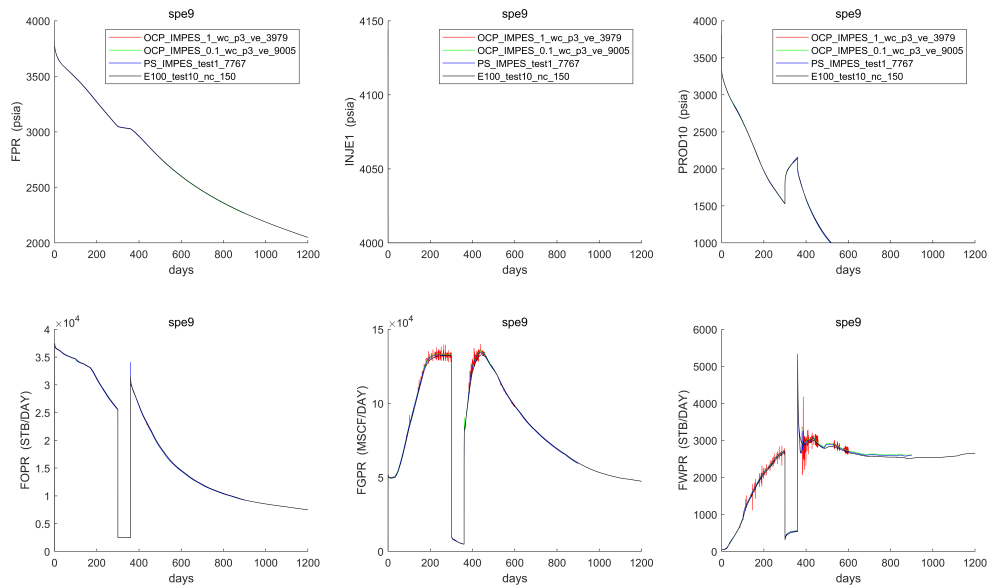
Final time: 900 Days
Total linear steps: 32056
Linear solve time: 83.3344s
Total time steps: 9000
Simulation time: 115.682s

OC_IMPES_1_nwc no well control

Final time: 900 Days
Total linear steps: 16455
Linear solve time: 48.4109s
Total time steps: 4033
Simulation time: 63.0615s

OC_IMPES_0.1_nwc

Final time: 900 Days
Total linear steps: 31955
Linear solve time: 84.0852s
Total time steps: 9000
Simulation time: 116.621s



PS_IMPES_1

TMARCH

0.1 1 0.1 5 0.3 0.3 300 0.3 0.3 0.001

Summary

Final time: 900 Days
 Total time steps: 7767
 Total nonlin steps: 7767
 Total linear steps: 12465
 Linear solver time: 57.9099s
 Simulation time: 276.62s

OCP_IMPES_0.1 with well control and volume error control

Final time: 900 Days
 Total linear steps: 32151
 Linear solve time: 82.9865s
 Total time steps: 9005
 Simulation time: 115.601s

OCP_IMPES_1 with well control and volume error control

Final time: 900 Days
 Total linear steps: 16617
 Linear solve time: 48.3633s
 Total time steps: 3979
 Simulation time: 63.1099s

