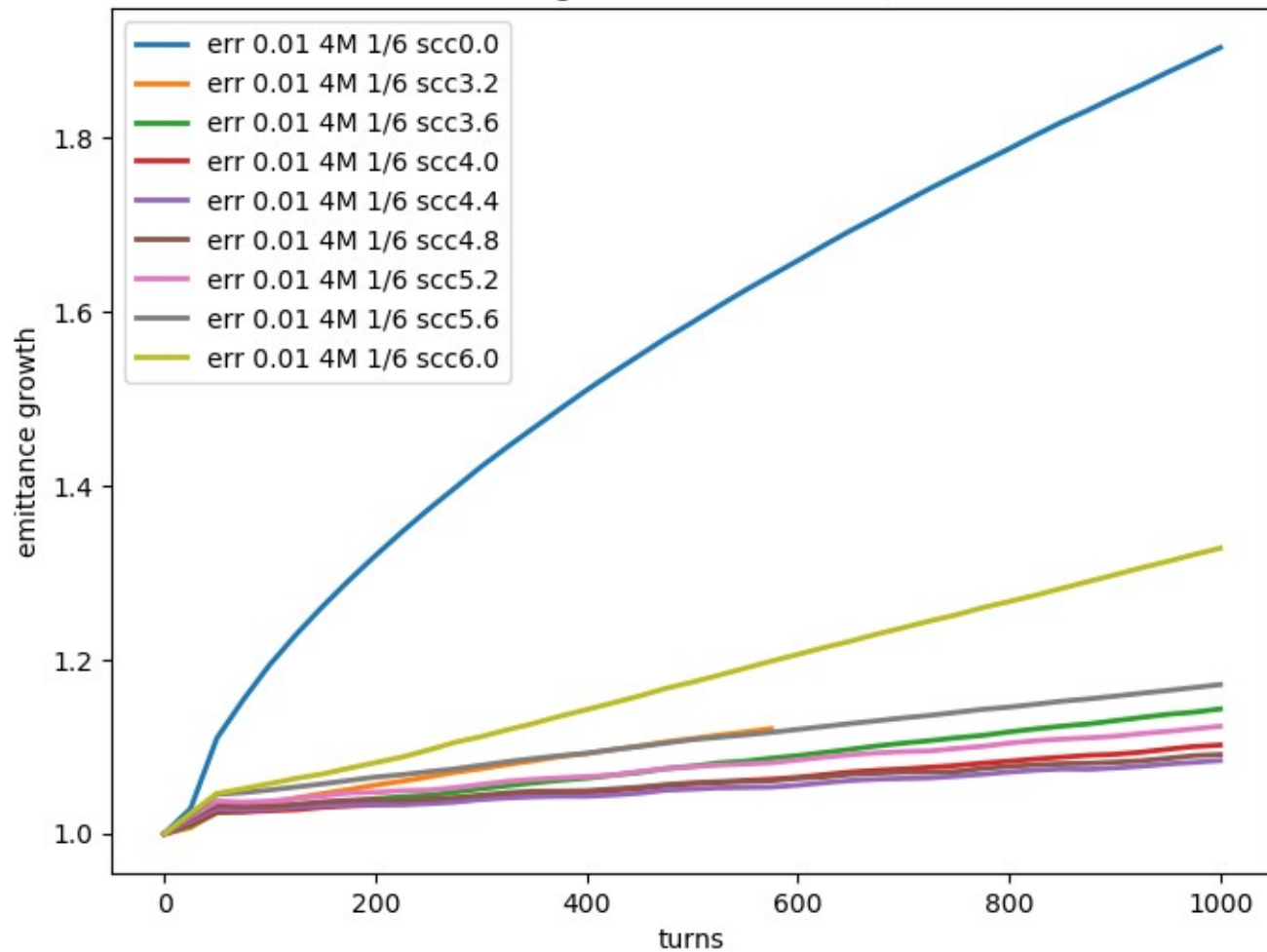
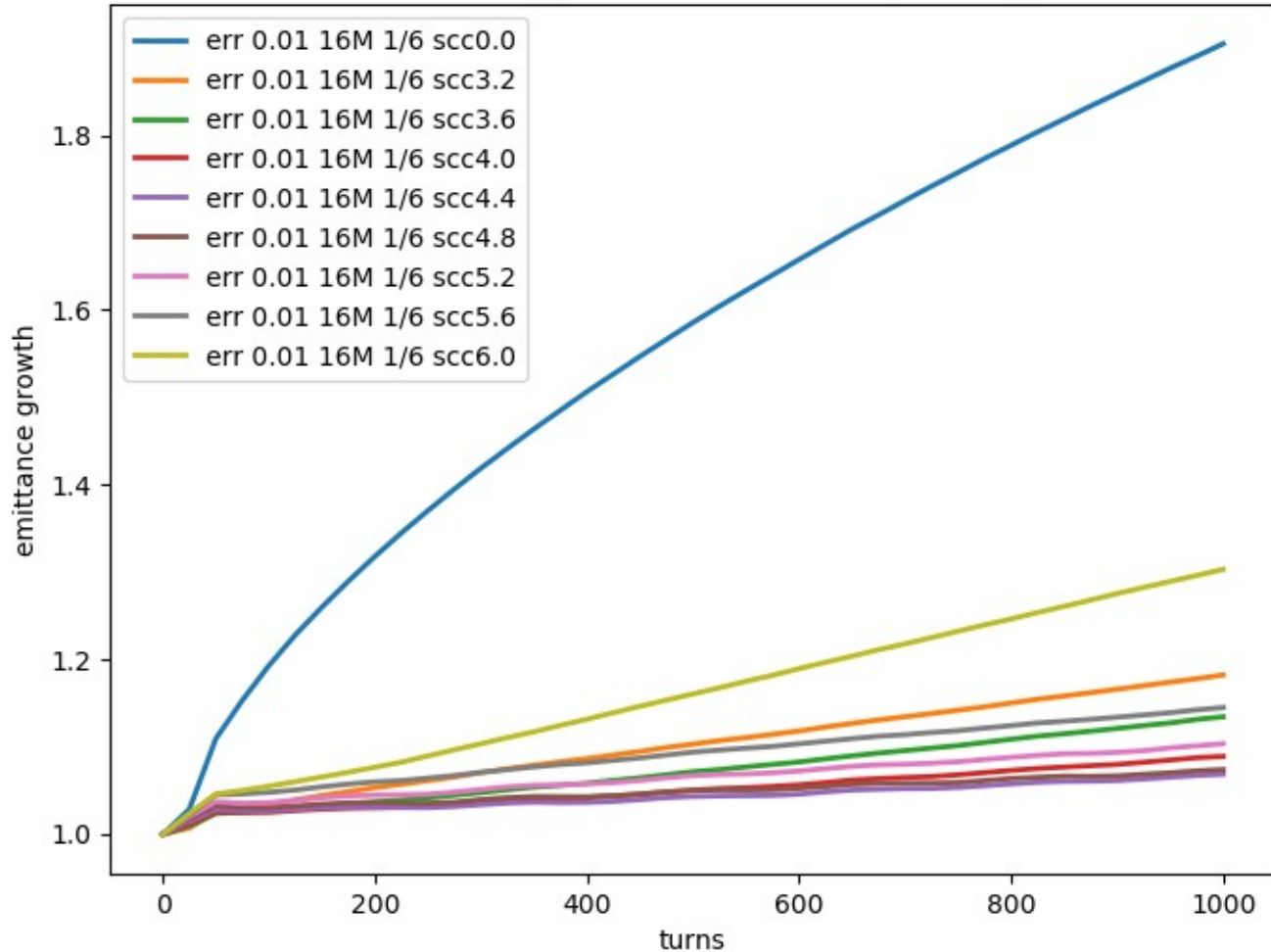


x RMS emittance growth 4M err 0.01 1/6 scc 0, 3.6-6



Best compensation at 4.4, growth rate is 1.084

x RMS emittance growth 16M err 0.01 1/6 scc 0, 3.6-6

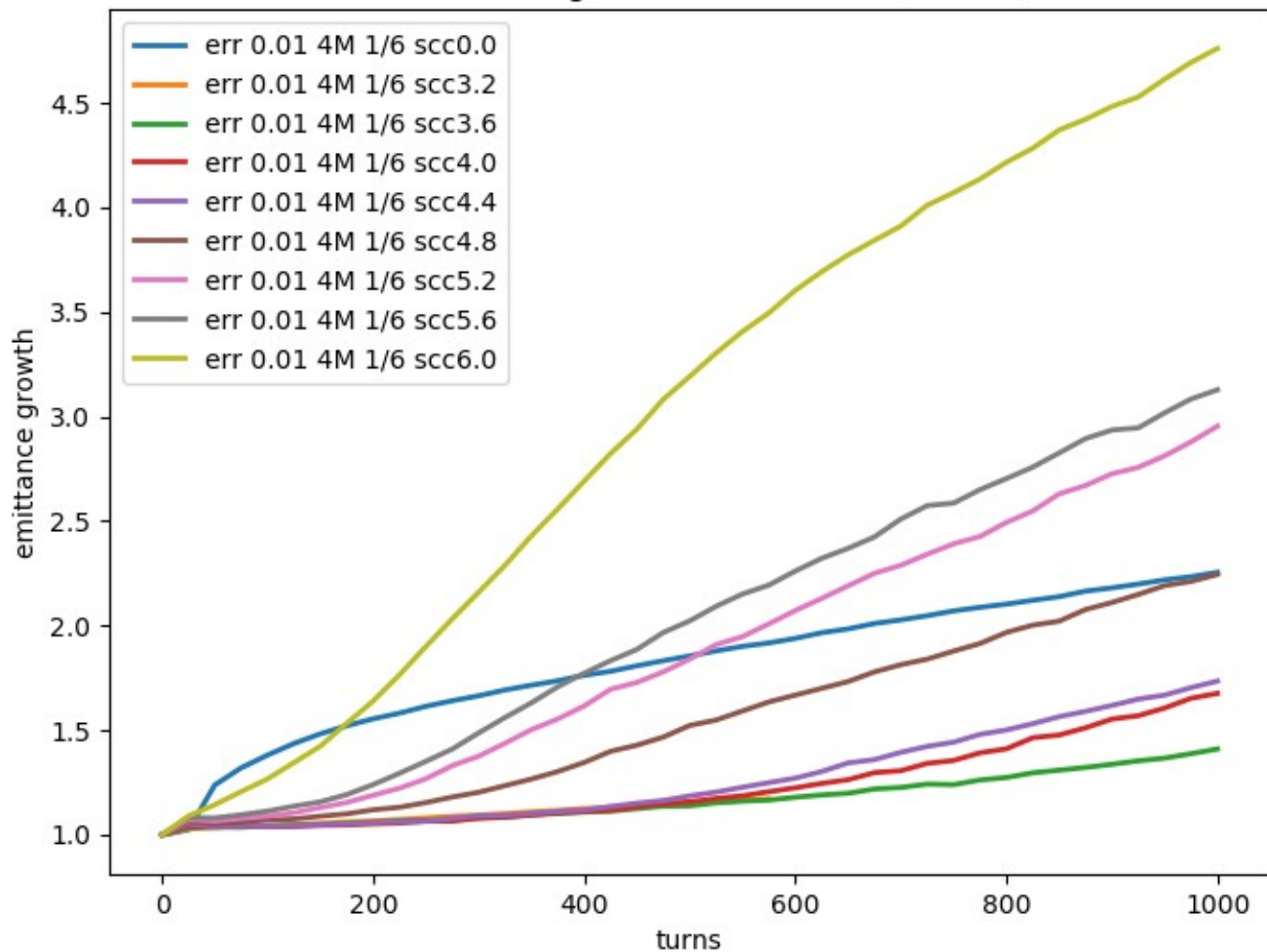


Best compensation is  
at 4.4, growth is  
1.069

RMS emittance growth 16M  
err01

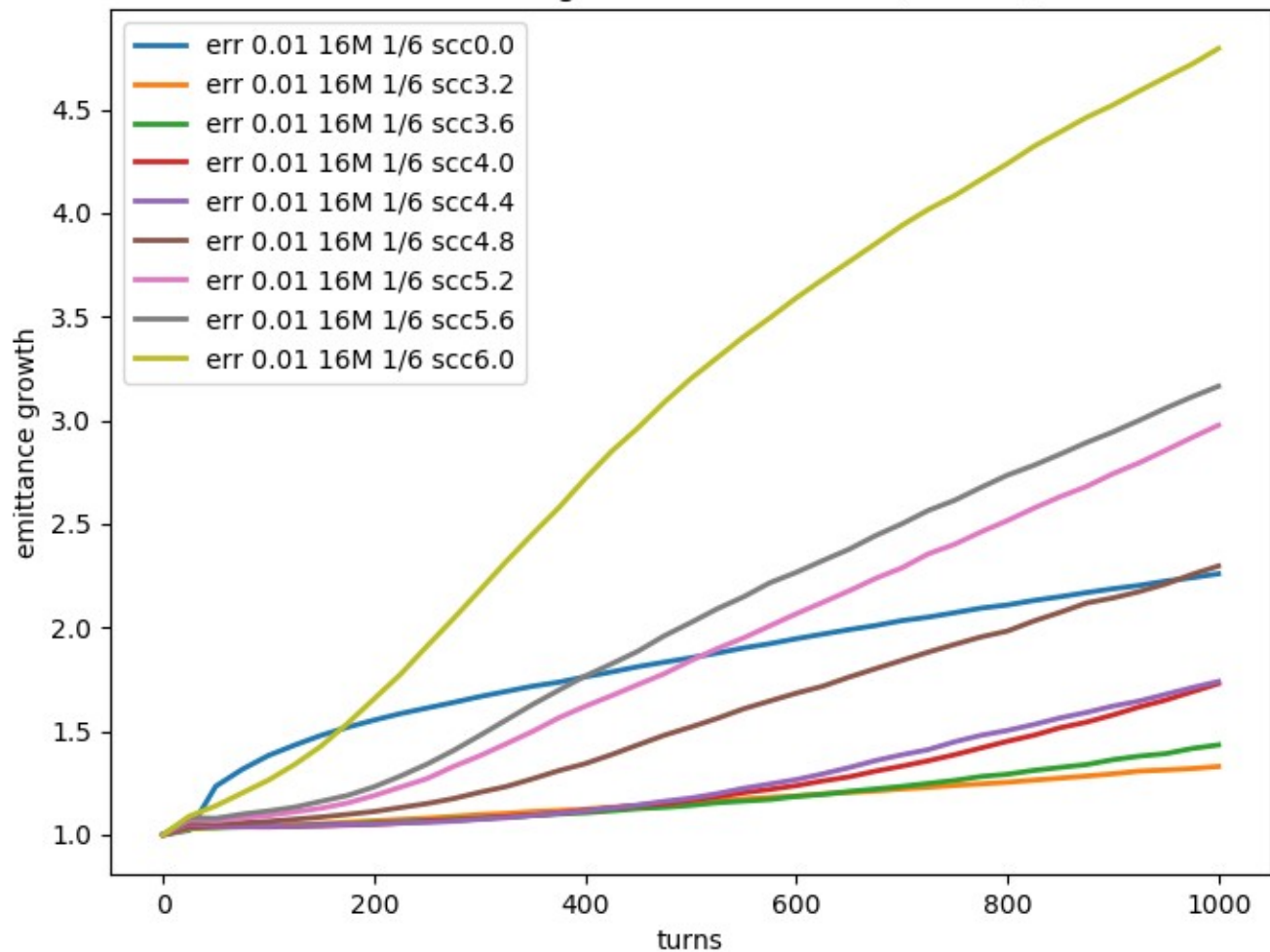
0.0	1.90450329041
3.6	1.13443149608
4.0	1.08911427235
4.4	1.06874102049
4.8	1.07405535209
5.2	1.10366525239
5.6	1.14500197021
6.0	1.30312382899

x 99.9% emittance growth 4M err 0.01 1/6 scc 0, 3.6-6



Best compensation at 3.6,  
growth is 1.41

x 99.9% emittance growth 16M err 0.01 1/6 scc 0, 3.6-6



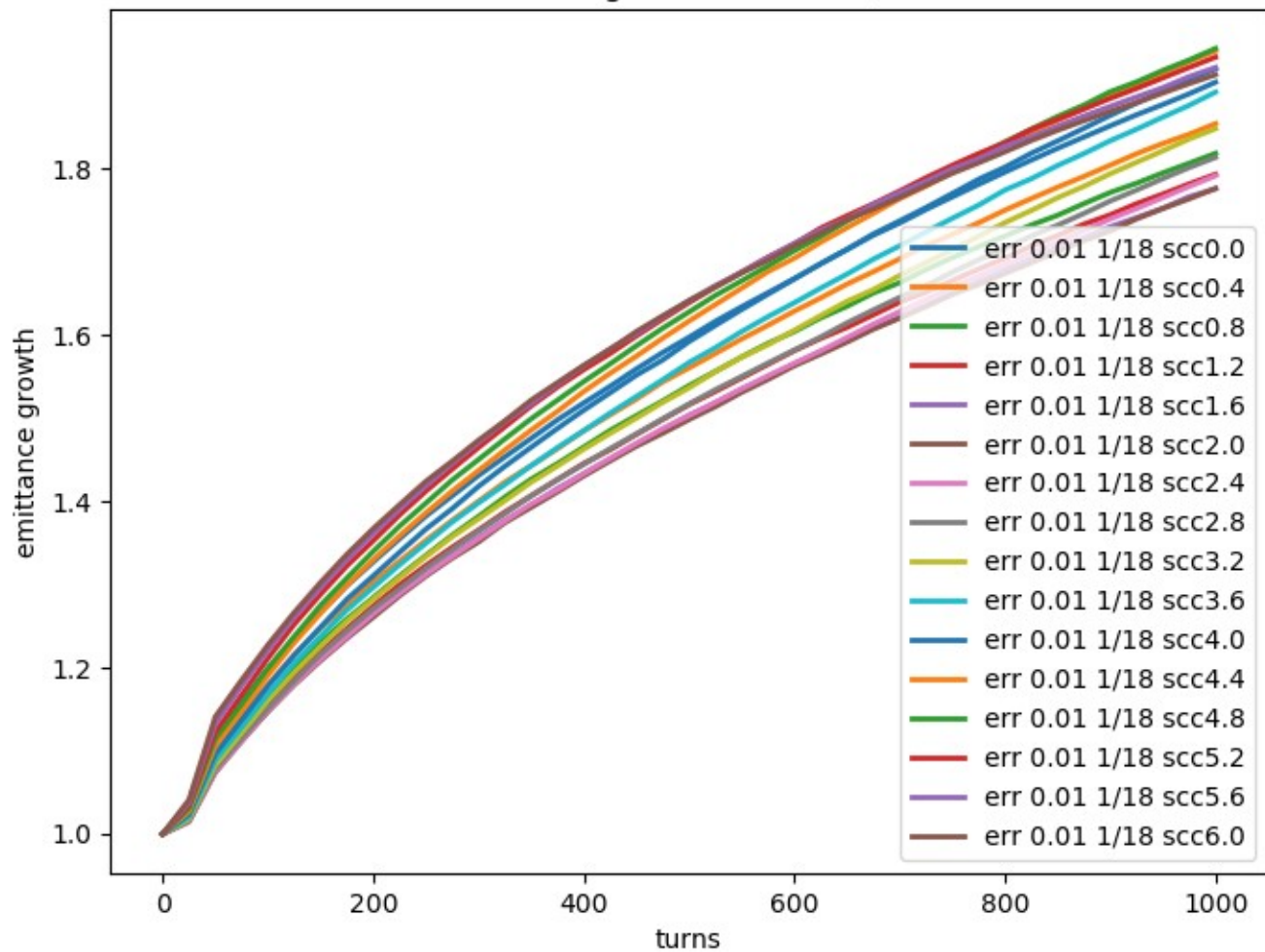
Best compensation is at 3.2, growth is 1.33

## Summary of macro particle effect

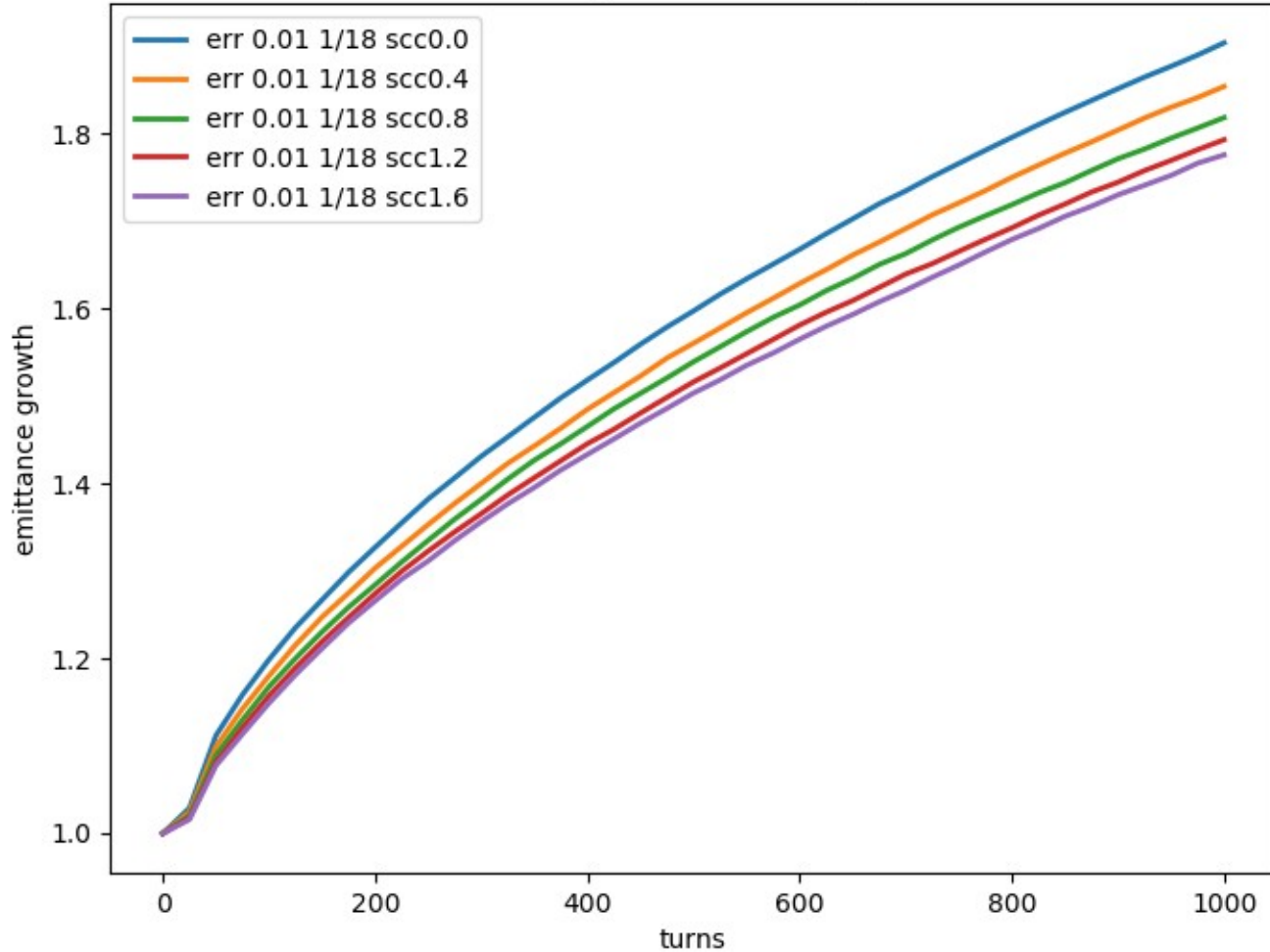
# macro particles	Optimal comp factor	RMS emittance growth
1M	4.4	1.14
4M	4.4	1.08
16M	4.4	1.07

# macro particles	Optimal comp factor	99.9% emittance
1M	3.2	1.31
4M	3.6	1.41
16M	3.2	1.32

x RMS emittance growth err 0.01 1/18 scc 0-6

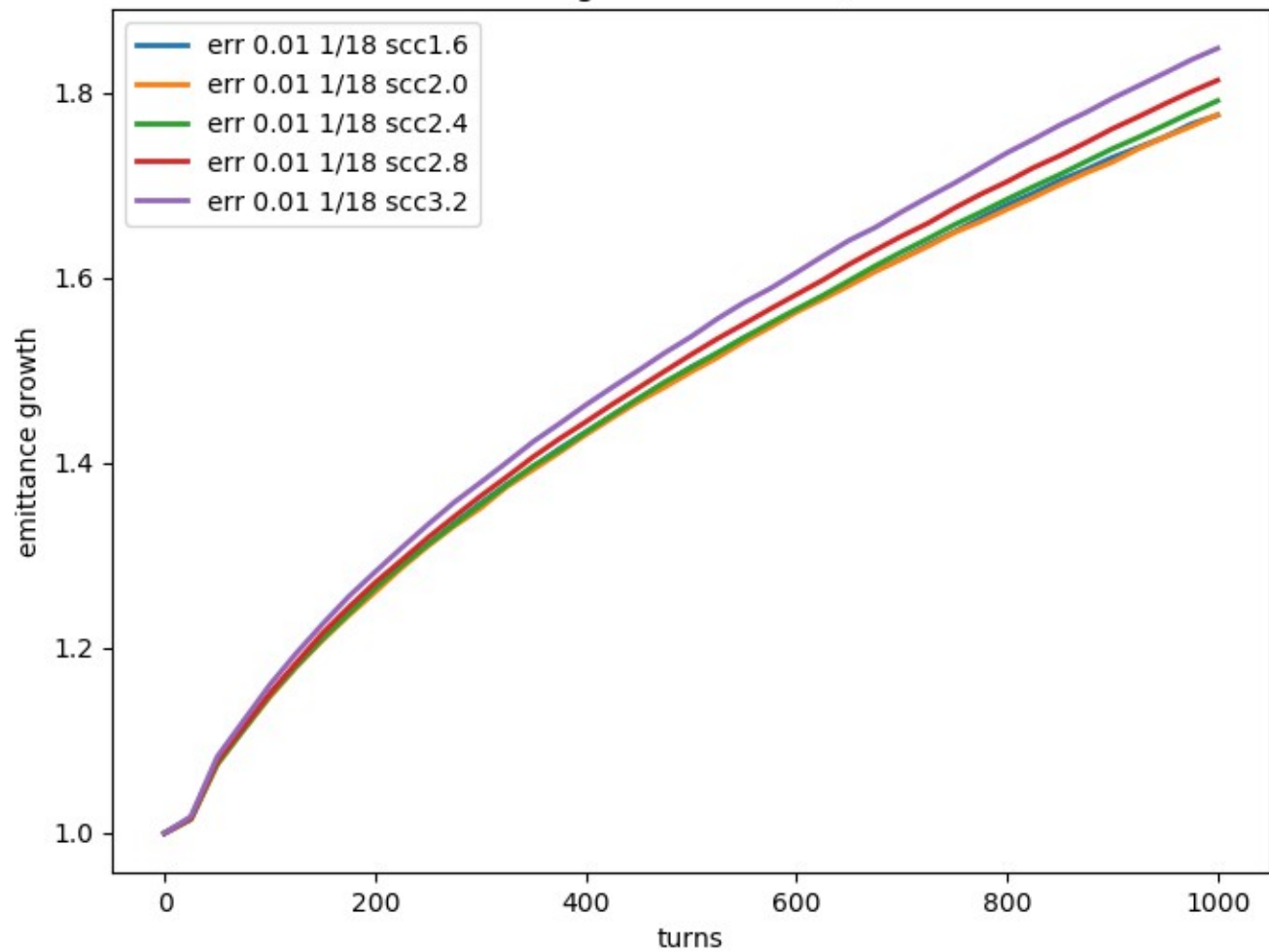


x RMS emittance growth err 0.01 1/18 scc 0-1.6



Best compensation at  
1.6, growth rate 1.78

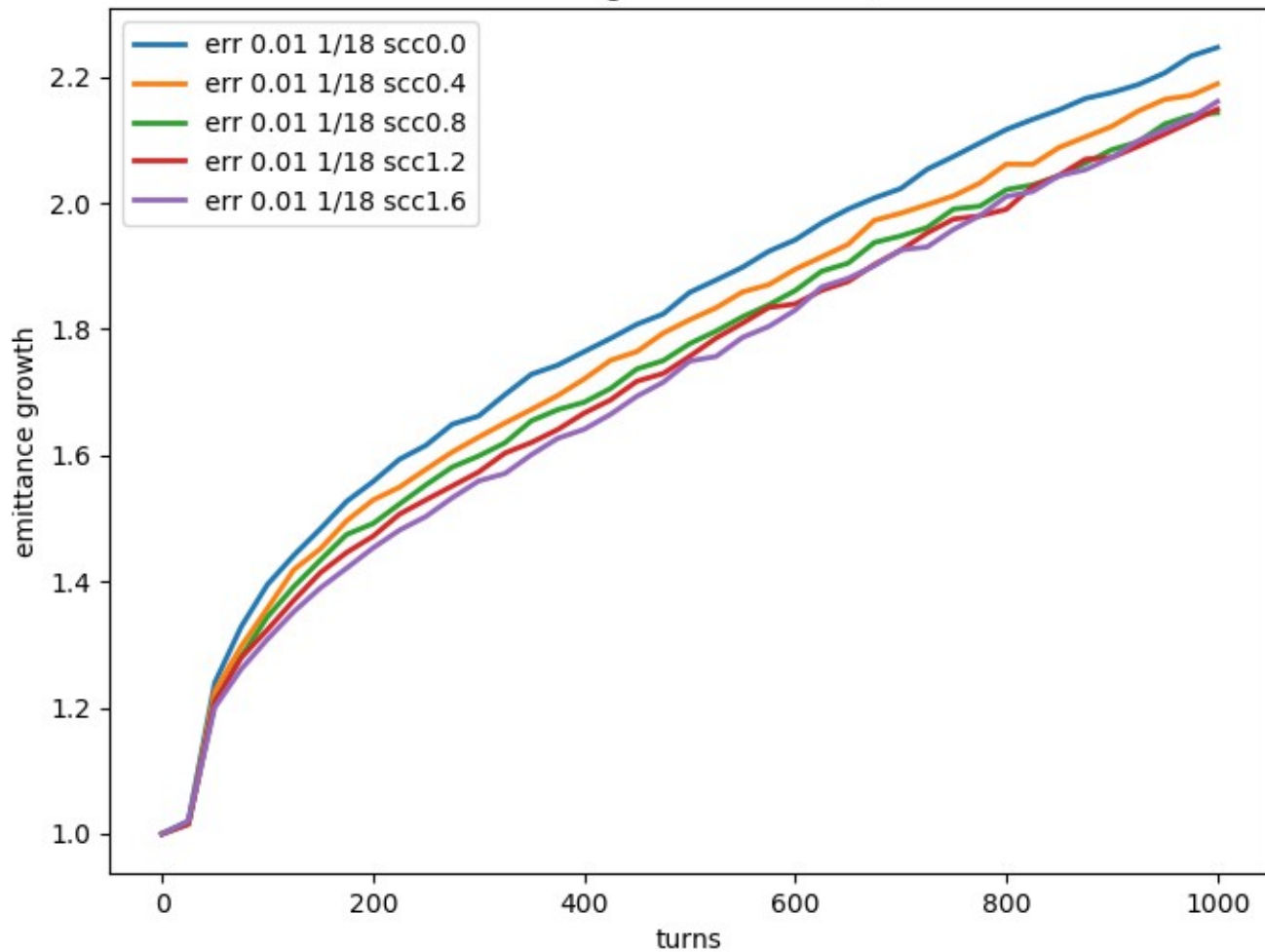
x RMS emittance growth err 0.01 1/18 scc 1.6-3.2







x 99.9% emittance growth err 0.01 1/18 scc 0-1.6



Best compensation at  
0.8, growth rate is 2.14

## Summary of RMS emittance growth by kick freq

Compensation freq	Optimal compensation factor	RMS emittance growth	Uncompensated RMS emittance growth
1/6	4.4	1.14	1.91
1/12	0.8	1.86	1.91
1/18	1.6	1.78	1.91

## 99.9% emittance growth by kick freq

Compensation freq	Optimal compensation factor	99.9% emittance growth	Uncompensated 99.9% emittance growth
1/6	3.2	1.31	1.09
1/12	1.2	2.07	1.09
1/18	0.8	2.14	1.09