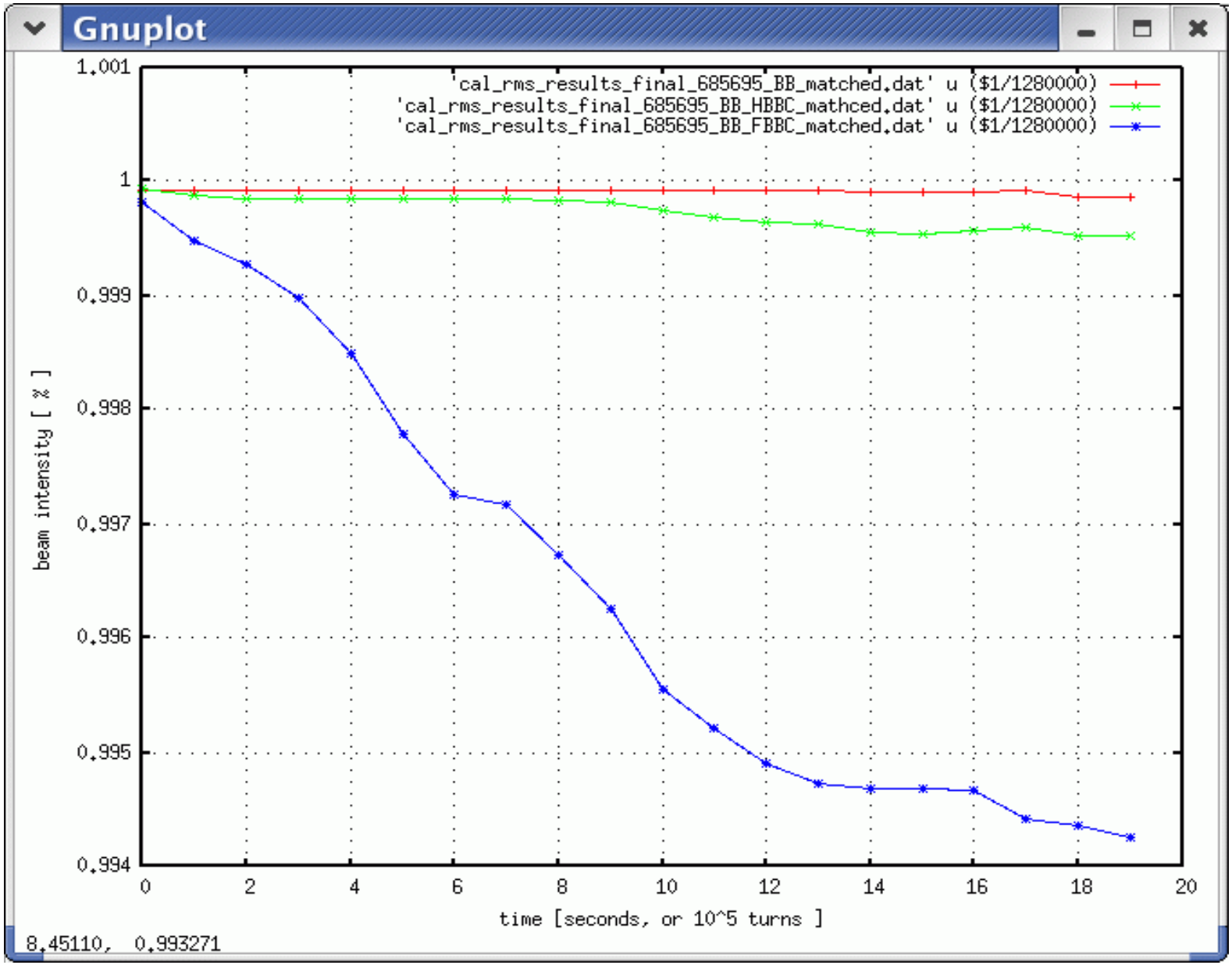
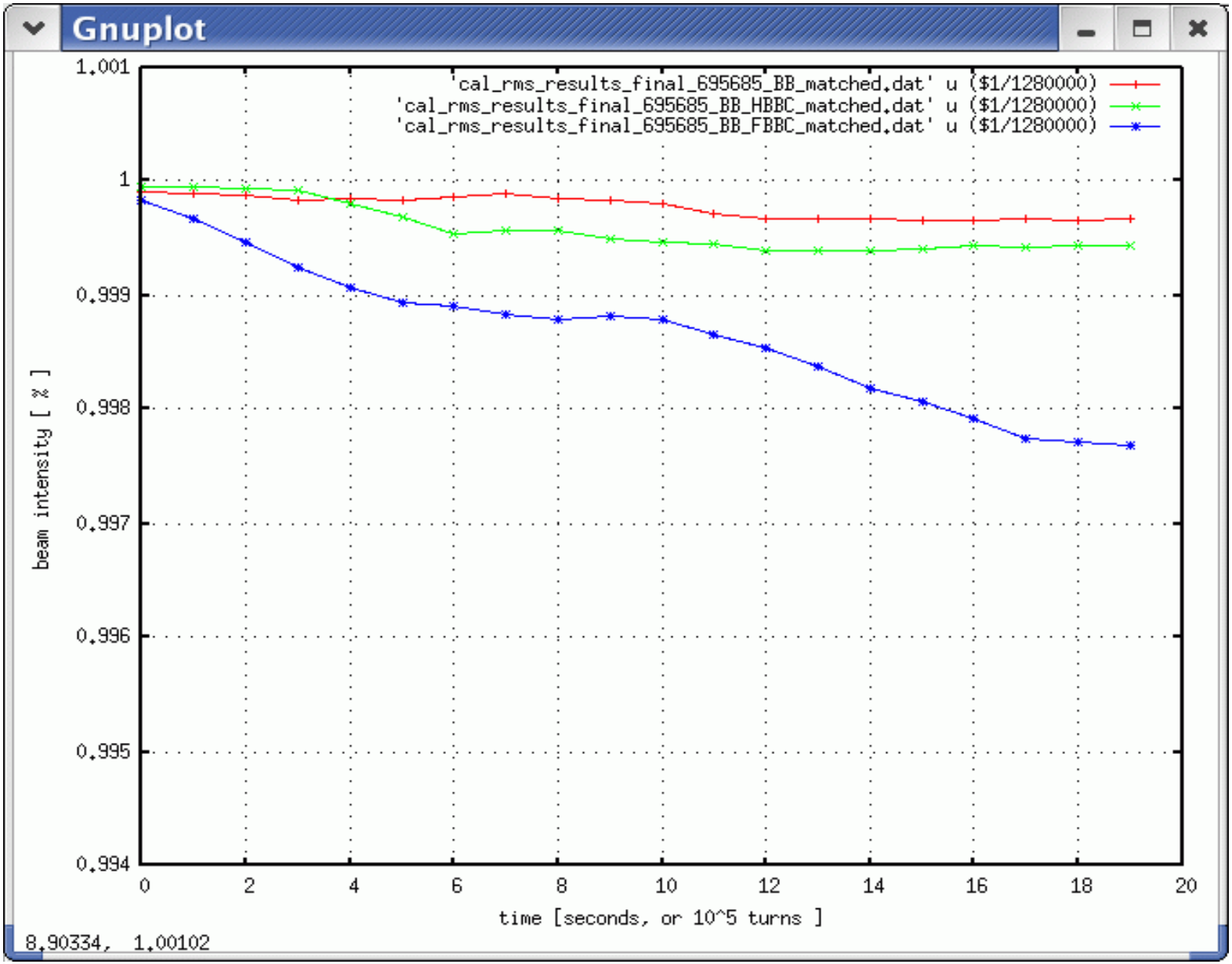
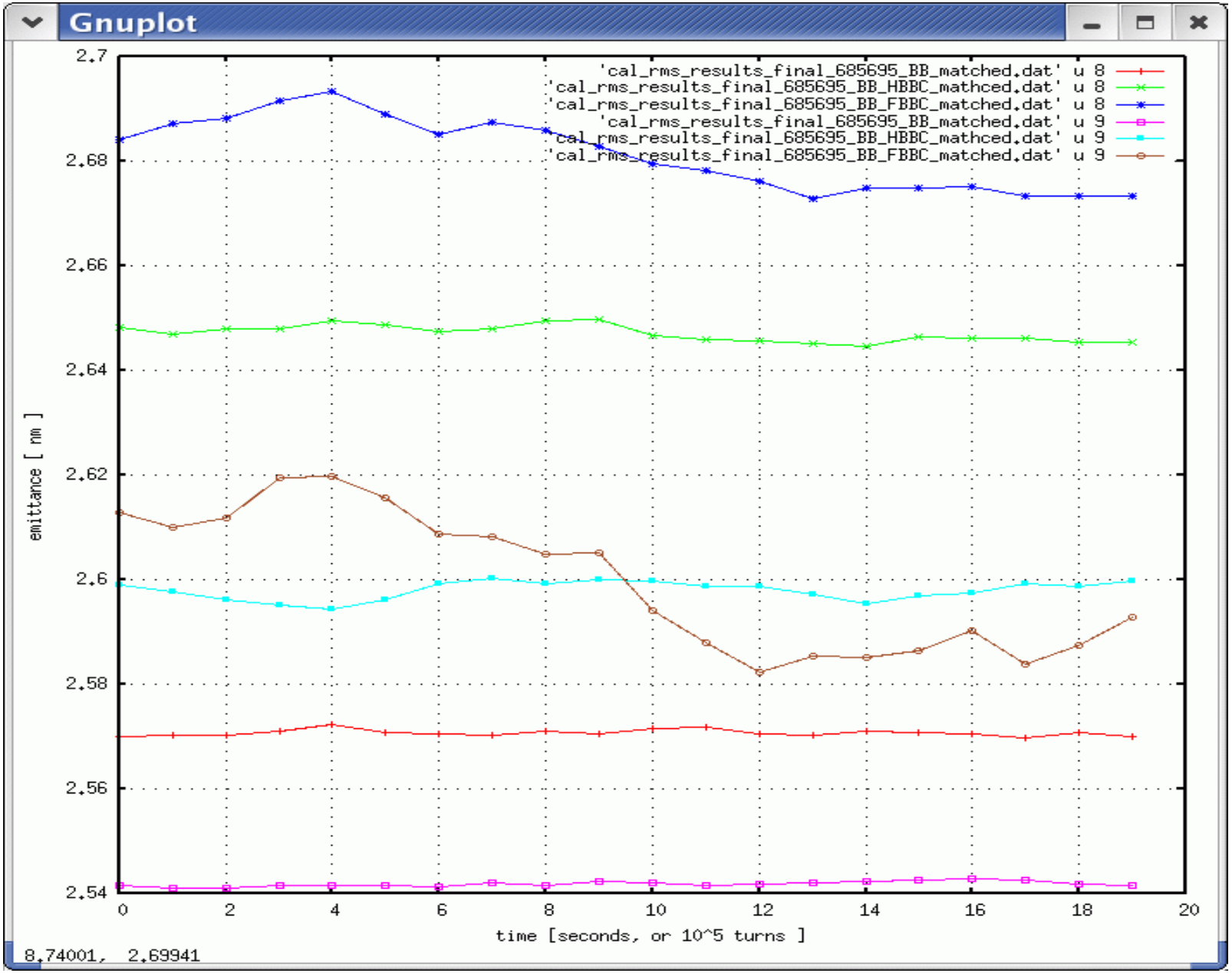
1. Tracking results with matched initial Gaussian Distribution



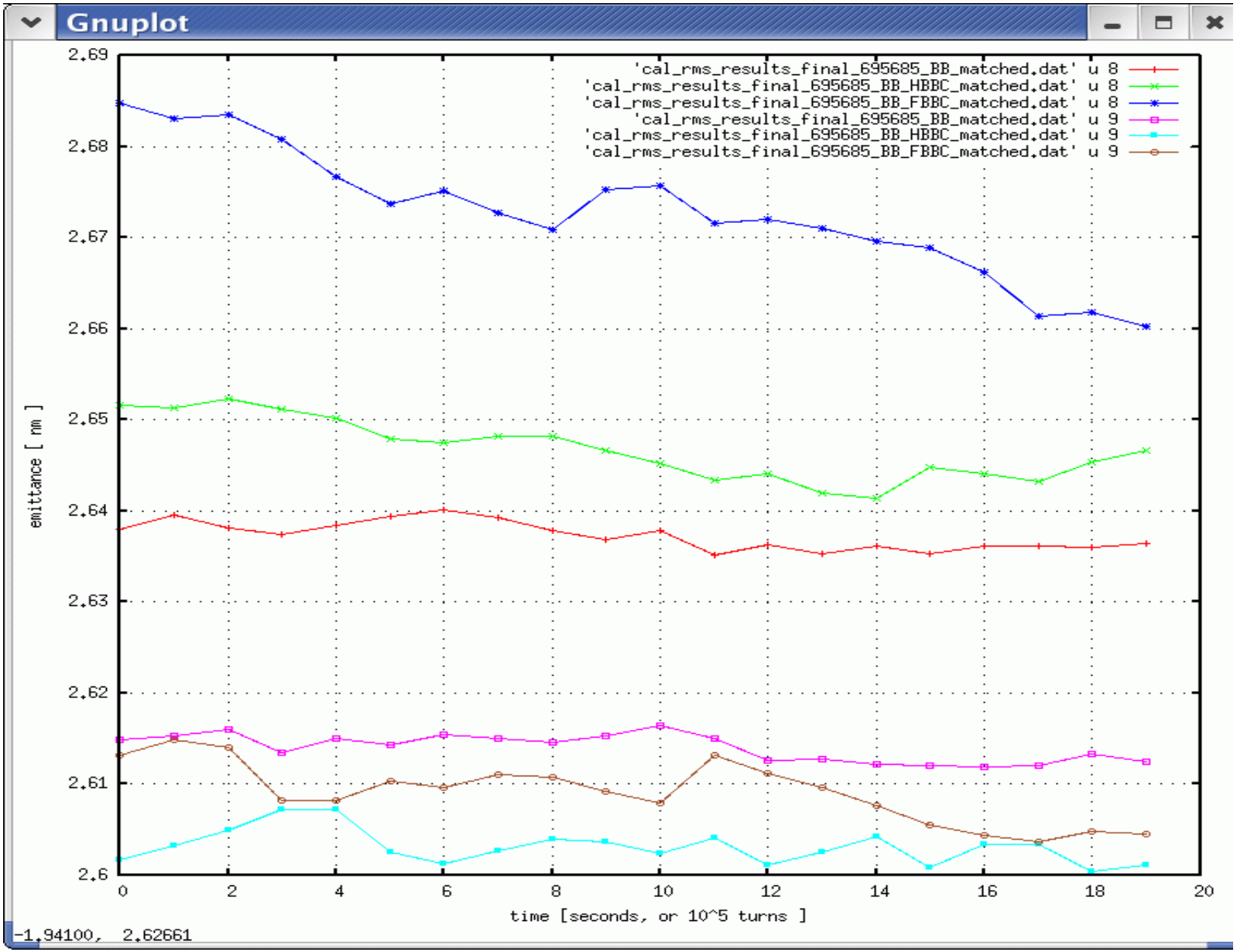
For WP (28.685, 29.695)



For WP (28.695, 29.685)

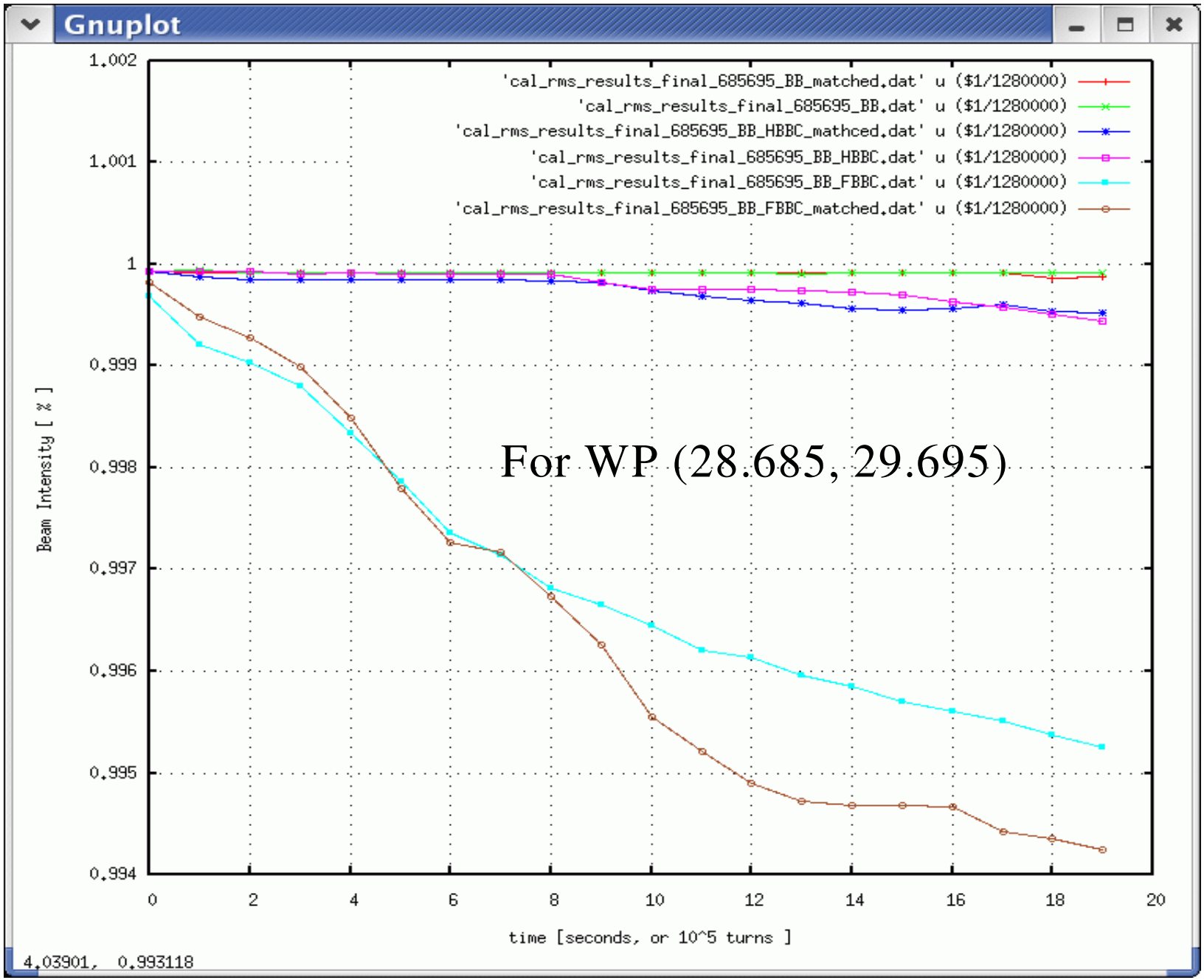


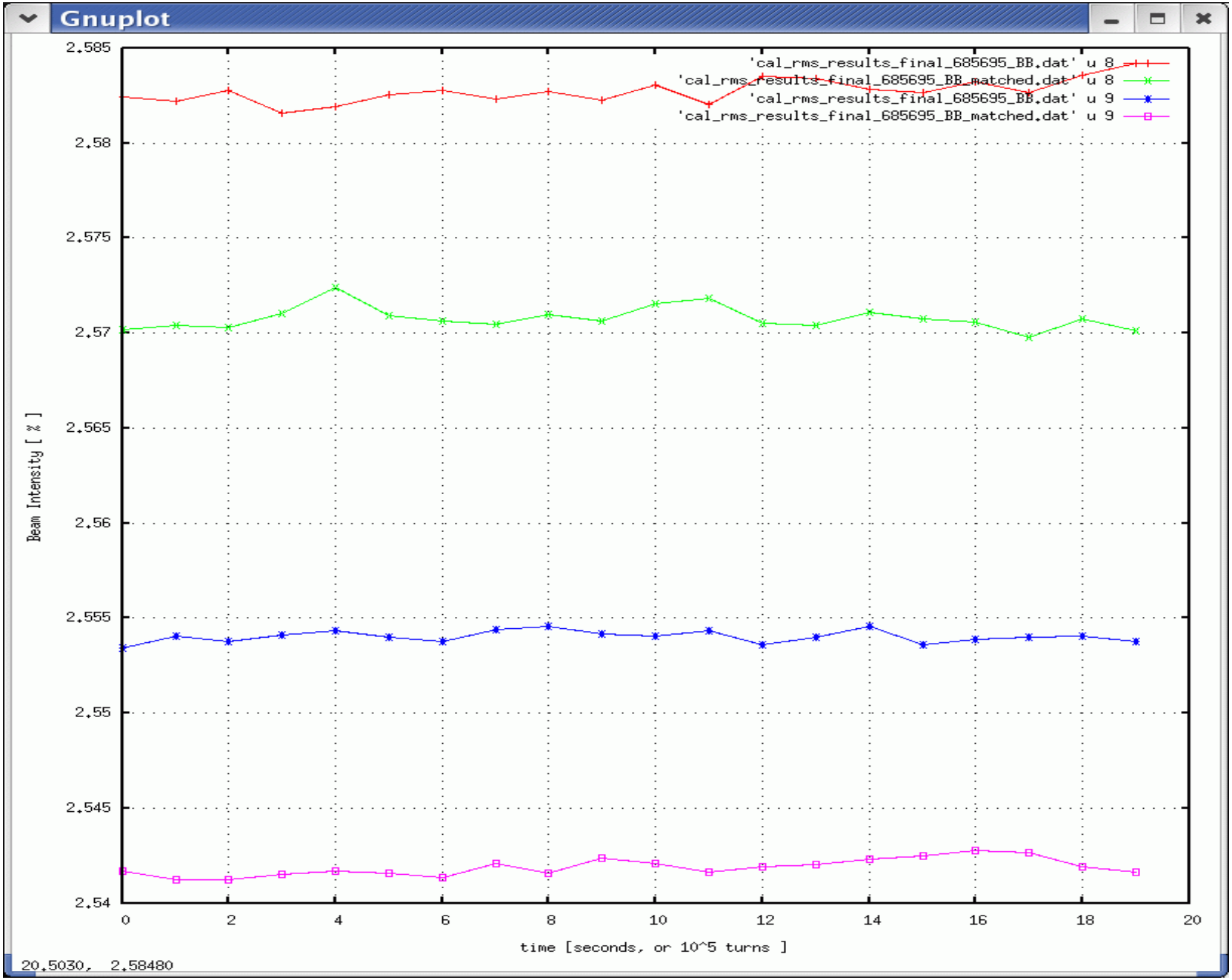
For WP (28.685, 29.695)



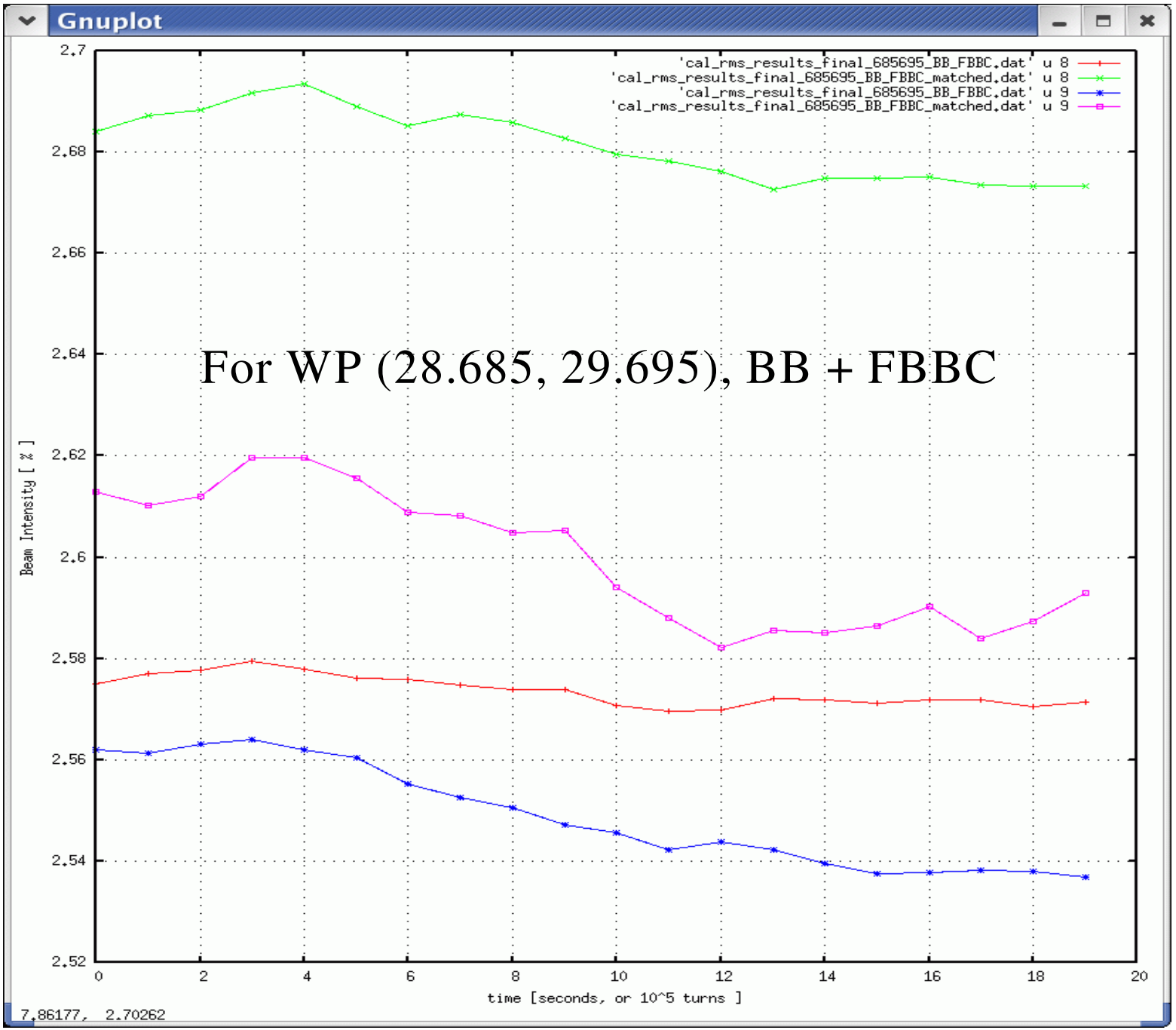
For WP (28.695, 29.685)

2) with matched and un-matched initial particle distributions

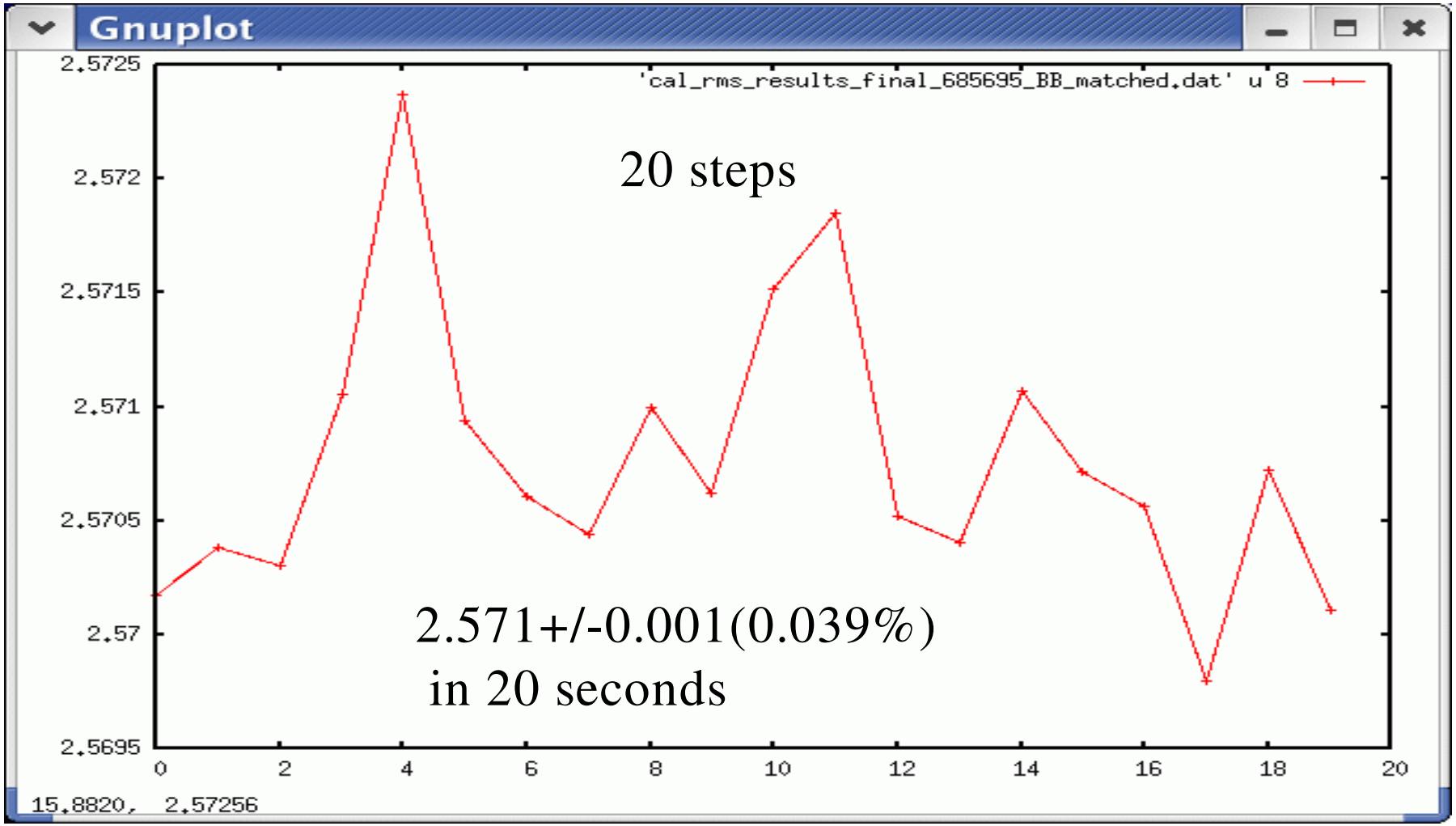


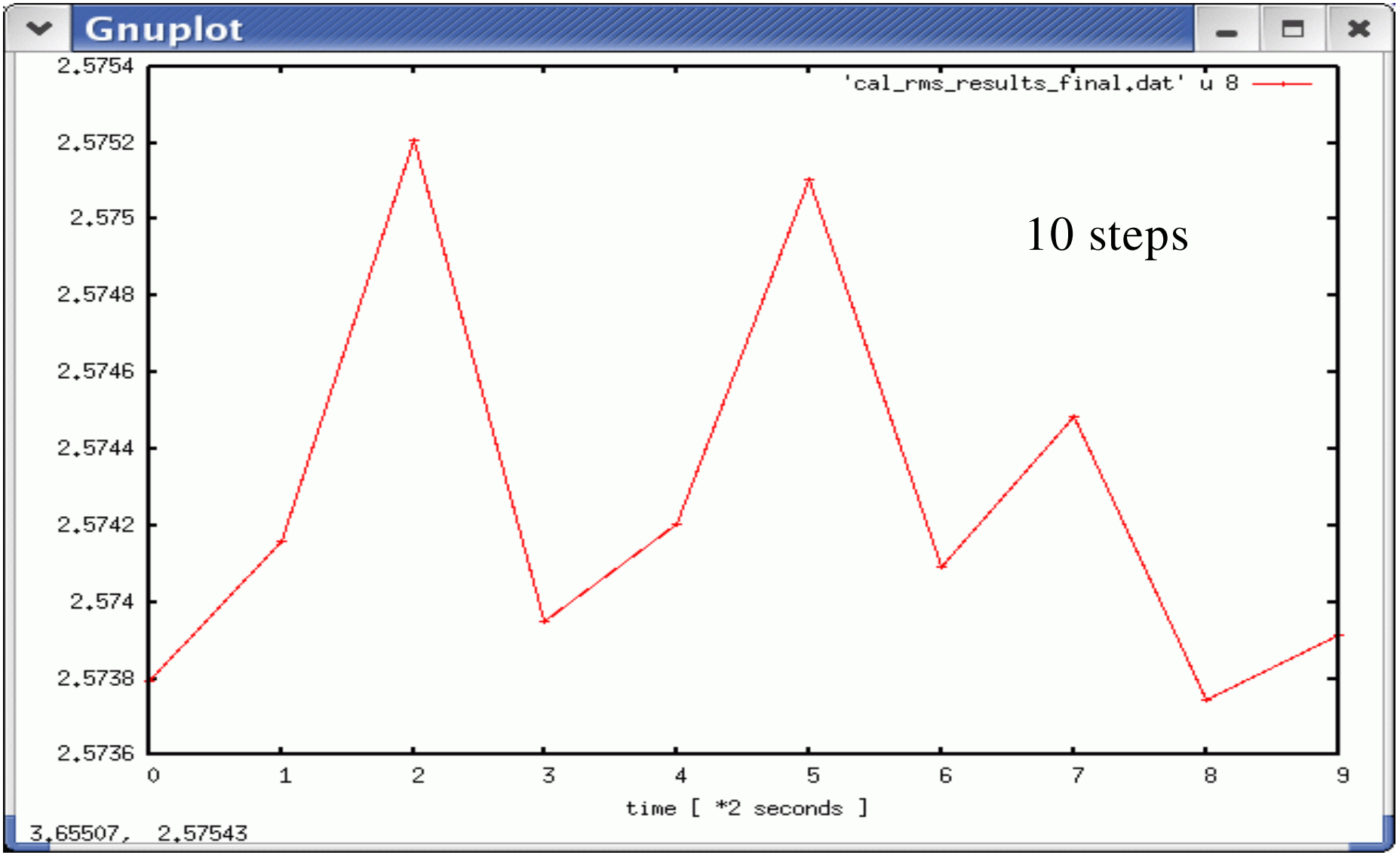


For WP (28.685, 29.695), BB only

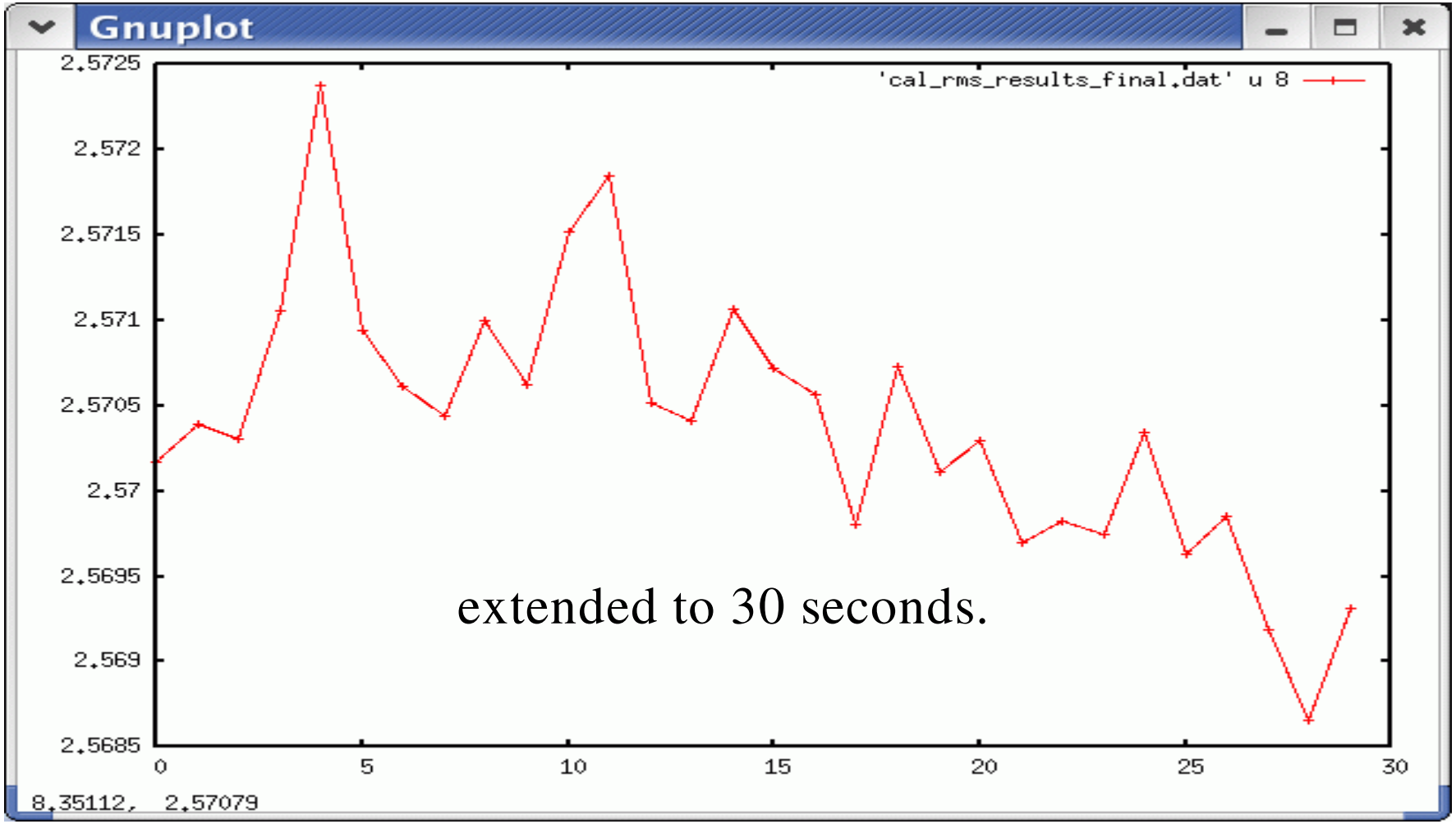

Gnuplot
'cal_rms_results_final_685695_BB_FBBC.dat' u 8
'cal_rms_results_final_685695_BB_FBBC_matched.dat' u 8
'cal_rms_results_final_685695_BB_FBBC.dat' u 9
'cal_rms_results_final_685695_BB_FBBC_matched.dat' u 9
For WP (28.685, 29.695), BB + FBBC
Beam Intensity [%]
2.7
2.68
2.66
2.64
2.62
2.6
2.58
2.56
2.54
2.52
0
2
4
6
8
10
12
14
16
18
20
time [seconds, or 10^5 turns]
7.86177, 2.70262

3. Our emittance resolution is not so bad.





2.5746+/-0.0007 (0.027%)
in 20 seconds
6hrs: 15pi-->19.5pi



extended to 30 seconds.

Possibility of tracking to 10^7 turns:
reduce output, writing only sigmas of each jobs?
Sixtrack modifying. Thanks to Guillaume again.