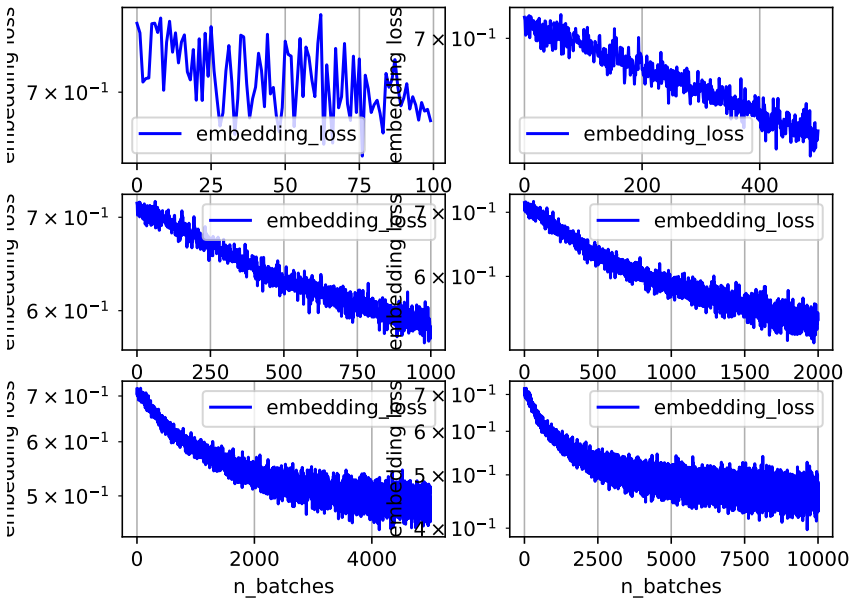

Figure 1: ml100k embedding loss with fixed alpha = 1.0

Table 1: Results obtained on ML-100K. Settings with fixed α, increasing α and decreasing α

	MAP@1	MAP@5	MAP@10
$\alpha = 1.0$, $\beta = 0.1$	0.888	0.865	0.842
Increase α	0.819	0.804	0.775
Decrease α	0.8375	0.822	0.794

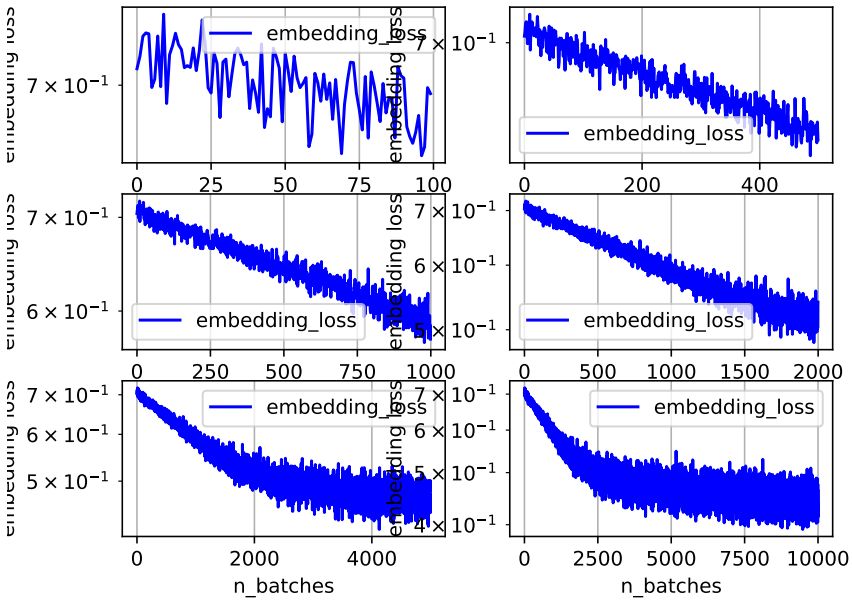

Figure 2: ml100k embedding loss with increasing alpha. embedding loss does not seem to have converged

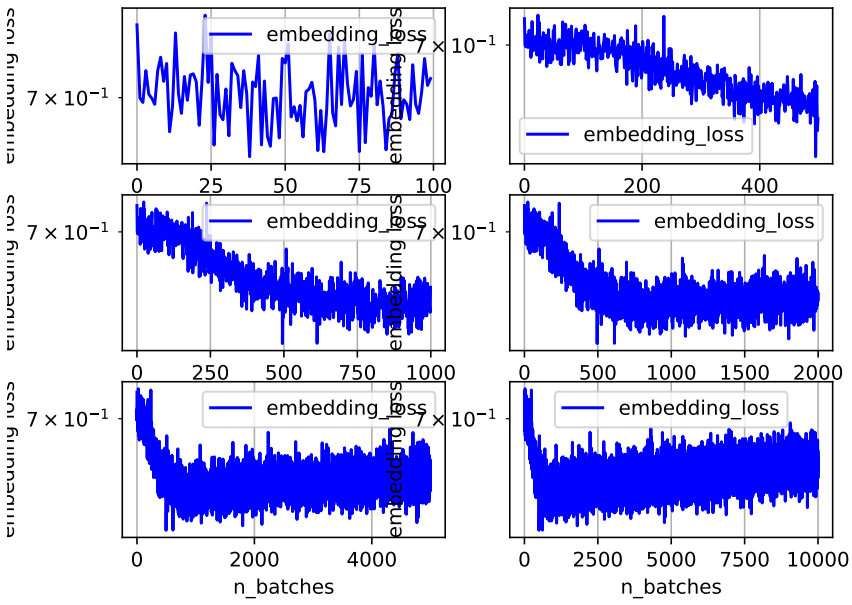

Figure 3: ml100k embedding loss with decreasing alpha.

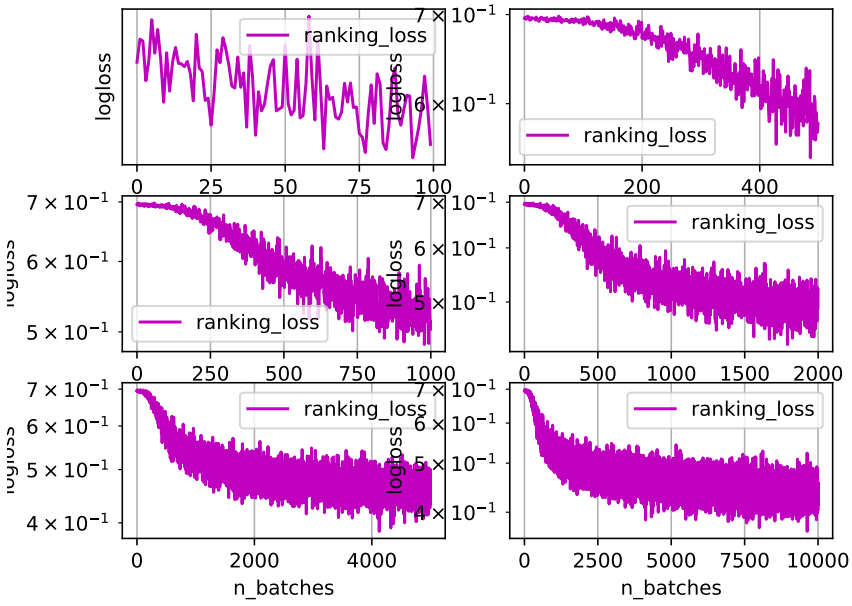

Figure 4: ml100k ranking loss with fixed alpha = 1.0

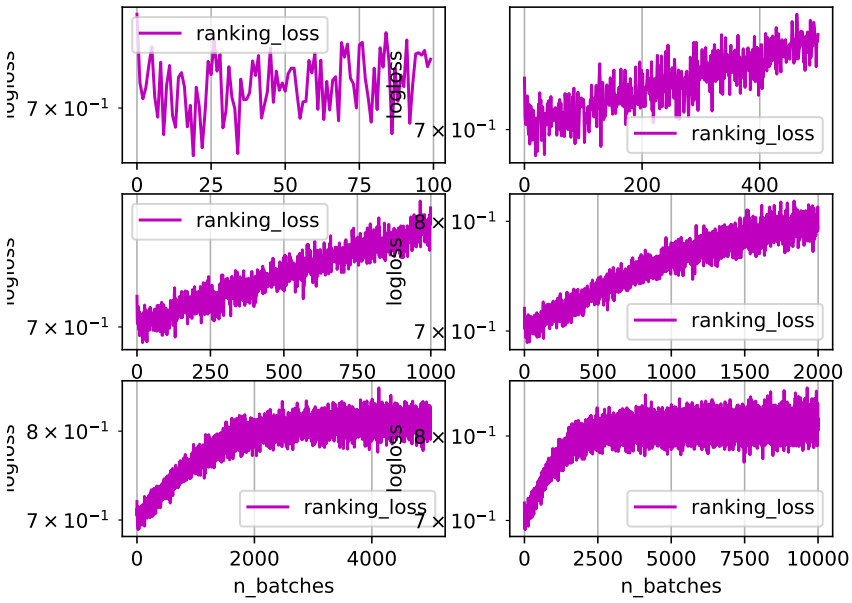

Figure 5: ml100k ranking loss with increasing alpha. ranking loss does not seem to have converged

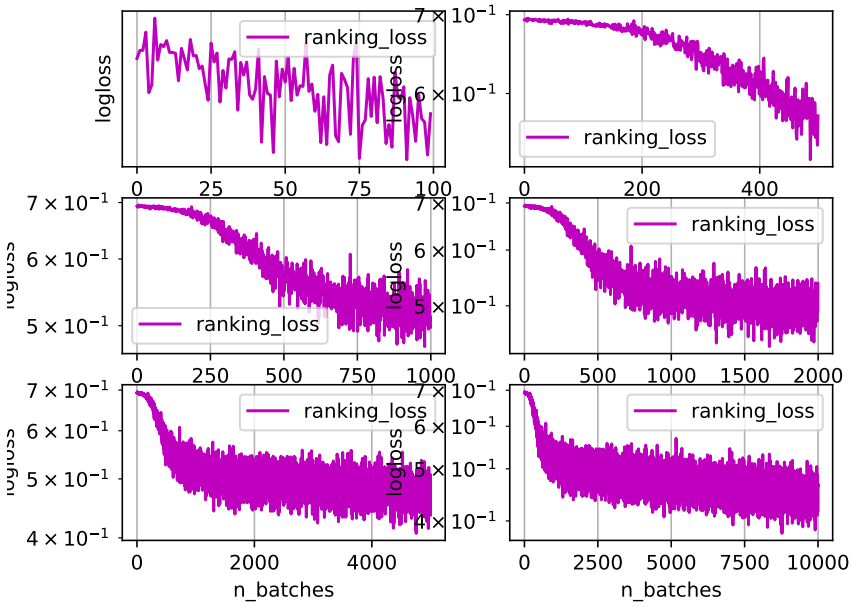

Figure 6: ml100k ranking loss with decreasing alpha.

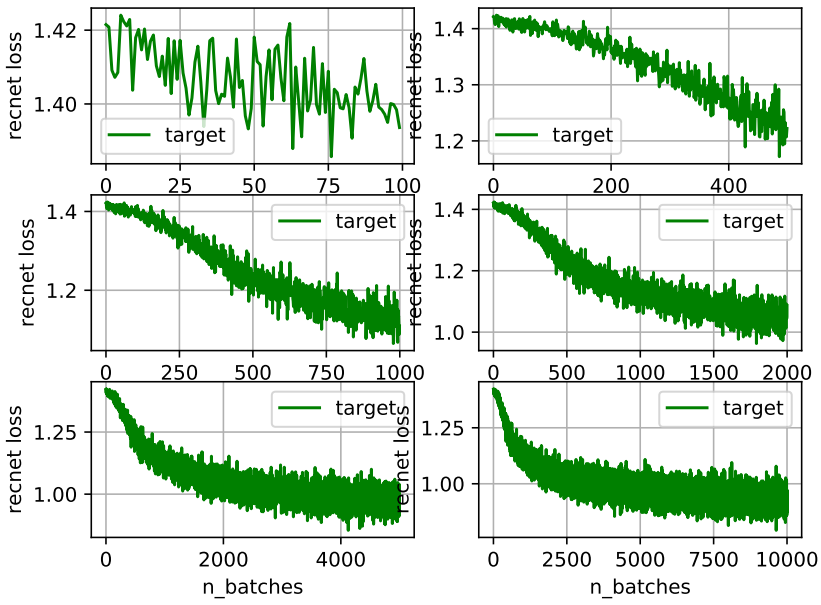

Figure 7: ml100k target loss with fixed alpha = 1.0

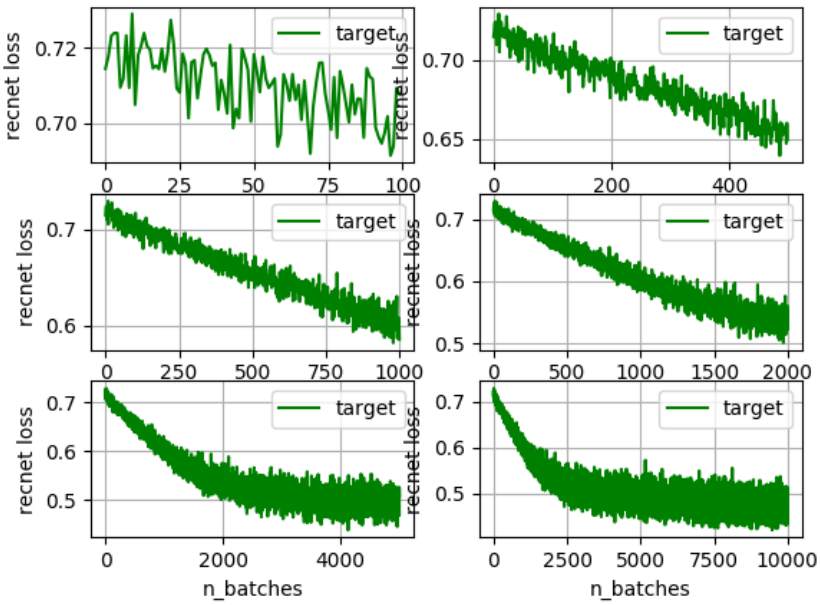

Figure 8: ml100k target loss with increasing alpha. target loss does not seem to have converged

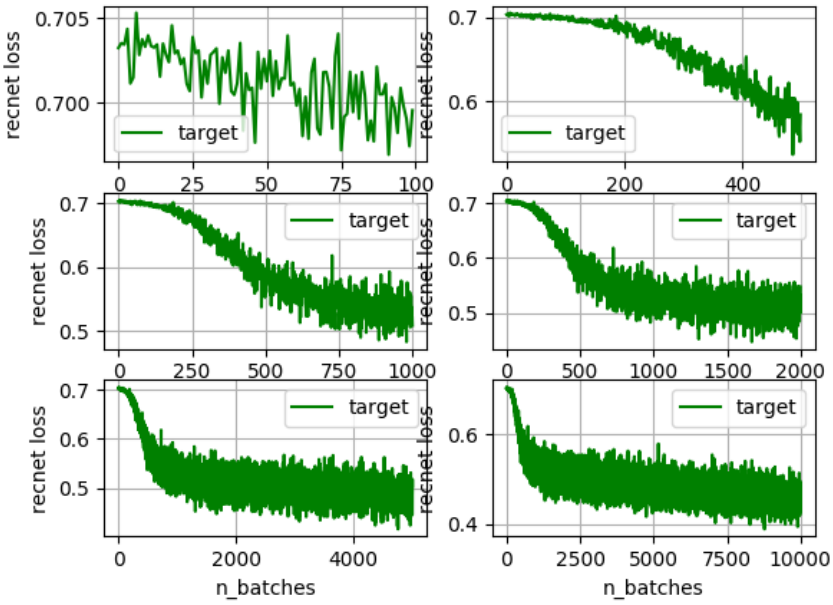

Figure 9: ml100k target loss with decreasing alpha.