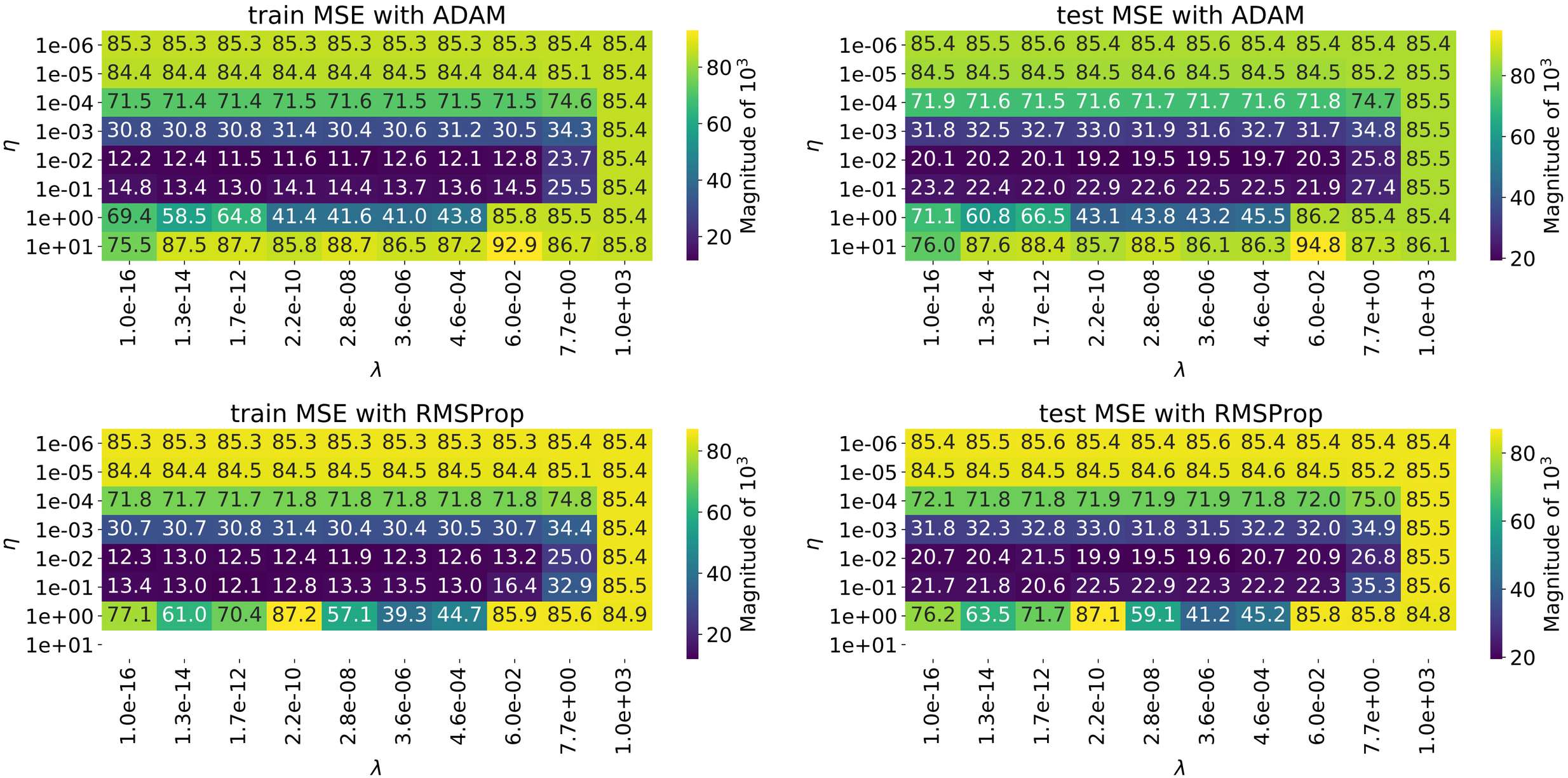
train MSE with ADAM
η
1e-06 85.3 85.3 85.3 85.3 85.3 85.3 85.3 85.3 85.4 85.4
1e-05 84.4 84.4 84.4 84.4 84.4 84.5 84.4 84.4 85.1 85.4
1e-04 71.5 71.4 71.4 71.5 71.6 71.5 71.5 71.5 74.6 85.4
1e-03 30.8 30.8 30.8 31.4 30.4 30.6 31.2 30.5 34.3 85.4
1e-02 12.2 12.4 11.5 11.6 11.7 12.6 12.1 12.8 23.7 85.4
1e-01 14.8 13.4 13.0 14.1 14.4 13.7 13.6 14.5 25.5 85.4
1e+00 69.4 58.5 64.8 41.4 41.6 41.0 43.8 85.8 85.5 85.4
1e+01 75.5 87.5 87.7 85.8 88.7 86.5 87.2 92.9 86.7 85.8
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
λ
Magnitude of 10^3
80
60
40
20
test MSE with ADAM
η
1e-06 85.4 85.5 85.6 85.4 85.4 85.6 85.4 85.4 85.4 85.4
1e-05 84.5 84.5 84.5 84.5 84.6 84.5 84.5 84.5 85.2 85.5
1e-04 71.9 71.6 71.5 71.6 71.7 71.7 71.6 71.8 74.7 85.5
1e-03 31.8 32.5 32.7 33.0 31.9 31.6 32.7 31.7 34.8 85.5
1e-02 20.1 20.2 20.1 19.2 19.5 19.5 19.7 20.3 25.8 85.5
1e-01 23.2 22.4 22.0 22.9 22.6 22.5 22.5 21.9 27.4 85.5
1e+00 71.1 60.8 66.5 43.1 43.8 43.2 45.5 86.2 85.4 85.4
1e+01 76.0 87.6 88.4 85.7 88.5 86.1 86.3 94.8 87.3 86.1
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
λ
Magnitude of 10^3
80
60
40
20
train MSE with RMSProp
η
1e-06 85.3 85.3 85.3 85.3 85.3 85.3 85.3 85.3 85.4 85.4
1e-05 84.4 84.4 84.5 84.5 84.5 84.5 84.5 84.4 85.1 85.4
1e-04 71.8 71.7 71.7 71.8 71.8 71.8 71.8 71.8 74.8 85.4
1e-03 30.7 30.7 30.8 31.4 30.4 30.4 30.5 30.7 34.4 85.4
1e-02 12.3 13.0 12.5 12.4 11.9 12.3 12.6 13.2 25.0 85.4
1e-01 13.4 13.0 12.1 12.8 13.3 13.5 13.0 16.4 32.9 85.5
1e+00 77.1 61.0 70.4 87.2 57.1 39.3 44.7 85.9 85.6 84.9
1e+01
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
λ
Magnitude of 10^3
80
60
40
20
test MSE with RMSProp
η
1e-06 85.4 85.5 85.6 85.4 85.4 85.6 85.4 85.4 85.4 85.4
1e-05 84.5 84.5 84.5 84.5 84.6 84.5 84.6 84.5 85.2 85.5
1e-04 72.1 71.8 71.8 71.9 71.9 71.9 71.8 72.0 75.0 85.5
1e-03 31.8 32.3 32.8 33.0 31.8 31.5 32.2 32.0 34.9 85.5
1e-02 20.7 20.4 21.5 19.9 19.5 19.6 20.7 20.9 26.8 85.5
1e-01 21.7 21.8 20.6 22.5 22.9 22.3 22.2 22.3 35.3 85.6
1e+00 76.2 63.5 71.7 87.1 59.1 41.2 45.2 85.8 85.8 84.8
1e+01
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
λ
Magnitude of 10^3
80
60
40
20