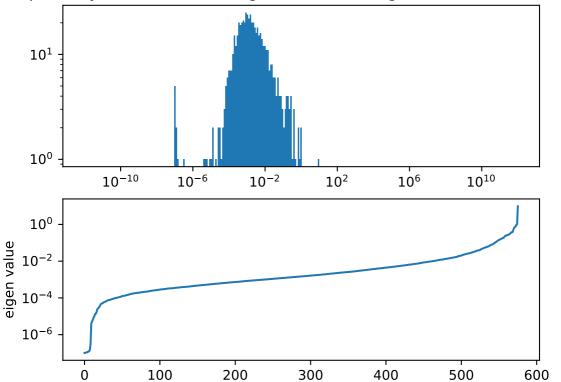
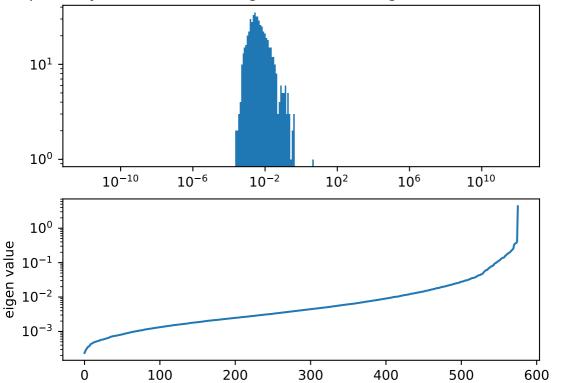
ep: 61 conv1 maxeig: 5.8e+01 mineig: 3.7e-03 con: 1.6e+04  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10-6 10-2 10<sup>2</sup> 10<sup>6</sup> 10<sup>1</sup> eigen value 10<sup>-1</sup>  $10^{-2}$ 10 15 25 20

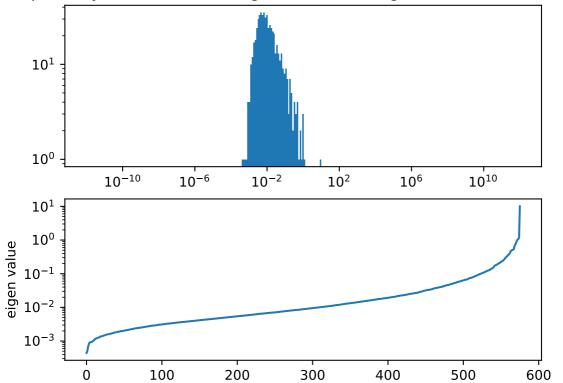
ep: 61 layer1.0.conv1 maxeig: 9.7e+00 mineig: 1.0e-07 con: 9.6e+07



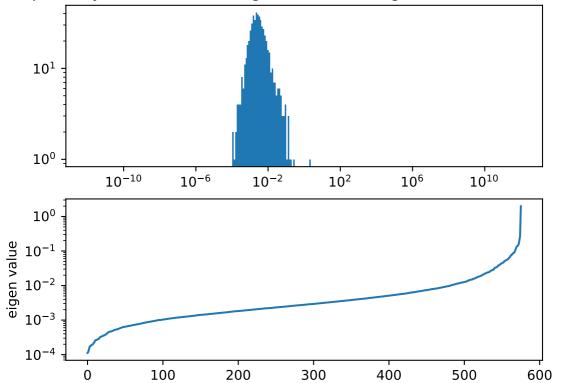
ep: 61 layer1.0.conv2 maxeig: 4.3e+00 mineig: 2.4e-04 con: 1.8e+04



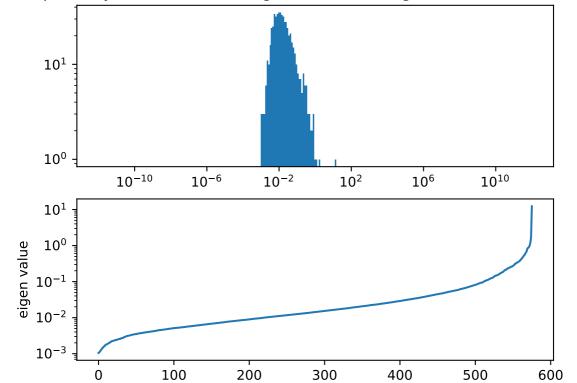
ep: 61 layer1.1.conv1 maxeig: 1.0e+01 mineig: 4.4e-04 con: 2.3e+04



ep: 61 layer1.1.conv2 maxeig: 2.0e+00 mineig: 1.1e-04 con: 1.8e+04



ep: 61 layer2.0.conv1 maxeig: 1.2e+01 mineig: 1.0e-03 con: 1.2e+04



ep: 61 layer2.0.conv2 maxeig: 3.7e+00 mineig: 7.3e-04 con: 5.0e+03  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-2}$ 10<sup>6</sup>  $10^{-6}$ 10<sup>2</sup> 10<sup>0</sup> e io  $10^{-3}$ 

600

800

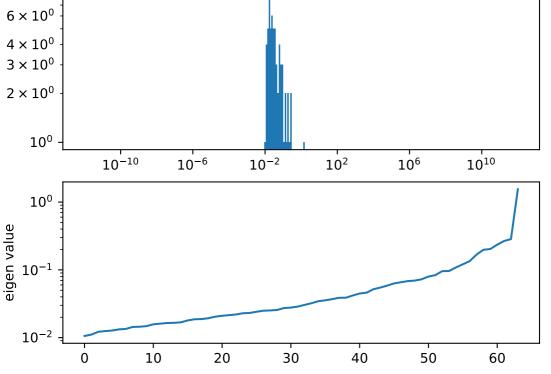
1000

1200

200

400

ep: 61 layer2.0.shortcut.0 maxeig: 1.5e+00 mineig: 1.1e-02 con: 1.5e+02  $6 \times 10^{0}$  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 1010  $10^{-10}$ 10-2 10<sup>6</sup>  $10^{-6}$ 10<sup>2</sup> 10<sup>0</sup>  $10^{-1}$ 

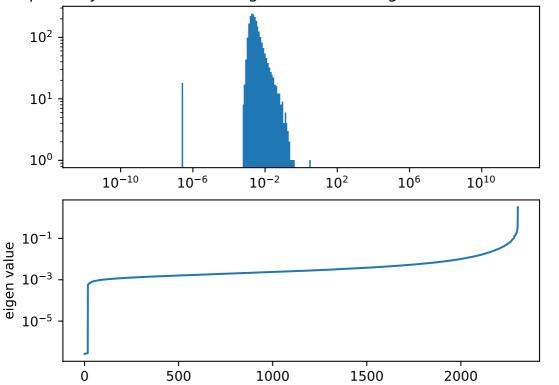


ep: 61 layer2.1.conv1 maxeig: 1.0e+01 mineig: 1.3e-04 con: 8.1e+04  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$ 10-2 10<sup>6</sup> 10<sup>2</sup>  $10^1$ eigen value  $10^{-1}$  $10^{-3}$ 200 400 600 800 1000 1200

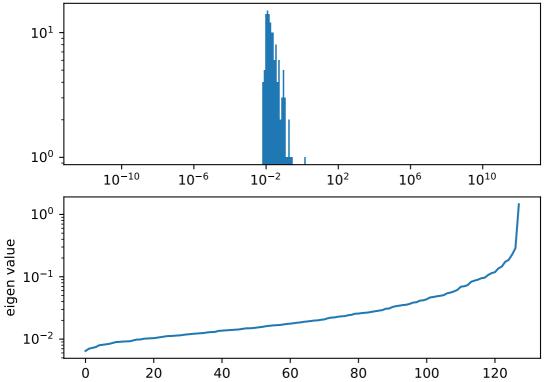
ep: 61 layer2.1.conv2 maxeig: 6.3e-01 mineig: 6.3e-05 con: 9.9e+03  $10^{1}$ 10<sup>0</sup> 1010 10-10 10<sup>6</sup>  $10^{-6}$  $10^{-2}$ 10<sup>2</sup>  $10^{-1}$ en lo<sup>-1</sup> en lo<sup>-2</sup> ue lo<sup>-2</sup> en lo<sup>-3</sup>  $10^{-4}$ 200 400 600 800 1000 1200

ep: 61 layer3.0.conv1 maxeig: 1.1e+01 mineig: 1.1e-03 con: 9.9e+03  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-2}$ 10<sup>6</sup>  $10^{-6}$ 10<sup>2</sup>  $10^{1}$ eigen value 10 -2 10<sup>-3</sup> 200 400 600 800 1000 1200

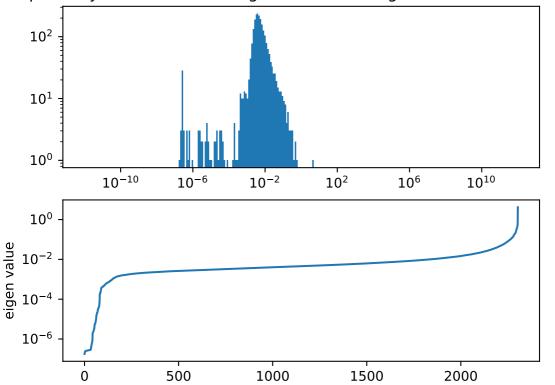
ep: 61 layer3.0.conv2 maxeig: 3.2e+00 mineig: 2.6e-07 con: 1.2e+07



ep: 61 layer3.0.shortcut.0 maxeig: 1.5e+00 mineig: 6.5e-03 con: 2.3e+02



ep: 61 layer3.1.conv1 maxeig: 4.1e+00 mineig: 1.8e-07 con: 2.3e+07



ep: 61 layer3.1.conv2 maxeig: 7.6e-01 mineig: 1.3e-07 con: 5.9e+06  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>6</sup> 10<sup>2</sup> 10<sup>0</sup>  $10^{-2}$  $10^{-4}$  $10^{-6}$ 

1000

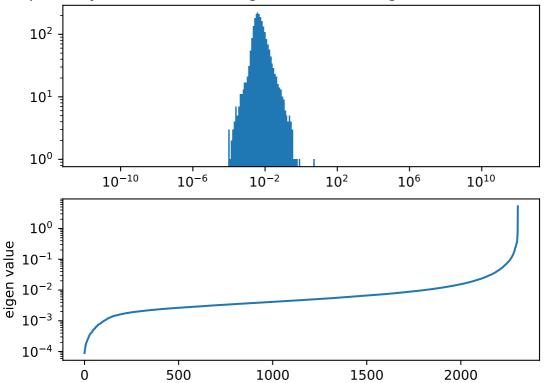
1500

2000

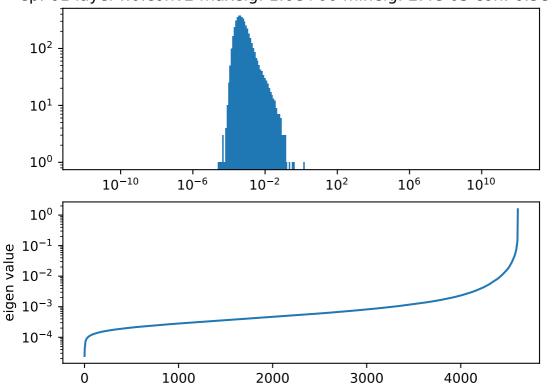
500

eigen value

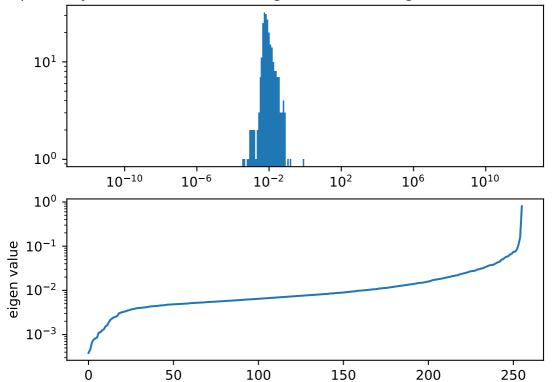
ep: 61 layer4.0.conv1 maxeig: 5.3e+00 mineig: 9.0e-05 con: 5.8e+04



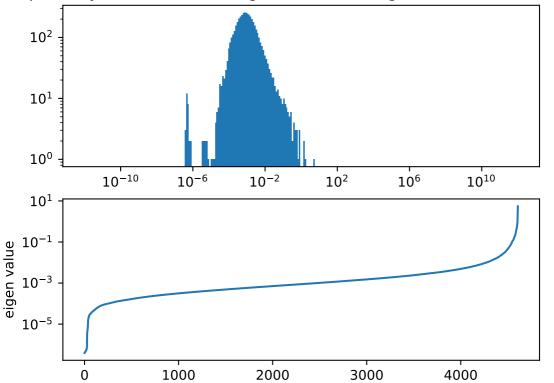
ep: 61 layer4.0.conv2 maxeig: 1.6e+00 mineig: 2.4e-05 con: 6.3e+04



ep: 61 layer4.0.shortcut.0 maxeig: 8.0e-01 mineig: 3.8e-04 con: 2.1e+03



ep: 61 layer4.1.conv1 maxeig: 5.5e+00 mineig: 3.9e-07 con: 1.4e+07



ep: 61 layer4.1.conv2 maxeig: 3.8e+00 mineig: -2.8e-08 con: 6.5e+09

