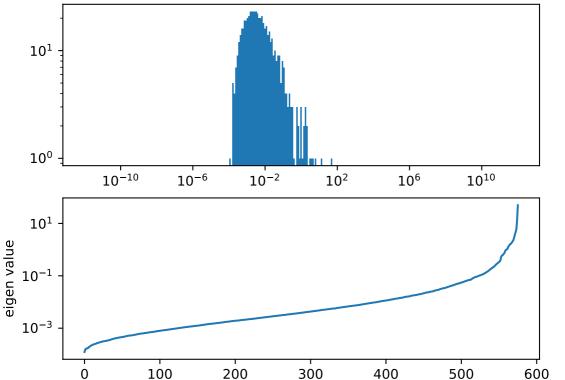
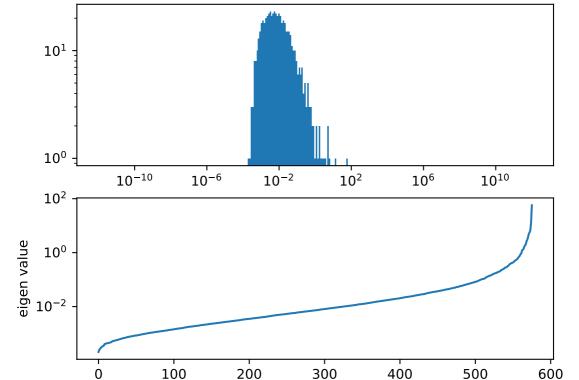


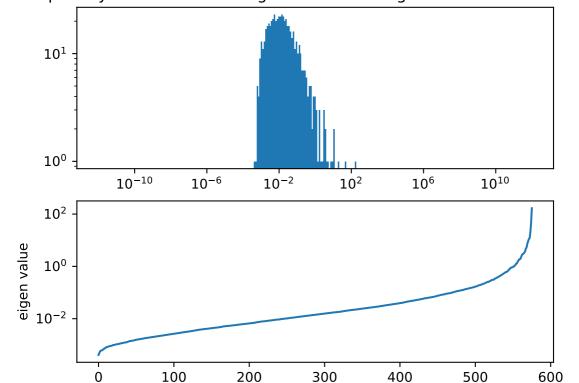
ep: 2 layer1.0.conv1 maxeig: 4.9e+01 mineig: 1.2e-04 con: 4.0e+05



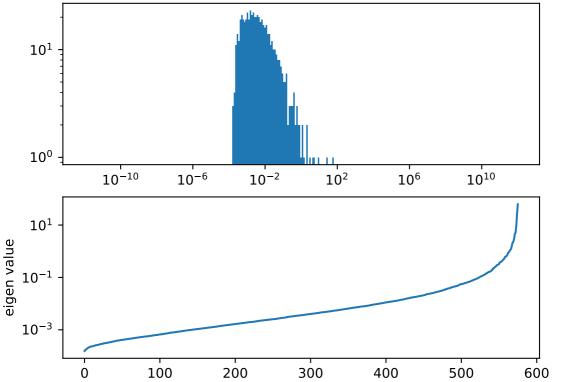
ep: 2 layer1.0.conv2 maxeig: 5.7e+01 mineig: 2.1e-04 con: 2.7e+05



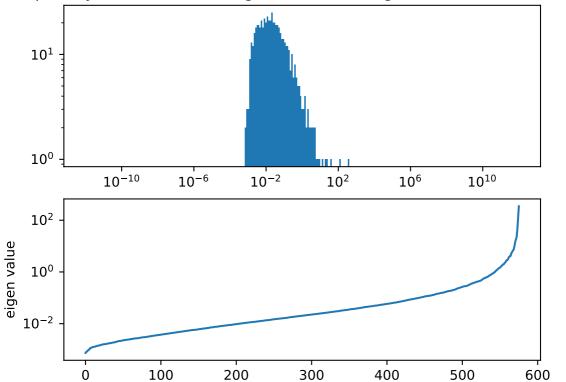
ep: 2 layer1.1.conv1 maxeig: 1.7e+02 mineig: 4.1e-04 con: 4.1e+05



ep: 2 layer1.1.conv2 maxeig: 6.2e+01 mineig: 1.6e-04 con: 4.0e+05

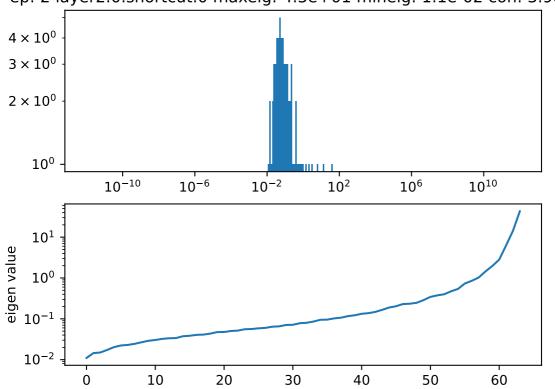


ep: 2 layer2.0.conv1 maxeig: 3.5e+02 mineig: 7.4e-04 con: 4.7e+05



ep: 2 layer2.0.conv2 maxeig: 1.1e+02 mineig: 3.1e-04 con: 3.6e+05  $10^{1}$ 10<sup>0</sup>  $10^{10}$ 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{2}$  $\frac{\text{en en}}{\text{den}}$   $10^{0}$   $10^{-2}$ 200 400 600 800 1000 1200

ep: 2 layer2.0.shortcut.0 maxeig: 4.3e+01 mineig: 1.1e-02 con: 3.9e+03



ep: 2 layer2.1.conv1 maxeig: 3.3e+02 mineig: 9.6e-04 con: 3.4e+05  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>6</sup>  $10^{-6}$  $10^{-2}$ 10<sup>2</sup>  $10^{2}$ eigen value 10<sup>0</sup>  $10^{-2}$ 200 400 600 800 1000 1200

ep: 2 layer2.1.conv2 maxeig: 1.5e+02 mineig: 3.4e-04 con: 4.4e+05  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^2$ eigen value 10<sup>-2</sup> 200 400 600 800 1000 1200

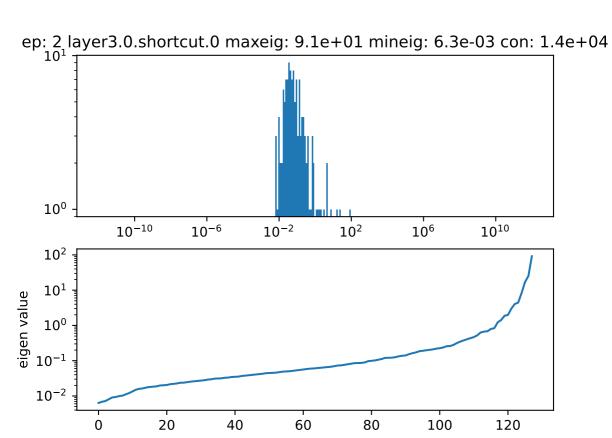
ep: 2 layer3.0.conv1 maxeig: 7.1e+02 mineig: 1.5e-03 con: 4.8e+05  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{2}$ eigen value 10<sup>0</sup>  $10^{-2}$ 200 400 600 800 1000 1200

ep: 2 layer3.0.conv2 maxeig: 1.8e+02 mineig: 6.5e-04 con: 2.8e+05  $10^{2}$  $10^{1}$ 10<sup>0</sup> 10 10 10-10 10<sup>6</sup>  $10^{-6}$  $10^{-2}$ 10<sup>2</sup>  $10^{2}$ eigen value 10<sup>0</sup>  $10^{-2}$ 

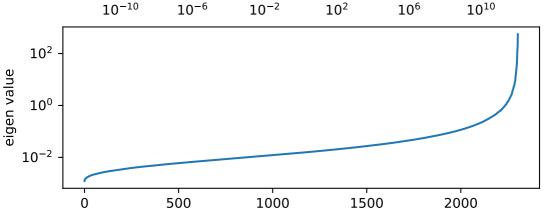
1500

2000

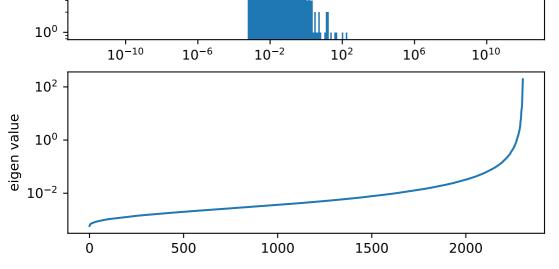
500



ep: 2 layer3.1.conv1 maxeig: 5.5e+02 mineig: 1.2e-03 con: 4.5e+05  $10^{2}$ 10<sup>1</sup> 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{2}$ 



ep: 2 layer3.1.conv2 maxeig: 1.9e+02 mineig: 5.9e-04 con: 3.3e+05  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10 10<sup>6</sup>  $10^{-6}$  $10^{-2}$ 10<sup>2</sup>  $10^{2}$ 



ep: 2 layer4.0.conv1 maxeig: 1.0e+03 mineig: 1.5e-03 con: 6.8e+05 10<sup>2</sup>  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{2}$ 10<sup>0</sup>  $10^{-2}$ 

1500

2000

500

eigen value

ep: 2 layer4.0.conv2 maxeig: 3.3e+02 mineig: 2.0e-04 con: 1.6e+06  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10<sup>-10</sup> 10<sup>6</sup>  $10^{-6}$  $10^{-2}$ 10<sup>2</sup>  $10^1$  $10^{-1}$  $10^{-3}$ 

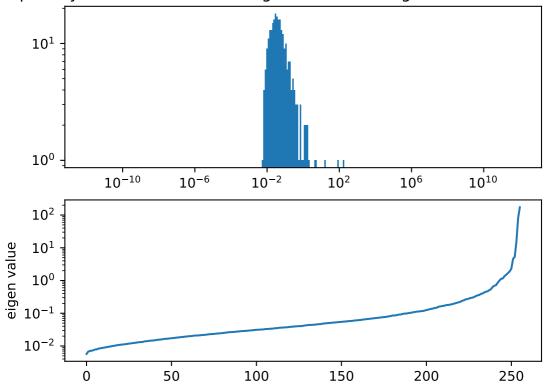
1000

4000

3000

eigen value

ep: 2 layer4.0.shortcut.0 maxeig: 1.7e+02 mineig: 5.7e-03 con: 3.0e+04



ep: 2 layer4.1.conv1 maxeig: 9.3e+01 mineig: 5.7e-04 con: 1.6e+05 10<sup>2</sup> 10<sup>1</sup> 10<sup>0</sup> 10 10 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{2}$ eigen value 10<sup>-2</sup>

1000

4000

3000

ep: 2 layer4.1.conv2 maxeig: 4.9e+02 mineig: 1.8e-04 con: 2.7e+06  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{3}$  $10^{1}$ eigen value  $10^{-1}$  $10^{-3}$ 

1000

4000

3000

