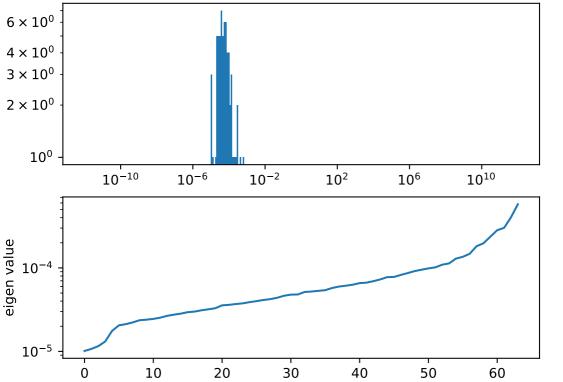
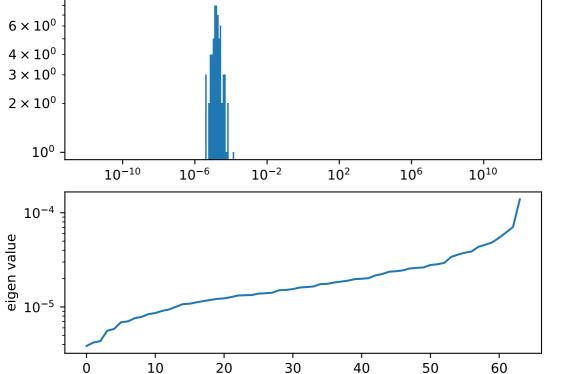


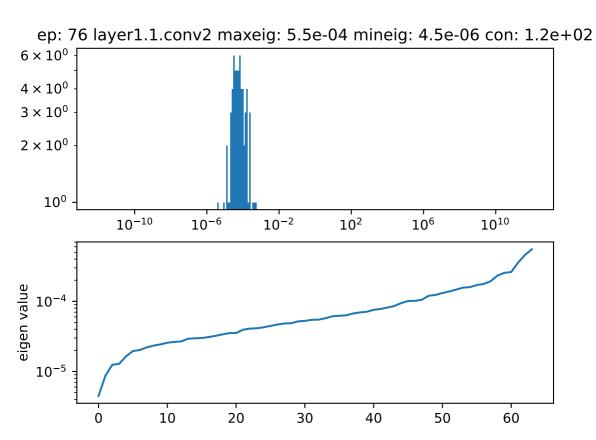
ep: 76 layer1.0.conv1 maxeig: 4.0e-03 mineig: 9.9e-06 con: 4.1e+02  $6 \times 10^{0}$  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 1010 10<sup>-10</sup>  $10^{-6}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{-2}$ eigen value 10<sup>-3</sup> 10<sup>-5</sup> 50 60 10 20 30 40

ep: 76 layer1.0.conv2 maxeig: 5.8e-04 mineig: 1.0e-05 con: 5.7e+01

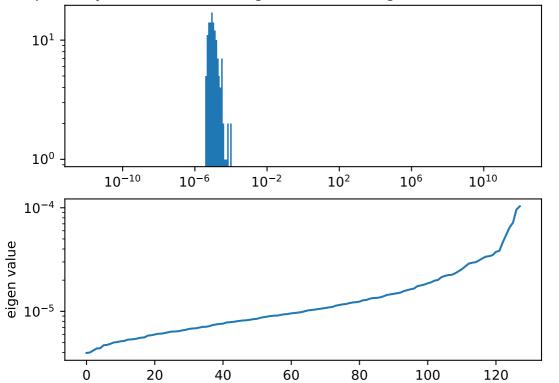


ep: 76 layer1.1.conv1 maxeig: 1.4e-04 mineig: 3.9e-06 con: 3.6e+01



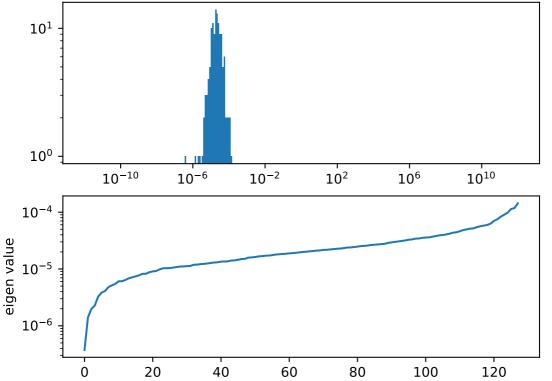


ep: 76 layer2.0.conv1 maxeig: 1.0e-04 mineig: 4.0e-06 con: 2.6e+01



ep: 76 layer2.0.conv2 maxeig: 1.5e-04 mineig: 4.3e-07 con: 3.4e+02  $10^{1}$ 10<sup>0</sup> 10 10 10<sup>2</sup> 10-10  $10^{-2}$ 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ 10<sup>-5</sup>  $10^{-6}$ 20 60 100 120 40 80

ep: 76 layer2.0.shortcut.0 maxeig: 1.4e-04 mineig: 3.8e-07 con: 3.8e+02

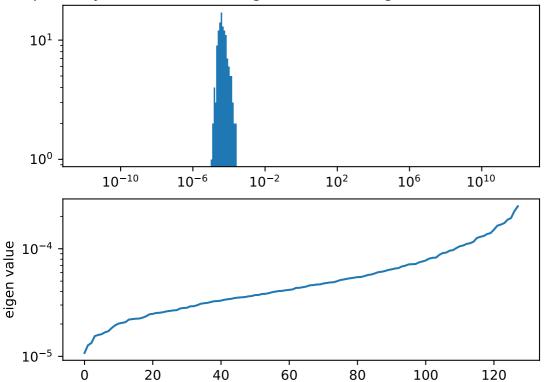


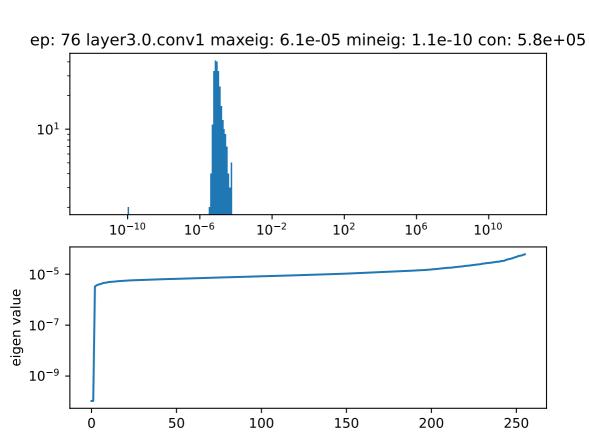
ep: 76 layer2.1.conv1 maxeig: 3.0e-05 mineig: 2.3e-06 con: 1.3e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10<sup>-10</sup>  $10^{-2}$ 10<sup>6</sup>  $10^{-6}$ eigen value 20 60 100 120

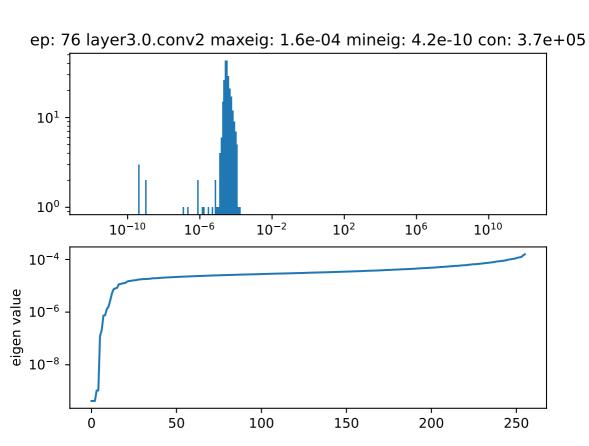
80

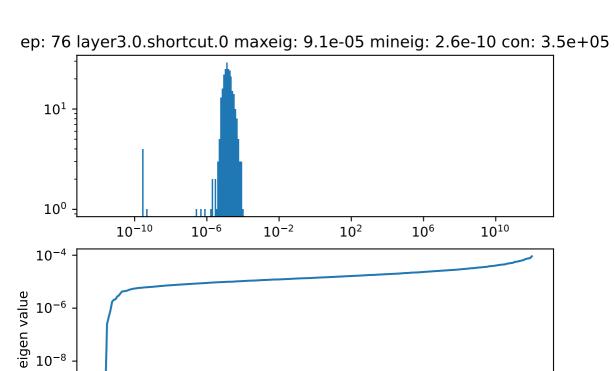
40

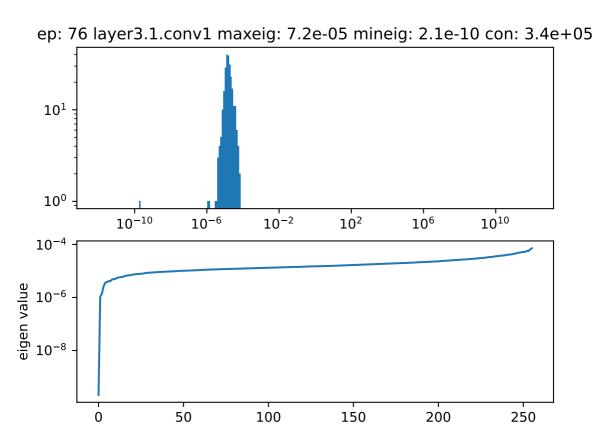
ep: 76 layer2.1.conv2 maxeig: 2.5e-04 mineig: 1.1e-05 con: 2.3e+01









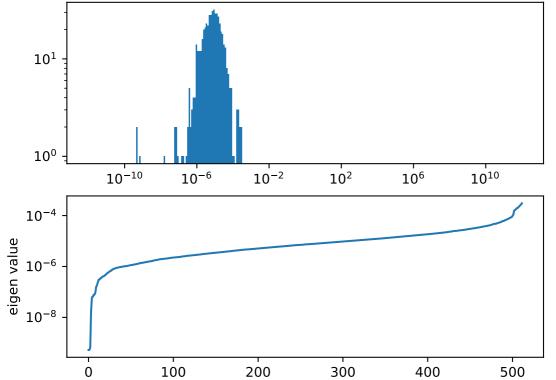


ep: 76 layer3.1.conv2 maxeig: 3.6e-04 mineig: 3.6e-06 con: 9.9e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup> eigen value  $10^{-4}$ 10<sup>-5</sup> 250 50 100 150 200

ep: 76 layer4.0.conv1 maxeig: 1.6e-04 mineig: 1.1e-06 con: 1.5e+02  $10^{1}$ 10<sup>0</sup> 10 10 10-10 10<sup>2</sup> 10-6  $10^{-2}$ 10<sup>6</sup>  $10^{-4}$ eigen value  $10^{-5}$  $10^{-6}$ 100 500 200 300 400

ep: 76 layer4.0.conv2 maxeig: 4.5e-04 mineig: 1.1e-09 con: 4.2e+05  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup>  $10^{-10}$  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-4}$  $10^{-6}$ 10<sup>-8</sup> 100 500 200 300 400

ep: 76 layer4.0.shortcut.0 maxeig: 3.0e-04 mineig: 5.3e-10 con: 5.8e+05



ep: 76 layer4.1.conv1 maxeig: 2.2e-04 mineig: 1.7e-11 con: 1.3e+07  $10^{2}$  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>-10</sup> 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup>  $10^{-4}$  $10^{-6}$  $10^{-8}$  $10^{-10}$ 100 500 200 300 400

ep: 76 layer4.1.conv2 maxeig: 1.3e-03 mineig: 1.1e-09 con: 1.2e+06  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-2 10<sup>2</sup>  $10^{-10}$  $10^{-6}$ 10<sup>6</sup>  $10^{-4}$  $10^{-6}$ 10-8

200

300

400

500

100

