Requirements：

* Intel i7-7700 CPU, Nvidia GeForce GTX 1060 6GB
* Python 3.6
* Keras 2.2.0
* Tensorflow 1.6.0
* Win 10

Usage：

DCAE\_VGG are first trained and the model weights are saved in spectralnet4k/src/pretrain\_weights. To run AICNet on the 4k auroral images, please run the python file run.py in spectralnet4k/src/applications/run.py. Please modify line 84 and lines 210-211 in spectralnet4k/src/core/data.py to give the right paths of auroral data and DCAE\_VGG model respectively.

More details about SpectralNet are available at [https://github.com/KlugerLab/SpectralNet](https://github.com/KlugerLab/SpectralNet）)