Firstly, several needed python packages are needed to be installed, such as torch, torch\_geometric, tsl and networkx. Please also make the directory of provided codes as your main directory.

* For generating the results for **Stability Analysis**, please run “Stability\_Analysis.py” in the “Stability\_Analysis” folder.
* For generating the results for **Over-smoothing Analysis**, please run “OverSmoothing\_Analysis.py” in the “Oversmoothing\_Analysis” folder.
* For generating the results on **MetrLA dataset** with number of horizons x, please run “MetrLA\_Hx.py” in the “MetrLA\_PemsBay” folder.
* For generating the results on **PemsBay dataset** with number of horizons x, please run “PemsBay\_Hx.py” in the “MetrLA\_PemsBay” folder.
* For generating the results on **Molene dataset** with number of horizons x, please run “Molene\_prediction.py” in the “Molene” folder.
* For generating the results on **NOAA dataset** with number of horizons x, please run “NOAA\_prediction.py” in the “NOAA” folder.