A Daily High-Resolution (1 km) Human Thermal Index Collection over the North China Plain from 2003 to 2020

1. Institutional information

1.1 Organization: School of Geography and Planning, and Guangdong Key Laboratory for Urbanization and Geo-simulation, Sun Yat-sen University, Guangzhou 510006, China.

2. Contact information

2.1 Authors:

Mr. Xiang Li (lixiang97@mail2.sysu.edu.cn)

Dr. Ming Luo (luom38@mail.sysu.edu.cn)

Dr. Yongquan Zhao (yqzhao@link.cuhk.edu.hk)

3. Codes information

3.1 Data preprocessing code.py

Gridded datasets processing, extraction values using weather station and data cleaning are recorded in this file. The section called "Obtain data" should be performed in Google Earth Engine, and the rest is operational under Python 3.8.

3.2 HiTIC-NCP Code.py

The codes in "HiTIC-NCP Code.py" is used for model training and prediction, as well as for incorporating accuracy evaluation and generating the dataset in the NetCDF format.

3.3 Figures code.py

The overall accuracy assessment of the 12 indices and the accuracy visualization code are also publicly available in the file named "Figures code.py". and the sample data required is publicly available in the "Data Samples" folder.