

Data description

1. data_BJ.gw1km_wrf.nc

Estimated urban irrigation water use in Beijing (~1km)

2. CLDAS_summer8_hour

China Meteorological Administration Land Data Assimilation System (CLDAS) reanalysis data for validation, here the temperature from May June July Aug of 2008-2017 was averaged as climate summer time to compare with the simulation results..

3. in-situ data

20 in-situ data of Beijing for validation, these data is hourly data from 2000-2017.

4. Cooling effect VS water amount.xlsx

The temperature decreases in different water amount in city center, suburbs and rural areas. Here, cooling effect means the decreased temperature which is calculated $T_{RS}-T_{raw}$ or $T_{UI}-T_{raw}$, T_{RS} means simulated temperature with road sprinkling scheme, T_{UI} means simulated temperature with urban irrigation, T_{raw} means the raw simulation without road sprinkling and urban irrigation.