Upper Yangtze River Scientific Data Center

**Spatiotemporal series dataset of population density in Chongqing - multifactor fusion model (2000-2015)**

1、Description

The data set first uses the multi factor fusion model to spatialize the population of Chongqing in 2010. Through the analysis of the correlation between factors and population and the actual situation, four factors, namely terrain, traffic, night light and NDVI, are selected as the impact factors of the simulated population, and industrial site factors are introduced. This paper verifies the accuracy of the population simulation results of the multi factor fusion model with the help of the township data of the sixth population census. The correlation coefficient is 0.836. In the error verification on the township scale, there are nearly 70% of the township accuracy is above 70%, and the simulation effect is already good. With this method, the spatial distribution simulation results of Chongqing's population in 2000, 2005 and 2015 are obtained. The spatial resolution of this dataset is 25m \* 25m. The specific inversion method is referred to the literature "Spatial simulation of population in mountain cities based on GIS and multi-source data (master's thesis)".

2、Keywords

Theme：  
Discipline：Human-nature Relationship  
Places：Chongqing  
Time：2000-2015

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：5240.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.310804 | - |
| west：105.275517 | - | east：110.411062 |
| - | south：28.065468 | - |

5、Time frame:1999-12-31 16:00:00+00:00--2015-12-30 16:00:00+00:00

6、Reference method

References to data:

LI Yuechen . Spatiotemporal series dataset of population density in Chongqing - multifactor fusion model (2000-2015). Upper Yangtze River Scientific Data Center, 2022

References to articles:

7、Supporting project information

8、Data resource provider

name: LI Yuechen   
unit: Southwest University  
email: liyuechen@swu.edu.cn