A Big Earth Data Platform for Three Poles

**HiWATER：Dataset of biomass observed in the middle reaches of the Heihe River Basin**

1、Description

The data set include crop biomass observed at four sample regions, that is the soil moisture control experimental field at Daman county, and the EC plots, the super station, and Shiqiao sample plots at Wuxing village in Zhangye city.

1) Objective
Crop biomass, a key biophysical parameter, was observed for calibration and validation of crop growth model and the retrieval of other biophysical parameters as well as the application in eco-hydrological models.
2) Measurement instrument:
Electronic balance (±0.1g) and oven.
3) Measurement site
a. the soil moisture control experimental field at Daman county,
Twelve soil water treatments are set. The wheat biomass for each treatment is measured on 17, 23 and 29 May, and 3, 9, 14 and 24 June, and 5 and 12 July.
b. the EC site
Maize biomass at 14 EC site (EC-2,EC-3,EC-5,EC-6,EC-7,EC-8,EC-9, EC-10, EC-11, EC-12, EC-13, EC-14, EC-15, EC-16) are measured on 14, 21, 25 and 31 May, 7, 13, 23 and 28 June, 3, 13, 18 and 23 July, 3, 12 and 28 August.
c. the super station
Maize biomass at the super station is measured on 22 and 28 May, 5, 11, 18, and 25 June, and 1, 8, 15, 22 and 31 July, 9, 15 and 22 August, and 3 and 11 September.
d. the Shiqiao sample site
Maize biomass at the Shiqiao village is measured on 17, 22 and 28 May, 4, 11, 17 and 25 June, 1, 8, 15, 22, and 30 July, 8, 16 and 27 August, and 9 September.
4) Data processing
 The observational data was recorded in the sheets and reorganized in the EXCEL sheets.

2、Keywords

Theme：Vegetation,Biomass
Discipline：Terrestrial Surface
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches, Daman Superstation,
Time：2012-09-15, 2012, 2012-05-17

3、Data details

1.Scale：0

2.Projection：4326

3.Filesize：0.0MB

4.Data format：文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.95 | - |
| west：100.35 | - | east：100.7 |
| - | south：38.95 | - |

5、Time frame:2018-11-24 18:48:18.616529+00:00--2018-11-24 18:48:18.616535+00:00

6、Reference method

References to data:

MA Mingguo, LI Xin. HiWATER：Dataset of biomass observed in the middle reaches of the Heihe River Basin. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.122.2013.db2017

References to articles:

Li, X., Liu, S.M., Xiao, Q., Ma, M.G., Jin, R., Che, T., Wang, W.Z., Hu, X.L., Xu, Z.W., Wen, J.G., Wang, L.X. (2017). A multiscale dataset for understanding complex eco-hydrological processes in a heterogeneous oasis system. Scientific Data, 4, 170083. doi:10.1038/sdata.2017.83.

7、Supporting project information

Heihe Watershed Allied Telemetry Experimental Research (HiWATER)
The CAS (Chinese Academy of Sciences) Action Plan for West Development Project

8、Data resource provider

name: MA Mingguo
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: mmg@lzb.ac.cn

name: LI Xin
unit:
email: xinli@itpcas.ac.cn