A Big Earth Data Platform for Three Poles

**Soil observation and leaf area index and aboveground biomass of maize sampling points in Yingke Daman area of Heihe River Basin (2012)**

1、Description

The experimental data of Yingke Daman in Heihe River Basin is supported by the key fund project of Heihe River plan, "eco hydrological effect of agricultural water saving in Heihe River Basin and multi-scale water use efficiency evaluation". Including: soil bulk density, soil water content, soil texture, corn sample biomass, cross-section flow, etc
Data Description:
1. Sampling location of Lai and aboveground biomass: Yingke irrigation district; sampling time: May 2012 to September 2012; Lai and aboveground biomass of maize were measured by canopy analyzer (lp-80), and aboveground biomass was measured by sampling drying method; sample number: 16.
2. Soil texture: Sampling location: Yingke irrigation district and Shiqiao Wudou Er Nongqu farmland in Yingke irrigation district; soil sampling depth is 140 cm, sampling levels are 0-20 cm every 10 cm, 20-80 cm every 20 cm, 80-140 cm every 30 cm; sampling time: 2012; measurement method: laboratory laser particle size analyzer; sample number: 38.
3. Soil bulk density: Sampling location: Yingke irrigation district and Daman irrigation district; sampling depth of soil bulk density is 100 cm, sampling levels are 0-50 cm and 50-100 cm respectively; sampling time: 2012; measurement method: ring knife method; number of sample points: 34.
4. Soil moisture content: this data is part of the monitoring content of hydrological elements in Yingke irrigation district. The specific sampling location is: Shiqiao Wudou Er Nongqu farmland in Yingke Irrigation District, planting corn for seed production; soil moisture sampling depth is 140 cm, sampling levels are 0-20 cm every 10 cm, 20-80 cm every 20 cm, 80-140 cm every 30 cm Methods: soil drying method and TDR measurement; sample number: 17.
5. Cross section flow: Sampling location: the farmland of Wudou Er Nong canal in Shiqiao, Yingke irrigation district; measure the flow velocity, water level and water temperature of different canal system sections during each irrigation, record the time and calculated flow, monitor once every 3 hours until the end of irrigation; sampling time: 2012.5-2012.9; measurement method: Doppler ultrasonic flow velocity meter (hoh-l-01, Measurement times: Yingke irrigation data of four times.

2、Keywords

Theme：Soil,Surface Water,Soil water content,Leaf area index,Vegetation,Biomass,Soil bulk density,Discharge/Flow,Soil texture
Discipline：Terrestrial Surface
Places：Heihe River Basin, Yingke irrigation district
Time：2012

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.03MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.966977 | - |
| west：100.570097 | - | east：100.29727 |
| - | south：38.837219 | - |

5、Time frame:2012-05-18 22:00:00+00:00--2012-09-24 11:23:00+00:00

6、Reference method

References to data:

JIANG Yao, HUANG Guanhua. Soil observation and leaf area index and aboveground biomass of maize sampling points in Yingke Daman area of Heihe River Basin (2012). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.037.2014.db2016

References to articles:

Jiang Y, Xu X, Huang GH. 2013. Distributed simulation of agro-hydrological processes and assessment of water productivity in irrigated areas of the middle Heihe River basin. 1st CIGR Inter-Regional Conference on Land and Water Challenges, Bari, Italy, 10-14 September, S1-12

7、Supporting project information

8、Data resource provider

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