A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of chlorophyll observed in the middle of Heihe River Basin from May to Jul, 2012**

1、Description

The data set include crop leaf chlorophyll content 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 leaf chlorophyll content, a key biophysical parameter, was observed as model parameter or a priori knowledge for canopy radiative transfer model or eco-hydrological models.
2) Measuring instruments
SPAD.
3) Measuring site
 a. the soil moisture control experimental field at Daman county,
 Twelve soil water treatments are set. The wheat leaf chlorophyll content 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
 The maize leaf chlorophyll content 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
The maize chlorophyll content 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
The maize chlorophyll content 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. The time used in this dataset is in UTC+8 Time.

2、Keywords

Theme：Vegetation,Chlorophyll
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：None

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：38.77 | - |

5、Time frame:2018-11-23 10:48:13+00:00--2018-11-23 10:48:13+00:00

6、Reference method

References to data:

MA Mingguo, LI Xin. HiWATER: Dataset of chlorophyll observed in the middle of Heihe River Basin from May to Jul, 2012. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.128.2013.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

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