A Big Earth Data Platform for Three Poles

**Ecological attribute data set of oasis vegetation in the middle and lower reaches of Heihe River (2015-2017)**

1、Description

This data set contains observation data of vegetation ecological properties in the middle and lower reaches of heihe river from January 1, 2015 to July 31, 2017. It contains 355 data, among which 208 are populus eupoplar and 147 are tamarisk.Ecological attributes include 4 groups of ecological parameters and a total of 15 categories of 74 indicators, as follows:
Vegetation structure parameters (25 indicators in 5 categories) :
Coverage: total coverage, three-layer coverage, average diameter of canopy;
Height: three-layer height, canopy thickness, litter thickness, moss thickness, maximum root depth;
Density: layer density and average diameter of trees;
Leaf area index: maximum leaf area index and minimum leaf area index of three layers of trees and grass;
Phenological stage: leaf spreading stage, leaf filling stage, leaf deciduous stage, complete deciduous stage.
Vegetation productivity parameters (16 indicators in 3 categories) :
Aboveground biomass: total biomass, three-layer stem biomass, leaf biomass;
Root biomass: root biomass, 0-5, 5-15, 15-30, 30-50, 50-100, 100-250cm fine root biomass;
Other biomass: litter layer, moss layer biomass and carbon storage.
Physiological and ecological parameters (24 indicators in 4 categories) :
Biomass distribution: proportion of rhizome and leaf distribution;
Element content: carbon content of roots and leaves, carbon - nitrogen ratio, carbon content of litters, carbon content of moss;
Blade shape: specific leaf area, blade length and width, leaf inclination;
Characteristics of gas exchange: leaf water potential, net photosynthetic rate, stomatal conductance, transpiration rate, air temperature, intercellular CO2 concentration, photosynthetic effective radiation, etc.
Hydrological parameters of vegetation (3 categories and 9 indicators) :
Redistribution of rainfall: maximum interception, canopy interception, rain penetration, trunk flow
Yield flow: yield flow, yield coefficient;
Evaporation: plant transpiration, soil evaporation, soil evaporation depth.

2、Keywords

Theme：Vegetation,Ecological attribute,Vegetation investigation
Discipline：Terrestrial Surface
Places：Heihe River Basin, The middle and lower of Heihe
Time：2015-2017

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.0MB

4.Data format：数字表格

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.69 | - |
| west：97.11 | - | east：101.96 |
| - | south：37.74 | - |

5、Time frame:2015-01-07 08:00:00+00:00--2017-08-06 08:00:00+00:00

6、Reference method

References to data:

Li Xiaoyan, ZHAO Wenwu. Ecological attribute data set of oasis vegetation in the middle and lower reaches of Heihe River (2015-2017). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.0002.2018.db2018

References to articles:

7、Supporting project information

8、Data resource provider

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