A Big Earth Data Platform for Three Poles

**Hydrological observation data of Central Asia's SYR River Basin (2021)**

1、Description

This data is the hydrological data of the Khujand Hydrological Station in the middle reaches of the Syr Darya. The station is jointly constructed by the Urumqi Desert Meteorological Institute of the China Meteorological Administration, the Institute of Water Issues, Hydropower and Ecology of the National Academy of Sciences of Tajikistan, and the Tajikistan Hydrological and Meteorological Bureau. This data can be used for scientific research such as water resource assessment in Central Asia and services such as water conservancy projects.  
Data period: December 5, 2020 to September 11, 2021.  
Data elements: hourly flow velocity (m/s), hourly water level (m) and hourly rainfall (m)  
Site location: 40°17′38″N, 69°40′18″E, 320m  
  
1. 300W-QX river velocity and water level observation instrument  
(1) Flow rate parameters:  
1 Power supply voltage 12 (9~27) V(DC)  
2 Working current 120 (110~135) mA  
3 Working temperature (-40 ~85) °C  
4 Measuring range (0.15 ~20) m/s  
5 Measurement accuracy ±0.02m/s  
6 Resolution 1mm  
7 Detection distance 0.1~50 m  
8 Installation height 0.15~ 25 m  
9 sampling frequency 20sps  
(2) Water level parameters:  
1 Measuring range 0.5~20 m  
2 Measurement accuracy ±3 mm  
3 Resolution 1 mm  
4 Repeatability ±1mm  
2. SL3-1 tipping bucket rain sensor  
1 Water bearing diameter ф200mm  
2 Measure the precipitation intensity within 4mm/min  
3 measure the minimum division of 0.1mm precipitation  
4 Maximum allowable error ±4%mm  
3. Frequency of flow rate and observation instrument data acquisition: The sensor measures the flow rate and water level data every 5S  
4. Hourly average flow rate calculation: The hourly average flow rate and water level data are calculated from the average of all flow rate and water level data measured every 5S within one hour

2、Keywords

Theme：Hydrology,Current speed  
Discipline：Terrestrial Surface  
Places：Syr Dayra River Basin, Tajikistan  
Time：2021, hourly

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.493MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：69.0 | - | east：69.0 |
| - | south：40.0 | - |

5、Time frame:2020-12-04 16:00:00+00:00--2021-09-10 16:00:00+00:00

6、Reference method

References to data:

HUO Wen. Hydrological observation data of Central Asia's SYR River Basin (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2724352022

References to articles:

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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