A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of hydrometeorological observation network (No.2 runoff observation system of 312 bridge on the Heihe River, 2015)**

1、Description

The data set includes the river level observation data of point 2 in the dense runoff observation of the middle reaches of Heihe River from January 1, 2015 to December 31, 2015. The observation point is located in Heihe bridge, 312 National Road, Zhangye City, Gansu Province. The riverbed is sandy gravel with unstable section. The longitude and latitude of the observation point are n38.996667 °, e100.427222 °, altitude 1485m, river width 70m and 20m. Sr50 ultrasonic range finder is used for water level observation, with acquisition frequency of 30 minutes. The data includes the following parts:   
Water level observation, observation frequency 30 minutes, unit (CM);   
In 2015, the section of bridge no.2-312 was frequently disturbed by human beings. The dam was built within 1km of the upstream and downstream of the section. The unstable area of the hydrological section led to the disorder of the water level and flow curve. During the measurement, the stable flow and water level curve could not be obtained.   
The observation of water level is based on the manual observation of water level at 0:00 on January 1, 2015. In the later stage, the hydrological section of river undercut changes. The result is that the datum water level changes and negative value appears;   
Refer to Li et al. (2013) for hydrometeorological network or station information, and he et al. (2016) for observation data processing

2、Keywords

Theme：Surface Water,Hydrology section,Discharge/Flow,Runoff  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches,   
Time：2015, 2015-01-01 to 2015-12-31

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.98MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.996667 | - |
| west：100.42444 | - | east：100.427222 |
| - | south：38.996387 | - |

5、Time frame:2015-01-08 16:00:00+00:00--2016-01-07 16:00:00+00:00

6、Reference method

References to data:

LI Xin, LIU Shaomin, XU Ziwei, HE Xiaobo. HiWATER: Dataset of hydrometeorological observation network (No.2 runoff observation system of 312 bridge on the Heihe River, 2015). A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.336.2016.db2016

References to articles:

Li, X., Cheng, G.D., Liu, S.M., Xiao, Q., Ma, M.G., Jin, R., Che, T., Liu, Q.H., Wang, W.Z., Qi, Y., Wen, J.G., Li, H.Y., Zhu, G.F., Guo, J.W., Ran, Y.H., Wang, S.G., Zhu, Z.L., Zhou, J., Hu, X.L., & Xu, Z.W. (2013). Heihe watershed allied telemetry experimental research (hiwater): scientific objectives and experimental design. Bulletin of the American Meteorological Society, 94(8), 1145-1160. doi:10.1175/BAMS-D-12-00154.1.  
  
Liu, S.M., Li, X., Xu, Z.W., Che, T., Xiao, Q., Ma, M.G., Liu, Q.H., Jin, R., Guo, J.W., Wang, L.X., Wang, W.Z., Qi, Y., Li, H.Y., Xu, T.R., Ran, Y.H., Hu, X.L., Shi, S.J., Zhu, Z.L., Tan, J.L., Zhang, Y., & Ren, Z.G. (2018). The Heihe Integrated Observatory Network: A Basin-Scale Land Surface Processes Observatory in China. Vadose Zone Journal, 17(1), 180072. doi:10.2136/vzj2018.04.0072.

7、Supporting project information

8、Data resource provider

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