A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of hydrometeorological observation network (No.3 runoff observation system of Railway bridge on the Heihe River, 2014)**

1、Description

This dataset contains data on river water level and flow velocity at No.3 in the intensive runoff observation in the middle reaches of Heihe River runoff from July 28, 2014 to December 31, 2014. The observation point is located at Heihe Bridge, Lan-Xin Railway, Zhangye City, Gansu Province. The riverbed is gravel and the section is stable. The latitude and longitude of the observation point is N39°2'33.08", E100°25'49.42", the altitude is 1443 meters, and the river channel width is 50 meters. The water level observation is measured by SR50 ultrasonic range finder with a frequency of 60 minutes. The flow profile observation is conducted by StreamPro micro ADCP. The data declaration includes the following two parts:
Water level observation, the observation frequency is 60 minutes, unit (cm); data covering time period from July 28, 2014 to December 31, 2014; Flow observation, unit (m3); monitoring flow and obtaining water level flow curve according to different water levels. The process of the runoff changing is obtained by observing the water level process. The missing data is uniformly represented by the string -6999.
For hydrometeorological network or site information, please refer to Li et al. (2013). For observation data processing, please refer to He et al. (2016).

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, No.3 Railway Bridge
Time：2014, 2014-07-28 to 2014-12-31

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.24MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.041944 | - |
| west：100.432778 | - | east：100.433056 |
| - | south：39.04222 | - |

5、Time frame:2014-08-04 00:00:00+00:00--2015-01-07 00:00:00+00:00

6、Reference method

References to data:

LI Xin, LIU Shaomin, XU Ziwei, HE Xiaobo. HiWATER: Dataset of hydrometeorological observation network (No.3 runoff observation system of Railway bridge on the Heihe River, 2014). A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.228.2015.db2016

References to articles:

Li X, Cheng GD, Liu SM, Xiao Q, Ma MG, Jin R, Che T, Liu QH, Wang WZ, Qi Y, Wen JG, Li HY, Zhu GF, Guo JW, Ran YH, Wang SG, Zhu ZL, Zhou J, Hu XL, Xu ZW. Heihe Watershed Allied Telemetry Experimental Research (HiWATER): Scientific objectives and experimental design. Bulletin of the American Meteorological Society, 2013, 94(8): 1145-1160, 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

National Natural Science Foundation of China

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