A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of hydrometeorological observation network (No.8 runoff observation system of Gaotai bridge on the Heihe River, 2014)**

1、Description

This dataset contains data on river water level and flow velocity at No.8 in the intensive runoff observation in the middle reaches of Heihe River runoff from January 1, 2014 to December 31, 2014. The observation point is located at Heihe Bridge, Gaotai County, Zhangye City, Gansu Province. The riverbed is sediment and the section is stable. The latitude and longitude of the observation point is N39°23'22.93", N 99°49'37.29", the altitude is 1347 meters, and the river channel width is 210 meters. The water level observation is measured by SR50 ultrasonic range finder with a frequency of 30 minutes. The data  declaration includes the following two parts:
Water level observation, observation frequency 30 minutes, unit (cm); data covering time period from January 1, 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 No. 8 point-Gaotaiqiao section only monitored the water level because the water body of the wetland park basically stopped flowing. 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.8 Gaotai Bridge
Time：2014, 2014-01-01 to 2014-12-31

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.99MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.331667 | - |
| west：100.097778 | - | east：100.099722 |
| - | south：39.328333 | - |

5、Time frame:2014-01-09 16:00:00+00:00--2015-01-08 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.8 runoff observation system of Gaotai bridge on the Heihe River, 2014). A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.233.2015.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

National Natural Science Foundation of China

8、Data resource provider

name: XU Ziwei
unit: Beijing Normal University
email: xuzw@bnu.edu.cn

name: HE Xiaobo
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: hxb@lzb.ac.cn

name: LI Xin
unit:
email: xinli@itpcas.ac.cn

name: LIU Shaomin
unit: Beijing Normal University
email: smliu@bnu.edu.cn