



Digital Heihe River System

Adan Wu

Cold and Arid Regions Environmental and Engineering Research Institute, CAS, Laboratory of Remote Sensing and Geospatial Science, Lanzhou, China (wuadan@lzb.ac.cn)

The “Digital Heihe River Basin” can be considered as an implementation of the Digital Earth concept in the Heihe River Basin, the second largest inland river basin of China. The Digital Heihe River Basin is composed of an information cyberinfrastructure and its applications. The former is further built up by a data integration platform, a modeling system and an automatic observing system, and the latter are various applications using integrated models and decision support systems. In this context, a Digital Heihe River System, supporting advanced data acquisition, storage, management, integration and visualization as well as other computing and information processing services over the internet in the Heihe river basin scale, was designed and implemented. This new system is the fourth edition of digital Heihe river and includes a website and APP application. Currently, 1058 datasets have been collected and published via this data sharing platform, the volume of these datasets is about 5T. These data have been widely used in support of the land surface process, the watershed integrated research, and the watershed sustainable development research in China. Most of these data are available for the international scientific community.