

Brief Introduction of Chongqing Key Laboratory of Spatial Data Mining and Big Data Integration under the Ecological Environment

Based on the Spatial Information Management and Decision Support Key Laboratory affiliated to Chongqing Bureau of Ecological Environment which is under construction, the Rongzhi College sub-center of Engineering Technology Research Center for Land Use and Remote Sensing Monitoring, and the previous research platforms like Institute of Spatial Information Technology in Rongzhi College, in 2018, we jointly declares the establishment of Chongqing Key Laboratory of Spatial Data Mining and Big Data Integration with Chongqing Institute of Land Resources and Housing Surveying and Planning and Chongqing Association for Environmental Sciences. Chongqing Science and Technology Bureau profiles it as the Key Laboratory (Doc No.10 [2018] by Chongqing Science and Technology Bureau).

The Key Laboratory mainly carries out scientific research, technological development and innovative personnel training in four directions. They are: (1) multi-source heterogeneous spatial information artificial intelligence acquisition technology under ecological environment, mainly engaged in data acquisition theory and method, data specification and standard development, data acquisition technology and other related research; (2) big data mining and simulation under ecological environment, mainly engaged in the related research of the spatial information of ecological environment elements, such as regularity and correlation, evolution model and prediction, and spatial warning; (3) Integration and sharing of spatial big data, mainly engaged in the research of big data acquisition and processing, big data integration and data application and sharing of ecological environment spatial information Internet; (4) big data decision support, the response relationship of ecological environment and human activities, ecological environment adaptive management and other related research.

The Key Laboratory now has more than 1,000 square meters of fixed research space, 70 sets of professional scientific research instruments and equipment, with a total value of 150,041,400 yuan, and 18 sets of equipment over 200,000 yuan. There are 23 researchers, 17 of whom are doctors or vice seniors. With a year of construction and operation, the Laboratory has won 6 scientific research achievement awards; published 30 SCI, EI and Chinese core retrieval papers, and 9 monographs; 12 provincial and ministerial scientific research projects; the research team has carried out 14 technical services and technology transfer projects, with the received funds of 1.846 million yuan. It has published or provided 9 decision-making consulting reports to the superior departments concerned, 2 of which were

submitted to the United Front Work Department of the CPC Central Committee, and 3 of which were approved or adopted.