

## GEOSCIENCES AND REMOTE SENSING

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GEOCHEMISTRY, ENVIRONMENTAL CHEMISTRY AND  
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**Cloud service platform system of county-scale remote sensing information products based on high-resolution satellite images****Longfang Duan and Yongtao Jin**

North China Institute of Aerospace Engineering, China

The Chinese high-resolution earth observation system (CHEOS) project is a major national special project. Since its implementation in 2010, it has played an important role in land-use surveys, resource comprehensive surveys, atmospheric and water environmental protection, disaster monitoring, and other application fields. Furthermore, it provides feasibility for the service of remote sensing technology in the development of regional economy and county economy. This article selects the demand for comprehensive regional management of new urbanization in the development of Beijing-Tianjin-Hebei urban-rural integration as a typical application of county-scale remote sensing in CHEOS and completes the design and development of system technology architecture and system function on the basis of cloud service. The background service adopts ArcGIS Server to provide interface services for the front end. The front-end page uses the ArcGIS API for Java script to implement the functional modules and introduces frameworks such as Bootstrap and jQuery to improve the system interface. By constructing the pivotal service components for remote sensing monitoring applications with universality and stability, the system realizes a set of refined, streamlined, and easily-expanded rapid development frameworks. And the application of products of the high-resolution remote sensing satellite images in different fields such as agriculture, forestry, environmental protection, and land resources, as well as multi-level administrative regions of cities, counties, and townships is centrally displayed and analyzed by this system. The aim of this system is to achieve an on-demand service model for multi-scale high-resolution remote sensing information products in the Beijing-Tianjin-Hebei region.

**Biography**

Longfang Duan graduated from Henan University (HENU) with a master's degree in July 2014. He is now a lecturer of North China Institute of Aerospace Engineering (NCIAE), his main research interests are computer application technology and gis software.

longfang0923@163.com

Yongtao Jin graduated from Tianjin Polytechnic University (TJPU) with a master's degree in March 2011. He is now vice director of Technology Department of North China Institute of Aerospace Engineering (NCIAE), associate professor, master tutor, vice director of Collaborative Innovation Center of Aerospace Remote Sensing Information Processing and Application of Hebei Province. His main research directions are county-scale remote sensing application technology, and computer network and information security. By now, he has published more than 10 papers in reputed journals.

jsj\_jin@126.com

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