

[Publications](#)[Archive](#)[Volumes](#)[Full Text Search](#)[Title and Author Search](#)[Annals](#)[ISPRS Journal](#)[ISPRS Journal Geo-Info](#)[ISPRS eBulletin](#)[ISPRS Highlights](#)[Book Series](#)[Brochure](#)[ISPRS Profile](#)[Annual Reports](#)[Related Publications](#)[Booklets](#)

#### [Volume XL-4](#)

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-4, 97-100, 2014  
[www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-4/97/2014/](http://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-4/97/2014/)  
doi: 10.5194/isprsarchives-XL-4-97-2014

## A Practice Approach of Multi-source Geospatial Data Integration for Web-based Geoinformation Services

W. Huang, J. Jiang, Z. Zha, H. Zhang, C. Wang, and J. Zhang  
National Geomatics Center of China, 28 West road, Lianhuachi, Beijing, P.R. China

**Keywords:** Geospatial data, Data Integration, Web-based geoinformation services, Practice approach, Principles, Procedure

**Abstract.** Geospatial data resources are the foundation of the construction of geo portal which is designed to provide online geoinformation services for the government, enterprise and public. It is vital to keep geospatial data fresh, accurate and comprehensive in order to satisfy the requirements of application and development of geographic location, route navigation, geo search and so on. One of the major problems we are facing is data acquisition. For us, integrating multi-sources geospatial data is the mainly means of data acquisition.

This paper introduced a practice integration approach of multi-source geospatial data with different data model, structure and format, which provided the construction of National Geospatial Information Service Platform of China (NGISP) with effective technical supports. NGISP is the China's official geo portal which provides online geoinformation services based on internet, e-government network and classified network. Within the NGISP architecture, there are three kinds of nodes: national, provincial and municipal. Therefore, the geospatial data is from these nodes and the different datasets are heterogeneous. According to the results of analysis of the heterogeneous datasets, the first thing we do is to define the basic principles of data fusion, including following aspects: 1. location precision; 2. geometric representation; 3. up-to-date state; 4. attribute values; and 5. spatial relationship. Then the technical procedure is researched and the method that used to process different categories of features such as road, railway, boundary, river, settlement and building is proposed based on the principles. A case study in Jiangsu province demonstrated the applicability of the principle, procedure and method of multi-source geospatial data integration.

[Conference Paper](#) (PDF, 456 KB)

Citation: Huang, W., Jiang, J., Zha, Z., Zhang, H., Wang, C., and Zhang, J.: A Practice Approach of Multi-source Geospatial Data Integration for Web-based Geoinformation Services, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-4, 97-100, doi: 10.5194/isprsarchives-XL-4-97-2014, 2014.

