

ICS 07.040
CCS A75



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14912-2017

Replacing GB/T 14912-2005

Specifications for 1:500 1:1 000 1:2 000 field digital mapping

1:500 1:1 000 1:2 000外业数字测图规程

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 14912-2005 "1: 50001. 10001..2000 field digital mapping technical specifications." This standard compared with GB/T 14912-2005, in addition to editorial changes outside the main technical changes are as follows:

- Standard name changed to "1: 001001. 10001..2000 field digital mapping procedures";
- In the "range" of the digital mapping mapping field survey results of the digital topographic map for the clear digital line and digital elevation model (See Chapter 1);
- "Normative references" added GB/T 13989, GB/T 20258.1, CH/T.2009, CH/T 9008.2 and other references Standard, and according to the standard update the original reference standard number has been modified (see Chapter 2);
- Added Chapter 3 "Terms and definitions", "field digital mapping" "non-symbolic data" "symbolic data" and "6" goniometer Device "is defined and described (see Chapter 3);
- In the "General" to increase the DEM requirements, software requirements, security and confidentiality and the requirements of the introduction of new technologies (See 4.2, 4.5, 4.6, 4.7); the "results requirements" section is coordinated with the relevant standards (see 4.2);
- Added Chapter 5 "Preparation and Planning", in which the provisions of the data collection, data analysis, survey survey, technical design and project strategy Contents and requirements of the plan (see Chapter 5);
- Added content and requirements of GNSS measurement control in Chapter "Tugen Control Measurement" (see
- In the "data acquisition" chapter added total station, the global satellite navigation system real-time dynamic positioning and measurement methods and technical requirements, At the same time in the data collection and content of the elements on the selection and GB/T 20257.1 and other related standards were coordinated, added to generate Feature points, lines, and polygons that need to be acquired for digital elevation model data (see 7.3, 7.5);

--- According to the actual production of the order of individual chapters were adjusted, the.2005 version of Chapter 6 "Data Processing" and Chapter 7 "Number Word map repair" the order of exchange (see Chapter 8, Chapter 9);

--- "Data Processing" chapter of the content and coordination of relevant standards, to supplement the digital elevation model generated technical requirements and processes (See 9.4). Removed the hierarchical data requirements of this chapter, the relevant content and GB/T 13923 unified coordination into the information appendix A (see Appendix A);

--- Increase Chapter 10 "related documents", the contents of the metadata and production requirements, the provisions of the contents of the picture album into the chapter (See Chapter 10);

--- The original standard "inspection and acceptance of information on the" split into "inspection and acceptance" and "finishing the results and turn over" two chapters, this part of the seizure Check the basic provisions of acceptance and other content with GB/T 18316 repeated deletion, instead quoted GB/T 18316 requirements, retained Planar, Elevation and Edge Checking Methods and Requirements (See Chapter 11). "Results finishing and turned over" to delete the.2005 version 8.4.2, the.2005 version of

8.4.1 merged, the content of.2005 version

1 Scope

GB/T 14912-2017 is the Chinese national standard on specifications for 1:500 1:1 000 1:2 000 field digital mapping, in the field of natural and applied sciences. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 29 December 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2018.

Classification: ICS 07.040, CCS A75. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the production of digital mapping based on field 1. 500,1. 1000,1..2000 digital line drawing, digital elevation model The operating methods, technical requirements and accuracy requirements. This standard applies to the field of digital mapping method to produce 1. 500, 1. 1000, 1..2000 digital line drawing, digital elevation model.

2 Normative references

The following documents for the application of this document is essential. For dated

references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 2312-1980 information exchange with Chinese character encoding character set basic set

GB/T 13923 basic geographic information element classification and code

GB/T 13989 National basic scale topographic map framing and numbering

GB/T 14268 National basic scale topographic map update specification

GB/T 17798 Geospatial data exchange format

GB/T 18316 digital mapping quality inspection and acceptance

GB/T 20257.1 National basic scale map schema Part 1 .1. 5001. 10001..2000 Topographic map schema

GB/T 20258.1 basic geographic information element data dictionary Part 1. 1. 5001. 10001..2000 basic geographic information Essential data dictionary

GB/T 24356 quality inspection and acceptance of surveying and mapping results CH/T 1001 Surveying and Mapping Technology summary writing requirements Designation of CH/T 1004 Surveying and Mapping Technology CH/T 1007 Basic Geographic Information Digital Product Metadata CH1016 Surveying and Mapping Operators Safety Regulations CH/T.2009 Global Positioning System Real-Time Dynamic Measurement (RTK) Specification CH/T 9008.2 Basic Geographic Information Digital Outcomes 1. 5001. 10001.2000 Digital Elevation Model CH/T 9012 Basic Geographic Information Digital Results Data Organization and file naming rules

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Field Digital Mapping of FieldDigitalmapping Full field digital mapping Digital terrain data acquisition in the field using Global Navigation Satellite System (GNSS), Total Station or other field measurement instruments, With the support of cartographic software, the method of generating digital mapping results through computer processing.