

ICS 07.040
CCS A75



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

GB/T 43956-2024

**Specification for the mesoscale data product of global land
cover mapping**

中尺度全球地表覆盖制图数据产品规范

Issued on: April 25, 2024

Implemented on: August 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
7 Product organization and naming	3
2 Metadata	3
7 Data collation and submission	5
2 Quality element content	5
14 Reference	18

Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting: Please note that some of the contents of this document may involve patents: The issuing organization of this document does not assume the responsibility for identifying patents: This document is proposed by the Ministry of Natural Resources of the People's Republic of China: This document is under the jurisdiction of the National Technical Committee for Geographic Information Standardization (SAC/TC230): This document was drafted by: National Basic Geographic Information Center, Sanya Surveying and Mapping Technology Development Service Training Center of the Ministry of Natural Resources, Shaanxi Surveying and Mapping Geographic Information Bureau, the First Aerial Survey and Remote Sensing Institute of the Ministry of Natural Resources, Heilongjiang Surveying and Mapping Geographic Information Bureau, Heilongjiang Geographic Information Engineering Institute, Sichuan Surveying and Mapping Bureau Bureau of Natural Resources and Information Technology, the Third Institute of Aerial Surveying and Remote Sensing of the Ministry of Natural Resources, Chinese Academy of Surveying and Mapping, and Beijing University of Civil Engineering: The main drafters of this document are: Chen Jun, Peng Shu, Chen Jiage, Tian Haibo, Liao Anping, Chen Lijun, Zhang Hongwei, Zhu Ling, He Chaoying, Zhang Xueping, Qu Ying, Qu Ping, Yuan Rujin, Shi Jiangnan, Li Xueju, and Zhai Liang: Mesoscale Global Land Cover Mapping Data Product Specification

1 Scope

GB/T 43956-2024 specifies the mesoscale global land cover mapping data product. China produced GlobeLand30, the first global land cover dataset at 30 metre resolution, and

donated it to the United Nations; the mesoscale products that sit above it, at hundreds of metres, are what feed climate models, carbon accounting and global change research, where consistency between epochs matters more than fine detail. The standard sets the basic requirements - data sources, the classification system, the mathematical foundations, the extraction of land classes, the overall classification accuracy, the treatment of data edges, and the organisation and naming of products - then the content of the product, covering the raster and vector land cover classification data and the metadata, together with the quality inspection, the accuracy assessment and the delivery and distribution provisions. It took effect on 1 August 2024.

This document specifies the basic requirements, content, production, quality requirements, product release and Serve: This document applies to the production, maintenance and updating of mesoscale global or regional land cover mapping data products using remote sensing images:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document:

GB/T 18316-2008 Quality inspection and acceptance of digital surveying and mapping results

GB/T 21336:1-2023 Geographic Information Data Quality Part 1: General Requirements

GB/T 30170 Geographic information - spatial reference based on coordinates CH/T 1027-2012 Technical specification for quality inspection of digital orthophotos

3 Terms and definitions

The following terms and definitions apply to this document: 3:1 land cover The land surface covers such as natural and artificial vegetation and buildings that can be observed directly or through remote sensing: 3:2 mesoscale Characterization of land cover types on remote sensing images with a spatial resolution of 10m~30m: 3:

3 Classification system A system for dividing objects into classes: [Source: GB/T 30322:1-2013:4:1:5] 3:

4 For each random sample, the probability that the classified result is consistent with the actual type corresponding to the ground: 3:

5 Commission error For a certain land cover type, the probability of taking any sample and finding that it is different from the actual ground observation type is: 3:

6 Omission error For a certain surface cover type observed on the ground, the probability of a sample being misclassified as another different type is determined by taking any sample from the classification results:

chinastandards.org · PREVIEW