

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HJ 724-2014

Technical specification for environmental spatial data processing

环境基础空间数据加工处理技术规范

(English Translation)

Issued on: December 25, 2014

Implemented on: March 1, 2015

Issued by: Ministry of Ecology and Environment

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Foreword

To carry out the "Environmental Protection Law of the People's Republic of China" to promote environmental information work, regulate and guide the environmental base Processing of data between the work, the development of this standard.

This standard specifies the commonly used environmental basic spatial data production data classification, attribute data description method, data organization, Storage format, data stratification, symbol specification, basic color scheme, data acquisition update rule, data quality control rules, etc.

content.

Annex A to this standard, Appendix B is a normative appendix, Appendix C, Appendix D, Appendix E, Appendix F, Appendix G is

Information appendix.

This standard is the first release.

This standard is organized by the Ministry of Environmental Protection Science and Technology Standards Division.

The main drafting of this standard. the Ministry of Environmental Protection Information Center, Jiangsu Province Environmental Information Center, Chongqing Environmental Protection Letter Interest center.

The Environmental Protection Department of this standard approved on December 25, 2014.

This standard is implemented on March 1, 2015.

This standard is explained by the Ministry of Environmental Protection.

Technical specification for processing of environmental basic spatial data

1 Scope of application

This standard specifies the commonly used environmental basic spatial data production data classification, attribute data description method, data organization, Storage format, data stratification, symbol specification, basic color scheme, data acquisition update rule, data quality control rules, etc.

content.

This standard is applicable to the processing of environmental basic spatial data in environmental information construction.

2 Normative reference documents

The contents of this standard refer to the terms of the following documents. For those who do not specify a date, the valid version applies to this standard.

Topographic specifications for aerial photogrammetry GB/T 7930-2008 1. 500 1. 1000
1..2000 Basic Geographic Information Element Classification and Code GB/T 13923-2006
GB/T 13989-2012 national basic scale topographic map Technical code for division of
applicable area of urban area environmental noise GB/T 15190-1994 Terminology for
geodetic survey GB/T 17159-2009 Digital specification for topographic map GB/T
17160-2008 1. 500 1. 1000 1..2000 Digital surveying and mapping results - Quality
requirements GB/T 17941-2008 Global positioning system (GPS) measurement
specification GB/T Digital topographic map series and basic requirements GB/T
18315-2001 Quality inspection and acceptance of digital surveying and mapping results
GB/T 18316-2008 HJ 522-2009 Surface Water Environment Functional Area Category
Code (Trial) Classification and code of environmental information HJ/T 417-2007 Code for
design and operation of environmental database CJJ 8-2011 Urban Survey Specification
Code for Digital Mapping of Aerial Photogrammetry

3 Terms and definitions

The following definitions and definitions in GB/T 17159-2009 apply to this standard.

3.1 Elevation datum

The starting point of the measurement elevation determined by the average sea level of the particular tide station and the elevation of the origin according to the level determined by the surface.

3.2 Depth datum sounding datum

Calculate the starting plane of the depth of the water.

Beijing Beijing Geodetic Coordinate System 1954 in 1954, China decided to adopt the national geodetic coordinate system (using Krassovsky ellipsoid), in essence, the union of the year of the extension of the 1942 coordinate system.

Xi'an Ge coordinate System Using IAG 1975 international ellipsoid to JYD1968.0 system for the ellipsoid orientation benchmark, the choice of Shaanxi Province Jingyang County Yongle the town is the location of the earth's origin, the use of multi-point positioning established by the earth coordinate system.

3.5 WGS84 (1150) World Geodetic System 84 (1150); WGS84 (1150)

Using the 1980 Earth reference system and BIH1984.0 point to the establishment of a polar reference system and the geocentric coordinate system.

The normal radius of the earth's normal ellipsoid is 6 378 137m, the gravity constant is $3.986\ 004\ 418 \times 10^{14} \text{m}^3 \cdot \text{s}^{-2}$, the flat rate is $1/298.257\ 223\ 563$, the Earth's angular velocity is $7.292\ 115 \times 10^{-5} \text{rad} \cdot \text{s}^{-1}$.

3.6 National Geodetic Coordinate System China Geodetic Coordinate System.2000; CGCS2000

The origin is in the right hand of the center of the earth. The Z axis is the reference pole direction defined by the International Earth Initiative (IERS) the X-axis is the intersection of the reference meridian surface defined by the International Earth Initiative and the equatorial plane perpendicular to the Z-axis. The Y-axis and the Z-axis and X the axis forms the right hand orthogonal coordinate system. The normal ellipsoid of the earth has a radius of 6 378 137 m and a gravity constant of $3.986\ 004\ 418 \times 10^{14} \text{m}^3 \cdot \text{s}^{-2}$ with a flat rate of $1/298.257\ 222\ 101$ and an earth angular velocity of $7.292\ 115 \times 10^{-5} \text{rad} \cdot \text{s}^{-1}$.

3.7 Map projection map projection

According to a certain mathematical law, the reference ellipsoid on the point, the line projected to the way on the exhibition.

3.8 Gauss-Kruger projection

An isometric crossed elliptical projection. Its projection with a central meridian projection into a straight line and the length of the same, the equatorial projection has become Straight line and orthogonal to the central meridian projection line.

3.9 Lambert orthorhombic conical projection lambert orthomorphic conical projection

An equilateral angle equidistant conical projection. The weft is a concentric circular arc, the warp is concentric radius. No angle change Shape, warp length ratio and weft length ratio are equal.

3.10 Spatial data spatial data

Data used to represent information about the location, shape, size, and distribution characteristics of a spatial entity are used to describe all Two-dimensional and multidimensional distribution of the phenomenon of the region.

3.11 Attribute data attribute data

Data describing the quality and quantity characteristics of geographic entities.

3.12 Basic geospatial data

Uniform spatial positioning framework and spatial analysis based spatial data, including measurement control points, the national basic scale scale Column topographic map data and other spatial data produced by mapping industry standards.

3.13 Environmental basic spatial data

Environmental protection departments and other relevant departments to collect, produce and process the spatial location of the environmental business data.

3.14 Environmental thematic spatial data

Based on the basis of environmental basic spatial data, according to the classification of environmental management business or focus on the performance of a subject content of the space data.

3.15 Check all entry inspection

Check the quality of all items required for the quality of the data.

3.16 Overview specific target inspection

Check the specific inspection items required for the quality of the data.

4.1 Elevation datum and depth datum

According to the relevant provisions of GB/T 18315-2001, the elevation reference adopts the "1985 National Elevation Benchmark", special circumstances Under 1. 500 ~ 1. 2 000