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

GB/T 33185-2016

**Geographic information -- Spatial referencing by geographic
identifiers**

地理信息 基于地理标识符的空间参照

(English Translation)

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method equivalent to ISO 19112.:2003 "Geographic Information Geographic Identifier Based Spatial Reference".

And the normative reference in this standard international documents are consistent with the relationship between China's documents are as follows.

Geographic Information Metadata (ISO 19115.:2003, MOD) this standard has made the following editorial changes.

--- Table 5 errors in the title;

--- to 4.3 example to China's provincial and postal code;

--- The list of foreign names in the examples are replaced by Chinese names.

This standard is proposed by the National Geographic Information Bureau.

This standard is under the jurisdiction of the National Geographic Information Standardization Technical Committee (SAC/TC230).

The drafting unit of this standard. National Basic Geographic Information Center.

Introduction

Geographic information contains a spatial reference, which involves elements and information that represent its position in geospatial in digital or literal form. space Reference is divided into two categories.

- a) spatial reference based on coordinates;
- b) Spatial reference based on geographic identifiers.

This standard refers only to spatial references based on geographic identifiers. Such spatial references are sometimes referred to as "indirect spatial references". Based on coordinates the spatial reference is specified in GB/T 30170-2013.

Spatial reference based on geographic identifiers is not directly based on coordinates, but is based on the location determined by one or several geographic elements. Joint Positions and elements can be the following relationships.

- a) contains, within the geographical elements, as in a country;
- b) Based on local measures, the location is defined as being associated with one or more fixed points in one or more geographic elements, the distance between the street and the other street along the street;
- c) fuzzy correlation, where there is a vague relationship with one or more geographic elements, such as a nearby building or in two buildings between.

The purpose of this standard is to specify the use of geographical identifiers to define and describe spatial reference methods. However it includes only the definition and record references of the elements, regardless of the position of the relationship with the elements of the form.

Geographic Information Geographic Information Based Spatial Reference

1 Scope

This standard specifies a conceptual model based on the spatial reference of the geographic identifier, establishes a general model based on the spatial reference of the geographic identifier, the constituent parts of the spatial reference system and the basic components of the toponymic dictionary are defined.

Although the spatial reference based on the coordinates has been determined in GB/T 30170-2013, this standard still contains the record supplementary coordinate reference Mechanisms.

This standard enables data producers to define spatial reference systems based on geographic identifiers to help users understand the spatial parameters used by data sets According to. It enables the names of dictionaries to be prepared on a consistent basis and supports the development of other standards in the field of geographic information.

This standard applies to digital geographic data, and its principles can be extended to other forms of geographic information such as maps, charts and text files.

2 Consistency

This standard specifies two types of consistency.

Any space reference system claiming to be consistent with this standard shall meet all the requirements specified in A.1.

Any names dictionary that claims to be consistent with this standard shall meet all the requirements specified in A.2.

GB/T 19333.5-2003 gives the definition of abstract test suite.

3 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

Geographic Information Consistency and Testing (ISO 19105.:2000, IDT) GB/T 19333.5-2003 Geographic information space model (ISO 19107.:2003, IDT) GB/T 23707-2009 GB/T 30170-2013 Geographic information Spatial-based reference for coordinates (ISO 19111.:2003, IDT) ISO 19115.:2003 Geographic information-Metadata

4 Terms and definitions

The following terms and definitions apply to this document.

Feature

The abstraction of the real world phenomenon.

[ISO 19101.:2002]

Note: Elements can appear as a type or instance. When expressing only one meaning, you should use feature types or feature instances.

Place names dictionary gazetteer Contains directories for one or more feature instances of location information.

Note: The location information does not require a certain coordinate, it can be descriptive.