

ICS 07.060
CCS A45



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

GB/T 14914.6-2021

**The specification for marine observation - Part 6: Data
processing and quality control of marine observational data**

海洋观测规范 第6部分：数据处理与质量控制

Issued on: December 31, 2021

Implemented on: July 1, 2022

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

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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 of Standardization Documents" drafted. This document is part 6 of GB/T 14914 "Ocean Observation Specifications". GB/T 14914 has released the following parts.

2. Coastal observations;

3. Observation of buoys and submersibles;

4. Shore-based radar observations;

5. Satellite remote sensing observations;

6. Data processing and quality control. Please note that some content of this document may be patented. The issuing agency of this document assumes no 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 Marine Standardization Technical Committee (SAC/TC283). This document is drafted by: National Oceanographic Information Center, National Oceanographic Standards and Metrology Center, National Satellite Ocean Application Center, Hangzhou Electronics Division Technical University. The main drafters of this document. Wu Shuangquan, Luo Jingxin, Liu Shouhua, Wang Hui, Yuan Lingling, Zhang Jianli, Li Wenshan, Fan Wenjing, Lang Shuyan, Zhang Zengjian, Xu Shanshan, Ji Fengying, Liu Yulong, Yang Yang, Yang Jinkun, Chen Manchun, Xing Hao.

With the development of ocean observation technology, my country's observation methods have gradually developed from traditional coastal observation to buoy submersible observation and radar observation. A variety of observation methods such as survey, aerial observation and satellite remote sensing observation have been adopted, and an ocean three-dimensional observation network integrating star-air-earth has been preliminarily formed. for the sea To meet the needs of the development of ocean observation,

standardize ocean observation activities, implement the "Regulations on the Administration of Ocean Observation and Forecasting" (Decree No. 615 of the State Council), Specification" (GB/T 14914-2006) was revised to "Ocean Observation Specification". "Ocean Observation Specification" includes general provisions, coastal observation, buoy submersible observation survey, shore-based radar observation, satellite remote sensing observation, data processing and quality control, among which the seashore code is the revised part, and the remaining 5 parts are new add part. GB/T 14914 "Ocean Observation Specification" is proposed to be composed of 6 parts.

- 1.General. The purpose is to stipulate the observation principle, observation content and quality control of ocean observation.
- 2.Coastal observations. The purpose is to stipulate the project time and technical requirements of coastal observation.
- 3.Buoy Submarine Observation. The purpose is to stipulate the observation items such as buoys, marine submersible buoys and surface drifting buoys, etc. skills requirement.
- 4.Shore-based radar observations. The purpose is to specify the observation items and timing, general regulations, and observation methods of shore-based radar observations. Laws and requirements, data processing and electromagnetic radiation protection.
- 5.Satellite remote sensing observations. The purpose is to specify sea surface temperature, marine meteorological elements, marine dynamic disasters, marine natural disasters Observation content and methods of hazards and sea surface height.
- 6.Data processing and quality control. The purpose is to specify the observation of seashore, buoy submersible, shore-based radar and satellite remote sensing. General requirements, processes, content and methods of data processing and quality control. GB/T 14914.6 focuses on refining the basic methods and requirements in the processing of operational ocean observation data, and regulates the collection of ocean observation data. Set, organize, process and quality control audit process, provide quality control processing methods that can be referenced, in order to clarify work ideas and improve work efficiency Finally, complete, accurate and reliable marine observation data and further data product production can be obtained. Ocean Observation Specification Part

1 Scope

GB/T 14914.6-2021 is the Chinese national standard on the specification for marine observation - part 6:data processing and quality control of marine observational data, 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 31 December 2021 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2022.

Classification: ICS 07.060, CCS A45. 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 document specifies the general requirements, procedures, contents and methods for ocean observation data processing and quality control. This document is applicable to the processing and quality control of marine observation data such as marine stations (points), buoys and submersibles, shore-based radars and satellite remote sensing.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 12460 Ocean Data Application Record Format

GB/T 15920 Oceanographic Terminology Physical Oceanography HY/T 023 China Ocean Observation Station (Point) Code HY/T 042 Classification, code and model designation of marine instruments and equipment HY/T 058 Operational specification for marine survey, observation and monitoring archives HY/T 136 Ocean Information Metadata

3 Terms and Definitions

The terms and definitions defined in GB/T 15920 and the following apply to this document.

3.1 data A formatted marine environment feature record is composed of data items.

3.2 file An ordered combination of several records.

3.3 data and information A file consisting of observational data and descriptions.

Note. Including charts, reports, observation logs, etc.

3.4 According to the data type, the standardized process is adopted to convert the format, coding, measurement unit, etc. of the data from different sources to form the data format, coding The processing process of unified data files such as codes and units of measurement.

3.5 quality control Using certain methods, models and parameters, the reliability of data quality is judged, and the process of quality identification is carried out.