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

GB/T 44066-2024

Automatic weather stations

自动气象站

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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 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 was proposed by the China Meteorological Administration. This document is under the jurisdiction of the National Technical Committee for Standardization of Meteorological Instruments and Observation Methods (SAC/TC507). This document was drafted by: Aerospace New Meteorological Technology Co., Ltd., 61540 Troops of the Chinese People's Liberation Army, Meteorological Observation Center of China Meteorological Administration Center, 31010 Unit of the Chinese People's Liberation Army, Jiangsu Meteorological Observation Center, Huayun Shengda (Beijing) Meteorological Technology Co., Ltd., China Meteorological Shanghai Material Management Office of the State Elephant Bureau. The main drafters of this document are. Sun Lixin, Jiang Mingbo, Hua Weidong, Du Zhitao, Xia Shenning, Chen Xi, Wang Bingmei, Jin Jianing, Zhu Ping, Han Yingqing, Jin Hongwei, Li Ning, Zhu Jing, Wang Qiangfeng, Chu Jinhua, Hu Xiaoxu. Automatic Weather Station

1 Scope

GB/T 44066-2024 is the Chinese standard for automatic weather stations, the unattended installations that produce almost all of the surface observations feeding forecasting, climate records, aviation, agriculture and the operation of power and transport networks. The document treats the station as a product rather than as an instrument collection: it sets the

product composition, then the technical requirements covering the general and safety requirements, the measurement performance for each element, the sampling and data processing, the data storage and transmission, the equipment status information, the clock, the power supply, the environmental adaptability, the electromagnetic compatibility, the reliability and the maintainability. Clause 6 gives the test method for each of those, and clauses 7 to 9 the inspection rules, the marking and accompanying documents and the packaging, transport and storage. The normative annex carries the optional algorithms for wind, temperature, humidity, pressure and precipitation. For a station manufacturer, a meteorological service or anyone procuring observation networks in China, this is the acceptance text.

This document specifies the product composition, technical requirements, inspection rules, marking and accompanying documents, packaging, transportation and storage of automatic weather stations, and The corresponding test methods are described. This document applies to the design, production, acceptance, storage and transportation of automatic weather stations.

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 191 Pictorial markings for packaging, storage and transportation

GB/T 2423.1-2008 Environmental testing for electric and electronic products Part

3 Verification and data collection, analysis and presentation

GB/T 11463-1989 Reliability test for electronic measuring instruments

GB/T 17626.2 Electromagnetic compatibility test and measurement technology
Electrostatic discharge immunity test

GB/T 17626.3 Electromagnetic compatibility test and measurement technology Part