

ICS 07.060
CCS A 47



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

GB/T 44956-2024

**Weather forecast verification-Precipitation and air temperature
forecast**

天气预报检验 降水和温度

Issued on: November 28, 2024

Implemented on: March 1, 2025

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

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Inspection contents and inspection indicators	1
4.1 Precipitation forecast verification	1
4.2 Temperature prediction verification	2
5 Calculation of test indicators	2
5.1 Precipitation forecast verification index	2
5.2 Temperature forecast verification index	4
References	6

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 Disaster Prevention and Mitigation (SAC/TC345).

This document was drafted by: National Meteorological Center, Unit 61540 of the Chinese People's Liberation Army, and Unit 61741 of the Chinese People's Liberation Army.

The main drafters of this document are: Wei Qing, Liu Couhua, Zhang Jinyan, Li Nina, Gu Chunli and Lan Weiren.

Weather forecast to check precipitation and temperature

1 Scope

This document specifies the verification content of precipitation and temperature forecasts in weather forecasts and describes the verification methods.

This document is applicable to the verification of precipitation and temperature forecasts in weather forecasts.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 precipitation

During a certain period of time, liquid (rain) or solid (snow) precipitation (after melting) that falls from the sky to the ground without evaporation, infiltration, or flow.

The depth at which the water is lost and accumulates on the horizontal plane.

Note. The unit is millimeter (mm).

[Source. GB/T 28592-2012, 2.1]

3.2 Temperature

During ground meteorological observations, the air temperature at a height of 1.50m above the ground is measured inside radiation protection devices such as louvered boxes.

Note. The unit is Celsius (°C).

[Source. GB/T 35226-2017, 3.1, modified]

3.3 forecast verification

According to the forecast results and actual observations, the forecast quality is tested according to certain methods.

[Source. GB/T 38308-2019, 2.6]

3.4 forecast skill

A comparison of the forecast accuracy of one forecasting method relative to another.

Note 1. Used to compare the relative quality of two forecast methods.

Note 2. The actual forecast accuracy is usually compared with the forecast accuracy of the climate persistence forecast method. If the former is higher than the latter, it is called "positive skill".

The former is equal to or lower than the latter and is called "zero skill" or "negative skill".

4.1 Precipitation forecast verification

Precipitation forecast verification is a test for precipitation forecast, including graded precipitation verification, cumulative precipitation verification and sunny/rainy (snowy) verification.

chinastandards.org · PREVIEW