

ICS 07.060
CCS A 47



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

GB/T 20480-2025

Replacing GB/T 20480-2017

Classification of sand and dust weather

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Issued on: May 30, 2025

Implemented on: December 1, 2025

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

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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.

This document replaces GB/T 20480-2017 "Sand and Dust Weather Grades". Compared with GB/T 20480-2017, except for structural adjustments and editing In addition to the changes in performance, the main technical changes are as follows.

a) Change the terms "weather process" and "visibility" to "dust weather process" and "horizontal visibility" (see 3.2 and 3.3, 2017 edition).

2.2, 2.3), the terms "National Basic Meteorological Station" and "National Reference Climate Station" were deleted (see 2.5 and 2.6 of the 2017 edition);

b) The "single-station dust level" was changed to "single-location dust weather level", and the horizontal visibility index requirements in the level classification were changed (see Chapter 4, Chapter 3 in the 2017 edition).

c) Change "Regional dust weather level" to "Dust weather process level" (see Chapter 5, Chapter 4 of the 2017 edition), change The classification basis and levels were revised (see 5.1, 4.1 of the 2017 edition); "regional dust weather" was deleted (see 4.2.1 of the 2017 edition).

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 China Meteorological Disaster Prevention and Mitigation Standardization Technical Committee (SAC/TC345).

This document was drafted by: National Meteorological Center, National Climate Center, Forestry and Grassland Survey and Planning Institute of the State Forestry and Grassland Administration, China Meteorological Administration, National Forestry and Grassland Administration (National Park Administration).

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2006 as GB/T 20480-2006, first revised in 2017;
- This is the second revision. Dust weather level

1 Scope

This document stipulates the sandstorm weather levels at single locations and the sandstorm weather process levels.

This document is applicable to the monitoring, forecasting, warning, assessment, services and scientific research of sandstorm weather.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 sand and dust weather

A weather phenomenon in which sand and dust are suspended in the air, reducing atmospheric visibility.

3.2

The entire process of the emergence, evolution and disappearance of sandstorm weather is affected by the same weather system.

3.3 Horizontal visibility

A person with normal vision can see and identify a near-ground target (black, of appropriate size) against the sky background under the prevailing weather conditions.

At night, it refers to the maximum horizontal distance at which a light source of medium intensity can be seen and identified.

Note. The minimum brightness contrast (contrast threshold) that a person with normal vision can perceive is 0.05.

[Source. GB/T 33673-2017, 2.1]

3.4 Wind force

The intensity of wind is often expressed in wind scale in meteorology, and the Beaufort scale is often used internationally.

[Source. GB/T 28591-2012, 2.2]

4.1 Classification basis and levels

The level of sandstorm weather in a single area is mainly divided according to the horizontal visibility when the sandstorm weather occurs, and the wind speed is also taken into consideration.

Single-location sandstorm weather with visibility less than 10km is divided into five levels. floating dust, blowing sand, sandstorm, strong sandstorm, and extremely strong sandstorm.

4.2.1 Dust

There is no wind or the wind force is less than or equal to level 3. Sand and dust on the ground are suspended in the air, making the air turbid. The horizontal visibility is greater than or equal to