

ICS 07.060
CCS A 47



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

GB/T 45842-2025

Scale of short-duration heavy rain

短时强降水等级

Issued on: August 1, 2025

Implemented on: November 1, 2025

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

Table of Contents

Preface	III
Introduction	IV
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Classification of short-term heavy rainfall levels	1
Reference	3

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 the National Meteorological Center, the 63921 Unit of the People's Liberation Army of China, and the 61540 Unit of the People's Liberation Army of China.

The main drafters of this document are: Wang Liping, Xu Youfu, Jiang Mingbo, Wang Weiguo, Wang Zhu, Lian Zhihua, Liu Lu, Wang Fan, Sheng Jie, Wang Yunzhe, Liu Shuxian.

Introduction

Short-term heavy rainfall is sudden and short-lived, with wide distribution points and great regional differences, often causing farmland flooding, urban and rural waterlogging, and even inducing Disasters such as mountain torrents, landslides, and mud-rock flows have had a serious impact on economic development and people's lives, property, and safety.

This document has been formulated to standardize the monitoring, forecasting, assessment and services of short-term heavy rainfall in China and to meet the needs of departments at all levels.

Short-term heavy rainfall level

1 Scope

This document stipulates the classification of short-term heavy rainfall levels.

This document applies to the monitoring, forecasting, assessment and services of short-term heavy rainfall.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 short-duration heavy rain

A weather phenomenon in which precipitation of 10 mm or more occurs in a relatively short period of time (within 6 hours).

4 Classification of short-term heavy rainfall levels

Based on the spatiotemporal distribution characteristics of short-term heavy rainfall, China's land and ocean are divided into three zones, with 1h, 3h, and 6h short-term heavy rainfall in each zone.

From weak to strong, it is divided into four levels. IV, III, II, and I, corresponding to the four levels of impact. "mild", "moderate", "severe", and "extremely severe" respectively. degree.

Table 1 specifies the levels of short-term heavy rainfall at the observation stations in the three districts.

Table 1 Classification of short-term heavy rainfall levels Unit is millimeter

Regional level	impact	Precipitation during this period	1h	3h	6h	District 1	Grade IV. Mild.	10.0-19.9,
								20.0-29.9, 30.0-39.9
								Grade III. moderate. 20.0-29.9, 30.0-39.9, 40.0-49.9
								Grade II severe 30.0-39.9 40.0-49.9 50.0-59.9
								Grade I Extra Heavy ≥ 40.0 ≥ 50.0 ≥ 60.0
								District 2 Grade IV. Mild. 20.0-39.9, 40.0-59.9, 50.0-79.9
								Grade III moderate 40.0-59.9 60.0-79.9 80.0-99.9
								Grade II severe. 60.0-79.9, 80.0-99.9, 100.0-119.9
								Grade I Extra Heavy ≥ 80.0 ≥ 100.0 ≥ 120.0