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

**GB/T 44953-2024**

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**Technical specification for lightning disaster investigation**

雷电灾害调查技术规范

**Issued on: November 28, 2024**

**Implemented on: March 1, 2025**

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**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 is required.

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/TC 345).

This document was drafted by: Anhui Meteorological Disaster Prevention Technology Center, 31010 Troops of the Chinese People's Liberation Army, Hangzhou Tianhu Intelligent Technology Co., Ltd., National Meteorological Center, China Science and Technology Tianji Technology Co., Ltd., Nanjing Meteorological Science and Technology Innovation Research Institute, Anhui Huangshan Meteorological Management Bureau Management Office, Financial Accounting Center of Anhui Meteorological Bureau, Hebei Information Engineering School, Beijing Meteorological Detection Center, Anhui Normal University,

Anhui Hua Cloud Meteorological Disaster Risk Assessment Center, Anhui Shenghui Testing Co., Ltd.

The main drafters of this document are: Tao Yin, Li Li, Qiu Yangyang, Liu Yan, Zhang Tian, Xia Shenning, Li Gen, Tao Guoqing, Wang Xinlai, Liang Jingfeng, Zhang Jiayi, Zhuang Daoquan, Sun Peng, Zou Junbin, Wang Yunzhe, Li Jingxiao, Dai Canxing, Wu Yicheng, Zhu Hao, Zhang Hui, Zhang Yongqin, Zhang Jie, Shi Yueling, Gao Panliang, Wang Liqing, Guan Xiangshi.

Technical Specifications for Lightning Disaster Investigation

## 1 Scope

This document establishes the investigation process of lightning disasters, stipulates the investigation content, analysis and appraisal, and preparation of investigation reports of lightning disasters.

The corresponding verification method is described.

This document is applicable to lightning disaster investigation work.

## 2 Normative references

GB/T 13870.4-2017

GB/T 16840.2-2021

GB/T 16840.4-2021

## 3 Terms and definitions

The following terms and definitions apply to this document.

### 3.1 lightning disaster

Damage caused by lightning strikes to living organisms, buildings (structures), electrical and electronic systems, etc.

### 3.2 Lightning disaster investigation

The process of on-site investigation and evidence collection, data collection, technical identification and analysis, evaluation and conclusion drawing of lightning disasters.

### 3.3 residual magnetism

The magnetism retained by a ferromagnetic material after it is magnetized by the magnetic field formed by a short-circuit current in a wire or a lightning current.

[Source. GB/T 16840.2-2021, 3.1]

### **3.4 Lightning location system; LLS**

Lightning Location System By detecting the electromagnetic radiation signals generated during lightning discharge, a variety of lightning location technologies and methods are used to determine the occurrence of lightning.

A system that measures multiple lightning parameters such as time, location, polarity, etc.

Note. It consists of multiple lightning sensors (also known as substations) located in different geographical locations, a data processing and system monitoring center (also known as a central station), product output and display system and supporting communication facilities.

[Source. GB/T 40619-2021, 3.2]

## **4 Investigation Process**

4.1 The lightning disaster investigation process should be carried out as shown in Figure 1.