

简报

## 辽宁省雷暴日数的时空变化特征

孙丽<sup>1</sup>, 于淑琴<sup>2</sup>, 李岚<sup>1</sup>, 唐亚平<sup>1</sup>, 刘晓娜<sup>3</sup>, 息涛<sup>1</sup>

1. 辽宁省气象科技服务中心, 辽宁 沈阳110016; 2. 淄博市临淄区气象局, 山东 淄博 255400; 3. 辽宁省气象培训中心, 辽宁 沈阳110016

收稿日期 2009-10-22 修回日期 2009-11-10 网络版发布日期 2010-2-28 接受日期 2009-11-10

**摘要** 利用1978—2007年辽宁59个站常规地面观测资料, 对雷暴日数的时空变化进行分析。结果表明: 辽宁省年平均雷暴日数为28.1 d, 在空间分布上呈现从东、西部山区向中部丘陵、平原及沿海地区逐渐递减的特征。1978—2007年雷暴日数总体呈逐渐下降趋势, 平均每10 a下降1.2 d; 并且有明显的季、月变化, 夏季最多, 秋季次之, 冬季几乎没有发生; 3—5月迅速增多, 6—8月变化趋于平稳, 9—12月迅速减少。雷暴在14—20时发生频率最高, 20—02时次之, 02—08时最少。雷暴初终日数平均为175.8 d, 最长为295 d, 最短为102 d。雷暴初日4月最多, 5月次之, 3月最少。雷暴终日10月最多, 9月次之, 12月最少。并呈开始早, 结束晚的趋势。

**关键词** [雷暴日数](#) [时空分布](#) [气候特征](#)

**分类号** [P446](#)

## Temporal and spatial distribution characteristics of thunderstorm days in Liaoning province

SUN Li<sup>1</sup>, YU Shu-qin<sup>2</sup>, LI Lan<sup>1</sup>, TANG Ya-ping<sup>1</sup>, LIU Xiao-na<sup>3</sup>, XI Tao<sup>1</sup>

1. Service Center of Meteorological Science and Technology in Liaoning Province, Shenyang 110016, China; 2. Meteorological Bureau in Linzi District of Zibo, Zibo 255400, China; 3. Meteorological Training Center in Liaoning Province, Shenyang 110016, China

**Abstract** Based on the observation data from 59 meteorological stations in Liaoning province from 1978 to 2007, the temporal and spatial distribution characteristics of thunderstorm days were analyzed. The results indicate that average value of annual thunderstorm days is 28.1 d in Liaoning province. The number of thunderstorm days decreases with 1.2 d/ 10a during recent 30 years from the eastern and western mountain areas to middle hills, plains and coastal areas, and there are obvious seasonal and monthly changes. Thunderstorm days often occur in summer, followed in autumn, yet no in winter. Thunderstorm days increase rapidly from March to May and are stable from June to August, and then decrease speedily from September to December. The highest frequency of thunderstorm is usually from 14:00 to 20:00, followed from 20:00 to 02:00, and the lowest from 02:00 to 08:00. Average duration of annual thunderstorm days is about 175.8 d, and the longest and the shortest are 295 d and 102 d, respectively. The first day of thunderstorm days often appears in April, followed in May and March. The last day of thunderstorm days usually occurs in October, followed in September and December. In generally, the first day of thunderstorm days is ahead and the last day is delayed during recent 30 years.

**Key words** [Number of thunderstorm days](#) [Temporal and spatial distribution](#) [Climatic characteristics](#)

DOI:

通讯作者

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(714KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

#### 服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

#### 相关信息

- ▶ [本刊中 包含“雷暴日数” 的相关文章](#)
- ▶ [本文作者相关文章](#)

- [孙丽](#)
- [于淑琴](#)
- [李岚](#)
- [唐亚平](#)
- [刘晓娜](#)
- [息涛](#)