

目次

·2023年广西极端降水·(栏目主编:刘国忠)

2023年广西暴雨强度极端性分析 刘国忠, 覃卫坚, 董良森, 陈业国, 李生艳, 梁存桂, 梁嘉颖(1)
近60年广西夜间降水与暴雨频次的时空特征分析 李秀昌, 黄 维, 黄小燕, 韦春霞, 吴玉霜(7)
台风“海葵”残涡长久维持及引发广西极端强降水成因分析
..... 林确略, 杨延志, 黄小燕, 张容菁, 陈明璐(14)
台风“三巴”期间多种降水融合实况产品适用性评估 李叶晴, 任晓炜, 邓 悦(23)
台风“三巴”(2316)特大暴雨成因及预报偏差分析 张容菁, 韦 荣, 李秀昌, 黄小燕, 林确略(29)
桂北地区前汛期两次极端强降水成因对比分析
..... 潘仕球, 唐小琴, 唐 熠, 欧阳荣谦, 阳 薇, 李向红(36)
桂林“5·22”大暴雨的 MCS 特征及对短时强降雨的影响
..... 胡 静, 薛玉龙, 胡 维, 王艳兰, 刘 锋, 阳 薇, 李向红, 侯 进(44)
“8·24”百色特大暴雨过程成因和预报难点分析 卢小丹, 岑妍妍, 黄开刚, 刘国忠(52)
“23·6”北海极端暴雨特征与成因分析 彭定宇, 刘国忠, 何启玄(59)
陆川县台风“三巴”强降雨过程气象服务复盘分析 刘文钊(64)

·综述·

我国极端降水时空分布及大气环流背景研究进展 张 辛, 张凌云(70)

·研究论文·

冬季北大西洋涛动对青藏高原水汽输送的影响 谢晨旭(78)
2022年广西两次低温雨雪冰冻过程分析 李生艳, 梁嘉颖, 覃皓, 董雪晗, 黄 晴, 刘国忠(85)
贺州市一次低温雨雪冰冻天气成因及预报效果分析 欧阳家萌, 韦小雪, 廖志朗, 黄远盼(91)
2021年3月广西一次罕见浮尘天气成因分析 王义耕, 麦博儒, 和凌红, 陈 丹, 刘晓梅, 姚胜芳(96)
1971—2020年广西喀斯特地区高温灾害时空变化特征 谢 映, 陈燕丽, 陈耀飞, 苏相琴(102)
基于自动站资料的梧州市短时强降水时空特征分析 孙靖雯, 王建东, 卢伟萍, 谭胜寒, 宁晨阳(108)
柳城中回山云海的影响天气系统特征及其气象条件分析 林依雪, 陆 霞, 张凌云(114)
基于关键气象因子的茂名市早稻产量预报模型
..... 李剑金, 梁 冰, 陈 冰, 黄 浩, 王洁远, 何泽华, 陈蔚烨(121)
基于GIS的梧州菜瓜主要生育期气候适宜度区划 叶 瑜, 徐 芳, 蒋 遇, 卢建壮(126)
崇左市澳洲坚果种植气候适宜性区划研究 范 路, 覃艺舒, 刘 芳(132)
X波段双极化相控阵天气雷达防雷工程实践 陈景荣, 李文飞, 戴春容, 钟雨珊, 曹虎文(137)

Journal of Meteorological Research and Application

Vol.44 No.4 December 2023

Contents

•Extreme Precipitation in Guangxi in 2023• (Editor-in-Chief of Column:LIU Guozhong)

- Analysis on the intensity of extreme rainstorm in Guangxi in 2023
..... LIU Guozhong, QIN Weijian, DONG Liangmiao, CHEN Yeguo, LI Shengyan, LIANG Cungui, LIANG Jiaying(1)
- Analysis of the spatiotemporal characteristics of nighttime precipitation and heavy rainfall frequency in Guangxi over the past 60 years LI Xiuchang, HUANG Wei, HUANG Xiaoyan, WEI Chunxia, WU Yushuang(7)
- Analysis of the causes of an extreme rainfall event in Guangxi induced by the long-lasting maintenance of the residual vortex of typhoon "HaiKui" LIN Quelue, YANG Yanzhi, HUANG Xiaoyan, ZHANG Rongjing, CHEN Minglu(14)
- Evaluation of the applicability of various Merged Precipitation Product during Typhoon "Sanba"
..... LI Yeqing, REN Xiaowei, DENG Yue(23)
- Analysis of causes and forecast deviations of severe rainfall caused by Typhoon "Sanba" (2316)
..... ZHANG Rongjing, WEI Rong, LI Xiuchang, HUANG Xiaoyan, LIN Quelue(29)
- Comparative analysis of the causes of two extreme heavy rainfalls during the previous flood season in northern Guangxi
..... PAN Shiqiu, TANG Xiaoqin, TANG Yi, OUYANG Rongqian, YANG Wei, LI Xianghong(36)
- Characteristics of mesoscale convective system in Guilin during the "5·22" rainstorm process and its effects on short-time heavy rainfall HU Jing, XUE Yulong, HU Wei, WANG Yanlan, LIU Feng, YANG Wei, LI Xianghong, HOU Jin(44)
- Analysis on the causes and forecasting difficulties of the "8·24" extreme rainfall event in Baise
..... LU Xiaodan, CEN Yanyan, HUANG Kaigang, LIU Guozhong(52)
- Analysis of characteristics and causes of the "23·6" extreme rainstorm in Beihai
..... PENG Dingyu, LIU Guozhong, HE Qixuan(59)
- Review and analysis of meteorological services during the heavy rainfall process of Typhoon "Sanba" in Luchuan County
..... LIU Wenzhao(64)

•Review Paper•

- Progress in the study of spatio-temporal distribution of extreme precipitation and its atmospheric circulation background in China ZHANG Xin, ZHANG Lingyun(70)

•Research Paper•

- Effect of North Atlantic Oscillation on water vapor transport over the Tibetan Plateau in winter XIE Chenxu(78)
- Analysis of two low temperature rain and snow freezing processes in Guangxi in 2022
..... LI Shengyan, LIANG Jiaying, QIN Hao, DONG Xuehan, HUANG Qing, LIU Guozhong(85)
- Analysis of the causes and forecasting effects of a low temperature rain and snow freezing weather in Hezhou City
..... OUYANG Jiameng, WEI Xiaoxue, LIAO Zhilang, HUANG Yuanpan(91)
- Analysis of the causes of a rare floating dust weather in Guangxi in March 2021
..... WANG Yigeng, MAI Boru, HE Linghong, CHEN Dan, LIU Xiaomei, YAO Shengfang(96)
- Spatio-temporal variation of high temperature disasters in karst area of Guangxi from 1971 to 2020
..... XIE Ying, CHEN Yanli, CHEN Yaofei, SU Xiangqin(102)
- Analysis of the spatial and temporal distribution characteristics of short-term heavy precipitation in Wuzhou City based on automatic station data SUN Jingwen, WANG Jiandong, LU Weiping, TAN Shenghan, NING Chenyang(108)
- Analysis of weather system characteristics and meteorological conditions of cloud sea of Zhonghui Mountain in Liucheng County LIN Yixue, LU Xia, ZHANG Lingyun(114)
- Forecast model of early rice yield in Maoming based on key meteorological factors
..... LI Jianjin, LIANG Bing, CHEN Bing, HUANG Hao, WANG Jiieyuan, HE Zehua, CHEN Weiye(121)
- Climate suitability regionalization for the main growth stages of Cucumis Melo Subsp in Wuzhou based on GIS
..... YE Yu, XU Fang, JIANG Yu, LU Jianzhuang(126)
- Regionalization of climate suitability for Macadamia Nut planting in Chongzuo City FAN Lu, QIN Yishu, LIU Fang(132)
- Lightning protection engineering practice of X-band dual-polarization phased array weather radar
..... CHEN Jingrong, LI Wenfei, DAI Chunrong, ZHONG Yushan, CAO Huwen(137)

《气象研究与应用》第十二届编审委员会

顾问委员：杨 崧 金 龙 姚 才 李耀先 林开平

主任委员：全文杰

副主任委员：陆 虹 廖雪萍(常务) 黄小燕

特邀编委：翟盘茂 周 兵 秦董洪 胡宝清 蒙伟光 徐 峰 杜尧东 黄 鹄
陈 生 李开祥 陈 蓓

常务编委：

匡昭敏 农孟松 刘国忠 黄明策 郑凤琴 何洁琳 肖志祥 莫伟华
陈燕丽 黄嘉宏 罗建英 陈伟斌

编 委：

赵金彪 曾小团 梁维亮 林振敏 董良森 李 雄 何 慧 覃卫坚
雍阳阳 谭宗琨 何 燕 钟仕全 丁美花 任晓炜 李艳萍 李宇中
周绍毅 黄 莉 张凌云 李向红

编辑部主任：廖雪萍

编辑部副主任：罗桂湘

气象研究与应用

QIXIANG YANJIU YU YINGYONG

(季刊 1956年创刊)

第44卷 第4期(总第230期)

2023年12月15日出版

Journal of Meteorological

Research and Application

(Quarterly, Started in 1956)

Vol.44 No.4 (General Number 230)

December 15, 2023

主管单位：广西壮族自治区气象局

主办单位：广西气象学会

技术支持：

中山大学环境科学与工程学院
广西大学资源与环境学院
北部湾大学

主 编：廖雪萍

副 主 编：陆虹 黄小燕

编 辑：《气象研究与应用》编辑部

地 址：南宁市新竹路30号

电 话：0771-5848935, 5846956

http://qxjyxy.paperopen.com

E-mail: qxjyxy@163.com

出 版：科学出版社

(北京东黄城根北街16号)

国内发行：科学出版社

国外发行：国际图书贸易集团有限公司

(北京市海淀区车公庄西路35号)

印 刷：广西瑞丰印务有限公司

Competent Unit: Guangxi Meteorological Service

Sponsor Unit: Guangxi Meteorological Society

Technical support:

School of Environmental Science and Engineering, Sun Yat-sen University
School of Resources and Environment, Guangxi University
Beibu Gulf University

Chief Editor: Liao Xueping

Associate editors: Lu Hong, Huang Xiaoyan

Editor: Editorial Department of Journal of Meteorological Research and Application

Address: 30 XinZhu Road, Nanning

Tel: 0771-5848935, 5846956

Publishing: Science Press

(16 East Huangchenggen North Street, Beijing)

Domestic Distribution: Science Press

Foreign Distribution: International Book Trading Group Co., Ltd.

(35 West Chegongzhuang Road, Haidian District, Beijing)

Printing: Guangxi Ruifeng Printing Co., Ltd.

中国标准连续出版物号：ISSN 1673-8411
CN45-1356/P

定价：30.00元