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CONTENTS

Special Collection on the July 2021 Zhengzhou, Henan Extreme Rainfall Event

EDITORIAL NOTES

Preface to the Special Collection on the July 2021 Zhengzhou, Henan Extreme Rainfall Event Ming XUE

ORIGINAL PAPERS

- 337 On the Key Dynamical Processes Supporting the 21.7 Zhengzhou Record-breaking Hourly Rainfall in China
 - Peng WEI, Xin XU, Ming XUE, Chenyue ZHANG, Yuan WANG, Kun ZHAO, Ang ZHOU, Shushi ZHANG, and Kefeng ZHU
- 350 The Roles of Low-level Jets in "21·7" Henan Extremely Persistent Heavy Rainfall Event Yuhan LUO and Yu DU
- 374 Analysis on Precipitation Efficiency of the "21.7" Henan Extremely Heavy Rainfall Event Lei YIN, Fan PING, Jiahua MAO, and Shuanggen JIN
- 393 On the Influences of Urbanization on the Extreme Rainfall over Zhengzhou on 20 July 2021: A Convection-Permitting Ensemble Modeling Study
 Yali LUO, Jiahua ZHANG, Miao YU, Xudong LIANG, Rudi XIA, Yanyu GAO, Xiaoyu GAO, and Jinfang YIN
- Seasonal Prediction of the Record-Breaking Northward Shift of the Western Pacific Subtropical High in July 2021
 - Shuai HU, Tianjun ZHOU, Bo WU, and Xiaolong CHEN
- 428 Synergistic Effect of the Planetary-scale Disturbance, Typhoon and Meso-β-scale Convective Vortex on the Extremely Intense Rainstorm on 20 July 2021 in Zhengzhou Guanshun ZHANG, Jiangyu MAO, Wei HUA, Xiaofei WU, Ruizao SUN, Ziyu YAN, Yimin LIU, and Guoxiong WU

Regular Articles

NEWS & VIEWS

447 Historic and Future Perspectives of Storm and Cyclone
Gang FU, Pengyuan LI, Lijia CHEN, Yongmao PENG, and Jing NI

ORIGINAL PAPERS

- 464 Effects of a Dry-Mass Conserving Dynamical Core on the Simulation of Tropical Cyclones
 Shaoying LI, Jun PENG, Weimin ZHANG, Jianping WU, Qiang YAO, Xiangrong YANG, and Tengling LUO
- The Regularized WSM6 Microphysical Scheme and Its Validation in WRF 4D-Var Sen YANG, Deqin LI, Liqiang CHEN, Zhiquan LIU, Xiang-Yu HUANG, and Xiao PAN
- 501 Impact of Perturbation Schemes on the Ensemble Prediction in a Coupled Lorenz Model Qian ZOU, Quanjia ZHONG, Jiangyu MAO, Ruiqiang DING, Deyu LU, Jianping LI, and Xuan LI
- 514 Response of the North Pacific Storm Track Activity in the Cold Season to Multi-scale Oceanic Variations of Kuroshio Extension System: A Statistical Assessment Peilong YU, Minghao YANG, Chao ZHANG, Yi LI, Lifeng ZHANG, and Shiyao CHEN
- 531 Extended Impact of Cold Air Invasions in East Asia in Response to a Warm South China Sea and Philippine Sea
 - Marco Y.-T. LEUNG, Dongxiao WANG, Wen ZHOU, and Yuntao JIAN

On the cover

Towards the goal of understanding the dynamic, thermodynamic, microphysical, and land surface and boundary layer processes and conditions leading to the July 2021 Zhengzhou, Henan Extreme Rainfall Event, and to understand the large-scale influence and control on the regional processes, a special collection of six articles that investigate some of the above questions are published in this issue.

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