

CONTENTS

ORIGINAL PAPERS

- 355 **Seasonal Prediction of Summer Precipitation over East Africa Using NUIST-CFS1.0**
Temesgen Gebremariam ASFAW and Jing-Jia LUO
- 373 **Another Record: Ocean Warming Continues through 2021 despite La Niña Conditions**
Lijing CHENG, John ABRAHAM, Kevin E. TRENBERTH, John FASULLO, Tim BOYER, Michael E. MANN, Jiang ZHU, Fan WANG, Ricardo LOCARNINI, Yuanlong LI, Bin ZHANG, Zhetao TAN, Fujiang YU, Liying WAN, Xingrong CHEN, Xiangzhou SONG, Yulong LIU, Franco RESEGHETTI, Simona SIMONCELLI, Viktor GOURETSKI, Gengxin CHEN, Alexey MISHONOV, and Jim REAGAN
- 386 **A New X-band Weather Radar System with Distributed Phased-Array Front-ends: Development and Preliminary Observation Results**
Xiaoqiong ZHEN, Shuqing MA, Hongbin CHEN, Guorong WANG, Xiaoping XU, and Siteng LI
- 403 **A New Index Developed for Fast Diagnosis of Meteorological Roles in Ground-Level Ozone Variations**
Weihua CHEN, Weiwen WANG, Shiguo JIA, Jingying MAO, Fenghua YAN, Lianming ZHENG, Yongkang WU, Xingteng ZHANG, Yutong DONG, Lingbin KONG, Buqing ZHONG, Ming CHANG, Min SHAO, and Xuemei WANG
- 415 **Hydro-climatic Characteristics of Yarlung Zangbo River Basin since the Last Glacial Maximum**
Shuang LIU, Kaiheng HU, Weiming LIU, and Paul A. CARLING
- 427 **Diagnosing SST Error Growth during ENSO Developing Phase in the BCC_CSM1.1(m) Prediction System**
Ben TIAN and Hong-Li REN
- 443 **The Weakening Relationship between ENSO and the South China Sea Summer Monsoon Onset in Recent Decades**
Peng HU, Wen CHEN, Shangfeng CHEN, Lin WANG, and Yuyun LIU
- 456 **Detection and Attribution of Changes in Thermal Discomfort over China during 1961–2014 and Future Projections**
Wanling LI, Xin HAO, Li WANG, Yuqing LI, Jiandong LI, Huixin LI, and Tingting HAN
- 471 **One-Dimensional Variational Retrieval of Temperature and Humidity Profiles from the FY4A GIIRS**
Qiumeng XUE, Li GUAN, and Xiaoning SHI
- 487 **An Adaptive Nonhydrostatic Atmospheric Dynamical Core Using a Multi-Moment Constrained Finite Volume Method**
Pei HUANG, Chungang CHEN, Xingliang LI, Xueshun SHEN, and Feng XIAO
- 502 **The Linkage between Midwinter Suppression of the North Pacific Storm Track and Atmospheric Circulation Features in the Northern Hemisphere**
Minghao YANG, Chongyin LI, Xin LI, Xiong CHEN, and Lifeng LI

NOTES & LETTERS

- 519 **Observations of Dynamic Turbulence in the Lower Stratosphere over Inner Mongolia Using a High-resolution Balloon Sensor Constant Temperature Anemometer**
Xiaoyu REN, Yi LIU, Zhaonan CAI, and Yuli ZHANG
- 529 **A New Method of Significance Testing for Correlation-Coefficient Fields and Its Application**
Xiaojuan SUN, Siyan LI, Julian X. L. WANG, Panxing WANG, and Dong GUO

MEETING SUMMARY

- 536 **The 16th Workshop on Antarctic Meteorology and Climate and 6th Year of Polar Prediction in the Southern Hemisphere Meeting**
David H. BROMWICH, Matthew A. LAZZARA, Arthur M. CAYETTE, Jordan G. POWERS, Kirstin WERNER, John J. CASSANO, Steven R. COLWELL, Scott CARPENTIER, and Xun ZOU

On the cover

Precipitation patterns in East Africa are becoming more variable because of climate change. East Africa is particularly vulnerable to precipitation variability, not only because it has the most spectacular mass game migrations in the world, but also because rainfed agriculture and pastoralism provides a livelihood to much of the population. In their paper (beginning on Page 355), scientists use the Nanjing University of Information Science and Technology Climate Forecast System version 1.0 (NUIST-CFS1.0) to improve prediction skill and overall model capabilities, and supplement summer seasonal precipitation forecasts throughout East Africa.