

大 气 科 学

DAQI KEXUE

(双月刊)

2018年5月15日 第42卷 第3期

目 次

前言.....	(447)
浪花和飞沫水滴在海面大风边界层中的垂直传输	曾庆存 程雪玲 吴琳 (448)
平流层大气动力学及其与对流层大气相互作用的研究：进展与问题	
.....	黄荣辉 陈文 魏科 王林 皇甫静亮 (463)
青藏高原感热气泵影响亚洲夏季风的机制	吴国雄 刘屹岷 何编 包庆 王子谦 (488)
热带太平洋—印度洋海温联合模及其气候影响	李崇银 黎鑫 杨辉 潘静 李刚 (505)
季风亚洲区域集成研究国际计划 (MAIRS) 10 年回顾	符淙斌 MANTON Michael (524)
论东亚夏季风的特征、驱动力与年代际变化	
.....	丁一汇 司东 柳艳菊 王遵娅 李怡 赵亮 宋亚芳 (533)
沙尘和生物气溶胶的环境和气候效应	石广玉 檀赛春 陈彬 (559)
季风与 ENSO 的选择性相互作用：年循环和春季预报障碍的影响	杨崧 邓开强 段晚锁 (570)
基于卫星降水和 WRF 预报降水的“6.18”门头沟泥石流事件的回报检验研究	
.....	何爽爽 汪君 王会军 (590)
大气污染资料同化与应用综述	朱江 唐晓 王自发 吴林 (607)
大气气溶胶的卫星遥感及其在气候和环境研究中的应用	陈洪滨 范学花 夏祥鳌 (621)
全球大气运动应遵循的拓扑定理	刘式达 (634)
不同类型 ENSO 对东亚季风的影响和机理研究进展 ...	陈文 丁硕毅 冯娟 陈尚锋 薛旭 周群 (640)
冬季大范围持续性极端低温事件与欧亚大陆大型斜脊斜槽系统研究进展	
.....	布和朝鲁 彭京备 谢作威 纪立人 (656)
粒子滤波同化在厄尔尼诺—南方涛动目标观测中的应用	段晚锁 封凡 侯美夷 (677)
RegCM4 模式对雄安及周边区域气候变化的集合预估	吴婕 高学杰 徐影 (696)
编后记	(706)

Chinese Journal of Atmospheric Sciences

(Bimonthly)

Vol. 42, No. 3, 15 May 2018

CONTENTS

Vertical Transport of Sea Spray and Spume Droplets in High-Wind Marine Atmospheric Boundary Layer	ZENG Qingcun, CHENG Xueling, and WU Lin (448)
Atmospheric Dynamics in the Stratosphere and Its Interaction with Tropospheric Processes: Progress and Problems	HUANG Ronghui, CHEN Wen, WEI Ke, WANG Lin, and HUANGFU Jingliang (463)
Review of the Impact of the Tibetan Plateau Sensible Heat Driven Air-Pump on the Asian Summer Monsoon	WU Guoxiong, LIU Yimin, HE Bian, BAO Qing, and WANG Ziqian (488)
Tropical Pacific–Indian Ocean Associated Mode and Its Climatic Impacts	LI Chongyin, LI Xin, YANG Hui, PAN Jing, and LI Gang (505)
Review of the Monsoon Asia Integrated Regional Study (MAIRS) Program over the Past 10 Years	FU Congbin and MANTON Michael (524)
On the Characteristics, Driving Forces and Inter-decadal Variability of the East Asian Summer Monsoon	DING Yihui, SI Dong, LIU Yanju, WANG Zunya, LI Yi, ZHAO Liang, and SONG Yafang (533)
Environmental and Climatic Effects of Mineral Dust and Bioaerosol	SHI Guangyu, TAN Saichun, and CHEN Bin (559)
Selective Interaction between Monsoon and ENSO: Effects of Annual Cycle and Spring Predictability Barrier	YANG Song, DENG Kaiqiang, and DUAN Wansuo (570)
Hindcast Study of “6.18” Mentougou Debris-Flow Event Based on Satellite Rainfall and WRF Forecasted Rainfall	HE Shuangshuang, WANG Jun, and WANG Huijun (590)
A Review of Air Quality Data Assimilation Methods and Their Application	ZHU Jiang, TANG Xiao, WANG Zifa, and WU Lin (607)
Review of Satellite Remote Sensing of Atmospheric Aerosols and Its Applications in Climate and Environment Studies	CHEN Hongbin, FAN Xuehua, and XIA Xiang’ao (621)
Global Atmospheric Motion Should Follow Topological Theorem	LIU Shida (634)
Progress in the Study of Impacts of Different Types of ENSO on the East Asian Monsoon and their Mechanisms	CHEN Wen, DING Shuoyi, FENG Juan, CHEN Shangfeng, XUE Xu, and ZHOU Qun (640)
Recent Progresses on the Studies of Wintertime Extensive and Persistent Extreme Cold Events in China and Large-scale Tilted Ridges and Troughs over the Eurasian Continent	BUEH Cholaw, PENG Jingbei, XIE Zuowei, and JI Liren (656)
Application of Particle Filter Assimilation in the Target Observation for El Niño–Southern Oscillation	DUAN Wansuo, FENG Fan, and HOU Meiyi (677)
Climate Change Projection over Xiong'an District and Its Adjacent Areas: An Ensemble of RegCM4 Simulations	WU Jie, GAO Xuejie, and XU Ying (696)