



ISSN 1000-0240

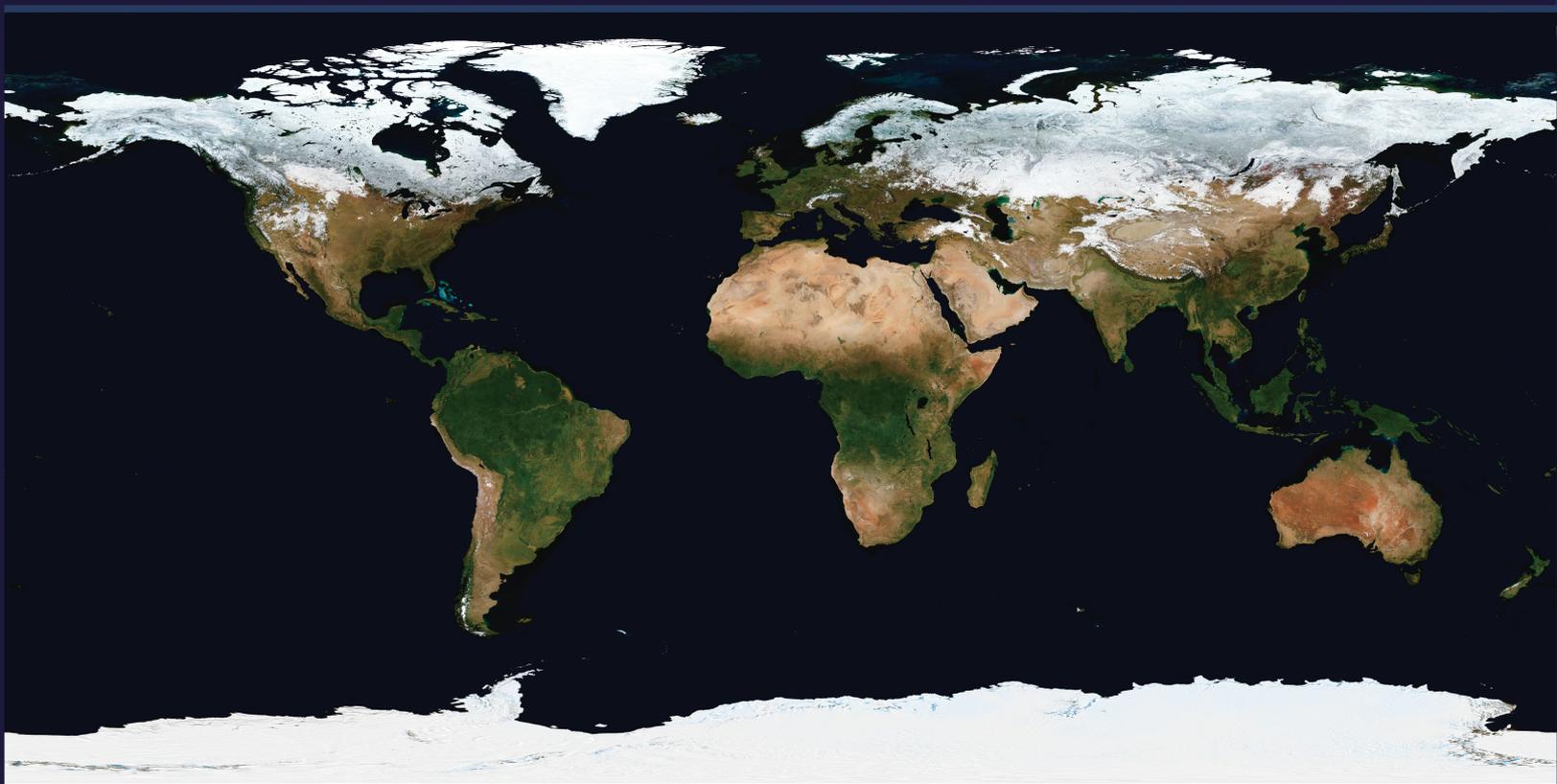
CN 62-1072/P

冰川冻土

Journal of Glaciology and Geocryology



第 41 卷 第 4 期 Volume 41 Issue 4 **2019**



主管：中国科学院

Authorities in Charge : Chinese Academy of Sciences

主办：中国科学院寒区旱区环境与工程研究所

Sponsored by : Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences

中国地理学会

The Geographical Society of China

出版：科学出版社

Published by : Science Press

冰 川 冻 土

(BINGCHUAN DONGTU)

第41卷第4期

2019年8月

目 次

冰冻圈与全球变化

- 0751 罗 伦, 朱立平, 王永杰, 杨 威, 旦 增, 张宏波
藏东南嘎隆拉冰川表碛冻融过程与零点幕效应
- 0761 曾兰华, 欧先交, 陈 嵘, 赖忠平
天山乌鲁木齐河源末次冰期冰川沉积光释光测年
- 0770 李志杰, 王宁练, 陈安安, 刘 凯
1993-2016年喀喇昆仑山什约克流域冰川变化遥感监测
- 0783 任 倩, 周长艳, 夏 阳, 岑思弦, 龙 园
青藏高原东部春季感热通量与我国东部气温的年际关系
- 0793 李登宣, 丁 煌, 王 清, 周 海, 王知嘉, 朱 想
青藏高原地面辐射对中国东部夏季降水影响的数值试验
- 0801 王利辉, 何晓波, 丁永建
青藏高原中部高寒草甸蒸散发特征及其影响因素
- 0809 刘义花, 鲁延荣, 周 强, 李红梅, 刘彩虹
1961-2017年青海高原降雪时空变化分析研究
- 0818 杨昭明, 白文蓉, 时兴合, 李红梅
黄河源区气温变化特征及预估分析
- 0828 崔 锦, 张爱忠, 阎 琦, 周晓珊, 王 恕, 杨 阳
2009-2017年辽宁省降雪含水比变化特征研究

- 0836 王秀琴, 卢新玉, 马 禹, 王 旭
基于灾情数据的新疆雪灾的评估与区划
- 0845 倪 杰, 吴通华, 赵 林, 李 韧, 谢昌卫, 吴晓东, 朱小凡, 杜宜臻, 杨 成, 郝君明
环北极多年冻土区碳循环研究进展与展望
- ### 寒区科学与技术
- 0858 程培峰, 王佳康
冻融循环对原状过湿土固结变形特性的影响
- 0865 施 瑞, 徐 震, 刘德仁, 蒋代军, 王 旭, 胡 渊, 温 智
多年冻土地基正温输气管道地温场实测及分析
- 0875 张彤炜, 邓永锋, 邓婷婷, 王 冲
盐分对黏性土的沉积特性与表面电位影响研究
- 0884 谢 涛, 尹前锋, 高 贺, 陈 芳, 慎乃齐, 林达明
基于激发条件和堆积体稳定性的冰川降雨型泥石流预警模型研究
- 0892 赵 飞, 吕建国
基于指标排序法冰川泥石流预警研究——以天山地区独库公路为例
- 0900 何永晴, 尹继鑫, 沈 洁, 王海娥, 冶明珠, 廖妍妮
西宁市短历时暴雨雨型及适用性分析
- ### 寒旱区水文水资源
- 0907 李洪源, 赵求东, 吴锦奎, 丁永建, 秦 甲, 韦 虹, 曾 帝
疏勒河上游径流组分及其变化特征定量模拟

- 0918 桂娟, 李宗省, 冯起, 张德栋,
吕越敏, 袁瑞丰
祁连山古浪河流域径流组分特征
- 0926 丑亚玲, 李永娥, 王莉杰, 曹伟,
盛煜
渭河流域西部季节冻融对浅层非饱和土壤
水热变化的影响
- 0937 张钧泳, 丁建丽, 谭娇, 陈文倩,
武鹏飞
1960—2013年艾比湖绿洲湿地潜在蒸散量
及地表湿润度变化特征分析
- 0945 郑箭珍, 李欢, 李景保, 王丹阳,
杨波, 张瑞
环境变化下荆南三口河系水文干旱演变特征
及归因分析
- 0958 刘燕, 刘友存, 焦克勤, 韩添丁,
边晓辉, 丁倩倩
1990年以来天山乌鲁木齐河上游水资源研究
进展

寒旱区生物学
- 0968 王凤, 王宁练, 徐柏青, 沈亮,

顾政权, 刘晓波
青藏高原唐古拉哈日钦冰芯表层和深层
可培养细菌特征
- 0977 张晓兰, 刘桂民, 李新星, 吴小丽,
徐海燕, 纪庚好, 李莉莎, 吴晓东
青藏高原北麓河地区荒漠草原土壤细菌对
热融滑塌的响应

生态经济与可持续发展
- 0986 王志成, 方功焕, 陈忠升, 蔡明,
李卫红
水资源约束下的阿克苏河流域适宜绿洲规模
分析
- 0993 李丽丽, 钟方雷, 程清平
黑河中游农村居民节水意识对节水行为的影
响路径——基于结构方程模型与计划行为理
论的研究
- 1005 杨延成, 阿里木江·卡斯木,
祖拜旦·阿克木, 买尔孜牙·吾买尔
干旱区绿洲灌溉条件下生态服务价值研究
——以新疆轮台县为例

CONTENTS

- 0760 **LUO Lun, ZHU Liping, WANG Yongjie, YANG Wei, Danzeng, ZHANG Hongbo**
The process of freezing and thawing and the zero curtain effect of debris-covered area of the Galongla Glacier in the southeastern Tibetan Plateau
- 0769 **ZENG Lanhua, OU Xianjiao, CHEN Rong, LAI Zhongping**
OSL dating on glacial sediments of the Last Glacial in headwater of Urumqi River, Tianshan Mountains
- 0782 **LI Zhijie, WANG Ninglian, CHEN An'an, LIU Kai**
Remote sensing monitoring of glacier changes in Shyok basin of the Karakoram Mountains, 1993 – 2016
- 0792 **REN Qian, ZHOU Changyan, XIA Yang, CEN Sixian, LONG Yuan**
Annual relationship between spring surface sensible heat flux over the East Qinghai-Tibet Plateau and air temperature in East China
- 0800 **LI Dengxuan, DING Huang, WANG Qing, ZHOU Hai, WANG Zhijia, ZHU Xiang**
Numerical experiment of the influence of ground radiation over the Qinghai-Tibet Plateau on summer precipitation in eastern China
- 0808 **WANG Lihui, HE Xiaobo, DING Yongjian**
Characteristics and influence factors of the evapotranspiration from alpine meadow in central Qinghai-Tibet Plateau
- 0817 **LIU Yihua, LU Yanrong, ZHOU Qiang, LI Hongmei, LIU Caihong**
Research on the spatiotemporal variation characteristics of snowfall in the Qinghai Plateau from 1961 to 2017
- 0827 **YANG Zhaoming, BAI Wenrong, SHI Xinghe, LI Hongmei**
Variation features and prediction of air temperature in the source regions of the Yellow River
- 0835 **CUI Jin, ZHANG Aizhong, YAN Qi, ZHOU Xiaoshan, WANG Shu, YANG Yang**
Variations of snow-to-liquid ratio in Liaoning Province from 2009 to 2017
- 0844 **WANG Xiuqin, LU Xinyu, MA Yu, WANG Xu**
Study on snow disaster assessment method and snow disaster regionalization in Xinjiang
- 0857 **NI Jie, WU Tonghua, ZHAO Lin, LI Ren, XIE Changwei, WU Xiaodong, ZHU Xiaofan, DU Yizhen, YANG Cheng, HAO Junming**
Carbon cycle in circum-Arctic permafrost regions: progress and prospects
- 0864 **CHENG Peifeng, WANG Jiakang**
Effect of freezing-thawing cycles on consolidation deformation characteristics of natural over-wet soil
- 0874 **SHI Rui, XU Zhen, LIU Deren, JIANG Daijun, WANG Xu, HU Yuan, WEN Zhi**
Measurement and analysis of the ground temperature field with positive temperature gas pipeline in permafrost regions
- 0883 **ZHANG Tongwei, DENG Yongfeng, DENG Tingting, WANG Chong**
The salinity effect on sedimentation behaviors and surface zeta potential of clay
- 0891 **XIE Tao, YIN Qianfeng, GAO He, CHEN Fang, SHEN Naiqi, LIN Daming**
Study on early warning model of glacial-rainfall debris flow based on excitation condition and stability of accumulation body
- 0899 **ZHAO Fei, LÜ Jianguo**
The early warning of glacier debris flow based on index sequencing method: Take Du-Ku highway in the Tianshan Mountains as an example
- 0906 **HE Yongqing, YIN Jixin, SHEN Jie, WANG Hai'e, YE Mingzhu, LIAO Yanni**
Analysis of short duration rainstorm type and its applicability in Xining City
- 0917 **LI Hongyuan, ZHAO Qiudong, WU Jinkui,**

- DING Yongjian, QIN Jia, WEI Hong, ZENG Di**
Quantitative simulation of the runoff components and its variation characteristics in the upstream of the Shule River
- 0925 **GUI Juan, LI Zongxing, FENG Qi, ZHANG Dedong, LÜ Yuemin, YUAN Ruifeng**
Characteristics of runoff components in the Gulang River basin of the Qilian Mountains
- 0936 **CHOU Yaling, LI Yong'e, WANG Lijie, CAO Wei, SHENG Yu**
Effects of seasonal freezing and thawing on the hydrothermal changes of the shallow unsaturated soil in the western Weihe River basin
- 0944 **ZHANG Junyong, DING Jianli, TAN Jiao, CHEN Wenqian, WU Pengfei**
Analysis on the variation characteristics of potential evapotranspiration and surface moisture in the Ebinur Lake Oasis Wetland from 1960 to 2013
- 0957 **ZHENG Yuzhen, LI Huan, LI Jingbao, WANG Danyang, YANG Bo, ZHANG Rui**
Evolution features of hydrologic drought of the three outlets of the southern Jing River and its attribution under changing environment
- 0967 **LIU Yan, LIU Youcun, JIAO Keqin, HAN Tianding, BIAN Xiaohui, DING Qianqian**
Advances on water resources research in upper reaches of the Urumqi River since 1990
- 0976 **WANG Feng, WANG Ninglian, XU Baiqing, SHEN Liang, GU Zhengquan, LIU Xiaobo**
Characteristics of the culturable bacteria in the surface and deep layers of the Tanggula Hariqin ice core, Tibetan Plateau
- 0985 **ZHANG Xiaolan, LIU Guimin, LI Xinxing, WU Xiaoli, XU Haiyan, JI Genghao, LI Lisha, WU Xiaodong**
The response of soil bacteria to thaw slump in a desert steppe in Beiluhe area, Qinghai-Tibet Plateau
- 0992 **WANG Zhicheng, FANG Gonghuan, Chen Zhongsheng, CAI Ming, LI Weihong**
Analysis on Suitable Scale of the Aksu Oasis Constrained by Limited Water Resources
- 1004 **LI Lili, ZHONG Fanglei, CHENG Qingping**
The influence path of water saving consciousness of rural residents on water saving behavior in the middle reaches of the Heihe River: Based on structural equation model and planned behavior theory
- 1014 **YANG Yancheng, Kasimu Alimujiang, Akmu Zubaidan, Wemaier Maierziya**
Study on ecosystem service value of oasis irrigation in arid area: taking Luntai County as an example