



Q K 2 1 0 6 8 9 7

遥感学报

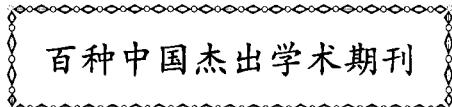
2021 | 03

Vol. 25

NATIONAL REMOTE SENSING BULLETIN

ISSN 1007-4619 CN11-3841 / TP CODEN YXAUAB





遥感学报

Yaogan Xuebao

第 25 卷 第 3 期 2021 年 3 月

目 次

研究进展

遥感大数据条件下多星一体化处理与分析 付琨, 孙显, 仇晓兰, 刁文辉, 闫志远, 黄丽佳, 于泓峰 (691)

无人机遥感

轻小型无人机测绘遥感系统研究进展 张继贤, 刘飞, 王坚 (708)

大兴安岭林区无人机可见光影像散发枯立木识别算法 俞天宇, 倪文俭, 刘见礼, 张志玉 (725)

无人机遥感与 XGBoost 的红树林物种分类 徐逸, 甄佳宁, 蒋侠朋, 王俊杰 (737)

技术方法

中分辨率成像光谱仪的海冰密集度遥感反演 史凯琦, 邹斌, 陈树果, 薛程, 石立坚, 张亭禄 (753)

超轻量网络的SAR图像舰船目标在轨提取 李宗凌, 汪路元, 蒋帅, 吴雨航, 张庆君 (765)

耦合 MOD16 和 SMAP 的微波土壤湿度降尺度研究 孙灏, 周柏池, 李欢, 阮琳 (776)

遥感影像时—空融合的“点”—“线”—“面”质量评价 雷晨阳, 孟祥超, 邵枫 (791)

FY-3C/VIRR 中红外图像太阳光污染订正 朱吉彪, 胡秀清, 杨磊库, 徐寒列, 徐娜, 张鹏 (803)

遥感应用

基于 Landsat 和 Sentinel-2 时间序列影像的海南西部橡胶林龙卷风灾情评估

..... 陈帮乾, 云挺, 安锋, 寇卫利, 李海亮, 罗红霞, 杨川, 王琴飞, 孙瑞, 吴志祥 (816)

长时序 Landsat 的北极 Lena 河 DOC 浓度变化及驱动力分析 吴铭, 黄珏, 宫丽娇, 江涛 (830)

本期责任编辑: 尤笛

《遥感学报》网络版: www.jors.cn

《遥感学报》微信公众号及官网



订阅号



官网

National Remote Sensing Bulletin

(Vol. 25 No.3 March, 2021)

CONTENTS

Research Progress

- Multi-satellite integrated processing and analysis method under remote sensing big data
..... FU Kun, SUN Xian, QIU Xiaolan, DIAO Wenhui, YAN Zhiyuan, HUANG Lijia, YU Hongfeng (706)

UAV Remote Sensing

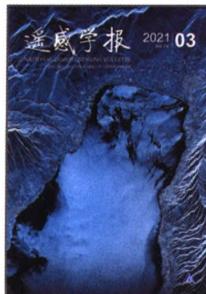
- Review of the light-weighted and small UAV system for aerial photography and remote sensing
..... ZHANG Jixian, LIU Fei, WANG Jian (723)
- Detection of scattered dead standing trees based on UAV visible images acquired in the Daxinganling Forest
..... YU Tianyu, NI Wenjian, LIU Jianli, ZHANG Zhiyu (736)
- Mangrove species classification with UAV-based remote sensing data and XGBoost
..... XU Yi, ZHEN Jianing, JIANG Xiapeng, WANG Junjie (751)

Technologies and Methodologies

- Remote sensing inversion of sea ice concentration by a middle-resolution imaging spectrometer
..... SHI Kaiqi, ZOU Bin, CHEN Shuoguo, XUE Cheng, SHI Lijian, ZHANG Tinglu (764)
- On orbit extraction method of ship target in SAR images based on ultra-lightweight network
..... LI Zongling, WANG Luyuan, JIANG Shuai, WU Yuhang, ZHANG Qingjun (774)
- A primary study on downscaling microwave soil moisture with MOD16 and SMAP
..... SUN Hao, ZHOU Baichi, LI huan, RUAN Lin (790)
- Spatio-temporal fusion quality evaluation based on “Point”–“Line”–“Plane” aspects
..... LEI Chenyang, MENG Xiangchao, SHAO Feng (802)
- Study on the correction of sunlight pollution in mid-infrared image of FY-3C/VIRR
..... ZHU Jibiao, HU Xiuqing, YANG Leiku, XU Hanlie, XU Na, ZHANG Peng (815)

Remote Sensing Applications

- Assessment of tornado disaster in rubber plantation in western Hainan using Landsat and Sentinel-2 time series images CHEN Bangqian, YUN Ting, AN Feng, KOU Weili, LI Hailiang, LUO Hongxia, YANG Chuan, WANG Qinfei, SUN Rui, WU Zhixiang (829)
- Analysis of DOC concentration variation and driving forces in the Arctic River Lena based on long-term Landsat time series WU Ming, HUANG Jue, GONG Lijiao, JIANG Tao (845)



封面说明

About the Cover

“海丝一号”卫星墨西哥查帕拉湖SAR遥感影像

HISEA-1 satellite SAR remote sensing image of Lake Chapala, Mexico

封面图片为“海丝一号”卫星(HISEA-1)于2020年12月29日获取的墨西哥哈利斯科州查帕拉湖西部及周边区域的合成孔径雷达(SAR)影像，展现了山地、湖泊、农田、城市等多种典型地貌特征，环湖公路、风浪和风条纹等清晰可见。“海丝一号”卫星由厦门大学、长沙天仪空间科技研究院有限公司(简称“天仪研究院”)和中国电子科技集团公司第三十八研究所(简称“中国电科38所”)等单位联合策划研制，是世界首颗面向海洋和海岸带观测的C波段轻小型(重量为185 kg)SAR卫星，具有聚束、滑动聚束、条带和扫描等多种SAR成像模式，最高分辨率可达1 m，最大幅宽可达100 km，并兼具星上SAR成像处理和AI目标识别等先进功能，将为全球变化背景下海洋动力环境参数的遥感反演、海洋灾害监测、洪水监测和地表形变分析等提供有力支持。

The cover image is a Synthetic Aperture Radar (SAR) image of the western and surrounding areas of Lake Chapala, Jalisco, Mexico, acquired by HISEA-1 satellite on Dec. 29, 2020, showing multiple typical features of mountain, lake, farmland and city, and the road around lake, wind waves and wind streaks are clearly visible. HISEA-1 is jointly planned and developed by Xiamen University Joint Center for Remote Sensing, Spacety Co. Ltd and China Electronics Technology group Corporation (CETC) 38th Research Institute, and it is the first C-band SAR miniature satellite (its weight is only 185 kg) for the observation of ocean and coastal area in the world. HISEA-1 has multiple imaging modes, such as spotlight SAR, sliding spotlight SAR, stripmap SAR and scan SAR. It has the highest resolution of 1 m and the max width of 100 km. Also it is equipped functions of the on-board SAR imaging and AI (Artificial Intelligence) target recognition. HISEA-1 will support remote sensing inversion of the marine dynamic environment parameters, marine disaster monitoring, flooding monitoring, land surface deformation analysis in the global warming background, and will further assist research on coastal and climate change with society's needs through early stakeholder engagement, community outreach and education, ultimately leading to informed decision making, mitigation of coastal climate change impacts, building more resilient communities, and protecting lives and livelihoods in the coastal areas.

遥感学报

NATIONAL REMOTE SENSING BULLETIN

YAOGAN XUEBAO (月刊 1997年创刊)

第25卷 第3期 2021年3月25日

(Monthly, Published since 1997)

Vol.25 No.3 March 25, 2021

主 管	中国科学院	Superintended	by	Chinese Academy of Sciences
主 办	中国科学院空天信息创新研究院	Sponsored	by	Aerospace Information Research Institute, Chinese Academy of Sciences
主 编	吴一戎	Editor in Chief		WU Yirong
编 辑	《遥感学报》编辑部 北京市海淀区北四环西路19号 邮编：100190 电话：86-10-58887052 http://www.jors.cn E-mail: nrsb@aircas.ac.cn	Edited	by	Editorial Office of National Remote Sensing Bulletin Add: P.O.Box 2702, Beijing 100190, China Tel: 86-10-58887052 http://www.jors.cn E-mail: nrsb@aircas.ac.cn
出 版	科学出版社	Published	by	Science Press
印 刷	北京科信印刷有限公司	Printed	by	Beijing Kexin Printing Co. Ltd.
总 发 行	科学出版社	Distributed	by	Science Press Add: 16 Donghuangchenggen North Street, Beijing 100717, China Tel: 86-10-64017032 Taobao:Zhongke Journal
国 外 发 行	中国国际图书贸易总公司 北京399信箱 邮政编码：100044 国外发行代号：BM 1002	Overseas distributed	by	China International Book Trading Corporation Add: P.O.Box 399, Beijing 100044, China

中国标准连续出版物号：ISSN 1007-4619
CN 11-3841/TP

CODEN YXAUAB

eISSN 2095-9494

定价：70.00元



官网



微站



淘宝



B 站

ISSN 1007-4619



0 3>