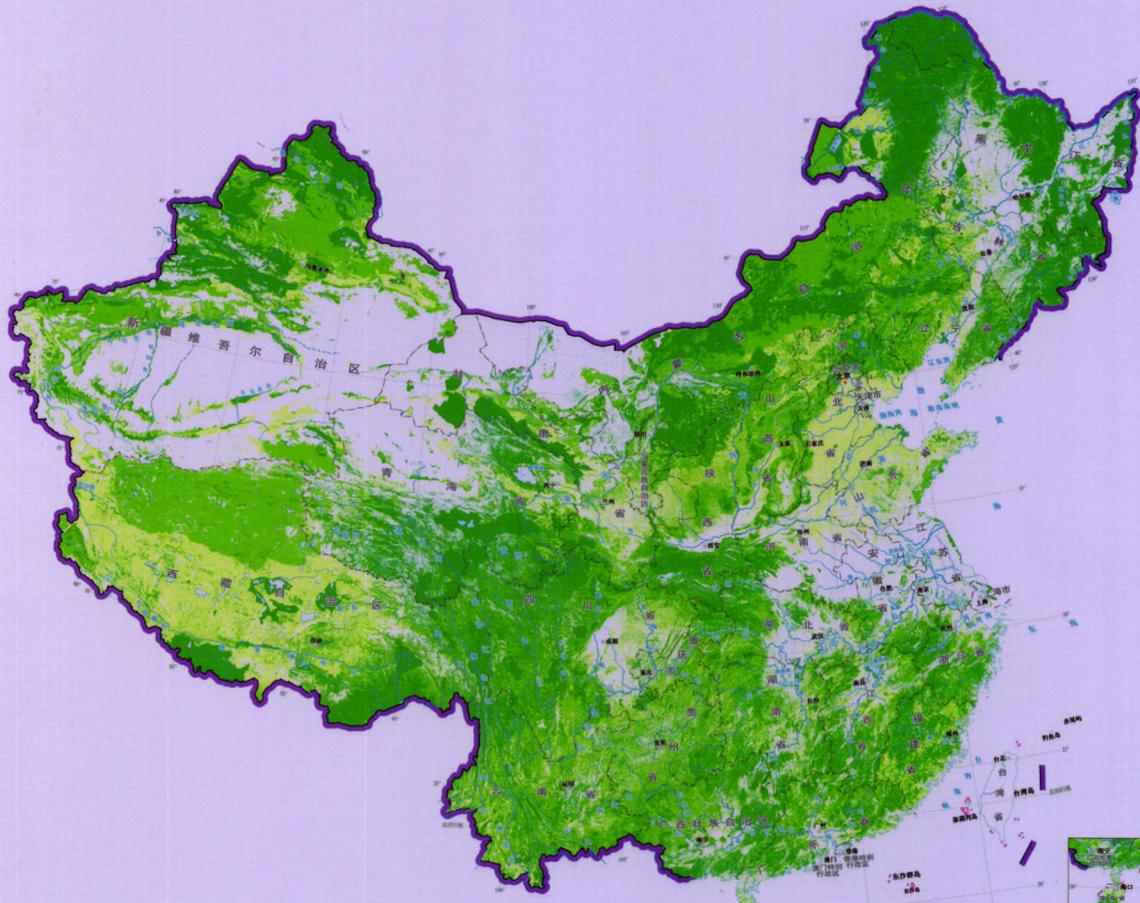
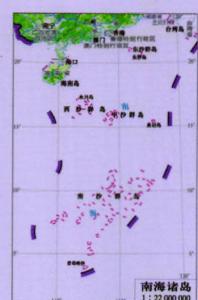


## 中国生态系统服务功能重要性空间分布



生态系统服务功能重要性

极重要	较重要	中等重要	一般
-----	-----	------	----





# 遥感学报

Yaogan Xuebao

第 20 卷 第 4 期 2016 年 7 月

## 目 次

### 大气遥感专栏

- 红外临边探测发展现状 ..... 王雅鹏, 李小英, 陈良富, 张莹, 邹铭敏, 张晗, 朱松岩 (513)  
结构函数法反演气溶胶光学厚度中像元的间隔设置 ..... 朱琳, 孙林, 杨磊, 徐菲菲, 徐青山 (528)  
合肥地区平流层气溶胶地基激光雷达与 SAGE 卫星探测比较 ..... 何文英, 凌超, 陈洪滨, 胡顺星 (540)  
沈阳地区 MODIS 与 MERSI 气溶胶产品对比研究 .....  
..... 张婕, 刘昊野, 辛金元, 张文煜, 肖国杰, 冯鑫媛, 王莉莉 (549)

### 基础理论

- 土壤水分及粗糙度对比辐射率的影响 ..... 田静, 米素娟, 何洪林, 张仁华, 马英, 董雪 (561)

### 技术方法

- 地基激光雷达的玉兰林冠层叶面积密度反演 ..... 王洪蜀, 李世华, 郭加伟, 梁祖琴 (570)  
结合投影变换和相位相关的海冰运动监测 ..... 胡迎迎, 郎文辉, 张盼, 杨学志 (579)  
利用地形正规化校正反立体现象 ..... 章皖秋, 岳彩荣, 袁华 (590)  
HJ-1B 热红外辐射定标对地表温度反演的影响 ..... 陈峰, 殷守敬, 朱利, 尹锴, 何报寅, 杨崧 (601)  
加入地物倾角分析的 LiDAR 回波强度校正 ..... 伊丕源, 满旺, 童鹏, 邱峻挺, 赵英俊, 张景发 (610)  
改进 HOT 法的 Landsat 8 OLI 遥感影像雾霾及薄云去除 ..... 姜侯, 吕宁, 姚凌 (620)

### 遥感应用

- 火星表面亮温的时空变化特征分析 ..... 贾萌娜, 邱凯昌, 岳宗玉, 孙姝娟 (632)  
短基线 InSAR 相干点探测及应用 ..... 刘利敏, 官辉力, 余洁, 李小娟, 柯樱海 (643)  
油松毛虫灾害遥感监测及其影响因子分析 ..... 朱程浩, 瞿帅, 张晓丽 (653)  
集成 Landsat OLI 和机载 LiDAR 条带数据的亚热带森林生物量制图 ..... 曹林, 徐婷, 申鑫, 余光辉 (665)

# JOURNAL OF REMOTE SENSING

(Vol. 20 No.4 July, 2016)

## CONTENTS

### Atmospheric Remote Sensing

- Overview of infrared limb sounding .....  
WANG Yapeng, LI Xiaoying, CHEN Liangfu, ZHANG Ying, ZOU Mingmin, ZHANG Han, ZHU Songyan (527)  
Pixel distance settings in aerosol optical depth retrieval through the structure function method .....  
..... ZHU Lin, SUN Lin, YANG Lei, XU Feifei, XU Qingshan (539)  
Comparison of stratospheric aerosol derived from ground LiDAR and SAGE in Hefei .....  
..... HE Wenying, LING Chao, CHEN Hongbin, HU Shunxing (547)  
The comparison of MODIS and MERSI aerosol products in Shenyang .....  
..... ZHANG Jie, LIU Haoye, XIN Jinyuan, ZHANG Wenyu, XIAO Guojie, FENG Xinyuan, WANG Lili (560)

### Fundamental Research

- Effect of soil water content and soil roughness on the thermal infrared emissivity of bare soil .....  
..... TIAN Jing, MI Sujuan, HE Honglin, ZHANG Renhua, MA Ying, DONG Xue (568)

### Technology and Methodology

- Retrieval of the leaf area density of *Magnolia* woody canopy with terrestrial Laser-scanning data .....  
..... WANG Hongshu, LI Shihua, GUO Jiawei, LIANG Zuqin (578)  
Monitoring sea ice motion by combining projection transformation and phase correlation .....  
..... HU Yingying, LANG Wenhui, ZHANG Pan, YANG Xuezhi (588)  
Correction of the false topographic perception phenomenon based on topographic normalization .....  
..... ZHANG Wanqiu, YUE Cairong, YUAN Hua (600)  
Radiometric calibration of the HJ-1B thermal channel and its effects on land surface temperature retrieval .....  
..... CHEN Feng, YIN Shoujing, ZHU Li, YIN Kai, HE Baoyin, YANG Song (608)  
Calibration algorithm and object tilt angle analysis and calculation for LiDAR intensity data .....  
..... YI Piyuan, MAN Wang, TONG Peng, QIU Junting, ZHAO Yingjun, ZHANG Jingfa (619)  
HOT-transform based method to remove haze or thin cloud for Landsat 8 OLI satellite data .....  
..... JIANG Hou, LYU Ning, YAO Ling (631)

### Remote Sensing Applications

- Spatio-temporal variation characteristics of the Mars surface brightness temperature .....  
..... JIA Mengna, DI Kaichang, YUE Zongyu, SUN Shujuan (642)  
Stable pointwise target detection method and small baseline subset InSAR used in beijing subsidence monitoring  
..... LIU Limin, GONG Huili, YU Jie, LI Xiaojuan, KE Yinghai (652)  
*Dendrolimus tabulaeformis* disaster monitoring and analysis of its influencing factors through remote sensing  
technology ..... ZHU Chenghao, QU Shuai, ZHANG Xiaoli (664)  
Mapping biomass by integrating Landsat OLI and airborne LiDAR transect data in subtropical forests .....  
..... CAO Lin, XU Ting, SHEN Xin, SHE Guanghui (674)



## 封面说明

About the Cover

中国生态系统服务功能重要性空间分布

Spatial distribution of ecosystem service importance in China

2012年1月，国家环境保护部和中国科学院联合开展了“全国生态环境10年变化遥感调查与评估（2000年—2010年）”，是中国开展的第2次大规模生态系统状况的综合调查与评估，构建了遥感数据和地面调查/核查相结合的“天地一体化”生态系统调查技术体系，建立了“格局—质量—功能—问题—胁迫”的生态系统综合评估框架。从全国、区域和省域3个空间尺度，利用20355景卫星遥感影像、11.45万个野外核查点、5333个观测样方以及39个国家生态系统长期定位观测站数据，对全国生态系统状况及其时空变化特征进行了综合评估，调查评估成果填补了国家生态状况本底资料的空白。封面图片是综合评估水源涵养、生物多样性维护、水土保持、防风固沙等生态系统服务功能，获得的中国生态系统服务功能重要性空间分布，为国家生态保护红线划定、生态功能区划调整、水污染防治行动计划、十三五生态环境保护规划等国家生态环境重大任务实施提供了重要支撑。

In January 2012, the Ministry of Environmental Protection and Chinese Academy of Sciences jointly launched the project of "Remote Sensing Investigation and Assessment on Eco-environment Changes from 2000 to 2010 of China". This is the second large-scale survey and assessment of ecosystem in China which has established a space-ground integrated technical system of ecosystem investigation based on "pattern- quality - services -problem- stress" framework of ecosystem assessment. The project has filled the gap of national ecosystem background material. Cover image is the spatial distribution map of ecosystem service importance, through comprehensive assessment of ecosystem services of water conservation, biodiversity maintenance, soil and water conservation, windbreak and sand fixation. It has provided important support for major national ecological protection action, such as defining national ecological protection red line, ecological function zoning adjustment, water pollution prevention action plan and environment protection planning from 2016 to 2020.

# 遥感学报

JOURNAL OF REMOTE SENSING

YAOGAN XUEBAO (双月刊 1997年创刊)

第20卷 第4期 2016年7月25日

(Bimonthly, Started in 1997)

Vol.20 No.4 July 25, 2016

主 管	中国科学院	Superintended by	Chinese Academy of Sciences
主 办	中国科学院遥感与数字地球研究所 中国地理学会环境遥感分会	Sponsored by	Institute of Remote Sensing and Digital Earth,CAS The Associate on Environment Remote Sensing of China
主 编	顾行发	Editor-in-Chief	GU Xing-fa
编 辑	《遥感学报》编委会 北京市朝阳区大屯路中国科学院遥感与数字地球研究所 邮编：100101 电话：86-10-64806643 http://www.jors.cn E-mail: jrs@radi.ac.cn	Edited by	Editorial Board of Journal of Remote Sensing Add: P.O.Box 9718, Beijing 100101, China Tel: 86-10-64806643 http://www.jors.cn E-mail: jrs@radi.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 E-mail: sales_journal@mail.sciencep.com
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

定价：70.00元



官网



微站

ISSN 1007-4619



9 771007 461163

07>