

遥感学报

2023|9

Vol.27

NATIONAL REMOTE SENSING BULLETIN

ISSN 1007-4619 CN11-3841 / TP CODEN YXAUAB



遥感学报

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第 27 卷 第 9 期 2023 年 9 月

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本期责任编辑:李薇

《遥感学报》网络版:www.ygxb.ac.cn

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NATIONAL REMOTE SENSING BULLETIN

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About the Cover

高分一号卫星青藏高原色林错湖化冰期遥感影像

The ice thawing period at Selincuo Lake on the Qinghai-Tibet Plateau by GF-1 satellite

封面图片为高分一号卫星宽幅相机 (WV) 于 2022 年 4 月 8 日获取的青藏高原腹地色林错湖化冰期遥感影像, 湖面的湖冰清晰可见 (中国科学院空天信息创新研究院 计璐艳 供图)。时值 4 月, 随着气温上升, 青藏高原湖泊开始进入融化期, 通常情况湖泊化冰期较短 (约 2 周), 由于高分一号宽幅相机具有较短的回访周期 (约 4 天), 因此较容易捕捉到青藏高原湖泊化冰瞬间。色林错藏语意为“威光映复的魔鬼湖”, 海拔 4530 m, 其面积自 20 世纪 70 年代以来一直在扩张, 超过纳木错湖成为西藏第一大湖泊。高分系列卫星自 2013 年发射以来, 已经稳定运行近 10 年, 提供了充足的数据, 长时间多源遥感数据可为湖泊面积、水量、冰候等变化提供良好技术手段, 有效支撑湖泊的动态监测。

The cover image features the thawing period at Selincuo Lake in the hinterland of the Qinghai-Tibet Plateau, captured by the Wide Field View (WV) camera on GF-1 satellite on April 8th, 2022. The lake ice is clearly visible (image provided by Luyan Ji from Aerospace Information Research Institute, Chinese Academy of Sciences). In April, as temperature rises, lakes on the Qinghai-Tibet Plateau begin to thaw, with the thawing period typically lasting about two weeks. Due to the short revisit period of the GF-1 WV camera (approximately four days), it is easier to capture the thawing moments of the lakes on the plateau. Selincuo, meaning "the Devil's Lake with reflected glory" in Tibetan, is located at the altitude of 4530 m and has been expanding since the 1970s, surpassing Namtso Lake as the largest lake in Tibet. Since the launch in 2013, the Gaofen satellites series has been operating stably for nearly ten years, providing abundant data. Long-term multi-source remote sensing data offer valuable technical means for monitoring changes in lake area, water volume and ice phenology supporting a dynamic and effective lake monitoring.

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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
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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.ygxb.ac.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.ygxb.ac.cn E-mail: nrsb@aircas.ac.cn
出 版 科 学 出 版 社	Published	by	Science Press
印刷装订 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 北京东黄城根北街16号 国内邮发代号: 82-324 邮政编码: 100717 电话: 86-10-64017032 淘宝店铺名称: 中科期刊	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



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