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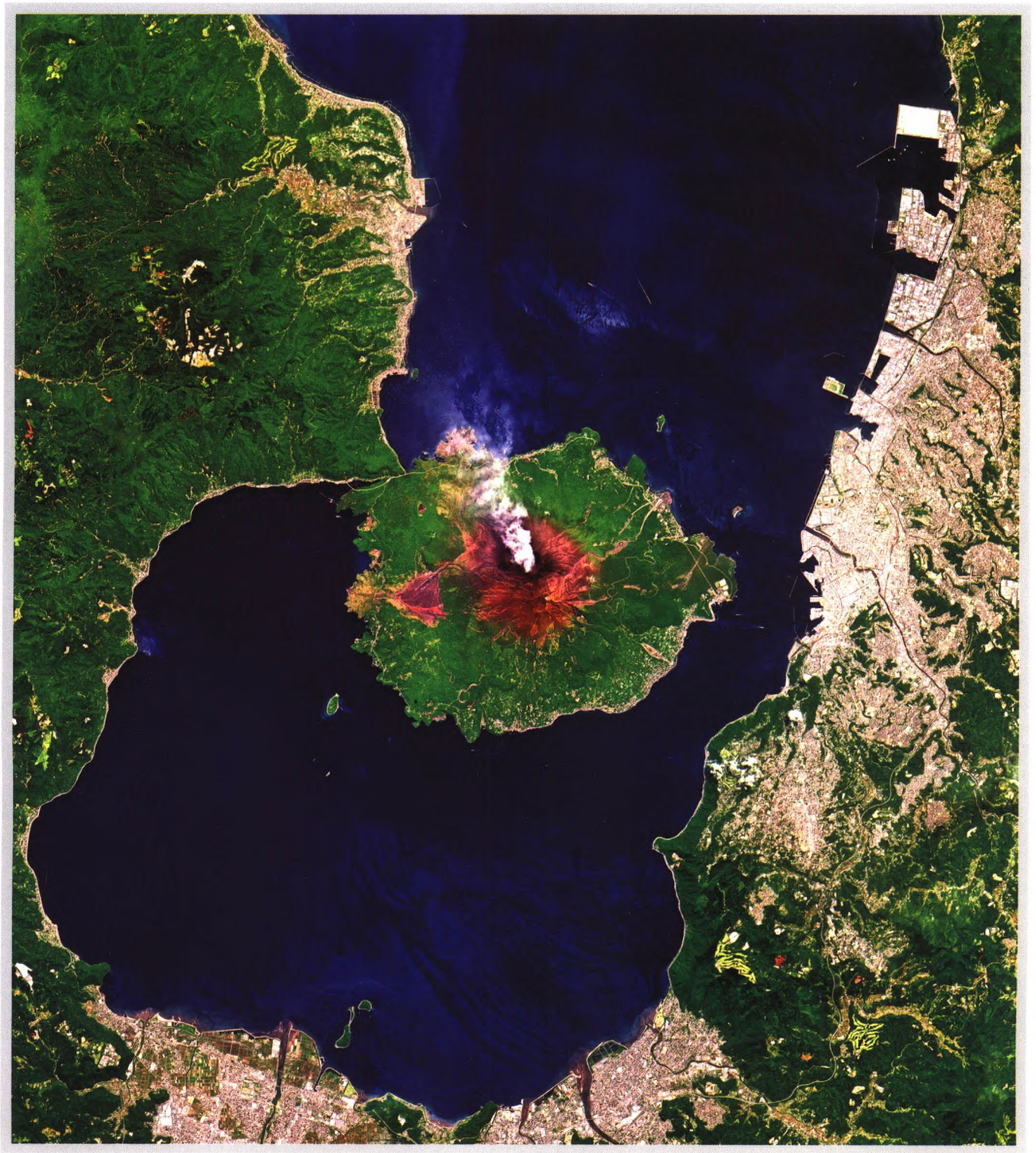

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Yaogan Xuebao

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封面说明

About the Cover

吉林一号光谱星获取的日本樱岛火山多光谱影像

Multispectral image of Sakura Island Volcano in Japan by the JL-1 spectral satellite

封面图片为吉林一号光谱星于 2019 年 5 月 2 日获取的日本樱岛火山的多光谱影像。该卫星属于“吉林一号”星座，由长光卫星技术有限公司研制并运营，目前已有 2 颗在轨组网运行。卫星搭载了多光谱（PMS）相机、短波红外（SWIR）相机、中波红外（MWIR）相机、长波红外（LWIR）相机，能够提供从 450—13500 nm，共 26 个谱段的遥感影像，其中主载荷分辨率为 5 m、幅宽为 110 km。截至 2019 年 8 月，全球拍摄总面积 1.4 亿 km^2，全国覆盖率 99.65%，部分区域已经覆盖 3—5 次。吉林一号光谱星原始图像传函优于 0.13，信噪比优于 40 dB，绝对辐射精度优于 5%，相对辐射精度优于 3%，可广泛应用于精准农业、自然资源、生态环境、防灾减灾、国防安全等领域。吉林一号数据查询下载网站：http://discover.charmingglobe.com。

The cover image shows the multispectral of Sakura Island Volcano, Japan, which was acquired on May 2, 2019 by the JL-1 Spectral Satellite. The satellite belongs to the JL-1 satellite constellation, which is constructed and managed by CGSTL (Changguang Satellite Technology Co., Ltd.). The satellite is equipped with multispectral (PMS) camera, shortwave infrared (SWIR) camera, medium wave infrared (MWIR) camera and long wave infrared (LWIR) camera. It can provide remote sensing images with a total of 26 spectral bands ranging from 450 to 13500 nm, in which the main load resolution is 5 m, with a swath of 110 km. The two satellites had a total global shooting area of 140 million square kilometers, with a national coverage rate of 99.65 percent and some local areas covered 3-5 times, until August 2019. The original image of JL-1 spectral satellite (JL-1 01C/JL-1 02C), which' s the MTF is better than 0.13, the SNR is better than 40 dB, the absolute radiometric accuracy is better than 5%, the relative radiometric accuracy is better than 3%. It can be widely used in precision agriculture, natural resources, ecological environment, disaster prevention and mitigation, national defense security and other fields. The JL-1 satellite data query and download website: http://discover.charmingglobe.com.

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