

Abstract

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An Automated Change Detection System for Specific Features

Track: Remote Sensing Imagery

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Monitoring change through remote sensing has numerous applications, such as monitoring agricultural lands, mapping noxious weeds, disaster monitoring, ecosystem monitoring, fire detection, and countless other applications. Currently, detecting changes of specific features between imagery over time is a slow, labor-intensive, painful, and costly process. Previous attempts to automate this process do not provide accurate enough information. This paper presents the first viable system for automating the target-specific change-detection process. Results on several datasets show our technique is accurate at extracting only changes of interest, saves a considerable amount of labor, has a simple user interface, and works directly within ArcGIS.

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