

Identifying Data Richness and Data Gaps in the 38-Year Record of Landsat Environmental Holdings

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ABSTRACT

This paper describes the spatial and temporal coverage of the Landsat satellite data records from 1972 to the present. Data richness and data gaps are explored through examination of the Multispectral Scanner, Thematic Mapper, and Enhanced Thematic Mapper+ data collections. These data are part of the U.S. Geological Survey's National Satellite Land Remote Sensing Data Archive and represents a continuous record of the Earth's land mass, coastal boundaries, and coral reefs -- creating an unprecedented comprehensive record of landscape dynamics. Documenting the temporal and spatial catalog of full and sparse environmental records facilitates researchers' understanding of the global record, so alternative records may be located, if available. Data gaps in the record continue to impede use of the Landsat archive. Recommendations for filling these gaps are discussed.