

User requirements of moderate resolution land imaging instrument - Landsat Next

Zhuoting Wu

US Geological Survey, Flagstaff, AZ, US

The U. S. Geological Survey (USGS) initiated the Requirements, Capabilities and Analysis for Earth Observations (RCA-EO) activity in the Land Remote Sensing (LRS) program to provide a structured approach to collect, store, maintain, and analyze user requirements and Earth observing system capabilities information. To better understand moderate resolution imagery user needs and help inform the next Landsat mission, we specifically focused on the key moderate resolution Landsat-like system user needs in the Federal civil government agencies and organizations in the US. In the past year, we systematically collected hundreds of user requirements, including information on geographic coverage, spatial resolution, temporal revisit, accuracy, sampling condition, spectral characteristics, data latency, length of data record, and data access. Here, we summarized the user needs information from various moderate resolution land imaging application areas, to highlight the areas of improvement desired by the users and potentially inform the design of future Landsat satellites.