Topic: Repeat Station Imaging (RSI) in support of wide-area and time-sensitive land surface monitoring

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Overview: Repeat station imaging pertains to capturing and registering airborne digital frame camera images from sequential image collections or passes at nearly the same station or point in the sky. Such imagery can be precisely registered, which enables very detailed and accurate detection of land surface changes, including moving objects such as people, animals, vehicles, wildfire fronts, etc. Potential applications evaluated by our research team have included post-earthquake assessment of damage to critical infrastructure, detecting smuggling activities in the border zone, and search and rescue operation, and measurement of wildfire spread rates.
- Moving people: 3/3
- Moving vehicles: 3/3