

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Heat Flow and Change Detection of Thermal Features in Yellowstone Park Using High Resolution Airborne Remote Sensing

Discipline: Natural Resources
Type of Project: Research
Funding Agency: National Park Service
Other Partners/Cooperators: Utah State University
Effective Dates: August 15, 2011 – June 30, 2014
Funding Amount: \$225,000 [FY12: \$105,000; FY11: \$120,000]

Investigators and Agency Representative:

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Abstract: The purpose of this agreement is continued collaboration of the surface energy balance at Yellowstone National Park during the summer field season and acquisition of airborne thermal infrared imagery over selected thermal areas. The field data will be used to develop atmospheric correction models to improve heat and temperature maps. Investigating the surface energy balance will help this project as well as many other projects within Yellowstone.

Outcomes with Completion Dates: Final maps produced in May 2013. Change detection and heat flow calculations completed by July 2013. Draft reports completed for NPS review by September 30, 2013 Final reports and data due December 31, 2013.

Keywords: Utah State University, Yellowstone National Park, remote sensing, thermal springs