



NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the U.S. Geological Survey's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	USGS-17-FA-0024
Project Title	Calibration methods for the Thermal Infrared Sensor
Recipient	Rochester Institute of Technology
Anticipated Federal Amount	\$100,000
Cost Share	N/A
Total Anticipated Award Amount	\$100,000
New Award or Continuation?	New
Anticipated Period of Performance	2/1/2017 – 1/31/2018
Award Instrument	Grant
CFDA # and Title	15.808 Research and Data Collection
USGS Point of Contact	Brian Sauer, bsauer@usgs.gov

OVERVIEW

The goal of this announcement is to evaluate non-traditional calibration methods for the Thermal Infrared Sensor (TIRS) given its stray light issue and assess the potential of stray-light removed (SLR) data to be used for deriving land surface temperature.

RECIPIENT INVOLVEMENT

The recipient will research calibration methods for the Landsat TIRS to assess its potential to be used for deriving land-surface temperature using split-window technique. The recipient will investigate non-traditional methodologies to provide an enhanced absolute calibration for TIRS and future Landsat thermal instruments. The stray-light removal technique implemented into the EROS Landsat 8 ground systems is a first step to calibrate Landsat 8 TIRS data. The recipient

will characterize residual artifacts of the stray-light corrected TIRS data and propose potential calibration solutions.

USGS INVOLVEMENT

No substantial involvement on the part of USGS is anticipated for the successful completion of the objectives to be funded by this award.

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR SINGLE SOURCE POLICY REQUIREMENTS
Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.
In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria: (1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives; (2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity; (3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress’ intent to restrict the award to a particular recipient of purpose; (4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications; (5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed. (6) Cooperative Agreements - USGS Unique Authority cited at 43 U.S.C. 36d (Federal, State, and academic partners) or DOI Authority cited at 43 U.S.C. 1457b (not-for-profit organizations).

USGS did not solicit full and open competition for this award based the following criteria:

(4) UNIQUE QUALIFICATIONS

Single Source Justification Description:

Rochester Institute of Technology (RIT) has unique technical expertise in that it has been providing research to NASA for the TIRS instrument. Specifically, the RIT technical representative on this proposal researched and developed the stray-light algorithm for TIRS data correction given the instrument on-orbit anomaly. RIT has instrumental knowledge of the TIRS instrument and has been supporting TIRS research that led to the development of the instrument and subsequent calibration methods used today. RIT is the only institution with the technical expertise to efficiently perform this work.

STATUTORY AUTHORITY

§ 36d. Cooperative agreements. Notwithstanding the provisions of the Federal Grant and Cooperative Agreement Act of 1977 (31 U.S.C. 6301–6308), the United States Geological Survey is authorized to continue existing, and on and after November 10, 2003, to enter into new cooperative agreements directed towards a particular cooperator, in support of joint research and data collection activities with Federal, State, and academic partners funded by appropriations herein, including those that provide for space in cooperator facilities.