NATIONAL SCIENCE FOUNDATION
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NSF 23-092

Dear Colleague Letter: Availability of Earth Observation Data for NSF-Funded Researchers

April 26, 2023

Dear Colleagues:

Recent developments in satellite and sensor technology have led to unprecedented advances in the resolution, extent, and frequency of Earth observations. High spatial and temporal resolution capabilities now allow for the investigation of crucial research questions across several Earth system science education and research themes. Yet, many of these datasets have previously been unavailable for research purposes because they are generated by commercial providers. This Dear Colleague Letter (DCL) announces the availability of high-quality commercial Earth observation data to NSF-funded researchers at no additional cost through the National Aeronautics and Space Administration (NASA) Commercial SmallSat Data Acquisition (CSDA) Program.

To inform and assist interested researchers, this DCL describes the process for gaining access to this imagery, the currently available datasets, and related training resources.

ACCESS TO COMMERCIAL SATELLITE DATA AND HOW TO APPLY

Through the CSDA Program, all NSF-funded researchers have access to a vast array of datasets. An overview of the CSDA program can be found here: https://www.earthdata.nasa.gov/esds/csda.

To request access, please fill out the form located at: https://csdap.earthdata.nasa.gov/signup/. You will need to include your active NSF grant number on the form (a seven-digit number), the contact information for the managing NSF Program Officer for the award, and a description of how the requested remote sensing data would be used to support your NSF-funded project. Access must be requested by an individual user associated with an NSF-funded project. The applications are then reviewed by NASA to determine eligibility, which will take about 2–3 weeks. Once verified, the user will be provided additional information on how to request and access data. There is a 30-day latency

on PlanetScope access; for no-latency access on time-sensitive projects (i.e., ongoing natural disasters), waivers can be requested.

NSF researchers funded by the Office of Polar Programs also have access to high resolution satellite imagery from Maxar and other geospatial services at no additional cost to their award. Please see the Polar Geospatial Center webpage for more details: https://www.pgc.umn.edu/data/commercial-imagery/.

CURRENTLY AVAILABLE DATA

Several very high-resolution remote sensing data sets are available for use, with the potential to power many scientific advances. Currently, data from Spire Global Subsidiary, Inc., and data acquired through NASA's Earth Science Division's collaboration with the International Space Station (ISS) from the Teledyne Brown Engineering, Inc. DLR Earth Sensing Imaging Spectrometer (DESIS) are available for all U.S. Government-funded researchers. Data from Planet, covered under the CSDA program, are also available for U.S. Government Federal civil agencies and NSF-funded researchers. NSF-funded researchers are included in the category of U.S. Government (funded) researchers.

Information about these vendors, user licenses, and data is available on the Commercial Datasets page: https://www.earthdata.nasa.gov/esds/csda/commercial-datasets. Information on the available satellites, their orbits, and their sensors' temporal and spectral resolutions is also available at that webpage. As additional commercial small satellite datasets are evaluated and acquired, those datasets will also be made available.

QUESTIONS

For any questions about how to access and request commercial data, please start with this list of Frequently Asked Questions: https://www.earthdata.nasa.gov/esds/csda/csda-faq.

If an NSF-funded investigator has further questions, they may contact:

- Application Questions: Aaron Kaulfus, CSDA Data Team, email: aaron.s.kaulfus@nasa.gov
- CSDA Program Questions: Alfreda Hall, CSDA Program Manager, email: alfreda.a.hall@nasa.gov
- NSF Questions: remotesensing@nsf.gov

UPCOMING TRAINING SESSIONS

There are a variety of training resources for the science and education community to help researchers get started with the data, access pathways, and integration with other software packages. The CSDA Program conducts a variety of conferences and Lunch and Learn

sessions that are available here: https://www.earthdata.nasa.gov/esds/csda/program-activities.

Sincerely,

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