

Accessing Satellite Capabilities to Enable New Discoveries (ASCEND) Act

Sponsored by: Senator John Hickenlooper (D-CO), Senator John Cornyn (R-TX)

Background: Through the Commercial Space Act of 1998, NASA is authorized to acquire commercial remote sensing datasets of our Earth. In the decades since, there has been an unprecedented growth of the commercial space industry, including a sharp increase in the number of privately owned and operated satellites and small satellites (“SmallSats”) launched into orbit. Over 2300 SmallSats were launched in 2022 alone, and forecasts predict this number to grow exponentially by 2030.

Recognizing the opportunities provided by these new entrants, NASA launched the Private-Sector Small Constellation Satellite Data Product Pilot Program in 2017 to evaluate the utility and reliability of commercial datasets for advancing Earth science research and applications. User feedback provided as part of the pilot program’s evaluation report was overwhelmingly positive; researchers found commercial data to be useful for a range of disciplines, including agriculture, forestry, weather forecasting, and space science.

Following the successful pilot, NASA established the Commercial SmallSat Data Acquisition (CSDA) Program to continue identifying and evaluating commercial capabilities; establish new processes to onramp vendors; and enable broad sharing and use of acquired data products. Today, five commercial vendors are providing 25 unique datasets to federal researchers through CSDA, and six more companies are being on-ramped by NASA.

Problem: Despite the overwhelming success of CSDA, the program’s growth has been hindered by stagnant funding levels and lack of long-term certainty. Without Congressional authorization for the CSDA Program, NASA will be unable to fully leverage the advancing capabilities in remote sensing offered by commercial vendors, which is critical for maintaining global leadership in space and maximizing federal investments in scientific research.

Solution: Building off the success of CSDA to date, the ASCEND Act will permanently authorize CSDA within NASA to enable the program’s continued growth and longevity.

Specifically, the ASCEND Act will:

- Establish CSDA as a permanent program within NASA’s Earth Science Division
- Direct NASA to expand procurement licenses to provide federal agencies access to high-quality Earth remote sensing datasets and imagery
- Promote the acquisition of new datasets for scientific and non-scientific applications
- Require an annual report to Congress on the uses and impact of commercial data products and licensing agreements