



2 December 2015

Dear Member of Congress:

On behalf of the American Geophysical Union (AGU) and its more than 60,000 Earth and space scientists, I urge you to support robust funding for Earth science as the appropriations process moves forward.

Earth science is a fundamental part of science. It constitutes the hard sciences that help us understand the world we live in and provide a basis for knowledge and understanding of natural hazards, weather forecasting, air quality, and water availability, among other concerns.

Earth science provides a broad array of benefits and applications across the public and private sectors. In the wake of the 2010 Deepwater Horizon oil spill, NASA's UAVSAR project allowed response teams to track the movement of oil into coastal waterways and assisted in monitoring the impact and recovery of affected areas along the Gulf of Mexico. With one-third of our GDP affected by weather and the environment, our economy relies on accurate and timely forecasts. Earth scientists work to ensure that our forecasting capabilities remain on the cutting edge of scientific innovation and are able keep our economy sustainable.

In addition to economic benefits, Earth science plays a key role in public safety and national security. In the past year, NASA launched five new Earth-observing satellites aimed at utilizing satellite data and analytical tools to improve natural hazard preparedness, inform decisions and benefit society. For example, the sensors on NASA Earth's new FireSat satellite will allow the U.S. to not only detect wildfires around the clock, but also locate explosions, oil spills and other dangerous events involving high heat around the globe by June 2018. This is a breakthrough development in natural hazard mitigation as well as economic and national security.

More generally, NASA's Earth Science Division aids in flood prediction, earthquake response, and severe storm tracking across the Great Plains. Greater knowledge and prediction skills are urgent when we consider the effort, time and costs of protecting infrastructure along coasts, rebuilding fish populations, developing new water resources for manufacturing and agriculture, and restoring communities in the wake of natural disasters. These observations, and many others like them, are integral to protecting our infrastructure, food supply, and public health and safety.

As the appropriations process continues, I urge you to keep in mind the multitude of societal, economic, and security benefits that Earth science provides our nation. By investing in Earth science, you can ensure that America is on a path of globally competitive scientific growth and progress.

Sincerely,

A handwritten signature in black ink that reads "Christine W. McEntee". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Christine W. McEntee
Executive Director/CEO
American Geophysical Union