



ADVANCING EARTH
AND SPACE SCIENCE

8 January 2020

The Honorable Ed Perlmutter
1226 Longworth House Office Building
Washington, D.C. 20515

The Honorable Mo Brooks
2246 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressmen Perlmutter and Brooks:

On behalf of the American Geophysical Union (AGU) and its 60,000 members, I am writing to endorse H.R. 5260, The Promoting Research and Observations of Space Weather to Improve the Forecasting of Tomorrow (PROSWIFT) Act, and to thank you for crafting this important legislation.

Space weather has the potential to inflict trillions of dollars of damage on our economy, weaken our national security, and alter our way of life. The National Research Council estimates that a severe space weather event has the potential to inflict \$1-2 trillion dollars of economic and societal damage in the first year alone and impact more than 130 million people. To recover from such an event could take from 4-10 years.¹ Moreover, space weather fluctuations are not limited to rare catastrophic events but regularly impact our society and economy. It's estimated that the average economic impact of moderate geomagnetic events on the electric power grid in the U.S. is \$7 to \$10 billion per year.² Additionally, advancing our understanding of the Sun is essential for the United States to realize its space exploration ambitions.

Given the economic and opportunity costs associated with space weather, we support the bill's approach of creating a national, coordinated plan to advance our understanding of the relationship between the Sun and Earth and to ensure the development of new technologies and forecasting capabilities to mitigate the threat posed by space weather. We appreciate the bill's recognition that a partnership between industry, academia, and federal agencies is needed to further our understanding and capacity to address the impacts of space weather. As a community dedicated to advancing the understanding of Earth and space science, we applaud the bill's intent to further scientifically informed action towards disaster preparation, mitigation, response, and recovery.

AGU looks forward to working with you as this legislation advances.

¹ National Research Council (2008) *Severe Space Weather Events: Understanding Societal and Economic Impacts: A Workshop Report*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12507>.

² Schrijver, C. J. (2015), Socio-Economic Hazards and Impacts of Space Weather: The Important Range Between Mild and Extreme, *Space Weather*, 13, 524–528, doi:[10.1002/2015SW001252](https://doi.org/10.1002/2015SW001252).



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With best wishes,

A handwritten signature in black ink that reads 'Christine W. McEntee'.

Christine W. McEntee
CEO/Executive Director
American Geophysical Union