Dear Chairmen Thune and Smith and Ranking Members Nelson and Johnson:

The 1400 employees and the over 100 member universities that make up the University Corporation for Atmospheric Research (UCAR) would like to thank the Members and staff of the Senate Committee on Commerce, Science, and Transportation and the House Committee on Science, Space, and Technology for their leadership and commitment to progress in weather forecasting and the atmospheric sciences.

The Weather Research and Forecasting Innovation Act, H.R. 1561, and the Seasonal Forecasting Improvement Act, S. 1331, are the results of targeted and impressive efforts in both chambers of Congress and address some of the greatest challenges facing the geoscience and atmospheric science communities. The Committees have prioritized national and regional needs while advancing our weather forecasting and predictive capabilities in order to save lives, property, and businesses. As you move forward in addressing the challenges facing the weather enterprise, UCAR commits our continued support as you craft a bipartisan and bicameral weather bill that will address the priorities and needs of the growing weather community. UCAR offers the following comments on provisions that we believe should remain a part of the final legislation.
Improving seasonal forecasts is an essential capability. Section 2 of the Senate bill has directly addressed some of the current challenges faced by the weather enterprise in improving these valuable forecasts and we look forward to working for its inclusion in the final bill. Improving seasonal forecast will lend immediate, as well as long-term, advantage to consumers in many different economic sectors, including agriculture, tourism, transportation, and more. Improved seasonal forecasts will also be of critical importance to our Homeland Security and Defense departments as they assess threats to our national security and safety. The coordination between the public, private, and academic sectors that has been encouraged by both pieces of legislation will help to focus the weather enterprise and greatly improve our long-term seasonal forecasting capabilities.

Both Committees have also correctly recognized the difficulties that the weather enterprise has faced in getting promising and lifesaving research incorporated into weather forecasting operations – the R2O pipeline. The U.S. Weather Research Program (USWRP) in Section 3 of the Senate bill and the technology transfer initiative in Section 3 of the House bill are both excellent examples of improving the identification of beneficial research and will assist in breaking down barriers to operationalization. Facilitating the transfer of technology and research into operations by improving the transfer of knowledge and ideas through visiting scholar programs, test-beds, extramural research, and cooperative institutes is essential to developing a united effort towards tackling our greatest challenges and questions.

Maintaining a strong partnership between the federal government and our academic institutions is essential to advancing the type of cutting edge research that is the hallmark of the U.S. university system. The requirement in Section 3 of the House bill that calls for not less than 30 percent of weather research funding to be done through the extramural research community will reinforce and add much needed stability to the invaluable relationships that NOAA has created with its academic and private sector research partners. Again, the Committees' actions to this end are commended and your collectively expressed desire to have the entire weather enterprise engaged in improving the research to operations pipeline will undoubtedly lead to improvements in communication and allow for the rapid and efficient identification of lifesaving and economically impactful research.

The prioritization of research and the efficient collection of environmental observations are addressed by both Committees. Section 6 of the House bill requires NOAA, in conjunction with our weather community, to identify technical and research priorities. Section 3 of the Senate bill also develops an approach for prioritization within the weather enterprise. These efforts will ensure that our valuable academic and economic resources are focused on our most pressing questions, solutions to which will return our nation to weather forecasting preeminence.

Both the Senate and House bills call for the assessment of GPS radio occultation and microsatellite constellations, as well as other alternate observation platforms. These assessments will lead to greater competition and future efficiencies and cost savings in the procurement of earth and atmospheric observations. UCAR supports
the specific provisions in Section 4 of the Senate bill that focus on microsatellites. These smaller and less expensive constellations can add significant data to our weather prediction models and help to mitigate any future gaps in our numerical weather prediction data stream. Microsatellites, such as the COSMIC array, which uses GPS radio occultation, incorporate new and efficient technology which can supplement and compliment the larger and more costly systems already in use. UCAR supports the Committee’s efforts to gain the greatest advantage from every dollar spent on polar and equatorial orbiting satellite constellations and also in ensuring that the data received from these constellations is seamlessly integrated into all national operational weather forecast models.

UCAR commends the exemplary bicameral and bipartisan leadership displayed in these two Committees and we look forward to working with you to shape final legislation.

Sincerely,

Dr. Thomas Bogdan
President
University Corporation for Atmospheric Research