U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Joint Subcommittee Hearing:
Space Weather: Advancing Research, Monitoring, and Forecasting Capabilities
Wednesday, October 23, 2019

Thank you, Chair Fletcher.

I am pleased that the committee is holding this hearing to examine crucial knowledge gaps that the space weather community is working hard to address. I look forward to continuing the discussion begun last Congress on how the federal government can leverage our research, monitoring, and forecasting capabilities to protect communities and limit costs to our economy. It is my hope to move bipartisan space weather legislation through the Committee this Congress that has support from the full space weather community.

Though not as publicly prominent as the day-to-day weather generated by Earth's atmosphere and oceans, space weather also can disrupt lives and damage critical infrastructure. Solar events such as solar flares, solar wind, coronal mass ejections, and solar radiation storms send electromagnetic radiation towards Earth's atmosphere which can disrupt GPS function, radio and satellite communications, and our electric grid. Severe space weather events occur about once a decade, though more mild variability is routine.

The need for research on space weather is clear, as fundamental scientific questions remain unanswered. Sustained space weather observations and monitoring are equally important. It is commonly said that space weather prediction is around 50 years behind terrestrial weather predictions; however, innovations such as Cubesats may be able to help advance space weather research and operations.

I look forward to hearing from our expert panel to get an update on the state of space weather R&D, and to explore how Congress can facilitate high-level goal-setting and coordination among federal agencies, the commercial sector, and academia. I am delighted to see representatives from NOAA and NASA, the two lead agencies that carry out research, collect data, and generate space weather predictions, as well as a distinguished panelist from the commercial sector. Though our panelist from the academic sector was unable to make it due to unexpected circumstances, the contributions of the academic community are greatly appreciated. All three sectors do critical work conducting the research, making the observations, analyzing the data,

improving the models, and bolstering the preparedness of technologies, industry sectors, and communities affected by space weather.

As I've said before, it is important for Congress to continue the forward momentum of what was set in motion by the National Space Weather Strategy and the National Space Weather Action Plan in 2015. The persistent threat posed by space weather to our economy, which is more and more reliant on space- and ground-based infrastructure makes clear the need for additional space weather research and collaboration. Now is the time to put forth a legislative framework that can guide and successfully leverage the ongoing work on this critical issue.

Thank you and I yield back.