

# NASA and NOAA Roles in Space Weather

- Fundamentally, **NOAA is operations-driven** and **NASA is science-driven**, and NASA strives to **push the boundaries of what's currently possible** through cutting-edge activities.
- NOAA is the **source of the official forecast, watches, warnings, and alerts** for space weather for the Nation
- NASA's role regarding...
  - Science: NASA **advances our scientific understanding and space-based observations of the Sun and space environment** to ultimately enable space weather forecasting. **We are currently working to build better interfacing & coordination between LWS and SWxP.**
  - Operations: NASA is committed to **transitioning the best applicable science into operations at SWPC, SRAG, and DAF** through the R2O2R program element. **We are currently working to improve NASA's role in the R2O2R process.**
  - Applications: NASA work in space weather is also informed by the needs of the **broader user community** and our mission to push the boundaries by **exploring novel and cutting-edge uses of space weather information.** **We are currently brainstorming how best to implement this function at NASA, and we will coordinate with NOAA on this effort.**
  - Exploration: NASA is **responsible for the success** of its robotic and human exploration missions (e.g., Artemis I), and that drives unique space weather requirements in some situations. The **SWPC, CCMC, and M2M Space Weather Analysis Office collaboration is very strong and mutually beneficial.** **We continue efforts to enable lunar and eventual Mars human exploration missions.**
- FYI: One NOAA Space Weather Strategy and interfaces with NASA Space Weather Program will be discussed at the Space Weather Council on **23 February** by Dr. Elsayed Talaat
- *For Discussion: What is HPAC hearing from the community regarding NASA and NOAA roles in space weather?*