Understanding and managing risks and impacts associated with space weather – National Weather Service perspective

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- Averaging 200 new subscribers monthly...even through solar minimum
  - Increased awareness across all sectors
  - Hundreds of Federal, State, and local emergency responders
Adapting To Consumers Evolving Needs

Community must anticipate and manage the needs of a rapidly evolving technological society

- Autonomous vehicles
- Advanced Rail Technologies - Positive Train Control (GPS-based safety system)
- Supersonic and Hypersonic transport
- Space Tourism
- Drone technology
- Deep space exploration
NOAA Response – Meeting commitments to improve space weather services through critical observations

NSWS - Establish and sustain a baseline observational capability

- **GONG** – NOAA now supporting the Operations and Maintenance of the Observatories
  - SWPC working with NSF/NSO and NOAA/IDP program to operationalize the processing of the GONG data

- **GOES** – Currently Operational with GOES 14&15
  - GOES-16 operational FY19/Q2
  - GOES-17 operational ~FY20

- **DSCOVR** – Supporting SWPC operations and models since 2016
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• **Space Weather Follow On + Operational Coronagraph**
  - Host coronagraph on GOES-U, launch in 2024
  - Rideshare to L1 with NASA’s Interstellar Mapping and Acceleration Probe (IMAP) late 2024 to include solar wind instruments and coronagraph

• **NOAA Commercial Weather Data Buy Program (radio occultation data for operational use)**
  - Showing promise as replacement to the now canceled COSMIC-2B program
Building a Sun-to-Earth modeling capability
Achieving our goals will require the Federal Government to work across agencies and to develop enhanced and innovative partnerships with State, tribal, and local governments; academia; non-profits; the private sector; and international partners. These efforts will enhance national preparedness and speed the creation of a space-weather-ready Nation.