



## Critical U.S. Earth Observation Systems are Aging

### AIA RECOMMENDATION

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- **Congress must appropriate sufficient funding for space-based Earth Observation system satellites needed to continue acquisition of all essential weather and climate information.**

### BACKGROUND

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The U.S. needs a healthy Earth Observation capability to sustain our collection of critical environmental data.

Maintaining our continuous daily capability to disseminate weather and environmental forecasts across media outlets and into the homes of the citizenry is critical to the nation's economy and security. Space technology assets used to monitor weather, climate, and environmental conditions have contributed to significant advancements over the past decades, progressing from weather predictions three only days in advance a few years ago to the 10-15 day forecasts available to us today, and enabling seasonal predictions – like El Nino conditions – that allow businesses and households to plan ahead.

As the United States formulates and enhances policies for addressing global challenges, such as climate change, it is essential to sustain national and economic security, space preeminence, and full participation and leadership in national and international efforts to monitor, forecast, predict, and assess environmental, weather, and climate conditions. The gap in capacity in the near-term and out into the next decades can be filled by establishing the plans, programs, and funding resources now, just as we have in the past, to provide comprehensive United States Earth Observation capability.

### KEY POINTS

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- **The nation faces gaps in the capability to provide essential environmental data. There are no plans for U.S. operational systems to acquire 11 of the 26 essential climate variables.**
- **With an average span of 15 years between initiation of Earth Observation satellite programs and launch, the time is now to establish the detailed plans for near-term missions (through 2015-25), mid-term missions (2025-35) and long-term missions.**
- **Early plans must be put in place to correlate data across observing systems and models using the international and national GEOSS guidelines.**