

National Ecological Observatory Network (NEON) Update to the National Science Board

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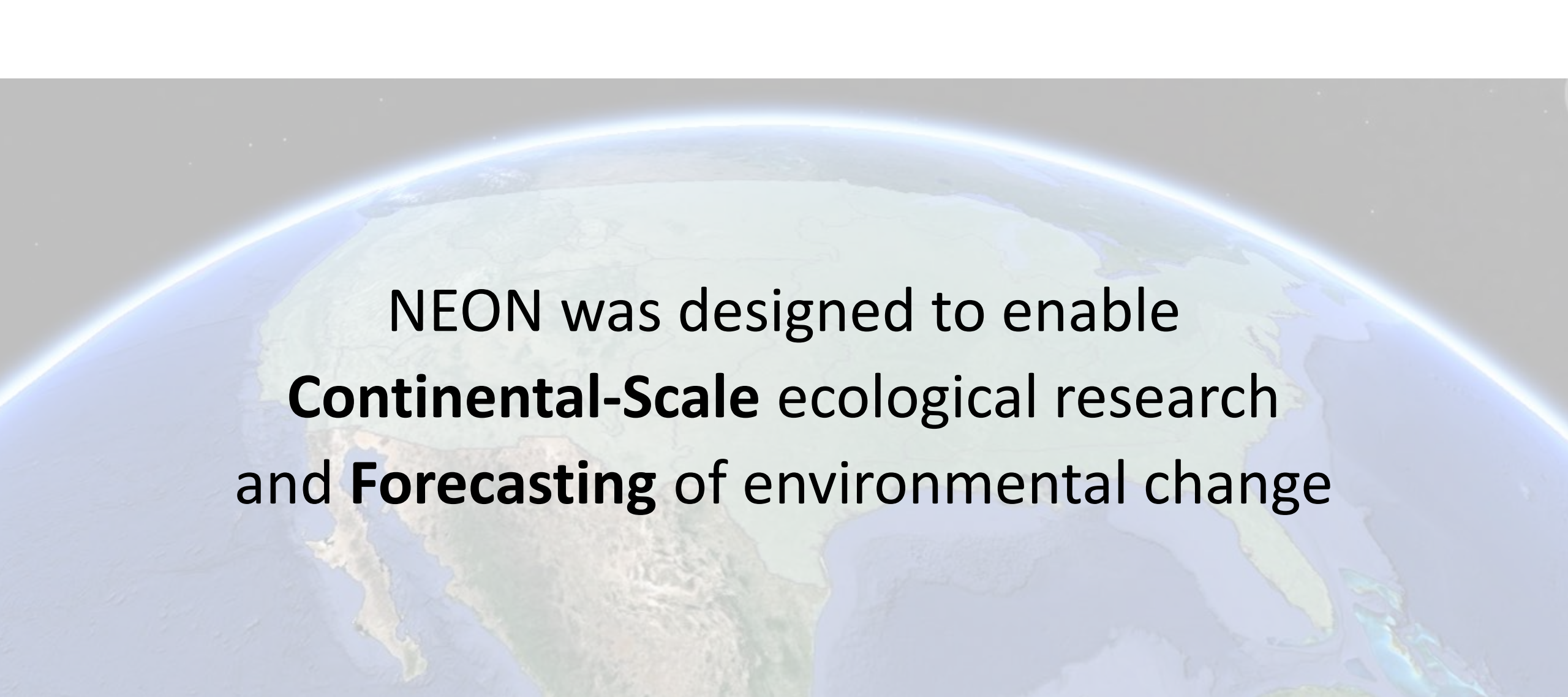
A view of Earth from space, showing the Americas. The text is overlaid on this image.

NEON is revolutionary

NEON is fully operational

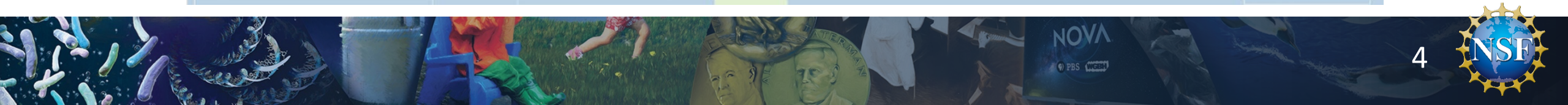
NEON is increasingly used by researchers



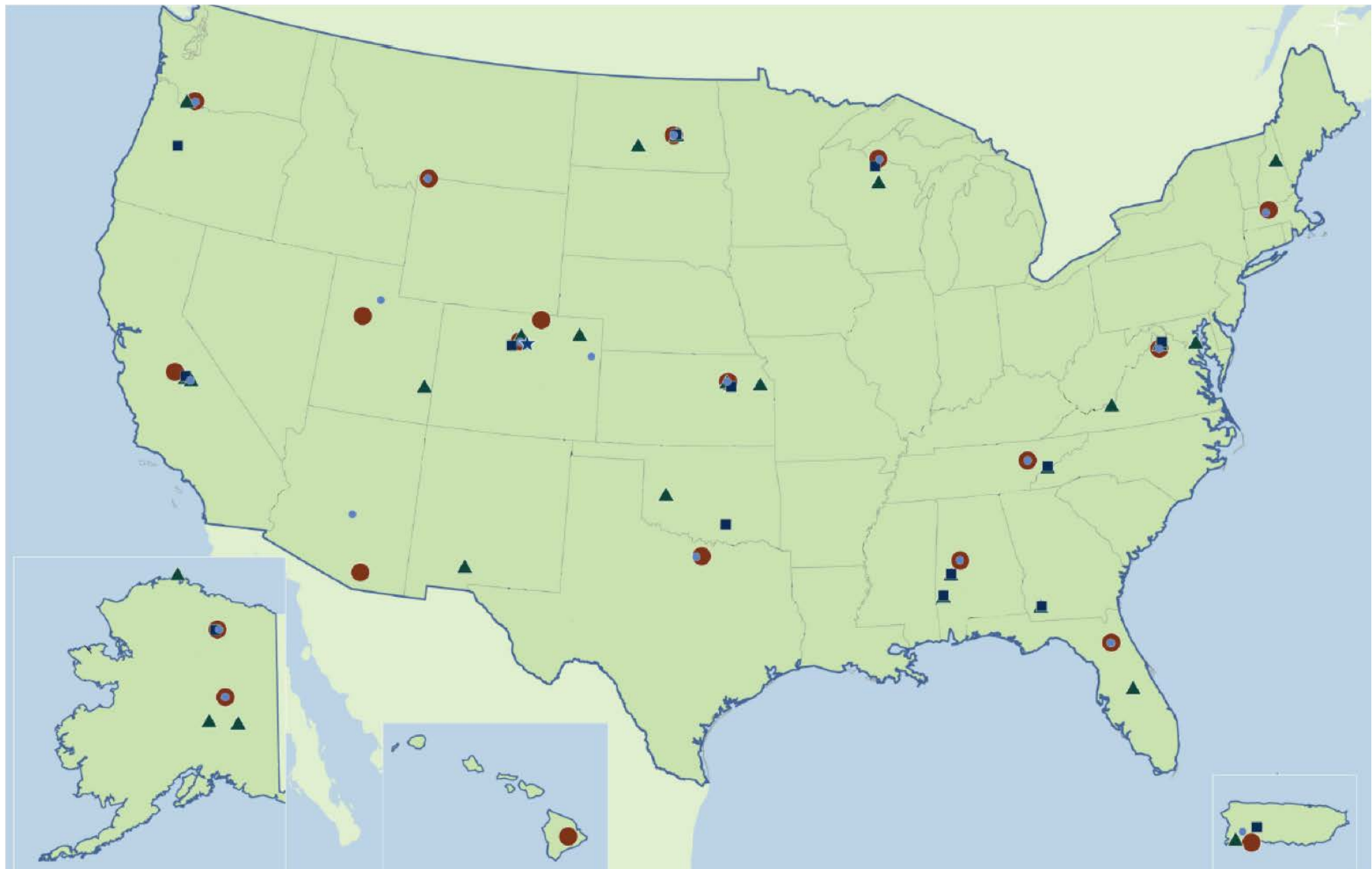


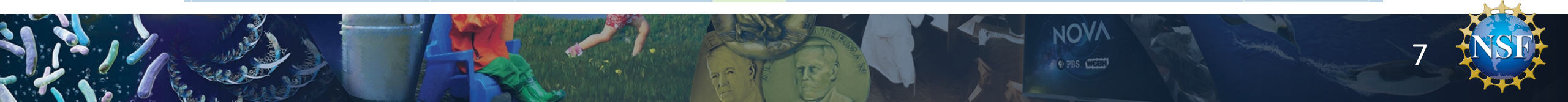
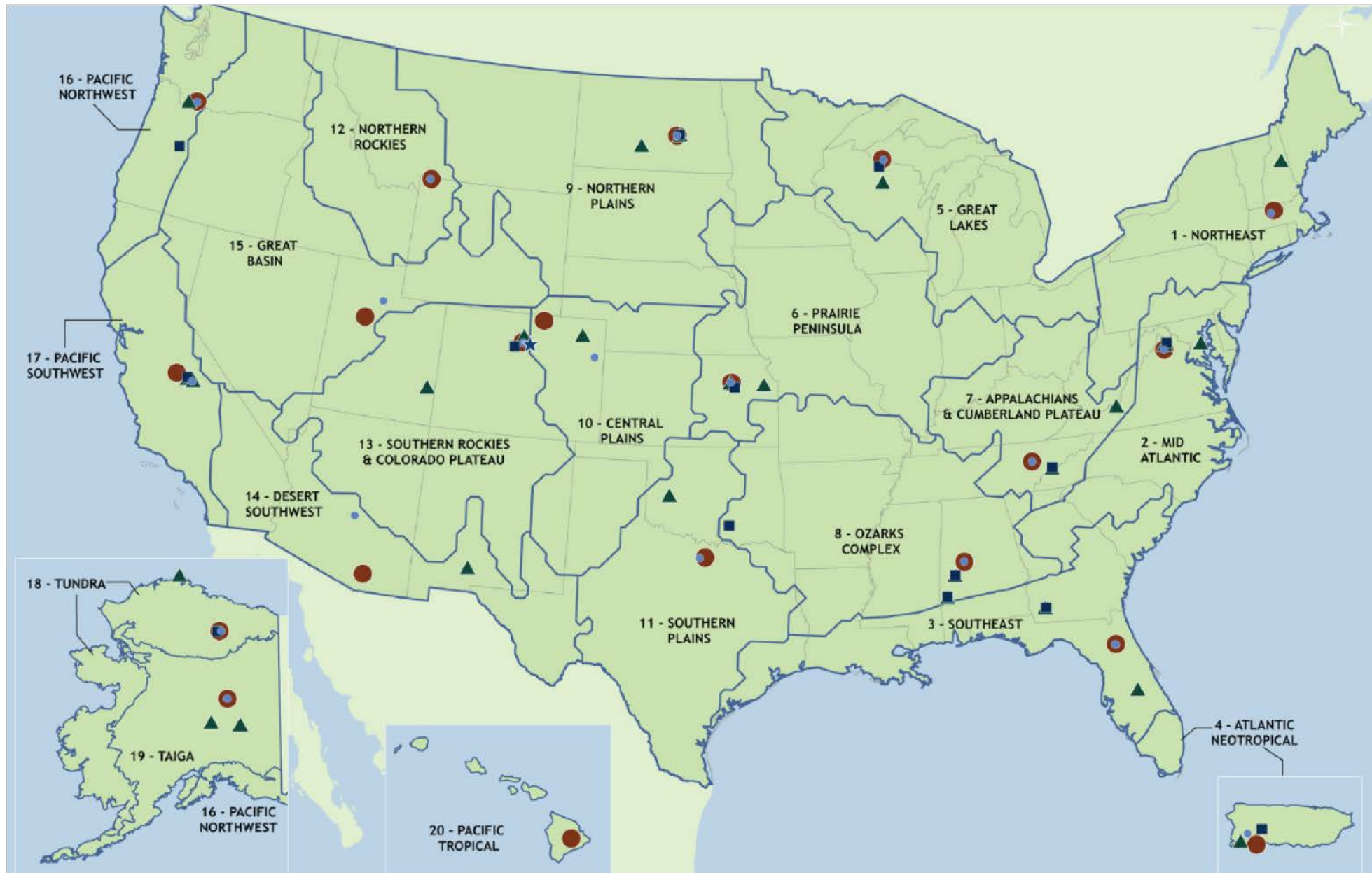
NEON was designed to enable
Continental-Scale ecological research
and **Forecasting** of environmental change

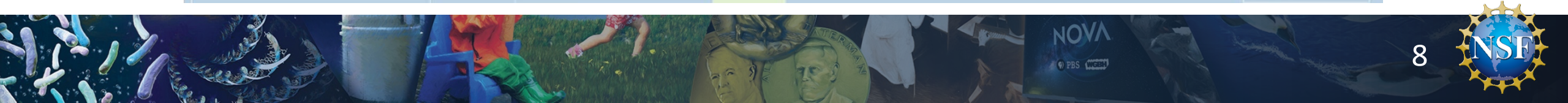
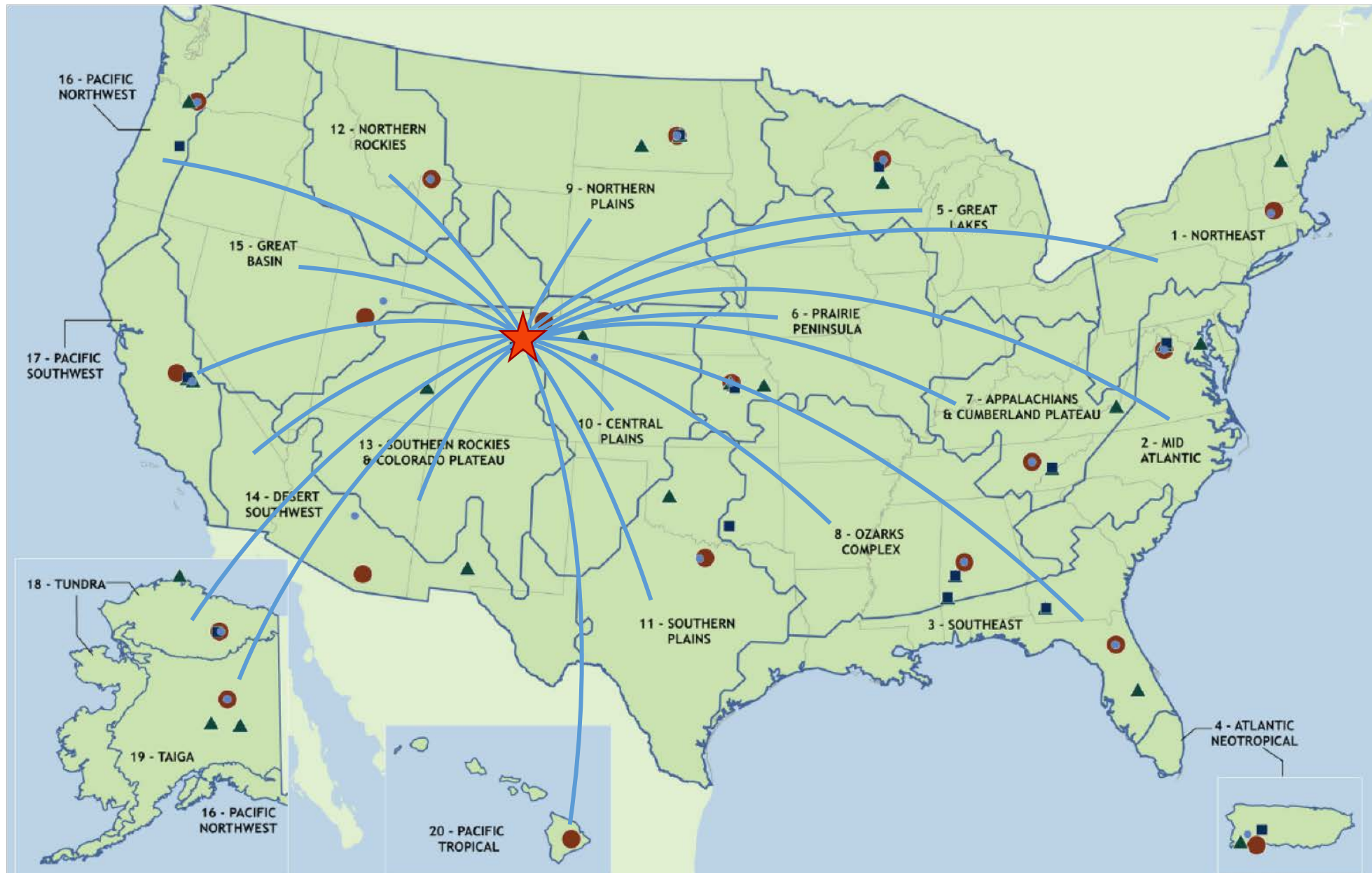




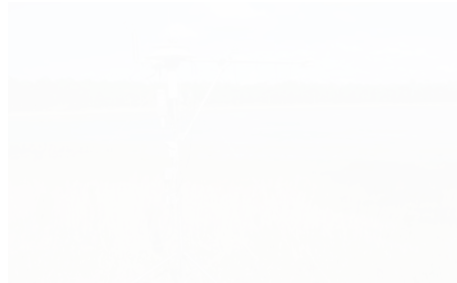






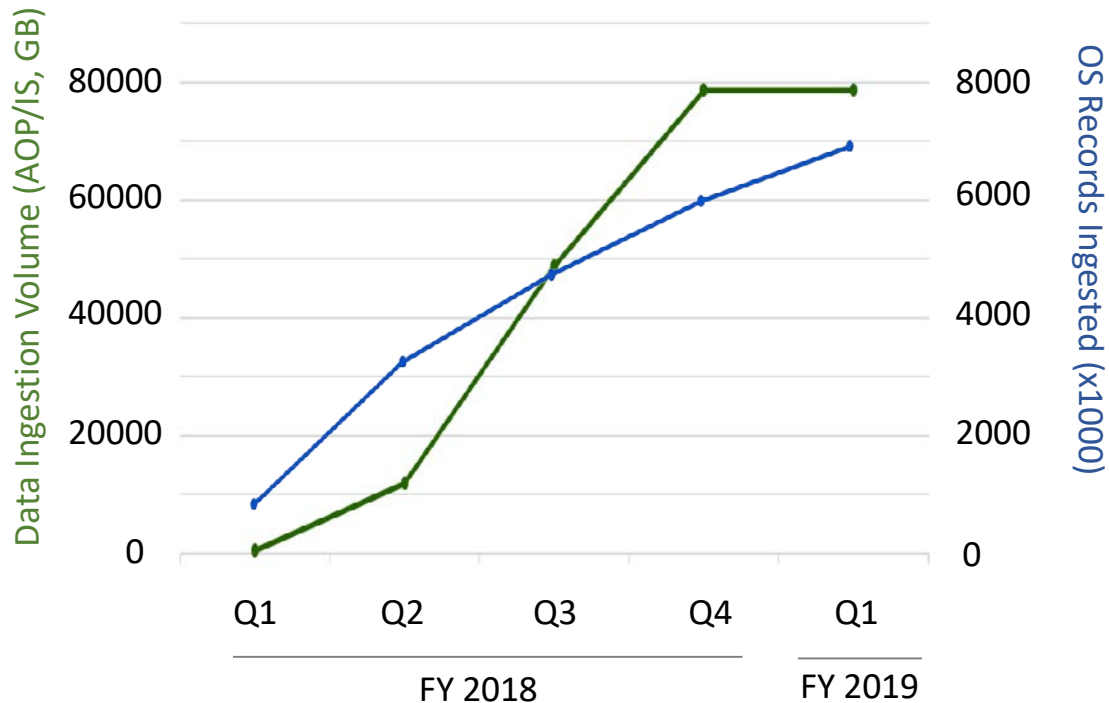


The Observatory is now in Full Operations

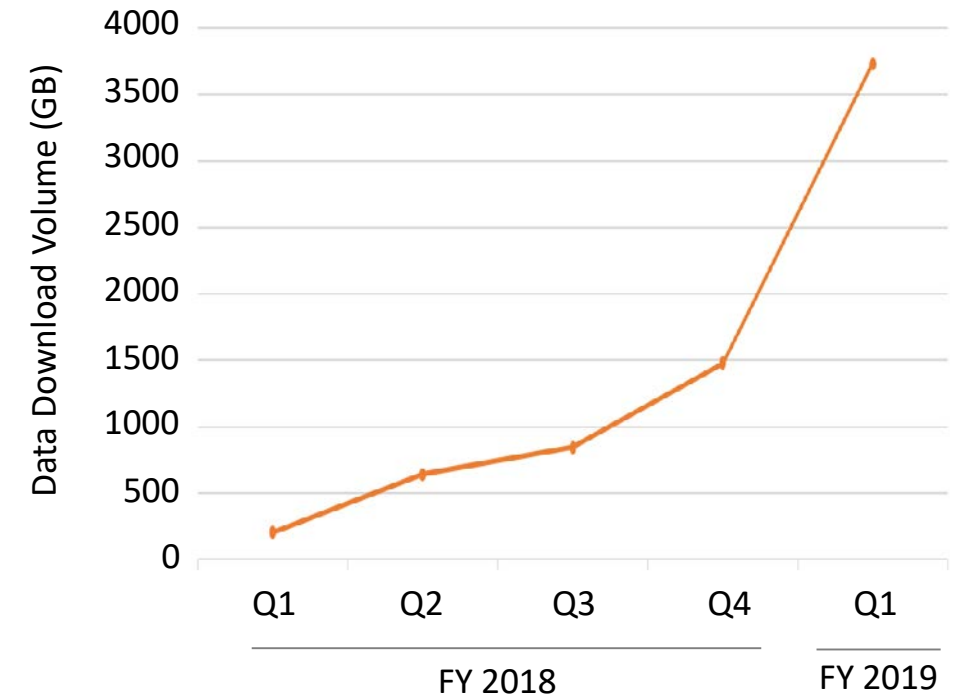


Increasing Data Ingestion and Community Data Use

Cumulative Data Ingestion



Community Data Use

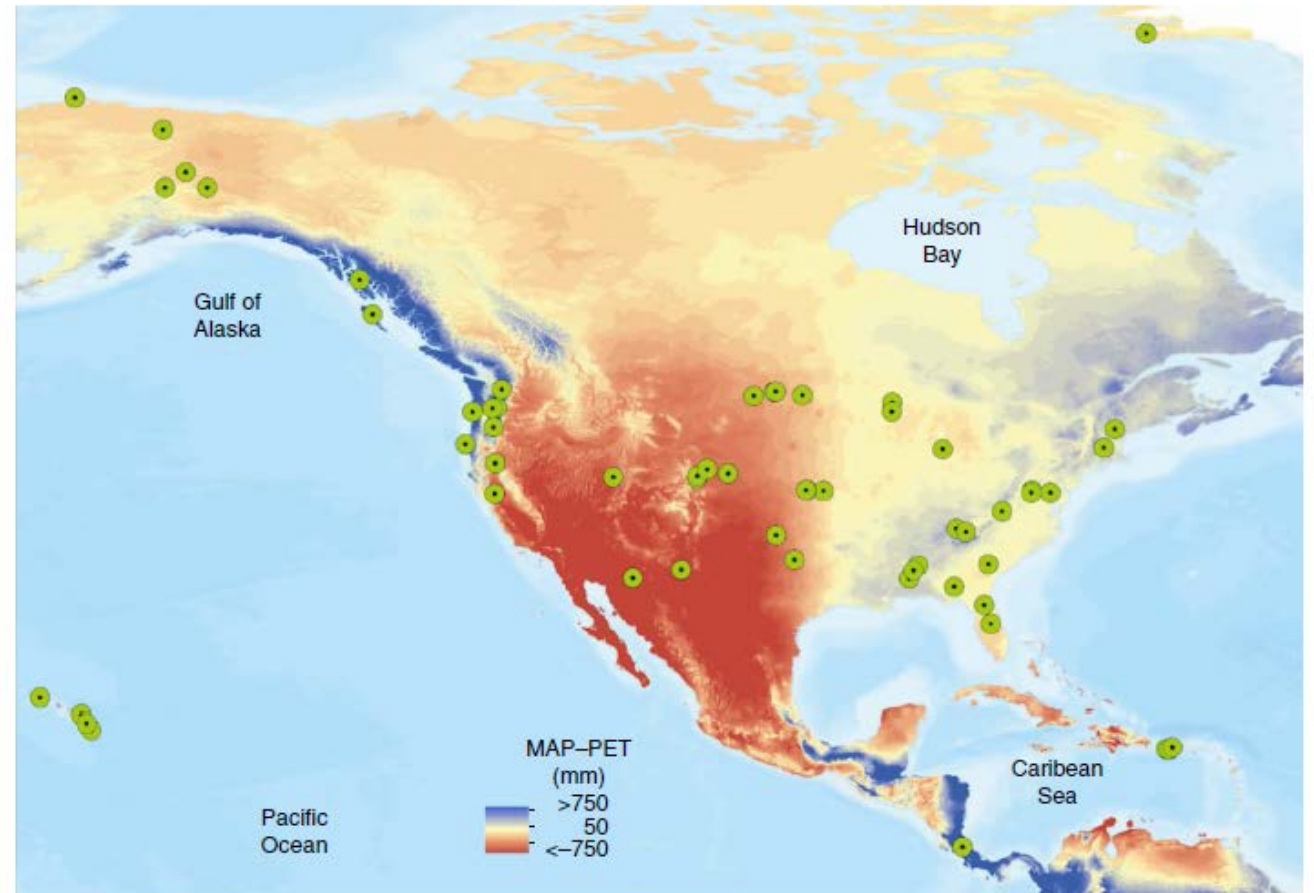


● – Aerial Observation Platform ● – Observational Systems



Research demonstrating NEON's forecasting ability, continental-scale and temporal breadth.

- NEON soil cores used in first-ever global-scale evaluation of reactive mineral retention of soil carbon
- Provides key insight into long-term carbon storage, global soil carbon pool



Kramer, Marc G., and Oliver A. Chadwick. 2018. "Climate-Driven Thresholds in Reactive Mineral Retention of Soil Carbon at the Global Scale." *Nature Climate Change* 8 (12): 1104.



NEON's Presence at Major Conferences

NEON Symposia

NEON-related presentations

NEON-led workshops

- Ecological Society of America
- American Geophysical Union



Tyson L. Swetnam
@tswetnam

Maybe, its who I follow on Twitter, but my [#AGU18](#) feed was dominated by: early career, graduate student, (e)posters, & [#NEONdata](#) tweets.

.....
Science is young, and digital.

8:06 PM · Dec 15, 2018 · [Twitter for Android](#)



Community Engagement Activities

ESA Webinar

- Access NEON: Data Portal and Tools for **Accessing and Understanding NEON Data**

Joint NCAR/NEON workshop

- Predicting life in the Earth system – **linking the geosciences and ecology**

NSF INCLUDES Conference

- Bringing Conversations on **Diversity, Equity, and Inclusion in Data Science** to the Environmental Sciences

Explore NEON Workshops (Fall 2019)



Facilitating Community Engagement



- NEON Science Summit
- Planned NEON-related Research Coordination Networks
- BIO Advisory Committee Subcommittee on NEON user engagement



- NEON is transformative
- NEON is fully operational
- NEON is increasingly used by the community

