

The National Ecological Observatory Network: Overview and Strategies for Radiation Measurements Across the Continent

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The National Ecological Observatory Network (NEON) is responsible for making observations of terrestrial, aquatic, and organismal ecology in 20 different eco-climatic domains across the continent. NEON will provide localized data on key physical, climate, and chemical forcing, as well as their associated biotic responses, in an effort to inform climate change, land-use change, invasive species, and other impact studies. The sheer volume of data is expected to exceed hundreds of Terabytes per year and will present challenges for data management on an unprecedented scale.

This talk will provide an overview of NEON as a whole, while specifically focusing on the numerous radiation measurements that will be made across the network. This consists of broad-band measurements in the Ultraviolet, Visible Spectroscopy, and Infrared throughout all NEON sites as well as planned observations with sunphoto spectrometers. Highlights will include preliminary first results hosted on the NEON data portal and look toward first article science results.

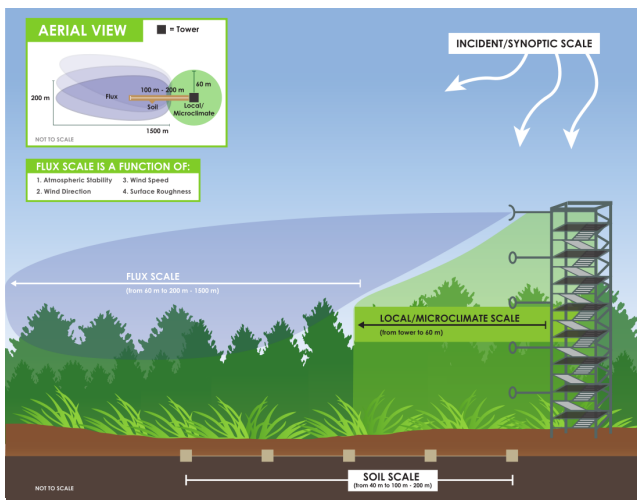


Figure 1. NEON's Tower-based Observations.

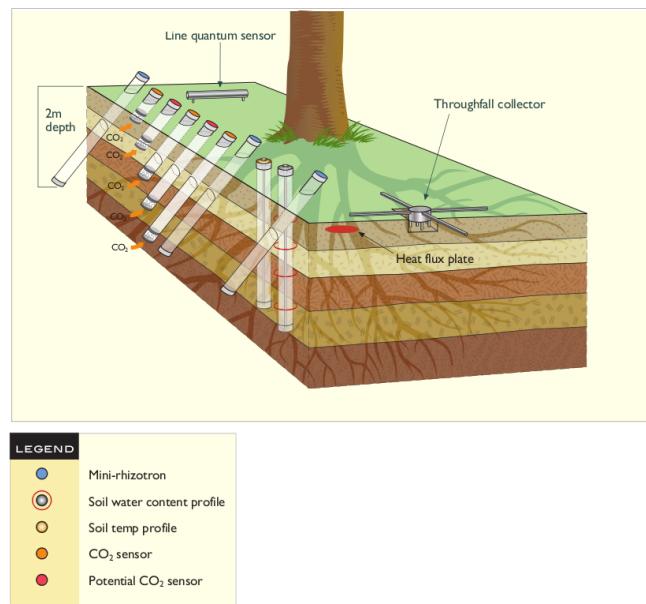


Figure 2. NEON's Soil-based Observations.