

Vaisala Quanterra Ecosystem Monitoring Service

Solution Spotlight



Measure carbon and water fluxes continuously to verify climate action outcomes

Climate action initiatives need verifiable data to demonstrate their impact. Whether you are developing nature-based solutions, managing carbon projects, or conducting ecosystem research, making confident decisions requires continuous, site-specific measurement rather than estimates or infrequent snapshots.

The Ecosystem Monitoring Service provides the trusted site-specific data you need to optimize climate actions and verify results. Using scientifically robust atmospheric monitoring, the service measures carbon, water, and energy flows every 30 minutes, giving you a complete picture of how your ecosystem responds to management practices and weather events.

With an affordable subscription fee, you can access this advanced measurement technology without the burden of hardware investment, installation challenges, maintenance, or data processing expertise.

The service deploys flux stations at your locations and delivers processed data through a user-friendly web interface or API. This verified data helps you demonstrate impact to stakeholders, secure carbon credits, optimize land management strategies, and meet your climate goals with confidence.



Key benefits

Continuous site-specific monitoring provides measurements every 30 minutes, rather than samples and snapshots, capturing real-time ecosystem responses to weather and management practices throughout your project.

Affordable as-a-service model makes atmospheric flux monitoring accessible without expensive equipment or specialized expertise.

Verified impact data demonstrates climate action effectiveness, helping you optimize efforts and achieve measurable results for carbon accounting, supply chain commitments, or certification.

Expert deployment and data processing deliver high-quality measurements you can trust.

Versatile application across farmland, grassland, forests, and peatland ecosystems, even in remote locations.

Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala enables confident climate action through trusted, science-based data.

With over 90 years of experience and customers in 170+ countries from the Poles to Mars, we provide the gold standard in precision and reliability. Our accurate data and insights help organizations meet their Net Zero ambitions and create a better planet for all.

Quanterra Systems

Acquired by Vaisala in 2025, Quanterra was founded as a spin-out from the University of Exeter in 2021. Building on years of scientific experience, the founding team aims to drive greater use of advanced ecosystem monitoring approaches in our push for a better world.

