To: Interested Parties
From: Sceye Inc.
Re: Findings from First-Ever Real-Time Methane Detection from the Stratosphere
Date: June 2025

Overview: A Breakthrough in Real-Time Methane Detection

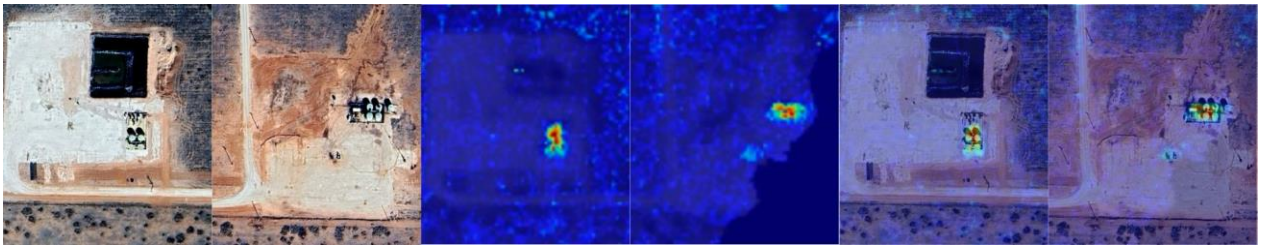
In partnership with the U.S. Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED), Sceye has achieved a global first: real-time detection and continuous wide-angle monitoring of methane emissions from the stratosphere, which identified specific emitters and quantified the rate of emissions. Using its High Altitude Platform Systems (HAPS), Sceye conducted two missions over the Permian Basin, marking a major turning point in environmental monitoring. For the first time, Sceye HAPS completed persistent methane detection while maintaining position at 65,000 feet.

Sceye opens new possibilities for how governments, regulators, and industries can detect, quantify, and respond to methane pollution with greater speed, accuracy, and coverage than ever before. By filling critical blind spots left by satellites, planes, drones, and ground crews, Sceye can dramatically reduce response time from months to minutes, improve regulatory oversight, and enable faster mitigation of all types of methane emissions, large and small.

Key Findings and Accomplishments

During flights in June and October 2024, Sceye's custom-modified dual-sensor payload (SWIR640 + SceyeCam) recorded the following:

- **High-resolution detection:** Demonstrated ability for granular imaging at sub meter precision, enabling unprecedented visibility from the stratosphere.
- **Super-emitter capture:** Identified multiple emitters of various sizes, including a rogue source emitting ~1,000 kg/hr, or 10x the EPA threshold for a super emitter.
- **Persistent wide-area coverage:** Continuous surveillance across thousands of square miles in the Permian Basin, vs LEO satellites, which typically scan days or weeks apart.
- **Advanced payload:** Quantified specific methane emissions using custom infrared and optical sensors, revealing both large and previously undetected leaks.
- **Operational proof of concept:** Validated imaging and quantification from the stratosphere, at a resolution, cadence and coverage previously impossible.



Left to right: Image from SceyeCam, image of methane emissions from infrared sensors, overlay of both to identify specific emitters and quantified the rate of emissions.

Why It Matters

Methane is the second-largest contributor to global warming, and the oil and gas sector is its largest industrial source. As the U.S. EPA and regulators push for next-generation monitoring tools, Sceye is already delivering. Its technology can detect both super-emitters – like a rogue site releasing ~1,000 kg/hr of methane – and smaller, overlooked leaks.

What's Next: July 2025 and Beyond

Sceye's next flight program begins in July 2025, with long-duration missions designed to transition from demonstration to commercial deployment, including:

- **Longer flights:** Potential for multi week to month-long deployment in the stratosphere.
- **Image resolution**: 4-inch optical and 10-ft infrared imaging.
- **Refined detection thresholds**: Targeting validated detection of 6-8 kg/hr.
- **Real-time alerting**: Transition from mapping to actionable, near-instant alerts and continuous monitoring.
- **Pilots with partners**: Sceye will continue to expand its partnerships with federal, state, and commercial partners.
- **Additional payloads:** Enhanced sensing for early wildfire detection, vegetation health, maritime awareness, and more.

About Sceye and Detection Capabilities and Comparisons

Sceye is setting a new standard in earth observation, climate monitoring, and connectivity and is the first company to achieve a solar-powered diurnal flight in the stratosphere for over 24-hours while staying over an area of operation at altitude. By combining drone-like precision with satellite-scale coverage, Sceye's platforms deliver unmatched real-time detection and rapid response capabilities.

Sceye's next-generation HAPS overcome the critical trade-offs of satellites, planes, and drones to offer a truly persistent, high-resolution solution for tracking methane and other atmospheric pollutants at scale.

Platform	Key Limitation	Sceye Advantage
Satellites	Infrequent revisits, poor resolution	Hi- res, persistent real-time data
Planes	Costly, labor-intensive operations	Low-cost, continuous aerial coverage
Drones	Limited range and endurance	50+ mile radius, weeks of flight time
Ground Crews	Sparse data, miss intermittent leaks	Automated, persistent monitoring at scale

With payload capacities of 250+kg, Sceye's non-terrestrial platforms support multi-sensor, customizable payloads. Their SWIR640 allows for fine-grained spatial attribution down to specific site components, empowering faster, more cost-effective mitigation. No other platform offers this unique vantage point and resolution from the stratosphere.