

Key Highlights

Uncovered Hidden Problem:

Imagery revealed emergence issues that may have gone unnoticed otherwise.

Data-Driven Action

Horizons maps enabled quick and targeted troubleshooting of equipment performance.

Tangible ROI

Resolving the issue is expected by improve yields by 8-12 bu/acre annually.

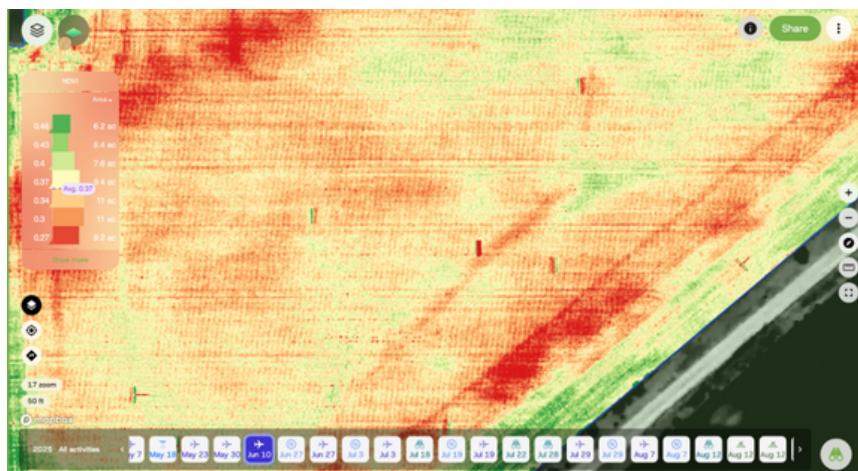
Emergence

Horizons Uncovers Hidden Equipment Issue for Iowa Grower

By:  John Deere

Background

An Iowa grower who farms approximately 600 acres relied on Horizons to help manage his operation during the 2025 crop season. The grower believed he had minimized common planter-related issues; however, an unexpected emergence problem appeared early in the season, challenging their assumptions about equipment performance.



Down pressure variability caused uneven emergence noted in the NDVI map on June 10.

Challenge

The grower faced a hidden machine issue that led to poor emergence and uneven crop health across parts of the field. With his planter setup, he did not initially suspect the equipment could be the source of the problem. If left unresolved, these emergence gaps would have resulted in reduced stand uniformity and measurable yield loss. The grower needed a reliable way to validate the cause and pinpoint the problem quickly to avoid repeat issues during the critical planting window.



Emergence

Horizons Uncovers Hidden Equipment Issue for Iowa Grower

Solution

By leveraging Horizons imagery and database tools, the grower was able to visualize emergence patterns at scale. The maps highlighted inconsistent emergence zones, which prompted a deeper investigation into the planter. Cross-referencing imagery with planting data revealed a subtle mechanical issue that had not been detected during normal operation. With this insight, the grower made the necessary equipment adjustments to address the underlying problem.

Results

The corrective actions resulted in significantly improved crop emergence and more uniform stands. The grower estimates that identifying and resolving this issue will deliver an 8-12 bu/ac yield improvement year over year. Based on this experience, he plans to use Horizons more proactively in future seasons to detect similar issues earlier.