

## Key Highlights

### Field Prioritization

Rainfall accumulation and emergence maps helped the grower target low-performing areas without needing to scout every field manually.

### Actionable Insights in Real Time

The data confirmed emergence wasn't improving, prompting timely replant decisions to protect yield potential.

### Efficient Decision-Making at Scale

AGMRI enabled quick field assessments across large acreages during planting window.

## Emergence and Replant

# Pinpointing Problem Fields During Planting Season Using AGMRI

### Background:

An Indiana grower was in the middle of planting with limited time to revisit recently planted fields. His acres are spread across a wide region experiencing highly variable weather—some fields were saturated, while others were bone dry. This made it incredibly difficult to monitor conditions and address emerging issues promptly. Historically, spotting emergence problems early has been a challenge, especially when weather conditions shift rapidly between locations.

To stay ahead of problems without physically scouting every field, the grower turned to AGMRI, leveraging its ability to remotely monitor conditions and alert them to trouble spots.

### Challenge:



*Soybean plants exhibiting 'broken necks'—a condition where the stem bends sharply just below the cotyledons. These damaged seedlings will not survive, leading to potential stand loss in the affected area.*

During a routine AGMRI review, emergence maps flagged a concern in one of the soybean fields. The grower was uncertain whether the poor emergence would resolve itself over time or if replanting would be necessary.

He opted to monitor the field for a couple of weeks, but the emergence percentage never improved. Ground scouting of low-emergence zones confirmed that many plants had pushed hard through crusted soil only to result in "broken necks"—a sure sign that those plants wouldn't survive.

If nothing had been done, the stand loss would have likely led to noticeable yield drag, and we decided to take action.

Without intervention, the farmer risked having 21% of the field suffer from inadequate emergence, which would drastically reduce his yield and impact his overall ROI for the year. The urgency of the situation and the tight schedule meant he needed a dependable data source to inform his replanting decisions quickly.



## Emergence and Replant

# Pinpointing Problem Fields During Planting Season Using AGMRI



*Variable emergence across the field due to dry soil conditions. Initial dryness followed by a pounding rain led to soil crusting, hindering seedling emergence. After observing no improvement in emergence several days post-rain, the grower determined replanting soybeans was necessary.*

### Solution:

Using AGMRI's rainfall accumulation layer, the grower identified that this specific field had received just enough rain after planting to crust the already dry soil. Pairing this rainfall data with the emergence layer, AGMRI told a clear story: this wasn't a one-off issue, it was a pattern across the field that needed to be addressed.

This insight allowed the grower to prioritize scouting in the most affected zones. Based on what they found, a decision was made to add soybean seed to supplement the low-population areas and protect the season's yield potential.

### Results:

With AGMRI providing targeted insights, the grower is now moving forward with replanting soybeans at an angle to the original rows in the low-emergence zones.

AGMRI not only helped identify issues remotely but also gave the grower confidence to act quickly. In the future, AGMRI will be a critical tool in helping the grower monitor variable conditions and make fast, informed decisions across his entire operation.

