



SWATMAPS

YIELD ANALYTICS

FARMER BROCHURE

PERFORMANCE WITH PROOF

TURN YIELD DATA INTO A REPORT CARD TO DRIVE PROFIT

Yield Analytics helps you understand why your yield varies, where money is being made, where it is being lost, and how to improve future agronomic decisions with confidence.

SWAT MAPS Yield Analytics cleans, organizes, and analyzes your yield data to identify which zones, fields, crops, and strategies consistently deliver the best return. By comparing actual yield, target yield, profit, and stability over time, you gain a clear understanding of where your agronomic decisions are working and where they are not working.

THE PROBLEM: YIELD DATA ISN'T USED

- In its raw form, yield data can be messy and of no use. It takes a lot of time to clean it properly and accurately.
- As a result, yield data can pile up year after year with no analytics that create value.
- Even with clean data, it can be difficult to understand yield variability without connected base layers, like SWAT MAPS, that provide the information needed to help understand the “why” of yield variability and how to better manage it.
- The opportunity for yield data is lost, leading to wasted money, time, and effort into collecting it.
- SWAT MAPS precision services require another large step to get to the ultimate level of profit focused precision required by measuring actual yield data analytics.

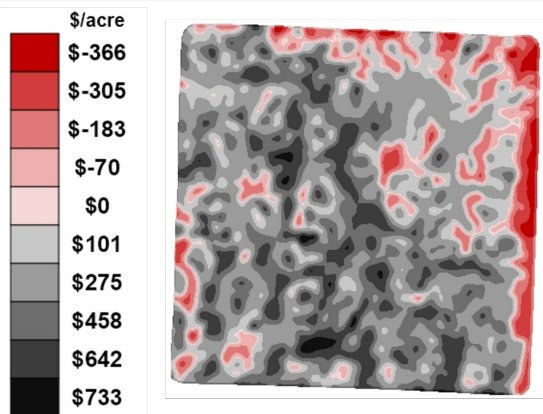
THE SOLUTION: YIELD ANALYTICS

- We clean and organize your messy raw data to a professional level necessary for analytics.
- Linking your yield to SWAT zones will help you understand yield trends by zone, by field, and spatial yield stability for better performance by zone and risk.
- You'll build accurate yield targets.
- You'll calculate actual performance by zone on every field and understand which areas of the field consistently perform over time and are highly profitable. You'll identify low-return areas of the field, define why, and suggest future management strategies for improvement and/or reduce investment of crop inputs.
- You'll replace guesswork of zone potential and zone yield targets with evidence. Instead of relying on assumptions, you'll move forward with decisions grounded in measurable results.
- Long-term yield analytics by SWAT zones prove how to increase profitability and reduce risk.

PROFIT MAPS

We calculate profit by assigning cost per application unit to variable expenses like fertilizer, seed and any other in crop application done by prescription. Fixed per-acre costs are then applied to obtain a total cost for each SWAT ZONE. This is then subtracted from the income.

PROFIT MAP SUMMARY



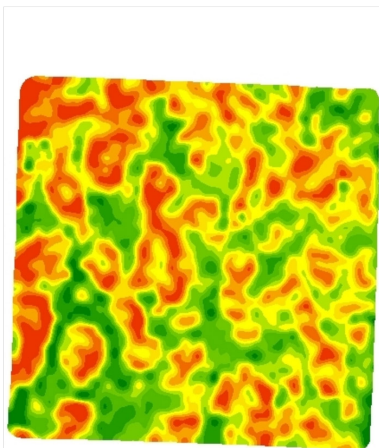
ACTUAL VS EXPECTED PROFIT



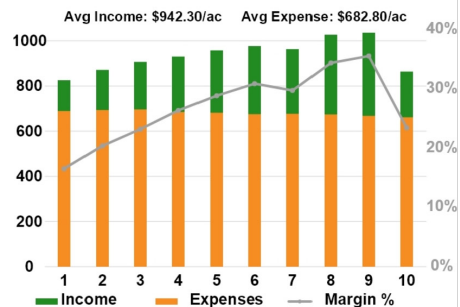
*Expected profit is calculated using the target yield multiplied by selling price.

SWAT MAP

Zone	Acres
1	9.9
2	17.4
3	22.6
4	21.8
5	21.6
6	21.9
7	18.3
8	15.4
9	9.1
10	2.5



EXPENSES VS INCOME



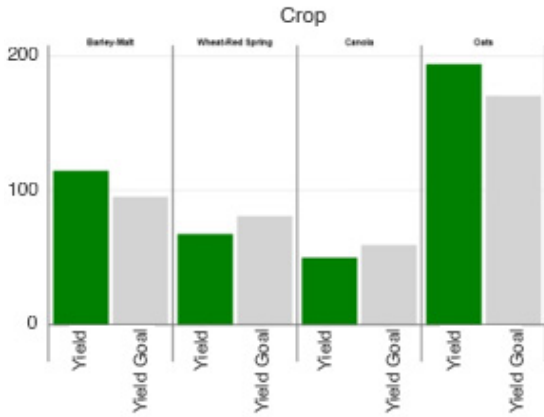
A MORE COMPLETE PICTURE ON YOUR TERMS

- Calculate what the profit would be for each zone based on the target yields at the beginning of the season.
- Calculate margin by zone to identify parts of the field or specific SWAT zones that consistently have poor returns to guide future management.

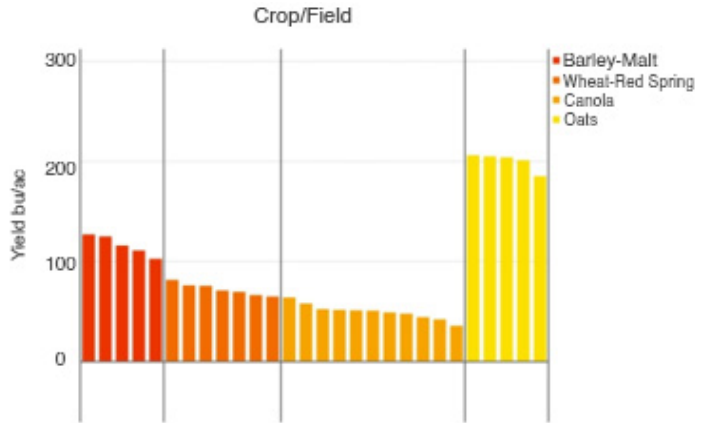
FARM REPORT

The Farm Report section of the Yield Potential report is higher level overview of the year. We summarize the acres per crop and zone, compare yields to yield targets, soil test trends across zones, and variety performance.

AVERAGE YIELD VS YIELD GOAL



AVERAGE YIELDS BY FIELD



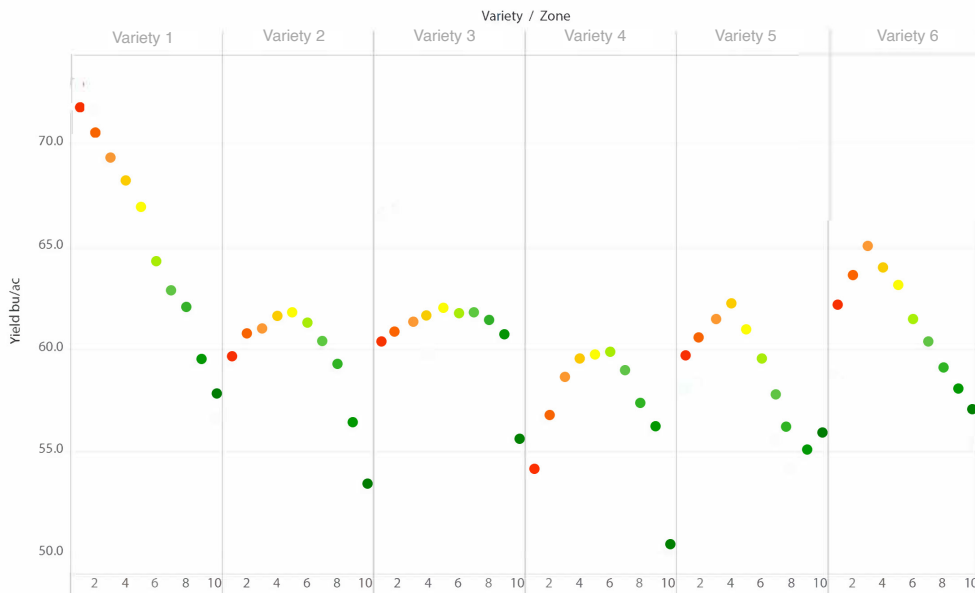
VARIETY REPORT

The Variety Report summarizes yield performance for each variety across your management zones, providing a clear comparison of both overall results and zone-specific strengths. This allows you to identify which varieties are best suited to different areas of your farm.

Example: Distinguishing performance in lower-producing zones versus higher-potential zones.

With this insight, you can make more informed placement decisions, matching the right variety to the right field. In some cases, this can be taken a step further by strategically blending varieties within a field to promote even more crop maturity and maximize overall yield potential.

CANOLA YIELD BY VARIETY



YIELD DISTRIBUTION

The Yield Distribution chart shows the percentage of average yield achieved within each zone across every field. For farms with multiple years of data, results are averaged to provide a more consistent and reliable view of performance over time. Color gradients are used to highlight variability, making it easy to identify fields that are more inconsistent than others.

The purpose of this chart is to quickly draw attention to the fields that stand out, whether due to high variability or uneven performance, so you can focus your time on investigating where adjustments may have the greatest impact.

YIELD DISTRIBUTION BY ZONE (%) ALL YEARS

Field Name	Zone									
	1	2	3	4	5	6	7	8	9	10
(1) 16 N	95.5	98.1	101.8	104.0	104.7	103.7	98.7	90.8	78.1	70.1
(2) 3 SE	91.0	96.2	100.1	103.1	104.7	102.5	101.7	97.9	84.8	76.2
(3) 3 SW	98.7	102.4	103.9	104.6	105.2	101.7	101.4	92.8	74.6	62.8
(4) 3 NW	94.8	99.5	102.3	104.0	102.6	100.0	99.6	92.2	82.2	73.5
(5) 3 NE	104.4	108.6	108.4	106.9	103.7	98.6	93.3	87.2	77.8	69.1
(6) 16 SW	95.9	98.8	102.8	104.5	104.4	102.5	97.1	92.2	87.0	86.2
(7) 16 SE	100.4	101.0	104.1	107.1	107.4	105.1	98.6	87.7	72.1	57.6
(8) 9 NW	97.1	99.8	105.4	106.9	105.8	102.9	96.8	87.2	78.0	71.3
(9) 9 NE	98.0	100.3	103.0	103.5	100.6	98.3	95.7	92.5	91.1	91.1
(10) 9 SW	103.2	104.4	107.0	105.6	101.7	98.0	87.8	75.9	60.9	49.4
(11) 9 SE	92.8	96.3	98.7	100.5	101.8	102.6	101.6	103.3	100.7	87.9
(12) 17 S	98.3	101.1	104.1	104.6	102.7	99.4	93.6	84.9	75.7	64.8
(13) 17 NE	92.4	100.2	101.5	102.9	102.2	100.9	101.2	95.0	88.7	81.0
(14) 21 NE	92.1	99.8	102.5	102.9	104.0	103.2	98.9	90.3	84.2	79.6
(15) 22 NW	108.5	108.4	106.5	104.4	101.3	96.5	91.6	85.8	74.2	68.3
(16) 22 NE	106.5	107.5	107.0	106.7	104.4	100.1	92.7	85.4	78.5	67.5
(17) 4 N	106.3	106.1	107.0	106.8	103.7	99.6	93.0	84.2	80.4	72.2
(18) 4 S	97.0	100.1	101.9	103.4	102.5	101.2	100.5	85.2	72.3	52.0
(19) 20 NE	93.3	96.2	99.8	102.0	103.1	102.5	101.8	95.6	87.0	75.9
(20) 21 SE	94.7	96.2	98.1	102.0	104.0	105.3	106.4	101.0	85.9	67.1
(21) 22 SW	93.2	96.4	100.1	102.8	103.7	103.8	103.4	100.2	91.5	79.5
(22) 28 SE	85.6	92.1	96.8	101.2	103.8	104.6	104.1	104.3	97.9	87.6

Shows the percent of average yield achieved in each zone. The values of each field are averaged across all years of data. Highlighted colours from orange to green show extreme values on a farm level. This demonstrates which fields have extreme changes in yield from Zones 1 to 10 that persist from year to year.

MEASURE WHAT ACTUALLY PAYS

- See which zone has the highest yield on your farm.
- See which field or fields don't follow that trend.

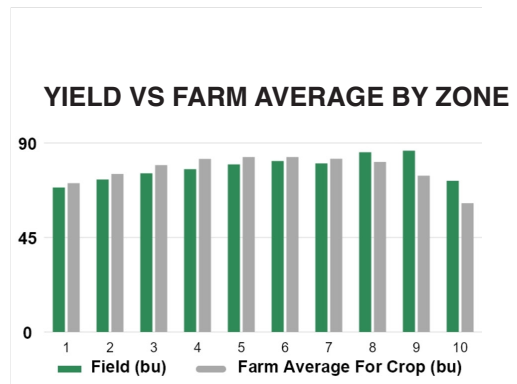
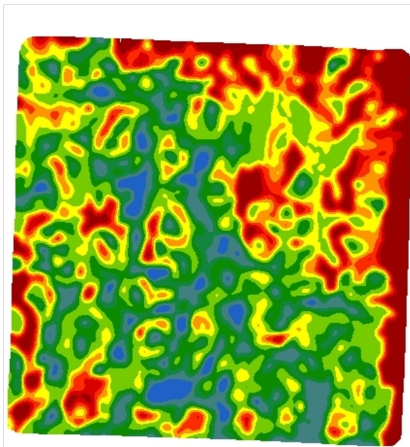
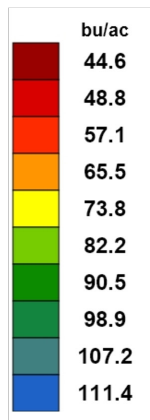
YIELD VS TARGET YIELD

Pairing your yield map with supporting graphs adds critical context to field performance. By comparing yield by management zone to both the farm-wide average for that crop and the intended target yield, you can quickly see where each zone is exceeding expectations and where it is falling short.

This dual benchmark makes it easier to distinguish between natural variability and true underperformance, helping you identify where management is working and where adjustments are needed. The result is clearer, more actionable insight, so you can focus your time and inputs where they will have the greatest impact.

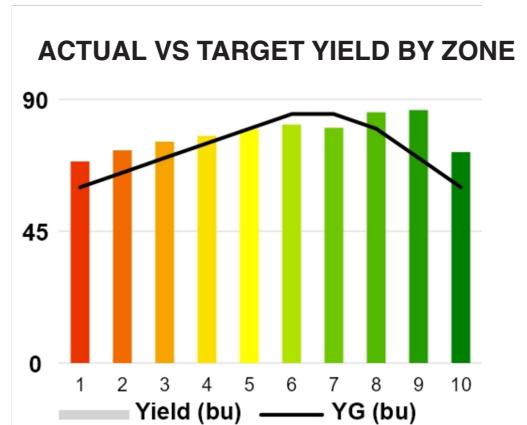
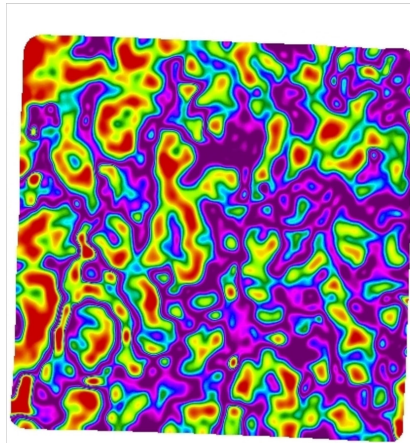
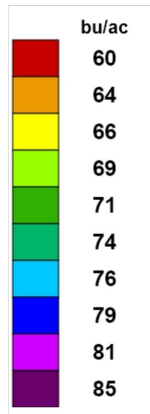
CLEANED YIELD MAP

Field Average: 78.53



TARGET YIELD

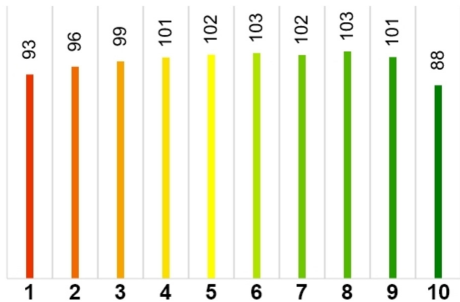
Target Yield: 75.43



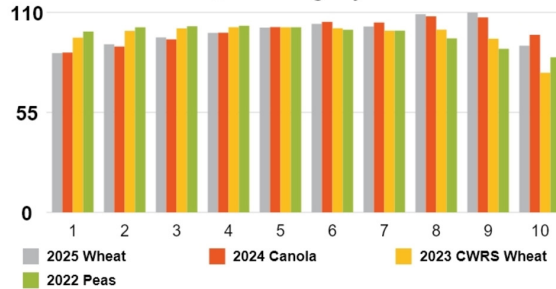
MULTI-YEAR PERFORMANCE & STABILITY

For farms still building toward a full multi-year dataset, a validated modeling approach is used to estimate yield variability until enough historical data is available. This allows you to begin identifying patterns and making data-driven decisions immediately, with increasing accuracy as more years of actual yield data are collected. To create this report, yield maps for each year are normalized by dividing the yield values by the mean. Normalizing allows us to compare yields between different crop types and environmental conditions without bias. Next, normalized yield maps are averaged together to create the Multi-Year map which is then summarized by SWAT ZONE.

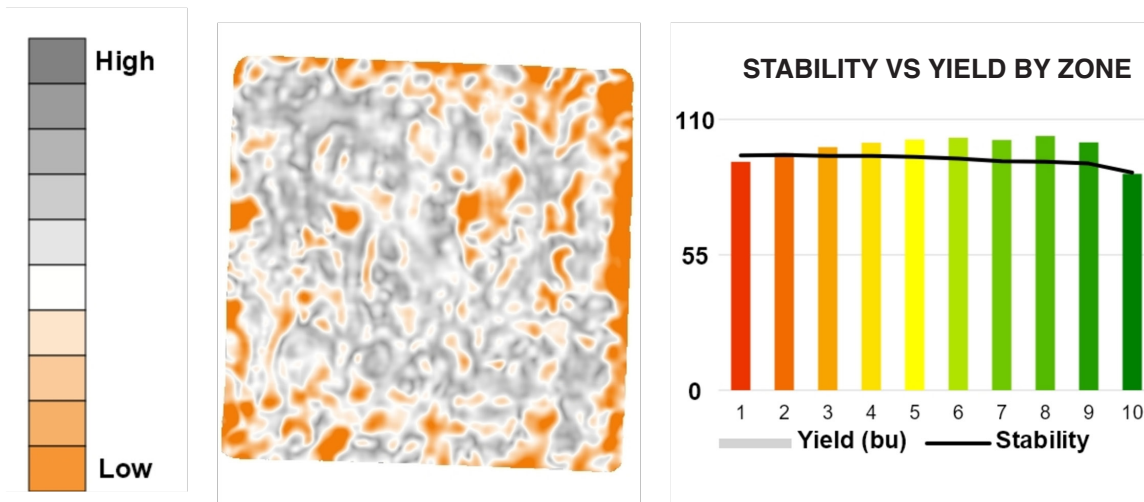
MULTI-YEAR YIELD BY ZONE (%)



YIELD % OF AVERAGE BY ZONE



MULTI-YEAR STABILITY



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