



**NAU Country**<sup>®</sup>  
A QBE Insurance Company



# Precision Farming Technology Systems Loss Adjustment Guidelines

Disclaimer: Information is based on the 2022 Loss Adjustment Handbook and does not reference all provisions for PFTS loss settlement procedures. For more detailed instructions, please refer to the 2022 LAM.

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*Benefit from NAU  
Country's Precision  
Farming today!*

# Precision Farming Technology Systems (PFTS) Definition

PFTS requires the use of technologies, such as a global positioning system (GPS) and geographic information system (GIS) management tools for the purpose of improving crop management. The utilization of systems' technologies and agronomic principles to manage variability within and between fields and/or over time that is associated with all aspects of agricultural production.

## Advantages of Precision Farming



**Faster Claim Settlement:** Your NAU Country adjuster utilizes records directly from your precision equipment, reducing the settlement time of claims.



**Convenient:** NAU Country claims utilize planting maps, harvest maps, and calibration reports directly from your precision equipment. It also eliminates the need for settlement sheets, load records, or weight tickets to settle claims.



**Efficient:** Acreage Reporting and Production Reporting made more efficient. PFTS allows the submission of electronic data to your NAU Country agent without having to leave your home or office. Reports will be automatically created for you and your agent to review, approve, and sign.



**Precision Accuracy:** Claims and/or review information is considered accurate, consistent, and verified for Crop Insurance Records when they follow the prescribed PFTS procedures.



**Actual Acreage/Production:** Precision Crop Reporting uses the accurate data you are already collecting to simplify crop insurance reporting by using data from your precision farming equipment, making your acreage and production reporting easier, and claim settlement faster and accurate. Manual records and maps might include FSA non-farmland acres such as ditches and waterways, potentially reducing your APH which can affect a field's coverage level, per-acre guarantee, loss payment, and premiums paid for coverage.



**Upload Files with Ease:** Easily upload your files from various planter monitor companies! Upload via cloud connection or from a flash drive directly to NAU Country. These companies include, but are not limited to Climate FieldView™, Trimble Ag Software (Formerly Farm Works), AgFinity® by Ag Leader®, and MyJohnDeere.

# Precision Farming General Requirements

This section will only apply if the insured is using the full PFTS from **planting** through **harvesting**. Minimum requirements consist of:

- Planter Monitor data
- Combine Monitor data
- Yield Mapping Software
- Calibration Records

## Acceptable Planting Records

*AIP approved precision farming technology system automated planter records may be used to separate Optional Units (OU) on center pivots irrigation systems for IRR circles and NIRR corners without discernable breaks in the planting pattern provided the insured can:*

- Document the automated planter monitoring system used
- Provide the acres planted and practice for each OU
- Provide production records by OU and practice
- Provide the required information
- Provide records of variable rate planting populations if recommended by ag experts

## Farm Management Records

*Must contain Summary Reports that reflect:*

- Planted Acres
- Harvested Acres
- Harvested Production
- Calibration Reports

Crop Type Summary Report								
<b>Grower:</b>	Deal Farms							
<b>Year:</b>	2020							
<b>Operation:</b>	Grain Harvest							
<b>Product - Crop Type:</b>	Corn							
Farm	Field	Load / Region	Area ac	Average Moisture %	Estimated Weight (Wet) lb	Estimated Volume (Dry) bu	Average Yield (Dry) bu/ac	Cal. Loads
Deal Farms	Harvest Center	1	129.83	18.83	1,822,203	31,254	240.73	0
	Pivot Corners	1	12.51	18.03	129,112	2,234.4	178.57	0
	<b>Totals</b>	<b>2</b>	<b>142.34</b>	<b>18.76</b>	<b>1,951,315</b>	<b>33,489</b>	<b>235.27</b>	<b>0</b>
<b>Operation:</b>	Planting							
<b>Product - Crop Type:</b>	Corn							
Farm	Field	Area ac	Average Rate (count) kds/ac	Minimum Date / Time	Maximum Date / Time			
Deal Farms	Harvest Center	130.54	34.04	5/25/2018	5/26/2018			
	Pivot Corners	13.56	22.09	5/25/2018	5/26/2018			
	<b>Totals</b>	<b>144.11</b>	<b>32.92</b>	<b>5/25/2018</b>	<b>5/26/2018</b>			

# Precision Farming Claims Procedure

## Planting Details

### Planted Acreage

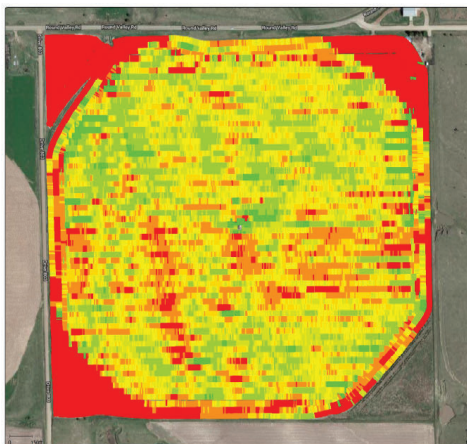
- For producers utilizing PFTS, electronic record outputs for planted acreage are acceptable as Determined Acres by following all PFTS procedures. There will be no need for FSA 578s, maps, or other measurements for acreage determination.
- Planting maps that display variable rates between units and/or practices qualify for discernible breaks, required on Pivot Corners.
  - Discernible breaks apply only to Pivot Corners. If planted with overlapping rows, determination is required to find out if the monitor records were adjusted for the overlap when planting.



Planting 2018 - North Pivot

**EXAMPLE:**

The map in the NAU Country EASYmapping® Booklet displays fields, acreage, and unit structure. Shapefiles can be downloaded to the Farmer PFTS.

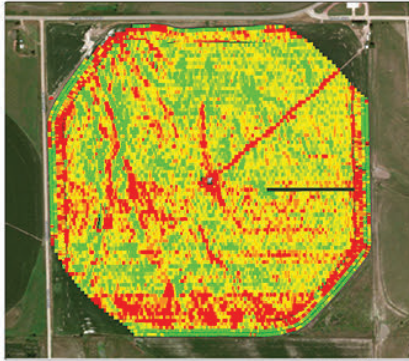


**EXAMPLE:**

Planting map from the insured shows variable rates for NI Corner/Center Pivot and unit structure.

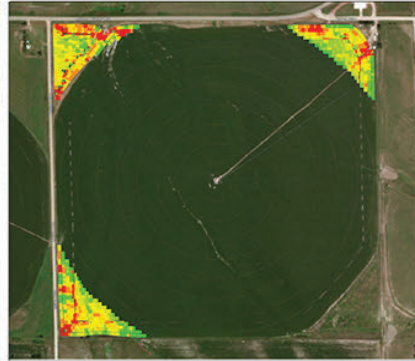
Grower : John Doe	Area : 146.54 ac	Rate (Count)
Farm : Deal Farms	Est. Amount : 4,814.2 kdsd	(kds/ac)
Field : North Pivot	Avg. Rate : 32.85 kds/ac	34.33 - 35.33( 3.95 AC)
Year : 2018	Start Date : 5/25/2018	34.16 - 34.33(23.79 AC)
Operation : Planting	End Date : 5/26/2018	34.11 - 34.16(23.60 AC)
Crop / Product : Multiple		34.07 - 34.11(23.12 AC)
		34.02 - 34.07(23.29 AC)
		33.91 - 34.02(24.12 AC)
		10.00 - 33.91(24.59 AC)

**Planting 2018 - Irrigated Center**



Grower : John Doe	Area : 146.54 ac	Rate (count)
Farm : Deal Farms	Est. Amount : 4,814.2 kds	(kds/ac)
Field : North Pivot	Avg. Rate : 32.85 kds/ac	34.33 - 35.33 (23.95 ac)
Year : 2018	Start Date : 5/25/2018	34.16 - 34.33 (23.79 ac)
Operation : Planting	End Date : 5/26/2018	34.33 - 34.16 (23.60 ac)
		34.07 - 34.33 (23.52 ac)
		34.00 - 34.07 (23.29 ac)
		33.91 - 34.00 (24.12 ac)
		0.00 - 33.91 (24.59 ac)

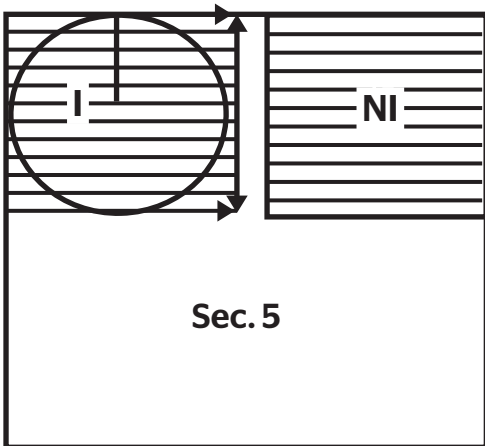
**Planting 2018 - Non-Irrigated Corners**



Grower : John Doe	Area : 12.51 ac	Rate (count)
Farm : Deal Farms	Est. Amount : 299.7 kds	(kds/ac)
Field : North Pivot	Avg. Rate : 22.69 kds/ac	34.33 - 35.33 (23.95 ac)
Year : 2018	Start Date : 5/25/2018	34.16 - 34.33 (23.79 ac)
Operation : Planting	End Date : 5/26/2018	34.33 - 34.16 (23.60 ac)
		34.07 - 34.33 (23.52 ac)
		34.00 - 34.07 (23.29 ac)
		33.91 - 34.00 (24.12 ac)
		0.00 - 33.91 (24.59 ac)

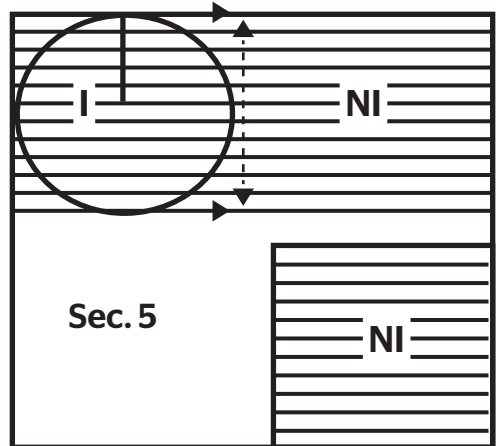
**EXAMPLE:**

The planting map shows the Plant Date, Population, and Acreage of both the Pivot and non-irrigated corners.



**EXAMPLE:**

If the crop's planting pattern/rows continue between the NI corners of the field and the portion of the field IRR by a center pivot irrigation system (circle), but do not extend into other NI acreage in the same section, section equivalent, or FSA FN; other NI acreage can qualify as a separate NI OU if the requirements are met.



**EXAMPLE:**

If the crop's planting pattern/rows extend beyond the center pivot into other NI acreage of the crop in the same section, section equivalent, FSA FN; the insured is not eligible for Optional Units and combines the NI and IRR into ONE UNIT.

## When an AIP must measure acreage

- Part of a unit is released and that part released will lose its field identity unless the AIP has approved the PFTS records;
- Acreage must be measured (or re-measured, as applicable) if PFTS records have not been approved records;
- Or, if parts of the fields in the unit have been planted and part of the fields in the unit have not been planted.
  - o The acres of the planted and non-planted portions of the field must be determined by the adjuster’s actual measurement unless the AIP has approved the PFTS data.

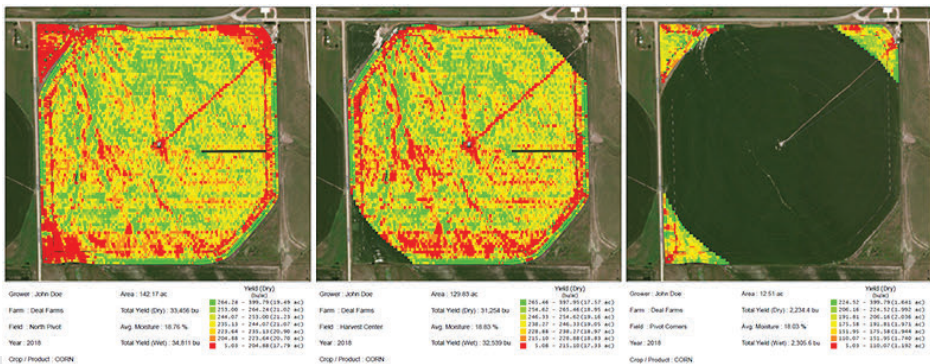
## Planter Records

- If the automated planter monitor acreage records provided by the insured are not reasonable, or the AIP has reason to question the records, the insured must provide the precision farming technology system’s raw data, and any additional records requested by the AIP.
- If the AIP determines the planted acreage records are not acceptable, the AIP must determine planted acreage in accordance with subparagraph 821A-F, H, and J, as applicable.
- However, the production records from the precision farming technology system’s yield monitor may still be used.

# Harvest Details

## Harvested Production

- Records, generated from the system, must show separate production records maintained by unit and/or practice. Records must meet all PFTS requirements as outlined in Para. 931 of the 2020 LAM. Yield maps or Summary reports may be used in lieu of settlement sheets and/or bin measurements.



### EXAMPLE: (from left to right)

1. Harvest Map from Insured displaying Harvested Production Total.
2. Harvest Map displaying Harvested Production Totals for The Optional Unit Center Pivot.
3. Harvest Map displaying Harvested Production Totals for The Optional Unit Pivot Corners.



## Unharvested (UH) Areas

Maps must be reviewed to identify harvested and UH acreage. If the map indicates UH acreage, a visual inspection is required to determine if crop harvest was warranted or appraisals are needed.

## Verifiable farm management records from producers using PFTS

- For the PFTS production records to be acceptable, the insured must provide the following information:
  - o Calibration of the automated yield monitoring system
  - o Insured's name
  - o Unit number
  - o FSA farm/tract/field ID number, if applicable
  - o Legal description of acreage
  - o A print out, by unit, of the following PFTS information:
    - Crop name
    - Acres harvested
    - Date harvested
    - Total production (unadjusted for moisture)
    - Average moisture content (must be adjusted in accordance with the CP)
    - Yield maps and acreage/production summary records that show separate production records were maintained by unit and/or practice
      - These maps must be reviewed to identify harvested and UH acreage
      - If the map indicates UH acreage, a visual inspection is required to determine if crop appraisals are needed

## Calibration

### • Self-Calibration Methods

For crop insurance purposes, self-calibrating yield monitoring systems must be compared to actual weighed production harvested from the acreage **at the beginning of harvest for each insured crop and crop year.**

### • Calibration Reports

**The insured must have calibrated the yield monitoring system at the beginning of harvest for each insured crop and crop year,** in accordance with the operator's manual specifications. The annual calibration report must include all calibrations and adjustments performed by crop, for the crop year, including the date each calibration/adjusting was performed, and the difference from the previous setting. The sensor calibrations **must not exceed three percent (3%)** when compared to the actual weighed production harvested from the acreage used to calibrate the sensor.


• **Calibrations Continued**

If the initial sensor calibration difference exceeds three percent (3%) when compared to the actual weighed production harvested from the acreage used to calibrate the sensor, the PFTS records **will not** be considered acceptable as stand-alone production evidence but may be used like load records.

• **Additional Calibrations**

If the initial sensor calibration difference exceeds three percent (3%) when compared to the actual weighed production harvested from the acreage used to calibrate the sensor, **additional** calibration samples may be taken until the results are within tolerance.

• **If after calibrating the yield monitoring system, the sensor calibrations exceed three percent (3%), post-calibration may not be performed.**

Crop Year 2019		Crop Corn	Scale Source Grain Cart	Farm Name Deal Farms			
Date	Field Name	Machine	Monitor Weight	Approved Scale Weight	+/- Weight	Percent %	Average Moisture
10/19/2019	West Field	JD	54,235	55,214	979	1.8%	18.3
10/24/2019	North Field	JD	52,156	53,214	1,058	2.0%	16.5
10/29/2019	East Field	JD	42,563	44,568	2,005	4.7%	15.0
11/19/2019	South Field	JD	38,956	39,586	630	1.6%	14.8
Operator Signature 		Date <u>11/22/2019</u>					

**EXAMPLE:**  
 Calibration Report that shows calibrations for the Combine Grain Monitor that was over the 3% limitations on one calculation. Recalibration shows less than 3% and could be approved.

**Load Records**

• **Records from Non-PFTS Combine Monitors:**

- Printed records from combine monitors must show the field identification and location, name of crop, date, and number of pounds or bushels of the crop. Insureds must also identify the unit number that correlates with the field identification on the records.
- The adjuster must verify that the field identification can be correlated with the unit numbers for the crop for the current crop year. If a field identification cannot be correlated to a unit number for the crop, the production must be considered commingled.

- If production from the combine monitor records has been adjusted for moisture by the insured or automatically by the combine monitor, this recorded amount will be the amount compared against the adjuster's measured and calculated production including adjustments for moisture.

#### • **Unapproved Records**

Records of production from combine monitors that are not part of a **PFTS may be used as load records**. Authorization to accept insured's structure markings, load records, and combine monitor records is not considered as a routine means to satisfy the insured's responsibility to keep production separate by units.

#### • **Alternate Records**

The insured should be advised to maintain alternate acceptable production records by unit in the event the PFTS production records are determined to be unacceptable. Summary sheets, truck loads, and bin markings are acceptable according to provisions.

#### • **Acceptable Scale Types**

The Approved Insurance Provider (AIP) must provide the following information (in writing) to the insured prior to harvest of what is needed to have acceptable scale weight tickets/records for loss adjustment purposes.

Acceptable scale types are Non-portable on-farm scales, commercial elevator scales, or grain carts provided the grain cart:

- Can produce printed tickets showing the weight;
- Has an integrated display panel to show the weight of the production in the cart, provided the cart is available so the capacity of the cart can be determined; or
- Is equipped with scales integrated with Bluetooth (or other wired or wireless) interface that is calibrated according to manufacturers' specifications and capable of electronically recording and storing weight records on a field-by-field basis from which the insured can print all individual load tickets and detailed summaries.

If a producer used multiple grain carts, but not all were equipped with the system described herein, the adjuster must verify the production by other means (ex. bin measurements, sales records, etc.).

For more information on Precision Farming Loss Guidelines, please reference the 2022 Loss Adjustment Manual, our Precision Farming Self-Help web page, or contact your Claims Supervisor.

**Download the electronic version:**

<http://www.naucountry.com/nauprecisionfarmingsystems>



# NAU Country<sup>®</sup>

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