

# Precision Farming Technology Qualifications



## **Acceptable farm management records from Precision Farming Technology**

The insured must utilize the full Precision Farming Technology System from planting through harvest for harvest production to be acceptable using this type of technology. This means that the planted acres from this technology must be used for Reported Acres in order for harvest production from this system to be acceptable. Acceptable Precision Farming Systems must include at least the following components: GPS technology integrated with planter monitors, combine monitors, yield mapping software; planting and harvesting summary reporting that reflects total harvested production; and calibrations performed per manufacturer's requirements.

**For planted acreage records from automated planter monitoring systems to be acceptable as determined acres,** the insured must provide the following information in conjunction with production data as stated in harvested production records section below: Insured's name; unit number; FSA farm/tract/field ID number (optional); legal description of acreage; and a print out from the precision farming technology system with the following information: crop name; acres planted; and electronically produced maps of planted acreage and acreage summary records. These records must show required discernable breaks between units or practices except as stated in (1) below. If the insured planted overlapping rows within the planted acreage, the AIP must determine if the automated planter monitor records adjusted for overlapping planted rows. If the system did not adjust for the overlapping planted rows, the automated planter monitoring system cannot be used for determined acres.

**AIP approved precision farming technology system automated planter records may be used to separate optional units on center pivots irrigation system** for irrigated circles and non-irrigated corners without discernable breaks in the planting pattern provided the insured can: provide records showing the variable rate planting populations; document the automated planter monitoring system used; provide the acres planted and practice for each optional unit; provide production records by optional unit and practice; and provide the required information listed above. 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 systems, yield monitor systems raw data and any additional records requested by the AIP. If the AIP determines the planted acreage records are not acceptable, the automated planter monitoring system cannot be used for determined acres. The production records from the precision farming technology system's yield monitor may still be used.

## **Acceptable harvested production records from precision farming technology to establish total production.**

The insured should maintain alternate production records by unit in the event the precision farming production records are determined to be unacceptable. Production records from precision farming technology systems may be used in lieu of settlement sheets and bin measurements provided all of the requirements are met. For the production records to be acceptable, the insured must provide the following information, in conjunction with planting data as stated above:

The insured must have calibrated the yield monitoring system for each insured crop and crop year, in accordance with the owner's manual specifications. The insured must provide documentation showing the weighed average sensor calibrations for the crop and crop year. The sensor calibrations must not exceed three percent when compared to the actual weighed production harvested from the acreage used to calibrate the sensor. If the initial sensor calibration difference exceeds three percent when compared to the actual weighed production harvested from the acreage used to calibrate the sensor, additional calibration samples must have been taken until the results were within tolerance.

If after calibrating the yield monitoring system as stated above, the average sensor calibrations for the crop and crop year still exceed three percent when compared to the actual production harvested from the acreage used to calibrate the sensor, the insured may utilize the precision farming system post-harvest calibration of yield maps created by the system.

The insured must provide documentation of the actual production based on acceptable weight records used to post calibrate the system and yield maps. The annual calibration report, from the yield monitor system or documentation from the insured, must include all calibrations and adjustments performed, by crop, for the crop year, including the date each calibration/adjustment was performed and the difference from the previous setting.

The annual calibration report must be provided to the AIP or RMA. The records should also include; insured's name; unit number; FSA farm/tract/field ID number; Legal description of acreage; and a print out, by unit, of the following precision farming technology information: crop name; acres harvested; date harvested; total production (unadjusted for moisture); average moisture content (moisture must be adjusted in accordance with the crop provisions); and yield maps and acreage/production summary records. These records, generated from the system, must show separate production records were maintained by unit and/or practice. These maps must be reviewed to identify harvested and unharvested acreage. If the map indicates unharvested acreage, a visual inspection is required to determine if crop appraisals are needed.

If the production and yield map records provided by the insured are not reasonable or the AIP has reason to question the production and/or yield map records, the insured must provide the precision farming technology or yield monitor systems raw data and any additional production records requested by the AIP. If after reviewing the systems raw data, the precision farming production records are determined to be not acceptable, production and quality determination must be determined using the applicable RMA procedures.