✅ ChecklistGuro

Precision Farming Data Verification Checklist

Sensor Calibration & Validation

Verify sensor accuracy and calibration against known standards.

Soil Moisture Sensor Reading (kPa)

Enter a number...

Temperature Sensor Reading (°C)

Enter a number...

pH Sensor Reading

Enter a number...

Calibration Status

☐ Needs Calibration

☐ Within Tolerance

☐ Out of Tolerance

Last Calibration Date

Enter date...

Nitrogen Sensor Reading (ppm)

Enter a number...

Data Transmission & Connectivity

Check for successful data transfer from field devices to the platform.

Transmission Start Time

Signal Strength (dBm)

Enter a number...

Connectivity Method

- [ ] WiFi
- [ ] Cellular
- [ ] Satellite
- [ ] LoRaWAN

Data Transmission Rate (Mbps)

Enter a number...

Transmission Status

☐ Success

☐ Partial Success

☐ Failure

Error Messages (if any)

Write something...

Data Storage & Integrity

Confirm data is stored correctly and hasn't been corrupted.

Database Size (GB)

Enter a number...

Last Backup Date

Enter date...

Backup Start Time

Percentage of Storage Used

Enter a number...

Backup Type (Full/Incremental)

☐ Full

☐ Incremental

Error Logs/Messages

Write something...

Data Encryption Status (Enabled/Disabled)

☐ Enabled

☐ Disabled

Map Accuracy & Alignment

Ensure data layers and maps are accurately aligned and georeferenced.

GPS Accuracy (meters)
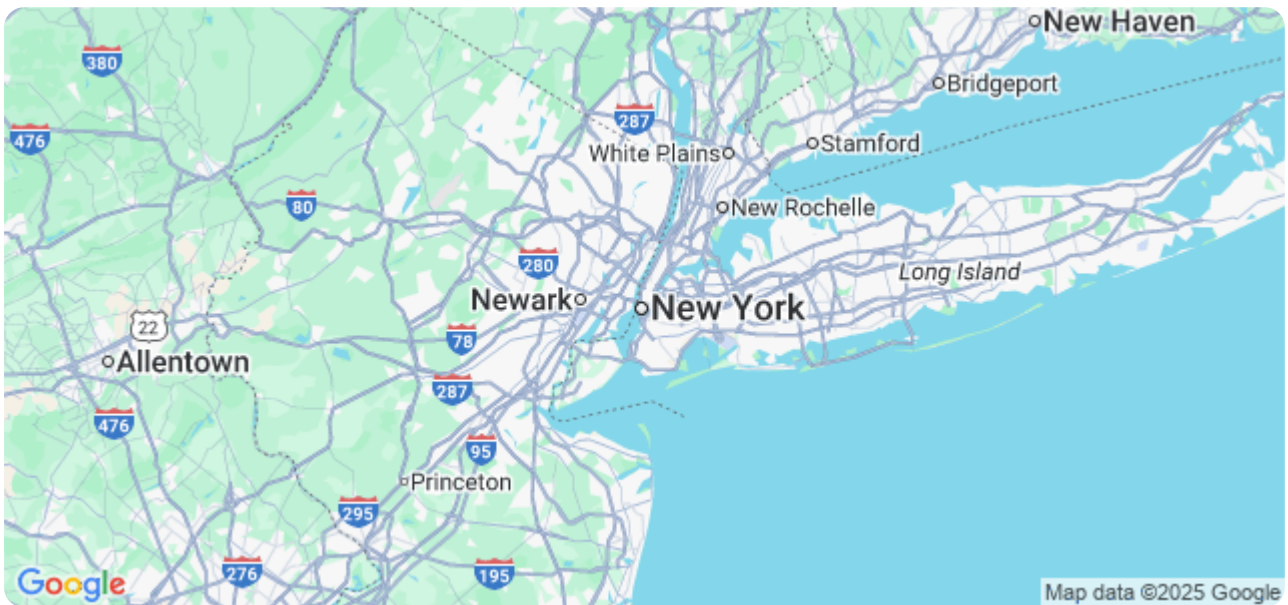
Enter a number...

Coordinate System

☐ UTM

☐ State Plane

☐ Latitude/Longitude

Description of Alignment Issues (if any)

Write something...

GPS Ground Truth Point Location

📍 Set My Current Location

Date of Alignment Check

Enter date...

Time of Alignment Check

Variable Rate Application Verification

Validate that variable rate prescriptions are being applied as intended.

Target Application Rate (kg/ha)

Enter a number...

Actual Application Rate (kg/ha)

Enter a number...

Application Method

- ☐ Sprayer
- ☐ Fertilizer Spreader
- ☐ Planter
- ☐ Other

Area Treated (ha)

Enter a number...

Observations/Notes on Application

Write something...

GPS Signal Strength

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

Application Date

Enter date...

Application Time

Yield Monitoring & Reporting

Check yield data accuracy and consistency with field observations.

Yield (Bushels/Acres)

Enter a number...

Moisture Content (%)

Enter a number...

Test Weight (lbs/bushel)

Enter a number...

Yield Map Format

- [ ] Shapefile
- [ ] GeoTIFF
- [ ] CSV

Harvest Date

Enter date...

Harvest Start Time

Notes/Observations

Write something...

Yield Map File

⬆ Upload File

Data Analysis & Interpretation

Review data for anomalies and inconsistencies, verifying analytical processes.

Describe any observed data anomalies or inconsistencies.

Write something...

Average Yield Deviation (%) from expected value.

Enter a number...

Overall Data Quality Assessment:

☐ Excellent
☐ Good
☐ Fair
☐ Poor

Number of Missing Data Points

Enter a number...

Explanation for any significant deviations or discrepancies.

Write something...

Were prescribed rates properly applied?

☐ Yes
☐ No
☐ Unsure

Security and Access Control

Confirm user permissions and data security protocols are in place.

Two-Factor Authentication Enabled?

☐ Yes
☐ No
☐ N/A

Number of Active User Accounts

Enter a number...

Password Complexity Requirements Applied?

☐ Yes

☐ No

☐ Partially

Last Password Policy Review Date

Enter date...

Data Access Permissions Reviewed?

☐ Role-Based Access

☐ Group Permissions

☐ Individual Assignments

Details of Access Control Procedures

Write something...

Equipment Functionality

Verify proper functioning of precision agriculture equipment.

GPS Accuracy (m)

Enter a number...

Application Rate (L/ha)

Enter a number...

Spreader Speed (km/h)

Enter a number...

Sprayer Nozzle Condition

- [ ] Excellent
- [ ] Good
- [ ] Fair
- [ ] Poor

Equipment Malfunctions

- [ ] Engine Issues
- [ ] Sensor Failure
- [ ] GPS Drift
- [ ] Navigation Error
- [ ] No Issues

Detailed Description of Issues

Write something...

Last Maintenance Date

Enter date...

Documentation & Audit Trail

Ensure all verification steps and findings are documented for auditing purposes.

Verification Date

Enter date...

Verification Time

Summary of Findings

Write something...

Sensor Reading Comparison (Baseline vs. Actual)

Enter a number...

Verification Status

☐ Pass

☐ Fail

☐ Needs Review

Supporting Documents (e.g., Calibration Certificates)

Upload File

Verified By (Signature)

Corrective Actions Taken (If Applicable)

Write something...