



Using GPS, Guidance, and Variable Rate for Increased Profits

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Trimble Agriculture

- **Designing Solutions to Improve Efficiency**
 - Autopilot - Automated Tractor Steering <1”
 - TrueTracker - Automated Implement Steering <1”
 - Field Level - Automated GPS “3-D” Leveling
 - True Application Control
 - Variable Rate Fertilizer, Seed Drives, Etc
 - Rate Control
 - Automated Boom Switching

Trimble AgGPS Autopilot







Issues with Tractor Steering Alone











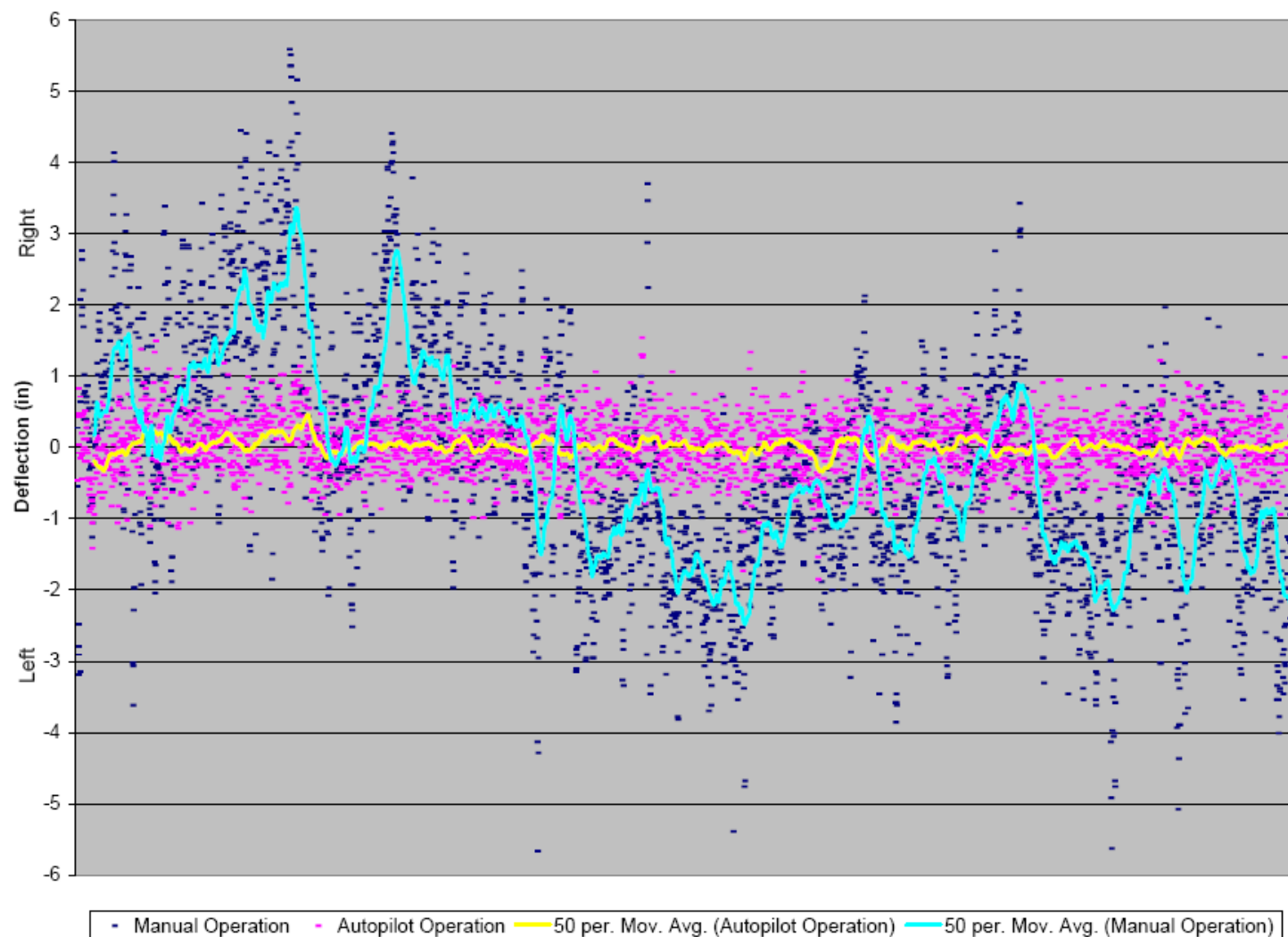
AgGPS TrueTracker

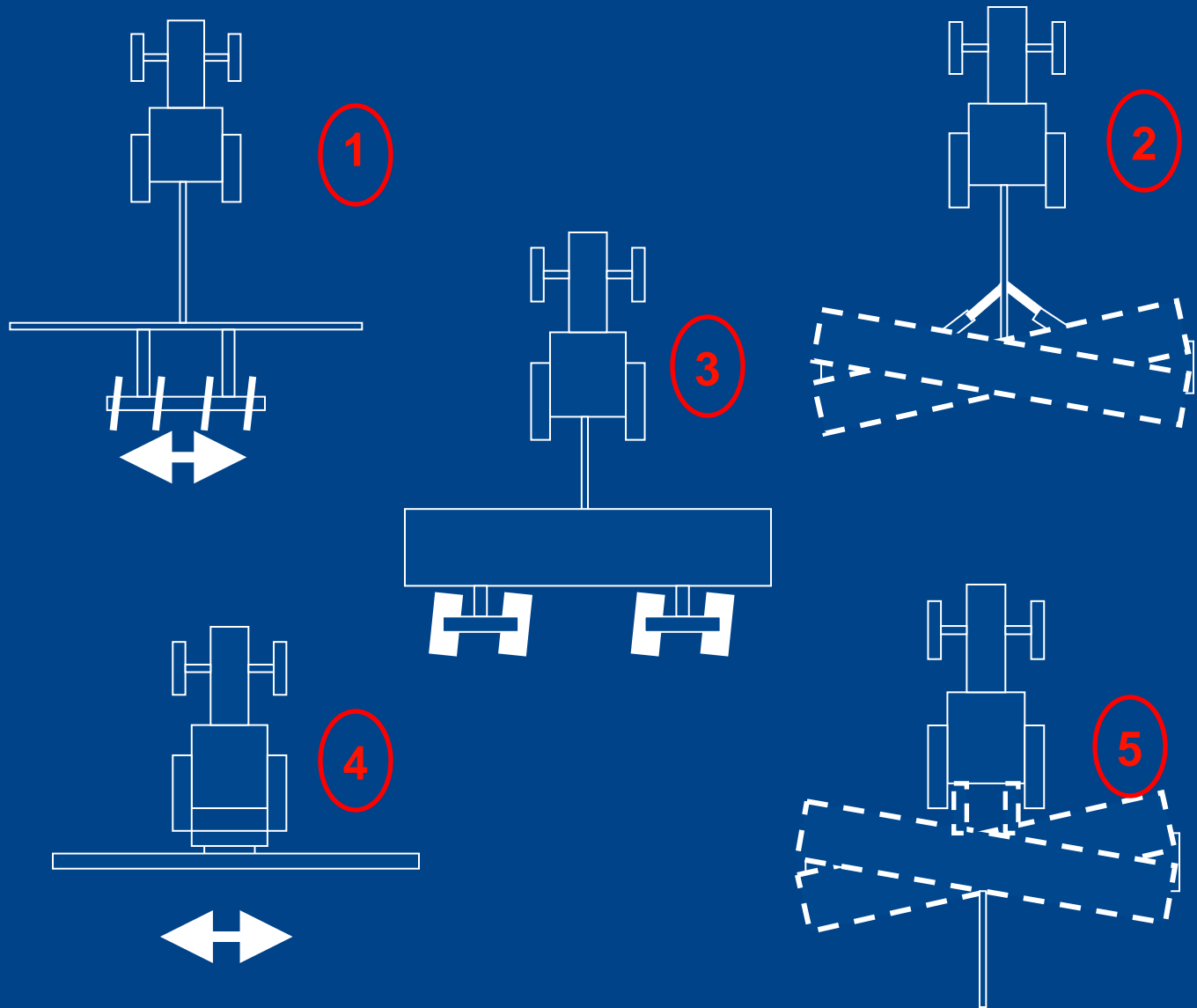


Vegetable Farm: Southern CA
Onions, Garlic, Carrots, Potatoes
Autopilot JD 9520/7530, Harvesters
TrueTracker planter/shaper, cultivator



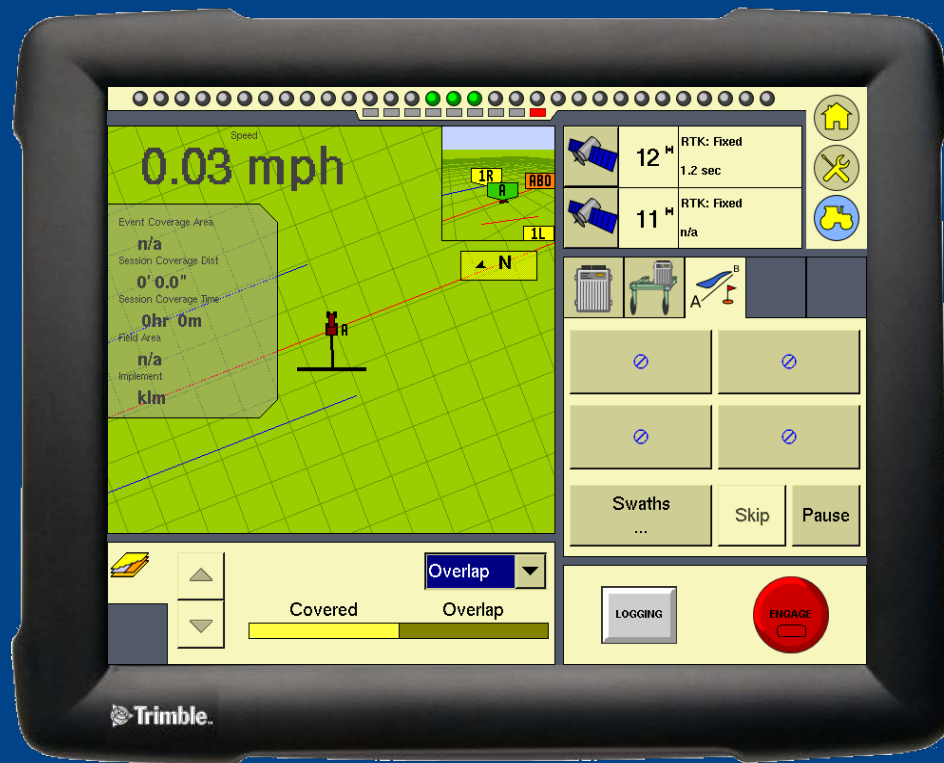
Harvesting - Autopilot vs. Manual





AgGPS[®] Fm[™]

Integrated Display



AgGPS[®] Fm[™]

Integrated Display

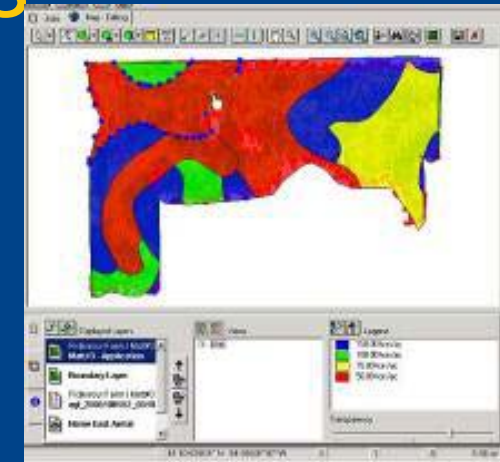
- **Autopilot (automated steering <1")**
 - simultaneous implement steering
 - simultaneous 3-D (GPS) Land Leveling
- **Two integrated GPS + GNSS Receivers**
- **integrated radio**
- **True Application Control**
 - variable rate, rate control, boom switching, monitoring

Trimble Field Level II
































Variable Rate Available in all Trimble Autopilot Displays

- **VRA Variable Rate Application**
 - Prescription import via SHP file
 - Single product control
 - Boom section control



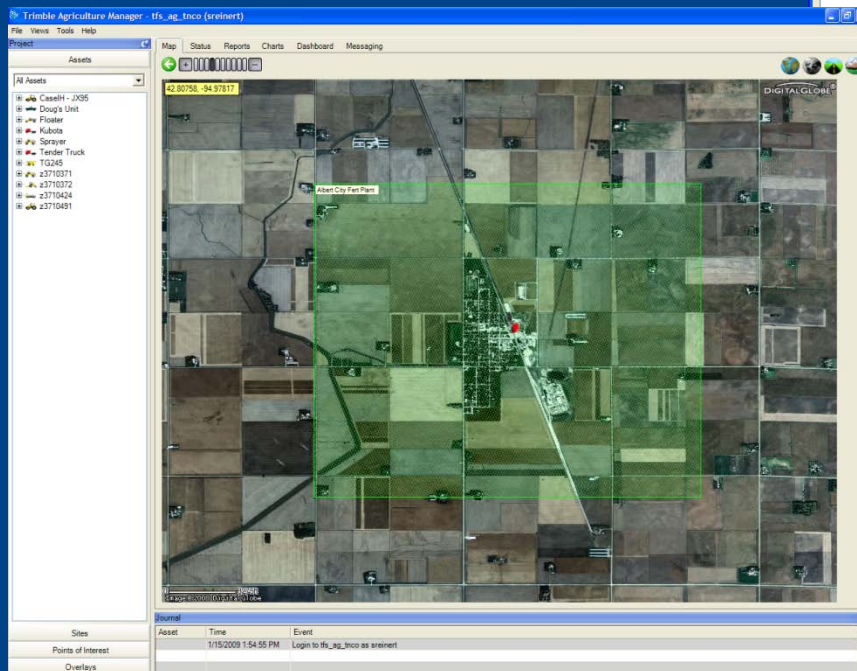
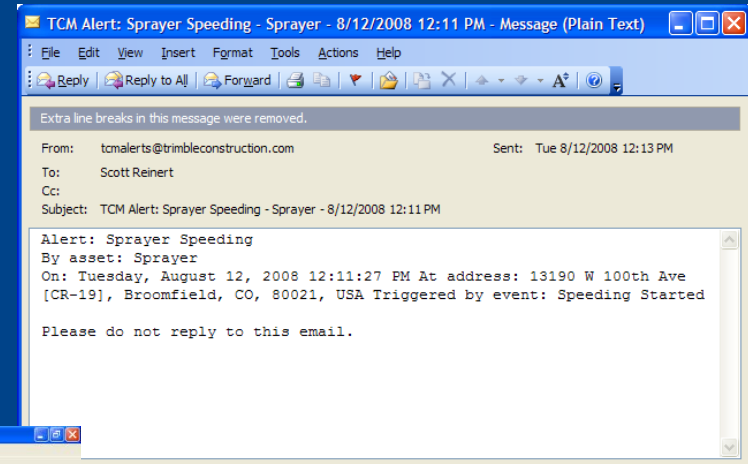
Display capabilities



Feature	EZ-Guide 250	EZ-Guide 500	FmX
EZ-Steer			May '09
Autopilot			
TrueTracker Implement Steering			
Implement monitoring			
TrueGuide Implement Guidance			May '09
Application Control			
EZ-Boom			
3rd Party rate controllers			
Boom switching			
Variable rate serial output			
Planter monitoring and control			
Aircart/Seeding and NH3 control			
Liquid sprayer control			
Granular spreader control			
TruCount row control			
Water Management			
Field Level II single scraper			
Field Level II single scrapers with Autopilot			
Field Level II tandem or dual scrapers			
Information Management			
EZ-Office / EZ-Office Pro			
Ag Manager / Cross Check			

Trimble AgManager

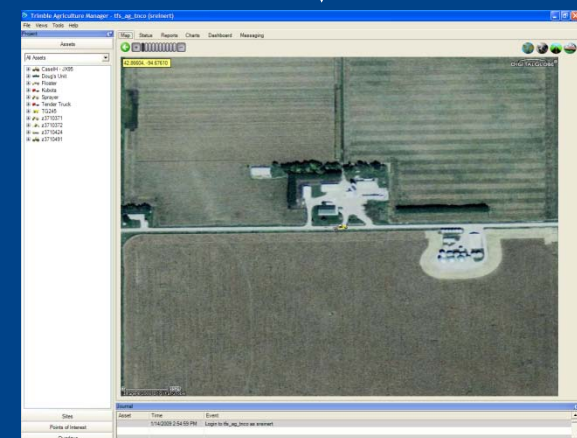
- **Locate vehicles/assets**
- **Mobile Alerts to Phone/Blackberry**
- **Vehicle History (where was it?)**
- **Site entry/exit alerts**
- **Moving/not moving alerts**



Type	Last Update	Status	Site	Address	RT Hrs	
Health Tractor	1:55 PM Jan-15	Stopped		20552 County Road 2 E, B-7 Northport, CO 80713	355	Update
	1:55 PM Jan-15	Ignition is On		941 Stewart Dr Northport, CO 80713	23	Update
FLX 4520	11:00 AM Dec-26	Not Reporting		22257 430e St Havelock, IA 50645	-	Update
ATV	5:50 PM Dec-11	Not Reporting		4300 Highway 71, PO-711 Woodrow, CO 80797	-	Update
MPD Tractor		Not Reporting			-	Update
4 ton Tender	3:05 PM Dec-04	Not Reporting		1st St Grand City, IA 50910	-	Update
LH Tractor	3:01 PM May-13	Not Reporting	Trimble Sunnyvale		-	Update
		Not Reporting			-	Update
		Not Reporting			-	Update
		Not Reporting			-	Update
		Not Reporting			-	Update

Trimble AgManager

- **Three components**
 - **CrossCheck hardware**
 - Cellular Modem + GPS
 - Analog inputs
 - Mobile Data Terminal
 - **Back-end server and communications that manages the data**
 - Hosted in a highly secure environment
 - **Trimble AgManager software**



How it Works

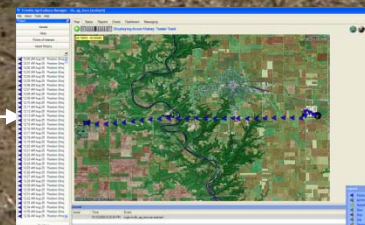
2. Data transmitted to server using cellular network

1. Agricultural vehicles enabled with Trimble AgManager

Web server

Internet

3. Managers access the data from their PC via the Internet



Trimble Nomad

- Ruggedized Handheld with internal GPS
- Data collection
- Feature mapping
- Soil Sampling
- 3D Map View
- Shape file export
- Sync data between PC or EZ-Office Mobile
- Sync data to other Trimble displays



Trimble Connected Farm Community

Trimble Connected Farm Community

Login



CONNECTED FARM COMMUNITY

Member ID

Organization

Password

Remember?



[Forgot password?](#)

Safe mode?

☐

Login

What does the Future Hold for GPS in Agriculture?





Questions?