emmetts
STAYING POWER

Volume 5 | 2019

PRECISION AG SOLUTIONS

emmetts
PRECISION AG. SOLUTIONS

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AGree Decision Ag by emmetts

INSIDE THIS ISSUE...

OUR PROMISE TO YOU...

We will keep you informed about new trends and technologies. We will provide high quality services to ensure you get the best out of your machinery purchases for the entire life of the equipment. We will visit you regularly to understand more about your farming equipment needs and we will always return your calls.

Good crops don't just happen. It's all about how well you manage the challenges of modern day farming. That's why it pays to invest in solutions that will help you maximise your crop potential. **And that's why it pays to choose Emmetts.** We offer a wide range of services designed to help you get the best from your equipment.

TRAINING PROGRAMS...

We offer a range of operator training, tailored to suit your operation, helping you gain the maximum efficiency from your John Deere equipment. Training is offered on farm or in our modern and comfortable classroom. Contact the Precision Ag team for details.

COURSE	TOPICS COVERED
Seeder Training	Operational setup of the Air Cart on the Greenstar AMS system Integrating working options and display run pages Task set up and basic documentation required Calibration and start up Software upgrades and machine optimisation
Sprayer Training	Systems overview, integrating working options and display run pages Task set up and basic documentation required Calibration and start up Software upgrades and machine optimisation
Harvester Training	Machine overview, current and older units Calibration variations across the range Task set up and basic documentation required Software upgrades and machine optimisation

Operations Center / Gen 4

Operations Center:
Set up and training in Operations Center, including how to use all the new tools
How to import paddock guidelines & data
Wireless Data Transfer

Generation 4 Display:
How to create paddock names & boundaries
Set up displays & daily tasks
Implement profiles

This training includes ride and drive of our John Deere gator with 4640 display

UNLOCK THE VALUE OF DATA ON YOUR FARM

WHY USE DATA?
Make a good farm even better

Improve Performance
- Learn what practices work and don't work.
- Save money by getting the most out of time and resources.

Increase Yield
- Learn which inputs and rates work best and where for repeatable gains.
- Identify ways to improve yield consistency across the farm.

Benefit From Insights
- Studies show that decisions made based on multiple years of data are more accurate.
- Data allows you to share your information easier so experts can quickly add depth to your experiences.

HOW TO START
Take baby steps

Collect it
- Ensure equipment can record the field work. Most newer equipment is ready and older equipment can be updated.
- Start with machine and harvest data. It is the easiest to understand and you can grow from there.

Use it
- Get harvest data into a form you can review. This means software or a cloud based tool!
- Review as-applied data (planting, crop nutrition or crop protection data) or other data layers compared to yield data. This is your first step towards insights.
- Use field data to control your equipment to maximize yield while minimizing costs with tools like variable rate and section control.

Share it
- Don't work alone - we can help look for additional analysis and insights
- Emmetts also provide help through data and other services to make implementing data tools easier. We already know your operation - take advantage!

WHAT TOOLS TO USE
Build your own data toolbox

Data Collection
- Collect the data as field work is performed.
- Gen4 Displays.
- GreenStar™ 3 2630 Display.

Data Transmission
- JDLink™ Connect (Automatic, wireless)
- Mobile Data Transfer (Uses smartphone)
- Manually moving data with a USB works, but it can be easier.

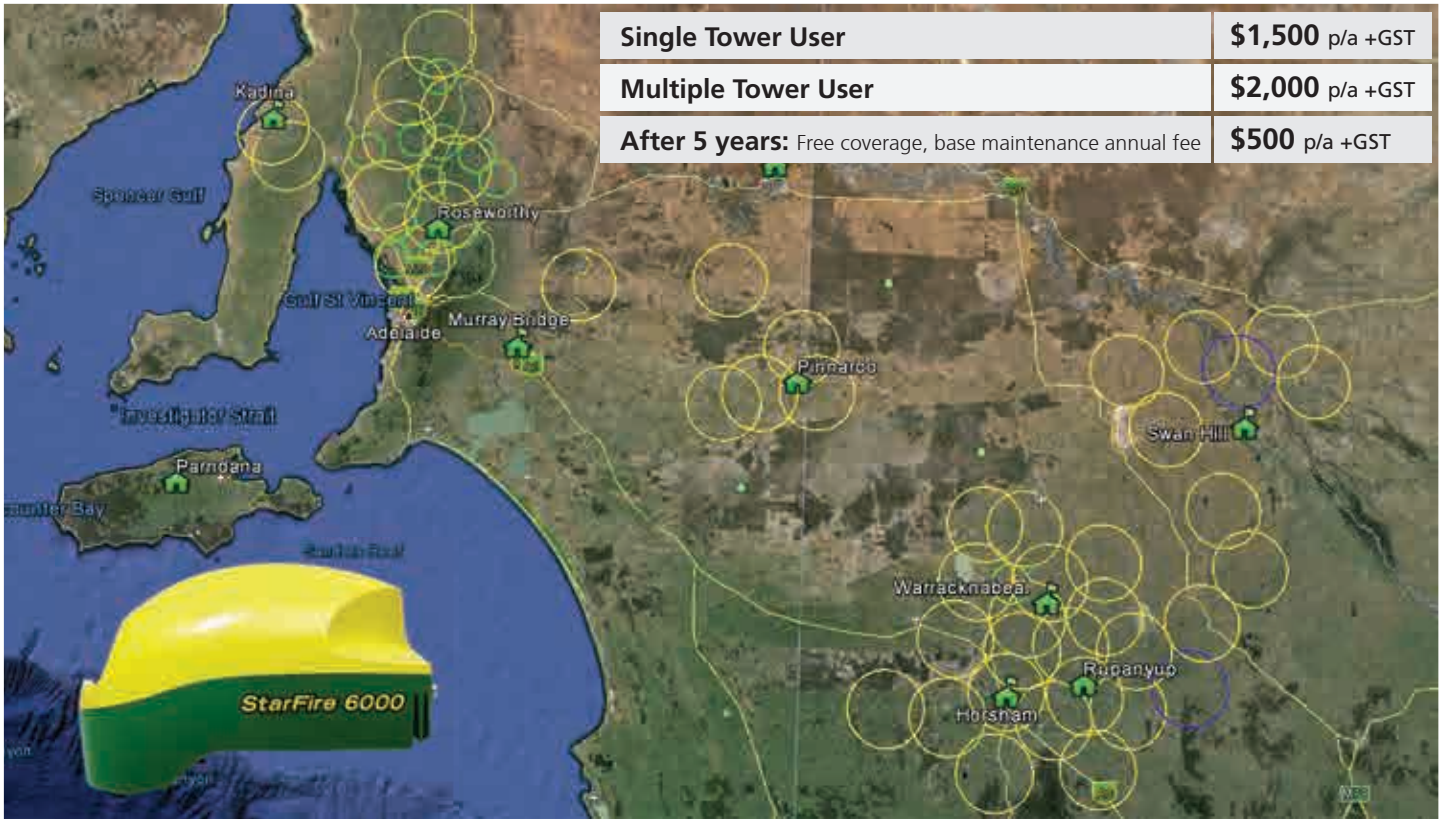
Data Viewing and Sharing
Once the data is off the machine, it's ready to use - and the tools below are at no extra cost.
- **John Deere Operations Center** Access your information anytime, anywhere to see, collaborate and direct your operation with precision.
- **MyOperations App**
  Operations Center information in your pocket for when you're on the go.

RTK CONNECTIVITY PACKAGES

Emmetts RTK network of base stations make it easy for you to upgrade to RTK. Connect your machines to our network and reap the rewards!

Once you are connected to the RTK network, enjoy the benefits of:

- Inter-row seeding using iSteer and AutoTrac
- Accurate inter-row sheilded spraying with AutoTrac
- More efficient harvesting with AutoTrac
- Save money on chemicals with more accurate spraying using Swath Control Pro and iTEC Pro

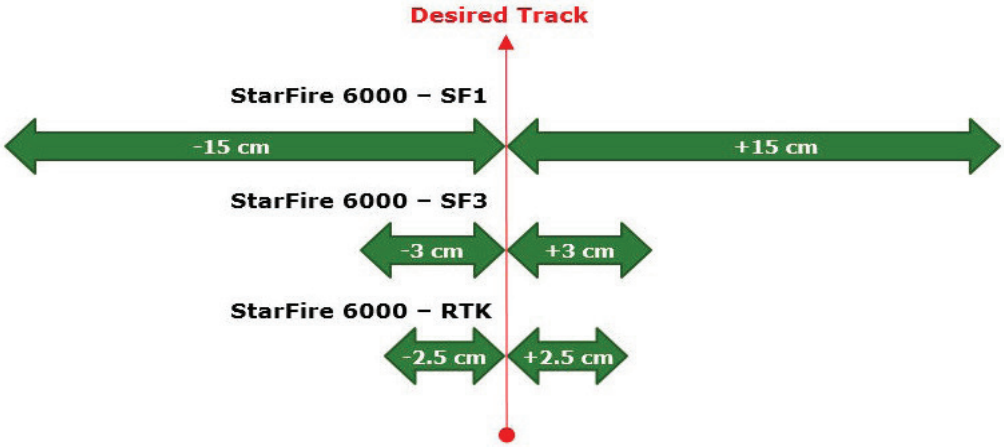


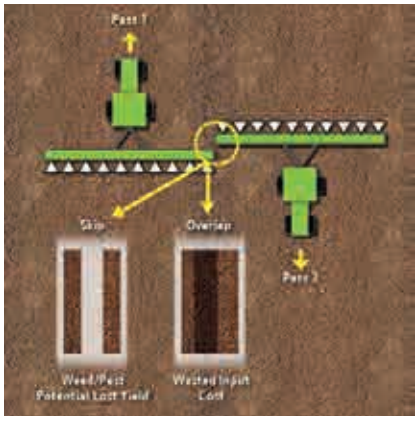
Single Tower User	**$1,500** p/a +GST
Multiple Tower User	**$2,000** p/a +GST
After 5 years: Free coverage, base maintenance annual fee	**$500** p/a +GST

STARFIRE 6000 RECEIVER

With faster pull-in times, better accuracy, and in-season repeatability, the new StarFire 6000 Receiver and SF3 differential correction signal can improve your bottom line. The StarFire 6000 Receiver offers multiple differential correction signal levels to match receiver performance with the needs of the operation. Pass-to-pass accuracy impacts the amount of skip or overlap.

StarFire 6000 horizontal pass-to-pass accuracy (@15 min pass):
SF1: +/- 15 cm
SF3: +/- 3 cm
Radio RTK: +/- 2.5 cm





StarFire 6000 repeatability (@15 min pass):
SF1: no repeatability, position drifts over time
SF3: +/- 3 cm (1.2 in.) in-season repeatability (where applicable)
Radio RTK: +/- 2.5 cm (1.0 in.) long-term repeatability

Repeatability is measured at the receiver and defines how accurately the receiver can calculate its position over a relatively long time window. In-season repeatability is critical when using AutoTrac for multiple jobs throughout the growing season, eg. creating AutoTrac guidance lines during planting, then using those same lines to complete fertilising, spraying, and harvesting.

Long-term repeatability is critical when mapping interior and exterior boundaries for use over multiple seasons for operations like subsurface-drip irrigation, controlled traffic, or alternating planter spacing between the rows from a previous season.

AMS TECHNICAL SUPPORT PACKAGES

Select Plus — $385 p/a +GST

- 1800-Emmetts precision ag phone support (Business hours Mon-Fri 8am-5pm. Peak periods* Mon-Sun 8am-7pm)
- Code identification, diagnostics and support via phone
- One free admission to Emmetts Precision Ag Training Course
- One hour of in-branch PC support for MyJohnDeere and Operations Center
- Optional access 24/7 to John Deere Stellar Support at discounted rates

Premium Plus — $585 p/a +GST

- All the benefits and inclusions of a Select Plus package, plus:
- Support via Remote Display Access (Equipment must have a current JDLink subscription)
- AMS software update support

Ultimate Plus — $985 p/a +GST

- All the benefits and inclusions of a Premium Plus package, plus:
- Emmetts full machine code and alert monitoring via JDLink*
- Equipment service plan creation and monitoring via JDLink Dashboard

Base AMS Date Support Package — $985 p/a +GST

Set up of My JohnDeere and Operations Center

- Assist with transfer of historical data between APEX and Operations Center (if needed)
- Guidance line and boundary management through Operations Center
- Basic set up and data clean-up of farm data eg. merge and rename fields
- Edit field operations and task names, merge multiple harvest files etc.
- Sync operational data to Operations Center and demonstrate features and tools within Operations Center
- Assist in the creation of set up files and transfer to equipment in Operations Center
- Training on prescription creator by Agrian and the transfer of prescriptions to equipment
- Set up Wireless Data Transfer and Remote Display Access
- Includes Premium Select Plus package

JDLink Connect Annual Subscription Packages — $400p/a +GST

- JDLink Connect Cellular Subscription (1 renewal only/per unit) cellular connectivity

John Deere 24/7 Stellar Support Phone Service* — $215 p/a +GST

For customers requiring 24/7 phone support, a current subscription to the Precision Ag. Customer Contact Centre is required. This allows unlimited access to the John Deere Stellar Support Customer Contact Centre for all Precision Ag related issues. This is offered at a significantly discounted cost to Emmetts customers who have a current service agreement (when purchased with an Emmetts Support Agreement)

Pay As You Go On Farm Support — POA

For customers that do not require a continuous support agreement, a Pay As You Go option is available with Precision Ag Support.

*Peak periods (season dependent) April - June / November - December.
On-Farm Support and Support / Service outside of selected service agreement will be charged at current workshop labour rates.

MACHINE OPTIMISATION SUPPORT PACKAGES

Packages can be tailored to suit your operational needs. Prices are based on user requirements - ask for a quote today!

Seeding Package

- Pre-season inspection per check sheet
- Operator refresher training
- Screen setup and display settings
- Updates for AMS software
- Phone support and Stellar Support services

Spraying Package

- Pre-season inspection per check sheet
- Operator refresher training
- Updates for AMS software
- JDLink seasonal reports

Harvest Package

- Pre-season inspection per check sheet
- Operator refresher training
- Seasonal start up
- Calibration of machine settings
- Updates for AMS software
- Calibration of front
- JDLink reports weekly throughout harvest
- Code monitoring during harvest (Must have JDLink)

JOHN DEERE CONNECTED SUPPORT

When you buy John Deere equipment you expect reliability.

You should, because Nothing Runs like a Deere.

You also know that when you're in the field the unexpected can happen.

When it does, you need a quick resolution.

That's why John Deere equipment comes prepared from the factory with technology built in.

It senses potential issues and can alert you promptly - in the cab or anywhere you are.

Better yet, Emmetts can receive alerts and connect to your equipment.

Emmetts is always ready to keep you farming - and farming better.

When you connect your machine…

You can:

- Monitor alerts from the machine remotely
- View the in-cab display from wherever you are
- Monitor machine location, its prior path and coverage
- Monitor fuel level and idle time

Emmetts can:

- Monitor alerts coming from your machine
- Diagnose problems remotely to get you back running faster
- View the in-cab display to help you setup your machine
- Perform software updates from the dealership

Most new John Deere machines come ready with 5 years of machine connectivity to enable these tools that you keep running. If you have an existing machine capable of connecting, we'll connect it free of charge*. Visit Emmetts today. *Excludes 2G hardware

JDLINK CONNECT

Agronomic data from your in-cab displays, like yield maps and as-applied data, becomes even more powerful when you can access and use it remotely, away from the field. Your data becomes more powerful when you can access it when you need it and where you need it. Sending it from the field immediately and automatically can also prevent it from getting lost. That's why we recommend upgrading your machine connection to JDLink Connect.

JDLink Connect opens an information pipeline between you and your machines, so you can tell your machines what to do and have them report back. Two-way communication is powerful and essential for success. With JDLink Connect you get a steady, automatic flow of agronomic data between your machines and the devices you use to manage your operation, so you can make sound, timely decisions for your farm - wherever, whenever.

To see, share, and use your data, you'll have access to the John Deere Operations Center and the connected mobile apps.

The JDLink Connect Service is available by subscription. When you purchase new agricultural equipment, one year of JDLink Connect and 5 years of John Deere Connected Support are included as standard.

MOBILE DATA TRANSFER

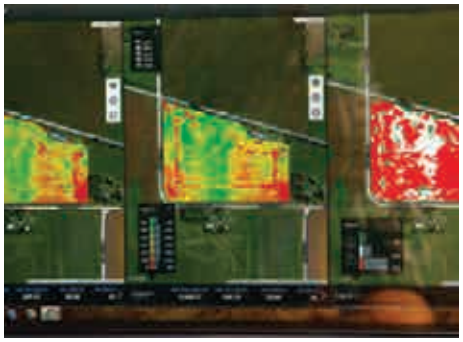
It's easy to wirelessly transfer data from older John Deere equipment and non-John Deere displays to the Operations Center with Mobile Data Transfer.

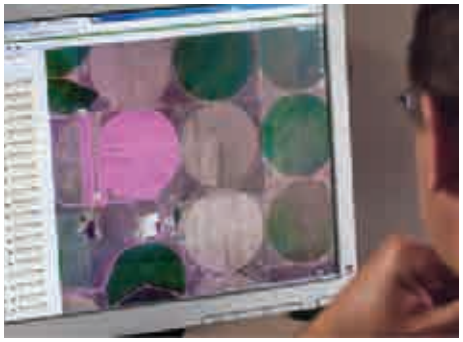
Wirelessly transfer agronomic data to and from non-John Deere displays and from John Deere's GreenStar 3 2630 display (in older John Deere equipment that is not JDLink compatible) to the Operations Centre. It enables producers to consolidate data from multiple branded displays into one centralised location for their use or to be shared with trusted advisors.

If you are running older John Deere equipment and have not yet moved to a JDLink Connect enabled machine, Mobile Data Transfer is a great way to get started.

JOHN DEERE OPERATIONS CENTER

A set of online tools that provides information about your farm when you need it, where you need it.





See what's happening in your operation right now, and learn from your performance over time

Use **Monitoring Tools** to see how your machines are performing and how jobs are progressing, even when you're not in the cab.

- JDLink Connect-enabled Location History
- Job Monitor

On the **Summary Tab**, get a quick view of your entire operation's performance.

With **Field Analyzer**, investigate what happened in a particular field.

Organise and analyse information your way, in **Agronomic Reports**.

Collaborate with the right people and tools to make decisions that save time, optimise yield, and maximise profits

Easily share machine and agronomic data with others by setting **Permissions** that grant the right access to the right people.

Keep one accurate view of your operation, with **Tools** you and your partners can use.

- Field Detection
- Post Calibration
- Product Editing

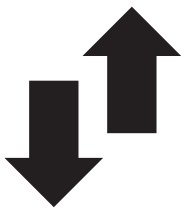
Direct your operations by turning your plans into action, and adjusting as conditions change

Use **Prescription Creator** to customise plans for unique zones in your fields.

Use **Jobs** to prioritise work and direct operators what to do next.

Use **Setup Builder** to equip operators to get the work done right.

5 ways Operations Center can help you farm better

Reduce Costs	Increase Yields	Share For Insights	Farm More Acres	Pick Your Solution
				
A mistake in the cab today can spell yield losses tomorrow. Reduce operator errors, spend less time at the edge of the field, and ensure the job is documented correctly with Setup Files and Rx-sent wirelessly to the in-cab display with JDLink™ Connect.	Decisions should be backed by data, and good agronomic decisions can increase your yields and decrease costs. The Field Analyzer tool, MyAnalyzer™ app and Agronomic Reports make it easy to analyze your past to understand what worked and what didn't.	Sometimes you need expert advice or a different tool for the job. Automatically share machine and agronomic data with your trusted advisors and preferred software tools. Get Rx, scouting info and other insights back into Operations Center for more confident decisions.	In the field or on the go, you still need access to information about your farm in order to run efficiently. MyOperations™ and other connected mobile apps put the power of Operations Center and JDLink™ Connect in your hand, at no additional cost.	You don't have to be all green in order to have all your data accessible in one place. Compatibility starts with Precision Planting®,Ag Leader® and Raven® doc data-soyou spend less time managing multiple data analysis tools and more time farming.

MACHINE LOGISTICS

Machine logistics lets you track your equipment from anywhere you have a wireless connection, even remote locations. It provide operators with maps and directions to save time. You are able to better manage who does what and when. During critical times like harvest, you can manage your equipment locations to ensure you get your crop off fast.

Machine Sync

Machine Sync is a John Deere exclusive system that takes harvest automation to the next level. Operators can see the location of all grain carts in the network and, from the combine, they can send a ready-to-unload request. This information enables operators and managers to make the best decisions to maximize the harvesting fleet, while reducing fuel consumption and ground compaction.

Machine Sync is simple to set up and use, even for inexperienced operators. The software provides the combine location and bin-fill status to the cart operator, who can determine how quickly the combine will need to unload; prioritise which combine to go to first when multiple combines are in the field; or call in additional carts as needed.

This technology also allows the combine operator to control the location of the tractor and grain cart for automated on-the-go unloading, lock the grain cart into position and adjust it as needed for optimal cart filling.

New Machine Sync technology allows the combine operator to automatically control the location of the tractor and grain cart while unloading on-the-go.

Guidance Line Sharing

With John Deere Machine Sync, two machines working in the same field can share coverage maps and guidance line live data. Coverage map sharing paired with Section Control enables machines to trigger sections to turn on/off based on the total coverage of work performed, regardless of which machine covered that area. This allows for the same high level of accurate overlap and skip control seen in fields where only one machine performed the job - but in less time.

Guidance line sharing paired with AutoTrac enables machines to share straight track guidance lines which helps coordinate the operators of both machines more effectively, optimising the number of trips across the field.

AutoTrac Turn Automation

AutoTrac Turn Automation automatically guides the tractor through the optimum pass and carries out end-of-row functions at appropriate times during the sequence. It uses the Gen 4 Display, as well as the StarFire™ 6000 or 3000 Receiver, and enables operators to automate in-cab tasks using the location of the machine and boundaries, and a sequence of functions.

AutoTrac Turn Automation accurately guides the tractor around an optimal end-of-row turn that is generated using implement and machine dimensions input into the display. It also more accurately positions the machine and implement for the next field pass to increase accuracy and efficiency.

Active Implement Guidance

Active Implement Guidance automatically steers the implement into the desired guidance line. Active Implement Guidance utilises the Application Controller 1100, a GreenStar display, and AutoTrac components with a variety of signal levels. These components team up with an implement steering mechanism to provide increased implement precision.

John Deere Active Implement Guidance automatically steers the implement to the guidance line by providing satellite data correction to the implement steering mechanism. Active implement guidance means both the tractor and implement are operating on the same guidance line.

It does this with a StarFire GPS receiver mounted on both the tractor and implement. By knowing the location of the tractor and implement, Active Implement Guidance enables operators to automate the steering along a preset line. This automation allows operators to focus more on the equipment and task at hand and less on the mechanics of operating the machine. Active Implement Guidance can be used for pull-type and integral implements.

JOHN DEERE MOBILE APPS

JDLink
Remotely locate your fleet, view machine information & diagnostics trouble codes (DTCs), or get driving directions to a machine when a trip is needed. Leveraging the power of JDLink™ enables data-based decisions that optimize productivity, increase uptime, and boost profits.

GoHarvest
The GoHarvest application gives combine operators the ability to optimize their 2012 or newer machine as they enter the harvest season. Choose the combine model and crop type, and GoHarvest suggests initial settings. GoHarvest also features a notes section and photo functionality to give combine operators a premium experience when setting their machine. GoHarvest is also a great guide to use in field for settings changes as conditions differ, and to document changes made to settings during harvest.

GoSeed
John Deere 1870, 1890, 1895 Air Drill and 1910 Air Cart operators can optimise their machine through monitor setup, maintenance and in-field procedures. Provides a quick-reference overview of key adjustments and setup instructions, and the ability to record observations (notes and/or pictures) for future reference.

ApplyPlus
John Deere 4 Series Sprayers operators and technicians can optimise machinery through proper set-up and maintenance procedures. Users can access a step by step guide of how to properly rinse their solution system. Customers can select & buy spray nozzles from the app, easily calculate their Tank Mix for a given application, and calculate their pump rate capacity for Direct Injection.

MyOperations
Take remote management of your field operations and equipment to the next level. This app connects with John Deere Operations Center, empowering you to evaluate expected vs. actual performance of job execution and machine utilisation. Powered by an easy, reliable connection between you and your machines through JDLink™ Connect, the MyOperations™ app allows you to monitor completed field activities that occurred today and yesterday to determine the productivity and quality of each field for a given operation like Seeding, Application, Harvest, and Tillage. The MyOperations app is truly your solution to view machine and agronomic data anytime and anywhere. Access to these insights into your farm helps you proactively manage your day to improve logistics and productivity, as well as increasing confidence that your jobs are being executed as planned.

John Deere Mobile Data Transfer
Mobile Data Transfer takes connectivity and data management to the next level. The Mobile Data Transfer app allows customers to transfer John Deere GreenStar 3 2630 Display files from their machines to their John Deere Operations Center account using a wireless USB device and a smartphone data plan. Mobile Data Transfer also allows customers the flexibility to make last-minute prescription and setup changes, which are retrieved from the "My Files" feature in the John Deere Operations Center. Mobile Data Transfer enables easy transfer of data files to and from the display, regardless of the brand of the machine being operated.

ActiveYield

Manual calibrations can take up to 90 minutes, but with ActiveYield, automatic calibrations occur all day long, eliminating those time consuming manual calibrations.

ActiveYield senses the weight of the grain in the grain tank as it fills, and uses this information to calibrate the yield system continually.

This means operatorscan make decisions in real time - without leaving the cab. More importantly, it provides more accurate yield mapping.

ActiveYield Retrofit kits are available for MY12 and later John Deere combines, with the exception of S660 with manual grain tank extensions.

NEW AND UPDATED JOHN DEERE TECHNOLOGY FOR 2019...

John Deere 4640 Universal Display
The new 4640 Universal Display offers better data collection, increased functionality and greater choice for monitoring and managing tractor-driven operations. It enables customers to use the most common and popular John Deere applications, including AutoTrac, documentation, and Section Control, in a portable display that has the latest internal components, design and user interface.

When it comes to performance, the 4640 Universal Display provides improved documentation for high-speed planting and nutrient applications, coupled with the latest data syncing functionalities for increased on-board/off-board flexibility.

Additional enhancements include the ability to more accurately map and operate Section Control to precisely apply multiple products simultaneously with individual coverage maps and application points.

The display is designed to import new customer and product information without the risk of overwriting existing client/farm/field and guidance line information. Setup time is reduced, meaning more uptime for the user, as a quickly learnable display results in reduced training time, more time working, and fewer operator mistakes.

Improved Gen 4 applications such as AutoTrac, Section Control, and documentation increase customer profitability, reduce overlap and skips, and maximise inputs and field operations.

Combined with Gen 4 Section Control, operators can optimise field performance using distance and speed-based turning with the ability to dial in more quickly and accurately the desired settings.

4240 Universal Display
The new 4240 Universal Display, which replaces the GreenStar 2 1800, adds to the Gen 4 display family as an affordable, portable, and durable option for many types of farming operations. It offers a user-friendly experience in an easy-to-read, high-contrast 213 mm (8.4-inch) touchscreen enclosed in a weather-resistant IP65-rated shell. Section Control and Data Sync with John Deere Operations Center can also be added.

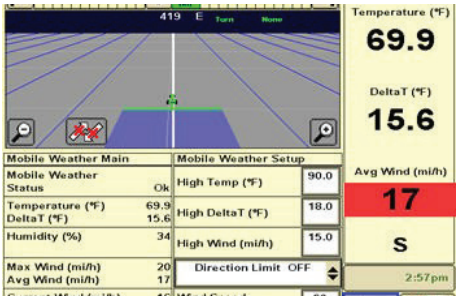
The 4240 Universal Display is perfect for producers who want an economical but robust display for AutoTrac and documentation. It can be used on open-station John Deere tractors and equipment of other brands. It's the ideal display for customers running mixed fleets who need basic precision applications for drawn sprayers, baling, planting, tillage and other operations.

Video input, ethernet ports, ISOBUS compatibility, a multi-colour display screen and scalable functionalities are also features of the 4240.

AutoTrac Universal 300
AutoTrac Universal 300, which replaces AutoTrac Universal 200, is designed for use on both John Deere and other brands of machines that are not AutoTrac ready.

Features include easy automatic setup, a smaller and more comfortable steering wheel, and a quieter steering motor in a weather-resistant housing. The 8.4 inch high-contrast touchscreen provides an easy-to-use experience and allows operators to clearly see their display, even in bright sunlight on open station tractors.

Basic documentation and AutoTrac come standard on the new AutoTrac Universal 300. Setup is easy – simply press "Start Calibration," drive 100m, and the correct settings for the equipment is determined.



Mobile Weather
Capture instantaneous, in-field weather information for on the go decision making. Accurate information is critical when making decisions surrounding chemical application. John Deere Mobile Weather displays temperature, wind speed, wind direction, Delta T, and relative humidity to allow operators to manage efficacy and potential drift of chemical applications

Utilize the customizable alerts and weather information to make educated decisions about when to spray. Built-in alerts make it easy for operators to set operational parameters to know when unfavorable weather conditions are present. Having weather information in the cab allows operators to increase product efficacy and decrease the risk of chemical drift.

New and updated John Deere products for 2019 include the 4640 & 4240 Universal Displays, AutoTrac Universal 300 guidance system and updated 19.1 Gen 4 software, all designed to help farmers farm even better in 2019 and beyond.

Weather Stations

METOS® ANZ Pessl INSTRUMENTS

iMETOS ECO D3

Reliable and cost-effective solution for basic soil moisture monitoring, irrigation management and hydrology (rainfall, water level, etc)

iMetos ECO D3 Soil Moisture

from $3,600 inc gst

- iMetos ECO D3 Base Station
- iMetos 90cm DDT TriScan Probe

+ add a Pessl Instruments rain gauge from $450

iMetos ECO D3 Climate Package

from $3,300 inc gst

- iMetos ECO D3 Climate Station
- Rain gauge, air temperature and digital wind speed

Includes 12 month disease model subscription

iMetos ECO D3 Delta T Package

from $4,500 inc gst

- iMetos ECO D3 Delta T Station
- Rain gauge, air temperature, relative humidity, ultrasonic wind speed and wind direction.

+ add a 90cm (25m ext) DDT TriScan Probe from $1,900

iMETOS 3.3

A complete solution for environmental monitoring, disease models, soil moisture and more.

iMetos 3.3 Complete Solution Package

from $9,900 inc gst

- iMetos 3.3 Base Station
- Rain gauge, air temperature, humidity and leaf wetness sensors
- Digital wind speed and wind direction
- 2x iMetos 90cm (25m ext) DDT TriScan probes

OVER 400 ADDITIONAL SENSORS AVAILABLE

iMetos DDT Soil Moisture Probe

- Measures Soil Moisture, Temperature & Salinity (EC)
- Rapid Connector
- Cable Protection
- Length: 60cm, 90cm, 120cm
- 2 Year Warranty

All packages include basic install and FieldClimate web software & mobile app (based on byo data) and are fully customisable to suit your requirements .

FieldClimate integrates with MyJohnDeere Operations Center and Croptical platforms

Data Interpretation
All measured data from your iMetos station is stored and available in real time on the FieldClimate web platform and accessible through free iOS and Android apps.
Define critical thresholds, automatically receive SMS alerts, or activate the alarm mode for instant updates.

Upgrade for more than 80 disease models for over 50 crops, and hyper localised weather forecast for weather dependent operations.

Your precise weather forecast

Your field in the palm of your hand

Your data in detailed charts

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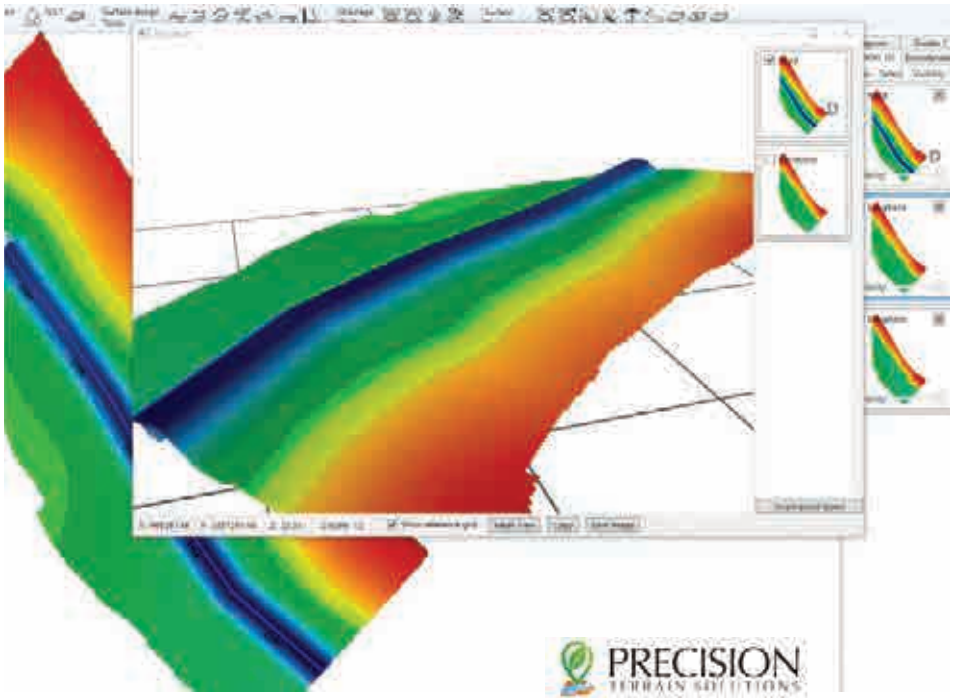
emmetts PRECISION AG. SOLUTIONS

AGree Decision Ag by emmetts

iGRADE & T3RRA CUTTA

iGrade software by John Deere allows automated water management and offers an advanced approach to levelling, ditching, grading, and plane generation. This application automates the hydraulic commands of a scraper blade or pan, making water management practices hassle-free.



T3RRA Cutta 2

T3RRA Cutta works with iGrade to allow the user to sculpt their farm terrain to their exact specifications. Used on a tablet console, the wizard based program guides the user through the landforming process, from elevation collection to design implementation. As well as best-fit and multi-fit optimized surfaces, T3RRA Cutta can build drains, roads and levee's all in-cab. Guidance lines can be created and exported directly to the GreenStar display.

T3RRA Design

T3RRA Design is a professional desktop terrain design tool that makes jobs like renovating a dam or designing a new bankless channel irrigation system easy.

T3RRA Design was built from the ground up with farming needs in mind. It is user friendly, yet has the grunt and sophistication to develop some of the most complex land forming and drainage design. No data lock-in means many data formats are supported.

T3RRA Ditch

T3RRA Ditch is the ultimate solution to design and create field drains. Begin with automated and optimised 3D placement that will drain your field with minimum soil movement. Further customise the design to create the ultimate drainage solution, then implement directly from your cab.

Analyse the shape of your paddock and automatically design, optimise and place accurate field levees.

T3RRA Ditch integrates seamlessly with John Deere equipment. Accurate positioning via StarFire receivers, drain and levee lines are ready to automatically steer with AutoTrac and automatic drain depth is controlled via John Deere iGrade integration. Other equipment compatibility is also available through universal integrations.

For more information, contact the Emmetts Precision Ag team.

CROPTICAL MONITORING APPLICATION

Providing decision support throughout the season with unbiased, actionable data, helping to find problem areas sooner, protecting yield potential and optimising return on investment.

Daily insights offered:
- Monitor day-to-day field performance with daily satellite and weather updates*
- Prioritise scouting, testing and operations by quickly identifying farms and fields performing above average (black) or below average (red).
- Use best-in-class Field Variability Maps for a closer look at your fields.
- Identify opportunities to protect and improve yields as the season progresses.

*GEOSYS guarantees daily updates of the Croptical monitoring application system. However, due to weather conditions, unstable satellite data is not always available every day on every field.

"Now that I use data from Croptical, and not just what I see with my naked eye, I feel more comfortable moving forward and making changes around the farm that are based on good evidence." - David D, grower.

Scout smarter with field benchmarking and support app:
- Bias-free decision making - fields are benchmarked using only objective satellite data.
- Intuitive interface makes discoveing crop conditions fast and easy with medium resolution maps.
- Croptical In Field mobile application gives you access to data on-the-go wit a scouting app that records notes and pictures.

Croptical MONITORING APPLICATION

GEOSYS Growing agriculture

AGree Decision Ag

Receive real-time email notifications to stay up to date with what' occurring in your fields.

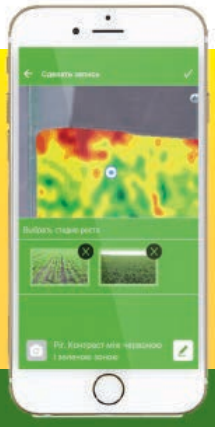
Quick, easy access to historical satellite and weather data:
- Access GEOSYS' extensive archive to compare performance of a field against previous years.
- Track crop health from previous years as compared to actual yields.
- Evaluate current weather data and patterns compared to past seasons.

"With Croptical, we've been able to compare the growth curve from previous yeas to the current season, so we can assess whether we're ahead or behind, and make strategic decisions." - Tim T, grower.

"In the past, we weren't able to identify problem fields quickly. Now, we can monitor the problem areas and use our resources wisely." - Michael S, grower.

Annual Subscription to GeoSys Croptical, Satellite Imagery Scouting Platform. Including historical imagery, variability maps, bench marked data and unlimited map exports

$1250 P/A +GST



For more information contact
AGree Decision Ag - Ph: 03 5382 9456 - info@agreedecisionag.com.au

EO SATELLITES IN AGRICULTURE

With more than 400 Earth Observation (EO) satellites in orbit, it's easy to get lost in space when trying to sort through the available data sources. But only a handful of the EO satellites in orbit meet the unique needs of agriculture. GeoSys and AGree have teamed up to provide customers with a premium, seamless satellite data service.

EO Satellites and agriculture

An EO (Earth Observation) satellite is equipped with passive or active sensors designed to image the earth. Most are low in Earth's orbit (400-800 km altitude) and travelling at around 27,000 km/h. There are public and commercial EO satellites, all with varying wavelengths, resolutions and orbits, depending on the specific application.

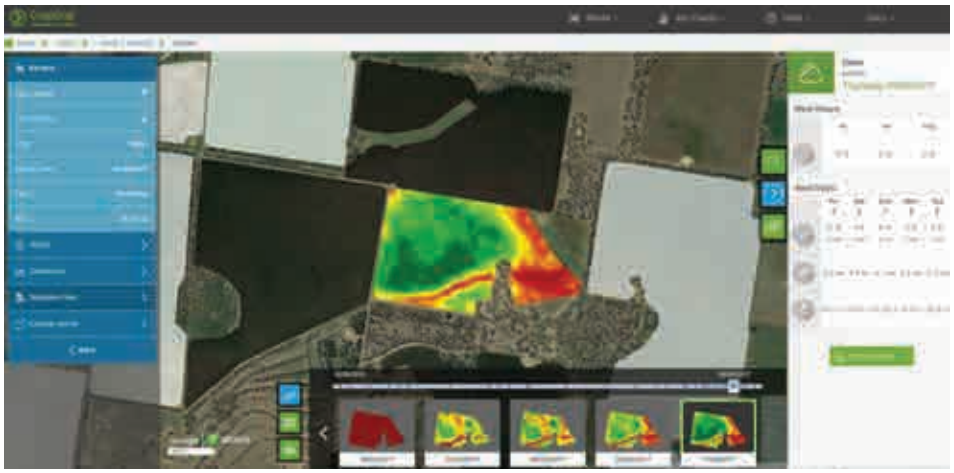
The key requirements that make the EO satellite good for agricultural application includes:

- Multispectral optical sensor
- Wide swath (and/or multiple satellites working together)
- Frequent revisit
- Excellent data quality (geometry and radiometry)
- High capacity ground segment
- Reliable management (tasking & delivery)
- Rapid pre-processing and delivery
- Low cost per square kilometre

Over the past 30 years, GeoSys has managed a virtual constellation of satellites for their customers. They prioritise high-quality, scientific grade data, and their exclusive processing system makes that data integrate seamlessly into any system. Many competitors base their service on a single data source, or the free public sources. With the aim of offering customers the best possible data source, AGree have teamed up with GeoSys so customers can take advantage of this seamless service.

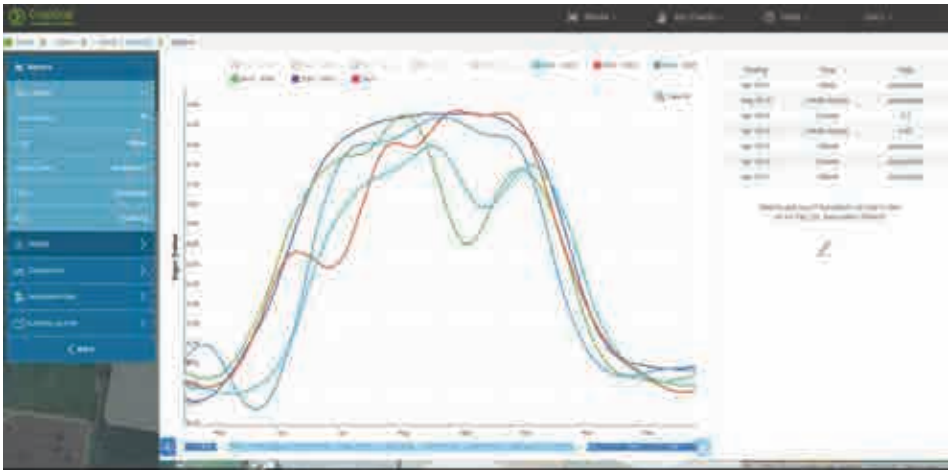
The Croptical Platform

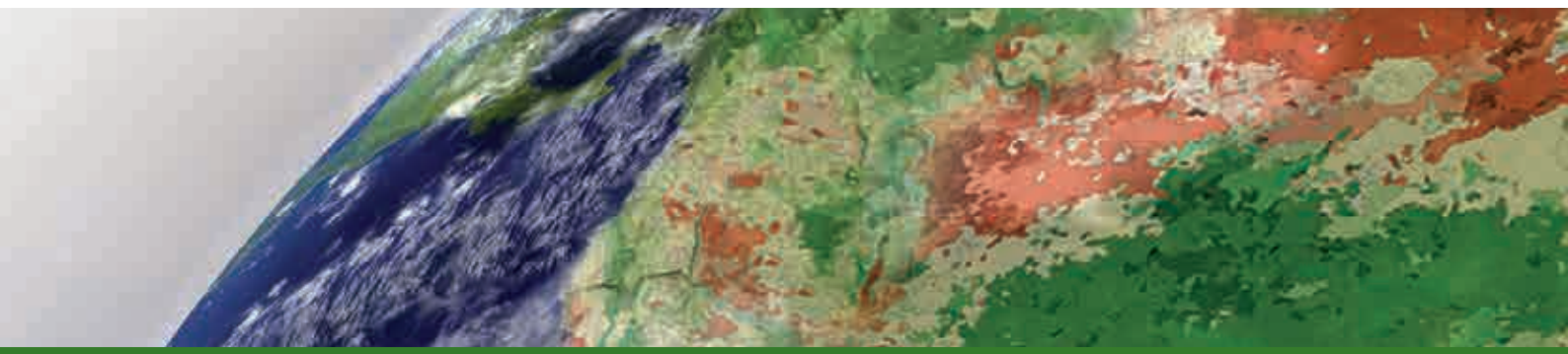
Croptical is GeoSys' agriculture field monitoring app. It uses data sourced from the GeoSys satellite constellation and offers growers daily insights into field performance, with satellite and weather updates. This data can be used to prioritise scouting, testing and field operations (eg spraying, nutrient application), and quickly identifies field performance with a simple glance at the dashboard or via email notifications.

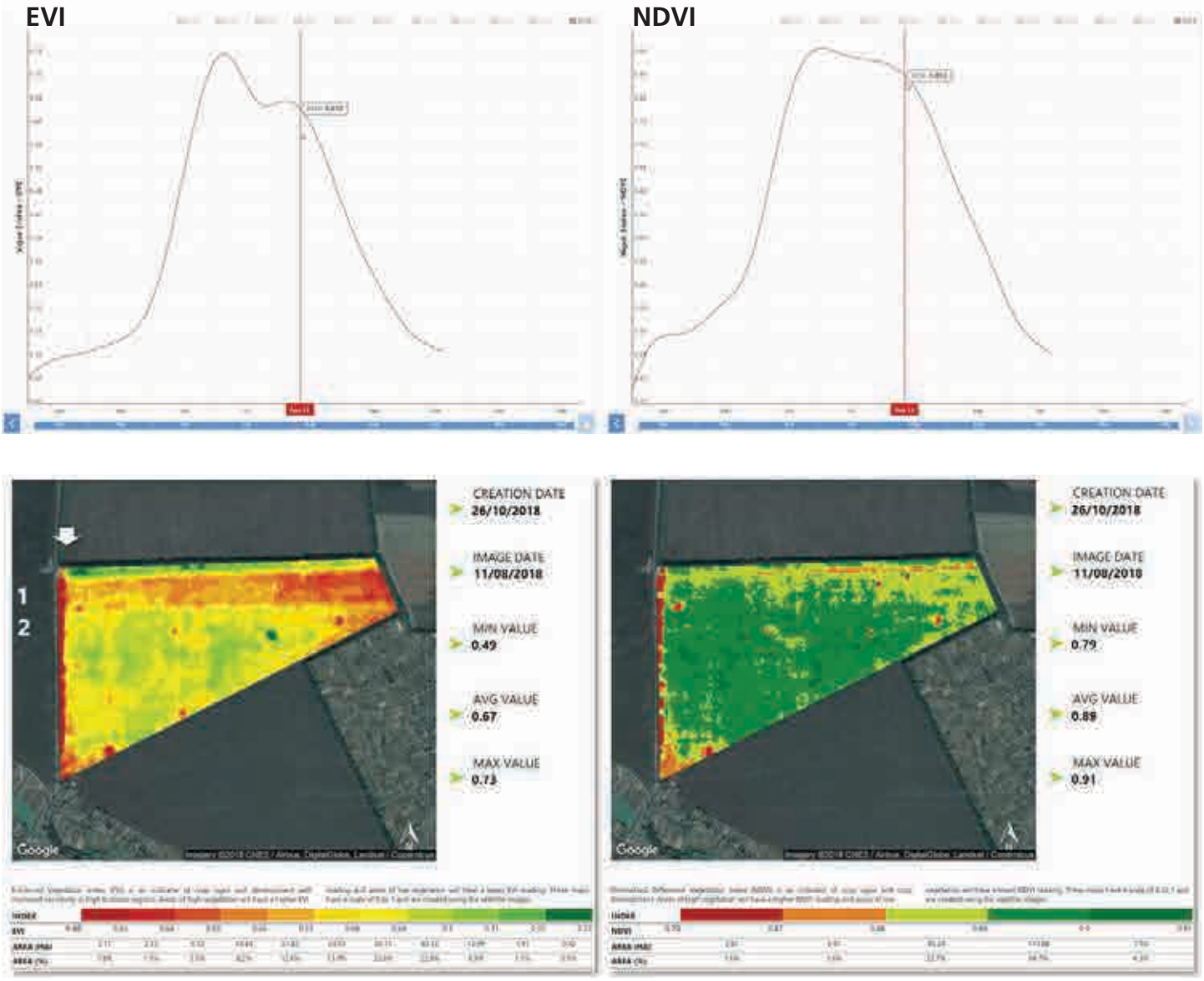


With the best in class field variability maps, on a field scale you can measure individual paddock performance throughout the growing season and identify opportunities to improve crop and yield performance.

As well as monitoring current season conditions, historical satellite and weather data is easily accessible, allowing comparison between historical and current situations. By adding historical field information such as crop type, variety and yield, growers can evaluate crop and variety performance on a seasonal basis, allowing better estimation of field performance.







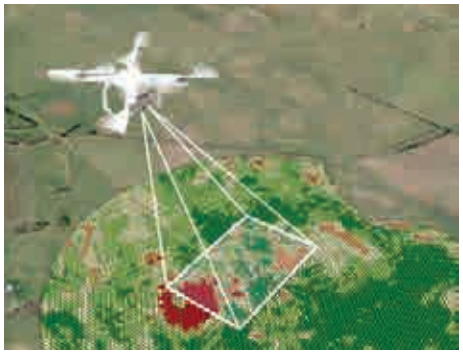
Enhanced Vegetation Index (EVI)

This season, a new Enhanced Vegetation Index (EVI) has been added to the Croptical platform. This index is designed to be more sensitive to vegetation changes in high biomass periods and is also more responsive to canopy structural variations. Testing has shown that during vegetation peak, due to the nature of NDVI (Normalized Difference Vegetation Index) being saturating, EVI maps can highlight patterns that NDVI may not be able to pick up. NDVI is more sensitive than EVI during low biomass period, and sensitivity is about the same during the medium biomass periods. Using both features can allow growers to get more accurate data throughout the growing cycle.

Looking to the future

So far, GeoSys is the only agriculture-related business planning to use the UrtheDaily constellation, which will launch in 2020. The satellites will provide systematic, daily acquisition of all global land surfaces at 5 metre resolution. This revolutionary constellation will transform the way customers are delivered data. For more information on EO satellites, GeoSys or the Croptical platform, contact the AGree team on 03 5382 9456 or info@agreedecisionag.com.au.

DJI DRONES



The Agribotix Agrion P4 Starter and Plus solutions are game-changers. Designed around the DJI™ PHANTOM™ 4 PRO drone, the portable system comes equipped with a 20MP near-infrared (NIR) camera designed to capture superb field-level imagery, which is integrated with the included Agribotix FarmLens™ platform for processing.

Results are produced automatically in the cloud, eliminating the need for hard-to-use software packages. The drones are easy to use; even beginners can fly with confidence within a few minutes.

Combined with the intuitive, best-in-class FarmLens, designed from the ground up for agriculture, the solution marks a new era for ag intelligence. With a price tag starting at just $5,590, the Agrion is a powerful, real-time decision support tool accessible to any farming operation, big or small.

Agribotix
Agricultural Intelligence. Drone-enabled.

Agribotix Agrion P4 Starter
from
$5,590.00
incl. gst

Agrion Starter Kit Includes:
NDVI Lens Modification, Rugged Case, 2 Batteries and 3 mths FarmLens Pro cloud based processing, 12 mth DJI Care Refresh and Technical Support.

Features	Agrion P4 RGB $3,790	Agrion P4 Starter $5,590	Agrion P4 Plus $7,250
FarmLens Pro Processing	3 months	3 months	3 months
Camera	Unmodified RGB	Near IR	Near IR
Rugged Case	✓	✓	✓
Batteries	1	2	4
iPad Mini 4 Tablet	X	X	✓
3 Port Charger	X	X	✓
Extra Propellers	X	X	4

Note: All prices include GST

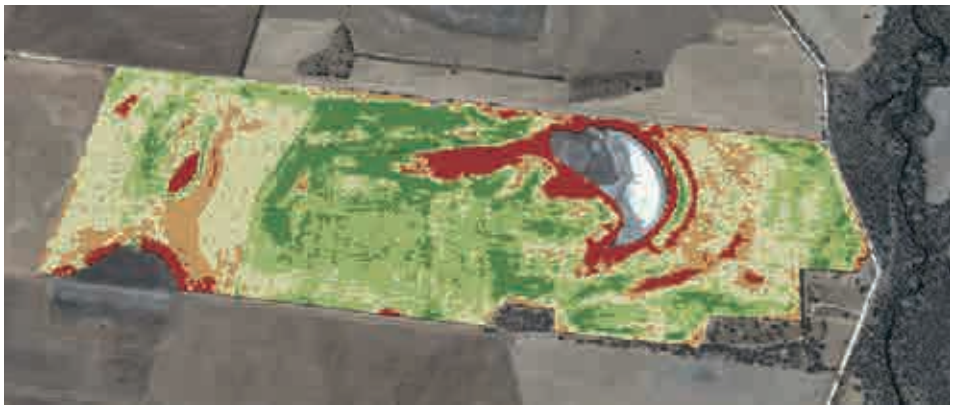
CROPFLIGHT

We not only capture data, we understand it.

Emmetts CropFlight services are leaders in agricultural remote sensing imagery. With the use of multiple platforms, including UAV's, both multirotor and fixed wing, Manned Aircraft and Satellite Imagery, and multiple sensor options including Near Infra Red (NIR), Red, Green, Blue (RGB) and thermal we have a solution to fit your requirements.

Combine historical field data with imagery from CropFlight to develop important insights into individual field performance. Giving both historical and real time data for the use in management decisions, including variable rate seeding, nutrient and spray applications.

CropFlight
Aerial Imagery Services by emmetts



CropFlight Services:

- Field Health Assessment
- Aerial Photography and Videography
- Paddock Inspections
- Weed Inspections
- Irrigation Assessment
- Pest Inspections
- Hay Stack Inspection (w/ thermal)
- Trial Mapping & Imagery
- Storm Damage Assessment
- Insurance Estimation
- Plant Stand Estimation

- Yield Estimation
- Management Zone & Prescription Map Creation

AGREE DECISION AG - PRECISION AGRONOMY

www.agreedecisionag.com.au

Ph: 03 5382 9456
info@agreedecisionag.com.au

"We understand soil and plant systems, we understand machinery, we understand data.

We will work with you to translate all of your data into actionable on farm decisions."

The Australian agriculture sector has never had as many resources available to them. With the continual advancements in machinery technology, guidance systems, mapping, satellites, and the multiple layers of data accessible, a majority of this technology and valuable information is currently not used to its full potential.

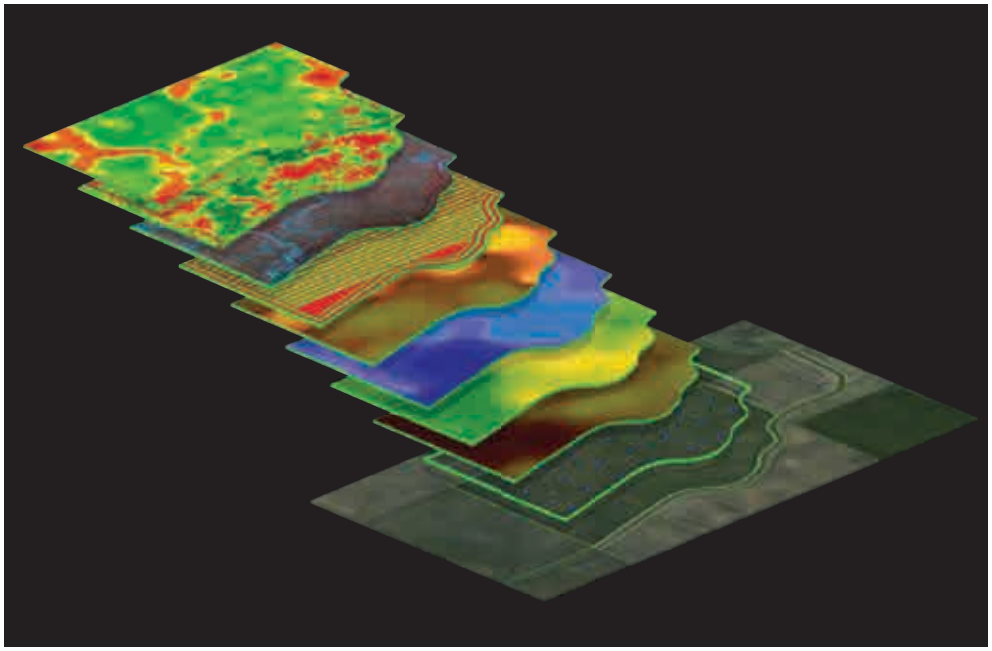
This gave rise to the establishment of AGree Decision Ag by Emmetts. AGree is focused on working through the precision ag journey with customers. To ensure clarity of information, by analysis and application of this data for optimal profits.

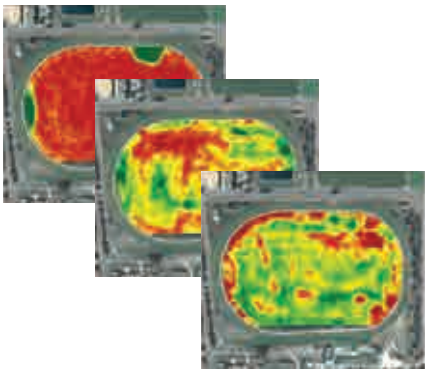
We will help turn the vast amount of data collected or collectable from your farming system into information that you can use to make informed decisions that will increase your knowledge into the future.

AGree aim to reduce the complexity of precision agriculture, with the continual developments in machinery, equipment and software applications, our promise is to stay on the forefront of this technology across all brands and platforms.

Our consultants can assist with:

- Soil mapping
- Soil testing
- Leaf testing
- Nutrient management plans
- VRT maps
- Predicta-B DNA testing
- Soil management plans
- Moisture monitoring
- Crop imagery (NDVI, RGB, Thermal)
- Elevation mapping
- Water flow modeling
- Consultation
- Yield map recording and analysis
- Map data cleaning
- Management zone analysis and creation
- Prescription mapping
- GPS guidance and boundary management
- Farm planning
- Digital farm maps
- Brand conversion of set up data
- GPS system integration
- On farm trials
- Machinery implementation





WHAT LIES BENEATH...

It's easy enough to see and understand what's on top of the ground, but how much more production insight would you have if you could explore underneath?

The Emmetts Precision Ag team has invested in a Topsoil Mapper (TSM) to help growers discover and further understand their soil condition. This precision agriculture soil sensor uses EMI (Electro Magnetic Induction) to create soil maps and performance zones autonomously to a depth of up to 1 metre.

Manufactured in Austria by soil geophysics measurement specialist Geoprospectors, the units can be used whatever the weather conditions or biomass condition. The Topsoil Mapper creates a series of soil maps with defined parameters – compaction, relative water content, soil zone delineation, potential nutrient needs and soil variance – and allows continuous decision-making for real-time farming operations such as strategic tillage (rip, delve, spade), sowing and fertiliser applications.

Easily fitted to either the front or back of machinery ranging from UTVs and seed drills to large tractors, the Topsoil Mapper operates on a single pass with no soil contact. This means it can operate in full stubble or in crop, regardless of ground cover. As it sits 30-40cm above the soil, operators can travel up to 40km/h while mapping.

Emmetts Precision Ag Solutions manager Matt Burns said the Topsoil Mapper had been available in Europe for several years, but a new model suited to Australian conditions and valuable software upgrades has been unveiled over the last 12 months.

"Overseas, the mappers have been mainly used in agricultural fields in Europe to monitor depth of soil moisture for Mouldboarding to avoid 'smearing' subsoil clays and creating compaction layers.

However, as technology has advanced to extrapolate much more information, mappers are being used for more specific agricultural uses including soil moisture measurement, depth and compaction across broader landscapes," Matt said.

"We received the first two units in Australia in April. One is set up on a John Deere Gator UTV, utilising the TSM and a Wintex 2000 for more accurate field zoning, soil testing and ground trothing for the creation of field management zones. We've done this so we can offer customers a mapping service, rather than them having to invest in their own machine."

"Producers currently have a mass of collected data including yield maps,

How can the TSM benefit you?

Local differences in soil can be targeted for treatment with the control for varying sub-plots.

The mapping of soil-specific water supplies allows targeted control of irrigation measures and optimisation of sprinkler system use.

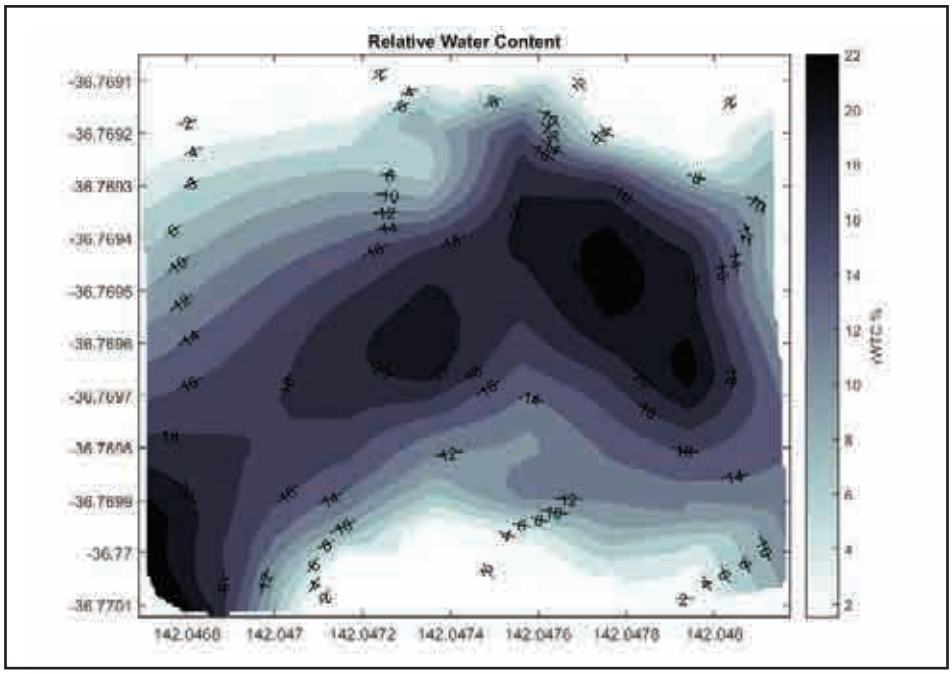
The thickness of the humid soil layer that is permeable by roots is determined in order to control soil improvement measures and fertiliser use in a targeted manner.

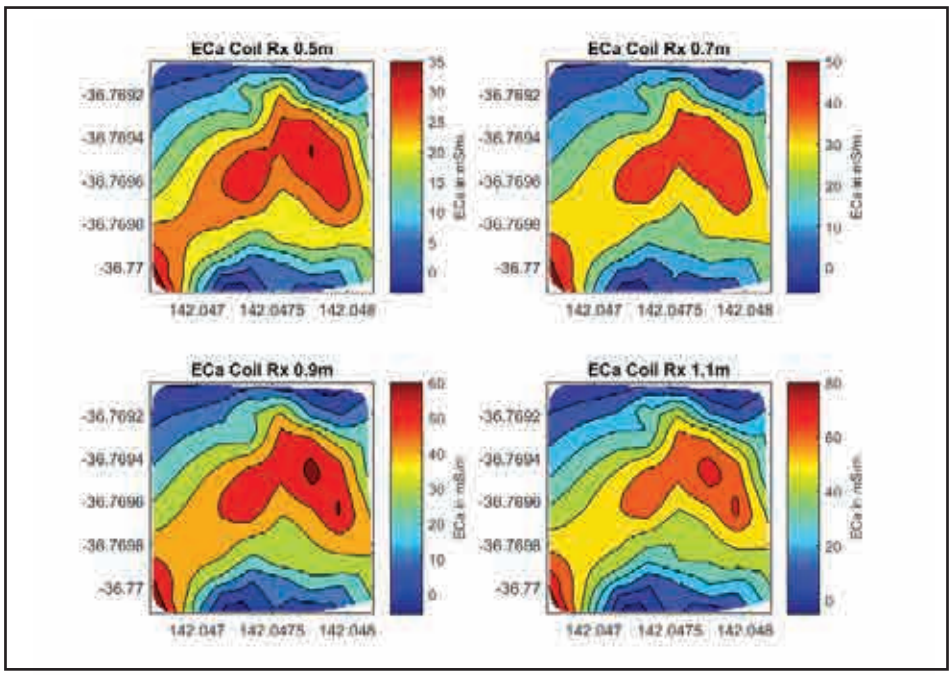
Compatibility with agricultural information systems permits integrated planning of agricultural operations while taking into account all available operating data (e.g. soil data, yield key indicators, vegetation measurement data, etc.)

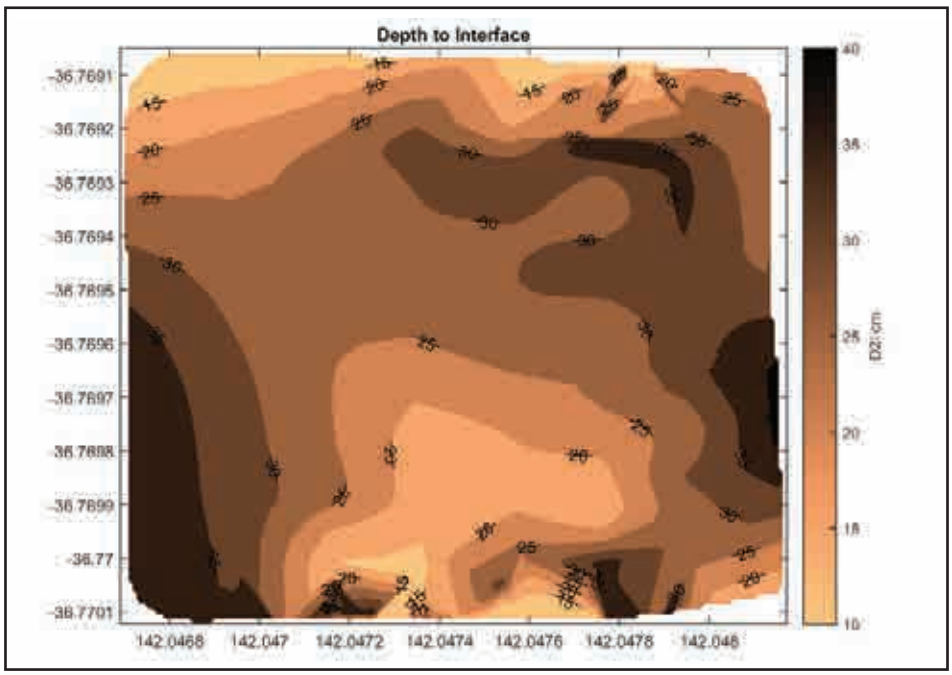
application maps, NDVI maps etc. which highlight field variability and performance. Sometimes it can be difficult to determine the exact cause of the variability or performance issue. The TSM allows us to define these zones in greater detail with the 4 band Ec, as well as explore and identify correlations between layers, including compaction and relative water content, giving us a much more in depth look at the root cause of the field variability"

"We're looking at running field trials around Warracknabeal and in the Mallee and hope to schedule some demonstration days later in the year," Matt said.

For more information on the TSM, or if you'd like to talk about getting a paddock or property mapped, phone Matt Burns on 03 5382 9456 or visit www.agreedecisionag.com.au.







Meet the Family

John Deere 1-9 family tractors for any task. Find your perfect match at Emmetts.

1 SERIES FAMILY

The value-spec 23 horsepower 1023E meets all of the basic needs around your property. Or choose the 1025R for a premium, comfortable workhorse for your small acreage.

2 SERIES FAMILY

Ranging from 24 to 36 horsepower, these comfortable compact tractors feature a drive-over mower deck, foldable Roll over protection and standard four-wheel drive.

3 SERIES FAMILY

Choose from the affordable E series or the premium R series compact tractors for tasks like finish mowing, rotary cutting, heavy loader work and rotary tilling on a large property.

4 SERIES FAMILY

The 4105 is built for hard work: loading, mowing and landscaping. The mid-spec 4M Series are available in 49 and 66 horsepower models, as are the premium 4R series.

UTILITY TRACTORS

The 5E Series (55 to 93 hp), mid-spec 5M Series (85 to 115 hp), premium 5R Series (90 to 125 hp), and powerful 6 Family (105 to 135) are built to get the job done.

SPECIALTY TRACTORS

Includes hi-crop tractors with over 594 mm of front axle space, low profile tractors, and the super-narrow 5GV Series (75 to 85 hp) and 5GN Series (75 to 100 hp).

ROW-CROP TRACTORS

The 6-Series (140 to 210 hp), the 7R Series, (210 to 310 hp) and the 8R8RT Series (245 to 400 hp) tractors deliver uncompromised performance.

9 FAMILY 4WD/TRACK TRACTORS

Meet the 9R, 9RT and the 9RX Series tractors (370 to 620hp). Whether your operation calls for tyres, two tracks or four, the 9 Family has you covered.

MANY MODELS IN STOCK NOW!

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