

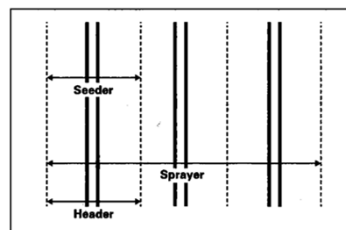
Agriculture Numérique et de Précision

Journée sur l'agriculture de précision 2020 Jean-François Ridel



Le plan

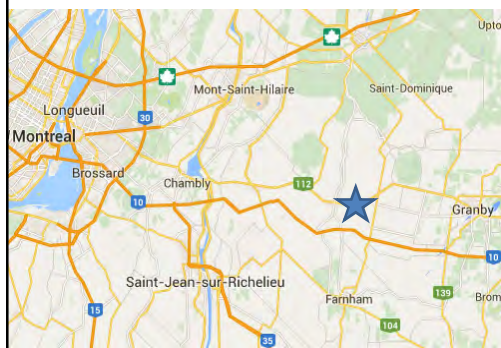
- Moi, ma ferme
- Compaction et précision
- Ça coute et ça rend
- Choses à suivre





Ferme Ridel

- 215 ha
- Maïs
- Soya
- Blé
- Chanvre



Mes origines en France

- Normandie, Calvados, St-Pair





10 ans au Japon comme ingénieur



JF-san au



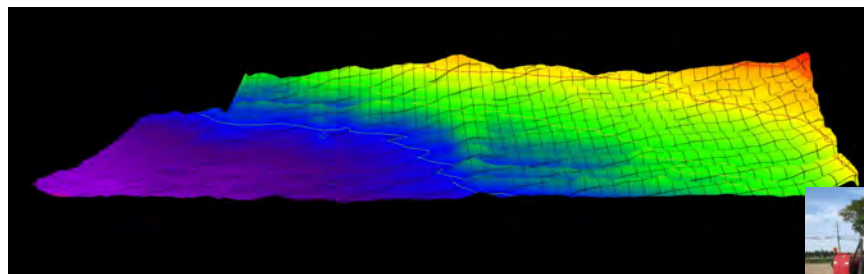
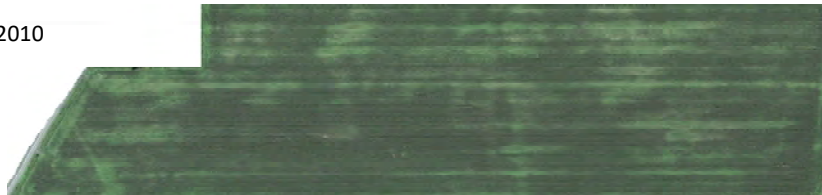


Prioriser les investissements

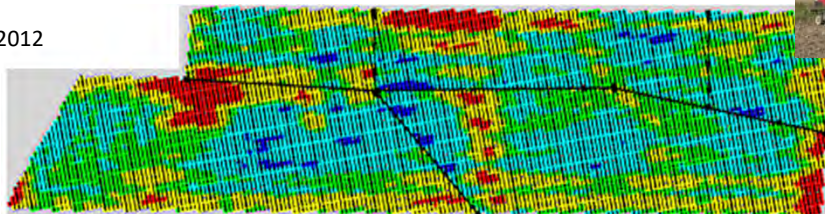
- Nivellement
- Drainage
- Compaction
- Chimie du sol
- Vie dans le sol
- Réduction des GES

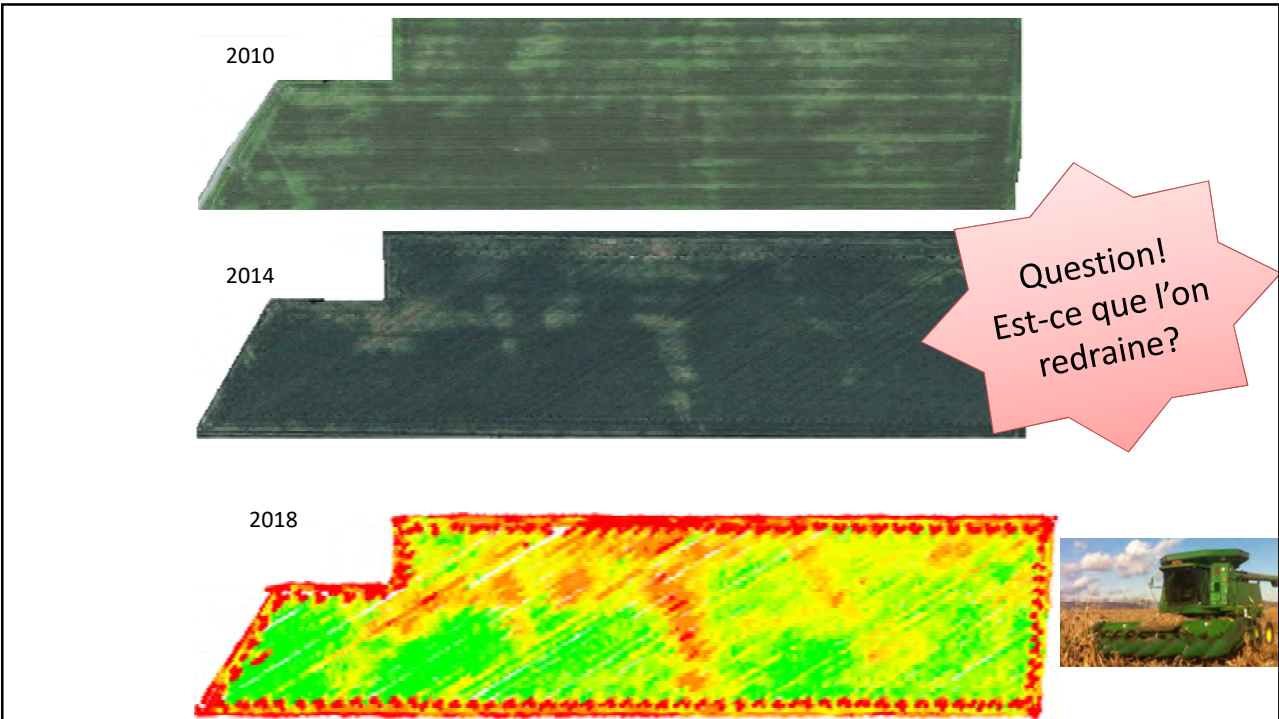
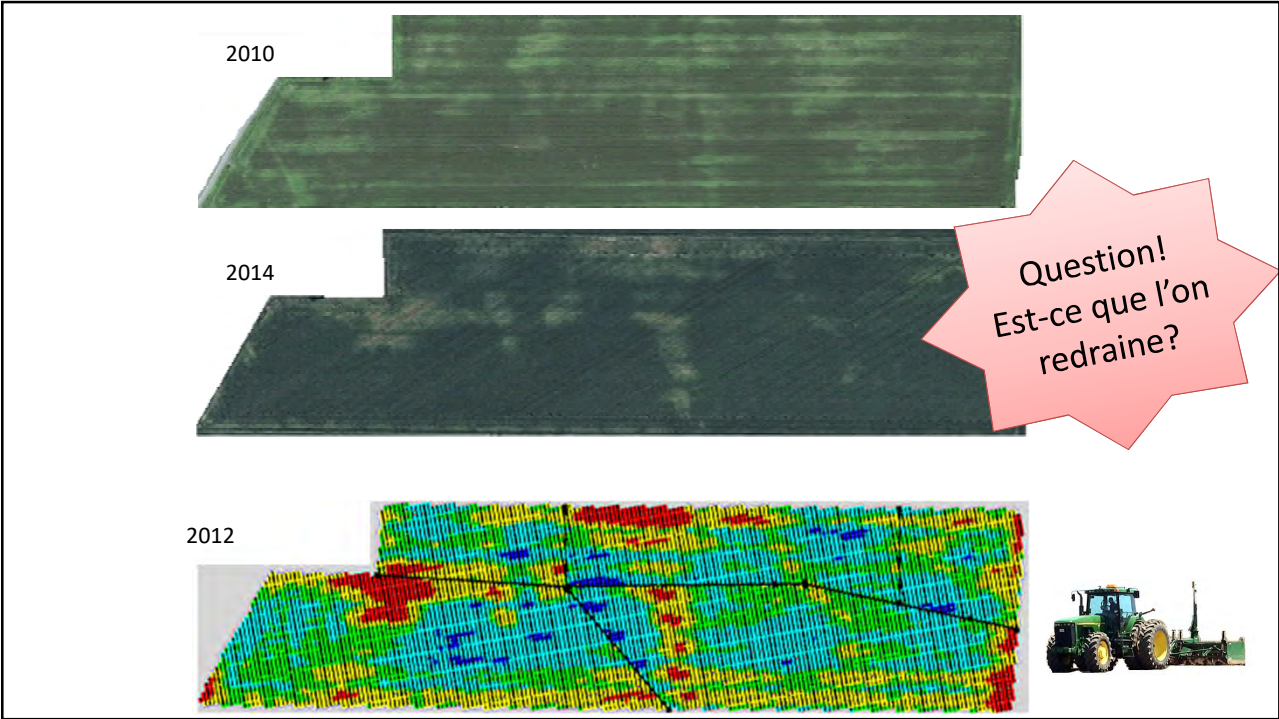


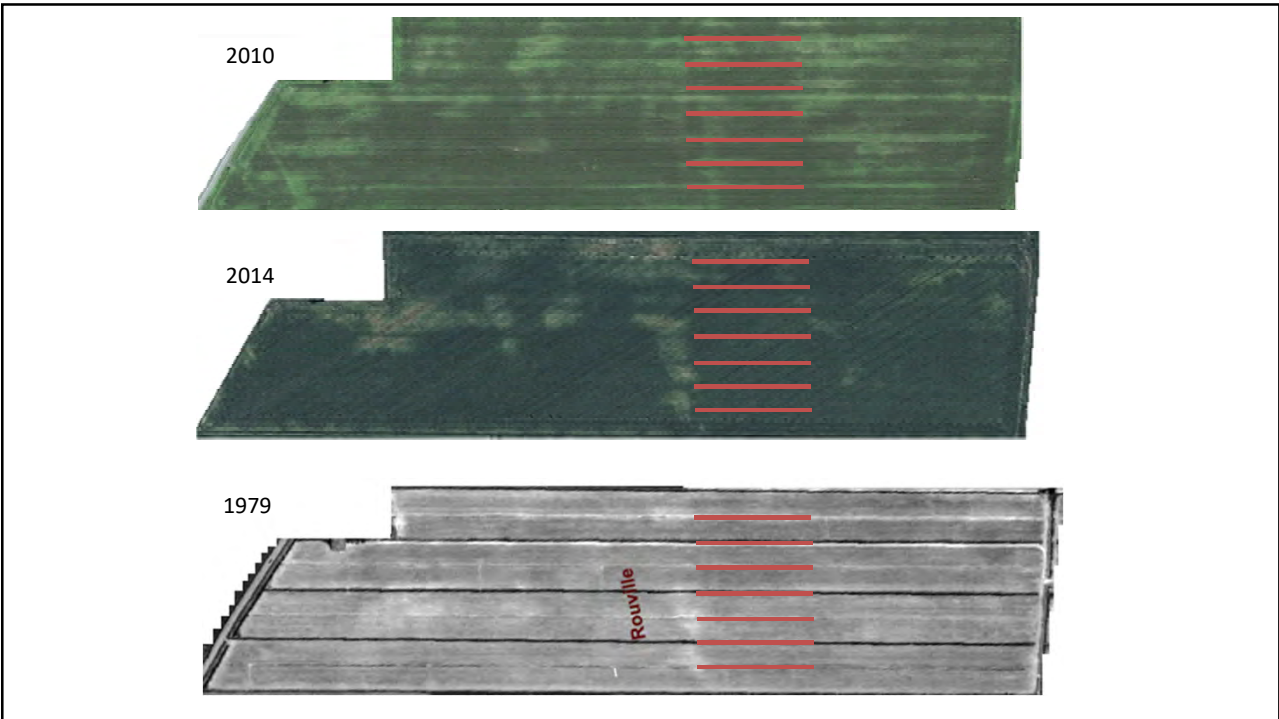
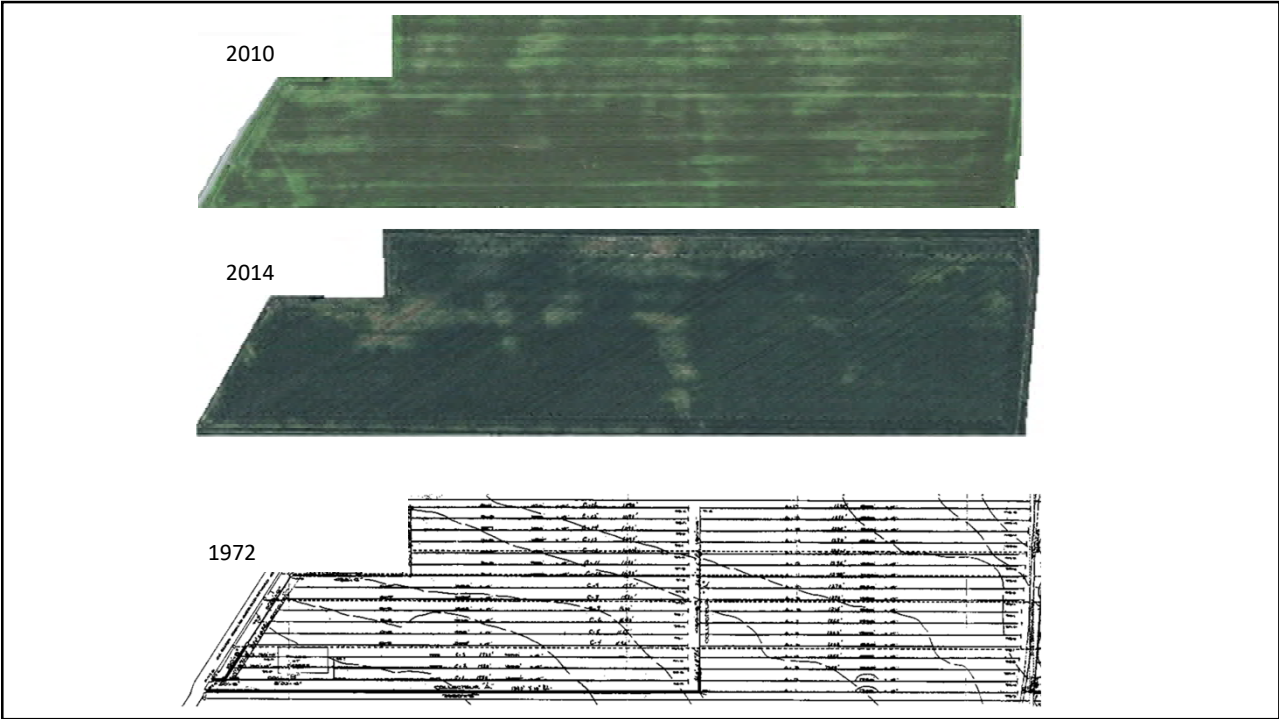
2010

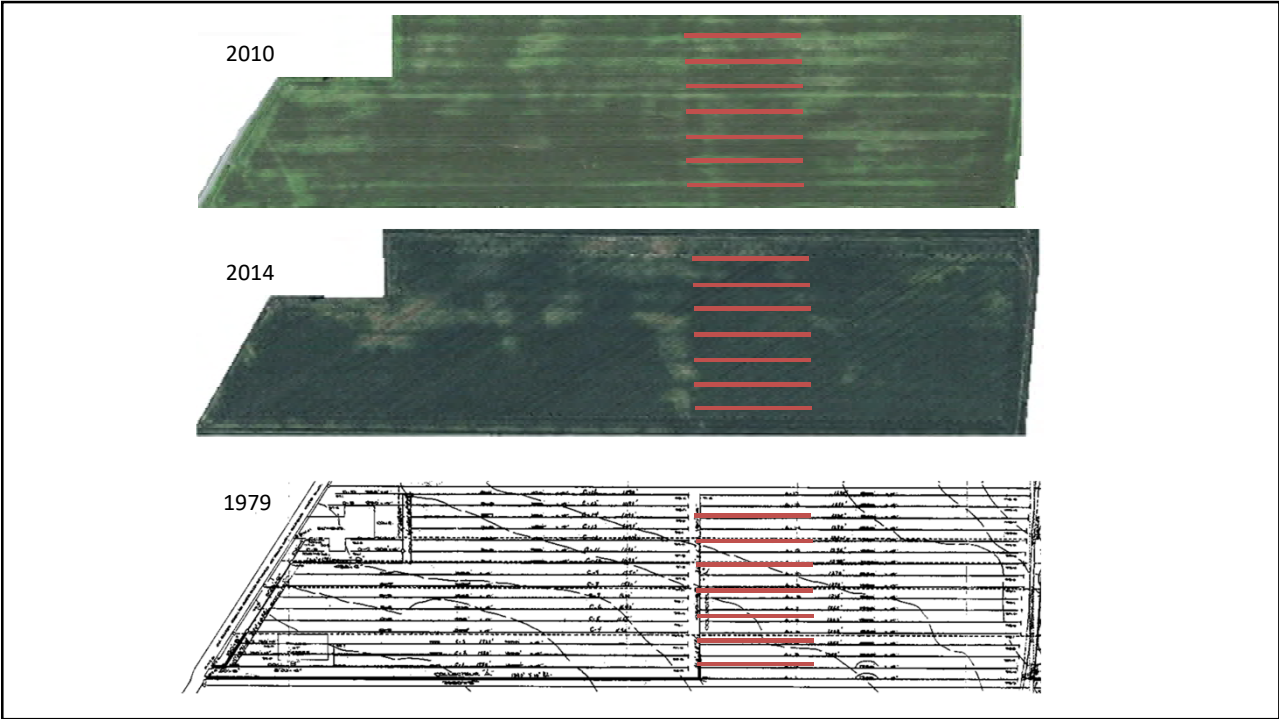


2012








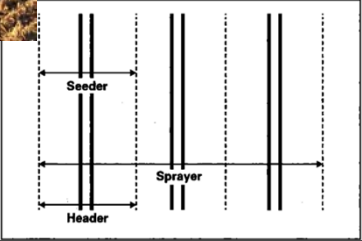




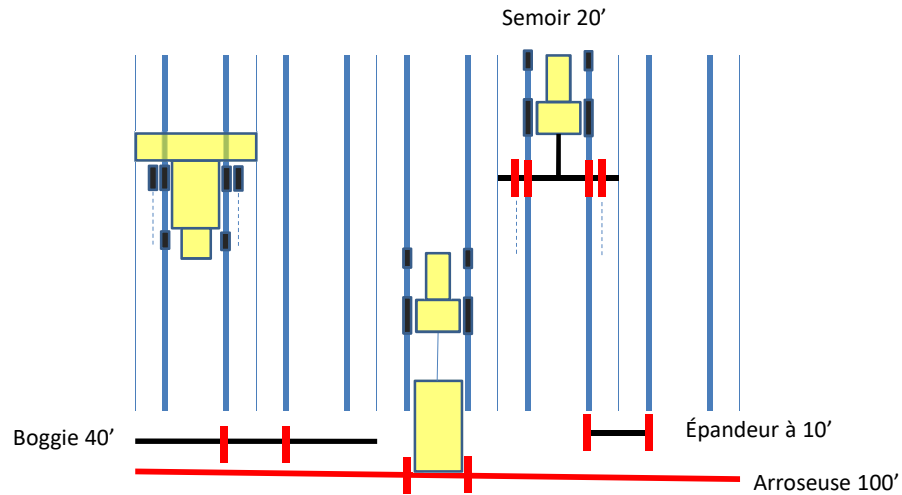


Trafic contrôlé à 20' CTF

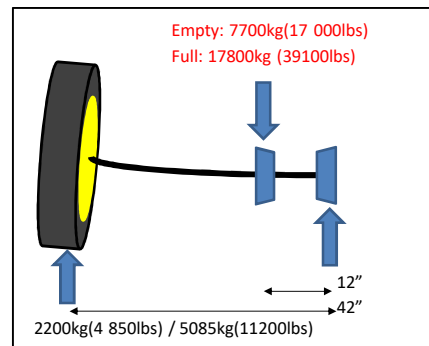
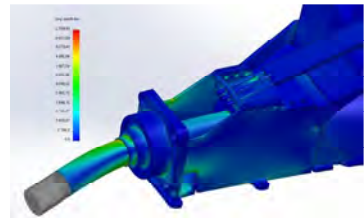
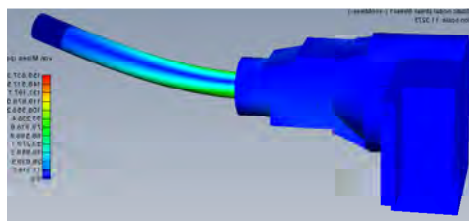








Gestion à 20' pour 10, 40 et 100'

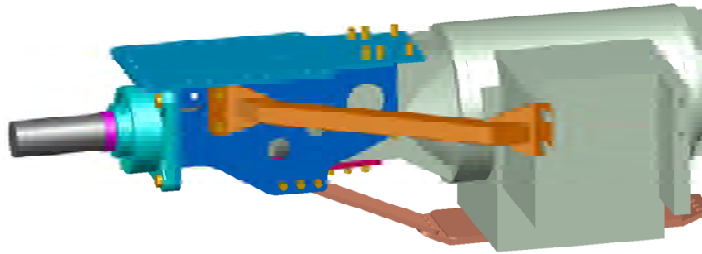


Train arrière du tracteur à risque



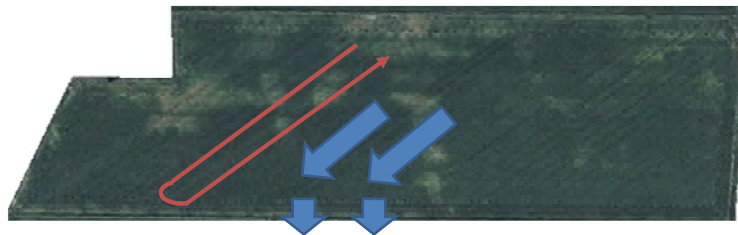
Le renfort

- Réduire
 - Investissement
 - Risque
- Optimiser
 - Équipement
 - Compaction
 - Maintenance



La récolte

- Distance de remplissage
 - À 15t/ha
 - Trémie de 7t @ 8 rangs
 - 800m

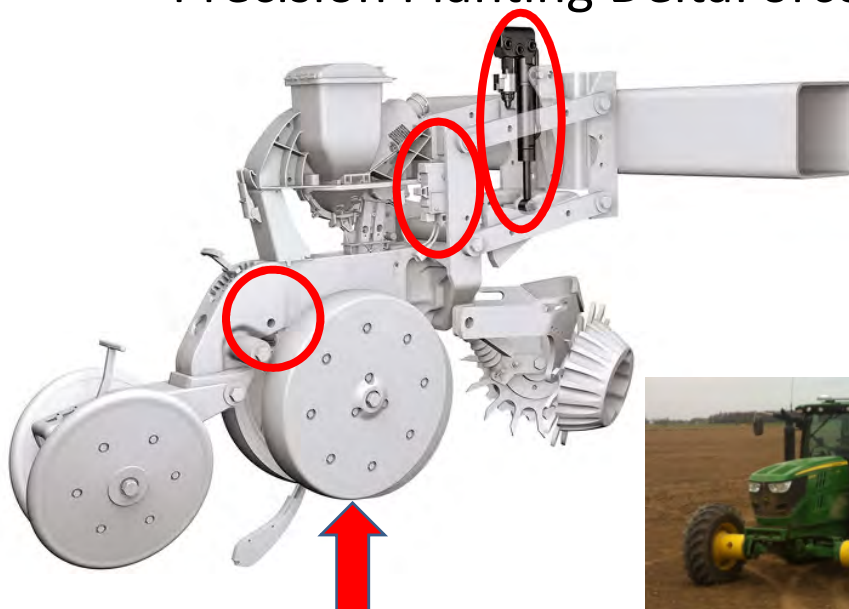


Compaction et épandage de lisier

- Cadman CMA



Précision Planting DeltaForce



Down force

Precision
Planting



Ag Leader



DAWN

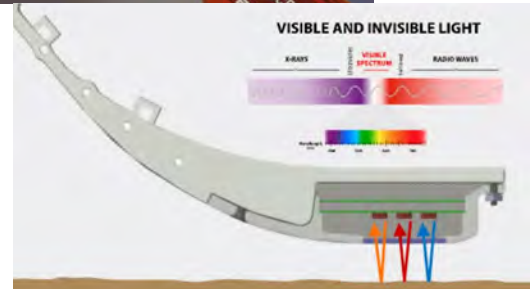
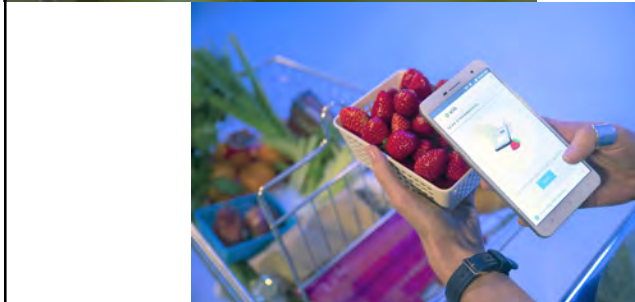
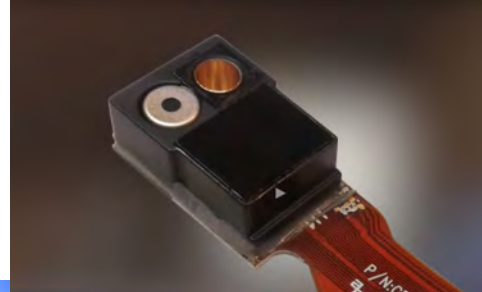


SmartFirmer

- Température
- Propreté
- Uniformité
- Humidité
- Matière organique

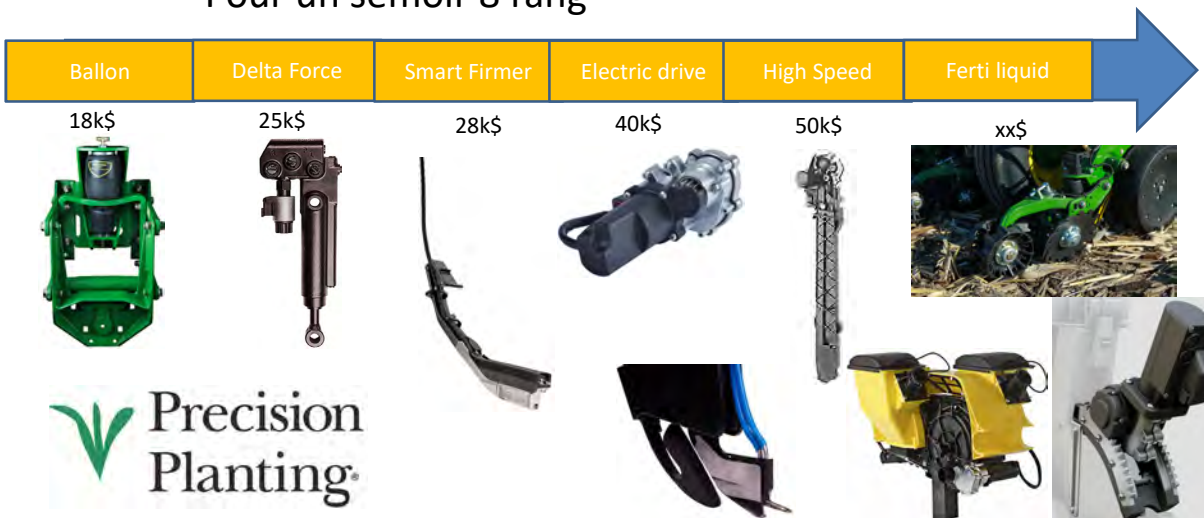


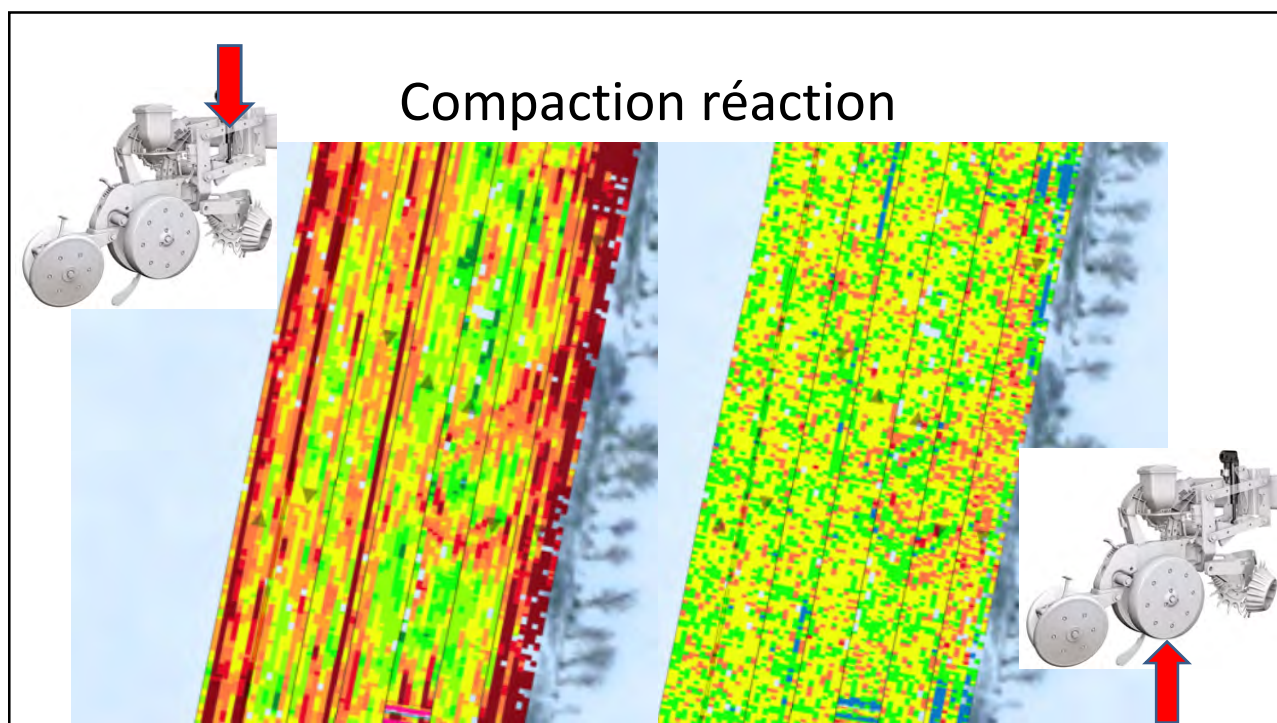
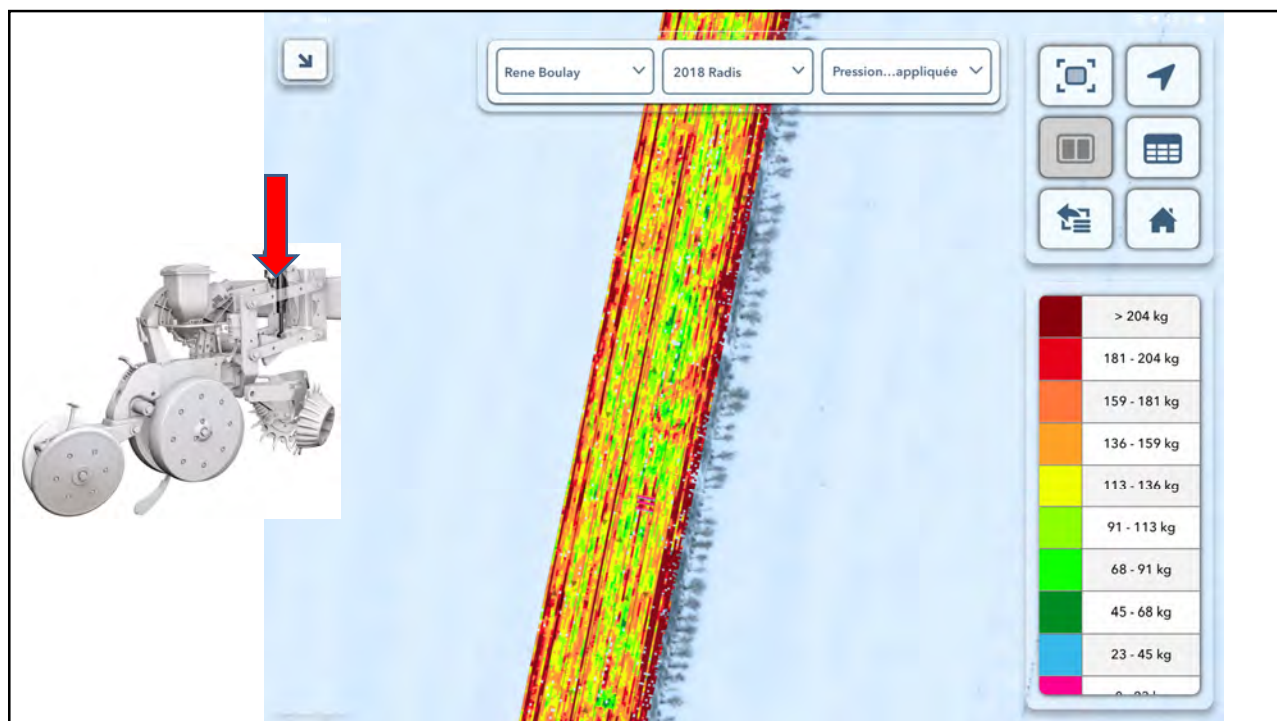
SCIO Spectromètre

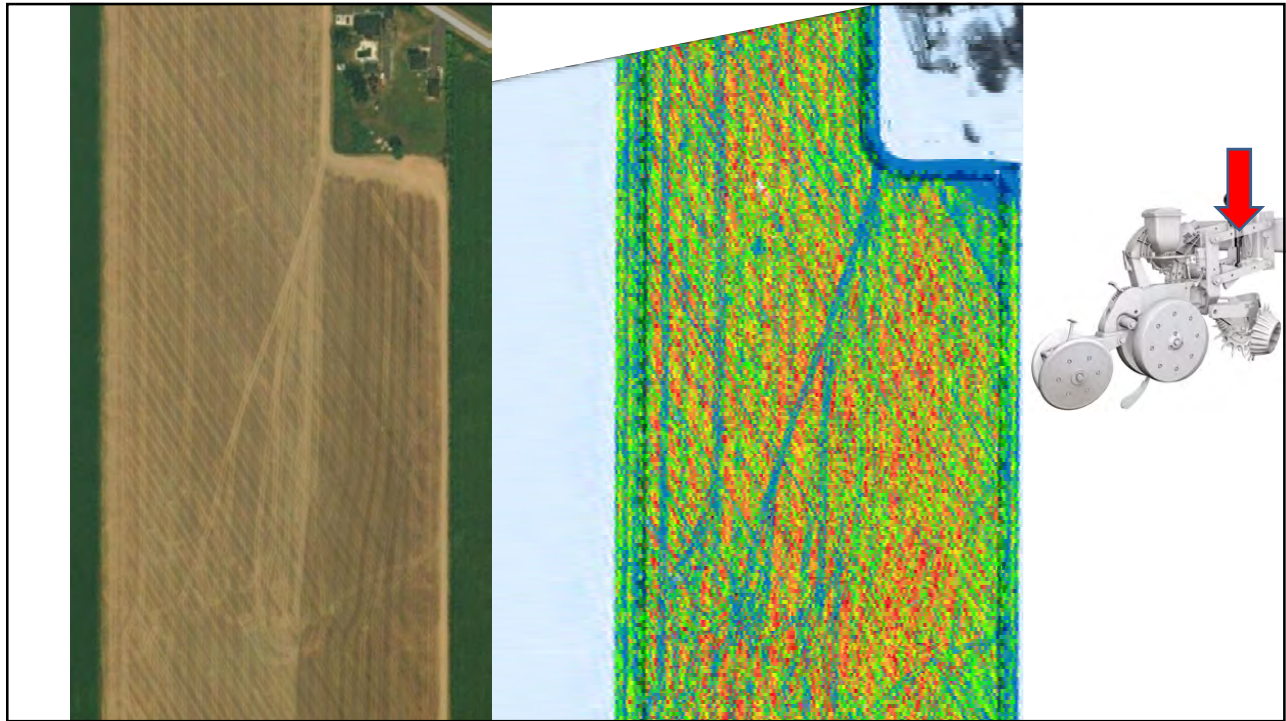


L'investissement *ou pas*

- Pour un semoir 8 rang

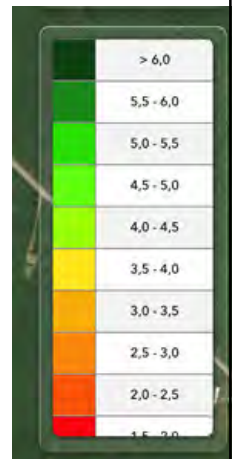






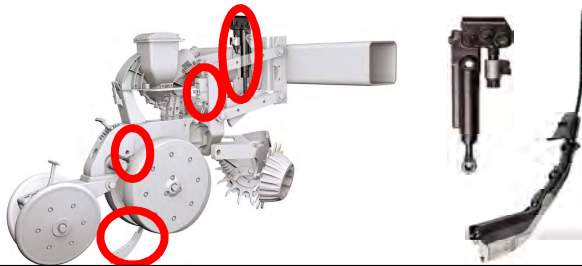
Matière organique

- Engrais vert 18
- Semis 19
- Augmentation de MO
- Bon améliore plus vite



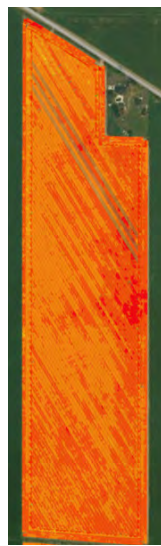
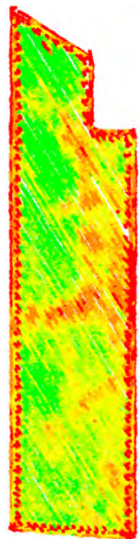
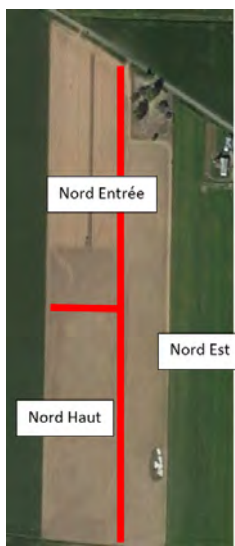
Les calculs

- $80\text{ha} \times 12.5\text{t/ha} = 1000\text{t}$
- $1000\text{t} \times 2\% = 20\text{t}$
- $12.5\text{t/ha} \times 2\% = 250\text{kg/ha}$
- $20\text{t} \times 200\$ = 4000\$/\text{an}$
- $28000\$/4000\$ = 7 \text{ ans}$

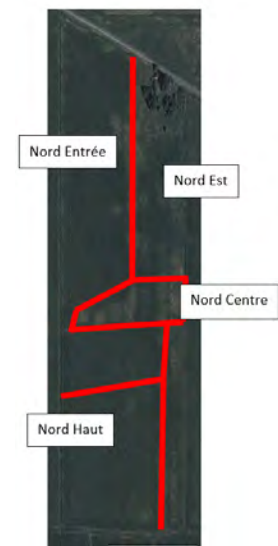


Zones Analyse de sol

2017



2020



Application d'Azote

- Pas facile d'atteindre la précision
- Taux variable ou pas



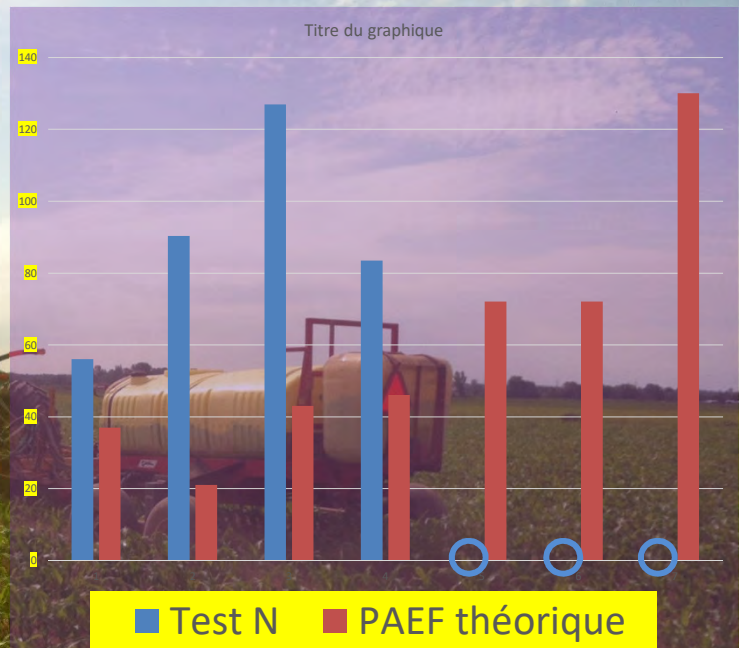
Taux variable

- Aucun bénéfices d'une recommandation d'azote à taux variable dans la production de maïs. (Nicolas Tremblay Agr.PhD)



Tests de Nitrate

Question!
Faites vous le
test de nitrate?



Les Données

- AgNote/AgPad
- Granular
- FieldView
- LogiAg
- SiGa
- 365FarmeNet
- Deere
- Excel
- Farmers Edge
- FarmLogs
- FarmOS
- FBN



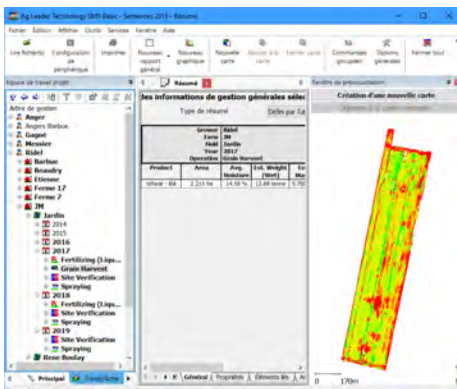
Mes plateformes de données



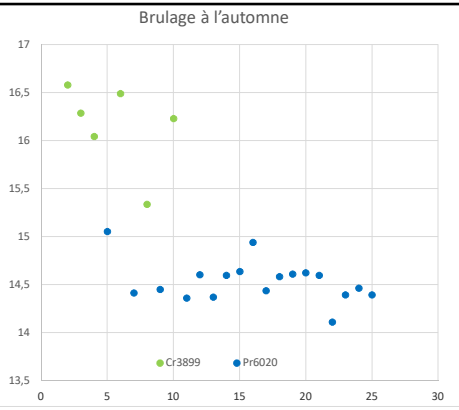
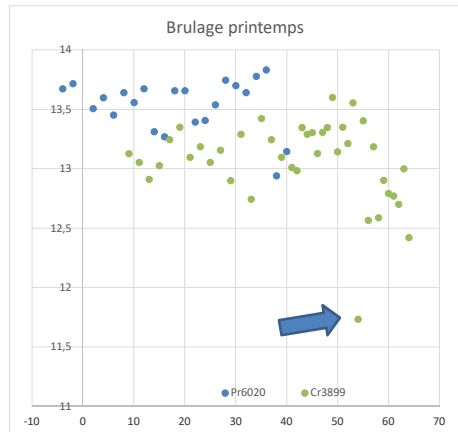
Ag Leader®



- Un certain registre d'opération au champs
- Rendu graphique des cartes de rendement



Analyses



FARMERS BUSINESS NETWORK

Granular | FIELD VIEW | SIGA | réseau agriConseils

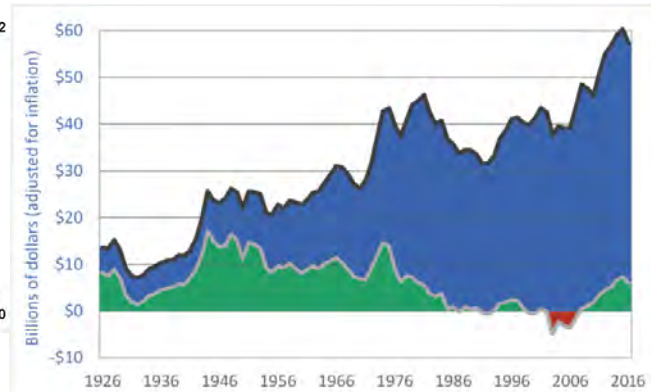
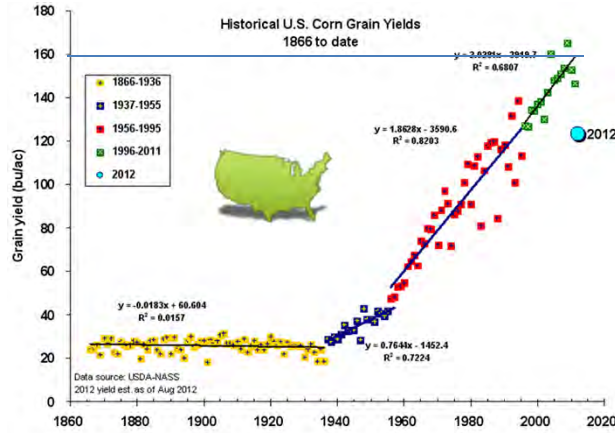
ANALYTICS | CROP MARKETING | FINANCE

SRDI+++
 PRODUCTEURS DE GRAINS DU QUÉBEC
 RJO'Brien
 La Coop Comax

JOHN DEERE FINANCIAL
 La Financière agricole Québec



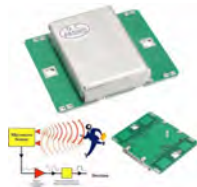
Plus de rendement/moins de revenu



Canadian net farm income and gross revenue, inflation adjusted, net of government payments, 1926-2016 DARRIN QUALMAN

Le prix de pièces

- Radar 5\$



- Contrôleur 30\$



- Sol humidité 2\$



- Humidité 6\$



- Cellule de charge 50\$



- Distance 2\$



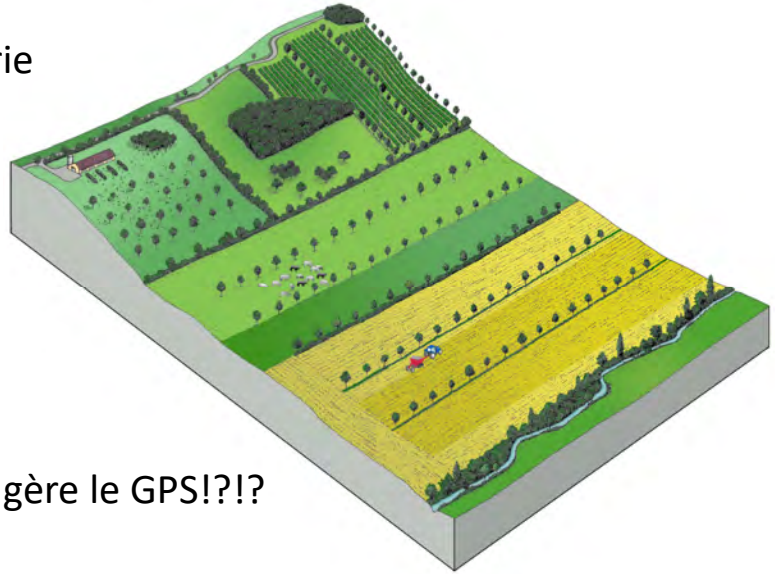
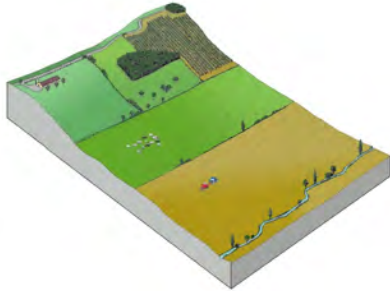
- Camera NIR 50\$



- Camera Thermique 75\$

Vision de l'agriculture de demain

- L'agroforesterie



- Comment on gère le GPS!?!?



GPS RTK AutoSteer  AllyNav
Kit RTK à partir de 11500\$



Kit laser moins de 7000\$~



consulligence ltd 450-210-0907



Merci!

- Thank you!
- ありがとうございます。

