



Hushållnings sällskapet

Analysis of official trials with drones



Stiftelsen
Lantbruksforskning



Förbättrad utvärdering av officiella fältförsök genom bildanalys av drönarfoton med maskininlärning

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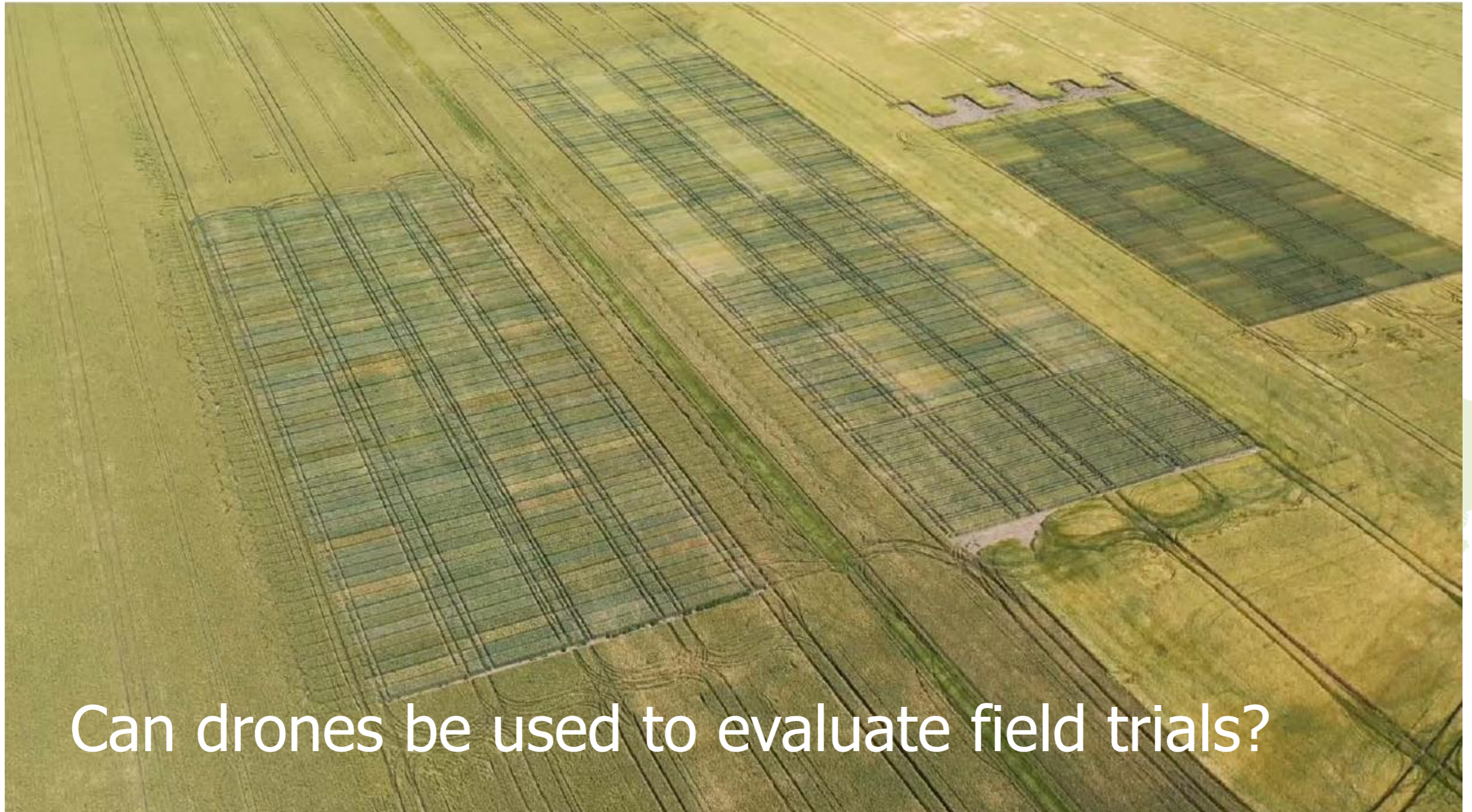
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Can drones be used to evaluate field trials?



Workflow



Drone flights

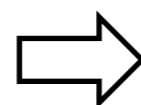
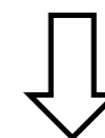


Image analysis



Interpretation



Discussion

Project partner
and
Reference
group

Which drone?

AIR 2S



13 000 sek

M3 ENTERPRISE RTK



46 000 sek

M3 MULTISPECTRAL RTK



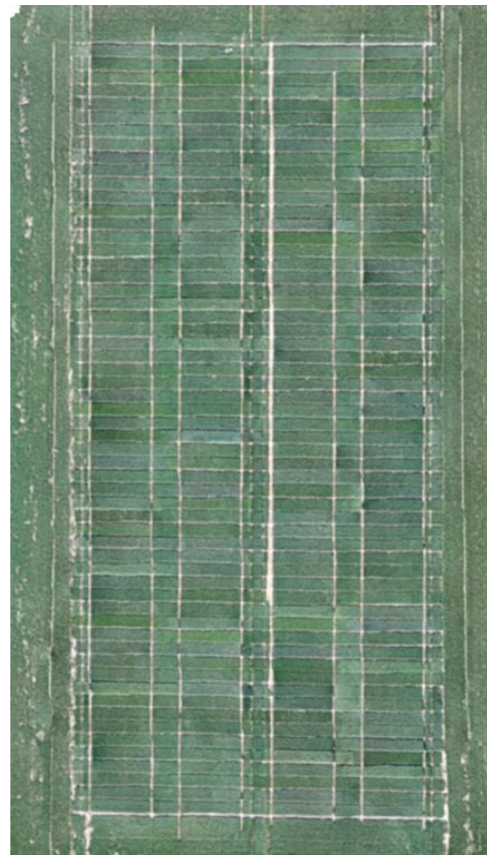
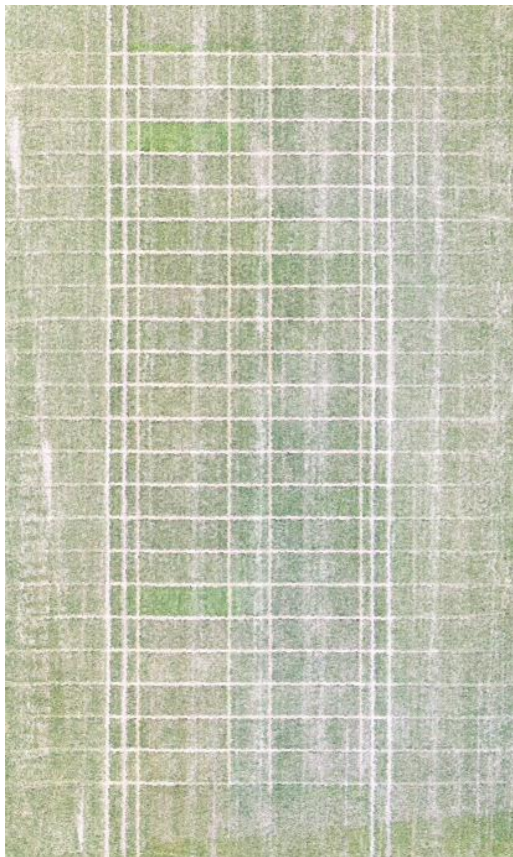
51 000 sek

Improve manual evaluations



The first step

- Flight training
- Protocols
- Flight height



Results so far

Over 60 flights

- Winter wheat
- Spring wheat
- Rapeseed
- Rye wheat
- Winter barley
- Spring barley
- Oat



The project will be completed in 2024

Drone measurements

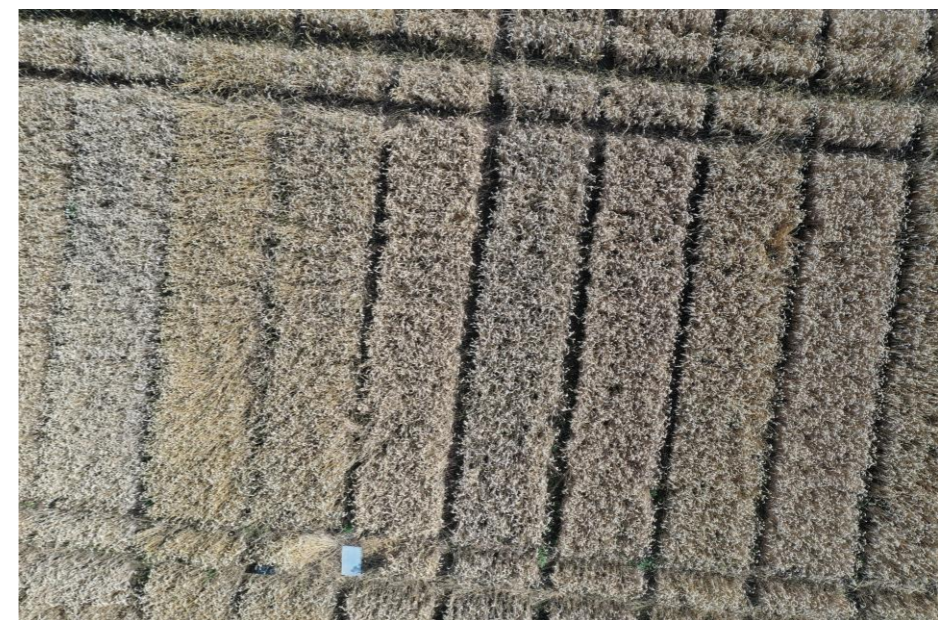
- Ground Cover
- Greenness
- Plant Height
- Maturity Start
- Maturity End
- Maturity Length

What about overwintering?



Future

- Standardize the use of drones in field trials
- Values from the image analysis must be possible to enter in NFTS and be validated and reviewed like all other assessments.
- EPPO and other guidelines





Thanks!