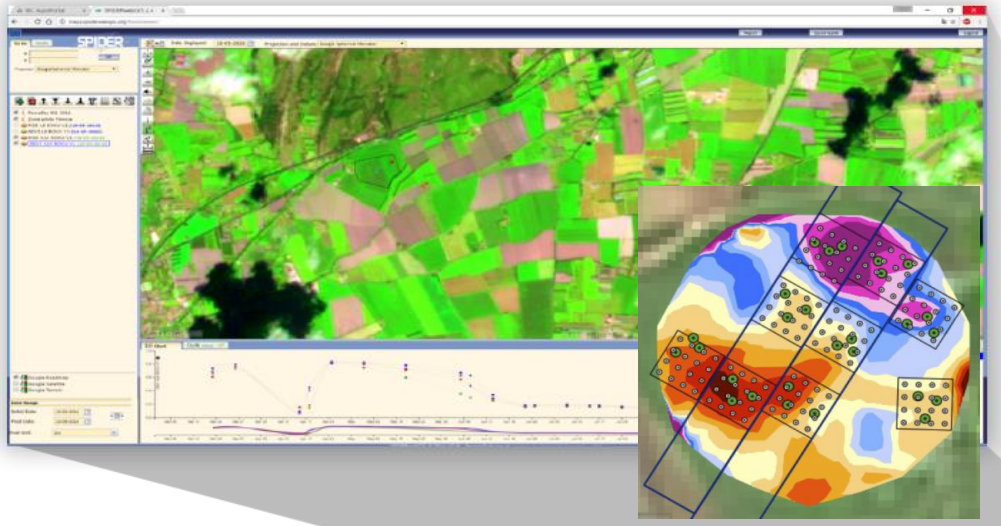
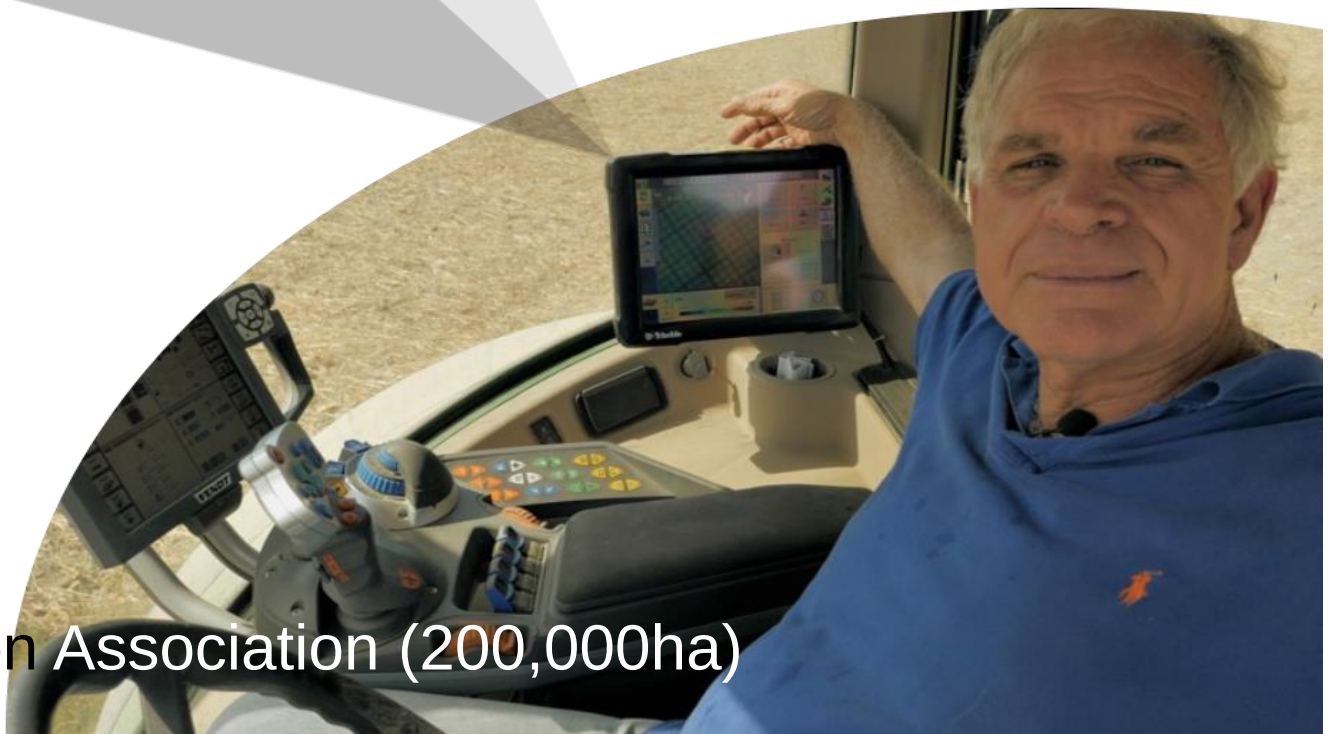


FATIMA

“I am proud to be part of this farm revolution

Jérome Grangier
Farmer
in the South of France



Owns 100ha,
cultivates 400ha;
President of the Durance Irrigation Association (200,000ha)

¿Why is it a revolution?

Digital Farming + Copernicus
gives access to variability…

"give each plant exactly
what it needs & when,
not more – not less"

→ Optimize resources & benefits

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Copernicus for Sustainable Agriculture

FATIMA

Agriculture 4.0: all about variability (in space & time)

"knowing variability → managing variability"

Copernicus helps to know – FATIMA shows how

FATIMA: Optimizing nutrient & water management in intensive agriculture

Copernicus for Sustainable Agriculture

FATIMA

Agriculture 4.0: all about variability (in space & time)

"knowing variability → managing variability"

Copernicus helps to know – FATIMA shows how

FATIMA: Optimizing nutrient & water management in intensive agriculture

FATIMA outcomes:

Practical tools, endorsed by users across Europe, within reach of all:

Service operational, large-scale, affordable for farmers & commercially viable (demonstrated SMEs)

Supported /backed up by 8MEUR of rigorous science in multi-actor project 2015-2018

Anna Osann & Alfonso Calera (Universidad de Castilla-La Mancha) coordinators

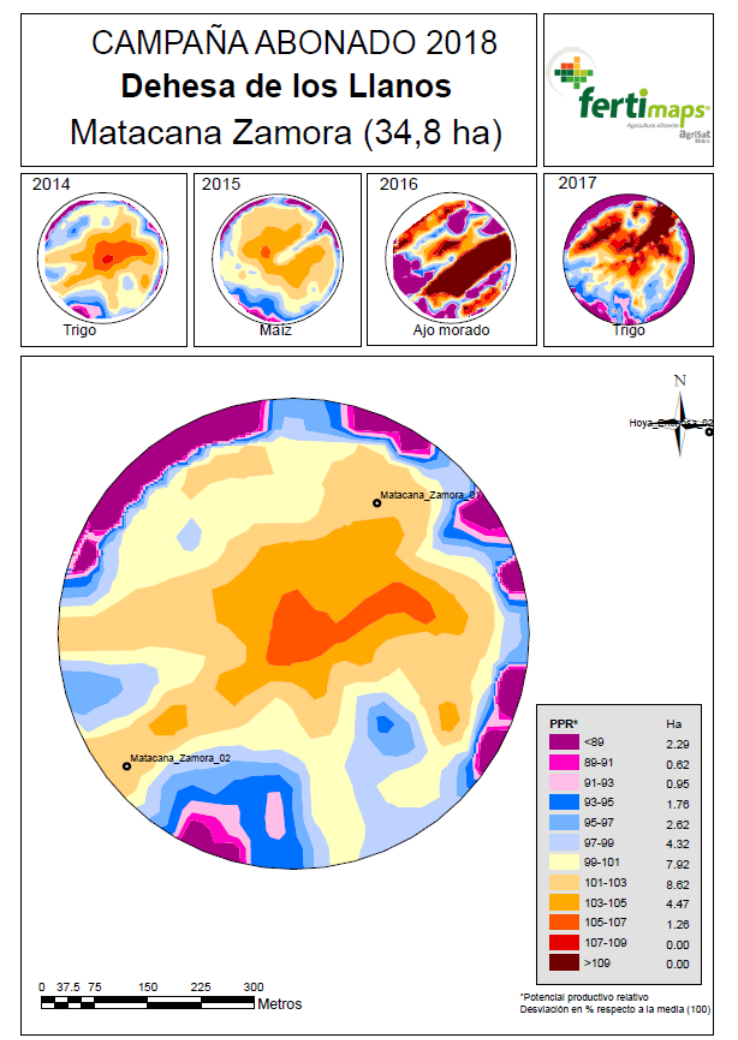
Research and Innovation Action (grant 633945)

¡GRACIAS!

Thanks
Teşekkürler
Grazie
Merci
Ευχαριστώ
Obrigad@s
Благодаря
Děkuji
Paldies
Danke
Dank u


25

A validated innovation with clear benefits



- Lower cost
- Allows to study the past
- No need to wait for years
- Available for any plot immediately

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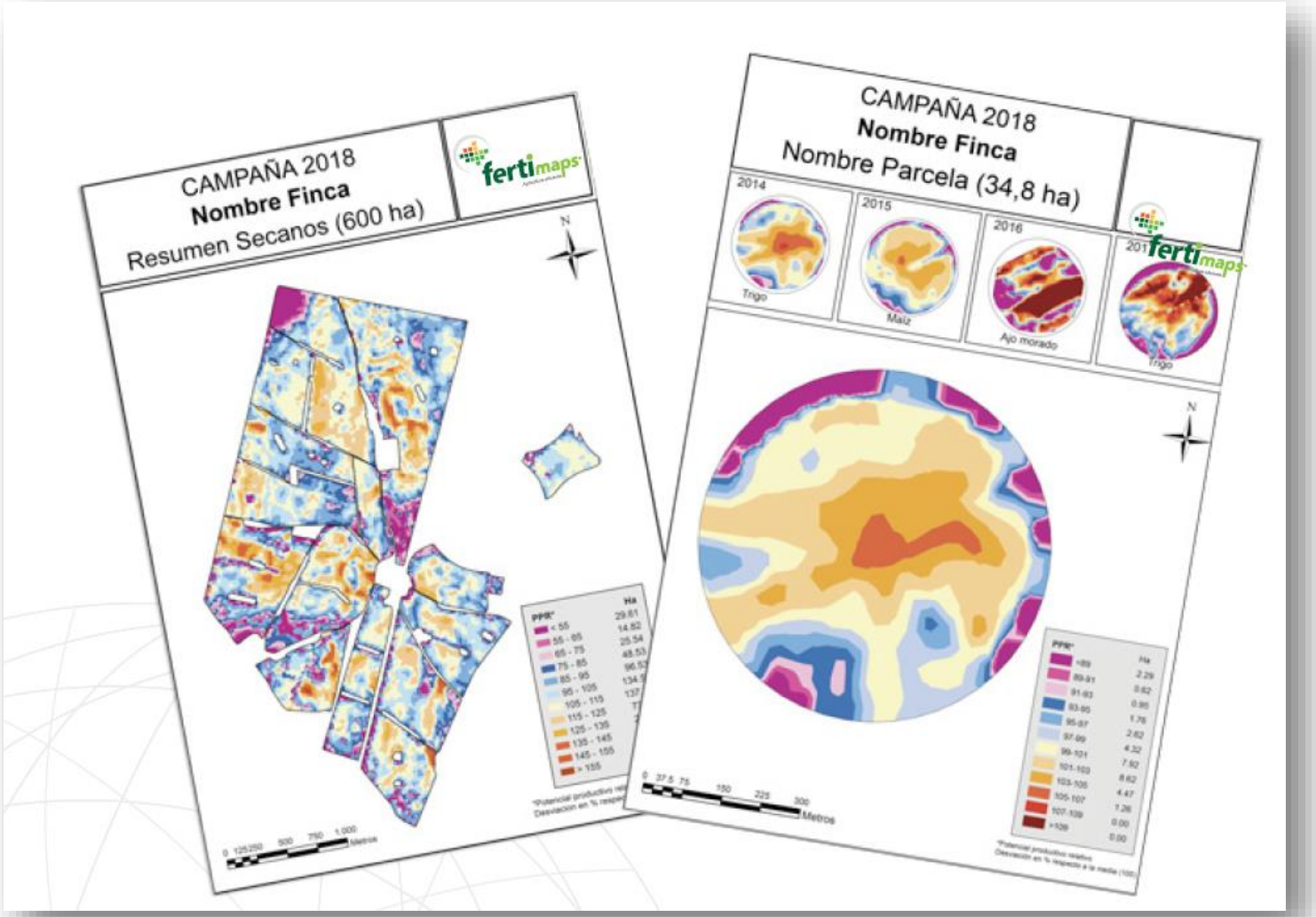
From EO based MZM



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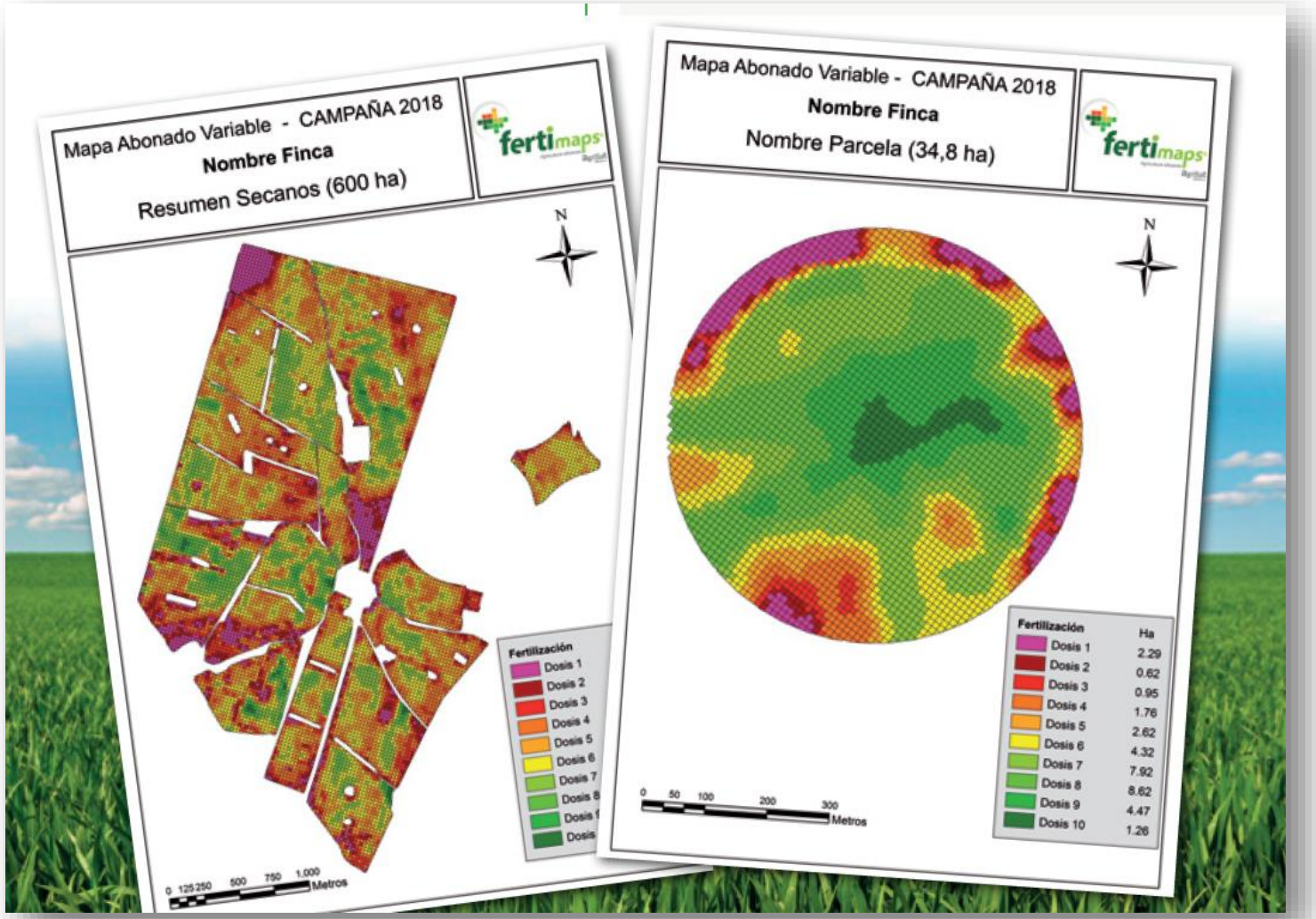
To a operational maps for fertilizer variable rate application



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Personalized service in Spain

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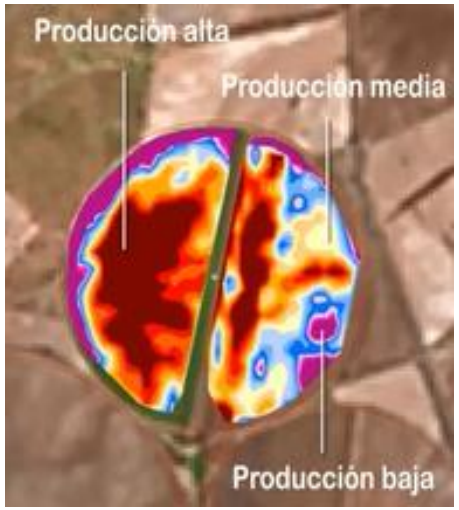
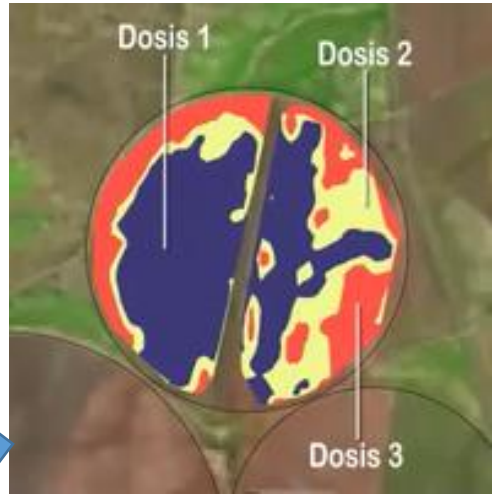
Iberia, S.L.

EO-generated map of potential productivity



transformed (using models) into map of fertilization requirements



Introduced into variable-rate spreader intelligence

Tractor in field spreading differential N rate

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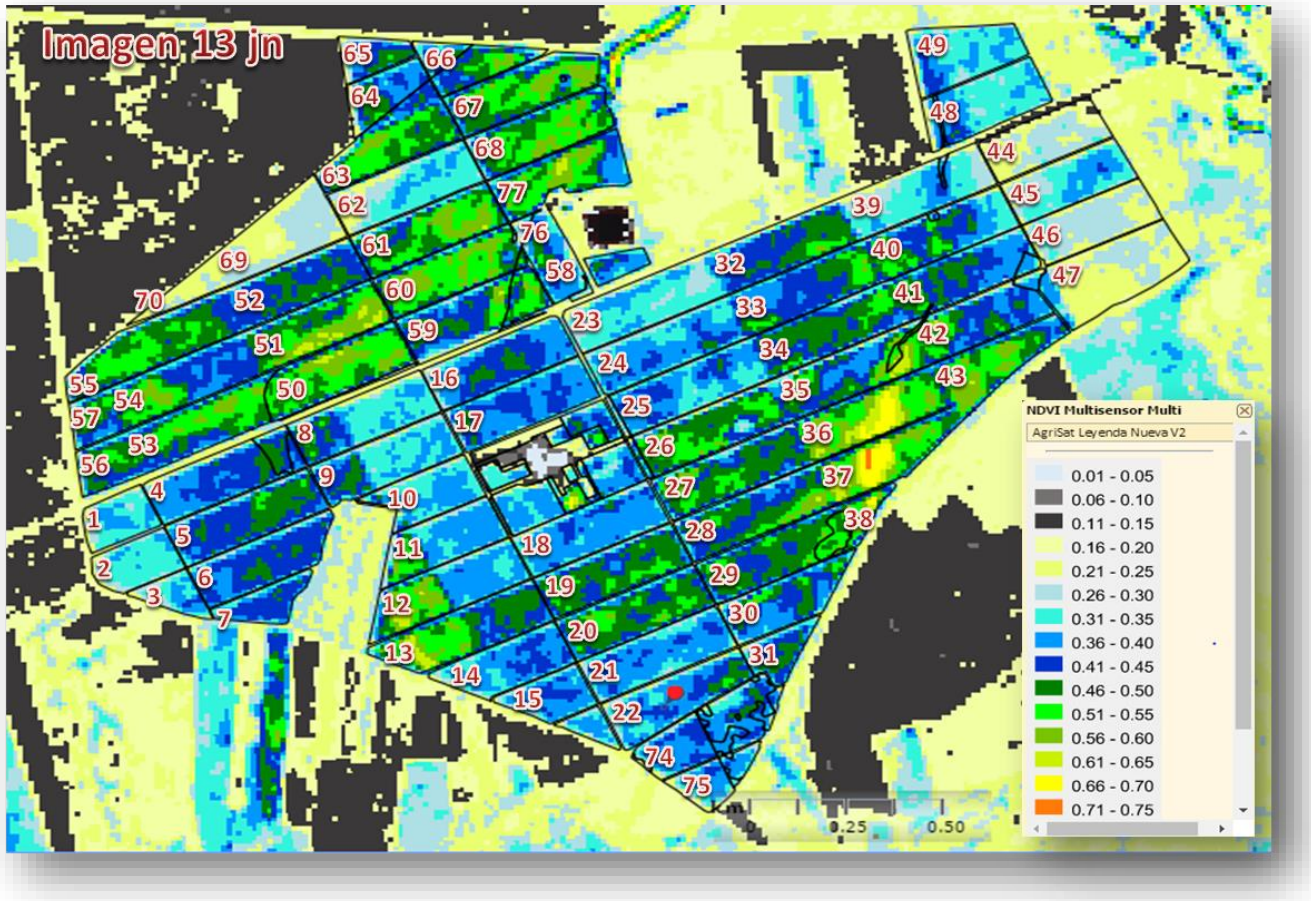
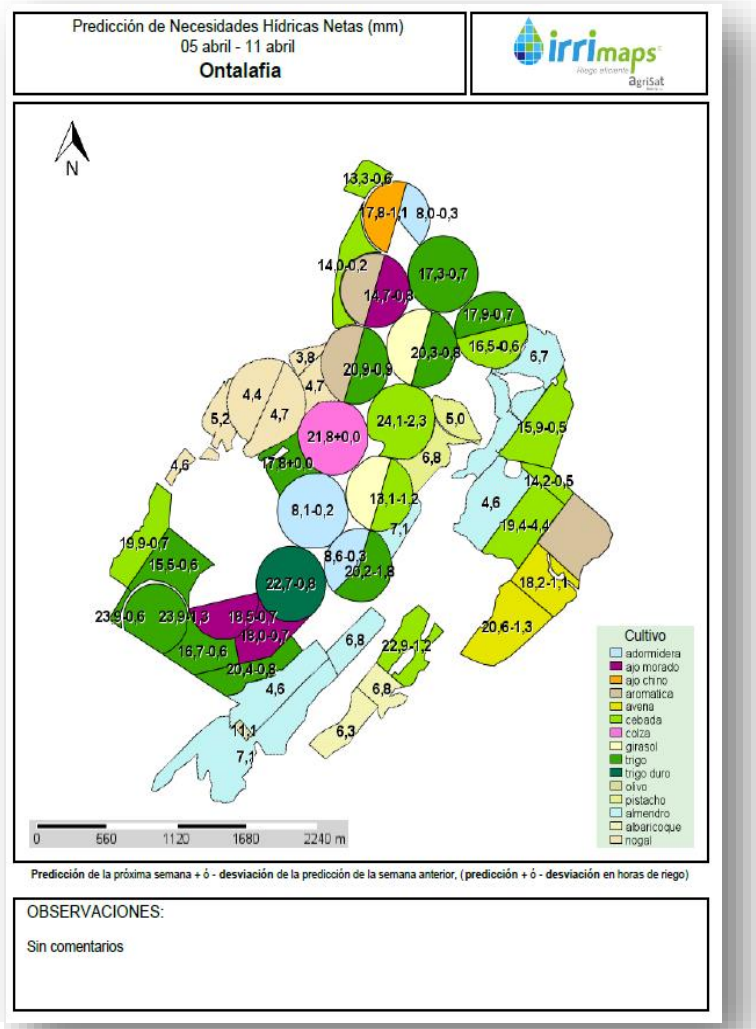
Crop monitoring assisted by satellite

EO variability of crop water requirements



Personalized service in Spain



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- Direct service to over 20,000 hectares

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- MZM of more than 20,000 hectares
- 4 VRT fertilizer spreaders purchased by farmers in the pilot area during the first quarter of 2018

WARNING

Digi-Space-Tech alone doesn't do the job

needs to be used / adopted / taken up:

→ co-creation process

→ multi-actor community

→ business (intermediaries)

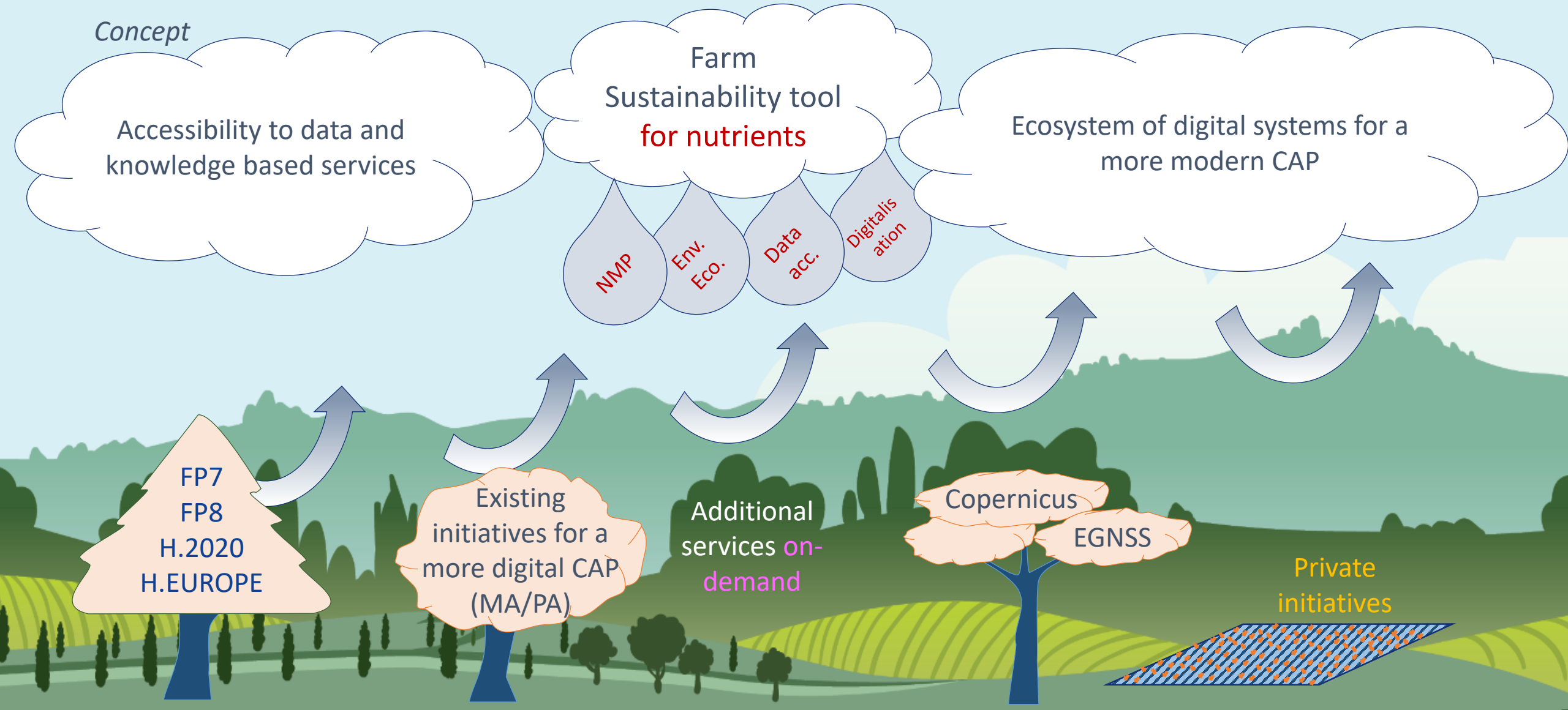
end-users + biz

Farm Sustainability Tool for Nutrients – FaST

Boosting innovation and sustainability in agriculture

GAEC 5 - Use of Farm Sustainability Tool for Nutrients

Concept



GAEC 5. Use of the Farm Sustainability Tool for nutrients. FaST

Recital 22, Article 12.3 and ANNEX III of the Regulation on the CAP post-2020 COM(2018) 392

- "Member States shall establish a system for providing the Farm Sustainability Tool for Nutrients referred to in Annex III"
- The Commission may support with the design of that Tool and with data storage and processing services requirements *>> FaST demo version implemented*

- Member States will have the choice to:
  - ❑customise/localise the common FaST system (language, algorithms, data sources, farm structure, …)
  - ❑use existing tools already operational if compliant with the minimum elements and functionalities
  - ❑develop their own tools

Farm Sustainability Tool for Nutrients – FaST

Support of the Comm.
Results of the: "Feasibility study for joint Space Agriculture Solutions on Nutrient Management"
Study managed by DG AGRI (Ref.) (March 2018/January 2019)

Featured results:	Project summary, audio-visual material:	Availability of the FaST demo:
❑ Initial design attending to the end-users requirements ❑ Demo version of the tool (FaST demo) ❑ Overview of the existing initiatives at national and EU level	- https://ec.europa.eu/info/news/new-tool-increase-sustainable-use-nutrients-across-eu-2019-feb-19_en	- https://github.com/PwC-FaST/: access to all the code produced for the application and the platform (public repository)

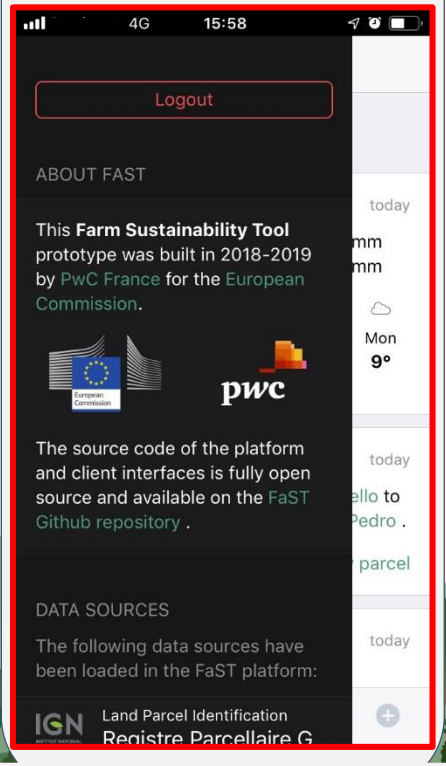
Farm Sustainability Tool for Nutrients – FaST

Implementation, first steps

- The steps envisaged for the FaST are:

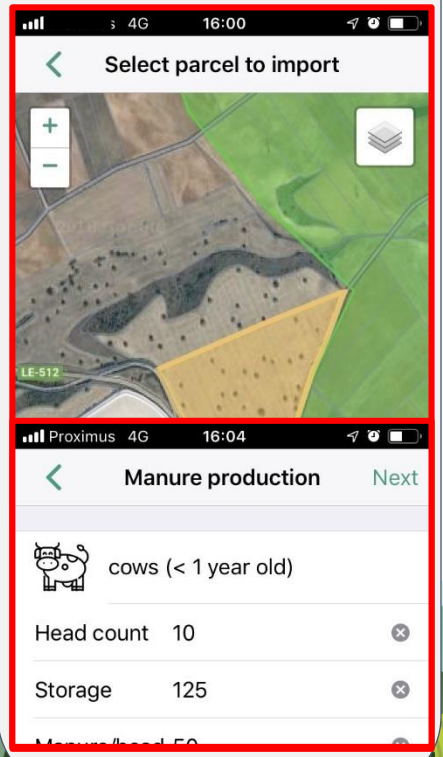
1

Access to the APP or web browser using **unique identification**



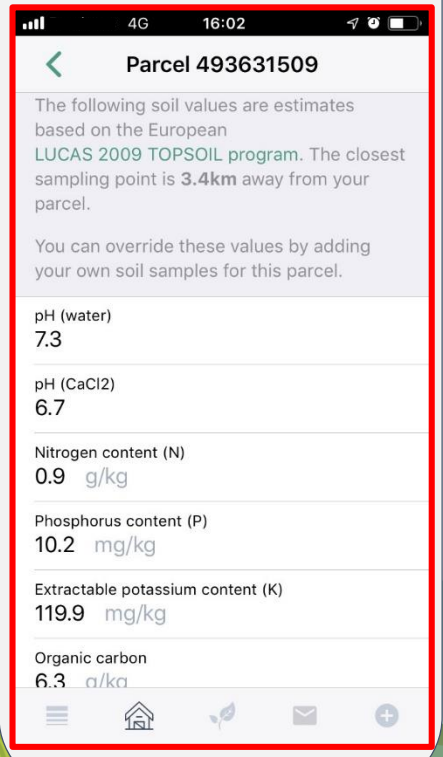
2

Confirmation of the parcels based on the LPIS limits



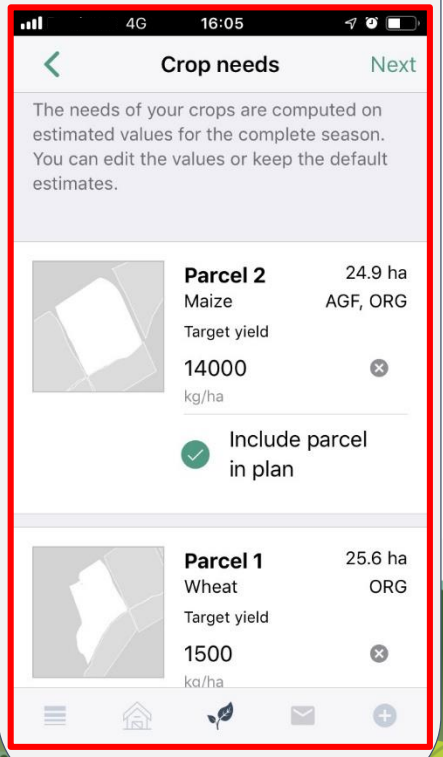
3

Integration of data sources:
Soil data, Natura2000



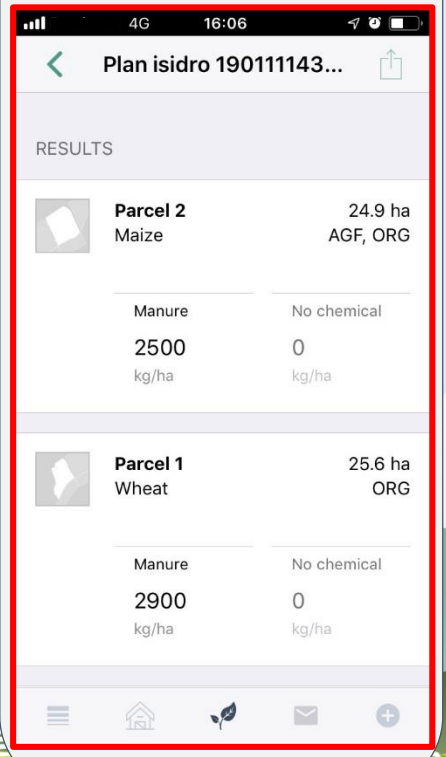
4

Data entry and confirmation
(Crop and expected yield)



5

Nutrients Management Plan
(Field/Farm scale)



Examples of the demo version from the Feasibility study.

Take-home message -1

Digital Farming + Copernicus
opens new dimension in agriculture:
manage variability

Needs enabling regulatory framework & multi-actor user community to convert this into relevant impacts:

Reduce water, fertilizer, energy use;
Reduce emissions;
Adaptive management

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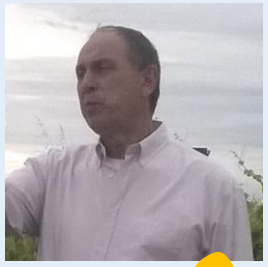
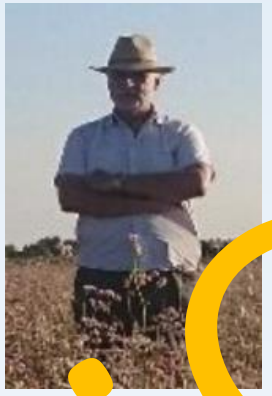
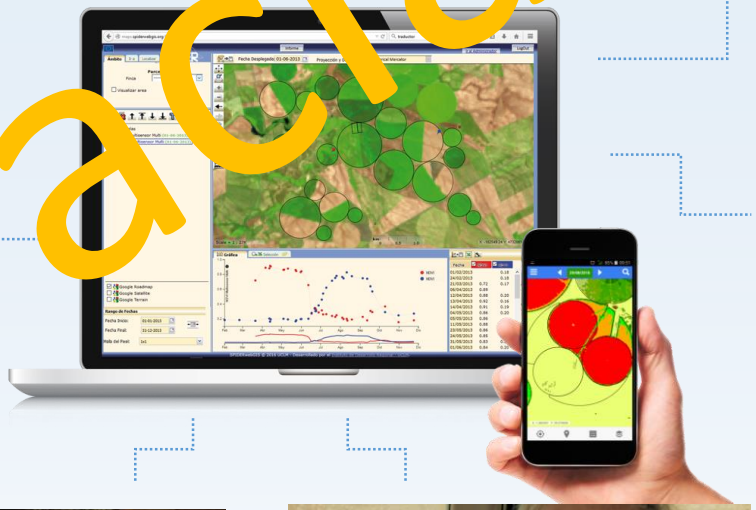
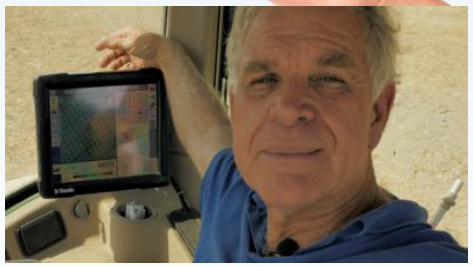
FATIMA
MULTI-ACTOR
LOCAL CHAMPIONS








¡Gracias!