

French Observation Center of Digital Agriculture Adoption

A collective framework to assess the adoption
of precision agriculture in France

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#ObsAgroTIC



Why is it important to know PA adoption?



- Service provider companies



To design services that correspond to **current needs**



- Academics and farmer's organisations



Appropriate initial and continuing training courses to support farmers and advisors in **adoption** and **use** of PA



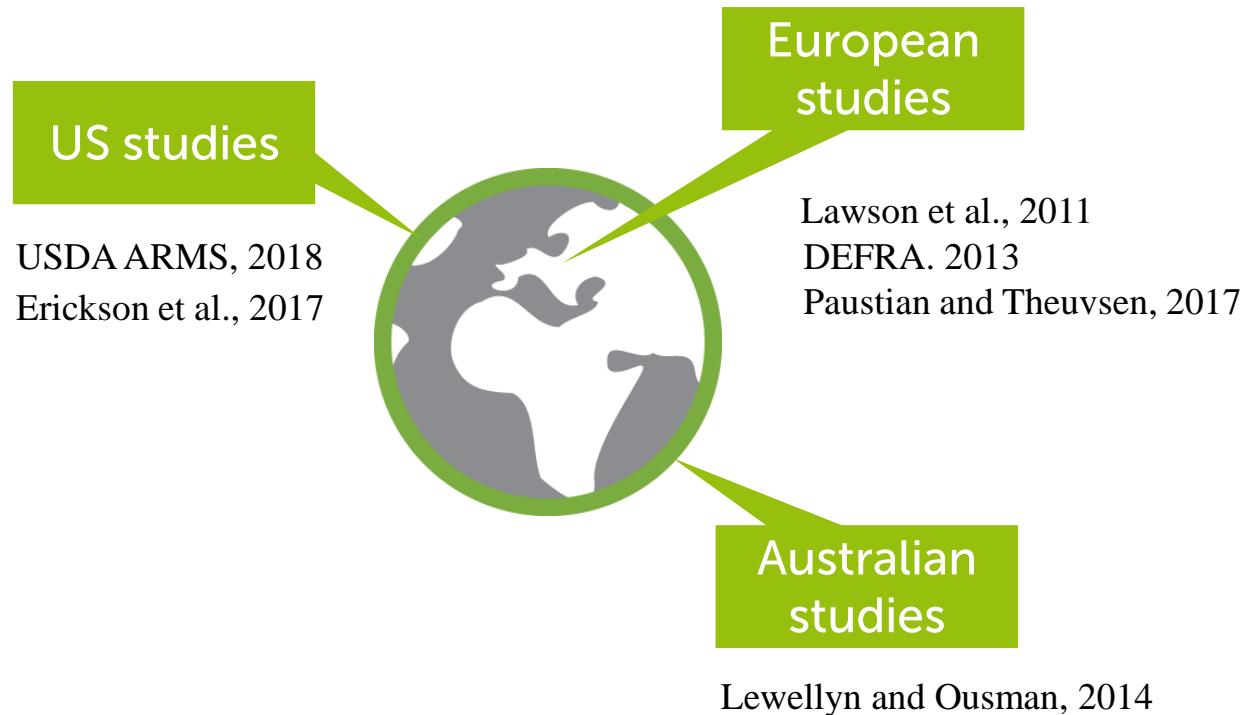
- Regional or national institutions



Strategies and **policies** in order to support the profession

A common need:
Reliable information about the adoption of precision agriculture

Why is it important to know PA adoption?



- Lack of national study in France
- Targeted samples of farmers
- Punctual over time

2016: two partnerships to answer these questions



#DigitAg



17 funding members	4 Research Institutes irstea INRA cirad Inria
29 research units	3 Institutes of Higher-Education Montpellier SupAgro agroParisTech
20 masters degrees	2 Innovation-Transfer Structures acta axLR
360 researchers and teachers	8 Companies itk smag VIVELYS terraNIS IDATE DIGIWORLD Fruition Sciences Pera AGRISCOPE

2016: two partnerships to answer these questions

3 teaching and
research
institutes



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2016: two partnerships to answer these questions



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Montpellier SupAgro



Bordeaux Sciences Agro



Irstea



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24
companies

2016: two partnerships to answer these questions



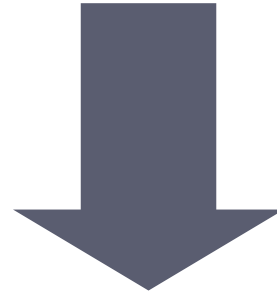
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Multidisciplinary
research



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2016: two partnerships
to answer these questions



Questions about digital agriculture adoption in France
60k€ per year
over a renewable period of 3 years



A collective framework to assess PA adoption since 2016



French Observation Centre of Digital Agriculture Adoption (FrOCDA)

A collective framework to assess PA adoption since 2016



French Observation Centre of Digital Agriculture Adoption (FrOCDA)

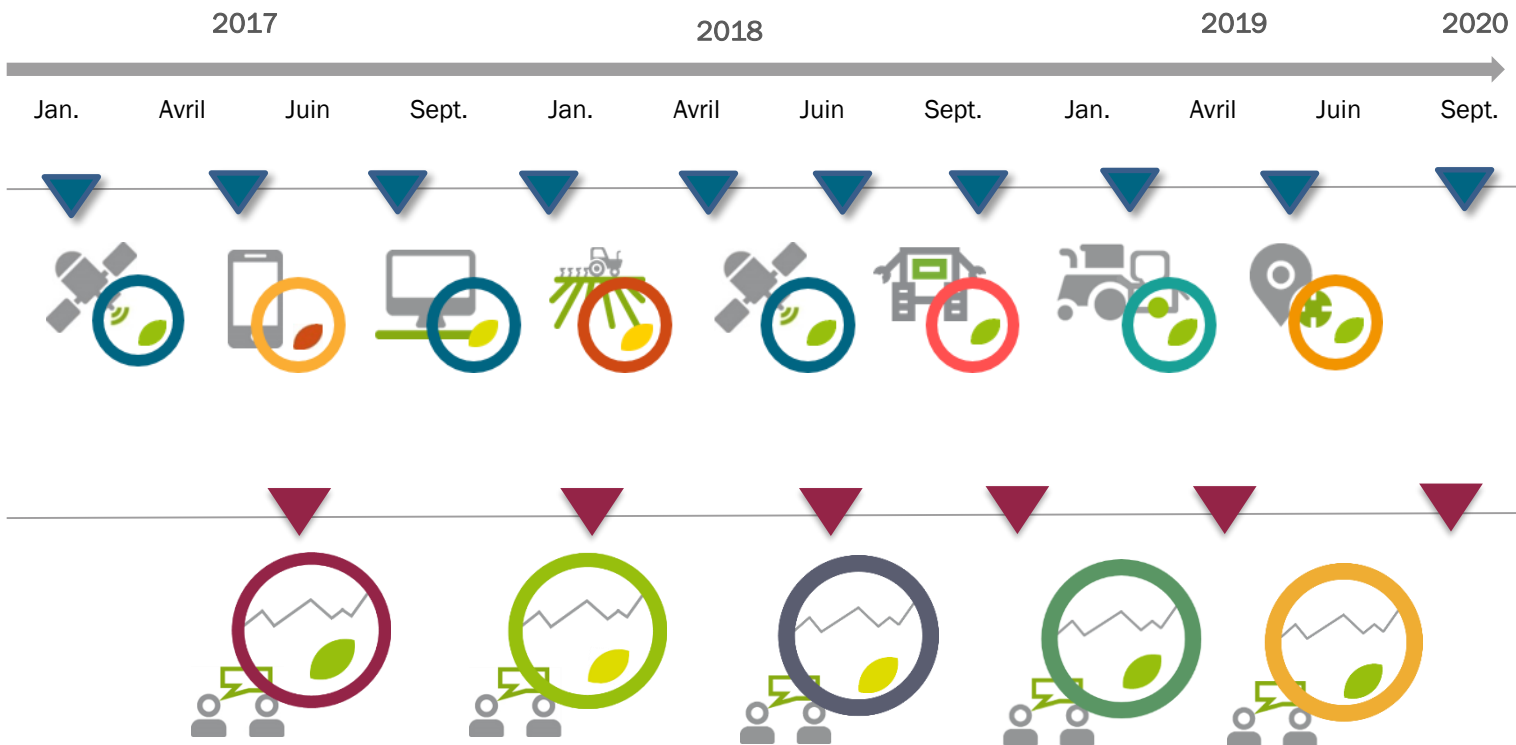
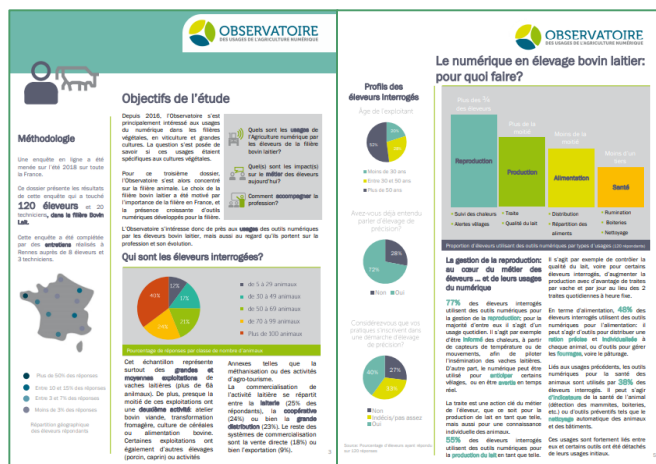
- **Productions**

2 types of deliverables

Infographics



Thematic briefs



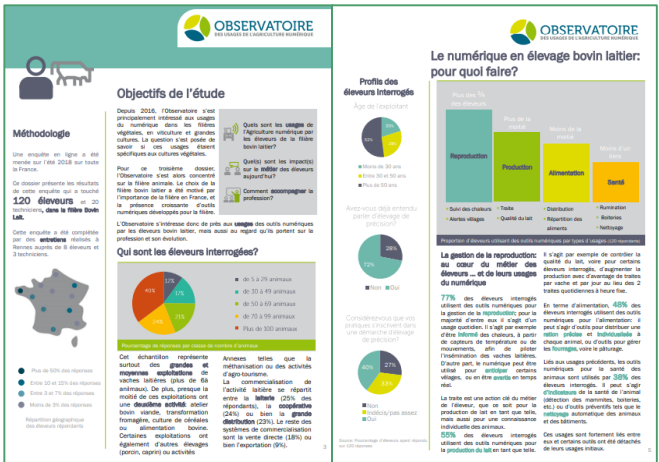
<https://agrotic.org/observatoire/>

2 types of deliverables

Infographics



Thematic briefs



Adoption of remote sensing in France



What is the level of adoption in France?

What is it used for?

Are there specificities between crops?

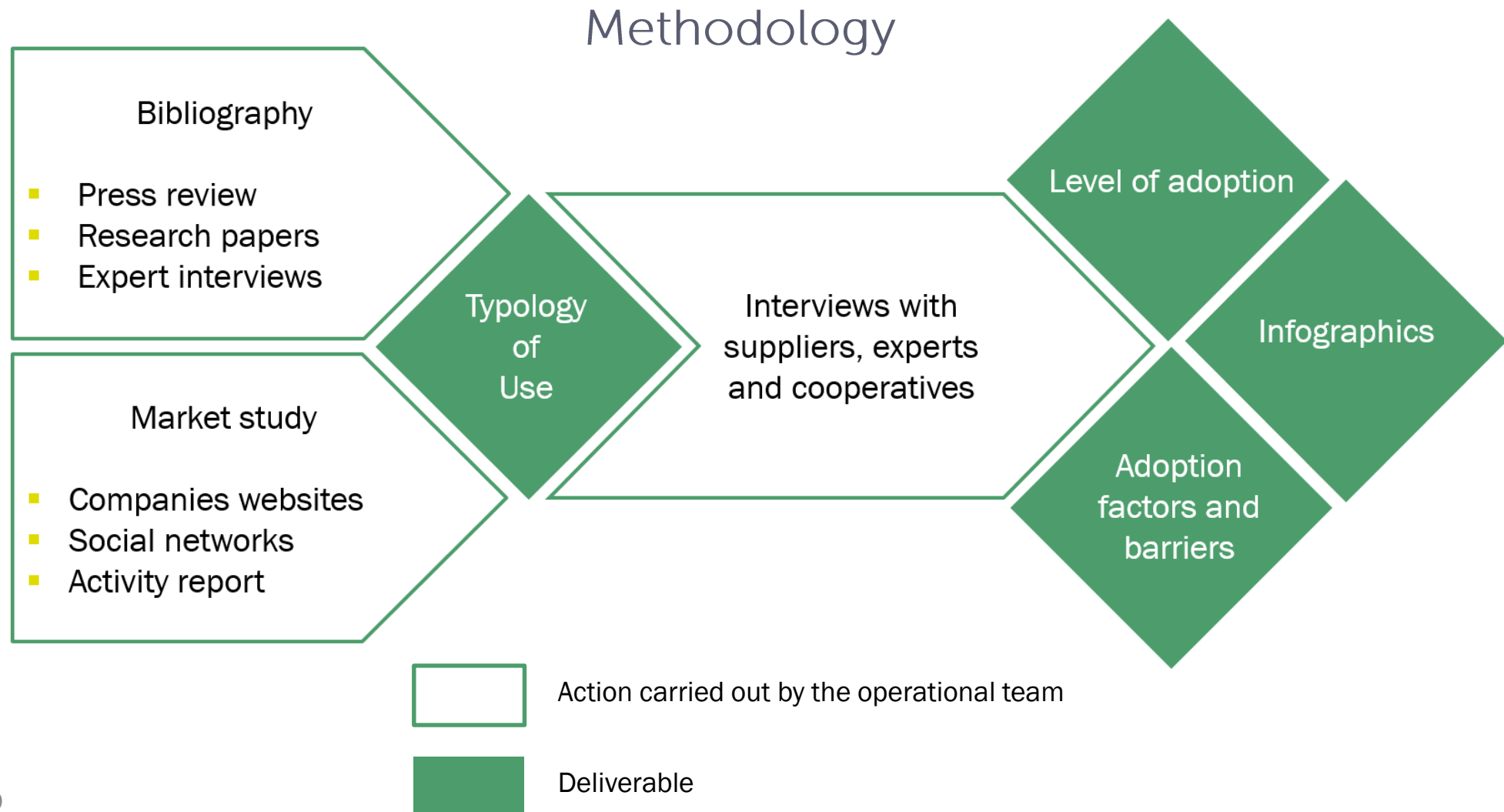
What are the barriers and factors to adoption?



French Observation Centre of Digital Agriculture Adoption (FrOCDA)

- Productions
- **Methodology**

Adoption of remote sensing in France







French Observation Centre of Digital Agriculture Adoption (FrOCDA)

- Productions
- Methodology
- **Some results**

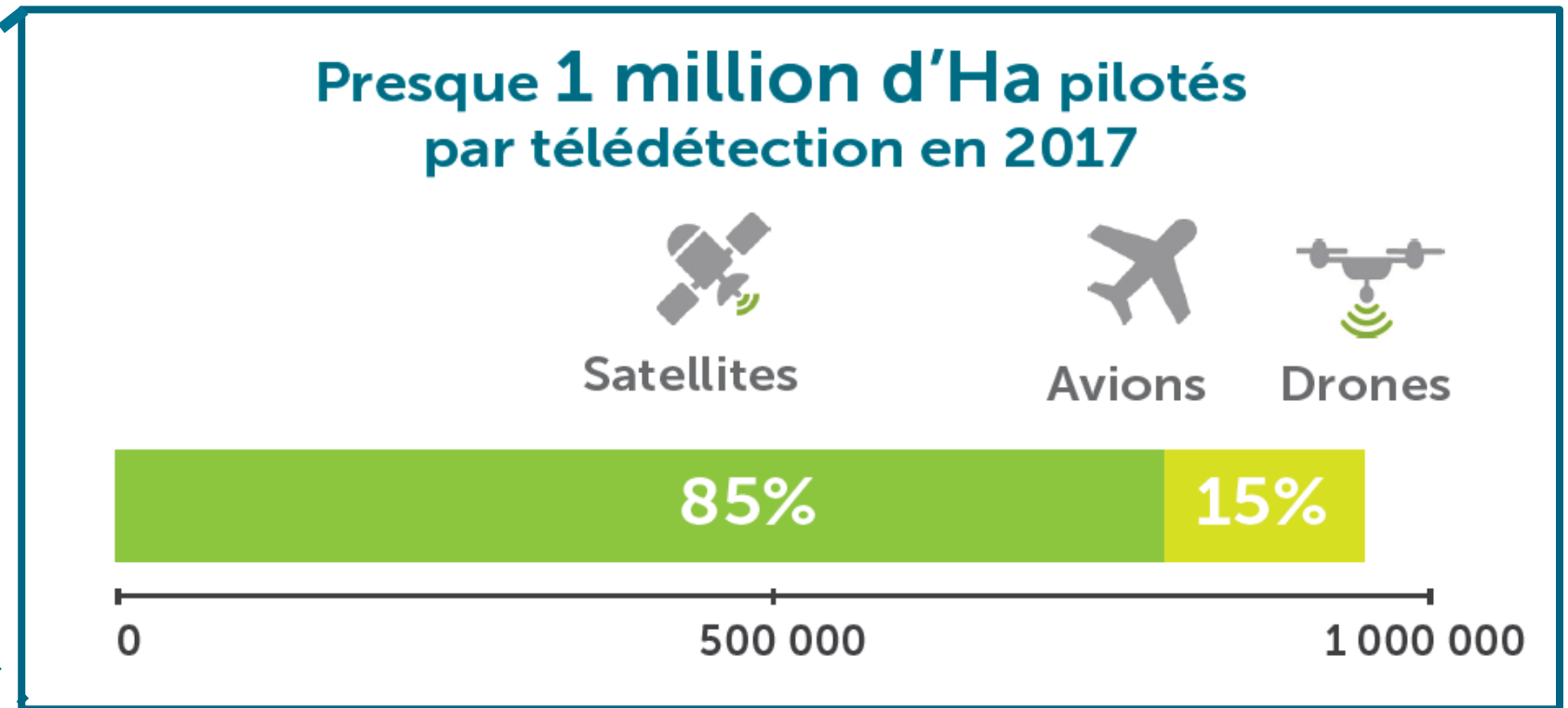
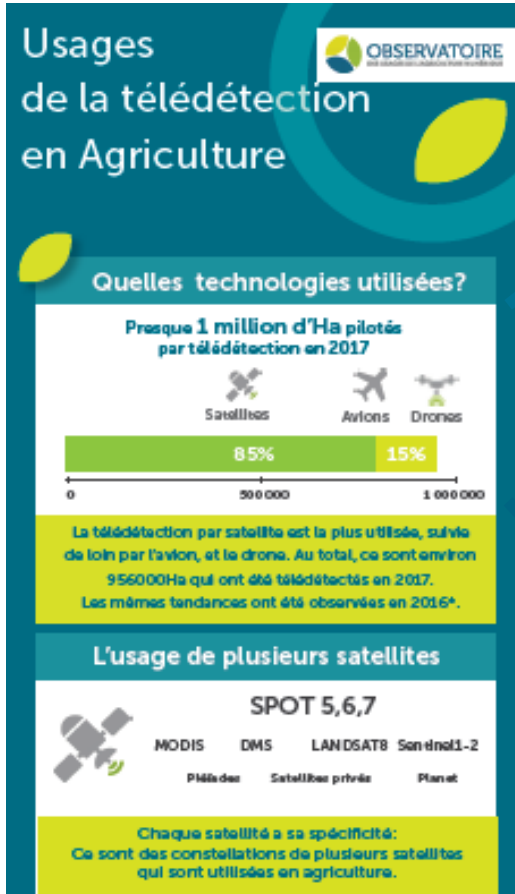
Adoption of remote sensing in France

Level of adoption

Crop type	% of the French surface, by crops, in 2016 (Total area measured)	% of the French surface, by crops, in 2017 (Total area measured)
 Field crops	~13% (1,284,238ha)	~10% (925,712ha)
 Viticulture	~1% (7,035ha)	~1,2% (11,200ha)
Others	Negligible	Negligible

Adoption of remote sensing in France

Level of adoption



Adoption of remote sensing in France

Agronomic applications



Fertilisation
is the main application



Many diverse applications

Crop observations
Fertilisation
Differential harvest

...



Adoption of remote sensing in France

Agronomic applications



Fertilisation
is the main application



Many diverse applications

Crop observations
Fertilisation
Differential harvest



Some explanations

- Regulatory constraints
- Mature commercial offer
- Input management

- Brand image
- Less structured commercial offer
- Personalised services



French Observation Centre of Digital Agriculture Adoption (FrOCDA)

- Productions
- Methodology
- Some results
- **Conclusions and next steps**

Adoption of digital agriculture in France

An overview after 3 years

Infographics	Date of publication
Remote sensing in 2016	Feb. 2017
Smartphone sensors	April 2017
Farm management information system	Oct. 2017
Geophysical measurements and soil mapping	Dec 2017
Remote sensing in 2017	April 2018
Robotics	Oct. 2018
Variable rate application technologies	Dec. 2018
GNSS	April 2019

Conclusion



- **Strong link** to manufacturers, users, media, digital companies, etc.
- Commercial neutrality and **academic legitimacy**
- Public and private funding for a **sustainable project**

Conclusion



- **Strong link** to manufacturers, users, media, digital companies, etc.
- Commercial neutrality and **academic legitimacy**
- Public and private funding for a **sustainable project**

Assessment and next steps

- **Many requests:** a response to a real need of professionals
- **Observatoire V2**
- A wish to **share similar experiences**

L'Observatoire des Usages

Thank you

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