

LES PRAIRIES

!! « CALAMITES » ??

2020

± 50 % de SAU wallonne



- PP – ± 311 000 ha (42.1% de SAU)
- PT – ± 56 200 ha (7.6 % de SAU)
- SAU – 739 361 ha (= 44% de territoire wallon)



5 497 800 ha PP (34 % de SAU)
SAU – 161 700 000ha (= 40% de territoire EU)

BIODIVERSITE

**FIXATION DE
CARBON**

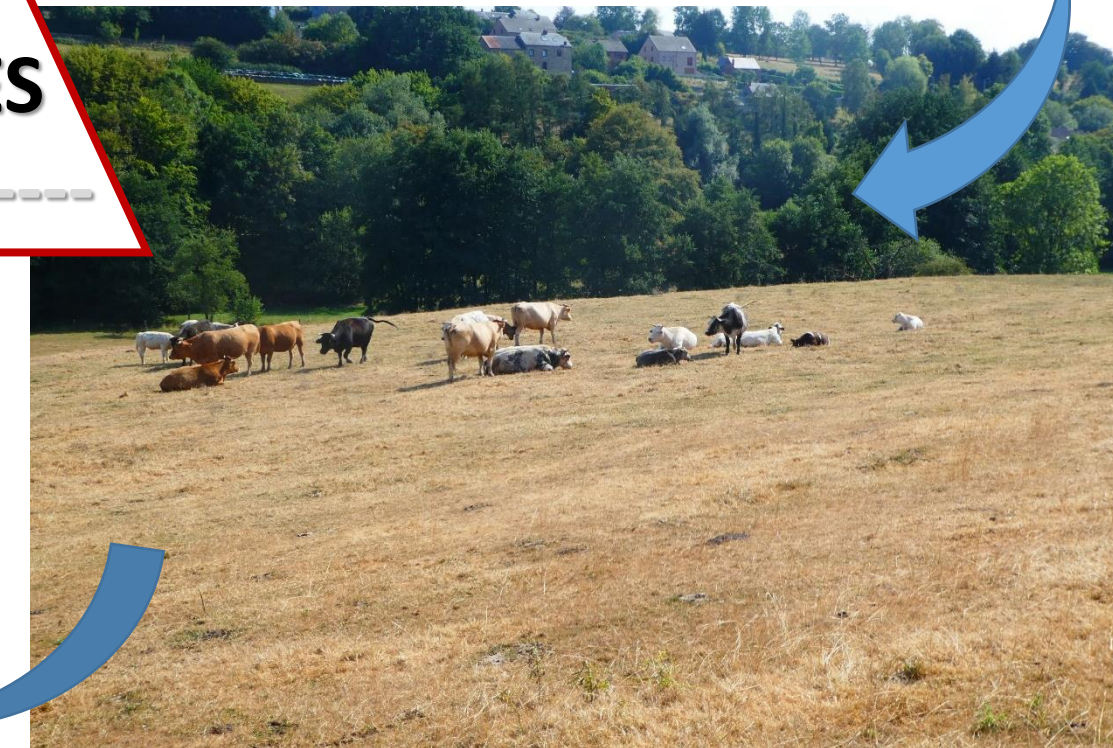
**IMPACT SUR
L'EROSION DES
SOLS**

**FILTRATION DE
L'EAU**

**ALIMENTATION ANIMALE
(pâturage, fauche)**

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GESTION DE LA POUSSE DE L'HERBE

Données
météo



Agromet

Données
de terrain



CALIBRATION

Données
télédétection



OPT SAR

Indices de
végétation

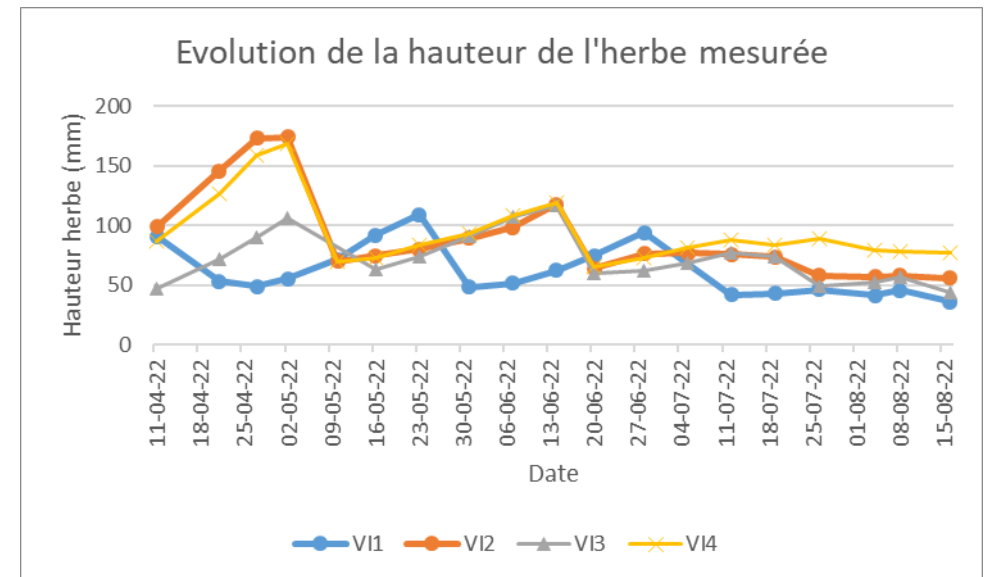
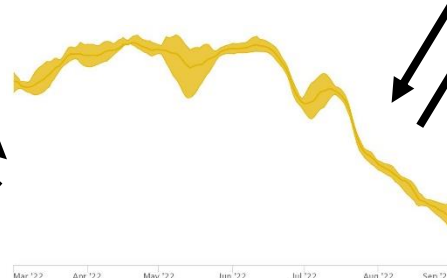
! SPATIALISATION !



MODELE
CROISSANCE

Prédictions

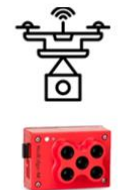
VALIDATION



Sentinel 1
(SAR)



Bandes Sentinel-2	Sentinel-2A		
	Longueur d'onde centrale (nm)	Largeur de bande (nm)	
Bande 1 – Aérosol côtier	442.7	21	
Bande 2 – Bleu	492.4	66	
Bande 3 – Vert	559.8	36	
Bande 4 – Rouge	664.6	31	
Bande 5 – Végétation "red edge"	704.1	15	
Bande 6 – Végétation "red edge"	740.5	15	
Bande 7 – Végétation "red edge"	782.8	20	
Bande 8 – PIR	832.8	106	
Bande 8A – PIR "étroit"	864.7	21	
Bande 9 – Vapeur d'eau	945.1	20	
Bande 10 – SWIR – Cirrus	1373.5	31	
Bande 11 – SWIR	1613.7	91	
Bande 12 – SWIR	2202.4	175	



MICASENSE
Rededge-M

Bleu 475 (32)
Vert 560 (27)
Rouge 668 (14)

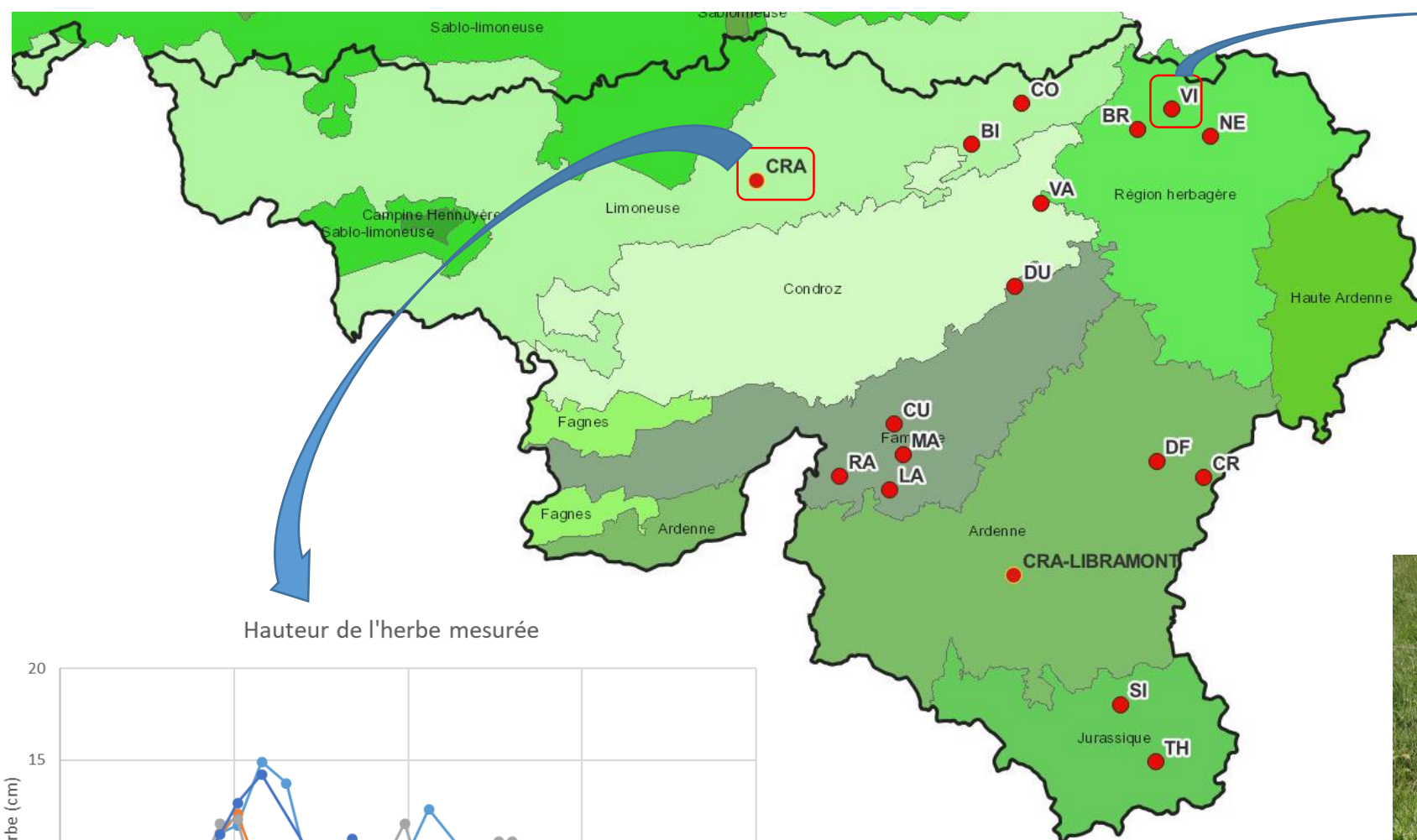
Red Edge 717 (12)

PIR 842 (57)

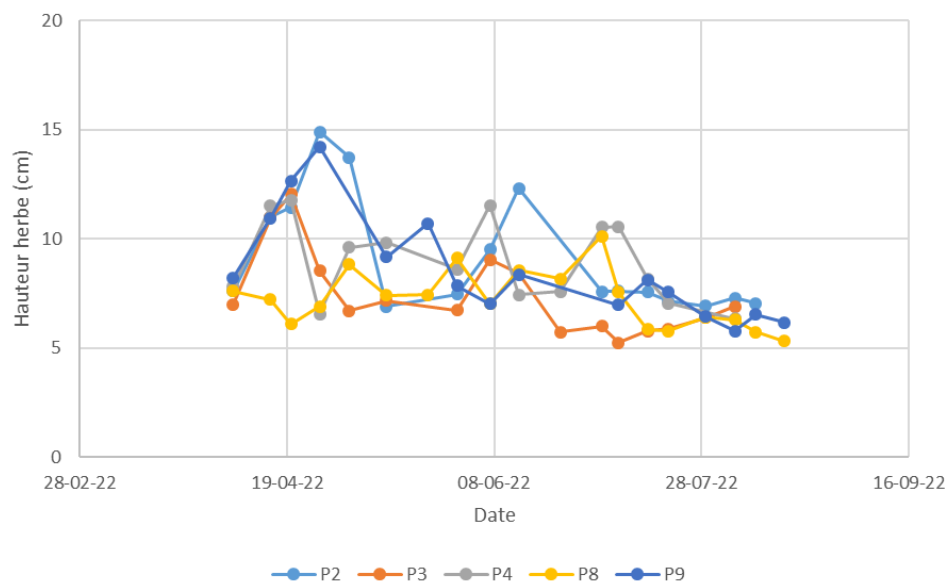
LAI

$$NDVI = \frac{PIR - R}{PIR + R}$$

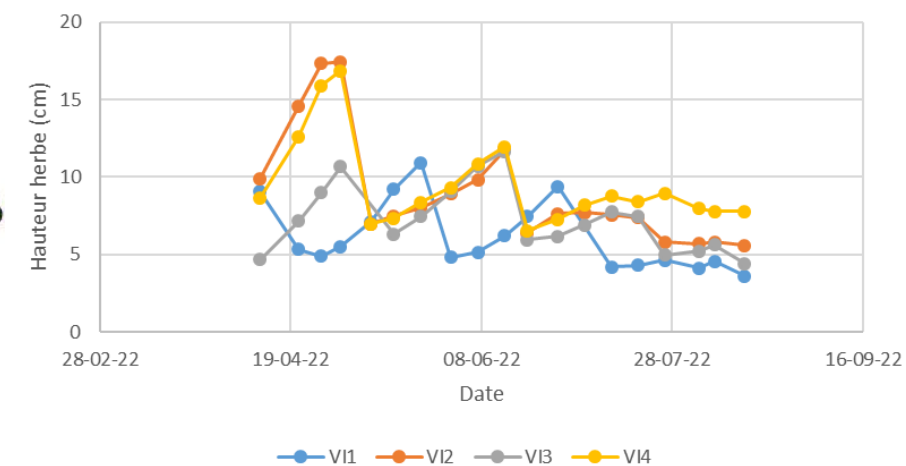
2022



Hauteur de l'herbe mesurée

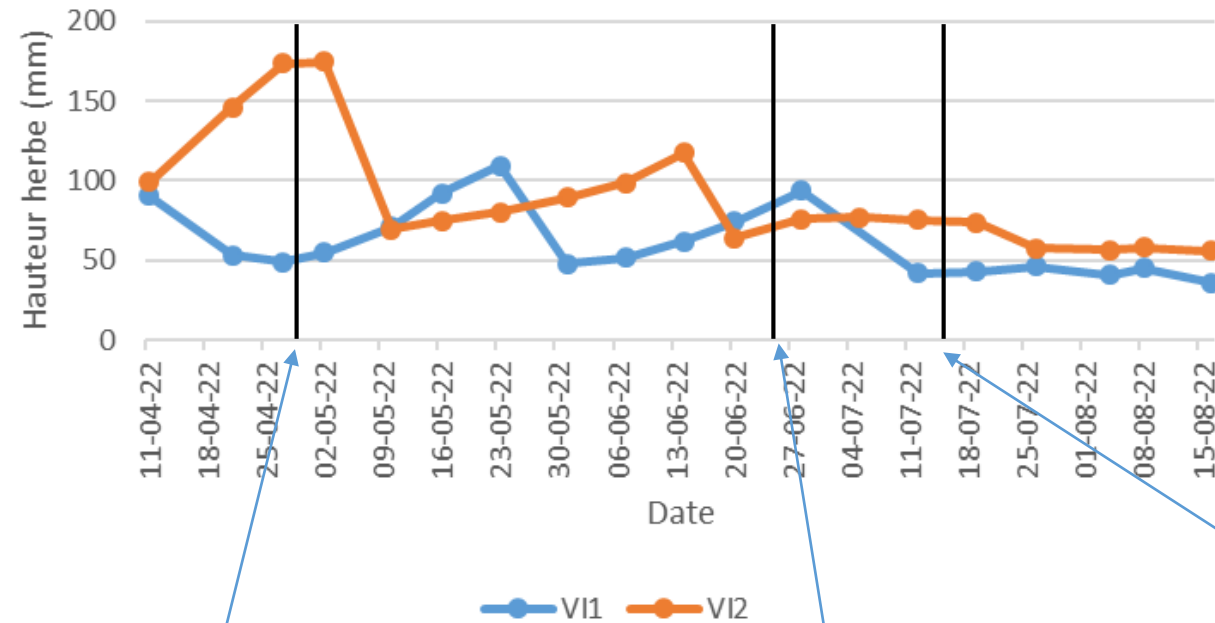


Hauteur de l'herbe mesurée

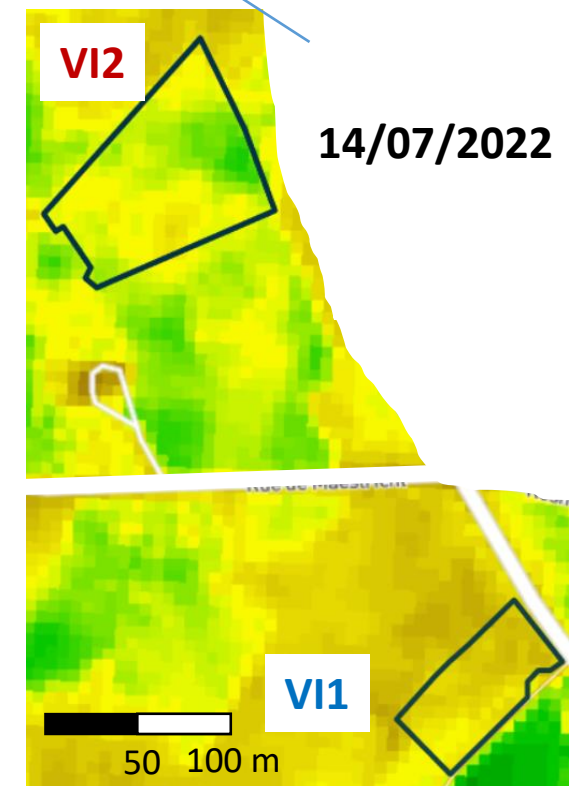
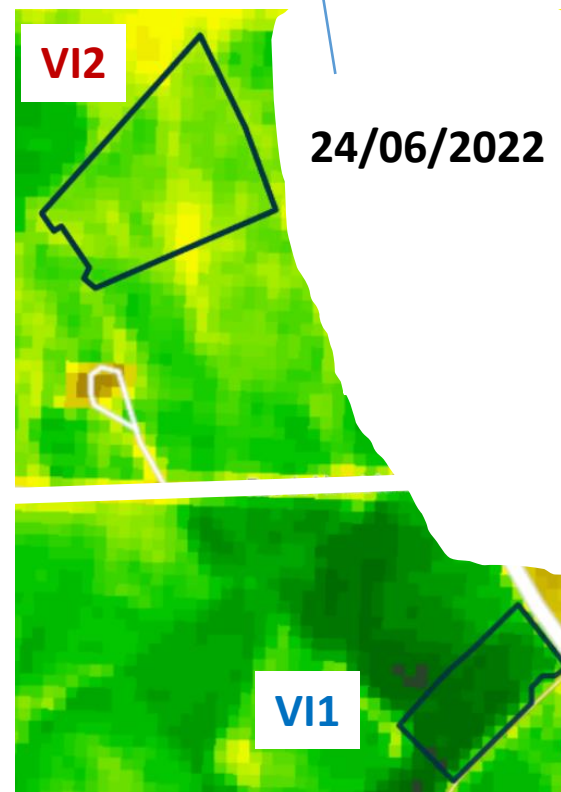
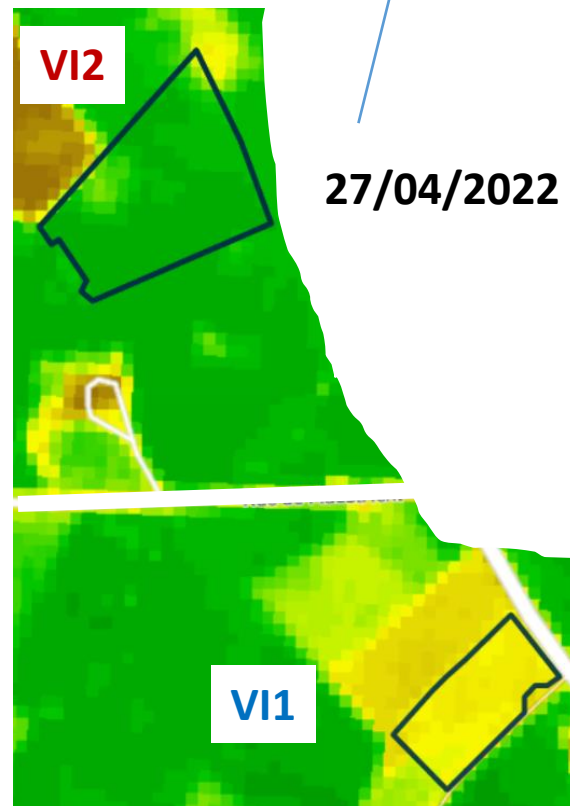
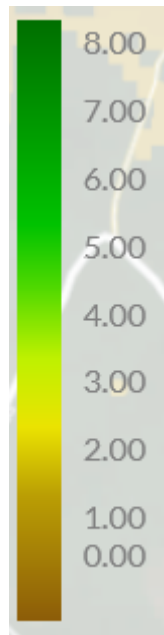


GESTION DE LA POUSSE DE L'HERBE

Evolution de la hauteur de l'herbe mesurée



Leaf Area Index (LAI) (S2)





Orthophoto
RGB, 2021, 25 cm



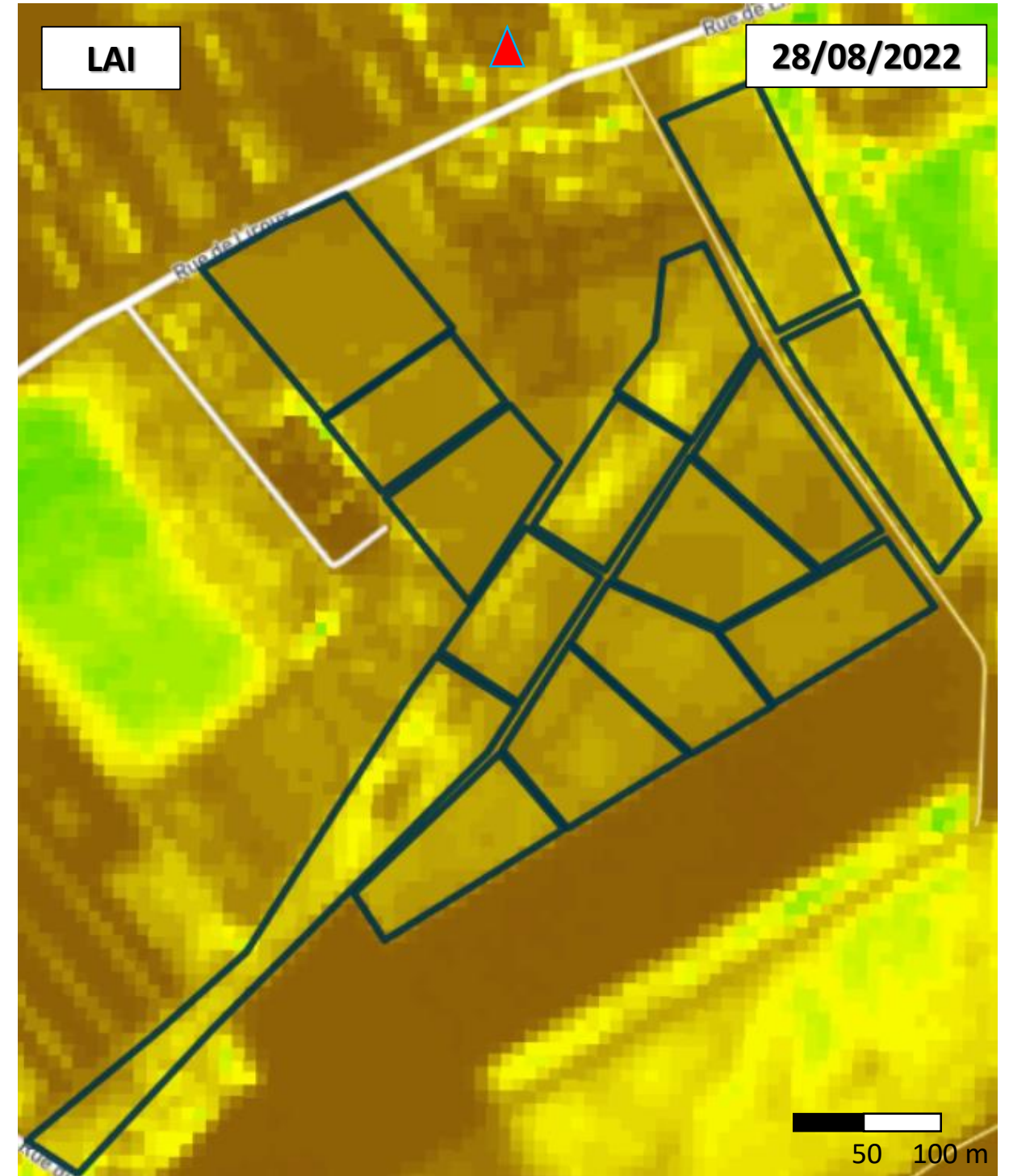
SENTINEL 2
RGB, 28/08/2022, 10 m

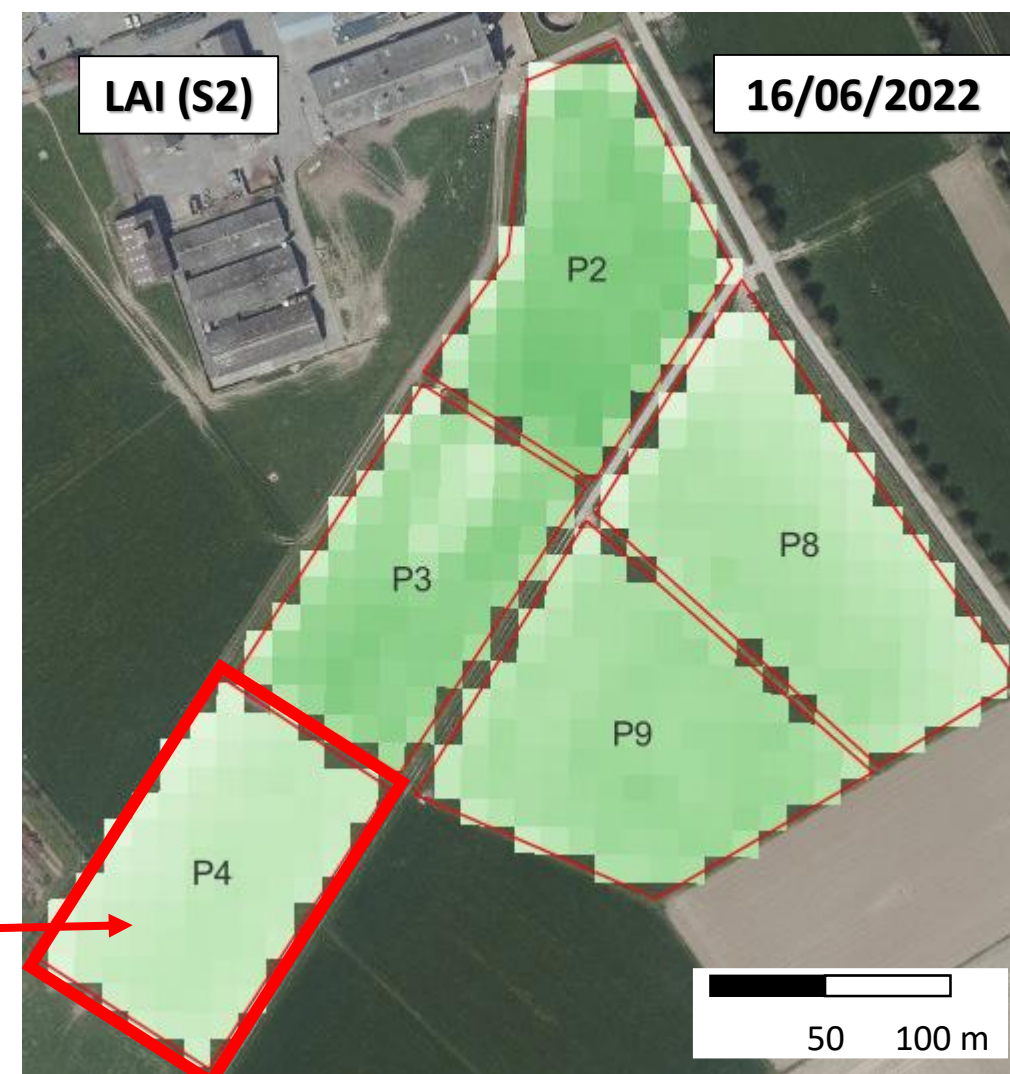
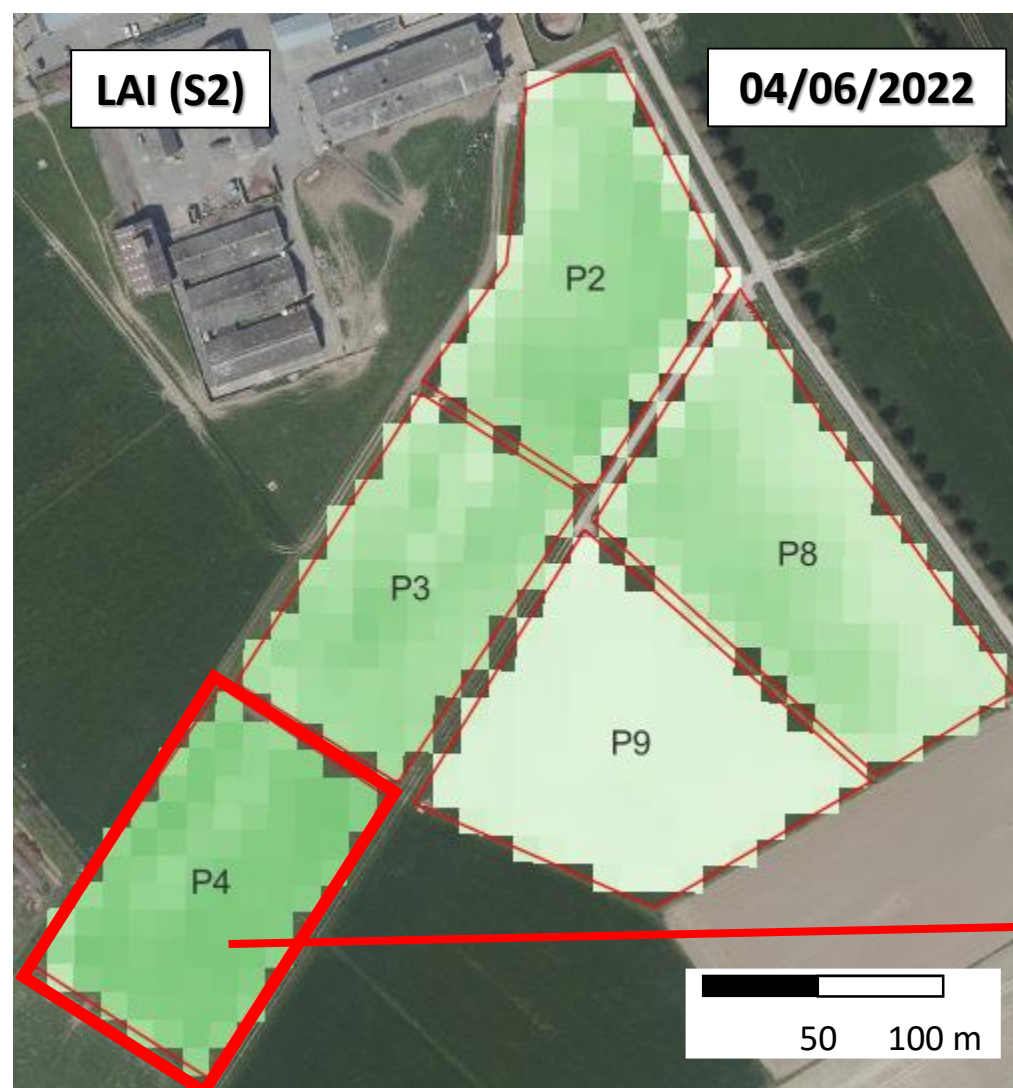
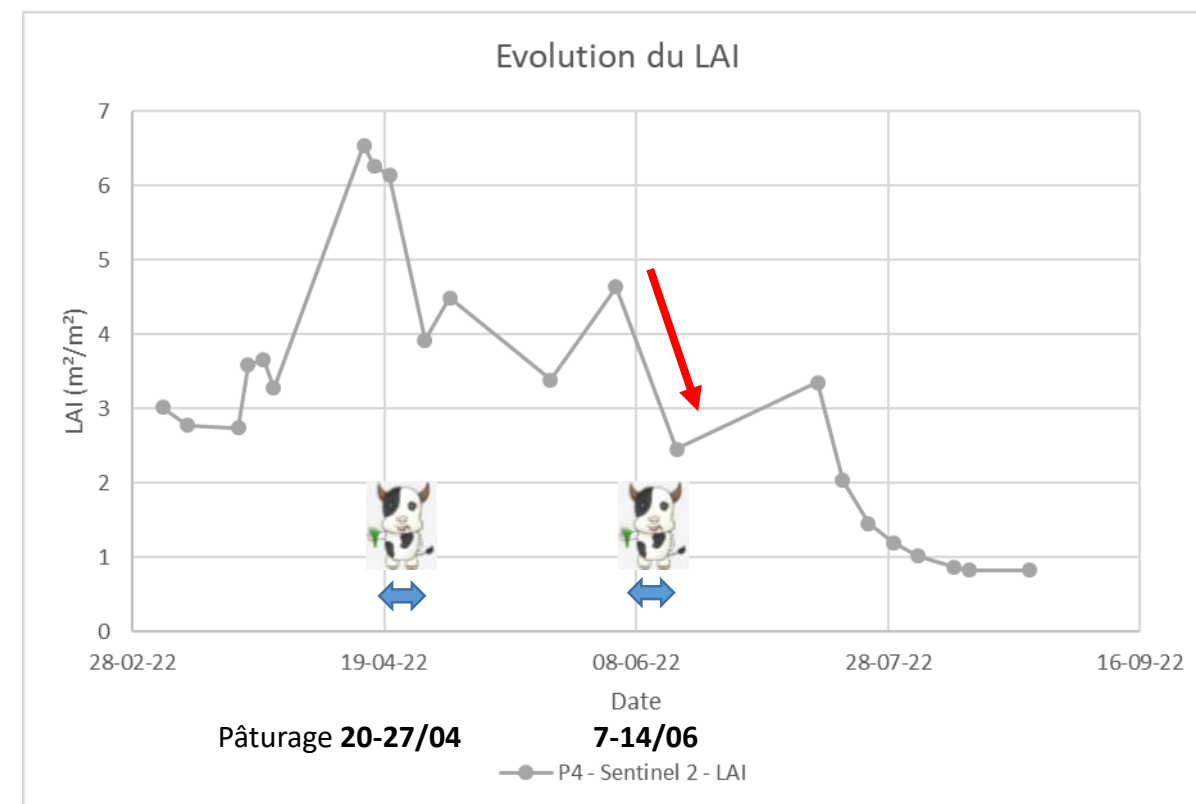
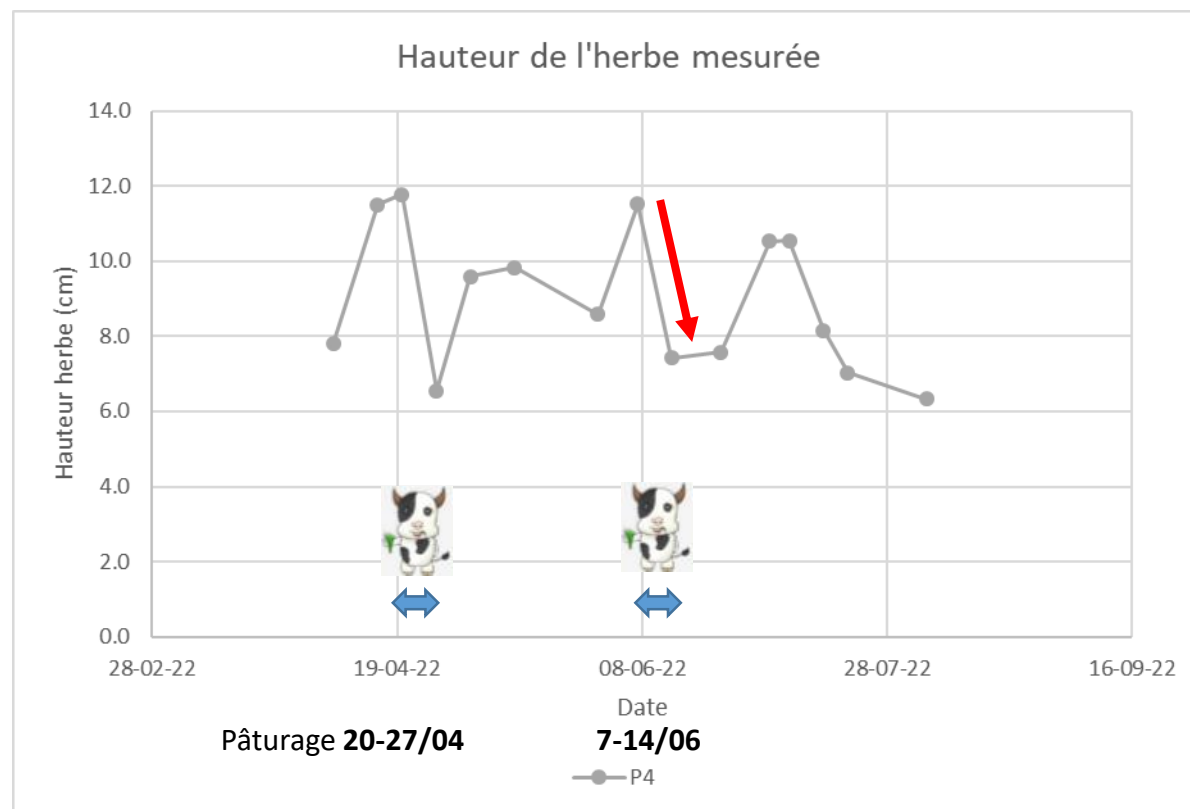


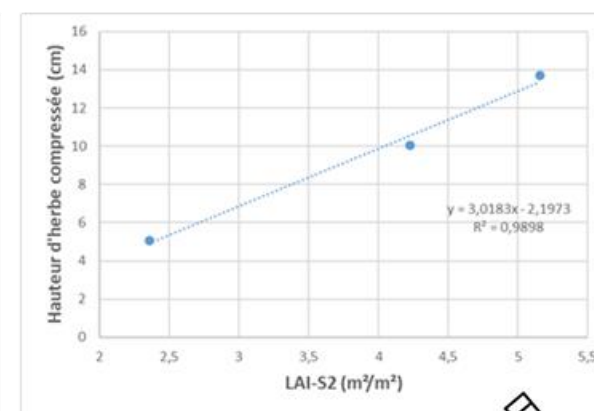
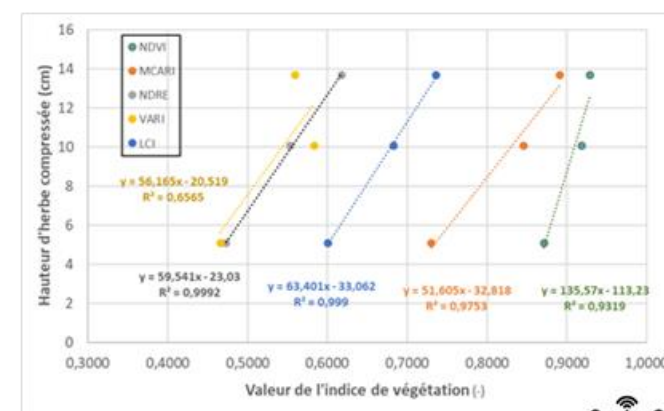
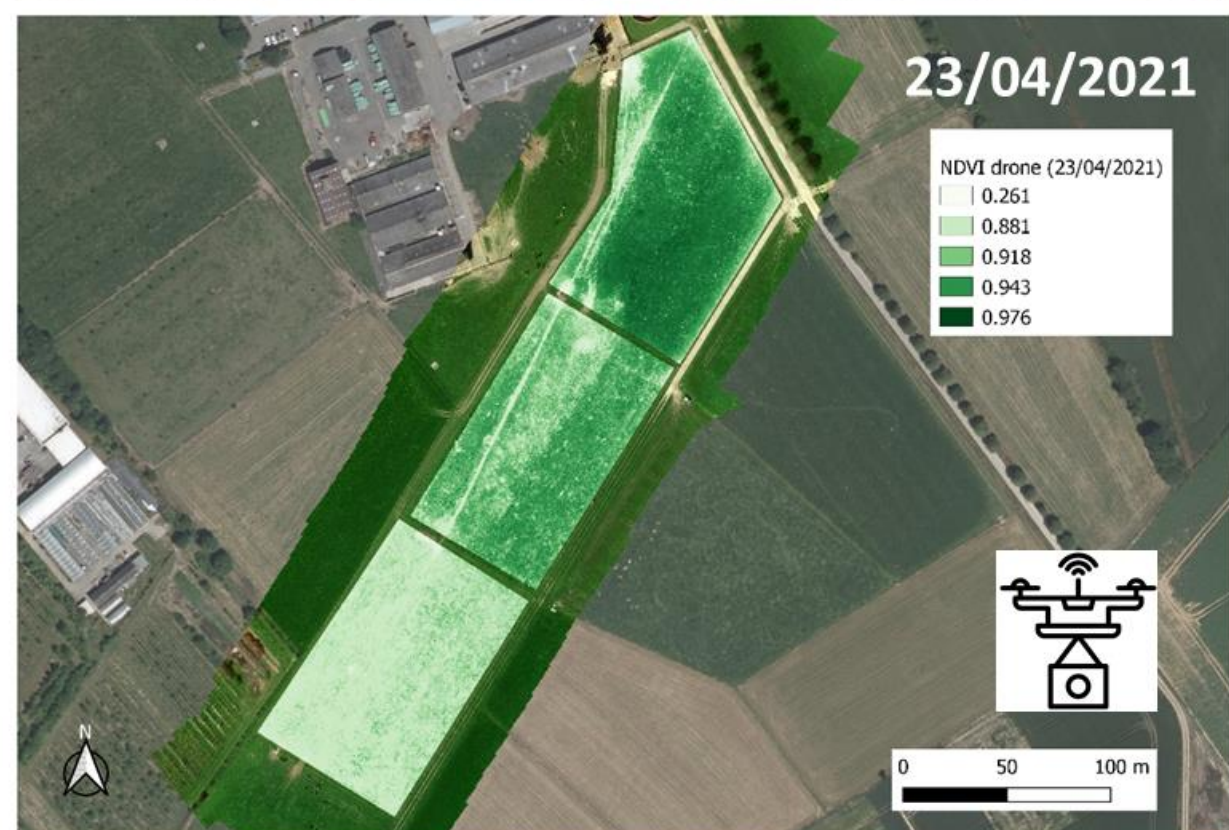
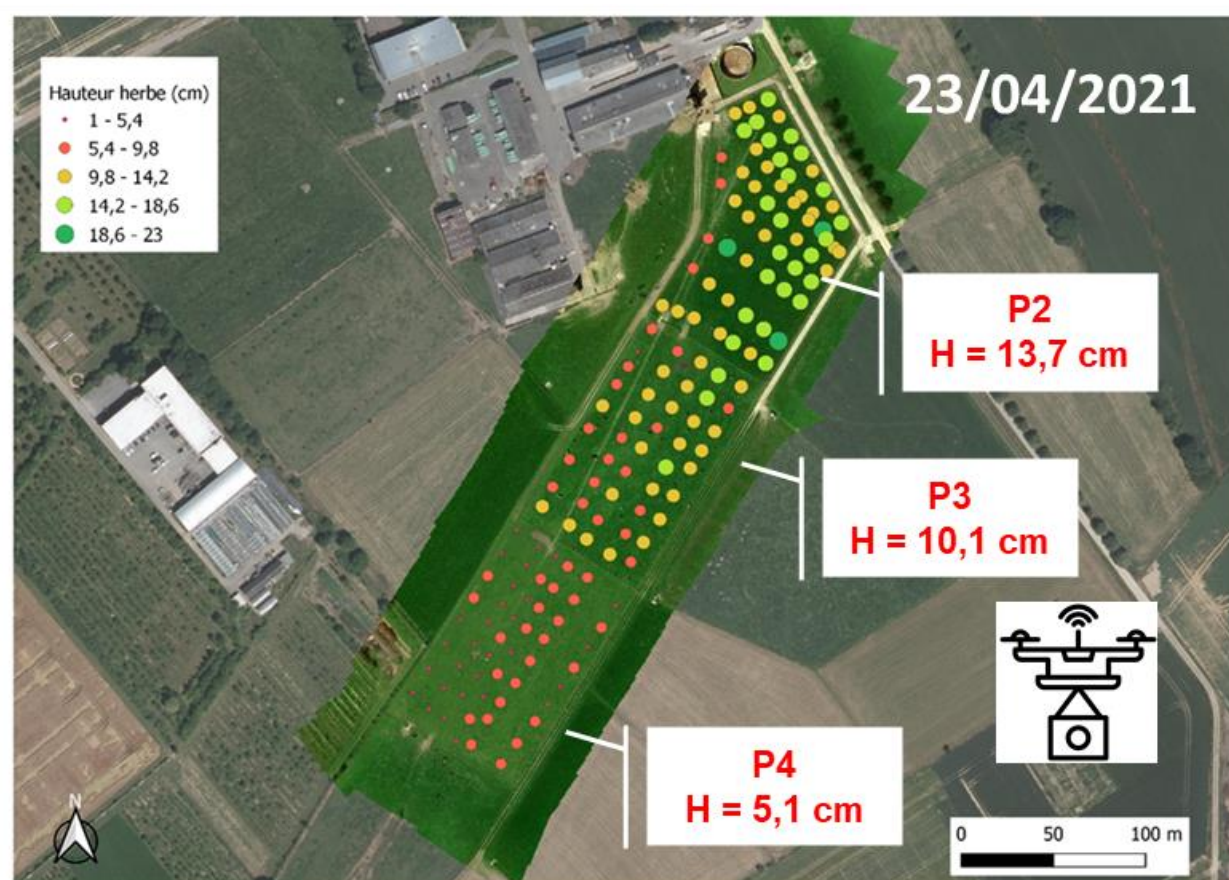
$$NDVI = \frac{(B8 - B4)}{(B8 + B4)}$$

Réseaux de neurones

IA





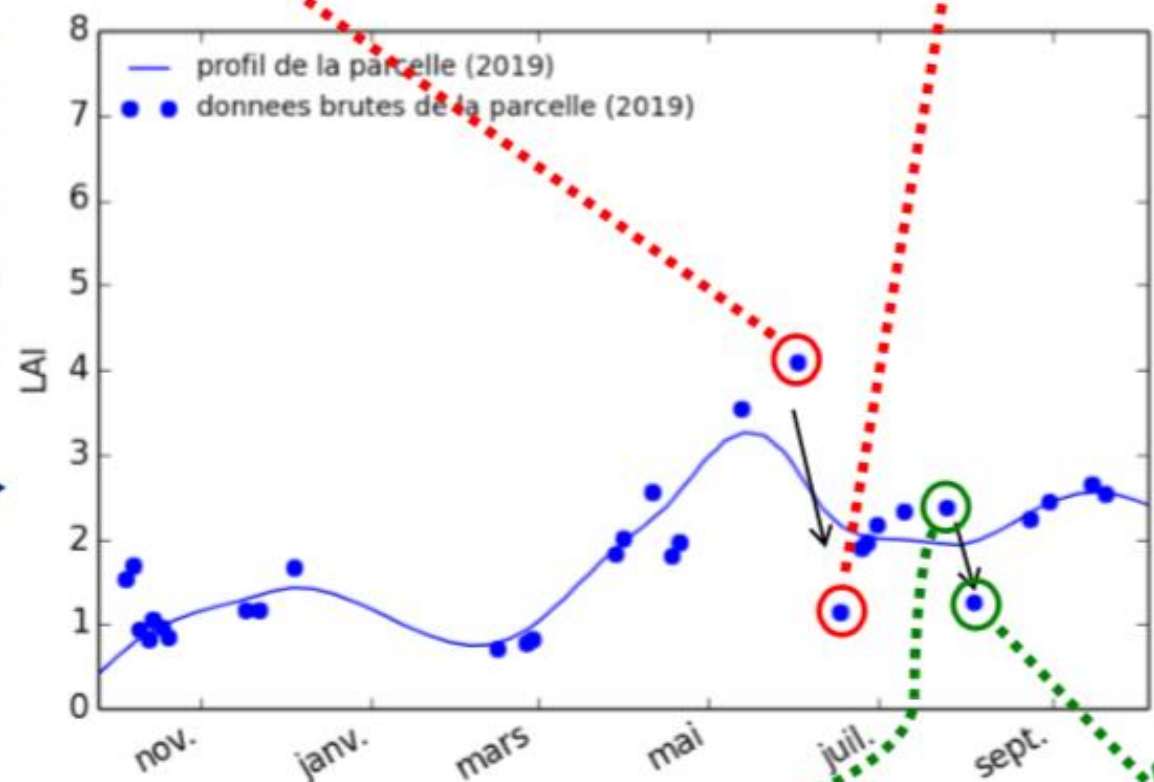


Planchette explicative réalisée dans le cadre de la foire agricole de Battice 2022

Y. Curnel, F. Regout, C. Lucau-Danila



CRA-W Libramont



Pâturage du 03 au 13/06



Pâturage du 01 au 08/08

