



SATELLITE IMAGERY USE-CASES FOR SUGAR BEET MONITORING

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Crop information

- French government spatial database
- pests and diseases monitoring
- water management
- and potentially more...



Sentinel-2 satellite constellation

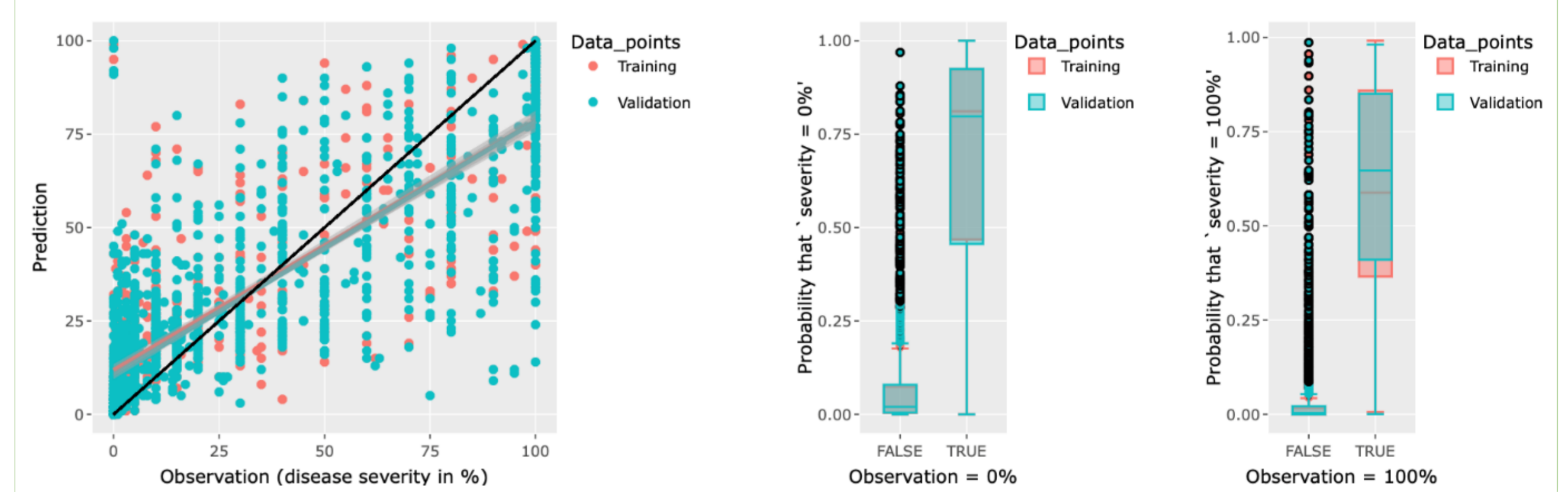
- 2 satellites
- since 2016
- acquisition every 5 days
- 10 useful spectral bands
- resolution up to 10m

Custom storage-optimized pipeline

- standard file formats
- comprehensive compressed storage
- Vegetation Index (customizable) computation with a standalone Js tool

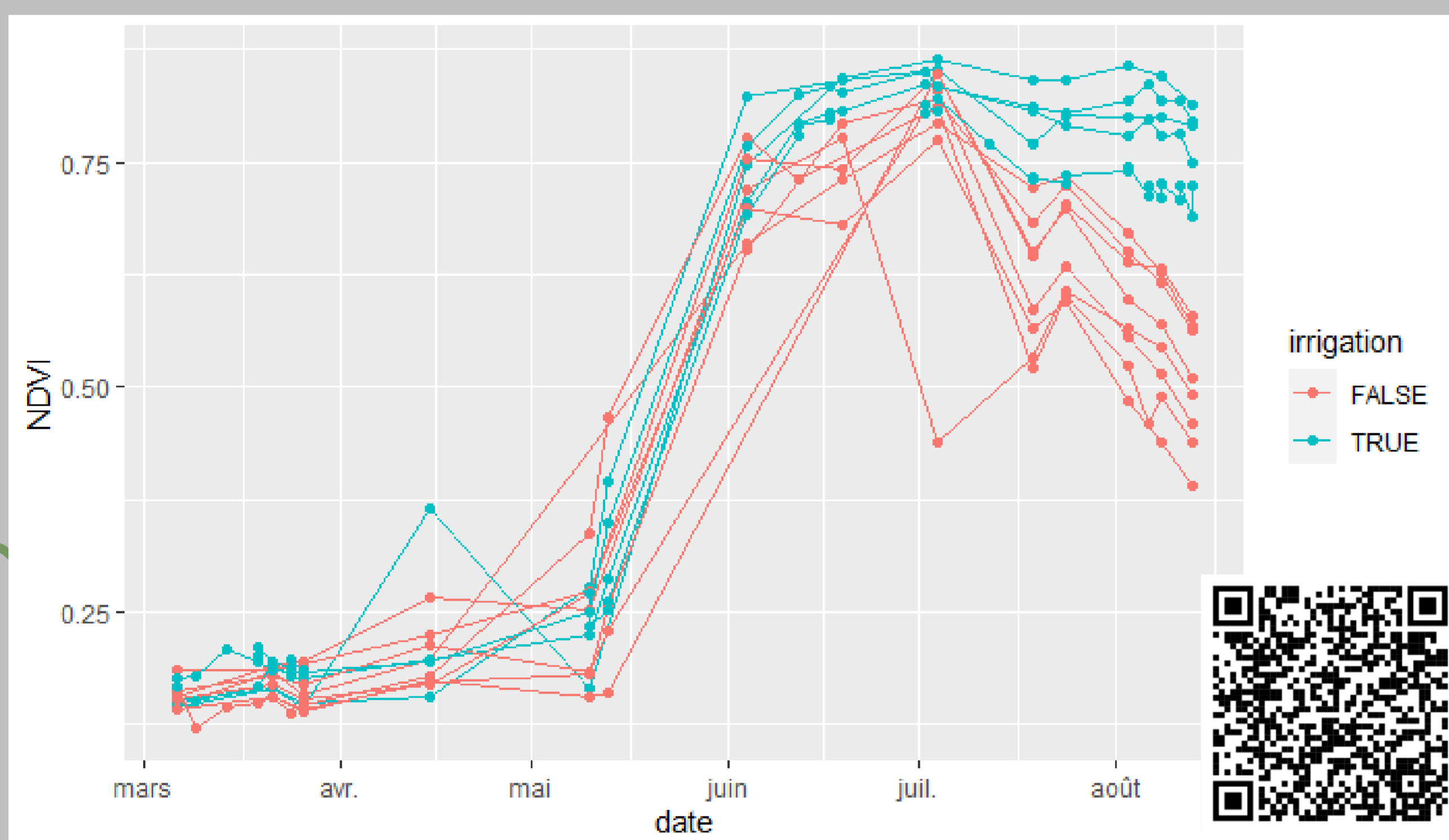
Modeling / Analysis

- Random Forest applied to satellite data for virus yellows estimation
- Geographic Information System and statistics

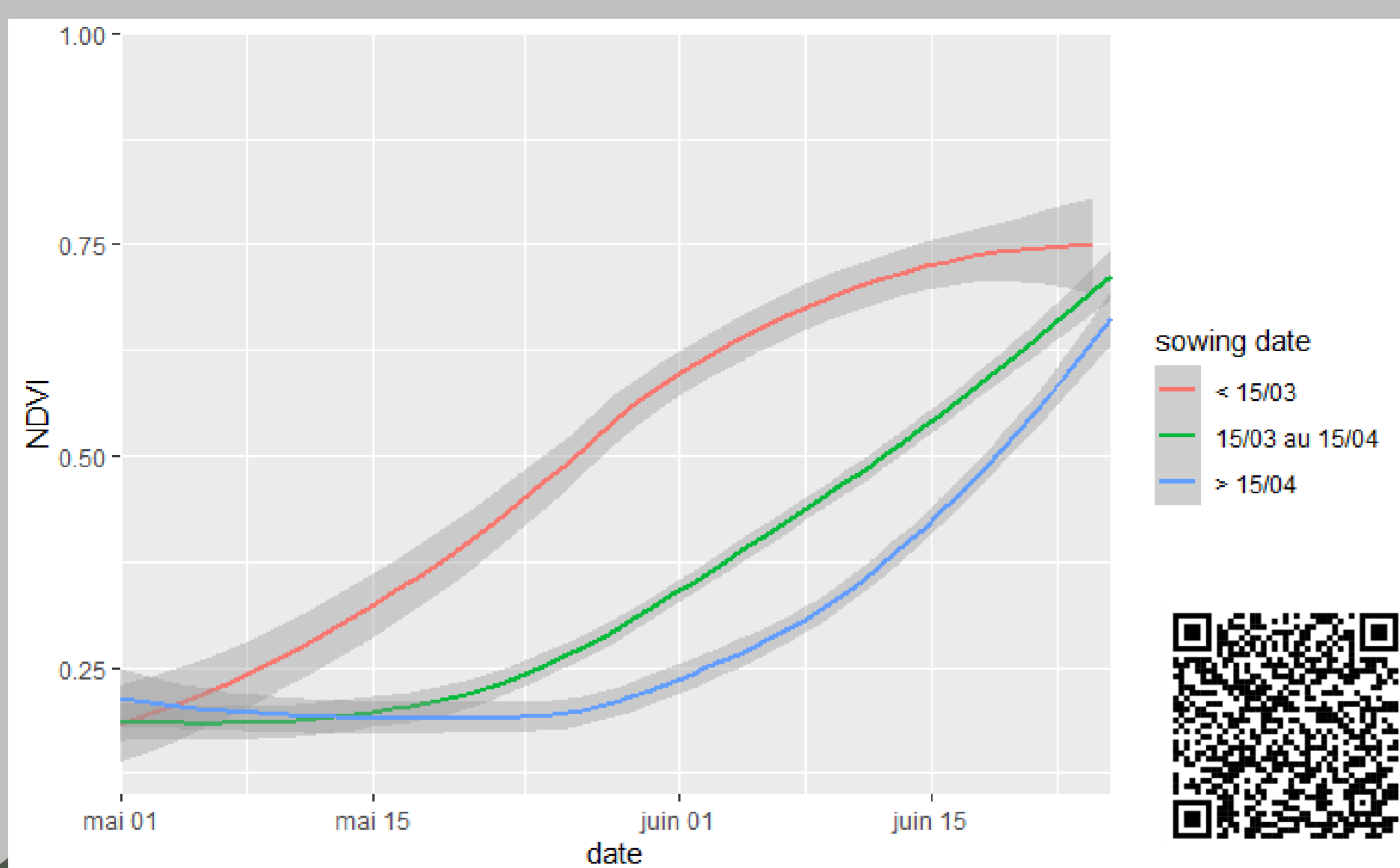


Real-time monitoring

- 2022 summer drought



- 2023 delayed sowing



Virus yellows reanalysis

- monitoring augmentation
 - estimation on 700+ plots in 2023
 - co-factors join
- ➔ help for disease investigation and decision making

