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LiDAR, a tool to inform sites-specific spraying: Application in a New York Concord grape production area

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LiDAR, a tool to inform site-specific spraying: Application in a New York Concord grape production area

Objective: To propose and to test a framework and workflow to analyse LiDAR data to be able to evaluate (via simulation) the application of variable chemical sprays according to vine architecture and grower needs in Lake Erie Concord vineyards.

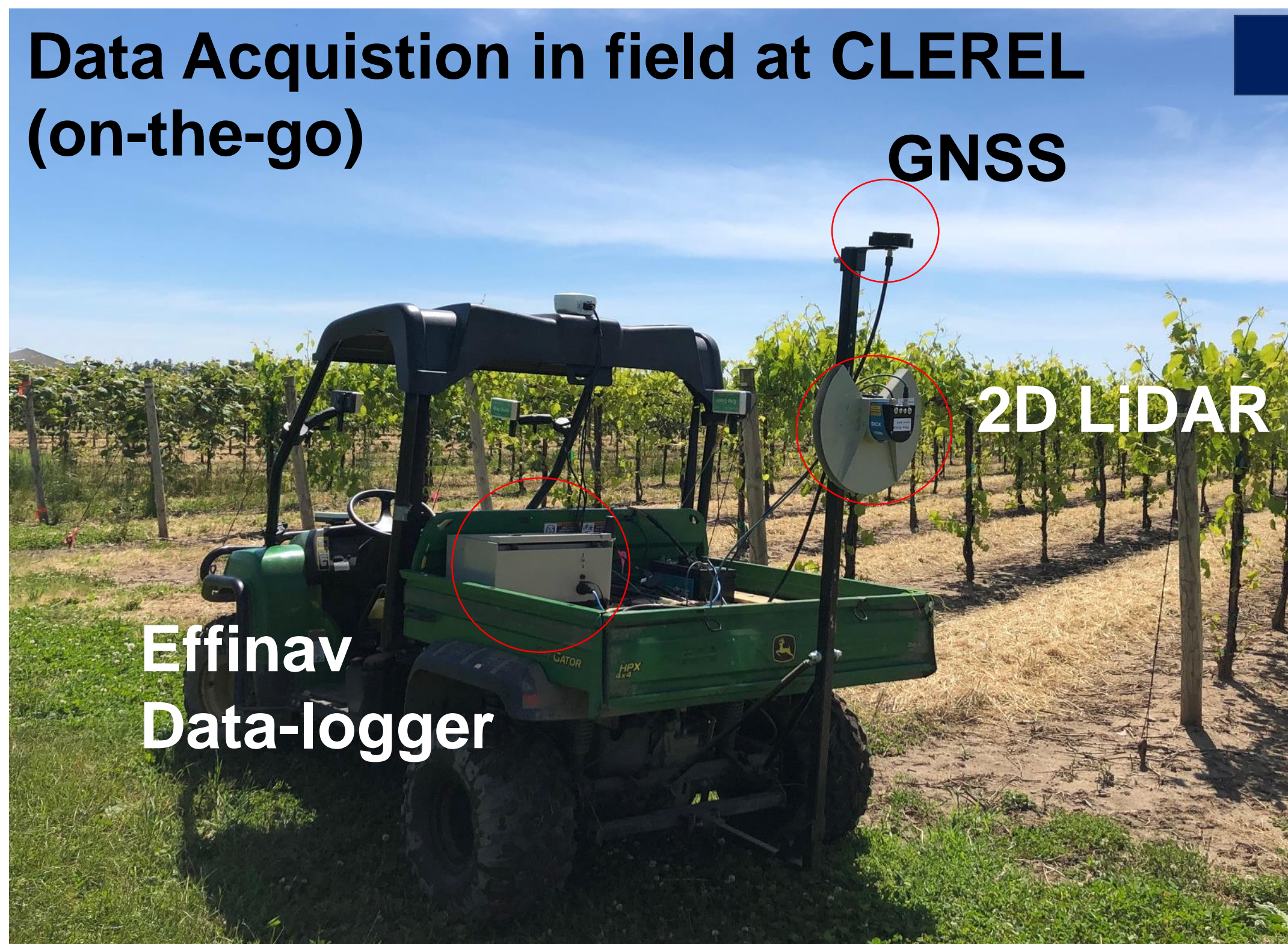
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To access the Efficient Vineyard website, scan the QR code



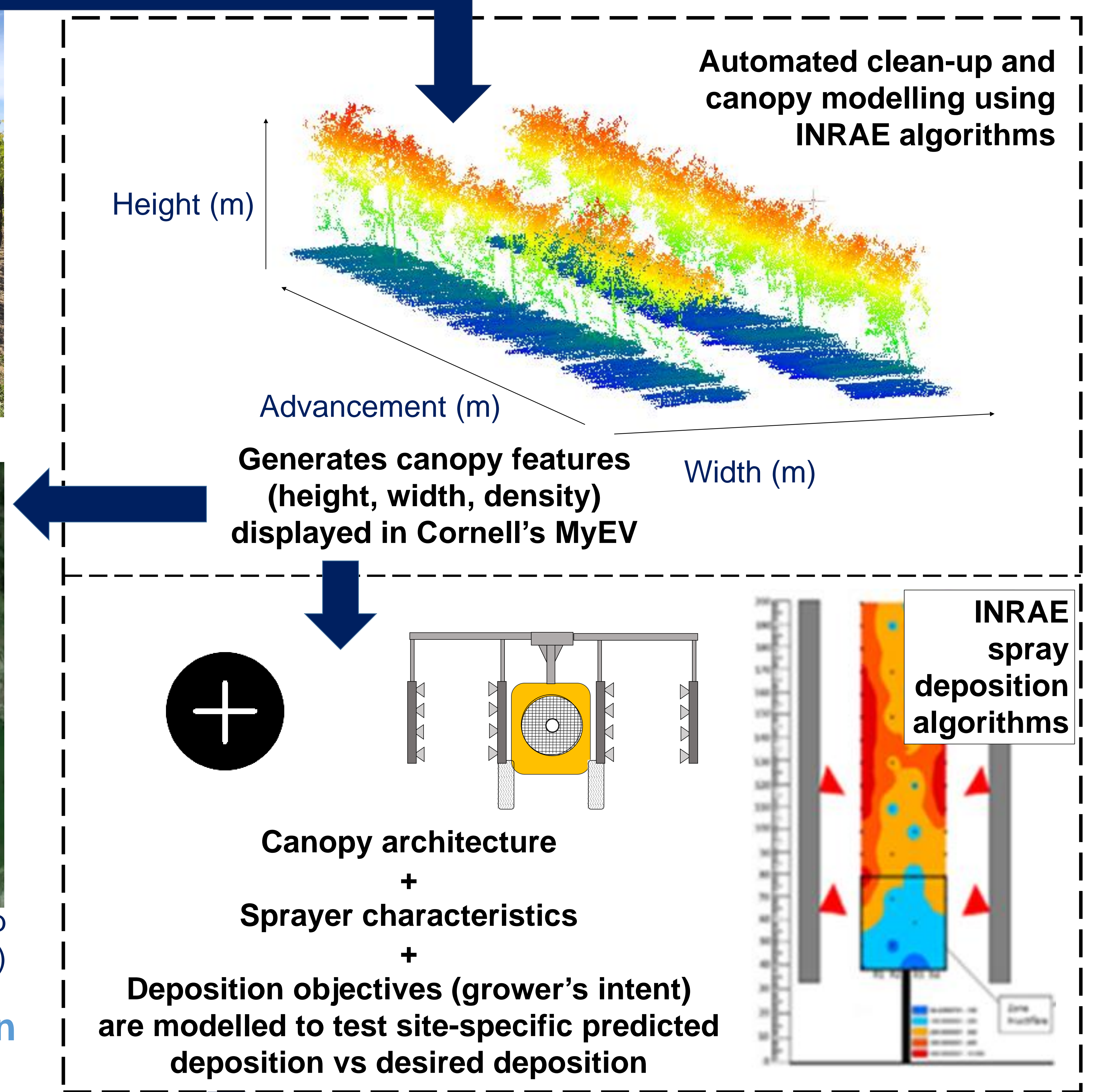
Canopy density map (shown in MyEv tools)

Pretty map vs. Useful information

Percentage of registered rate to be applied (delivered to growers via MyEv tools)



Modelisation



Simulation

From predictive modelling of spray deposit distribution to a dose recommendation map (that growers can assess and interact with)

Site-specific adaptation of spraying:

- ➔ Optimises local chemical use while ensuring satisfactory crop protection
- ➔ Has economical benefits for a winegrower