



Wakenet3 – Green-Wake

Geometric simulator for on-board wake vortex detection

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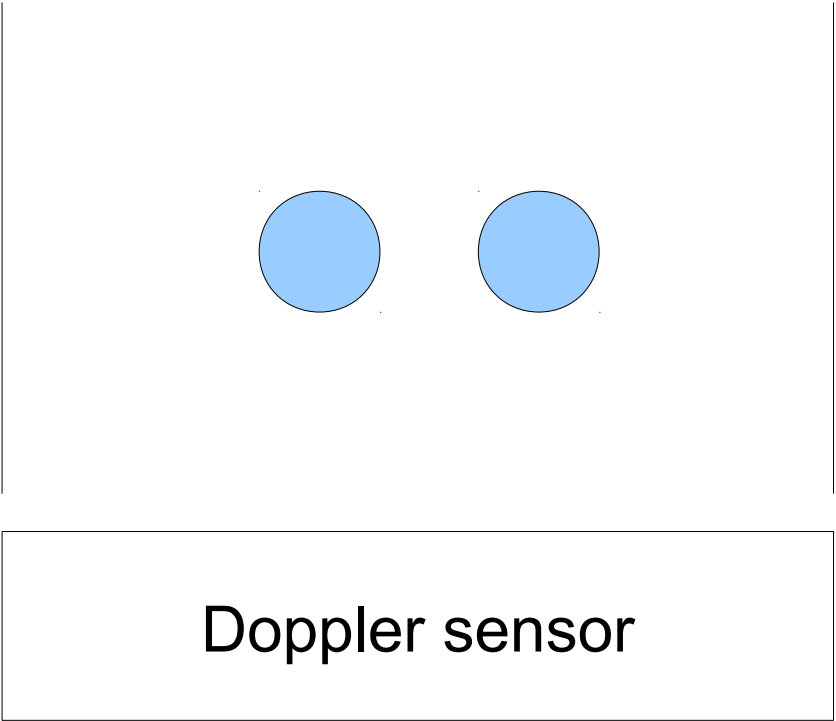
GREENWAKE



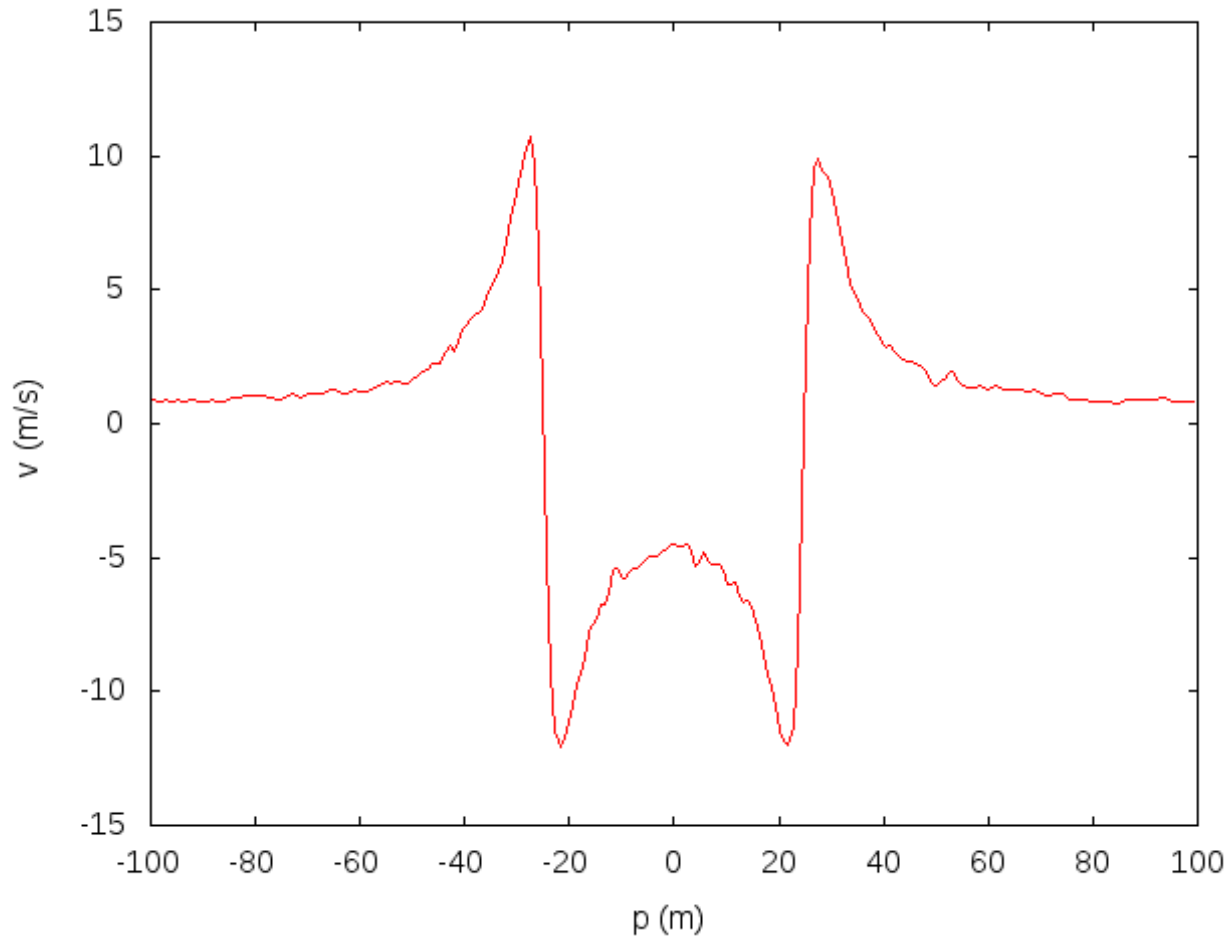
Why?

- Green-Wake: on-board detection system
- Detection scenario: depends on many parameters (aircraft position and attitude, position and nature of atmospheric hazard, etc.)

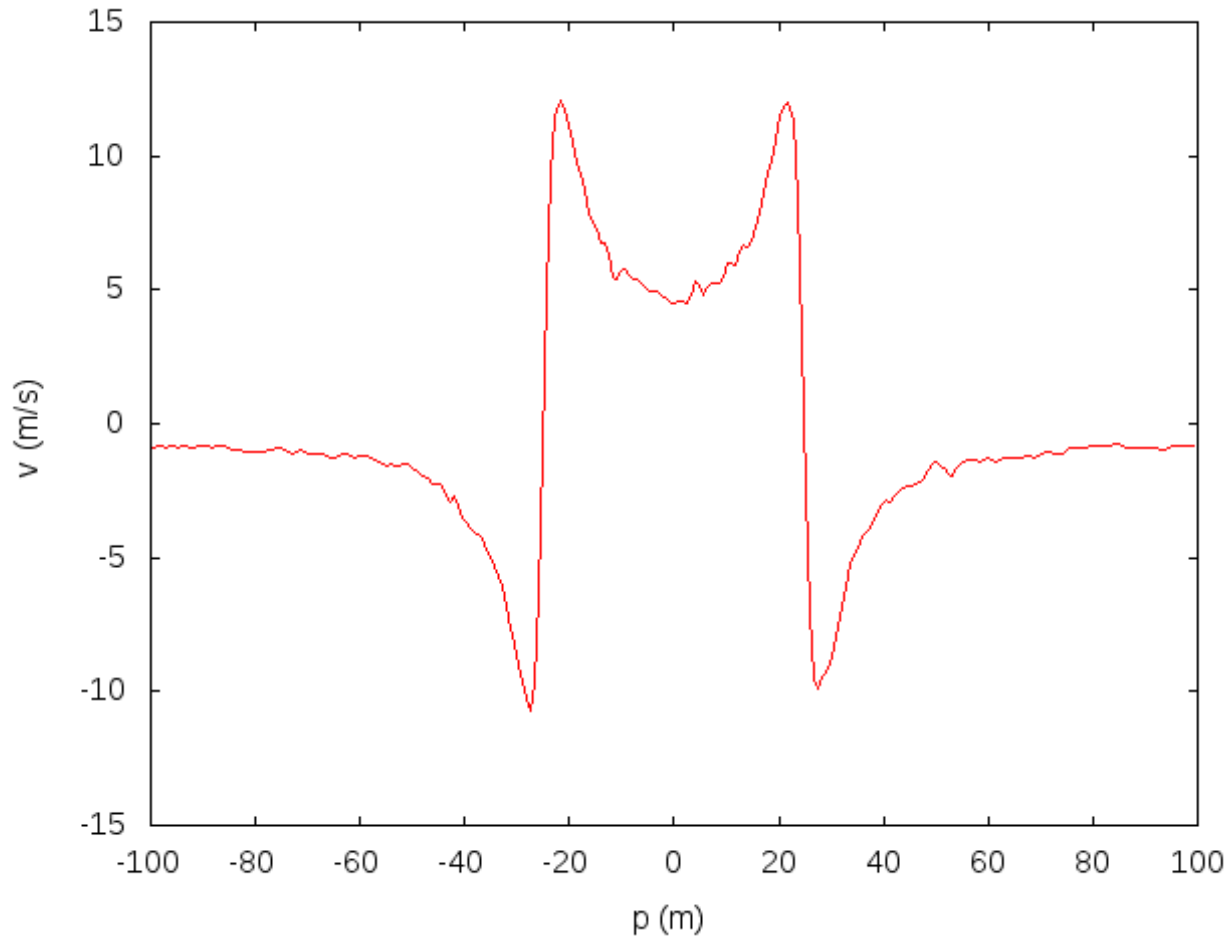
Ground-based sensing



Ground-based sensing



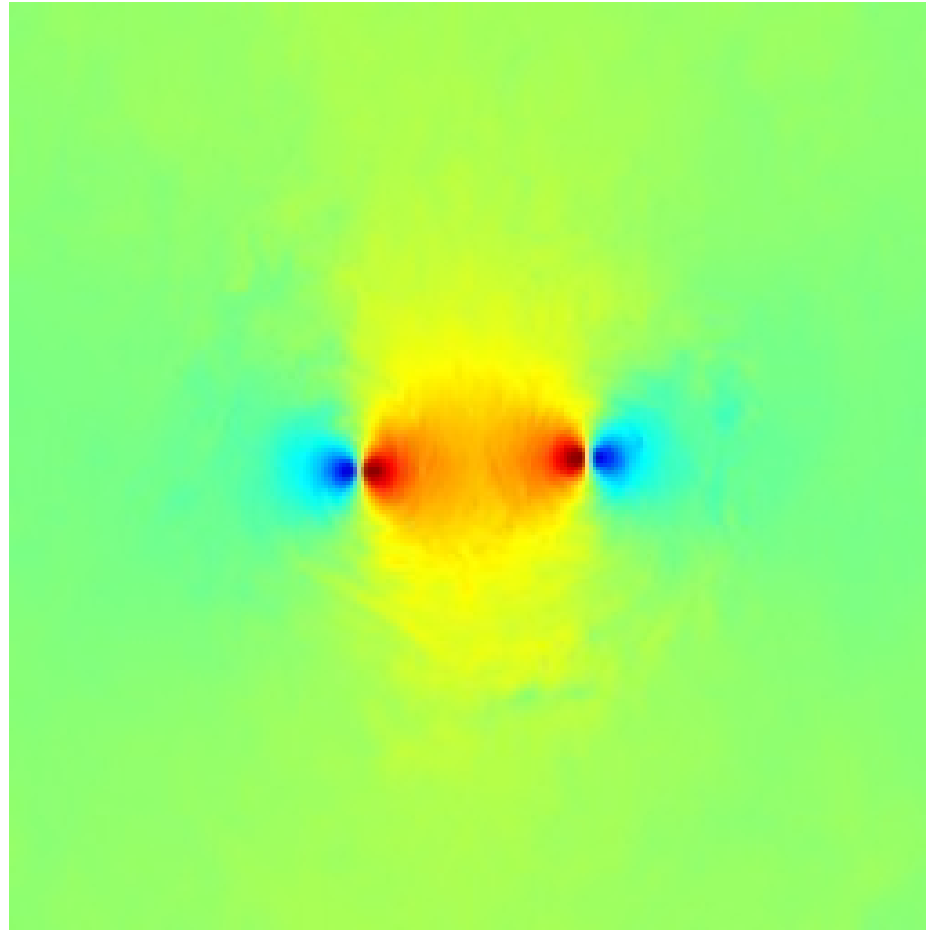
Ground-based sensing



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Ground-based sensing



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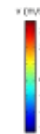
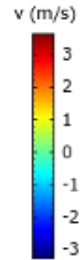
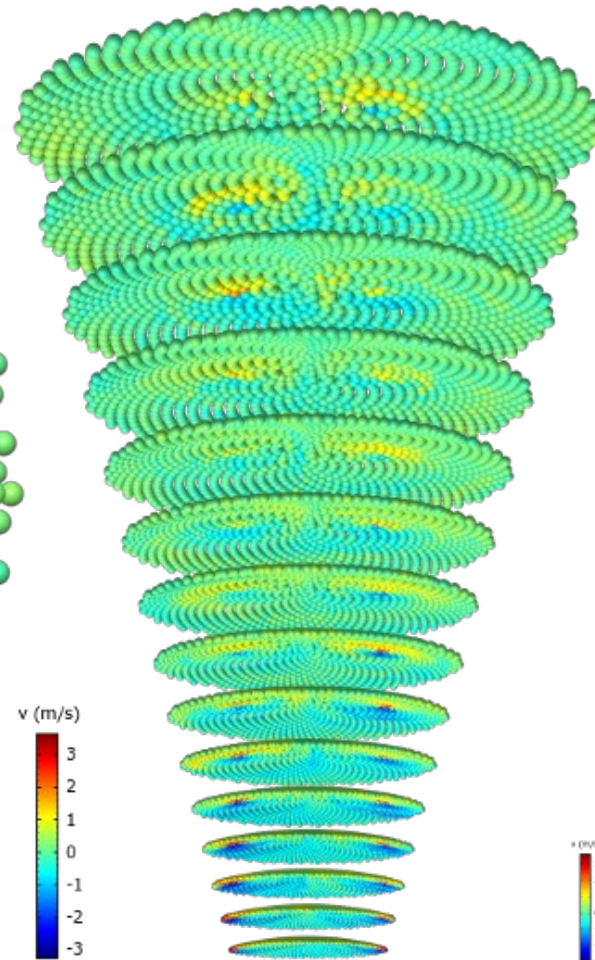
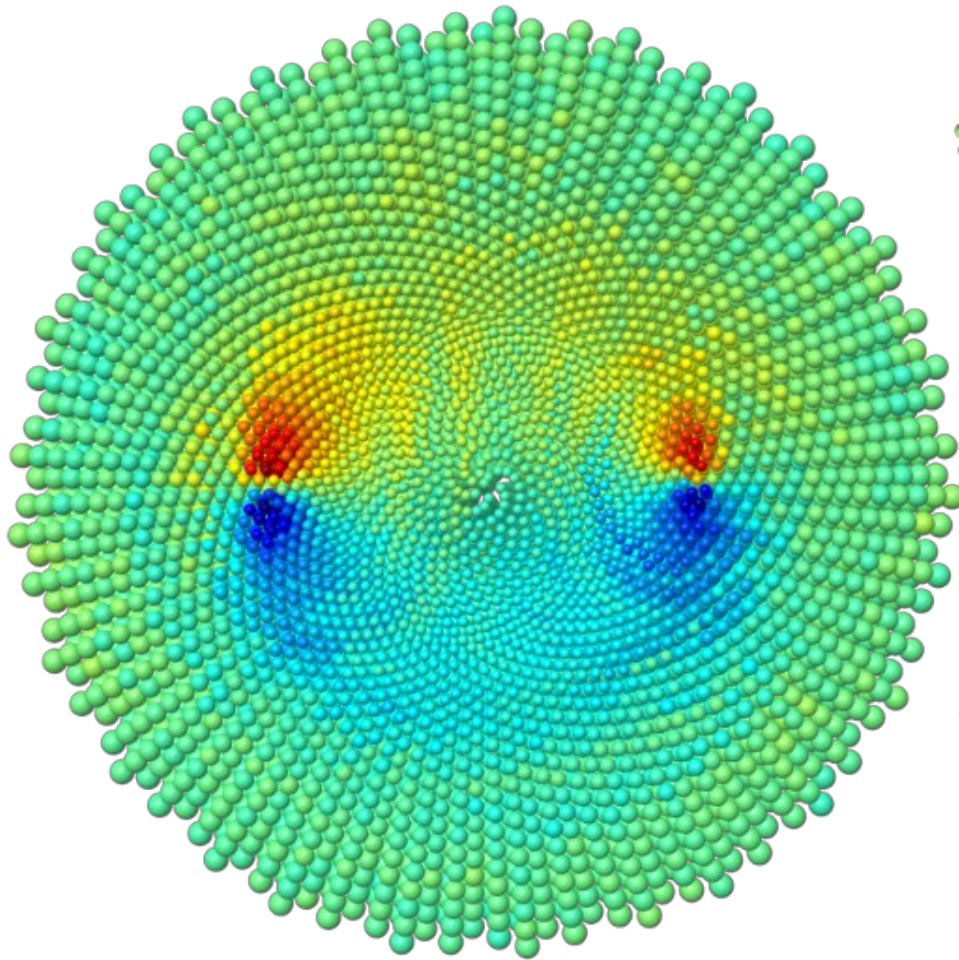


On-board sensing

- Video 1

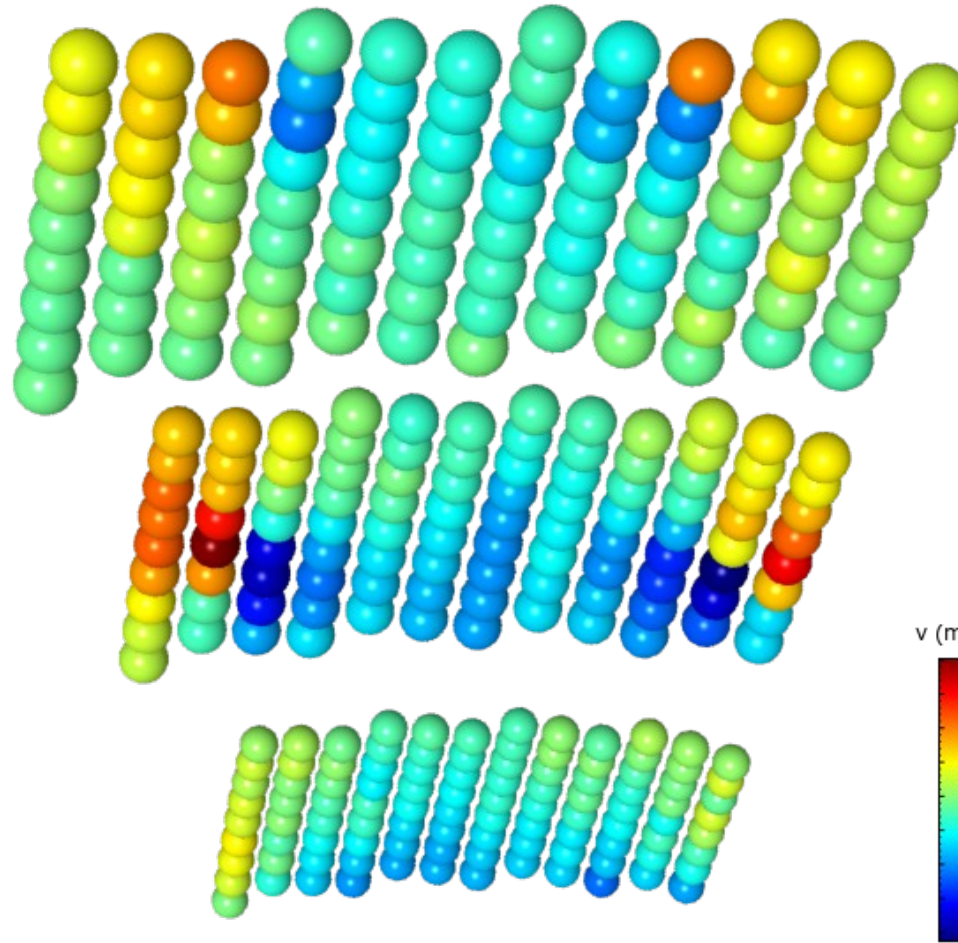


Worst detection scenario



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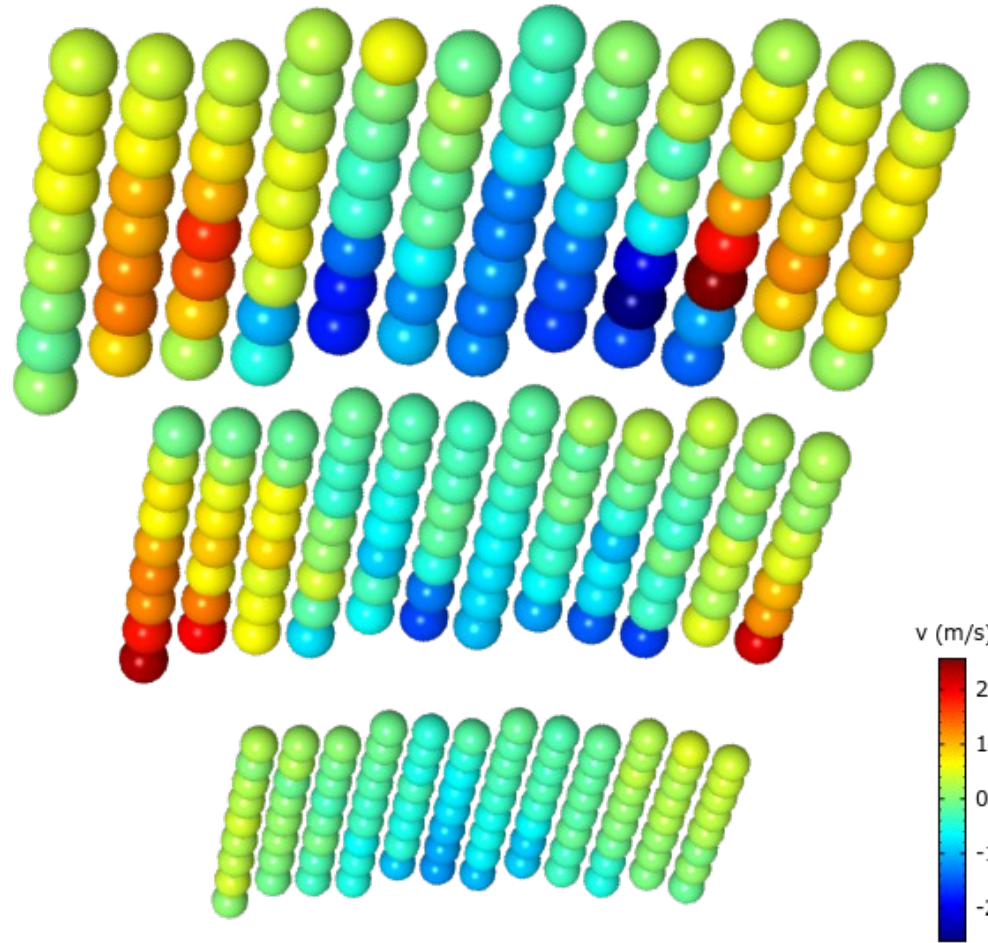
Other scenario



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Other scenario



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Geometric simulator

- Independent from the sensor technology
- Dependant on physical detector geometric characteristics:
 - Position
 - Field of view
 - Range
 - Resolution
 - Scanning pattern
 - etc.

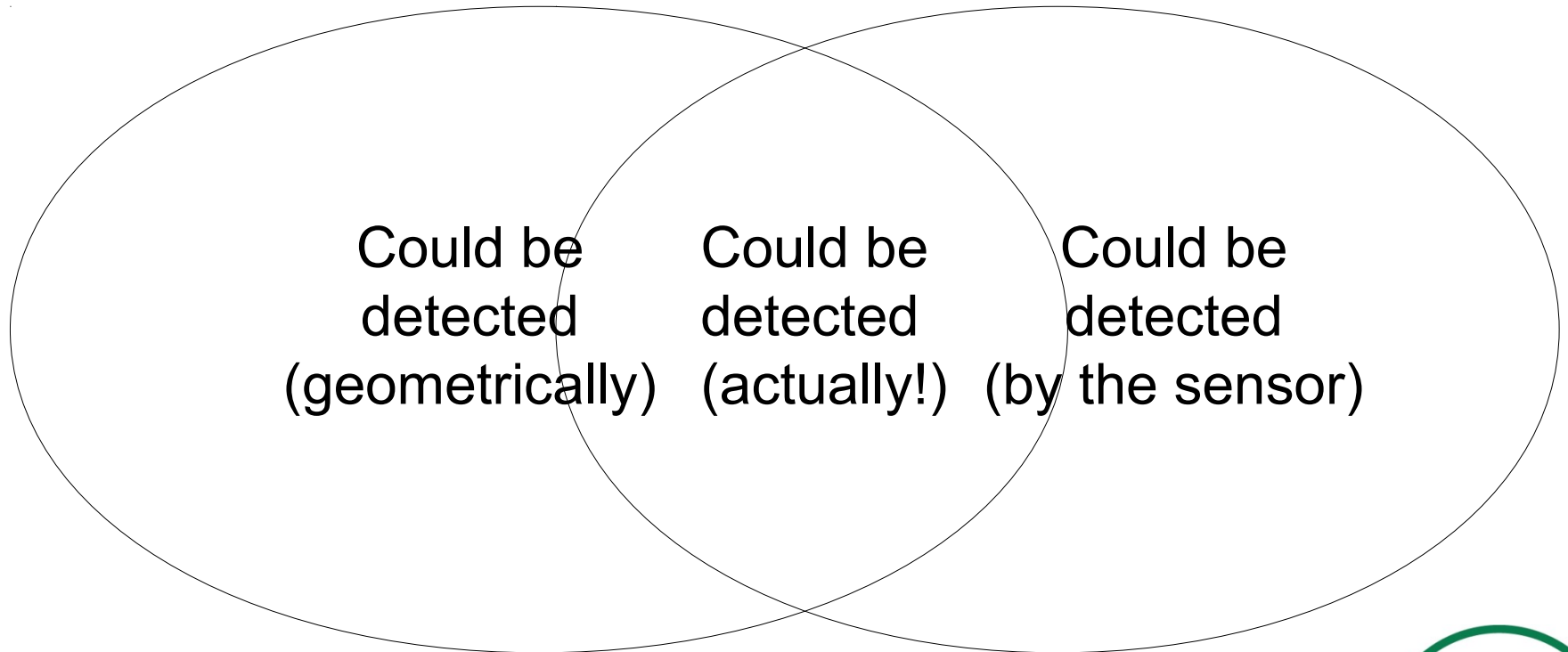


Uses

- Validating the feasibility of the detection scenario
- Defining the envelope in which the detector could be effectively used
- Help defining the geometrical and physical parameters of the sensing device (field of view, scanning pattern, range, etc.)



Detection envelope





Thank you!

