Structural complexity: from the laser scanner to the forest inventory

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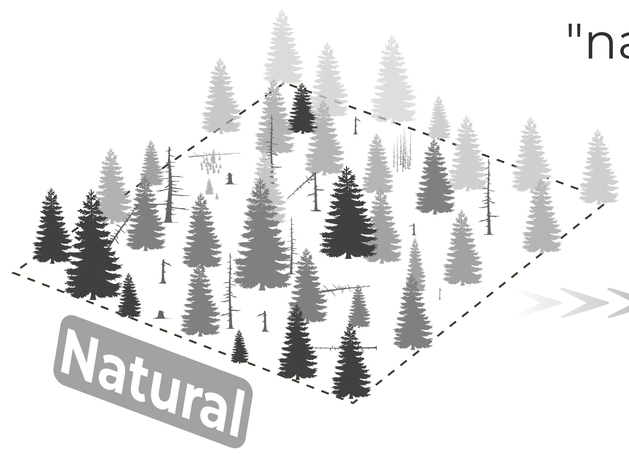
For **ecosystem-based management**, it is important to assess the departures from "natural conditions" in managed stands...

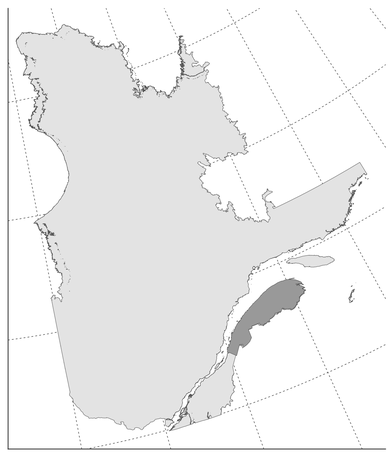


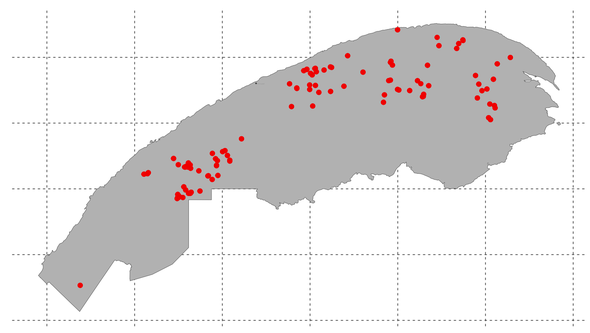
... by analyzing *differences* in **key attributes** (such as horizontal and vertical structure) with respect to **unmanaged stands**

Objetives

- Develop methods to directly **quantify structural variability** of natural balsam fir stands using terrestrial and drone LiDAR data.
- Model the **links** between diametral distribution, horizontal and vertical structure and dead wood.

Where?

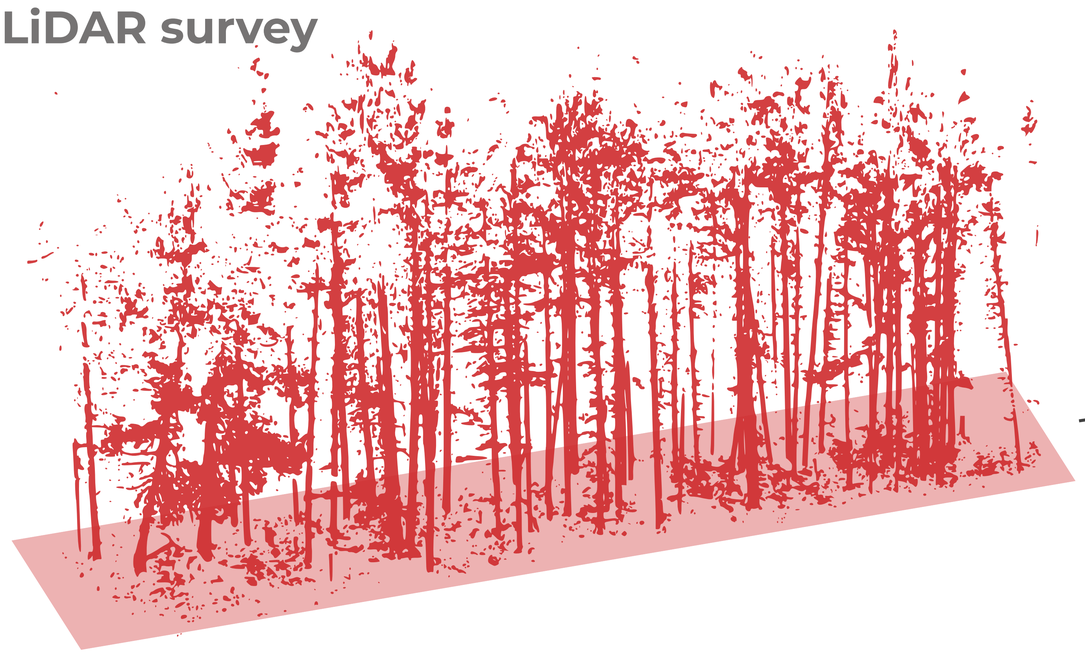




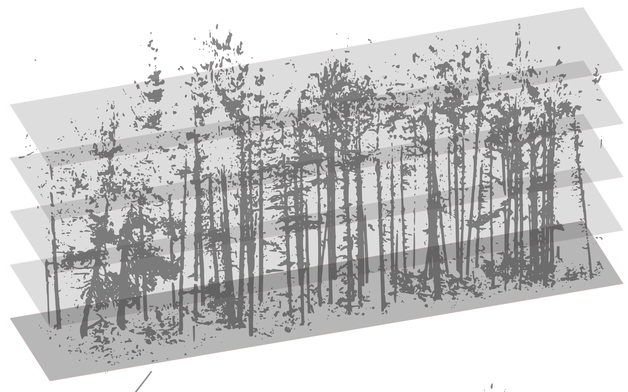
105 stands. LiDAR survey and forest inventory

How?

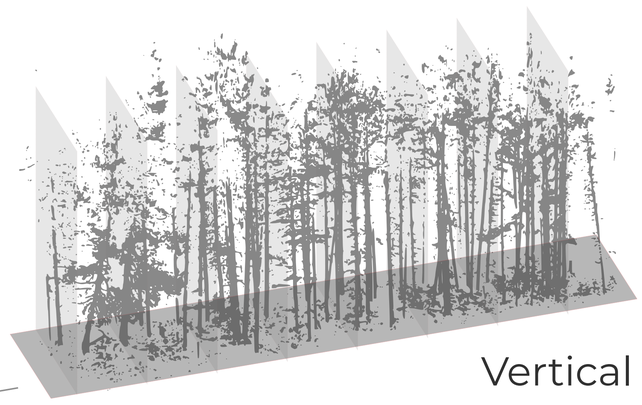
- **LiDAR survey**



Voxels approximation

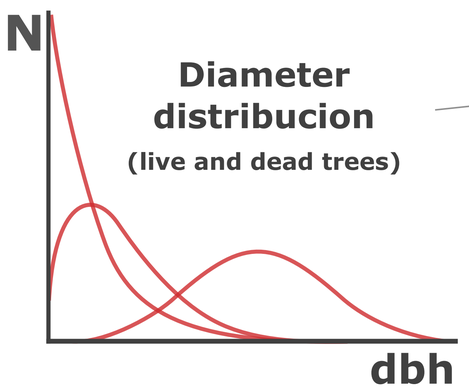


Horizontal structure metrics



Vertical structure metrics

- **Regular forest inventory**



Links

What?

The **links** between structural complexity metrics and the diametral distribution of live and dead trees will help to **translate** information from new technologies to the one obtained from traditionally collected data and define **targets of structural complexity** for managed stands.

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