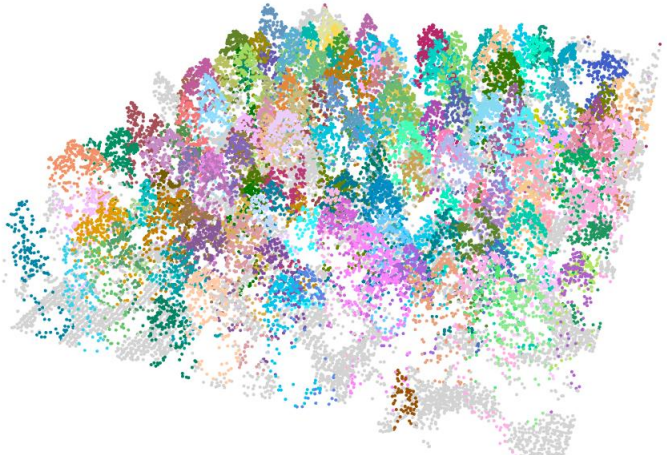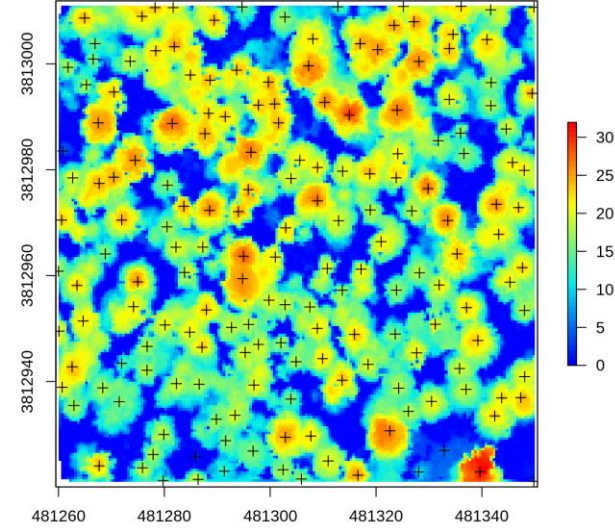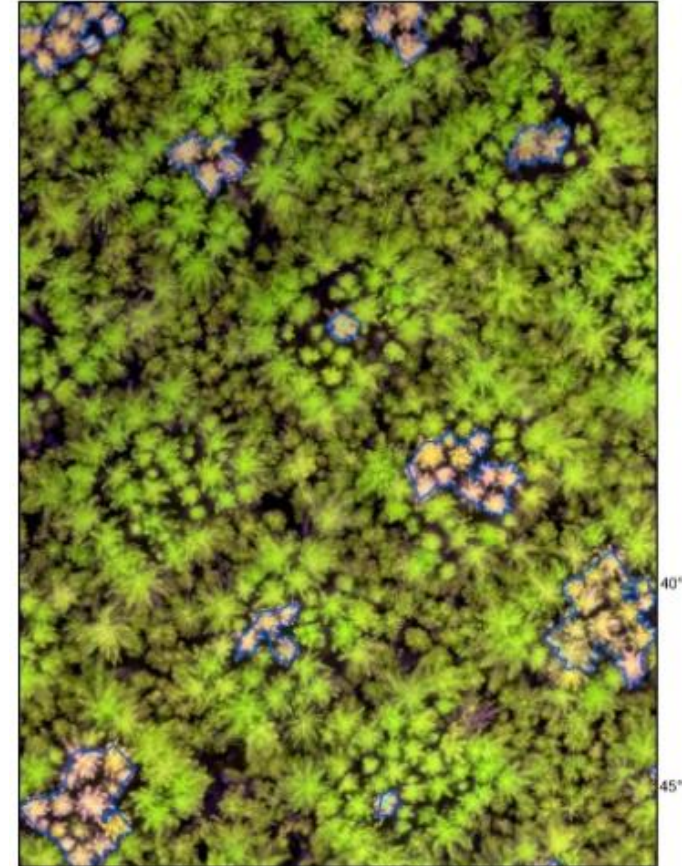# Remote Sensing Cluster Group meeting November 19, 2024

Cluster group background and purpose

- Formed in 2010, by Aaron Gunn and Michael Watt

- Current co-led by Michael Watt and David Crawley

- Current membership of the group is 147, comprising mostly industry participants

- Broad purpose of the group is to facilitate the transfer of remote sensing knowledge from specialists to industry allowing science uptake

Presentation overview

Time	Topic	Speaker
1.00 – 1.05 pm	Introduction	Michael Watt
1.05 – 1.20 pm	Early prediction of regional red needle cast outbreaks using climatic data trends and satellite-derived observations	Andrew Holdaway
1.20 – 1.35 pm	AI solutions in forestry: Monitoring growth and dynamics throughout a full rotation	Chaplin Chan
1.35 – 1.50 pm	Aerial surveying services for NZ forestry: A suppliers perspective	Steve Smith
1.50 – 2.10 pm	ForestInsights: Mapping New Zealand's forests through deep learning and data-centric AI	Melanie Palmer
2.10 – 2.30 pm	Using AI for woody debris assessment with 10 cm resolution imagery	David Herries
2.30 – 2.55 pm	Afternoon tea	
2.55 – 3.00 pm	Session introduction	Will Mace-Cochrane
3.00 – 3.20 pm	Assessing forestry plantations with UAVs: A comparative study of laser scanning and photogrammetry	Robin Hartley and Sadeepa Jayathunga
3.20 – 3.40 pm	Enhancing seedling detection in New Zealand forestry: A multi-datastream approach	Blake Singleton
3.40 – 4.00 pm	Virtual reality in thinning training and future forest design	Elizaveta Graevskaya and Claire Stewart
4.00 – 4.15 pm	Spatial comparisons of carbon and volume for radiata pine and 10 alternative exotic species using recently developed tools	Michael Watt and Jamie Heather
4.15 – 4.30 pm	DJI Enterprise Drones in Forestry	Cody Stevens and Russell Main
4.30 – 5.00 pm	Questions/Discussion	All