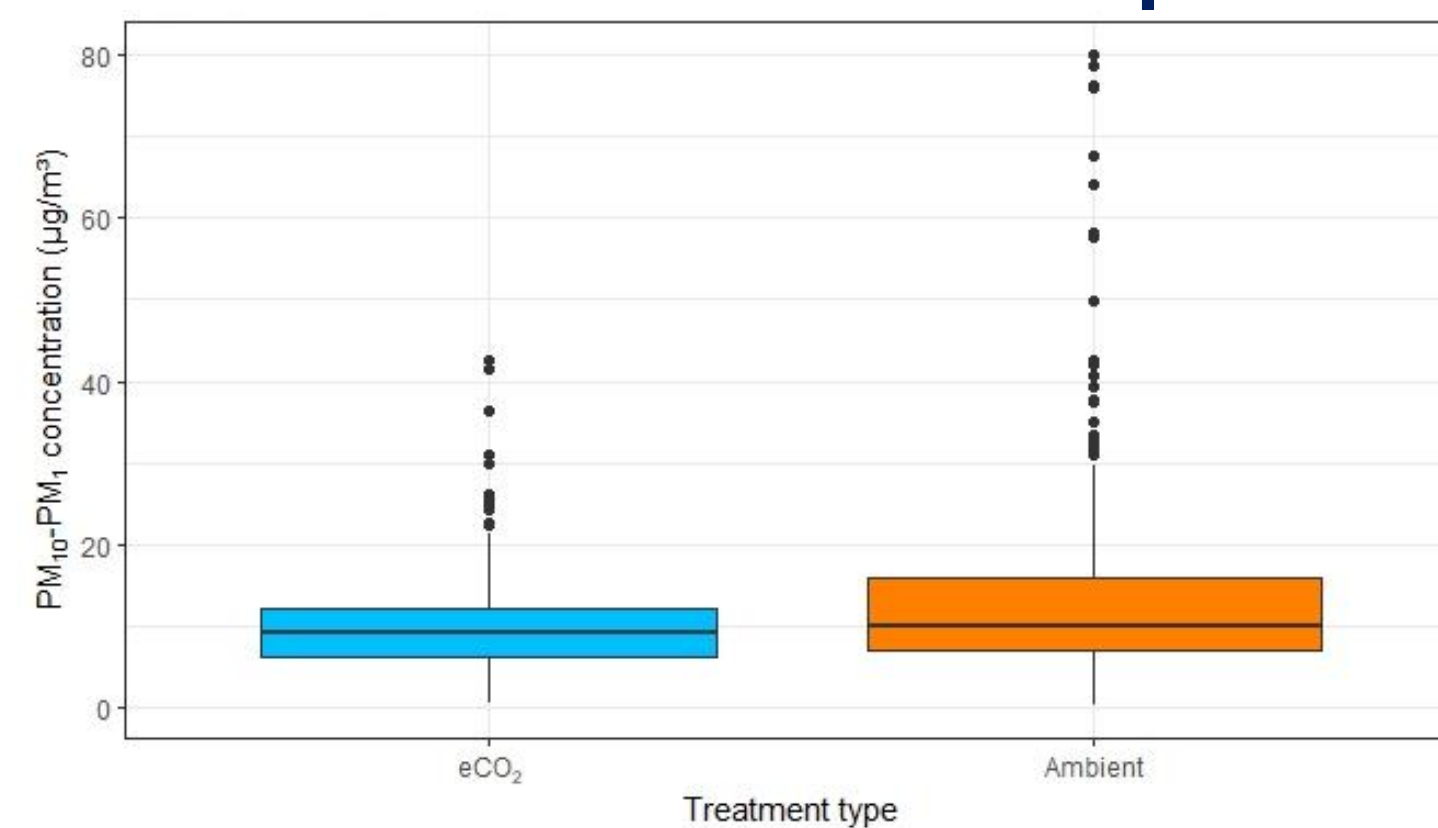
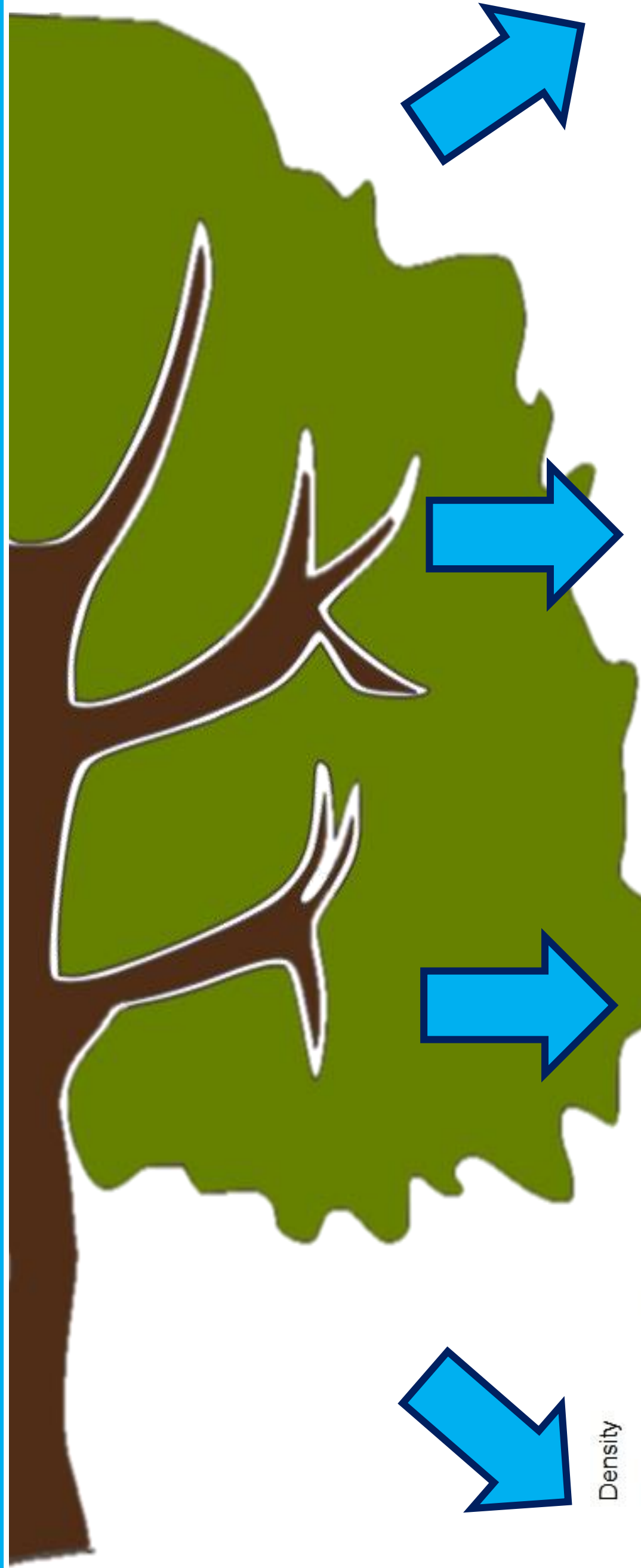


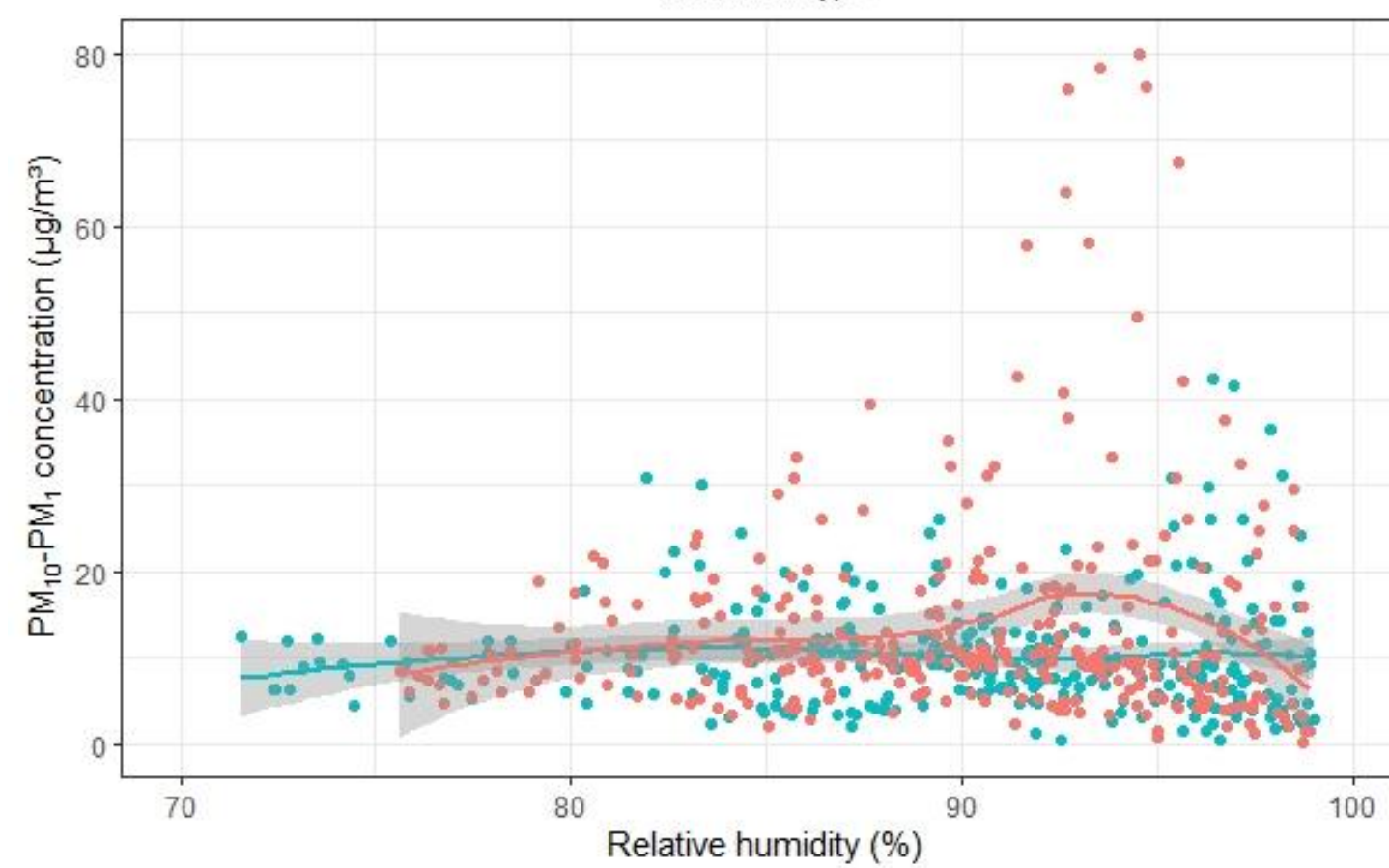
There is a lack of understanding of how climate change will affect forest bioaerosols in the future. We asked:

- A) Are low-cost Optical Particle Counters suitable for measuring bioaerosols in forests?
B) Are forest bioaerosol concentrations affected by elevated CO_2 and/or weather conditions?

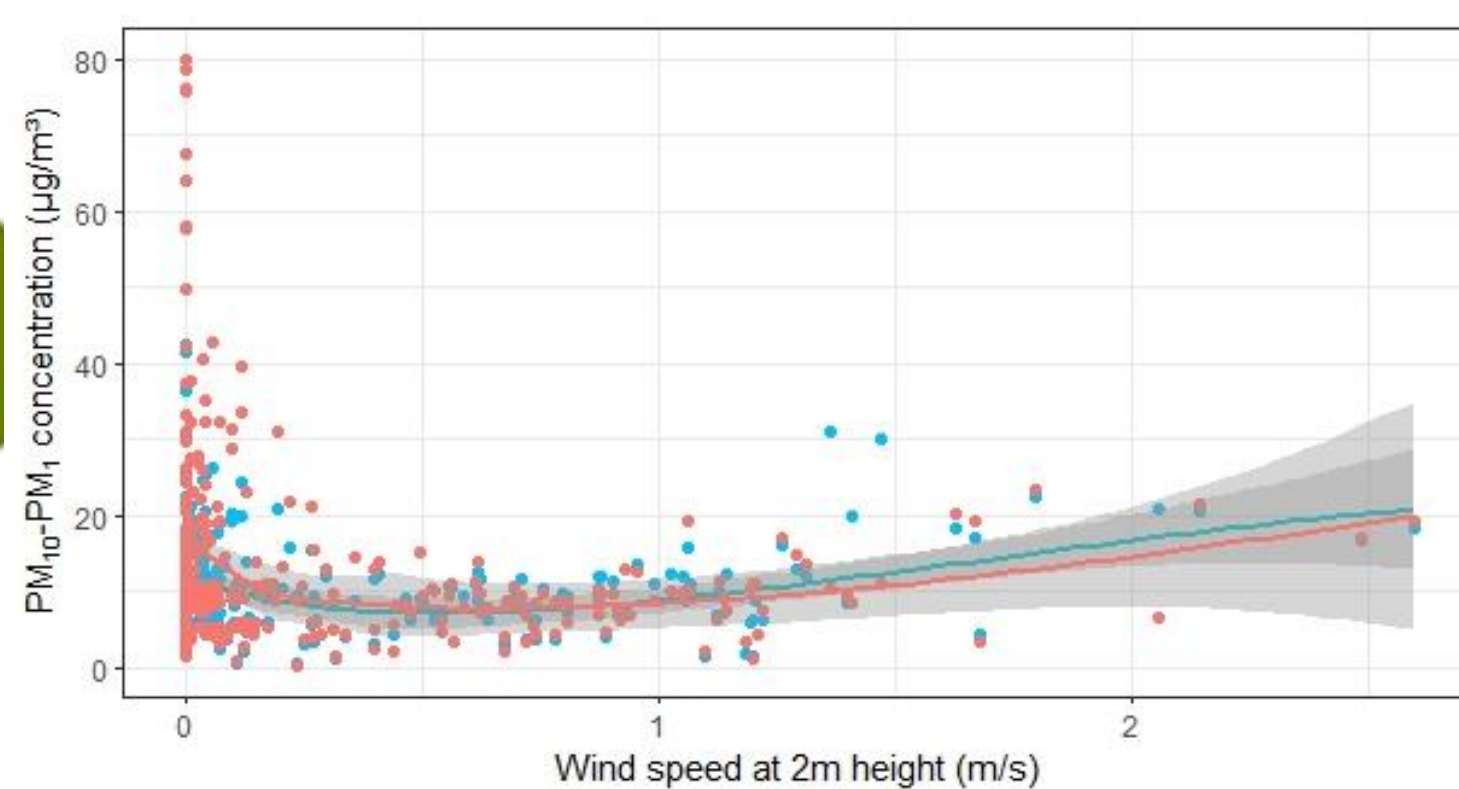
In Autumn 2018, we used the BIFoR FACE experiment to explore these two questions



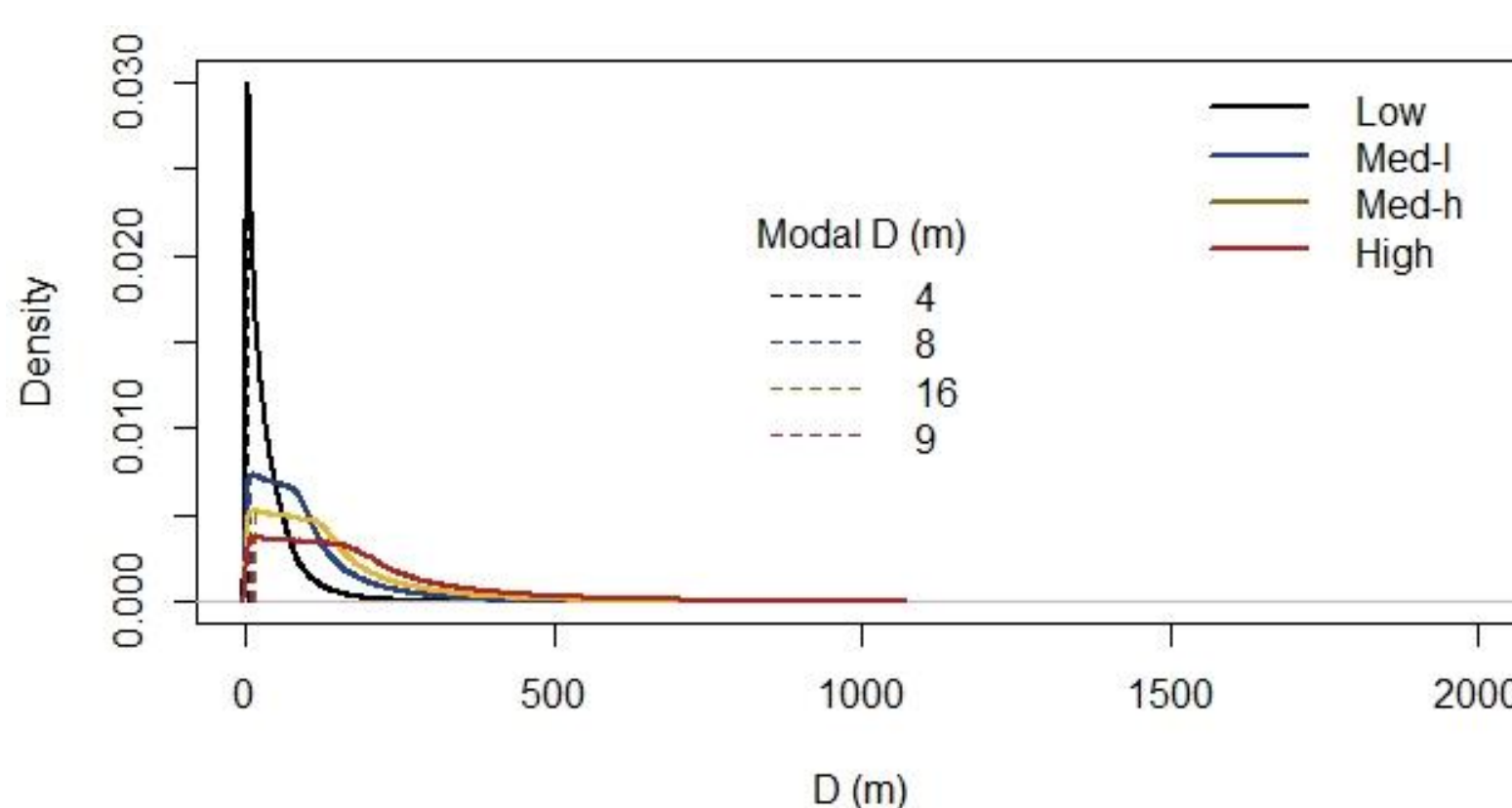
Increasing CO_2 concentrations by 150ppm did not affect bioaerosol concentrations



After correcting for equipment effects, RH had no effect on bioaerosol concentrations



Bioaerosol concentrations peaked at the lowest and highest wind speeds measured



Modelling showed that spores travel short distances (stay within an array) at low wind speeds

What are the wider implications?

The suitability of low cost equipment opens up aerosol measurements to a wider range of experimental conditions, and a broader group of researchers

Our findings have improved our understanding of aerosol dynamics in forests, feeding into the wider questions about forest responses to climate change