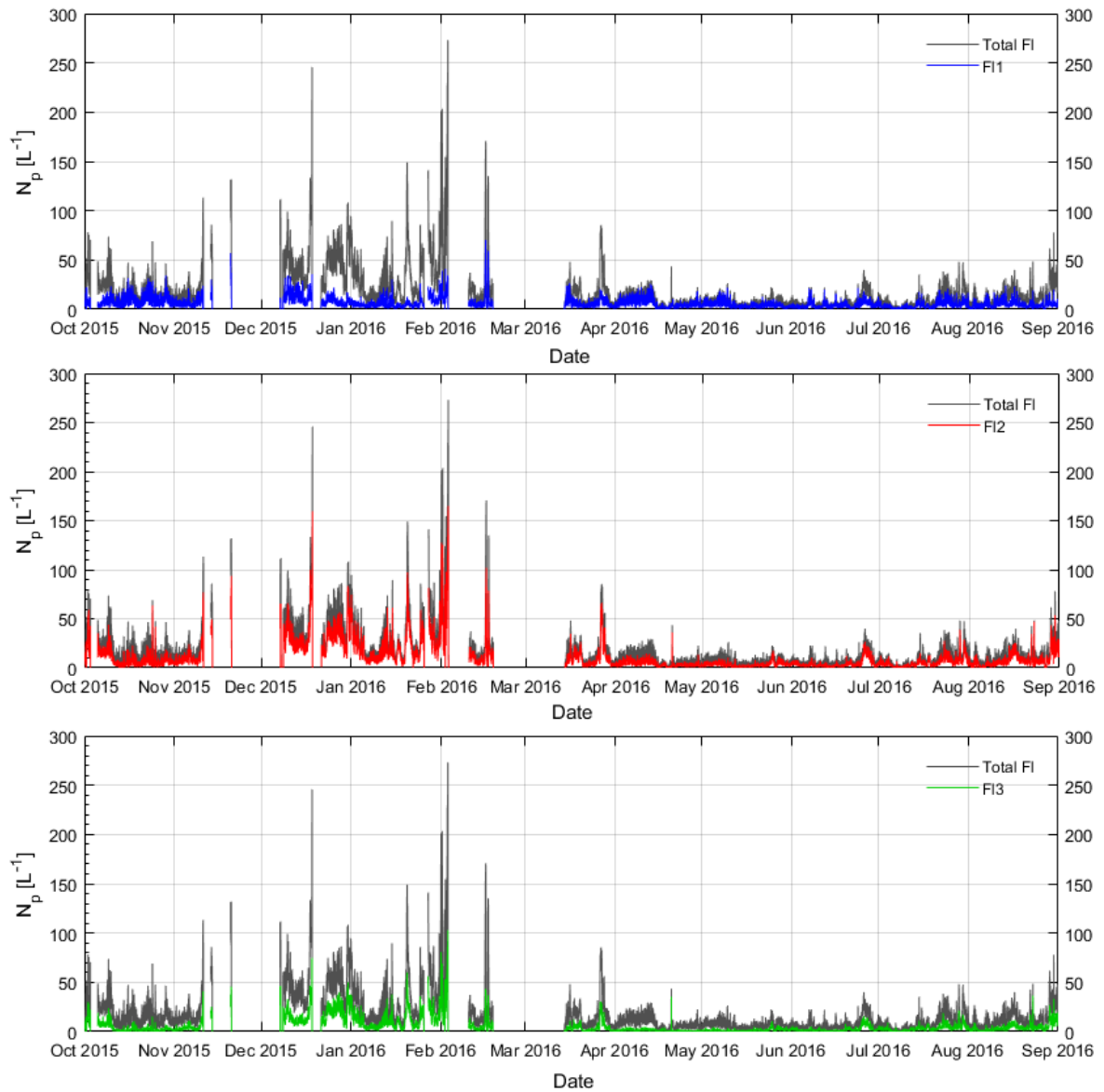


## Supplementary Material



*Fig.S.1. Number of particles per litre that illicit a fluorescent response in each channel, using 15-minute integrations. The grey trace represents total fluorescent particle concentrations.*

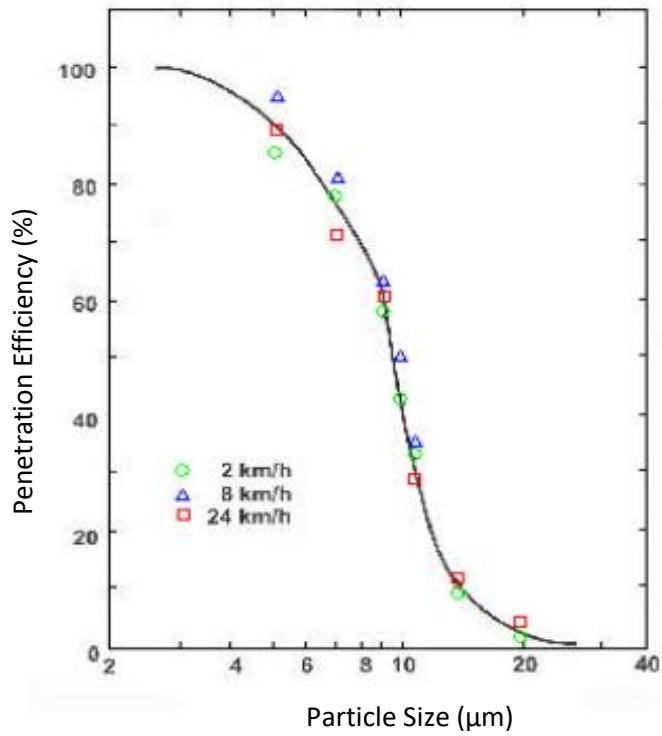


Fig.S.2. The percentage of particles that are able to penetrate the inlet head as a function of size, based on the Sierra-Anderson Model 321A inlet head (McFarland, 1984).

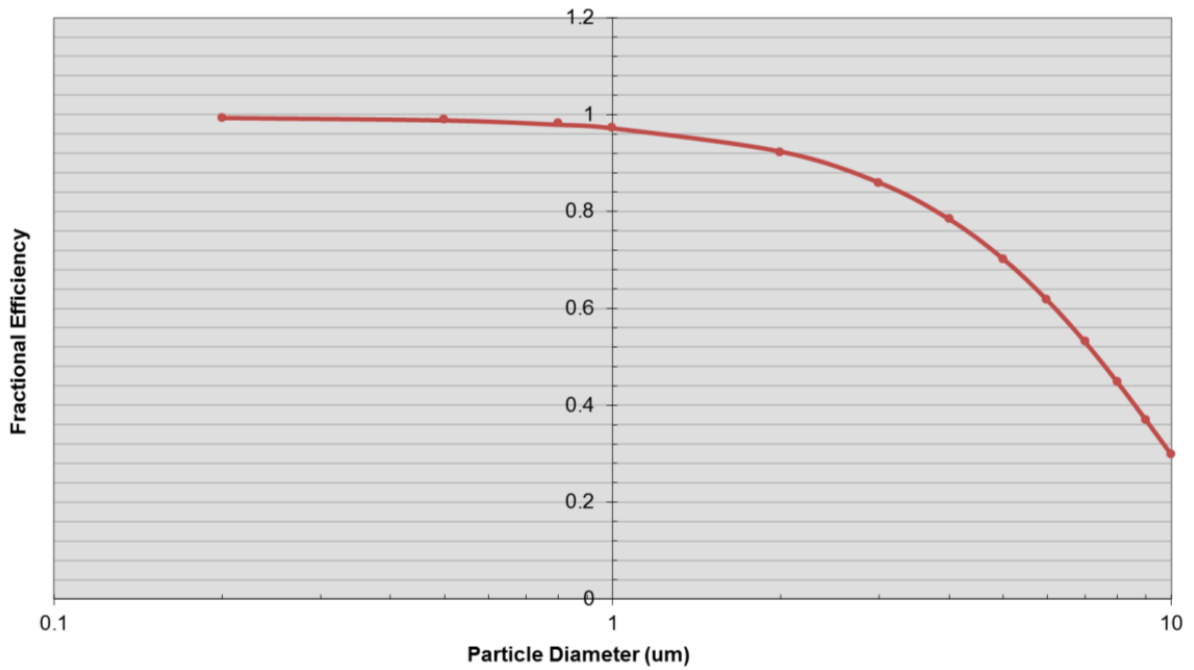


Fig.S.3. Estimated line losses once particles have penetrated the inlet as a function of size.

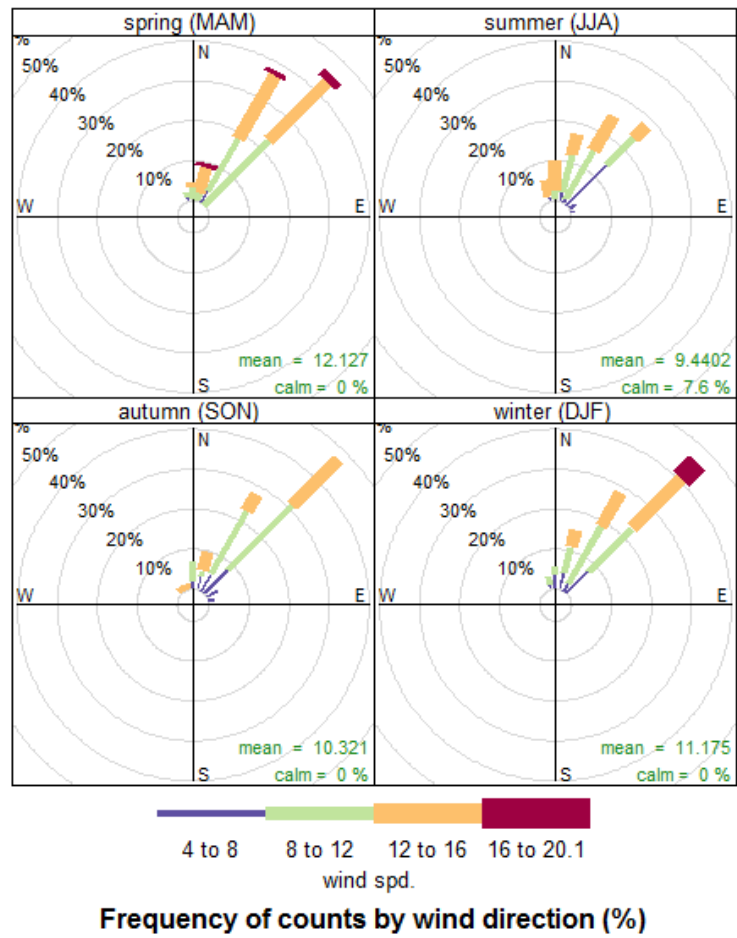


Fig.S.4. Wind direction and speed over the course of our campaign. Note that the values for autumn and winter are from 2015, while for spring and summer they are for 2016.