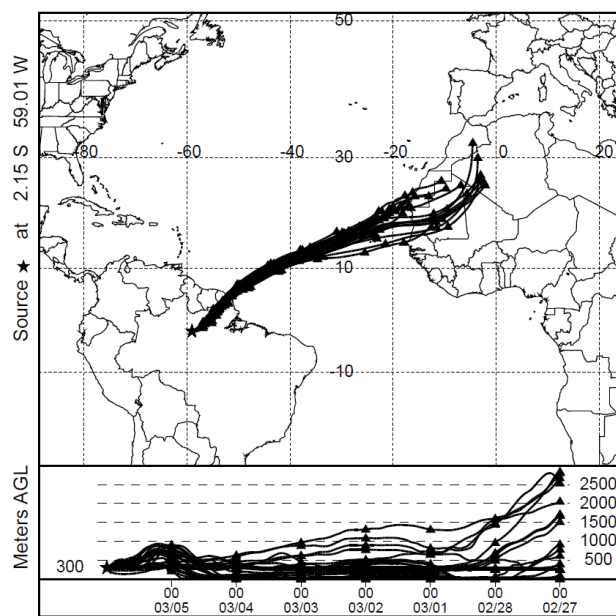**Figure S1: The 7 d HYSPLIT (Stein et al., 2015) backward trajectories starting at 300 m above ground level for the dry season 2018 campaign (left) and 2019 campaign (right).**

5   **Figure S2: The 7 d HYSPLIT backward trajectories starting at 300 m above ground level for the wet seasons 2019 campaign.**
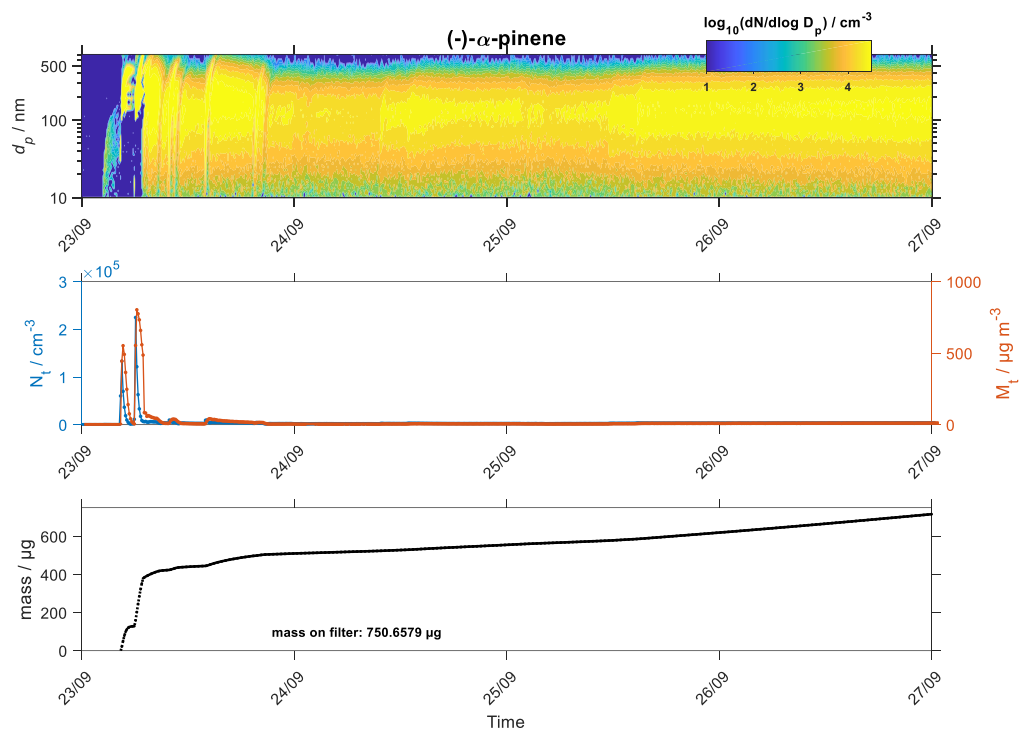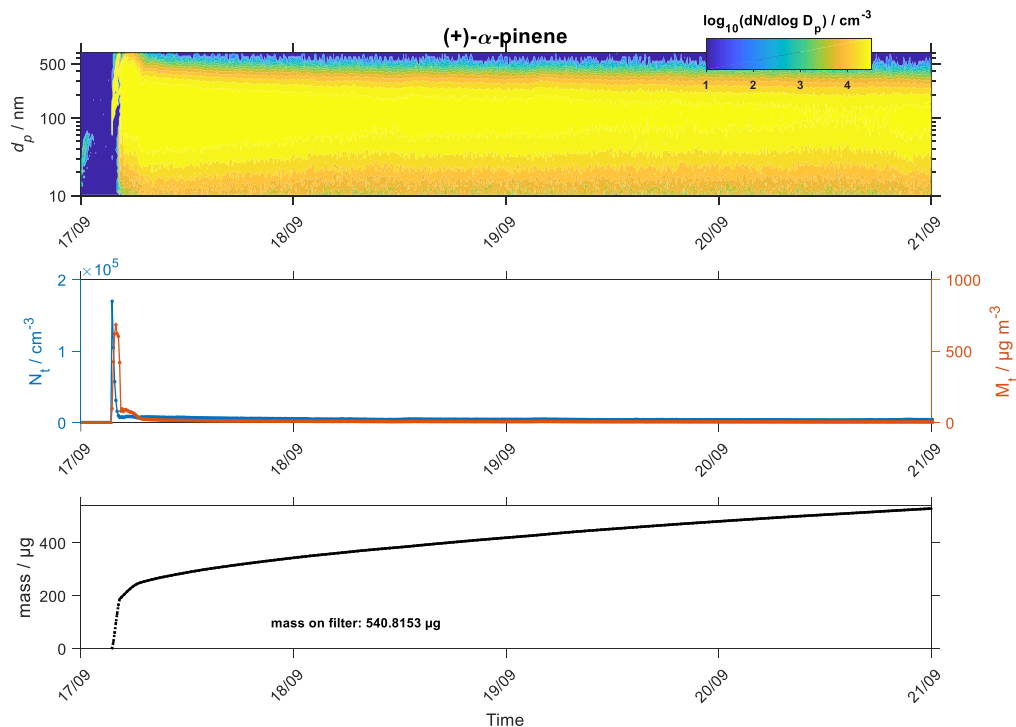
Figure S3: SMPS data of the chamber experiment of (–)-α-pinene and ozone. Additionally, the total particle number (N_t) and total particle mass (M_t) are displayed as well as the collected aerosol mass on the filter.

10   **Figure S4: SMPS data of the chamber experiment of (+)-α-pinene and ozone. Additionally, the total particle number (N_t) and total particle mass (M_t) are displayed as well as the collected aerosol mass on the filter.**
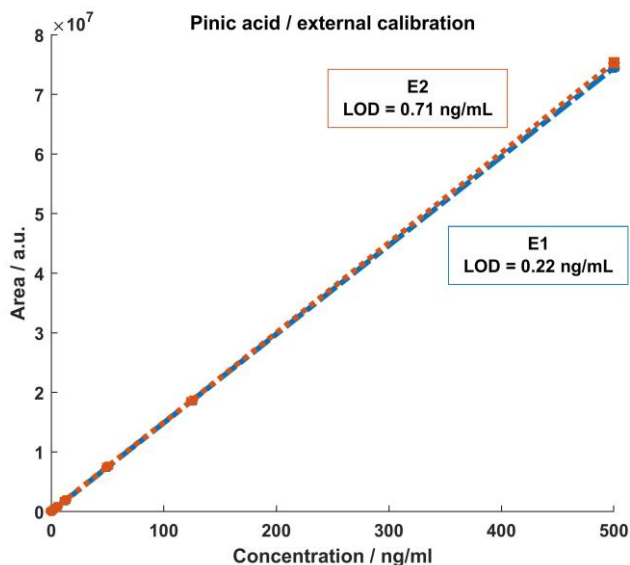

Figure S5: External calibration for the pinic acid enantiomers. Both structures show similar signal areas for increasing standard concentrations. The calculated limit of detection is below 1 ng/ml for both stereoisomers.
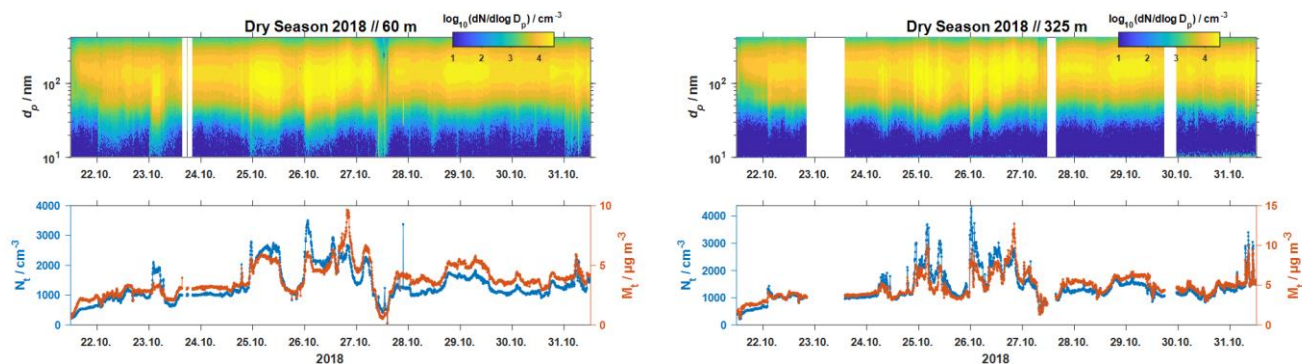
Figure S6: SMPS data for the dry season 2018 at 60 m and 325 m altitude. The calculated total particle numbers and total particle masses are illustrated in the lower panels. The instruments did not work during the 23., 27., and 30.10.2018.
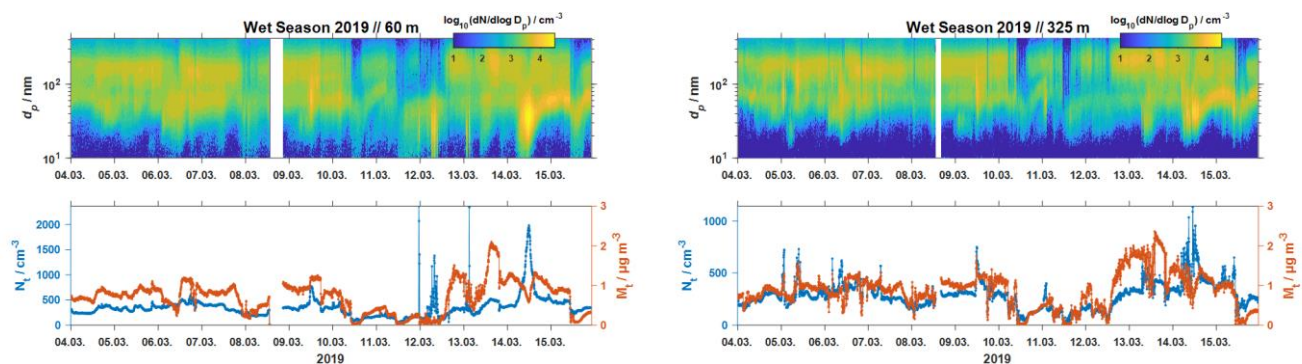
Figure S7: SMPS data for the wet season 2019 at 60 m and 325 m altitude. The calculated total particle numbers and total particle masses are illustrated in the lower panels. The instruments did not work during the 08. and 12.03.2019.
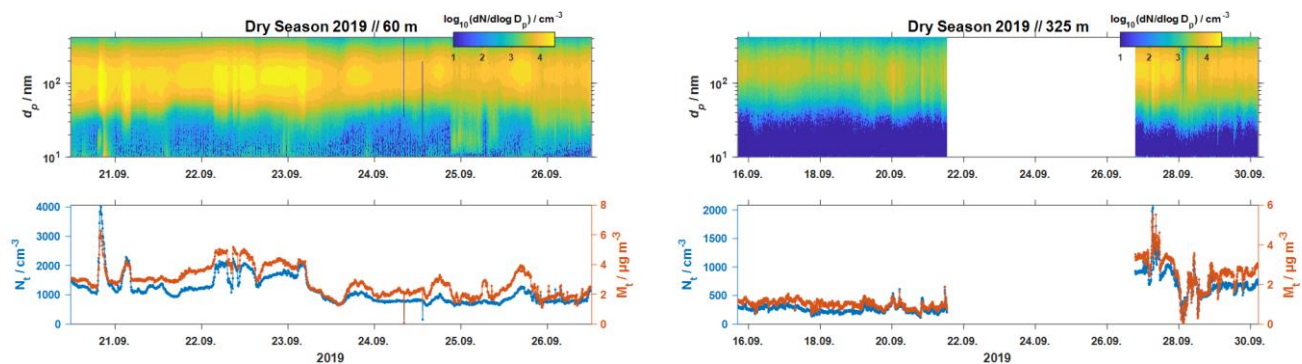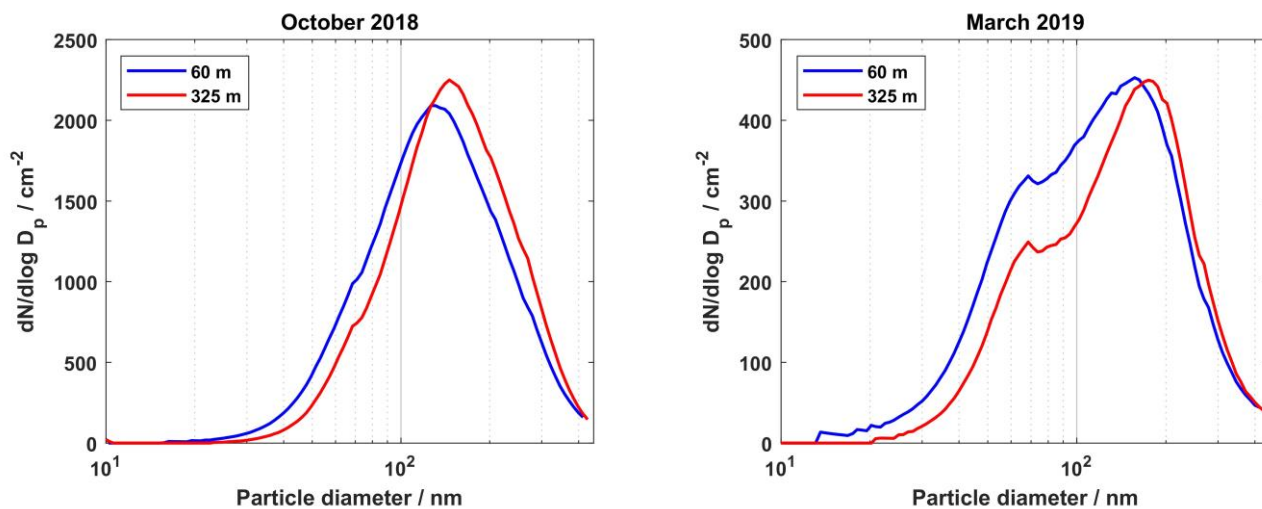

Figure S8: SMPS data for the dry season 2019 at 60 m and 325 m altitude. The calculated total particle numbers and total particle masses are illustrated in the lower panels. The instrument at 325m did not work between the 21.09. and 27.09.2019. Thus, a longer period is displayed.

Figure S9: Typical median particle number size distributions for the dry season (left) and wet season (right). The wet season is characterized by a bimodal distribution with two maxima at roughly 70 nm and 150 nm particle diameter.

References

Stein, A. F., Draxler, R. R., Rolph, G. D., Stunder, B. J. B., Cohen, M. D., and Ngan, F.: NOAA's HYSPLIT Atmospheric Transport and Dispersion Modeling System, Bulletin of the American Meteorological Society, 96, 2059–2077, https://doi.org/10.1175/BAMS-D-14-00110.1, 2015.