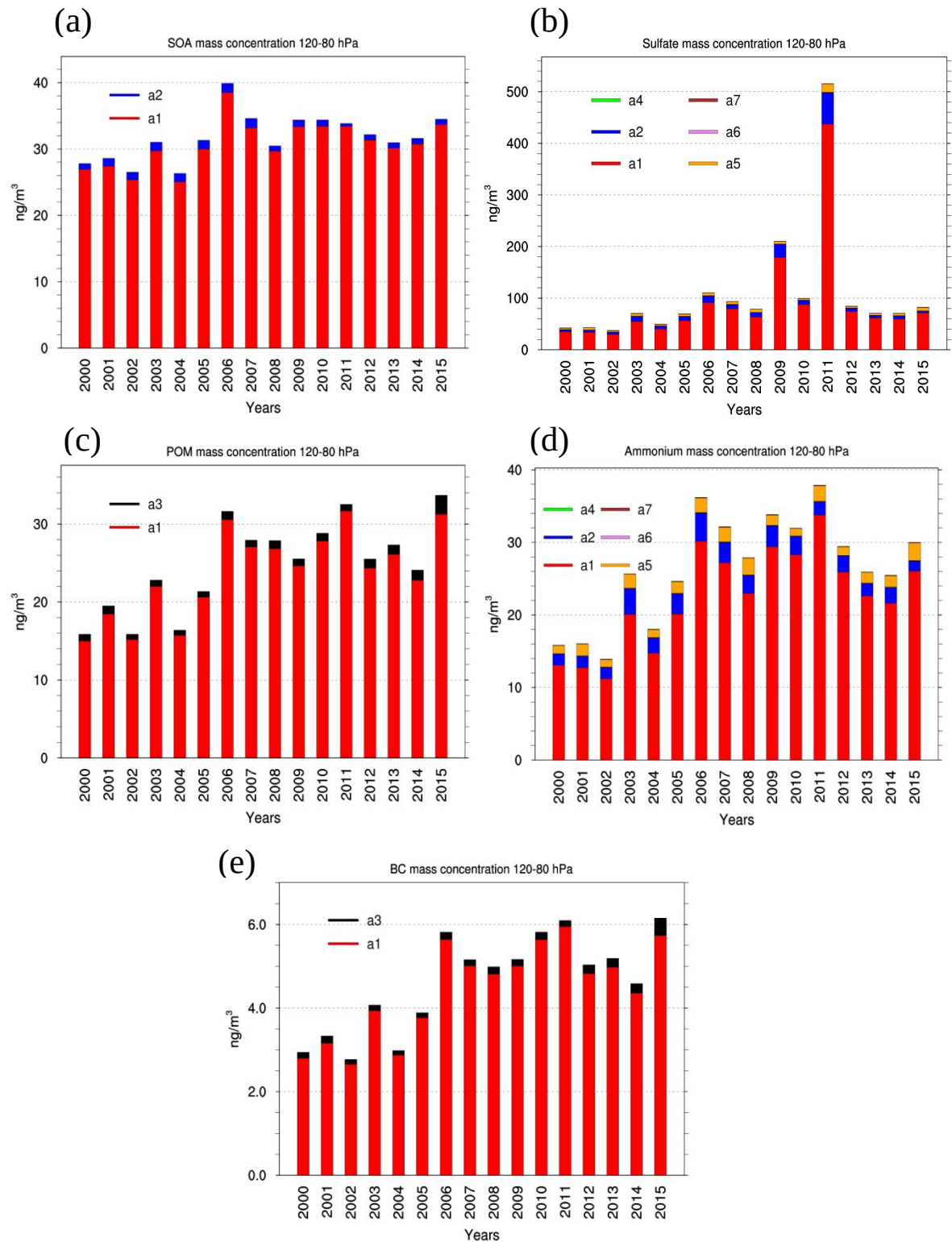
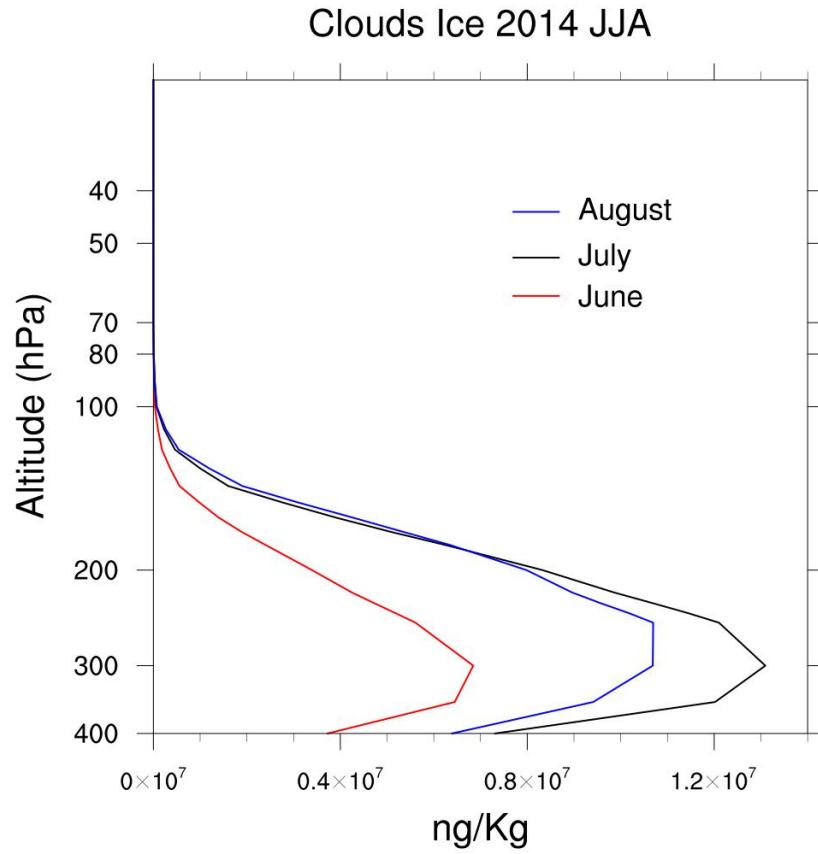


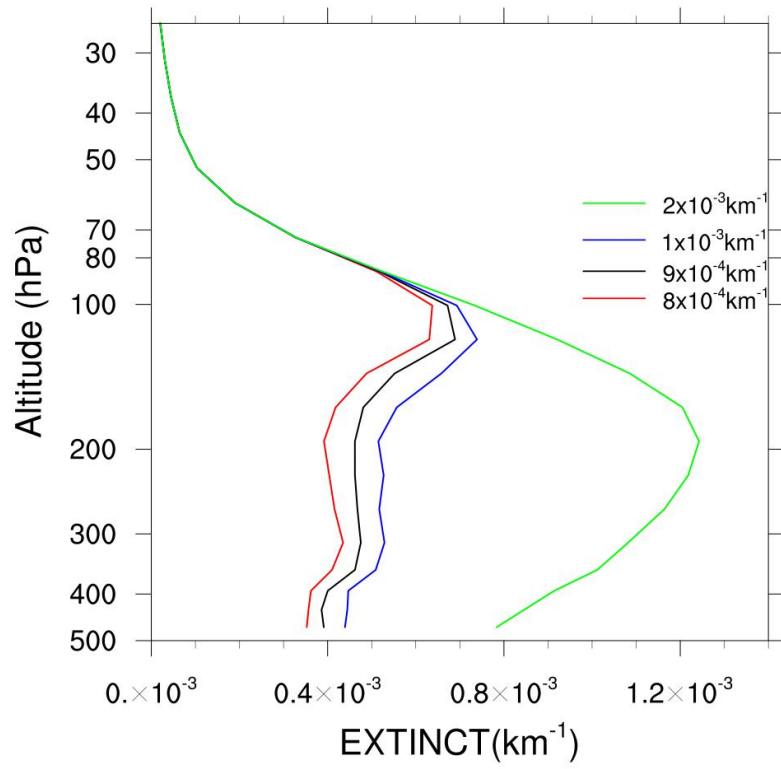
## Supplements



**Figure S1: Evolution of aerosol mass concentration in  $\text{ng/m}^3$  in the different modes, averaged between 20-35 °N, 60-100 °E at 120-80 hPa for July-August: (a) SOA, (b) Sulfate, (c) POM, (d) Ammonium and (e) BC.**



**Figure S2: Vertical profiles of cloud ice fraction averaged for June, July and August 2014 between 20-35 °N and 60-100 °E.**



**Figure S3: Vertical profiles of aerosol extinction coefficient averaged for August 2014 between 20-35 °N and 60-100 °E. The different color lines show the different filter applied for the Extinction coefficient.**