

2021 年 3 月 4 日

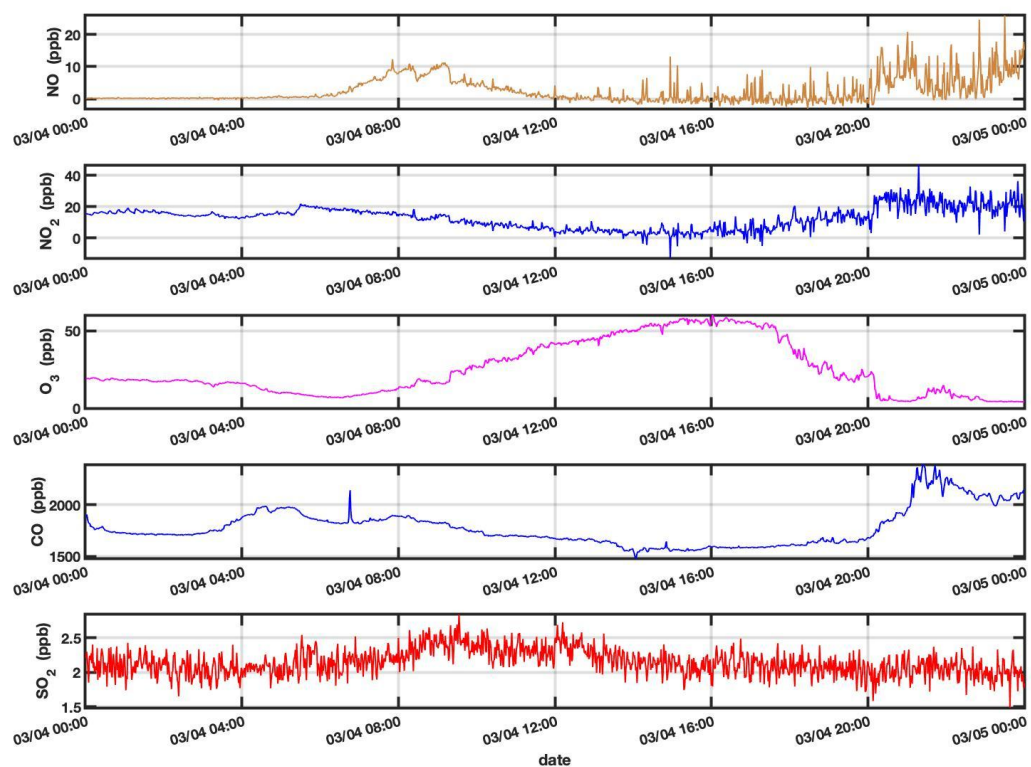
NUIST 站点

大气-气溶胶-边界层-云综合观测实验日报

注：以下观测结果均为观测数据初步处理结果，仅做参考，不能代表最终观测结果。对观测感兴趣者，可联系：王玉莹

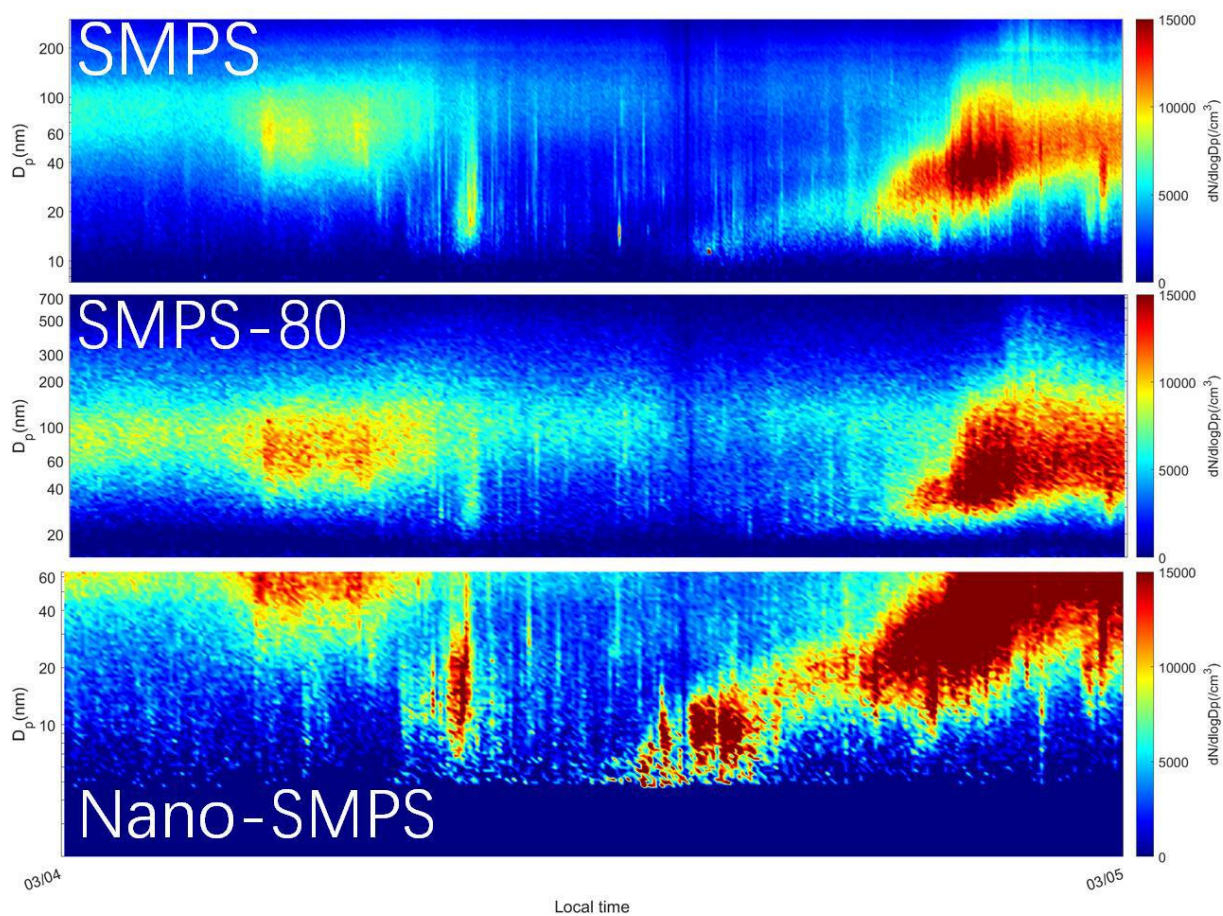
(yuyingwang@nuist.edu.cn)

1. 污染气体测量结果



作图：杨子谦

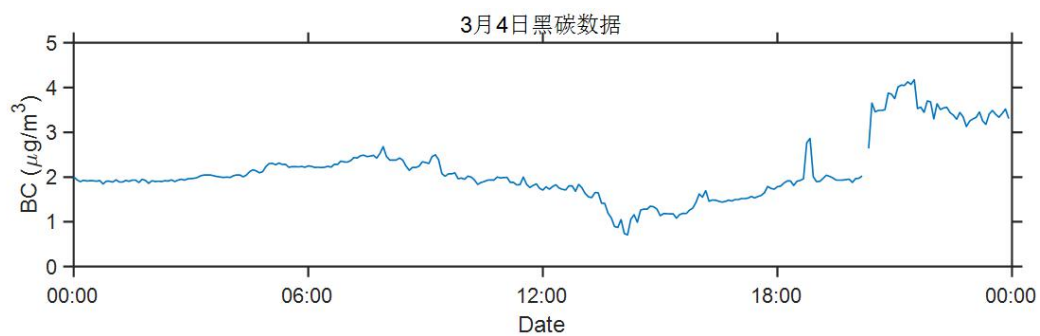
2. 气溶胶数浓度粒子谱分布测量结果



作图：陈曦

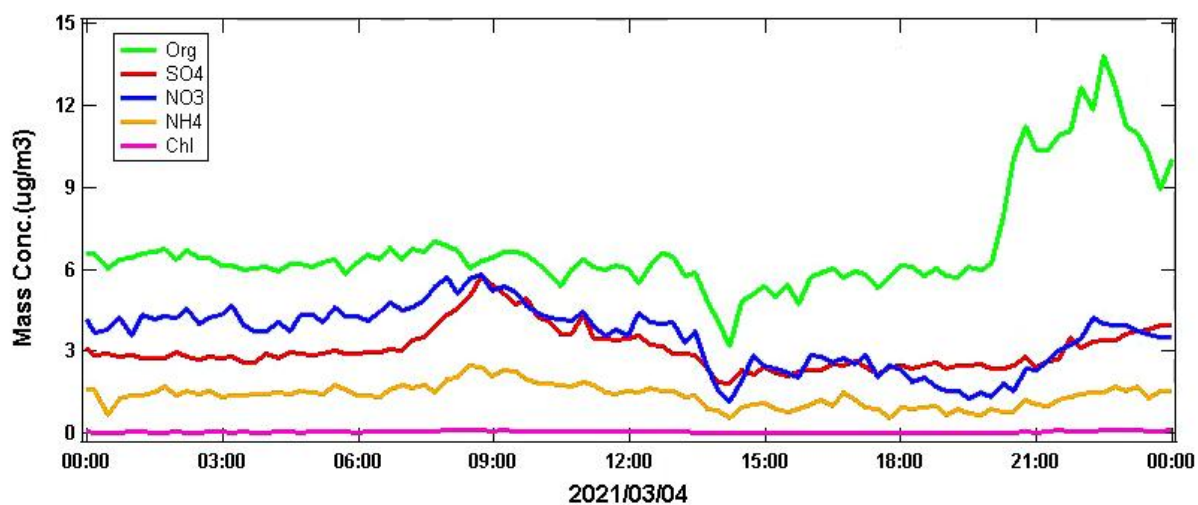
3. 气溶胶化学组分测量结果

AE-33:



作图：许嘉璐

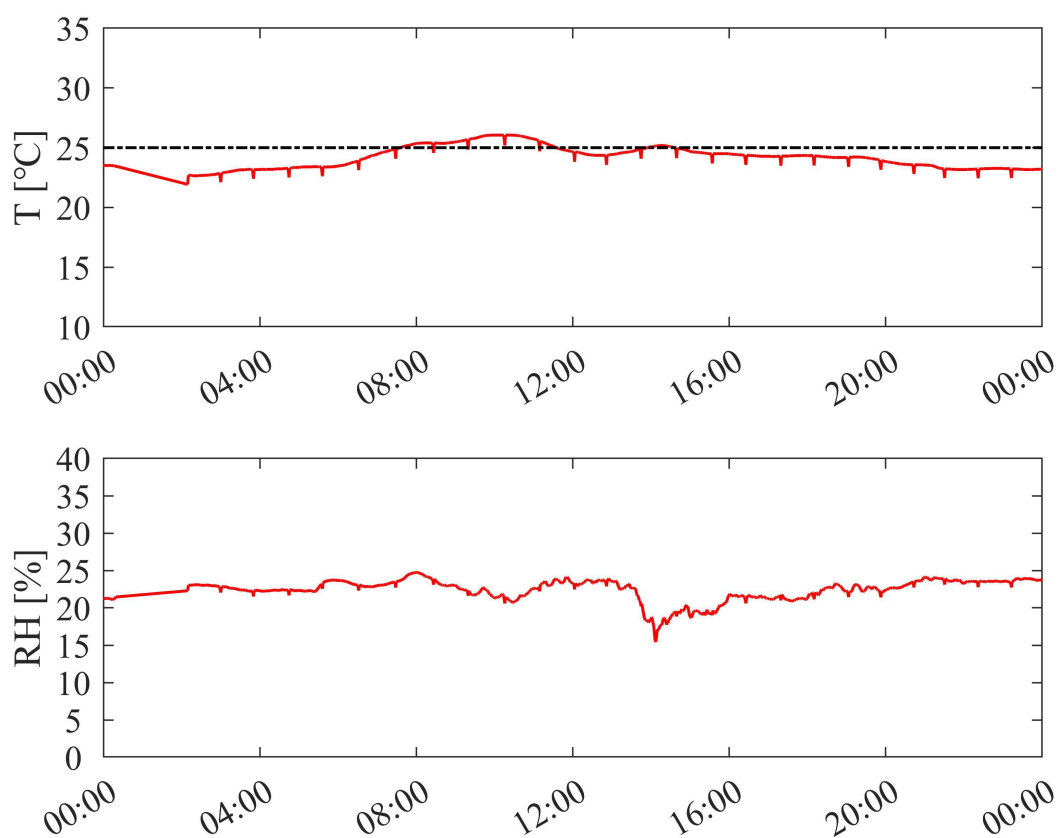
ACSM:



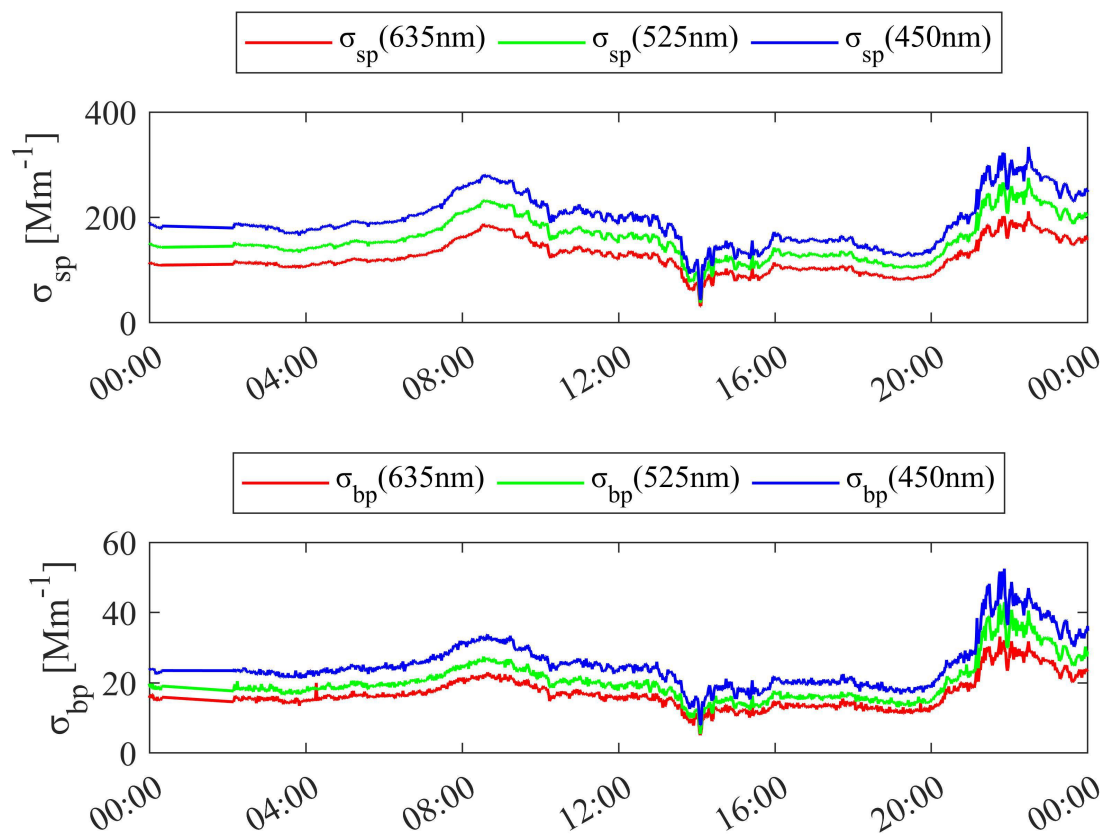
作图：曾思琪

4. 双浊度仪

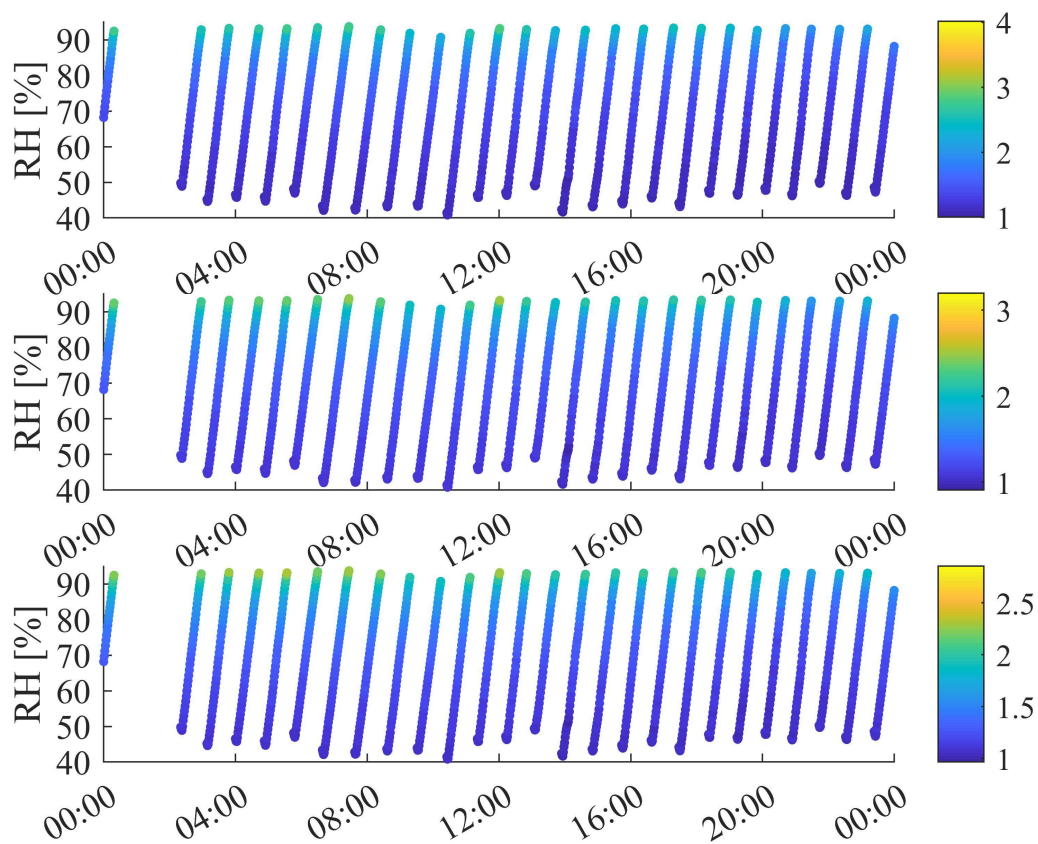
4.1 样气温湿控制



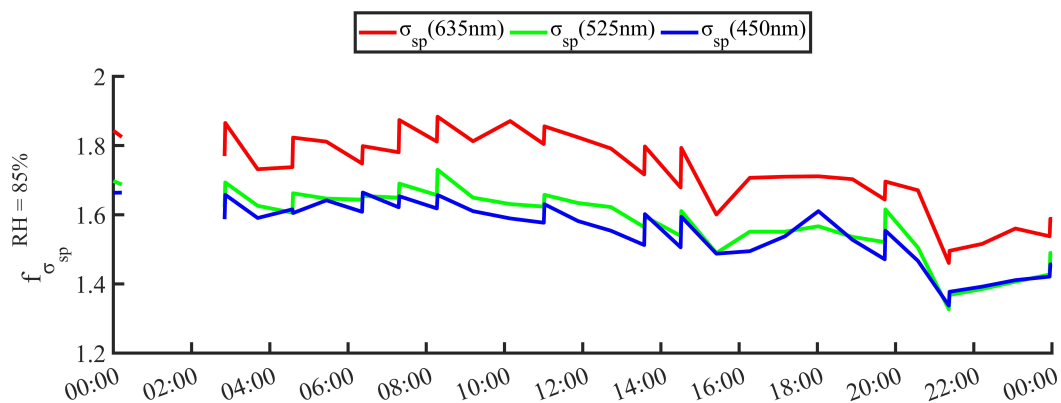
4.2 散射系数及后向散射系数



4.3 气溶胶散射系数吸湿性增强因子



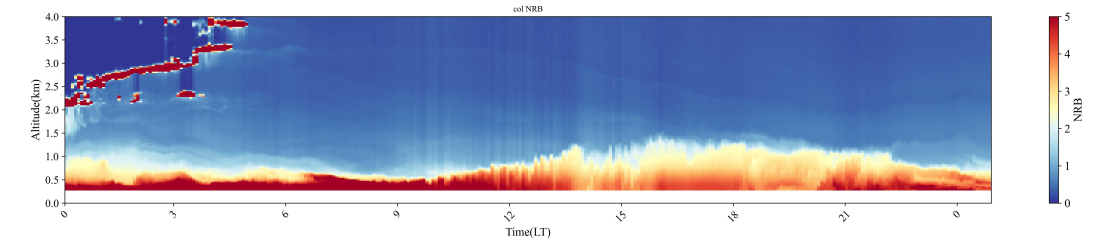
4.4 气溶胶散射系数吸湿性增强因子 (RH=85%)



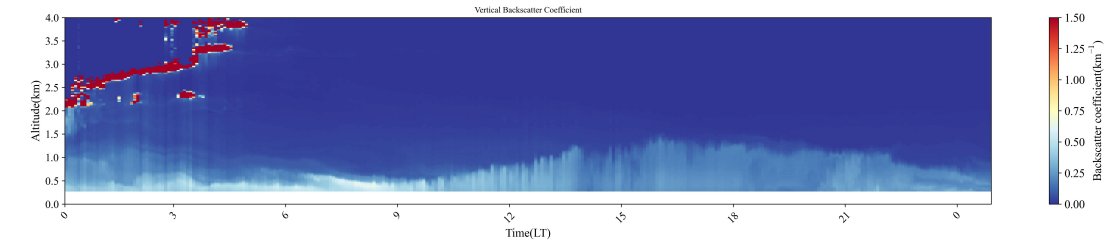
作图：胡嵘

5. 微脉冲激光雷达 (MPL)

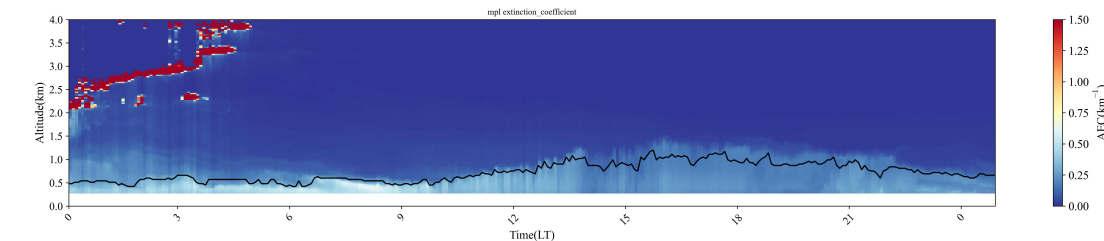
(1) NRB



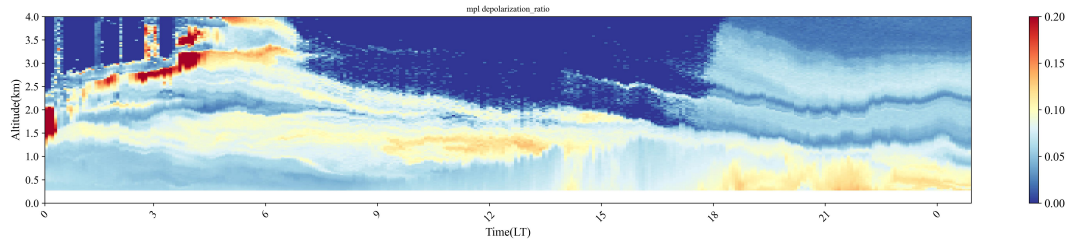
(2) 后向散射系数



(3) 消光系数与边界层高度

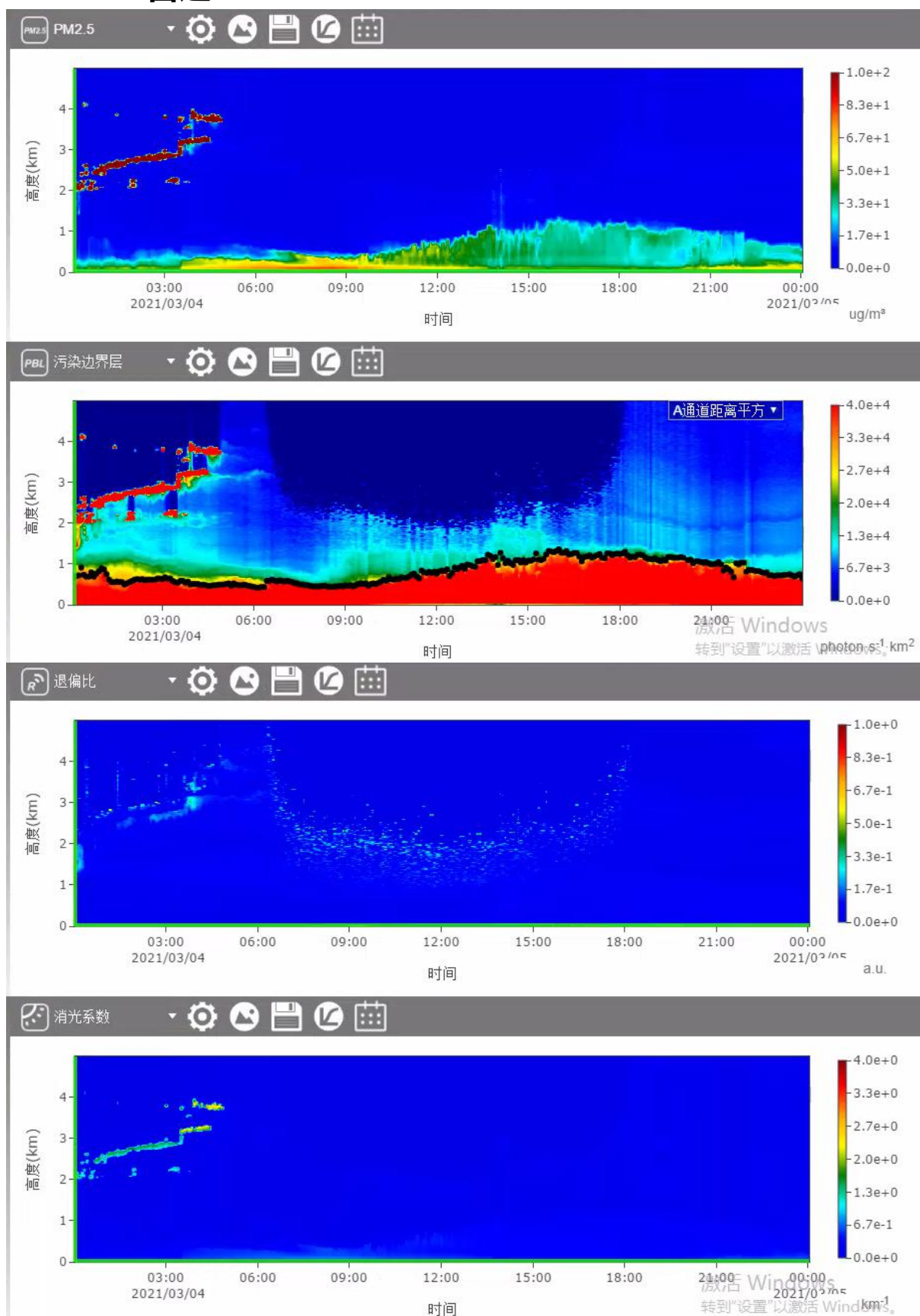


(4) 退偏振比



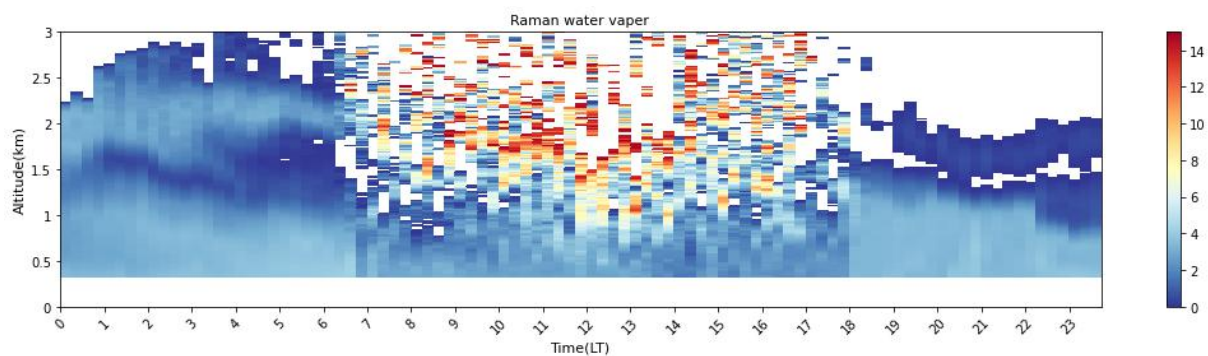
作图：黄鑫

6. 3D 雷达



作图：黄鑫

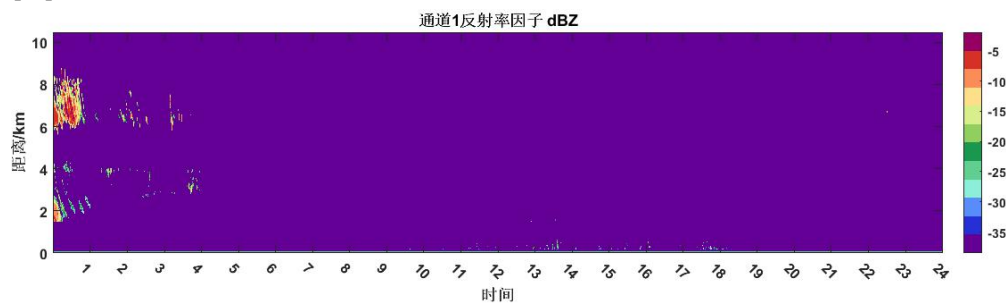
7. 拉曼激光雷达水汽图



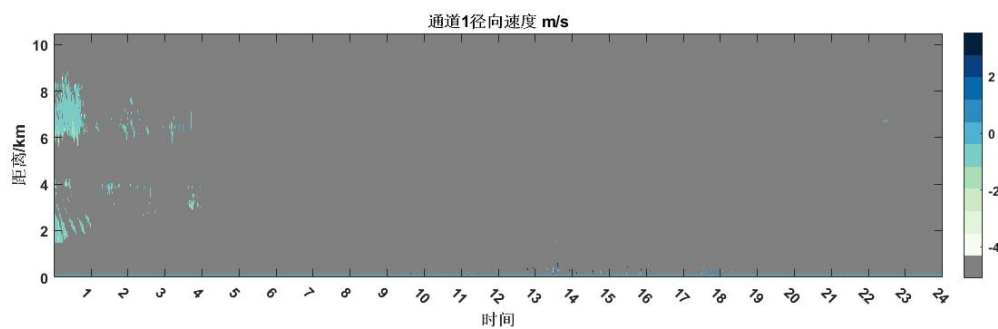
作图：黄鑫

8. 云雷达：

(1) 反射率因子



(2) 径向速度

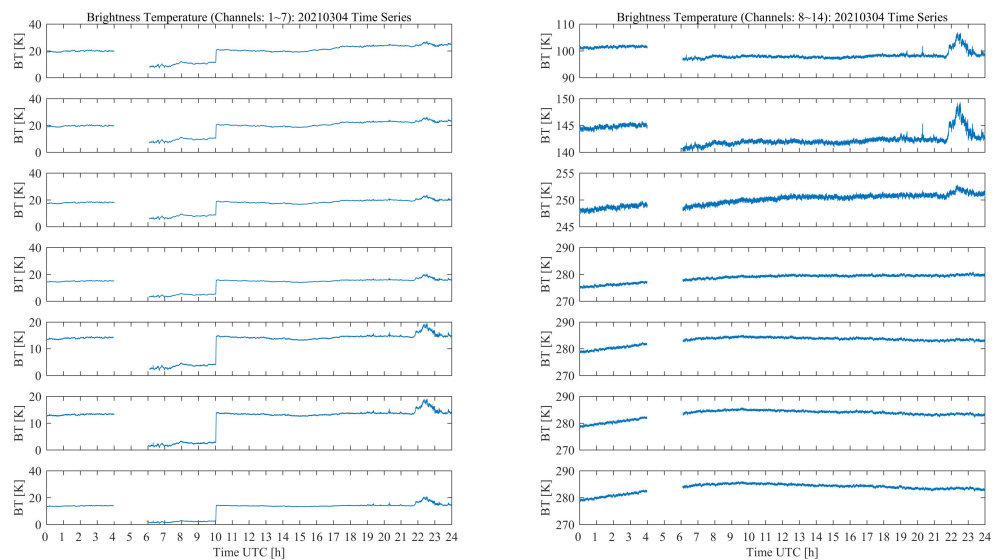


作图：吴懿璇

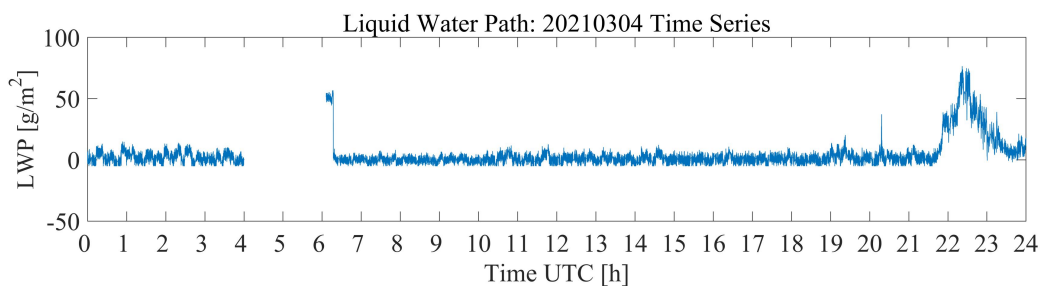
9. 微波辐射计

北京时间 3 月 4 日中午 13 点天气晴朗，相对湿度 44%，进行了一次定标。王晔说 k 波段效果不理想。

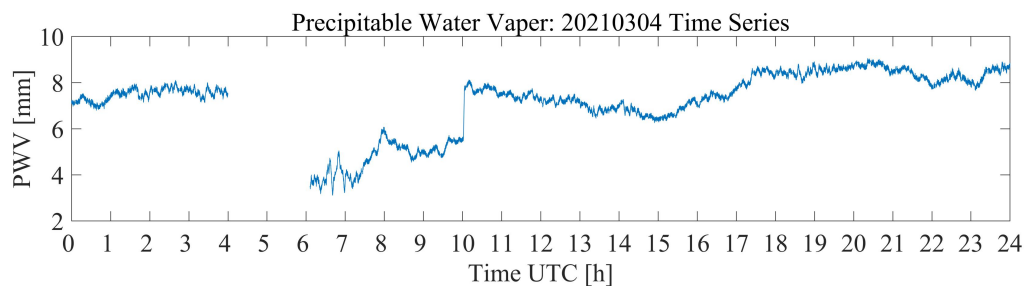
(1) 亮温 (14 通道) 时序:



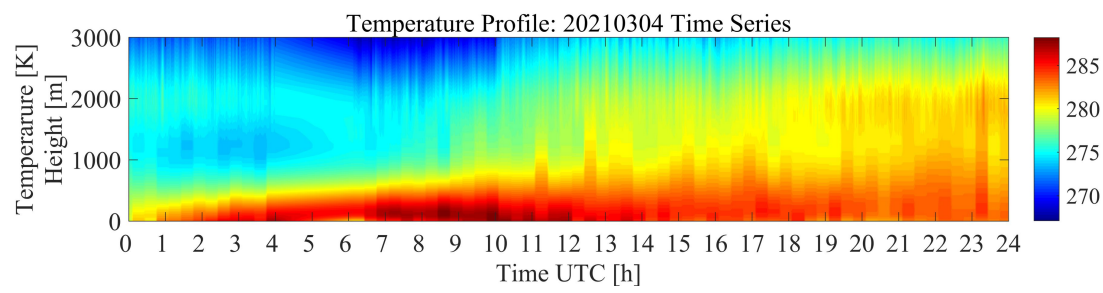
(2) 液水路径时序:



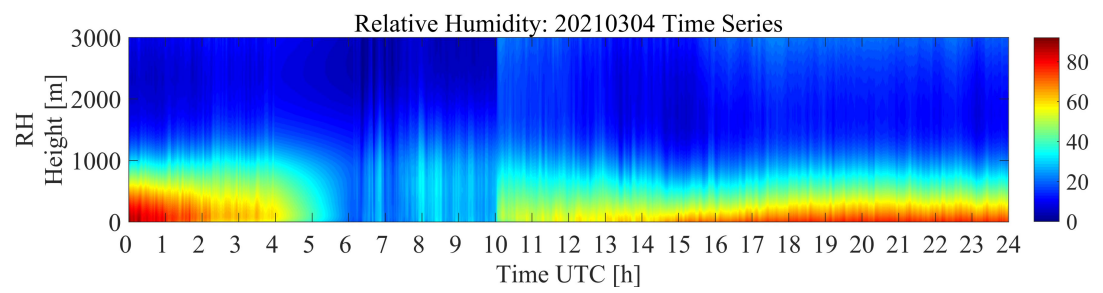
(3) 可降水量时序:



(4) 边界层温度廓线时序:



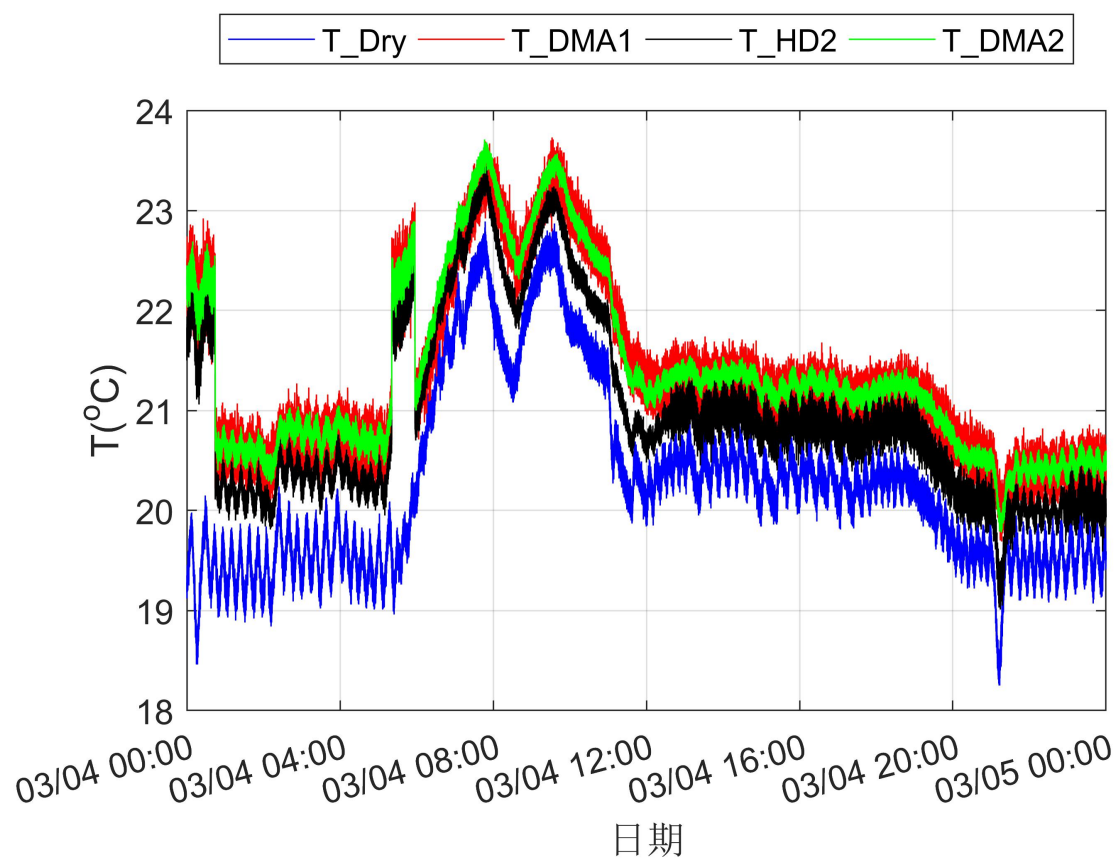
(5) 边界层相对湿度廓线时序:



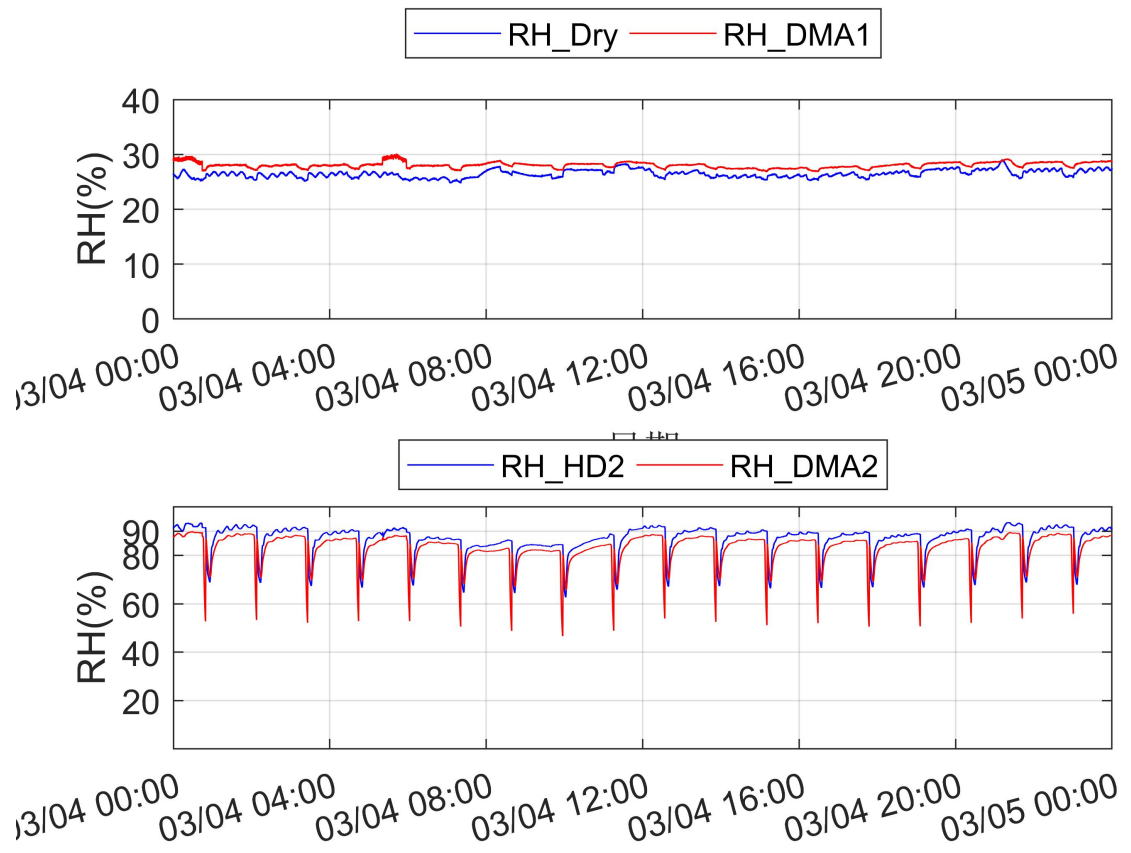
作图: 赏益

10. 气溶胶加湿迁移差分分析仪

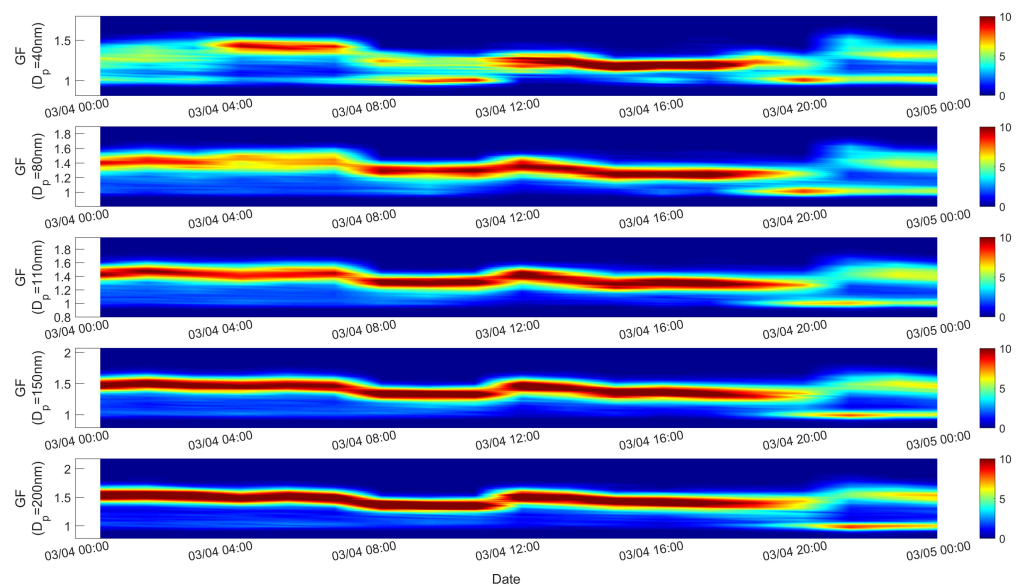
(1) 仪器温度控制



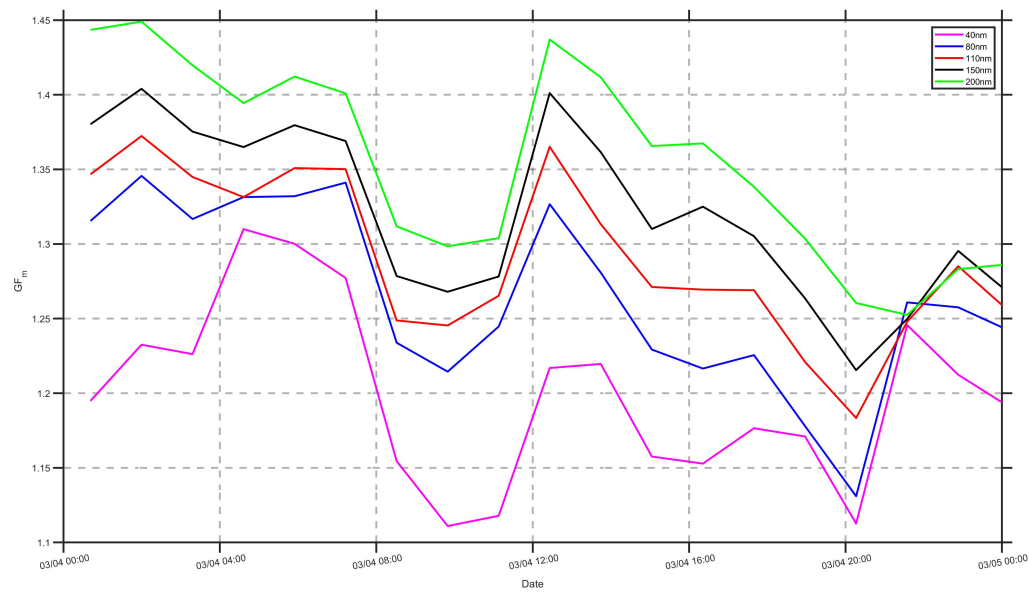
(2) 仪器湿度控制



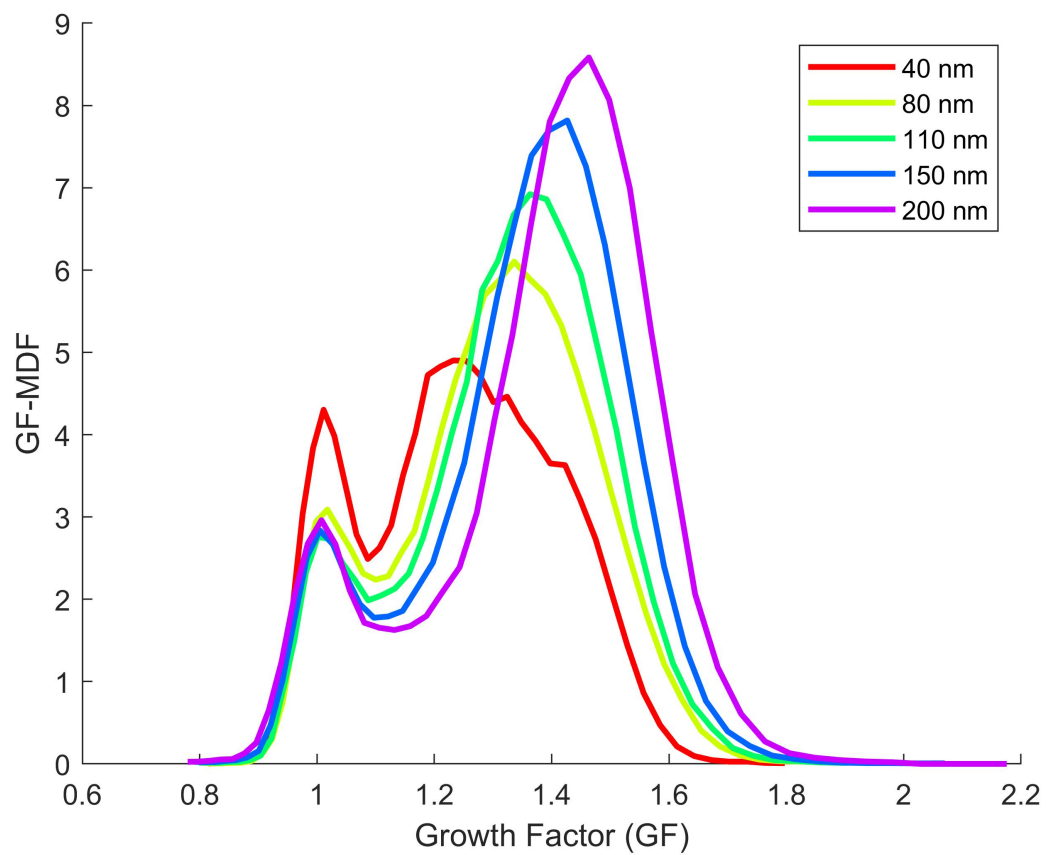
(3) 吸湿性生长因子测量谱分布



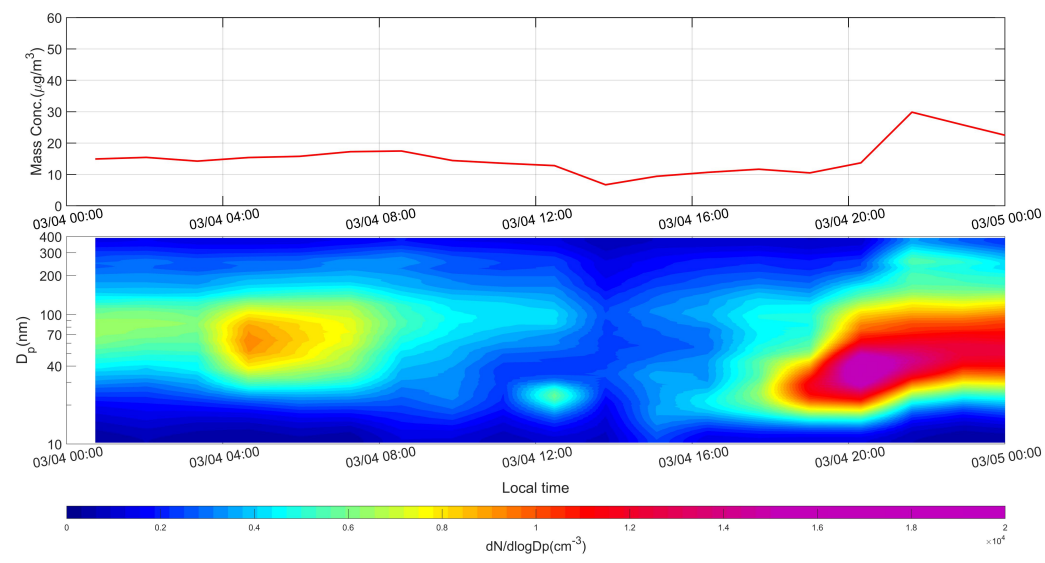
(4) 谱平均吸湿性生长因子



(5) 时间平均吸湿性生长因子



(6) 气溶胶数浓度粒子谱分布



作图：胡嵘