

**2021 年 3 月 7 日**

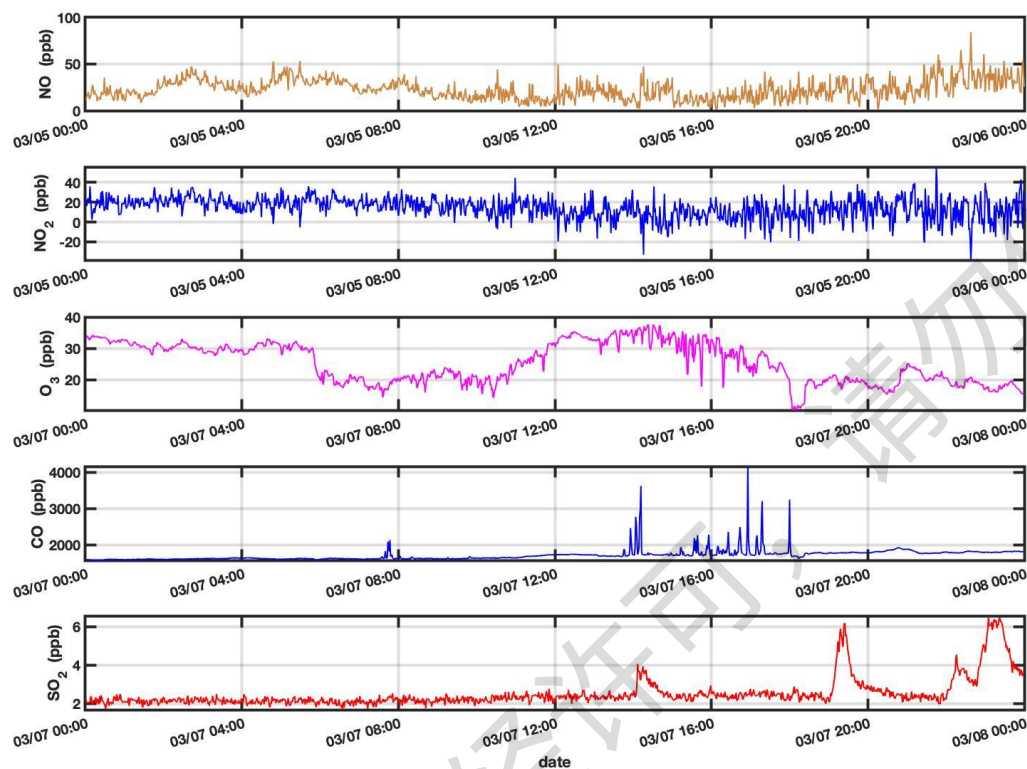
**NUIST 站点**

## **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](mailto:yuyingwang@nuist.edu.cn))

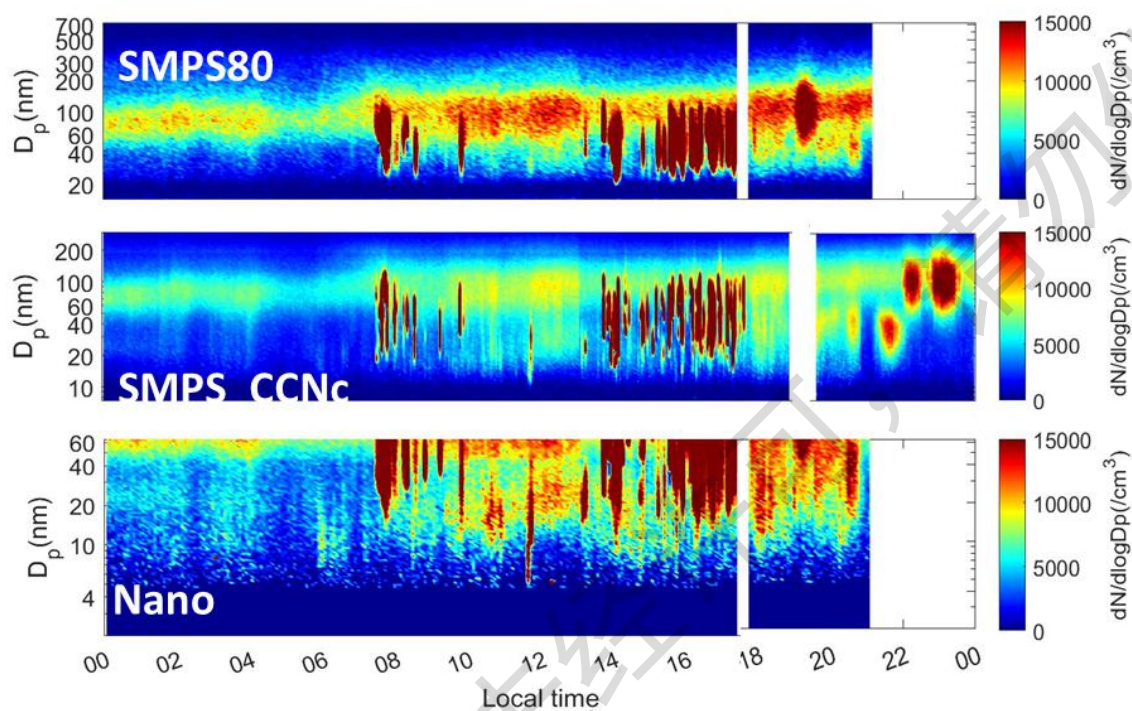
## 1. 污染气体测量结果



作图：杨子谦

## 2. 气溶胶数浓度粒子谱分布测量结果

### APS故障



SMPS80 和 nano 由于在 21:00 左右电脑重启，所以缺失部分数据

作图：高颖

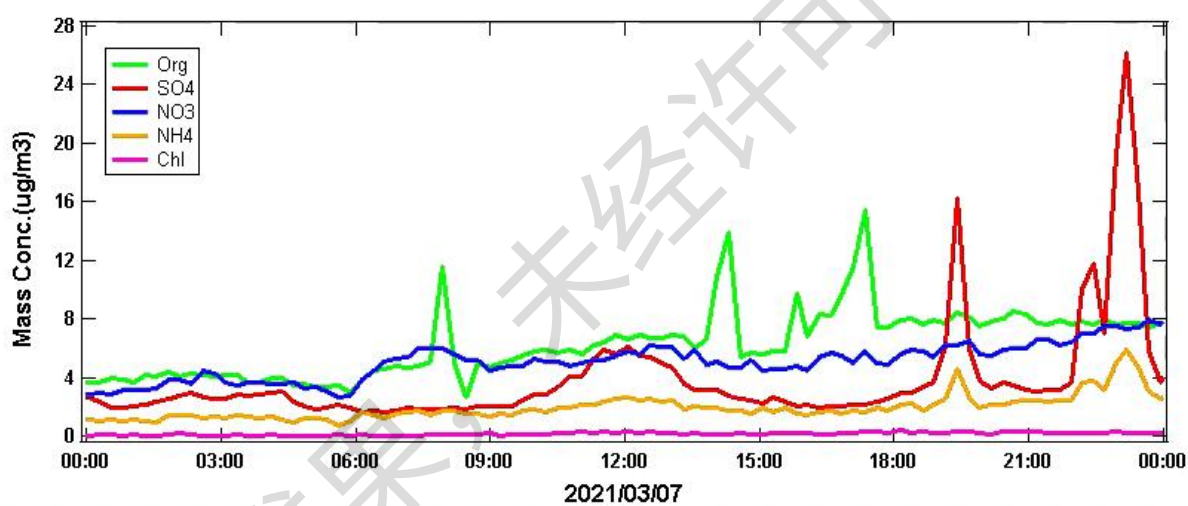
### 3. 气溶胶化学组分测量结果

**AE-33:**



作图：许嘉璐

**ACSM:**

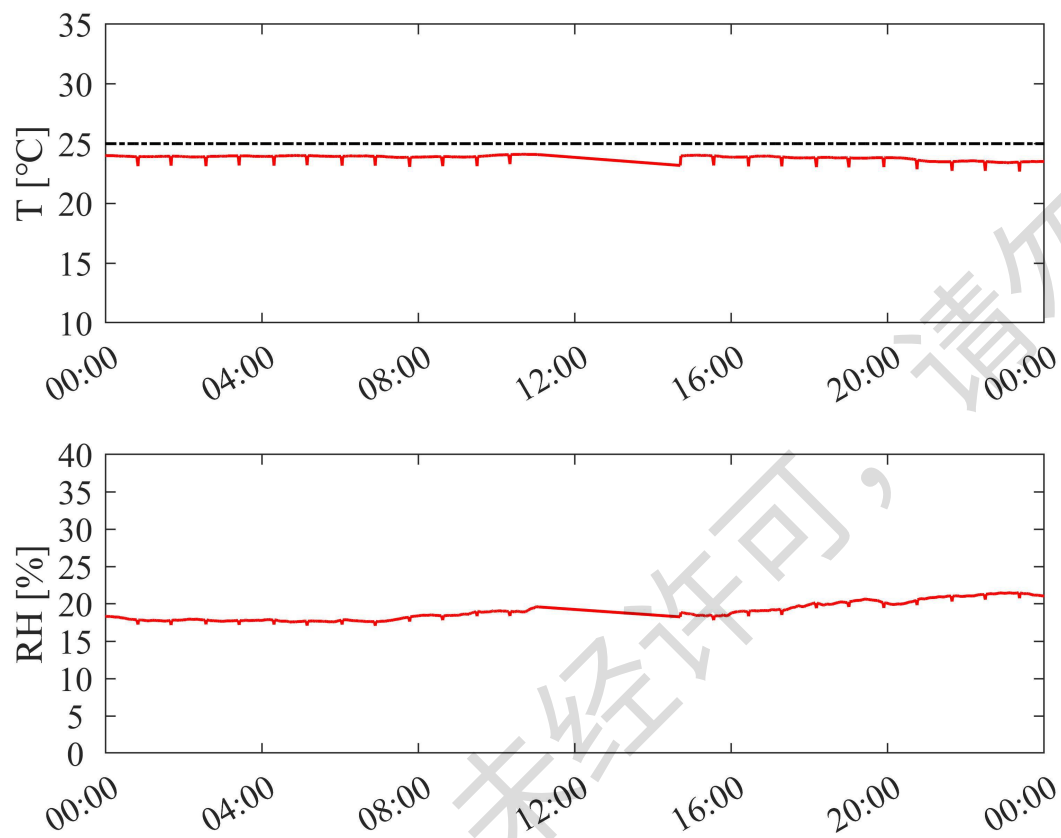


作图：曾思琪

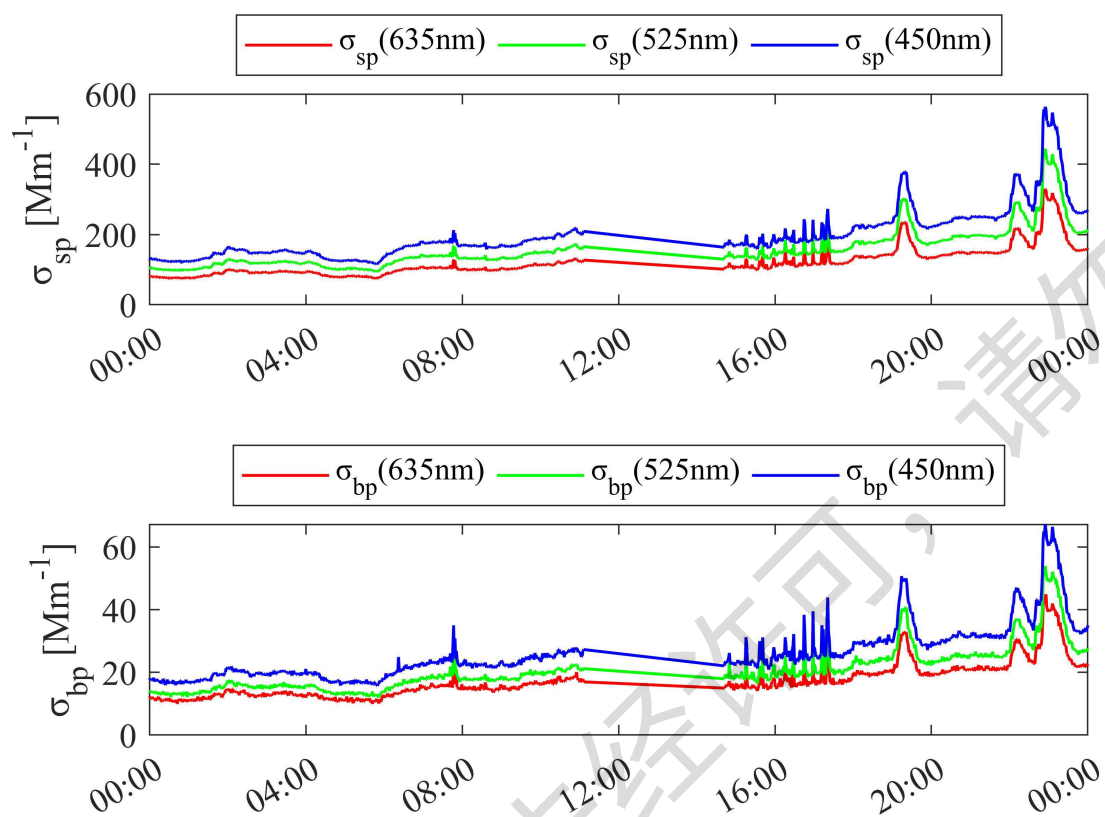


## 4. 双浊度仪

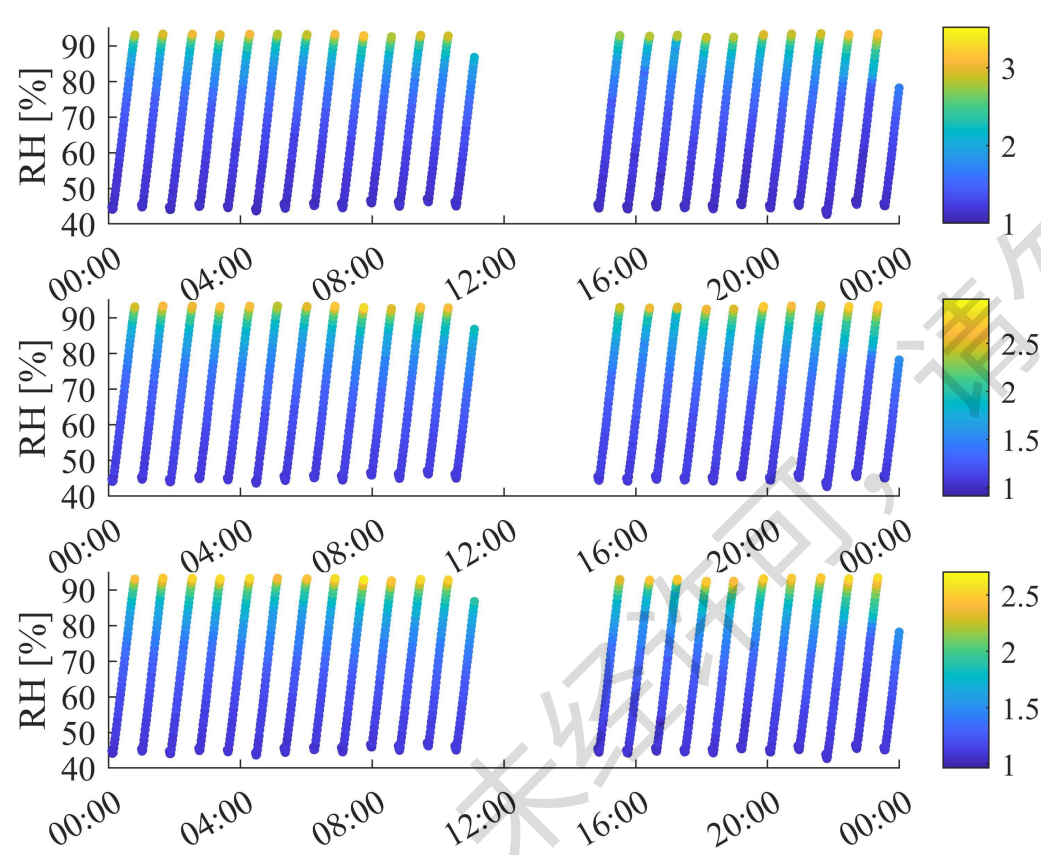
### 4.1 样气温湿控制



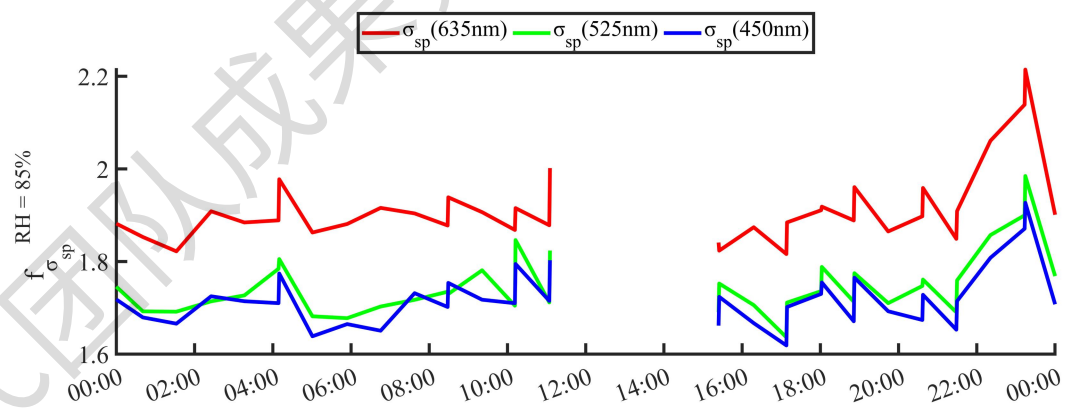
## 4.2 散射系数及后向散射系数



4.3 气溶胶散射系数吸湿性增强因子



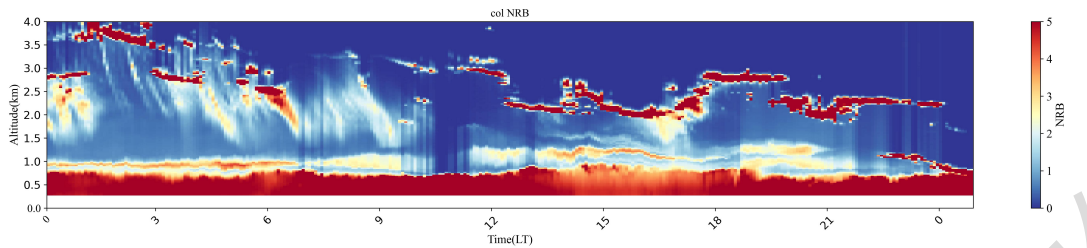
4.4 气溶胶散射系数吸湿性增强因子 (RH=85%)



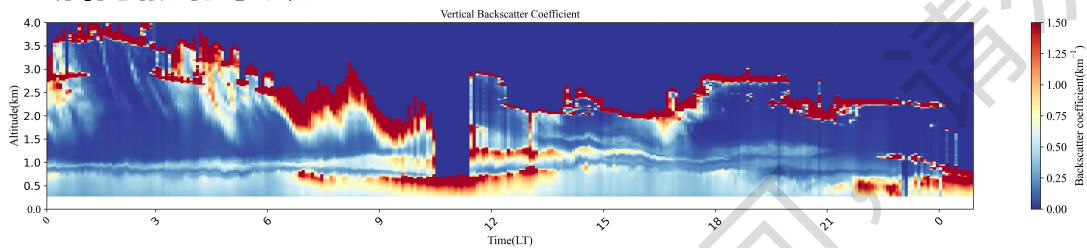
作图：胡嵘

# 5. 微脉冲激光雷达 (MPL)

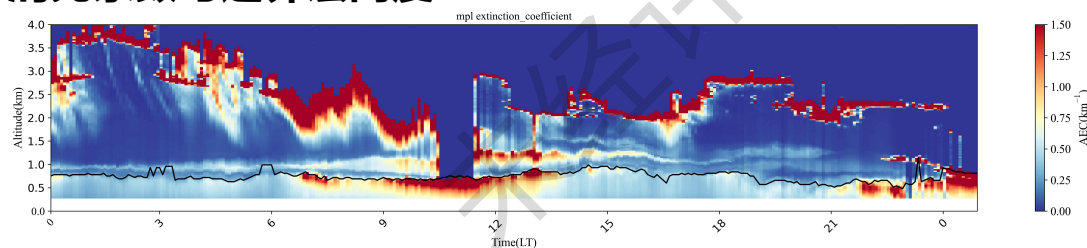
## (1) NRB



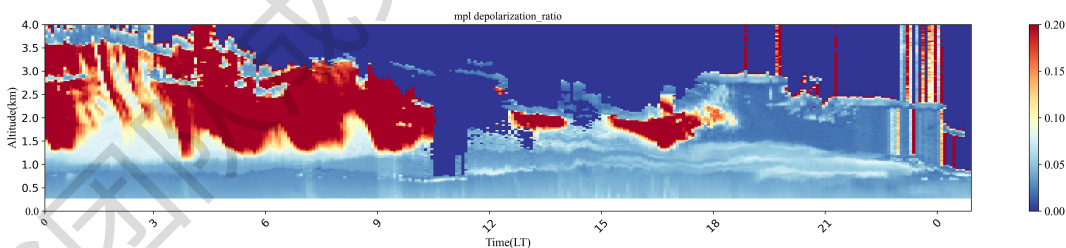
## (2) 后向散射系数



## (3) 消光系数与边界层高度

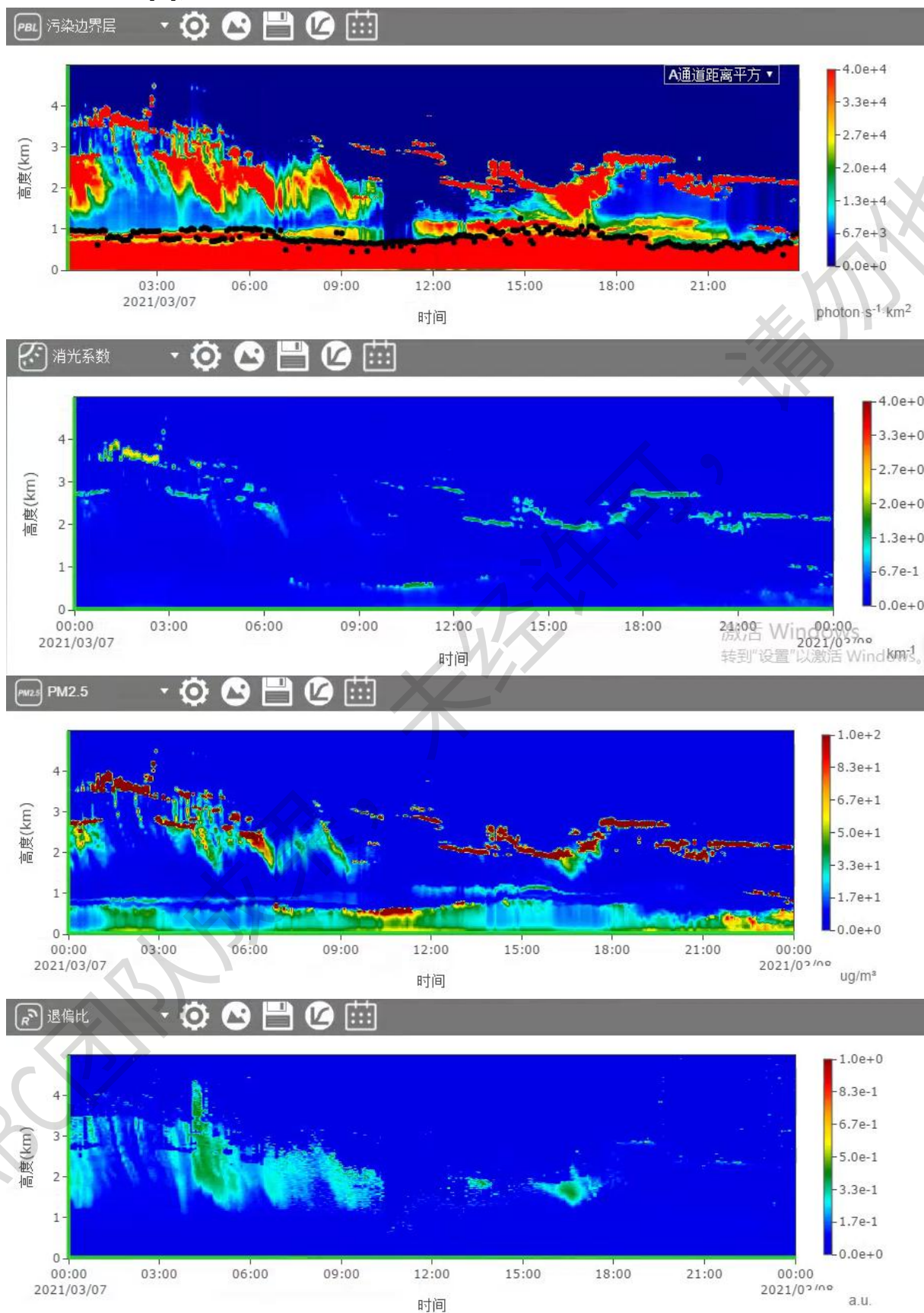


## (4) 退偏振比



作图：张寒

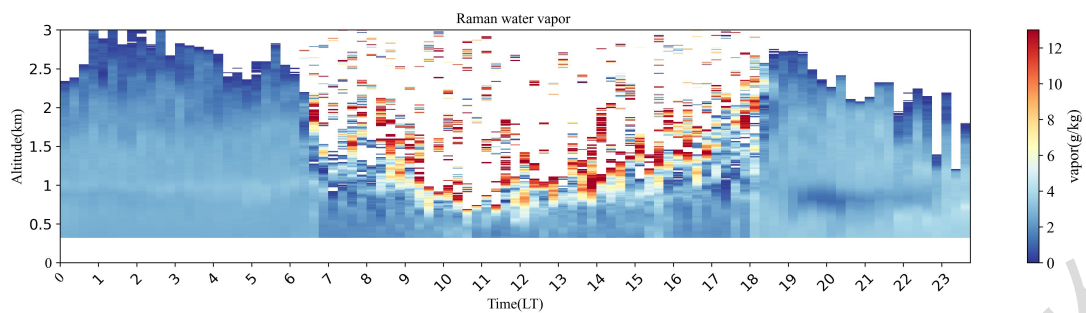
## 6. 3D 雷达



作图：张寒



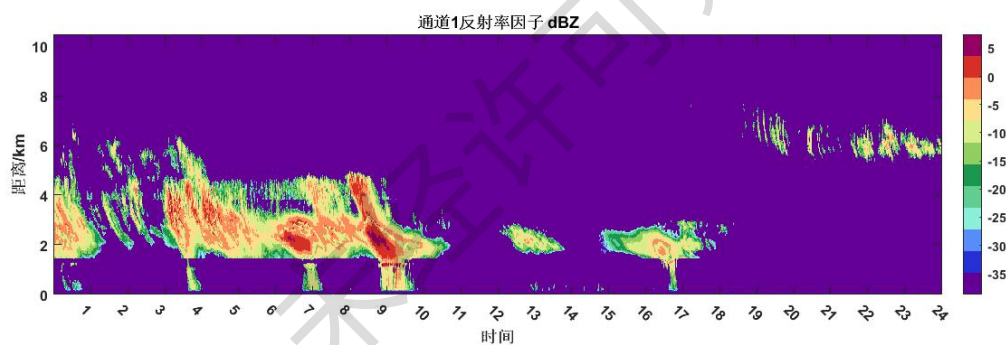
## 7. 拉曼激光雷达水汽图



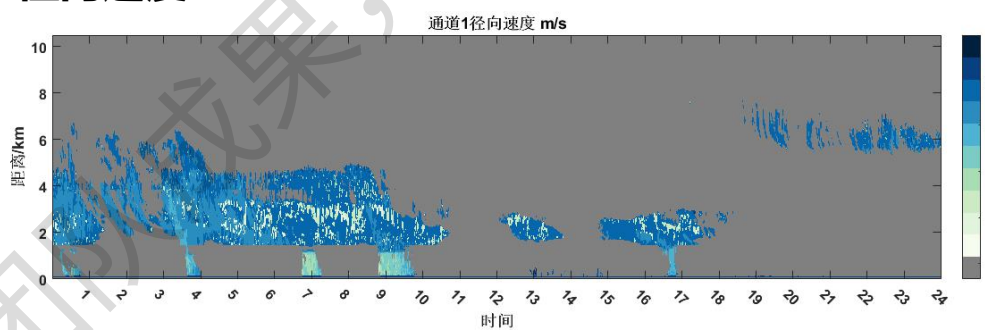
作图：张寒

## 8. 云雷达：

### (1) 反射率因子



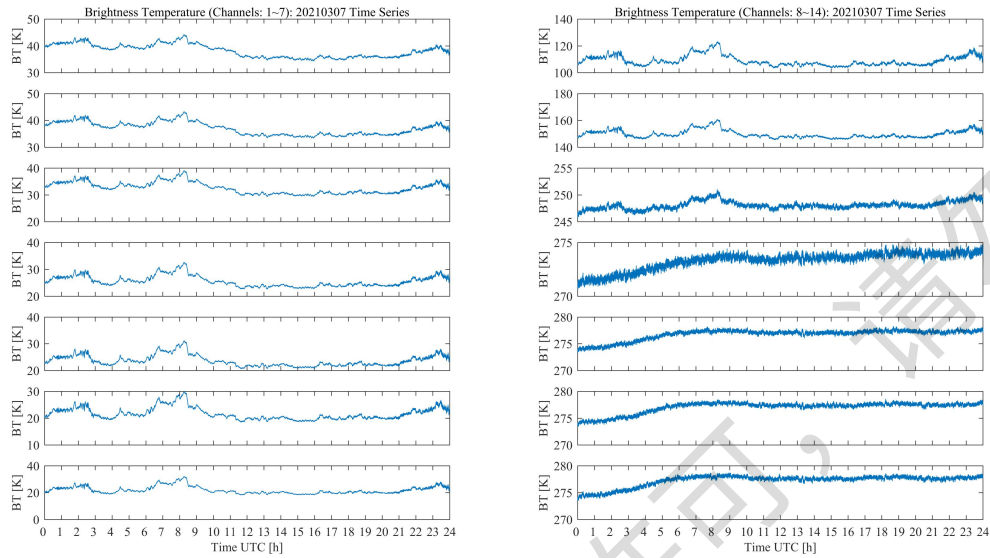
### (2) 径向速度



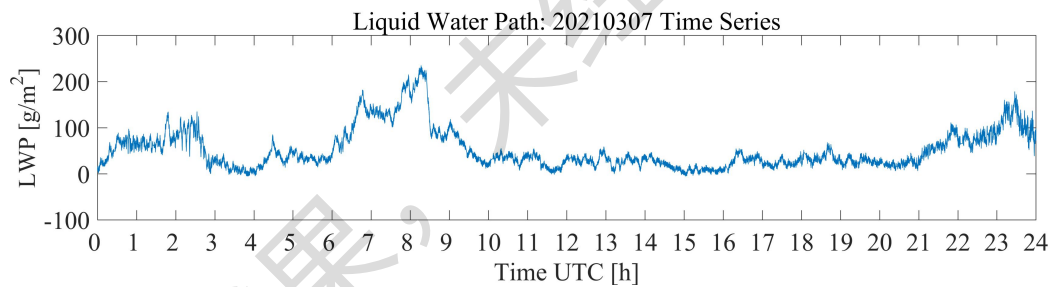
作图：吴懿璇

## 9. 微波辐射计

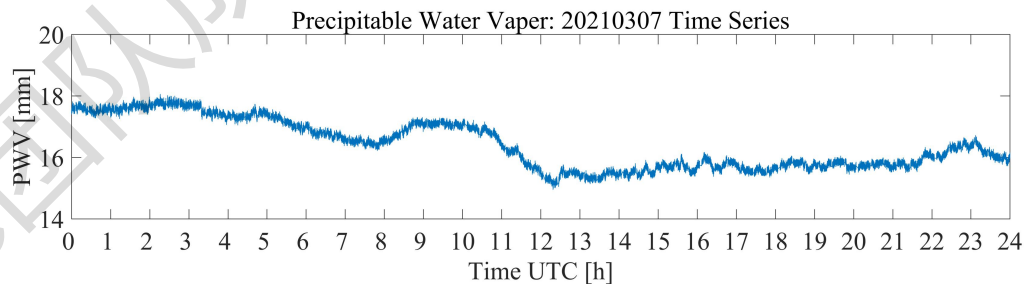
### (1) 亮温（14 通道）时序：



### (2) 液水路径时序：

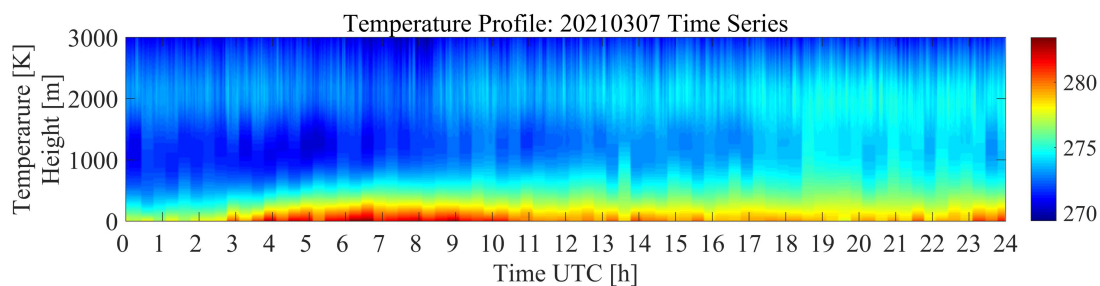


### (3) 可降水量时序：

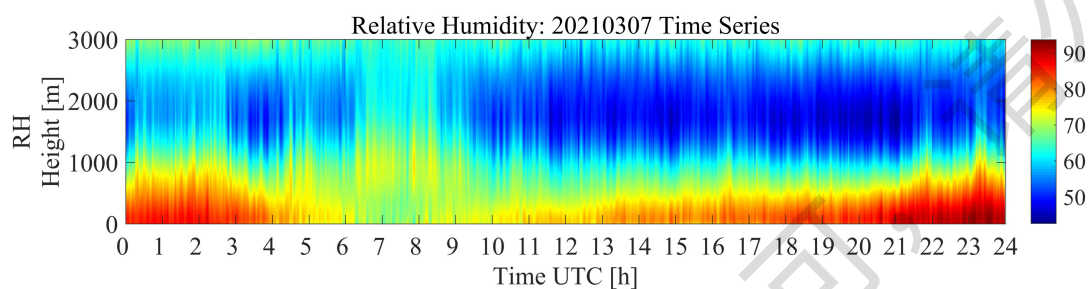




#### (4) 边界层温度廓线时序:



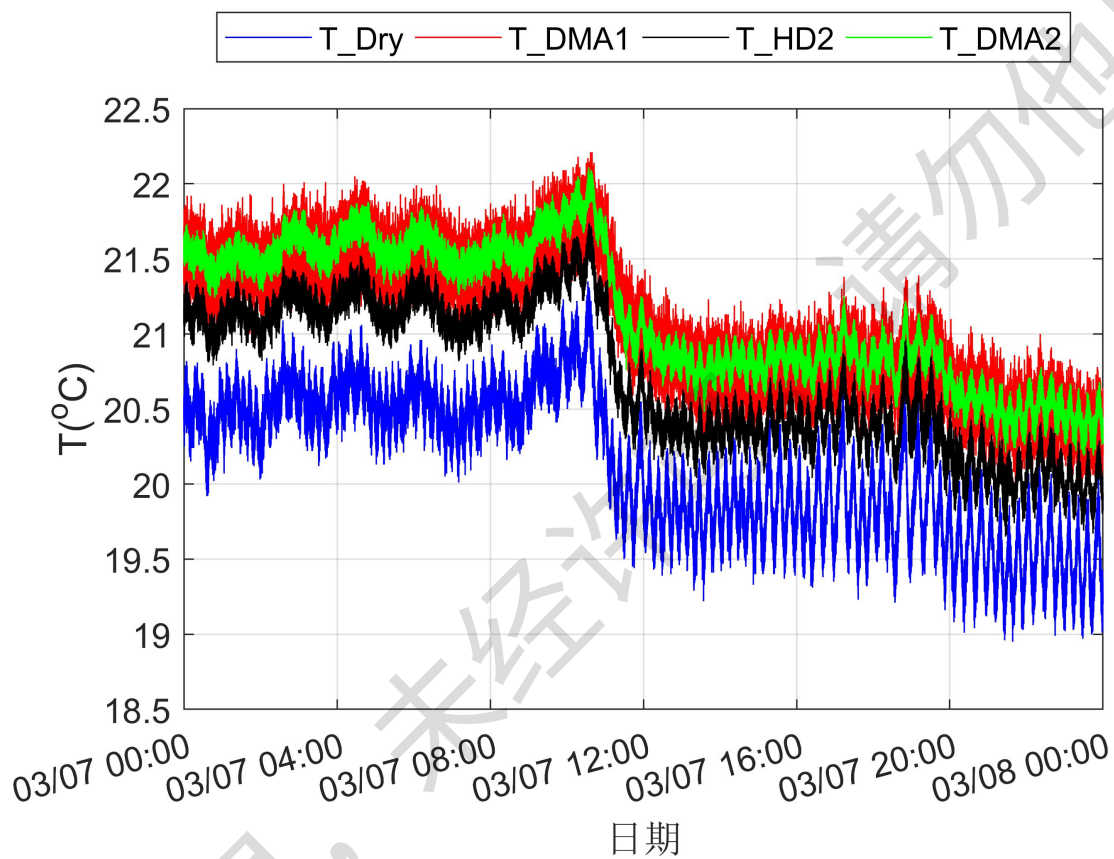
#### (5) 边界层相对湿度廓线时序:



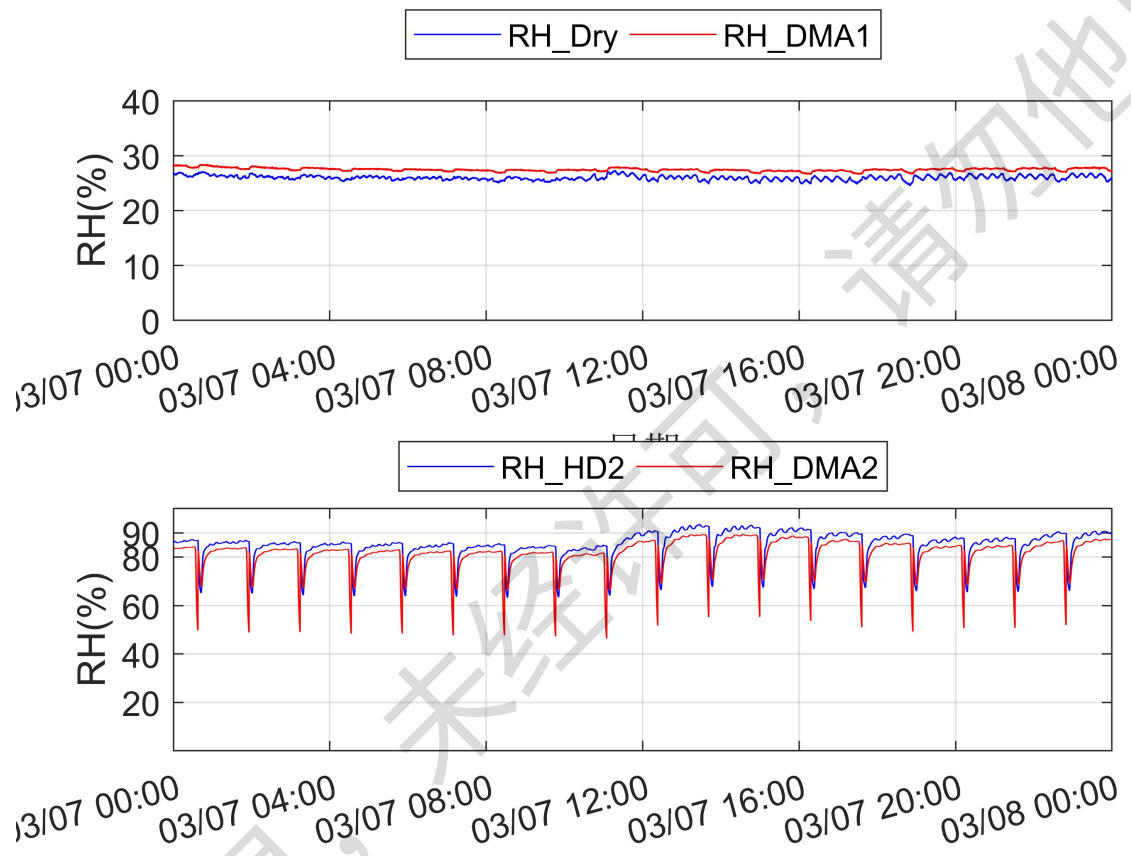
作图: 赏益

## 10. 气溶胶加湿迁移差分分析仪

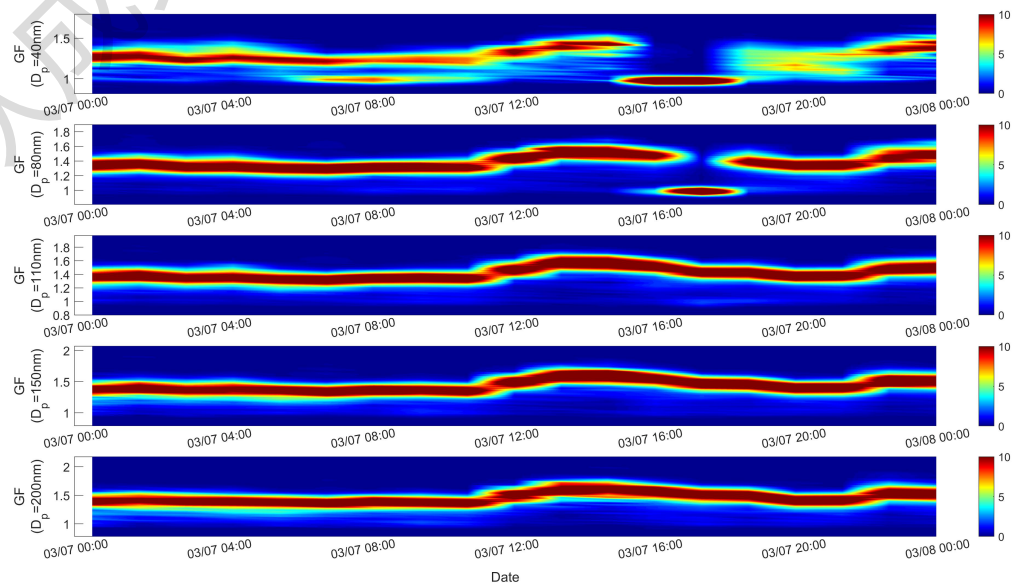
### (1) 仪器温度控制



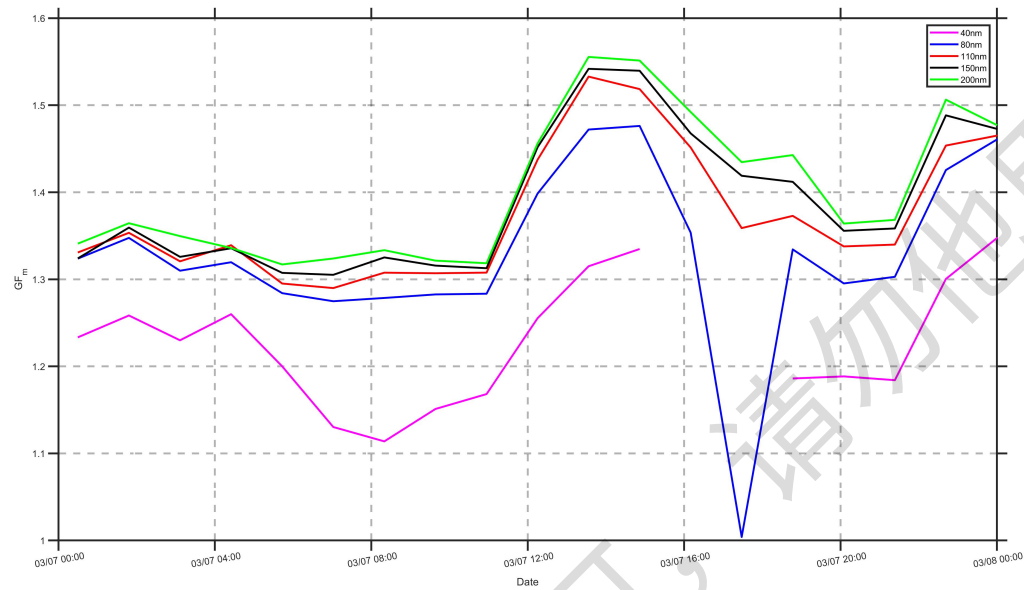
## (2) 仪器湿度控制



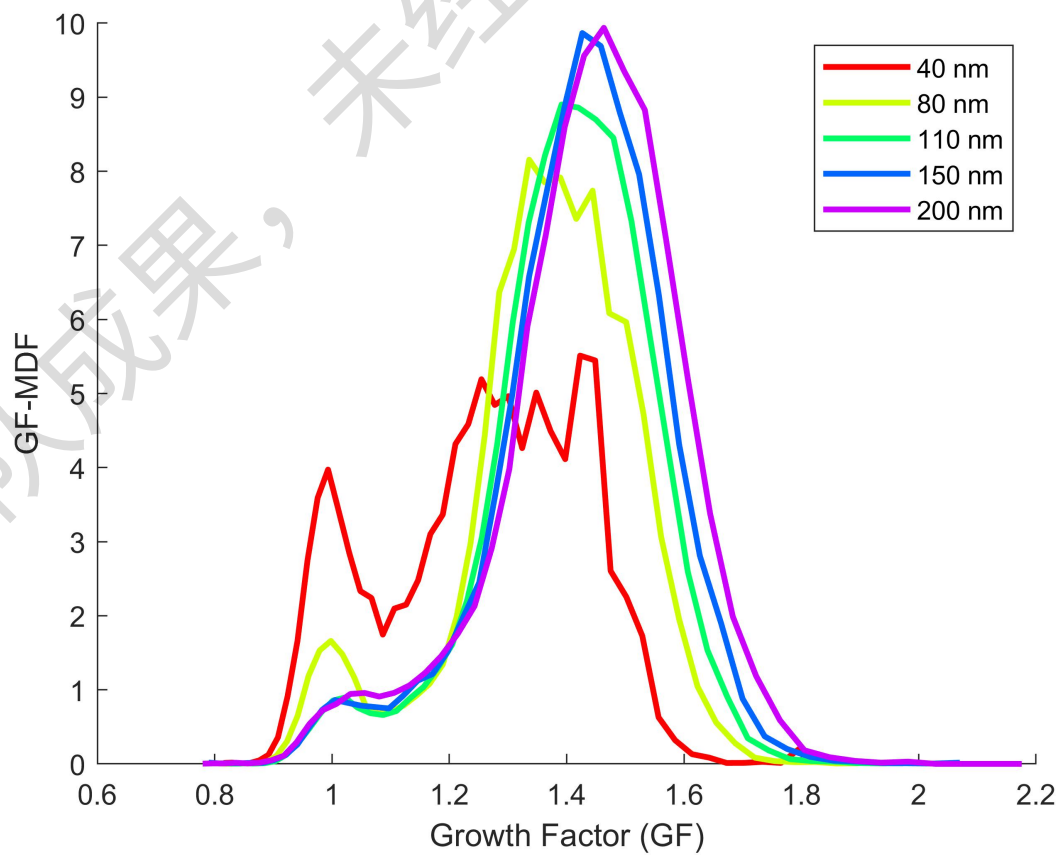
## (3) 吸湿性生长因子测量谱分布



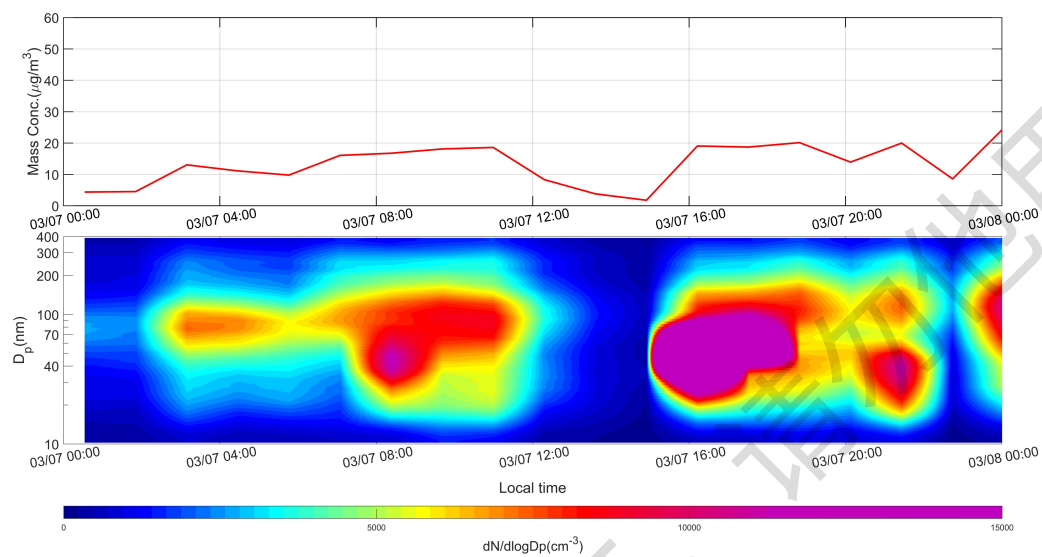
(4) 谱平均吸湿性生长因子



(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