

## Supplementary of

# Retrieval of Gridded Aerosol Direct Radiative Forcing Based on Multi-platform Datasets

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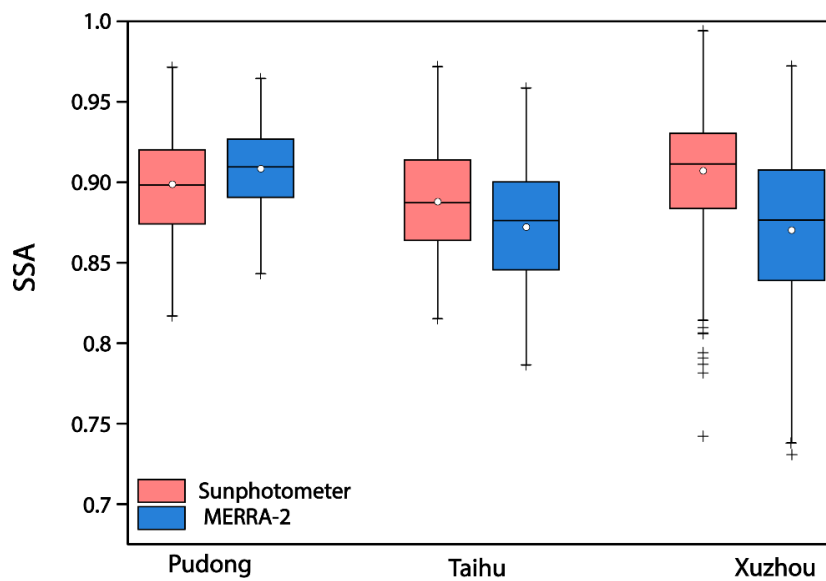
20 This Supplementary Information (SI) includes 3 figures.

**Supplementary Figures:**

**Figure S1.** The boxplot of MERRA-2 SSA and sunphotometer in Pudong, Taihu, and Xuzhou.

**Figure S2.** 48 h backward trajectories of air mass by HYSPLIT 4, which are terminating at Fuzhou at 500m altitude level.

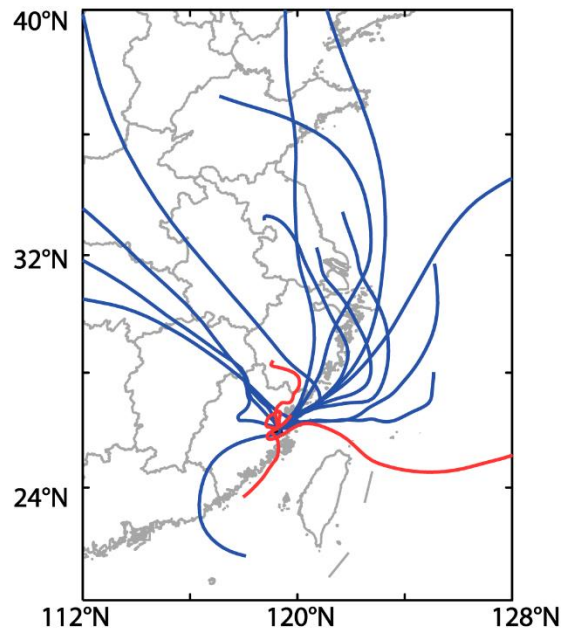
25 **Figure S3.** 48 h backward trajectories of air mass arriving at Yong'an at 500m altitude level and calculated every 24 h from October 22 to October 24, 2015.



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**Figure S1. The boxplot of MERRA-2 SSA and sunphotometer in Pudong, Taihu, and Xuzhou. The central marks in each box are the median value while the lower and upper edges of the boxes indicate 25th and 75th percentiles. The whiskers show extreme values and the outliers are marked with “+”.**

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**Figure S2. 48 h backward trajectories of air mass by HYSPLIT 4, which are terminating at Fuzhou at 500m altitude level. Blue lines are the trajectories with negative relative error and the red lines are the trajectories with positive relative error.**

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NOAA HYSPLIT MODEL  
 Backward trajectories ending at 0200 UTC 24 Oct 15  
 GDAS Meteorological Data

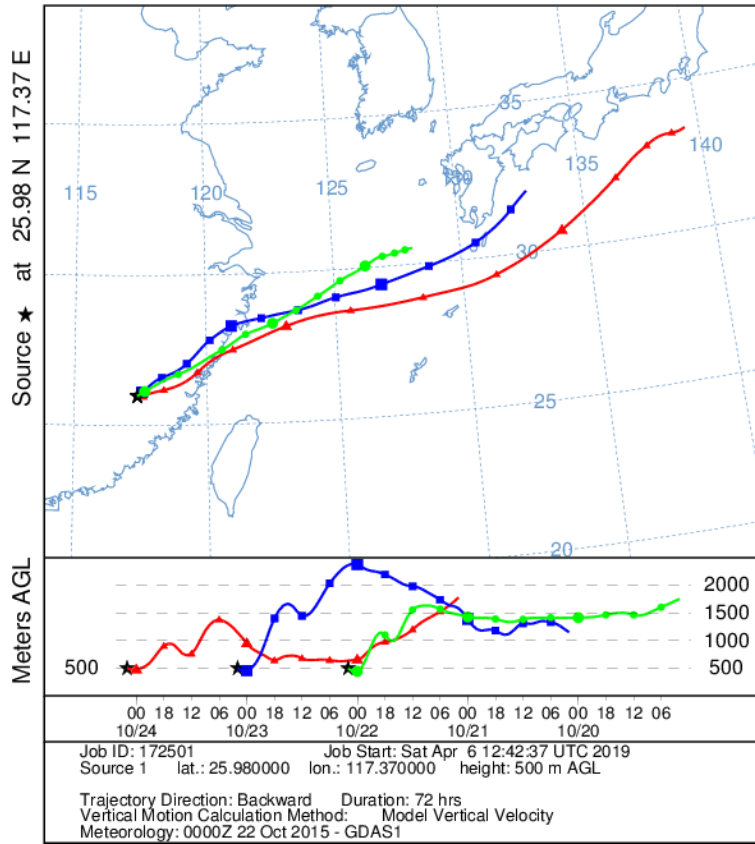


Figure S3. 48 h backward trajectories of air mass arriving at Yong'an at 500m altitude level and calculated every 24 h from October 22 to October 24, 2015. The start time is 2:00 (UTC) during satellite passing by.