



*Supplement of*

**Exploring the characteristics of Fengyun-4A Advanced Geostationary Radiation Imager (AGRI) visible reflectance using the China Meteorological Administration Mesoscale (CMA-MESO) forecasts and its implications for data assimilation**

**Yongbo Zhou et al.**

*Correspondence to:* Yubao Liu (ybliu@nuist.edu.cn)

The copyright of individual parts of the supplement might differ from the article licence.

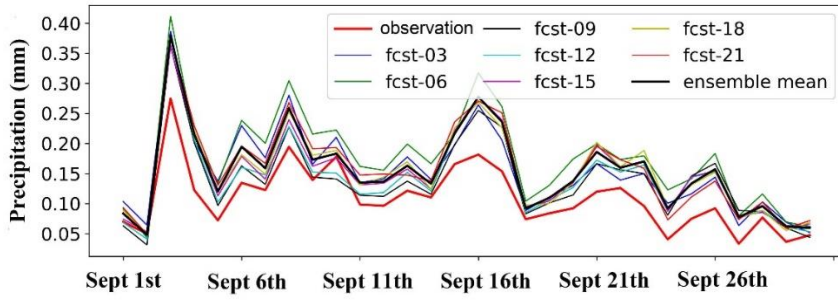
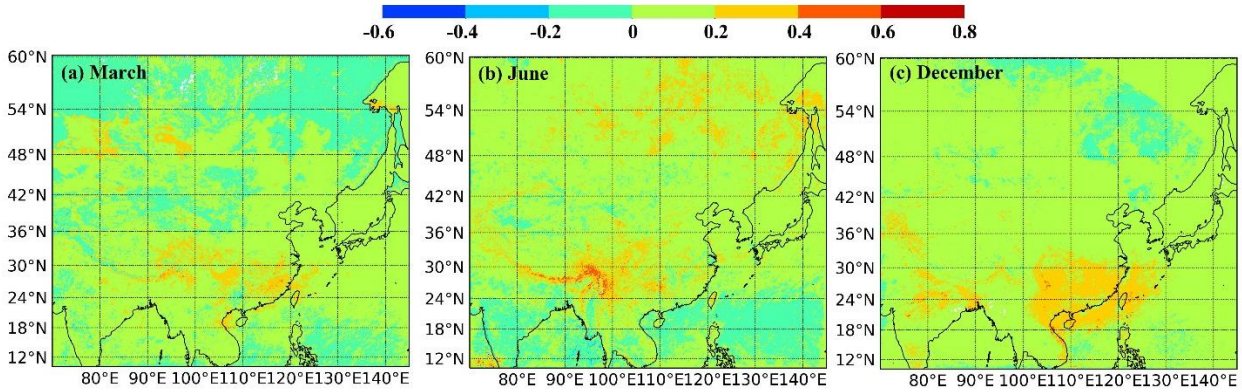


Figure S1: Domain-averaged 1-hour accumulated precipitation at 06:00 UTC derived from the short-term forecasts of CMA-MESO with different forecasting lead times.



5 Figure S2: Spatial distribution of the O-B biases for FY-4A visible observations in (a) March, (b) June, and (c) December.

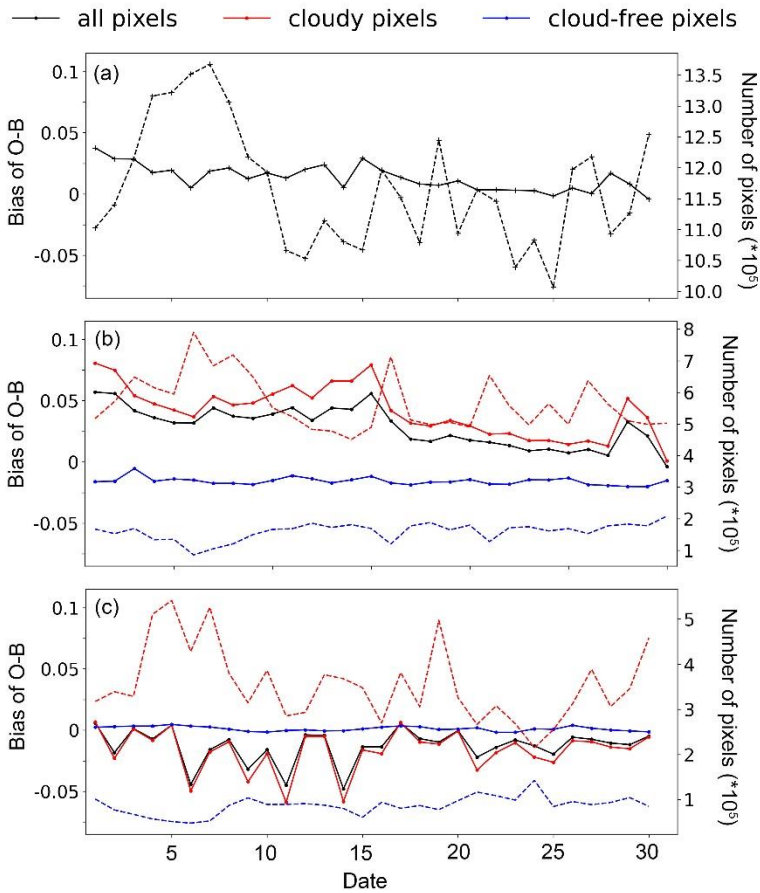
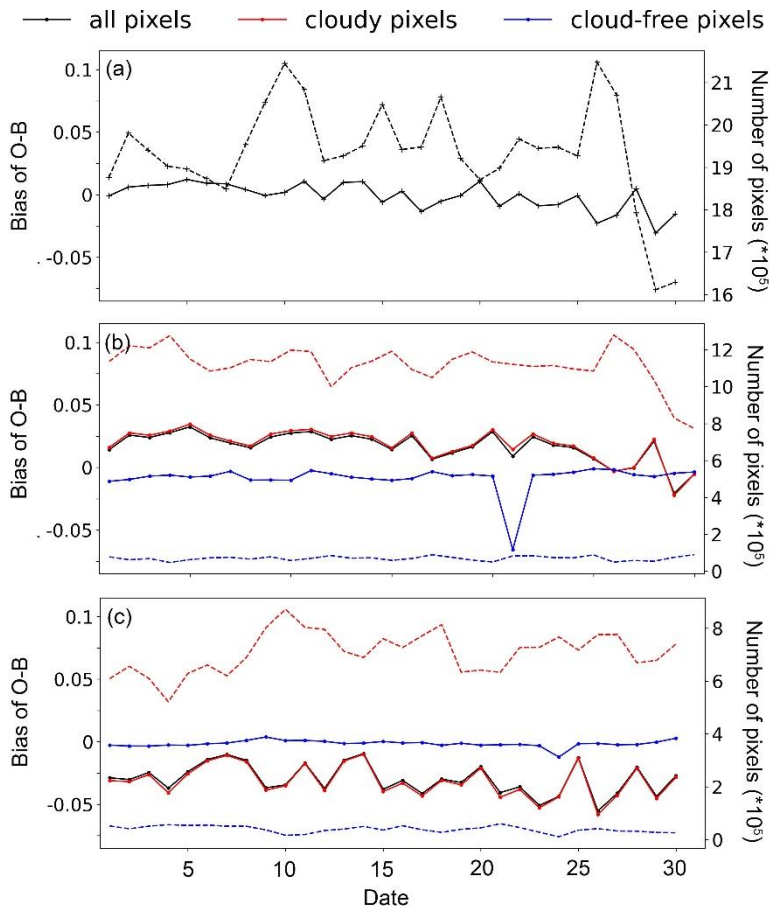


Figure S3: The time series of the O-B biases for all (cloudy + cloud-free), cloudy, and cloud-free pixels on March 2020. The results are shown for (a) all underlying surfaces (including land and sea), (b) land surface, and (c) ocean surface. The dashed lines denote the number of pixels for different cloud mask and underlying surfaces.



10

Figure S4: Same as Figure S3, except that the results are for June.

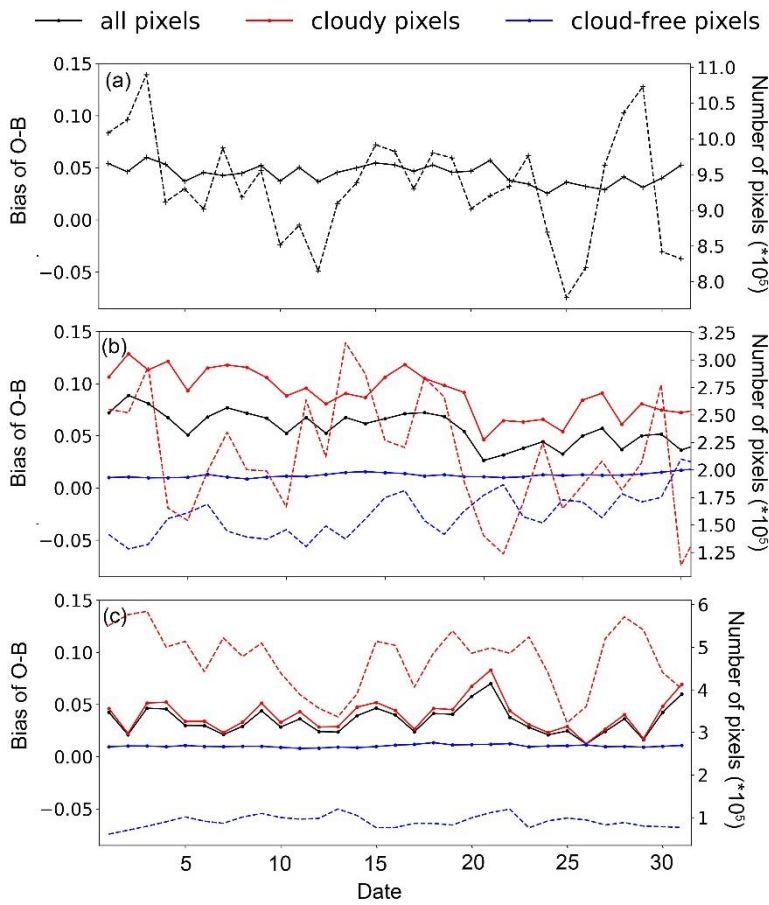


Figure S5: Same as Figure S3, except that the results are for December.