

Supplementary Material of

**Evaluation of correlated Pandora column NO₂ and *in situ* surface NO₂
measurements during GMAP campaign**

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Table S1. List of air quality monitoring network stations.

Site	Site name	Site locations	
		Long.(°E)	Lat.(°N)
AQM ₁	Padori	126.1344	36.7382
AQM ₂	Leewon	126.2805	36.8697
AQM ₃	Taeon	126.3015	36.7467
AQM ₄	Daesan	126.4339	36.9380
AQM ₅	Seongyeon	127.0145	36.7829
AQM ₆	Dongmoon	126.4561	36.7799

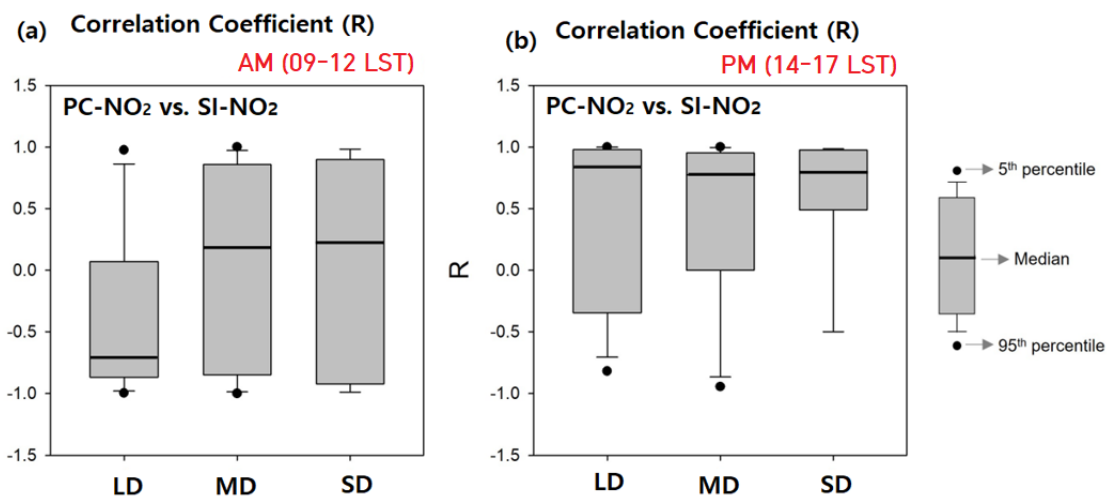


Figure S1. Correlation coefficients between PC-NO₂ vs. SI-NO₂ at (a)0900~1200 LST and (b)1400~1700LST, observed at Seosan during GMAP-2020 campaign.

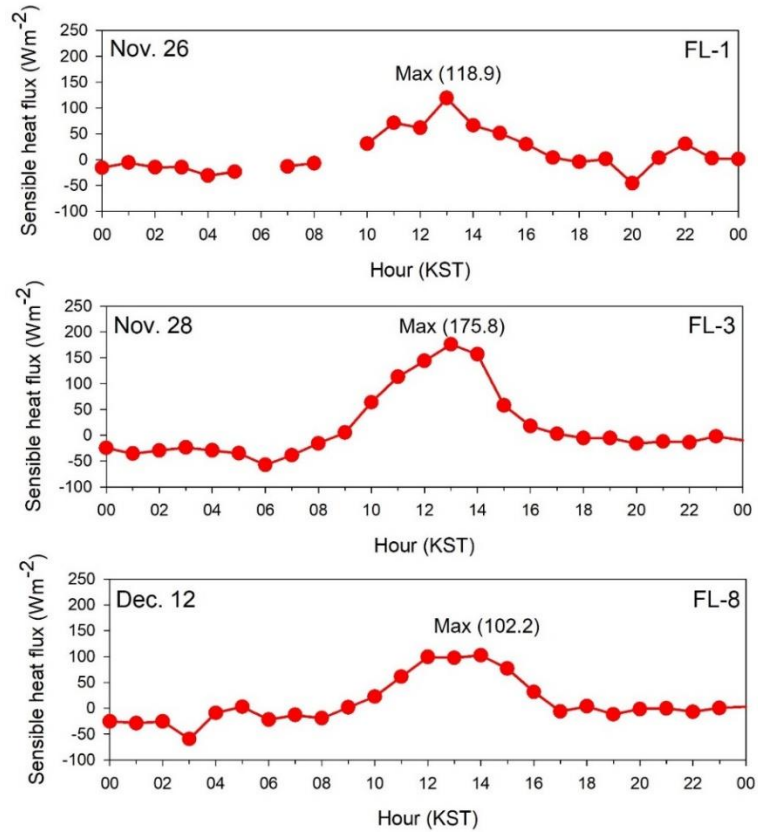


Figure S2. Diurnal variations of sensible heat fluxes on Nov. 26 (FL-1), Nov. 28 (FL-3), and Dec. 12(FL-8), observed at Seosan during GMAP-2020 campaign.

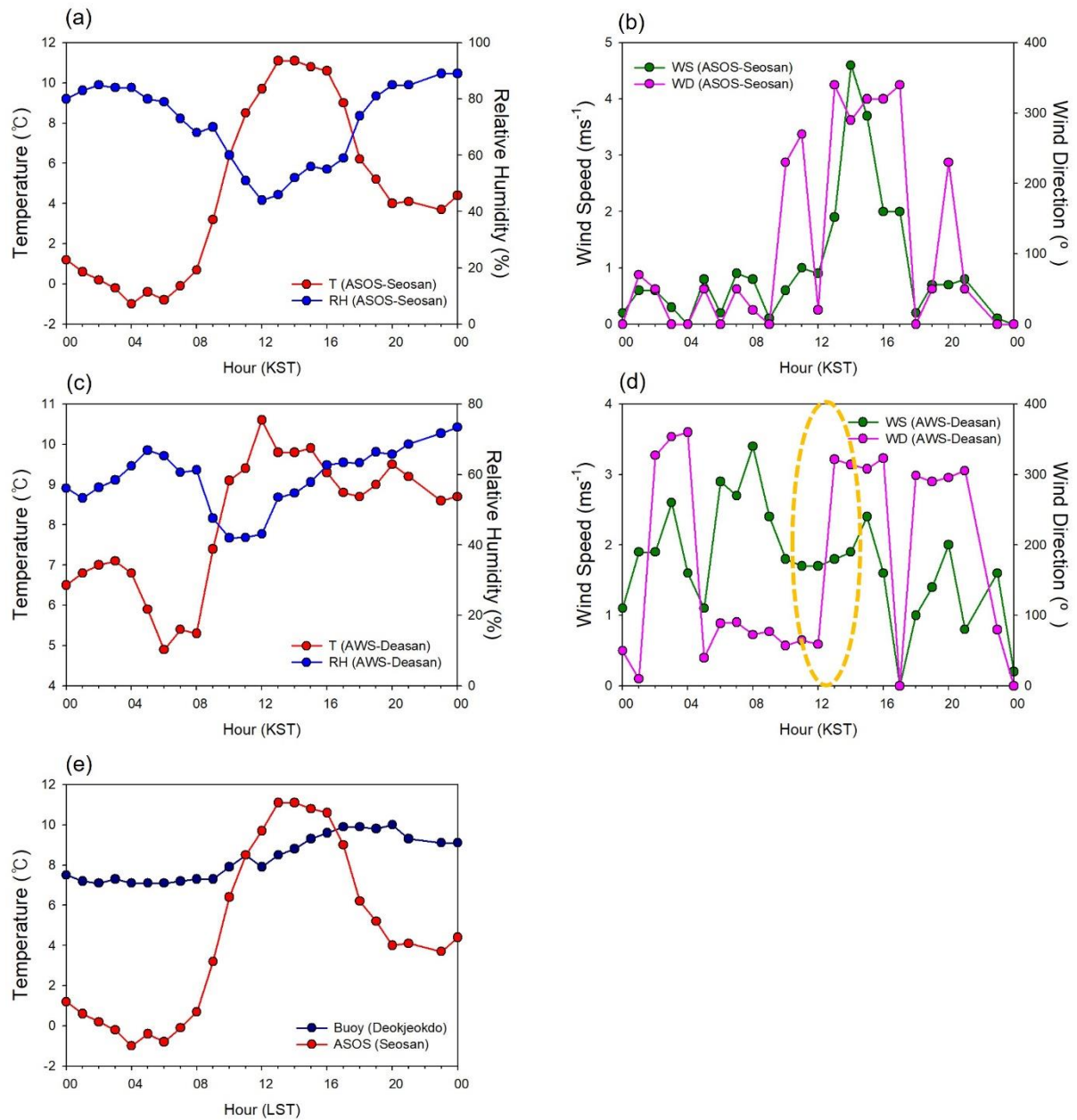


Figure S3. Diurnal variation of (e) Air temperature over ocean (observed at Met₃ site, red line) and inland (observed at Met₁ site, blue line), (a;d) Meteorological variables: wind speed/direction, temperature, and relative humidity, measured at two sites: Met₁ and Met₂ sites. Site locations are denoted in Figure 1.

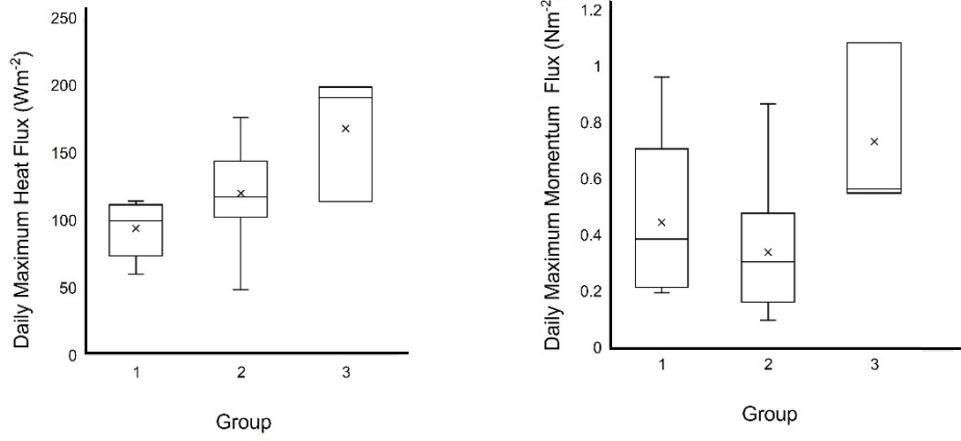


Figure S4. The comparison of observation-based daily maximum heat and momentum fluxes for three meteorological groups during GMAP-2020 campaign.