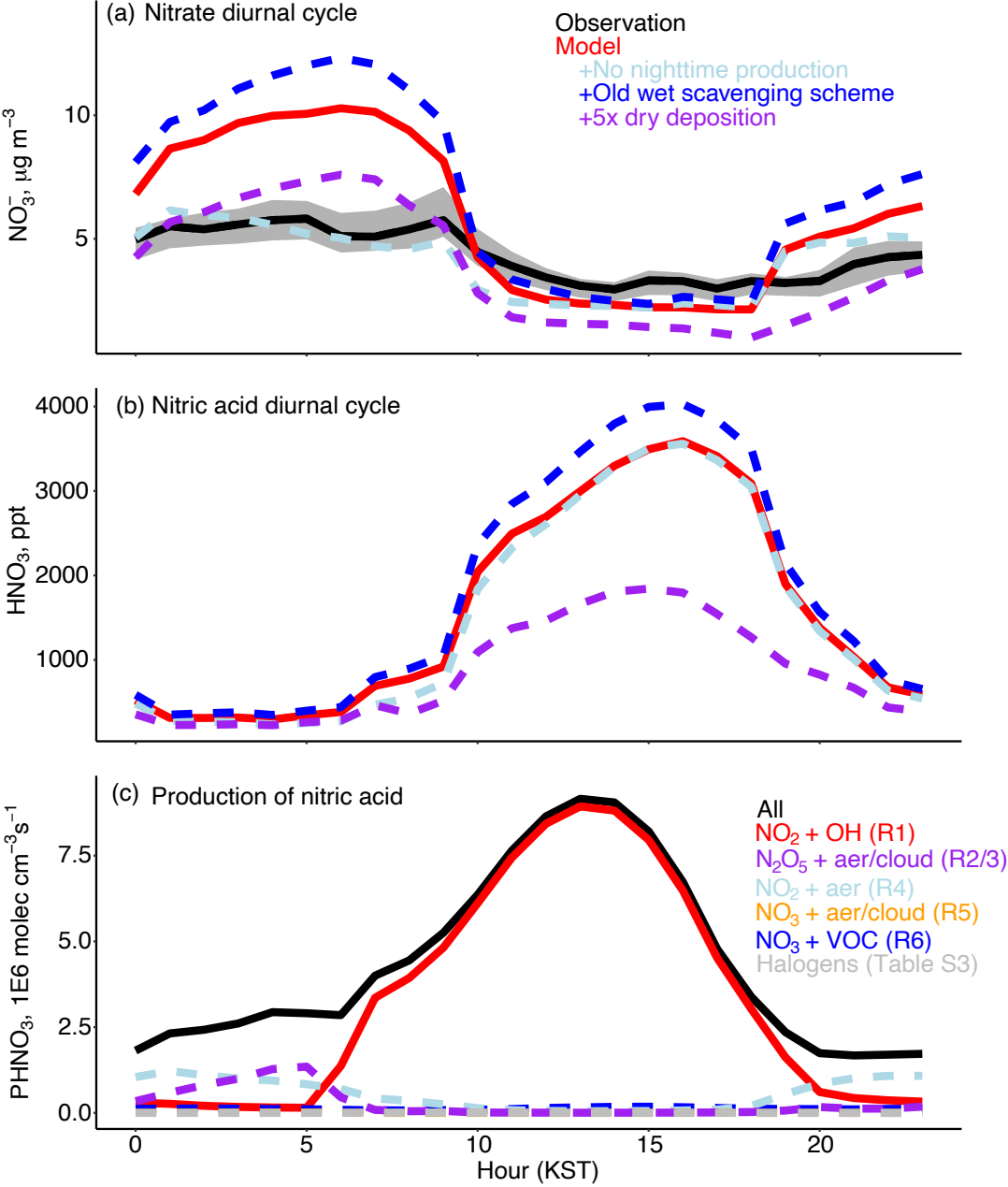
(a) Nitrate diurnal cycle
Observation
Model
+No nighttime production
+Old wet scavenging scheme
+5x dry deposition
NO_3^-, μg m^{-3}
10
5
(b) Nitric acid diurnal cycle
HNO_3, ppt
4000
3000
2000
1000
(c) Production of nitric acid
All
NO_2 + OH (R1)
N_2O_5 + aer/cloud (R2/3)
NO_2 + aer (R4)
NO_3 + aer/cloud (R5)
NO_3 + VOC (R6)
Halogens (Table S3)
$PHNO_3$, 1E6 molec cm^{-3}s^{-1}
7.5
5.0
2.5
0.0
0
5
10
15
20
Hour (KST)