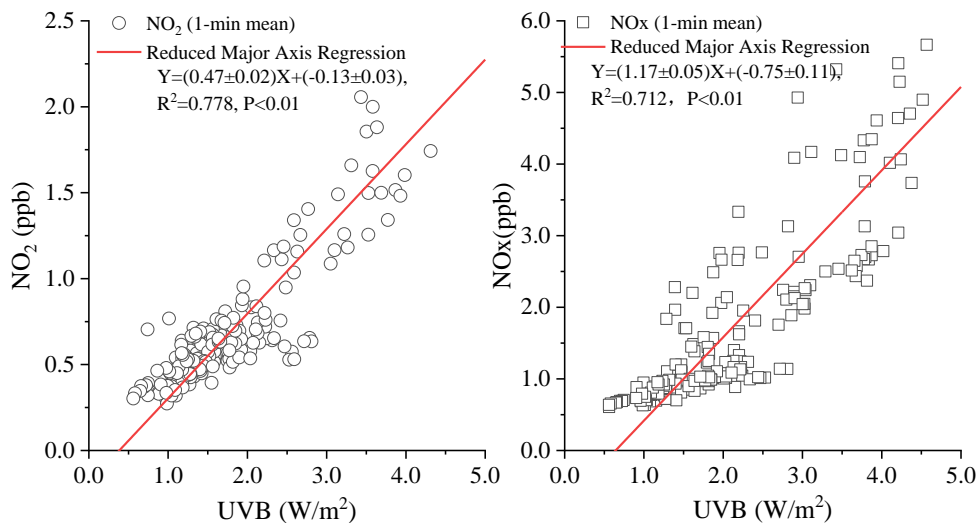


## Supplementary material



Figure S1: Sand and dust deposition on the glacier surface and the quick melting of snow and ice during the daytime.



5 Figure S2: Correlations between NO<sub>2</sub> (NO<sub>x</sub>) and UVB radiation levels during 12:00-18:00 on 26 August 2004. Reduced major axis regression was used.

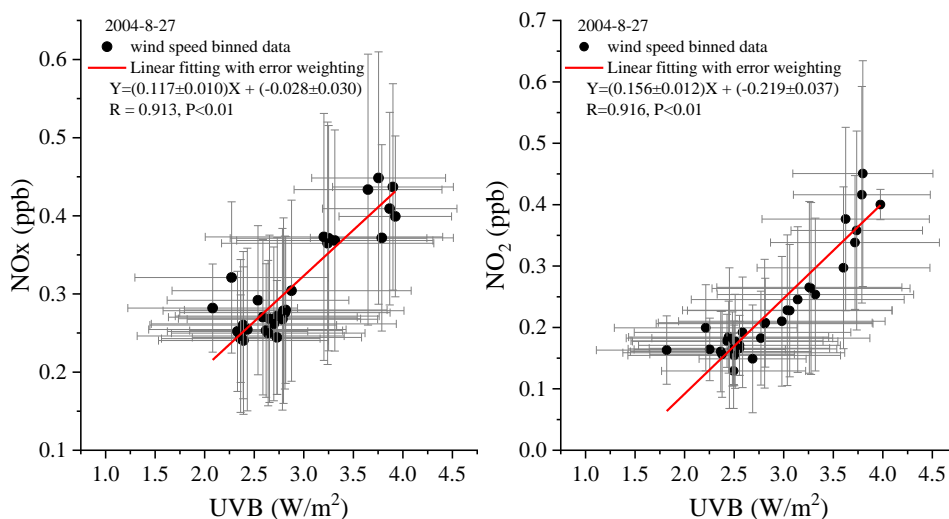
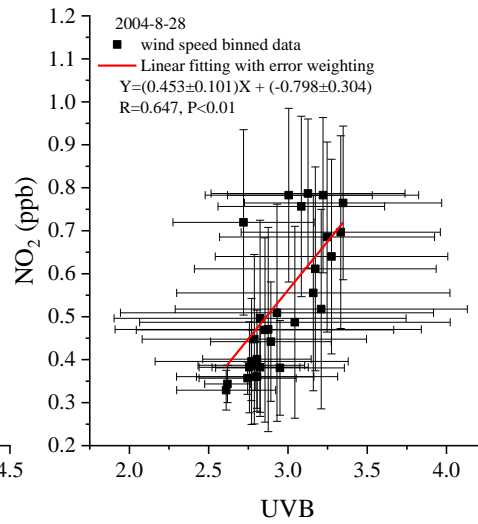
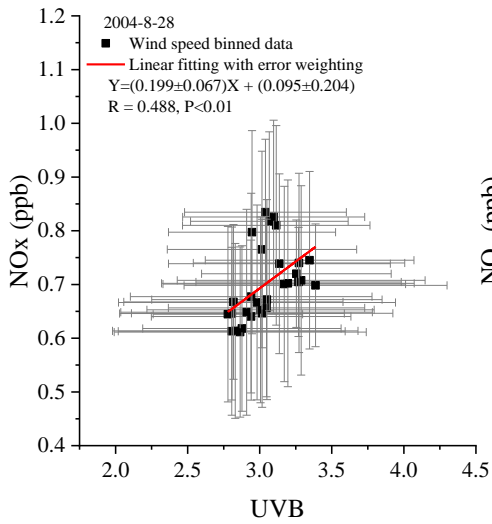
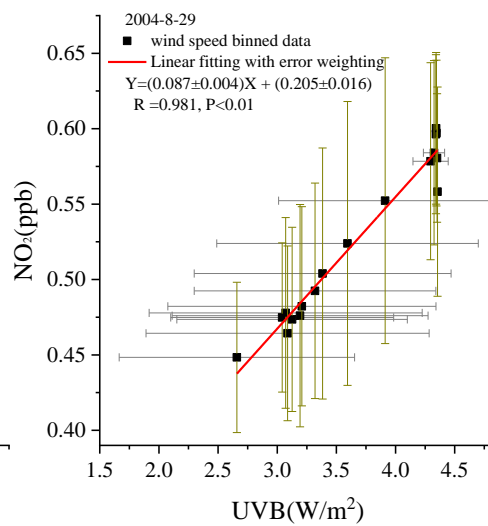
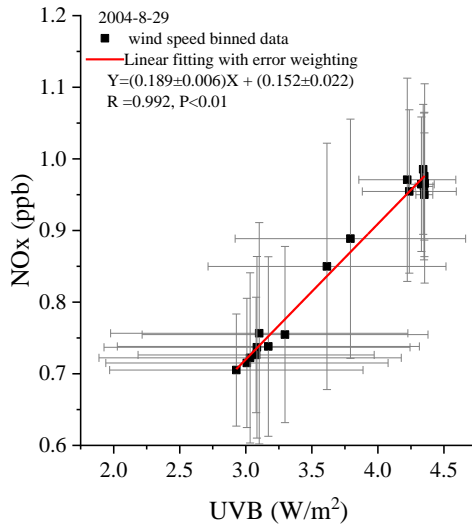


Figure S3: Correlations between NO<sub>x</sub> (NO<sub>2</sub>) and UVB radiation levels under different wind speed bins (0.5 m/s as an interval) on 27 August 2004.



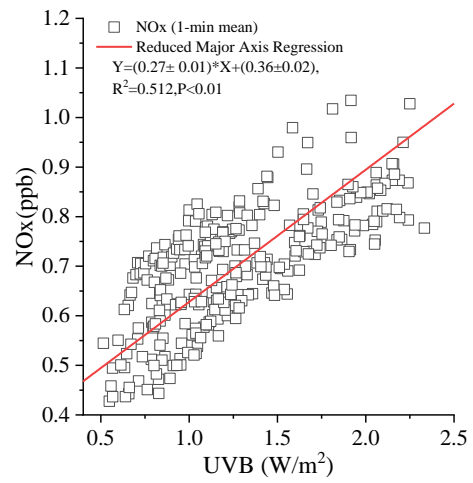
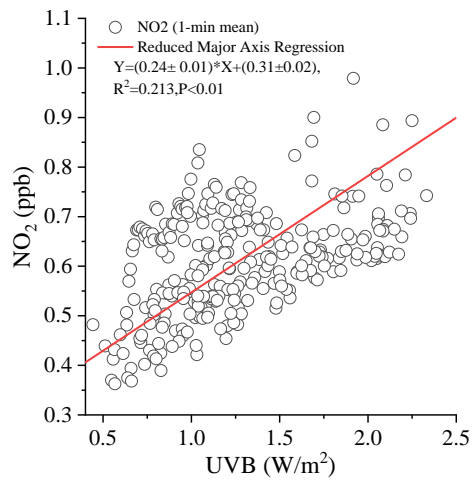
10

**Figure S4: Correlations between NO<sub>x</sub> (NO<sub>2</sub>) and UVB radiation levels under different wind speed bins (0.5 m/s as an interval) on 28 August 2004.**



15

**Figure S5. Correlations between NO<sub>x</sub> (NO<sub>2</sub>) and UVB radiation levels under different wind speed bins (0.5 m/s as an interval) on 29 August 2004.**



**Figure S6. Correlations between NO<sub>x</sub> (NO<sub>2</sub>) and UVB during 12:00-18:00 on 30 August 2004. Reduced major axis regression was used.**