

SUPPORTING MATERIAL

Study surface O₃ chemistry and photochemistry by UV energy conservation

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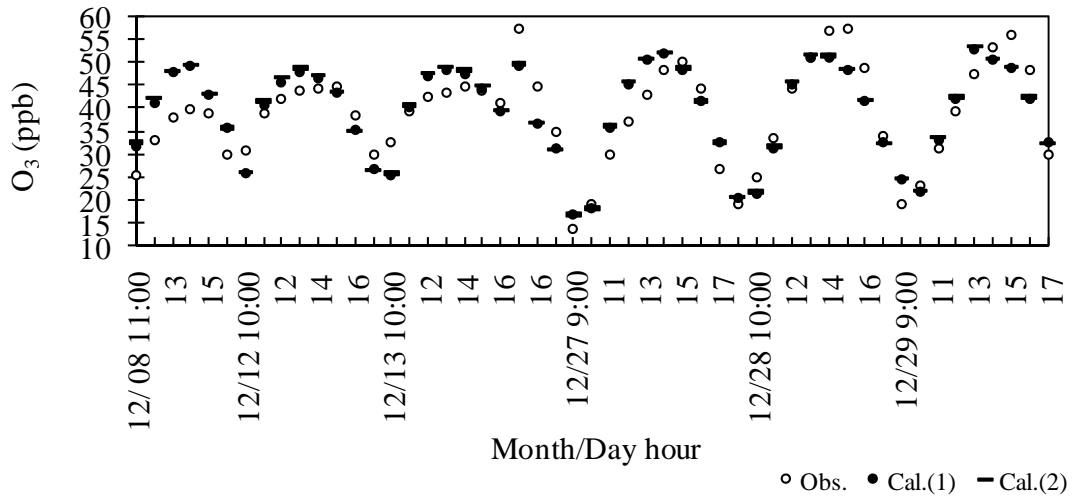


Figure S1a. The observed and calculated O₃, (1) 6 months, (2) 5 months.

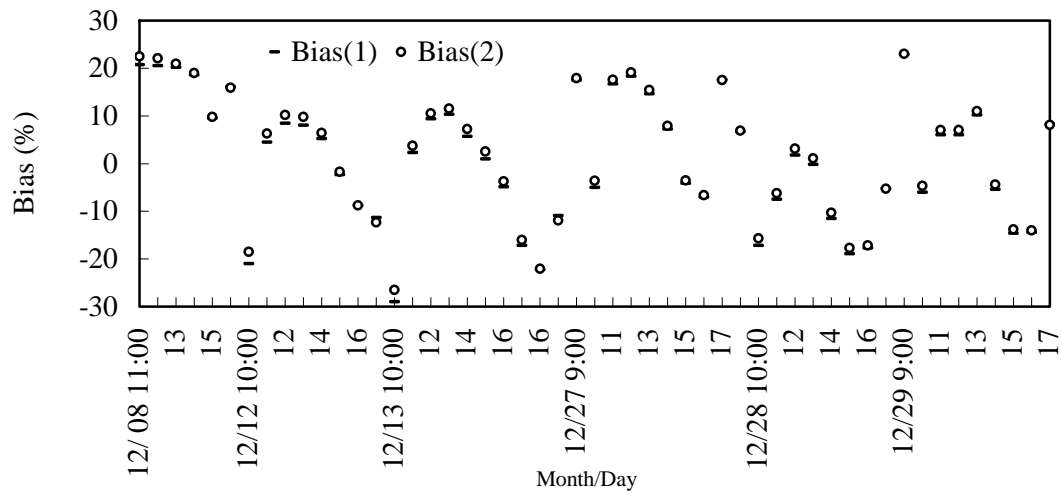


Figure S1b. The relative biases between observed and calculated O₃, (1) 6 months, (2) 5 months.

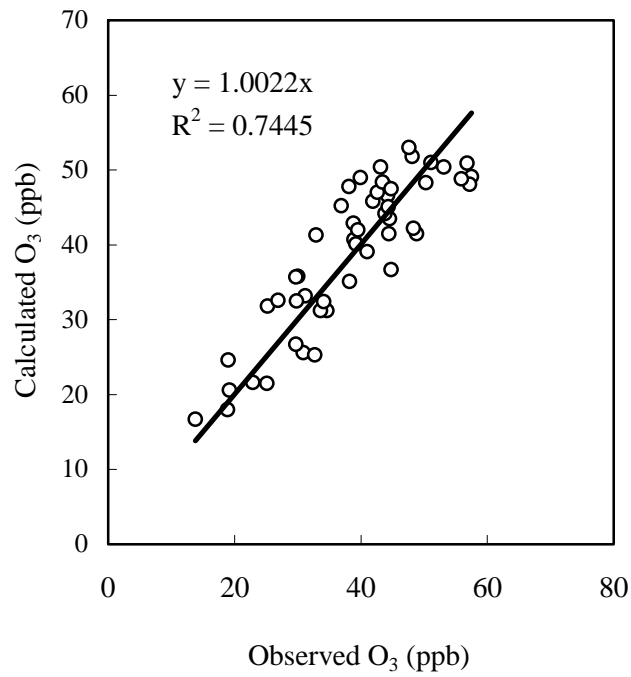


Figure S1c. The scattered plot of surface O₃ calculated vs. observed, (1) 6 months.

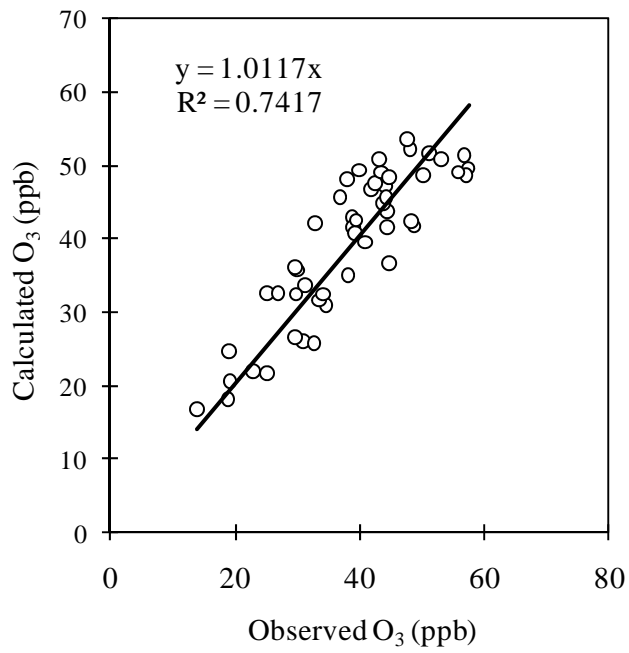


Figure S1d. The scattered plot of surface O₃ calculated vs. observed, (2) 5 months.

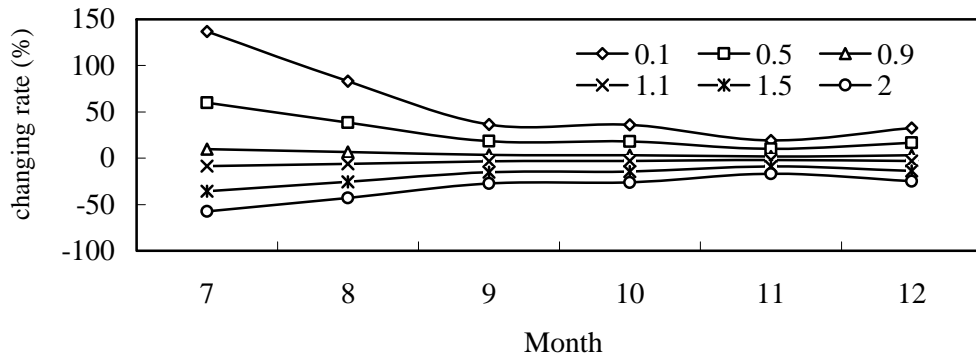


Figure S2a. O₃ changing rate caused by NO change at DBR.

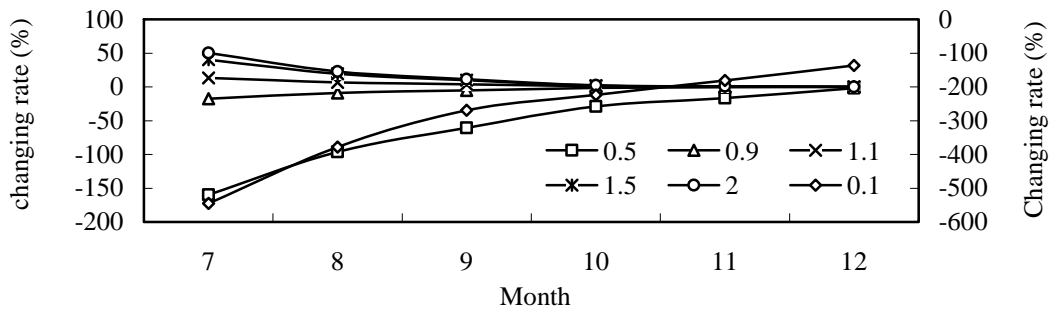


Figure S2b. O₃ changing rate caused by NO₂ change at DBR, its changing rate by 0.1NO₂ described in the right coordinate.

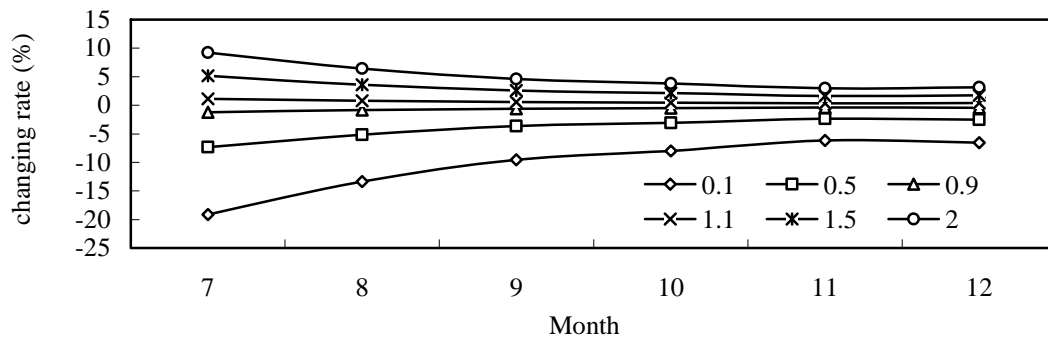


Figure S2c. O₃ changing rate caused by the change of water vapor at DBR.

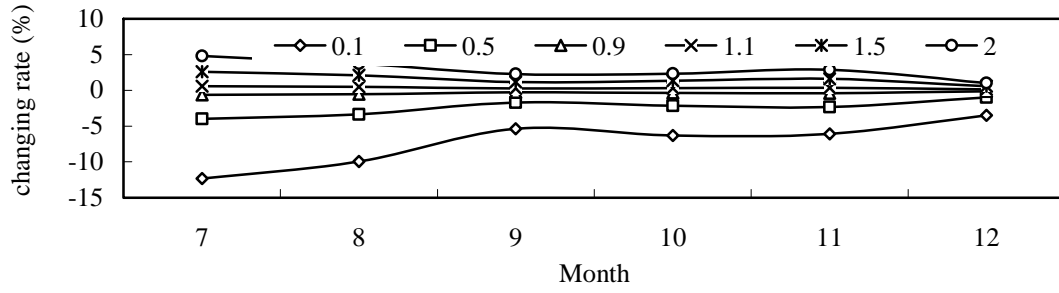


Figure S2d. O₃ changing rate caused by the change of scattering factor at DBR.

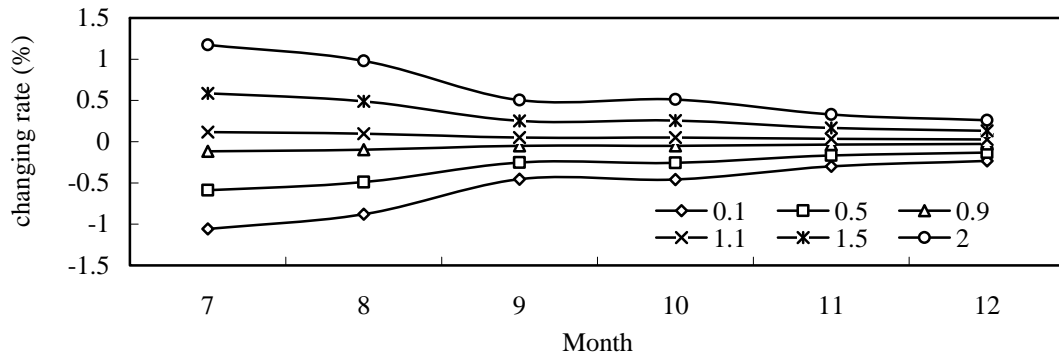


Figure S2e. O₃ changing rate caused by UV change at DBR.

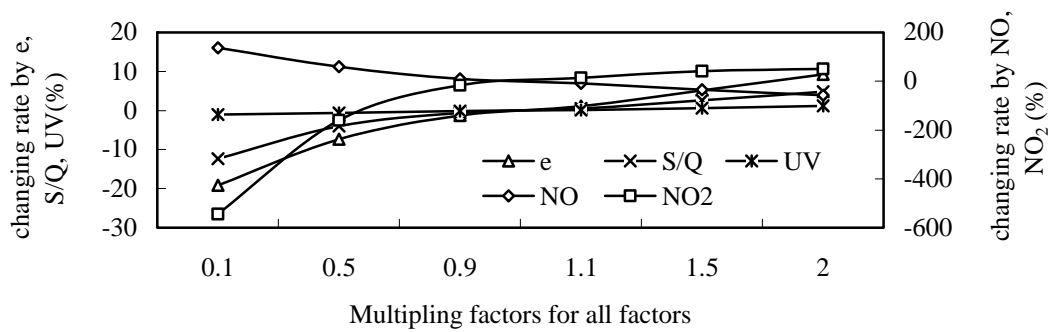


Figure S2f. O₃ changing rate caused by the changes of all factors in July at DBR.

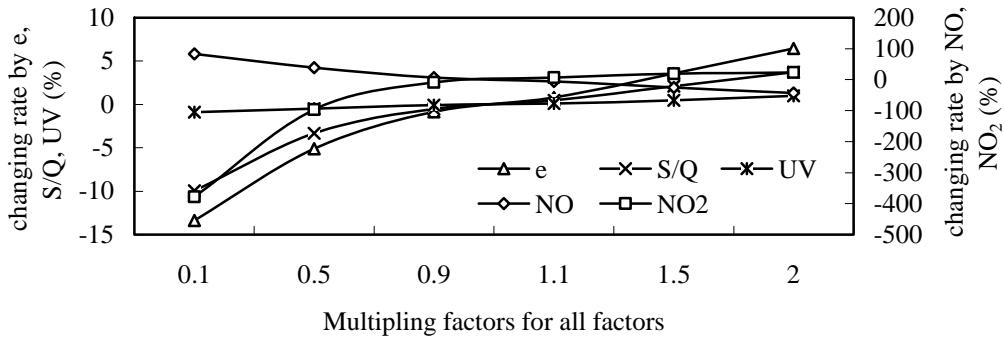


Figure S2g. O₃ changing rate caused by the changes of all factors in August at DBR.

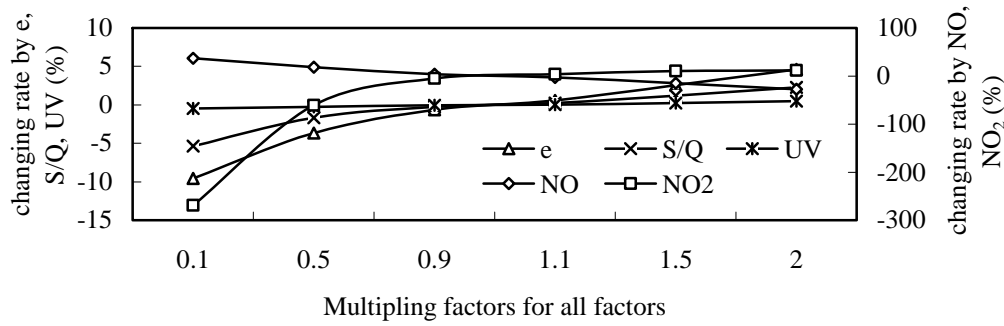


Figure S2h. O₃ changing rate caused by the changes of all factors in September at DBR.

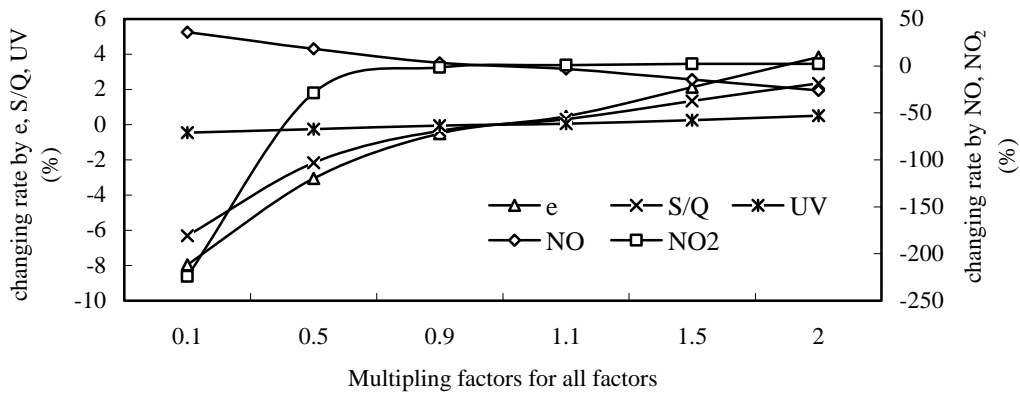


Figure S2i. O₃ changing rate caused by the changes of all factors in October at DBR.

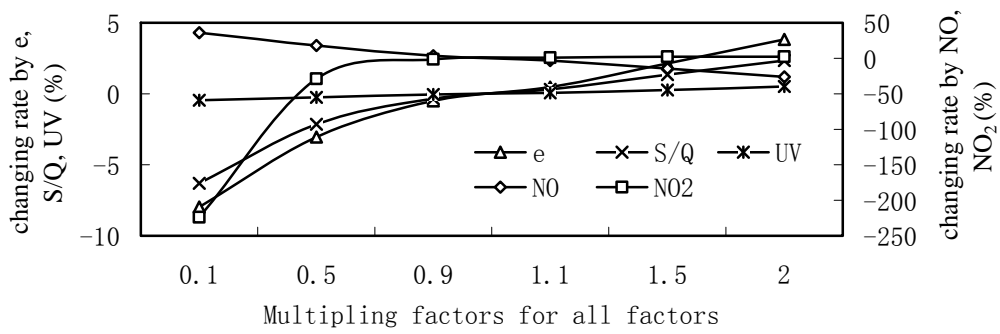


Figure S2j. O₃ changing rate caused by the changes of all factors in November at DBR.

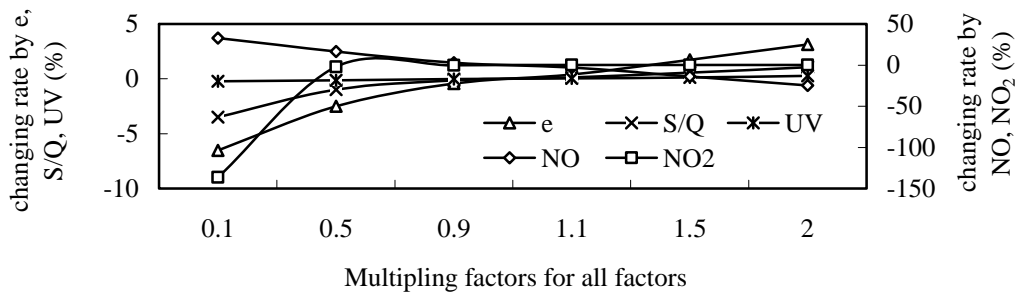


Figure S2k. O₃ changing rate caused by the changes of all factors in December at DBR.

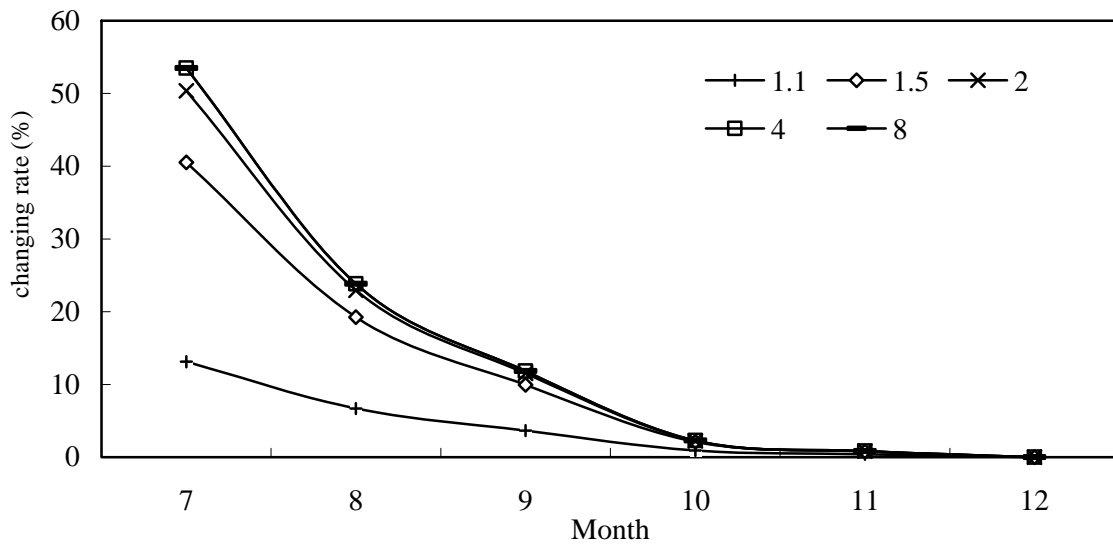


Figure S2l. O₃ production rate caused by NO₂ increases at DBR.

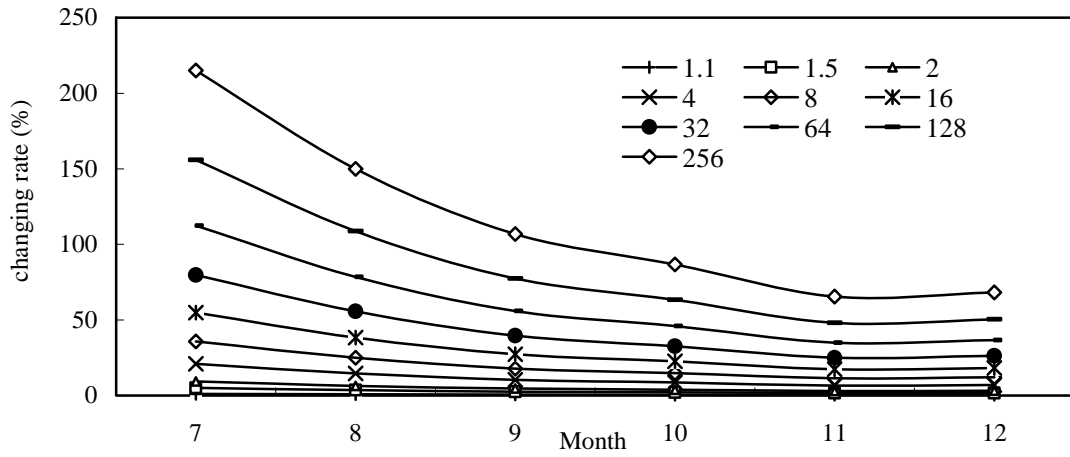


Figure S2m. O₃ changing rate caused by the change of water vapor at DBR.

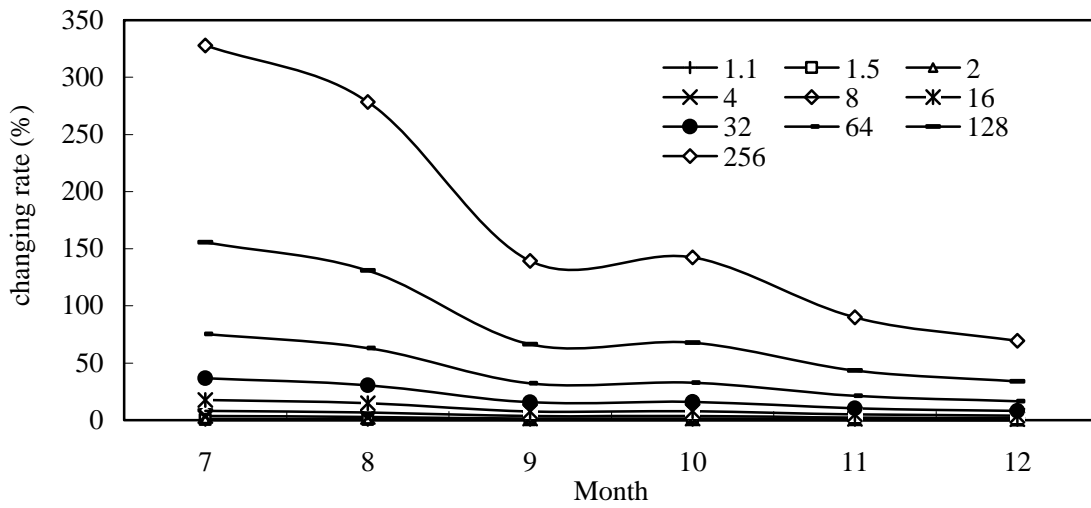


Figure S2n. O₃ changing rate caused by the change of UV at DBR.

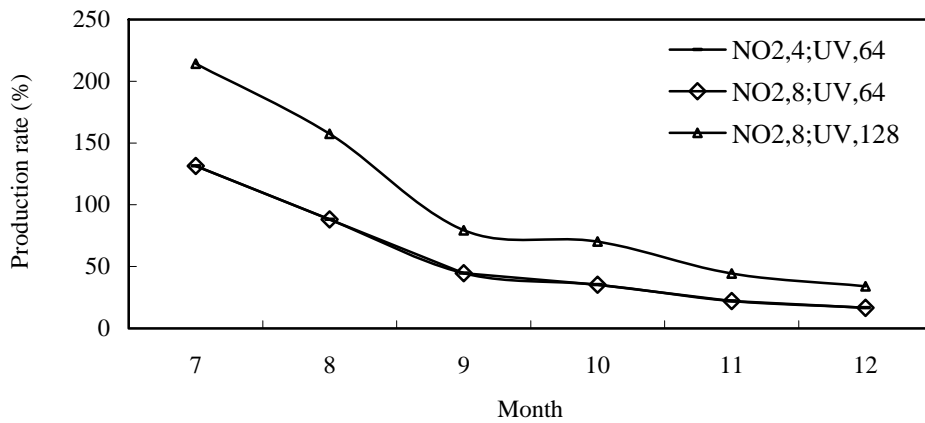


Figure S2o. O₃ production rate caused by the increase of NO₂ and UV at DBR.