

Supplementary Materials:

Regional Differences of Primary Meteorological Factors Impacting O₃ Variability in South Korea

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Table S1. The multiple linear regression analysis results using O₃ as a dependent variable and meteorological factors as an independent variable in PRD1 (Backward elimination regression method was used).

Dependent Variable	Predictors	Std. Error	Beta (Standardization Coefficients)	t	Sig.	Tolerance	VIF
Ozone	(Const.)	62.904		3.734	.010		
	RH	.724	-1.648	-3.047	.023*	.186	5.366
	SR	.007	-1.895	-3.503	.013*	.186	5.366
R= .820, R ² = .673, Adjusted R ² = .564, F= 6.170, p= .035, Durbin-Watson= 1.690							
*p<.05, **p<.01							

Table S2. The multiple linear regression analysis results using O₃ as a dependent variable and meteorological factors as an independent variable in PRD2 (Backward elimination regression method was used).

Dependent Variable	Predictors	Std. Error	Beta (Standardization Coefficients)	t	Sig.	Tolerance	VIF
Ozone	(Const.)	6.489		7.824	.001		
	SR	.001	.565	7.166	.001**	.646	1.548
	WS	2.125	-.544	-6.904	.001**	.646	1.548
R= .990, R ² = .980, Adjusted R ² = .972, F= 122.169, p= .000, Durbin-Watson= 2.862							

*p<.05, **p<.01

Table S3. The mean and standard deviation of WNPSH during PRD1 and PRD2 (calculated using the 850-hPa geopotential height anomalies of ERA-Interim reanalysis data).

	Mean	Standard deviation
PRD1	89.80	332.69
PRD2	220.47	340.99

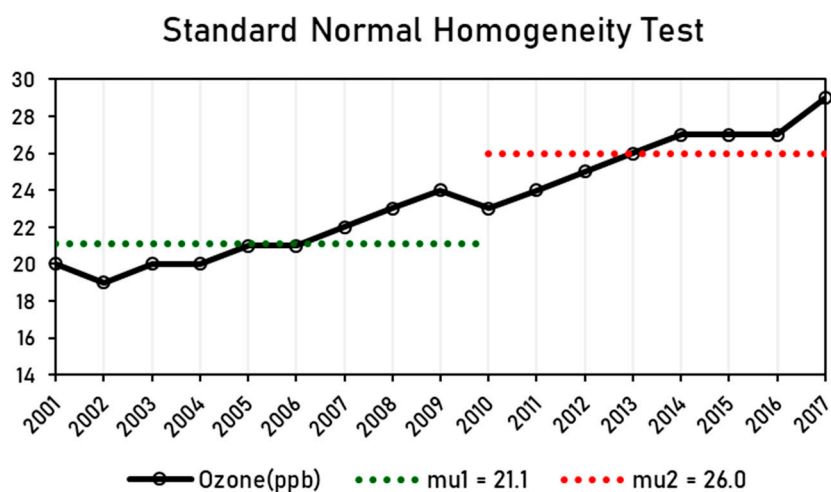


Figure S1. The result of Standard Normal Homogeneity Test