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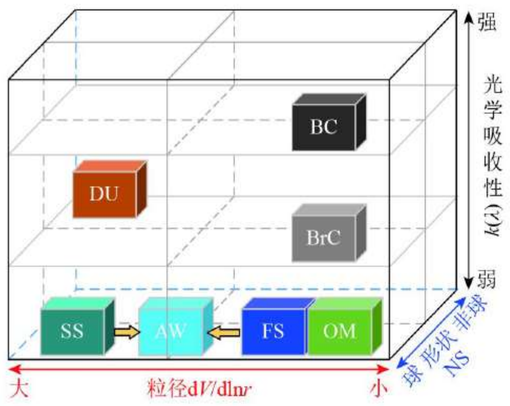
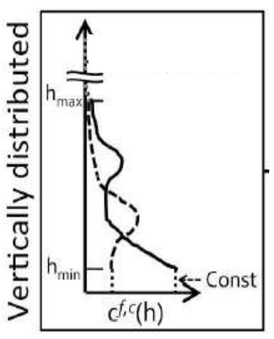


AOD( )

Sky Radiance(,)

8)/)12)32 ,) - m

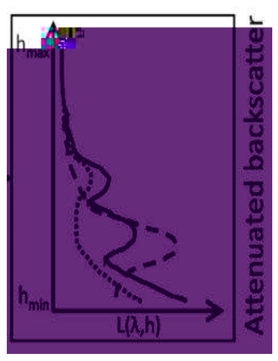
∈[0°, 150°]



Normalized signal profile

8). 00 0.532, 1.064 m

h∈[300m, 6000m]



上

AN AW RH

上

但 但

42%

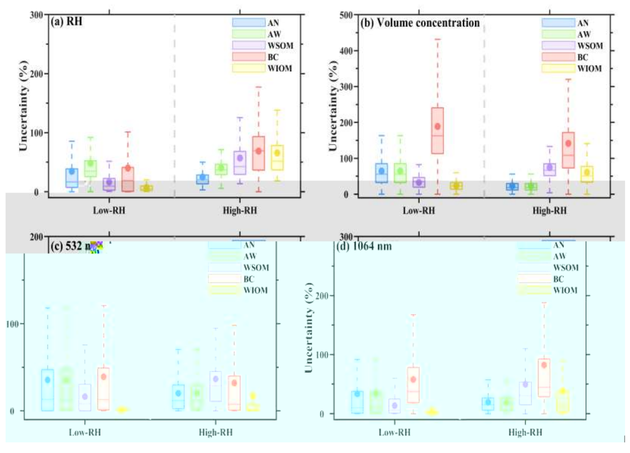
上

BC

1-2

上

	10%
	42%
	14%

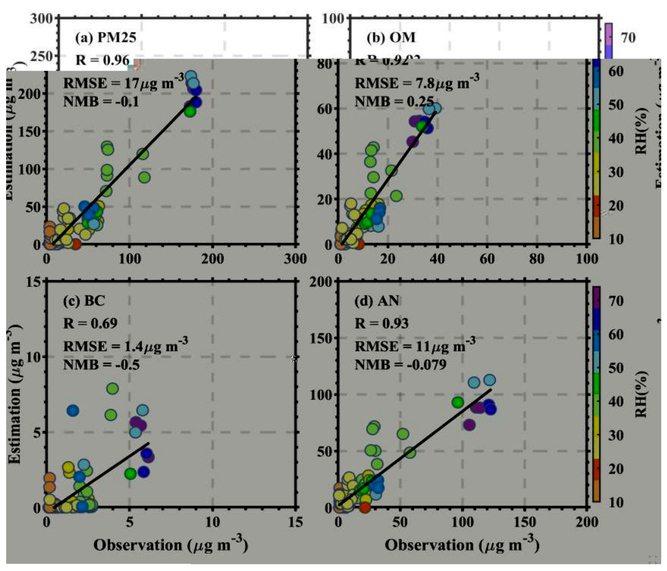


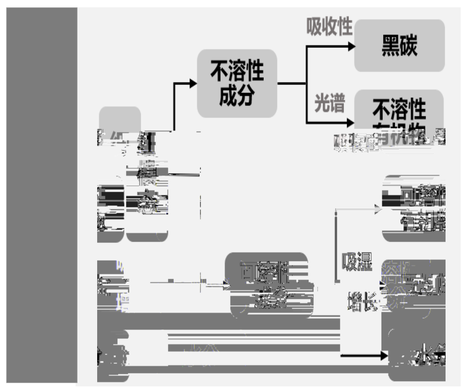
PM$_{2.5}$ 下 0.96

OM AN 下 0.9 RMSE

10 g/m^3

BC RMSE 1.4 g/m^3





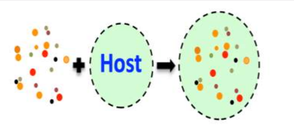
$$\frac{f_i}{f_s} = \varphi(RH)\int \varepsilon(D)dD$$

$$a_w = 1 + \sum_{k=1}^{4} C_k x^k$$

$$RH = a_w/100$$

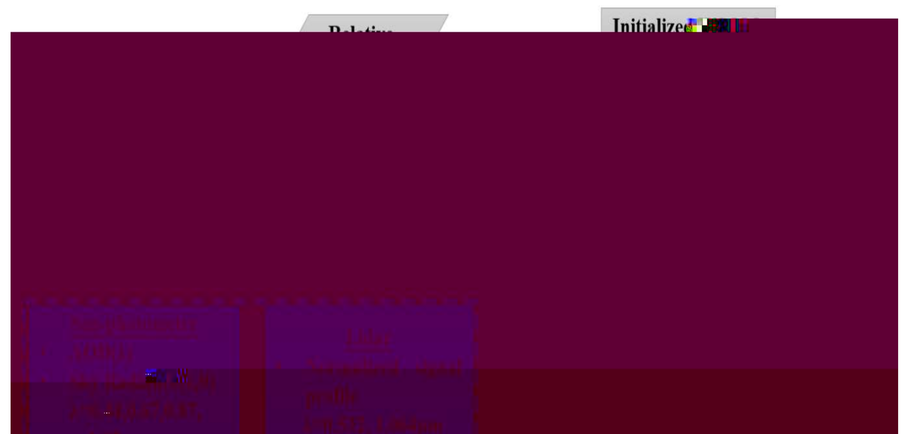
$$\rho_s = 0.9971 + \sum_{k=1}^{4} A_k x^k$$

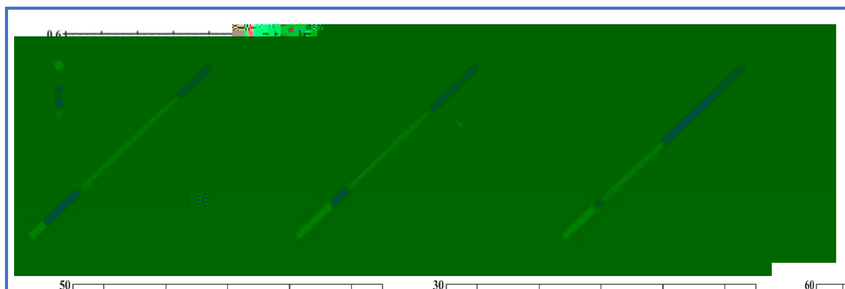
$$\frac{f_{AN}}{f_{AN}+f_{AW}} = x\frac{\rho(x)}{\rho(100)}$$

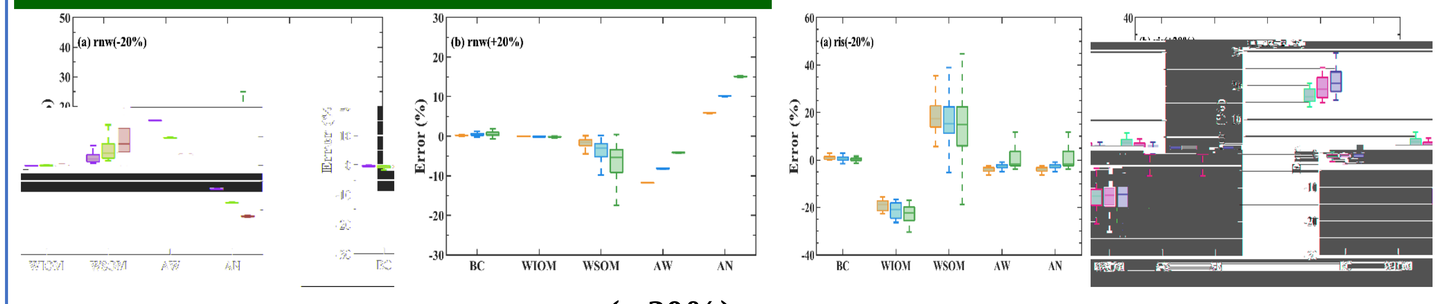


$$\varepsilon_{mix}(\lambda) = \varepsilon_{host} + 3\varepsilon_{host}\left[\frac{\sum_j \frac{\varepsilon_j(\lambda)-\varepsilon_{host}(\lambda)}{\varepsilon_j(\lambda)+2\varepsilon_{host}(\lambda)} f_j}{1-\sum_j \frac{\varepsilon_j(\lambda)-\varepsilon_{host}(\lambda)}{\varepsilon_j(\lambda)+2\varepsilon_{host}(\lambda)} f_j}\right]$$

$$m_{host}(\lambda) = \frac{\sum_j m_j(\lambda) f_j}{\sum_j f_j}$$







(20%)

下 WSOM 与 下

上 下

上 50%

2023 4 15 11:00 WSOM BC AN 1km

2023 4 16 BC , g/m^3 12:00 3km