

Parameter	Response of the model	RMSE < 15 %	RMSE < 12 %	RMSE < 10 %
$C^*$ ( $\mu\text{g m}^{-3}$ )	sensitive	2–10	3–10	3–10
$m_{\text{wall}}$ ( $\text{mg m}^{-3}$ )	not sensitive	1.6–25	1.6–25	1.6–6.4
$1/k_{\text{wall/g}}$ (min)	sensitive	10–30	10–25	10–20
$k_{\text{OH}}$ ( $\text{cm}^3 \text{ molecules}^{-1} \text{ s}^{-1}$ )	not sensitive	$5 \times 10^{-12} - 1 \times 10^{-10}$	$5 \times 10^{-12} - 1 \times 10^{-10}$	$5 \times 10^{-12} - 1 \times 10^{-10}$