## U (km/hr) *L* (km) BC (ppb) $y_n^{S}$ $y^{s_1}$ $X_1$ $X_2$ $\mathbf{X}_{n}$ $\mathbf{y}^{S} = [y^{S}_{1}, y^{S}_{2}, ..., y^{S}_{n}]^{T}$ (ppb)

 $\mathbf{x} = [x_1, x_2, ..., x_n]^T$  (ppb/hr)