Equations

https://camillejr.github.io/science-docs/

1 PC-transport

$$ho rac{D\phi}{Dt} = \mathbb{D}
abla^2 \phi + S_{\phi}$$

$$\mathbf{\Phi} pprox N(0, \mathbf{K}(\mathbf{Z}_{p}, \mathbf{Z}_{q}) + \sigma_{n}^{2} \mathbf{I})$$

 $\Phi \approx N(0, \sigma_n^2)$

$$S_{\phi}(\phi) = f(T, p, Y_1, \dots, Y_{N_S-1})$$

3 Arrhenius law

$$\rho \frac{D\mathbf{\Phi}}{Dt} = -\nabla(\mathbf{j}_{\mathbf{\Phi}}) + \mathbf{s}_{\mathbf{\Phi}}$$

$$ho rac{Doldsymbol{z}}{Doldsymbol{t}} = -
abla(oldsymbol{j}_z) + oldsymbol{s}_z$$

$$k = Ae^{\frac{-E_a}{RT}}$$

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$$ho rac{\partial oldsymbol{\Phi}}{\partial t} +
ho ec{V} \cdot
abla oldsymbol{\Phi} = \mathbb{D}_{oldsymbol{\Phi}}
abla^2 oldsymbol{\Phi} + oldsymbol{S}_{oldsymbol{\Phi}}$$

$$k = AT^n e^{\frac{-E_a}{RT}}$$

$$\rho \frac{\partial \mathbf{z}}{\partial t} + \rho \vec{V} \cdot \nabla \mathbf{z} = \mathbb{D}_{\mathbf{z}} \nabla^2 \mathbf{z} + \mathbf{S}_{\mathbf{z}}$$

$$z=\Phi A_{\mathfrak{q}}$$

2 Regression

$$\Phi = [T, p,]$$

$$\mathbf{\Phi} pprox f_{\mathbf{\Phi}}(\mathbf{Z}_{q})$$