$$\text{Deterministic change:} \quad \underbrace{\mathrm{d}\begin{bmatrix} \text{eta1} \\ \text{eta2} \end{bmatrix}(t)}_{\mathrm{d}\boldsymbol{\eta}(t)} = \left(\underbrace{\begin{bmatrix} -1 & 0.5 \\ 0 & -1 \end{bmatrix}}_{\mathbf{A}} \underbrace{\begin{bmatrix} \text{eta1} \\ \text{eta2} \end{bmatrix}(t)}_{\boldsymbol{\eta}(t)} + \underbrace{\begin{bmatrix} 0 \\ 0 \end{bmatrix}}_{\mathbf{b}} \right) \mathrm{d}t + \underbrace{\left\{ \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} \right\}}_{\mathbf{G}} \underbrace{\mathrm{d}\begin{bmatrix} W_1 \\ W_2 \end{bmatrix}(t)}_{\mathrm{d}\mathbf{W}(t)}$$

$$\text{Observations:} \quad \underbrace{\begin{bmatrix} \text{Y1} \\ \text{Y2} \end{bmatrix}(t)}_{\mathbf{Y}(t)} = \underbrace{\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}}_{\boldsymbol{\Lambda}} \underbrace{\begin{bmatrix} \text{eta1} \\ \text{eta2} \end{bmatrix}(t)}_{\boldsymbol{\eta}(t)} + \underbrace{\begin{bmatrix} \text{mm\_Y1} \\ \text{mm\_Y2} \end{bmatrix}}_{\boldsymbol{\tau}} + \underbrace{\begin{bmatrix} 0.1 & 0 \\ 0 & 0.1 \end{bmatrix}}_{\boldsymbol{\Theta}} \underbrace{\begin{bmatrix} \epsilon_1 \\ \epsilon_2 \end{bmatrix}(t)}_{\boldsymbol{\epsilon}(t)}$$

Latent noise per time step: $\Delta\big[W_{j\in[1,2]}\big](t-u) \sim \mathrm{N}(0, t-u)$

Observation noise: $\big[\epsilon_{j\in[1,2]}\big](t) \sim \mathrm{N}(0,1)$