$$\underbrace{\mathrm{d}\left[\mathrm{eta1}\right](t)}_{\mathrm{d}\boldsymbol{\eta}(t)} = \left(\underbrace{\left[\mathrm{drift\_eta1\_eta1}\right]}_{\underbrace{\mathbf{A}}_{\text{DRIFT}}} \underbrace{\left[\mathrm{eta1}\right](t)}_{\boldsymbol{\eta}(t)} + \underbrace{\left[0\right]}_{\underbrace{\mathbf{b}}_{\text{CINT}}} \right) \mathrm{d}t \quad +$$

$$\underbrace{\left[\mathrm{diffusion\_eta1\_eta1}\right]}_{\underbrace{\mathbf{G}}_{\text{DIFFUSION}}} \underbrace{\mathrm{d}\left[W_1\right](t)}_{\mathrm{d}\mathbf{W}(t)}$$

$$\underbrace{\left[W_1\right](t+u)}_{\mathbf{W}(t+u)} - \underbrace{\left[W_1\right](t)}_{\mathbf{W}(t)} \sim \mathrm{N}\left(\left[0\right], \left[\mathrm{u\text{-}t}\right]\right)$$

$$\underbrace{\left[\mathrm{weight}\right](t)}_{\mathbf{Y}(t)} = \underbrace{\left[1\right]}_{\underbrace{\boldsymbol{\Lambda}}_{\text{LAMBDA}}} \underbrace{\left[\mathrm{eta1}\right](t)}_{\boldsymbol{\eta}(t)} + \underbrace{\left[\mathrm{manifestmeans\_weight}\right]}_{\underbrace{\boldsymbol{\tau}}_{\text{MANIFESTMEANS}}} + \underbrace{\left[\epsilon_1\right](t)}_{\boldsymbol{\epsilon}(t)}$$

$$\underbrace{\left[\epsilon_1\right](t)}_{\boldsymbol{\epsilon}(t)} \sim \mathrm{N}\left(\left[0\right], \underbrace{\left[\mathrm{manifestvar\_weight\_weight}\right]}_{\underbrace{\boldsymbol{\Theta}}_{\text{MANIFESTVAR}}} \right)$$