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

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

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

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

$$\underbrace{\left[\epsilon_1\right](t)}_{\boldsymbol{\epsilon}(t)} \sim \mathrm{N}\left(\left[0\right], \left[1\right]\right)$$

cholsdcor = Function converting lower tri matrix of std dev and unconstrained correlation to Cholesky factor.

See Driver & Voelkle (2018) p11.