process model $\qquad x_t = E_t x_{t-1} + w_t$

noisy, incomplete observations $\qquad y_t = H_t x_t + v_t$

uncertainty model $\qquad \begin{aligned} w_t &\sim \mathcal{N}(0, Q_t) \\ v_t &\sim \mathcal{N}(0, R_t) \end{aligned}$