

Flow solver

Δt_{fluid}

Flow time step

Set kite state $\mathbf{x}^n$
Sample flow velocity
Evaluate forces/moments

$\mathbf{F}^n / \mathbf{M}^n$

Distribute force/moments
Solve flow

AWEbox/NMPC

Dynamics

NMPC

If $t \bmod T_c == 0$:
Update kite control $\mathbf{u}$

Integrate dynamics

$\Rightarrow$ New state $\mathbf{x}^{n+1}$

Δt_{dyn}

$\mathbf{x}^{n+1}$