

Symbol	Description	Range
$\Delta t$	Assimilation time step (particle evaluation time frame)	$\mathbb{R}^+$
$n$	Total number of root states $s_i$ in the probability distributions	$\mathbb{N} \geq 2$
$w_{\text{root}}$	Total weight of root samples drawn from $\mathcal{S}^t$	$\mathbb{R} \in [0, 1]$
$p_{\text{samp}}$	Percentage of $n$ corresponding to drawn and random samples	$\mathbb{R} \in [0, 1]$
$k_{\text{F-class}}$	Whether or not to use F-class kernels. If not, use D-class kernels.	true or false
$n_{\text{evo}}$	Samples to be generated by the optimizers per iteration	$\mathbb{N} \geq 2$
$g$	Level of greed for the assignment of particle weights $w_i$	$\mathbb{R} \in [-1, 1]$