

Simulations and post-processing
(base design) of all load cases.



Find the sampling set \tilde{V}_k of k most severe
load cases at each location (n total).



Calculate partial sums D_n^{base} and total
fatigue damage $D_{\text{tot}}^{\text{base}}$ at each location.



Simulations and post-processing
(new design) of n load cases in \tilde{V}_k .



Calculate partial sums
 D_n^{new} at each location.



Estimate $\hat{D}_{\text{tot}}^{\text{new}}$ from D_n^{new} , D_n^{base}
and $D_{\text{tot}}^{\text{base}}$ at each location.