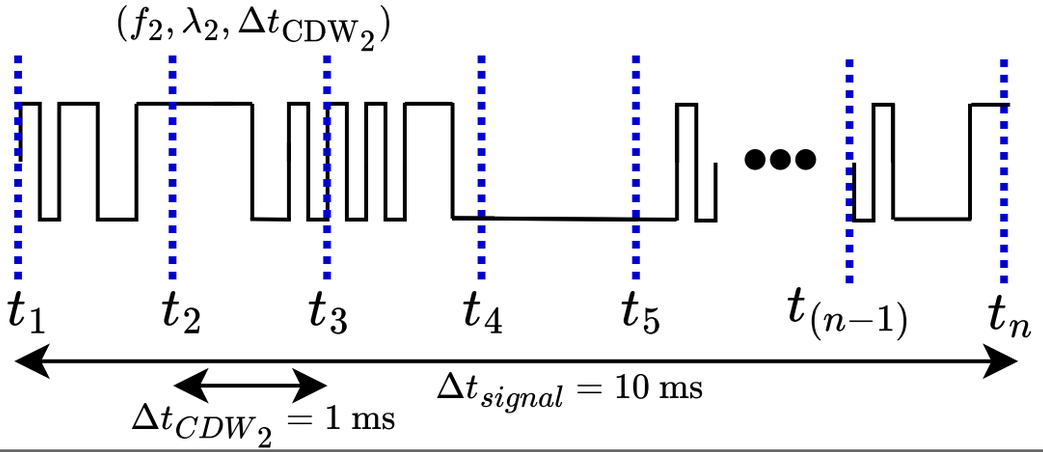
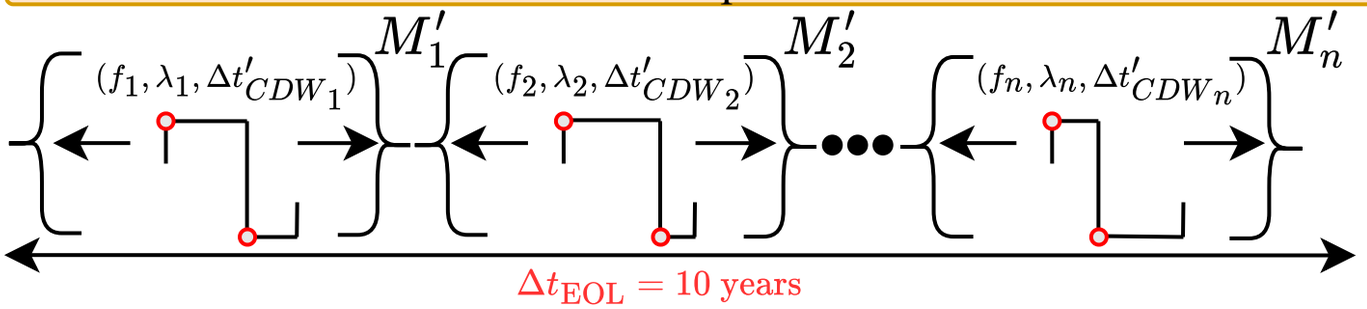
Original Representative Workload



Workload Parameters: $\Delta t_{\mathrm{EOL}} = 10$ years $n_{\mathrm{CDW}} = 10$ $\Delta t_{\mathrm{signal}} = 10$ ms

CDW Segment 2: $f_2 = 1$ GHz $\lambda_2 = 0.7$ $\Delta t_{\mathrm{CDW}_2} = 1$ ms

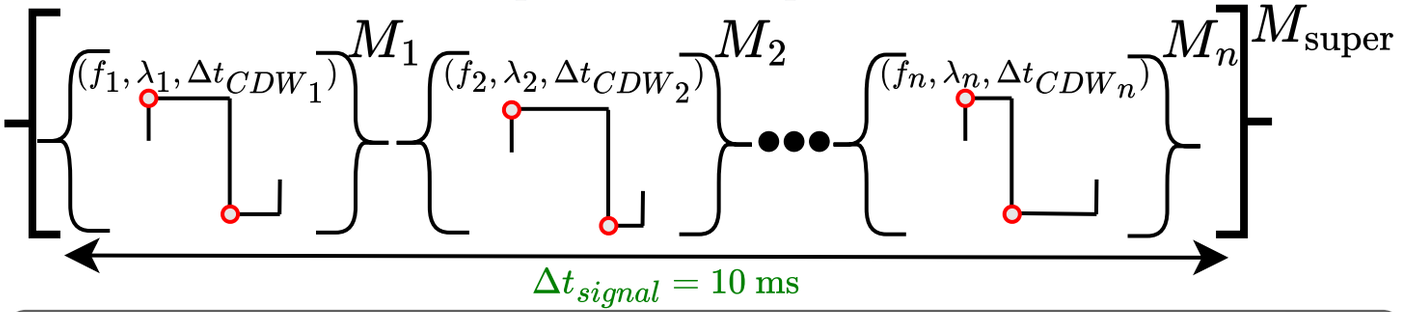
CDW compression



CDW Extrapolation Segment 2:

$$\Delta t'_{\mathrm{CDW}_2} = \Delta t_{\mathrm{EOL}} / n_{\mathrm{CDW}} = 1 \text{ year}$$
$$M'_2 = \Delta t'_{\mathrm{CDW}_2} \cdot f_2 = 3.156 \cdot 10^{16}$$

Super CDW compression



Super CDW Extrapolation:

$$M_{\mathrm{super}} = \Delta t_{\mathrm{EOL}} / \Delta t_{\mathrm{signal}} = 3.156 \cdot 10^9$$
$$M_2 = \Delta t_{\mathrm{CDW}_2} \cdot f_2 = 10^6$$