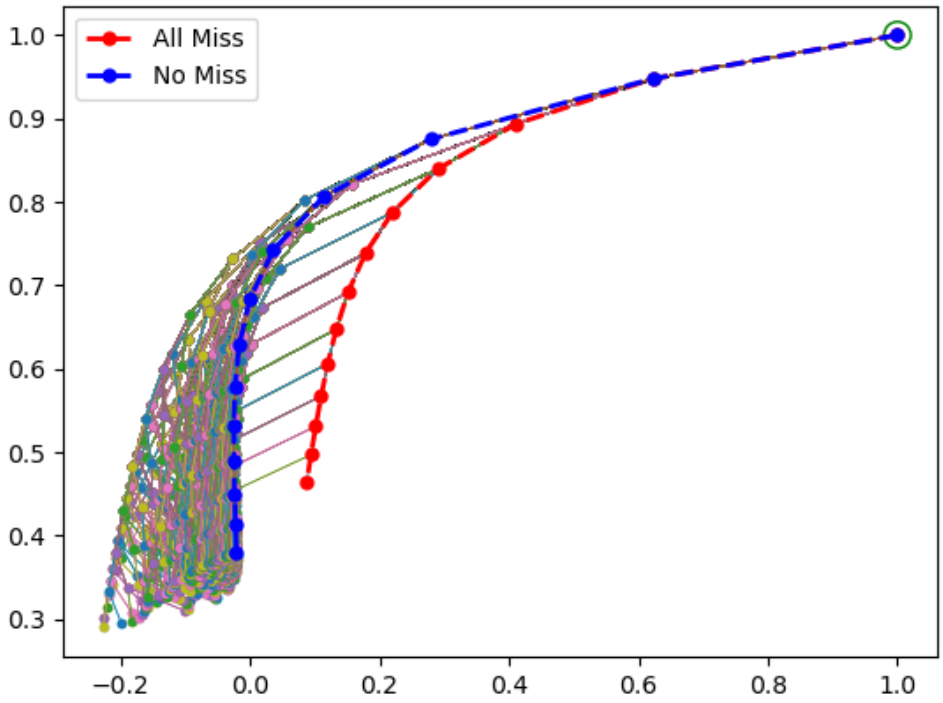
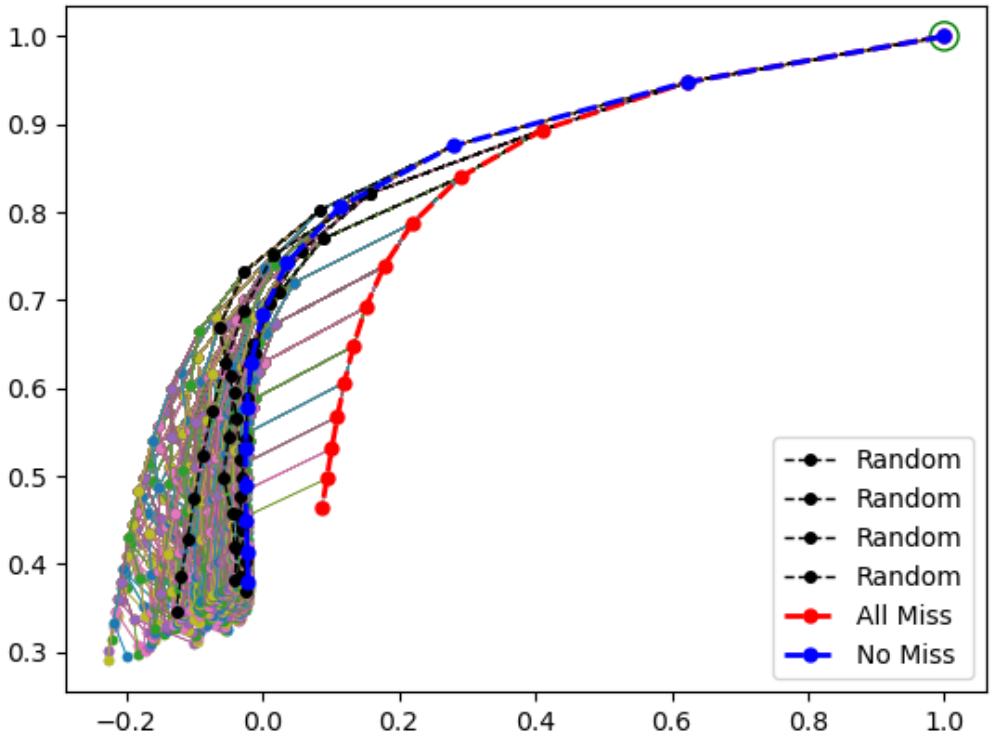
Report

- Using the same example that Clara used, here we see some plots that demonstrate the behavior of the system.
- We show all possible behavior for 12 time steps:
    - What we mean by 'all possible behavior' is, all possible combination of hit and miss. For instance, for 12 time steps, we have 2^{12} possible behaviors.
- Color Coding:
    - Red: All Miss. That is, for all the 12 time steps, the deadlines are missed.
    - Blue: All Hit. That is, for all the 12 time steps, the deadline are met.
    - The Green Circle (1,1): Initial Set.
    - Other Colors: All possible combination of hit and miss (for 12 time steps), 2^{12}.



Gauging Samples

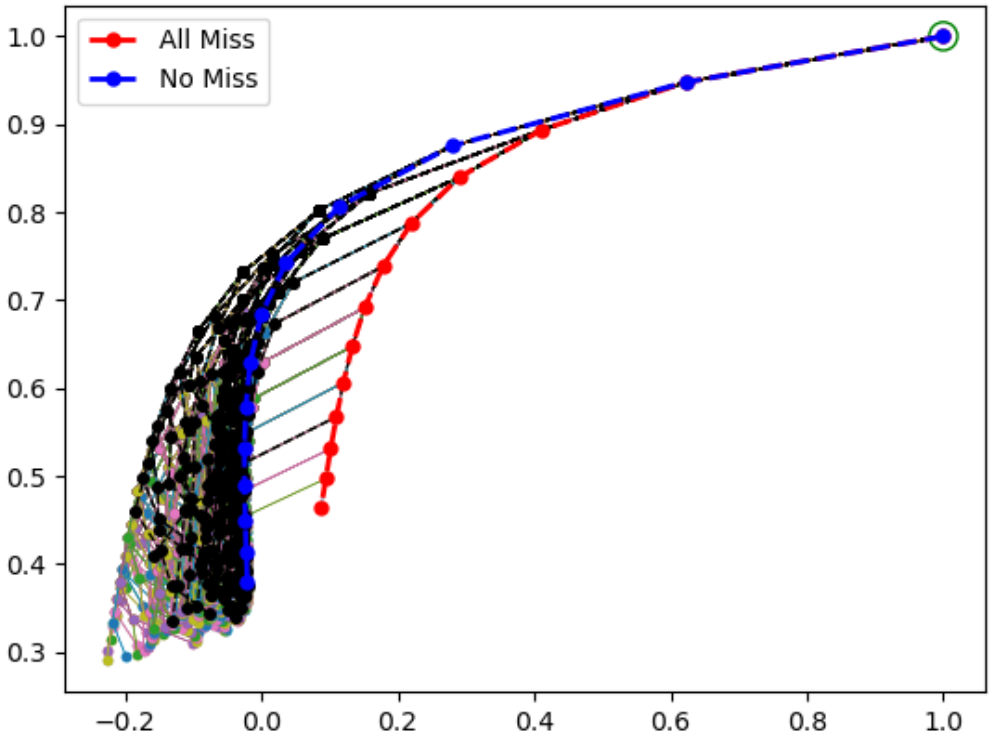
- To understand how a 'random' policy might work, we show 4 random trajectories which are a random combination of deadline hit/miss.
- Black: A random trajectory vis-à-vis deadline hit/miss at each time step.

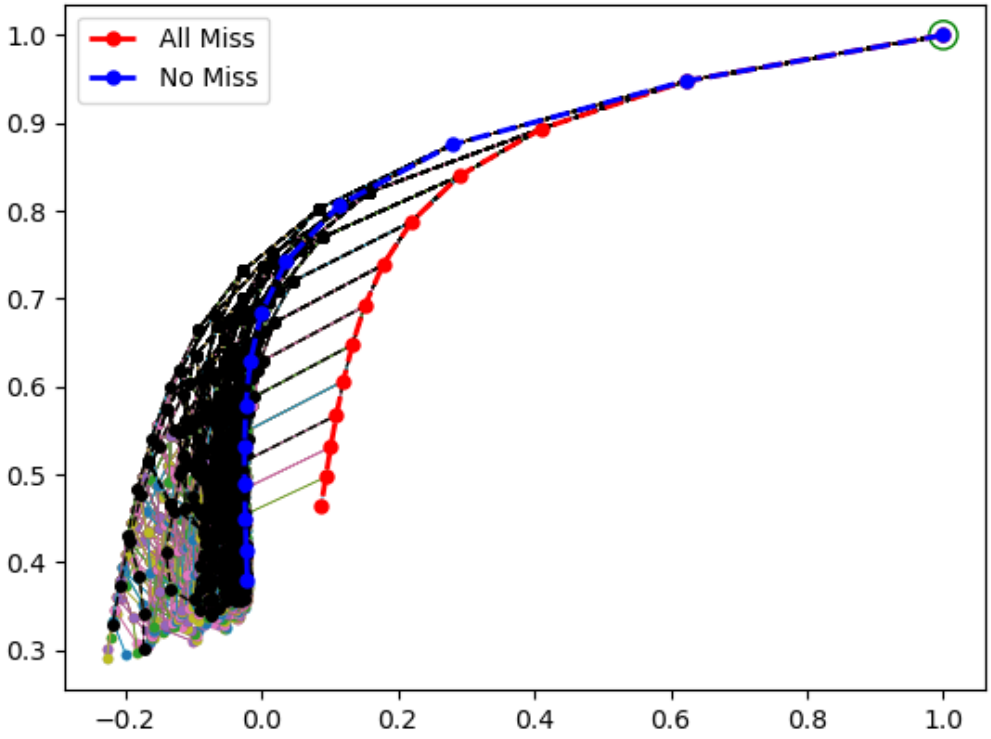


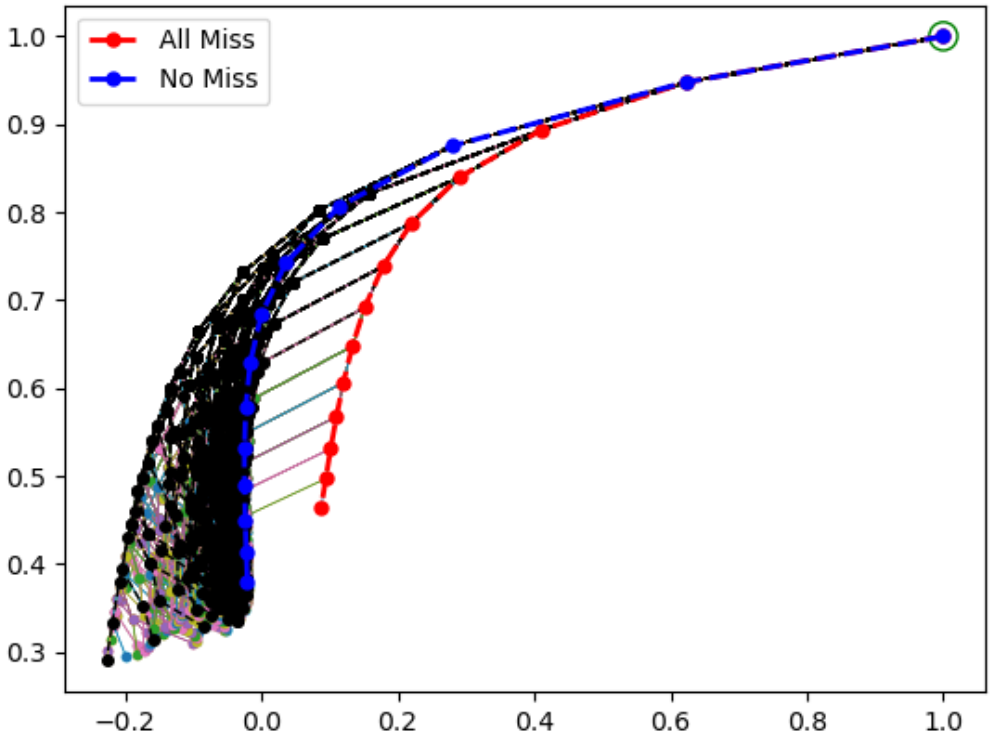
Note that, we can use this plot to demonstrate various policies that we will implement. That is, each highlighted trajectory is computed as per a specific proposed policy. This might give us a good comparative view.

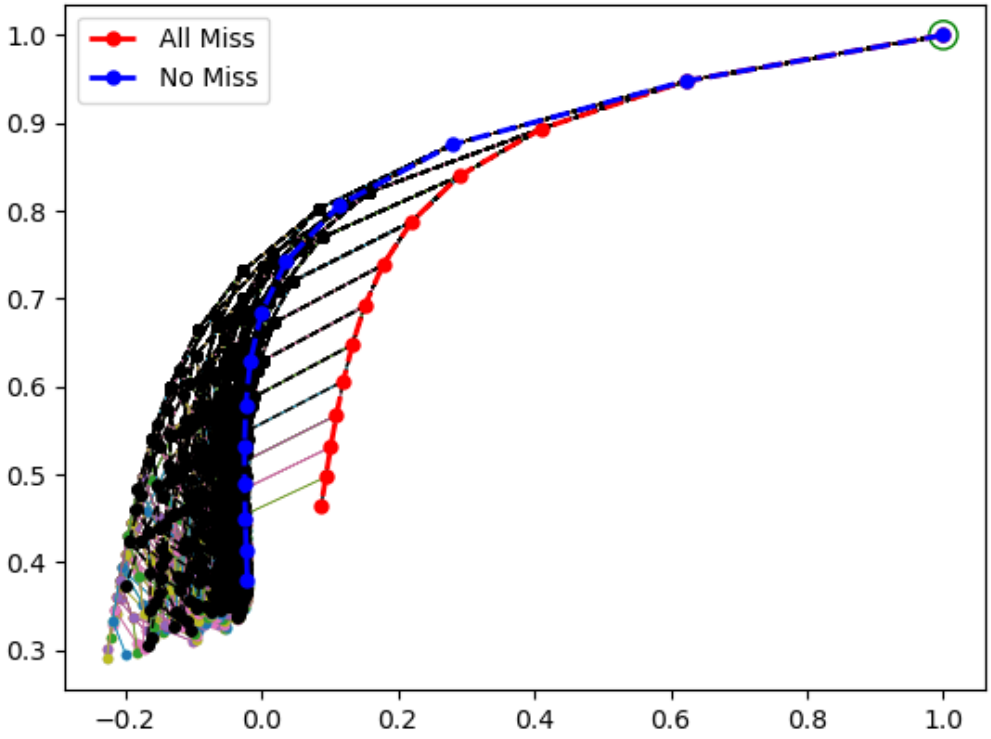
Sampling Based

- To understand how a statistical method using random sampling might work, here we will see some random samples being plotted. The next 4 plots show 50, 100, 150 and 200 random trajectories respectively, in black, plotted in the figures.


All Miss
No Miss
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
−0.2
0.0
0.2
0.4
0.6
0.8
1.0


All Miss
No Miss
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
−0.2
0.0
0.2
0.4
0.6
0.8
1.0


All Miss
No Miss
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
−0.2
0.0
0.2
0.4
0.6
0.8
1.0


All Miss
No Miss
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
−0.2
0.0
0.2
0.4
0.6
0.8
1.0