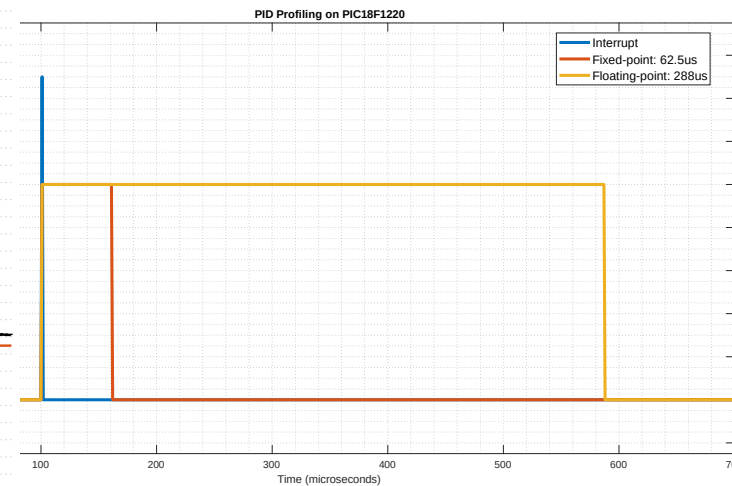
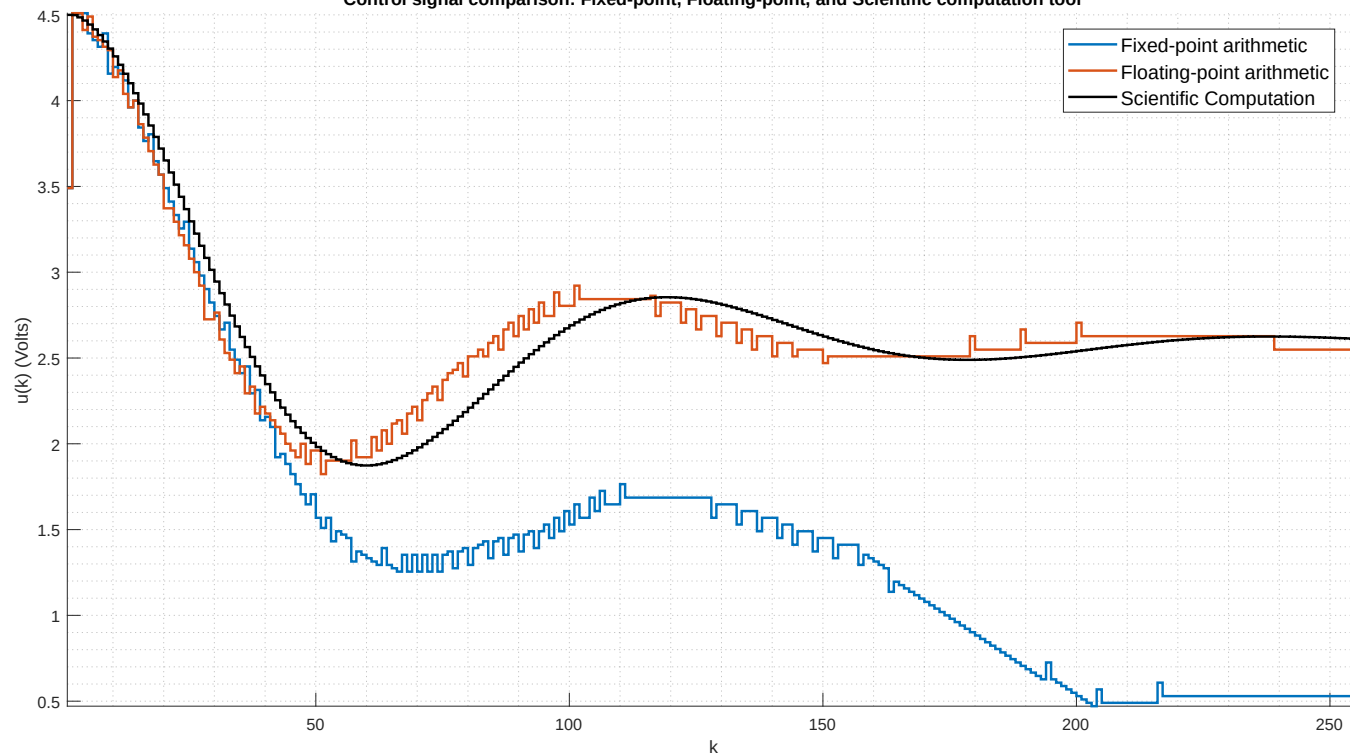


Control signal comparison: Fixed-point, Floating-point, and Scientific computation tool



Implementação	Tempo de Computação
Ponto Fixo	62,5 us
Ponto Flutuante	588 us

$$MSE = \frac{1}{n} \sum_{i=1}^n (Y_i - \hat{Y}_i)^2$$

$$M = \max(|(Y_i - \hat{Y}_i)|)$$

$$MAPE = \frac{1}{n} \sum_{i=1}^n \frac{(Y_i - \hat{Y}_i)}{Y_i} \cdot 100\%$$

Mean Squared Error	
Ponto Fixo	1,8336
Ponto Flutuante	0,0221

Maximum Error	
Fixed-point	2,1027
Floating-point	1,0098

Mean Absolute Percentage Error	
Fixed-point	0,1597
Floating-point	0,0027

RAM Usage	
Fixed-point	19 %
Floating-point	37 %

ROM Usage	
Fixed-point	15 %
Floating-point	58 %