# Average Time-Averaged Error

* Compares Frobenius Norm Average Error Values over the time horizon (RKHS State Matrix Approximation vs true State Matrix)
* N = # of time steps = 100
* Ts = Sampling Time(s)
* Time Horizon = N\*Ts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Ts = .1** | **Ts = .2** | **Ts = .5** | **Ts = 1** | **Ts = 5** |
| **RKHS Window Width = 5** | 0.1225 | .3363 | 6.6438 | 0.7614 | 4.2521 |
| **RKHS Window Width = 10** | 0.1011 | 0.2724 | 1.6332 | 0.7820 | 3.4601 |
| **RKHS Window Width = 15** | 0.0912 | 0.2262 | 0.7271 | 0.7247 | 3.0200 |
| **RKHS Window Width = 20** | 0.0916 | 0.2126 | 0.7671 | 0.7435 | 3.1392 |
| **RKHS Window Width = 40** | 0.0821 | 0.1783 | 0.5991 | 0.7028 | 2.8956 |