Truncation error: Assumes at step t, accurate, looks at difference with a step of delt t and delt x

Error here: looks at max error for all time between solution and simulation given that at t=0, equal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| dt | dx | N part | L inf error | L2 error |
| 0.0001 | 0.02 | 2 | 0.0038345 | 0.0191671 |
| 0.0001 | 0.02 | 1 | 0.0019173 | 0.0095835 |
|  |  |  |  |  |
| 0.000195 | 0.02 | 1 | 0.0022708 | 0.0113564 |
| 0.000175 | 0.02 | 1 | 0.0021963 | 0.0109809 |
| 0.00015 | 0.02 | 1 | 0.0021032 | 0.0105132 |
| 0.000125 | 0.02 | 1 | 0.0020102 | 0.0100473 |
| 0.0001 | 0.02 | 1 | 0.0019173 | 0.0095835 |
| 0.000075 | 0.02 | 1 | 0.0018244 | 0.0091220 |
| 0.00005 | 0.02 | 1 | 0.0017317 | 0.0086631 |
| 0.000025 | 0.02 | 1 | 0.0016390 | 0.0082071 |
|  |  |  |  |  |
| 0.0001 | 0.04 | 1 | 0.0029806 | 0.0105472 |
| 0.0001 | 0.0333333 | 1 | 0.0026800 | 0.0103796 |
| 0.0001 | 0.0285714 | 1 | 0.0024308 | 0.0101720 |
| 0.0001 | 0.025 | 1 | 0.0022283 | 0.0099624 |
| 0.0001 | 0.0222222 | 1 | 0.0020580 | 0.0097648 |
| 0.0001 | 0.02 | 1 | 0.0019173 | 0.0095835 |
| 0.0001 | 0.0181818 | 1 | 0.0017955 | 0.0094195 |
| 0.0001 | 0.0166667 | 1 | 0.0016933 | 0.0092720 |
| 0.0001 | 0.0153846 | 1 | 0.0016028 | 0.0091396 |
| 0.0001 | 0.0142857 | 1 | 0.0015252 | 0.0090208 |