Solving Zhou's chaotic system using Euler's method

ABSTRACT

An algorithm for Euler's method is used to obtain an approximation for the initial-value problem for ordinary differential equation. This method is then employing to Zhou's chaotic system. This system is a three-dimensional autonomous system according to the numerical simulation as well as the theoretical analysis. We use the C++ software to solve this system and MATLAB to plot the solutions and the results are given for different number of iterations