Review of: "On a New Two-Point Taylor Expansion With Applications"

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In this paper, a new two-point Taylor expansion is proposed, the convergence criterion and convergence intervals are discussed. The application in solving differential equations is also given. The work is well done.

If the following equations were discussed, the work might be better.

Question 1:

In the paper, the convergence intervals of the proposed two-point Taylor expansion are given and contrasted with the convergence intervals of the single-point Taylor expansion. Whether the convergence intervals of the classical two-point Taylor expansion (24) can be obtained? If they can, compared with the convergence intervals for classical ones, what's the advantage of the proposed two-point Taylor expansion?

Question 2:

When we approximate the function f(x) with both two-point Taylor expansions, what's the advantage of yours?

Question 3:

When we solve the differential equation with both two-point Taylor expansions, what's the advantage of yours?

Question :

In line 9 on page 6, under inequality (46), is it appropriate to use the symbol x_{0-2}?