COMMENTS ON "THE CHEN SYSTEM REVISITED"

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Abstract. We show that the criticisms done in the paper ["The Chen system revisited," Dynam. Cont. Dis. Ser. B 20 (2013) 691–696] against our work ["Chen's attractor exists if Lorenz repulsor exists: The Chen system is a special case of the Lorenz system," Chaos 23 (2013) 033108] are invalid. Therefore, the results found in this last paper are correct. Namely, a linear scaling in time and state variables demonstrates that absolutely all the dynamics exhibited by the Chen system (for $c \neq 0$) can be trivially deduced from the corresponding dynamics of the Lorenz system in the parameter plane $\rho + \sigma = -1$ (reversing time if $c > 0$ and without time reversion if $c < 0$).

Keywords. Lorenz system, Chen system, linear scaling, dynamical behavior, time reversion, chaotic attractor/repulsor

AMS (MOS) subject classification: 34C20, 34C41, 37C15, 37D45

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