

# Erratum: Simulating radiative magnetohydrodynamical flows with ASTROBEAR: implementation and applications of non-equilibrium cooling

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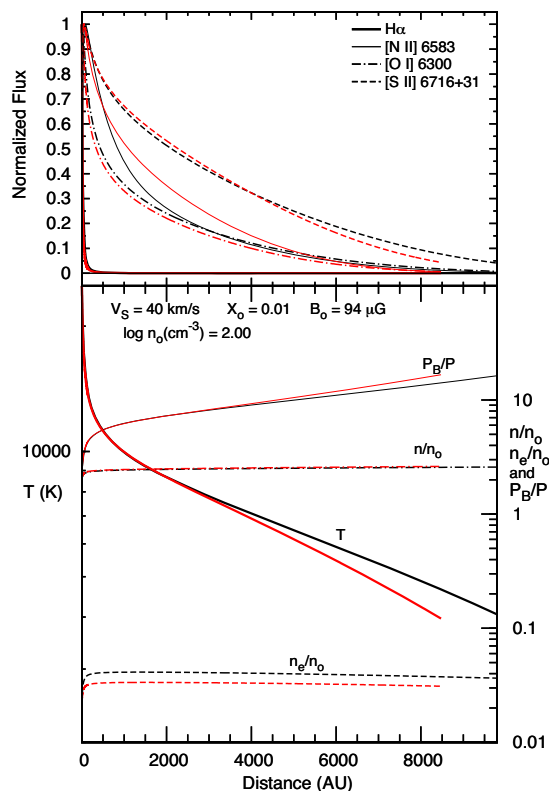
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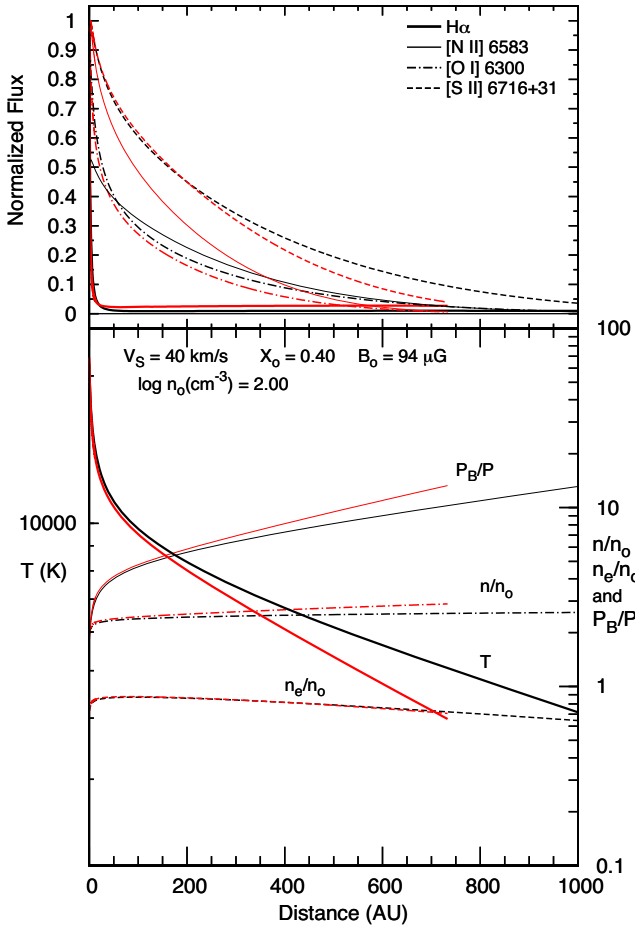
**Key words:** errata, addenda – radiation mechanisms: thermal – line: formation – (*ISM:*) Herbig-Haro objects – *ISM:* jets and outflows – methods: numerical – (*magnetohydrodynamics*) MHD.

In the paper “Simulating Radiative Magnetohydrodynamical Flows with ASTROBEAR: Implementation and Applications of Non-equilibrium Cooling”, MNRAS, 481, 3098, sty2471 (2018), the wrong figures were published for Figs 2, 3, and 4. The emission line profiles shown in the top halves of these three figures are incorrect. The figures that follow here are correct and are meant to replace those from the aforementioned paper. All of the captions, text, and conclusions drawn from these figures remain the same.

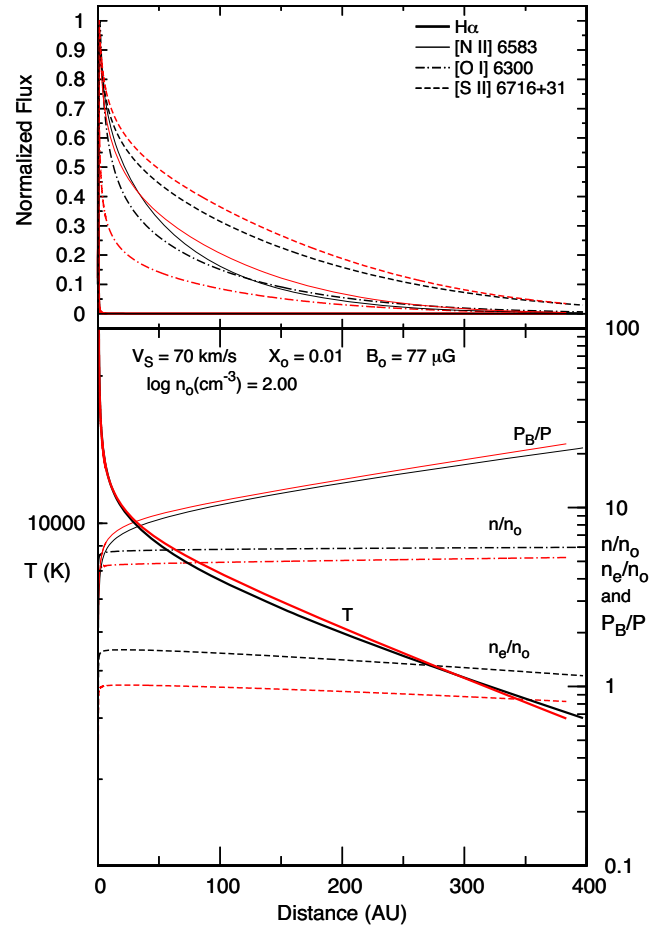


**Figure 2.** Radiative shock profile of model A. The *red* lines are from the ASTROBEAR model, and the *black* lines are from CRSC. The top plot shows the emission lines, and the bottom plot shows the temperature  $T$ , number density compression ratio  $n/n_0$ , inverse plasma beta  $P_B/P$ , and electron number density ratio  $n_e/n_0$ . The temperature values use the left vertical axis, and the ratios use the right vertical axis. Comparing  $n/n_0$  to  $n_e/n_0$  gives a sense for how ionization fraction changes with distance. The inverse plasma beta  $P_B/P$  is greater than 1 that means that the magnetic field pressure dominates over thermal pressure forces.

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**Figure 3.** Radiative shock profile of model B. The *red* lines are from the ASTROBEAR model, and the *black* lines are from CRSC.



**Figure 4.** Radiative shock profile of model C. The *red* lines are from the ASTROBEAR model, and the *black* lines are from CRSC.

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