

EoS Figures: Ionization and Recombination

Luke Chamandy,[★]

Department of Physics and Astronomy, University of Rochester, Rochester NY 14627, USA

2nd February 2022

ABSTRACT

Figures

Key words: binaries: close – stars: evolution – stars: kinematics and dynamics – stars: mass loss – stars: winds, outflows – hydrodynamics

[★] lchamandy@pas.rochester.edu

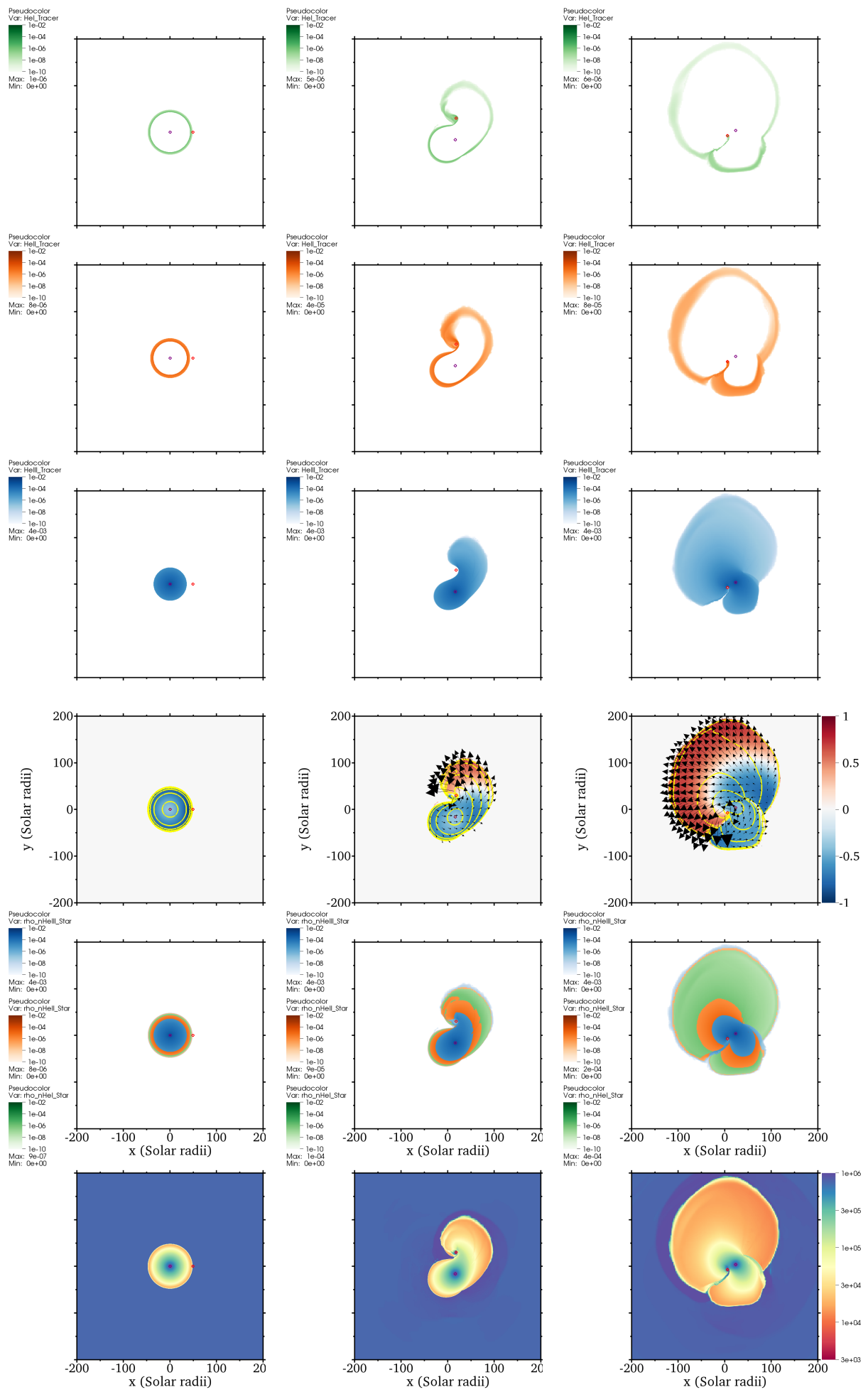


Figure 1. Columns show $t = 0, 5.8$ and 11.6 d. Rows are: (1) HeI-dominant gas tracer, (2) HeII-dominant gas tracer, (3) HeIII-dominant gas tracer, (4) Normalized binding energy density of star tracer gas, (5) Current dominant local ionization state of gas, (6) Gas temperature.

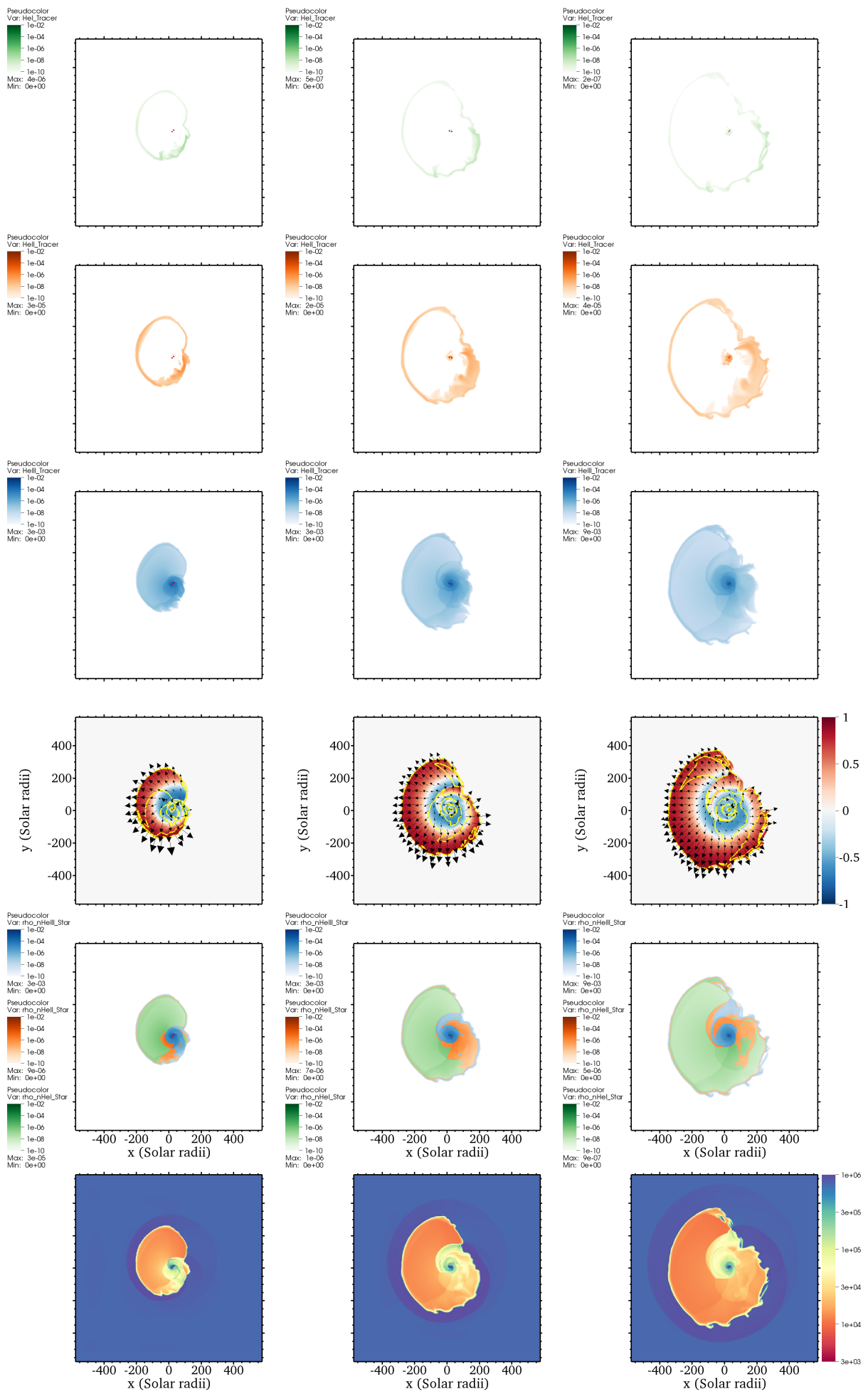


Figure 2. Continuation of Fig. 1 for times $t = 17.4, 23.1$ and 28.9 d.

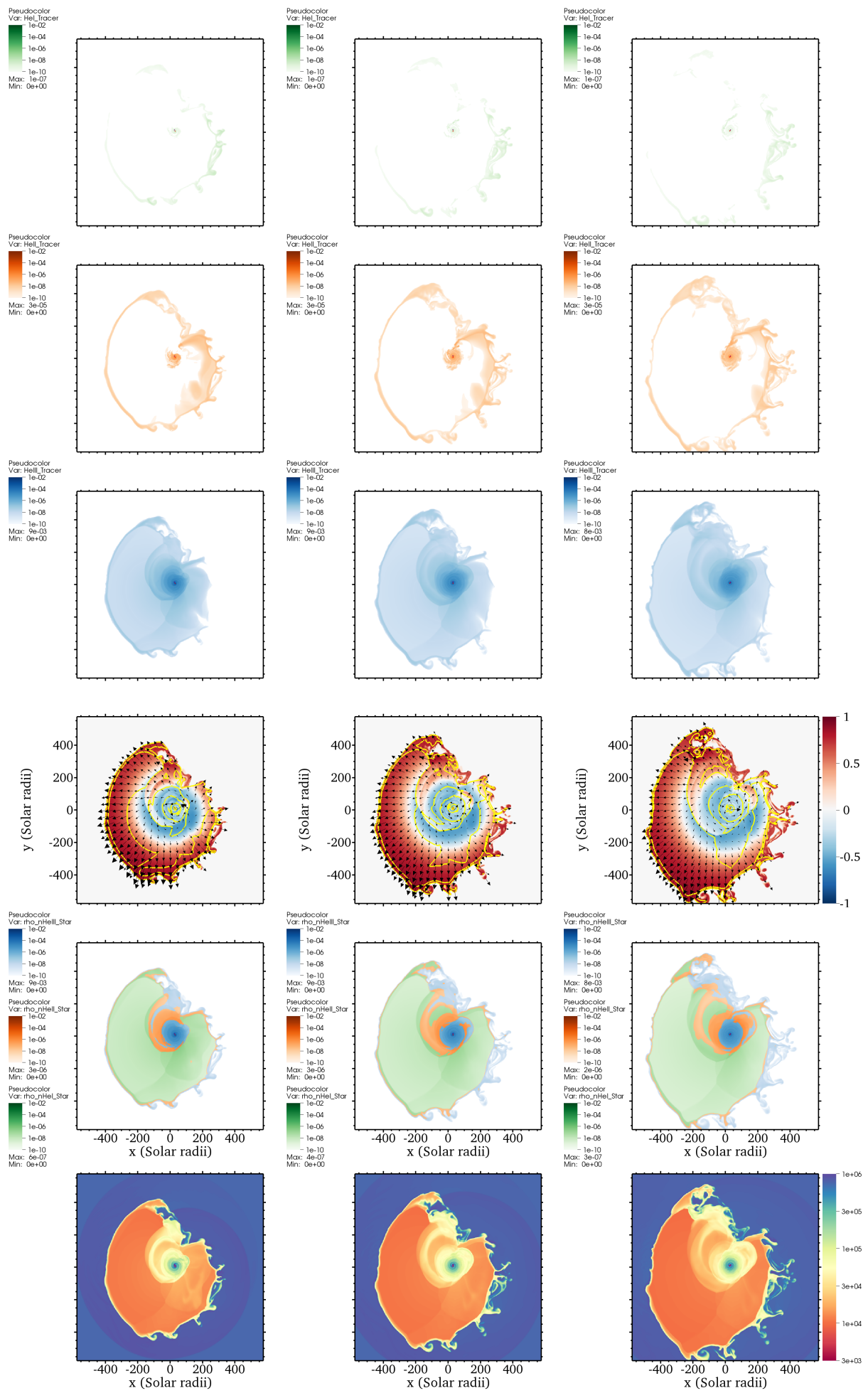


Figure 3. Continuation of Fig. 1 for times $t = 34.7, 40.5$ and 46.3 d.

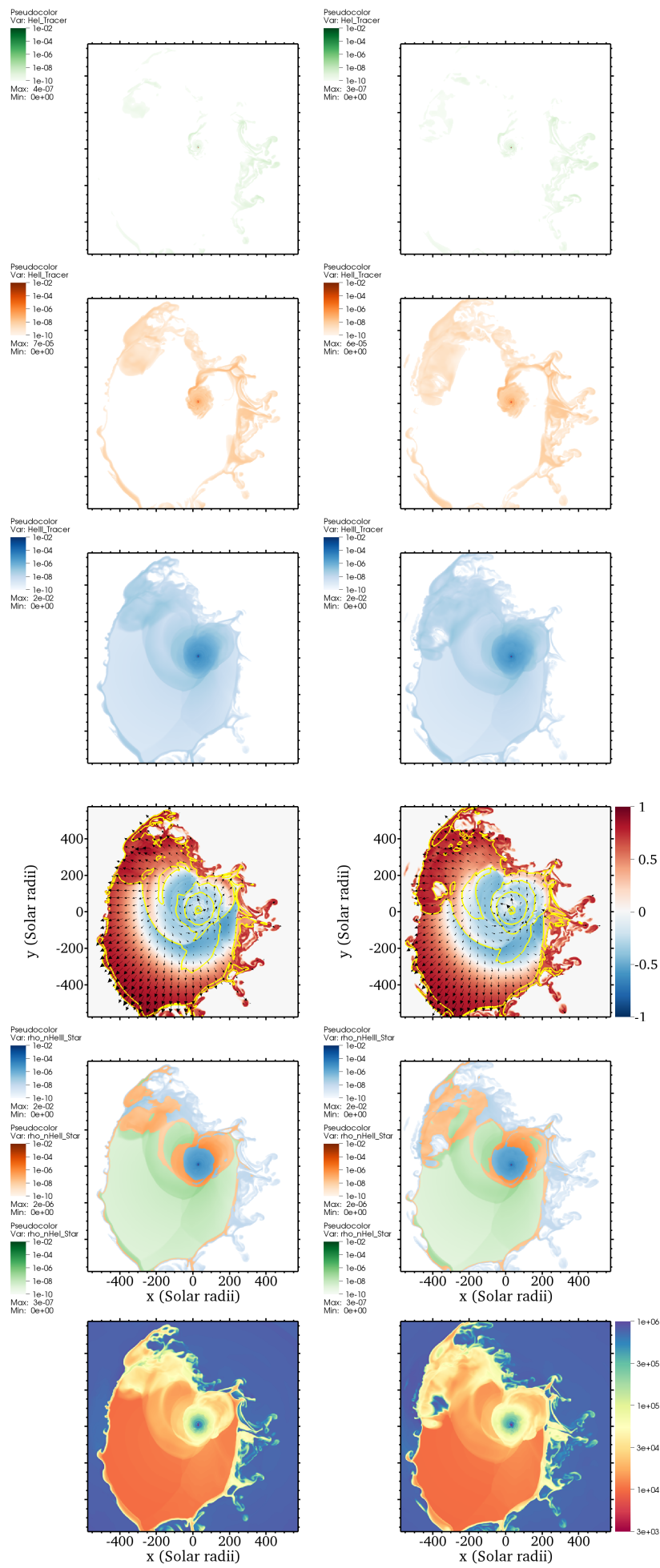


Figure 4. Continuation of Fig. 1 for times $t = 52.1$ and 57.9 d.

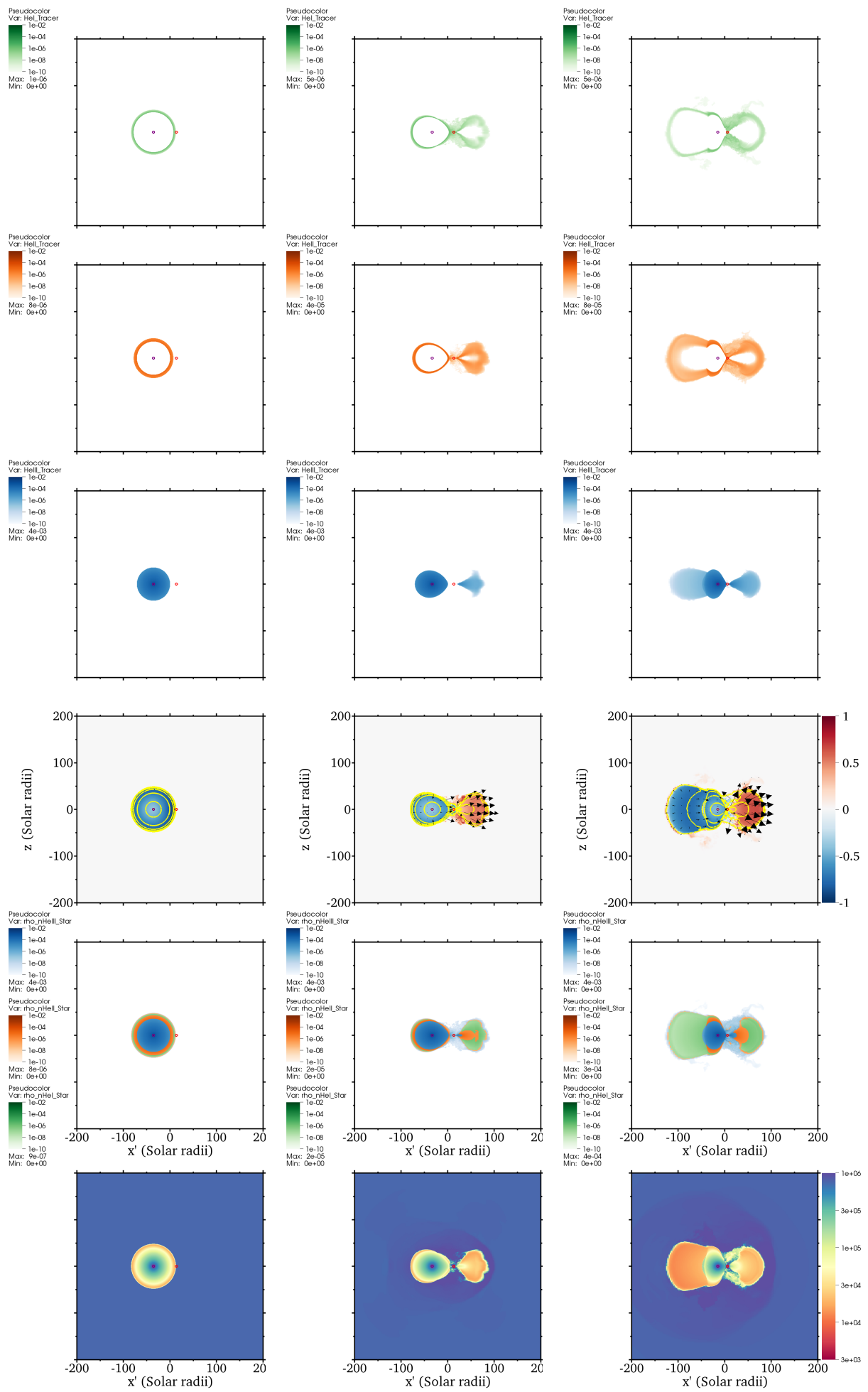


Figure 5. Columns show $t = 0, 5.8 \text{ and } 11.6 \text{ d}$. Rows are: (1) HeI-dominant gas tracer, (2) HeII-dominant gas tracer, (3) HeIII-dominant gas tracer, (4) Normalized binding energy density of star tracer gas, (5) Current dominant local ionization state of gas, (6) Gas temperature.

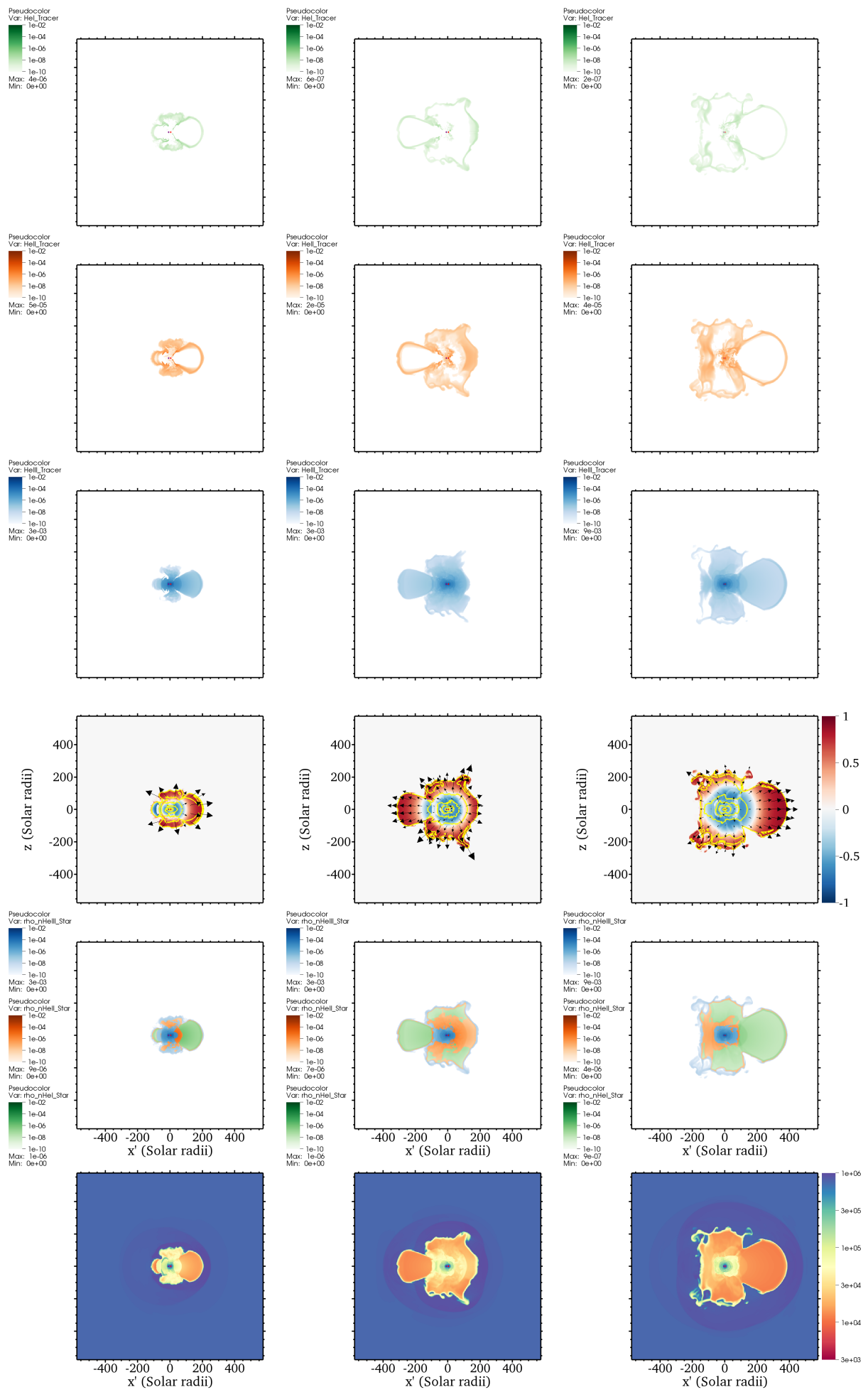


Figure 6. Continuation of Fig. ?? for times $t = 17.4, 23.1$ and 28.9 d.

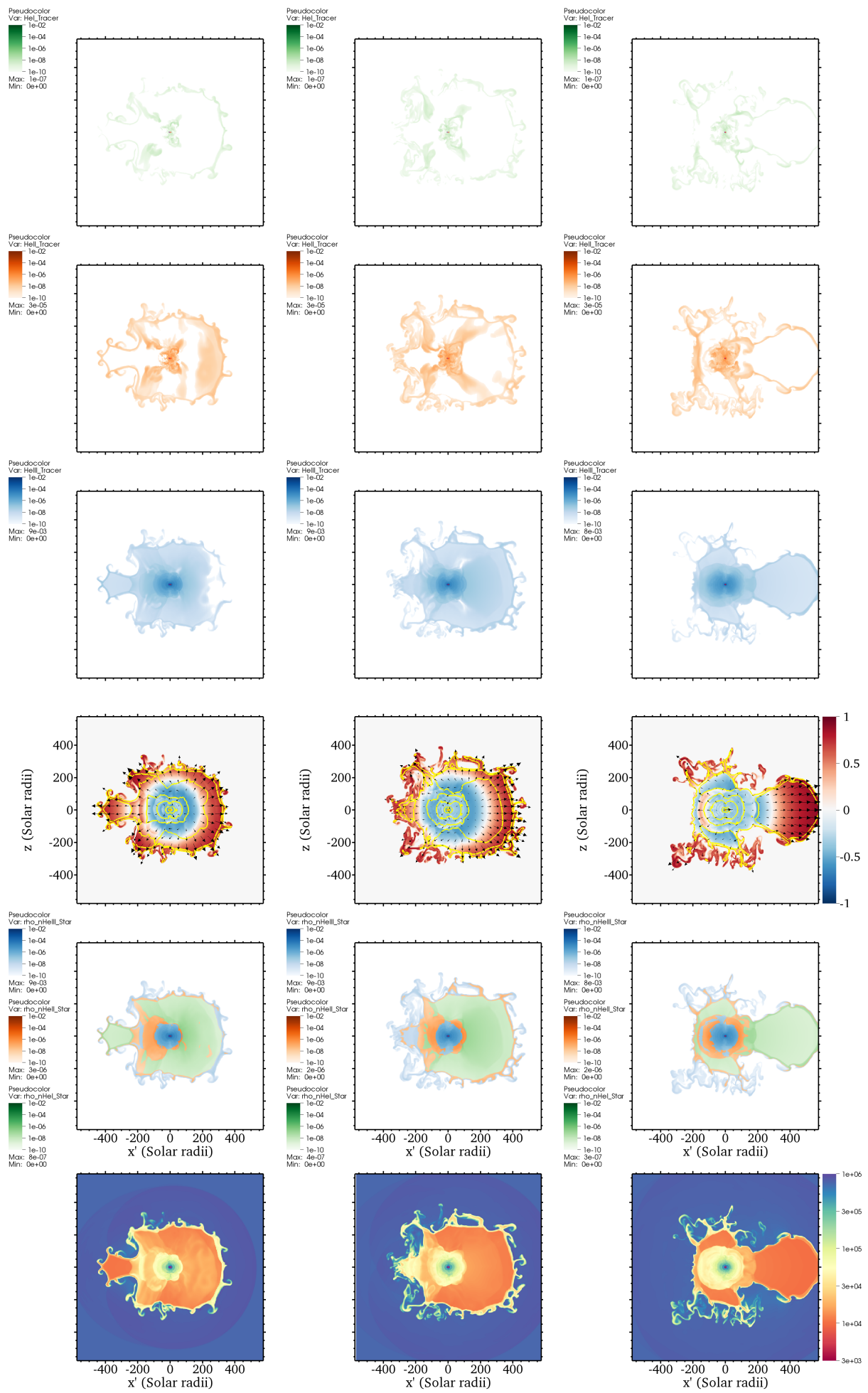


Figure 7. Continuation of Fig. ?? for times $t = 34.7, 40.5$ and 46.3 d.

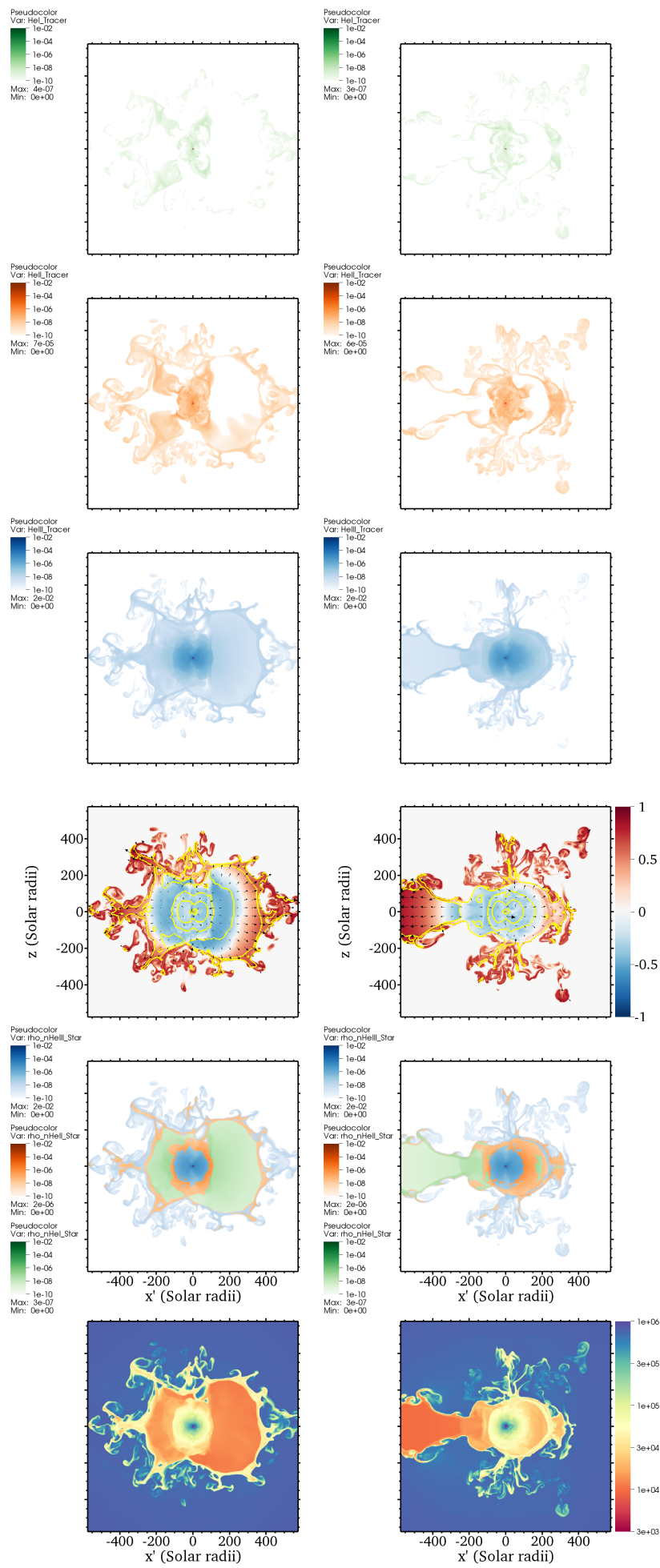


Figure 8. Continuation of Fig. ?? for times $t = 52.1$ and 57.9 d.

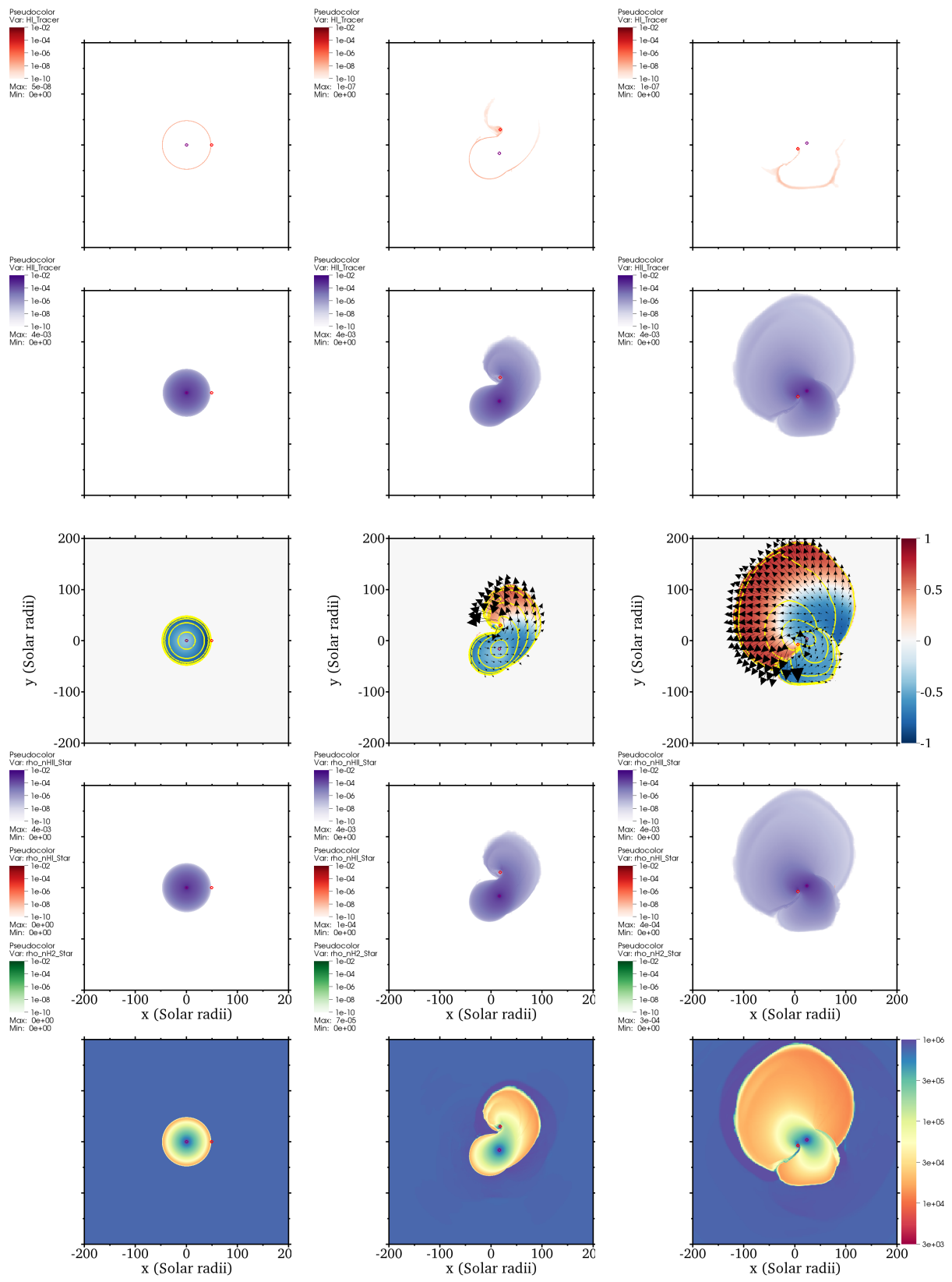


Figure 9. Columns show $t = 0, 5.8$ and 11.6 d. Rows are: (1) Normalized binding energy density of star tracer gas, (2) HI-dominant gas tracer, (3) HII-dominant gas tracer, (4) Current dominant local ionization state of gas, (5) Gas temperature.

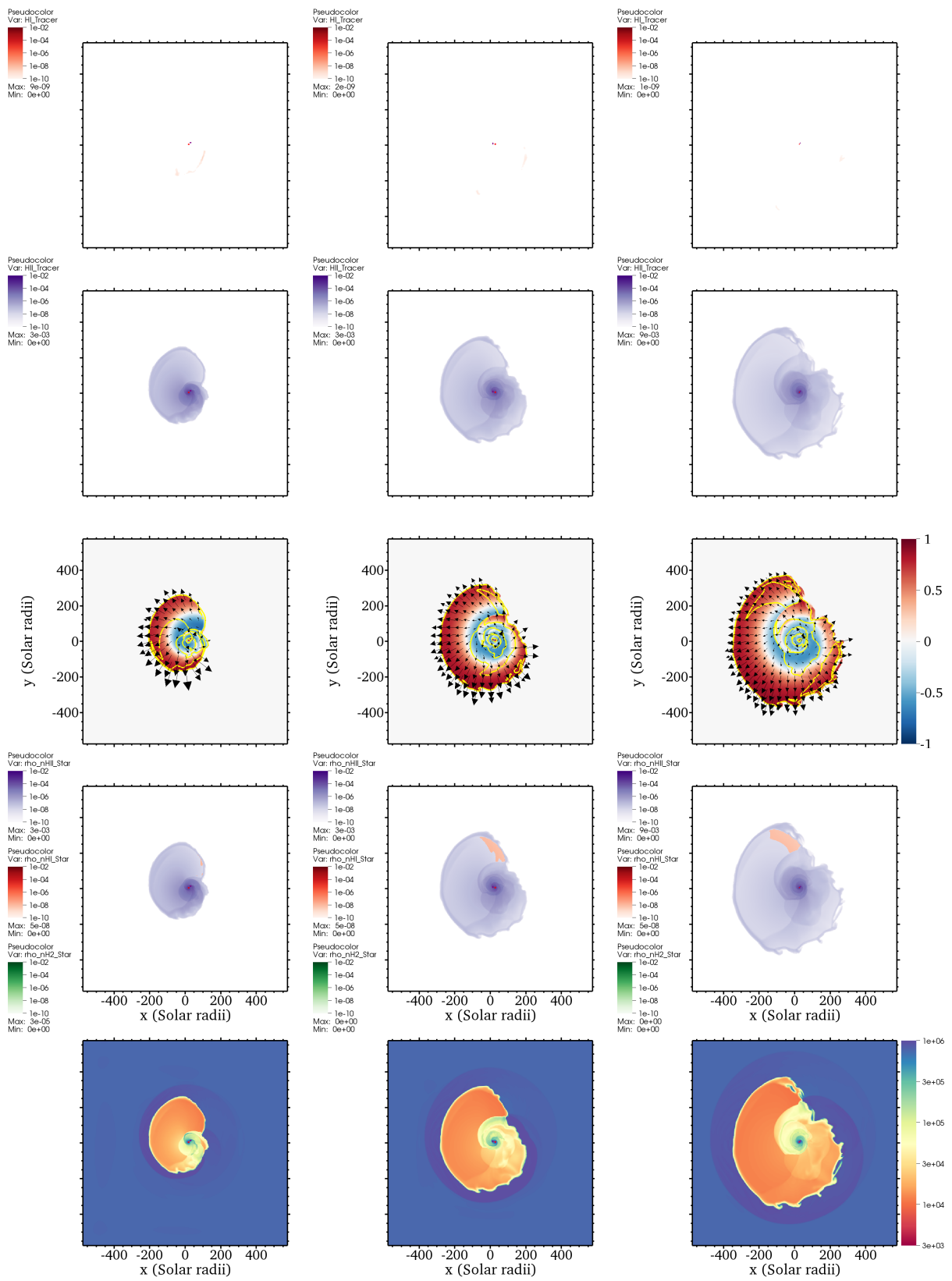


Figure 10. Continuation of Fig. 9 for times $t = 17.4, 23.1$ and 28.9 d.

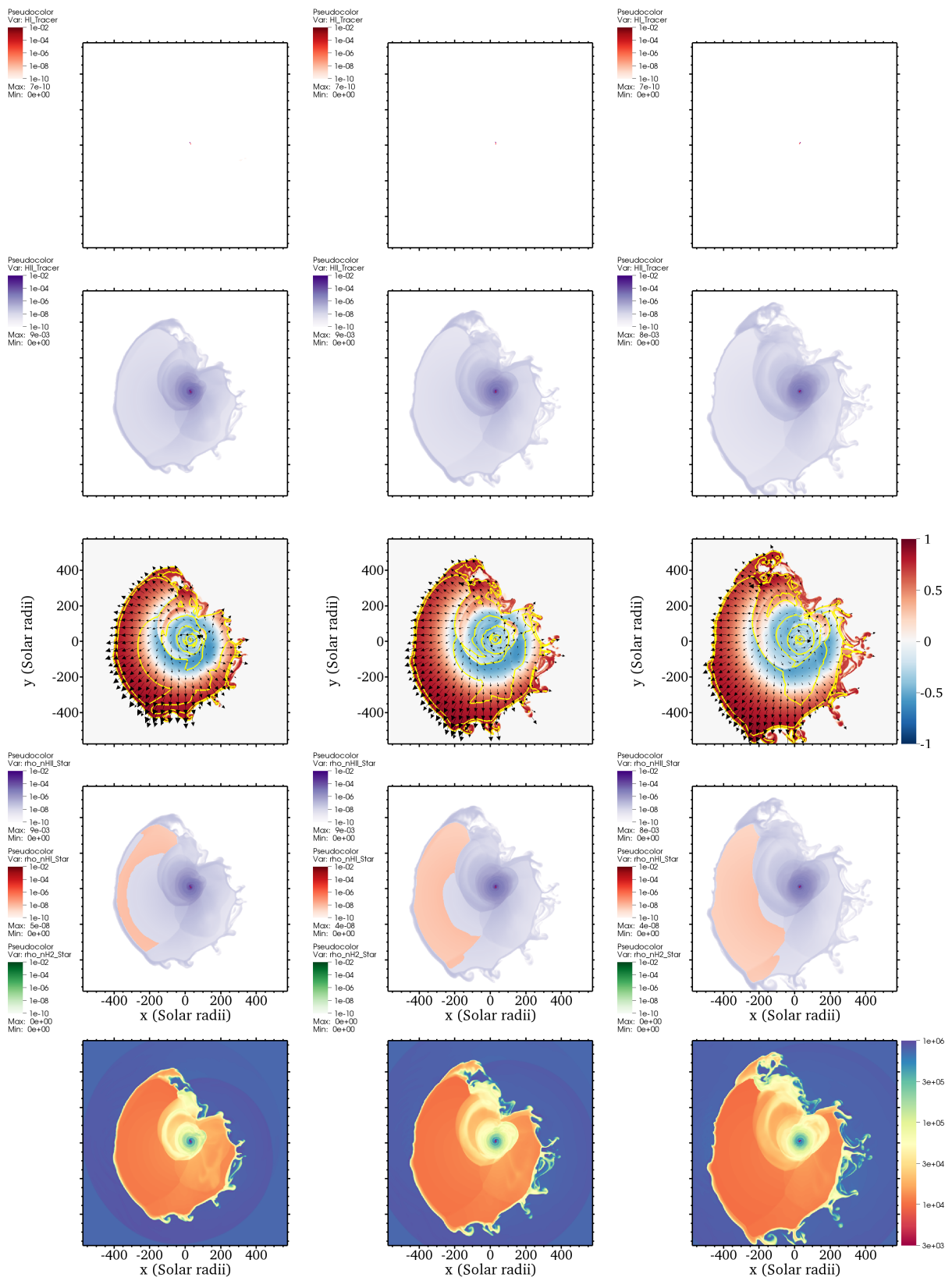


Figure 11. Continuation of Fig. 9 for times $t = 34.7, 40.5$ and 46.3 d.

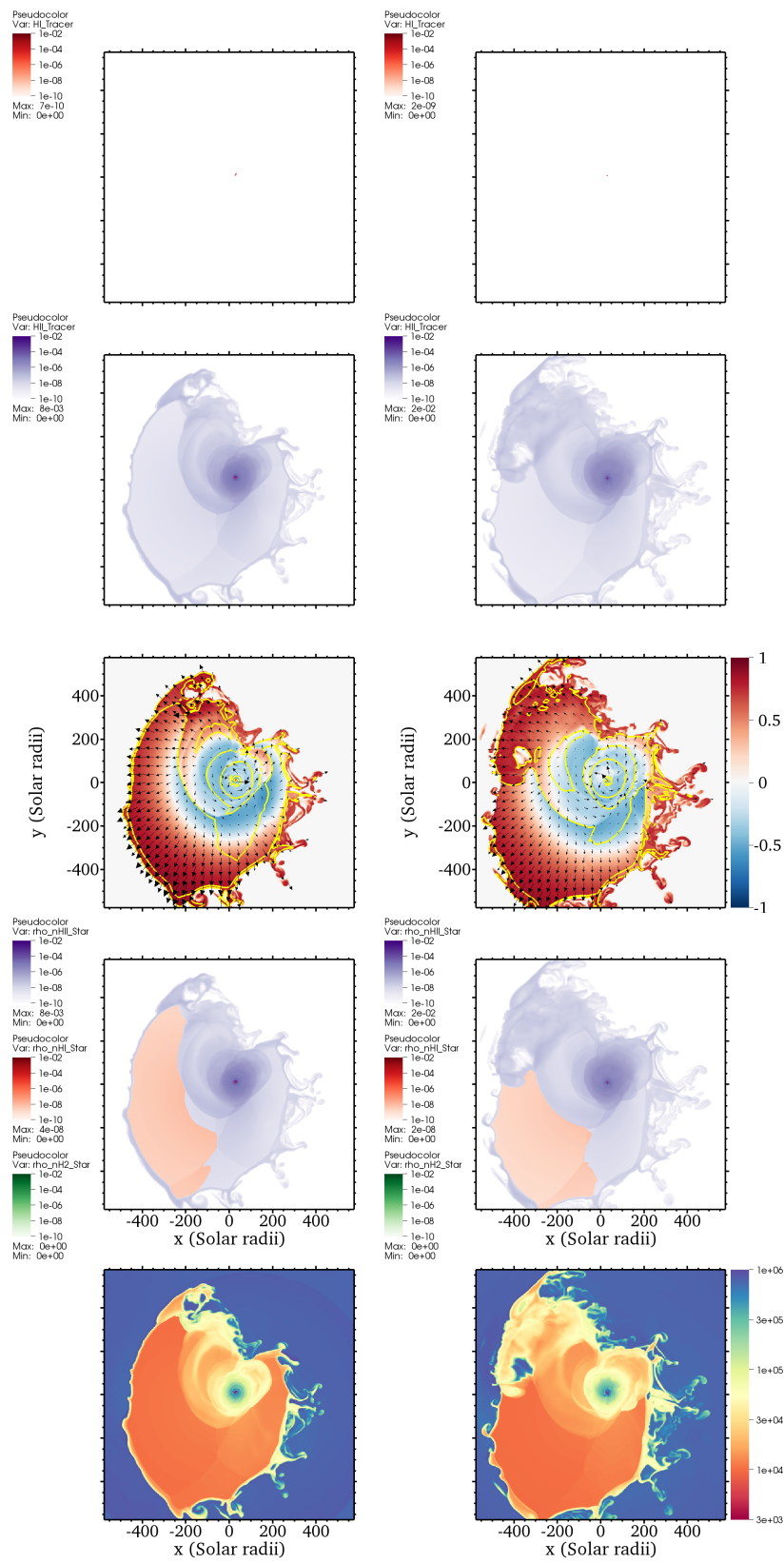


Figure 12. Continuation of Fig. 9 for times $t = 52.1$ and 57.9 d.

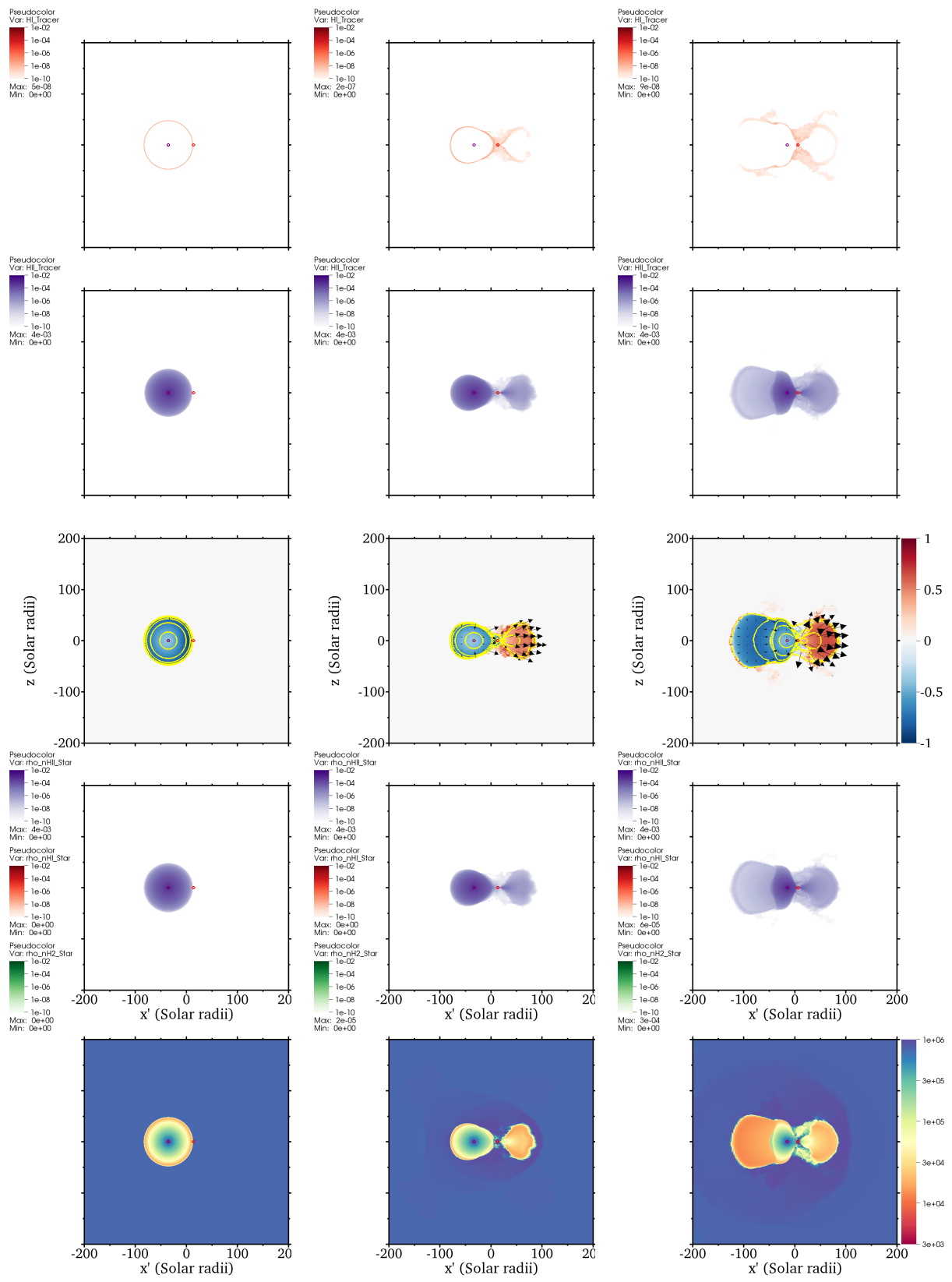


Figure 13. Columns show $t = 0, 5.8$ and 11.6 d. Rows are: (1) Normalized binding energy density of star tracer gas, (2) HI-dominant gas tracer, (3) HII-dominant gas tracer, (4) Current dominant local ionization state of gas, (5) Gas temperature.

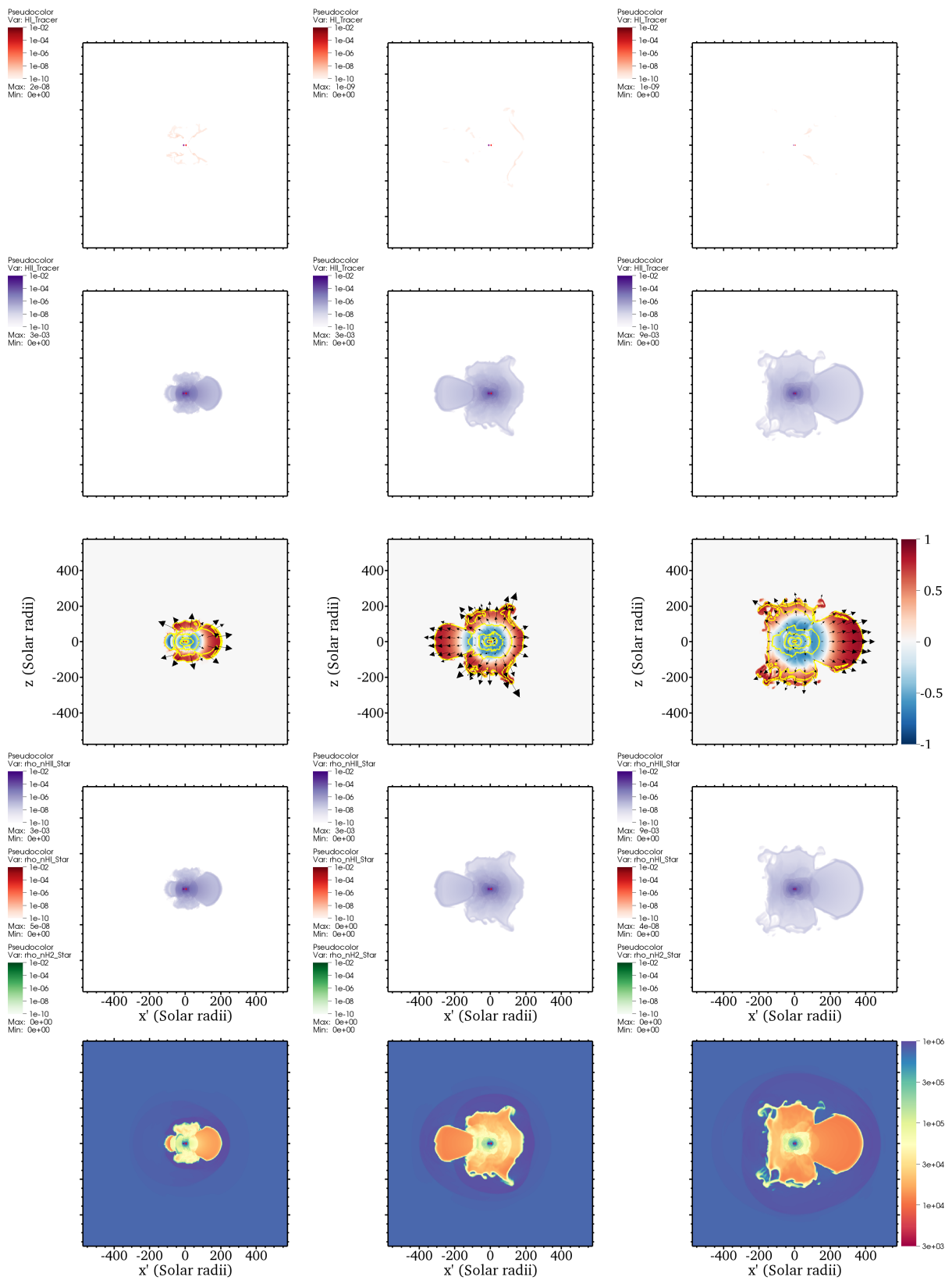


Figure 14. Continuation of Fig. 13 for times $t = 17.4, 23.1$ and 28.9 d.

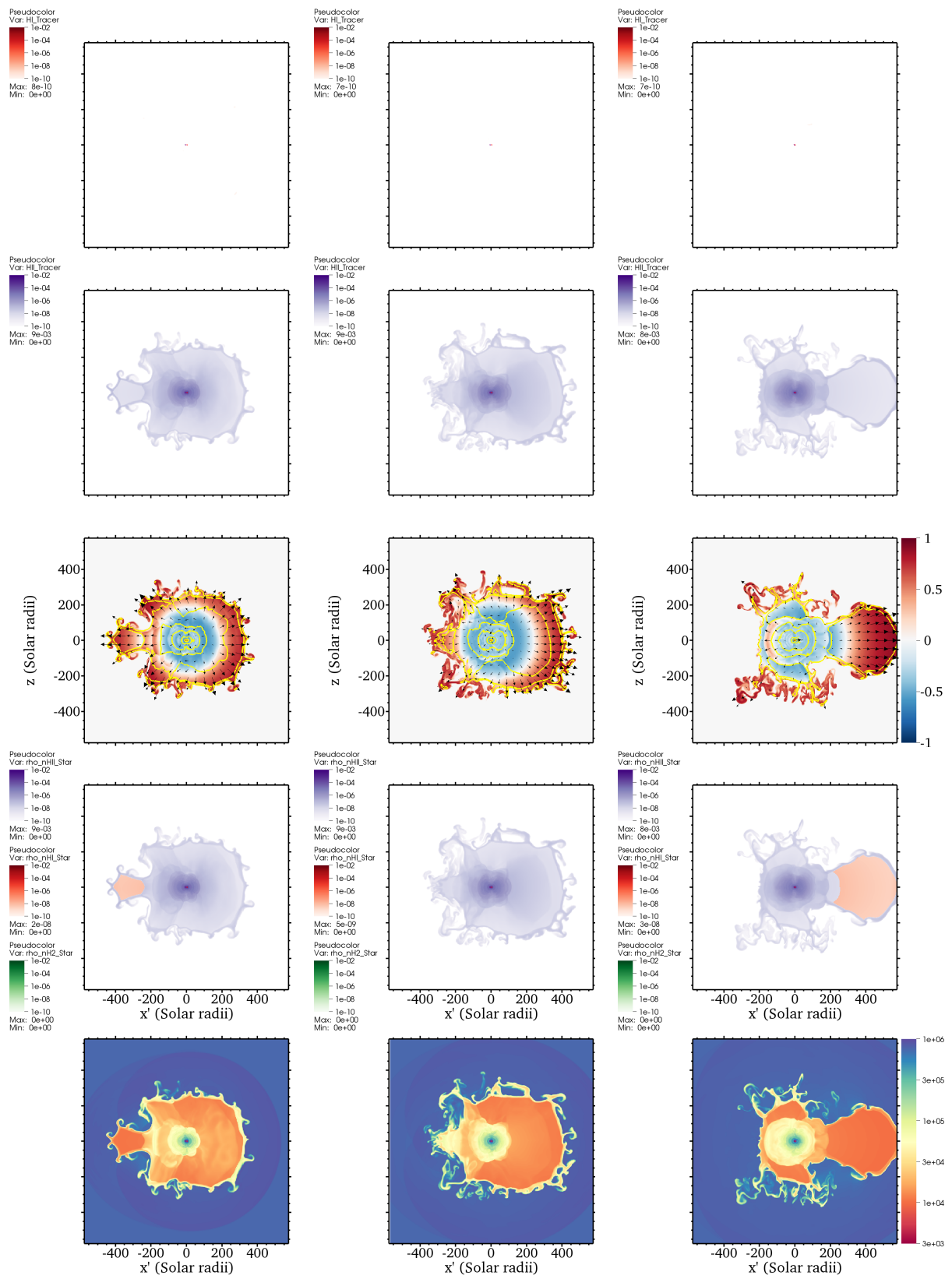


Figure 15. Continuation of Fig. 13 for times $t = 34.7, 40.5$ and 46.3 d.

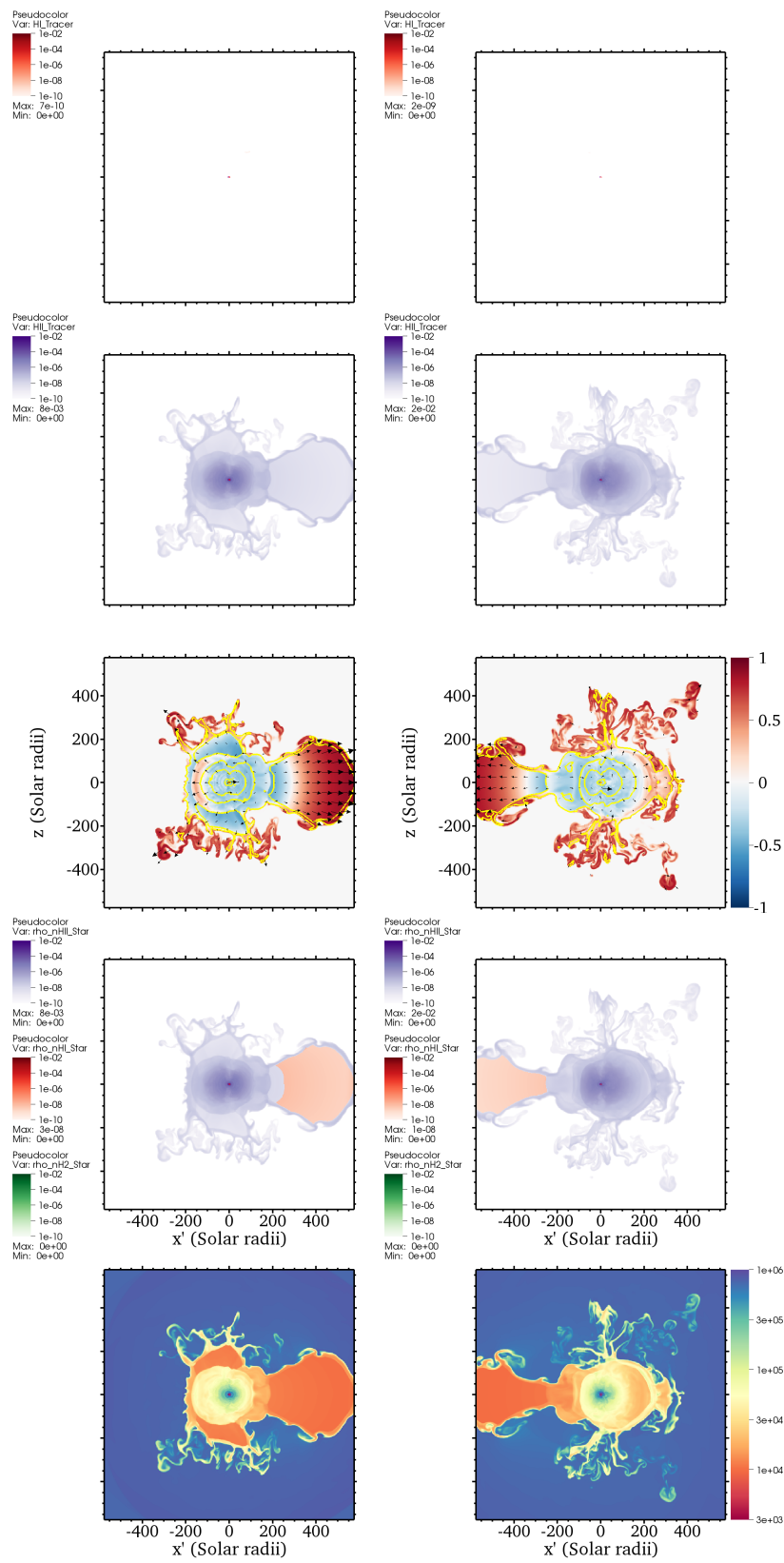


Figure 16. Continuation of Fig. 13 for times $t = 52.1$ and 57.9 d.