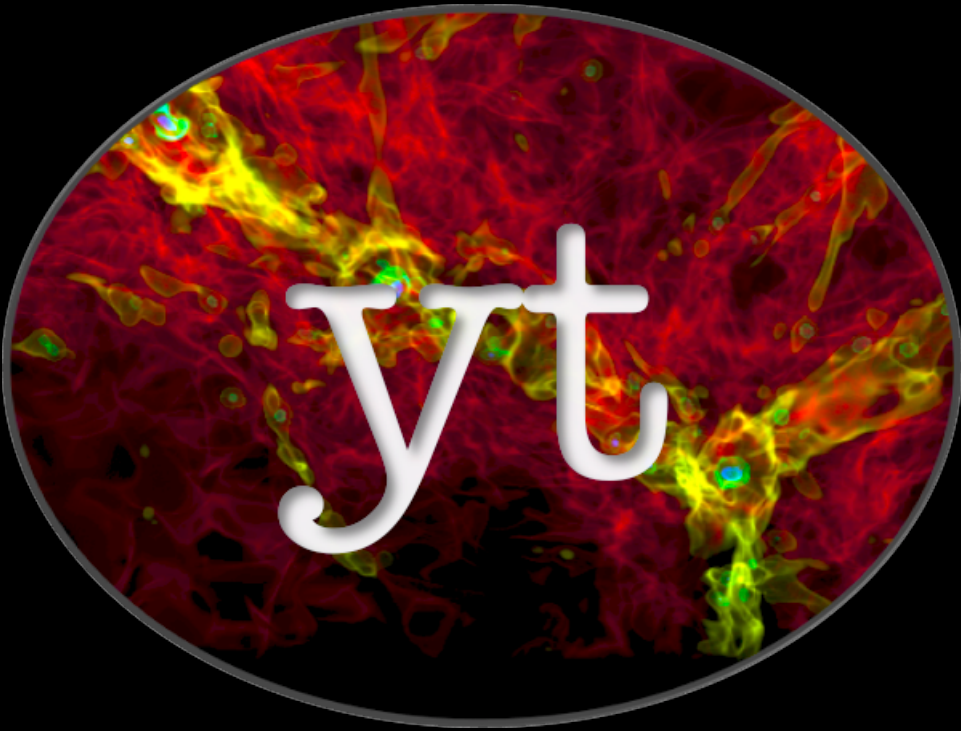


yt for cosmology

(a mostly hands-on introduction)

a little more introduction to yt

Astrophysical Simulation Analysis & Visualization



[astro-ph/1011.3514](#)

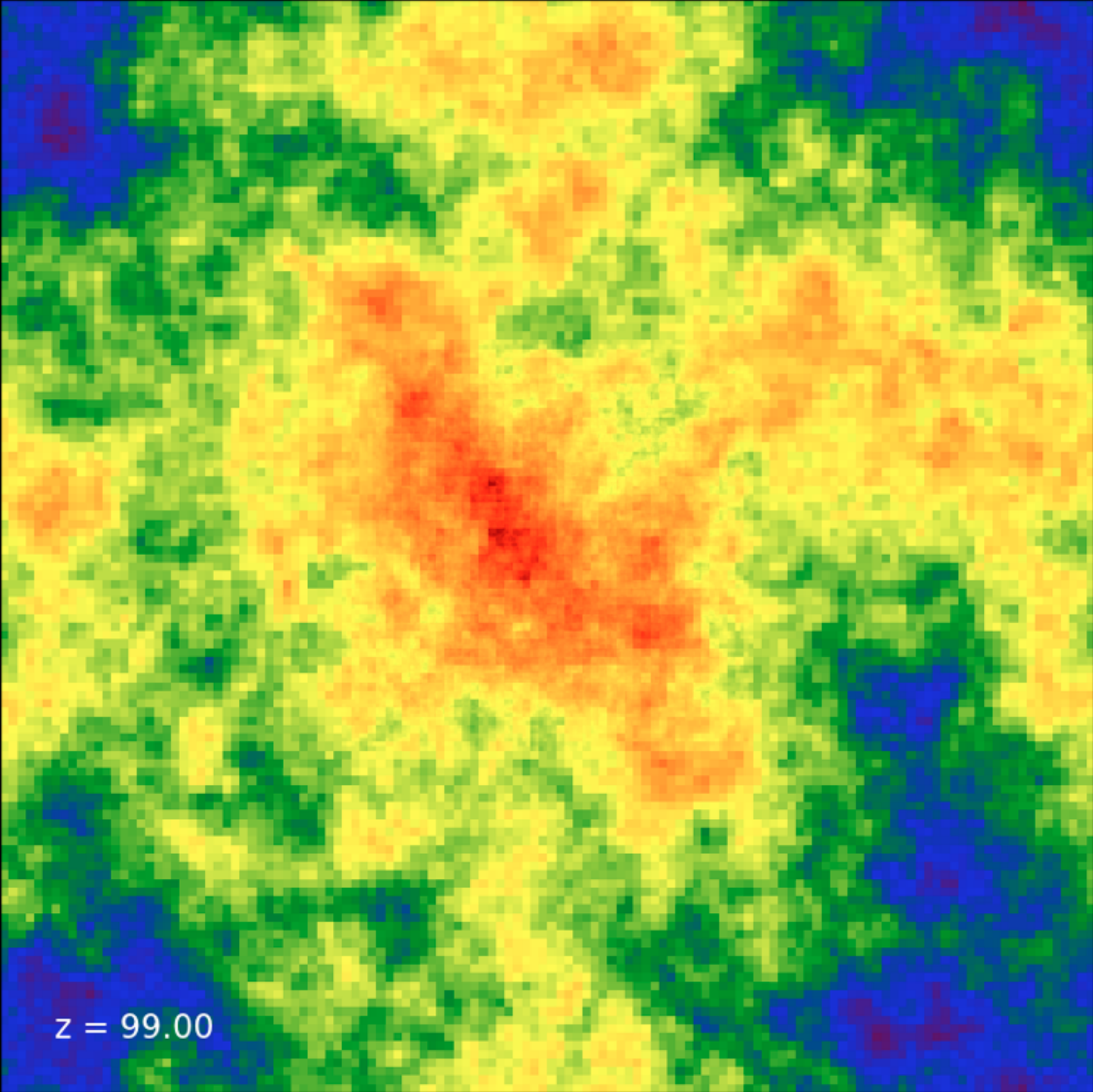
[astro-ph/1112.4482](#)

[astro-ph/1301.7064](#)

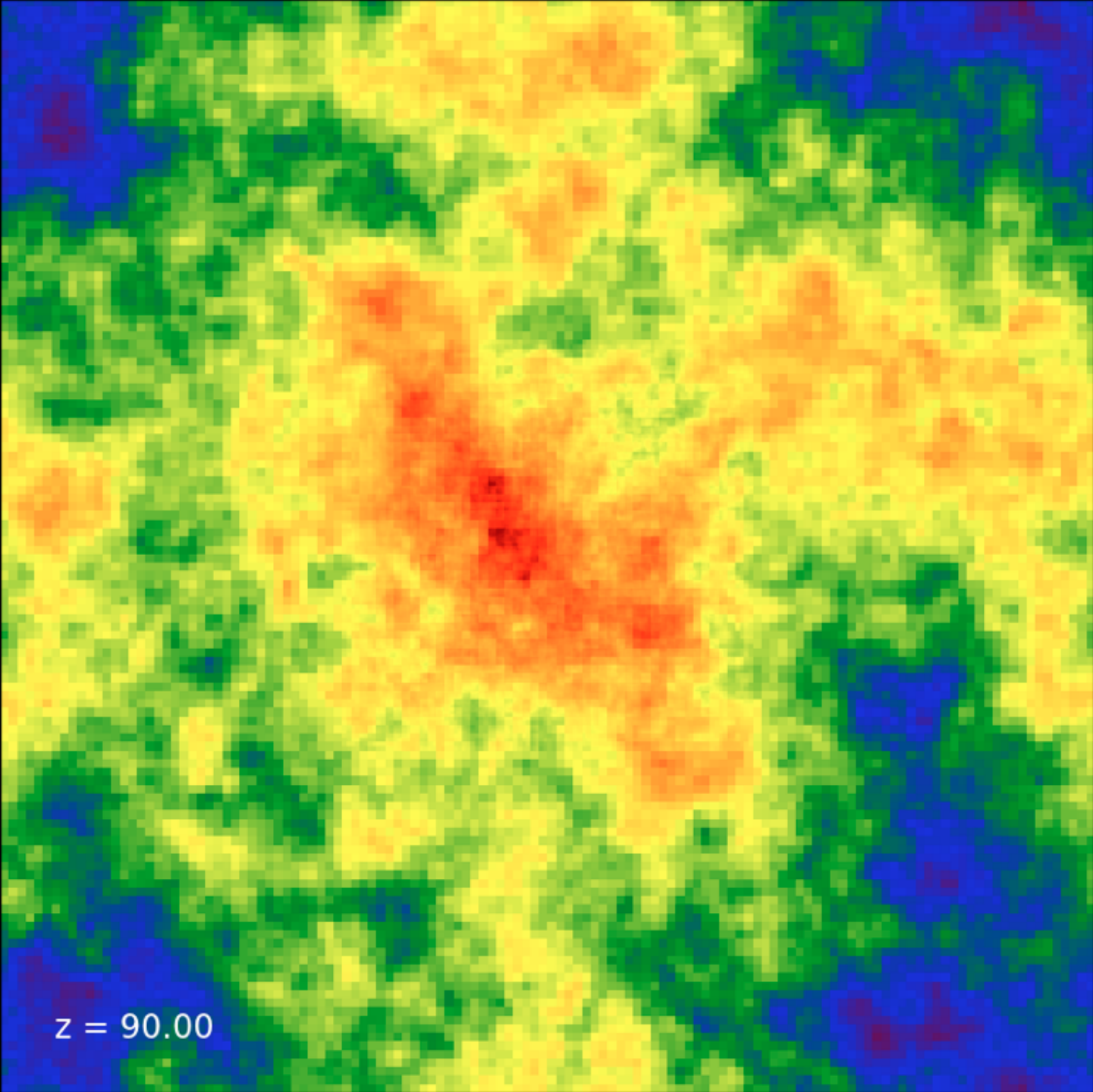
[yt-project.org](#)

How to make a star?

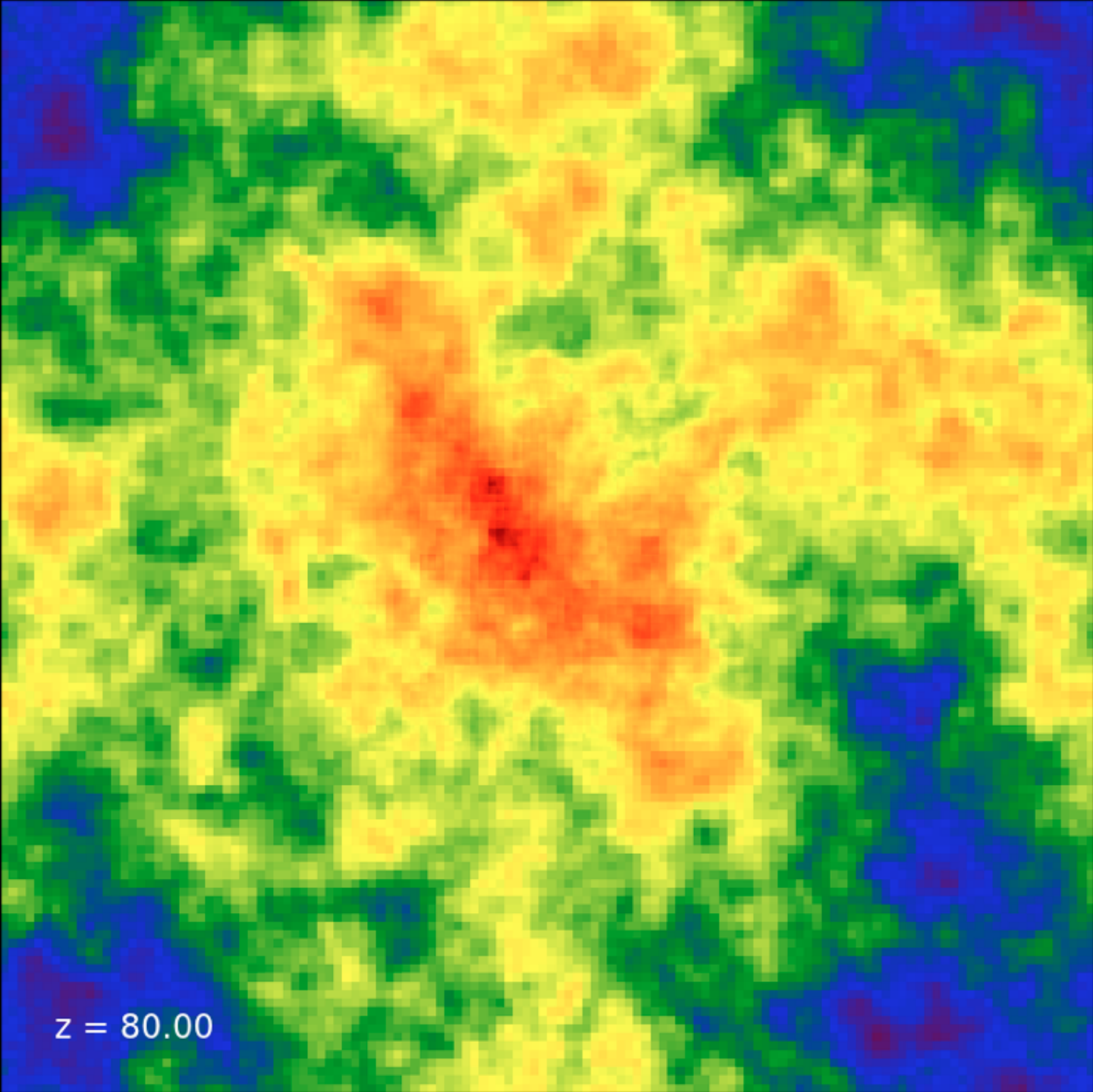




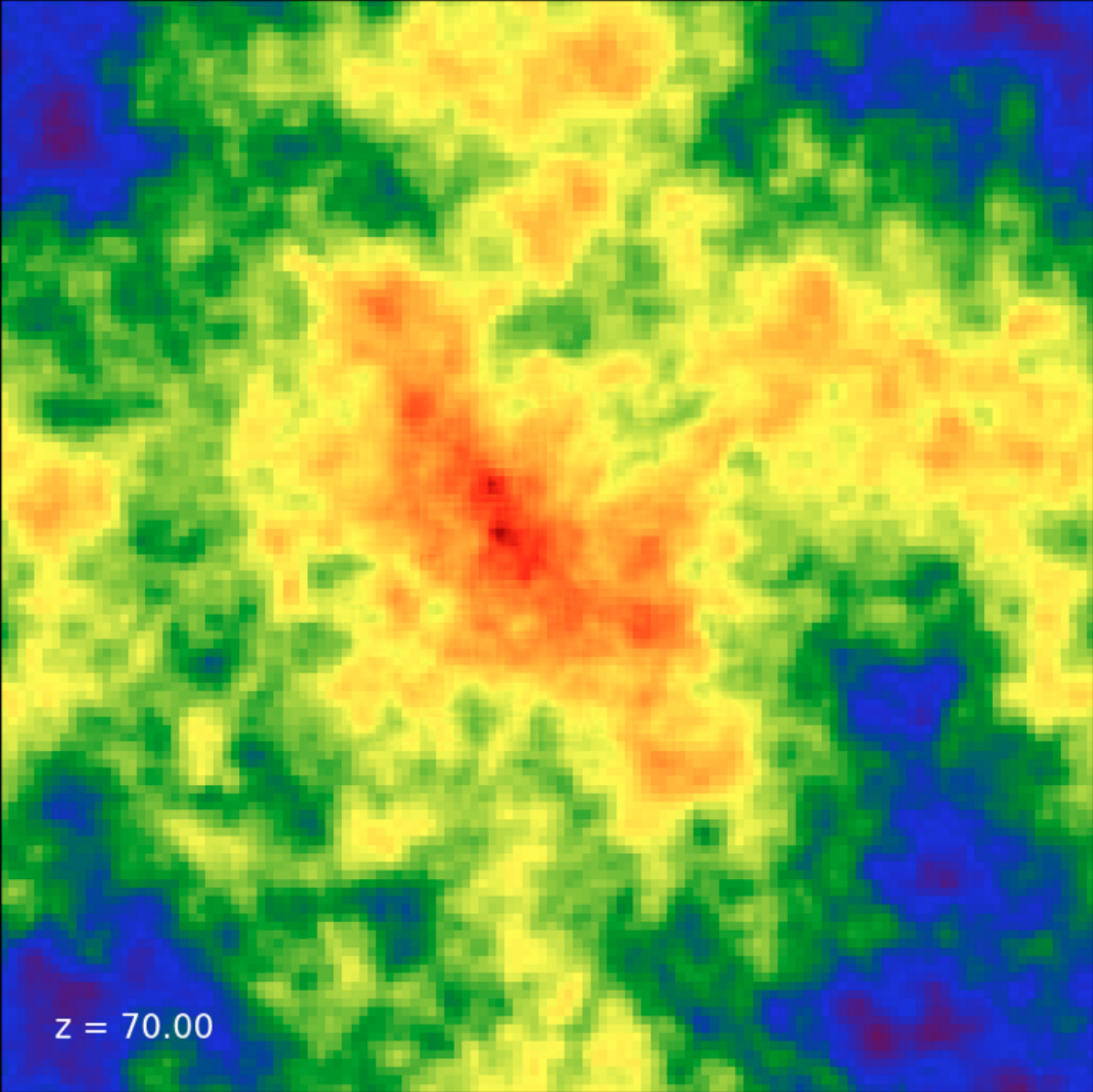
$z = 99.00$



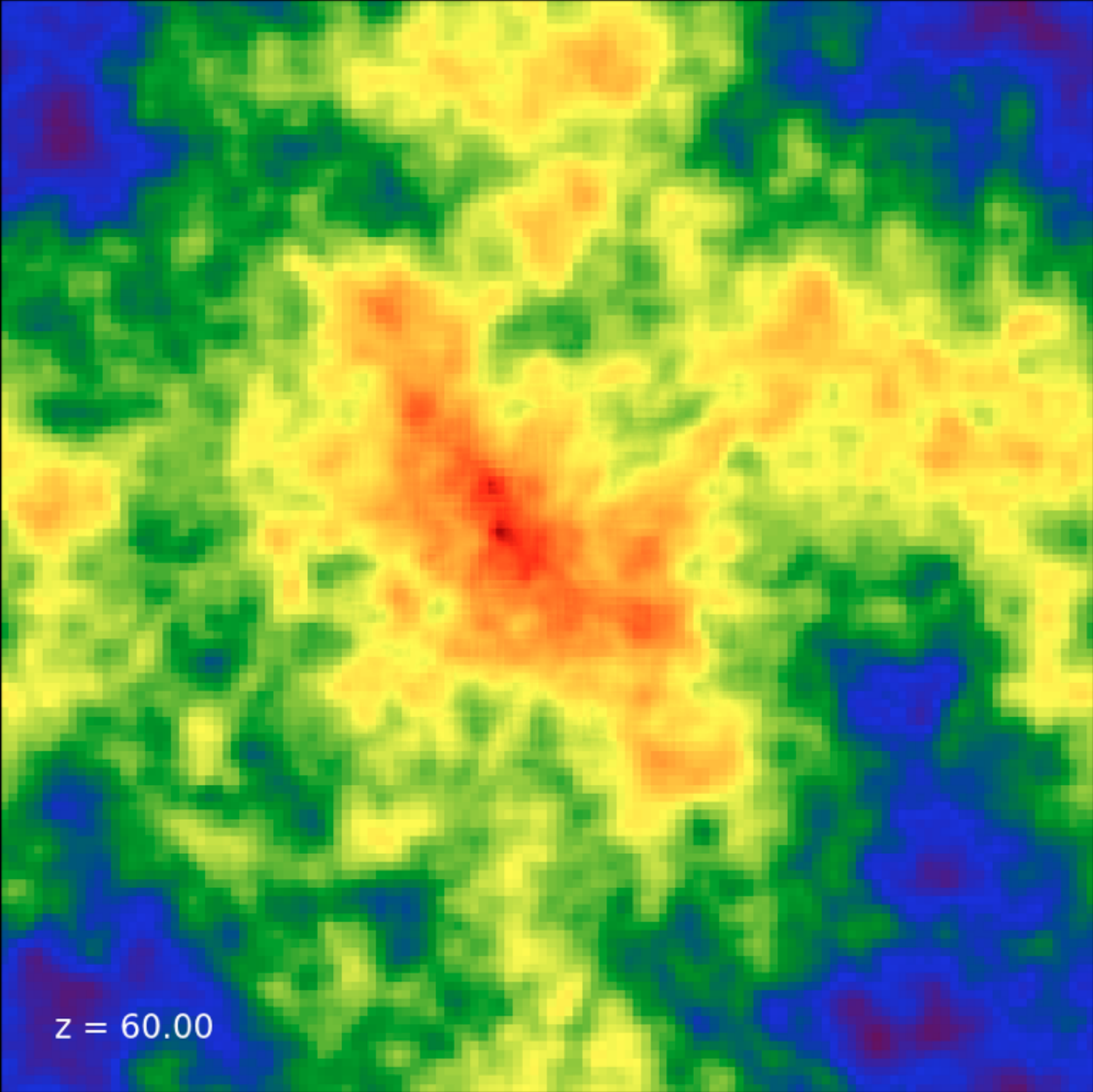
$z = 90.00$



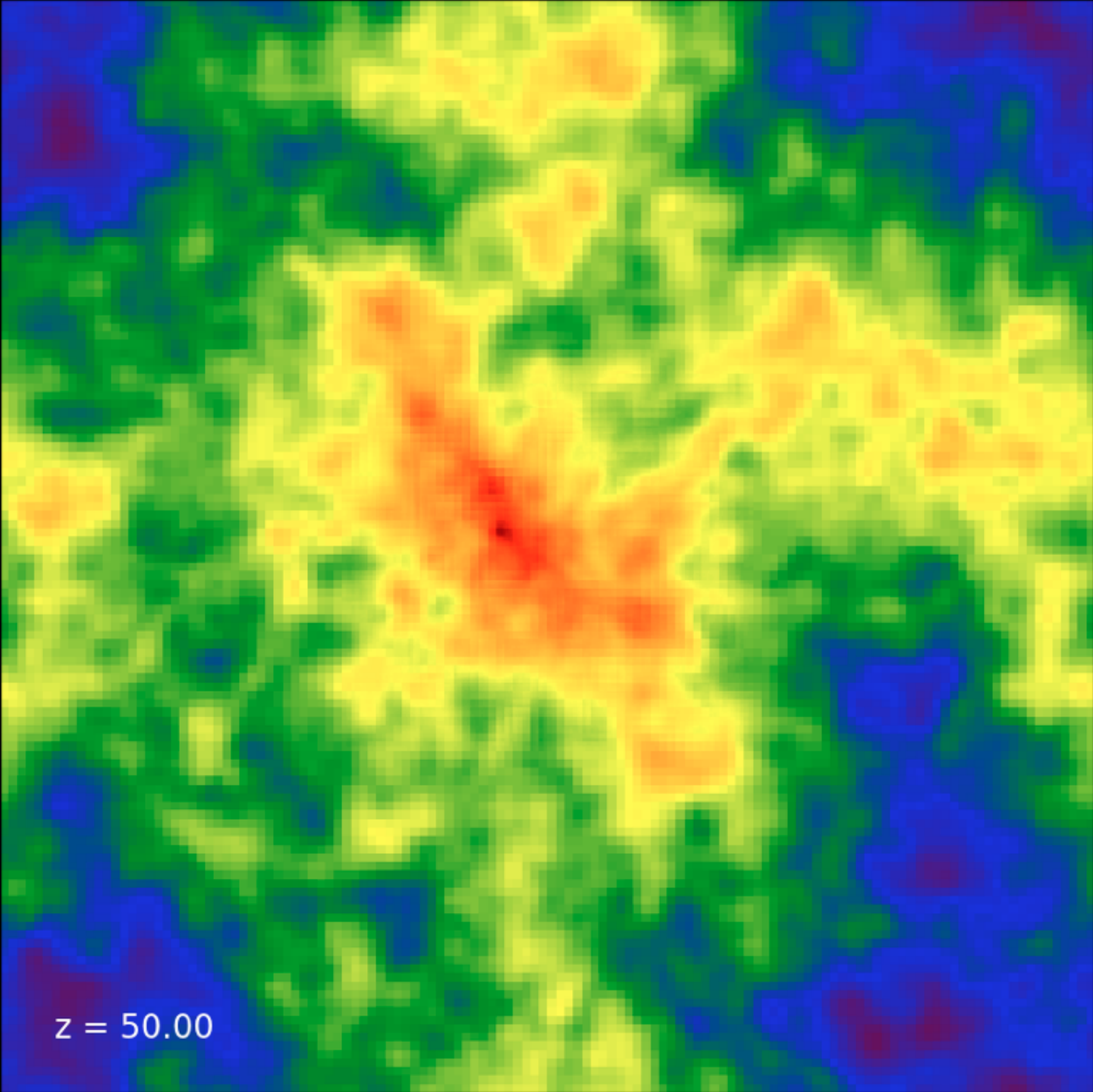
$z = 80.00$



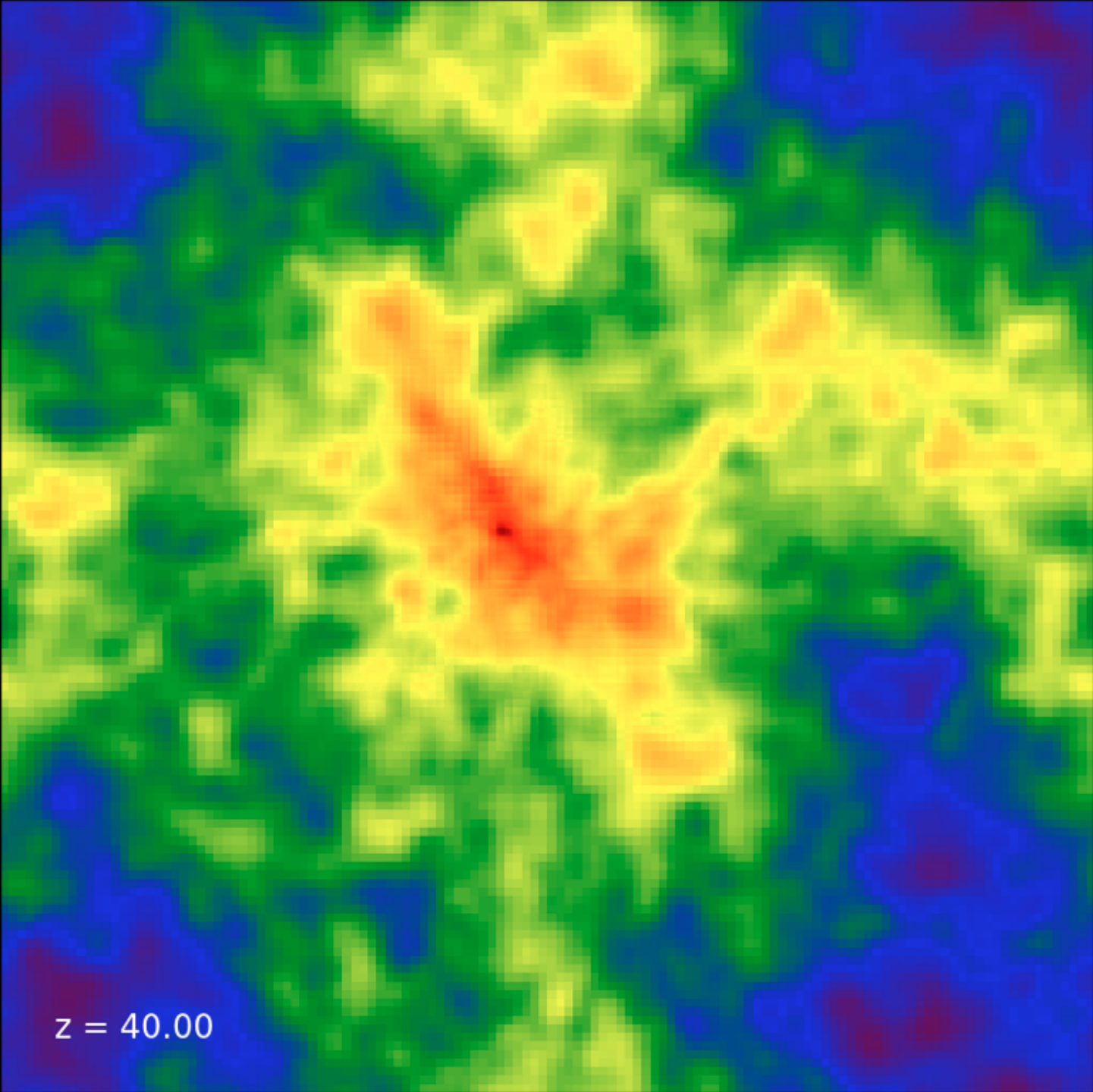
$z = 70.00$



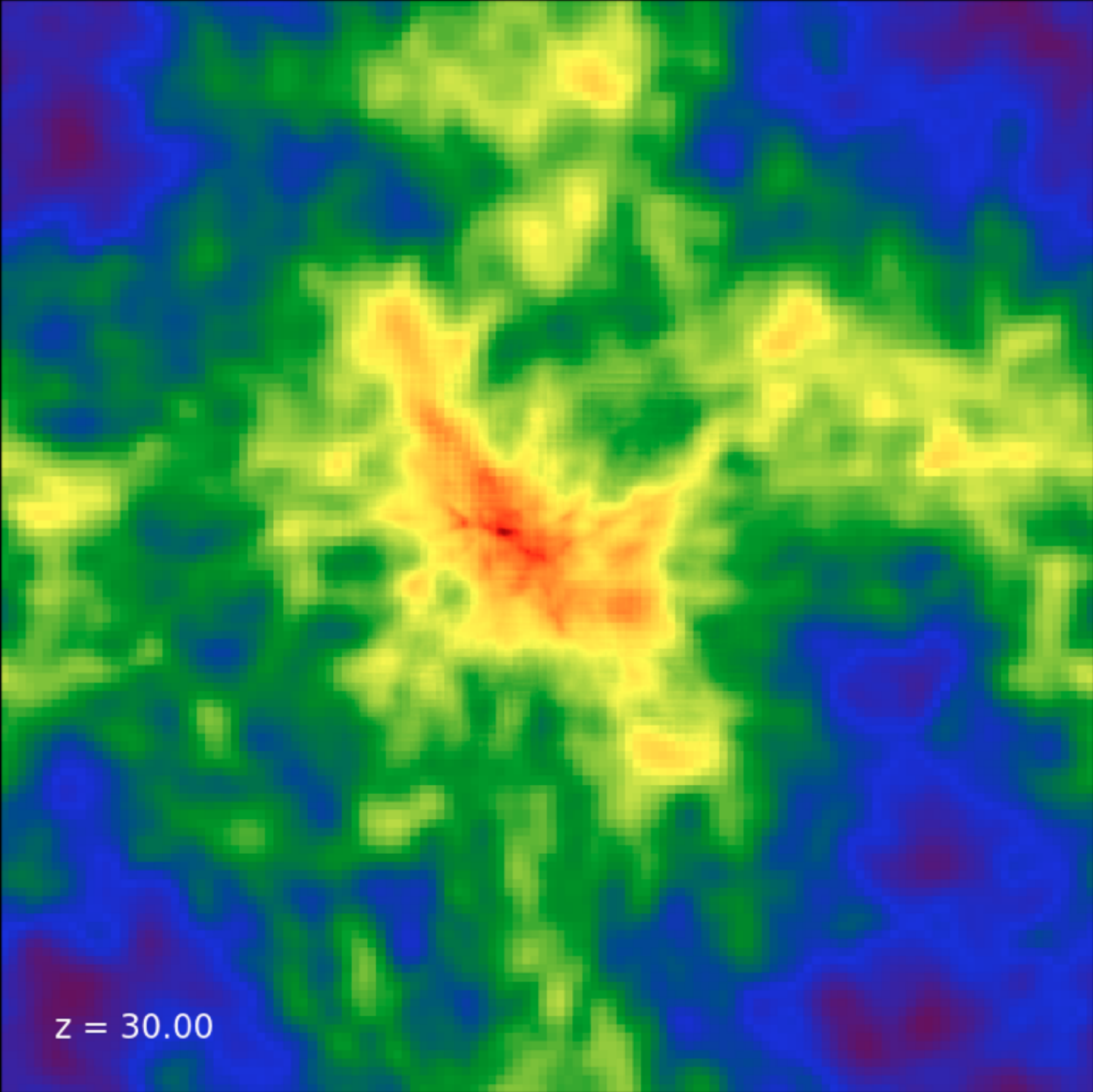
$z = 60.00$



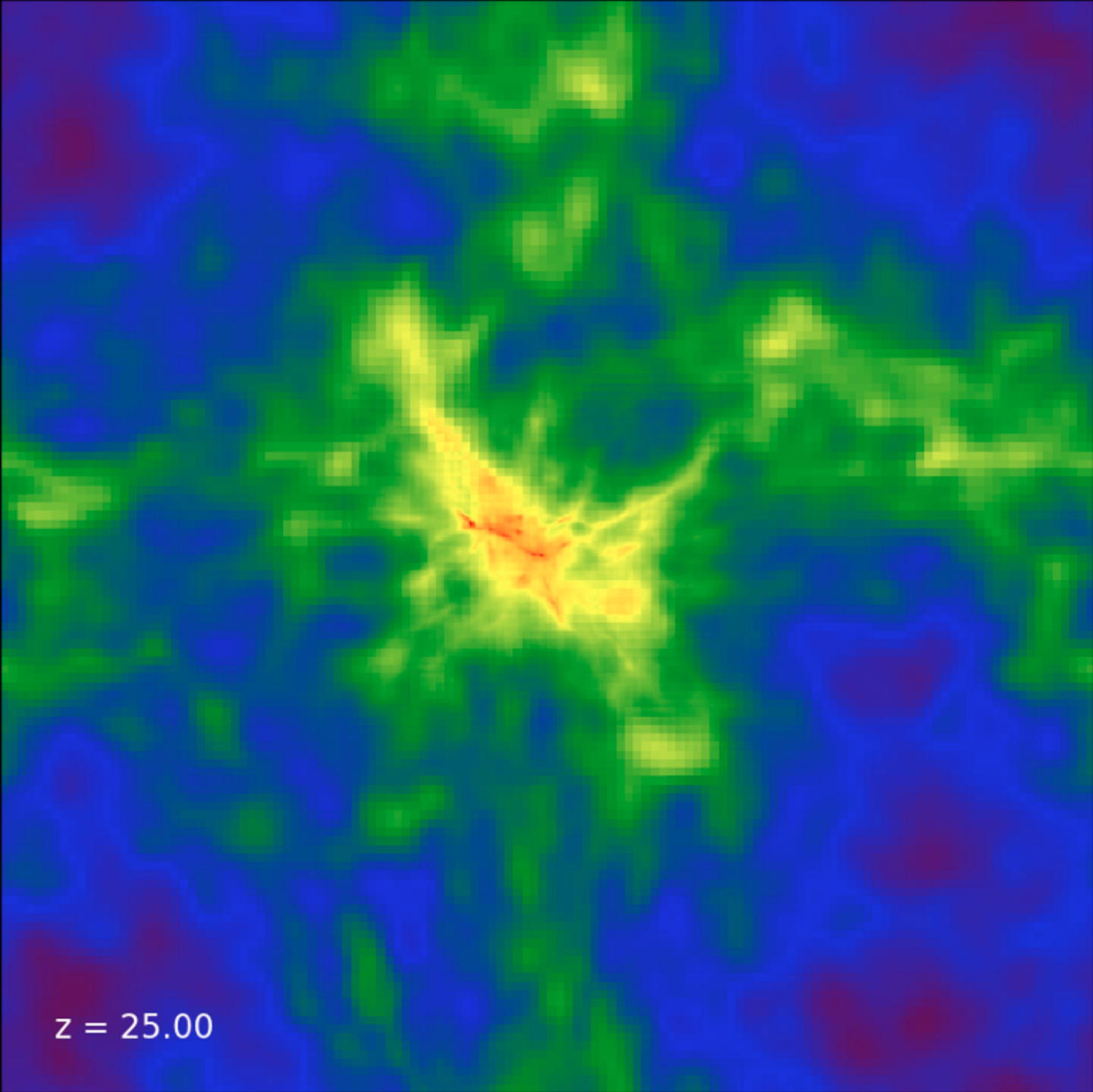
$z = 50.00$



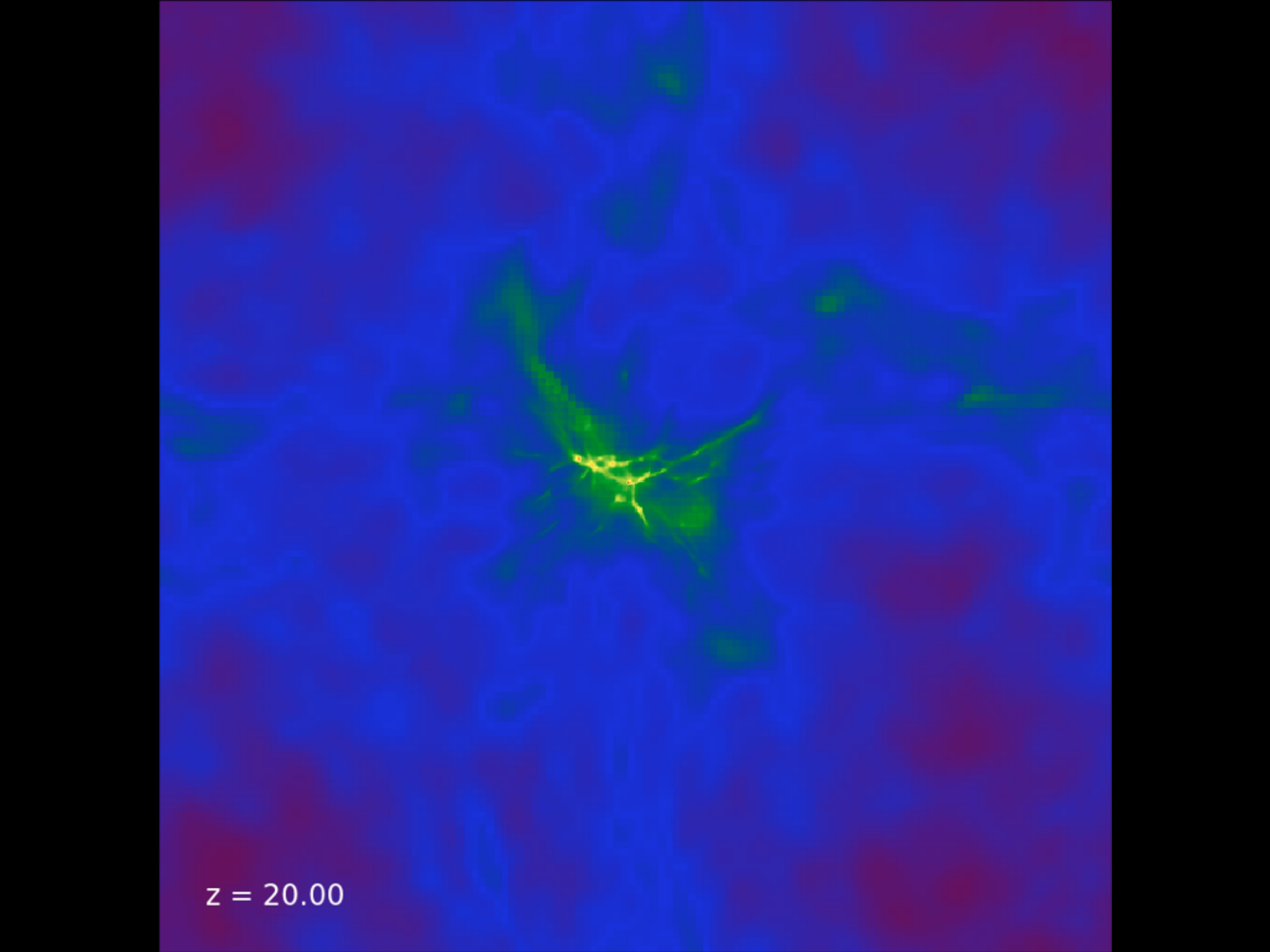
$z = 40.00$



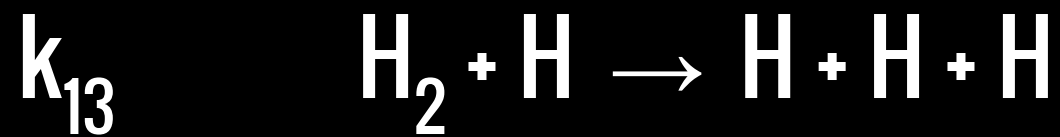
$z = 30.00$

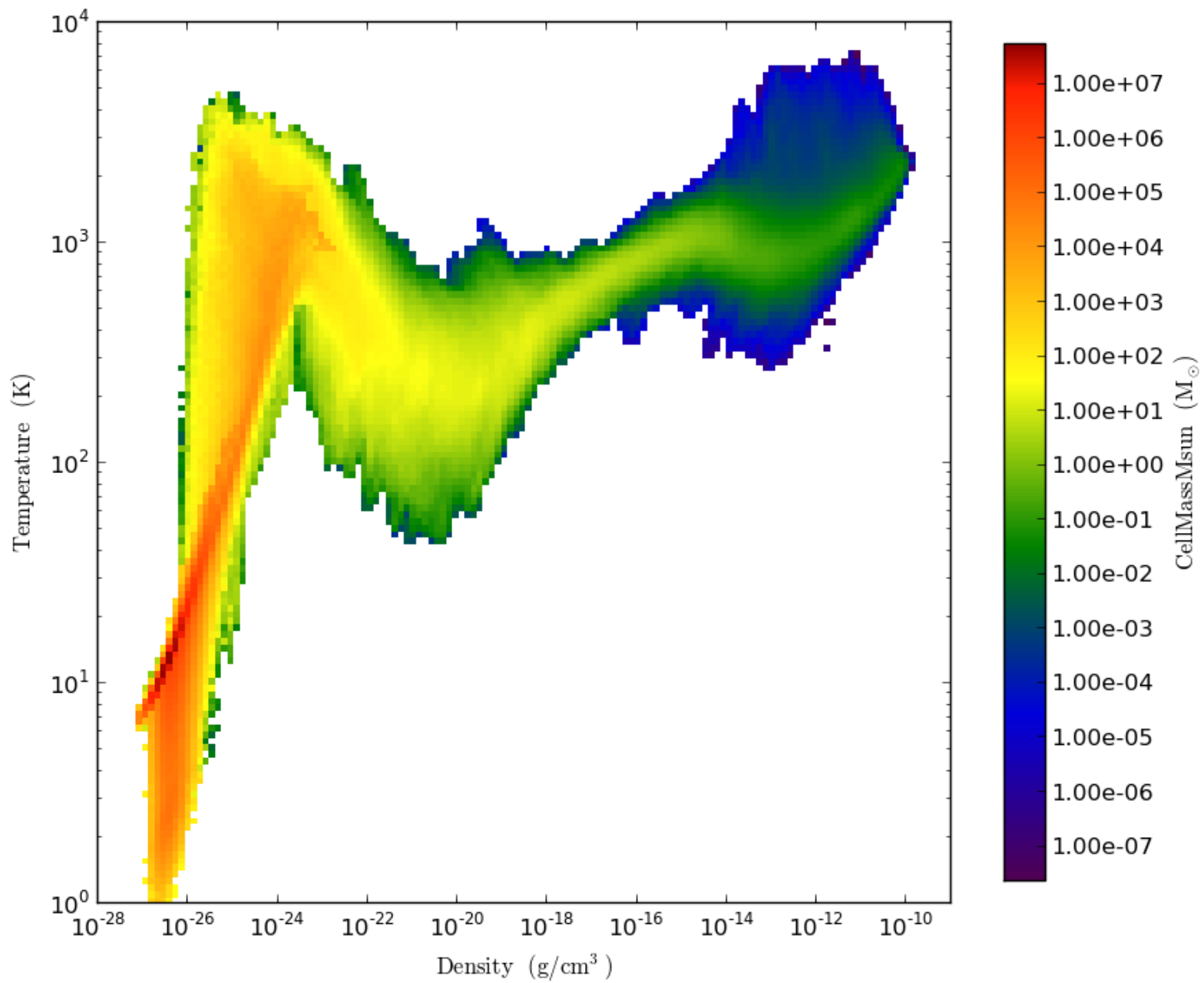


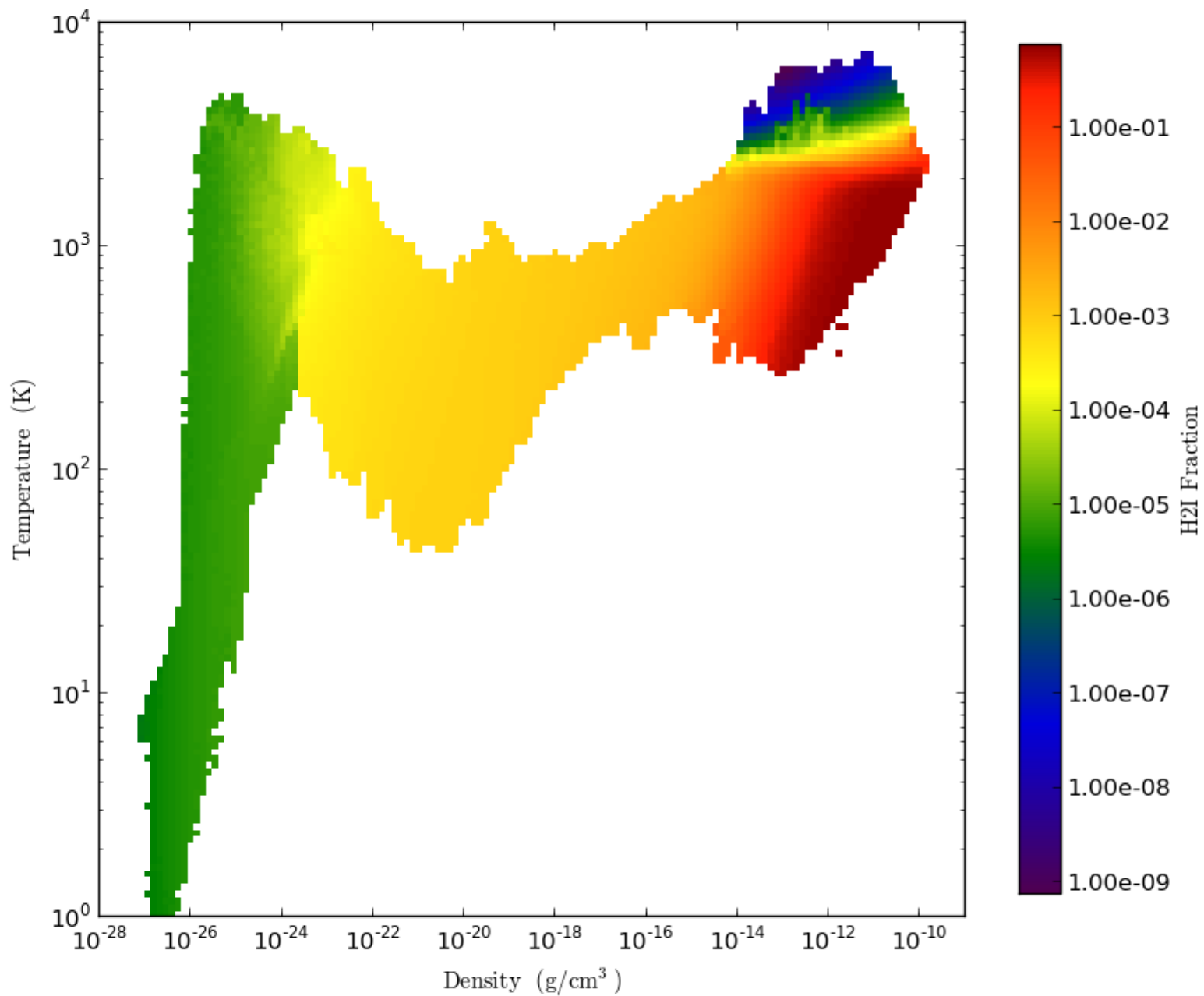
$z = 25.00$

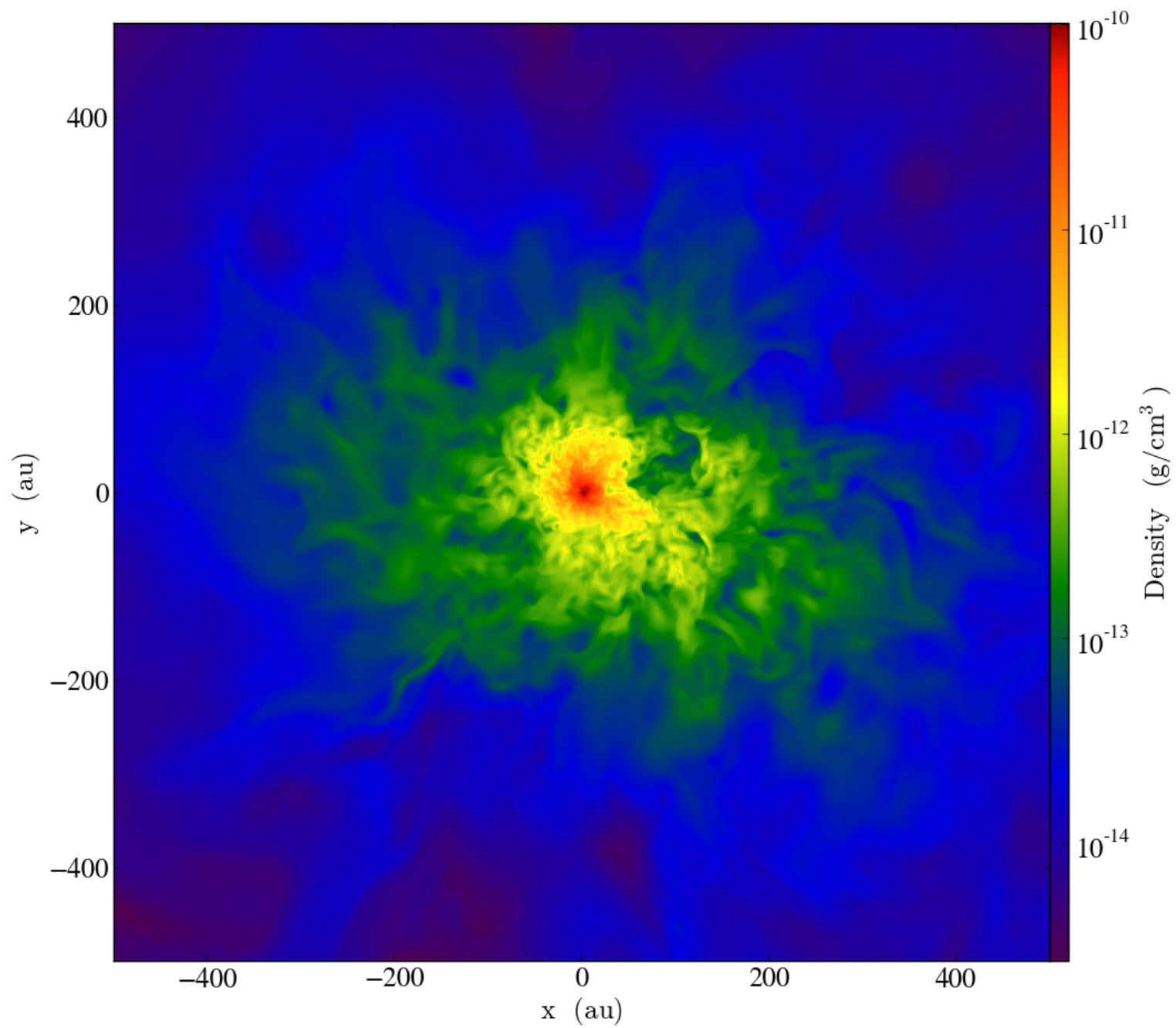


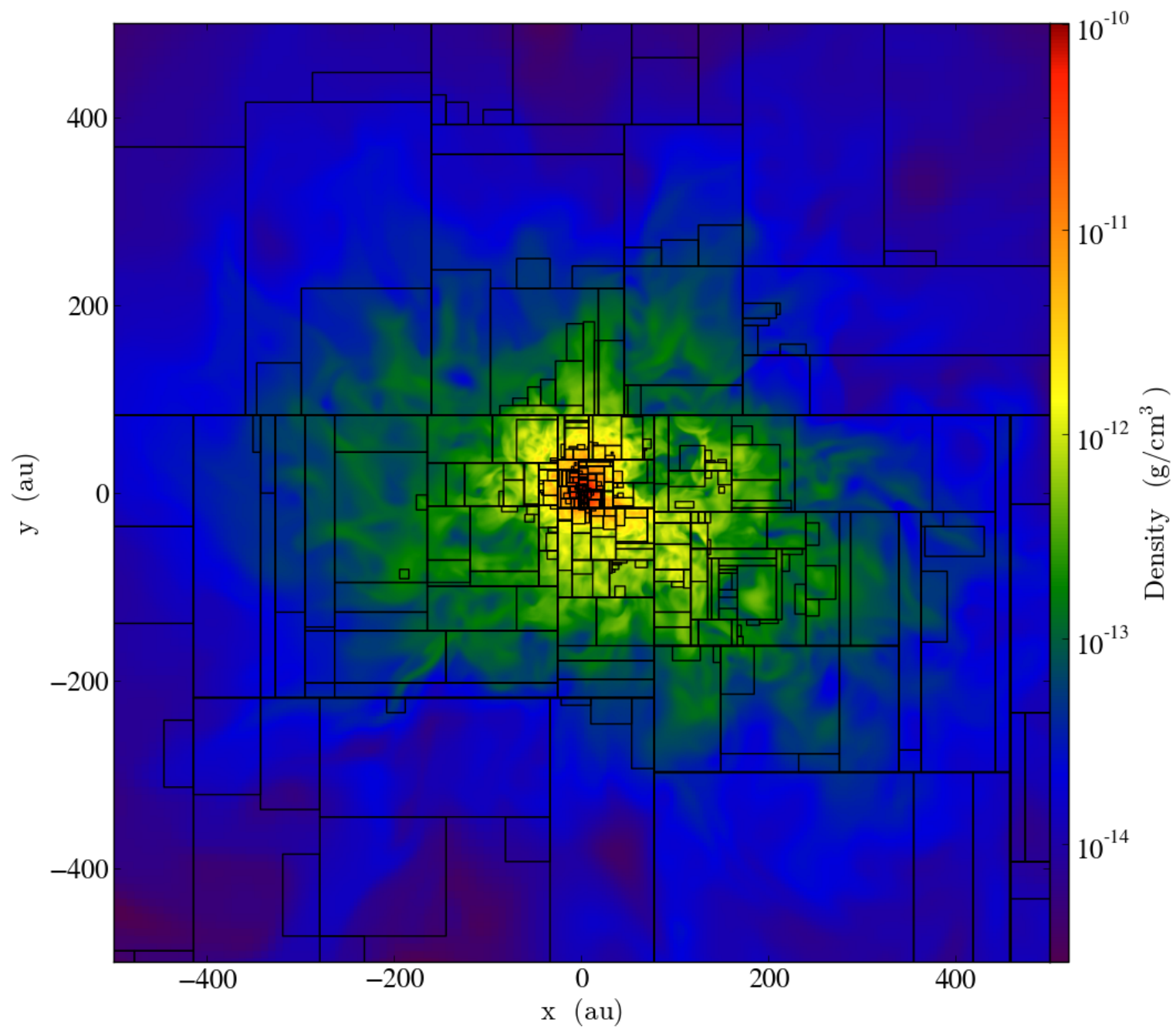
$z = 20.00$

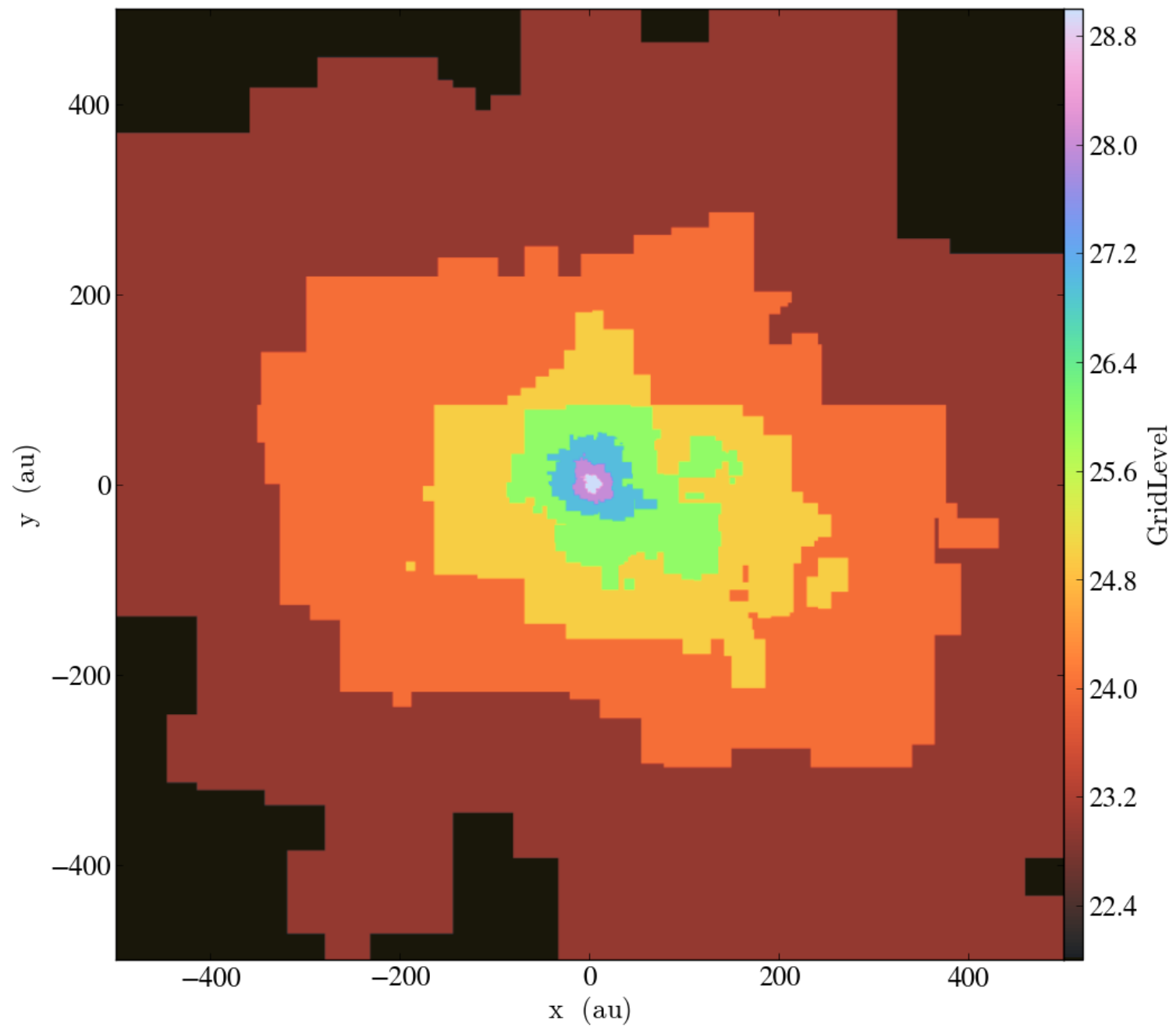


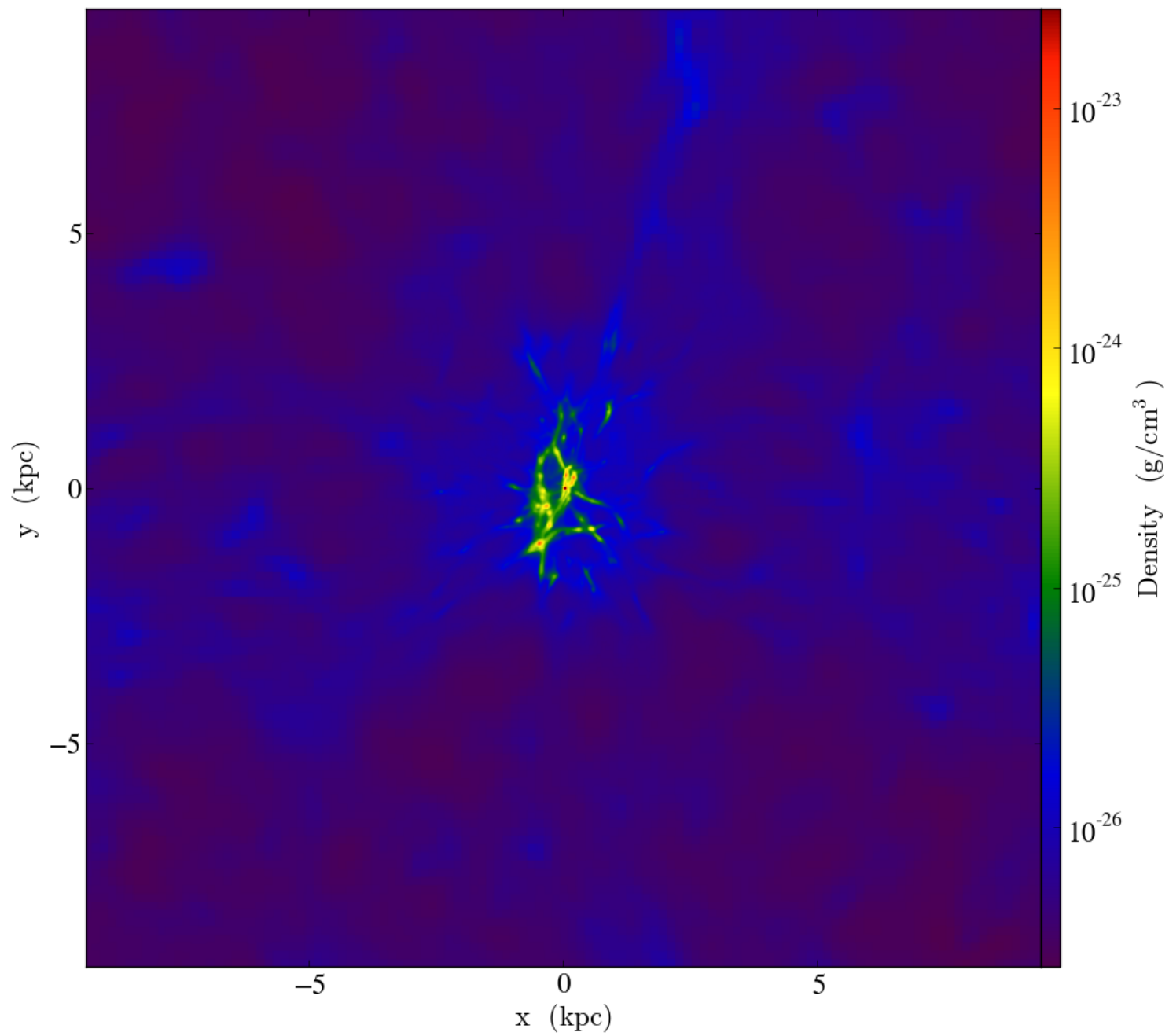


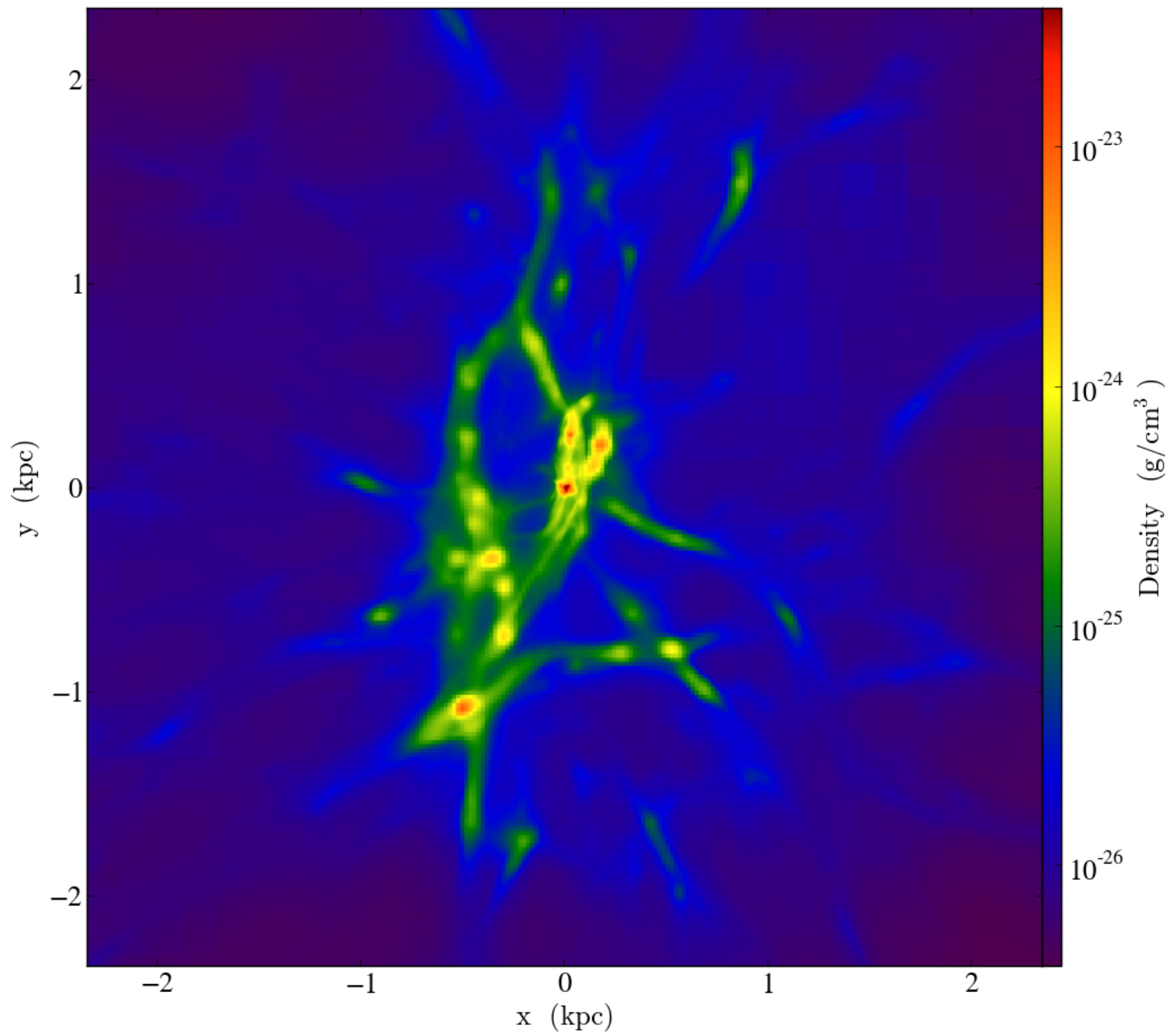


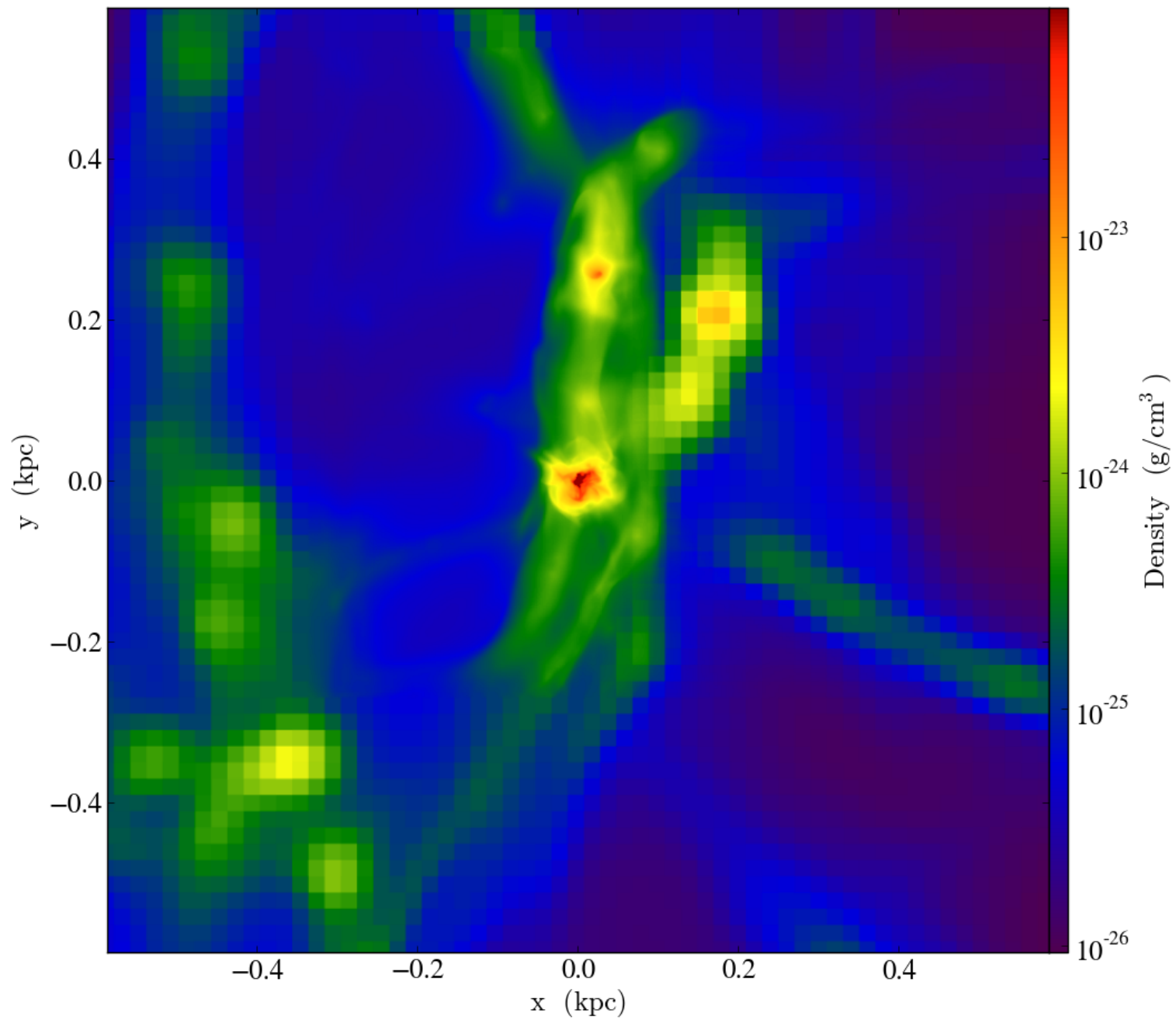


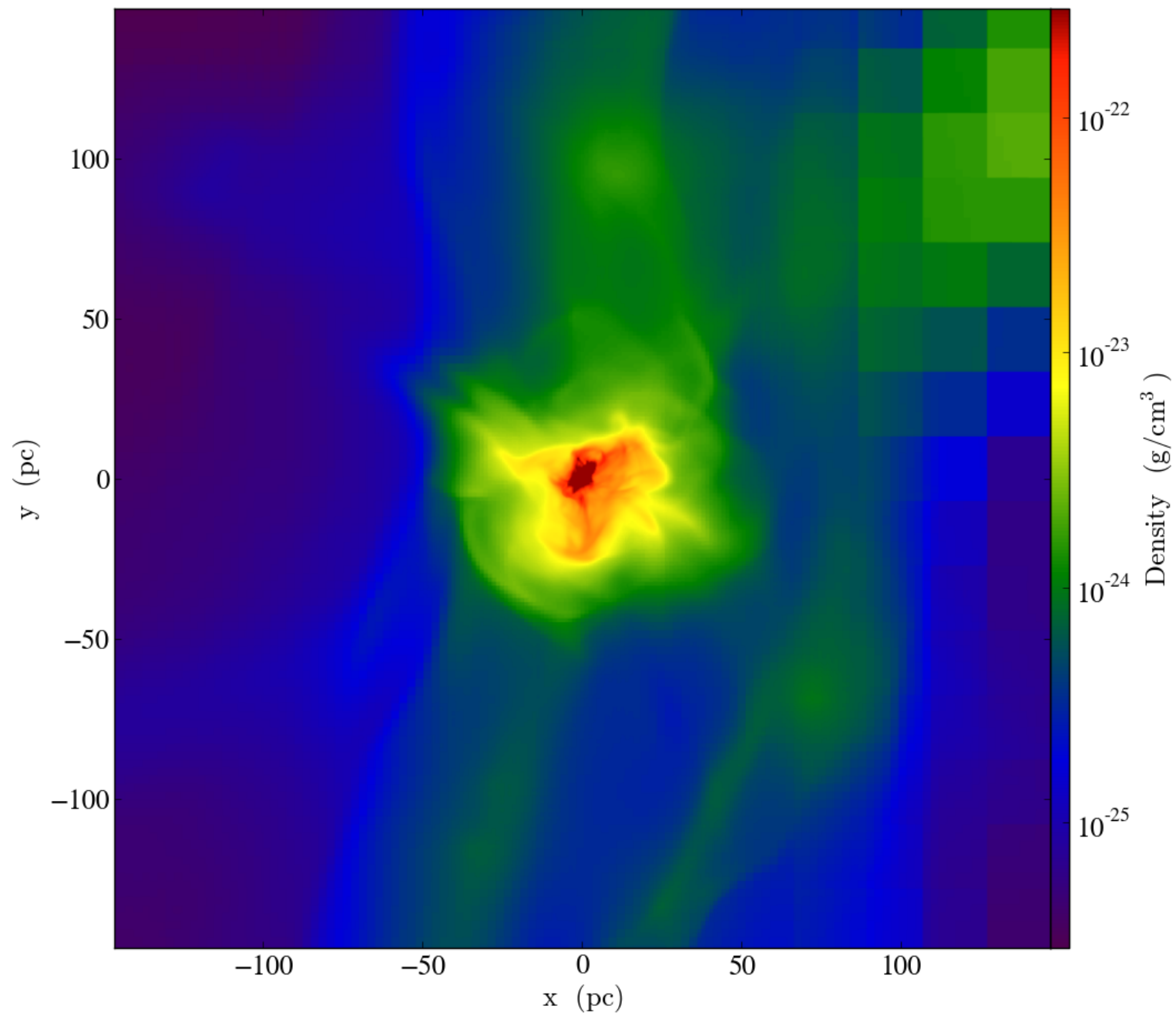


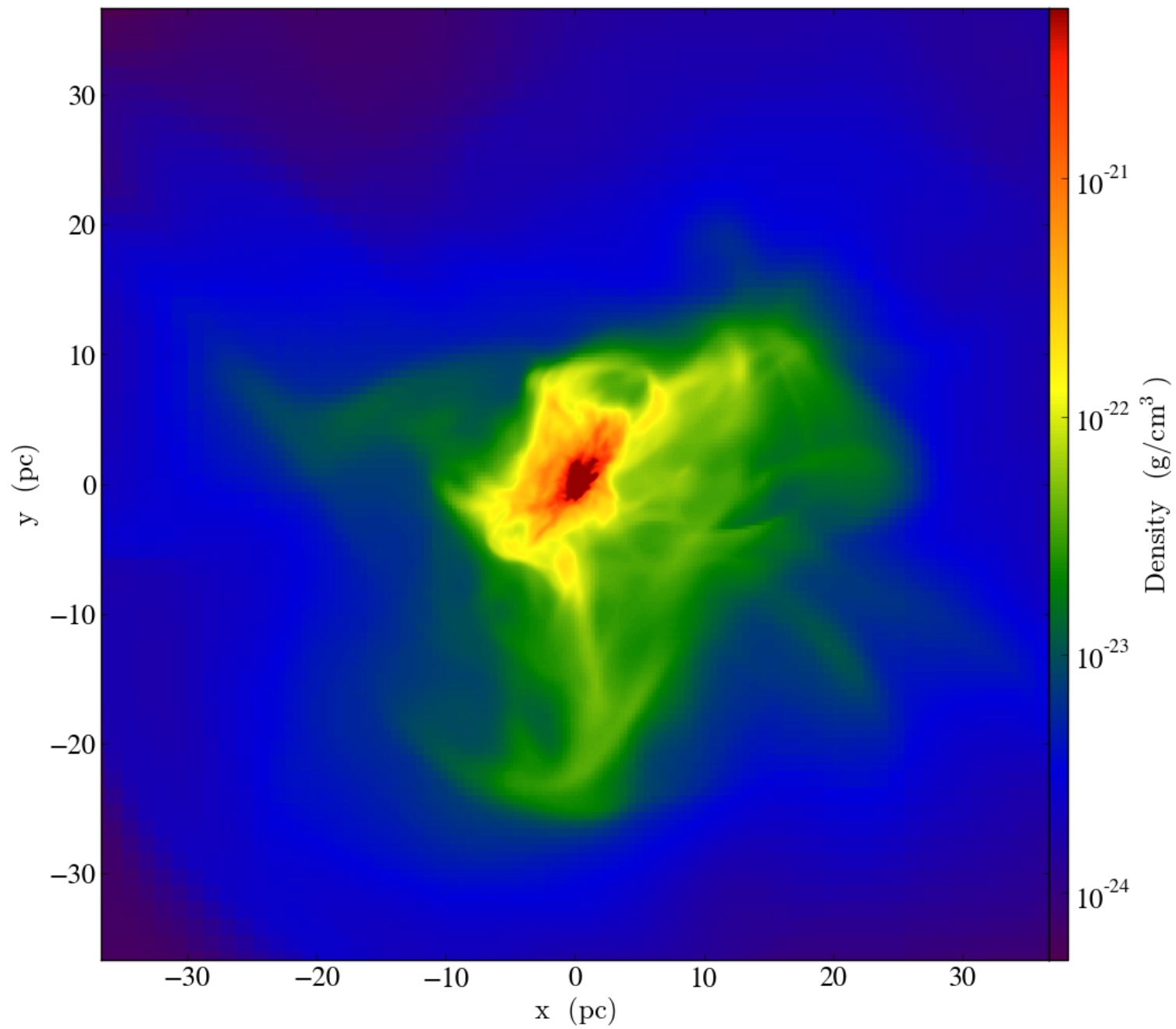


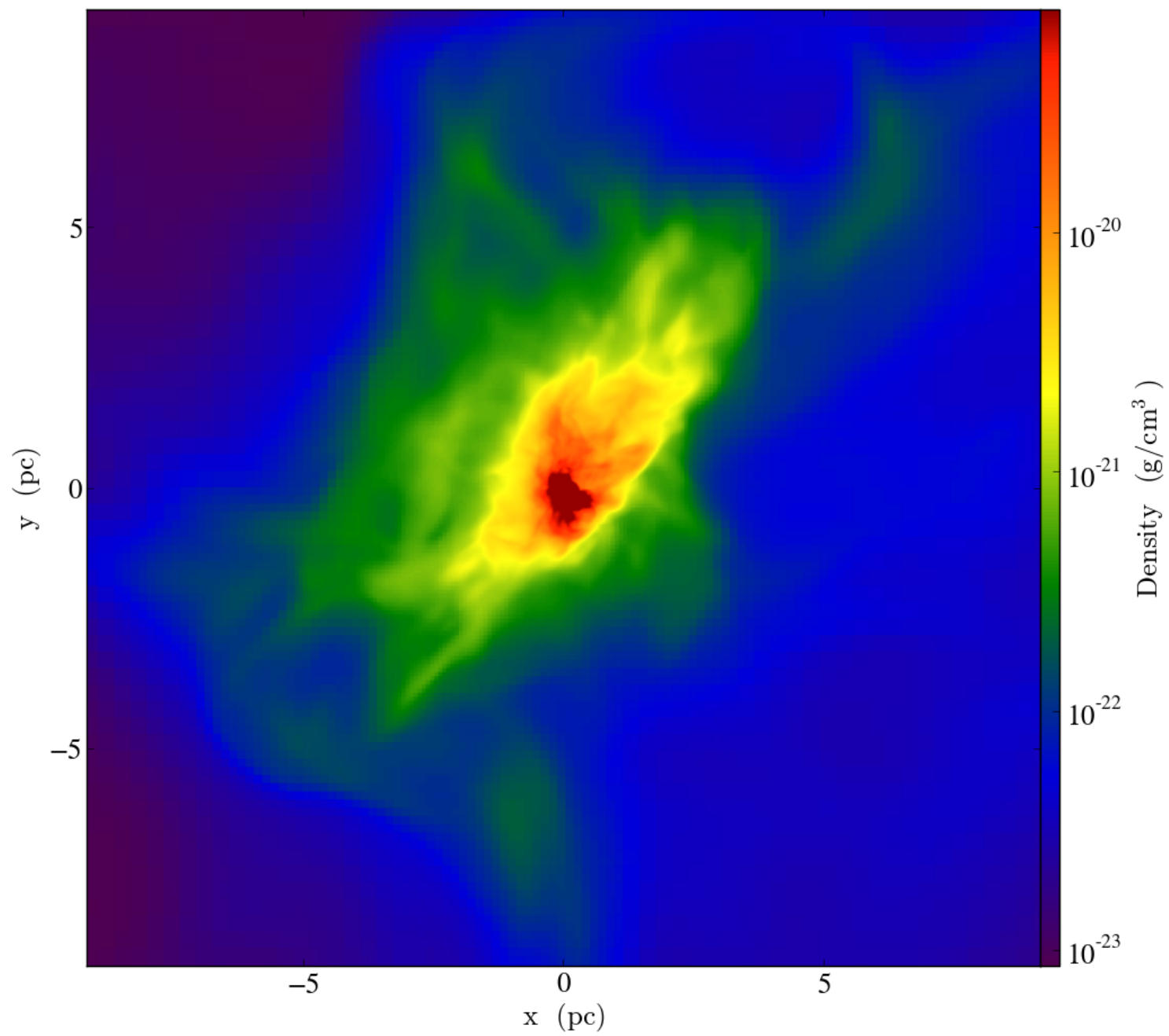


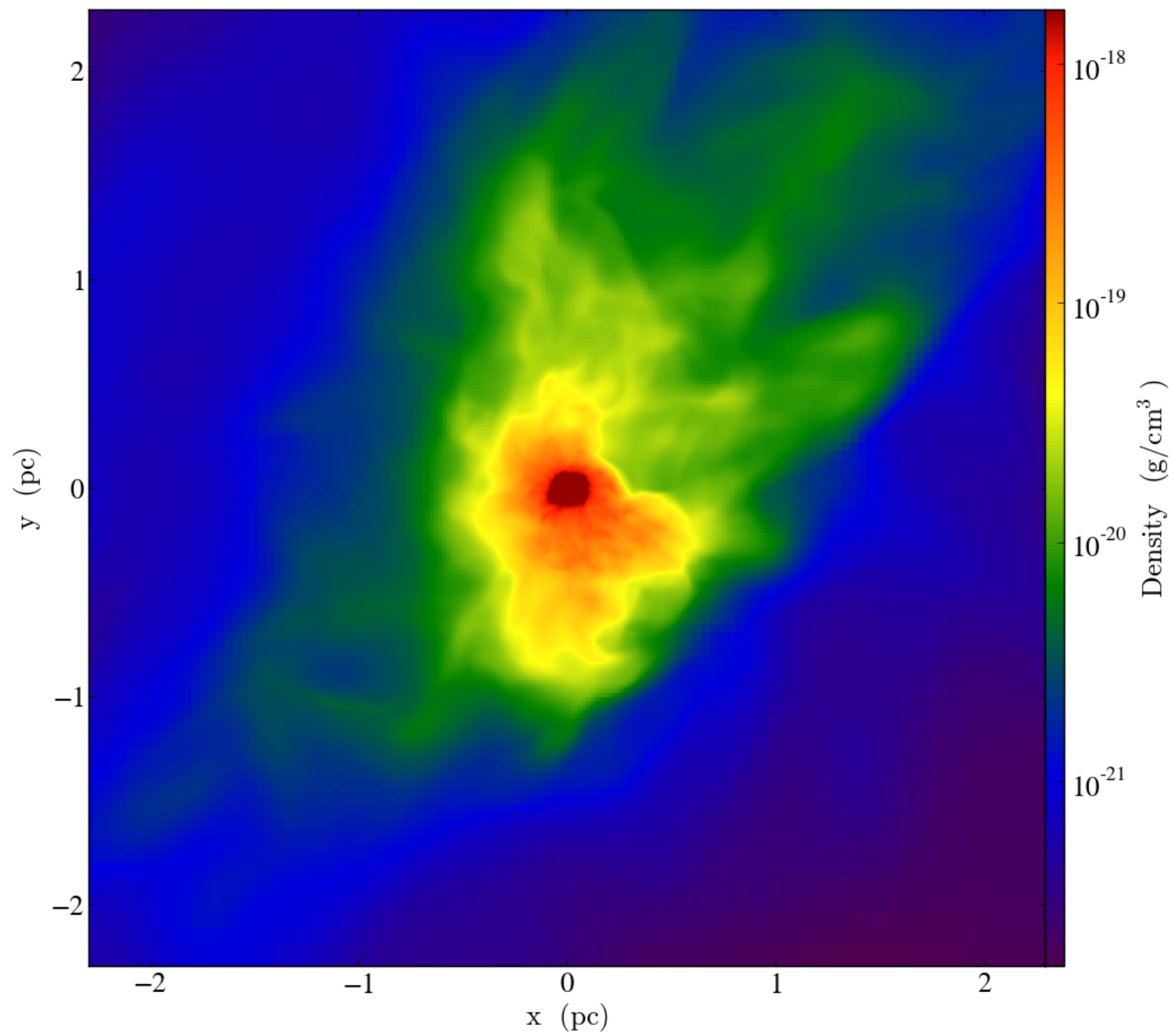


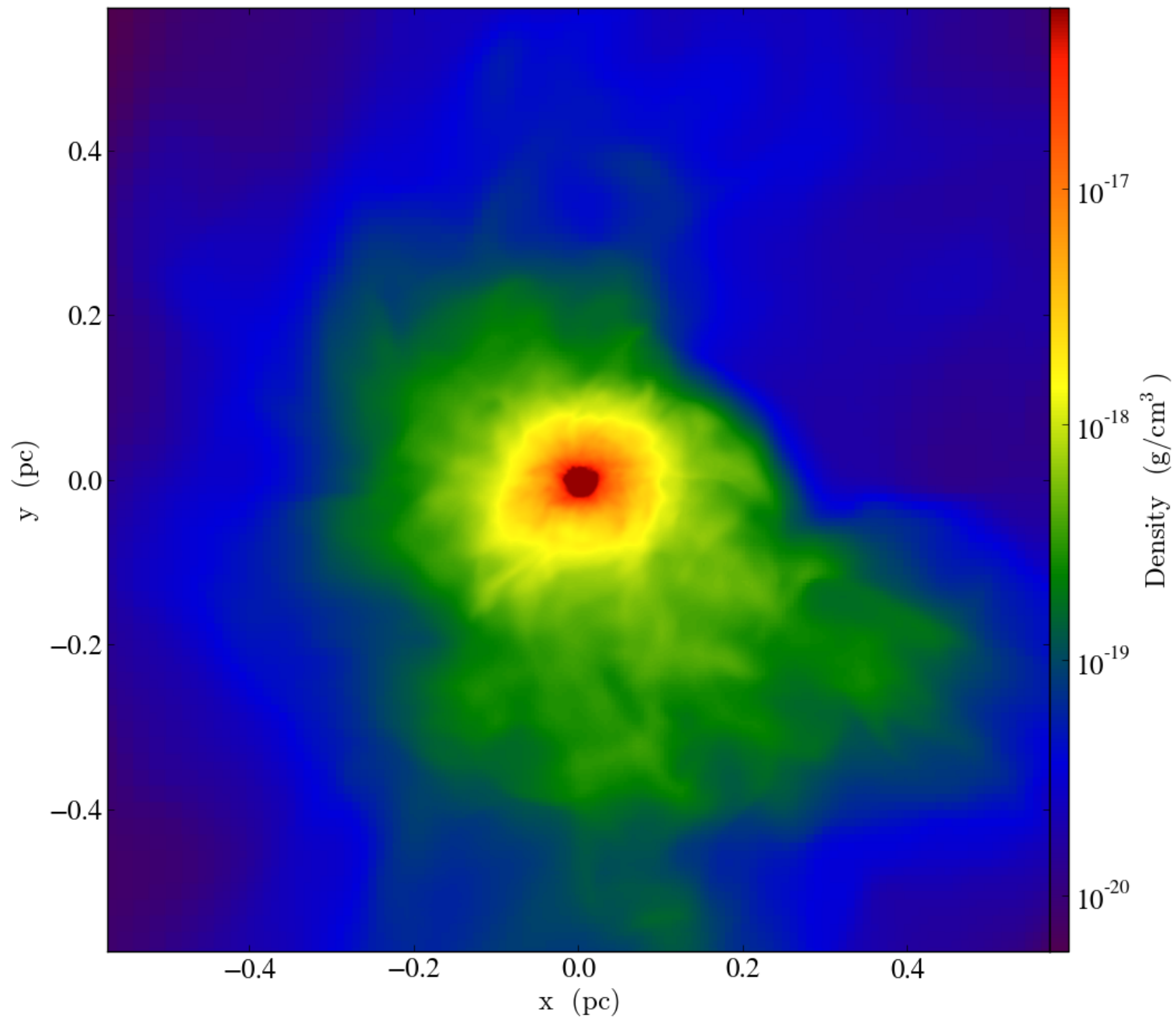


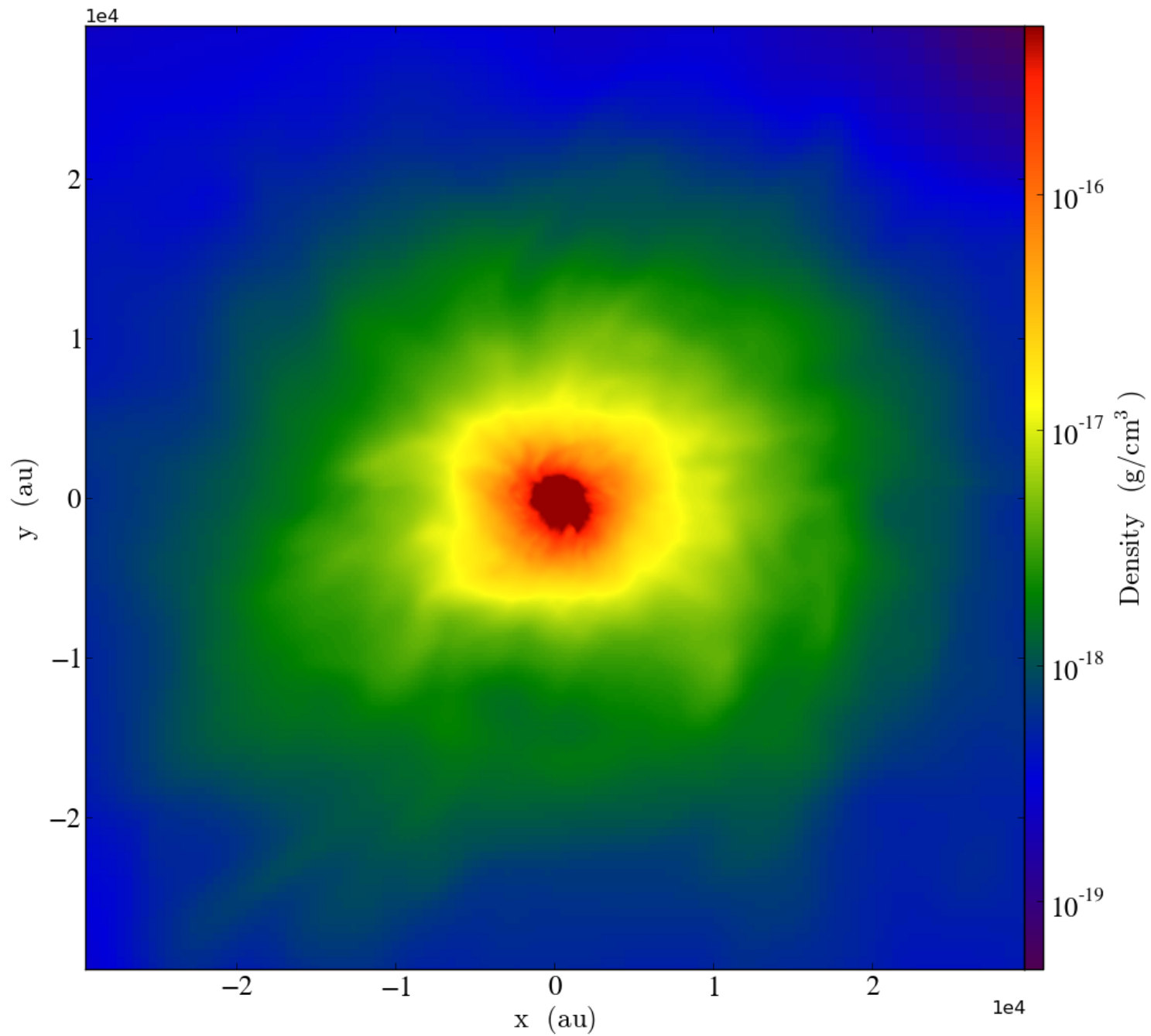


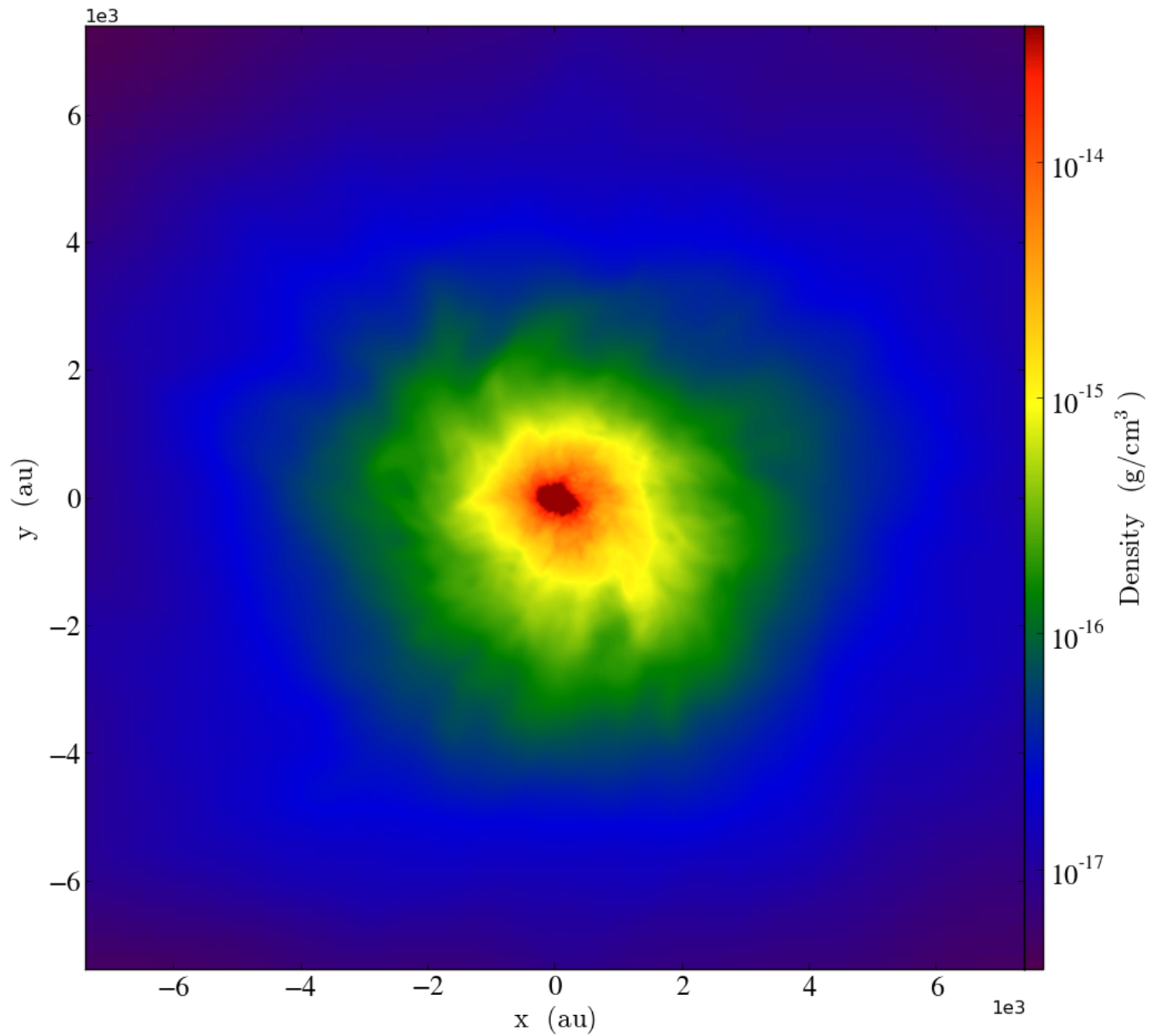


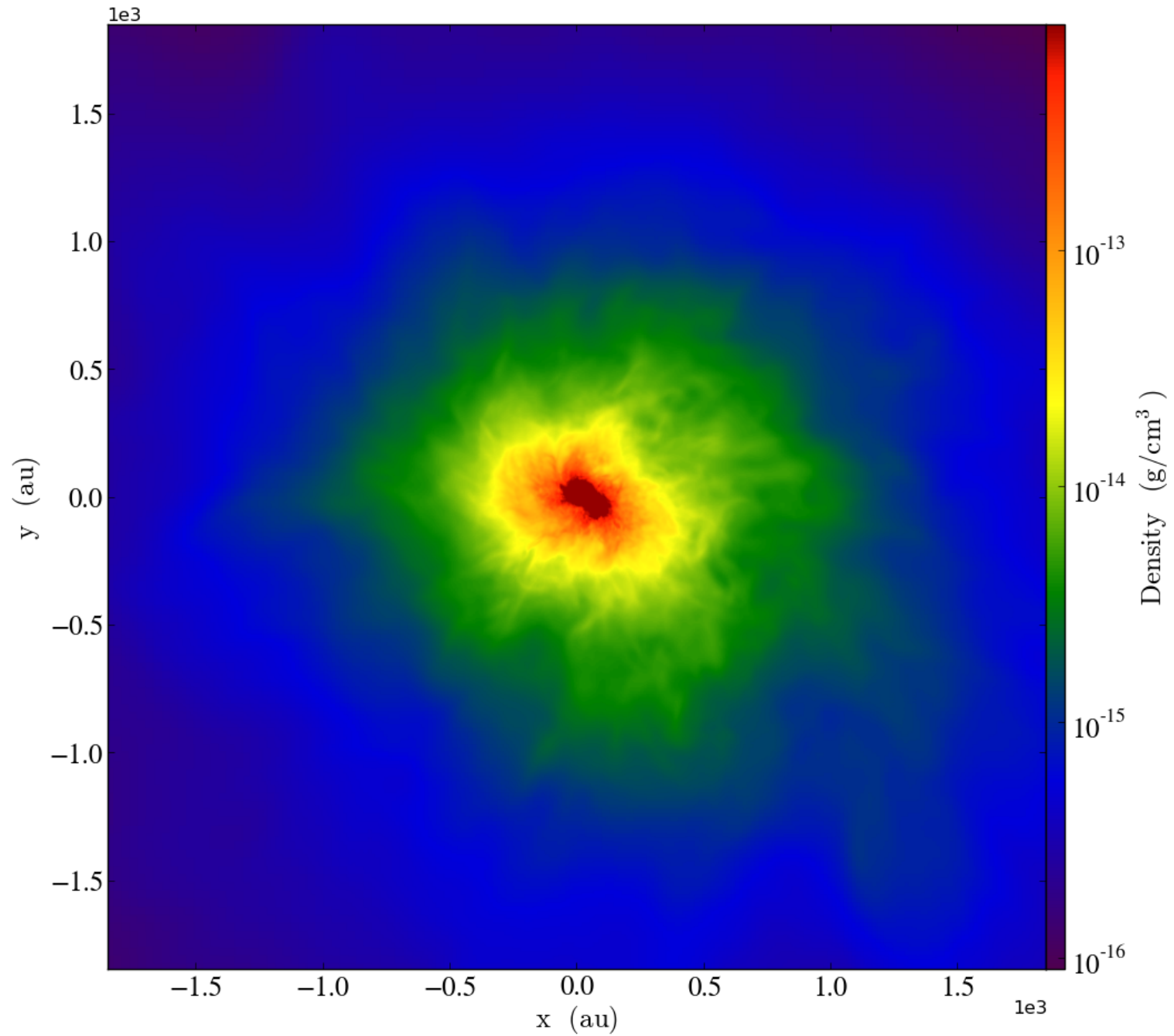


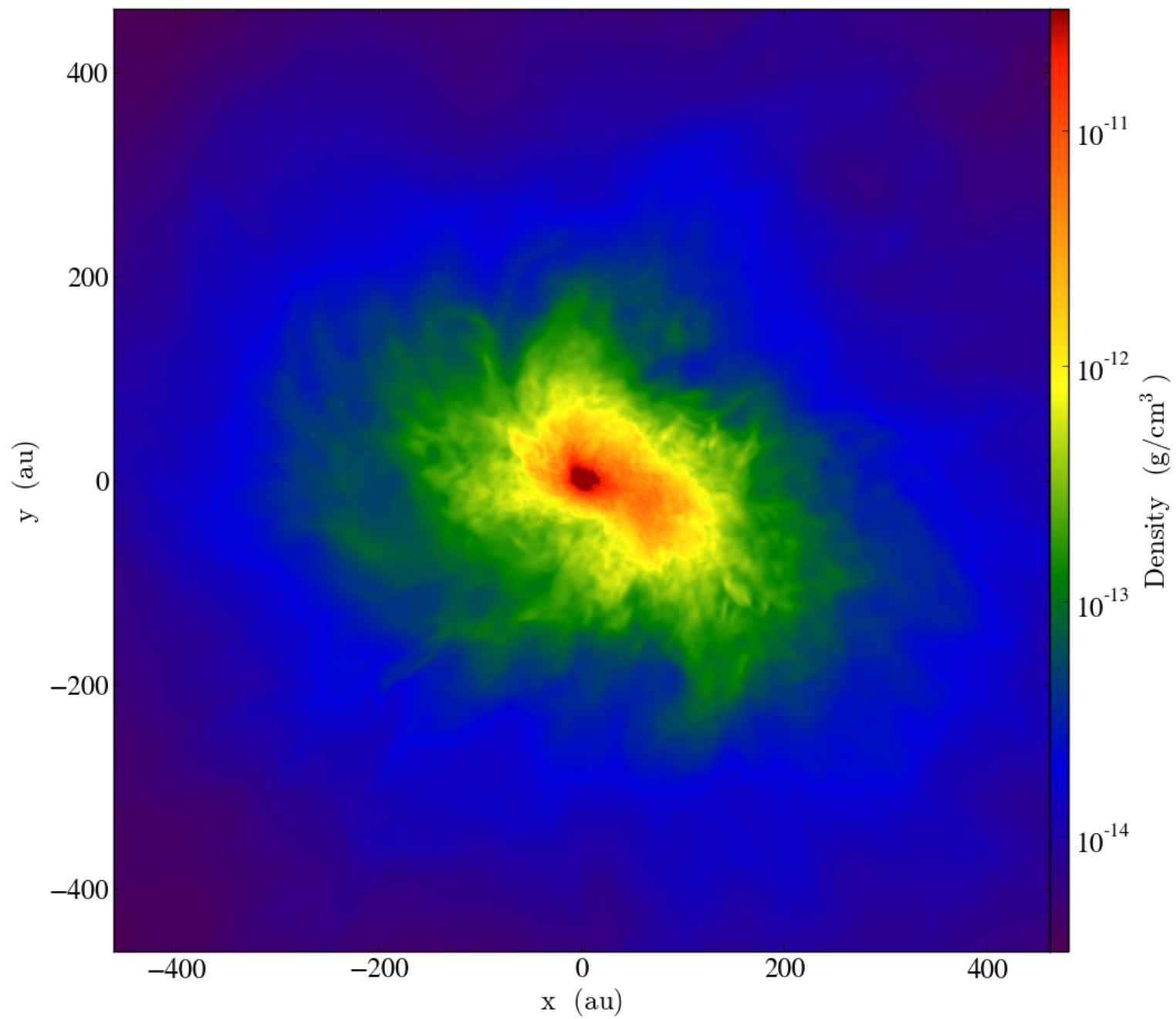


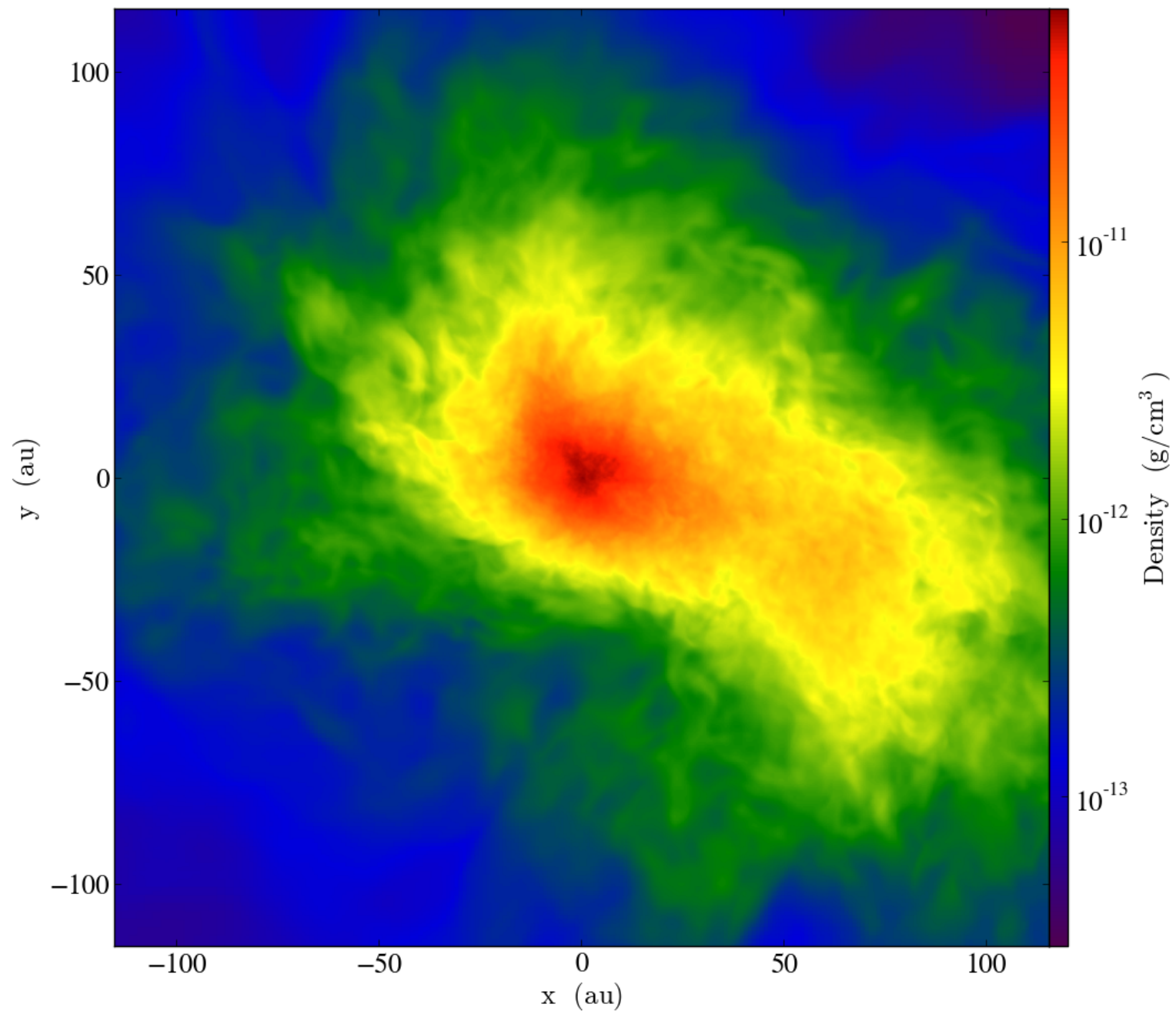


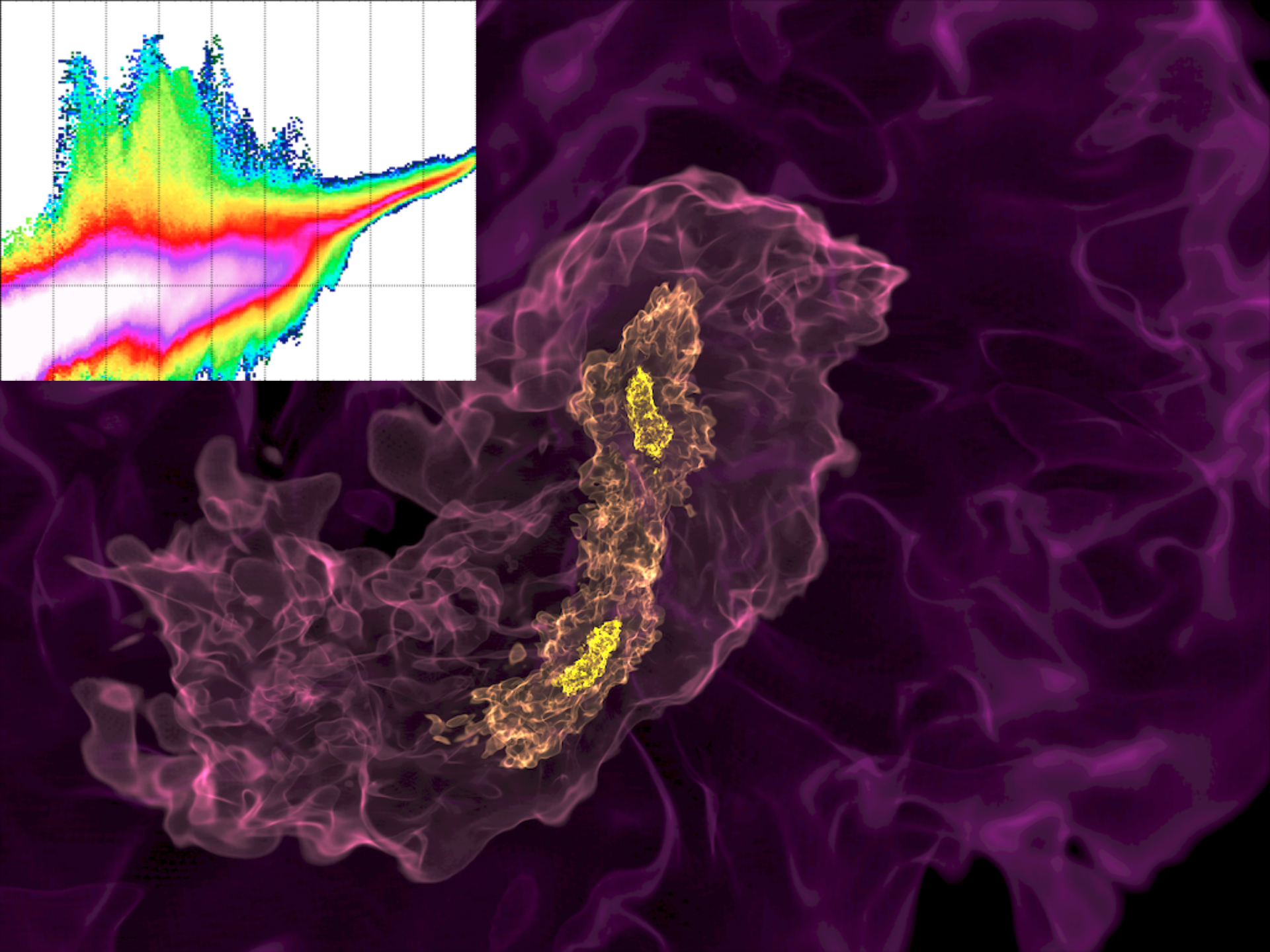
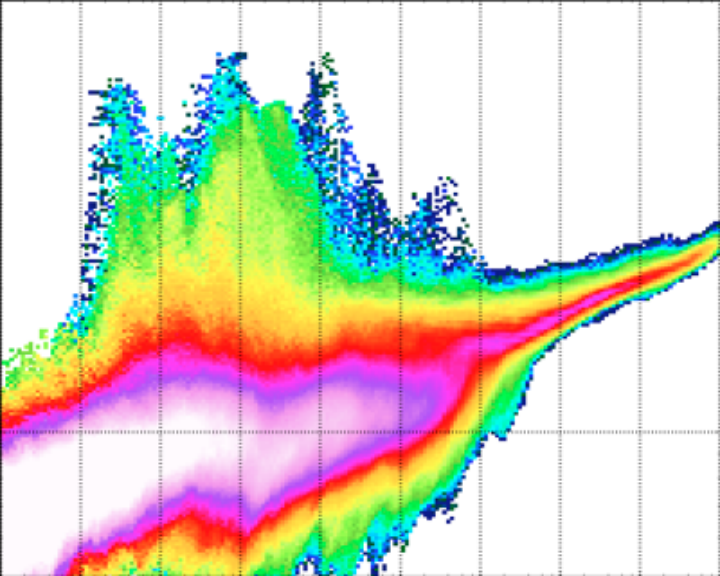


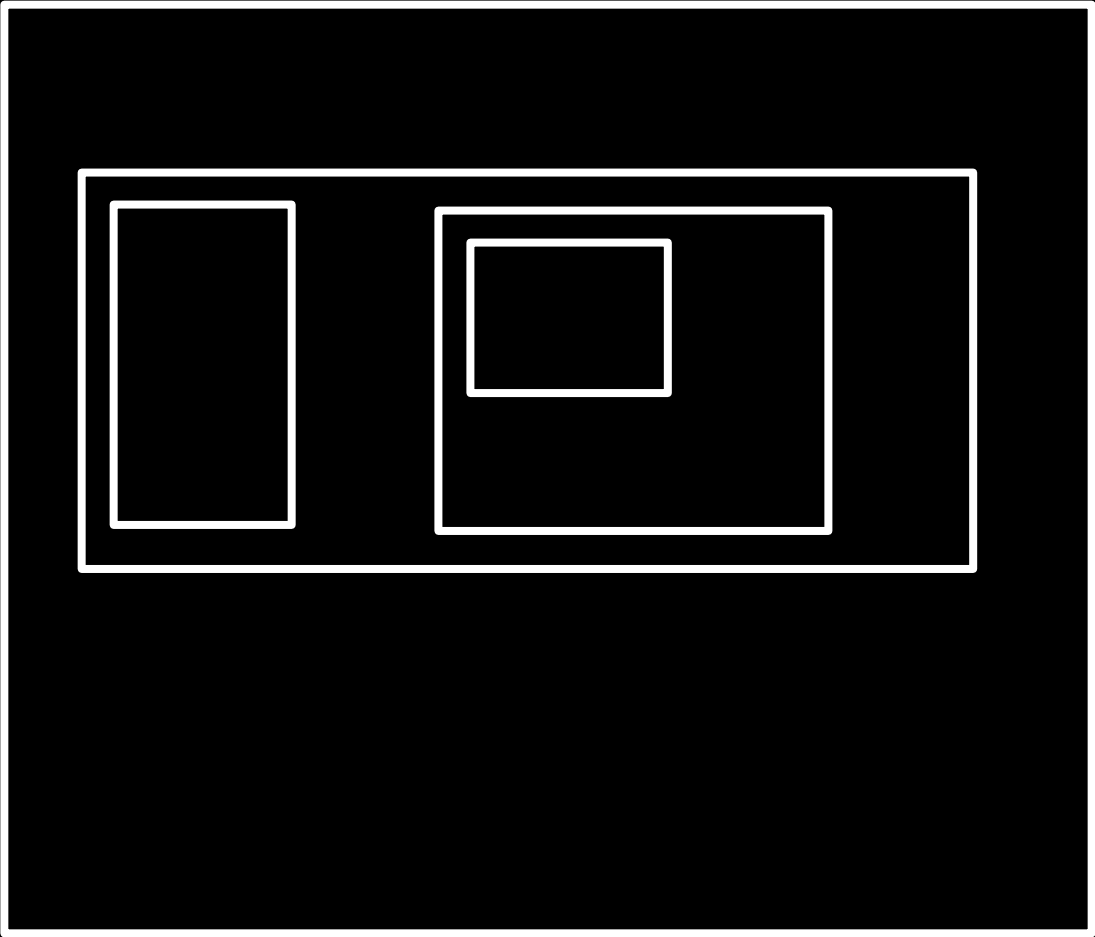


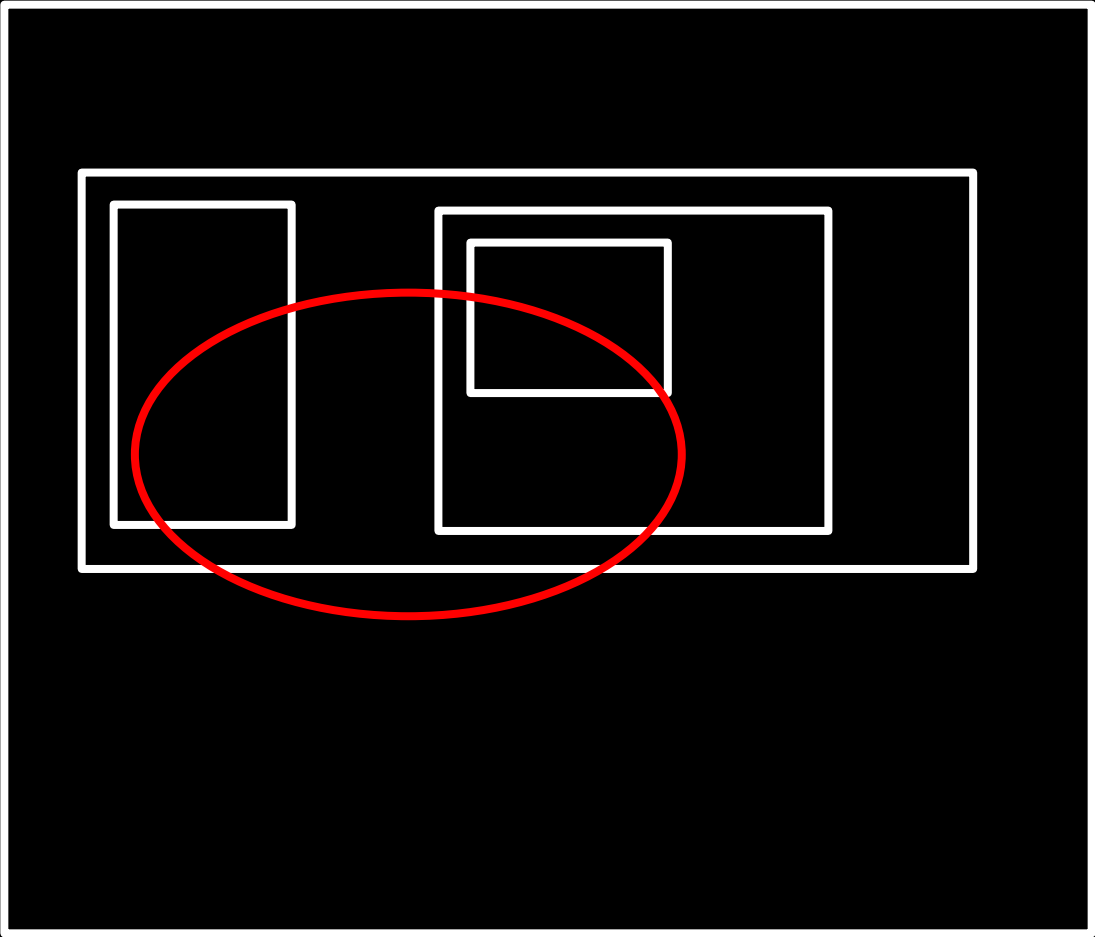


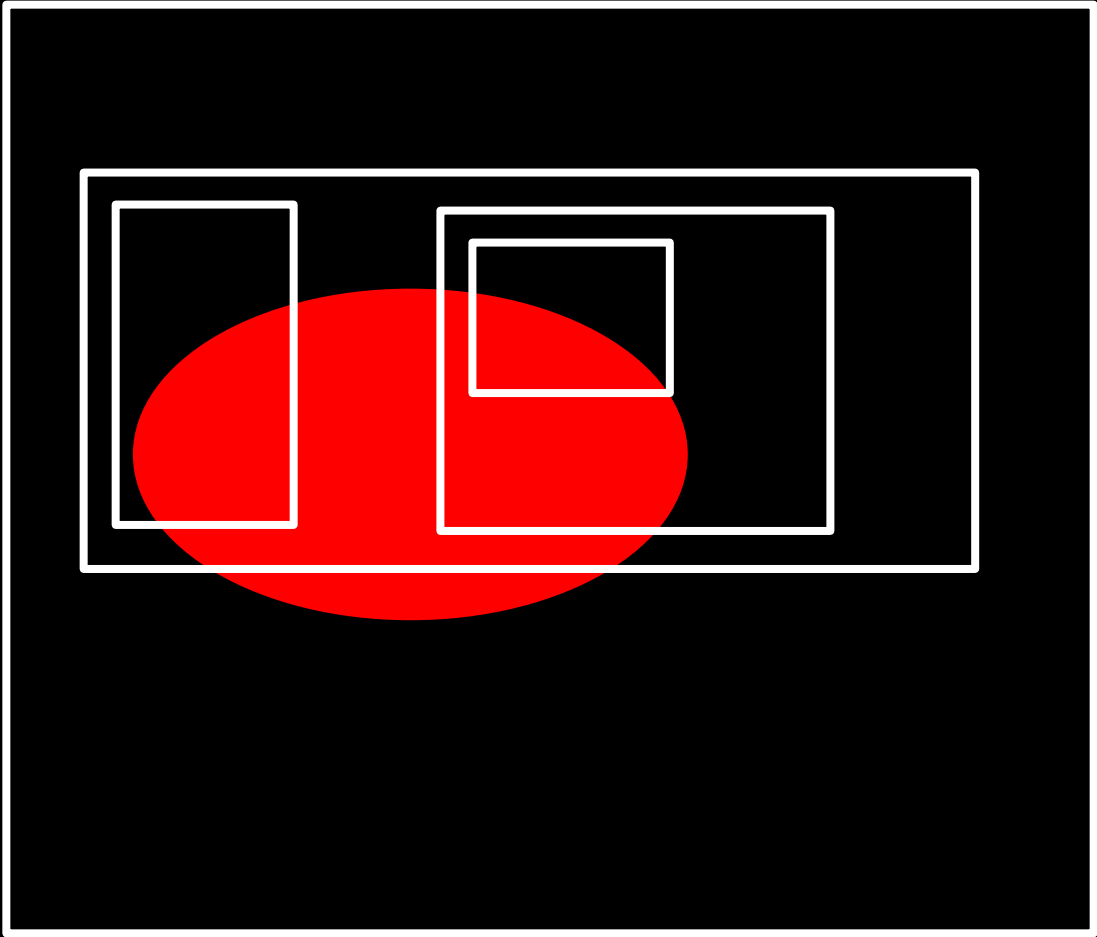












yt is not a visualization tool

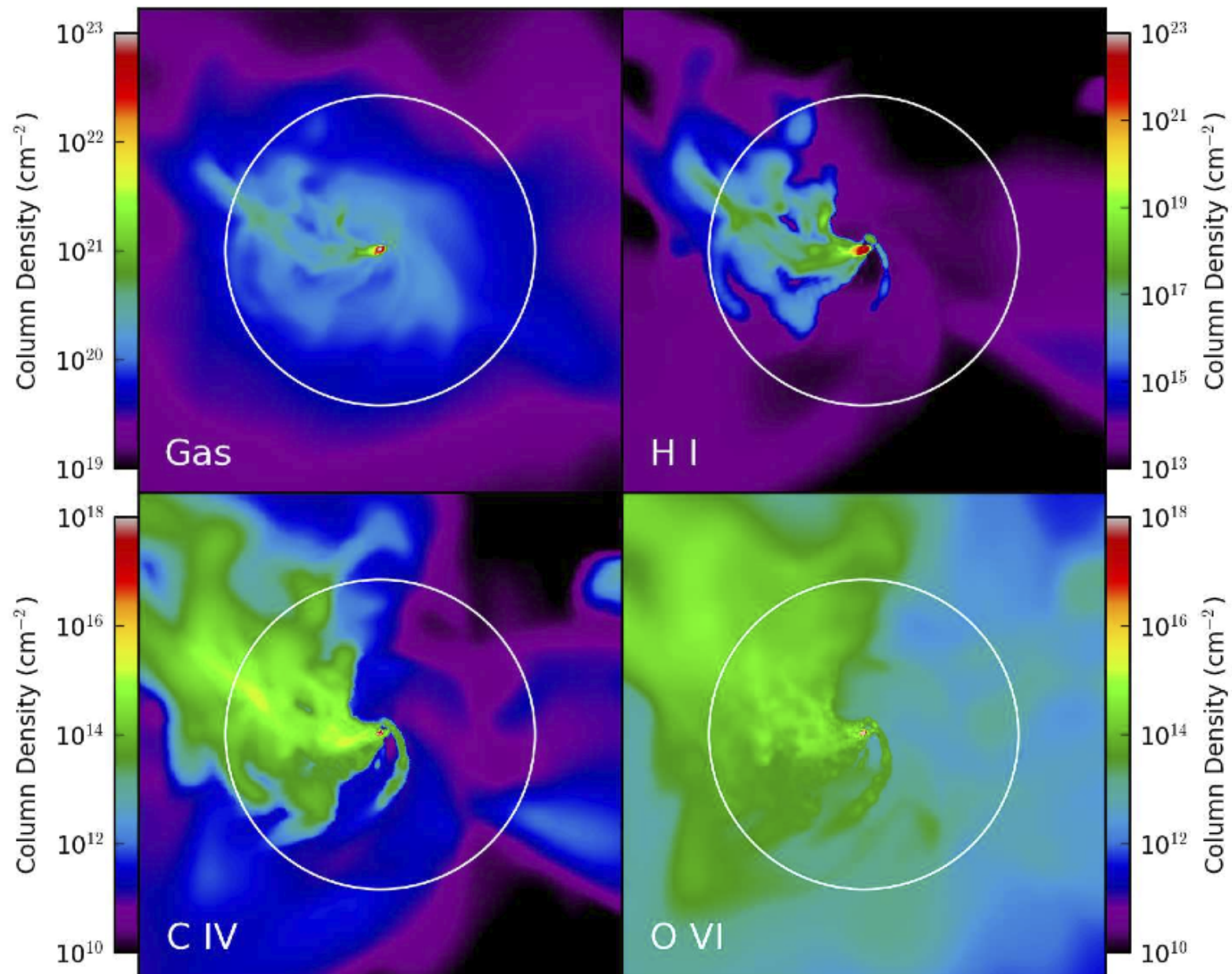
it is a question asking library

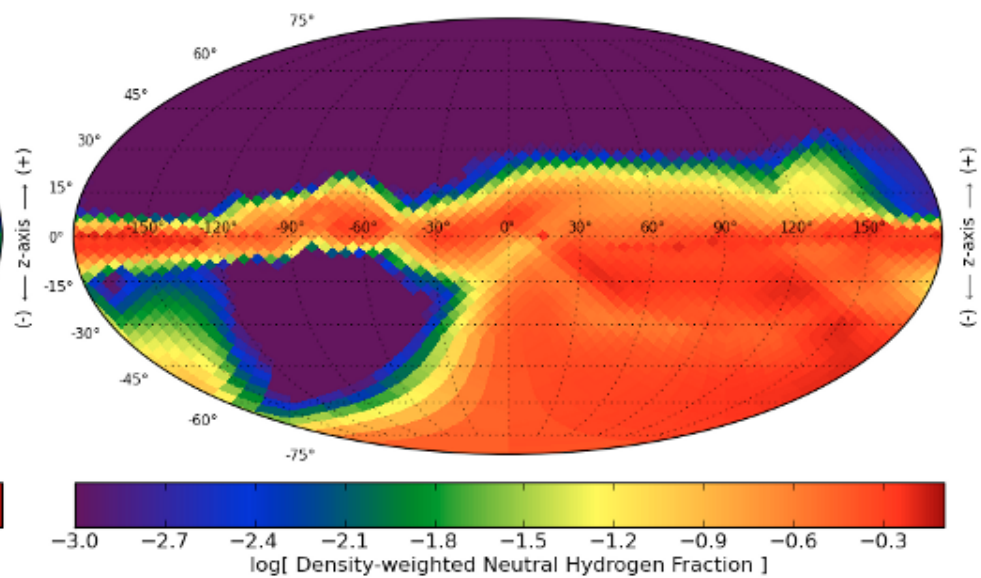
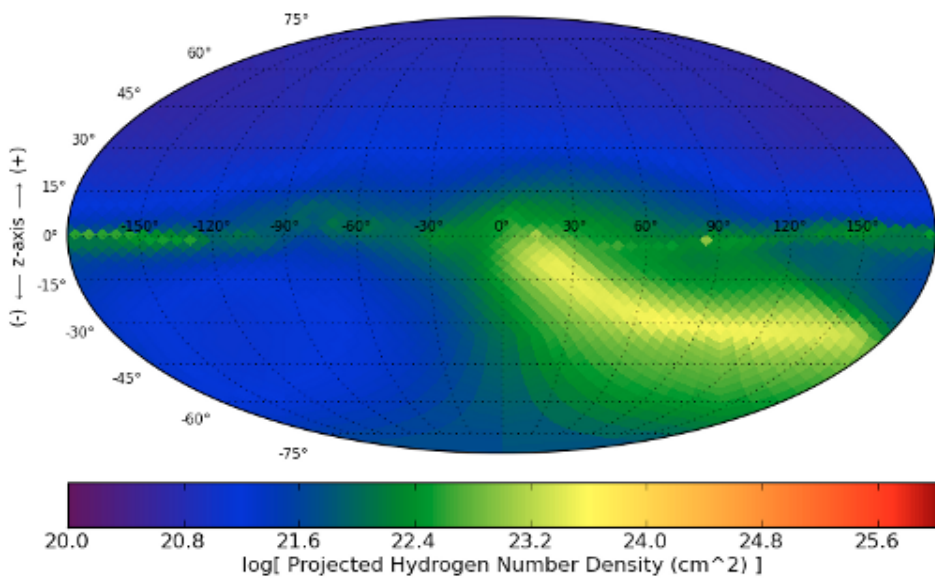
units

masking of data

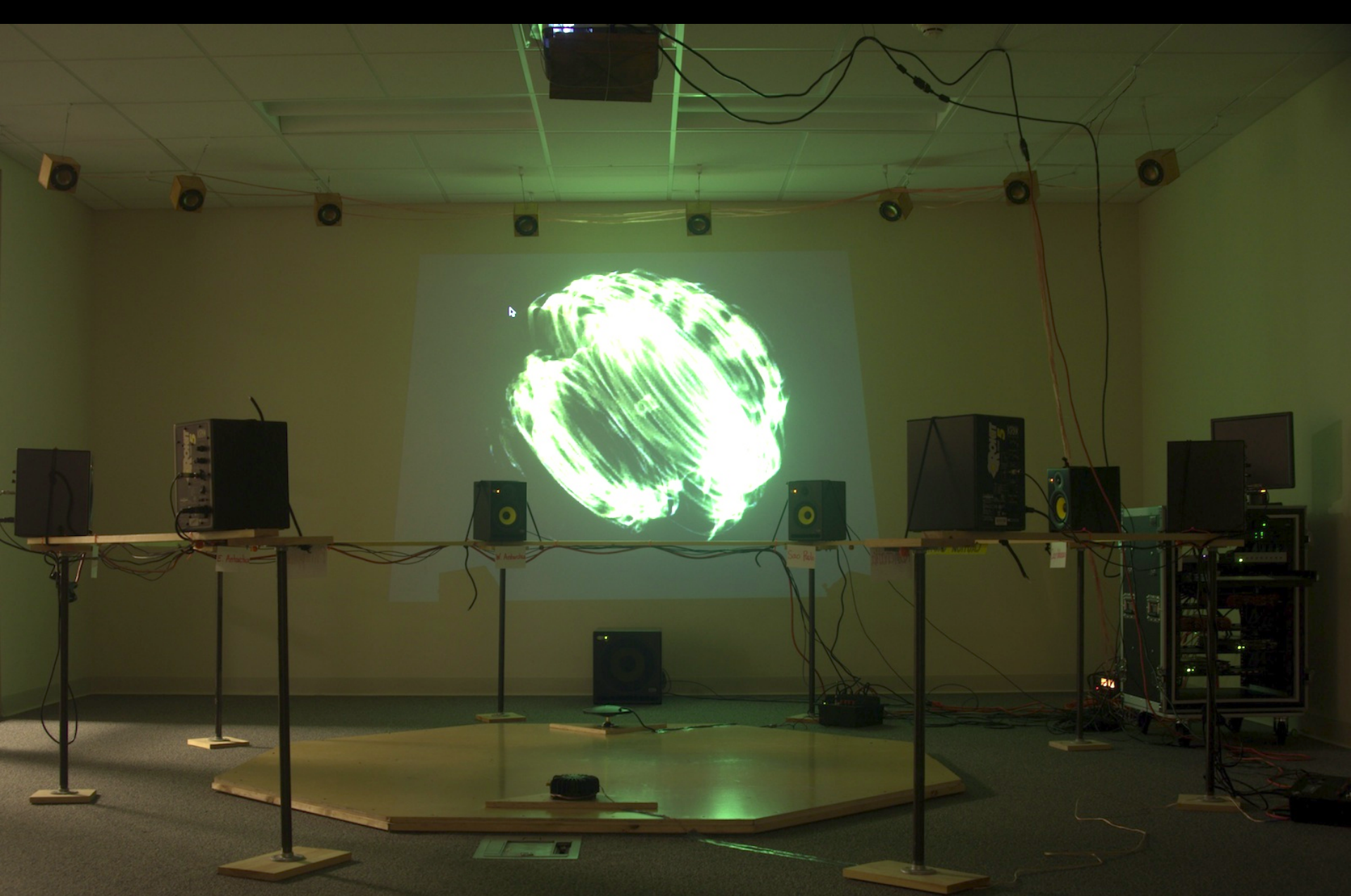
multiple resolutions

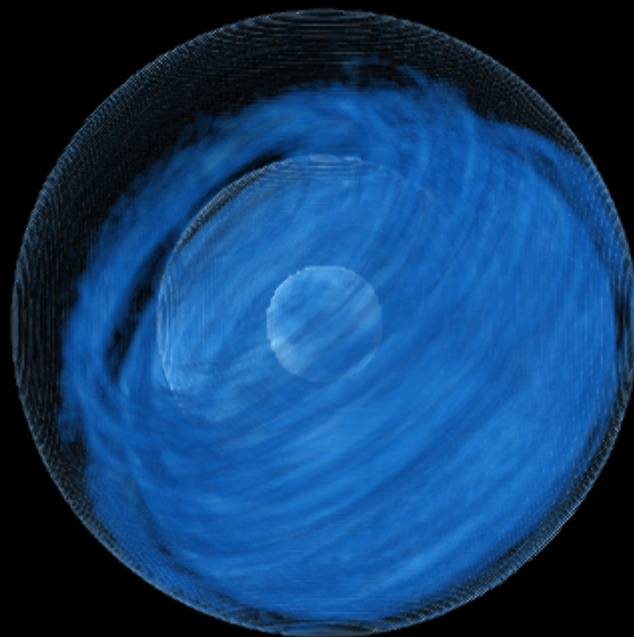
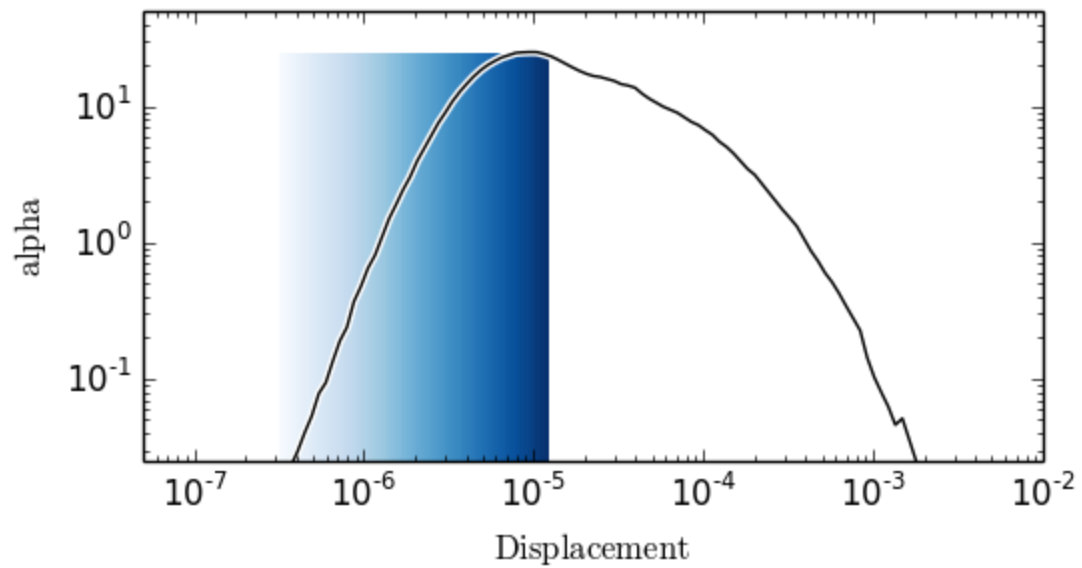
plotting

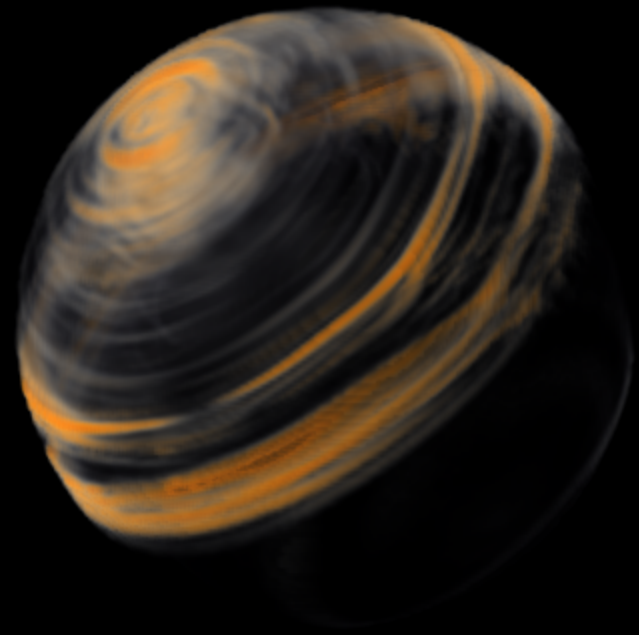
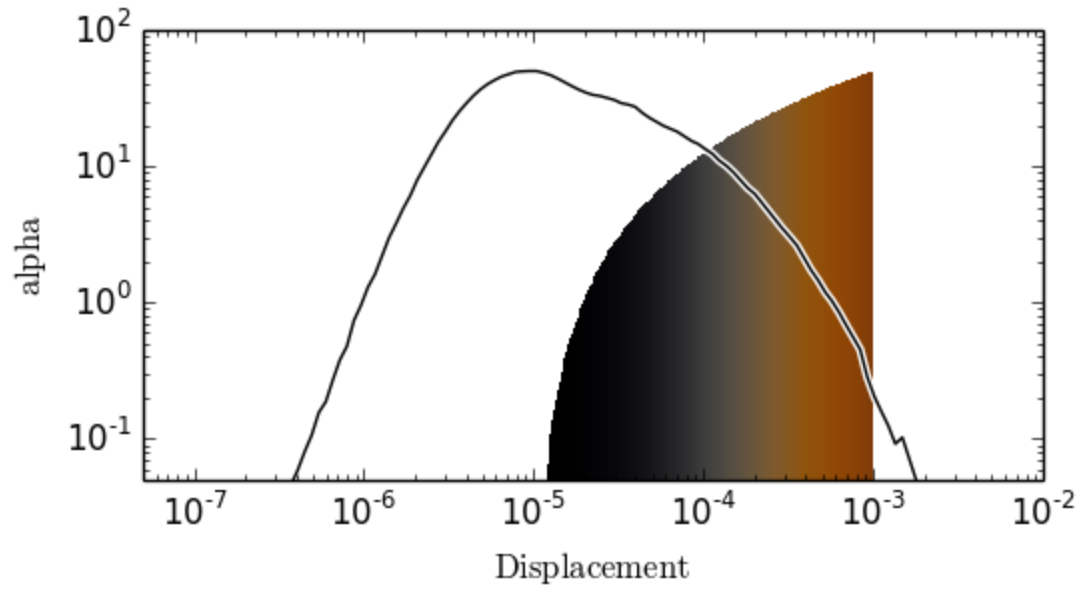




Seismology







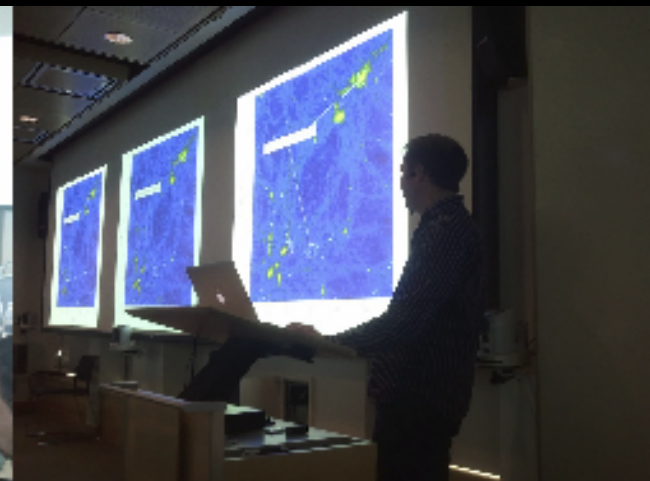
Halo finding
Clumps
Halo profiling
Simulated Observations
Fourier-Space Analysis
Power Spectra
Spectral Energy Distribution

**Analysis
Modules**

yt is not finished

Invest in Community

astro-ph/1301.7064





```
0  
1  
2 Here is a simple script for generating a volume rendering of  
3 a system taken from the docs. Note how much has to be done for  
4 rendering an output image.  
5  
6 >>> from yt.mods import *  
7 >>> pf = load("Enzo_S4/000001/datas0043")  
8 >>> dl = pf.h.all_data()  
9 >>> m1, m2 = dl.quantities["Extreme"]("Density")[:2]  
10 >>> pf = ColorTransferFunction((np.log10(m1)+1, np.log10(m2)  
11 >>> pf.add_layers(L, n=8.02, colormap="spectral")  
12 >>> c = [0.5, 0.5, 0.5]  
13 >>> l = [0.5, 0.2, 0.7]  
14 >>> s = 1.0  
15 >>> Npixels = 512  
16 >>> cam = pf.h.camera(c, l, N, Npixels, tF)  
17 >>> cam.snapshot("file_volume_rendered.png" % pf, clip_plane=4
```

Man in dark jacket presenting at the front of the room.

Whiteboard with faint writing on the left wall.



EXIT EXIT

the most important lesson

do not be afraid