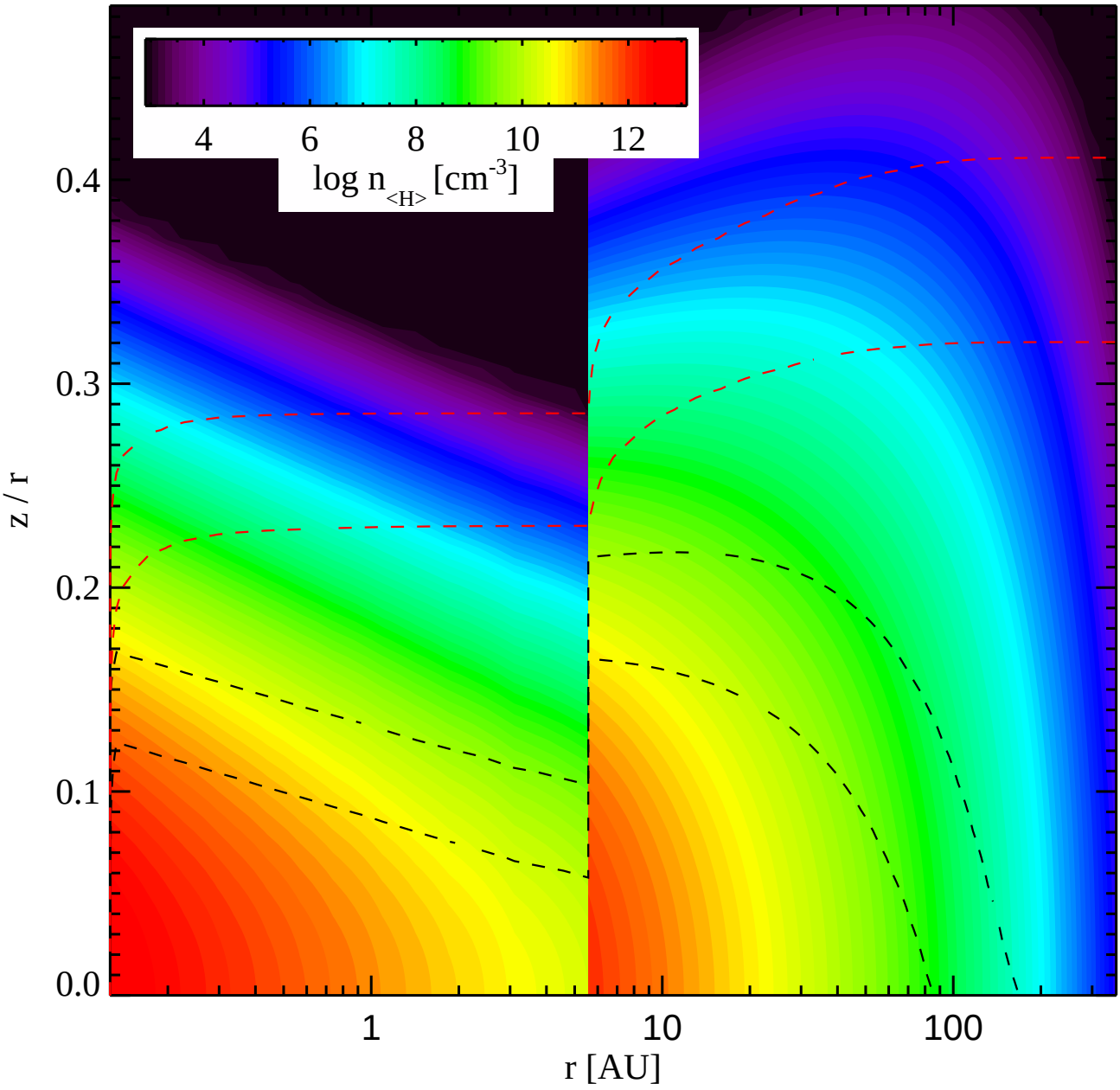
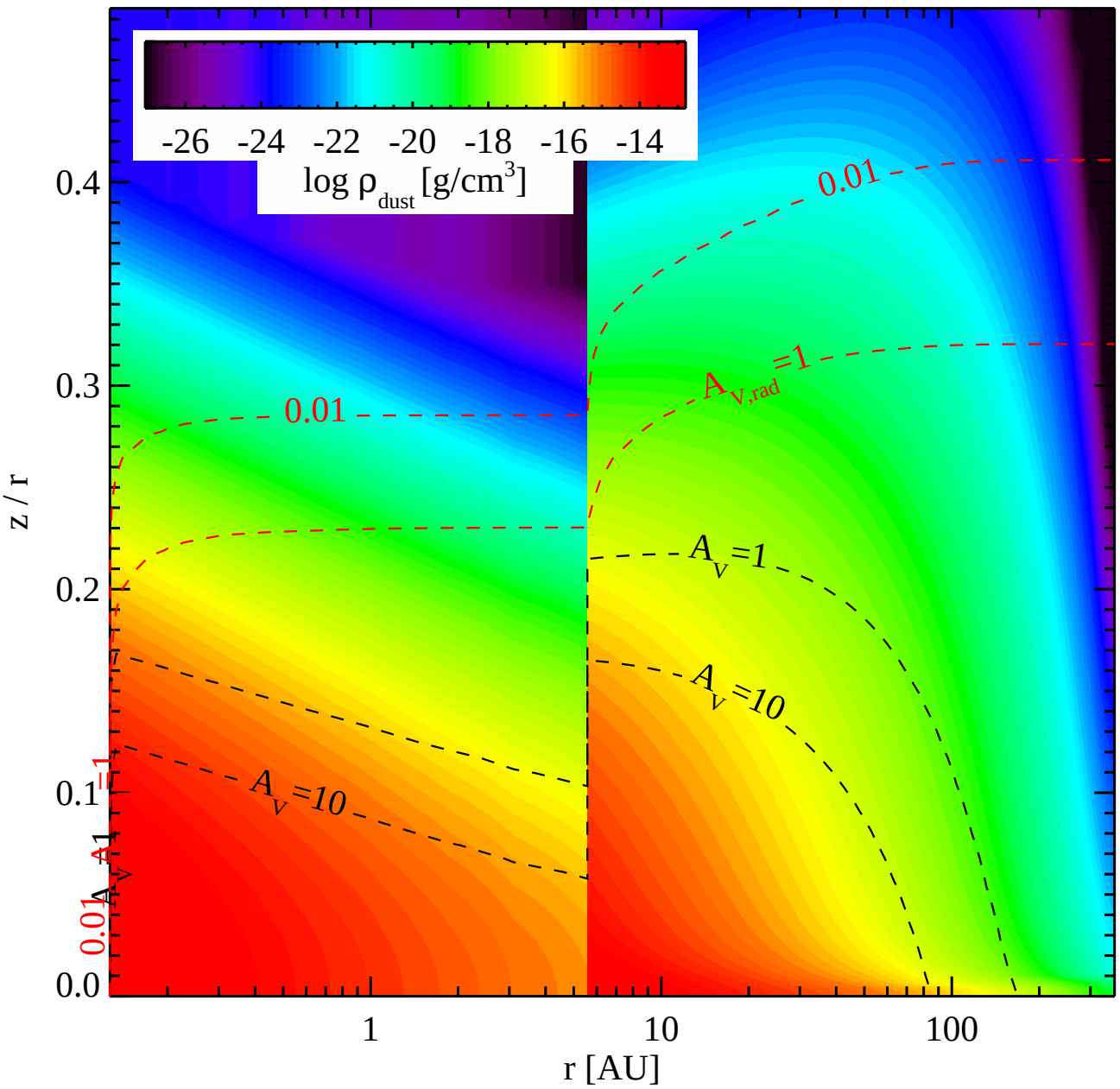
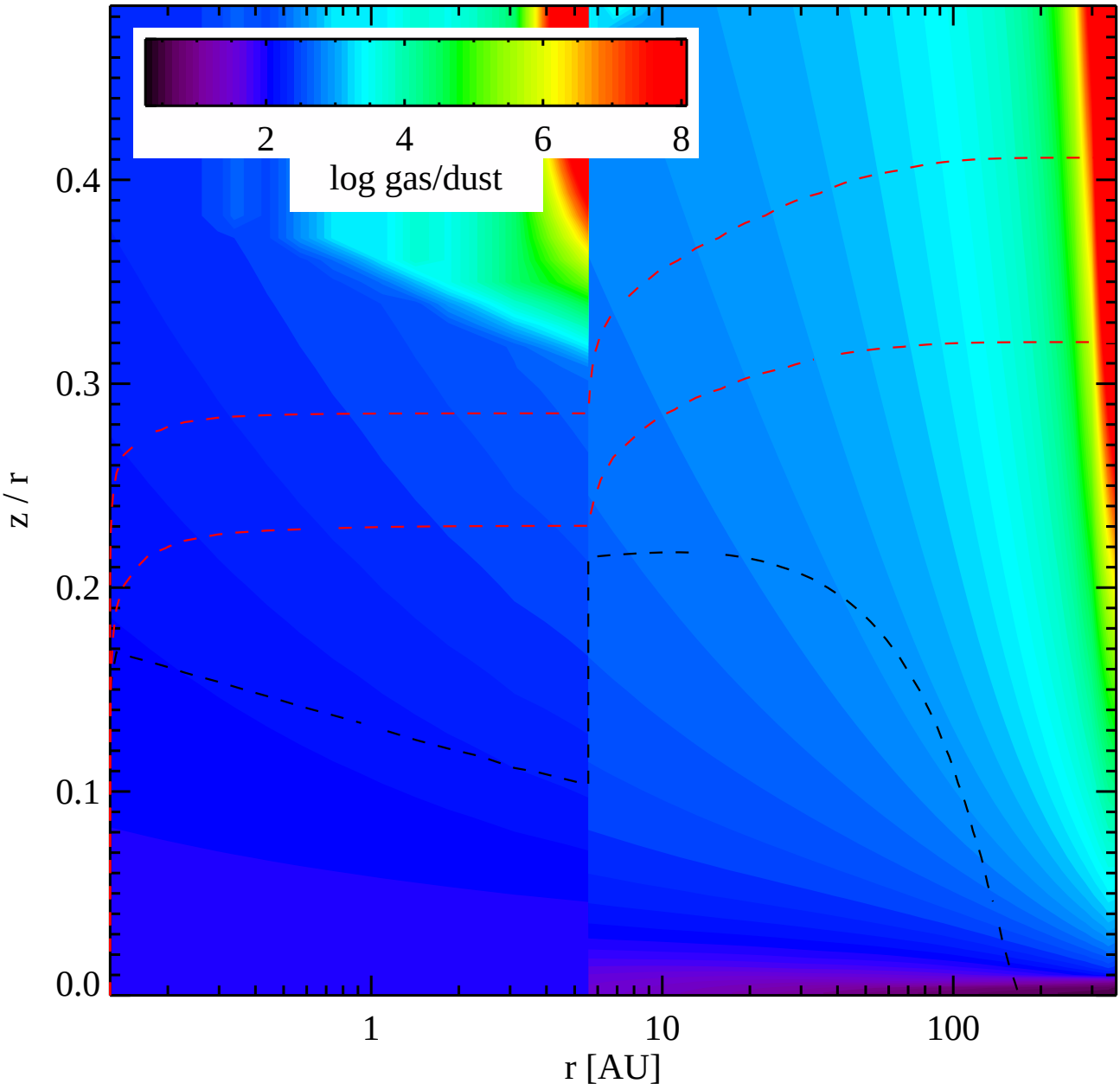
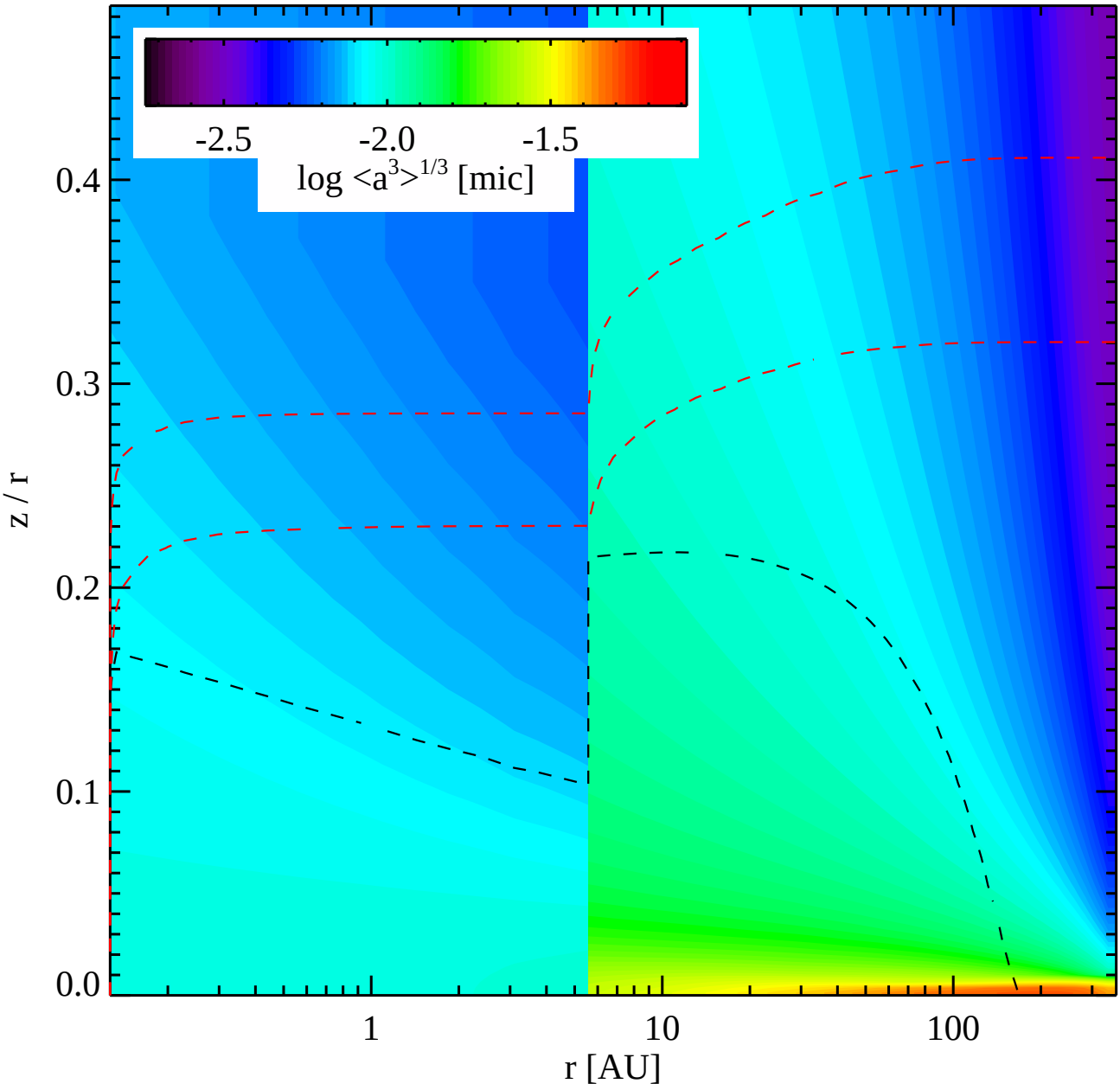
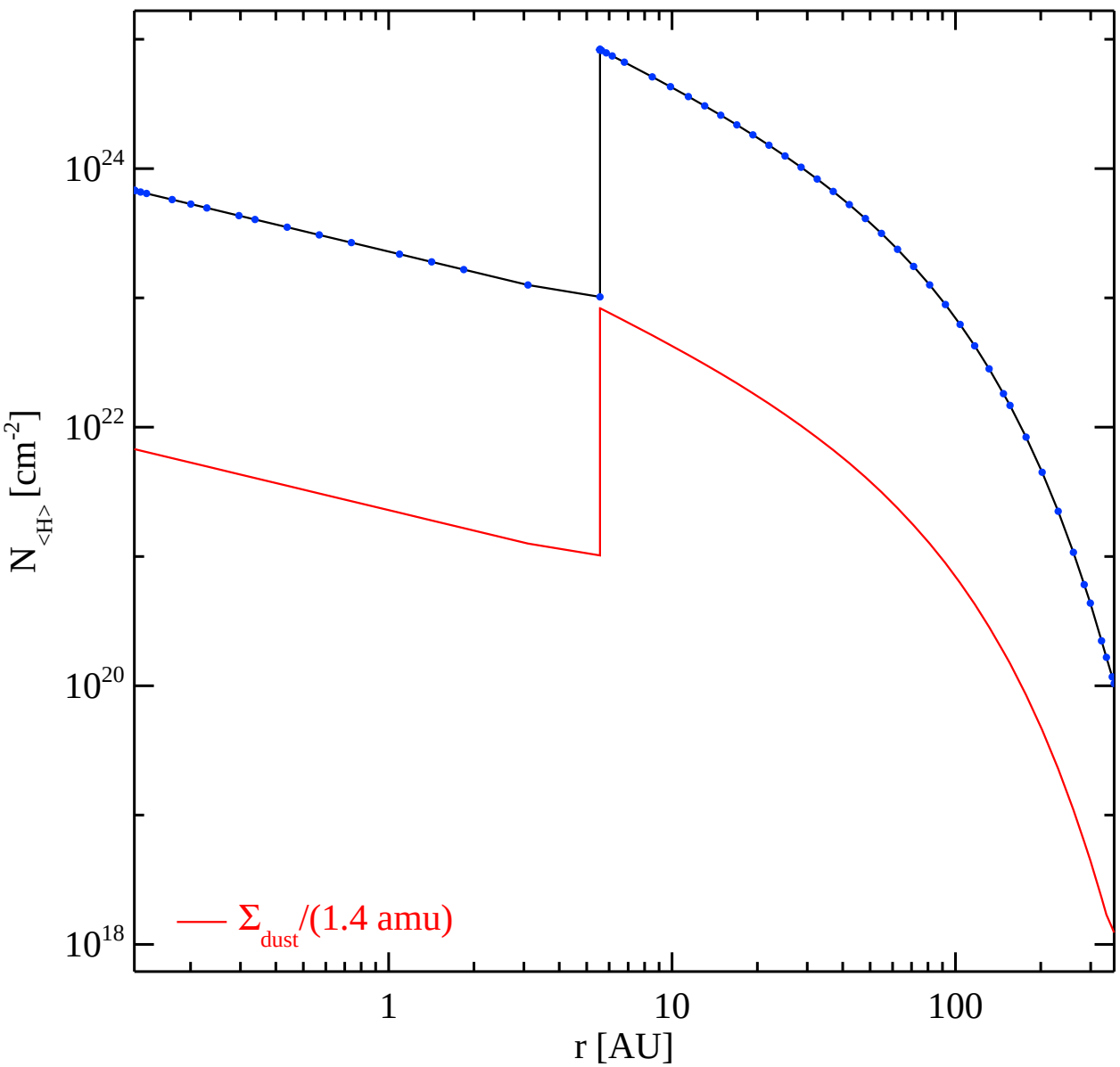
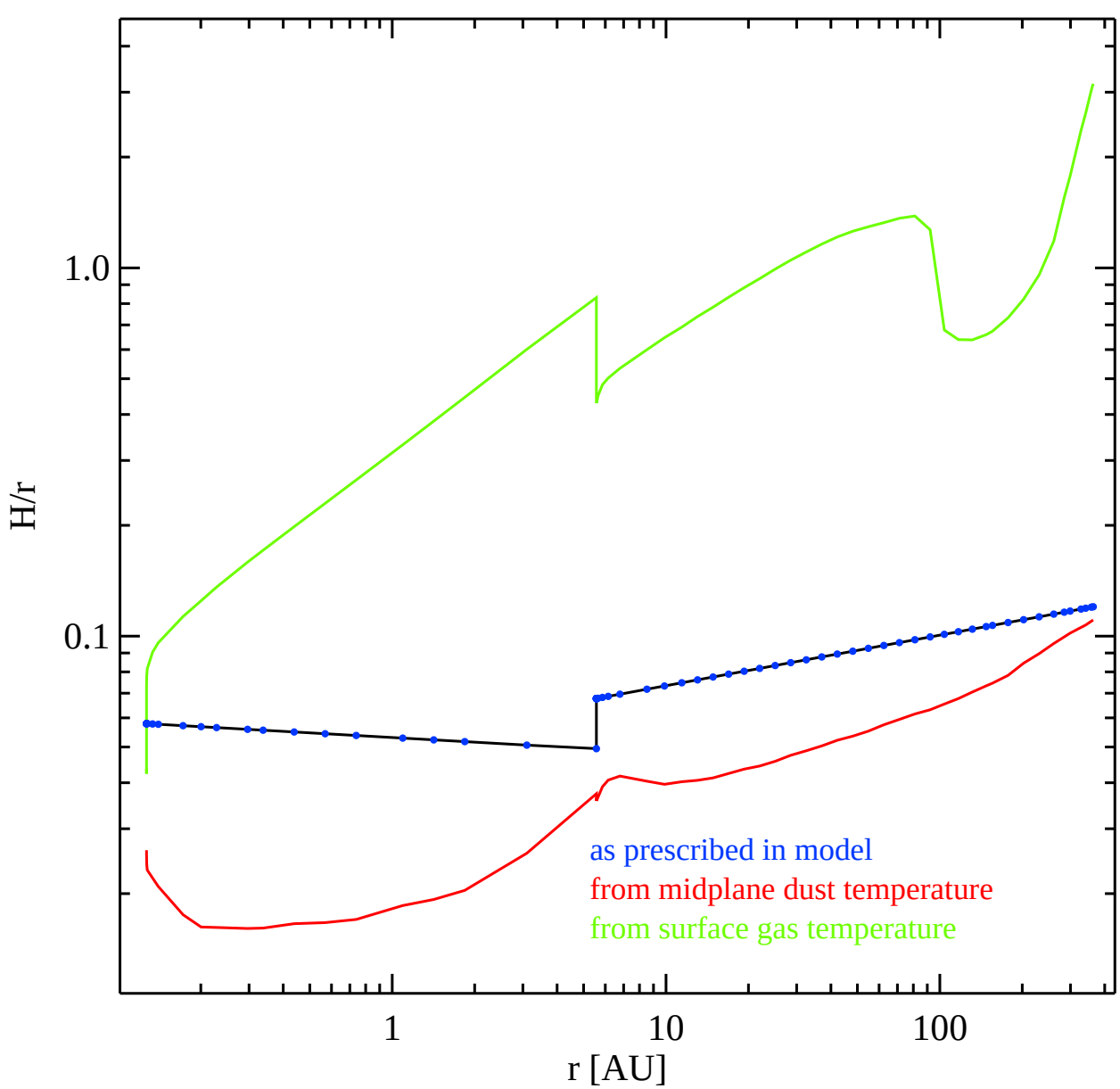

4
6
8
10
12
log n<H> [cm-3]
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

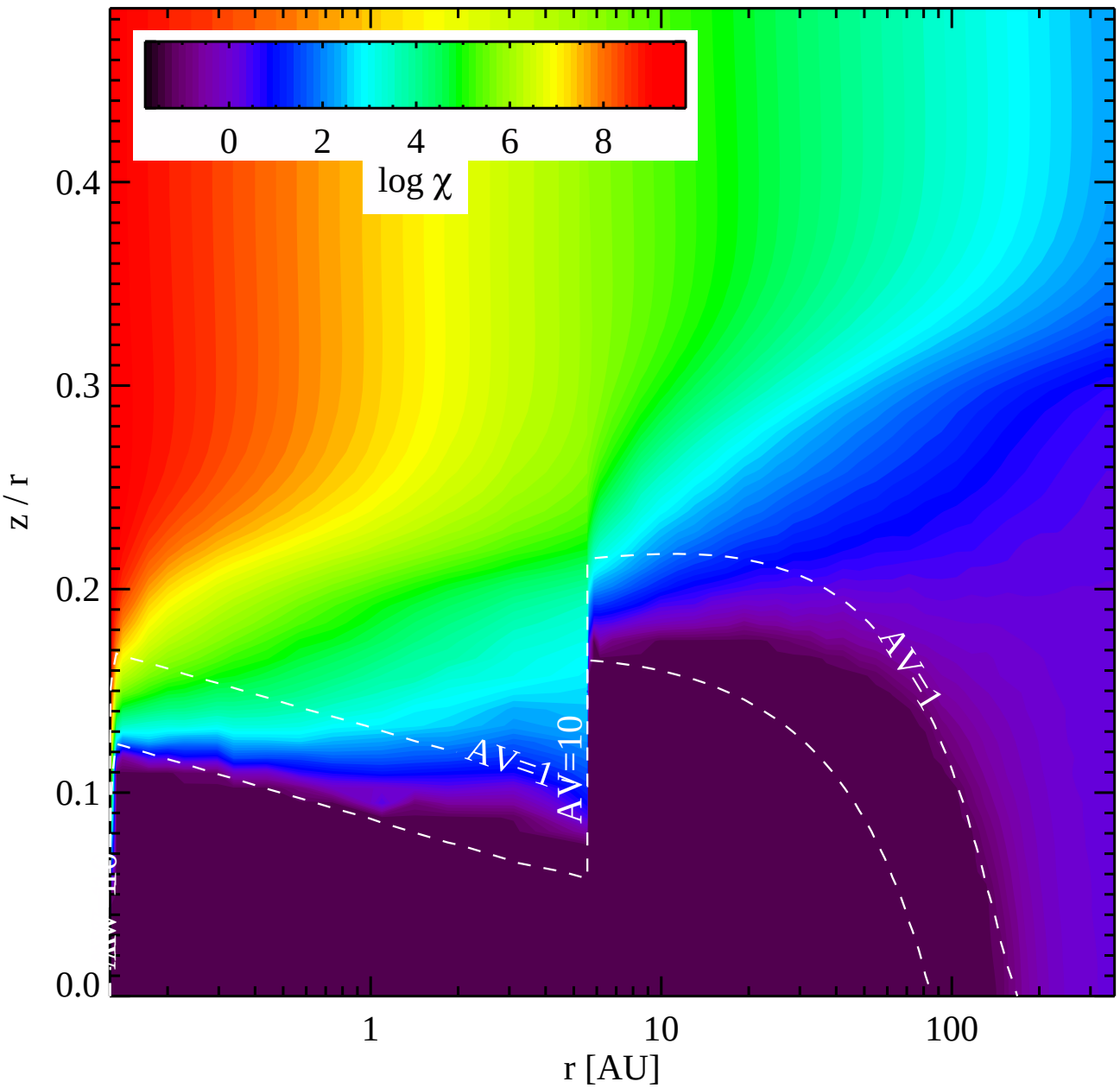

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.01
0.01
AV,rad=1
AV=1
AV=10
AV=1
AV=10
0.01
AV=1
z / r
0.0
0.1
0.2
0.3
0.4
1
10
100
r [AU]

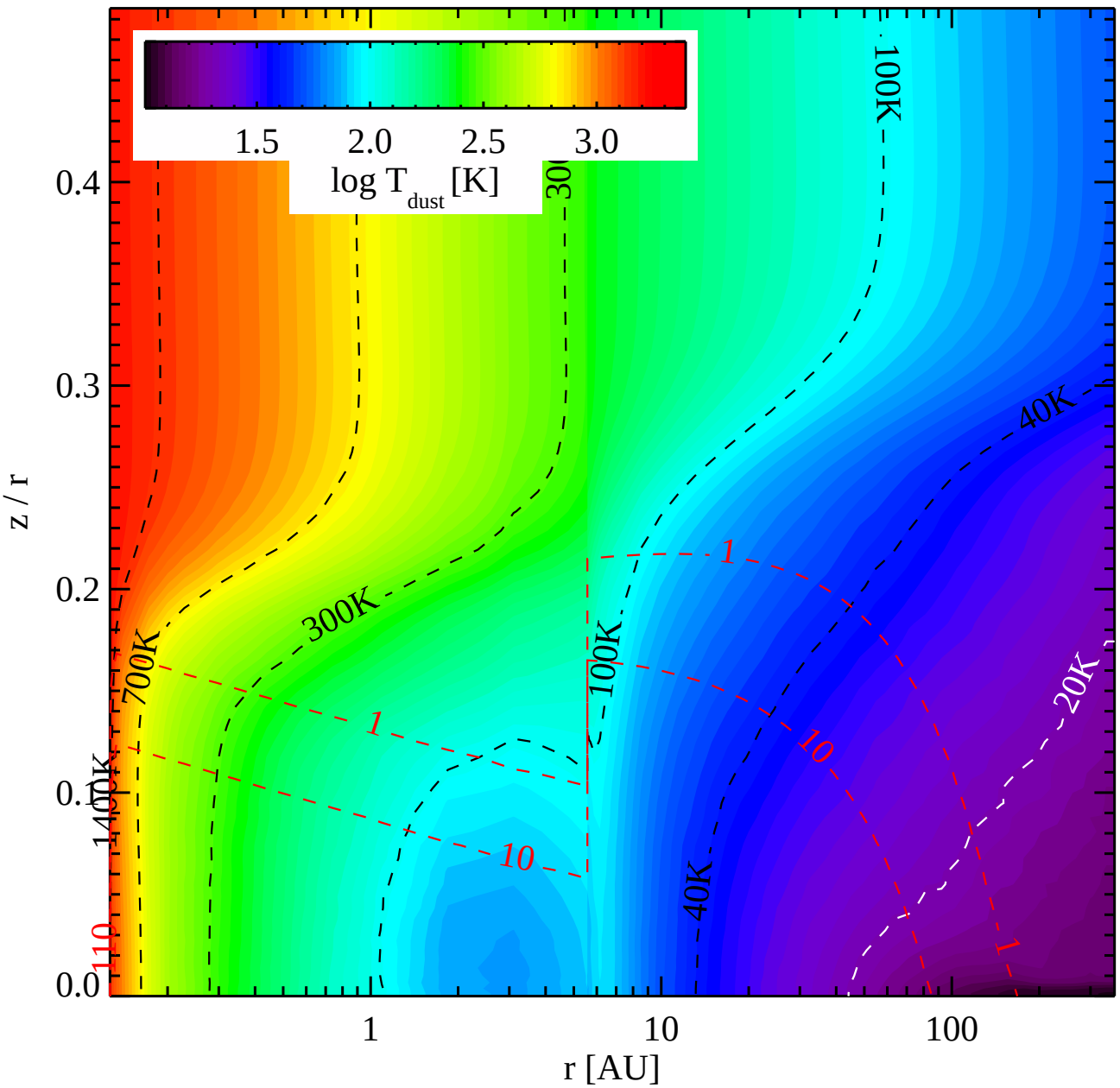

2
4
6
8
log gas/dust
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

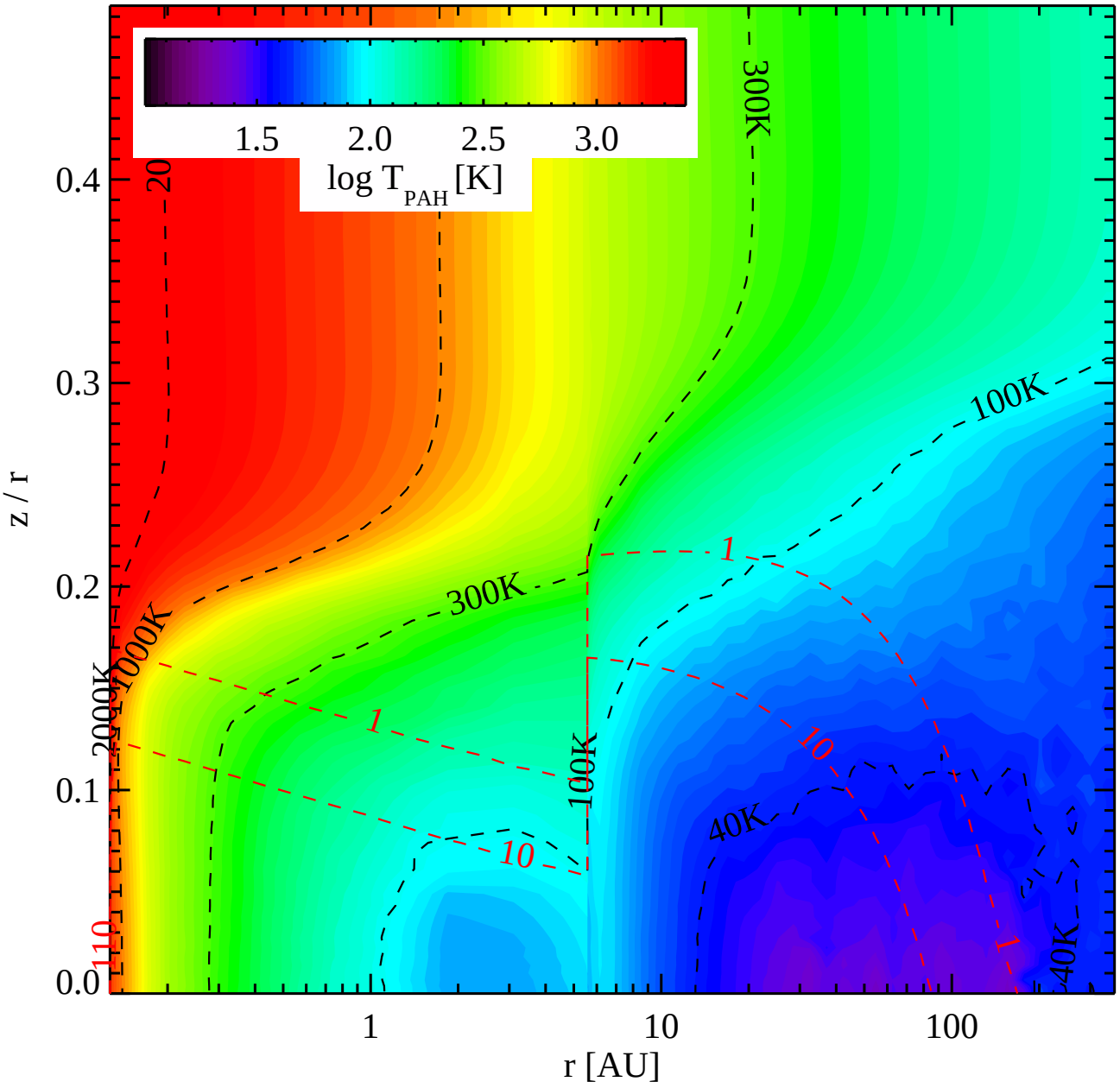

-2.5
-2.0
-1.5
log <a^3>^1/3 [mic]
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

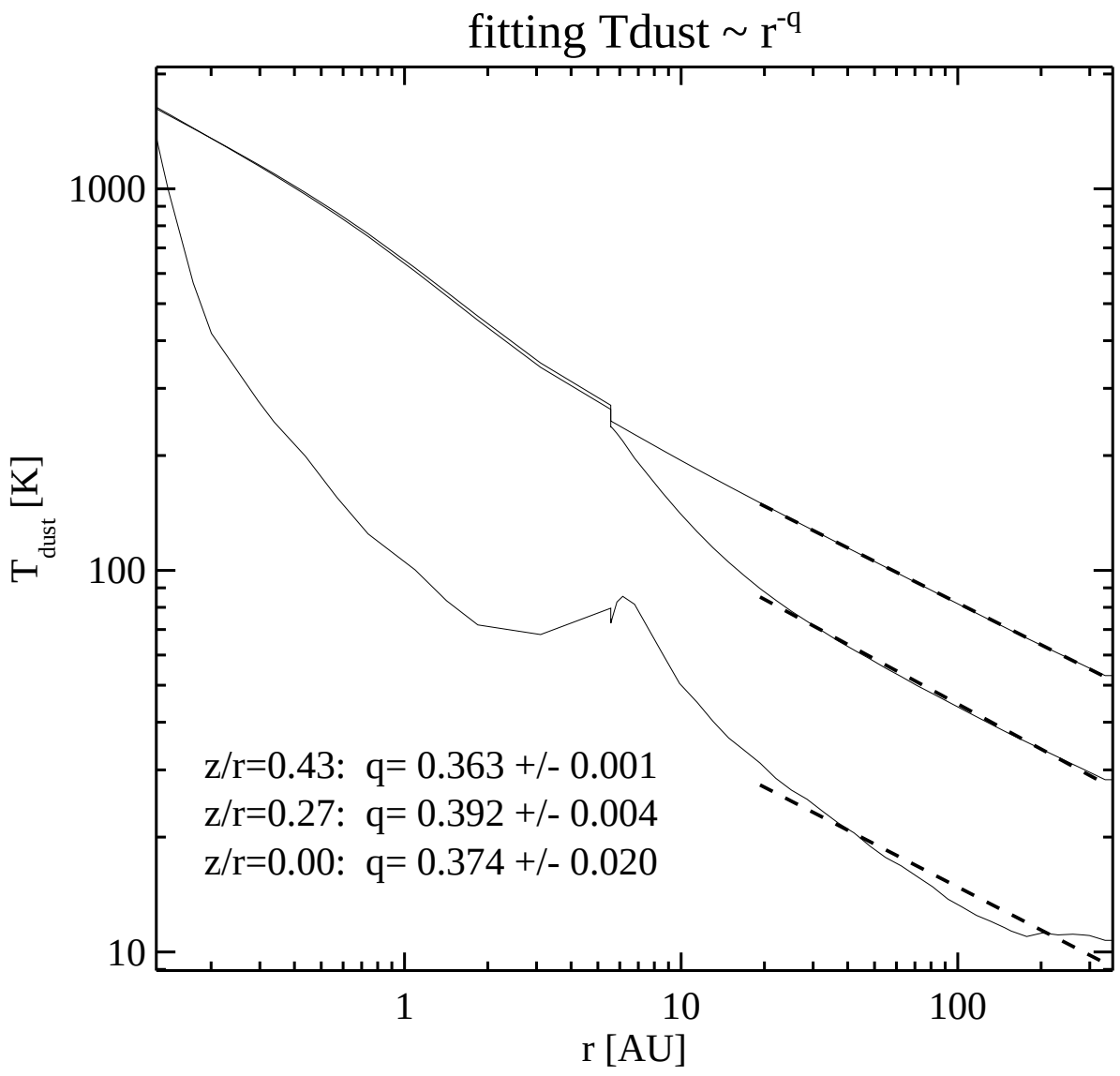

10^{24}
10^{22}
10^{20}
10^{18}
$N_{<H>}$ [cm^{-2}]
1
10
100
r [AU]
Σ_{dust}/(1.4 amu)

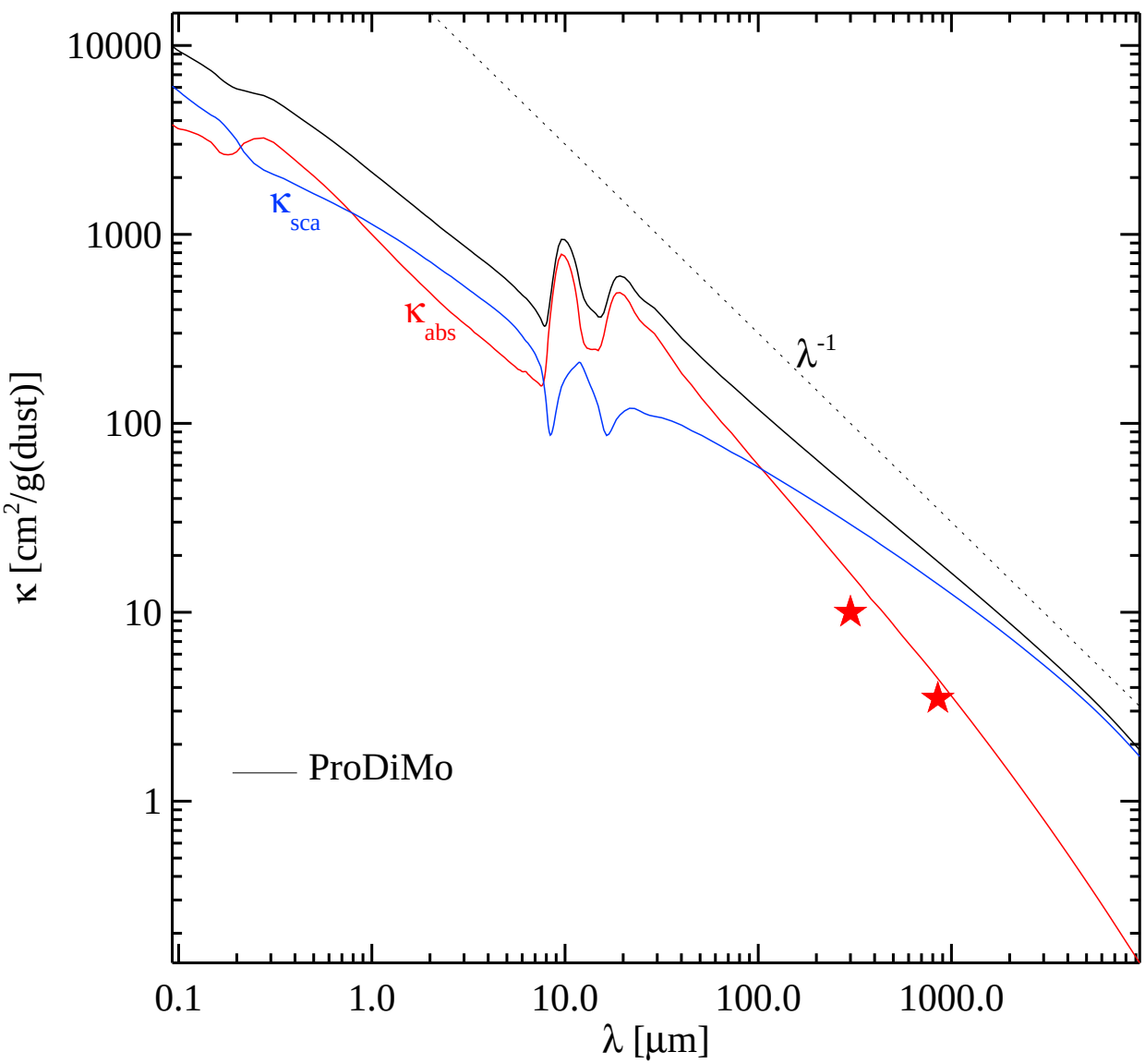

1.0
0.1
H/r
1
10
100
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

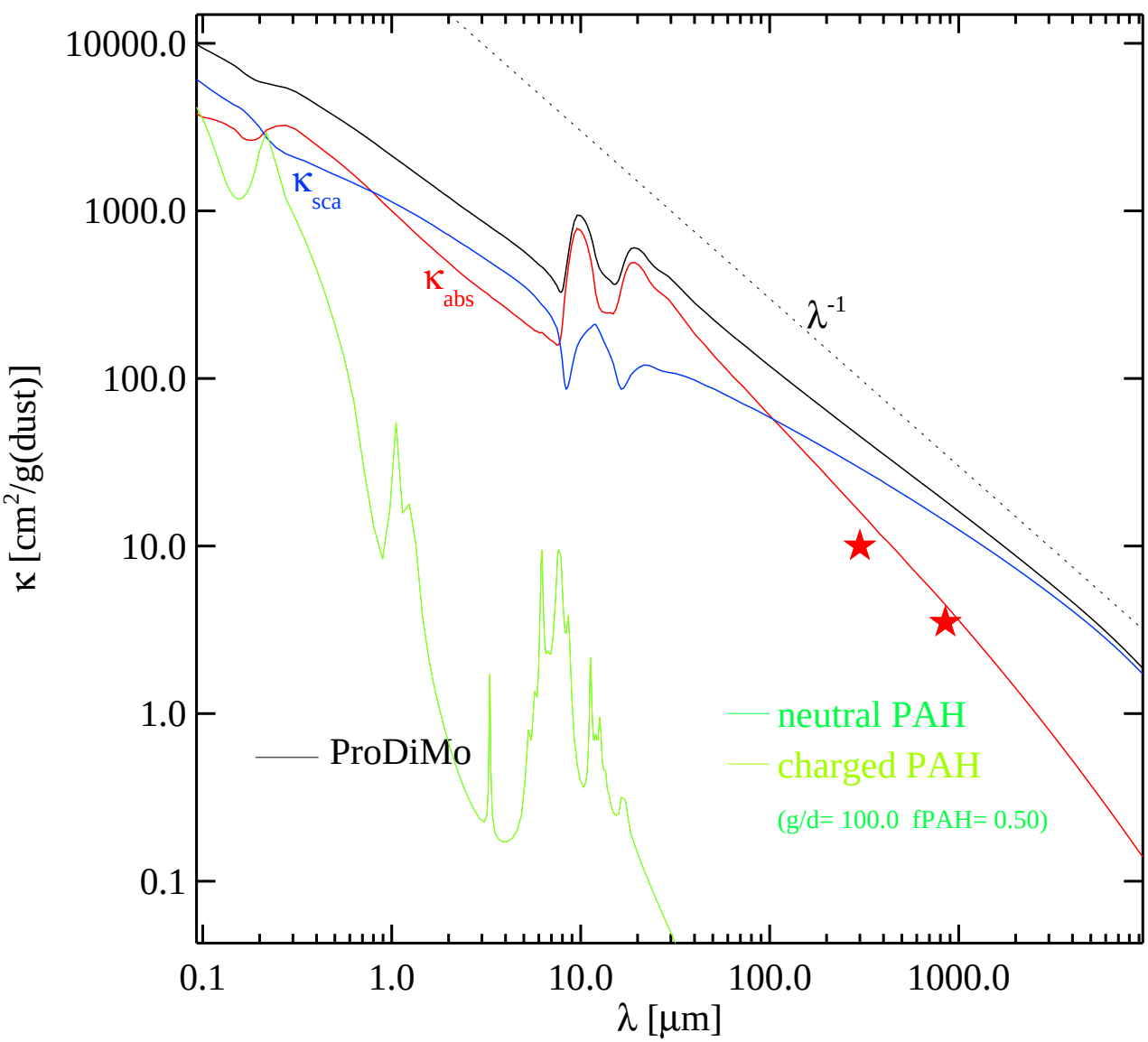

0
2
4
6
8
log χ
0.4
0.3
0.2
0.1
0.0
z / r
AV=1
AV=10
AV=1
1
10
100
r [AU]

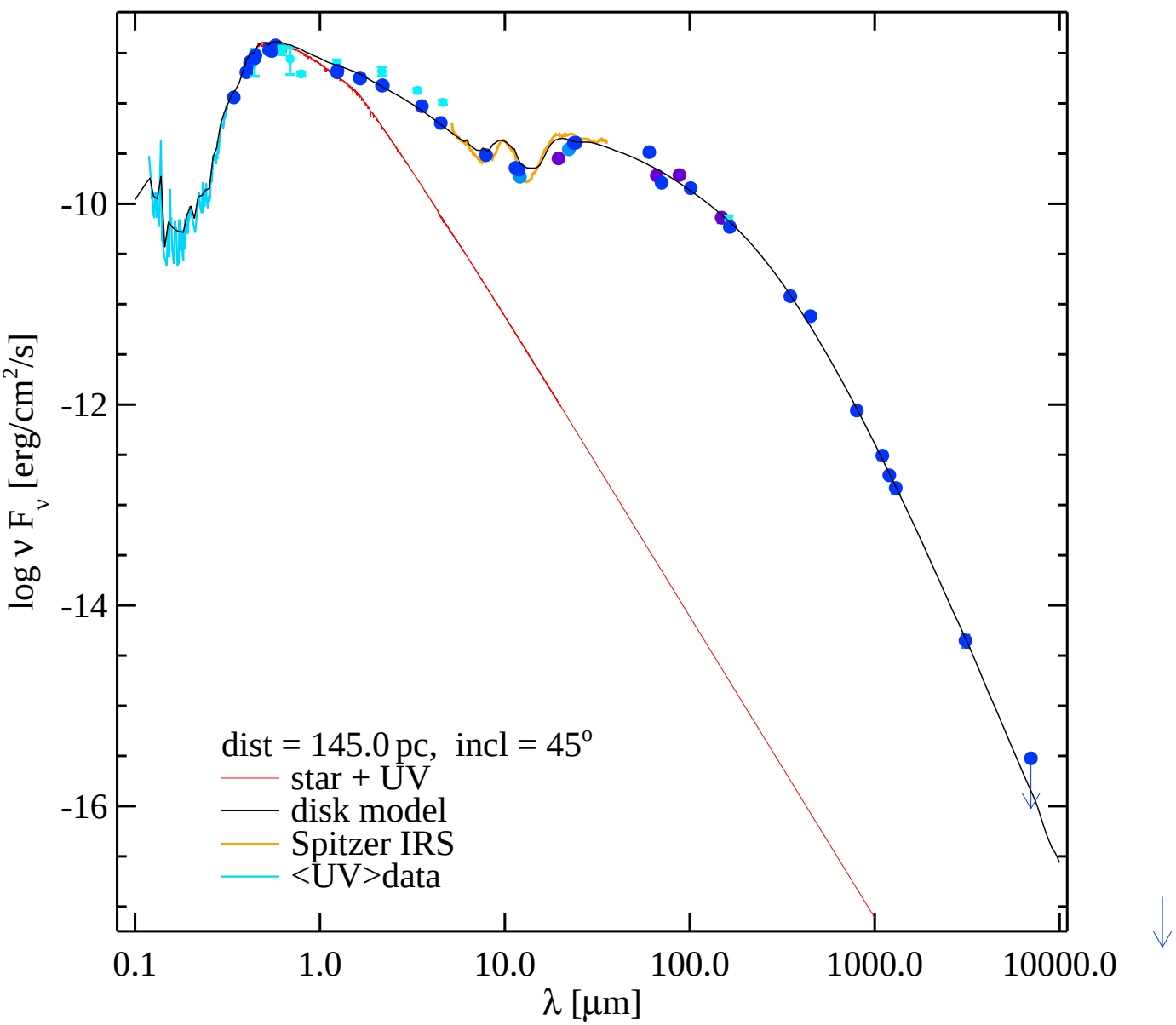

1.5
2.0
2.5
3.0
log T dust [K]
z / r
0.0
0.1
0.2
0.3
0.4
1
10
100
r [AU]
100K
40K
300K
700K
1400K
20K
1
10
1
10
1

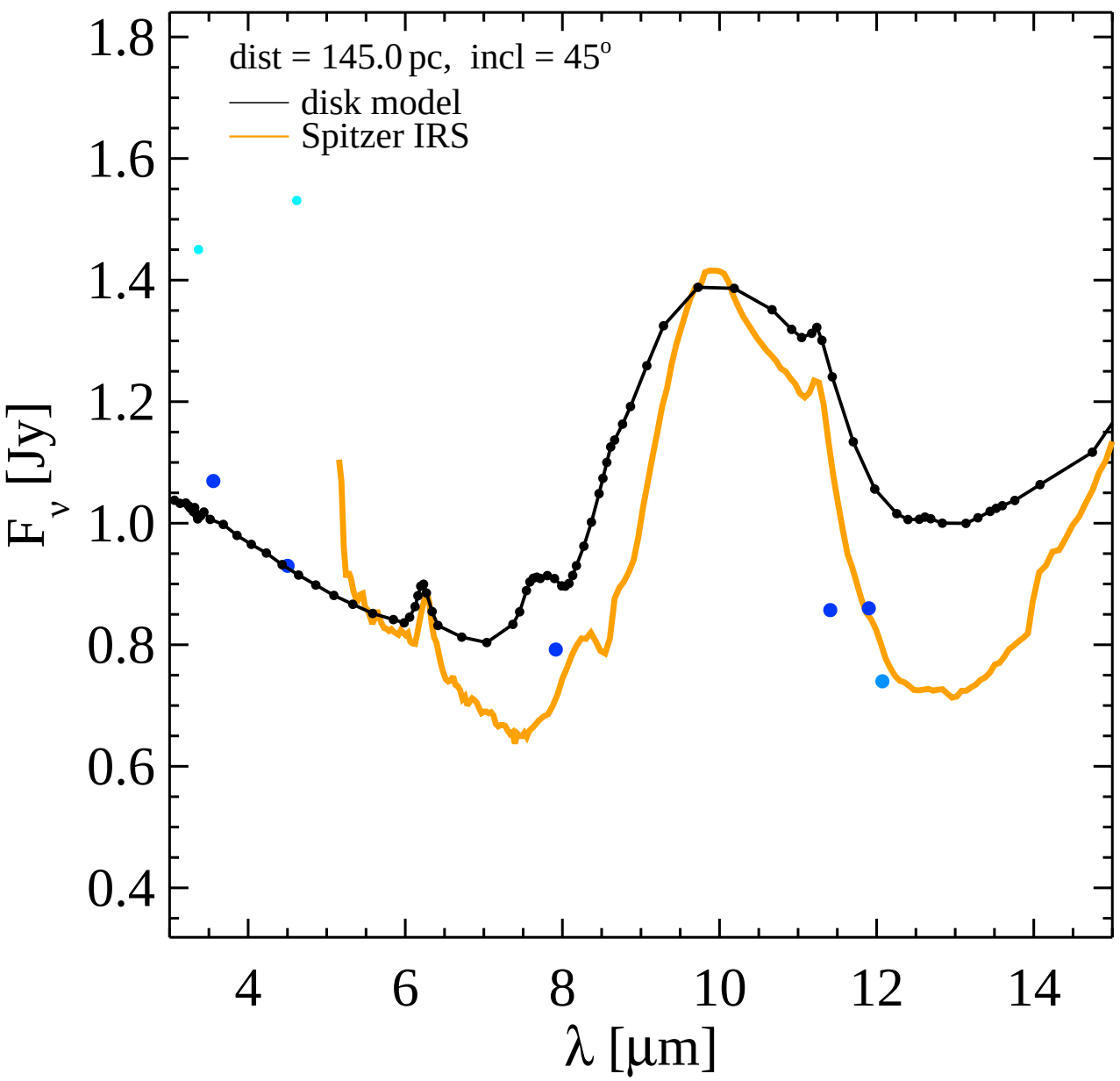

1.5
2.0
2.5
3.0
log T PAH [K]
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]
300K
100K
1000K
200K
40K
20
1
10

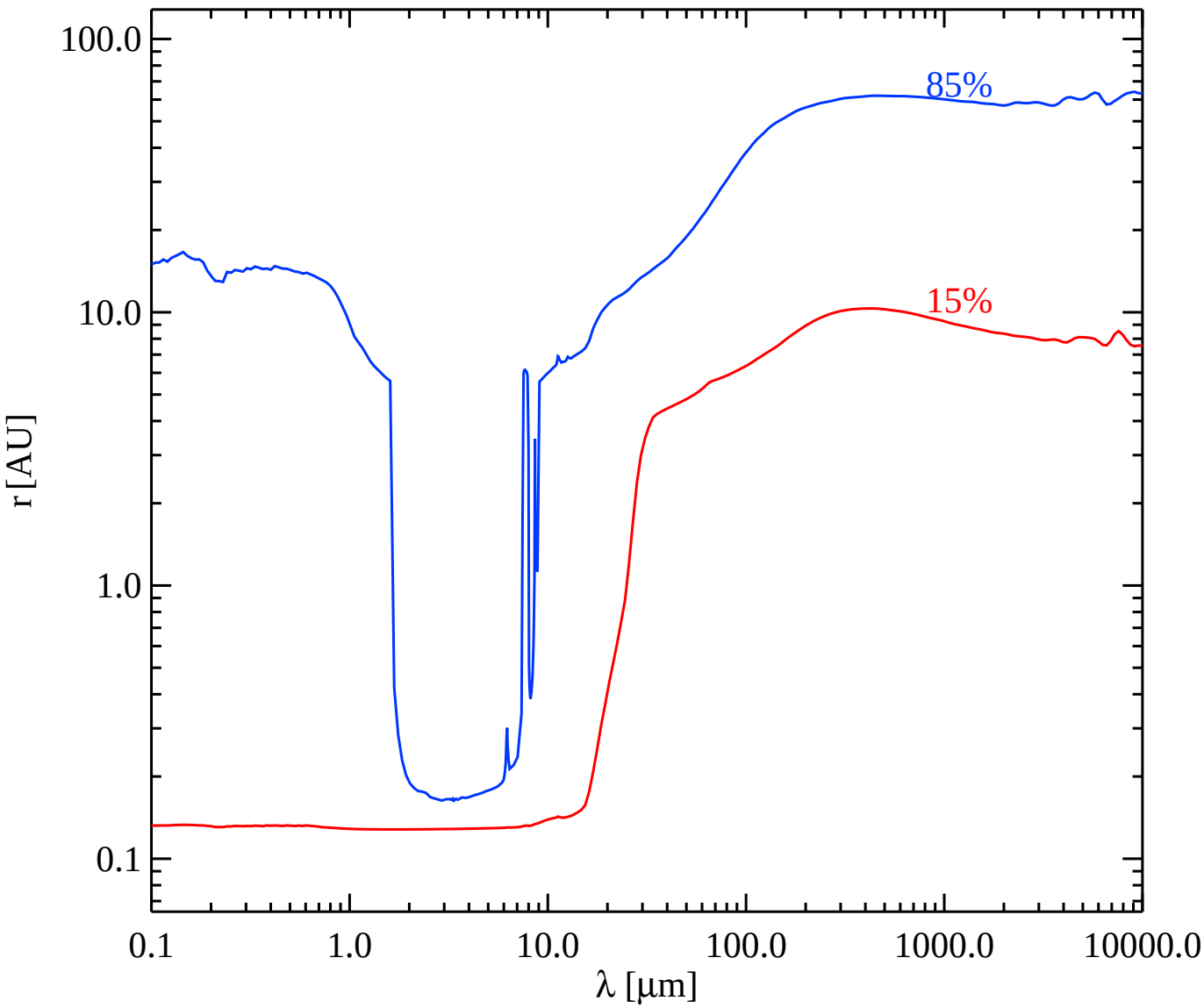

fitting Tdust ~ r^-q
1000
100
10
T dust [K]
1
10
100
r [AU]
z/r=0.43: q= 0.363 +/- 0.001
z/r=0.27: q= 0.392 +/- 0.004
z/r=0.00: q= 0.374 +/- 0.020

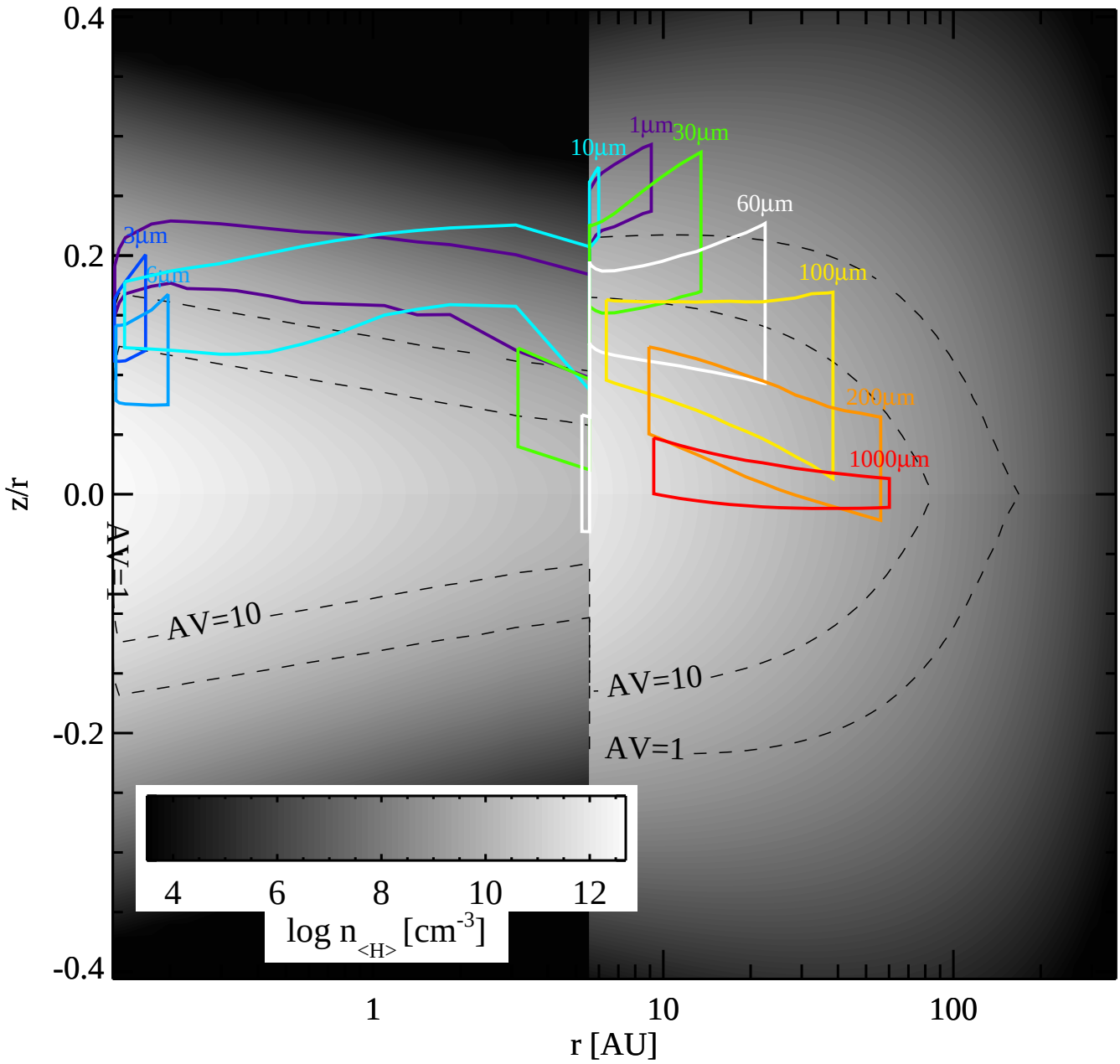

10000
1000
100
10
1
κ [cm²/g(dust)]
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

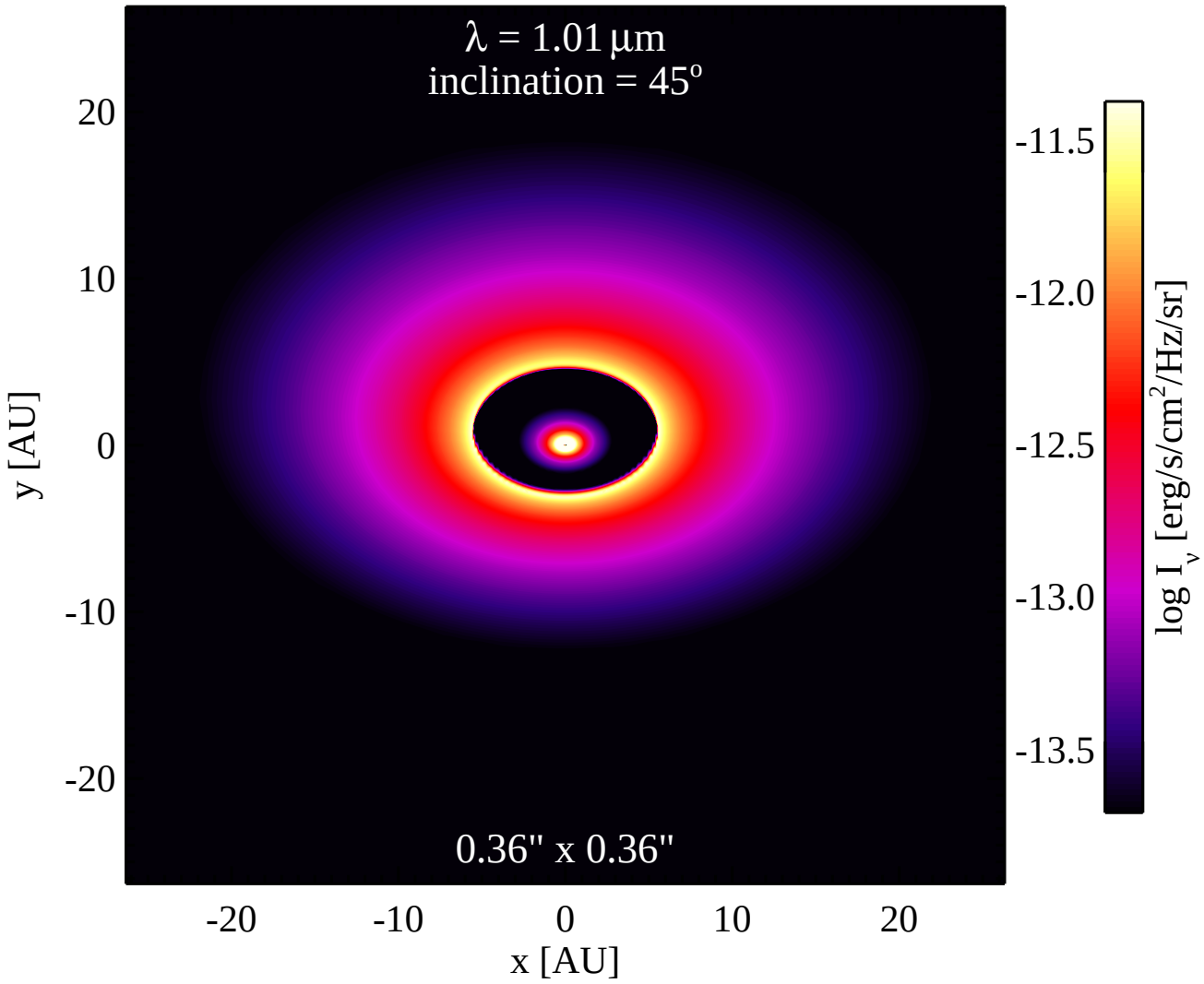

10000.0
1000.0
100.0
10.0
1.0
0.1
κ [cm²/g(dust)]
0.1
1.0
10.0
100.0
1000.0
λ [μm]
κsca
κabs
λ-1
ProDiMo
neutral PAH
charged PAH
(g/d= 100.0 fPAH= 0.50)

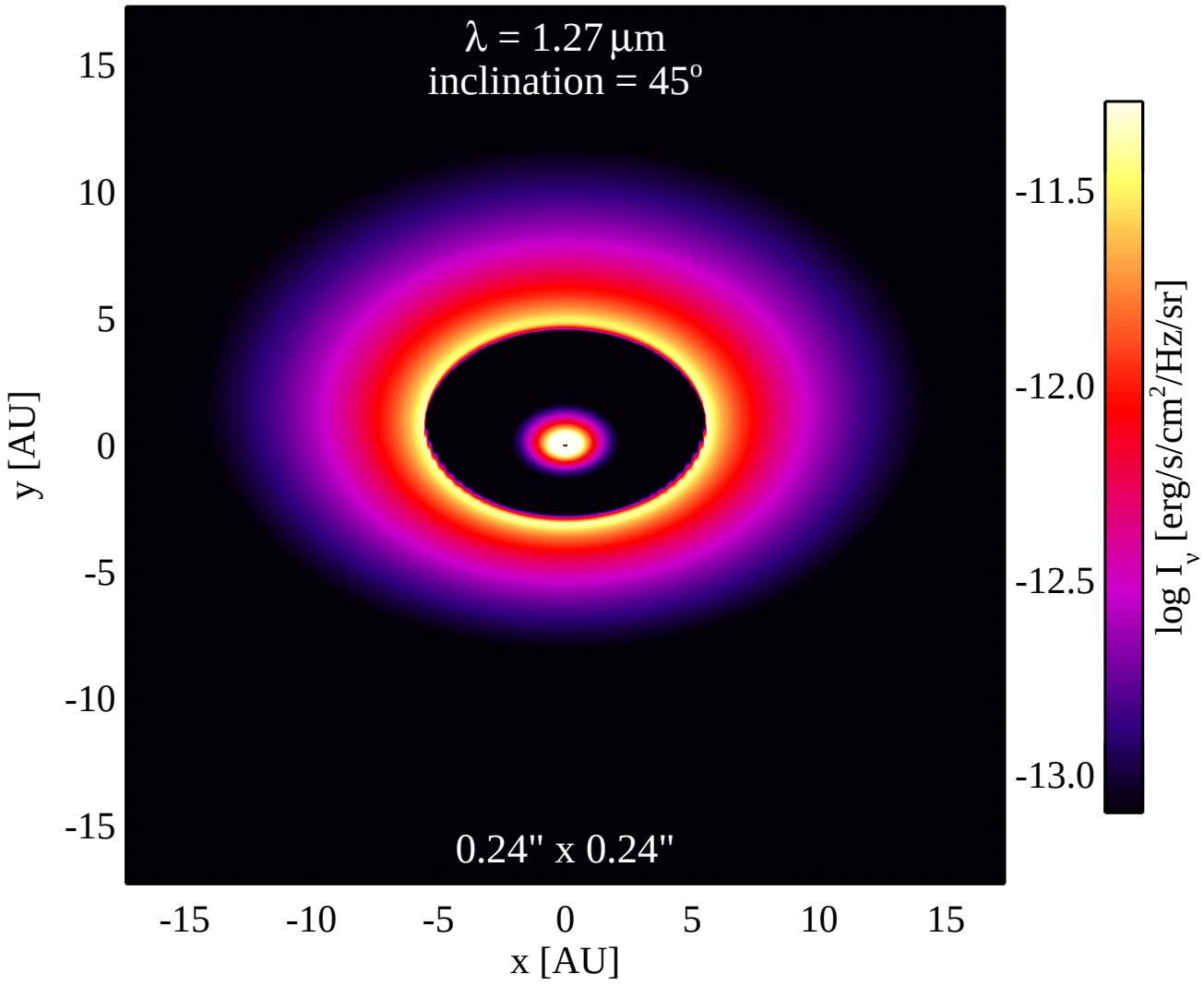

-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 145.0 pc, incl = 45°
star + UV
disk model
Spitzer IRS
<UV>data

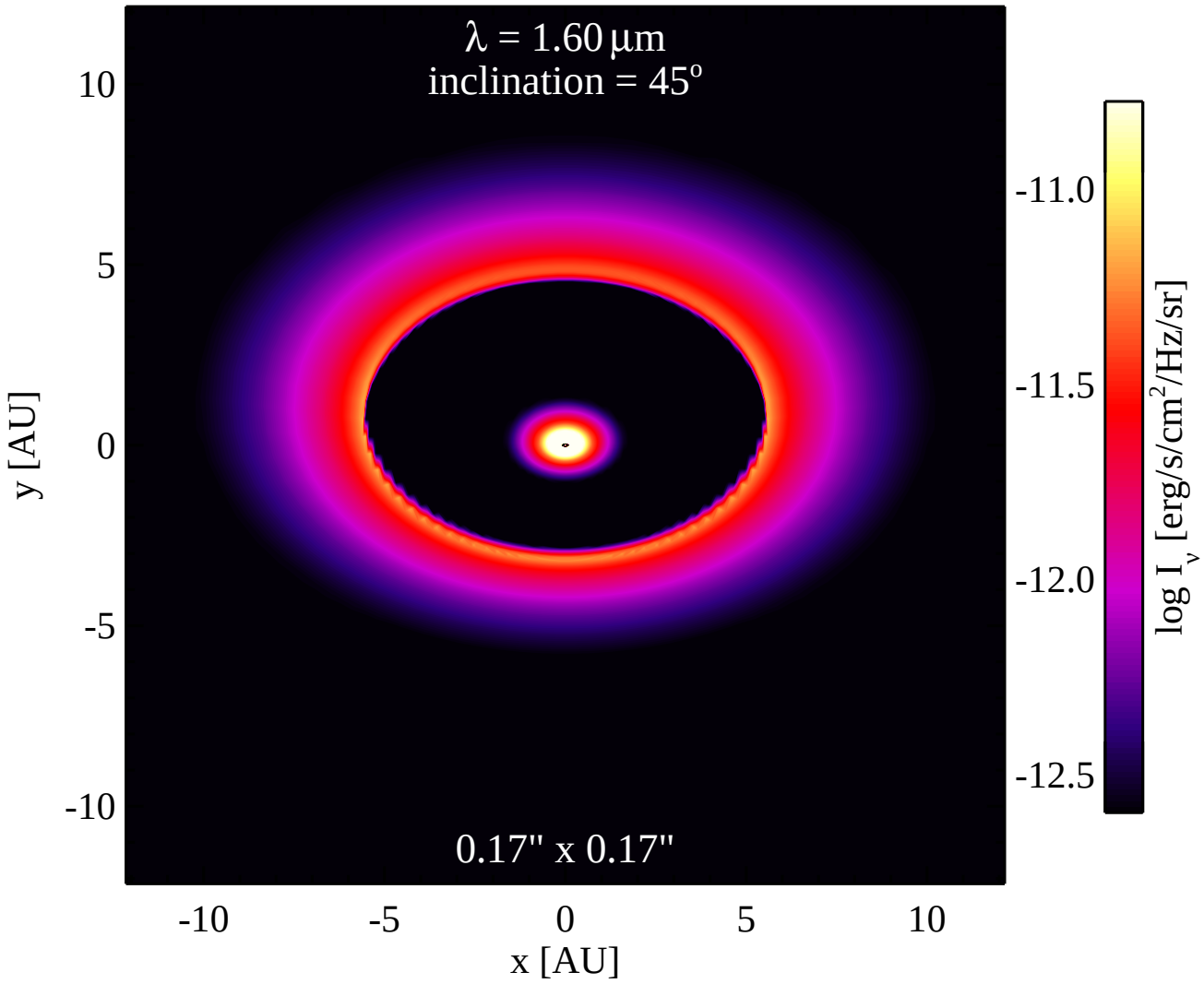

dist = 145.0 pc, incl = 45°
disk model
Spitzer IRS
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

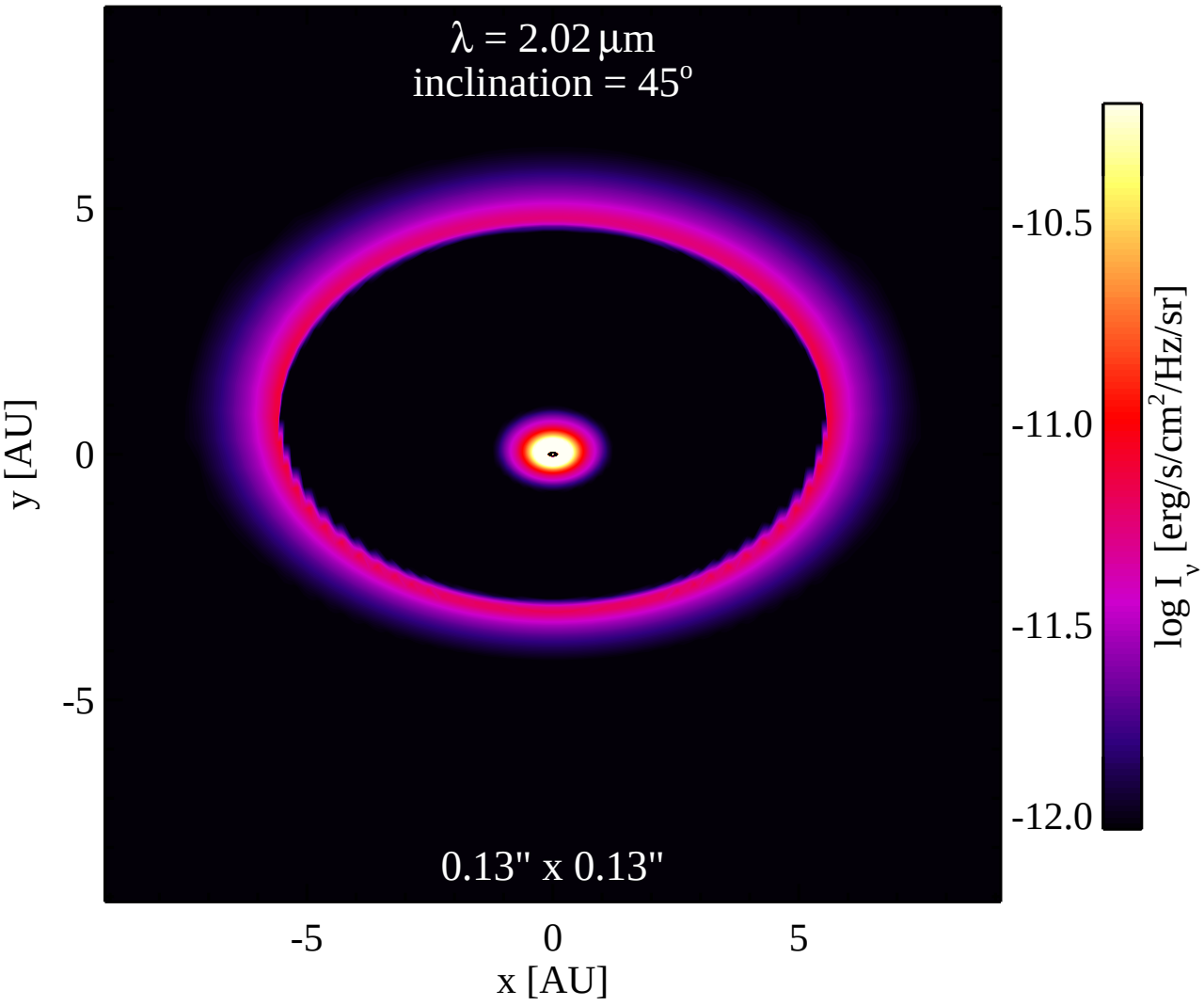

100.0
10.0
1.0
0.1
r [AU]
85%
15%
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

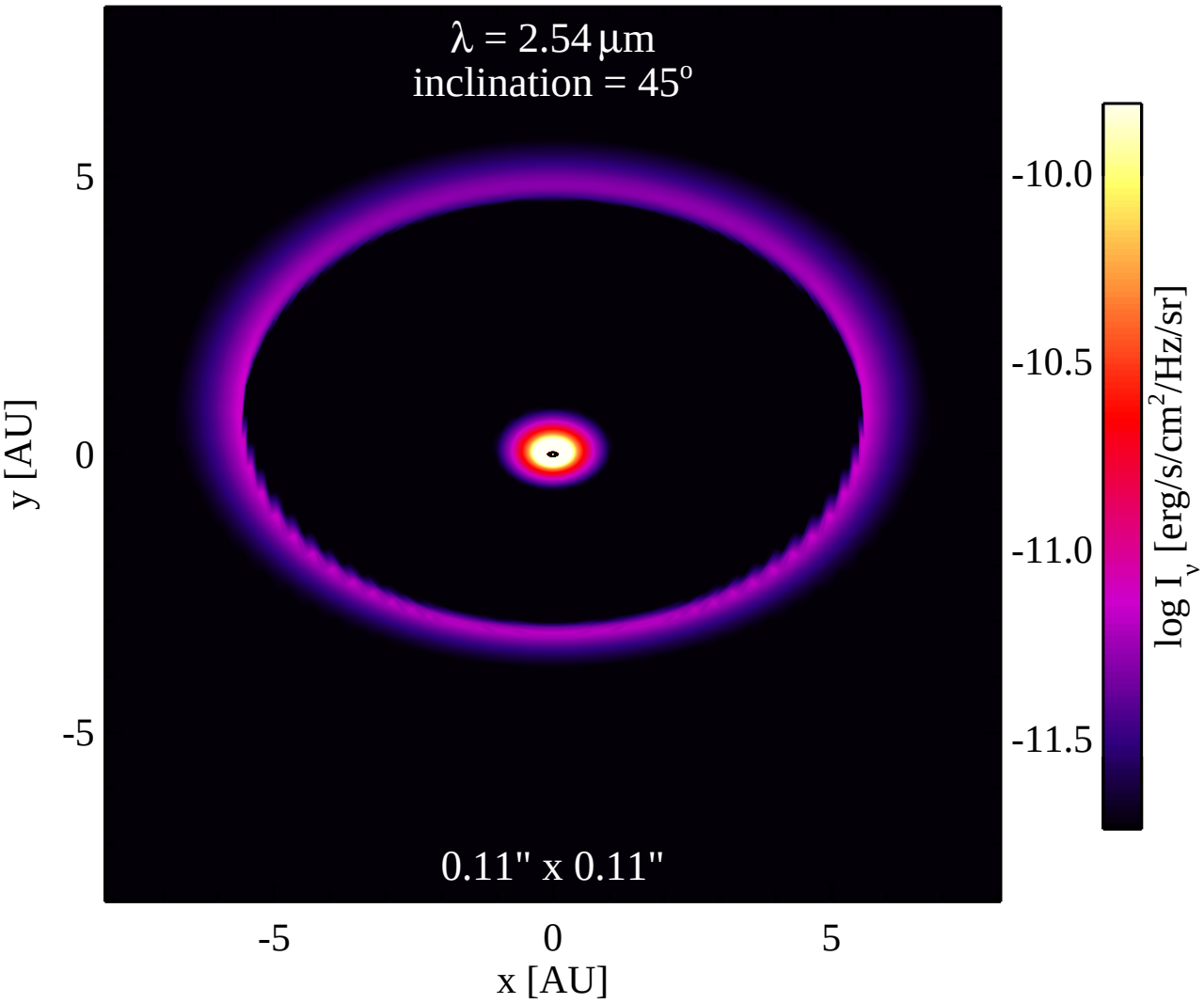

0.4
0.2
0.0
-0.2
-0.4
z/r
1
10
100
r [AU]
1µm
10µm
30µm
60µm
3µm
6µm
100µm
200µm
1000µm
AV=1
AV=10
AV=10
AV=1
4
6
8
10
12
log n <H> [cm-3]

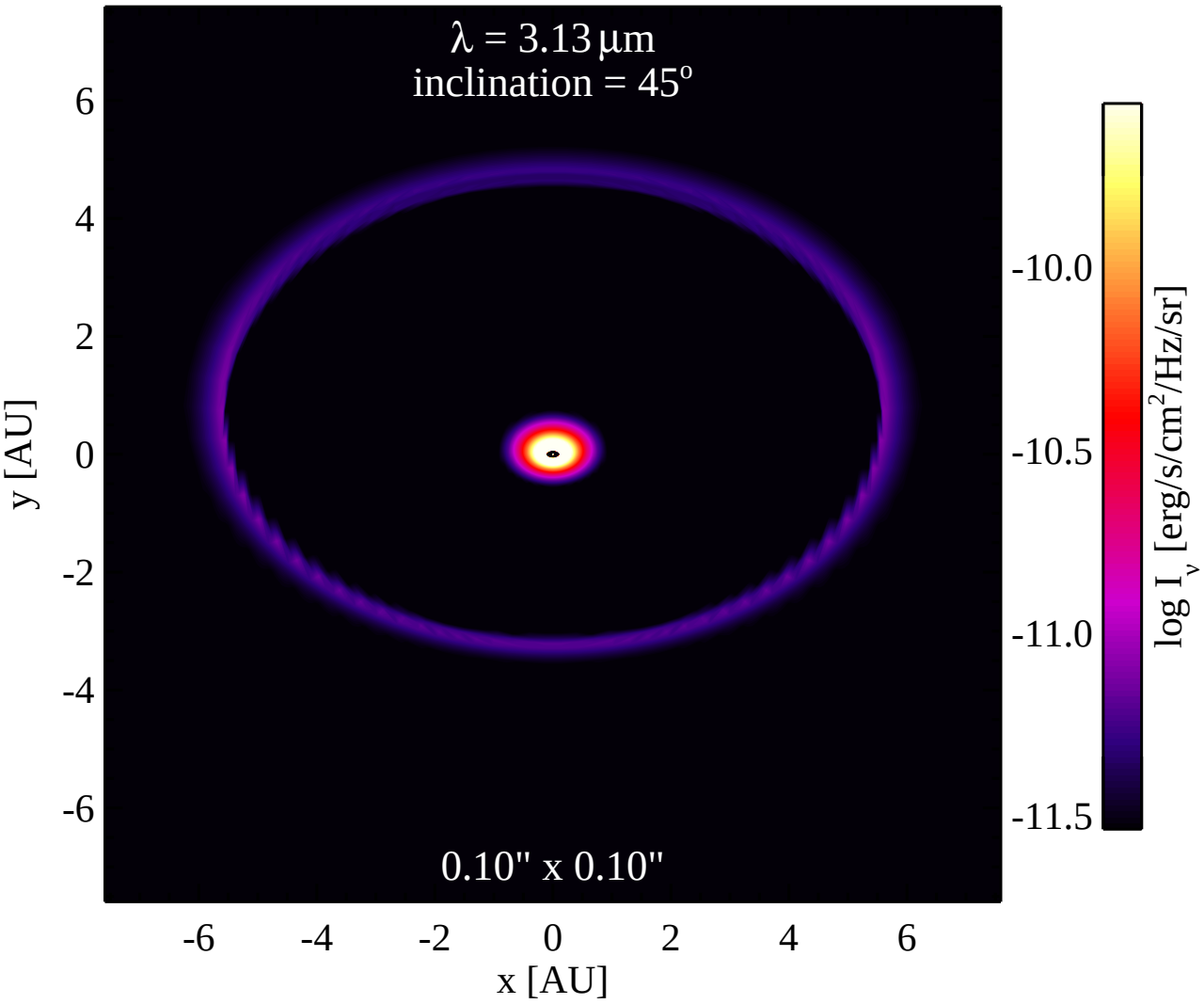

λ = 1.01 μm
inclination = 45°
0.36" x 0.36"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

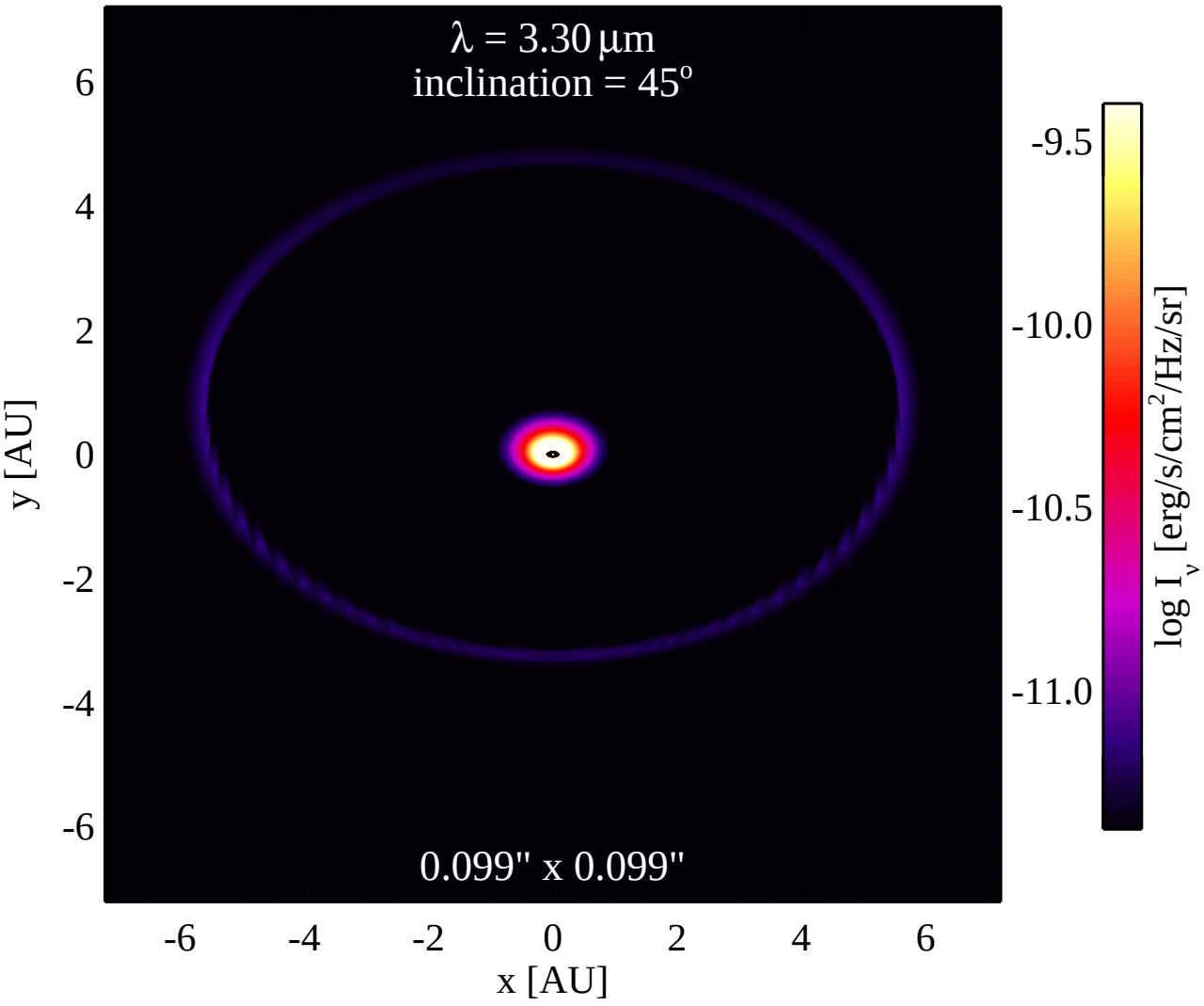

λ = 1.27 μm
inclination = 45°
0.24" x 0.24"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

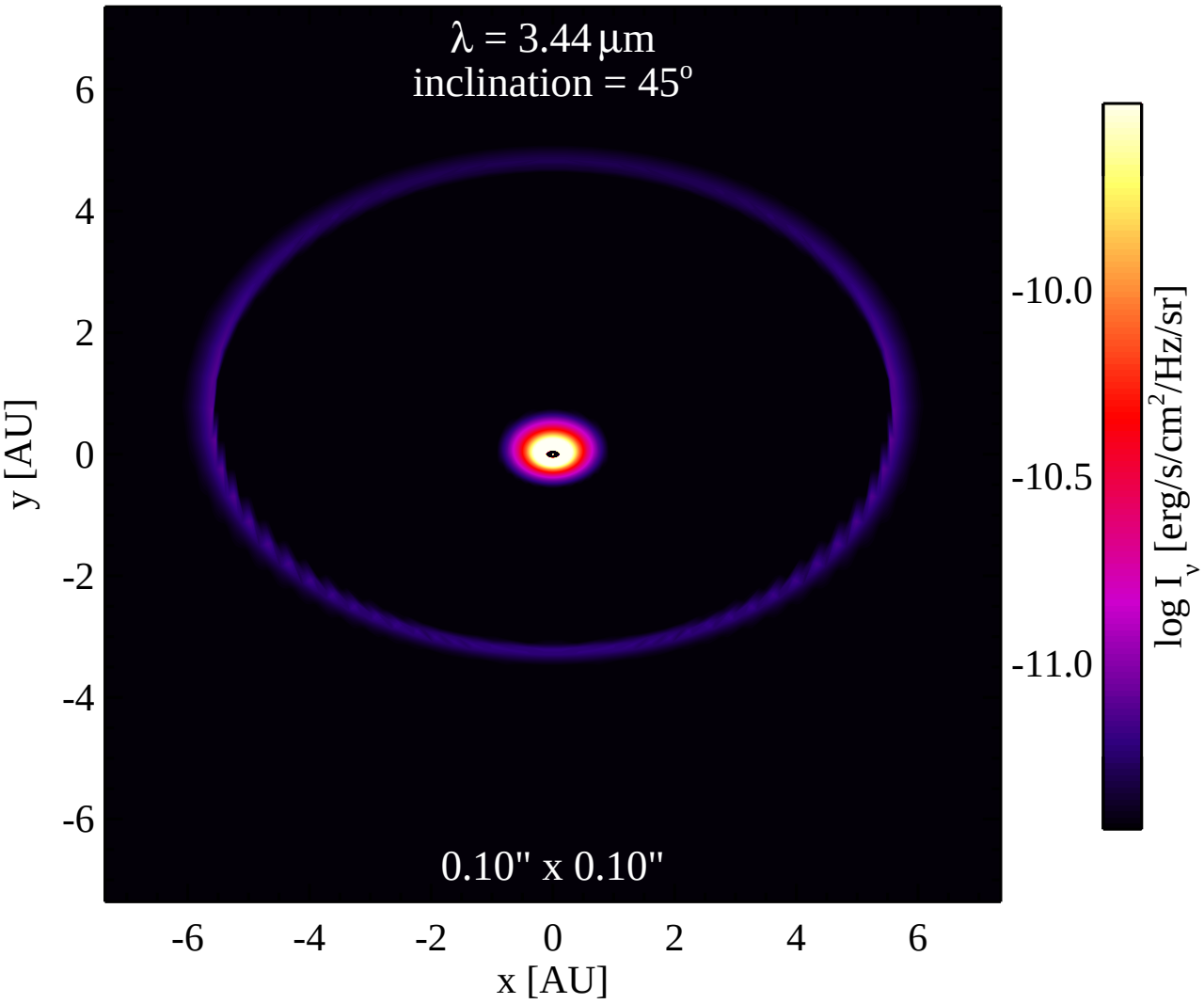

λ = 1.60 μm
inclination = 45°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

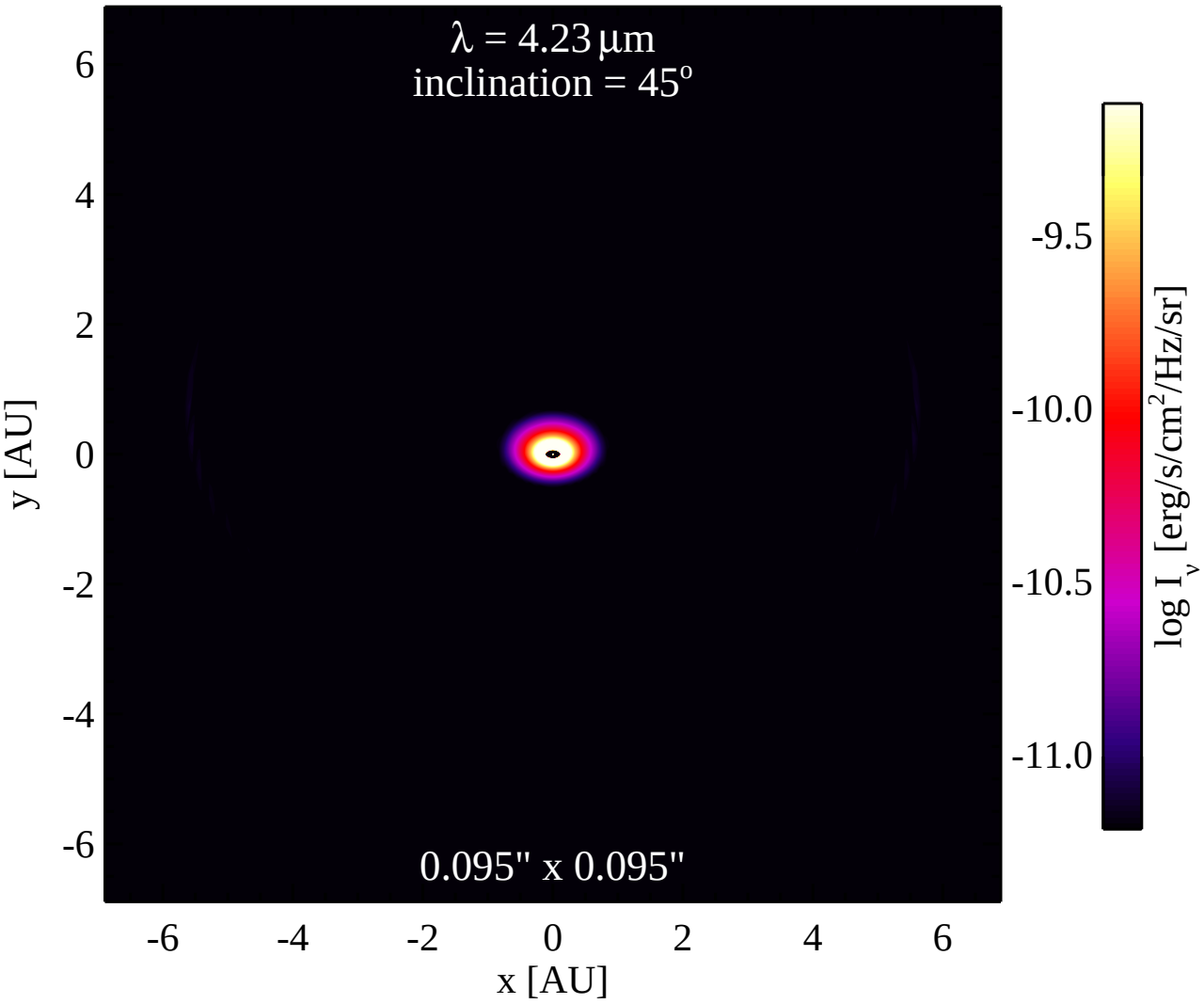

λ = 2.02 μm
inclination = 45°
0.13" x 0.13"
y [AU]
5
0
-5
x [AU]
-5
0
5
log I_ν [erg/s/cm²/Hz/sr]
-10.5
-11.0
-11.5
-12.0

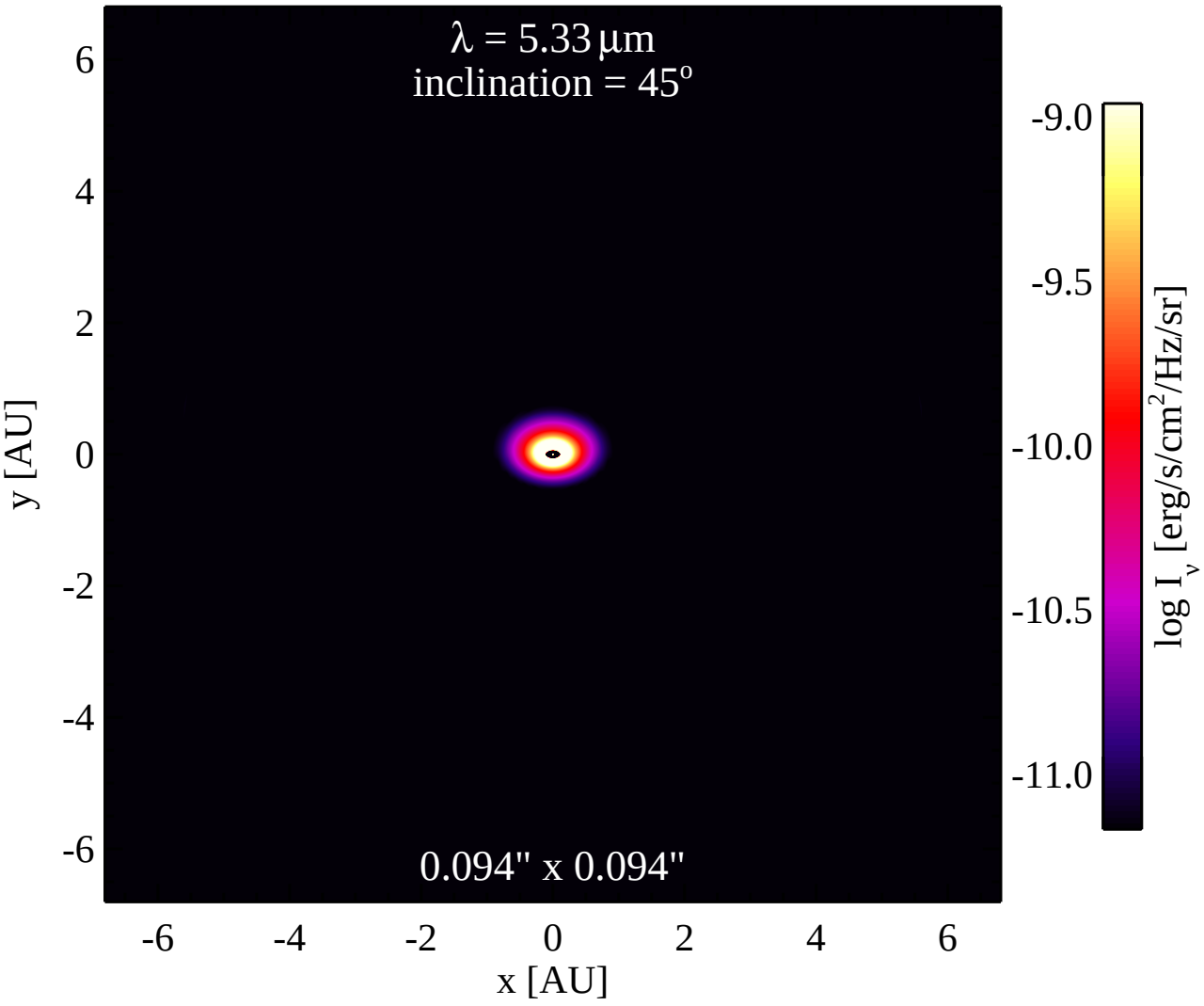

λ = 2.54 μm
inclination = 45°
0.11" x 0.11"
5
0
-5
y [AU]
-5
0
5
x [AU]
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

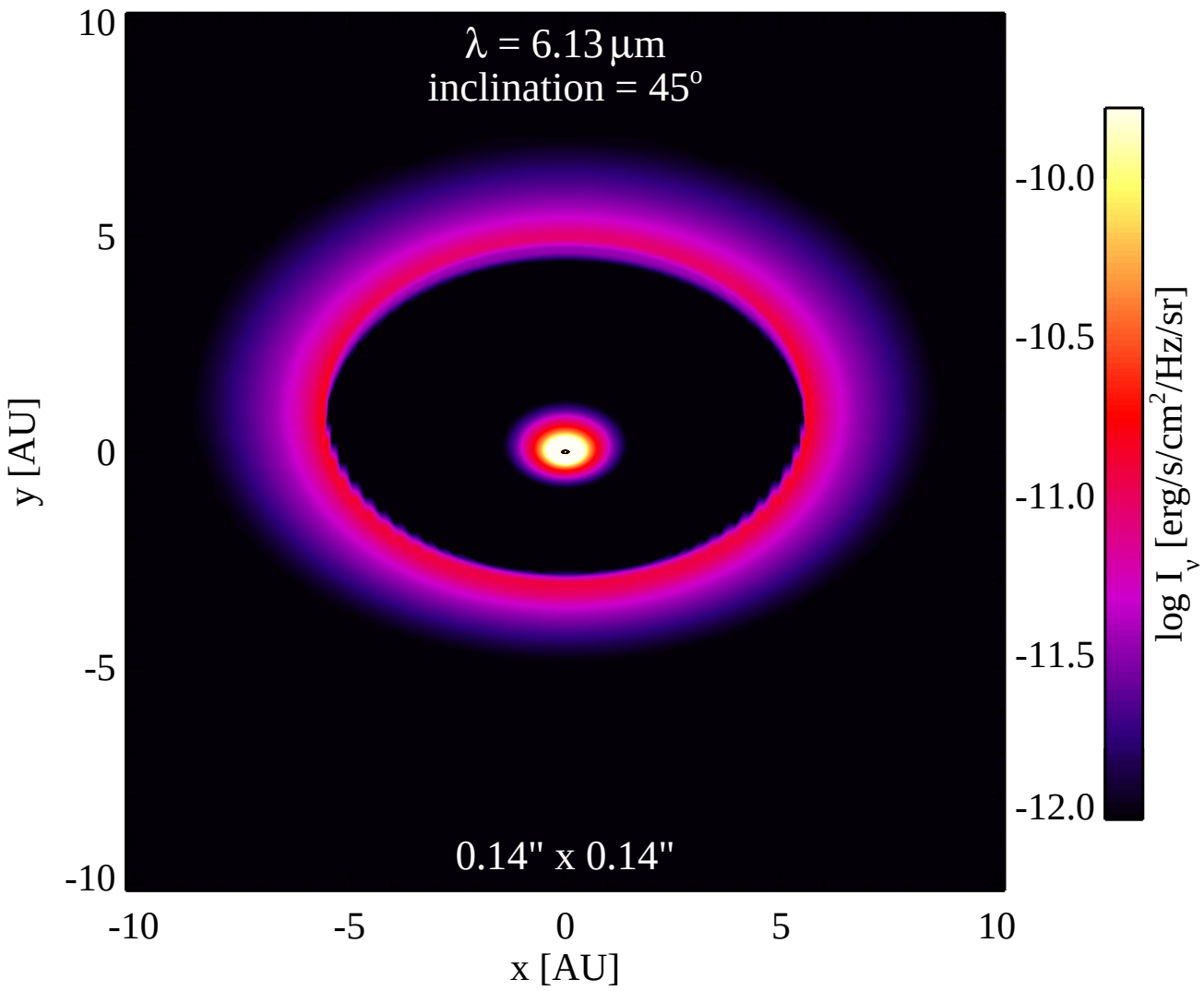

λ = 3.13 μm
inclination = 45°
0.10" x 0.10"
y [AU]
x [AU]
6
4
2
0
-2
-4
-6
-6
-4
-2
0
2
4
6
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

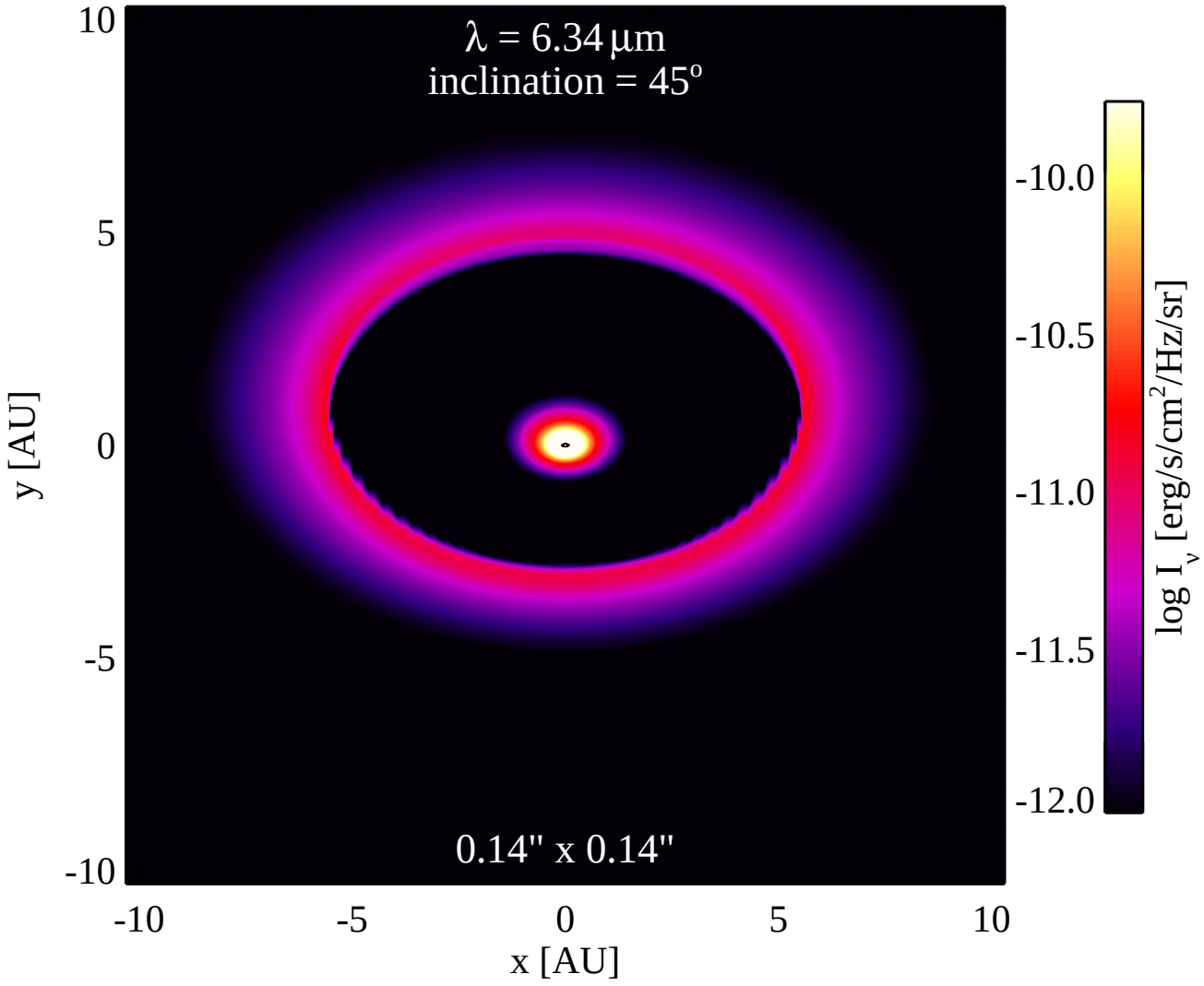

λ = 3.30 μm
inclination = 45°
0.099" x 0.099"
y [AU]
x [AU]
6
4
2
0
-2
-4
-6
-6
-4
-2
0
2
4
6
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

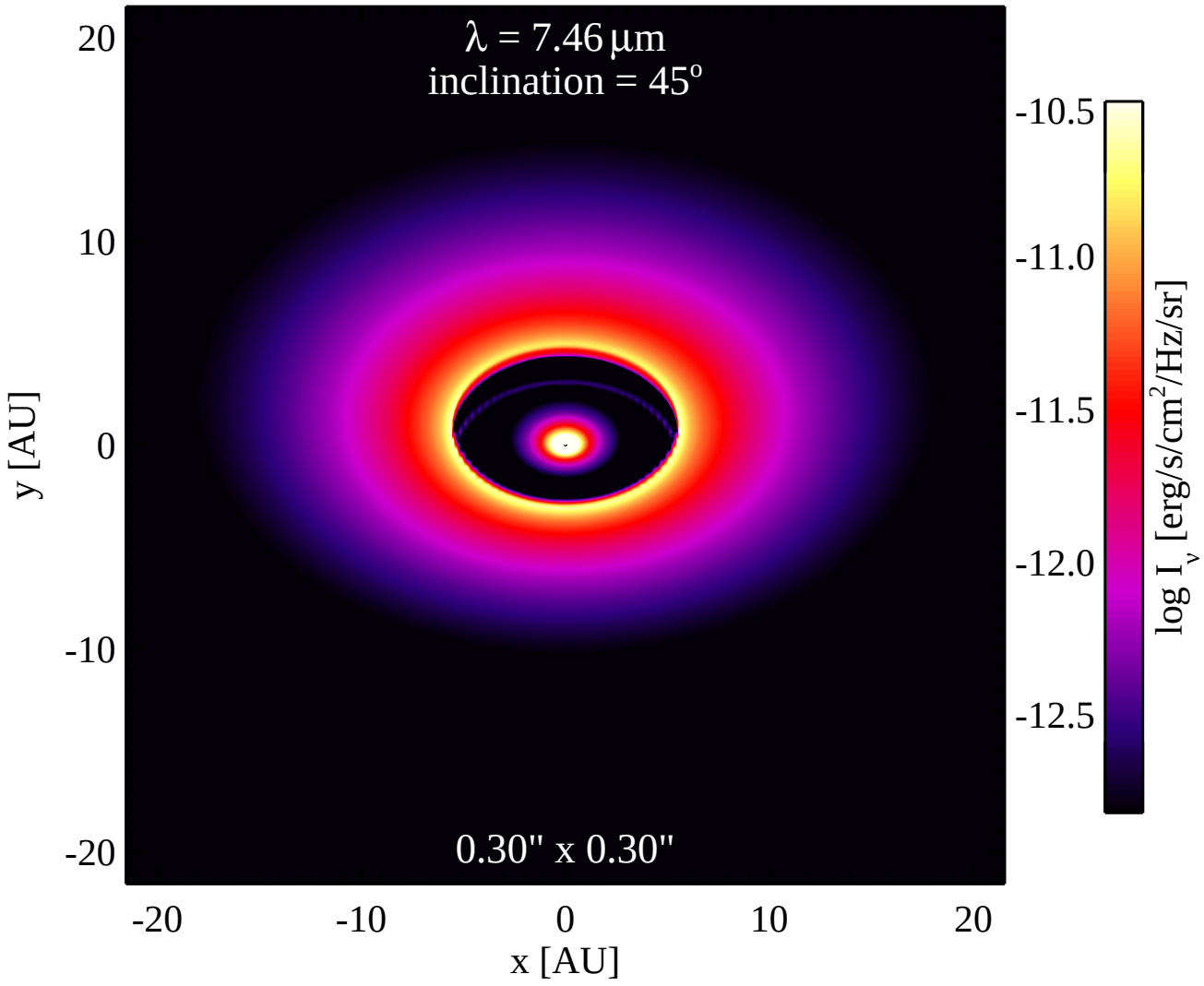

λ = 3.44 μm
inclination = 45°
0.10" x 0.10"
y [AU]
x [AU]
6
4
2
0
-2
-4
-6
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

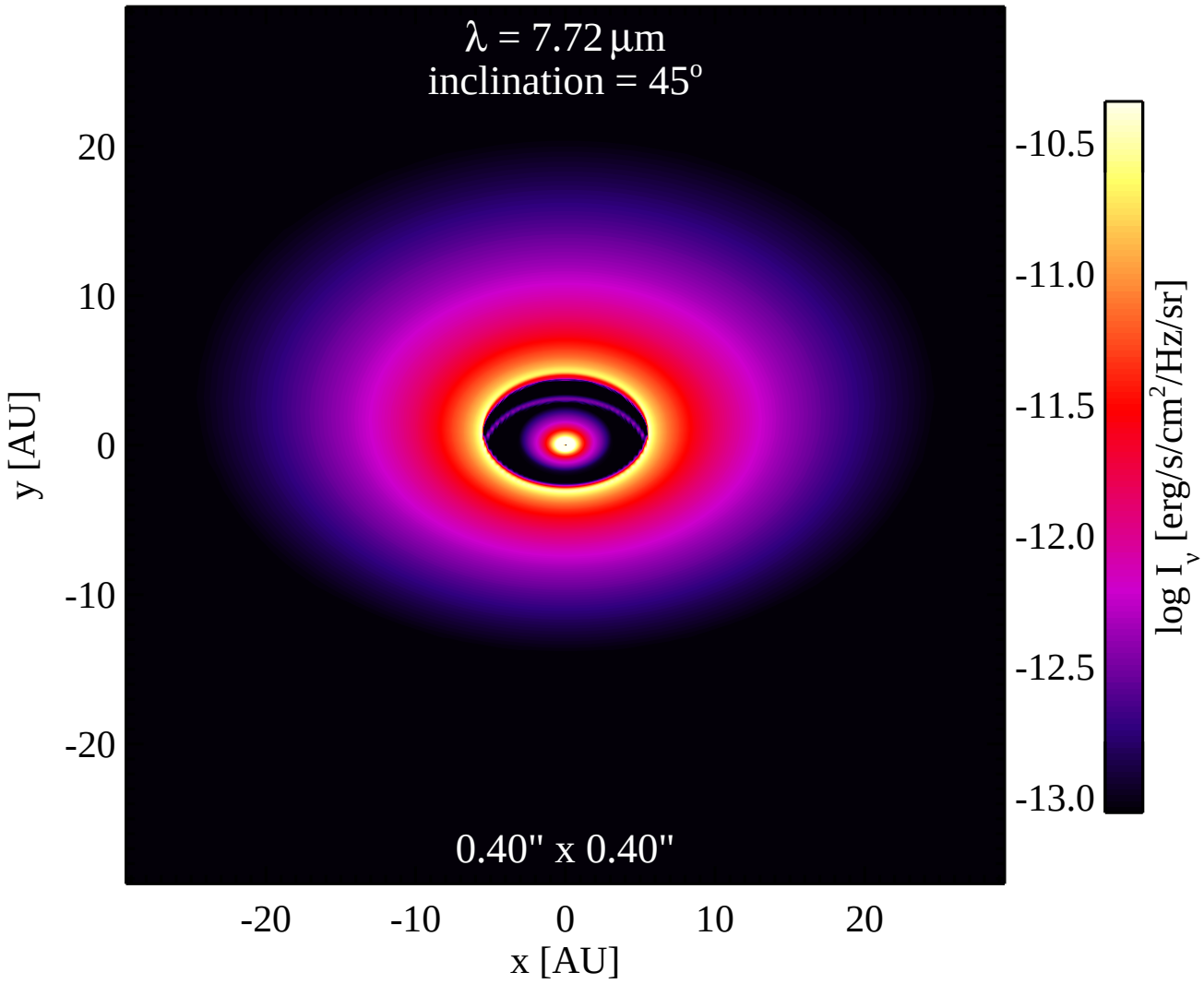

λ = 4.23 μm
inclination = 45°
0.095" x 0.095"
y [AU]
x [AU]
6
4
2
0
-2
-4
-6
-6
-4
-2
0
2
4
6
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

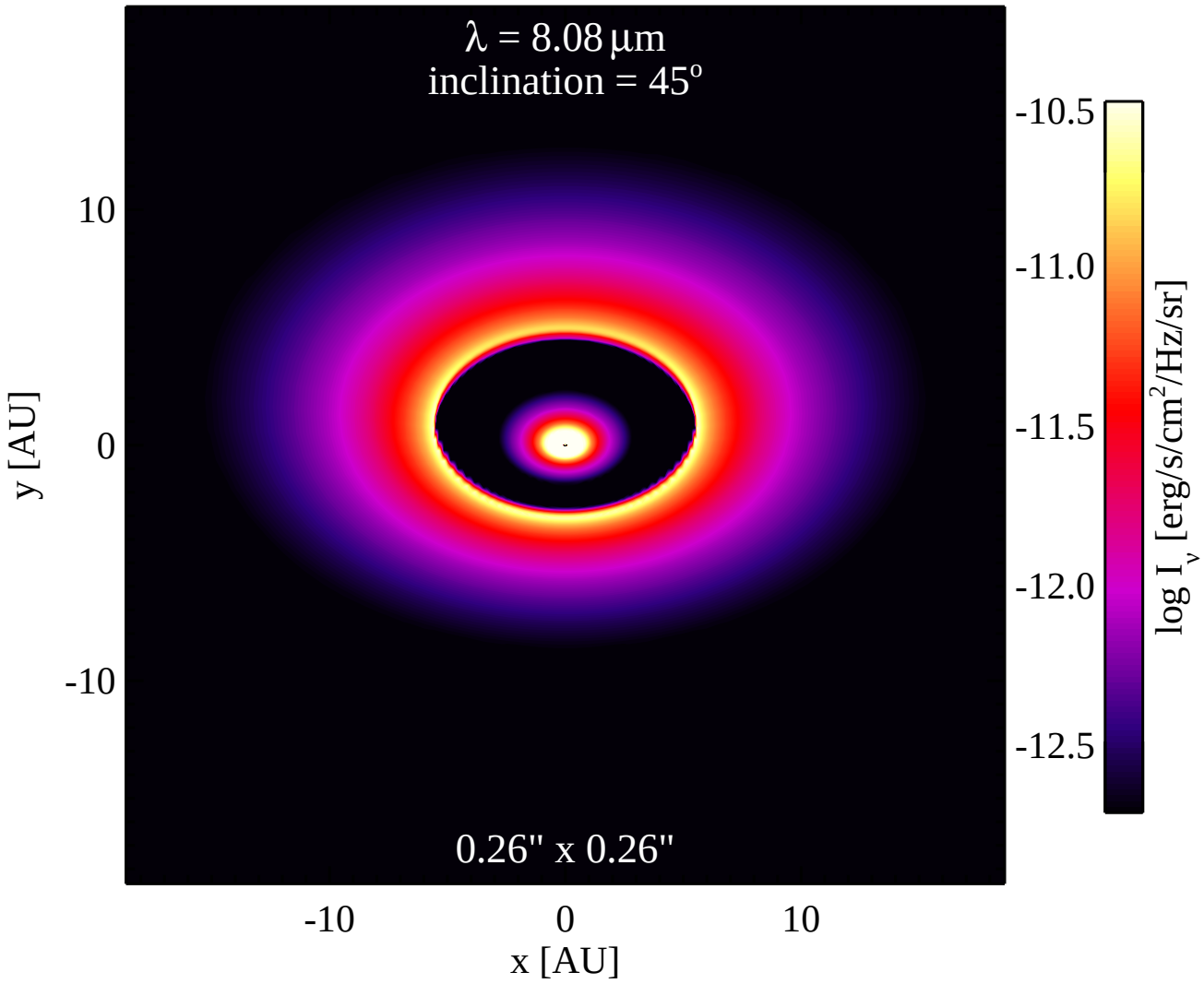

λ = 5.33 μm
inclination = 45°
0.094" x 0.094"
y [AU]
x [AU]
6
4
2
0
-2
-4
-6
-6
-4
-2
0
2
4
6
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

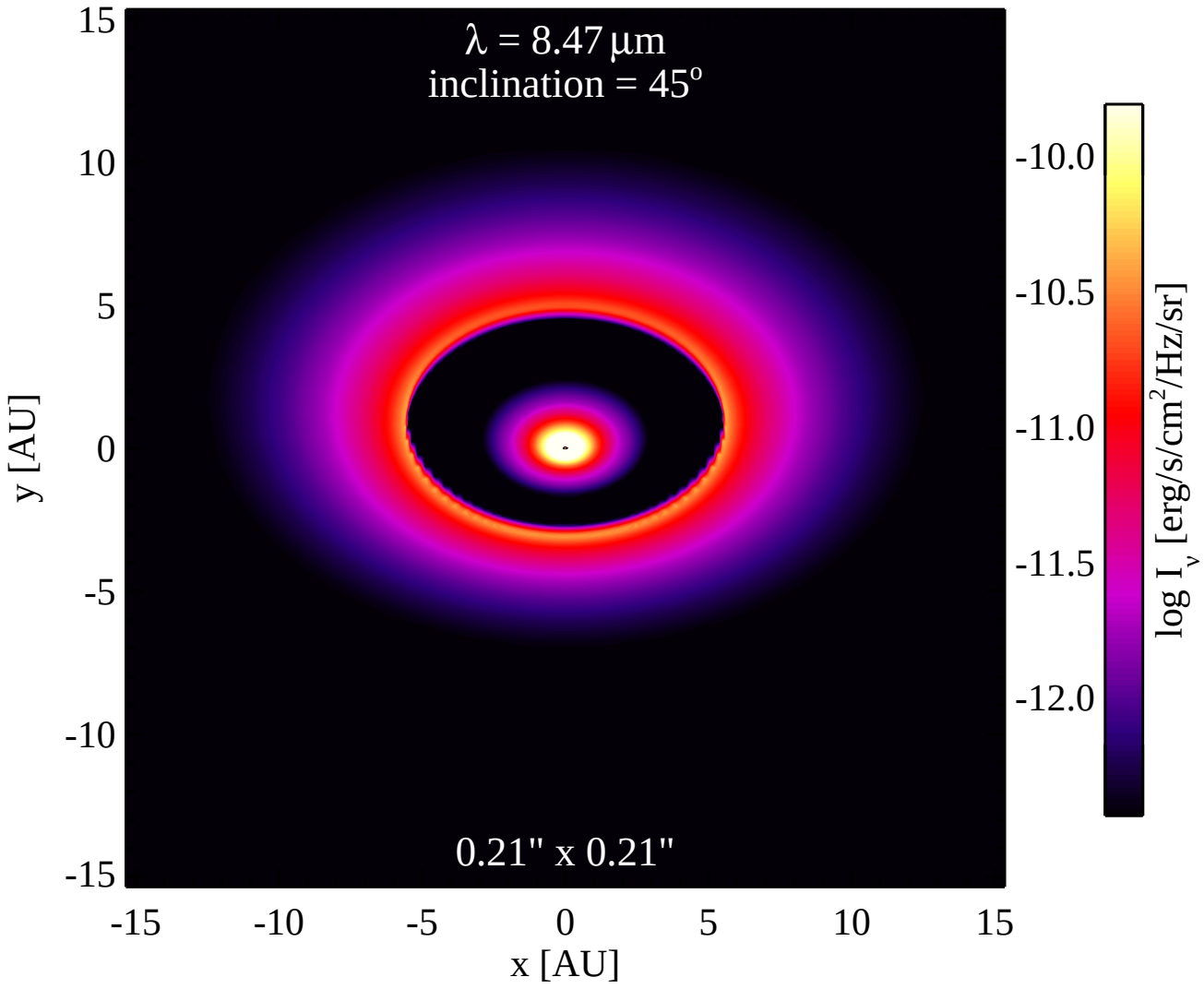

λ = 6.13 μm
inclination = 45°
0.14" x 0.14"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

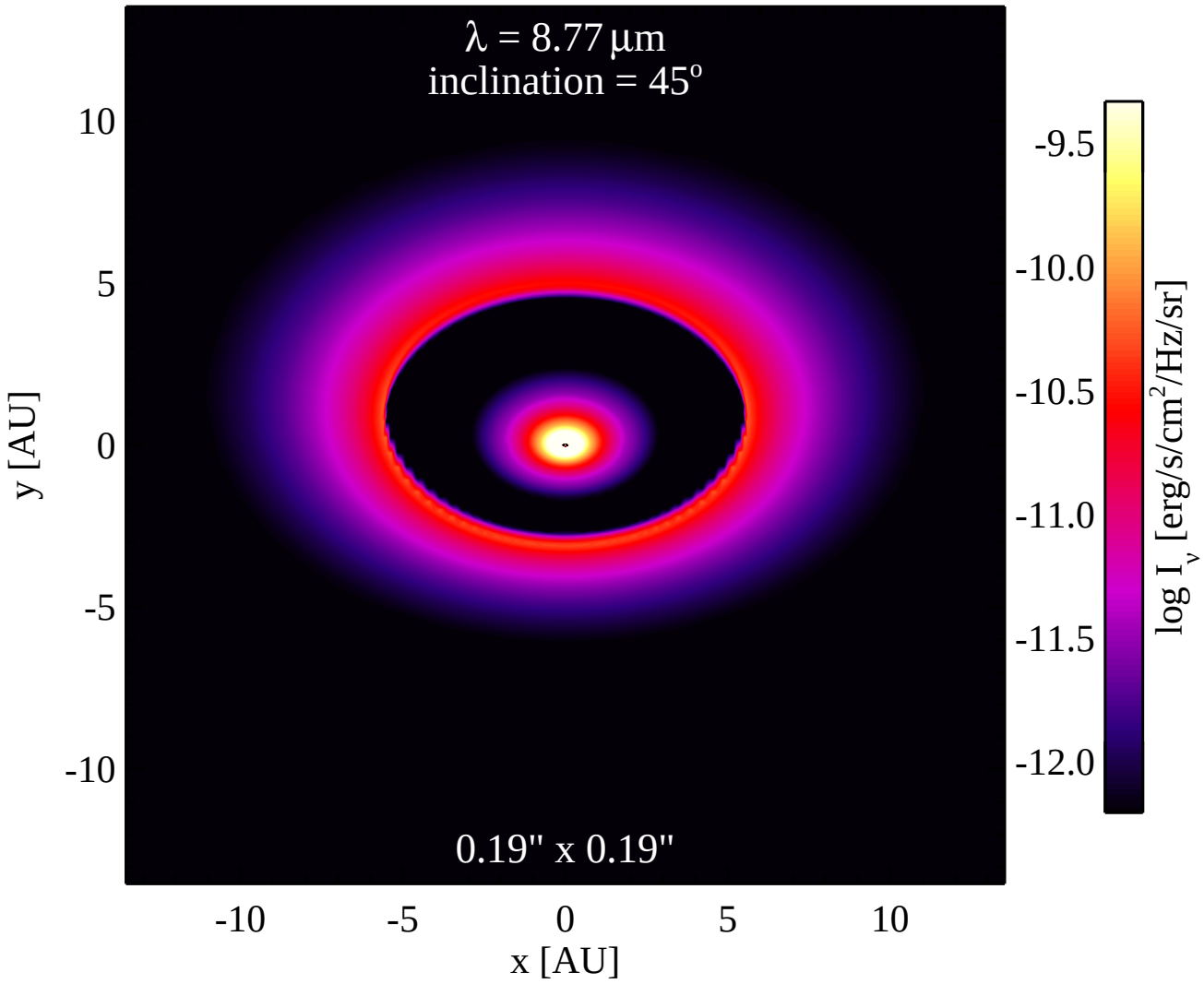

λ = 6.34 μm
inclination = 45°
0.14" x 0.14"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

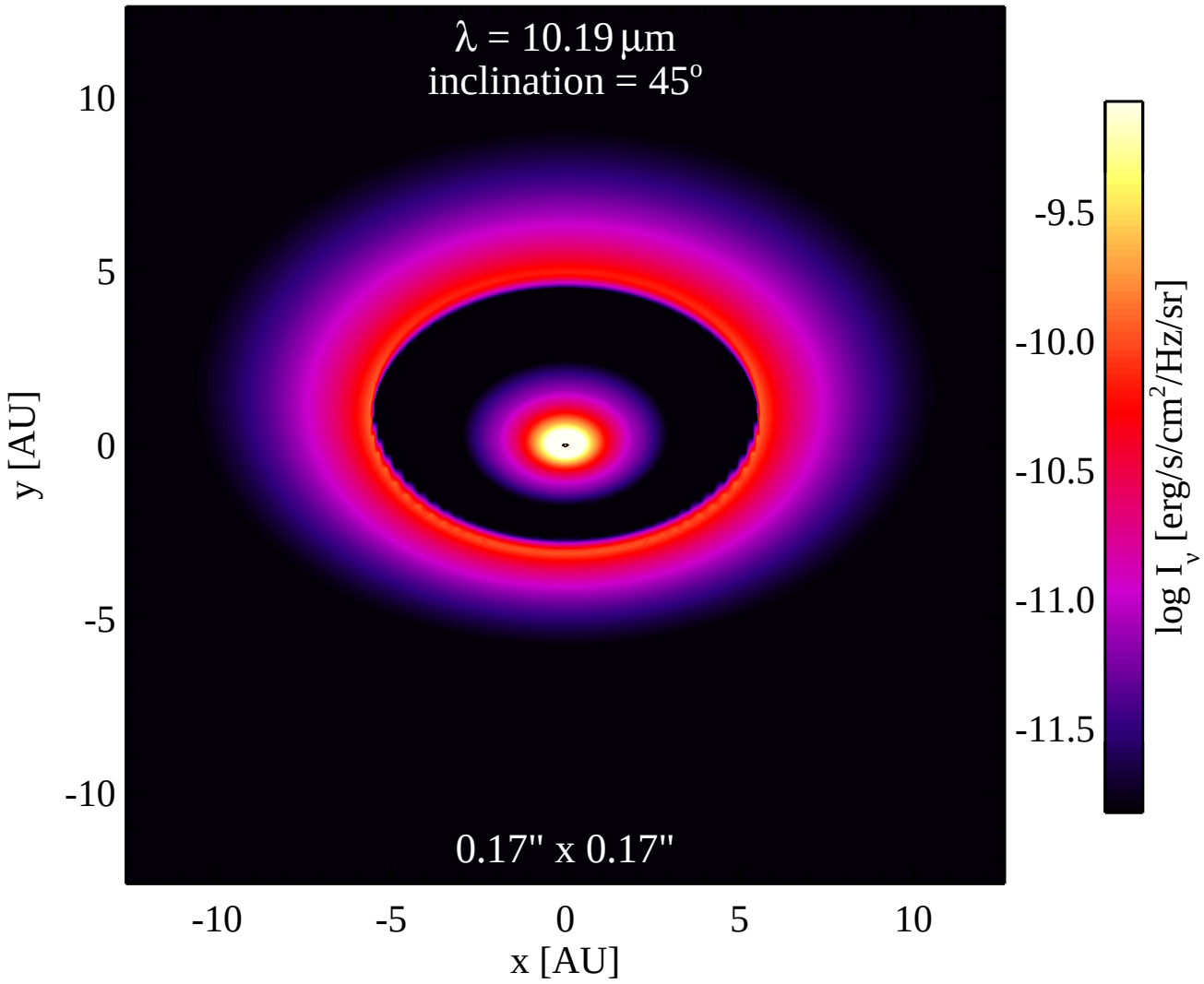

λ = 7.46 μm
inclination = 45°
0.30" x 0.30"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

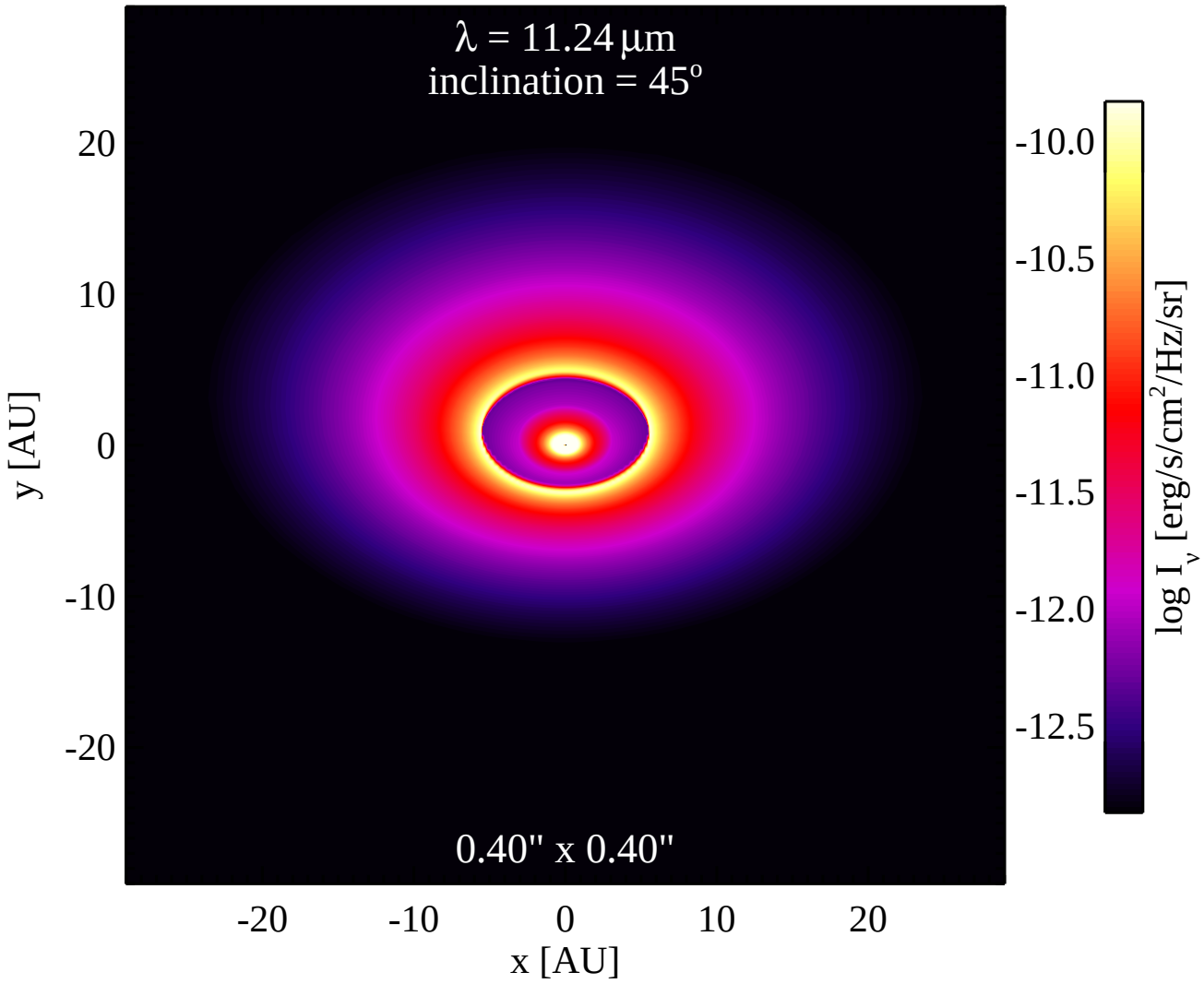

λ = 7.72 μm
inclination = 45°
0.40" x 0.40"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

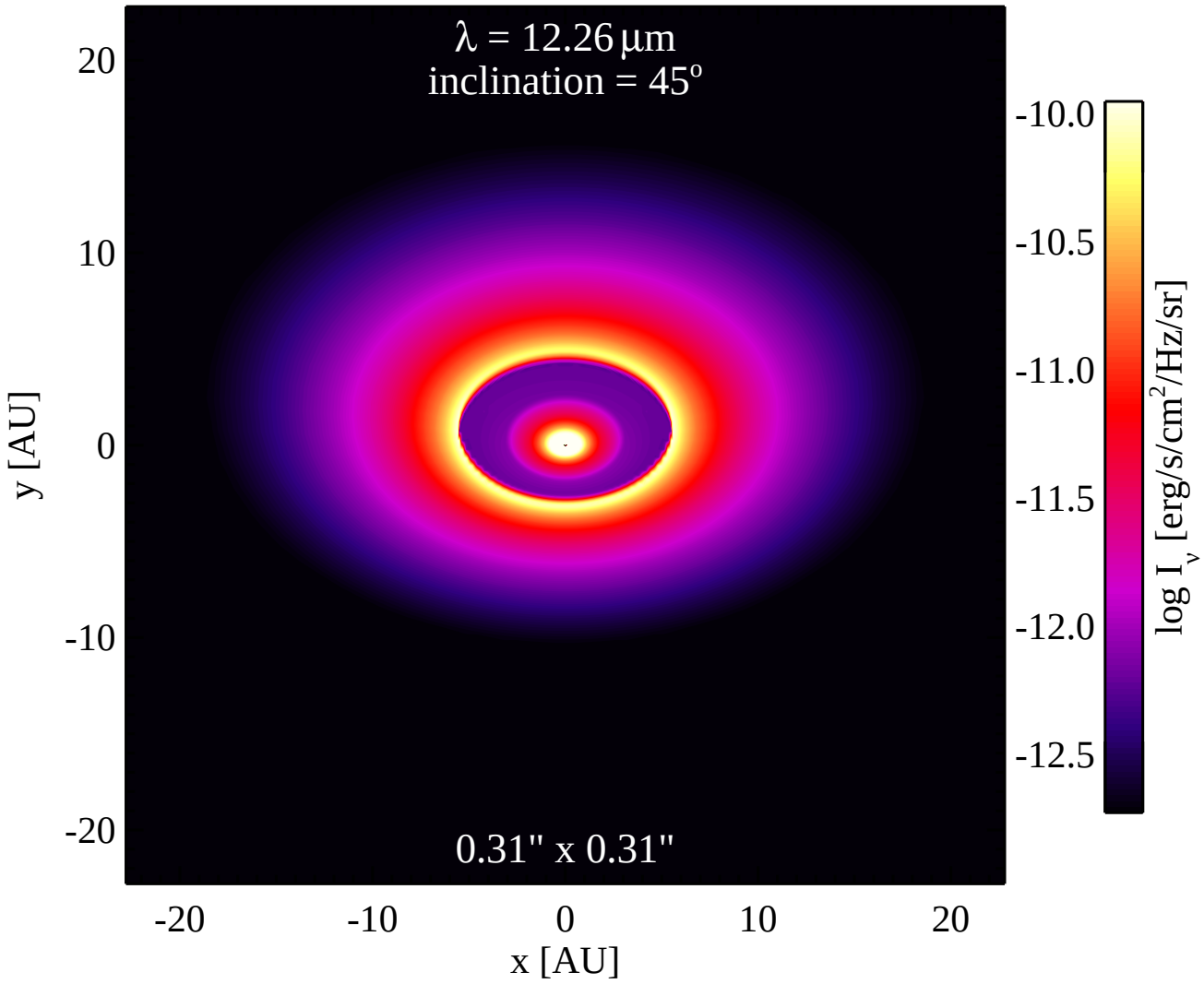

λ = 8.08 μm
inclination = 45°
0.26" x 0.26"
10
0
-10
y [AU]
-10
0
10
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

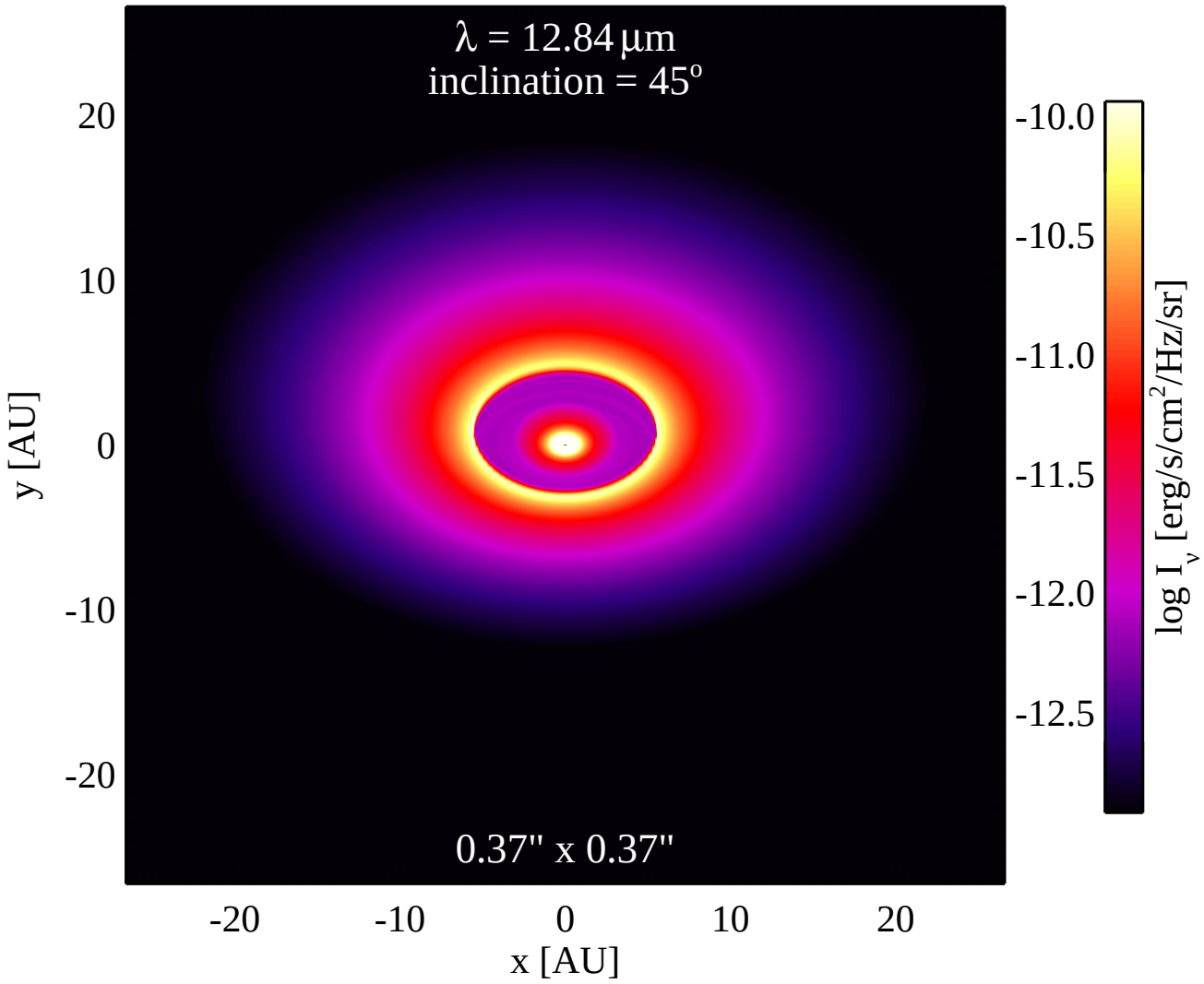

λ = 8.47 μm
inclination = 45°
0.21" x 0.21"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

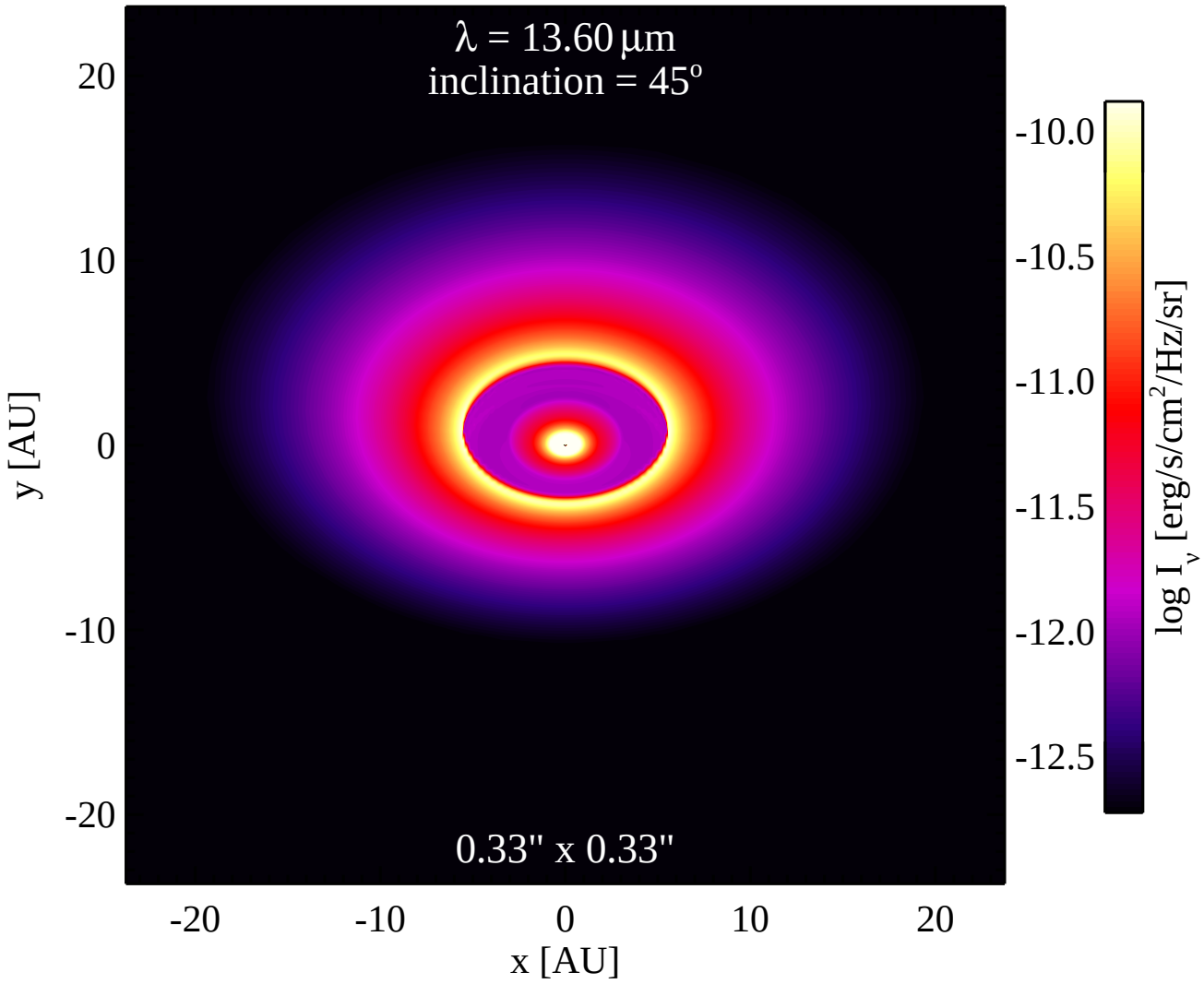

λ = 8.77 μm
inclination = 45°
0.19" x 0.19"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

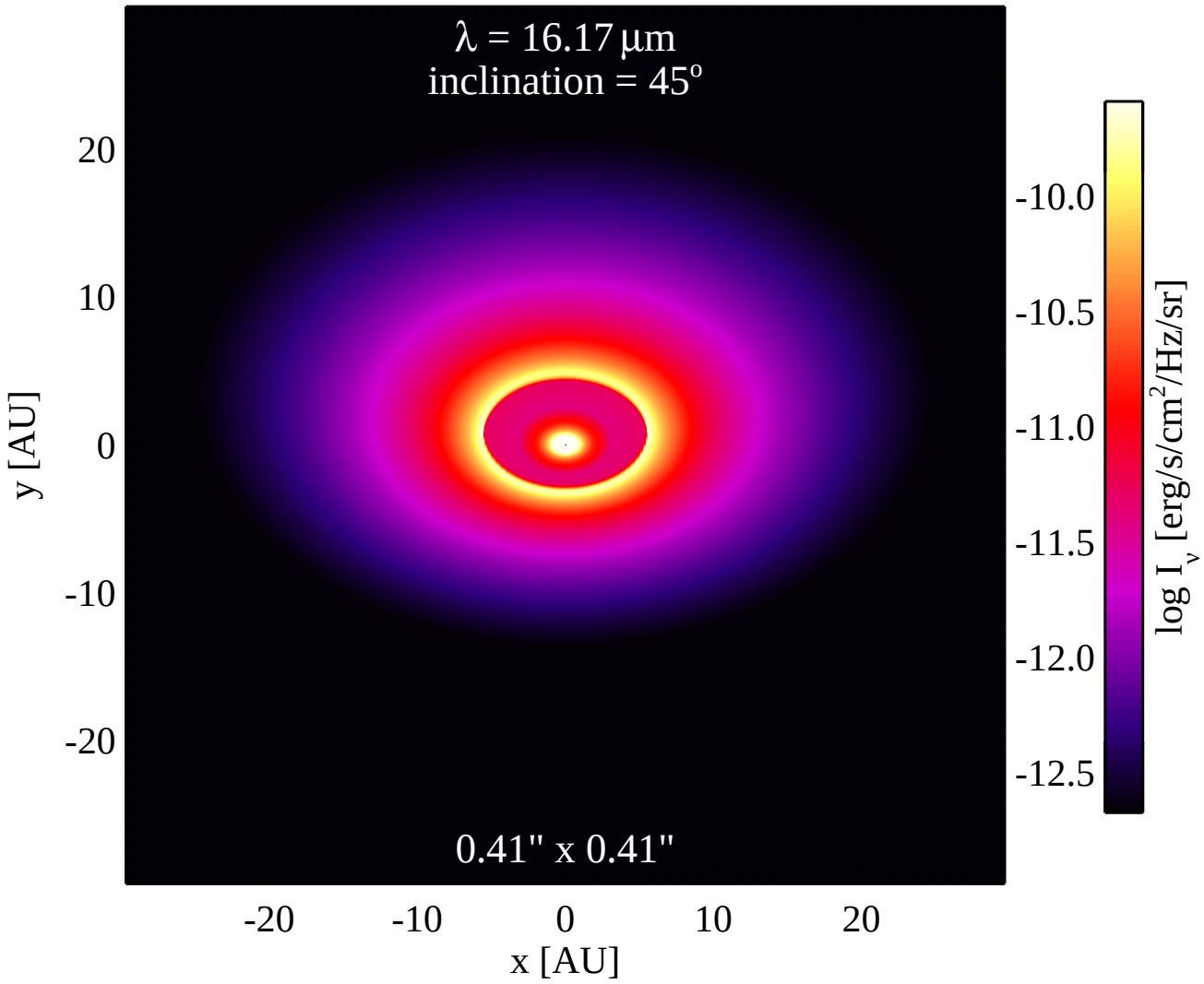

λ = 10.19 μm
inclination = 45°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

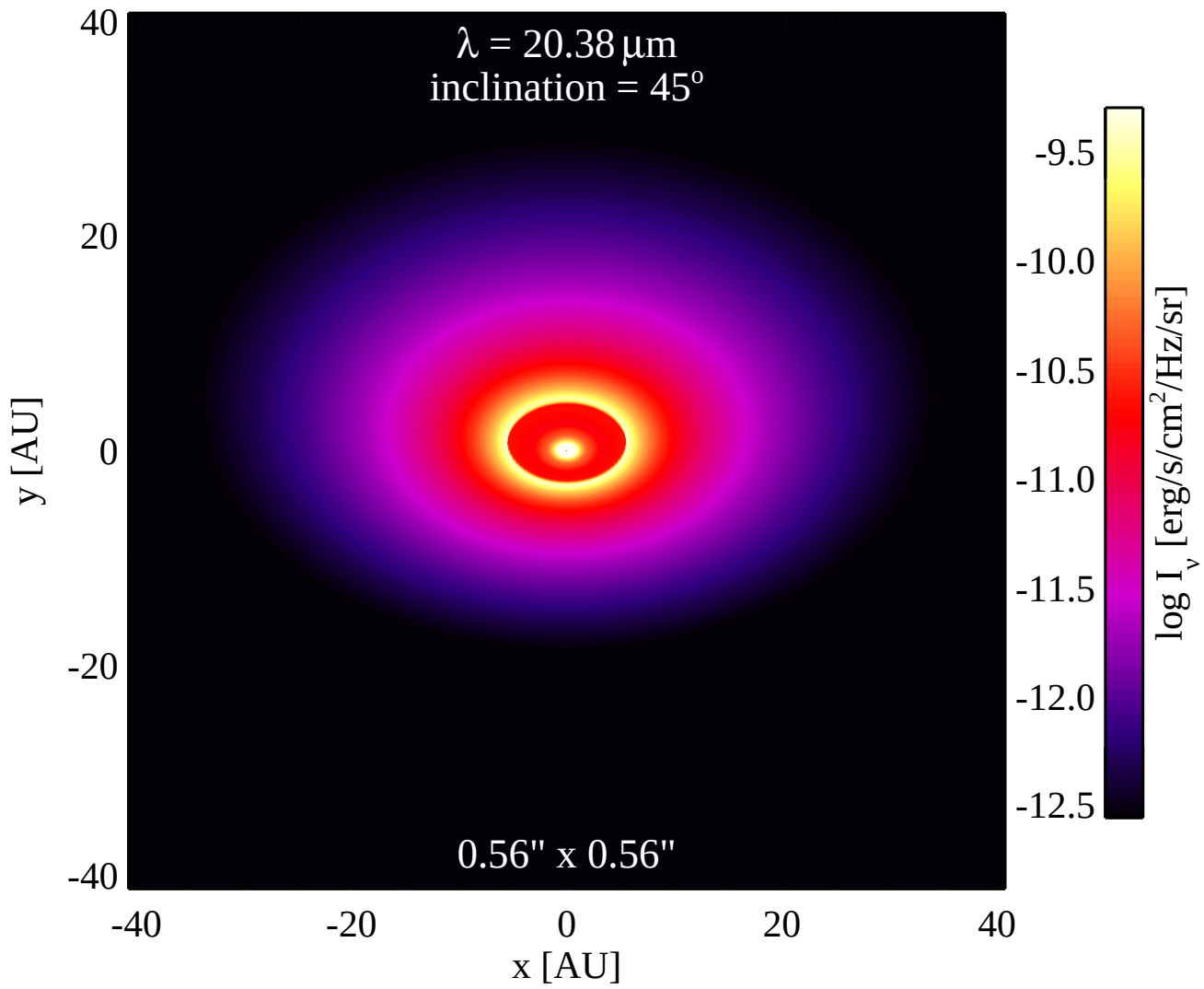

λ = 11.24 μm
inclination = 45°
0.40" x 0.40"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

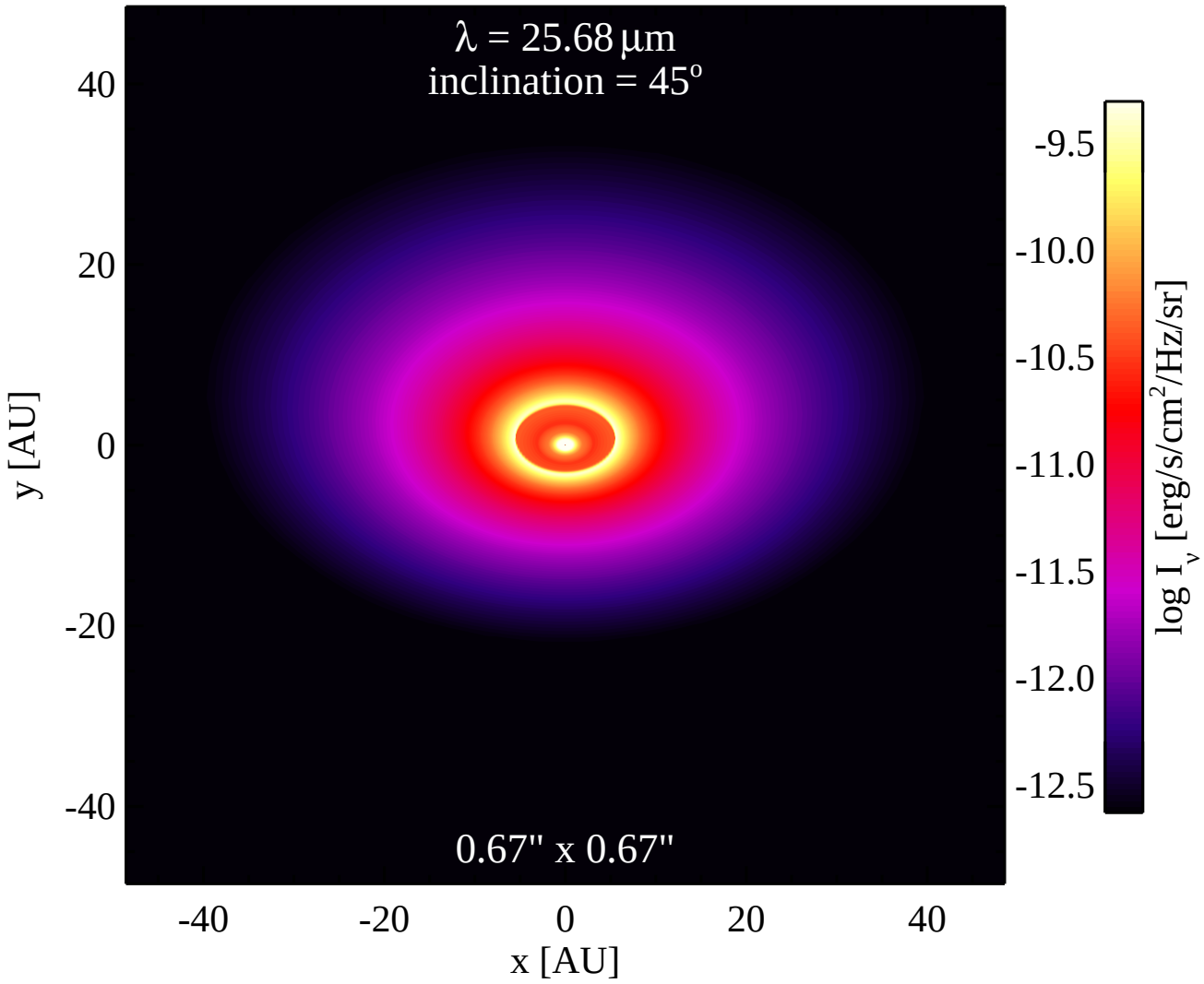

λ = 12.26 μm
inclination = 45°
0.31" x 0.31"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

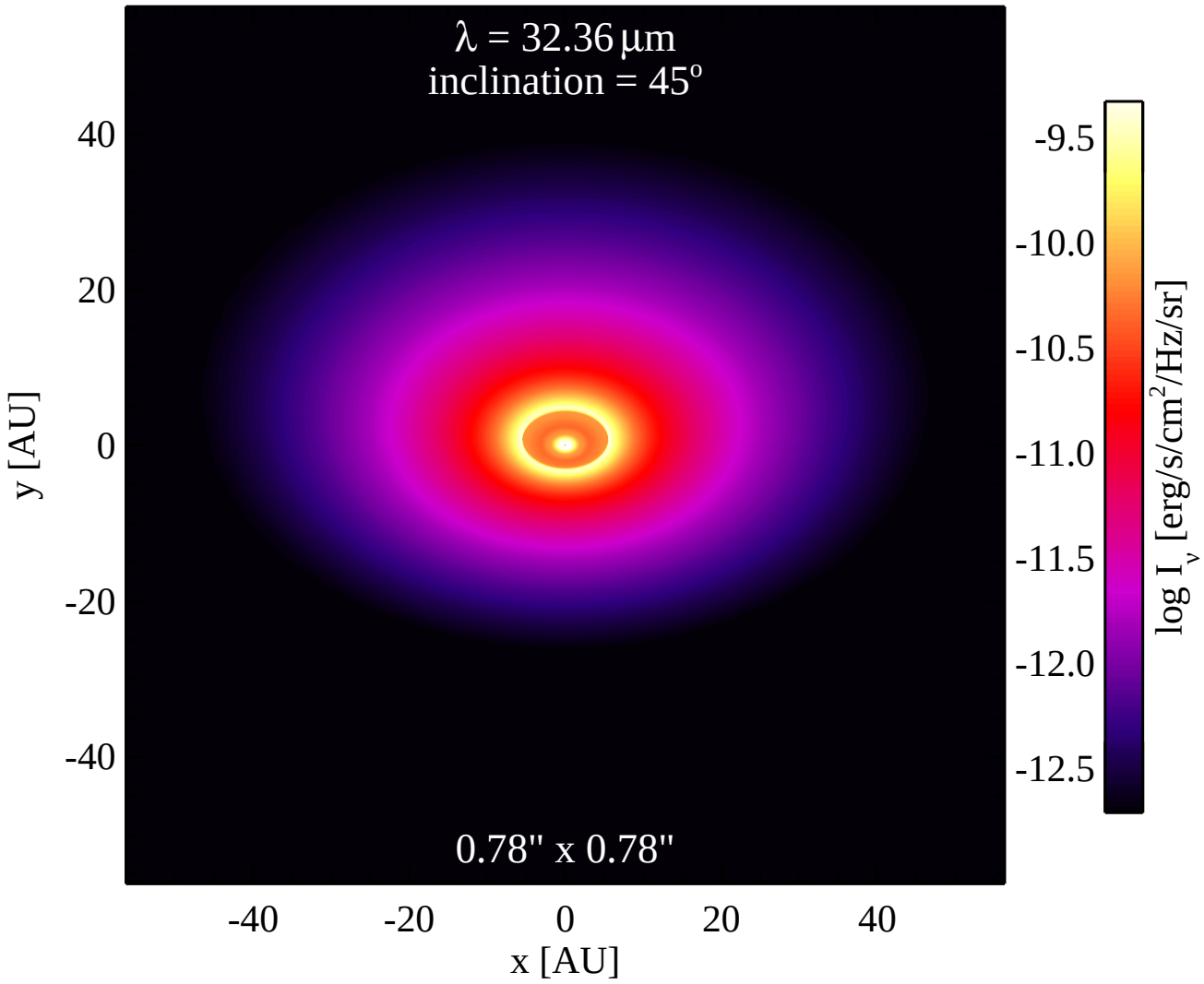

λ = 12.84 μm
inclination = 45°
0.37" x 0.37"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

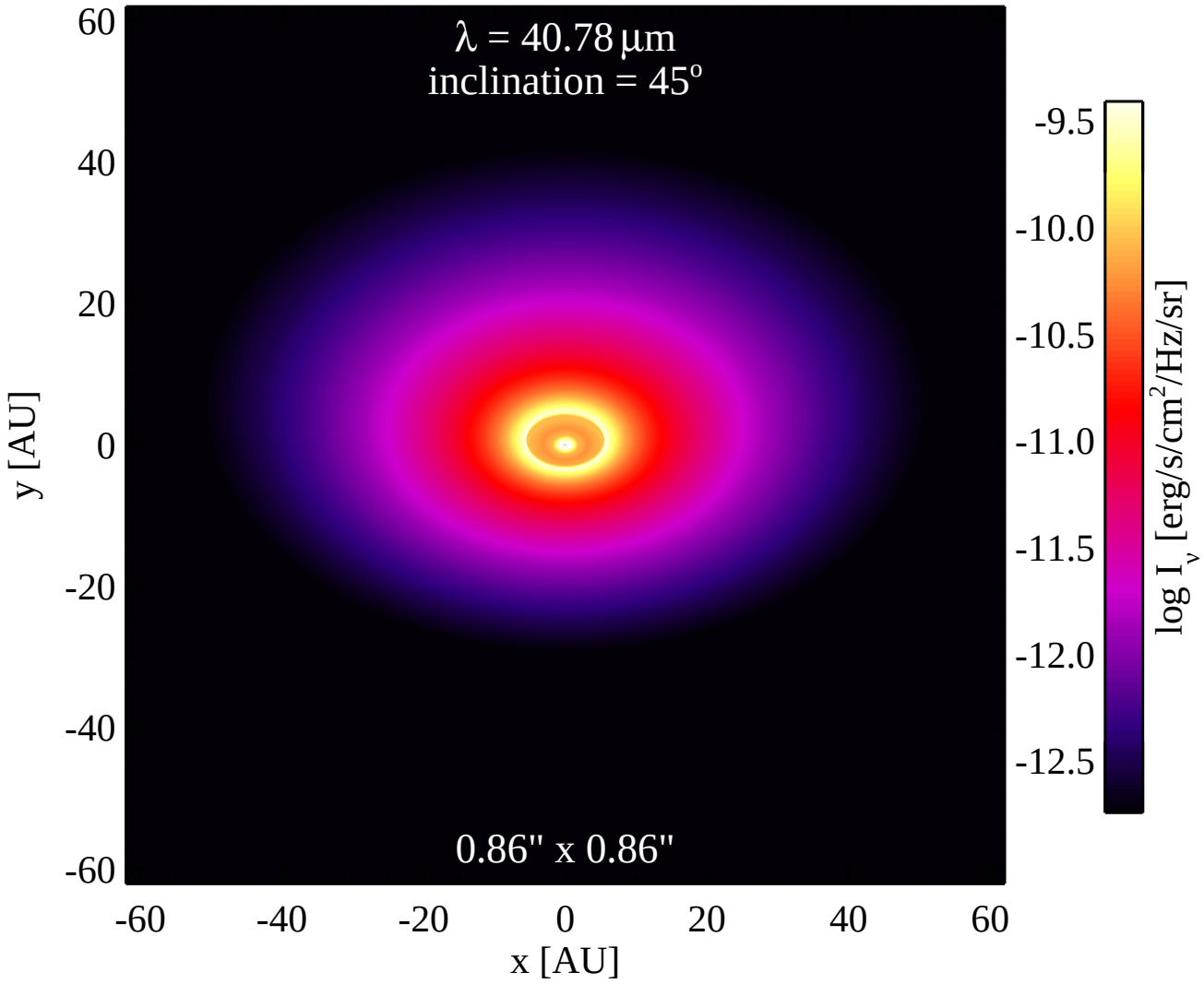

λ = 13.60 μm
inclination = 45°
0.33" x 0.33"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

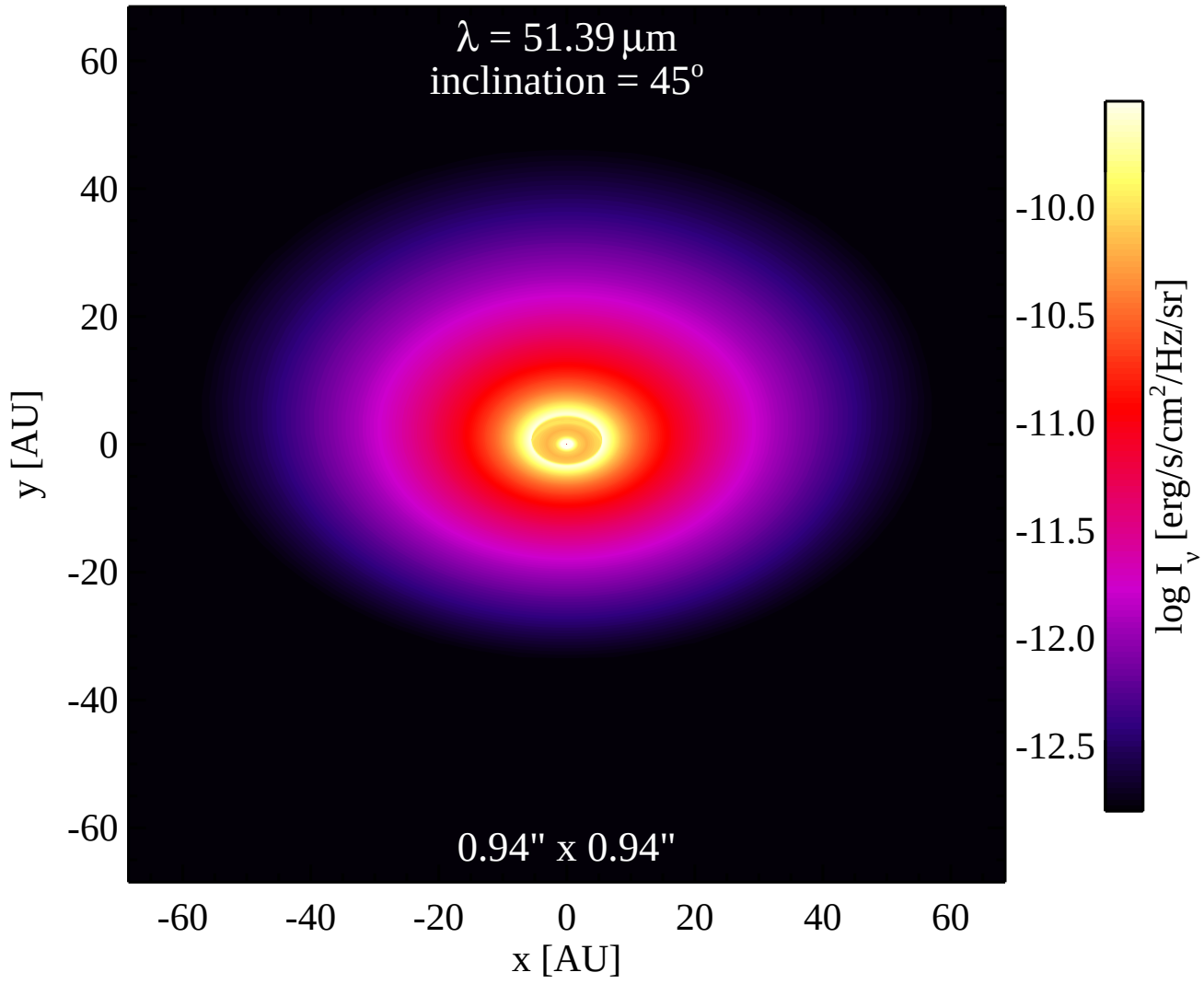

λ = 16.17 μm
inclination = 45°
0.41" x 0.41"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

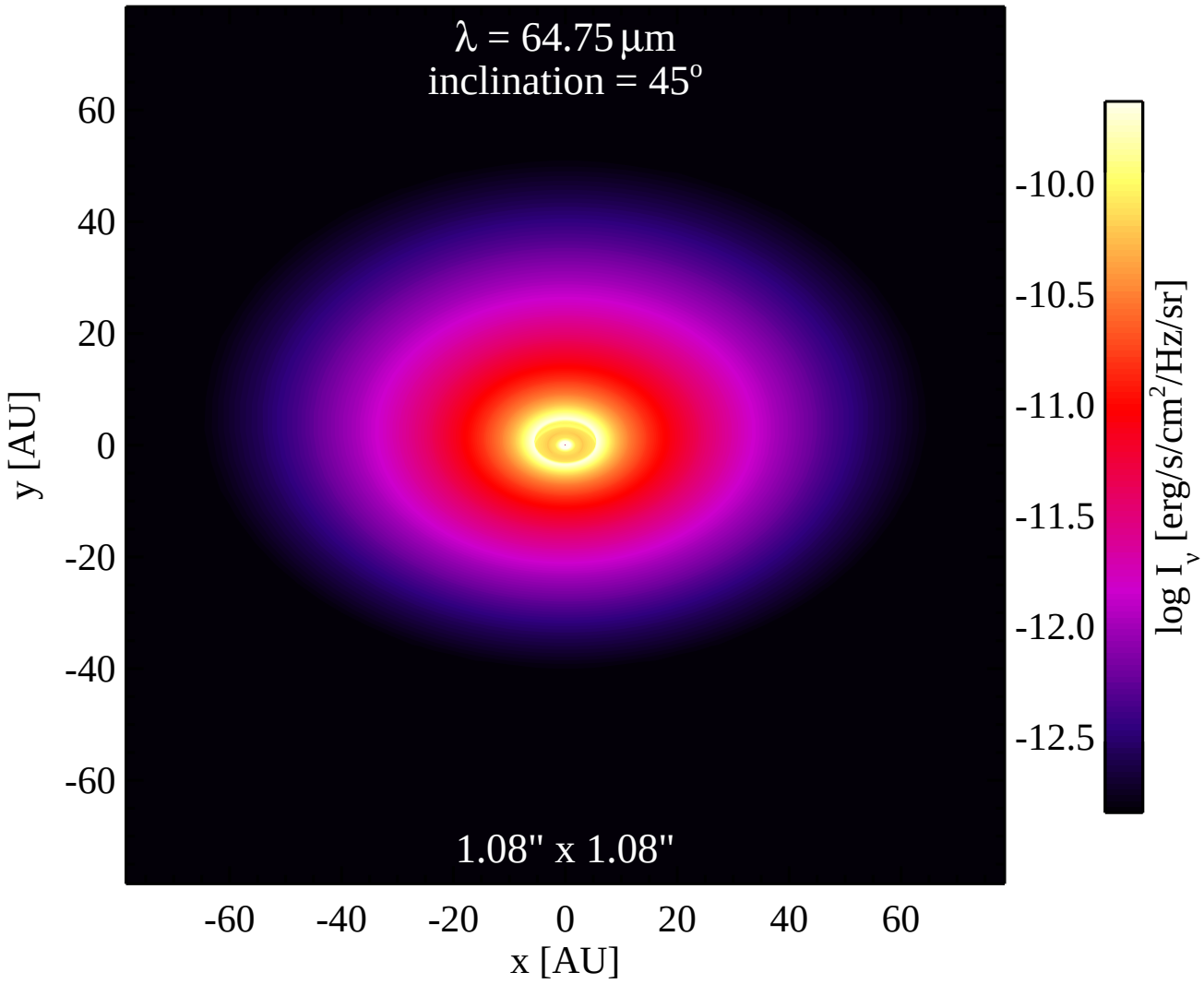

λ = 20.38 μm
inclination = 45°
0.56" x 0.56"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

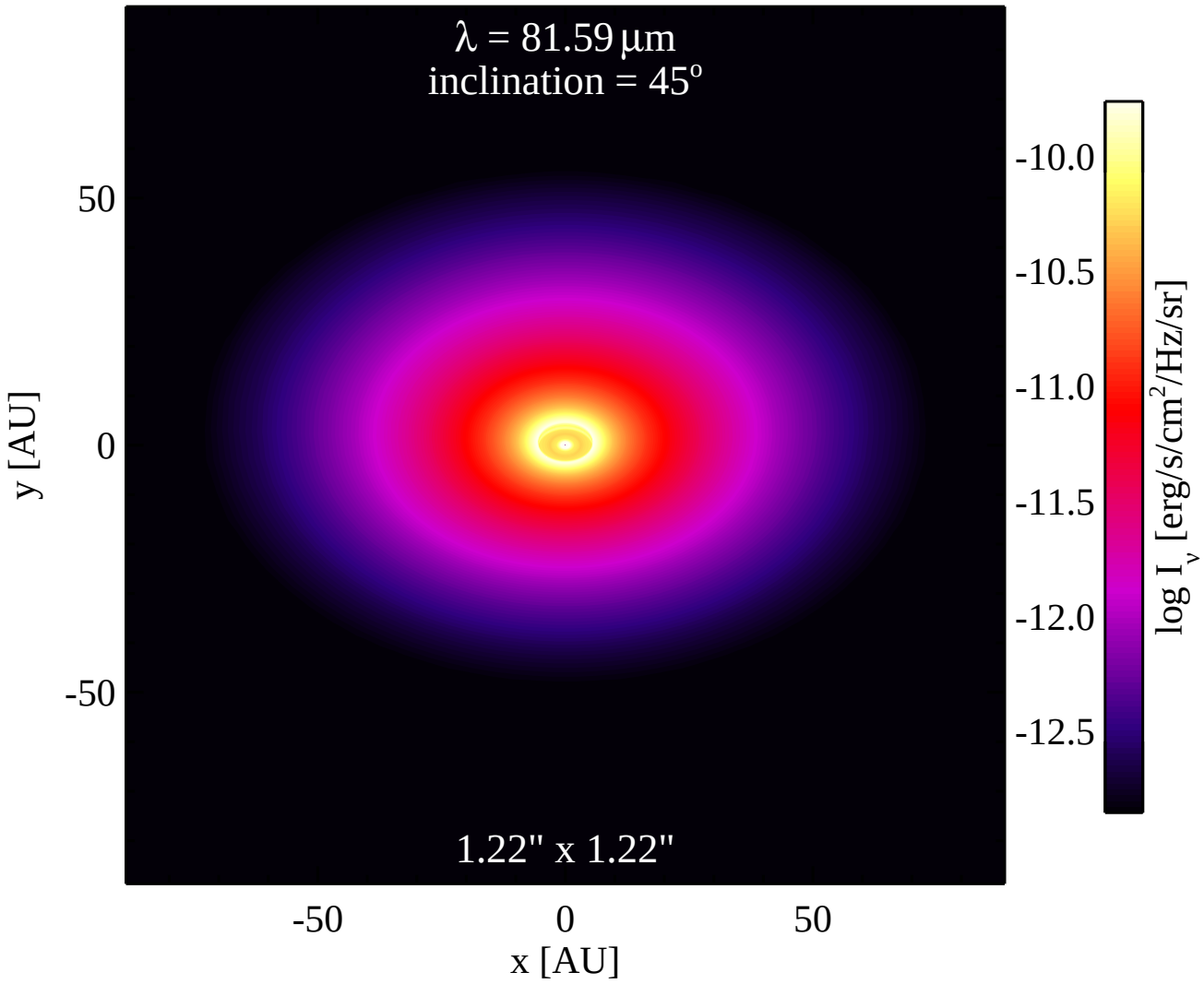

λ = 25.68 μm
inclination = 45°
0.67" x 0.67"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

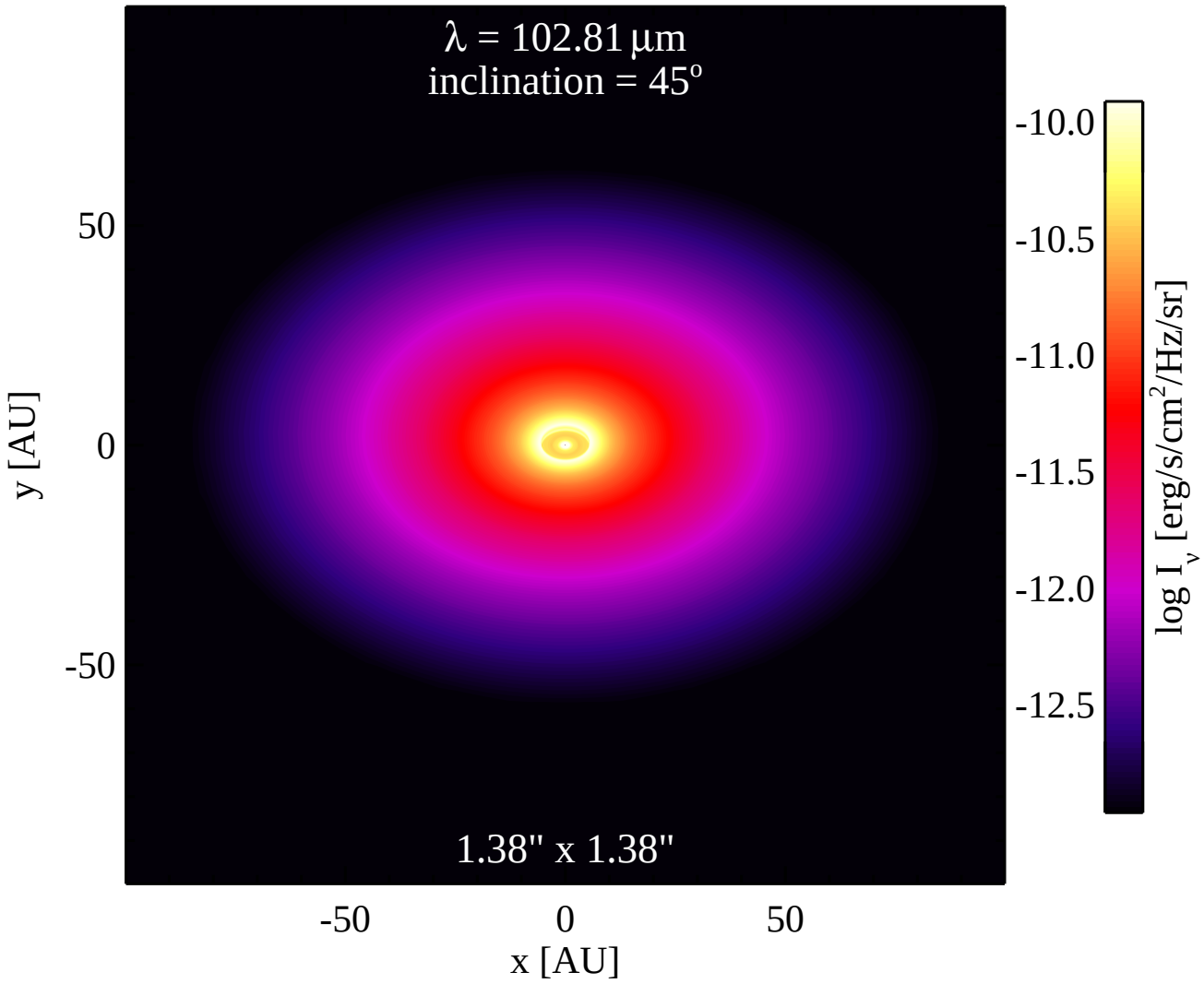

λ = 32.36 μm
inclination = 45°
0.78" x 0.78"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

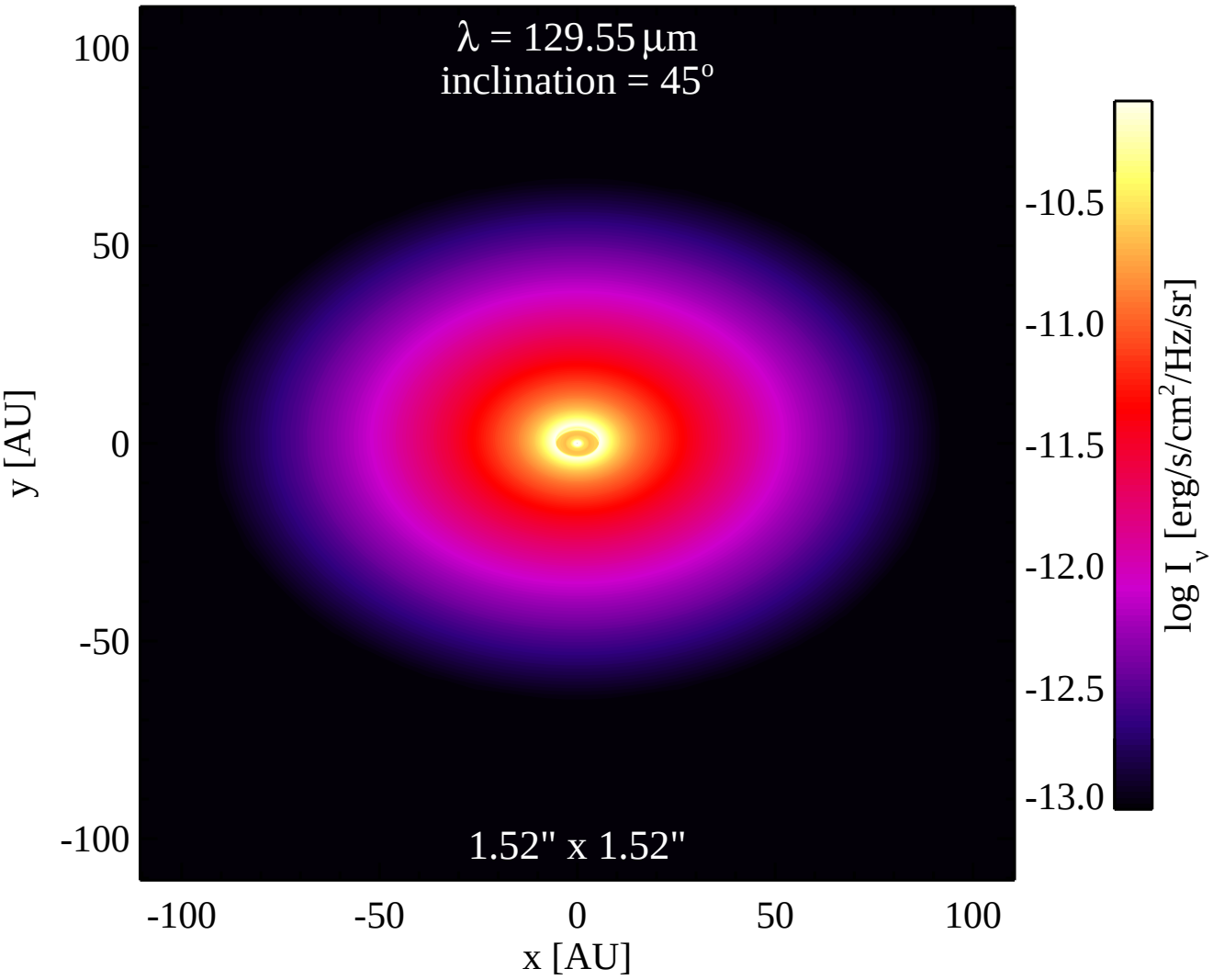

λ = 40.78 μm
inclination = 45°
0.86" x 0.86"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

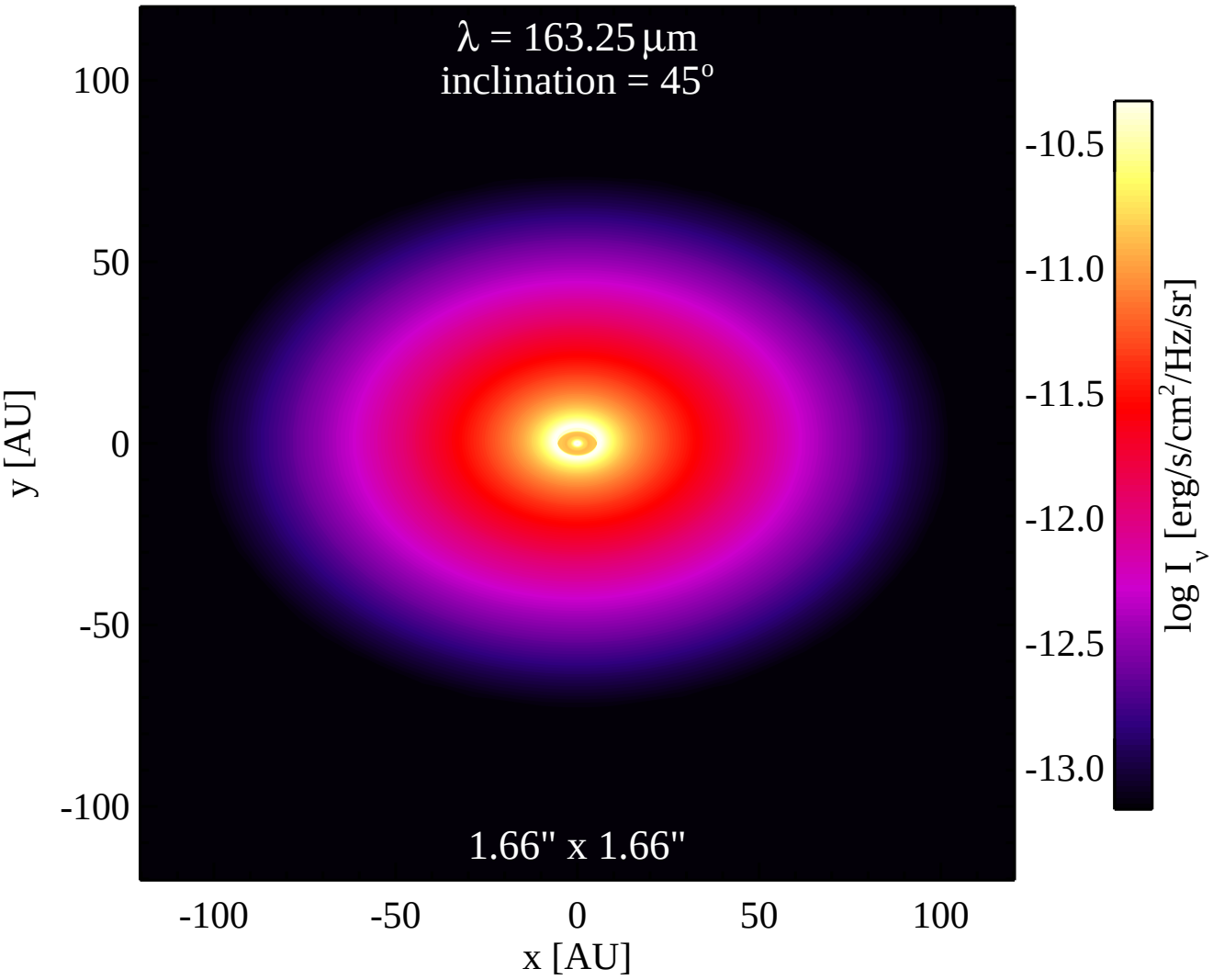

λ = 51.39 μm
inclination = 45°
0.94" x 0.94"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

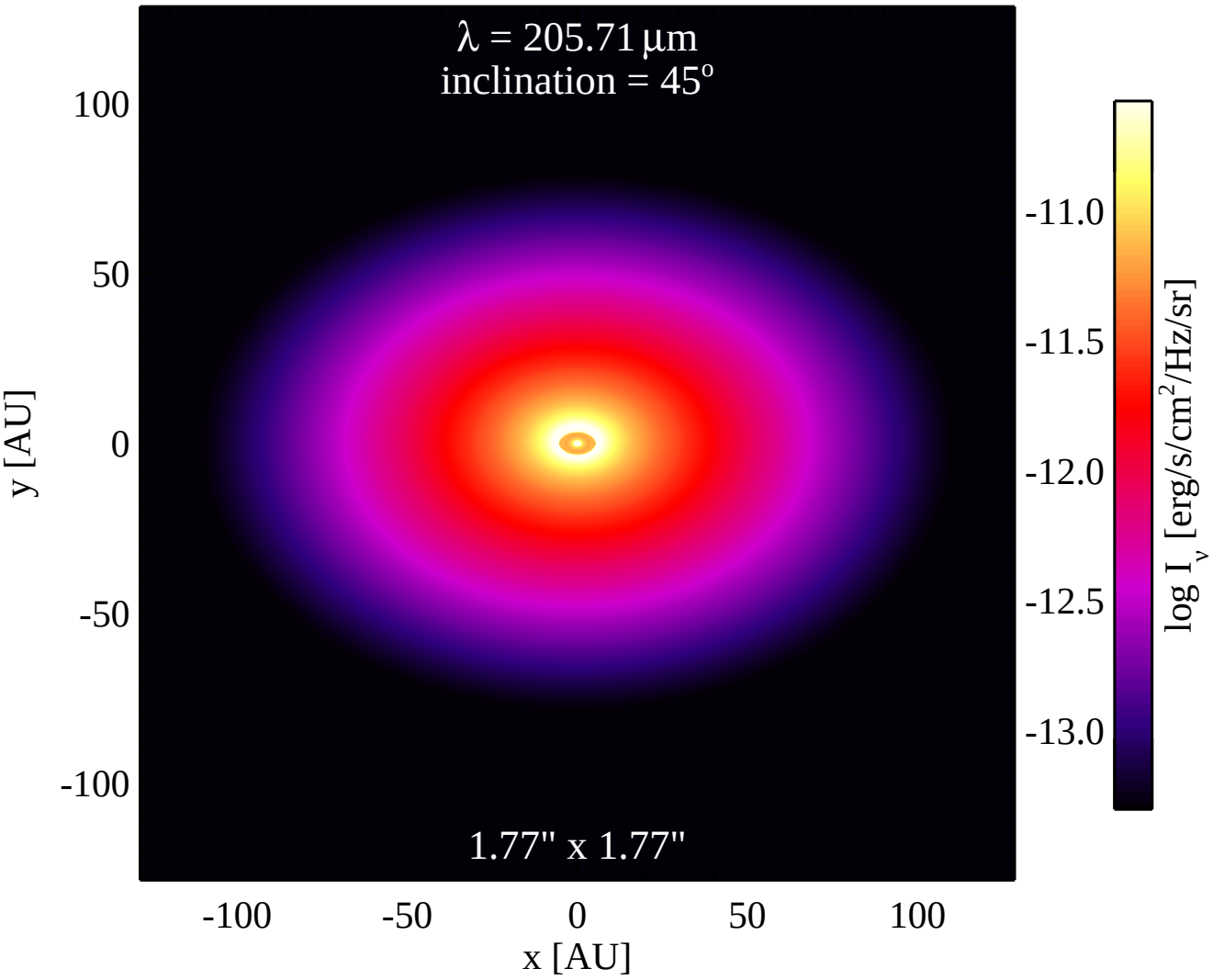

λ = 64.75 μm
inclination = 45°
1.08" x 1.08"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

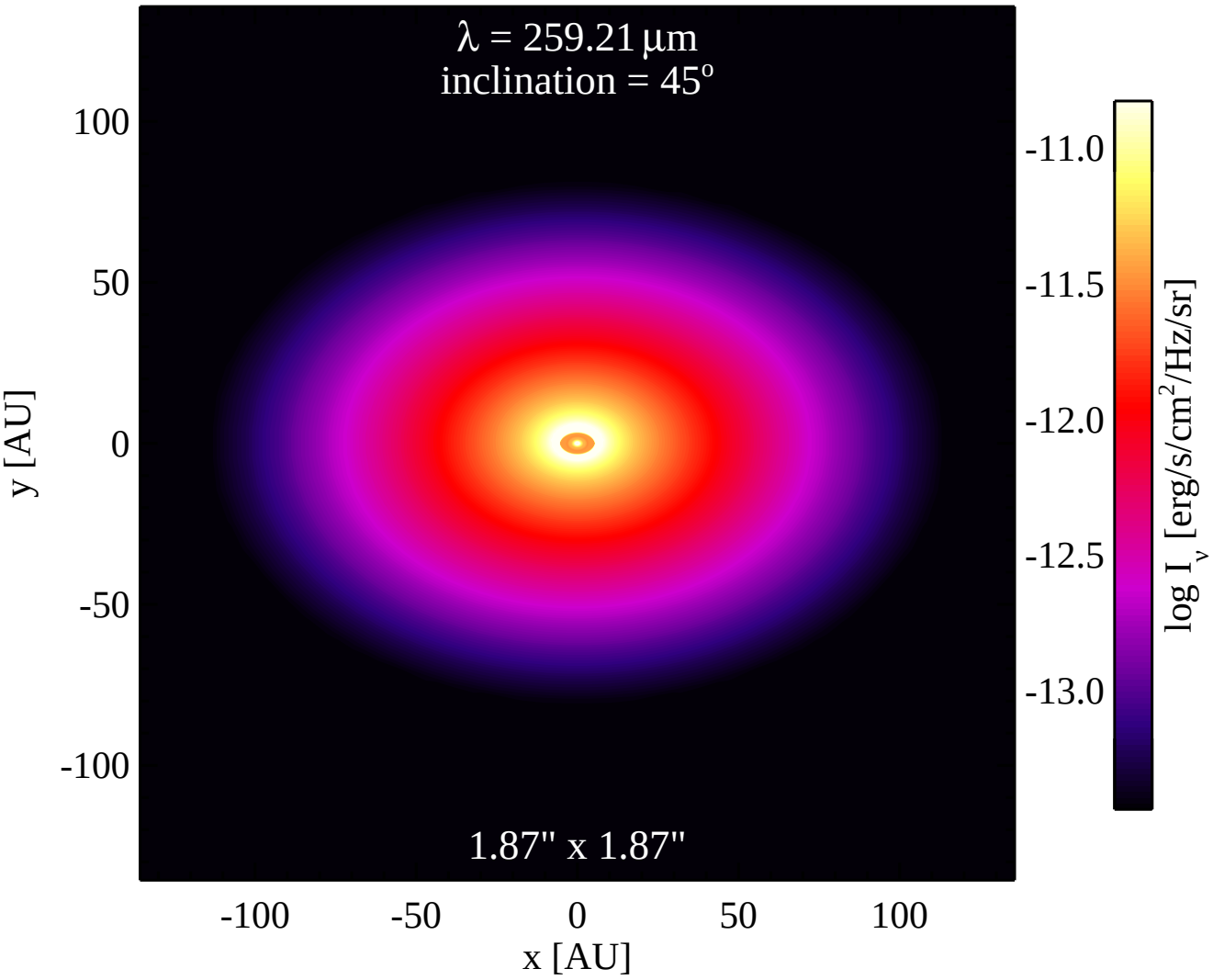

λ = 81.59 μm
inclination = 45°
1.22" x 1.22"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

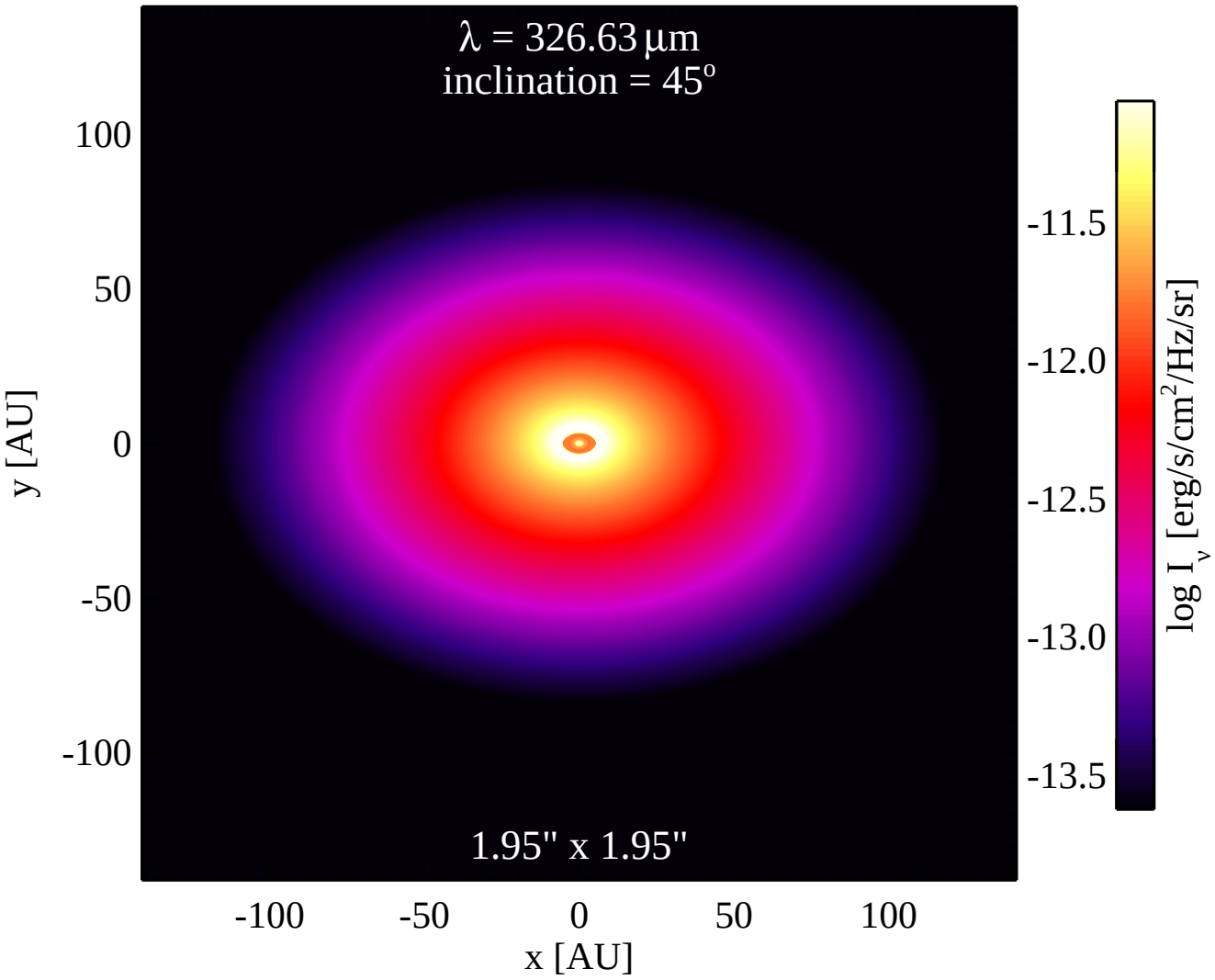

λ = 102.81 μm
inclination = 45°
1.38" x 1.38"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

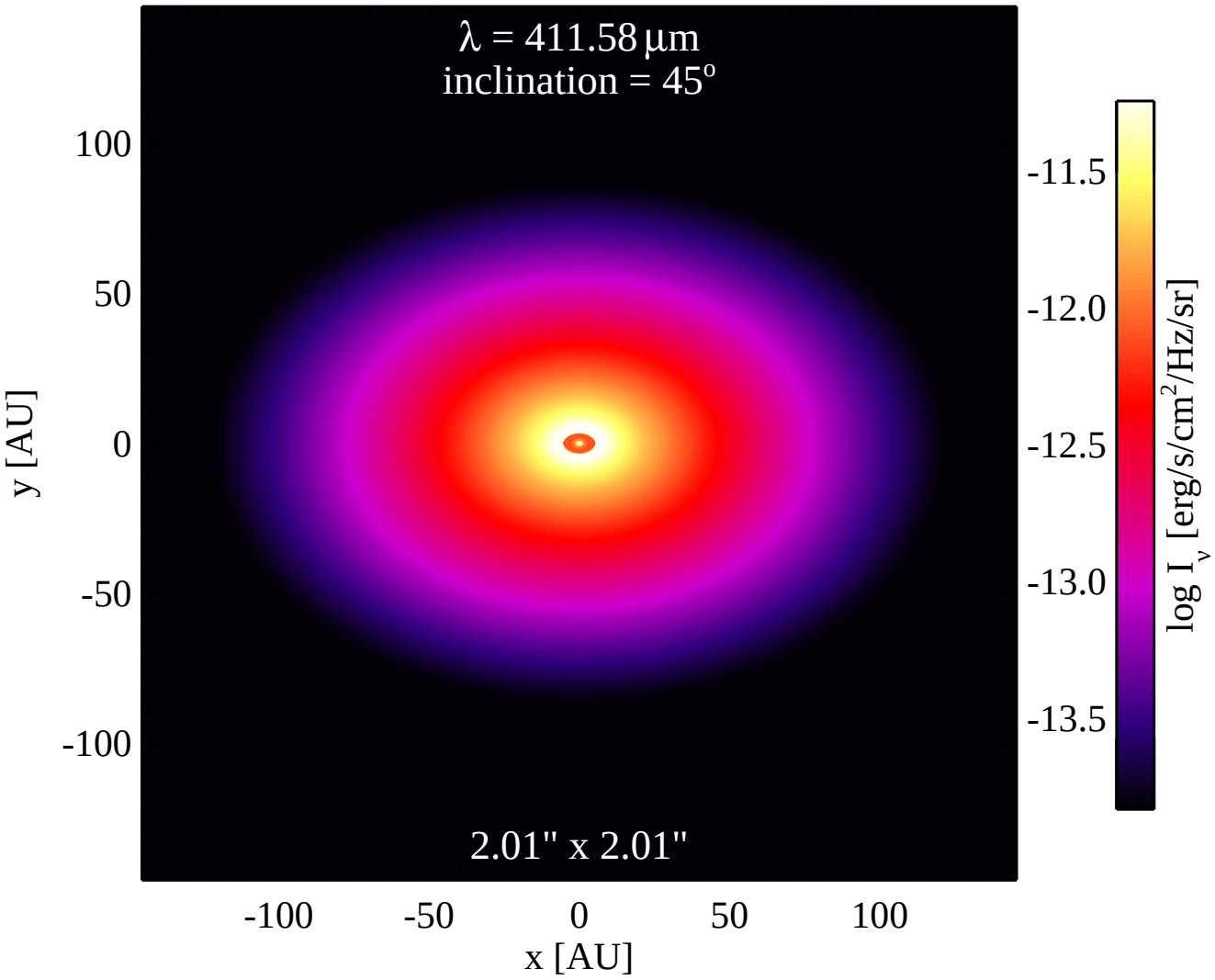

λ = 129.55 μm
inclination = 45°
1.52" x 1.52"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

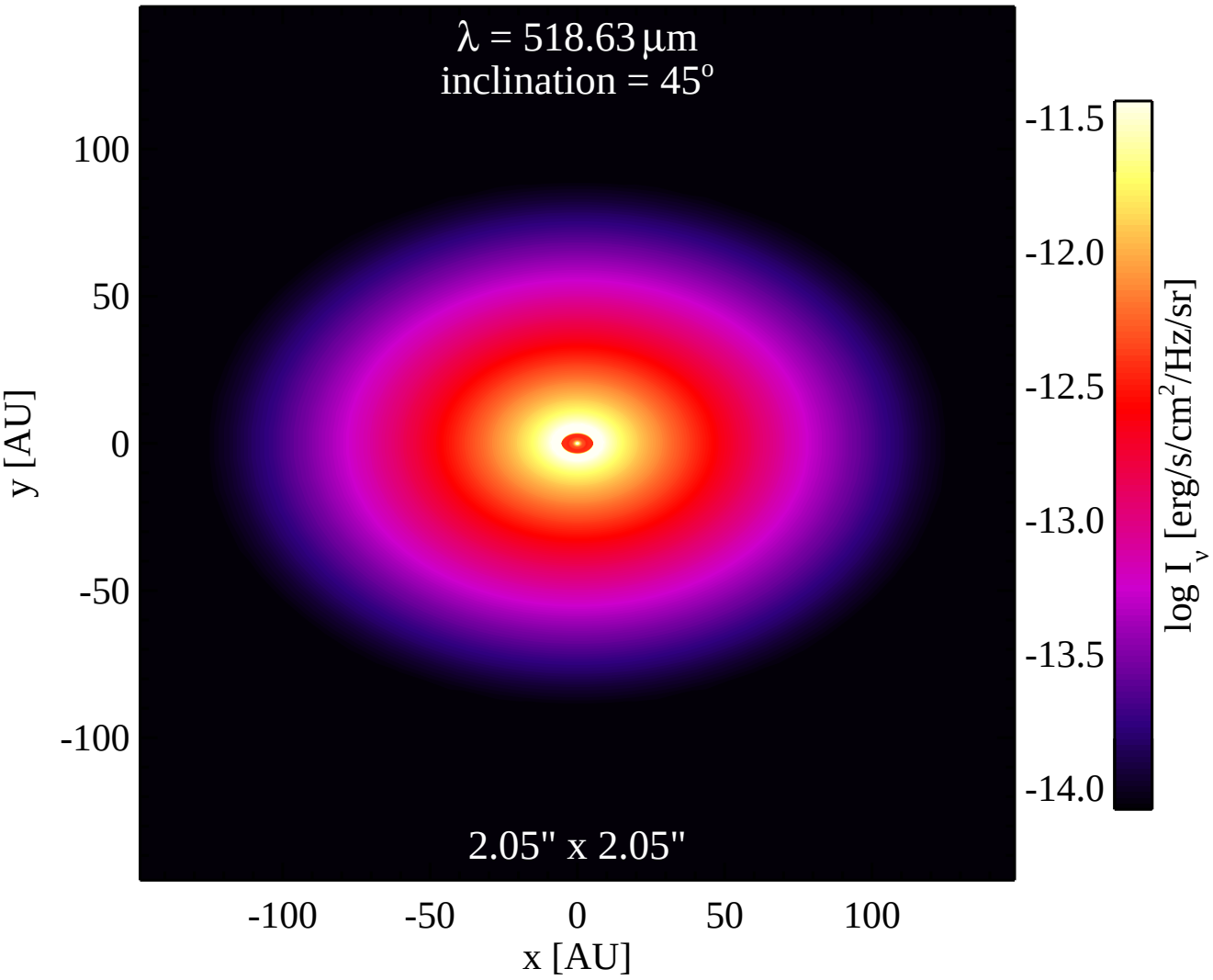

λ = 163.25 μm
inclination = 45°
1.66" x 1.66"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

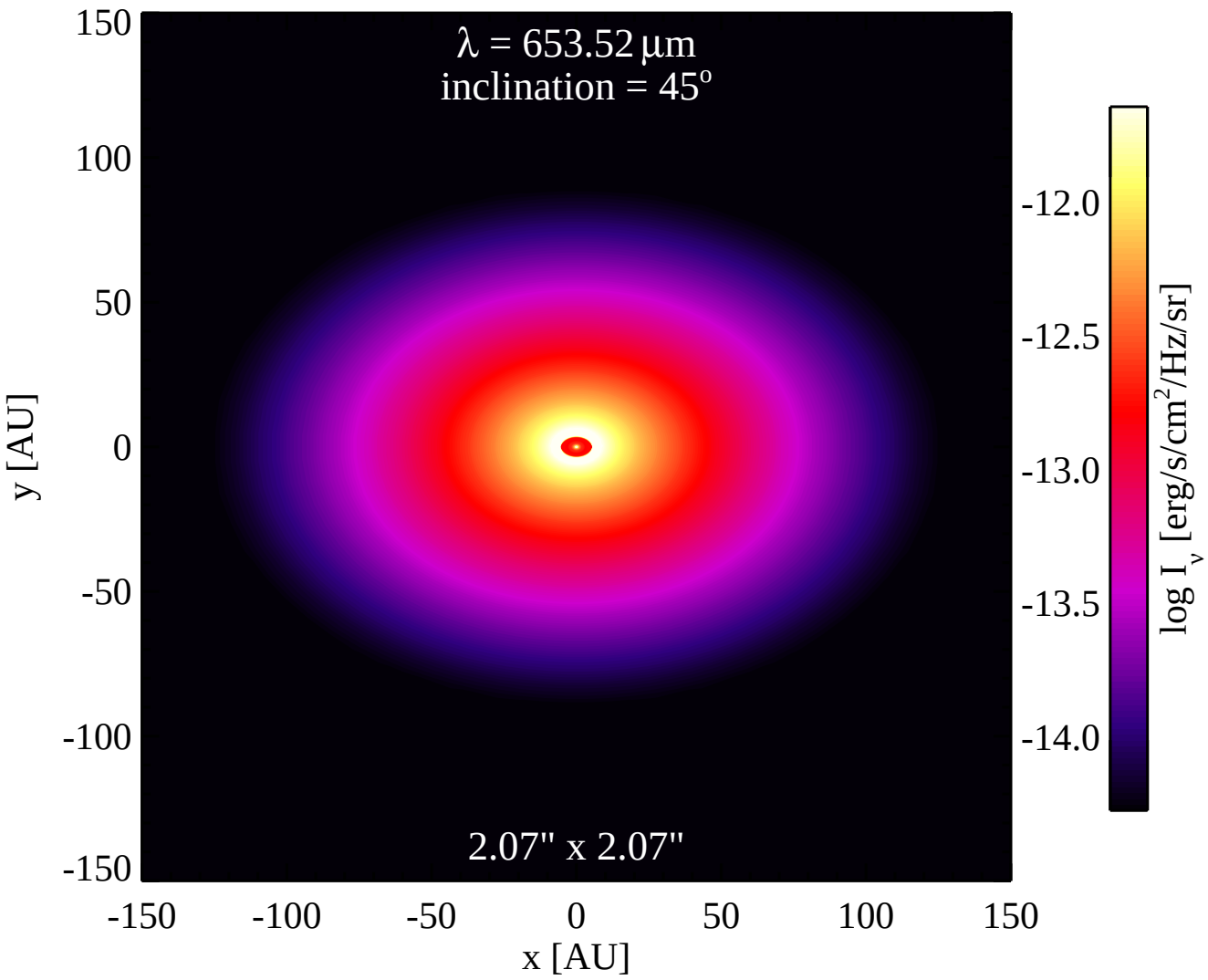

λ = 205.71 μm
inclination = 45°
1.77" x 1.77"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

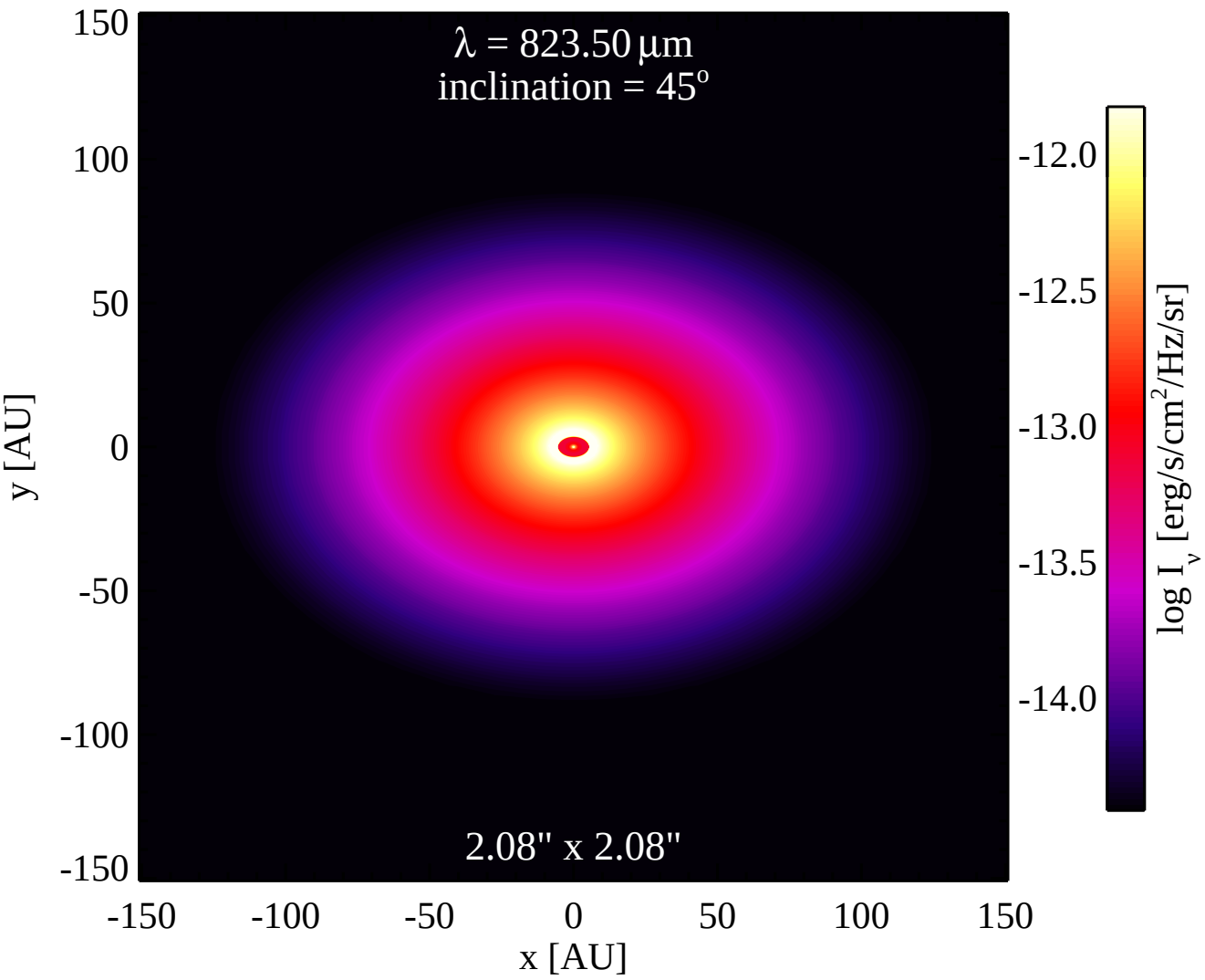

λ = 259.21 μm
inclination = 45°
1.87" x 1.87"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

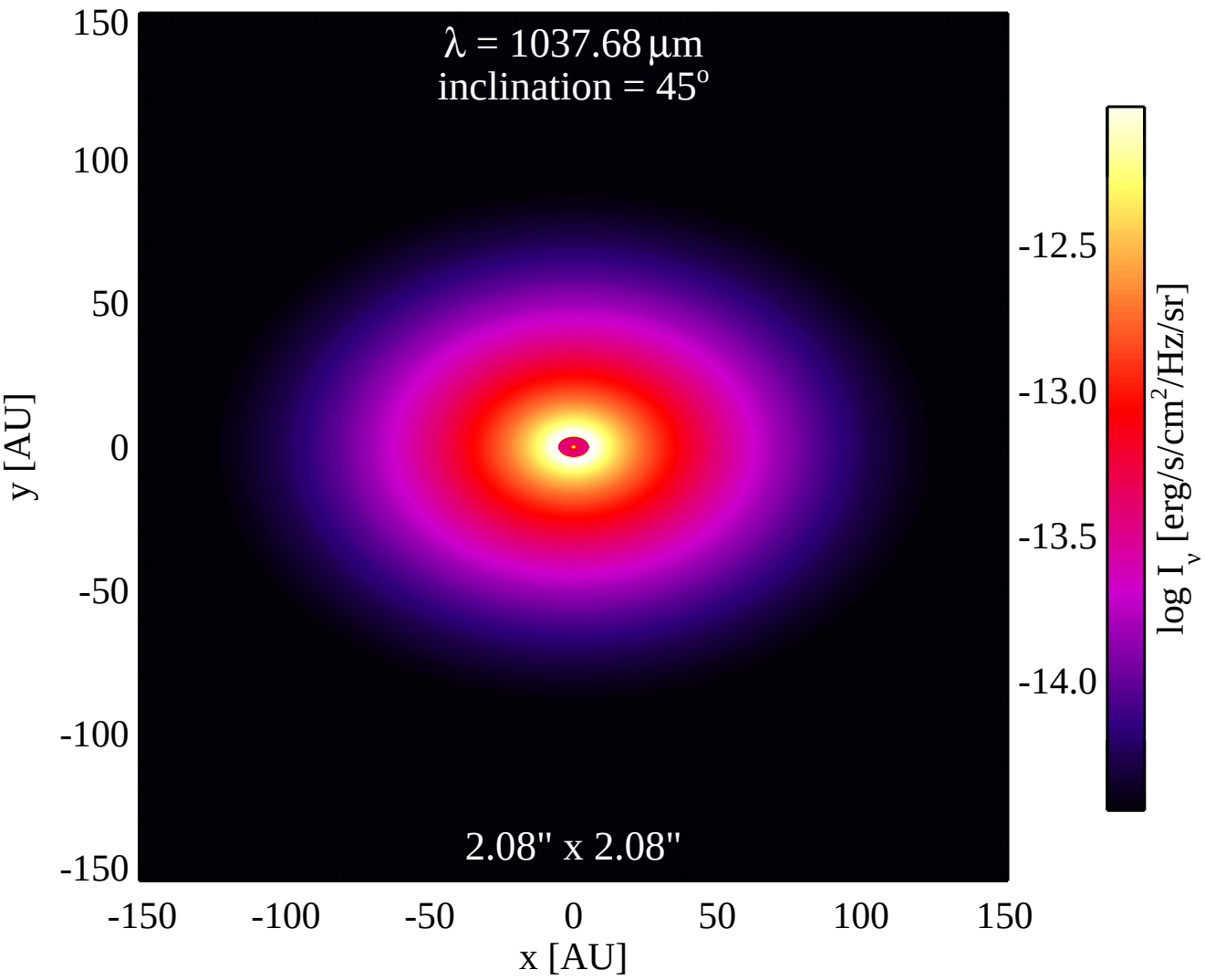

λ = 326.63 μm
inclination = 45°
1.95" x 1.95"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

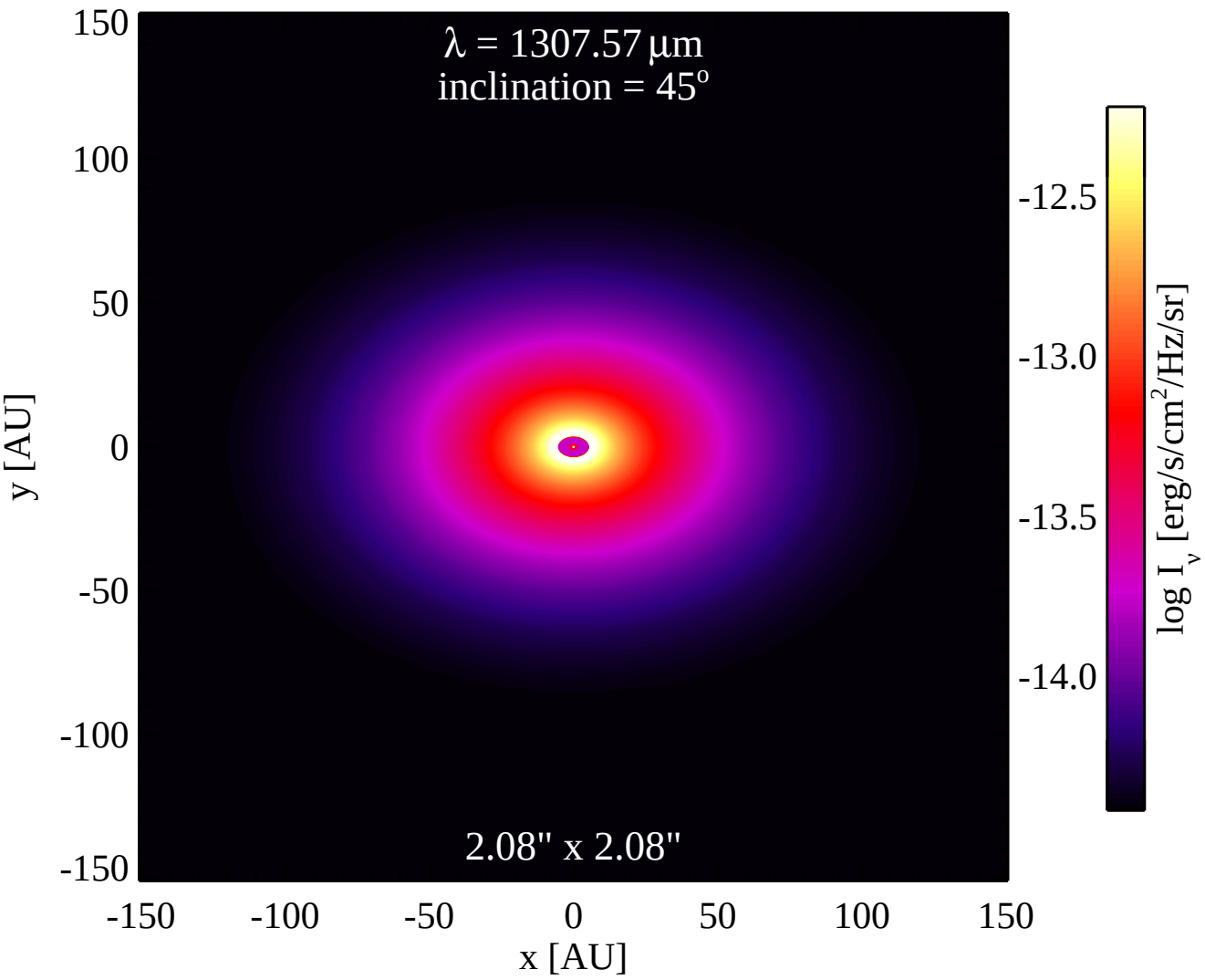

λ = 411.58 μm
inclination = 45°
2.01" x 2.01"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

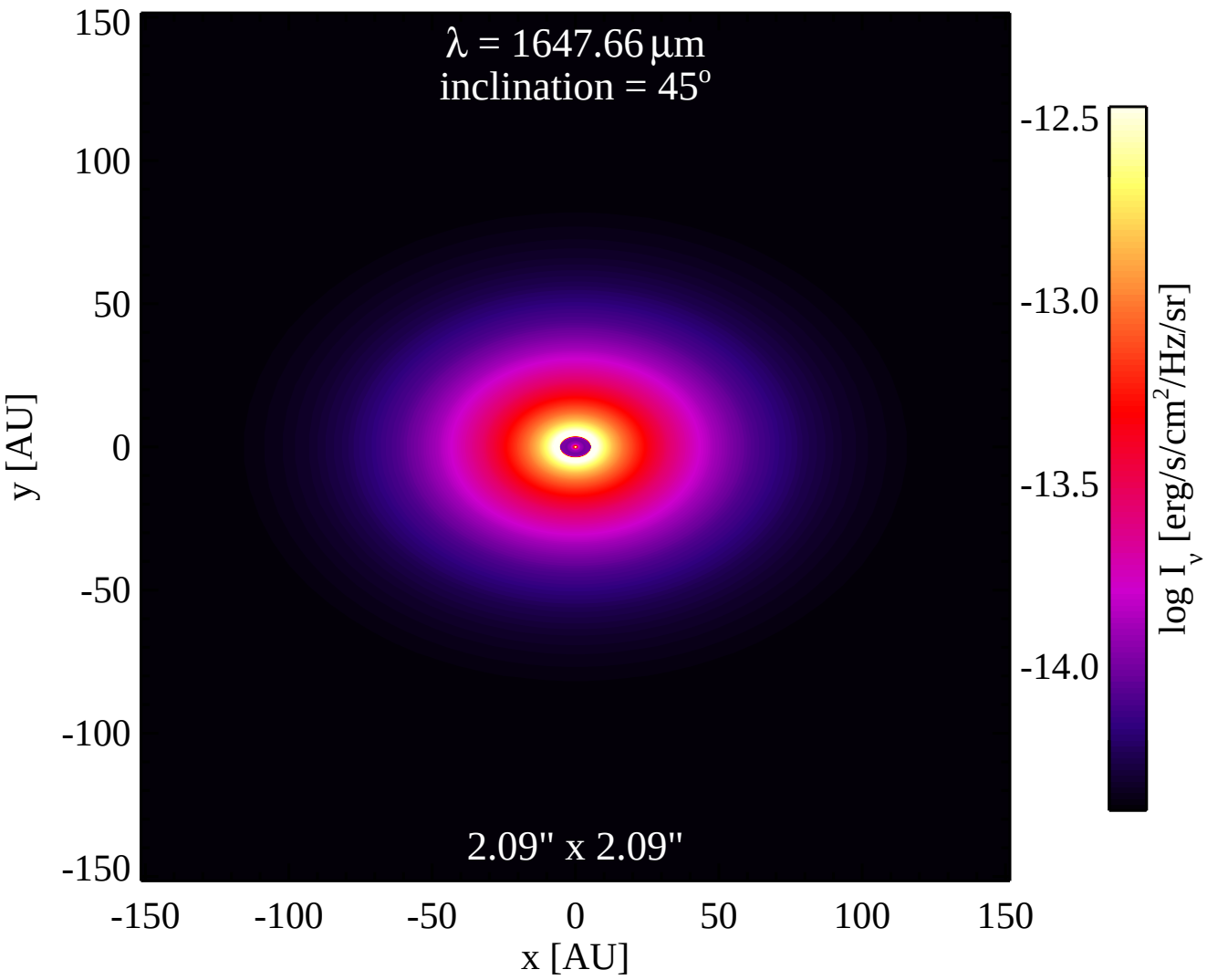

λ = 518.63 μm
inclination = 45°
2.05" x 2.05"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

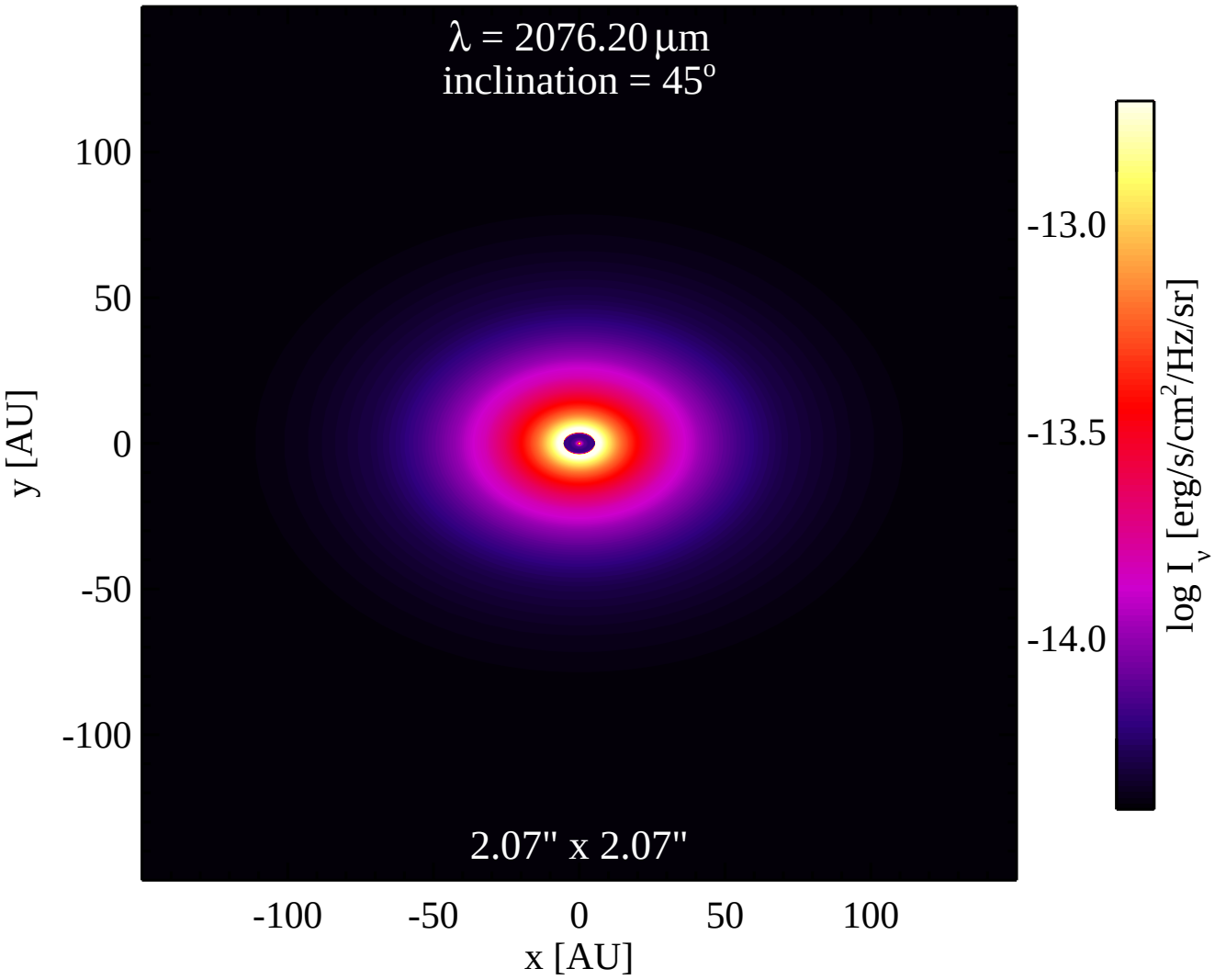

λ = 653.52 μm
inclination = 45°
2.07" x 2.07"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

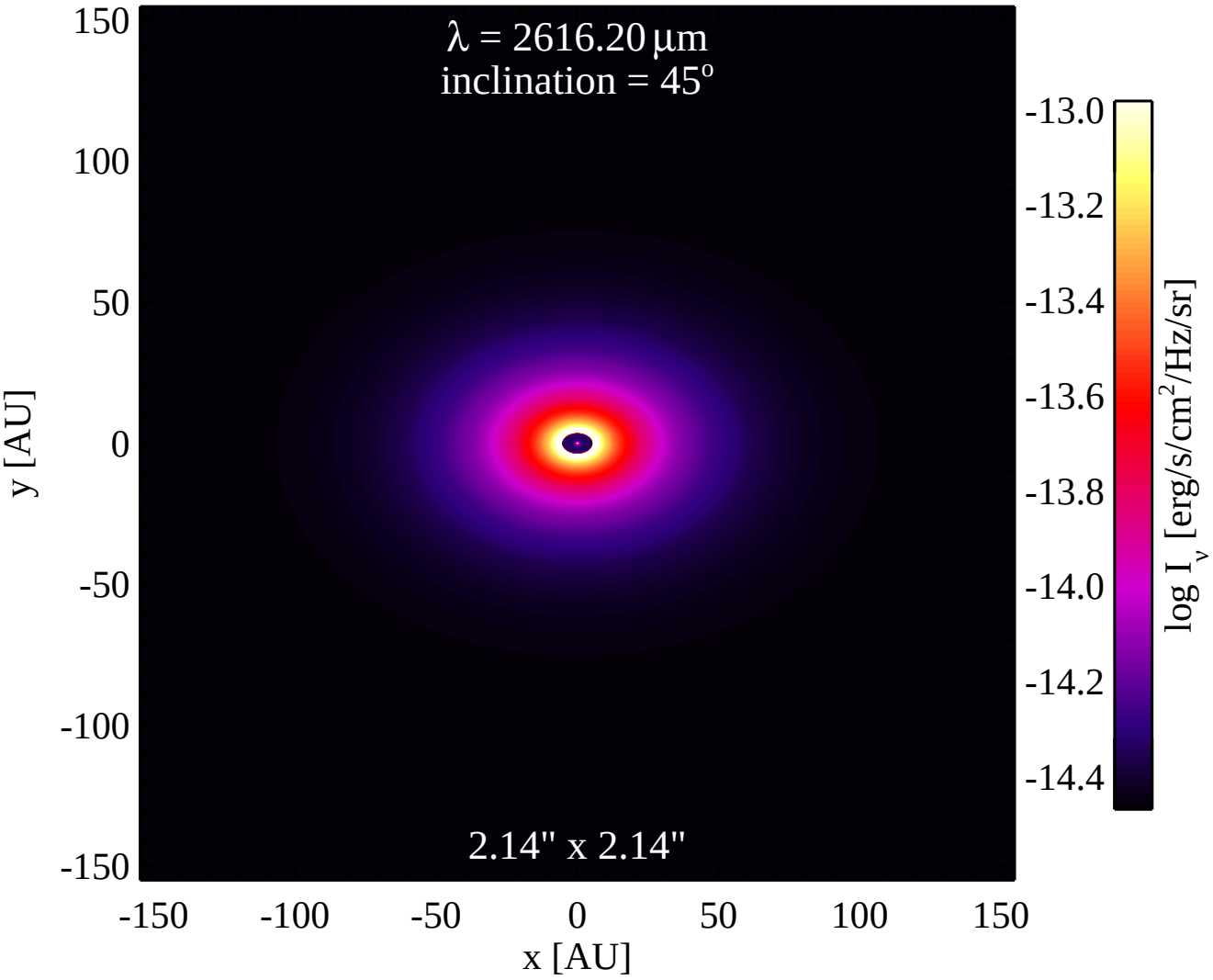

λ = 823.50 μm
inclination = 45°
2.08" x 2.08"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

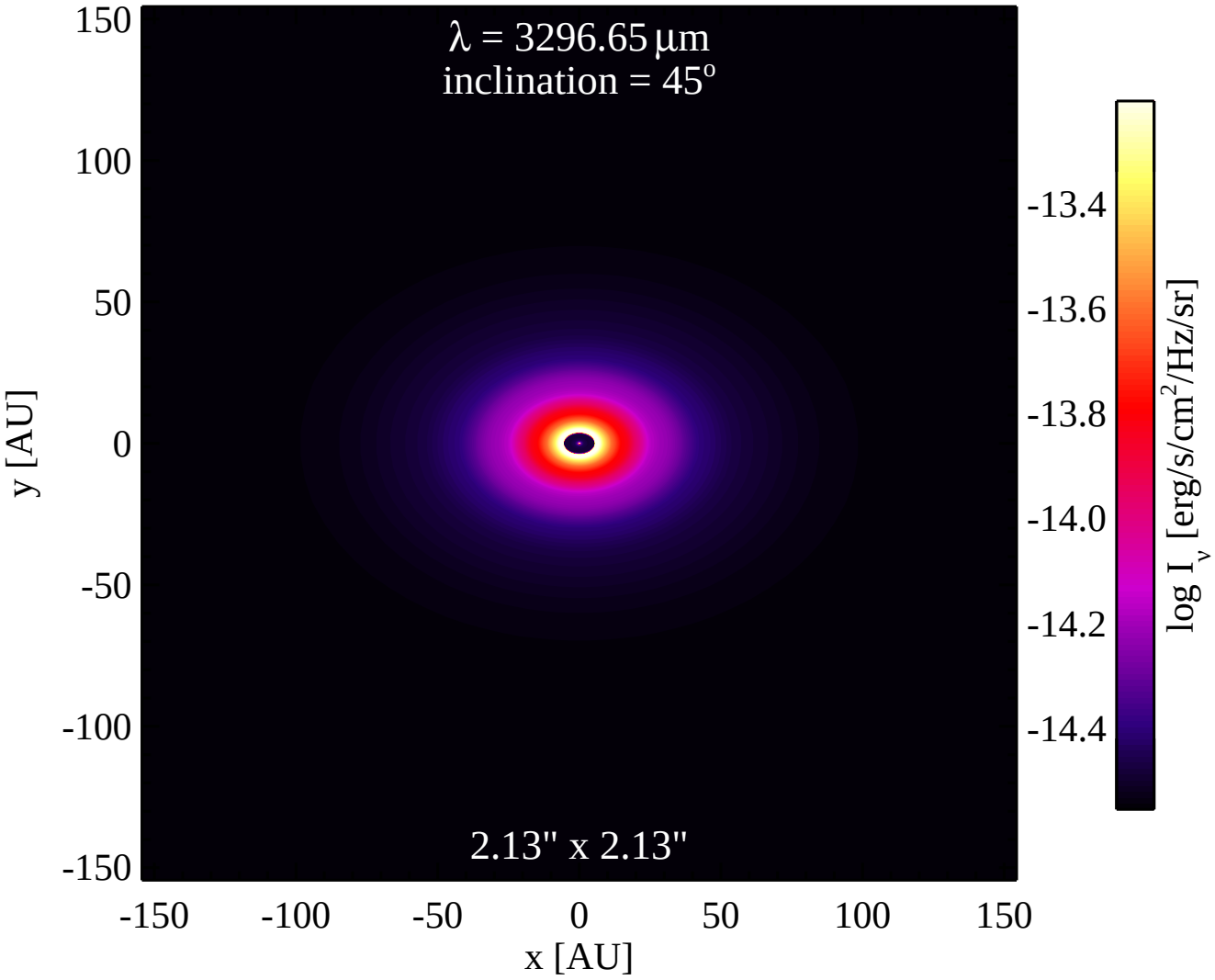

λ = 1037.68 μm
inclination = 45°
2.08" x 2.08"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

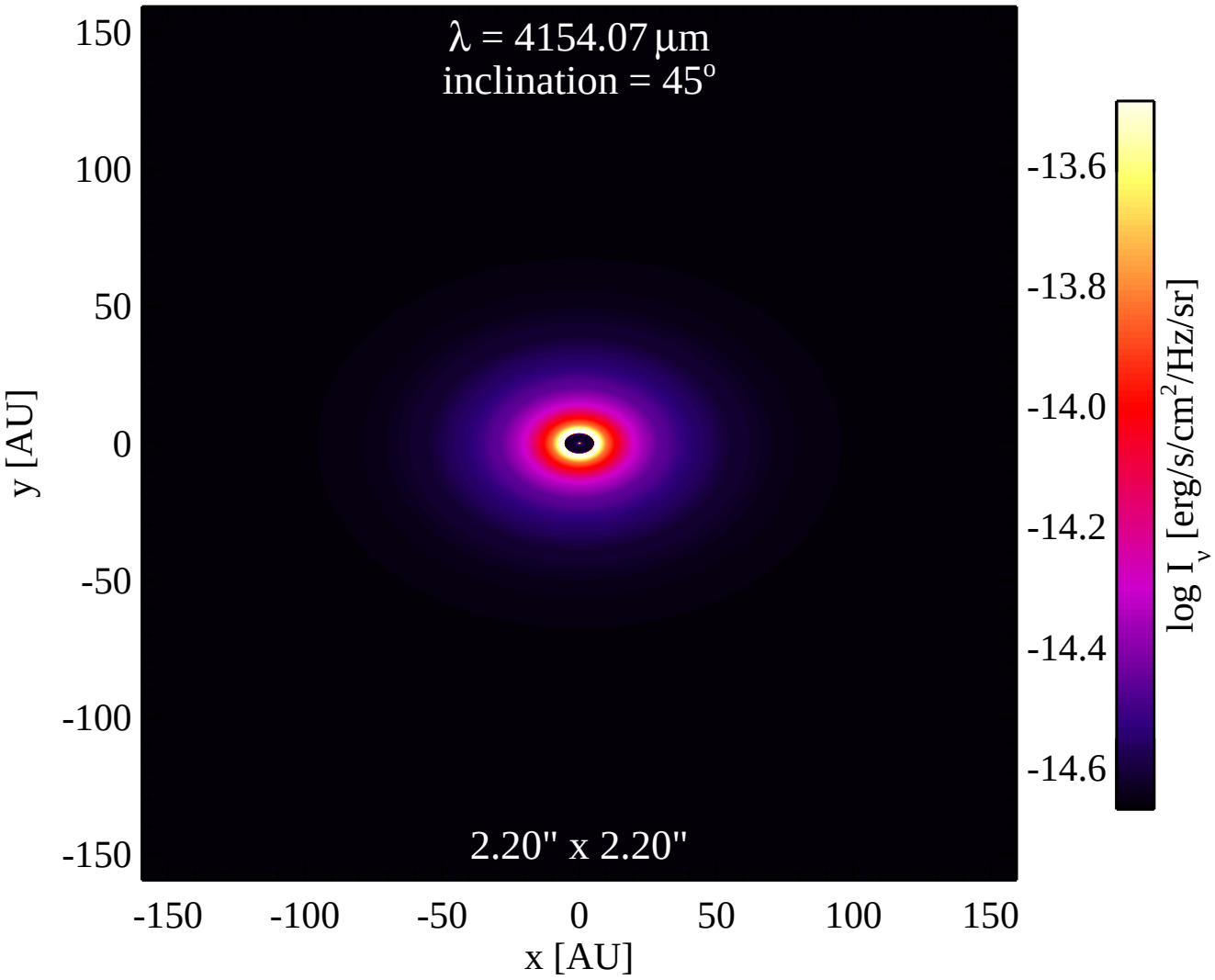

λ = 1307.57 μm
inclination = 45°
2.08" x 2.08"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 1647.66 μm
inclination = 45°
2.09" x 2.09"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 2076.20 μm
inclination = 45°
2.07" x 2.07"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 2616.20 μm
inclination = 45°
2.14" x 2.14"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-13.0
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 3296.65 μm
inclination = 45°
2.13" x 2.13"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 4154.07 μm
inclination = 45°
2.20" x 2.20"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-13.6
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]