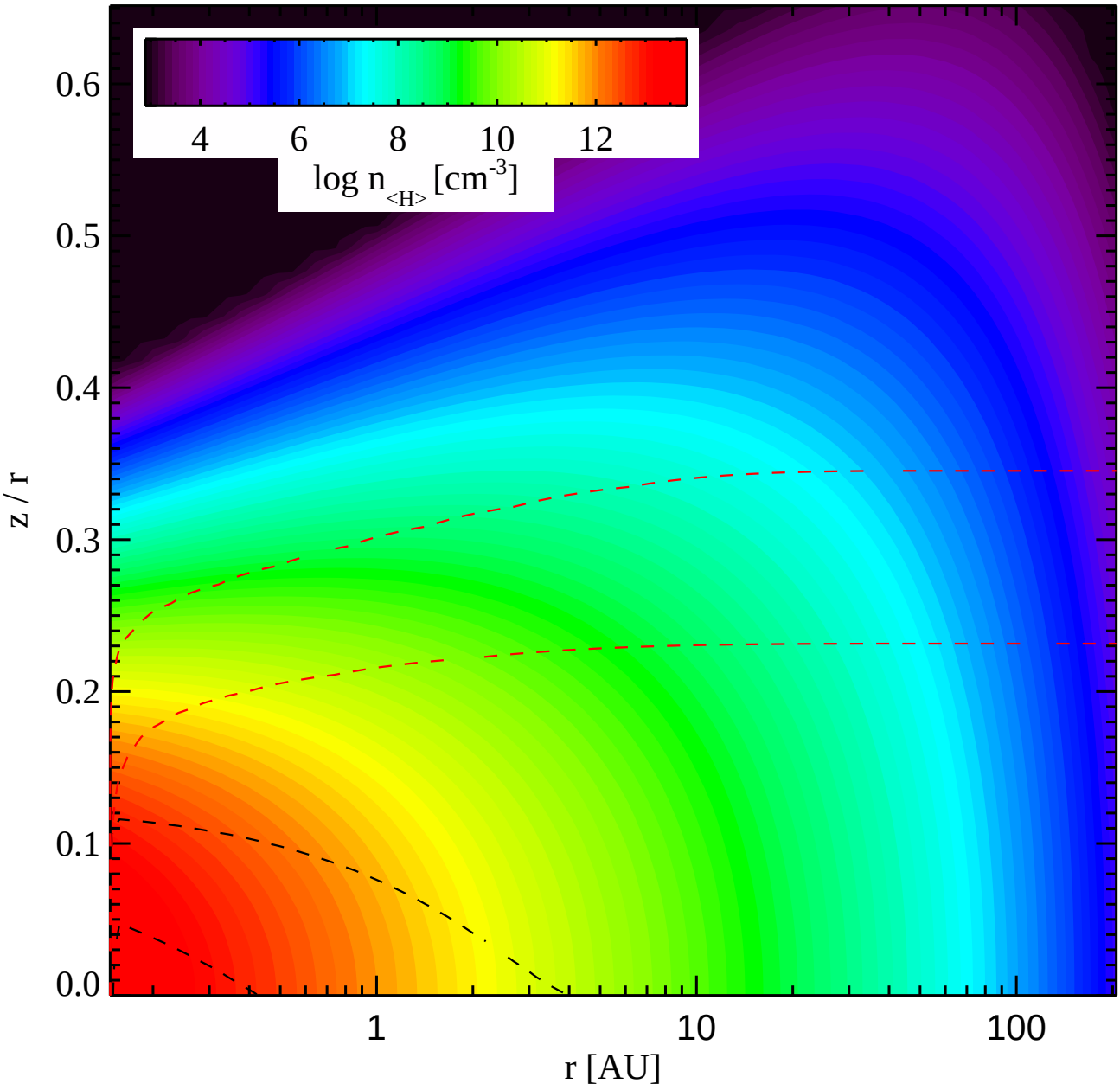
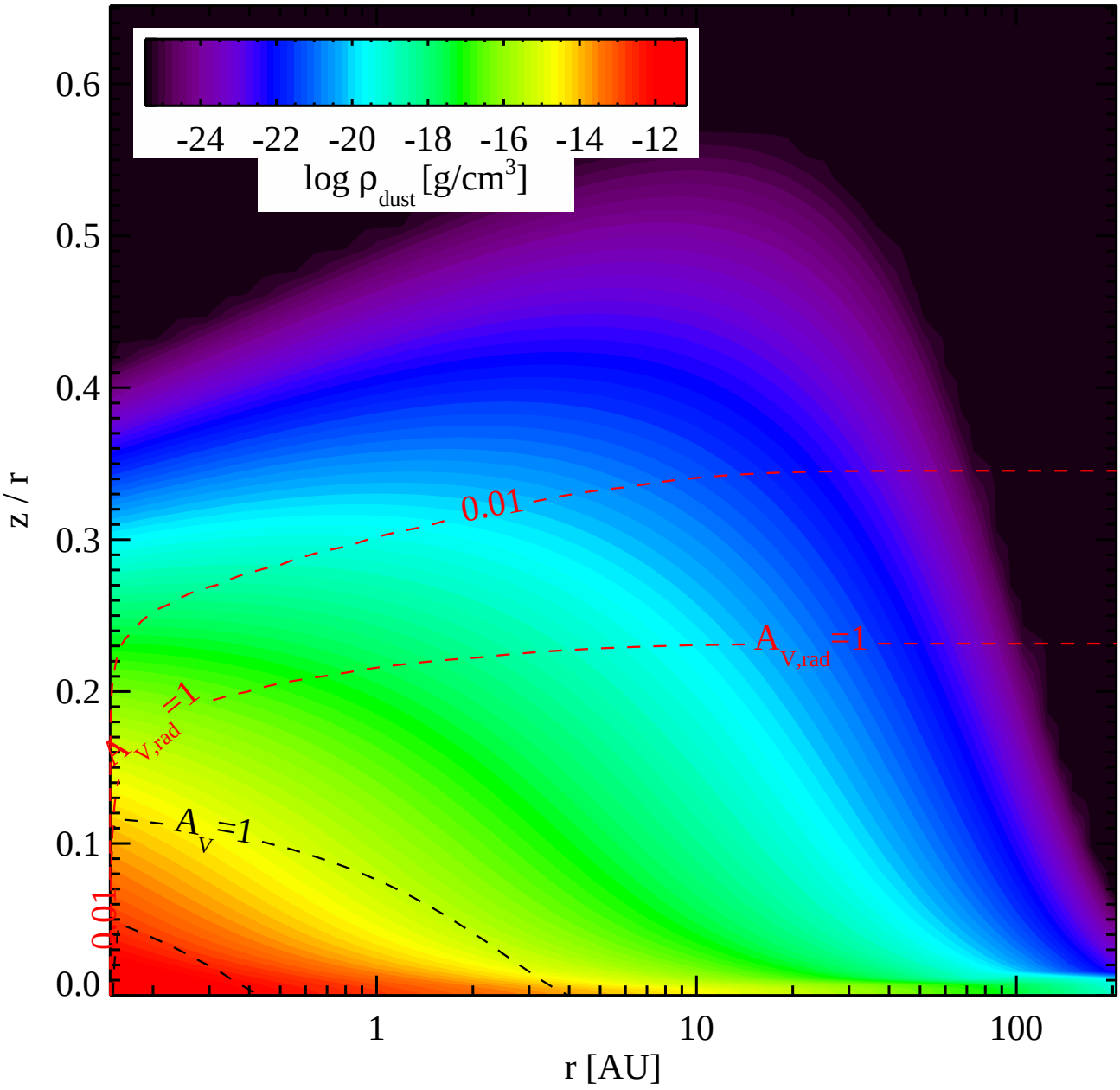
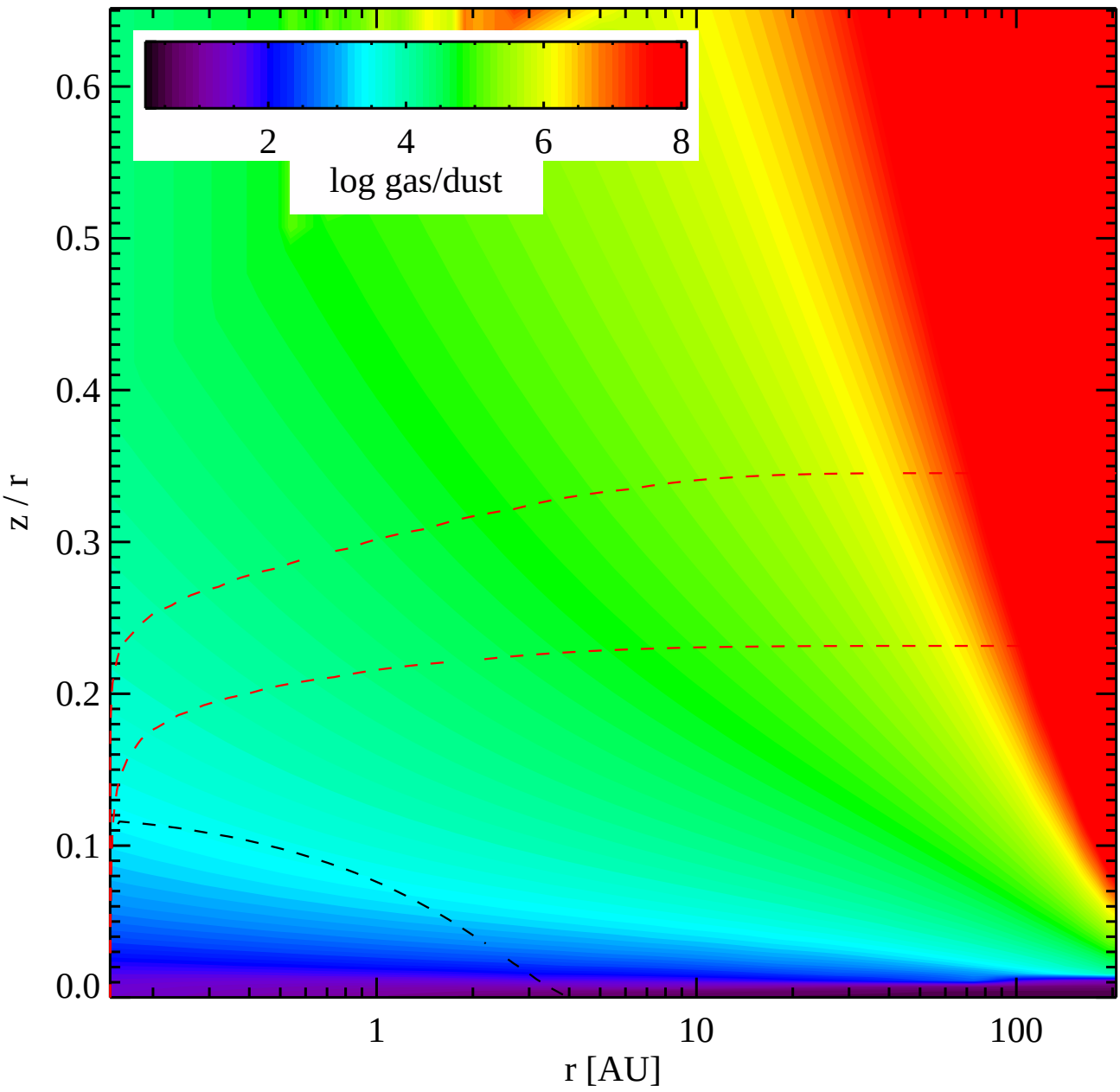
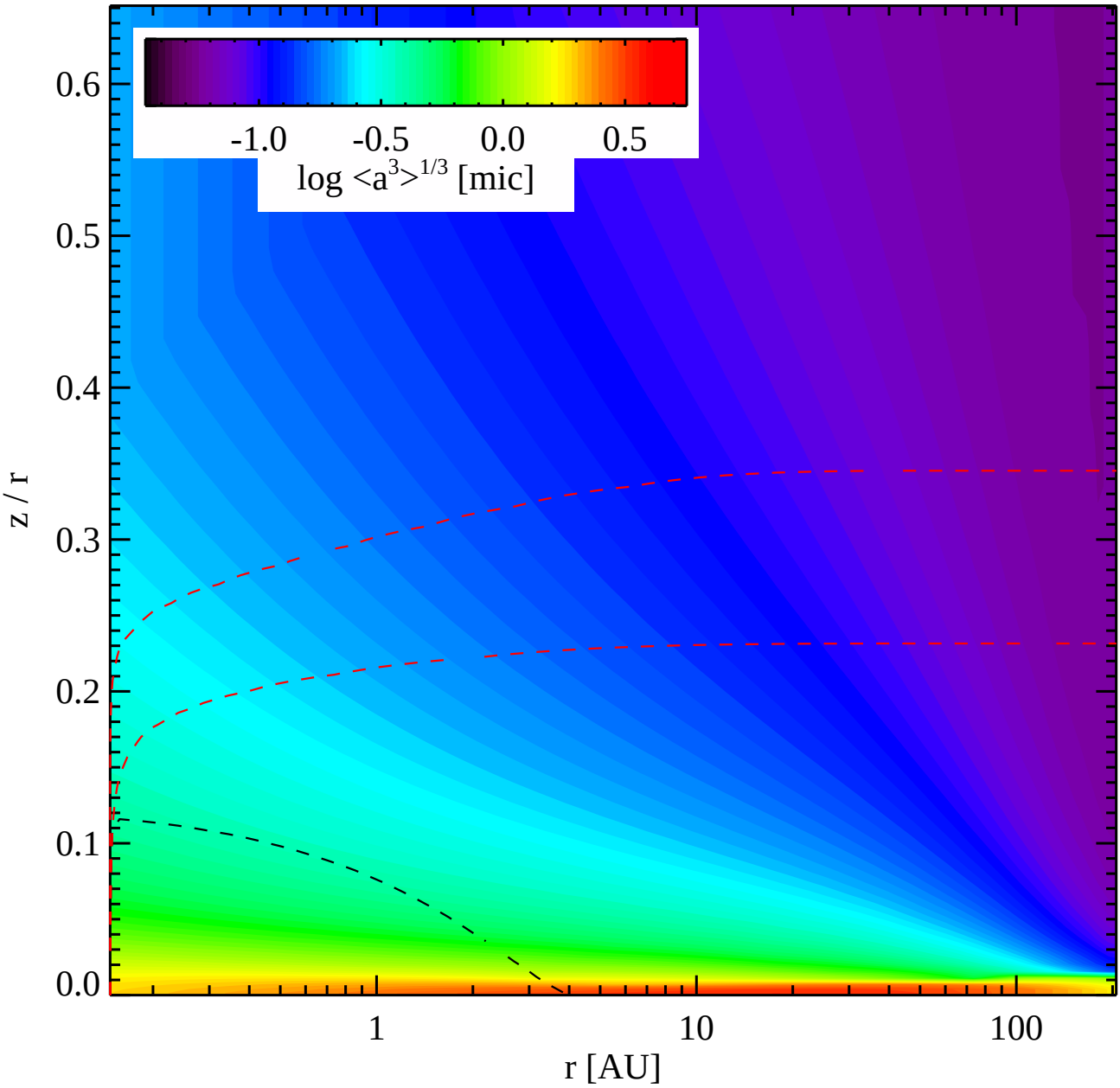
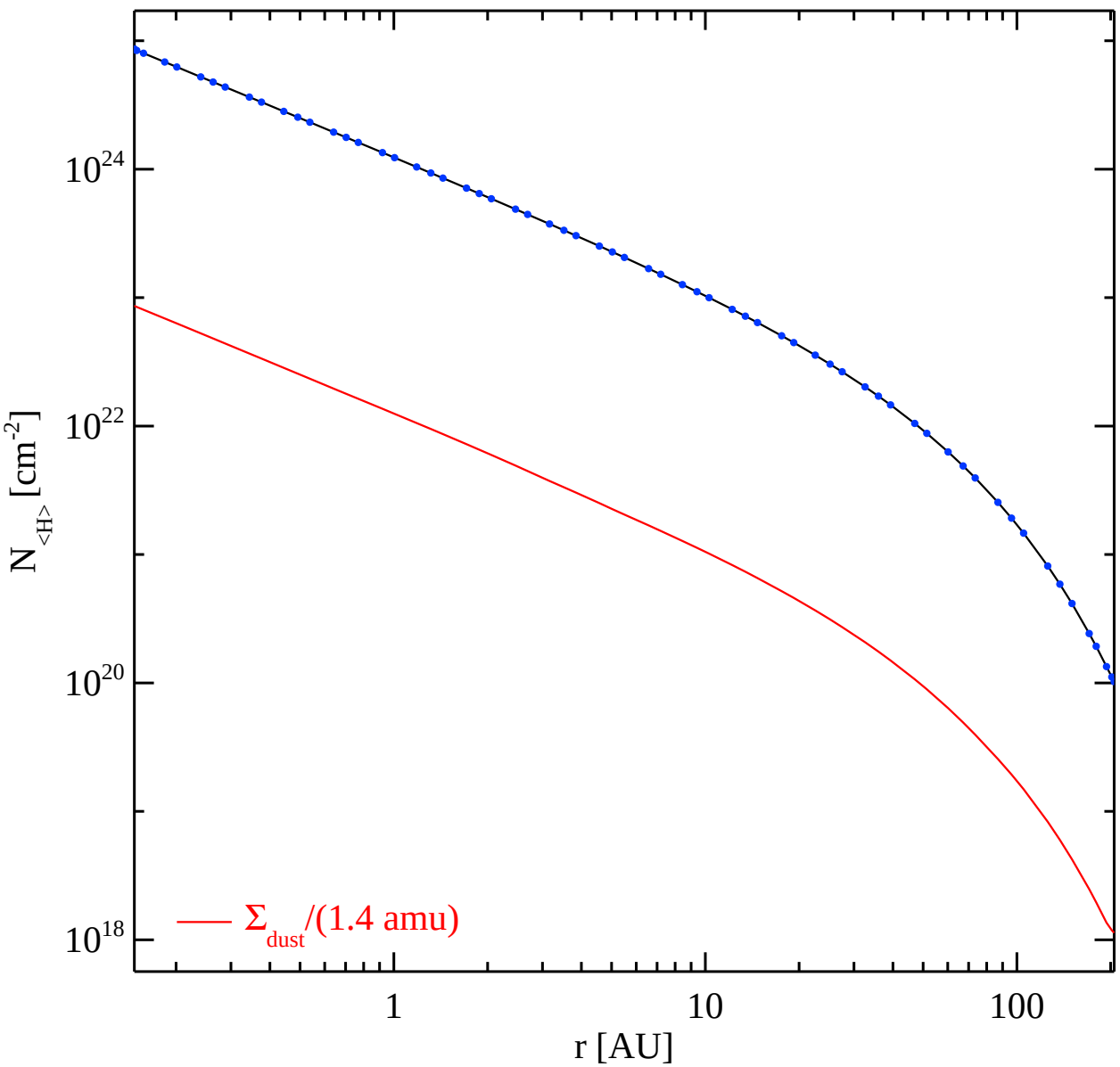
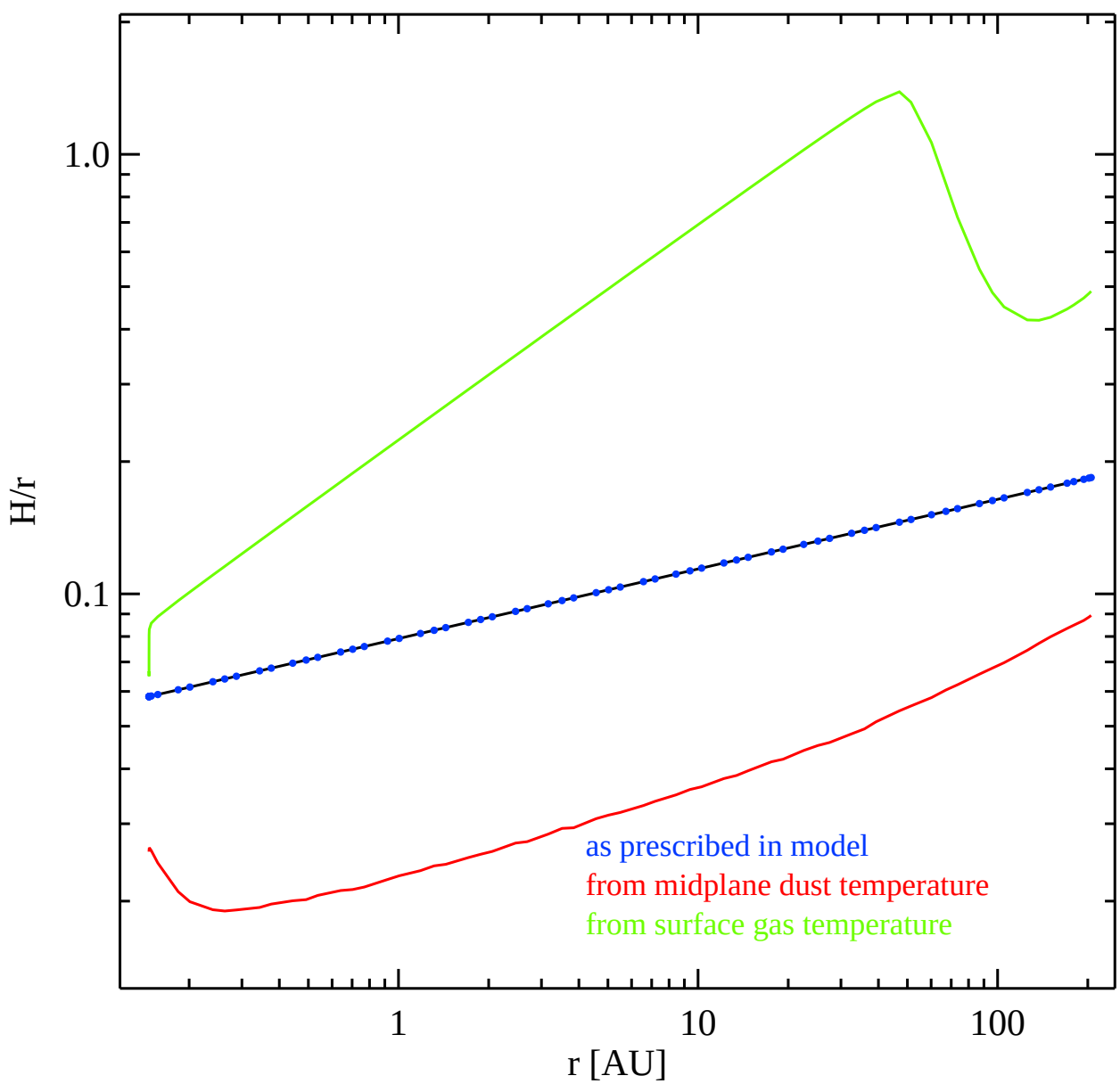

4
6
8
10
12
log n<H> [cm-3]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

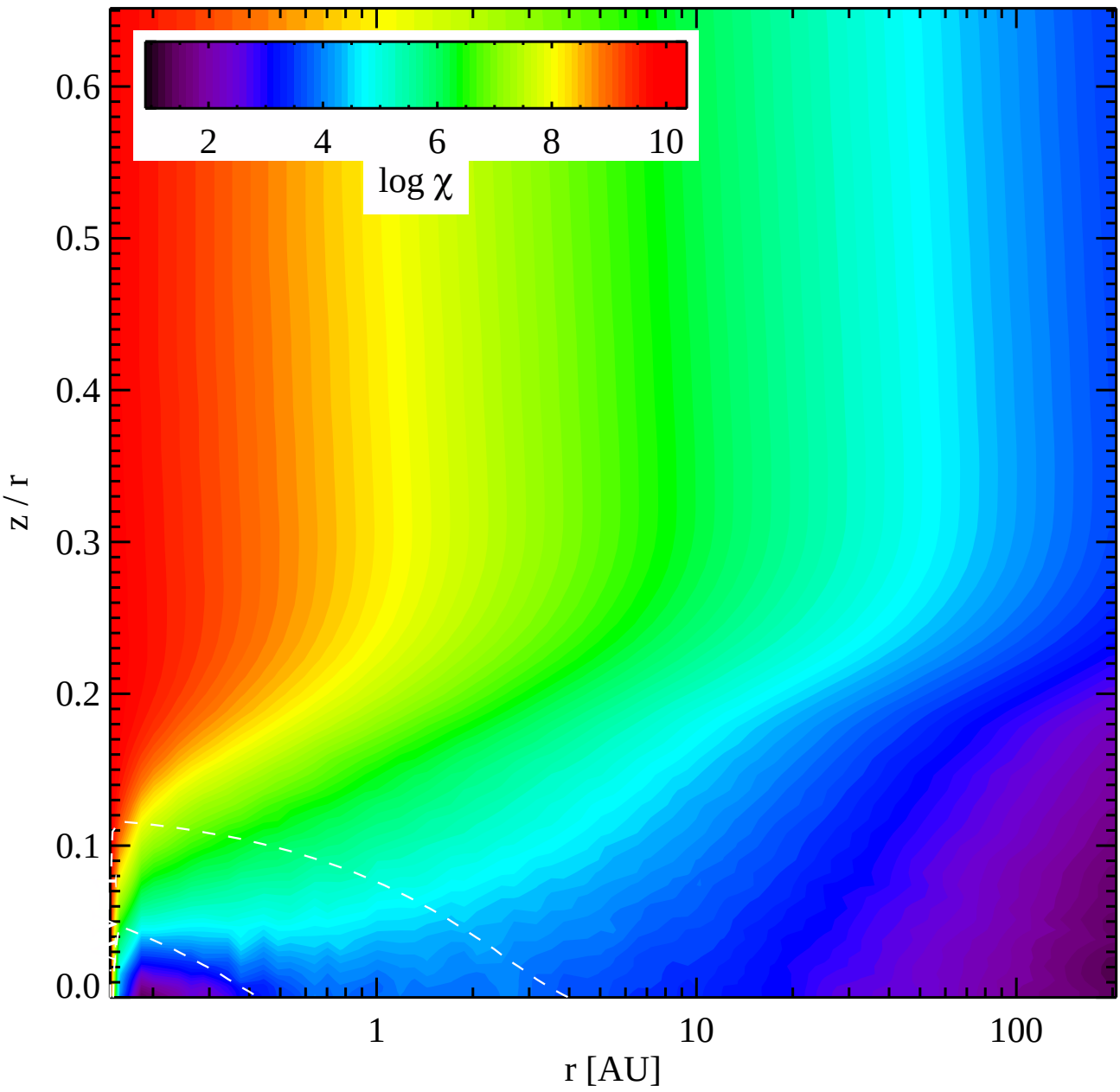

-24 -22 -20 -18 -16 -14 -12
log ρ dust [g/cm3]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.01
AV,rad =1
AV,rad =1
AV =1
0.01
1
10
100
r [AU]

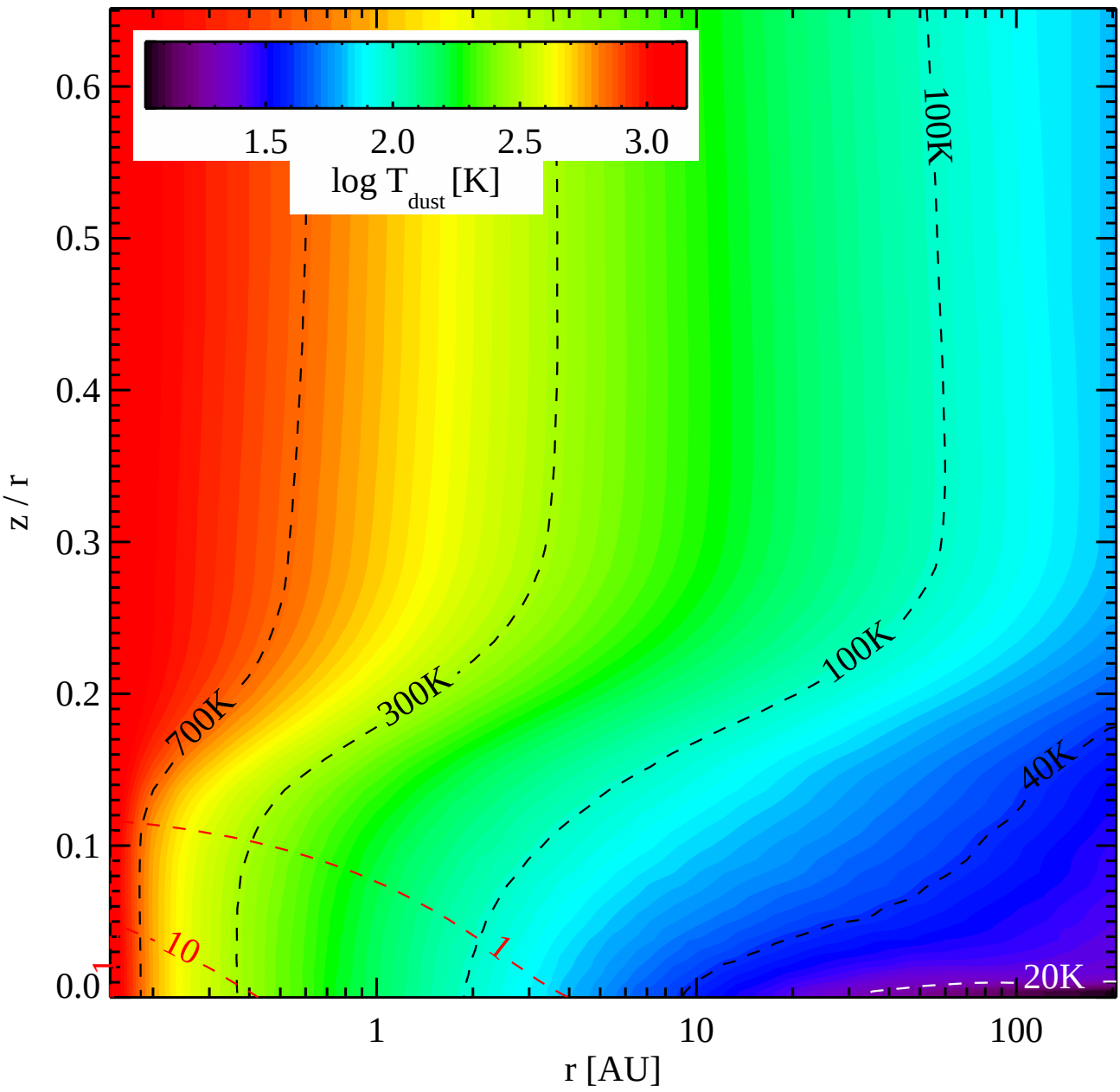

2
4
6
8
log gas/dust
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

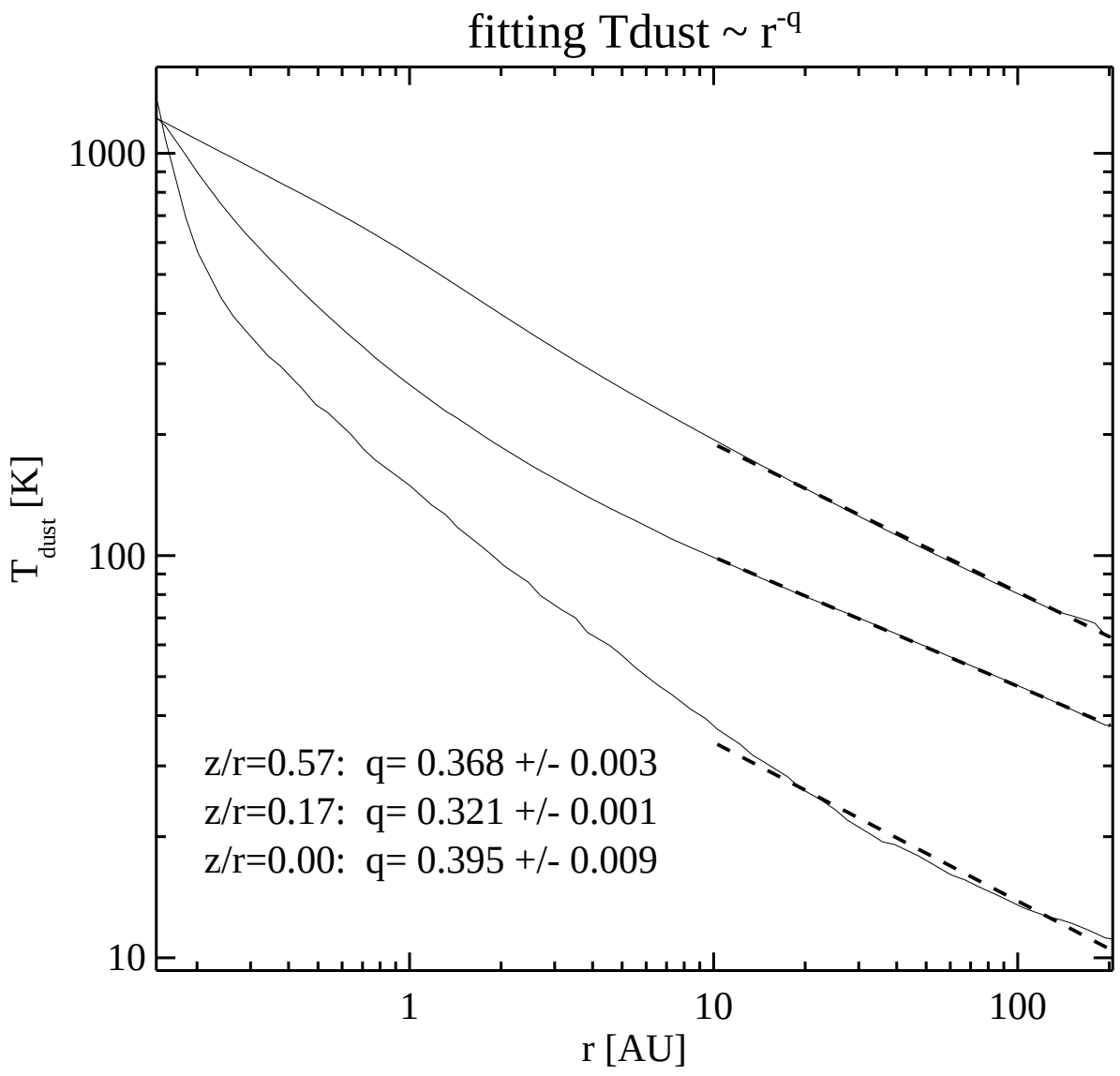

-1.0
-0.5
0.0
0.5
log <a^3>^1/3 [mic]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

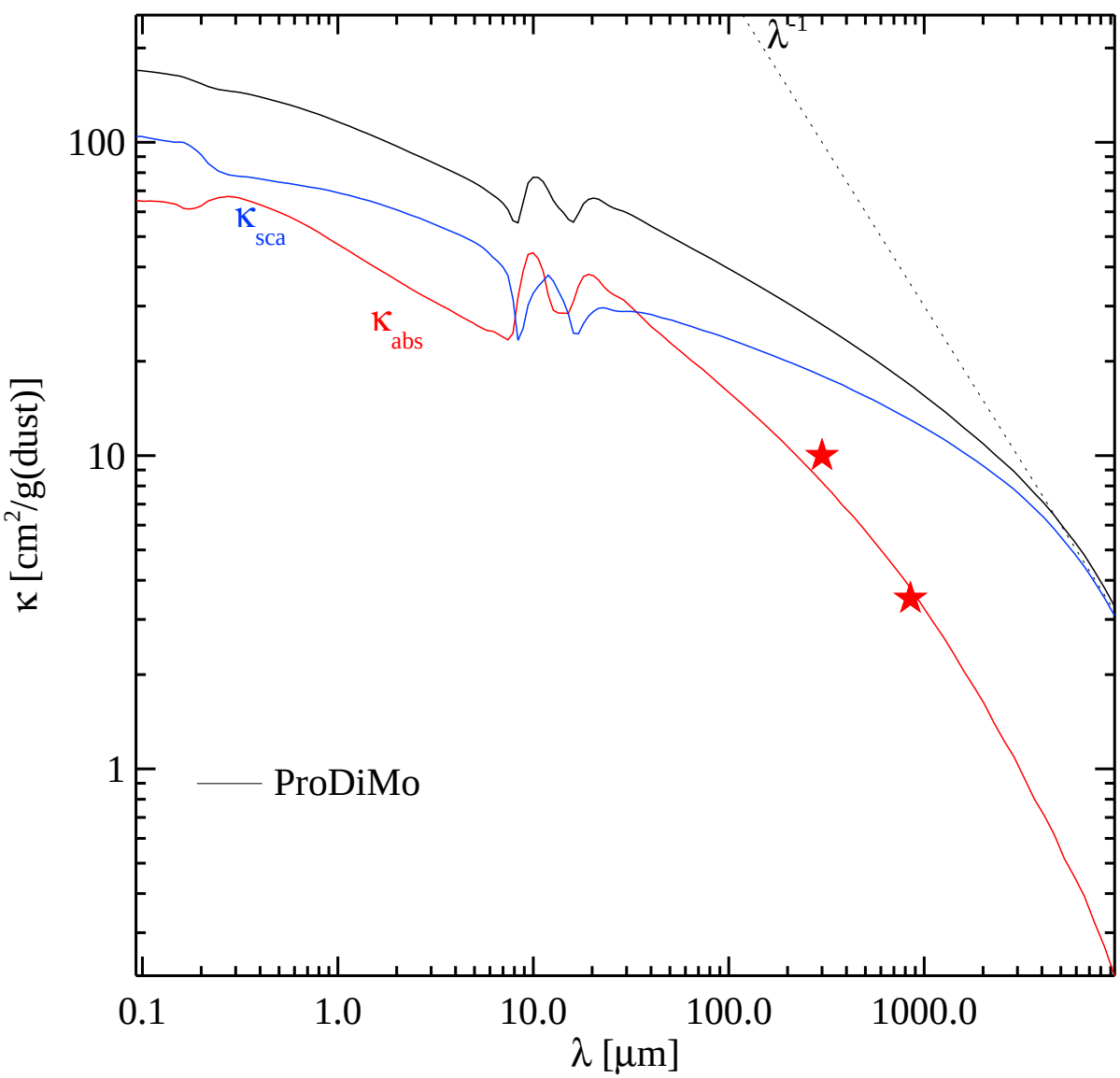

10^{24}
10^{22}
10^{20}
10^{18}
$N_{<H>}$ [cm^{-2}]
1
10
100
r [AU]
Σ_{dust}/(1.4 amu)

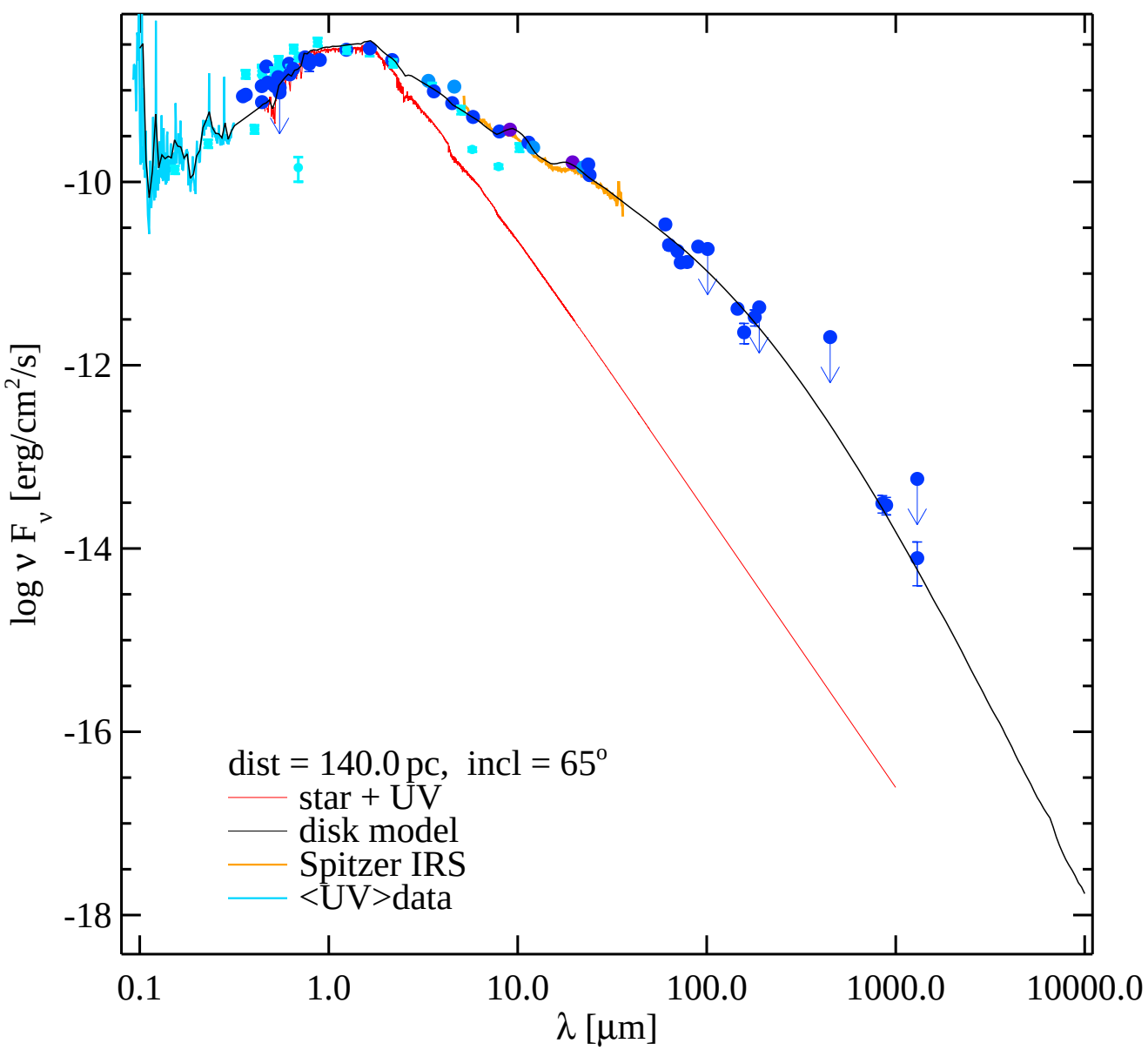

1.0
0.1
H/r
1
10
100
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

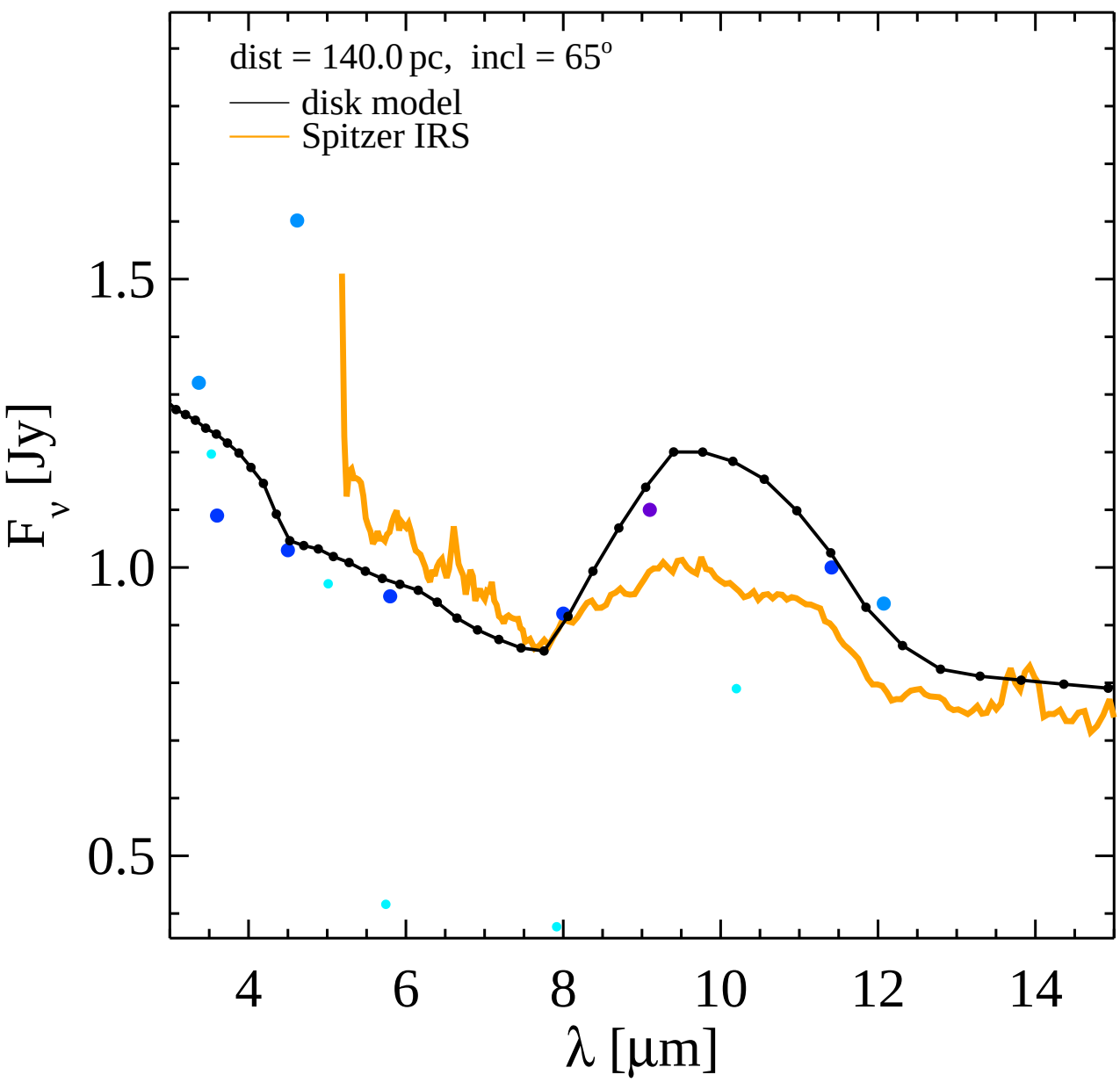

2
4
6
8
10
log χ
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

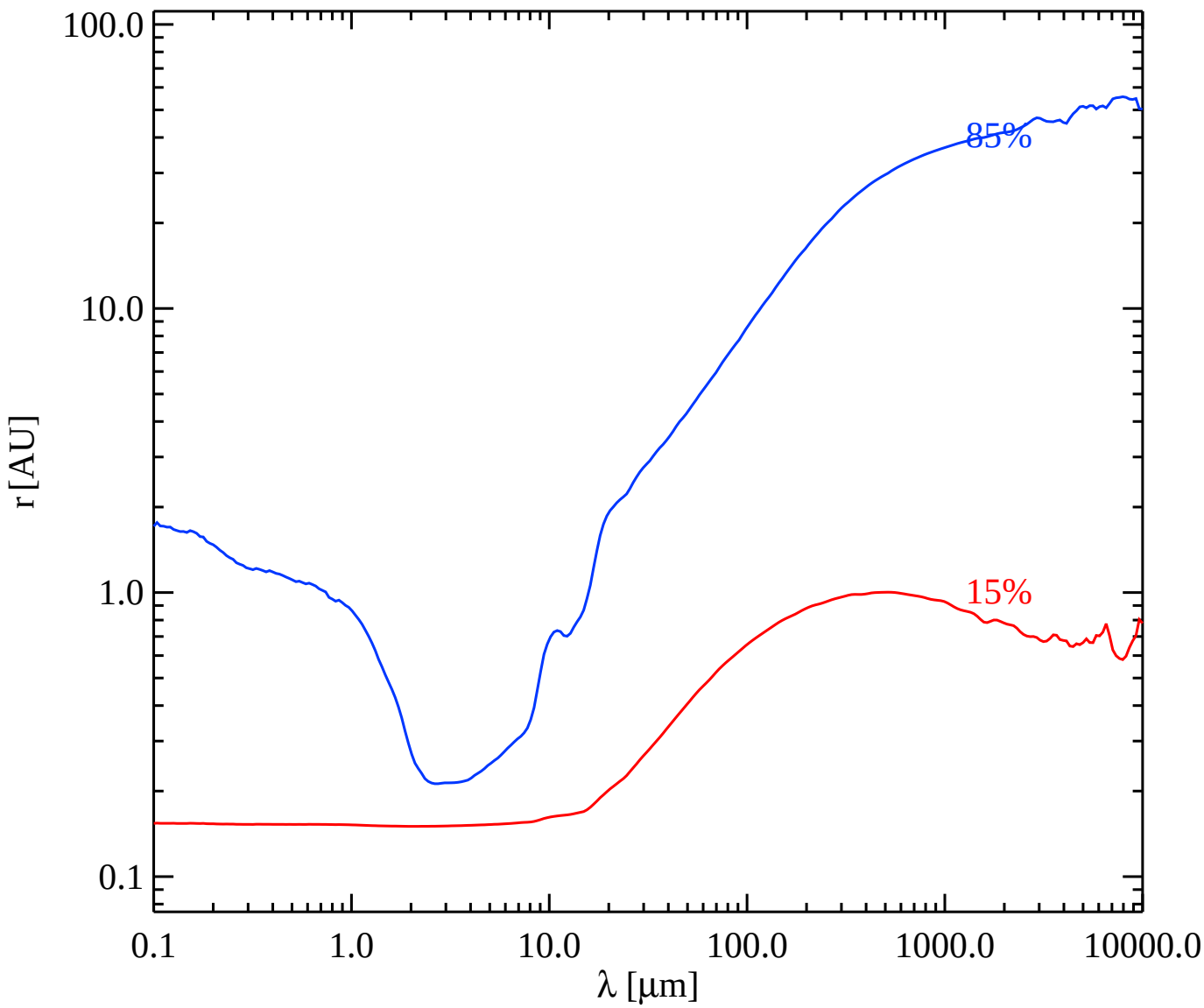

1.5
2.0
2.5
3.0
log T dust [K]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]
700K
300K
100K
100K
40K
20K
10
1

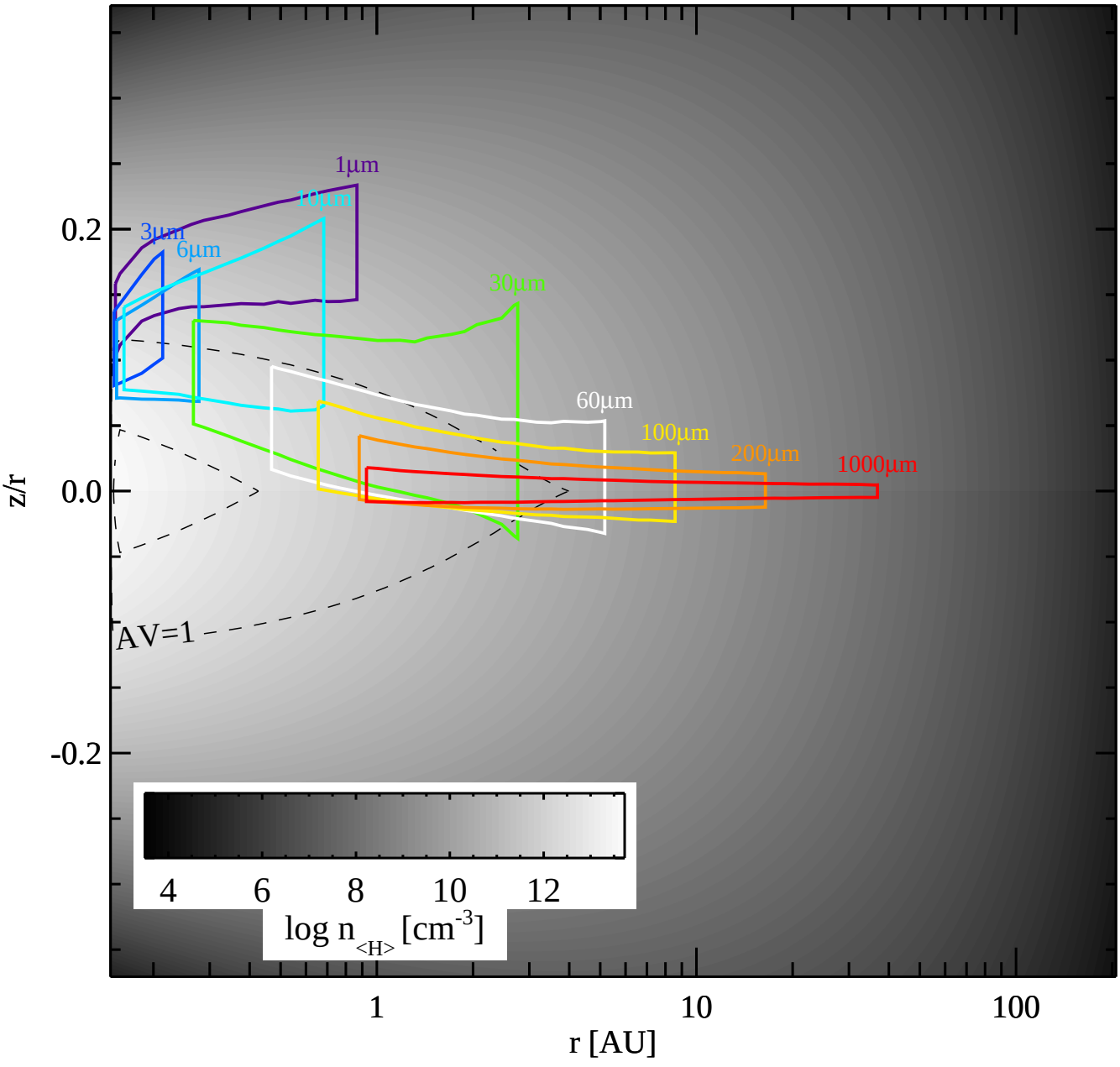

fitting Tdust ~ r^-q
1000
100
10
T_dust [K]
1
10
100
r [AU]
z/r=0.57: q= 0.368 +/- 0.003
z/r=0.17: q= 0.321 +/- 0.001
z/r=0.00: q= 0.395 +/- 0.009

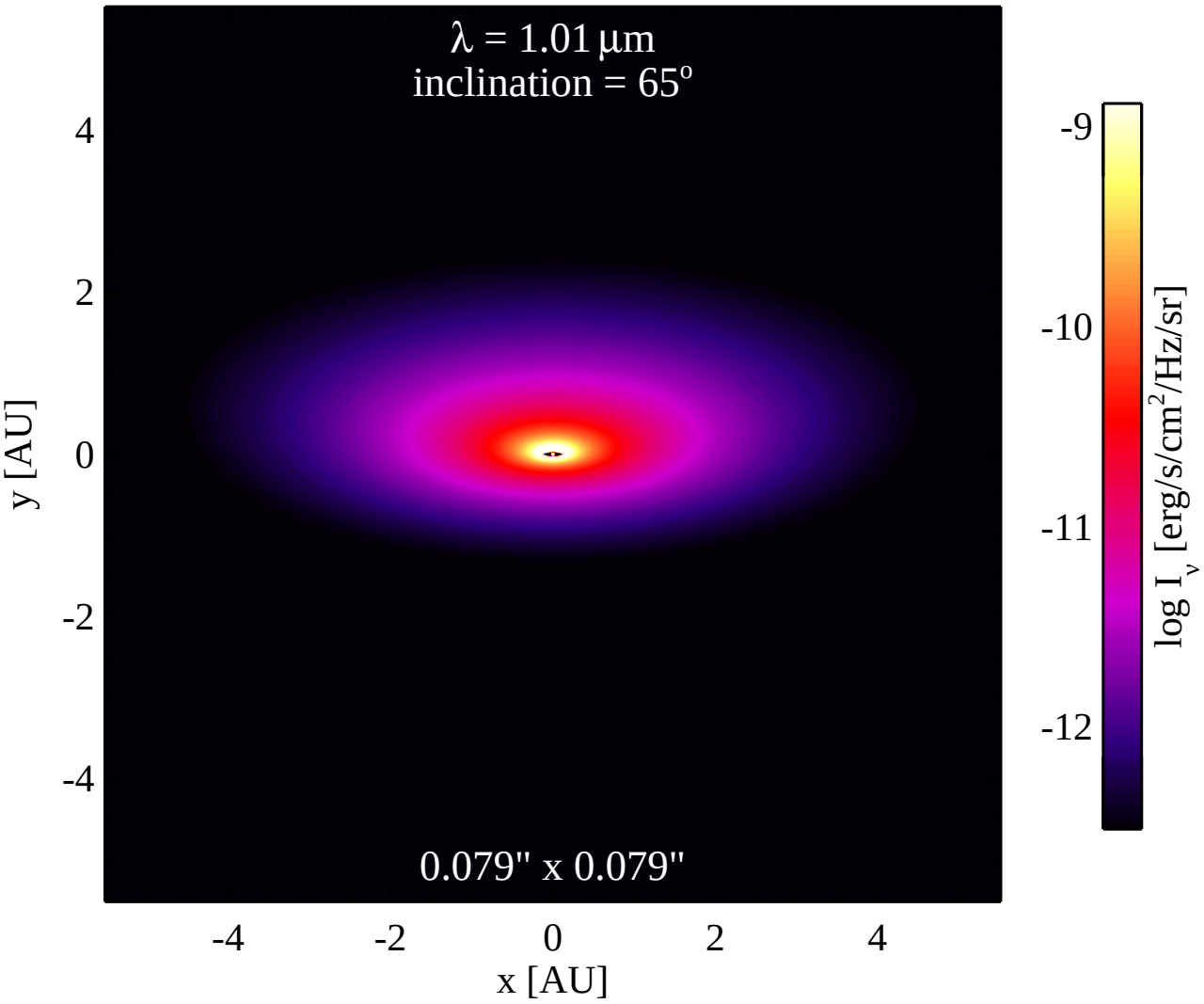

λ^-1
100
10
1
κ [cm²/g(dust)]
κsca
κabs
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

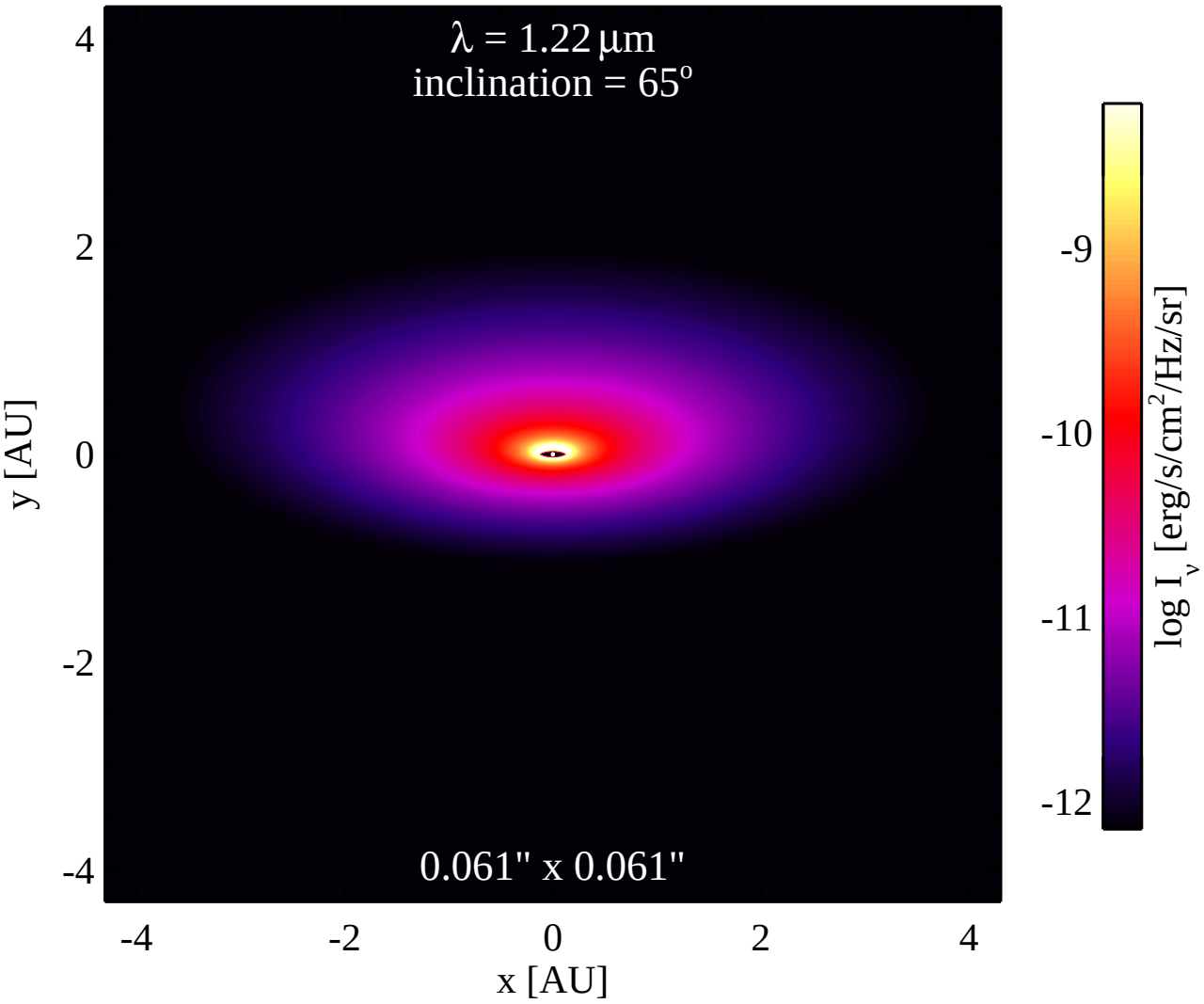

-10
-12
-14
-16
-18
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 140.0 pc, incl = 65°
star + UV
disk model
Spitzer IRS
<UV>data

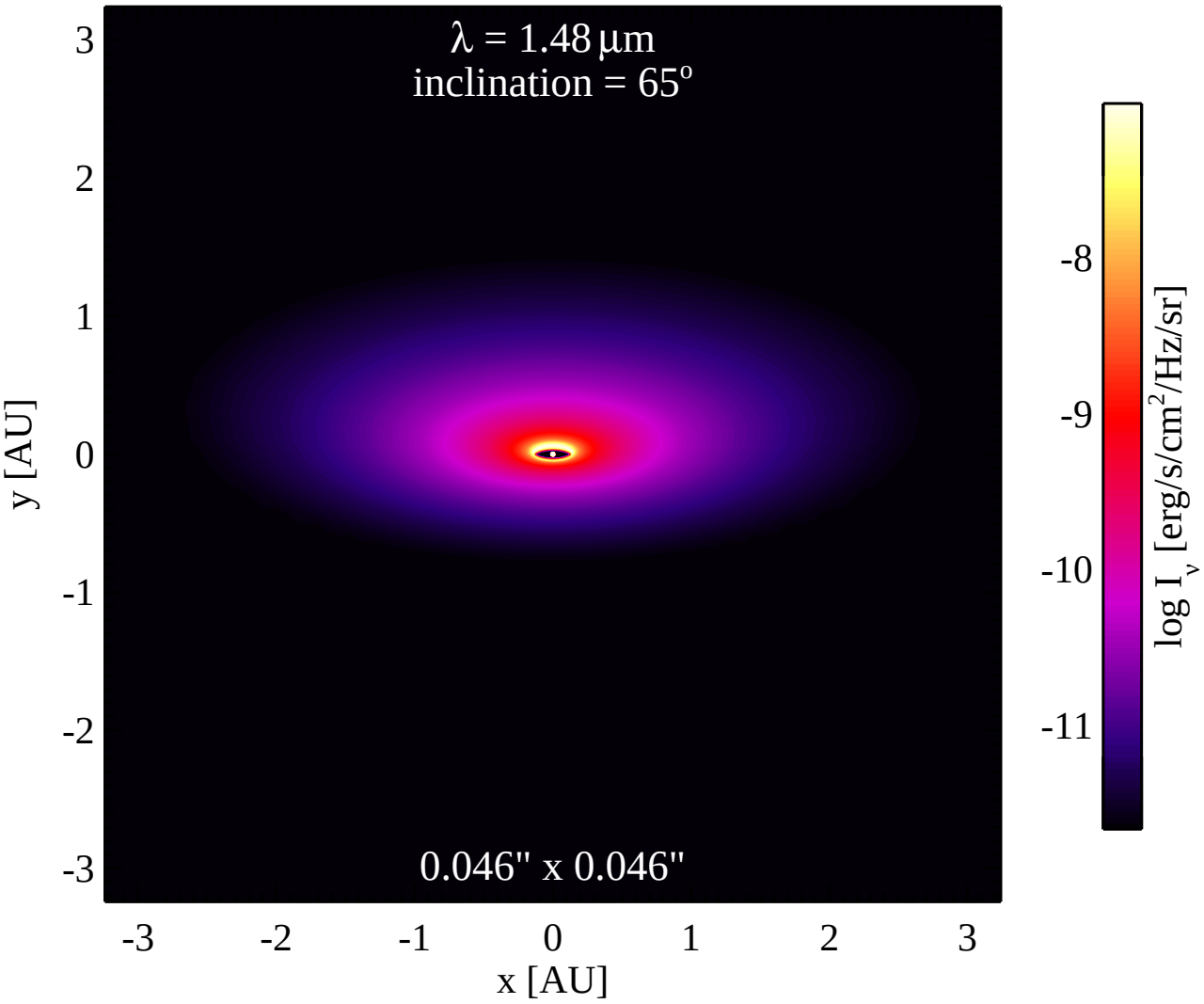

dist = 140.0 pc, incl = 65°
disk model
Spitzer IRS
1.5
1.0
0.5
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

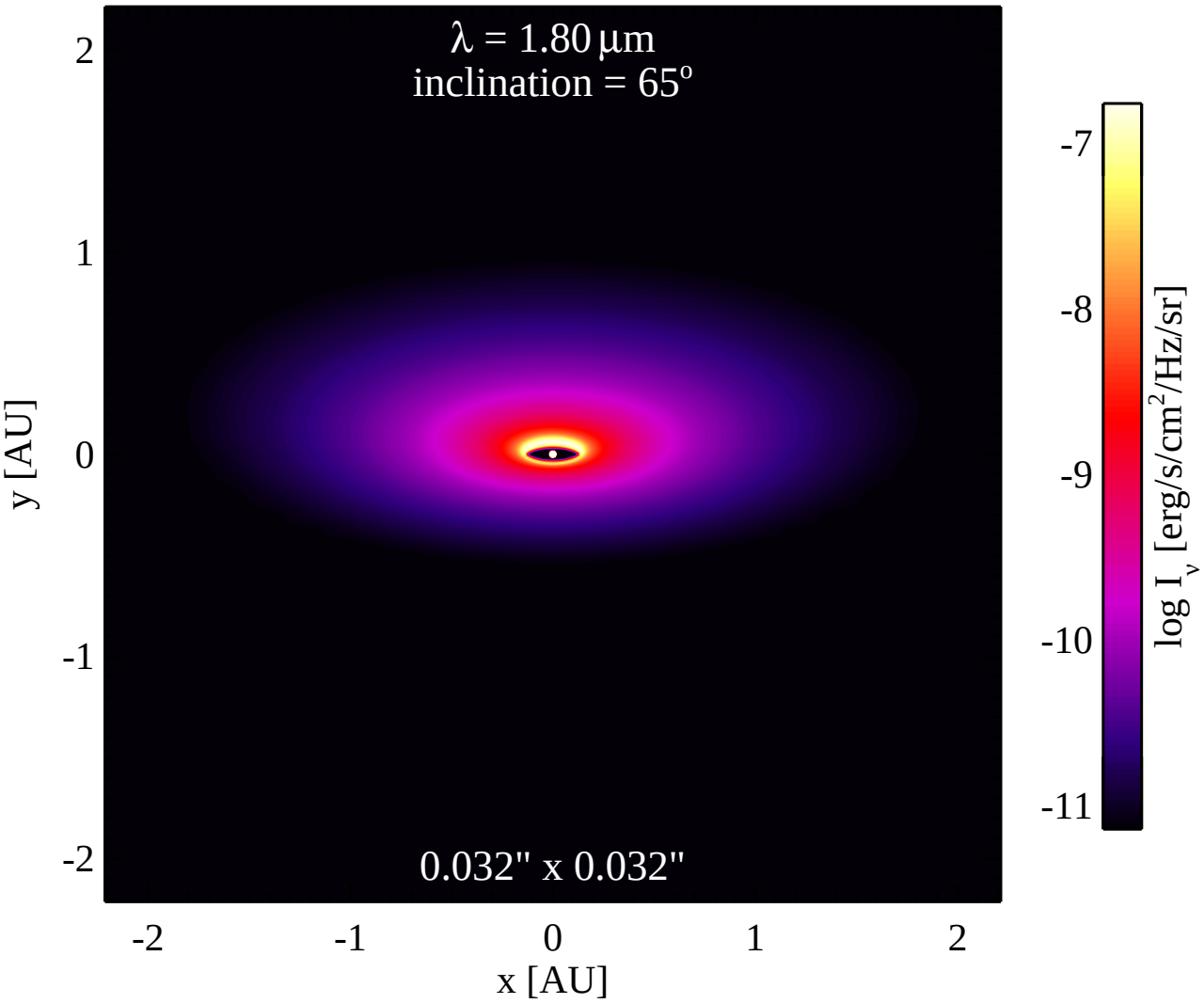

100.0
10.0
1.0
0.1
r [AU]
85%
15%
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

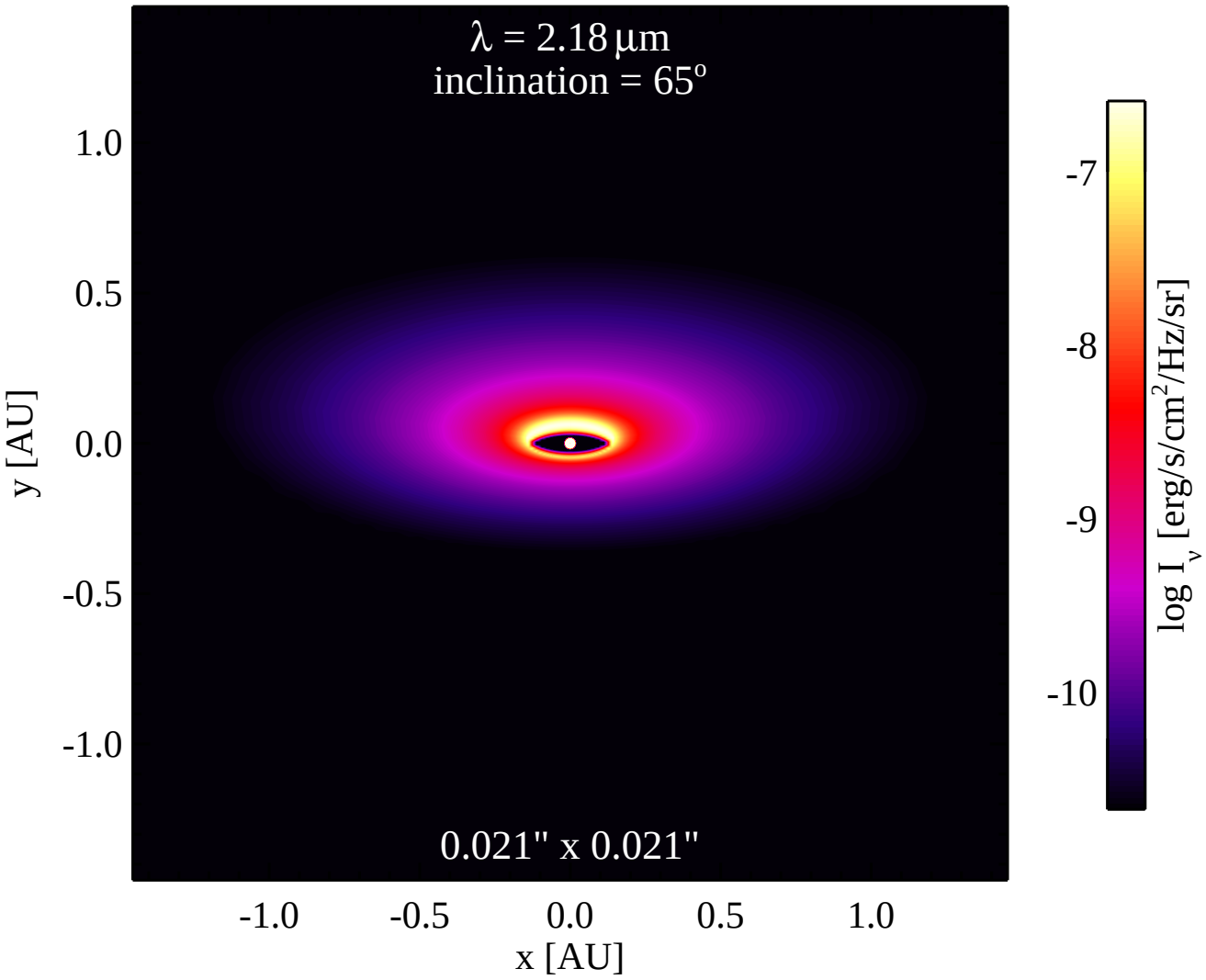

1µm
10µm
3µm
6µm
30µm
60µm
100µm
200µm
1000µm
AV=1
0.2
0.0
-0.2
z/r
4
6
8
10
12
log n<H> [cm-3]
1
10
100
r [AU]

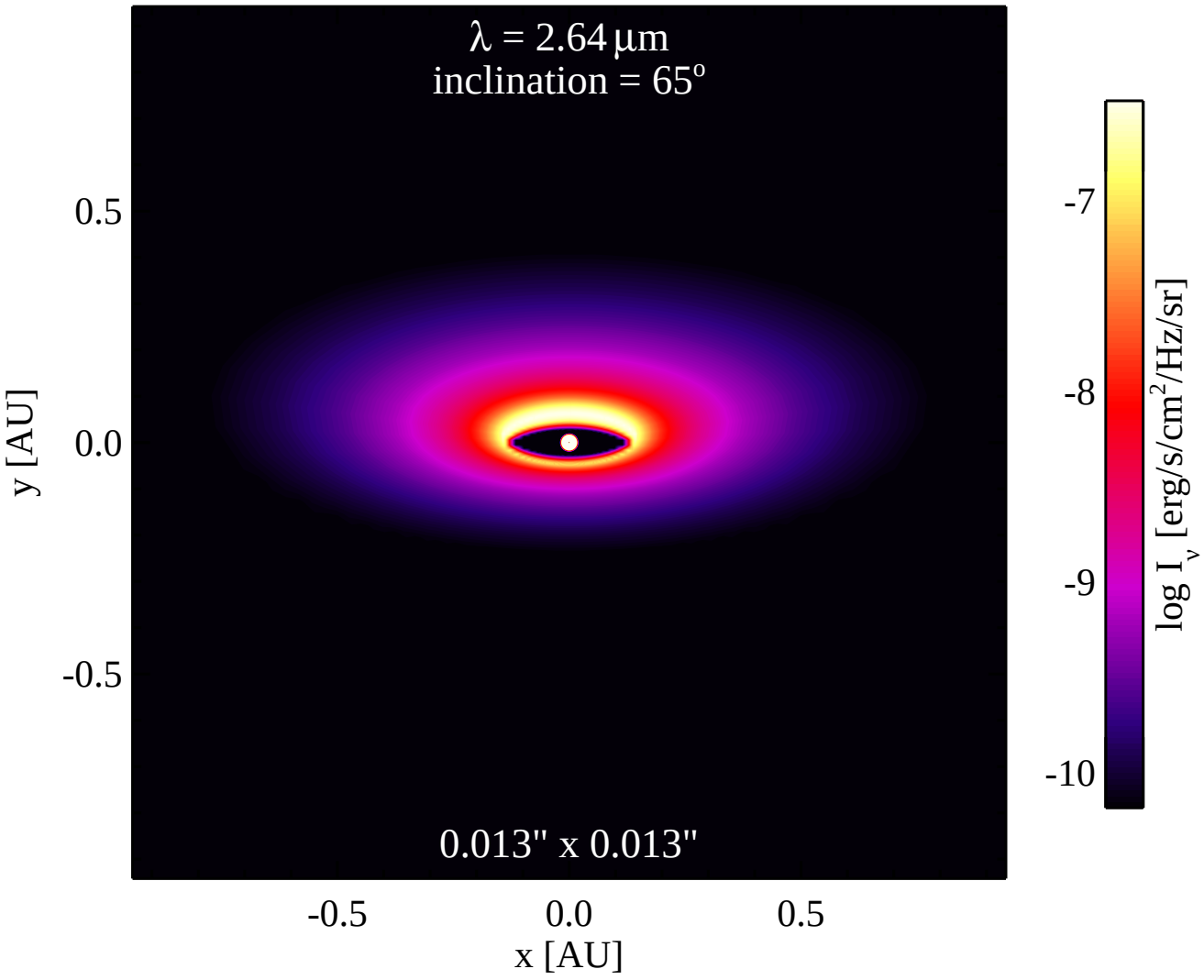

λ = 1.01 μm
inclination = 65°
0.079" x 0.079"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-9
-10
-11
-12
log I_ν [erg/s/cm²/Hz/sr]

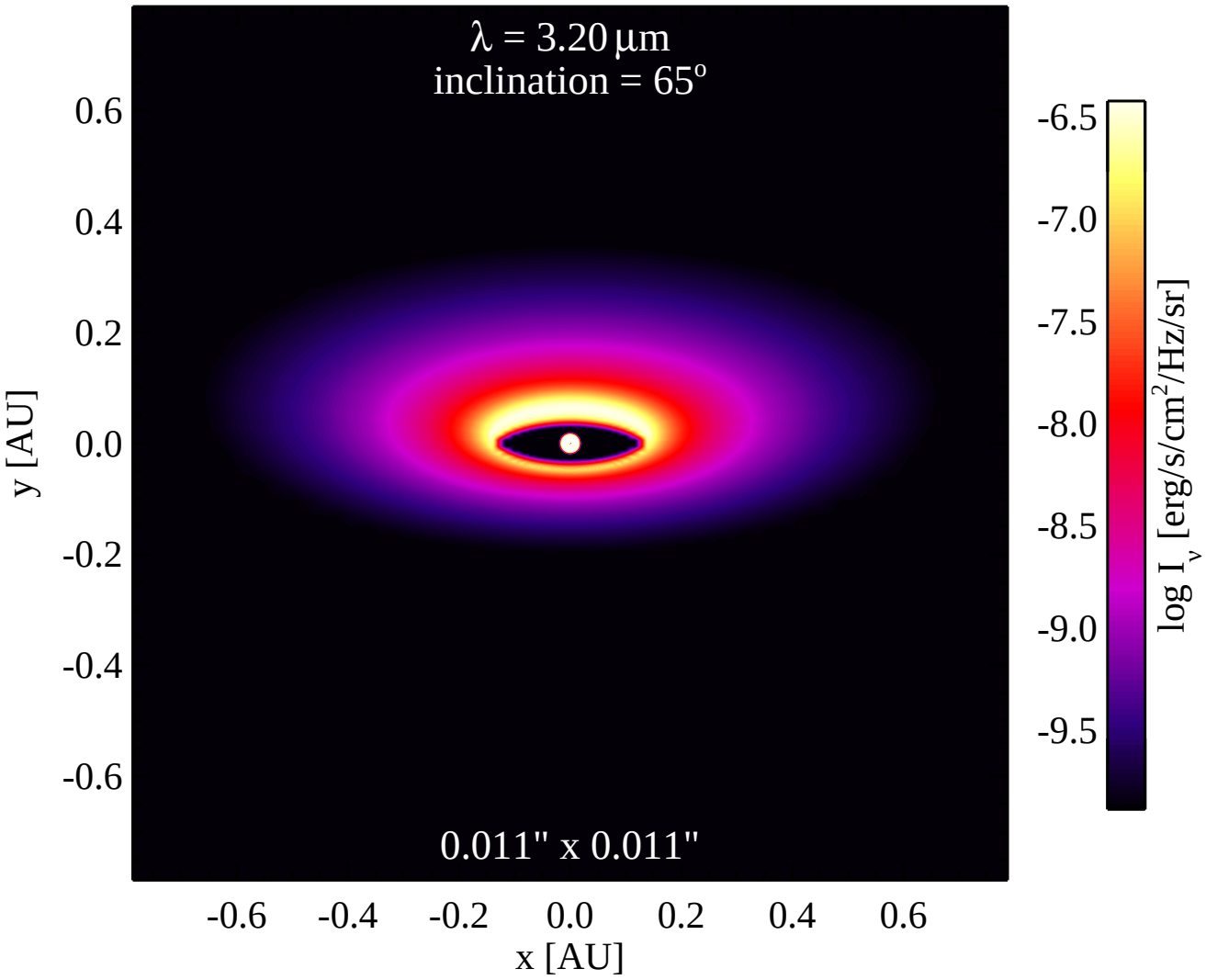

λ = 1.22 μm
inclination = 65°
0.061" x 0.061"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-9
-10
-11
-12
log I_ν [erg/s/cm²/Hz/sr]

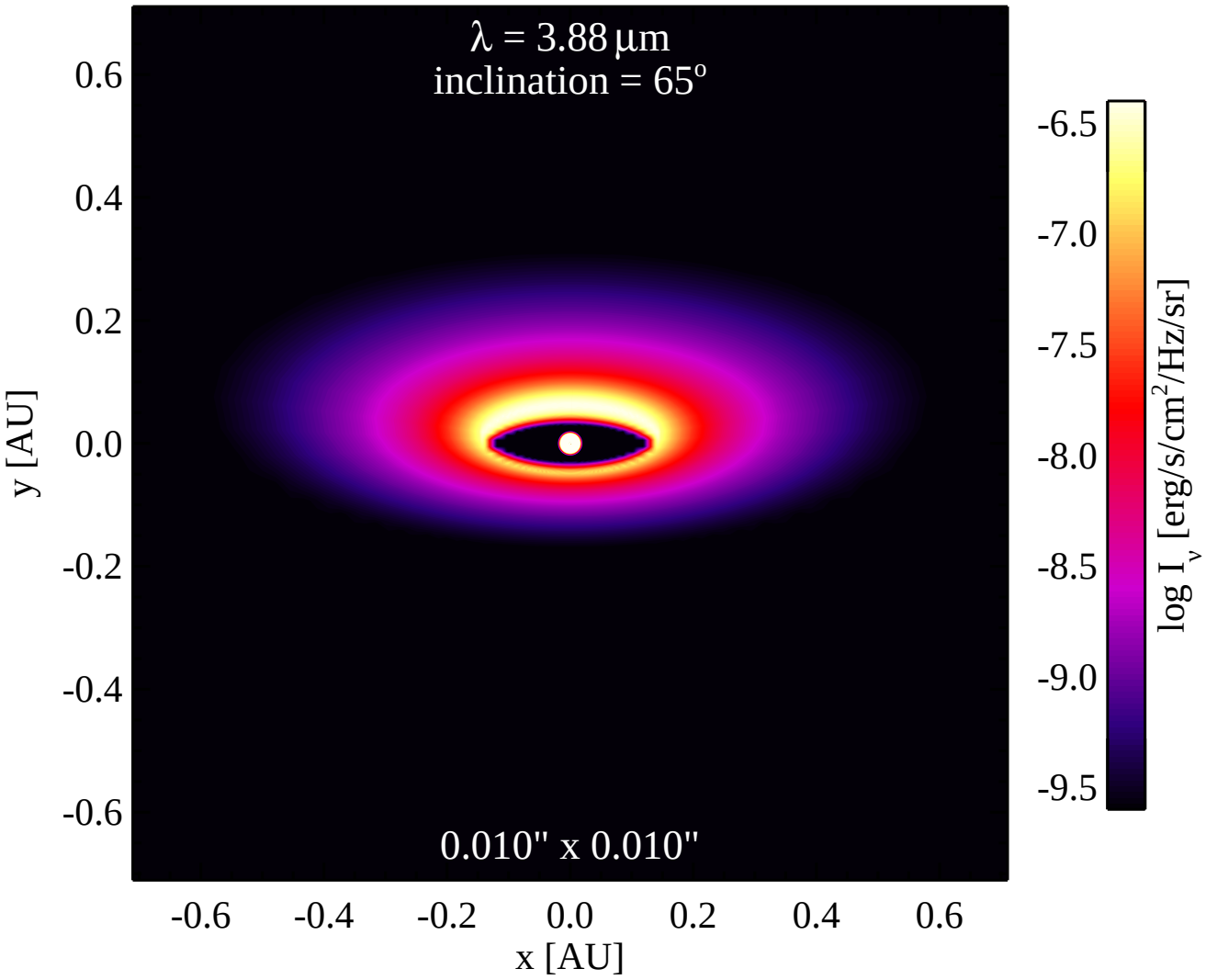

λ = 1.48 μm
inclination = 65°
0.046" x 0.046"
3
2
1
0
-1
-2
-3
y [AU]
-3
-2
-1
0
1
2
3
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

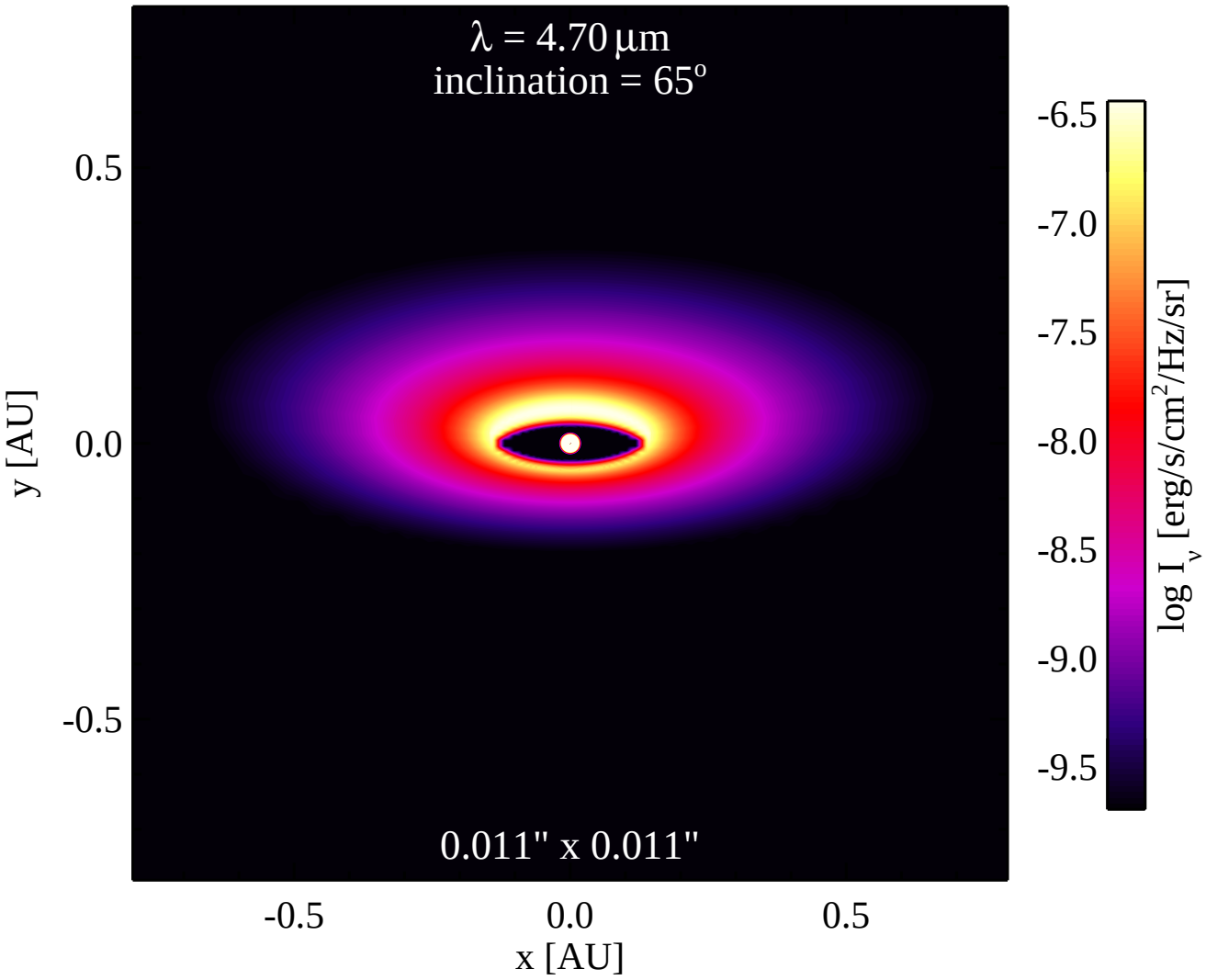

λ = 1.80 μm
inclination = 65°
0.032" x 0.032"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
log I_ν [erg/s/cm²/Hz/sr]
-7
-8
-9
-10
-11

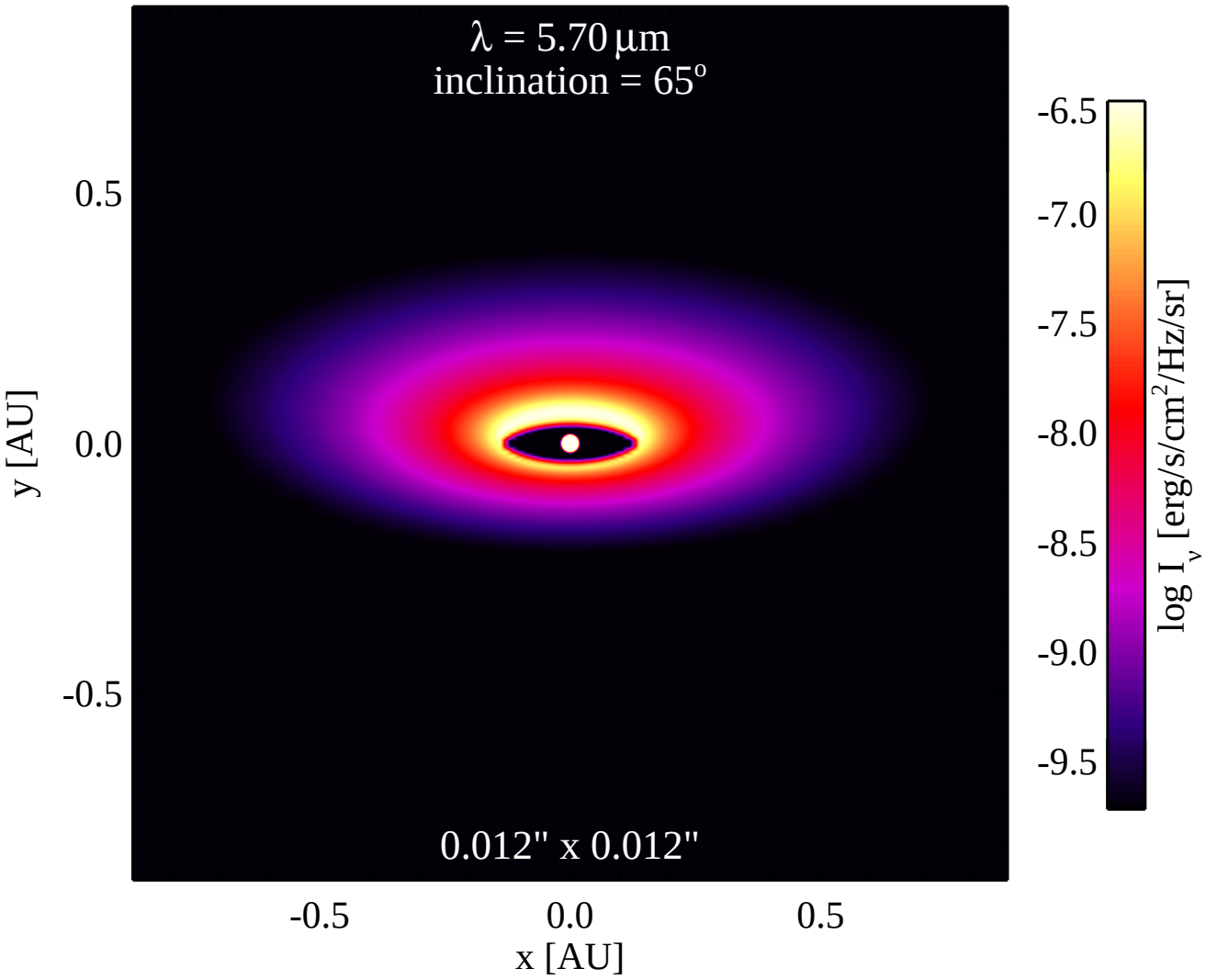

λ = 2.18 μm
inclination = 65°
0.021" x 0.021"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

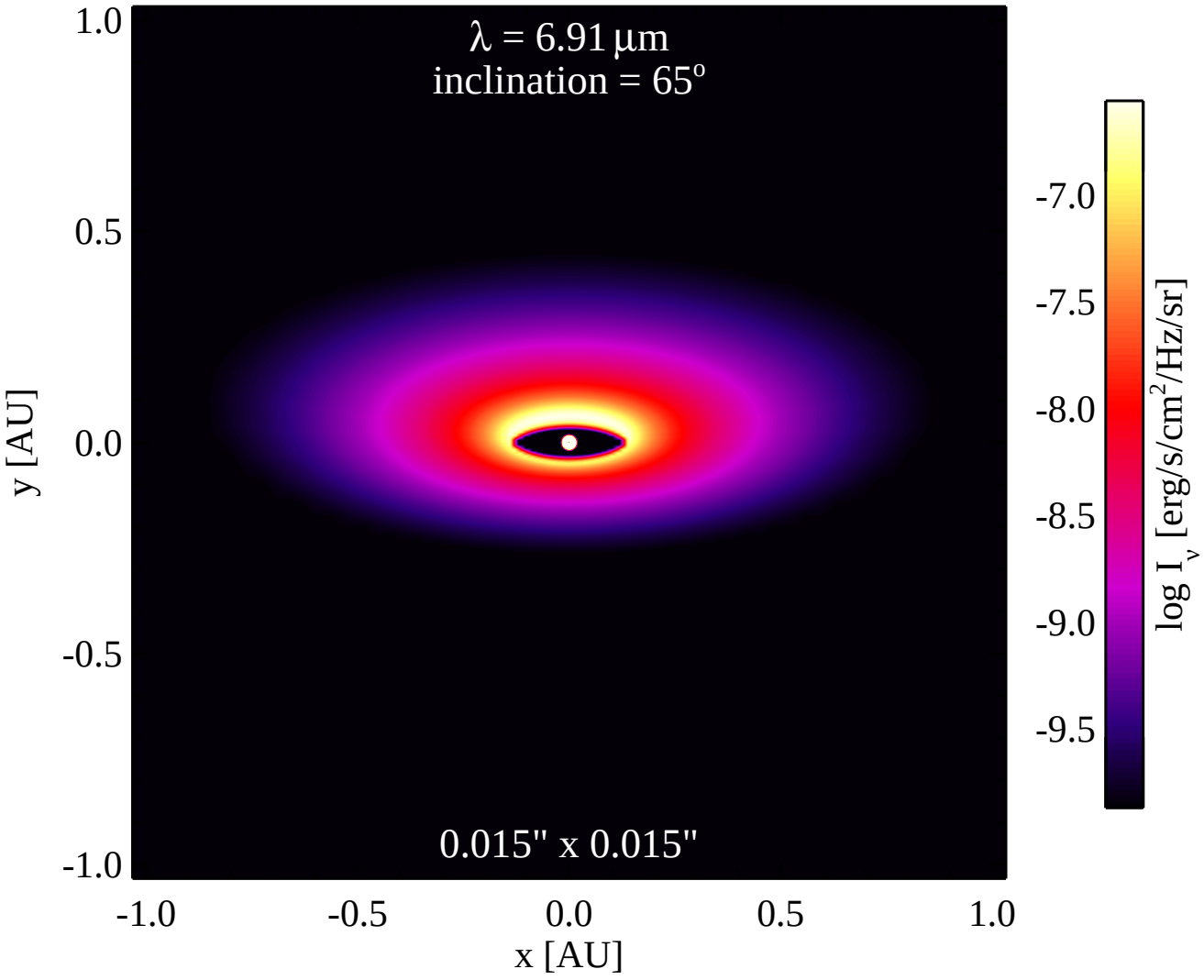

λ = 2.64 μm
inclination = 65°
0.013" x 0.013"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

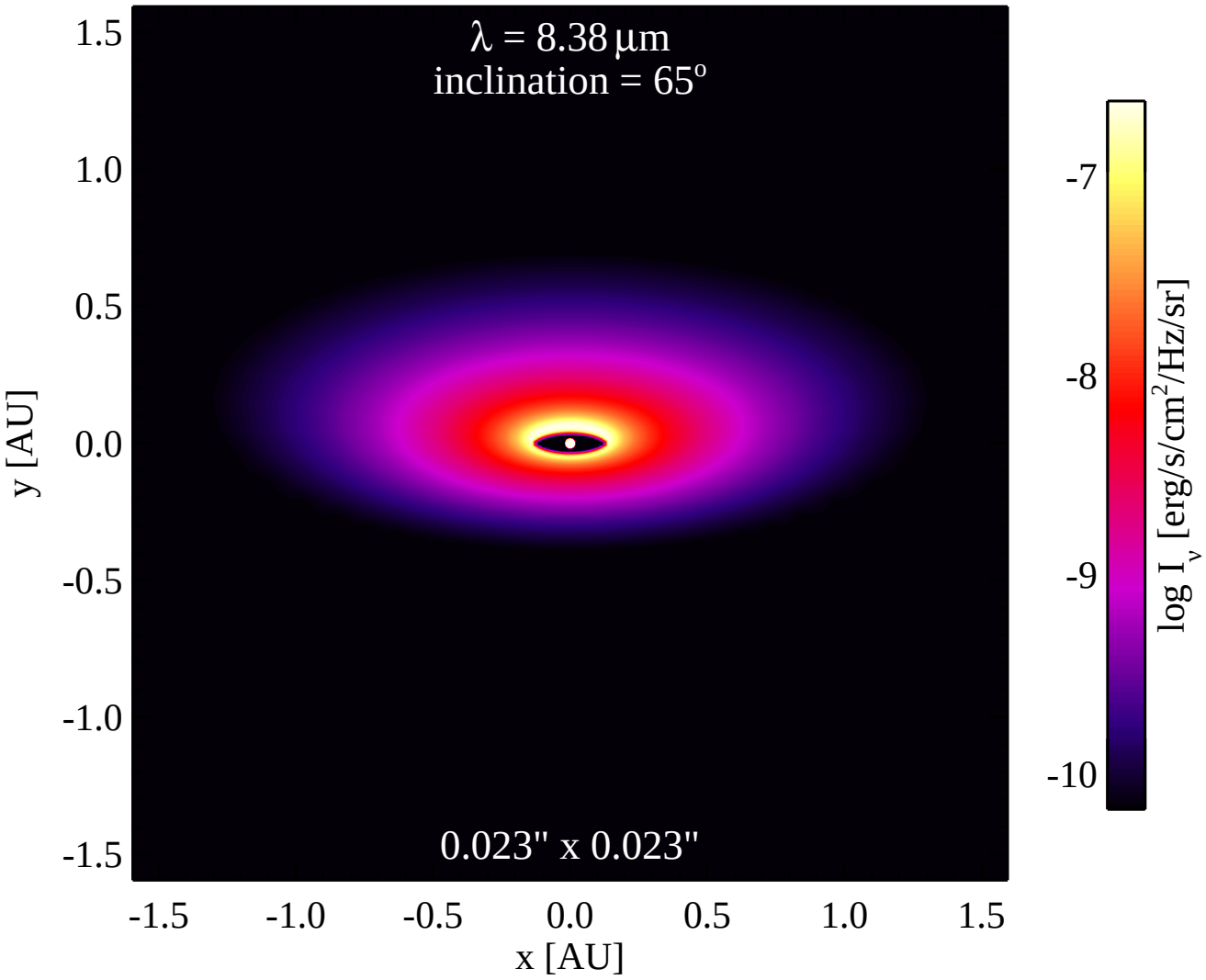

λ = 3.20 μm
inclination = 65°
0.011" x 0.011"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-6.5
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

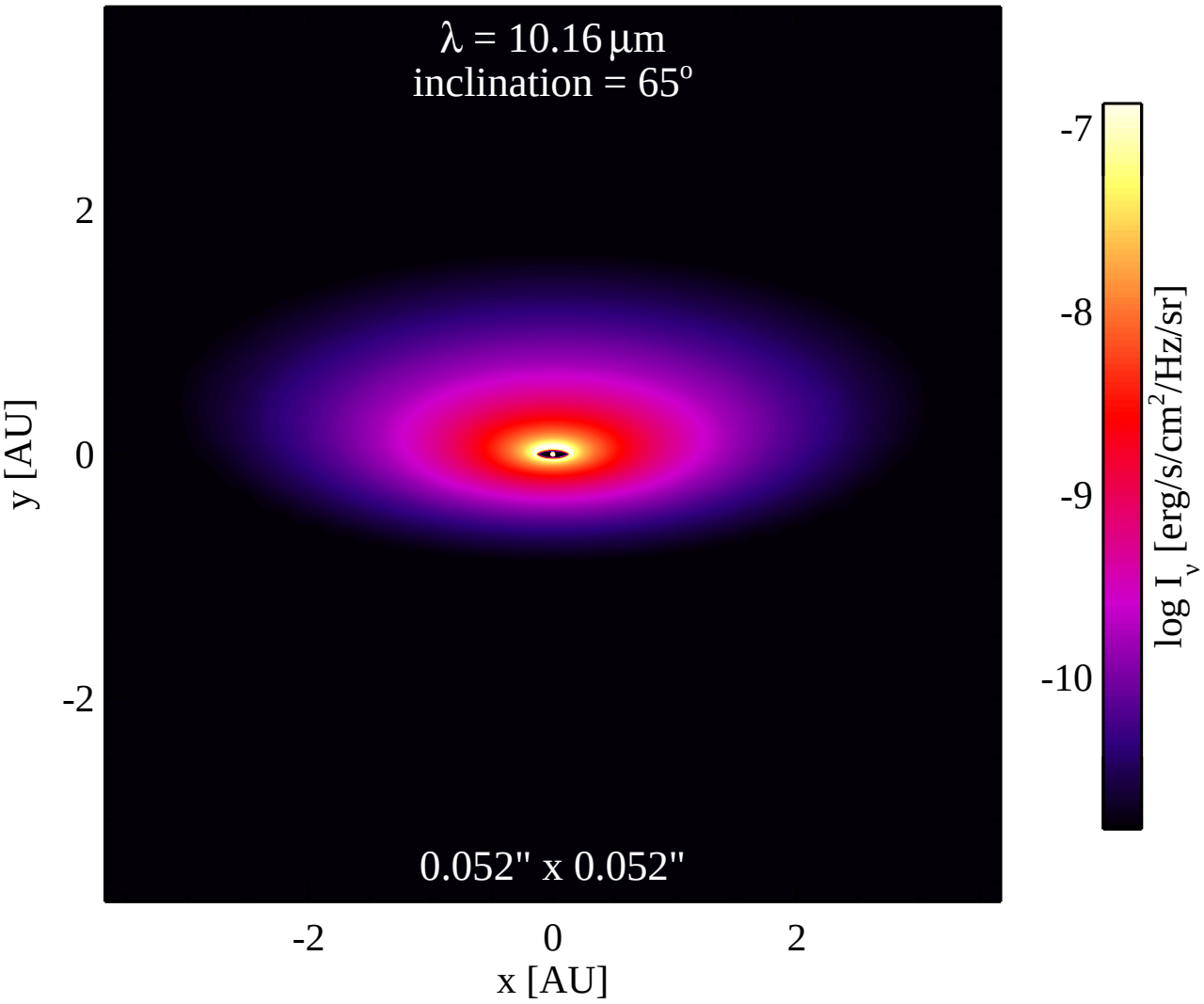

λ = 3.88 μm
inclination = 65°
0.010" x 0.010"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-6.5
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

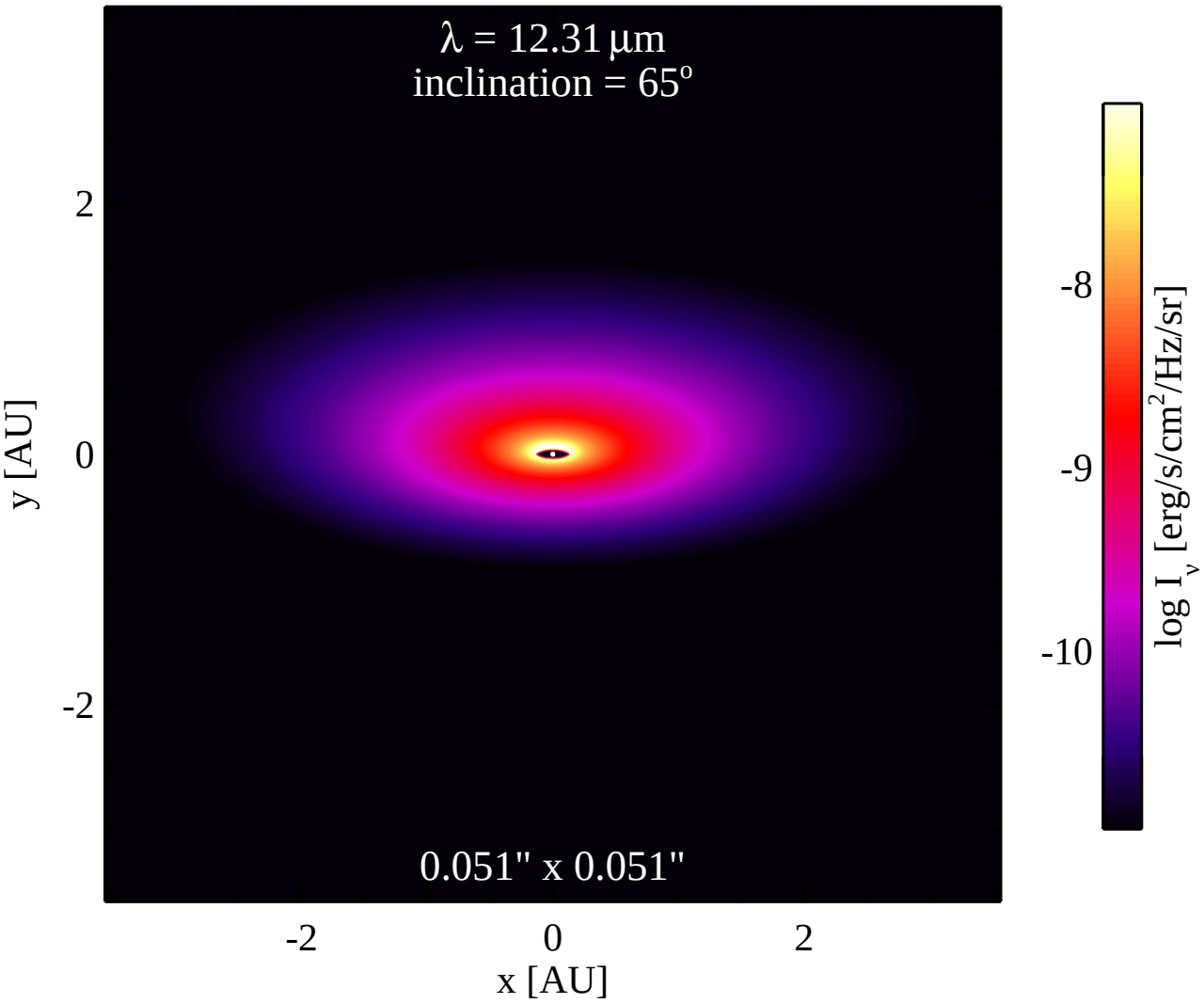

λ = 4.70 μm
inclination = 65°
0.011" x 0.011"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-6.5
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

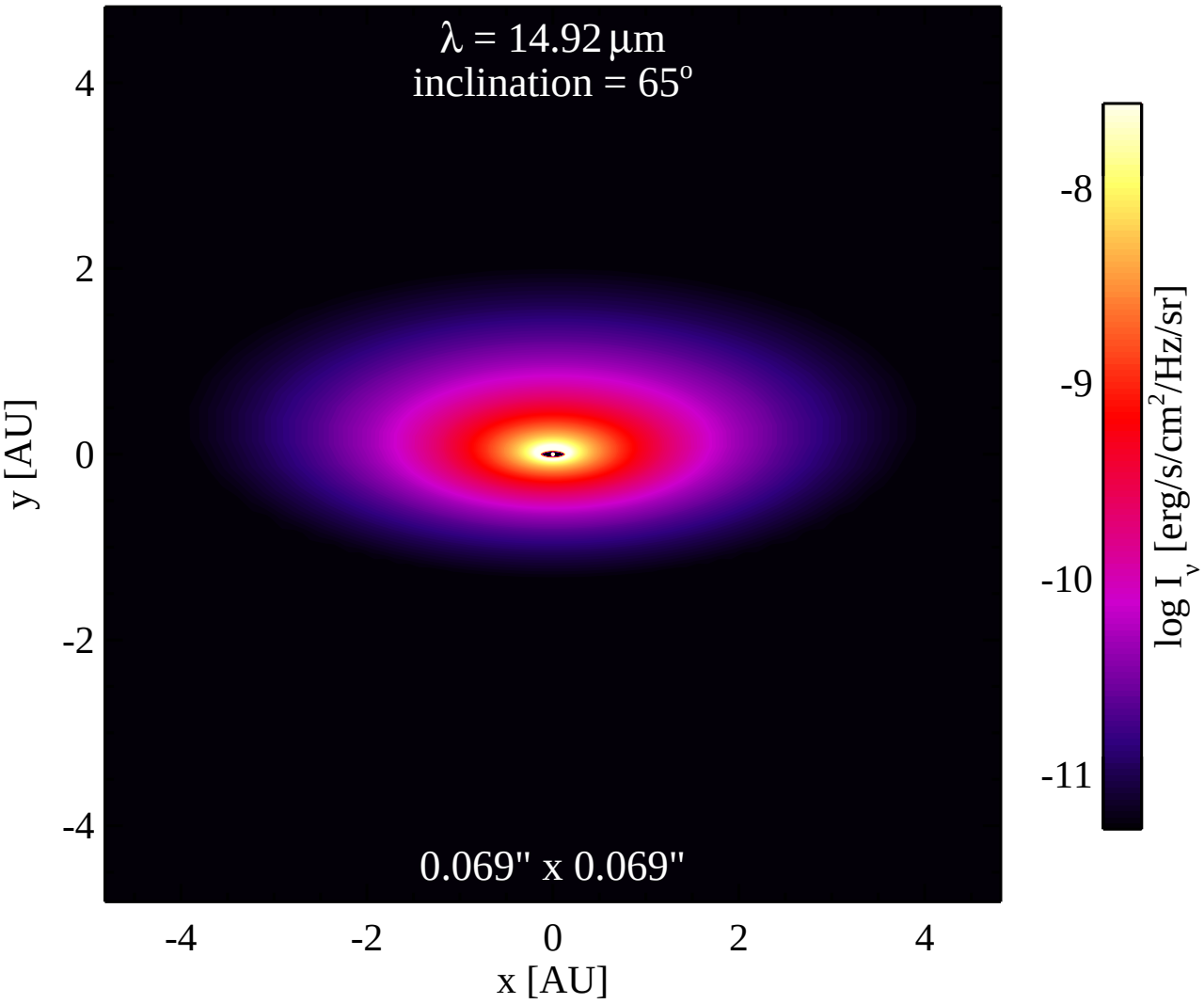

λ = 5.70 μm
inclination = 65°
0.012" x 0.012"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-6.5
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

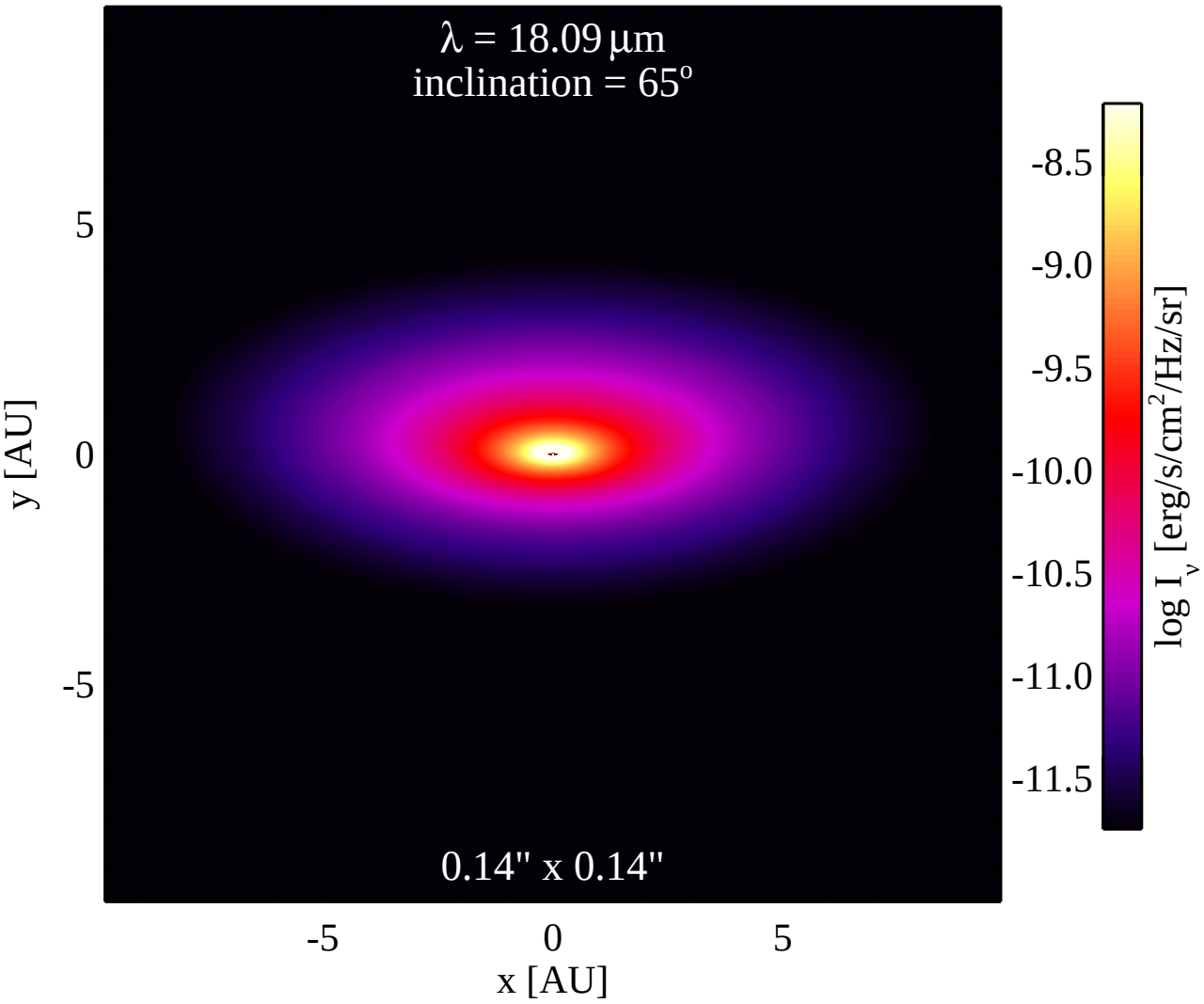

λ = 6.91 μm
inclination = 65°
0.015" x 0.015"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

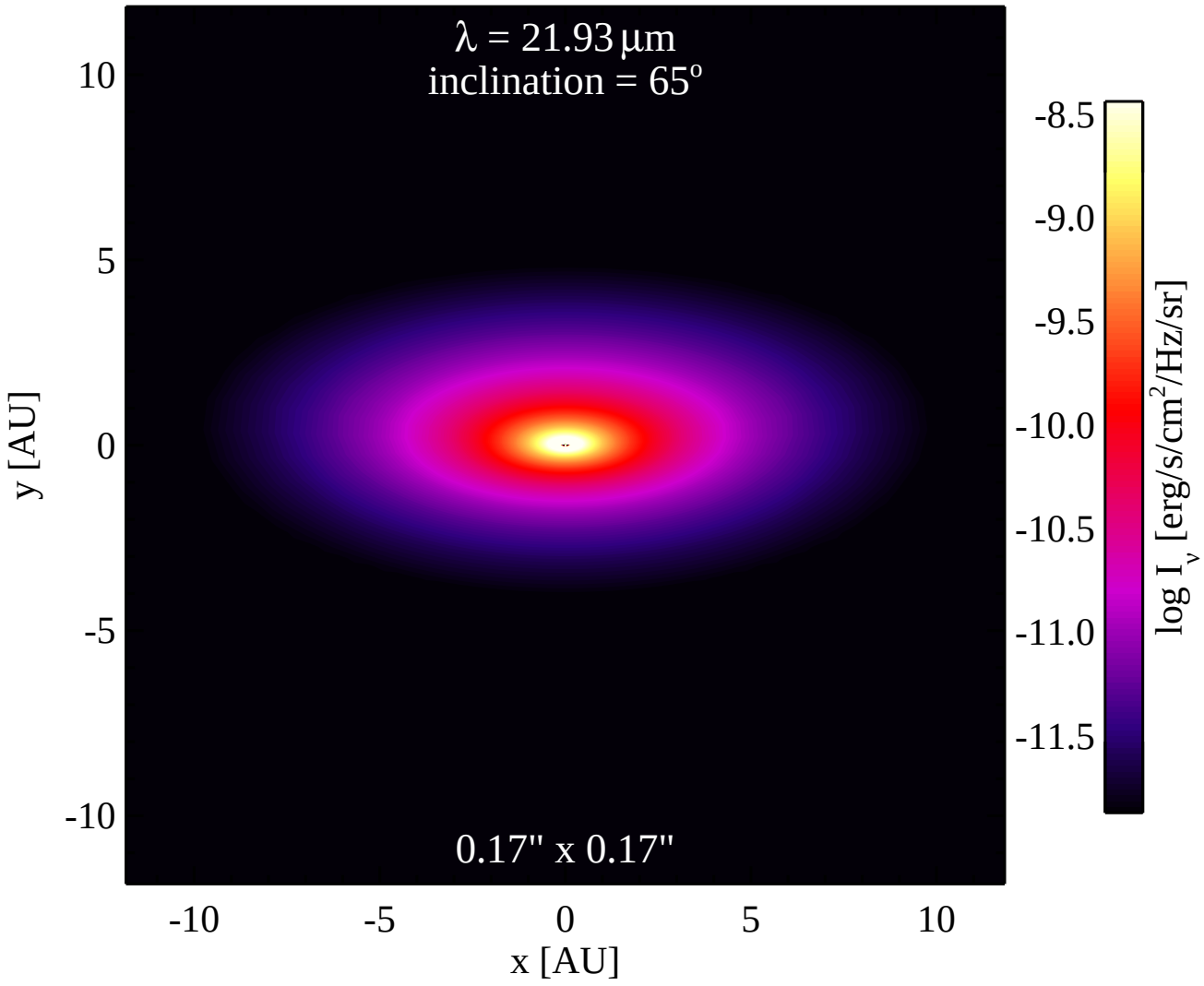

λ = 8.38 μm
inclination = 65°
0.023" x 0.023"
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
y [AU]
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

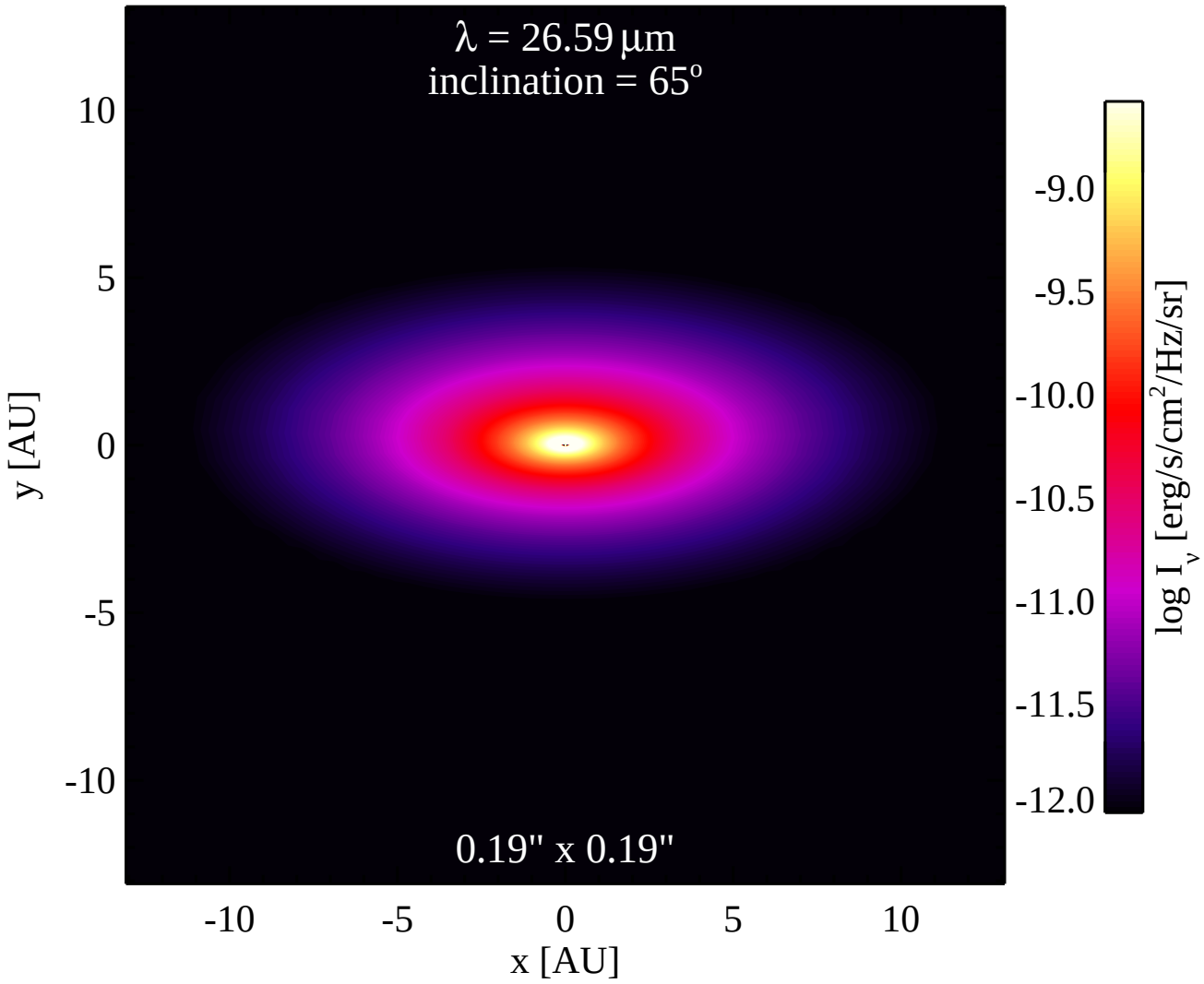

λ = 10.16 μm
inclination = 65°
0.052" x 0.052"
y [AU]
2
0
-2
x [AU]
-2
0
2
log I_ν [erg/s/cm²/Hz/sr]
-7
-8
-9
-10

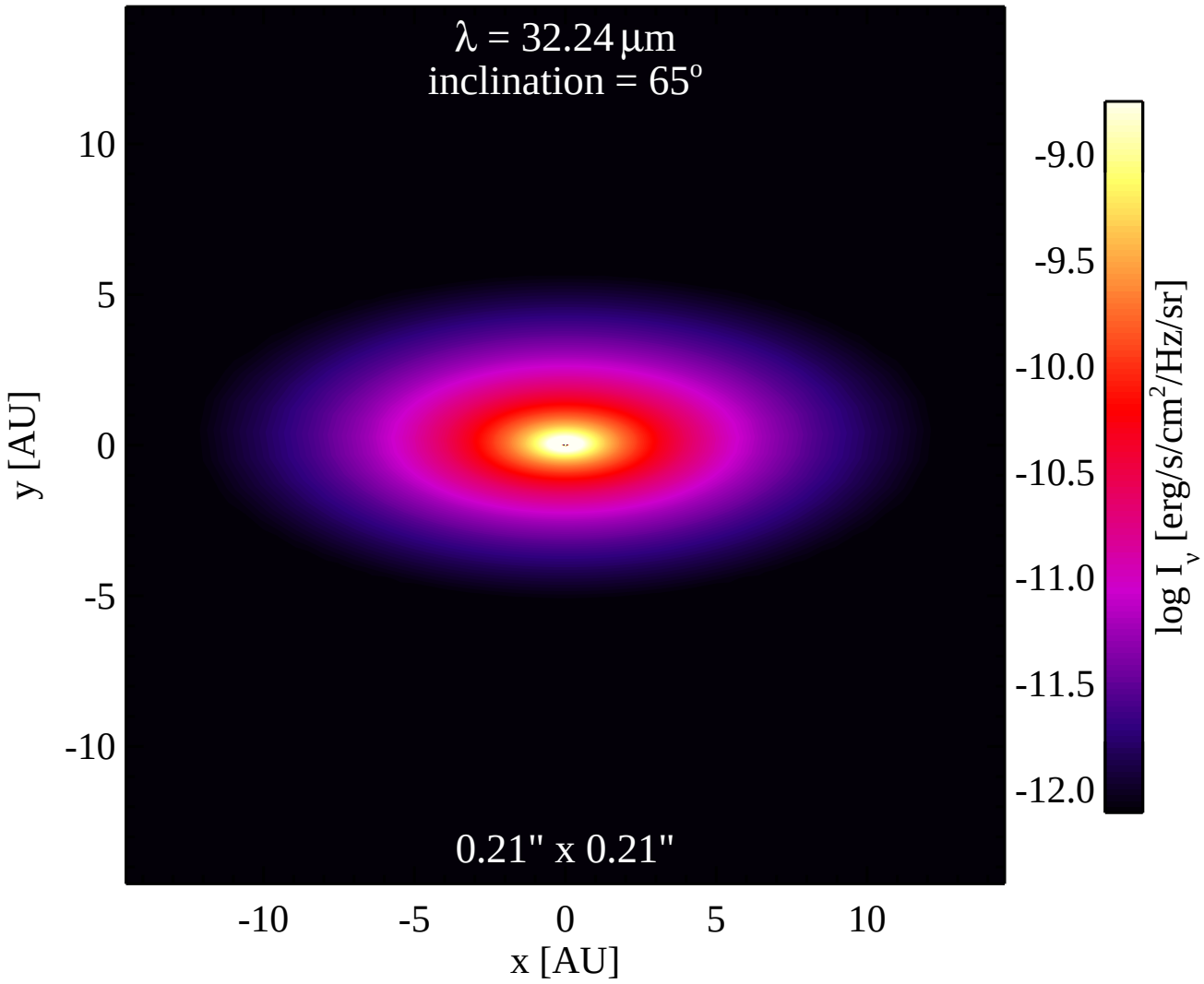

λ = 12.31 μm
inclination = 65°
0.051" x 0.051"
2
0
-2
y [AU]
-2
0
2
x [AU]
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

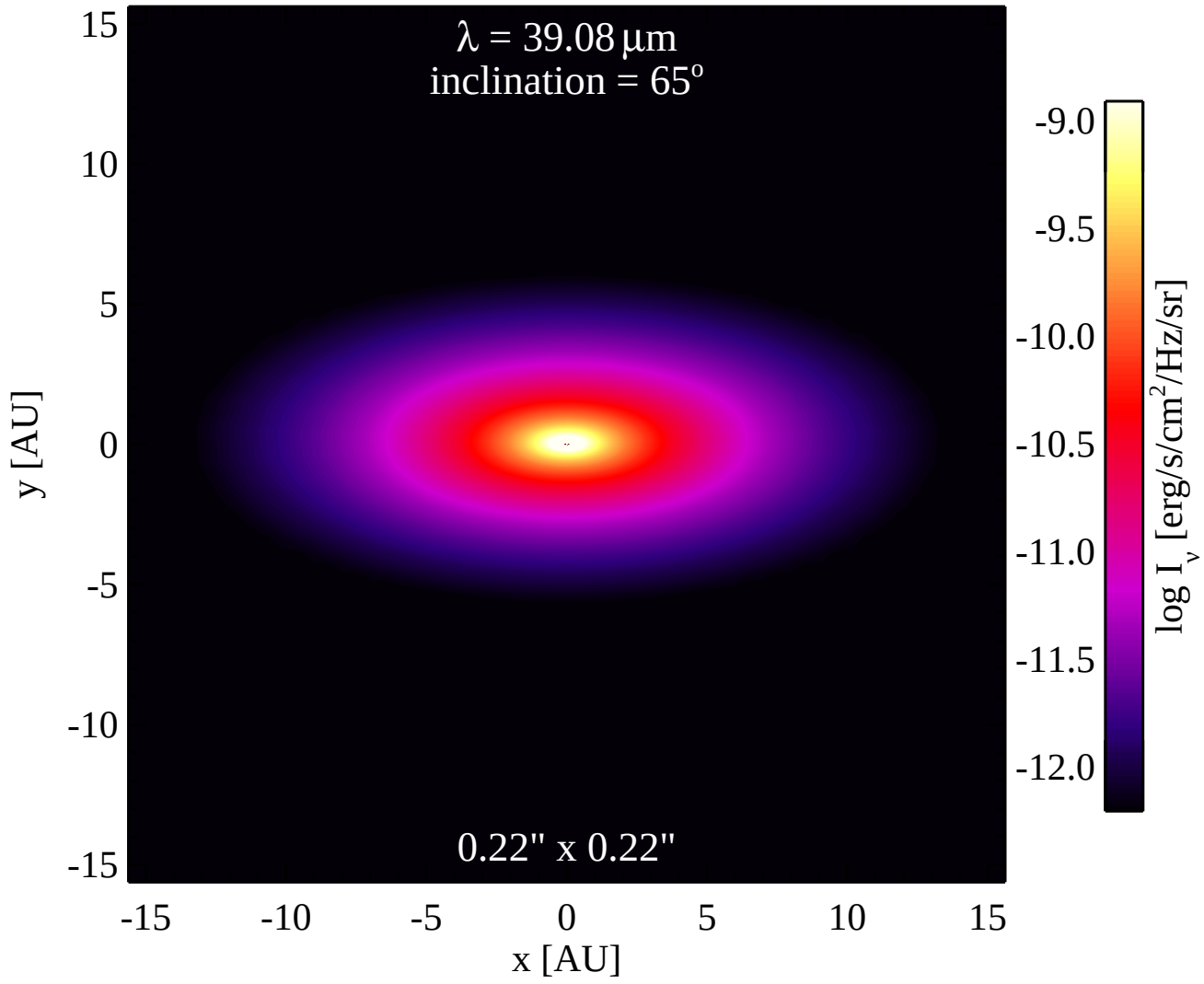

λ = 14.92 μm
inclination = 65°
0.069" x 0.069"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

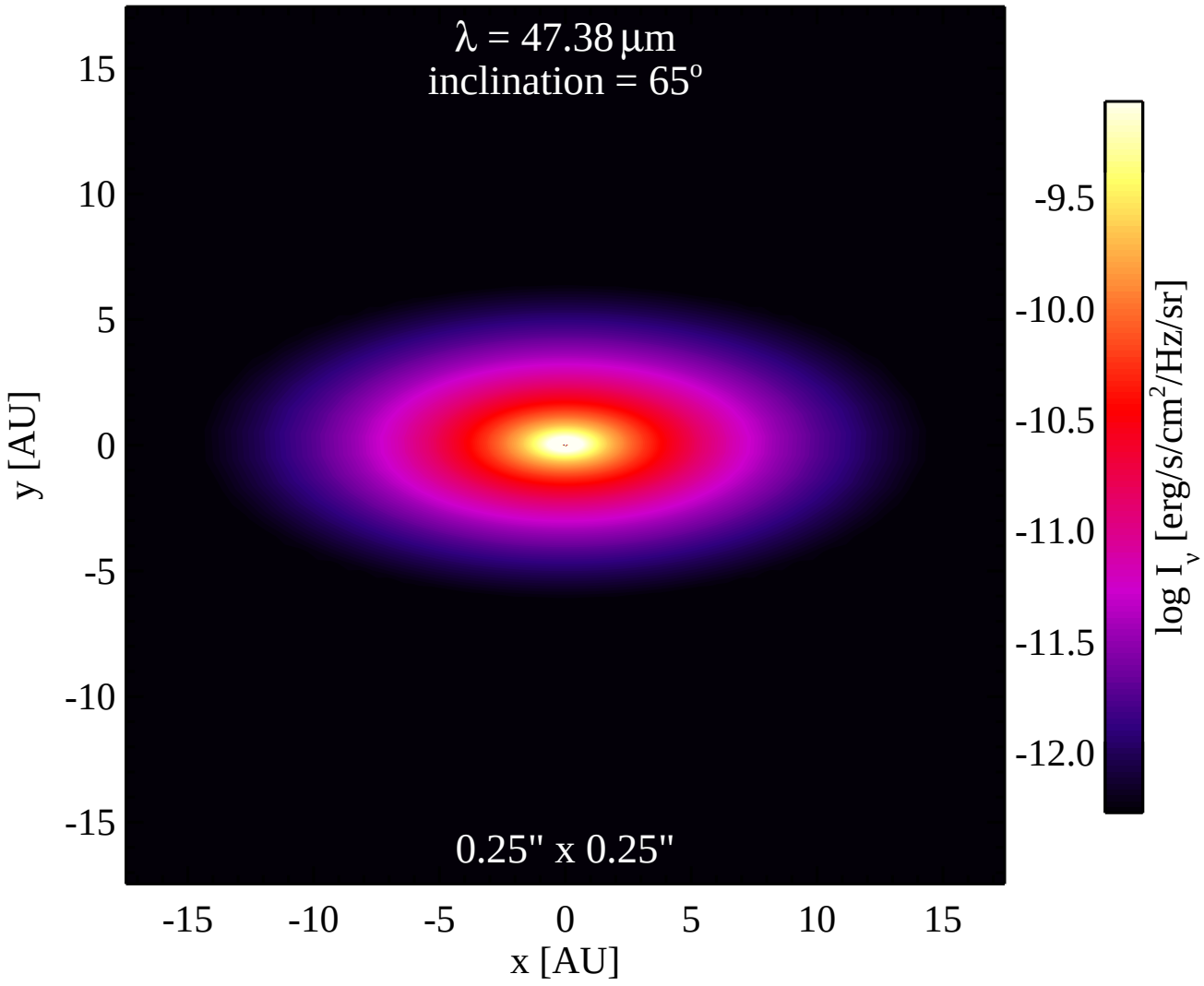

λ = 18.09 μm
inclination = 65°
0.14" x 0.14"
y [AU]
x [AU]
5
0
-5
-5
0
5
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

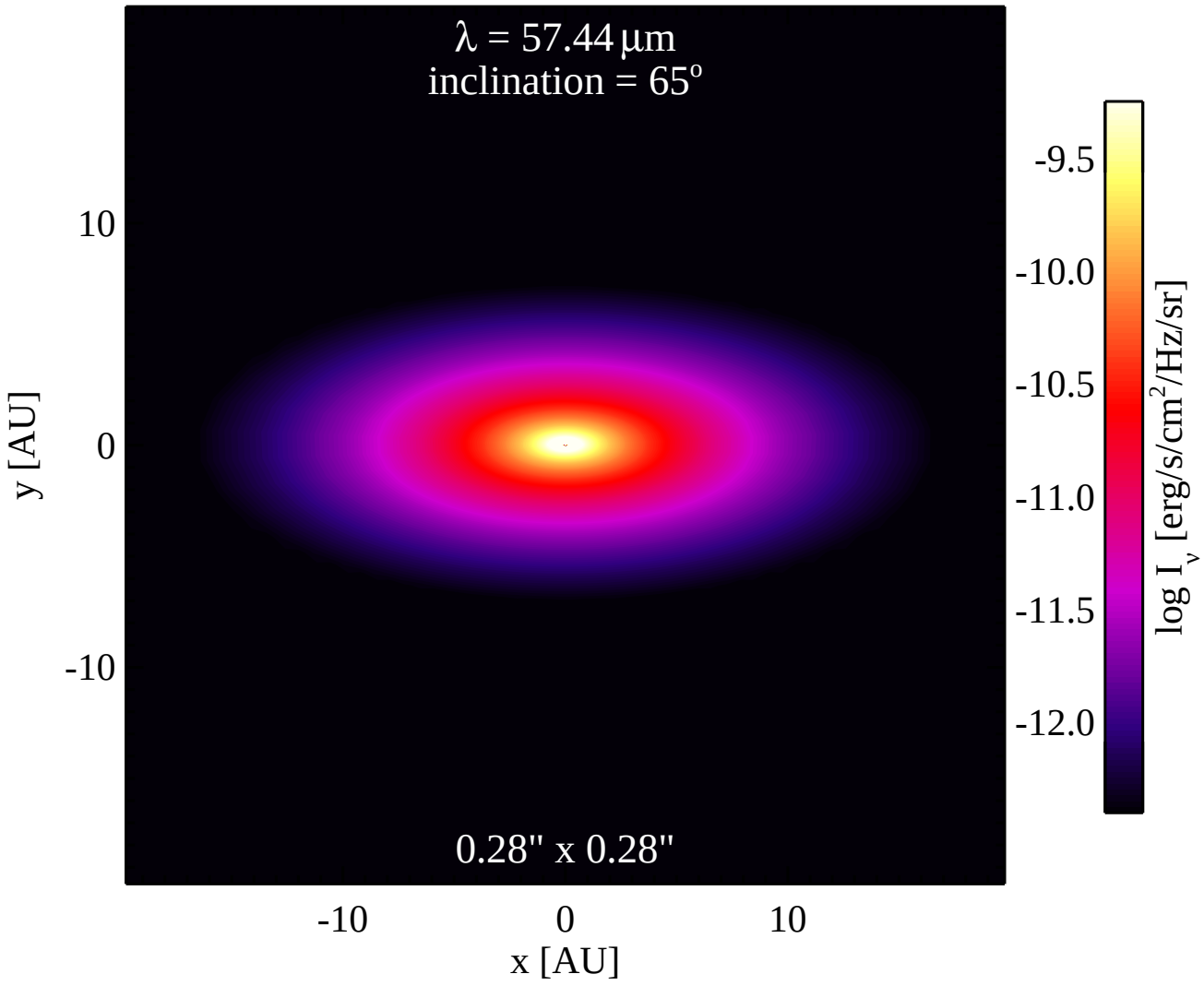

λ = 21.93 μm
inclination = 65°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

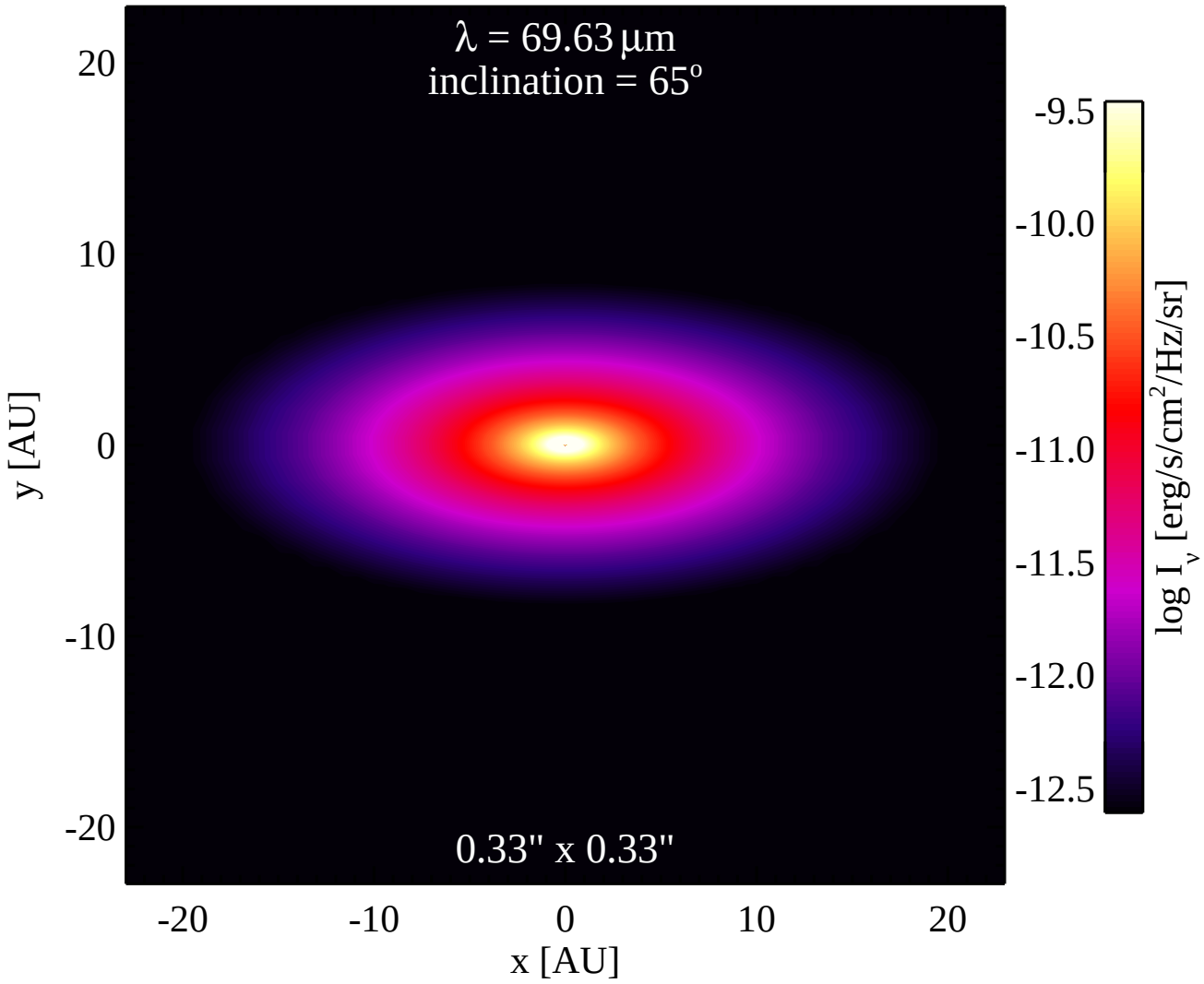

λ = 26.59 μm
inclination = 65°
0.19" x 0.19"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

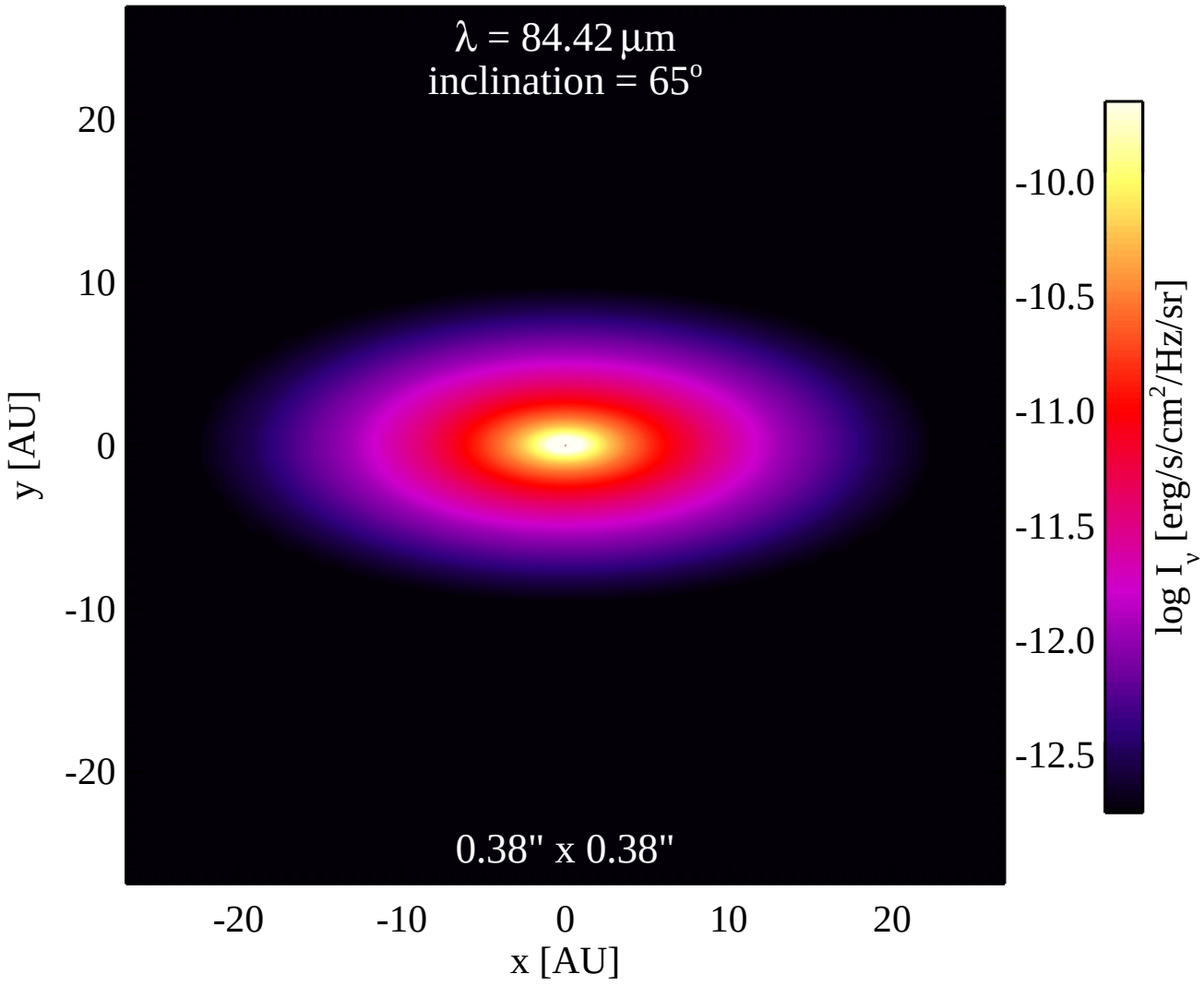

λ = 32.24 μm
inclination = 65°
0.21" x 0.21"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

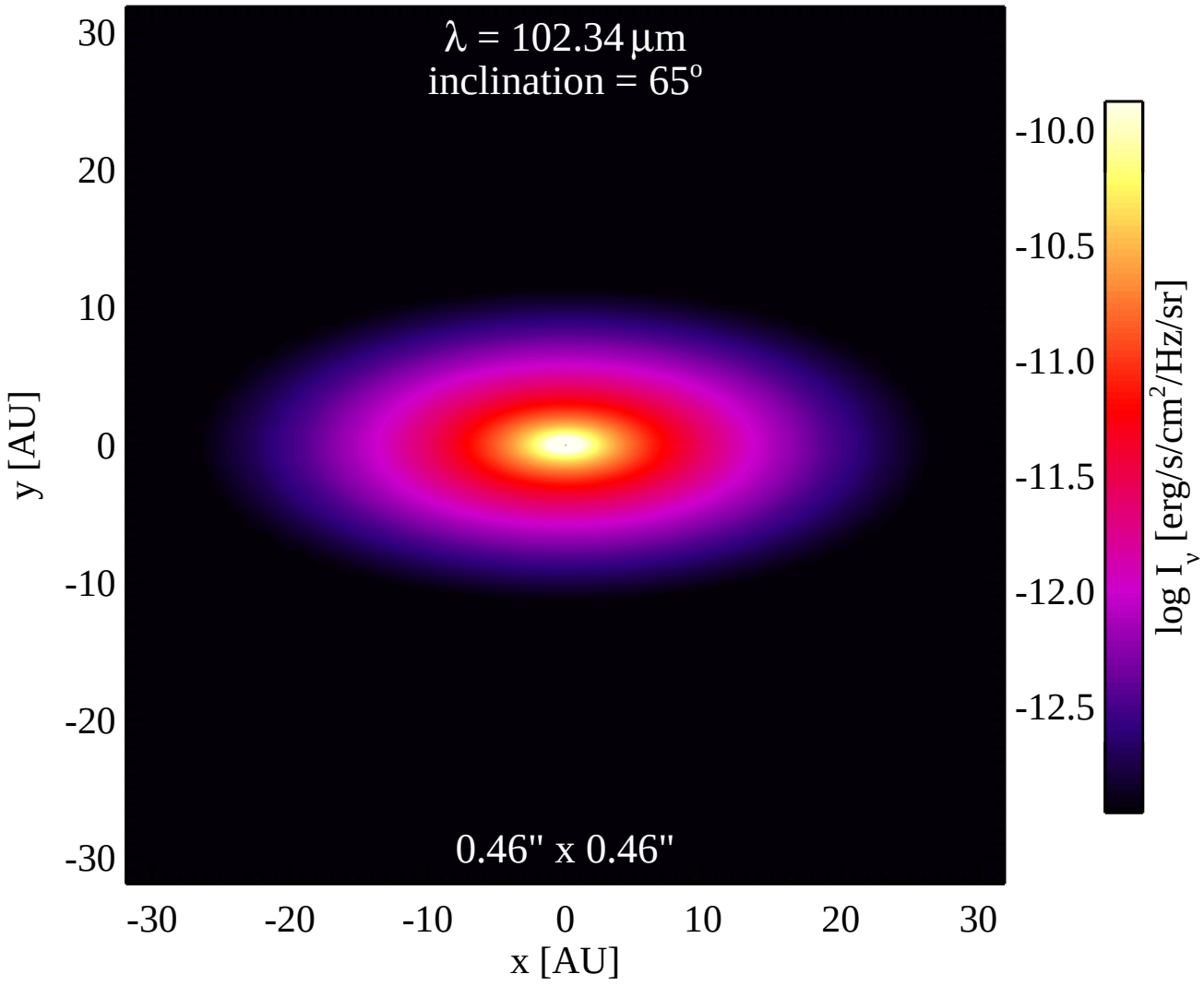

λ = 39.08 μm
inclination = 65°
0.22" x 0.22"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

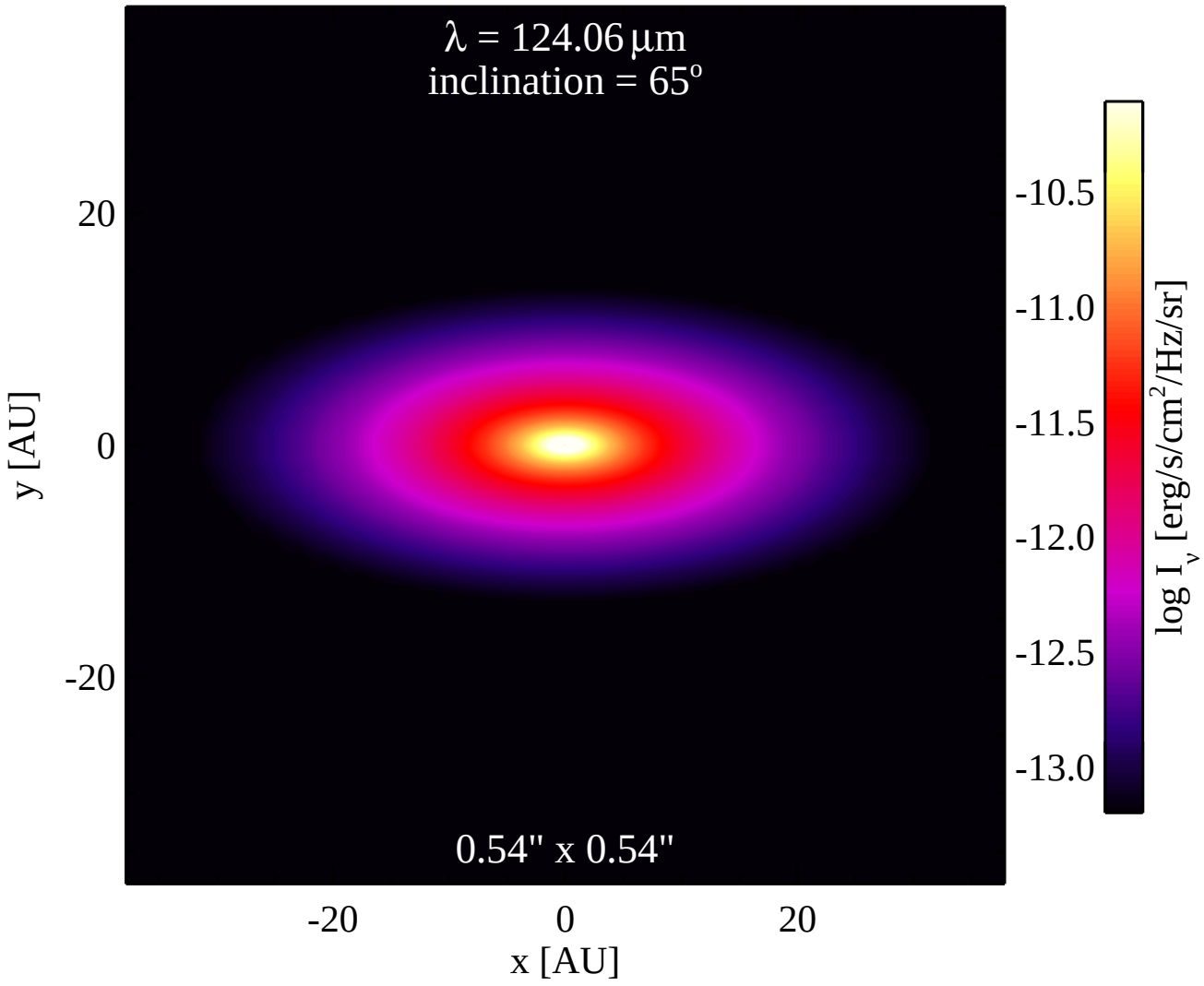

λ = 47.38 μm
inclination = 65°
0.25" x 0.25"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

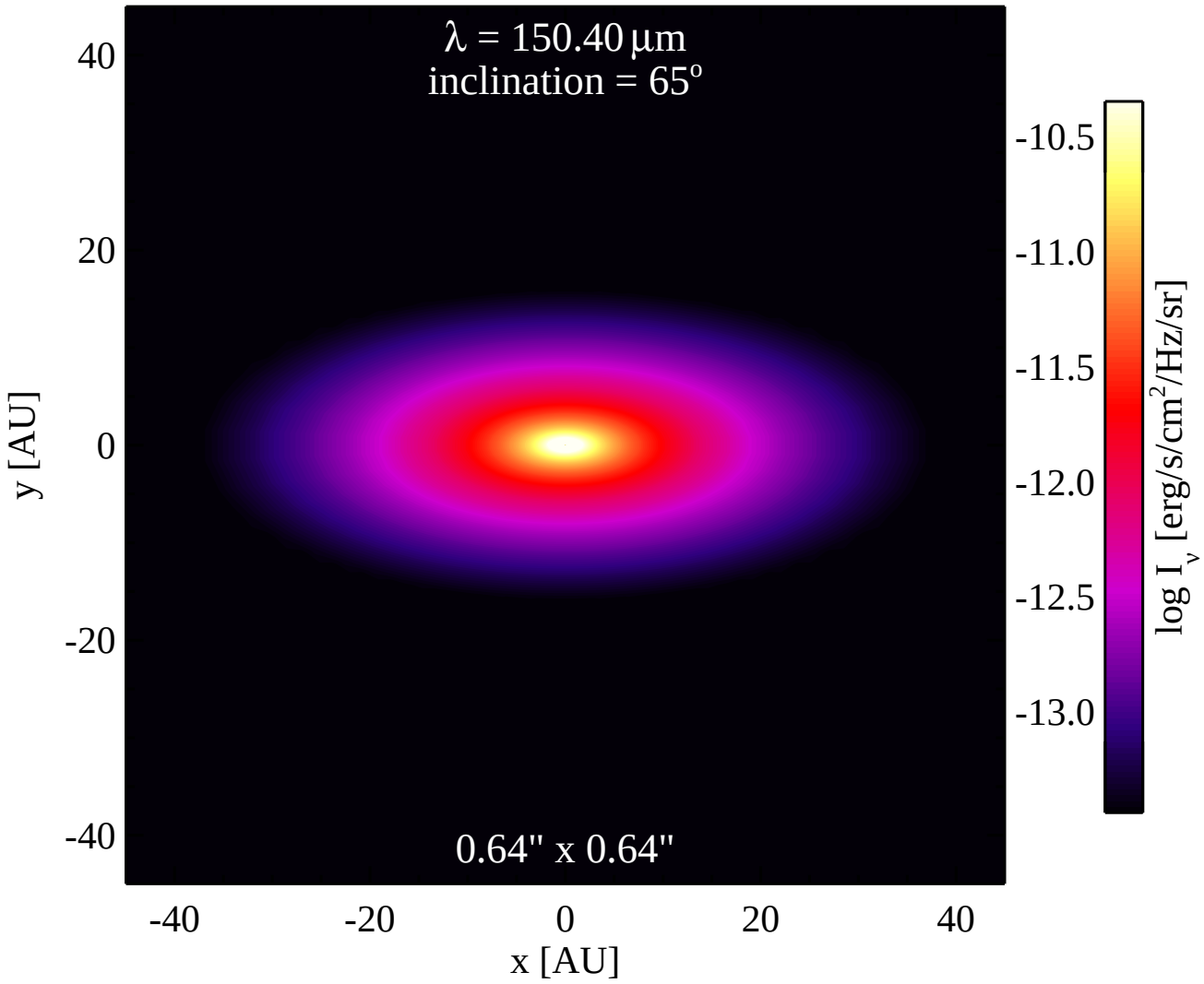

λ = 57.44 μm
inclination = 65°
0.28" x 0.28"
10
0
-10
y [AU]
-10
0
10
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

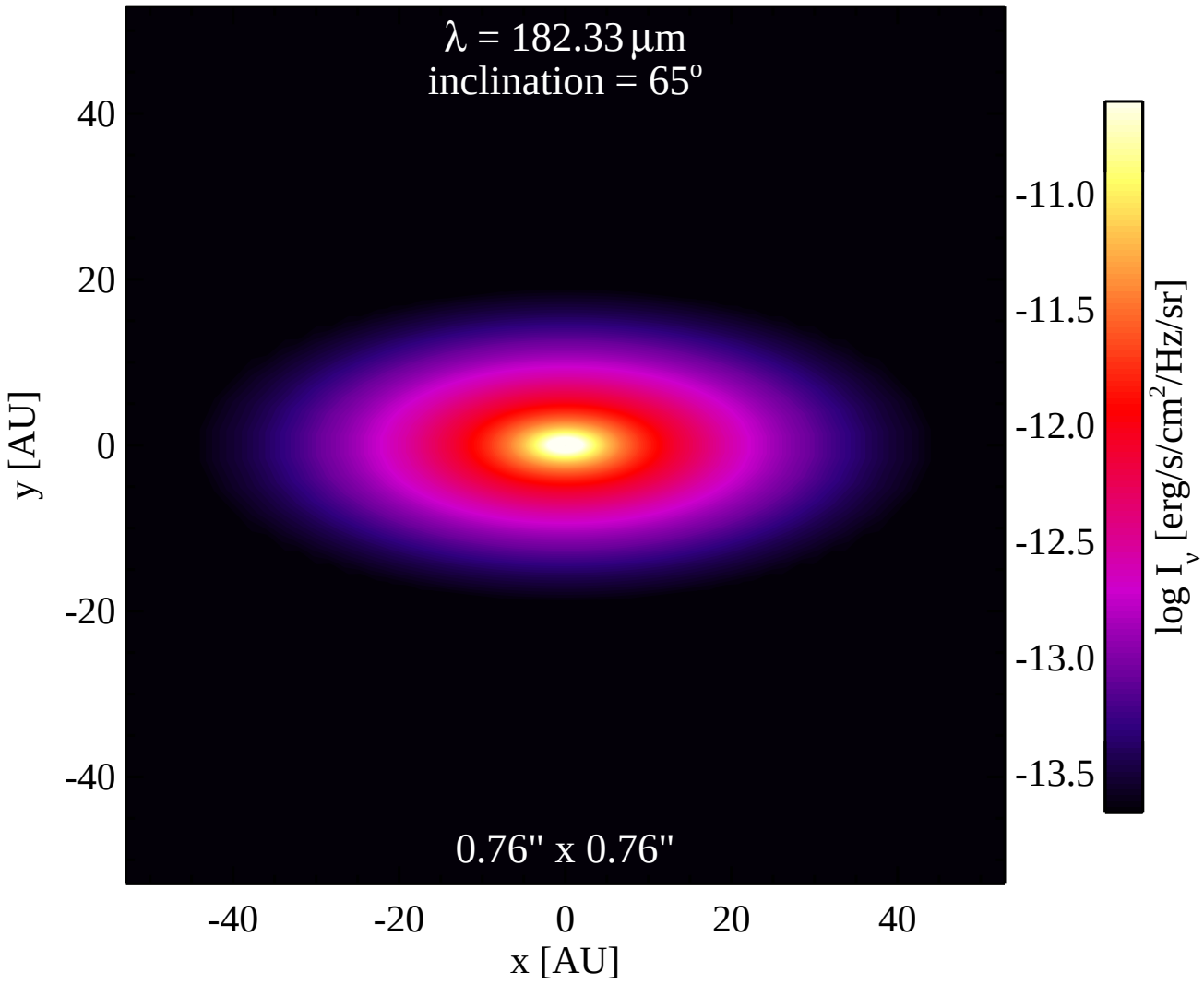

λ = 69.63 μm
inclination = 65°
0.33" x 0.33"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

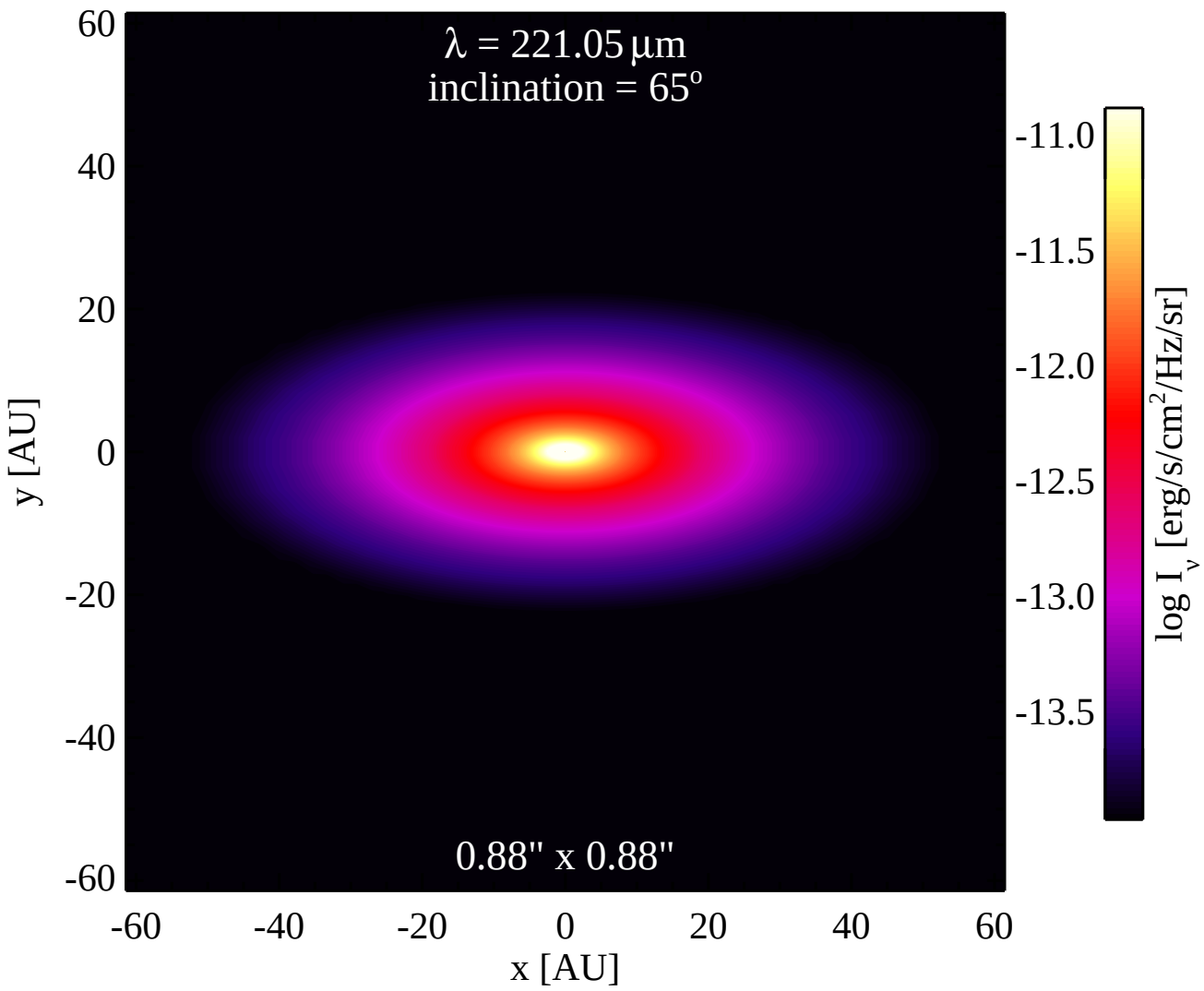

λ = 84.42 μm
inclination = 65°
0.38" x 0.38"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

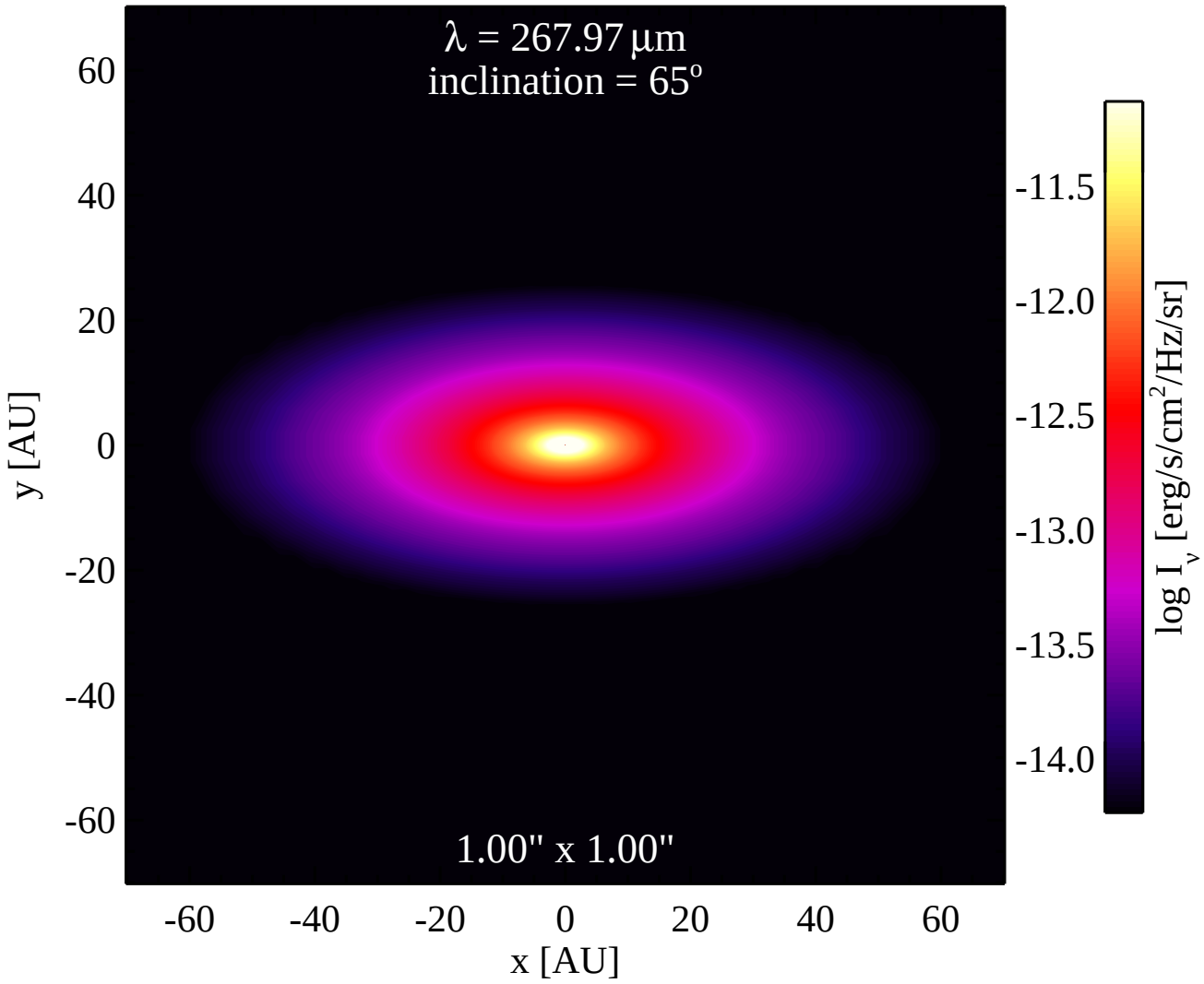

λ = 102.34 μm
inclination = 65°
0.46" x 0.46"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

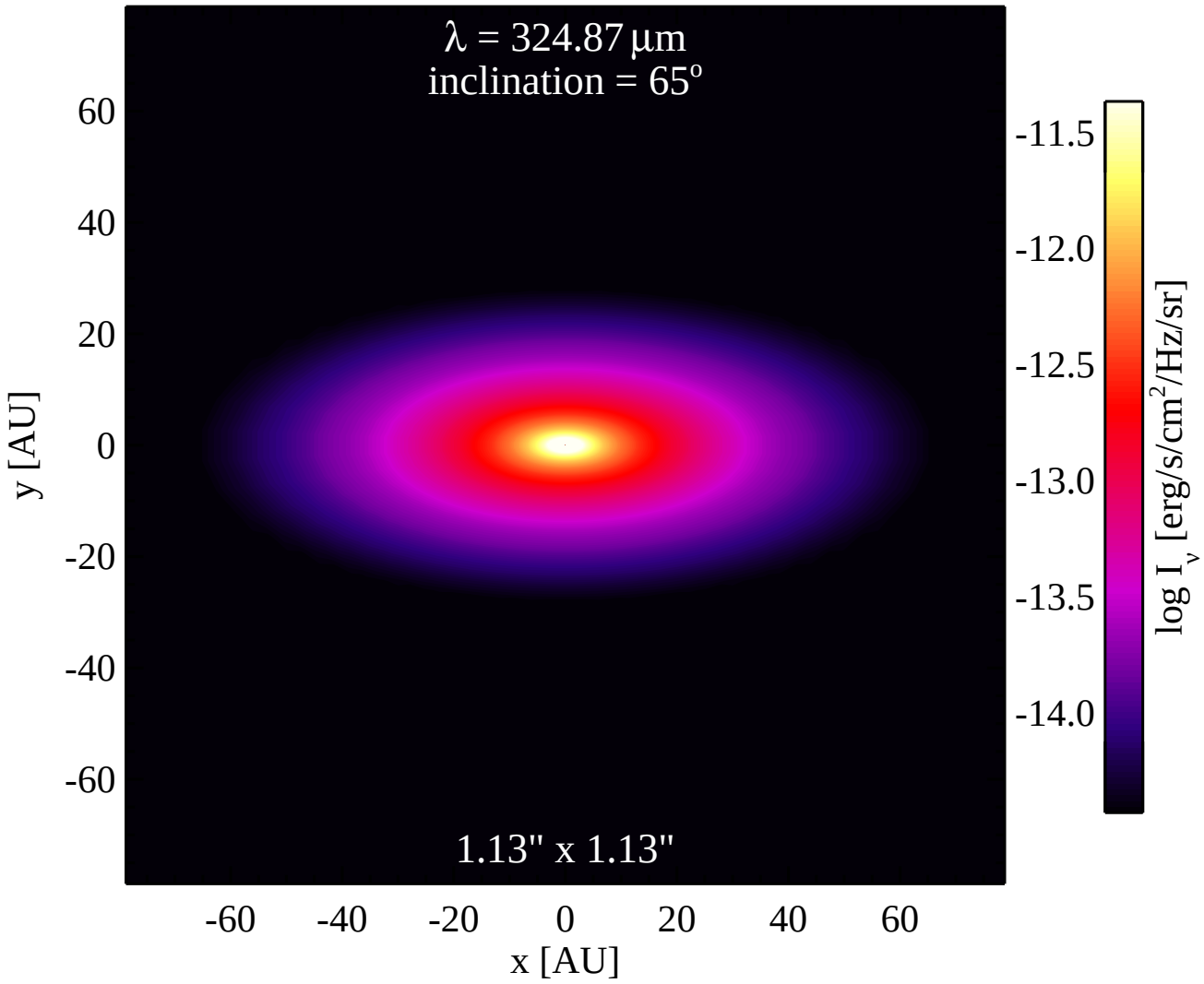

λ = 124.06 μm
inclination = 65°
0.54" x 0.54"
20
0
-20
y [AU]
-20
0
20
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

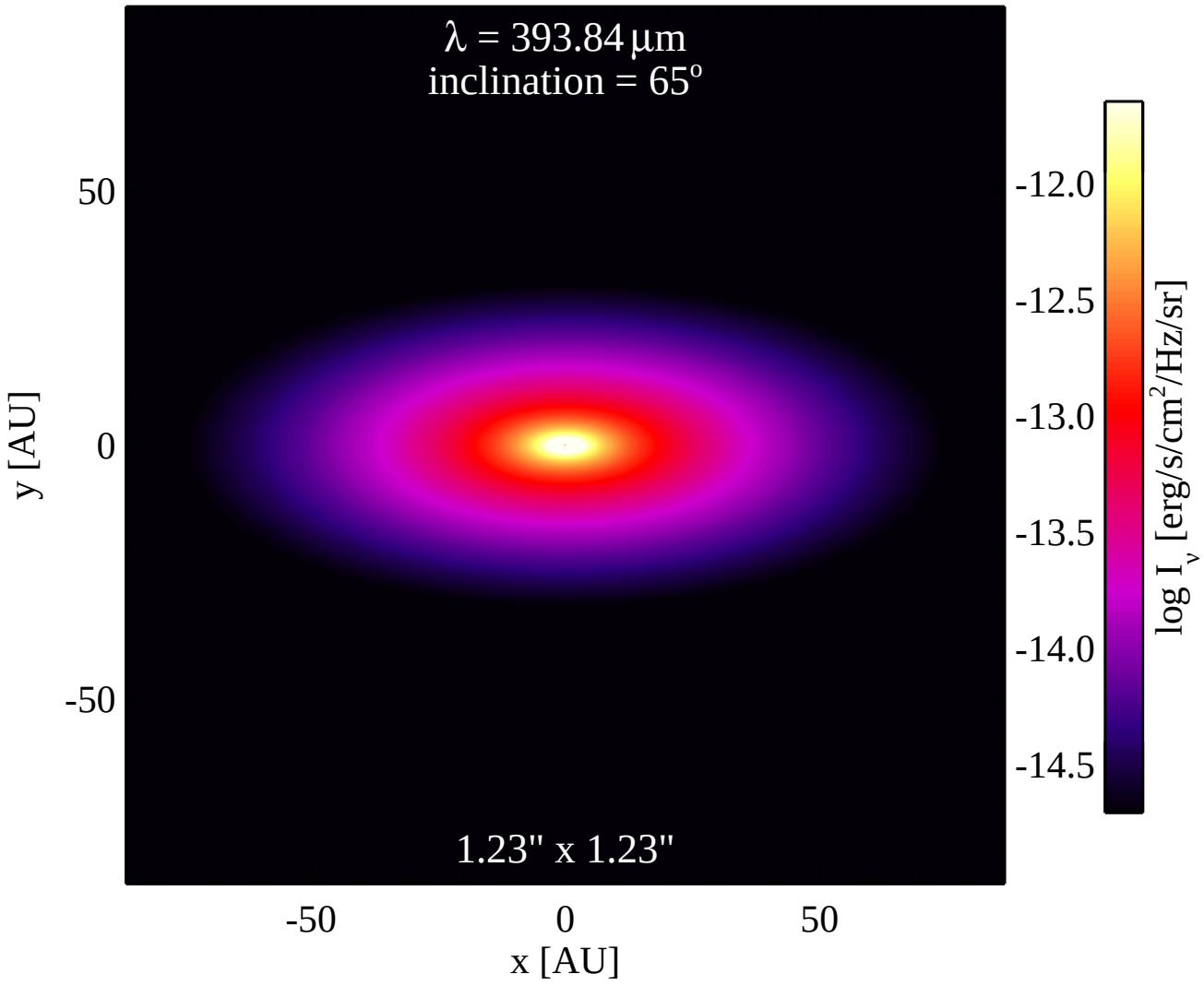

λ = 150.40 μm
inclination = 65°
0.64" x 0.64"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

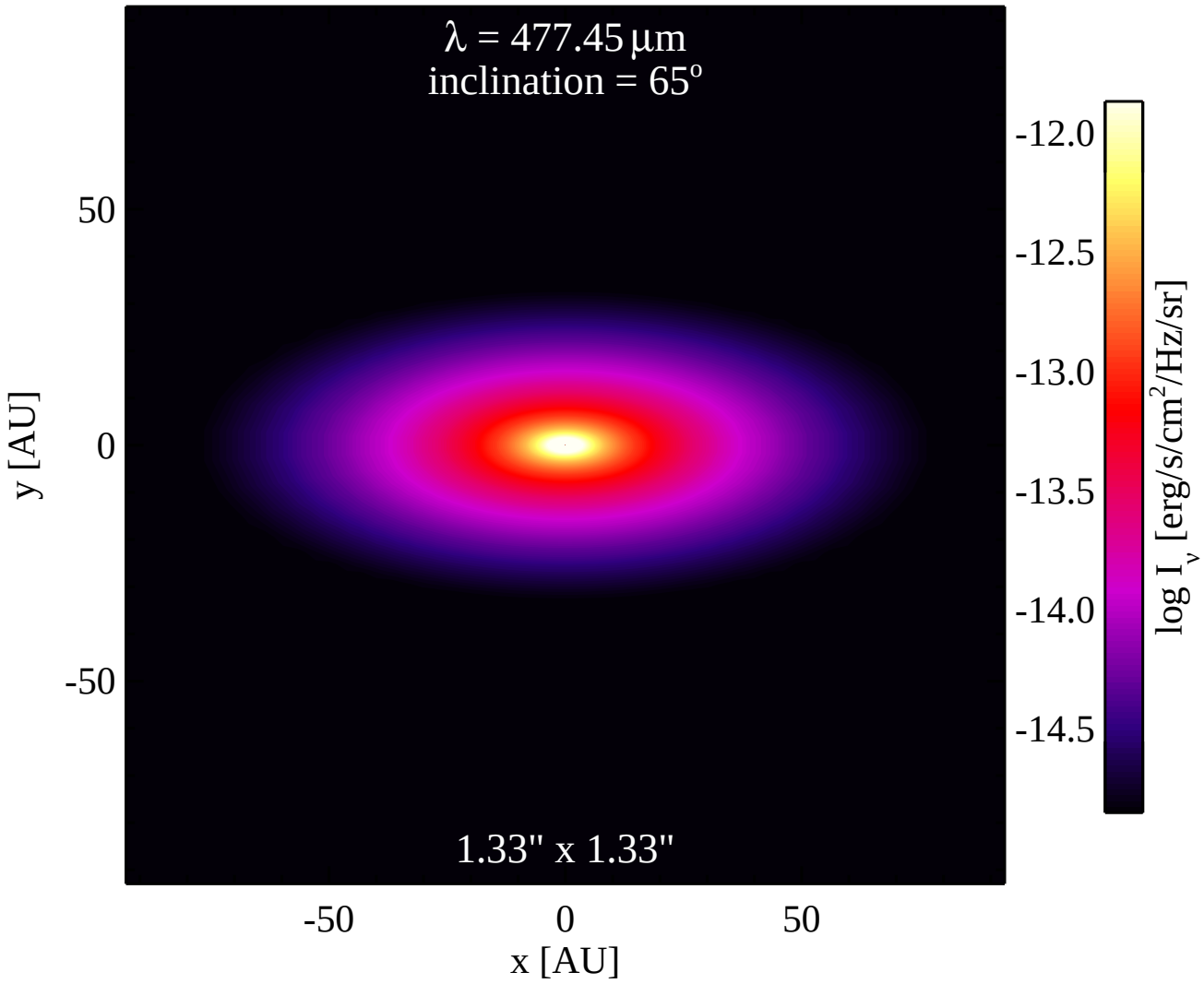

λ = 182.33 μm
inclination = 65°
0.76" x 0.76"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

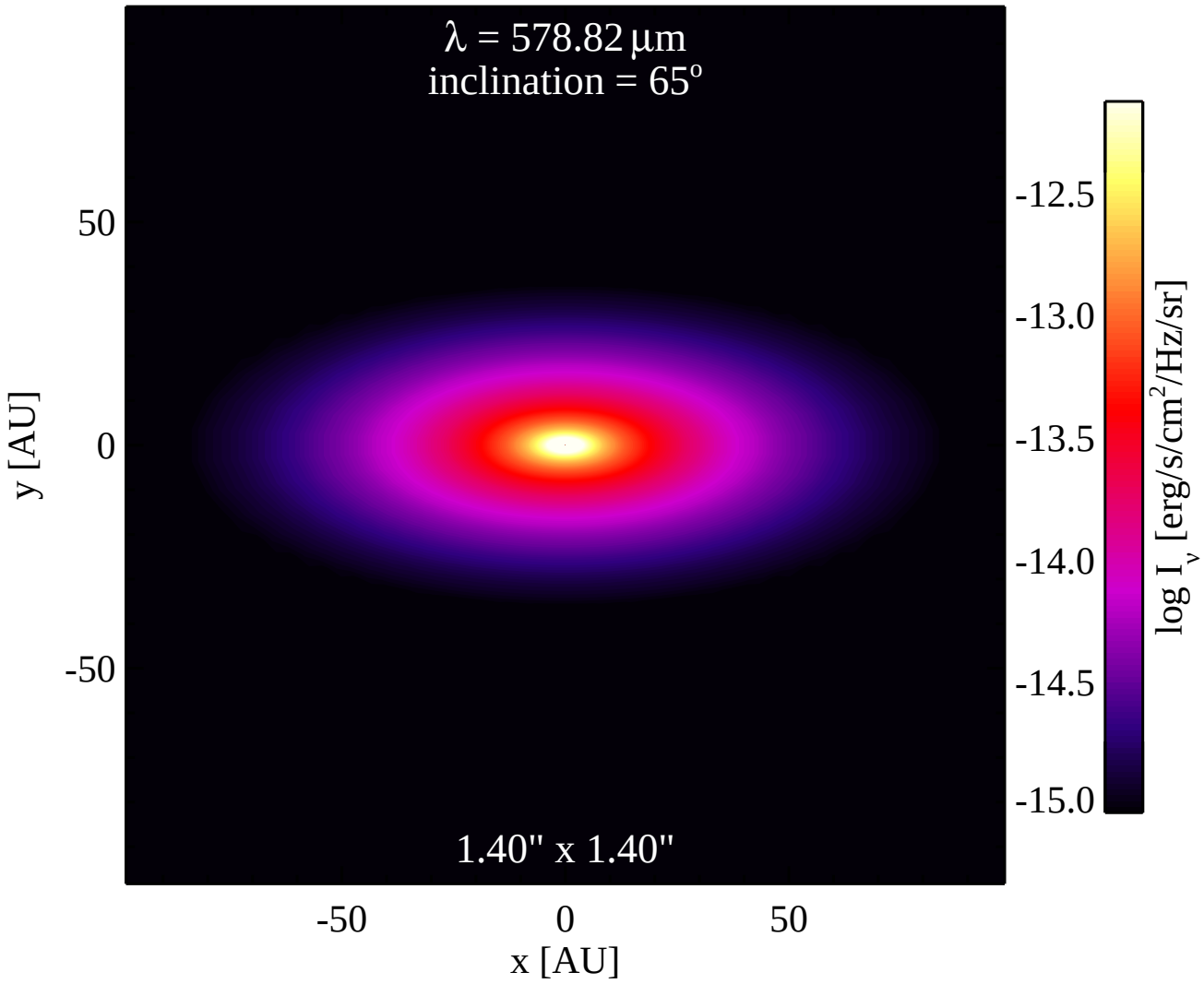

λ = 221.05 μm
inclination = 65°
0.88" x 0.88"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

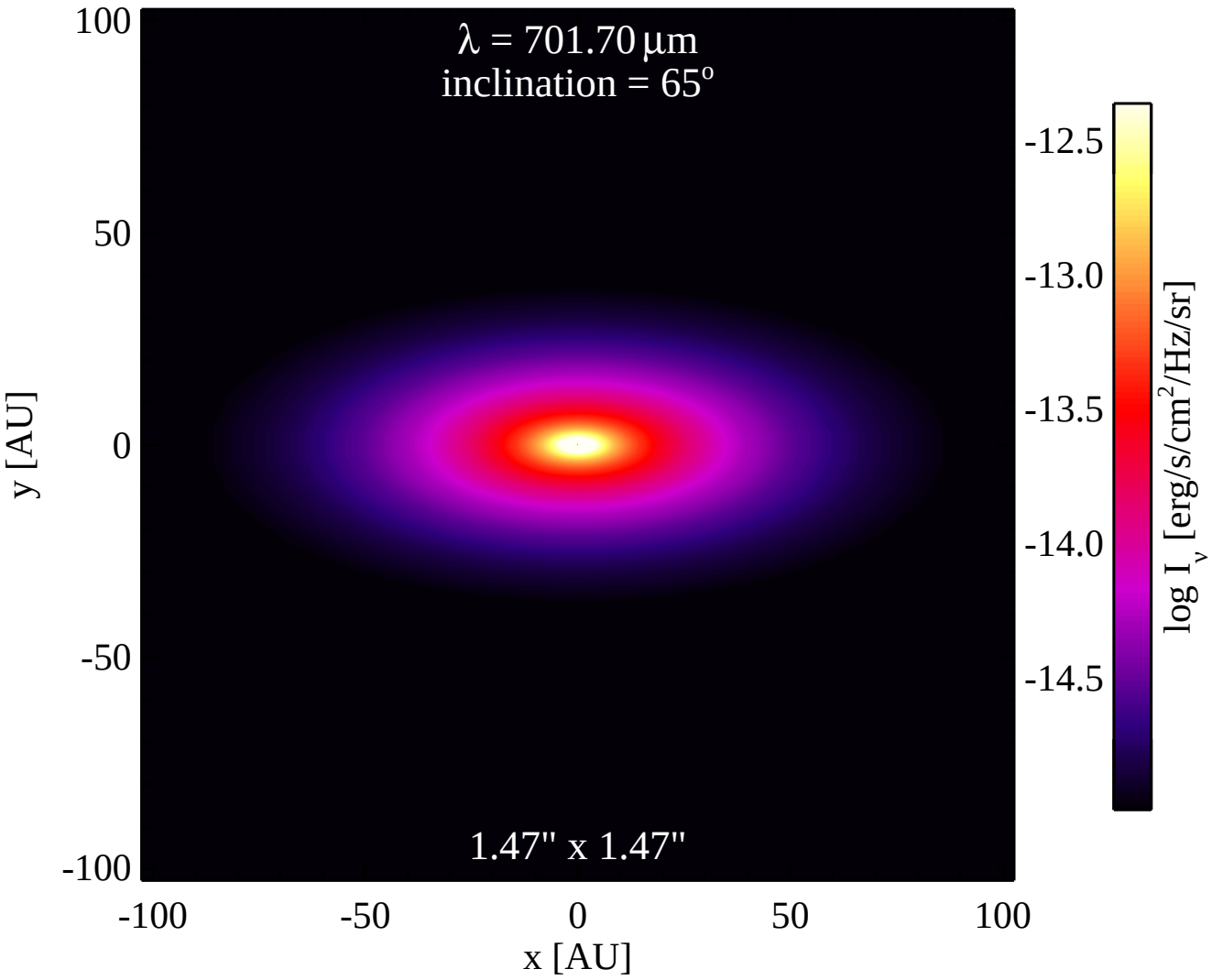

λ = 267.97 μm
inclination = 65°
1.00" x 1.00"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

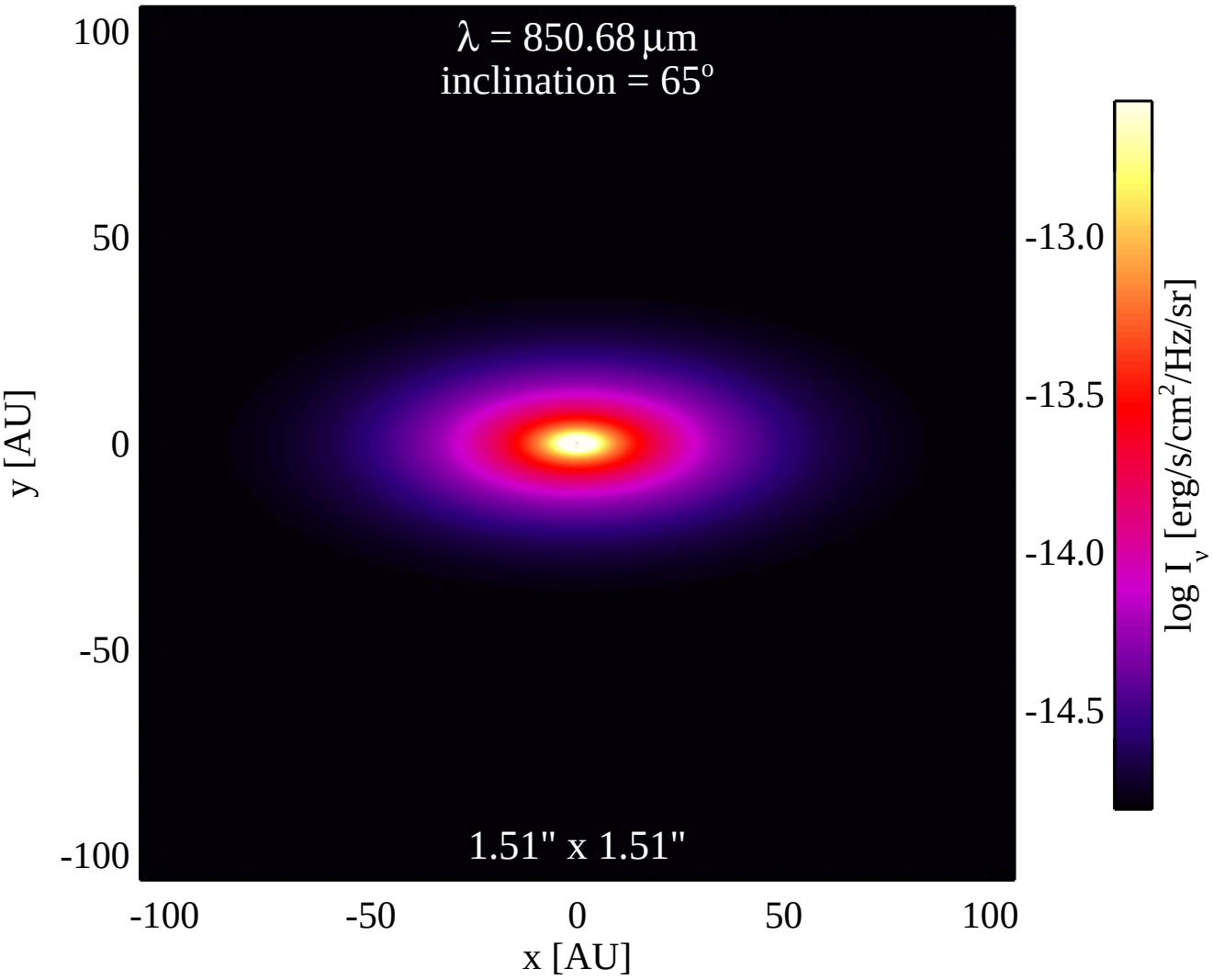

λ = 324.87 μm
inclination = 65°
1.13" x 1.13"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

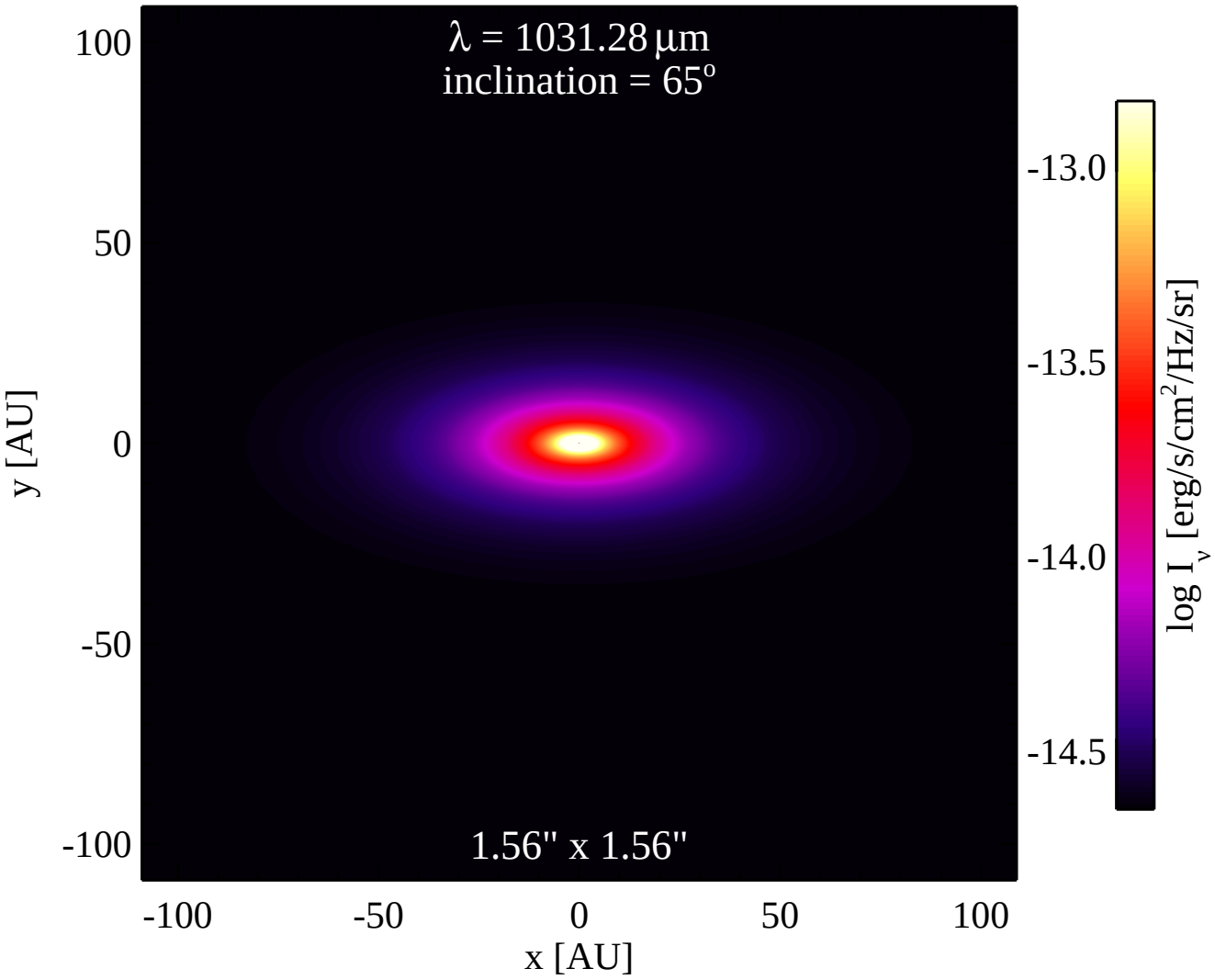

λ = 393.84 μm
inclination = 65°
1.23" x 1.23"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

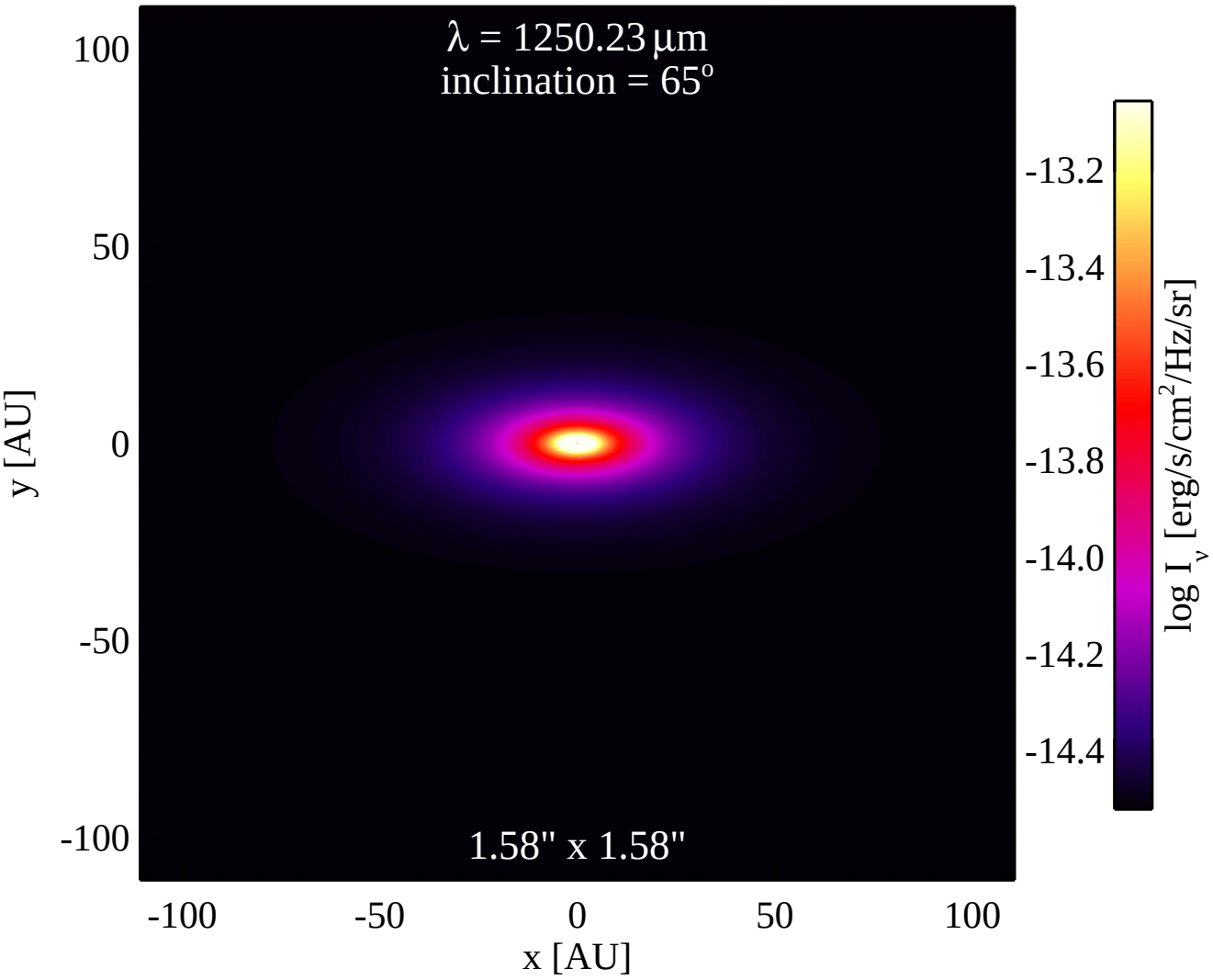

λ = 477.45 μm
inclination = 65°
1.33" x 1.33"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

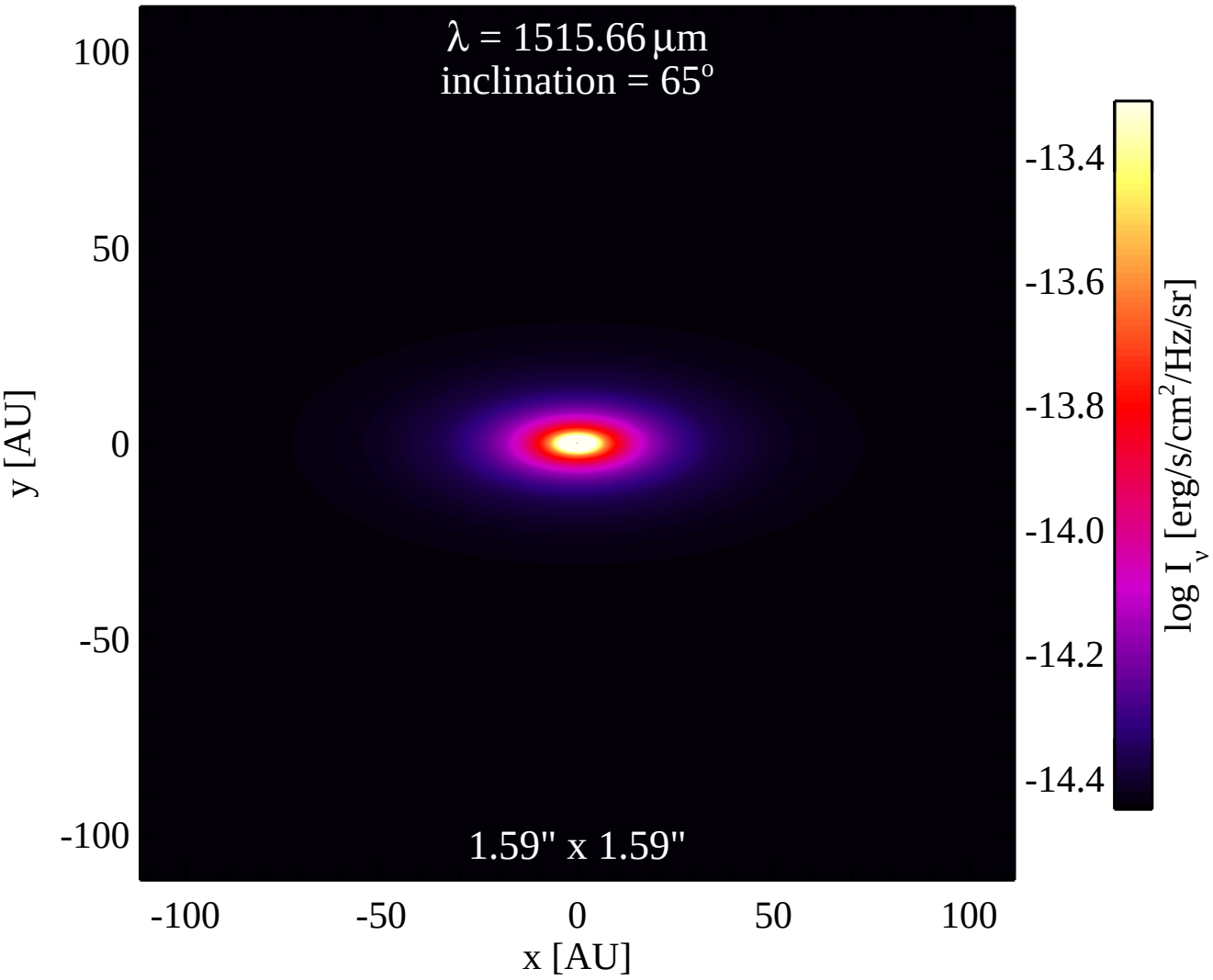

λ = 578.82 μm
inclination = 65°
1.40" x 1.40"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
log I_ν [erg/s/cm²/Hz/sr]

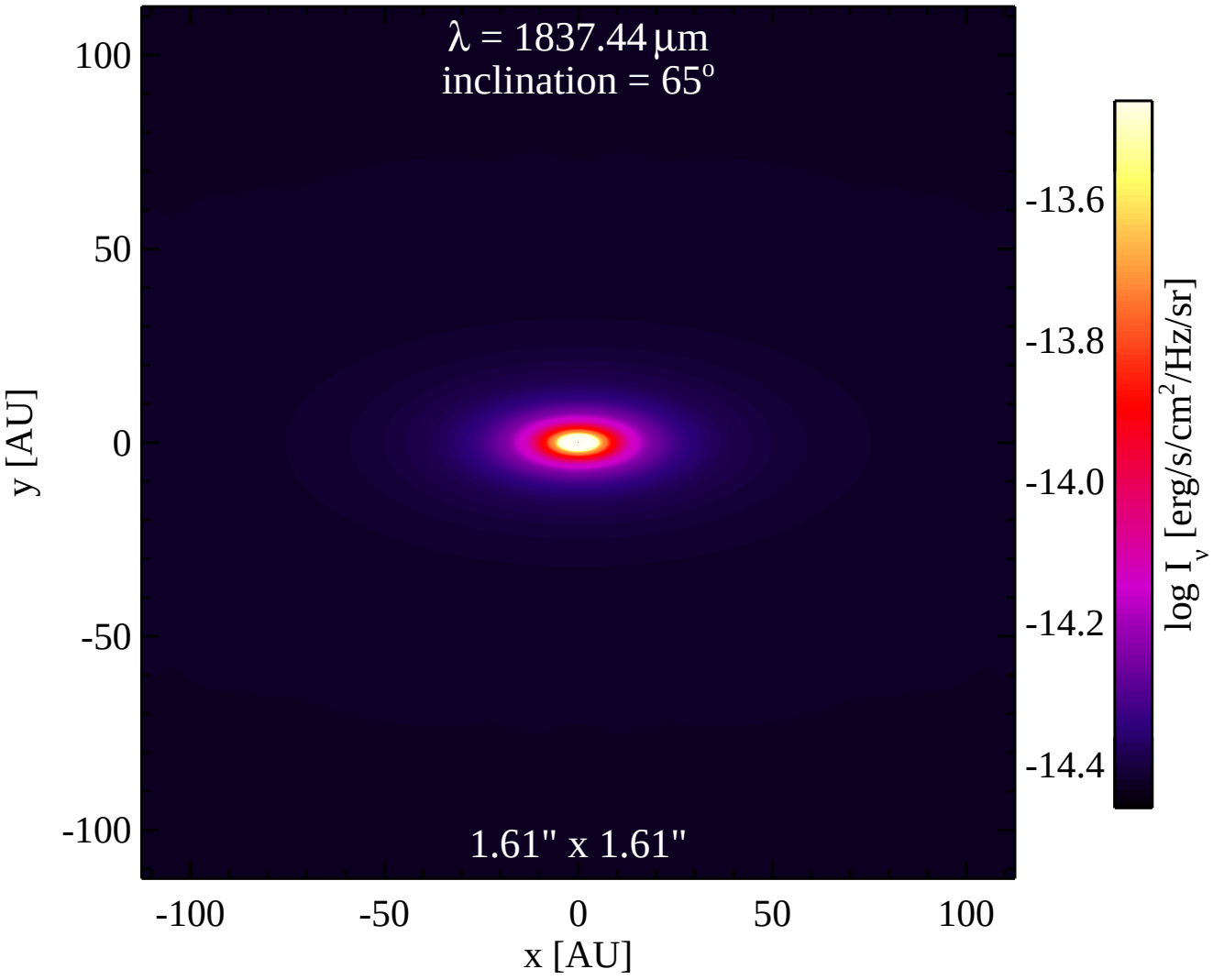

λ = 701.70 μm
inclination = 65°
1.47" x 1.47"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

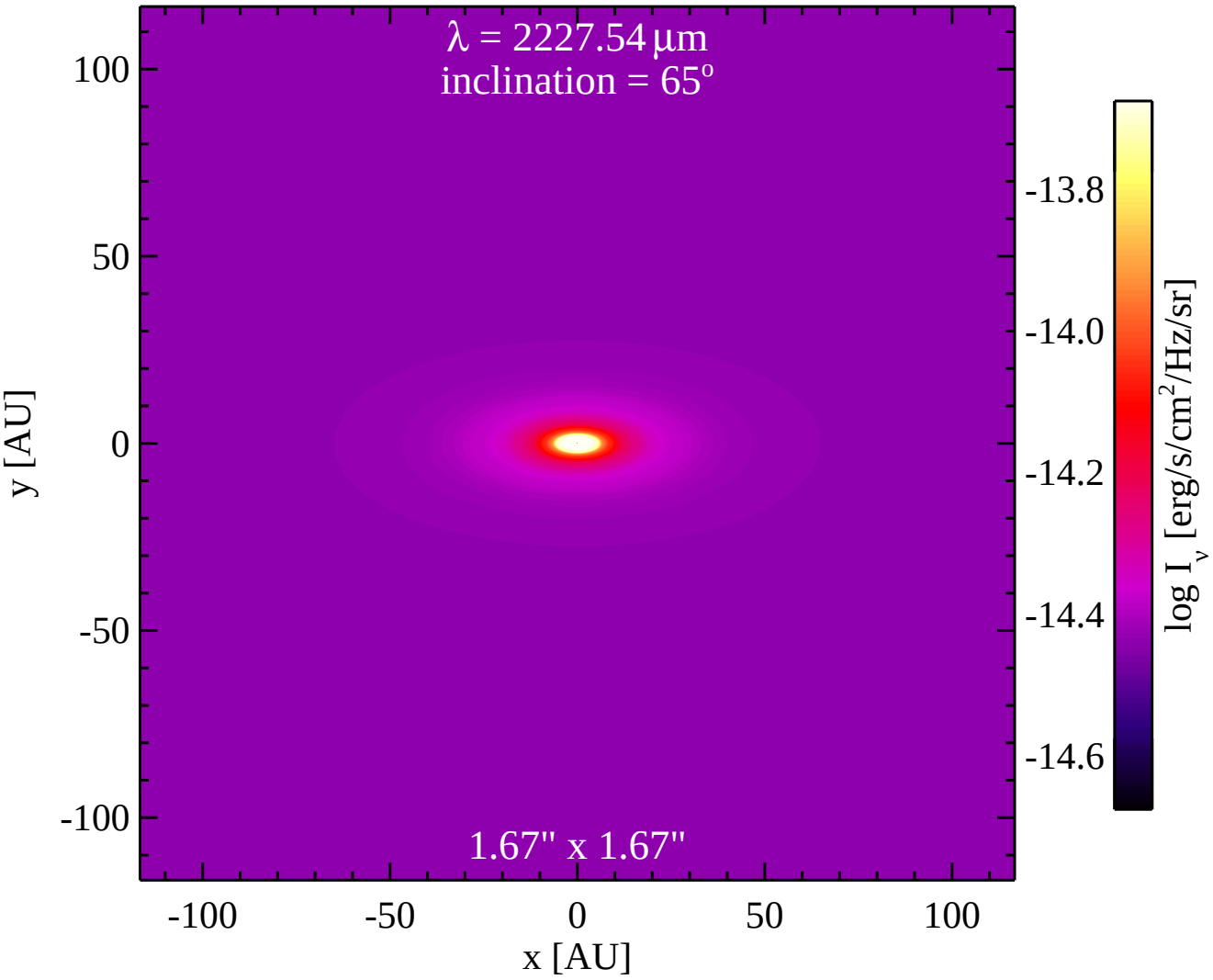

λ = 850.68 μm
inclination = 65°
1.51" x 1.51"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

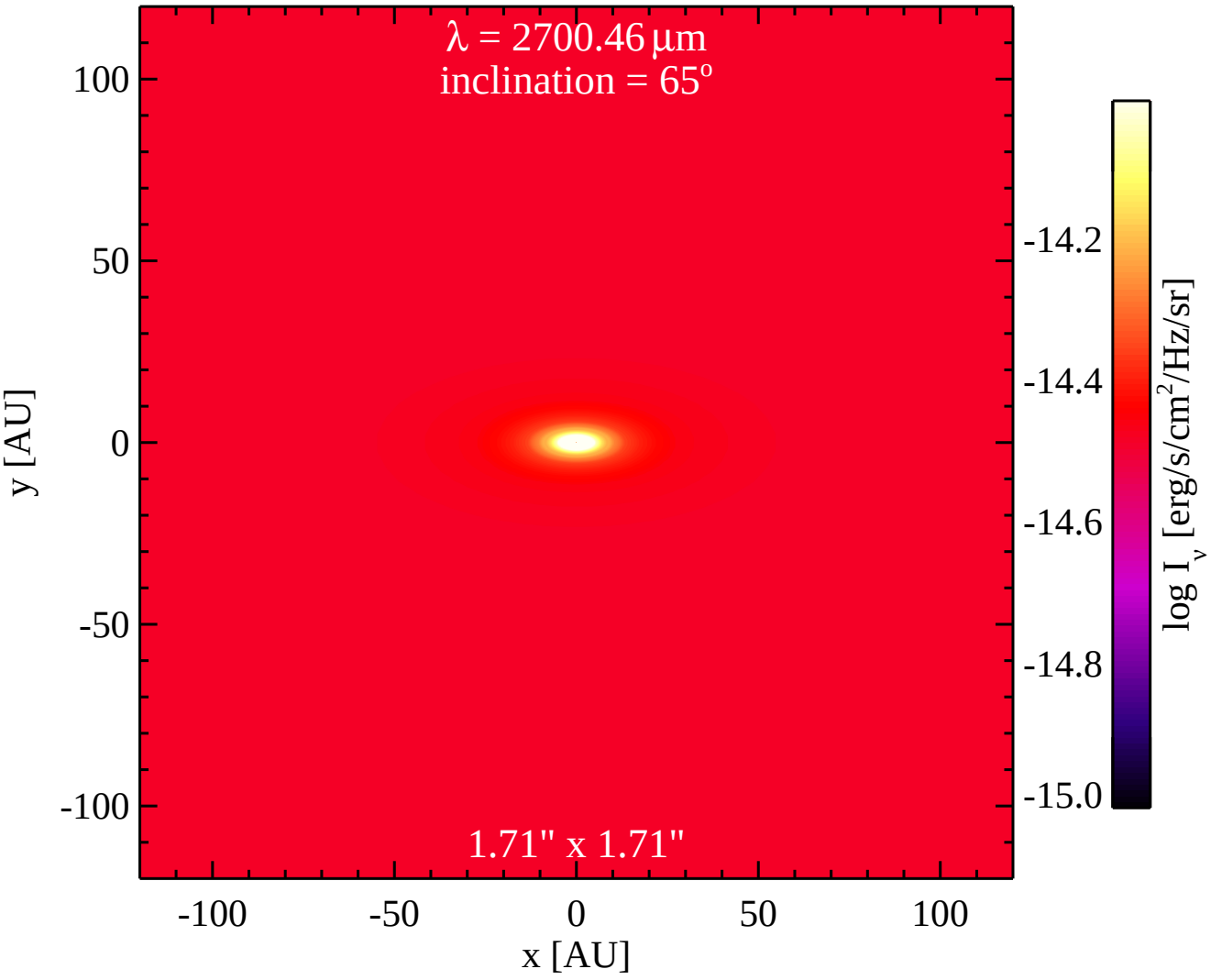

λ = 1031.28 μm
inclination = 65°
1.56" x 1.56"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

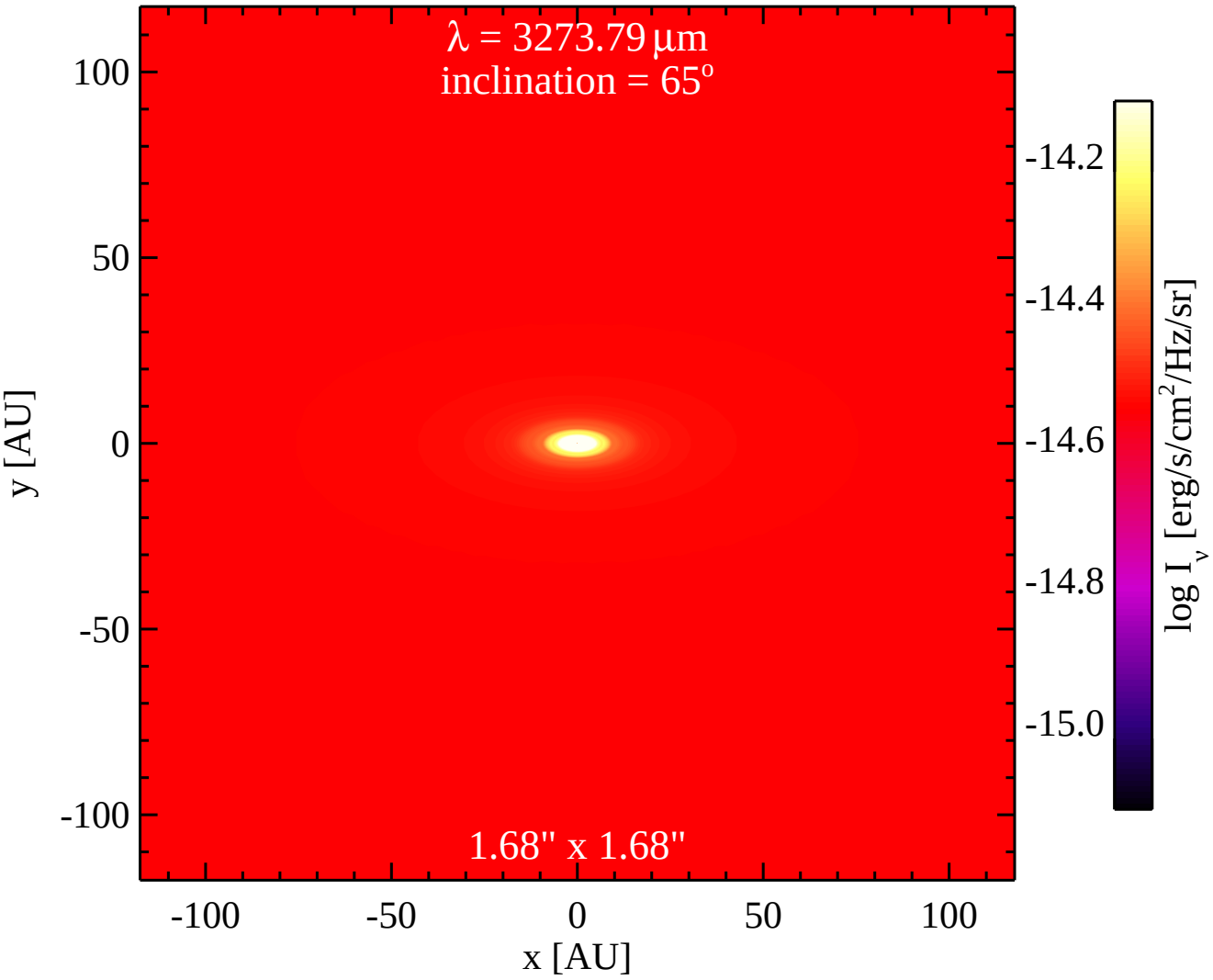

λ = 1250.23 μm
inclination = 65°
1.58" x 1.58"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]

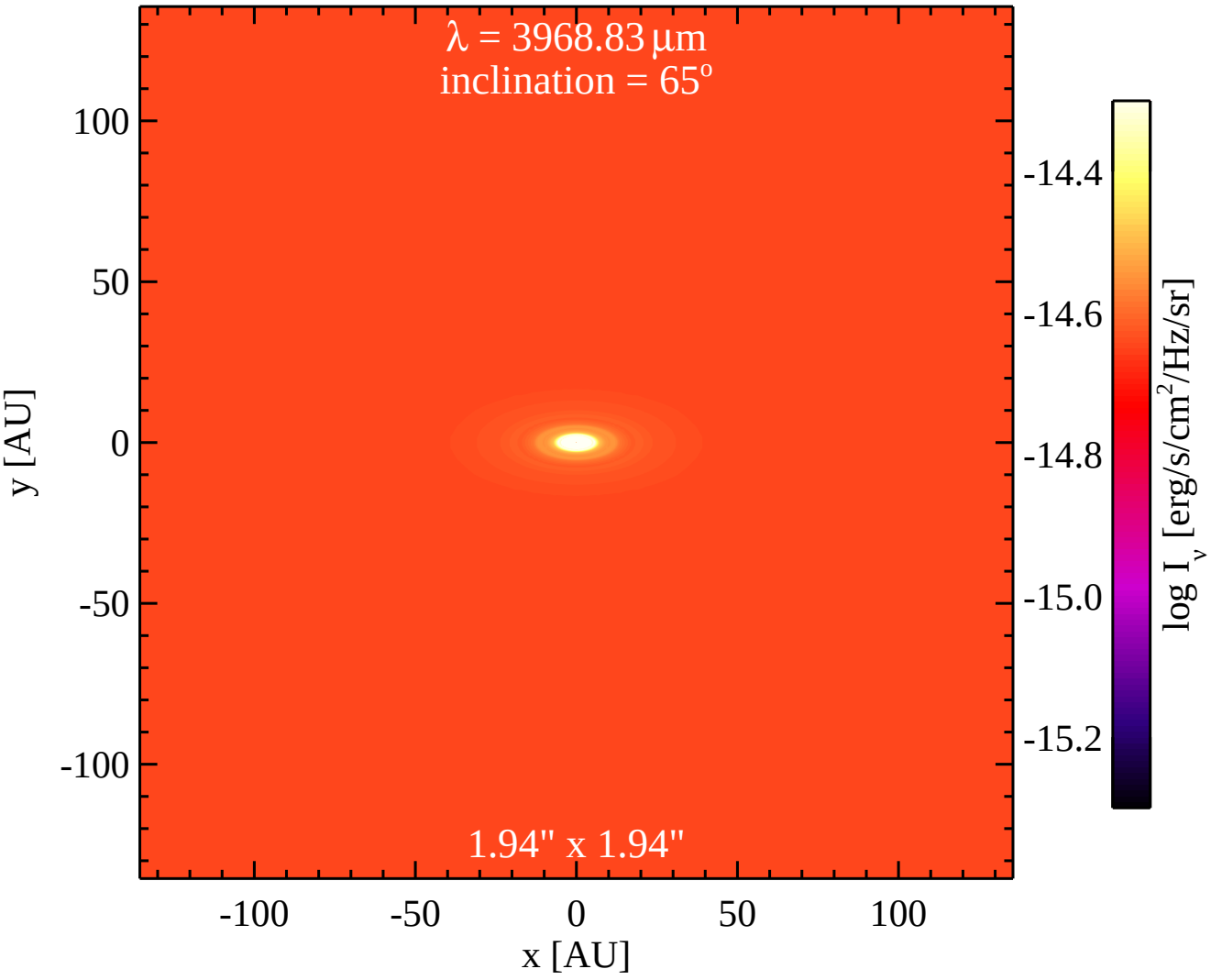

λ = 1515.66 μm
inclination = 65°
1.59" x 1.59"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]

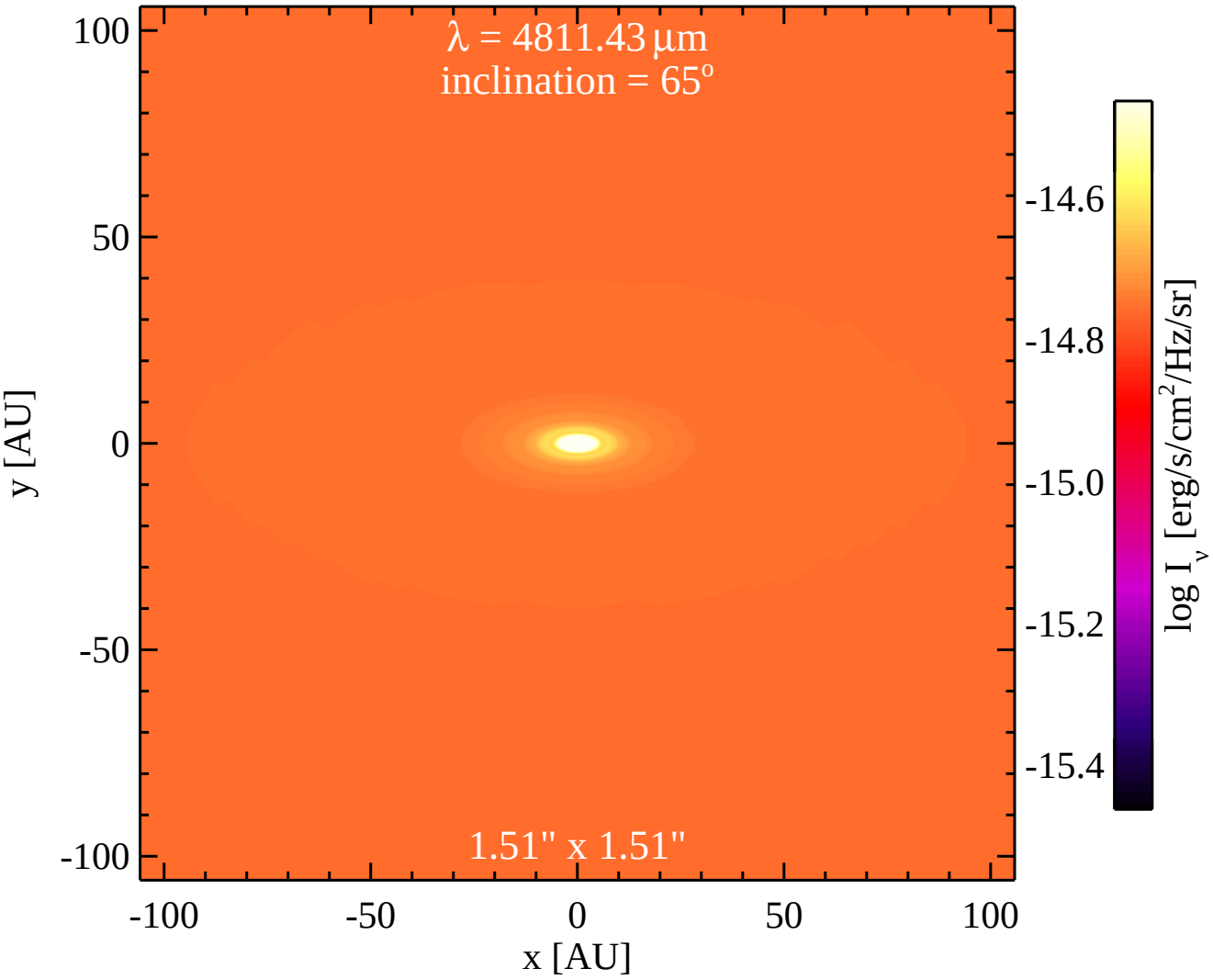

λ = 1837.44 μm
inclination = 65°
1.61" x 1.61"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 2227.54 μm
inclination = 65°
1.67" x 1.67"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 2700.46 μm
inclination = 65°
1.71" x 1.71"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-14.2
-14.4
-14.6
-14.8
-15.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 3273.79 μm
inclination = 65°
1.68" x 1.68"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-14.2
-14.4
-14.6
-14.8
-15.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 3968.83 μm
inclination = 65°
1.94" x 1.94"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-14.4
-14.6
-14.8
-15.0
-15.2
log I_ν [erg/s/cm²/Hz/sr]


λ = 4811.43 μm
inclination = 65°
1.51" x 1.51"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-14.6
-14.8
-15.0
-15.2
-15.4
log I_ν [erg/s/cm²/Hz/sr]