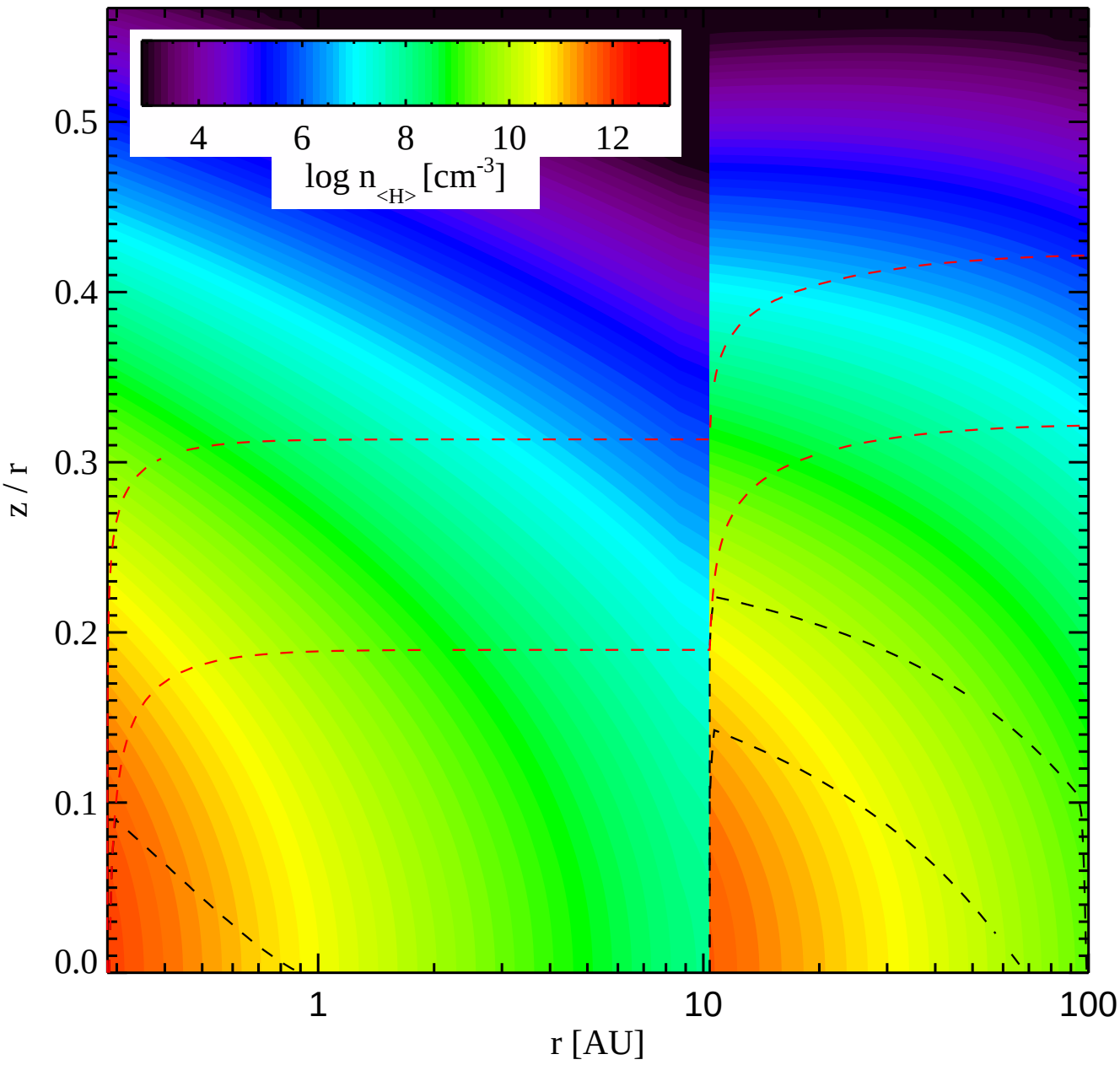
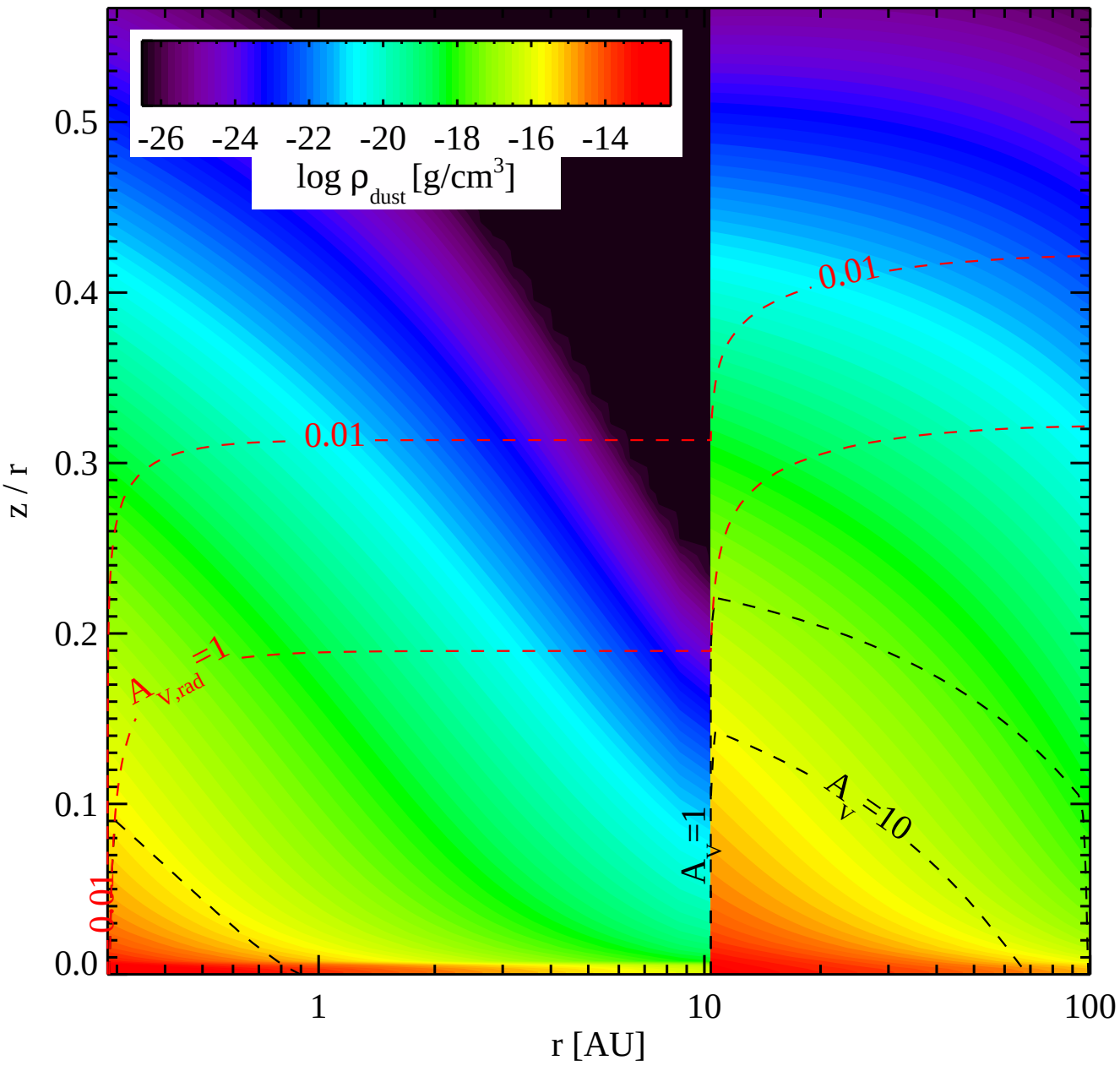
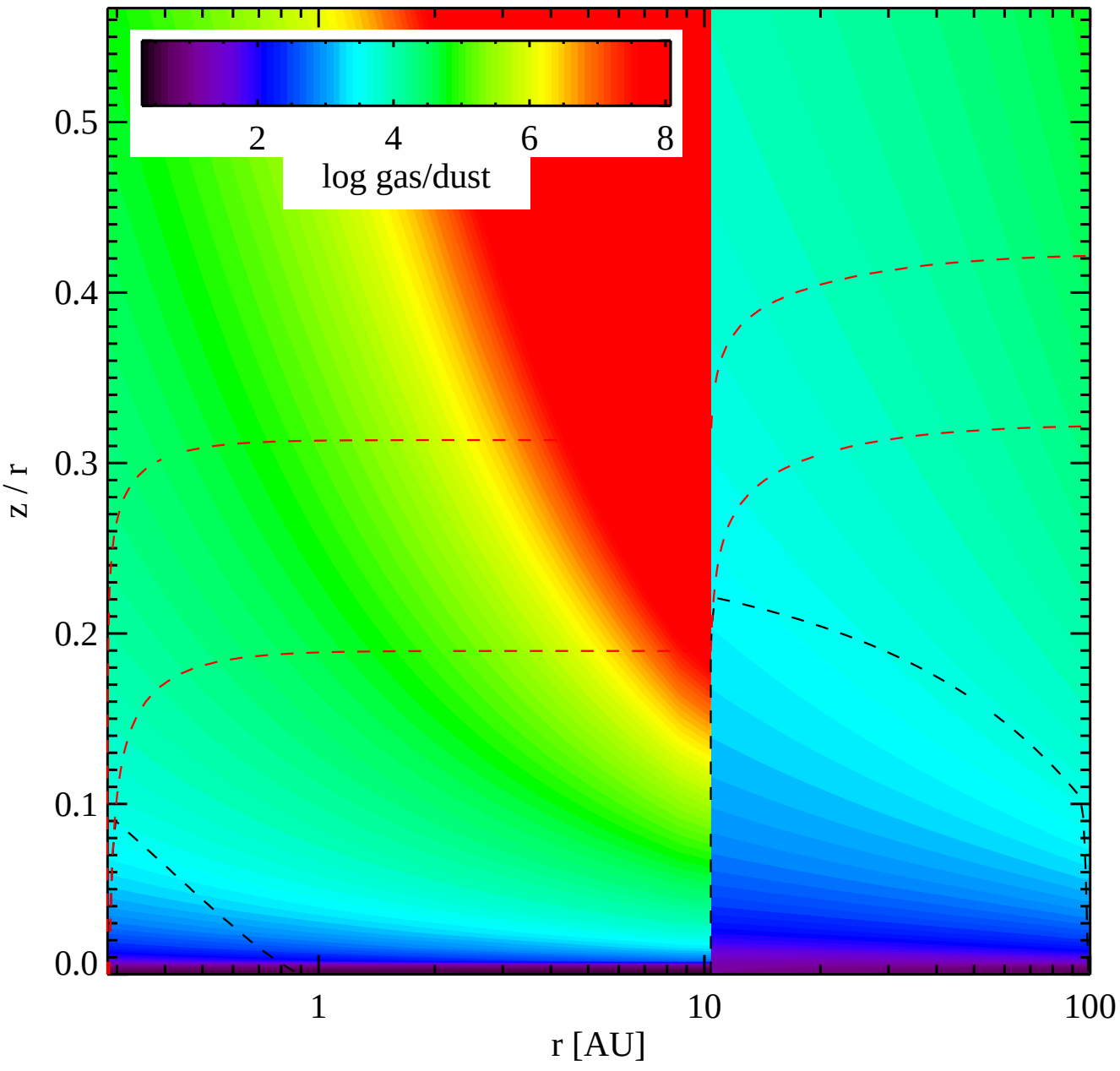
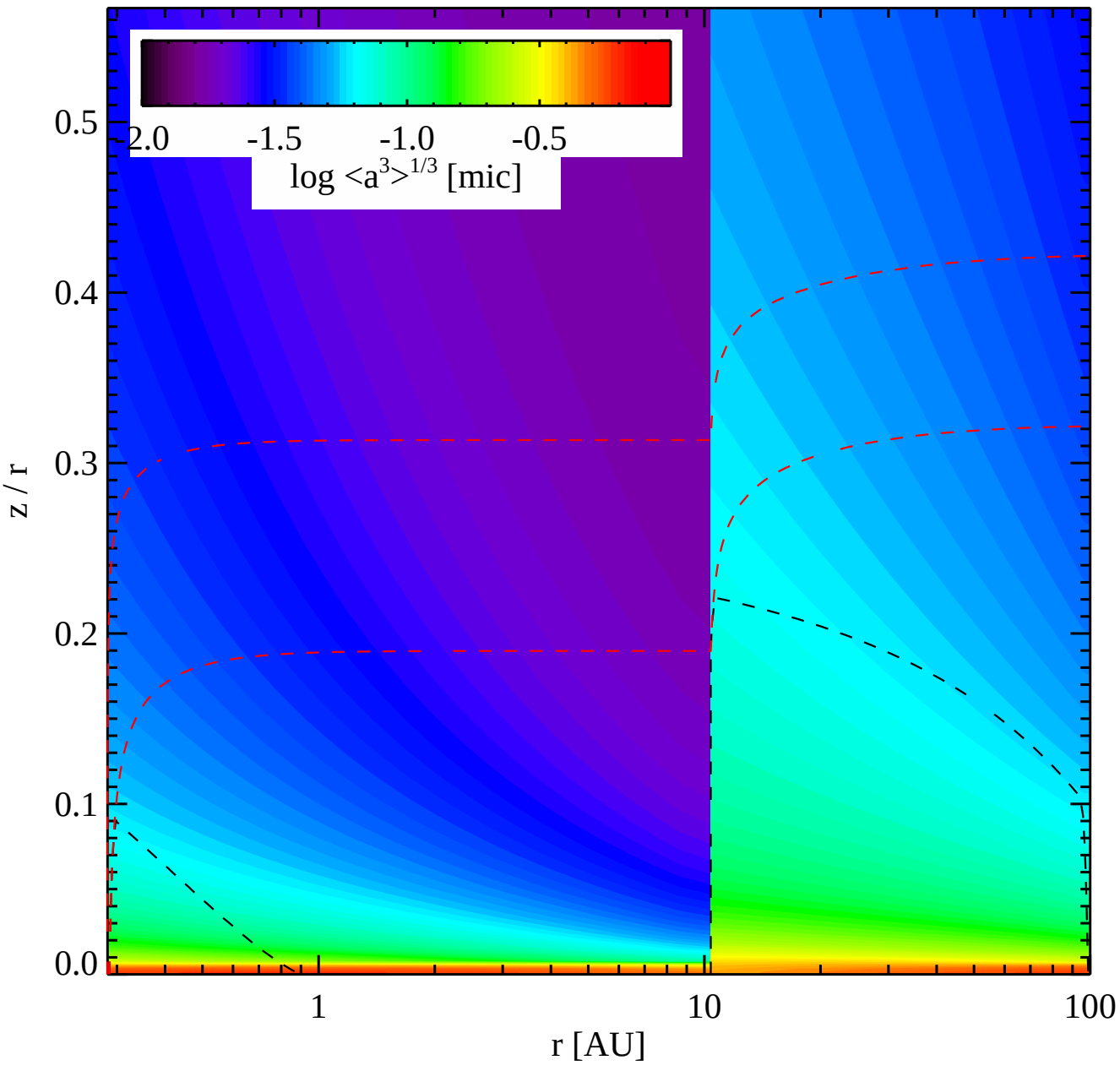
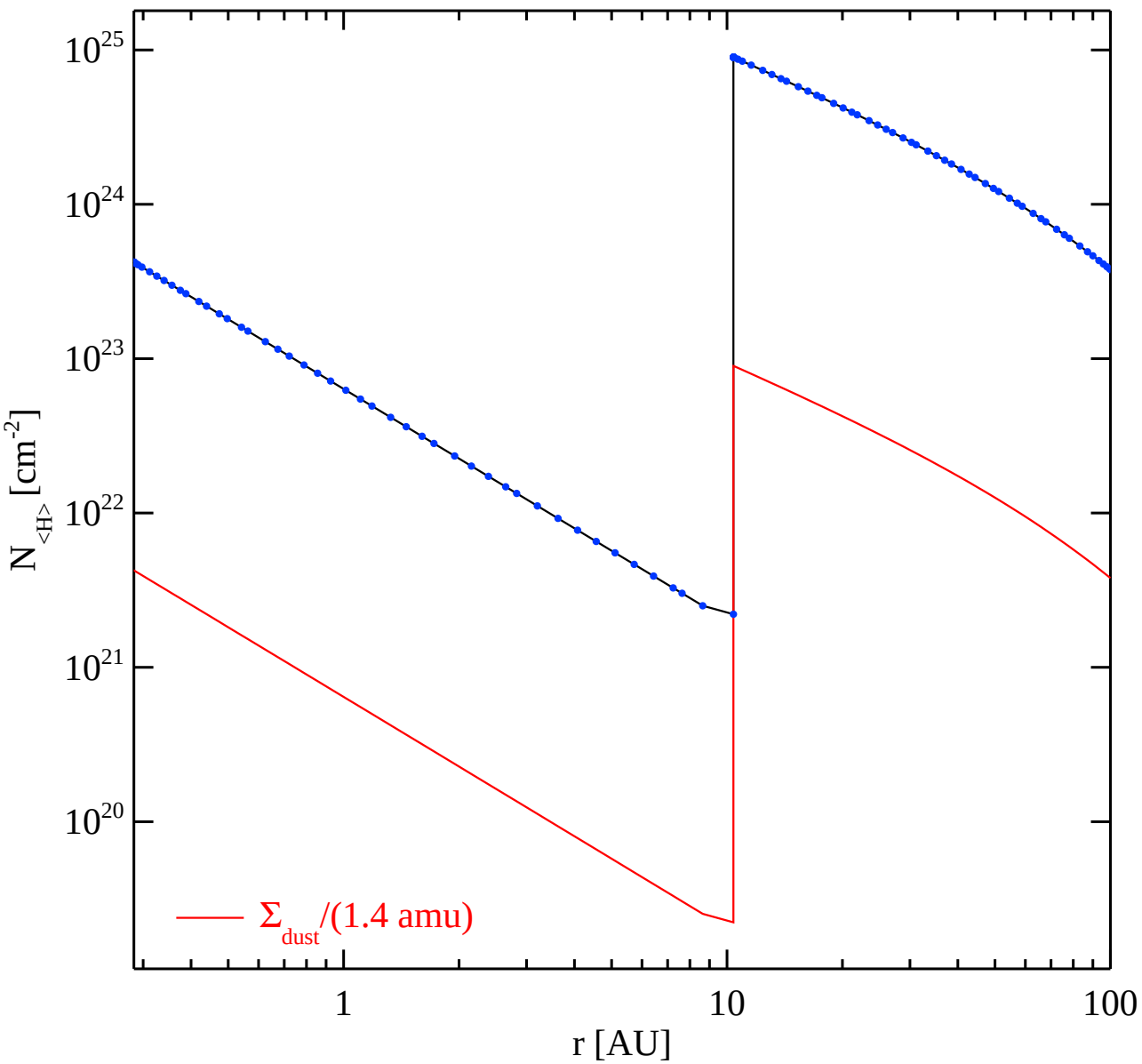
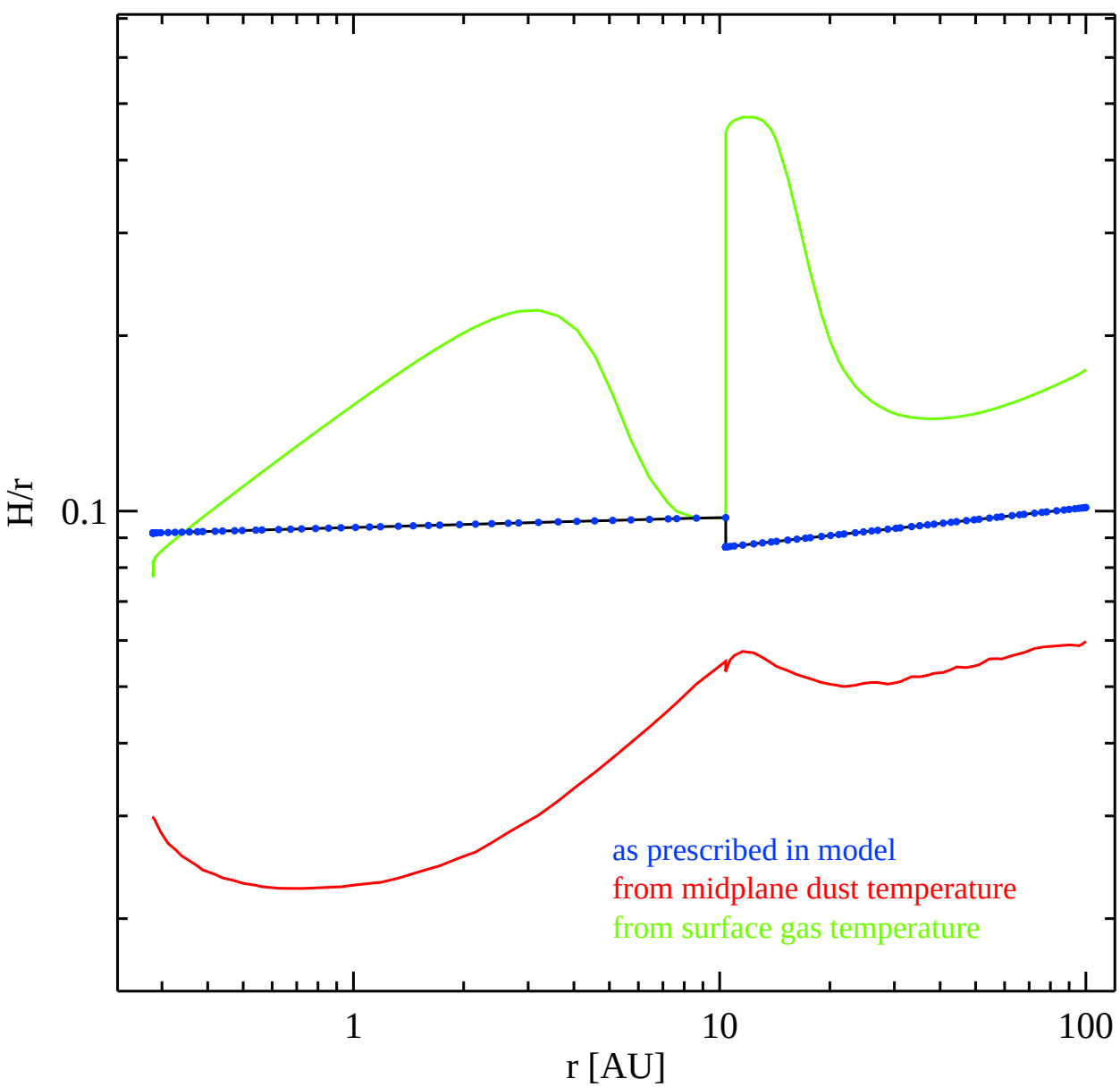

4
6
8
10
12
log n<H> [cm-3]
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

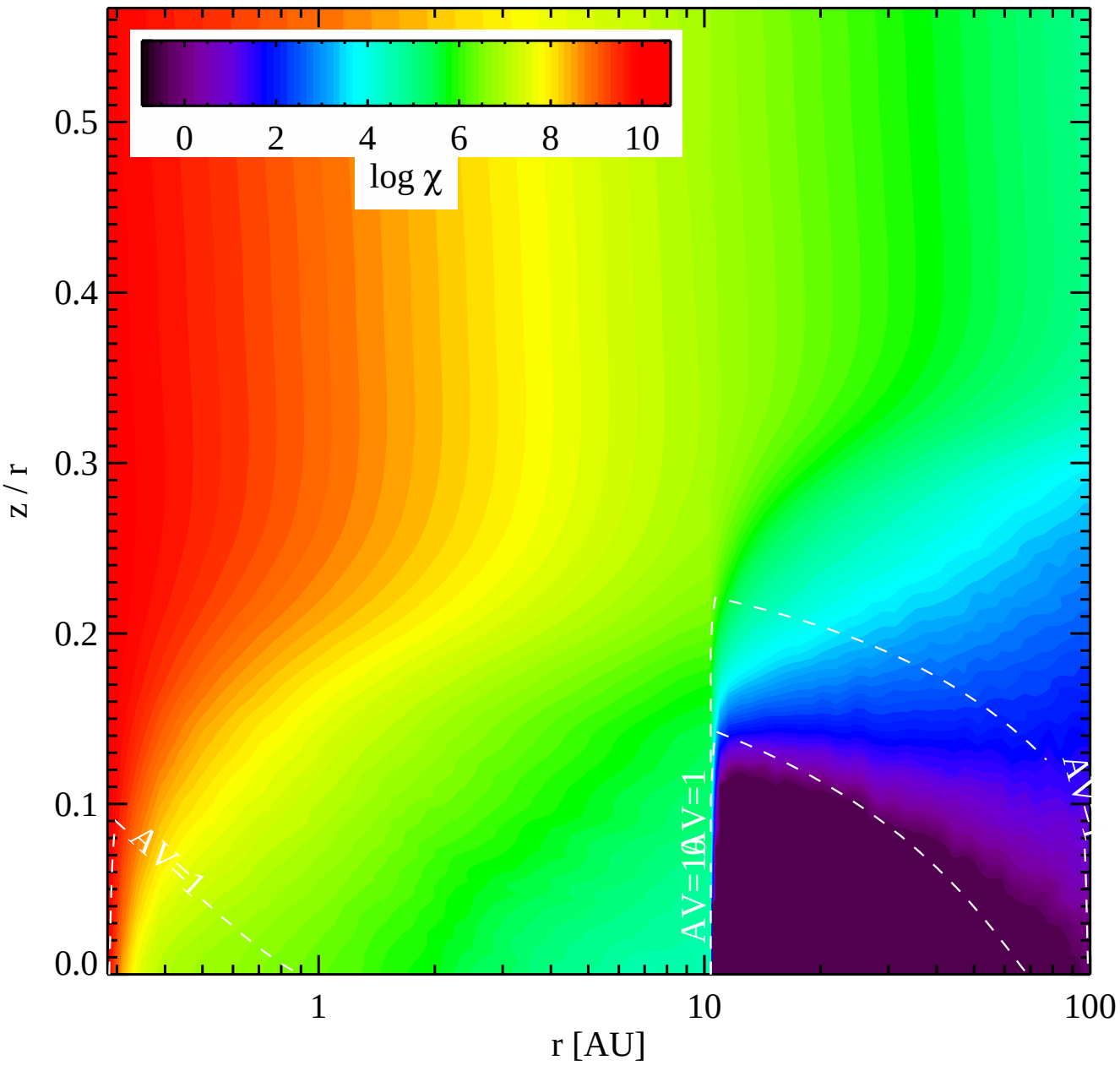

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]
0.01
0.01
0.01
AV,rad =1
AV =1
AV =10

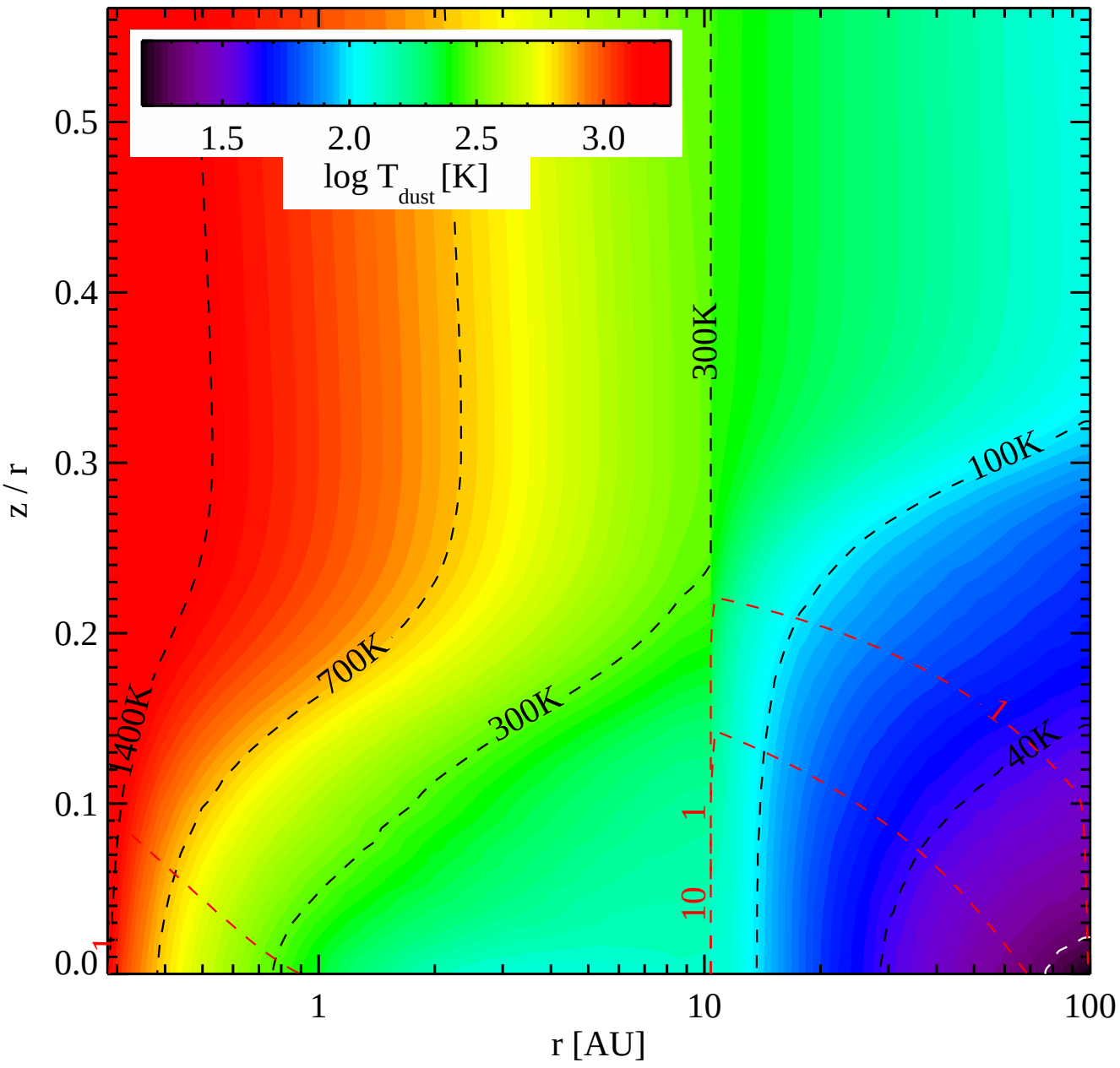

2
4
6
8
log gas/dust
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

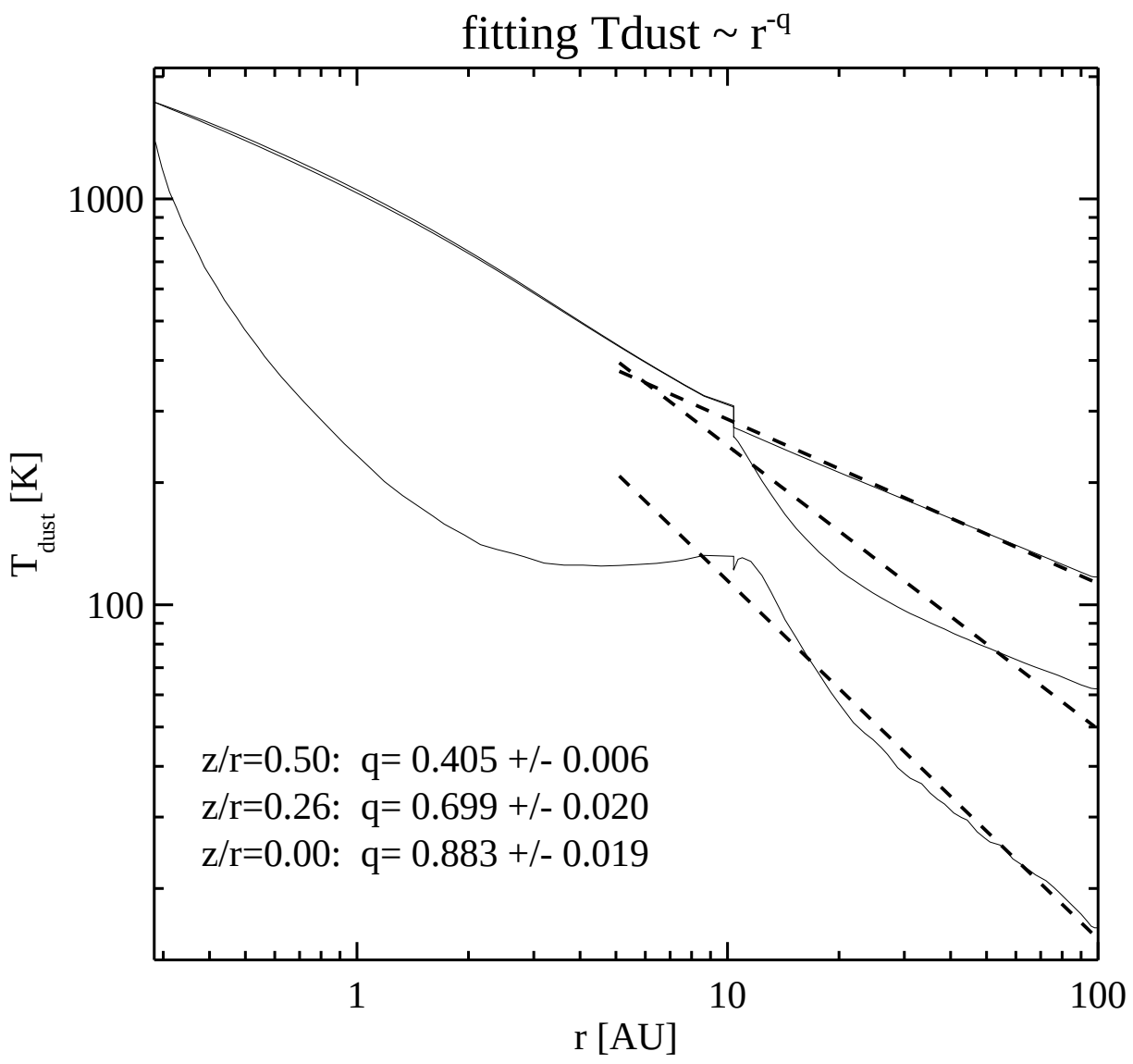

-2.0
-1.5
-1.0
-0.5
log <a^3>^1/3 [mic]
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

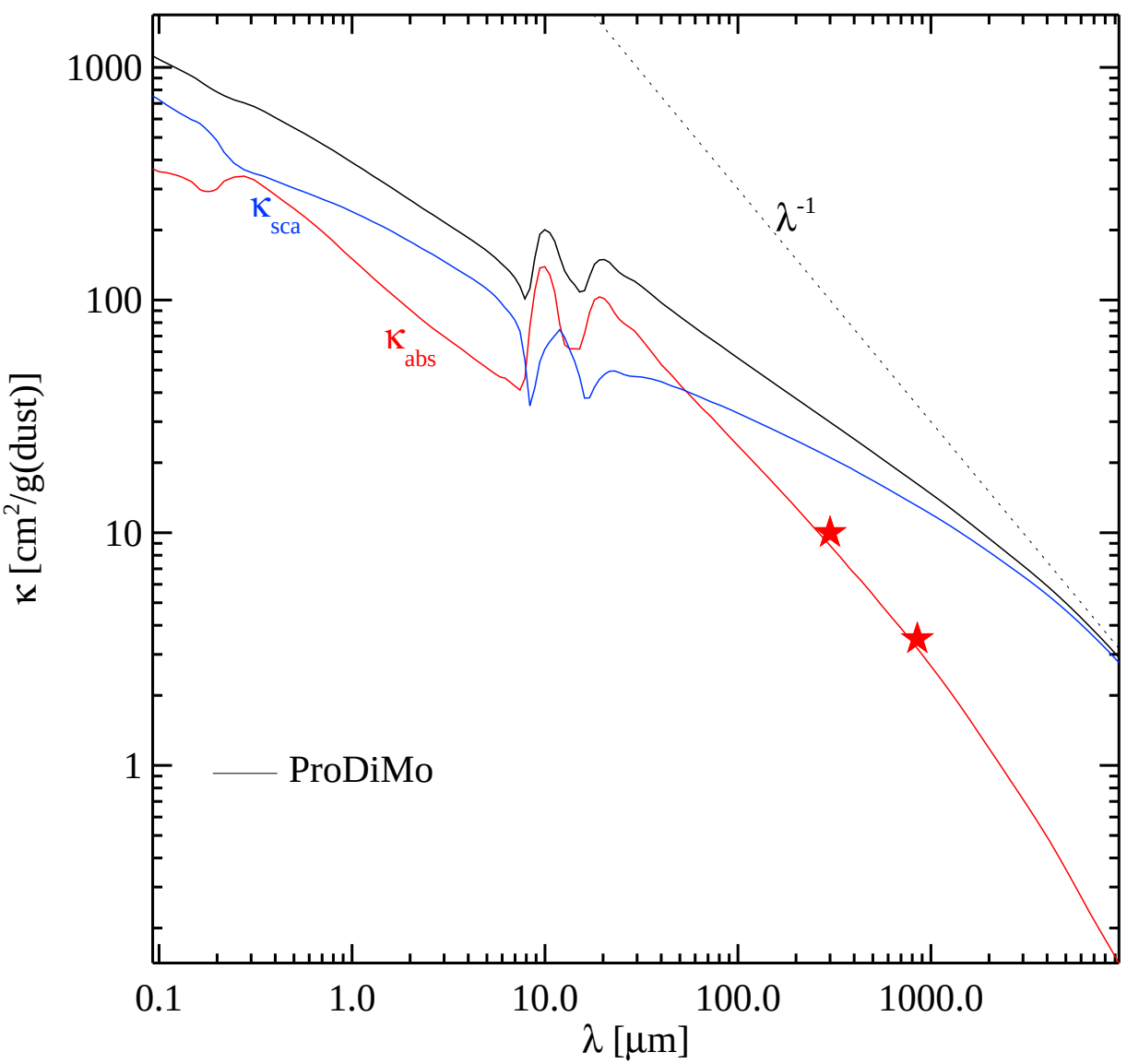

$10^{25}$
$10^{24}$
$10^{23}$
$10^{22}$
$10^{21}$
$10^{20}$
$N_{<H>}$ [cm$^{-2}$]
1
10
100
r [AU]
$\Sigma_{dust}$/(1.4 amu)

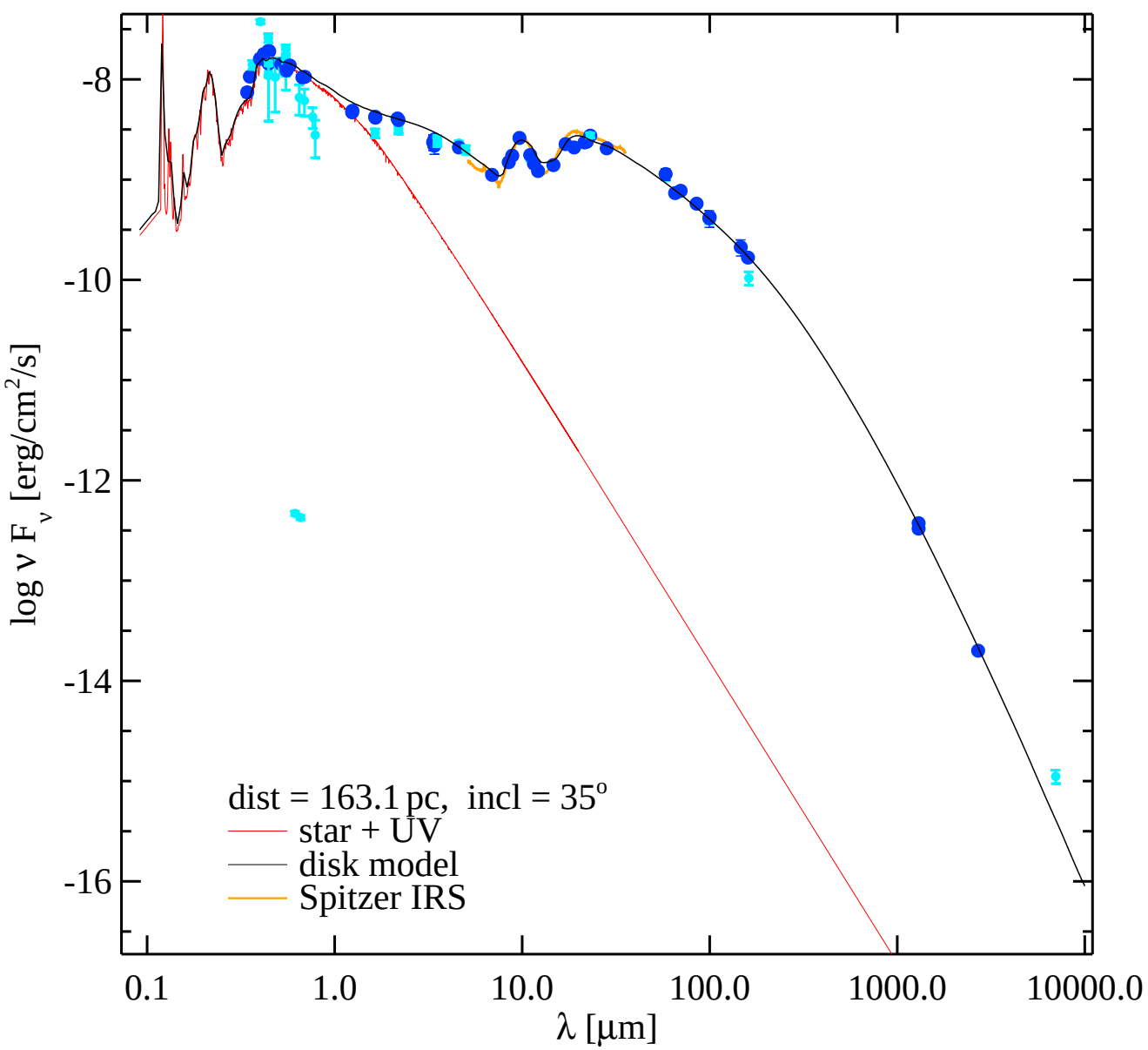

H/r
0.1
1
10
100
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

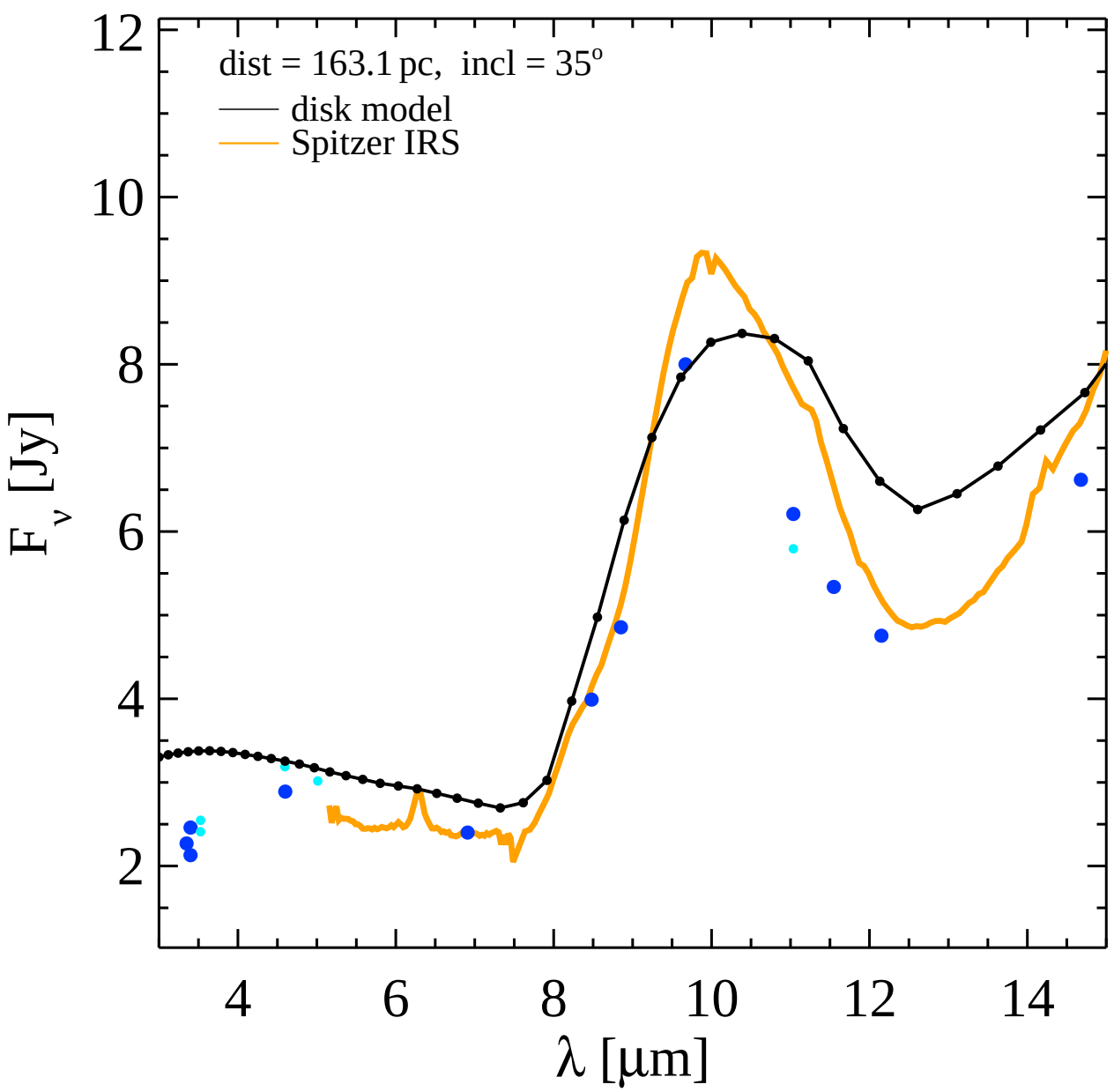

0
2
4
6
8
10
log χ
0.5
0.4
0.3
0.2
0.1
0.0
z / r
AV=1
AV=1
AV=1
1
10
100
r [AU]

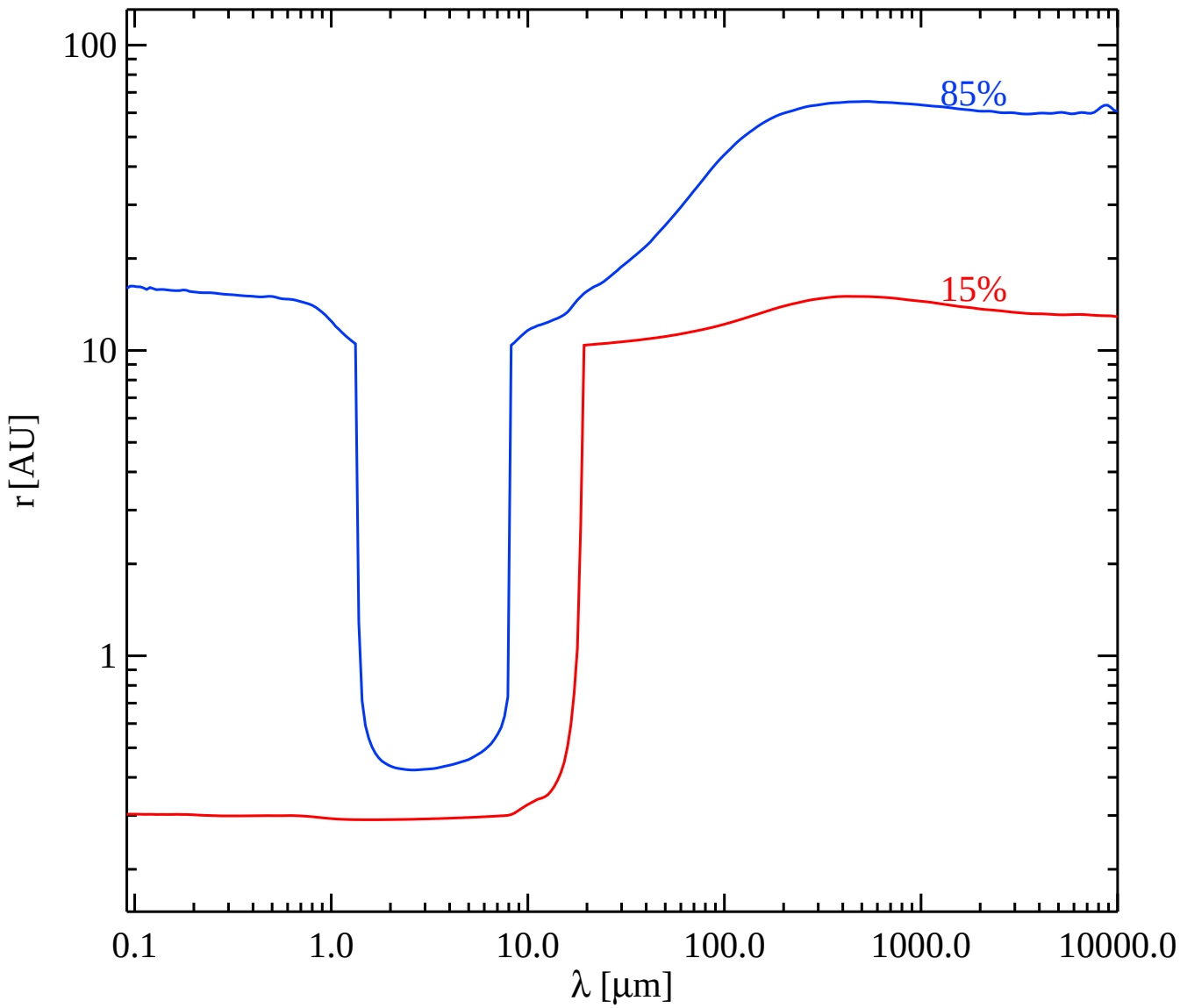

1.5
2.0
2.5
3.0
log T dust [K]
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1400K
700K
300K
300K
100K
40K
1
10
1
1
1
10
100
r [AU]

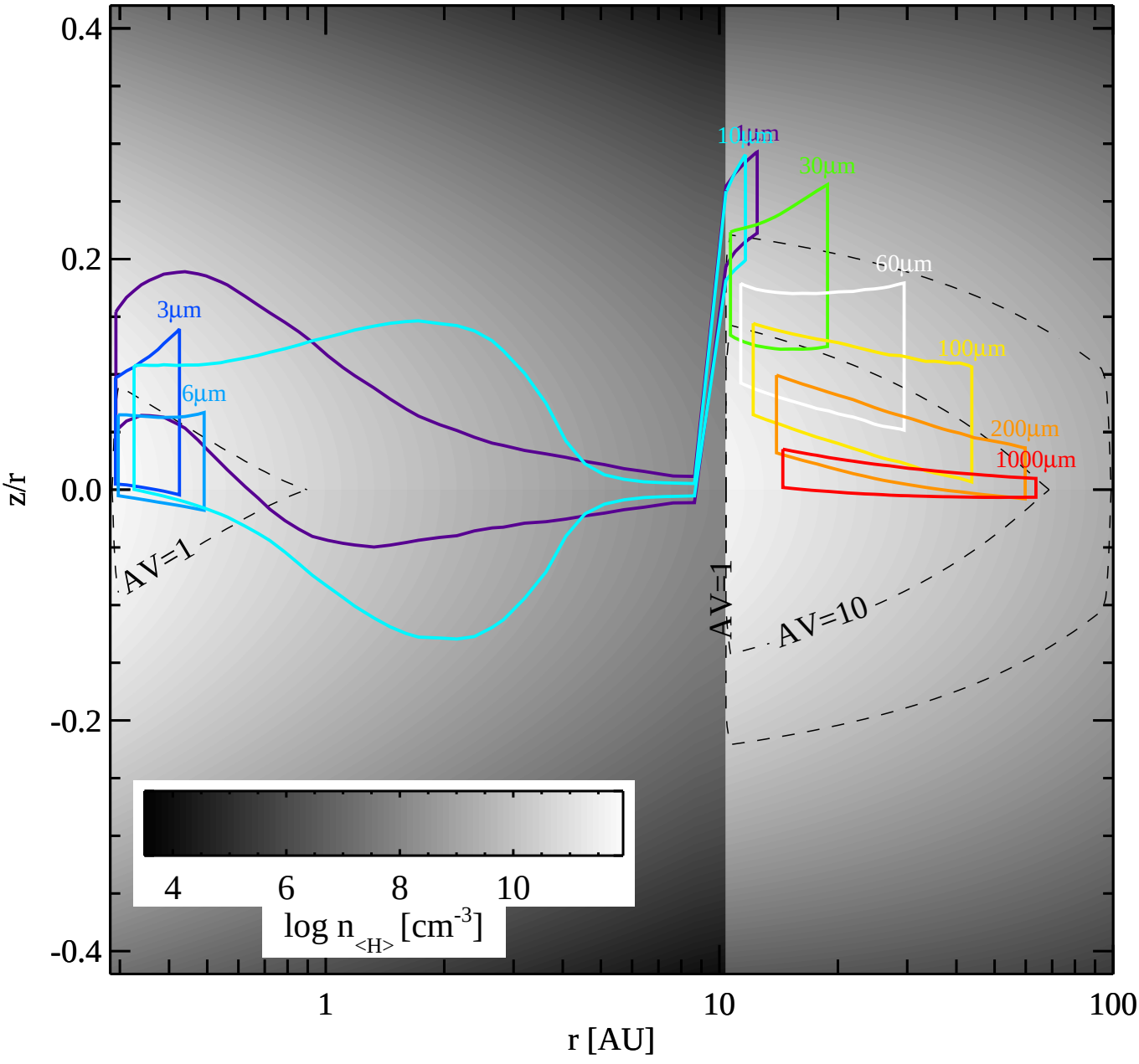

fitting Tdust ~ r^-q
1000
100
T dust [K]
1
10
100
r [AU]
z/r=0.50: q= 0.405 +/- 0.006
z/r=0.26: q= 0.699 +/- 0.020
z/r=0.00: q= 0.883 +/- 0.019

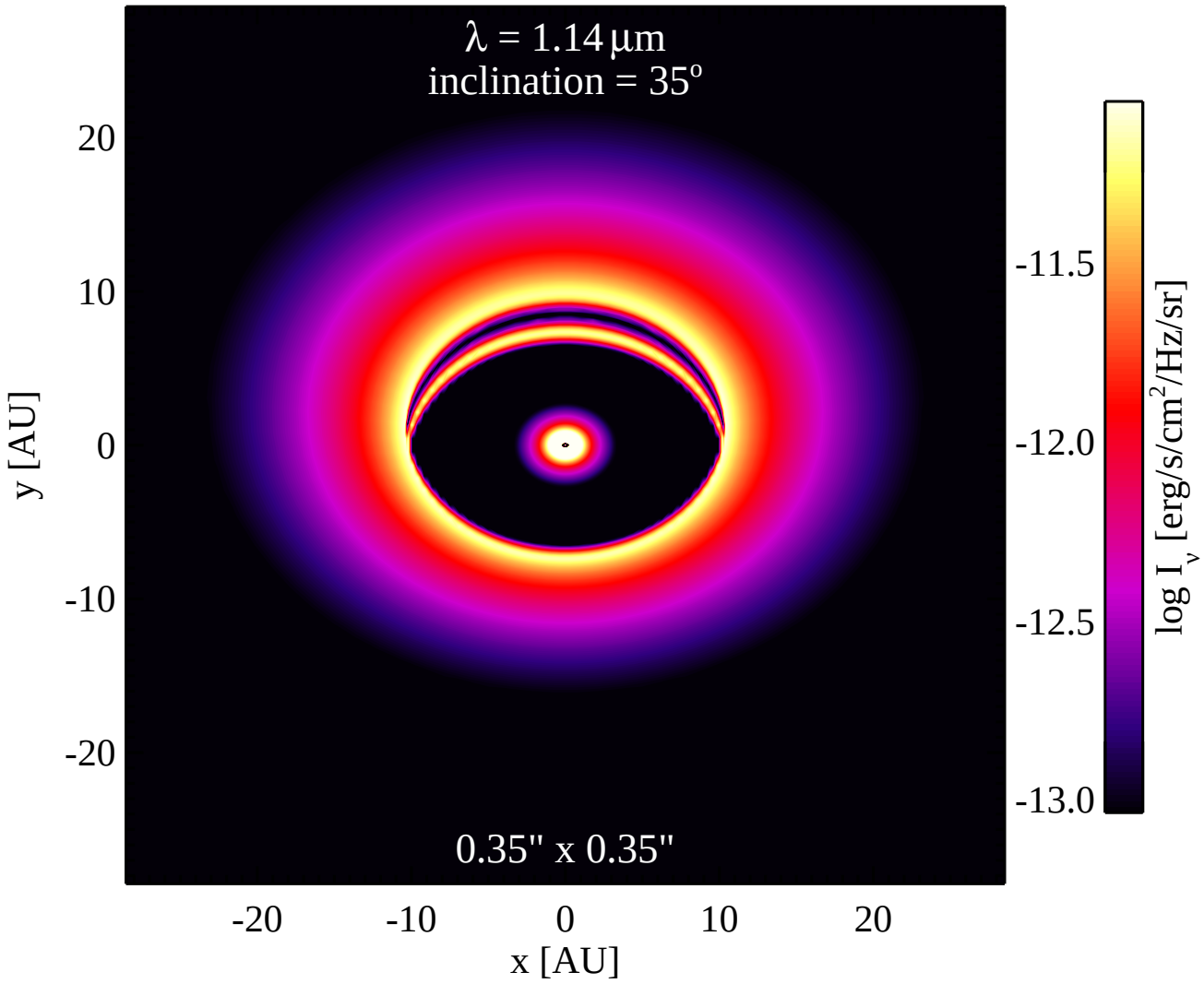

1000
100
10
1
κ [cm²/g(dust)]
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

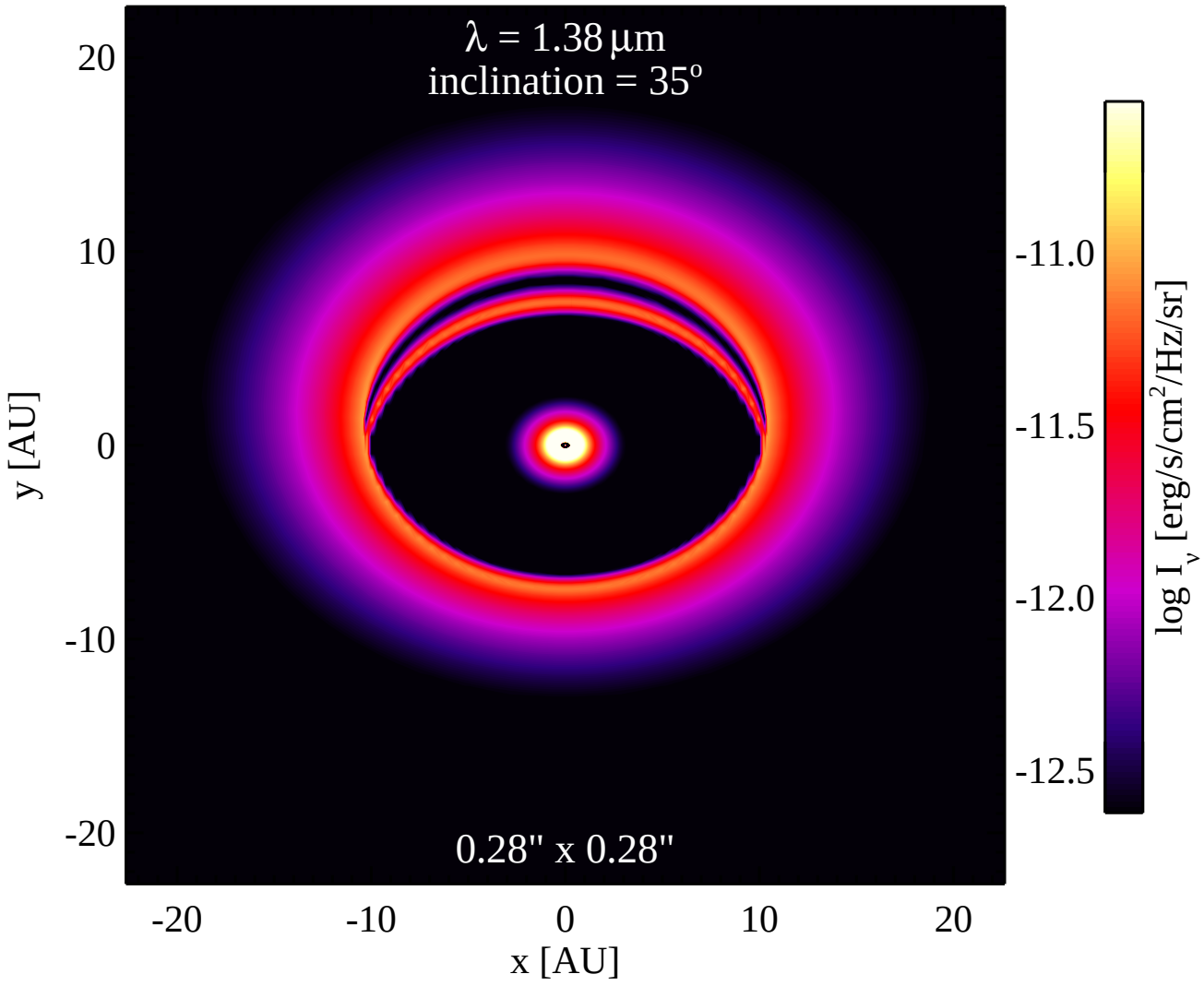

-8
-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 163.1 pc, incl = 35°
star + UV
disk model
Spitzer IRS

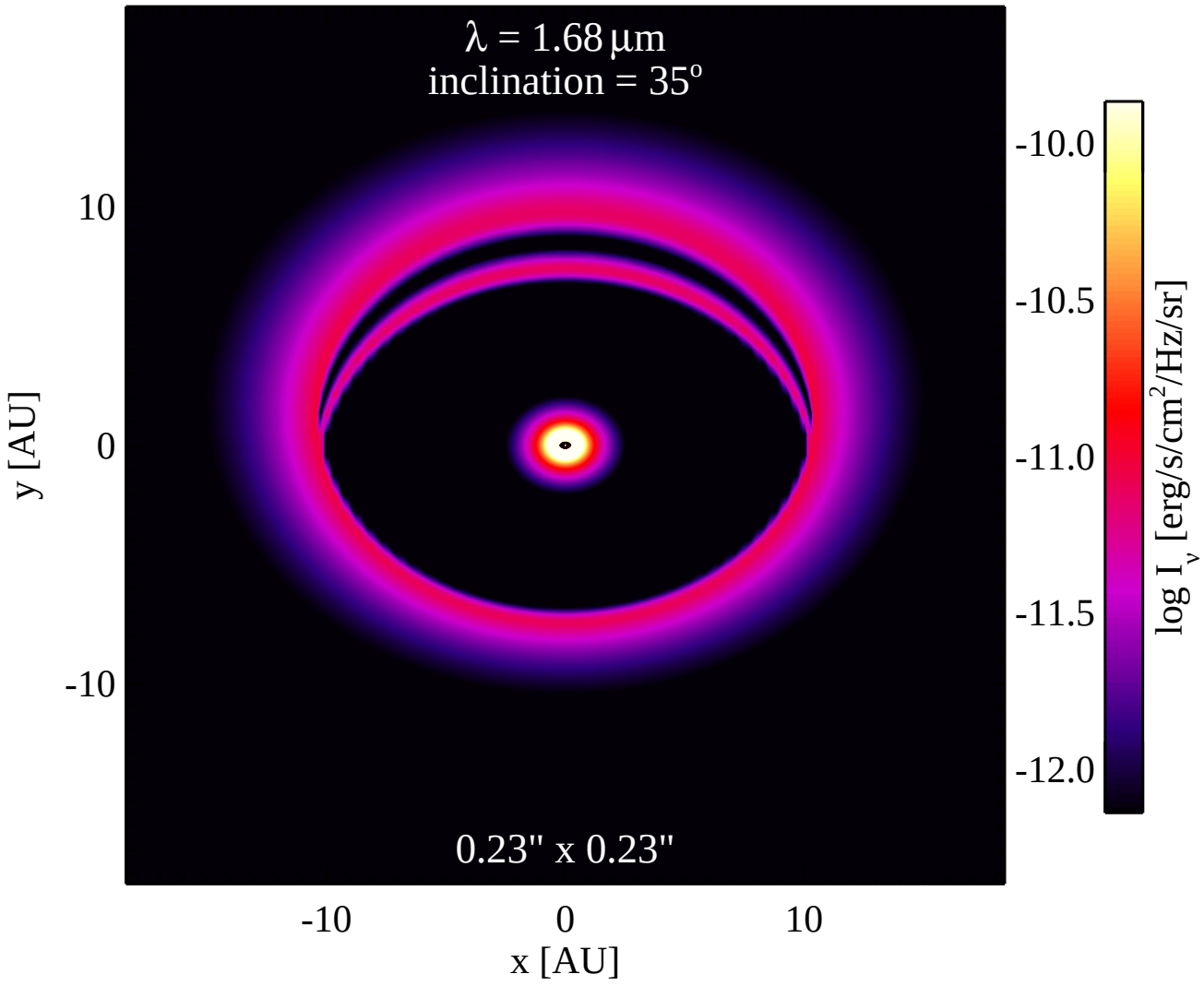

dist = 163.1 pc, incl = 35°
disk model
Spitzer IRS
12
10
8
6
4
2
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

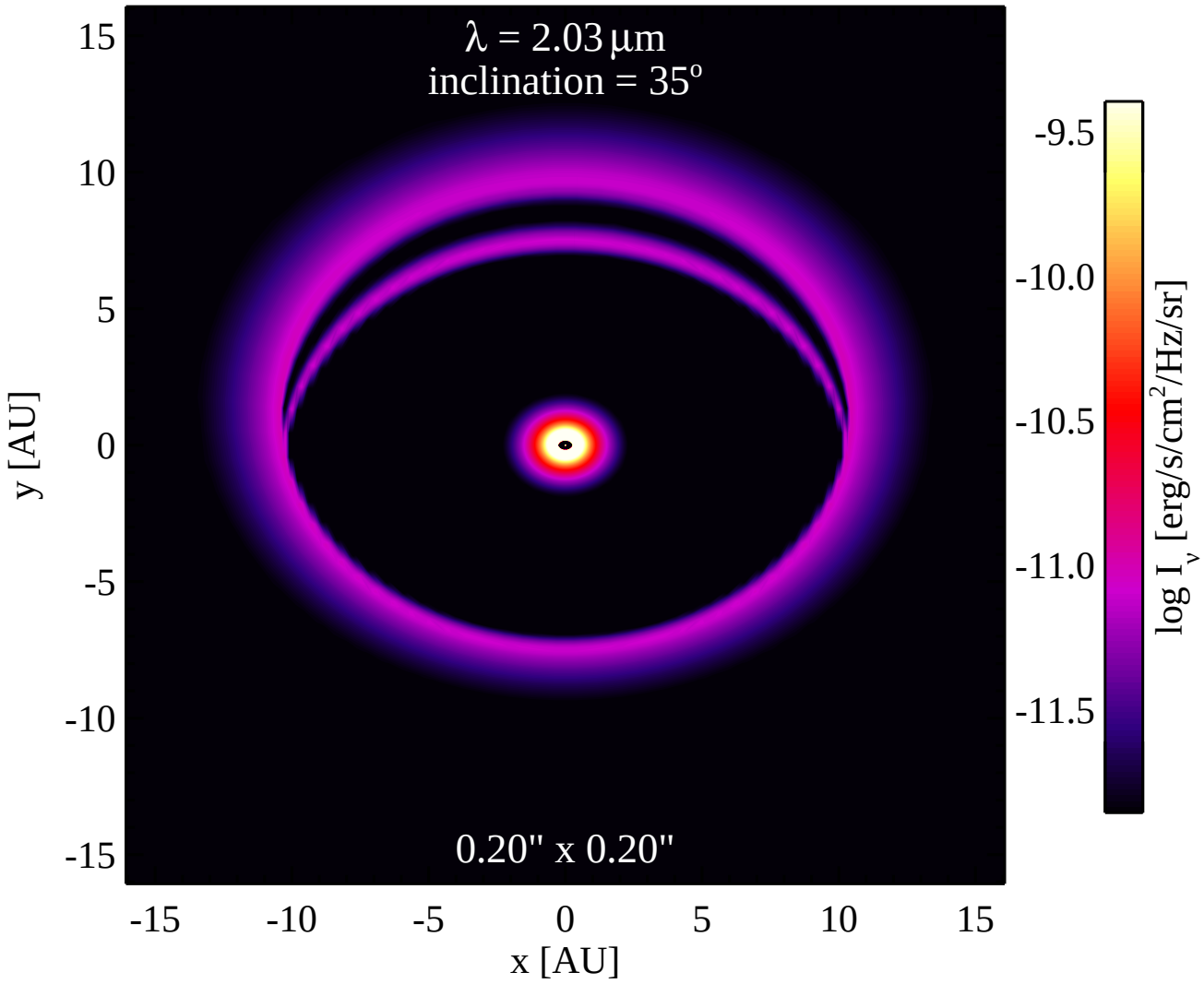

100
10
1
r [AU]
85%
15%
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

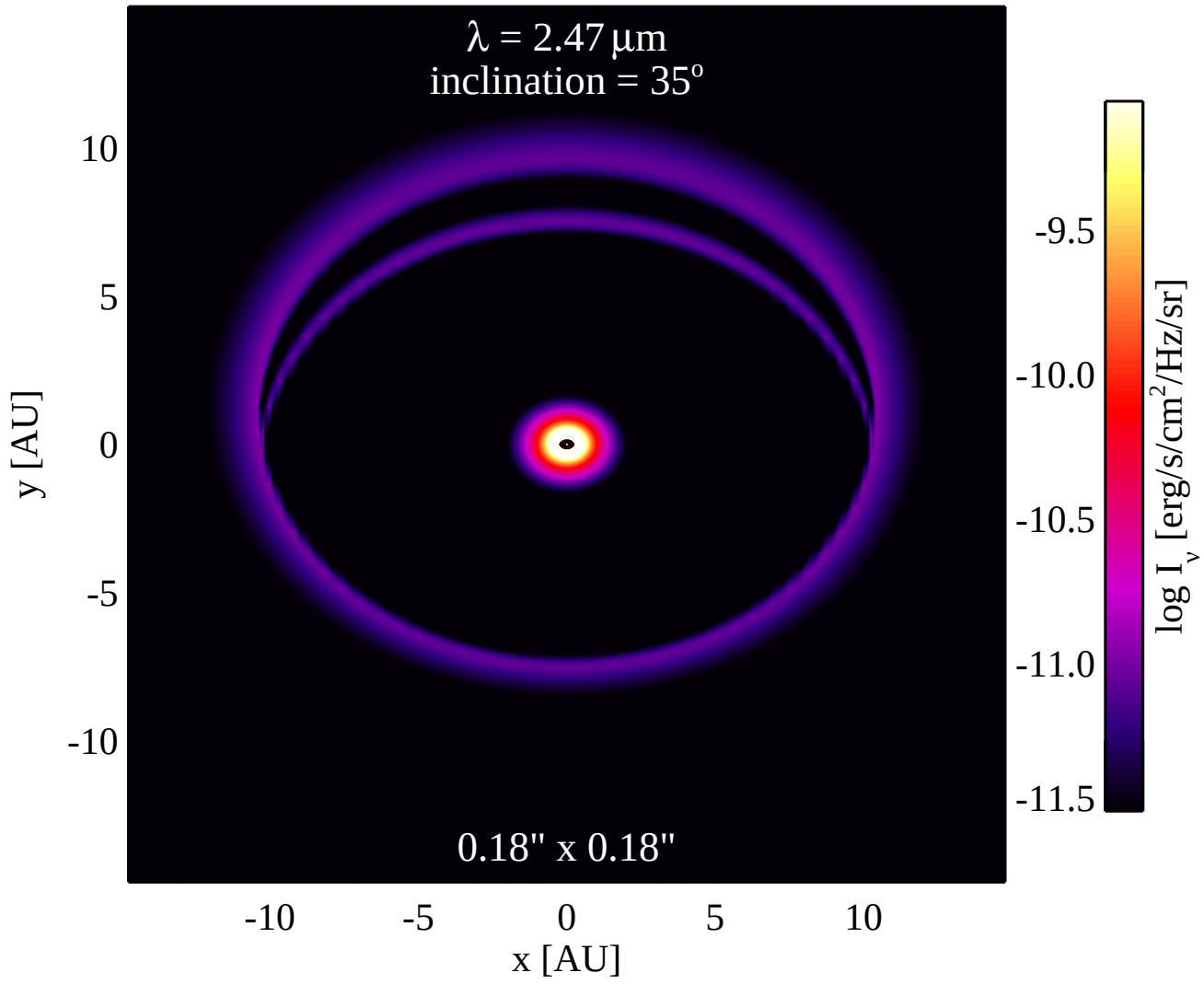

0.4
0.2
0.0
-0.2
-0.4
z/r
1
10
100
r [AU]
1µm
3µm
6µm
30µm
60µm
100µm
200µm
1000µm
AV=1
AV=1
AV=10
4
6
8
10
log n<H> [cm-3]

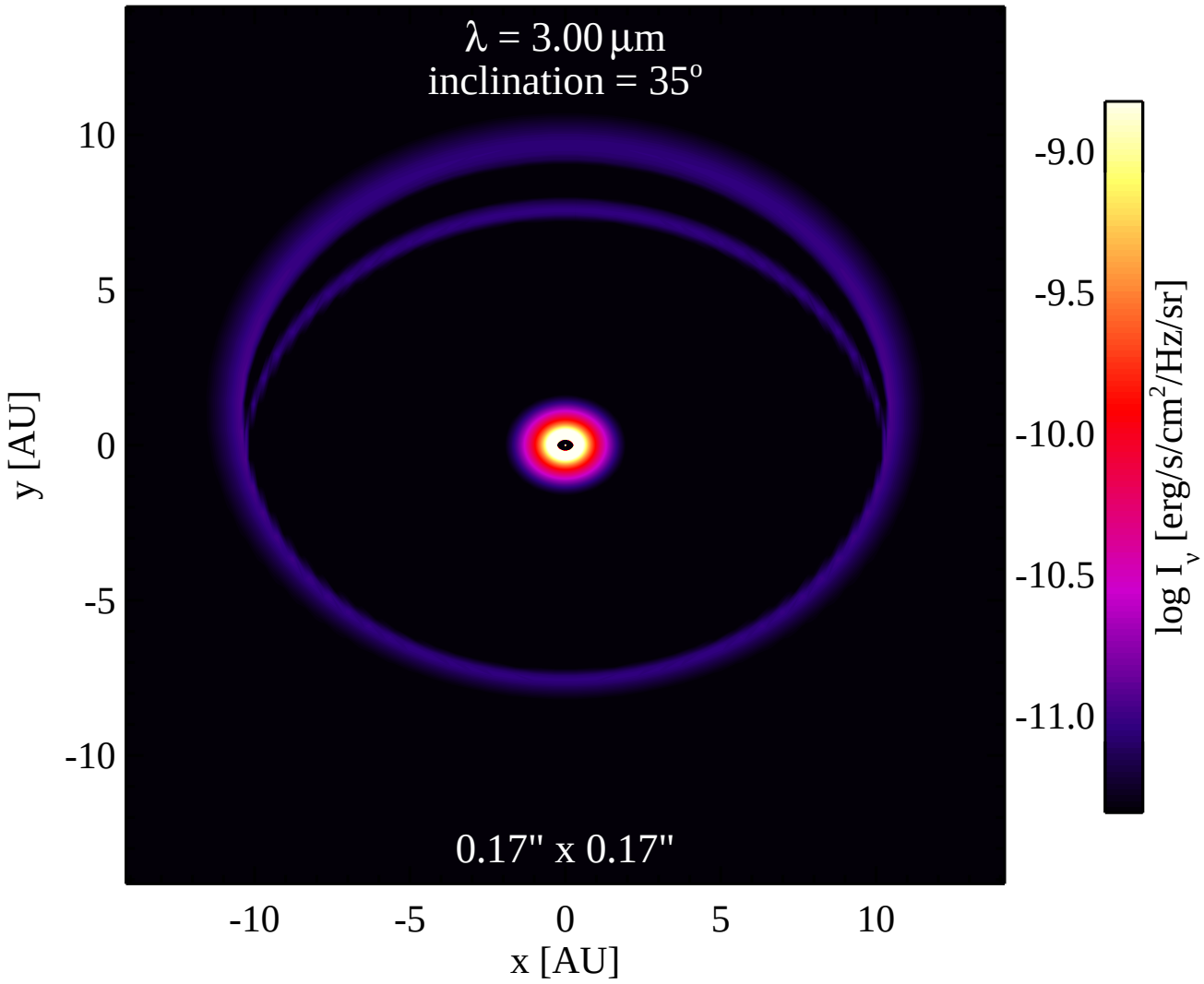

λ = 1.14 μm
inclination = 35°
0.35" x 0.35"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

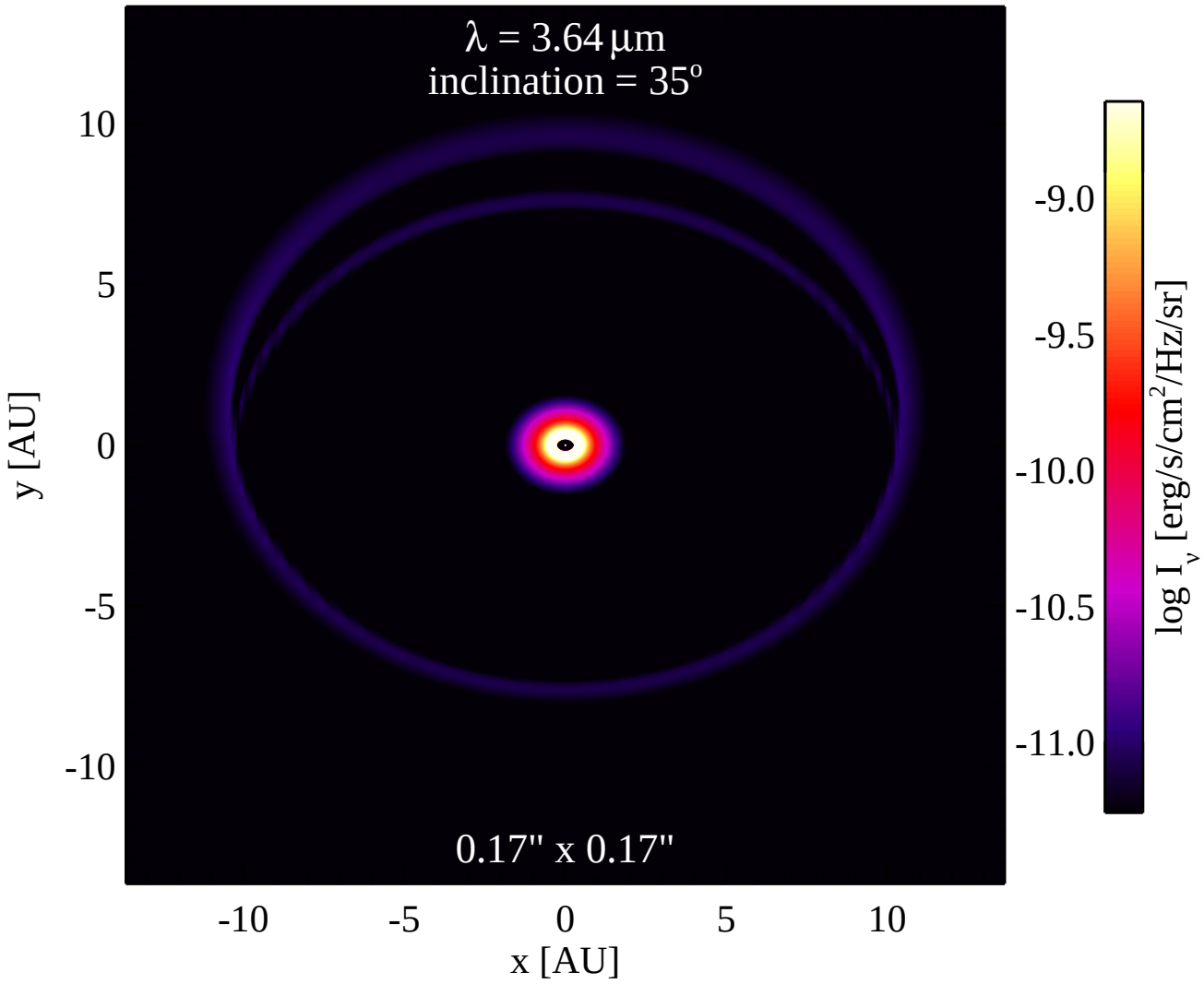

λ = 1.38 μm
inclination = 35°
0.28" x 0.28"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

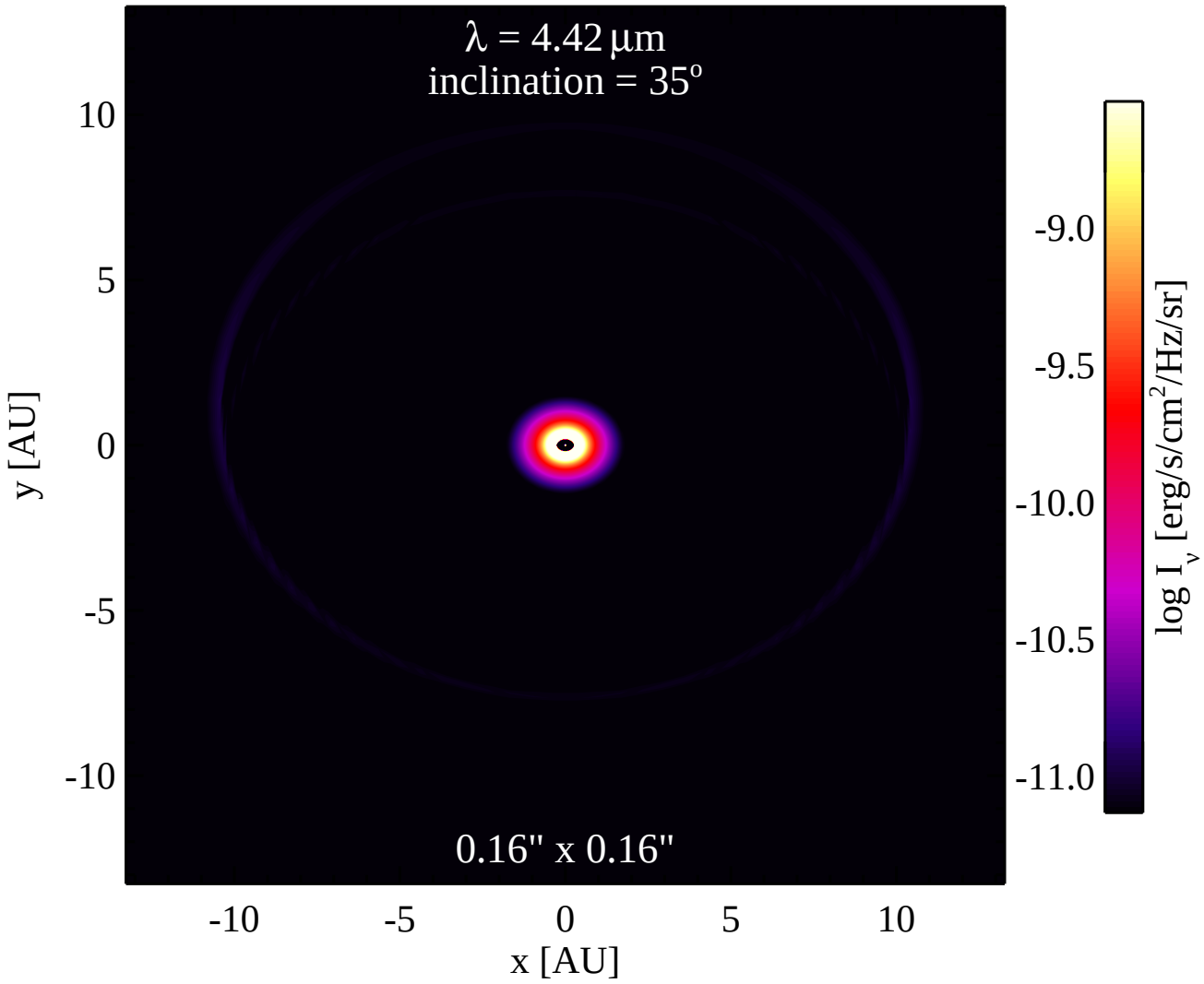

λ = 1.68 μm
inclination = 35°
0.23" x 0.23"
10
0
-10
y [AU]
-10
0
10
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

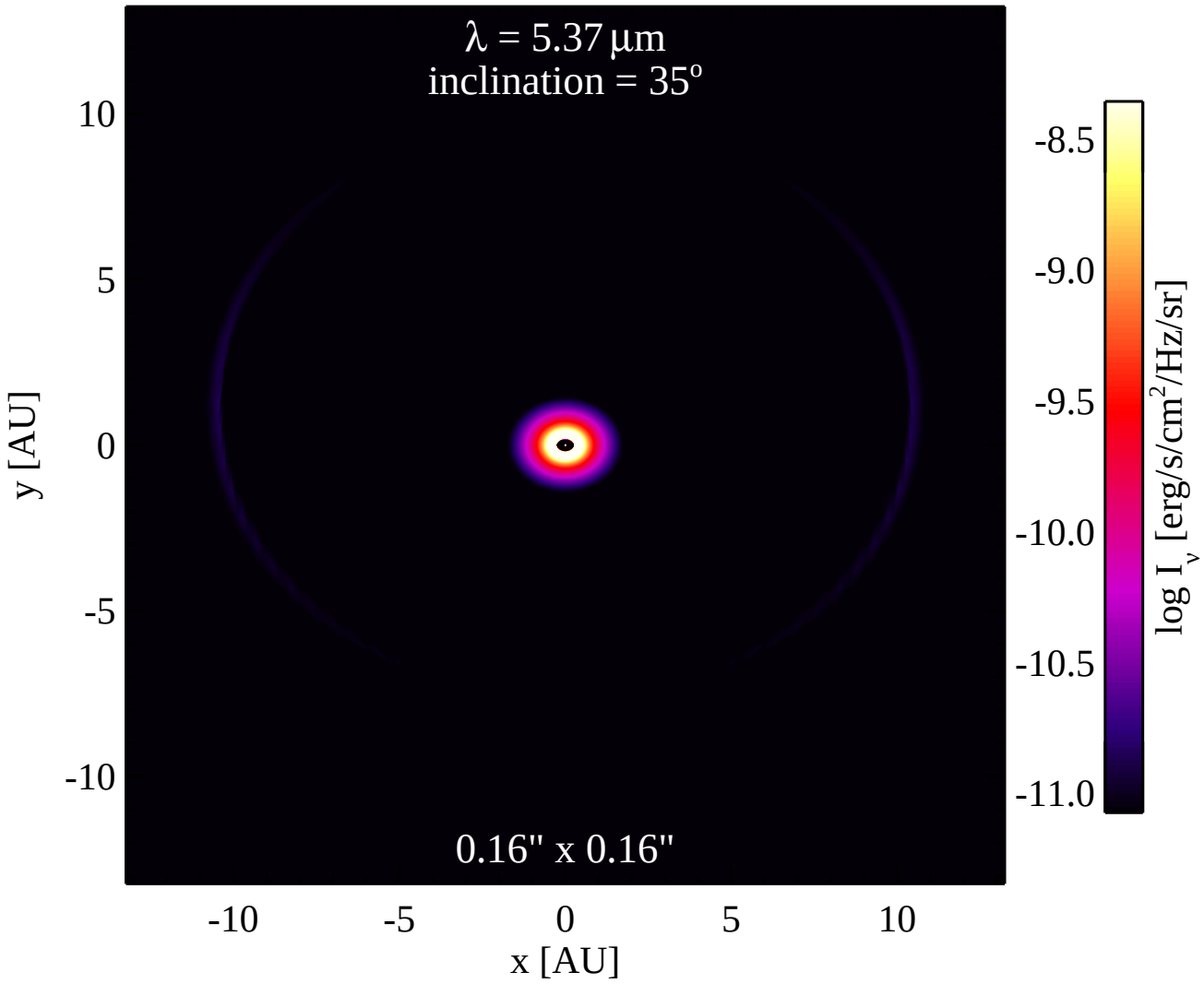

λ = 2.03 μm
inclination = 35°
0.20" x 0.20"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

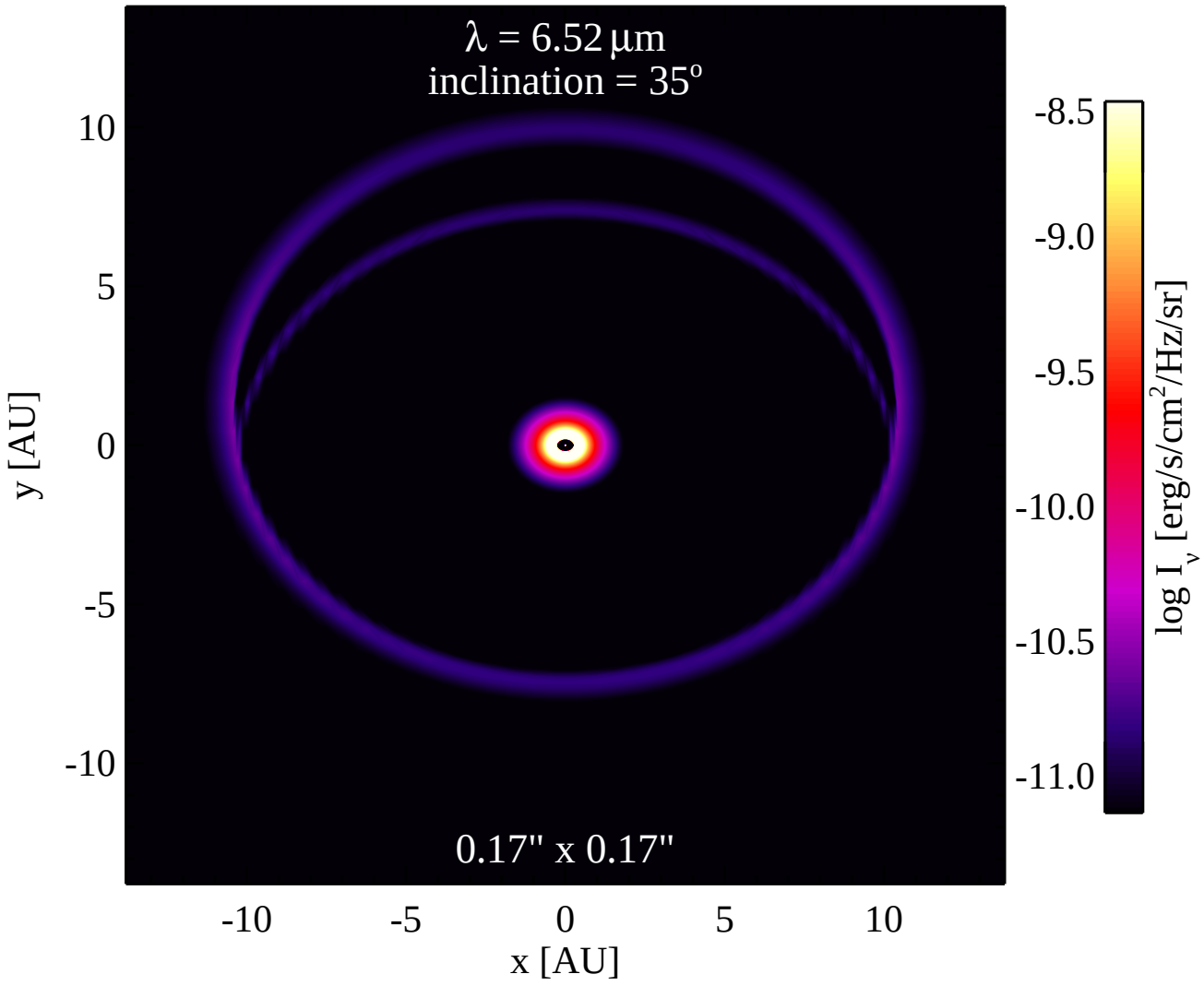

λ = 2.47 μm
inclination = 35°
0.18" x 0.18"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

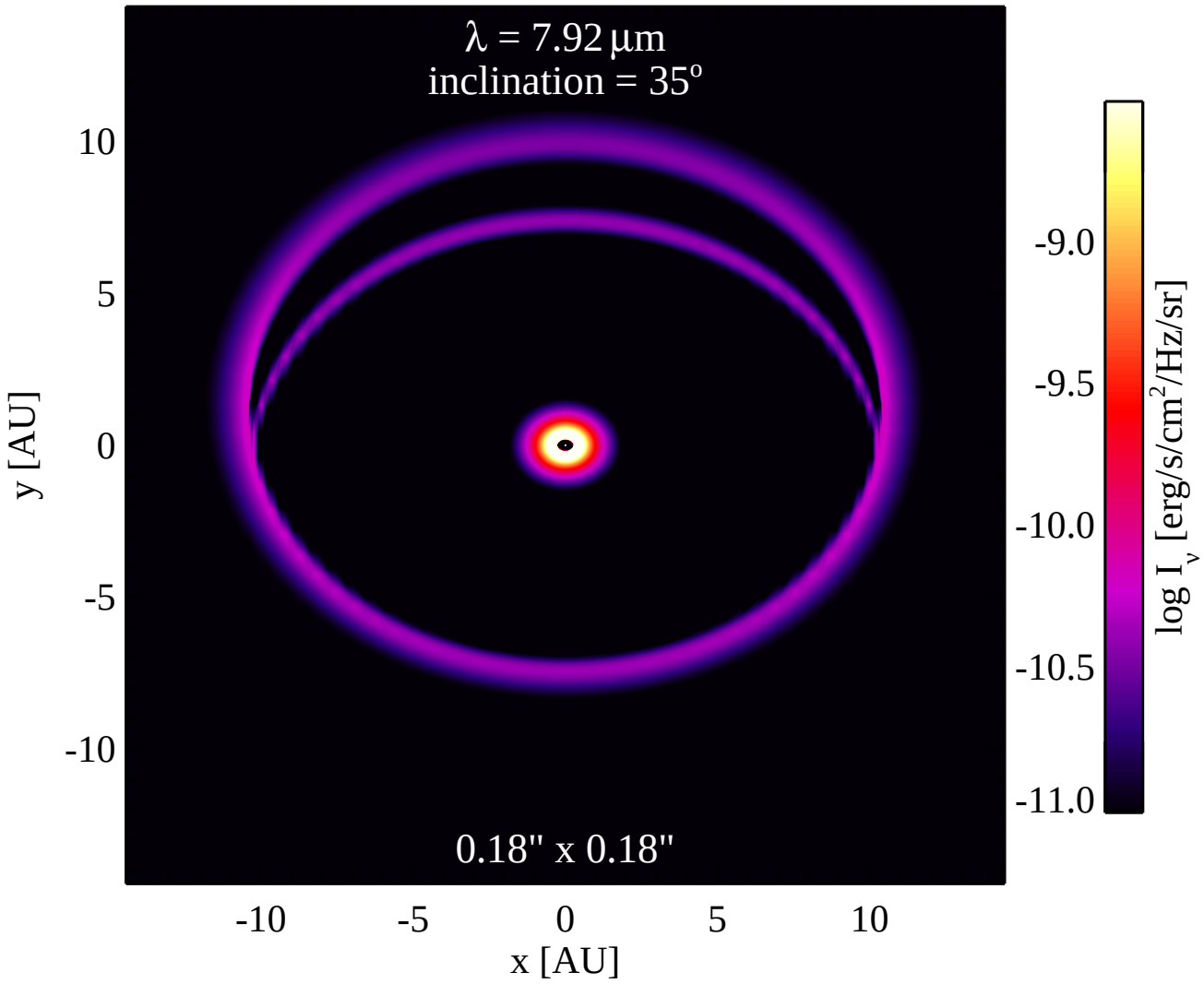

λ = 3.00 μm
inclination = 35°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

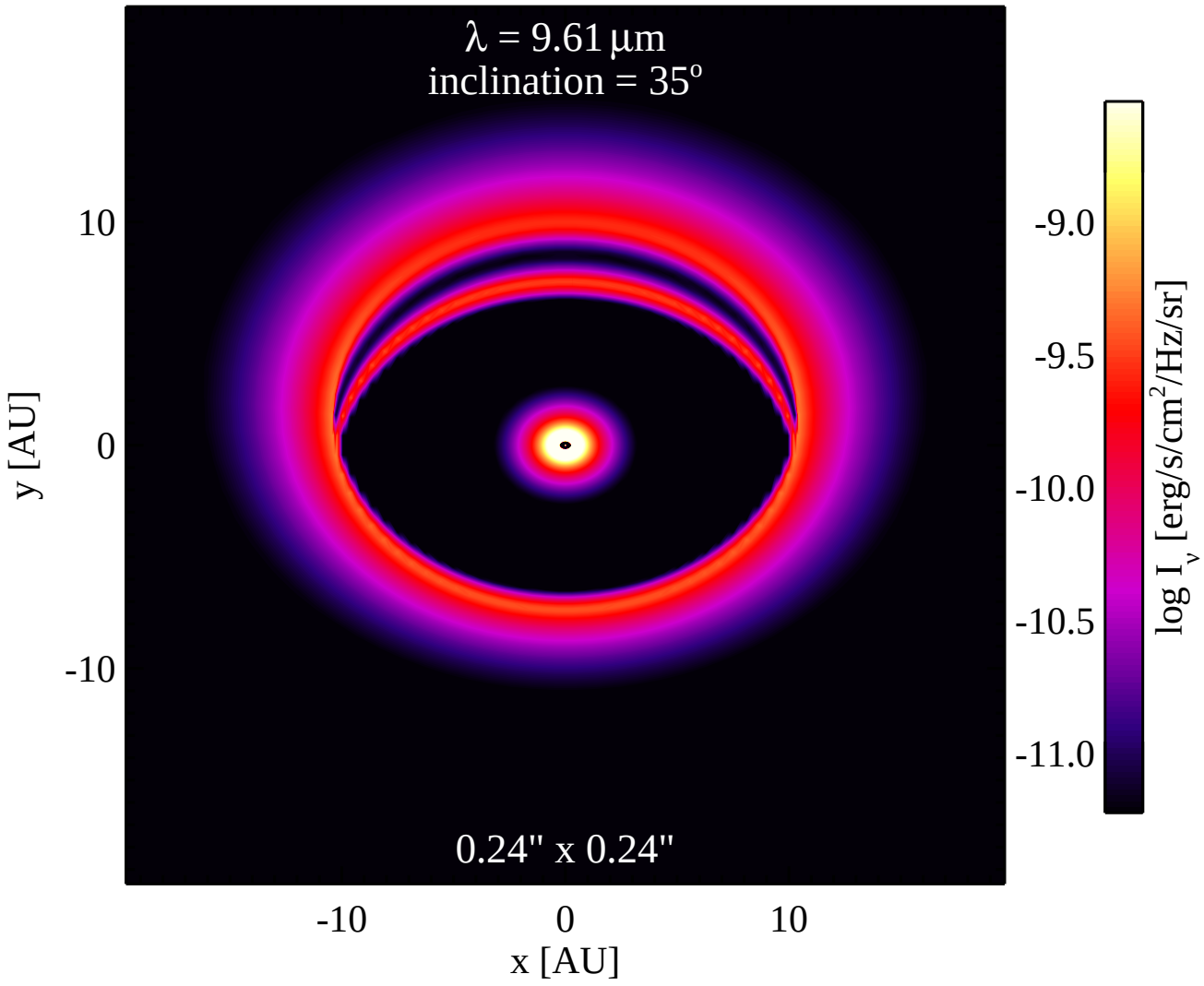

λ = 3.64 μm
inclination = 35°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

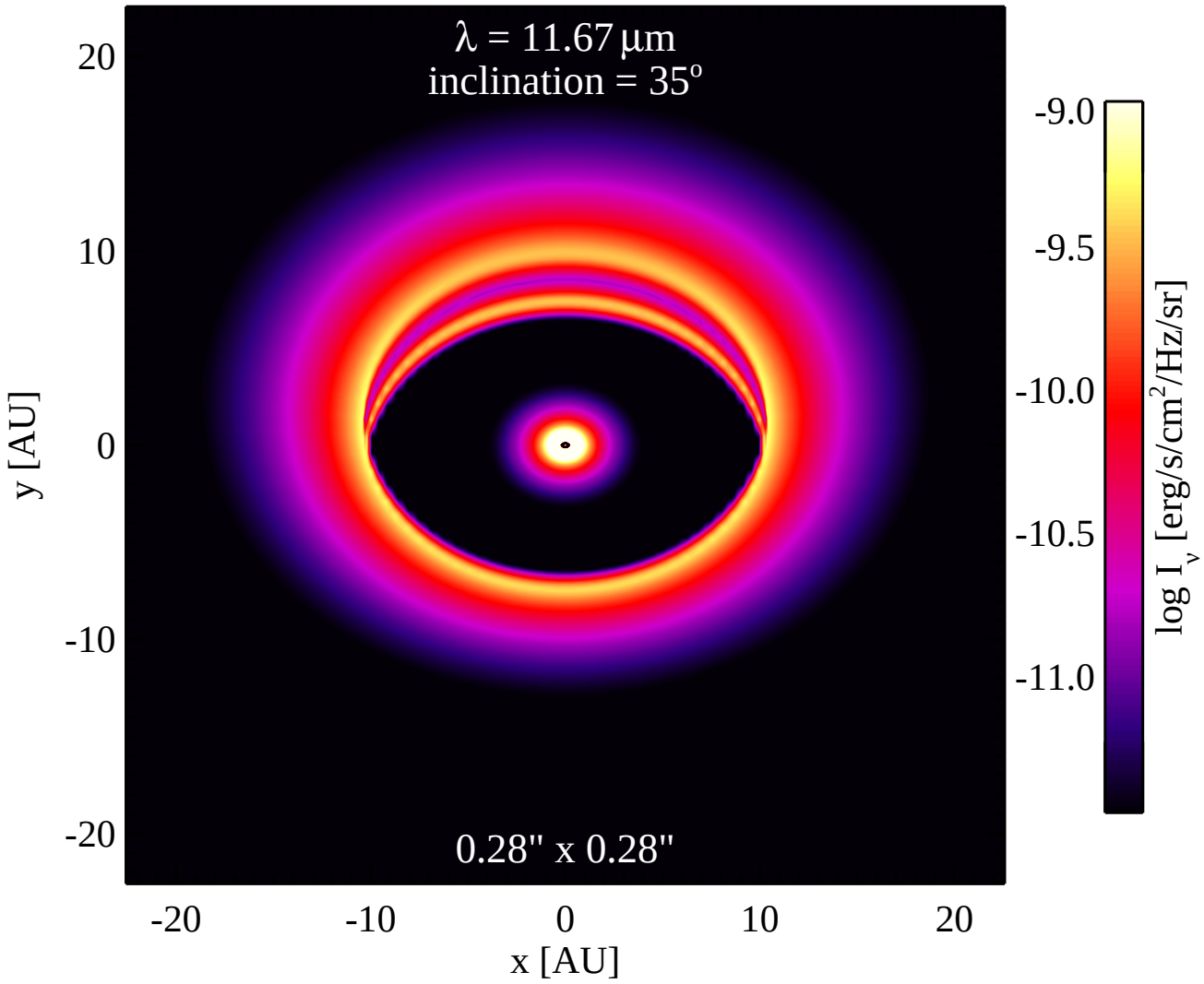

λ = 4.42 μm
inclination = 35°
0.16" x 0.16"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

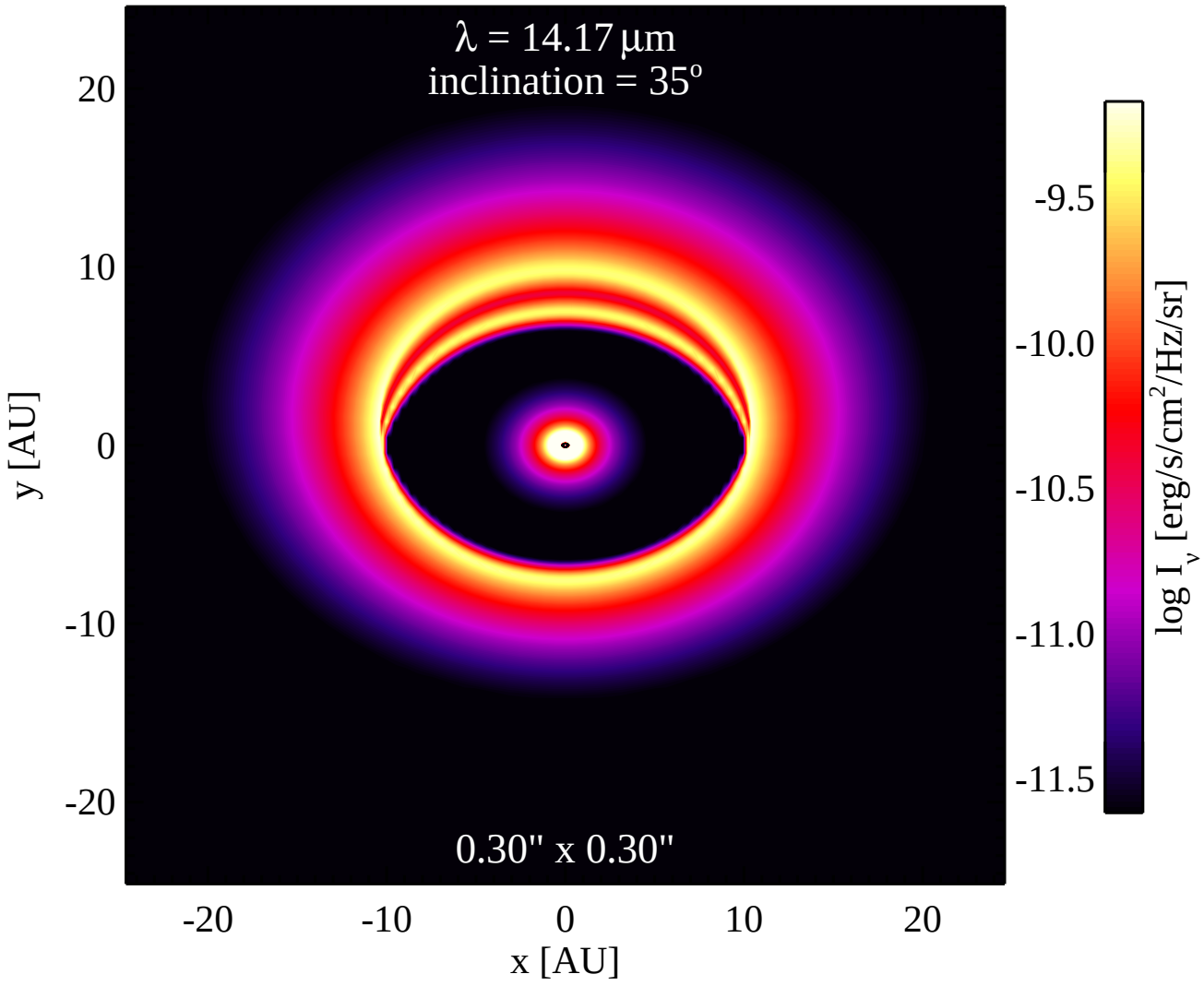

λ = 5.37 μm
inclination = 35°
0.16" x 0.16"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

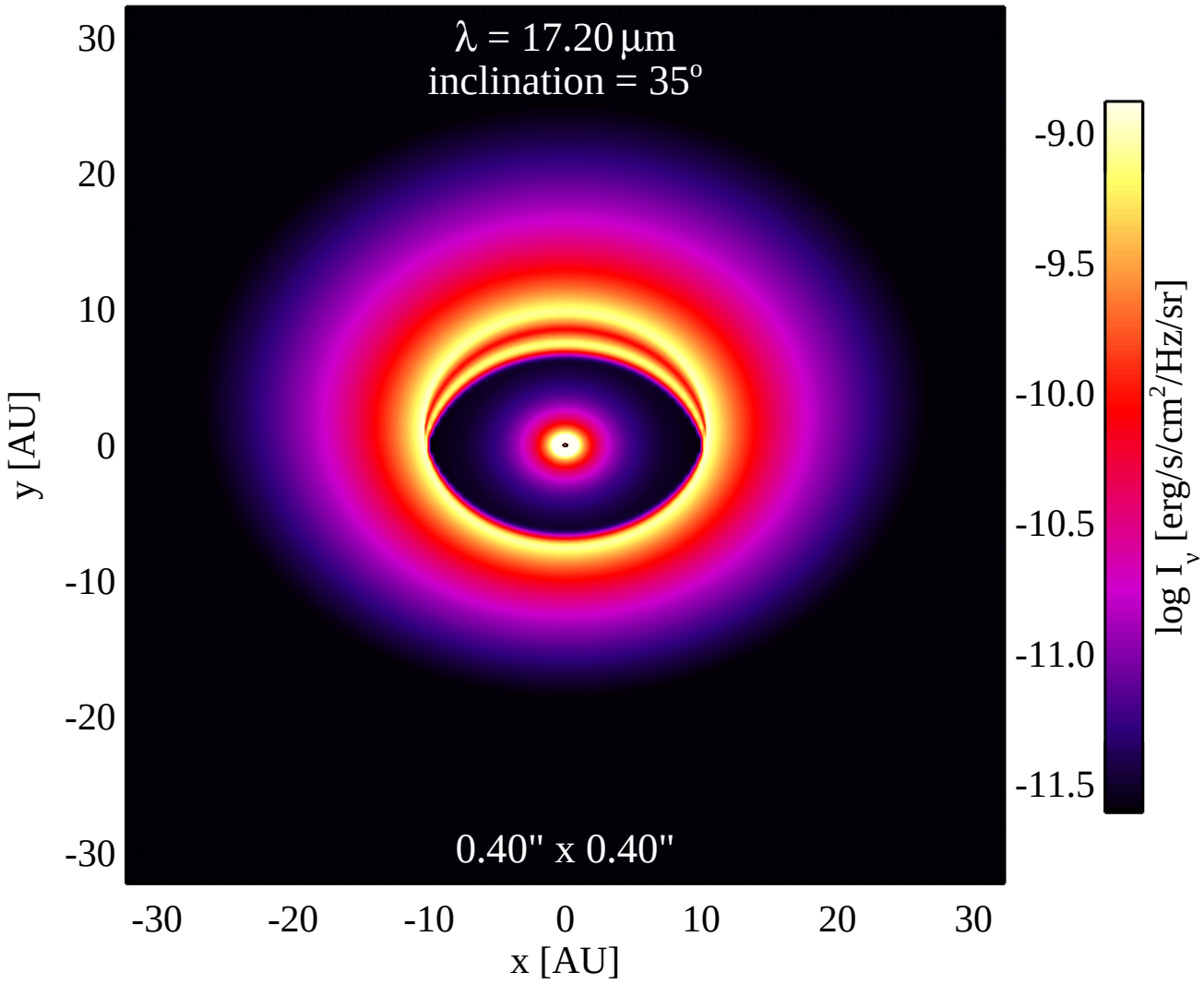

λ = 6.52 μm
inclination = 35°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

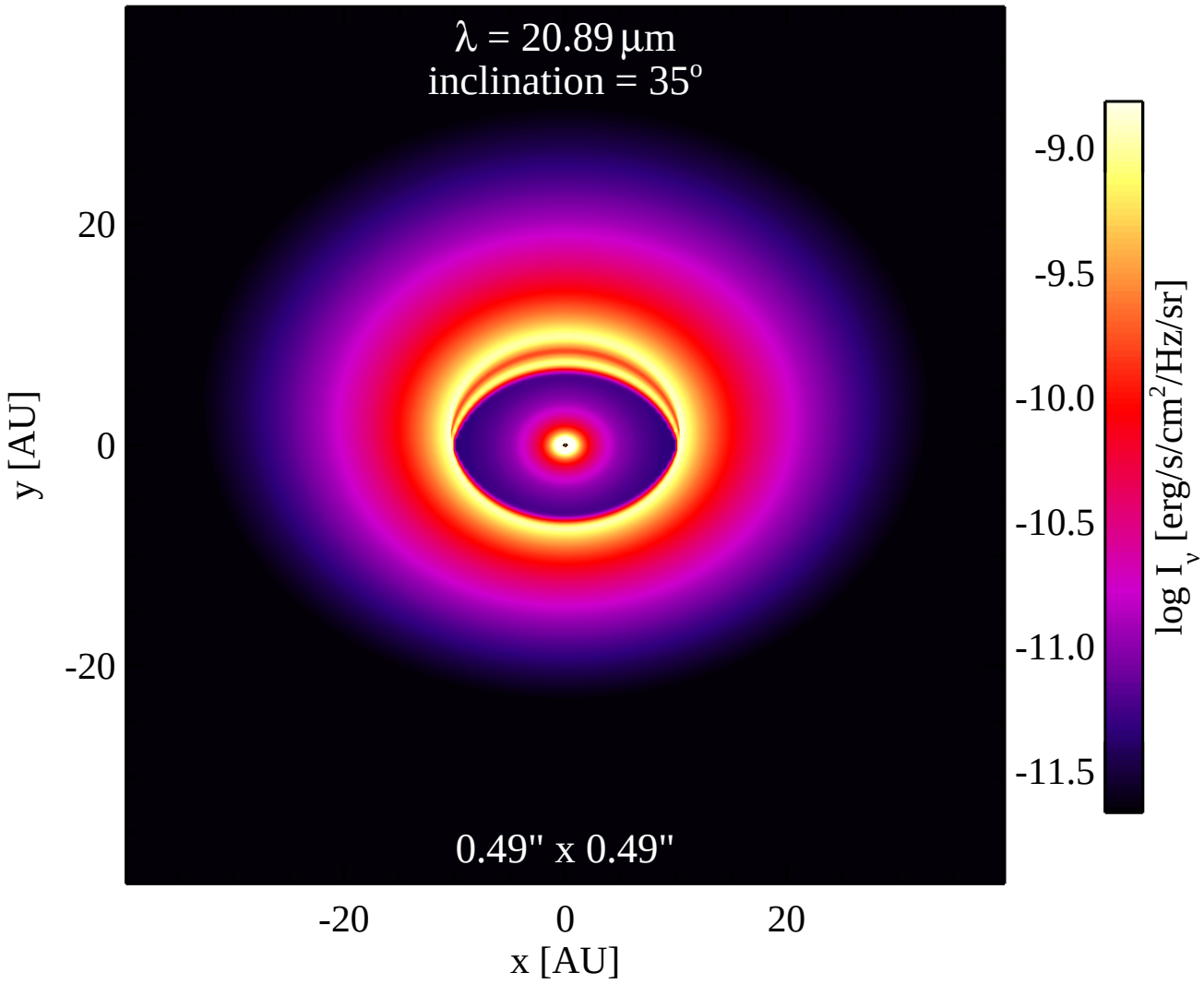

λ = 7.92 μm
inclination = 35°
0.18" x 0.18"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

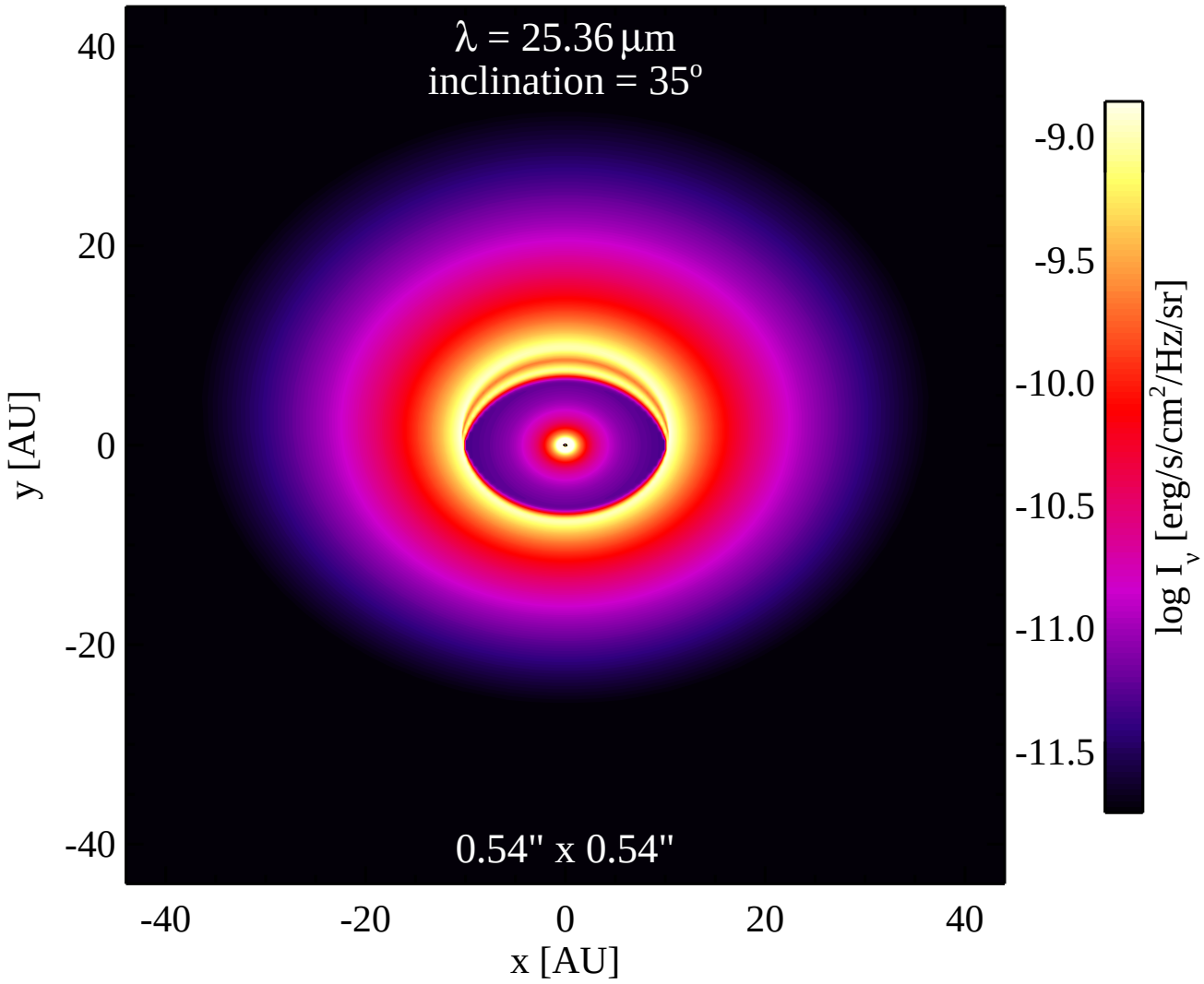

λ = 9.61 μm
inclination = 35°
0.24" x 0.24"
10
0
-10
y [AU]
-10
0
10
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

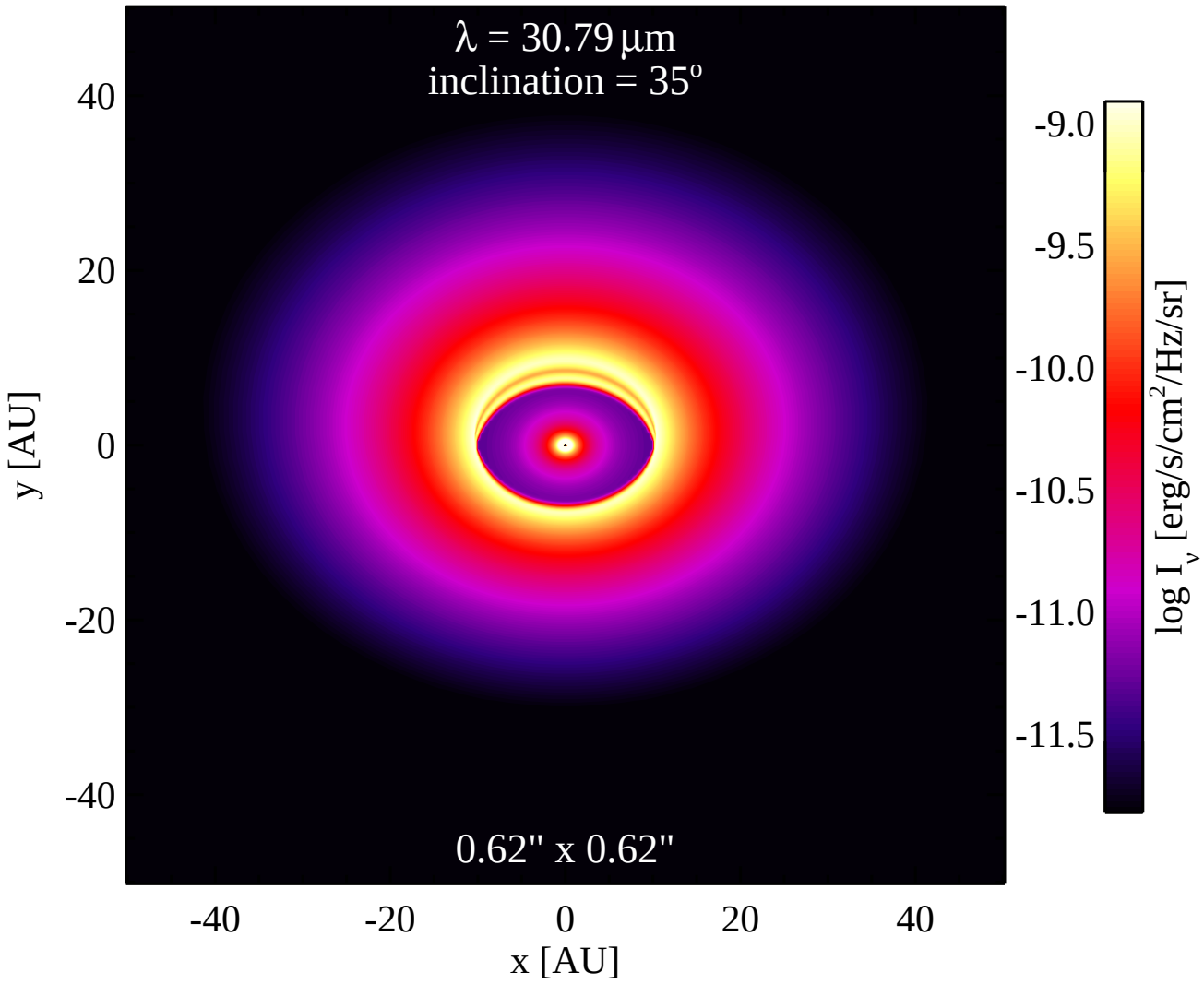

λ = 11.67 μm
inclination = 35°
0.28" x 0.28"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

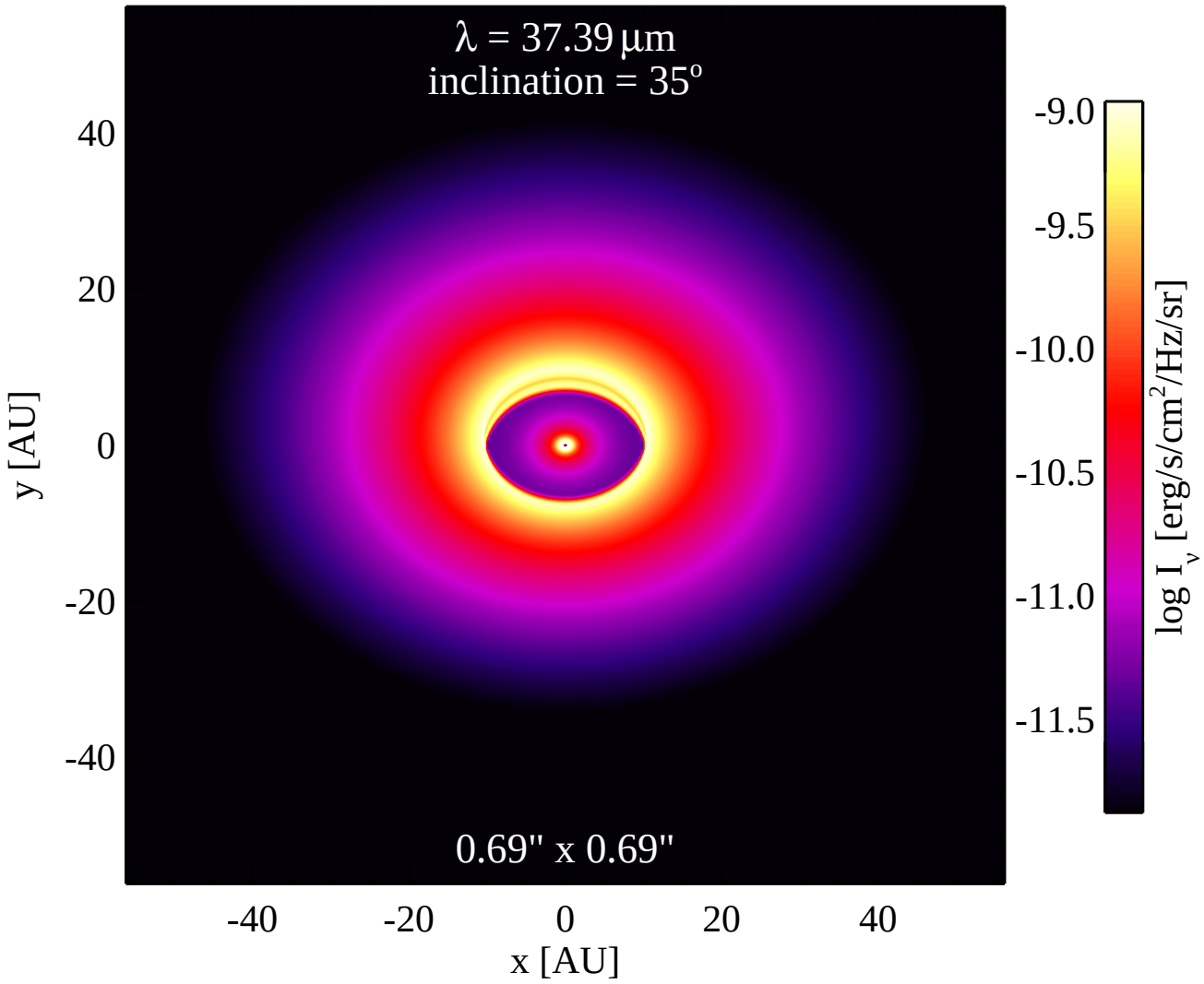

λ = 14.17 μm
inclination = 35°
0.30" x 0.30"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

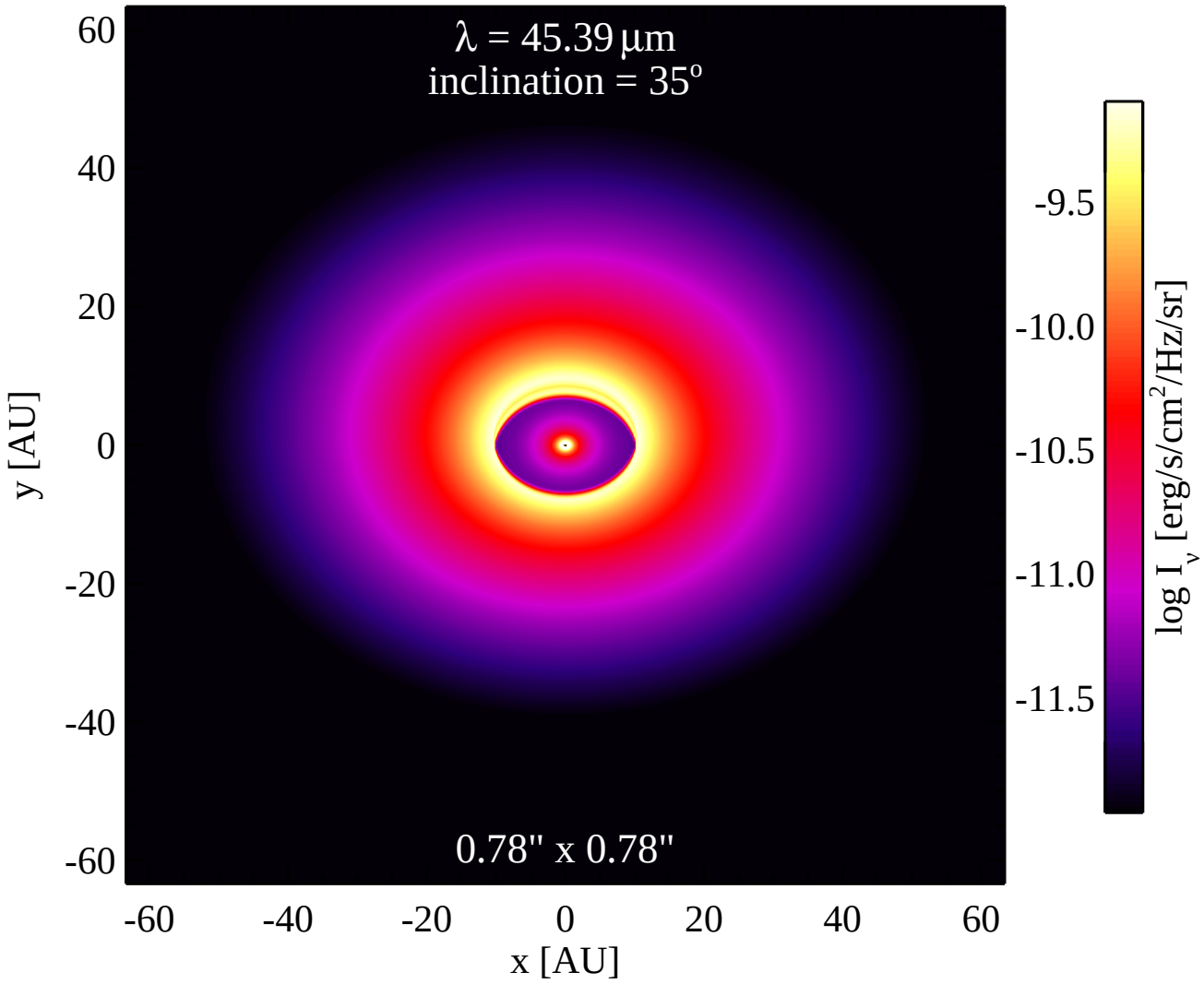

λ = 17.20 μm
inclination = 35°
0.40" x 0.40"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

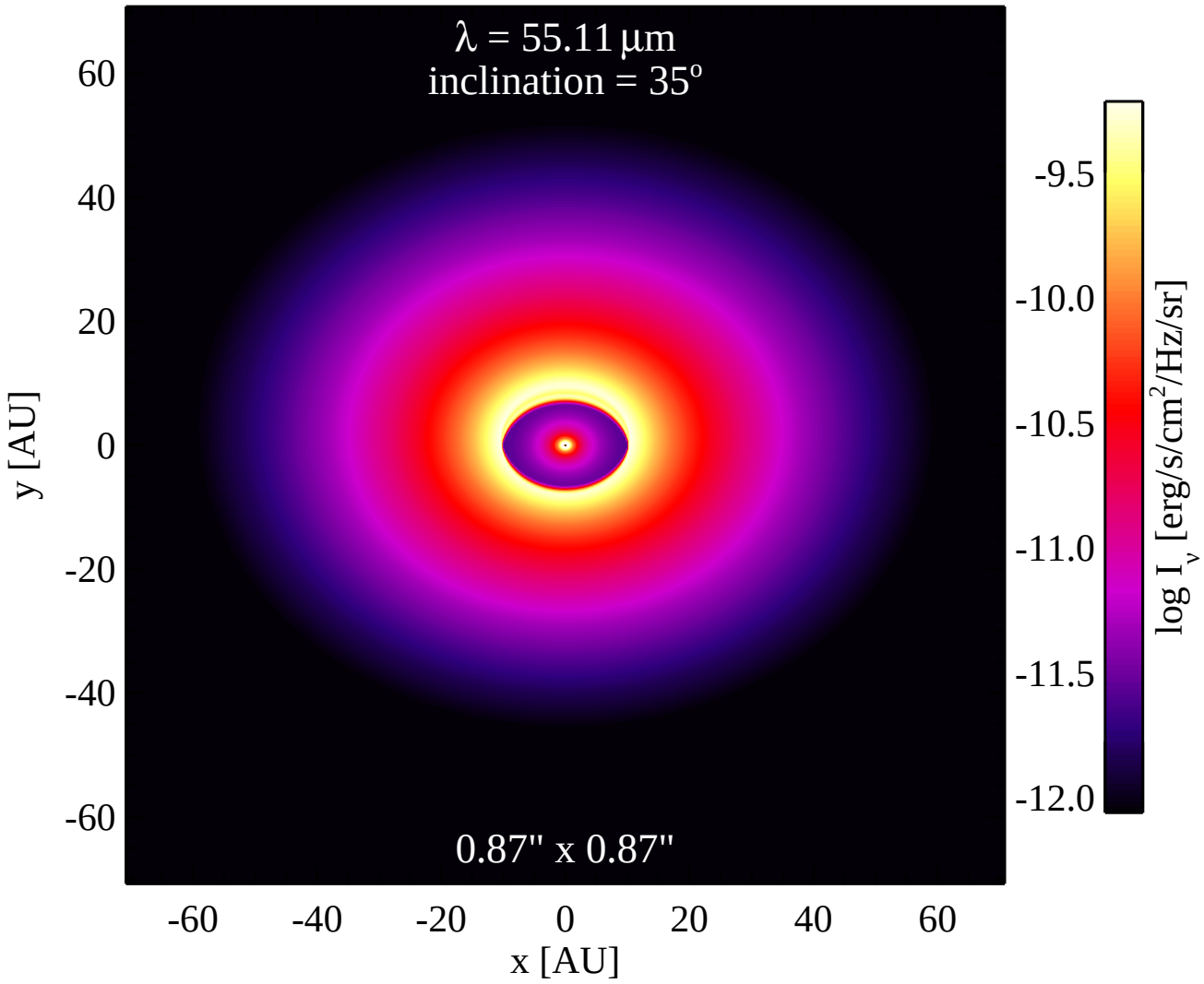

λ = 20.89 μm
inclination = 35°
0.49" x 0.49"
20
0
-20
y [AU]
-20
0
20
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

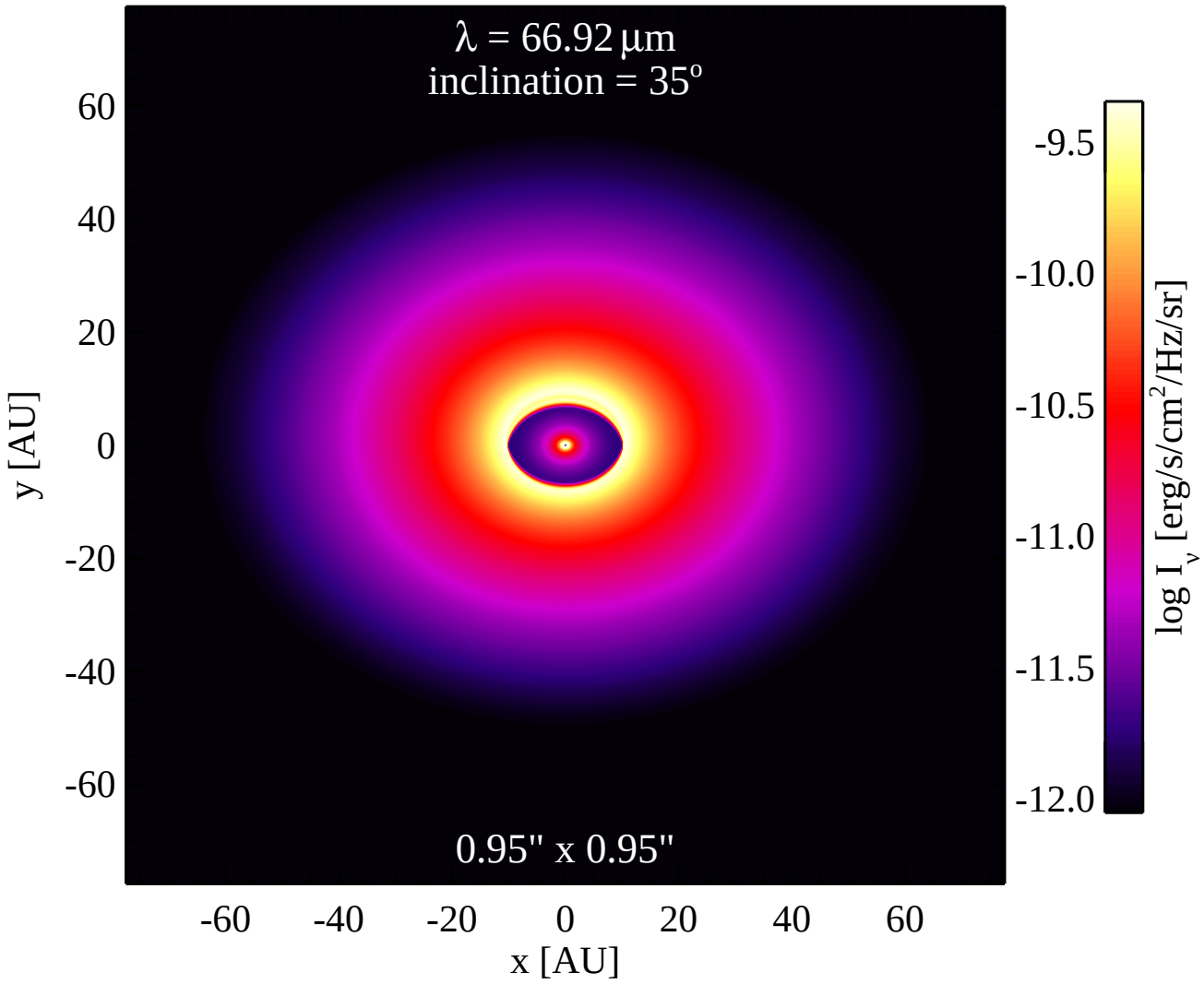

λ = 25.36 μm
inclination = 35°
0.54" x 0.54"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

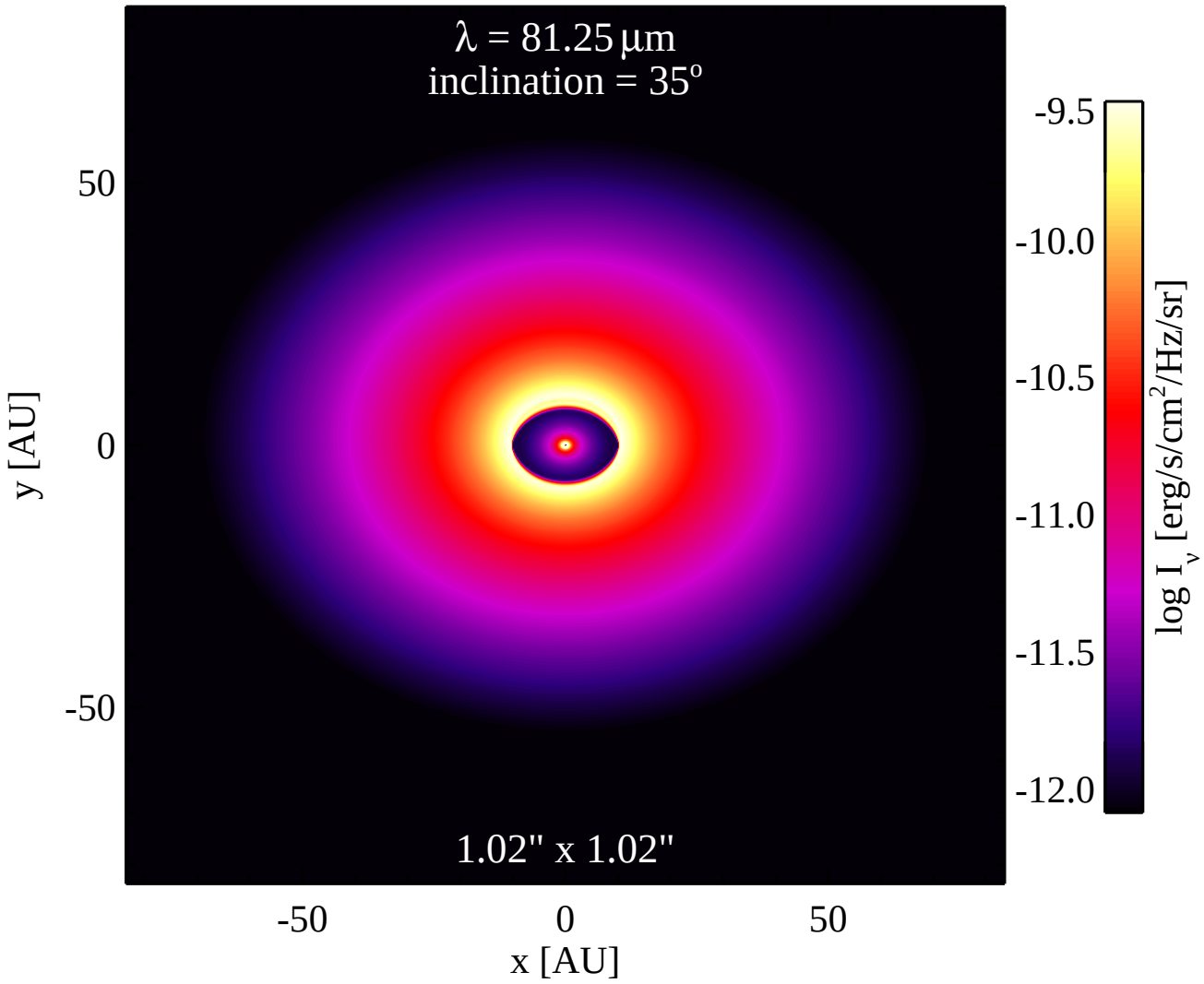

λ = 30.79 μm
inclination = 35°
0.62" x 0.62"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

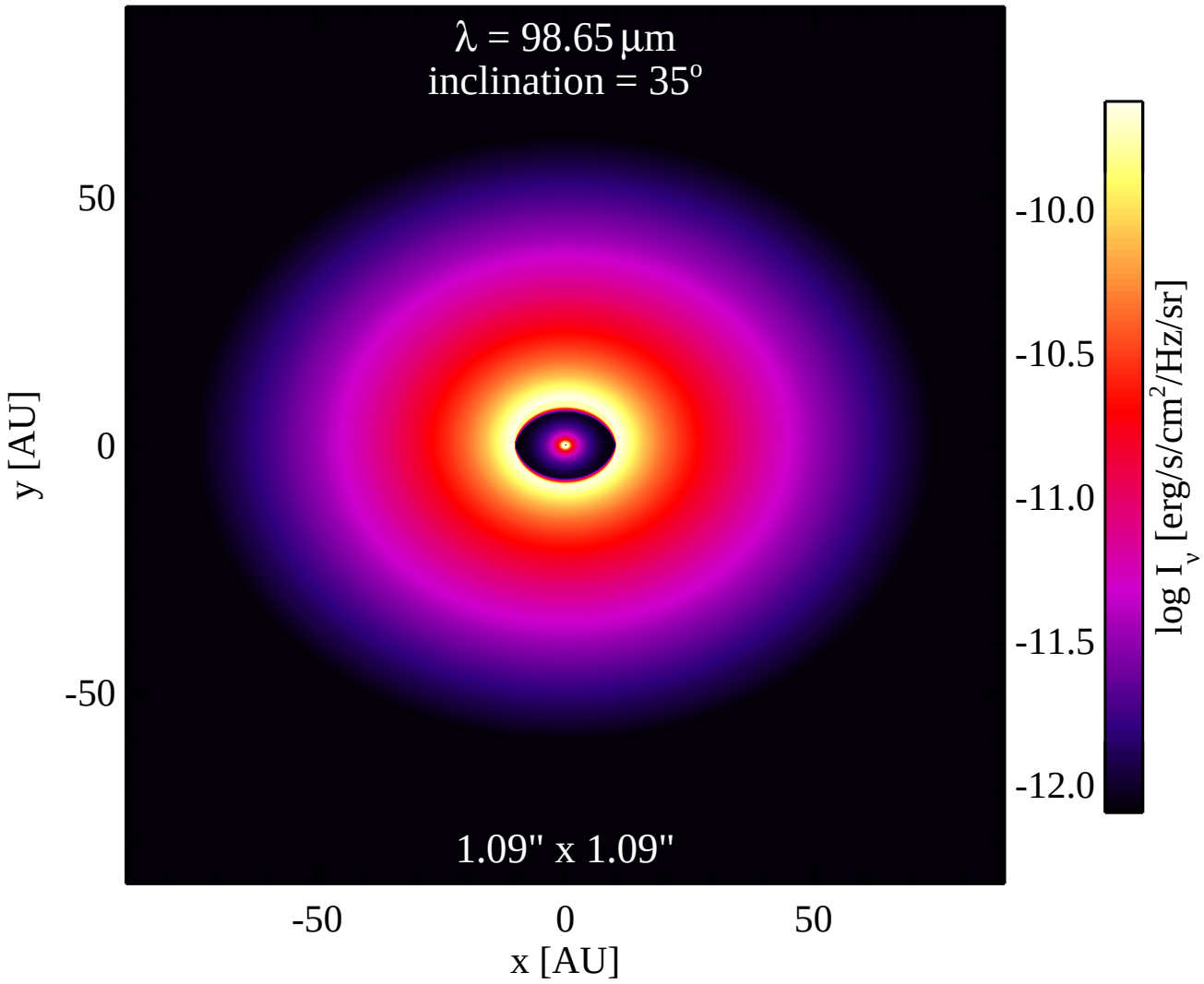

λ = 37.39 μm
inclination = 35°
0.69" x 0.69"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

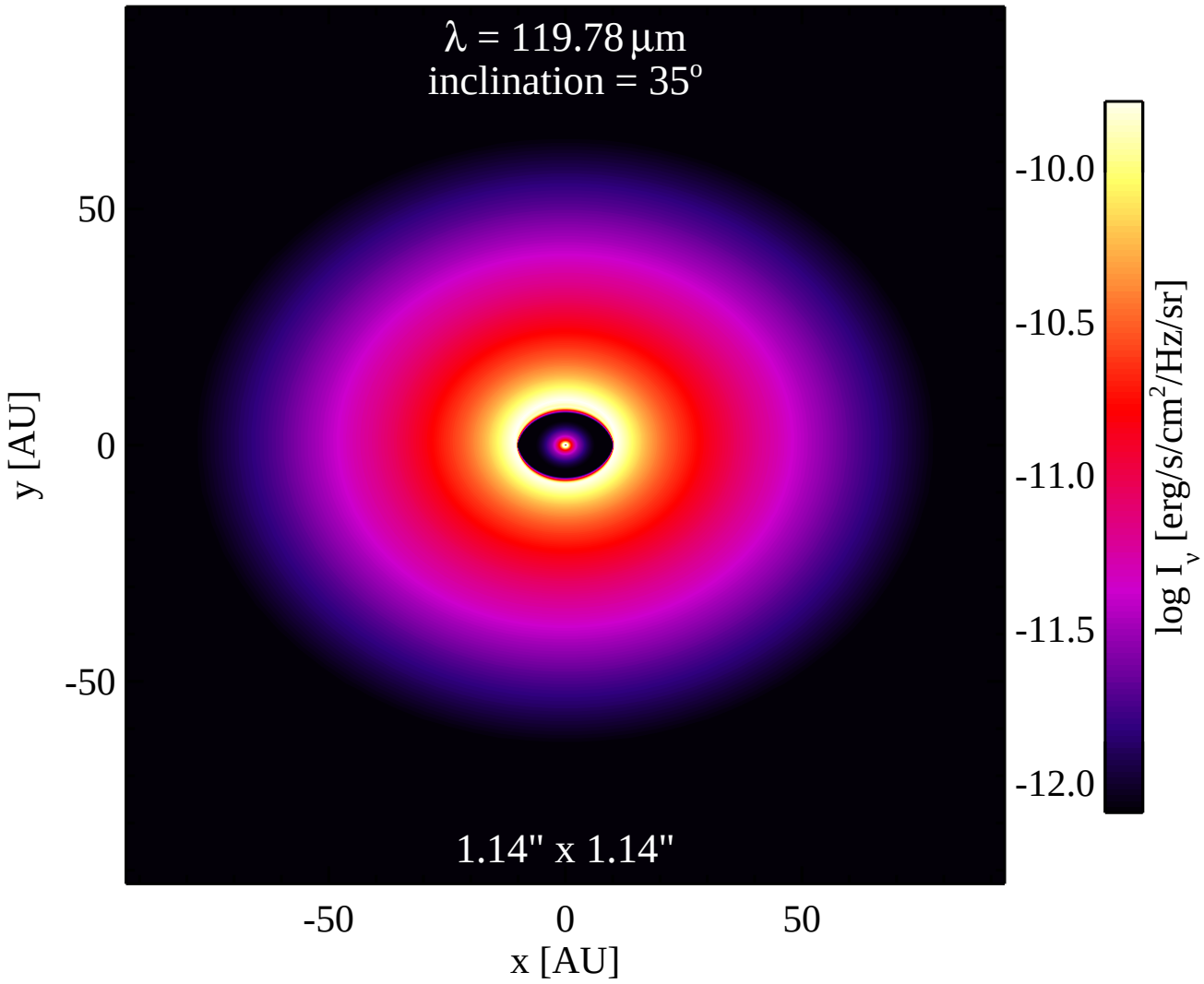

λ = 45.39 μm
inclination = 35°
0.78" x 0.78"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

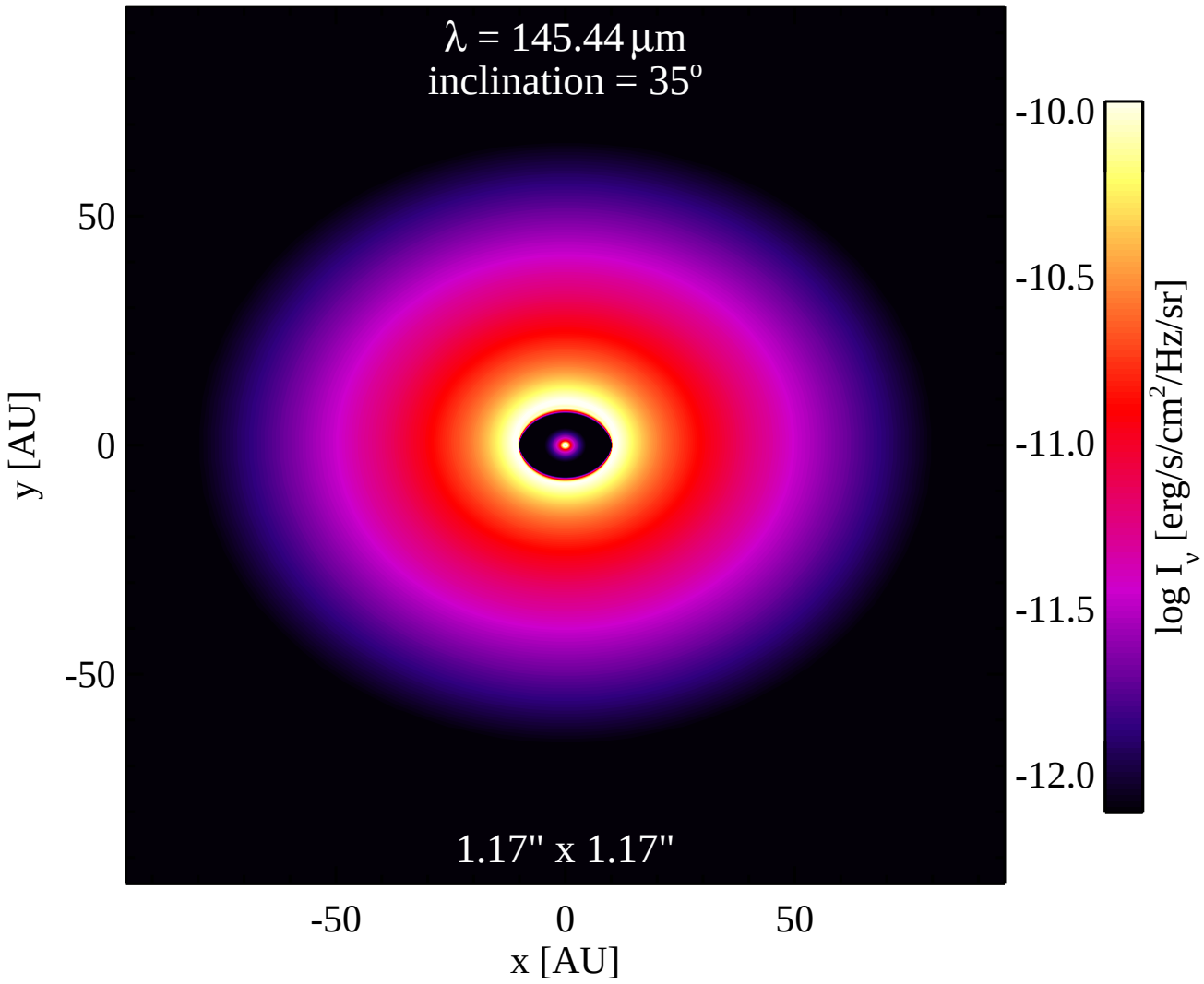

λ = 55.11 μm
inclination = 35°
0.87" x 0.87"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

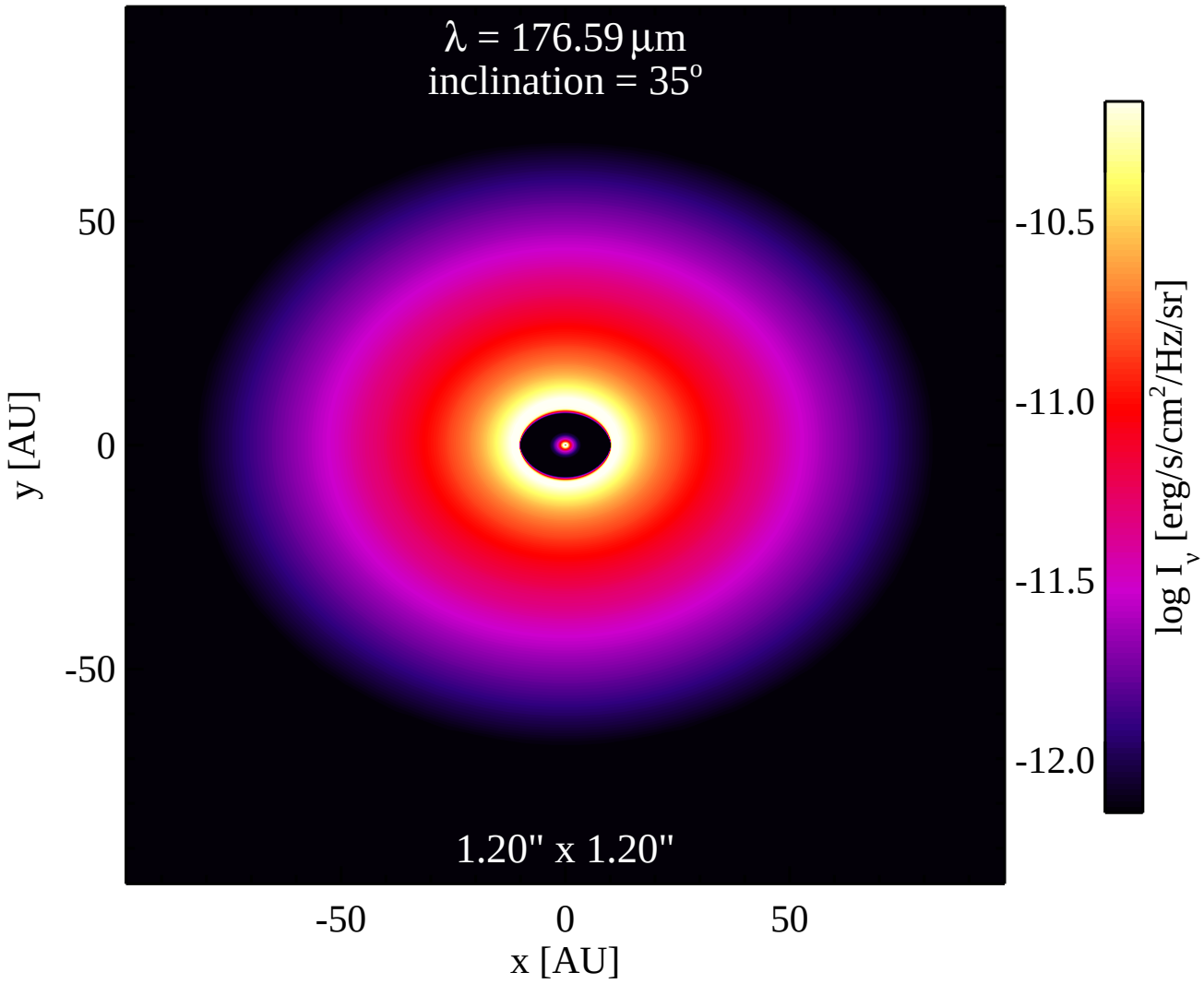

λ = 66.92 μm
inclination = 35°
0.95" x 0.95"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

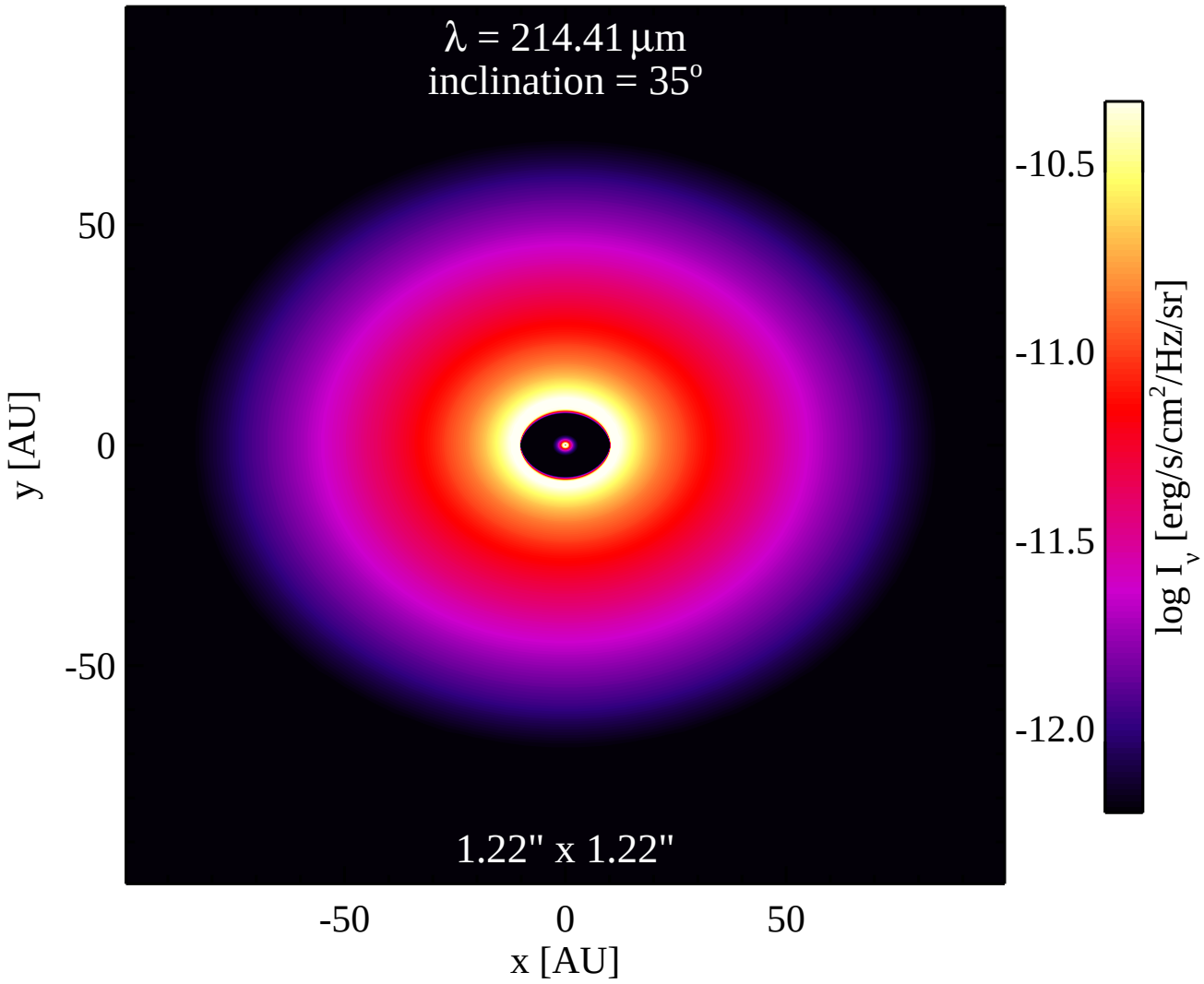

λ = 81.25 μm
inclination = 35°
1.02" x 1.02"
50
0
-50
y [AU]
-50
0
50
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

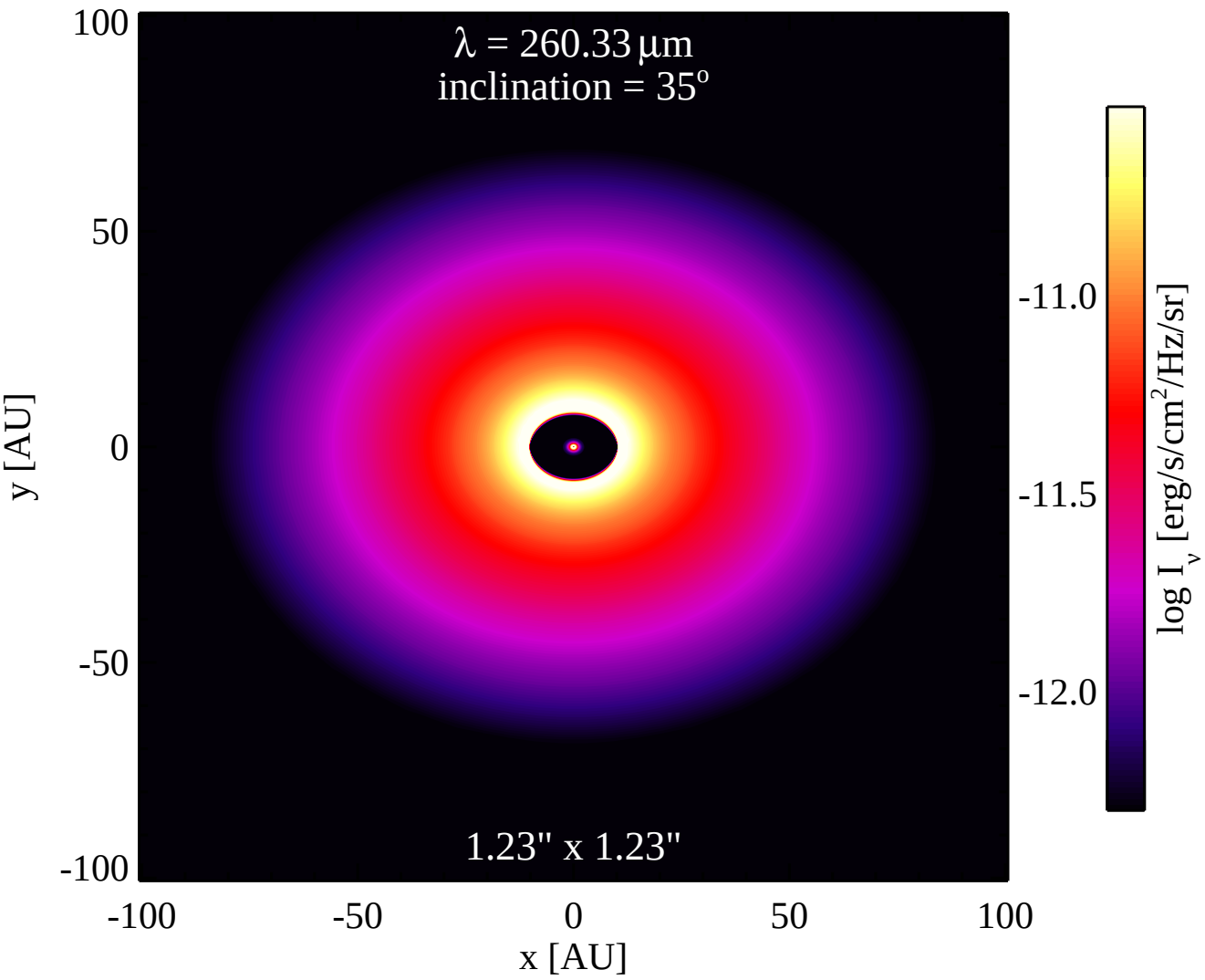

λ = 98.65 μm
inclination = 35°
1.09" x 1.09"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

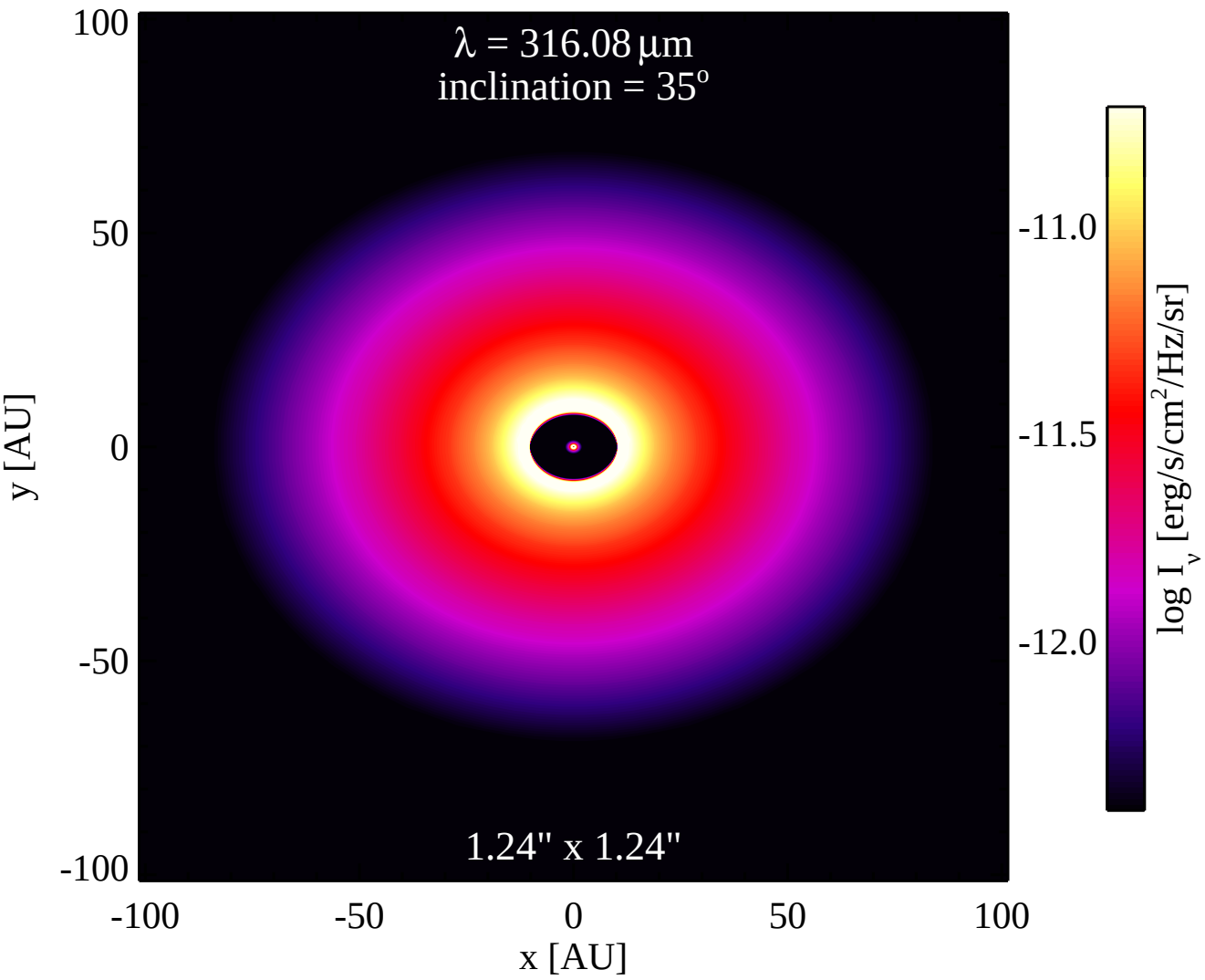

λ = 119.78 μm
inclination = 35°
1.14" x 1.14"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

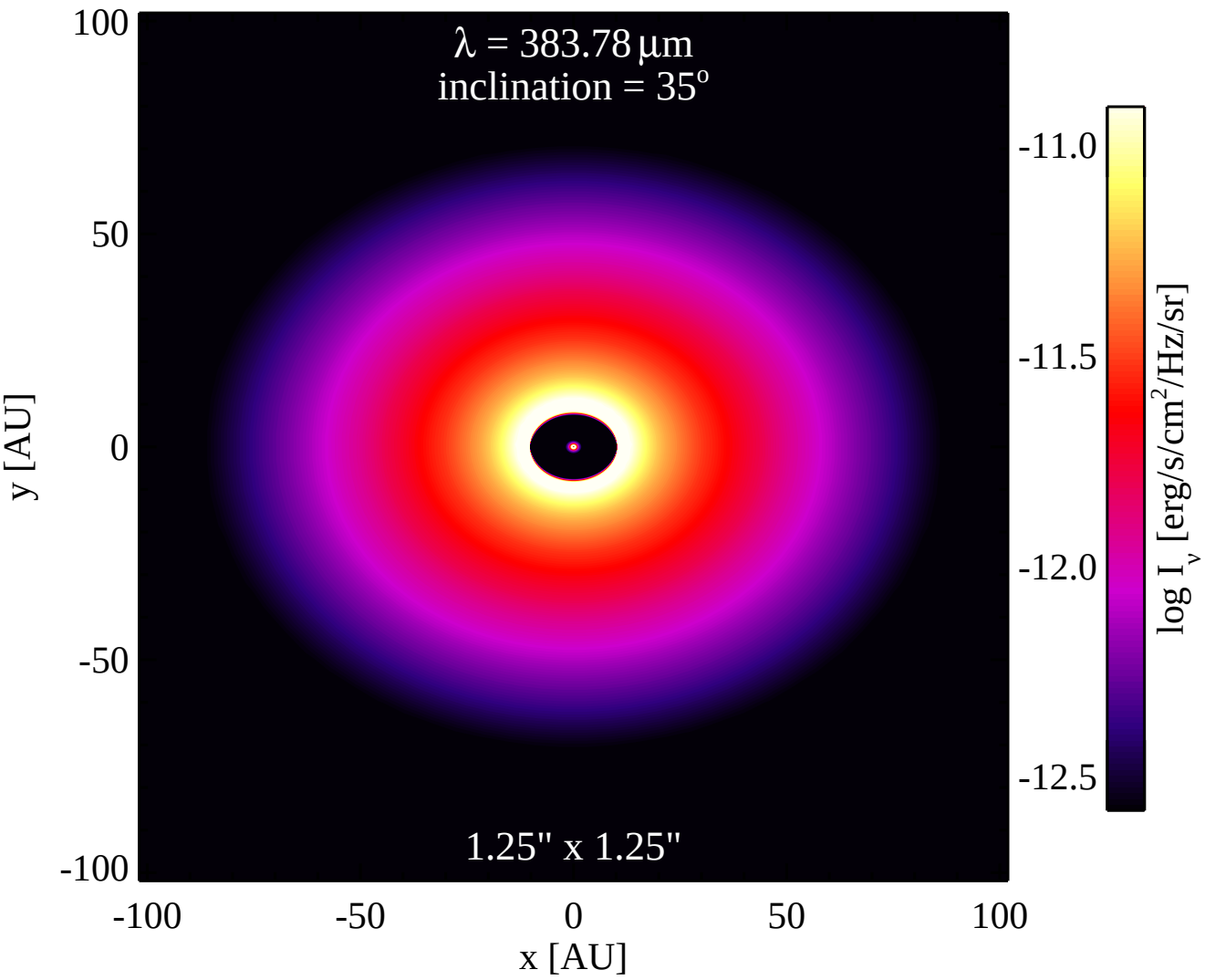

λ = 145.44 μm
inclination = 35°
1.17" x 1.17"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

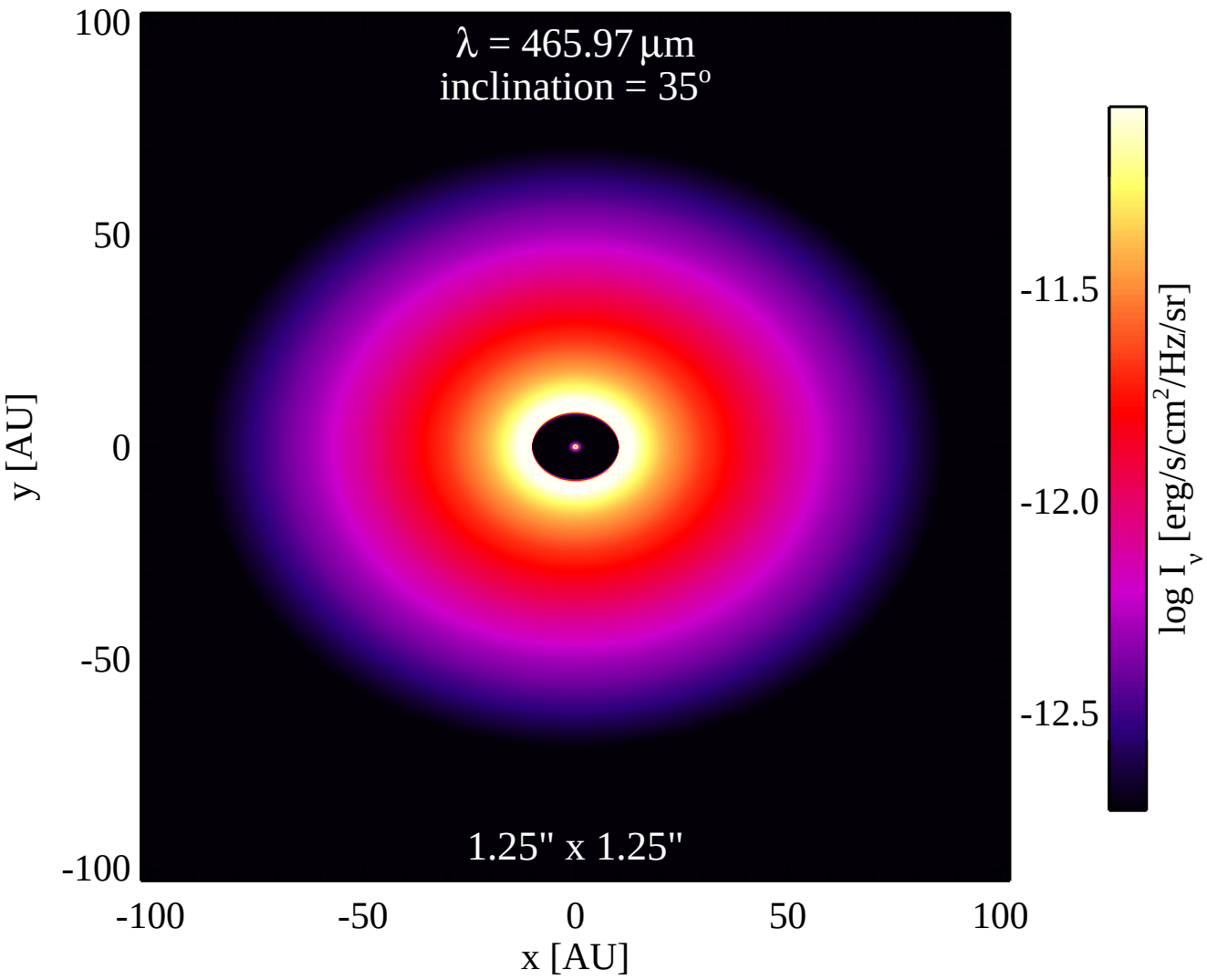

λ = 176.59 μm
inclination = 35°
1.20" x 1.20"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

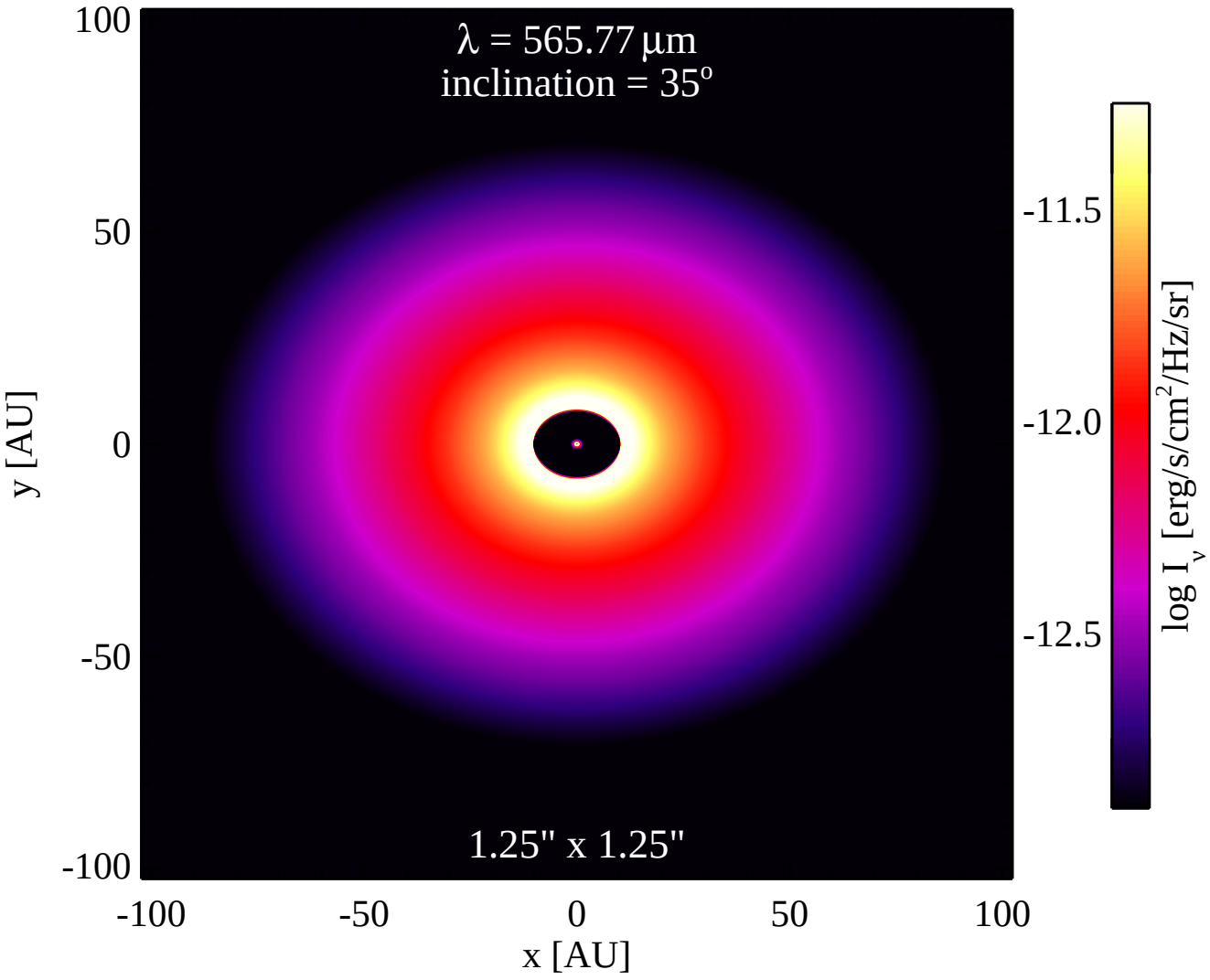

λ = 214.41 μm
inclination = 35°
1.22" x 1.22"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

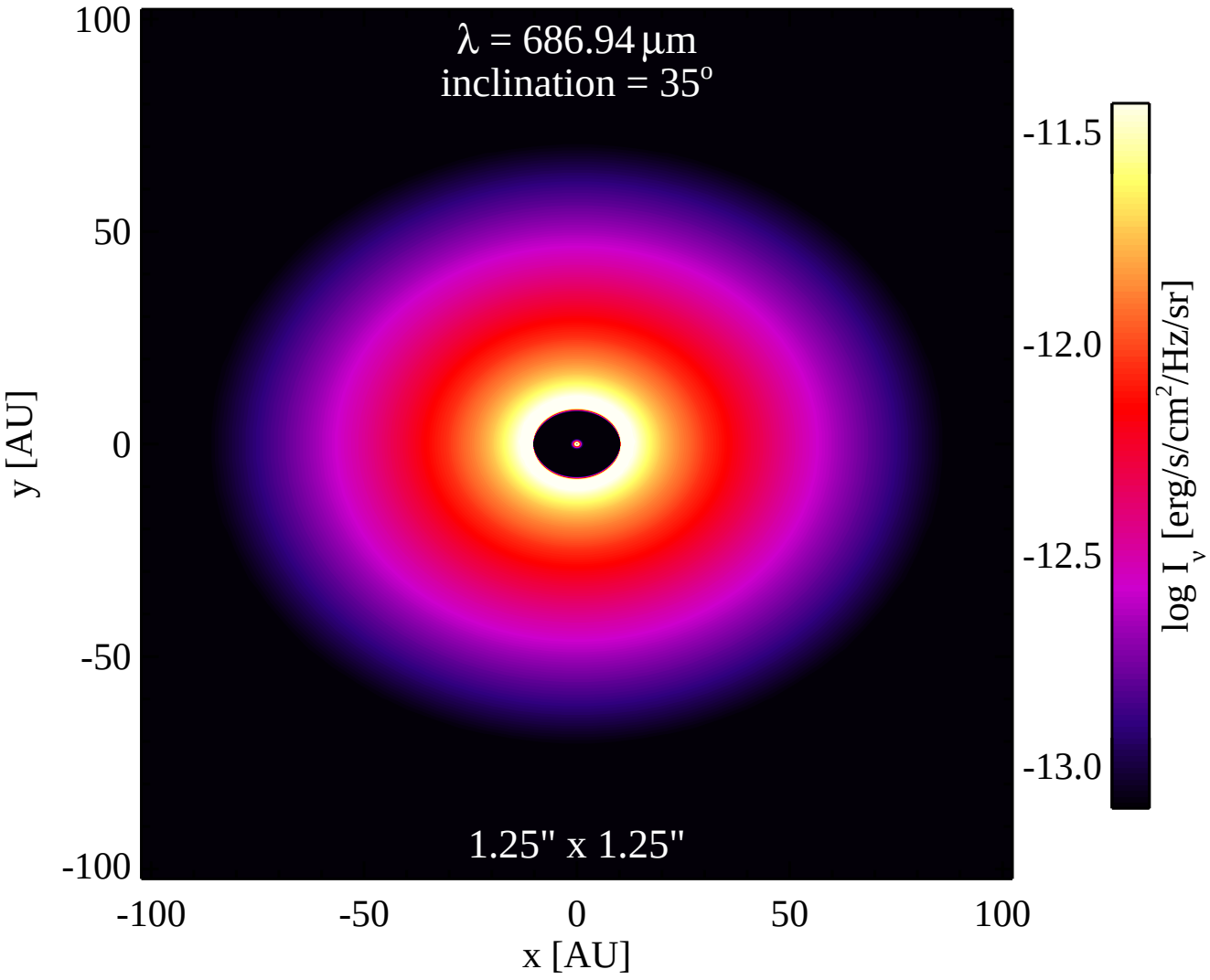

λ = 260.33 μm
inclination = 35°
1.23" x 1.23"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

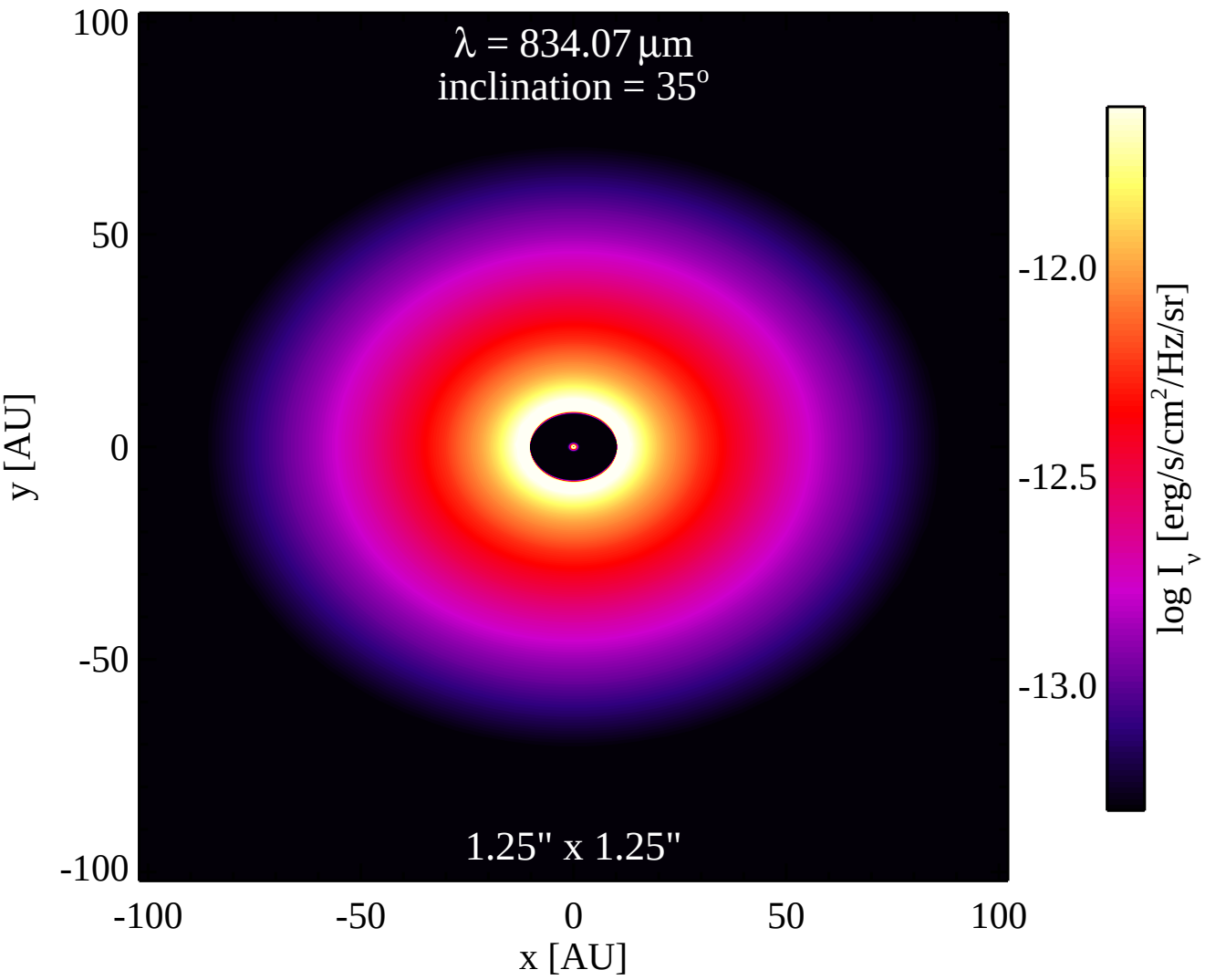

λ = 316.08 μm
inclination = 35°
1.24" x 1.24"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

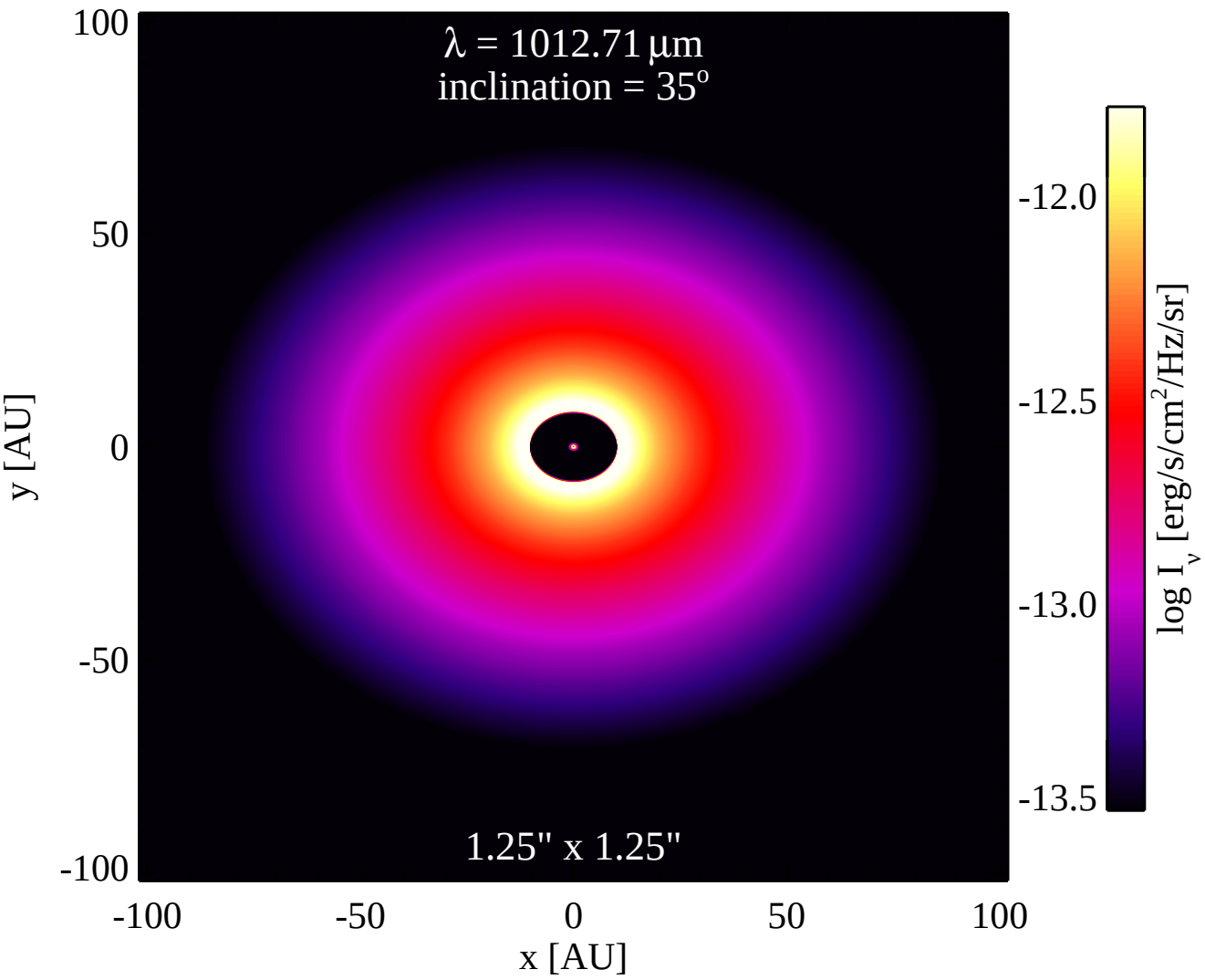

λ = 383.78 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

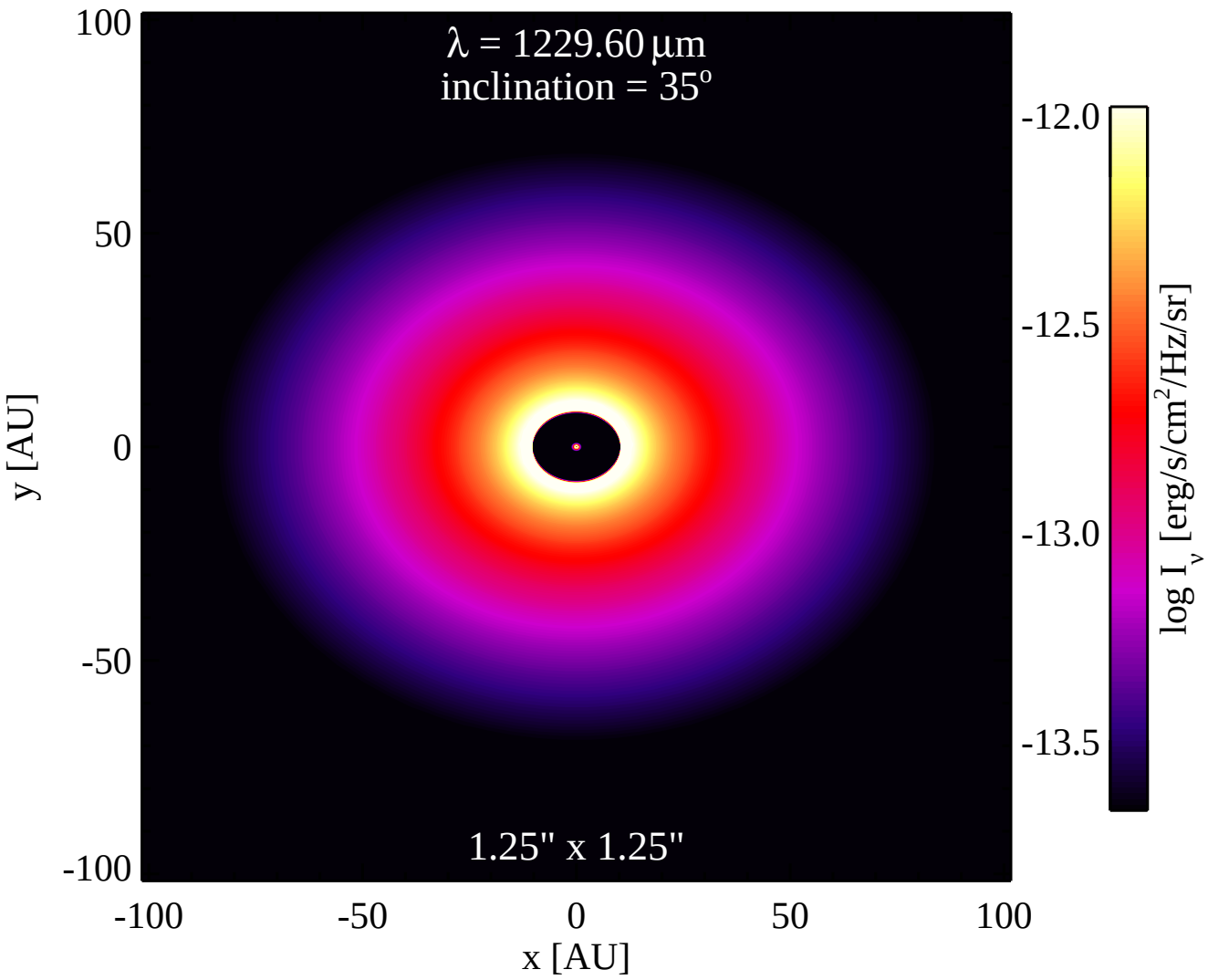

λ = 465.97 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

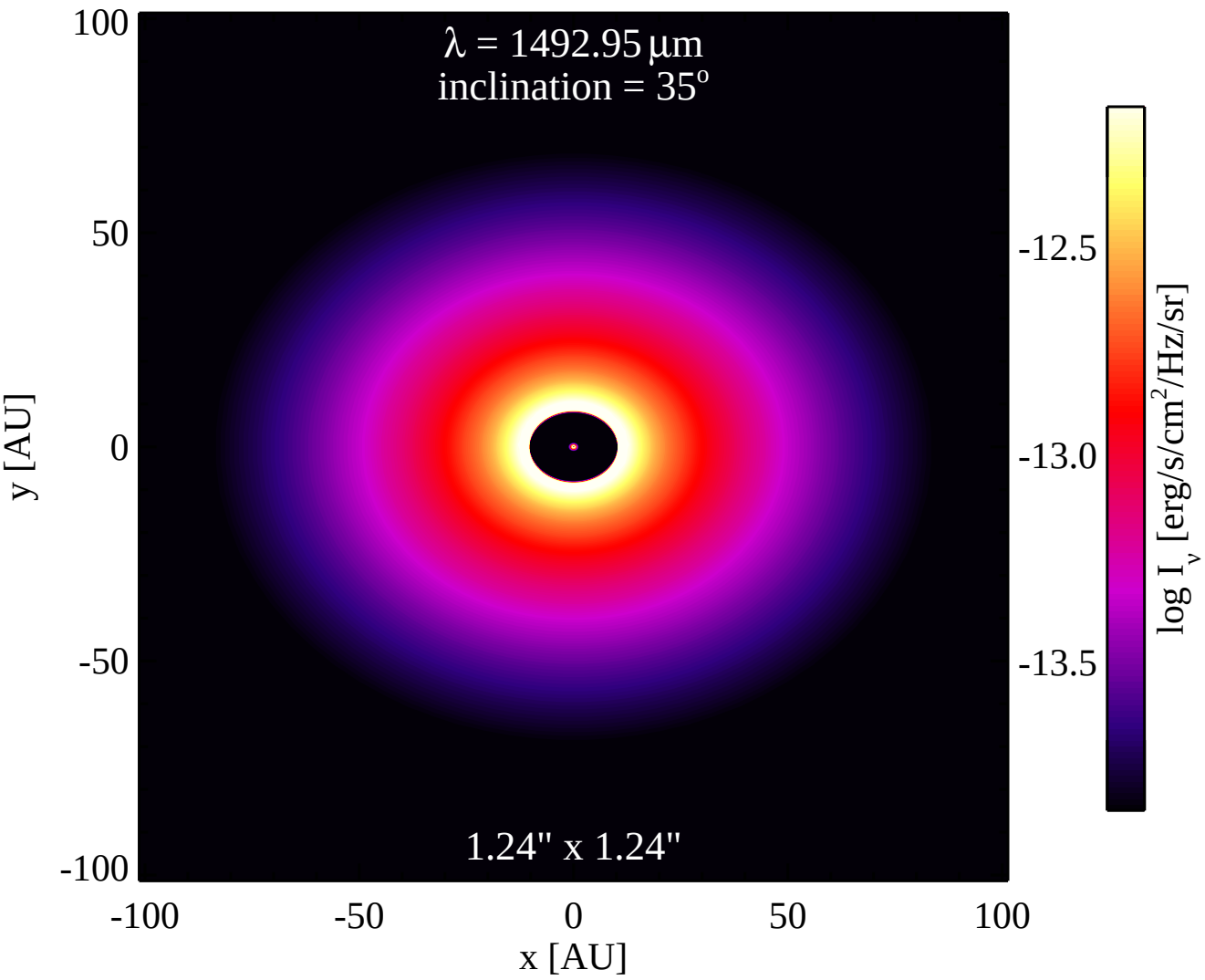

λ = 565.77 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

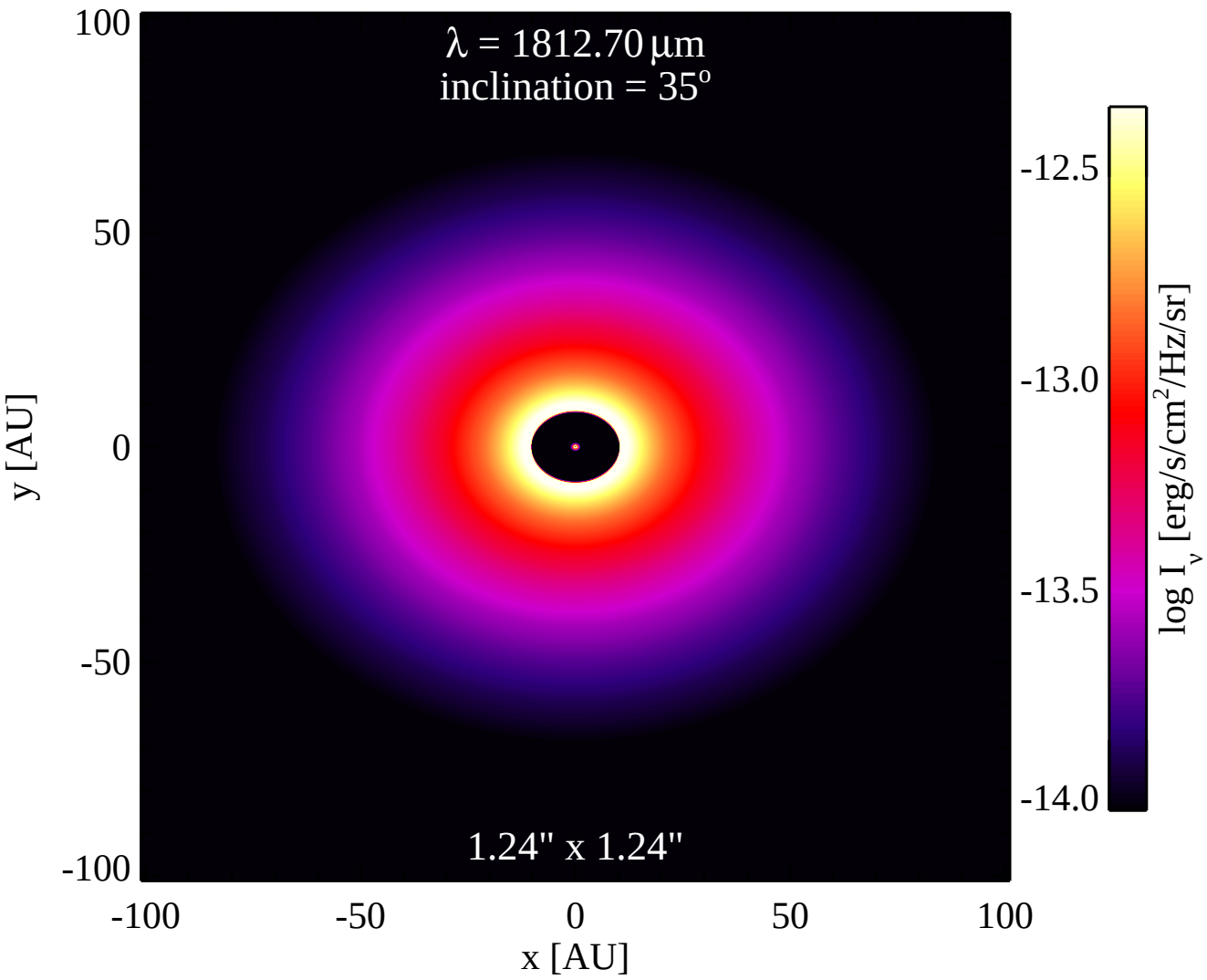

λ = 686.94 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

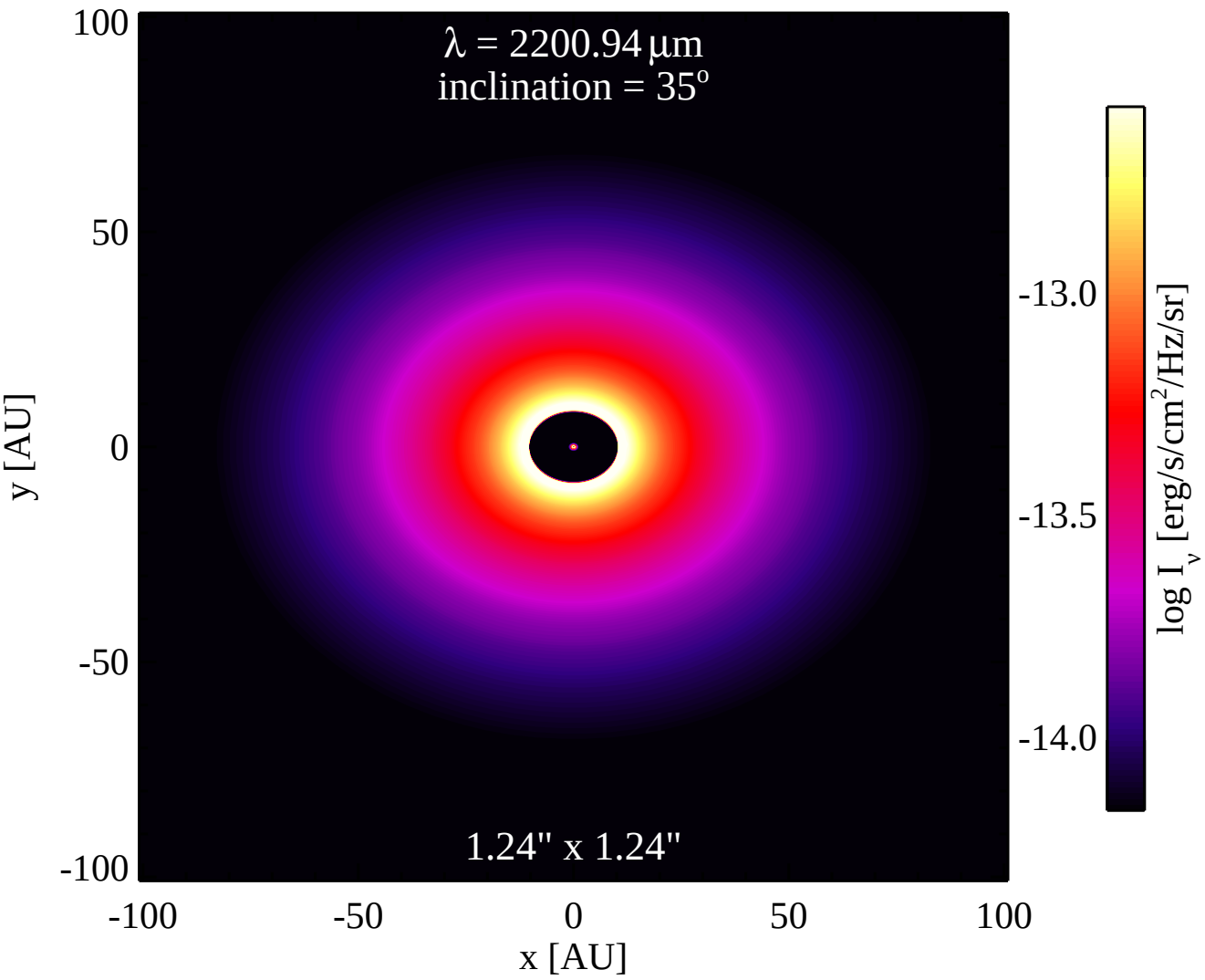

λ = 834.07 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

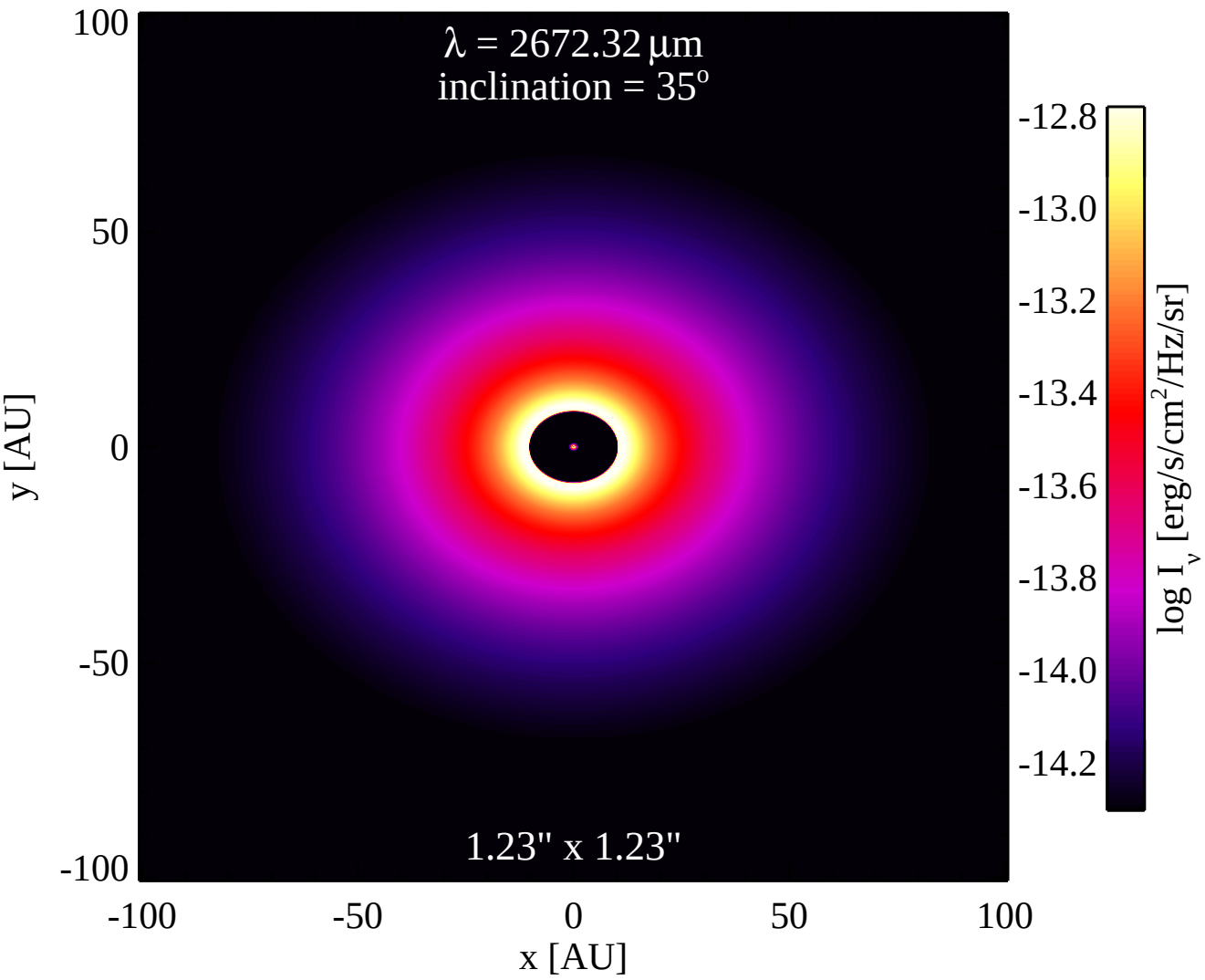

λ = 1012.71 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

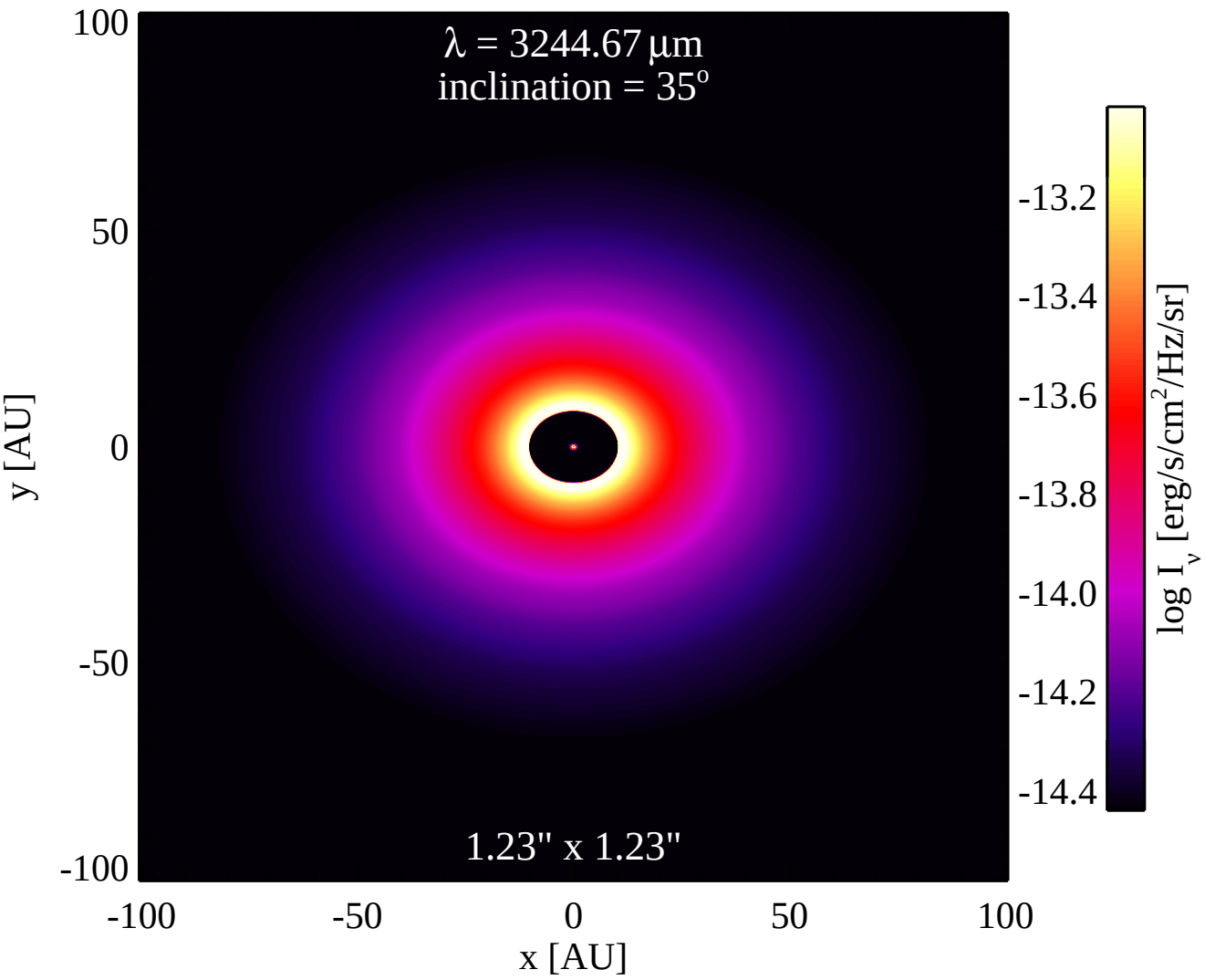

λ = 1229.60 μm
inclination = 35°
1.25" x 1.25"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

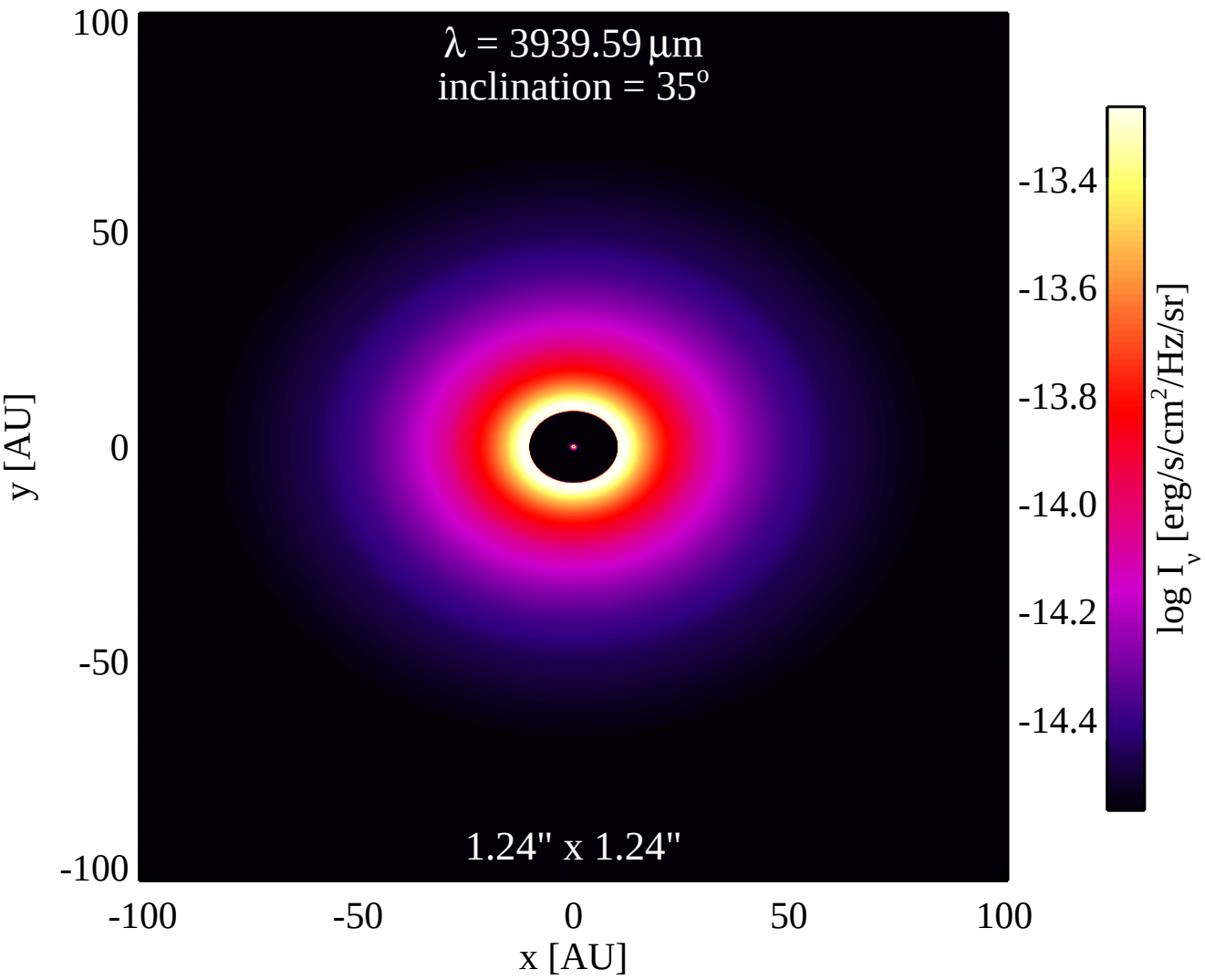

λ = 1492.95 μm
inclination = 35°
1.24" x 1.24"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

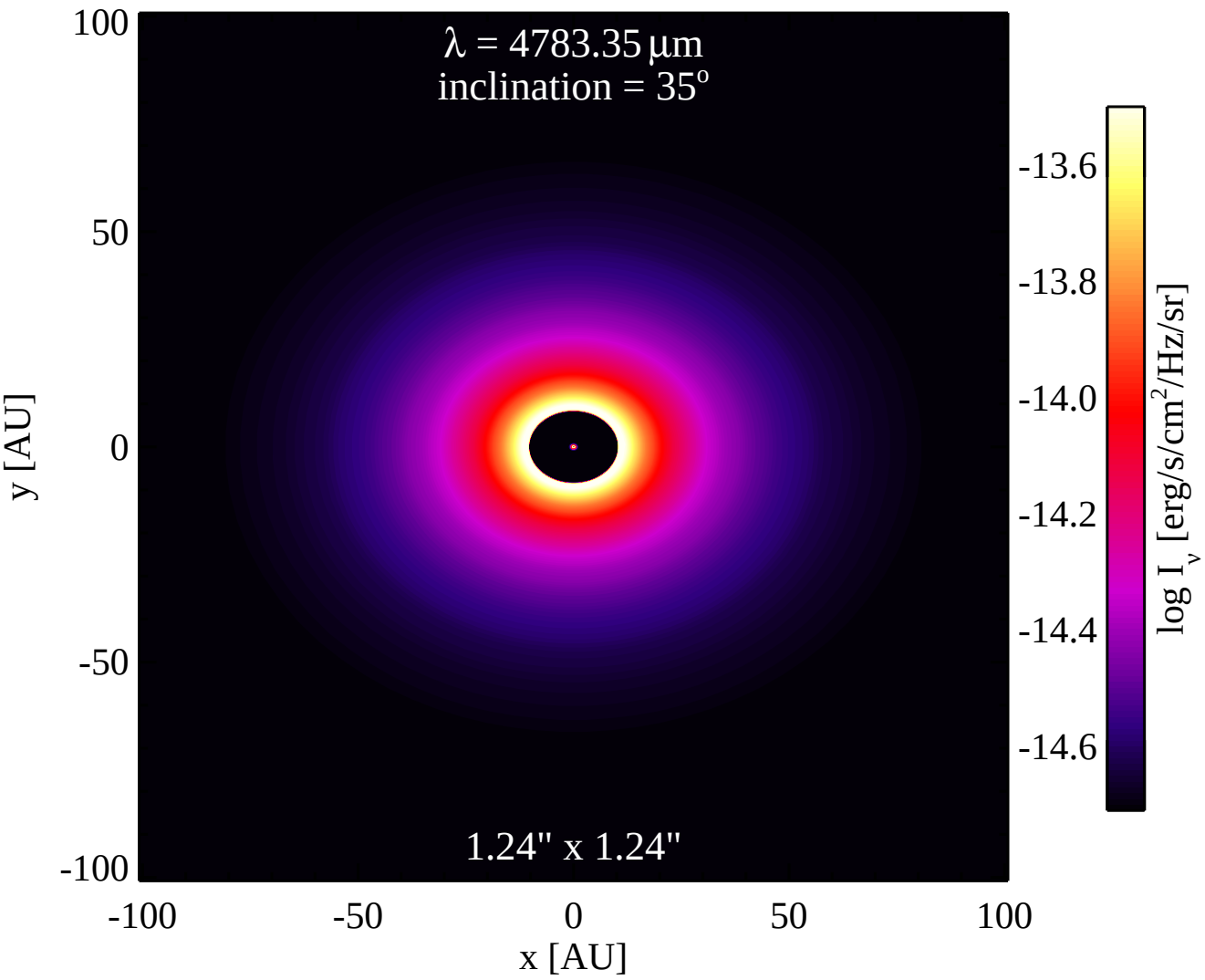

λ = 1812.70 μm
inclination = 35°
1.24" x 1.24"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 2200.94 μm
inclination = 35°
1.24" x 1.24"
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 = 2672.32 μm
inclination = 35°
1.23" x 1.23"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.8
-13.0
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
log I_ν [erg/s/cm²/Hz/sr]


λ = 3244.67 μm
inclination = 35°
1.23" x 1.23"
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 = 3939.59 μm
inclination = 35°
1.24" x 1.24"
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 = 4783.35 μm
inclination = 35°
1.24" x 1.24"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.6
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]