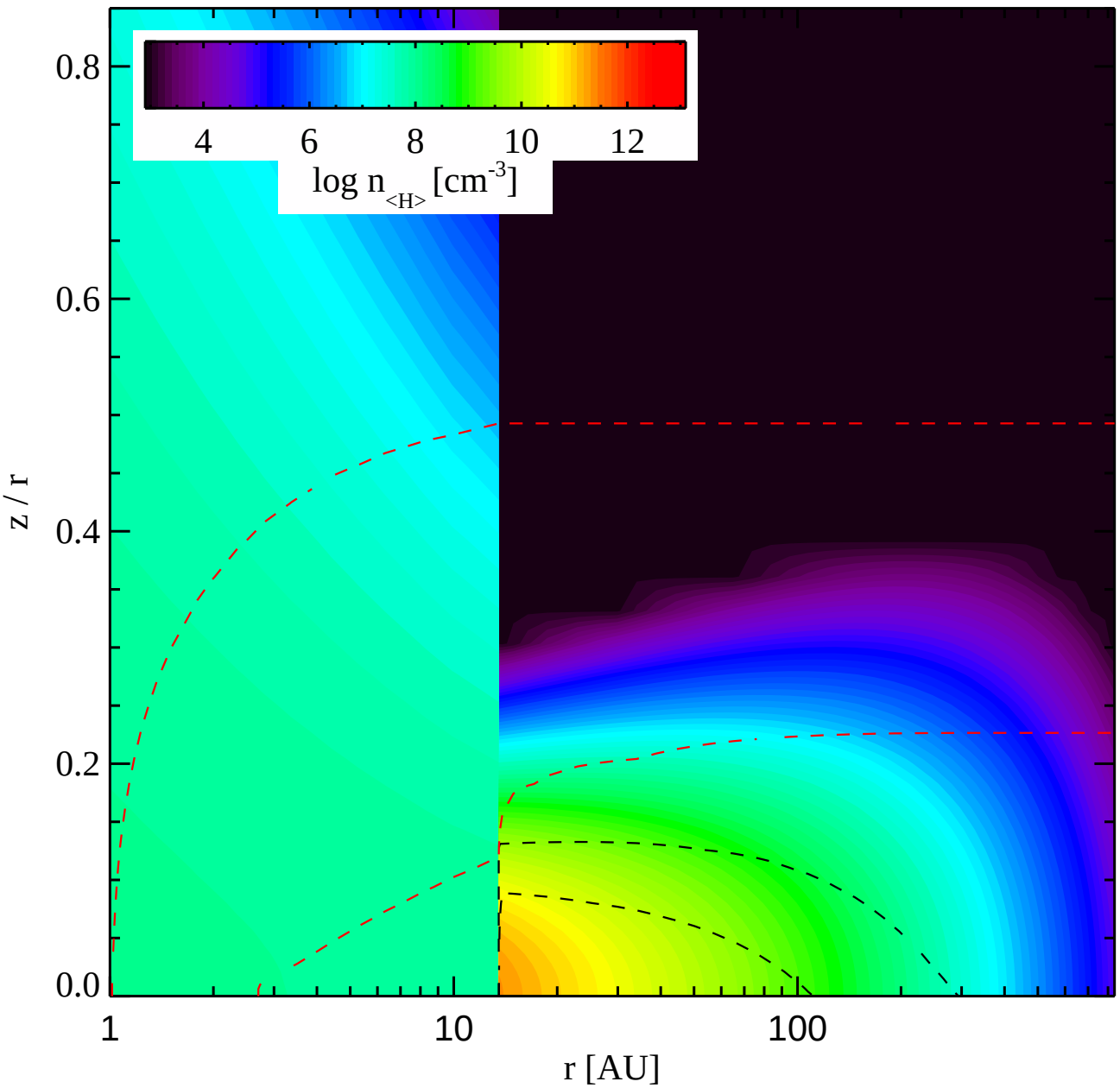
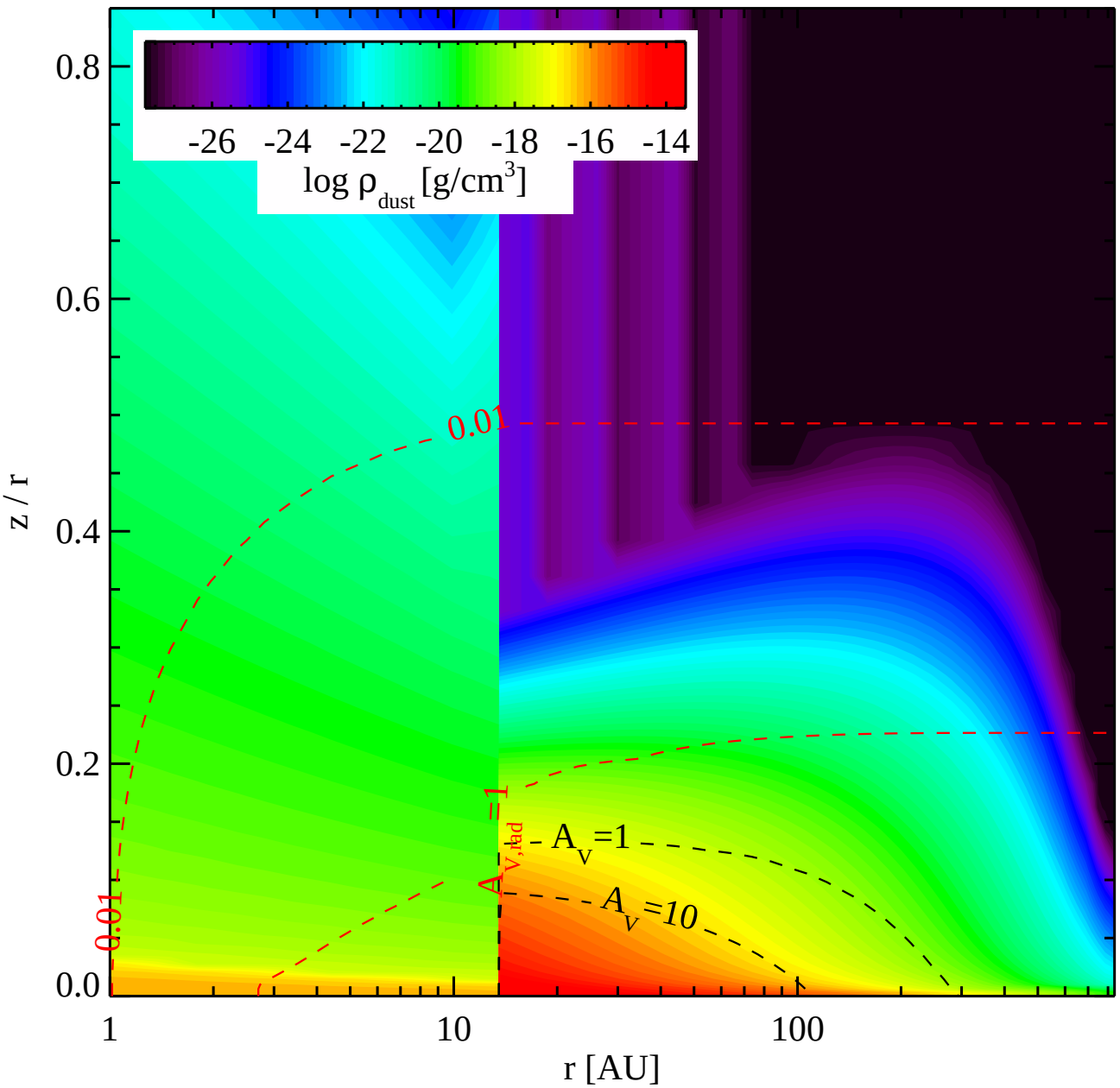
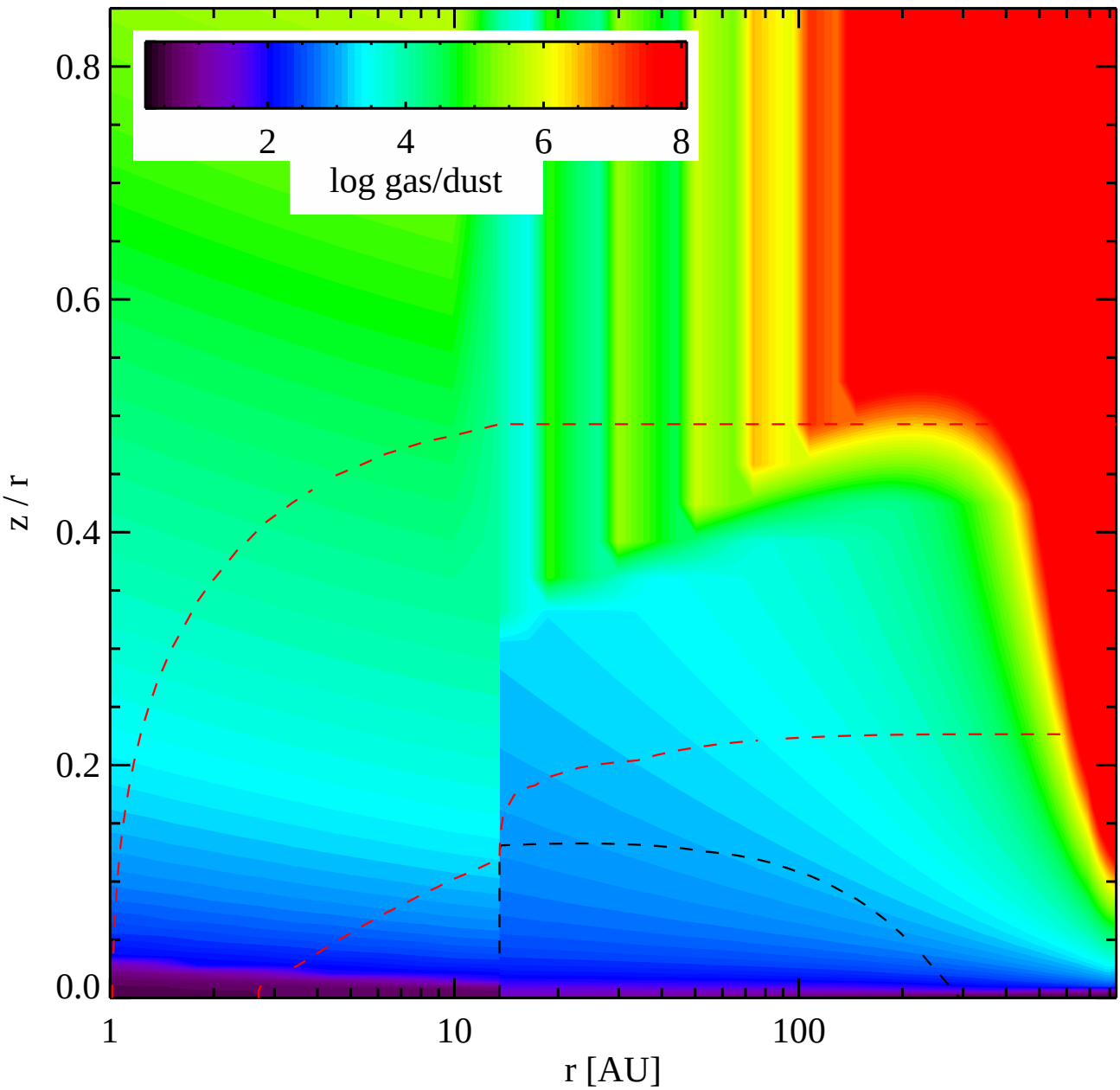
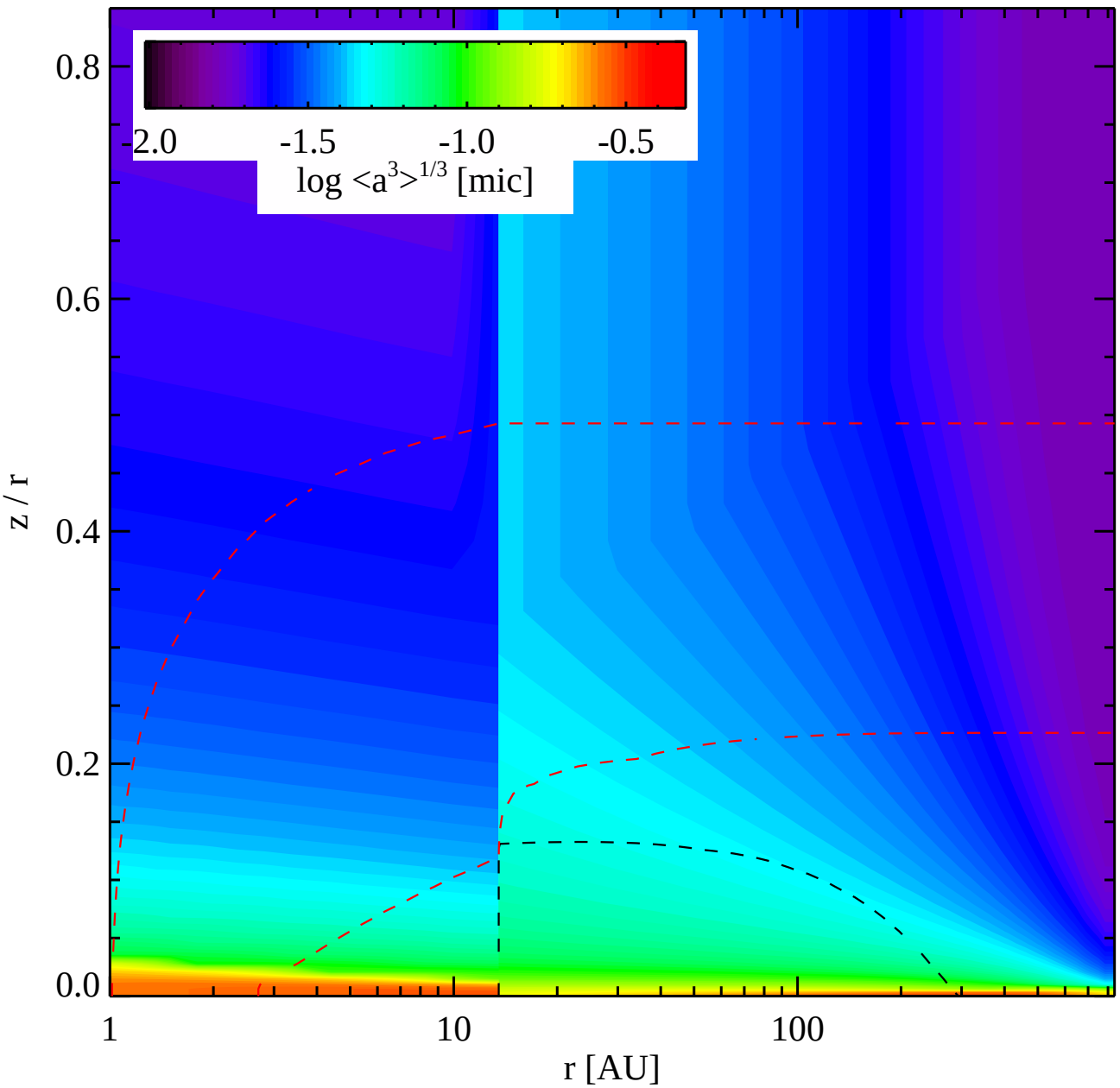
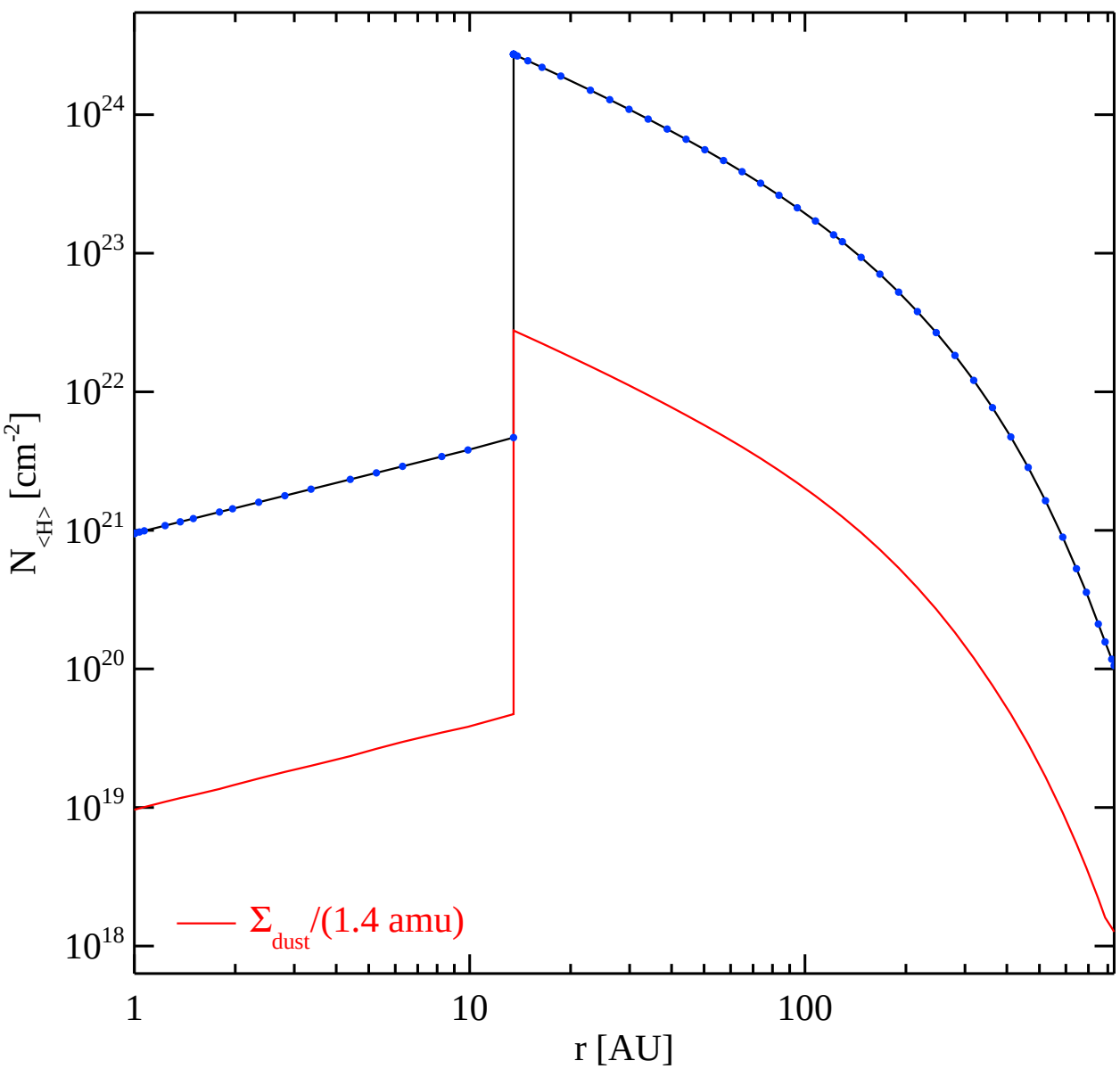
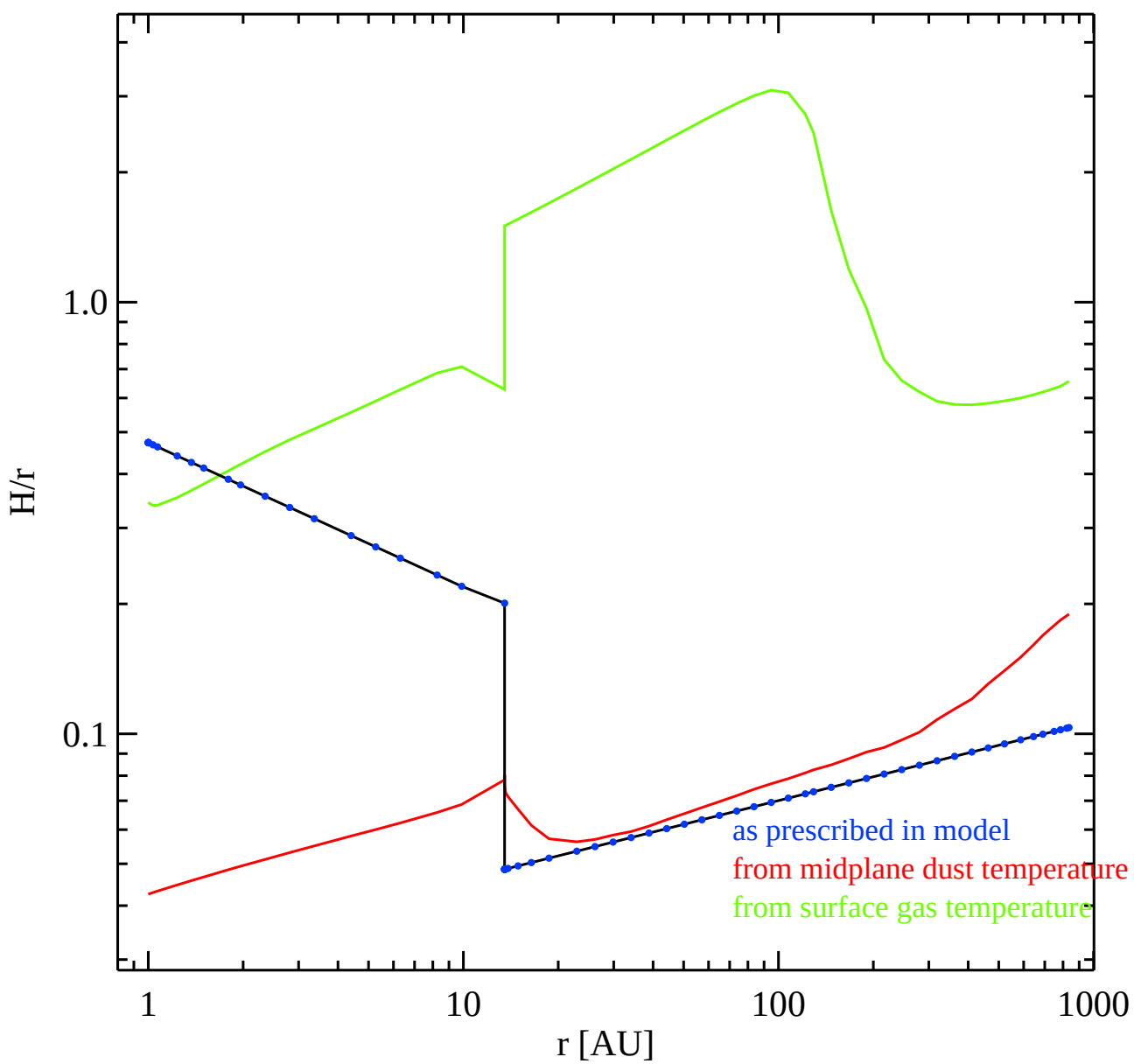

4
6
8
10
12
log n<H> [cm-3]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]

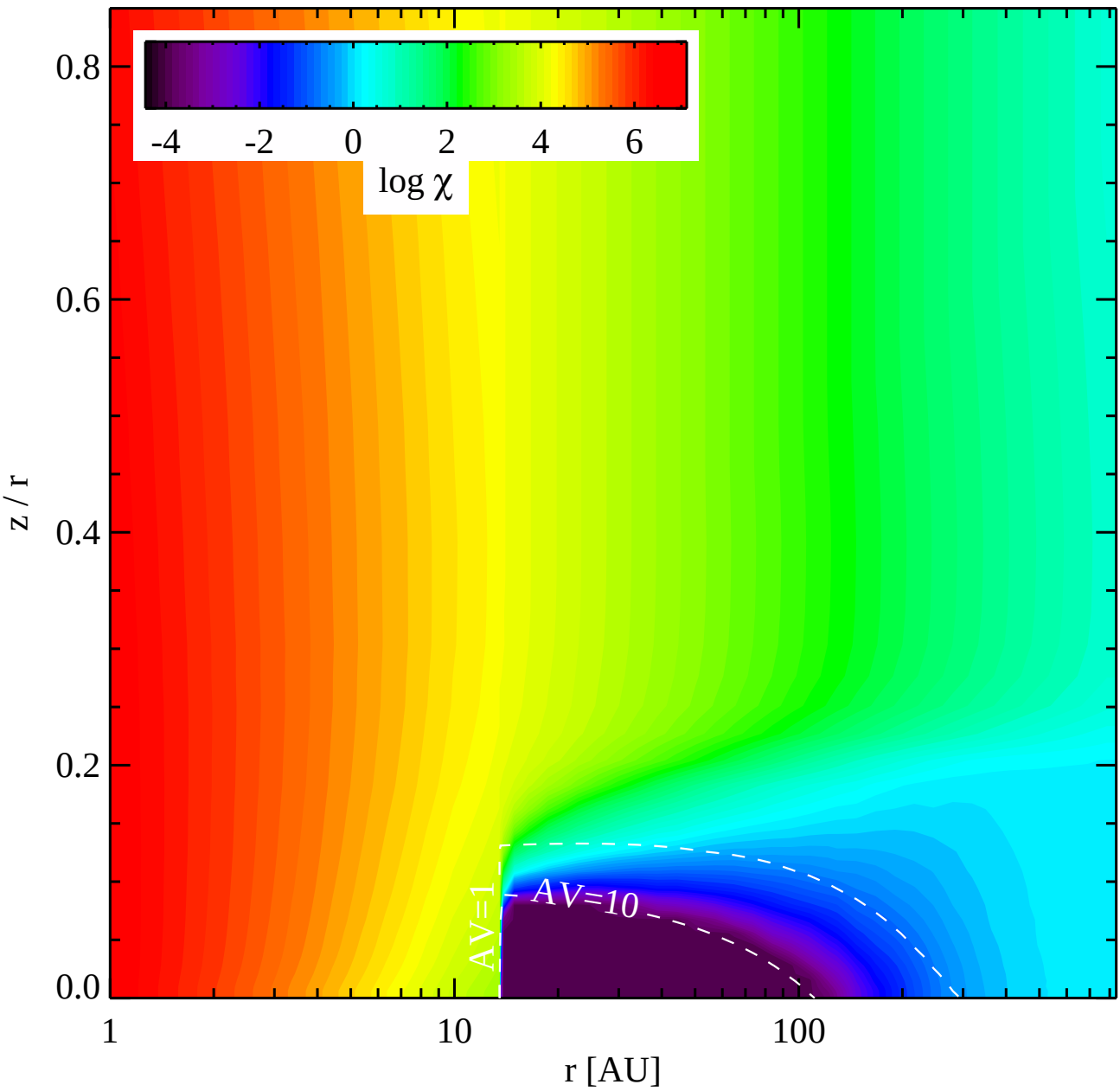

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]
0.01
0.01
AV,rad=1
AV=1
AV=10

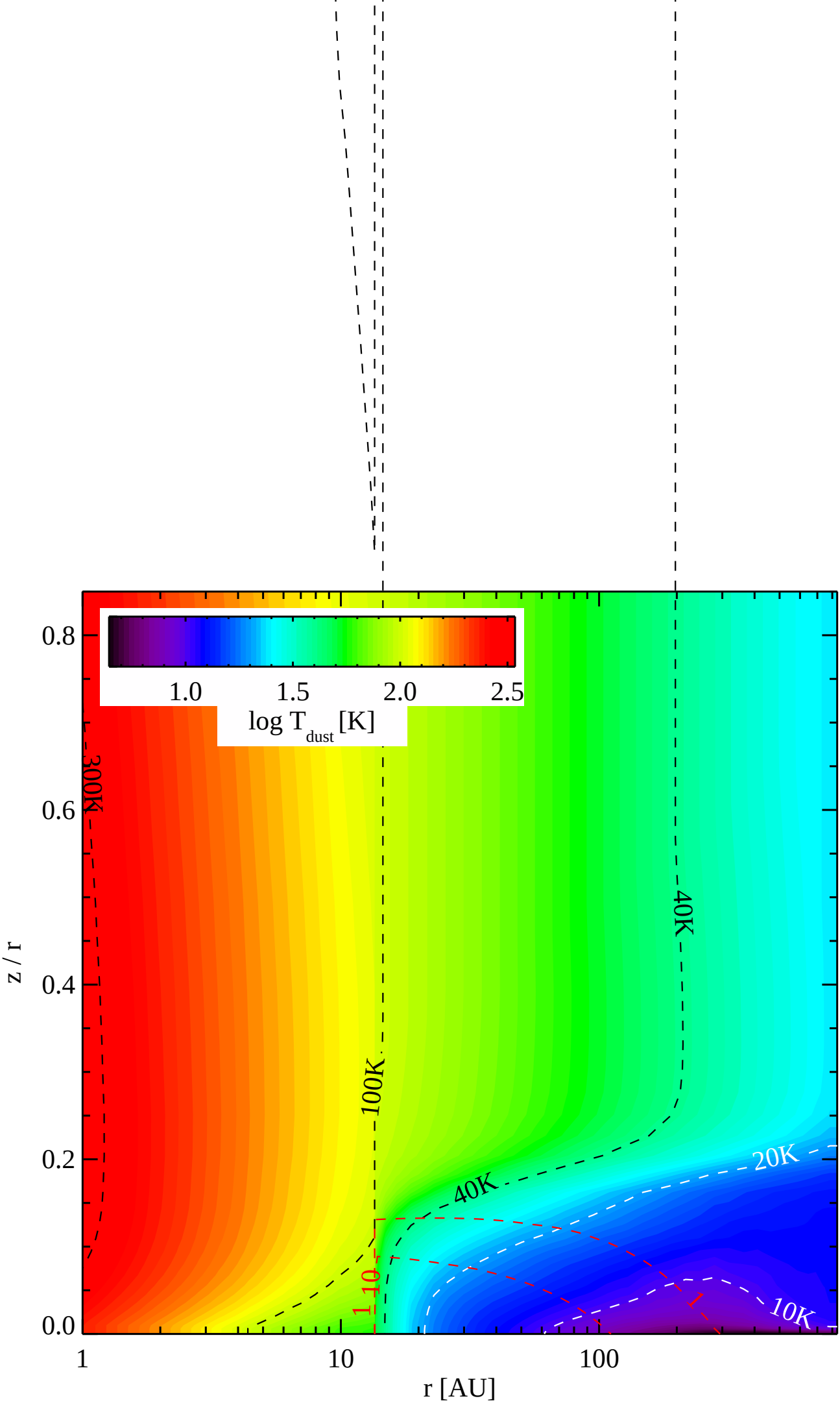

2
4
6
8
log gas/dust
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]

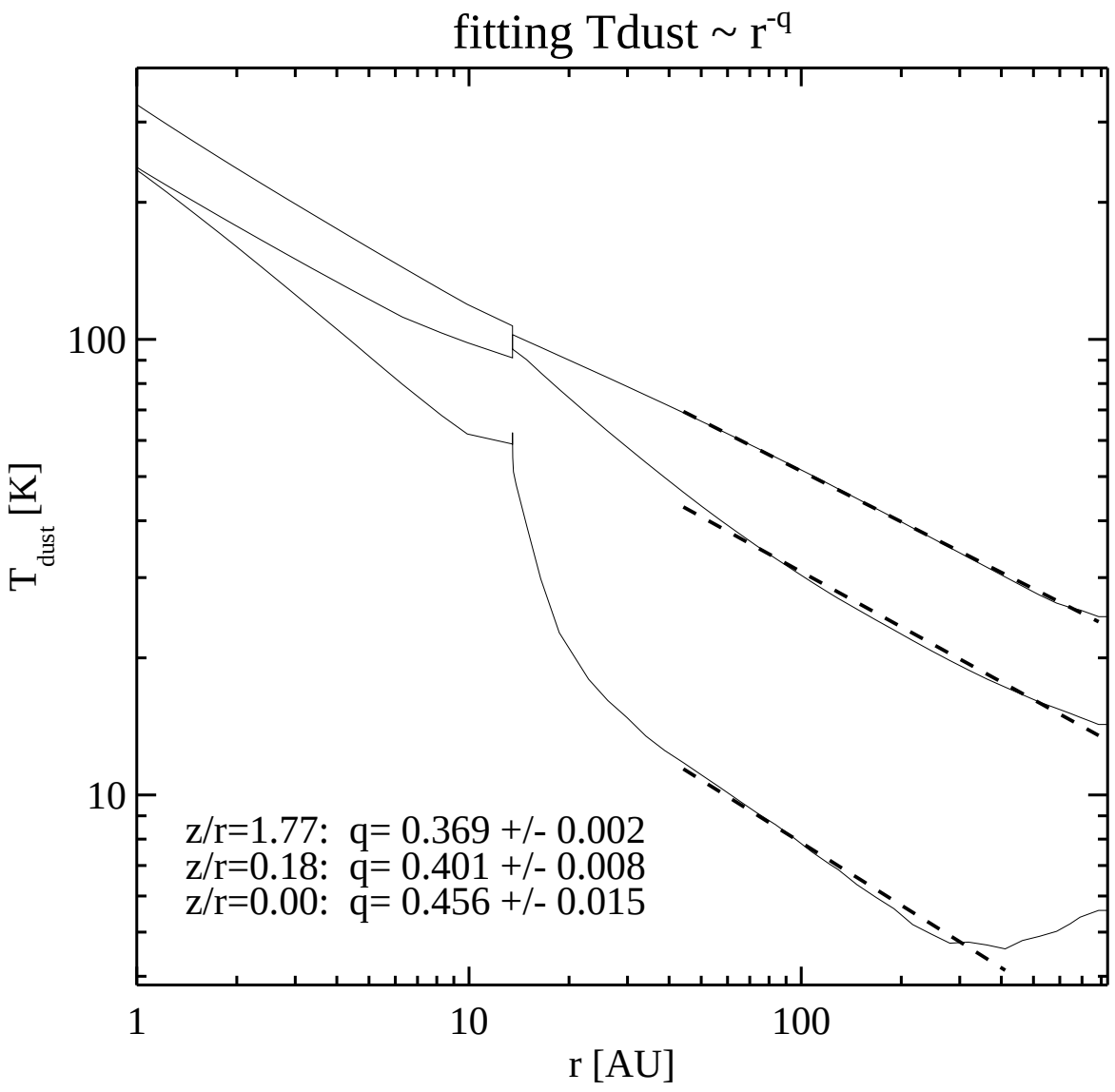

-2.0
-1.5
-1.0
-0.5
log <a^3>^1/3 [mic]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]

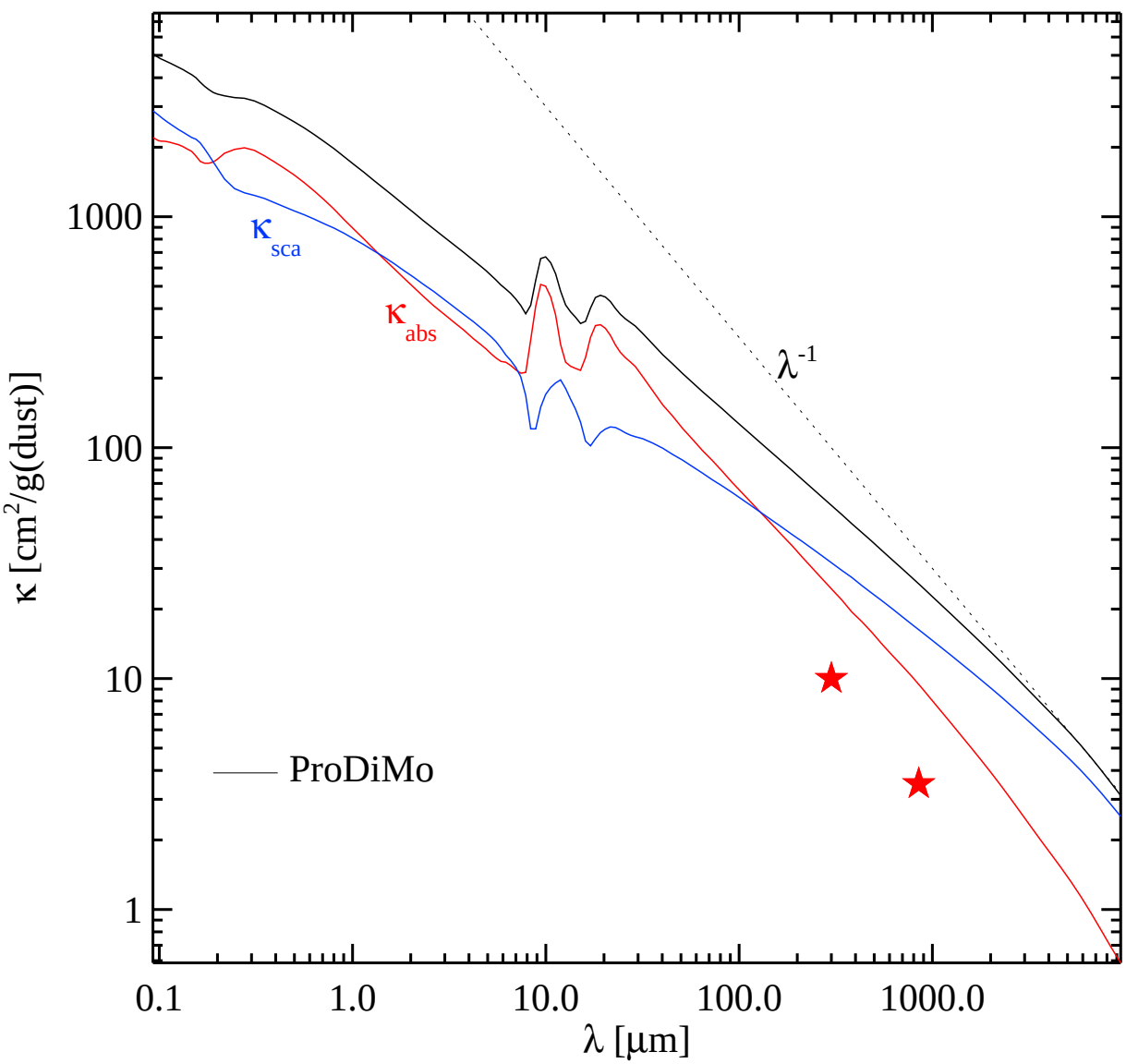

10^{24}
10^{23}
10^{22}
10^{21}
10^{20}
10^{19}
10^{18}
$N_{<H>}$ [cm^{-2}]
1
10
100
r [AU]
Σ_{dust}/(1.4 amu)

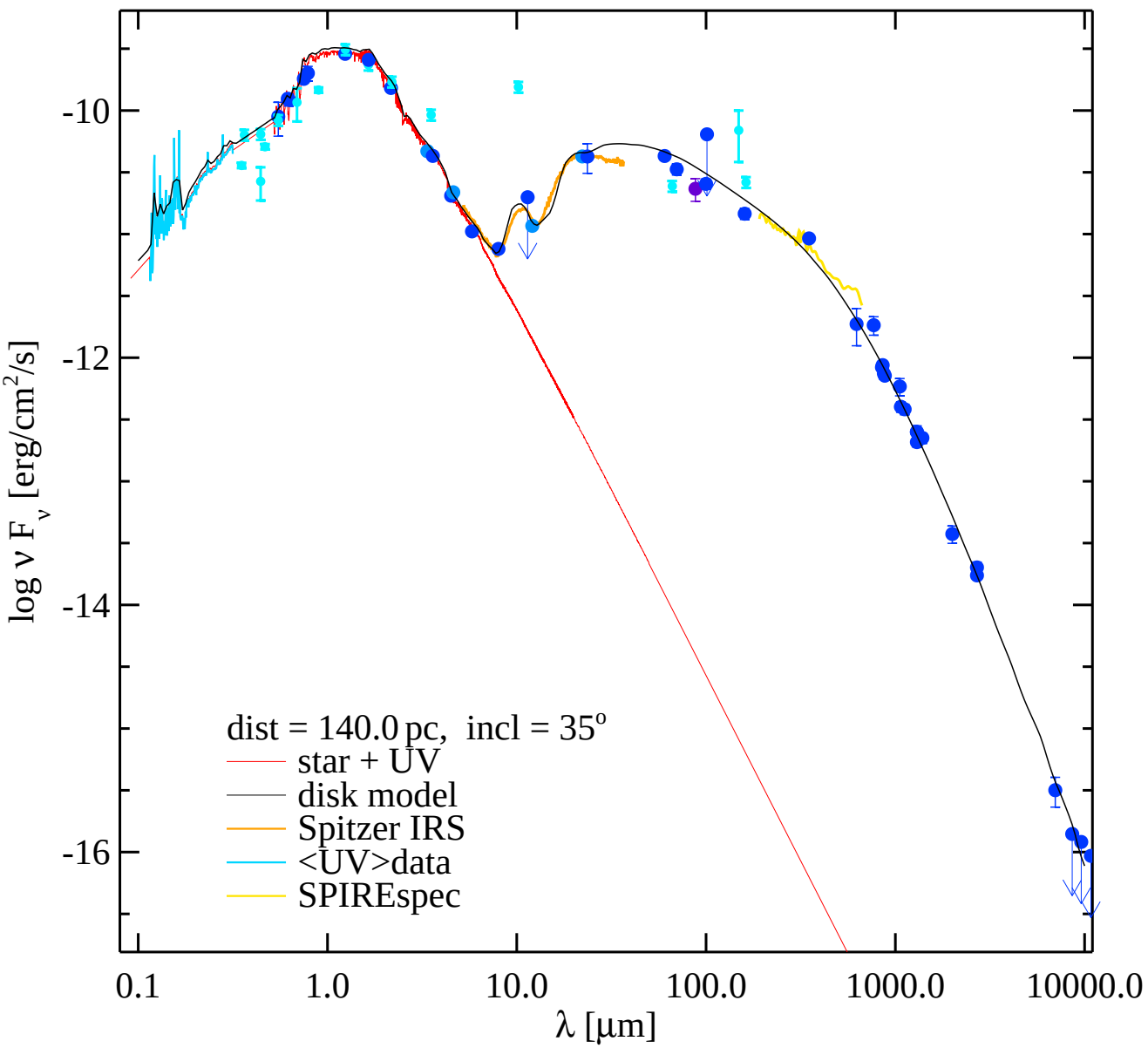

1.0
0.1
H/r
1
10
100
1000
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

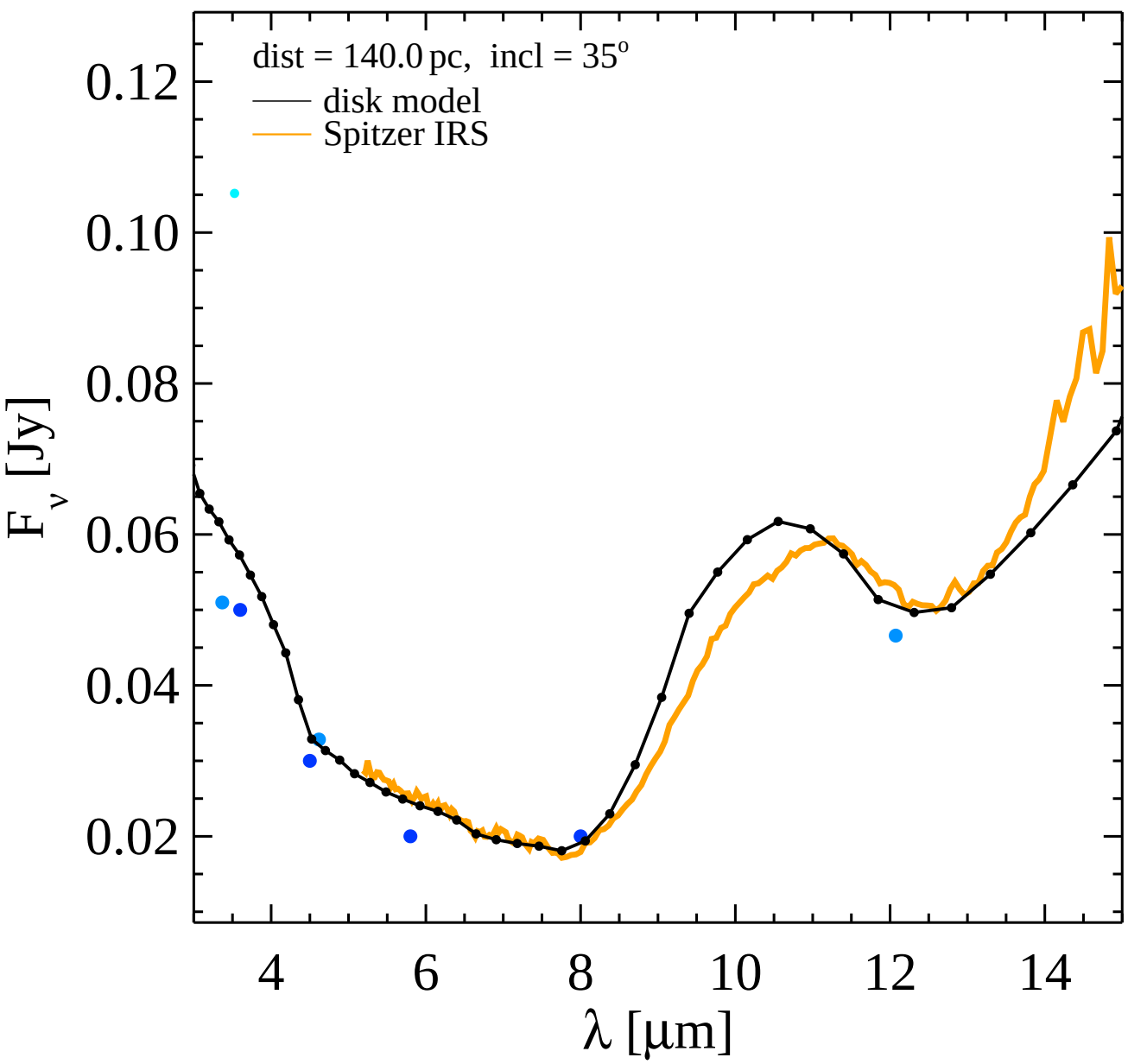

-4
-2
0
2
4
6
log χ
0.8
0.6
0.4
0.2
0.0
z / r
AV=1
AV=10
1
10
100
r [AU]

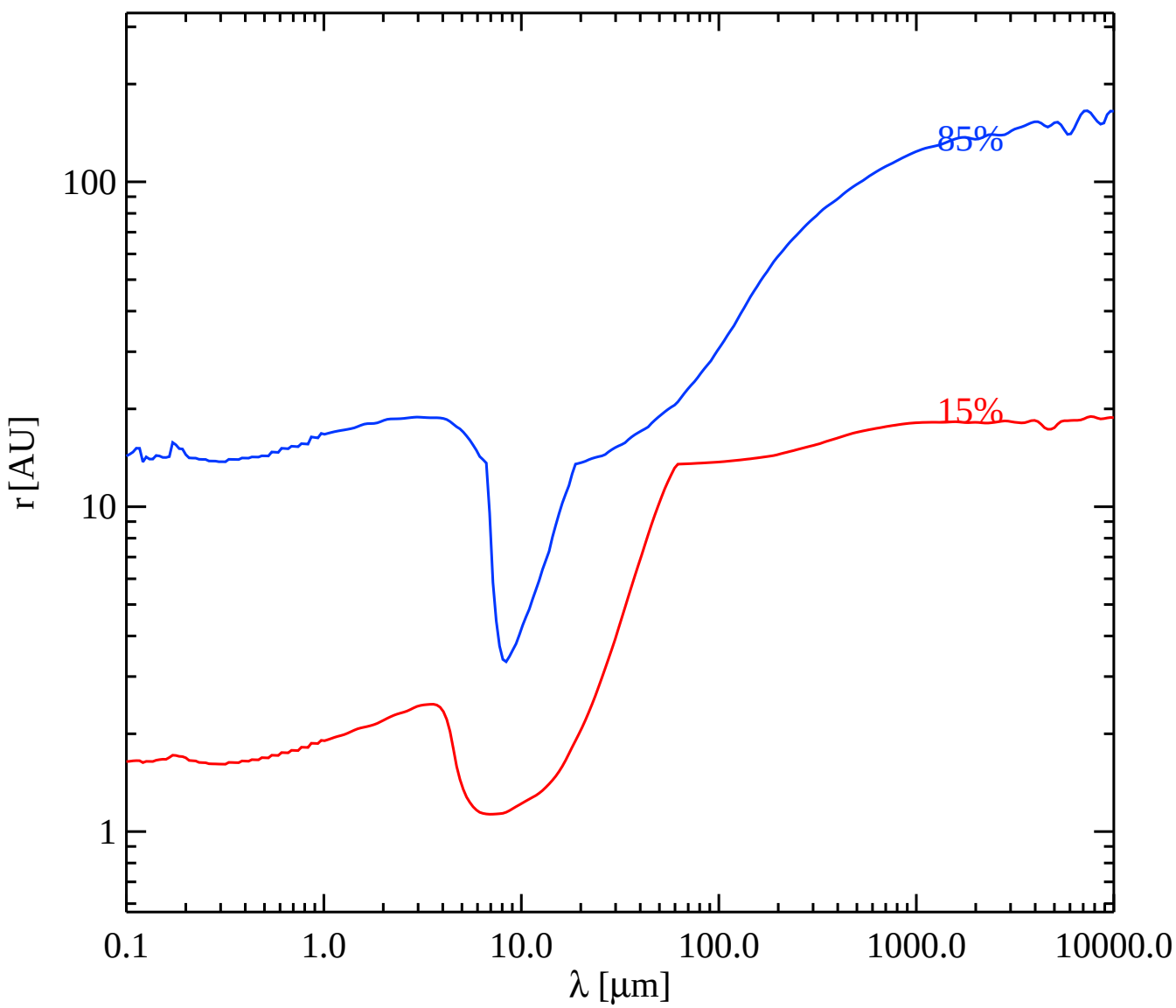

1.0
1.5
2.0
2.5
log T dust [K]
300K
100K
40K
40K
20K
10K
1
10
0.0
0.2
0.4
0.6
0.8
z / r
1
10
100
r [AU]

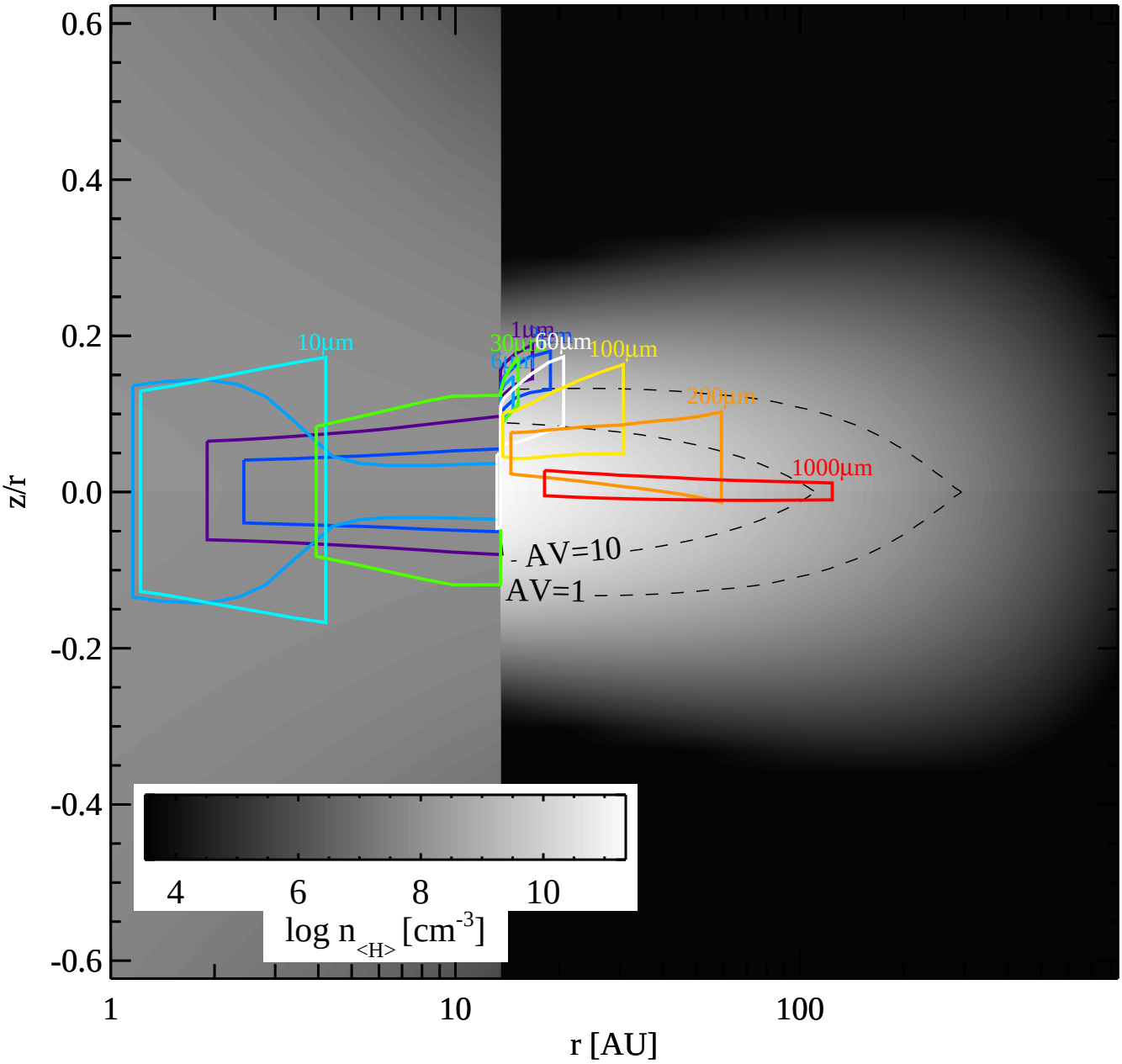

fitting Tdust ~ r^-q
100
10
T dust [K]
1
10
100
r [AU]
z/r=1.77: q= 0.369 +/- 0.002
z/r=0.18: q= 0.401 +/- 0.008
z/r=0.00: q= 0.456 +/- 0.015

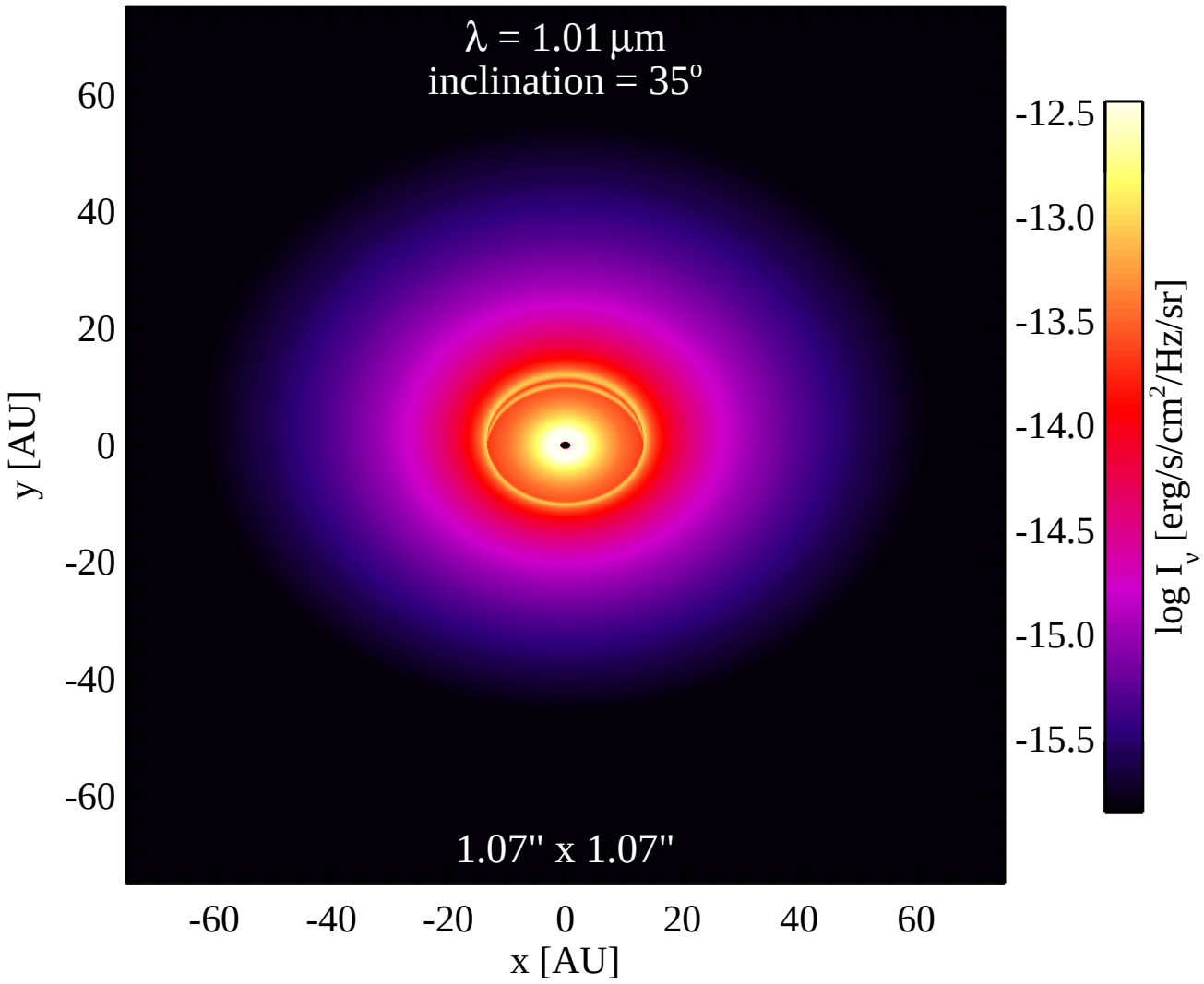

1000
100
10
1
κ [cm²/g(dust)]
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

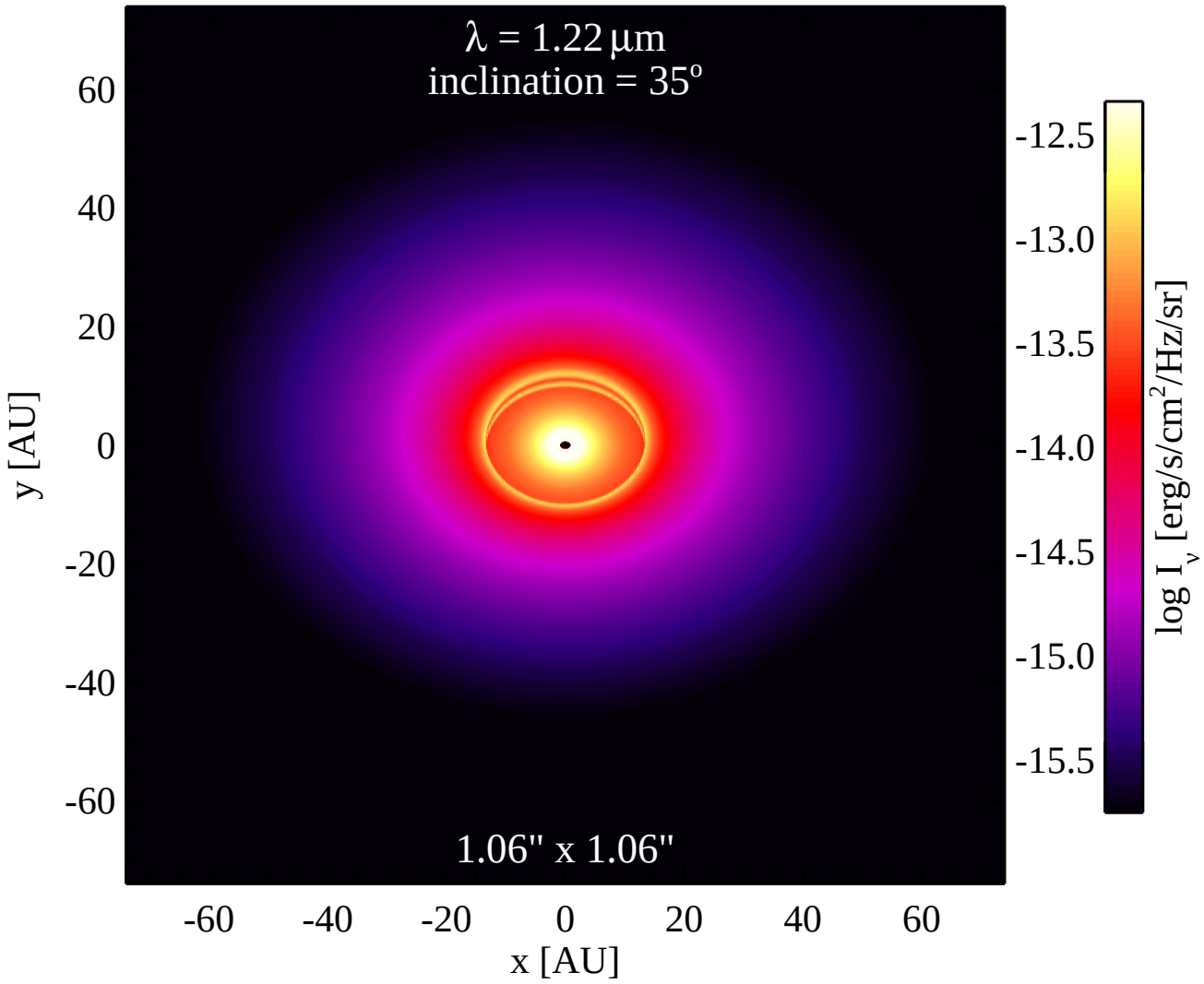

-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 140.0 pc, incl = 35°
star + UV
disk model
Spitzer IRS
<UV>data
SPIREspec

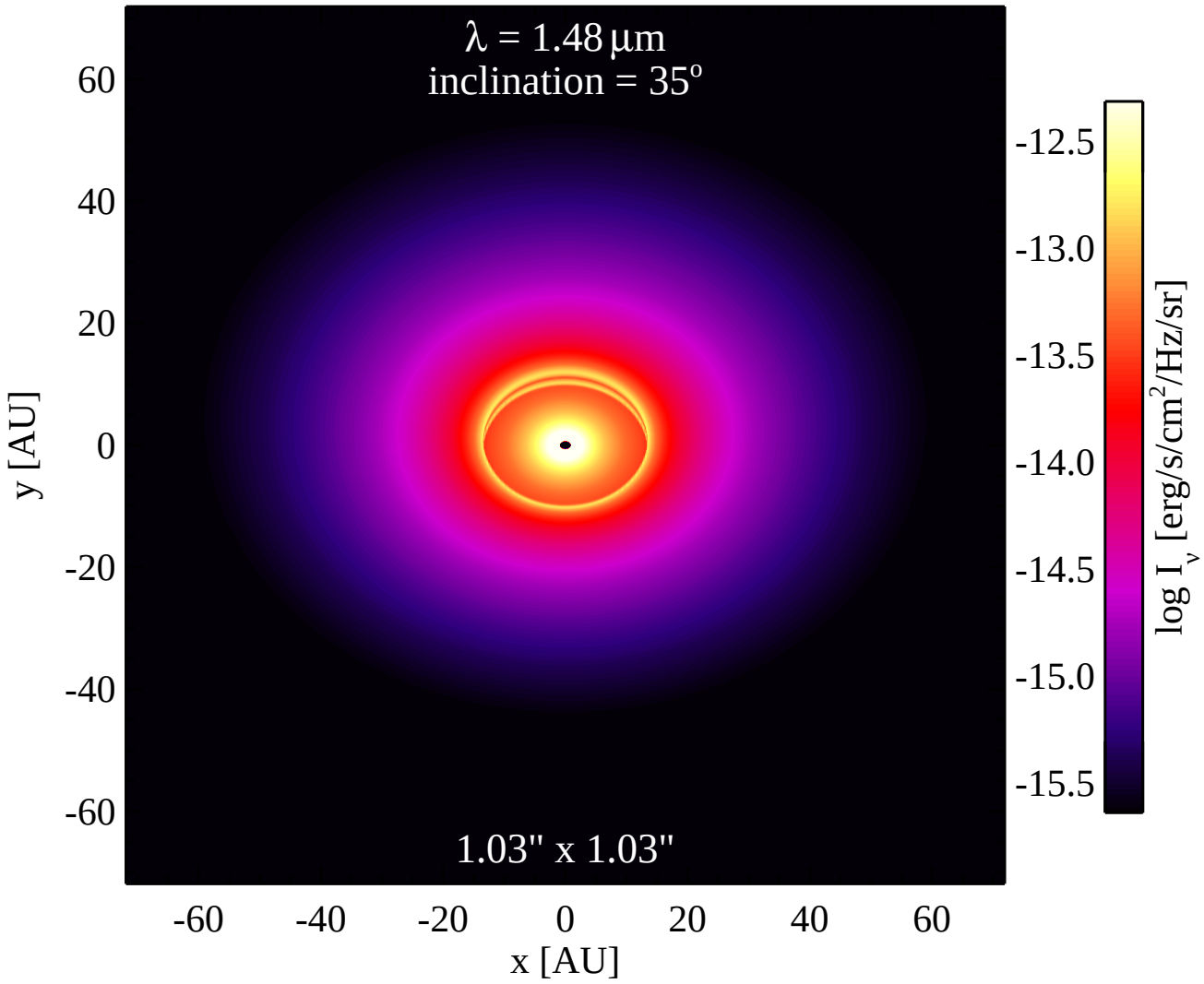

dist = 140.0 pc, incl = 35°
disk model
Spitzer IRS
0.12
0.10
0.08
0.06
0.04
0.02
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

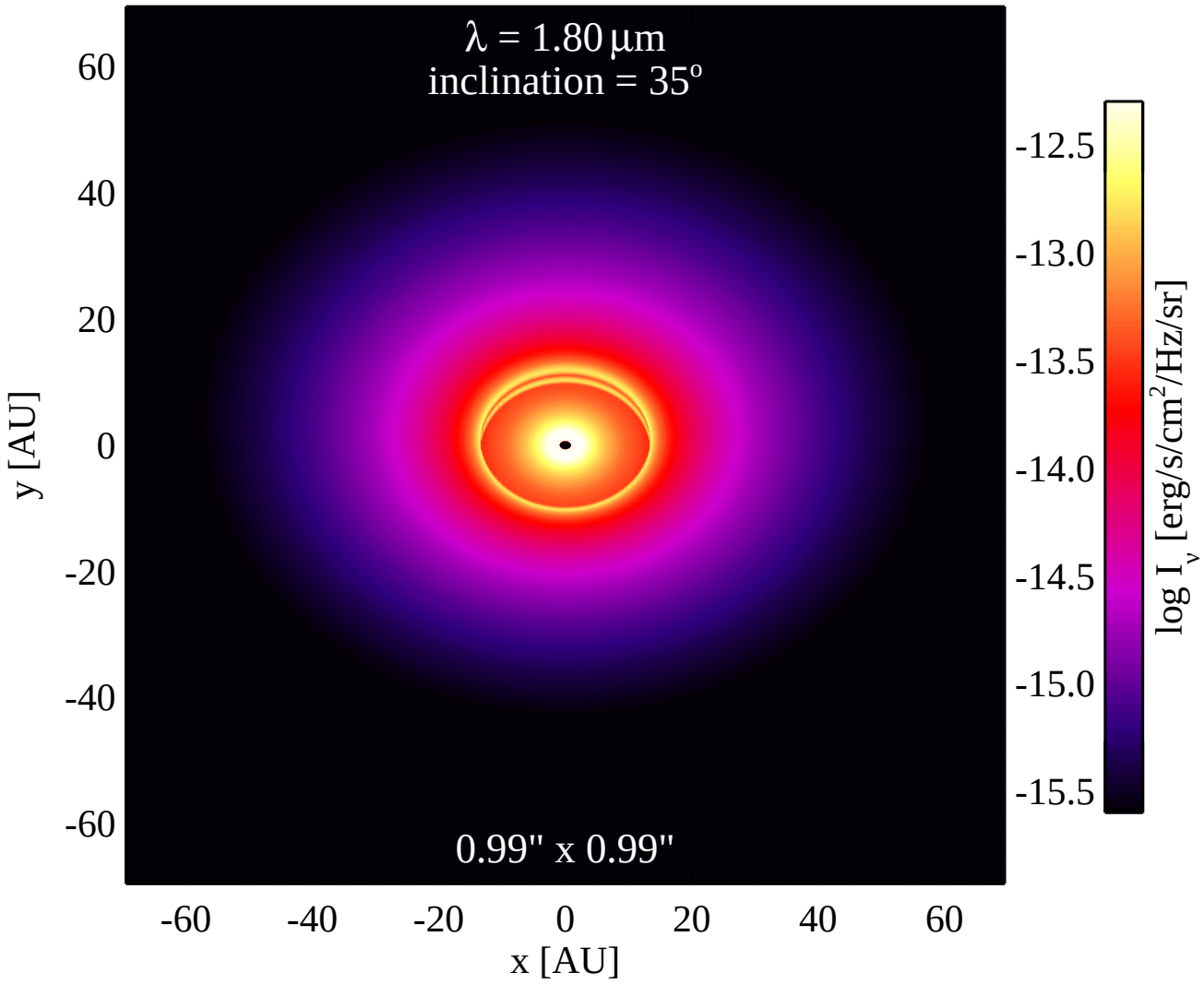

85%
15%
100
10
1
r [AU]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

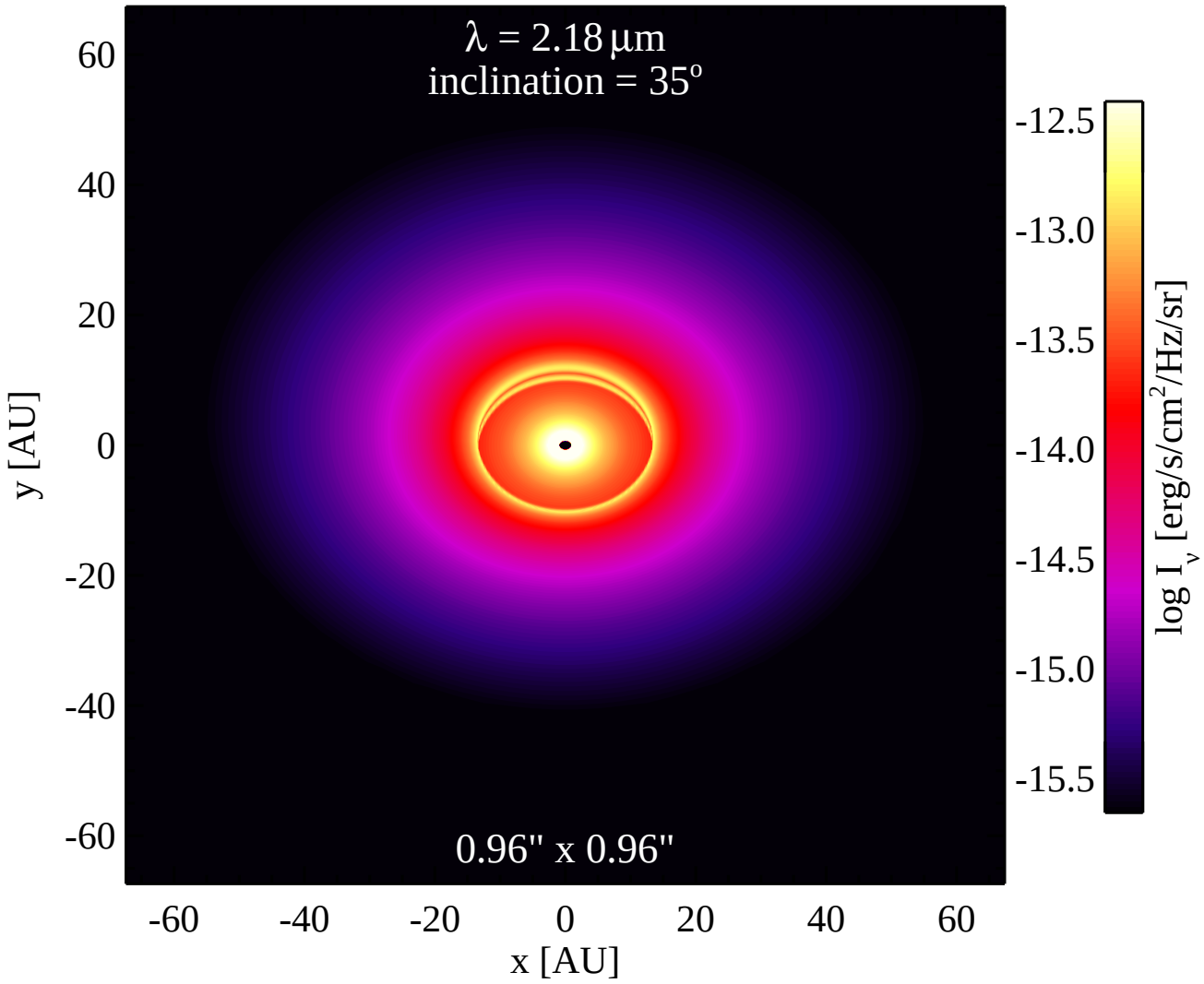

0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
z/r
1
10
100
r [AU]
10µm
1µm
60µm
100µm
200µm
1000µm
AV=10
AV=1
4
6
8
10
log n<H> [cm-3]

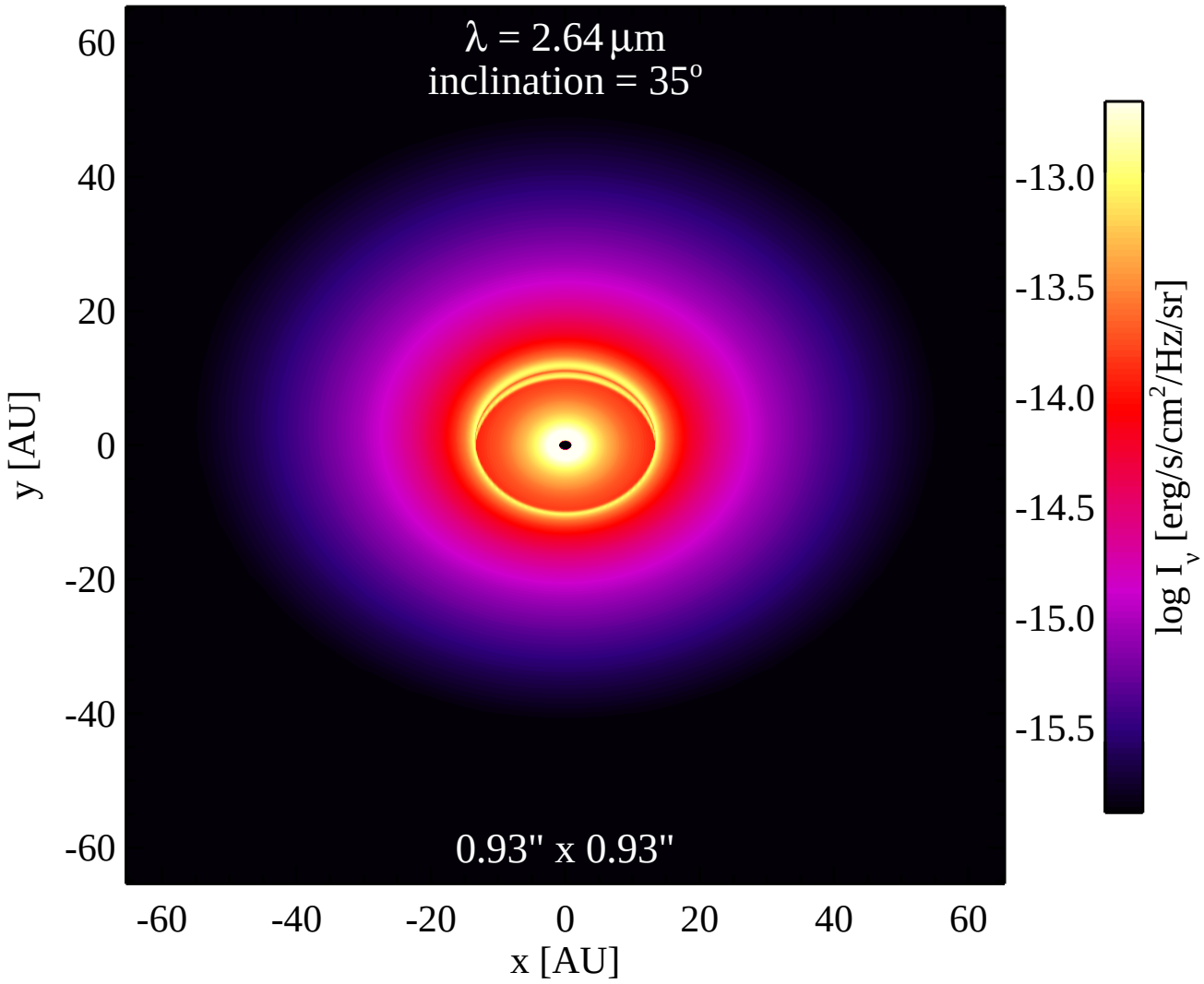

λ = 1.01 μm
inclination = 35°
1.07" x 1.07"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

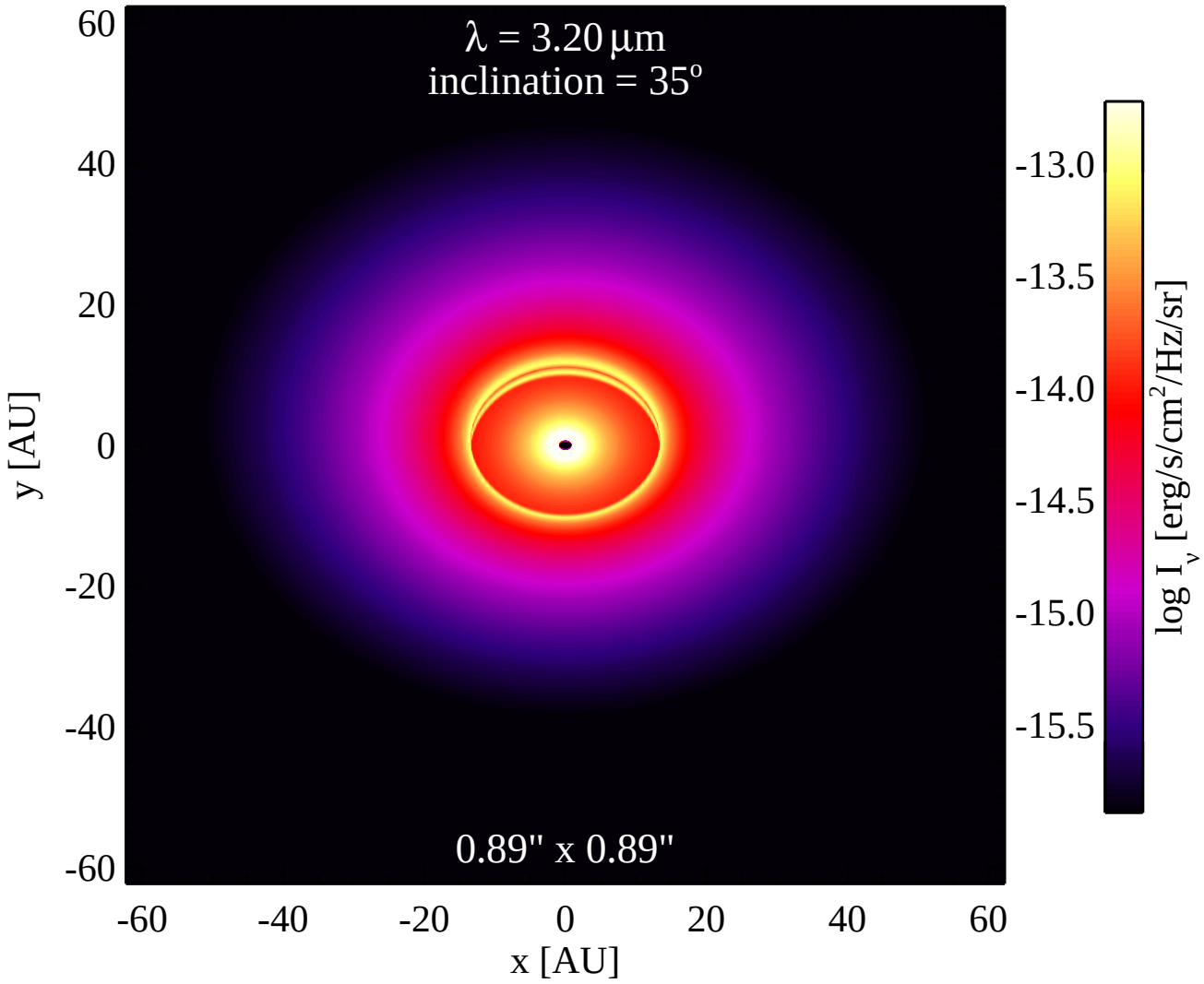

λ = 1.22 μm
inclination = 35°
1.06" x 1.06"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

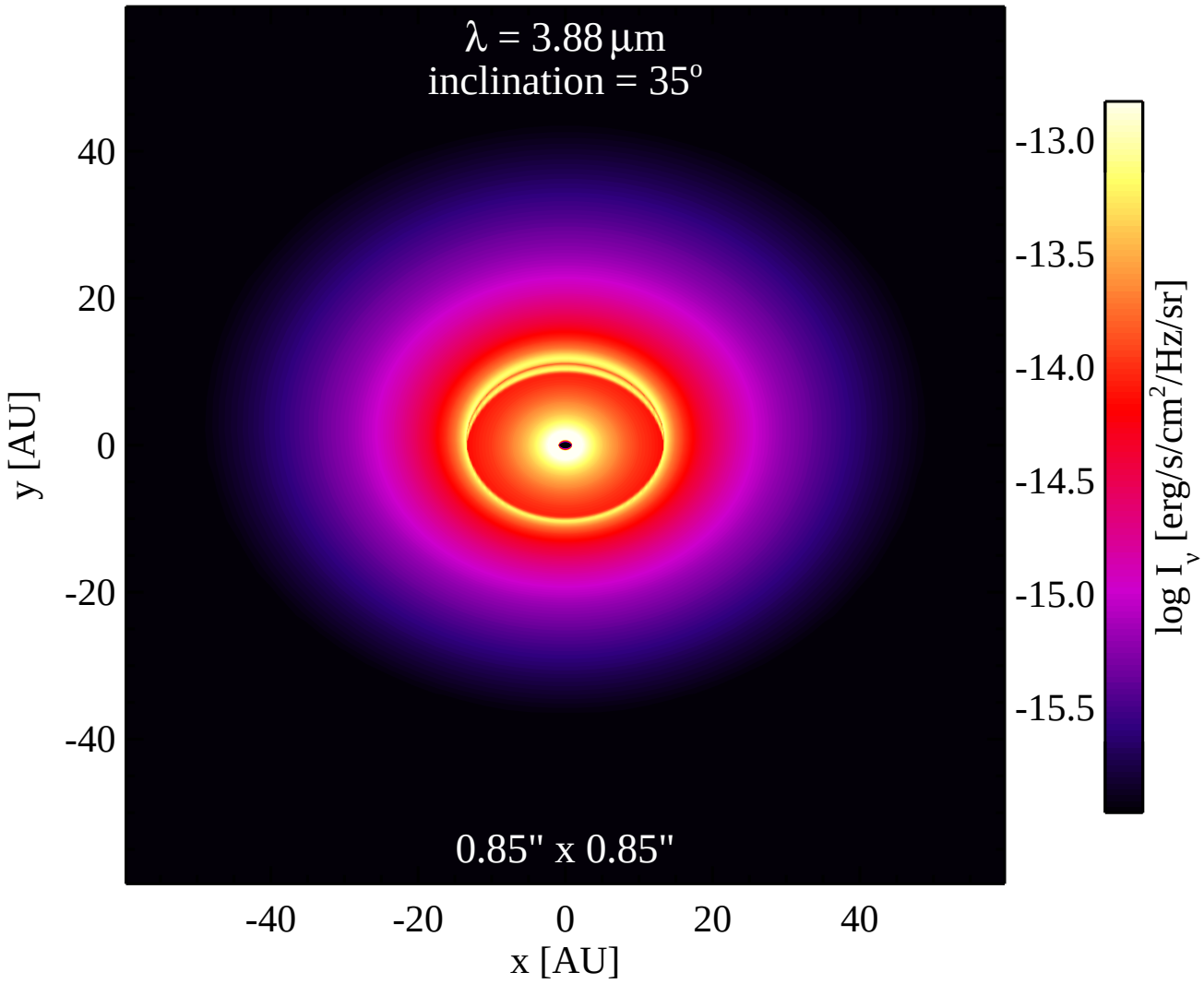

λ = 1.48 μm
inclination = 35°
1.03" x 1.03"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

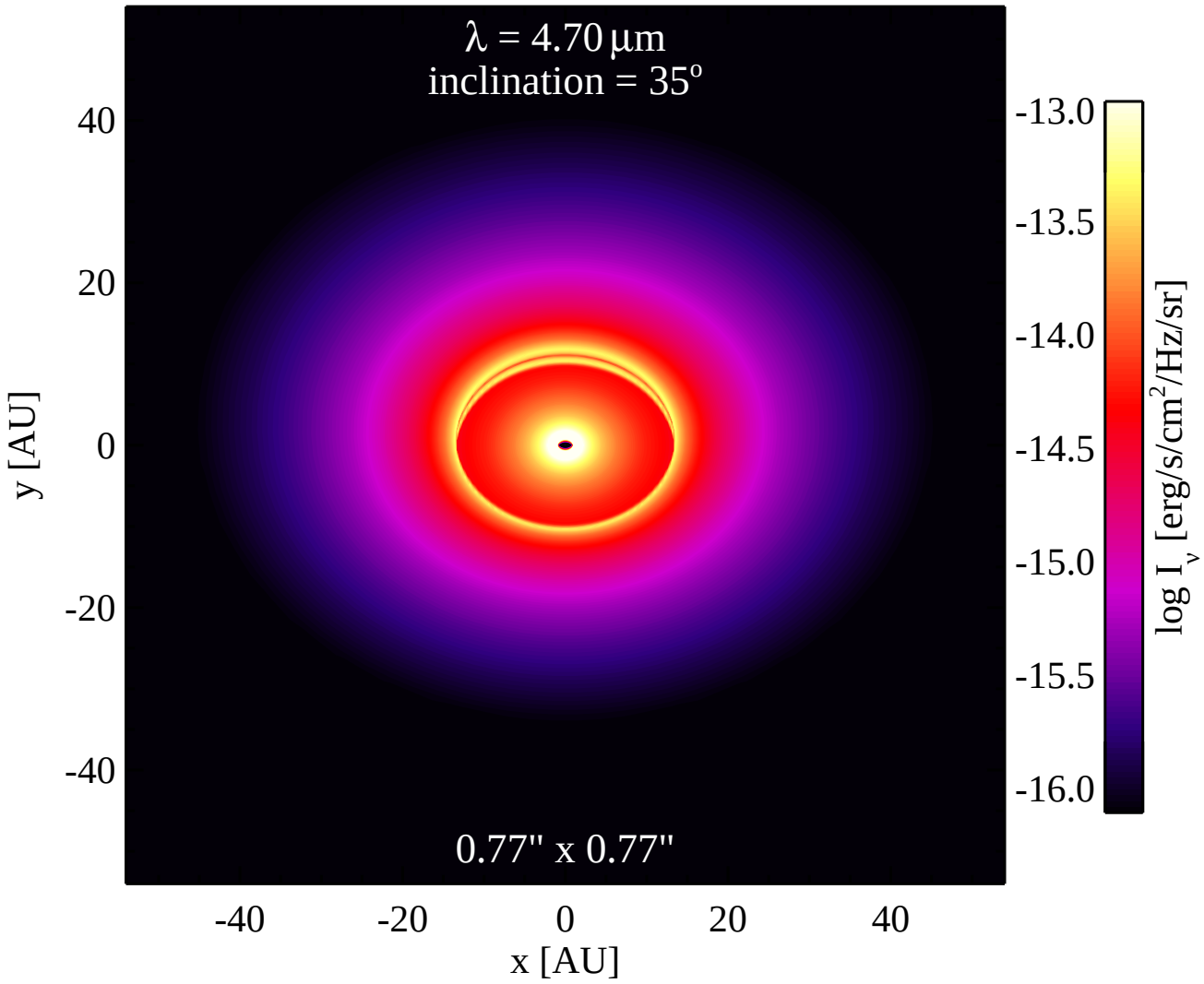

λ = 1.80 μm
inclination = 35°
0.99" x 0.99"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

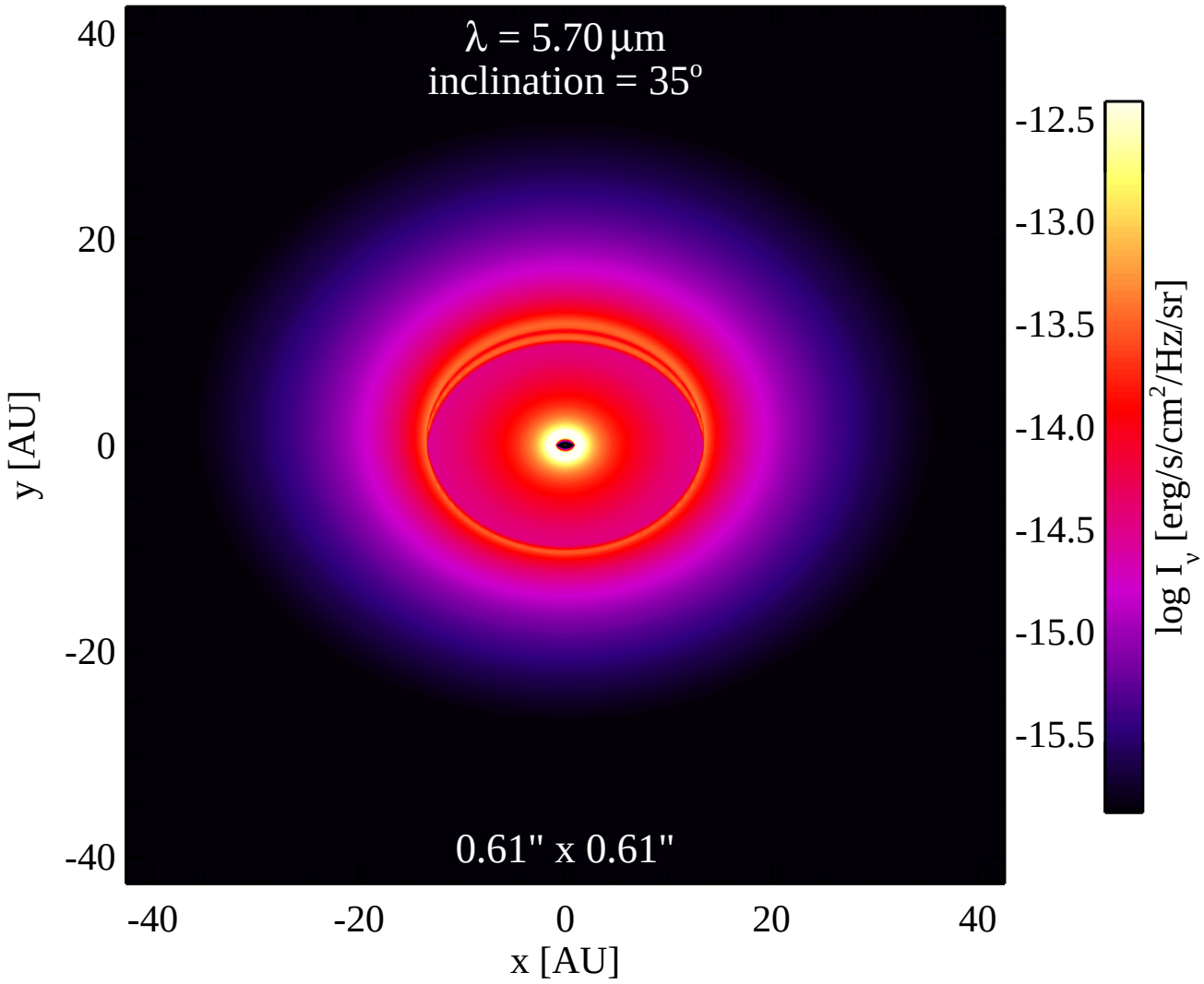

λ = 2.18 μm
inclination = 35°
0.96" x 0.96"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

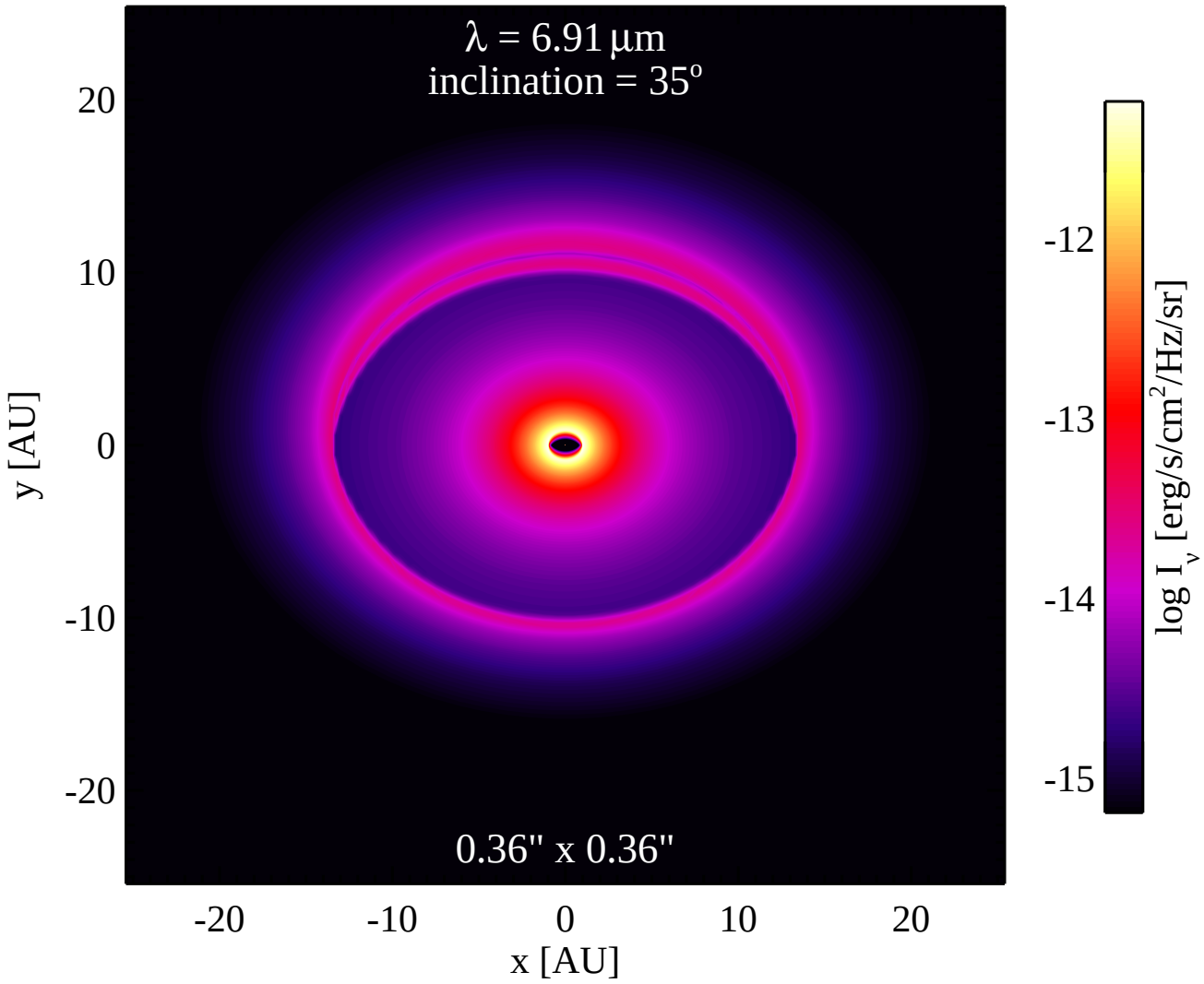

λ = 2.64 μm
inclination = 35°
0.93" x 0.93"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

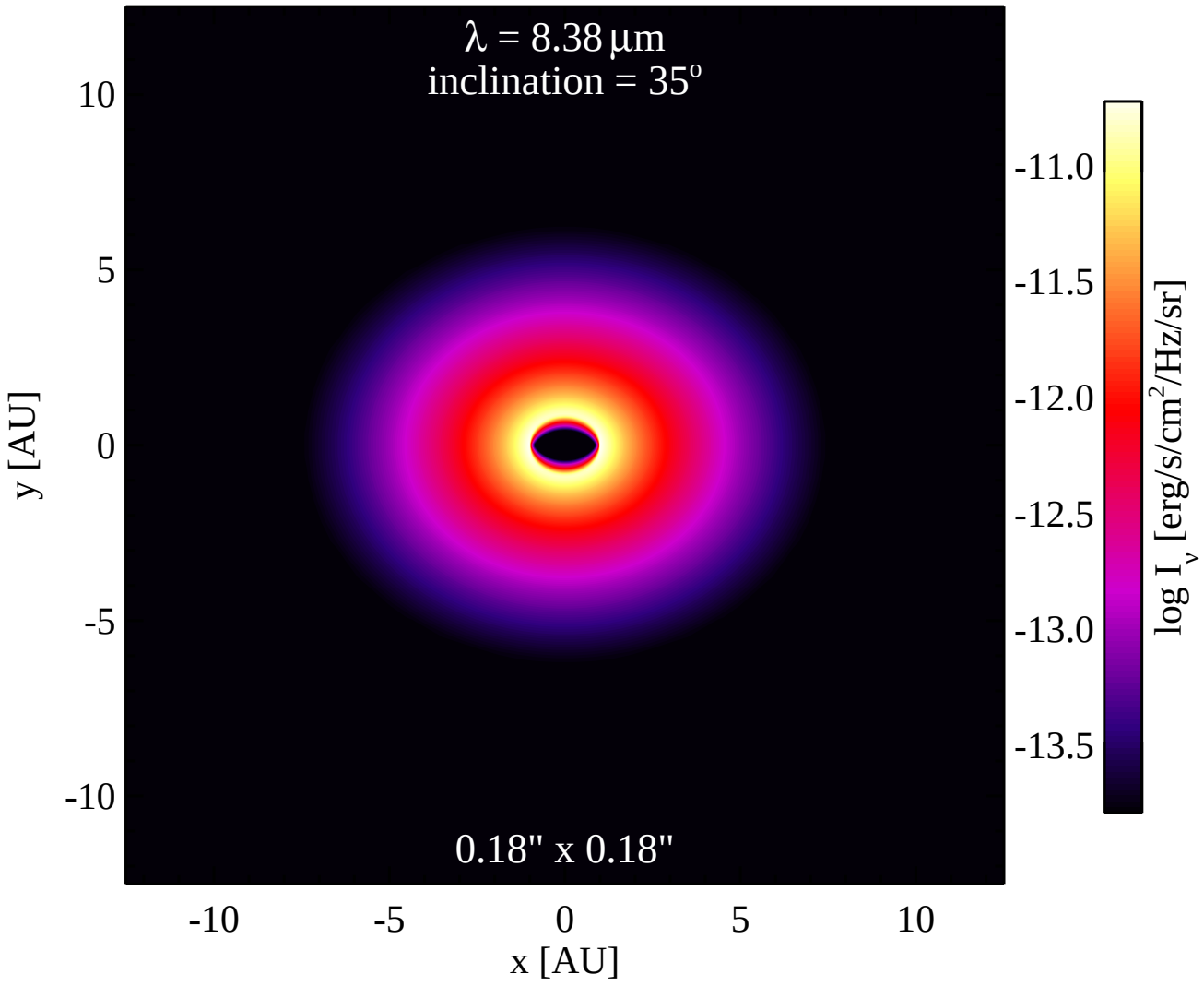

λ = 3.20 μm
inclination = 35°
0.89" x 0.89"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

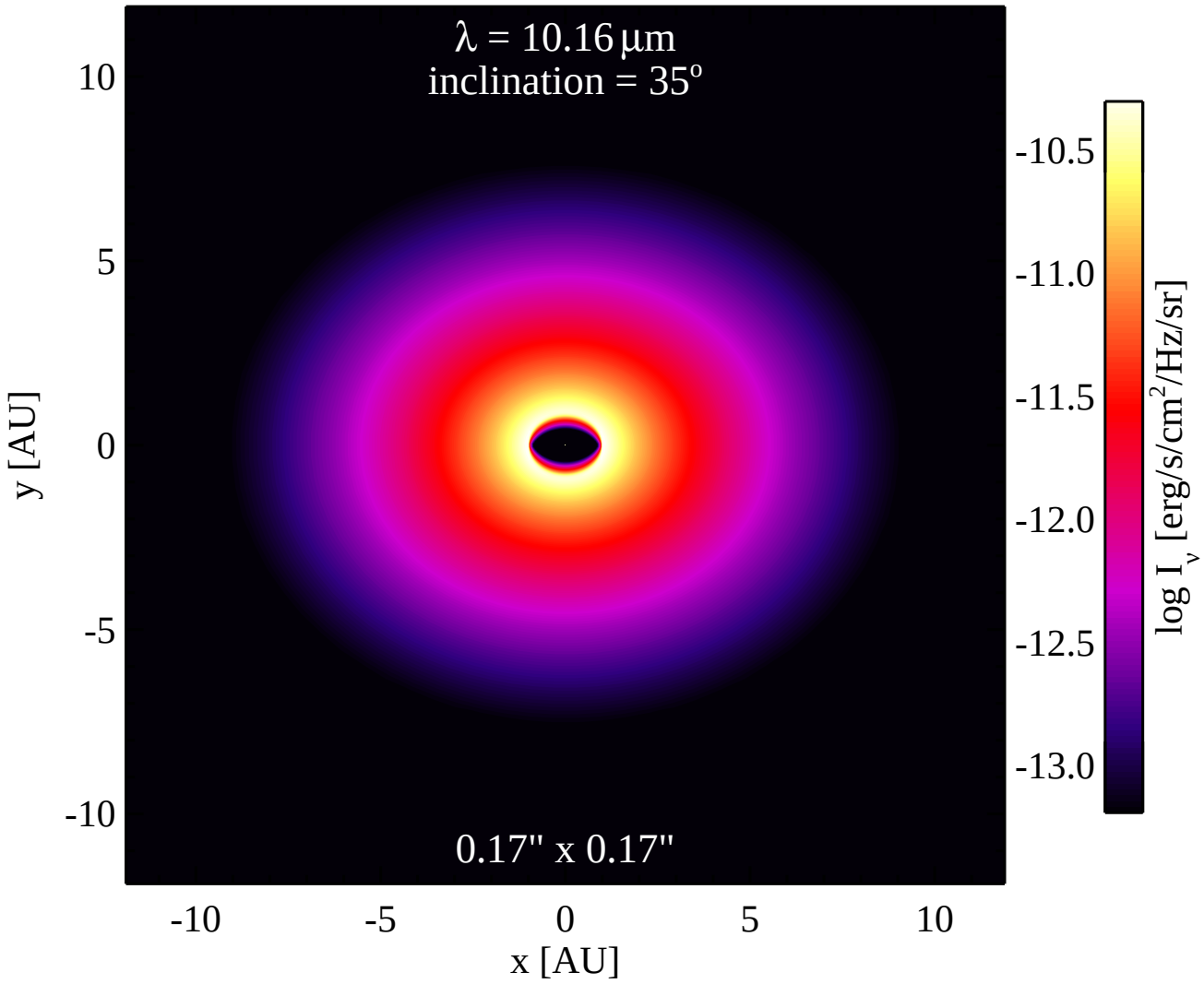

λ = 3.88 μm
inclination = 35°
0.85" x 0.85"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

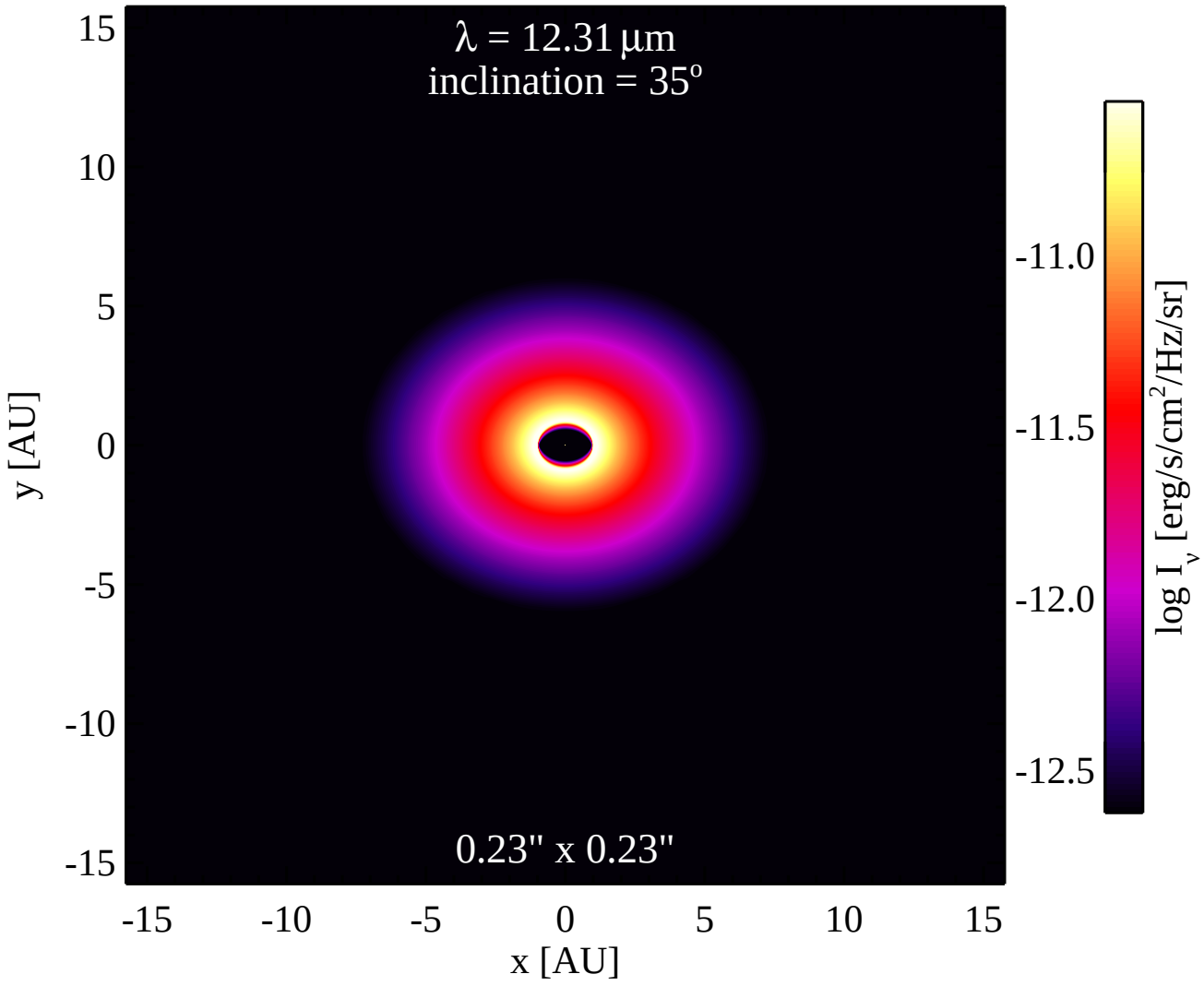

λ = 4.70 μm
inclination = 35°
0.77" x 0.77"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
-16.0
log I_ν [erg/s/cm²/Hz/sr]

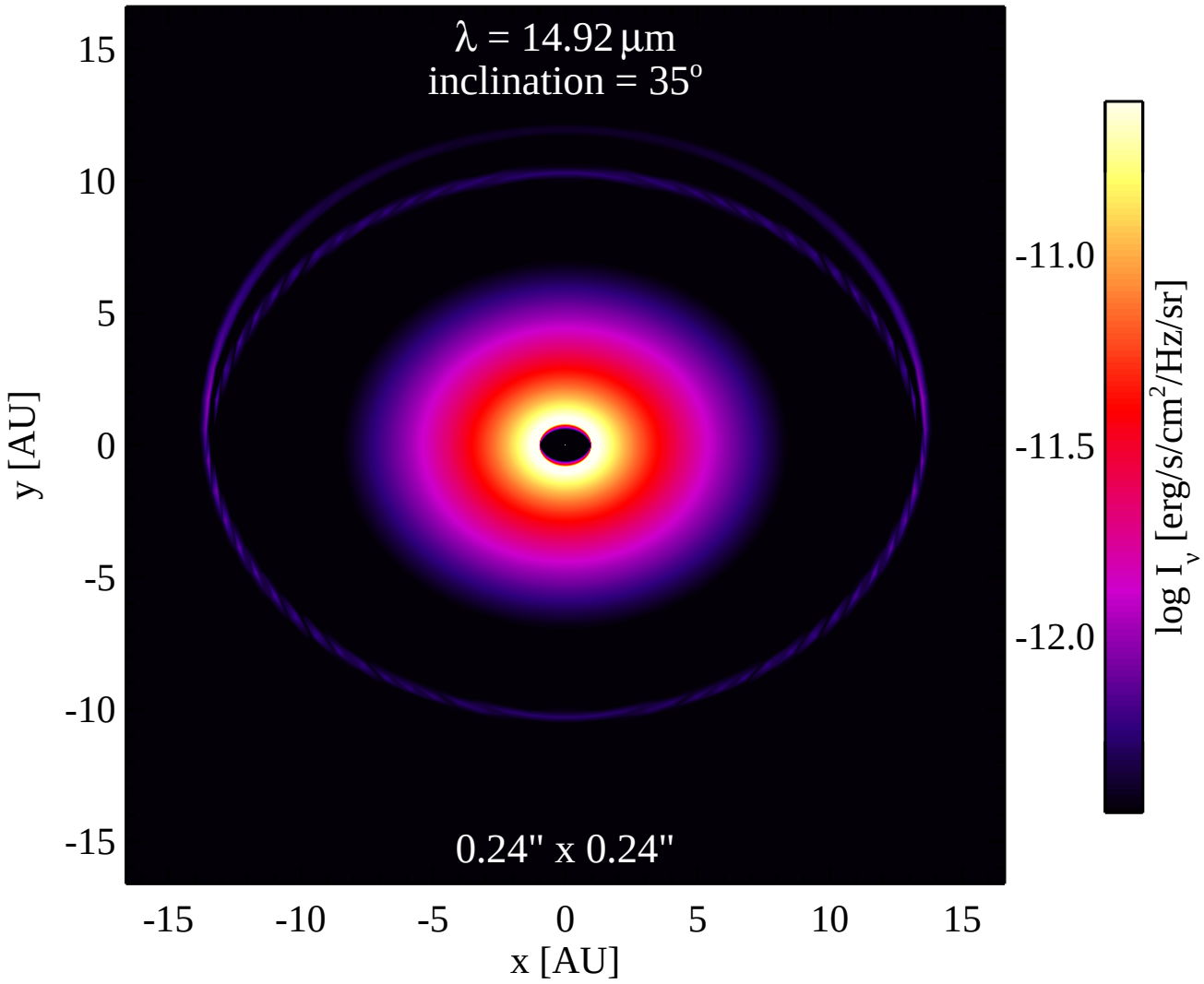

λ = 5.70 μm
inclination = 35°
0.61" x 0.61"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

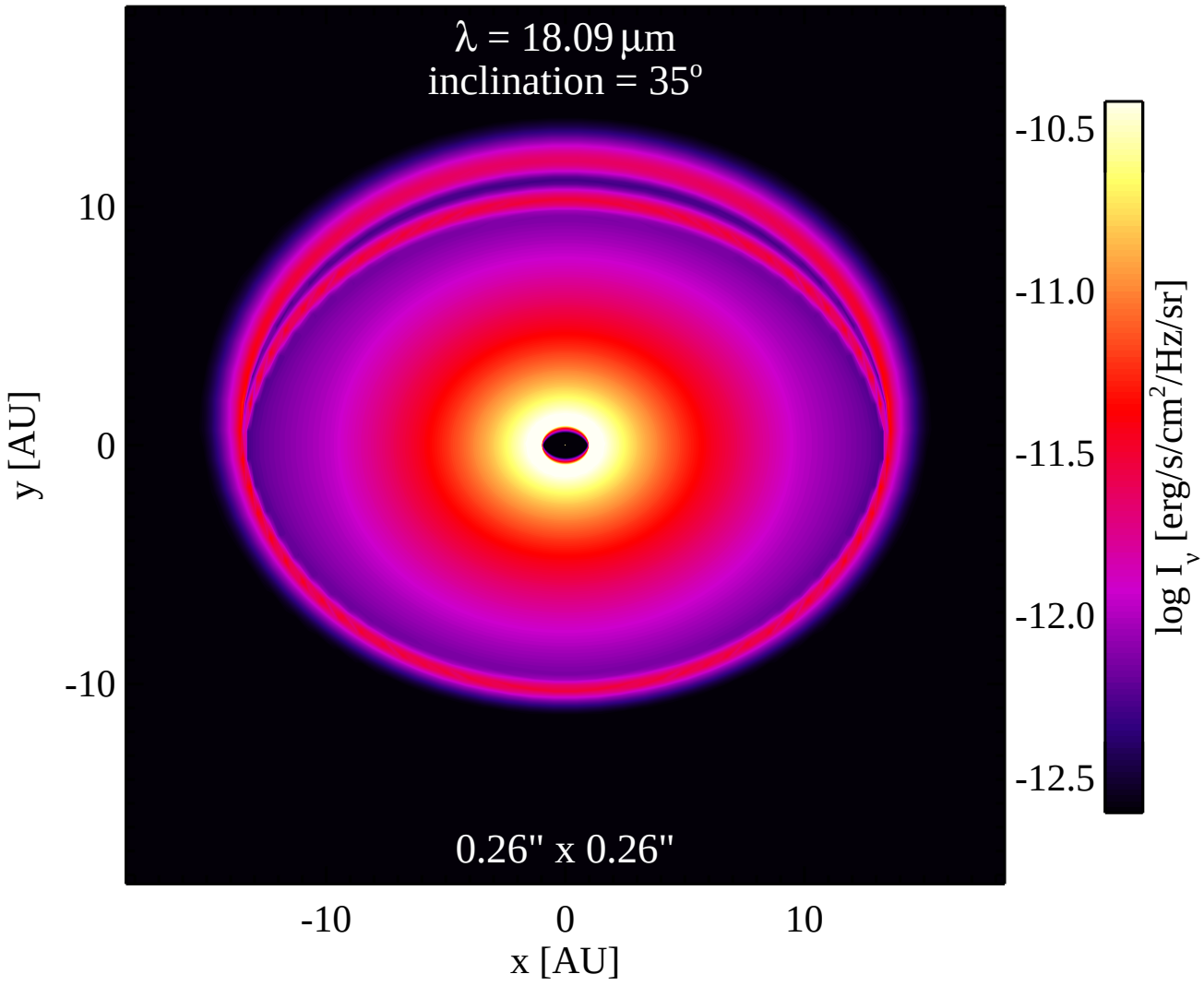

λ = 6.91 μm
inclination = 35°
0.36" x 0.36"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-12
-13
-14
-15
log I_ν [erg/s/cm²/Hz/sr]

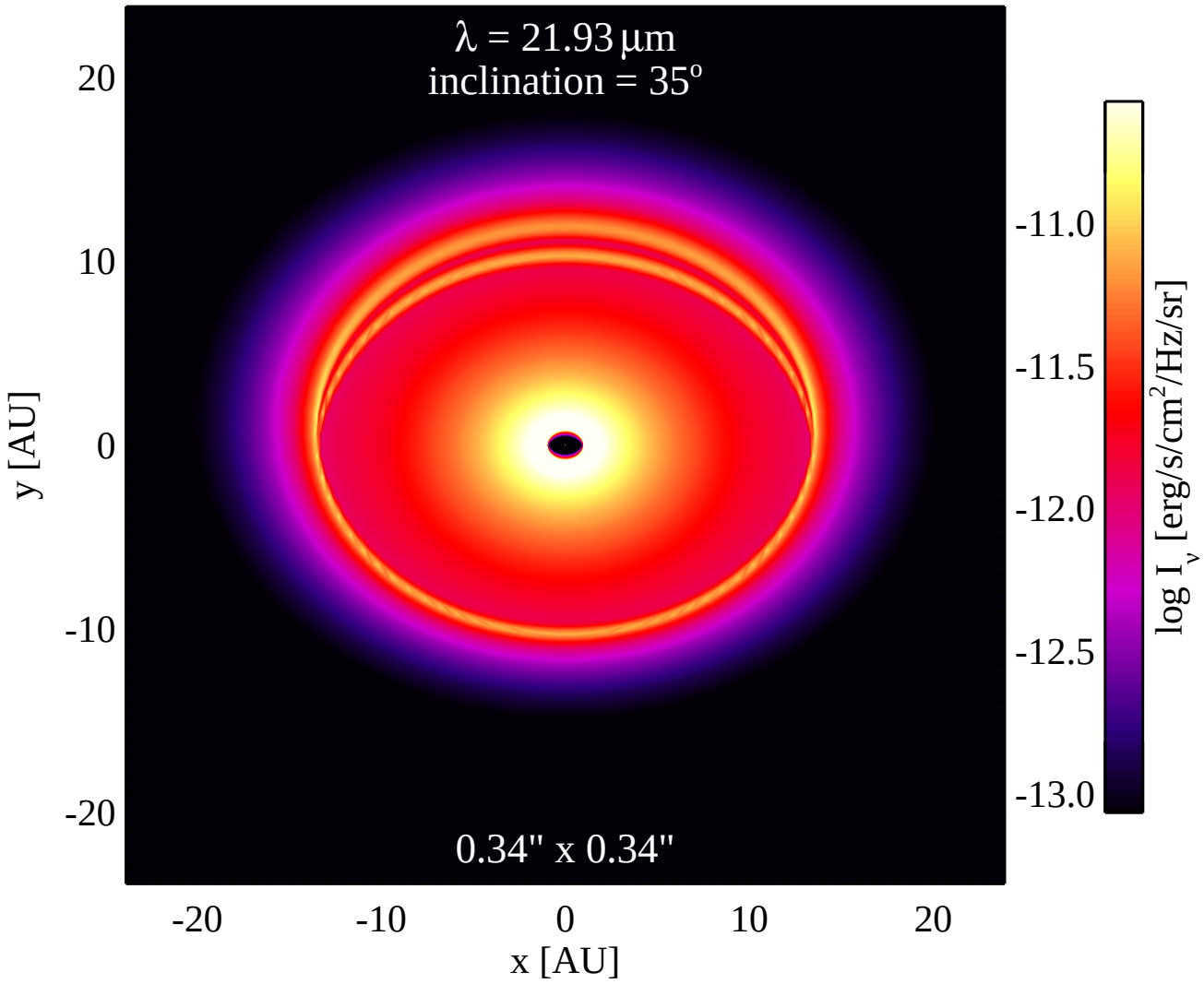

λ = 8.38 μm
inclination = 35°
0.18" x 0.18"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

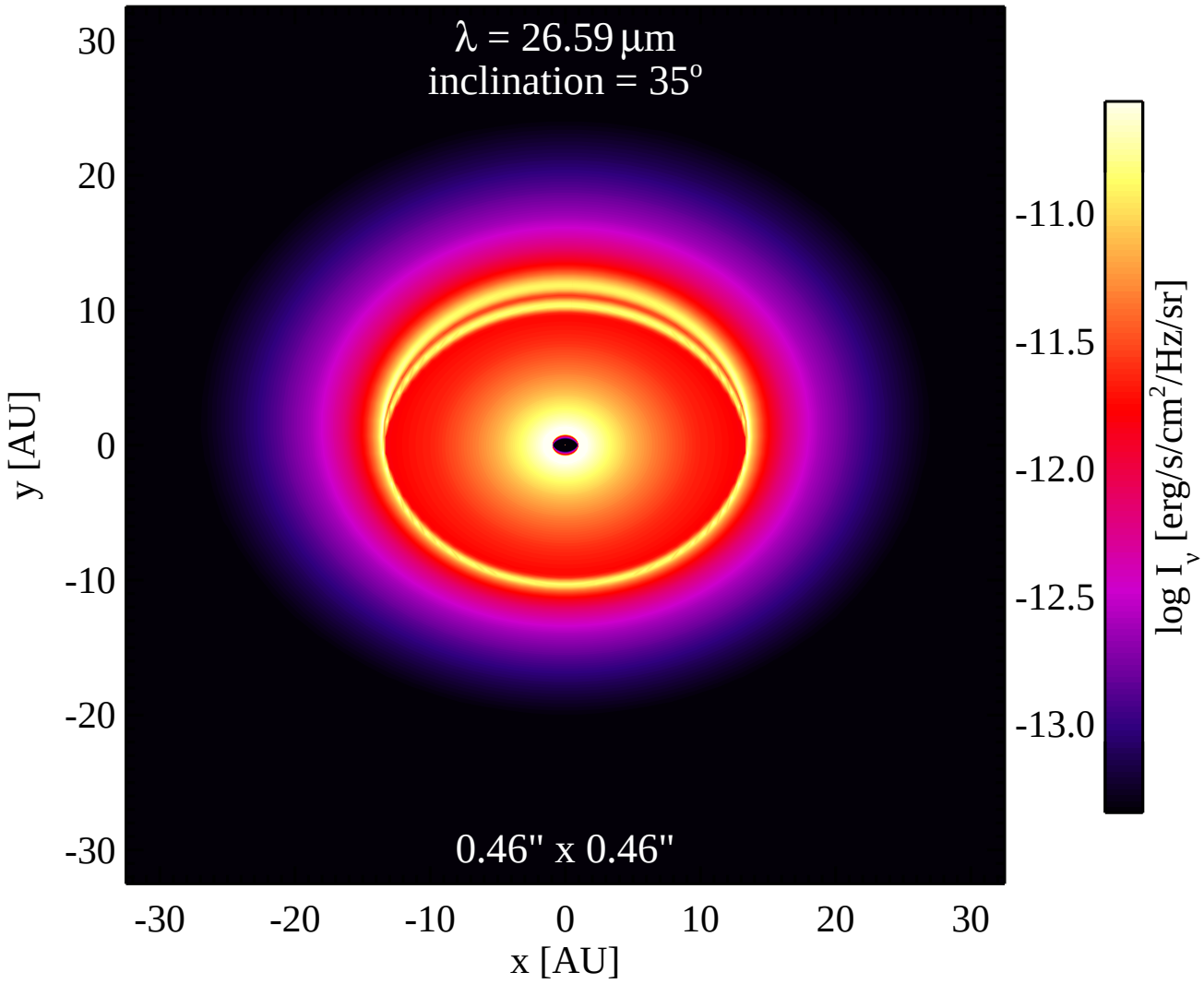

λ = 10.16 μm
inclination = 35°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

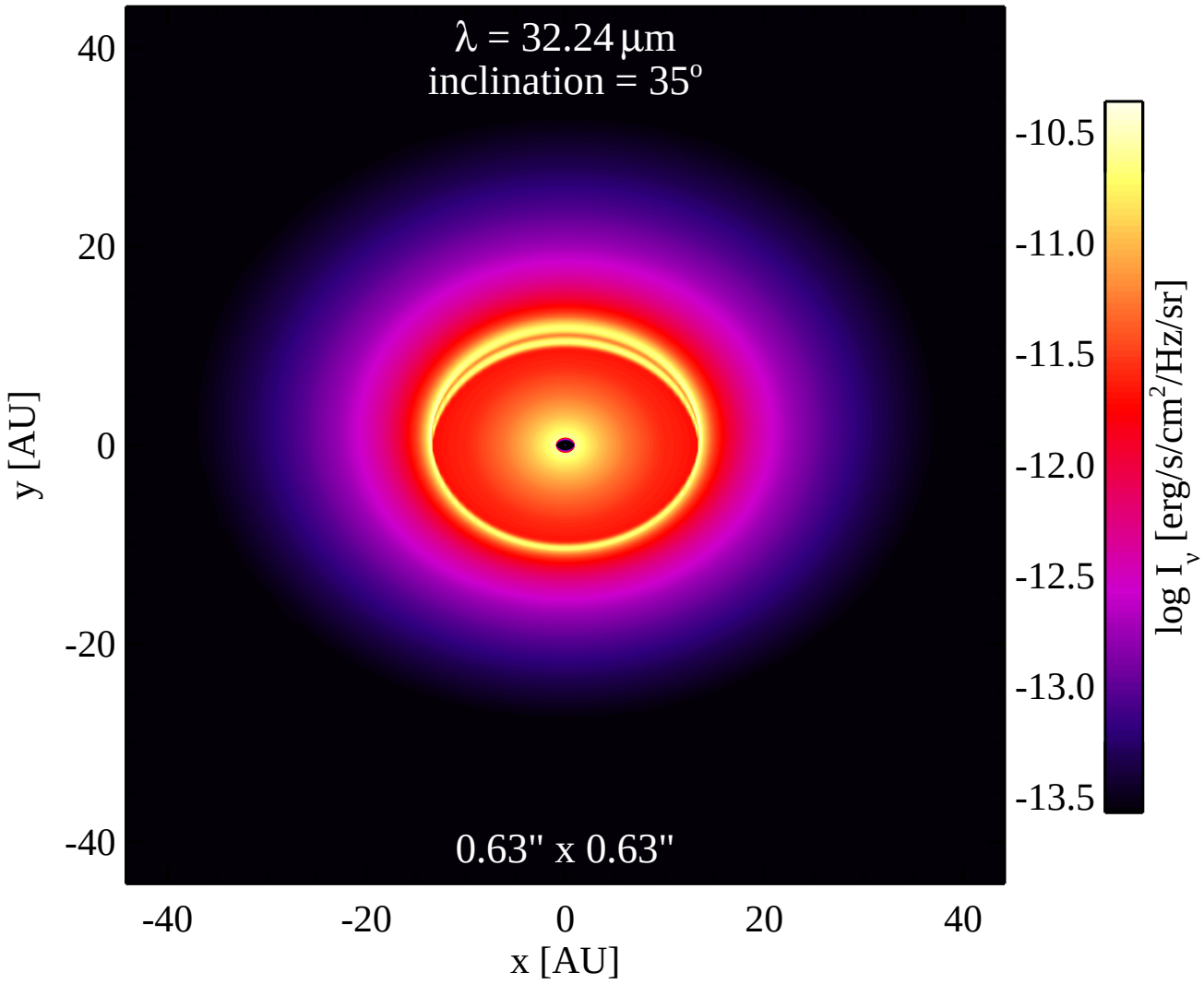

λ = 12.31 μm
inclination = 35°
0.23" x 0.23"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

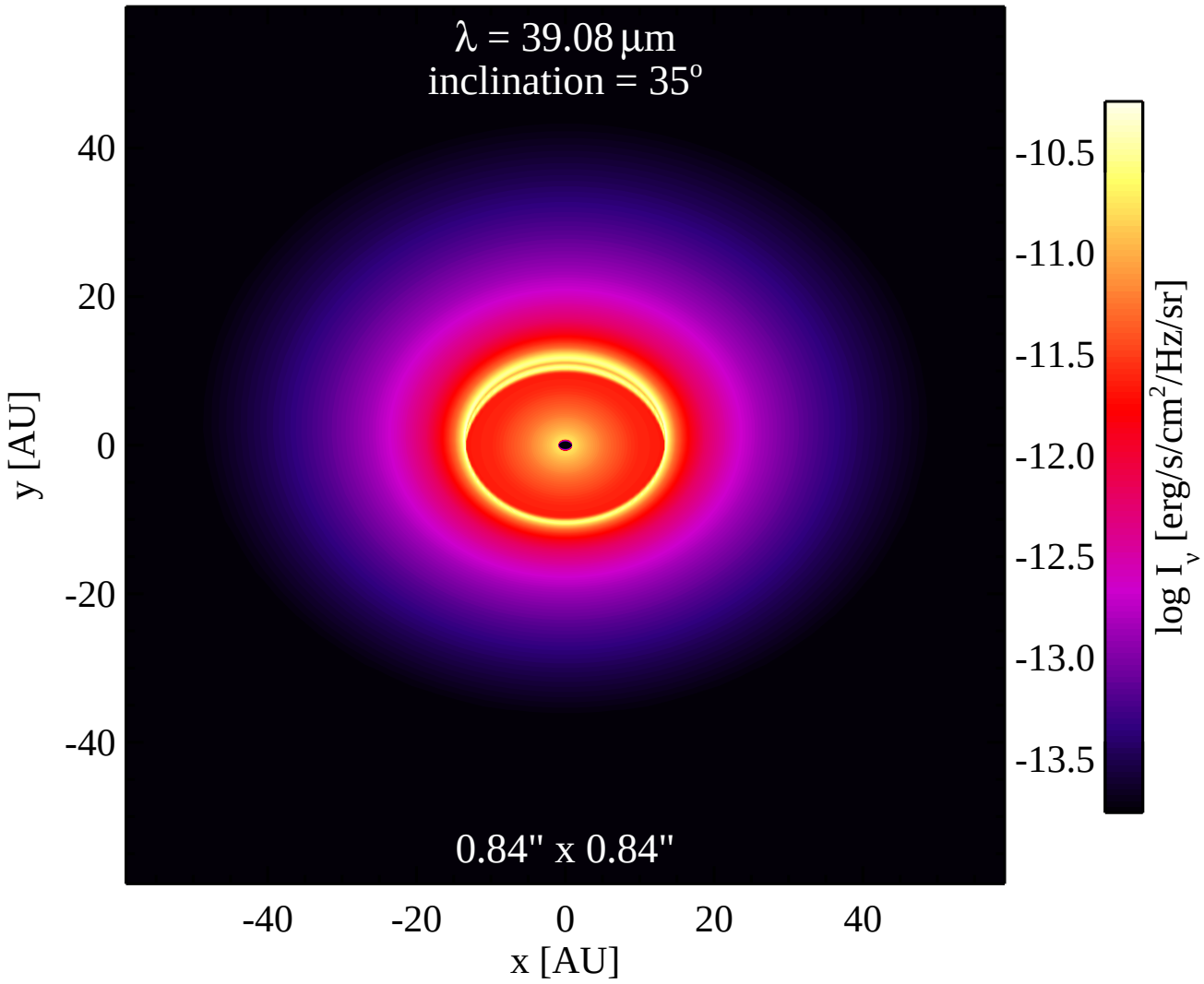

λ = 14.92 μm
inclination = 35°
0.24" x 0.24"
15
10
5
0
-5
-10
-15
y [AU]
-15
-10
-5
0
5
10
15
x [AU]
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

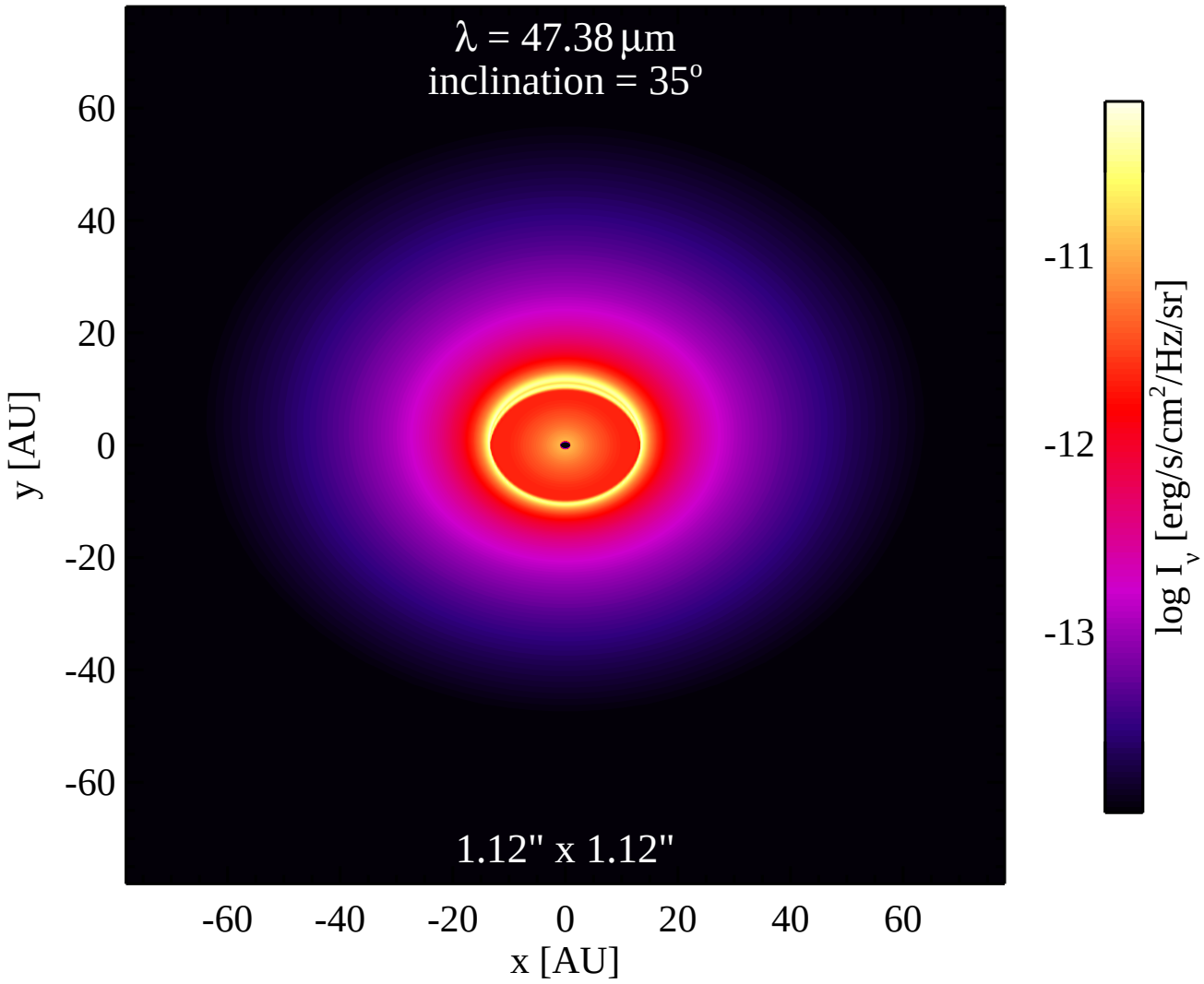

λ = 18.09 μm
inclination = 35°
0.26" x 0.26"
10
0
-10
y [AU]
-10
0
10
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

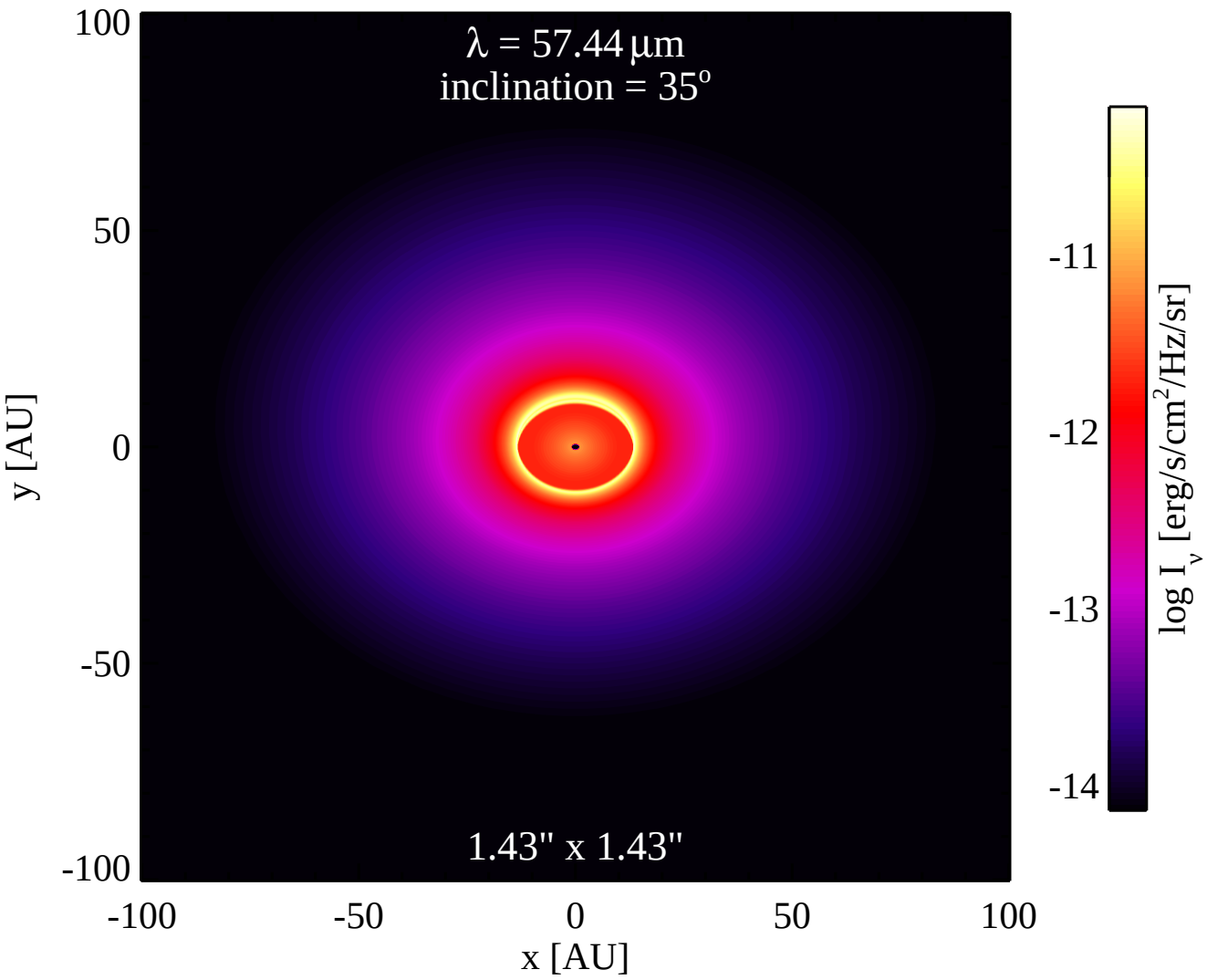

λ = 21.93 μm
inclination = 35°
0.34" x 0.34"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

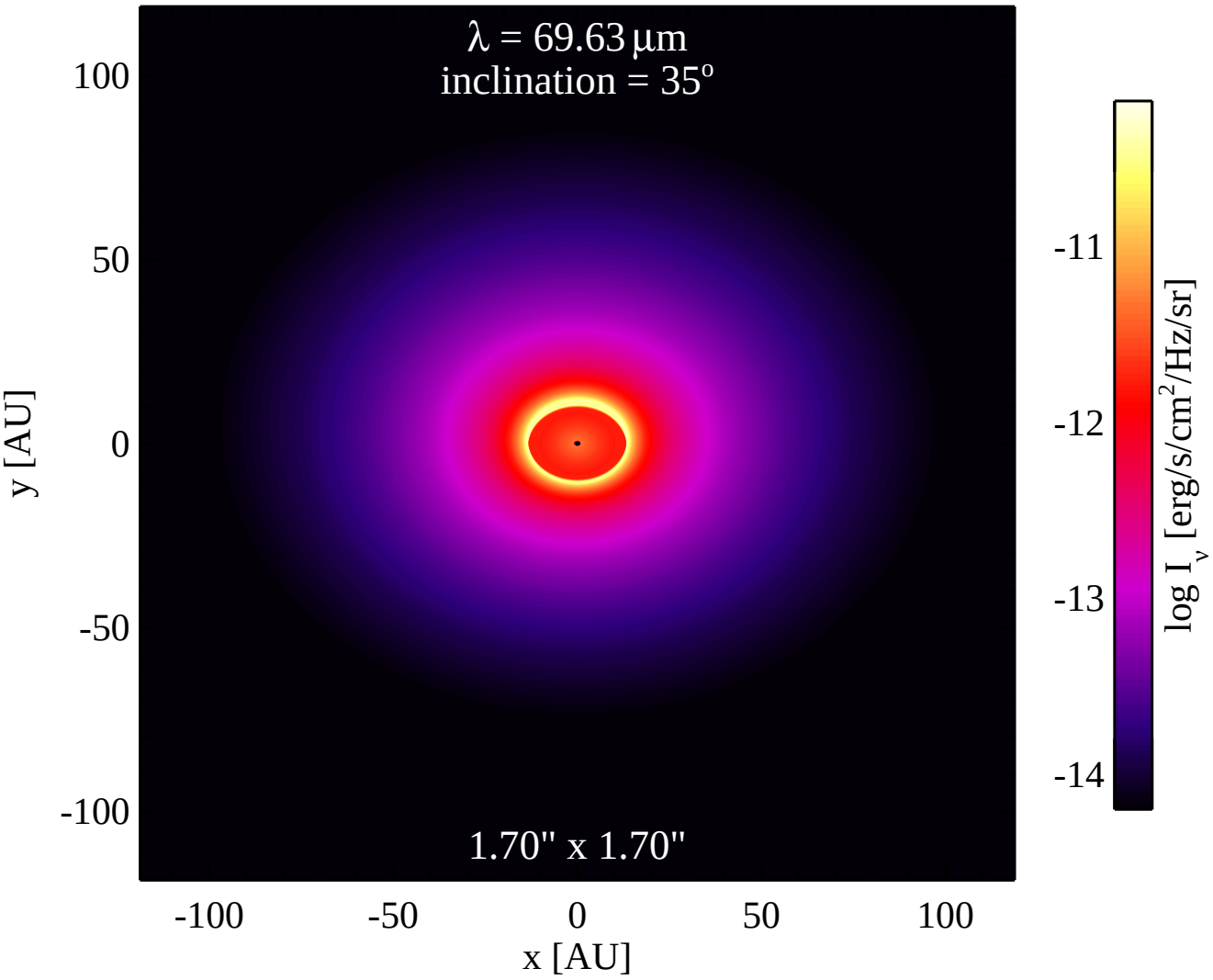

λ = 26.59 μm
inclination = 35°
0.46" x 0.46"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

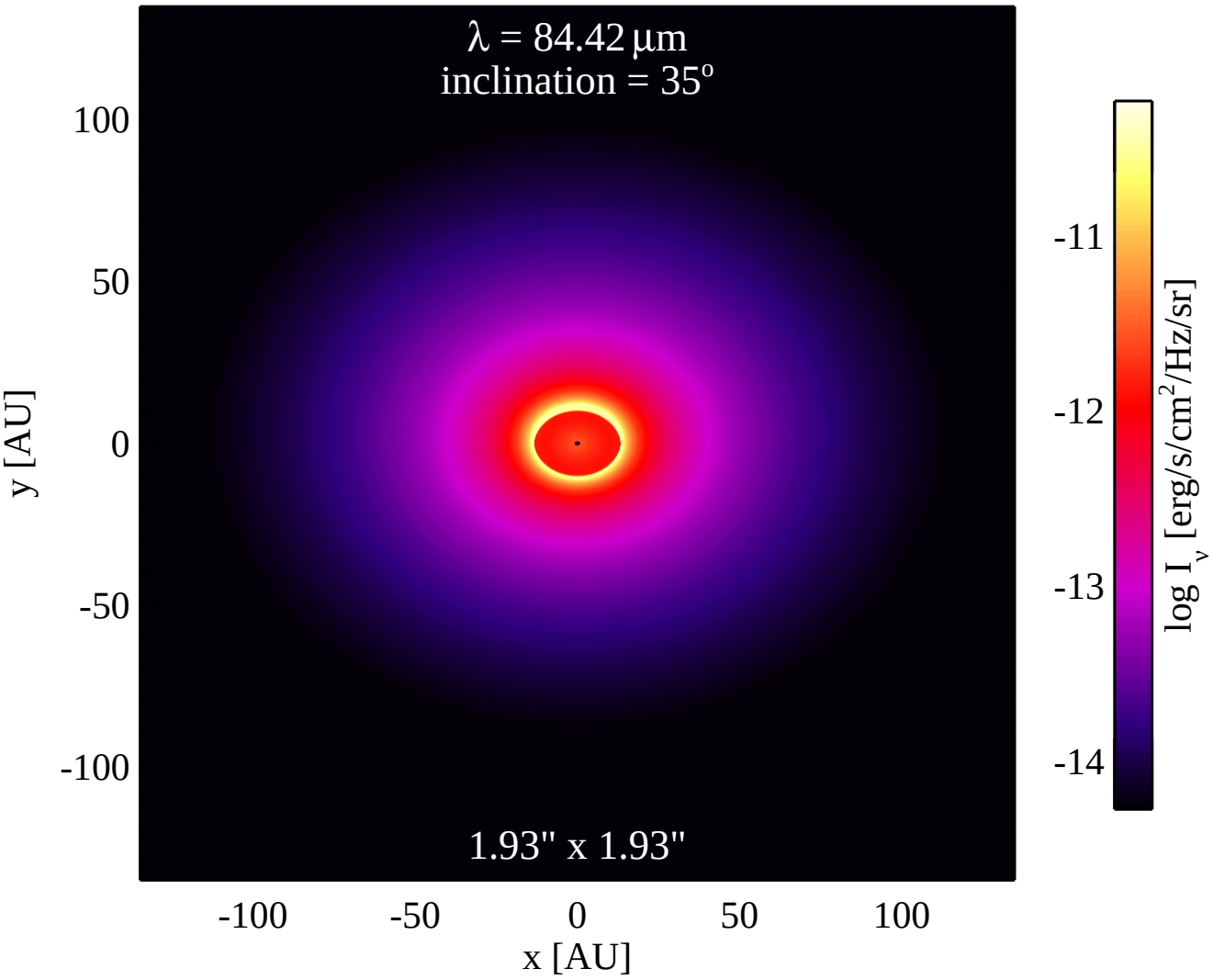

λ = 32.24 μm
inclination = 35°
0.63" x 0.63"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

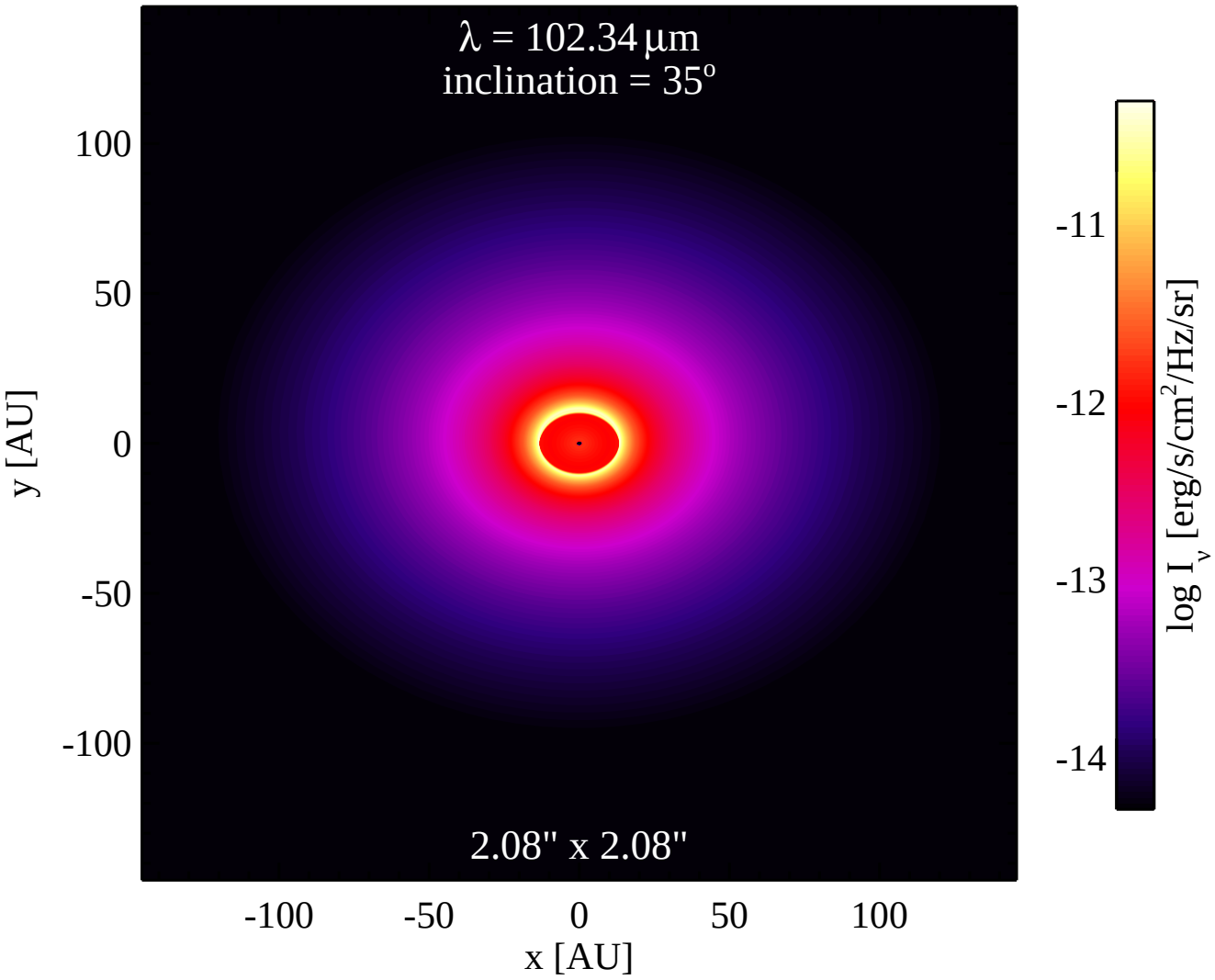

λ = 39.08 μm
inclination = 35°
0.84" x 0.84"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

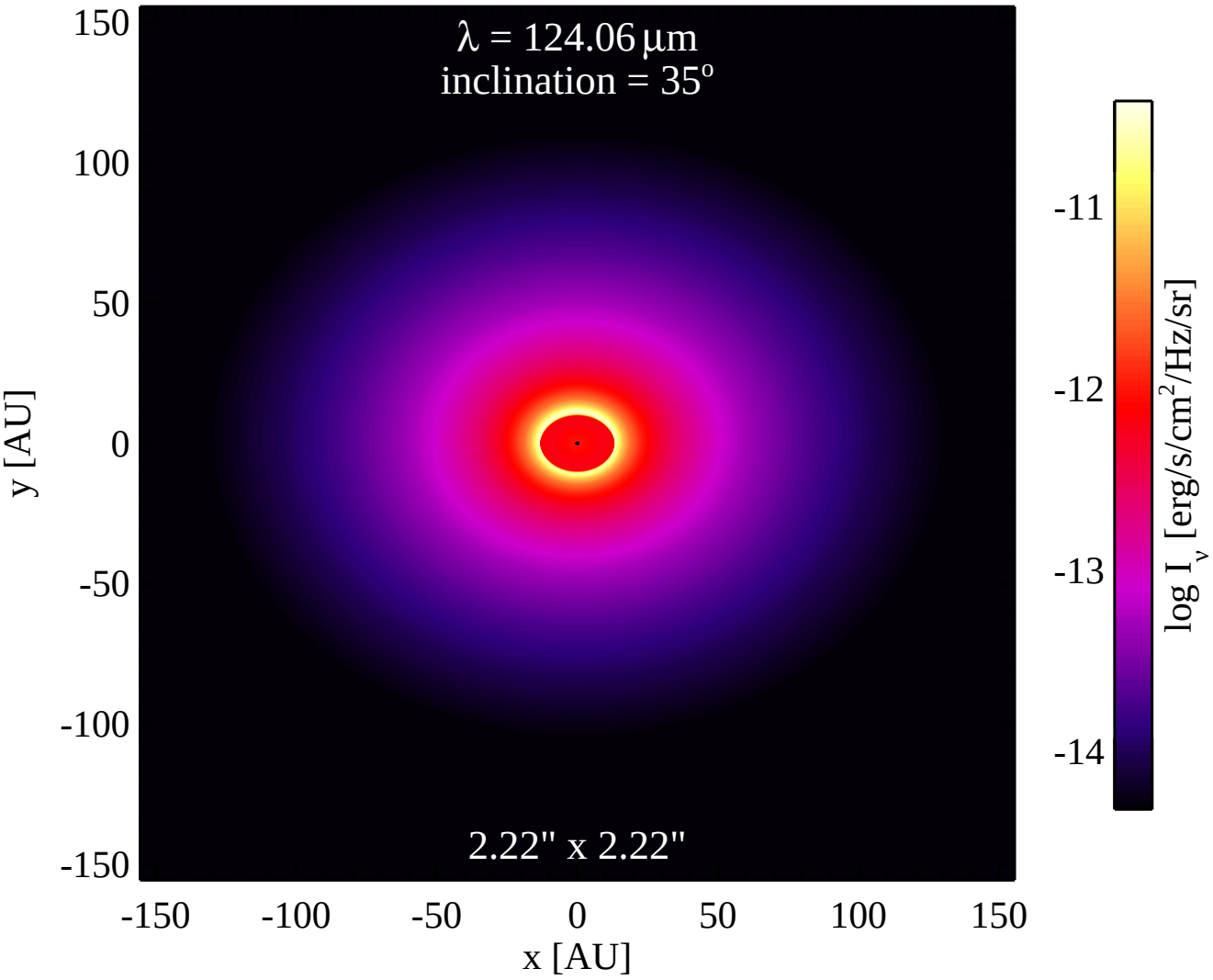

λ = 47.38 μm
inclination = 35°
1.12" x 1.12"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

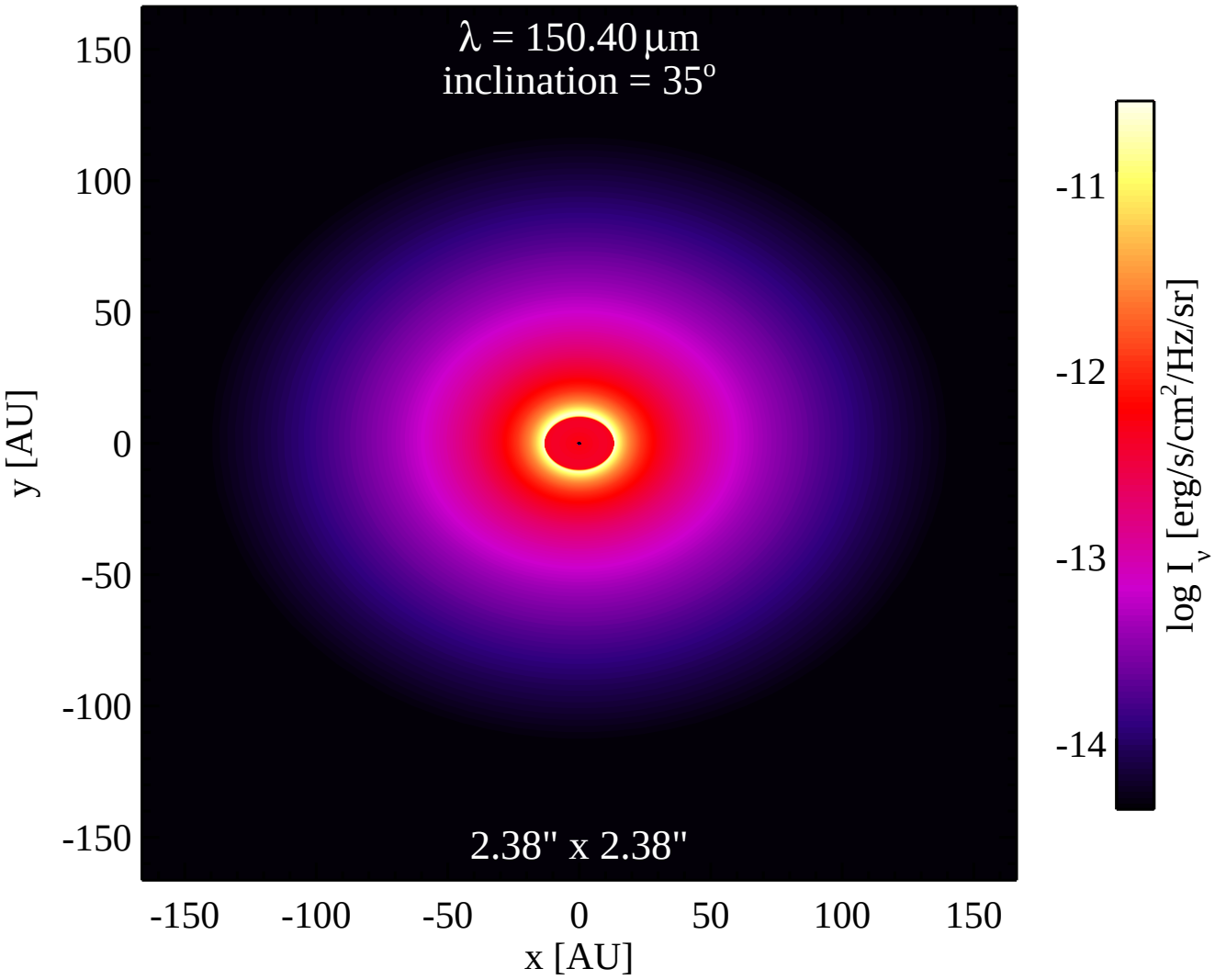

λ = 57.44 μm
inclination = 35°
1.43" x 1.43"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

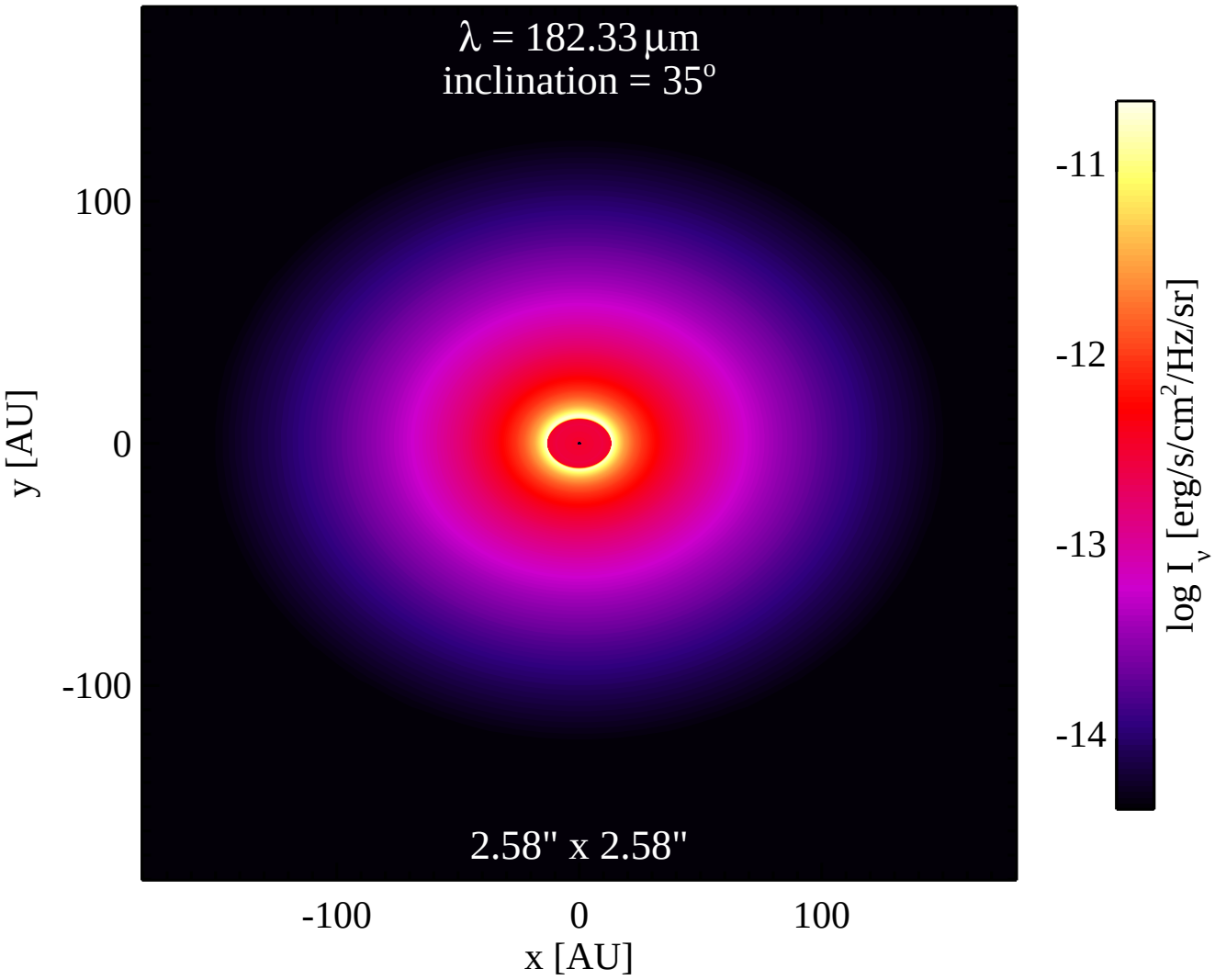

λ = 69.63 μm
inclination = 35°
1.70" x 1.70"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

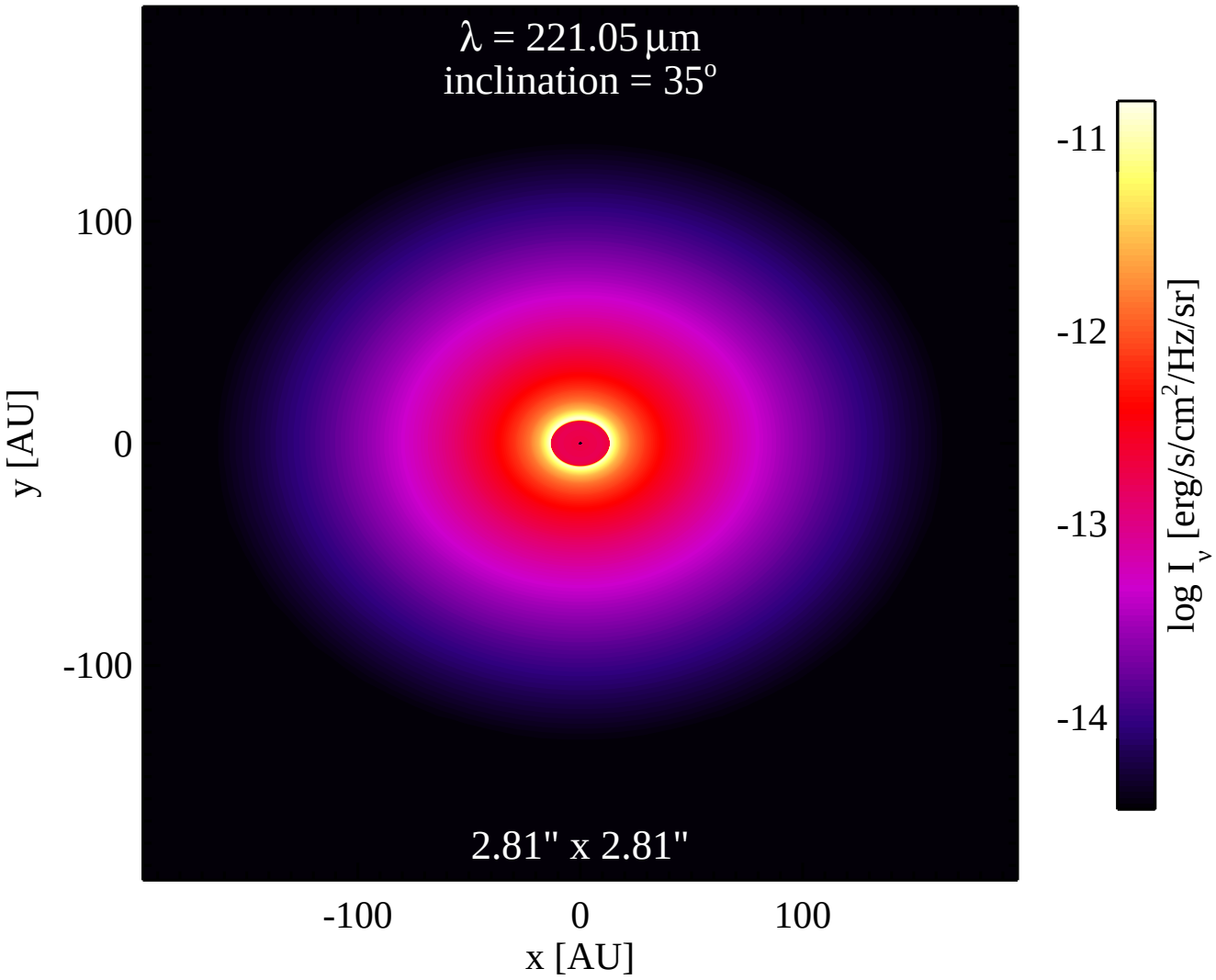

λ = 84.42 μm
inclination = 35°
1.93" x 1.93"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

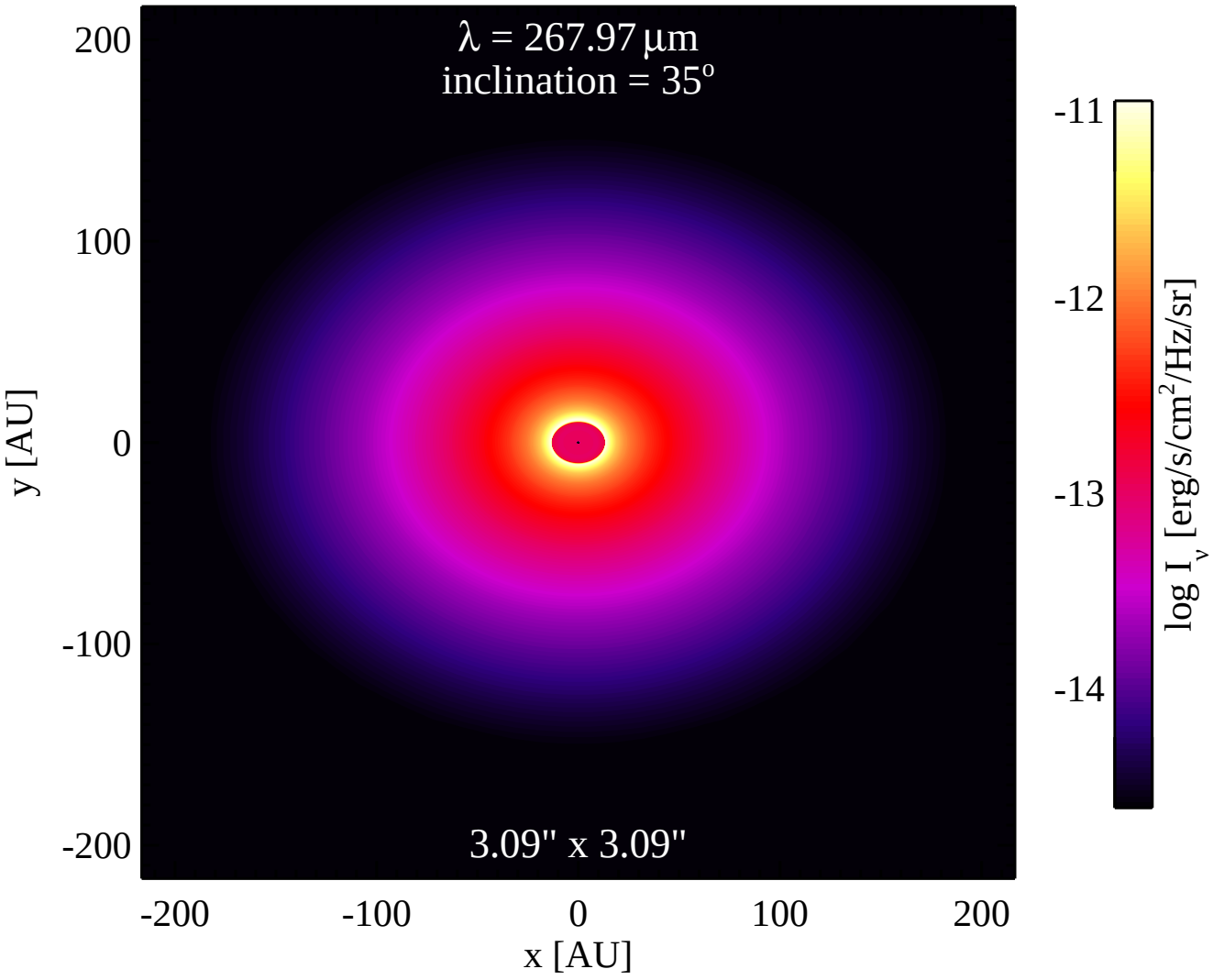

λ = 102.34 μm
inclination = 35°
2.08" x 2.08"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

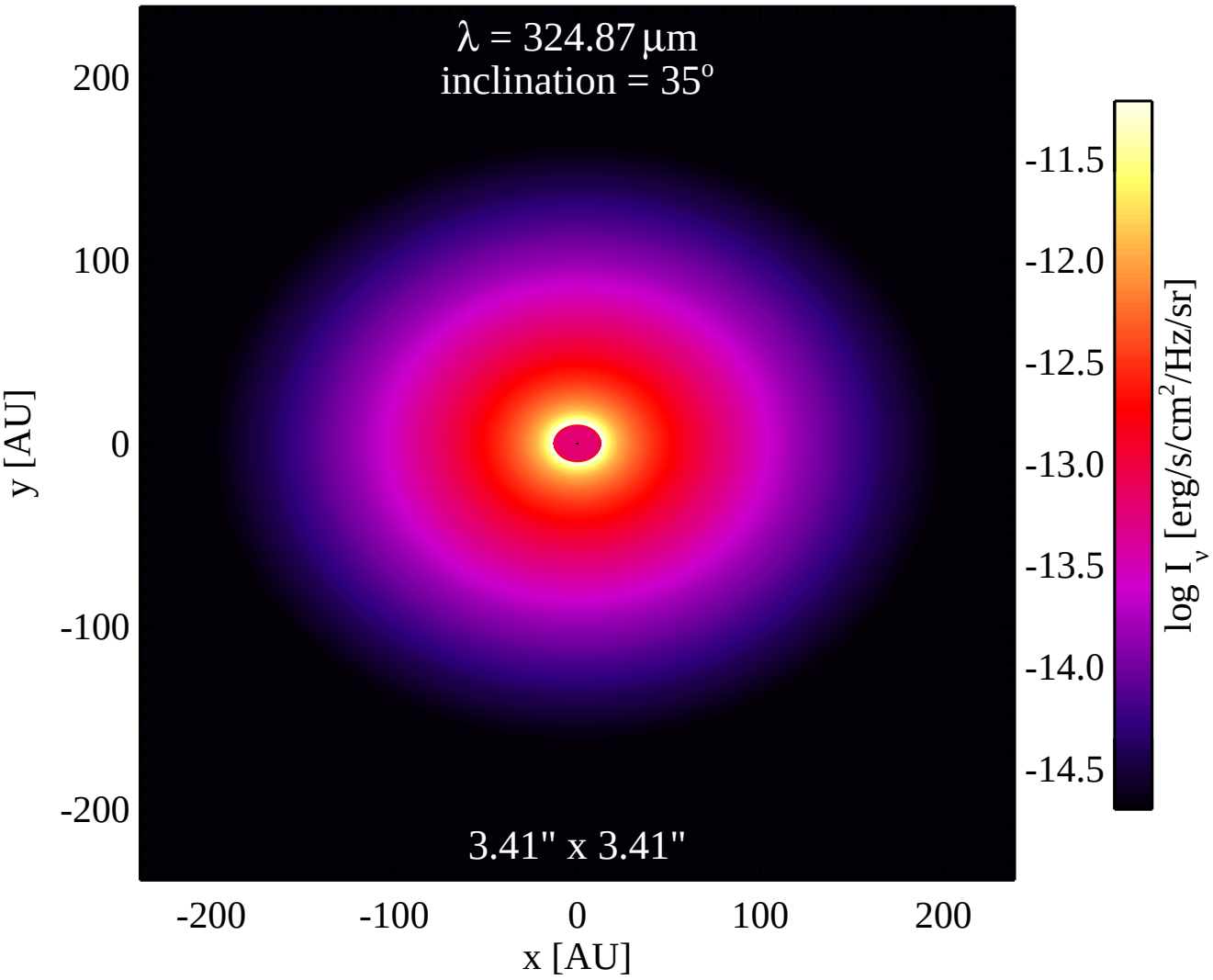

λ = 124.06 μm
inclination = 35°
2.22" x 2.22"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

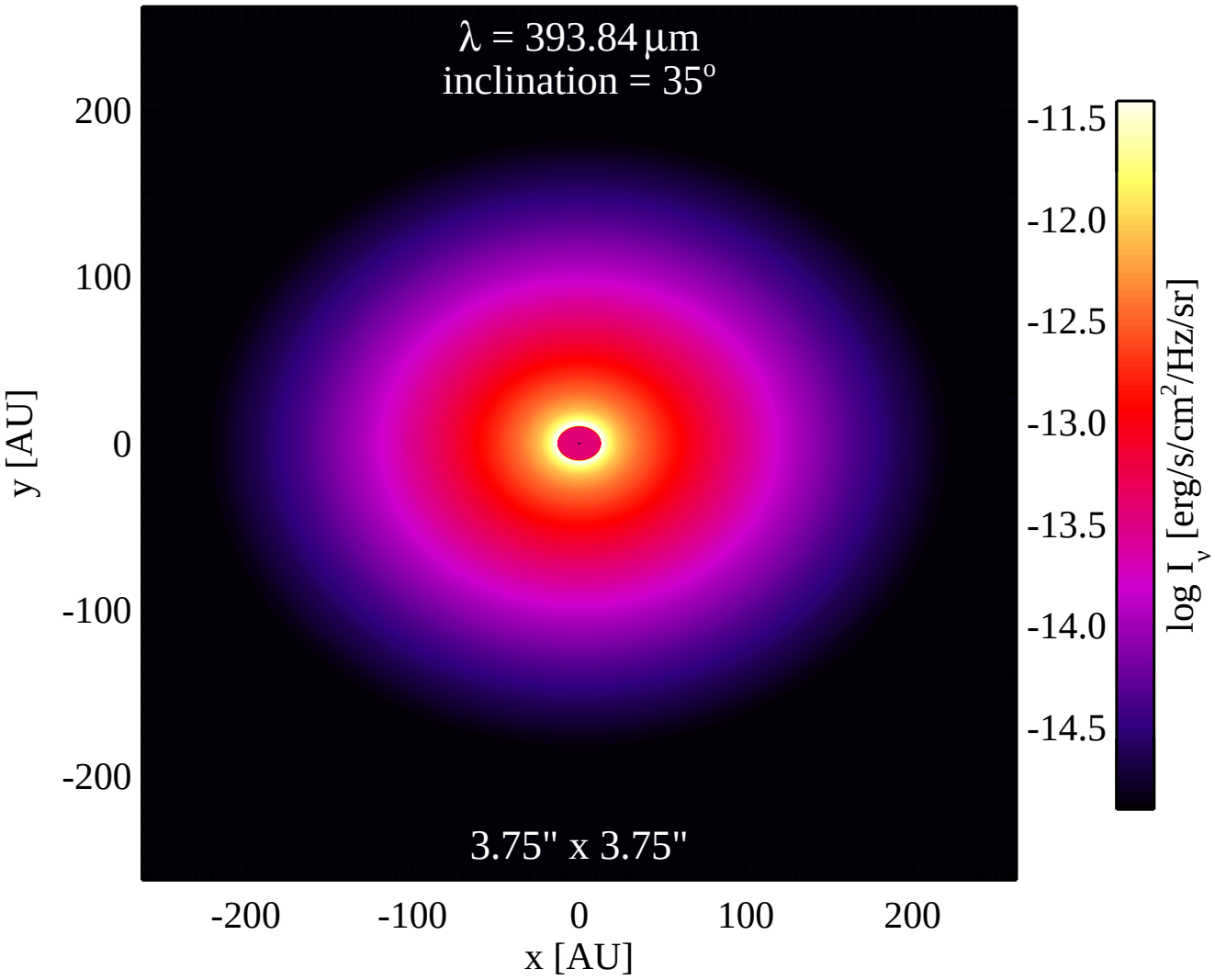

λ = 150.40 μm
inclination = 35°
2.38" x 2.38"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

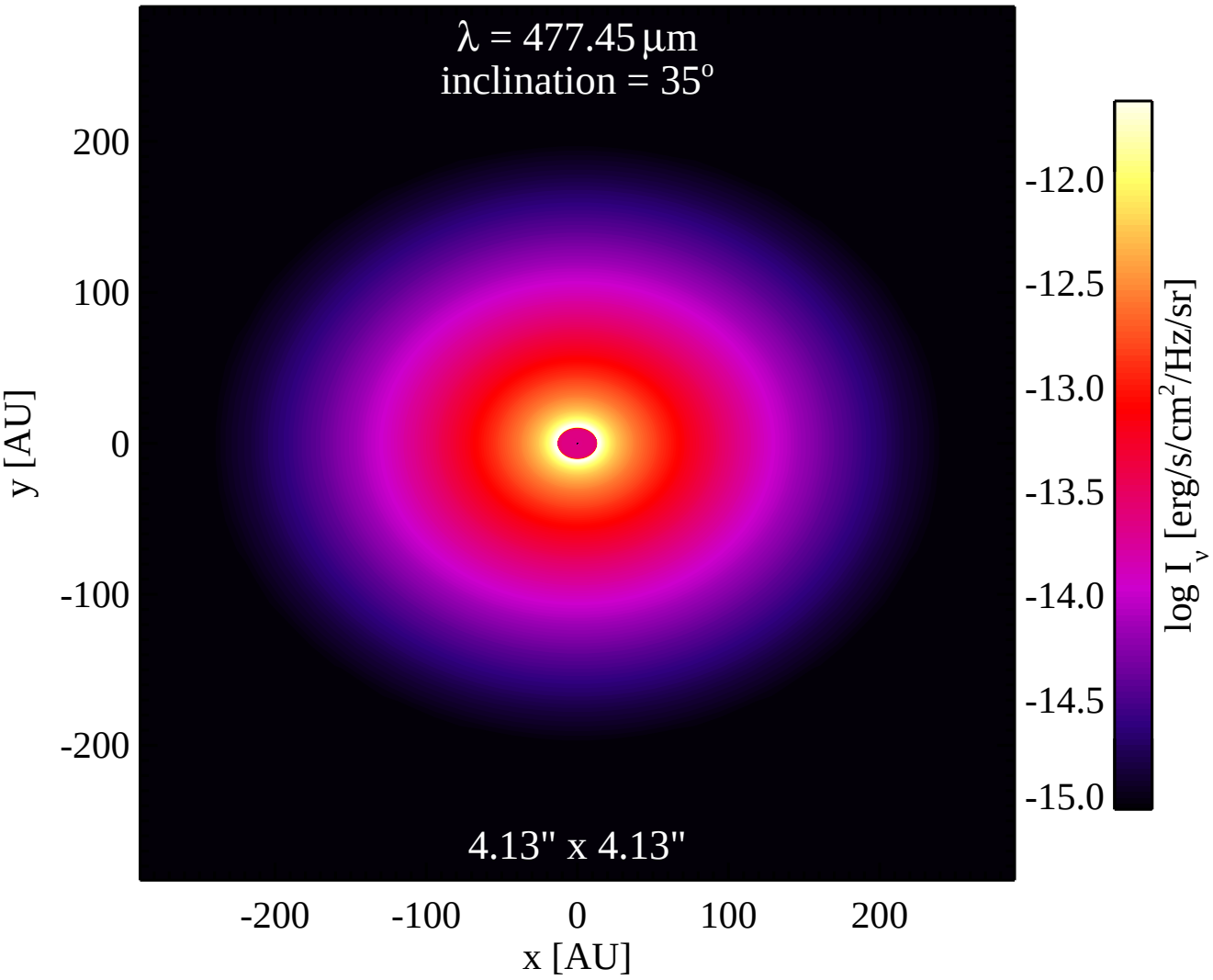

λ = 182.33 μm
inclination = 35°
2.58" x 2.58"
100
0
-100
y [AU]
-100
0
100
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

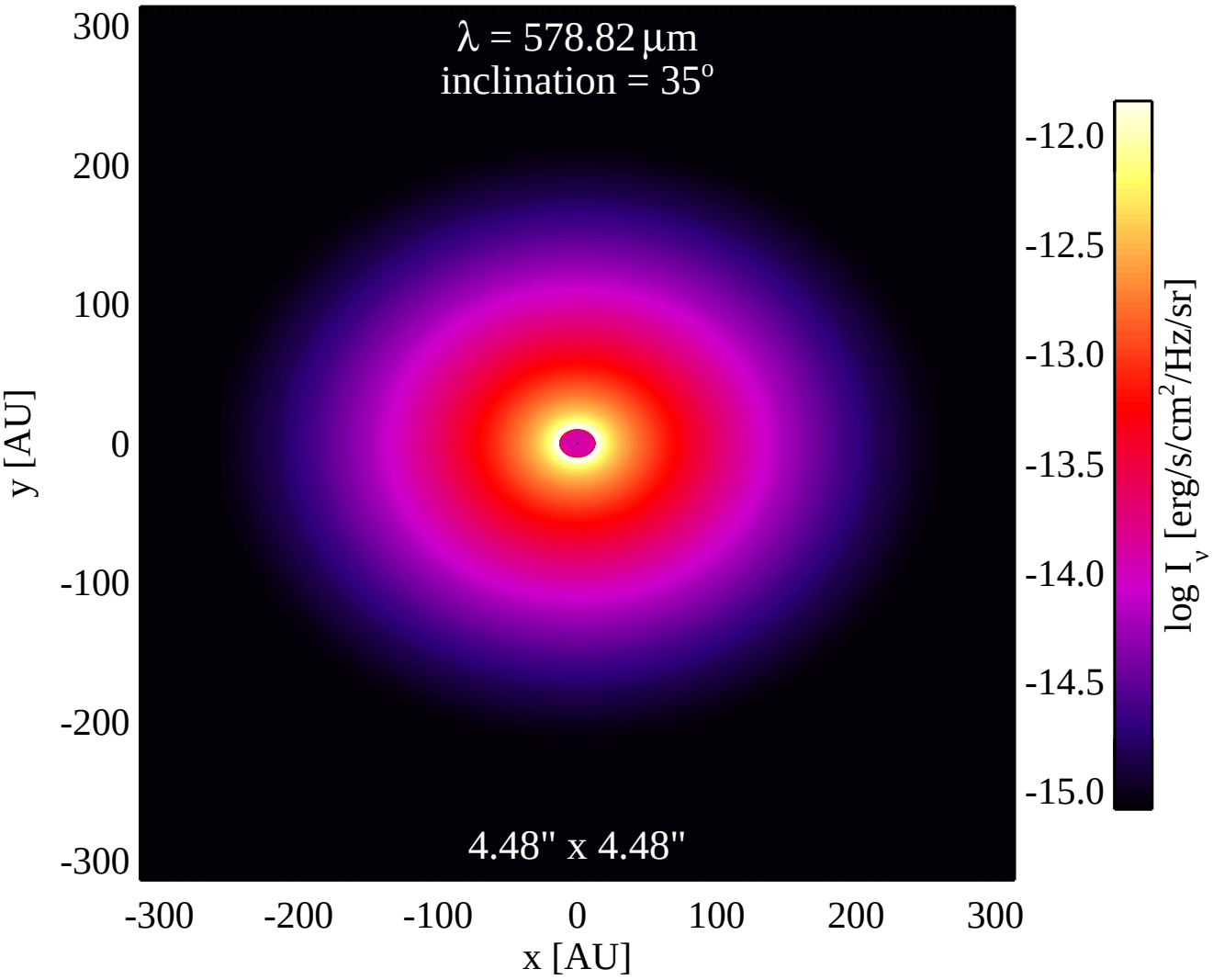

λ = 221.05 μm
inclination = 35°
2.81" x 2.81"
100
0
-100
y [AU]
-100
0
100
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

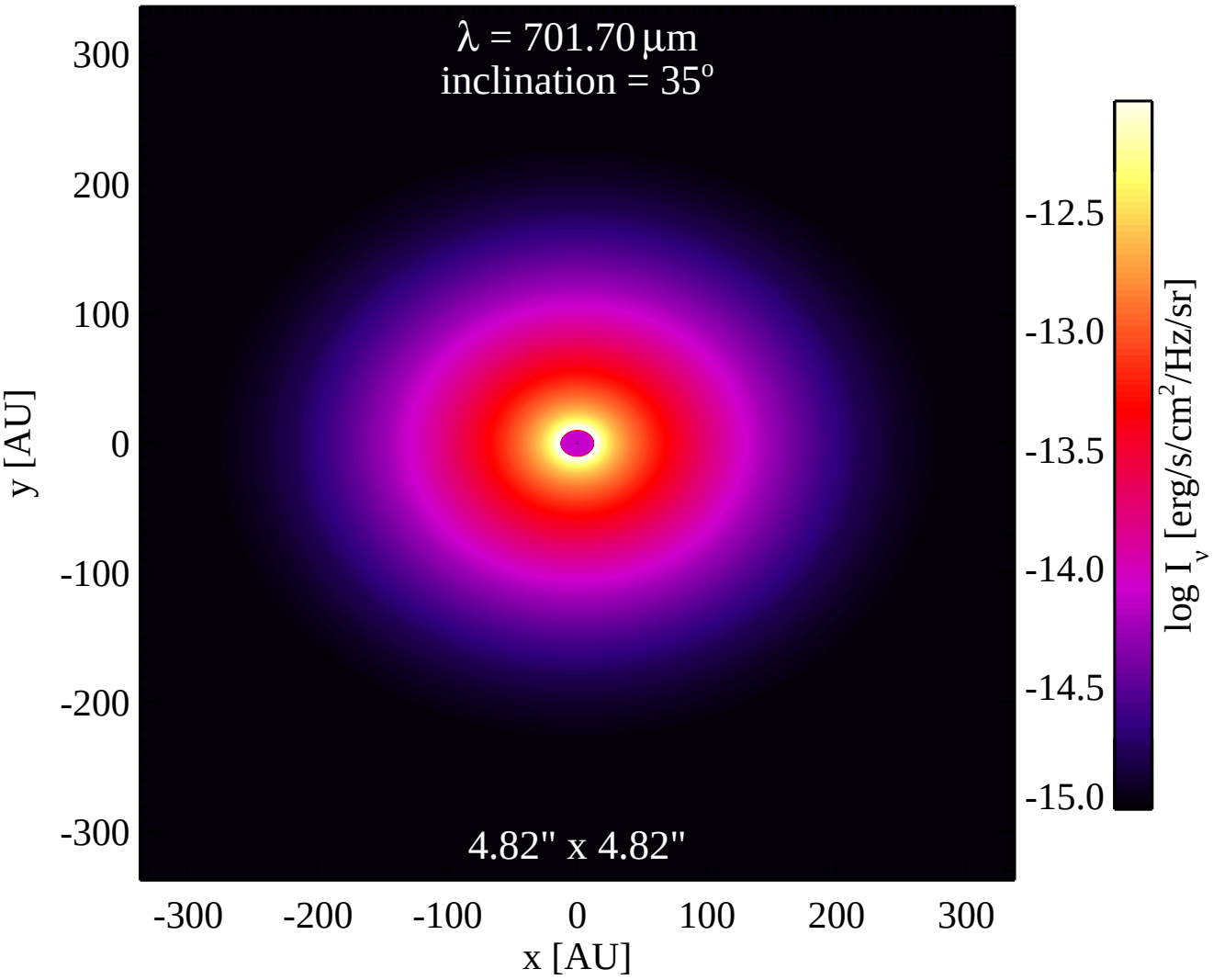

λ = 267.97 μm
inclination = 35°
3.09" x 3.09"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11
-12
-13
-14
log I_ν [erg/s/cm²/Hz/sr]

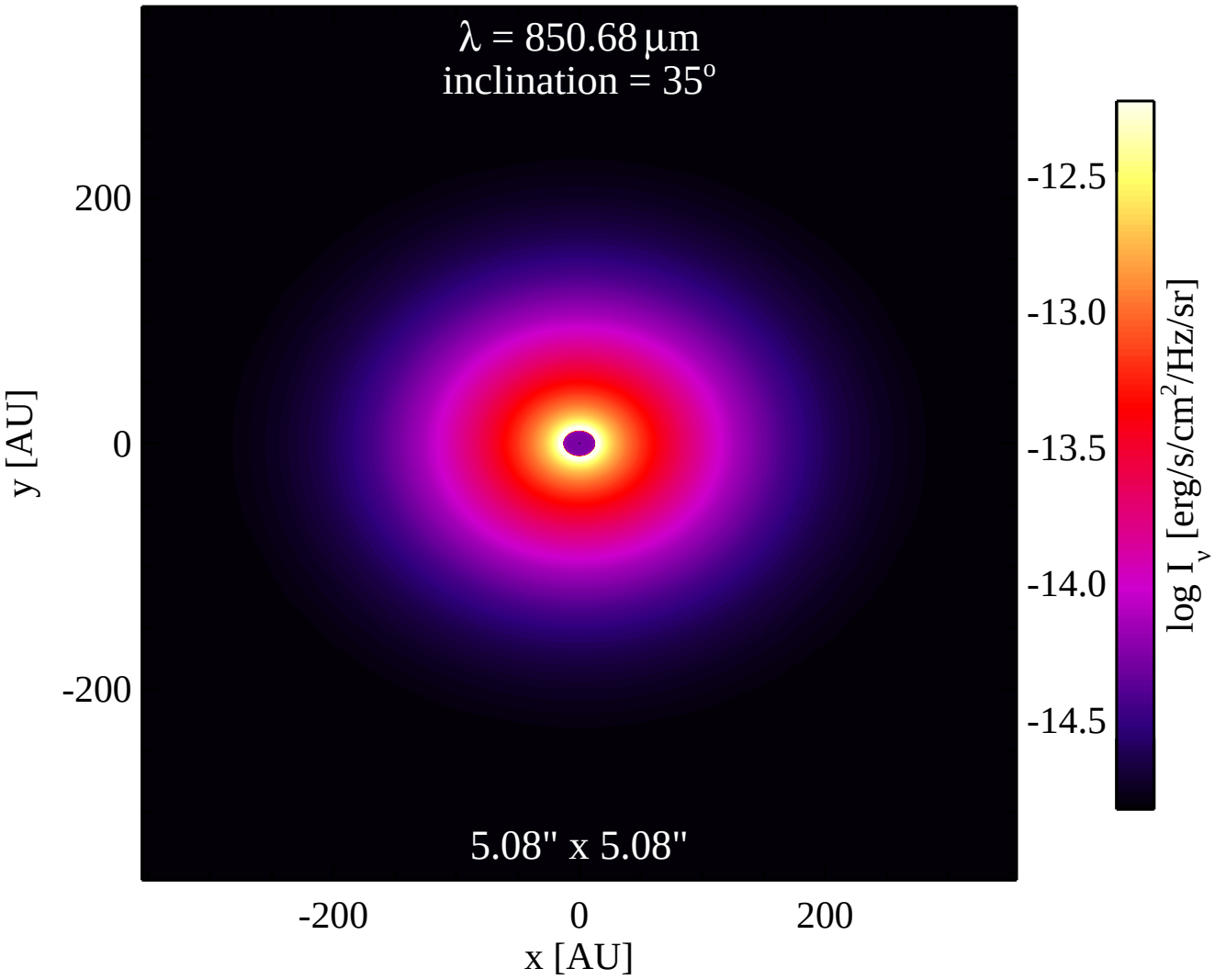

λ = 324.87 μm
inclination = 35°
3.41" x 3.41"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

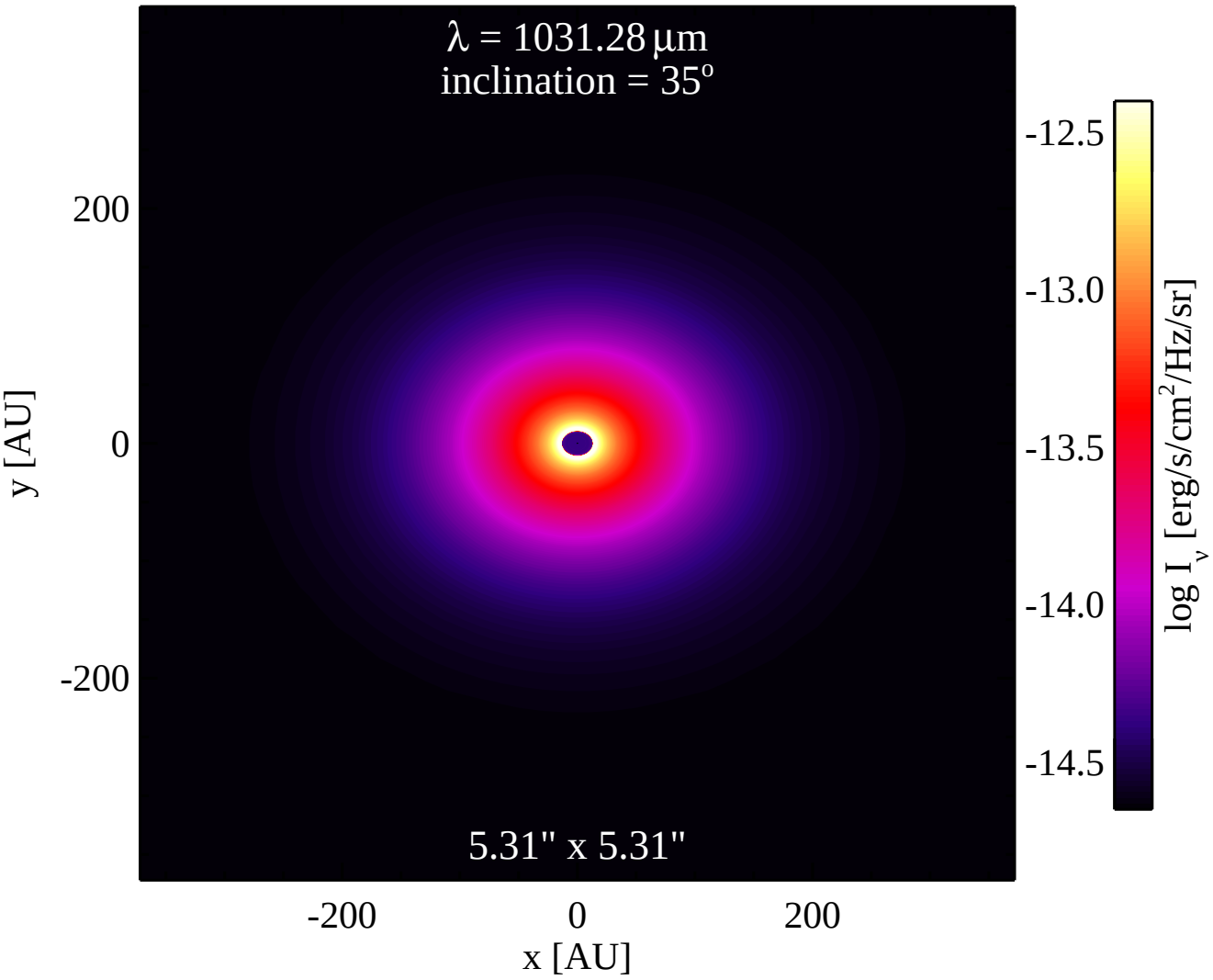

λ = 393.84 μm
inclination = 35°
3.75" x 3.75"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

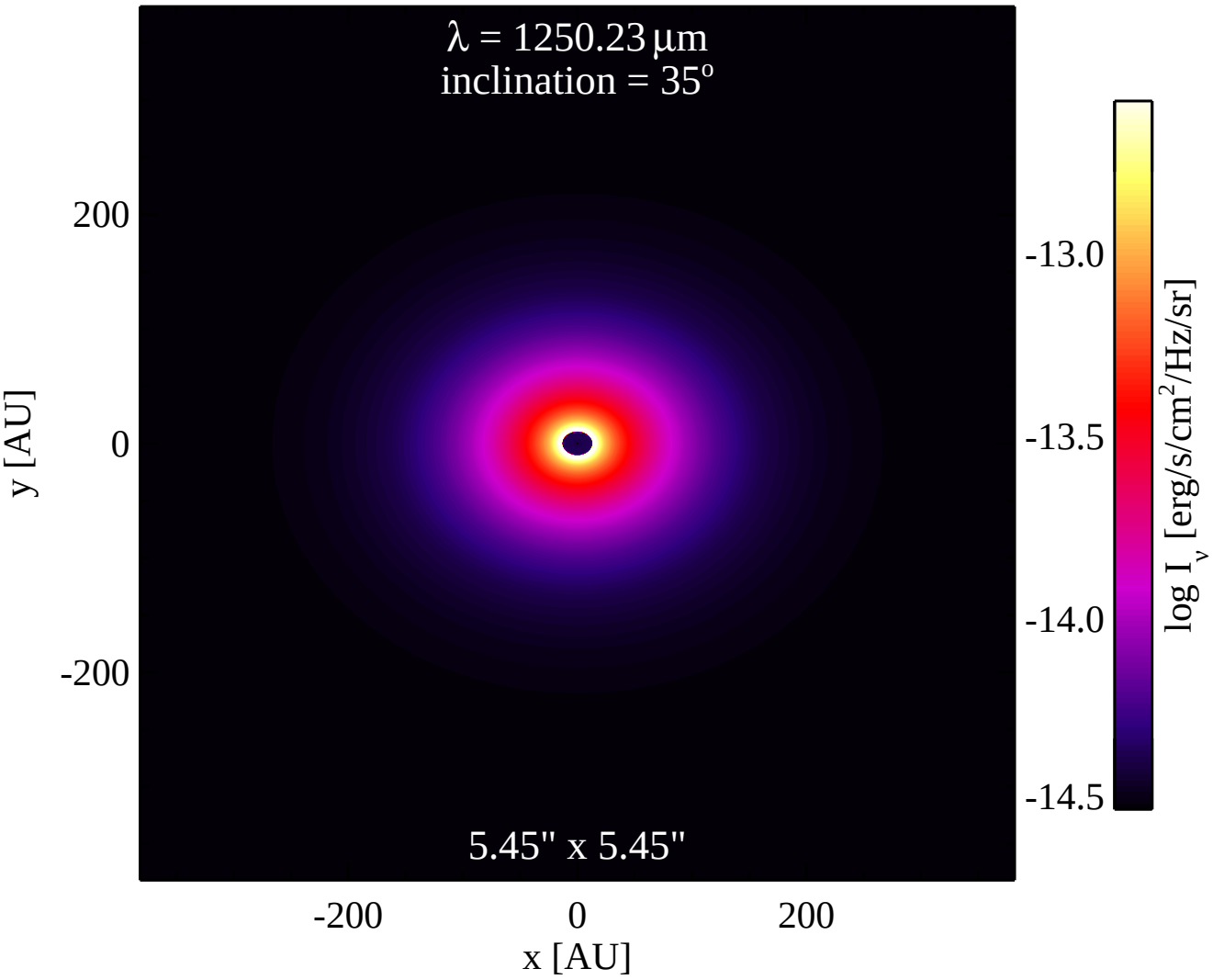

λ = 477.45 μm
inclination = 35°
4.13" x 4.13"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
log I_ν [erg/s/cm²/Hz/sr]

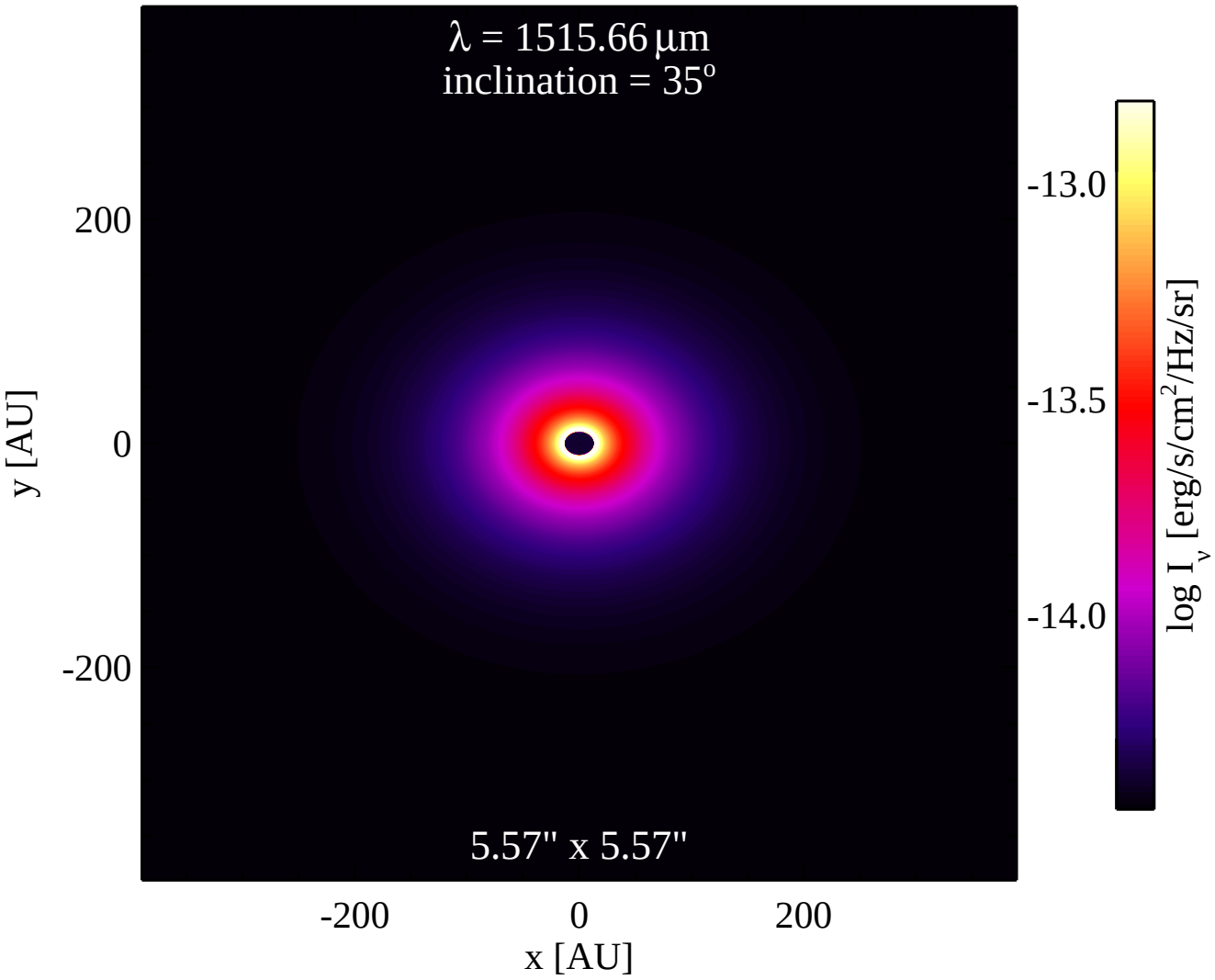

λ = 578.82 μm
inclination = 35°
4.48" x 4.48"
300
200
100
0
-100
-200
-300
y [AU]
-300
-200
-100
0
100
200
300
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
log I_ν [erg/s/cm²/Hz/sr]

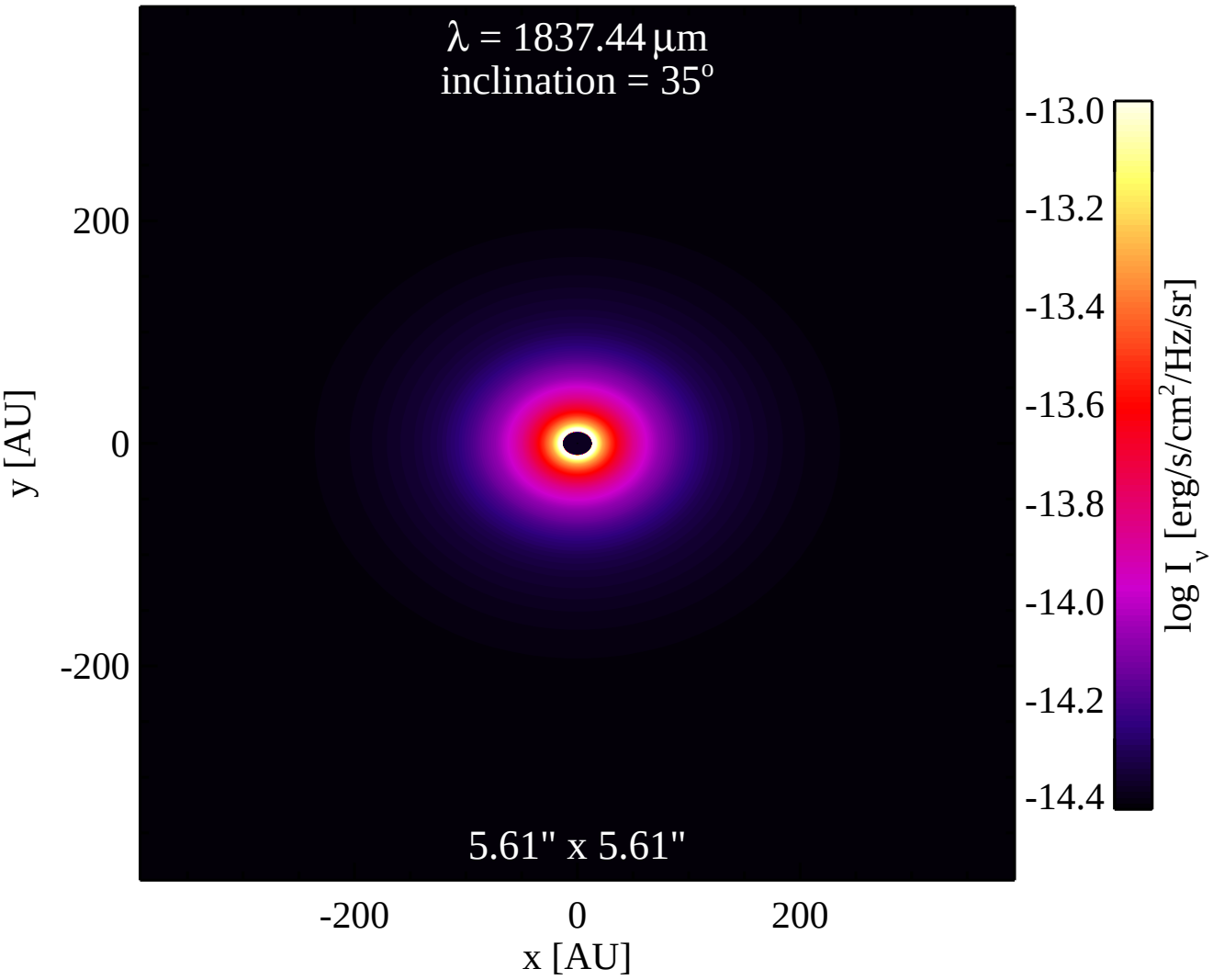

λ = 701.70 μm
inclination = 35°
4.82" x 4.82"
300
200
100
0
-100
-200
-300
y [AU]
-300
-200
-100
0
100
200
300
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
log I_ν [erg/s/cm²/Hz/sr]

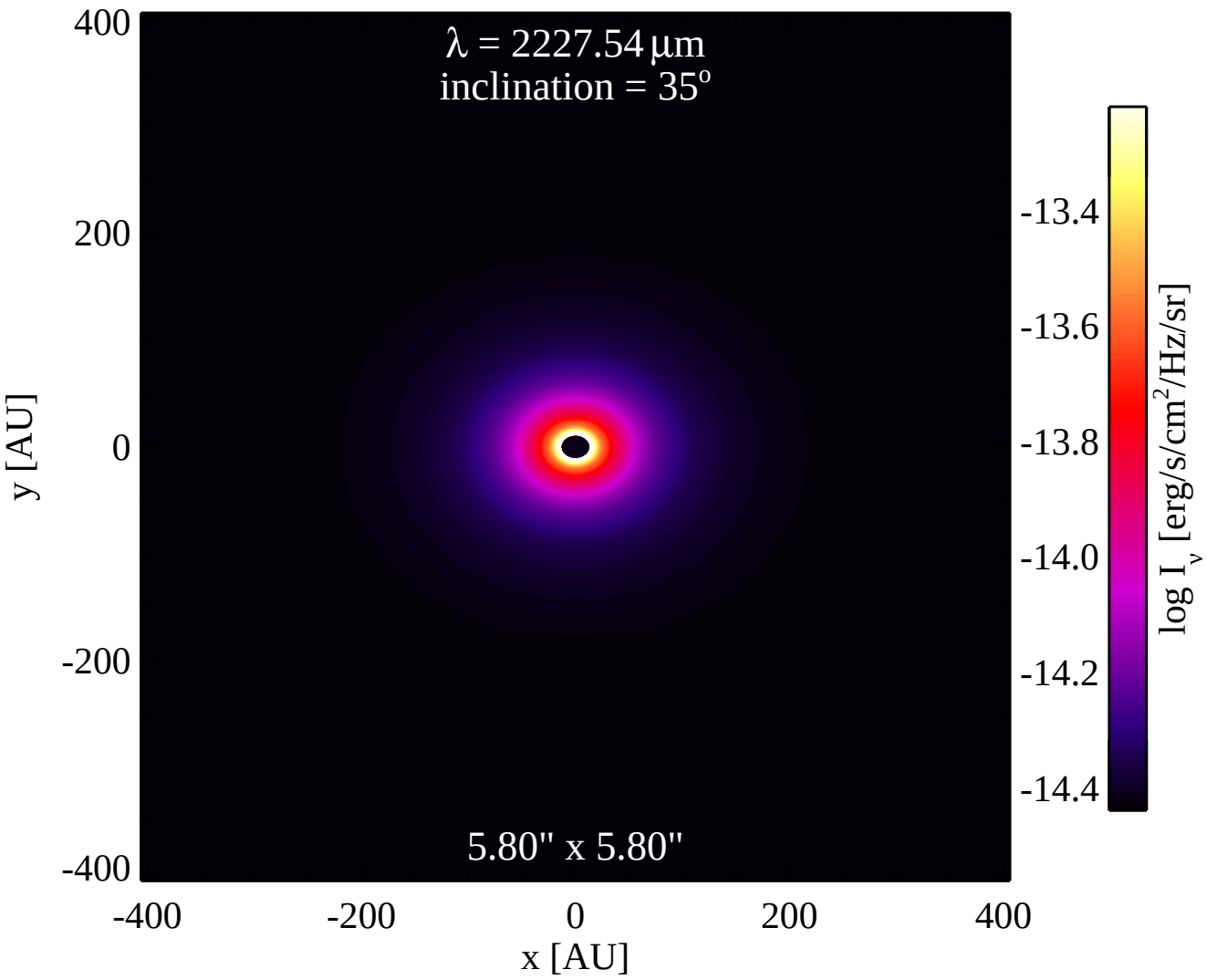

λ = 850.68 μm
inclination = 35°
5.08" x 5.08"
200
0
-200
y [AU]
-200
0
200
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

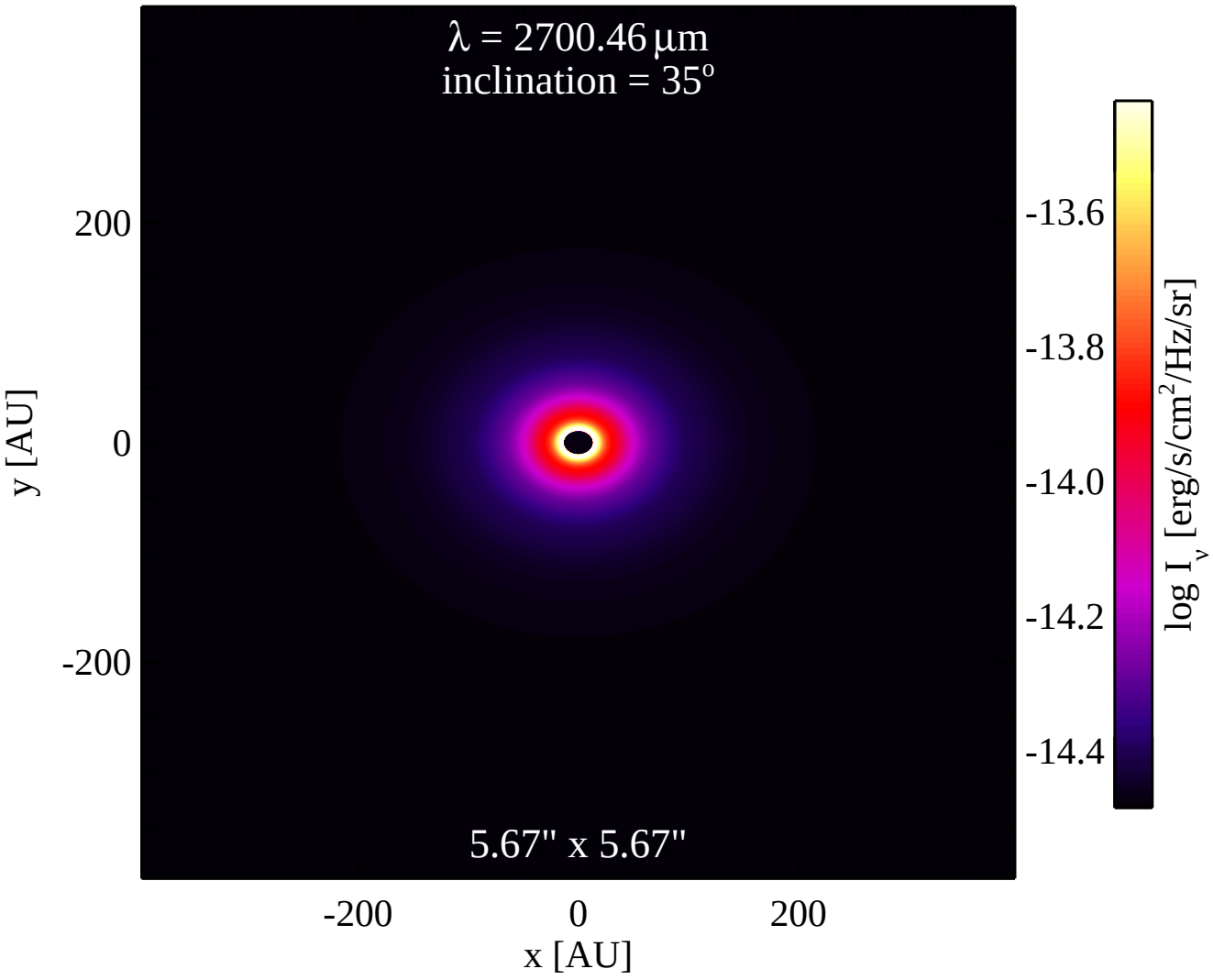

λ = 1031.28 μm
inclination = 35°
5.31" x 5.31"
200
0
-200
y [AU]
-200
0
200
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

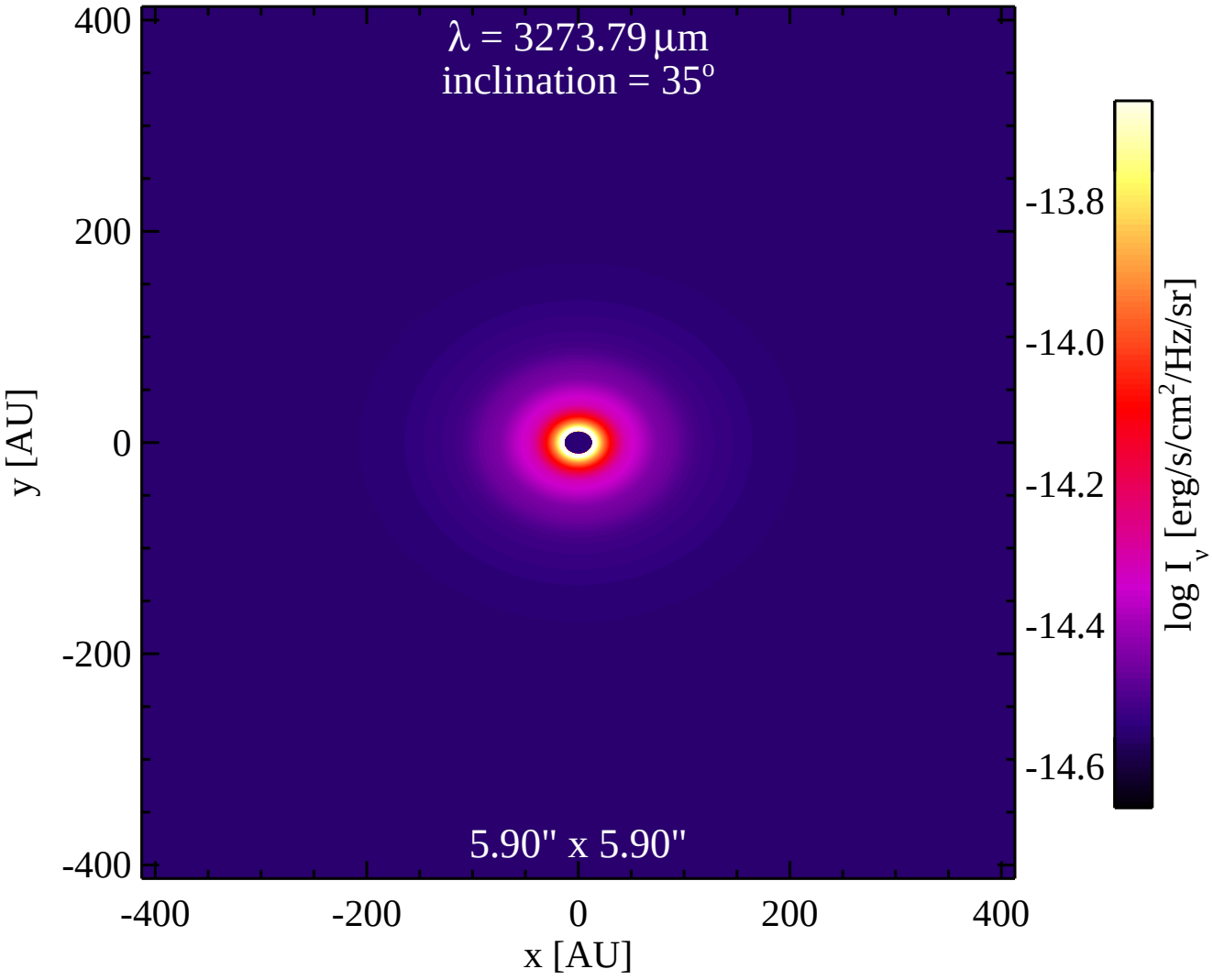

λ = 1250.23 μm
inclination = 35°
5.45" x 5.45"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

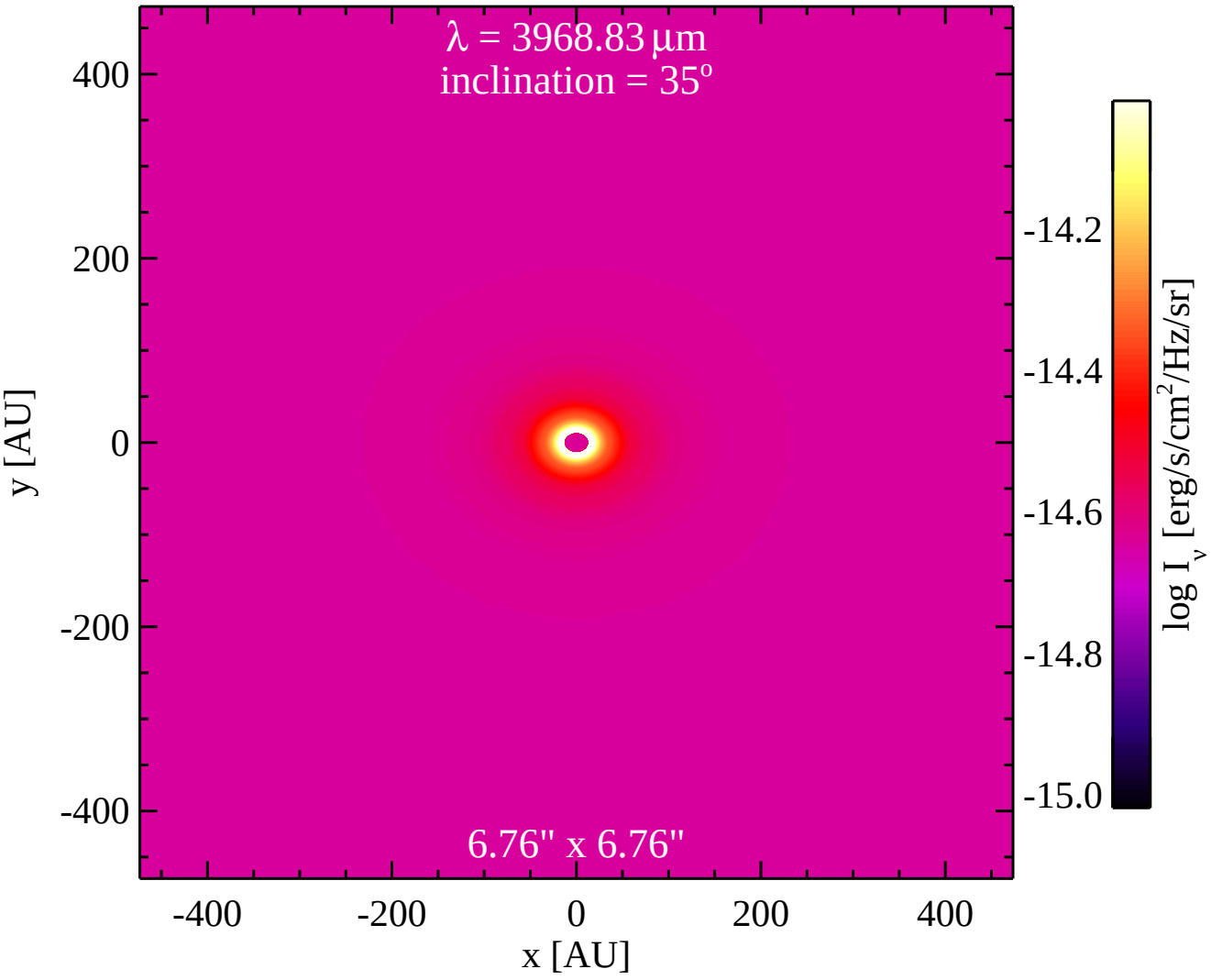

λ = 1515.66 μm
inclination = 35°
5.57" x 5.57"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

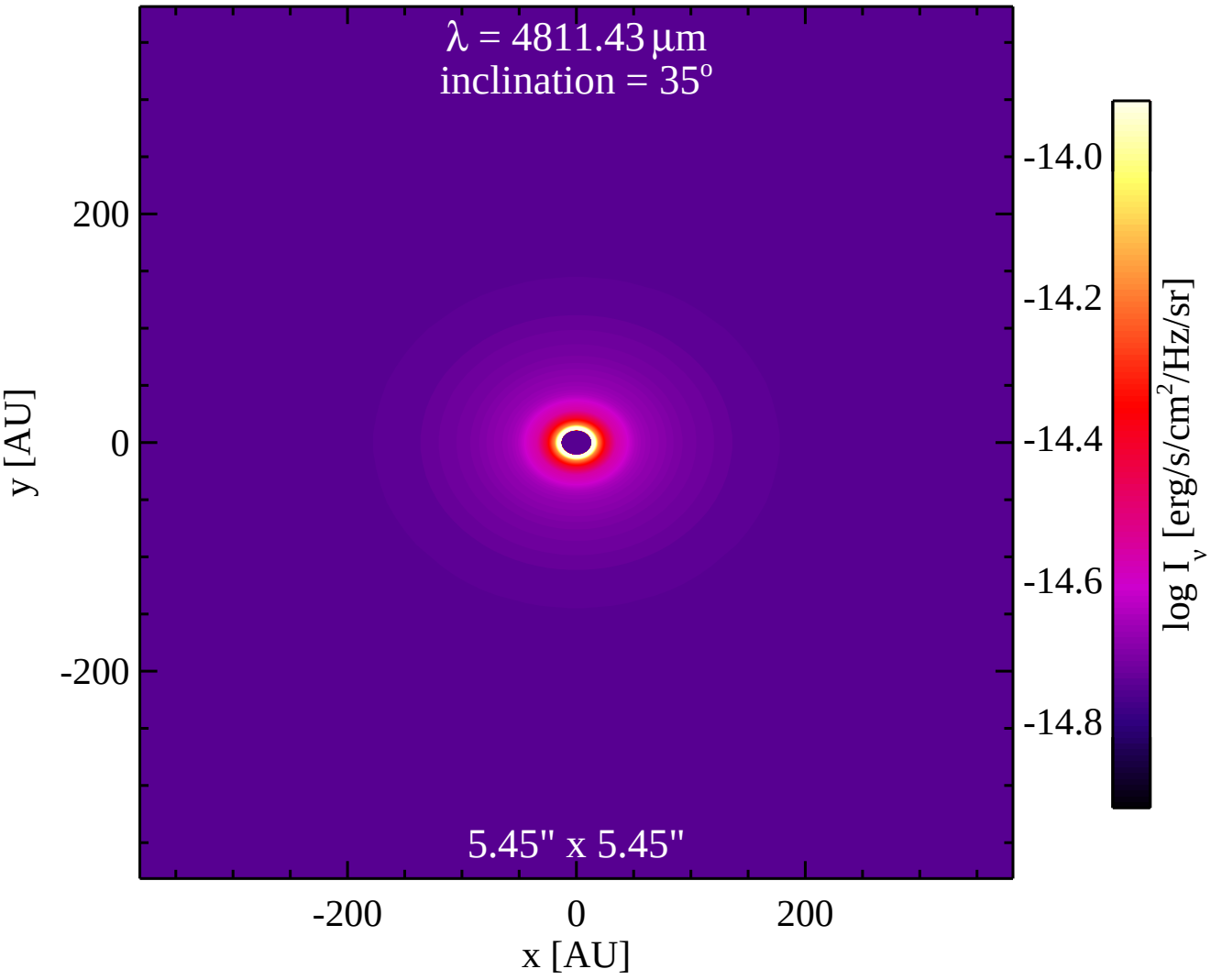

λ = 1837.44 μm
inclination = 35°
5.61" x 5.61"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.0
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 2227.54 μm
inclination = 35°
5.80" x 5.80"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 2700.46 μm
inclination = 35°
5.67" x 5.67"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 3273.79 μm
inclination = 35°
5.90" x 5.90"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 3968.83 μm
inclination = 35°
6.76" x 6.76"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-14.2
-14.4
-14.6
-14.8
-15.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 4811.43 μm
inclination = 35°
5.45" x 5.45"
200
0
-200
y [AU]
-200
0
200
x [AU]
-14.0
-14.2
-14.4
-14.6
-14.8
log I_ν [erg/s/cm²/Hz/sr]