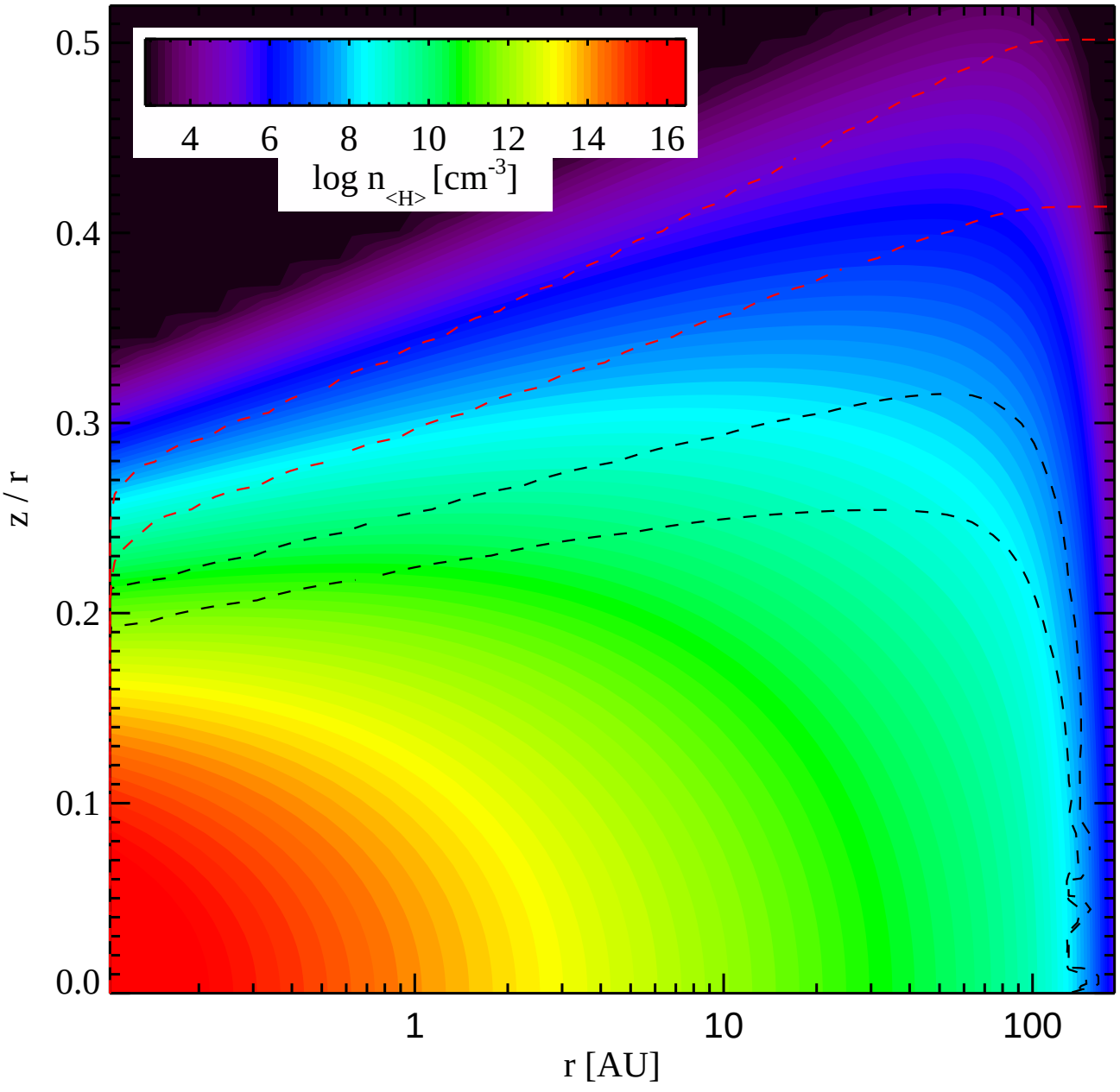
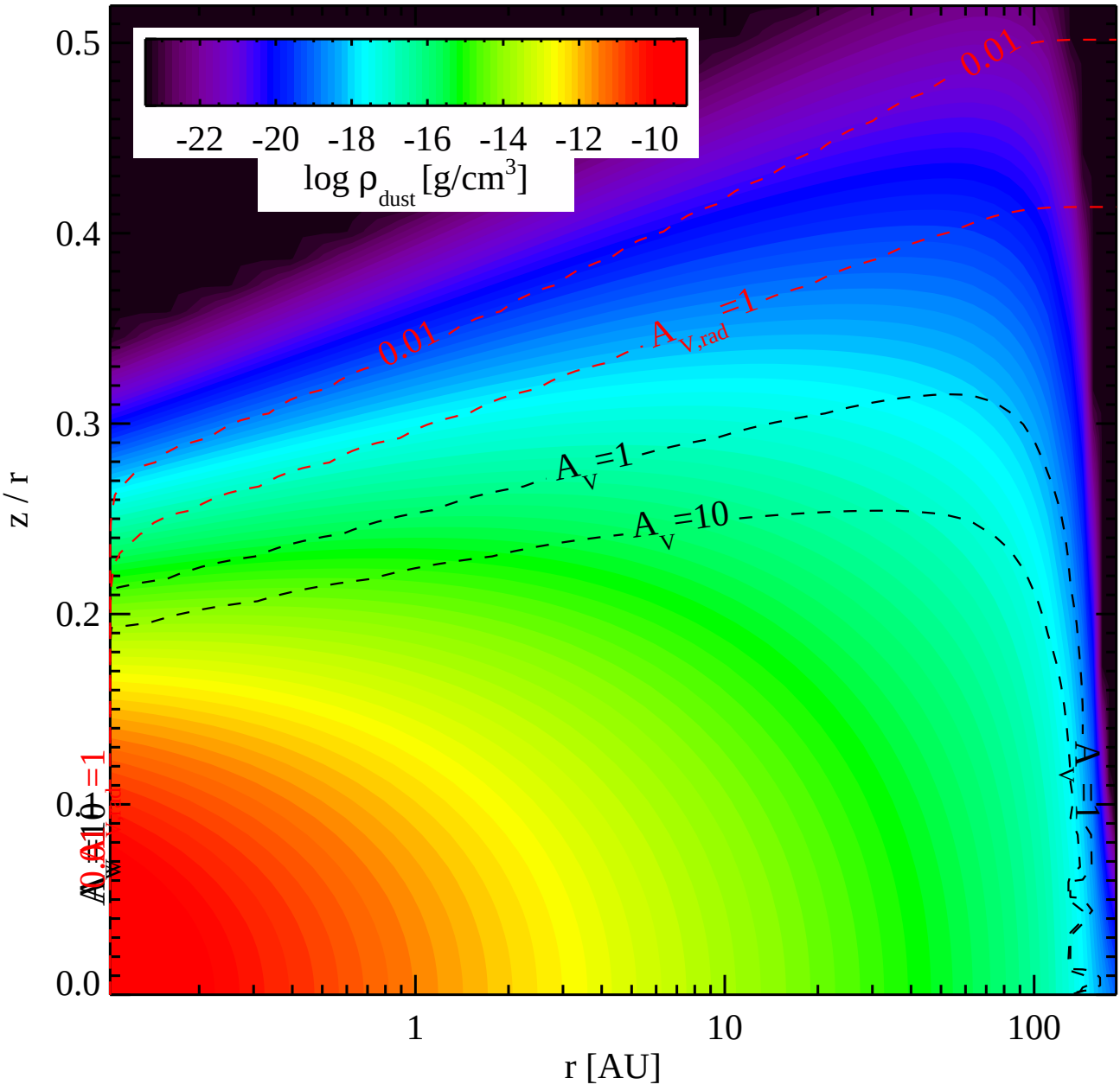
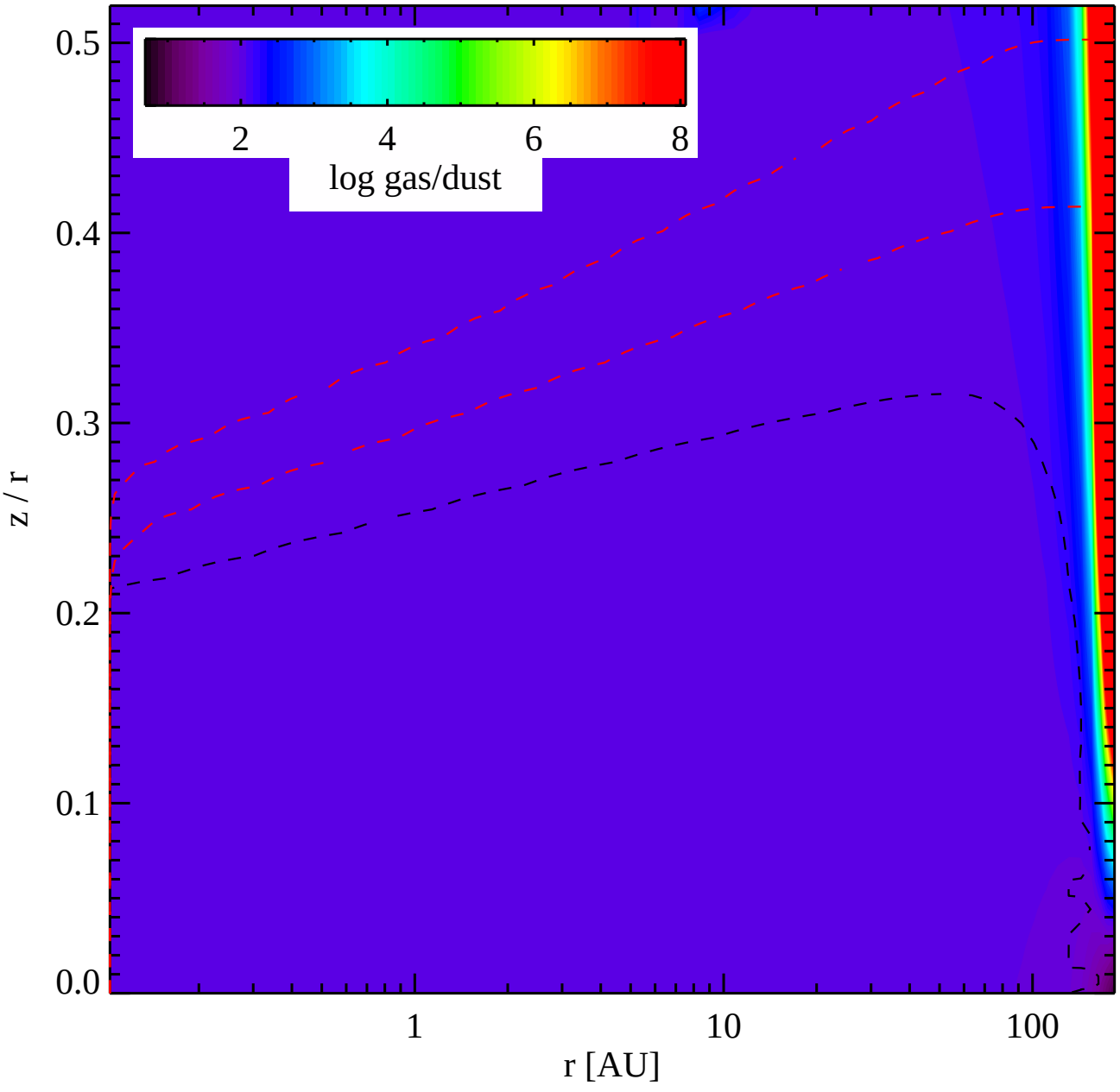
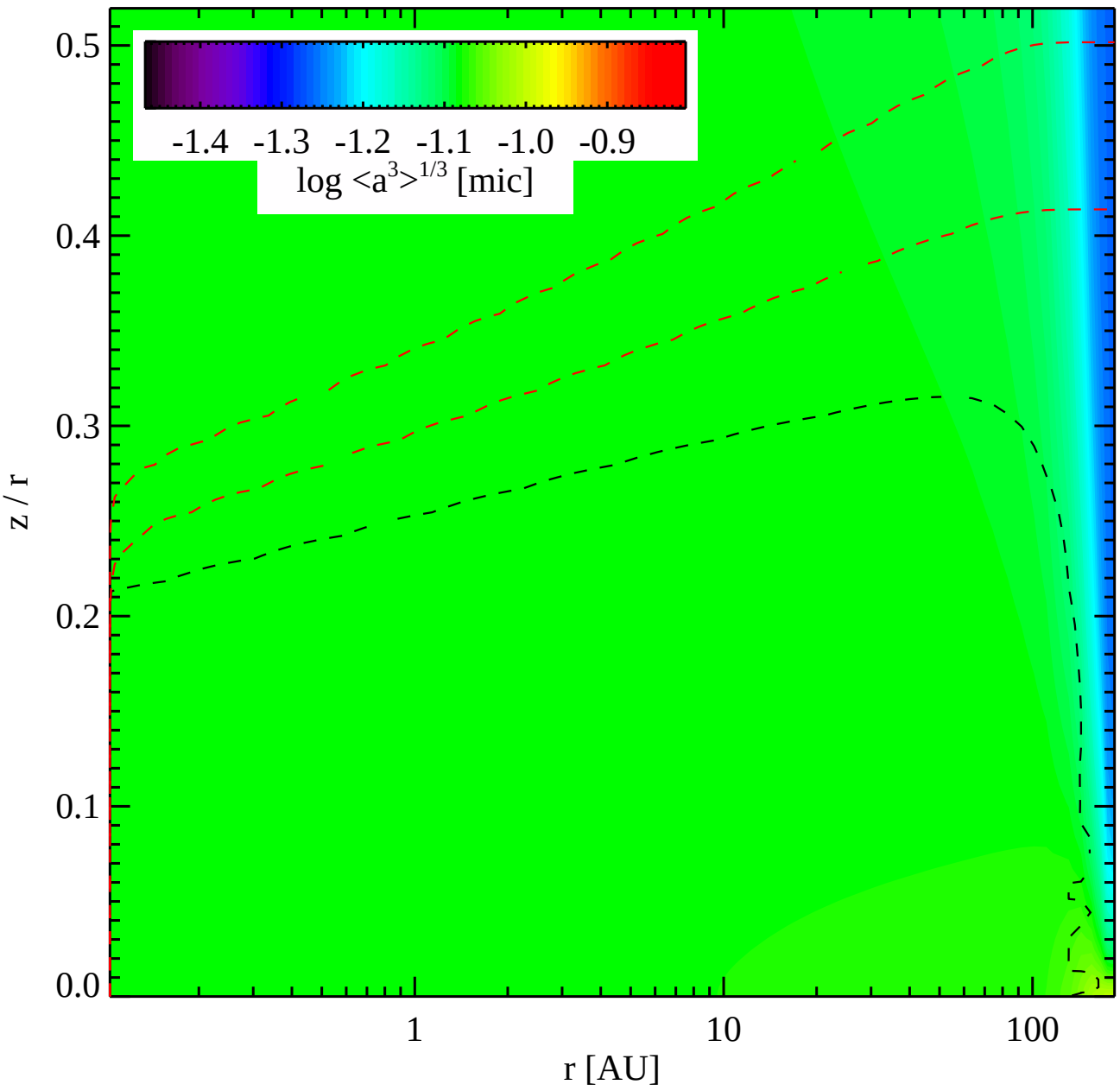
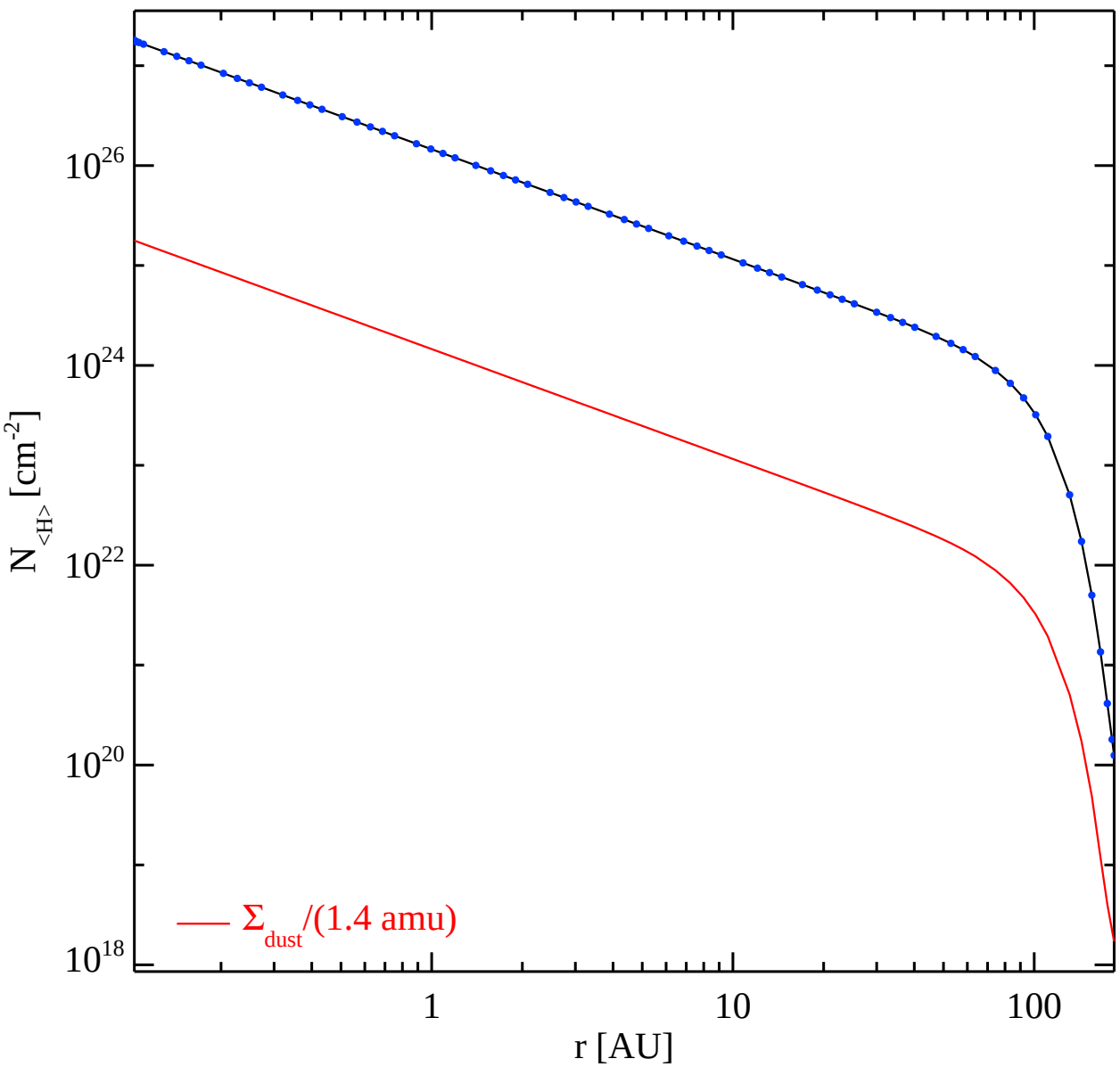
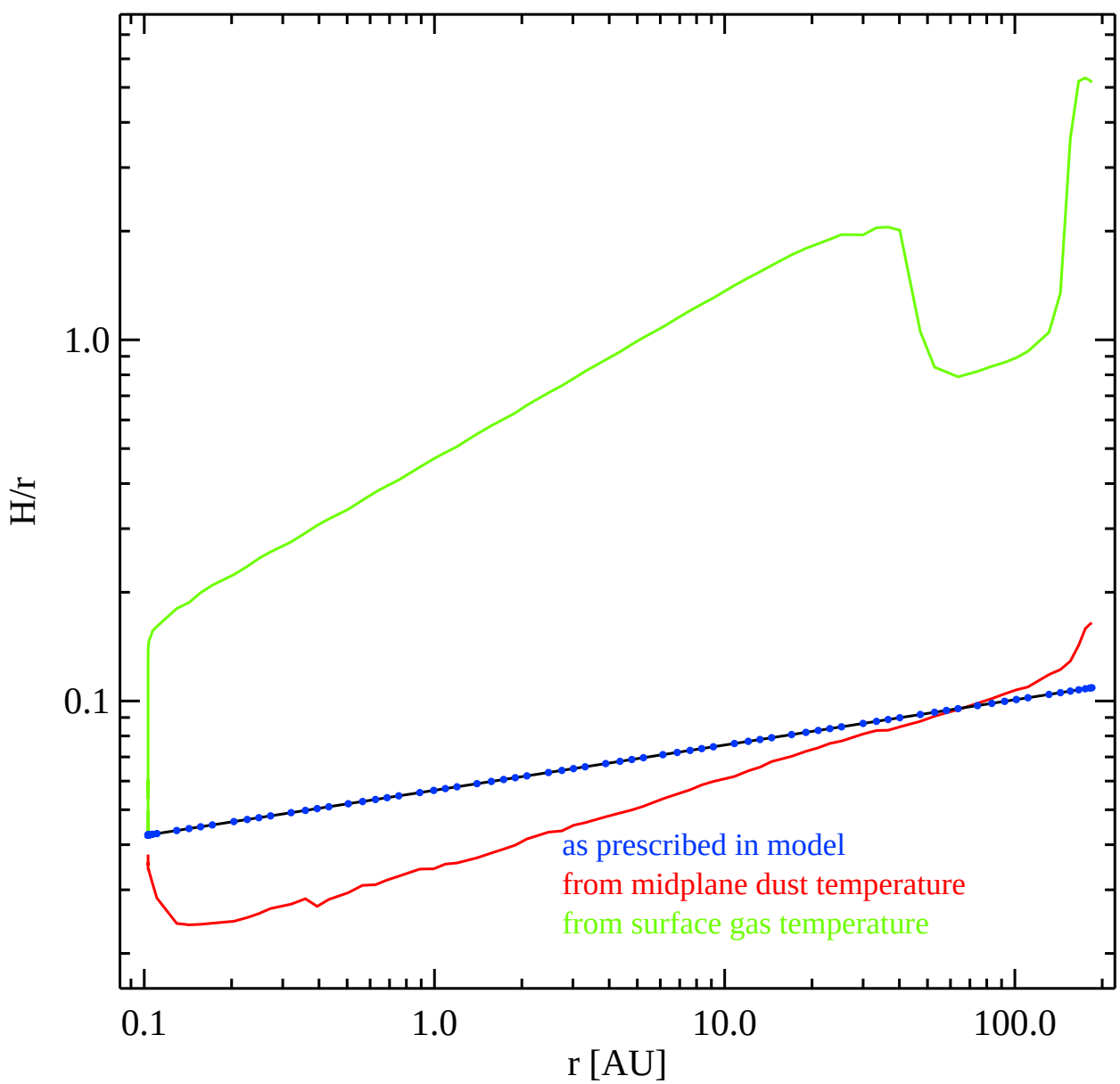

4
6
8
10
12
14
16
log n<H> [cm-3]
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

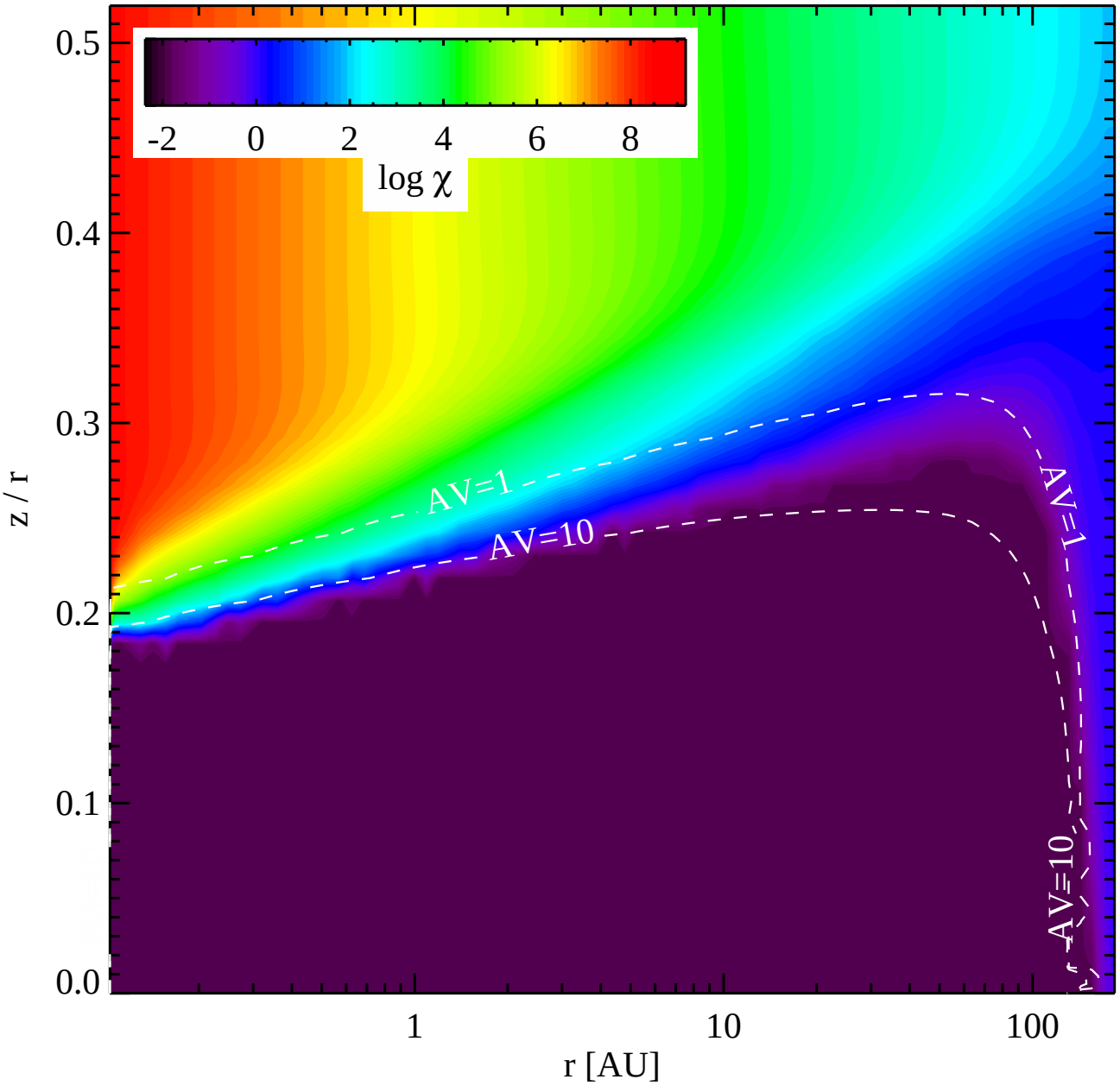

-22 -20 -18 -16 -14 -12 -10
log ρ dust [g/cm3]
0.01
A V,rad =1
A V =1
A V =10
A V =1
0.01
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

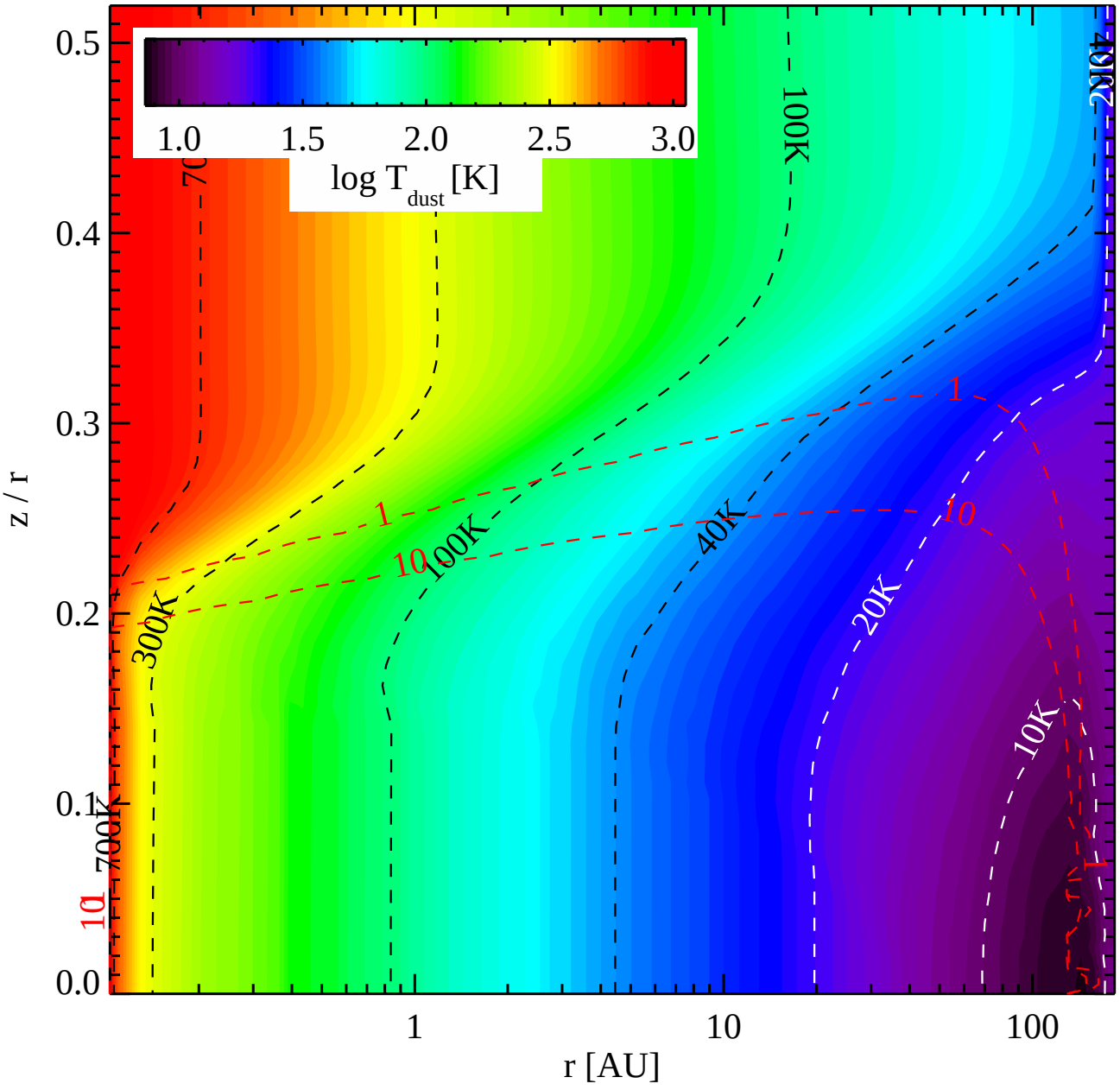

2
4
6
8
log gas/dust
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

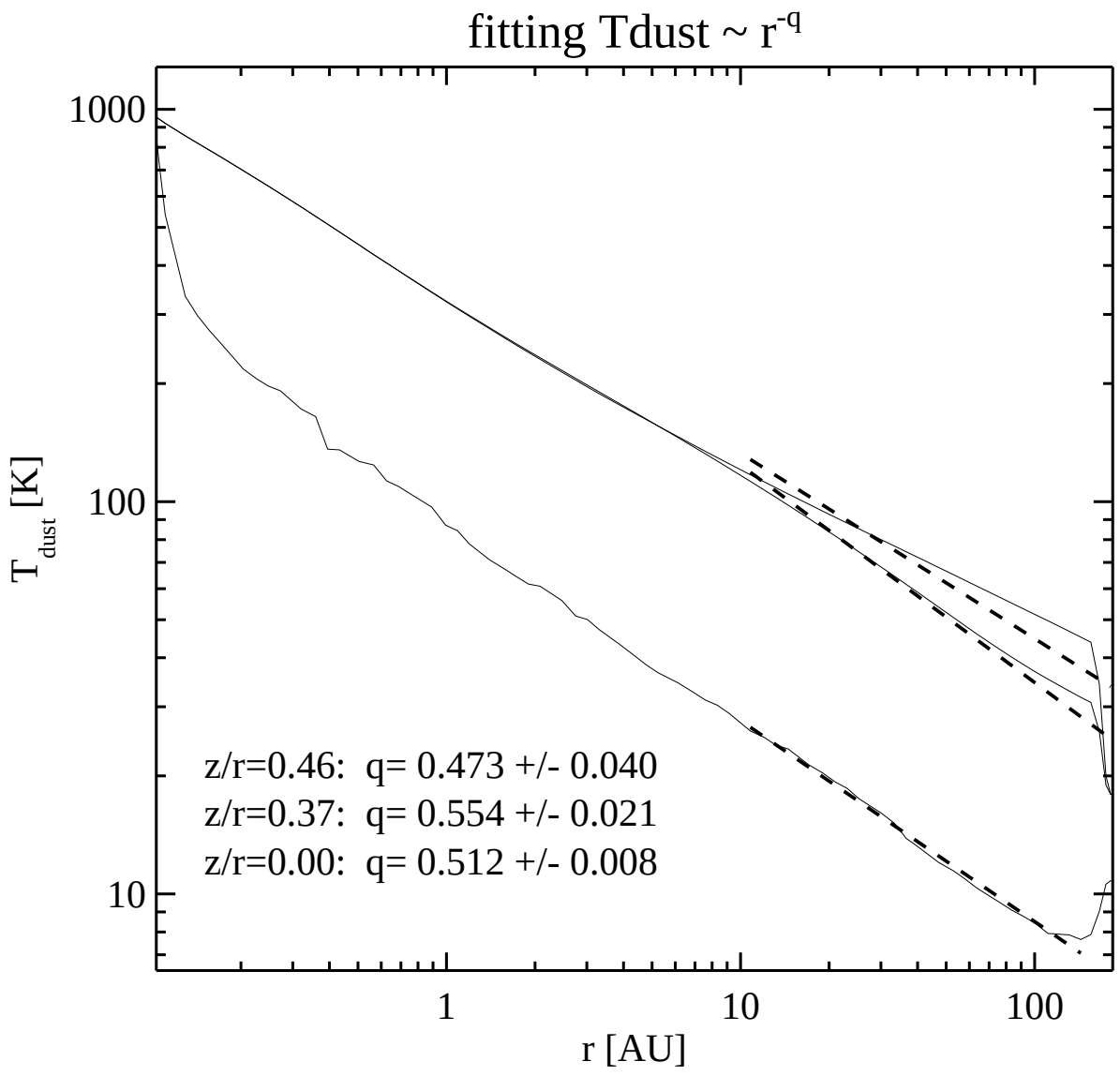

-1.4 -1.3 -1.2 -1.1 -1.0 -0.9
log <a^3>^1/3 [mic]
0.5
0.4
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

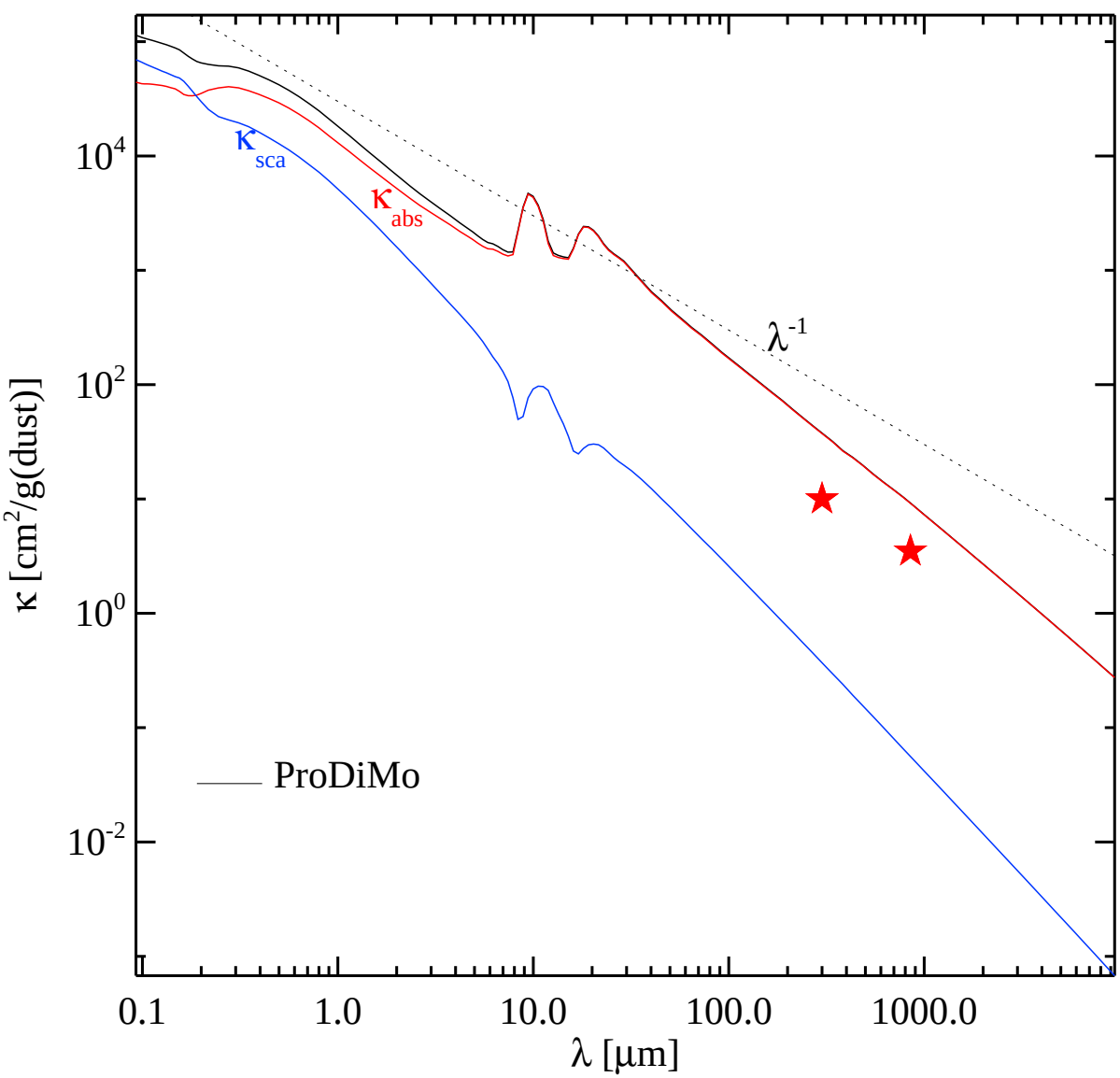

10^{26}
10^{24}
10^{22}
10^{20}
10^{18}
$N_{<H>}$ [cm^{-2}]
1
10
100
r [AU]
Σ_{dust}/(1.4 amu)

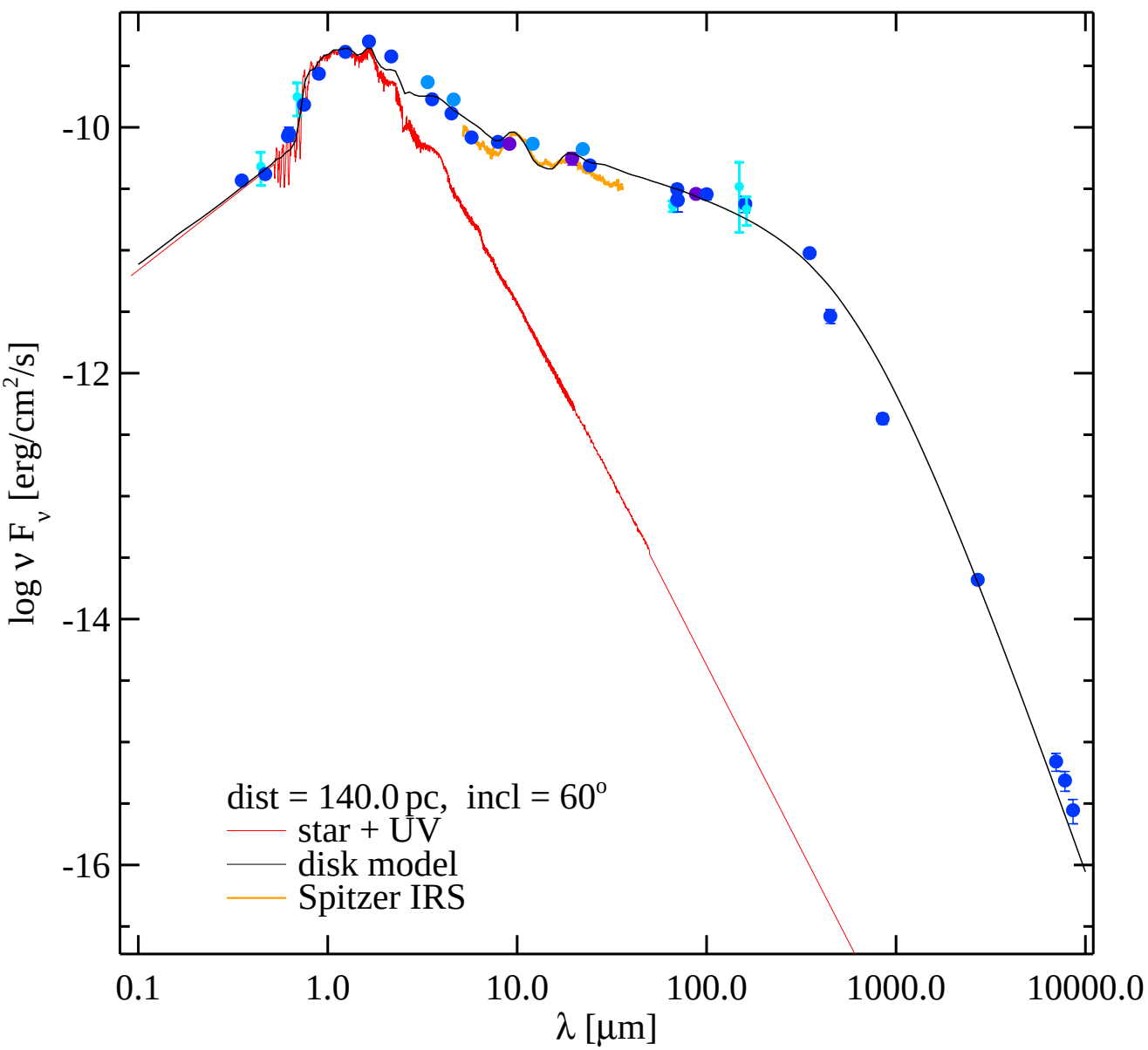

1.0
0.1
H/r
0.1
1.0
10.0
100.0
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

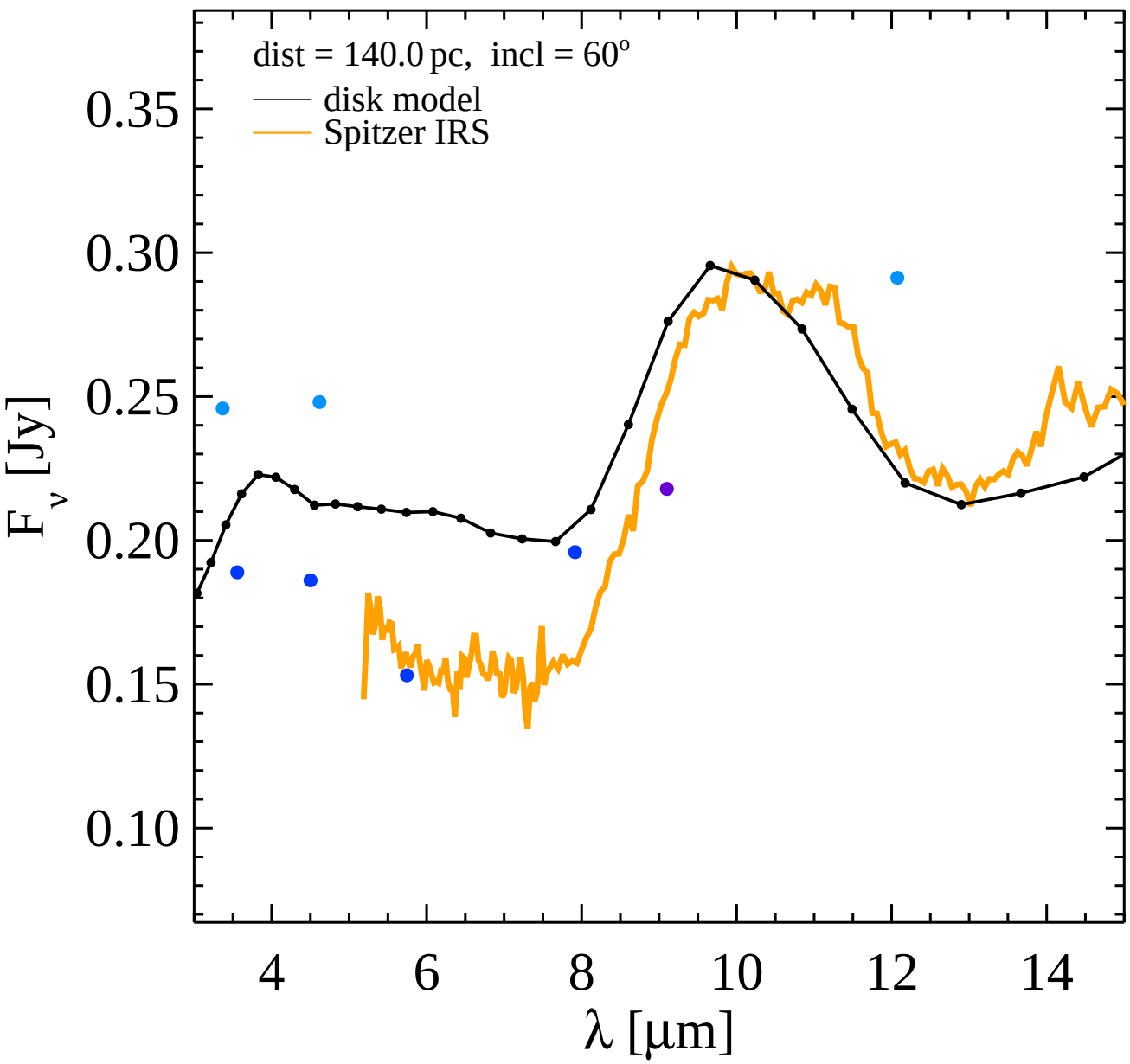

0.5
0.4
0.3
0.2
0.1
0.0
z / r
-2
0
2
4
6
8
log χ
AV=1
AV=10
AV=1
AV=10
1
10
100
r [AU]

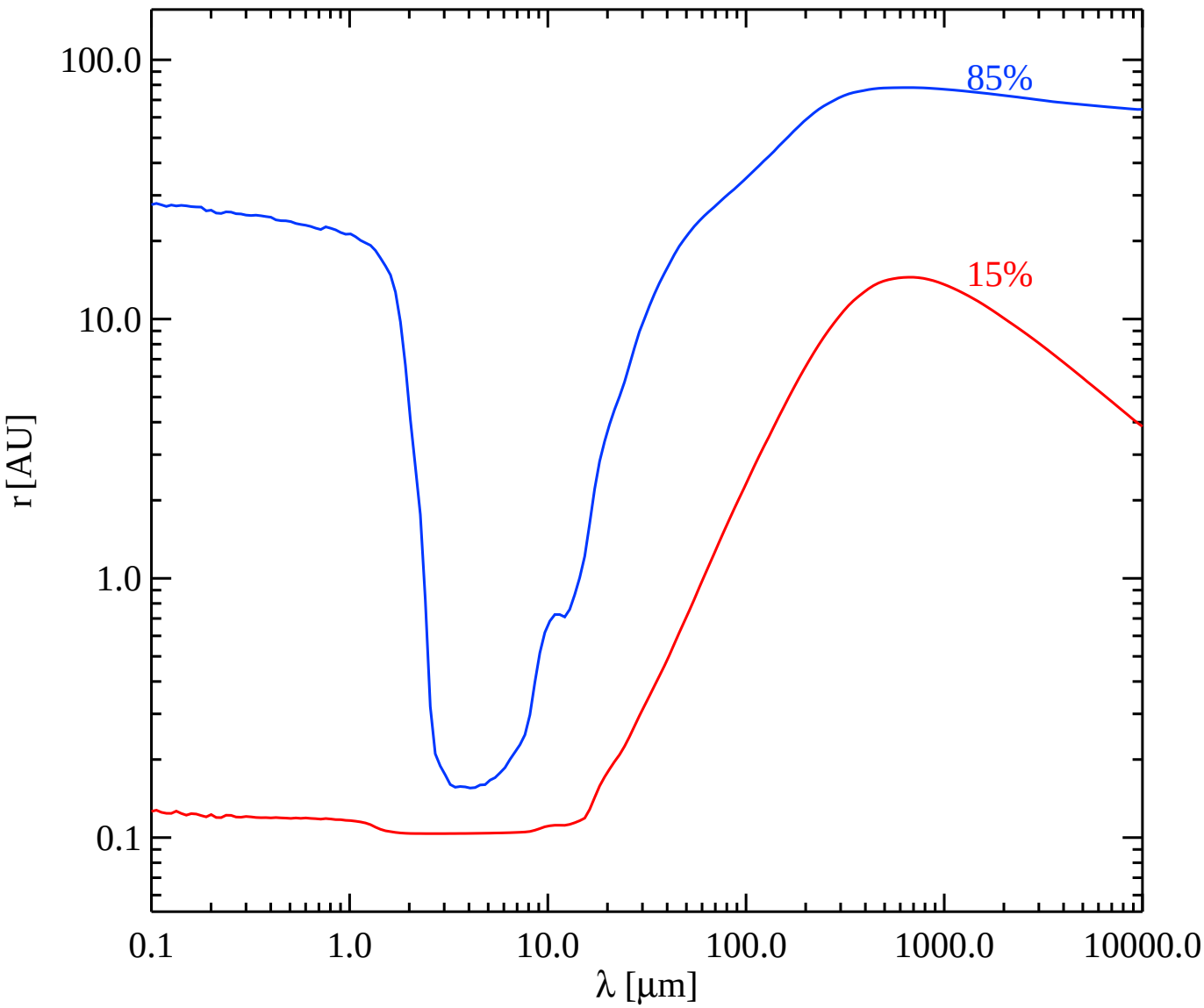

1.0
1.5
2.0
2.5
3.0
log T dust [K]
z / r
r [AU]
0.0
0.1
0.2
0.3
0.4
0.5
1
10
100
700K
300K
100K
40K
20K
10K
1
10
1
10
100K
200K

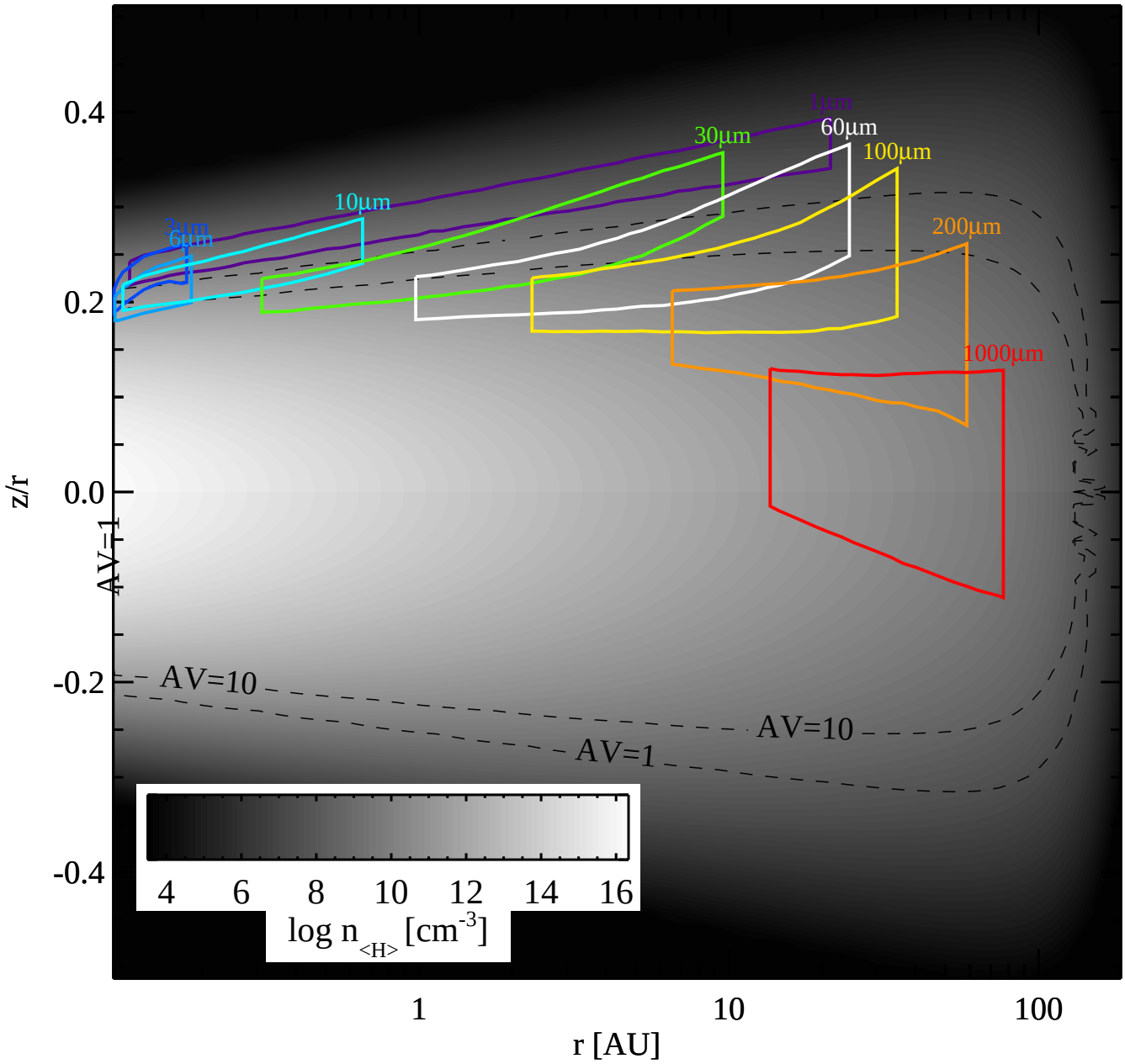

fitting Tdust ~ r^-q
1000
100
10
T dust [K]
1
10
100
r [AU]
z/r=0.46: q= 0.473 +/- 0.040
z/r=0.37: q= 0.554 +/- 0.021
z/r=0.00: q= 0.512 +/- 0.008

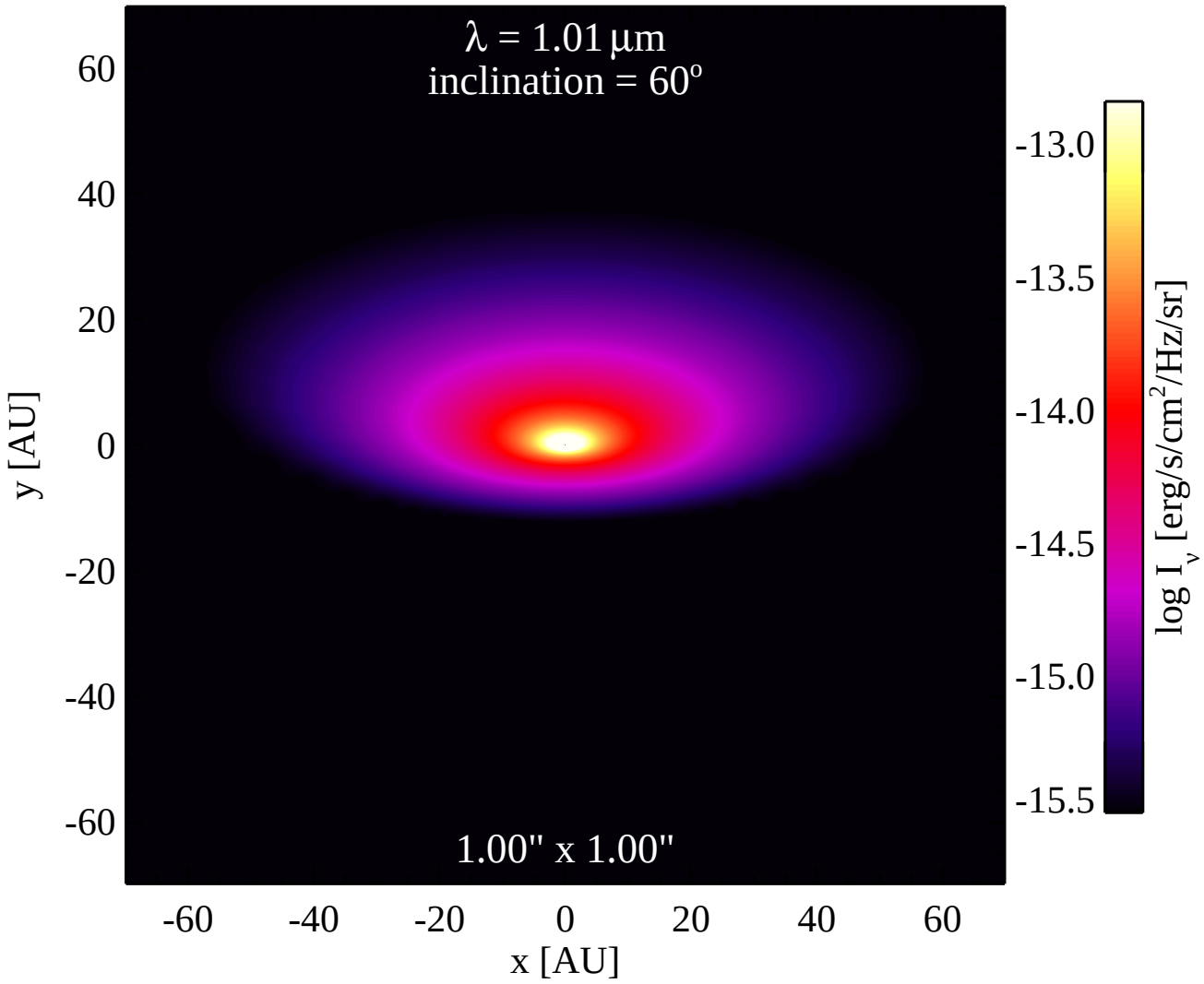

κ [cm²/g(dust)]
10⁴
10²
10⁰
10⁻²
κsca
κabs
λ⁻¹
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

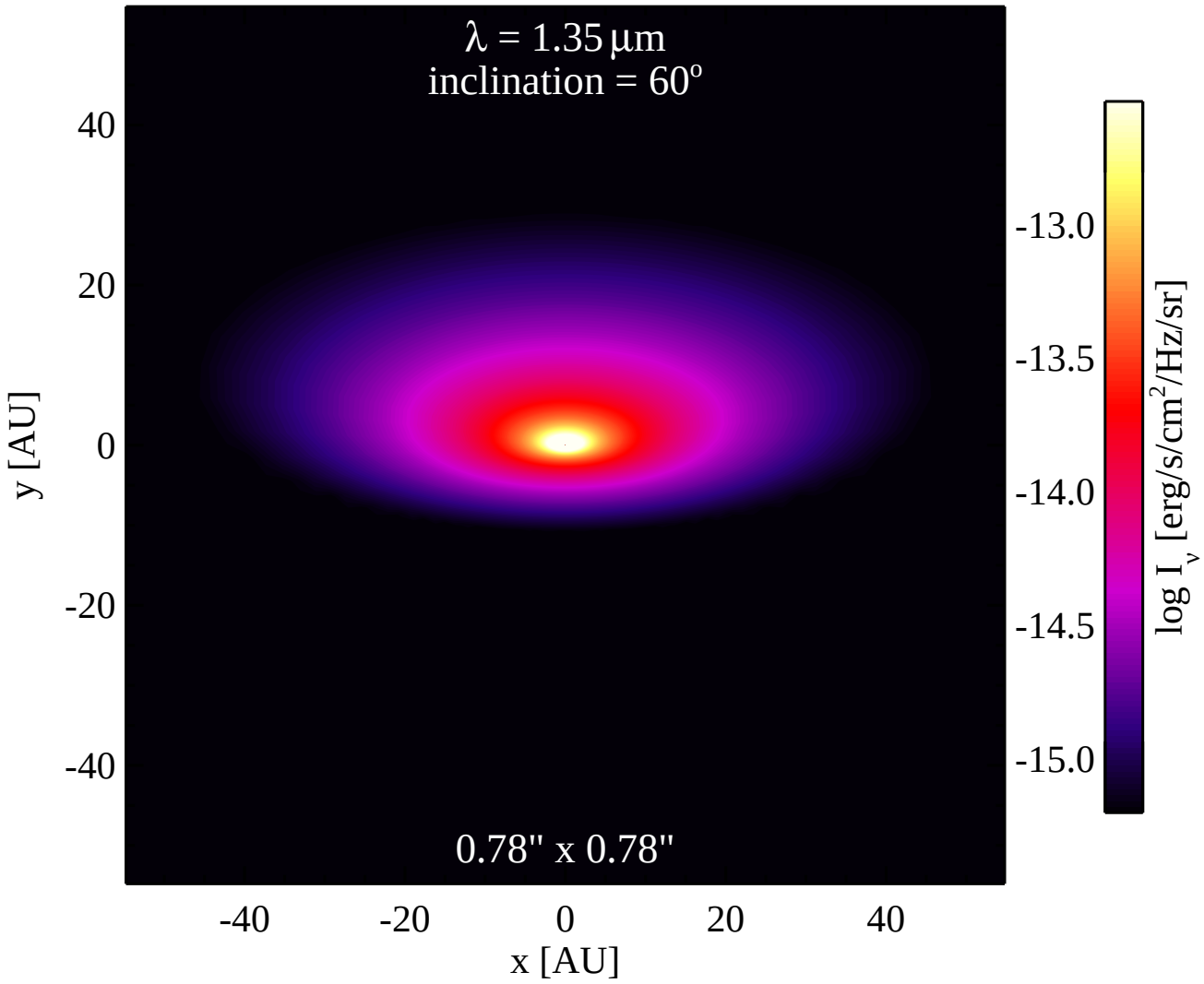

-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 140.0 pc, incl = 60°
star + UV
disk model
Spitzer IRS

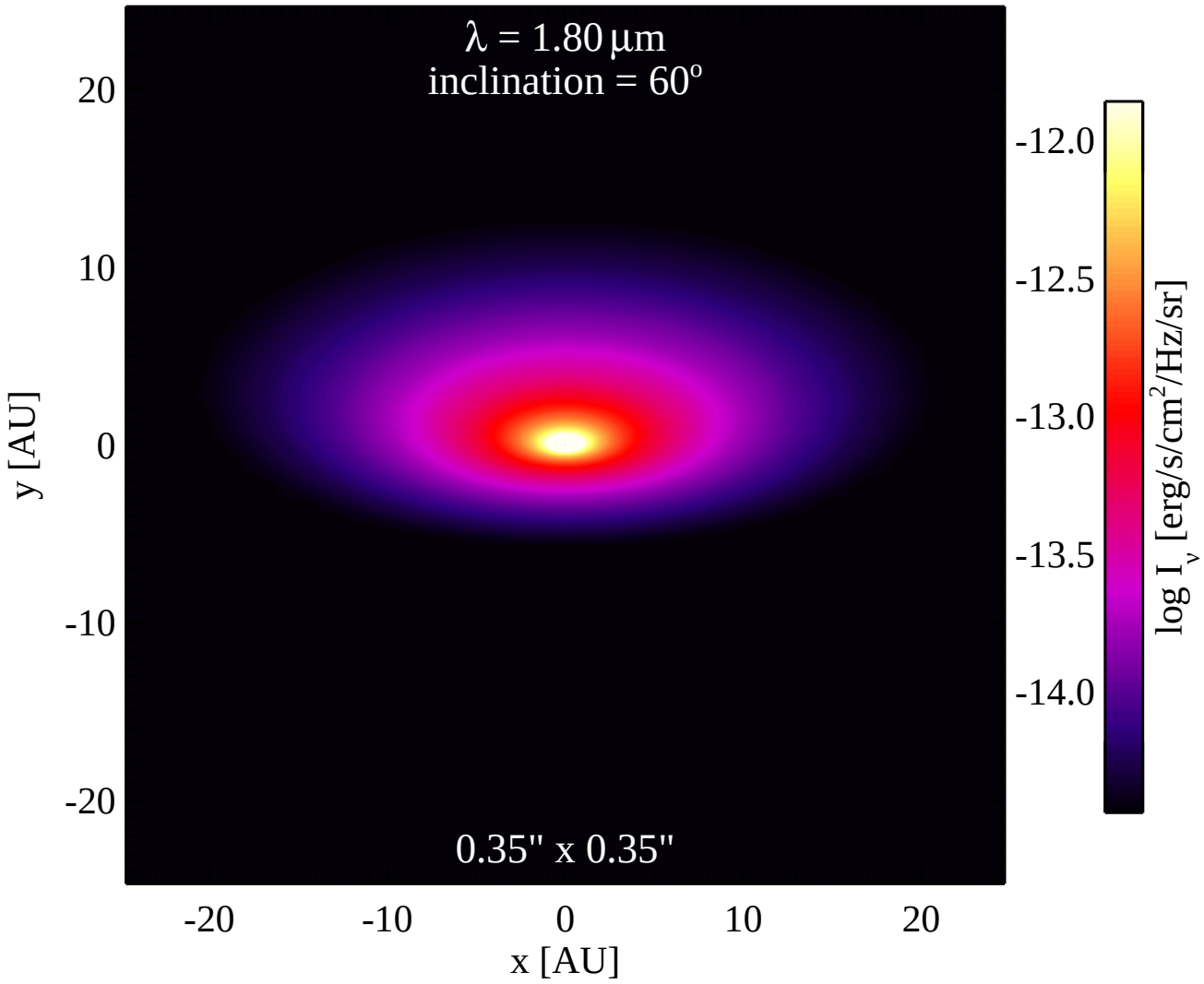

dist = 140.0 pc, incl = 60°
disk model
Spitzer IRS
0.35
0.30
0.25
0.20
0.15
0.10
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

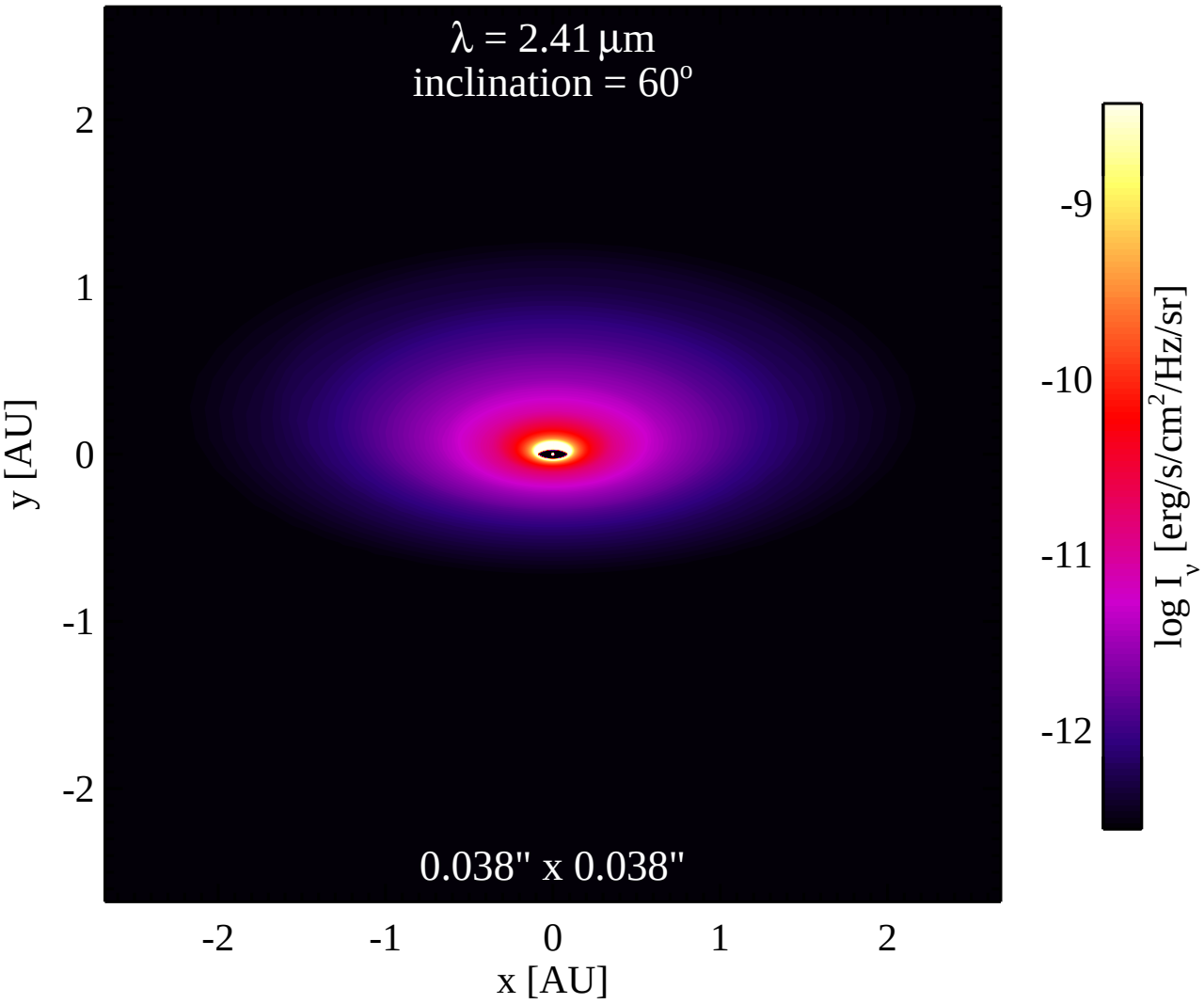

100.0
10.0
1.0
0.1
r [AU]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
85%
15%

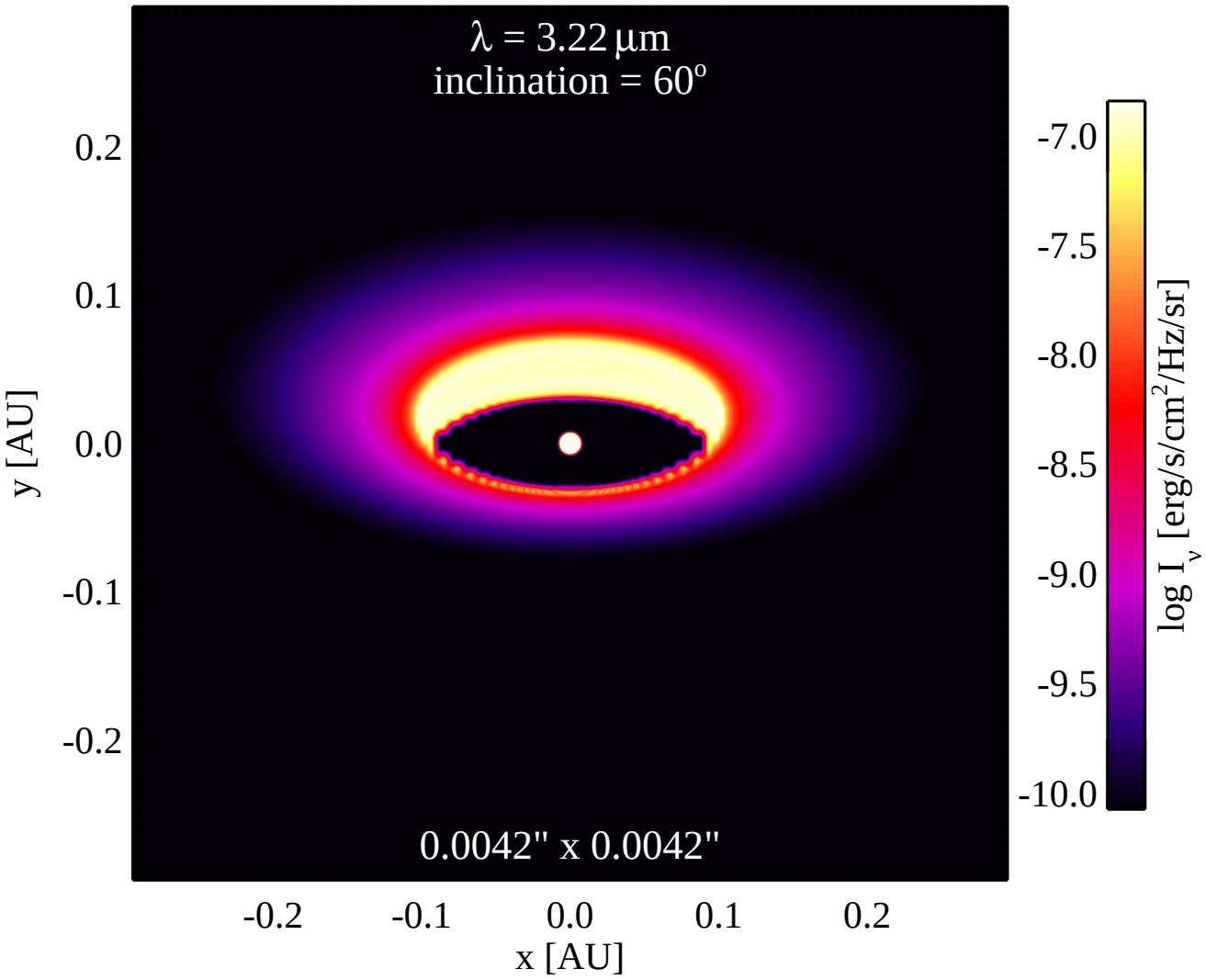

0.4
0.2
0.0
-0.2
-0.4
z/r
AV=1
AV=10
AV=10
AV=1
1µm
2µm
6µm
10µm
30µm
60µm
100µm
200µm
1000µm
4
6
8
10
12
14
16
log n<H> [cm-3]
1
10
100
r [AU]

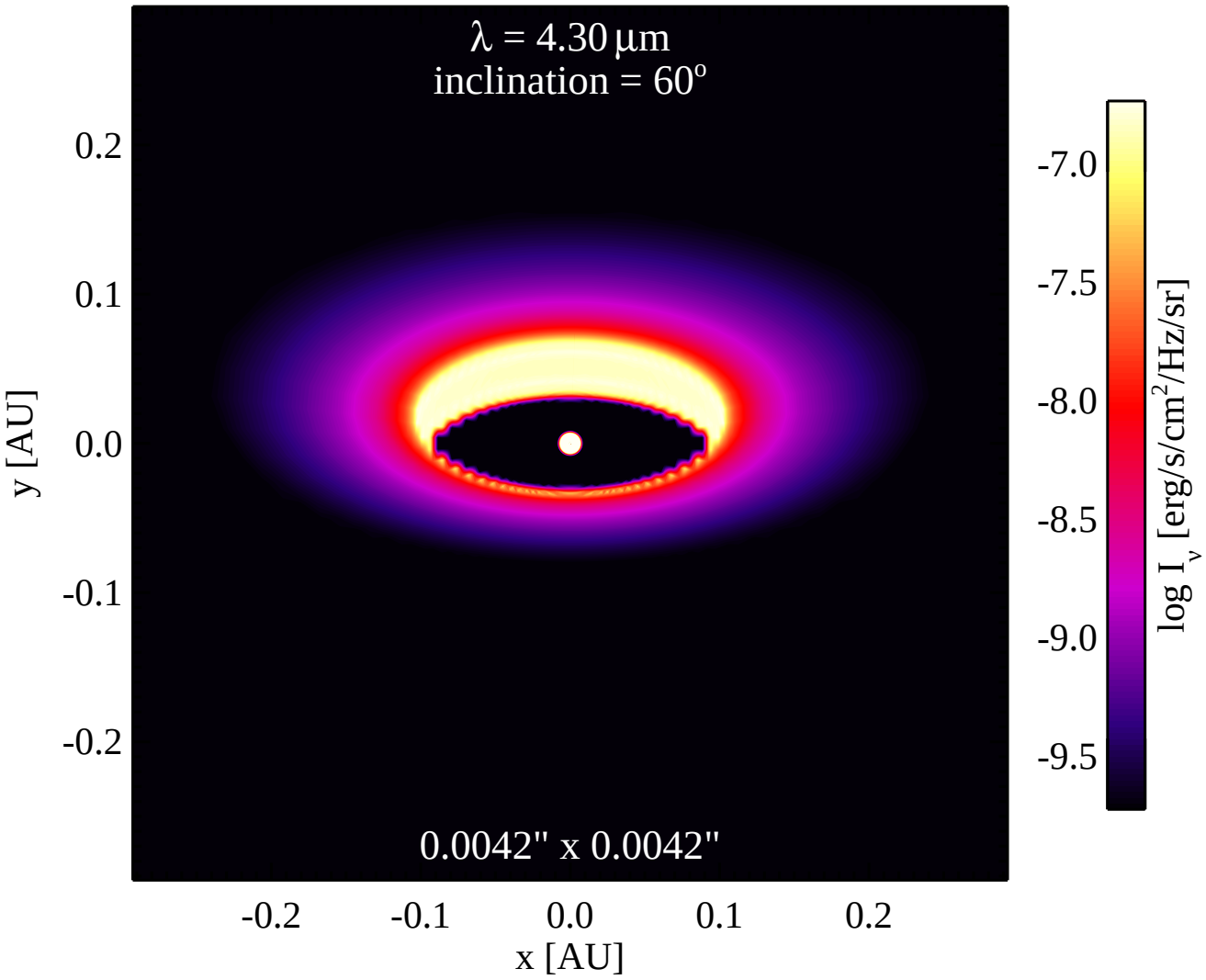

λ = 1.01 μm
inclination = 60°
1.00" x 1.00"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
log I_ν [erg/s/cm²/Hz/sr]

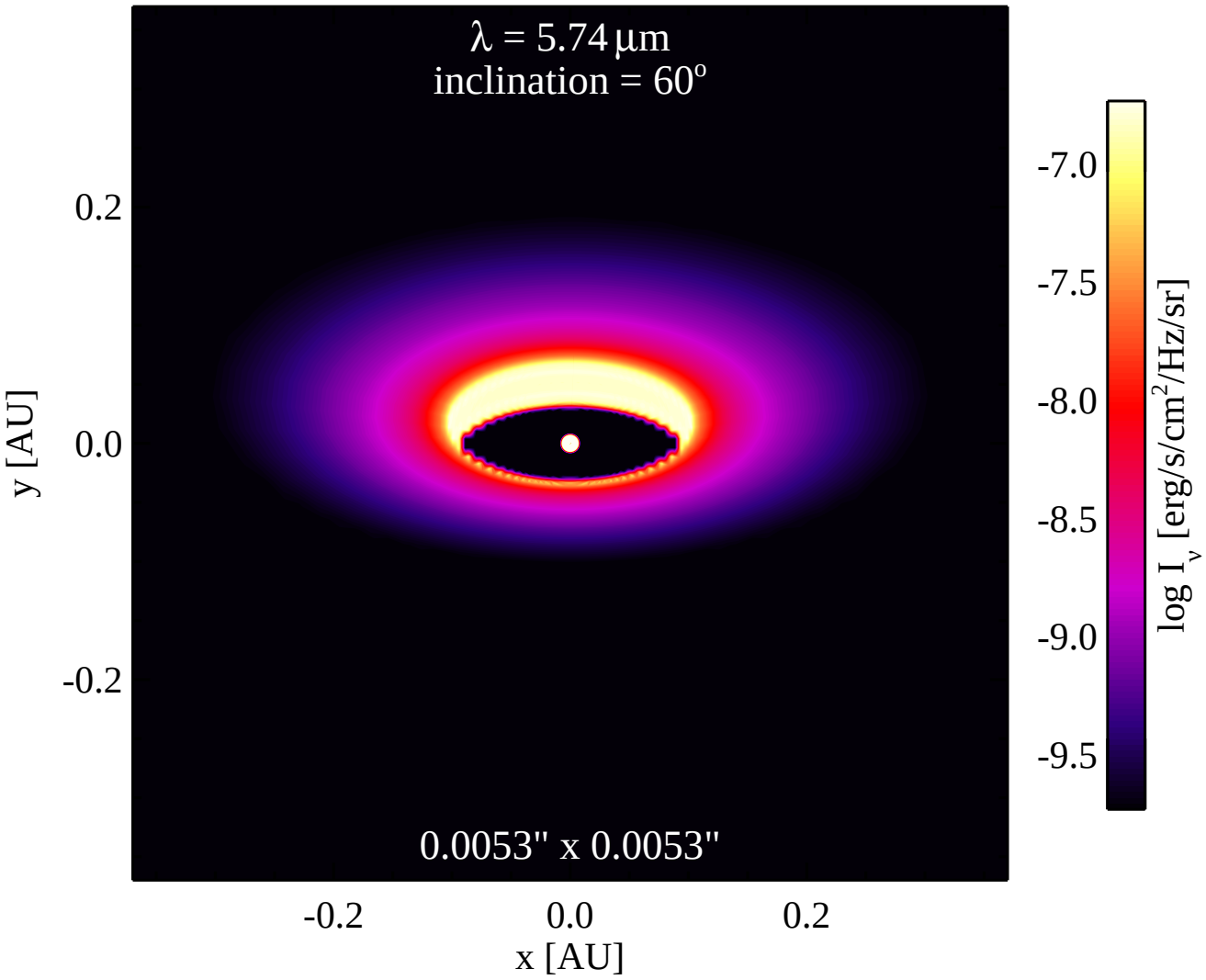

λ = 1.35 μm
inclination = 60°
0.78" x 0.78"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-13.0
-13.5
-14.0
-14.5
-15.0
log I_ν [erg/s/cm²/Hz/sr]

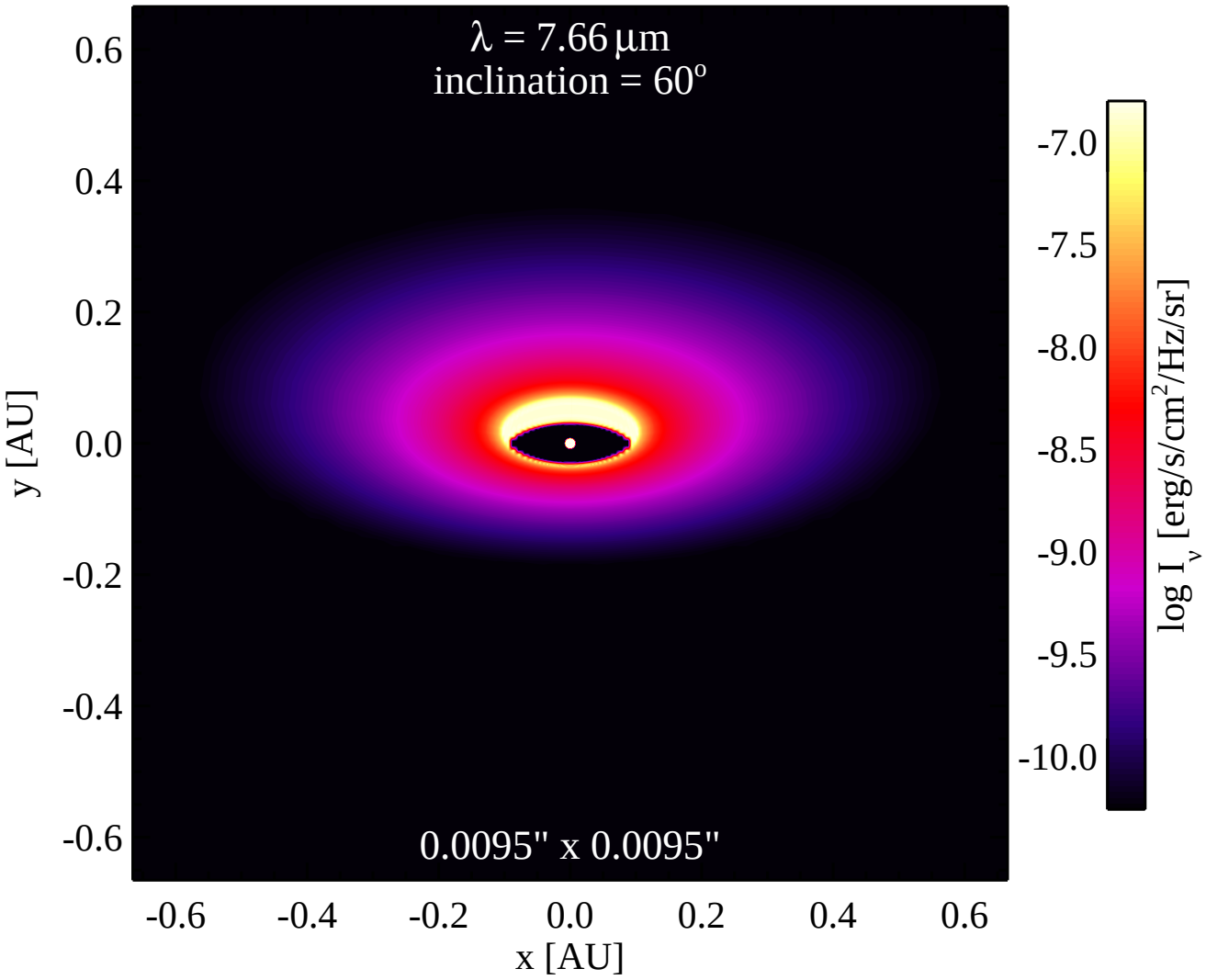

λ = 1.80 μm
inclination = 60°
0.35" x 0.35"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

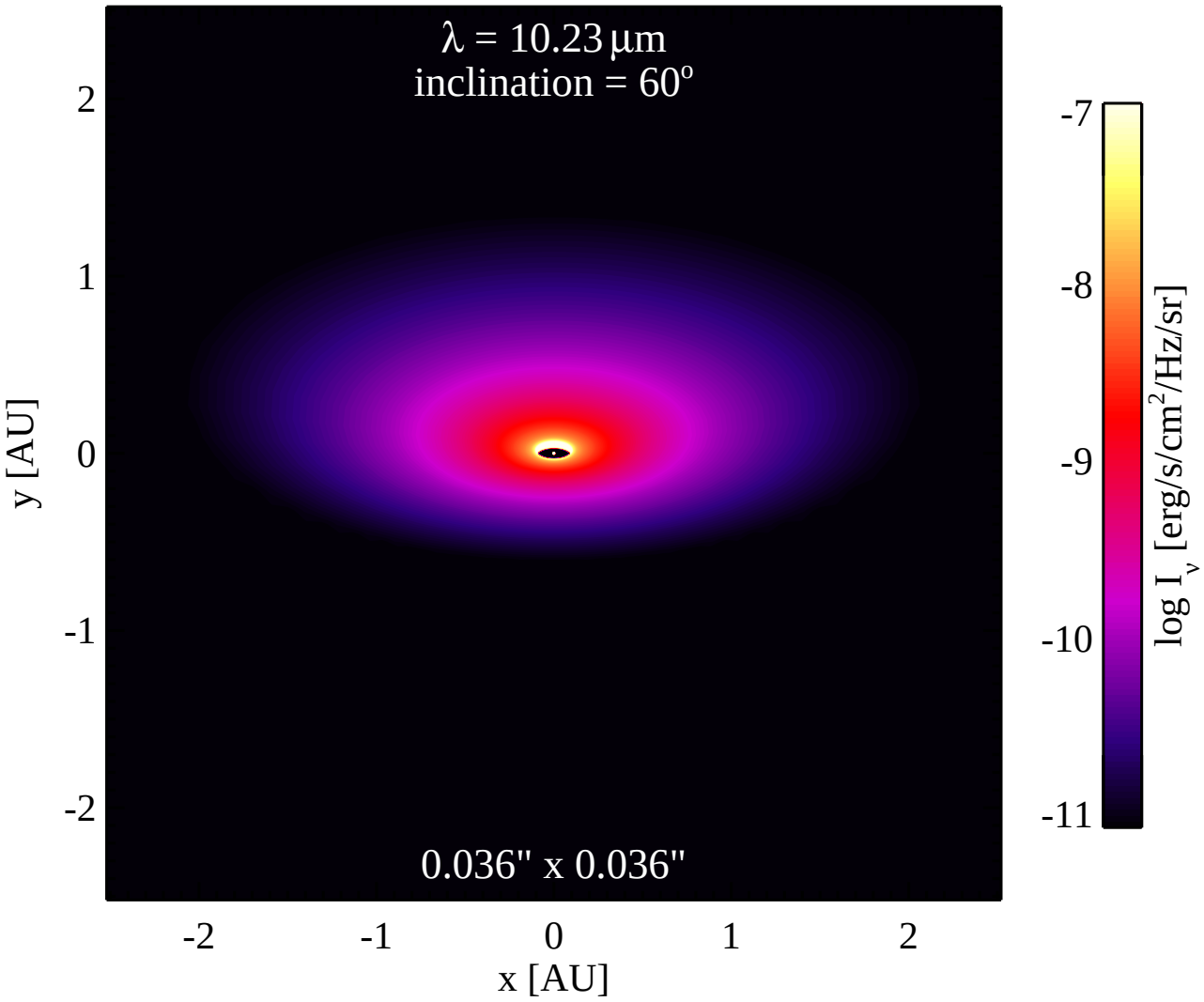

λ = 2.41 μm
inclination = 60°
0.038" x 0.038"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
-9
-10
-11
-12
log I_ν [erg/s/cm²/Hz/sr]

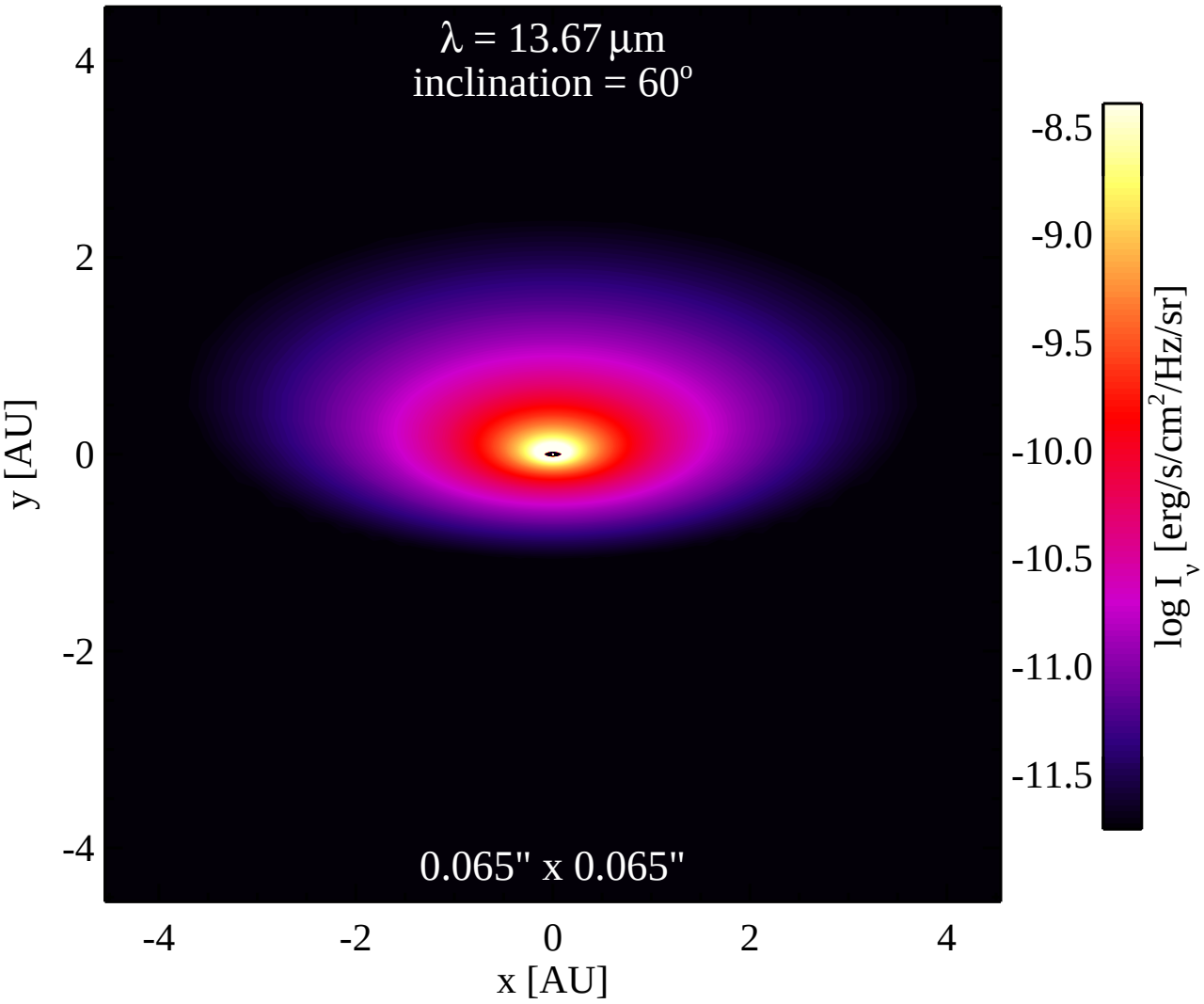

λ = 3.22 μm
inclination = 60°
0.0042" x 0.0042"
0.2
0.1
0.0
-0.1
-0.2
y [AU]
-0.2
-0.1
0.0
0.1
0.2
x [AU]
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
-10.0
log I_ν [erg/s/cm²/Hz/sr]

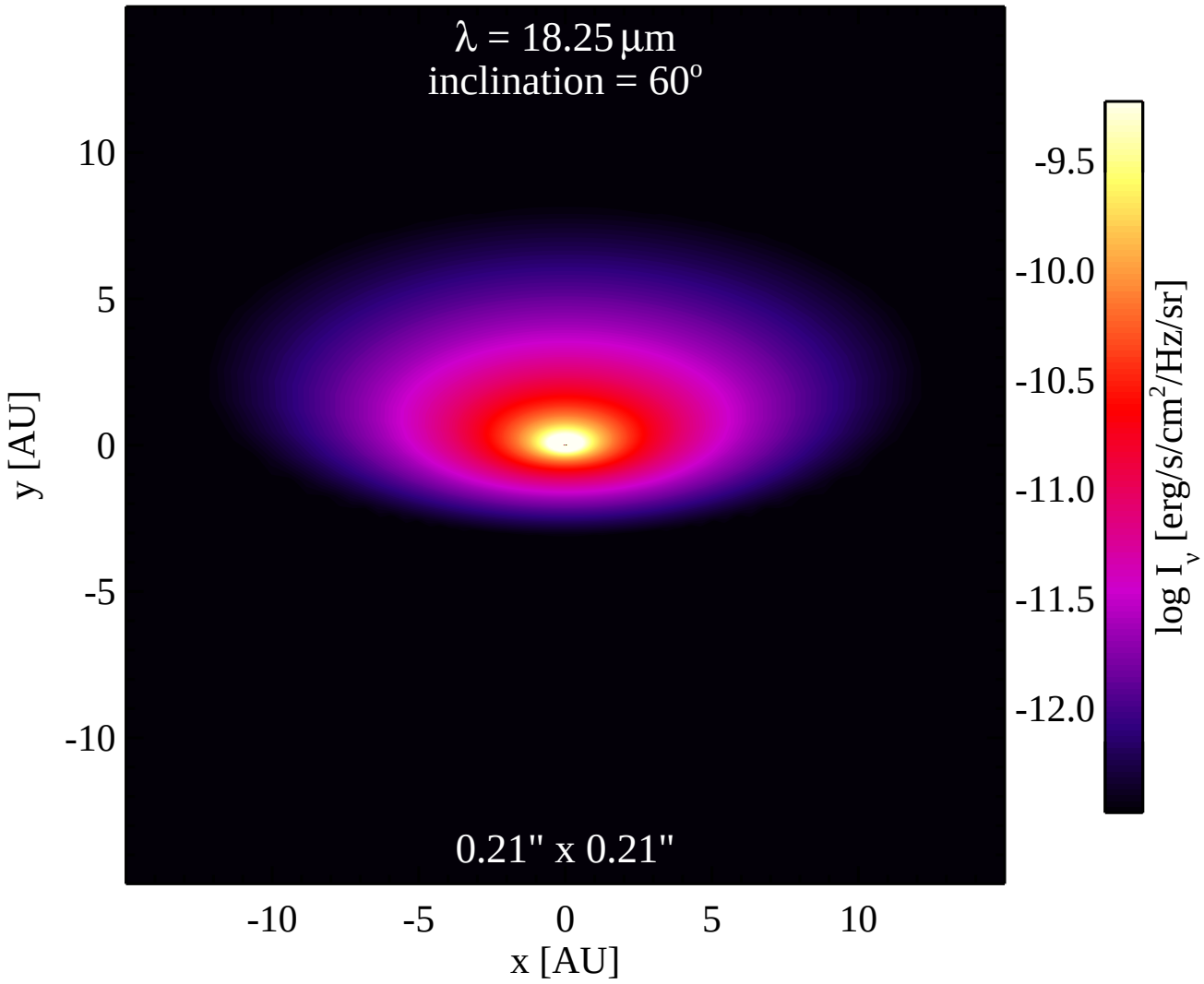

λ = 4.30 μm
inclination = 60°
0.0042" x 0.0042"
0.2
0.1
0.0
-0.1
-0.2
y [AU]
-0.2
-0.1
0.0
0.1
0.2
x [AU]
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

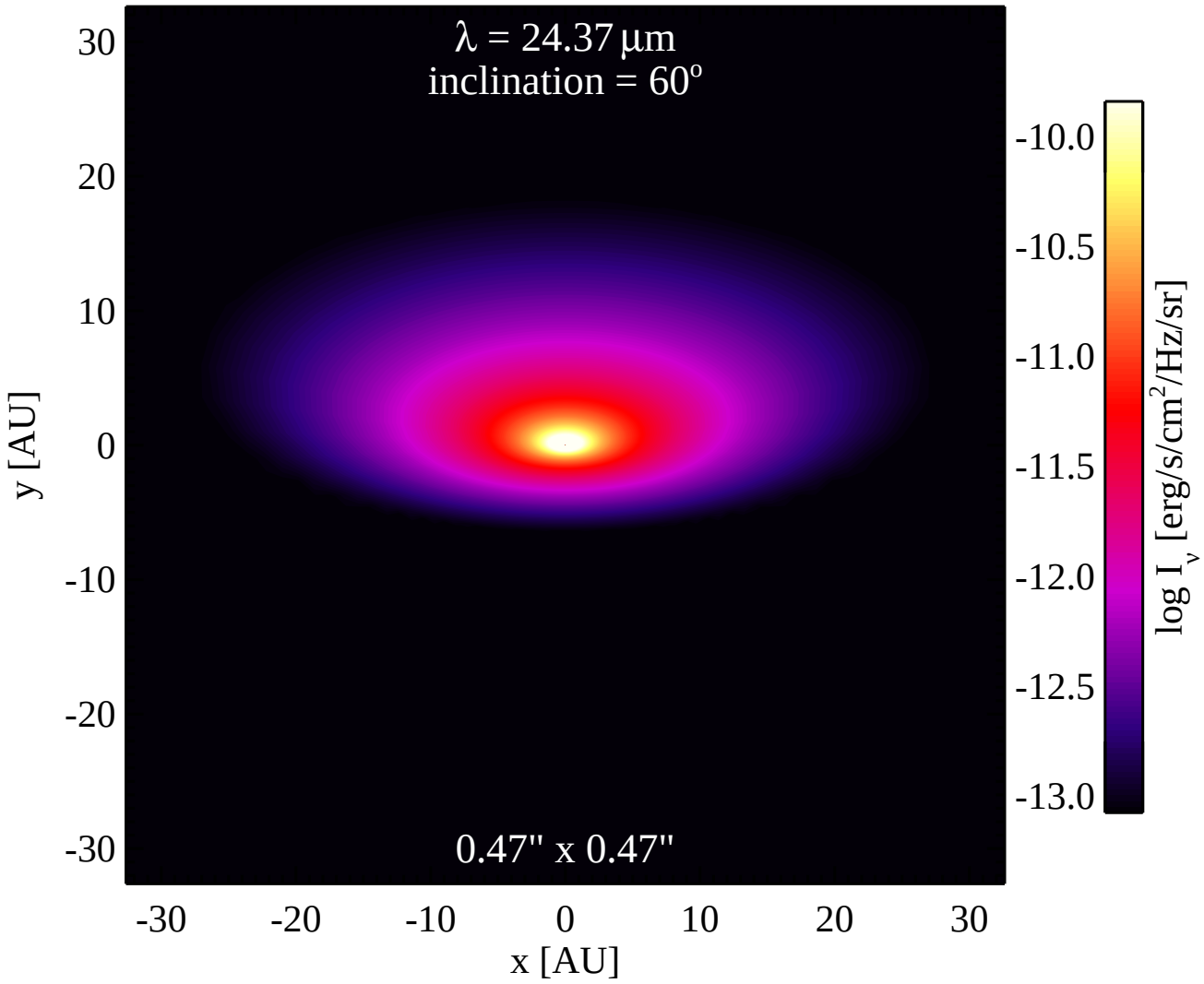

λ = 5.74 μm
inclination = 60°
0.0053" x 0.0053"
0.2
0.0
-0.2
y [AU]
-0.2
0.0
0.2
x [AU]
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
log I_ν [erg/s/cm²/Hz/sr]

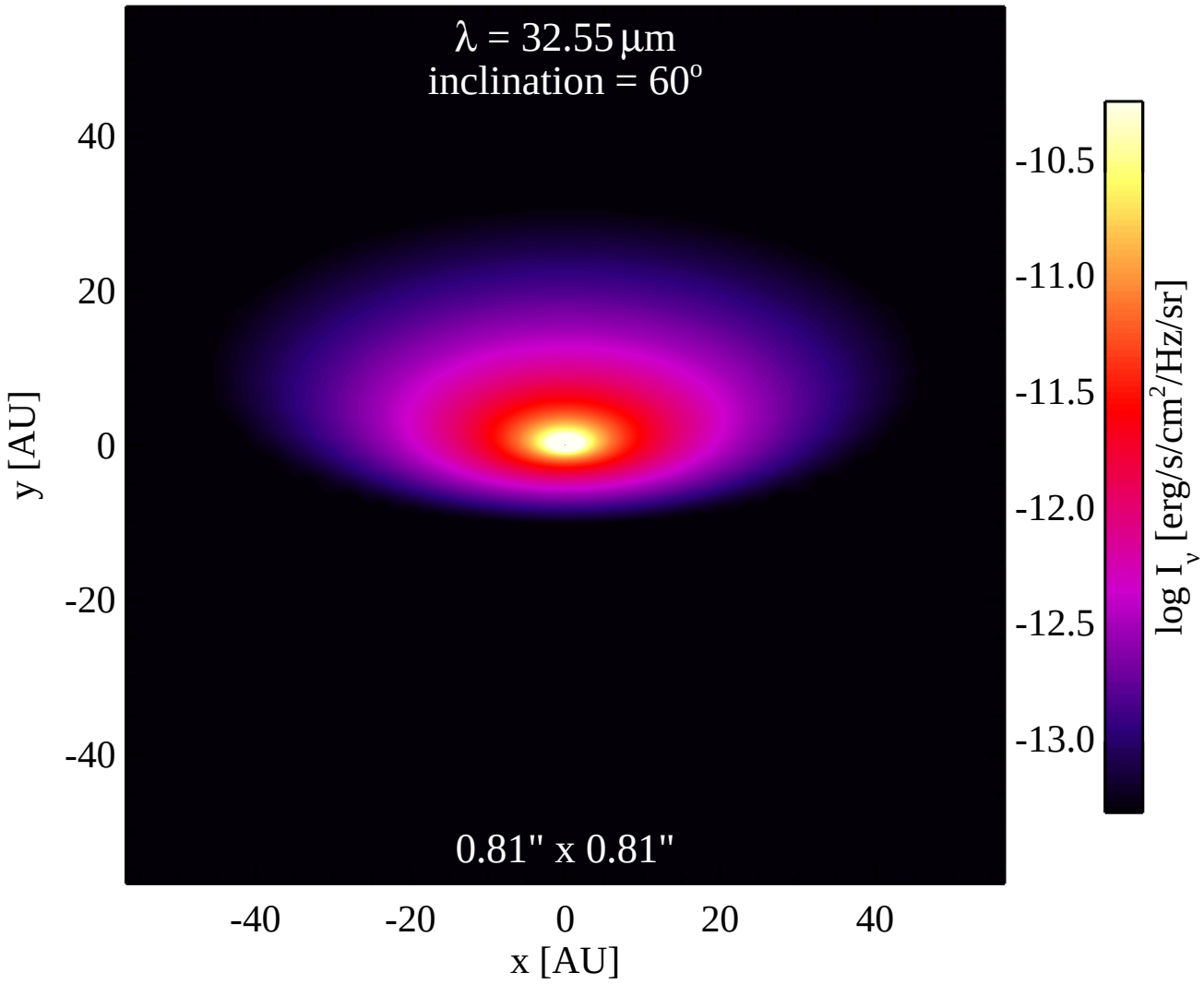

λ = 7.66 μm
inclination = 60°
0.0095" x 0.0095"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7.0
-7.5
-8.0
-8.5
-9.0
-9.5
-10.0
log I_ν [erg/s/cm²/Hz/sr]

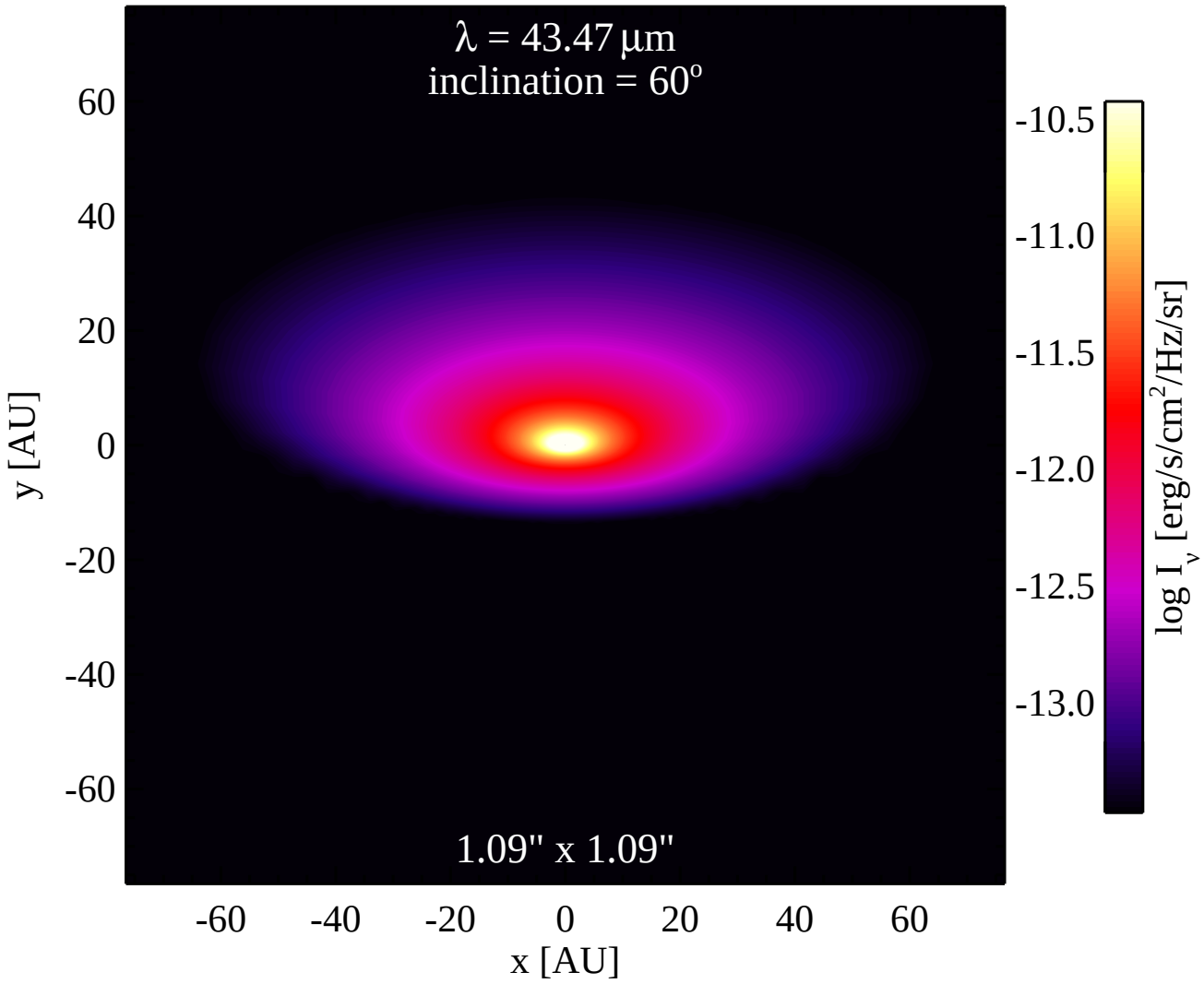

λ = 10.23 μm
inclination = 60°
0.036" x 0.036"
2
1
0
-1
-2
y [AU]
-2
-1
0
1
2
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

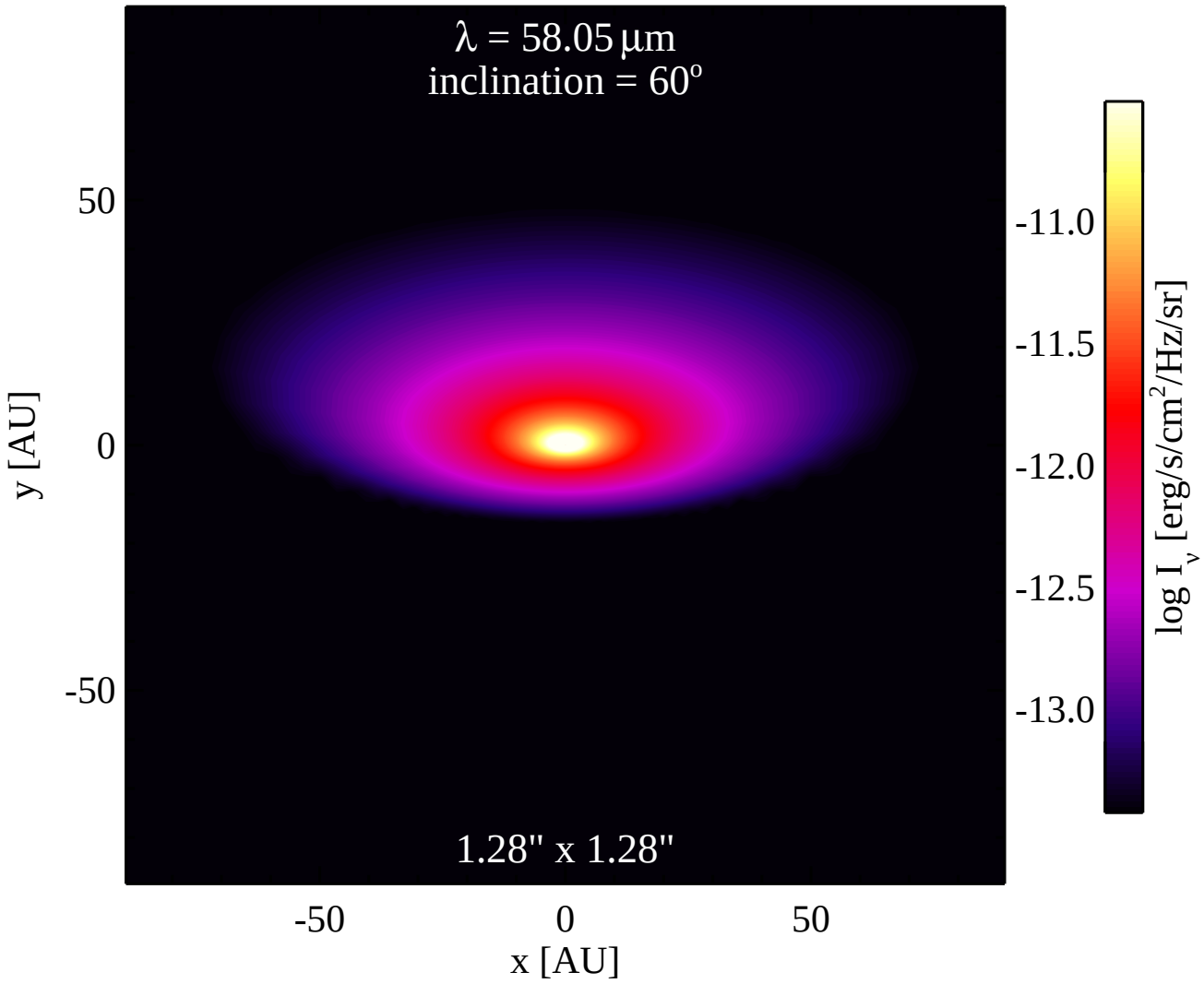

λ = 13.67 μm
inclination = 60°
0.065" x 0.065"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

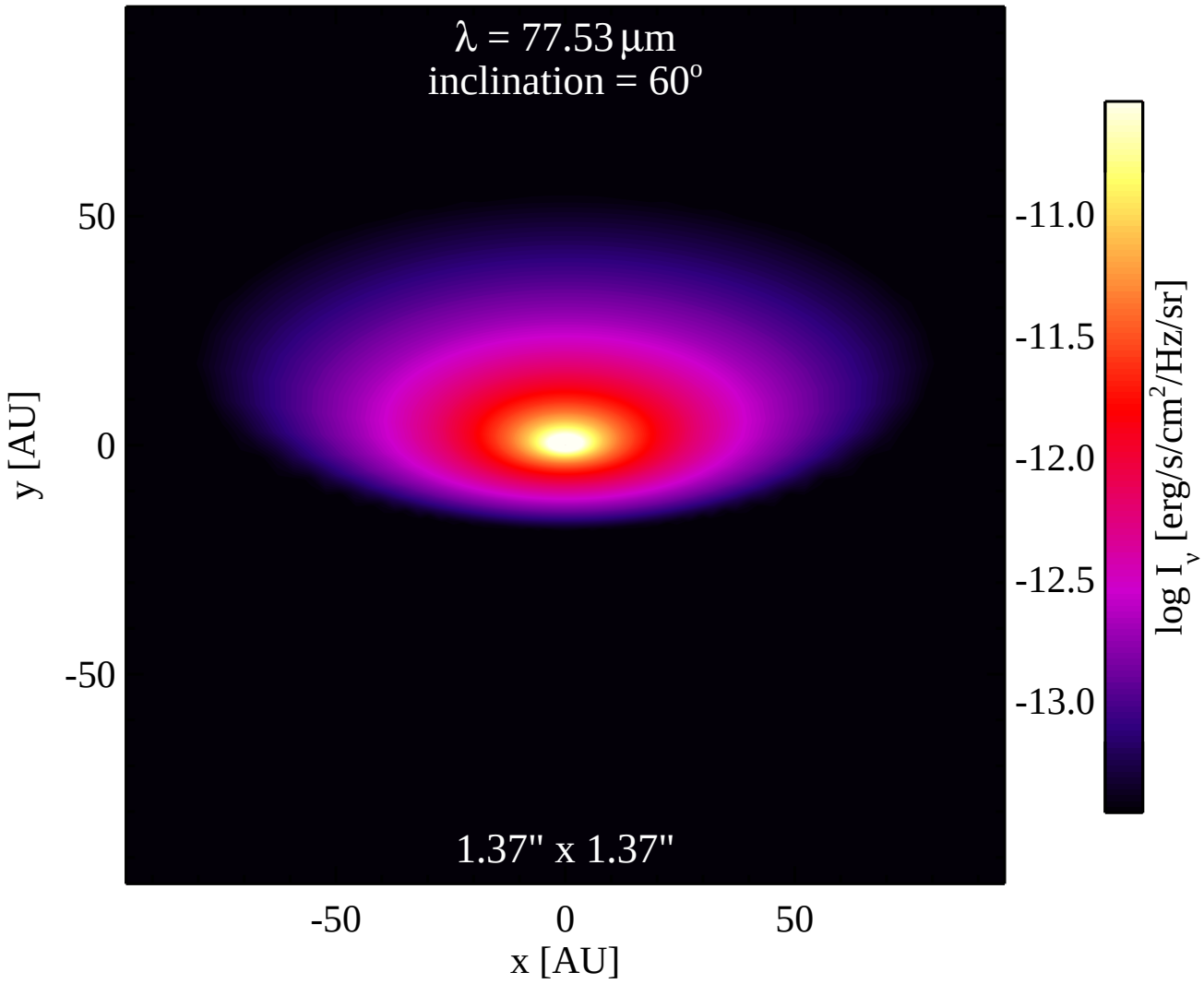

λ = 18.25 μm
inclination = 60°
0.21" x 0.21"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

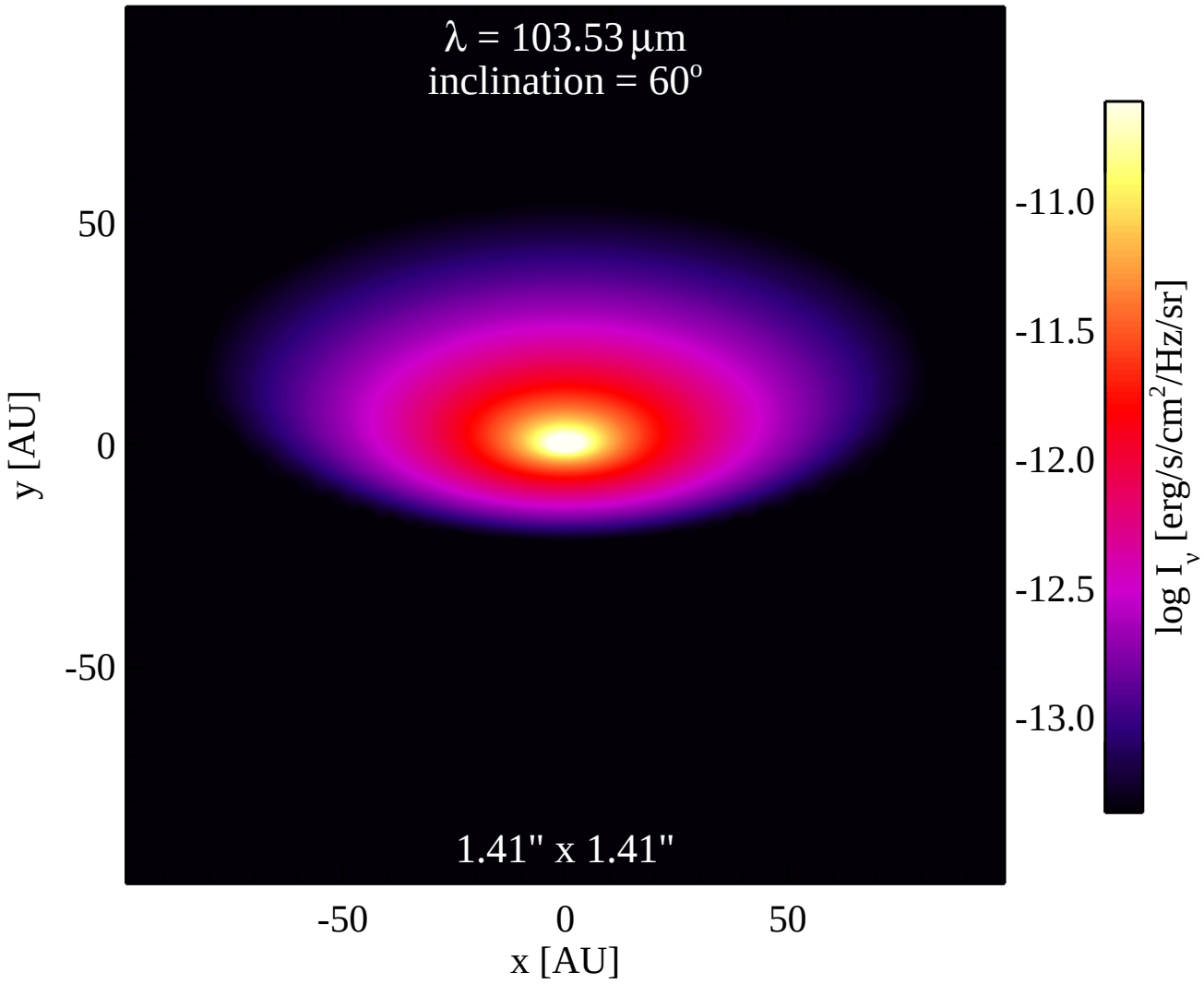

λ = 24.37 μm
inclination = 60°
0.47" x 0.47"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

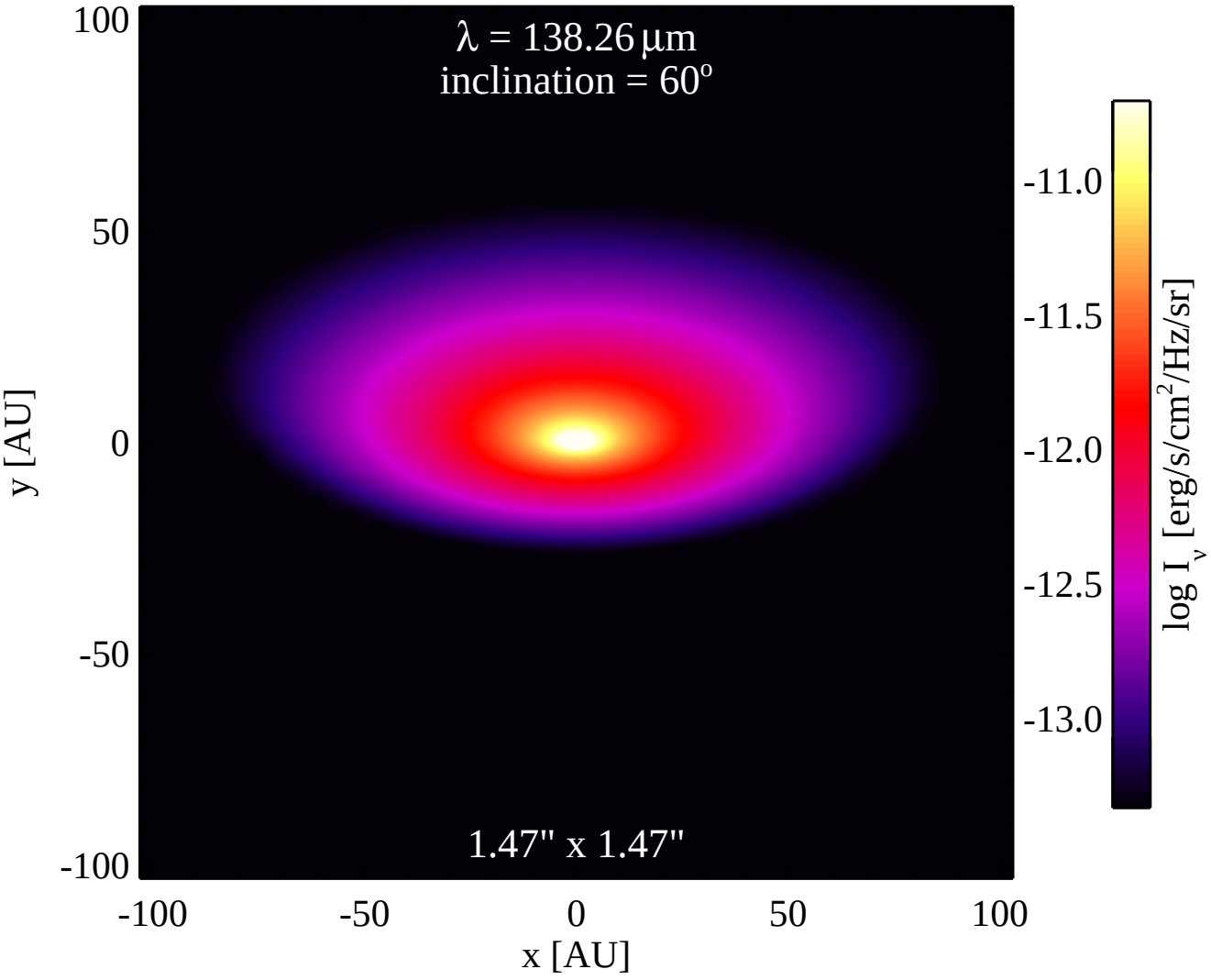

λ = 32.55 μm
inclination = 60°
0.81" x 0.81"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

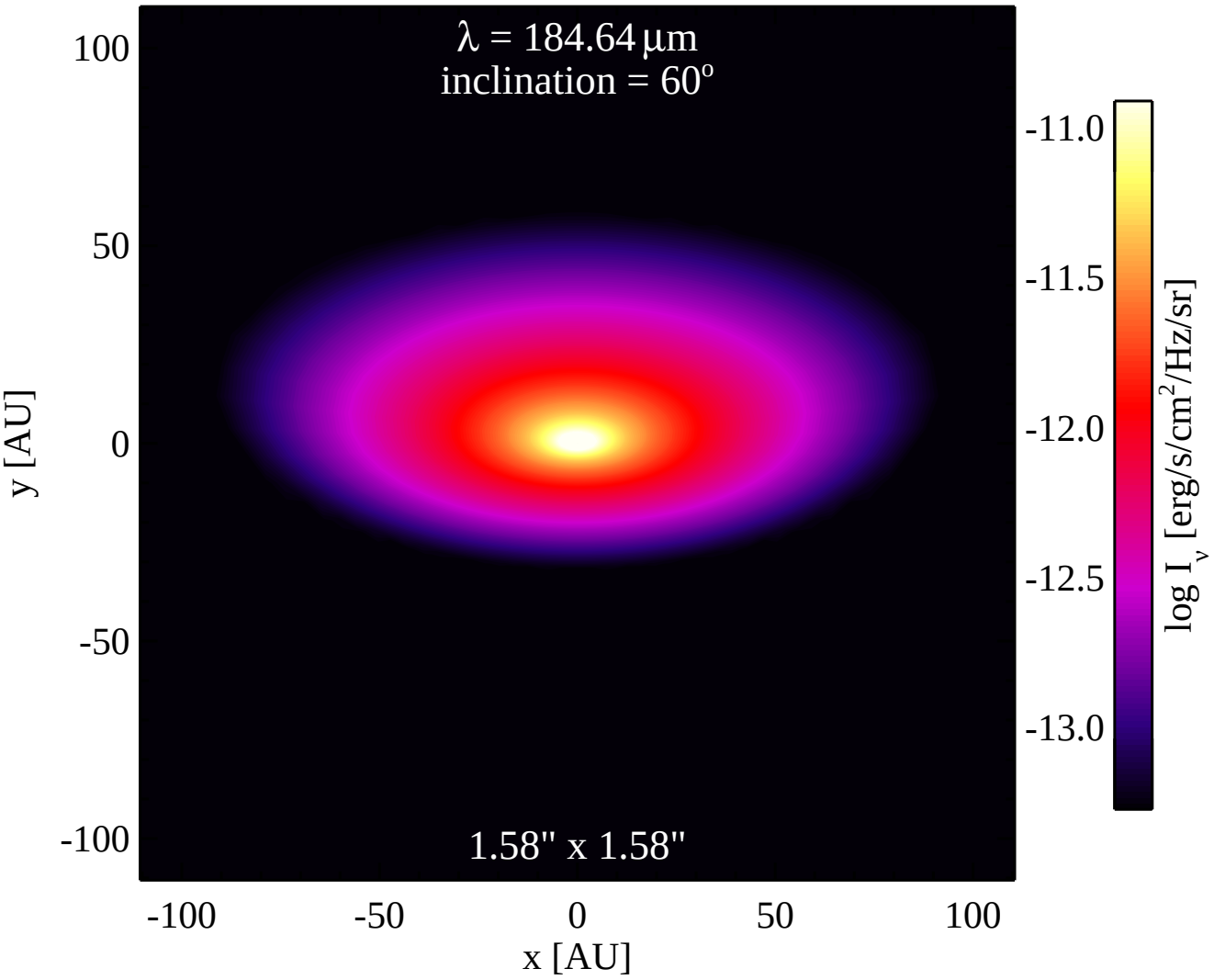

λ = 43.47 μm
inclination = 60°
1.09" x 1.09"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

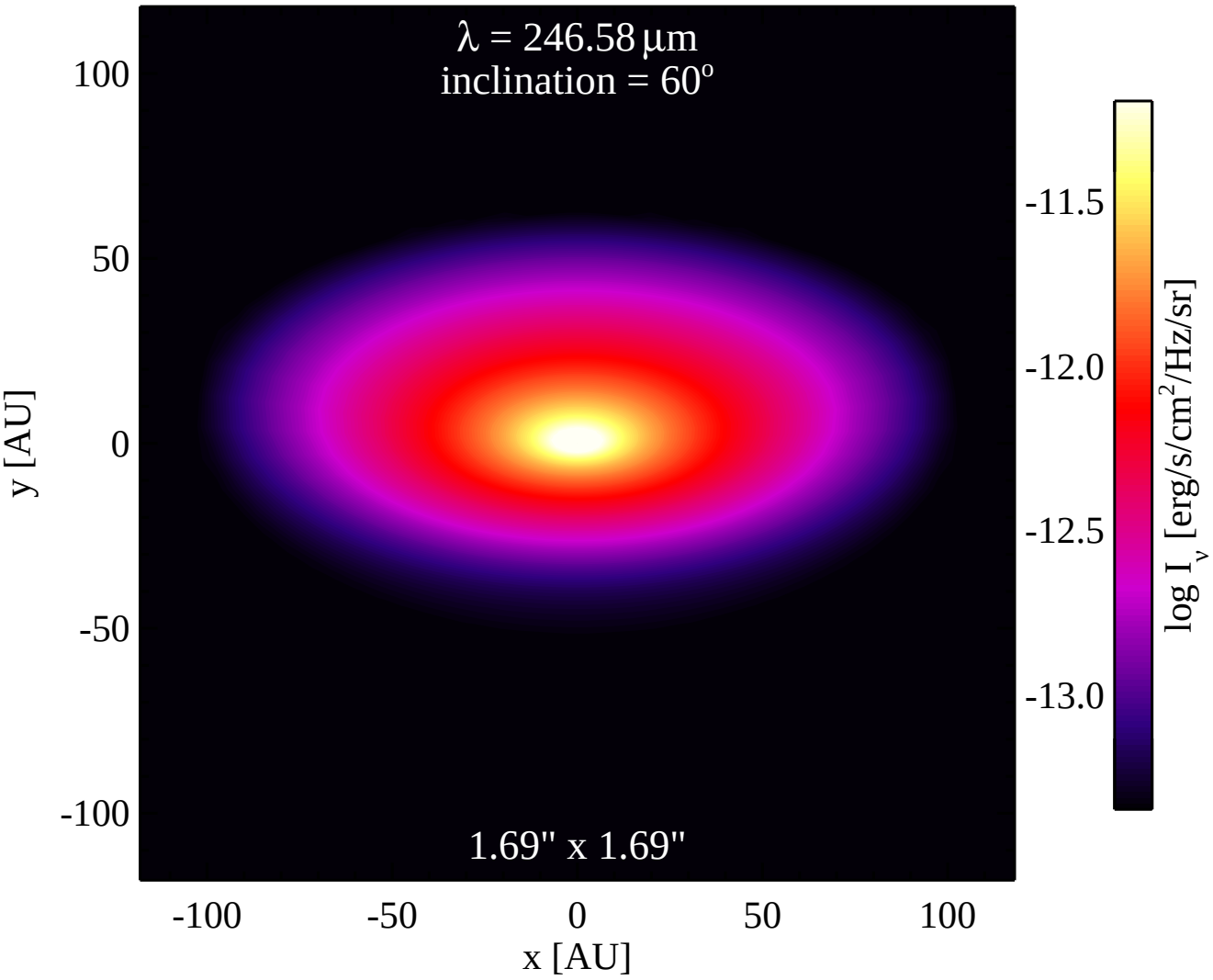

λ = 58.05 μm
inclination = 60°
1.28" x 1.28"
50
0
-50
y [AU]
-50
0
50
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

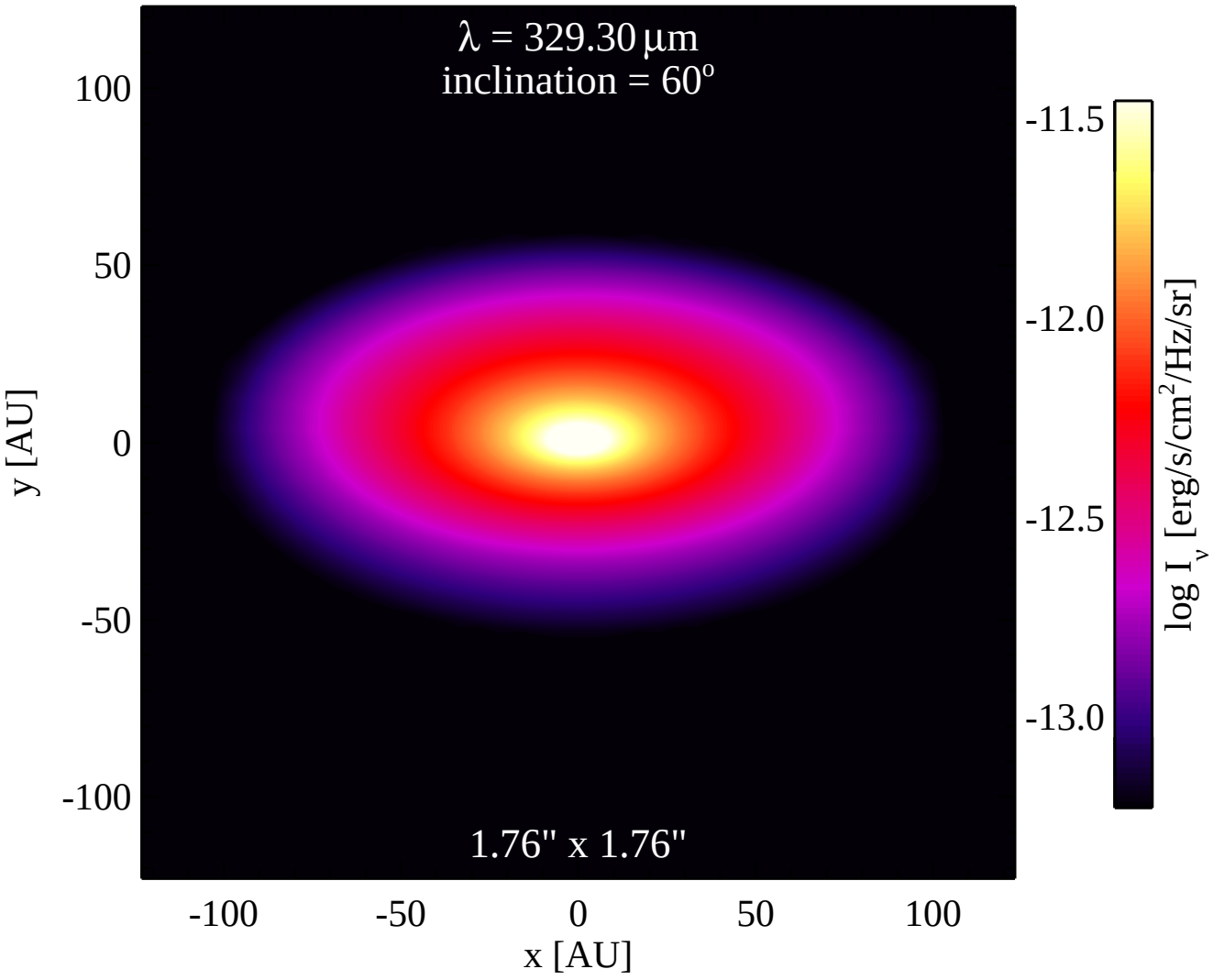

λ = 77.53 μm
inclination = 60°
1.37" x 1.37"
50
0
-50
y [AU]
-50
0
50
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

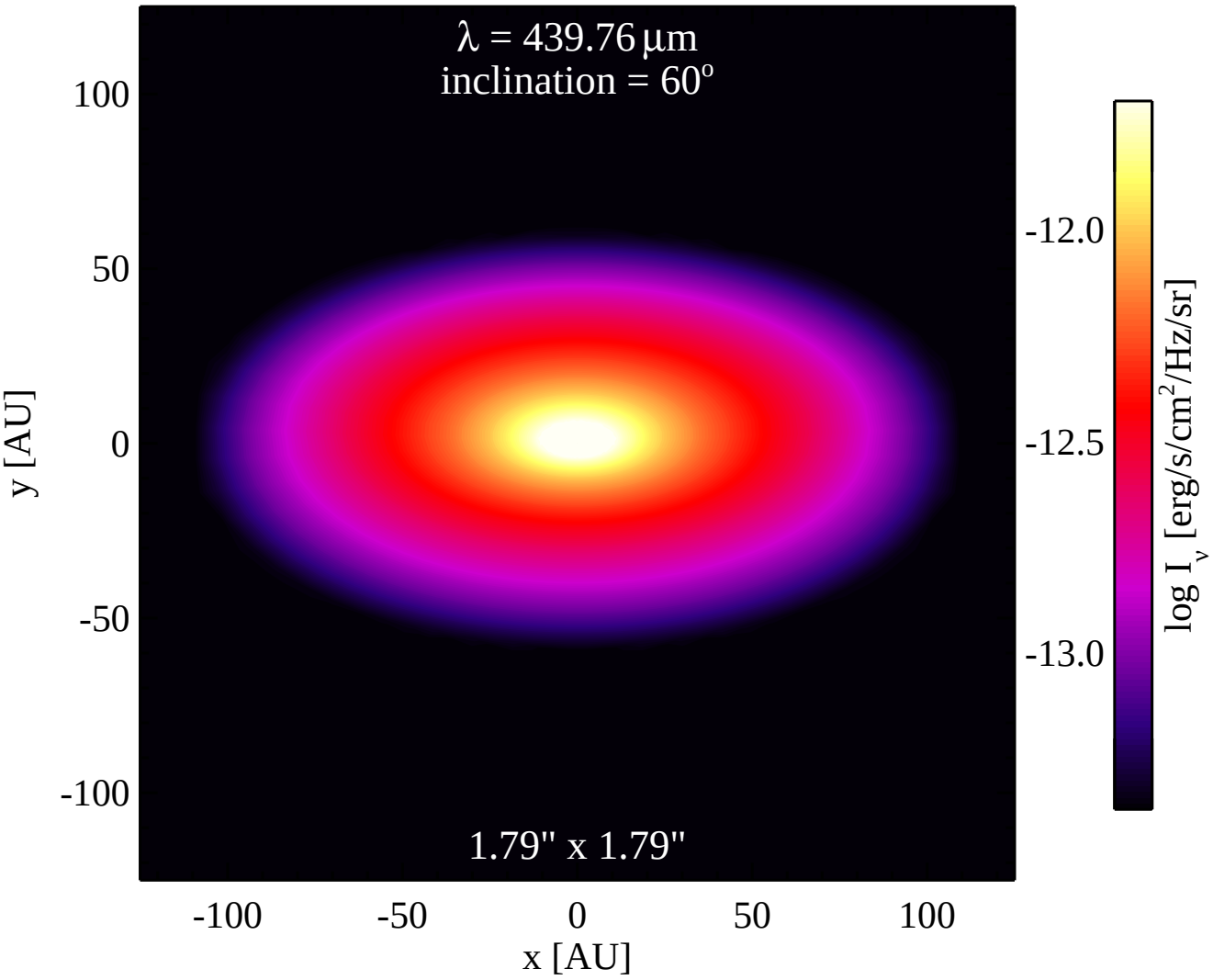

λ = 103.53 μm
inclination = 60°
1.41" x 1.41"
50
0
-50
y [AU]
-50
0
50
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

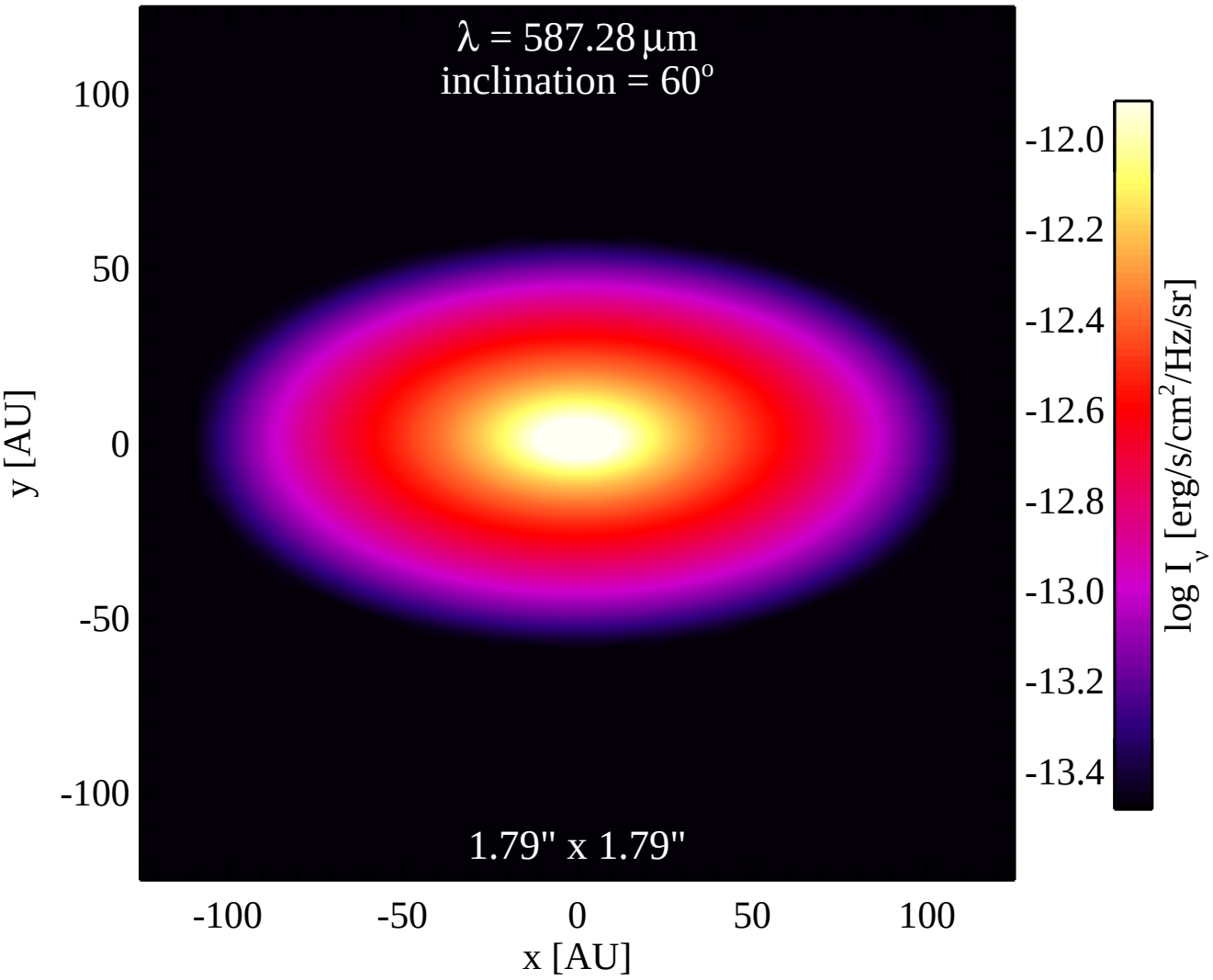

λ = 138.26 μm
inclination = 60°
1.47" x 1.47"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

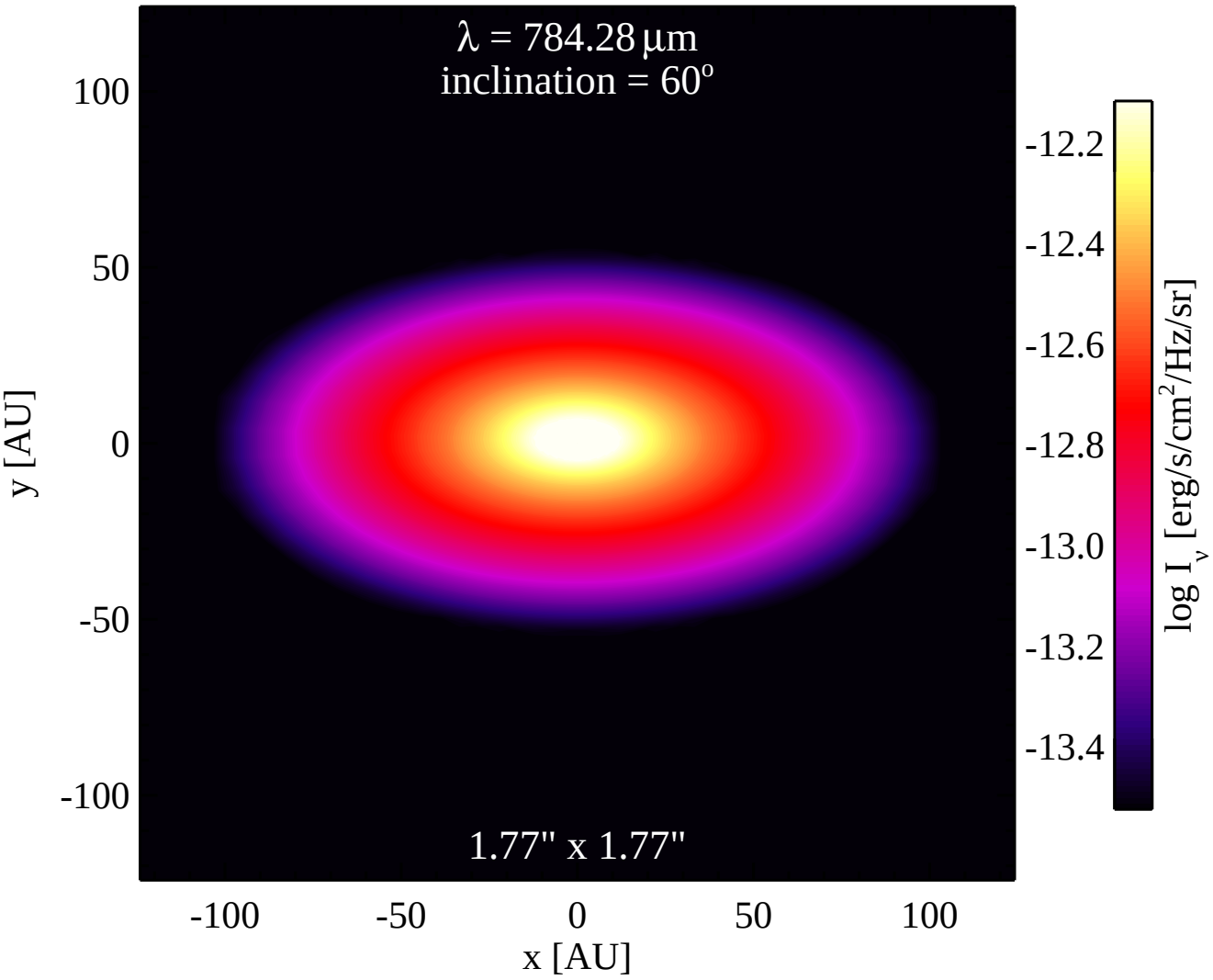

λ = 184.64 μm
inclination = 60°
1.58" x 1.58"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

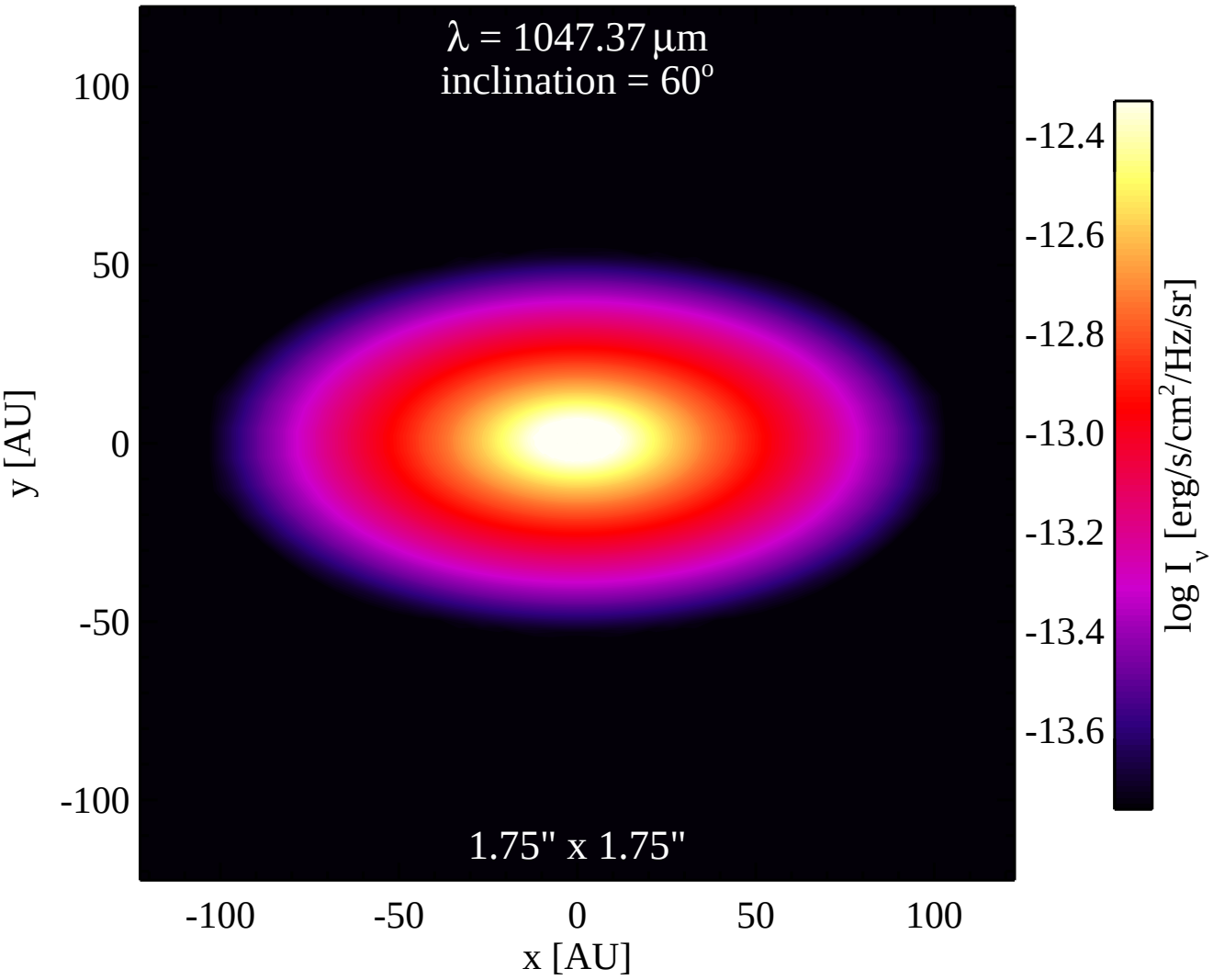

λ = 246.58 μm
inclination = 60°
1.69" x 1.69"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

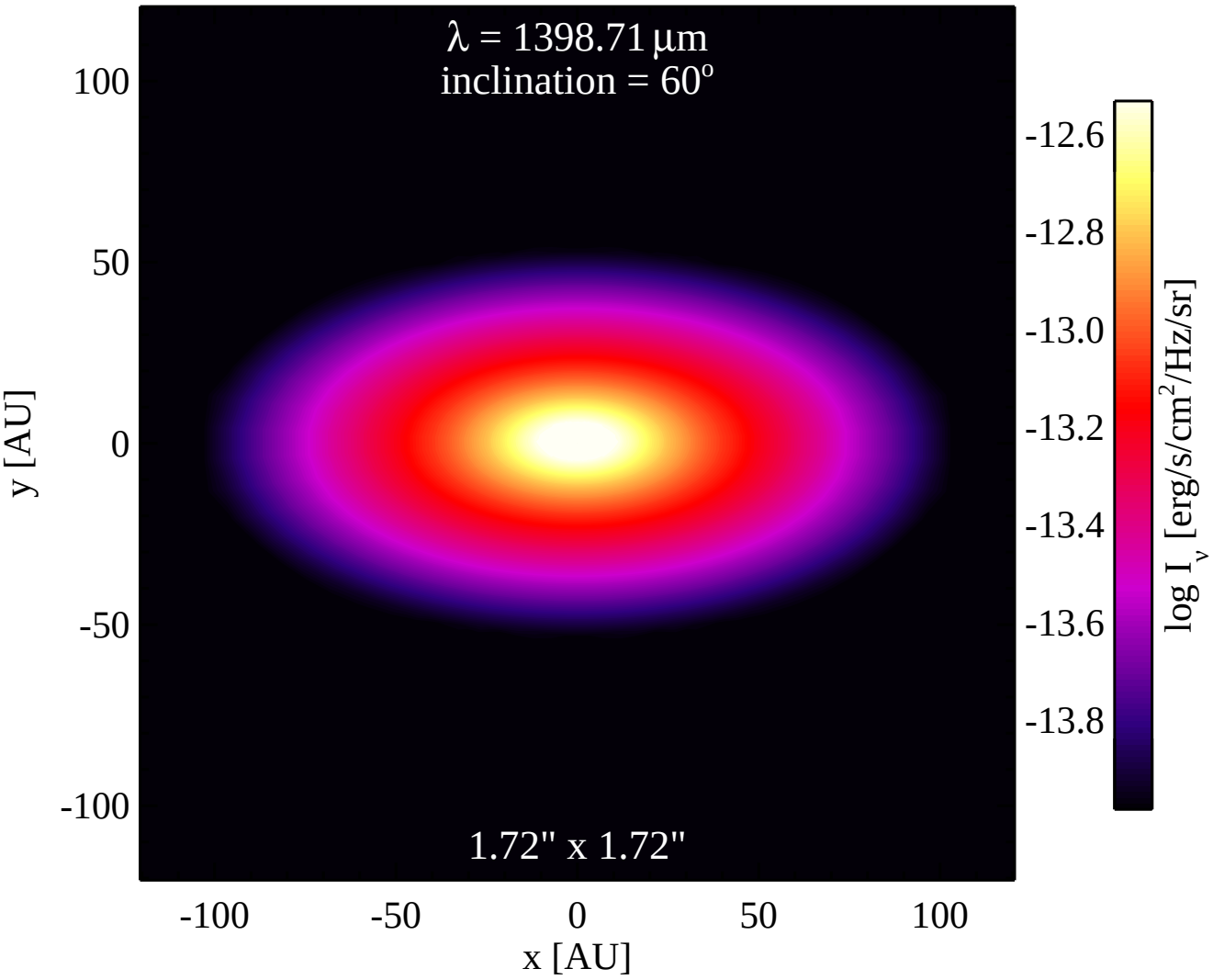

λ = 329.30 μm
inclination = 60°
1.76" x 1.76"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

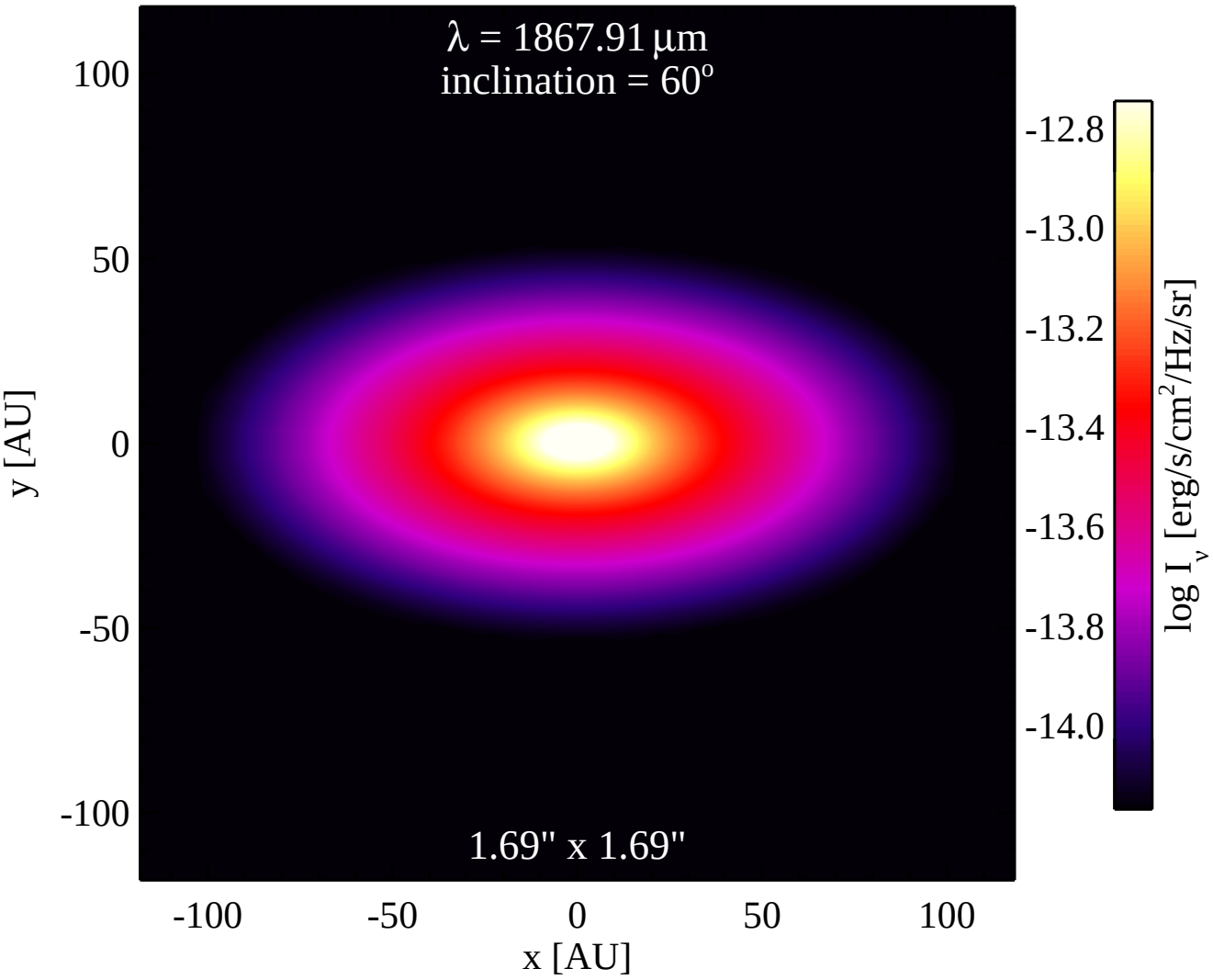

λ = 439.76 μm
inclination = 60°
1.79" x 1.79"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

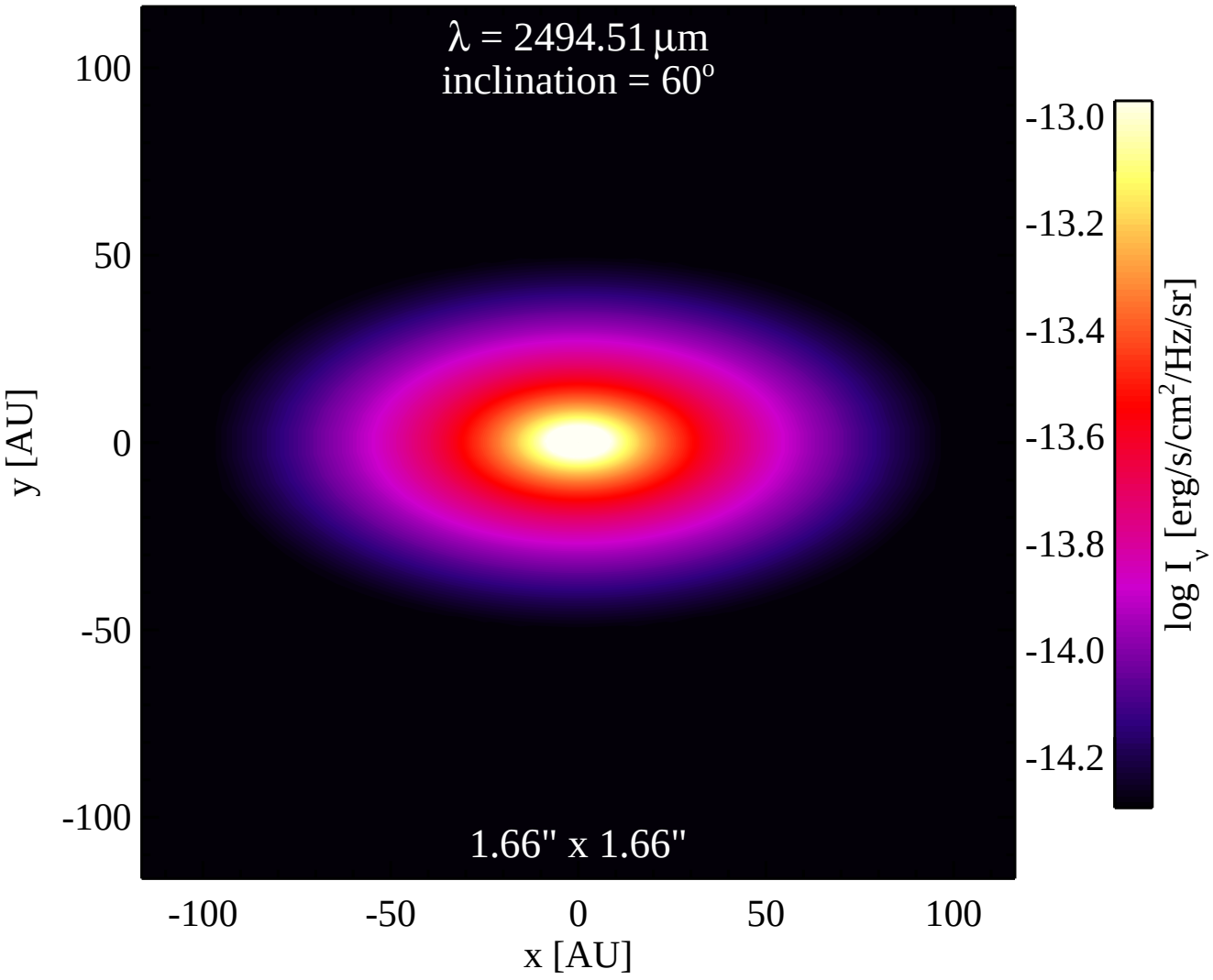

λ = 587.28 μm
inclination = 60°
1.79" x 1.79"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

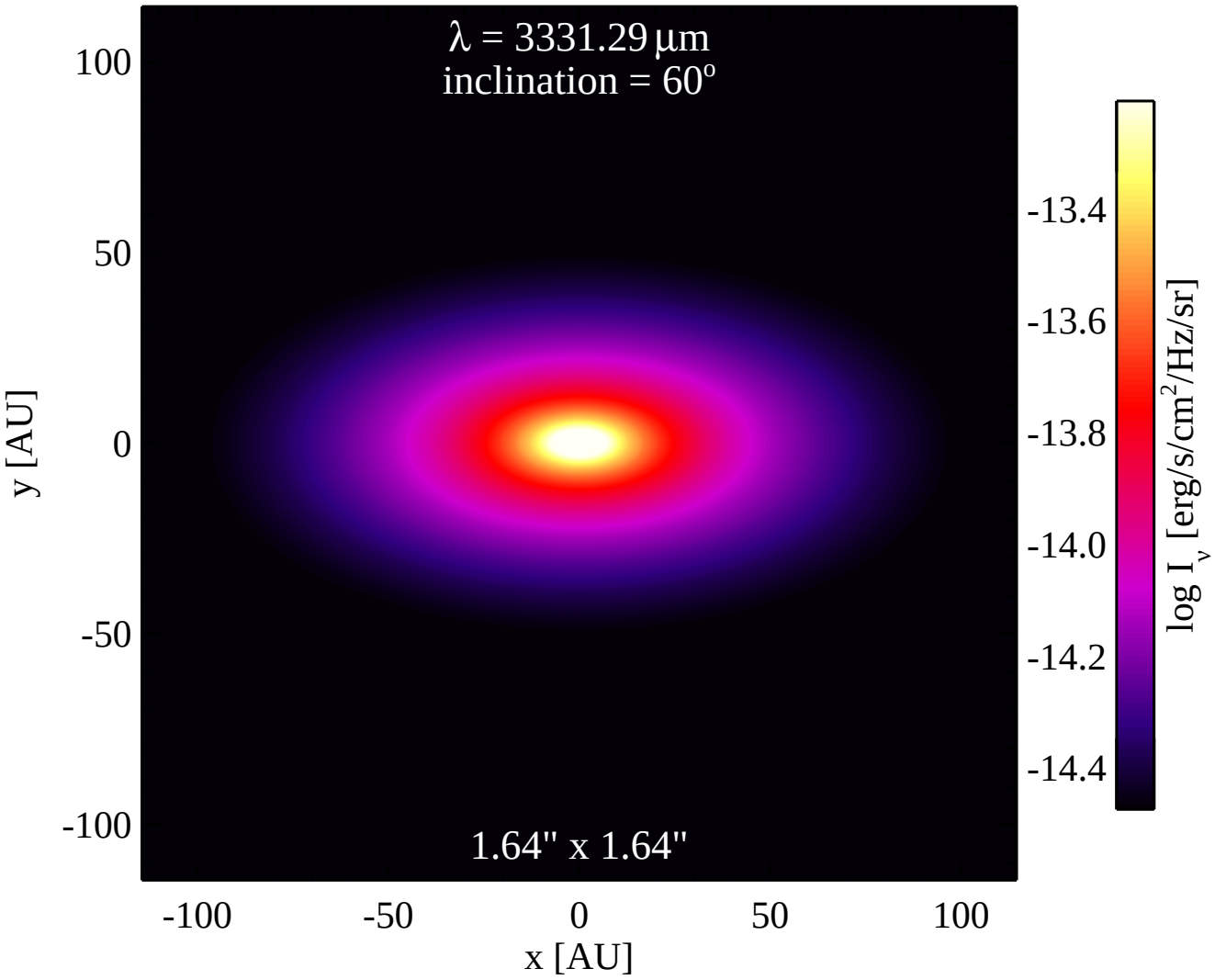

λ = 784.28 μm
inclination = 60°
1.77" x 1.77"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.2
-12.4
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

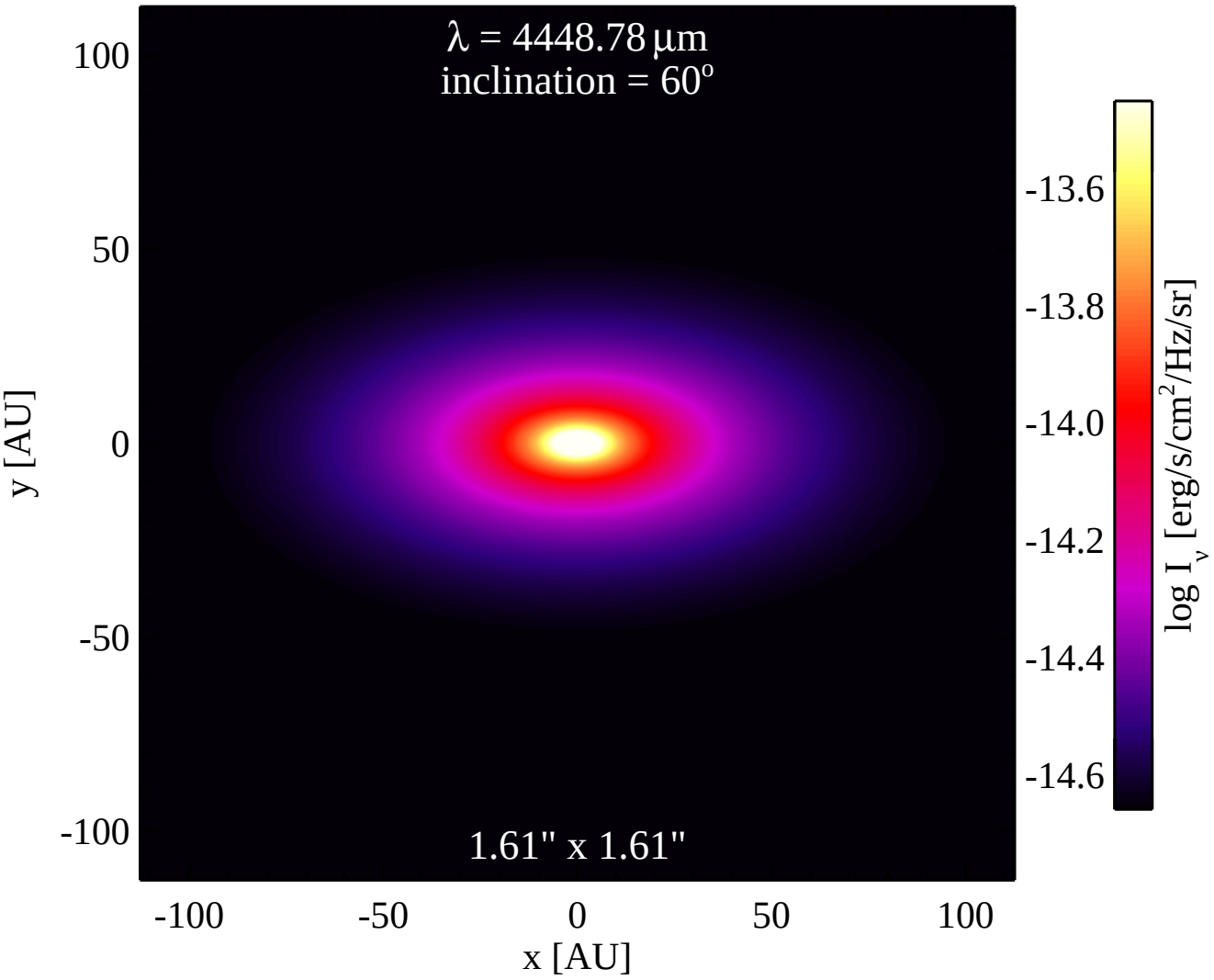

λ = 1047.37 μm
inclination = 60°
1.75" x 1.75"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.4
-12.6
-12.8
-13.0
-13.2
-13.4
-13.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 1398.71 μm
inclination = 60°
1.72" x 1.72"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
-13.6
-13.8
log I_ν [erg/s/cm²/Hz/sr]


λ = 1867.91 μm
inclination = 60°
1.69" x 1.69"
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
log I_ν [erg/s/cm²/Hz/sr]


λ = 2494.51 μm
inclination = 60°
1.66" x 1.66"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.0
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
log I_ν [erg/s/cm²/Hz/sr]


λ = 3331.29 μm
inclination = 60°
1.64" x 1.64"
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 = 4448.78 μm
inclination = 60°
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
-14.6
log I_ν [erg/s/cm²/Hz/sr]