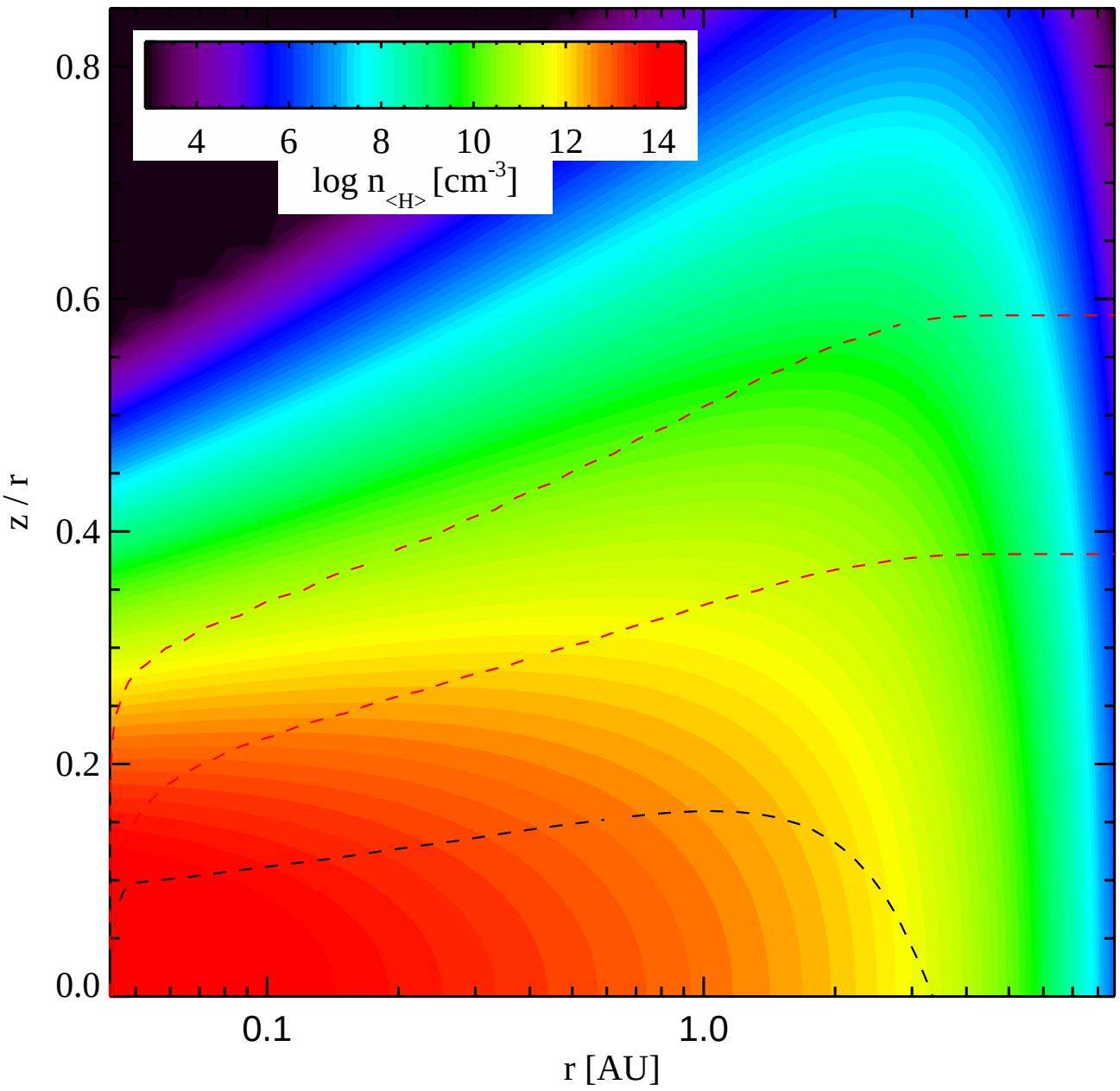
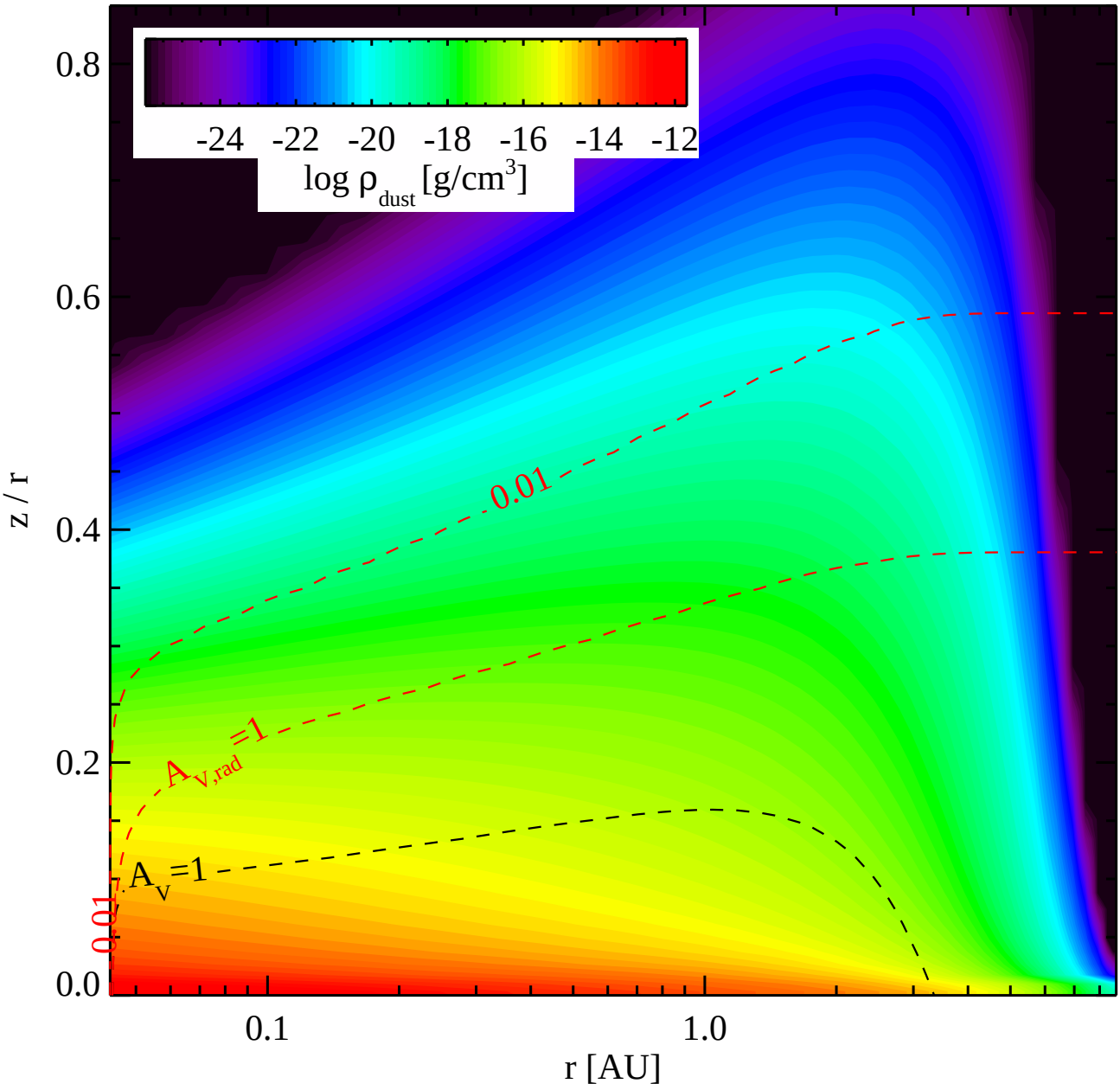
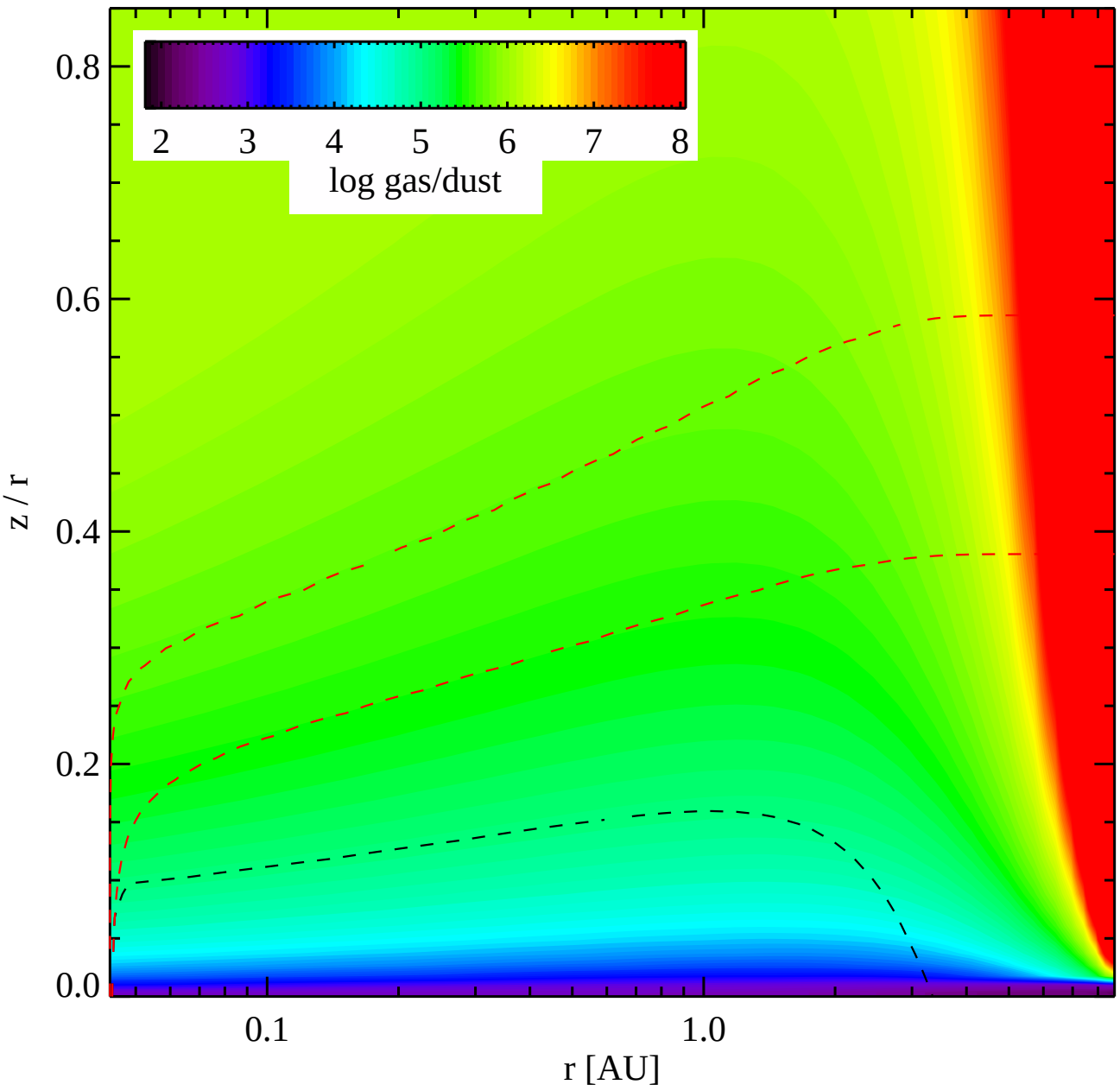
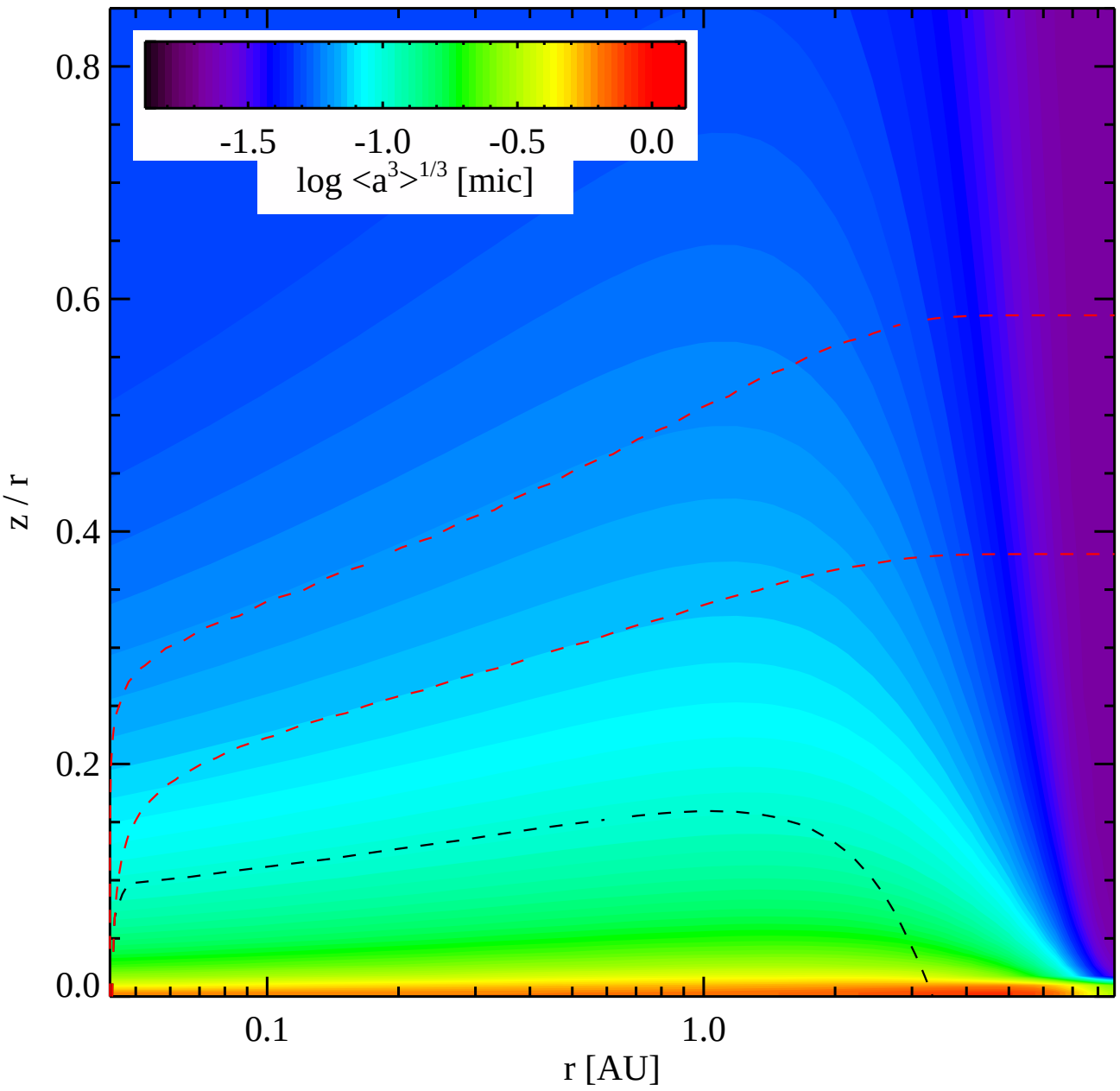
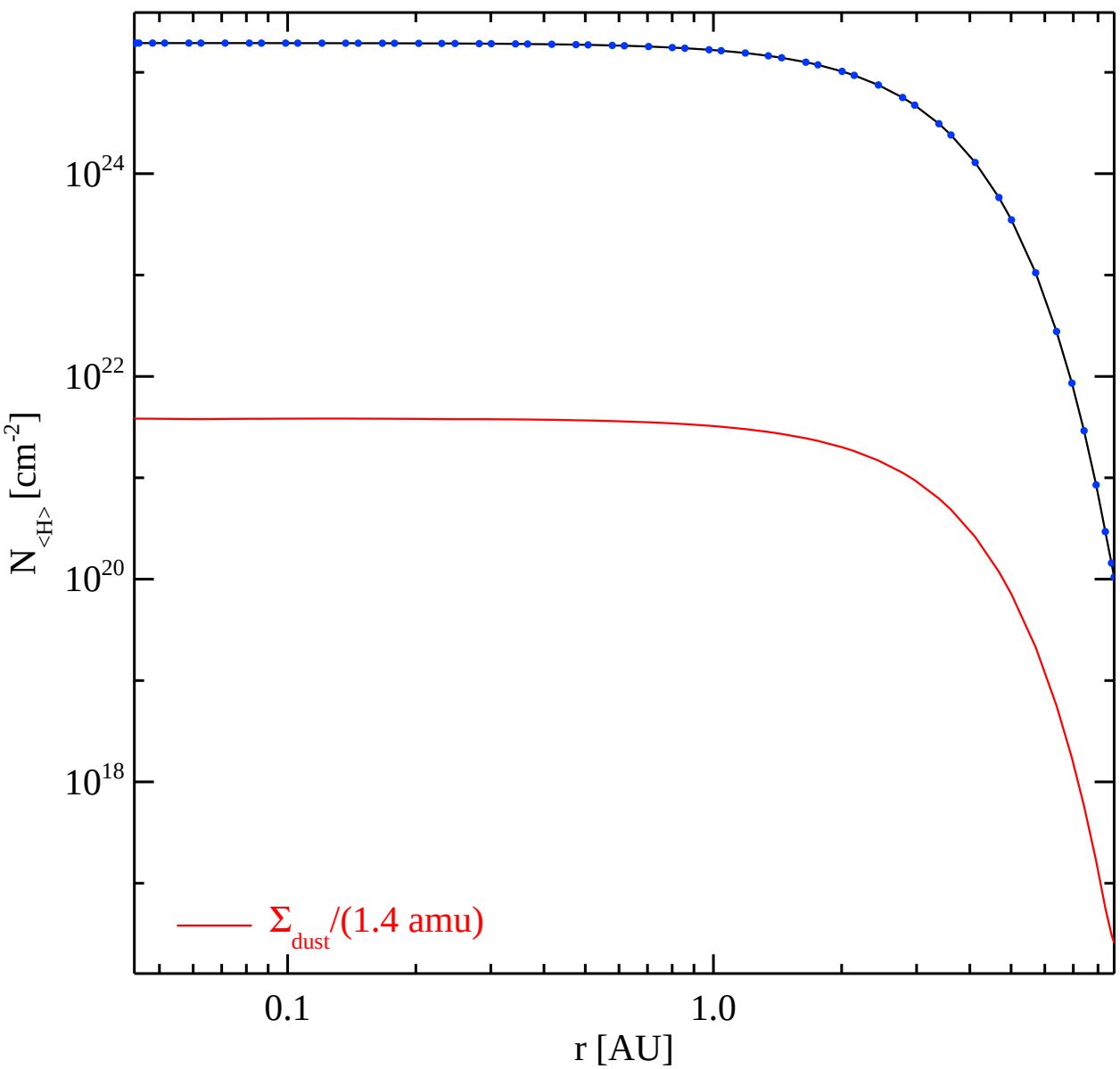
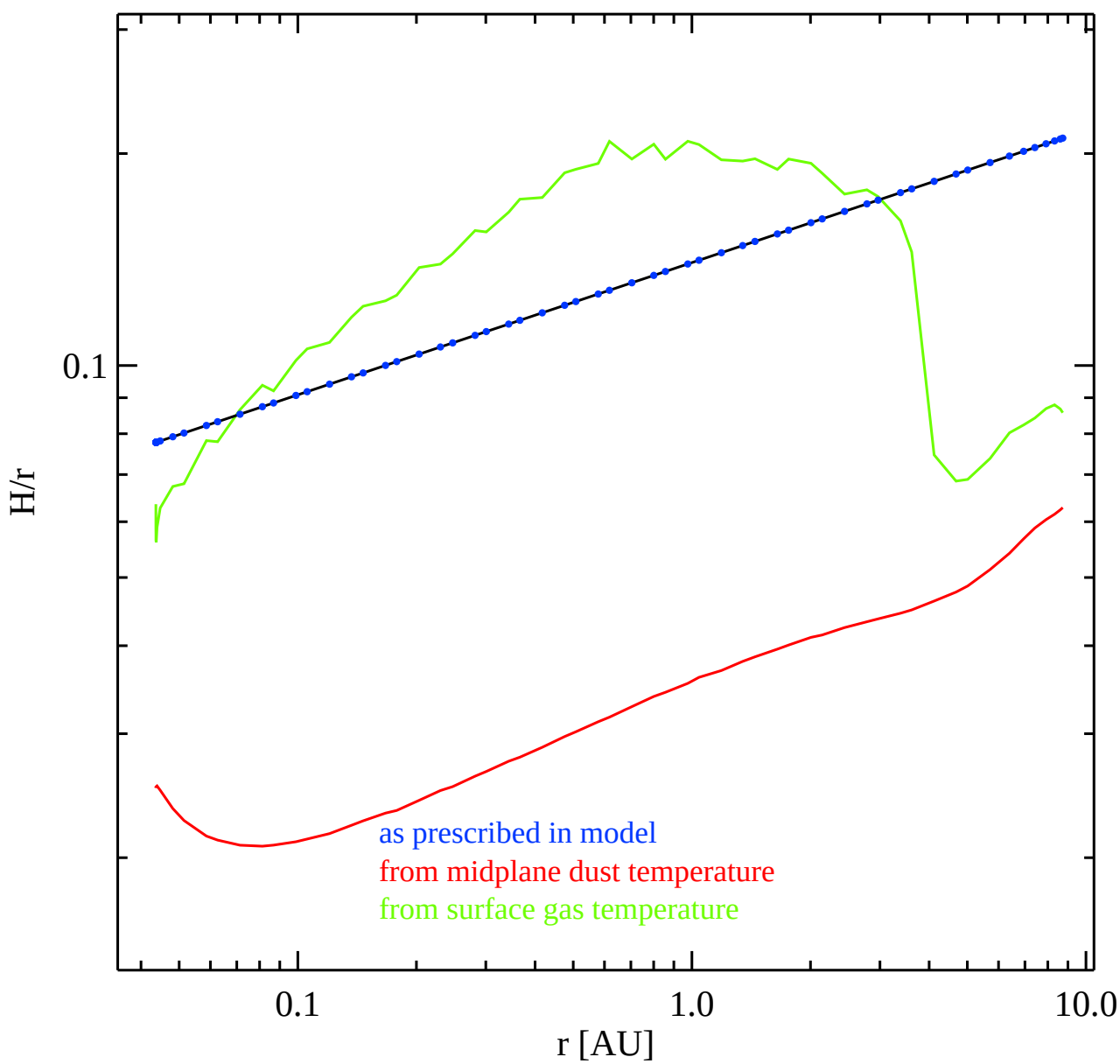

4
6
8
10
12
14
log n<H> [cm-3]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
r [AU]

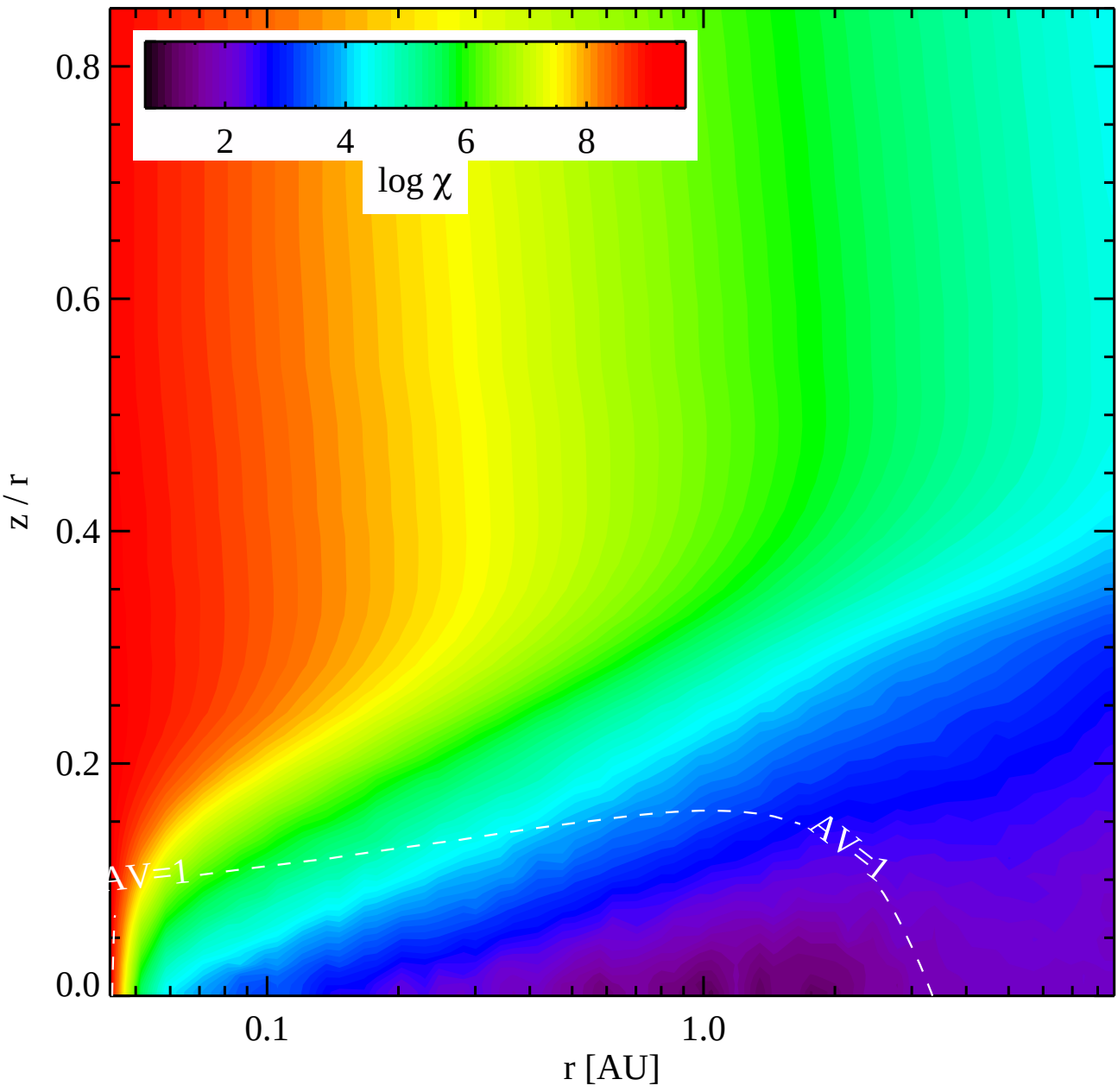

-24 -22 -20 -18 -16 -14 -12
log ρ dust [g/cm3]
0.8
0.6
0.4
0.2
0.0
z / r
0.01
AV,rad =1
AV =1
0.01
0.1
1.0
r [AU]

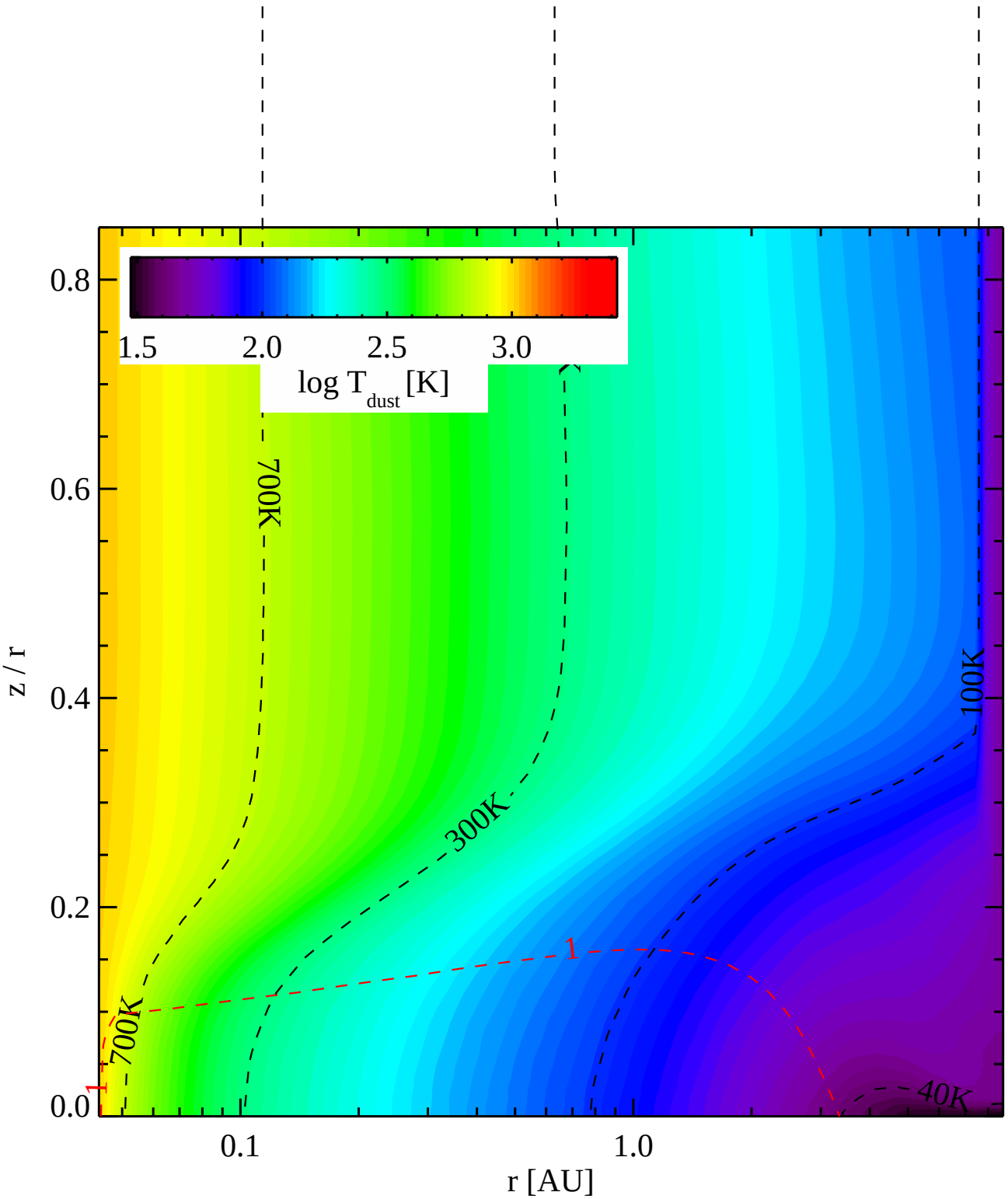

2
3
4
5
6
7
8
log gas/dust
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
r [AU]

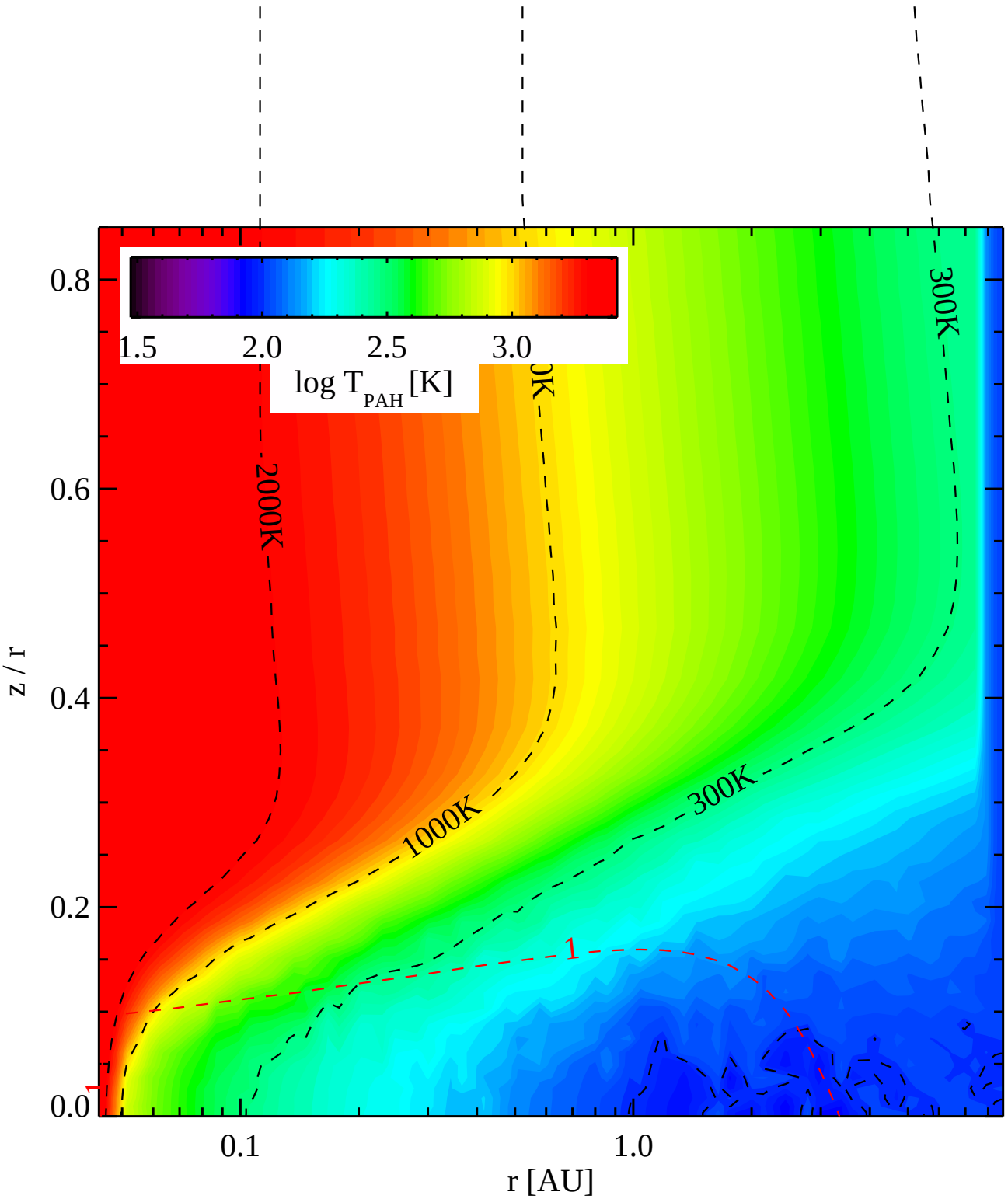

-1.5
-1.0
-0.5
0.0
log <a^3>^1/3 [mic]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
r [AU]

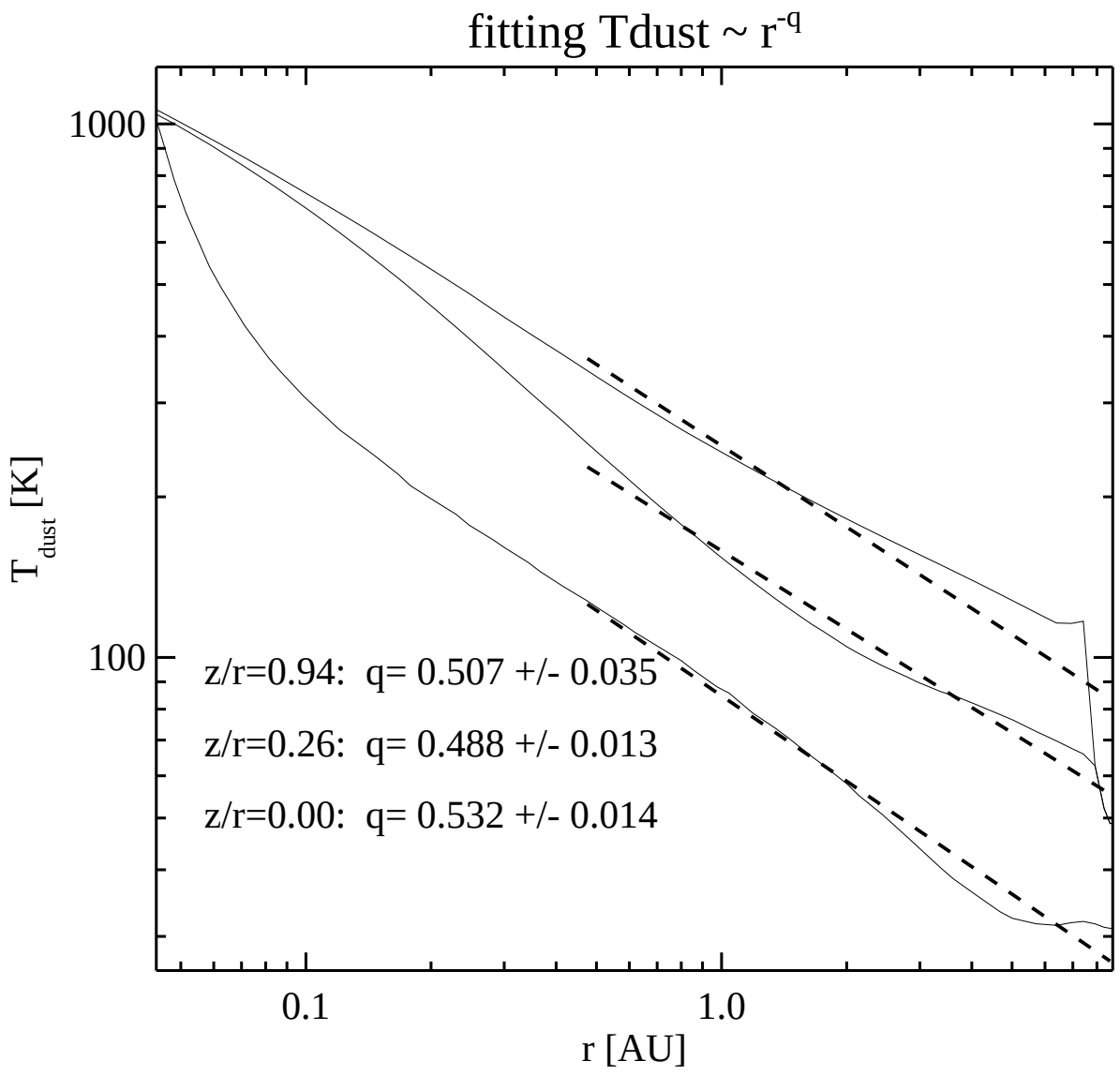

10^{24}
10^{22}
10^{20}
10^{18}
$N_{<H>}$ [cm^{-2}]
Σ_{dust}/(1.4 amu)
0.1
1.0
r [AU]

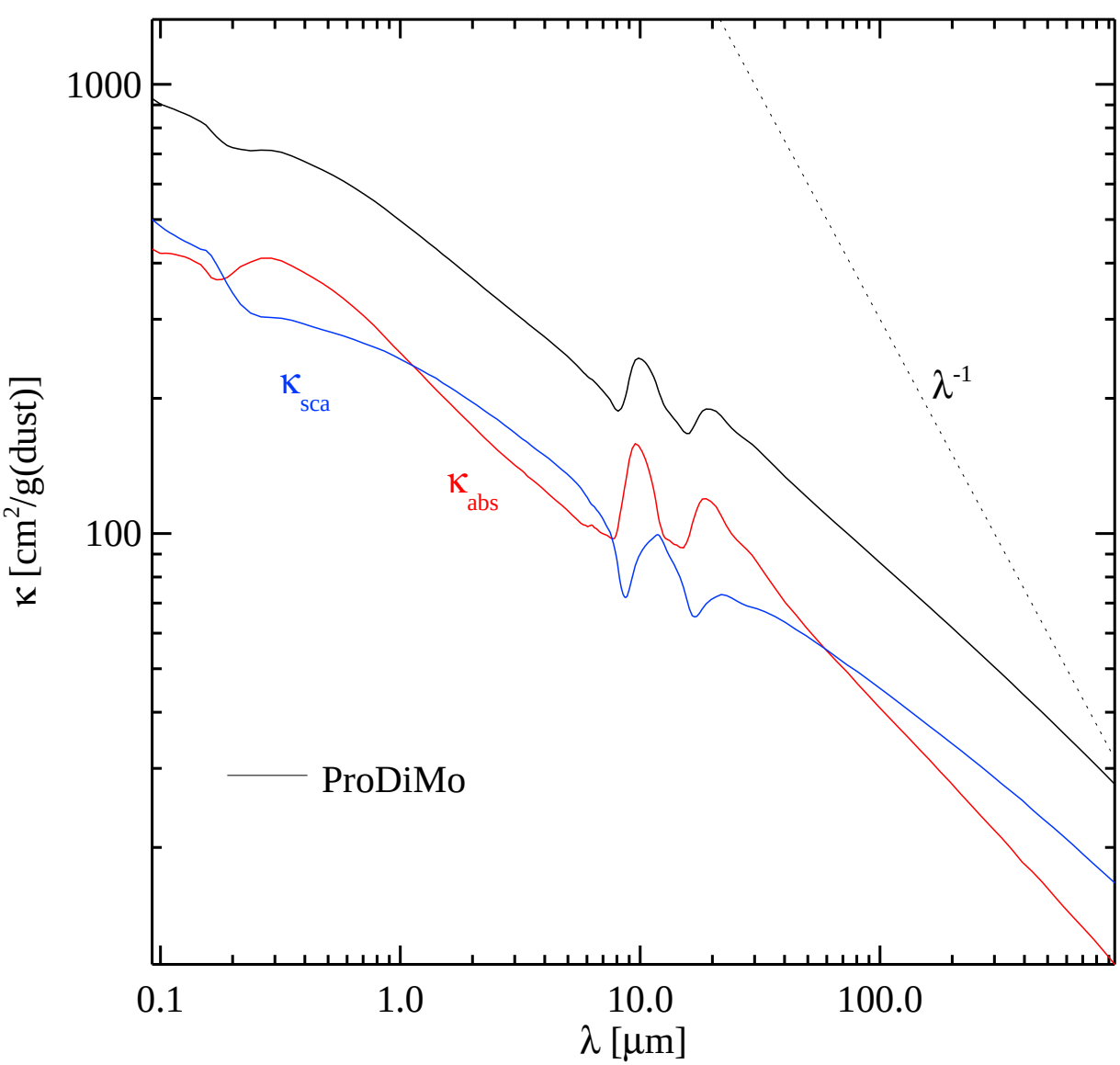

0.1
H/r
0.1
1.0
10.0
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

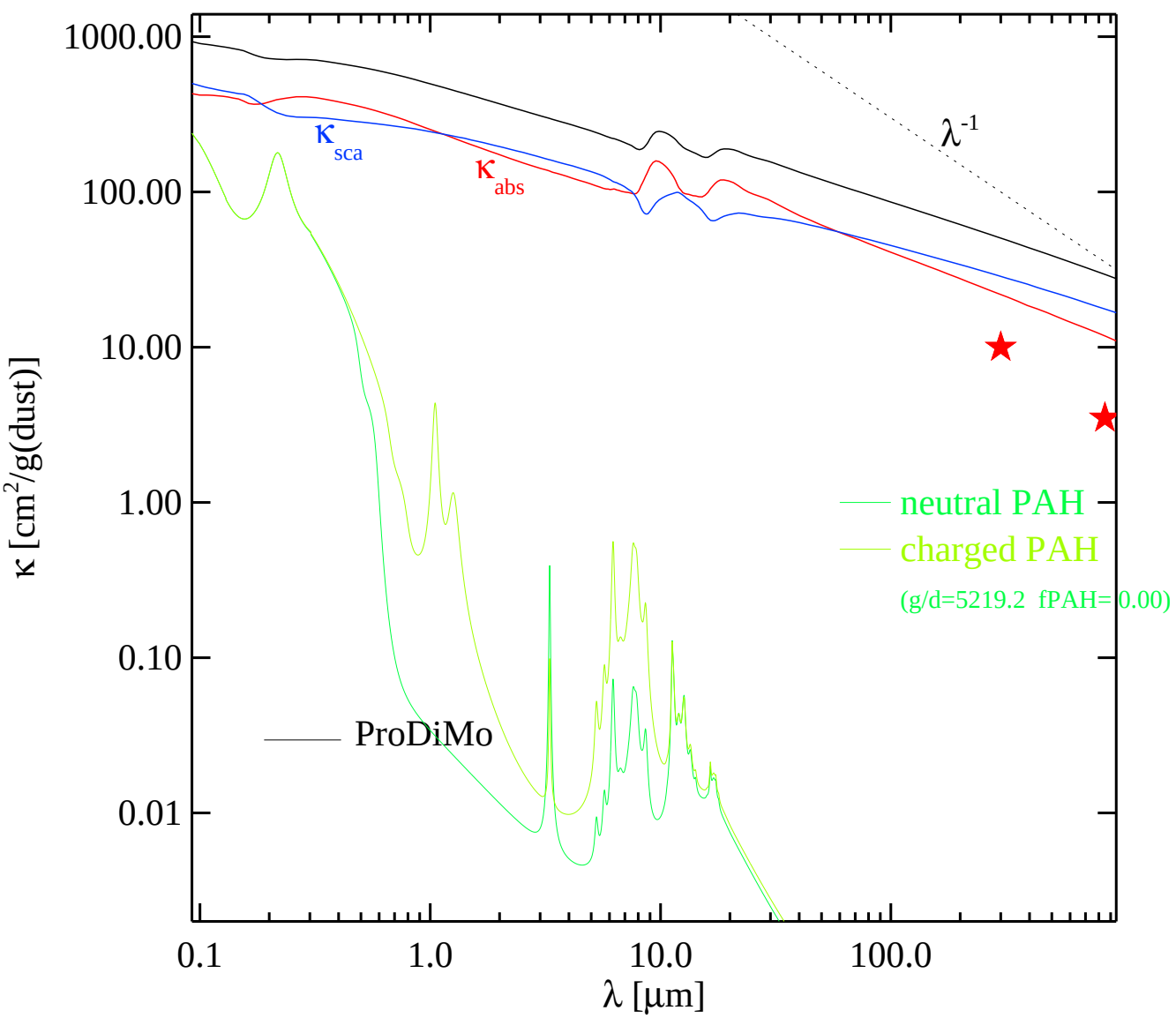

2
4
6
8
log χ
0.8
0.6
0.4
0.2
0.0
z / r
AV=1
AV=1
0.1
1.0
r [AU]

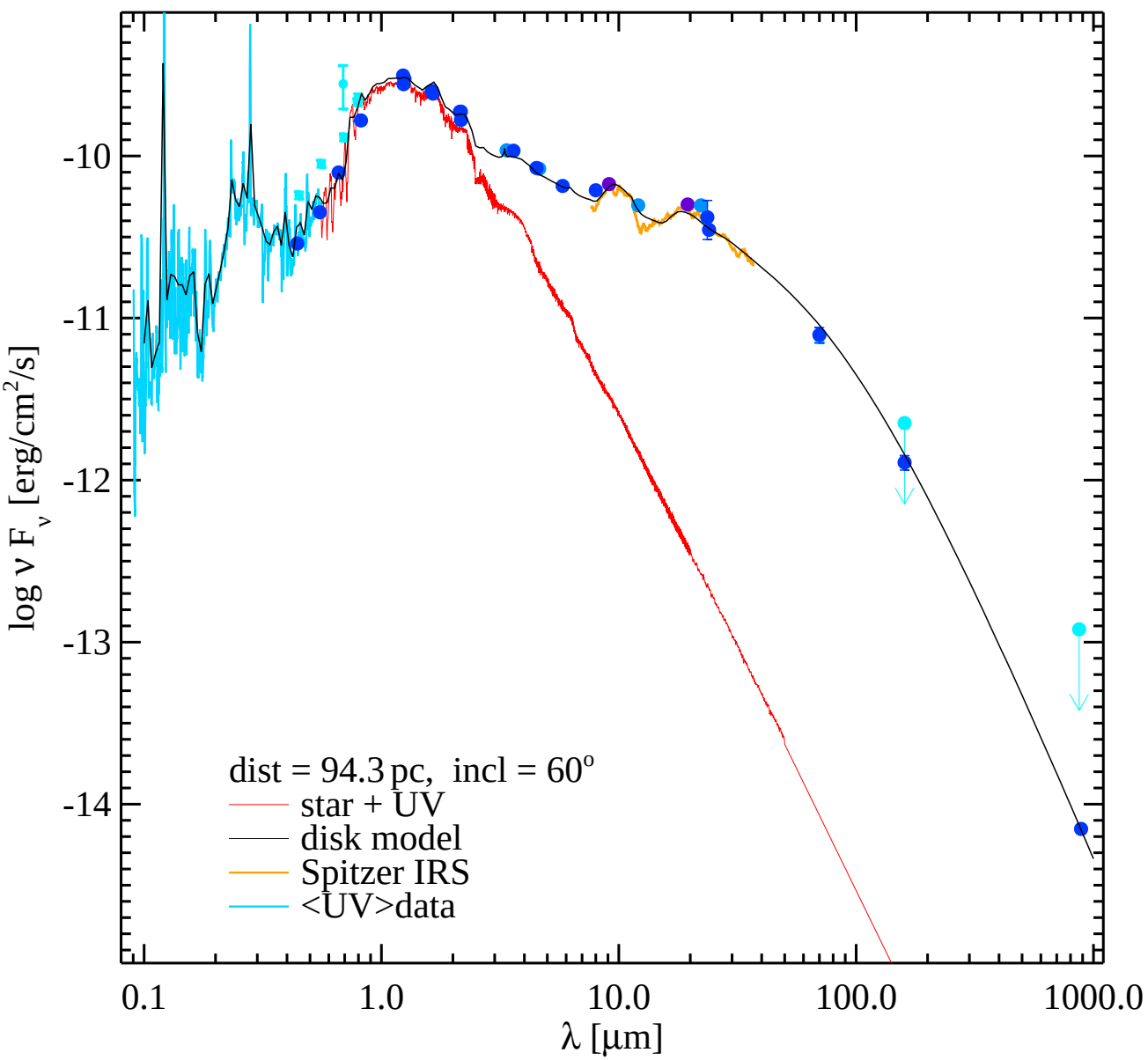

1.5
2.0
2.5
3.0
log T dust [K]
700K
300K
100K
40K
700K
1
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
r [AU]

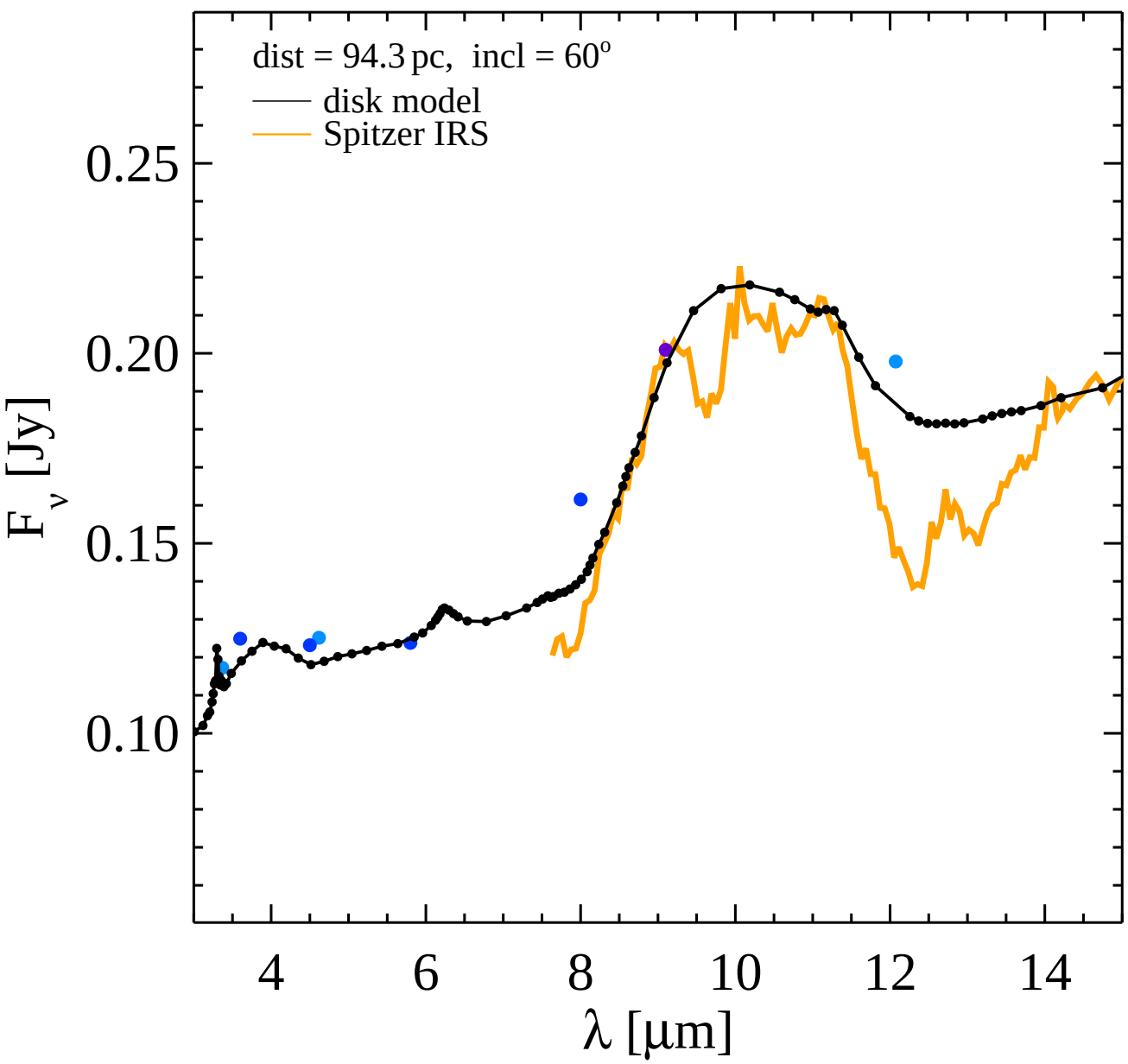

1.5
2.0
2.5
3.0
log T_PAH [K]
2000K
1000K
300K
300K
1
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
r [AU]

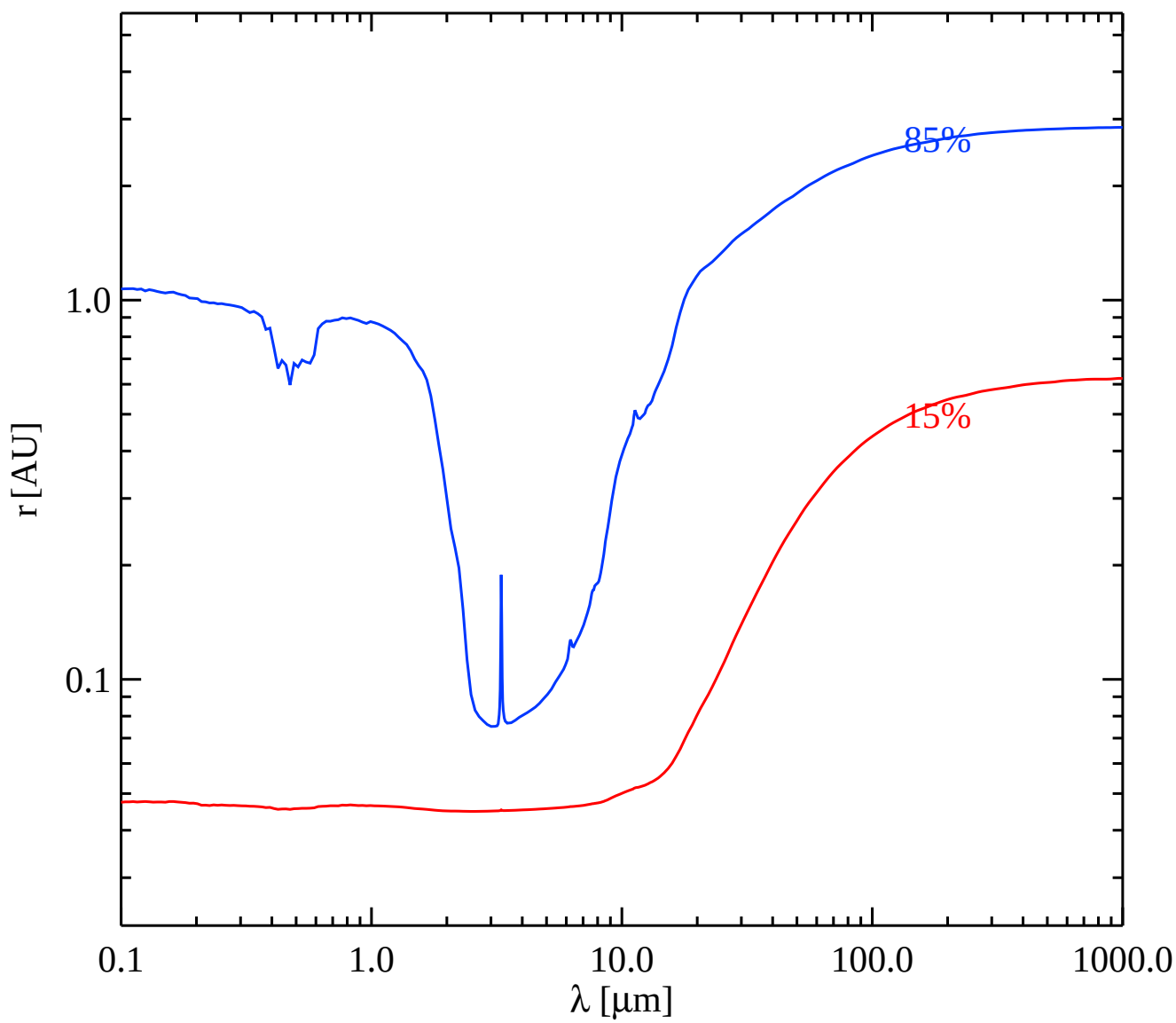

fitting Tdust ~ r^-q
1000
100
T dust [K]
z/r=0.94: q= 0.507 +/- 0.035
z/r=0.26: q= 0.488 +/- 0.013
z/r=0.00: q= 0.532 +/- 0.014
0.1
1.0
r [AU]

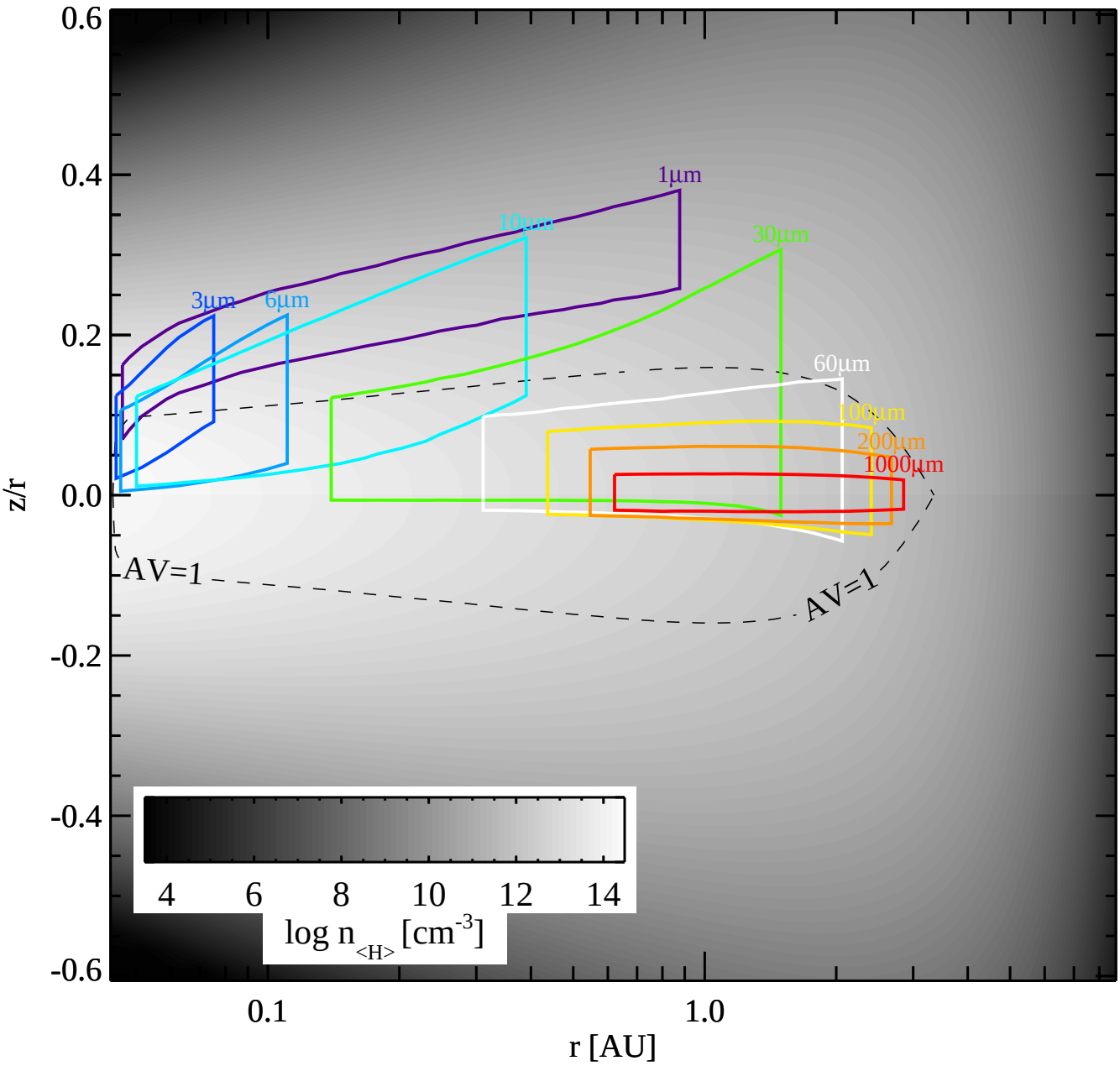

1000
100
κ [cm²/g(dust)]
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
λ [μm]

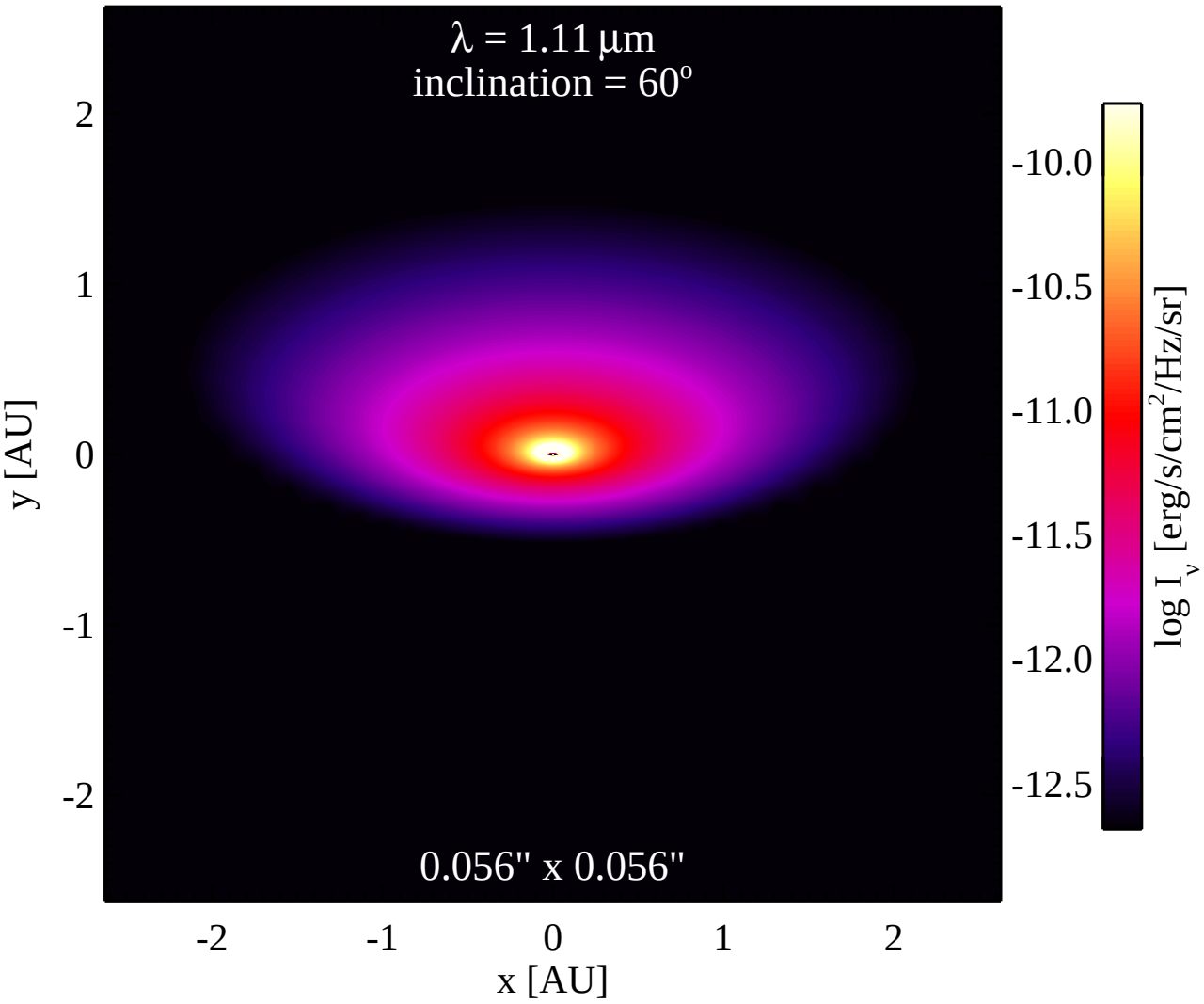

1000.00
100.00
10.00
1.00
0.10
0.01
κ [cm²/g(dust)]
0.1
1.0
10.0
100.0
λ [μm]
κsca
κabs
λ-1
neutral PAH
charged PAH
(g/d=5219.2 fPAH= 0.00)
ProDiMo

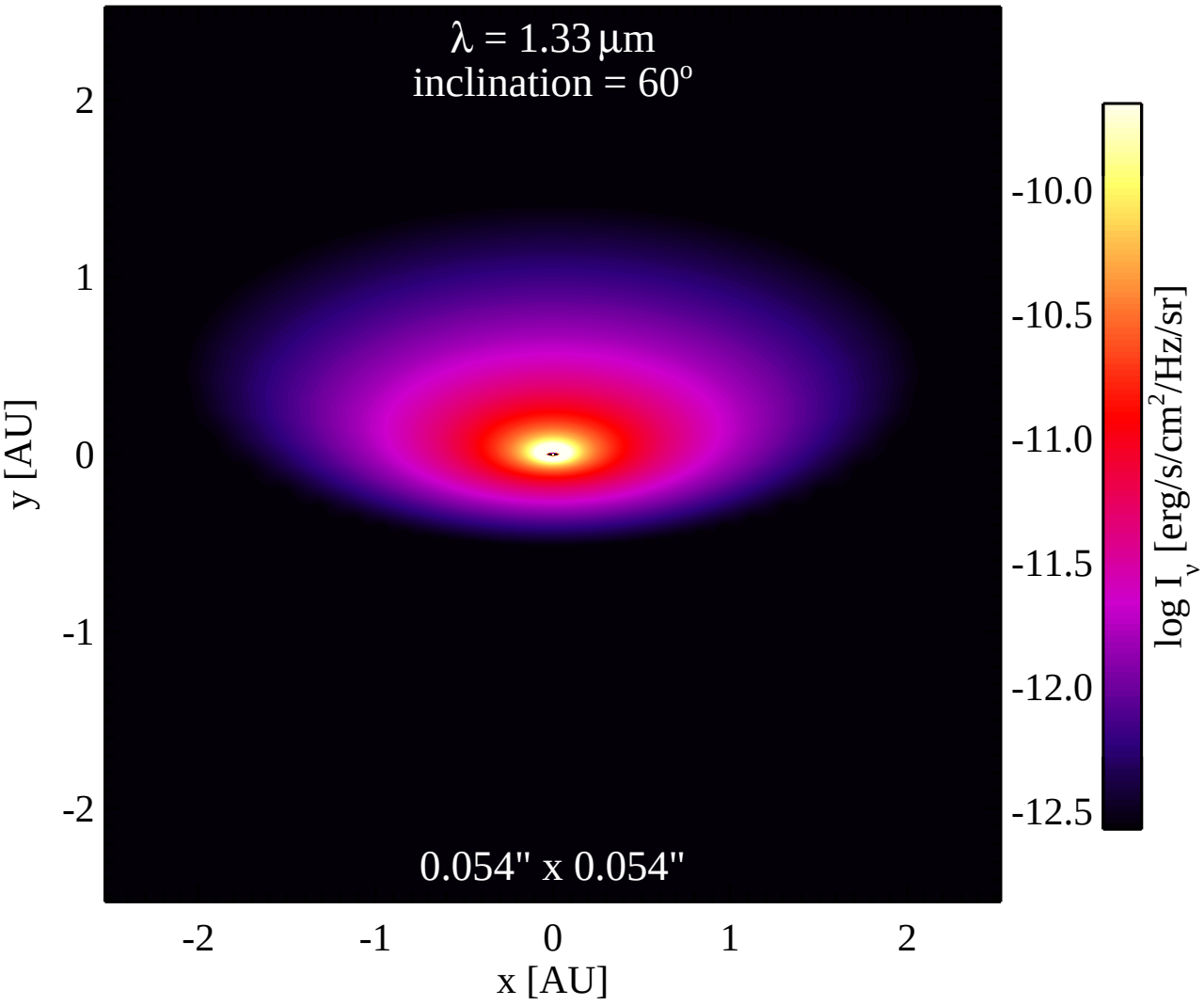

-10
-11
-12
-13
-14
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
λ [μm]
dist = 94.3 pc, incl = 60°
star + UV
disk model
Spitzer IRS
<UV>data

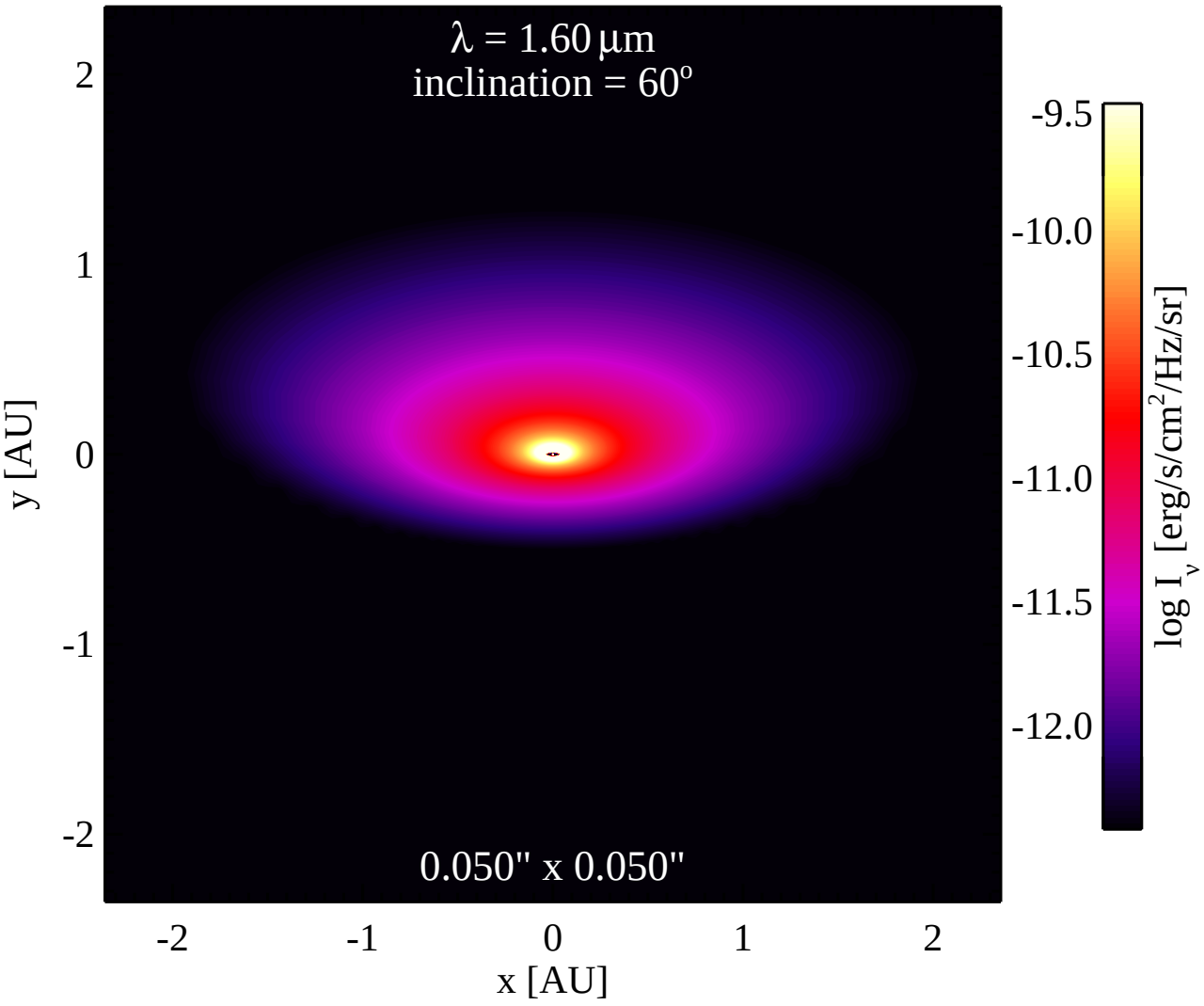

dist = 94.3 pc, incl = 60°
disk model
Spitzer IRS
0.25
0.20
0.15
0.10
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

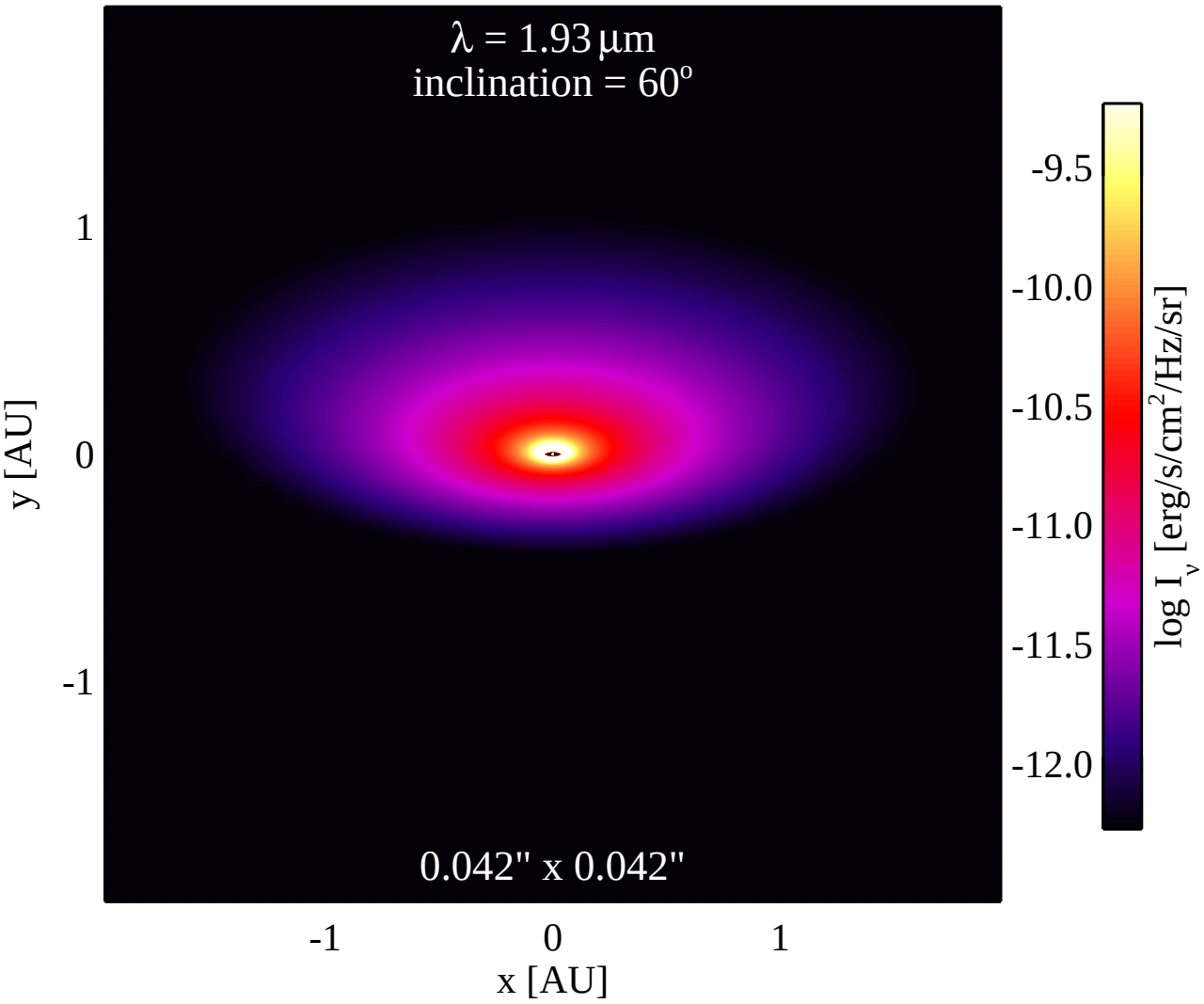

85%
15%
1.0
0.1
r [AU]
0.1
1.0
10.0
100.0
1000.0
λ [μm]

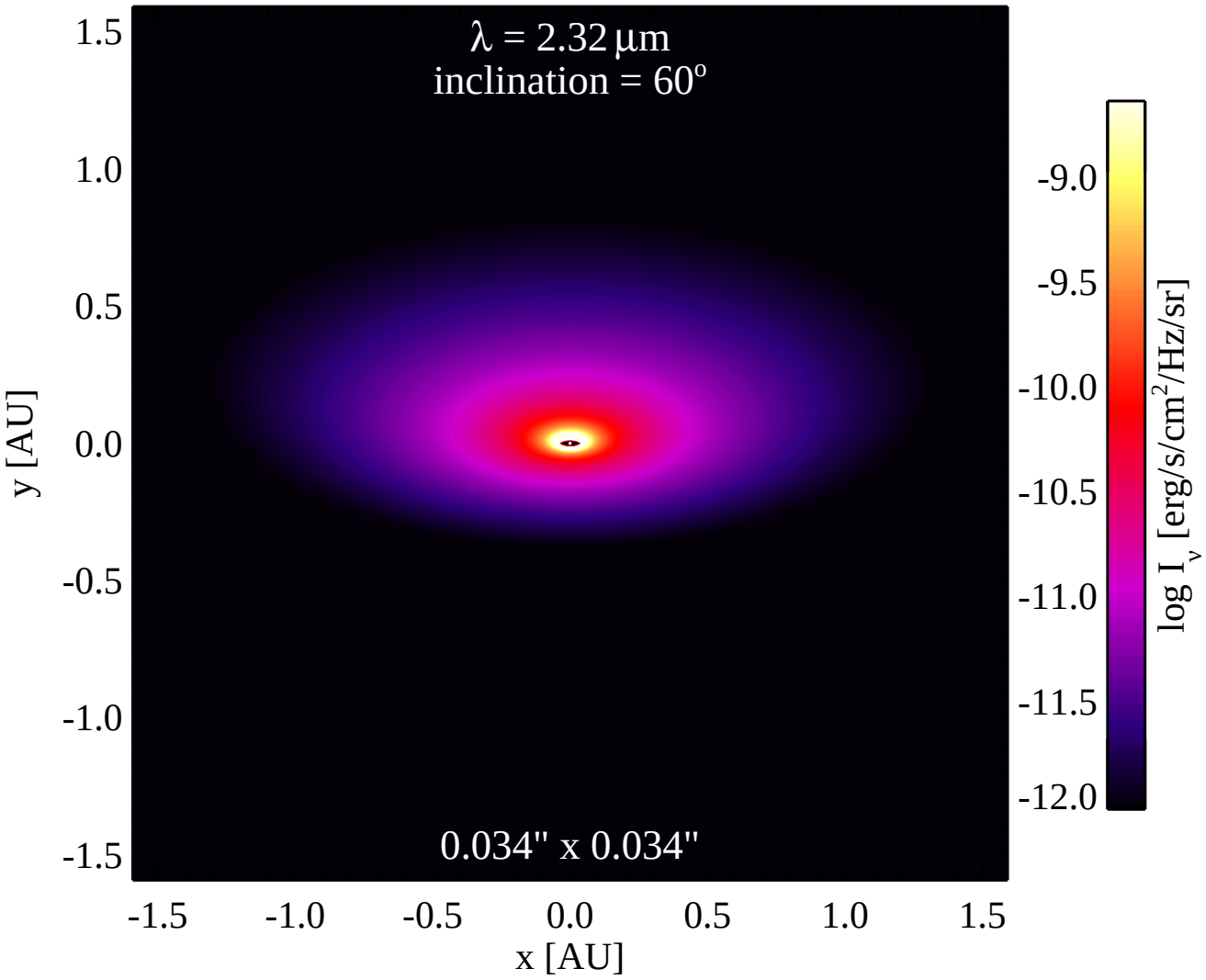

0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
z/r
0.1
1.0
r [AU]
1µm
10µm
30µm
3µm
6µm
60µm
100µm
200µm
1000µm
AV=1
AV=1
4
6
8
10
12
14
log n<H> [cm-3]

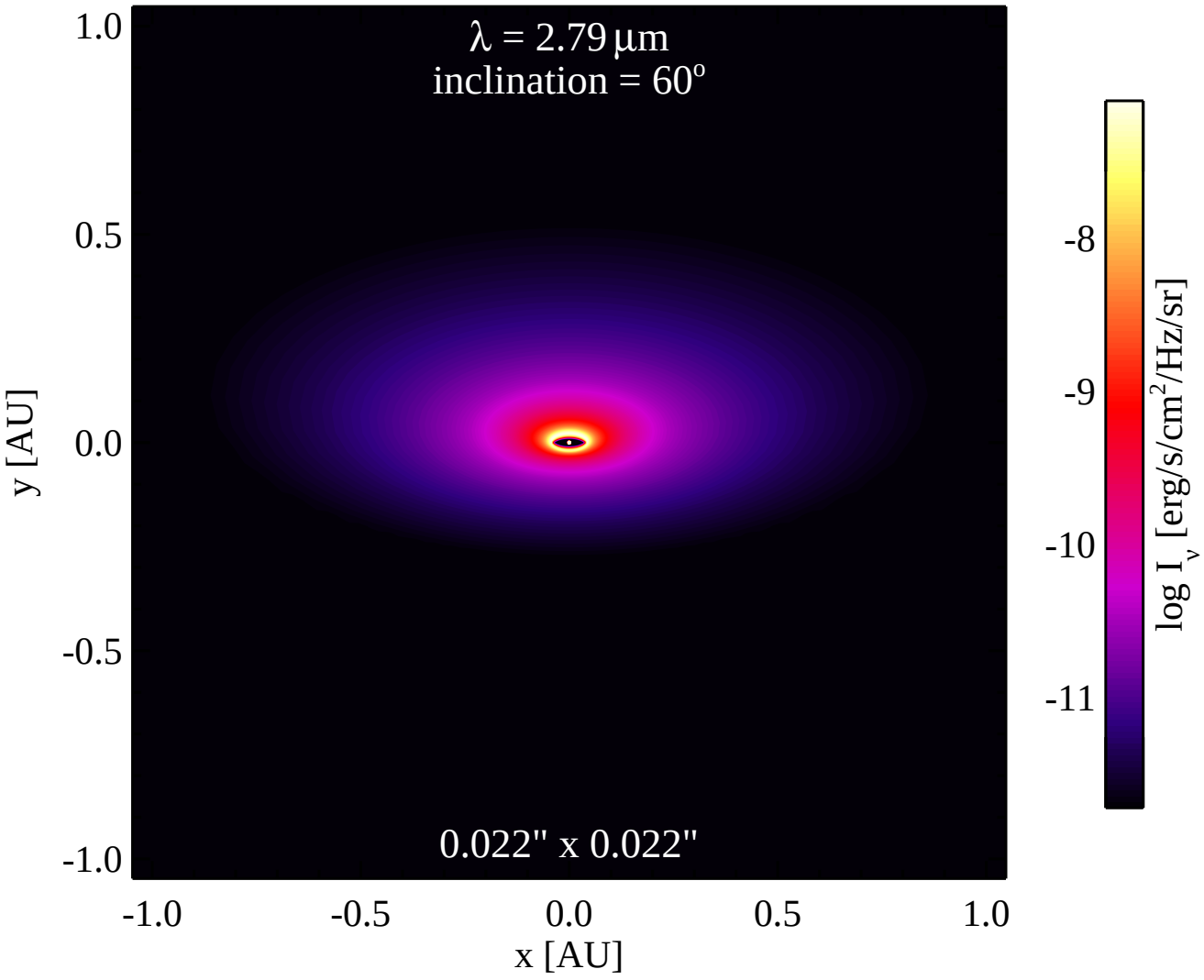

λ = 1.11 μm
inclination = 60°
0.056" x 0.056"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

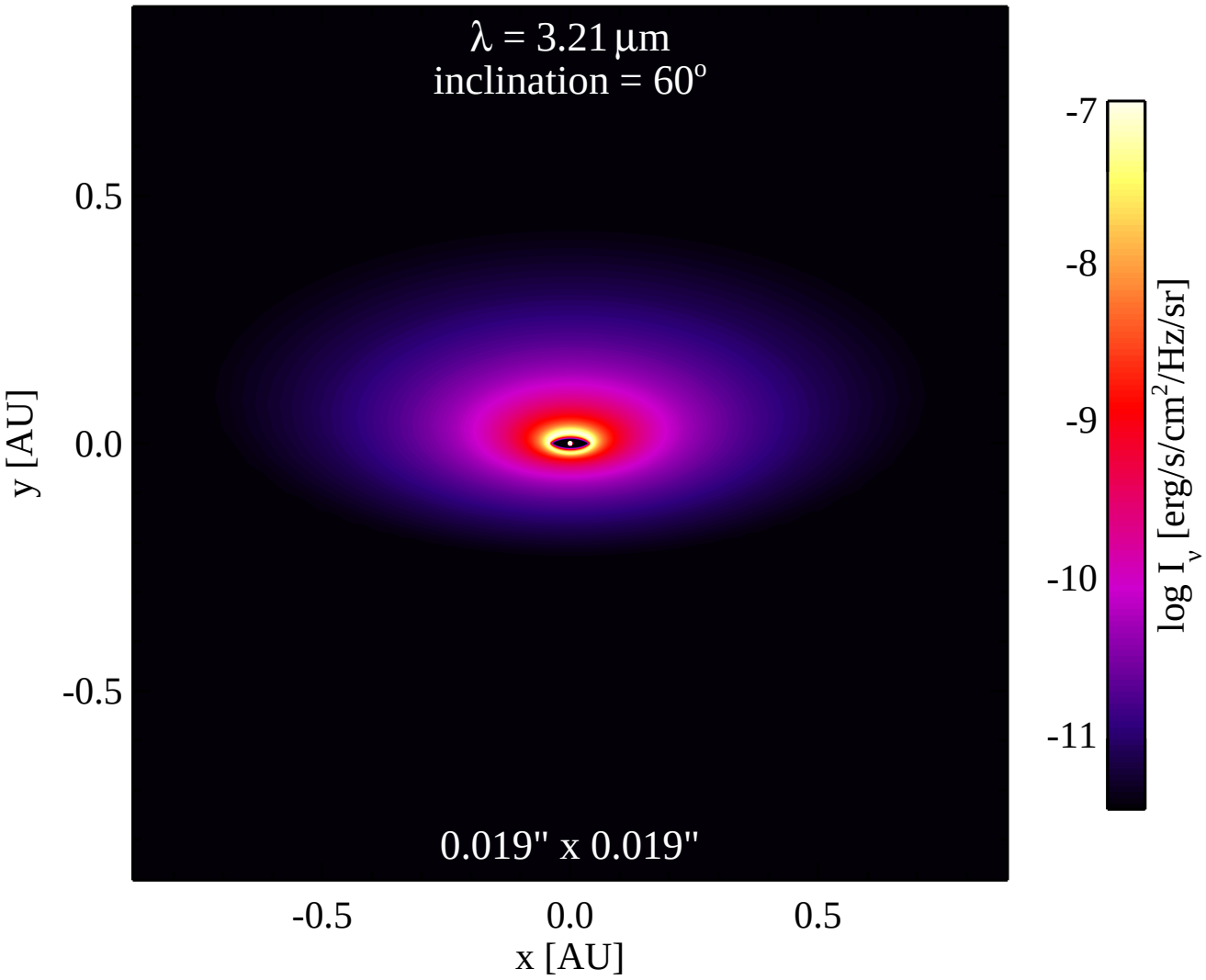

λ = 1.33 μm
inclination = 60°
0.054" x 0.054"
y [AU]
x [AU]
2
1
0
-1
-2
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

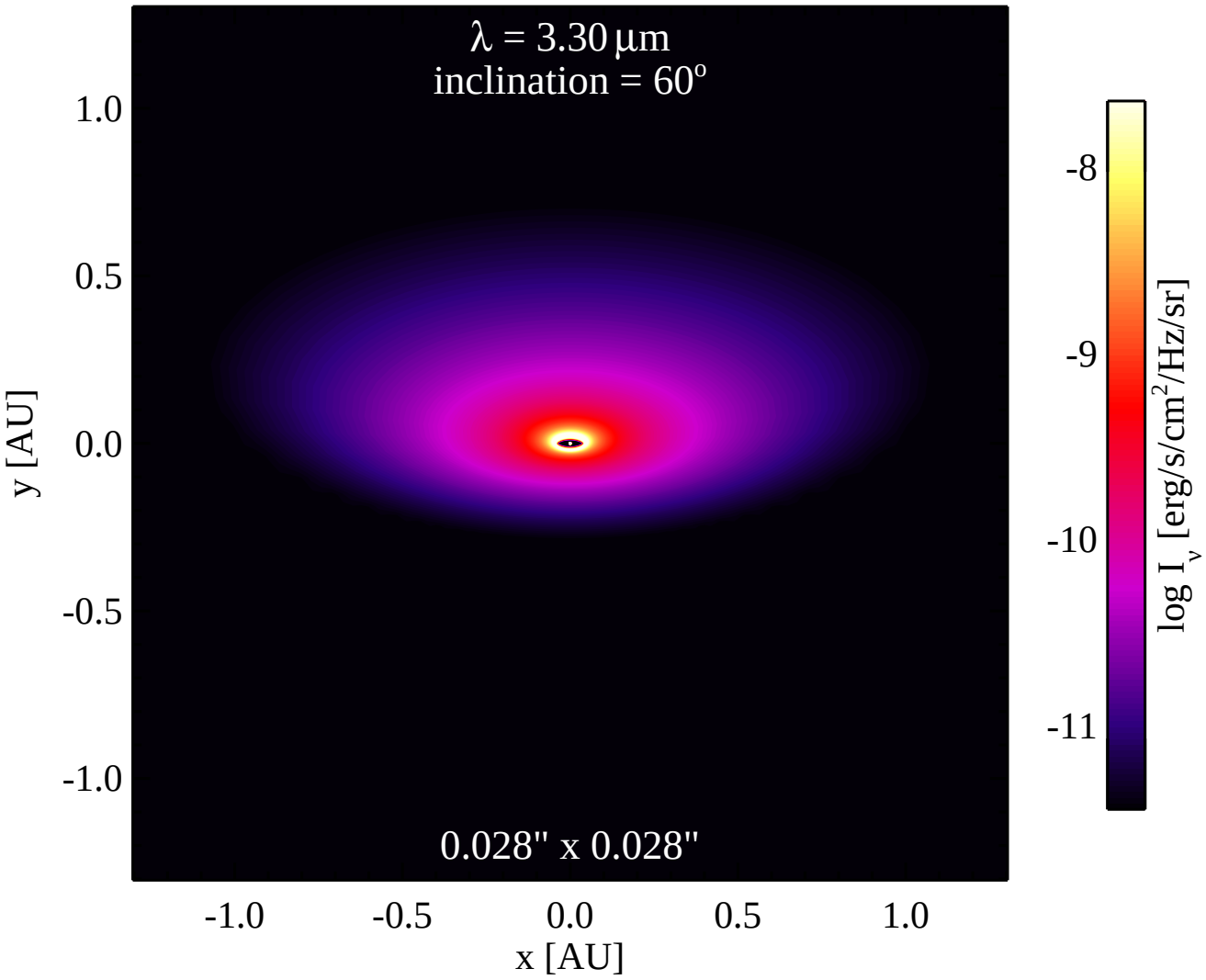

λ = 1.60 μm
inclination = 60°
0.050" x 0.050"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

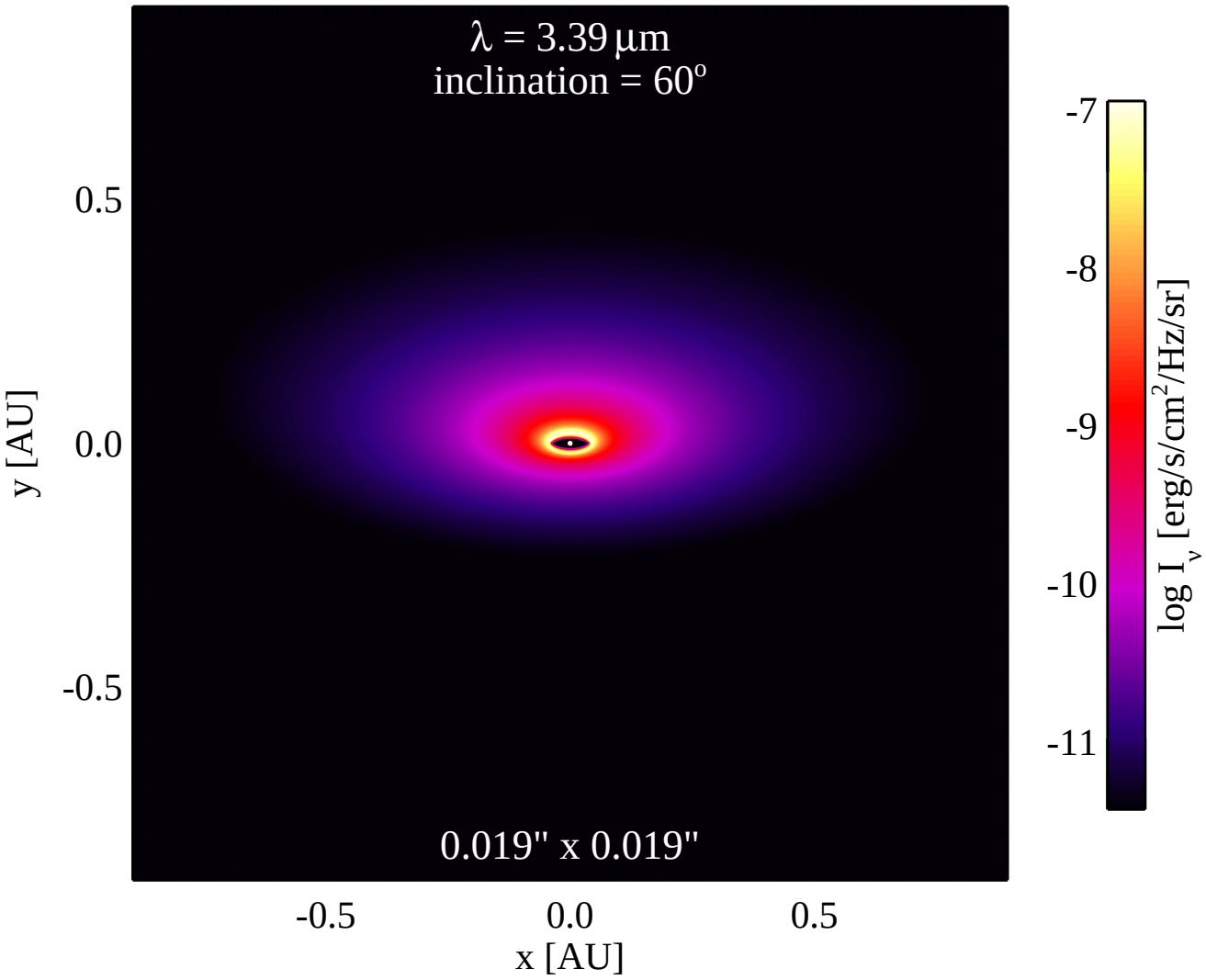

λ = 1.93 μm
inclination = 60°
0.042" x 0.042"
y [AU]
1
0
-1
x [AU]
-1
0
1
log I_ν [erg/s/cm²/Hz/sr]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0

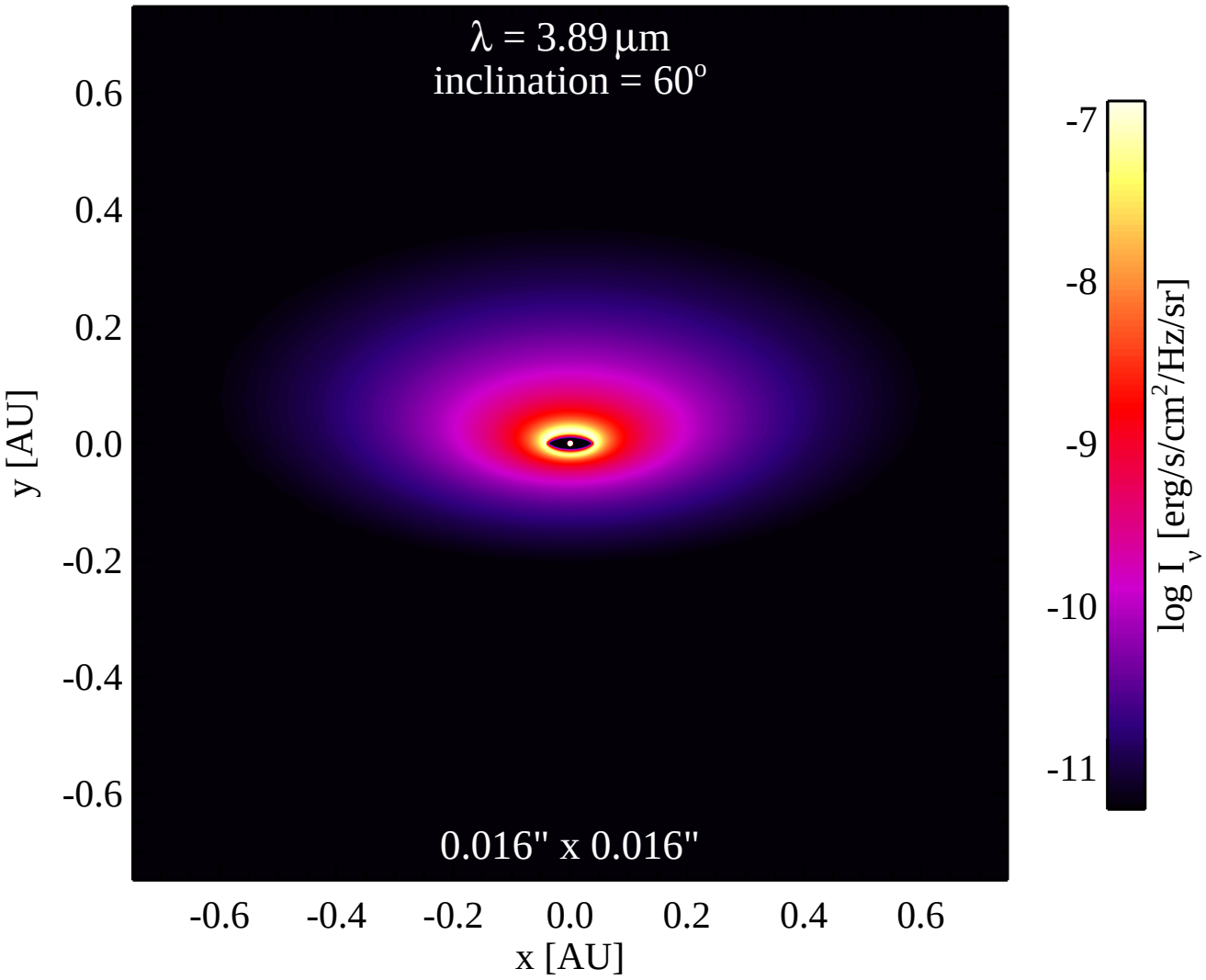

λ = 2.32 μm
inclination = 60°
0.034" x 0.034"
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
y [AU]
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
x [AU]
-9.0
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

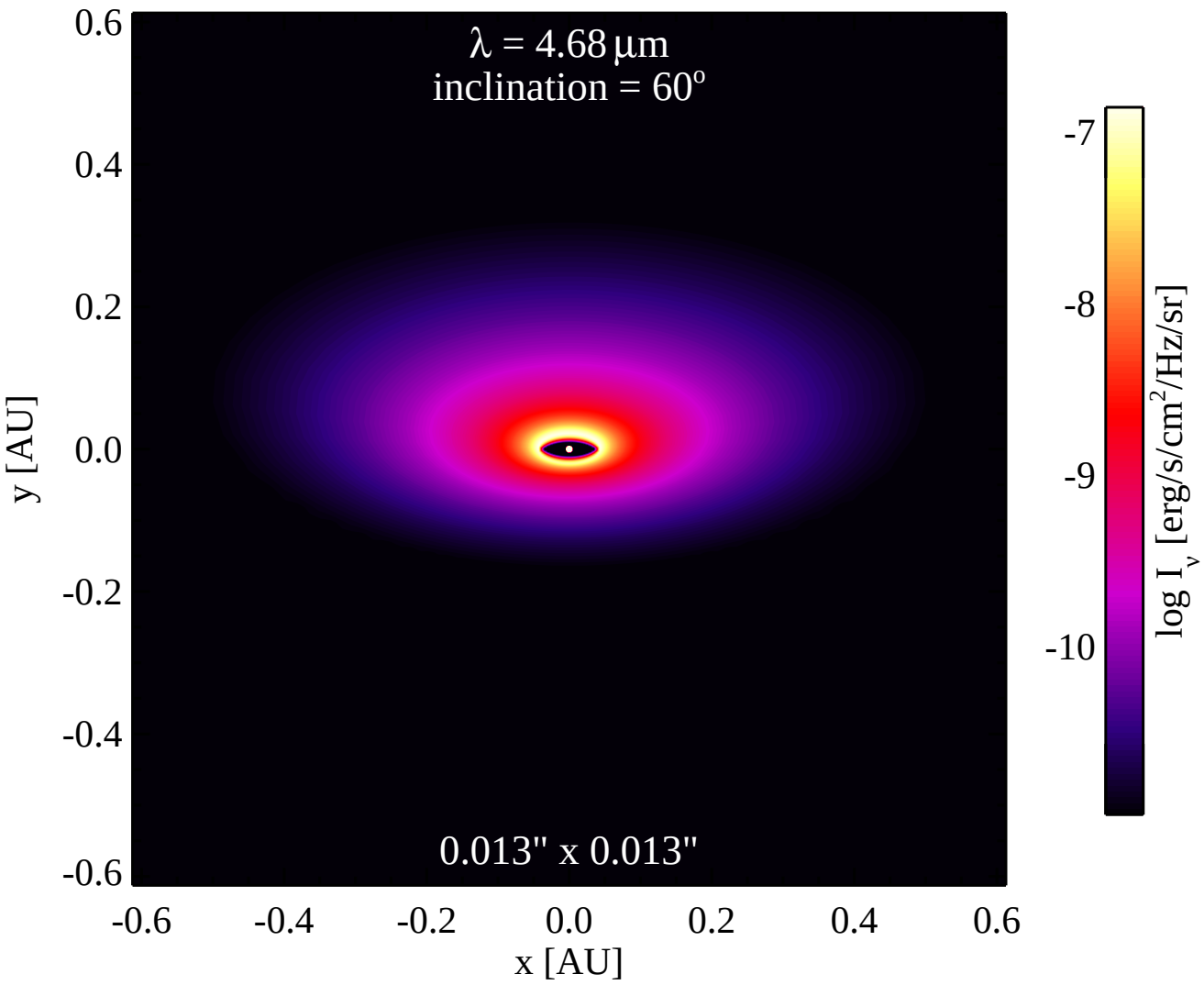

λ = 2.79 μm
inclination = 60°
0.022" x 0.022"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

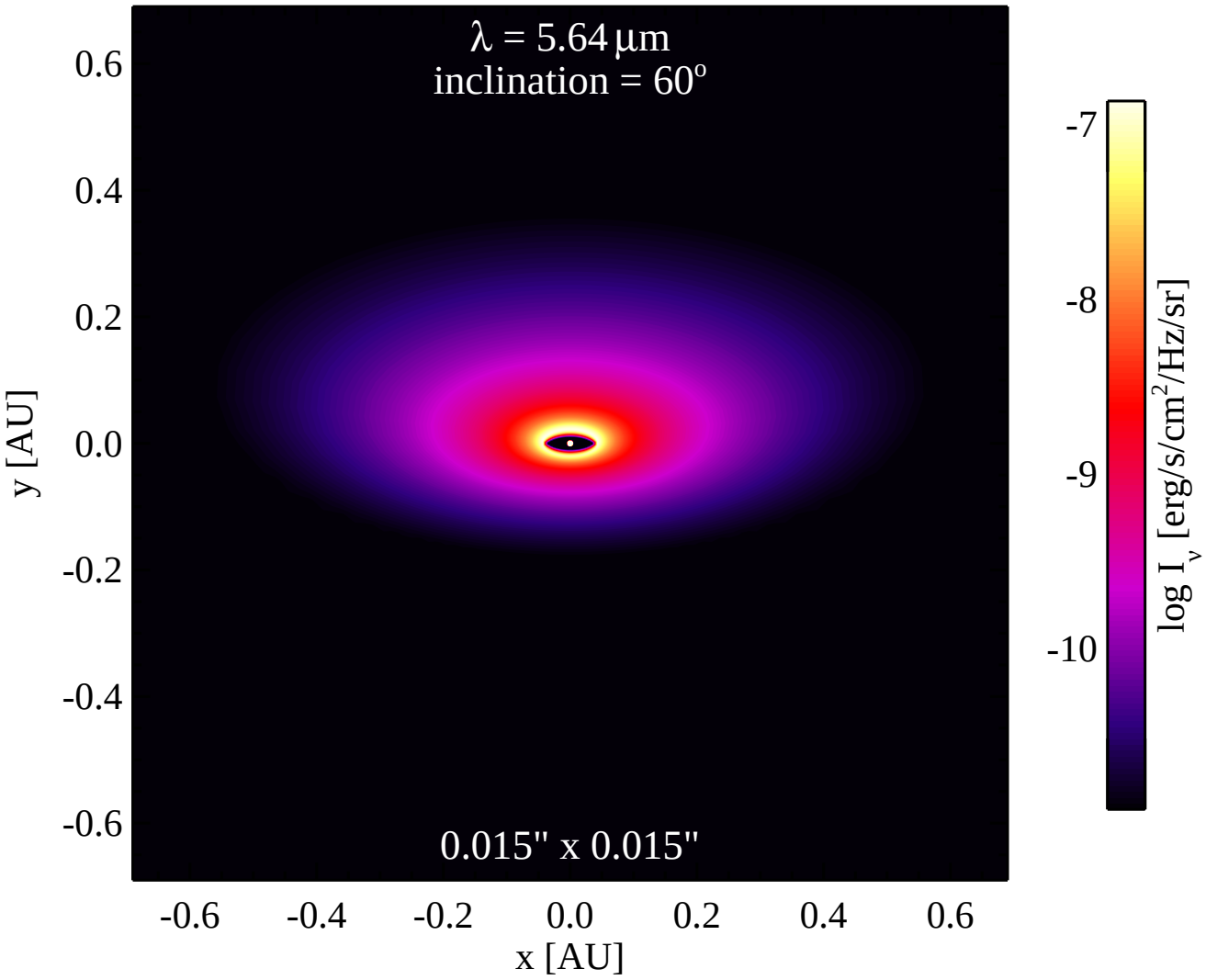

λ = 3.21 μm
inclination = 60°
0.019" x 0.019"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

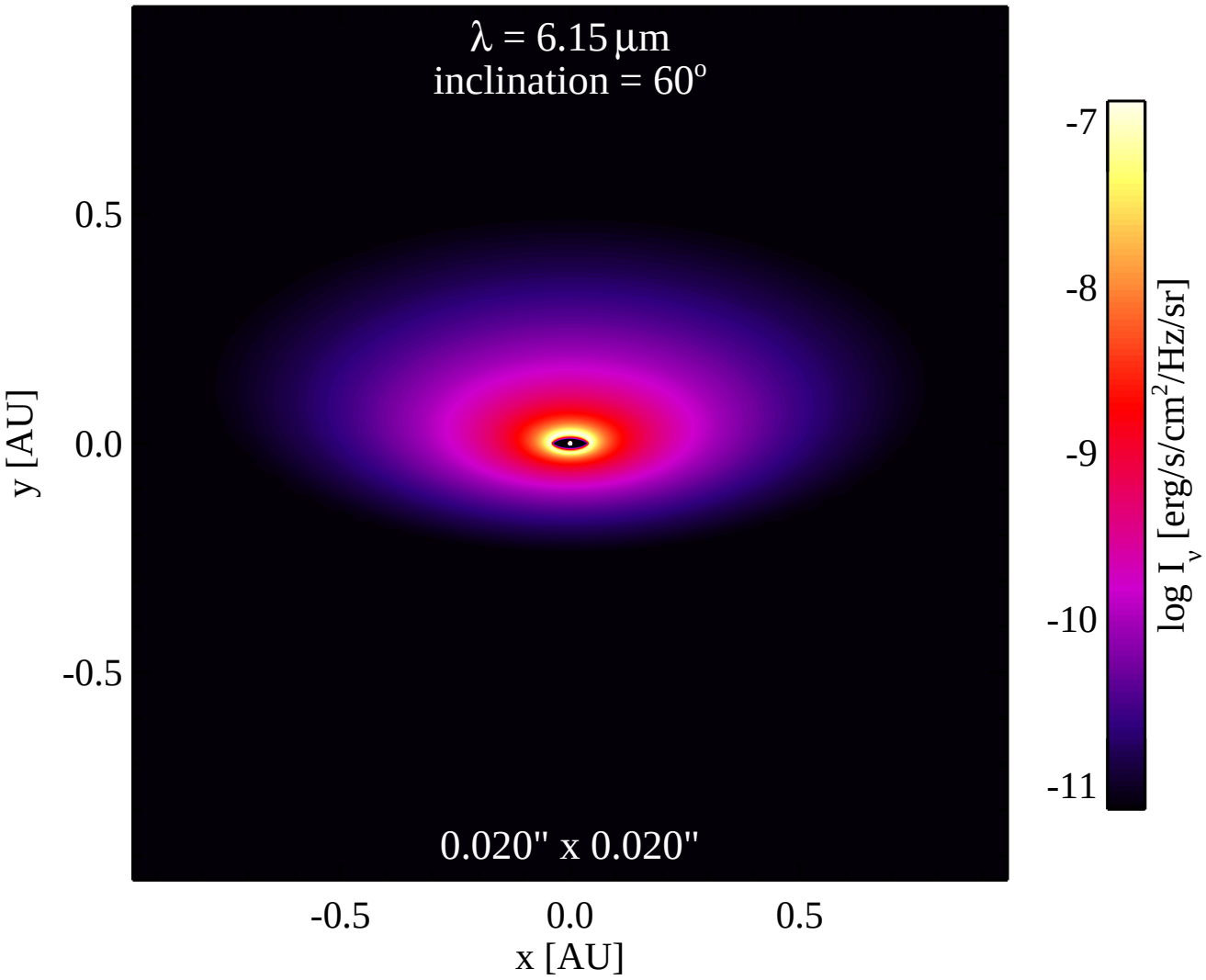

λ = 3.30 μm
inclination = 60°
0.028" x 0.028"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

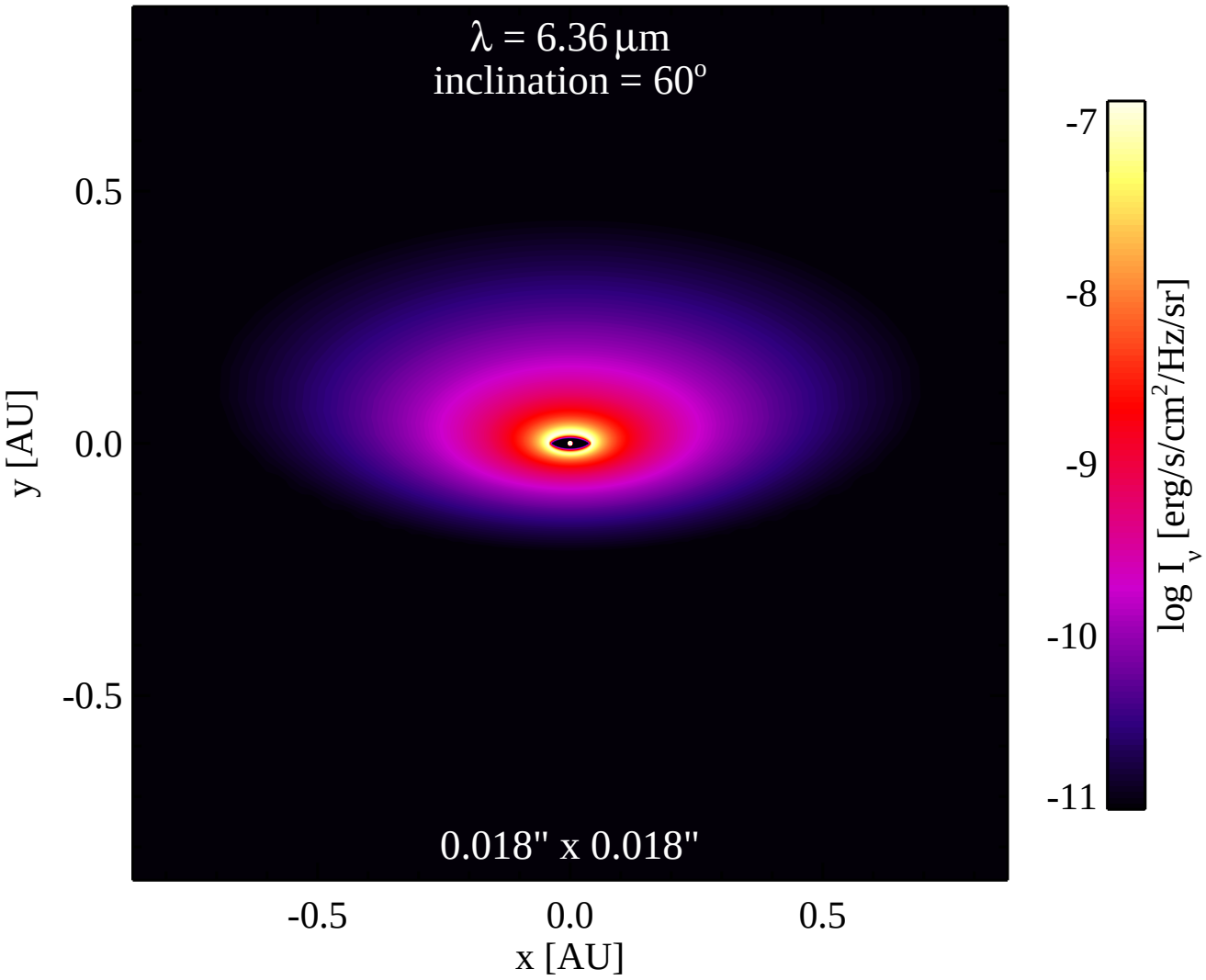

λ = 3.39 μm
inclination = 60°
0.019" x 0.019"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

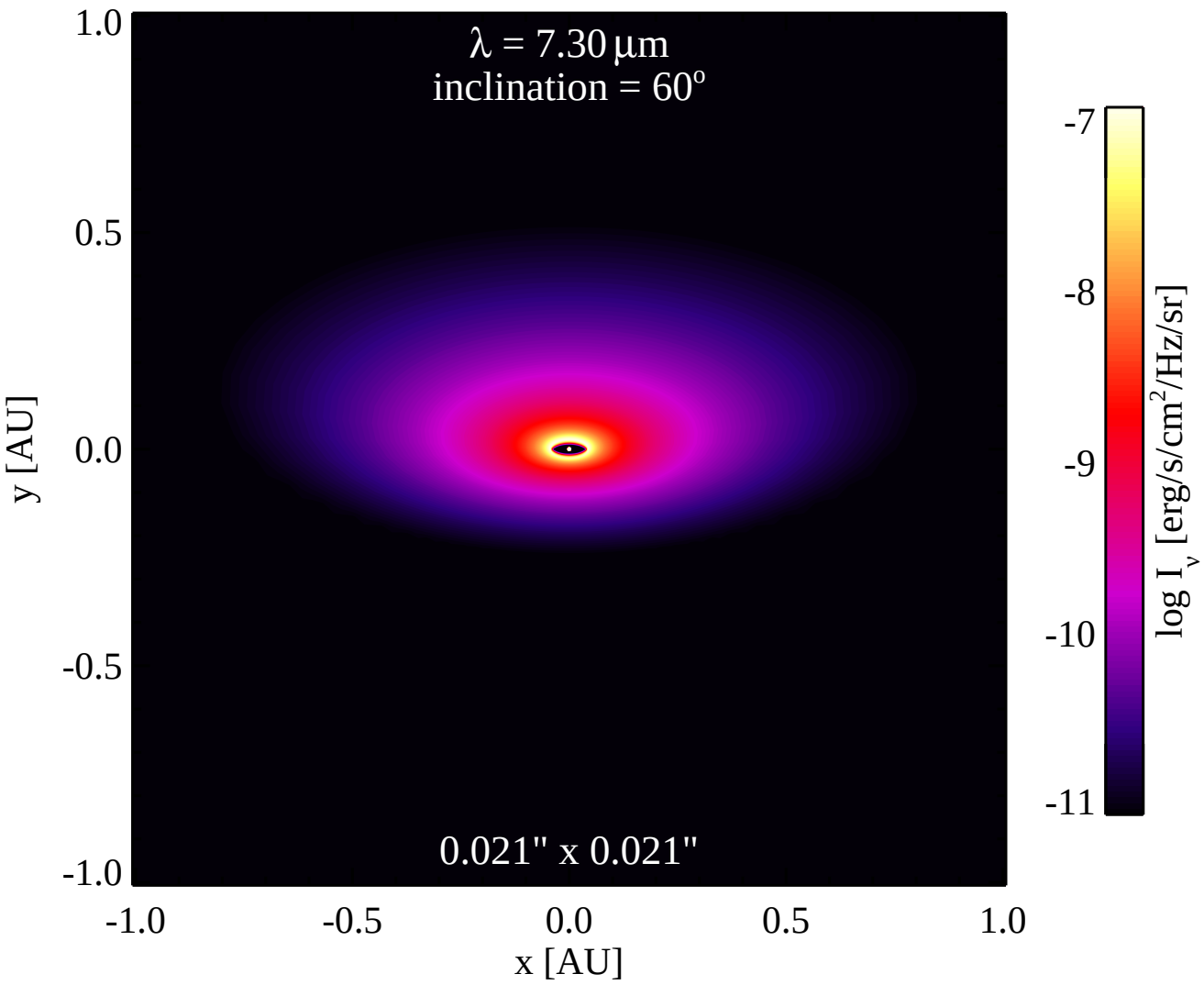

λ = 3.89 μm
inclination = 60°
0.016" x 0.016"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

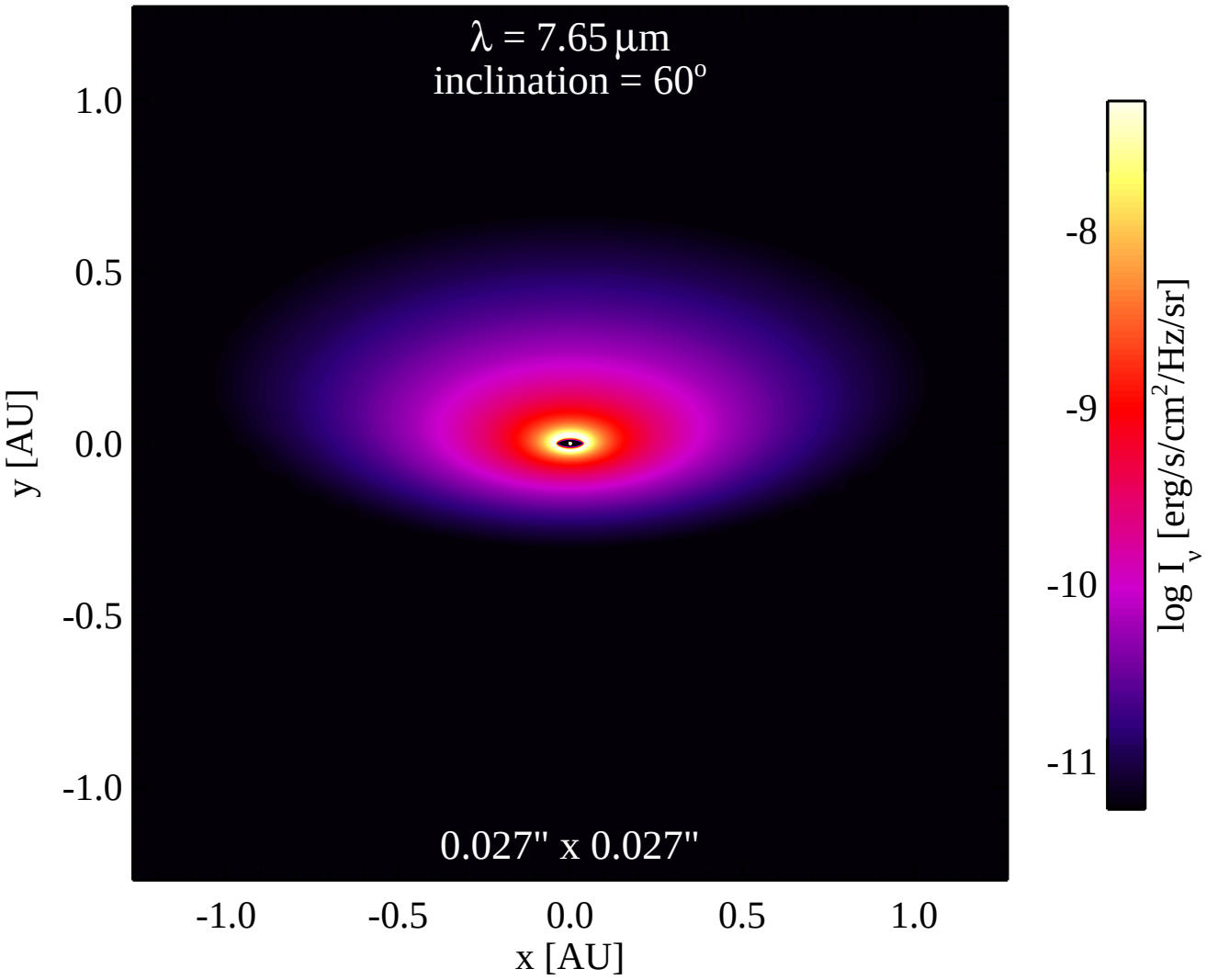

λ = 4.68 μm
inclination = 60°
0.013" x 0.013"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

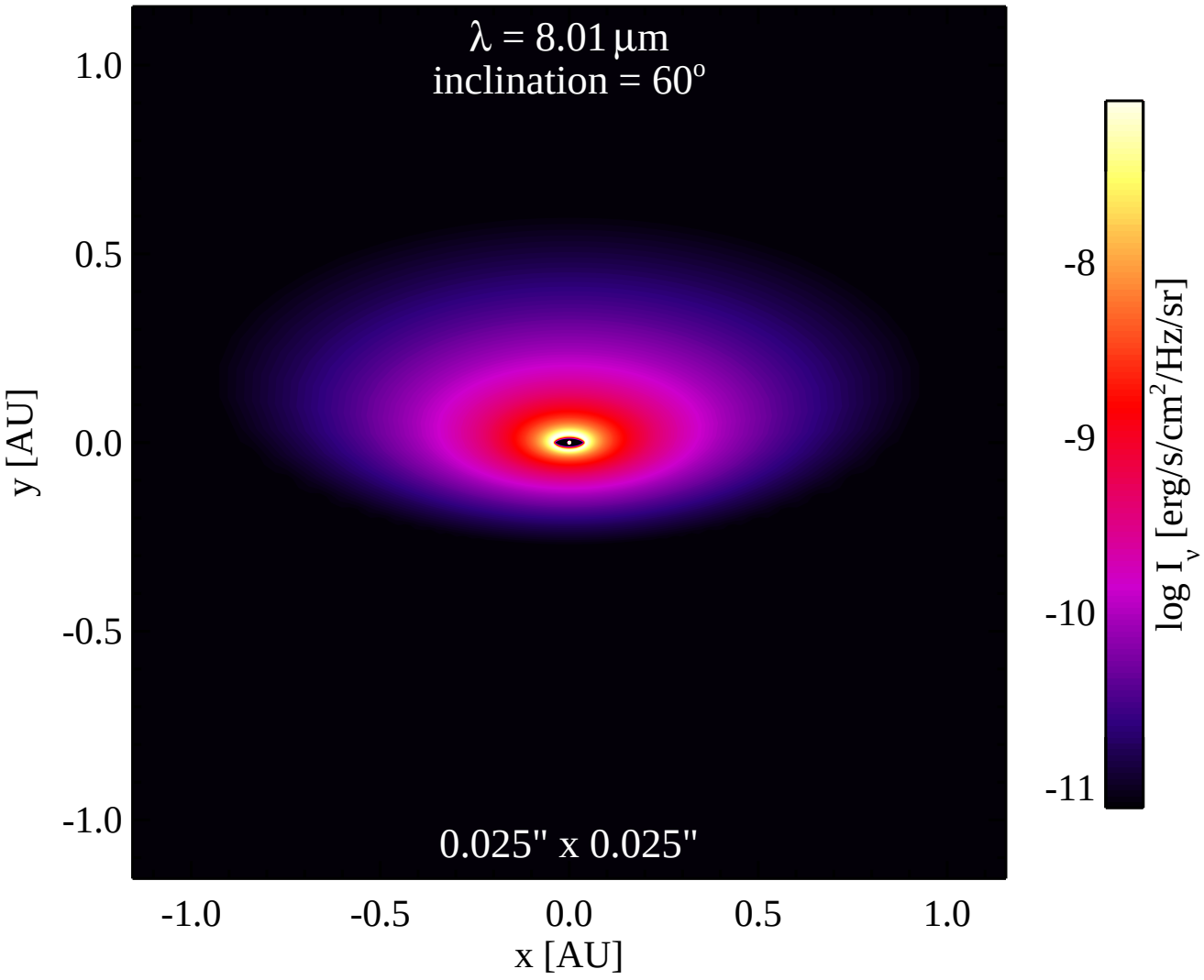

λ = 5.64 μm
inclination = 60°
0.015" x 0.015"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

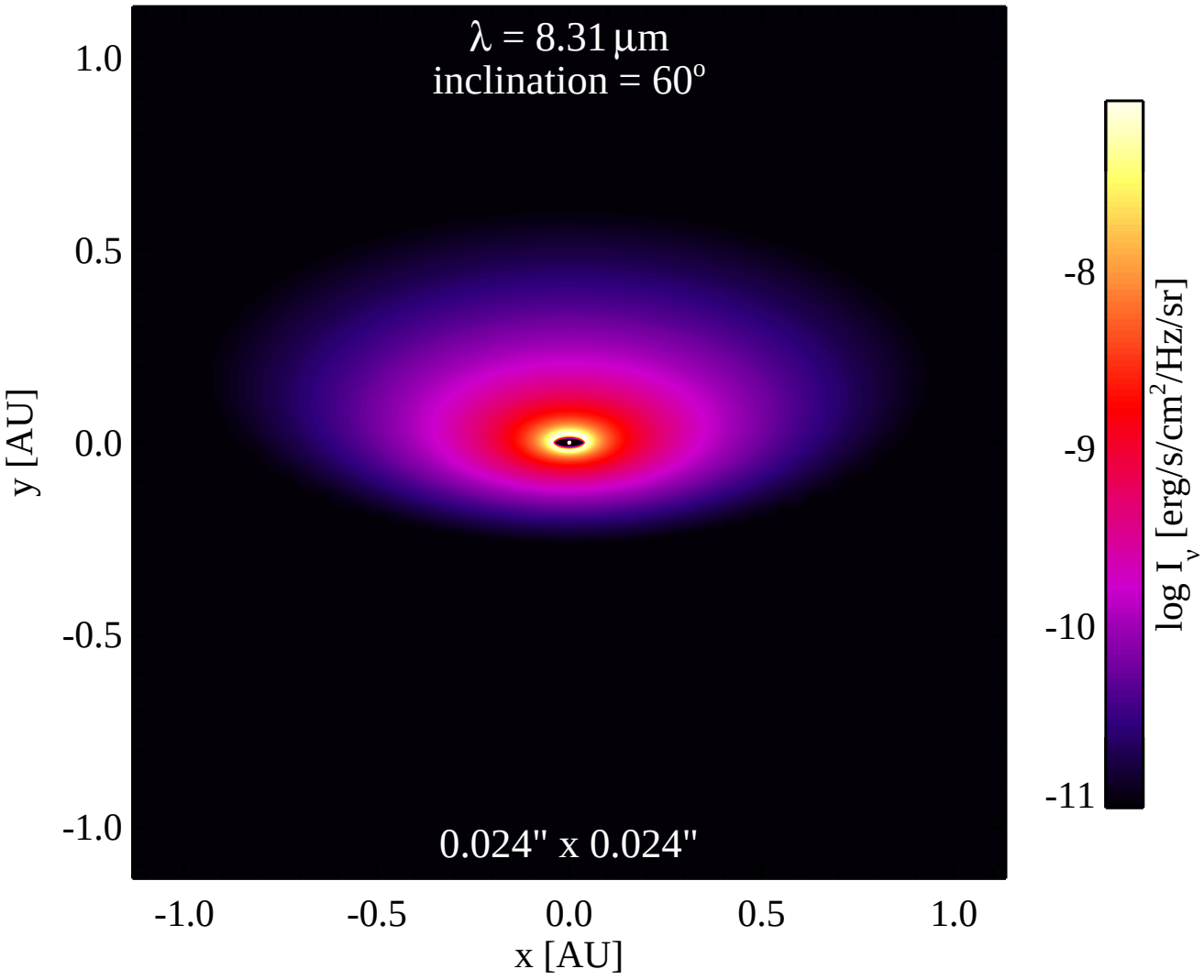

λ = 6.15 μm
inclination = 60°
0.020" x 0.020"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

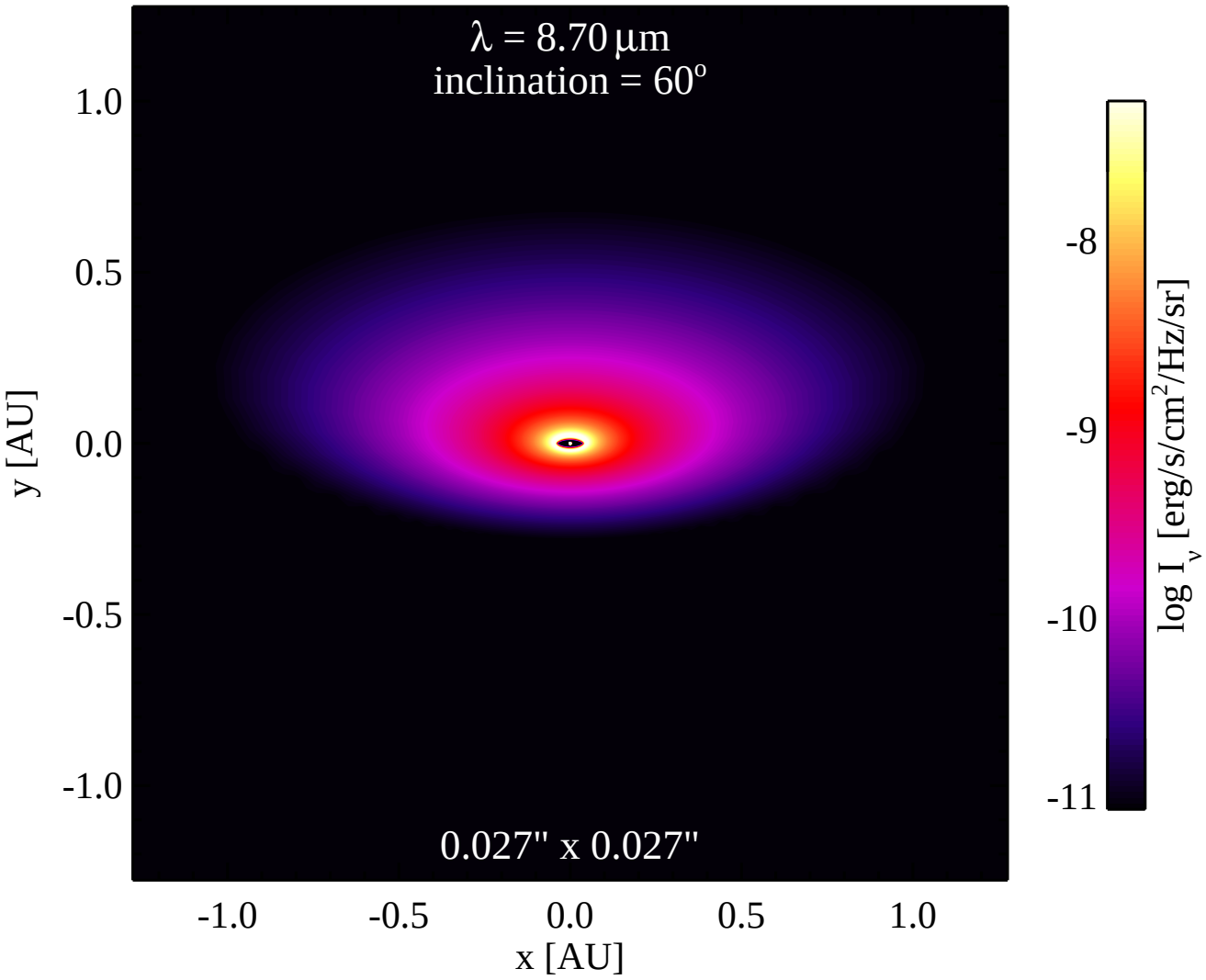

λ = 6.36 μm
inclination = 60°
0.018" x 0.018"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

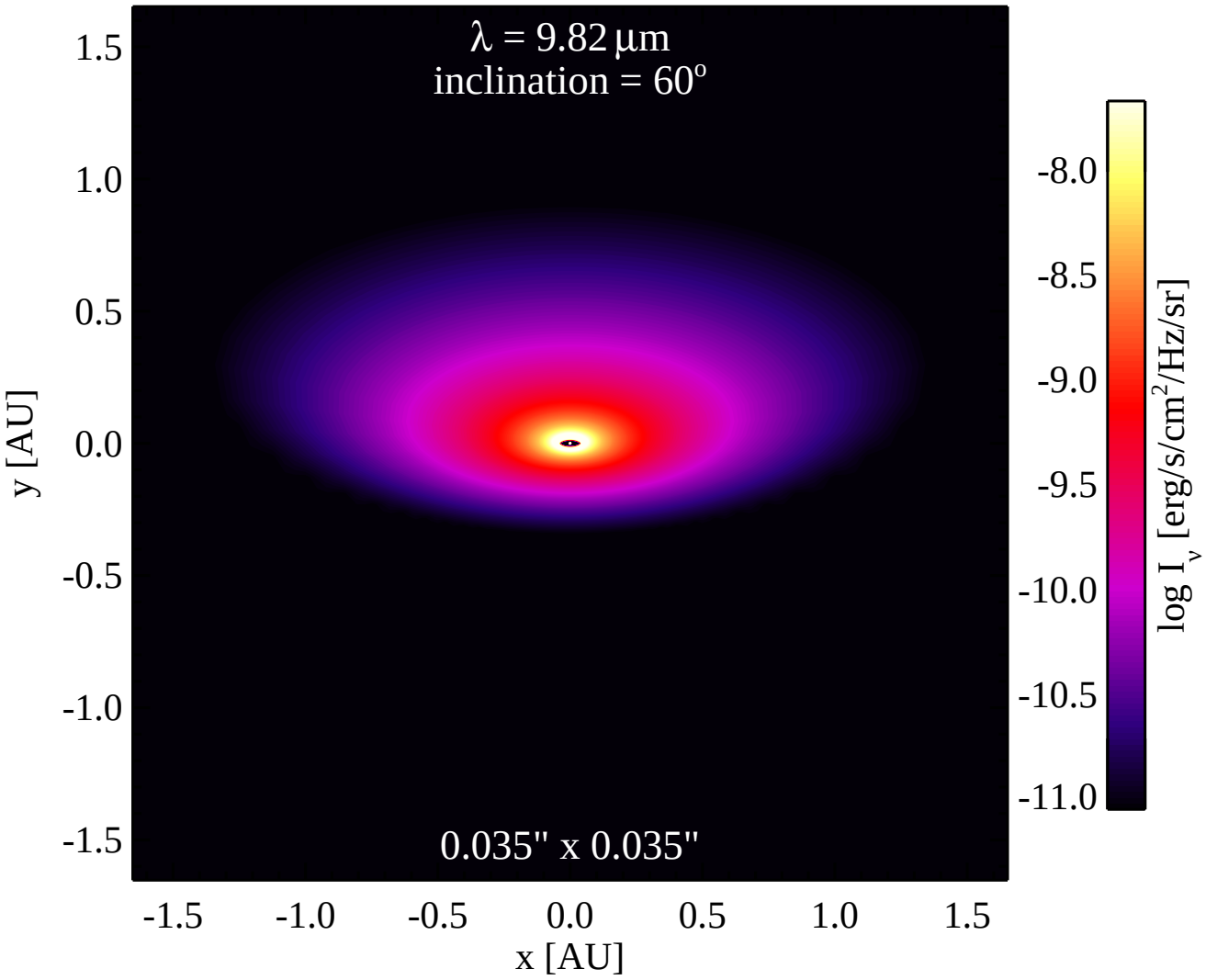

λ = 7.30 μm
inclination = 60°
0.021" x 0.021"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

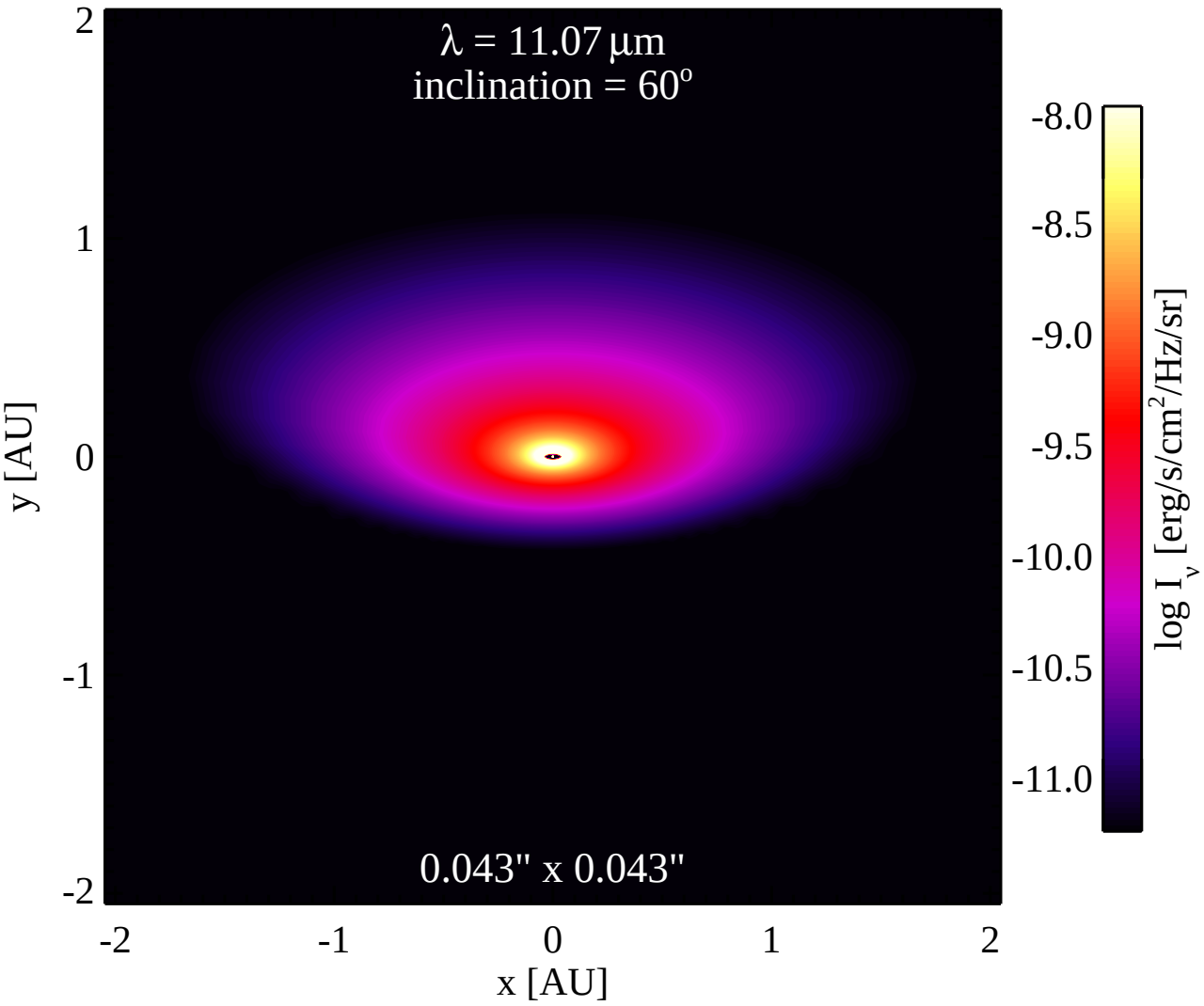

λ = 7.65 μm
inclination = 60°
0.027" x 0.027"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

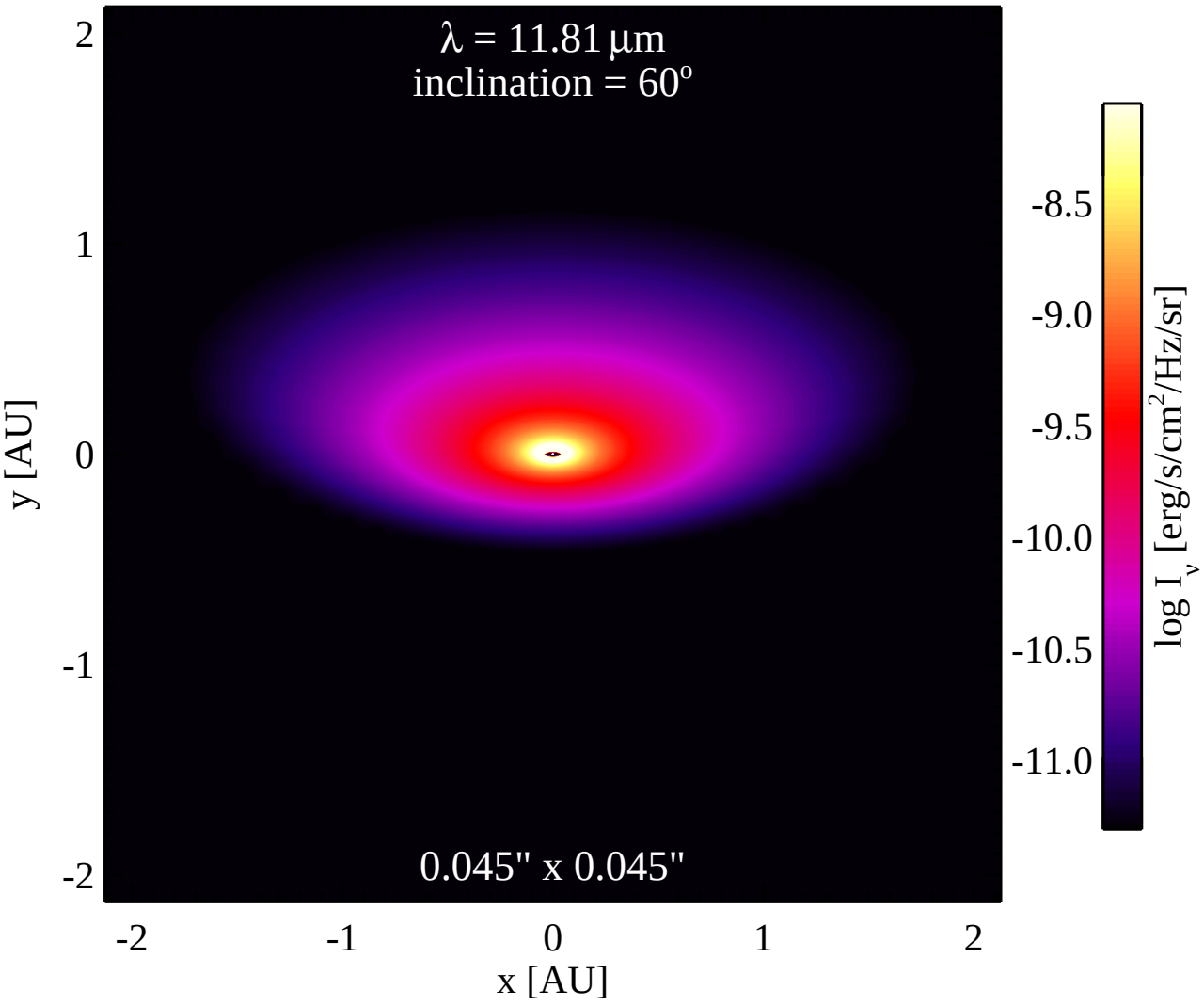

λ = 8.01 μm
inclination = 60°
0.025" x 0.025"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

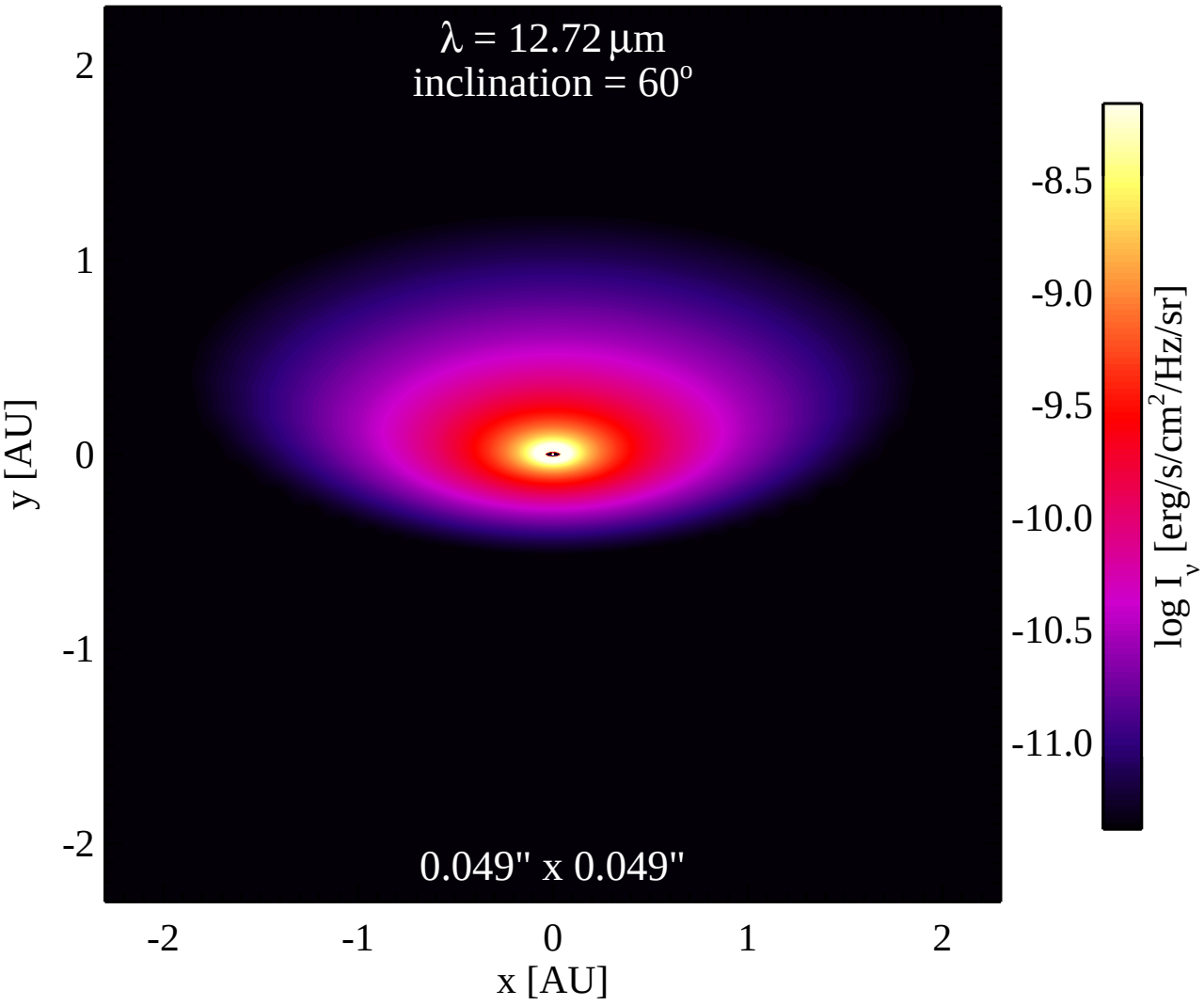

λ = 8.31 μm
inclination = 60°
0.024" x 0.024"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

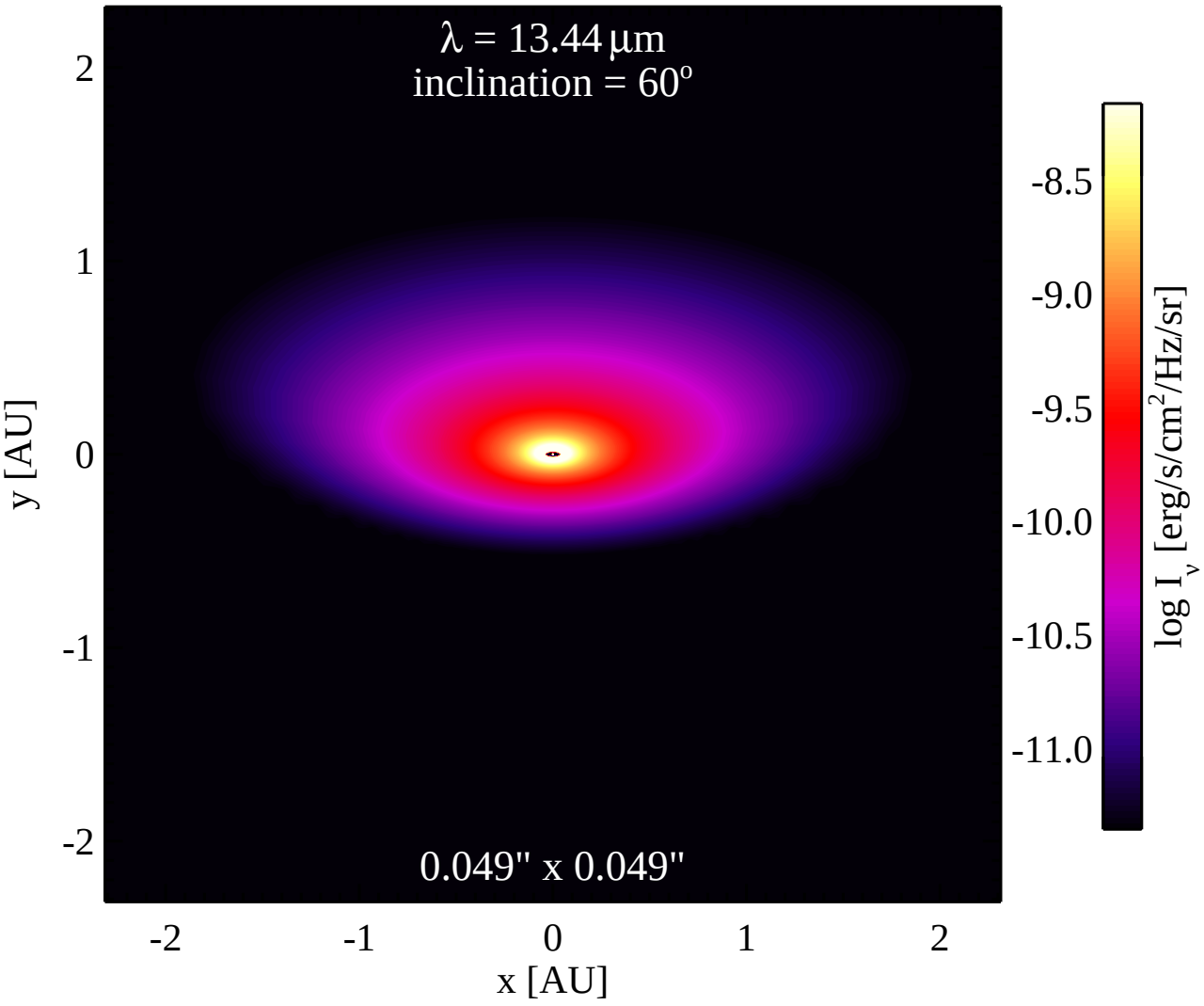

λ = 8.70 μm
inclination = 60°
0.027" x 0.027"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

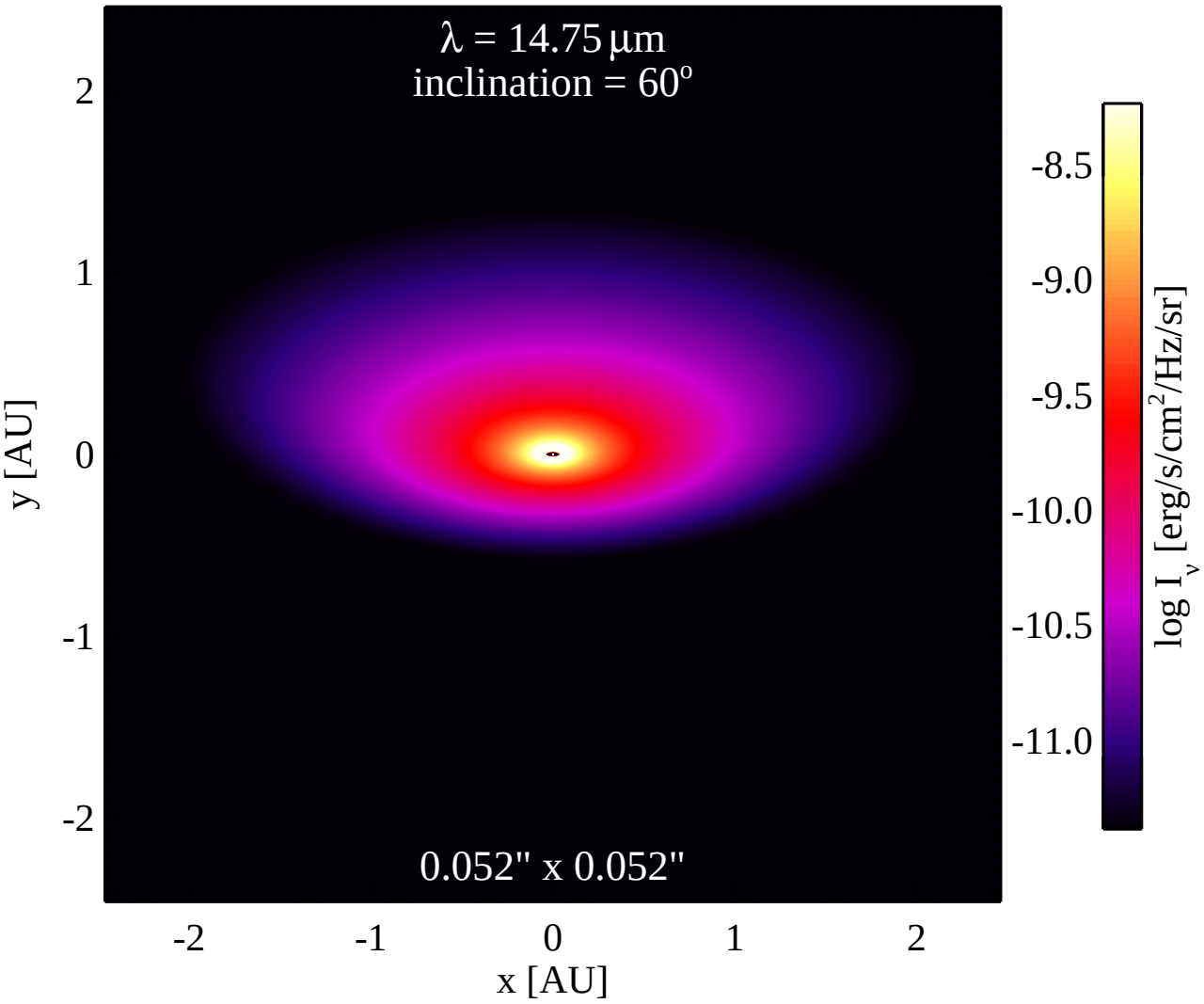

λ = 9.82 μm
inclination = 60°
0.035" x 0.035"
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
y [AU]
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
x [AU]
-8.0
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

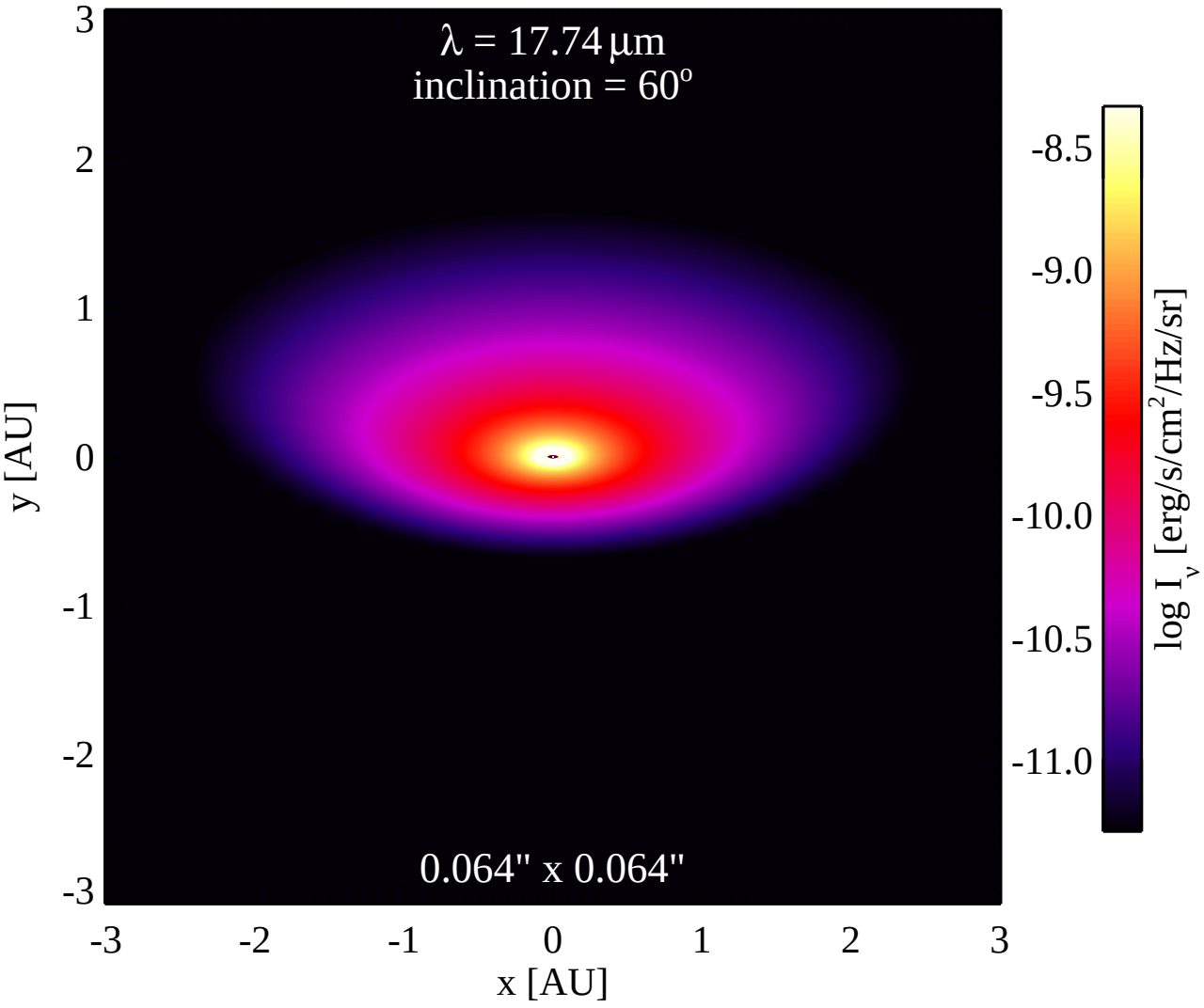

λ = 11.07 μm
inclination = 60°
0.043" x 0.043"
2
1
0
-1
-2
y [AU]
-2
-1
0
1
2
x [AU]
-8.0
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

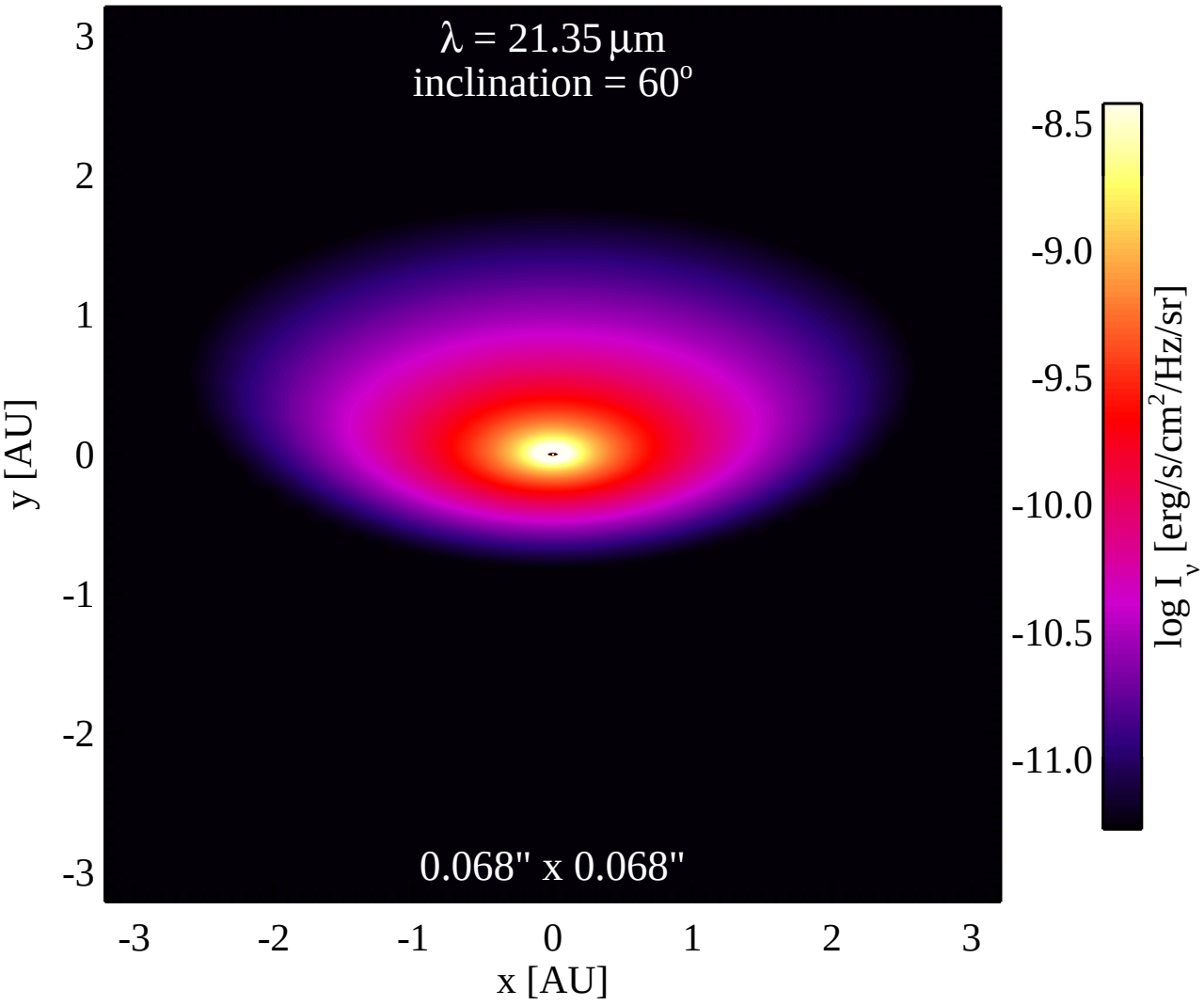

λ = 11.81 μm
inclination = 60°
0.045" x 0.045"
2
1
0
-1
-2
y [AU]
-2
-1
0
1
2
x [AU]
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

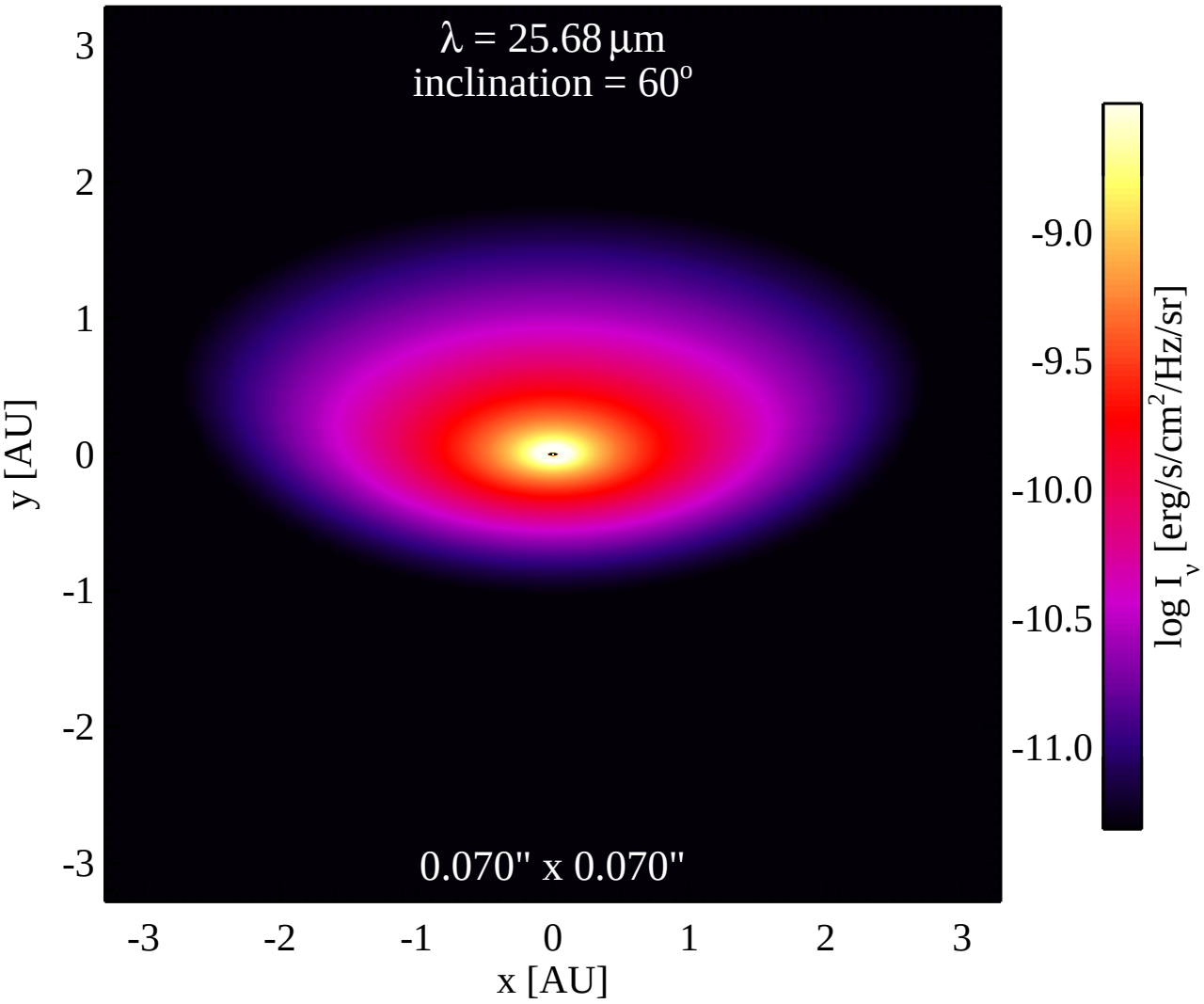

λ = 12.72 μm
inclination = 60°
0.049" x 0.049"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

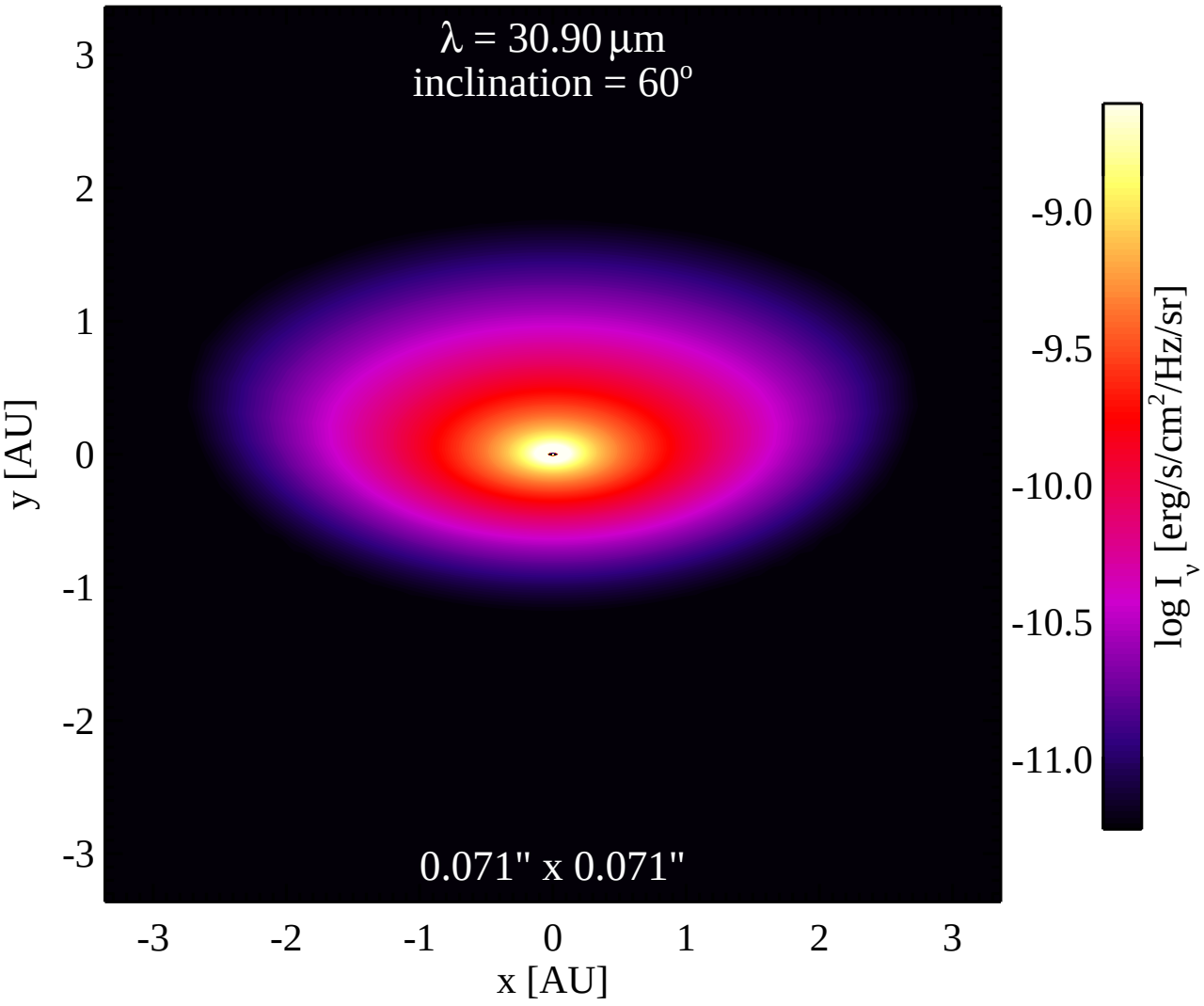

λ = 13.44 μm
inclination = 60°
0.049" x 0.049"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

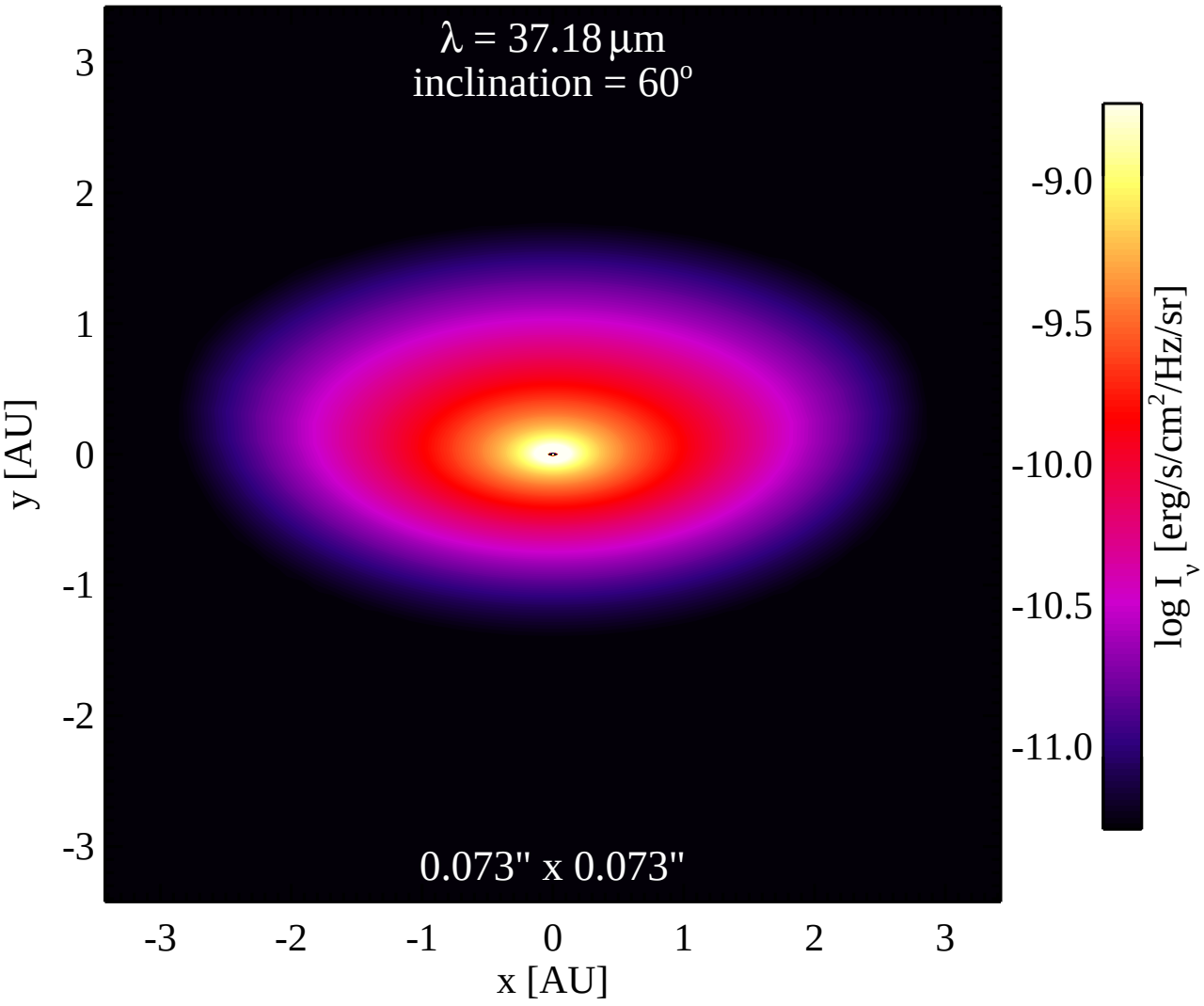

λ = 14.75 μm
inclination = 60°
0.052" x 0.052"
2
1
0
-1
-2
y [AU]
-2
-1
0
1
2
x [AU]
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

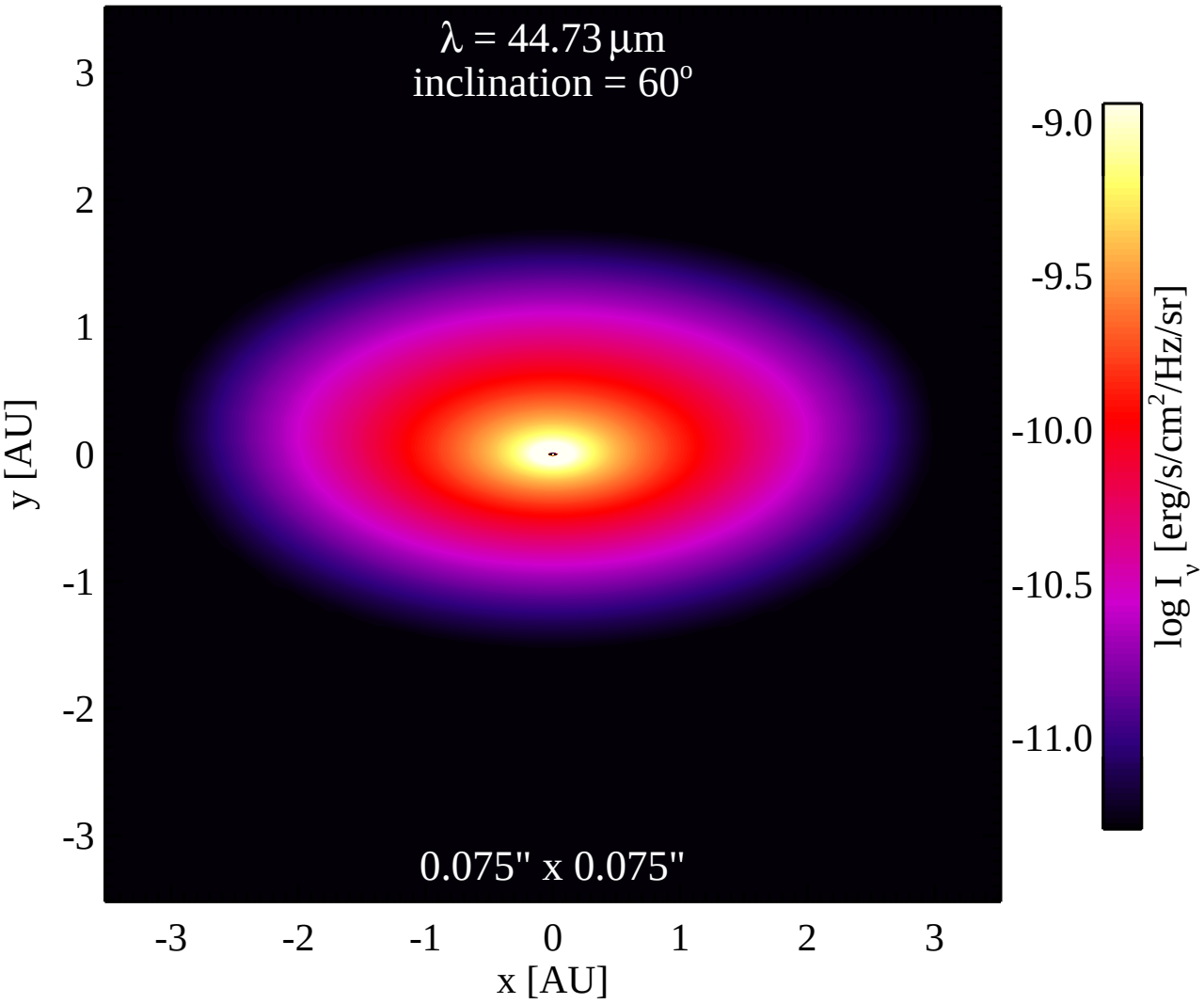

λ = 17.74 μm
inclination = 60°
0.064" x 0.064"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

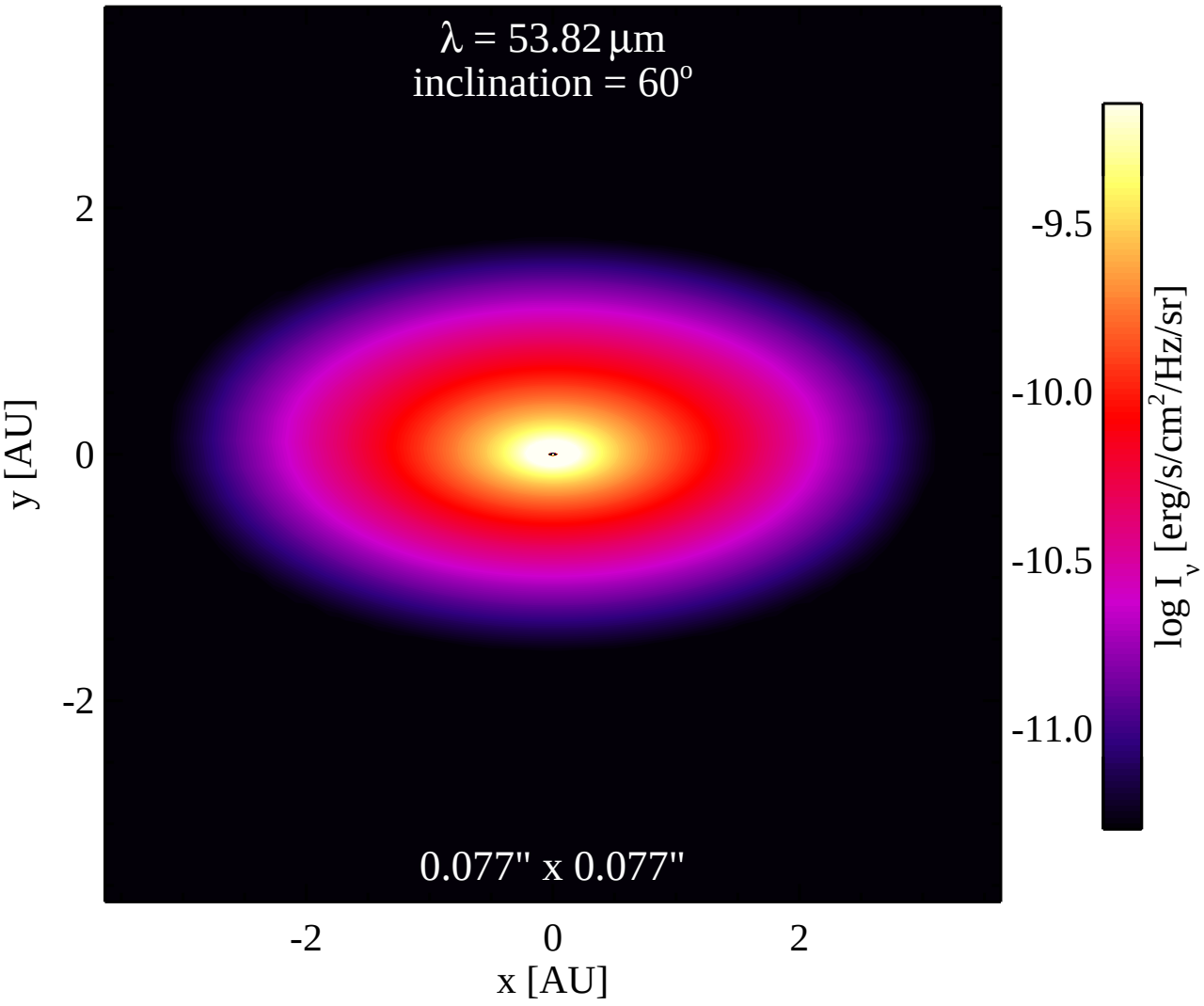

λ = 21.35 μm
inclination = 60°
0.068" x 0.068"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

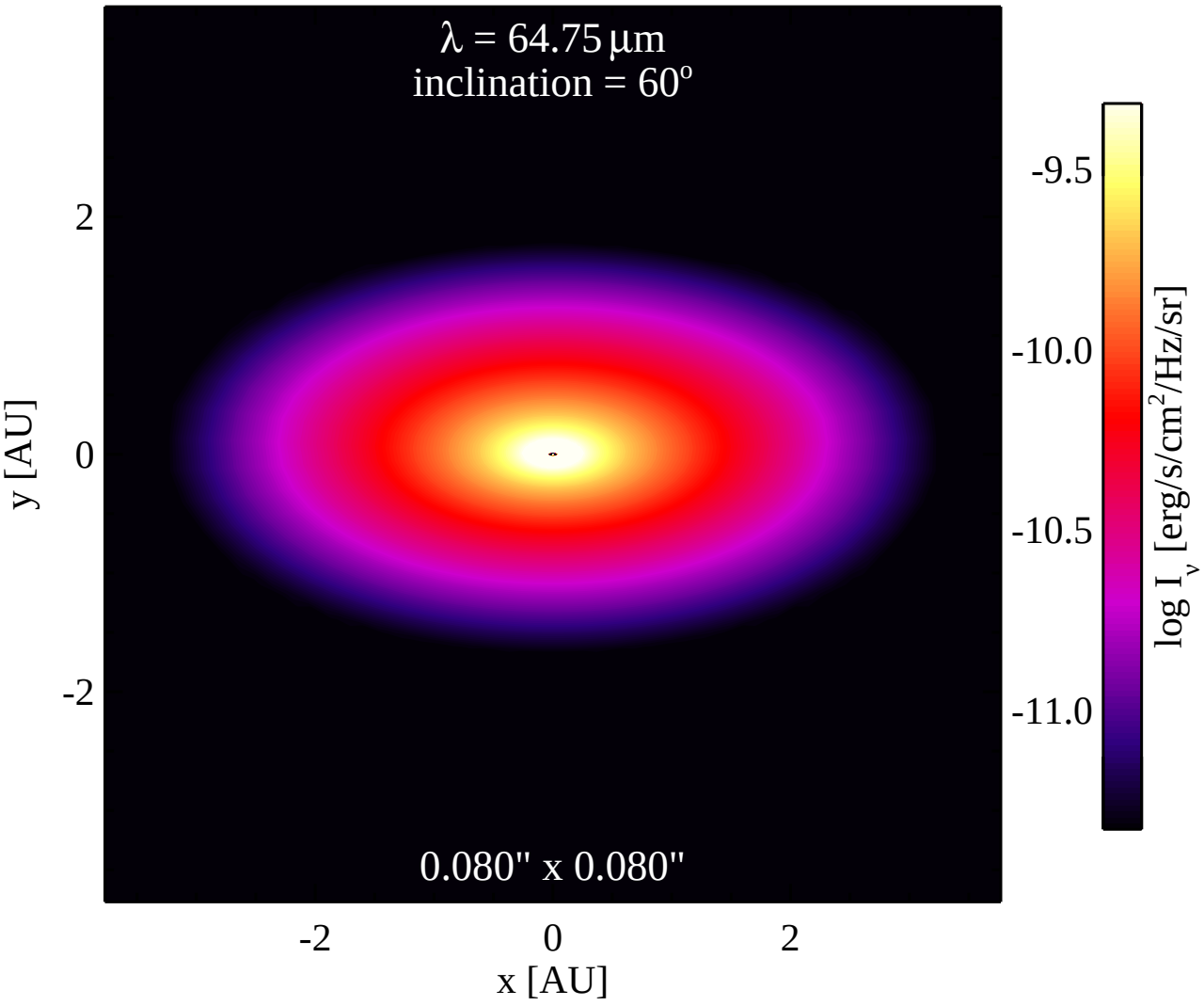

λ = 25.68 μm
inclination = 60°
0.070" x 0.070"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

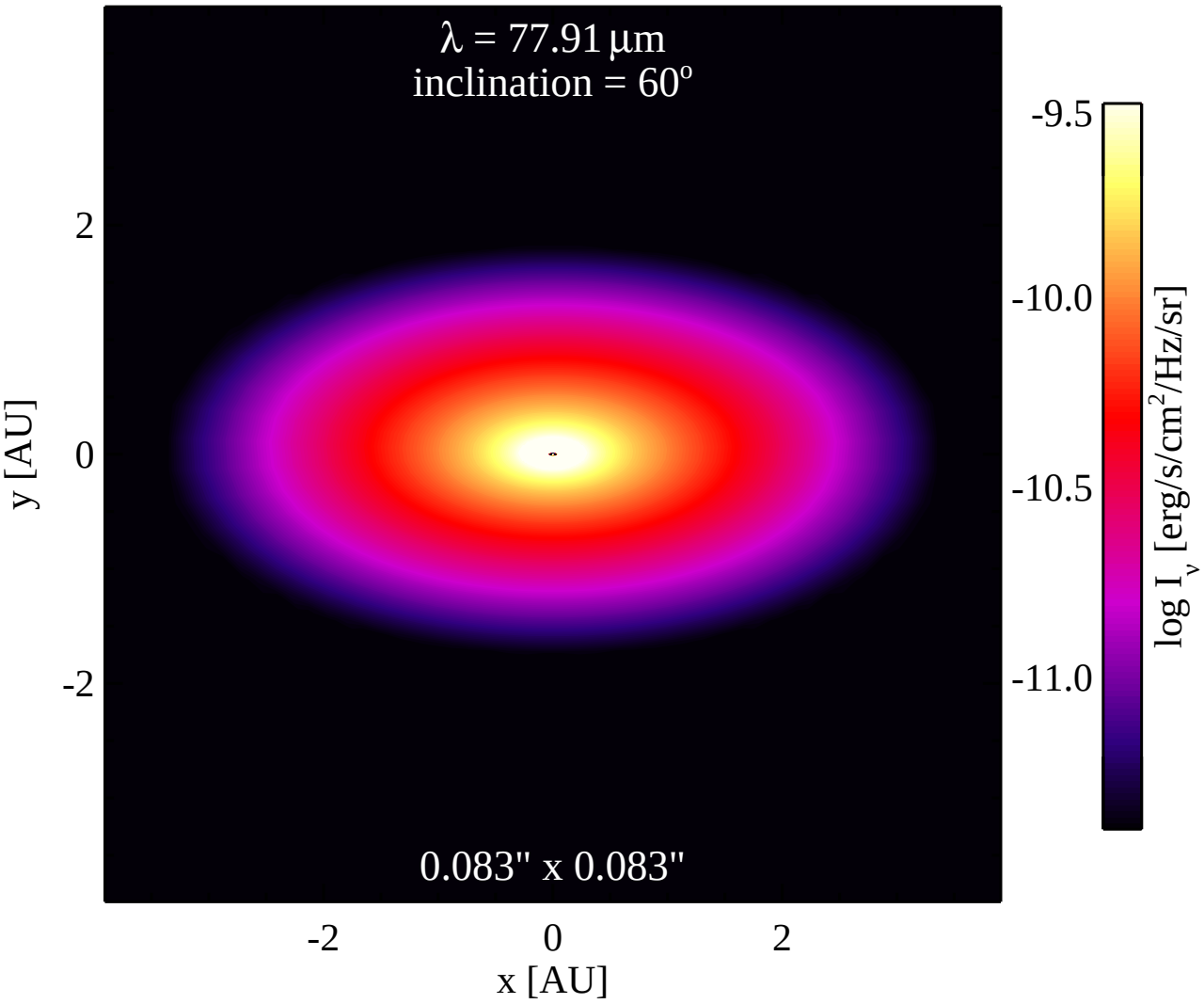

λ = 30.90 μm
inclination = 60°
0.071" x 0.071"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

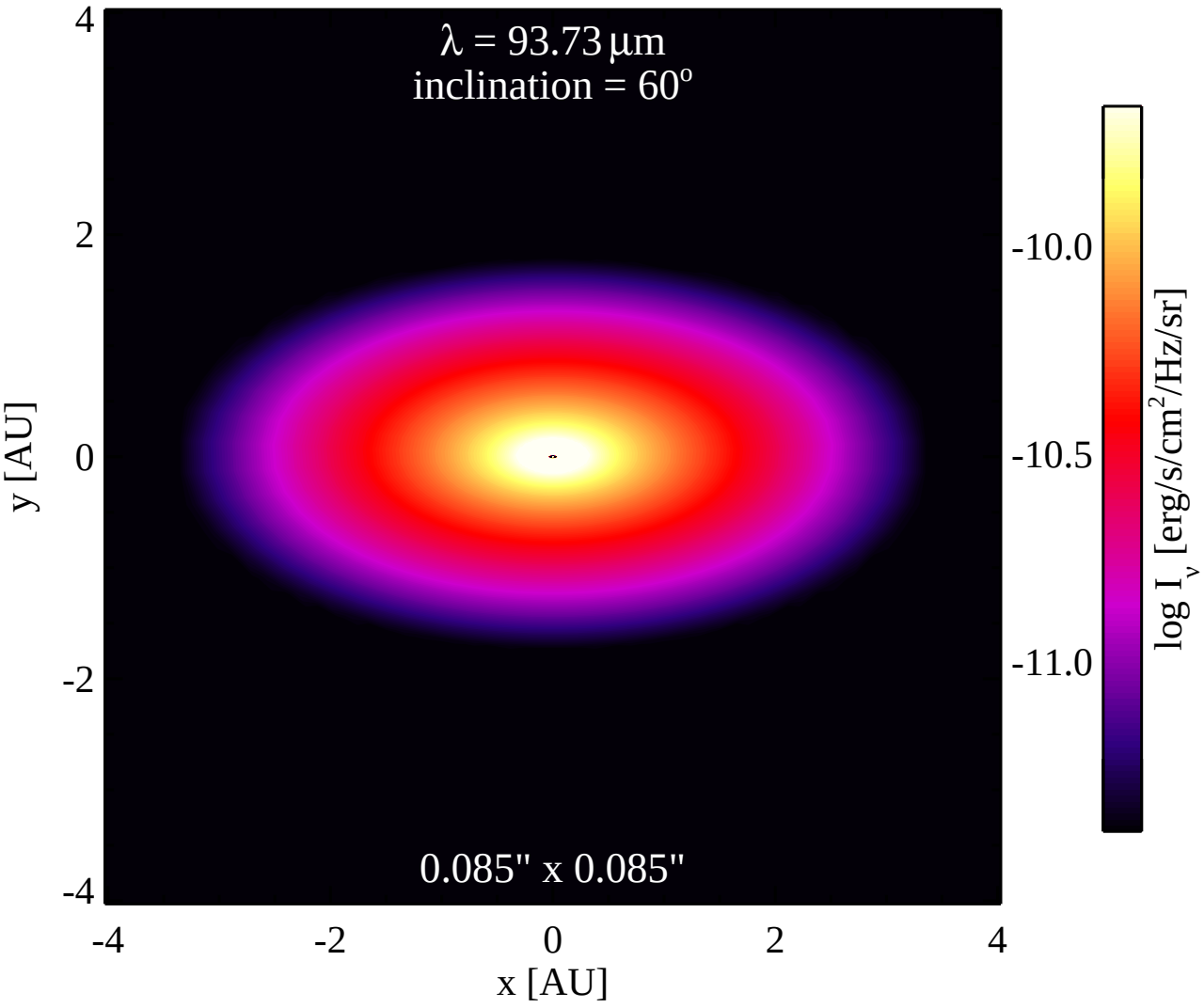

λ = 37.18 μm
inclination = 60°
0.073" x 0.073"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

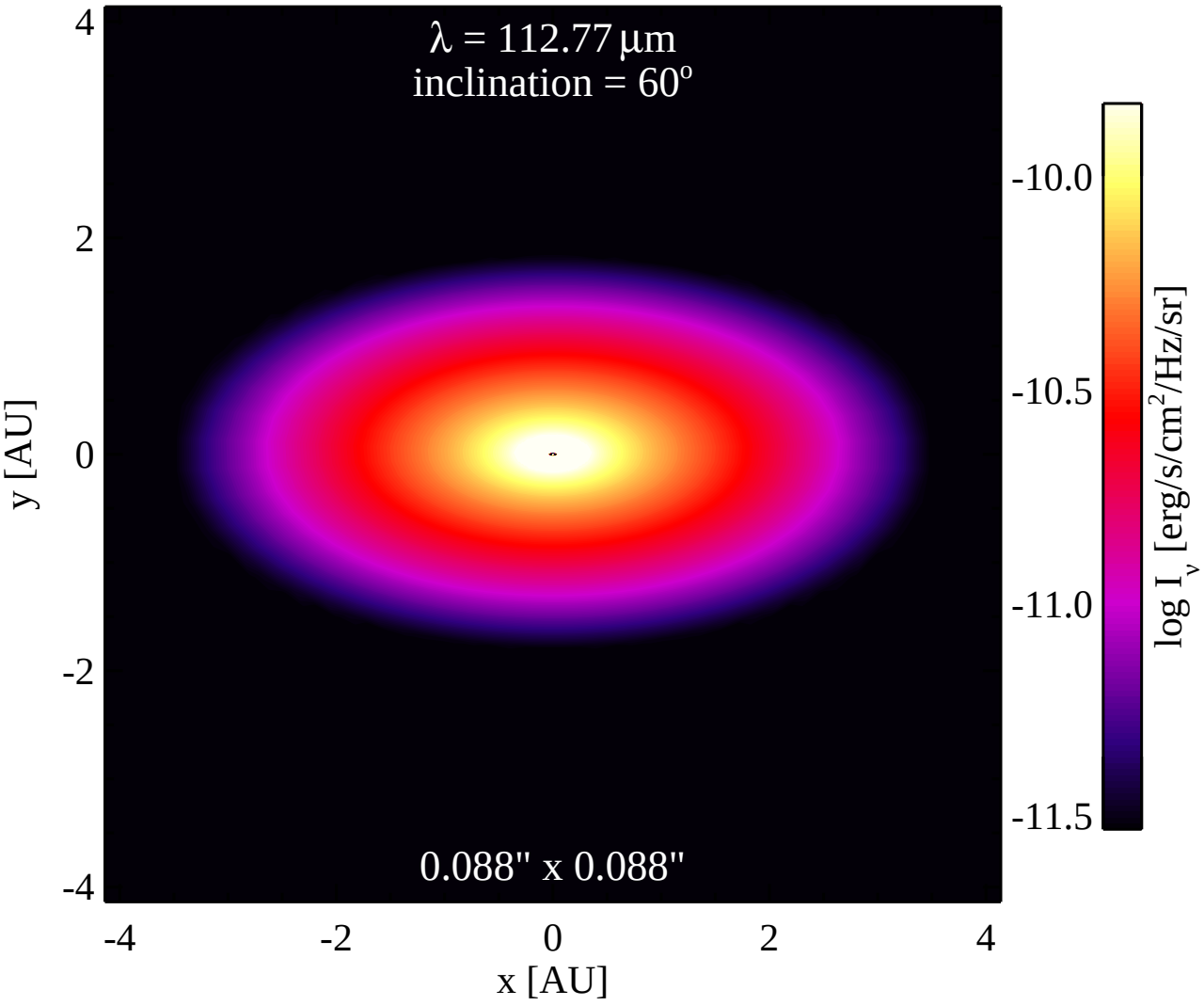

λ = 44.73 μm
inclination = 60°
0.075" x 0.075"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

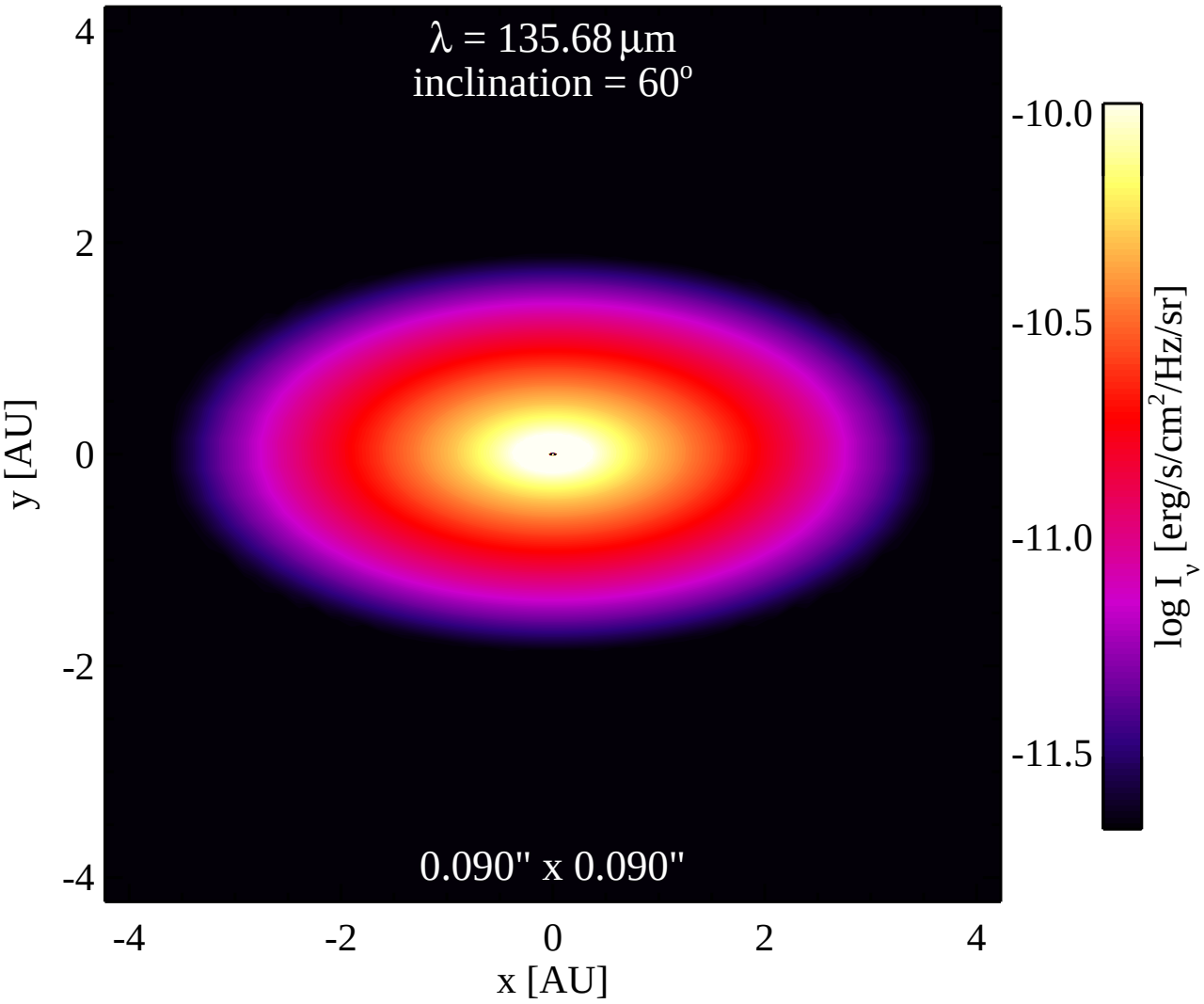

λ = 53.82 μm
inclination = 60°
0.077" x 0.077"
y [AU]
x [AU]
2
0
-2
-2
0
2
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

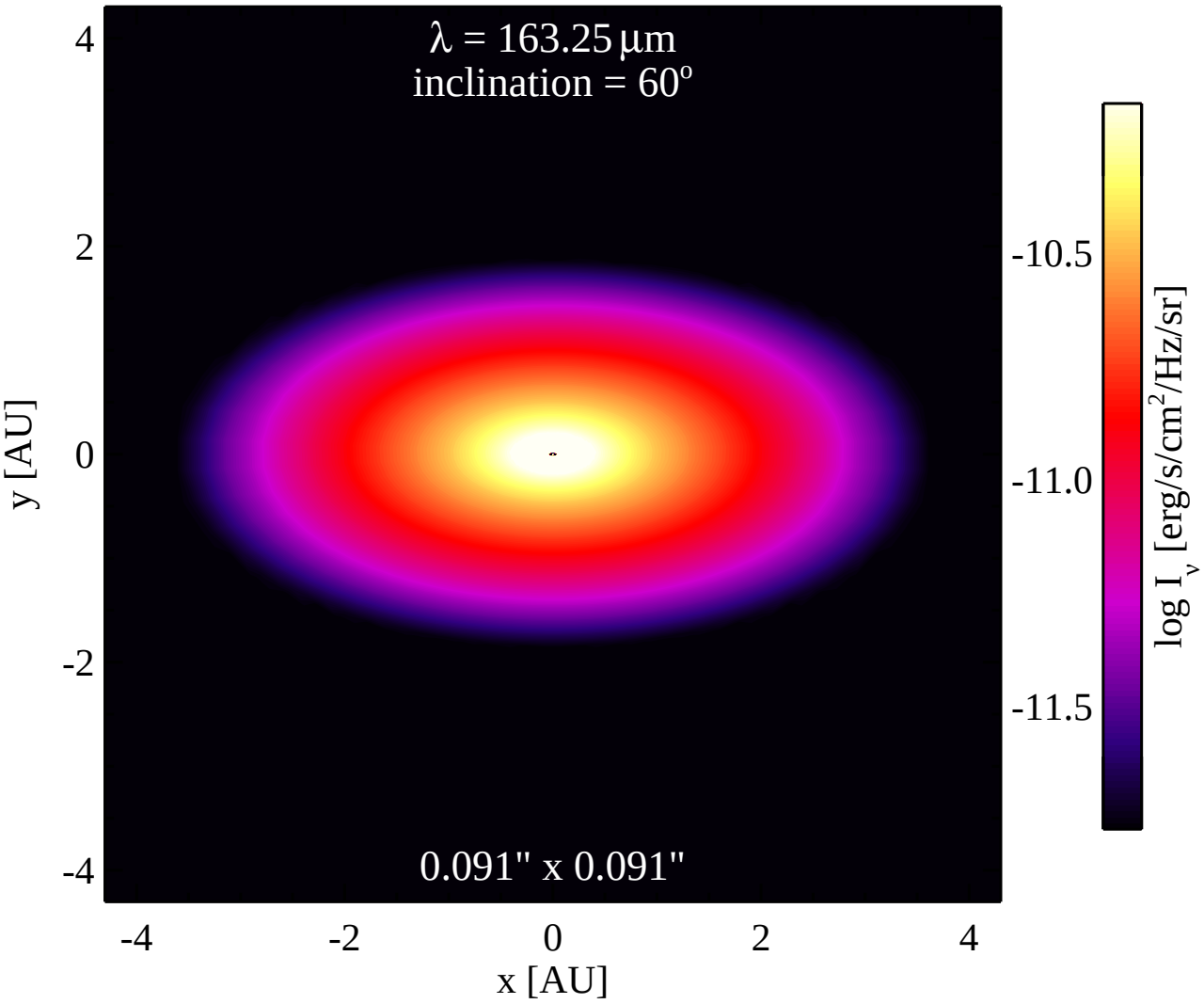

λ = 64.75 μm
inclination = 60°
0.080" x 0.080"
y [AU]
x [AU]
2
0
-2
-2
0
2
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

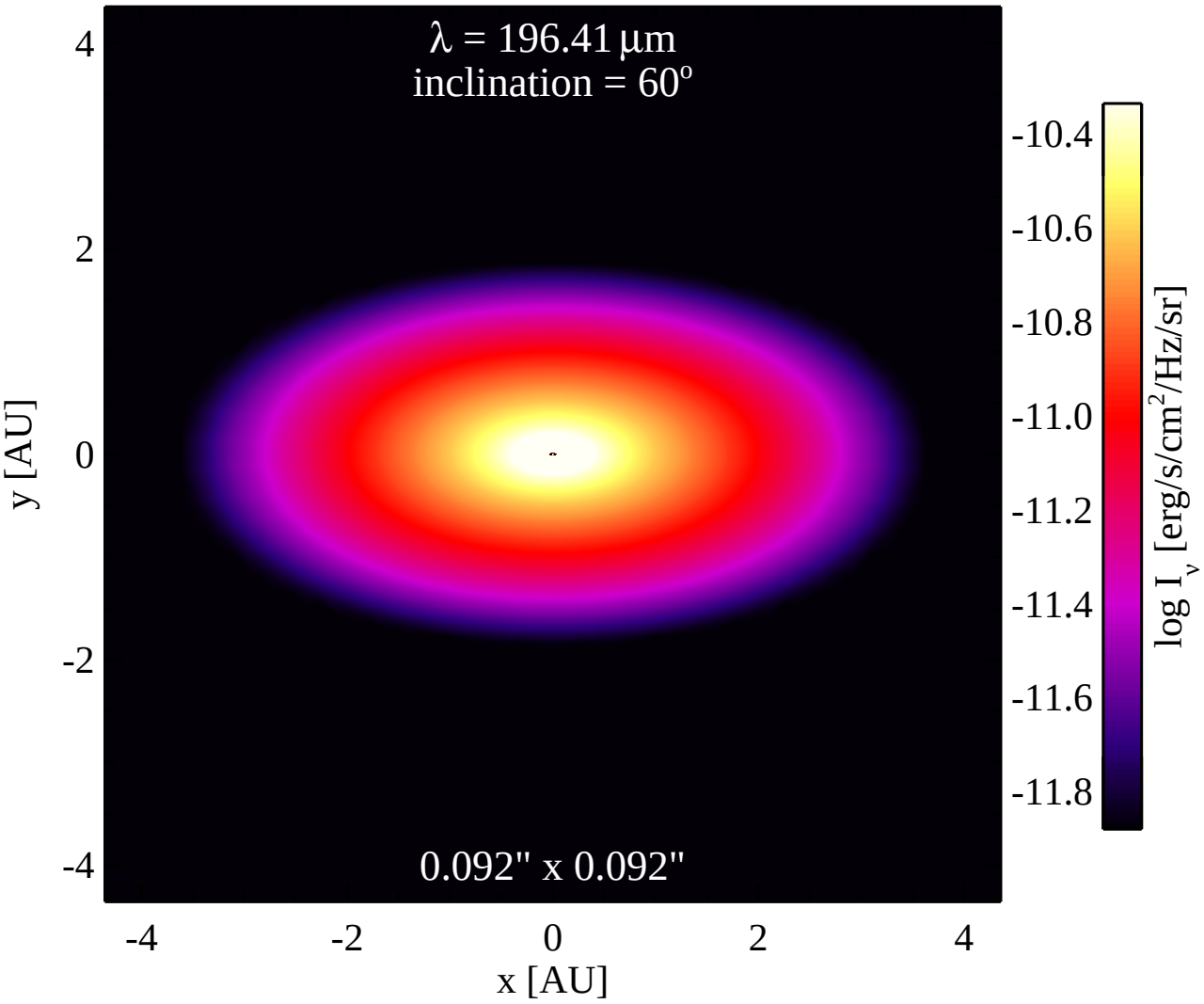

λ = 77.91 μm
inclination = 60°
0.083" x 0.083"
y [AU]
2
0
-2
x [AU]
-2
0
2
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

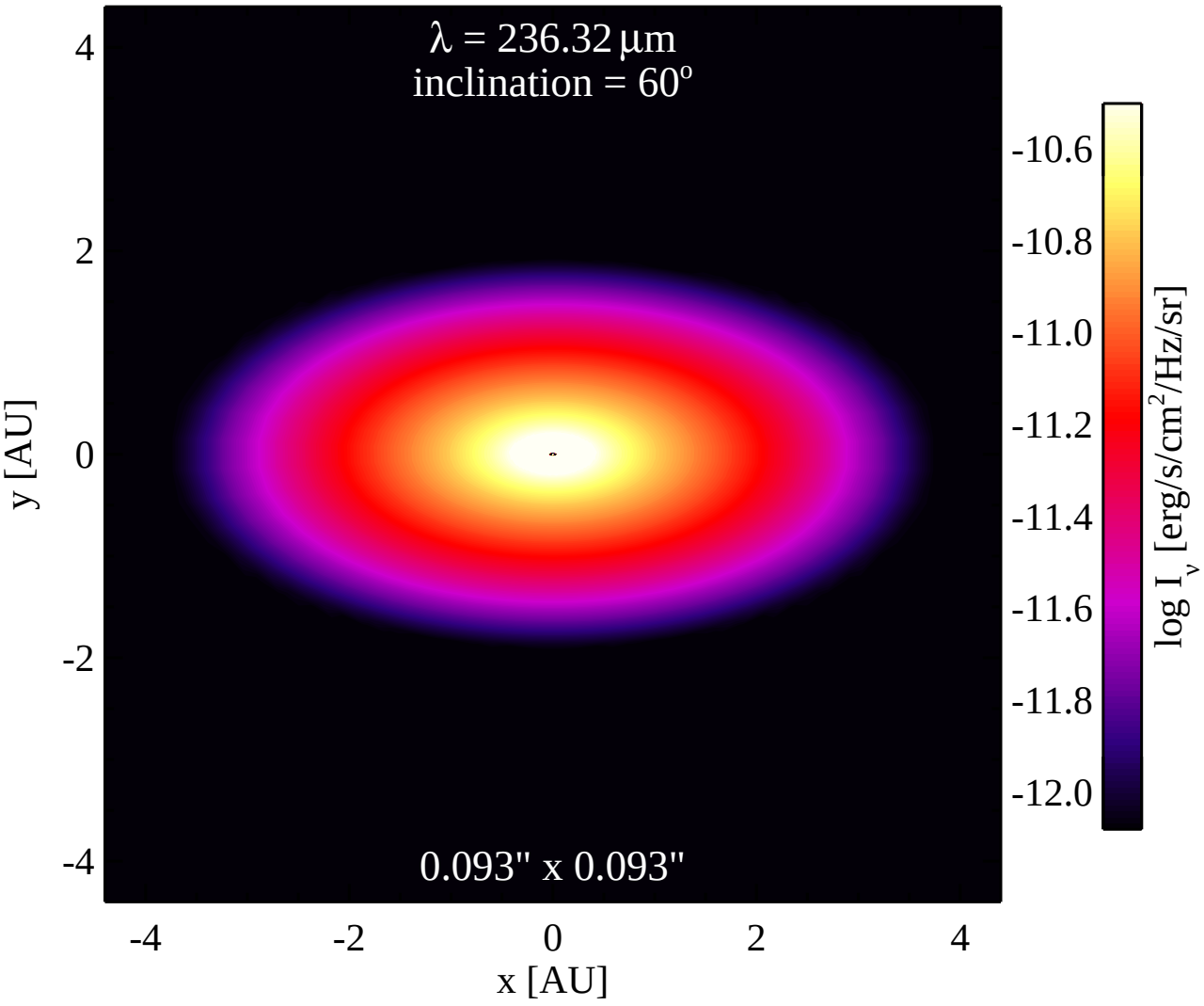

λ = 93.73 μm
inclination = 60°
0.085" x 0.085"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

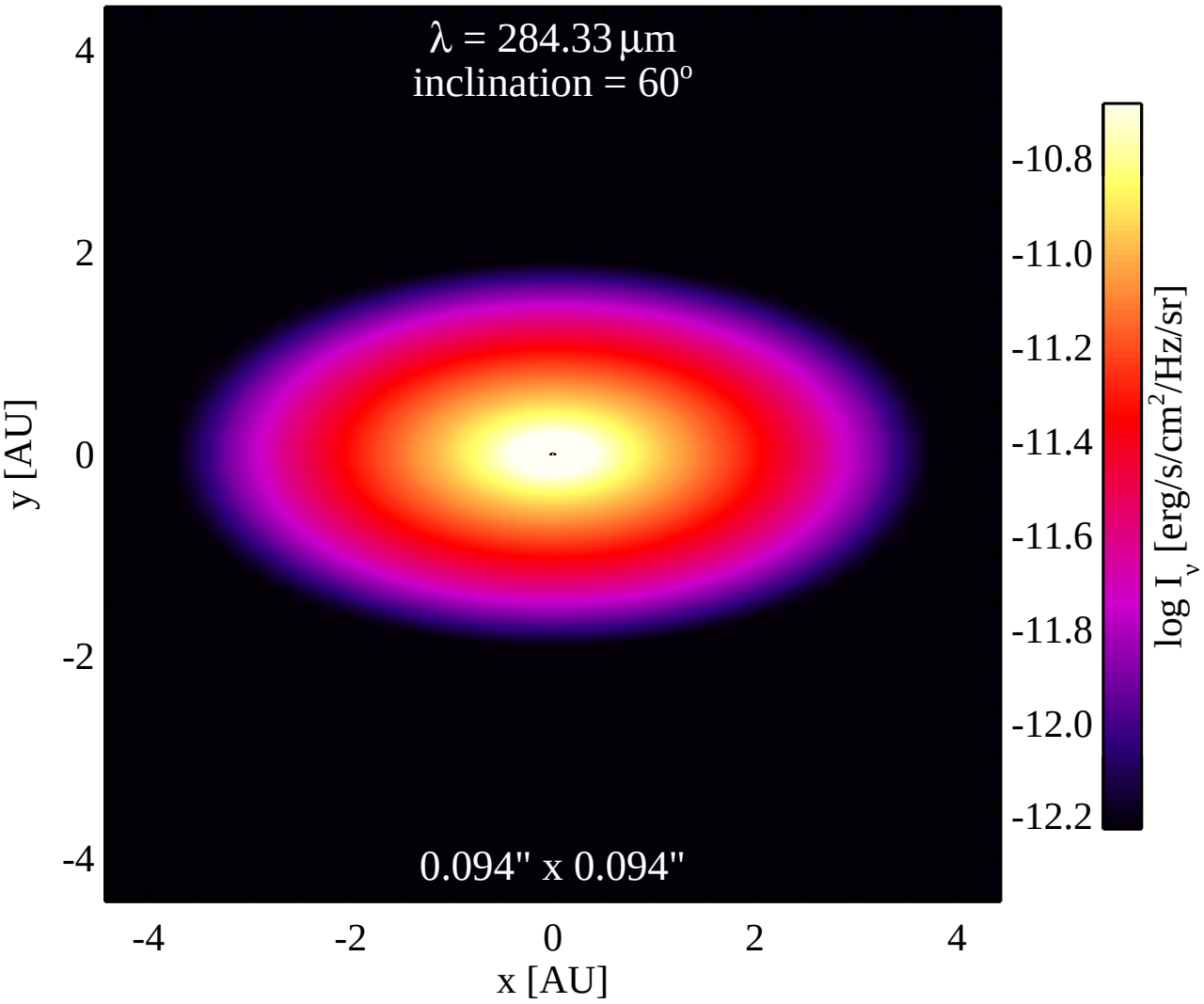

λ = 112.77 μm
inclination = 60°
0.088" x 0.088"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

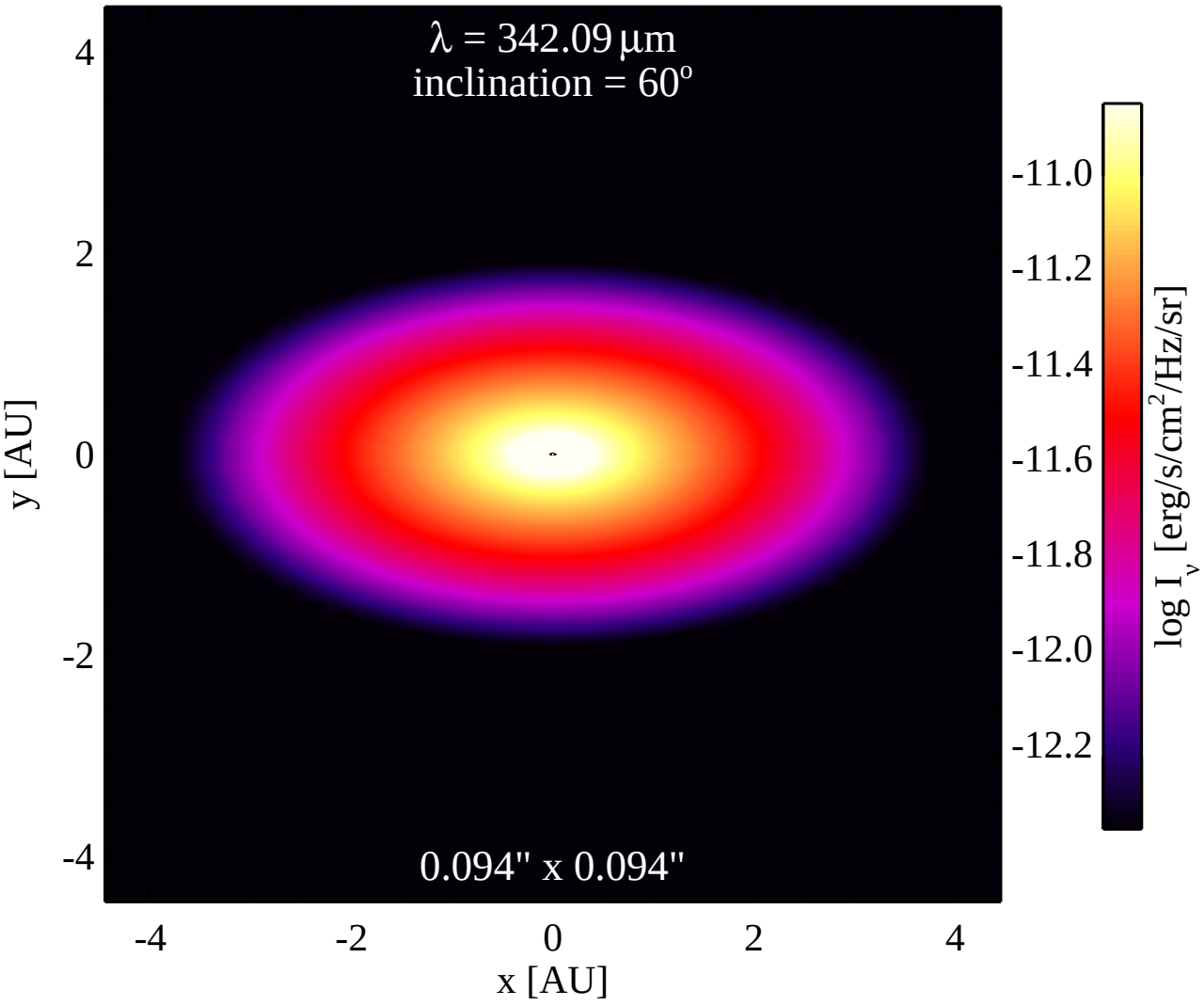

λ = 135.68 μm
inclination = 60°
0.090" x 0.090"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-10.0
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

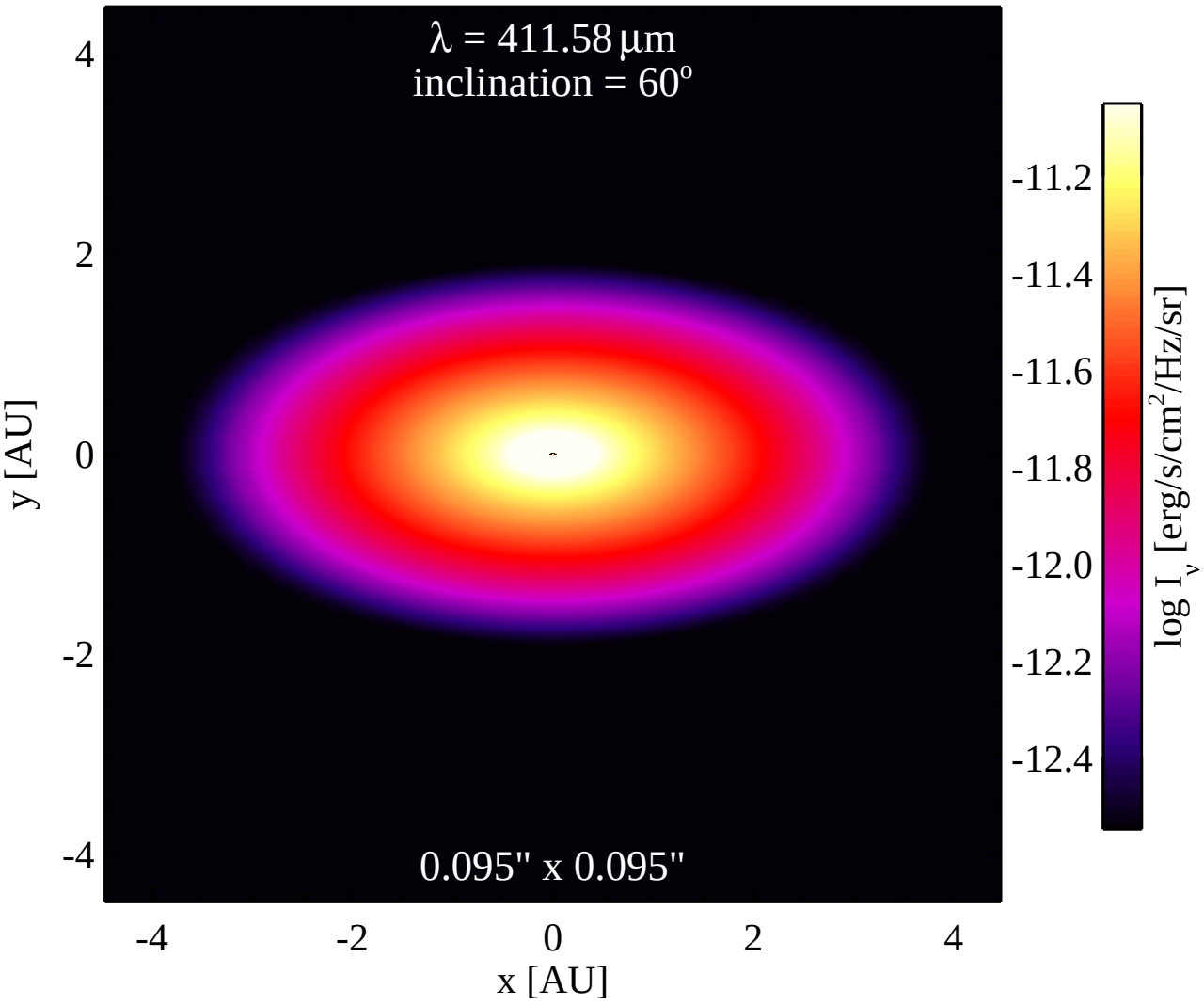

λ = 163.25 μm
inclination = 60°
0.091" x 0.091"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-10.5
-11.0
-11.5
log I_ν [erg/s/cm²/Hz/sr]

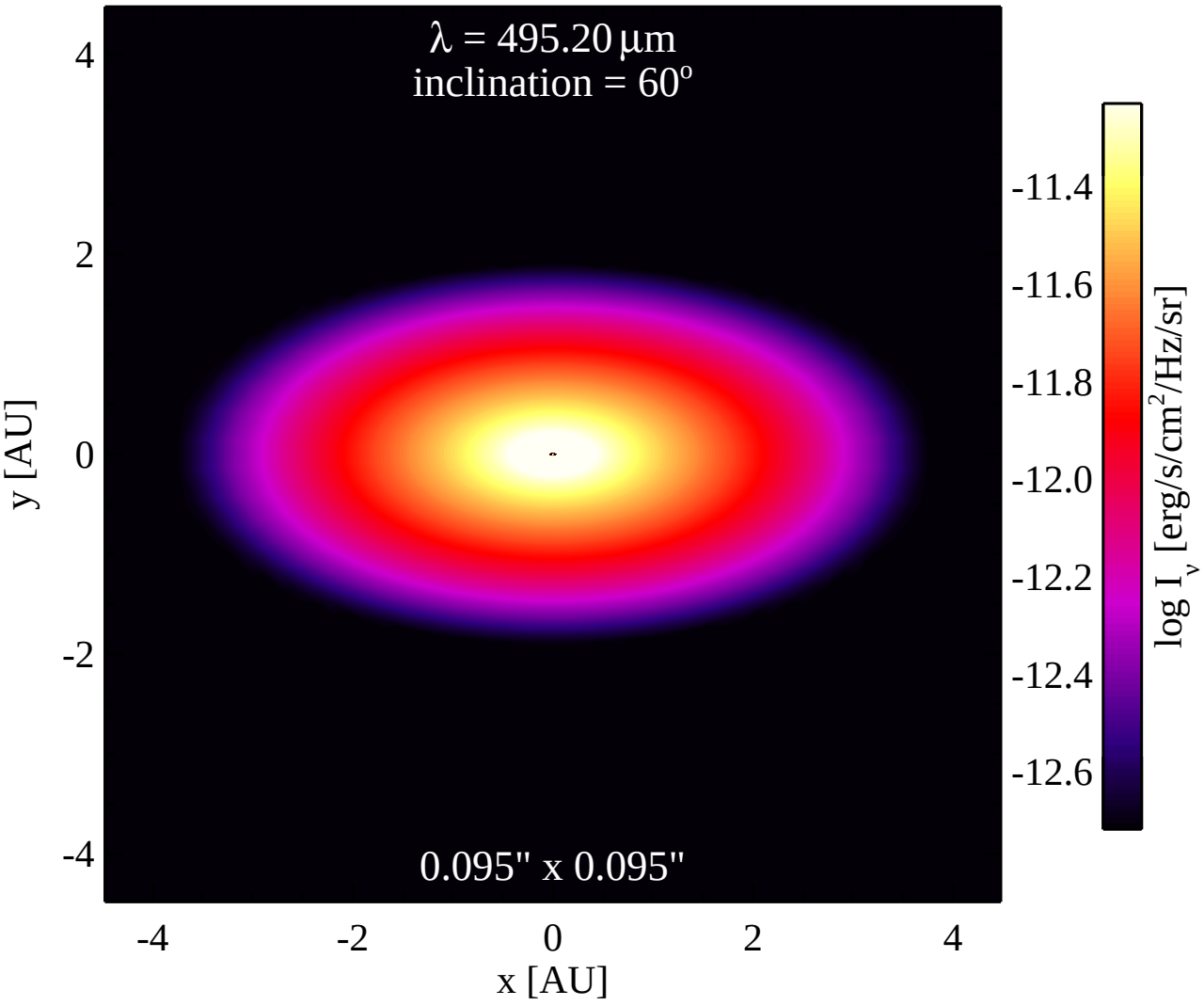

λ = 196.41 μm
inclination = 60°
0.092" x 0.092"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-10.4
-10.6
-10.8
-11.0
-11.2
-11.4
-11.6
-11.8
log I_ν [erg/s/cm²/Hz/sr]

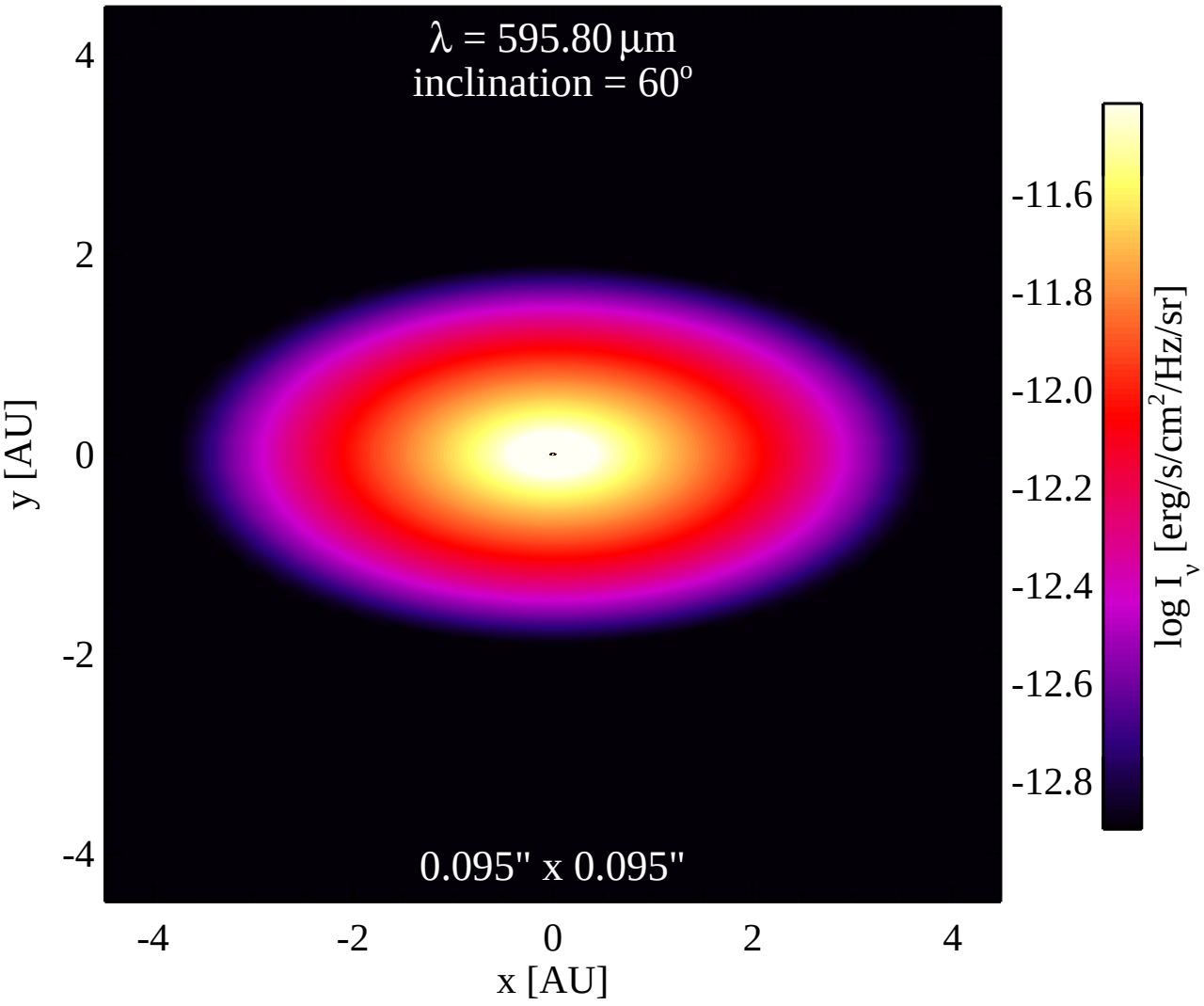

λ = 236.32 μm
inclination = 60°
0.093" x 0.093"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-10.6
-10.8
-11.0
-11.2
-11.4
-11.6
-11.8
-12.0
log I_ν [erg/s/cm²/Hz/sr]

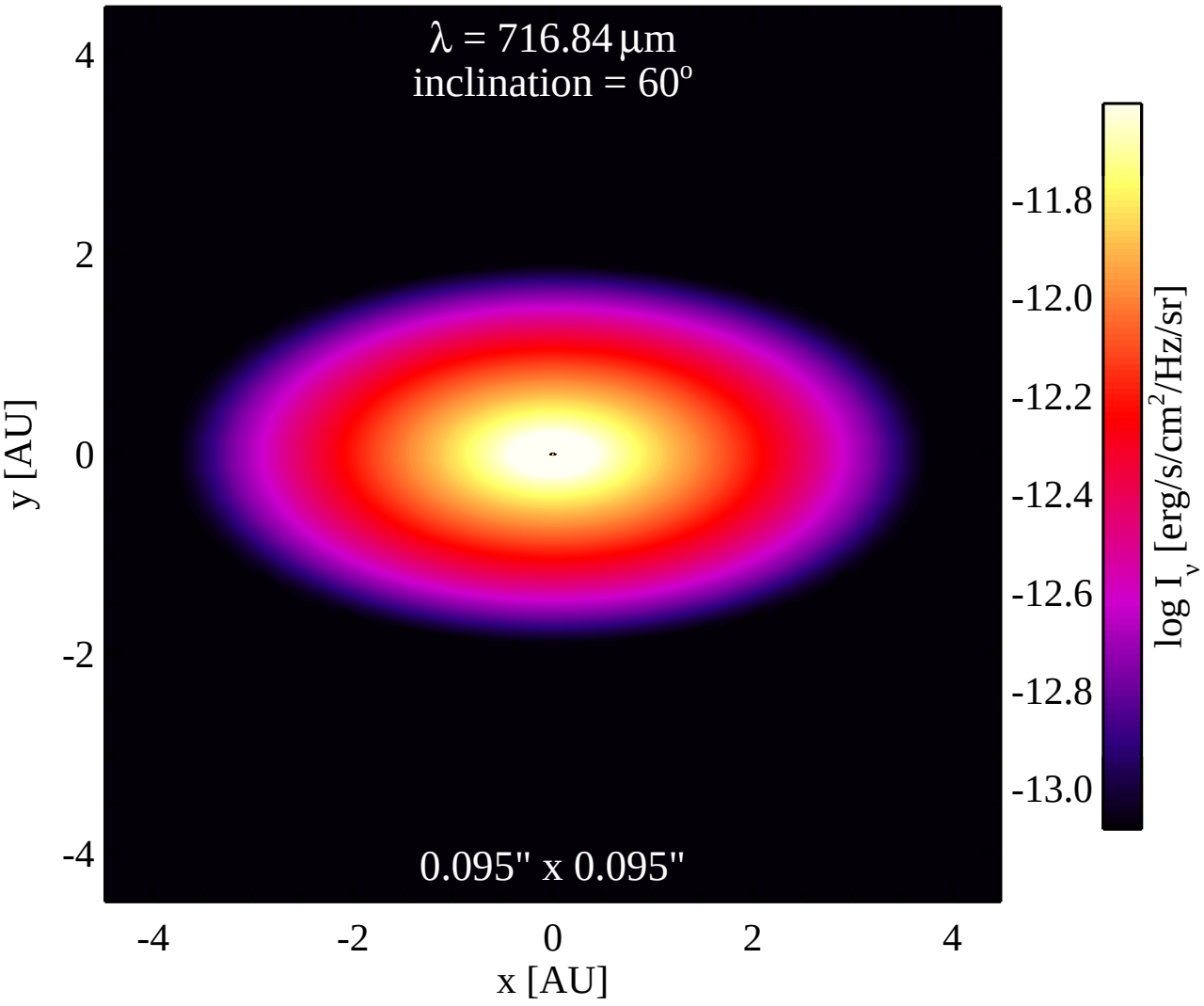

λ = 284.33 μm
inclination = 60°
0.094" x 0.094"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-10.8
-11.0
-11.2
-11.4
-11.6
-11.8
-12.0
-12.2
log I_ν [erg/s/cm²/Hz/sr]

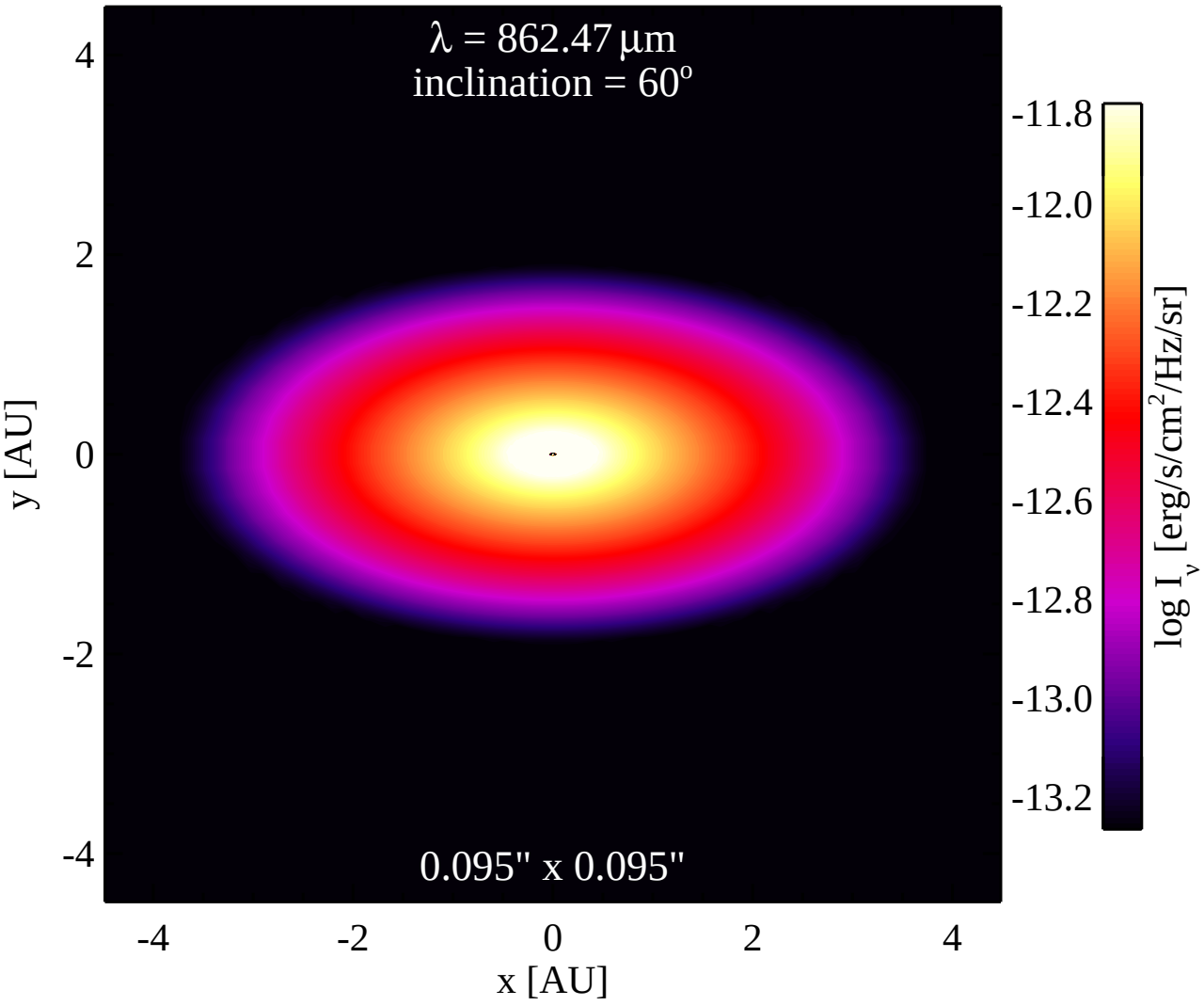

λ = 342.09 μm
inclination = 60°
0.094" x 0.094"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-11.0
-11.2
-11.4
-11.6
-11.8
-12.0
-12.2
log I_ν [erg/s/cm²/Hz/sr]


λ = 411.58 μm
inclination = 60°
0.095" x 0.095"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-11.2
-11.4
-11.6
-11.8
-12.0
-12.2
-12.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 495.20 μm
inclination = 60°
0.095" x 0.095"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-11.4
-11.6
-11.8
-12.0
-12.2
-12.4
-12.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 595.80 μm
inclination = 60°
0.095" x 0.095"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-11.6
-11.8
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]


λ = 716.84 μm
inclination = 60°
0.095" x 0.095"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-11.8
-12.0
-12.2
-12.4
-12.6
-12.8
-13.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 862.47 μm
inclination = 60°
0.095" x 0.095"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-11.8
-12.0
-12.2
-12.4
-12.6
-12.8
-13.0
-13.2
log I_ν [erg/s/cm²/Hz/sr]