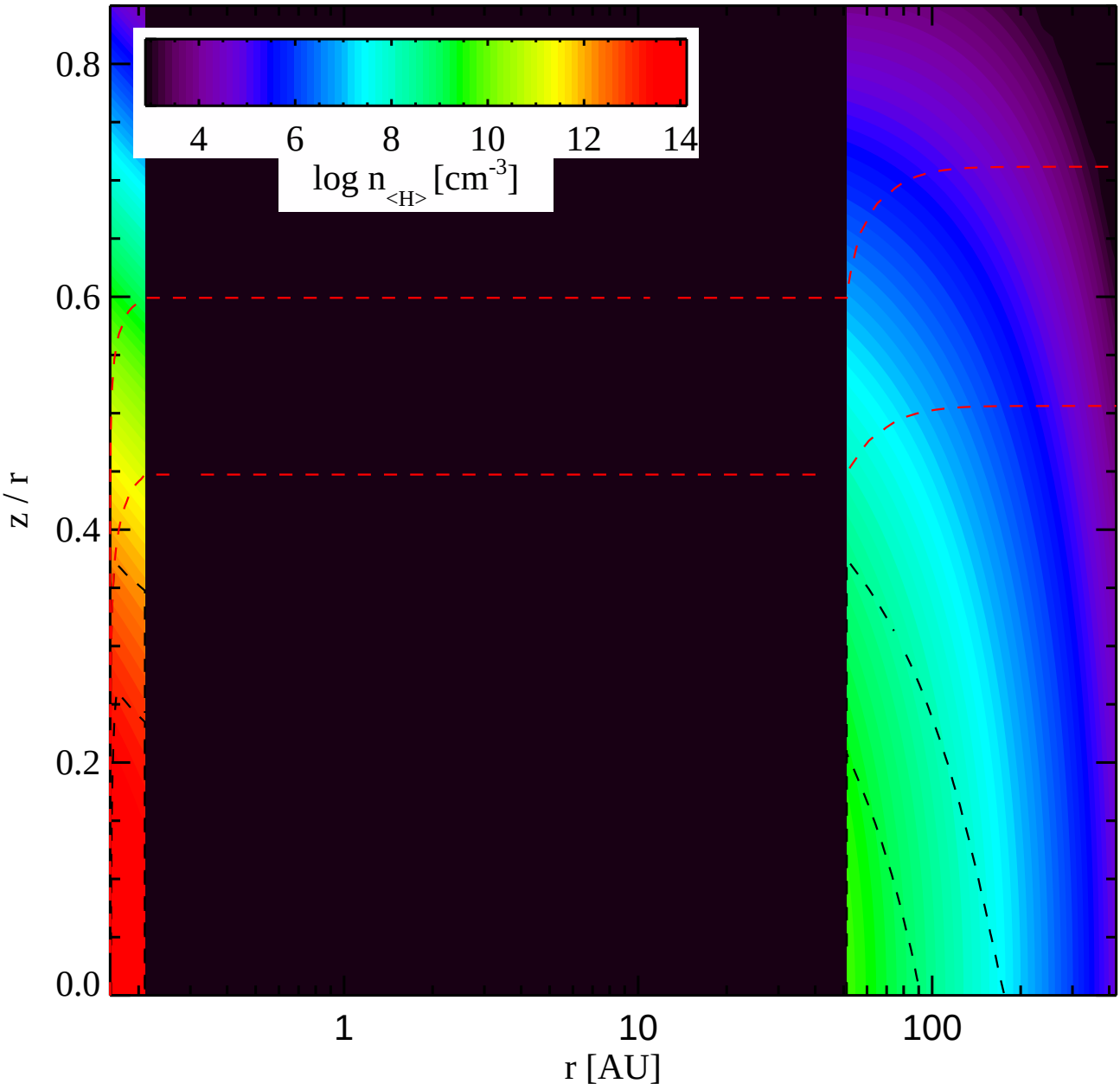
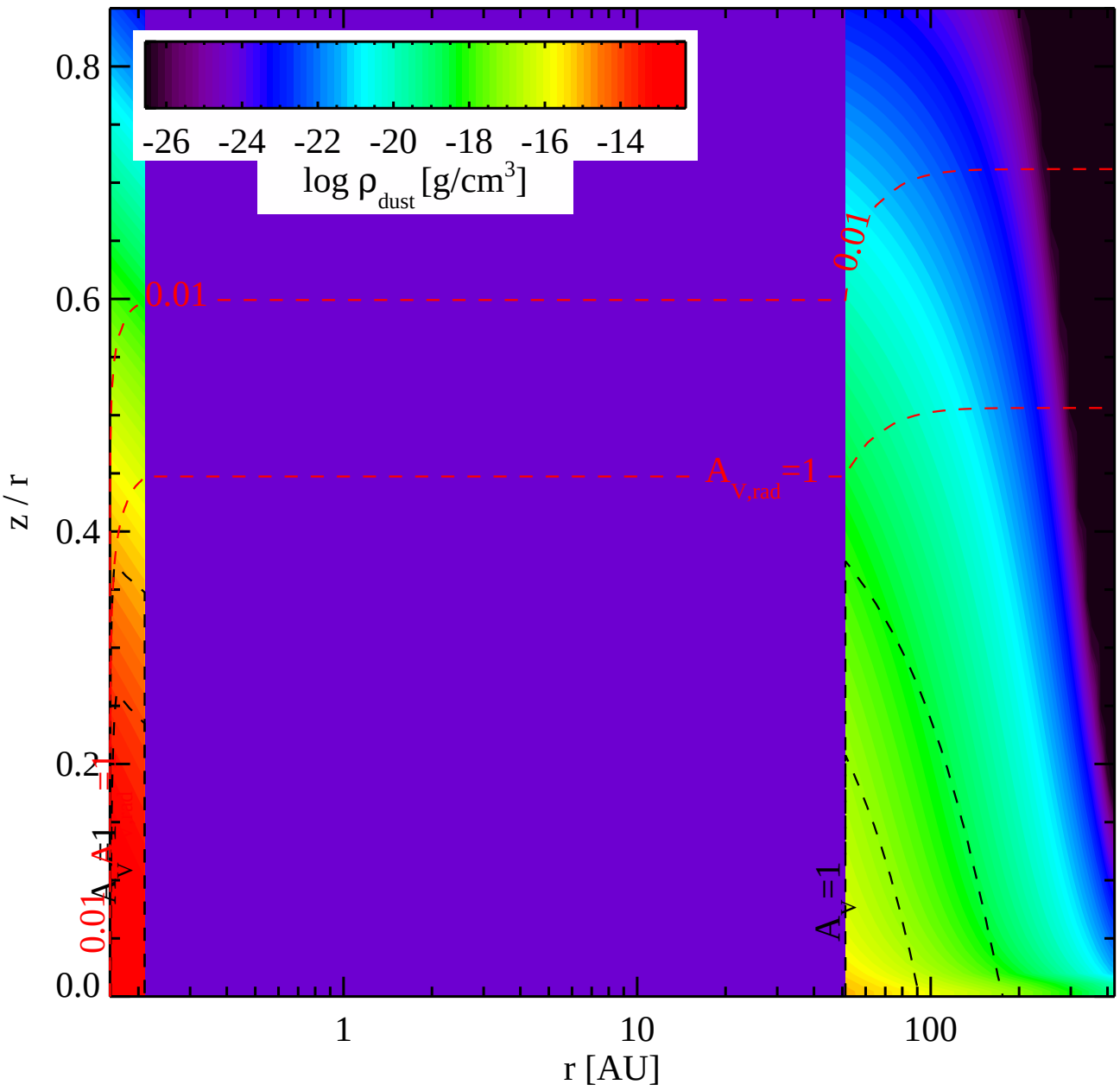
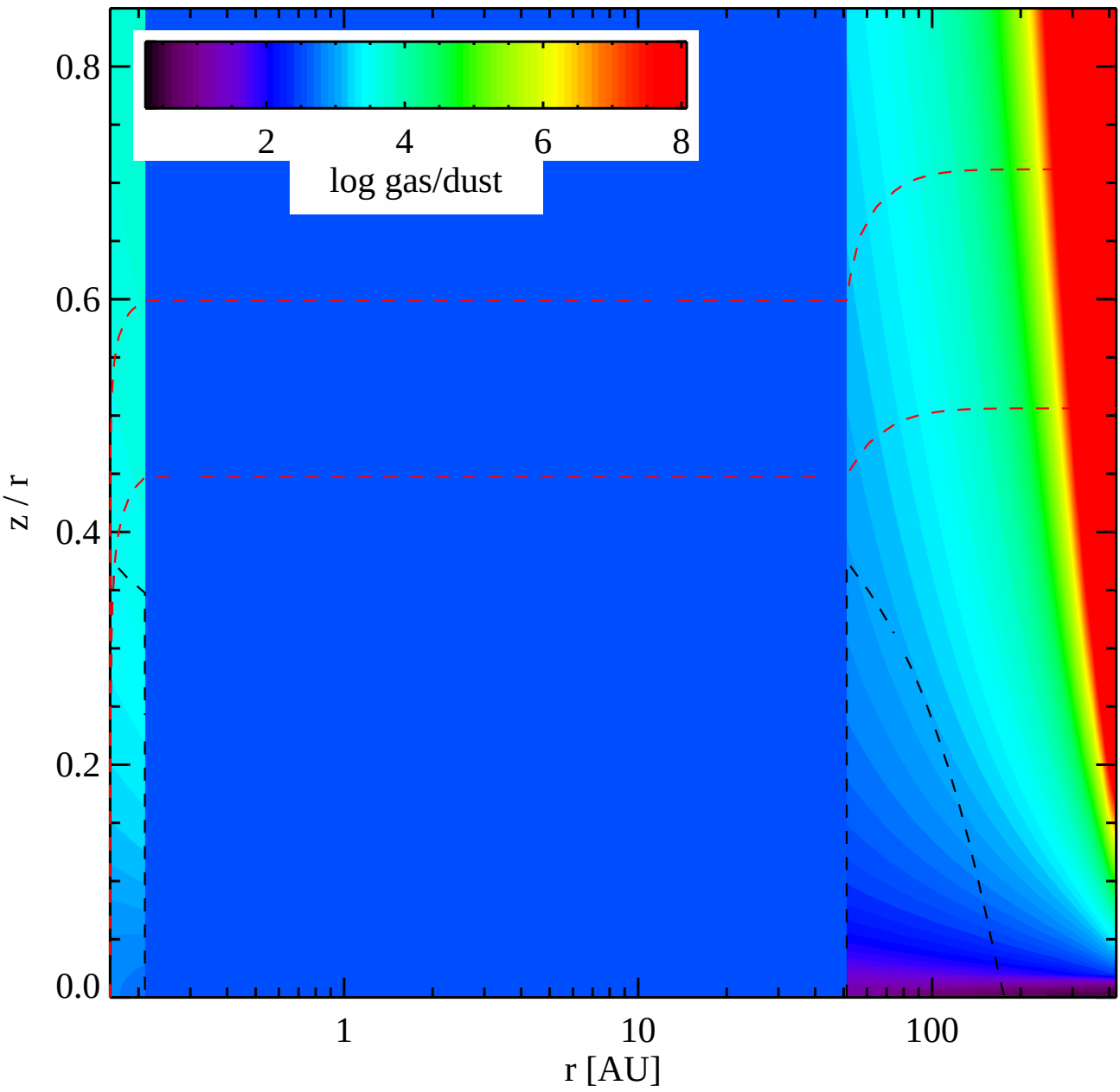
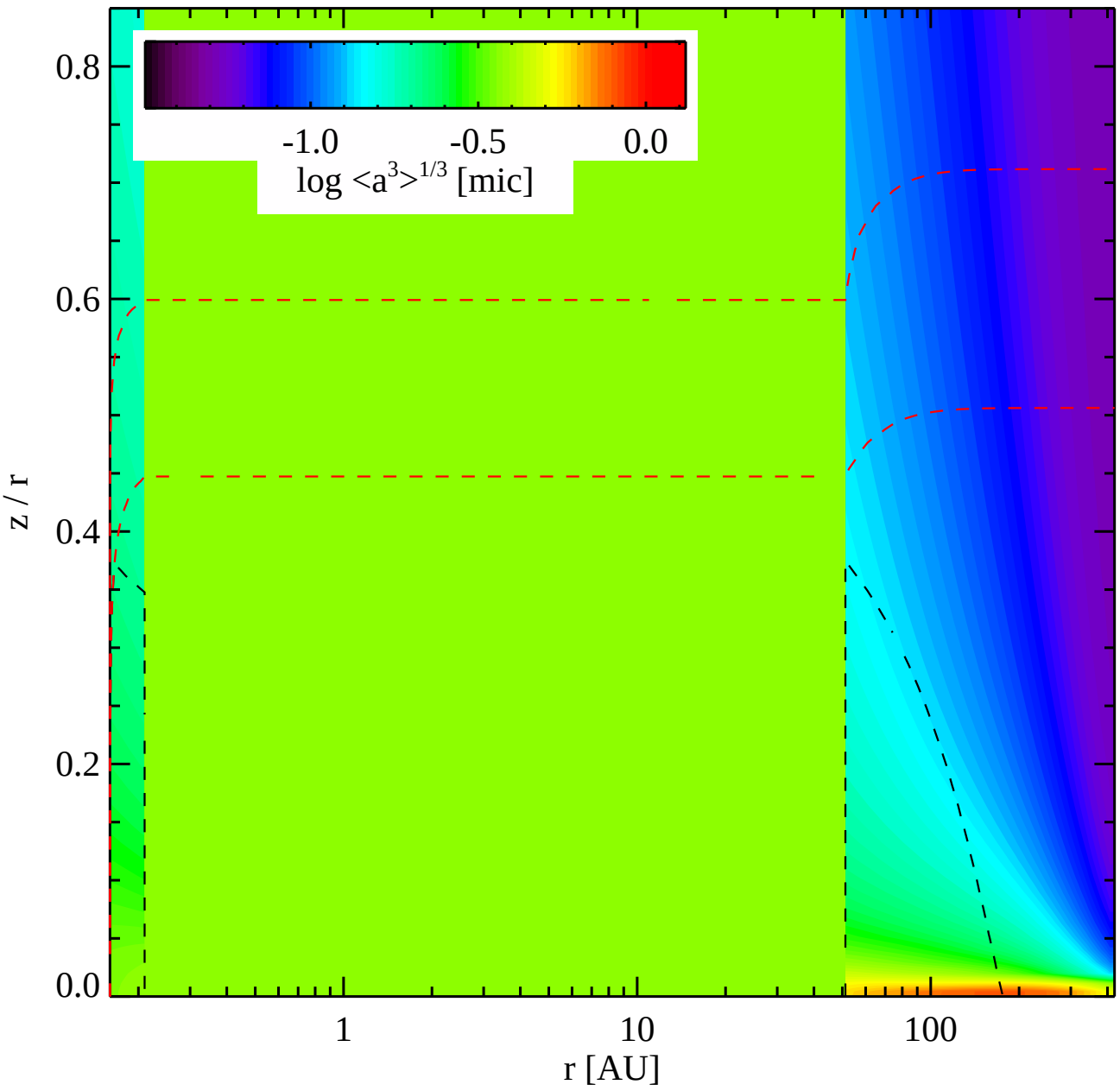
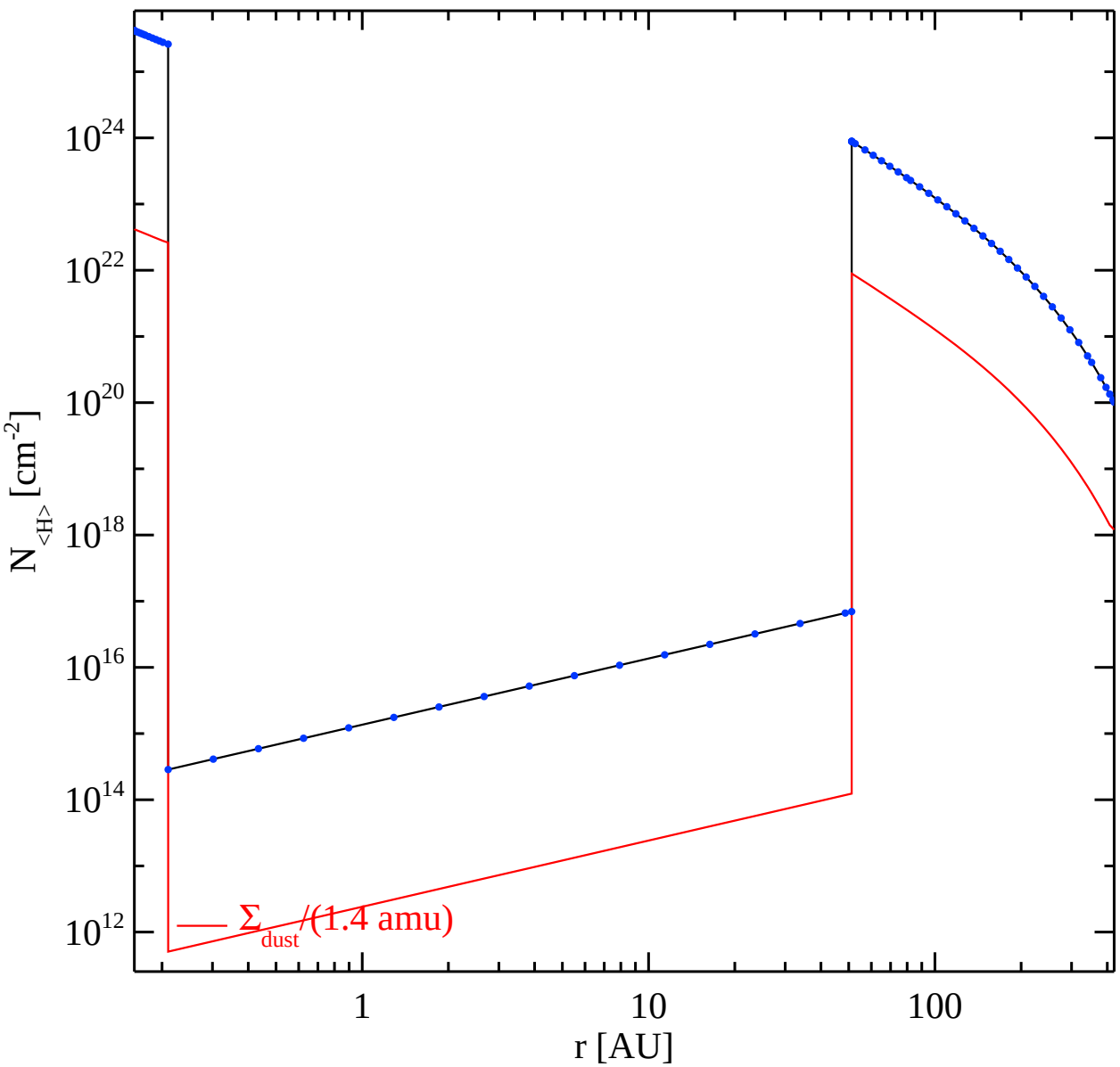
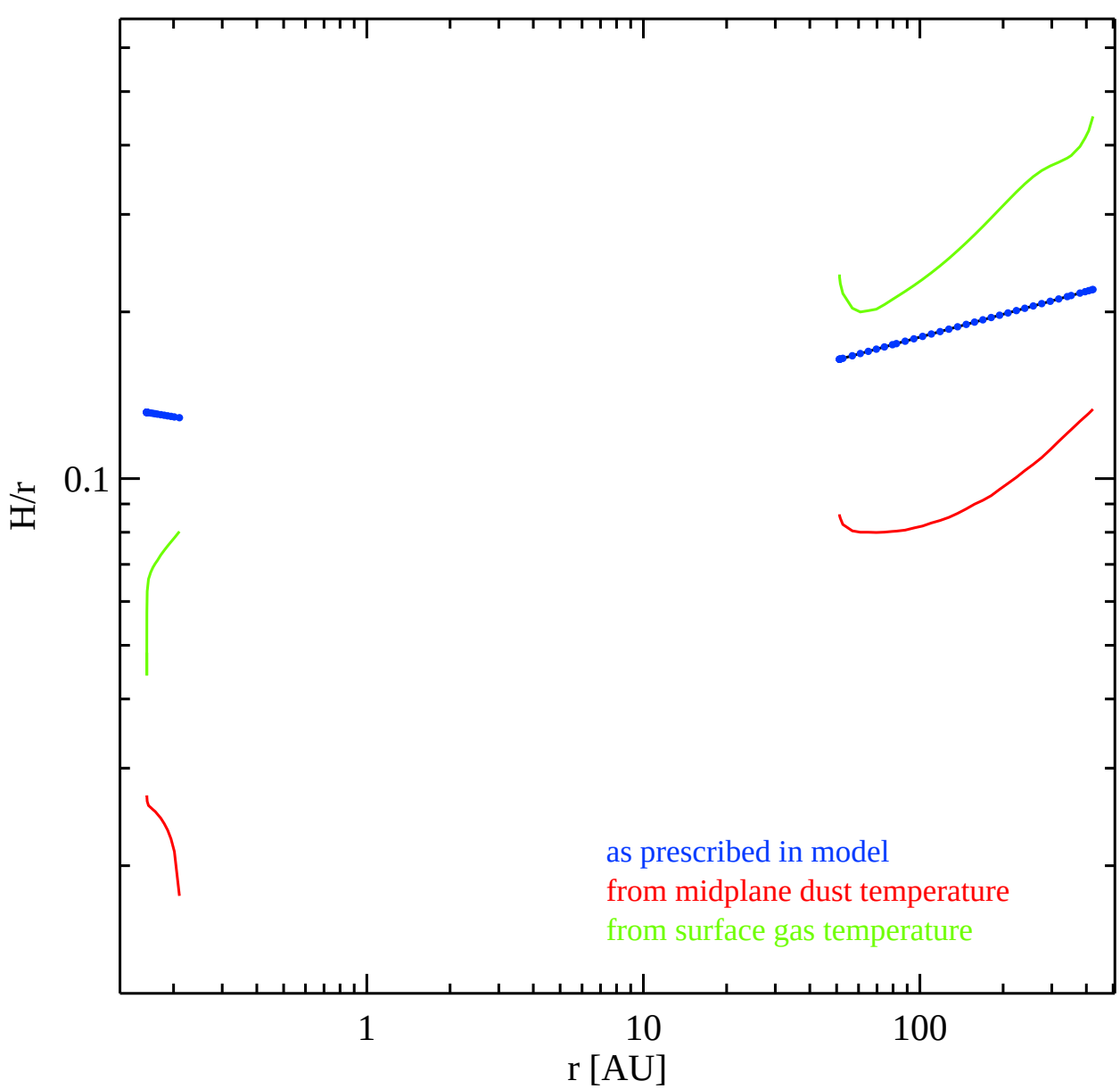

4
6
8
10
12
14
log n<H> [cm-3]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]

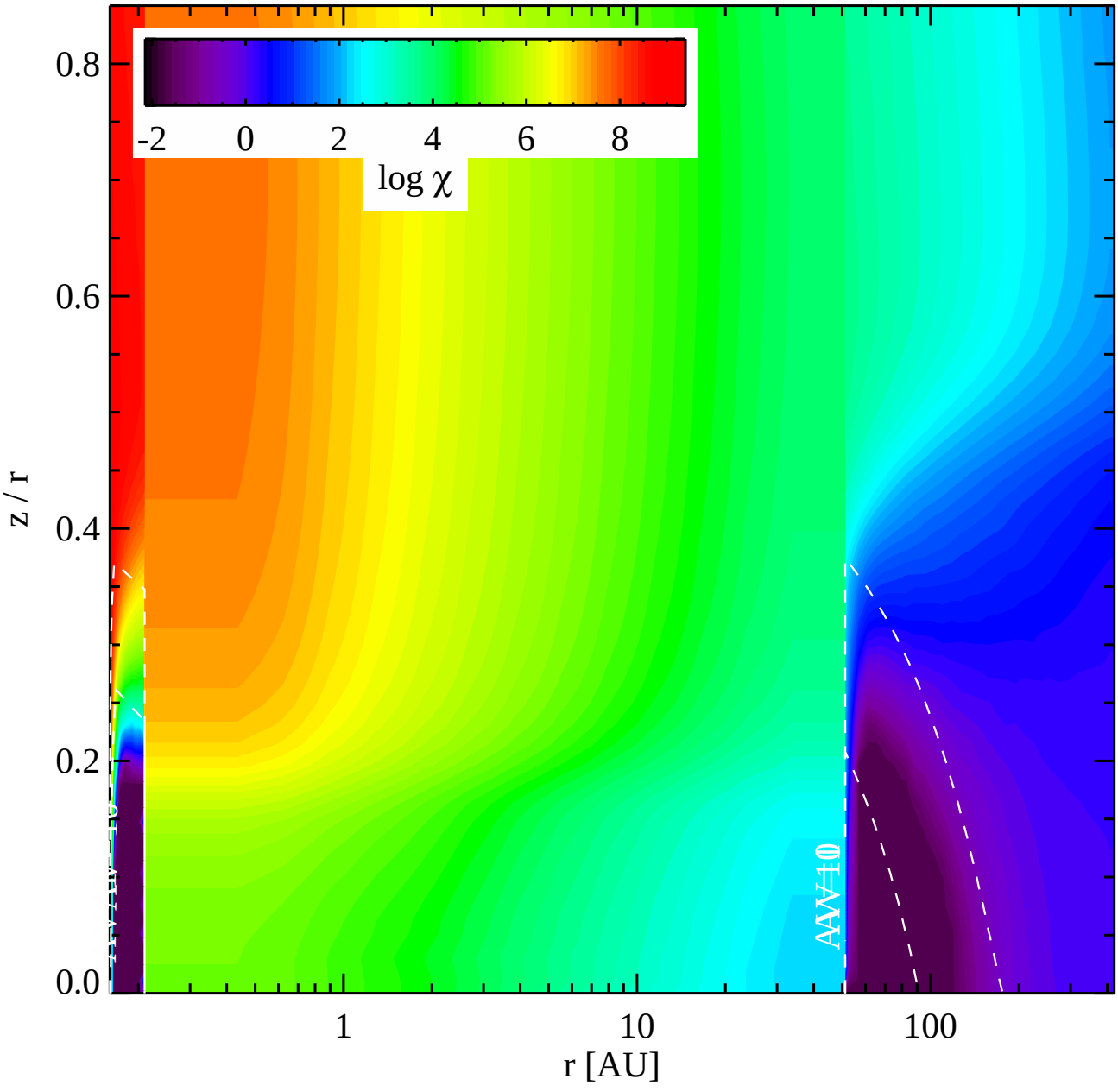

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]
0.01
A V,rad =1
A V =1
0.01
A V =1

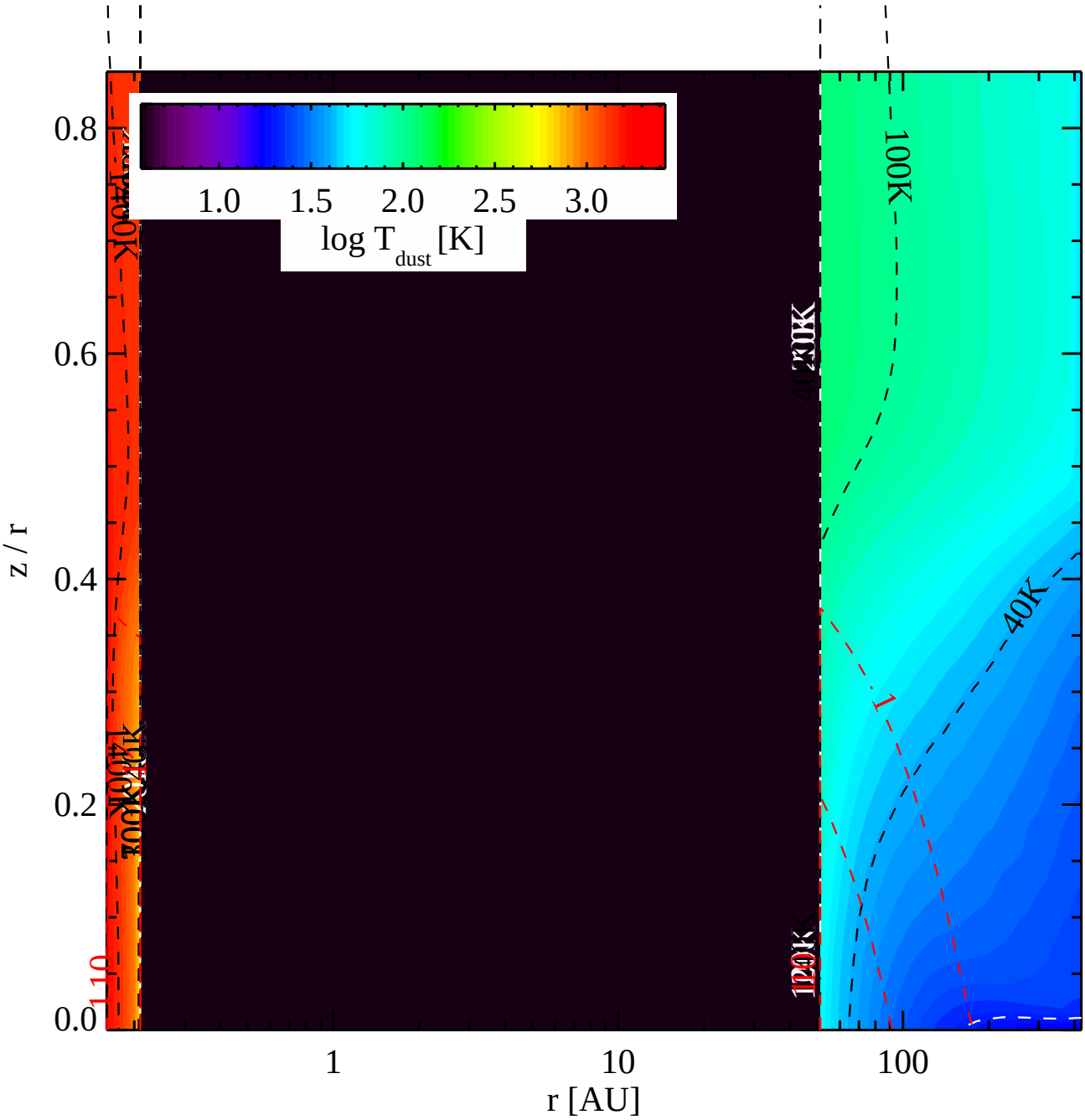

0.8
0.6
0.4
0.2
0.0
z / r
2
4
6
8
log gas/dust
1
10
100
r [AU]

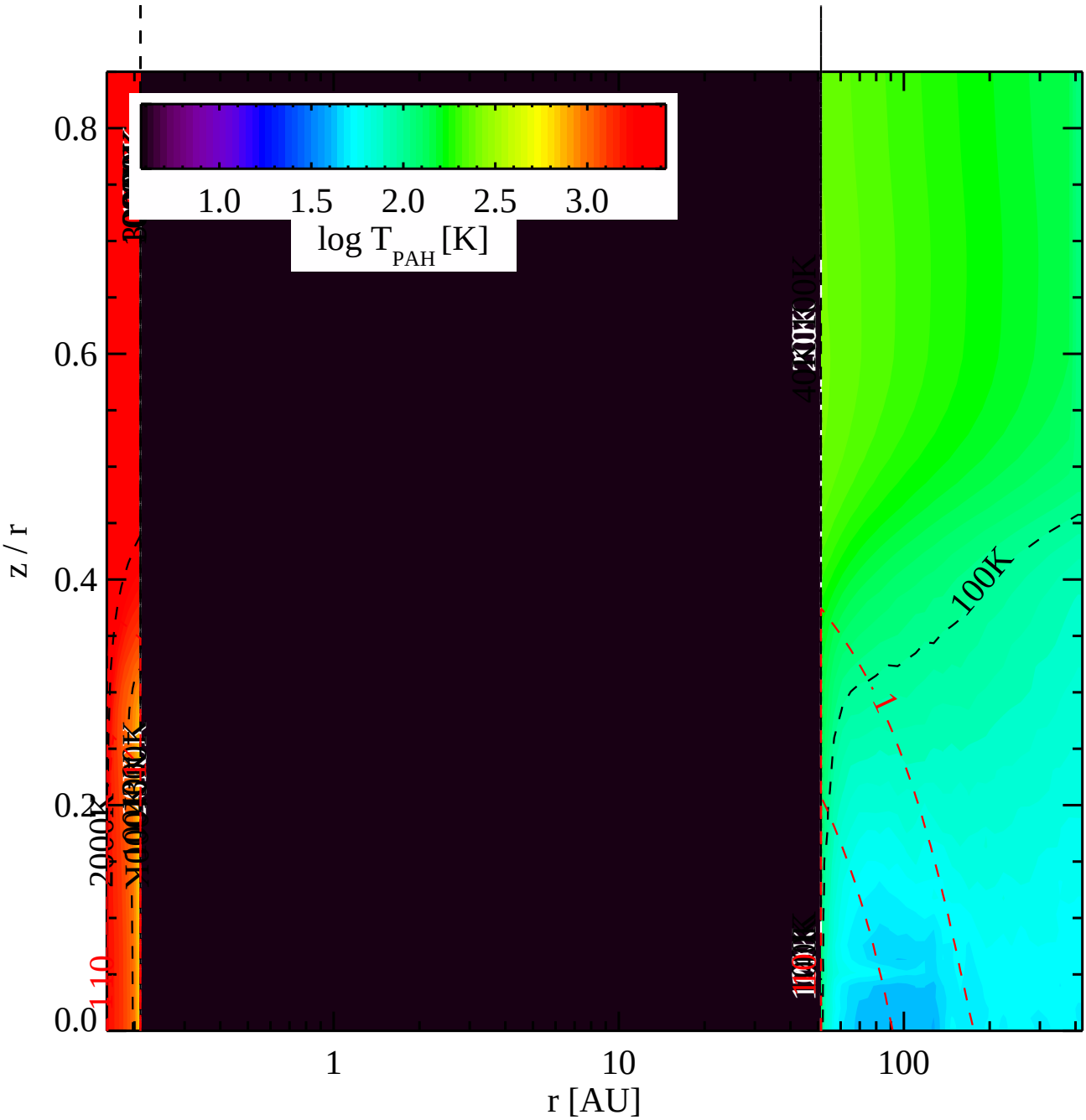

-1.0
-0.5
0.0
log <a^3>^1/3 [mic]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]

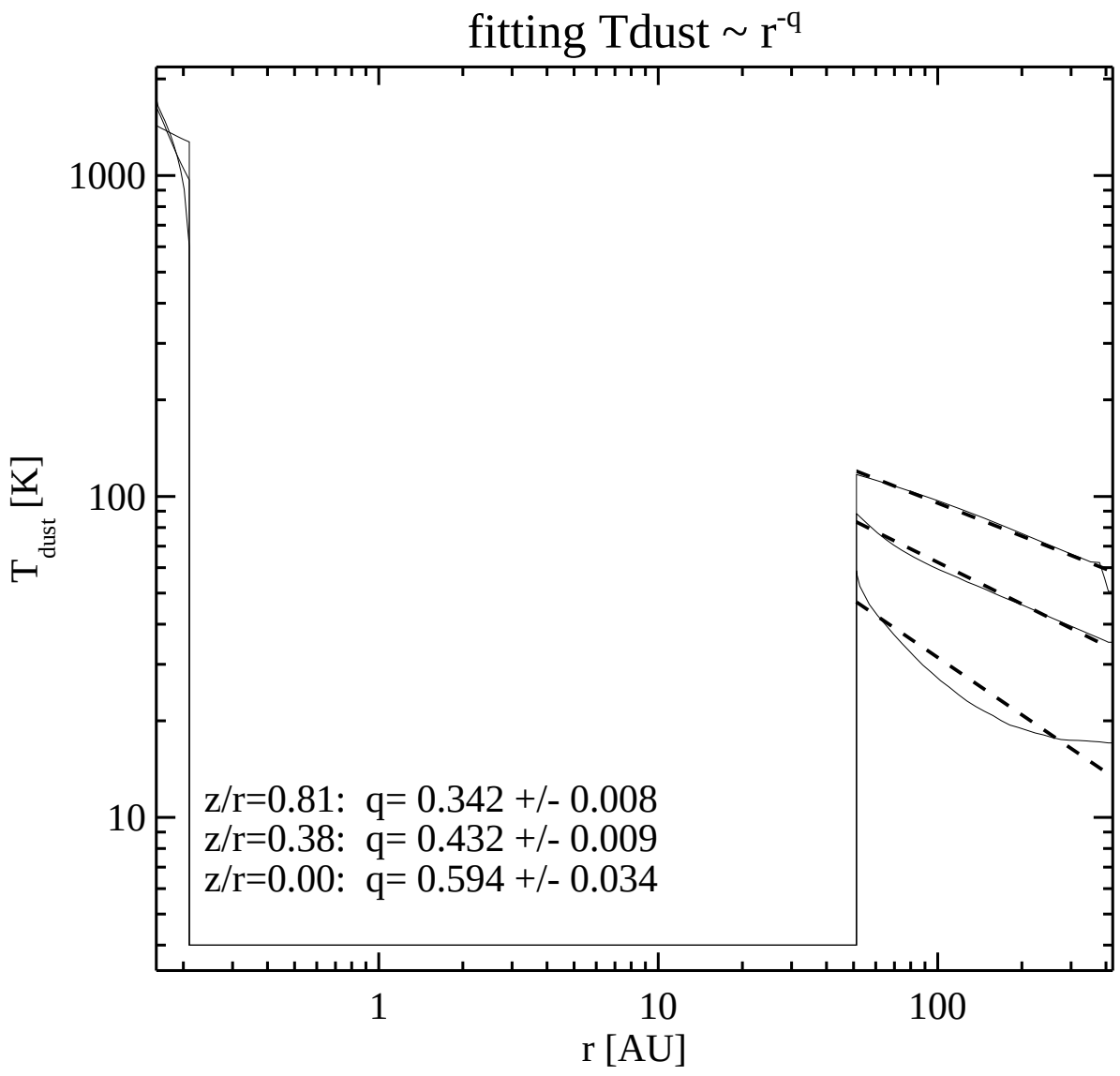

$10^{24}$
$10^{22}$
$10^{20}$
$10^{18}$
$10^{16}$
$10^{14}$
$10^{12}$
$N_{<H>}$ [cm$^{-2}$]
1
10
100
r [AU]
$\Sigma_{dust}$/(1.4 amu)

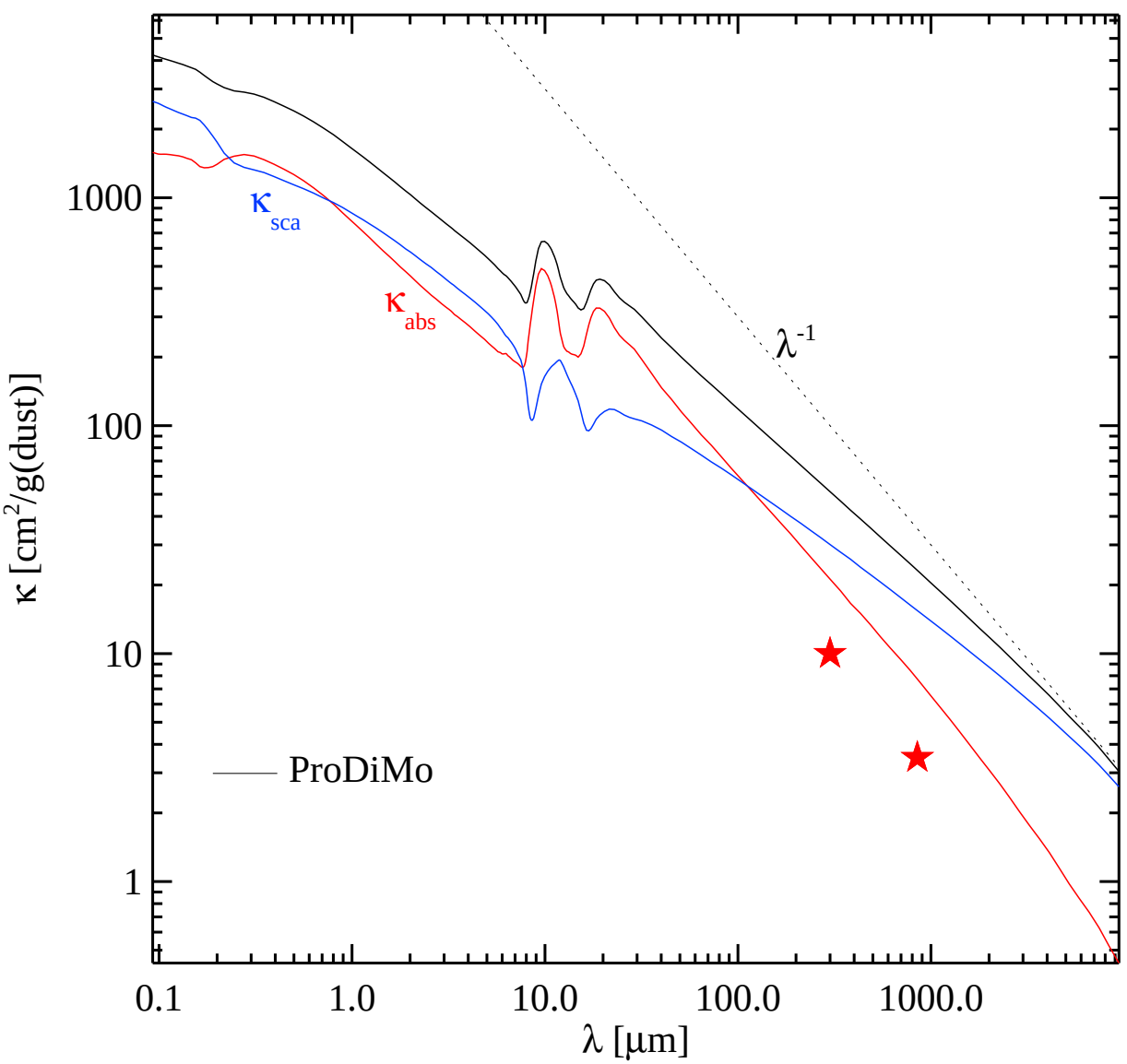

H/r
0.1
1
10
100
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

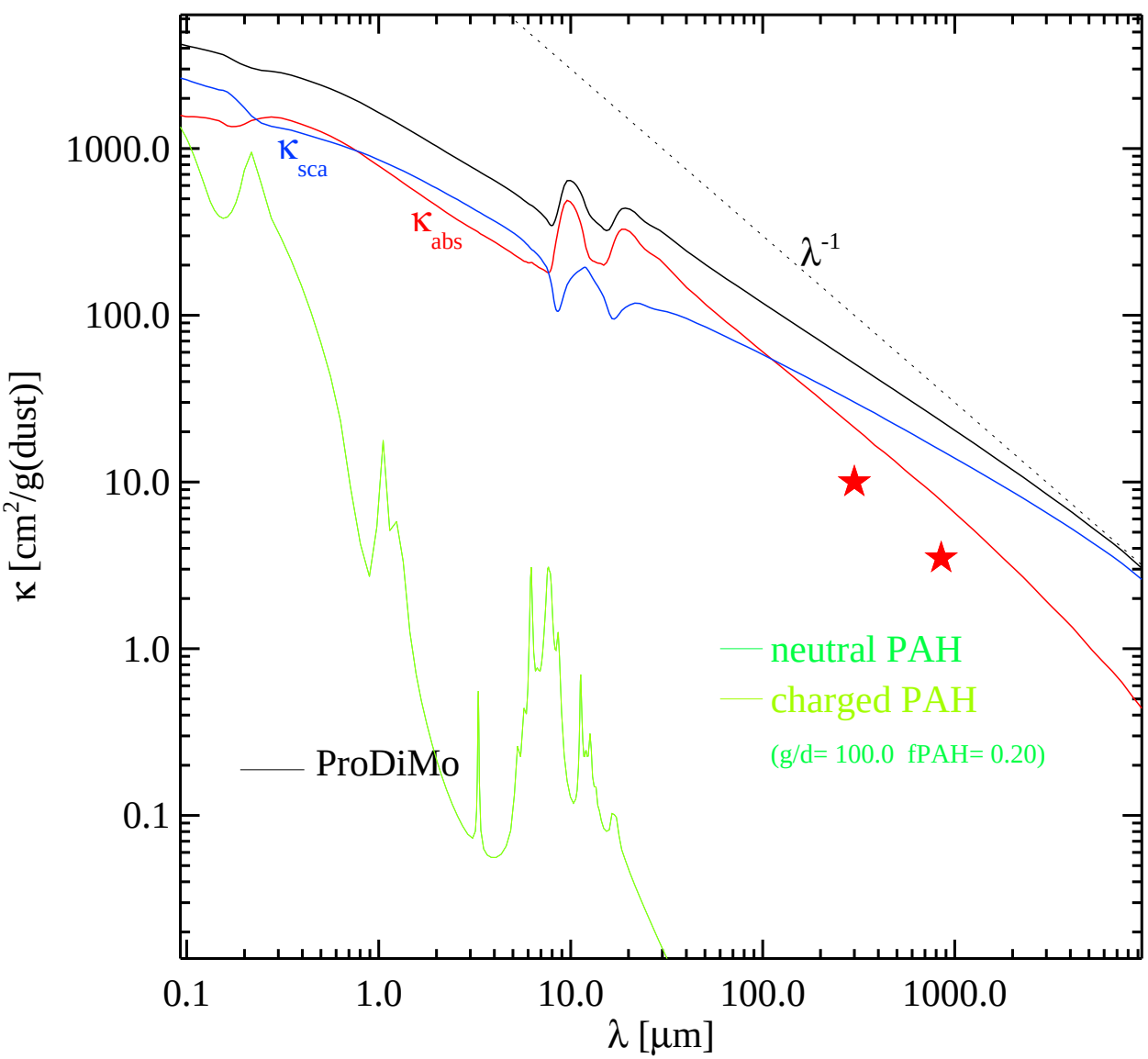

-2
0
2
4
6
8
log χ
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]
AV=10

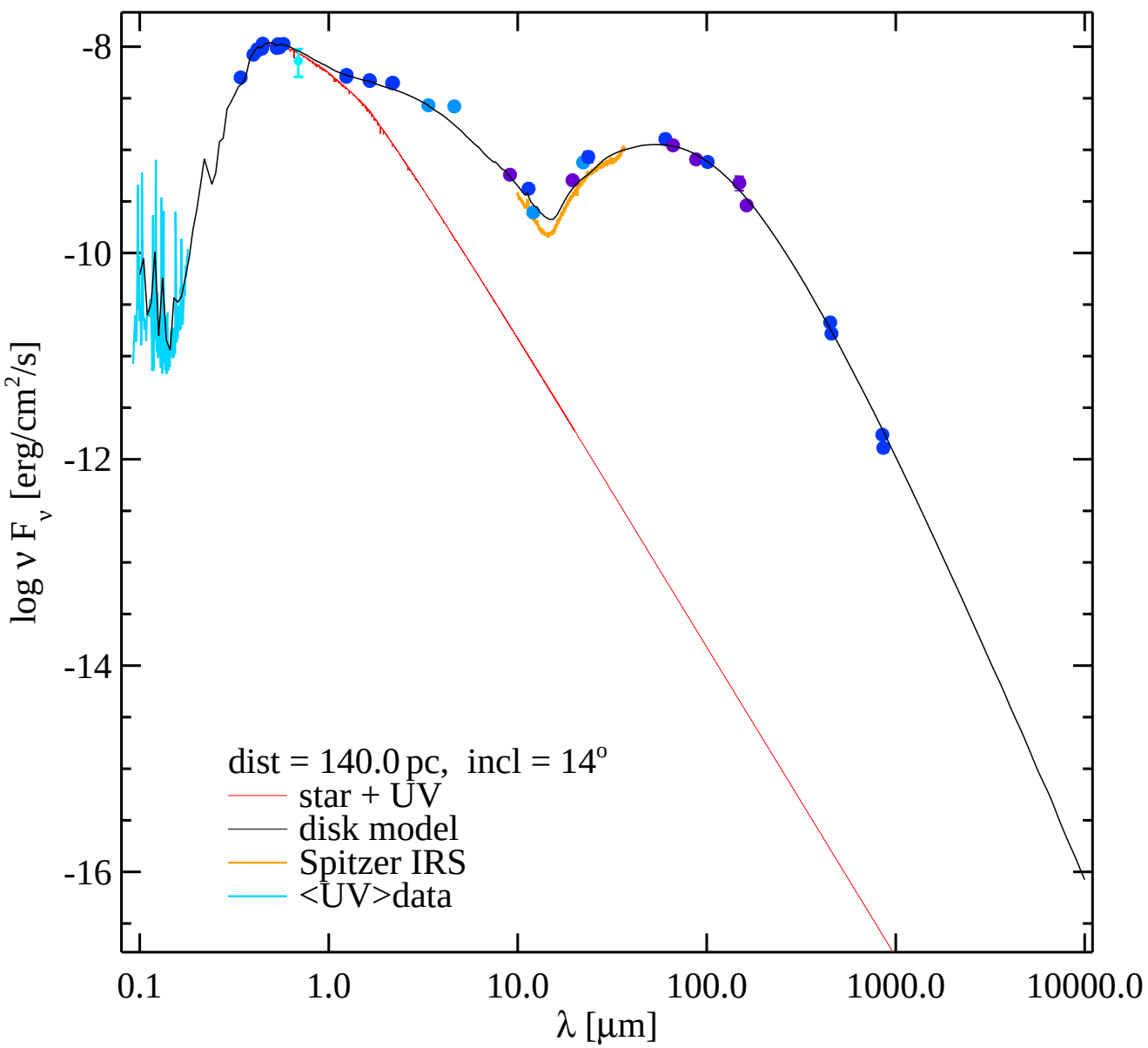

1.0
1.5
2.0
2.5
3.0
log T dust [K]
100K
40K
1
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]

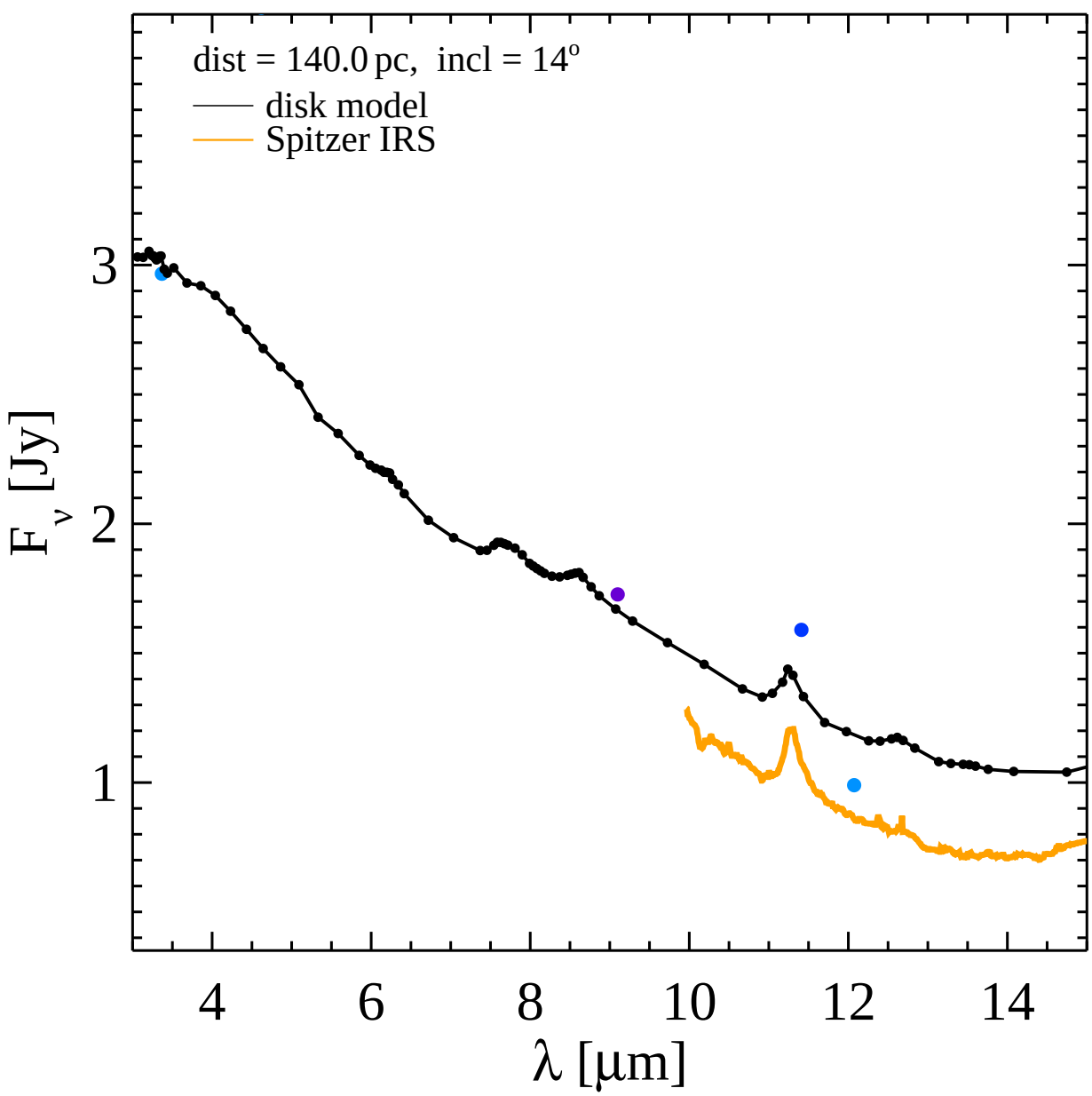

1.0
1.5
2.0
2.5
3.0
log T PAH [K]
0.8
0.6
0.4
0.2
0.0
z / r
1
10
100
r [AU]
100K
1

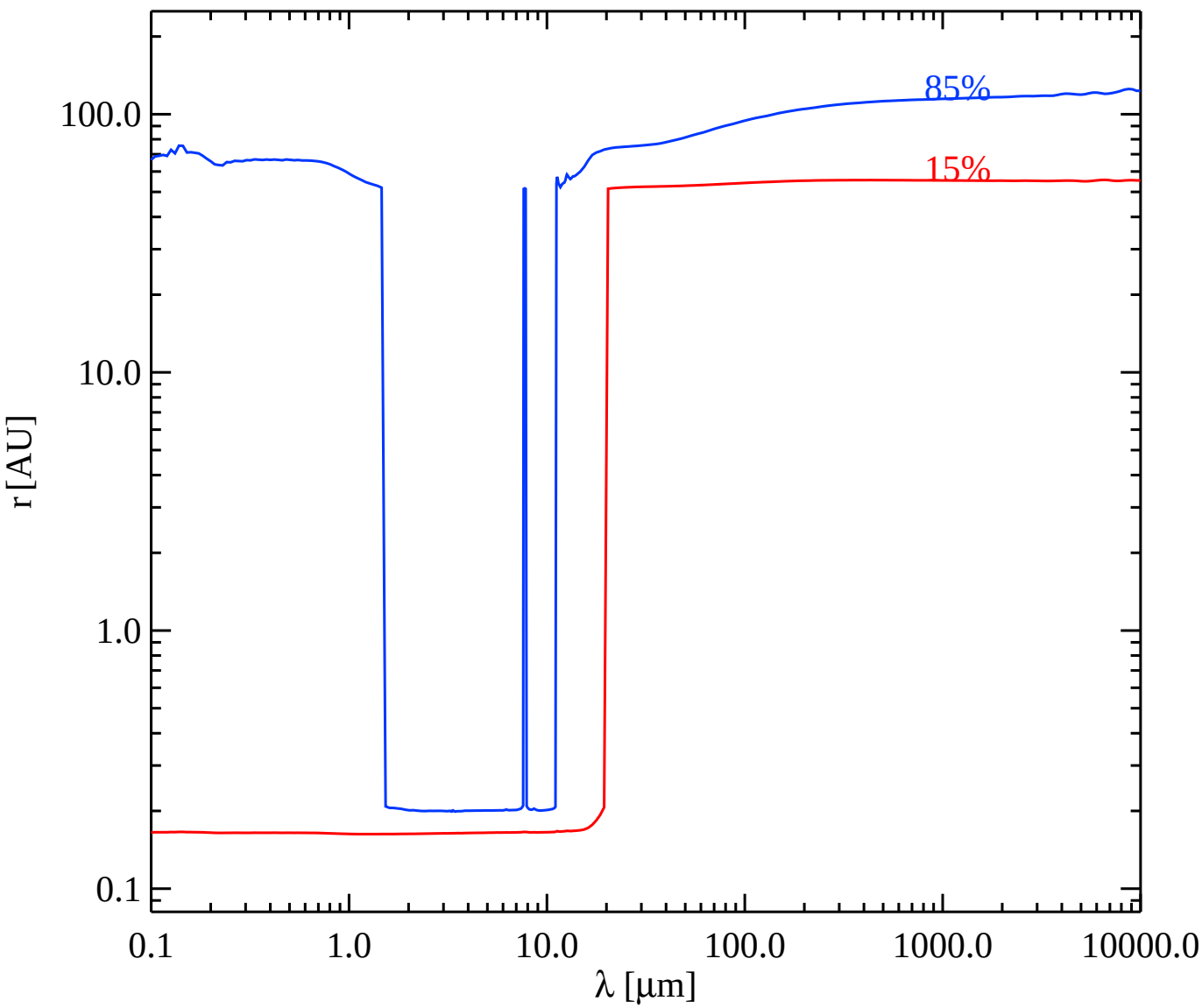

fitting Tdust ~ r^-q
1000
100
10
T dust [K]
1
10
100
r [AU]
z/r=0.81: q= 0.342 +/- 0.008
z/r=0.38: q= 0.432 +/- 0.009
z/r=0.00: q= 0.594 +/- 0.034

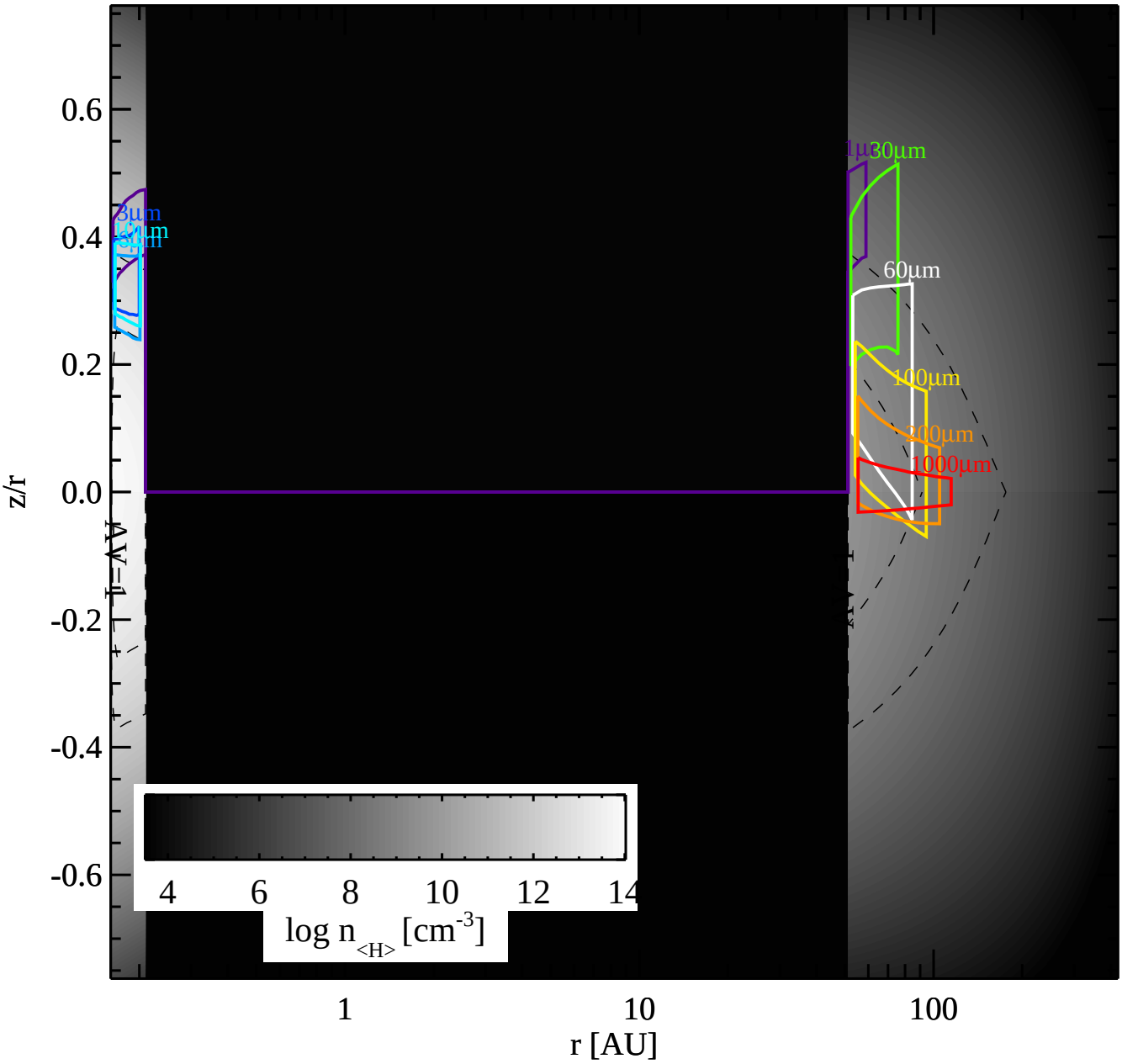

κ [cm²/g(dust)]
1000
100
10
1
0.1
1.0
10.0
100.0
1000.0
λ [μm]
κsca
κabs
λ-1
ProDiMo

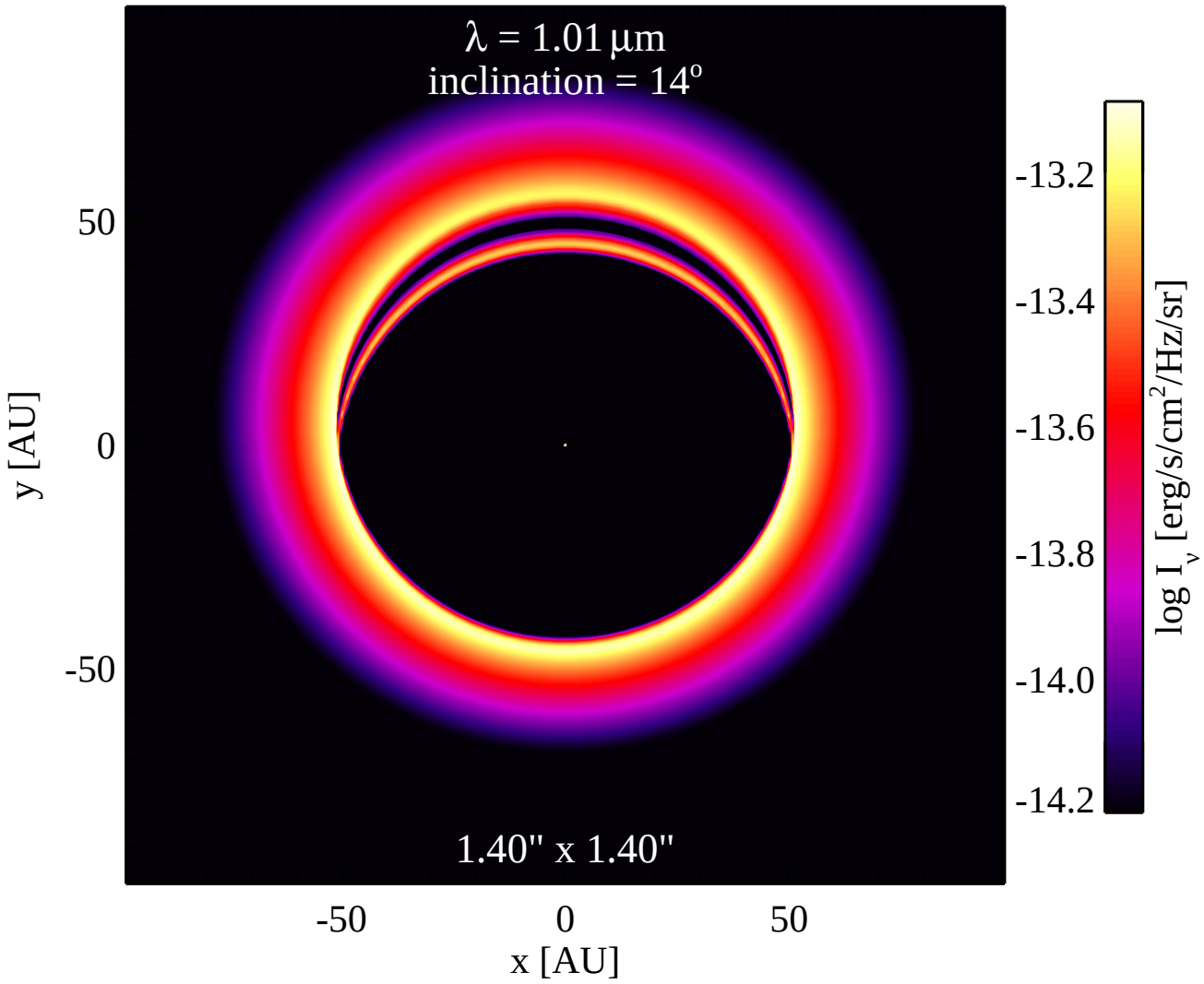

1000.0
100.0
10.0
1.0
0.1
κ [cm²/g(dust)]
κsca
κabs
λ-1
neutral PAH
charged PAH
(g/d= 100.0 fPAH= 0.20)
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

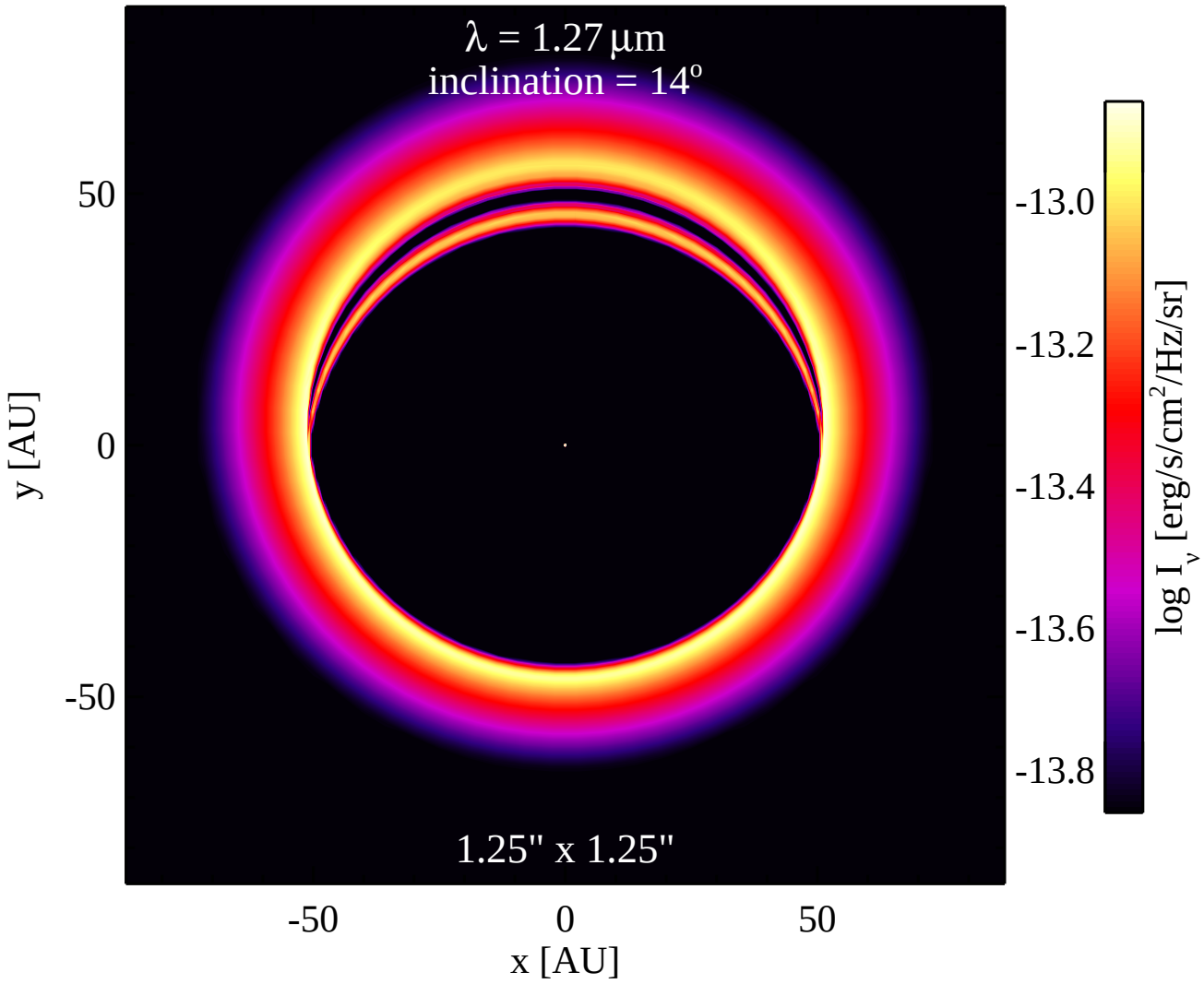

-8
-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 140.0 pc, incl = 14°
star + UV
disk model
Spitzer IRS
<UV>data

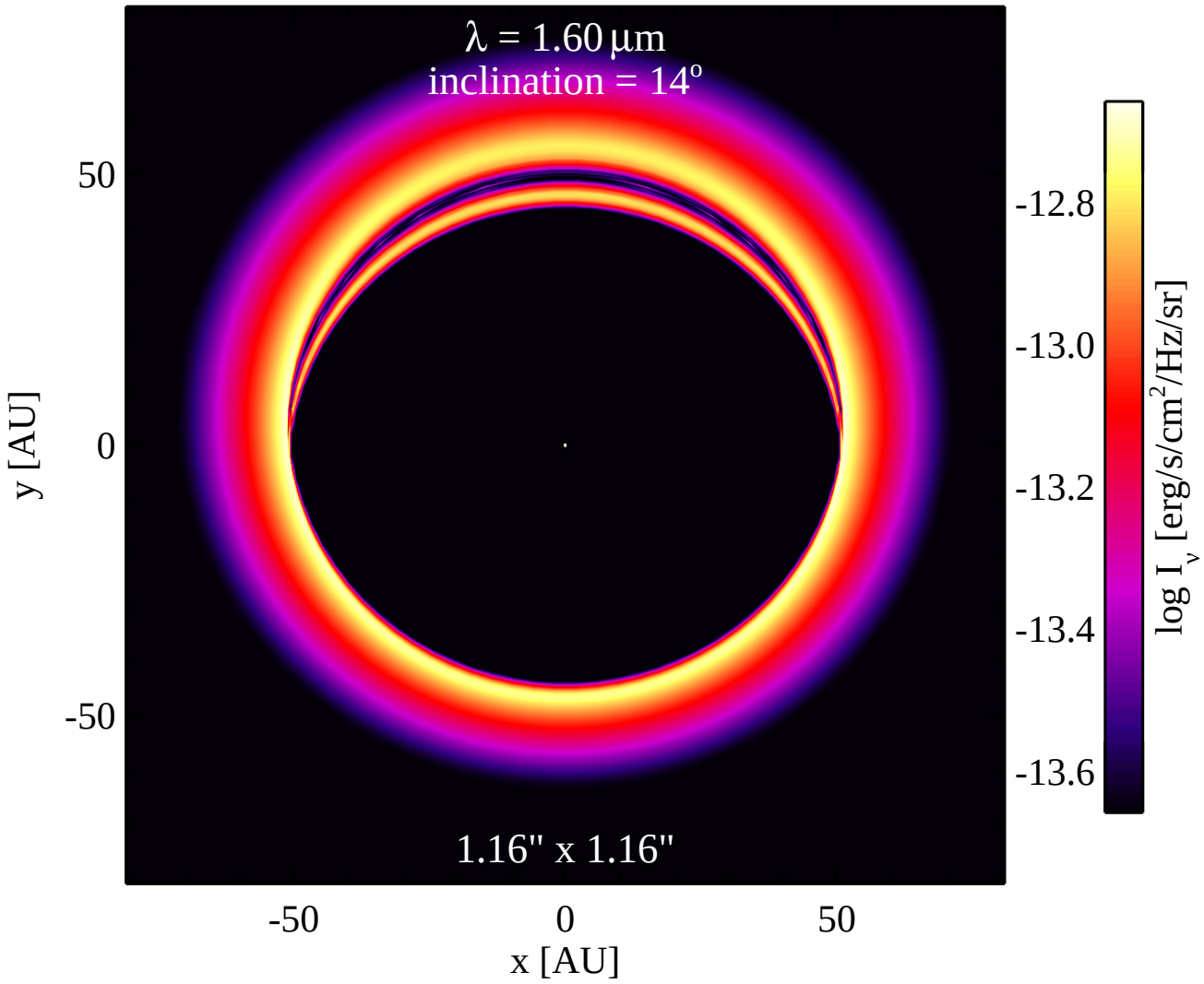

dist = 140.0 pc, incl = 14°
disk model
Spitzer IRS
F_ν [Jy]
λ [μm]
1
2
3
4
6
8
10
12
14

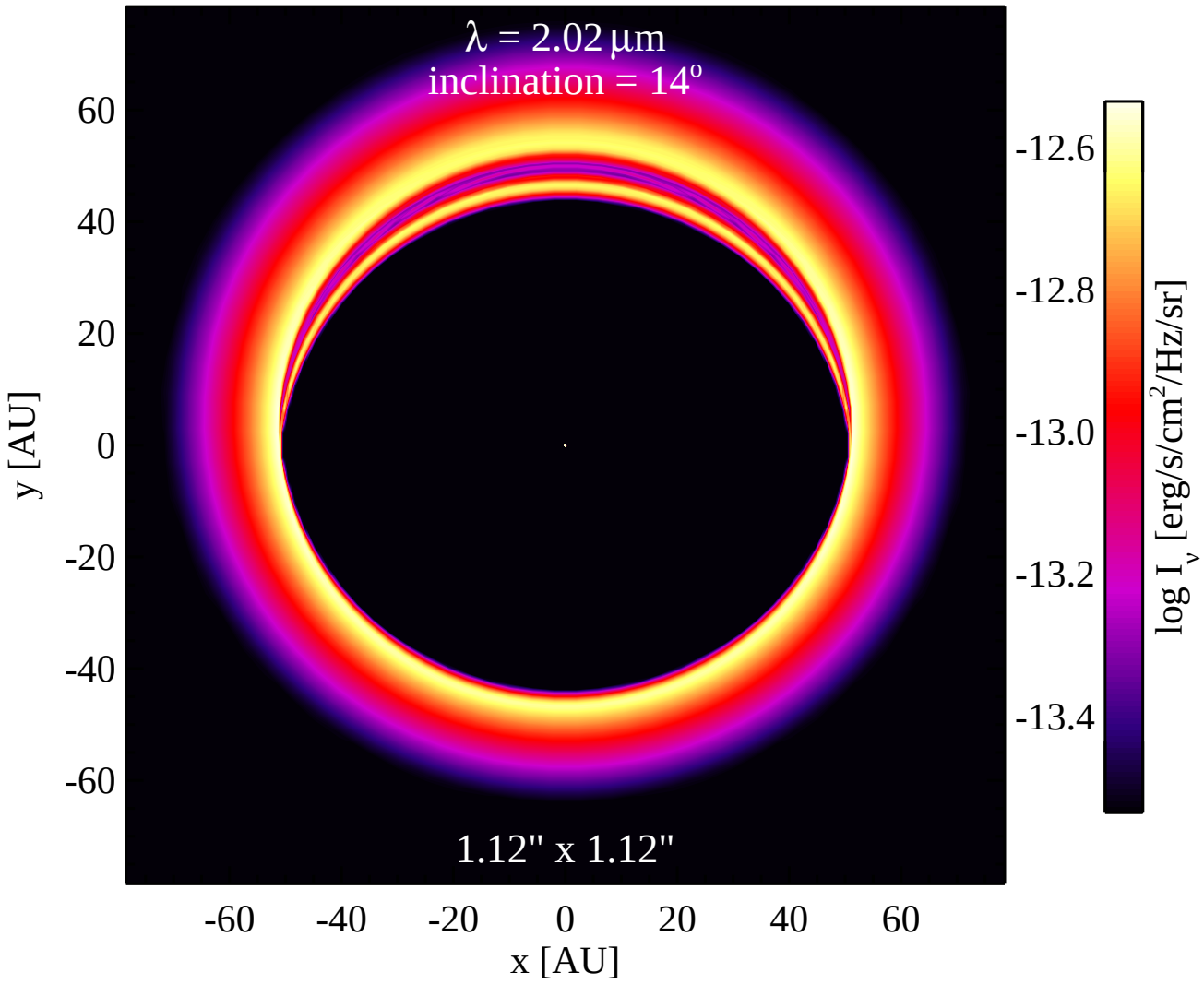

85%
15%
100.0
10.0
1.0
0.1
r [AU]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

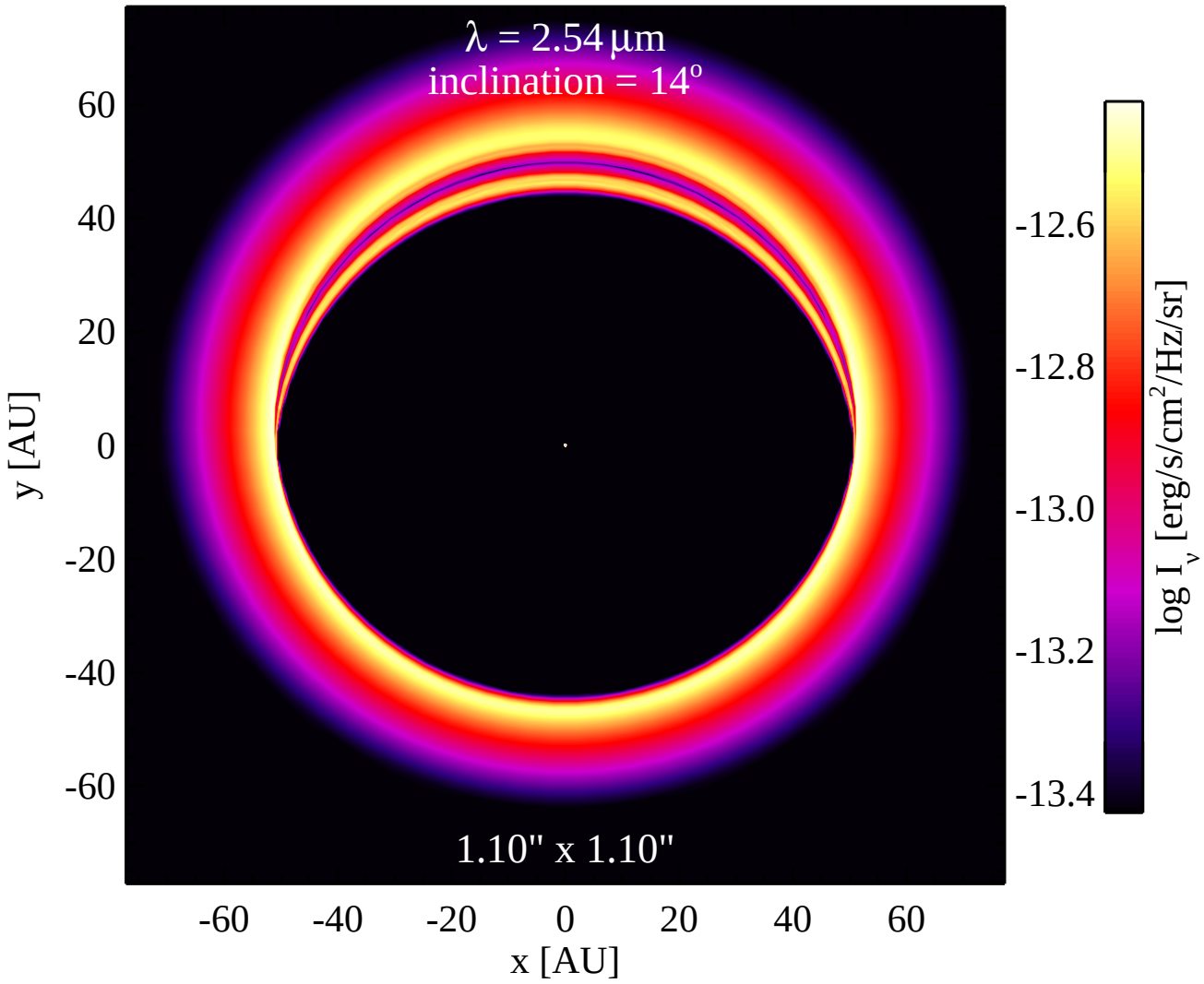

0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
z/r
AV=1
1µm
30µm
60µm
100µm
200µm
1000µm
4
6
8
10
12
14
log n<H> [cm-3]
1
10
100
r [AU]

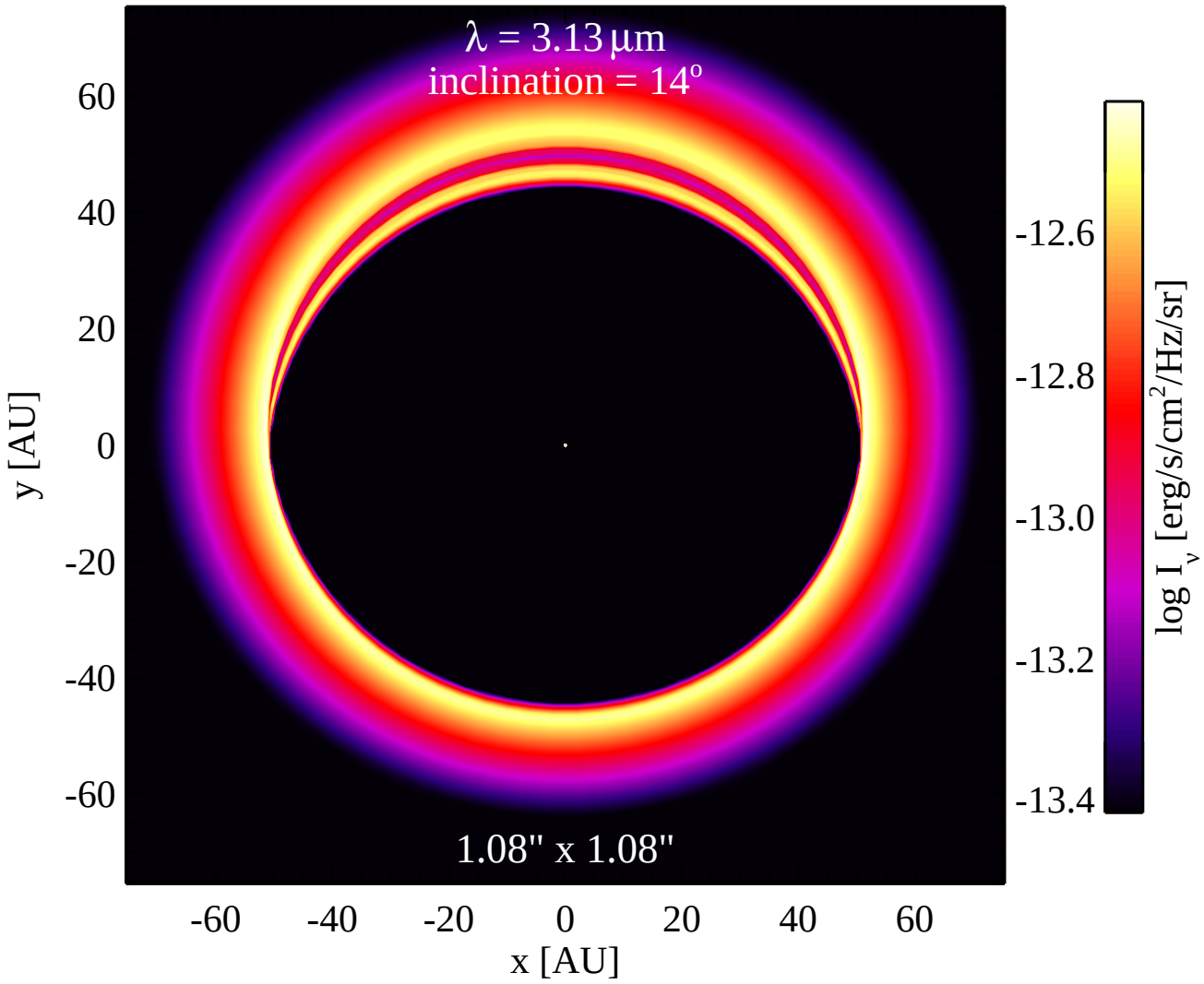

λ = 1.01 μm
inclination = 14°
1.40" x 1.40"
50
0
-50
y [AU]
-50
0
50
x [AU]
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
log I_ν [erg/s/cm²/Hz/sr]

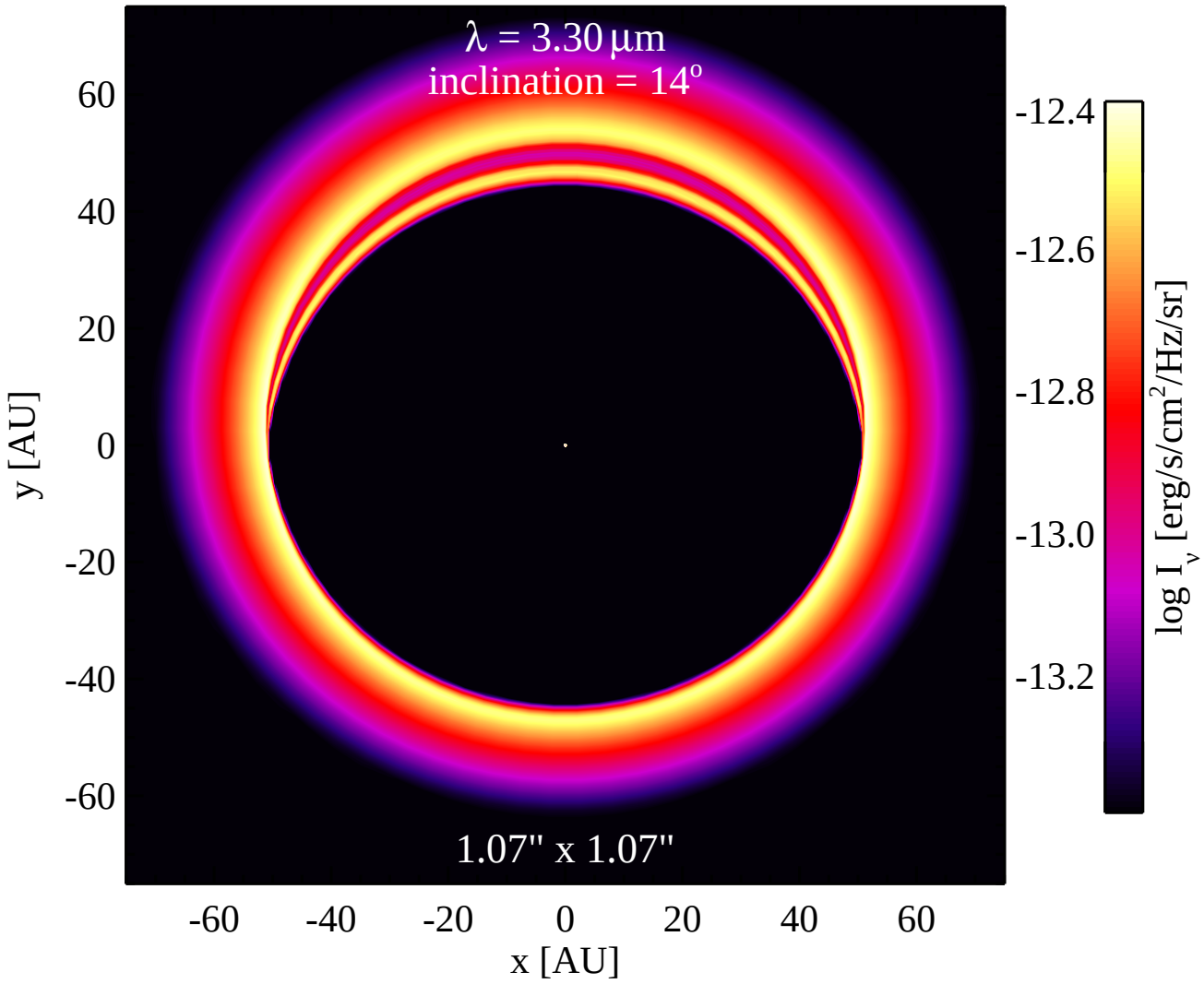

λ = 1.27 μm
inclination = 14°
1.25" x 1.25"
50
0
-50
y [AU]
-50
0
50
x [AU]
-13.0
-13.2
-13.4
-13.6
-13.8
log I_ν [erg/s/cm²/Hz/sr]

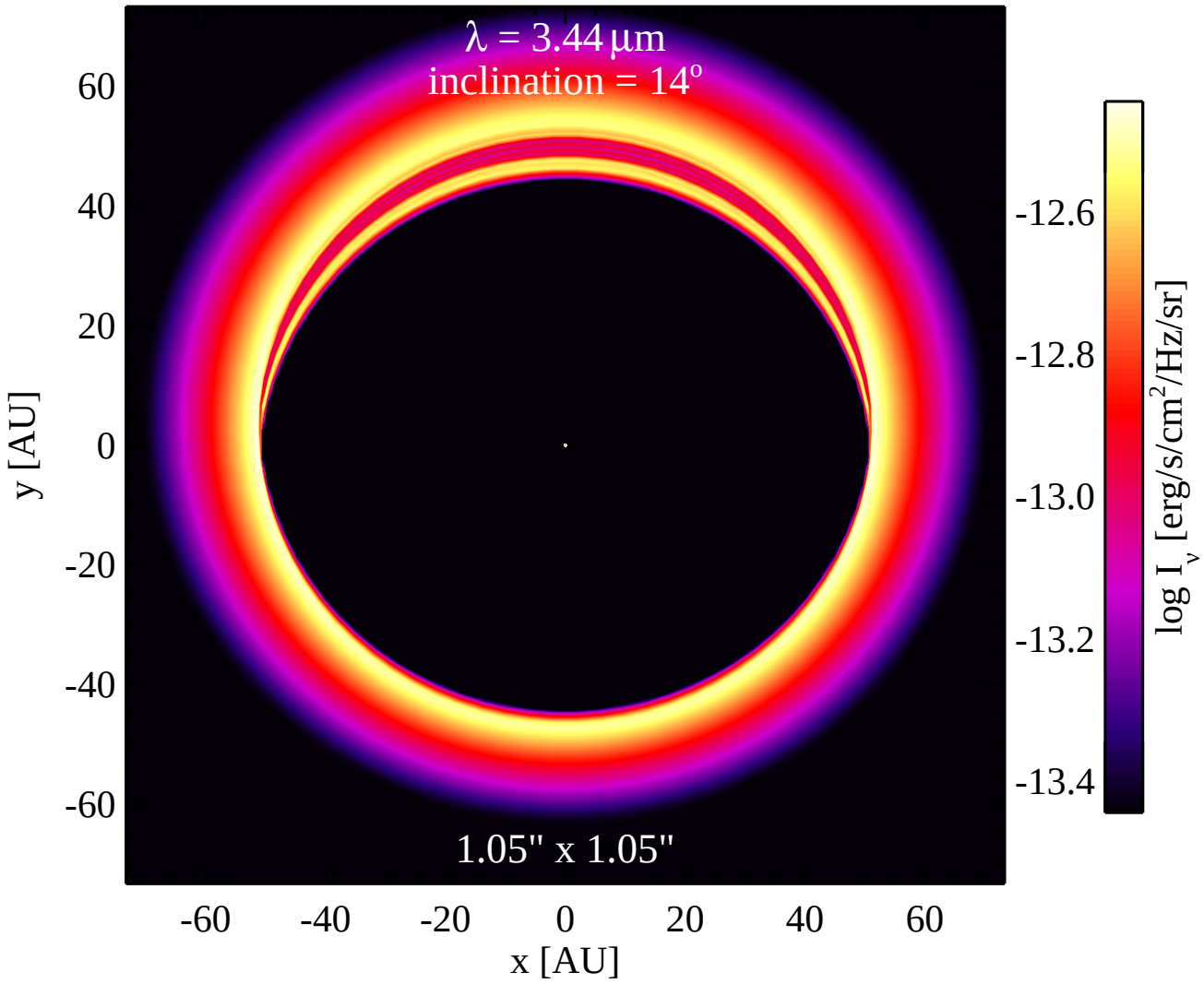

λ = 1.60 μm
inclination = 14°
1.16" x 1.16"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.8
-13.0
-13.2
-13.4
-13.6
log I_ν [erg/s/cm²/Hz/sr]

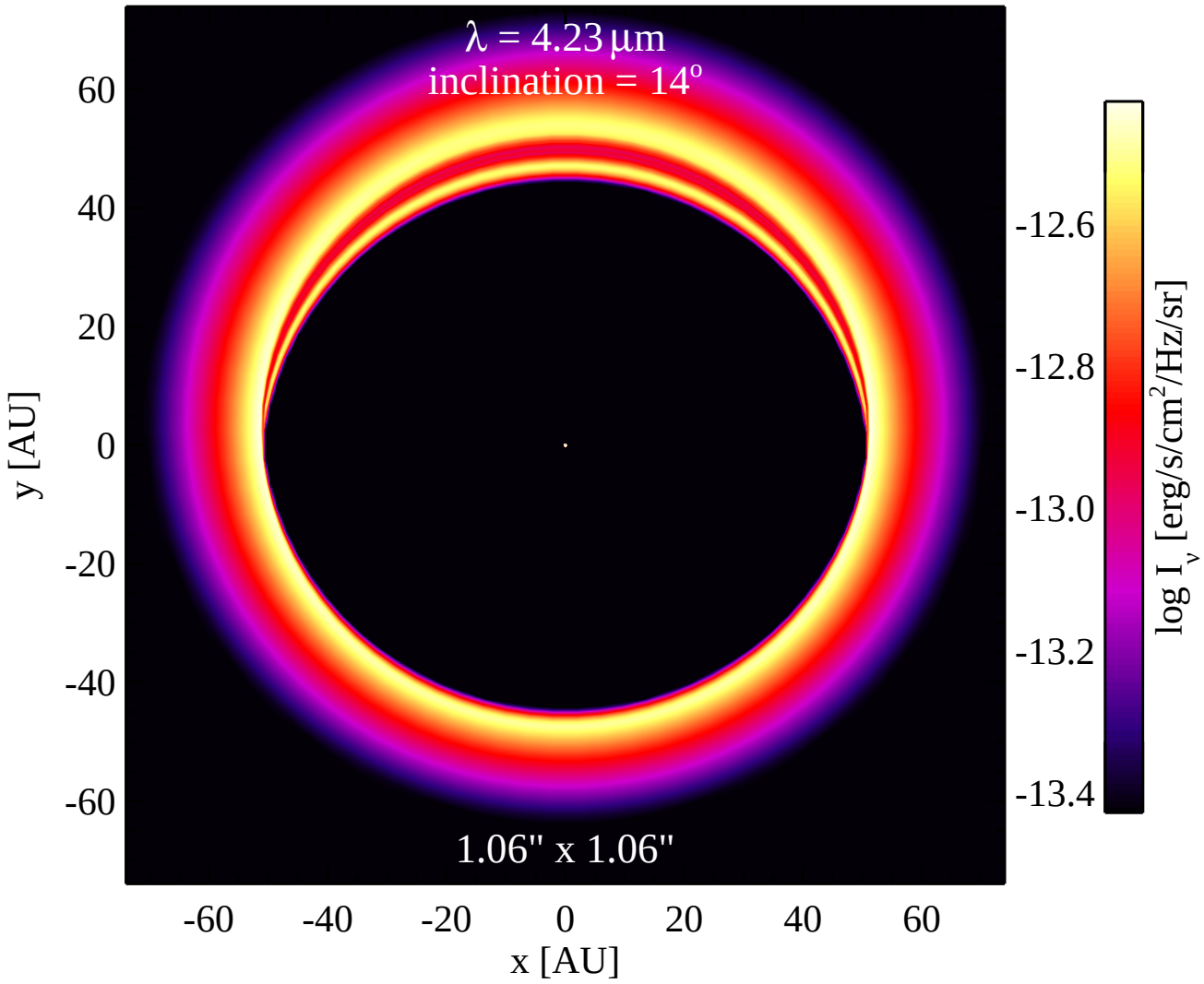

λ = 2.02 μm
inclination = 14°
1.12" x 1.12"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

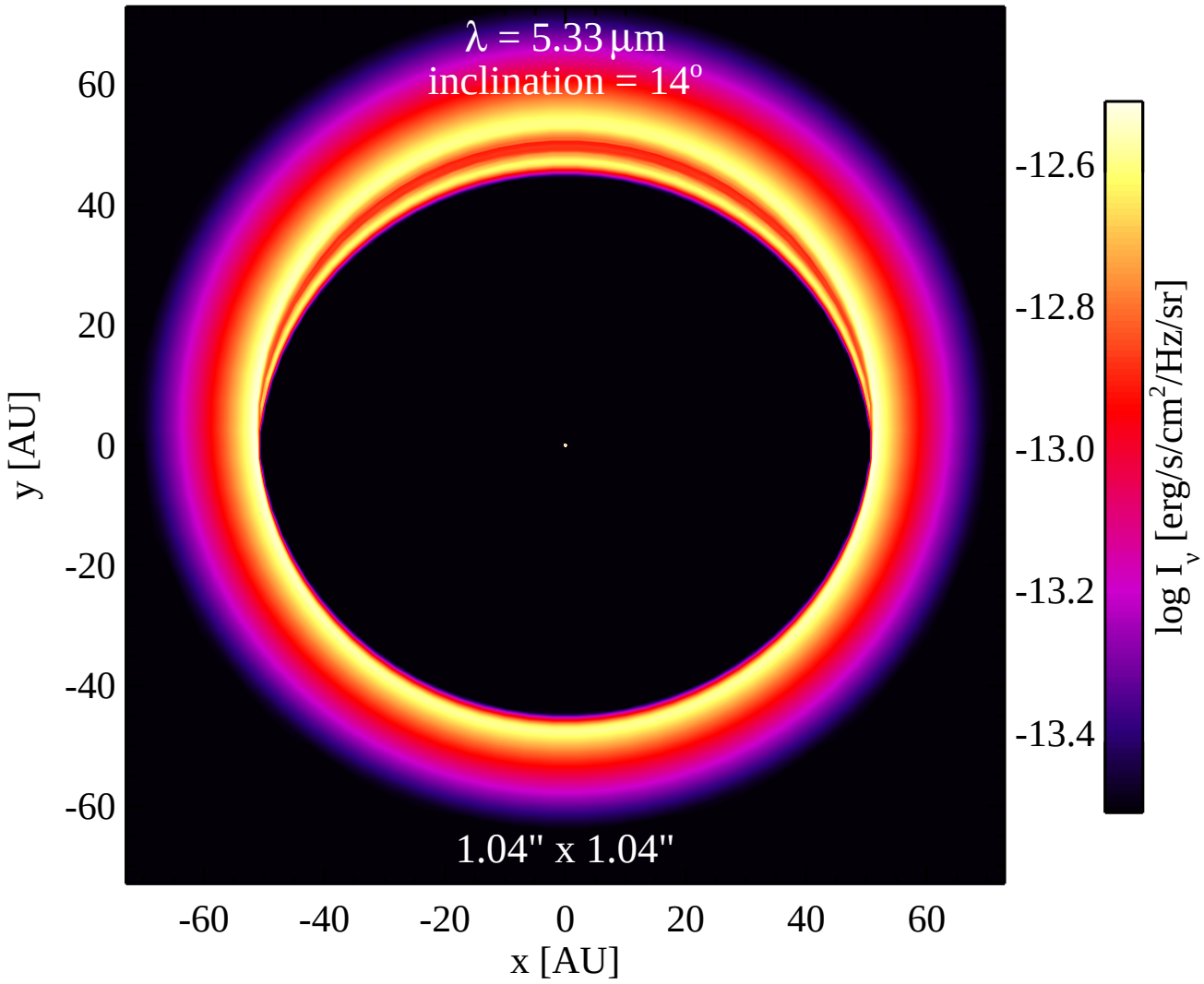

λ = 2.54 μm
inclination = 14°
1.10" x 1.10"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

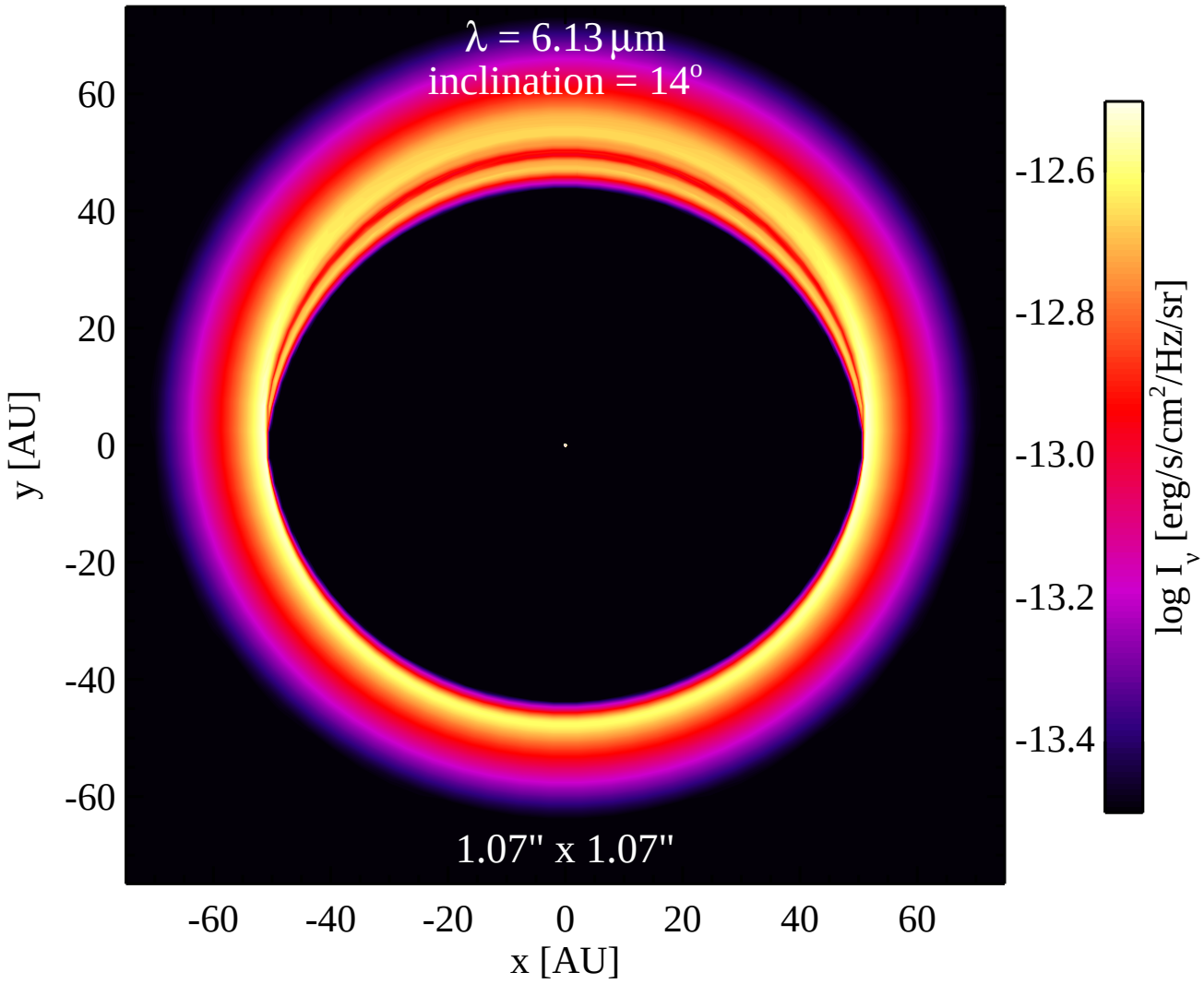

λ = 3.13 μm
inclination = 14°
1.08" x 1.08"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

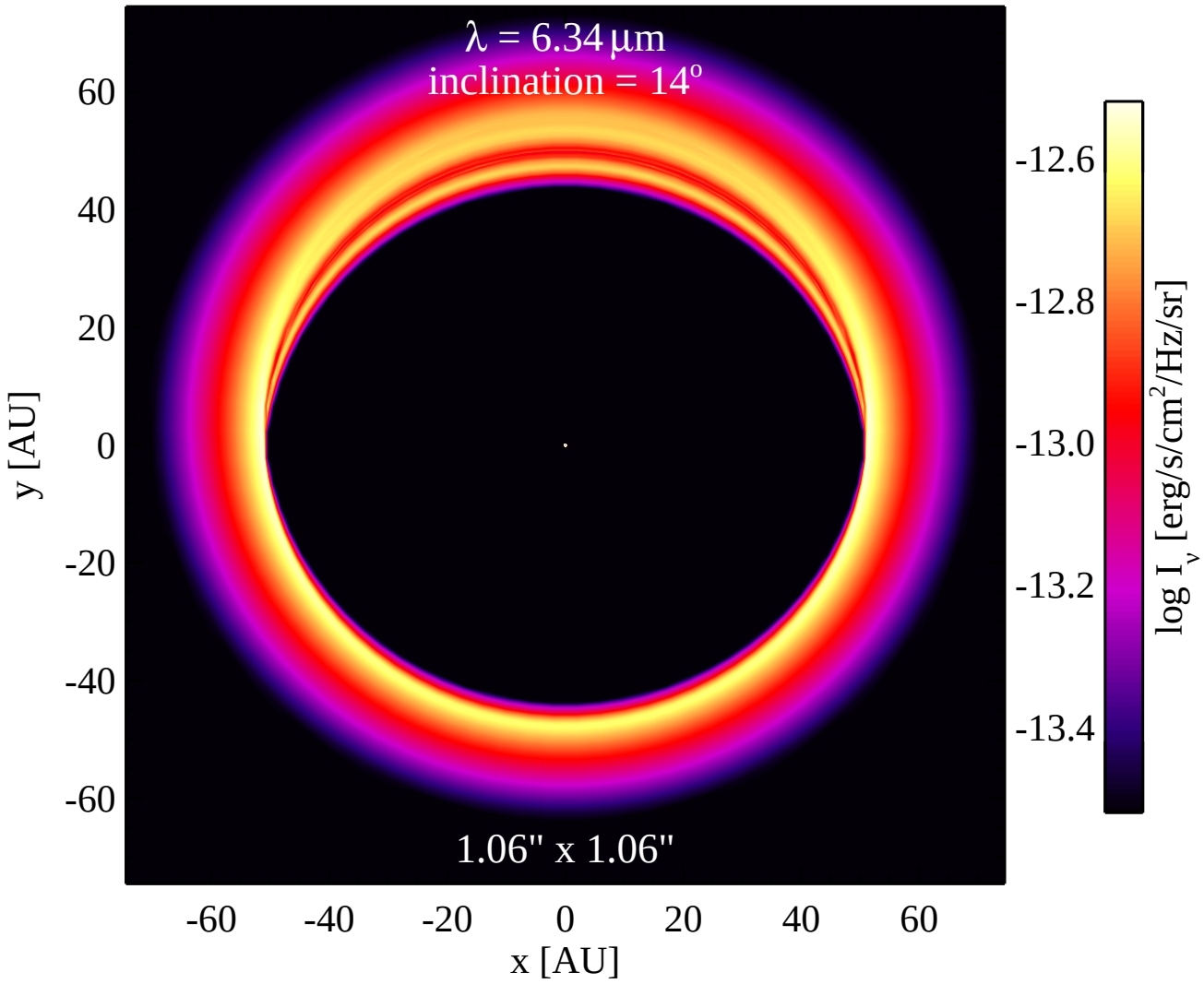

λ = 3.30 μm
inclination = 14°
1.07" x 1.07"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.4
-12.6
-12.8
-13.0
-13.2
log I_ν [erg/s/cm²/Hz/sr]

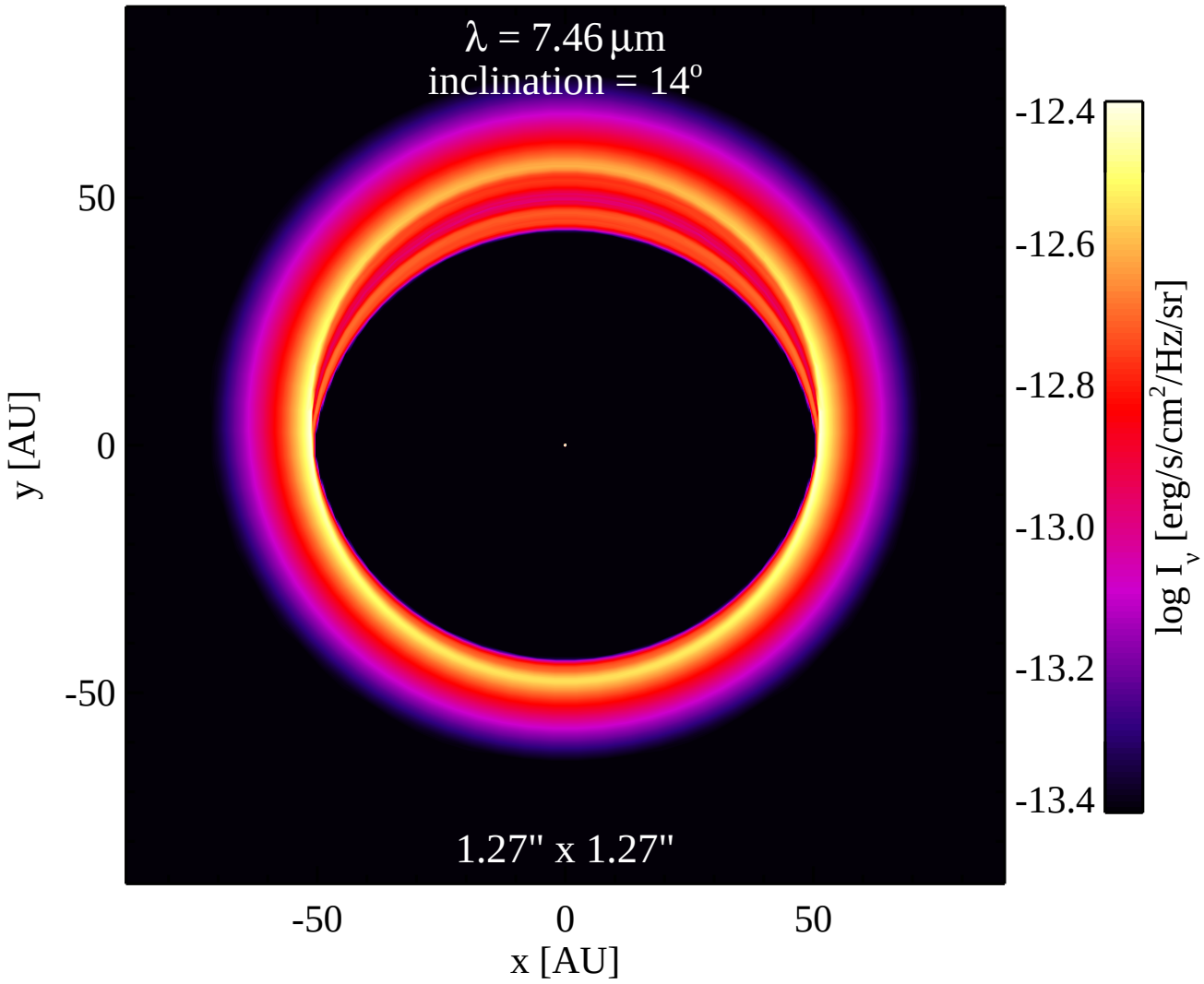

λ = 3.44 μm
inclination = 14°
1.05" x 1.05"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

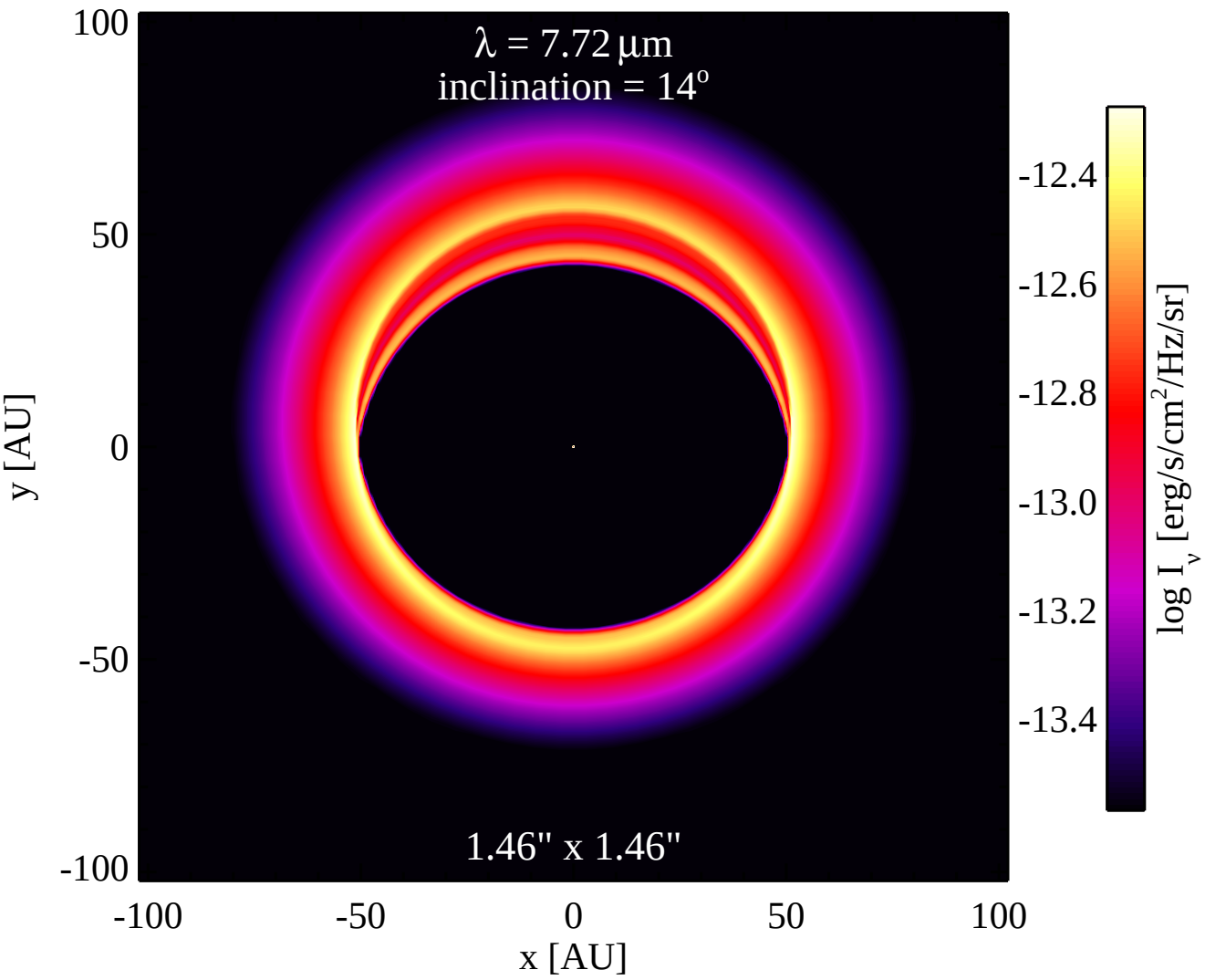

λ = 4.23 μm
inclination = 14°
1.06" x 1.06"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

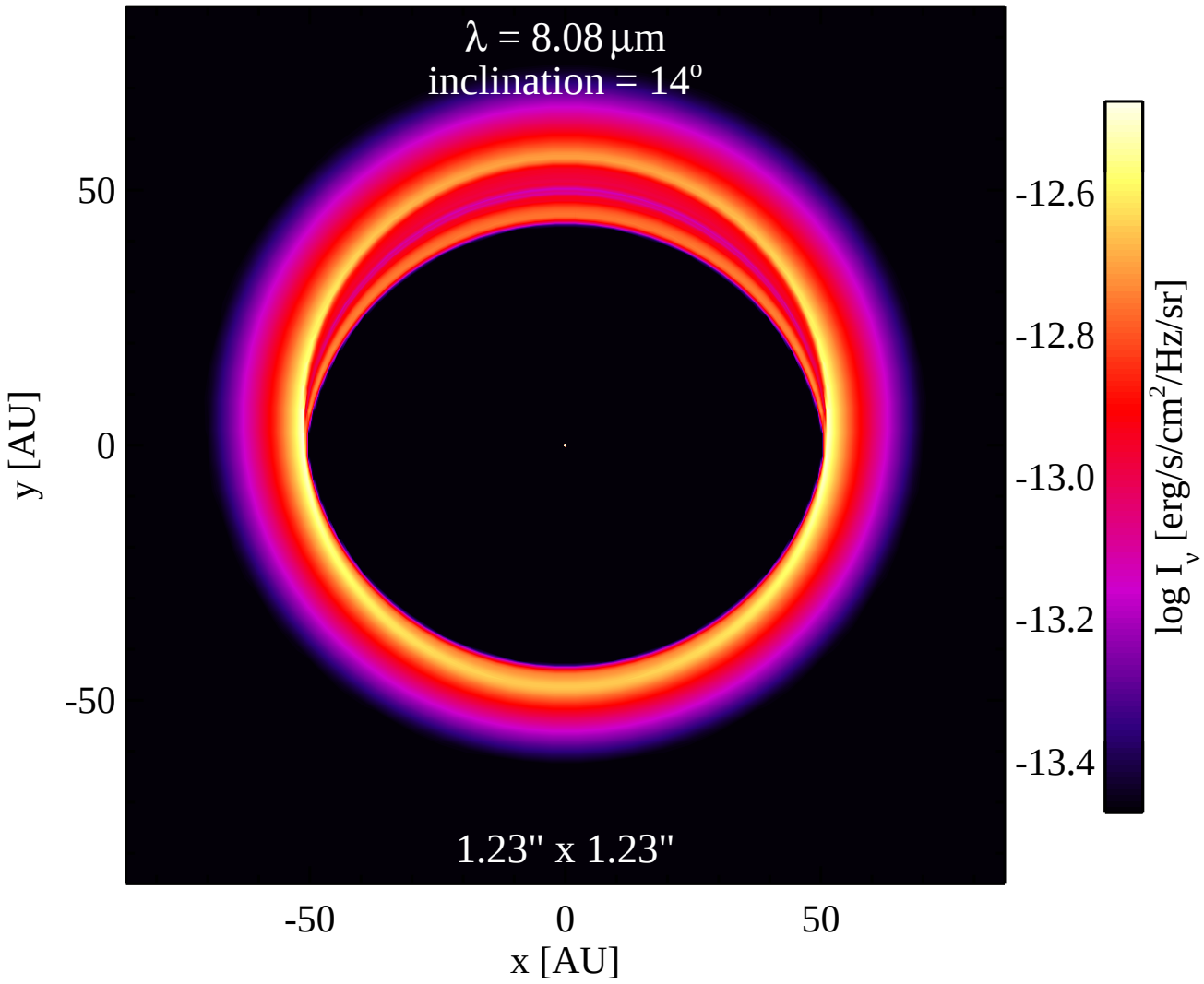

λ = 5.33 μm
inclination = 14°
1.04" x 1.04"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

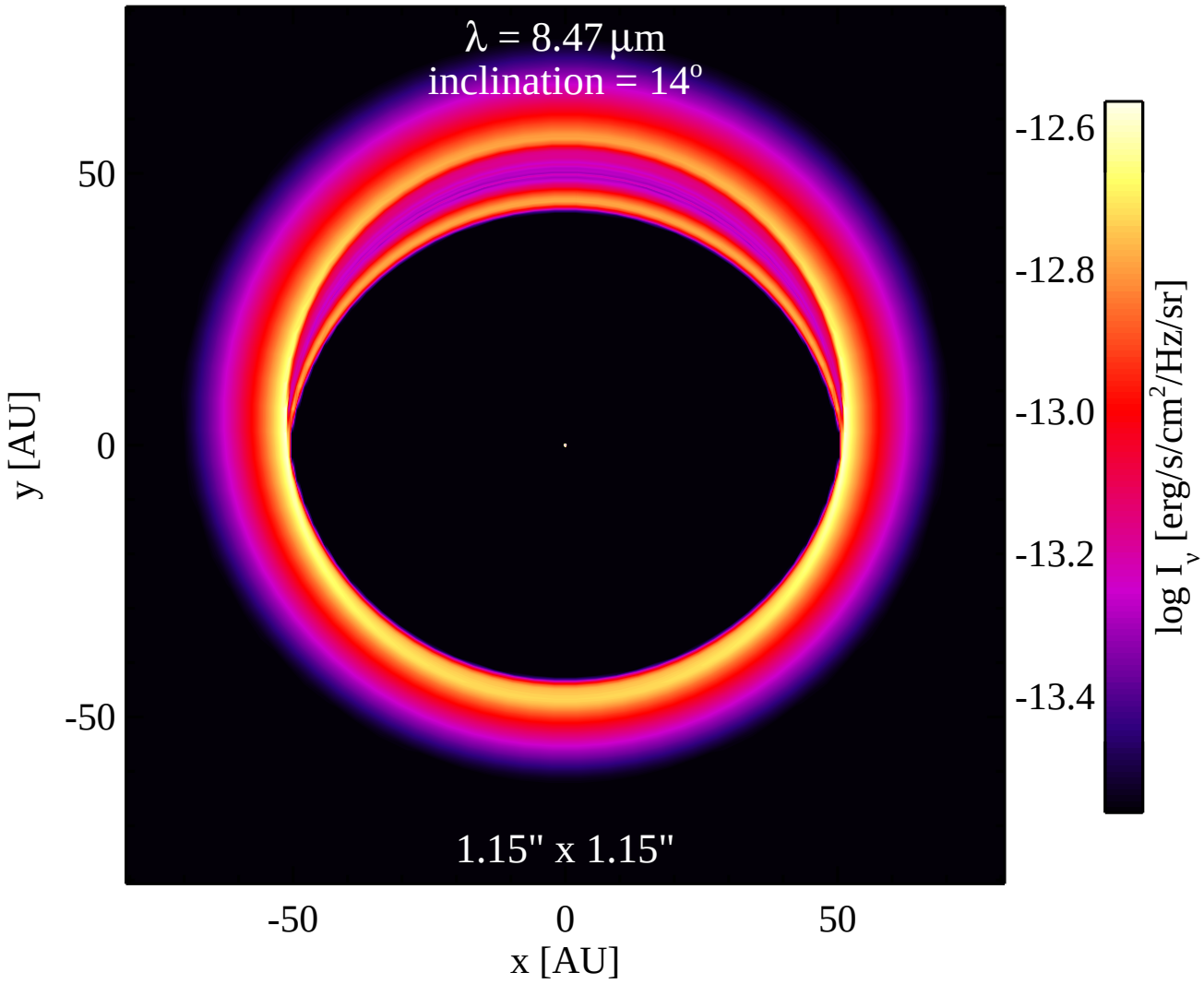

λ = 6.13 μm
inclination = 14°
1.07" x 1.07"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

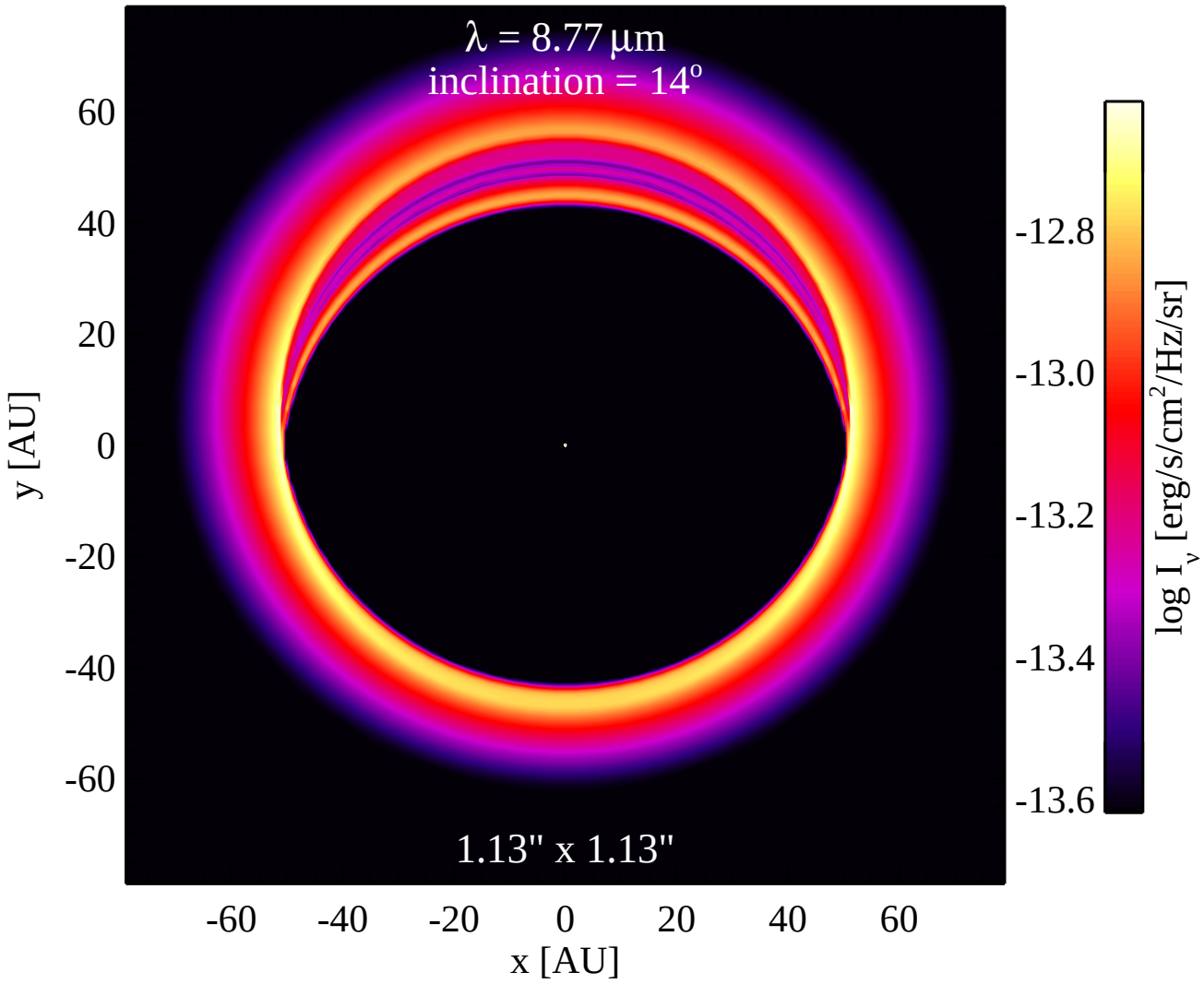

λ = 6.34 μm
inclination = 14°
1.06" x 1.06"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

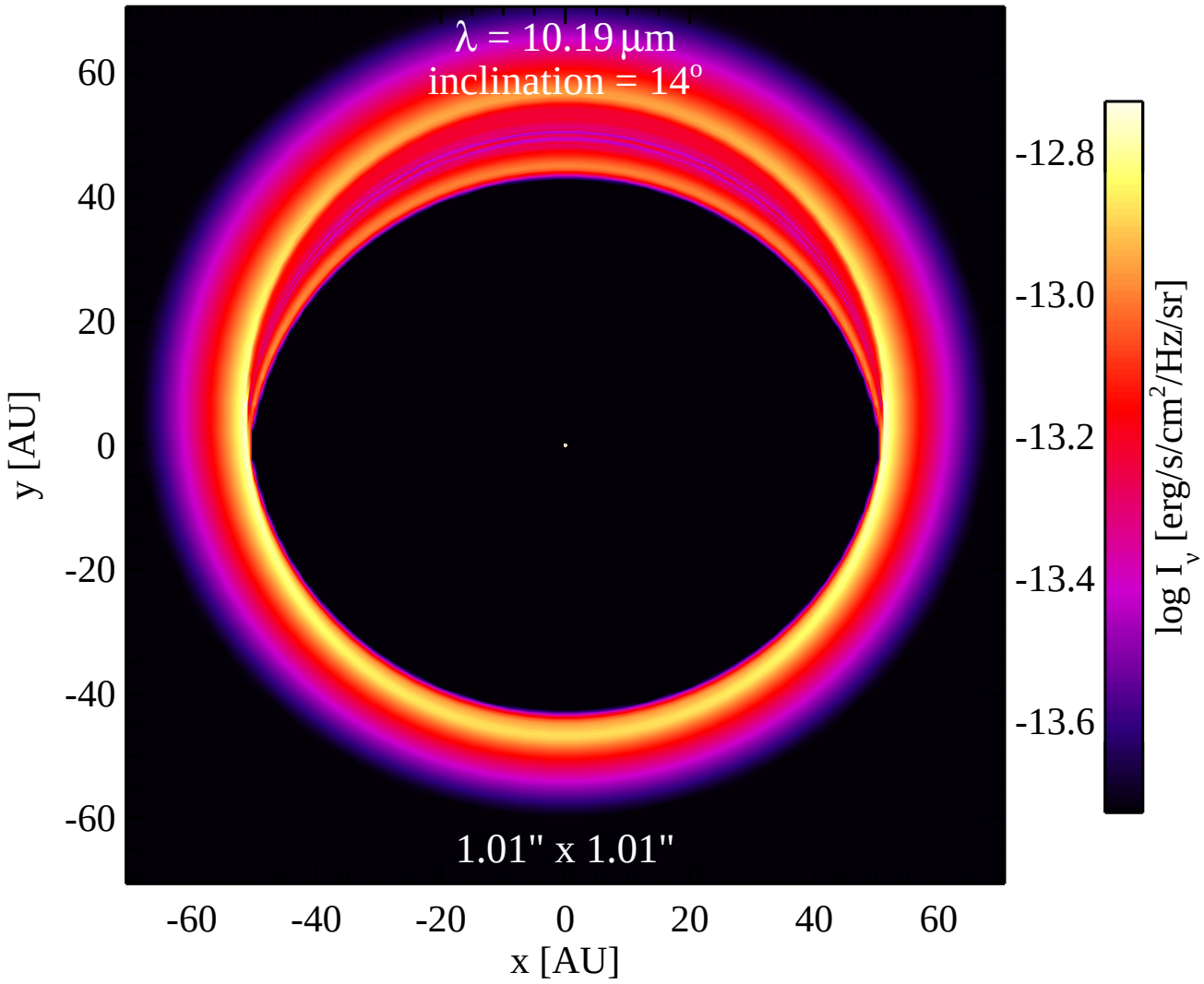

λ = 7.46 μm
inclination = 14°
1.27" x 1.27"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.4
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

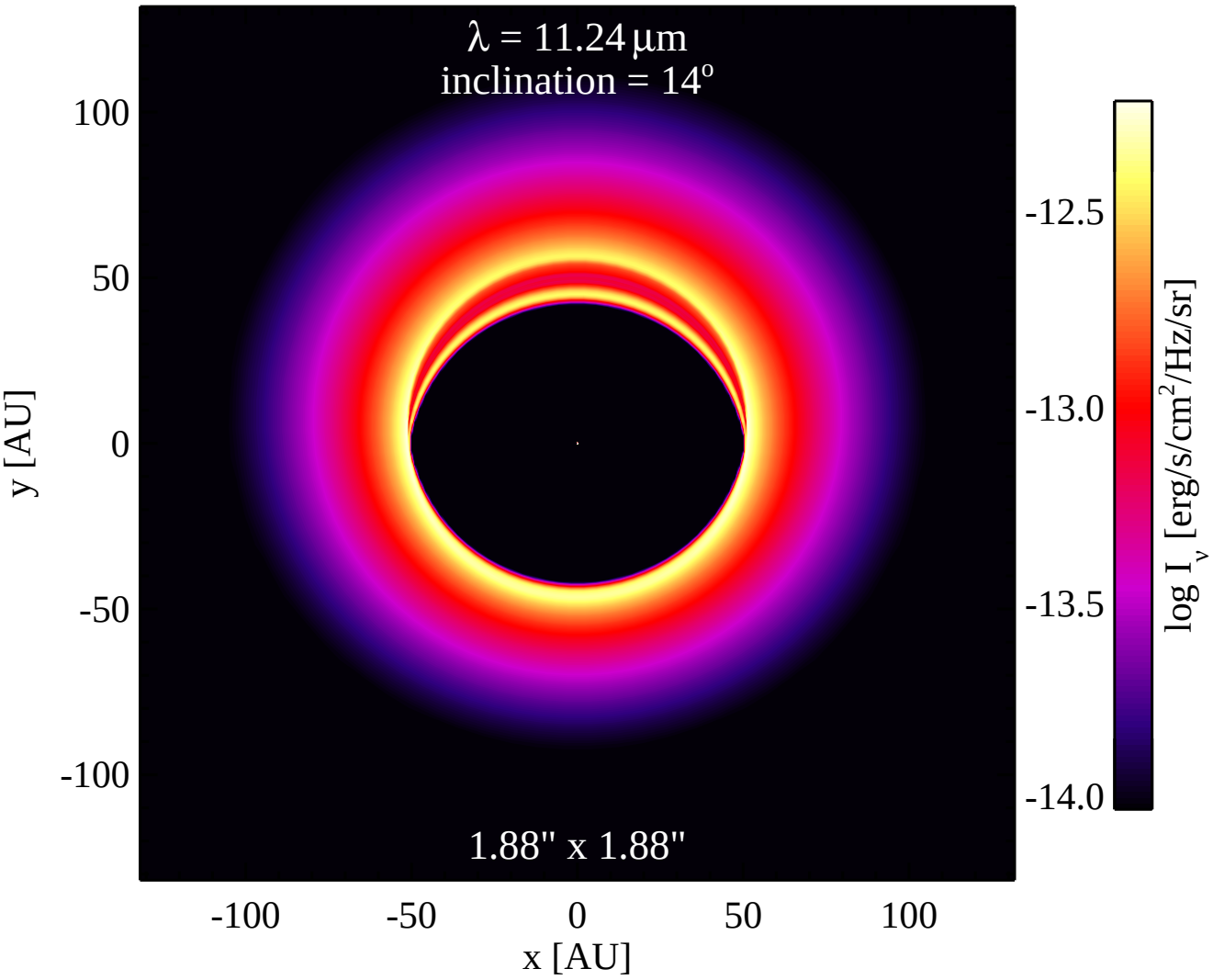

λ = 7.72 μm
inclination = 14°
1.46" x 1.46"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.4
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

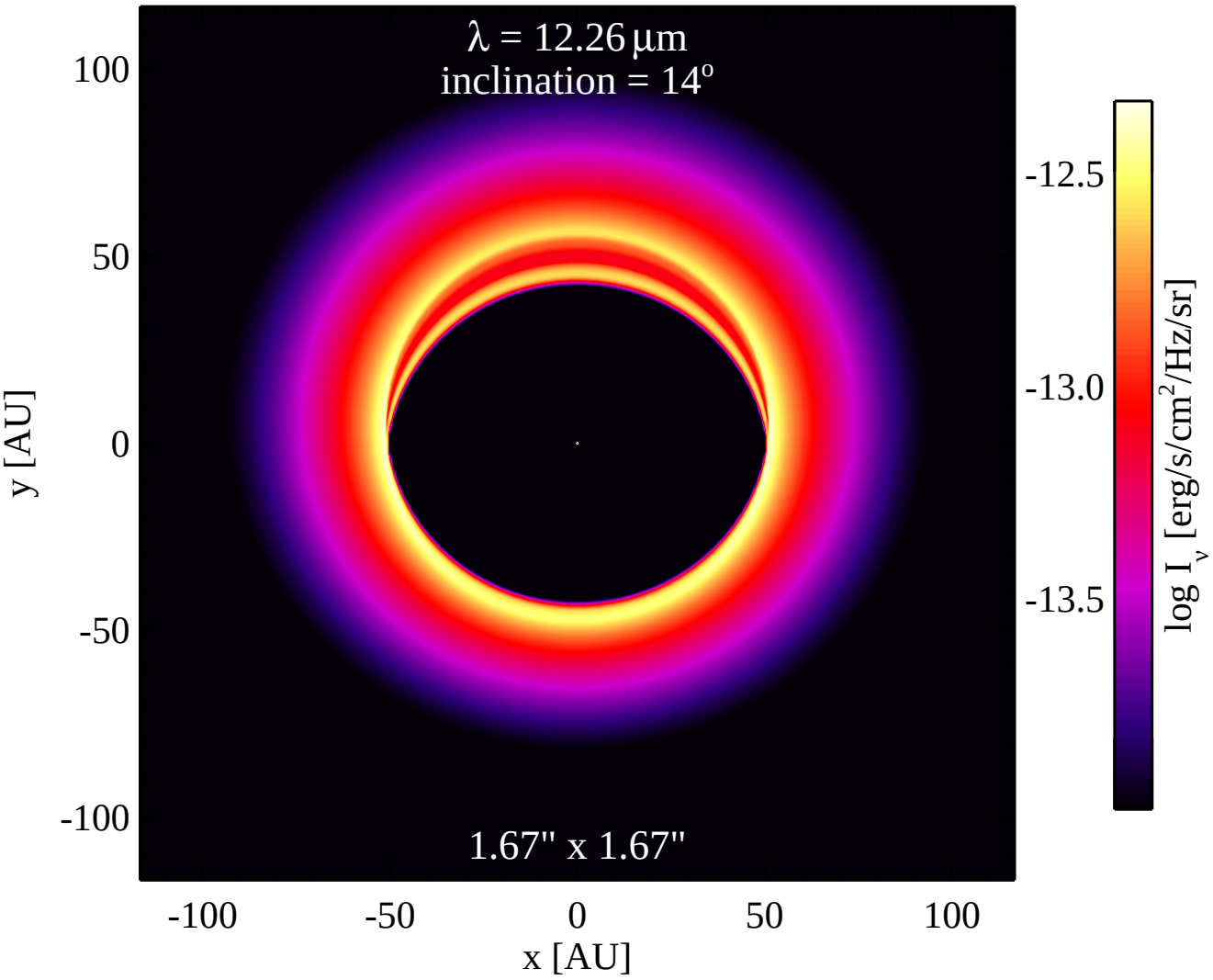

λ = 8.08 μm
inclination = 14°
1.23" x 1.23"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

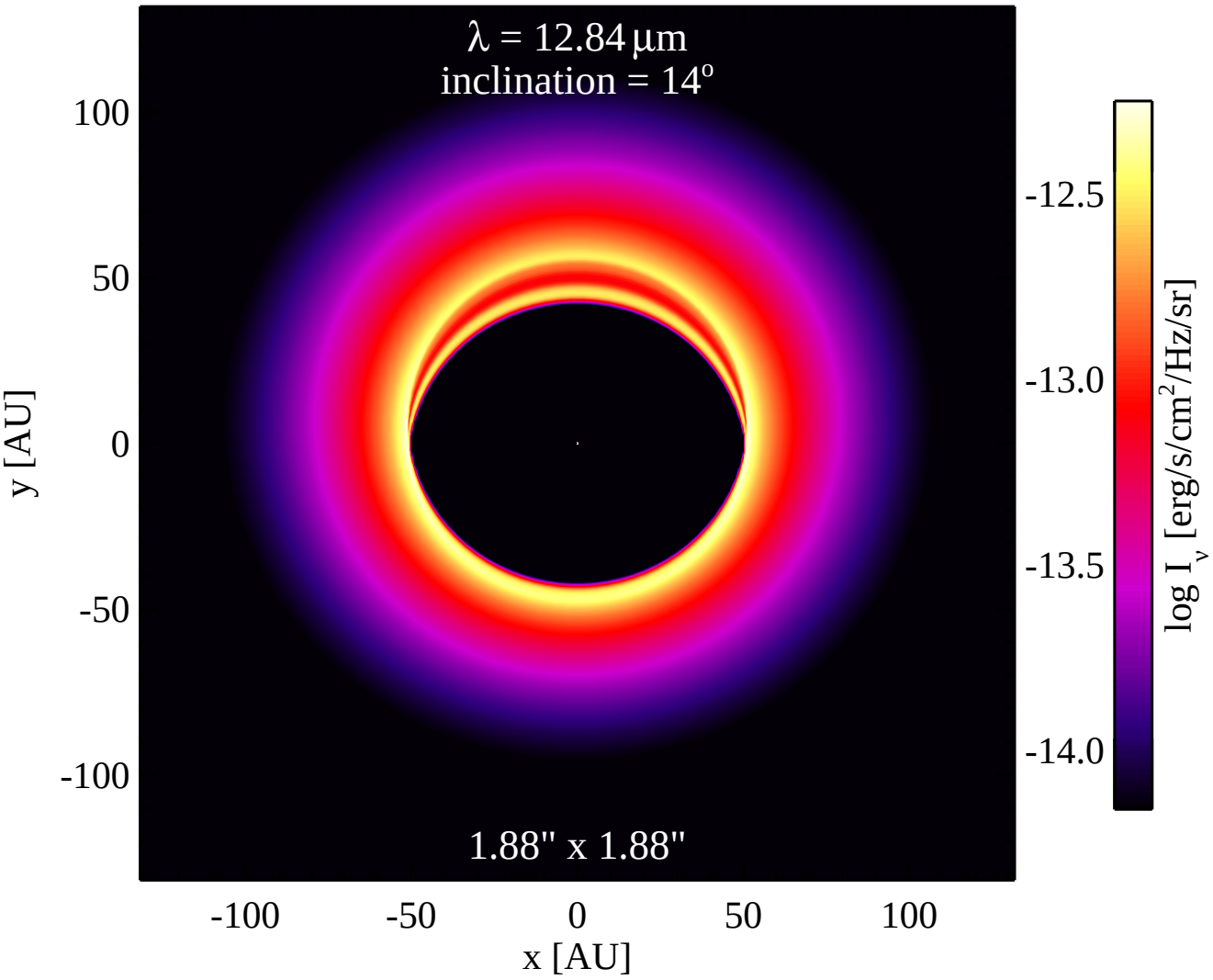

λ = 8.47 μm
inclination = 14°
1.15" x 1.15"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.6
-12.8
-13.0
-13.2
-13.4
log I_ν [erg/s/cm²/Hz/sr]

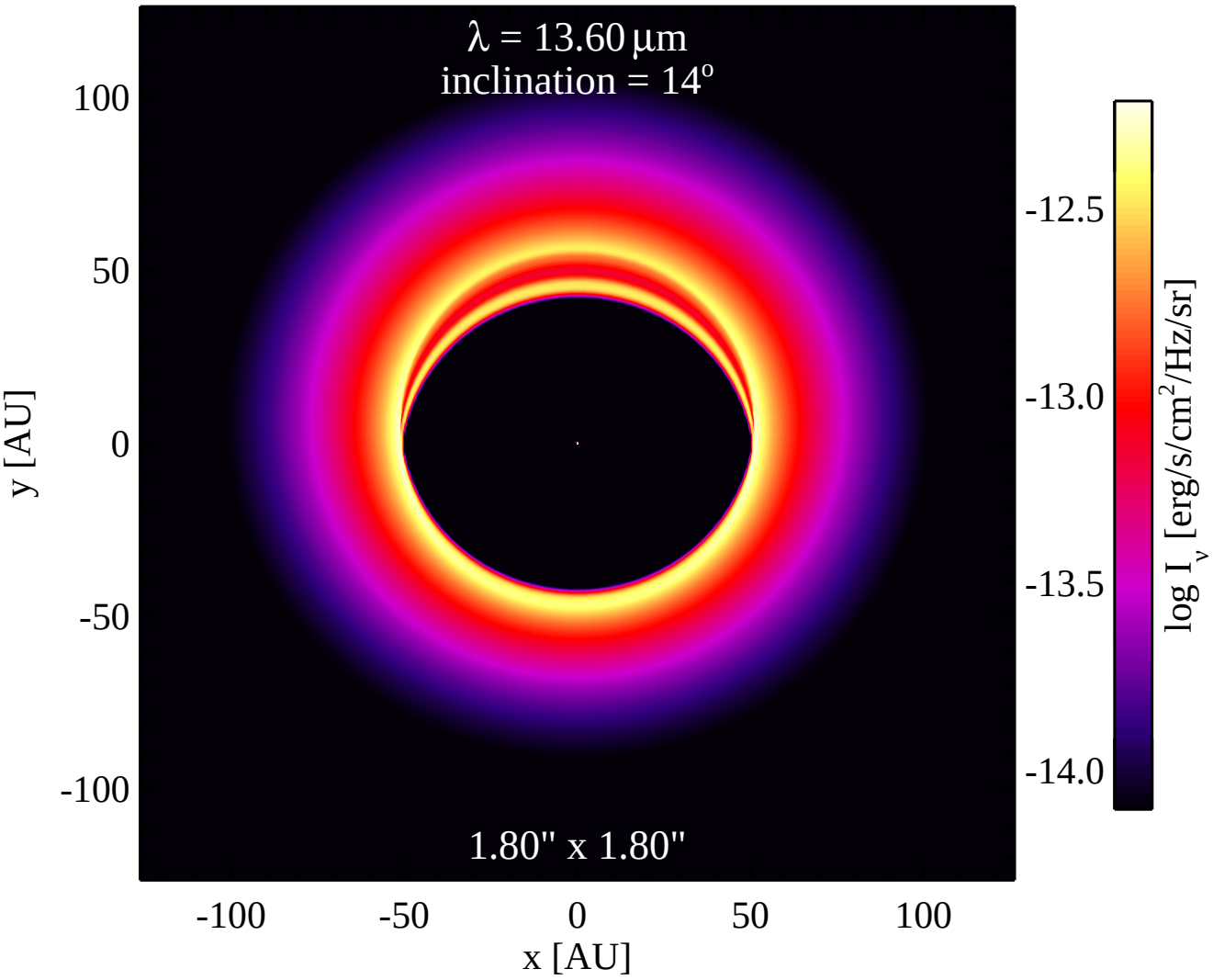

λ = 8.77 μm
inclination = 14°
1.13" x 1.13"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.8
-13.0
-13.2
-13.4
-13.6
log I_ν [erg/s/cm²/Hz/sr]

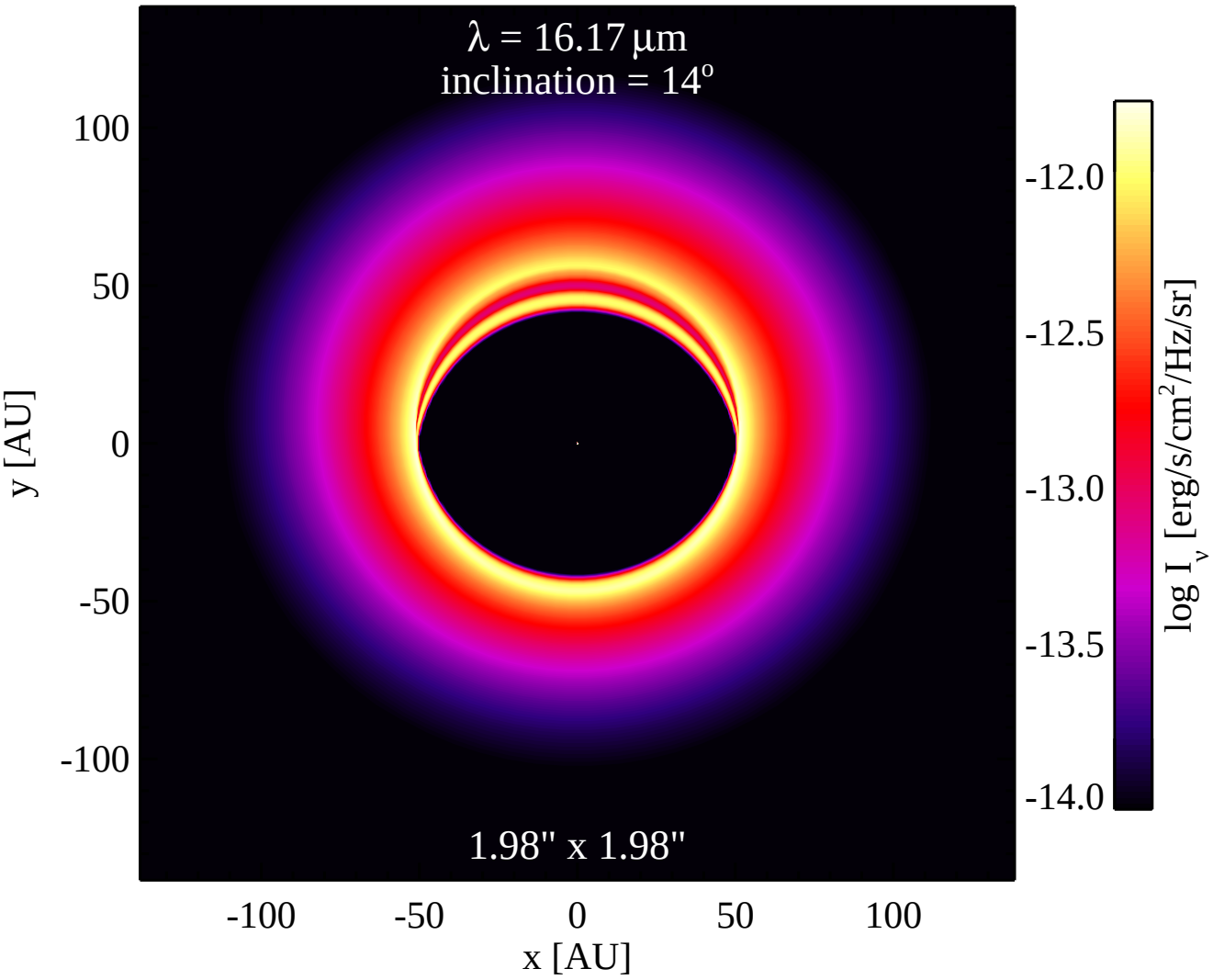

λ = 10.19 μm
inclination = 14°
1.01" x 1.01"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.8
-13.0
-13.2
-13.4
-13.6
log I_ν [erg/s/cm²/Hz/sr]

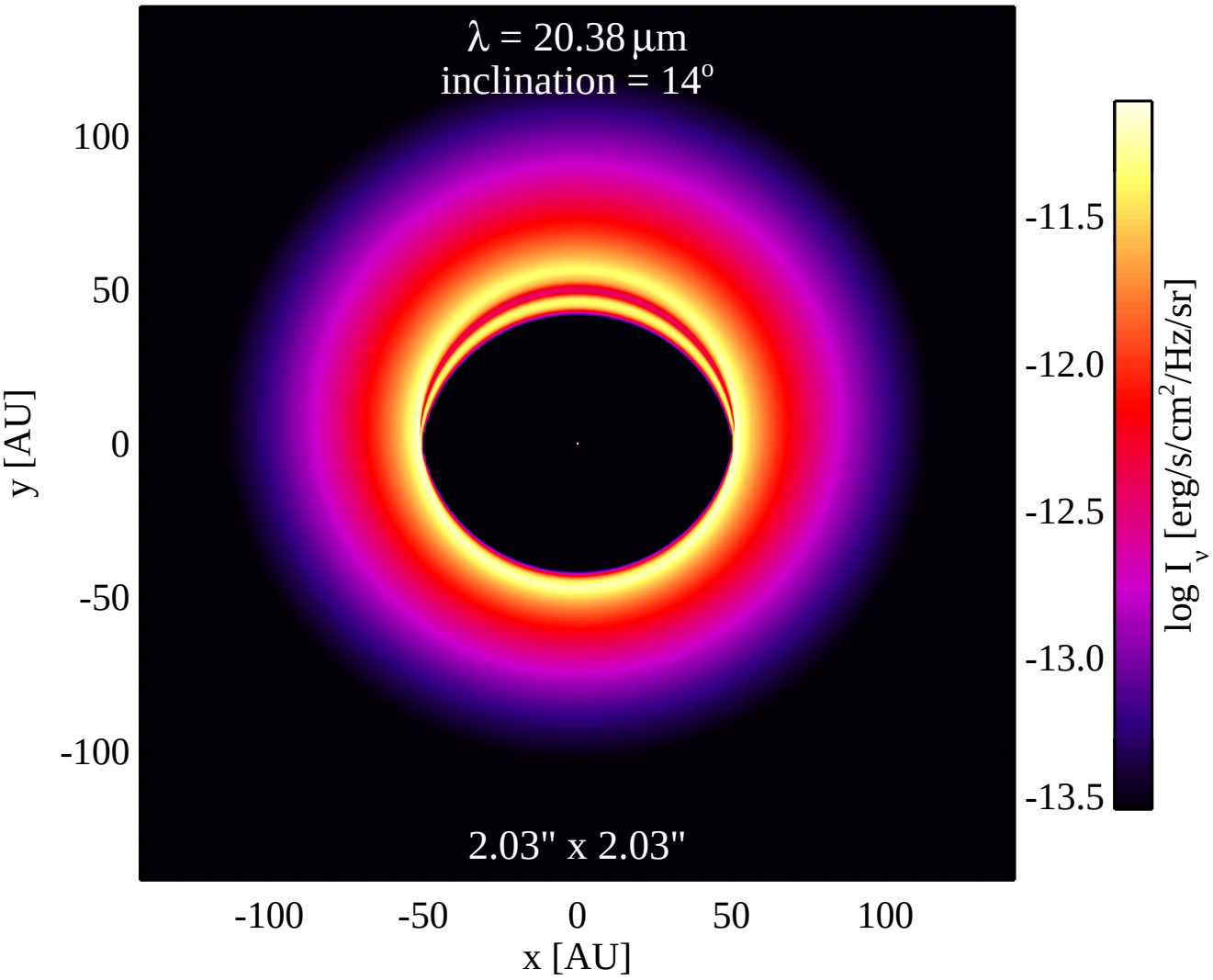

λ = 11.24 μm
inclination = 14°
1.88" x 1.88"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

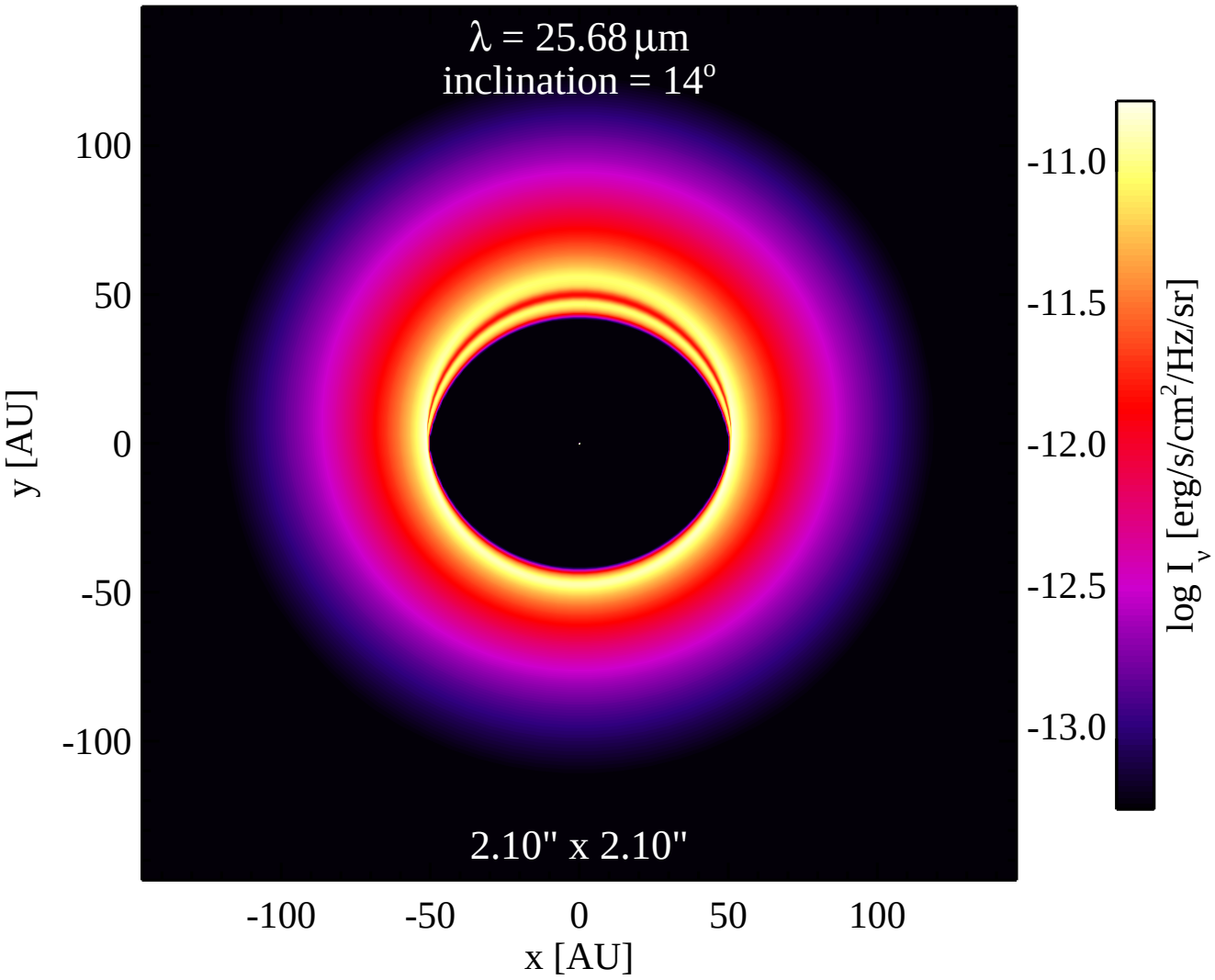

λ = 12.26 μm
inclination = 14°
1.67" x 1.67"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

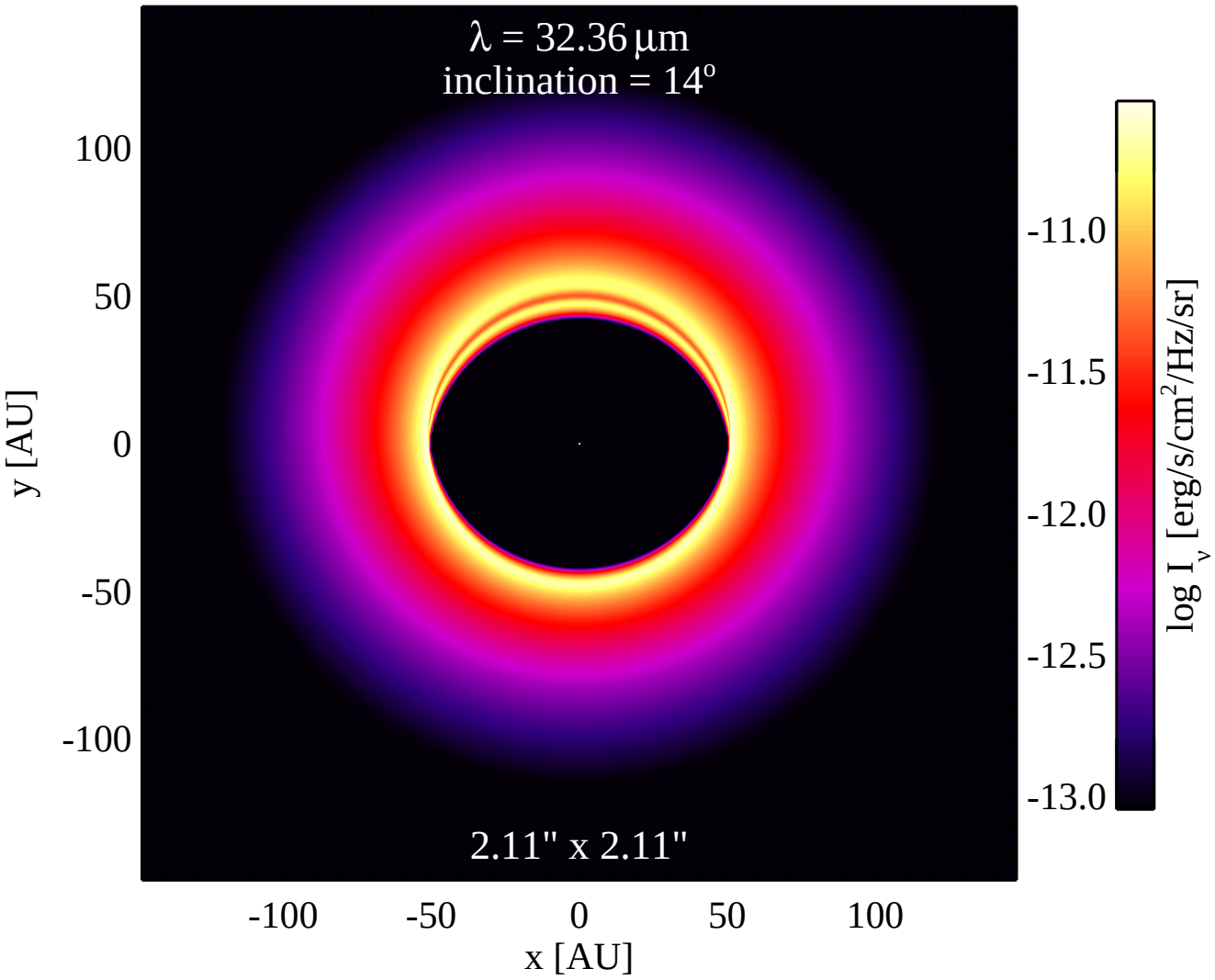

λ = 12.84 μm
inclination = 14°
1.88" x 1.88"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

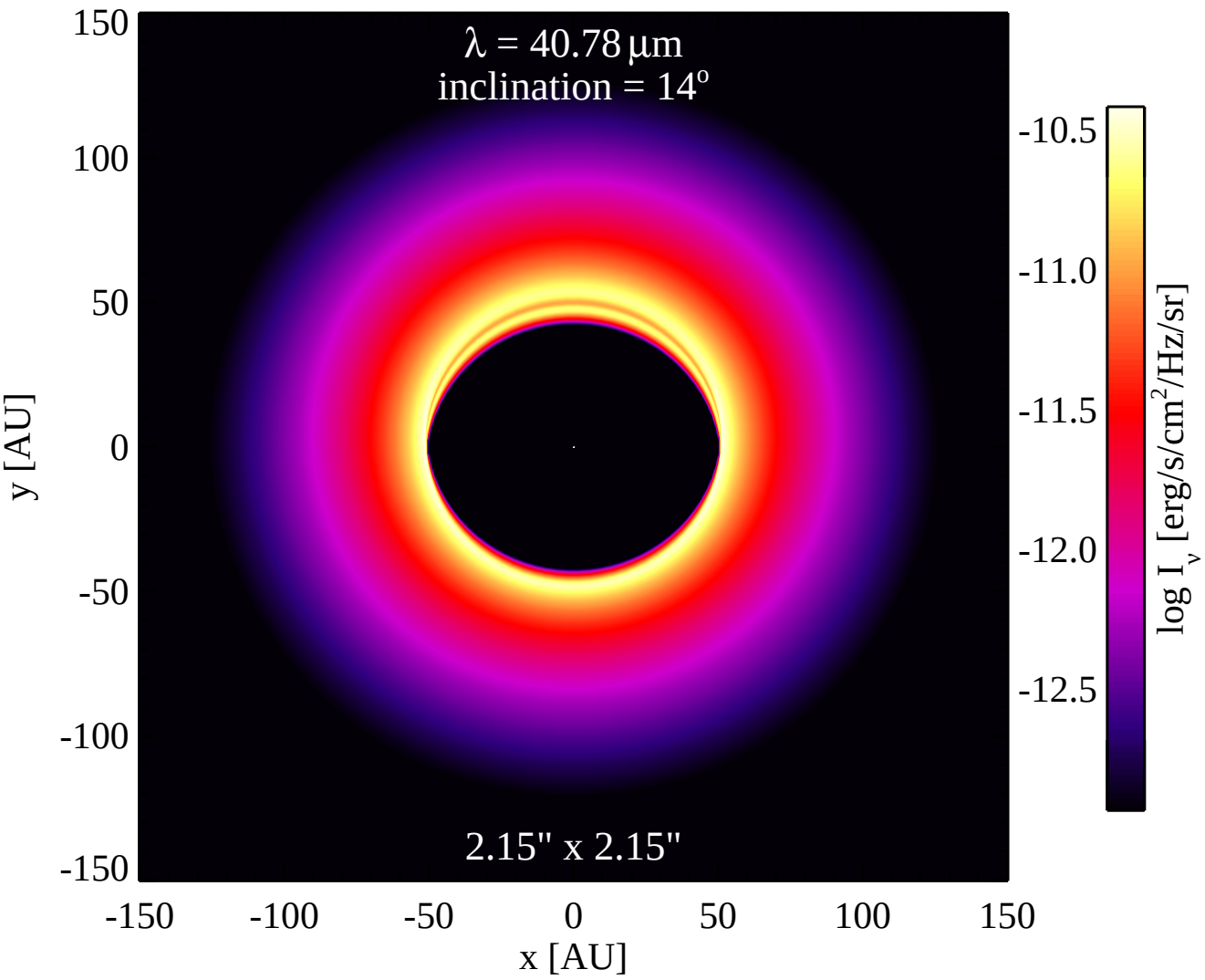

λ = 13.60 μm
inclination = 14°
1.80" x 1.80"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

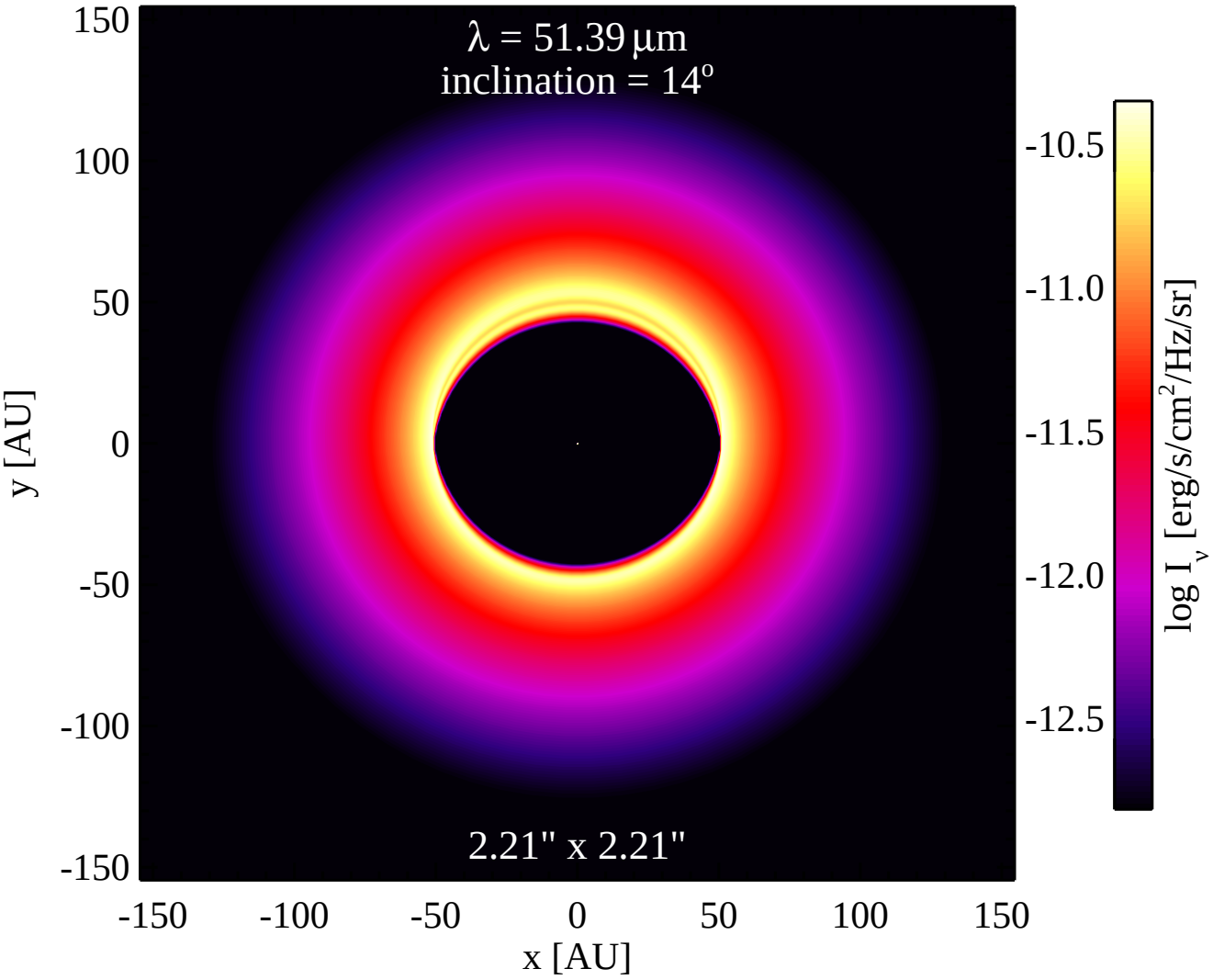

λ = 16.17 μm
inclination = 14°
1.98" x 1.98"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

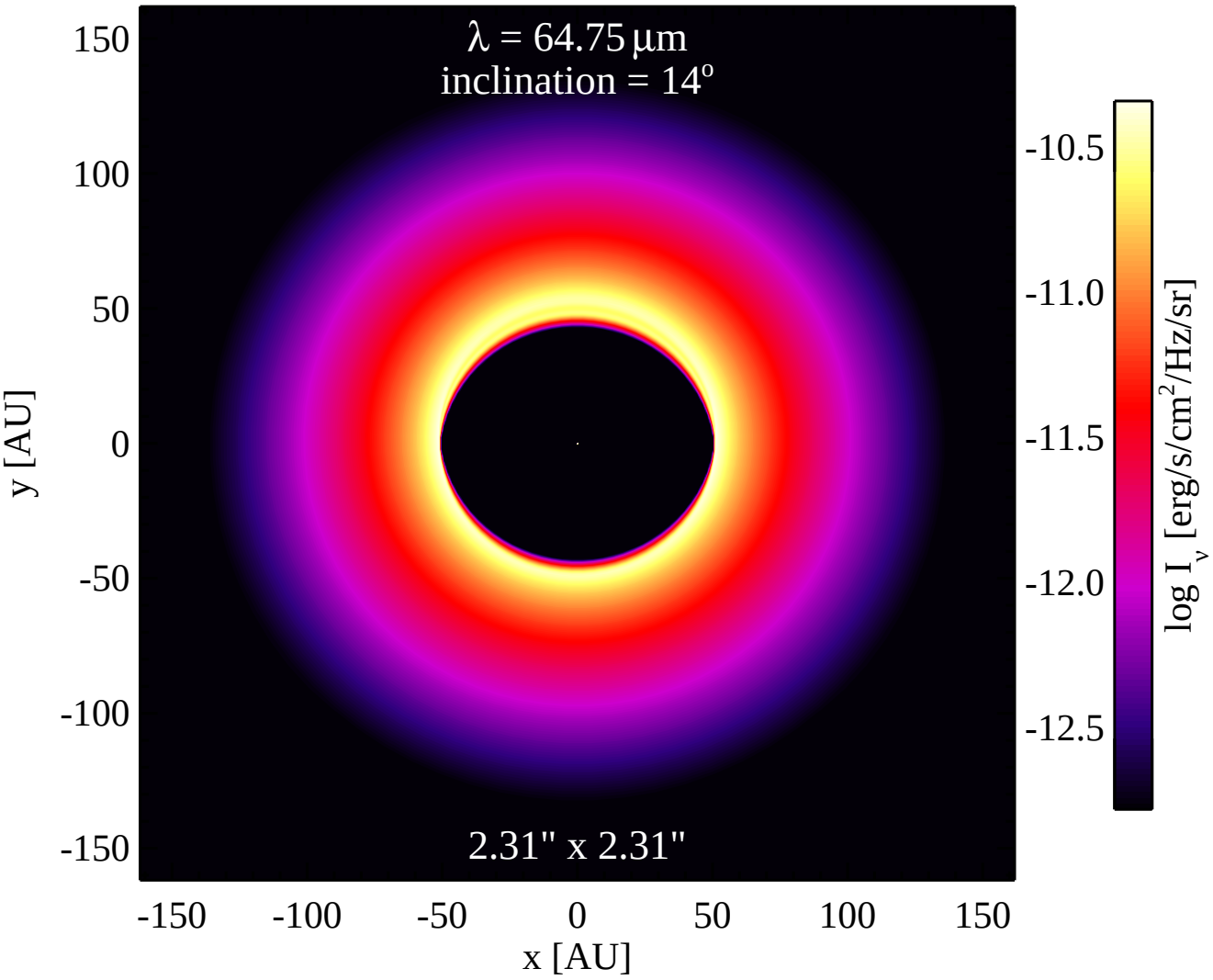

λ = 20.38 μm
inclination = 14°
2.03" x 2.03"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

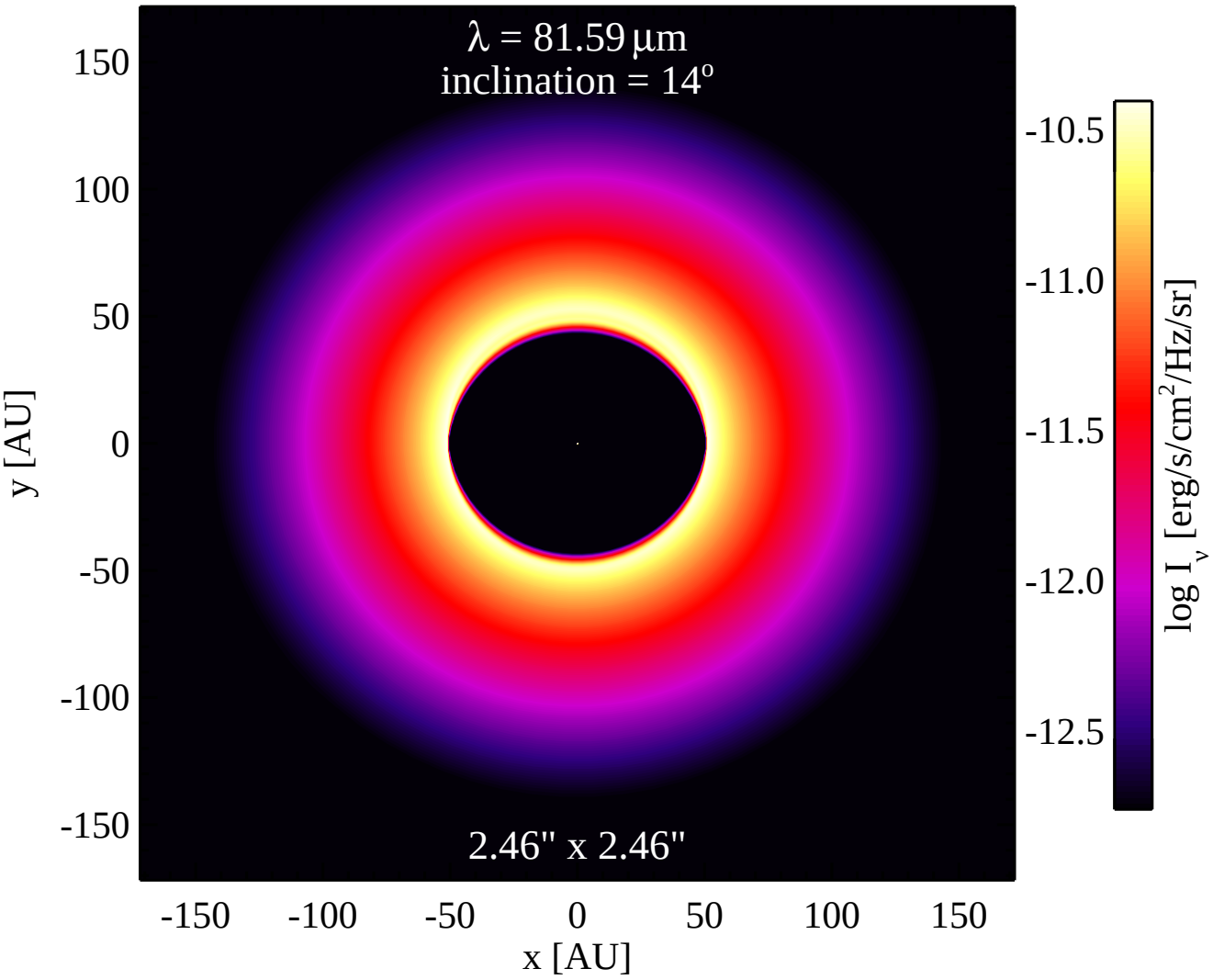

λ = 25.68 μm
inclination = 14°
2.10" x 2.10"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

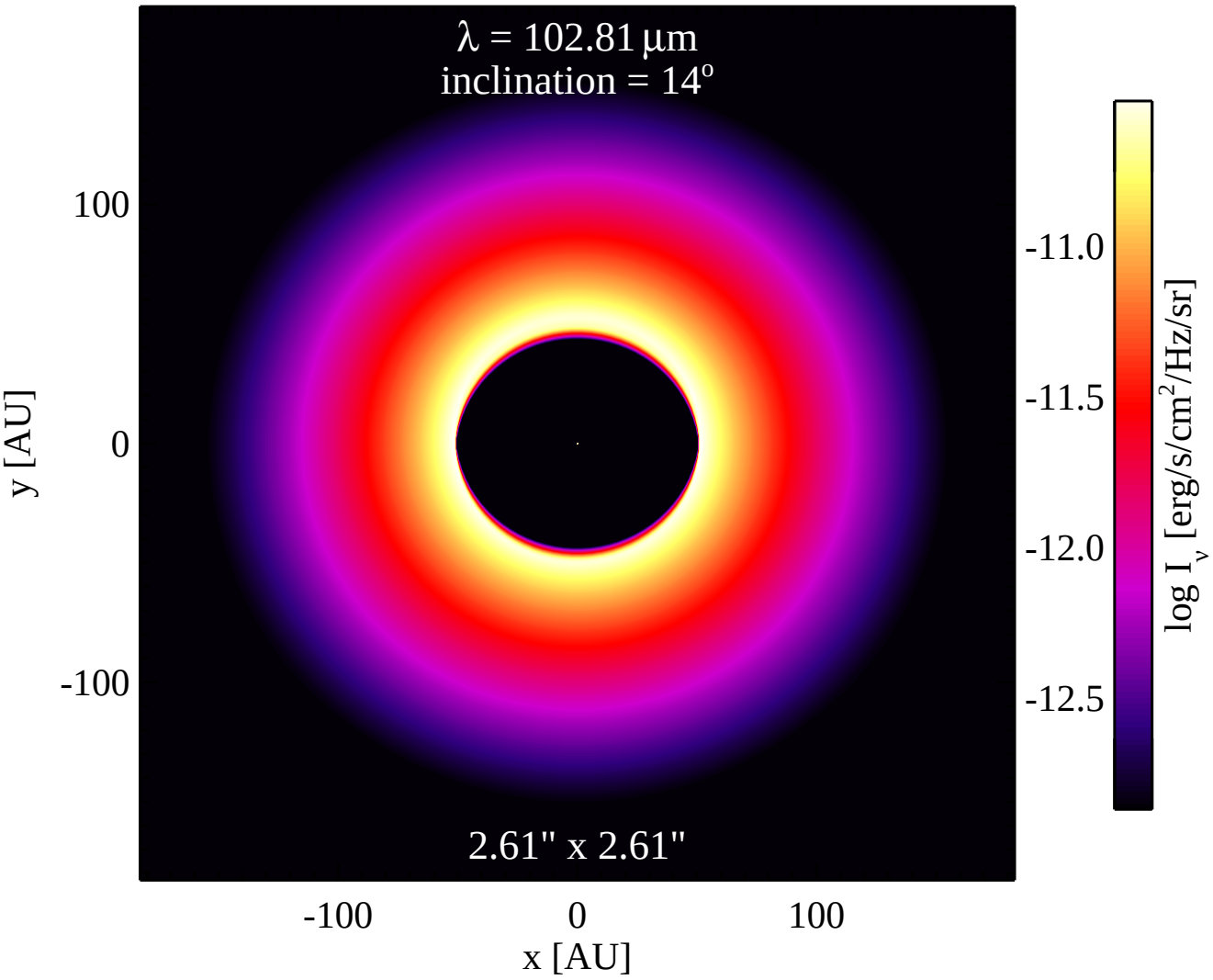

λ = 32.36 μm
inclination = 14°
2.11" x 2.11"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

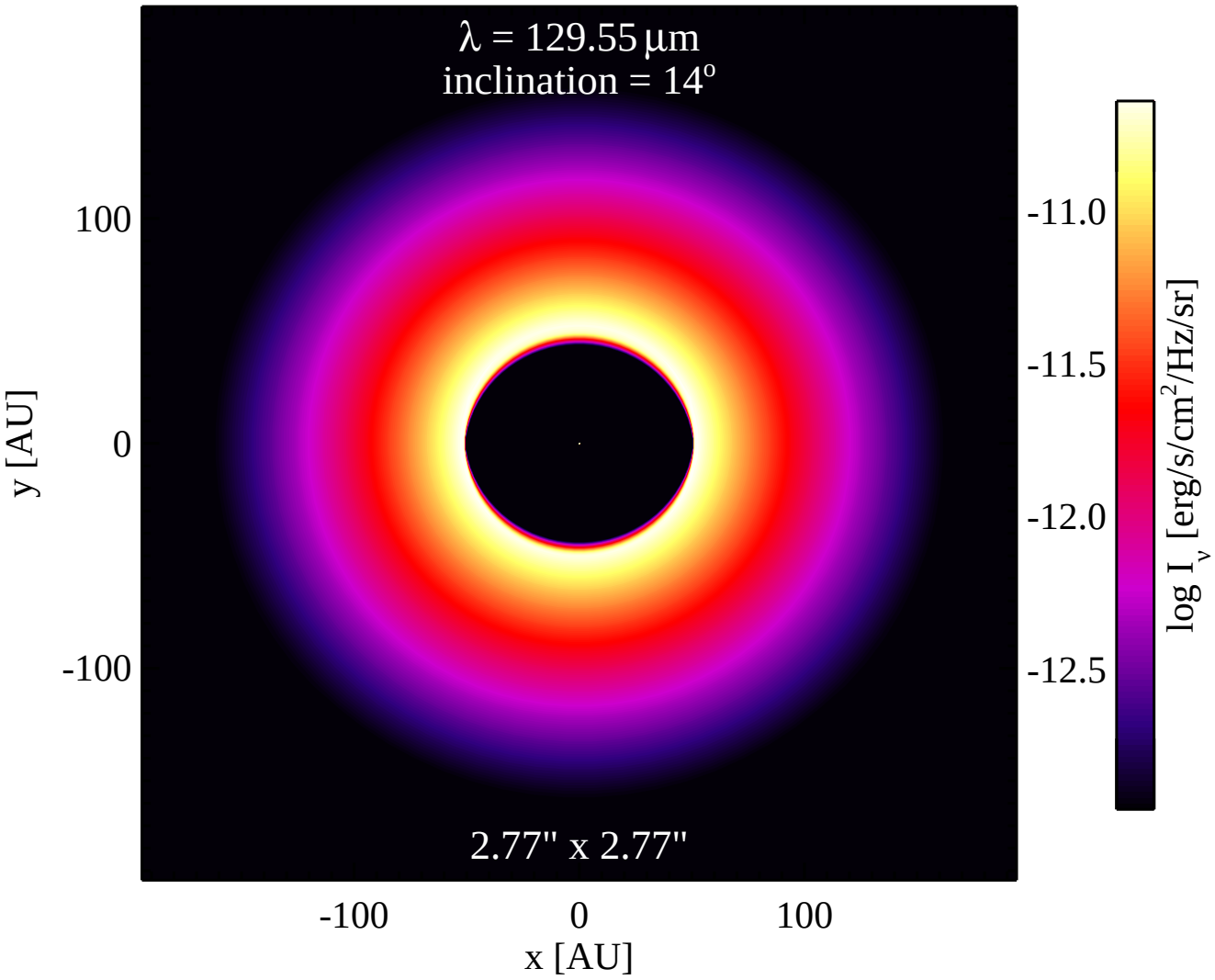

λ = 40.78 μm
inclination = 14°
2.15" x 2.15"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

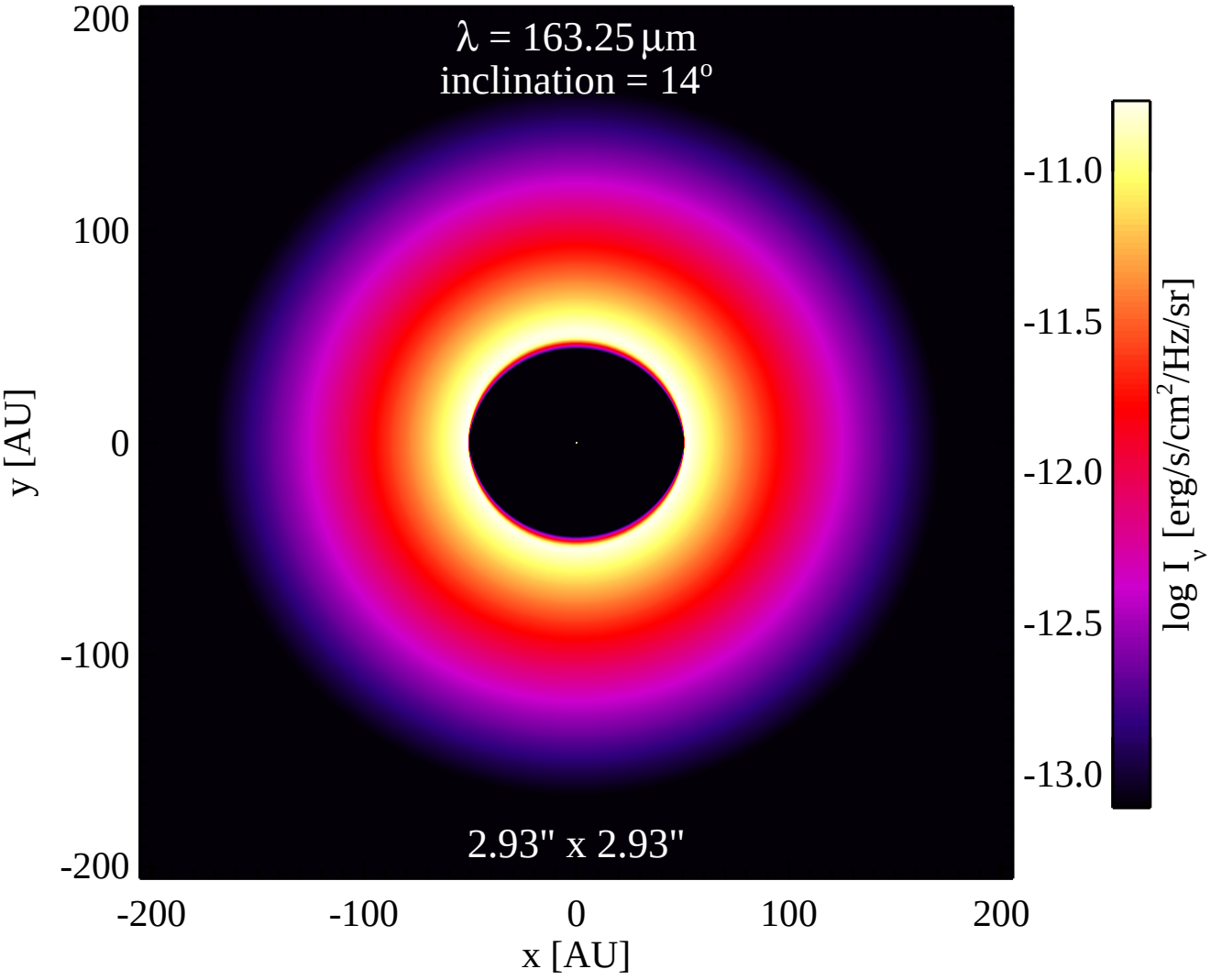

λ = 51.39 μm
inclination = 14°
2.21" x 2.21"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

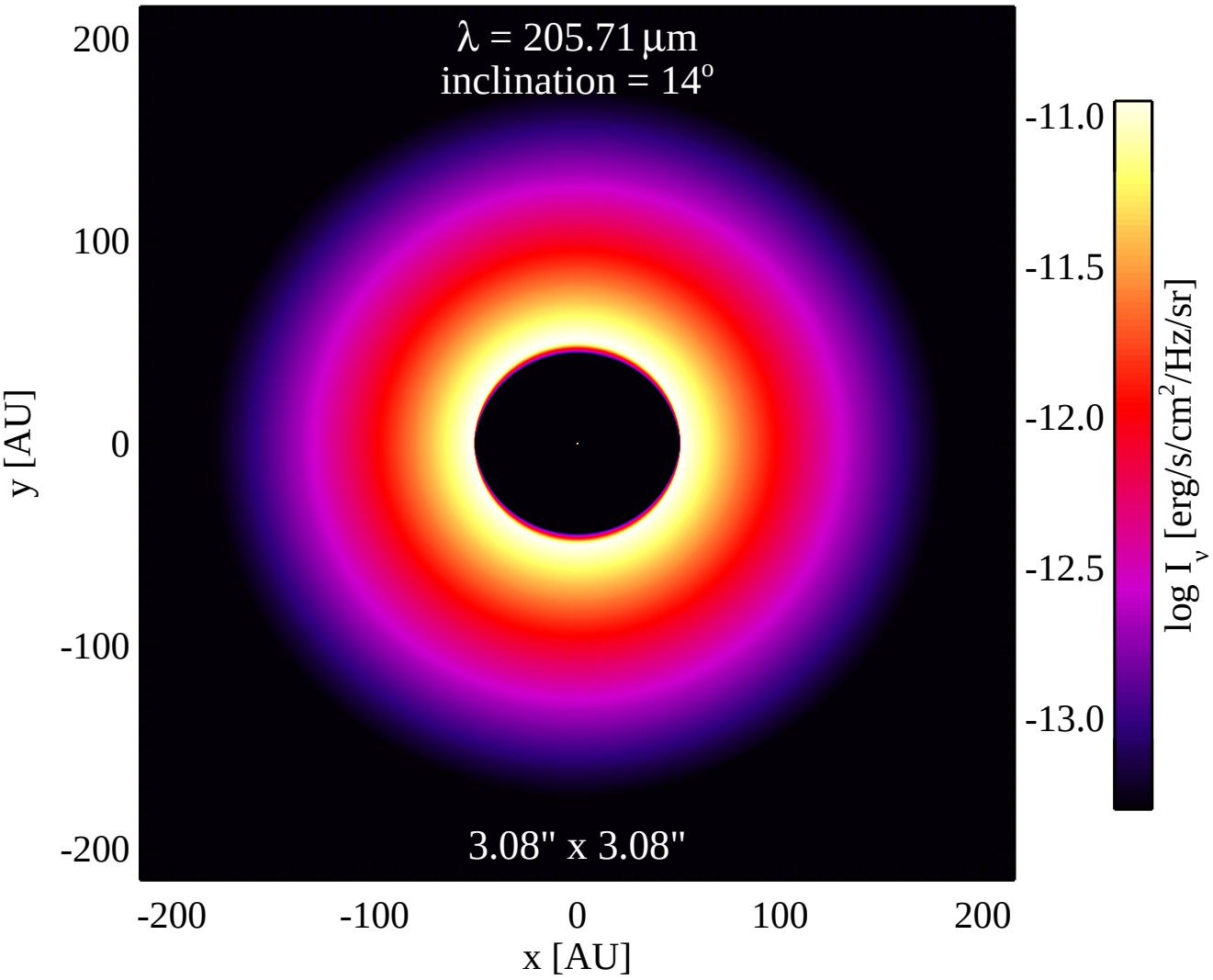

λ = 64.75 μm
inclination = 14°
2.31" x 2.31"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

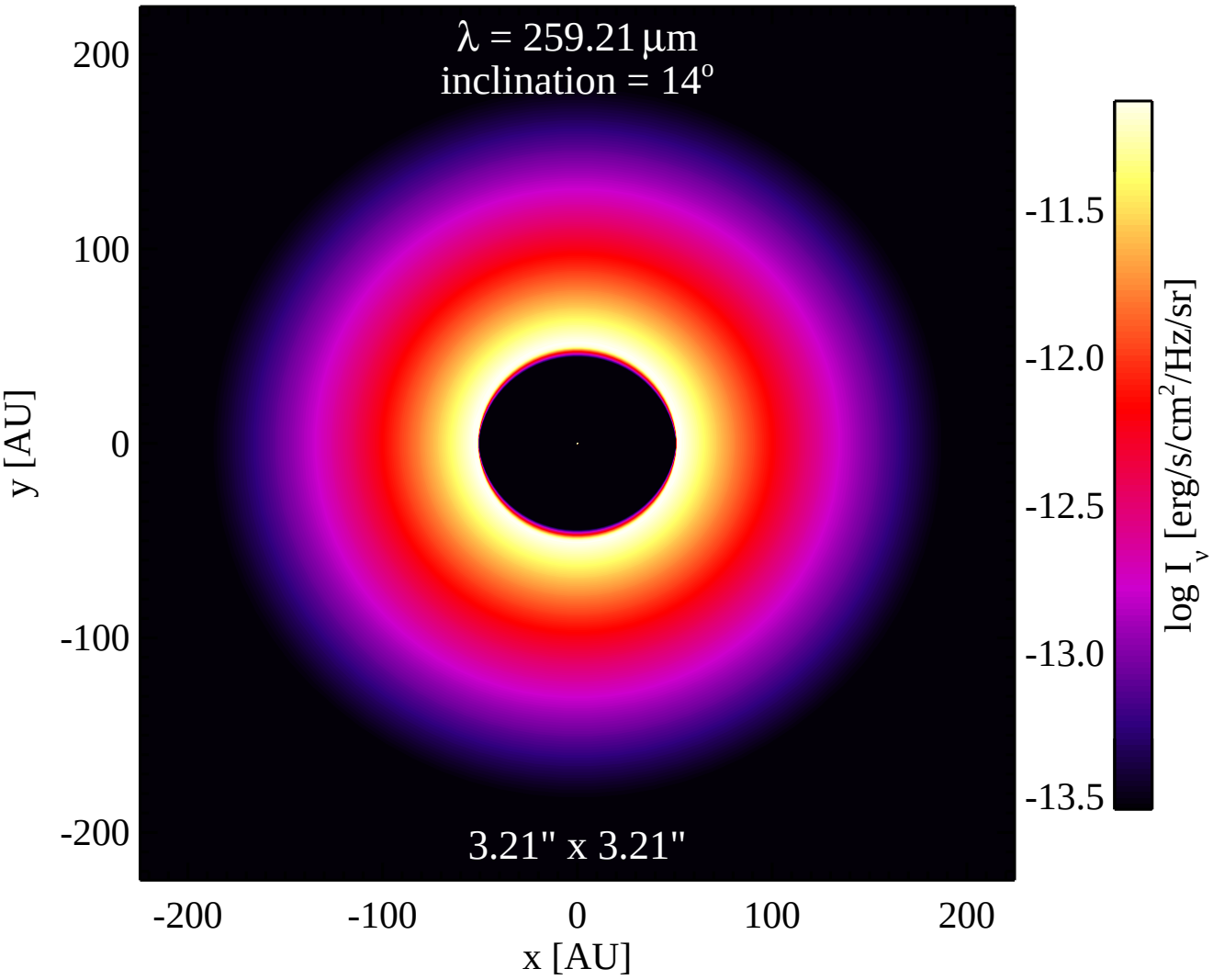

λ = 81.59 μm
inclination = 14°
2.46" x 2.46"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

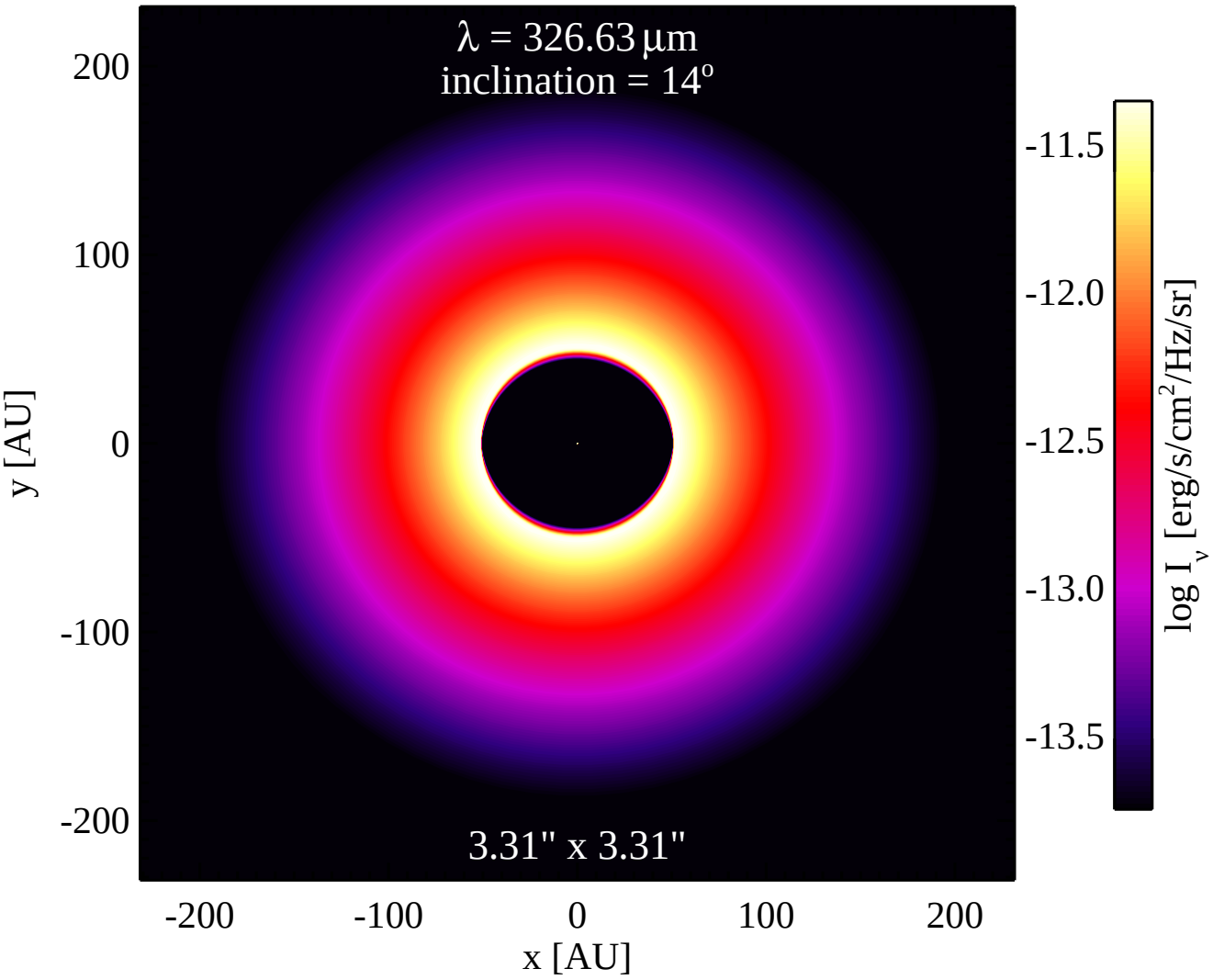

λ = 102.81 μm
inclination = 14°
2.61" x 2.61"
100
0
-100
y [AU]
-100
0
100
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

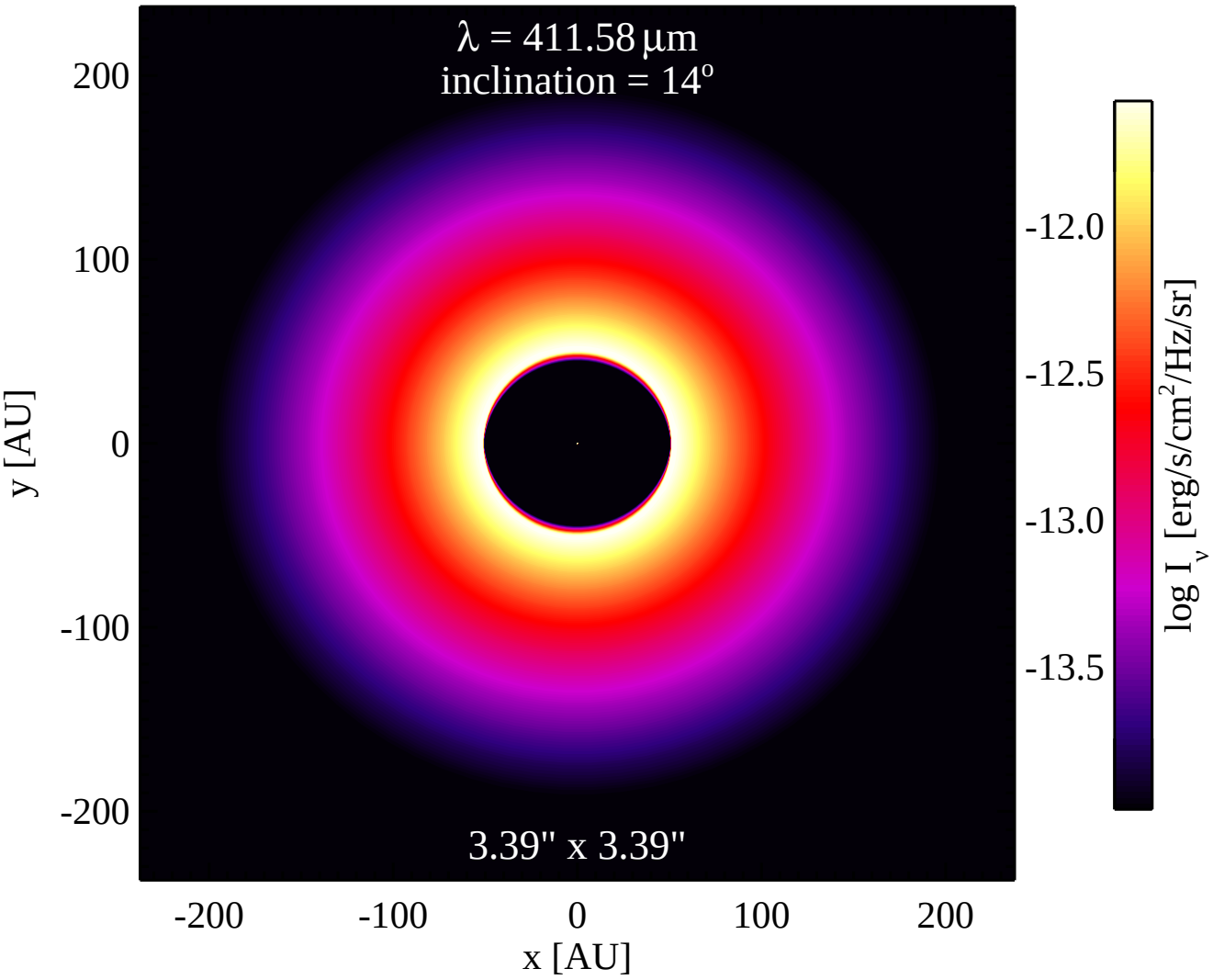

λ = 129.55 μm
inclination = 14°
2.77" x 2.77"
100
0
-100
y [AU]
-100
0
100
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

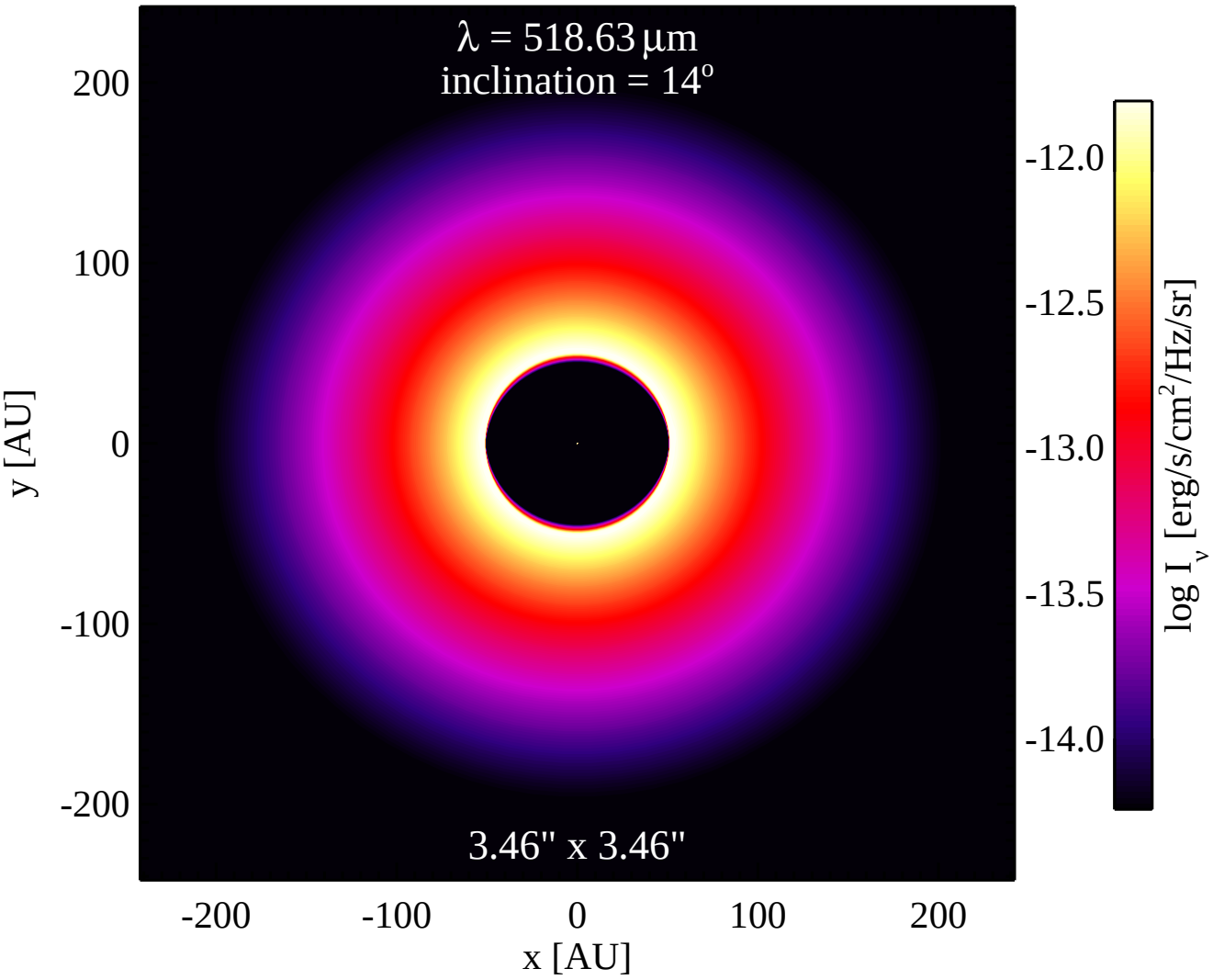

λ = 163.25 μm
inclination = 14°
2.93" x 2.93"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

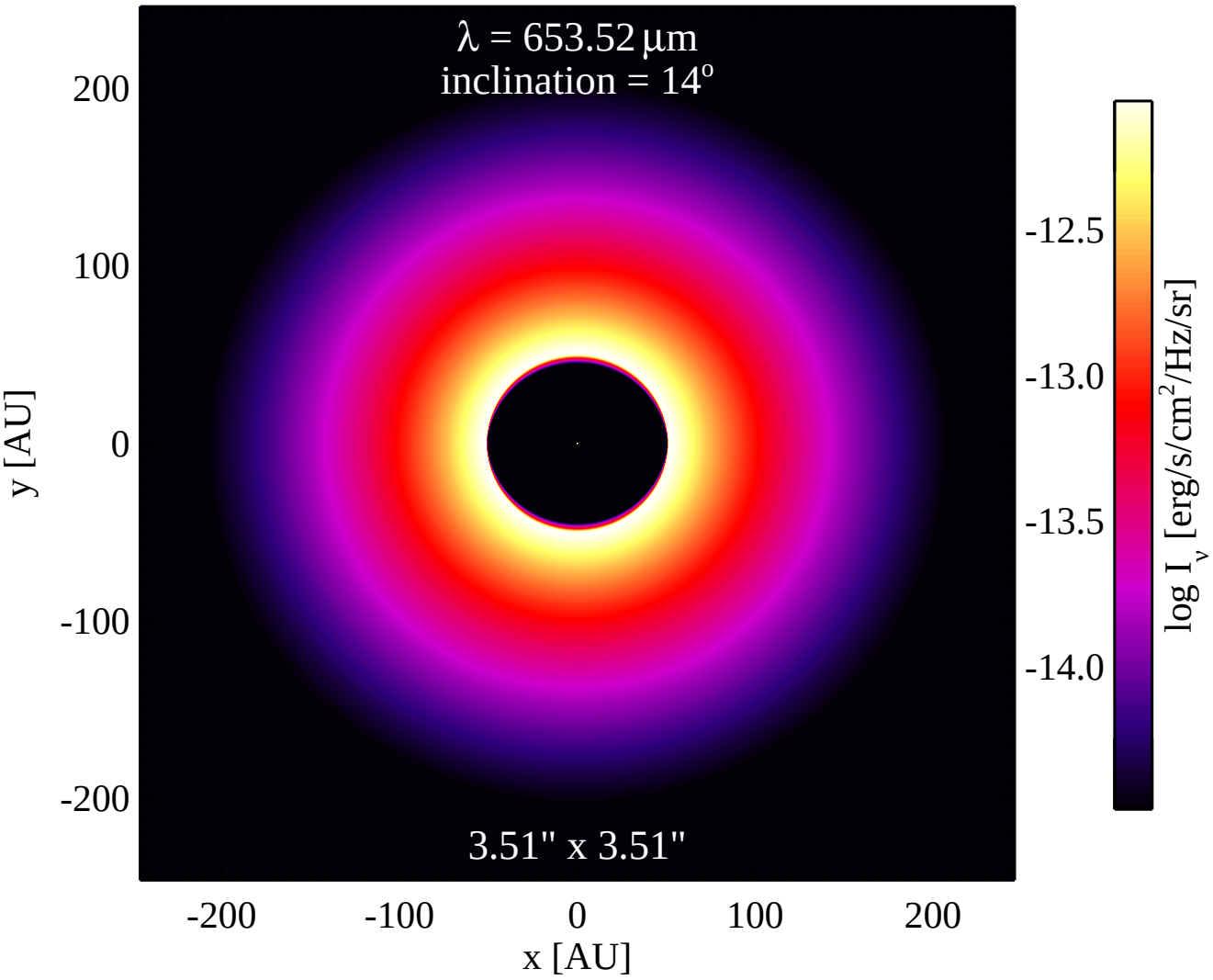

λ = 205.71 μm
inclination = 14°
3.08" x 3.08"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

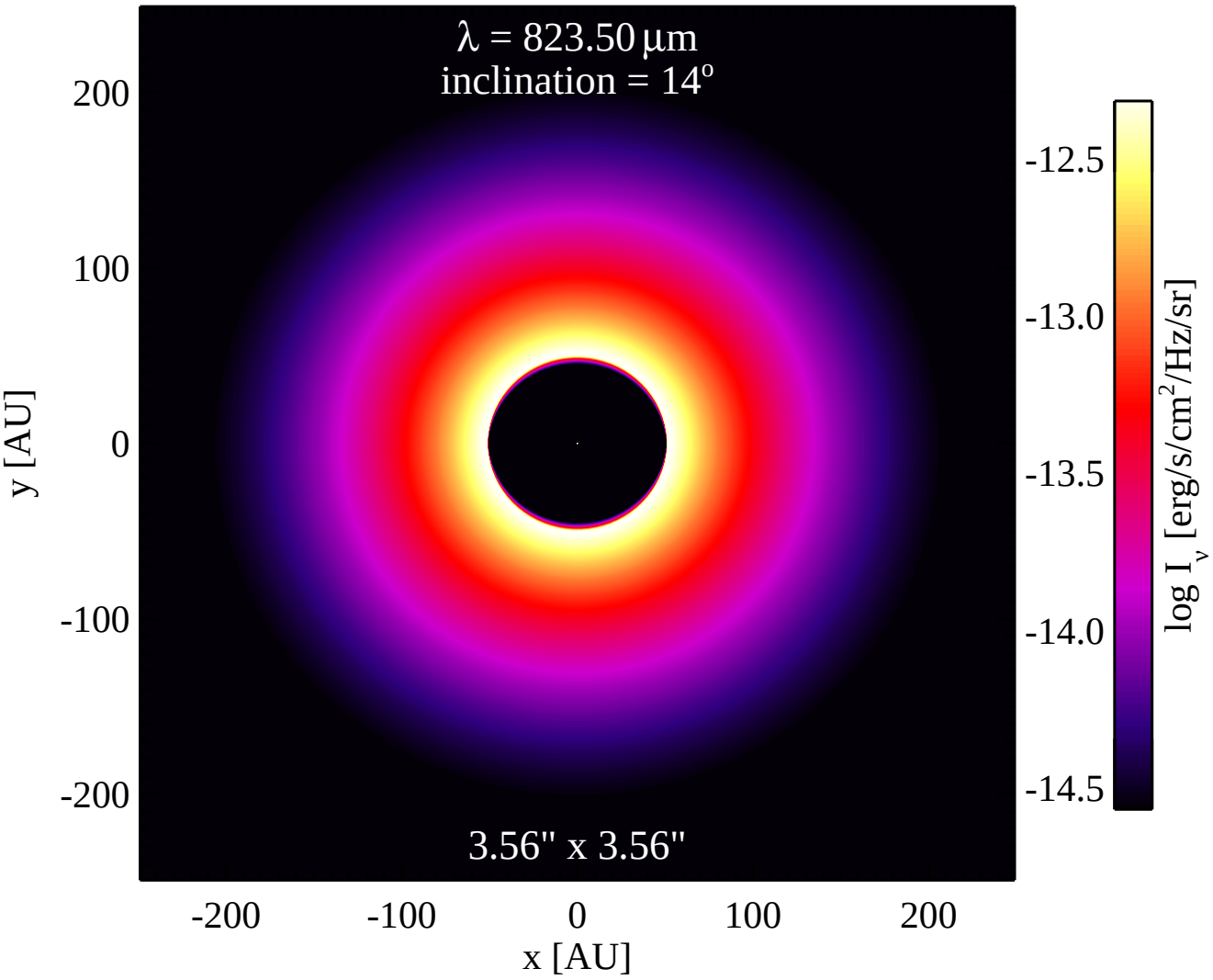

λ = 259.21 μm
inclination = 14°
3.21" x 3.21"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

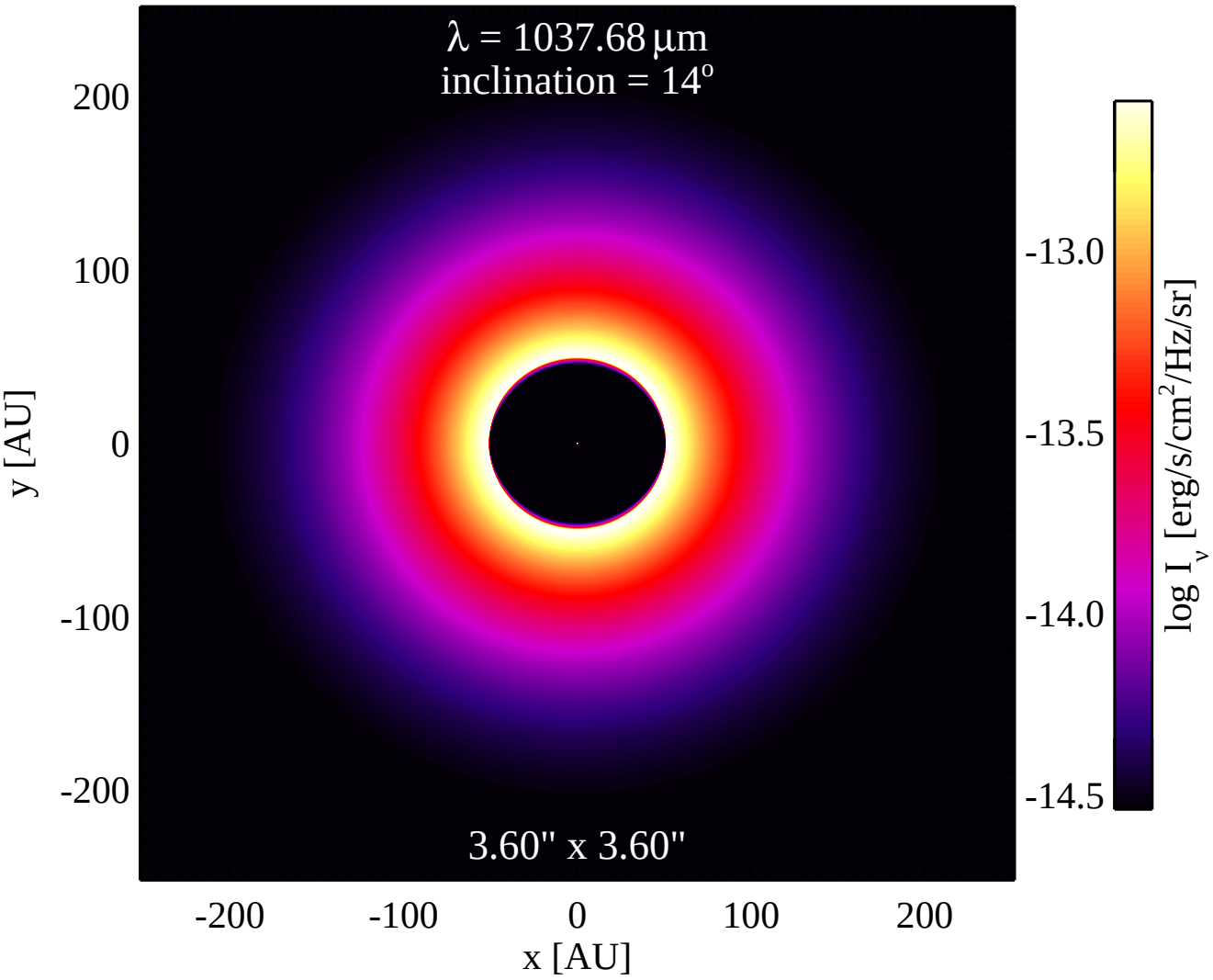

λ = 326.63 μm
inclination = 14°
3.31" x 3.31"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

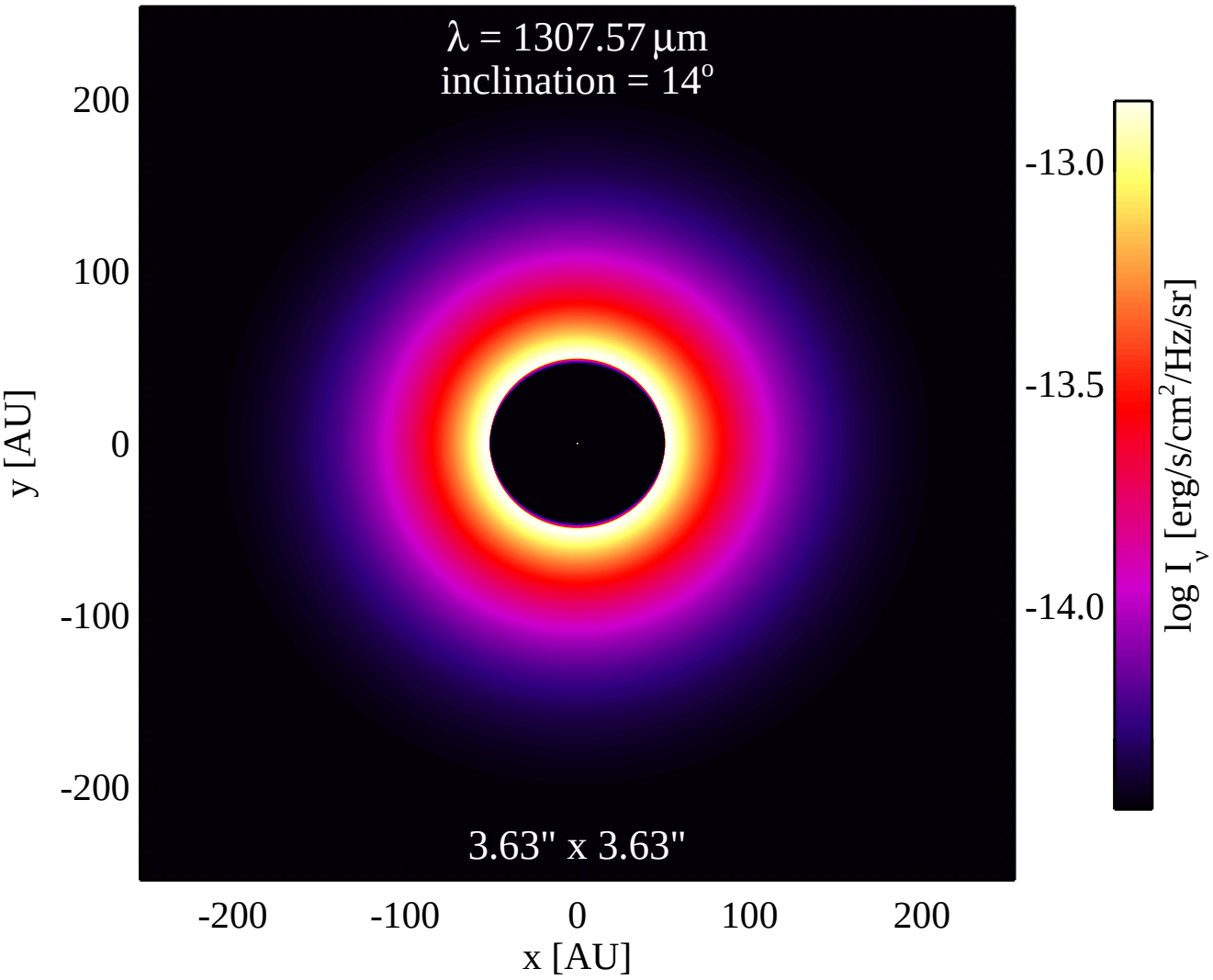

λ = 411.58 μm
inclination = 14°
3.39" x 3.39"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

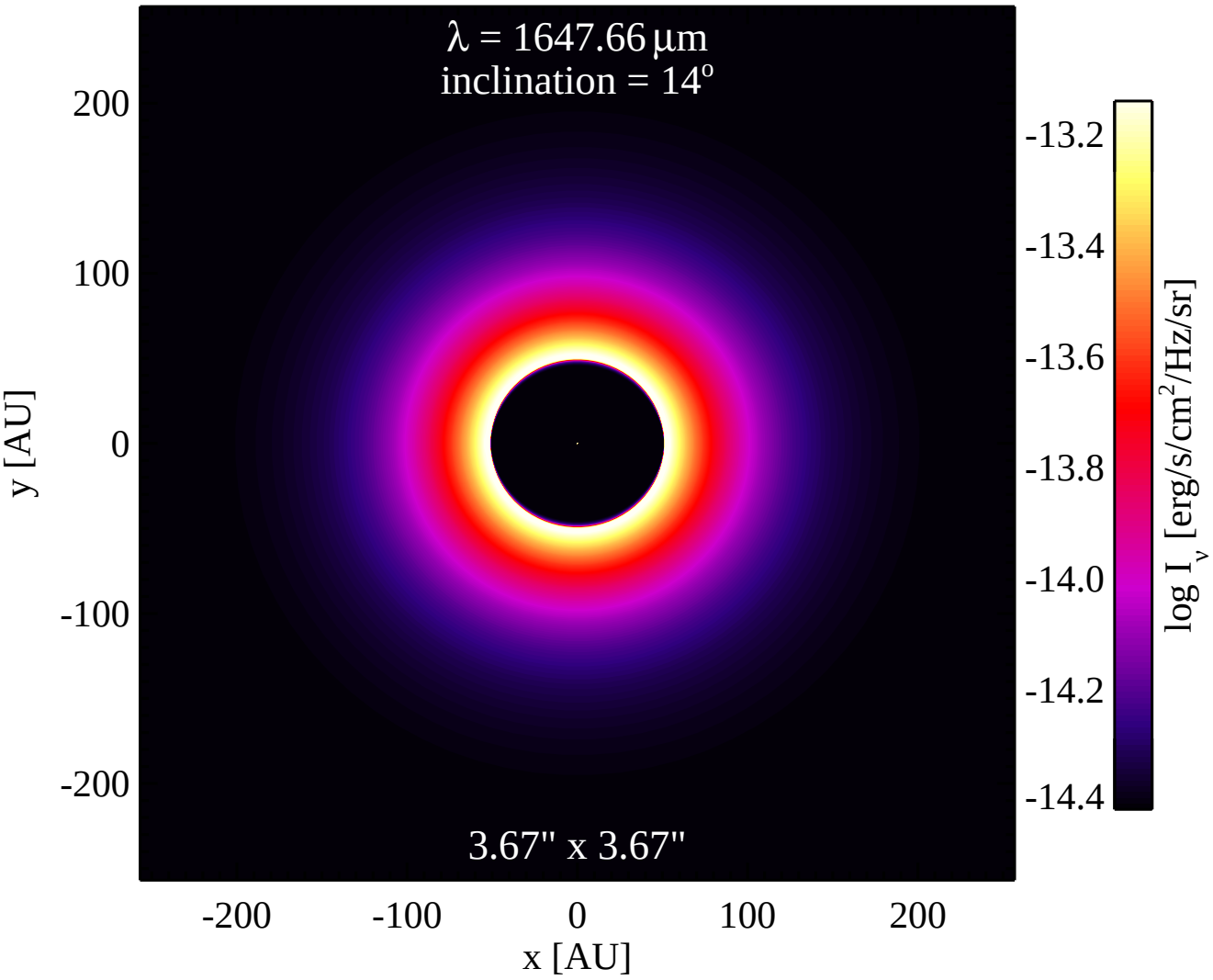

λ = 518.63 μm
inclination = 14°
3.46" x 3.46"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

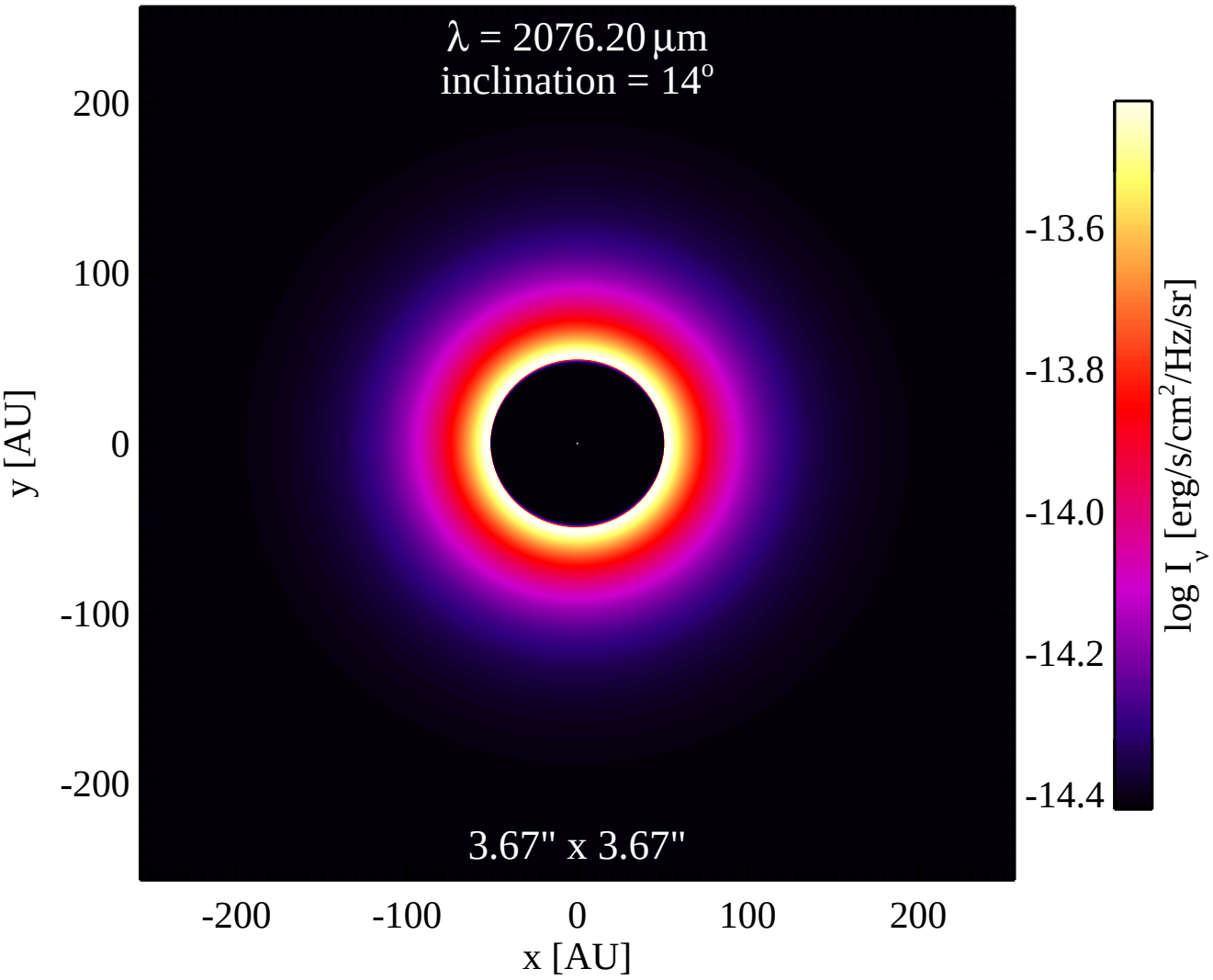

λ = 653.52 μm
inclination = 14°
3.51" x 3.51"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

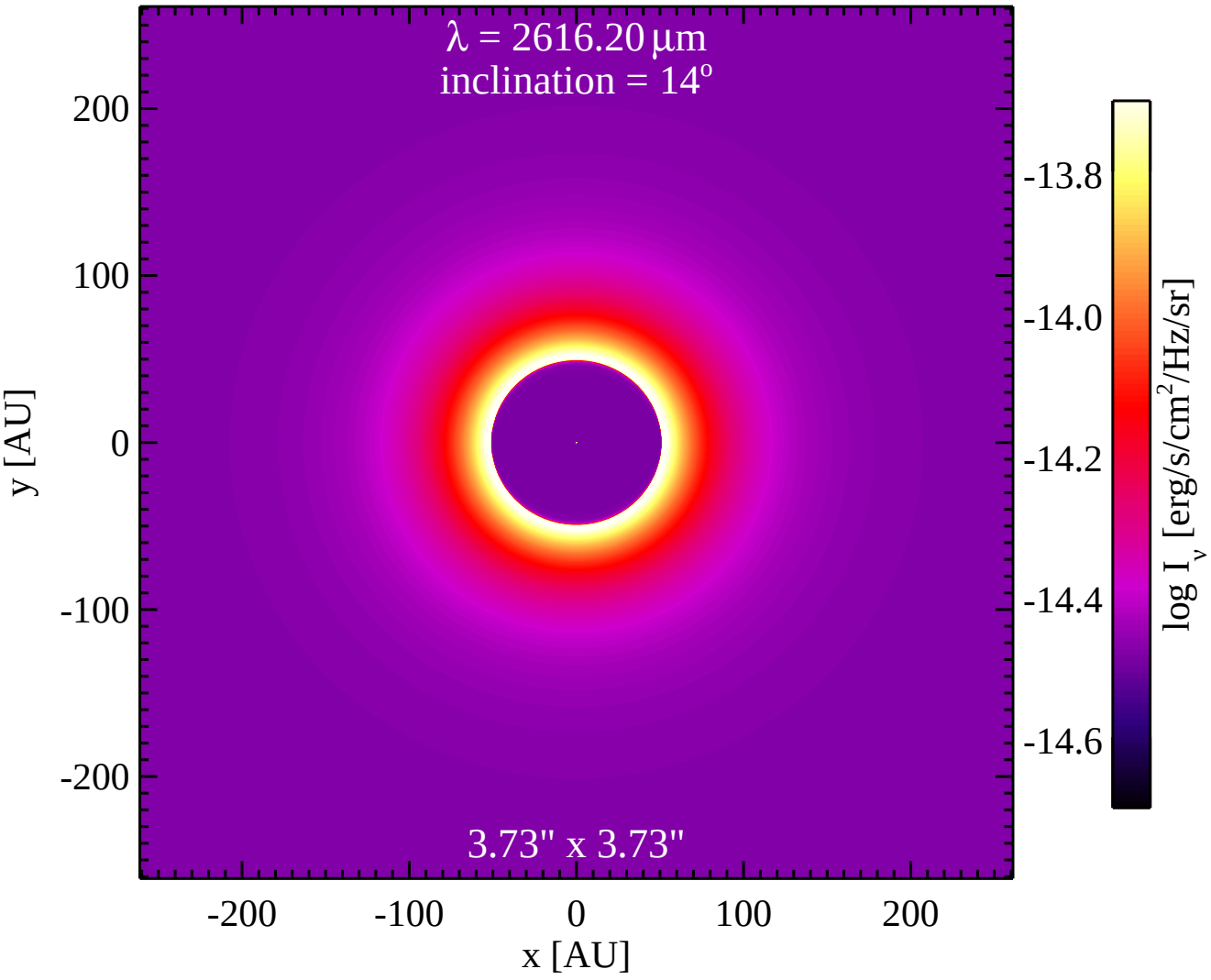

λ = 823.50 μm
inclination = 14°
3.56" x 3.56"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

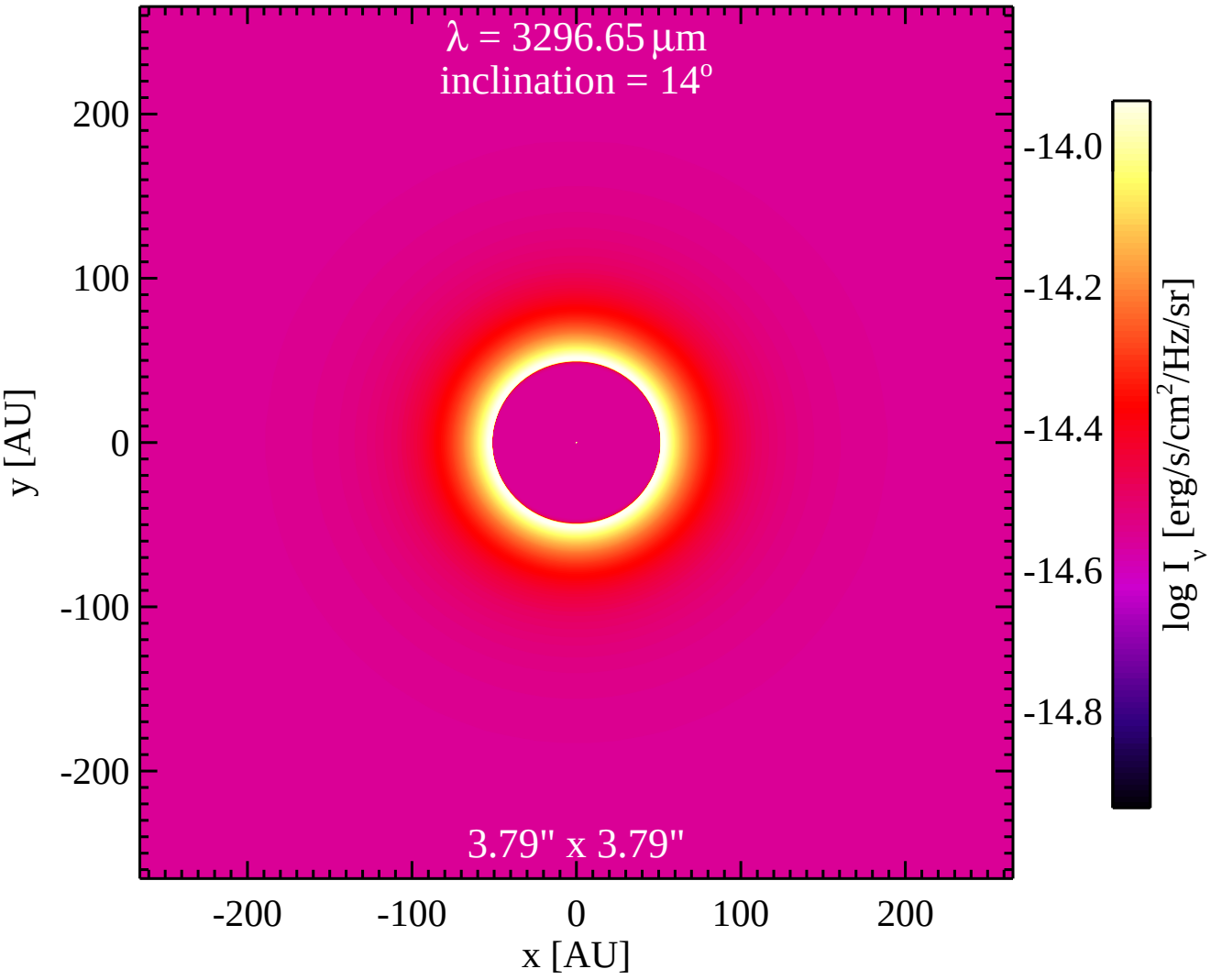

λ = 1037.68 μm
inclination = 14°
3.60" x 3.60"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

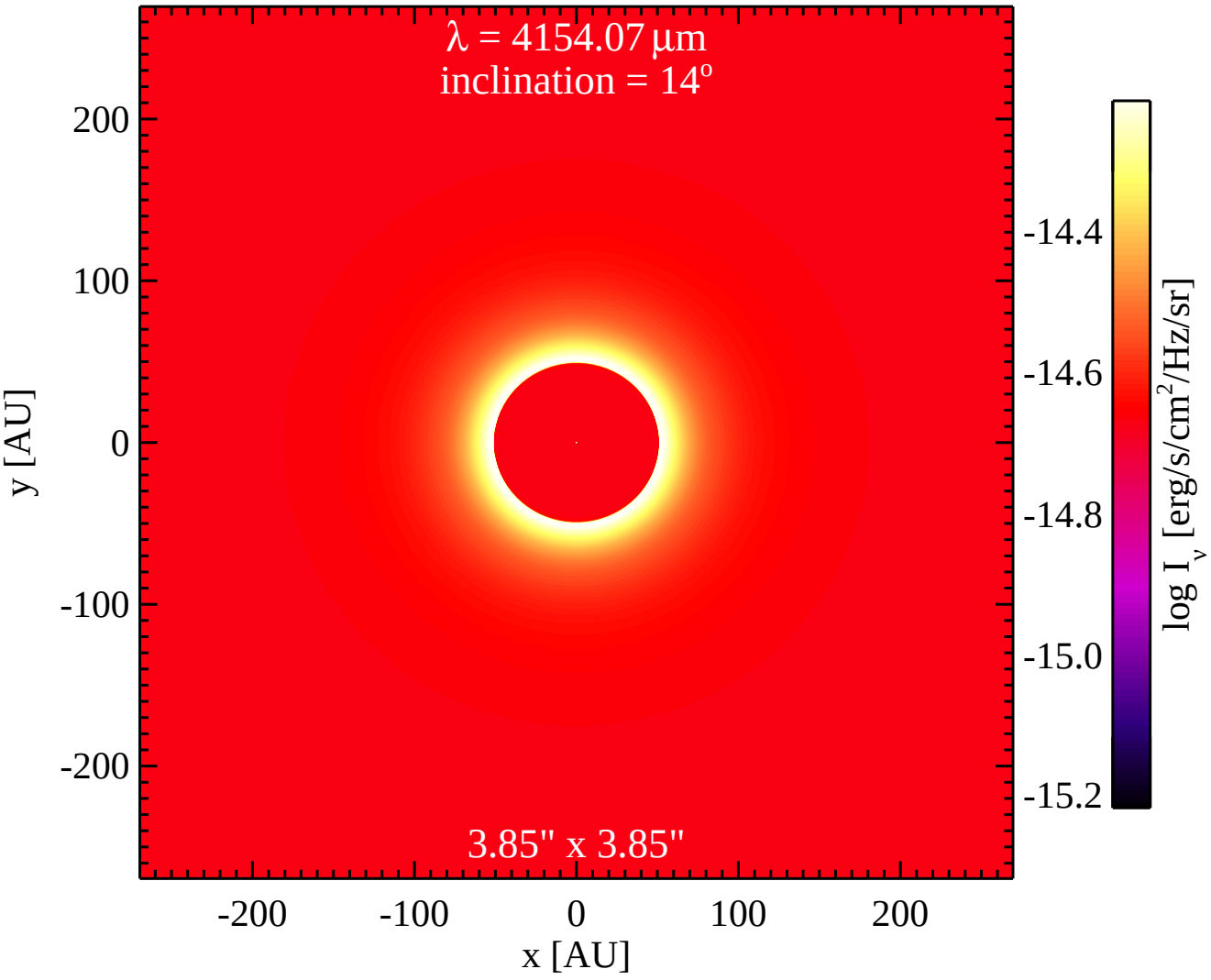

λ = 1307.57 μm
inclination = 14°
3.63" x 3.63"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 1647.66 μm
inclination = 14°
3.67" x 3.67"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
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 = 2076.20 μm
inclination = 14°
3.67" x 3.67"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 2616.20 μm
inclination = 14°
3.73" x 3.73"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 3296.65 μm
inclination = 14°
3.79" x 3.79"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-14.0
-14.2
-14.4
-14.6
-14.8
log I_ν [erg/s/cm²/Hz/sr]


λ = 4154.07 μm
inclination = 14°
3.85" x 3.85"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-14.4
-14.6
-14.8
-15.0
-15.2
log I_ν [erg/s/cm²/Hz/sr]