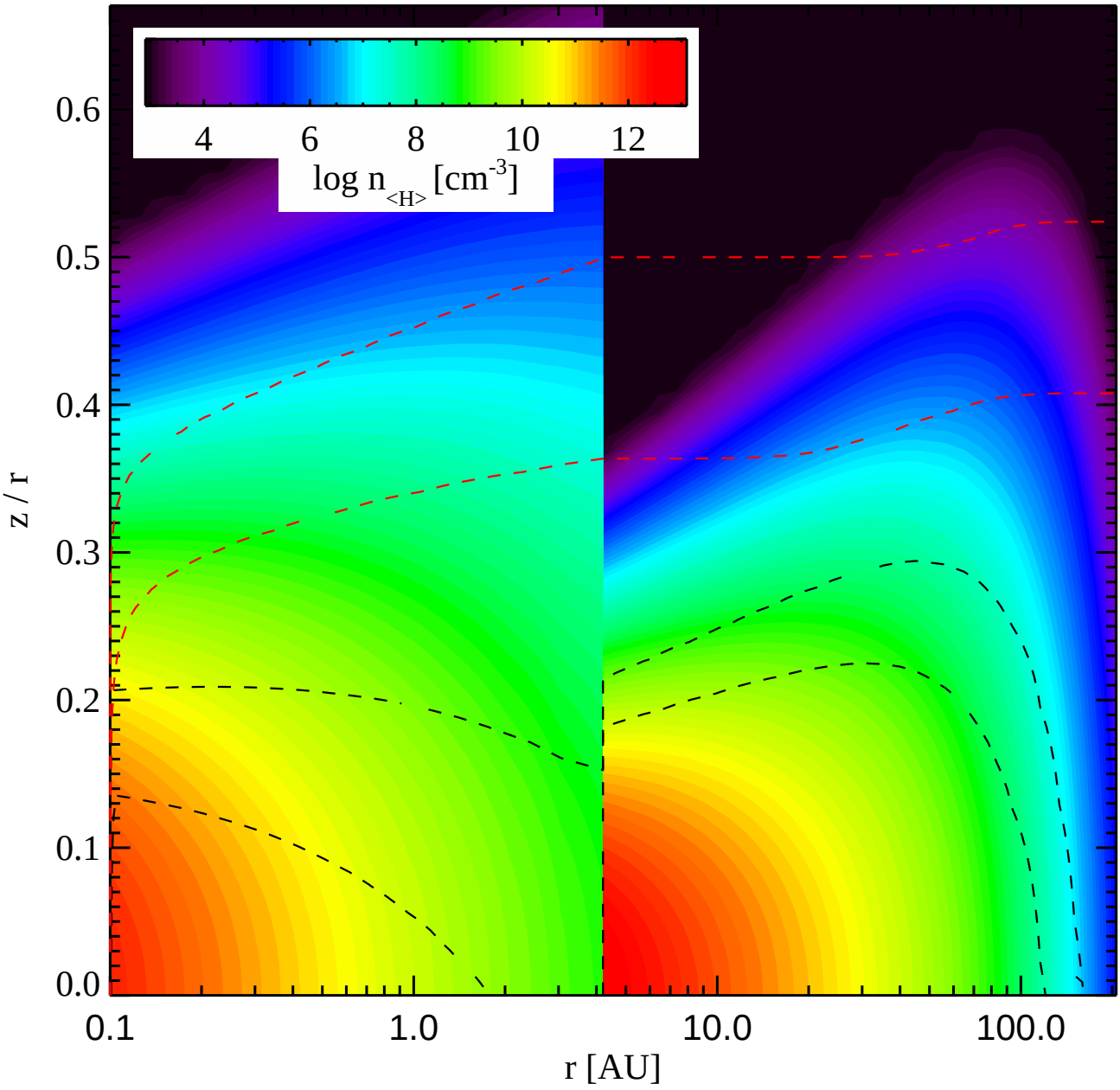
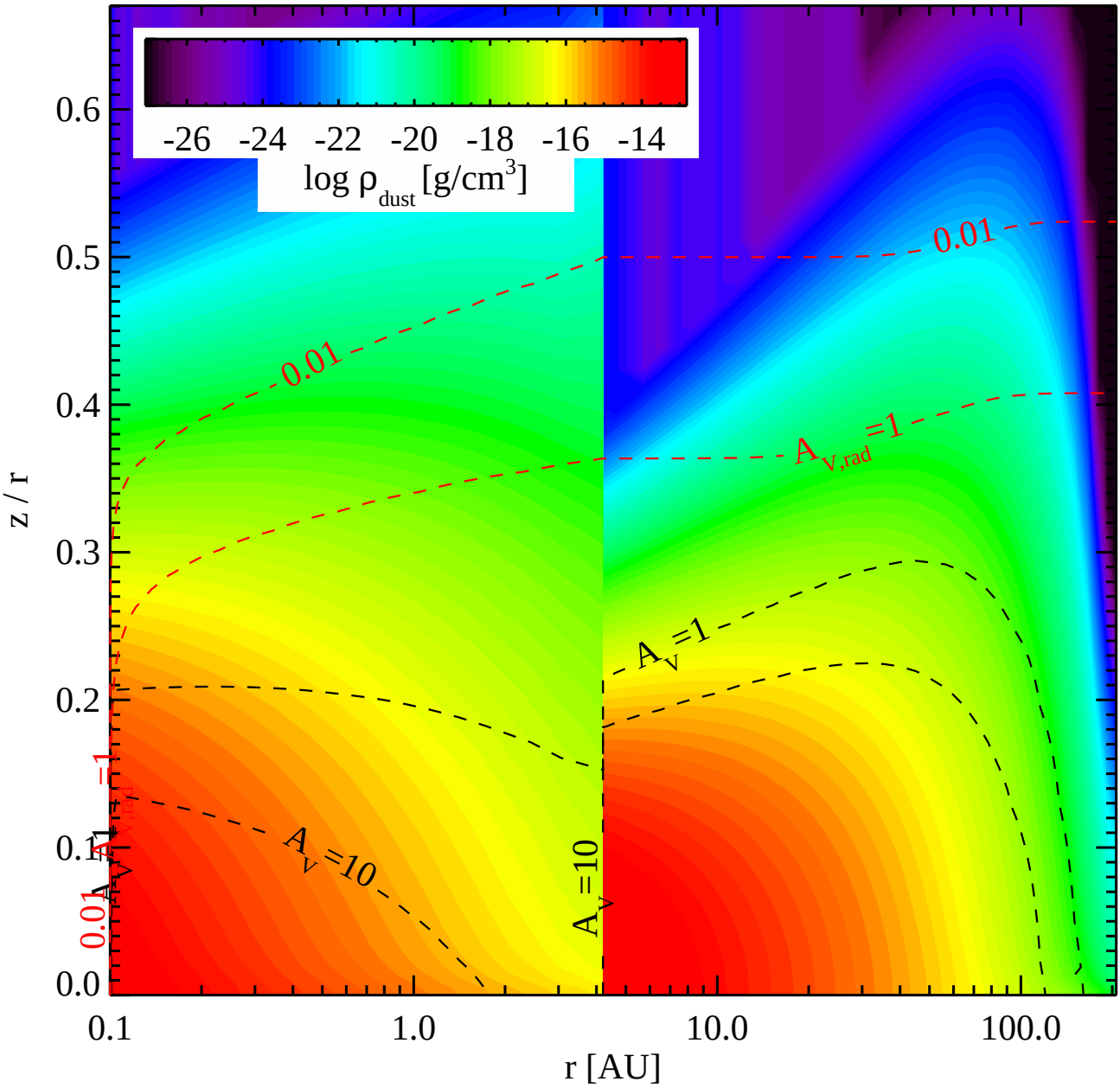
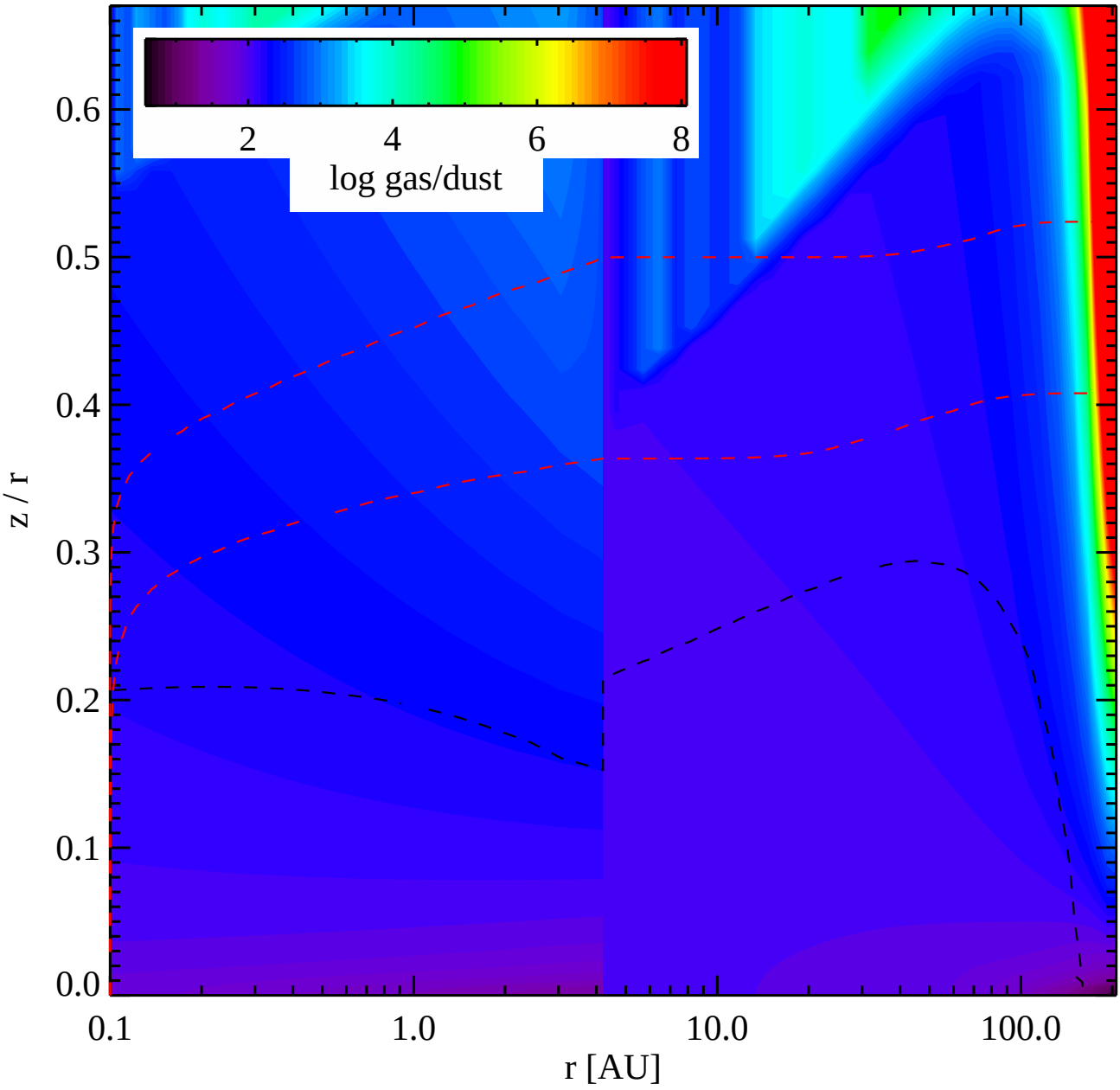
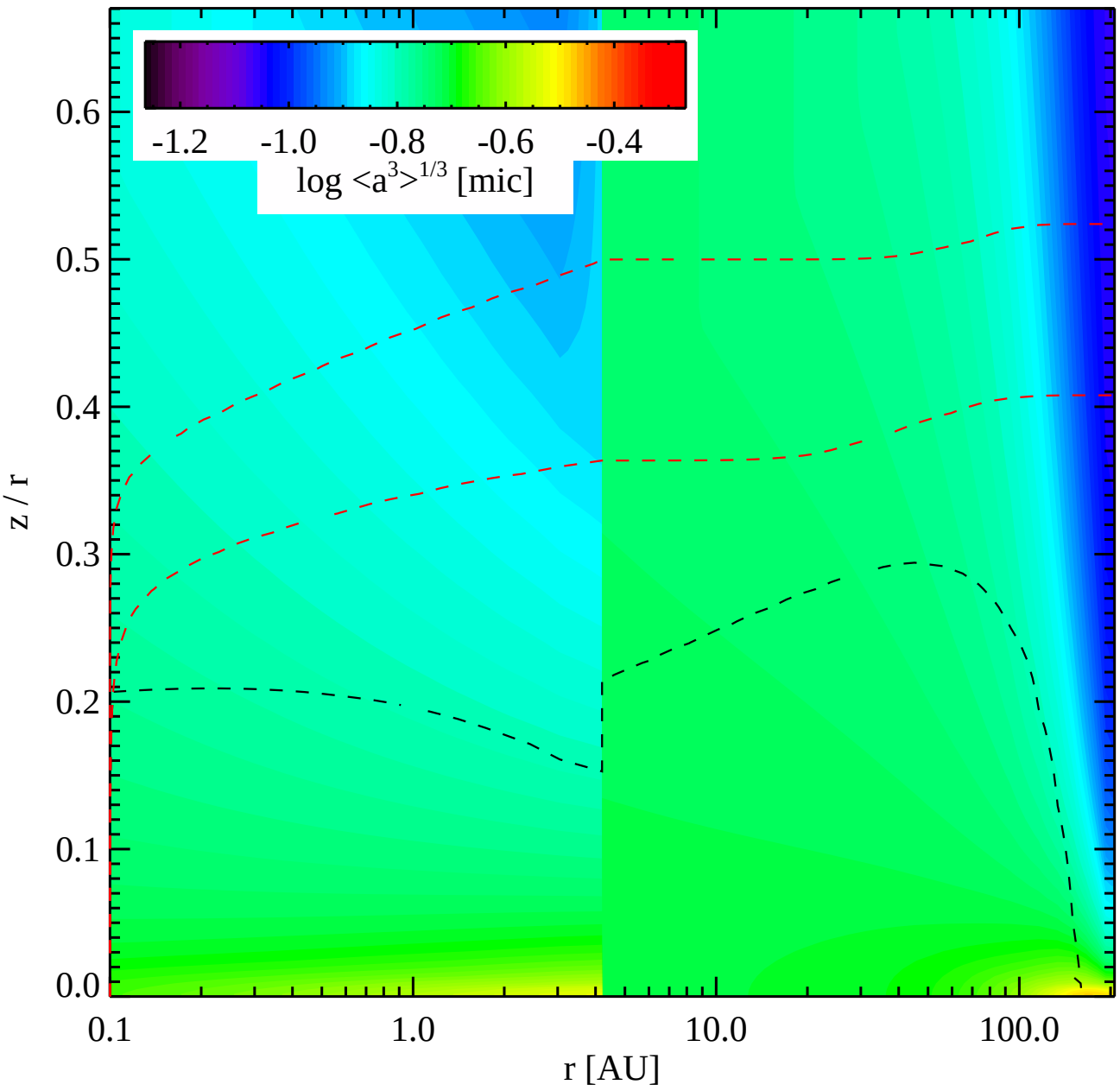
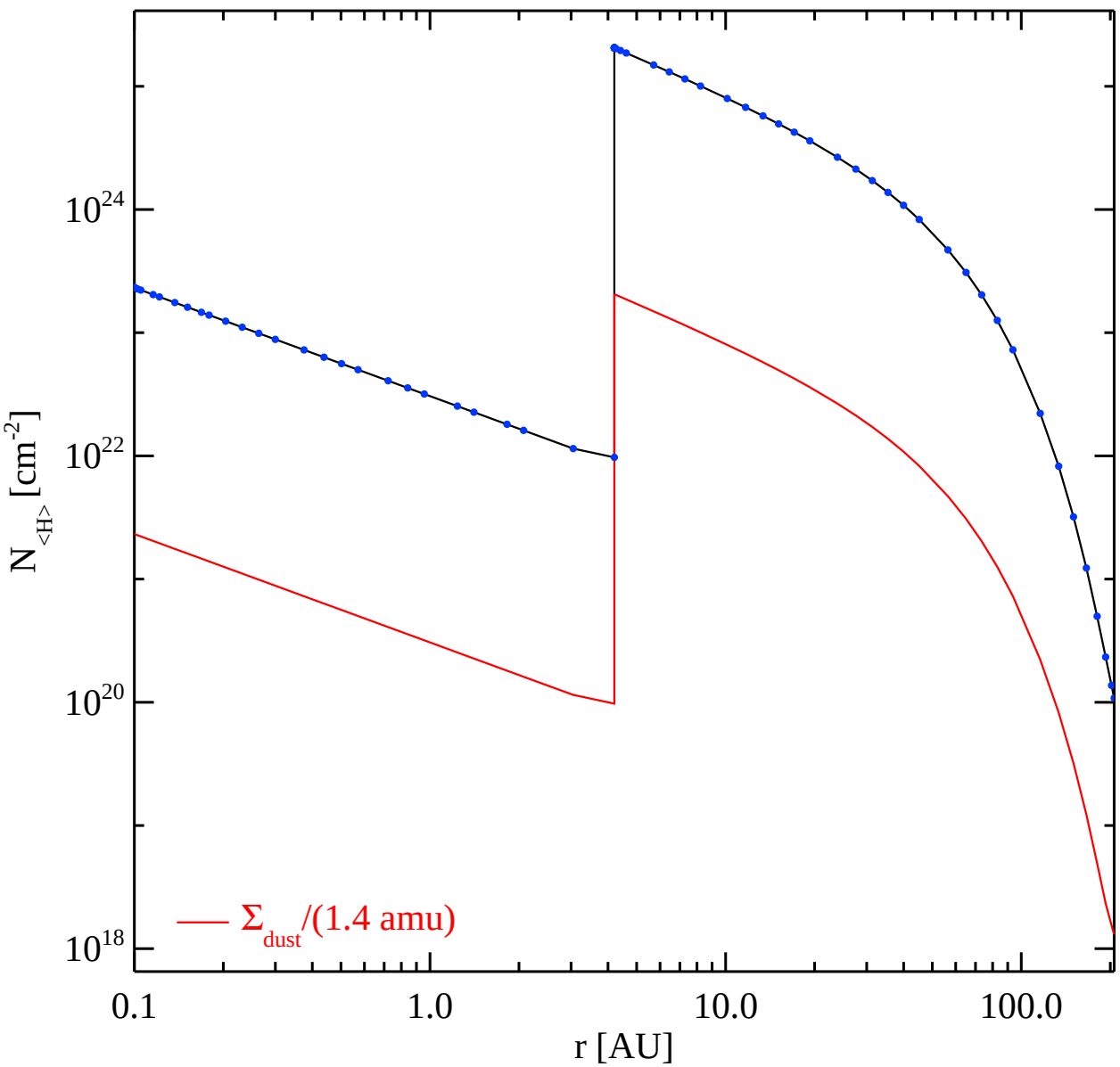
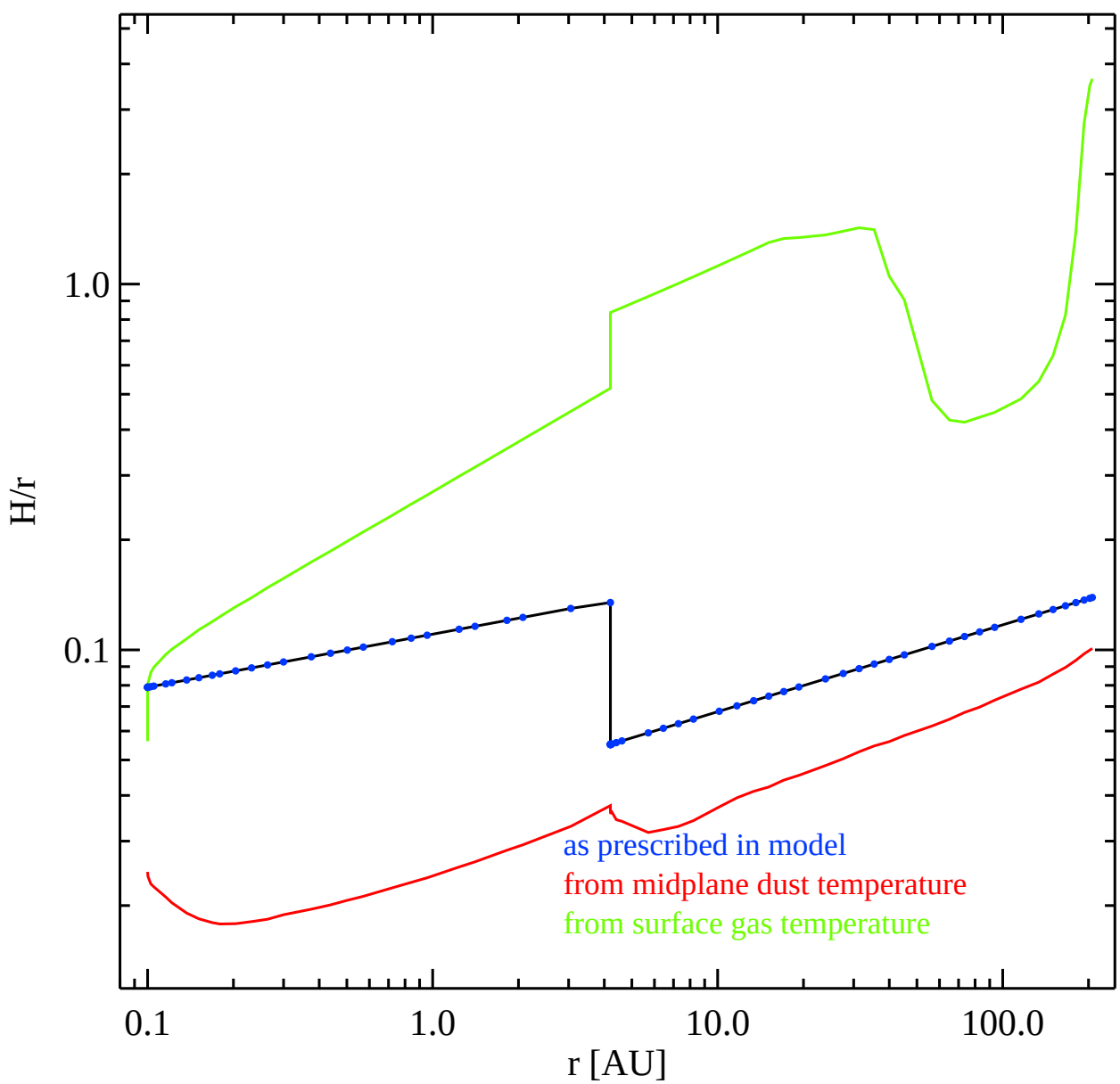

4
6
8
10
12
log n<H> [cm-3]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

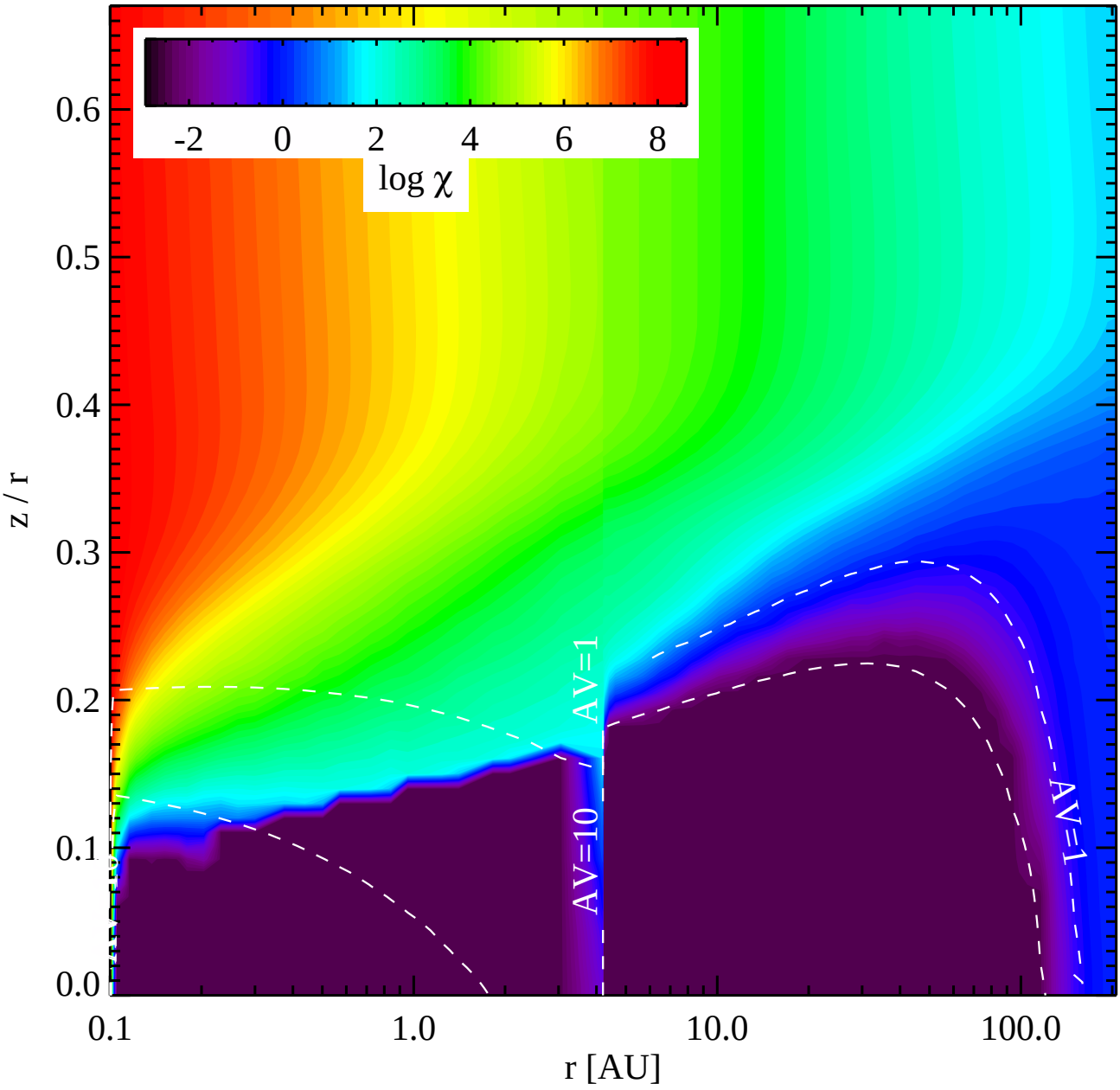

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
0.01
AV,rad=1
AV=1
AV=10

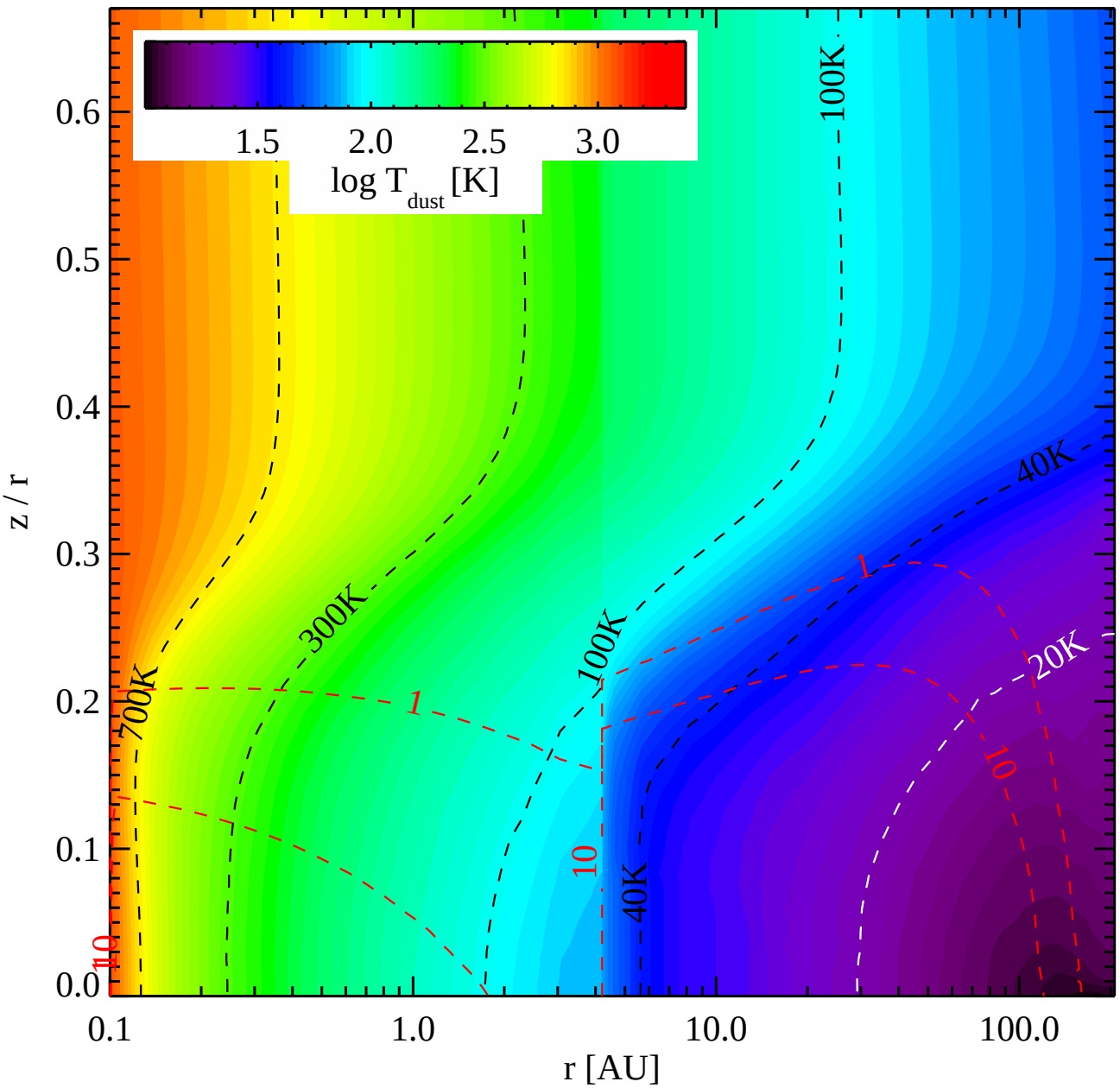

2
4
6
8
log gas/dust
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

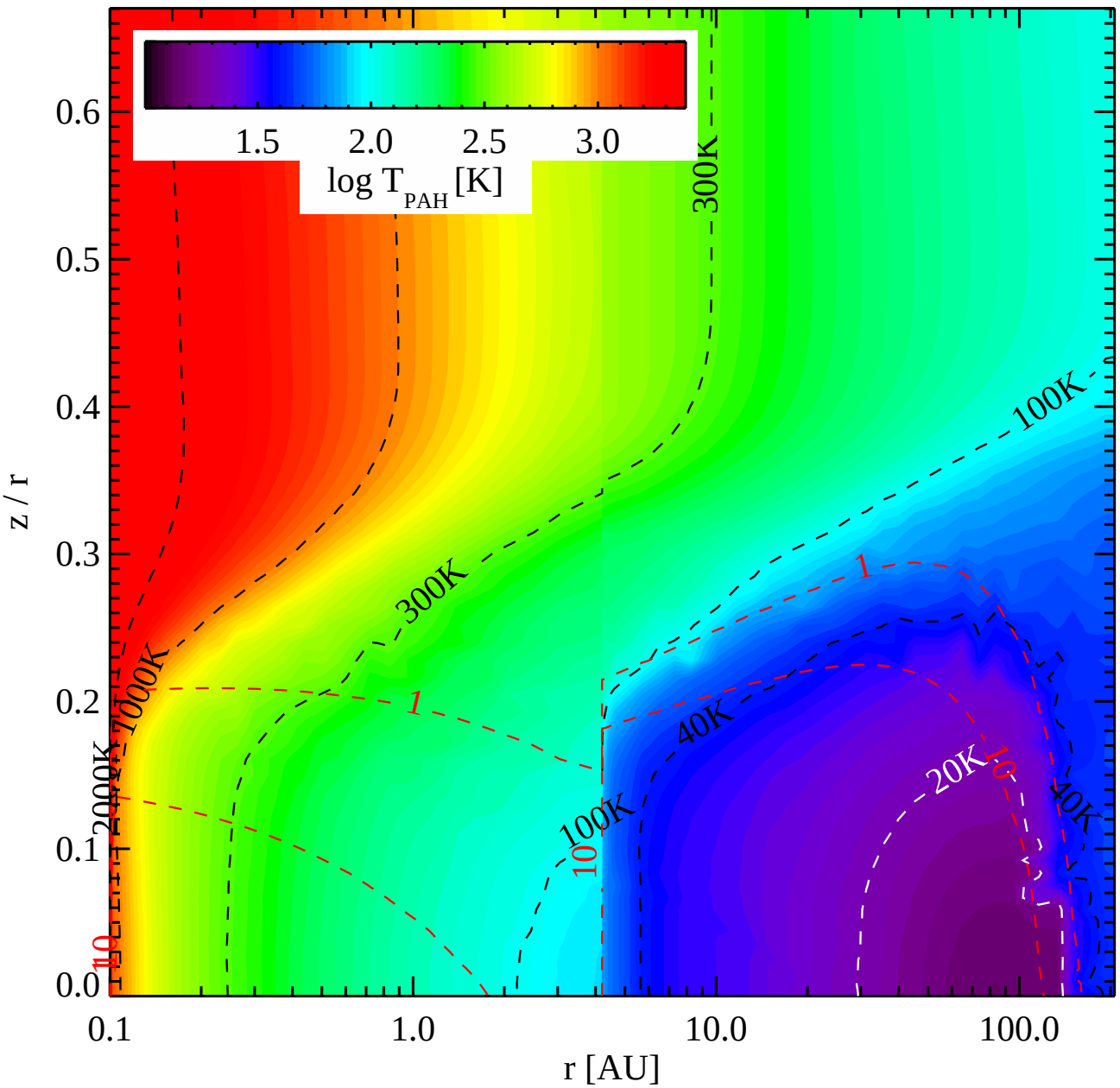

-1.2
-1.0
-0.8
-0.6
-0.4
log <a^3>^1/3 [mic]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]


10^{24}
10^{22}
10^{20}
10^{18}
$N_{<H>}$ [cm^{-2}]
0.1
1.0
10.0
100.0
r [AU]
Σ_{dust}/(1.4 amu)

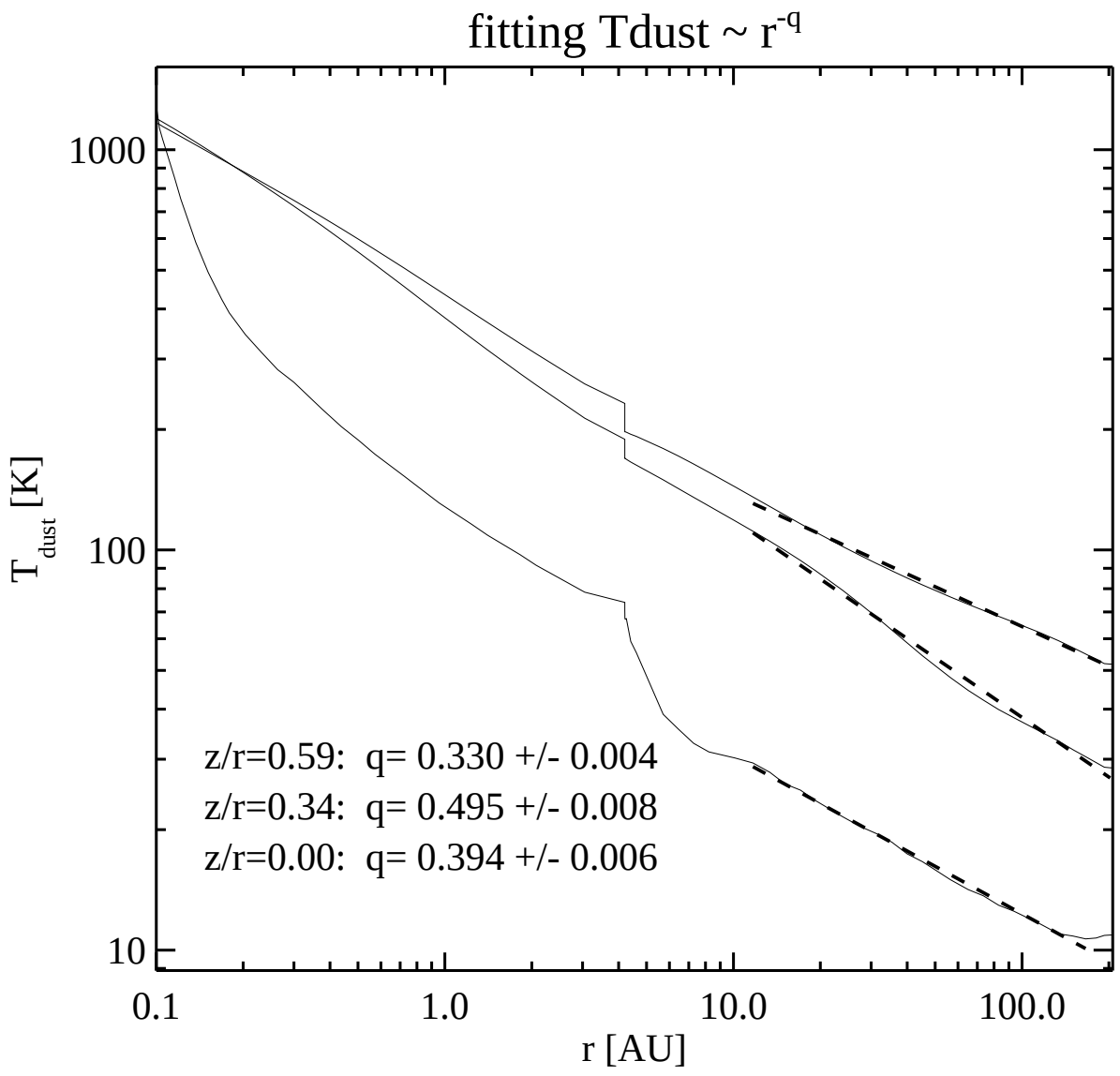

1.0
0.1
H/r
0.1
1.0
10.0
100.0
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

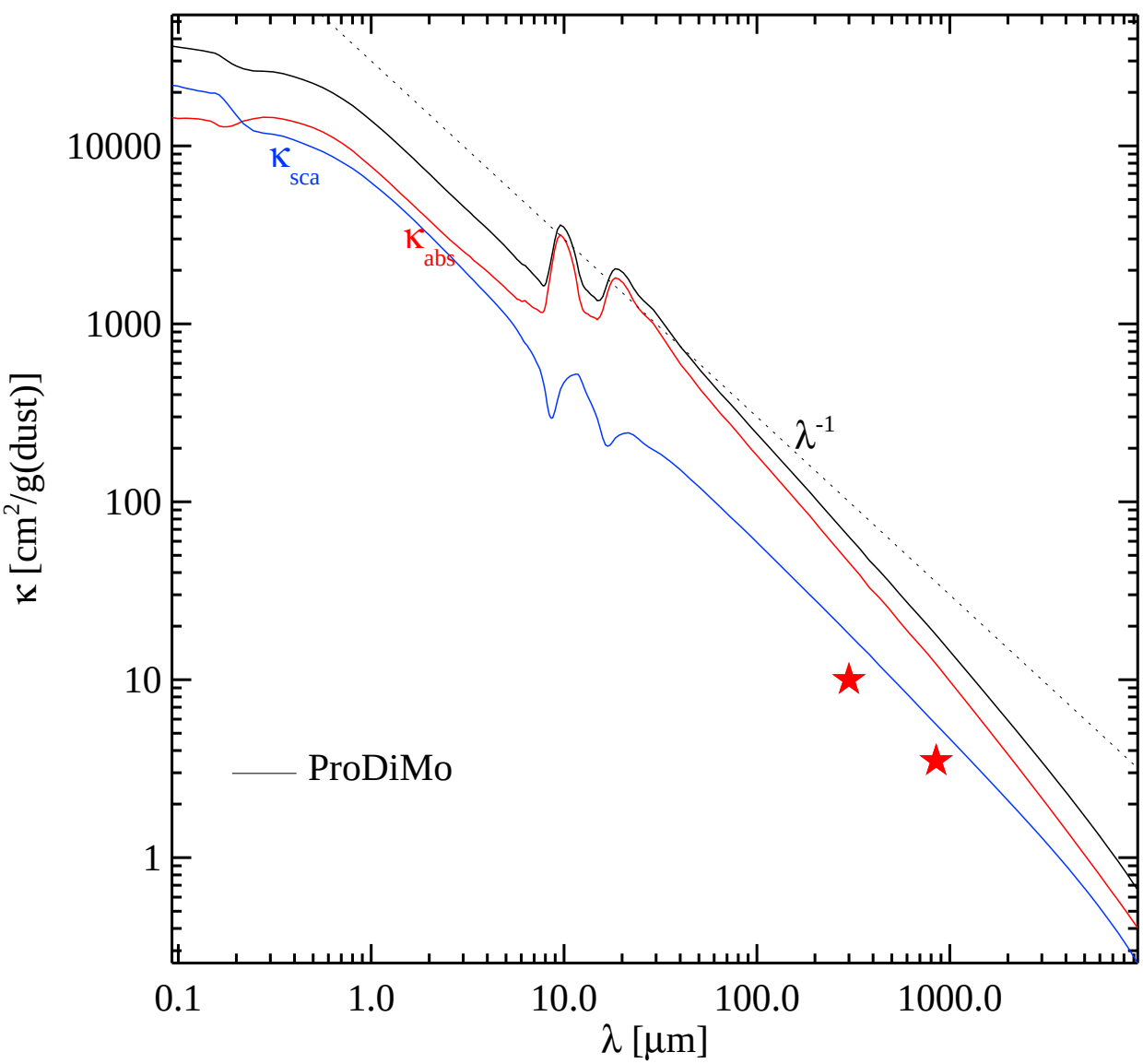

-2
0
2
4
6
8
log χ
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
AV=1
AV=10
AV=1
0.1
1.0
10.0
100.0
r [AU]

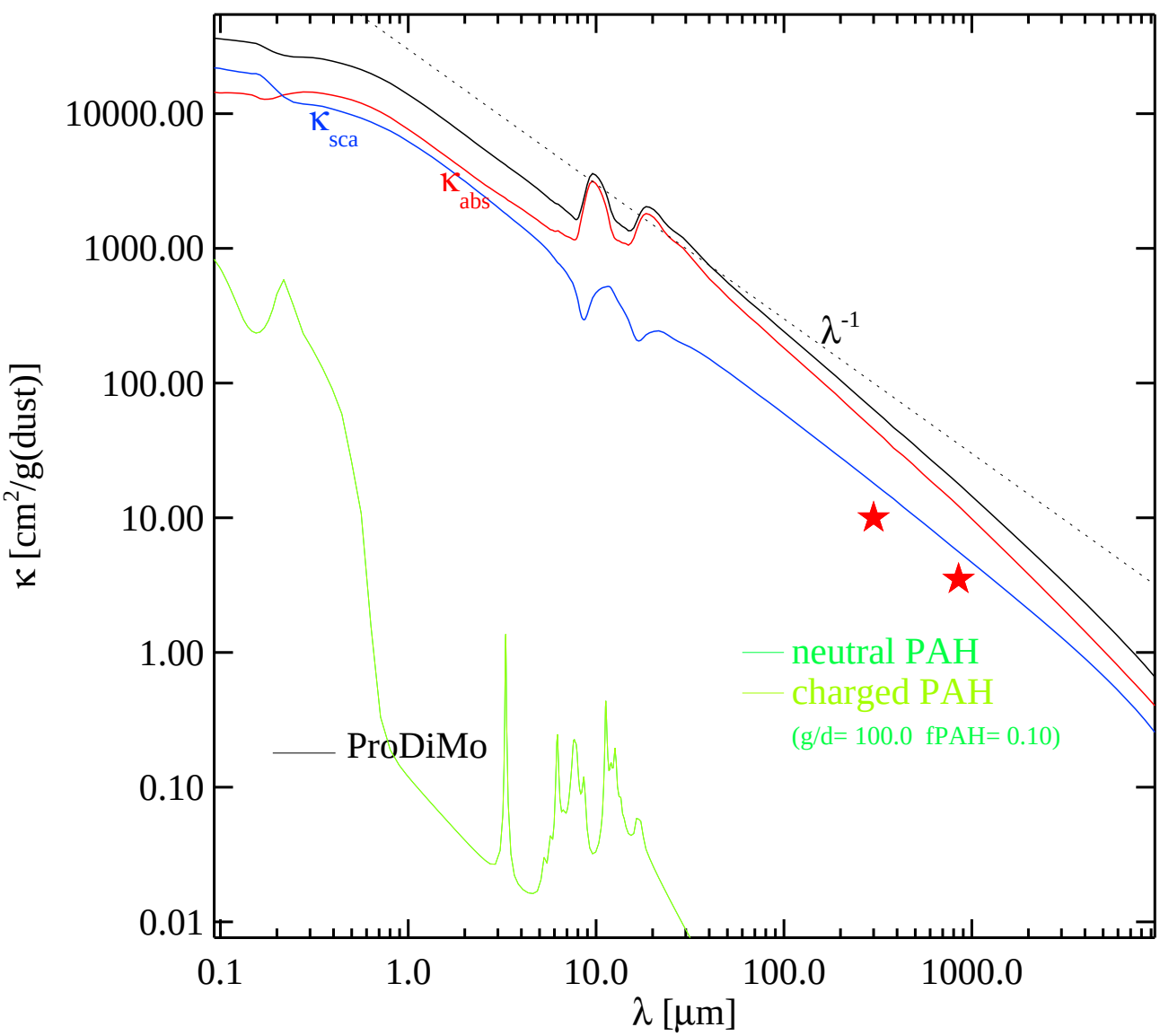

1.5
2.0
2.5
3.0
log T dust [K]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
100K
40K
300K
100K
700K
1
1
10
10
40K
20K

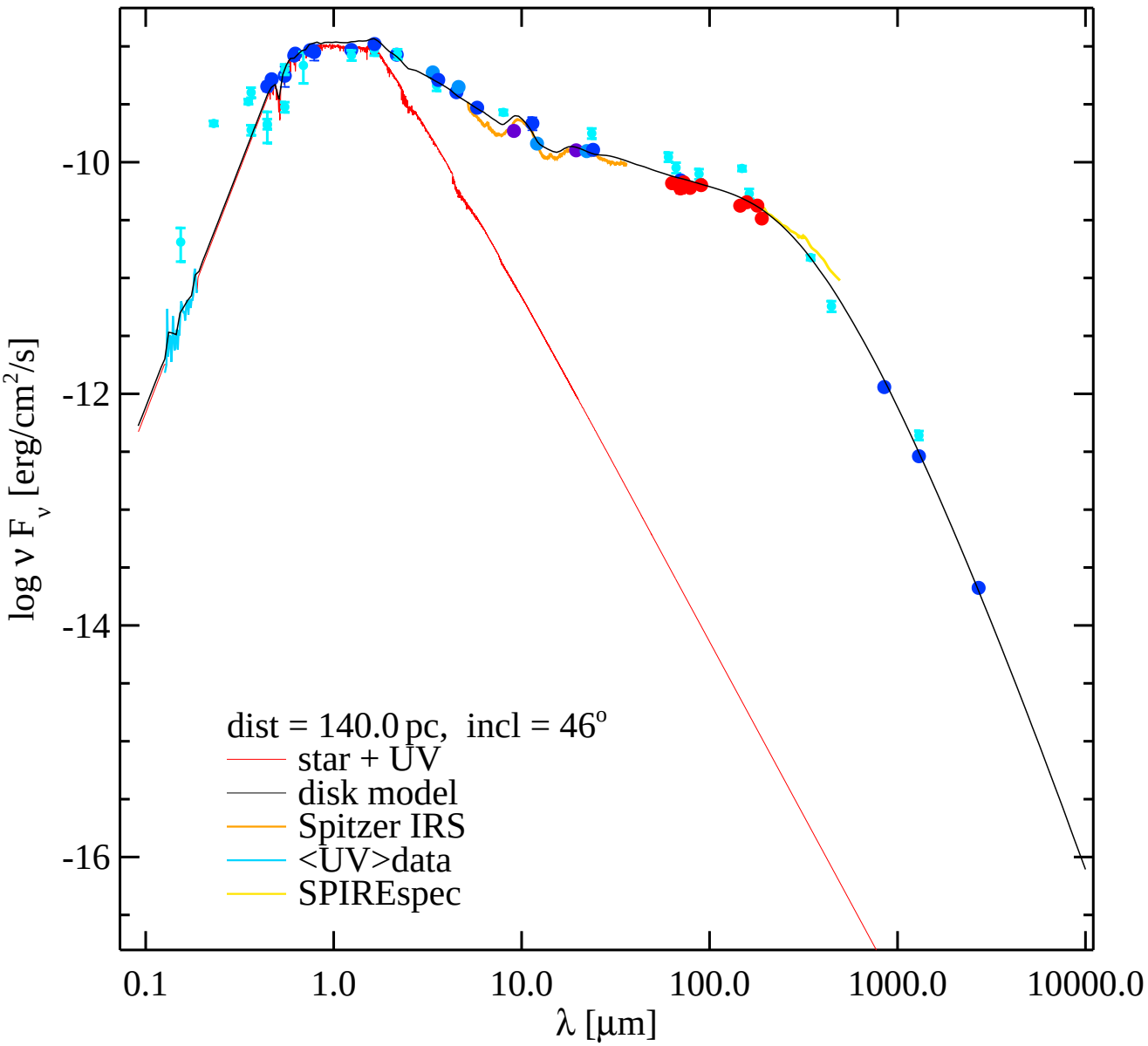


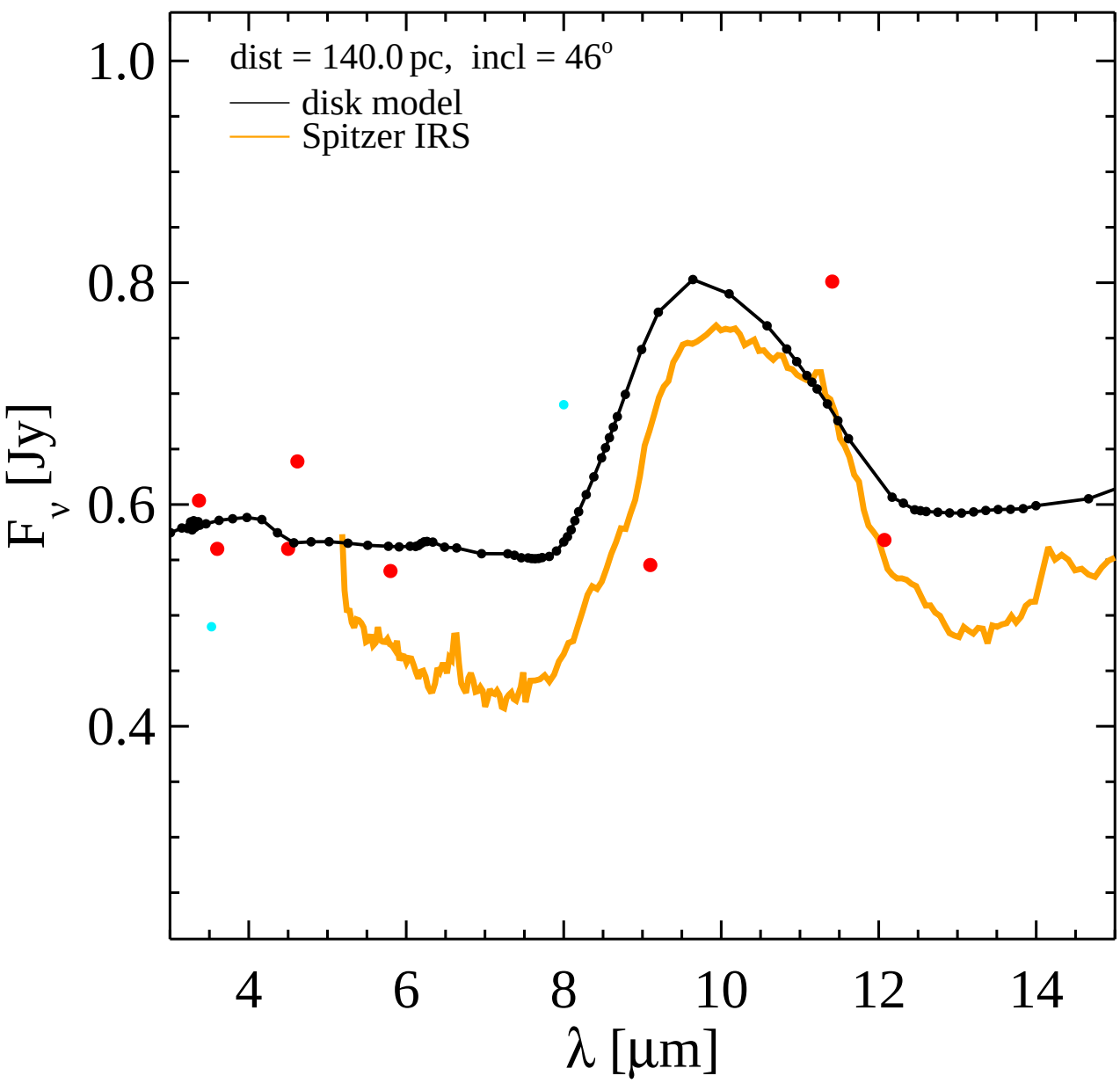
1.5
2.0
2.5
3.0
log T_PAH [K]
0.6
0.5
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
300K
100K
1000K
2000K
40K
20K
1
10

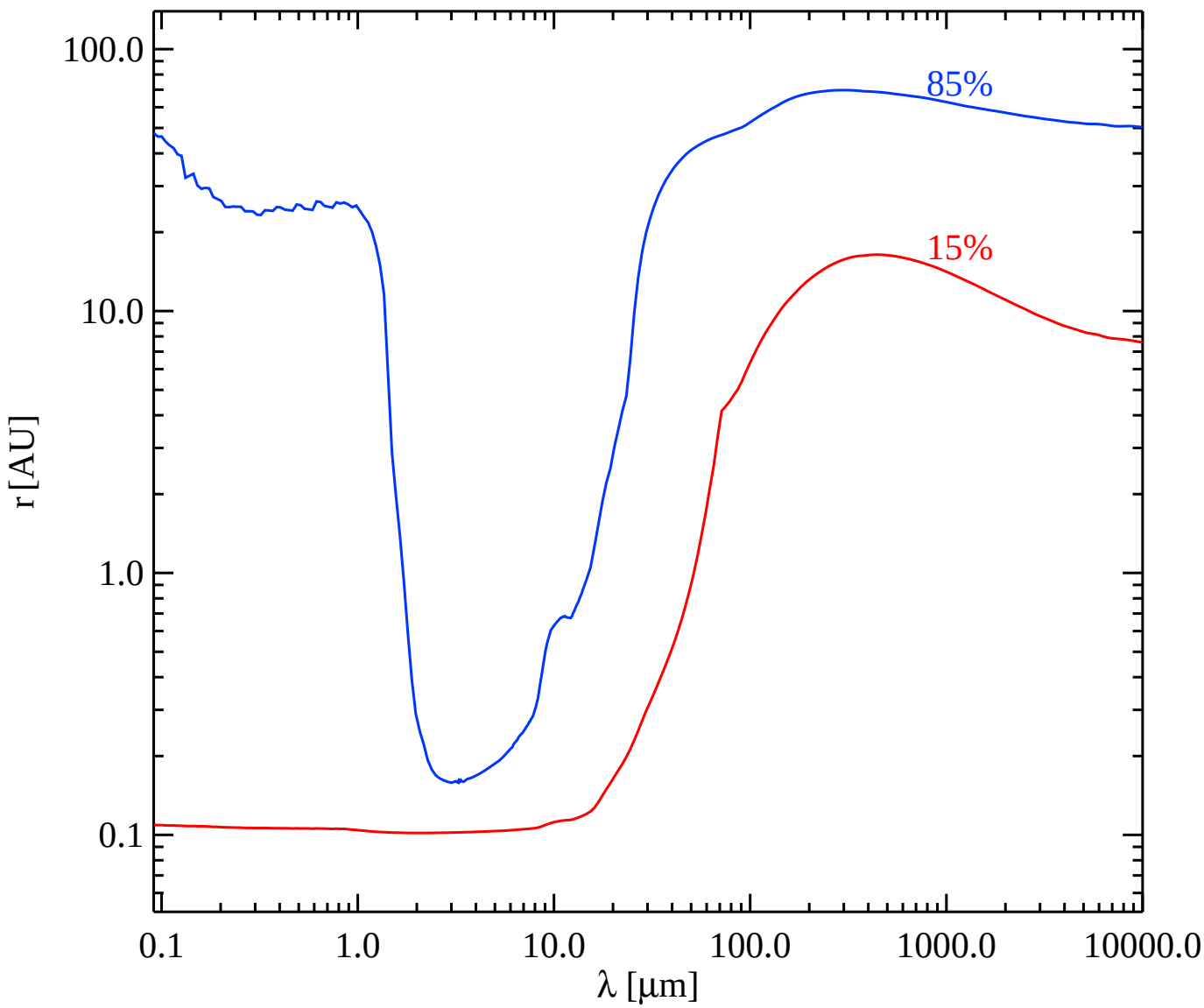

fitting Tdust ~ r^-q
1000
100
10
T dust [K]
0.1
1.0
10.0
100.0
r [AU]
z/r=0.59: q= 0.330 +/- 0.004
z/r=0.34: q= 0.495 +/- 0.008
z/r=0.00: q= 0.394 +/- 0.006

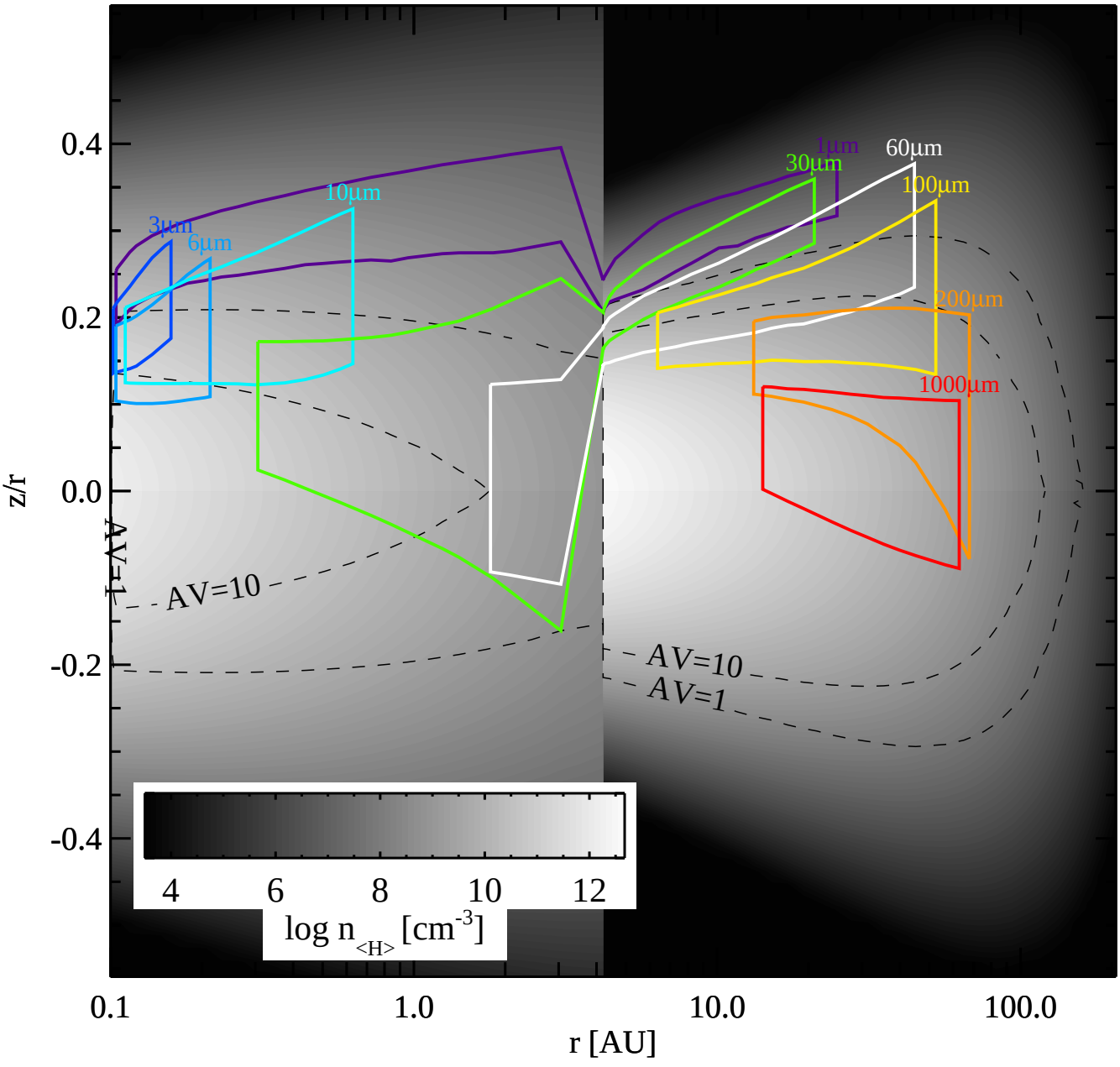

10000
1000
100
10
1
κ [cm²/g(dust)]
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

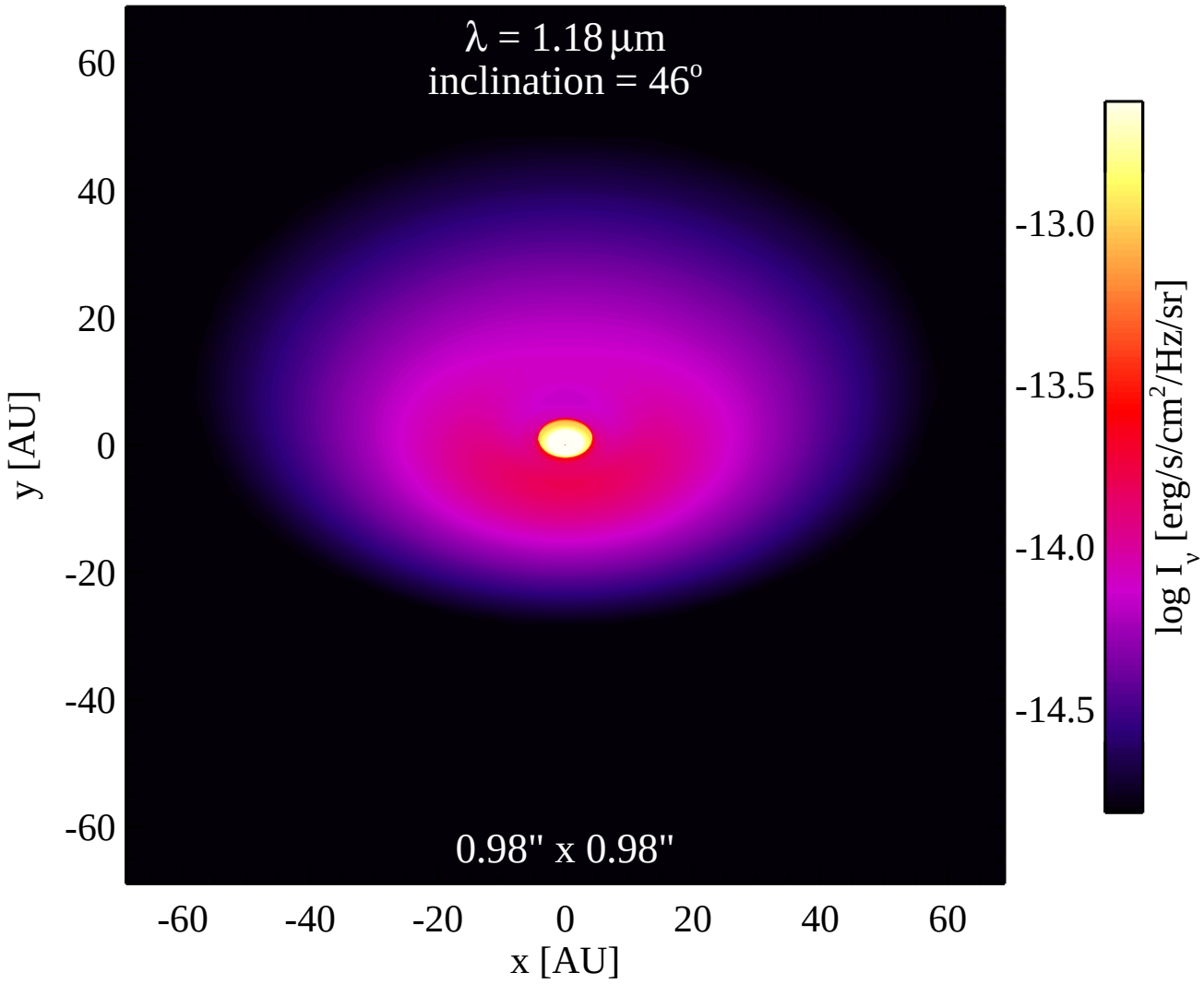

10000.00
1000.00
100.00
10.00
1.00
0.10
0.01
κ [cm²/g(dust)]
0.1
1.0
10.0
100.0
1000.0
λ [μm]
κsca
κabs
λ-1
neutral PAH
charged PAH
(g/d= 100.0 fPAH= 0.10)
ProDiMo

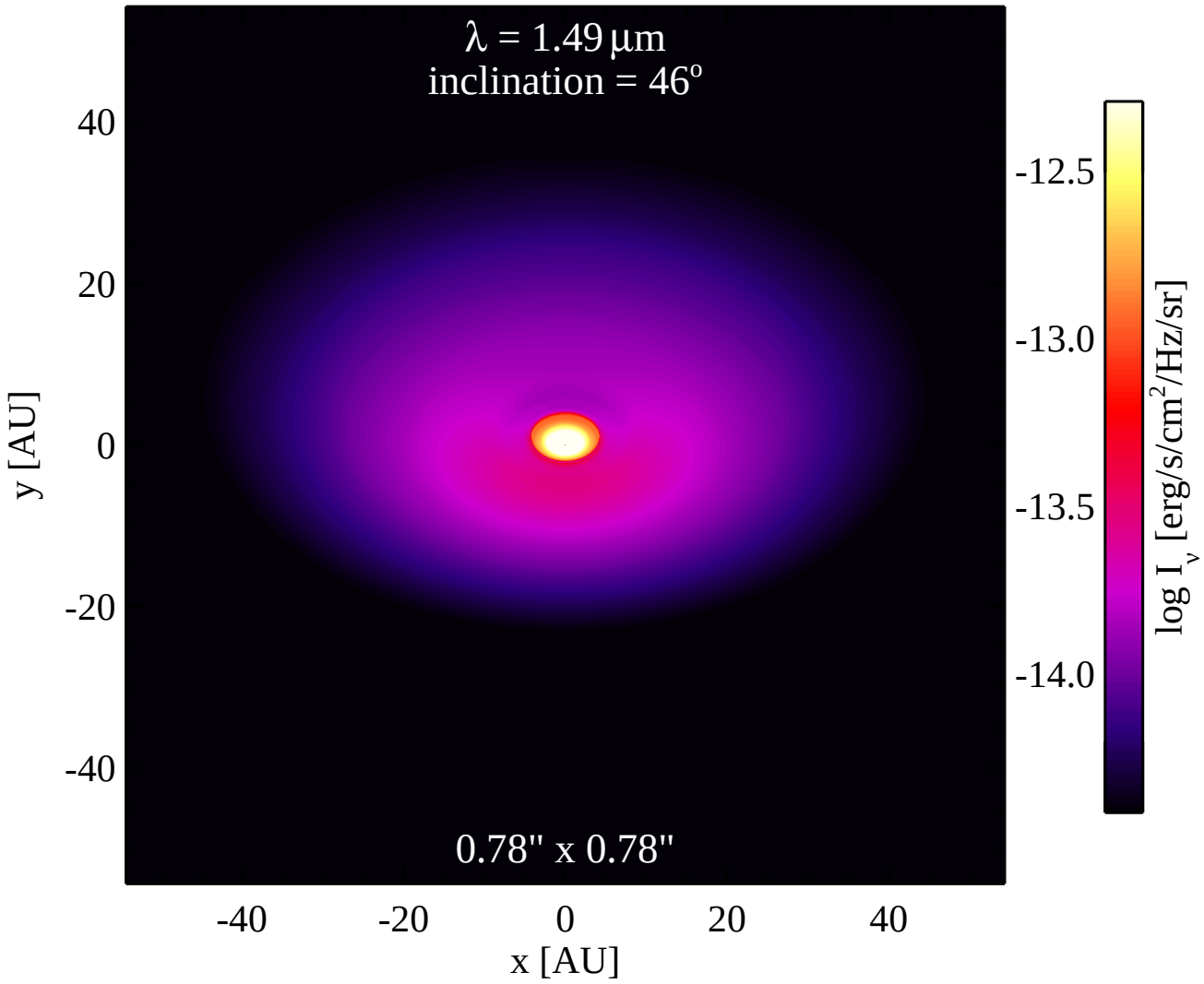

-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 140.0 pc, incl = 46°
star + UV
disk model
Spitzer IRS
<UV>data
SPIREspec

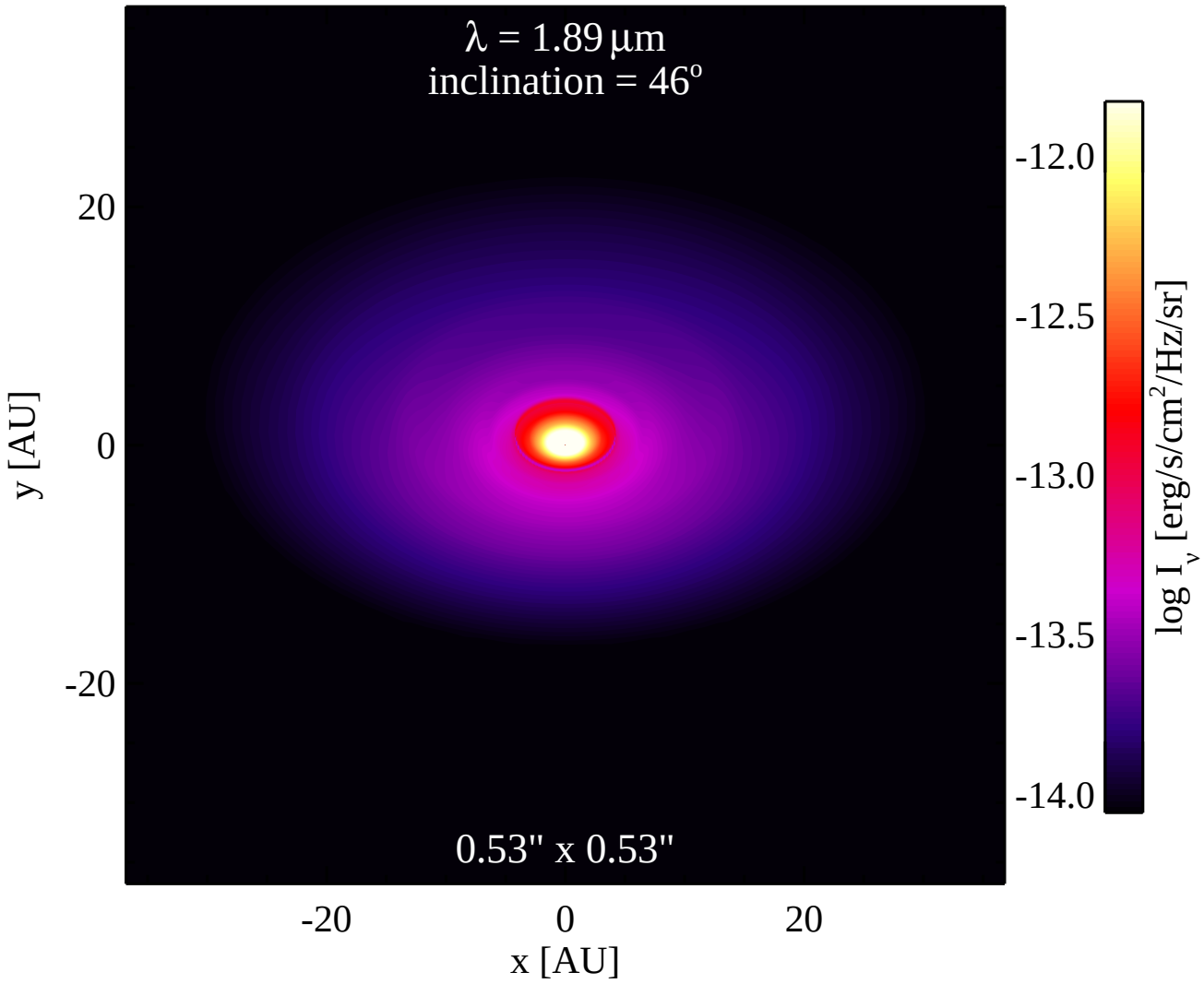

dist = 140.0 pc, incl = 46°
disk model
Spitzer IRS
1.0
0.8
0.6
0.4
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

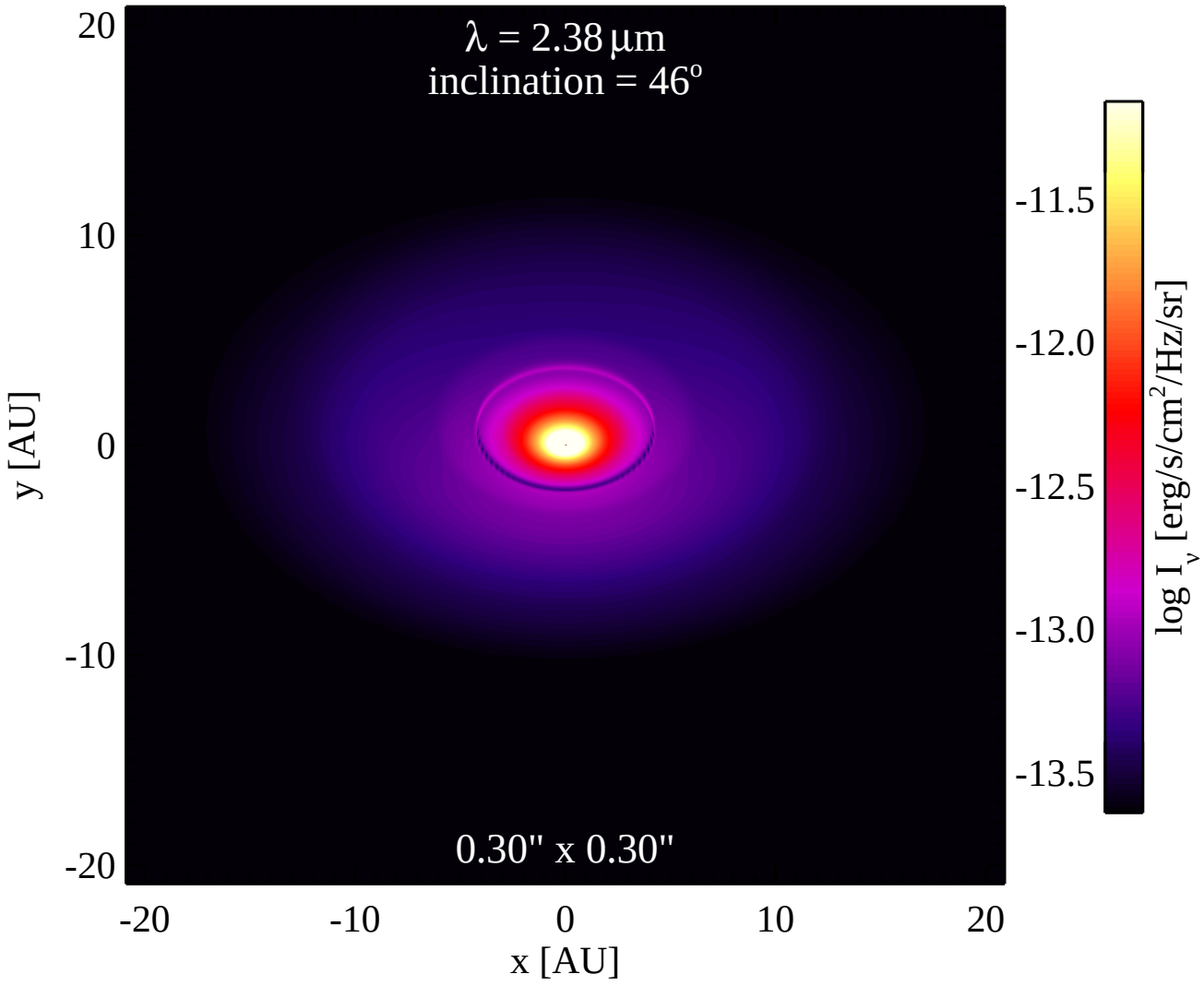

100.0
10.0
1.0
0.1
r [AU]
85%
15%
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

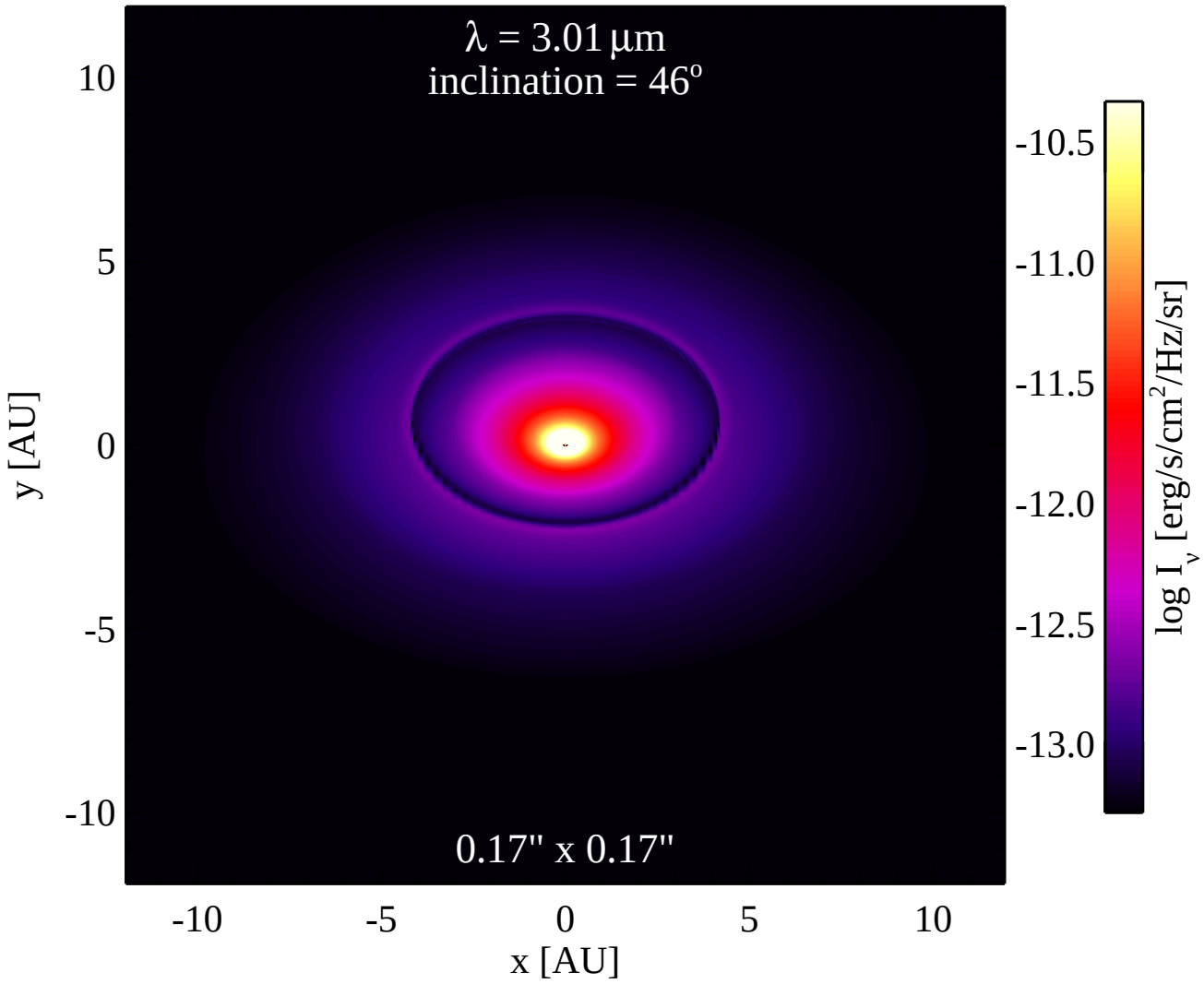

0.4
0.2
0.0
-0.2
-0.4
z/r
0.1
1.0
10.0
100.0
r [AU]
1μm
30μm
60μm
100μm
200μm
1000μm
3μm
6μm
10μm
AV=1
AV=10
AV=10
AV=1
4
6
8
10
12
log n<H> [cm-3]

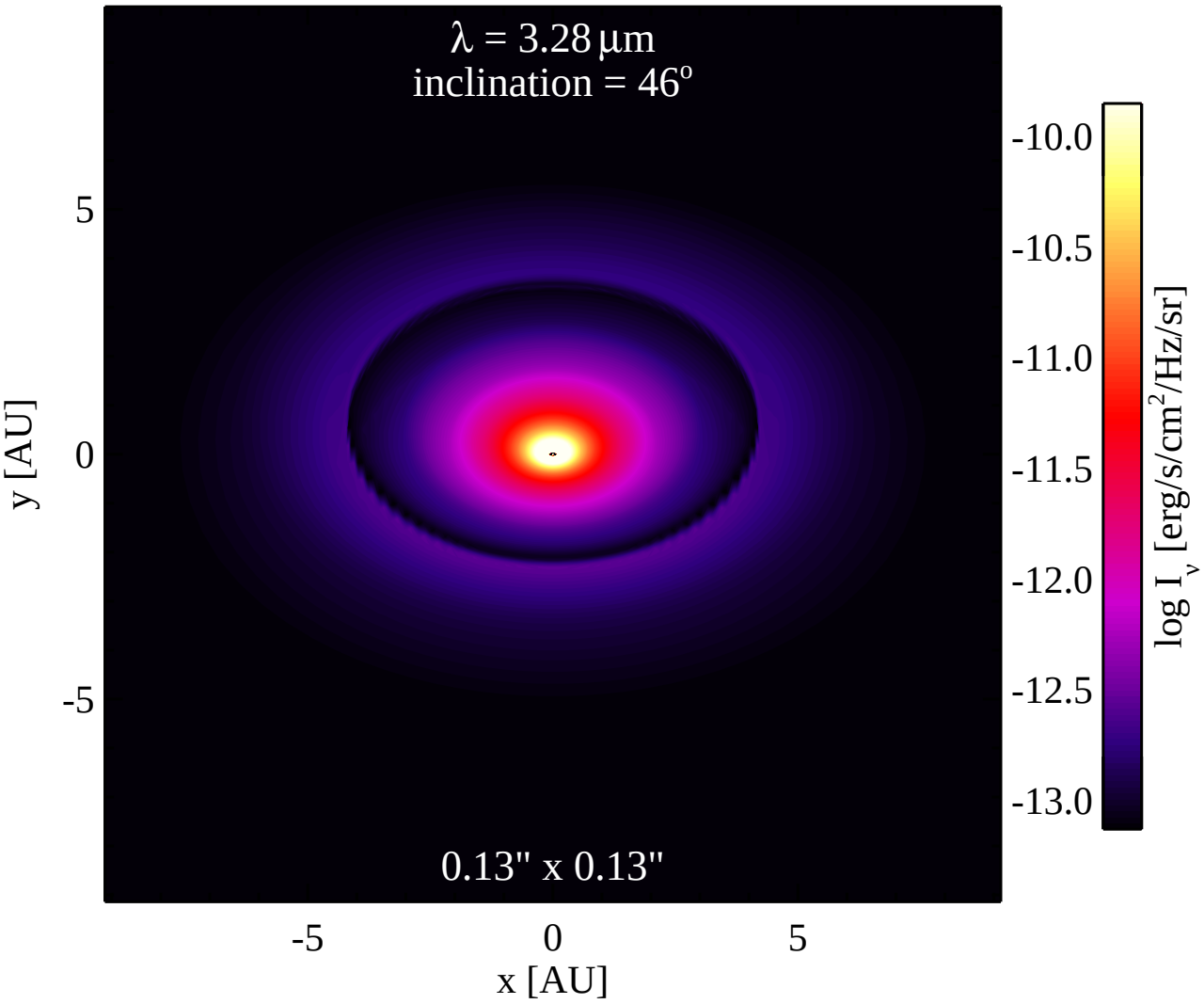

λ = 1.18 μm
inclination = 46°
0.98" x 0.98"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

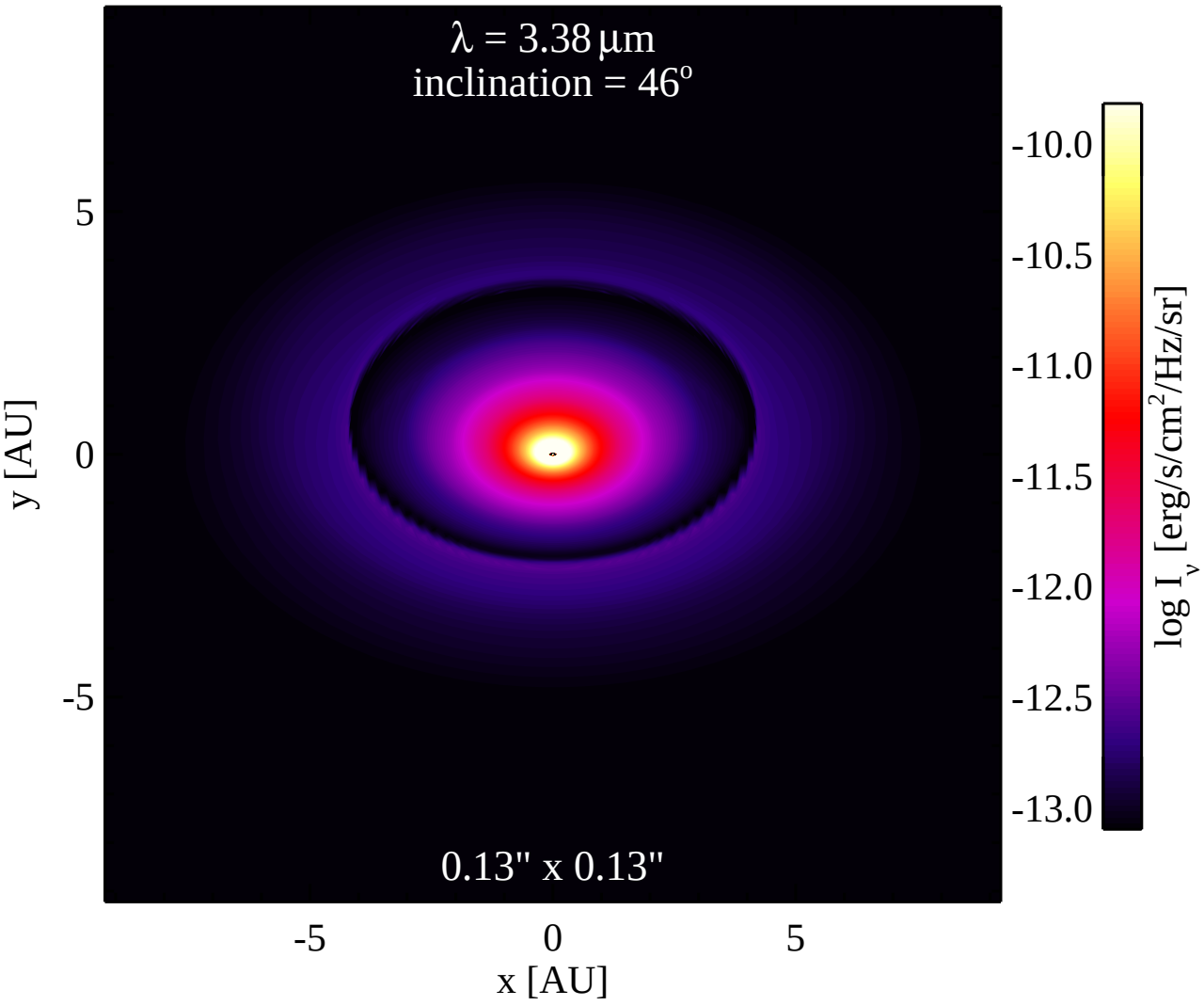

λ = 1.49 μm
inclination = 46°
0.78" x 0.78"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

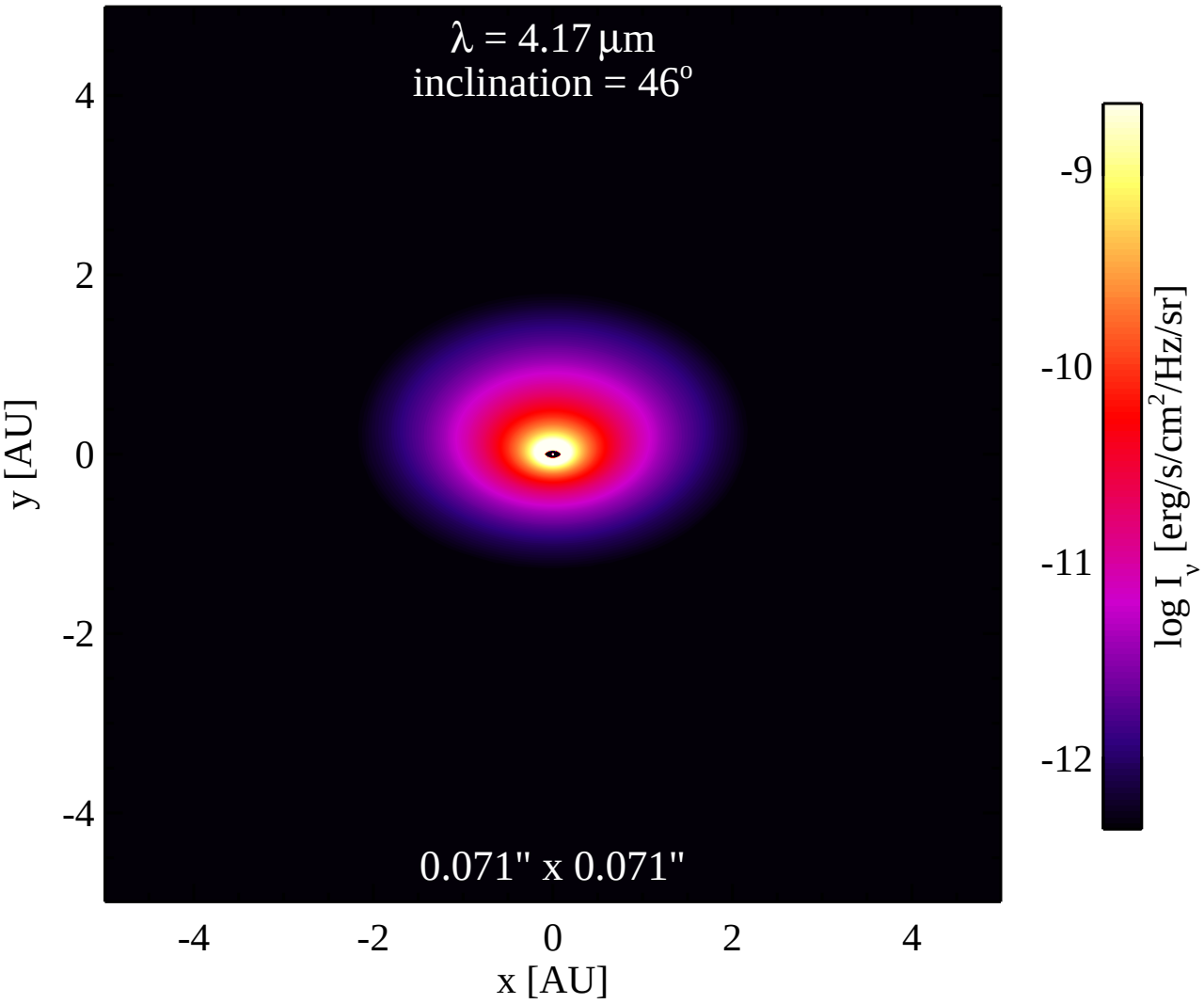

λ = 1.89 μm
inclination = 46°
0.53" x 0.53"
20
0
-20
y [AU]
-20
0
20
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

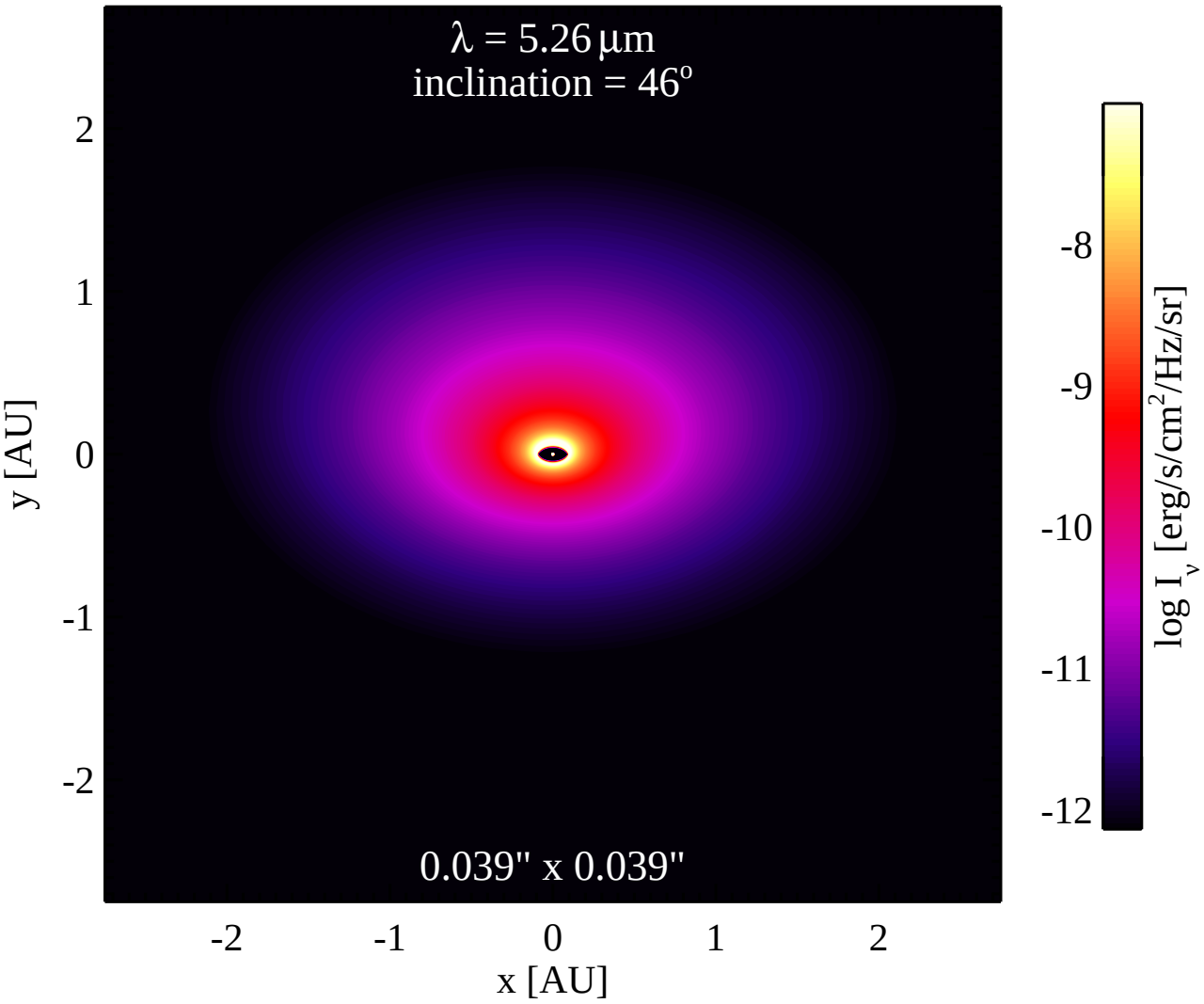

λ = 2.38 μm
inclination = 46°
0.30" x 0.30"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

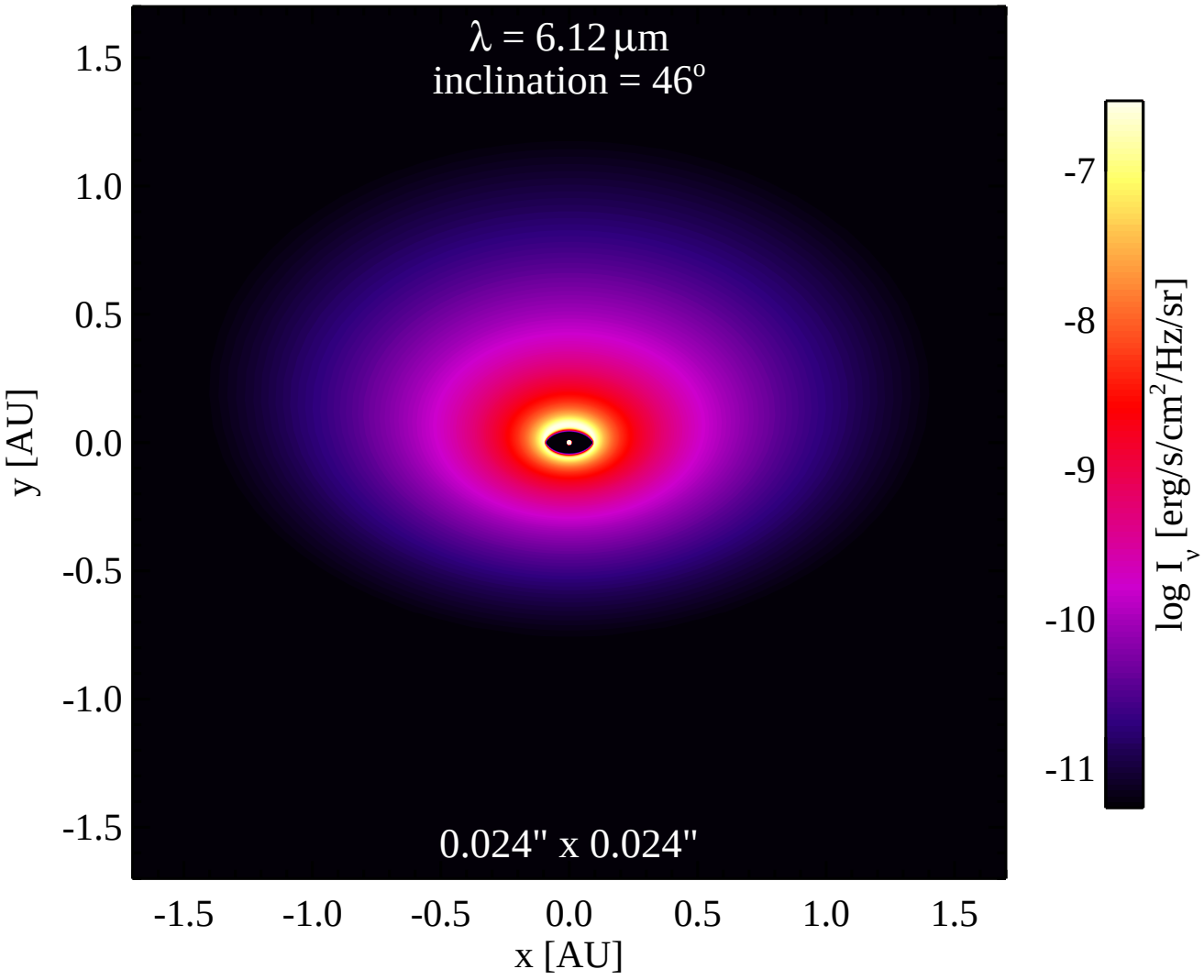

λ = 3.01 μm
inclination = 46°
0.17" x 0.17"
10
5
0
-5
-10
y [AU]
-10
-5
0
5
10
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

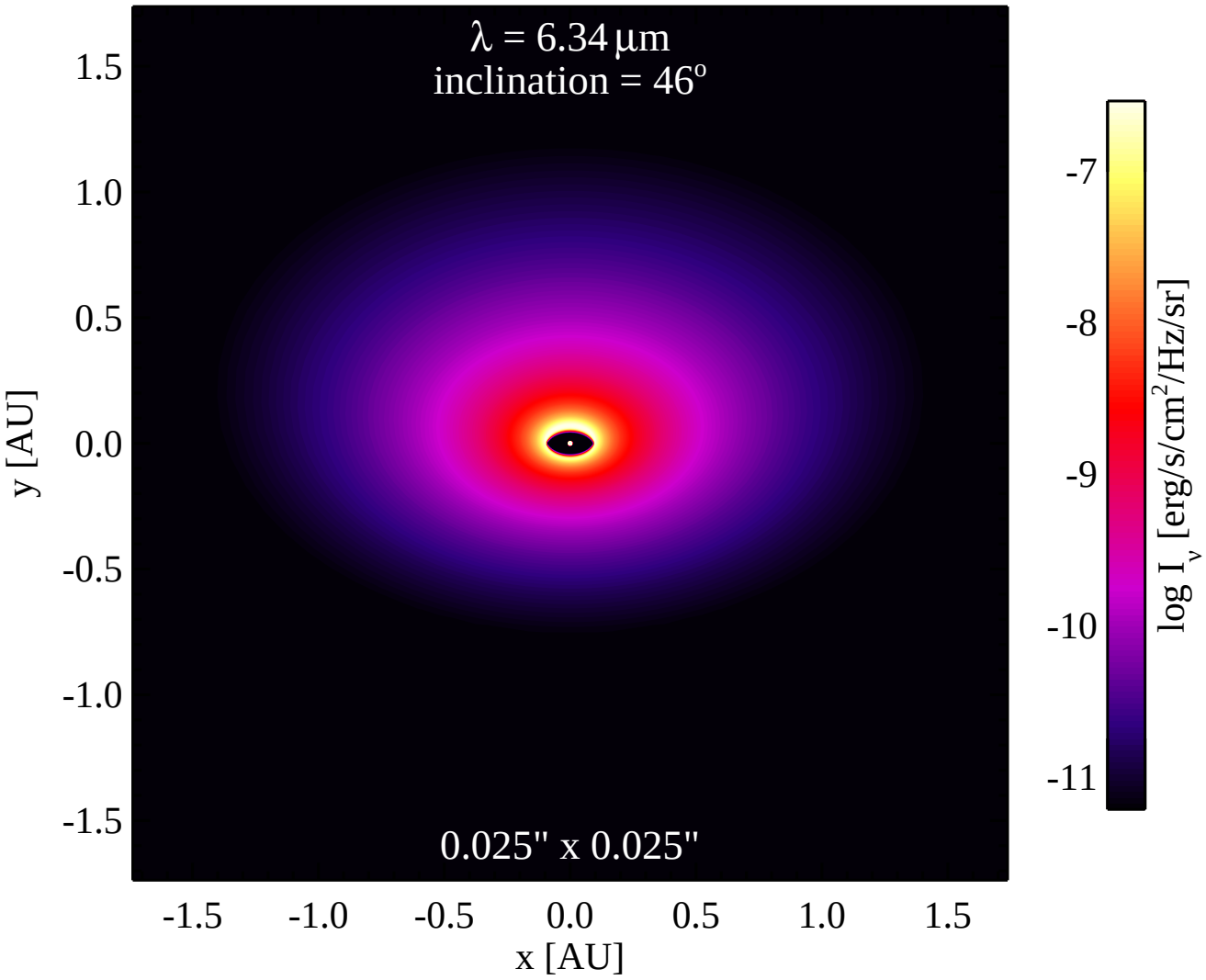

λ = 3.28 μm
inclination = 46°
0.13" x 0.13"
y [AU]
5
0
-5
-5
0
5
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

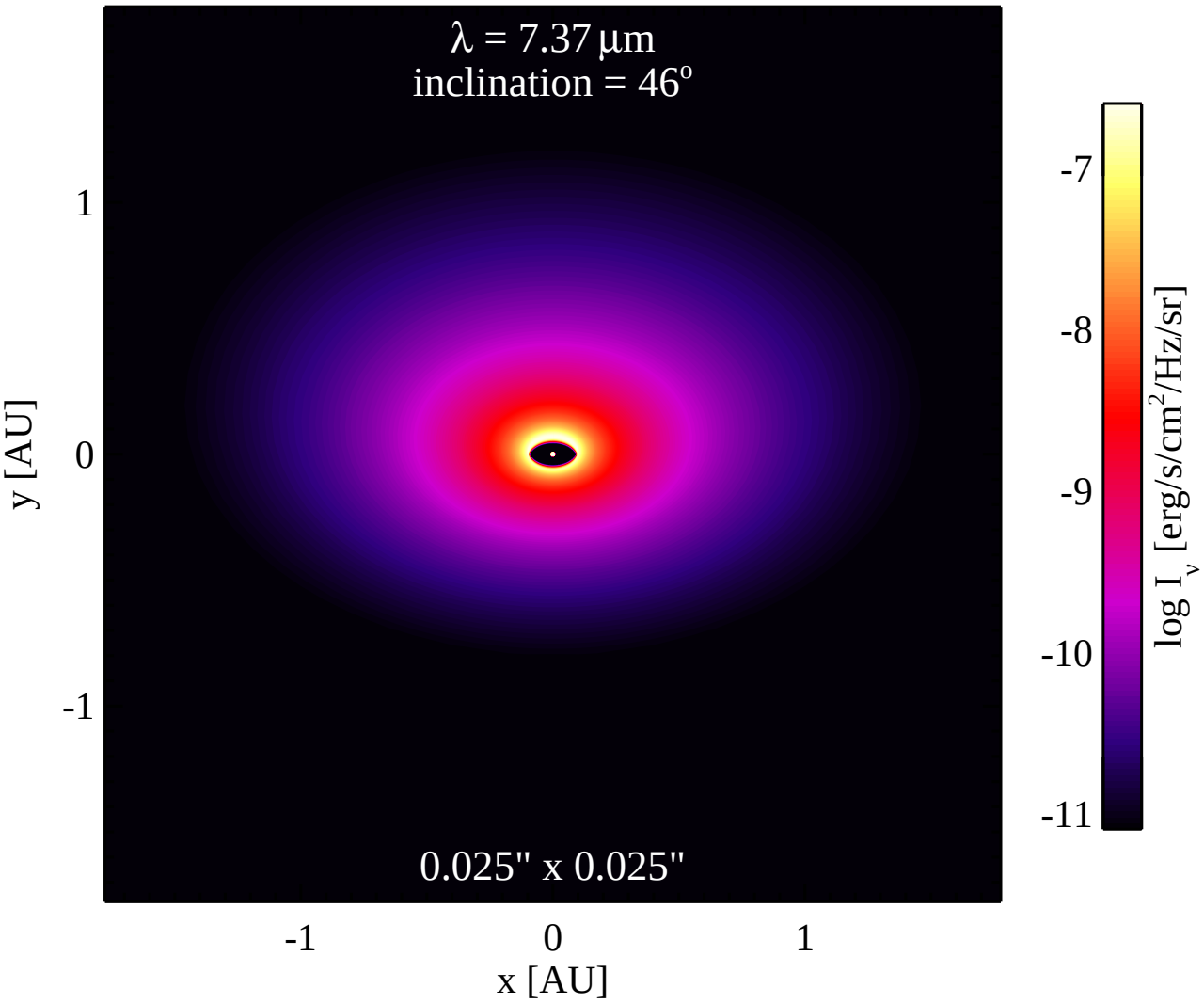

λ = 3.38 μm
inclination = 46°
0.13" x 0.13"
y [AU]
5
0
-5
-5
0
5
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

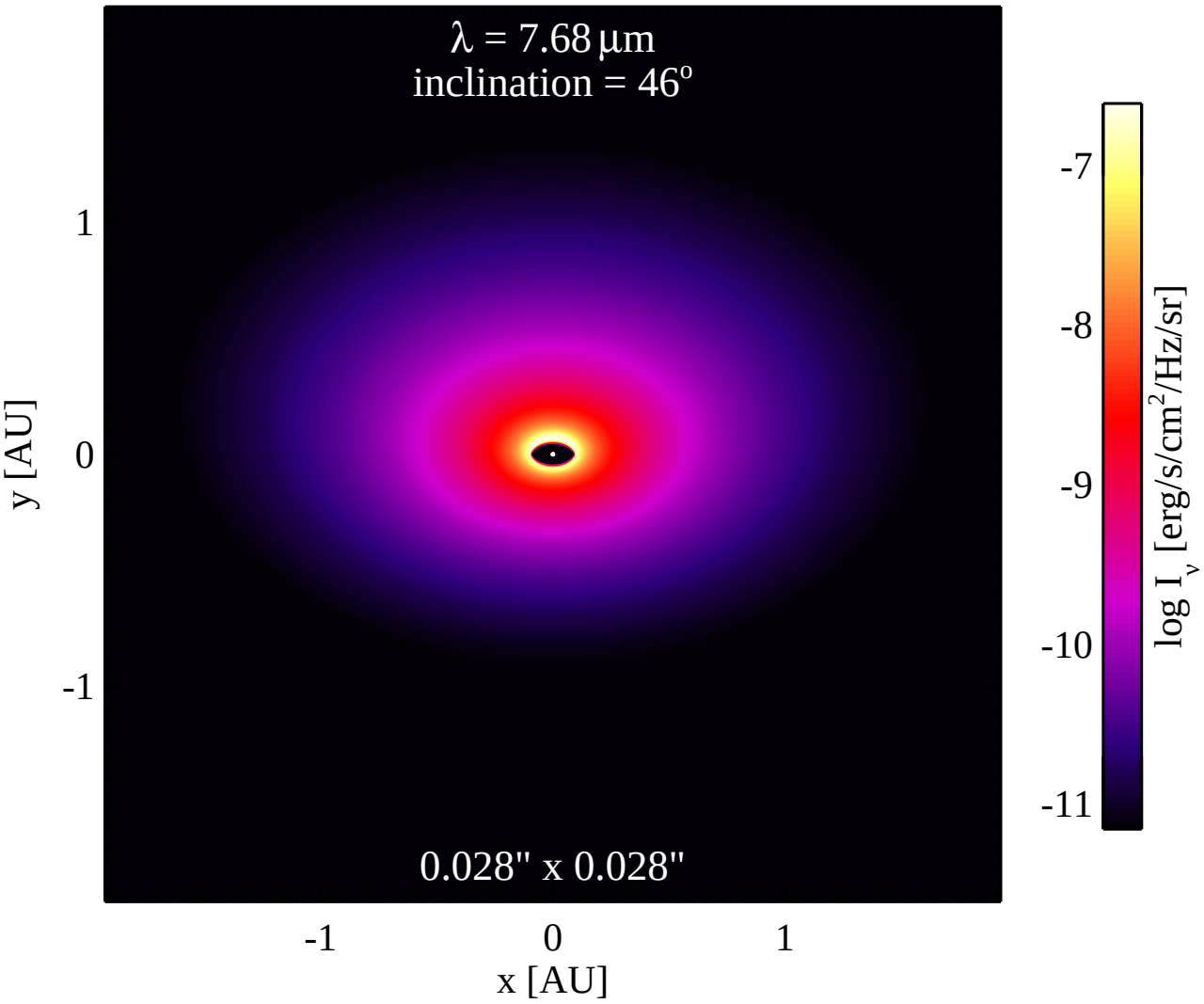

λ = 4.17 μm
inclination = 46°
0.071" x 0.071"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-9
-10
-11
-12
log I_ν [erg/s/cm²/Hz/sr]

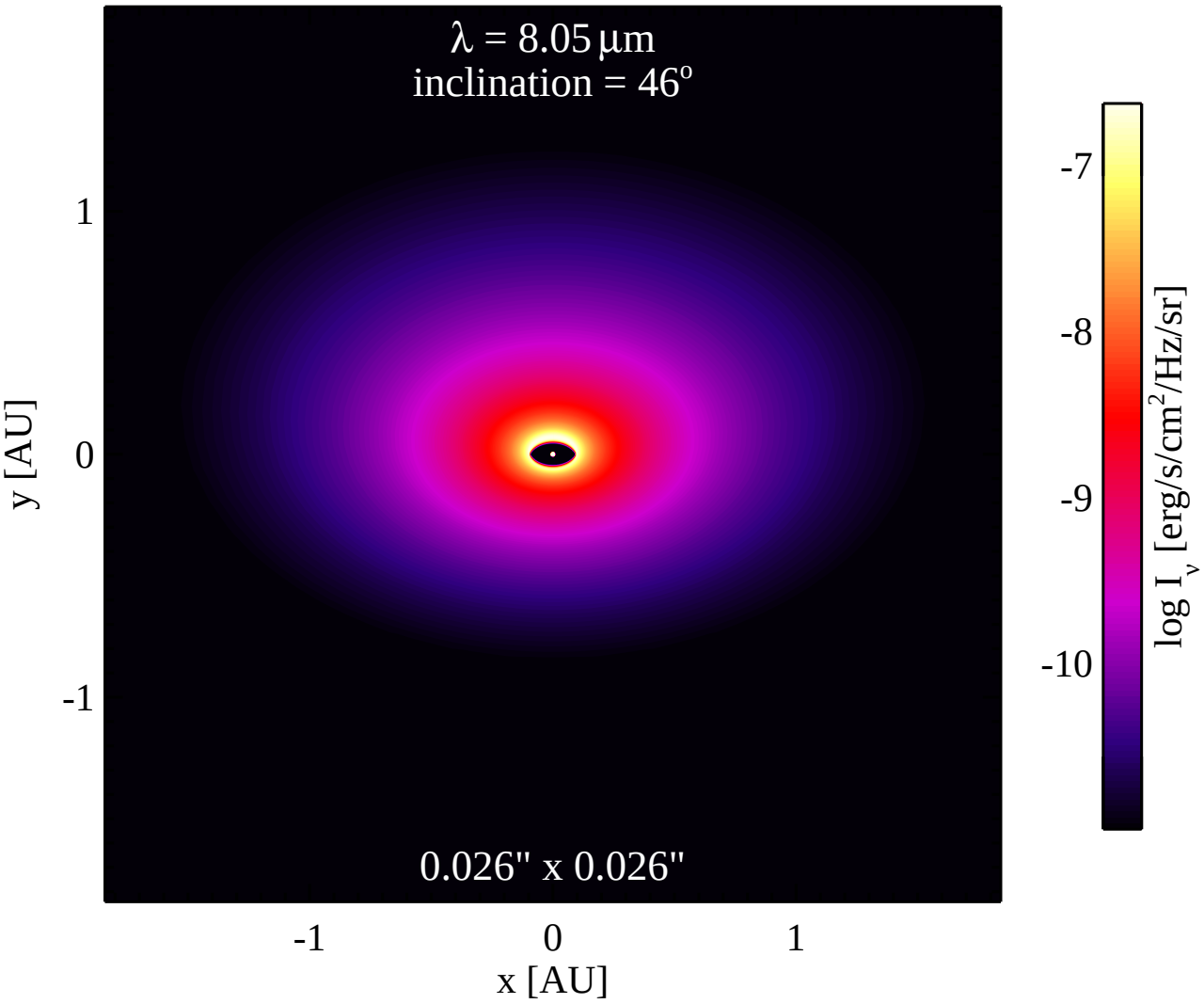

λ = 5.26 μm
inclination = 46°
0.039" x 0.039"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
log I_ν [erg/s/cm²/Hz/sr]
-8
-9
-10
-11
-12

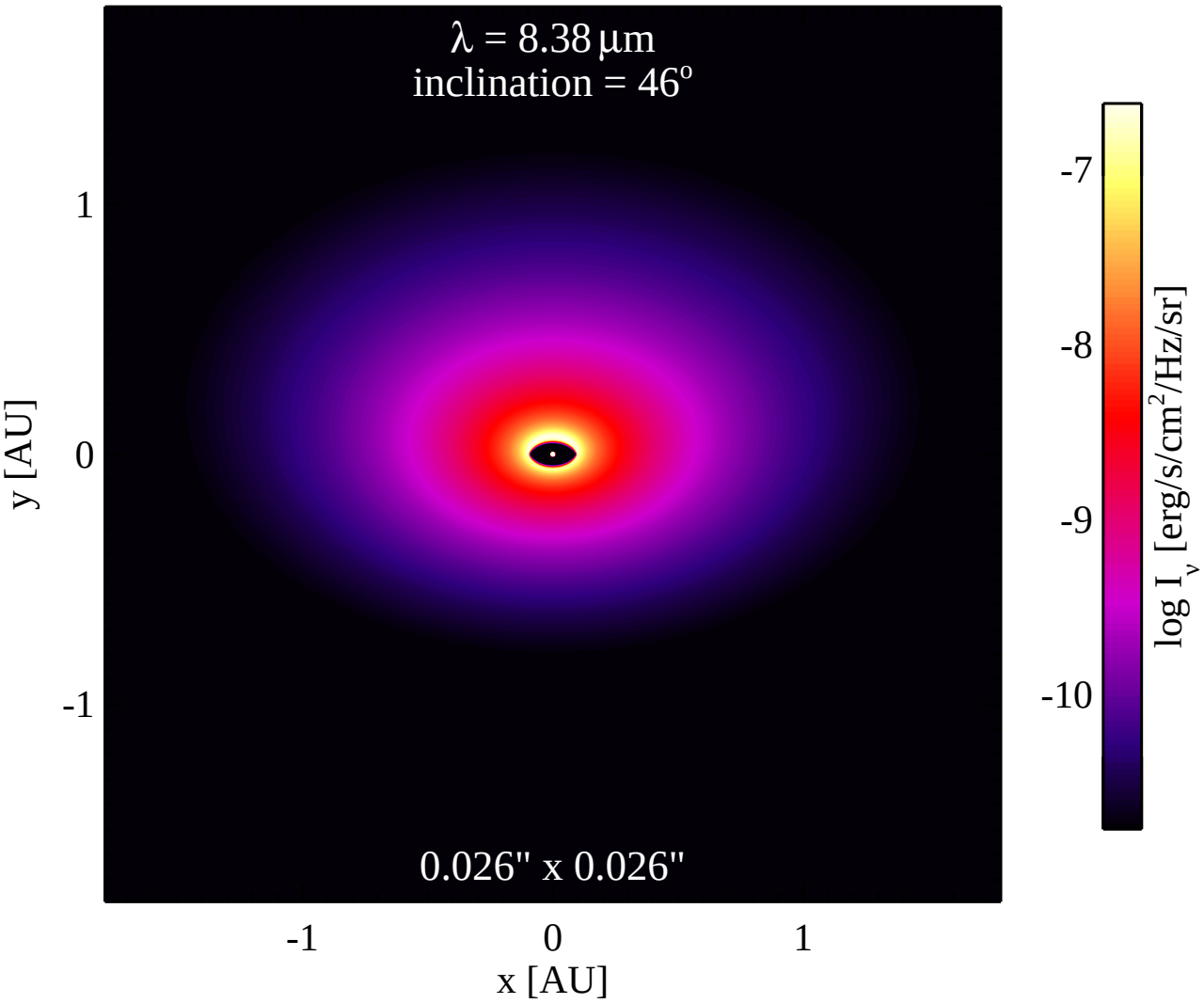

λ = 6.12 μm
inclination = 46°
0.024" x 0.024"
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
y [AU]
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

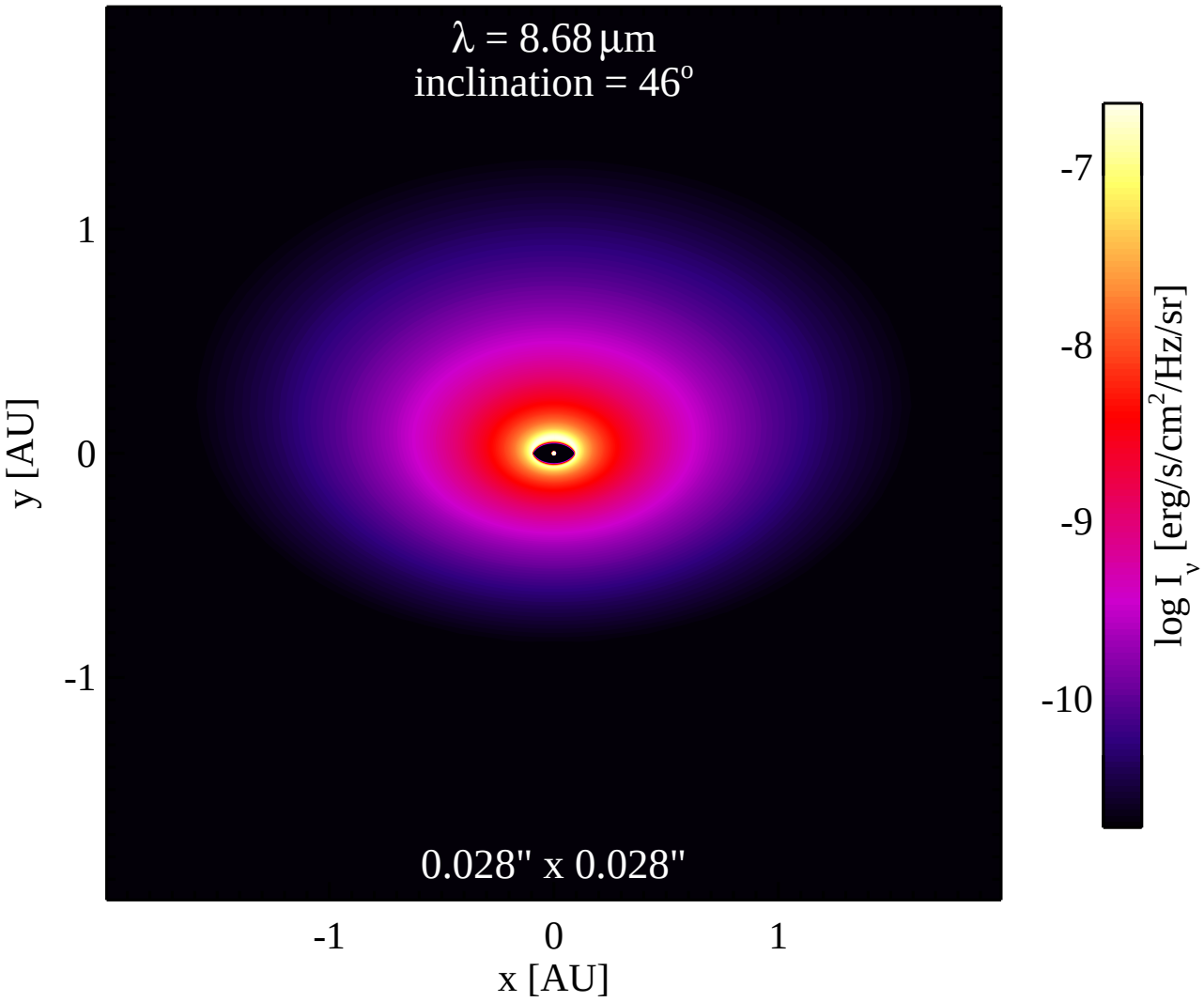

λ = 6.34 μm
inclination = 46°
0.025" x 0.025"
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
y [AU]
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

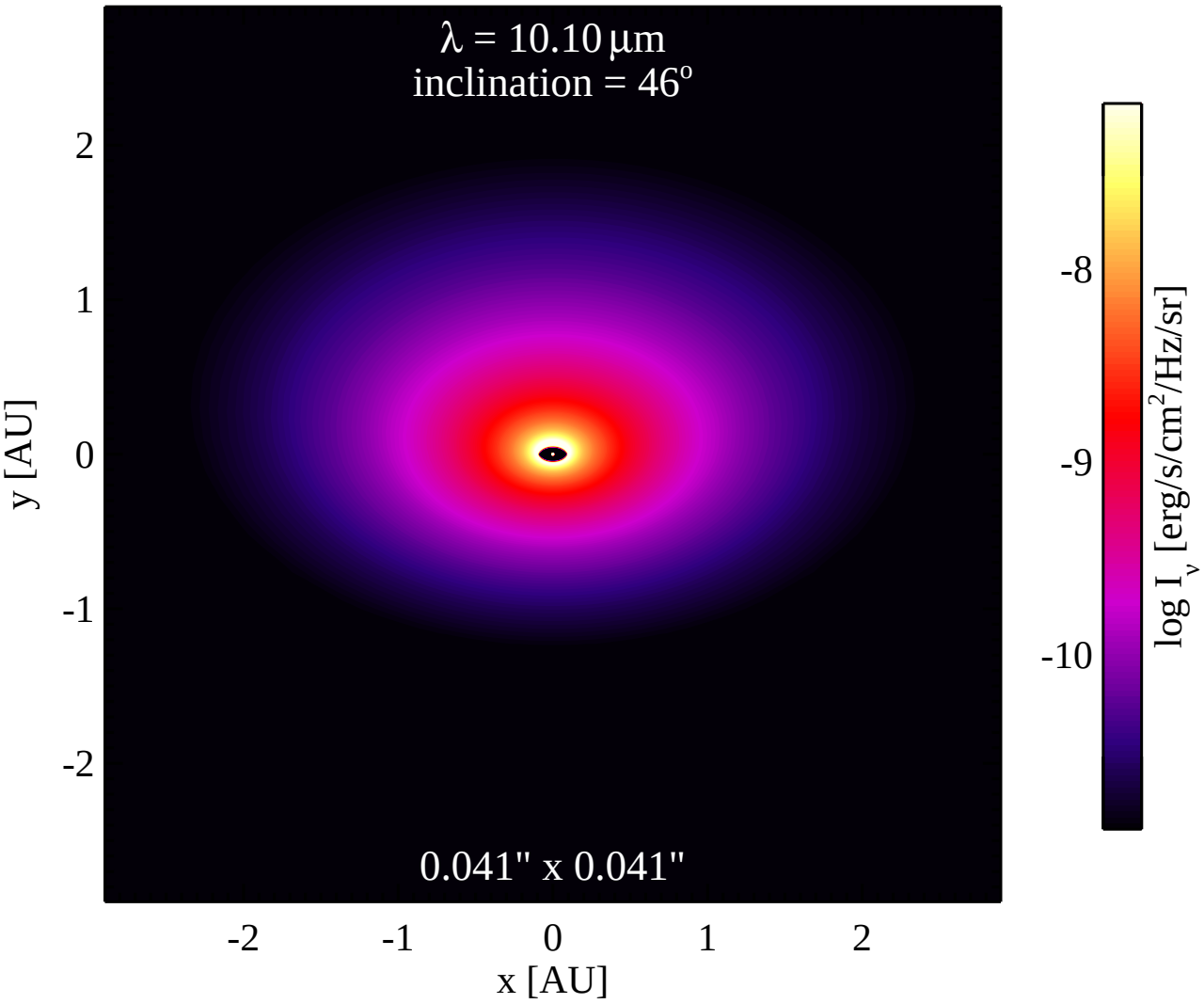

λ = 7.37 μm
inclination = 46°
0.025" x 0.025"
1
0
-1
y [AU]
-1
0
1
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

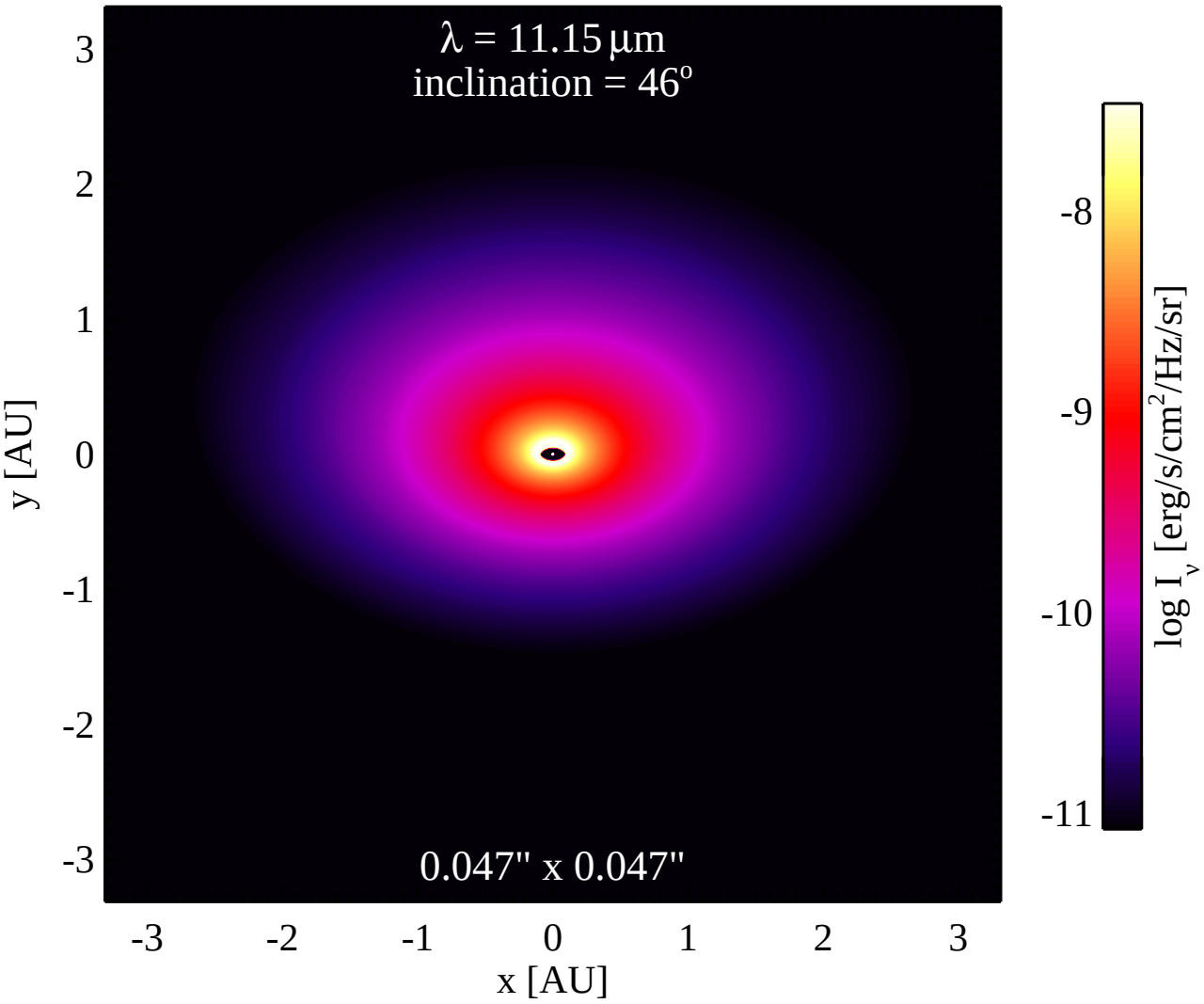

λ = 7.68 μm
inclination = 46°
0.028" x 0.028"
y [AU]
x [AU]
1
0
-1
-1
0
1
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

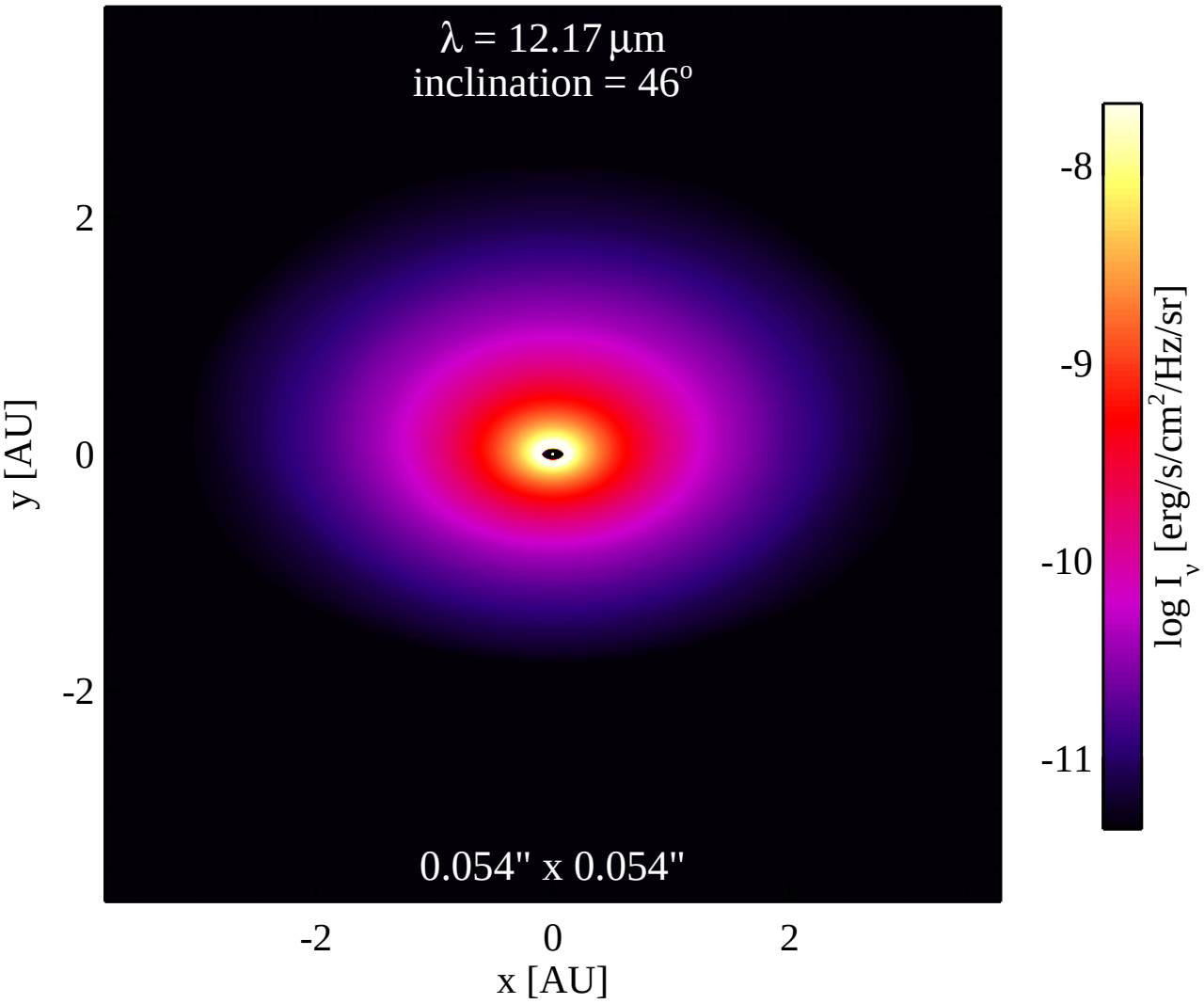

λ = 8.05 μm
inclination = 46°
0.026" x 0.026"
y [AU]
1
0
-1
-1
0
1
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

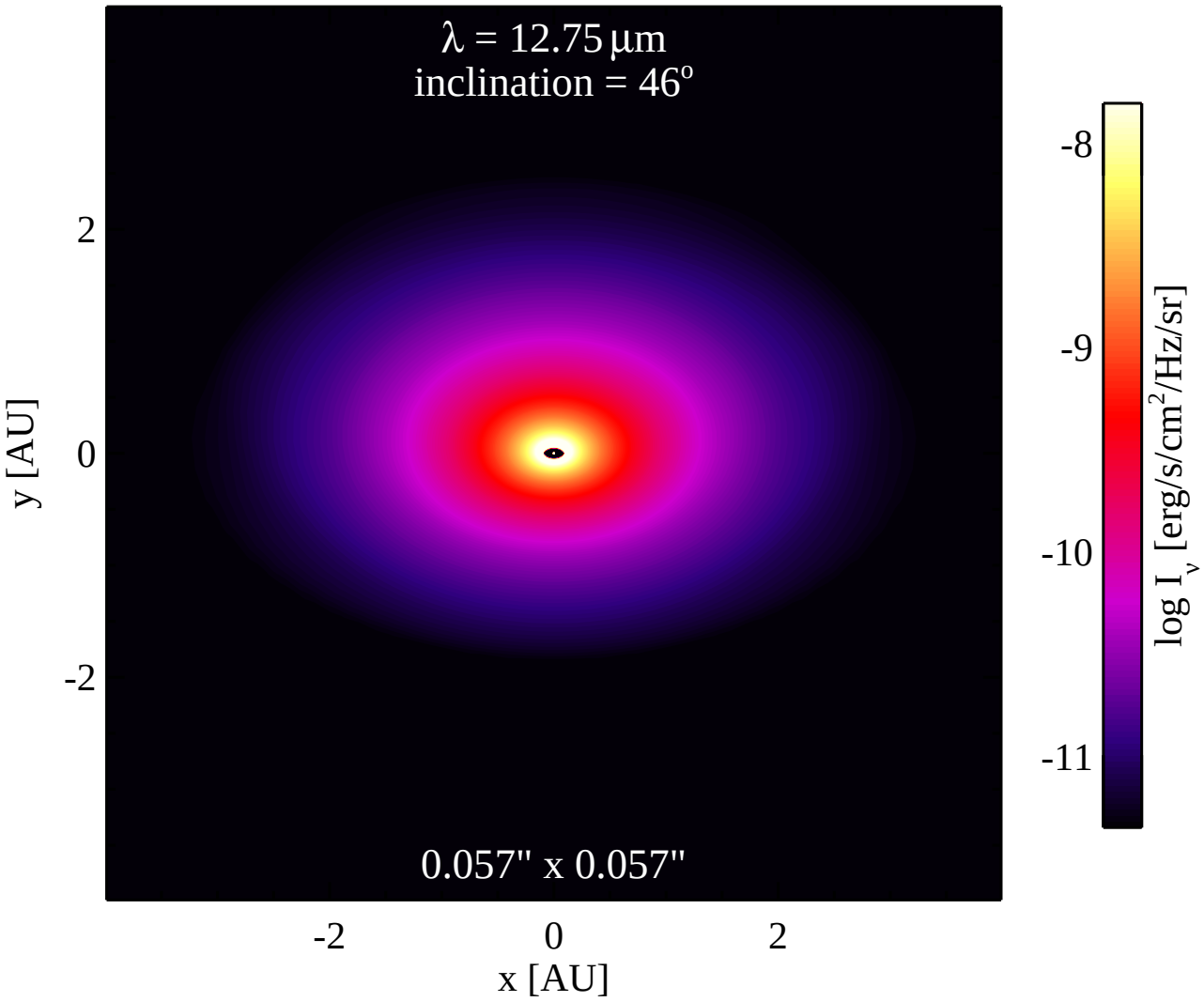

λ = 8.38 μm
inclination = 46°
0.026" x 0.026"
1
0
-1
y [AU]
-1
0
1
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

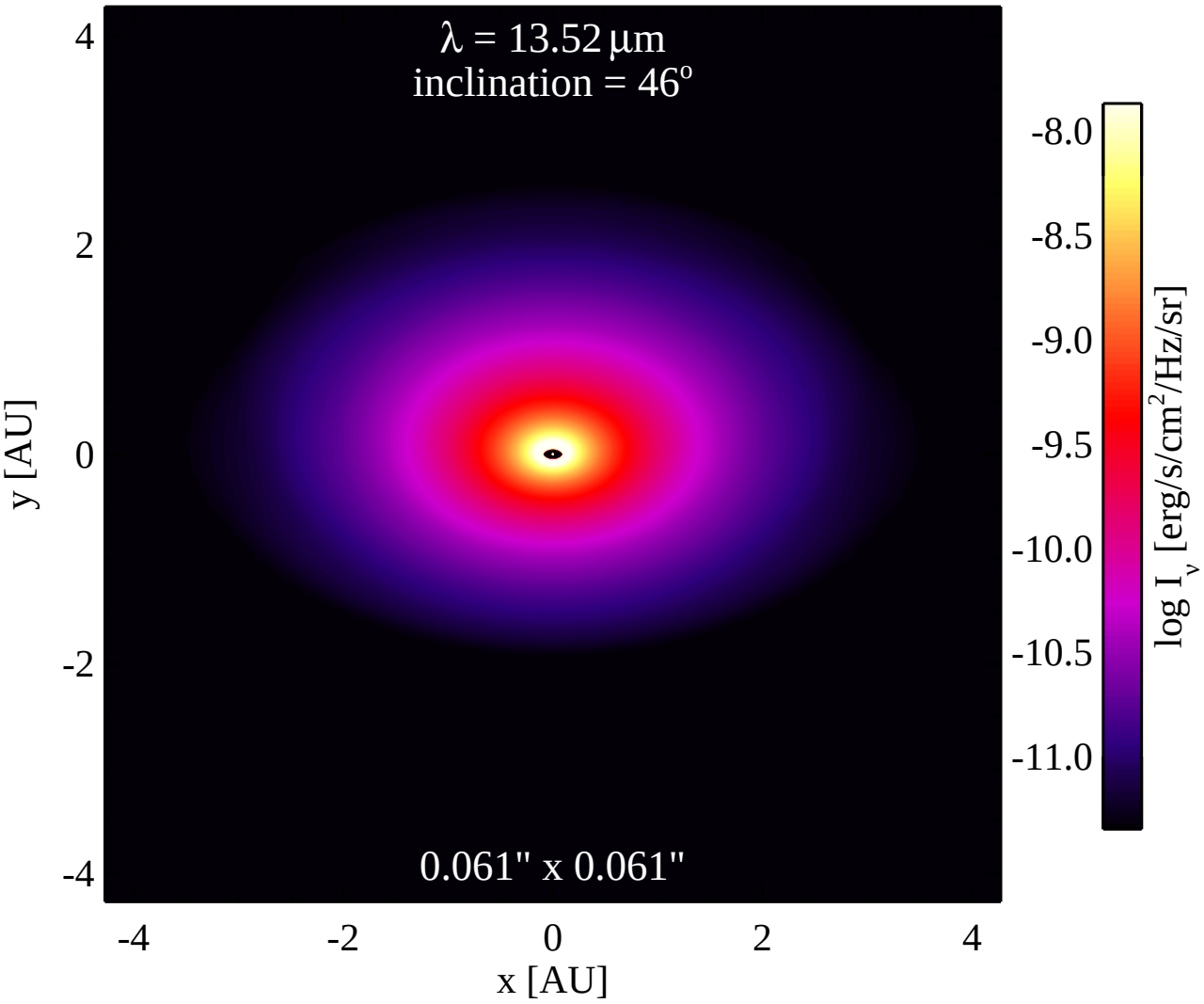

λ = 8.68 μm
inclination = 46°
0.028" x 0.028"
y [AU]
1
0
-1
x [AU]
-1
0
1
log I_ν [erg/s/cm²/Hz/sr]
-7
-8
-9
-10

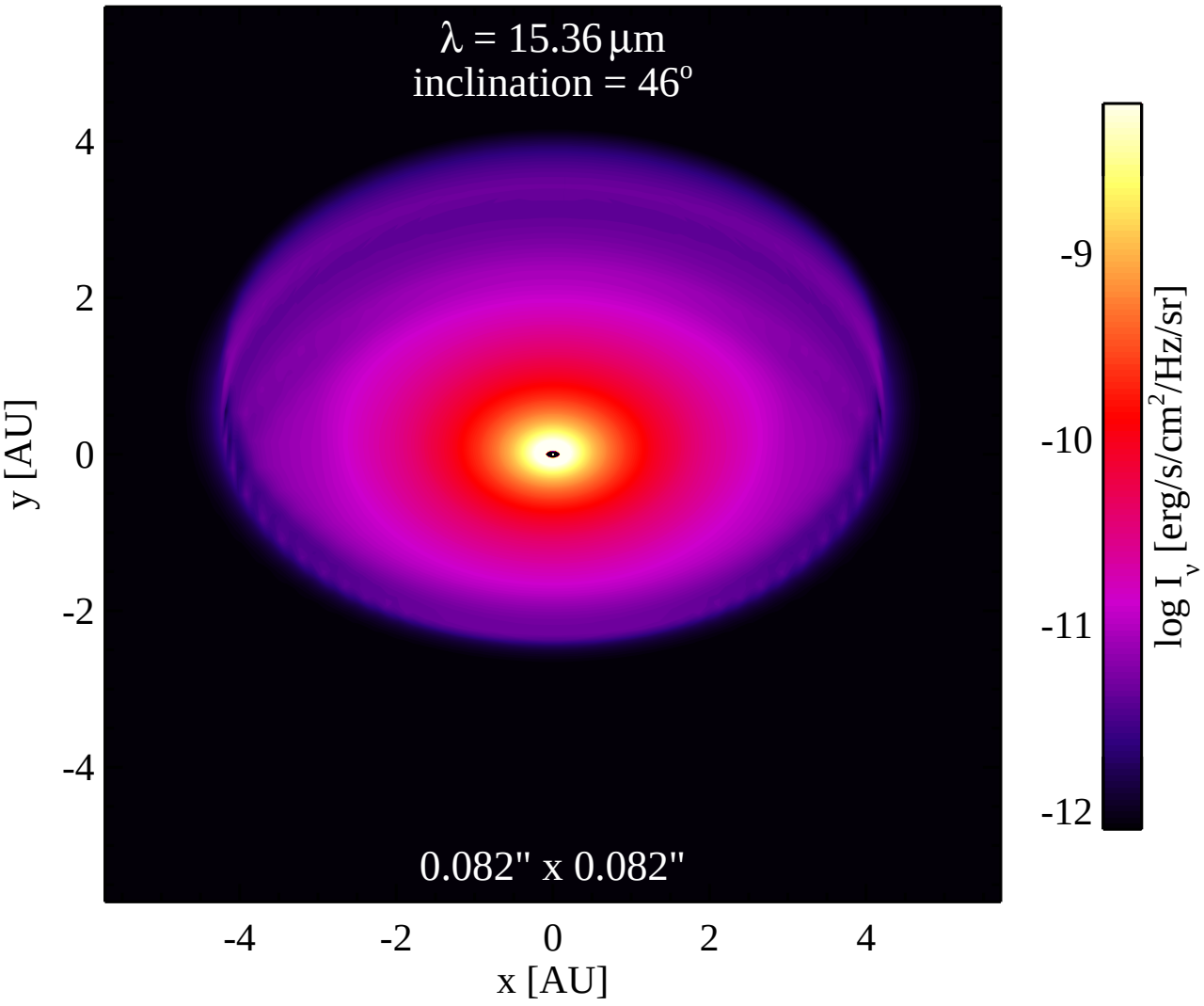

λ = 10.10 μm
inclination = 46°
0.041" x 0.041"
y [AU]
x [AU]
2
1
0
-1
-2
-2
-1
0
1
2
log I_ν [erg/s/cm²/Hz/sr]
-8
-9
-10

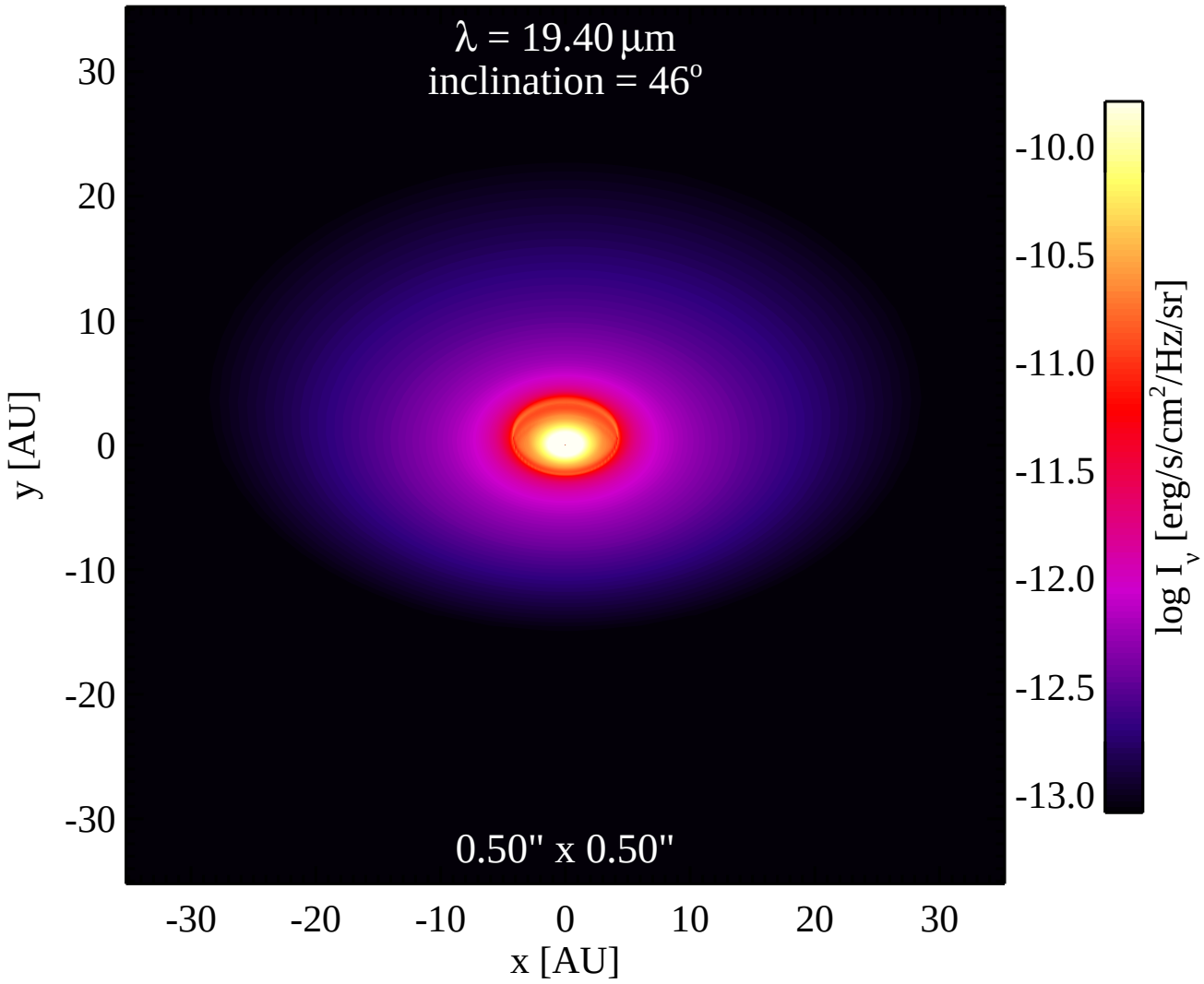

λ = 11.15 μm
inclination = 46°
0.047" x 0.047"
y [AU]
x [AU]
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

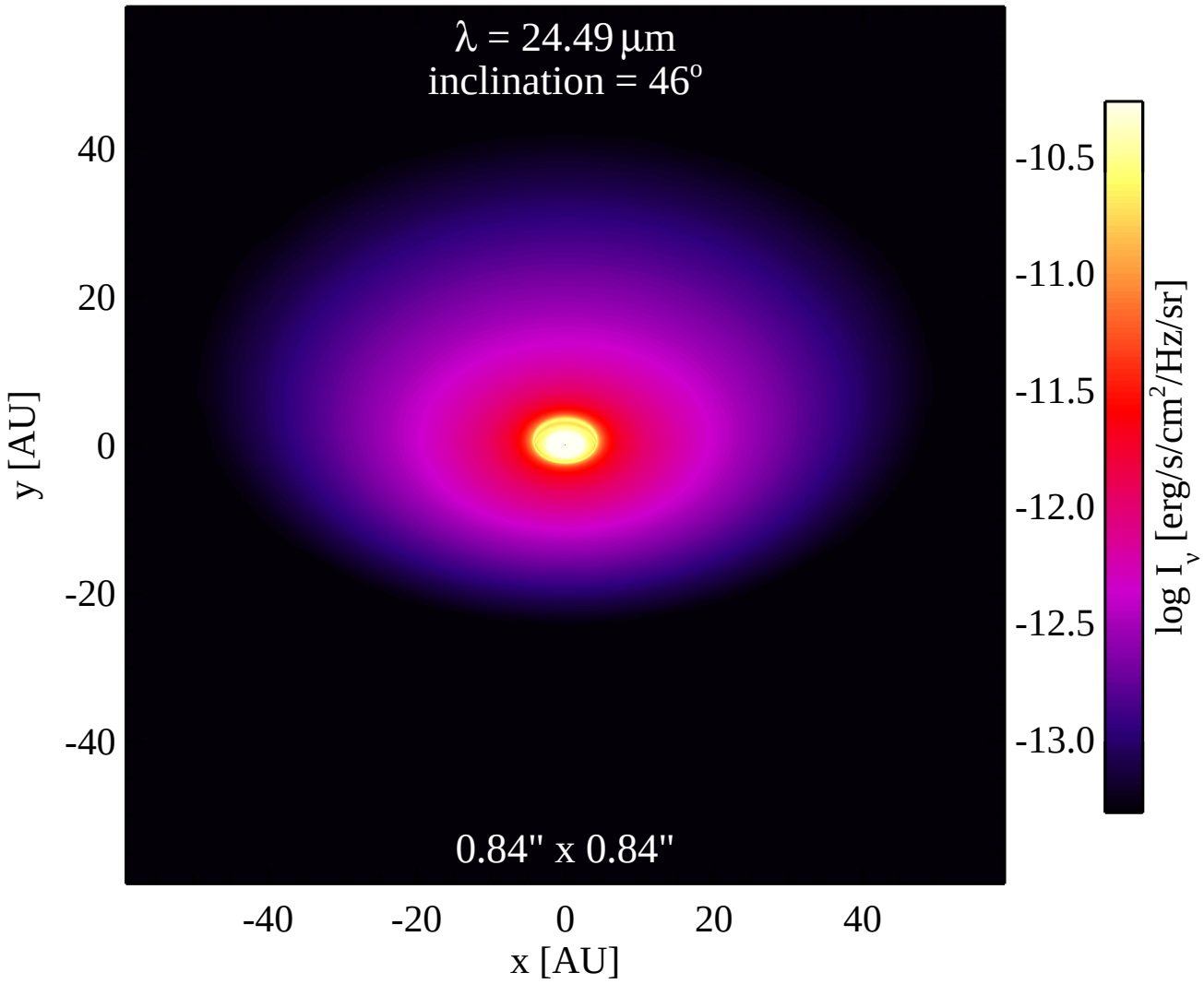

λ = 12.17 μm
inclination = 46°
0.054" x 0.054"
y [AU]
x [AU]
2
0
-2
-2
0
2
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

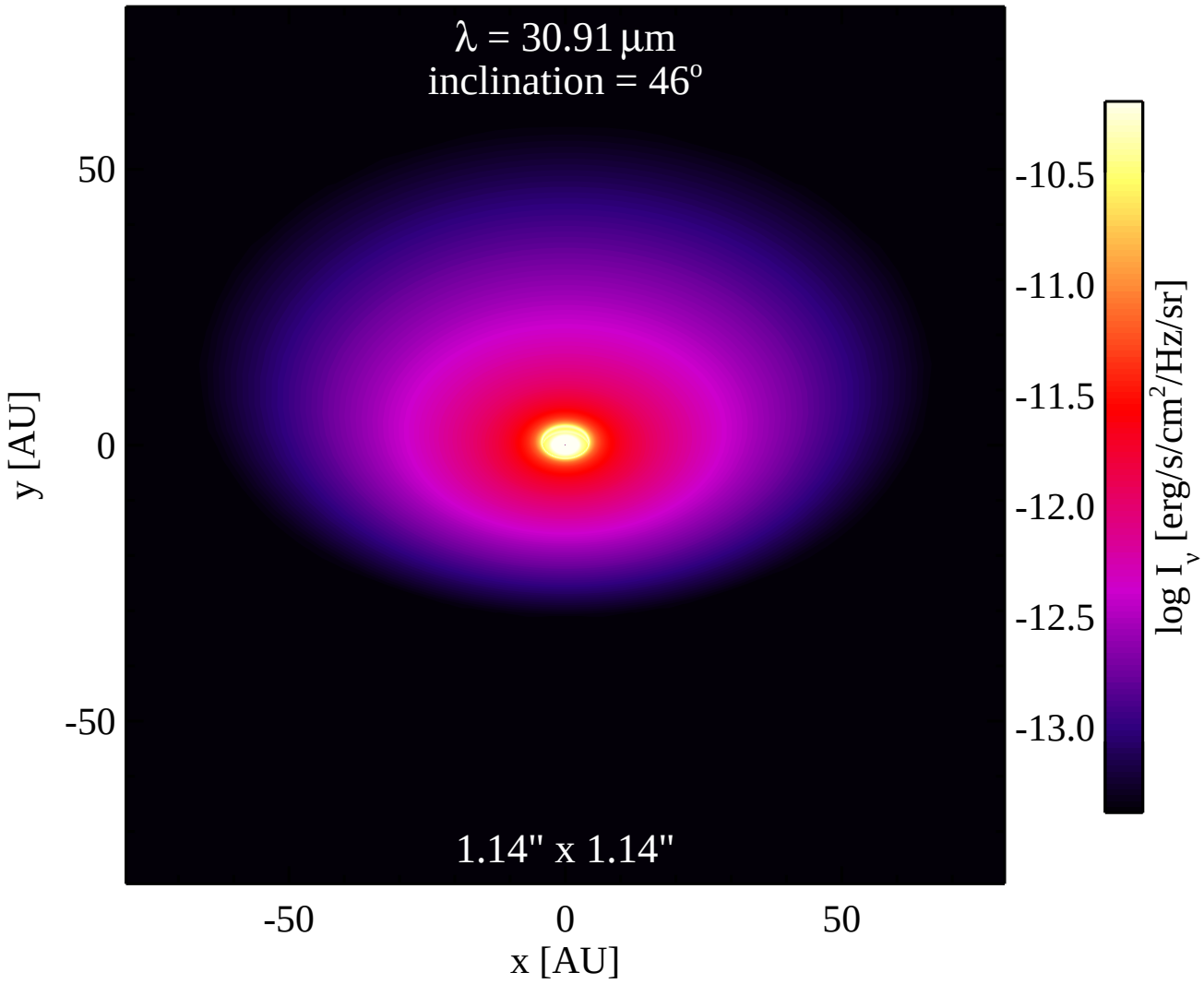

λ = 12.75 μm
inclination = 46°
0.057" x 0.057"
2
0
-2
y [AU]
-2
0
2
x [AU]
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

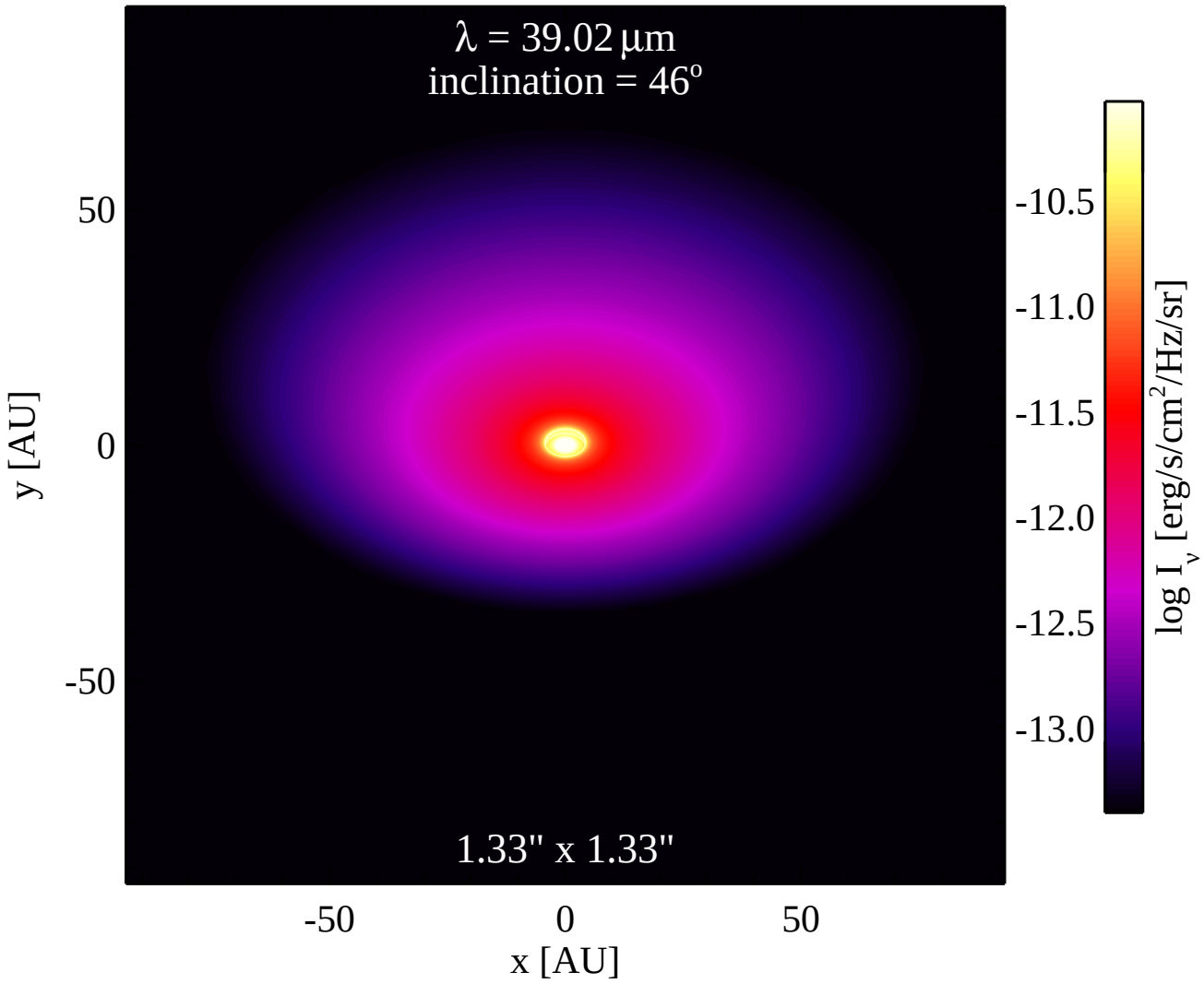

λ = 13.52 μm
inclination = 46°
0.061" x 0.061"
4
2
0
-2
-4
y [AU]
-4
-2
0
2
4
x [AU]
-8.0
-8.5
-9.0
-9.5
-10.0
-10.5
-11.0
log I_ν [erg/s/cm²/Hz/sr]

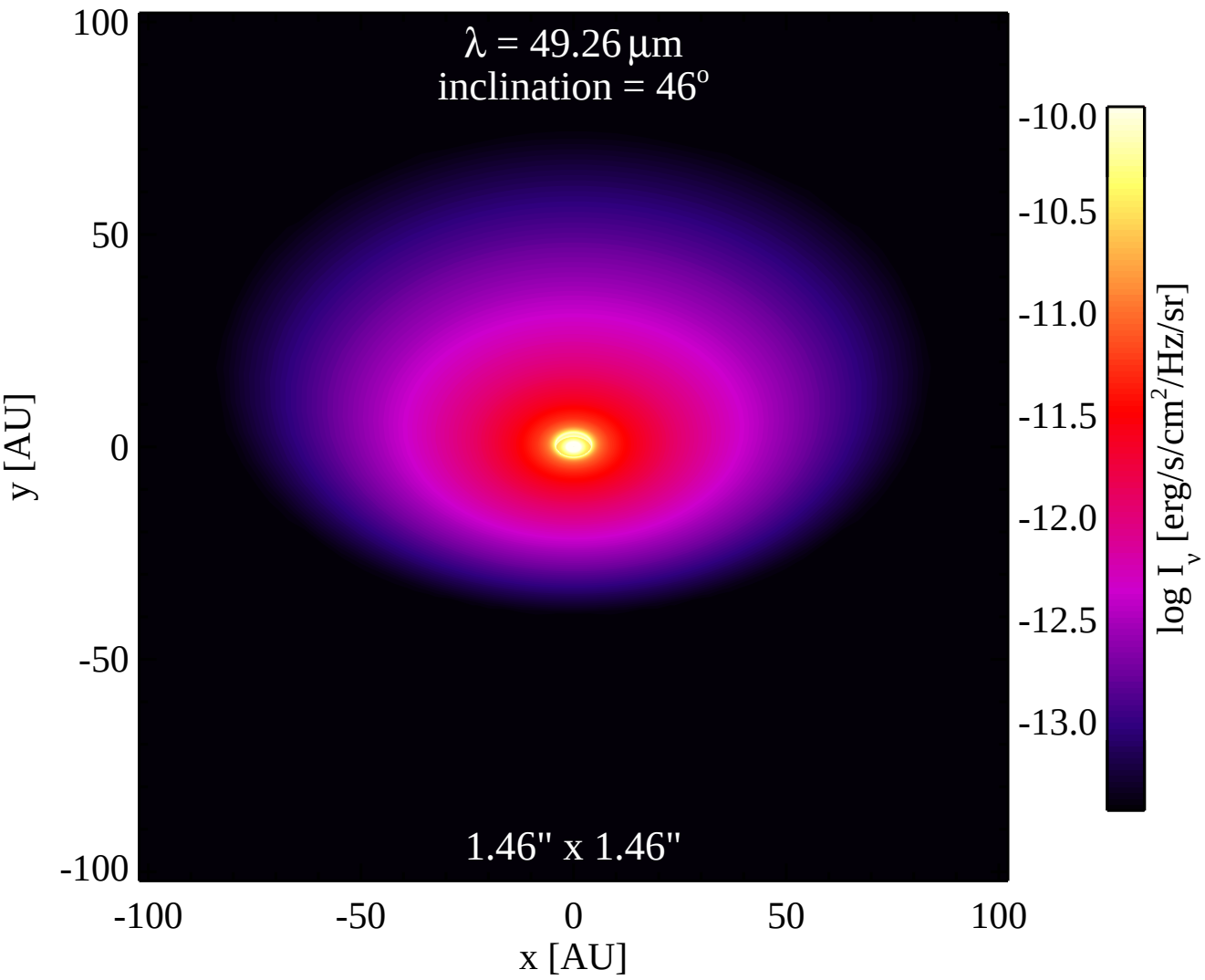

λ = 15.36 μm
inclination = 46°
0.082" x 0.082"
y [AU]
x [AU]
4
2
0
-2
-4
-4
-2
0
2
4
-9
-10
-11
-12
log I_ν [erg/s/cm²/Hz/sr]

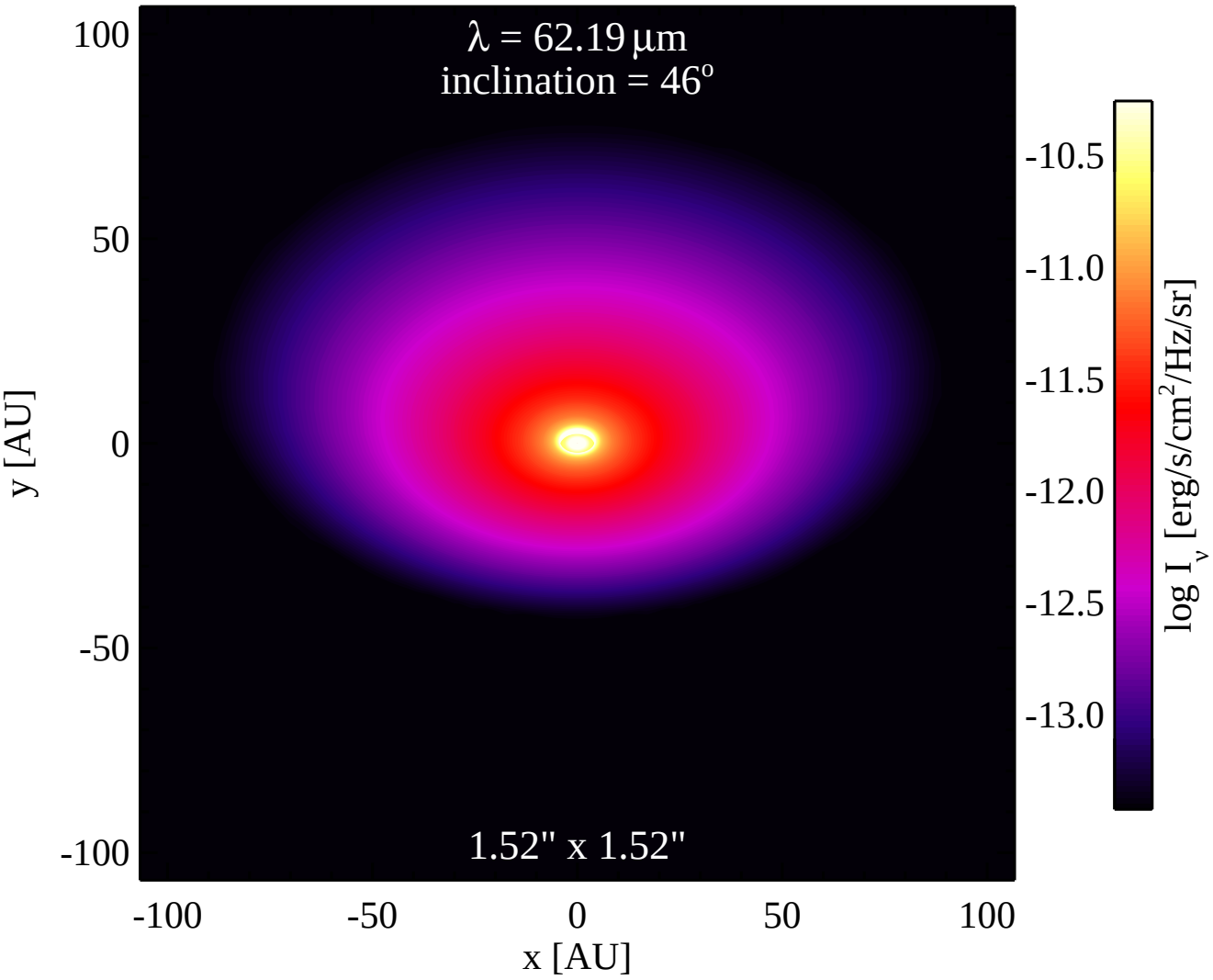

λ = 19.40 μm
inclination = 46°
0.50" x 0.50"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

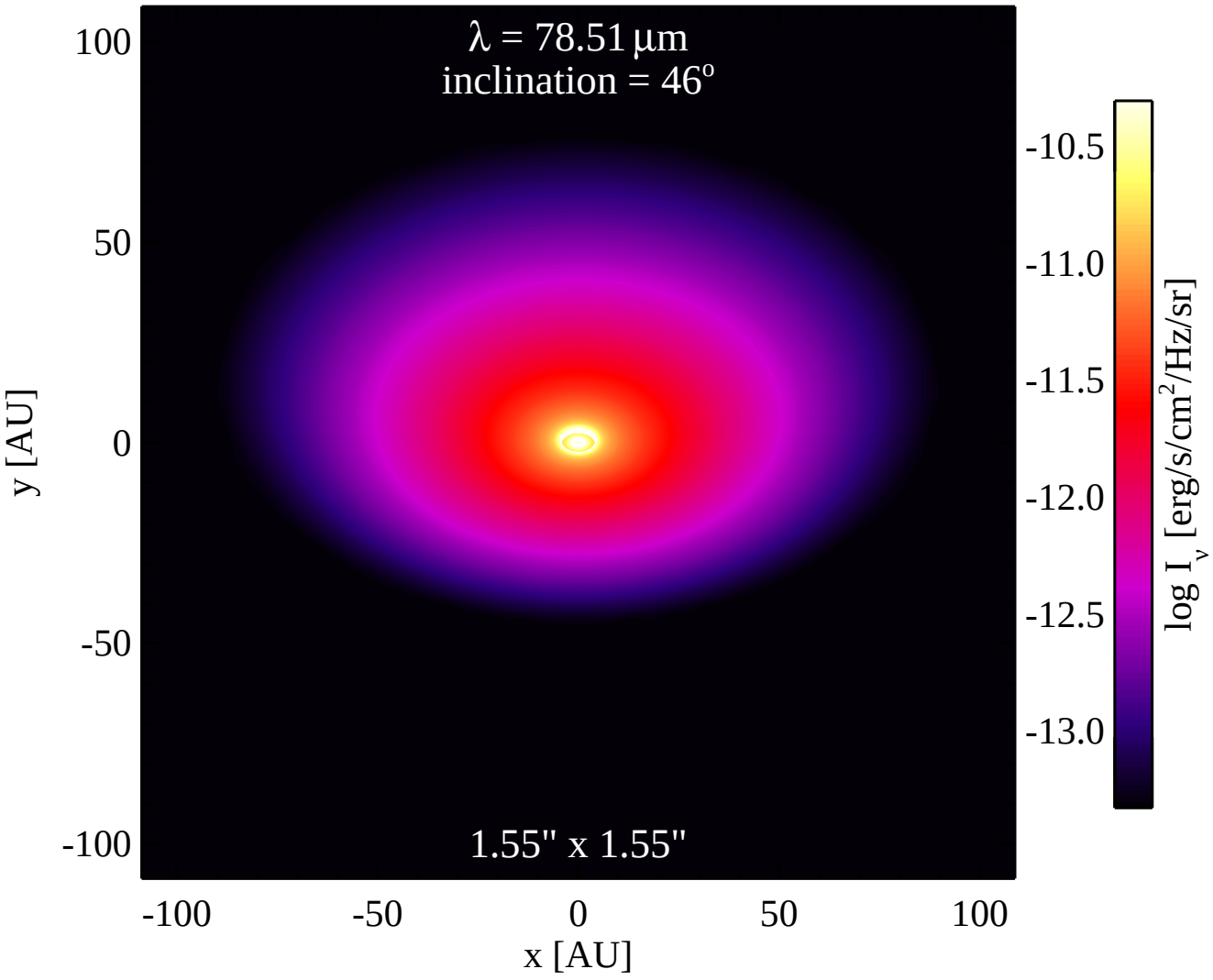

λ = 24.49 μm
inclination = 46°
0.84" x 0.84"
y [AU]
x [AU]
40
20
0
-20
-40
-40
-20
0
20
40
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

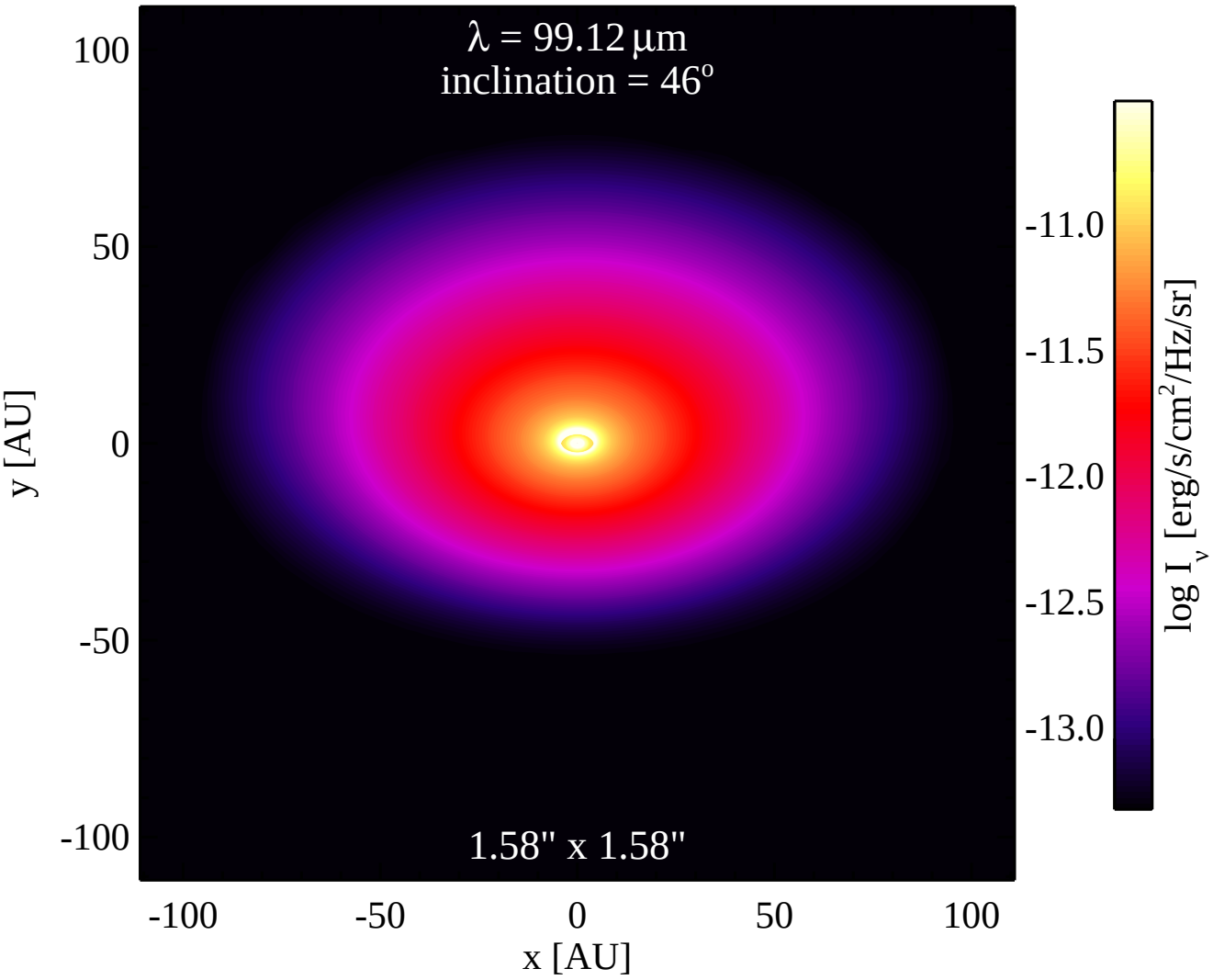

λ = 30.91 μm
inclination = 46°
1.14" x 1.14"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

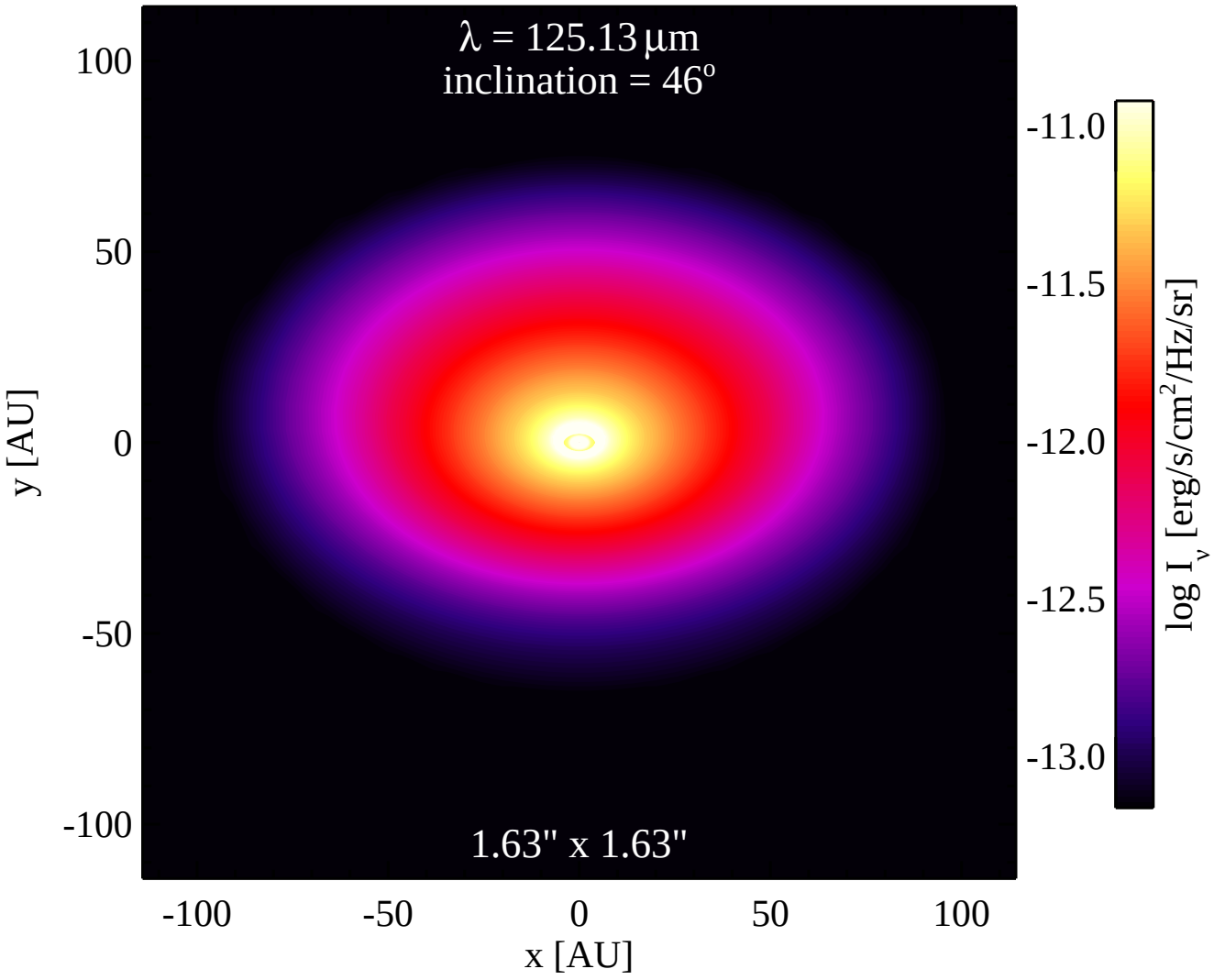

λ = 39.02 μm
inclination = 46°
1.33" x 1.33"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

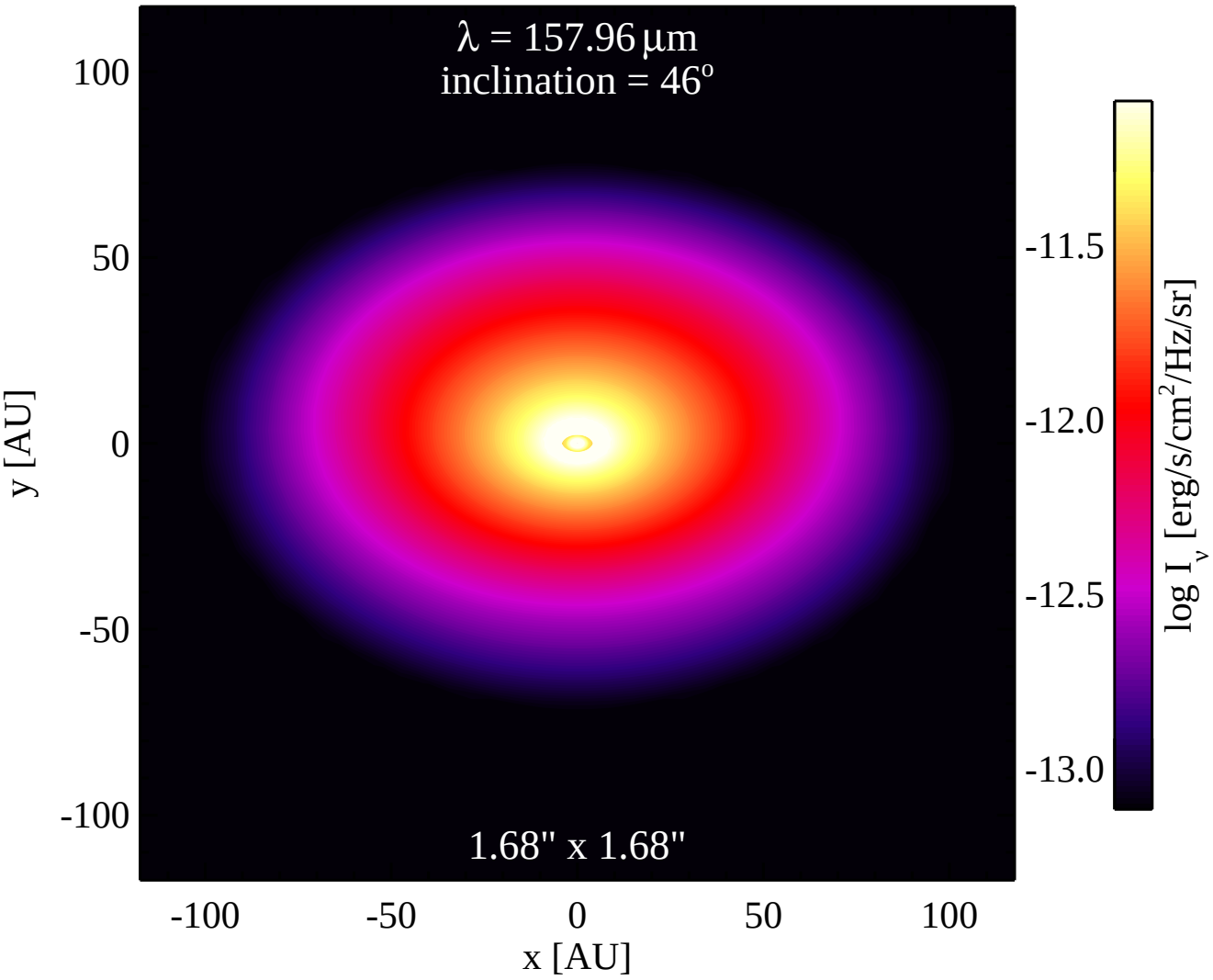

λ = 49.26 μm
inclination = 46°
1.46" x 1.46"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

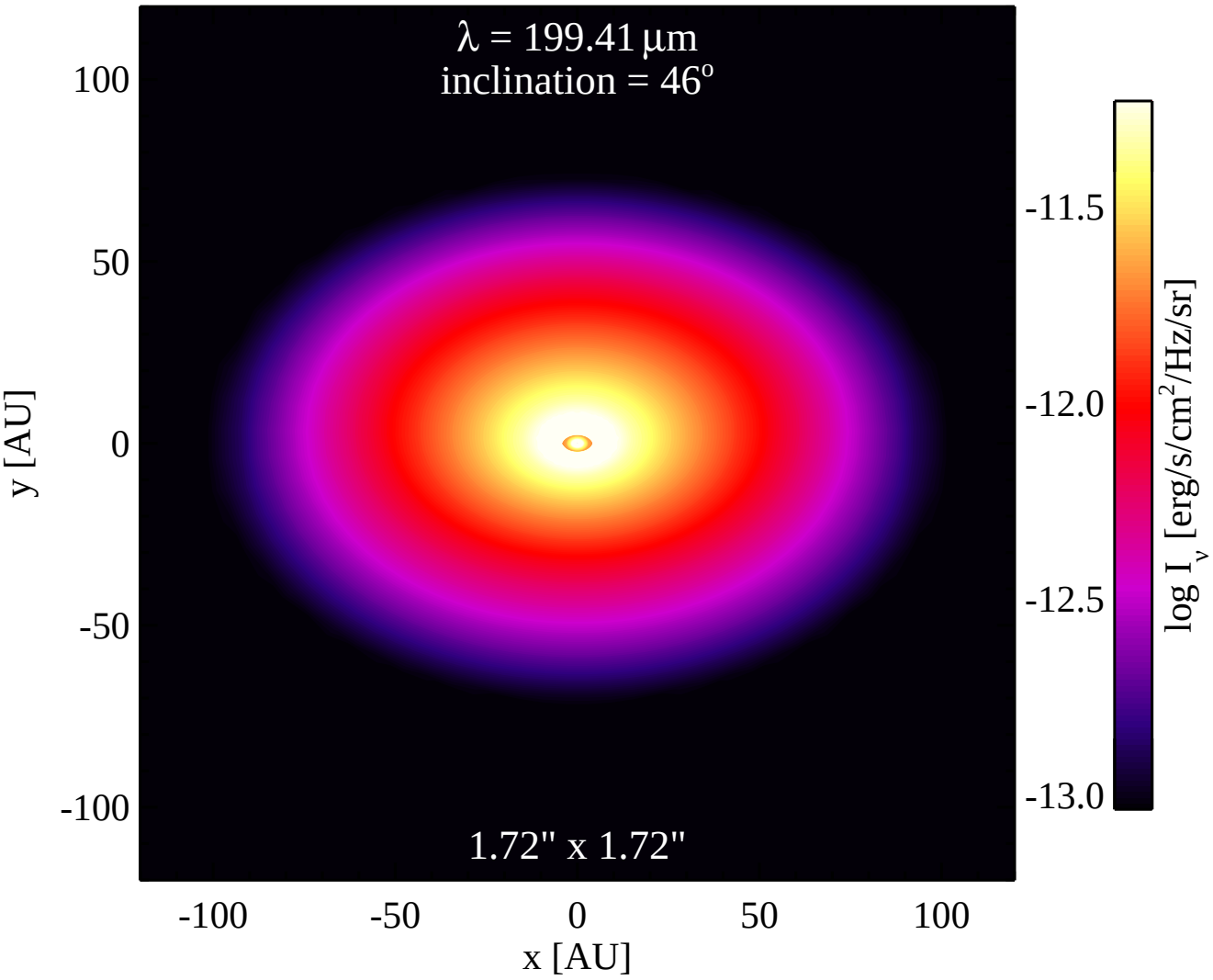

λ = 62.19 μm
inclination = 46°
1.52" x 1.52"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

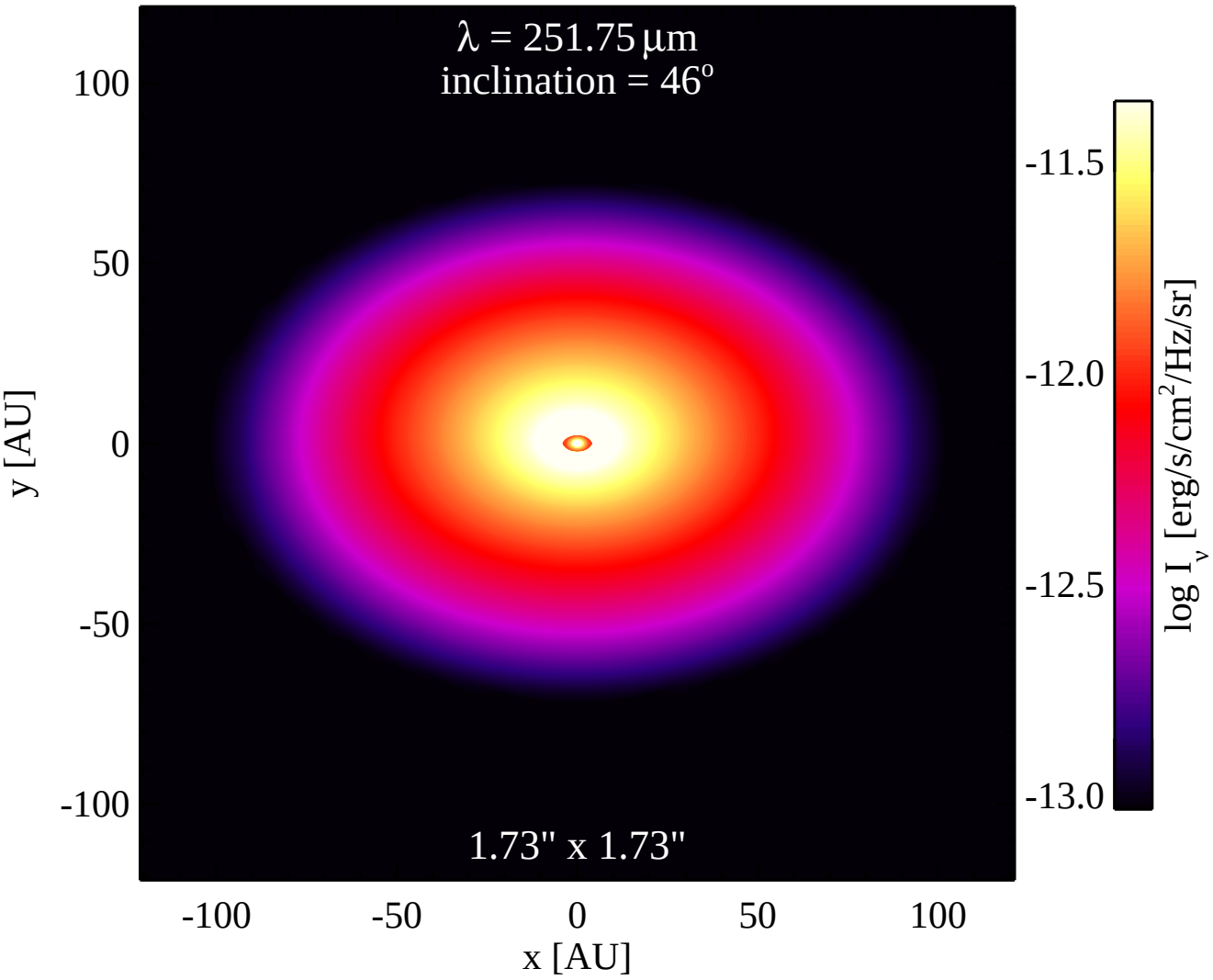

λ = 78.51 μm
inclination = 46°
1.55" x 1.55"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

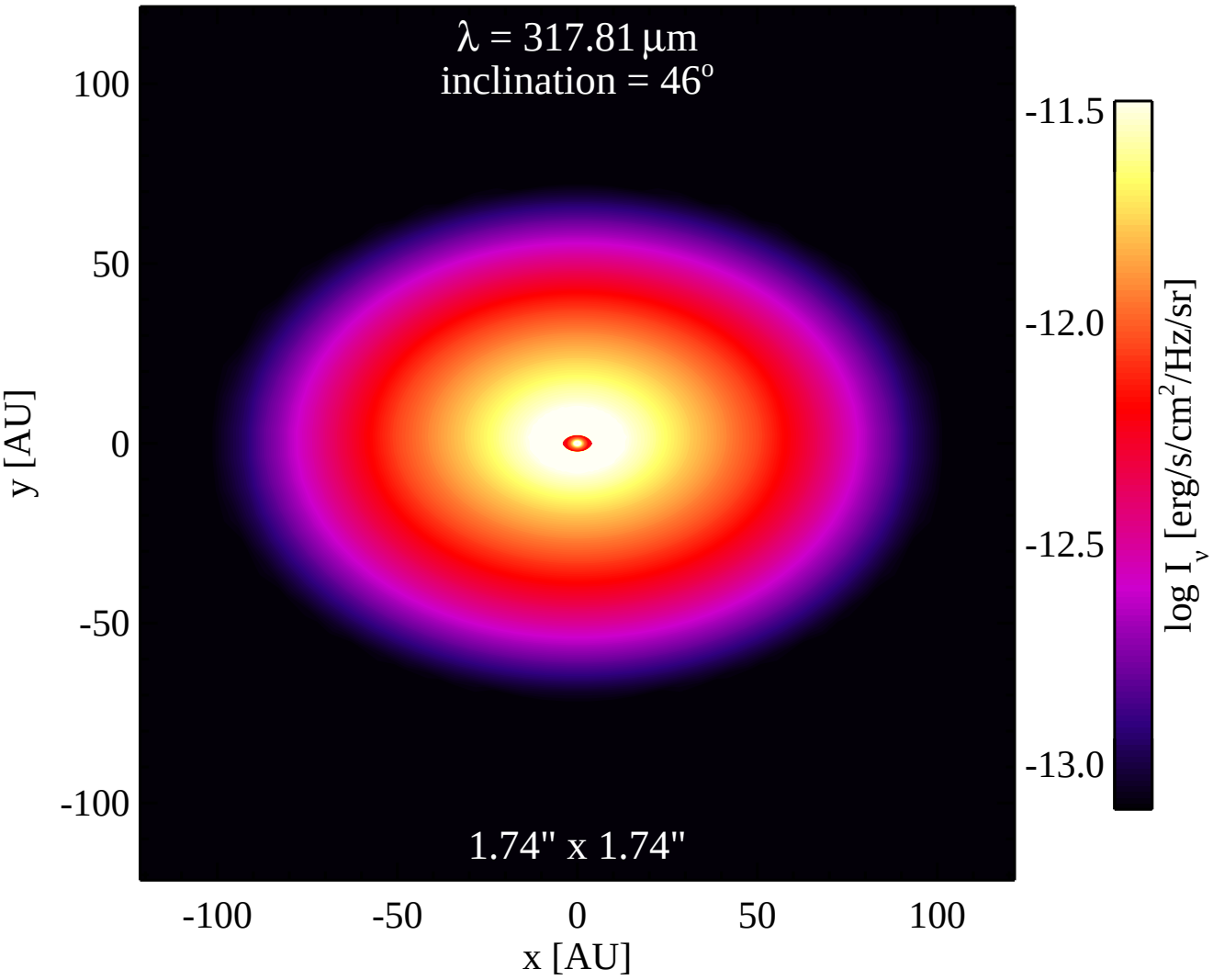

λ = 99.12 μm
inclination = 46°
1.58" x 1.58"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

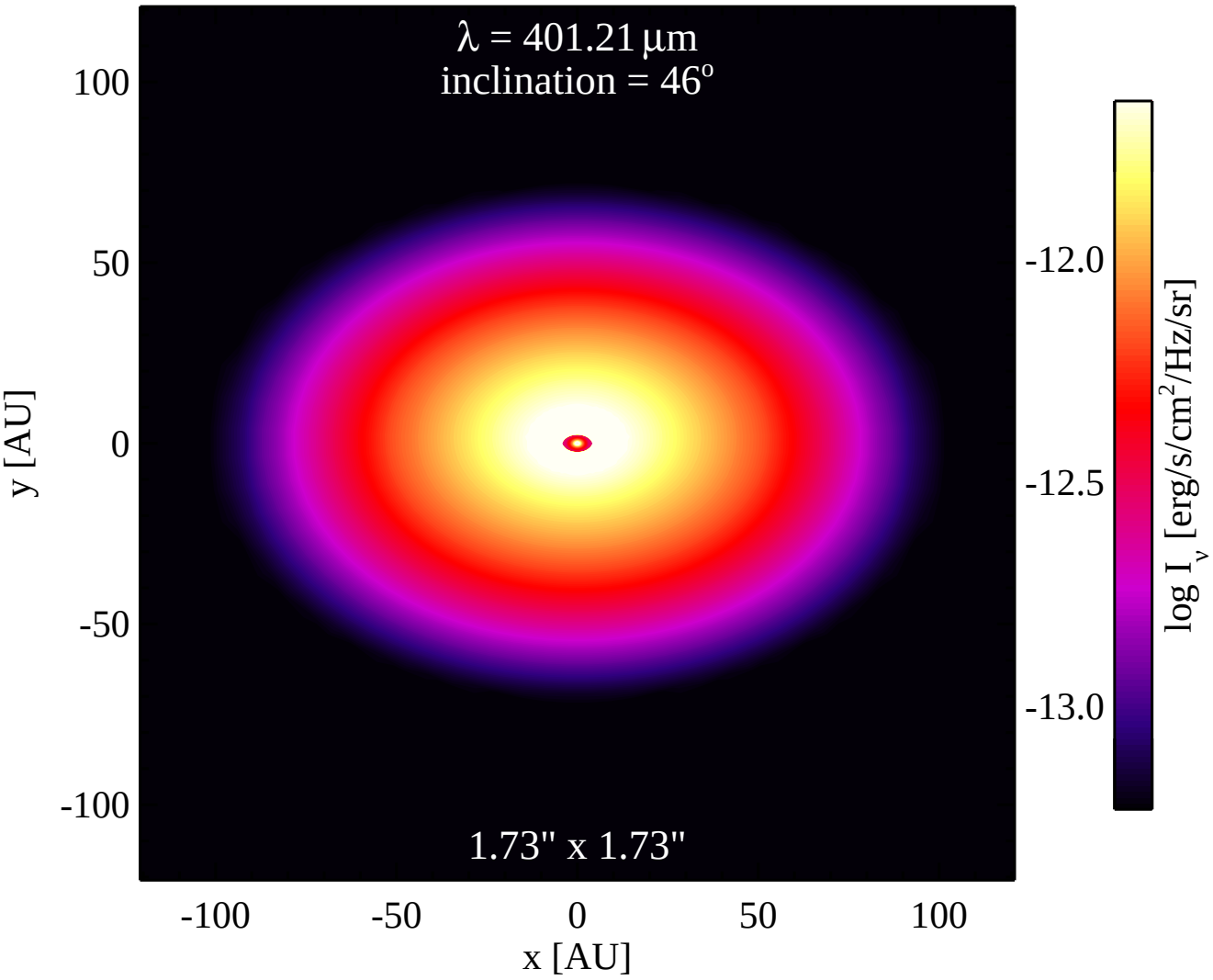

λ = 125.13 μm
inclination = 46°
1.63" x 1.63"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

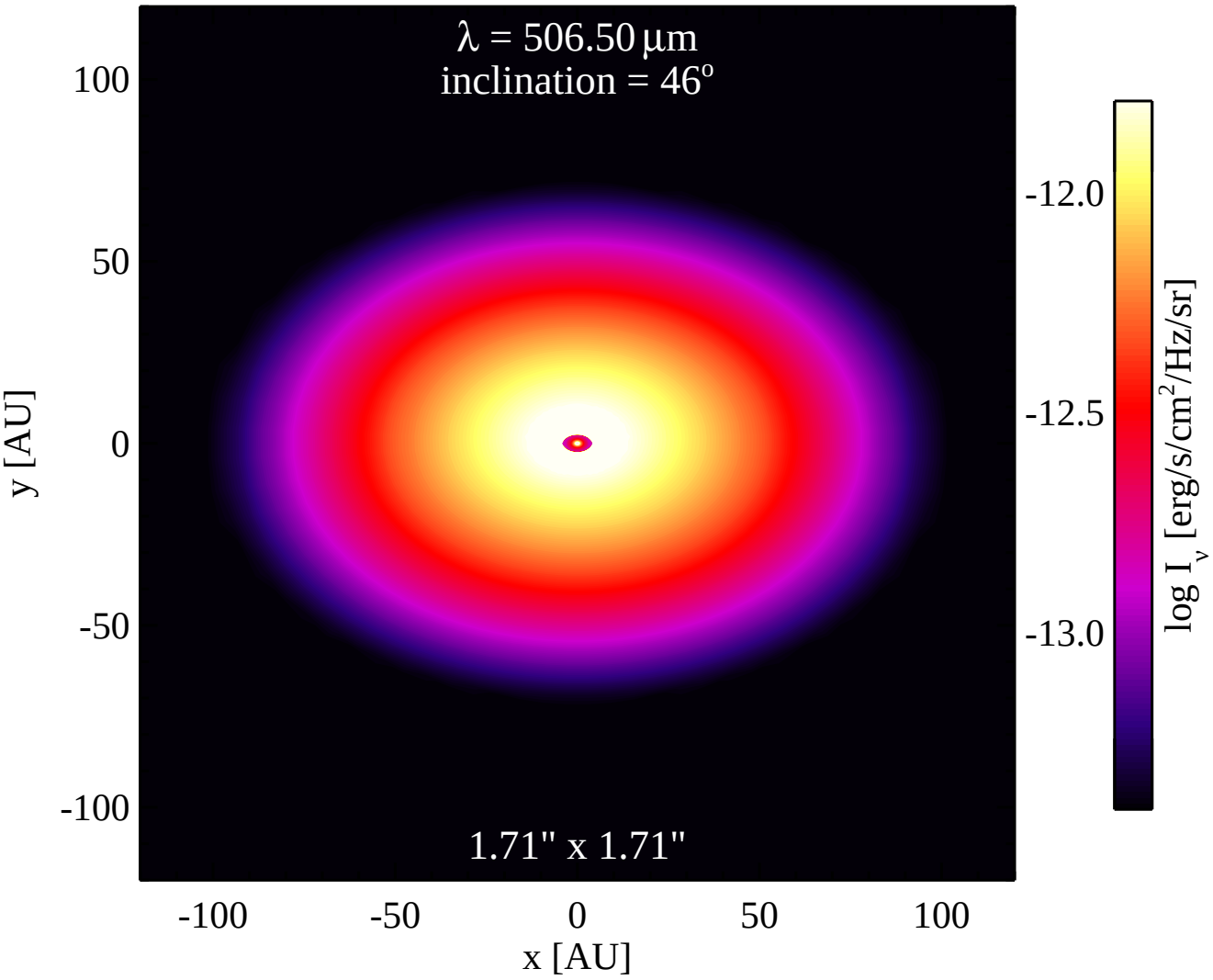

λ = 157.96 μm
inclination = 46°
1.68" x 1.68"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

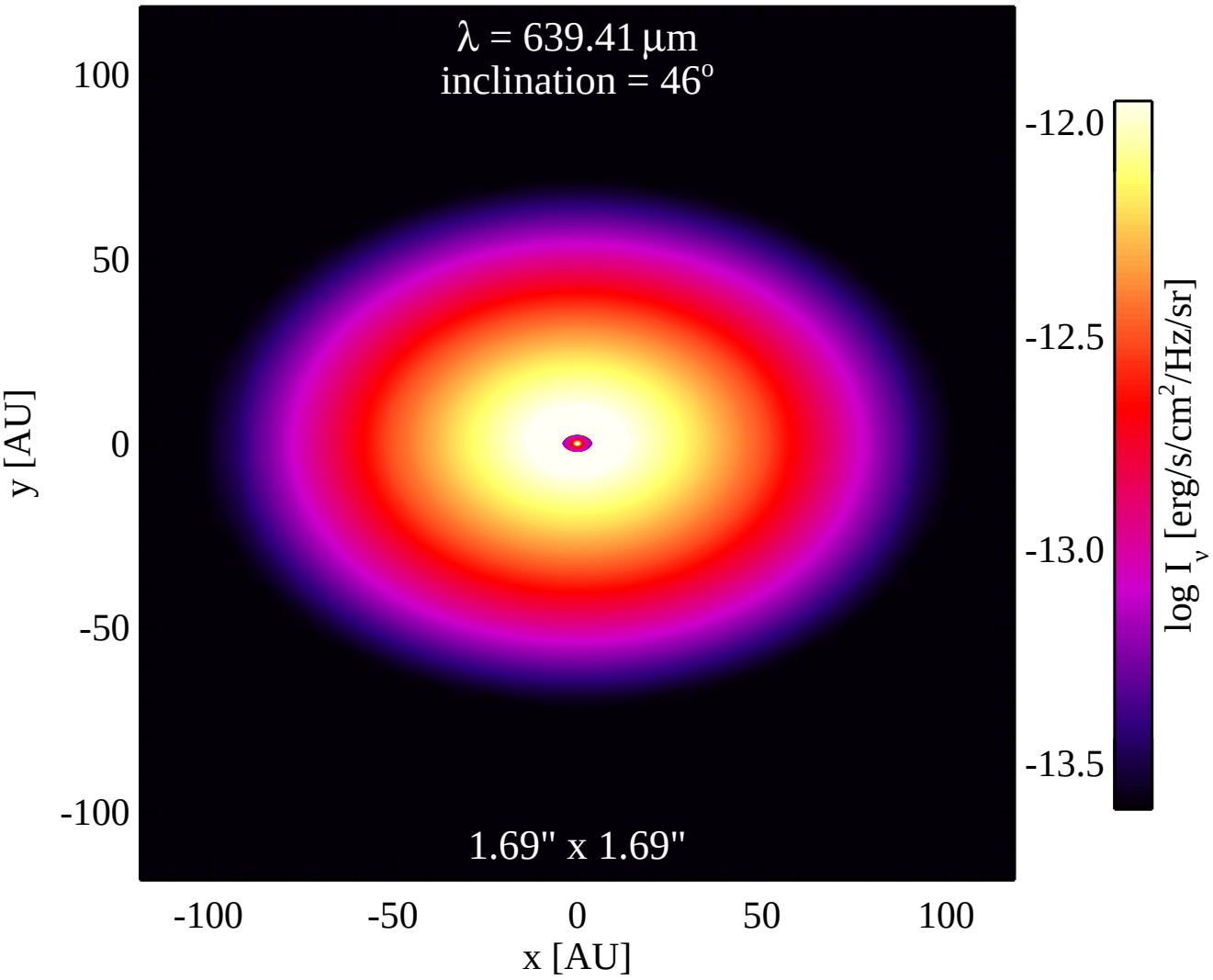

λ = 199.41 μm
inclination = 46°
1.72" x 1.72"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

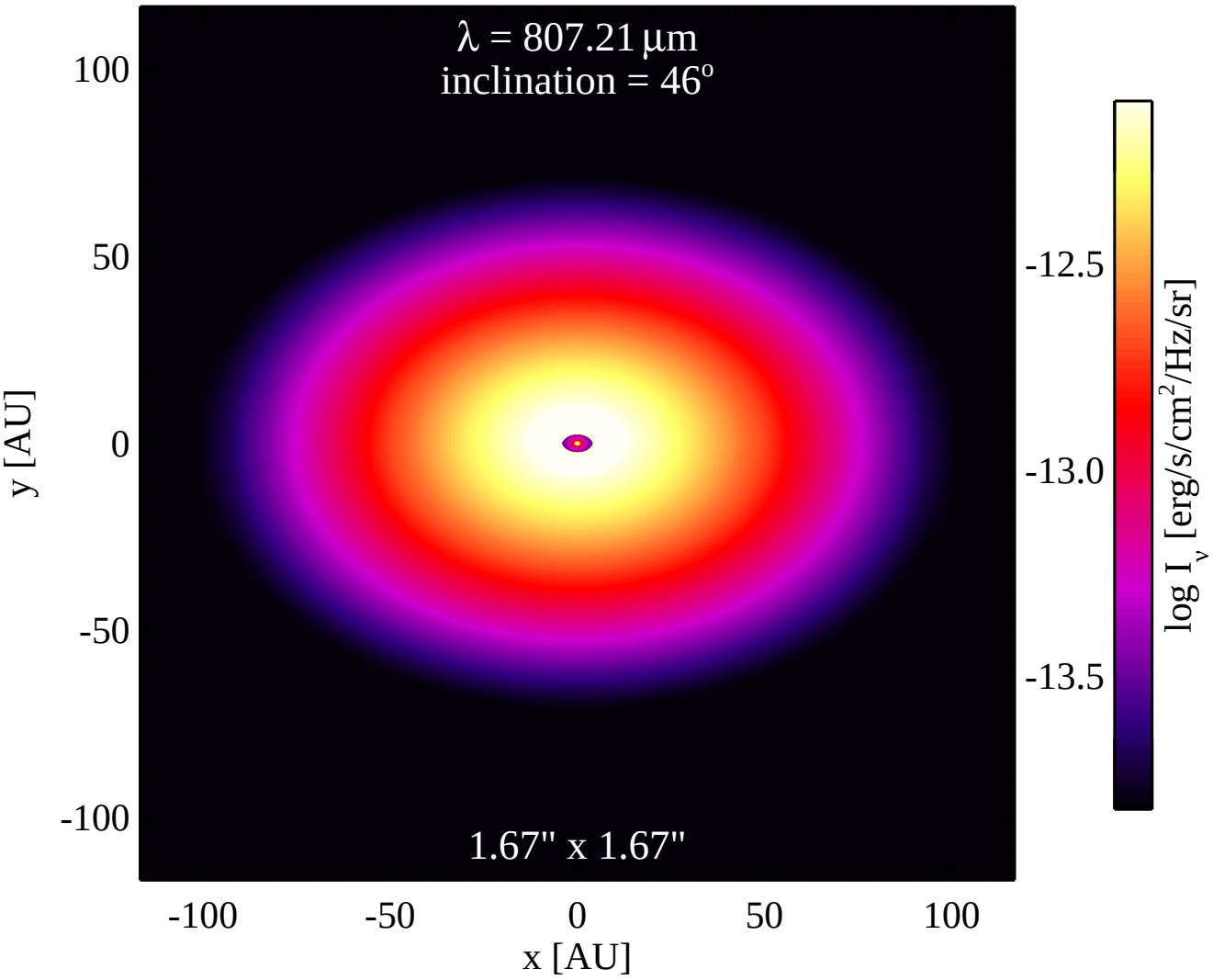

λ = 251.75 μm
inclination = 46°
1.73" x 1.73"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

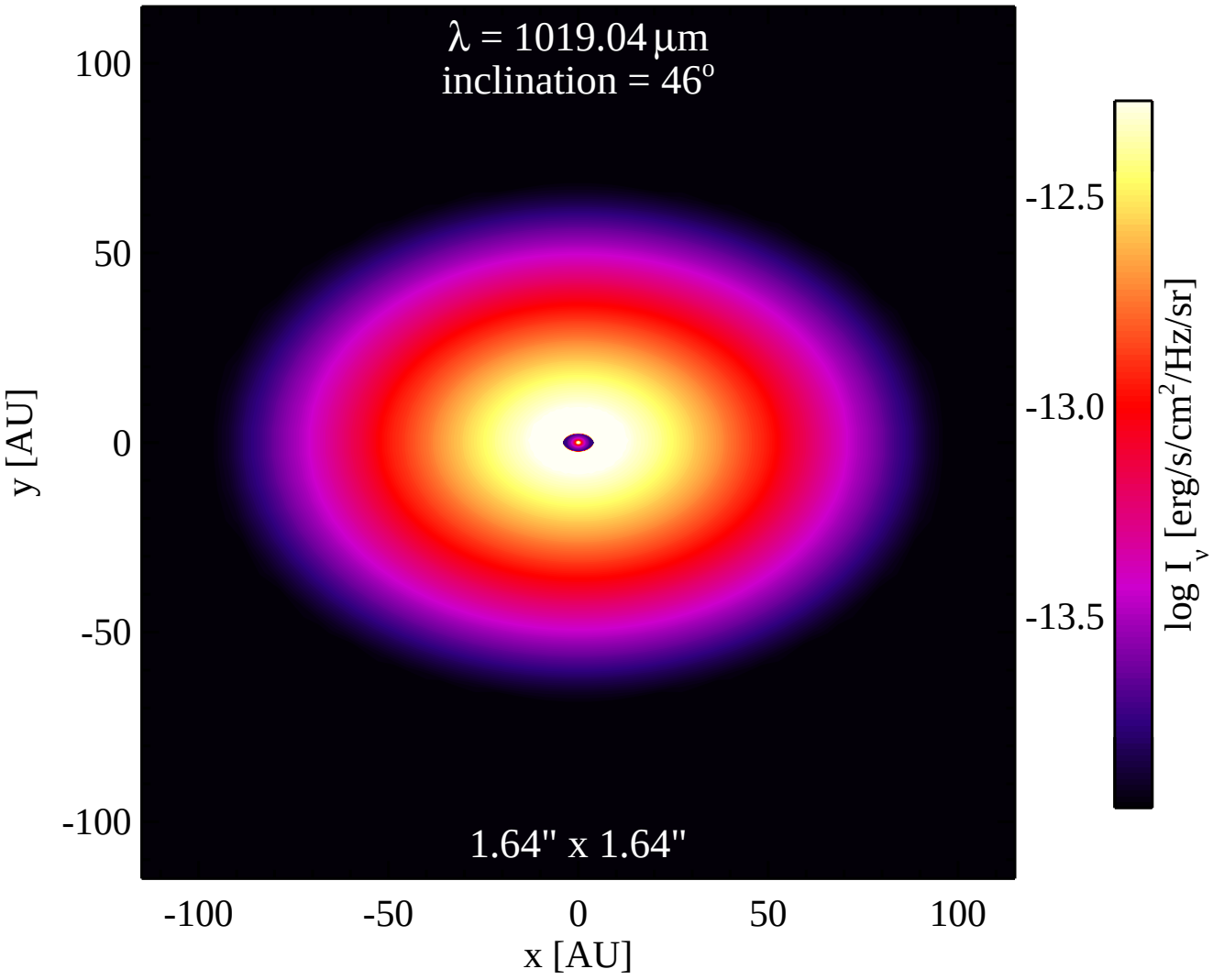

λ = 317.81 μm
inclination = 46°
1.74" x 1.74"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

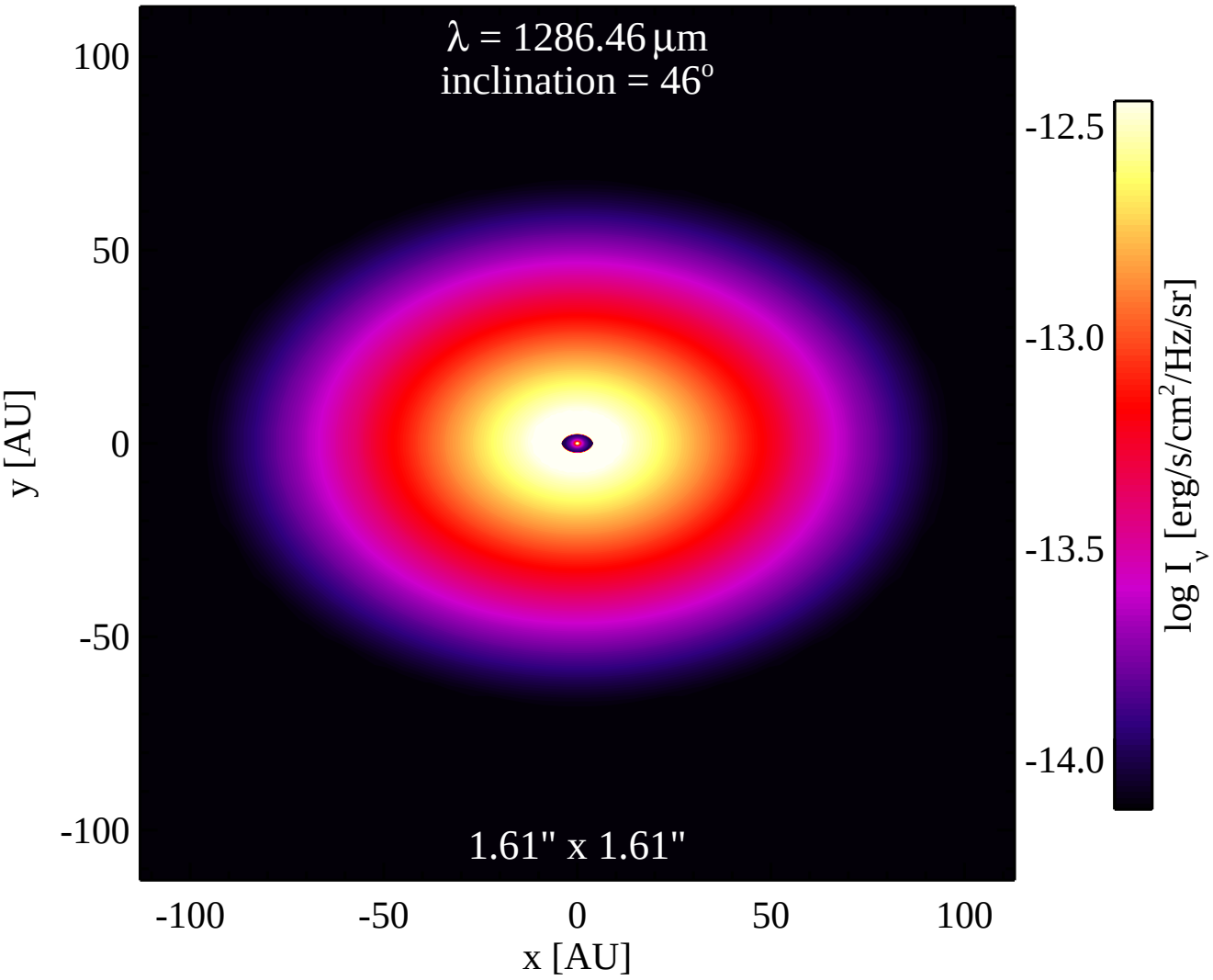

λ = 401.21 μm
inclination = 46°
1.73" x 1.73"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

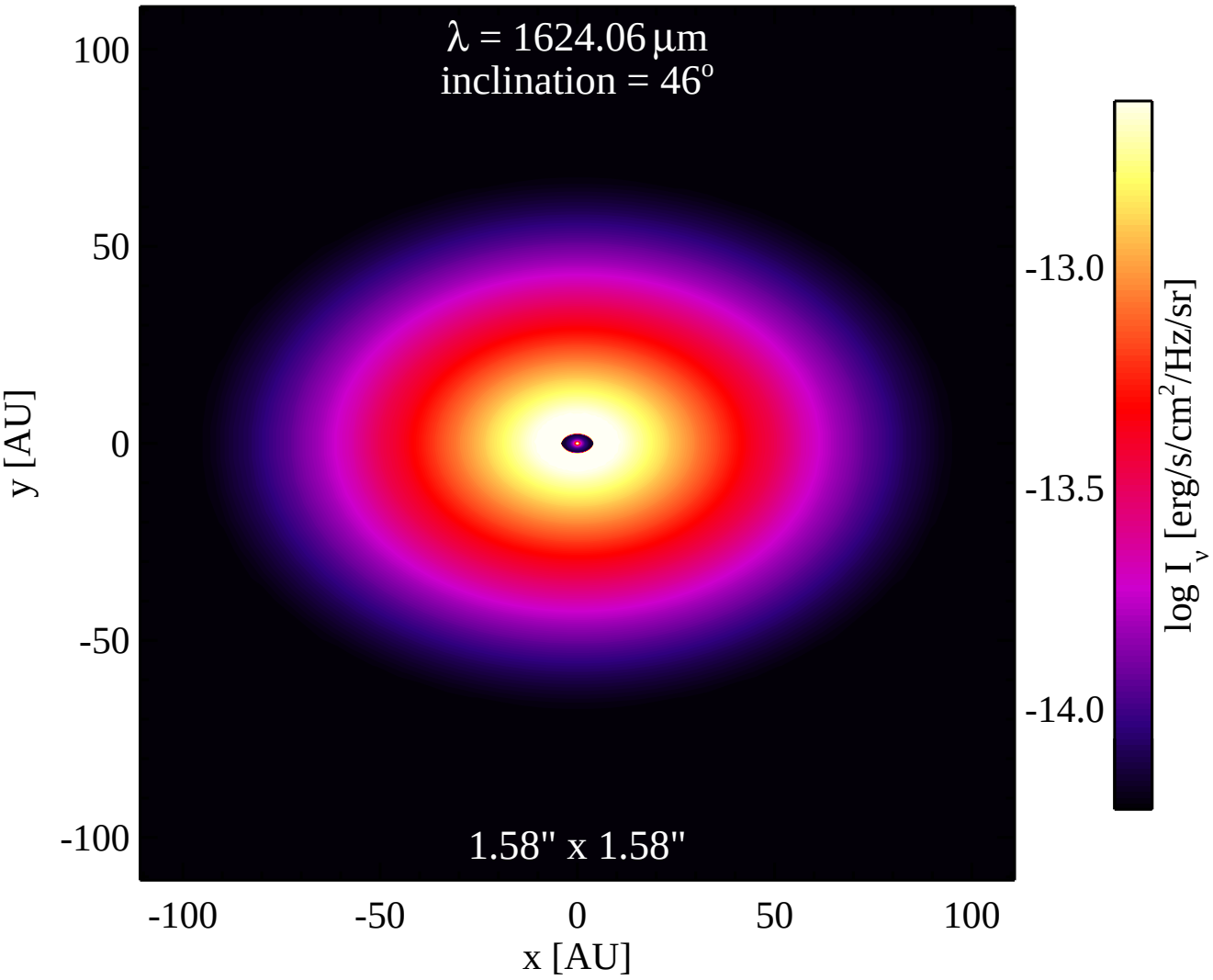

λ = 506.50 μm
inclination = 46°
1.71" x 1.71"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

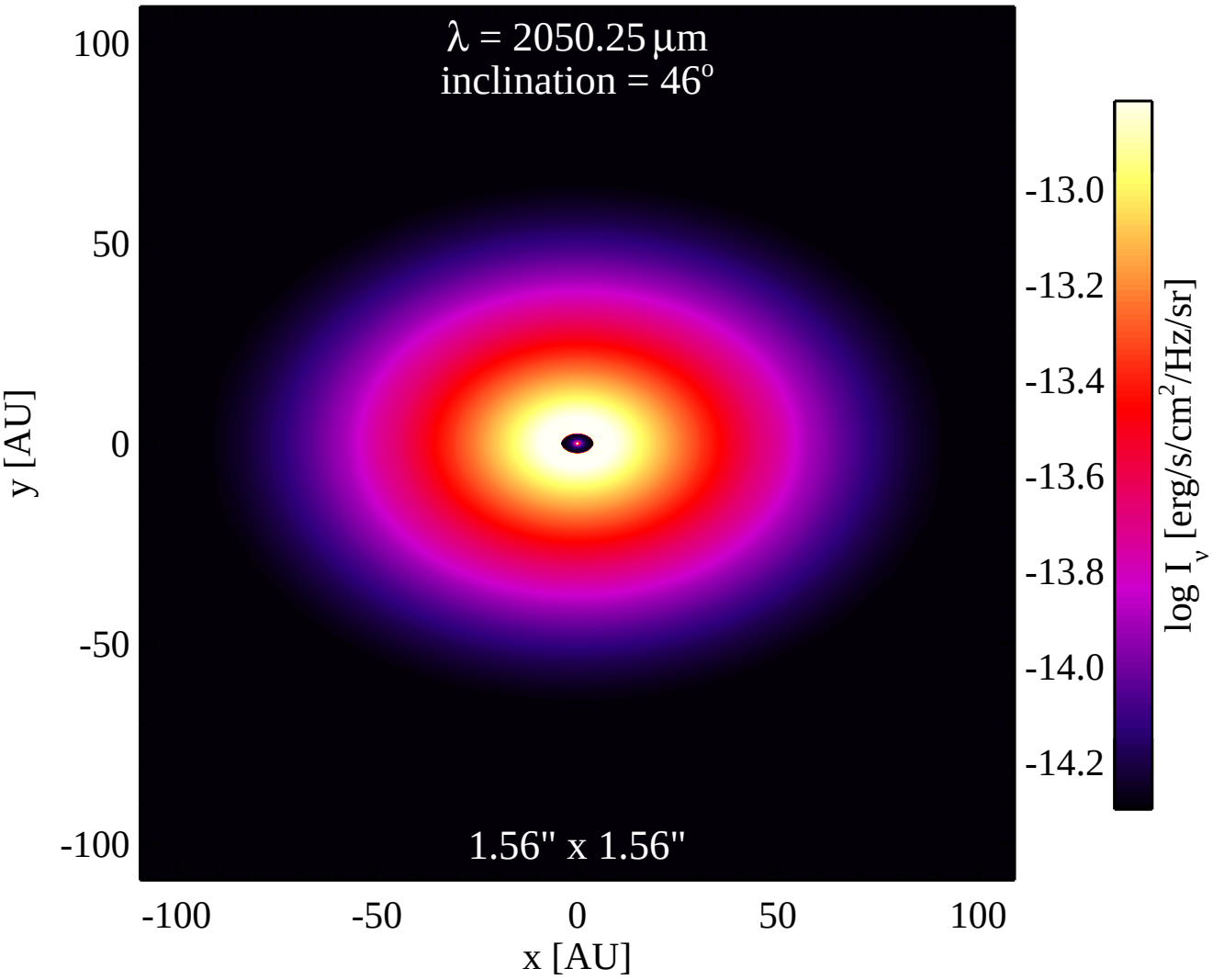

λ = 639.41 μm
inclination = 46°
1.69" x 1.69"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

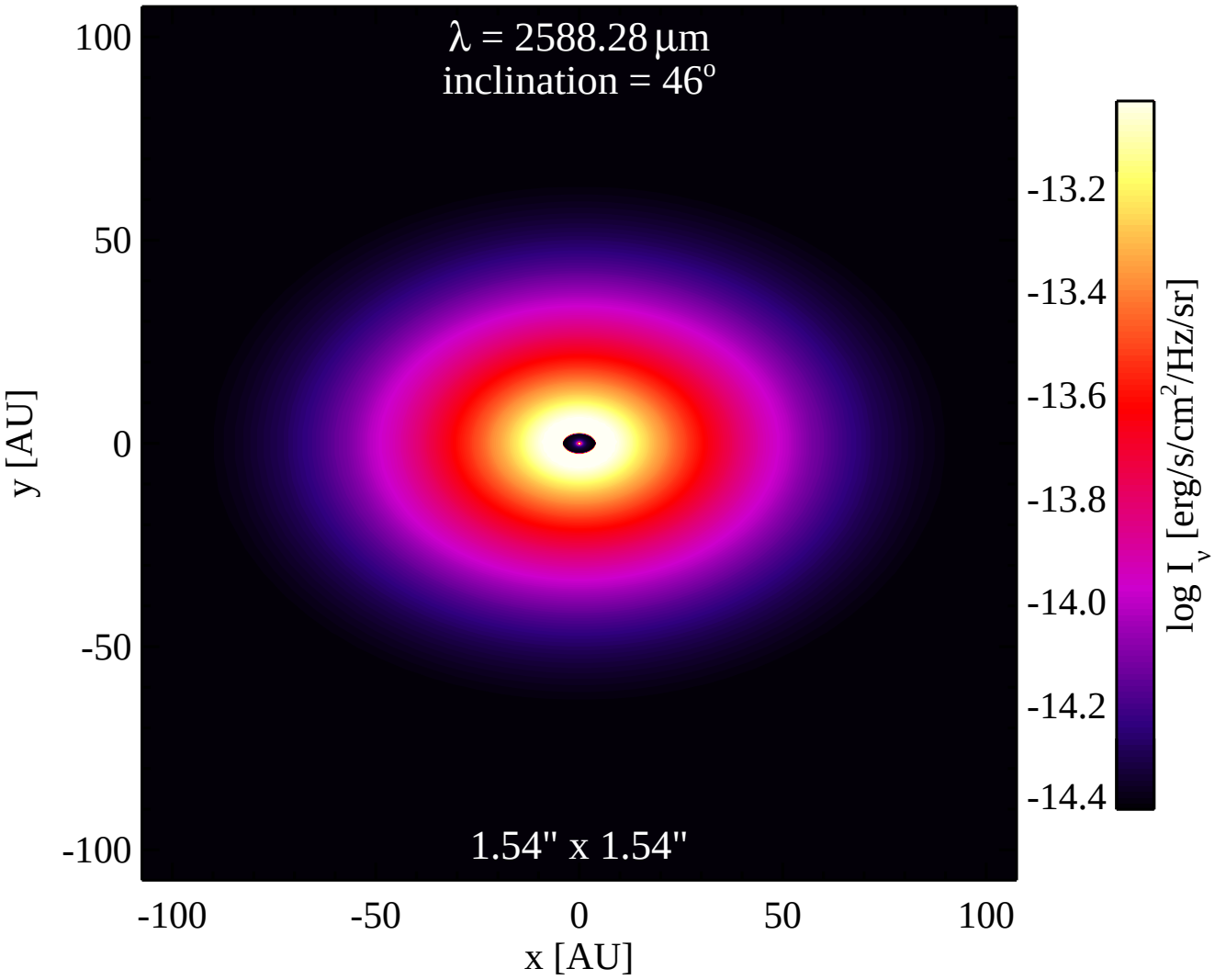

λ = 807.21 μm
inclination = 46°
1.67" x 1.67"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

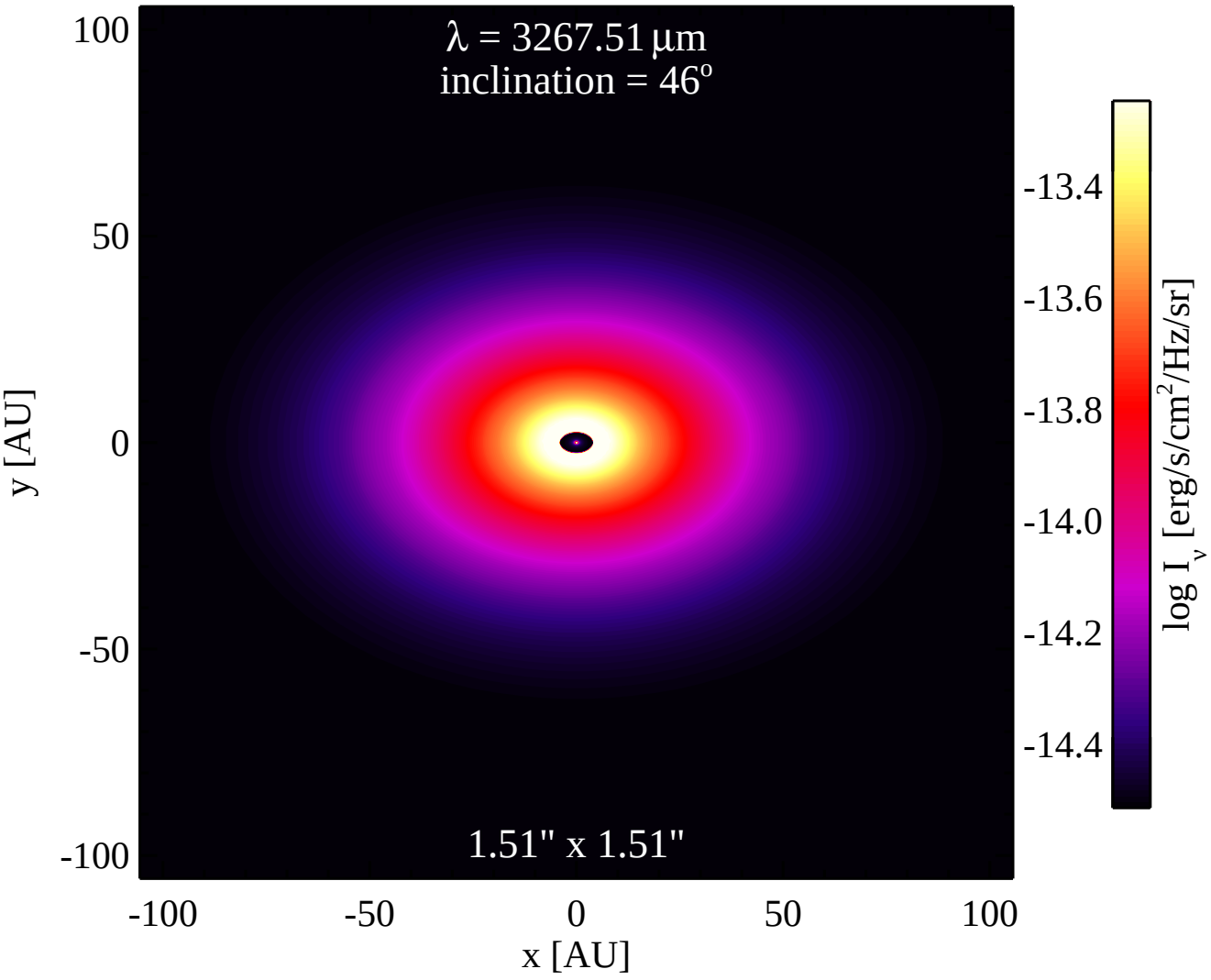

λ = 1019.04 μm
inclination = 46°
1.64" x 1.64"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

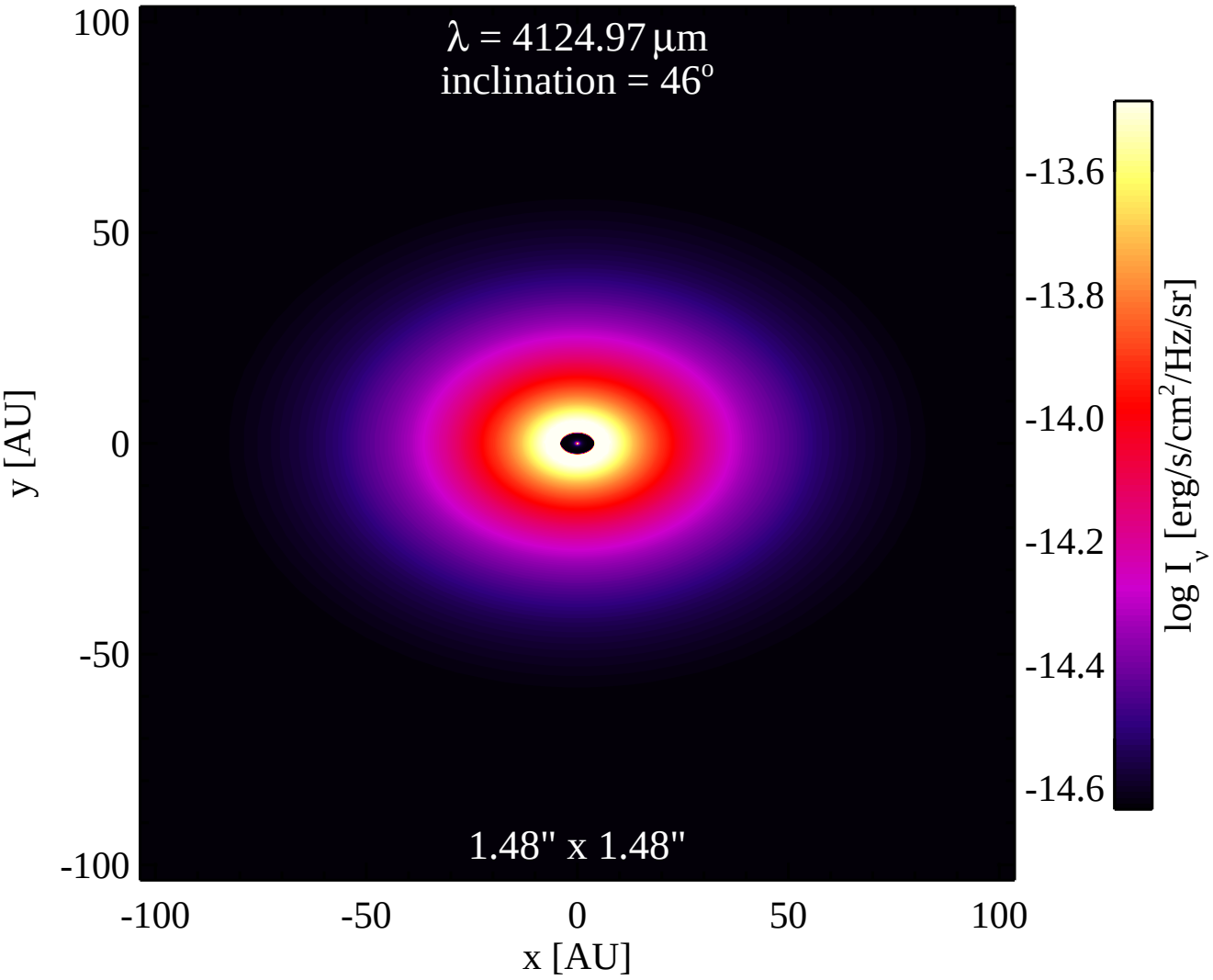

λ = 1286.46 μm
inclination = 46°
1.61" x 1.61"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 1624.06 μm
inclination = 46°
1.58" x 1.58"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 2050.25 μm
inclination = 46°
1.56" x 1.56"
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 = 2588.28 μm
inclination = 46°
1.54" x 1.54"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 3267.51 μm
inclination = 46°
1.51" x 1.51"
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 = 4124.97 μm
inclination = 46°
1.48" x 1.48"
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]