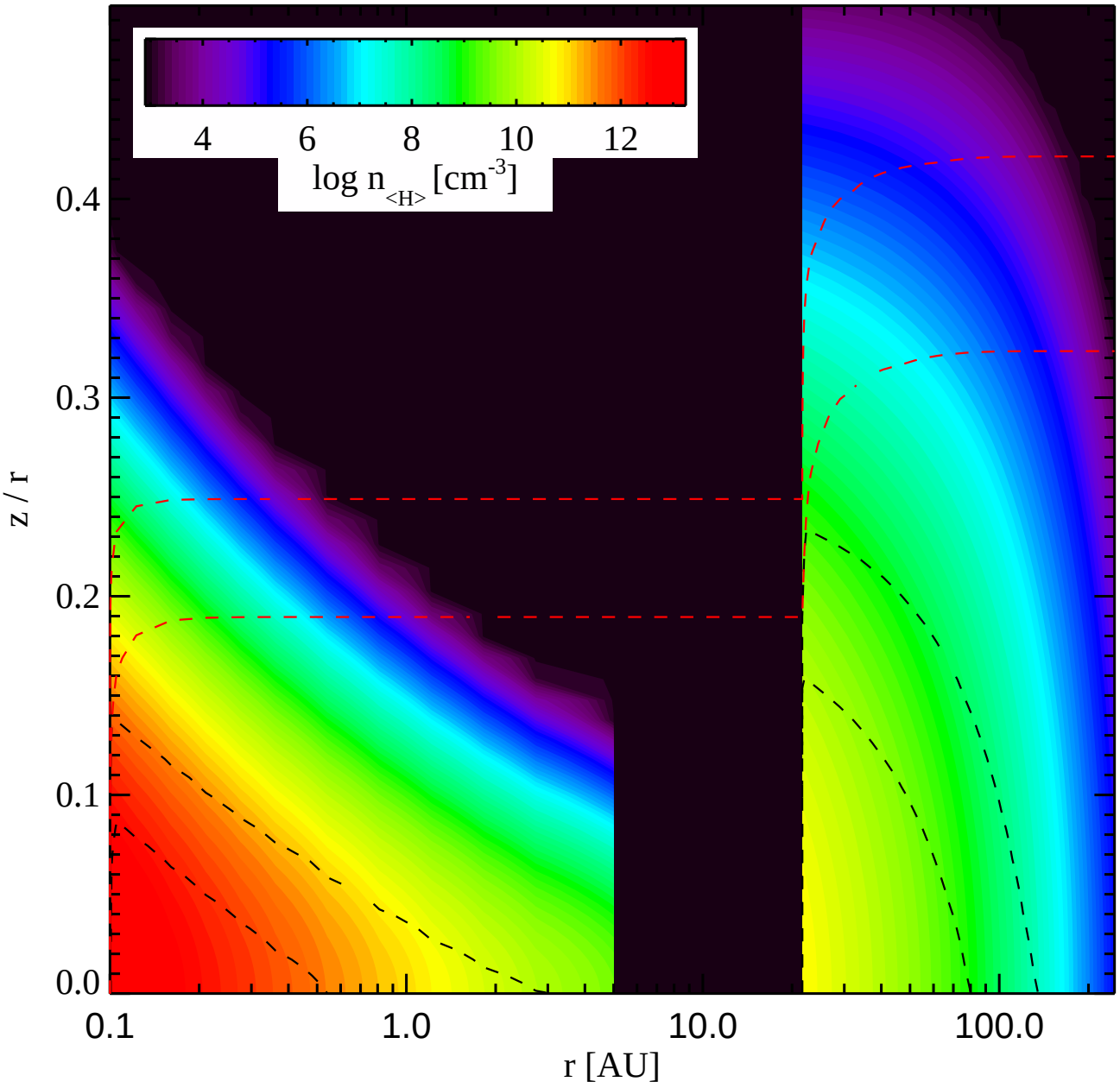
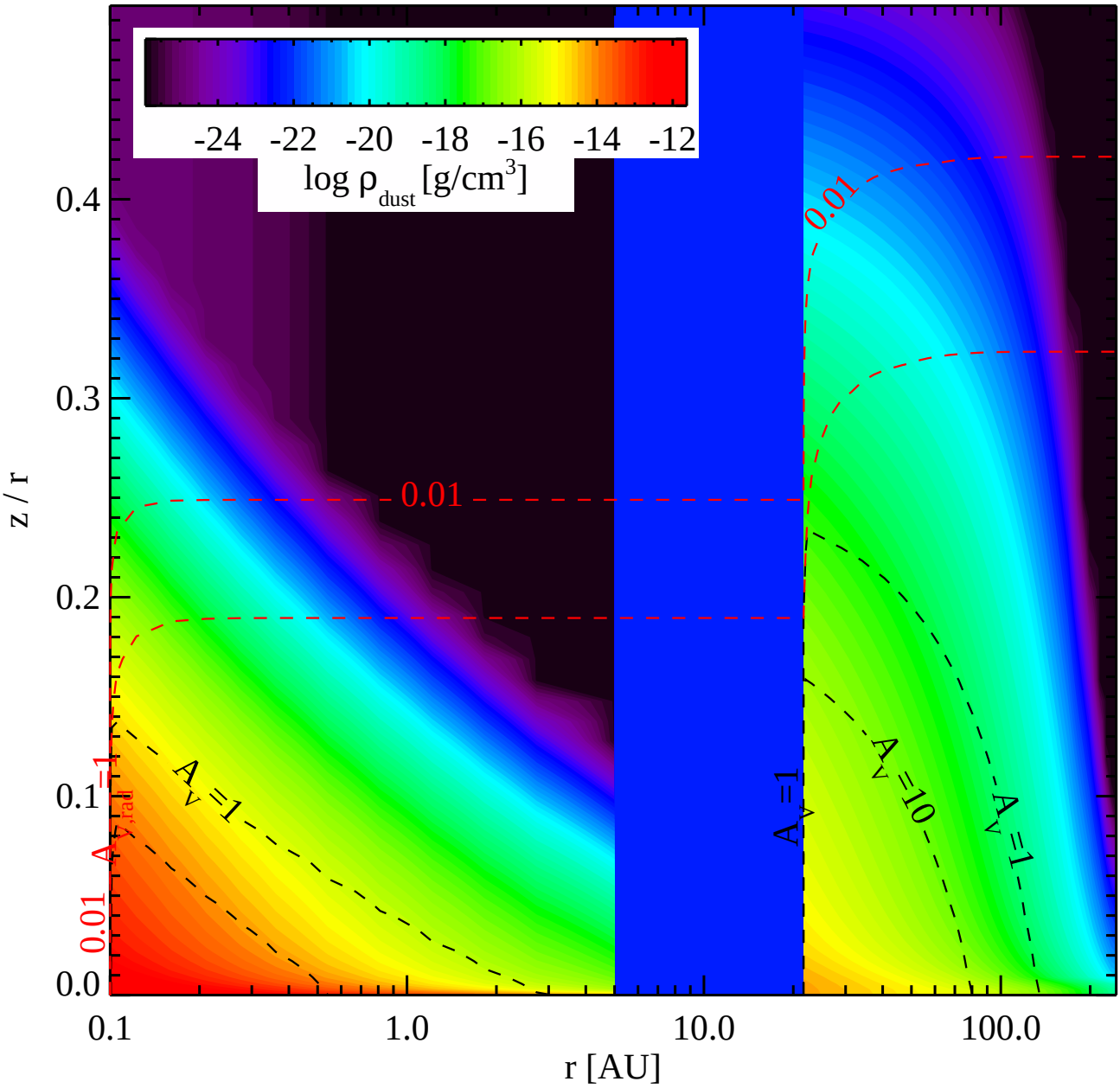
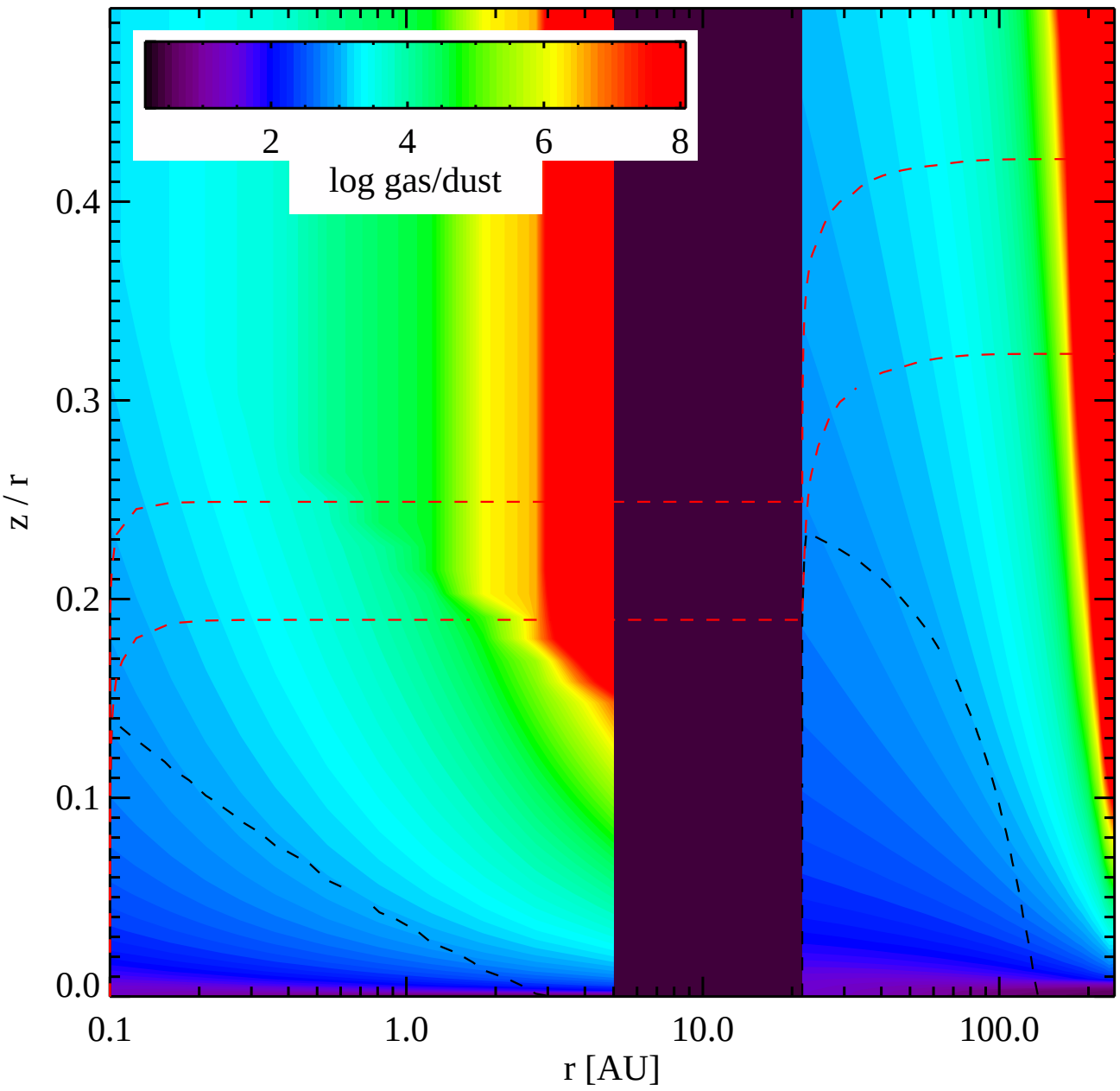
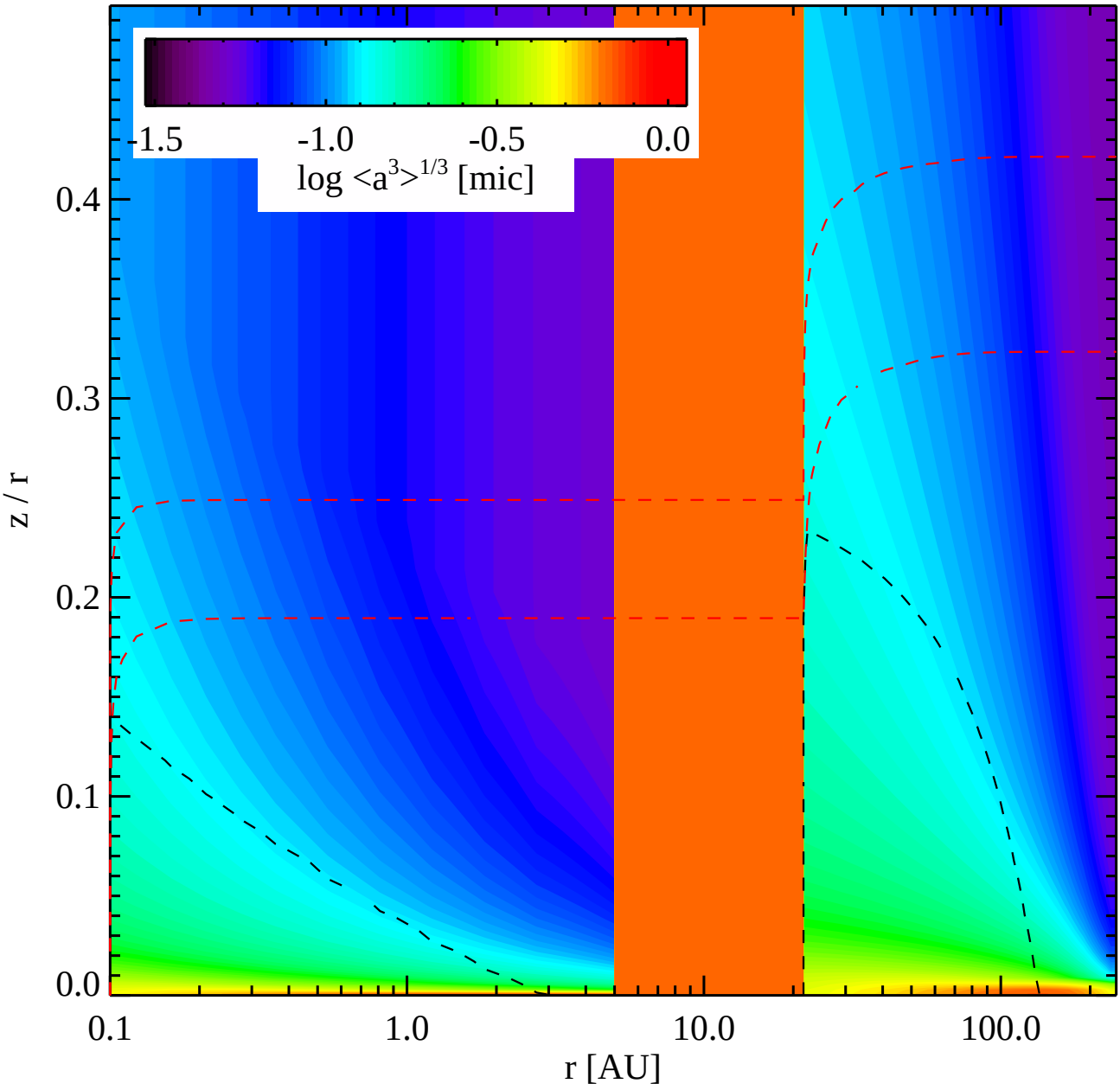
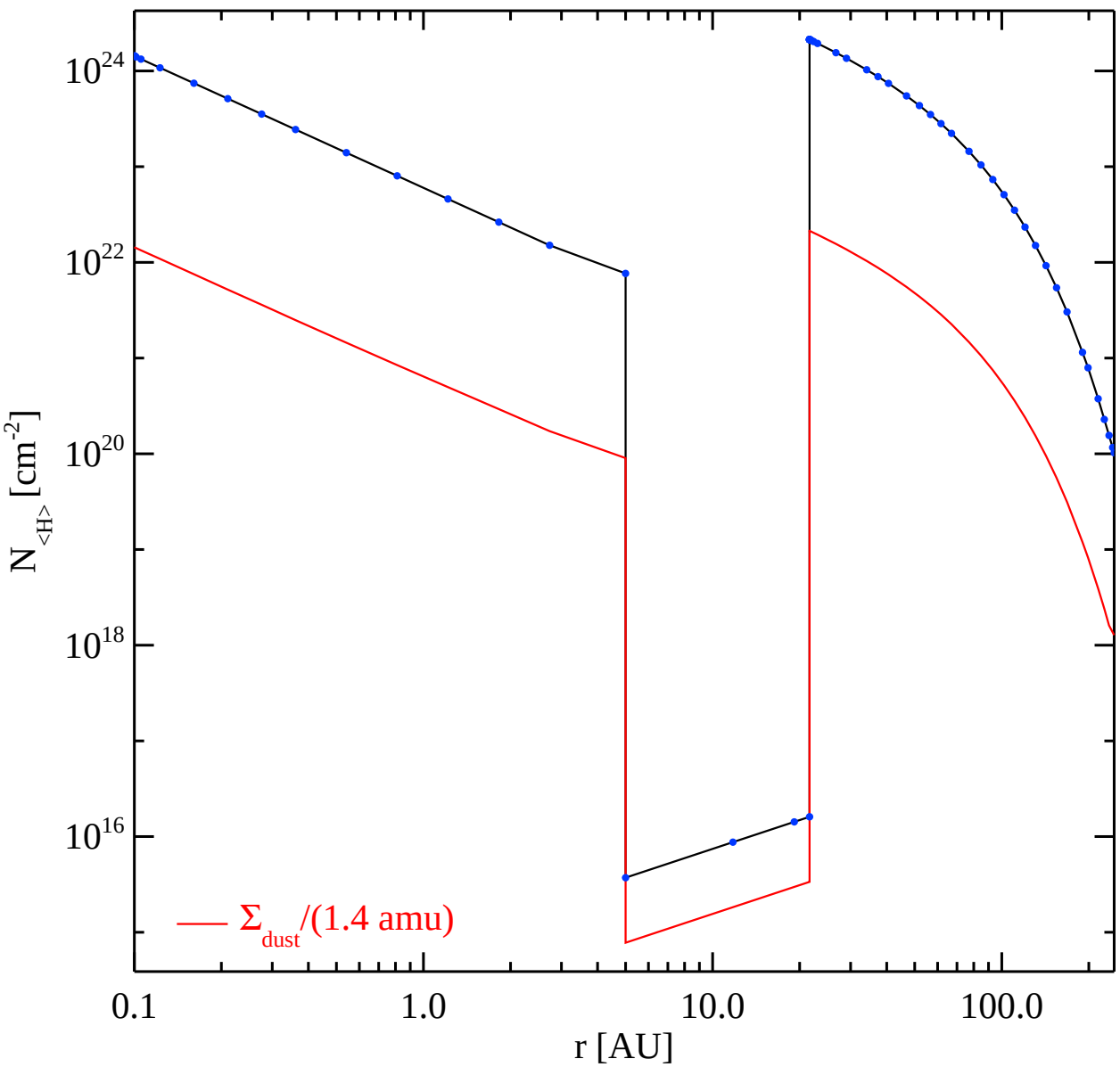
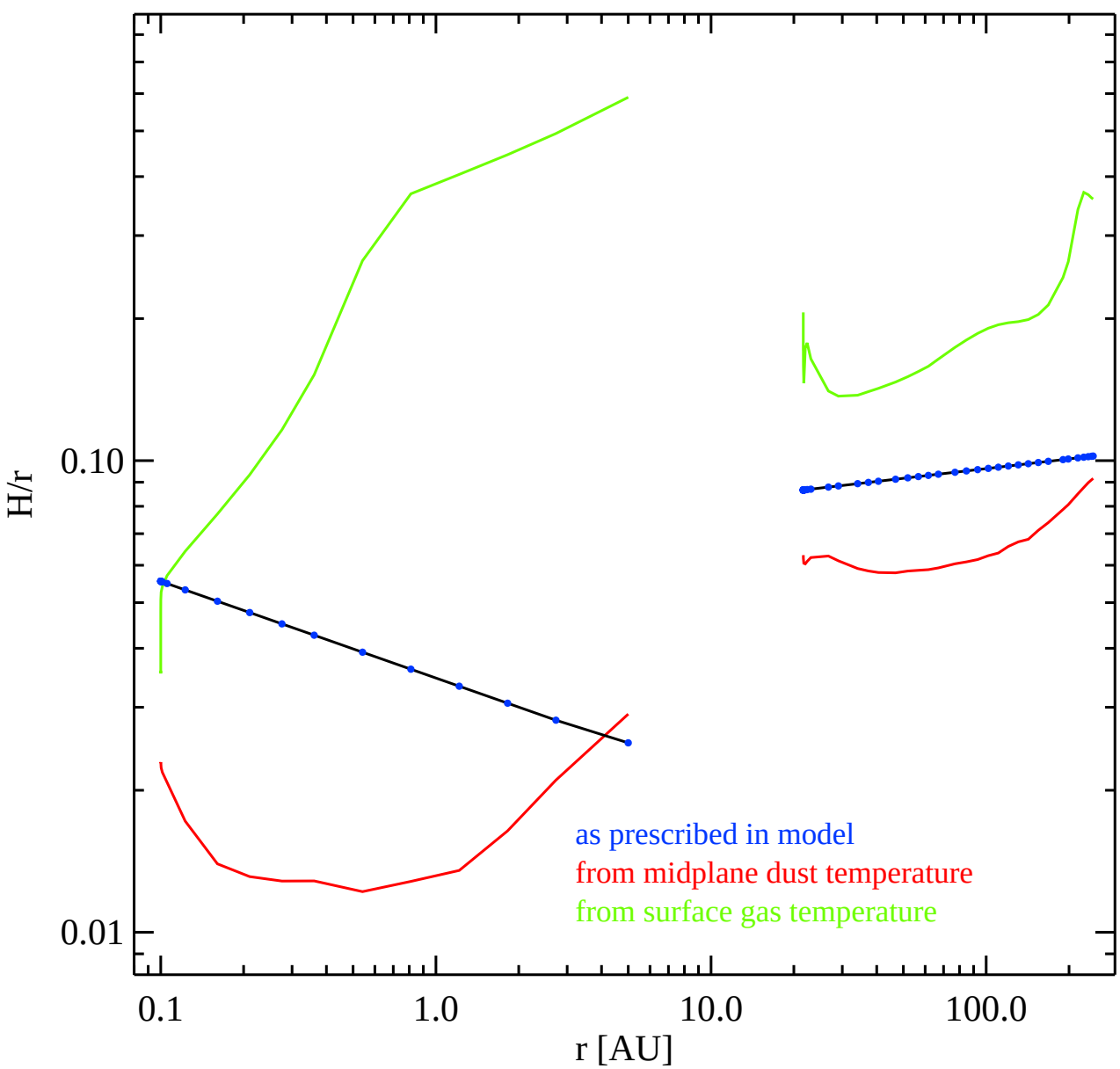

4
6
8
10
12
log n<H> [cm-3]
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

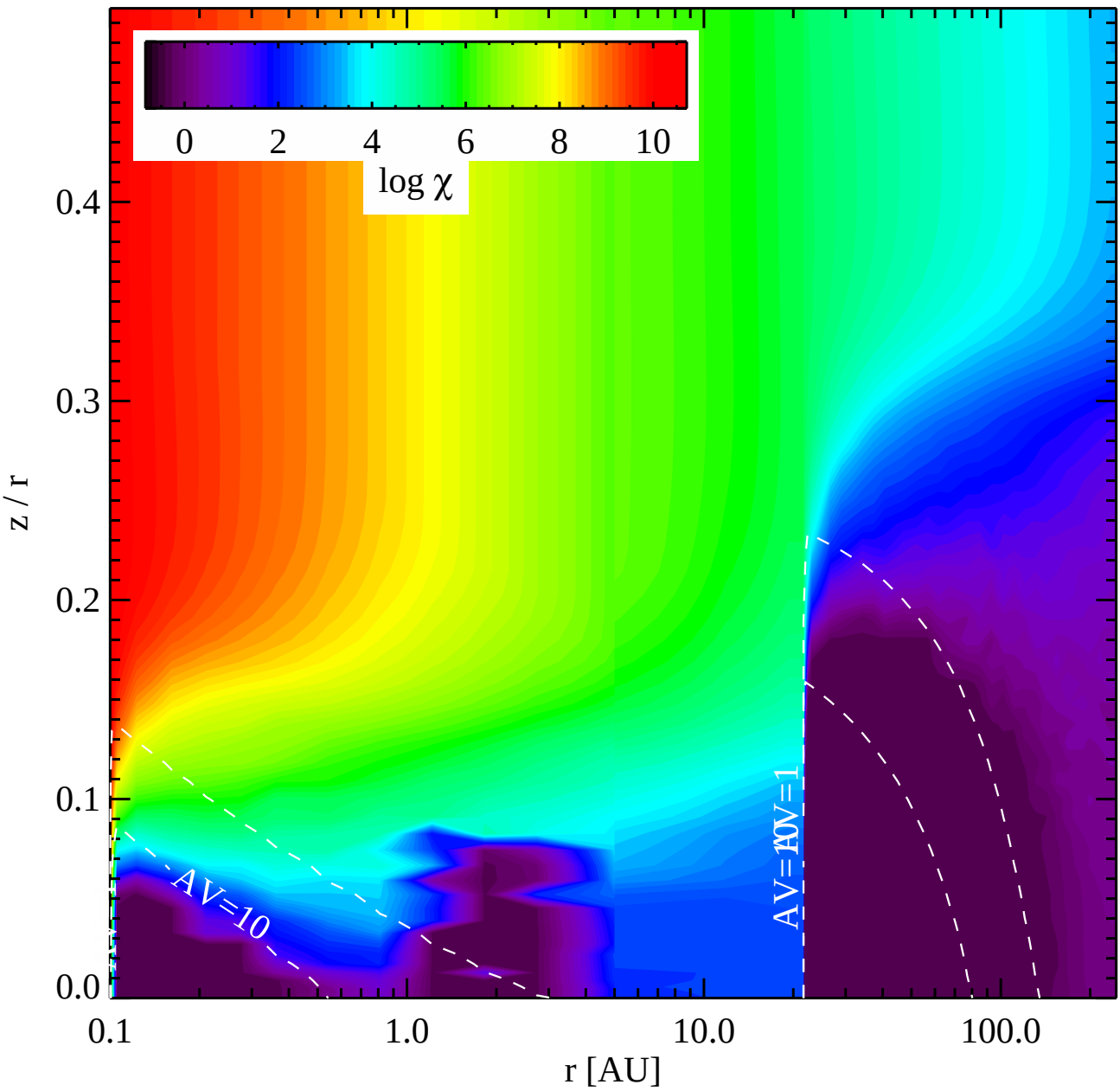

-24
-22
-20
-18
-16
-14
-12
log ρ dust [g/cm3]
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
0.01
0.01
0.01
A v,rad =1
A v =1
A v =1
A v =10
A v =1

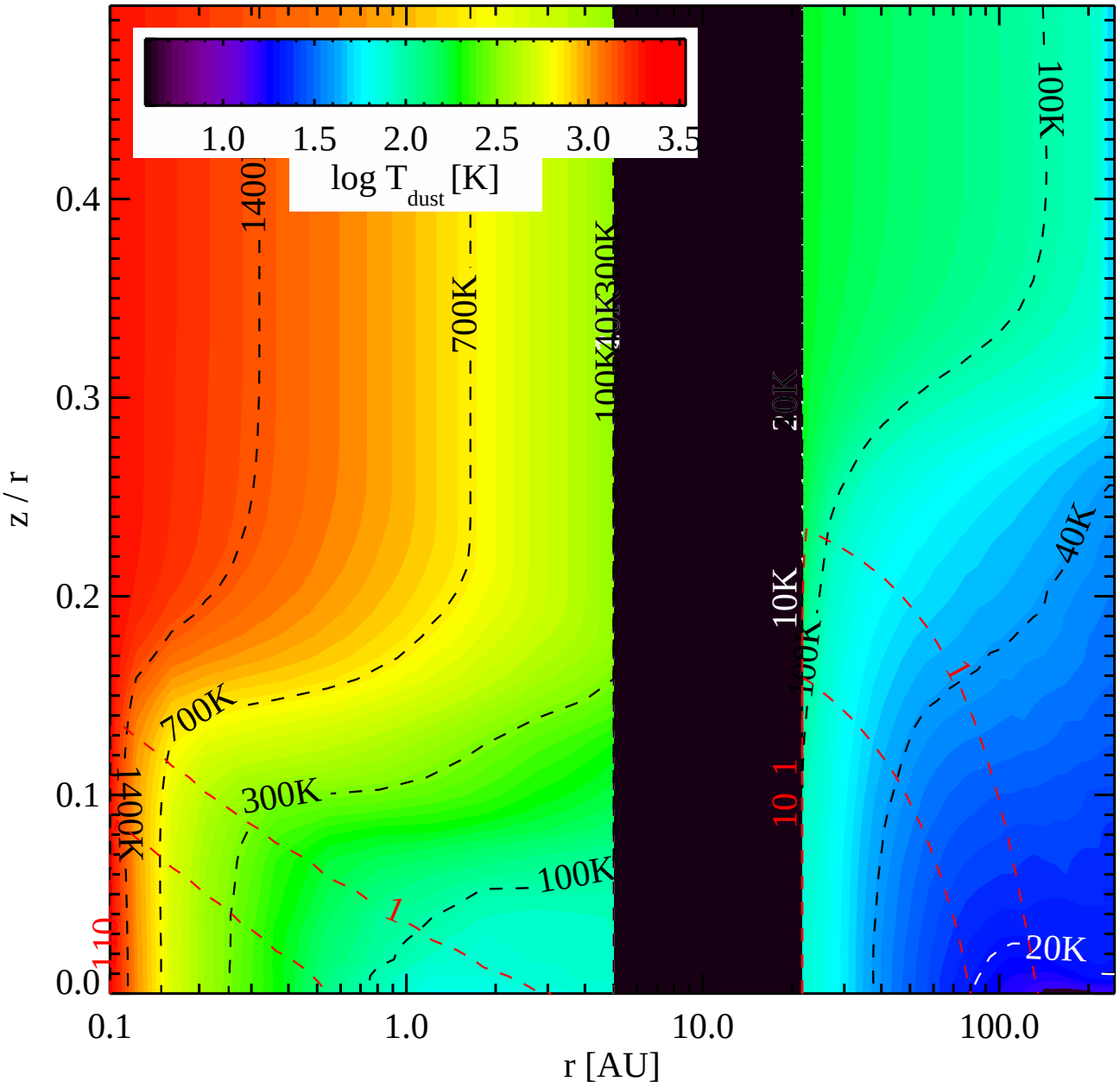

2
4
6
8
log gas/dust
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]


-1.5
-1.0
-0.5
0.0
log <a^3>^1/3 [mic]
0.4
0.3
0.2
0.1
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

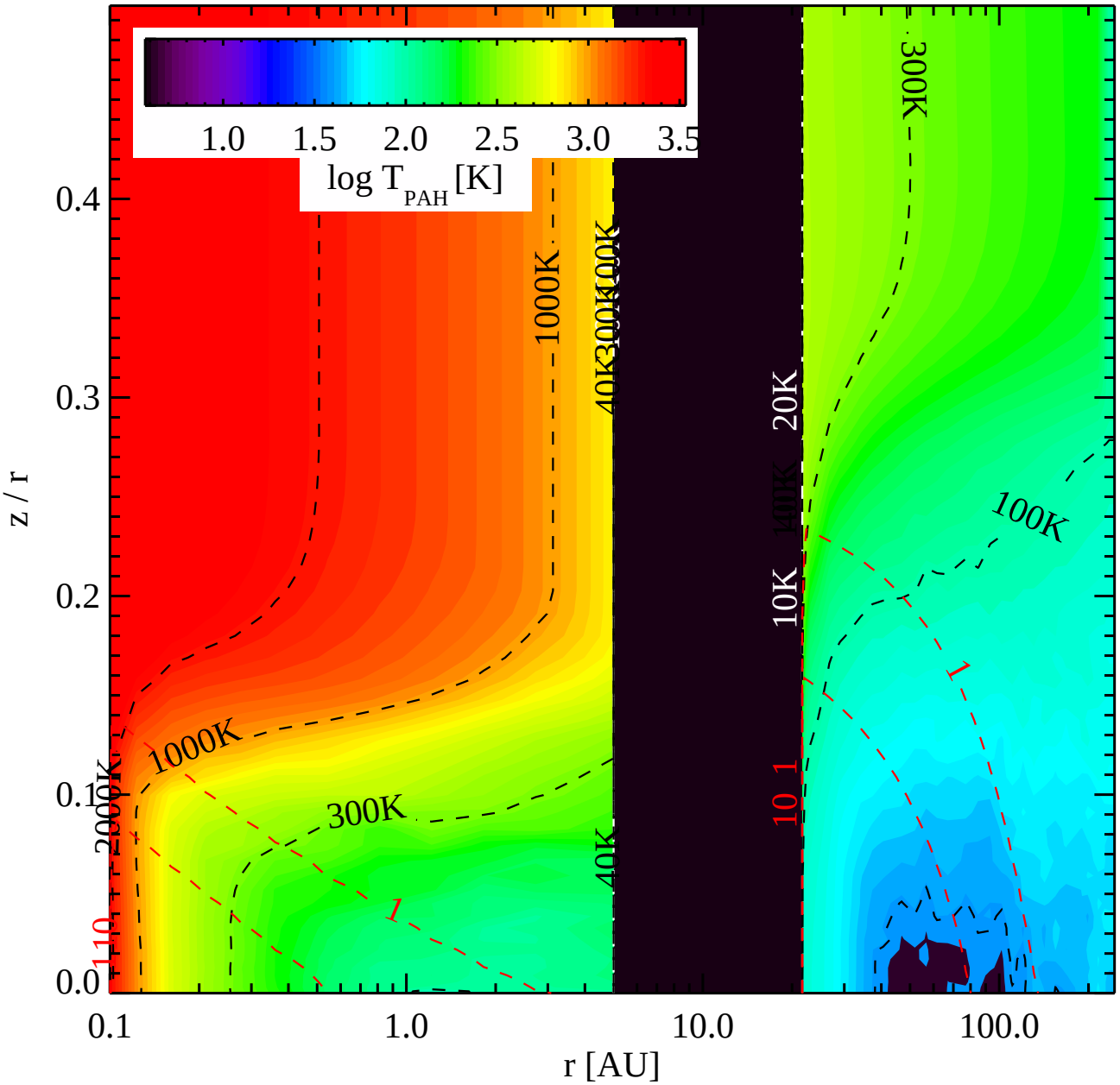

10^{24}
10^{22}
10^{20}
10^{18}
10^{16}
$N_{<H>}$ [cm^{-2}]
Σ_{dust}/(1.4 amu)
0.1
1.0
10.0
100.0
r [AU]


H/r
0.10
0.01
0.1
1.0
10.0
100.0
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

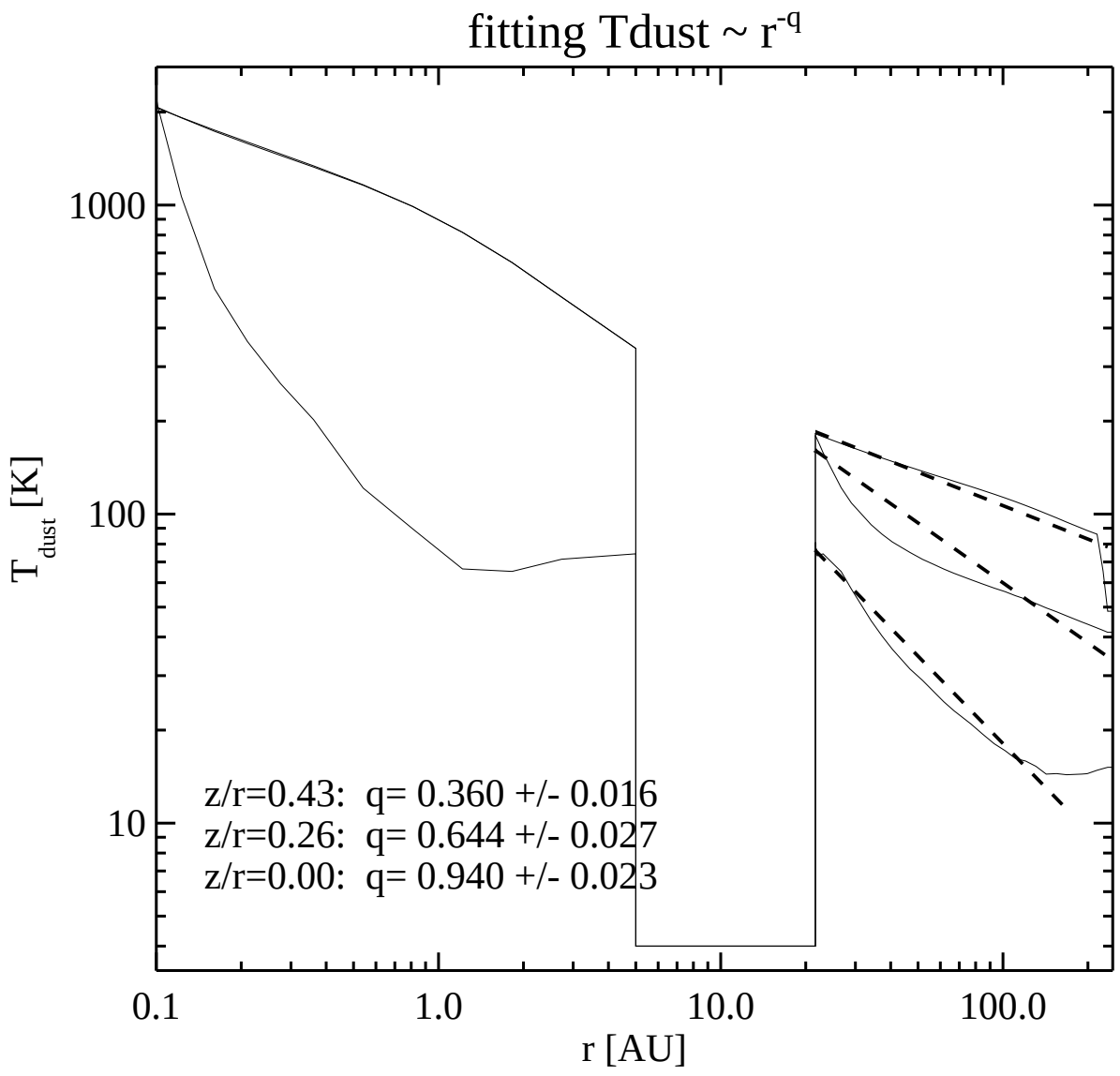

0
2
4
6
8
10
log χ
0.4
0.3
0.2
0.1
0.0
z / r
AV=10
AV=1
0.1
1.0
10.0
100.0
r [AU]

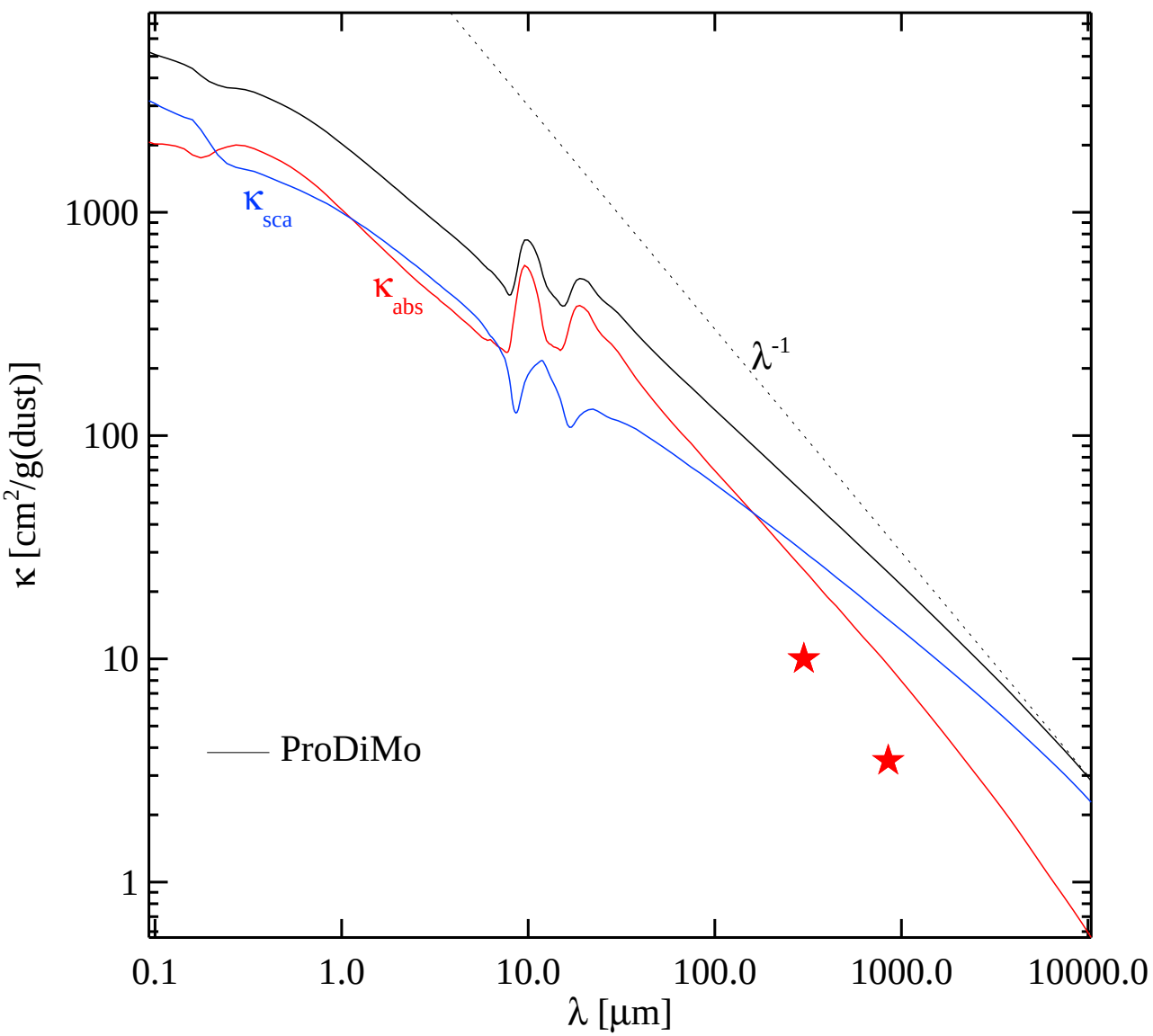


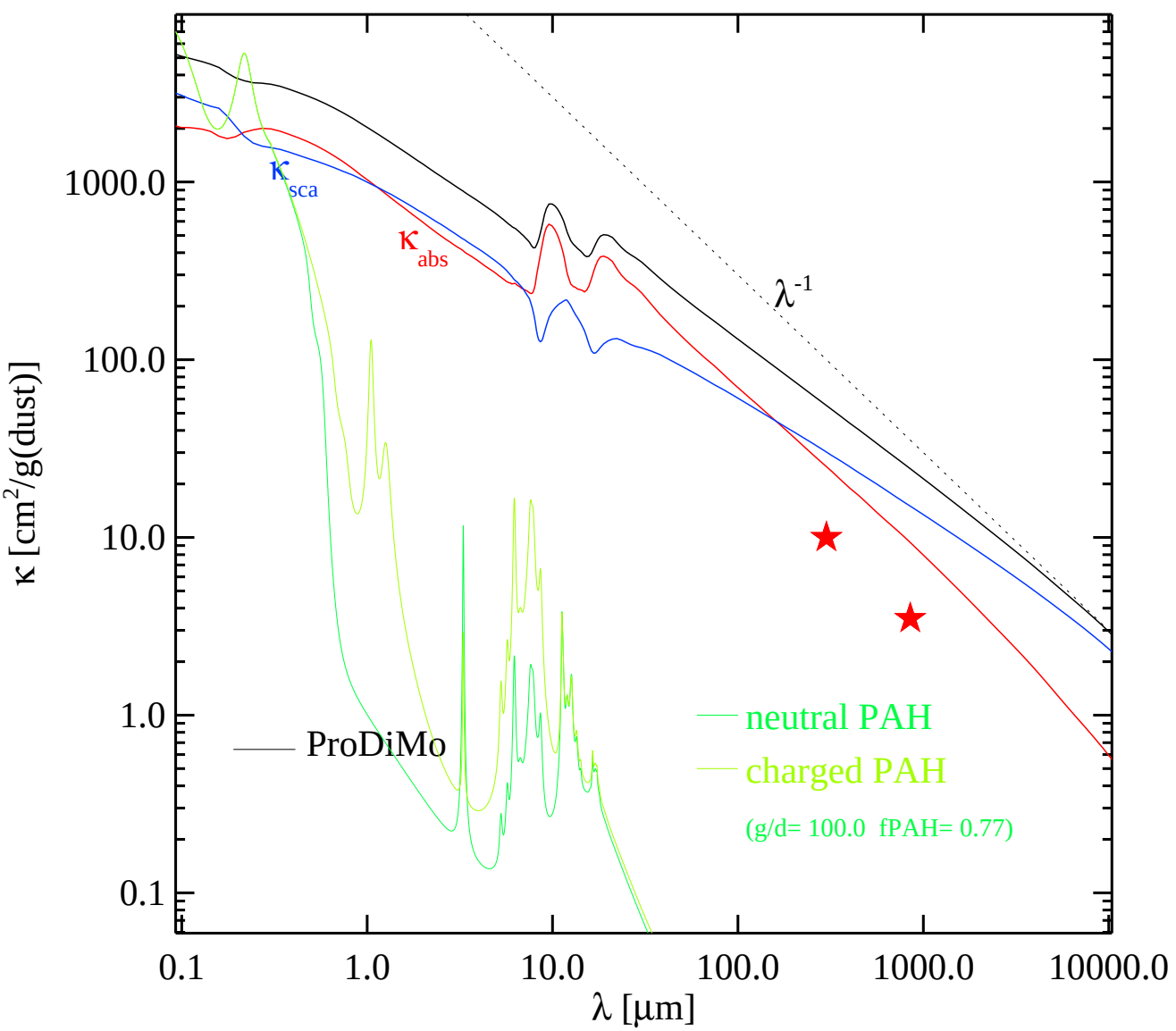
1.0
1.5
2.0
2.5
3.0
3.5
log T dust [K]
z / r
r [AU]
0.0
0.1
0.2
0.3
0.4
0.1
1.0
10.0
100.0
1400K
700K
300K
100K
40K
20K
10K
1
10

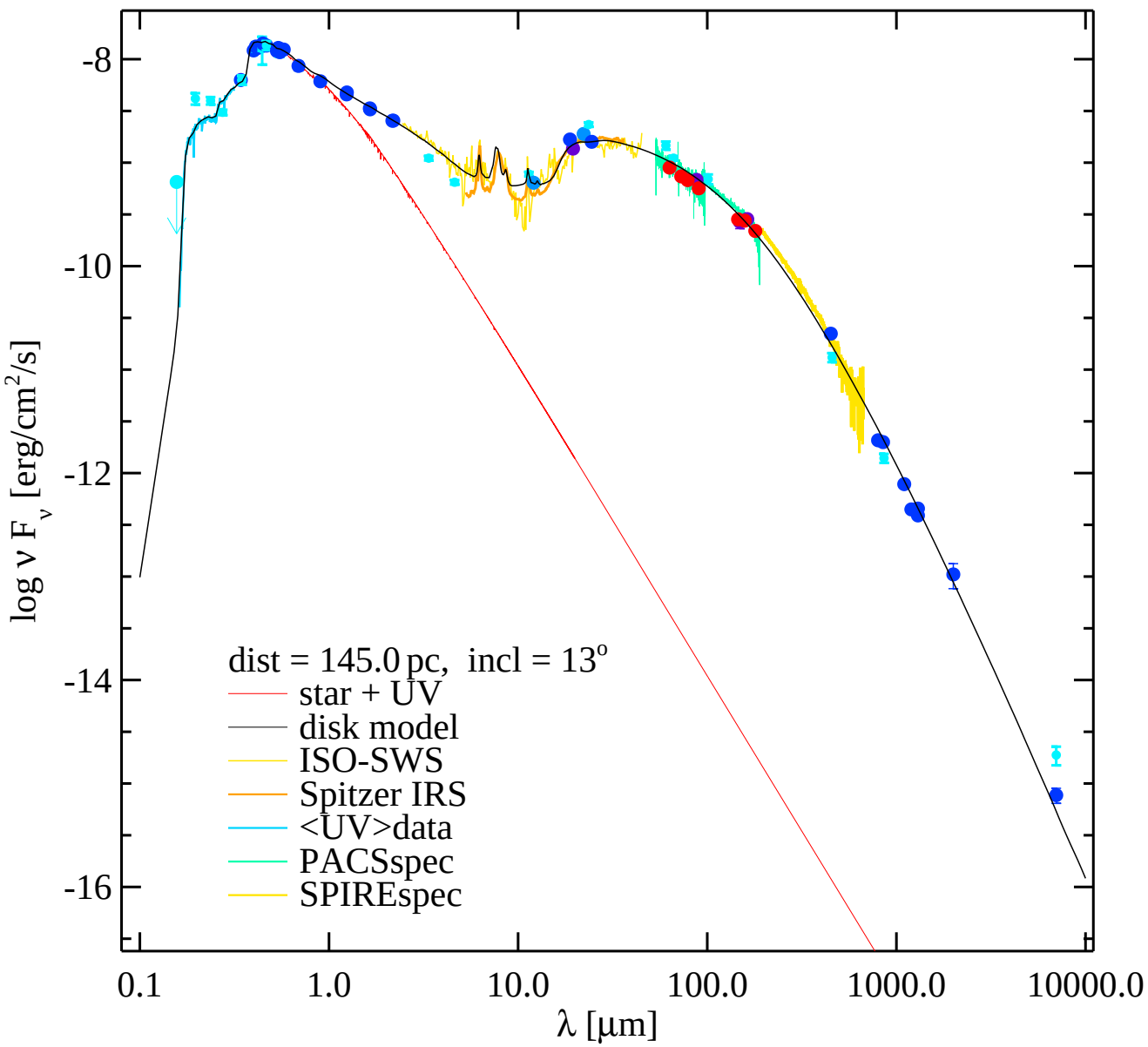


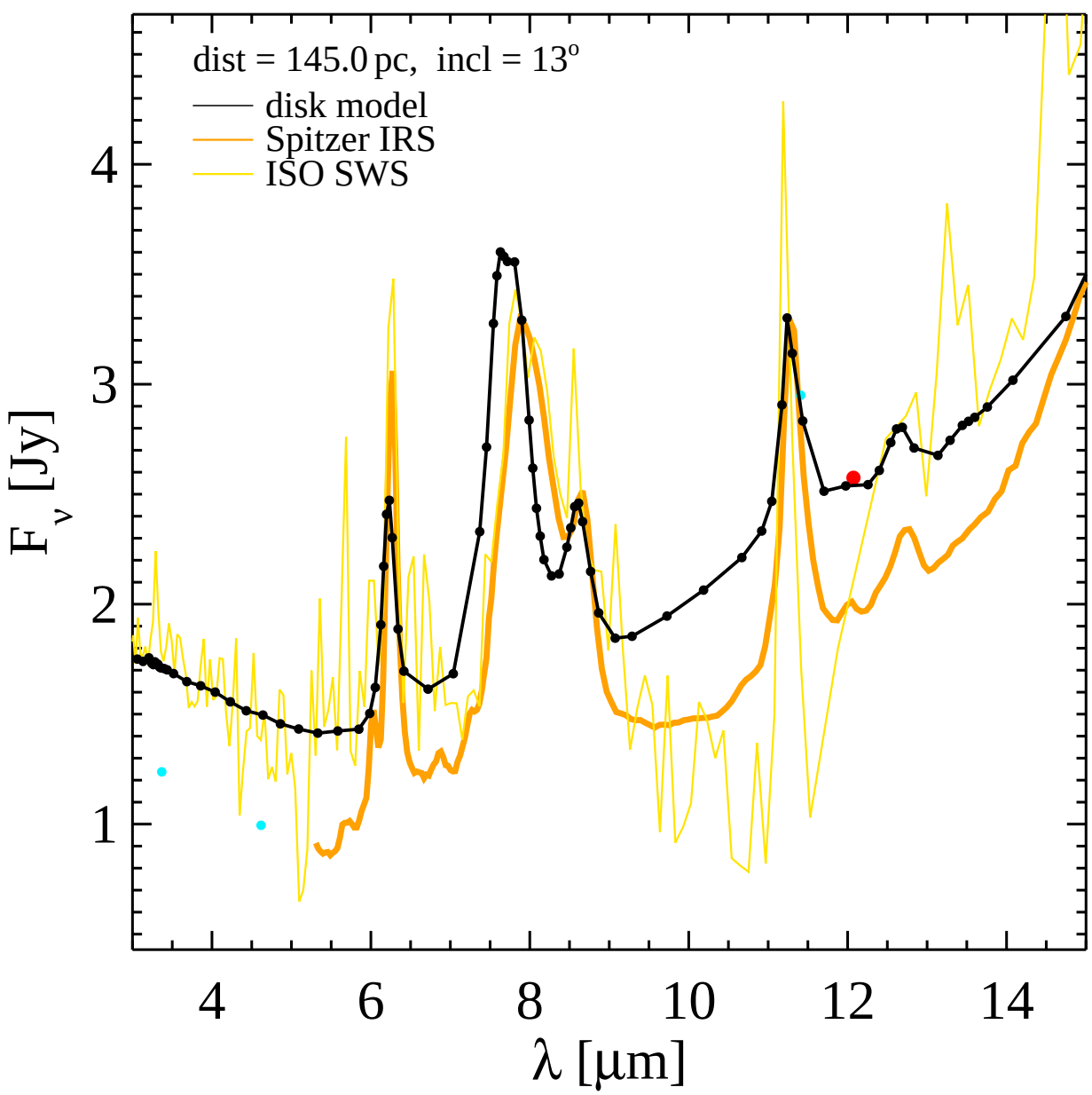
1.0
1.5
2.0
2.5
3.0
3.5
log T_PAH [K]
z / r
r [AU]
0.0
0.1
0.2
0.3
0.4
0.1
1.0
10.0
100.0
1000K
300K
100K
20K
10K
40K
2000K
1
10

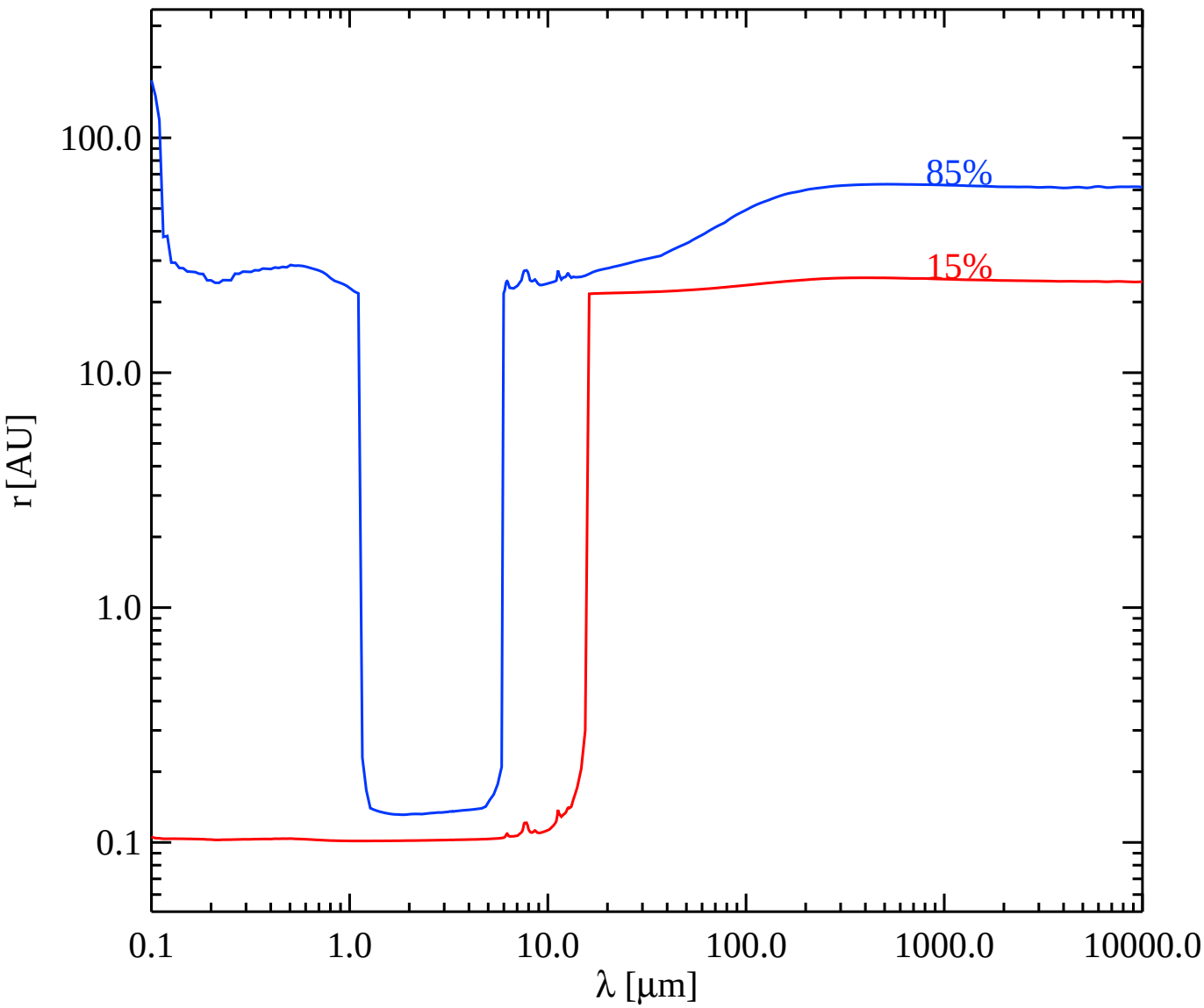

fitting Tdust ~ r^-q
1000
100
10
T dust [K]
0.1
1.0
10.0
100.0
r [AU]
z/r=0.43: q= 0.360 +/- 0.016
z/r=0.26: q= 0.644 +/- 0.027
z/r=0.00: q= 0.940 +/- 0.023

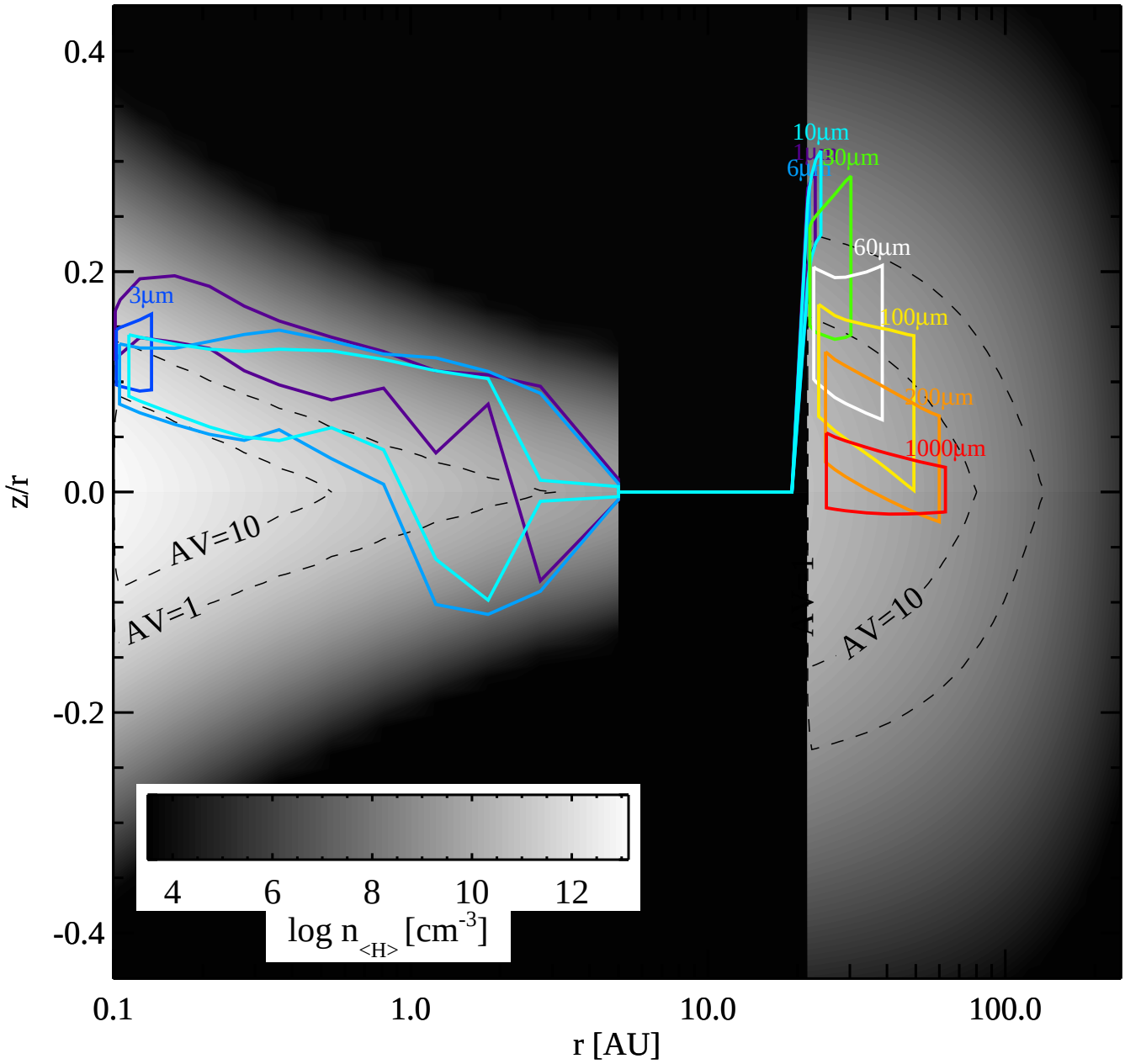

κ [cm²/g(dust)]
1000
100
10
1
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

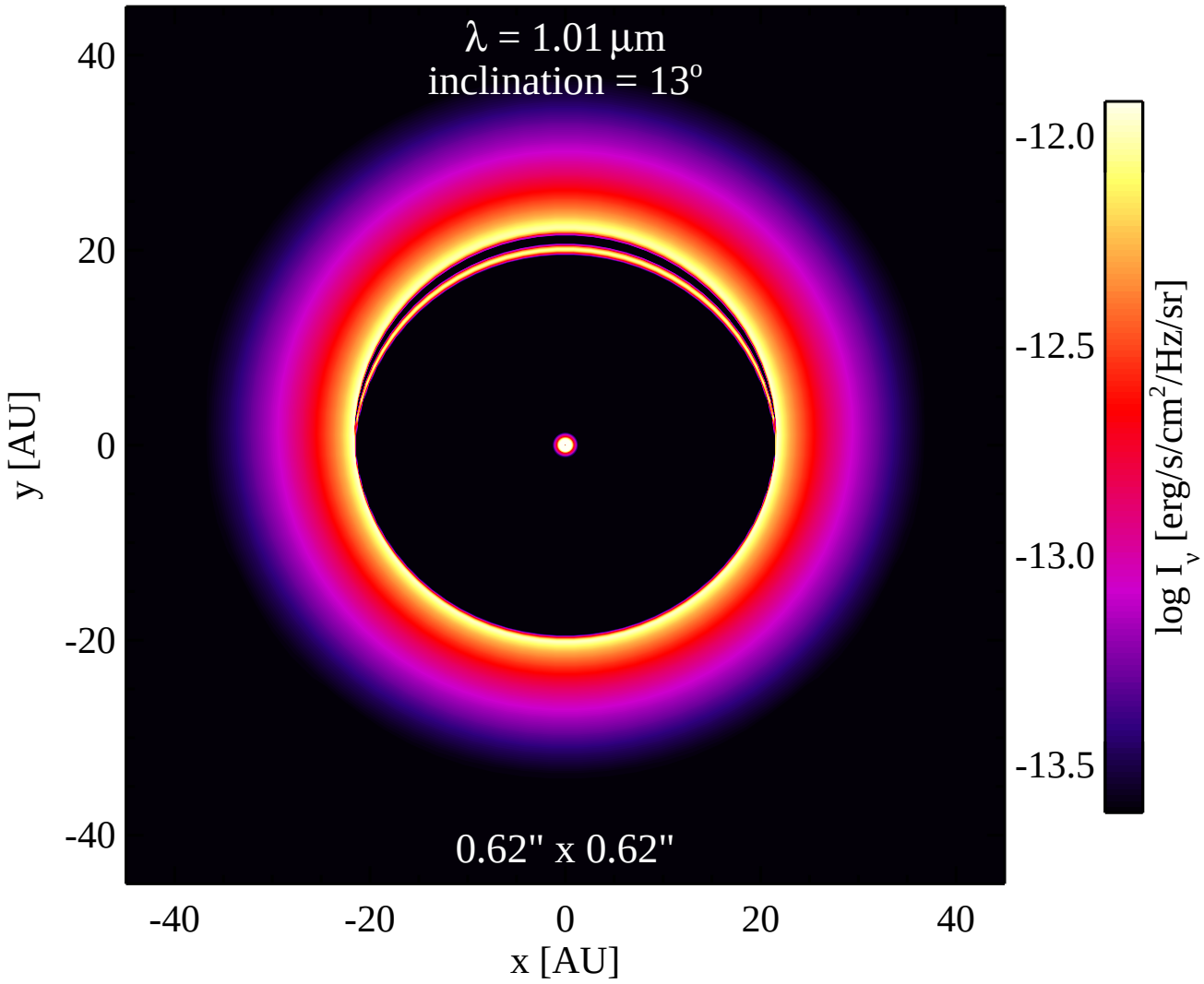

κ [cm²/g(dust)]
1000.0
100.0
10.0
1.0
0.1
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
κsca
κabs
λ-1
ProDiMo
neutral PAH
charged PAH
(g/d= 100.0 fPAH= 0.77)

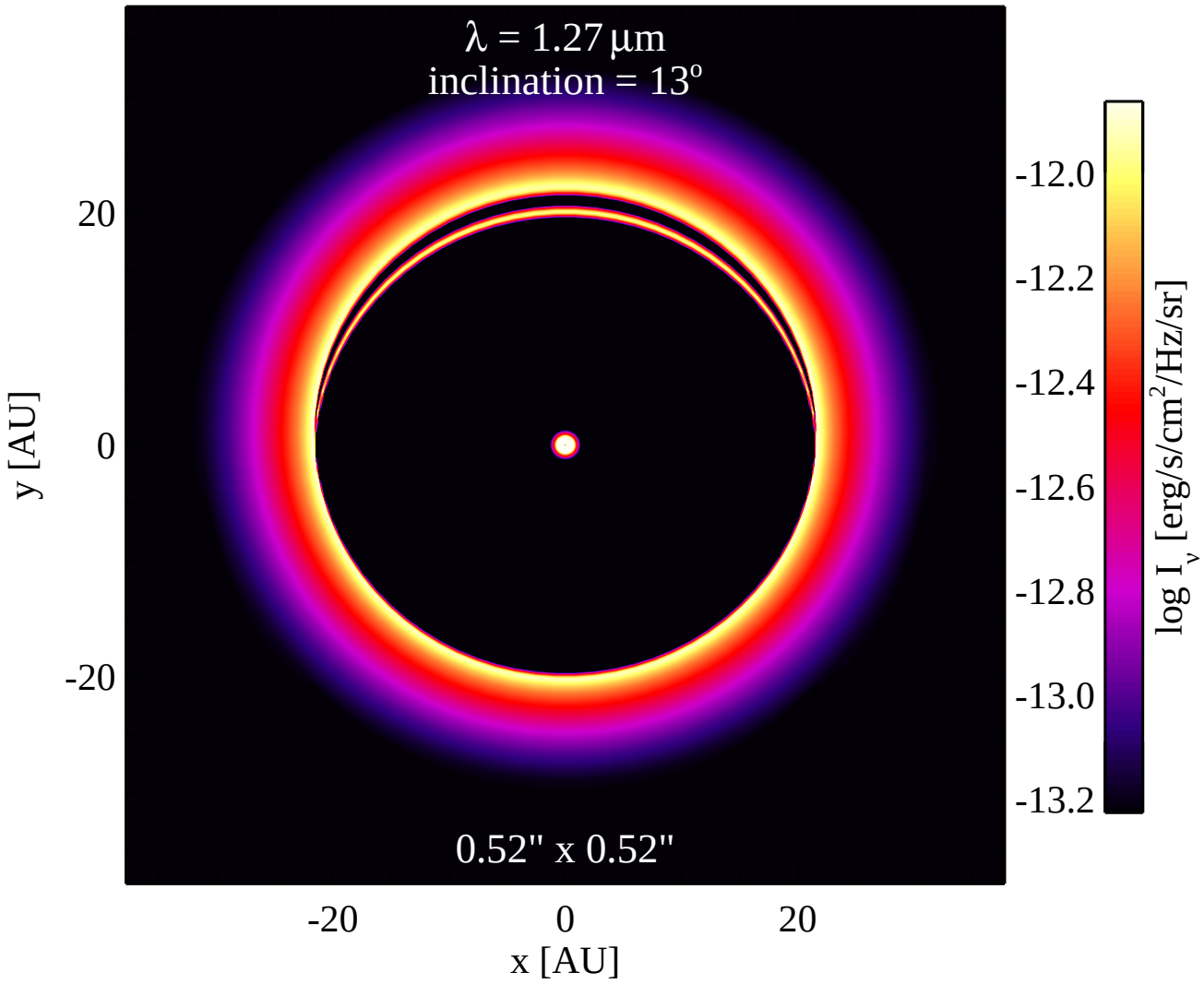

-8
-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 145.0 pc, incl = 13°
star + UV
disk model
ISO-SWS
Spitzer IRS
<UV>data
PACSspec
SPIREspec

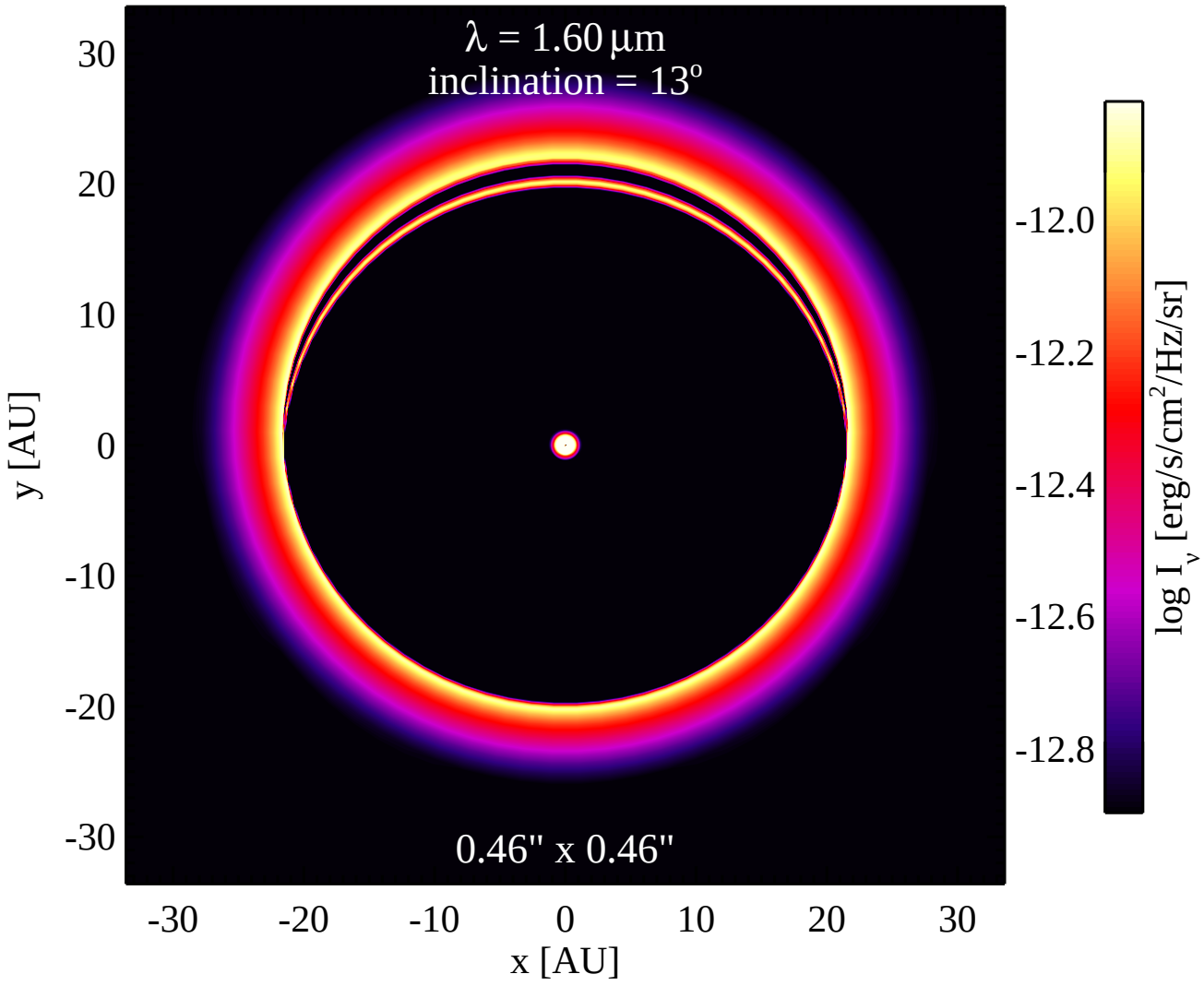

dist = 145.0 pc, incl = 13°
disk model
Spitzer IRS
ISO SWS
F_ν [Jy]
λ [μm]
1
2
3
4
4
6
8
10
12
14

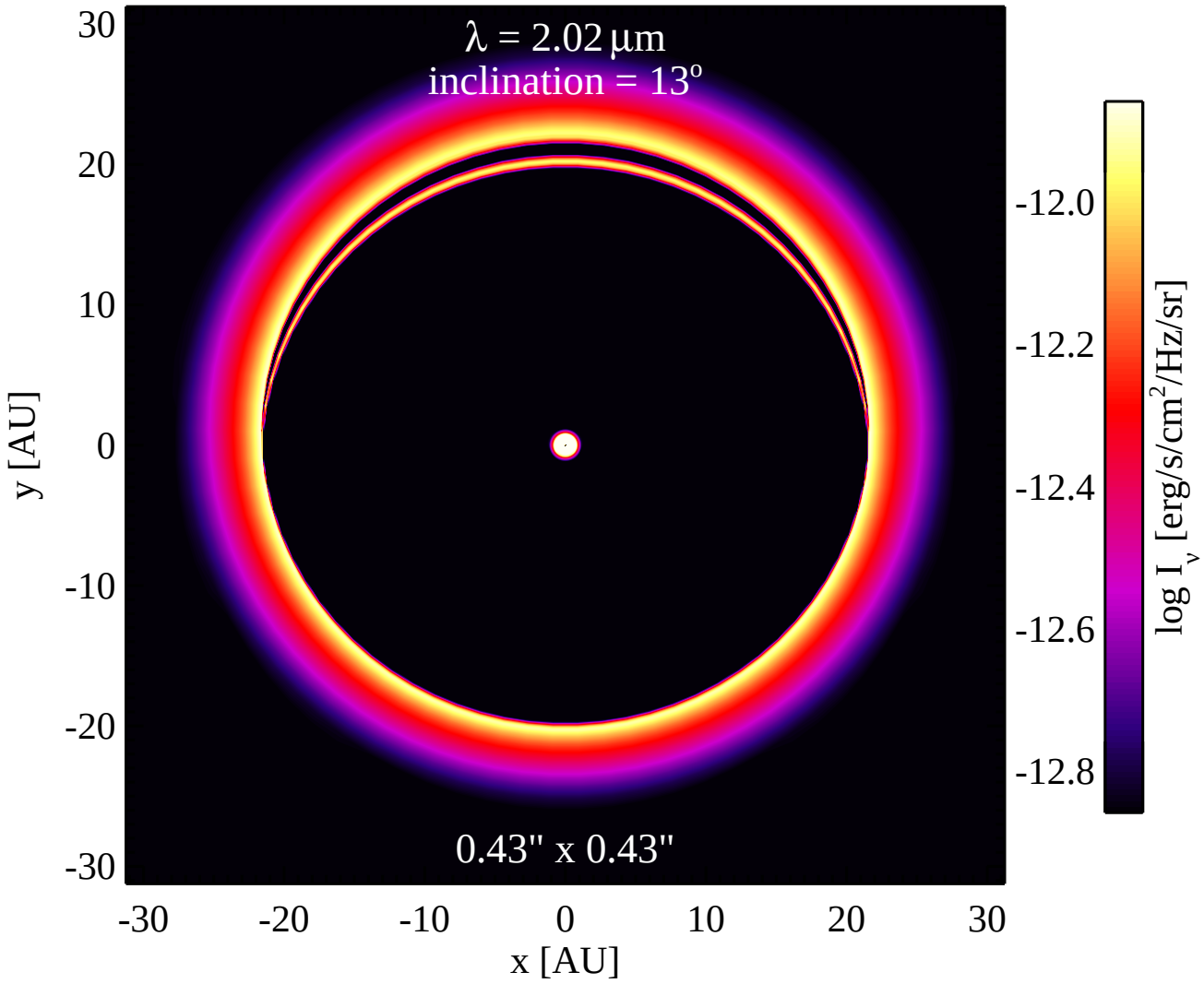

100.0
10.0
1.0
0.1
r [AU]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
85%
15%

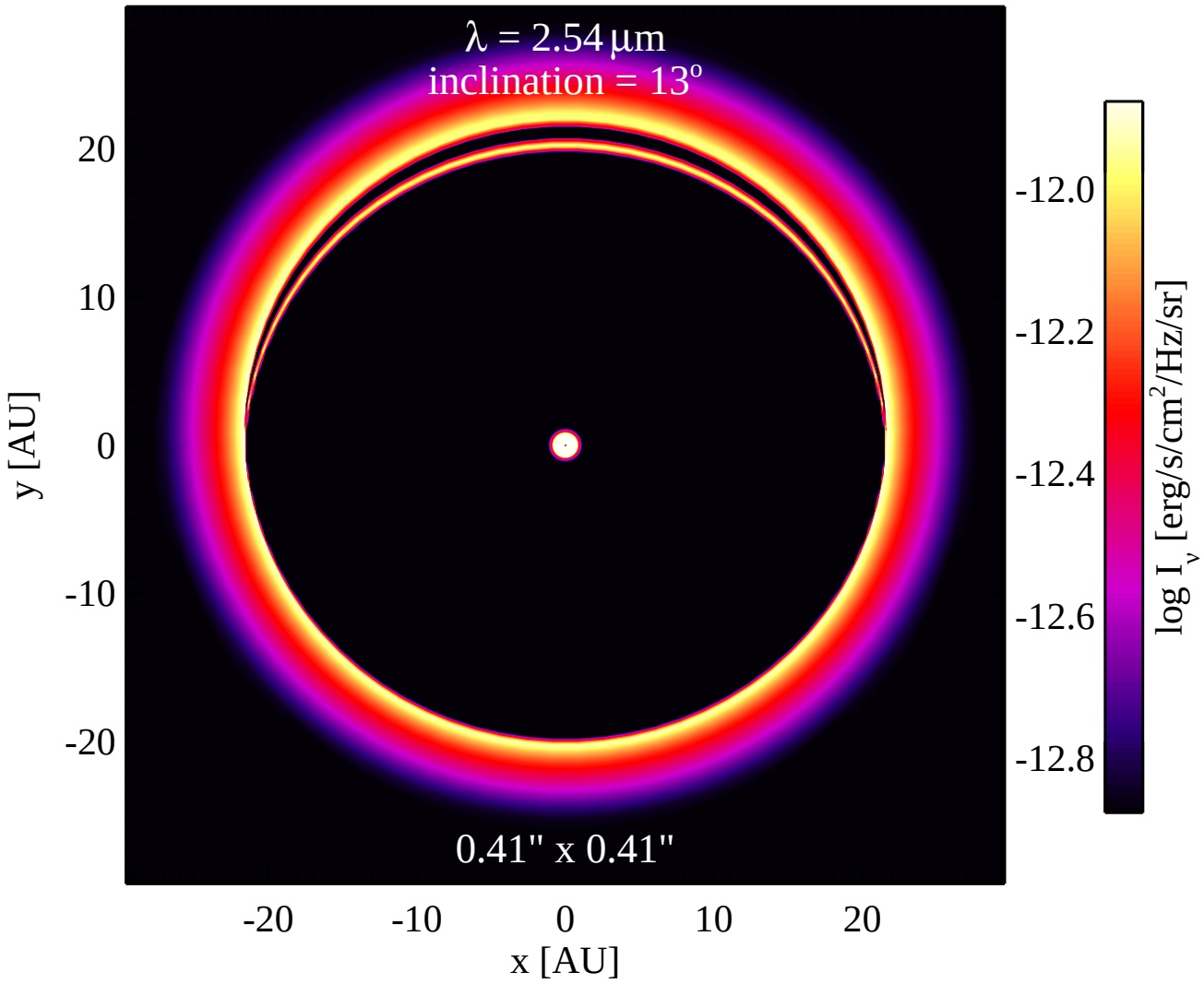

0.4
0.2
0.0
-0.2
-0.4
z/r
0.1
1.0
10.0
100.0
r [AU]
3μm
10μm
30μm
60μm
100μm
1000μm
AV=10
AV=1
AV=10
4
6
8
10
12
log n <H> [cm-3]

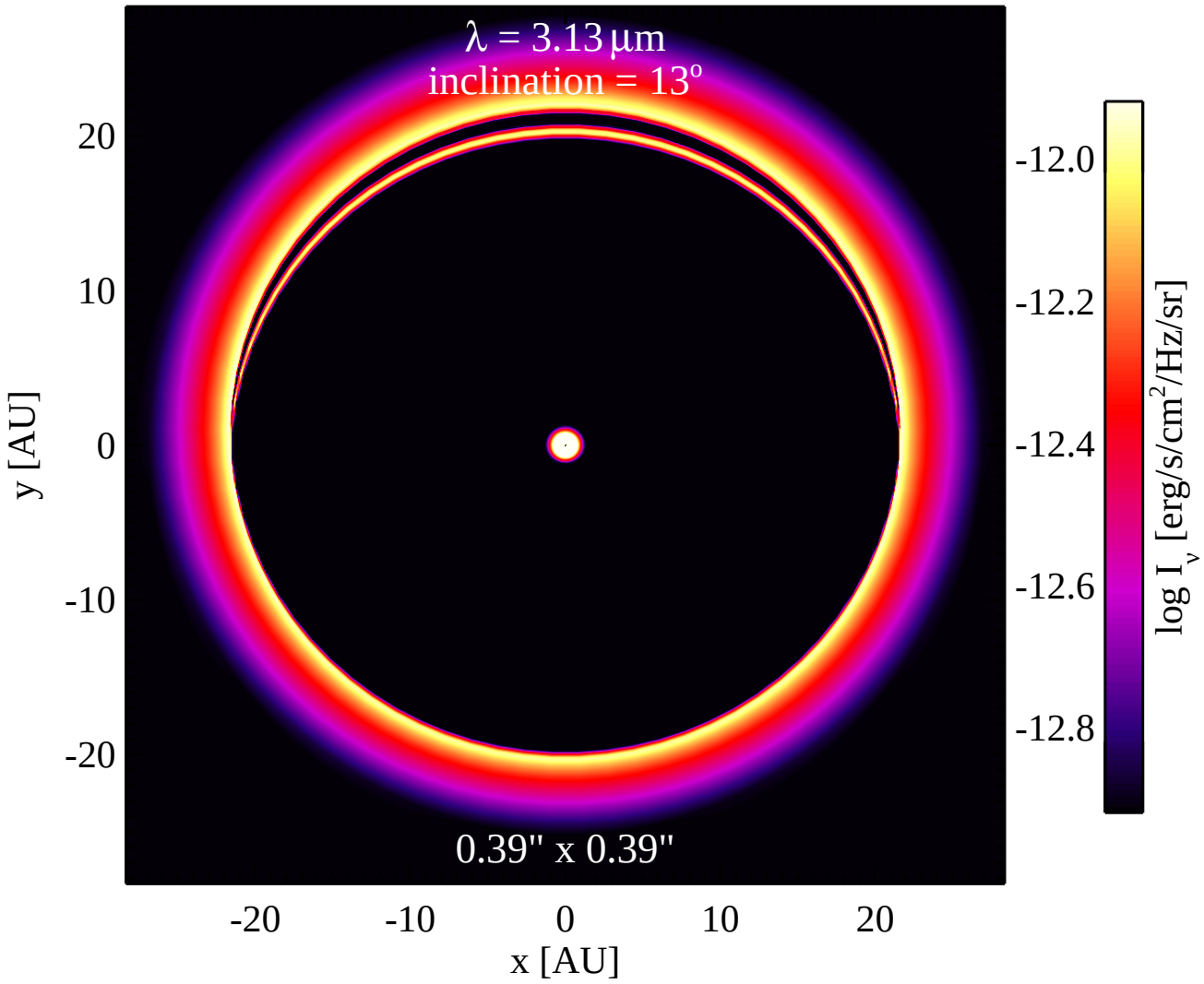

λ = 1.01 μm
inclination = 13°
0.62" x 0.62"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

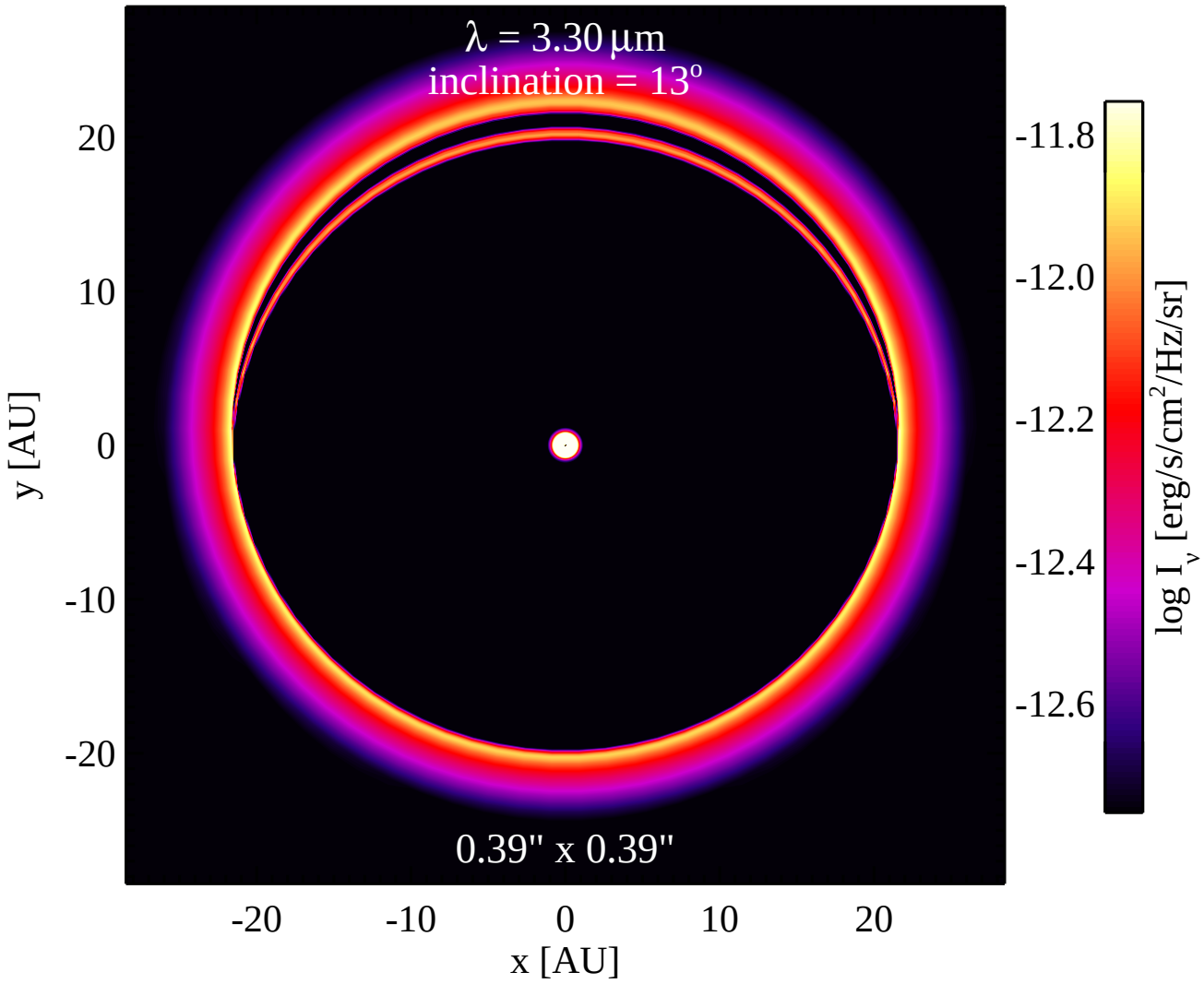

λ = 1.27 μm
inclination = 13°
0.52" x 0.52"
20
0
-20
y [AU]
-20
0
20
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
-13.0
-13.2
log I_ν [erg/s/cm²/Hz/sr]

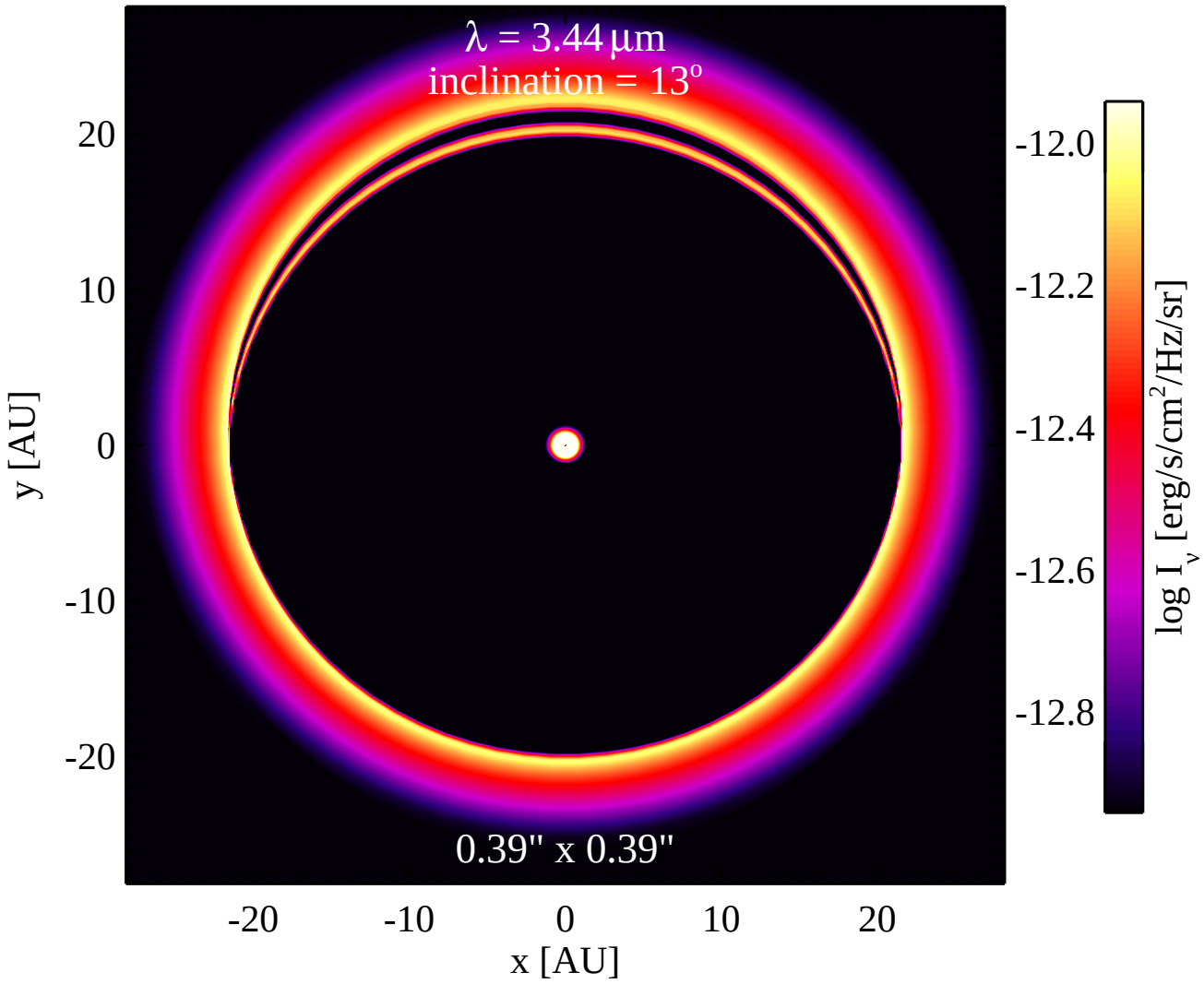

λ = 1.60 μm
inclination = 13°
0.46" x 0.46"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]

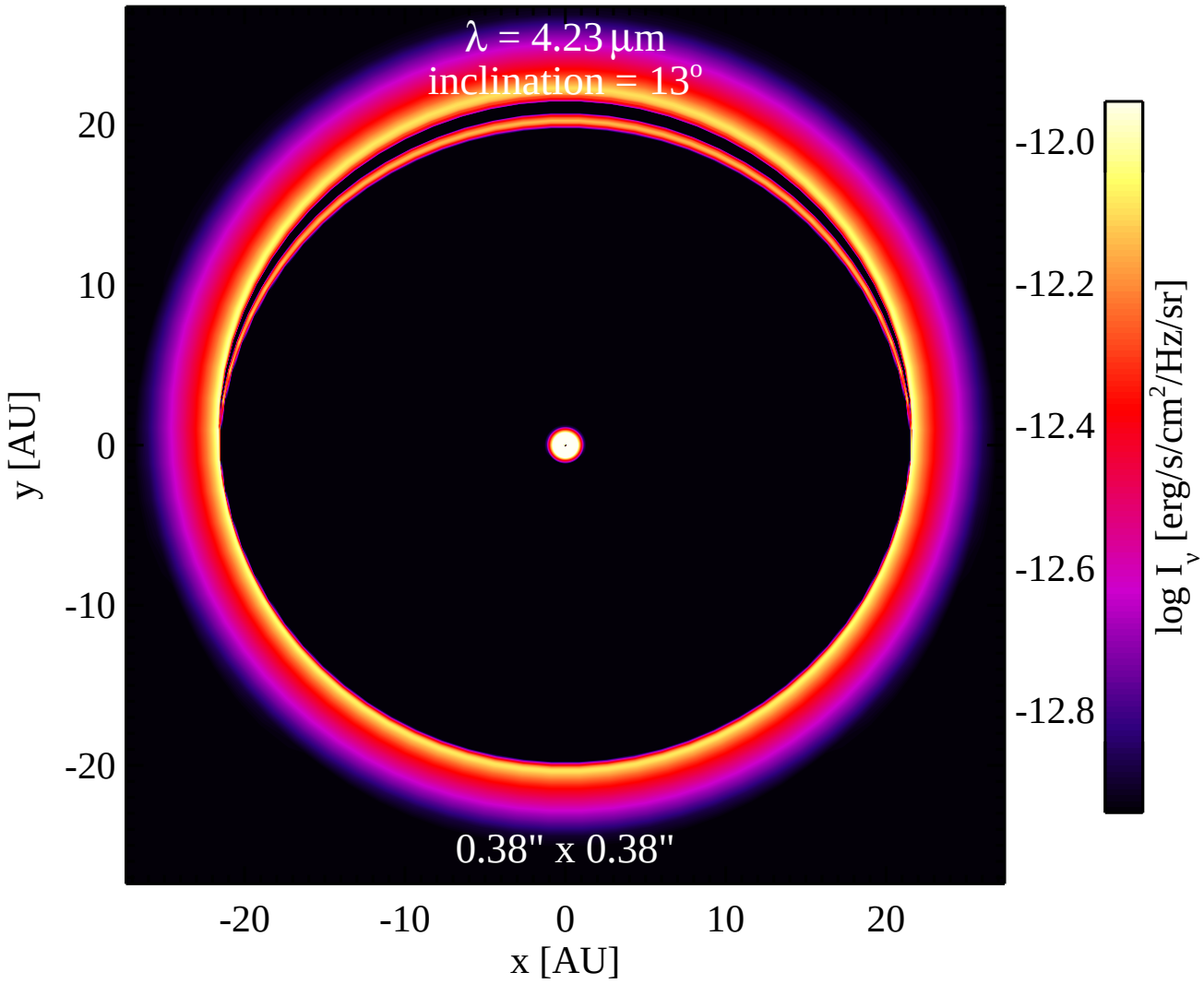

λ = 2.02 μm
inclination = 13°
0.43" x 0.43"
30
20
10
0
-10
-20
-30
y [AU]
-30
-20
-10
0
10
20
30
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]

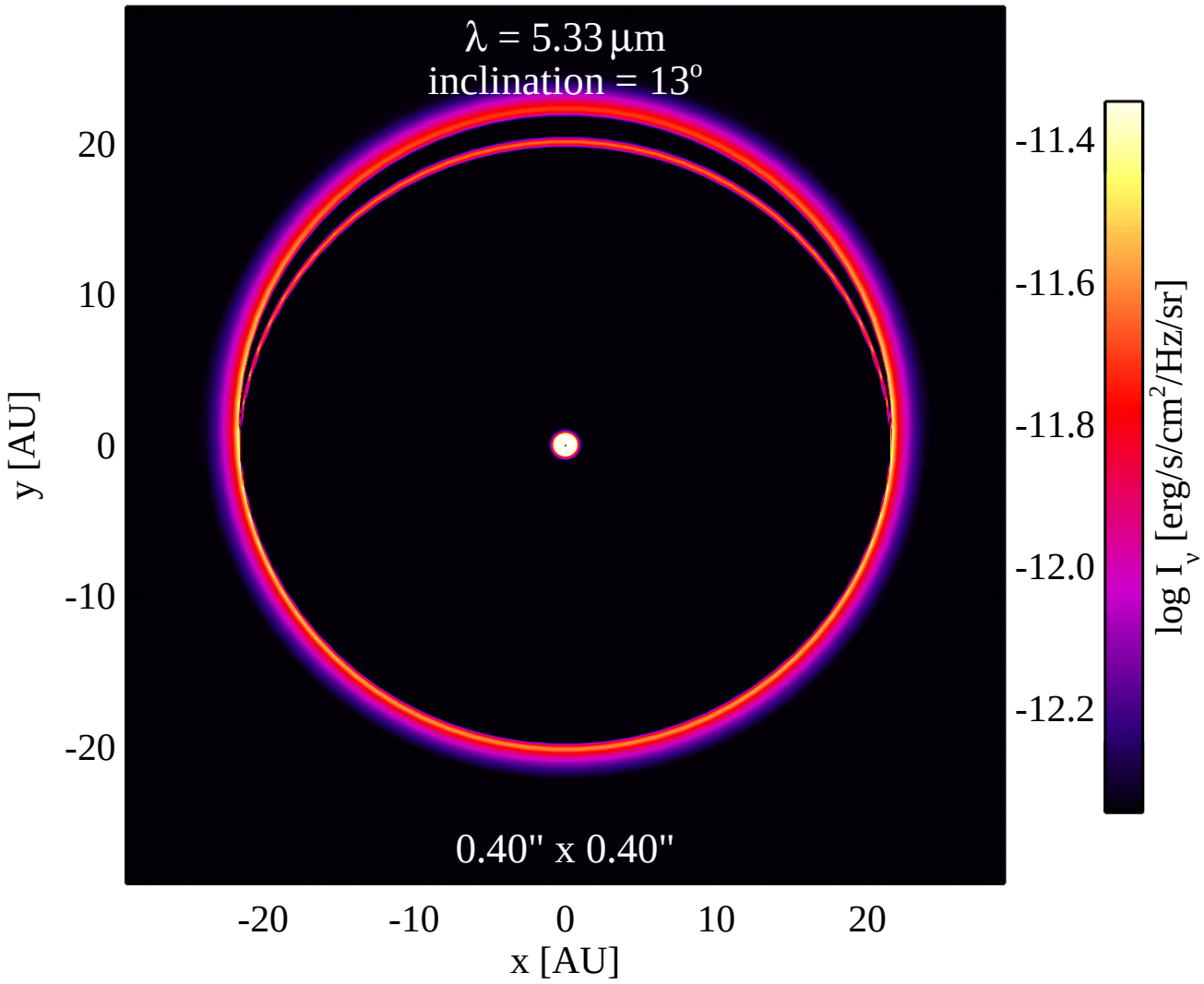

λ = 2.54 μm
inclination = 13°
0.41" x 0.41"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]

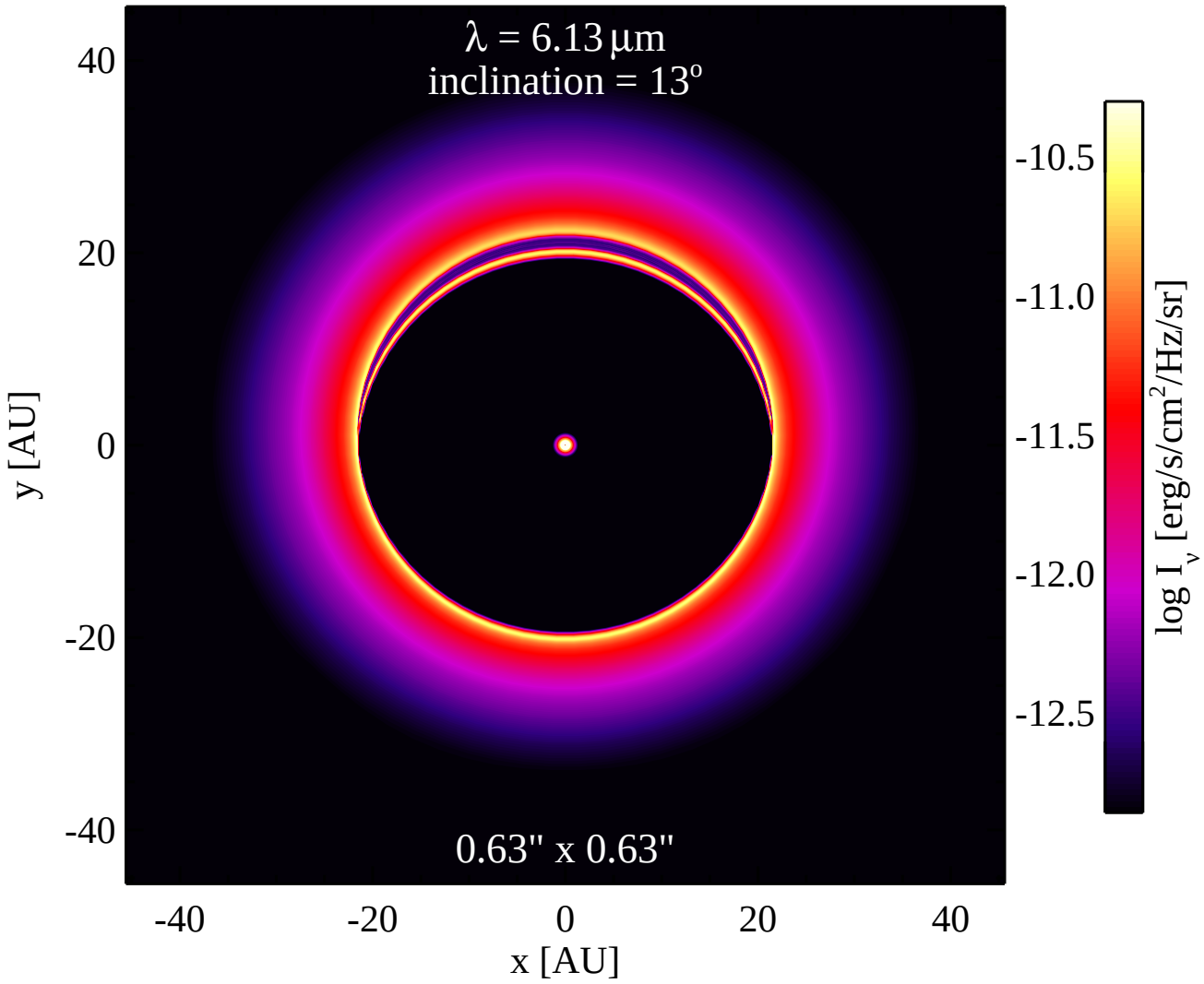

λ = 3.13 μm
inclination = 13°
0.39" x 0.39"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]

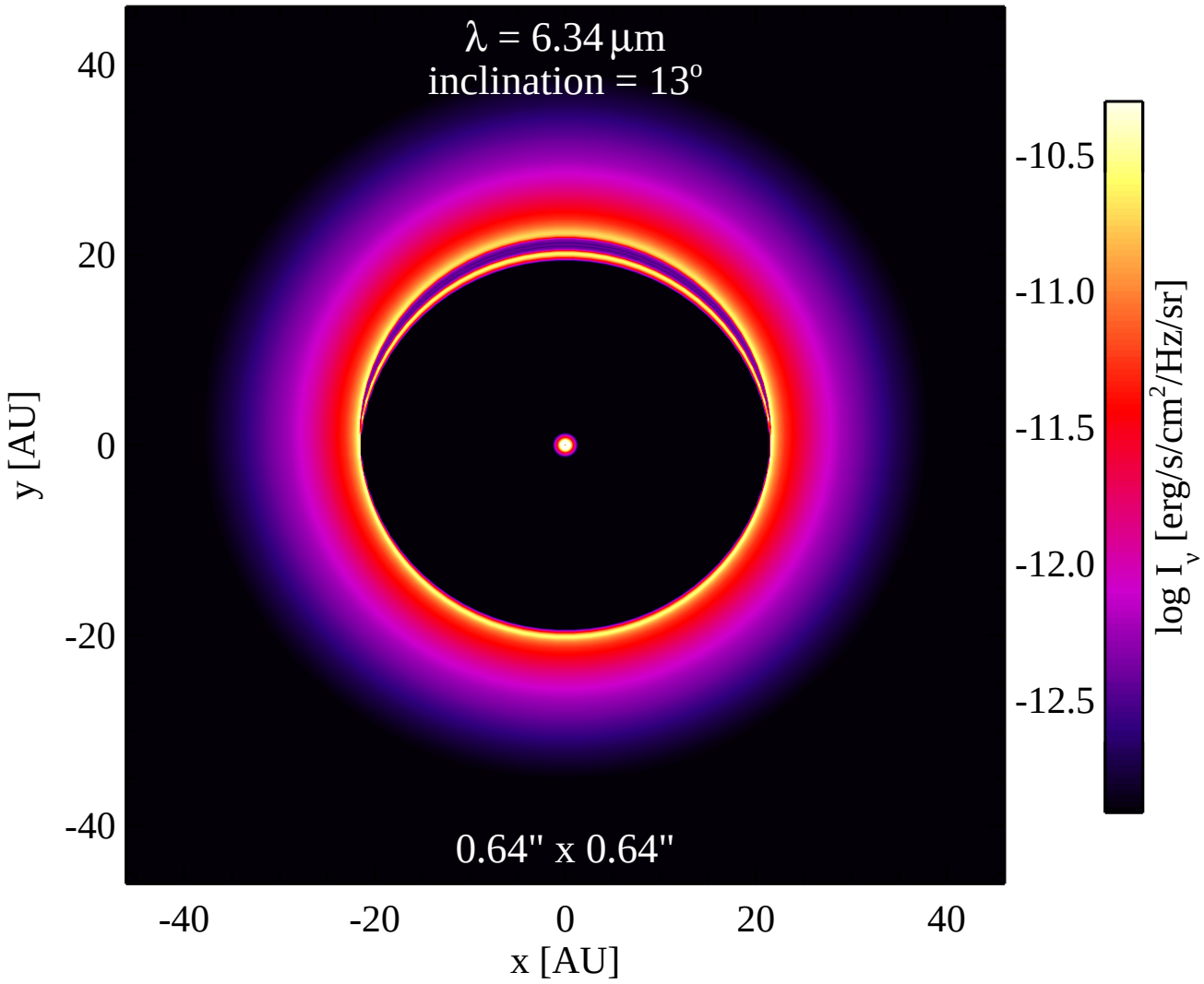

λ = 3.30 μm
inclination = 13°
0.39" x 0.39"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.8
-12.0
-12.2
-12.4
-12.6
log I_ν [erg/s/cm²/Hz/sr]

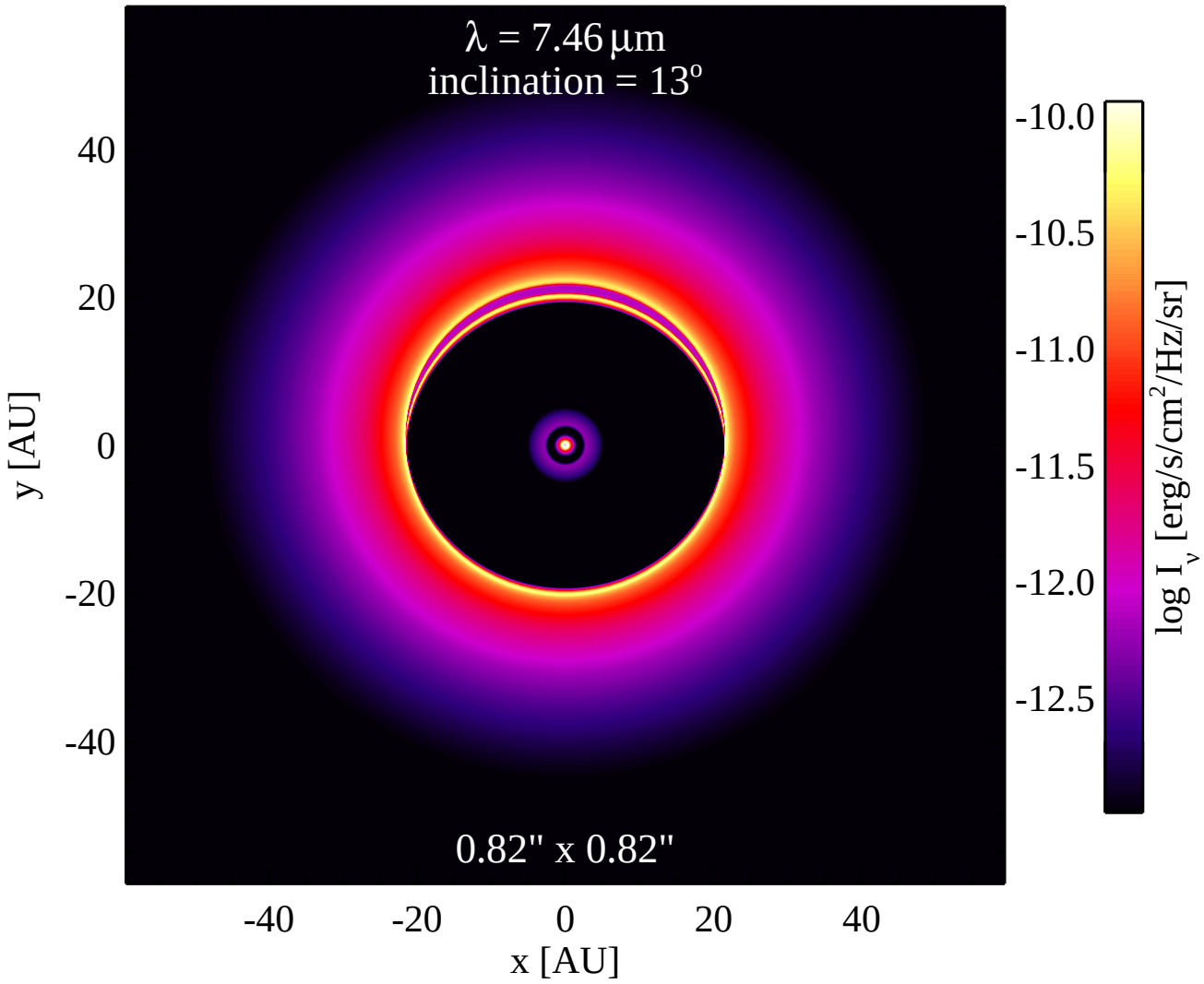

λ = 3.44 μm
inclination = 13°
0.39" x 0.39"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]

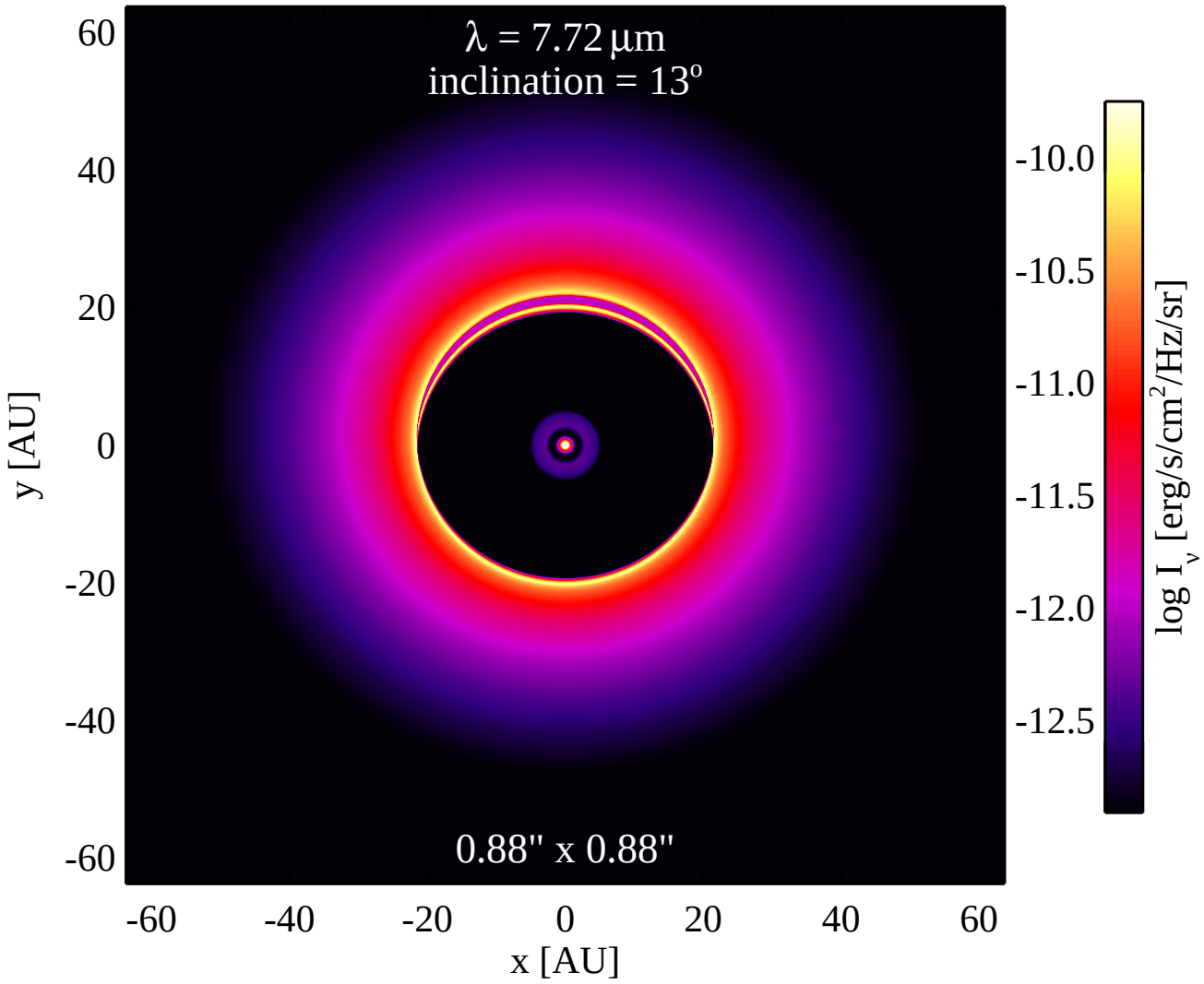

λ = 4.23 μm
inclination = 13°
0.38" x 0.38"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-12.0
-12.2
-12.4
-12.6
-12.8
log I_ν [erg/s/cm²/Hz/sr]

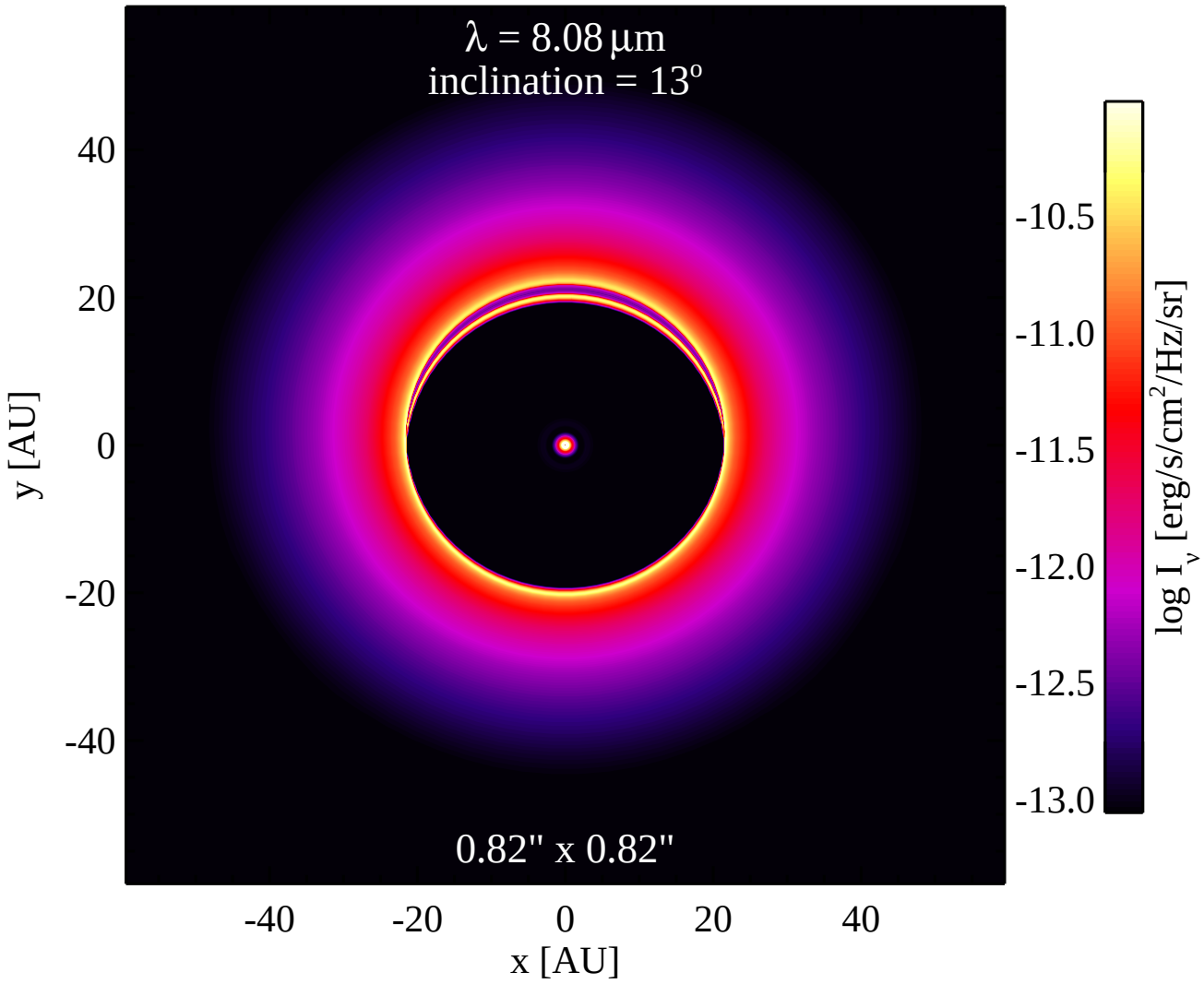

λ = 5.33 μm
inclination = 13°
0.40" x 0.40"
20
10
0
-10
-20
y [AU]
-20
-10
0
10
20
x [AU]
-11.4
-11.6
-11.8
-12.0
-12.2
log I_ν [erg/s/cm²/Hz/sr]

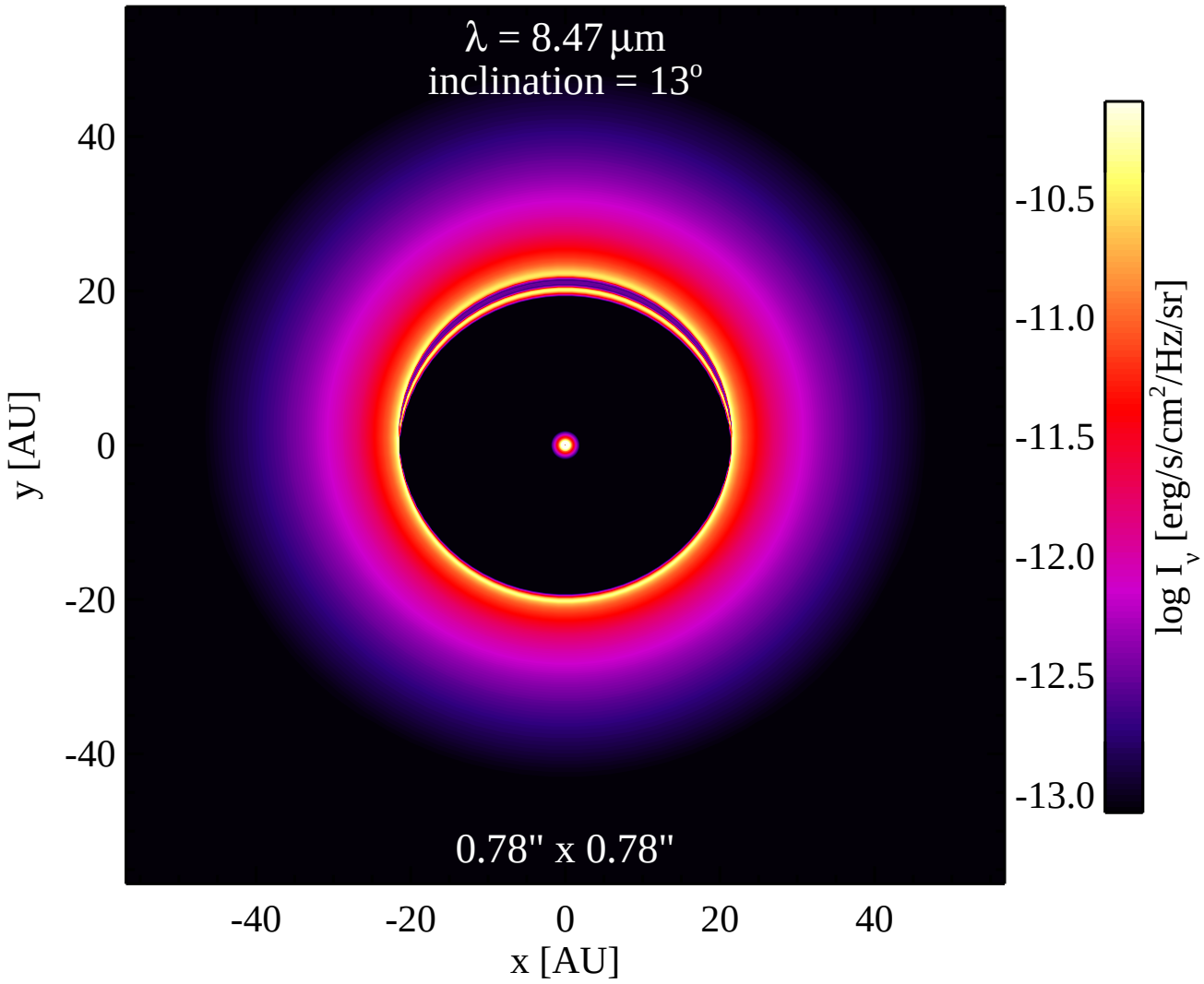

λ = 6.13 μm
inclination = 13°
0.63" x 0.63"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

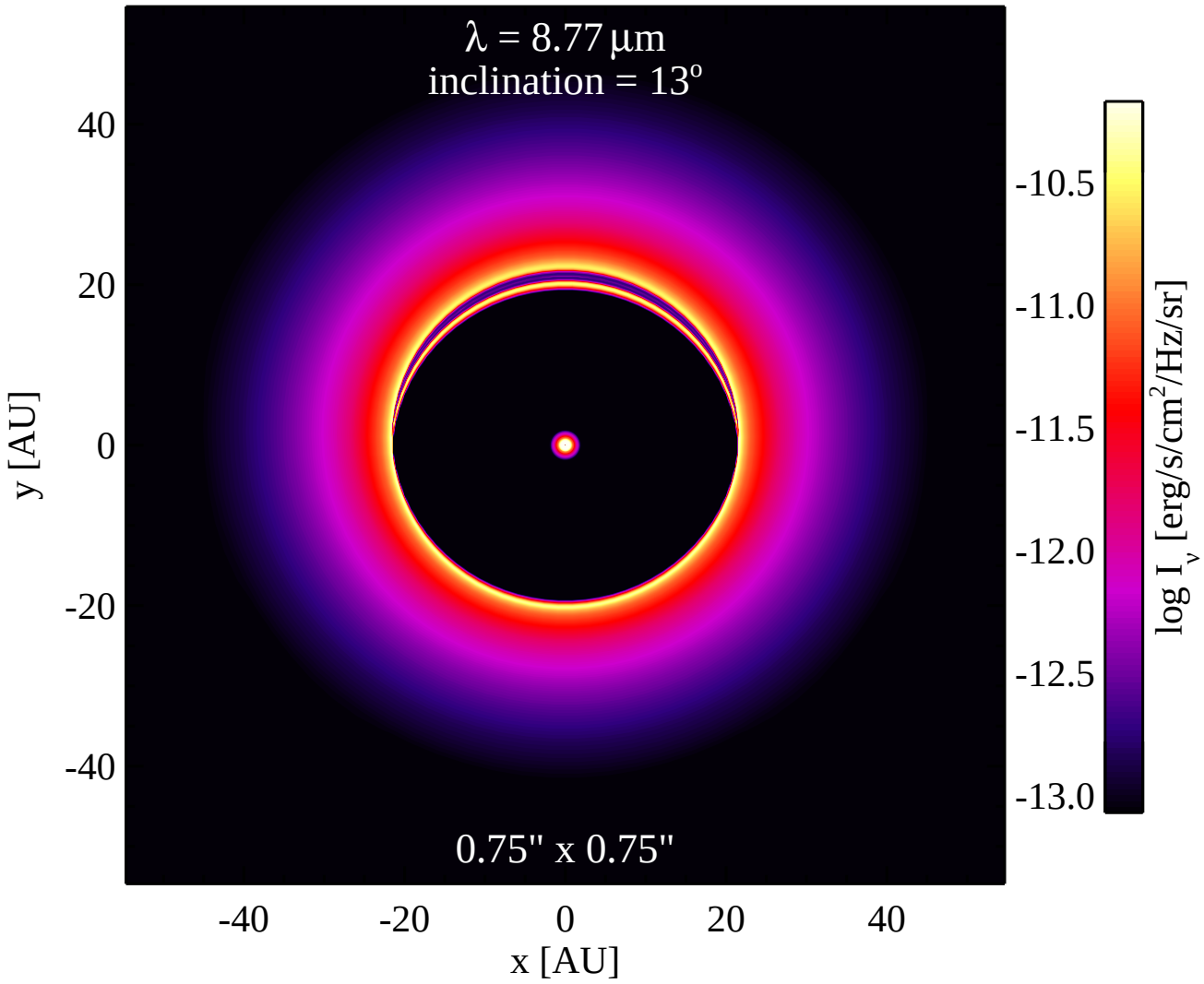

λ = 6.34 μm
inclination = 13°
0.64" x 0.64"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

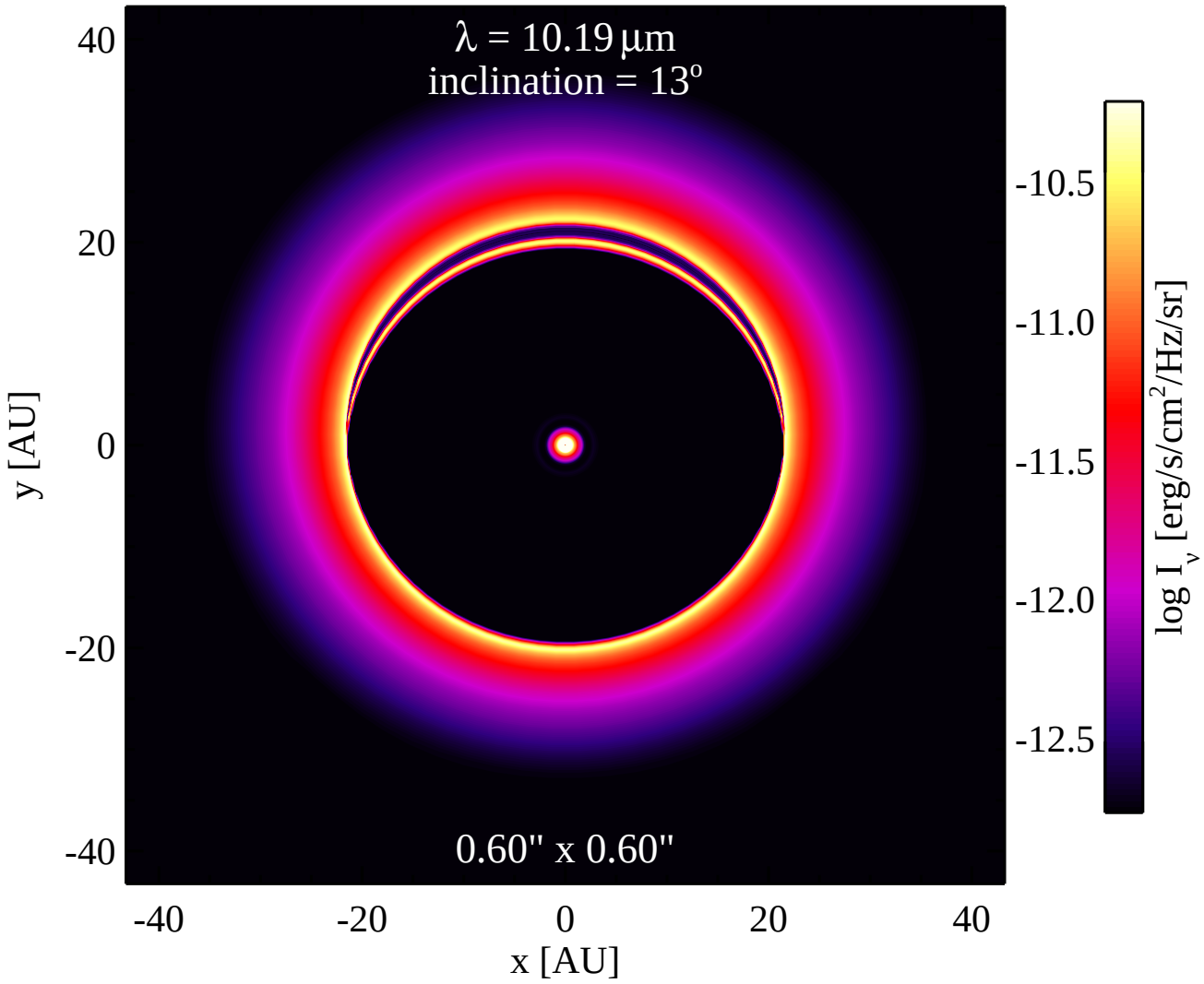

λ = 7.46 μm
inclination = 13°
0.82" x 0.82"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

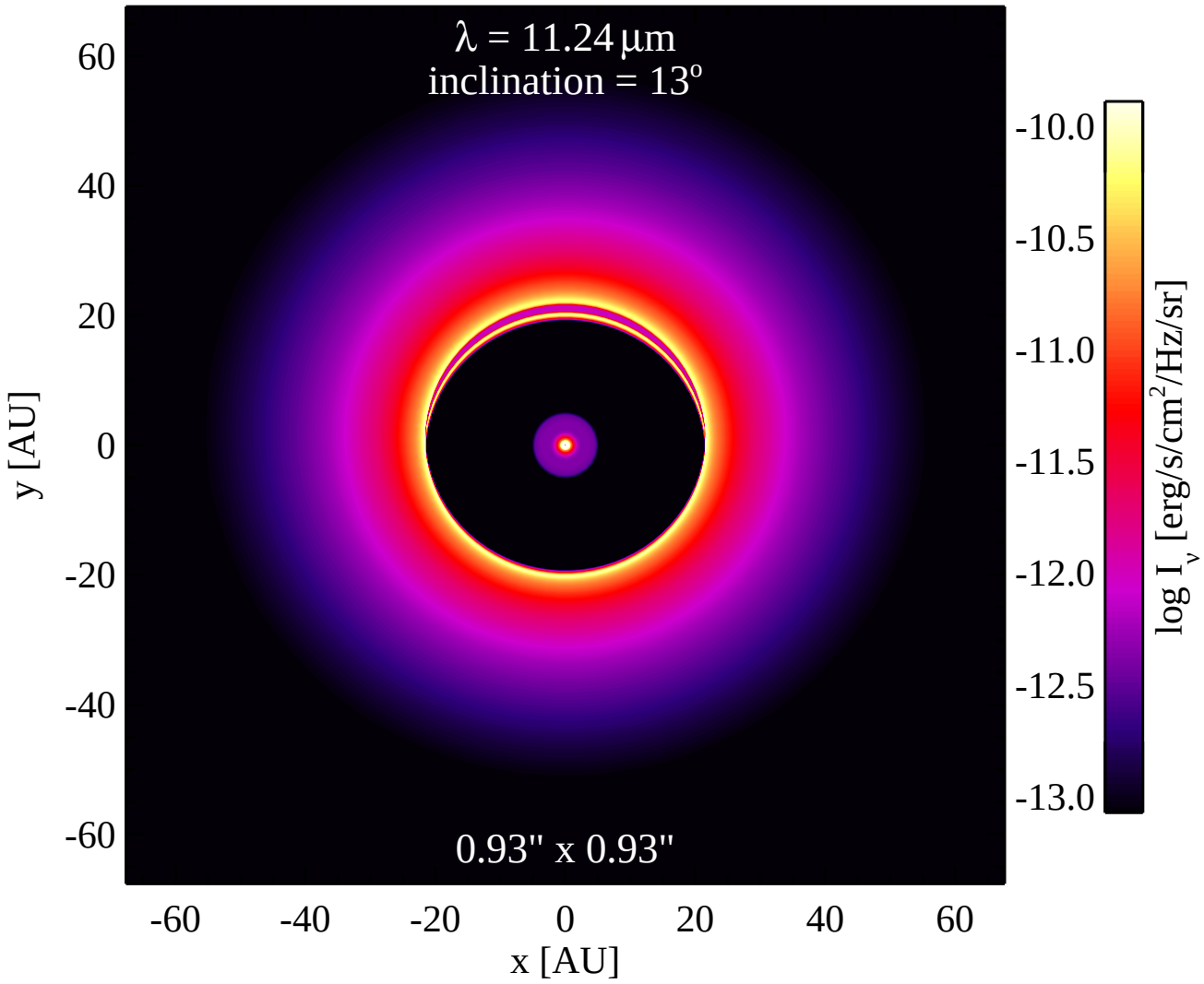

λ = 7.72 μm
inclination = 13°
0.88" x 0.88"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

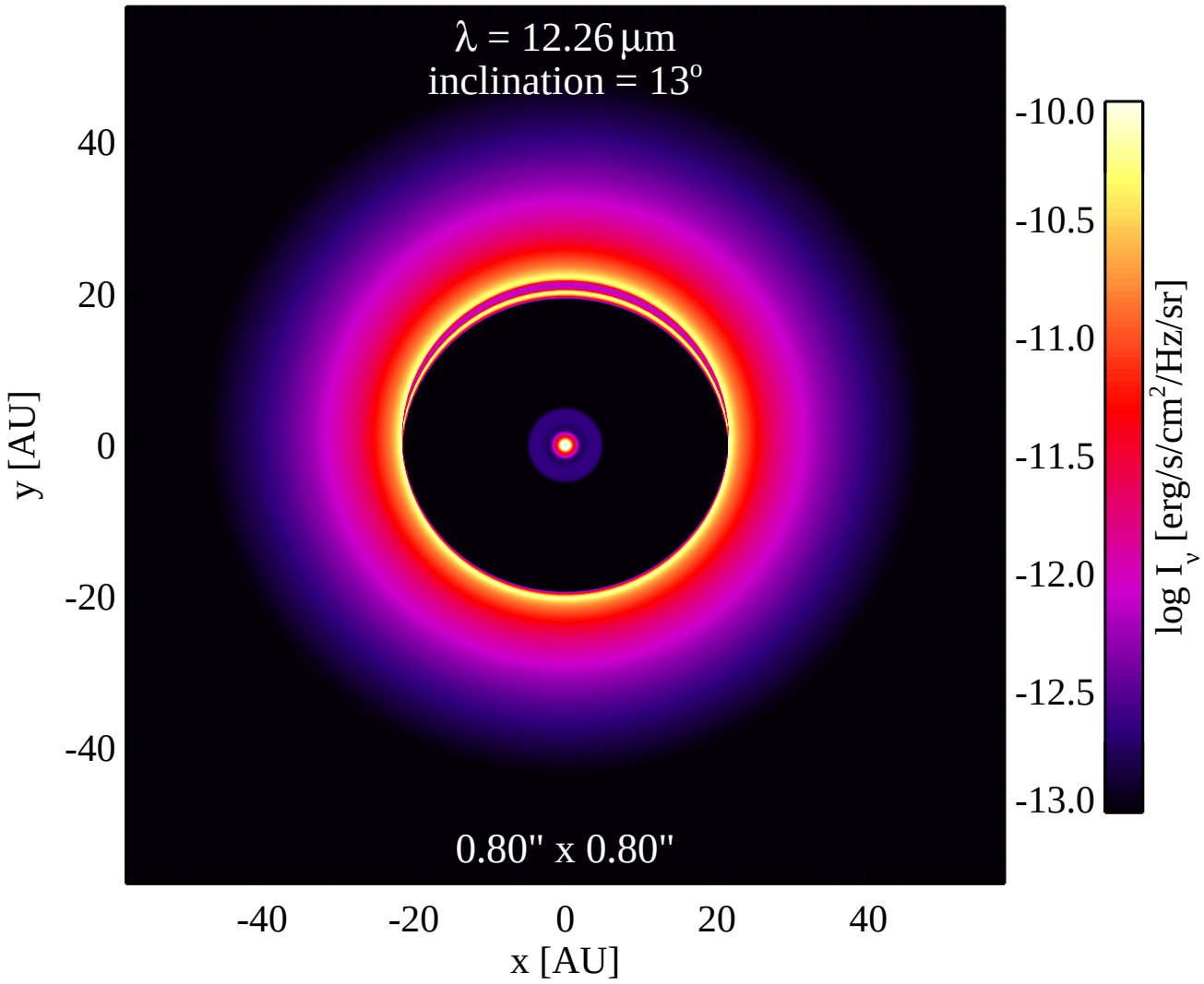

λ = 8.08 μm
inclination = 13°
0.82" x 0.82"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

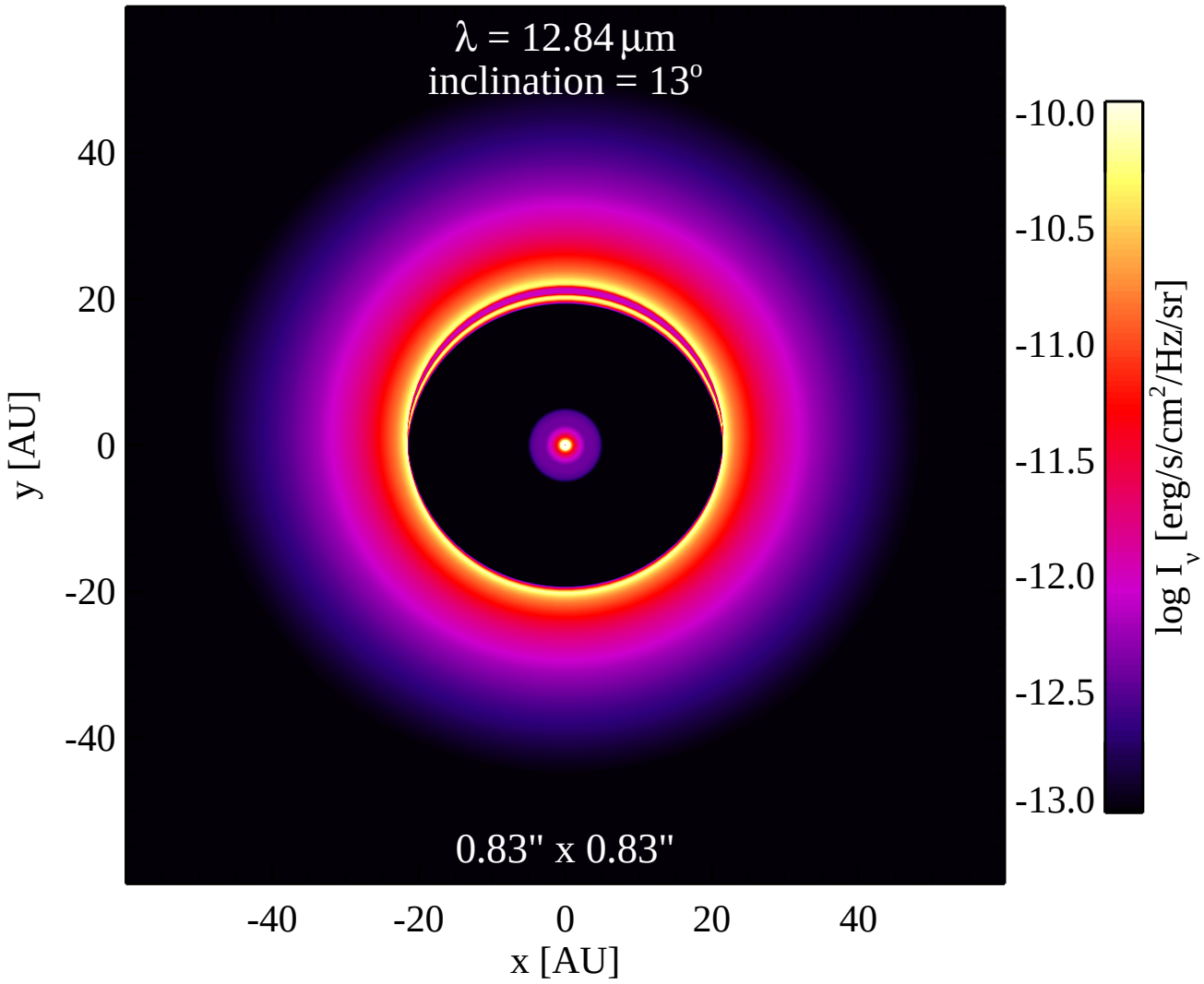

λ = 8.47 μm
inclination = 13°
0.78" x 0.78"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

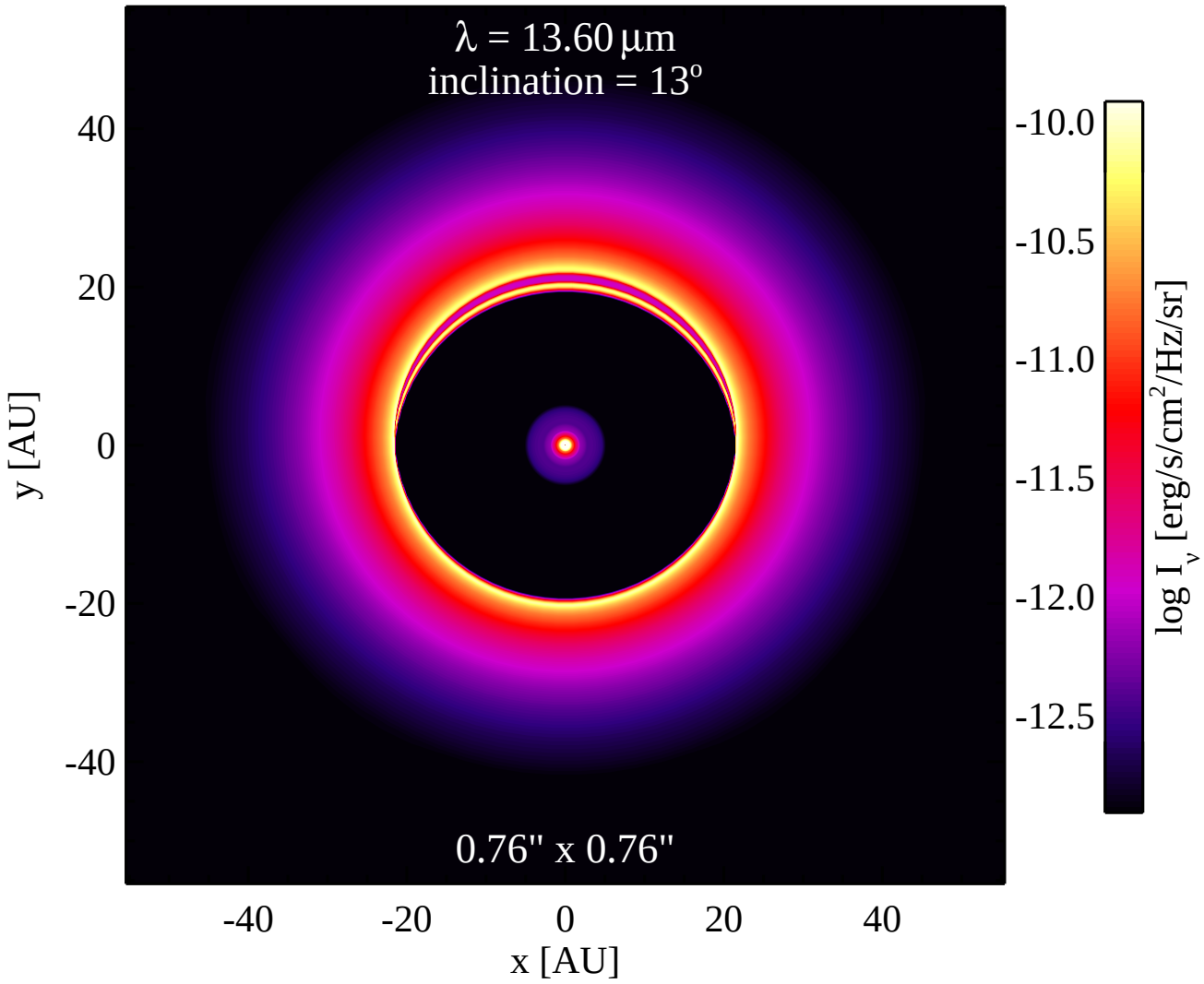

λ = 8.77 μm
inclination = 13°
0.75" x 0.75"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

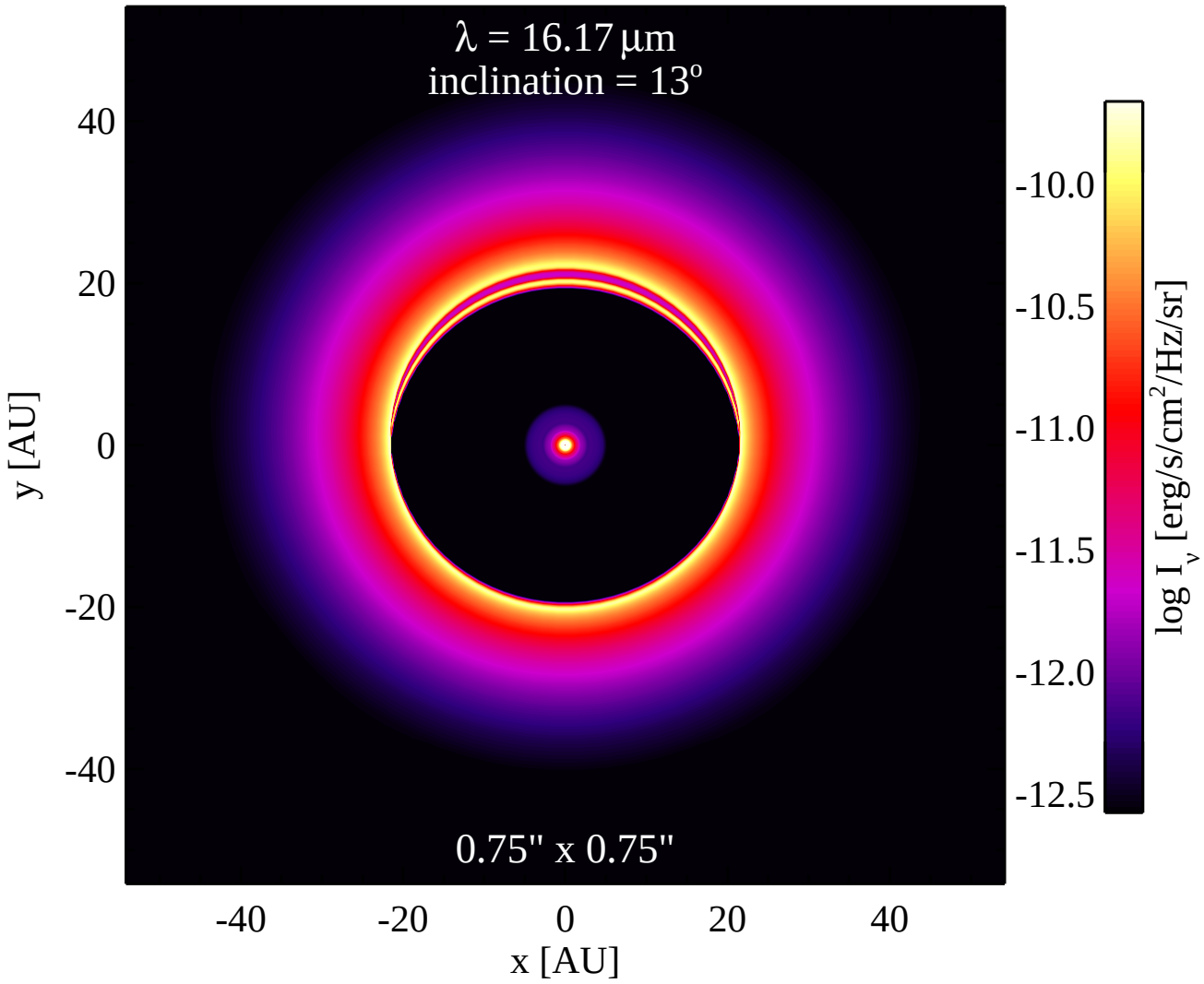

λ = 10.19 μm
inclination = 13°
0.60" x 0.60"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

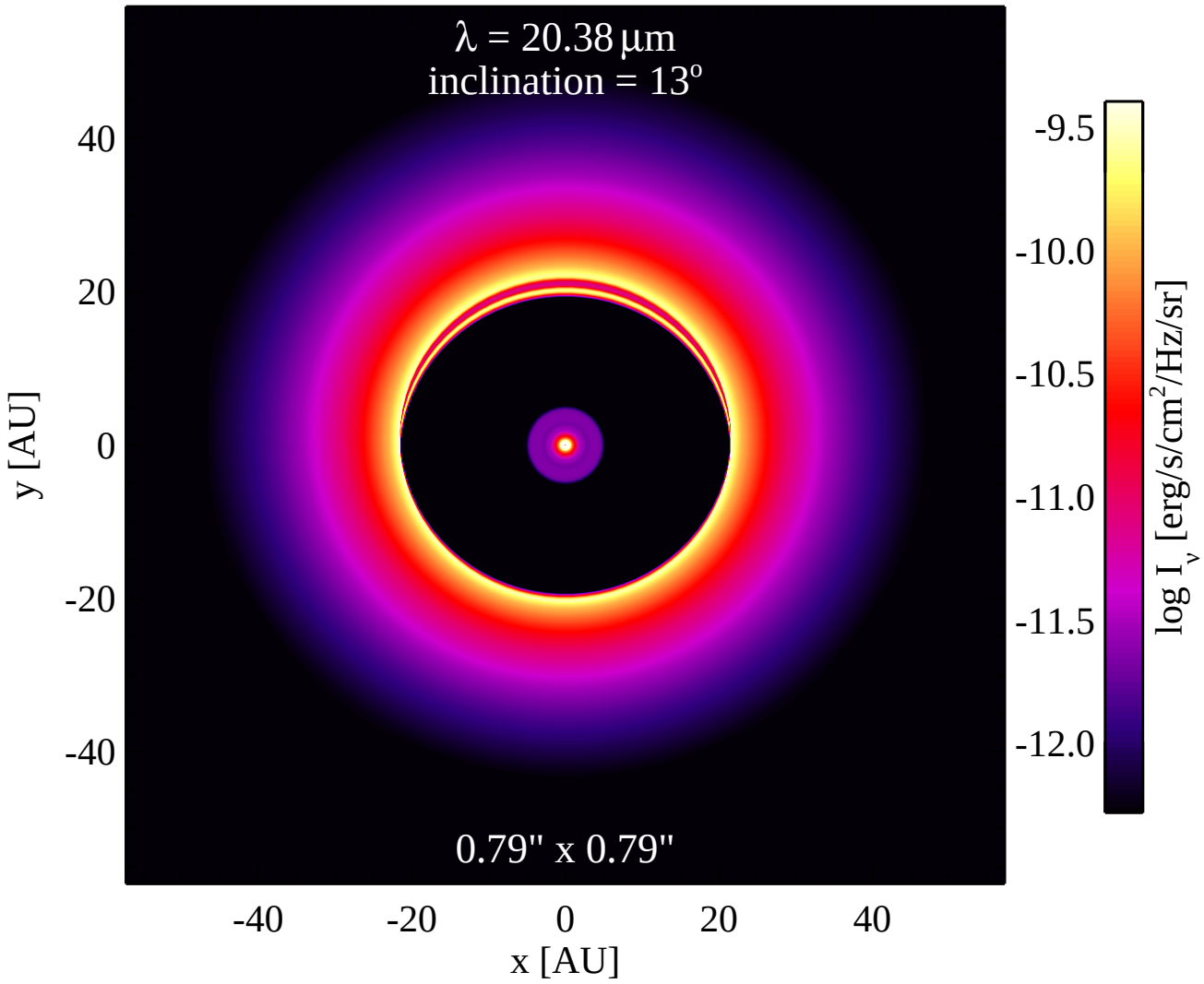

λ = 11.24 μm
inclination = 13°
0.93" x 0.93"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

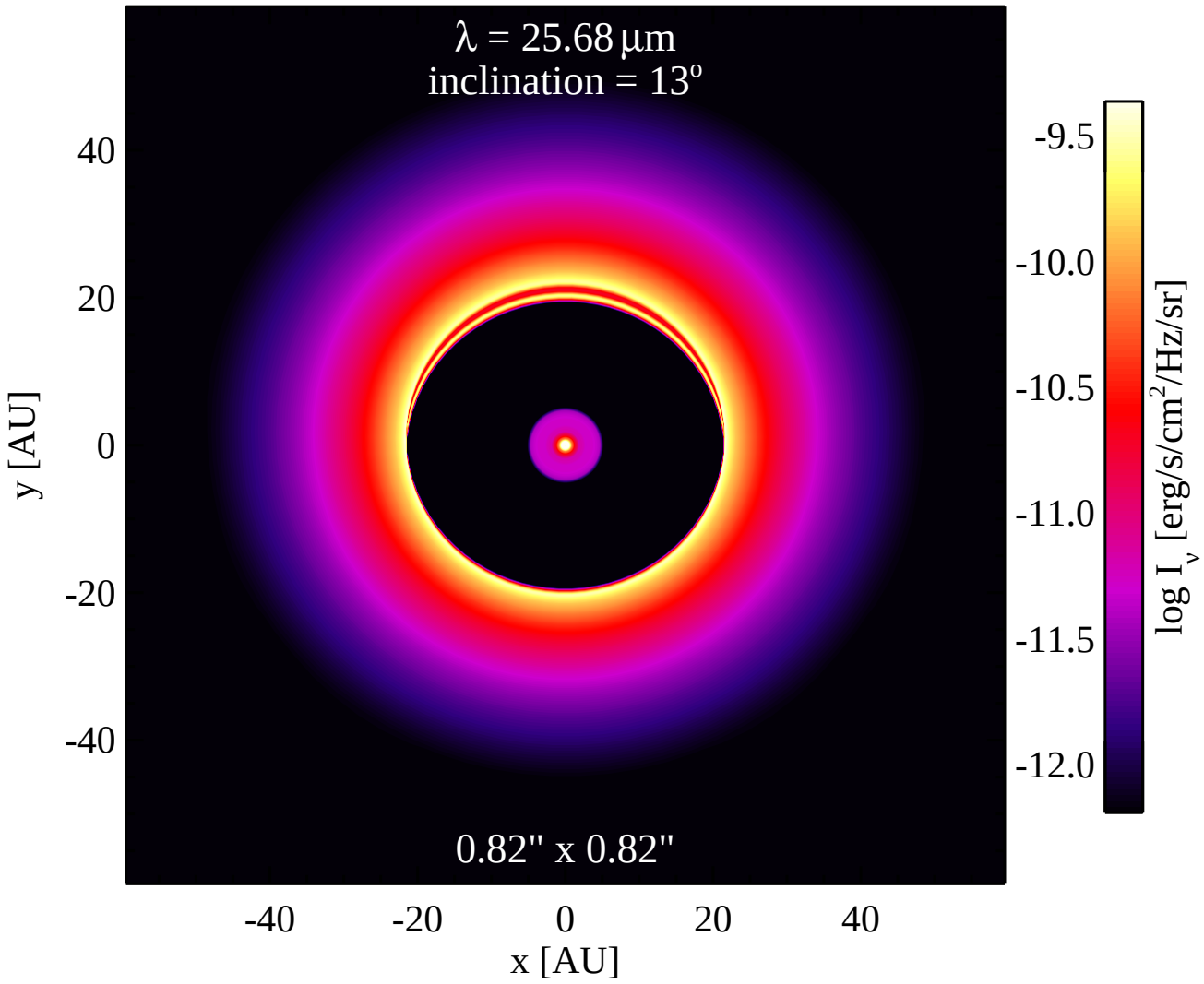

λ = 12.26 μm
inclination = 13°
0.80" x 0.80"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

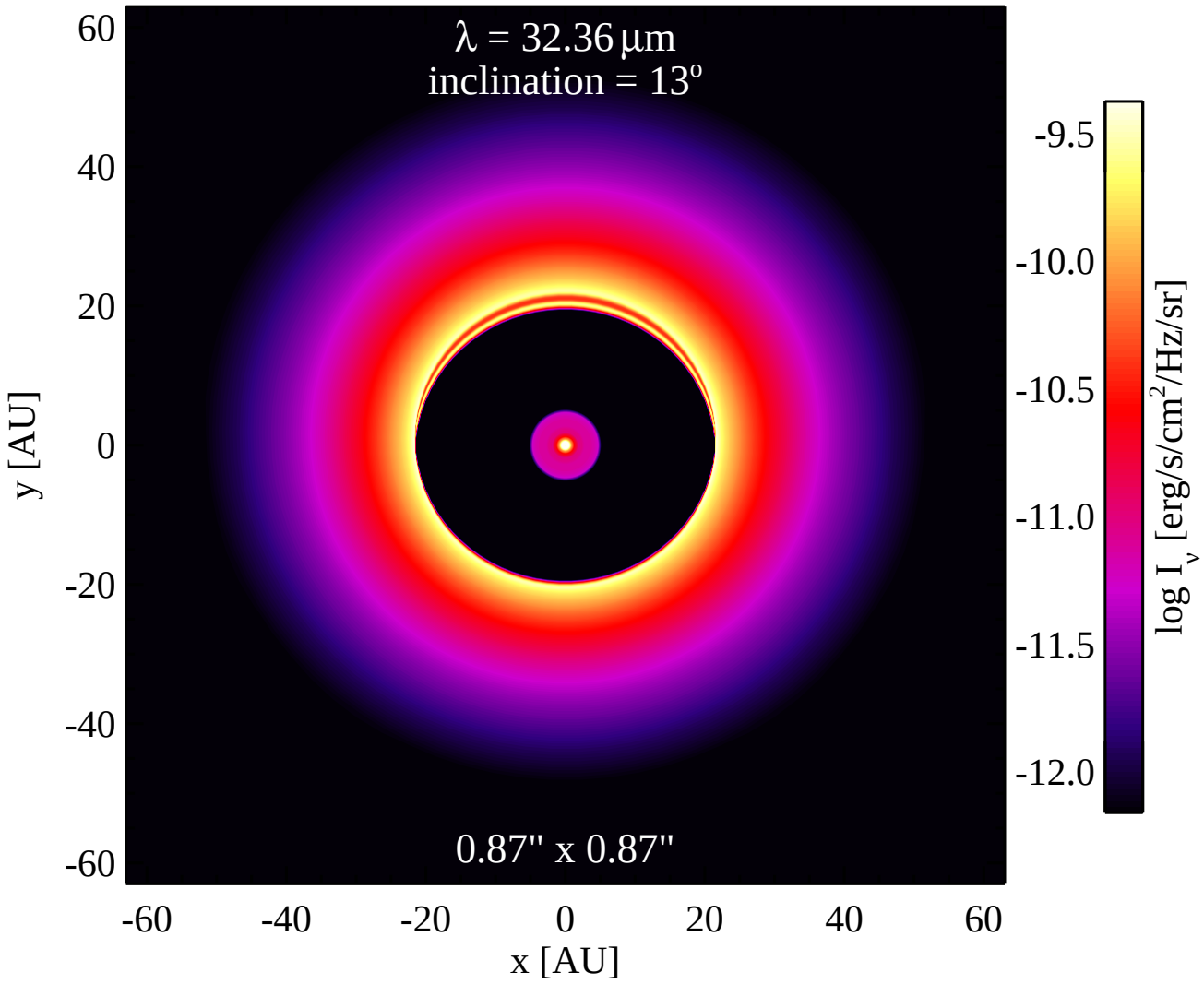

λ = 12.84 μm
inclination = 13°
0.83" x 0.83"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

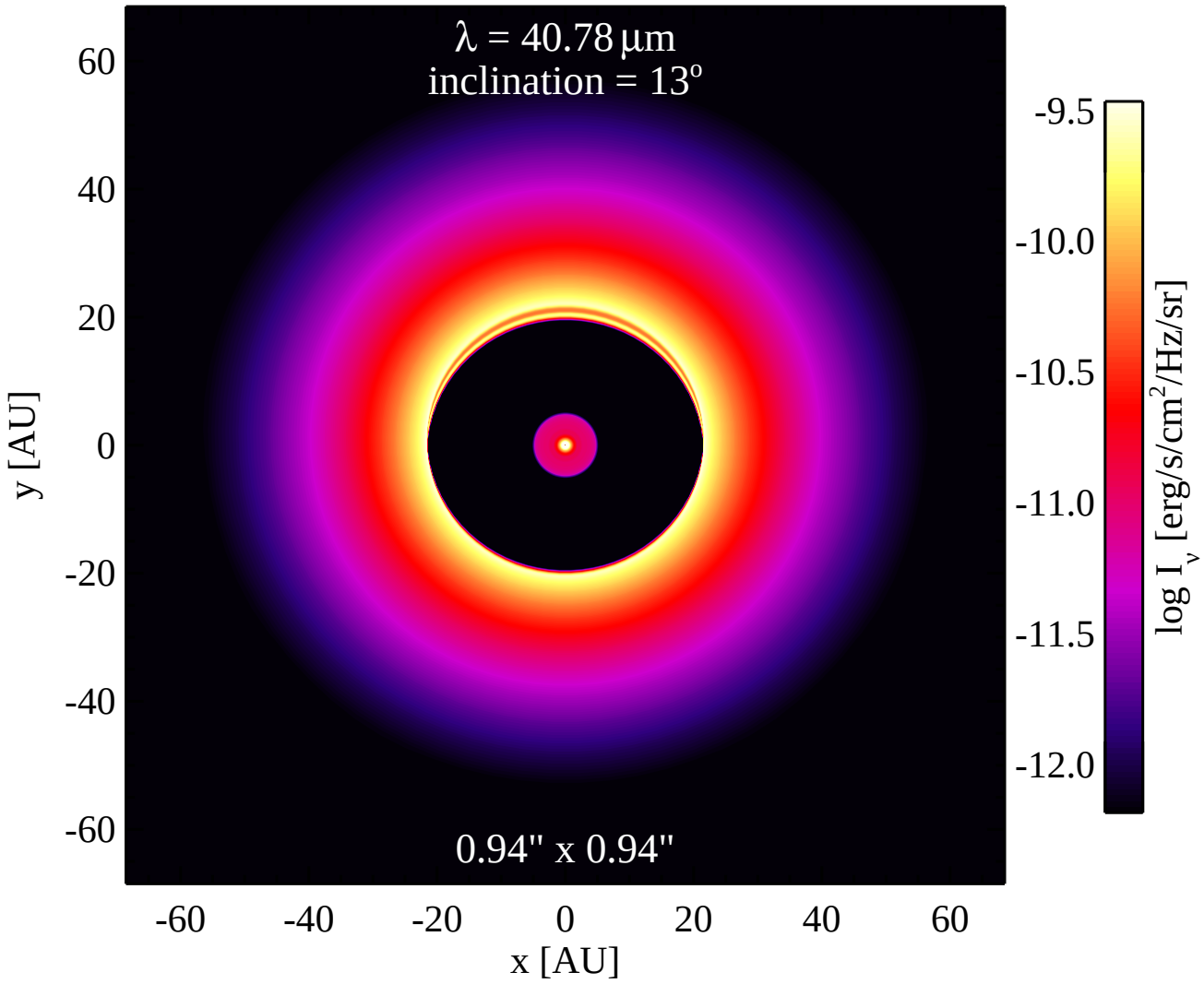

λ = 13.60 μm
inclination = 13°
0.76" x 0.76"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

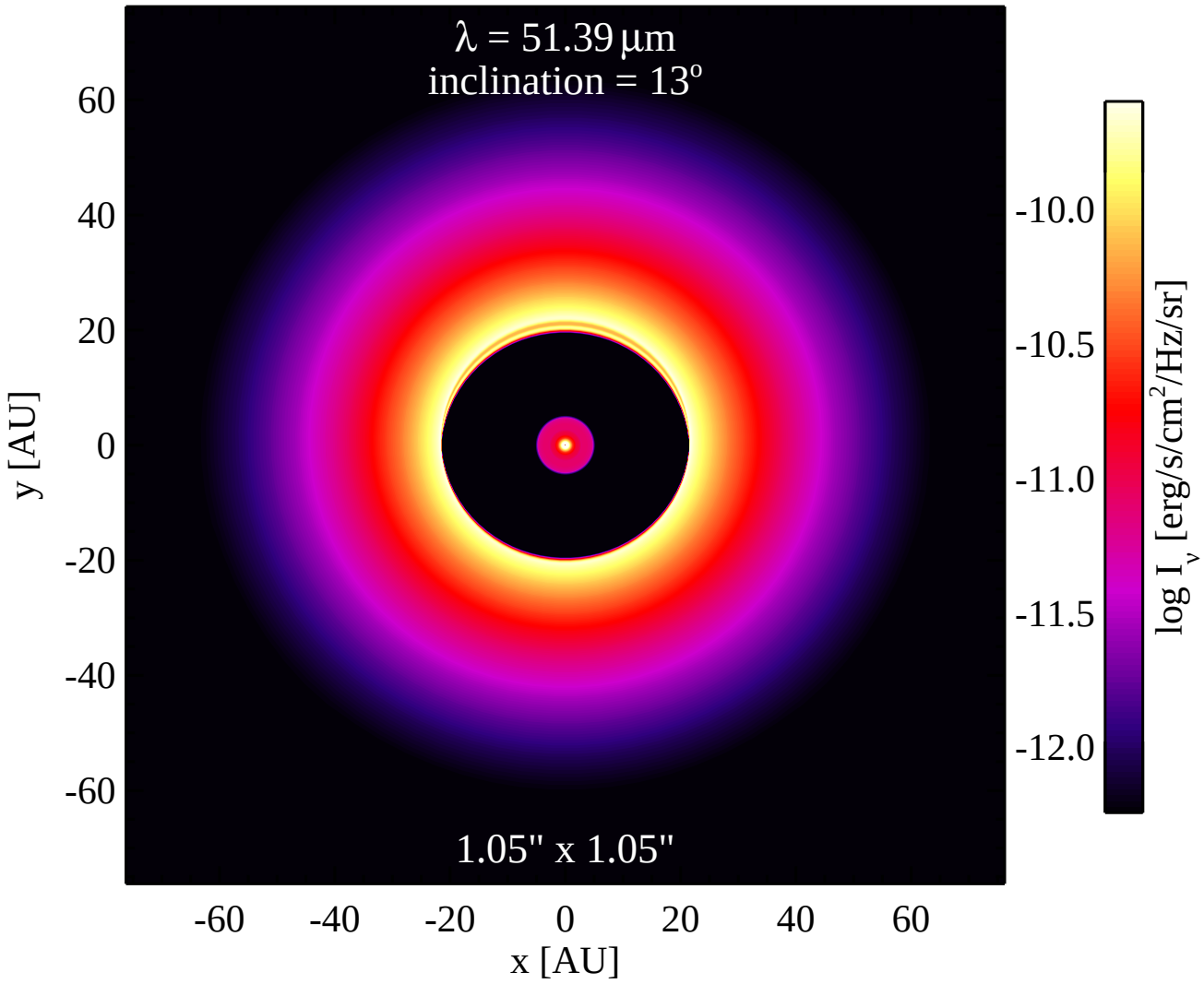

λ = 16.17 μm
inclination = 13°
0.75" x 0.75"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

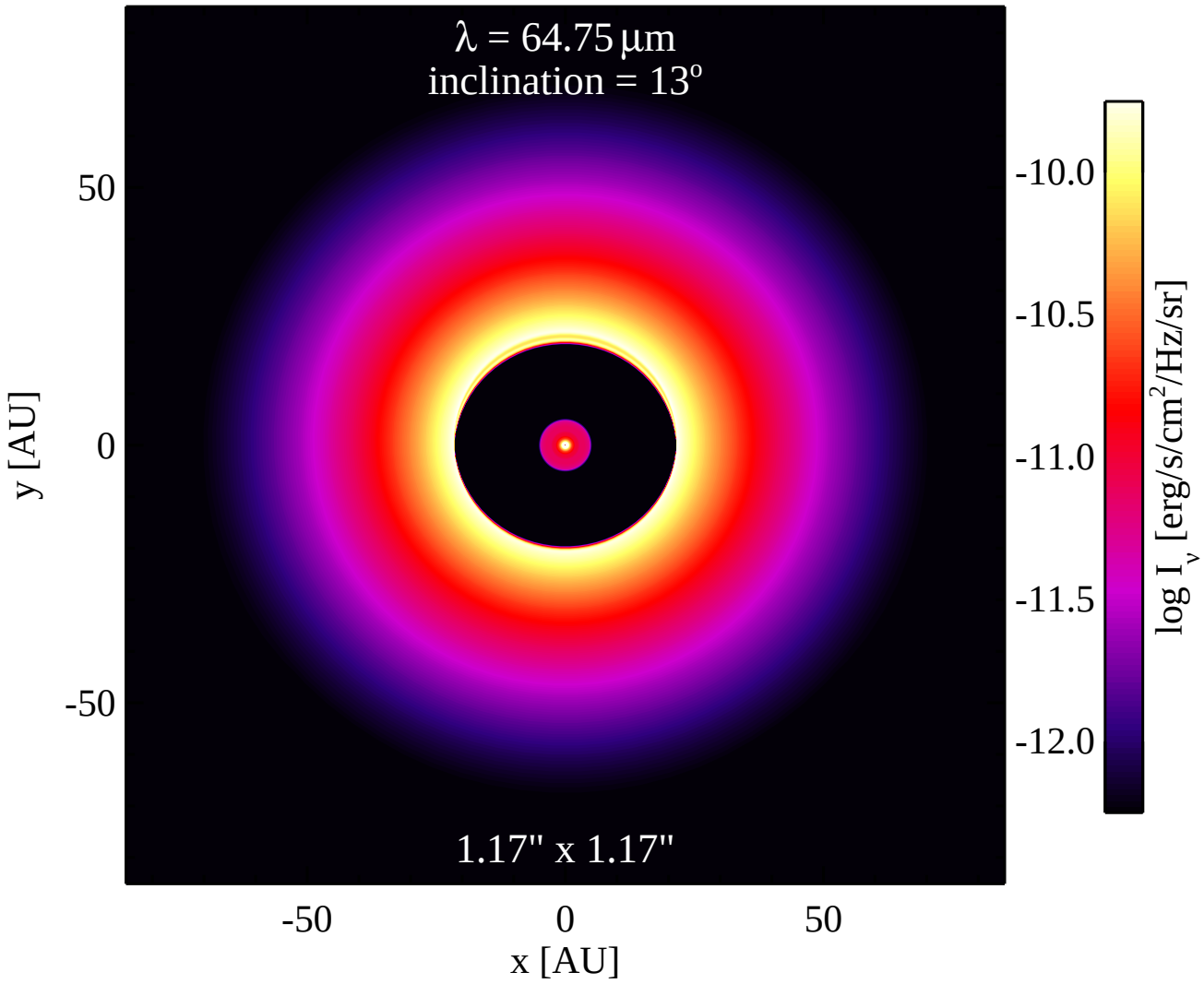

λ = 20.38 μm
inclination = 13°
0.79" x 0.79"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

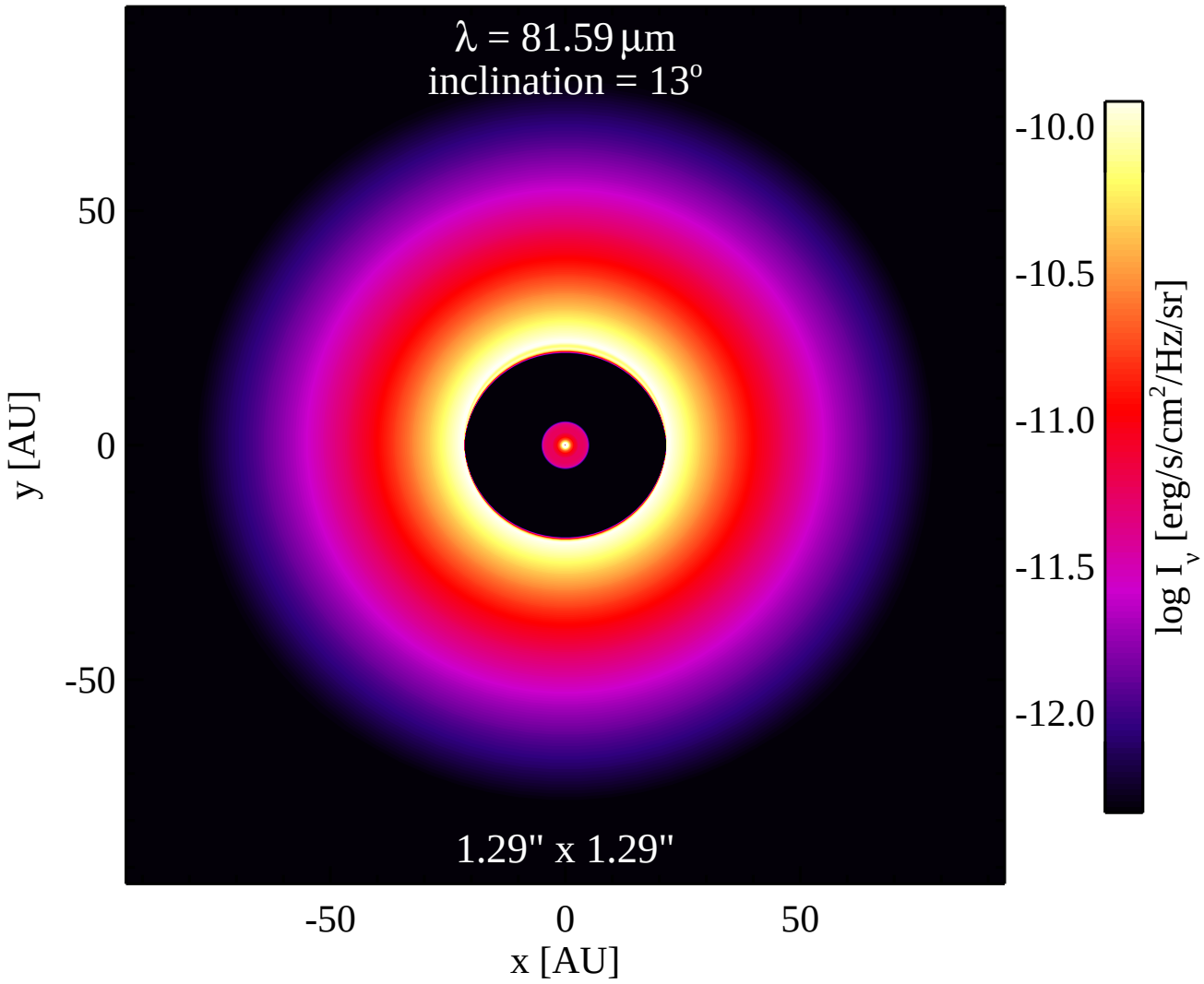

λ = 25.68 μm
inclination = 13°
0.82" x 0.82"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

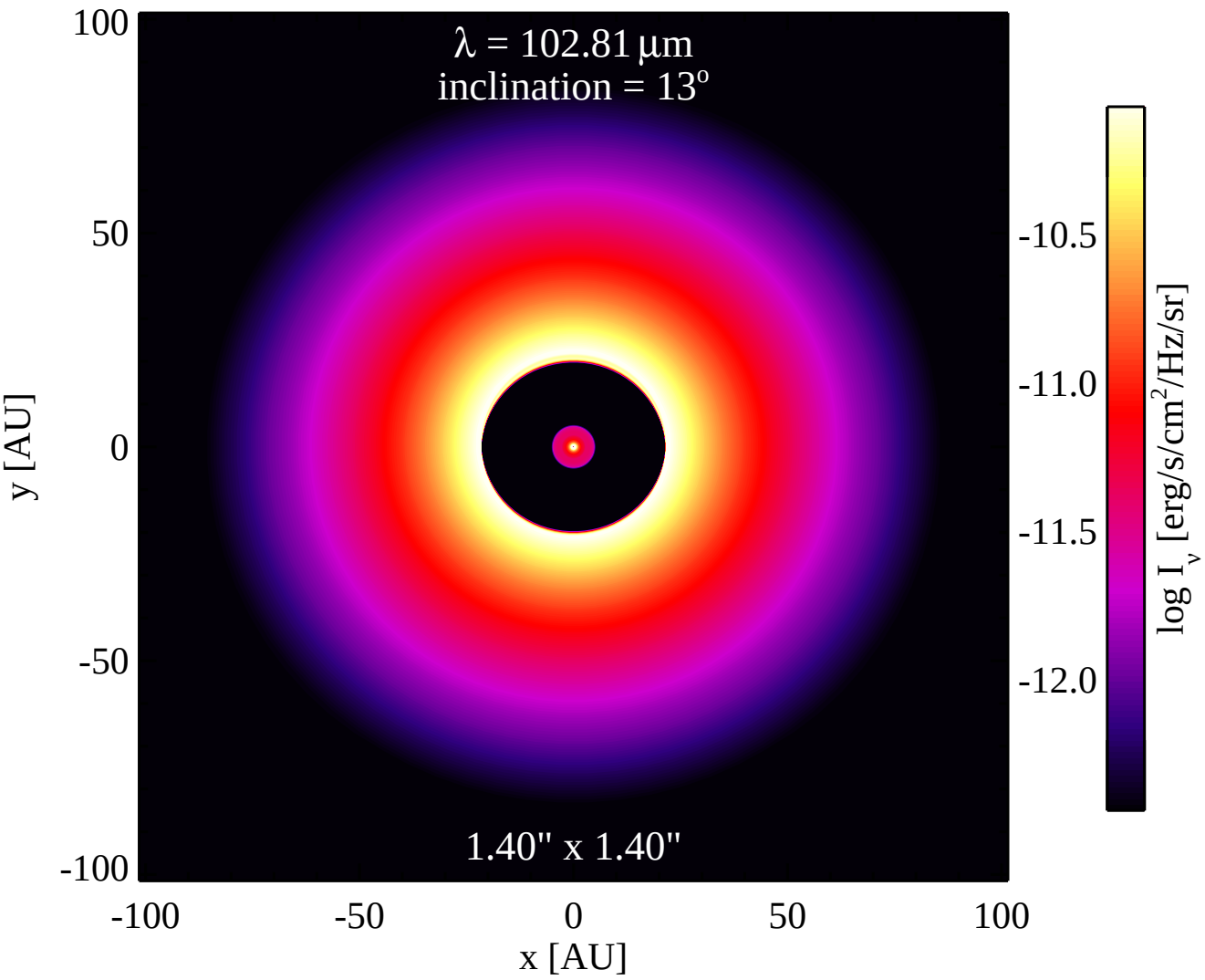

λ = 32.36 μm
inclination = 13°
0.87" x 0.87"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

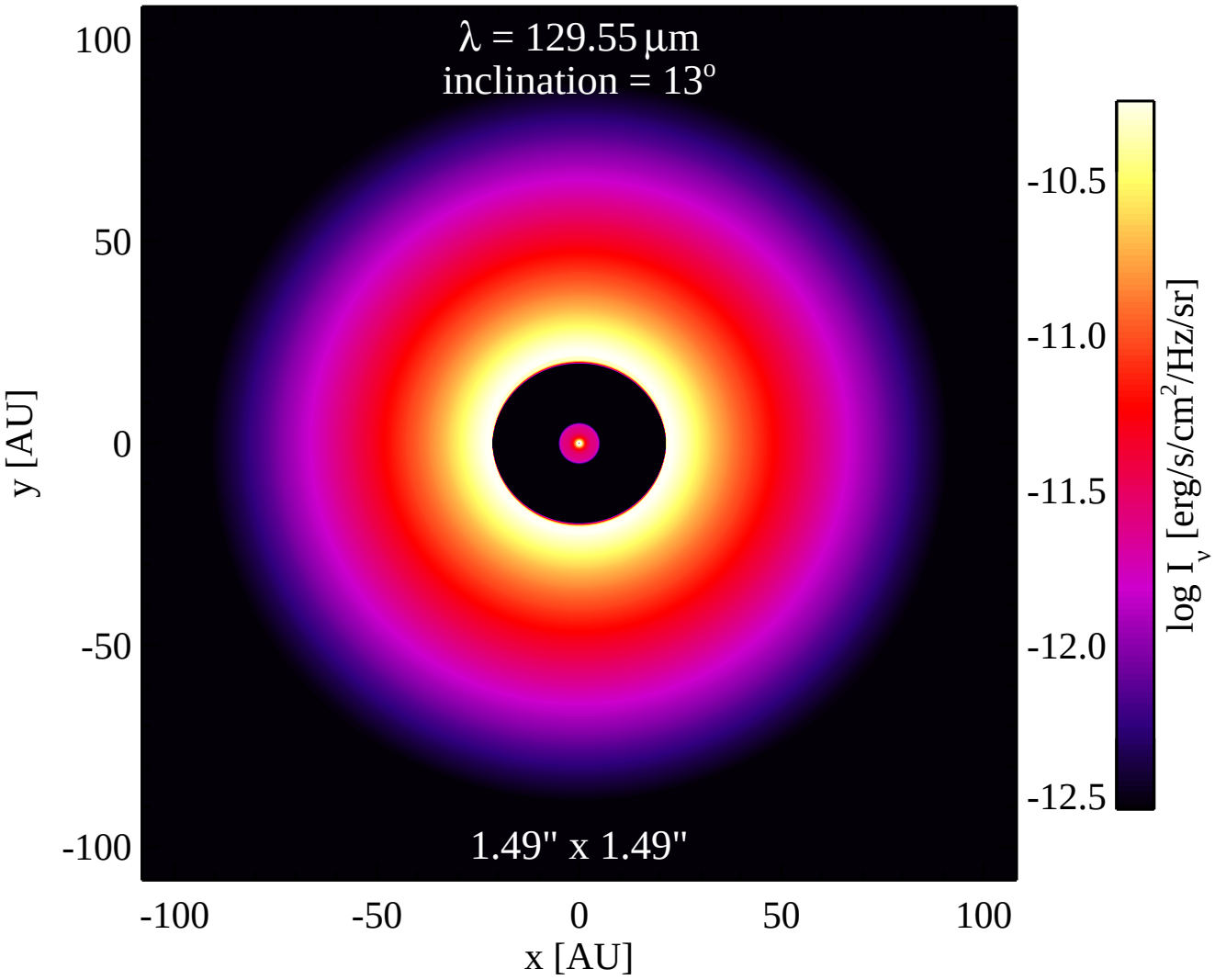

λ = 40.78 μm
inclination = 13°
0.94" x 0.94"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

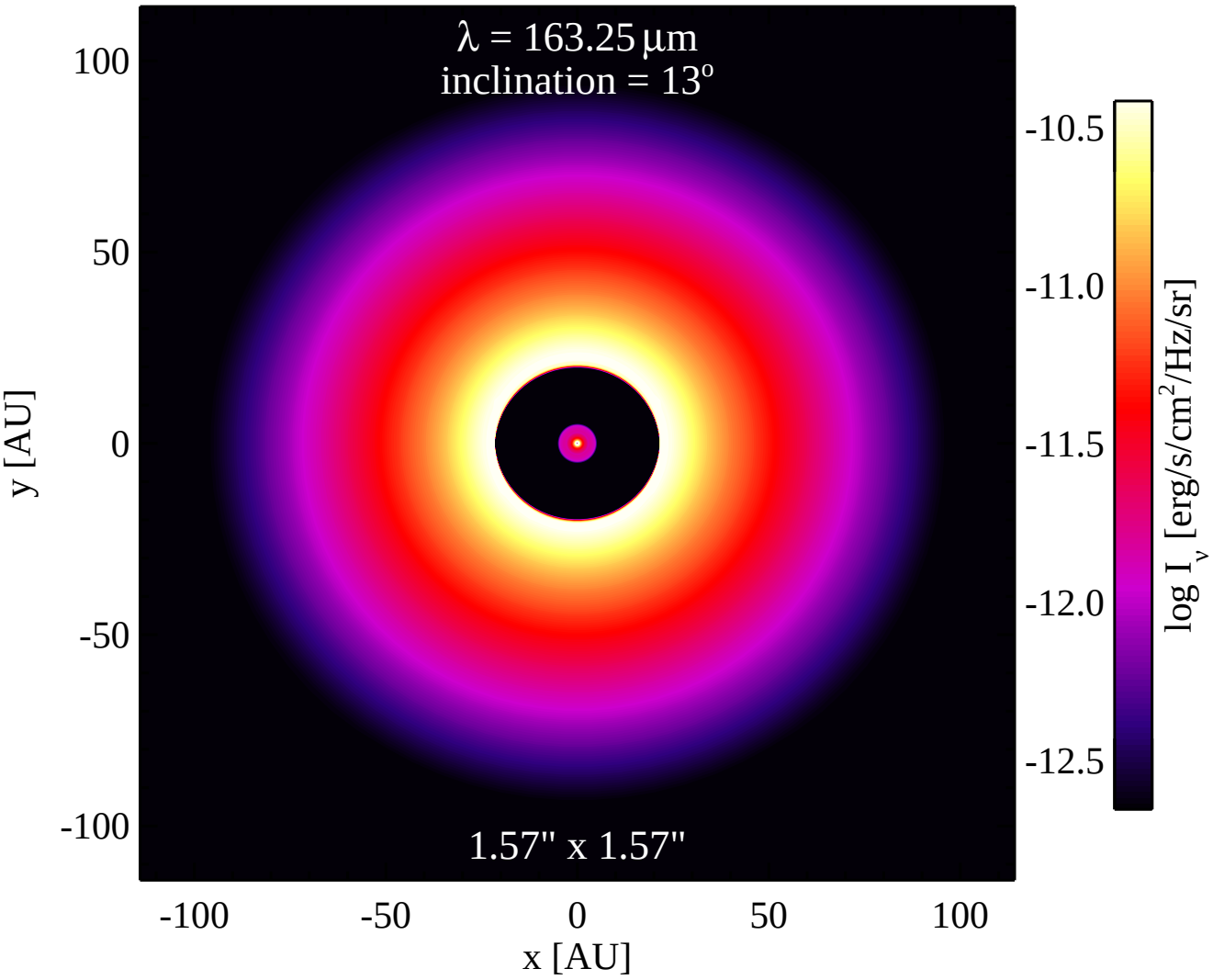

λ = 51.39 μm
inclination = 13°
1.05" x 1.05"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

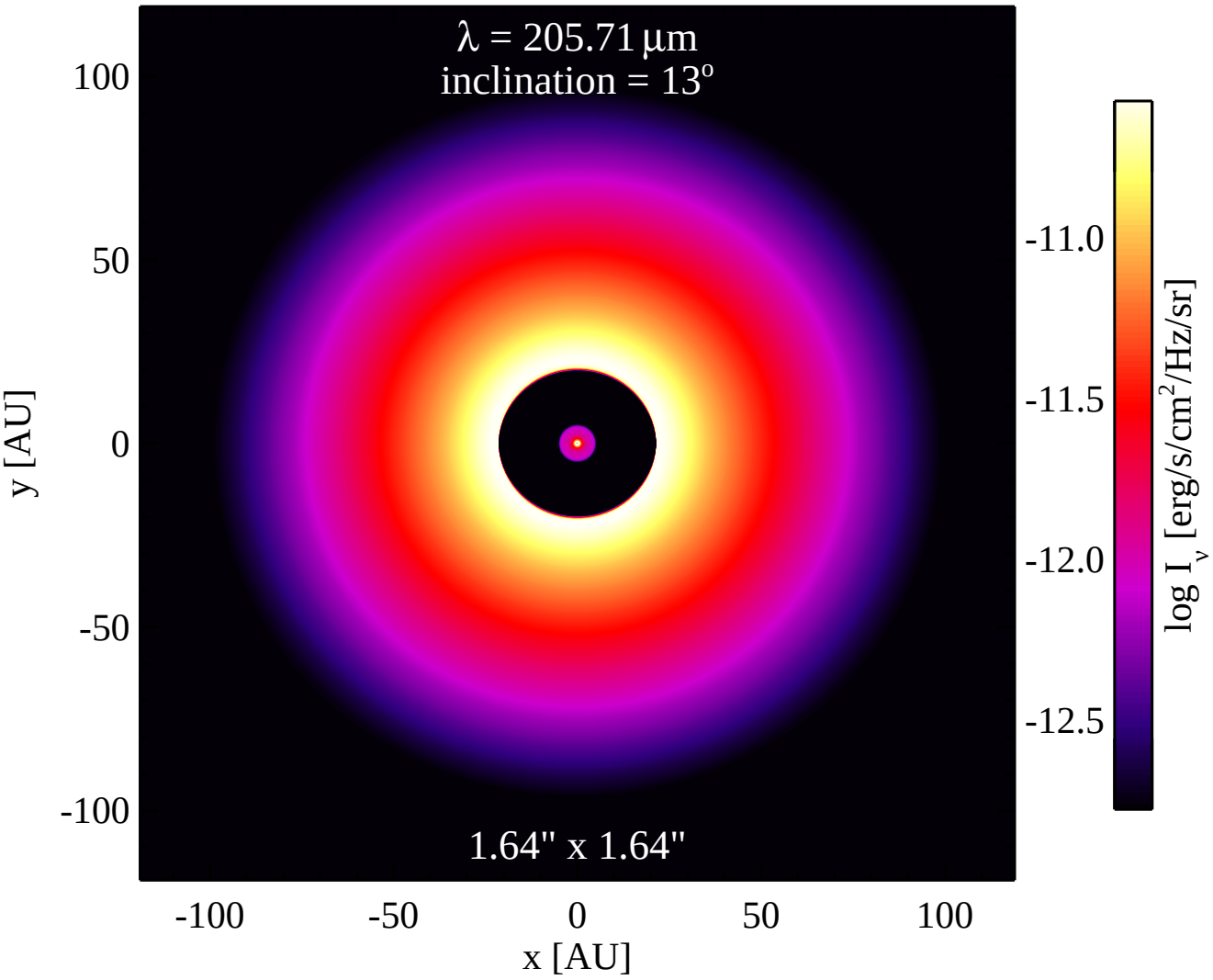

λ = 64.75 μm
inclination = 13°
1.17" x 1.17"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

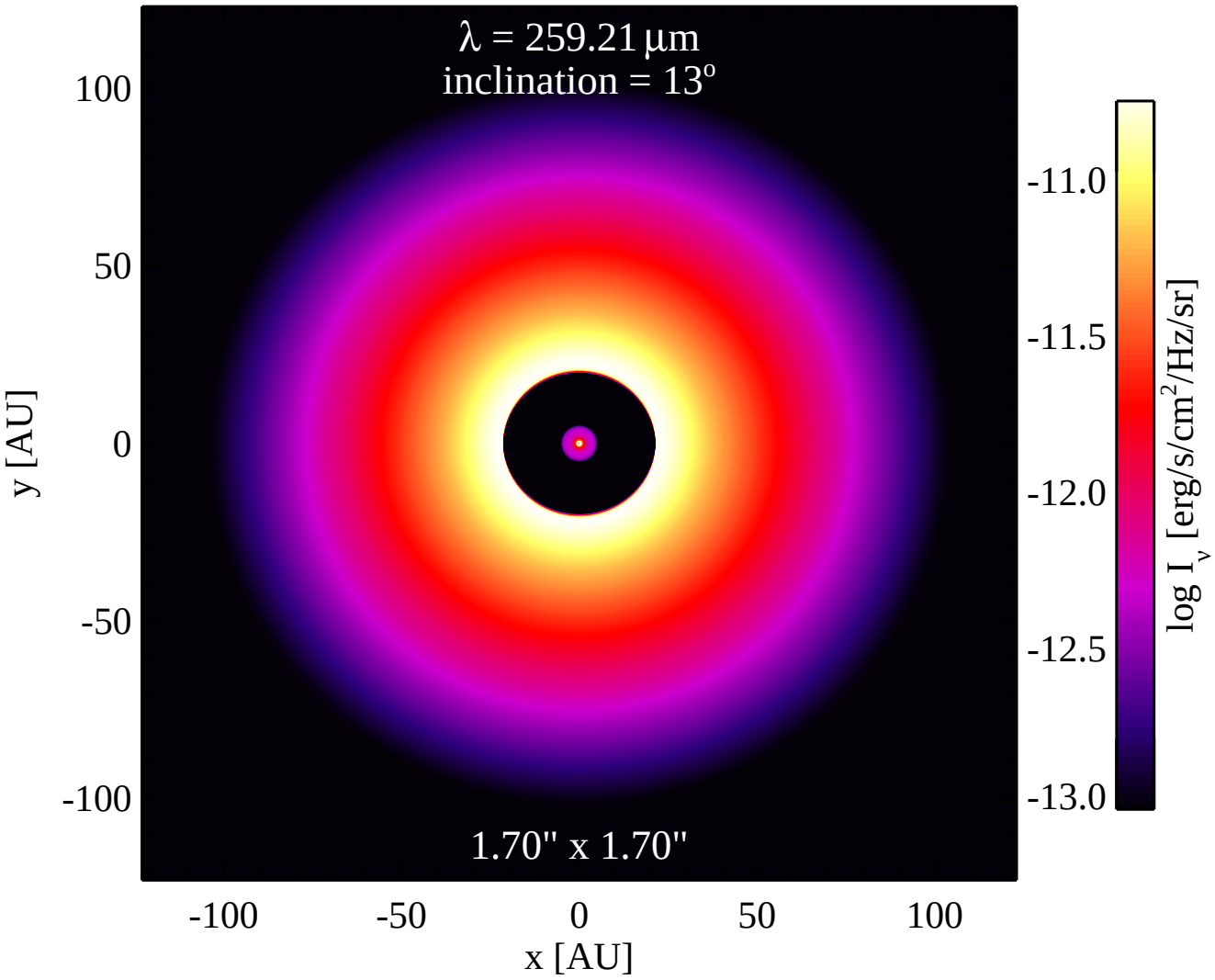

λ = 81.59 μm
inclination = 13°
1.29" x 1.29"
50
0
-50
y [AU]
-50
0
50
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

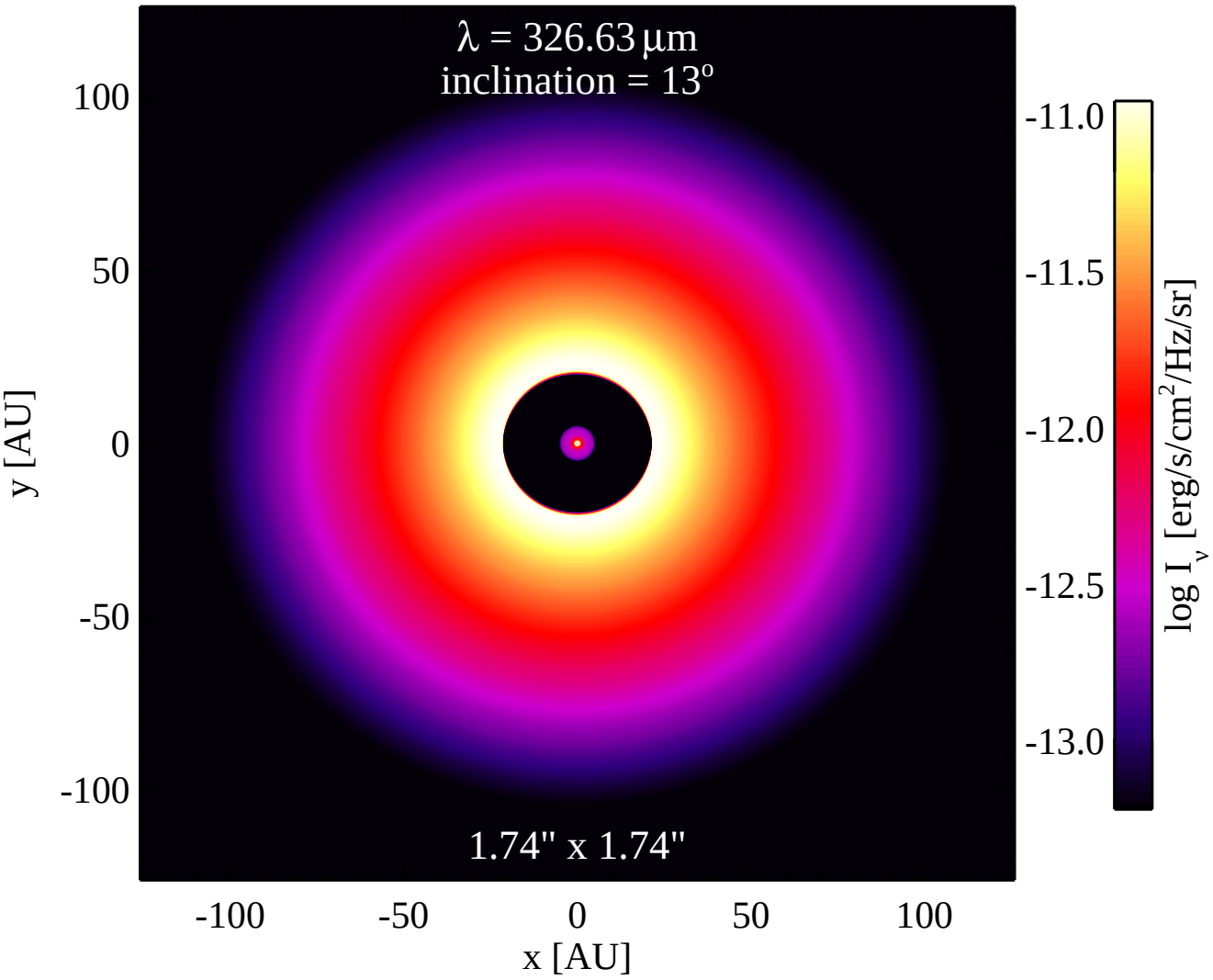

λ = 102.81 μm
inclination = 13°
1.40" x 1.40"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
log I_ν [erg/s/cm²/Hz/sr]

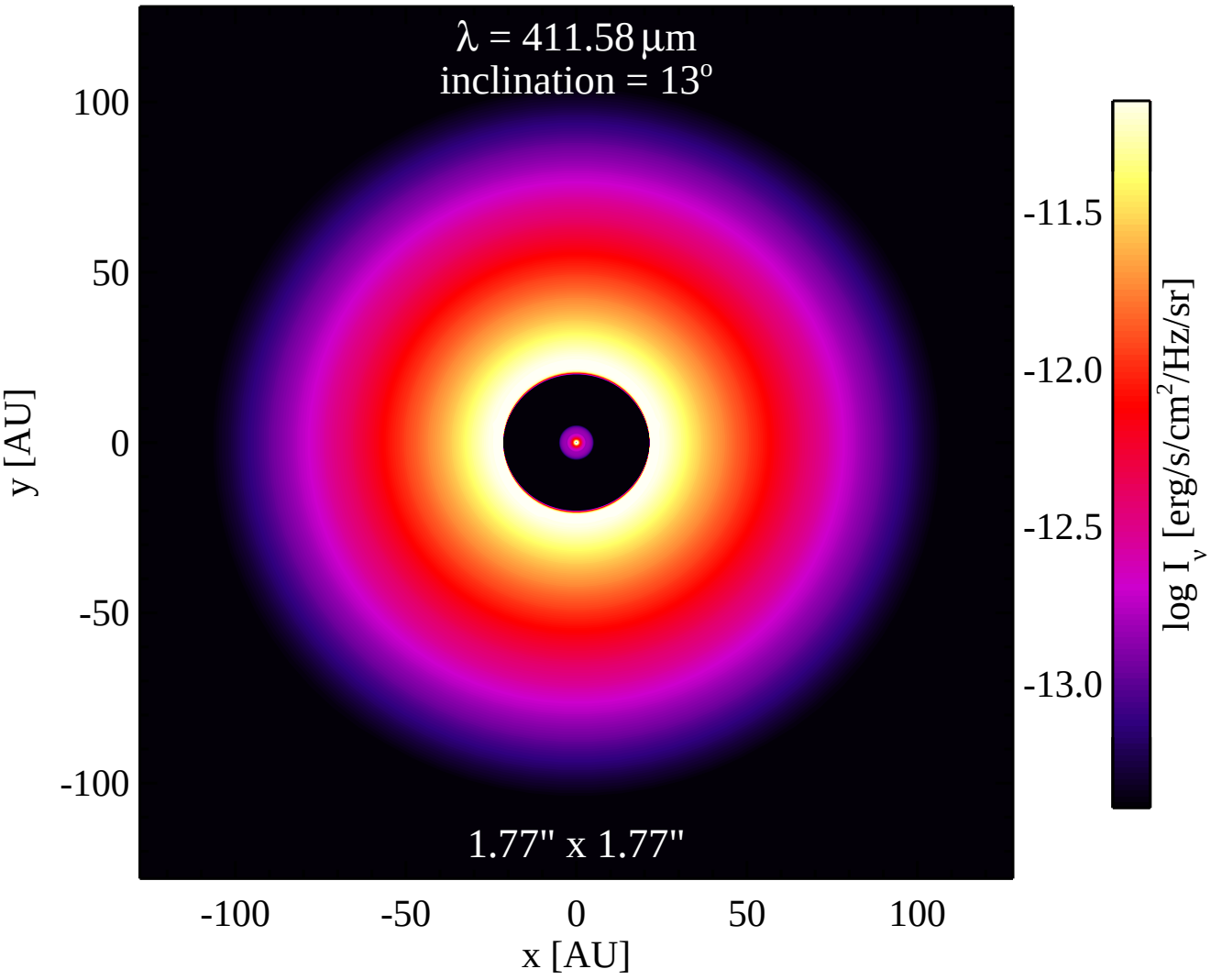

λ = 129.55 μm
inclination = 13°
1.49" x 1.49"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

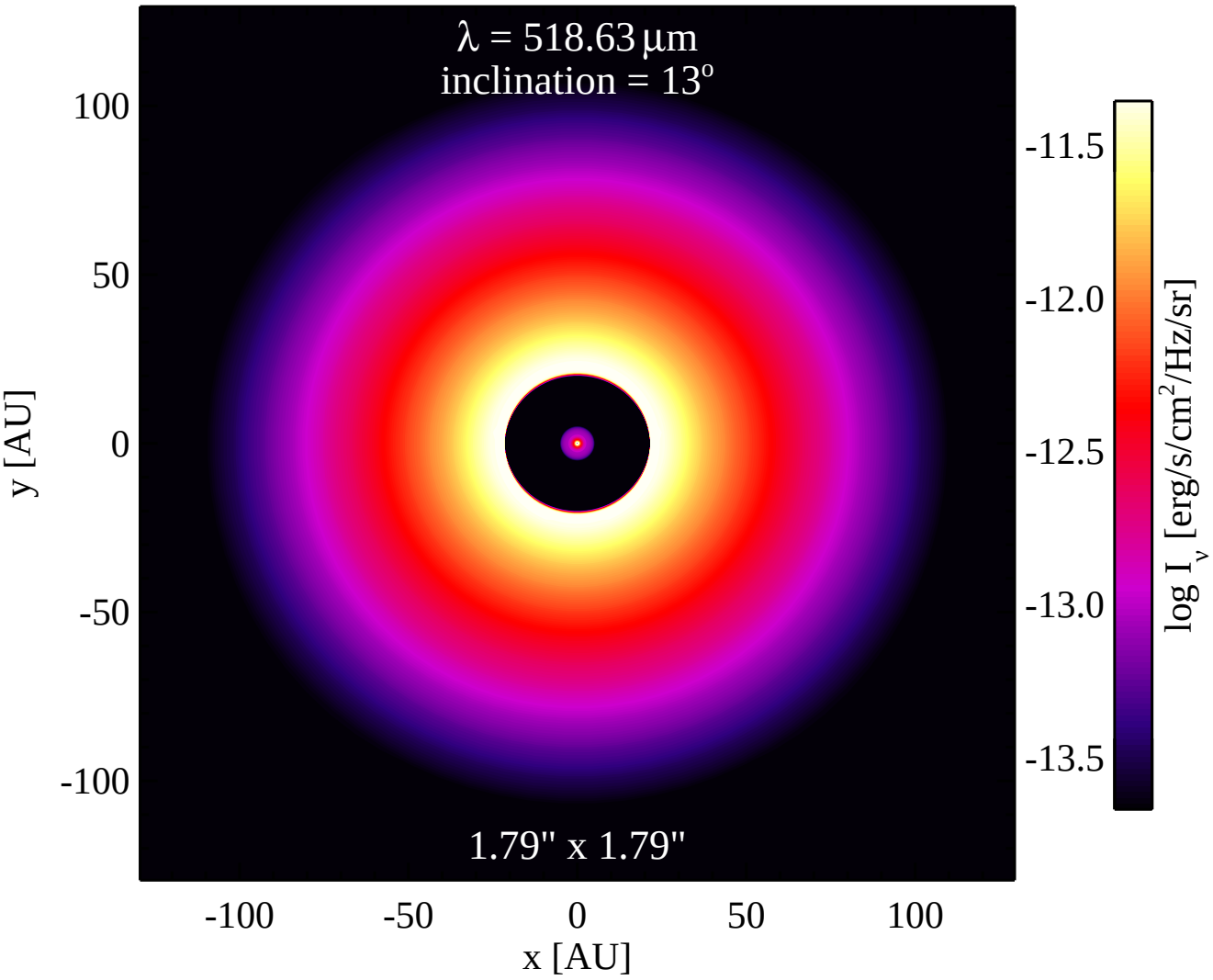

λ = 163.25 μm
inclination = 13°
1.57" x 1.57"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

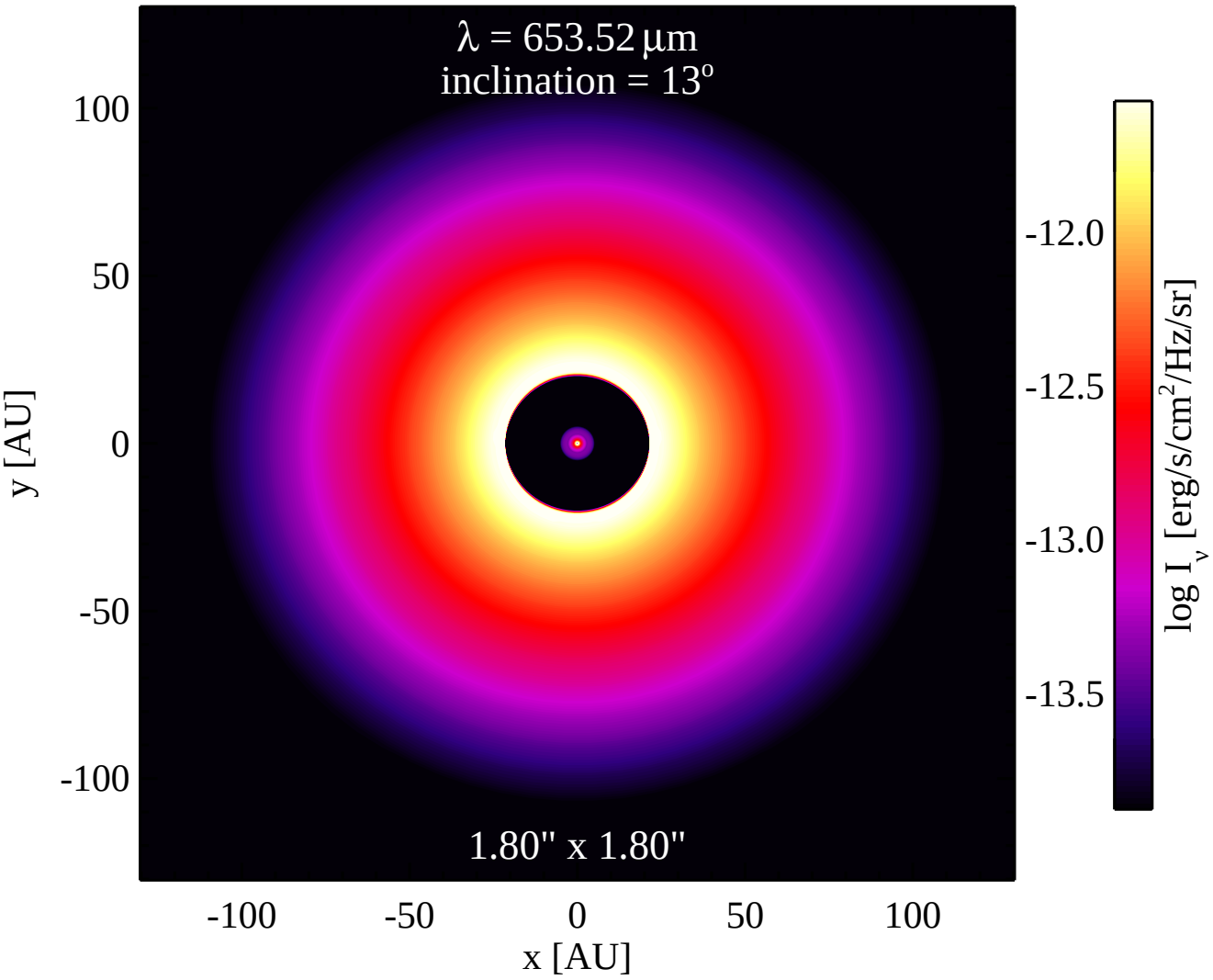

λ = 205.71 μm
inclination = 13°
1.64" x 1.64"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

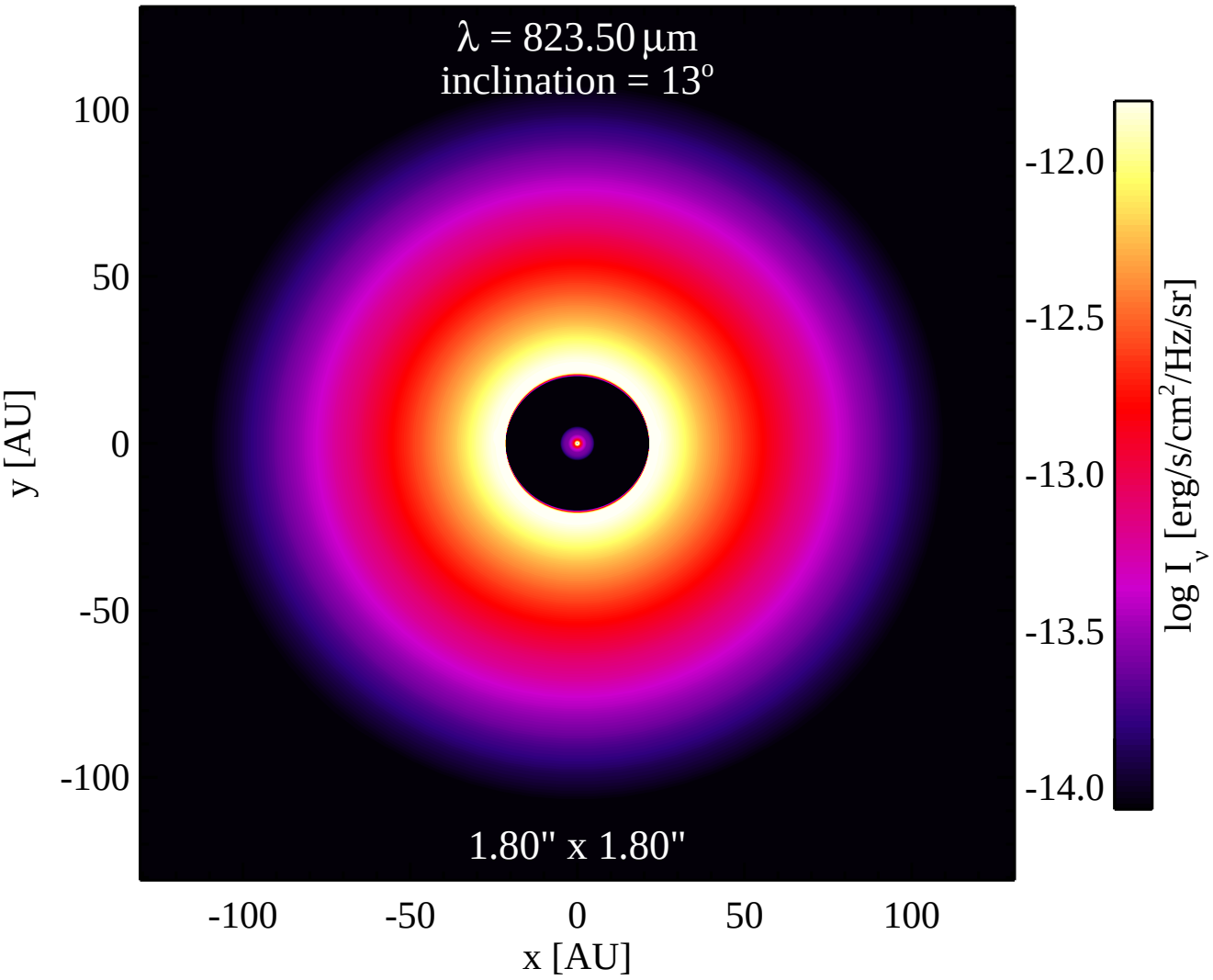

λ = 259.21 μm
inclination = 13°
1.70" x 1.70"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

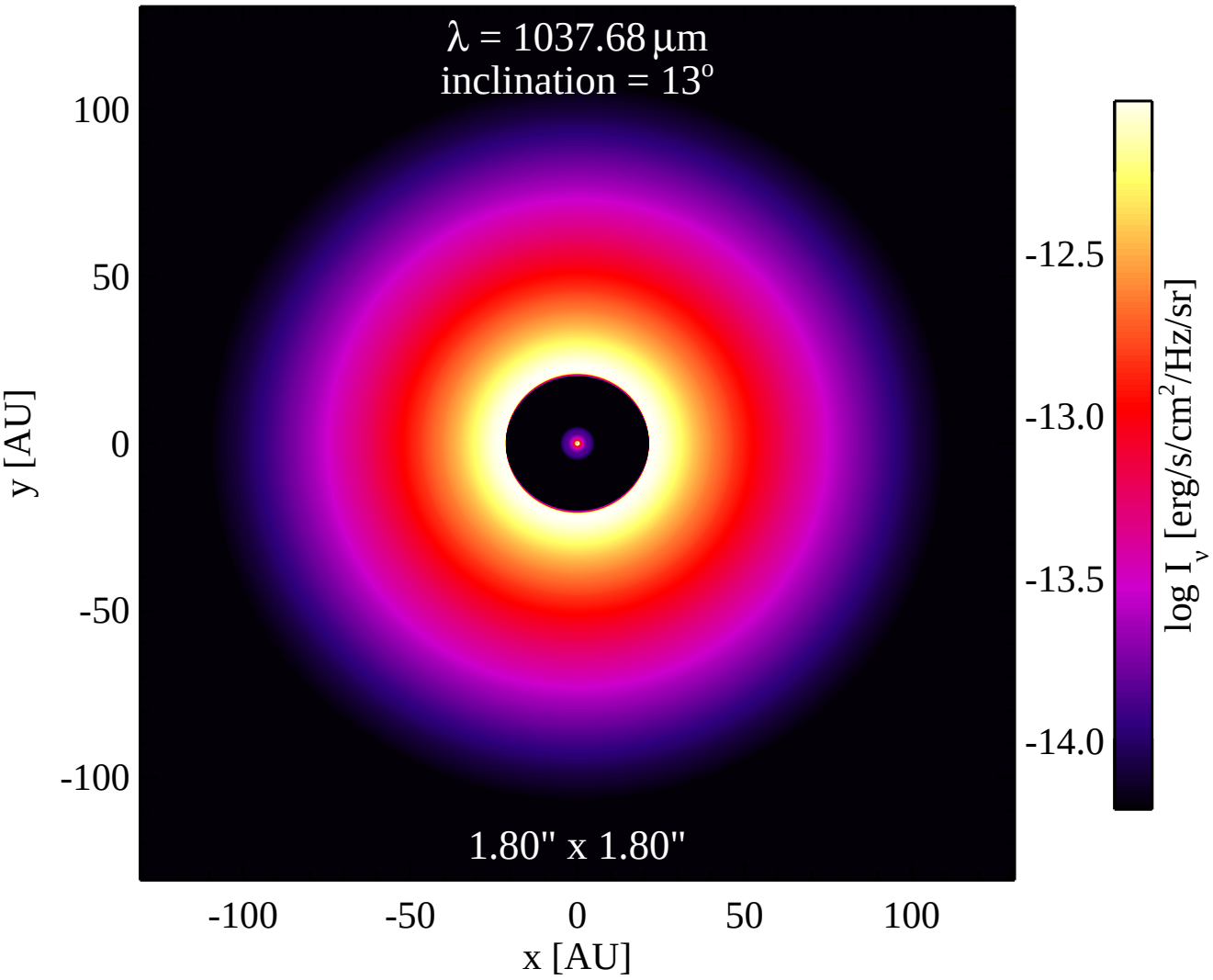

λ = 326.63 μm
inclination = 13°
1.74" x 1.74"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

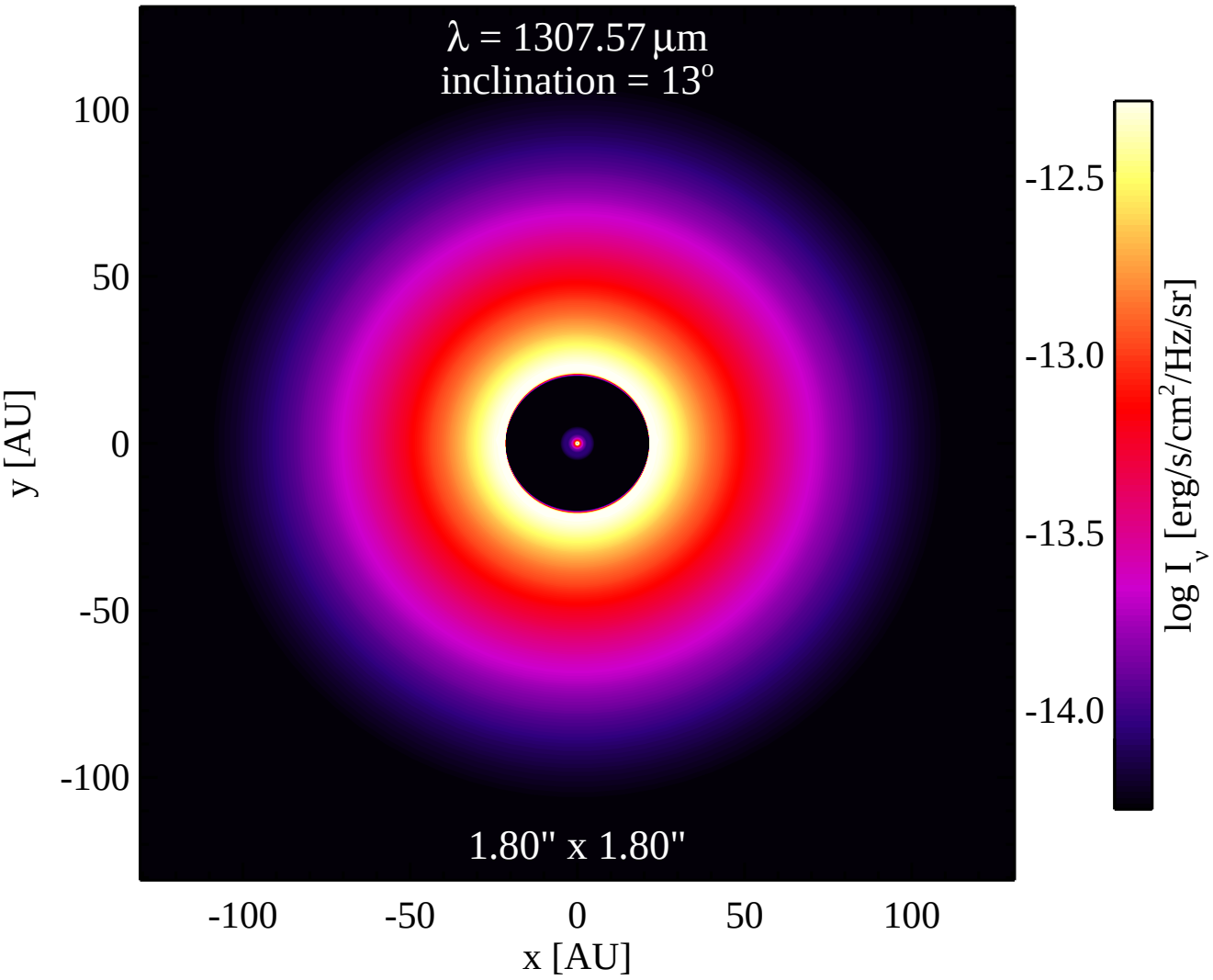

λ = 411.58 μm
inclination = 13°
1.77" x 1.77"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

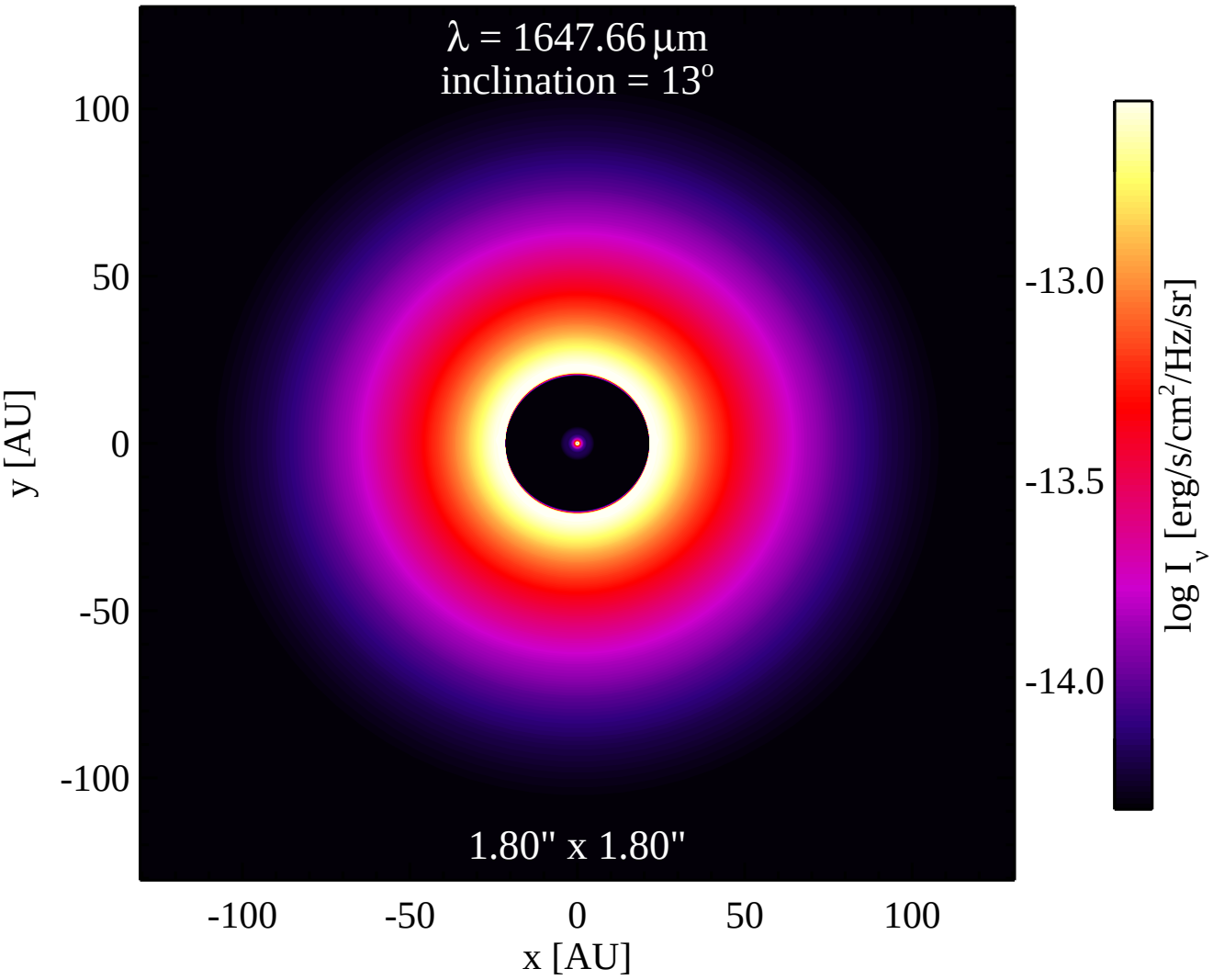

λ = 518.63 μm
inclination = 13°
1.79" x 1.79"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

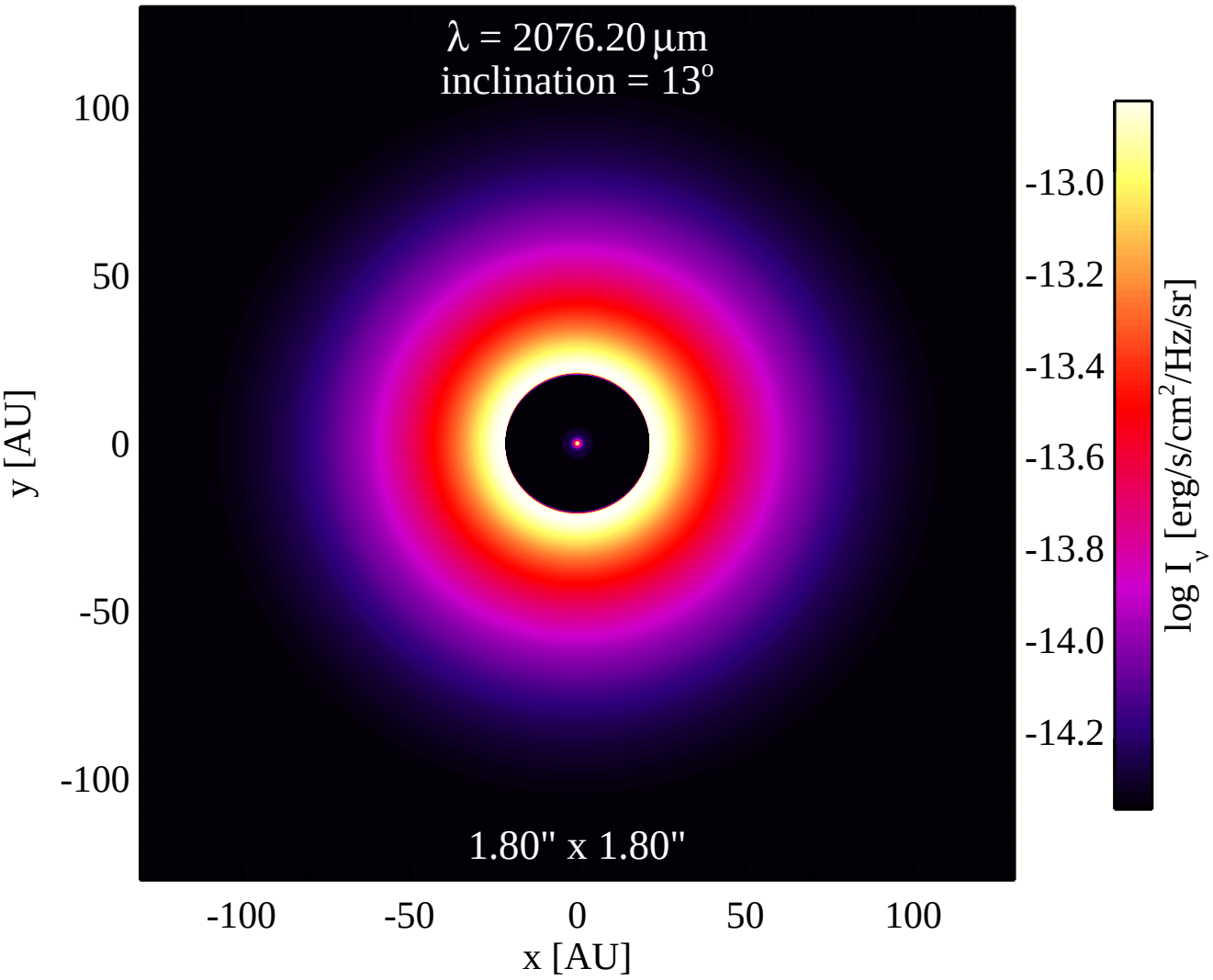

λ = 653.52 μm
inclination = 13°
1.80" x 1.80"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

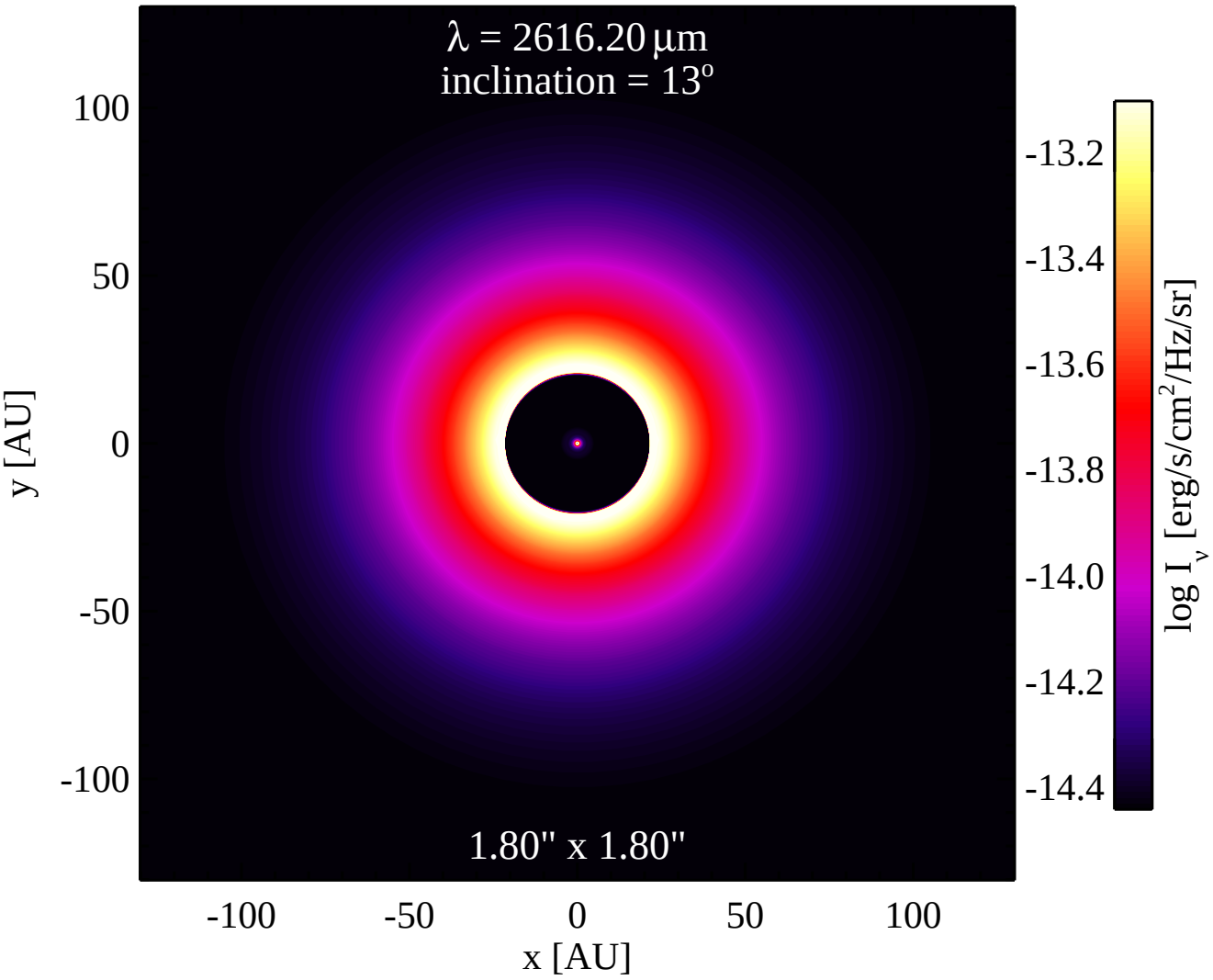

λ = 823.50 μm
inclination = 13°
1.80" x 1.80"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

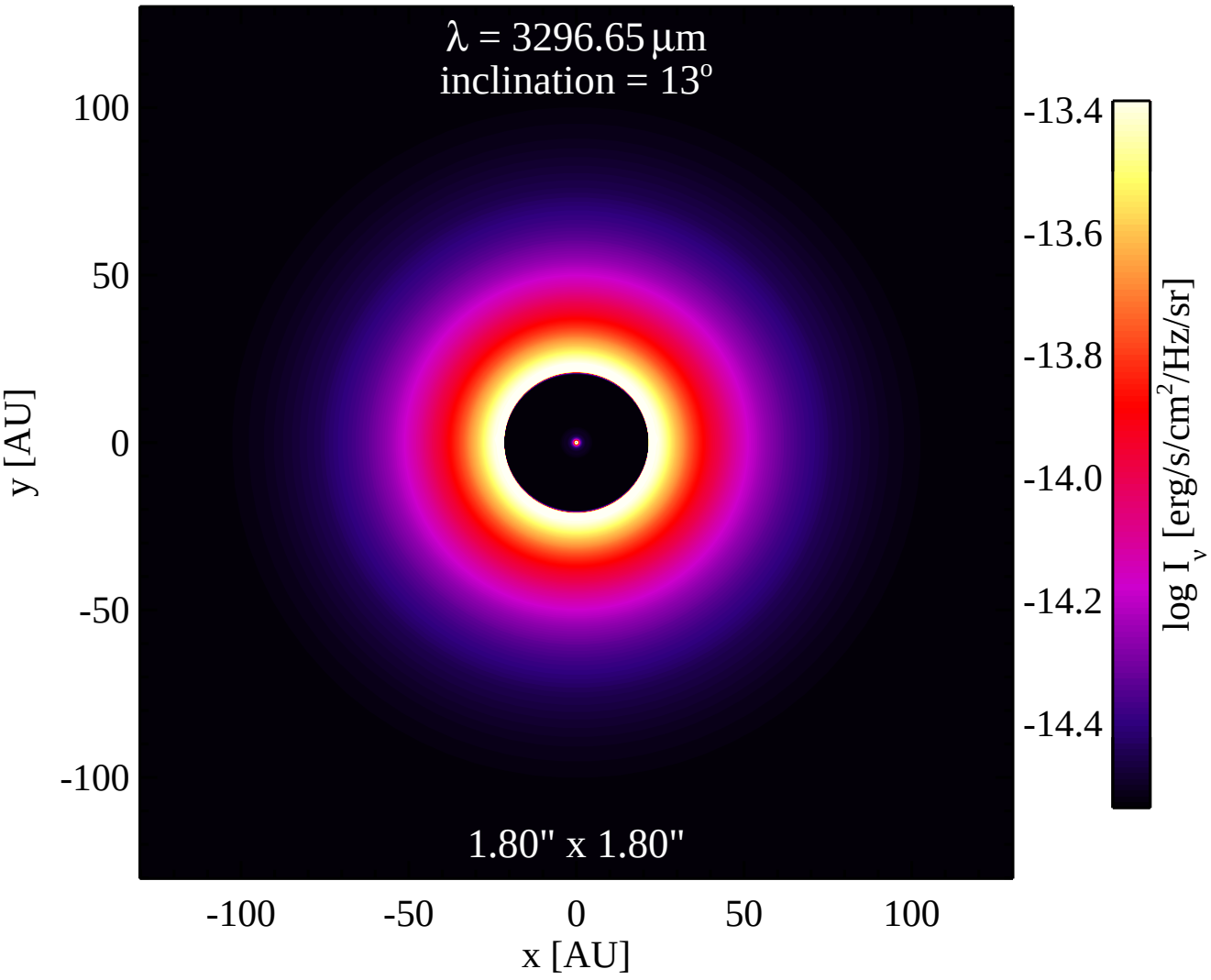

λ = 1037.68 μm
inclination = 13°
1.80" x 1.80"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

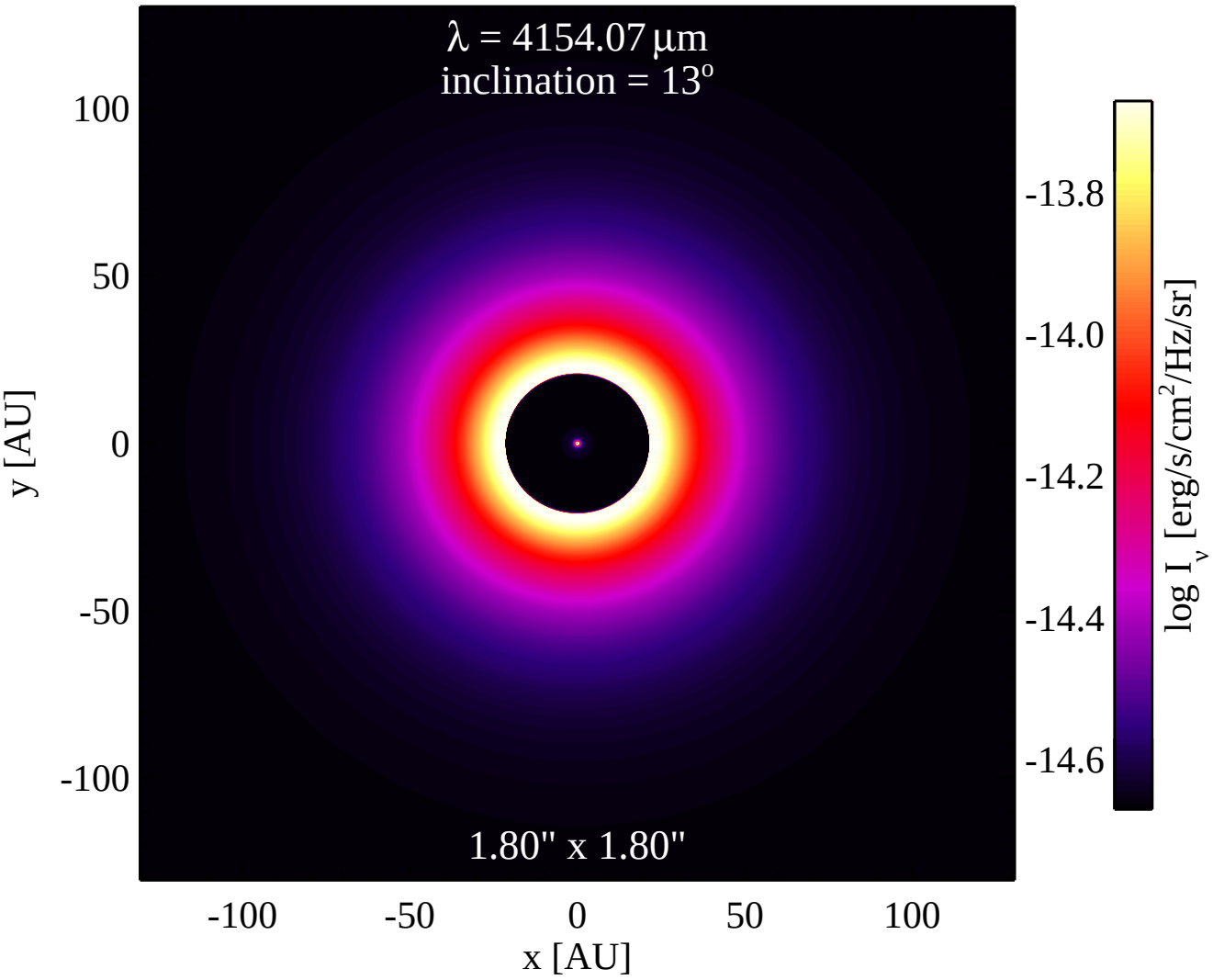

λ = 1307.57 μm
inclination = 13°
1.80" x 1.80"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 1647.66 μm
inclination = 13°
1.80" x 1.80"
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 = 2076.20 μm
inclination = 13°
1.80" x 1.80"
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 = 2616.20 μm
inclination = 13°
1.80" x 1.80"
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 = 3296.65 μm
inclination = 13°
1.80" x 1.80"
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 = 4154.07 μm
inclination = 13°
1.80" x 1.80"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]