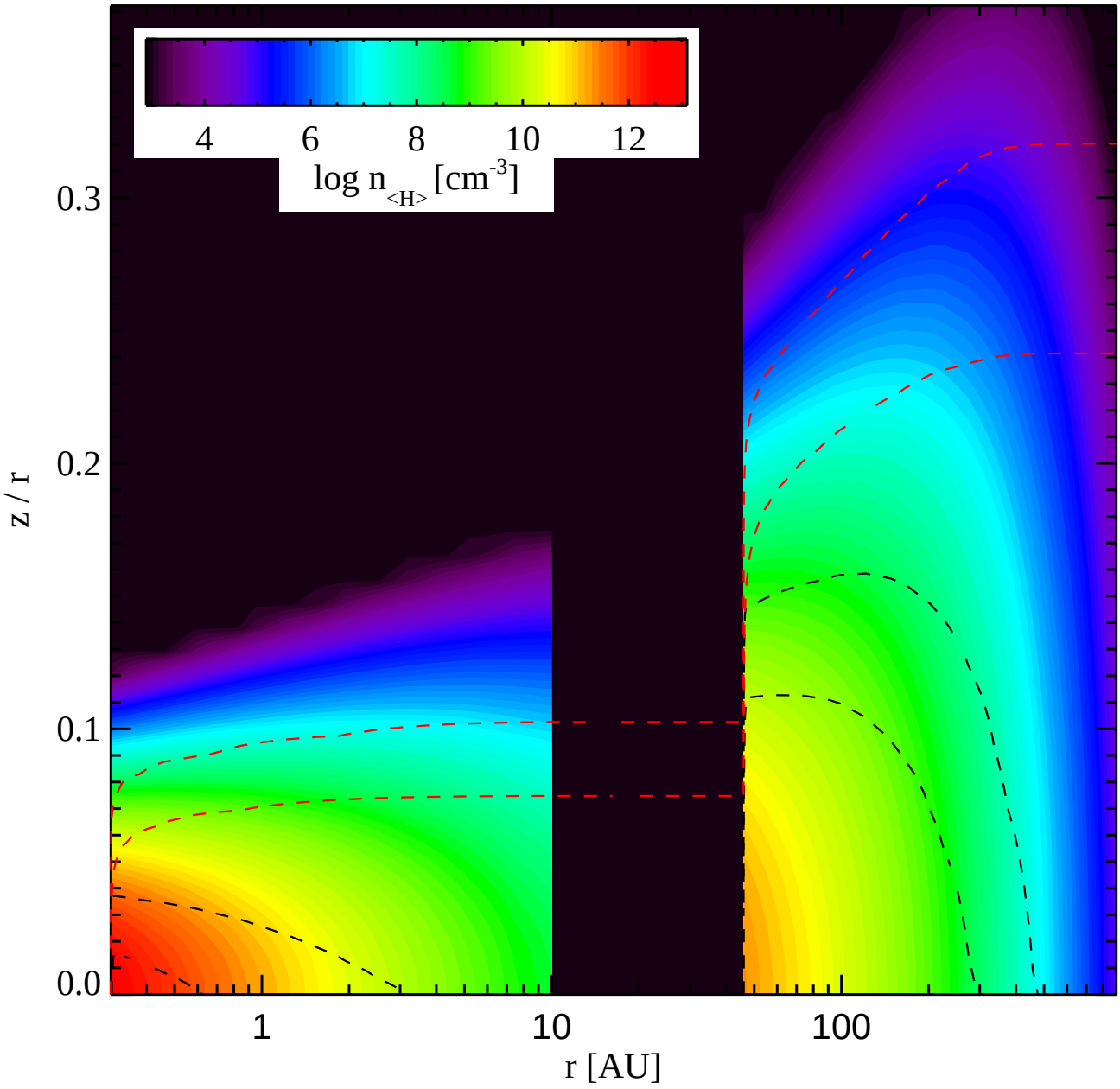
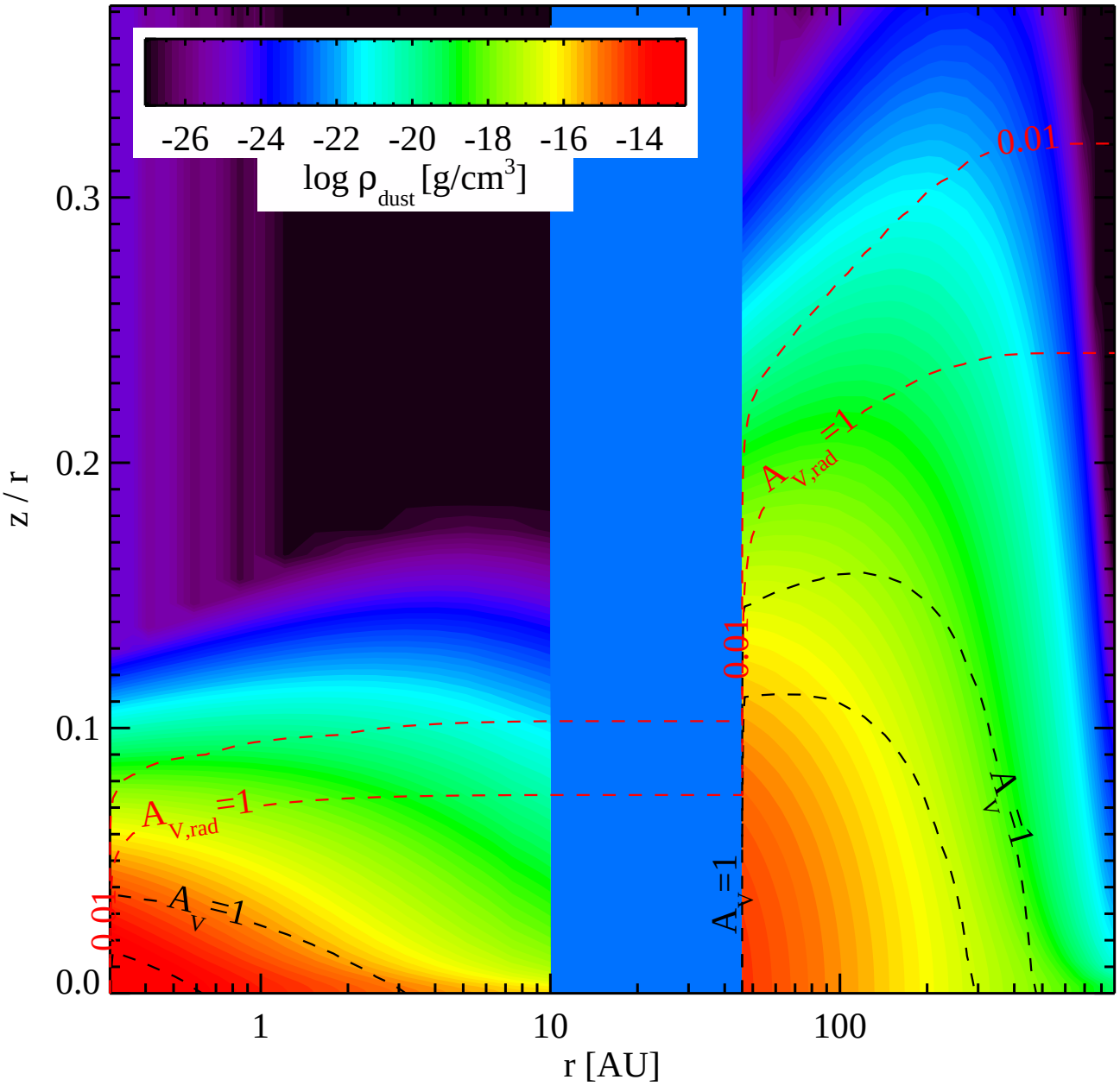
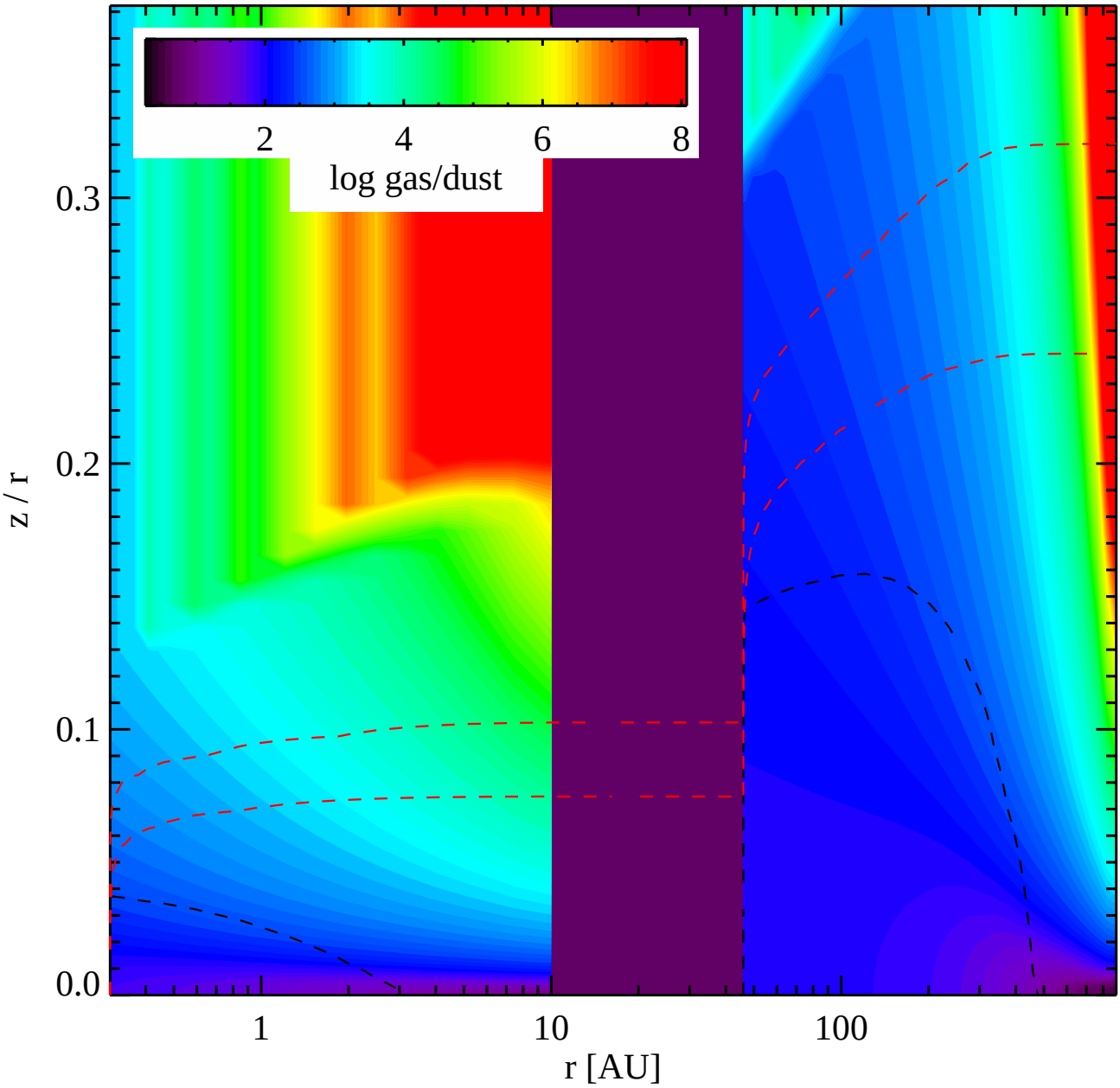
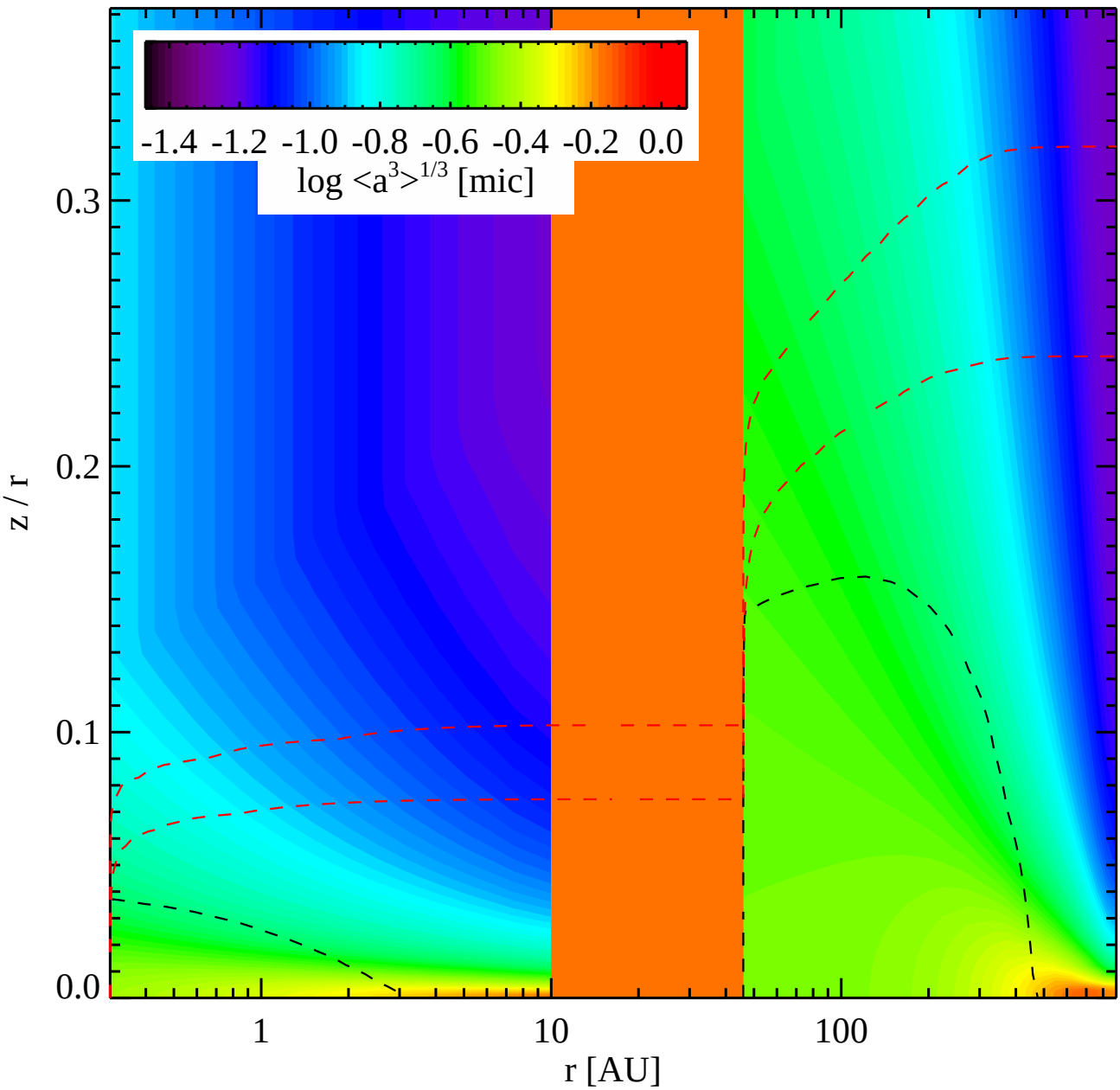
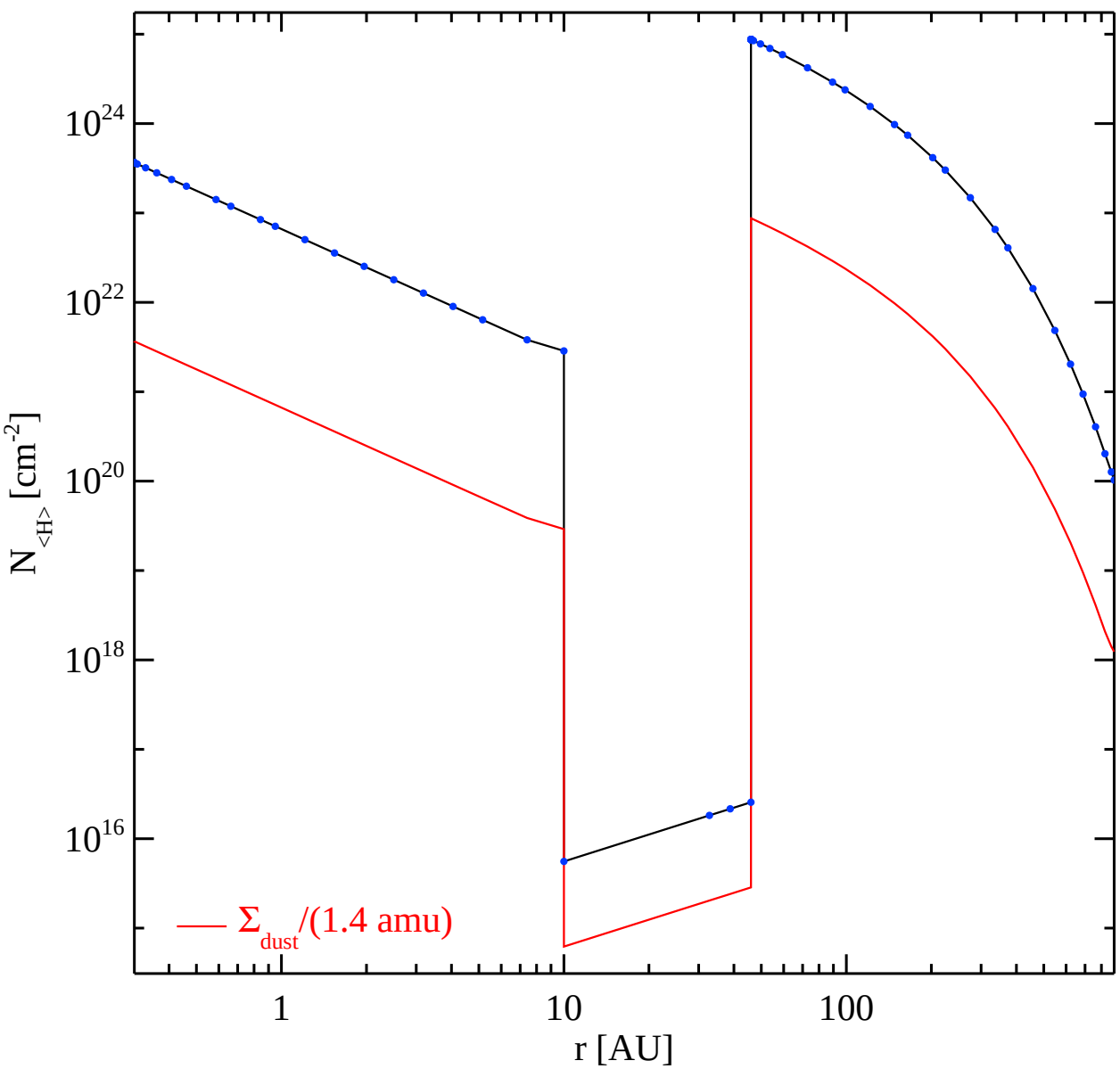
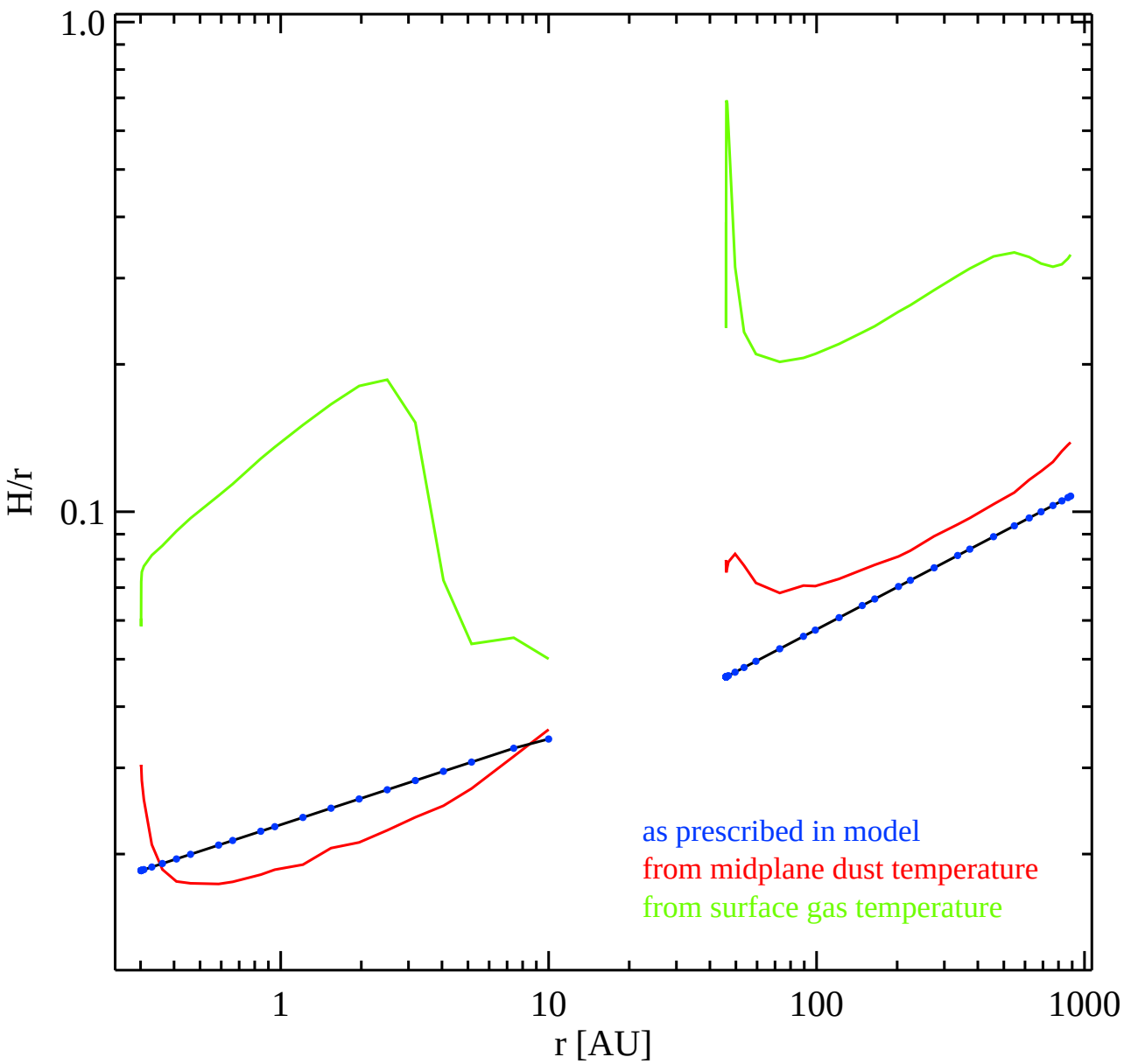

4
6
8
10
12
log n<H> [cm-3]
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

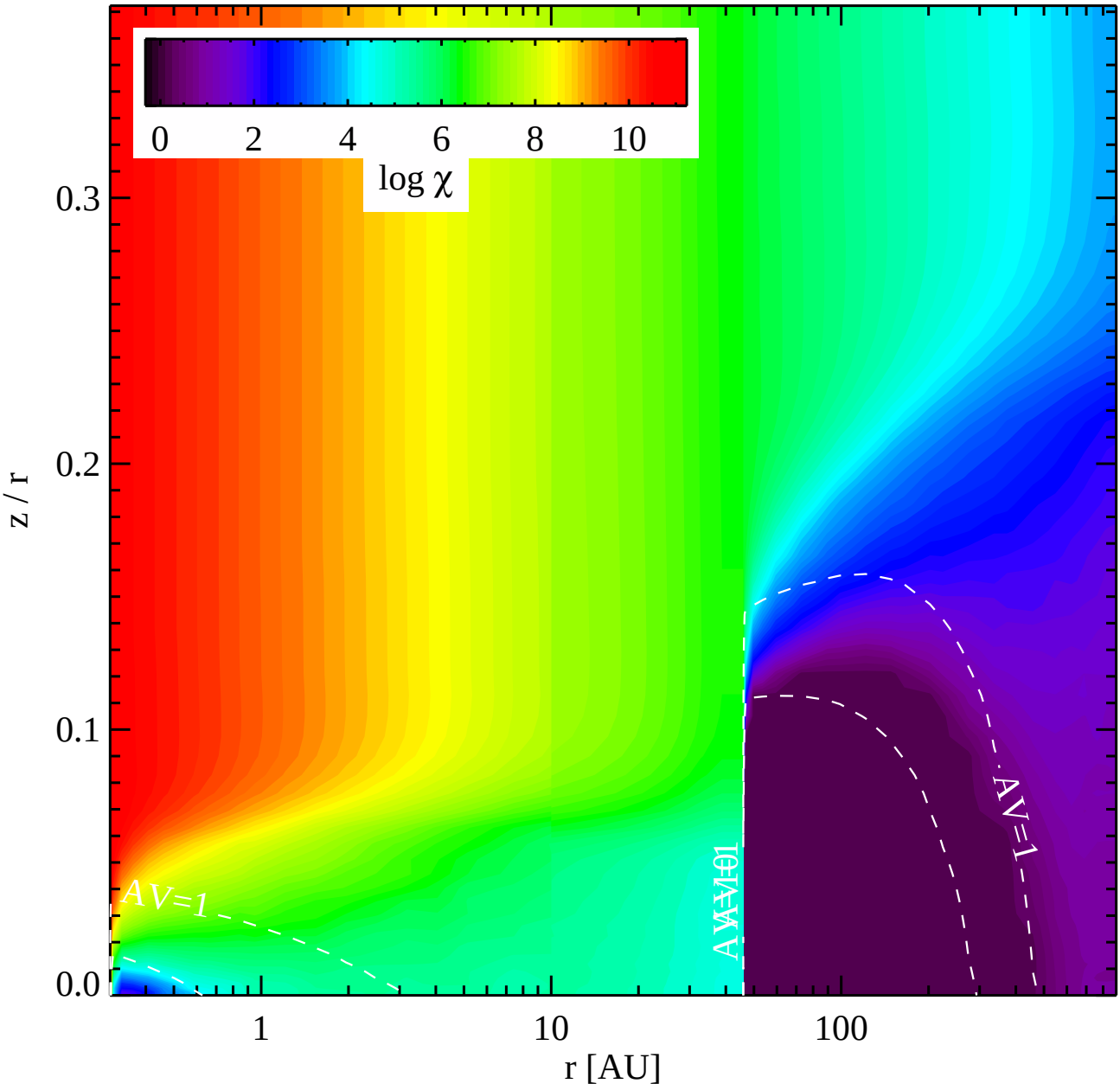

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]
0.01
AV,rad =1
AV =1
0.01
AV,rad =1
AV =1
0.01

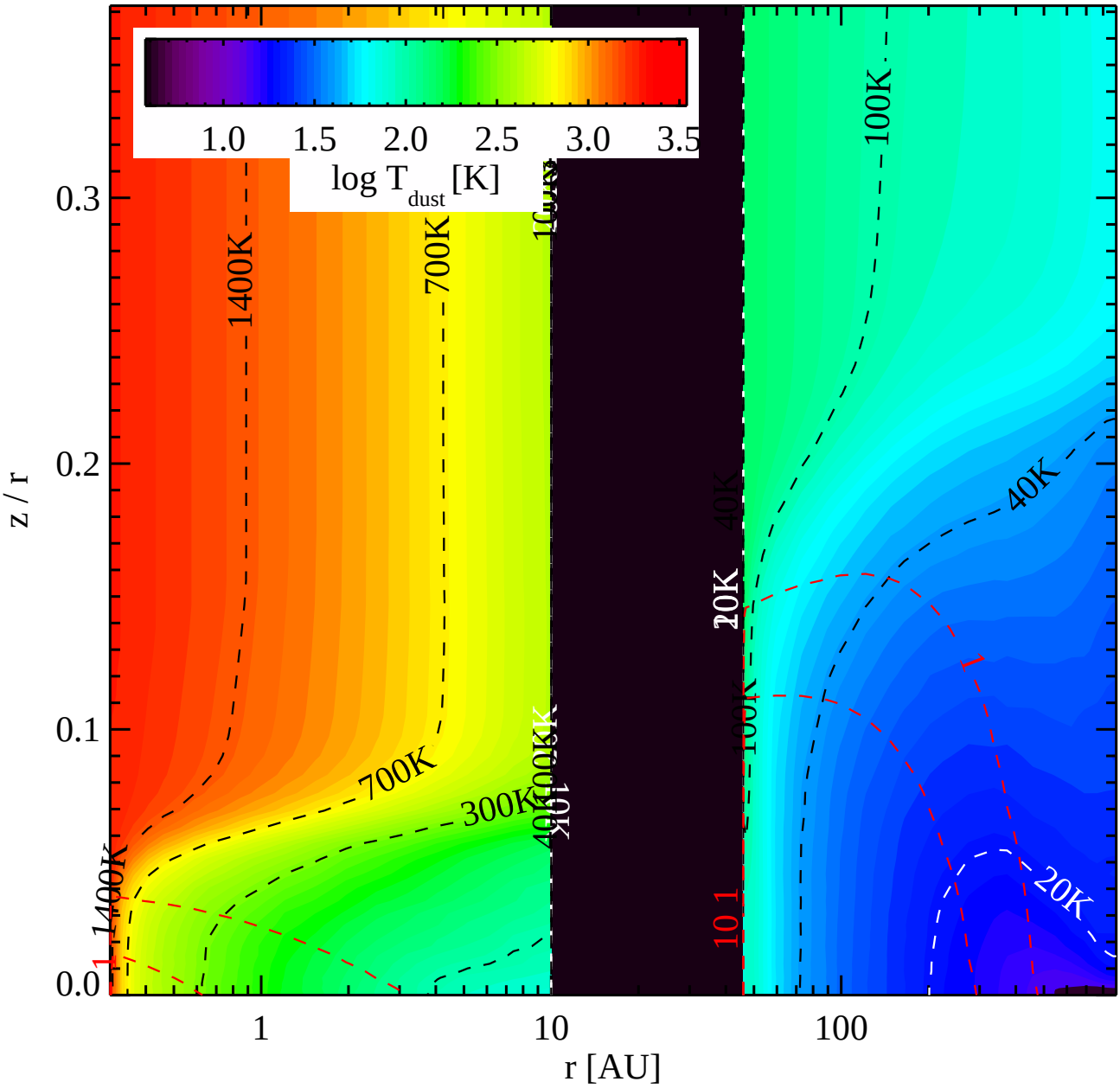

2
4
6
8
log gas/dust
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]


-1.4 -1.2 -1.0 -0.8 -0.6 -0.4 -0.2 0.0
log <a^3>^1/3 [mic]
0.3
0.2
0.1
0.0
z / r
1
10
100
r [AU]

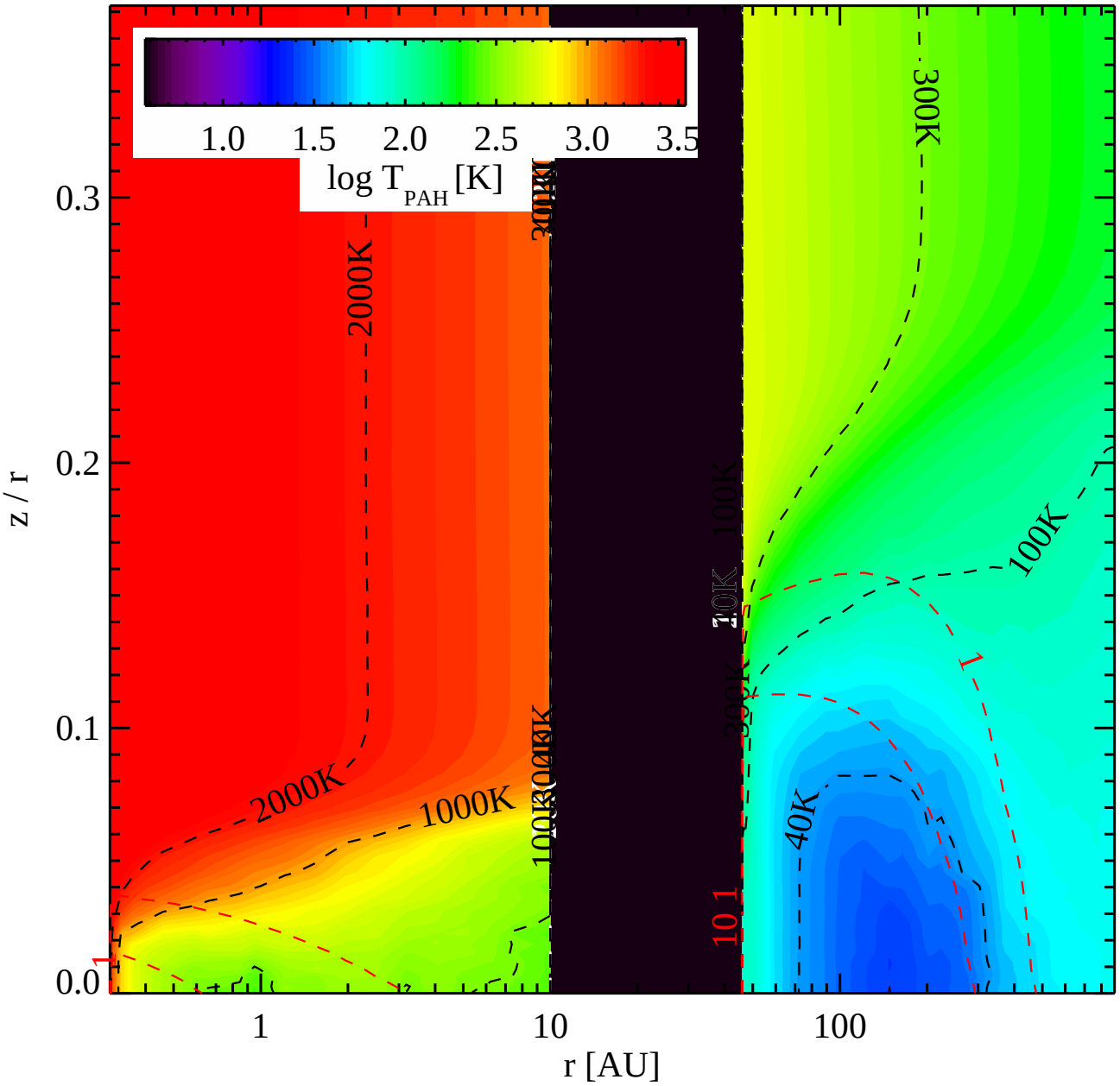

10^{24}
10^{22}
10^{20}
10^{18}
10^{16}
$N_{<H>}$ [cm^{-2}]
1
10
100
r [AU]
Σ_{dust}/(1.4 amu)

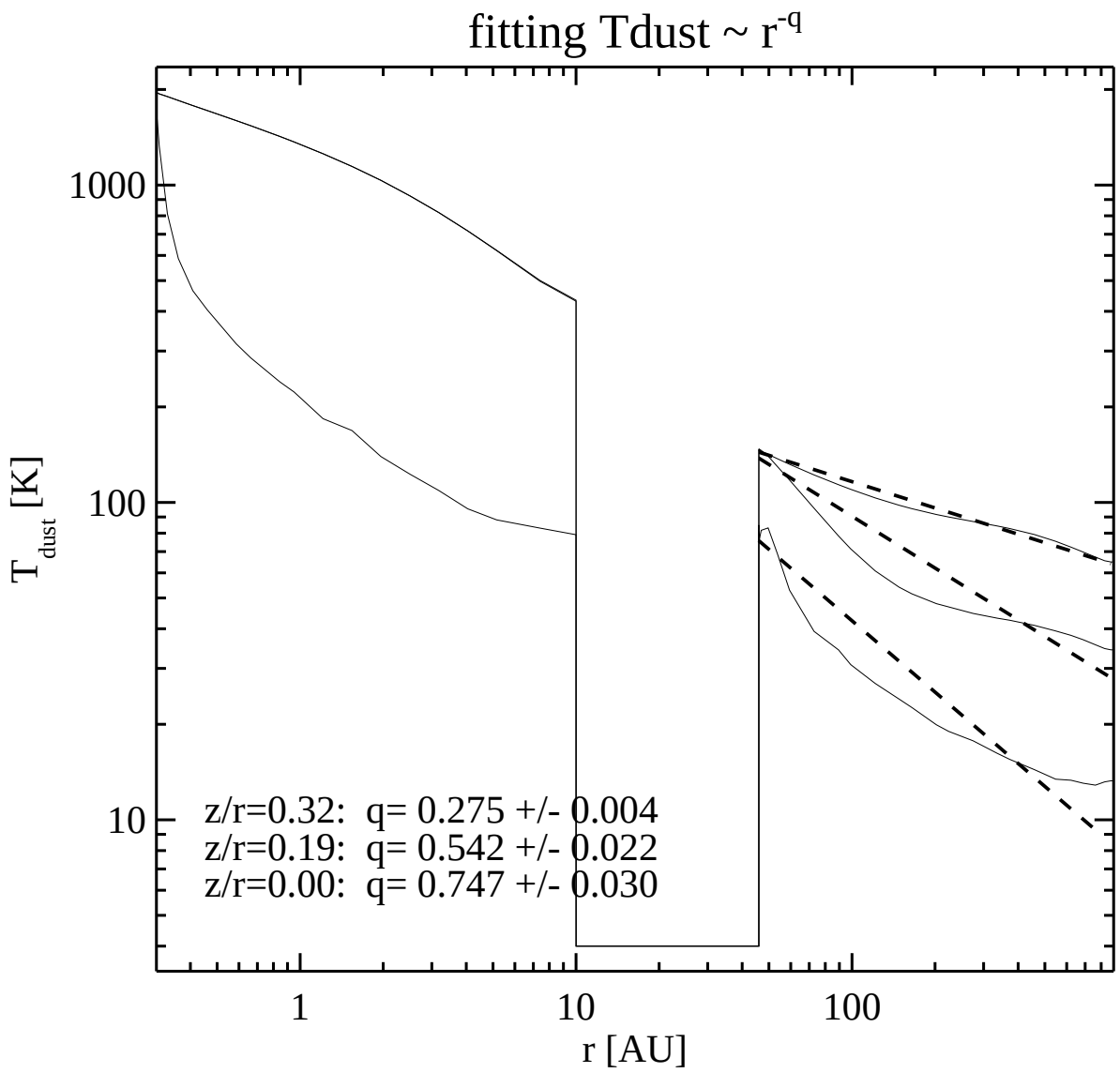

1.0
0.1
H/r
1
10
100
1000
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

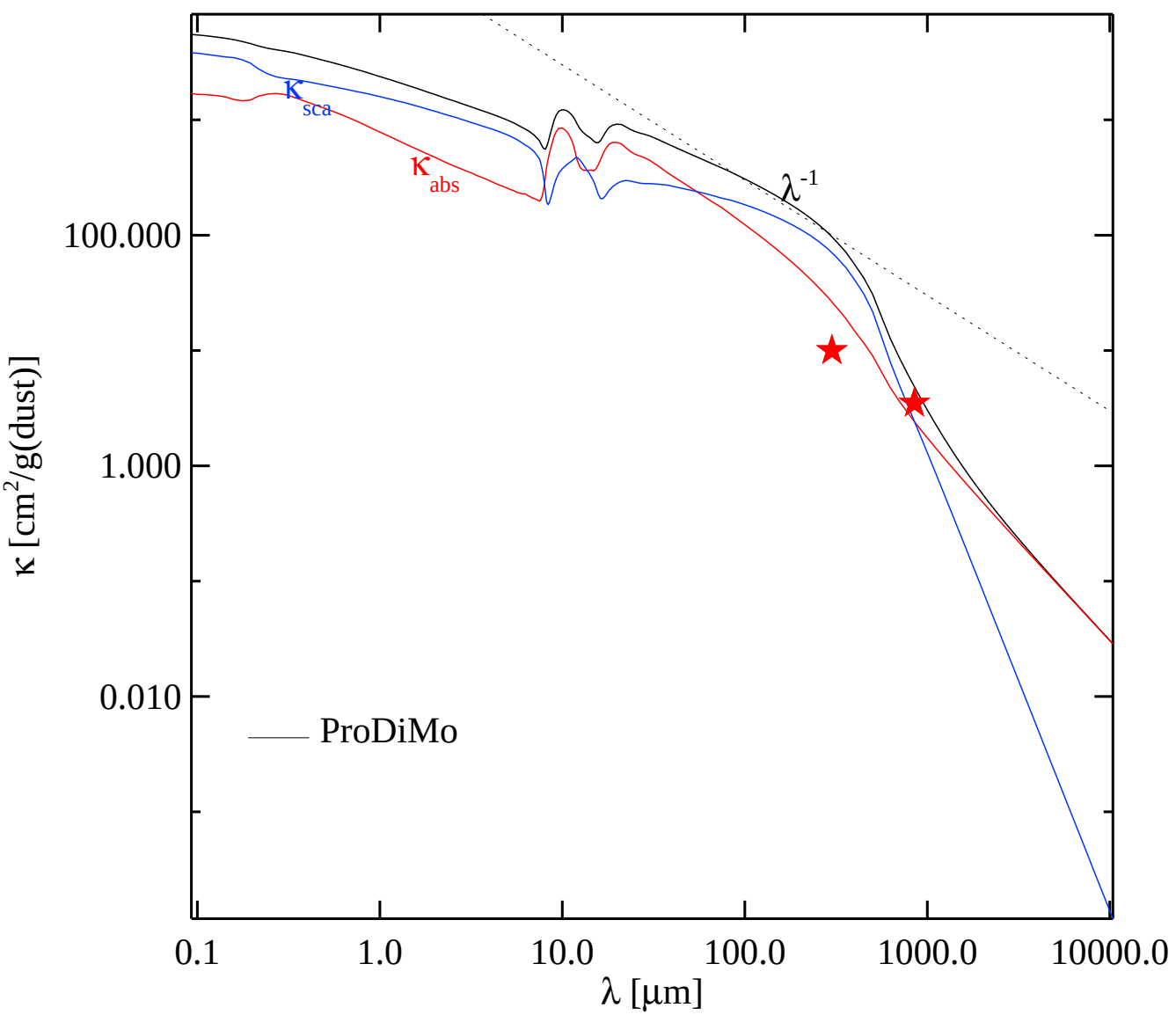

0
2
4
6
8
10
log χ
0.3
0.2
0.1
0.0
z / r
AV=1
AV=1
AV=1
1
10
100
r [AU]

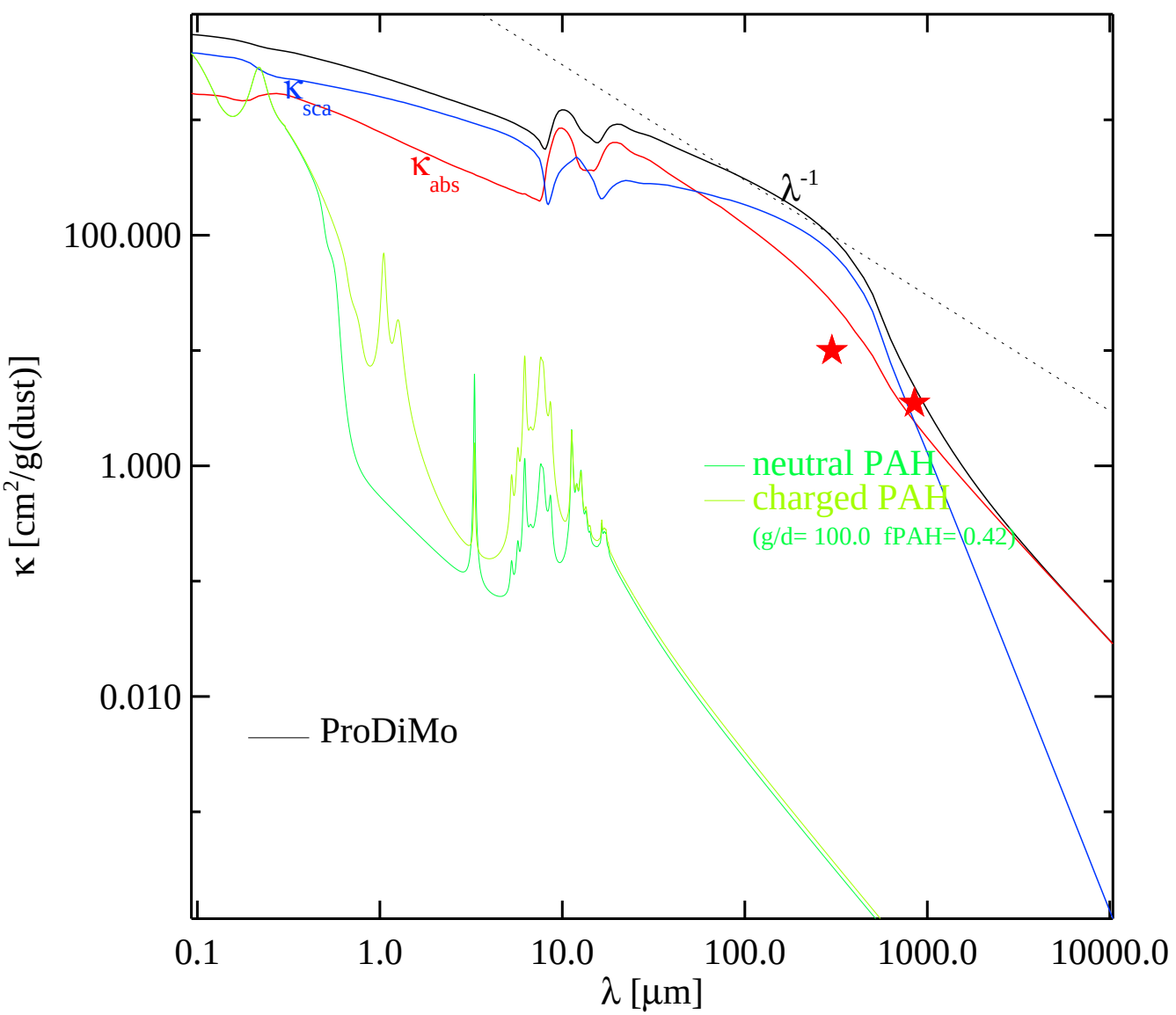


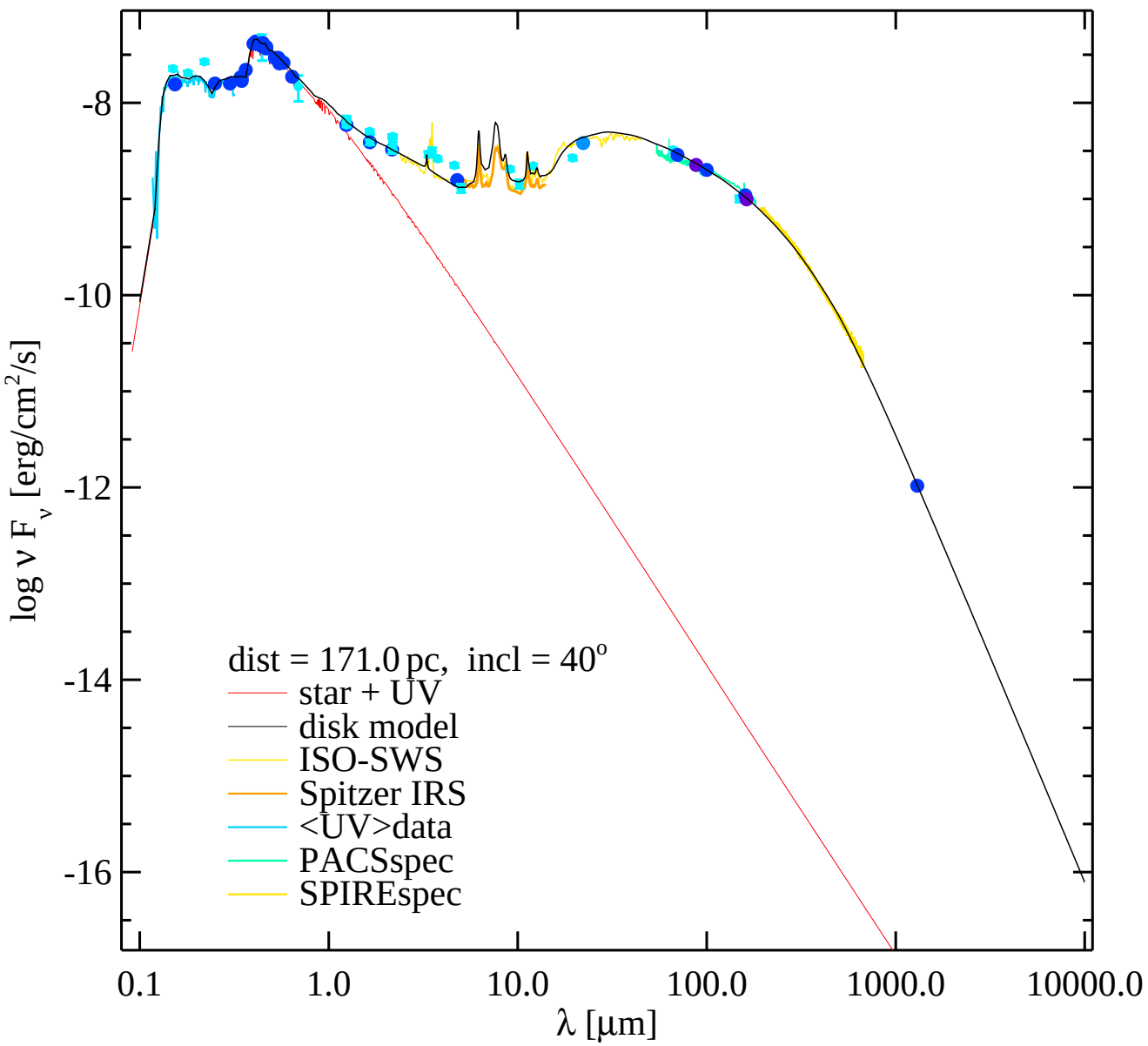
1.0
1.5
2.0
2.5
3.0
3.5
log T dust [K]
1400K
700K
300K
100K
40K
20K
z / r
r [AU]
0.0
0.1
0.2
0.3
1
10
100

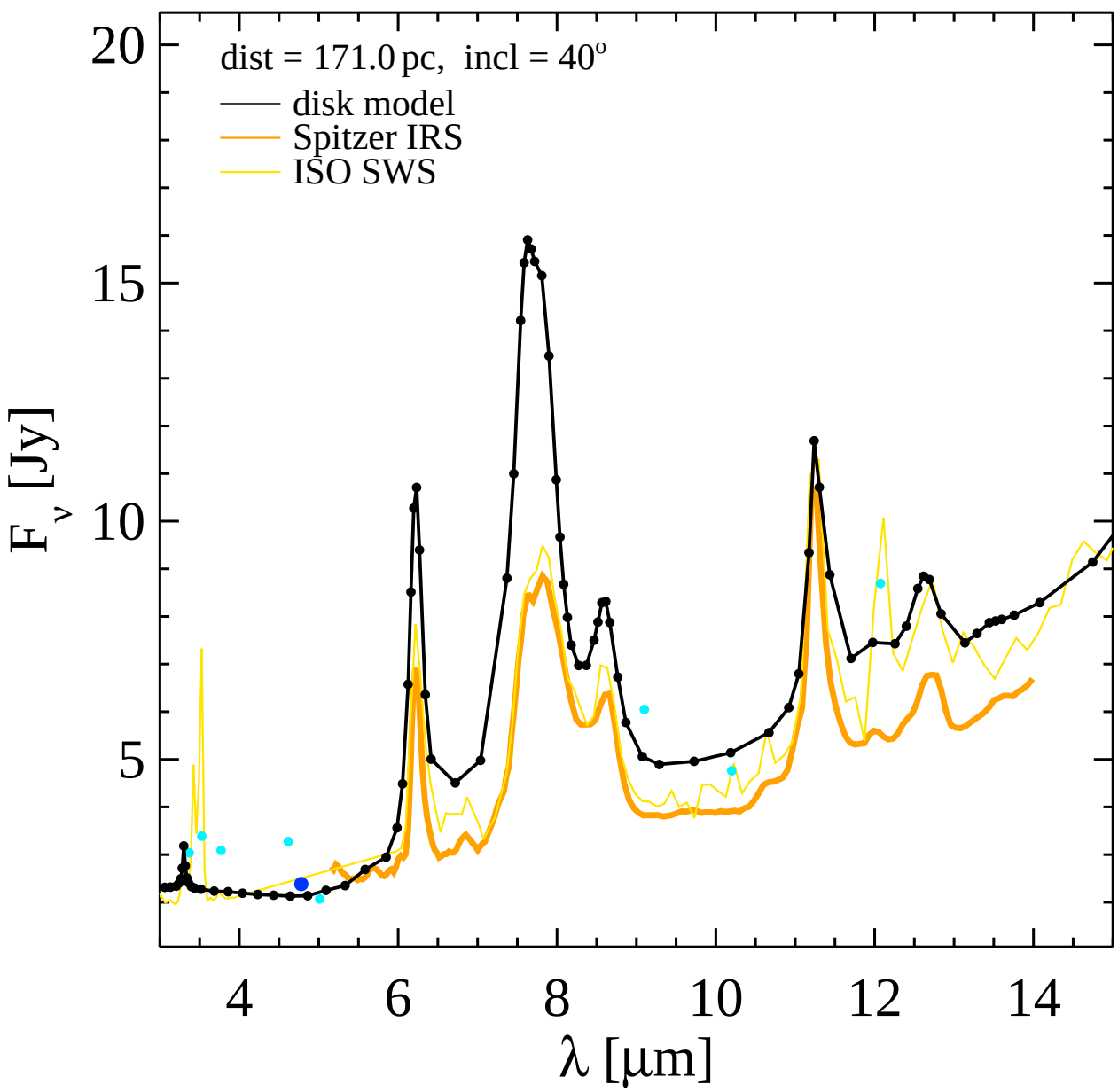

1.0
1.5
2.0
2.5
3.0
3.5
log T PAH [K]
2000K
1000K
300K
100K
40K
1
0.0
0.1
0.2
0.3
z / r
1
10
100
r [AU]

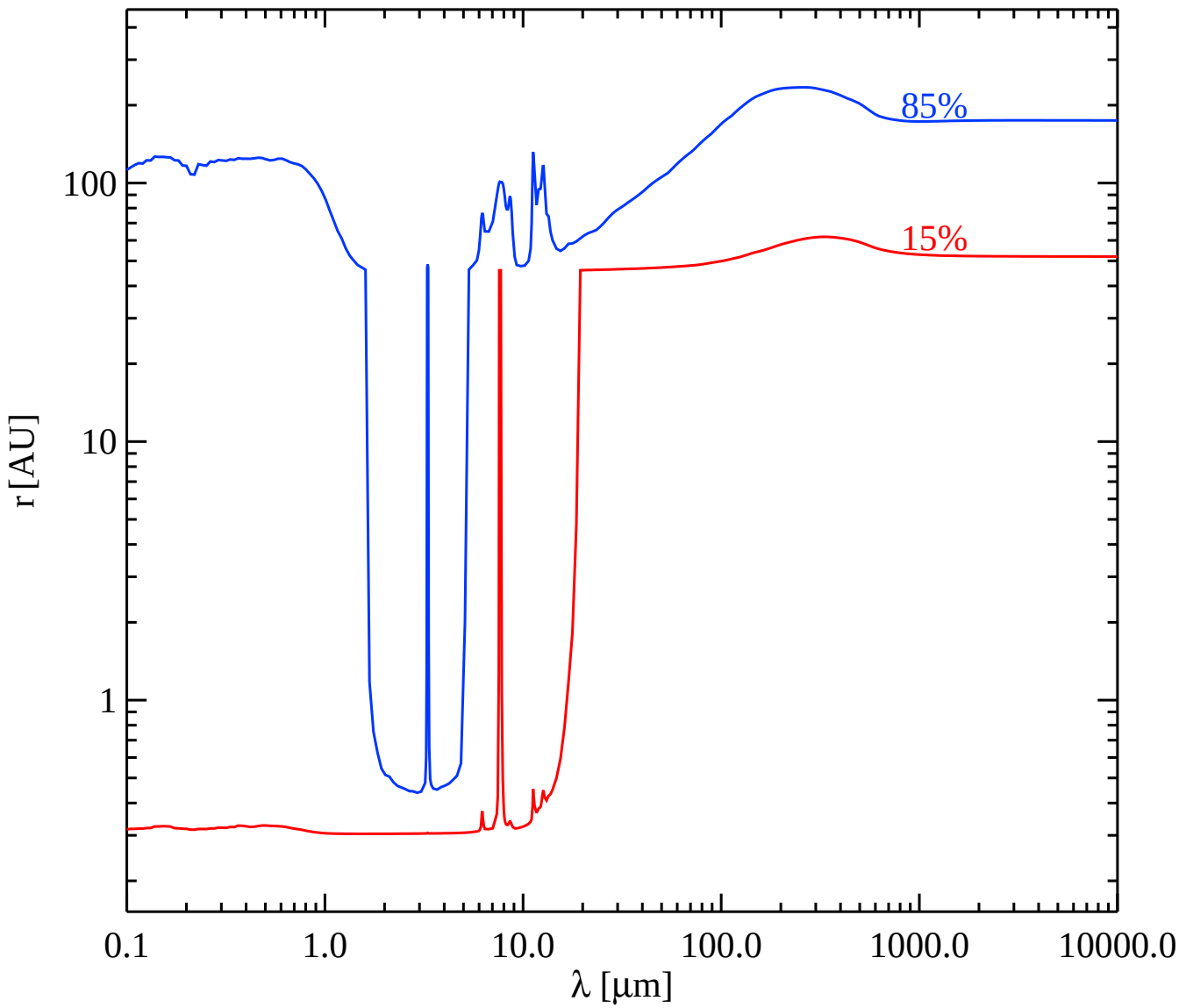

fitting Tdust ~ r^-q
1000
100
10
T dust [K]
1
10
100
r [AU]
z/r=0.32: q= 0.275 +/- 0.004
z/r=0.19: q= 0.542 +/- 0.022
z/r=0.00: q= 0.747 +/- 0.030

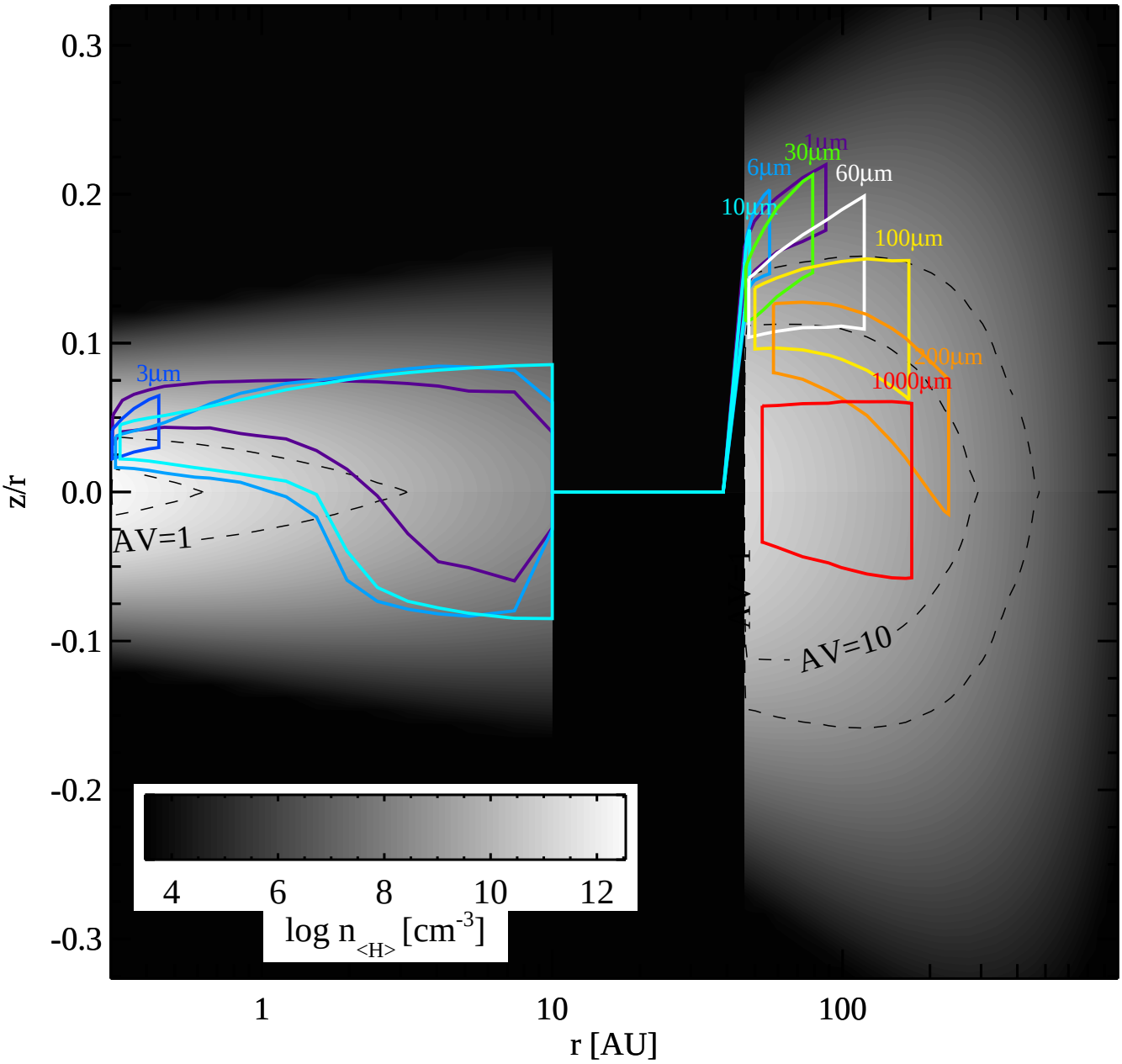

κ sca
κ abs
λ-1
100.000
1.000
0.010
κ [cm2/g(dust)]
ProDiMo
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

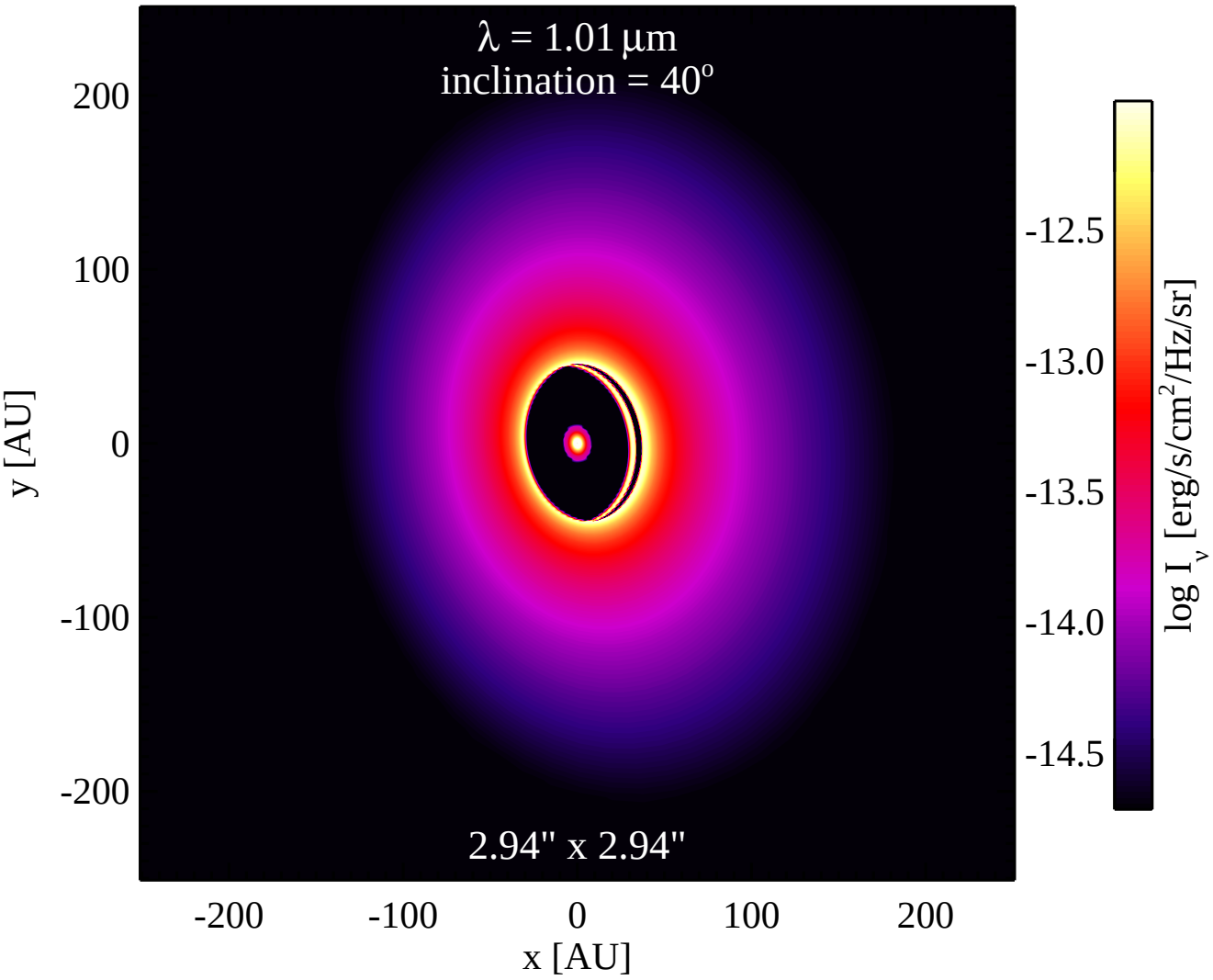

κ [cm²/g(dust)]
100.000
1.000
0.010
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
κ sca
κ abs
λ -1
neutral PAH
charged PAH
(g/d= 100.0 fPAH= 0.42)
ProDiMo

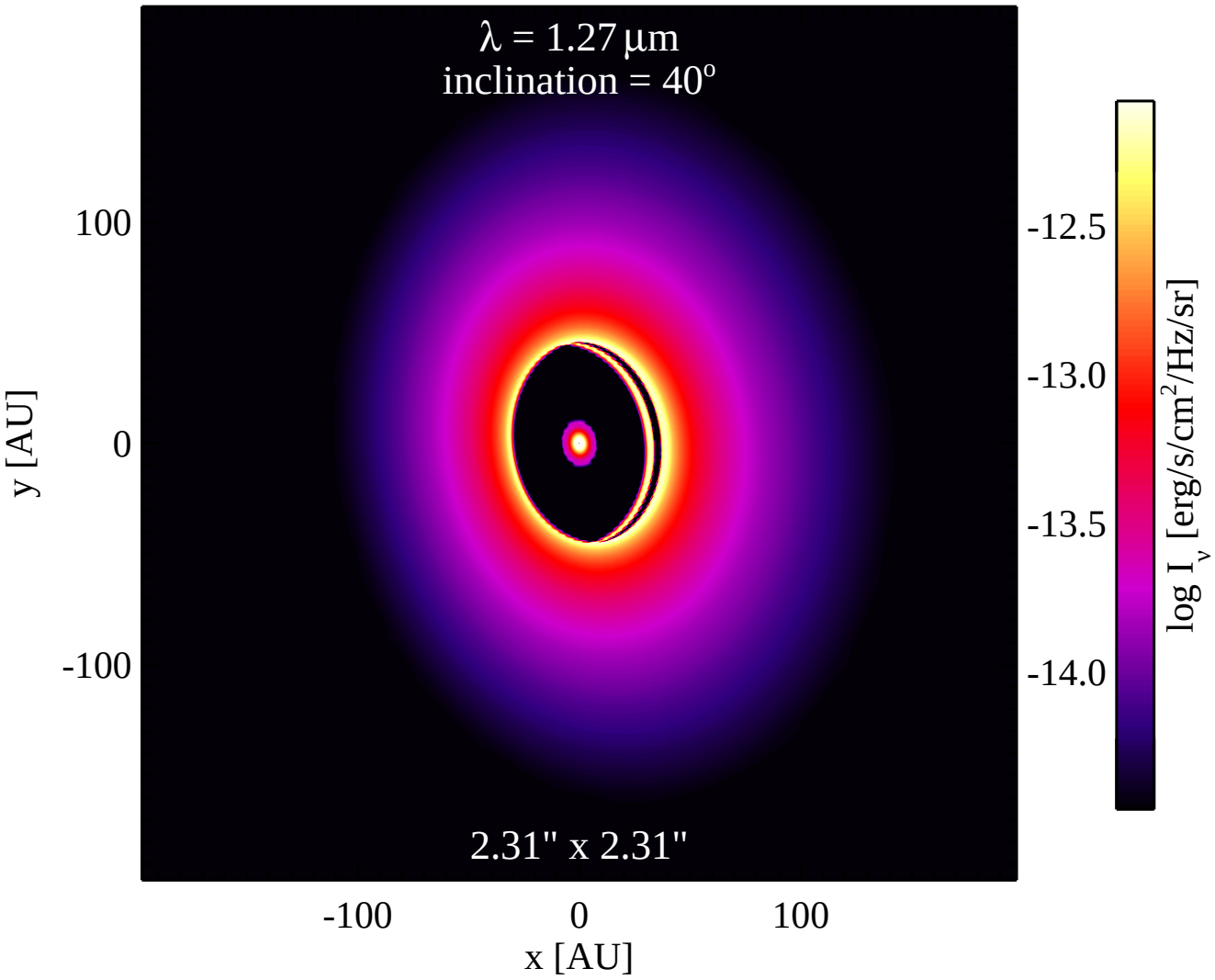

-8
-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 171.0 pc, incl = 40°
star + UV
disk model
ISO-SWS
Spitzer IRS
<UV>data
PACSspec
SPIREspec

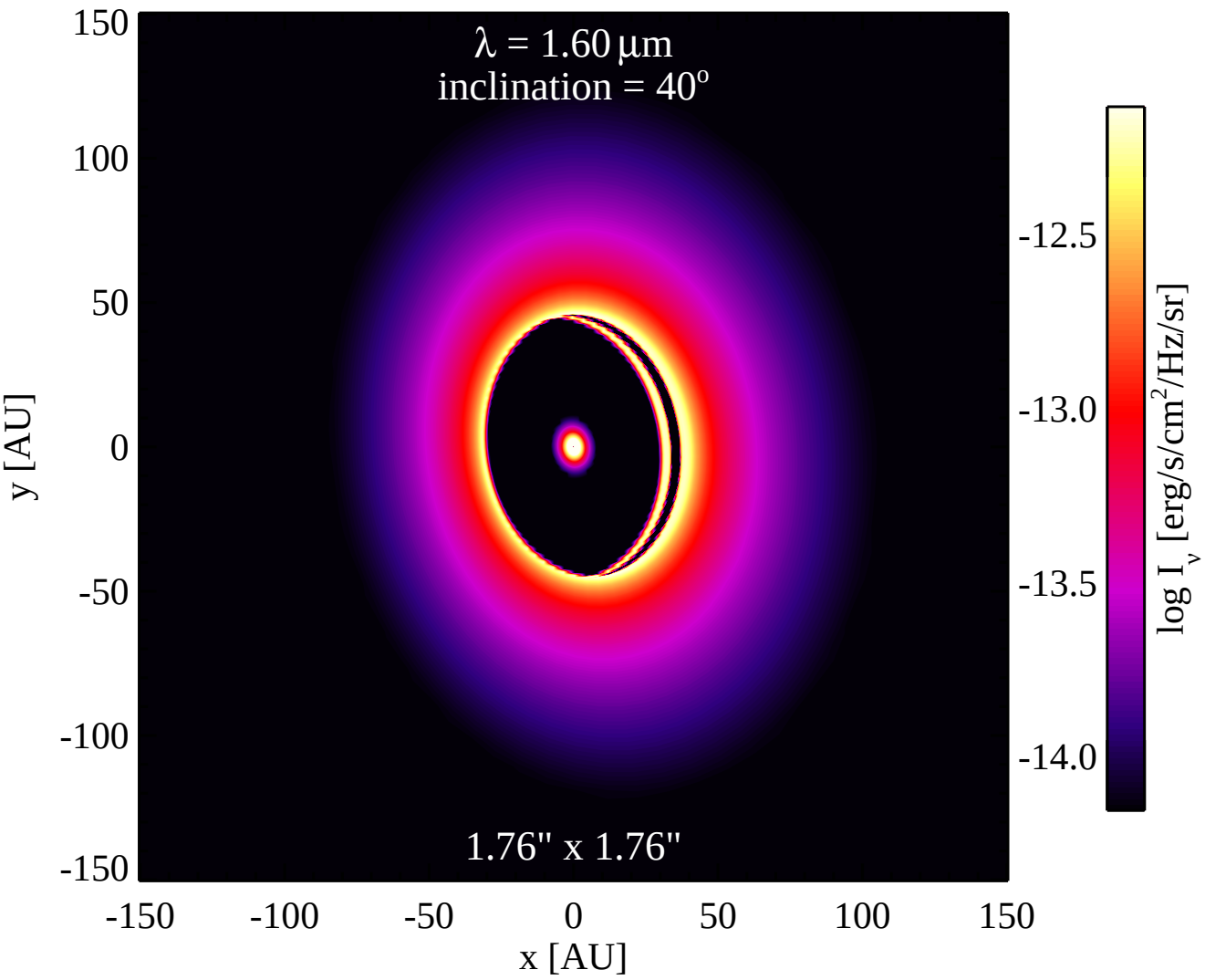

dist = 171.0 pc, incl = 40°
disk model
Spitzer IRS
ISO SWS
20
15
10
5
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

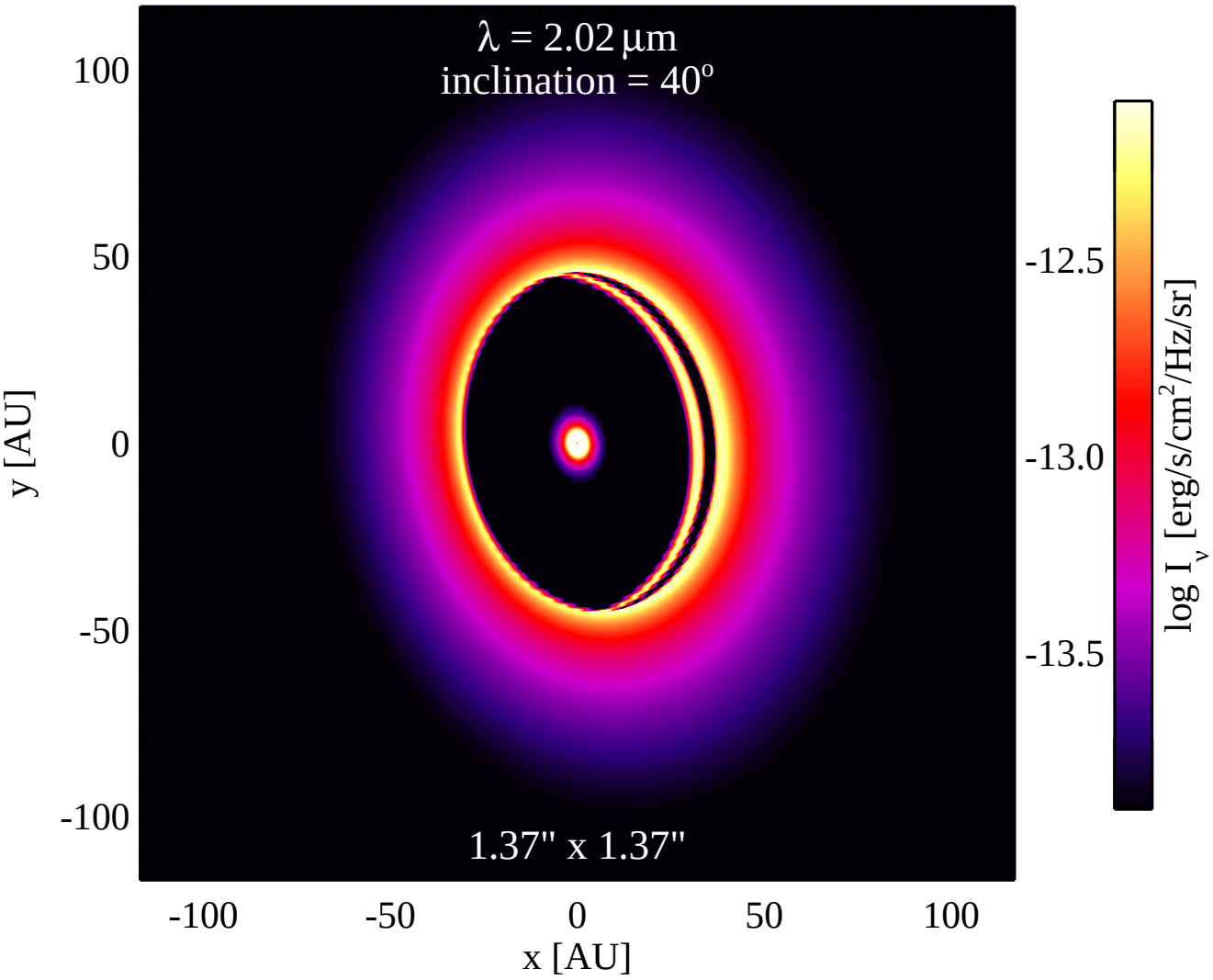

85%
15%
100
10
1
r [AU]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

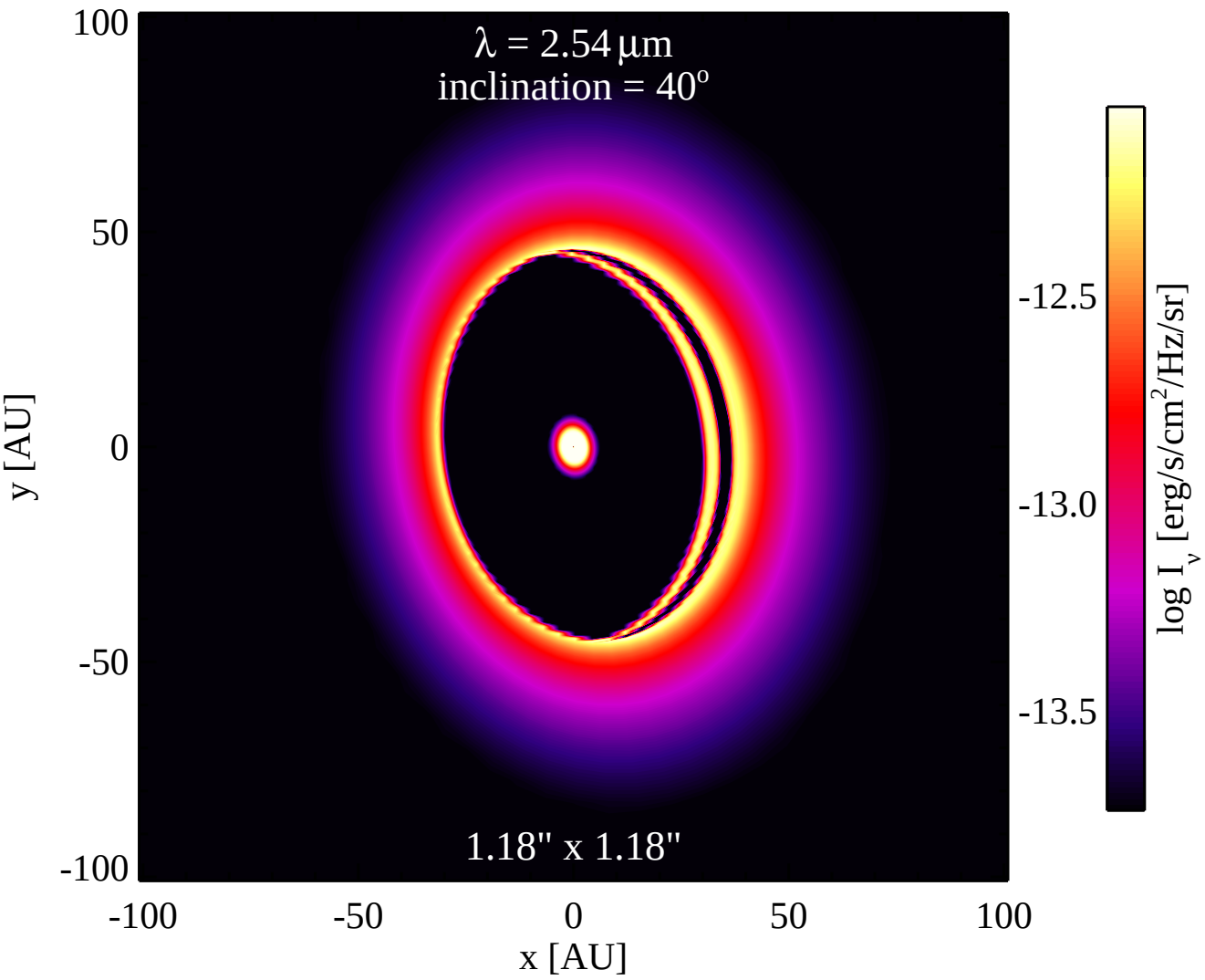

0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
z/r
1
10
100
r [AU]
3μm
1μm
30μm
6μm
60μm
10μm
100μm
300μm
1000μm
AV=1
AV=10
4
6
8
10
12
log n<H> [cm-3]

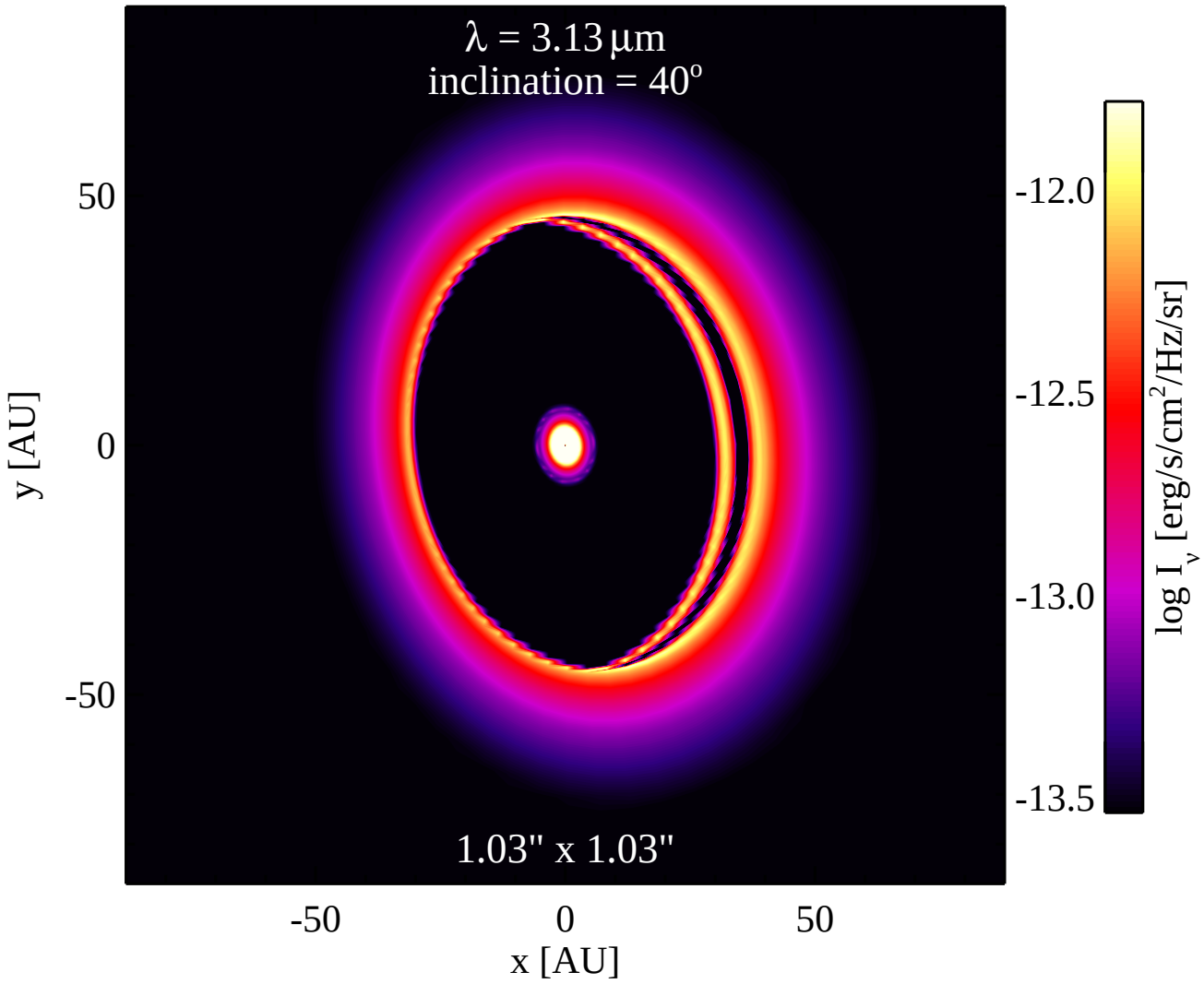

λ = 1.01 μm
inclination = 40°
2.94" x 2.94"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.5
-13.0
-13.5
-14.0
-14.5
log I_ν [erg/s/cm²/Hz/sr]

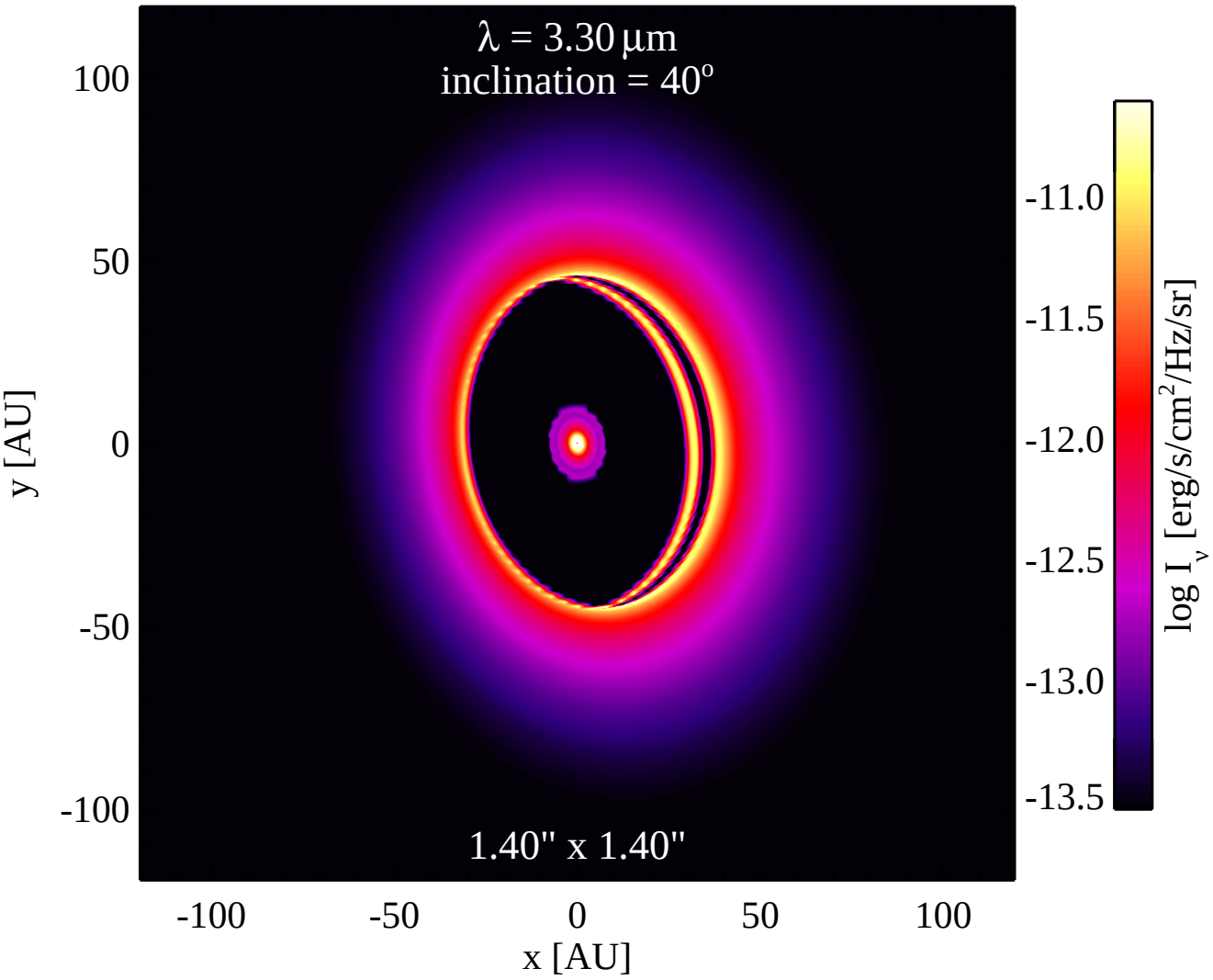

λ = 1.27 μm
inclination = 40°
2.31" x 2.31"
100
0
-100
y [AU]
-100
0
100
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

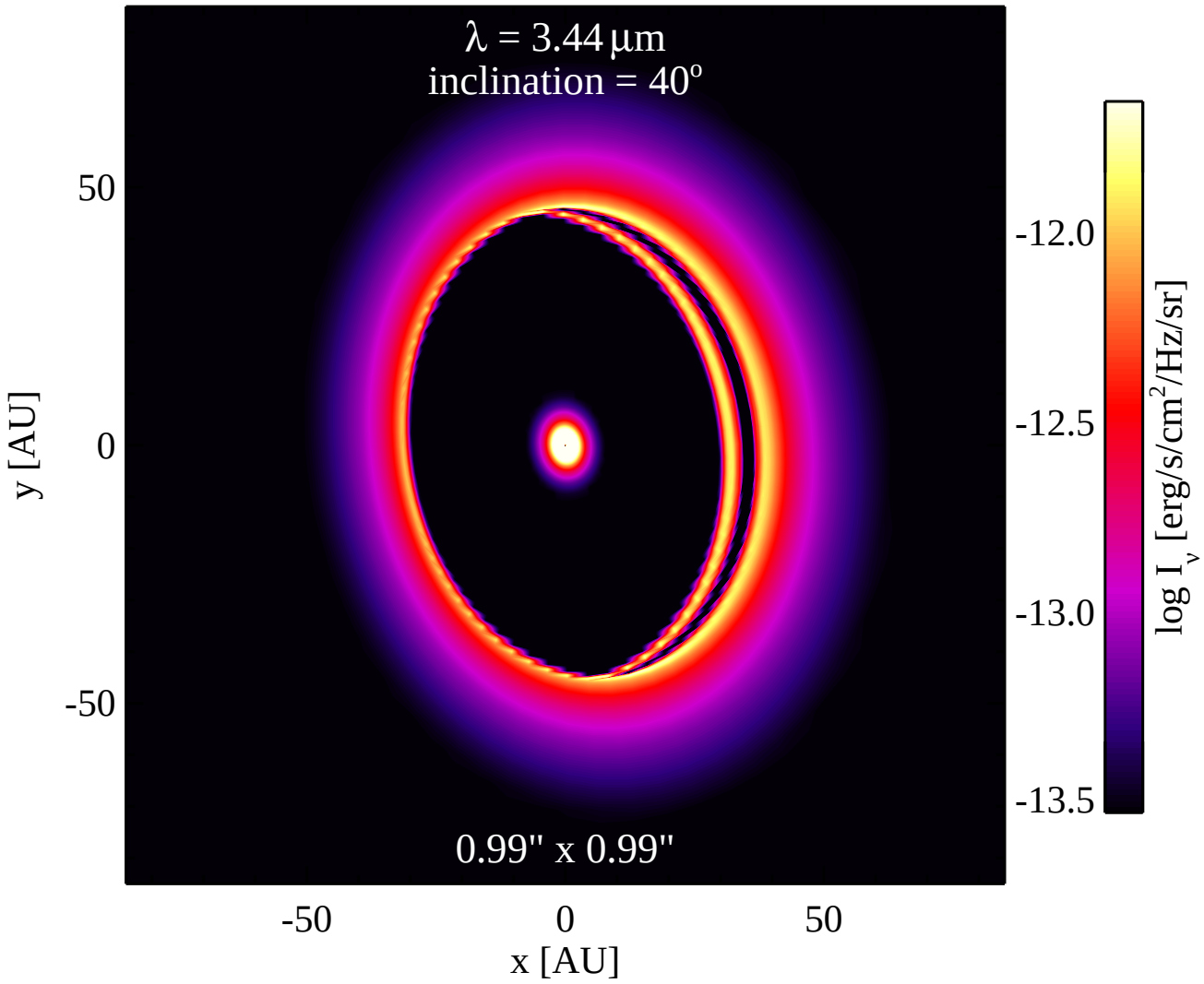

λ = 1.60 μm
inclination = 40°
1.76" x 1.76"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

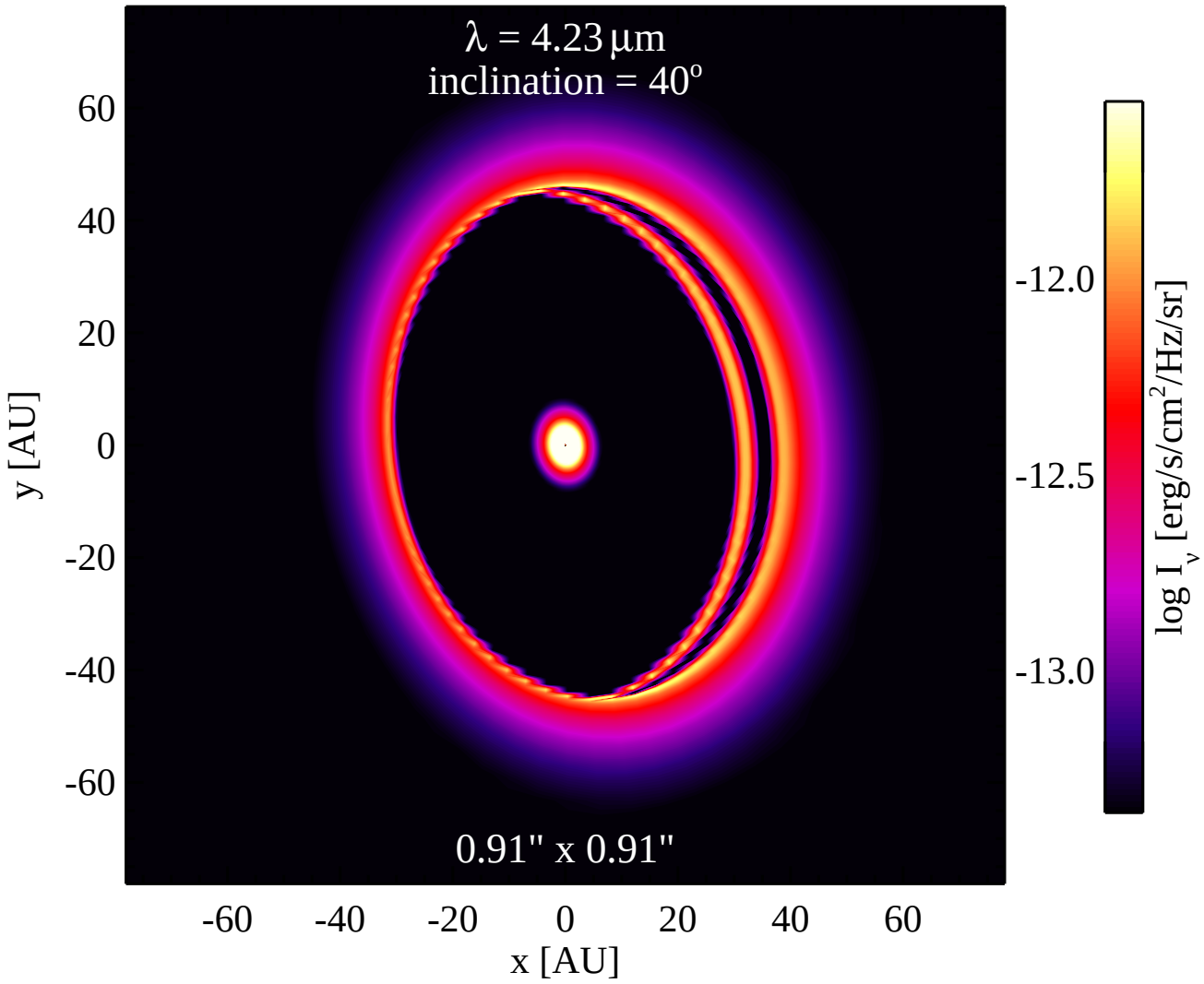

λ = 2.02 μm
inclination = 40°
1.37" x 1.37"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

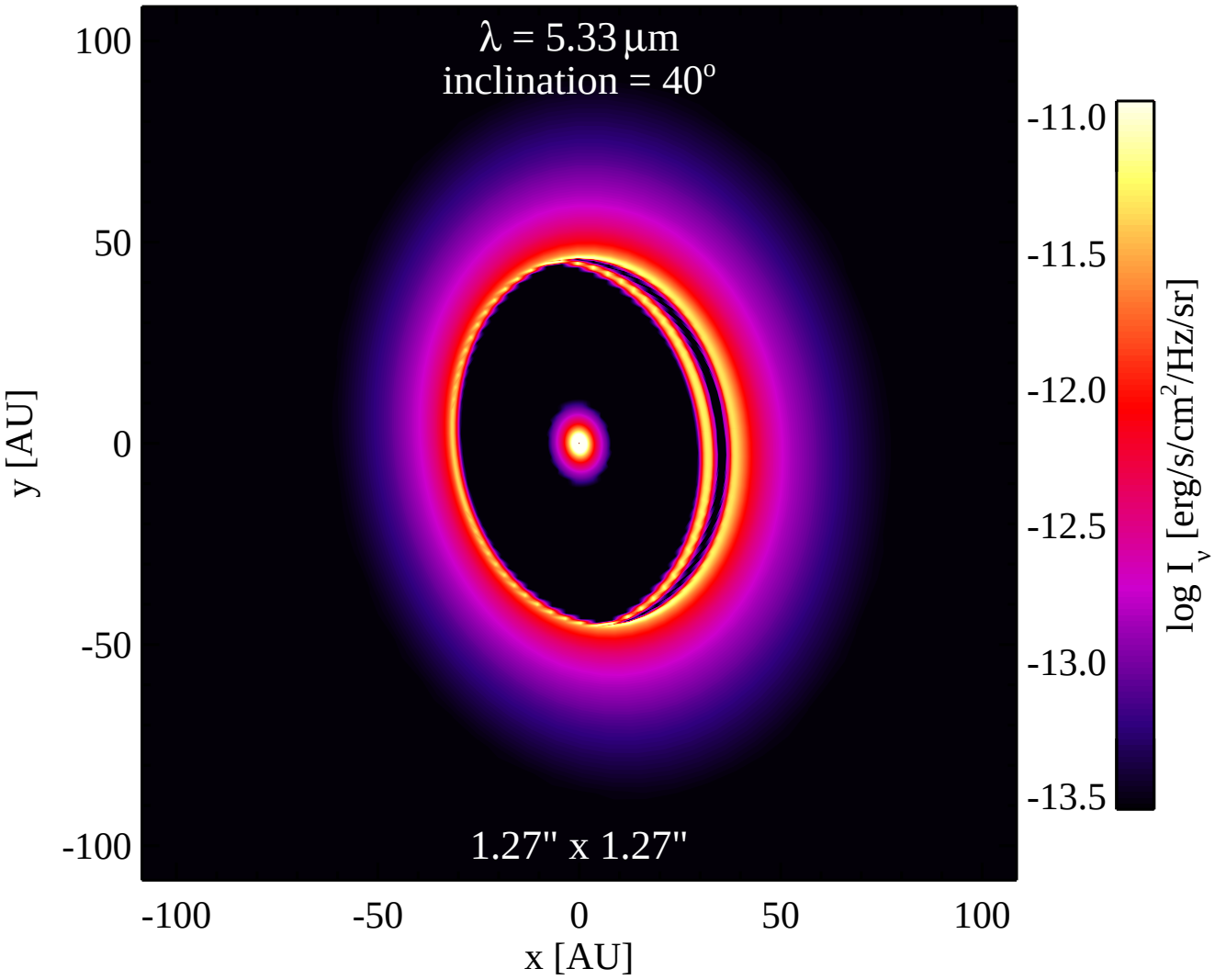

λ = 2.54 μm
inclination = 40°
1.18" x 1.18"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

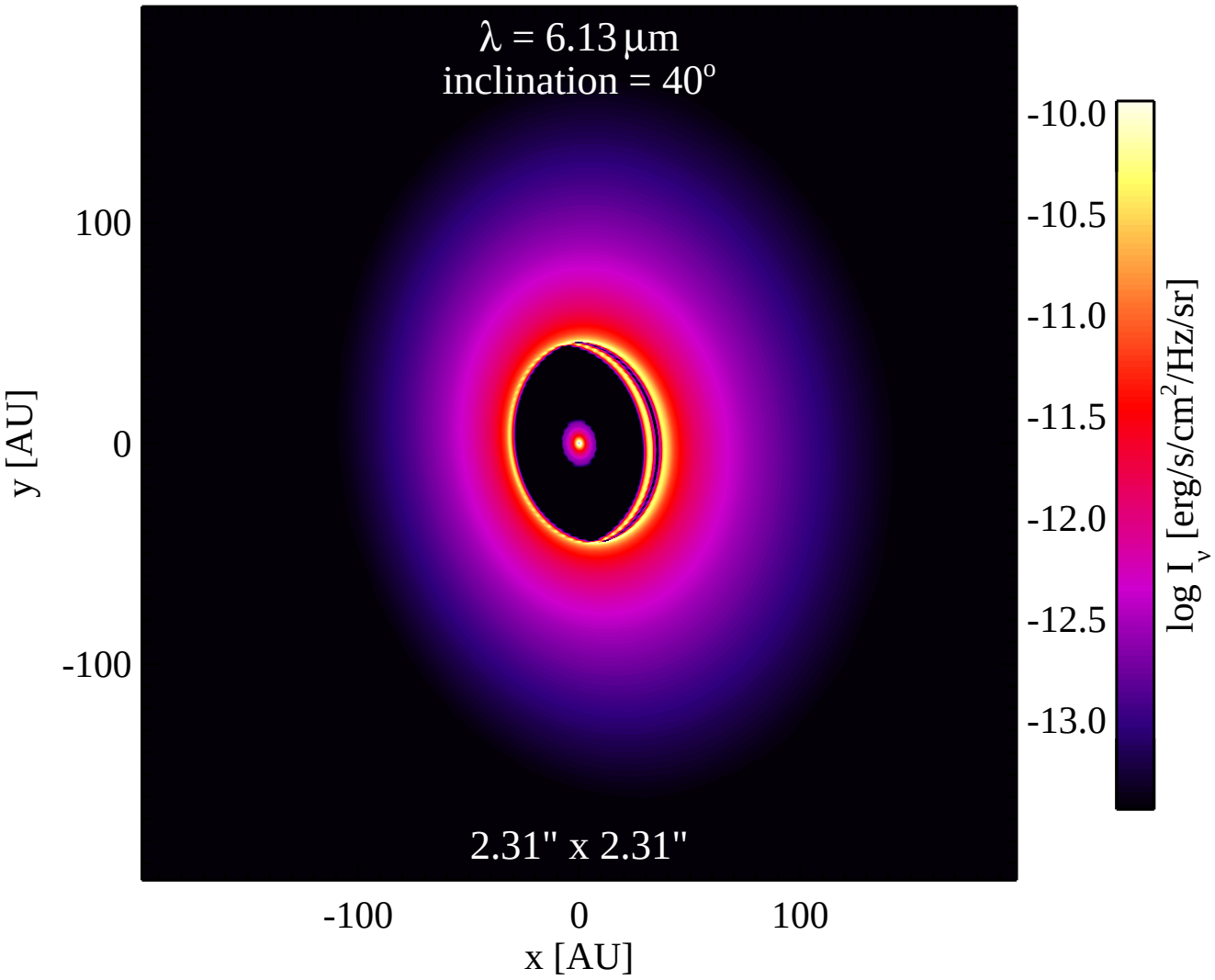

λ = 3.13 μm
inclination = 40°
1.03" x 1.03"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

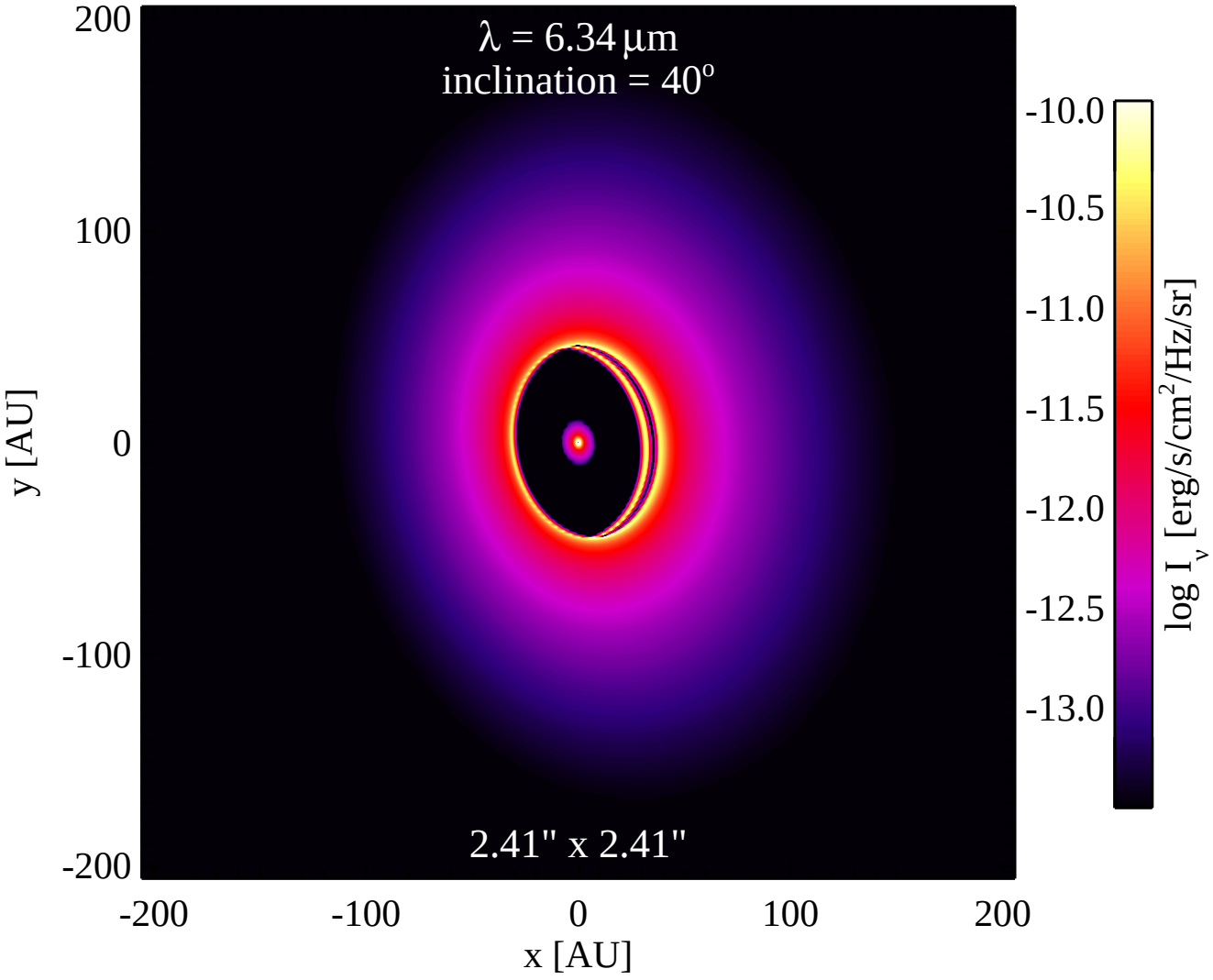

λ = 3.30 μm
inclination = 40°
1.40" x 1.40"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

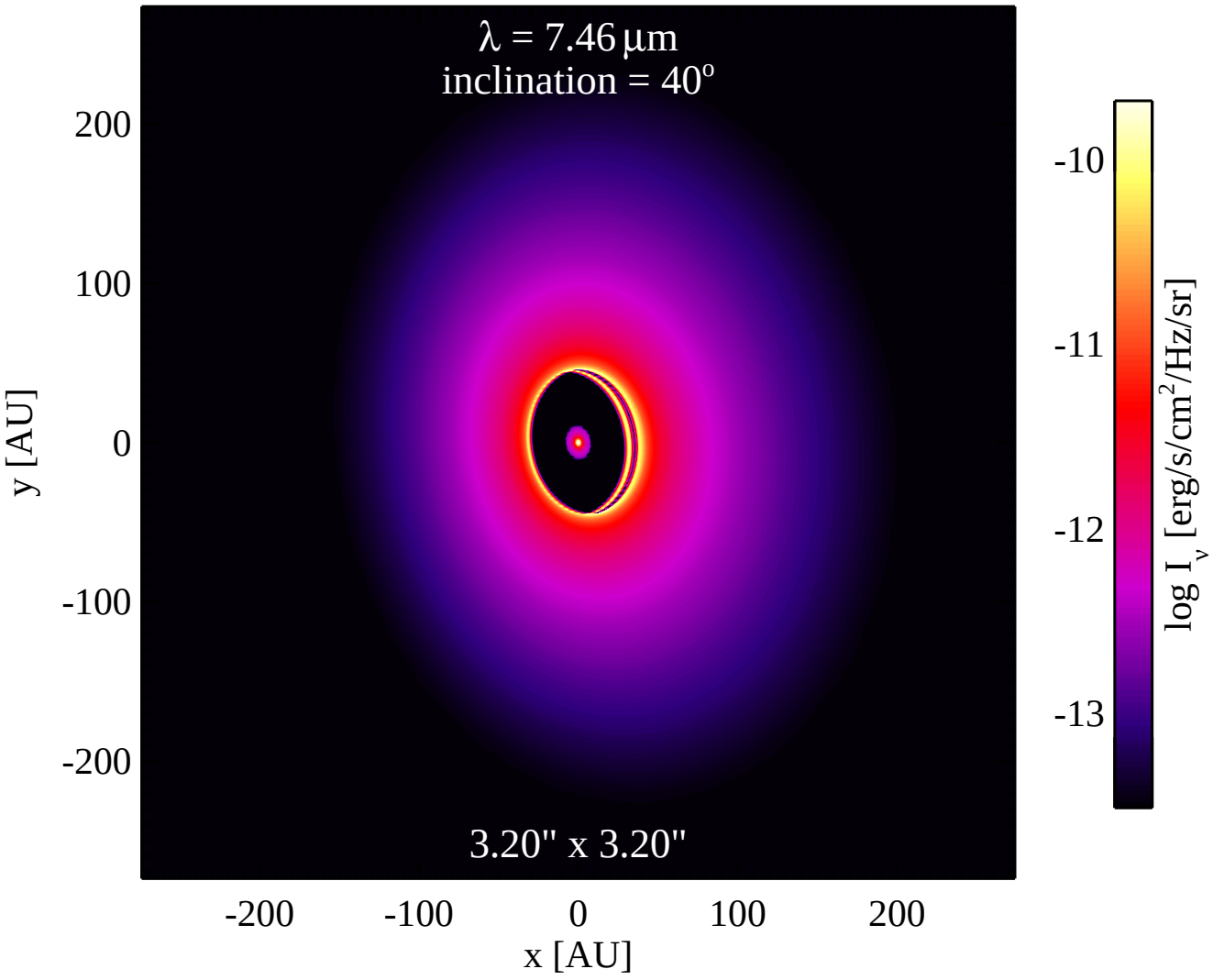

λ = 3.44 μm
inclination = 40°
0.99" x 0.99"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

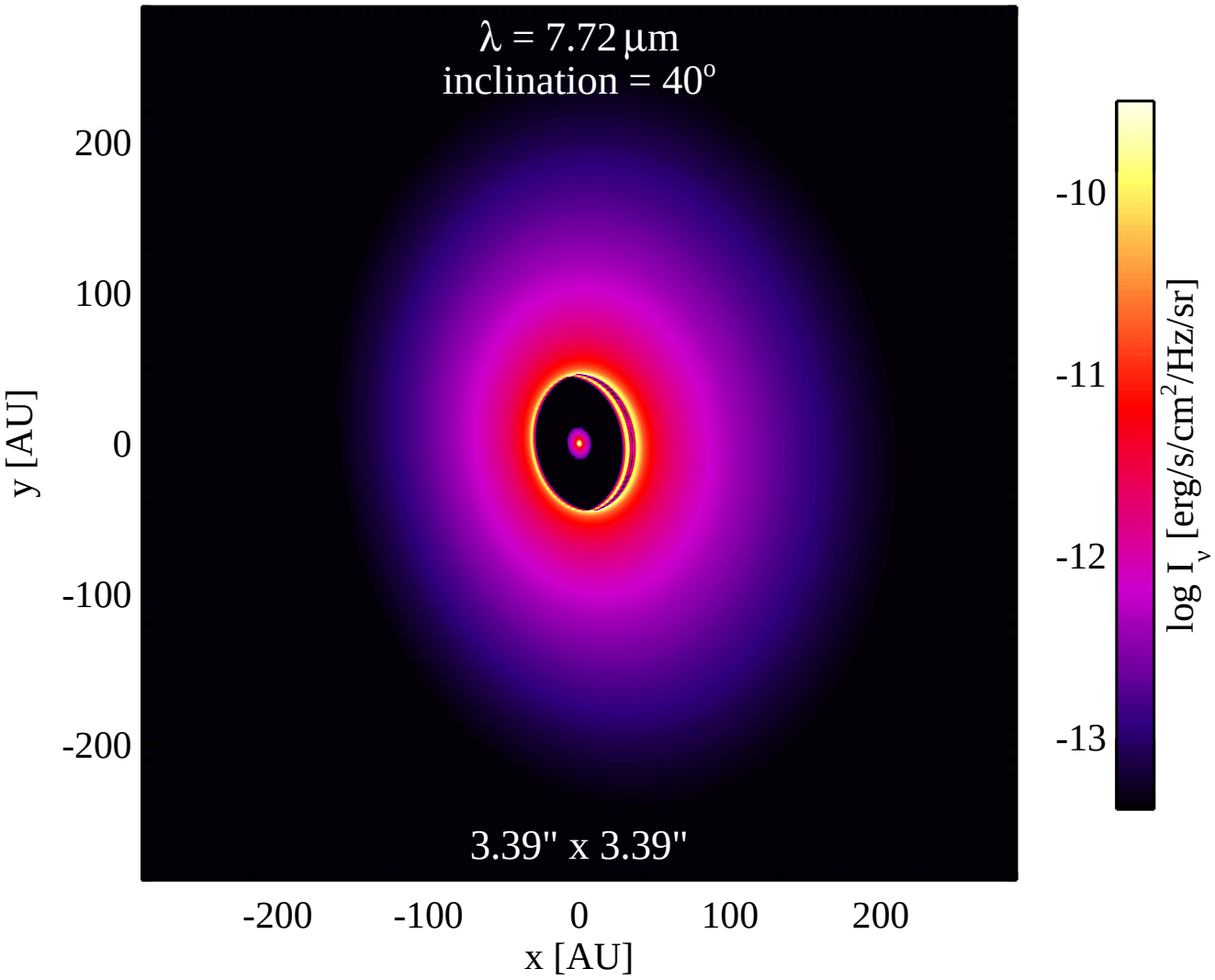

λ = 4.23 μm
inclination = 40°
0.91" x 0.91"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

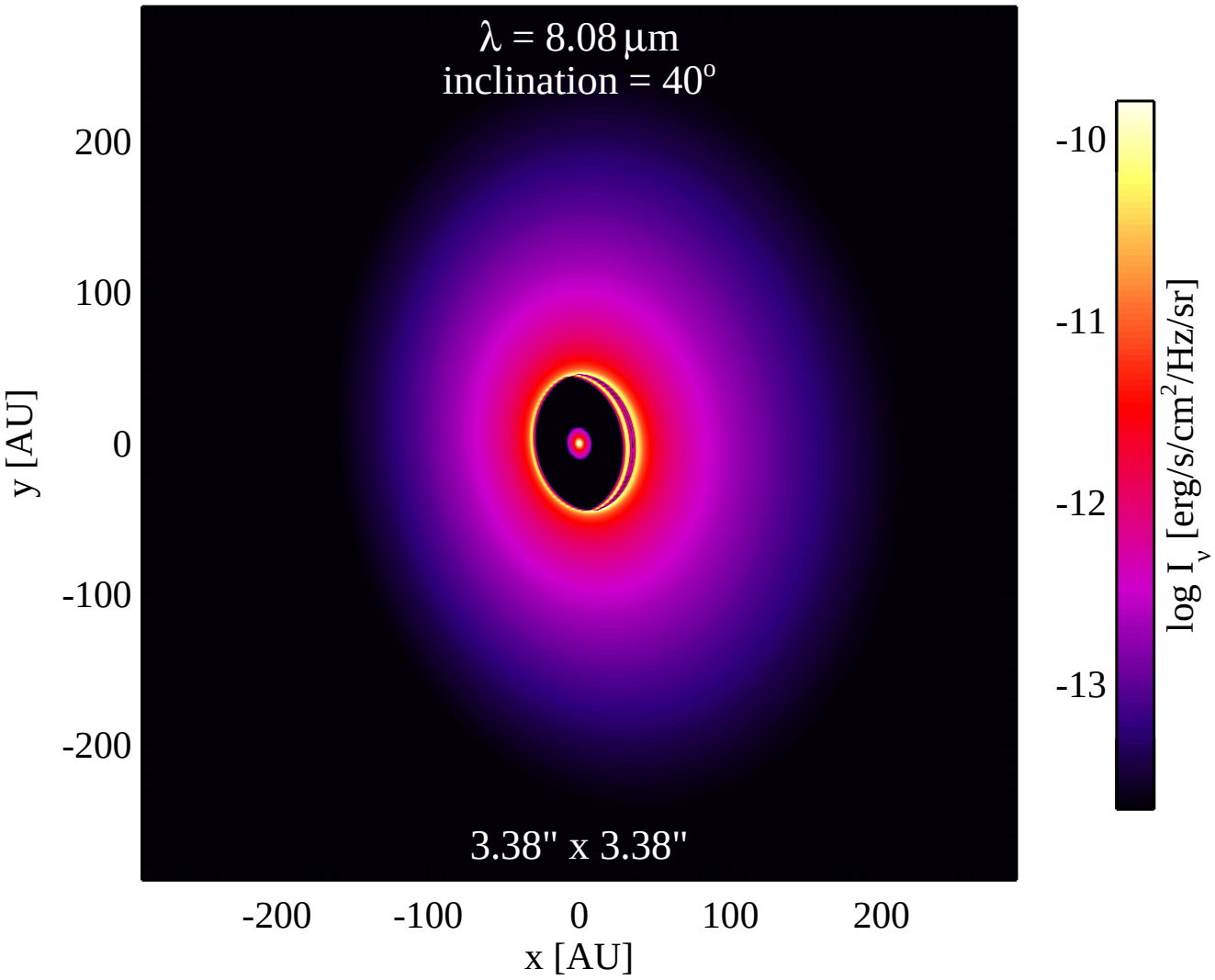

λ = 5.33 μm
inclination = 40°
1.27" x 1.27"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

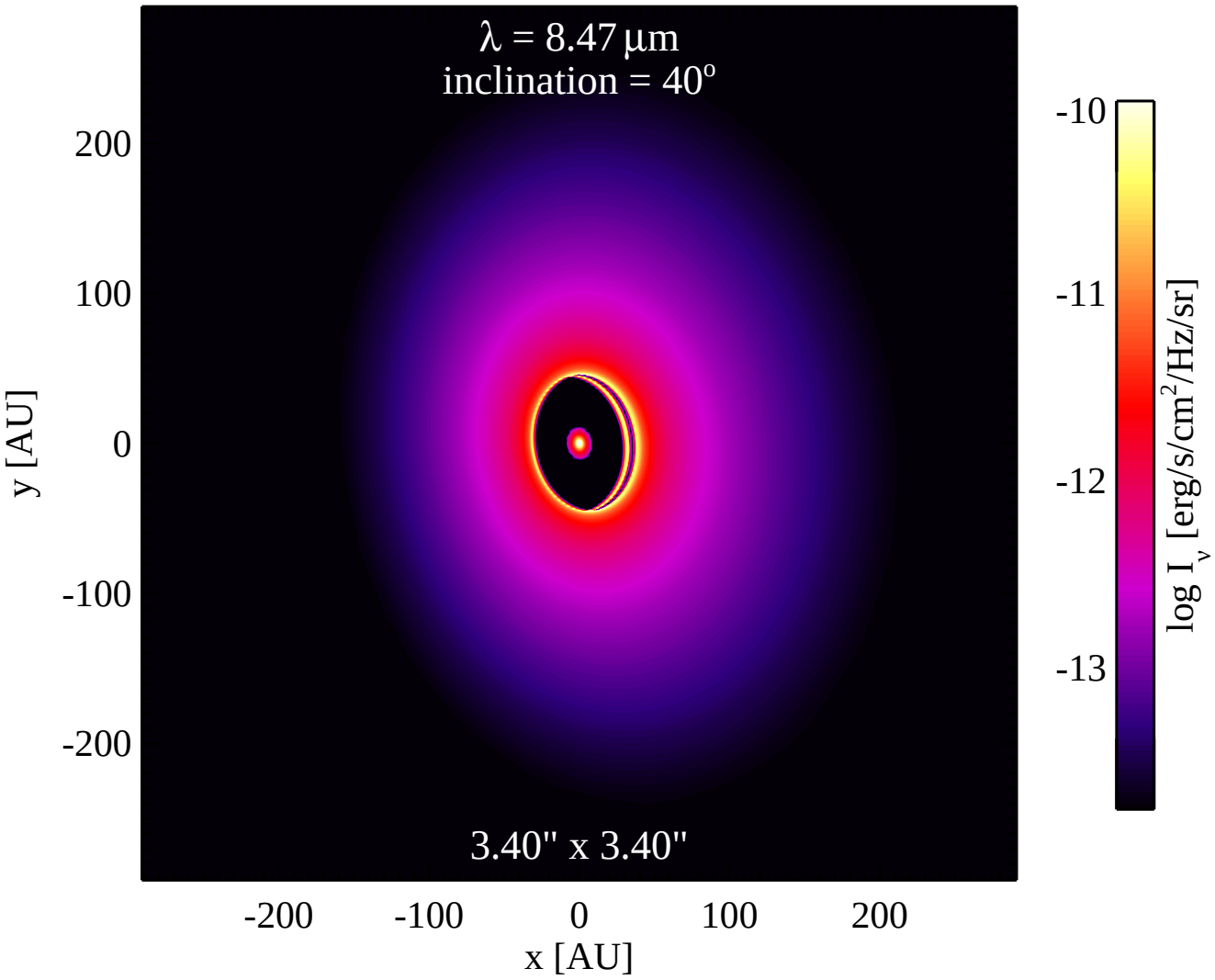

λ = 6.13 μm
inclination = 40°
2.31" x 2.31"
100
0
-100
y [AU]
-100
0
100
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

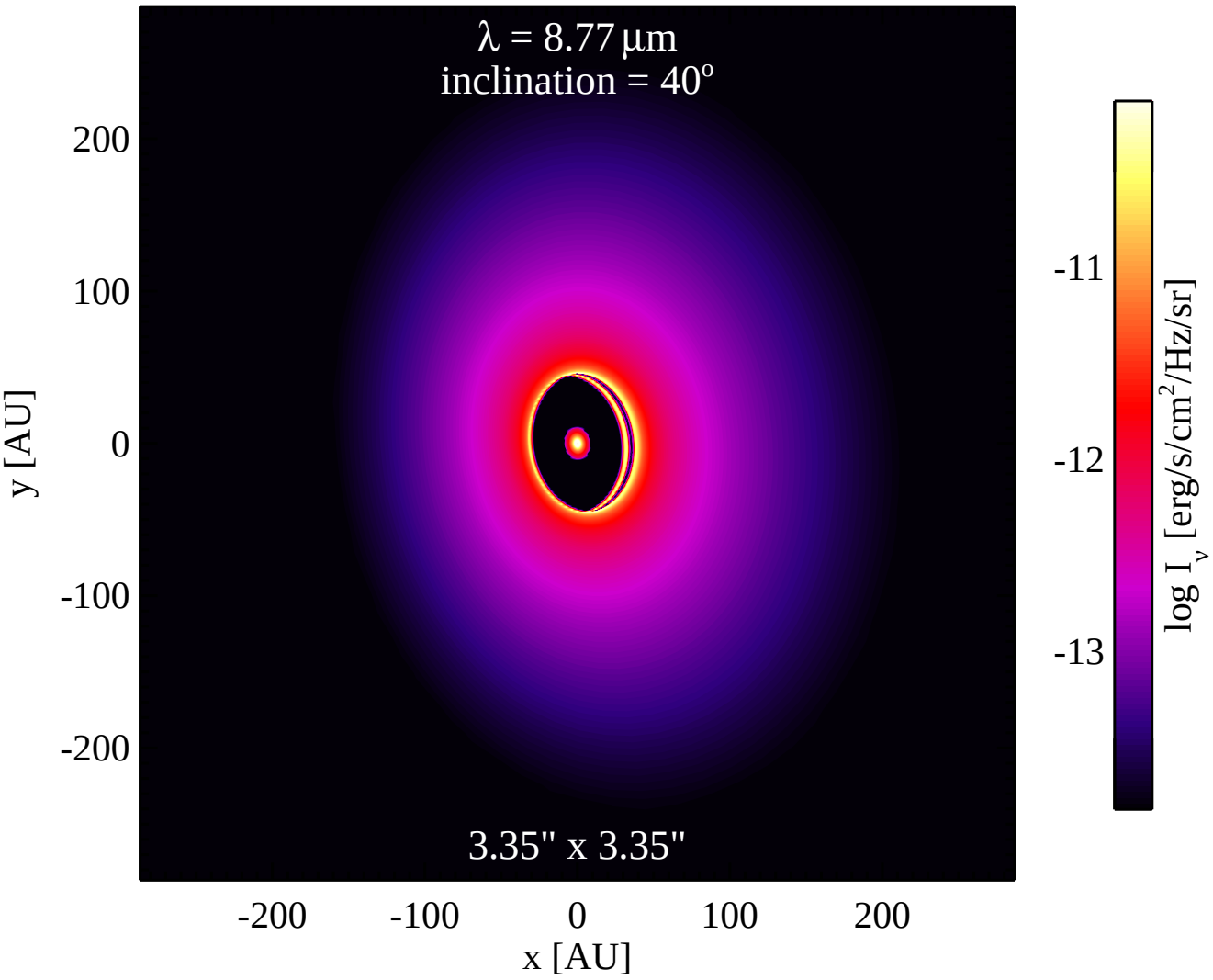

λ = 6.34 μm
inclination = 40°
2.41" x 2.41"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

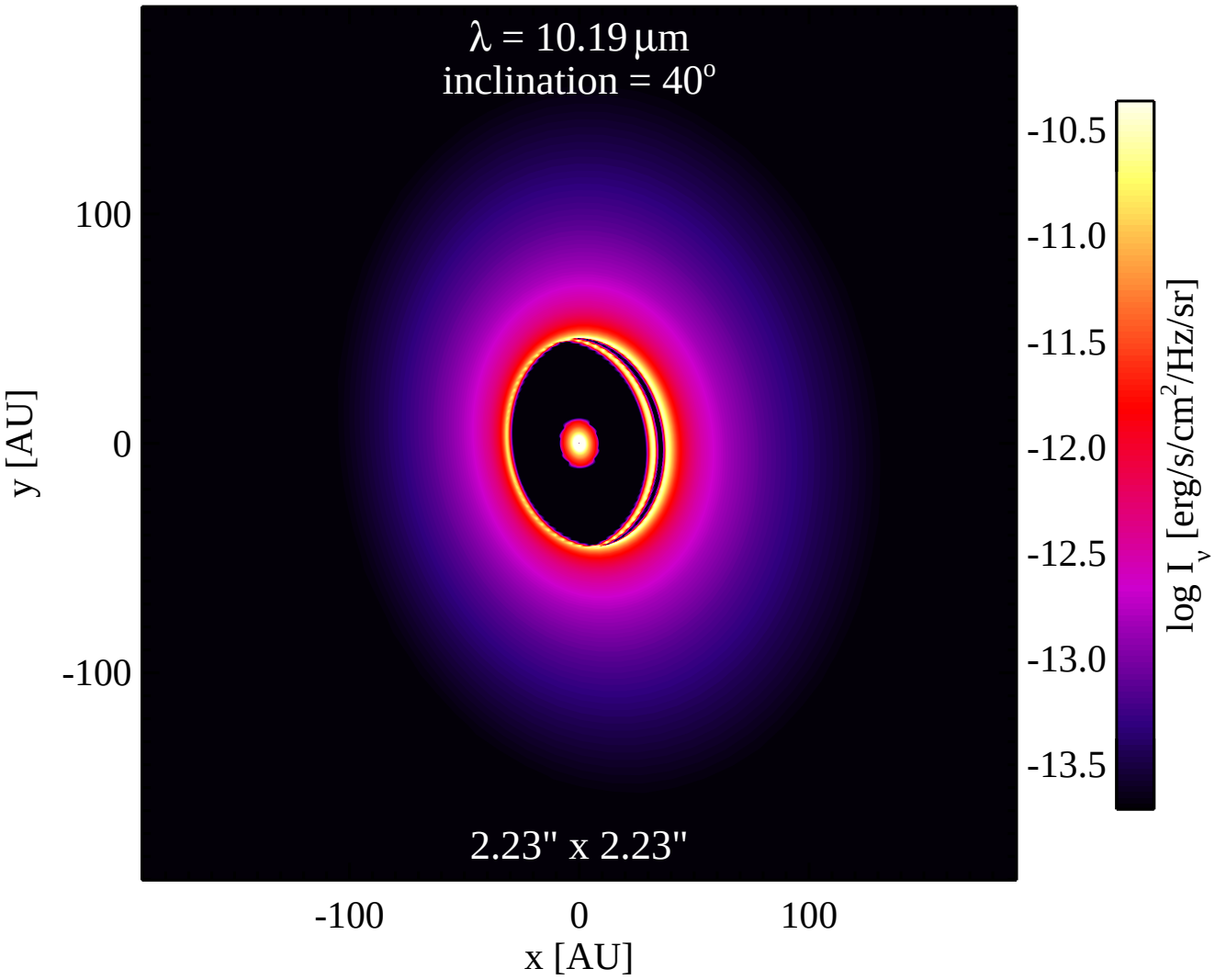

λ = 7.46 μm
inclination = 40°
3.20" x 3.20"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

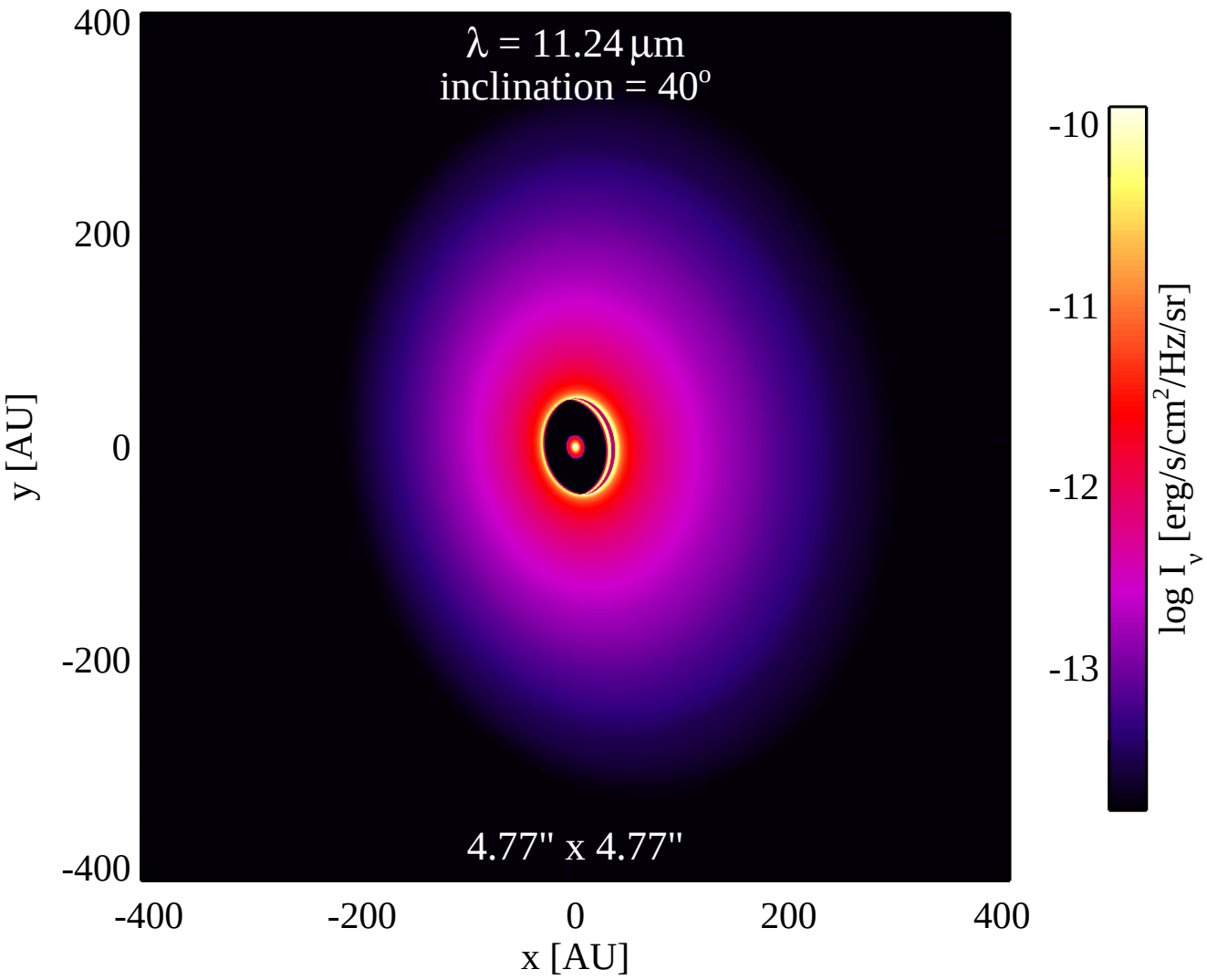

λ = 7.72 μm
inclination = 40°
3.39" x 3.39"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

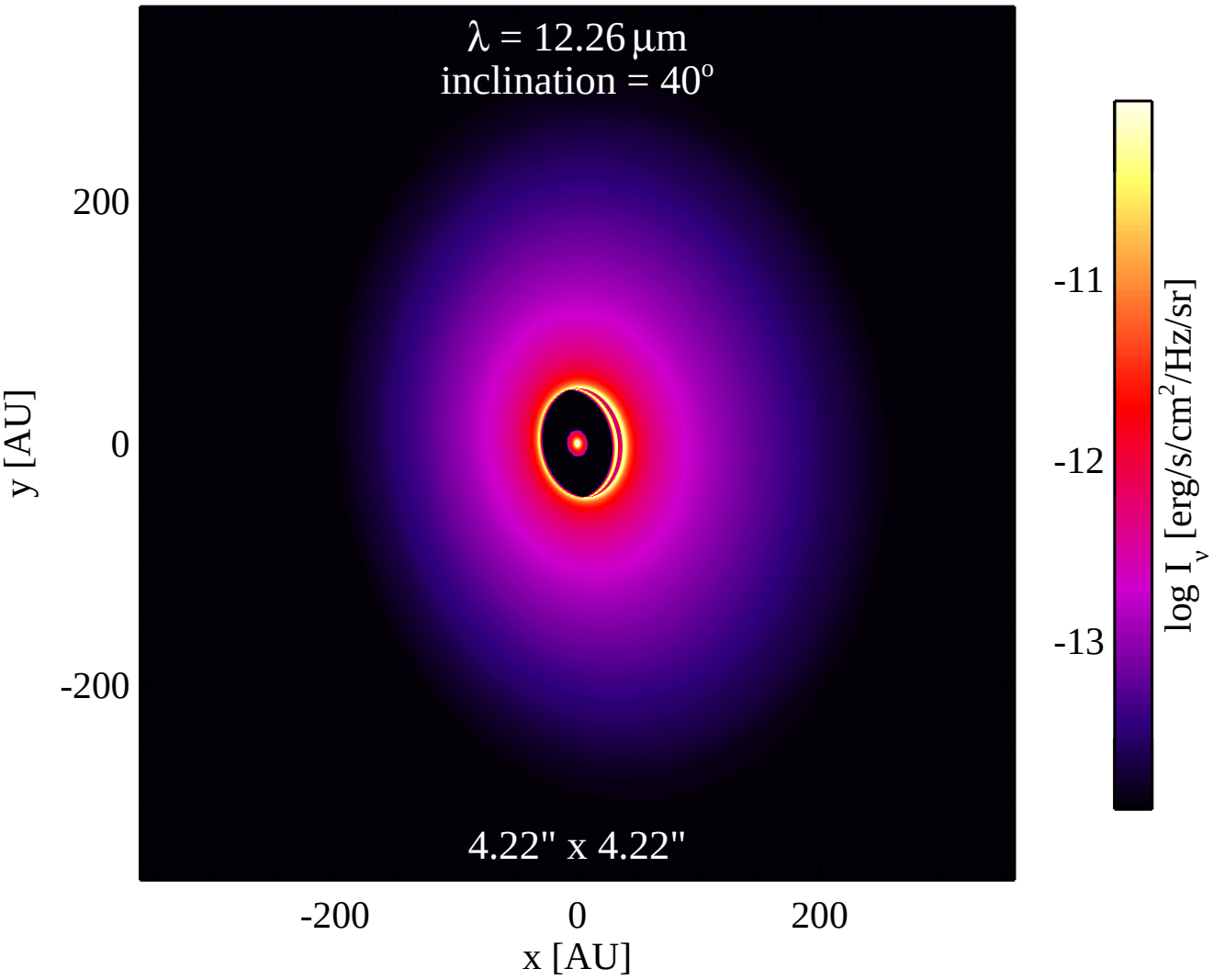

λ = 8.08 μm
inclination = 40°
3.38" x 3.38"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

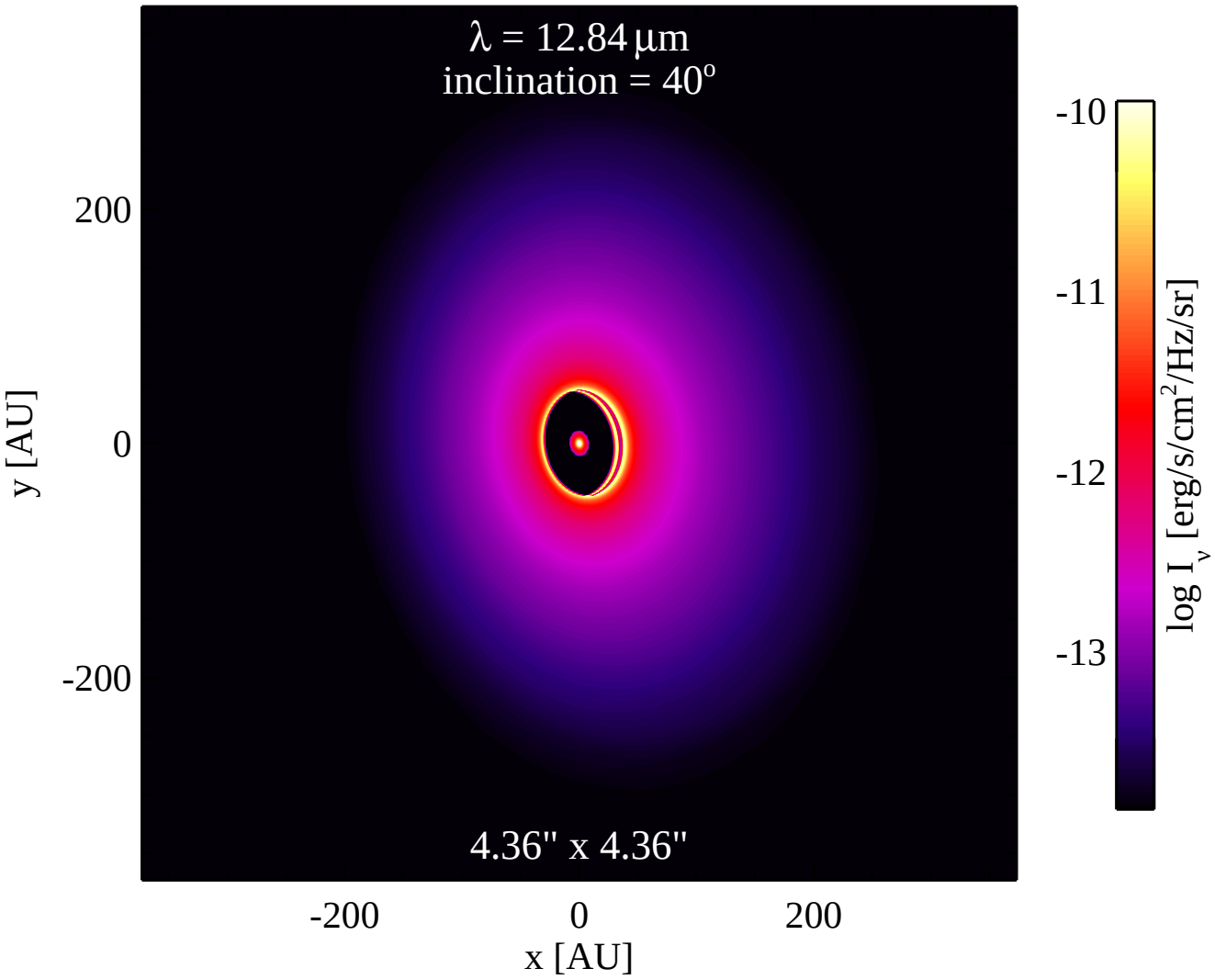

λ = 8.47 μm
inclination = 40°
3.40" x 3.40"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

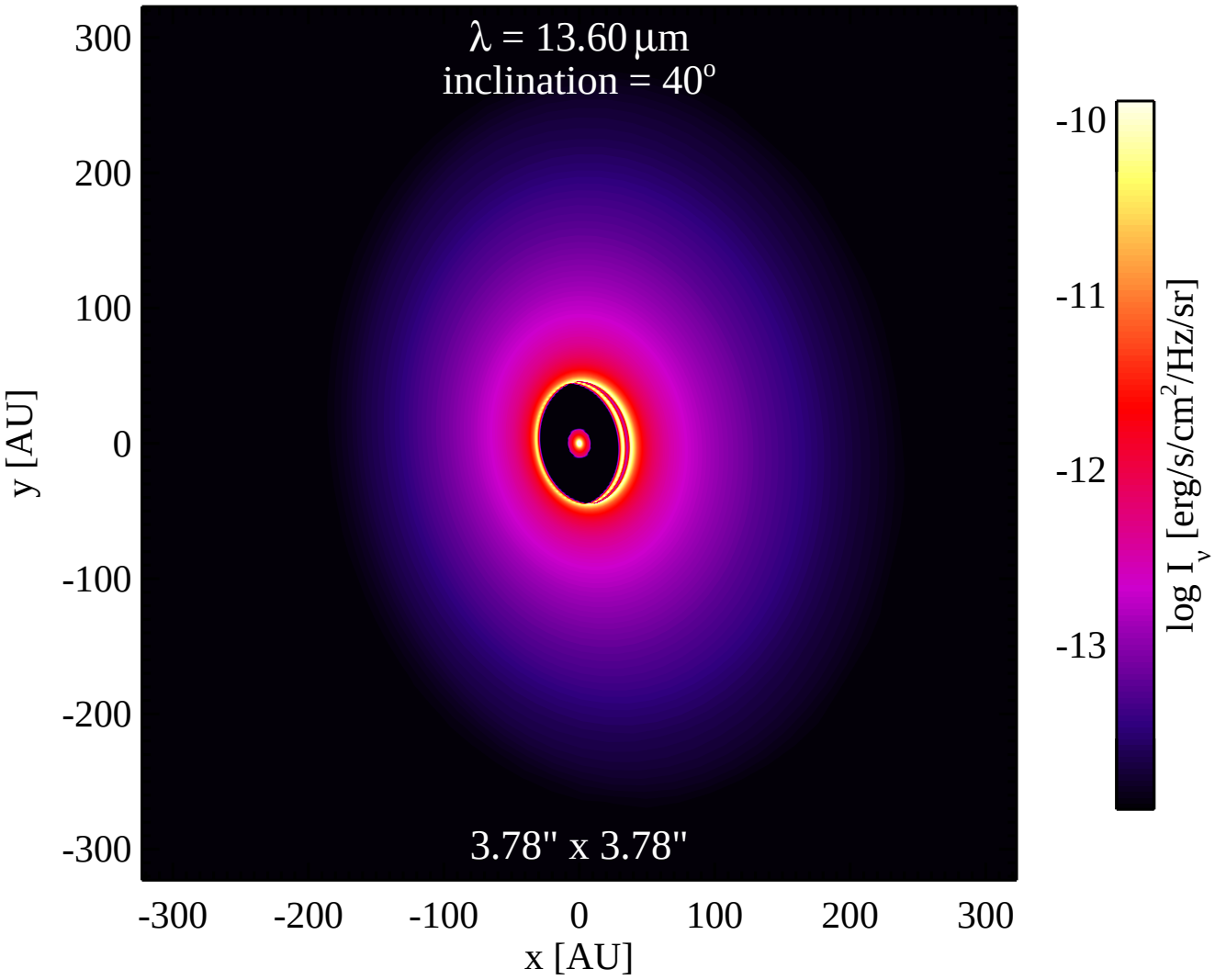

λ = 8.77 μm
inclination = 40°
3.35" x 3.35"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

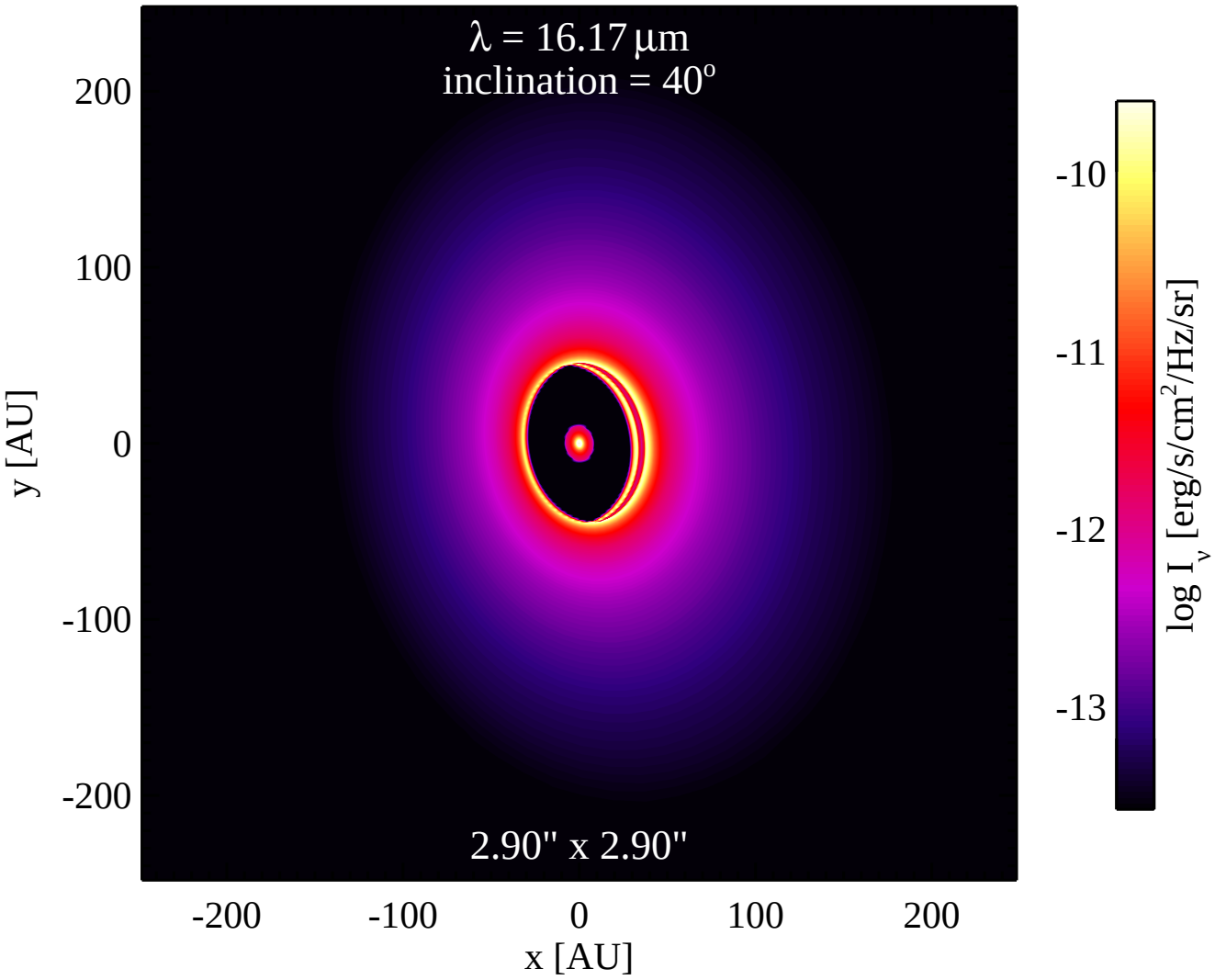

λ = 10.19 μm
inclination = 40°
2.23" x 2.23"
100
0
-100
y [AU]
-100
0
100
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

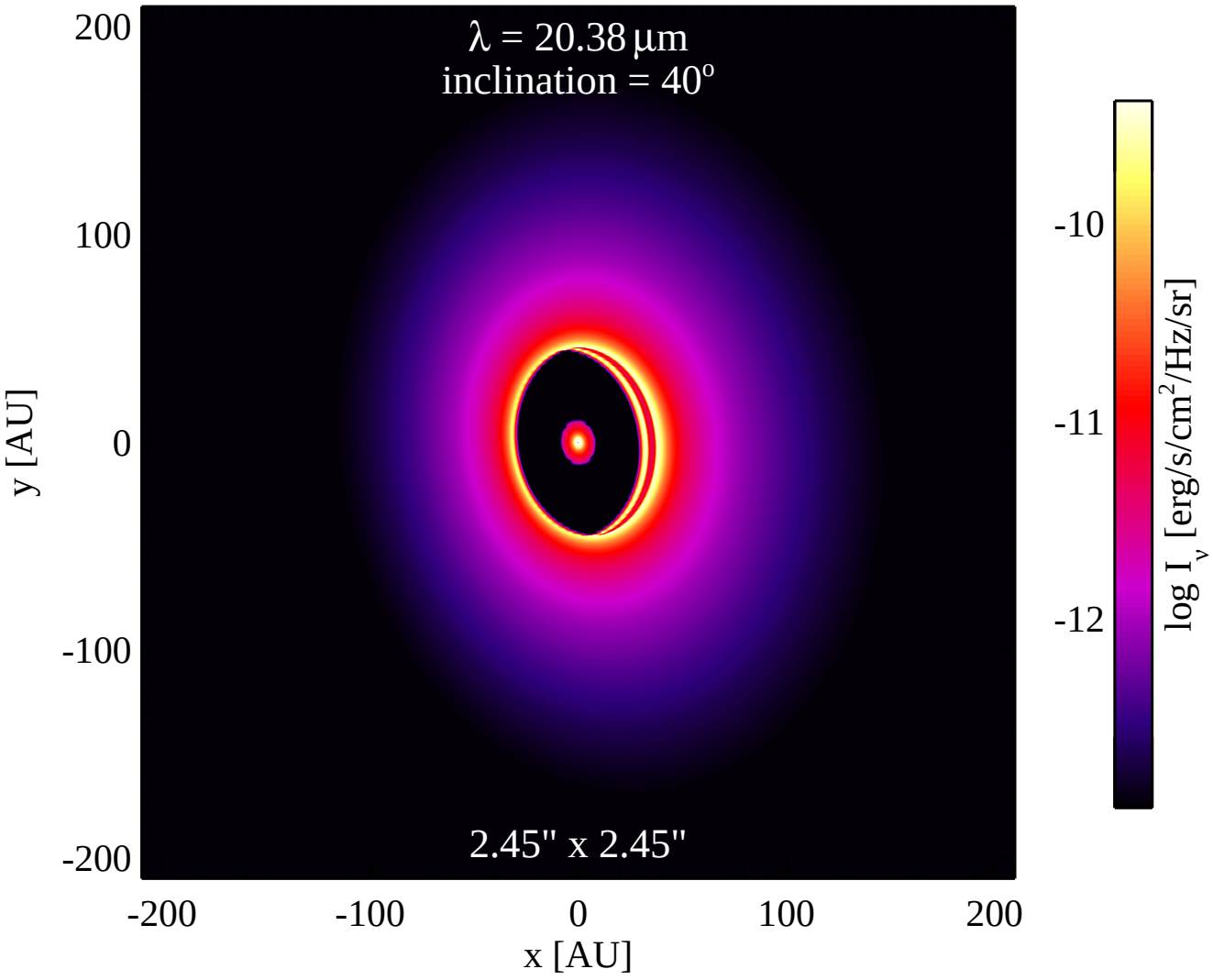

λ = 11.24 μm
inclination = 40°
4.77" x 4.77"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

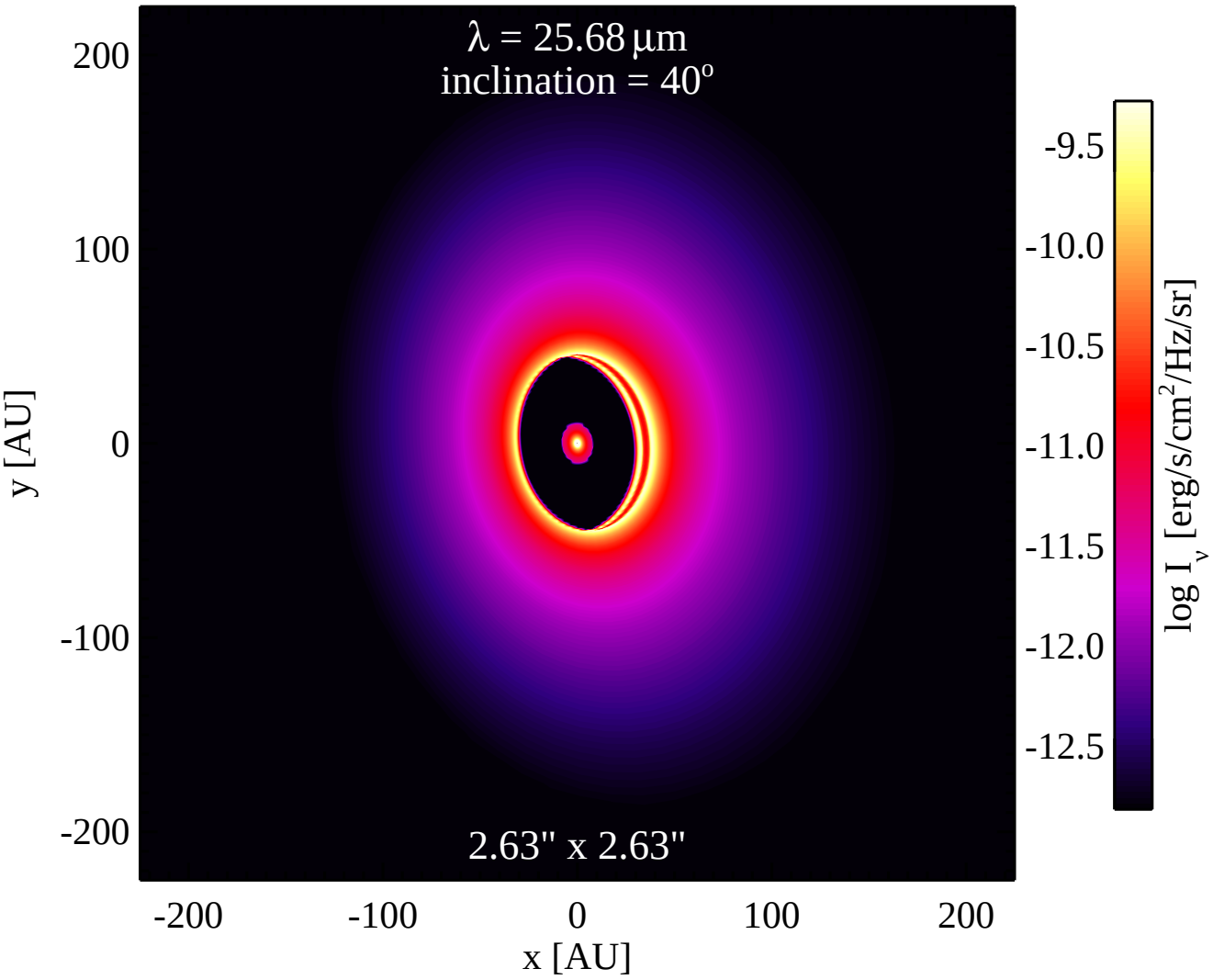

λ = 12.26 μm
inclination = 40°
4.22" x 4.22"
200
0
-200
y [AU]
-200
0
200
x [AU]
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

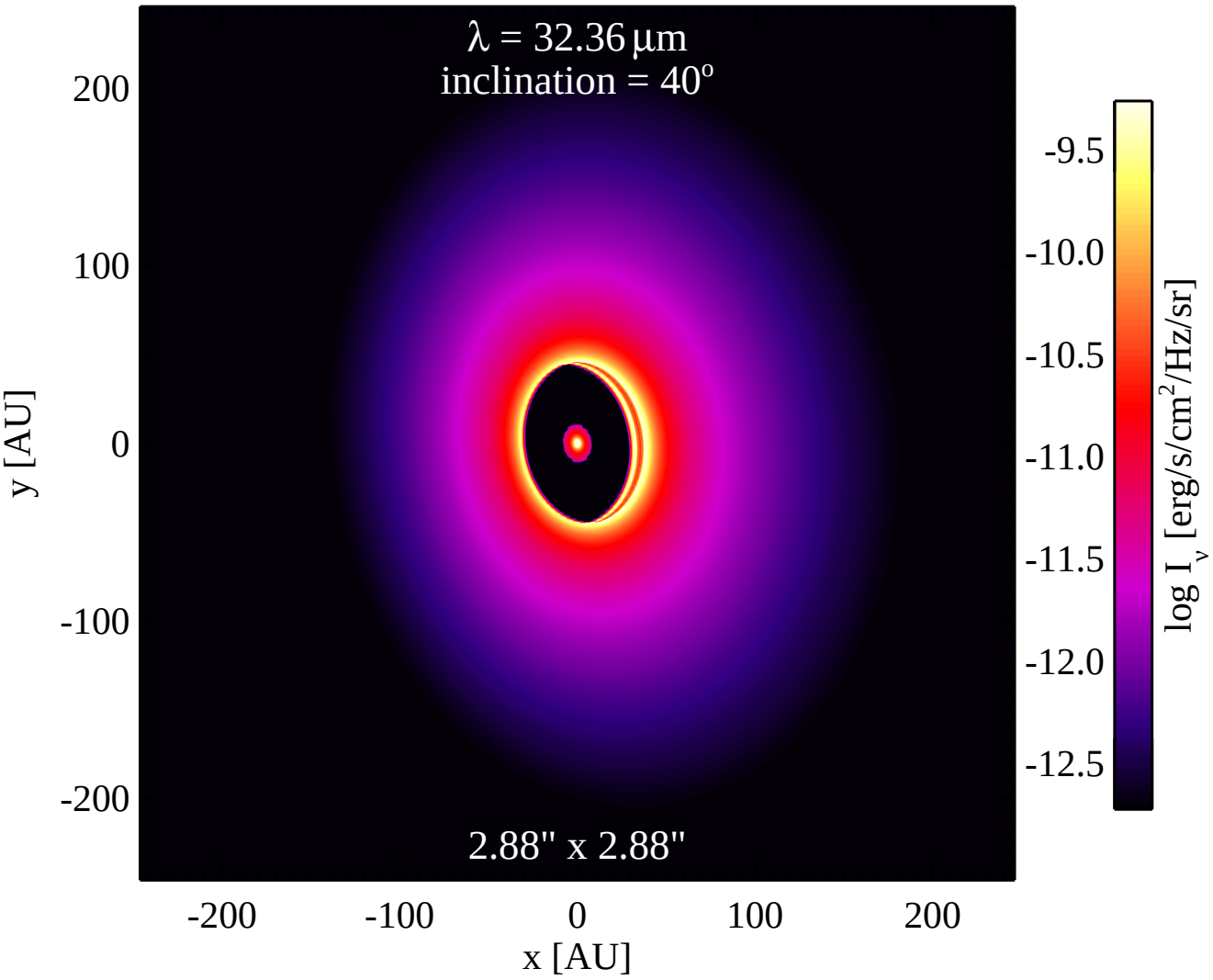

λ = 12.84 μm
inclination = 40°
4.36" x 4.36"
200
0
-200
y [AU]
-200
0
200
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

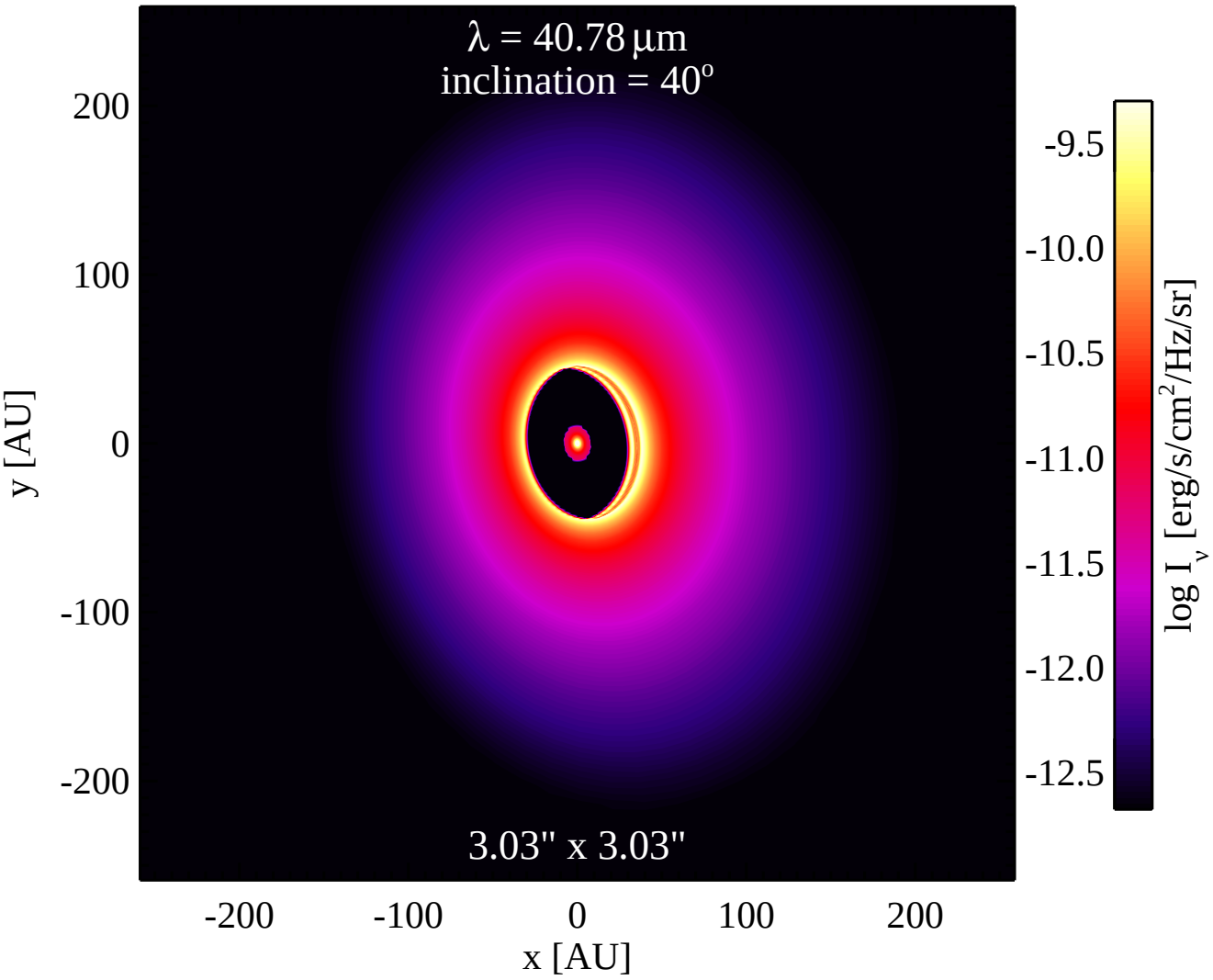

λ = 13.60 μm
inclination = 40°
3.78" x 3.78"
300
200
100
0
-100
-200
-300
y [AU]
-300
-200
-100
0
100
200
300
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

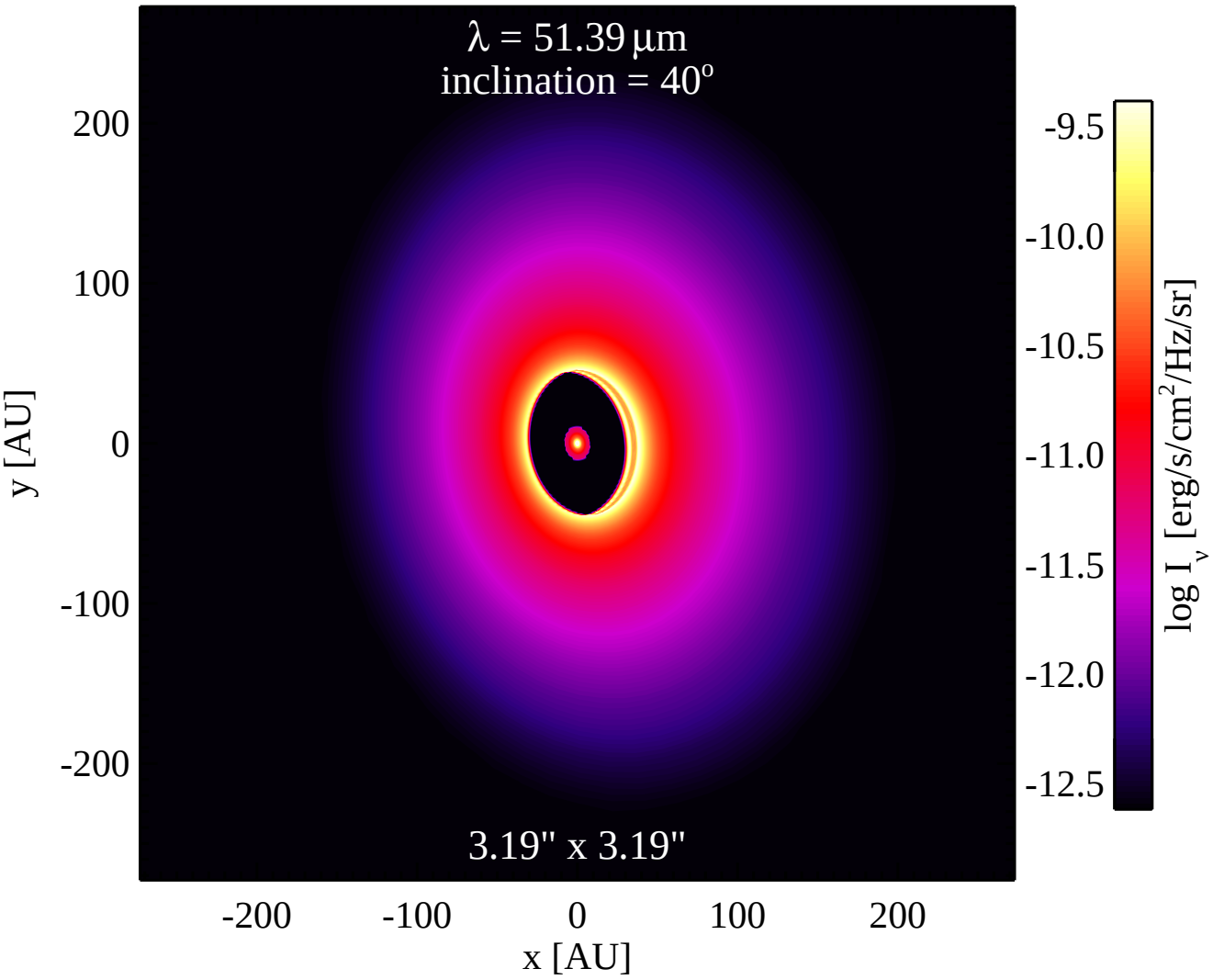

λ = 16.17 μm
inclination = 40°
2.90" x 2.90"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10
-11
-12
-13
log I_ν [erg/s/cm²/Hz/sr]

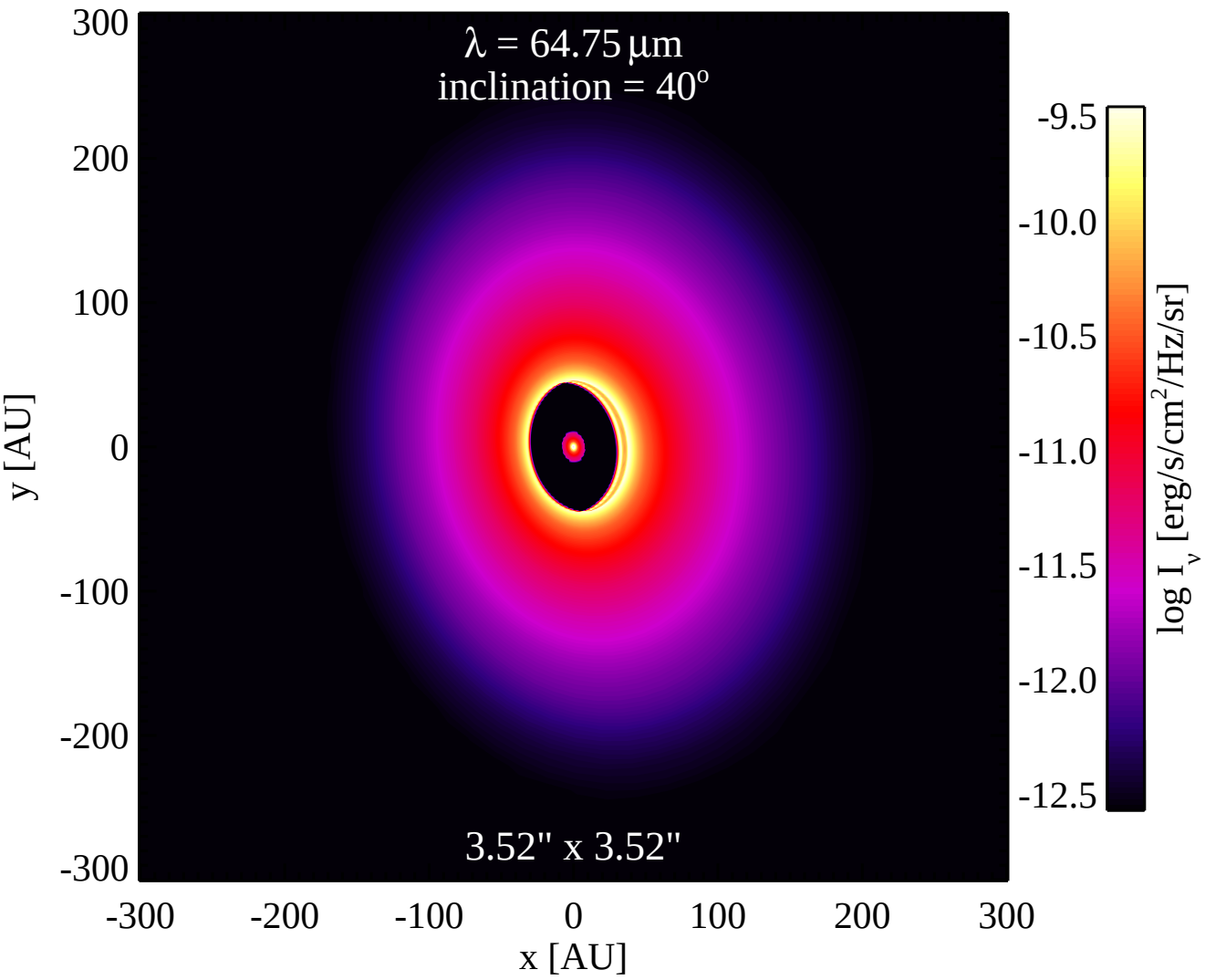

λ = 20.38 μm
inclination = 40°
2.45" x 2.45"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-10
-11
-12
log I_ν [erg/s/cm²/Hz/sr]

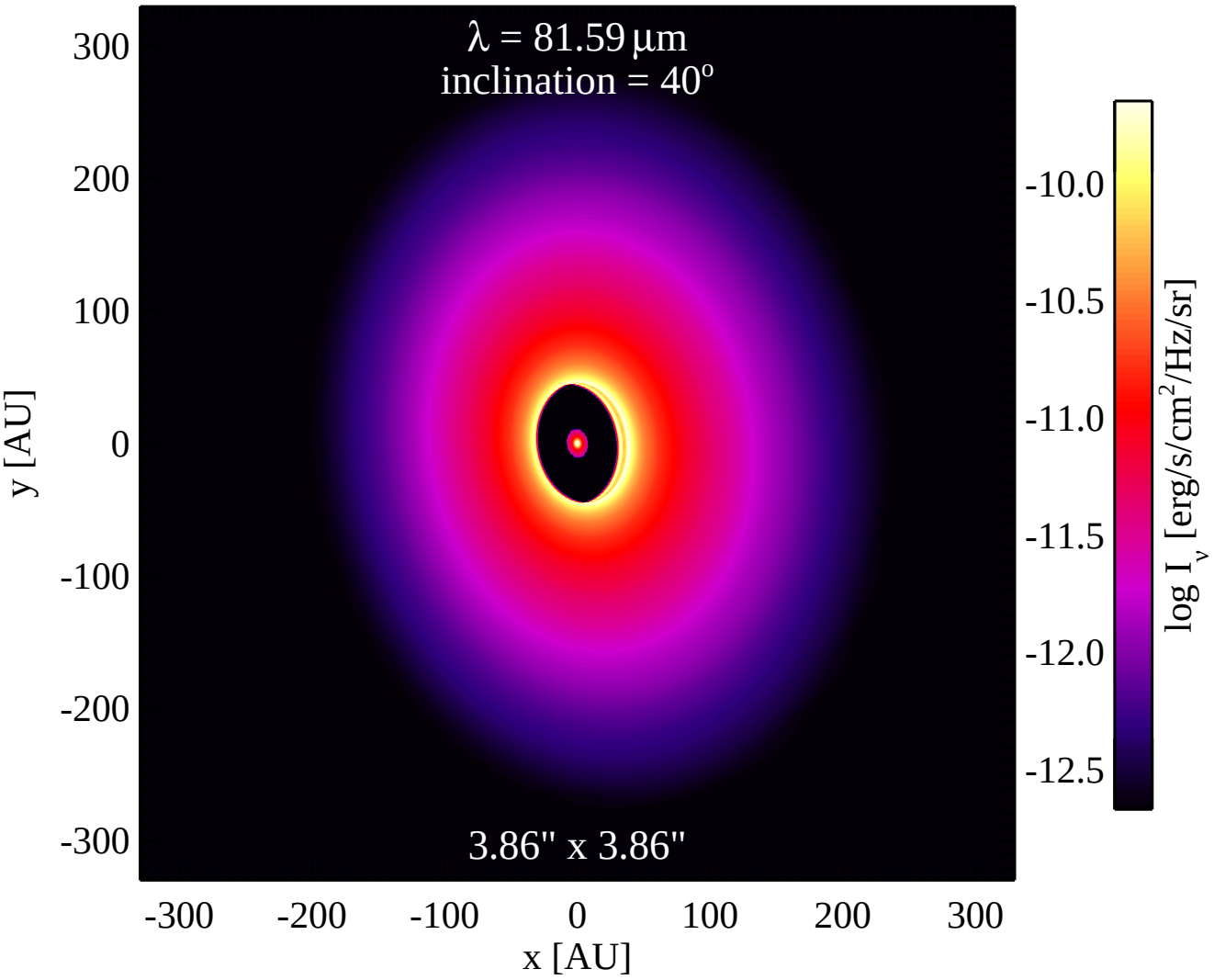

λ = 25.68 μm
inclination = 40°
2.63" x 2.63"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

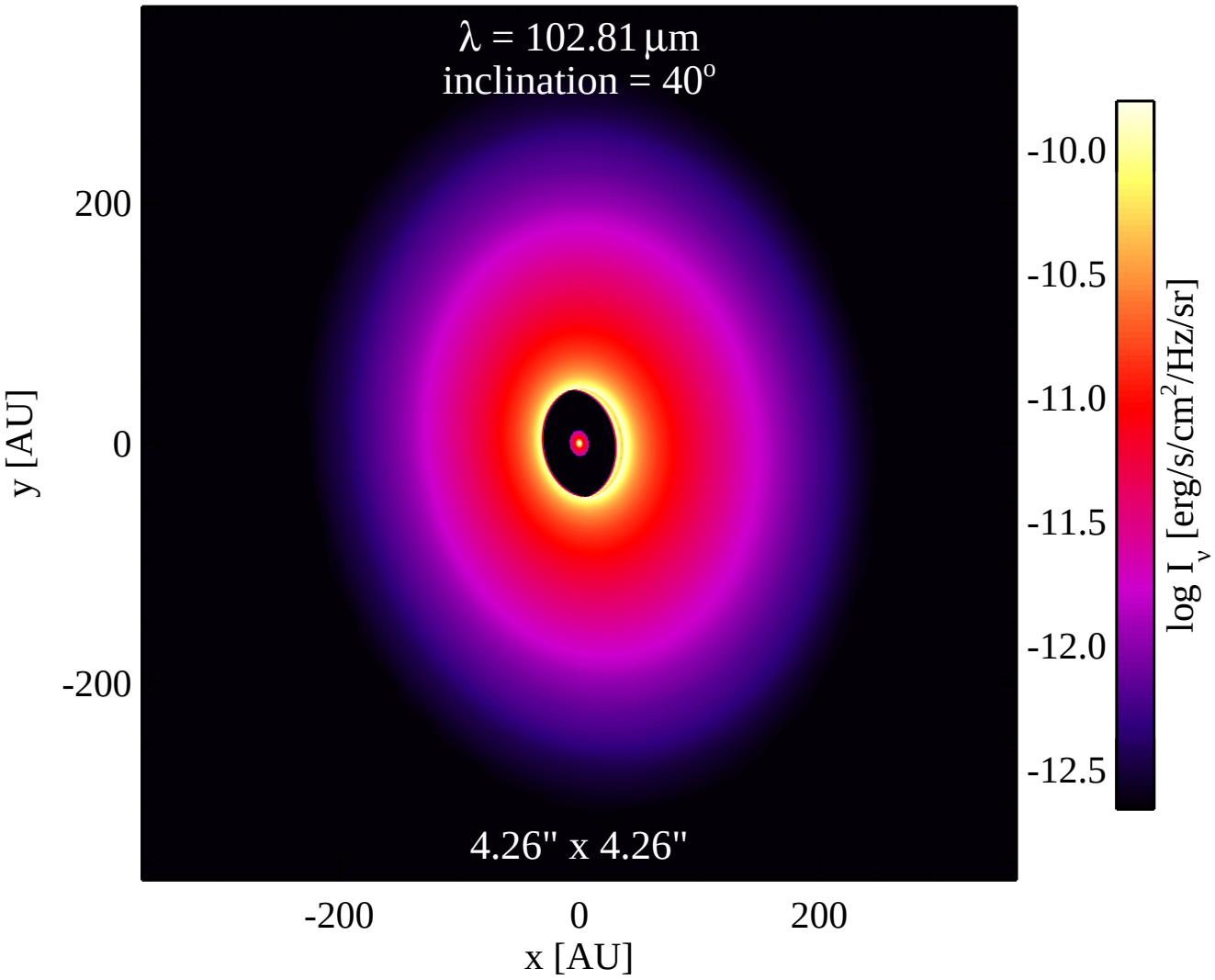

λ = 32.36 μm
inclination = 40°
2.88" x 2.88"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

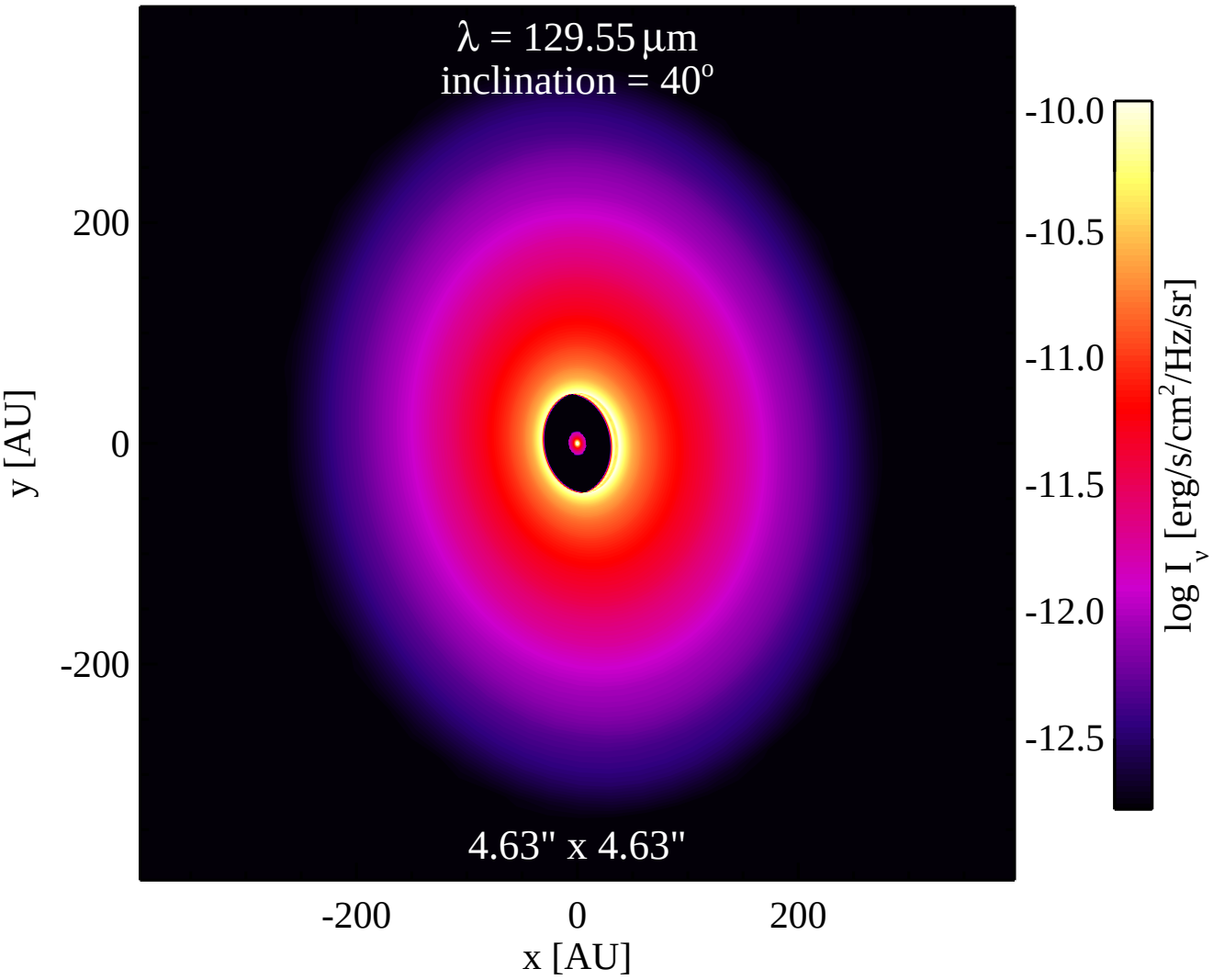

λ = 40.78 μm
inclination = 40°
3.03" x 3.03"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

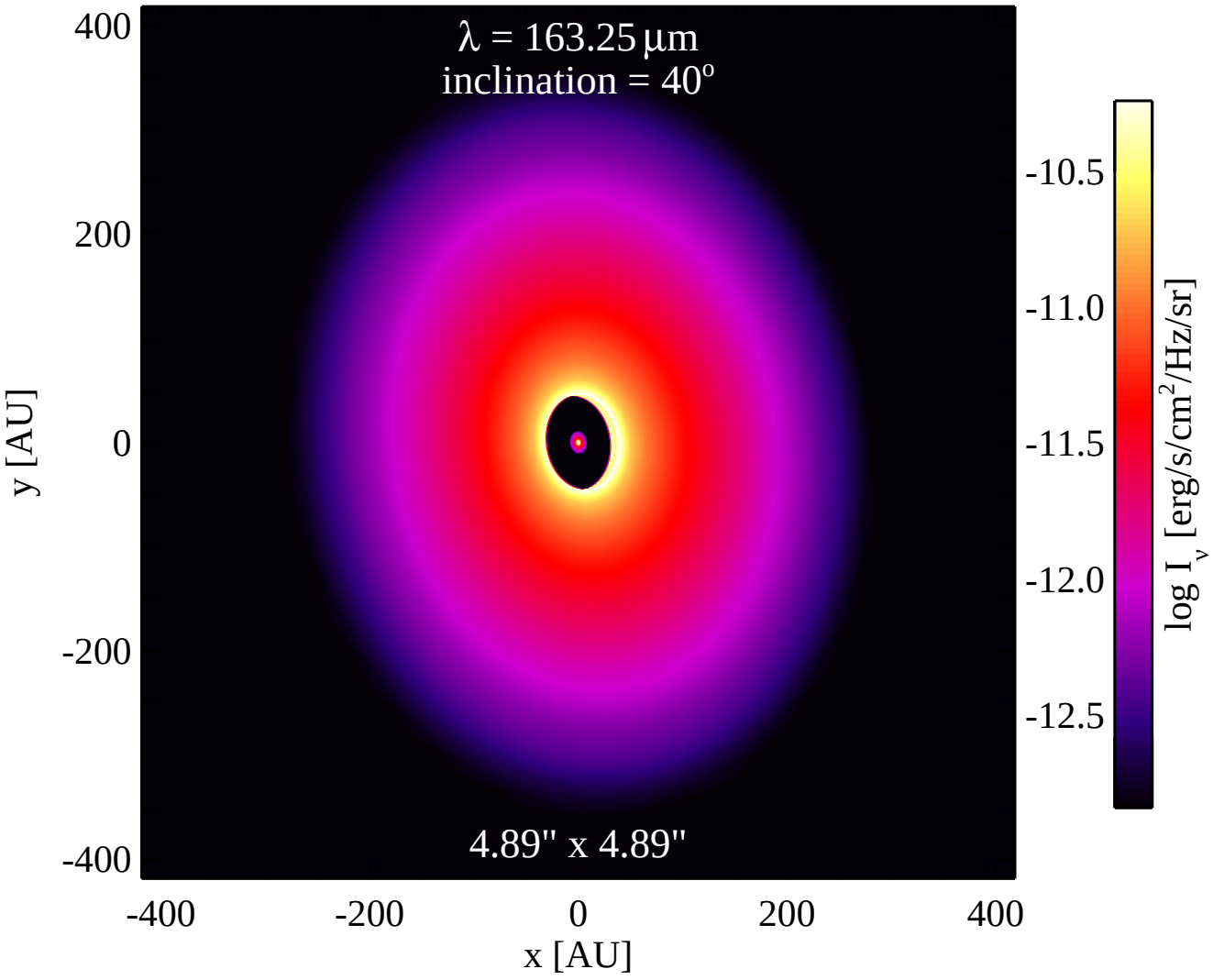

λ = 51.39 μm
inclination = 40°
3.19" x 3.19"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

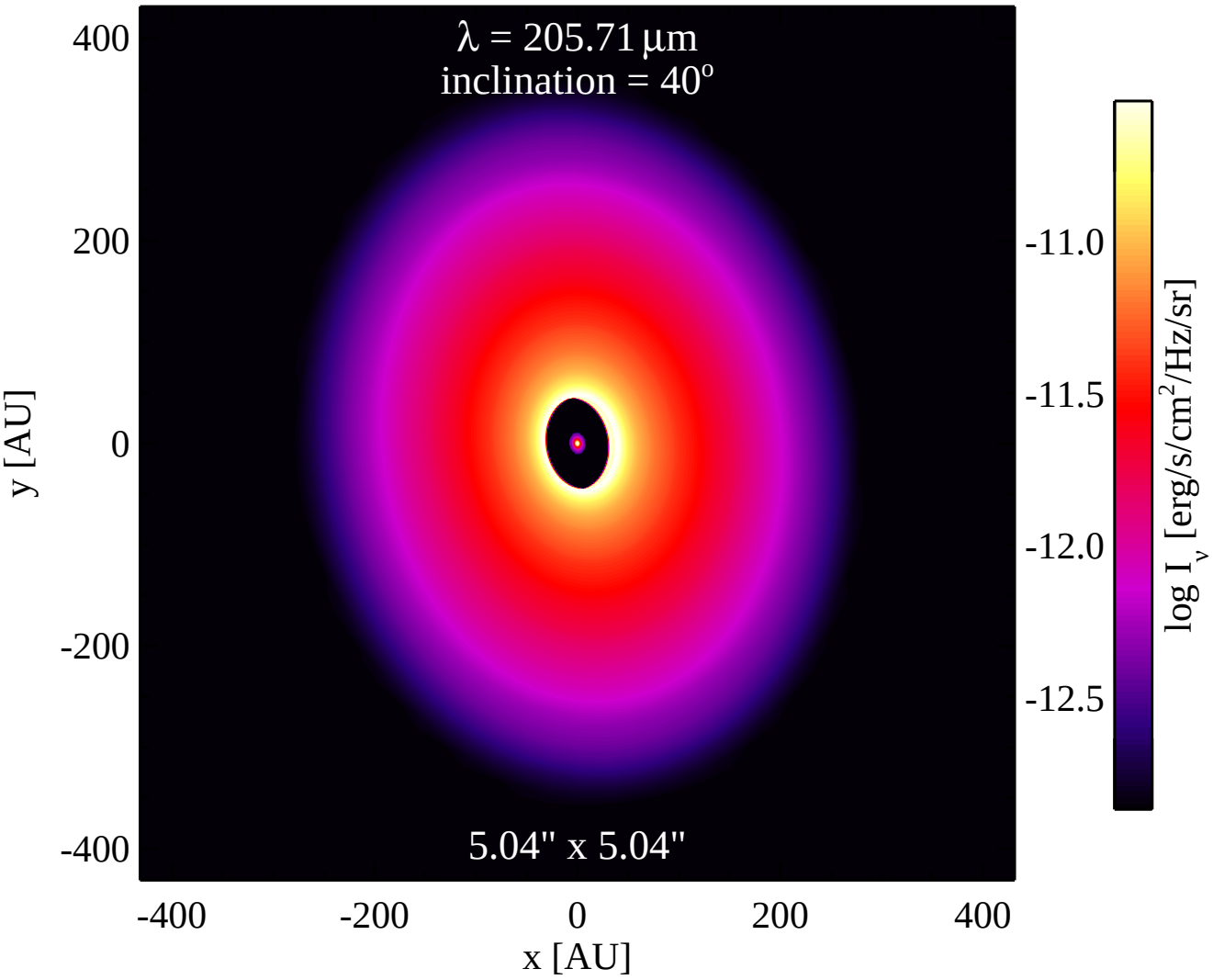

λ = 64.75 μm
inclination = 40°
3.52" x 3.52"
300
200
100
0
-100
-200
-300
y [AU]
-300
-200
-100
0
100
200
300
x [AU]
-9.5
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

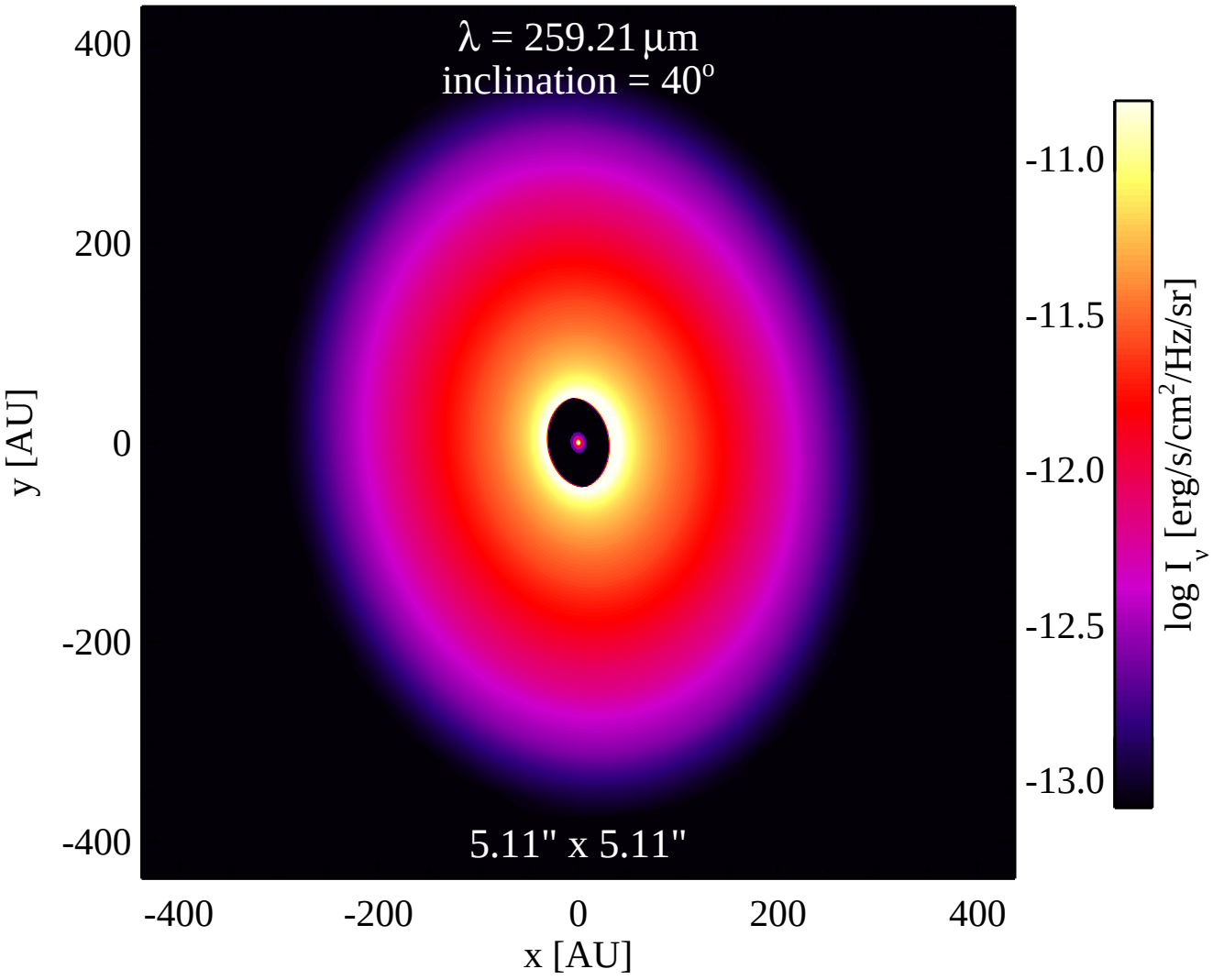

λ = 81.59 μm
inclination = 40°
3.86" x 3.86"
300
200
100
0
-100
-200
-300
y [AU]
-300
-200
-100
0
100
200
300
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

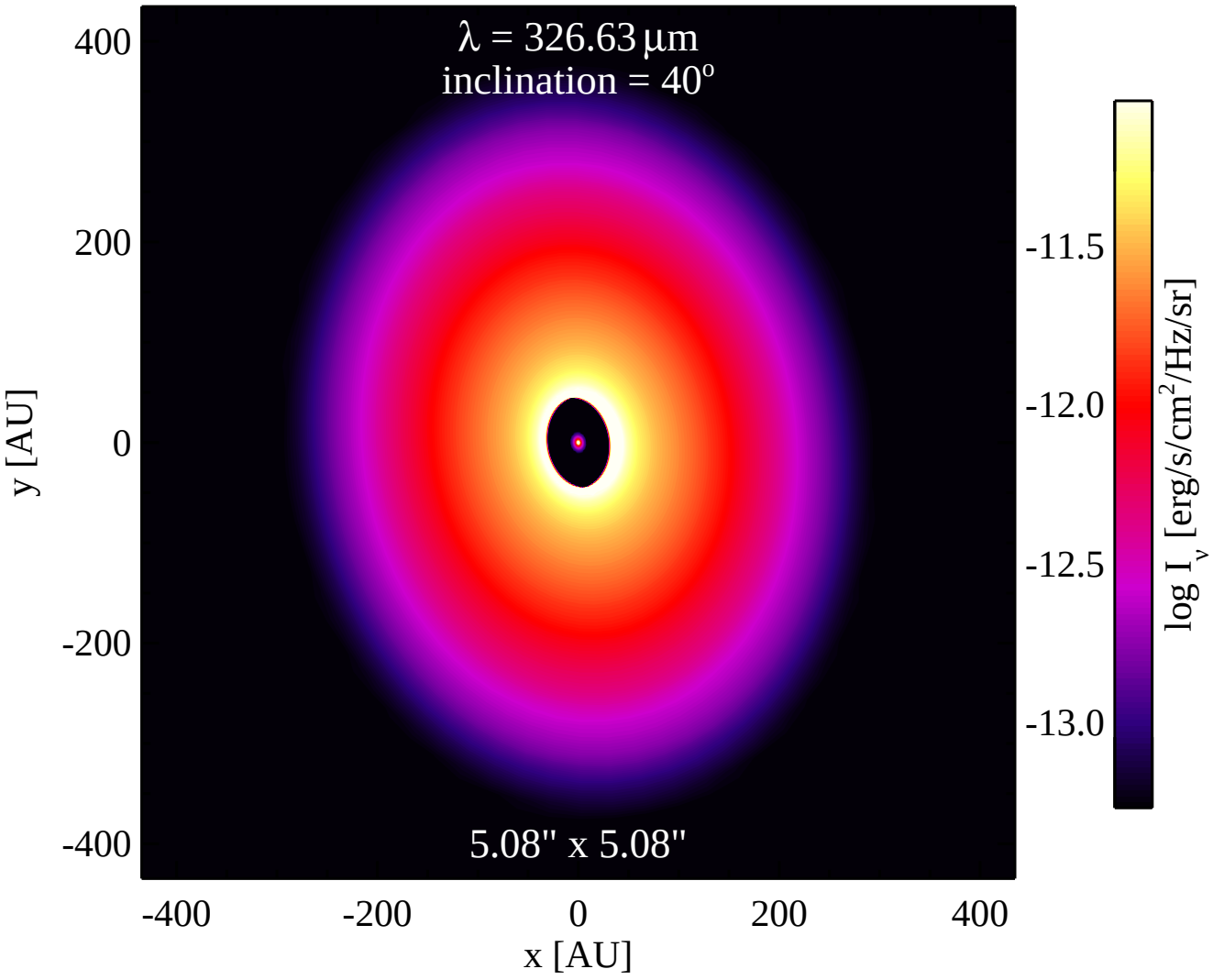

λ = 102.81 μm
inclination = 40°
4.26" x 4.26"
200
0
-200
y [AU]
-200
0
200
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

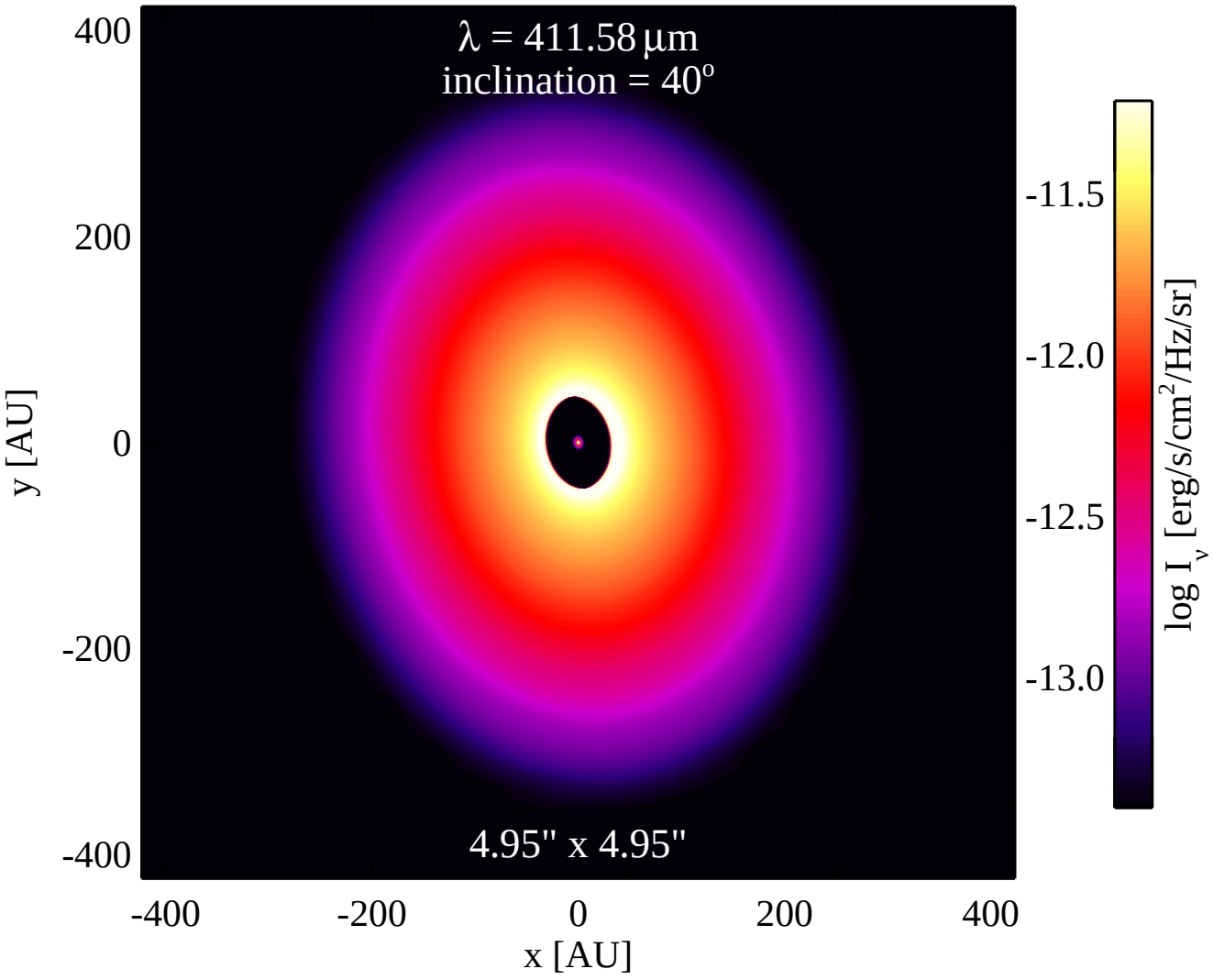

λ = 129.55 μm
inclination = 40°
4.63" x 4.63"
200
0
-200
y [AU]
-200
0
200
x [AU]
-10.0
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

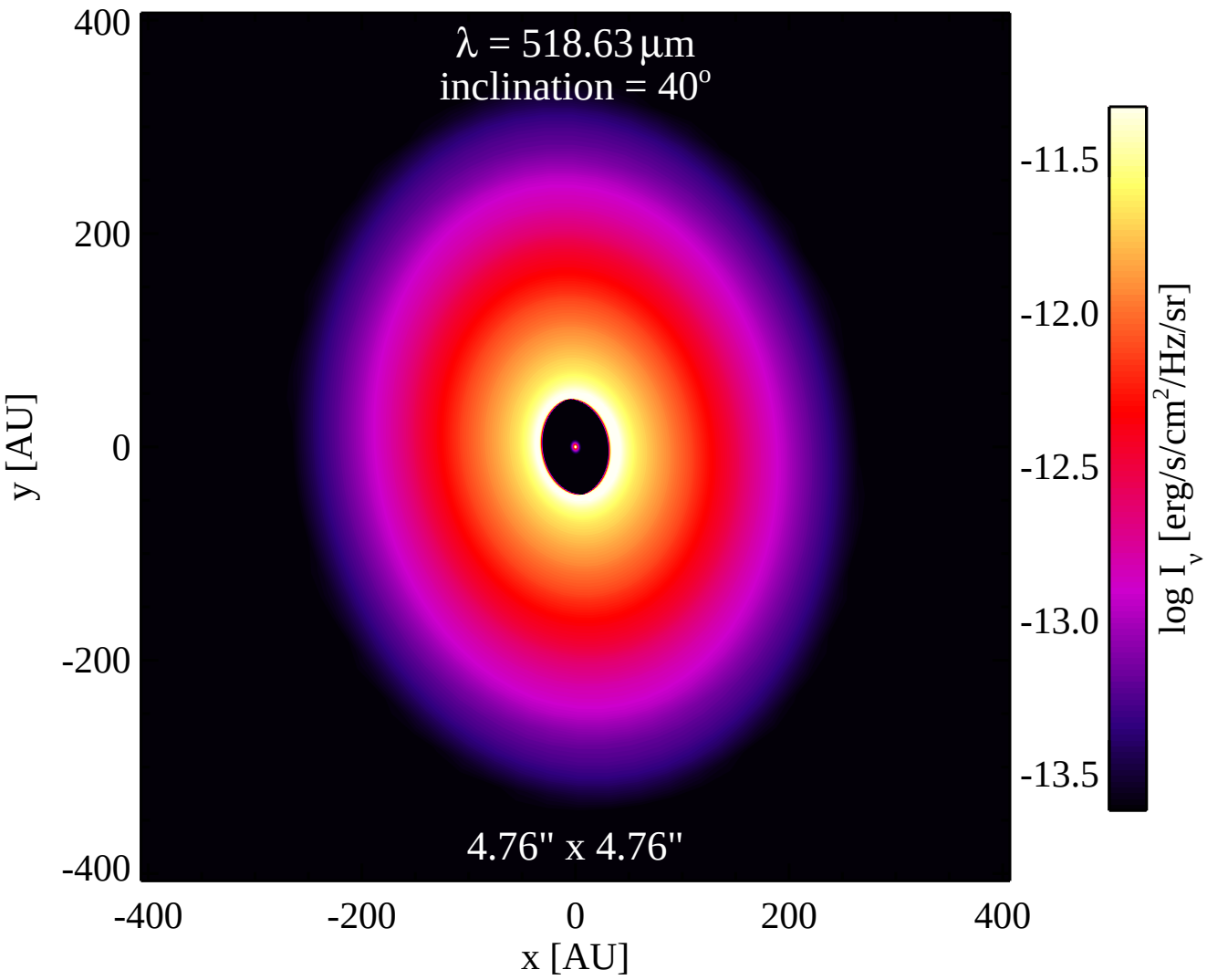

λ = 163.25 μm
inclination = 40°
4.89" x 4.89"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-10.5
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

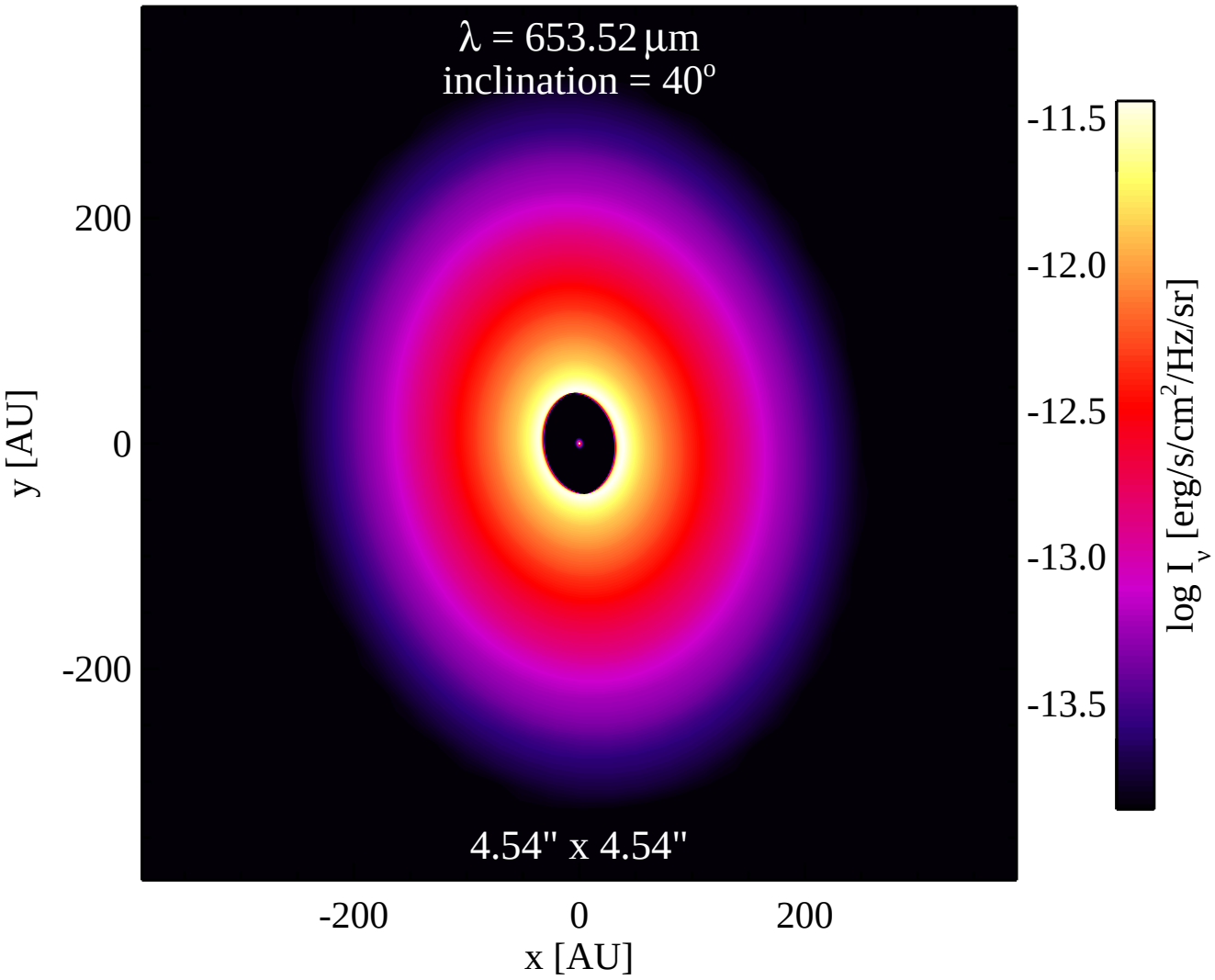

λ = 205.71 μm
inclination = 40°
5.04" x 5.04"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-11.0
-11.5
-12.0
-12.5
log I_ν [erg/s/cm²/Hz/sr]

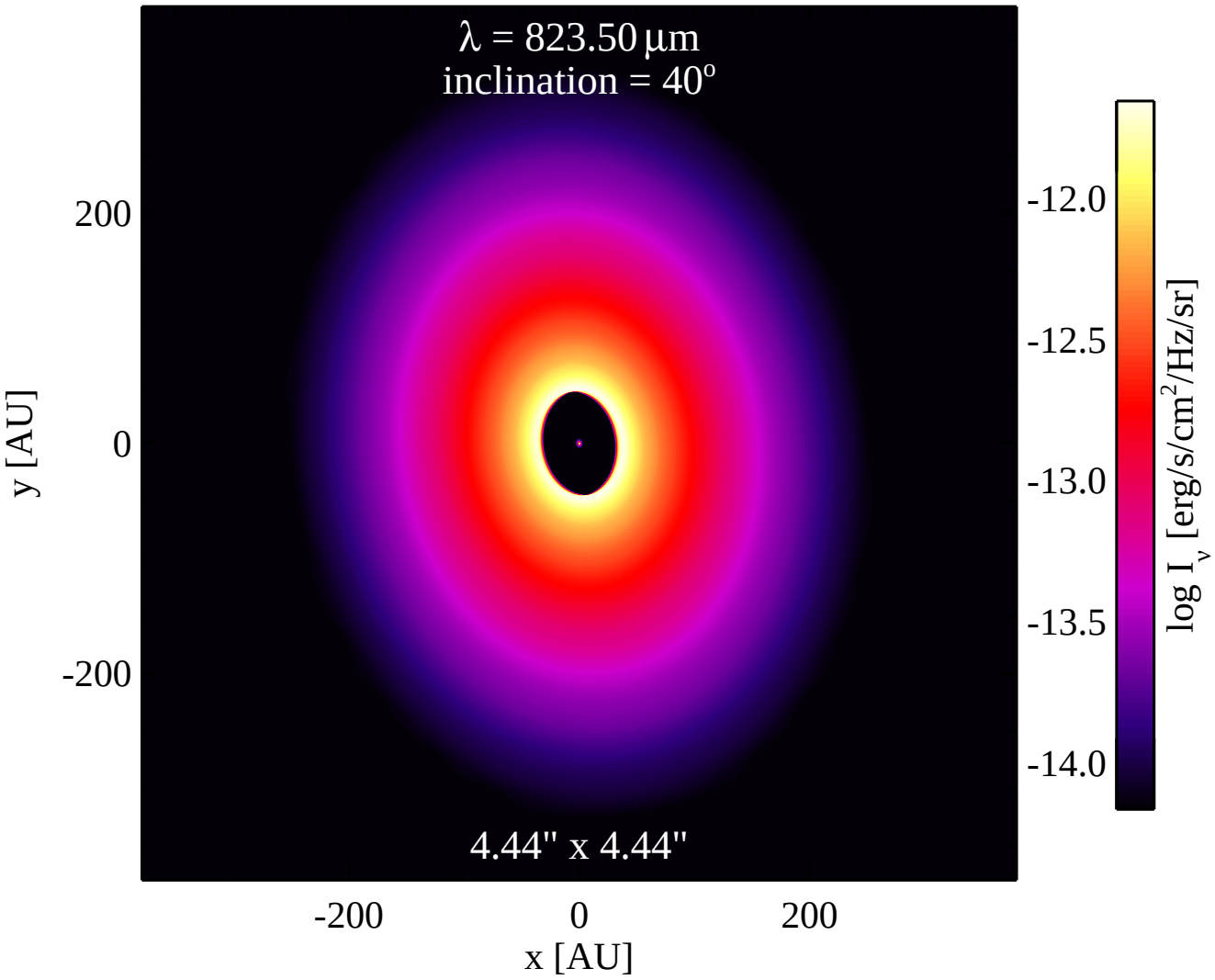

λ = 259.21 μm
inclination = 40°
5.11" x 5.11"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

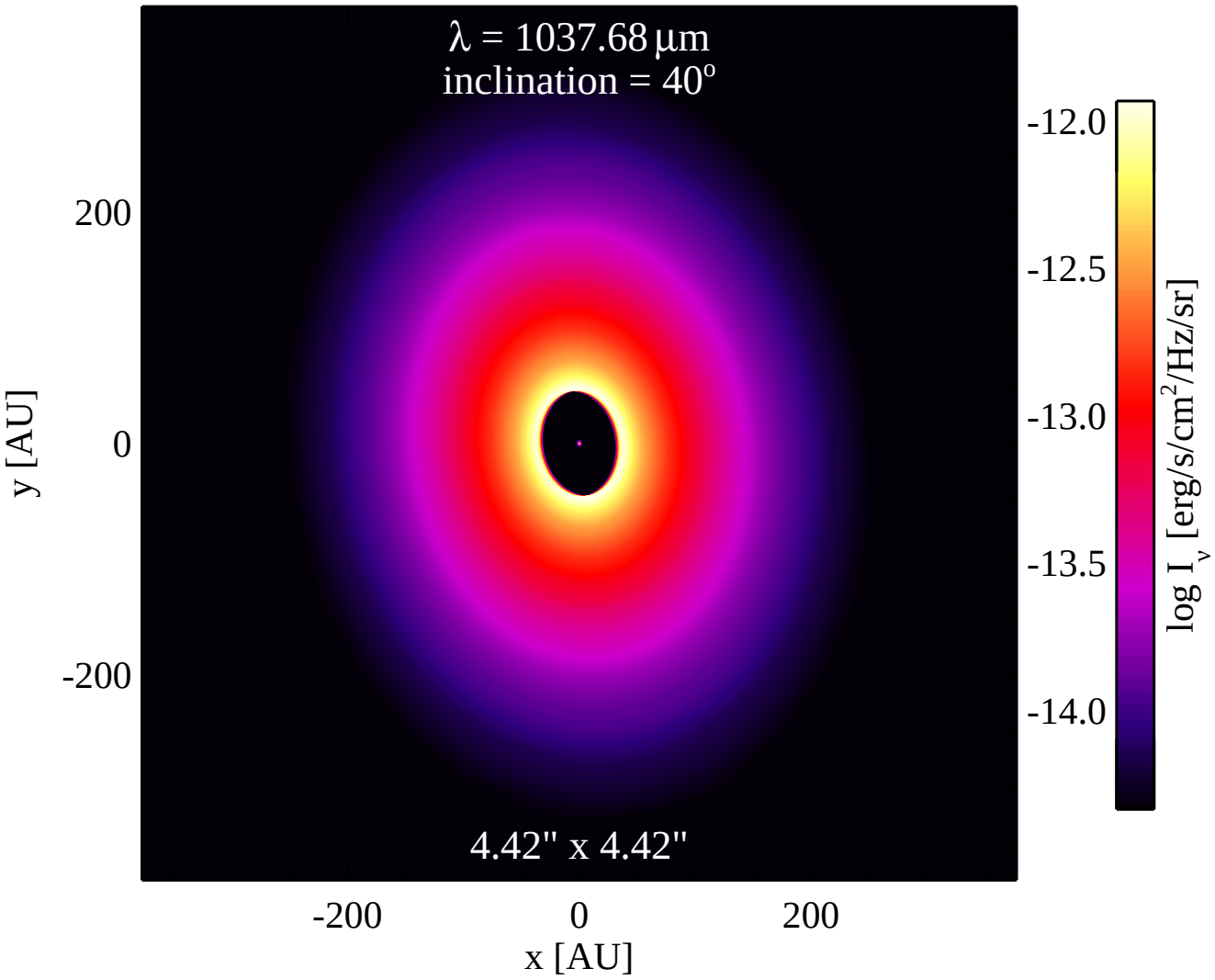

λ = 326.63 μm
inclination = 40°
5.08" x 5.08"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

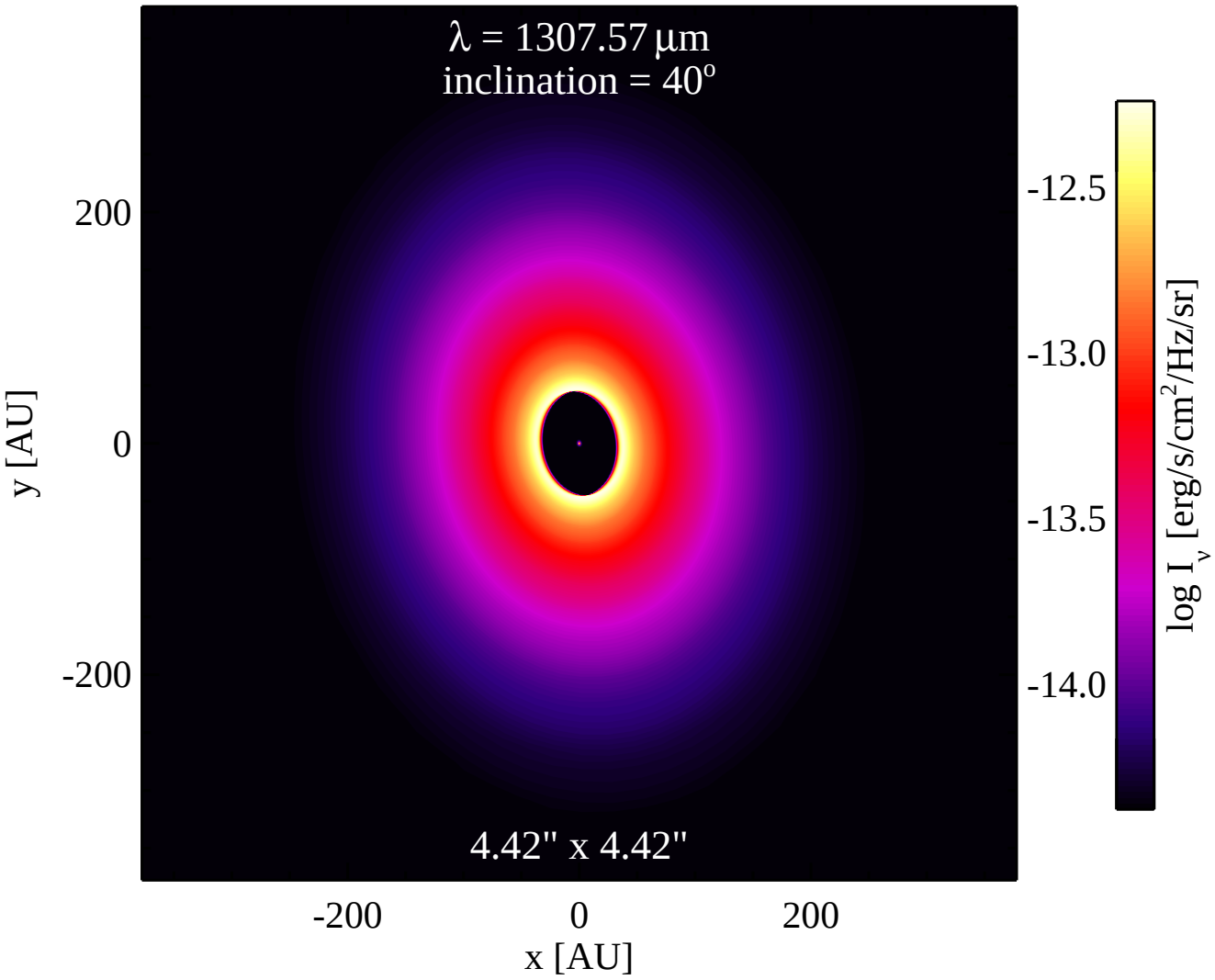

λ = 411.58 μm
inclination = 40°
4.95" x 4.95"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-11.5
-12.0
-12.5
-13.0
log I_ν [erg/s/cm²/Hz/sr]

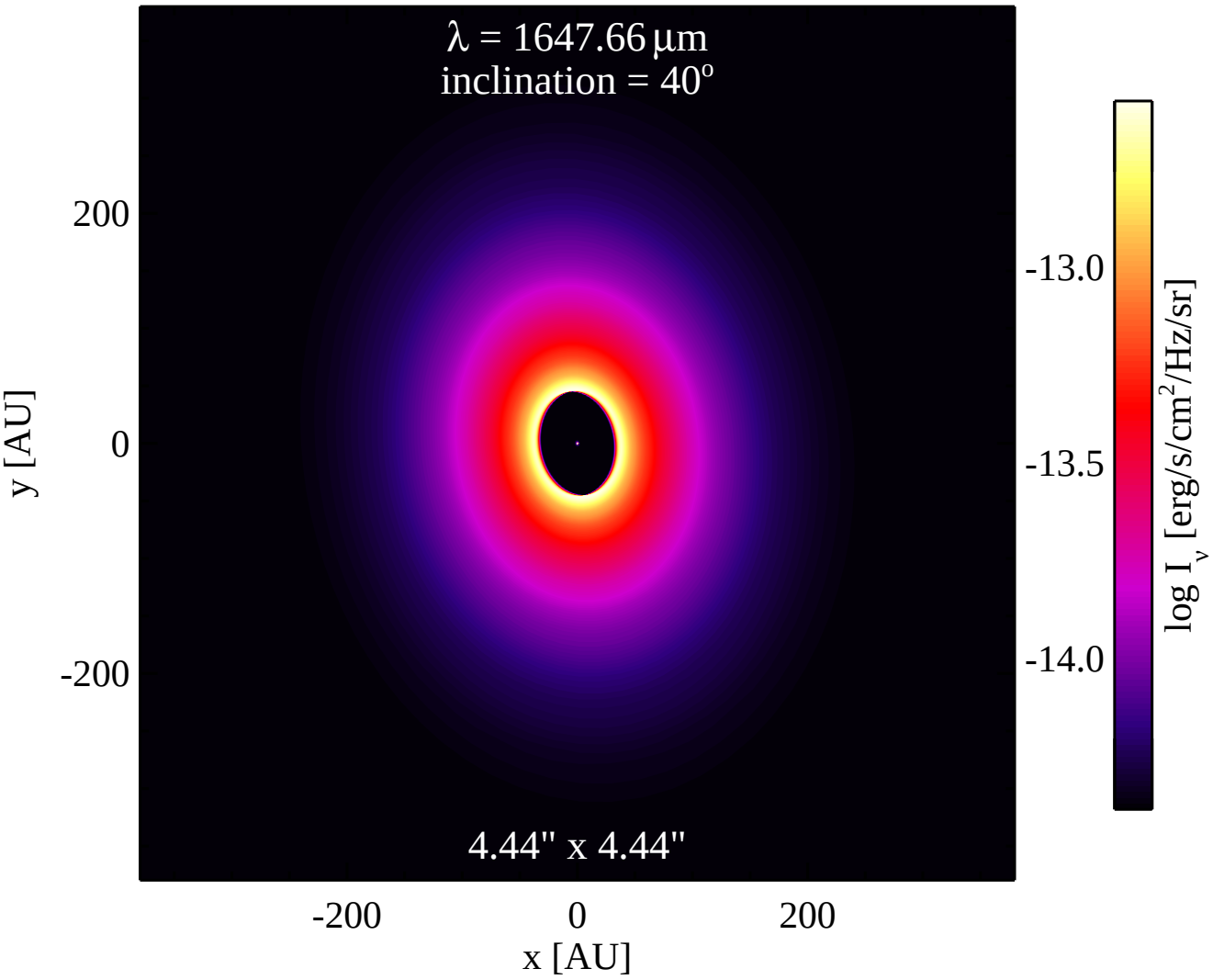

λ = 518.63 μm
inclination = 40°
4.76" x 4.76"
400
200
0
-200
-400
y [AU]
-400
-200
0
200
400
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

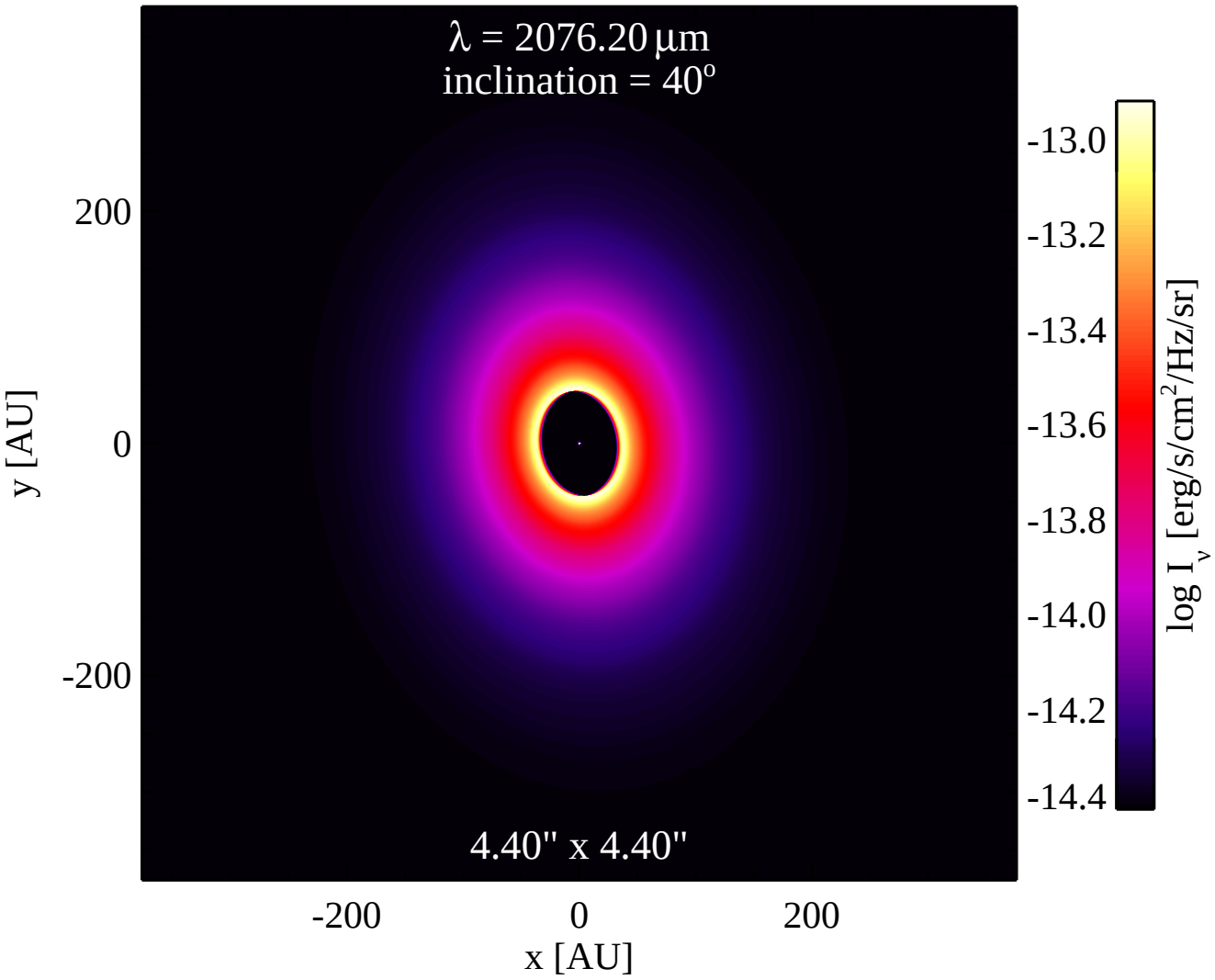

λ = 653.52 μm
inclination = 40°
4.54" x 4.54"
200
0
-200
y [AU]
-200
0
200
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

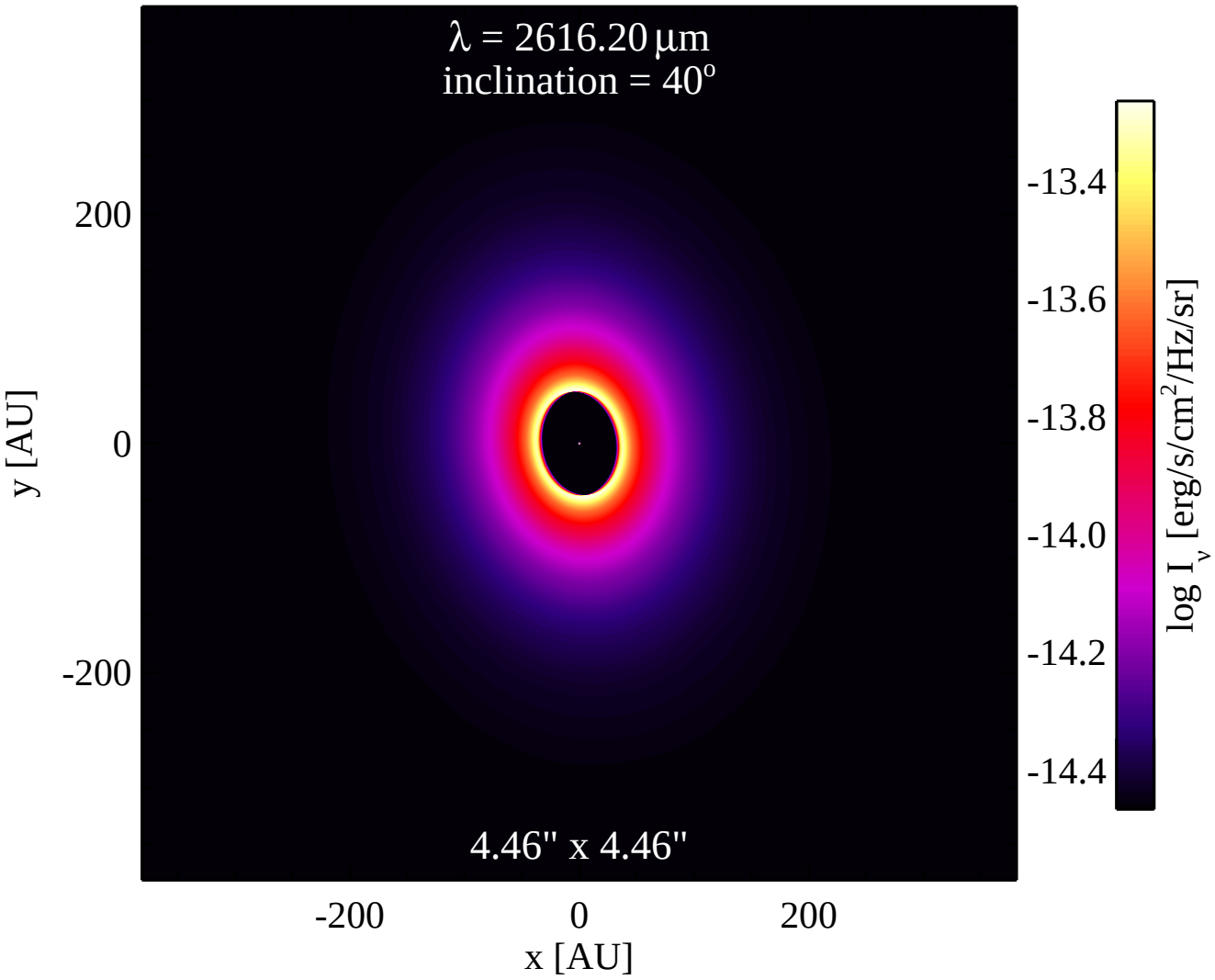

λ = 823.50 μm
inclination = 40°
4.44" x 4.44"
200
0
-200
y [AU]
-200
0
200
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

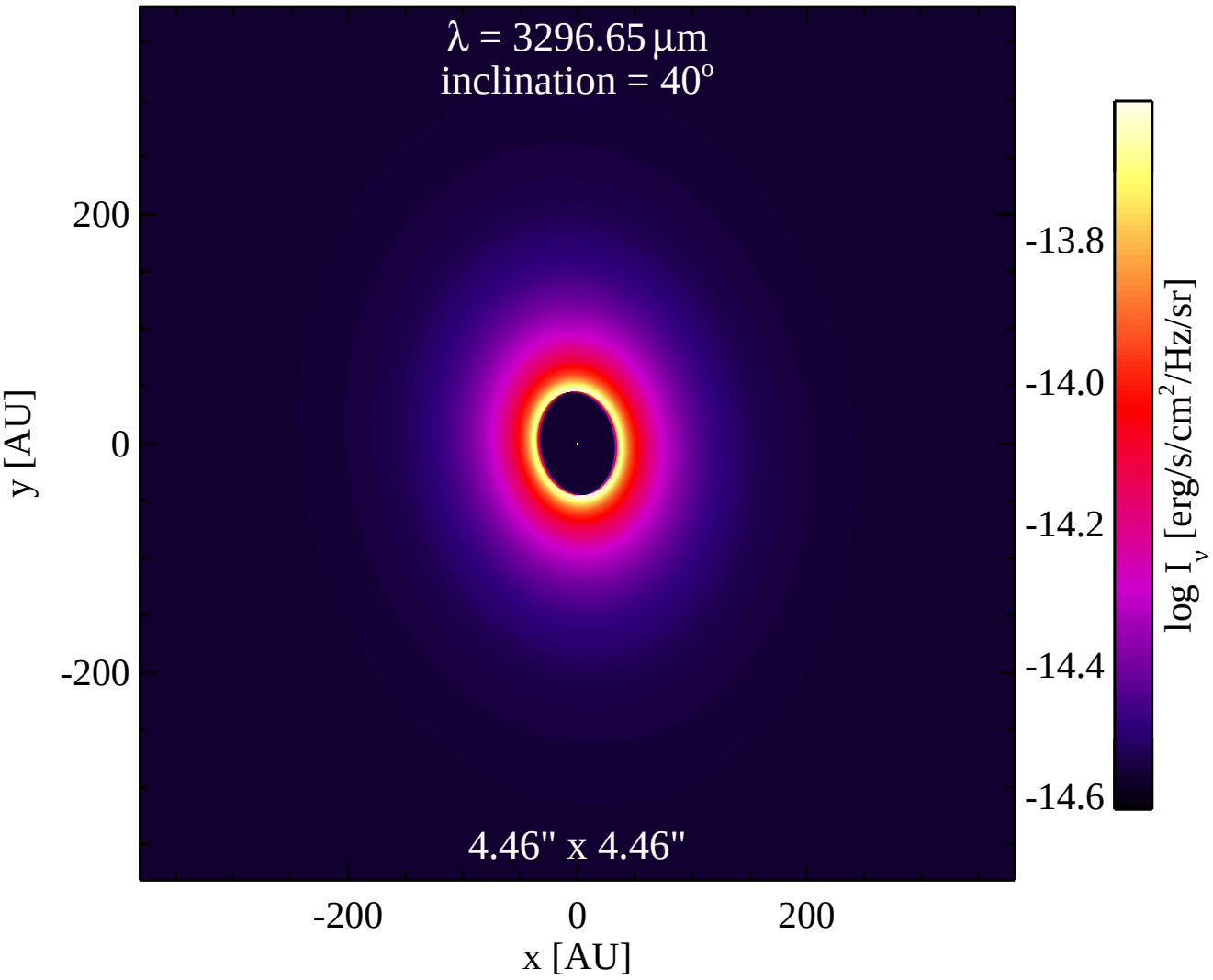

λ = 1037.68 μm
inclination = 40°
4.42" x 4.42"
200
0
-200
y [AU]
-200
0
200
x [AU]
-12.0
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]

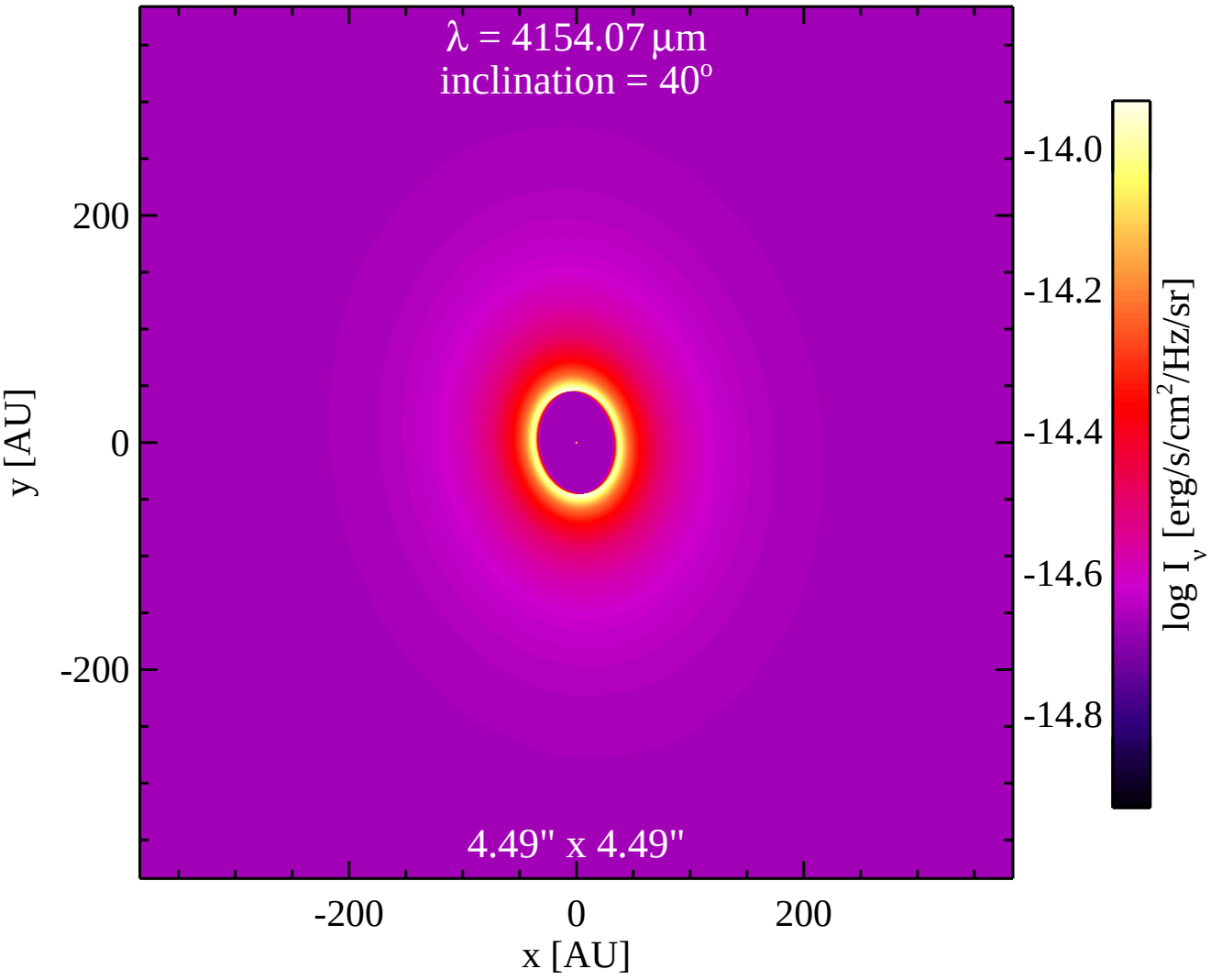

λ = 1307.57 μm
inclination = 40°
4.42" x 4.42"
200
0
-200
y [AU]
-200
0
200
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 1647.66 μm
inclination = 40°
4.44" x 4.44"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 2076.20 μm
inclination = 40°
4.40" x 4.40"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.0
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]


λ = 2616.20 μm
inclination = 40°
4.46" x 4.46"
200
0
-200
y [AU]
-200
0
200
x [AU]
-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 = 40°
4.46" x 4.46"
200
0
-200
y [AU]
-200
0
200
x [AU]
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 4154.07 μm
inclination = 40°
4.49" x 4.49"
200
0
-200
y [AU]
-200
0
200
x [AU]
-14.0
-14.2
-14.4
-14.6
-14.8
log I_ν [erg/s/cm²/Hz/sr]