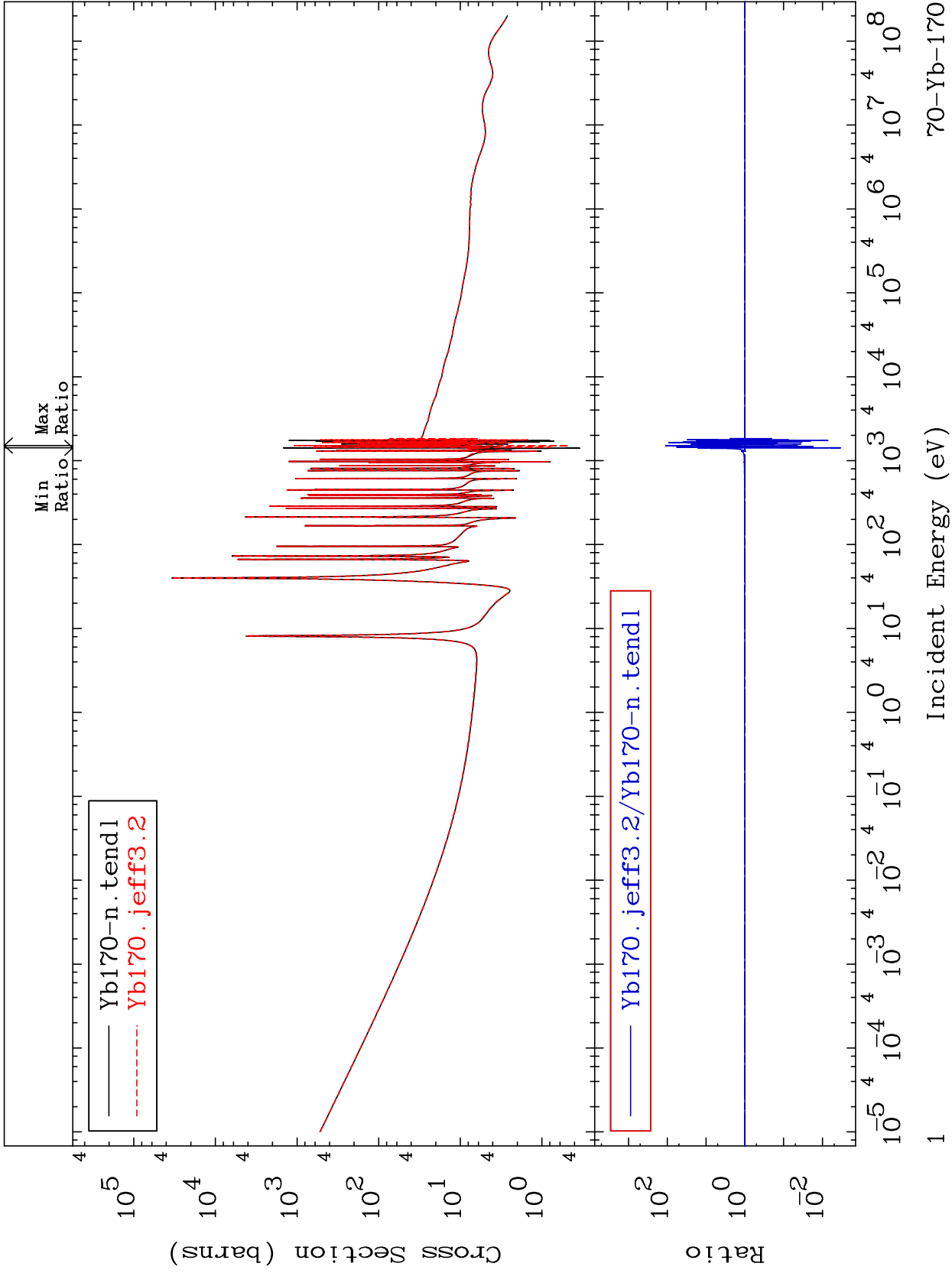


MAT 7031

Total Cross Section
70-Yb-170
-99.66 To 9999. %



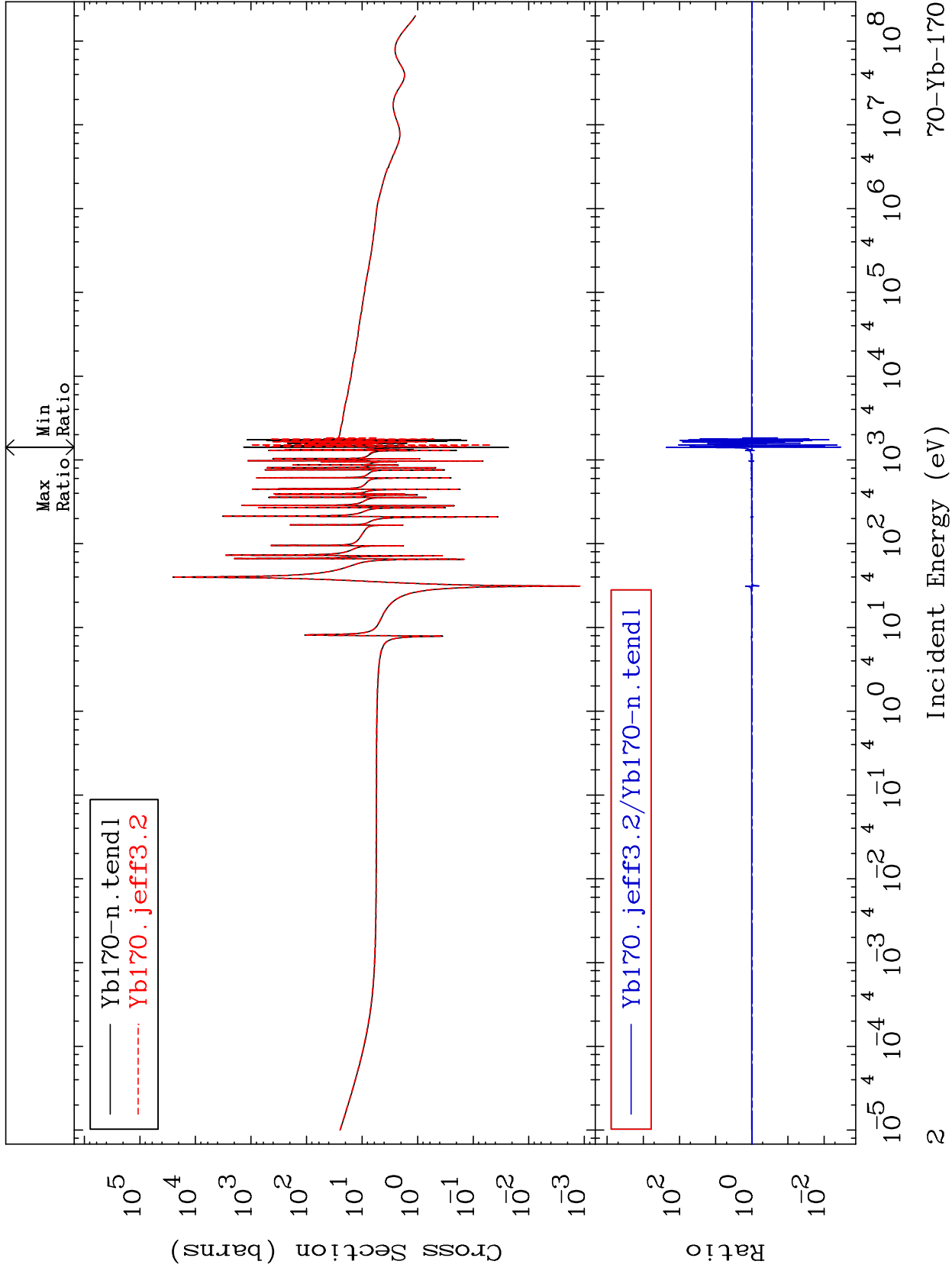
70-Yb-170

Incident Energy (eV)

MAT 7031

Elastic
Cross Section

70-Yb-170
-99.65 To 9999. %



2

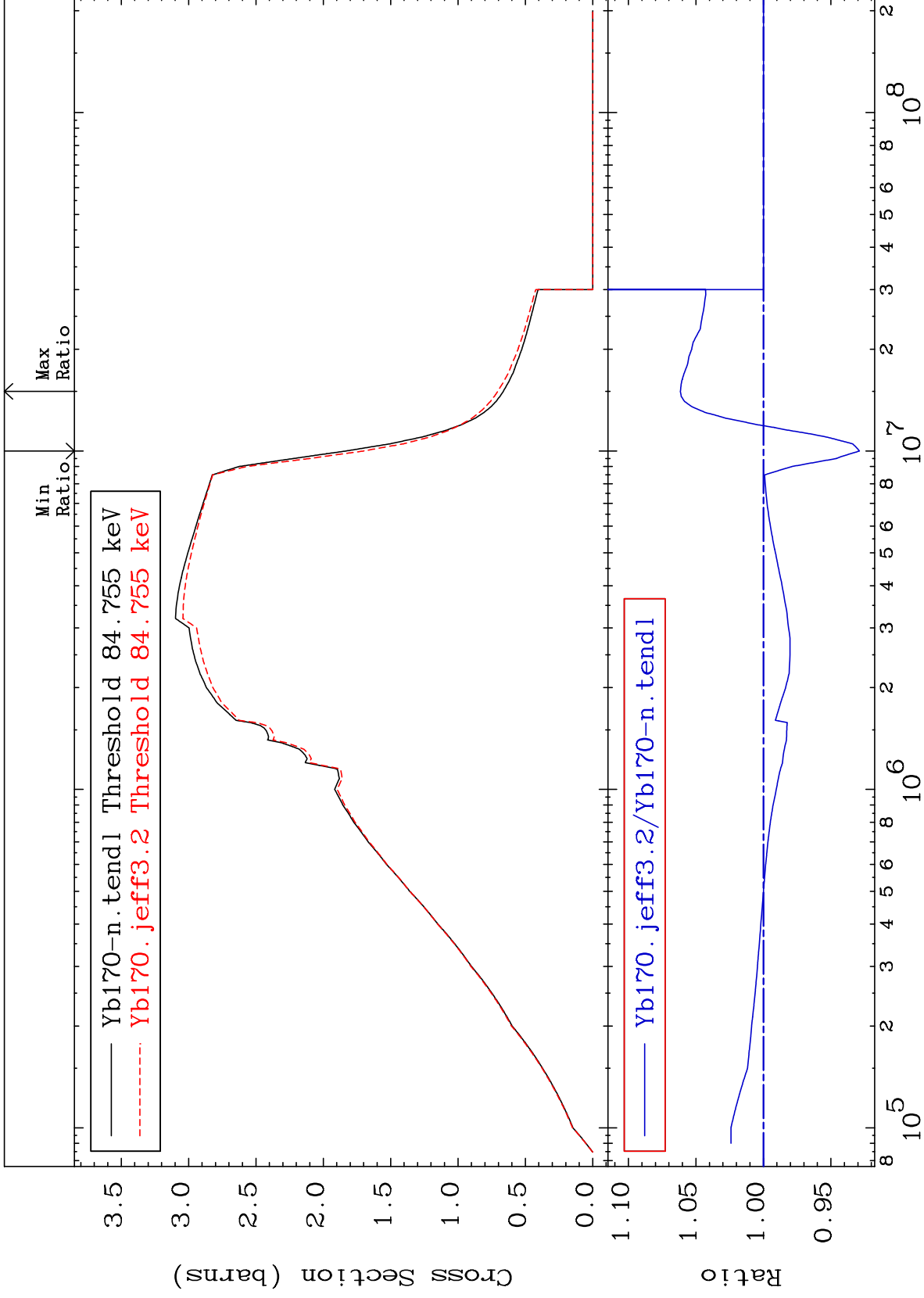
Incident Energy (eV)

70-Yb-170

MAT 7031

Inelastic
Cross Section

70-Yb-170
-7.113 To 6.153 %



Incident Energy (eV)

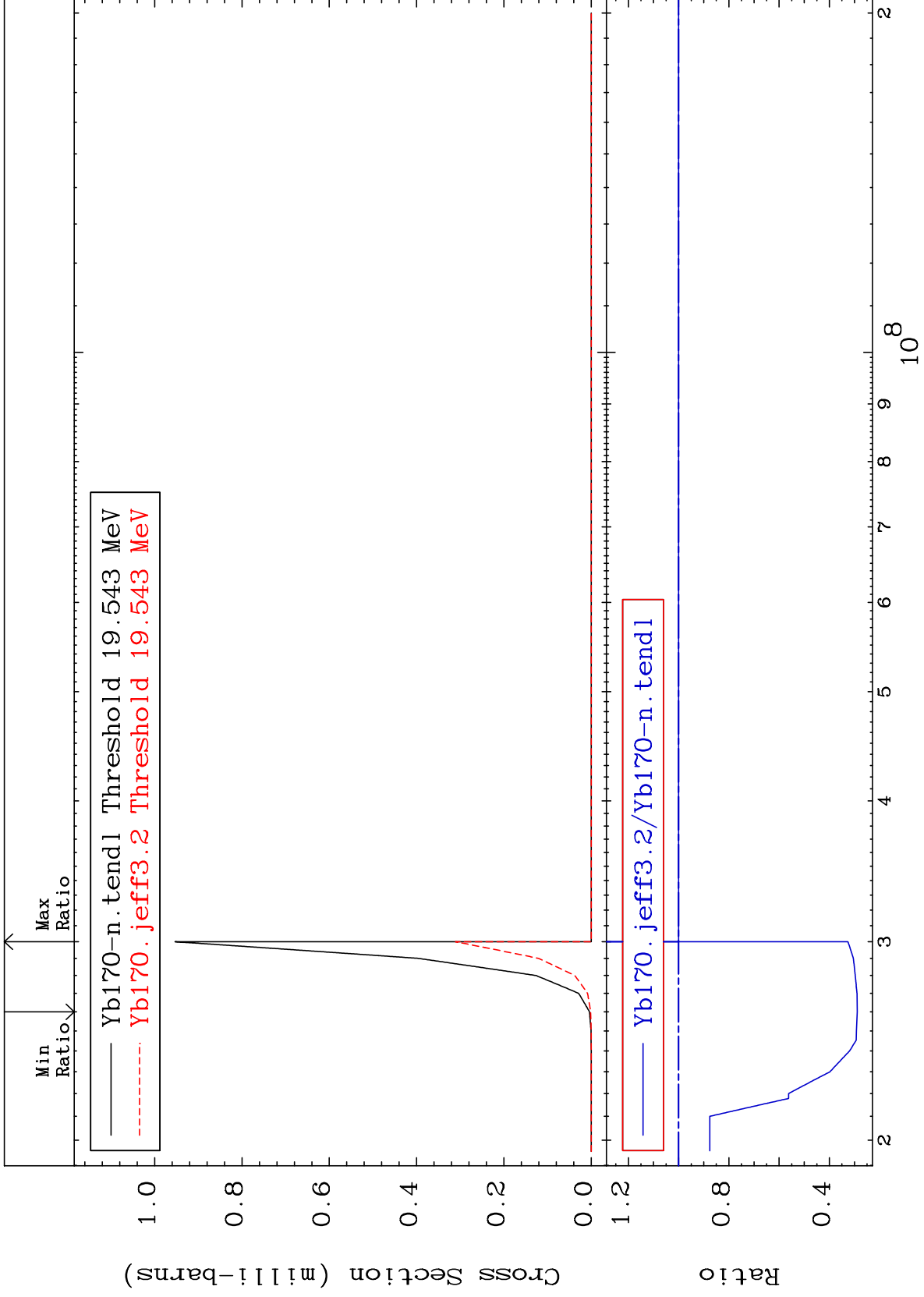
70-Yb-170

3

MAT 7031

(n,2n) d
Cross Section

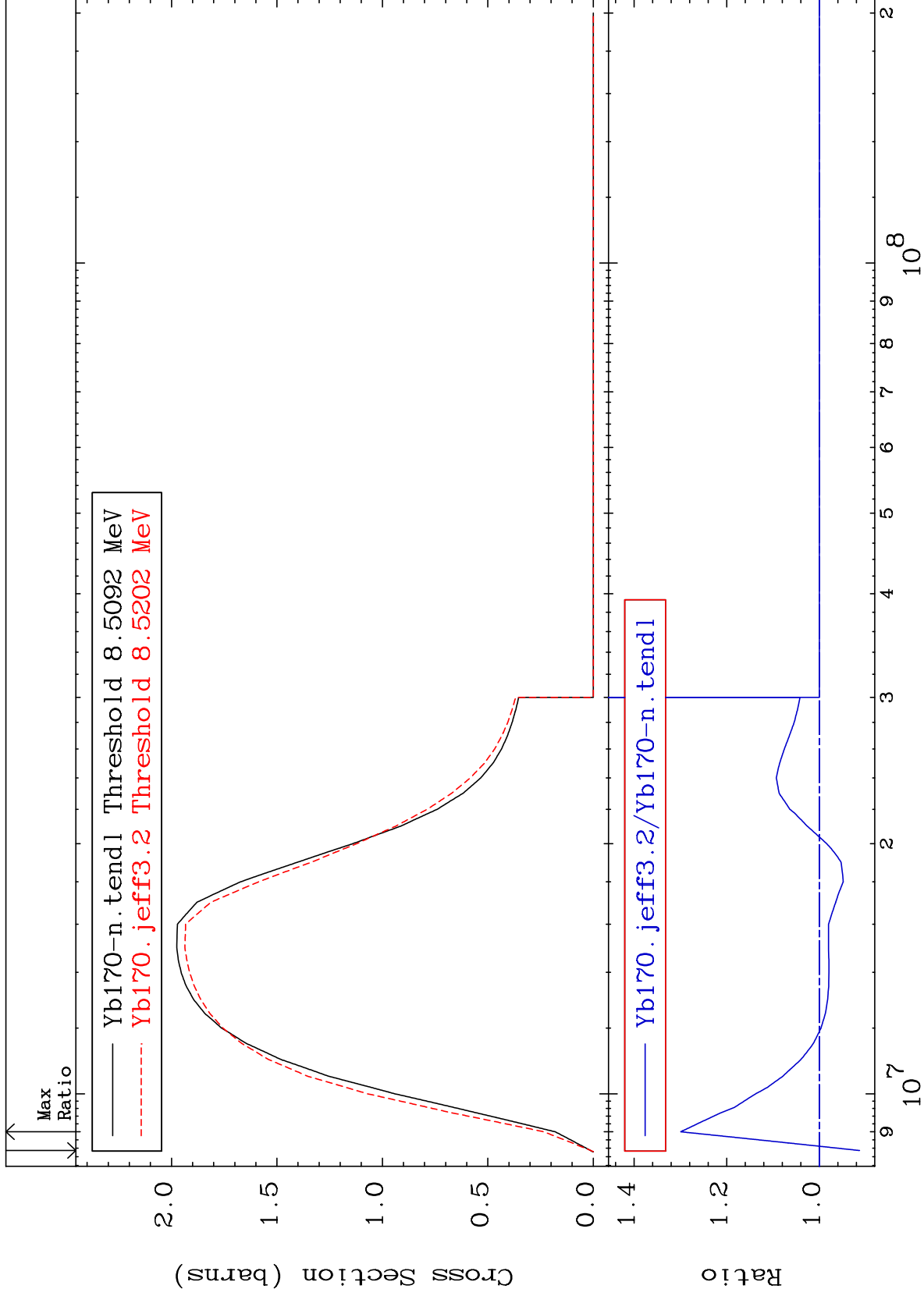
70-Yb-170
-71.10 To 0.000 %



MAT 7031

(n,2n)
Cross Section

70-Yb-170
-8.661 To 29.93 %



5

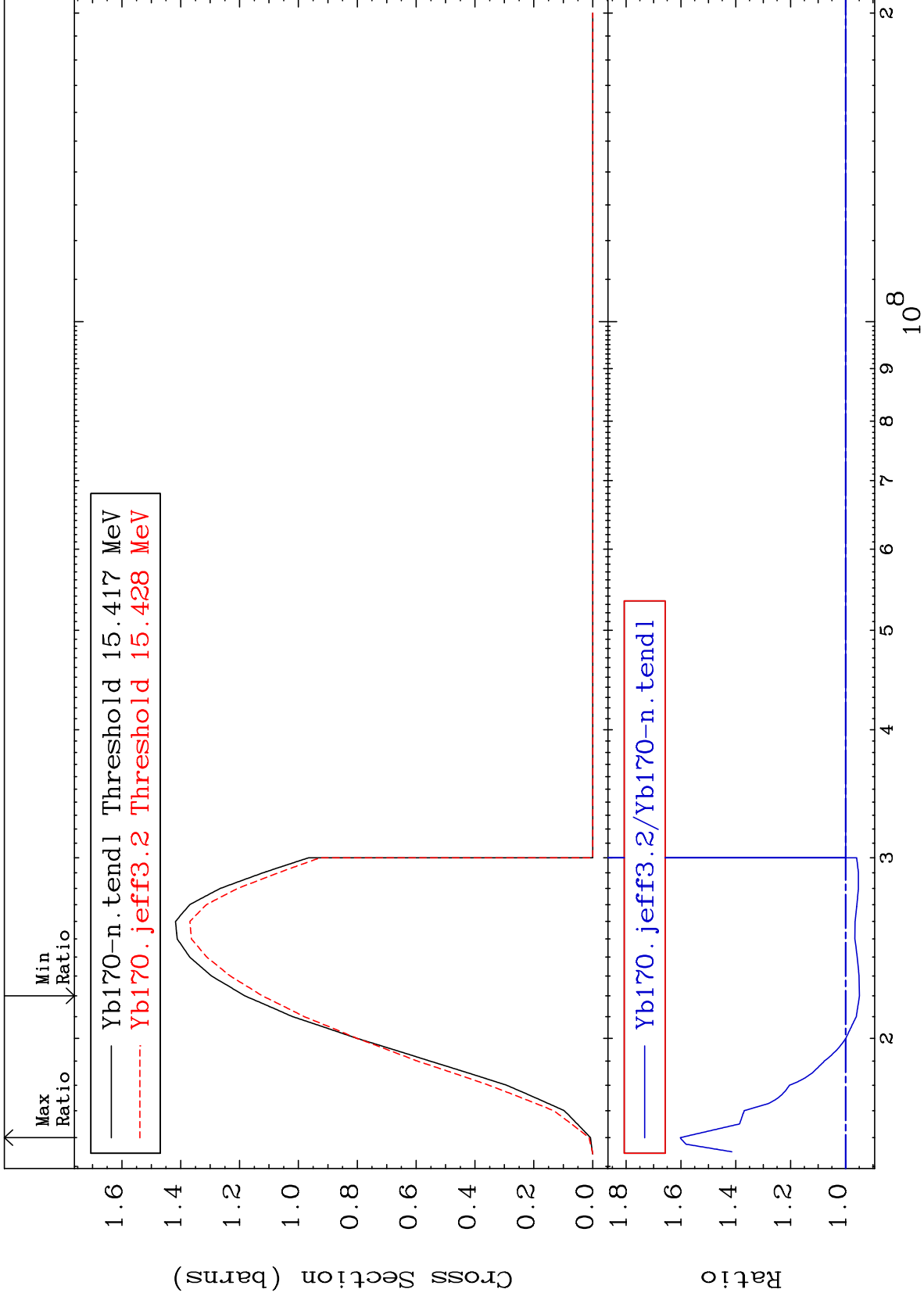
Incident Energy (eV)

70-Yb-170

MAT 7031

(n, 3n)
Cross Section

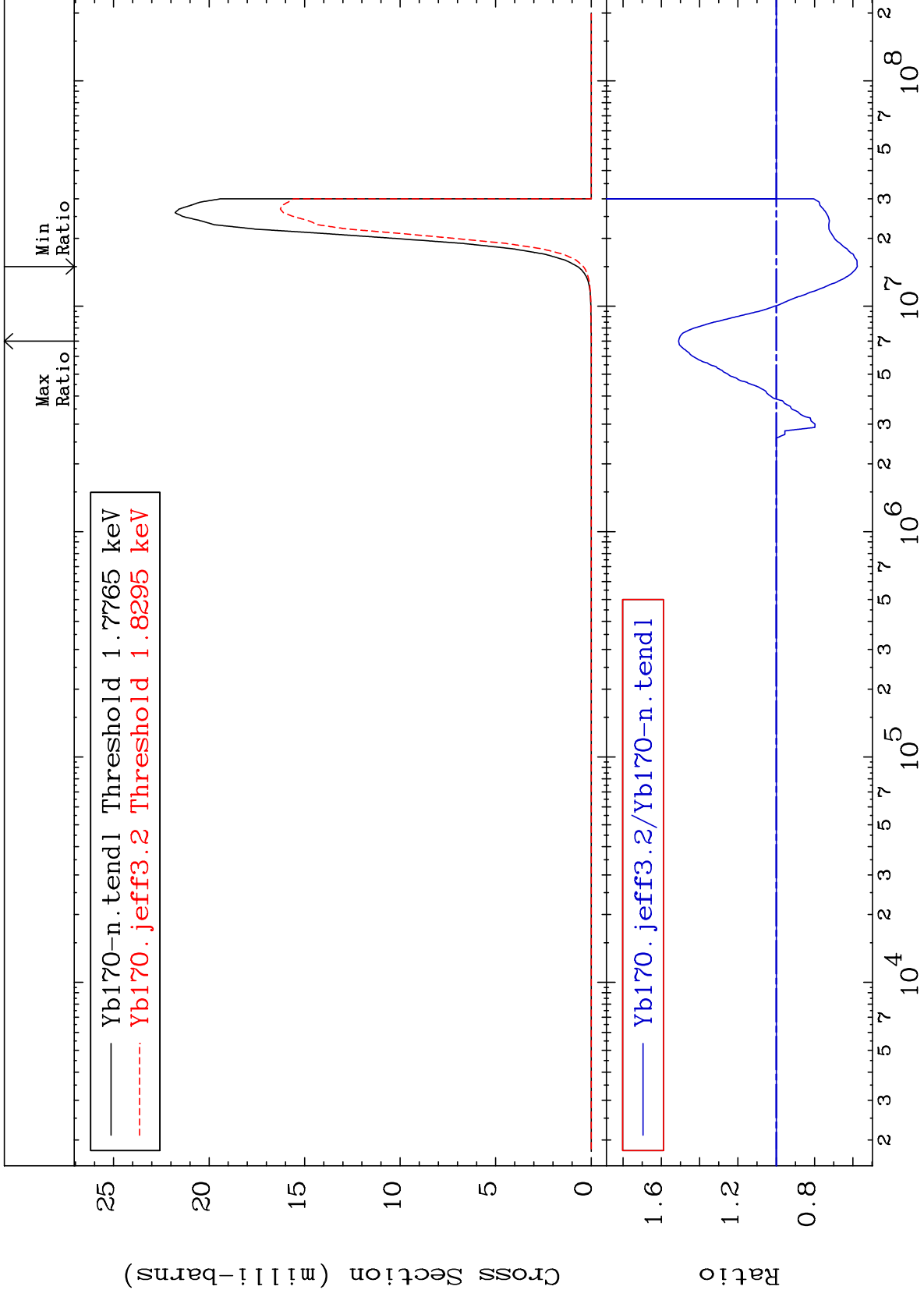
⁷⁰Yb-170
-5.048 To 60.22 %



MAT 7031

$(n, n') \alpha$
Cross Section

70-Yb-170
-42.27 To 50.95 %



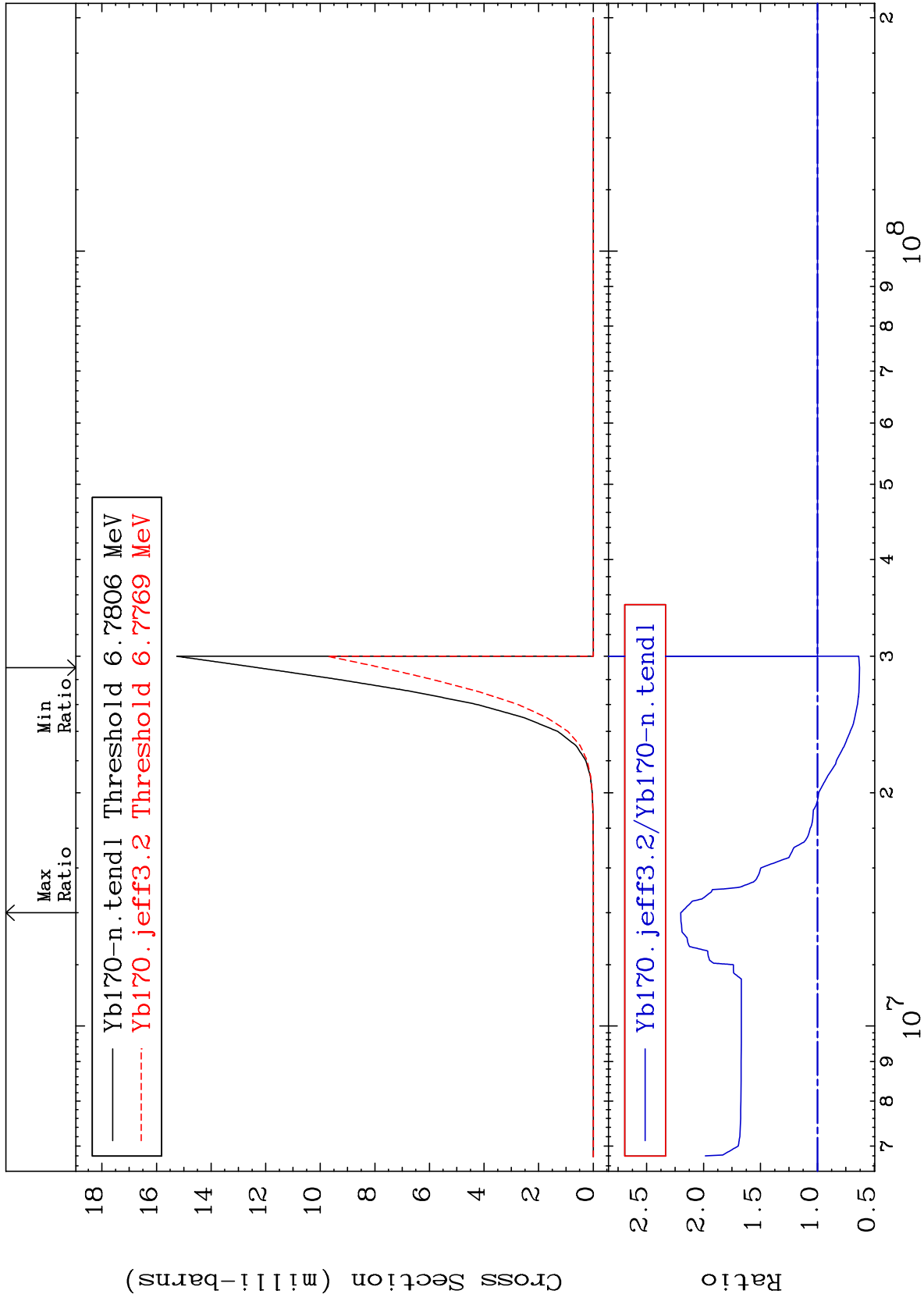
7

Incident Energy (eV)

70-Yb-170

MAT 7031

(n,2n) α Cross Section
70-Yb-170
-37.01 To 120.0 %



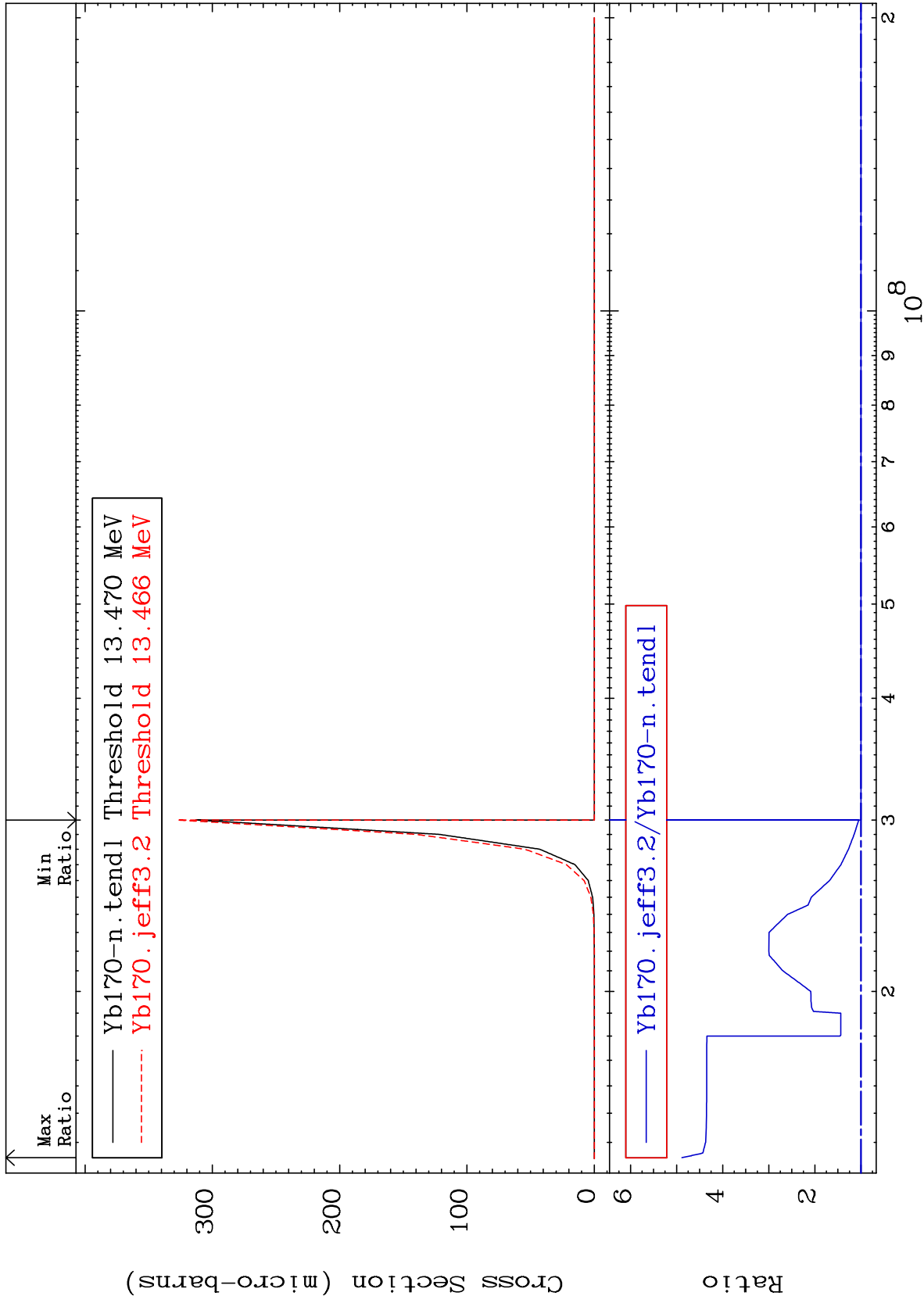
8

Incident Energy (eV)

70-Yb-170

MAT 7031

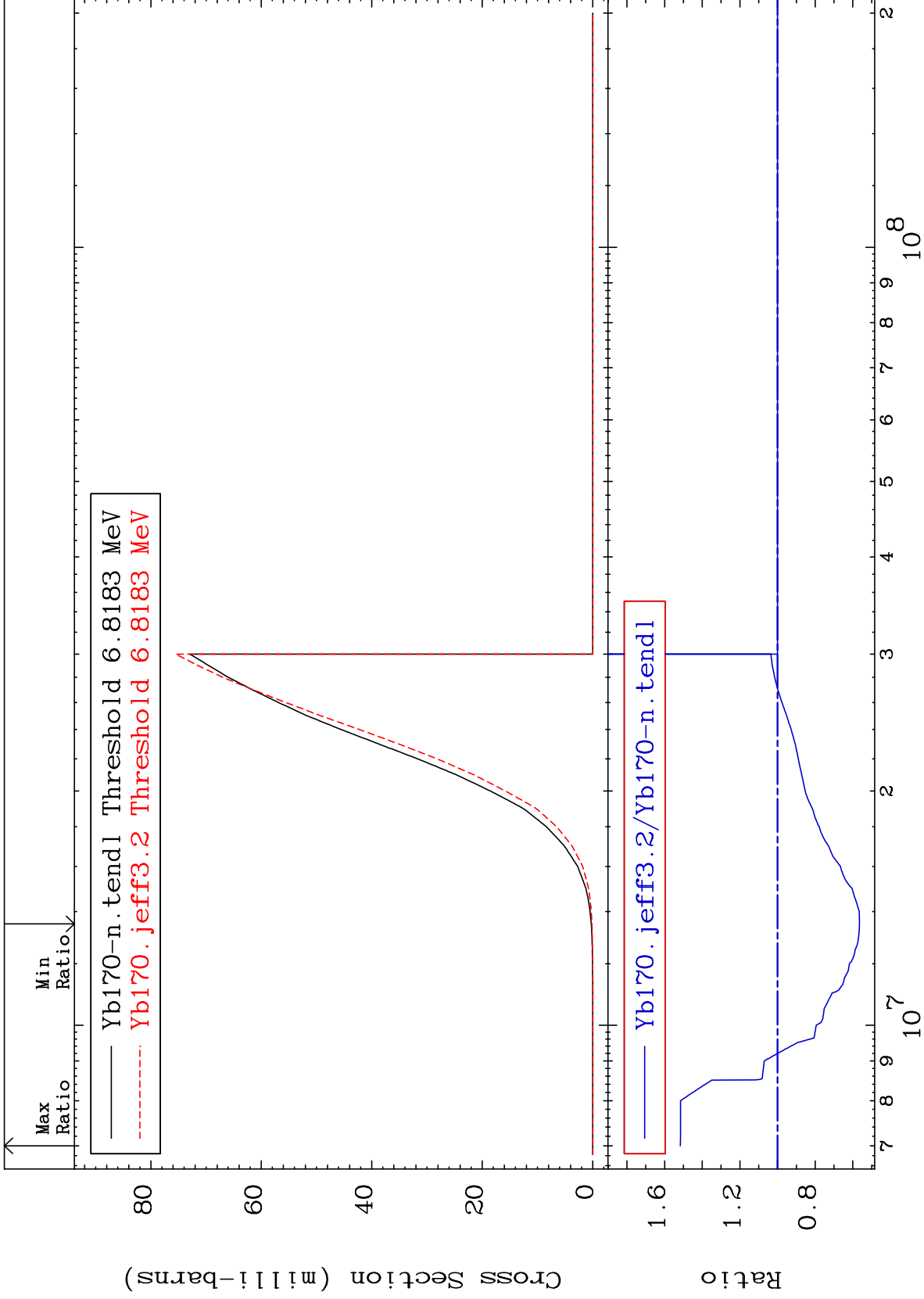
(n,3n) α
Cross Section
0.000 To 388.5 %
70-Yb-170



MAT 7031

(n, n') p
Cross Section

70-Yb-170
-43.52 To 51.63 %



10

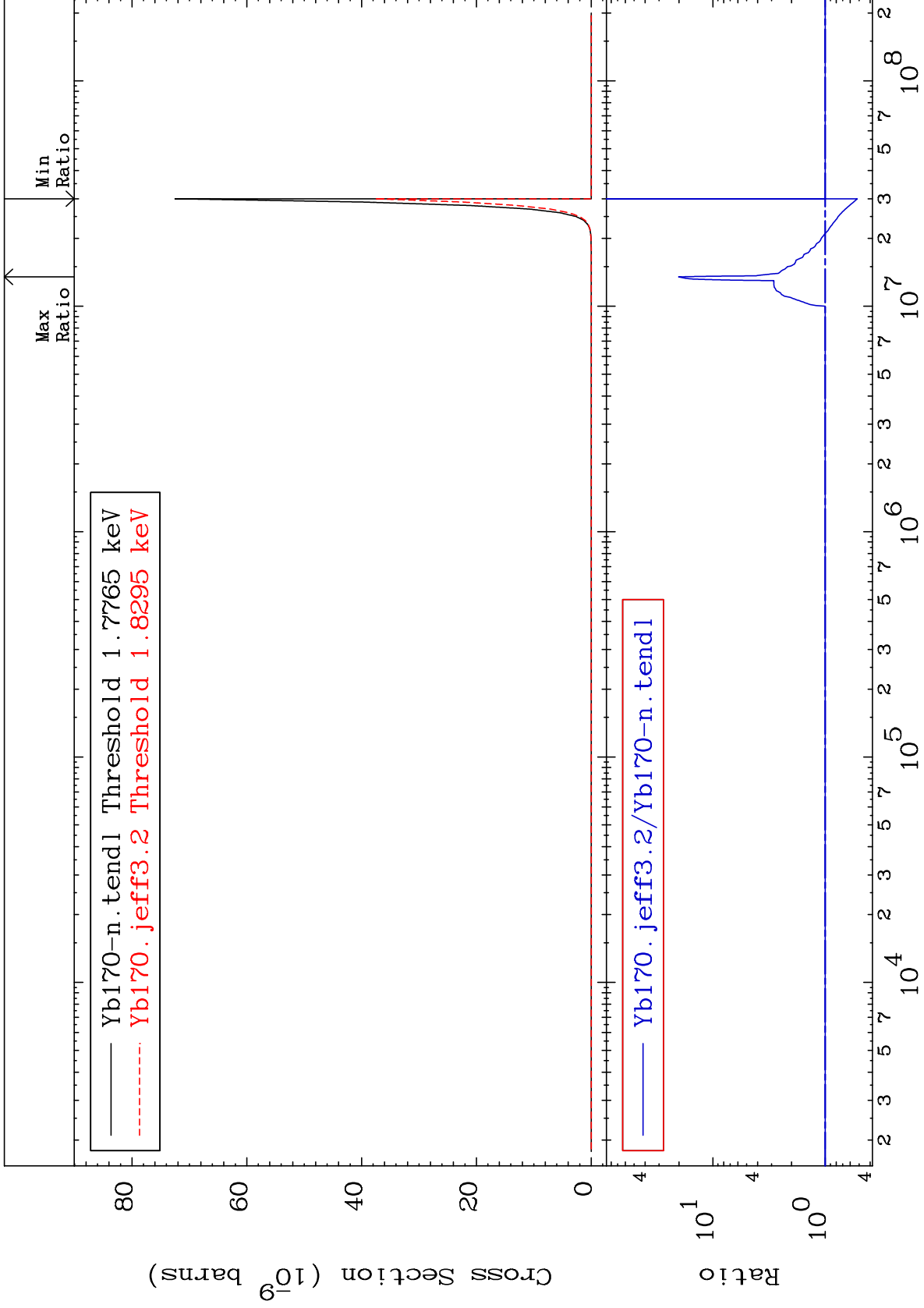
Incident Energy (eV)

70-Yb-170

MAT 7031

(n, n') 2α
Cross Section

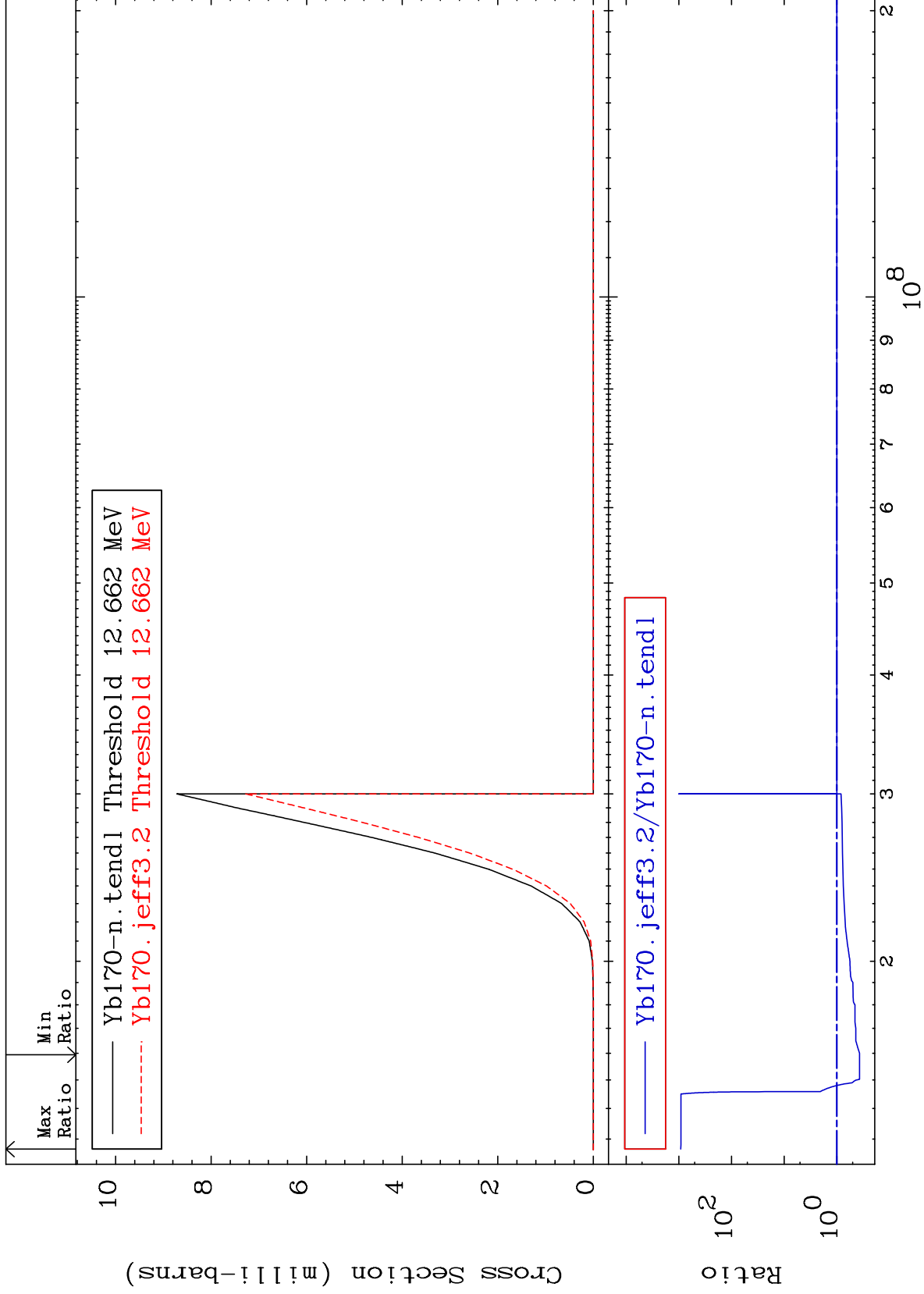
70-Yb-170
-47.98 To 1913. %



MAT 7031

(n,n') d
Cross Section

⁷⁰Yb-170
-62.95 To 9999. %

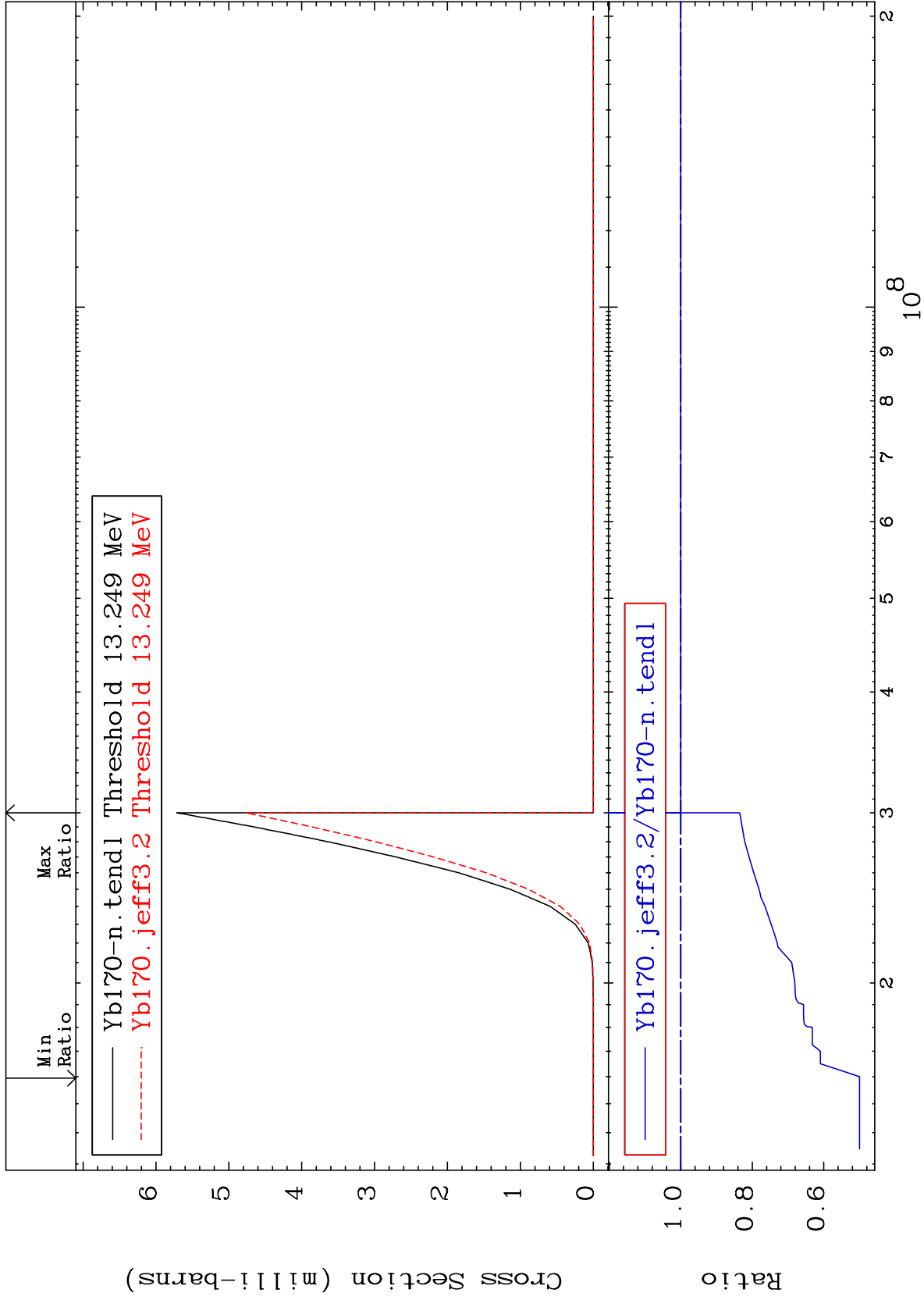


12

Incident Energy (eV)

⁷⁰Yb-170

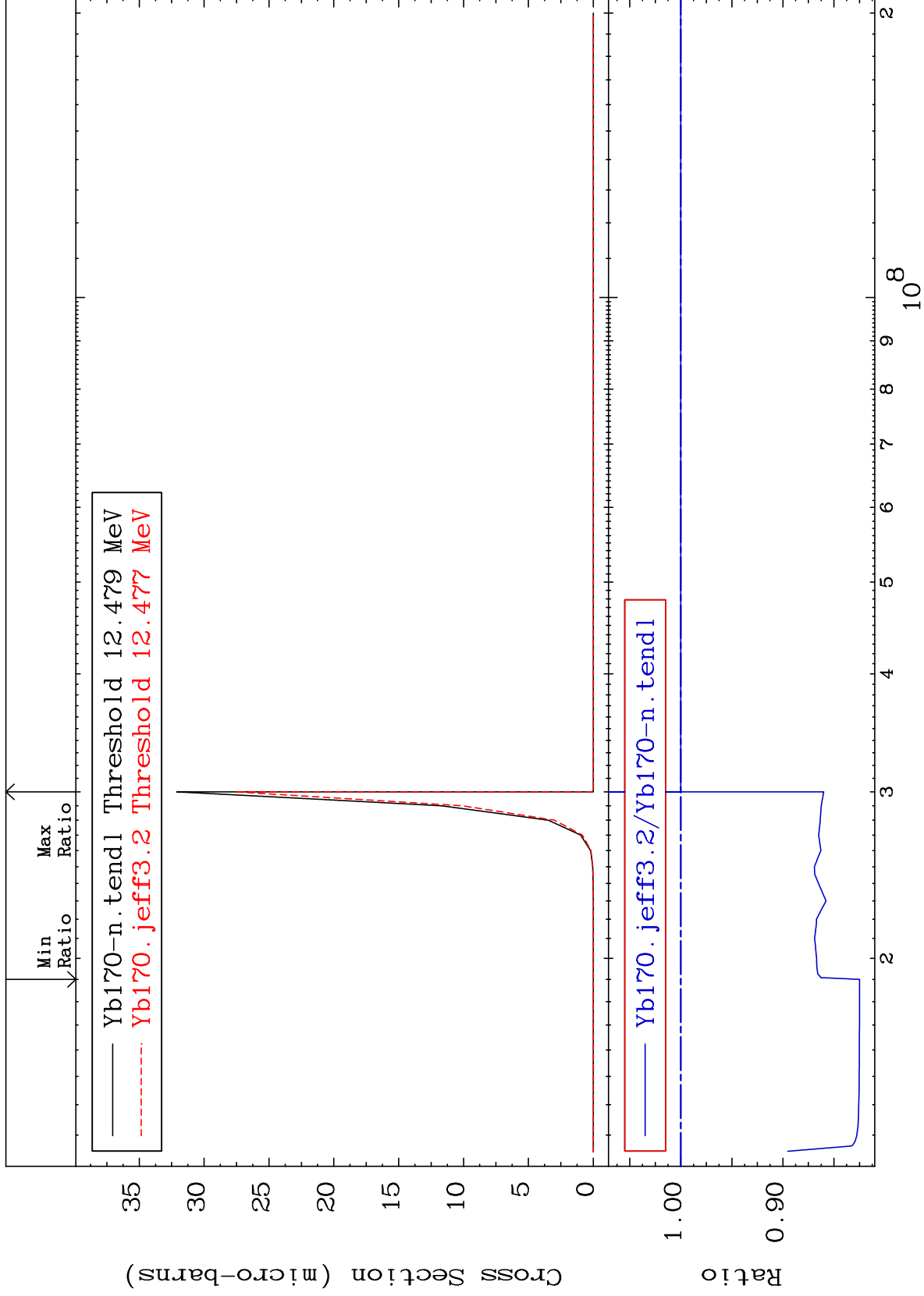
MAT 7031 $(n, n') t$ $^{70}\text{Yb}-^{170}$
 Cross Section -49.99 To 0.000 %



MAT 7031

(n, n') He-3
Cross Section

70-Yb-170
-17.51 To 0.000 %



MAT 7031

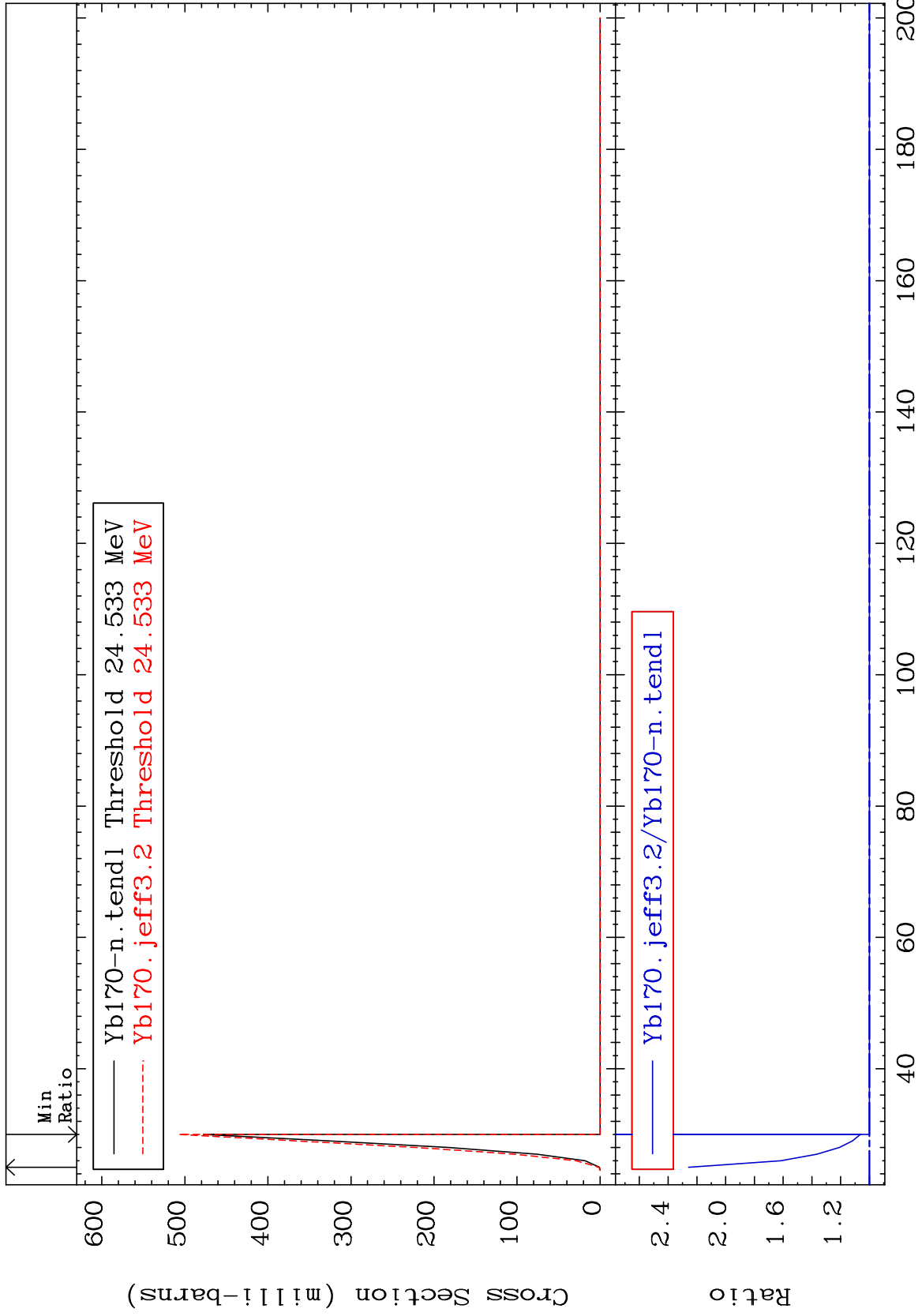
(n,4n)

70-Yb-170

Cross Section

0.000

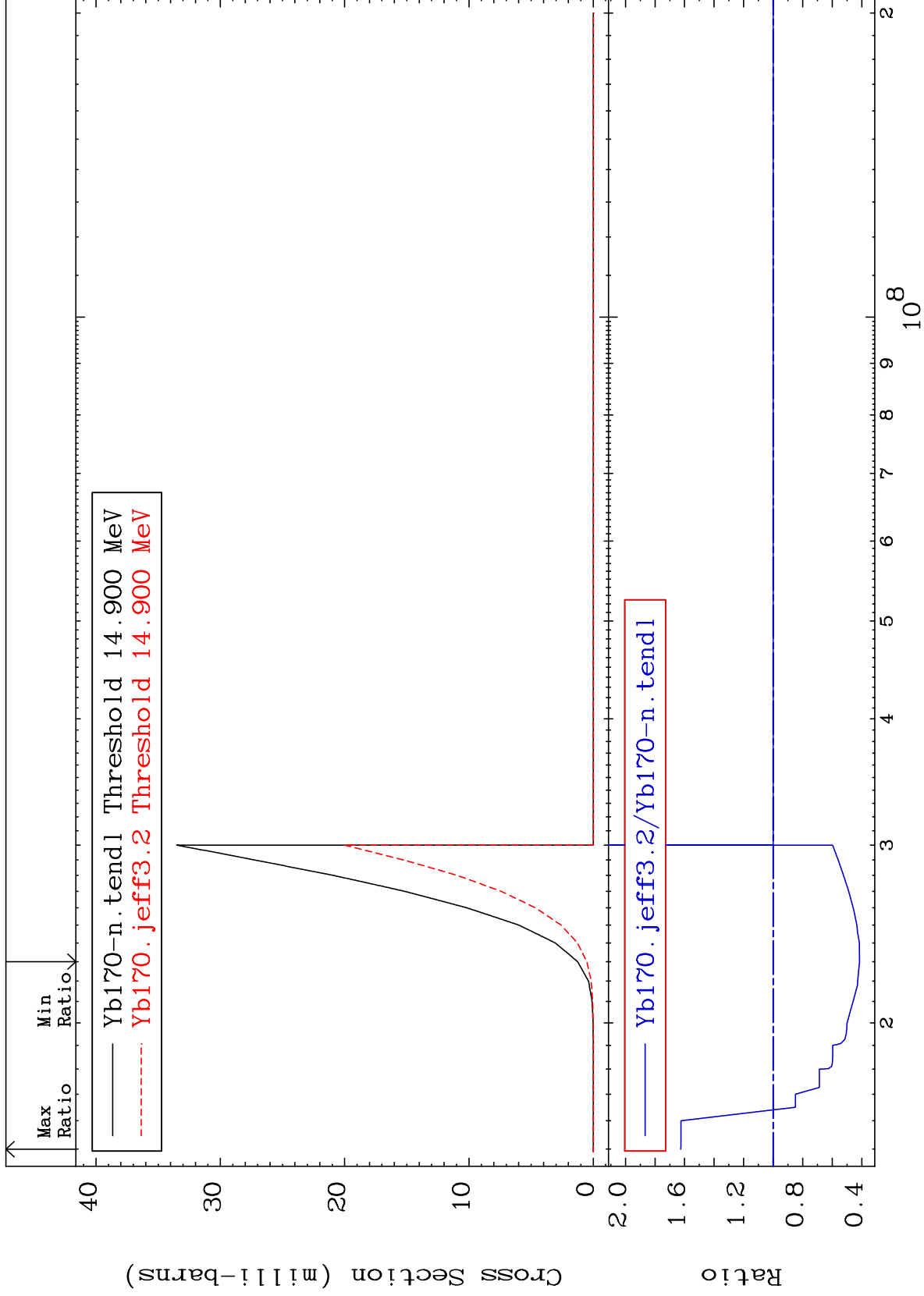
To 125.8 %



MAT 7031

(n,2n) p
Cross Section

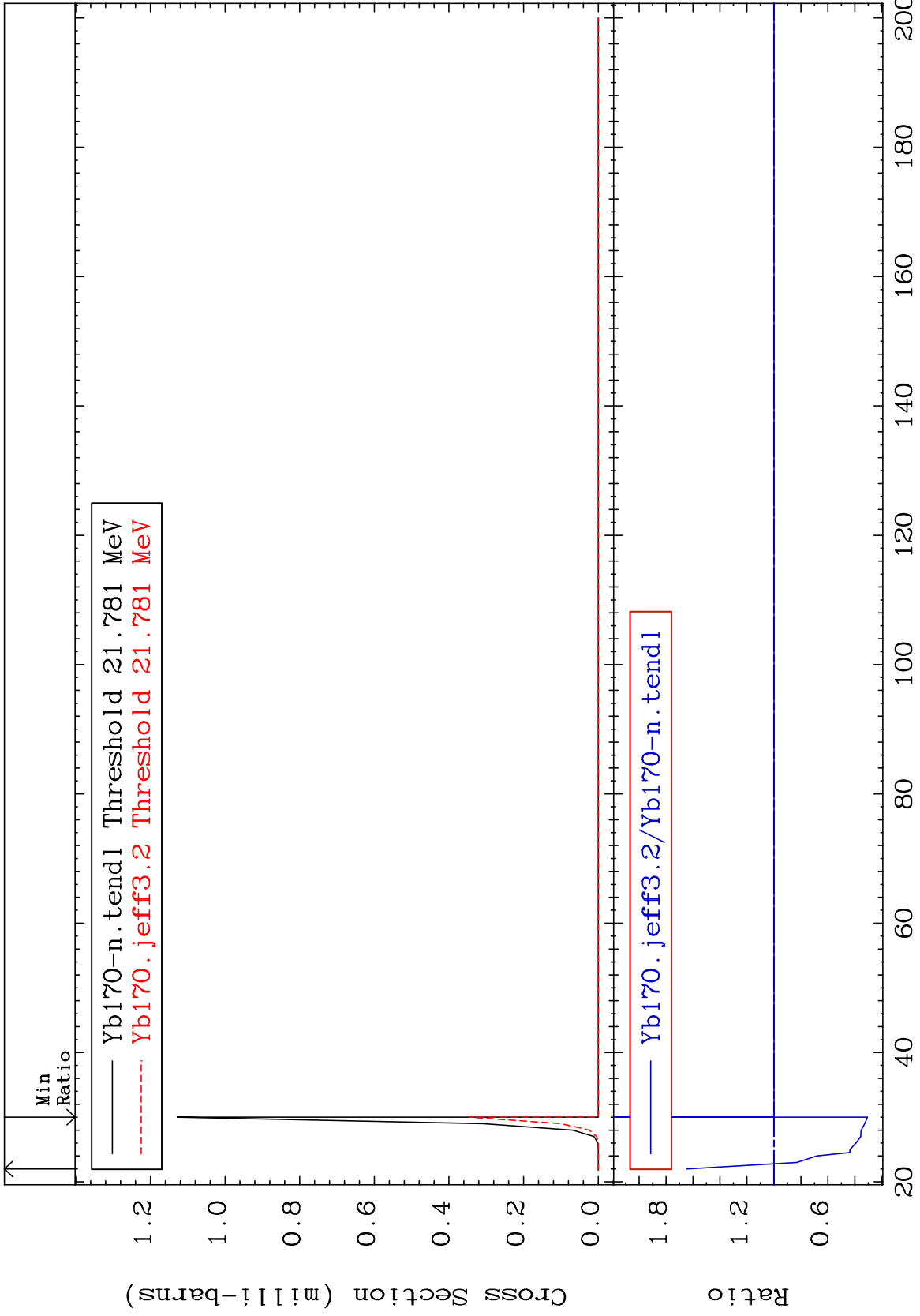
⁷⁰Yb-170
-58.52 To 62.57 %



MAT 7031

(n,3n) p
Cross Section

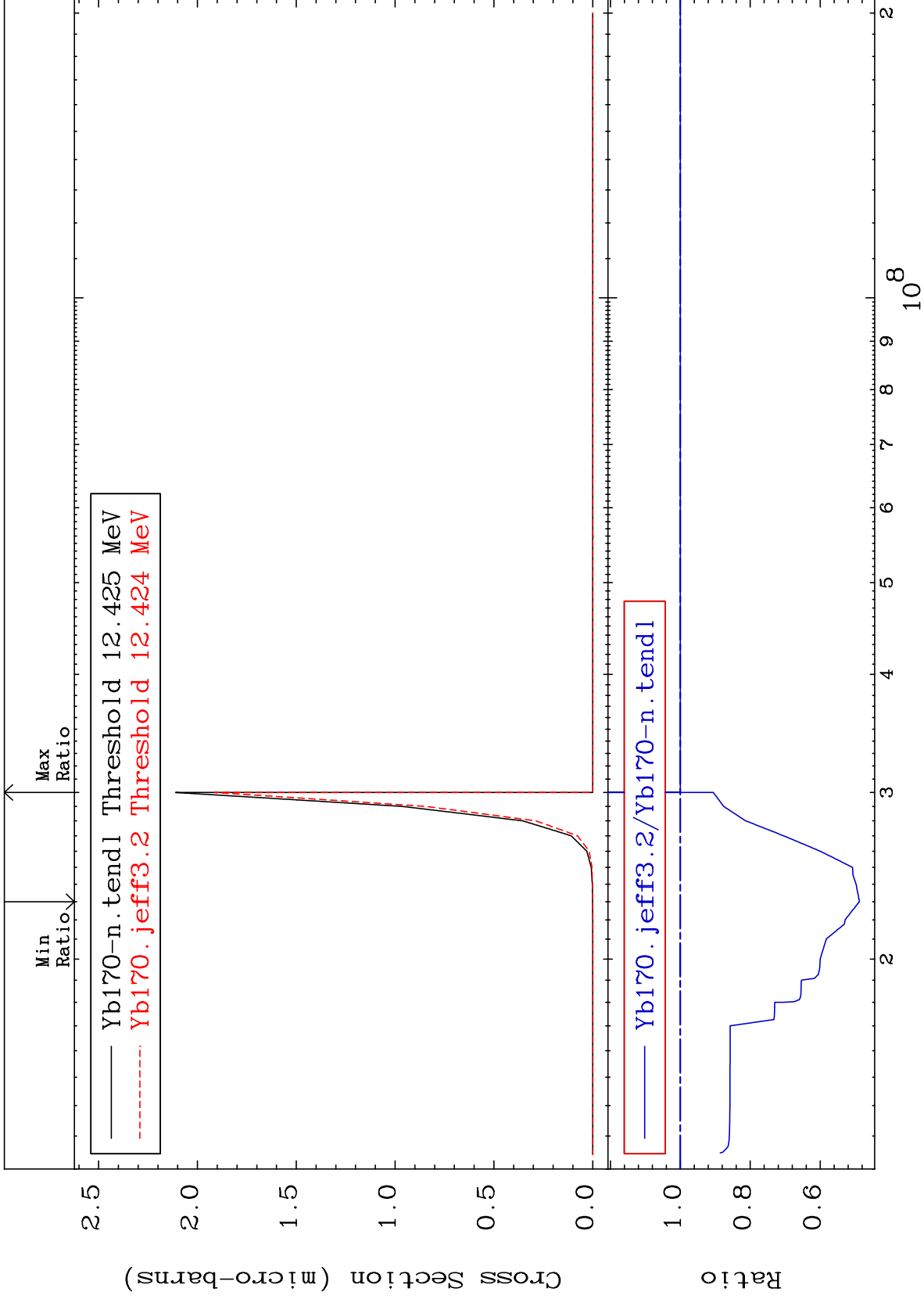
70-Yb-170
-69.38 To 64.67 %



MAT 7031

(n,2n) p
Cross Section

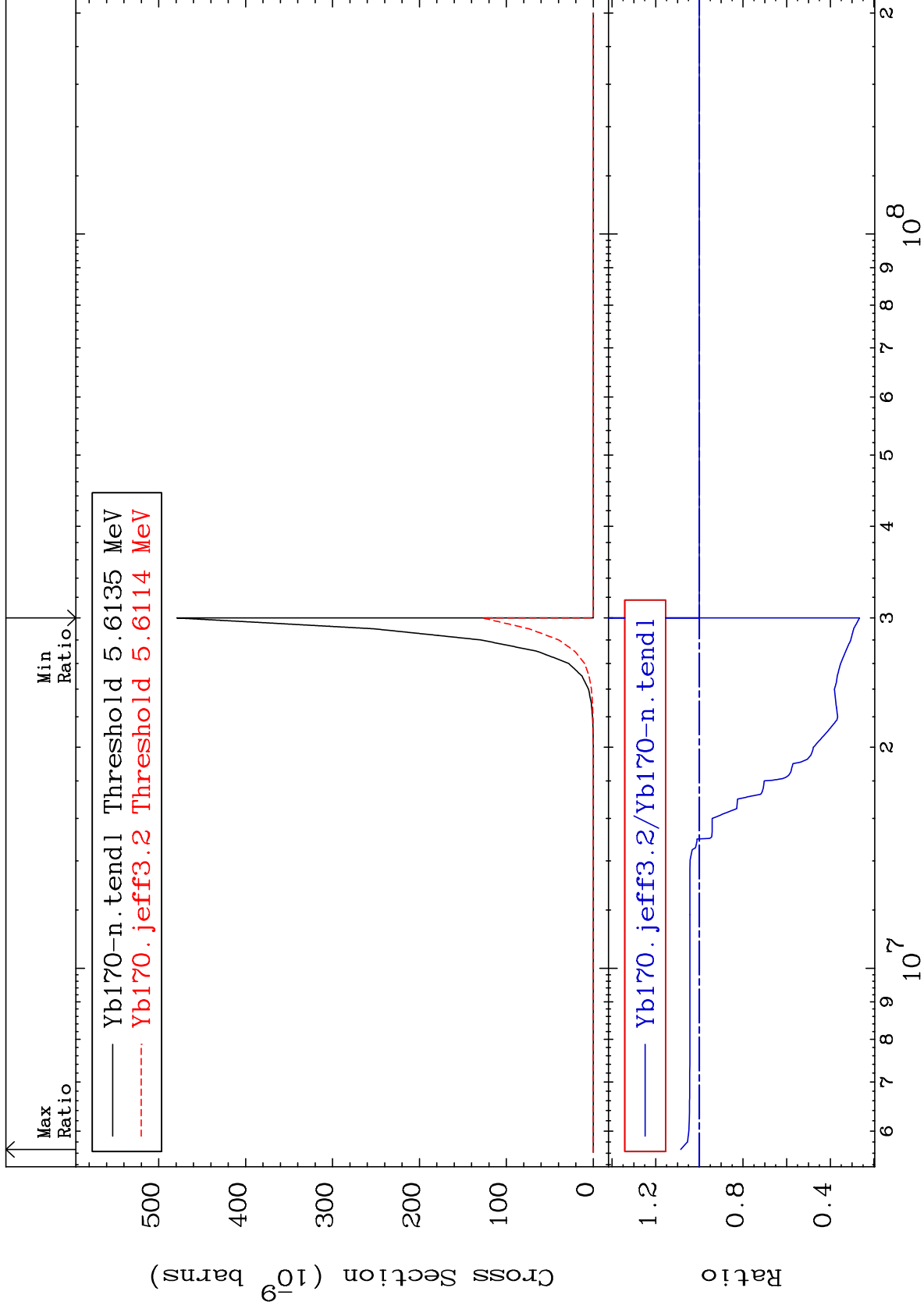
70-Yb-170
-51.24 To 0.000 %



MAT 7031

(n,n') p α
Cross Section

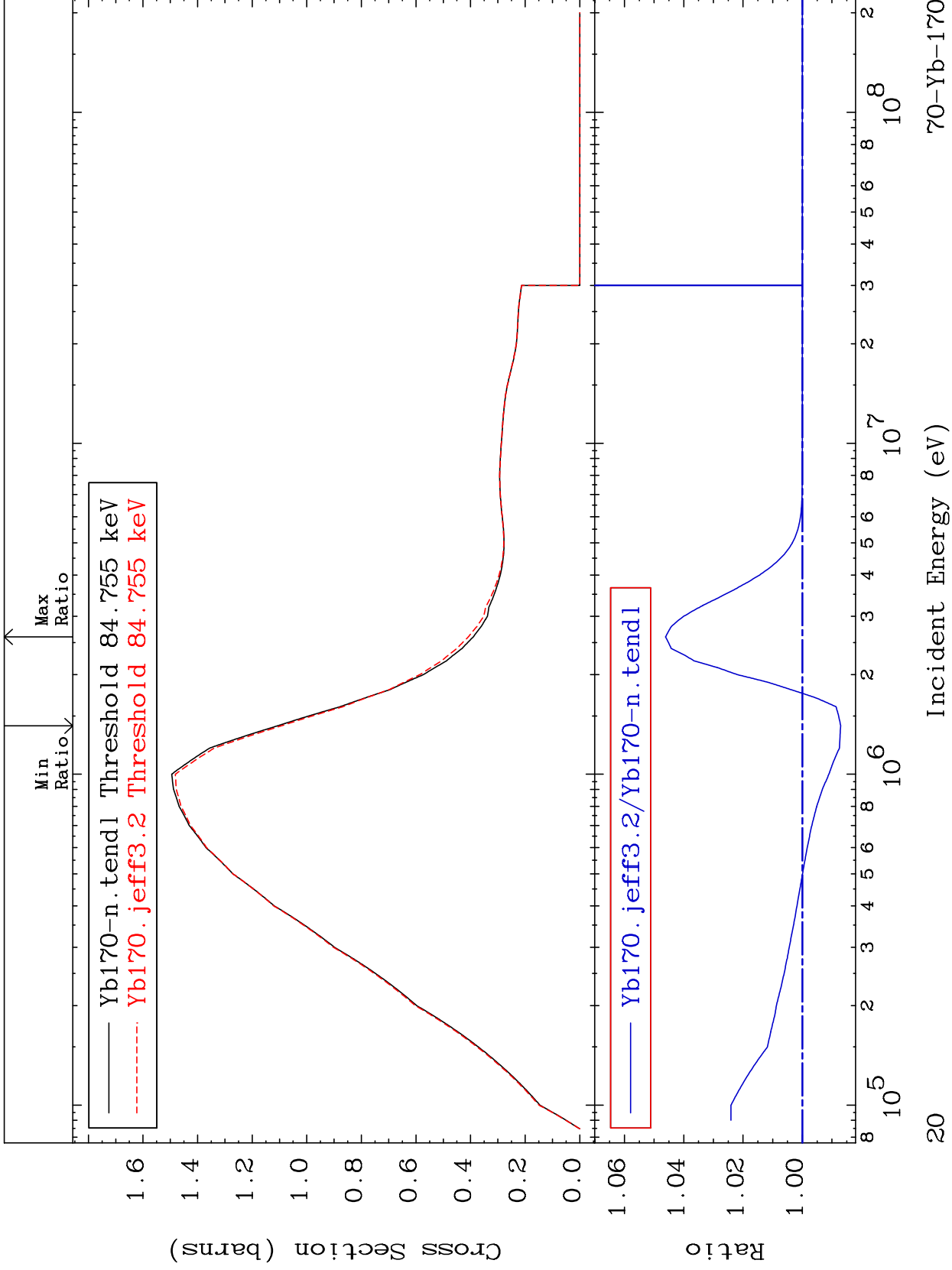
70-Yb-170
-73.39 To 8.515 %



MAT 7031

84.26 keV (n,n') Level
Cross Section

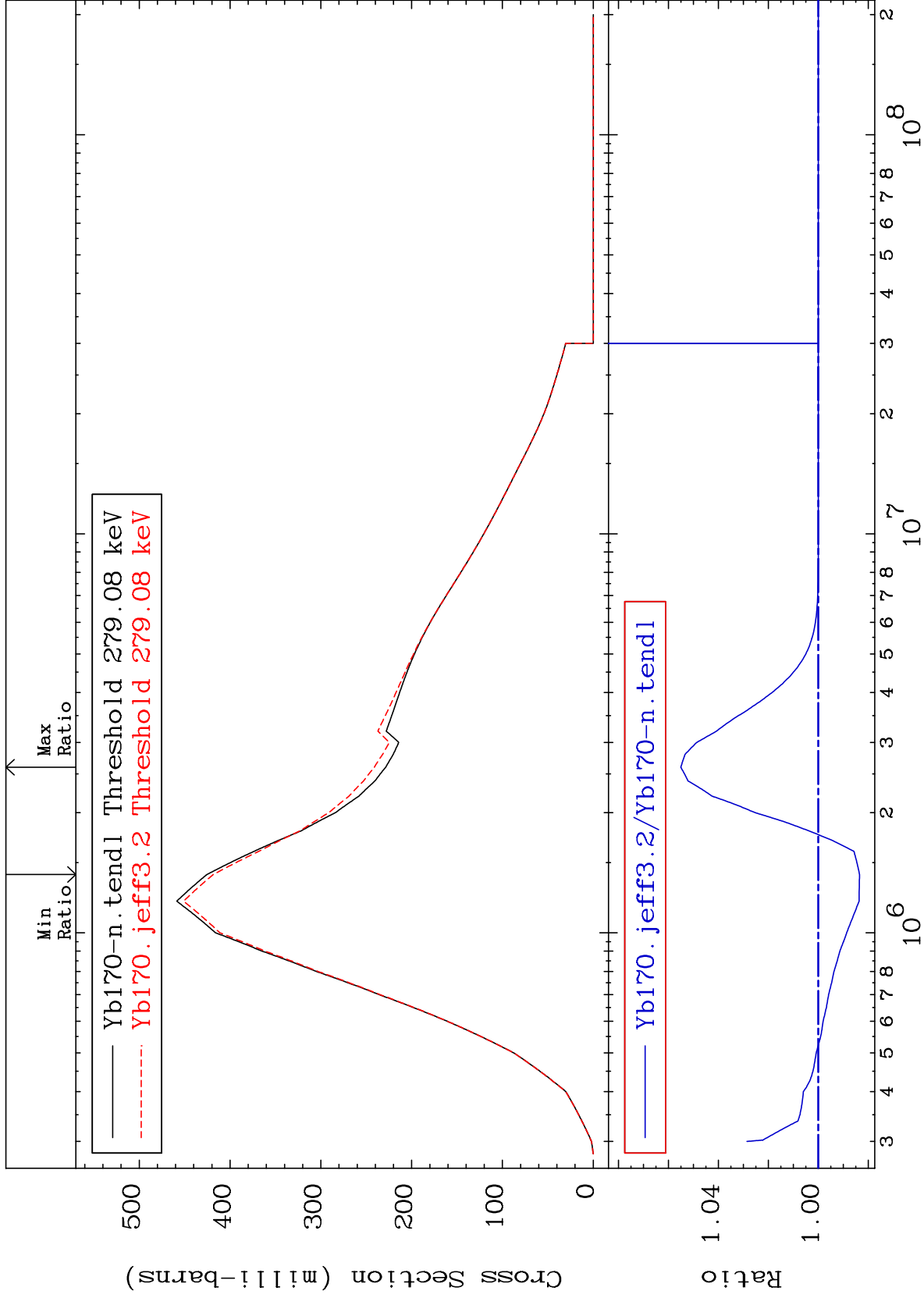
70-Yb-170
-1.293 To 4.615 %



MAT 7031

277.4 keV (n,n') Level
Cross Section

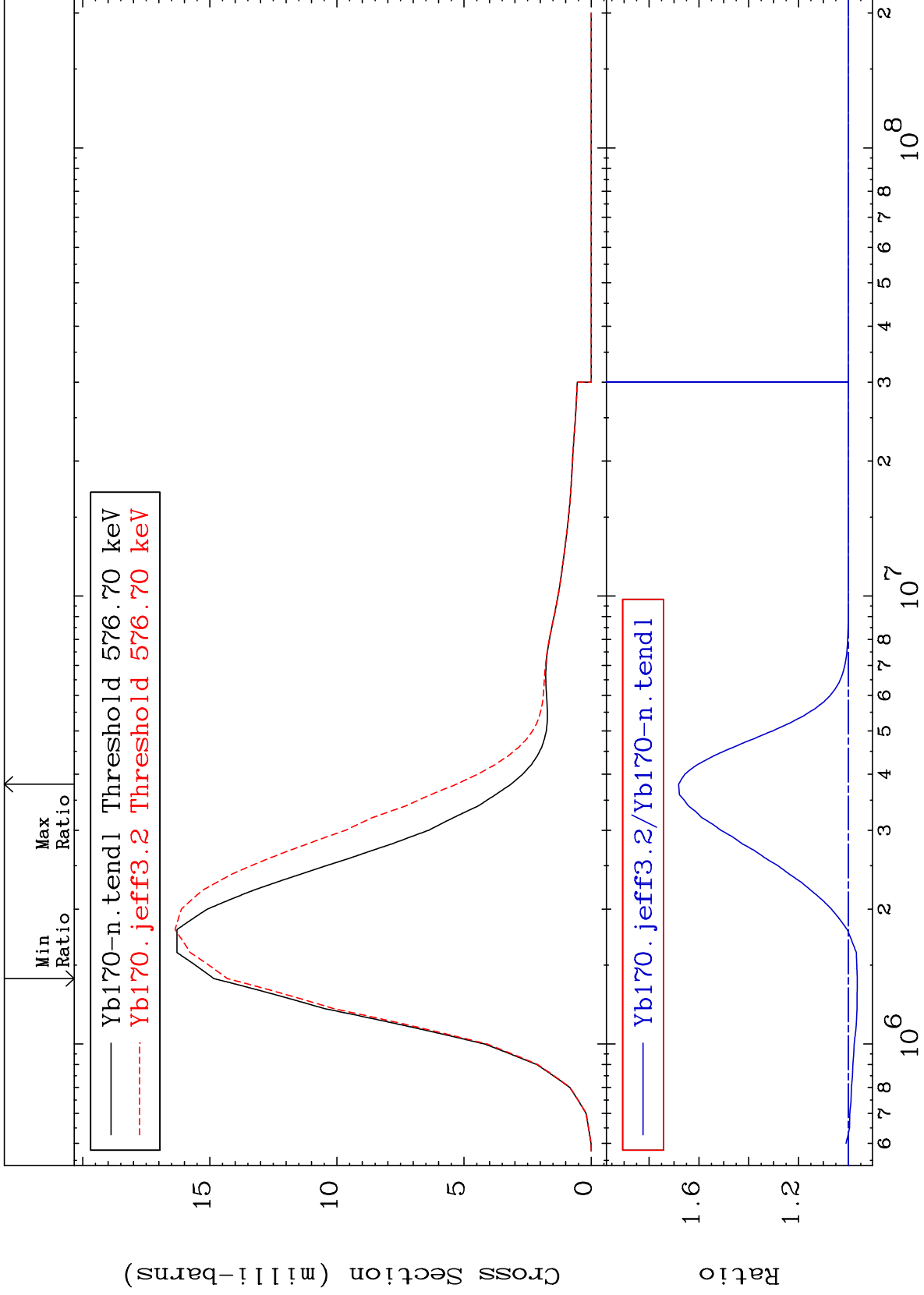
70-Yb-170
-1.653 To 5.503 %



MAT 7031

573.3 keV (n,n') Level
Cross Section

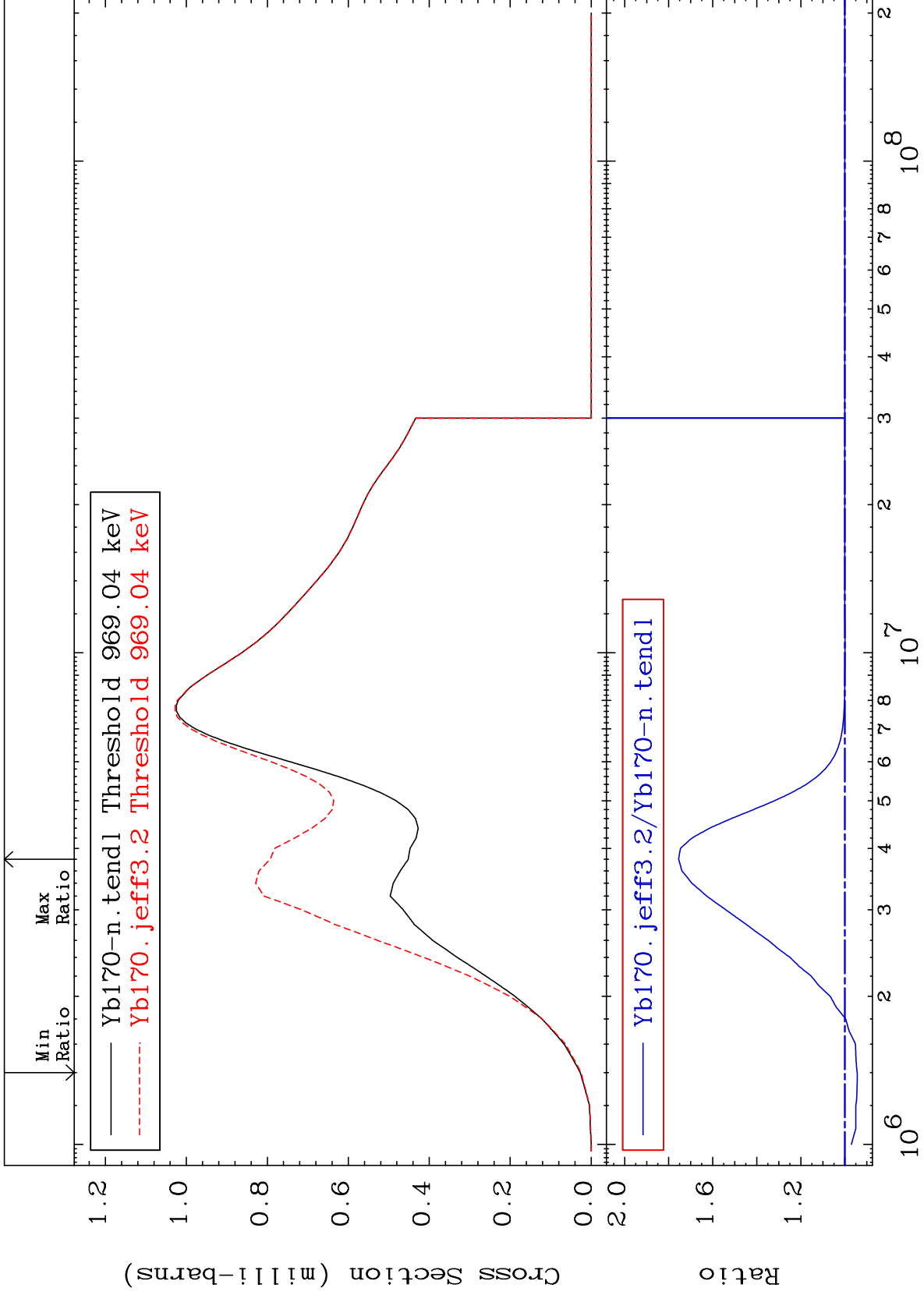
70-Yb-170
-3.591 To 68.14 %



MAT 7031

963.3 keV (n,n') Level
Cross Section

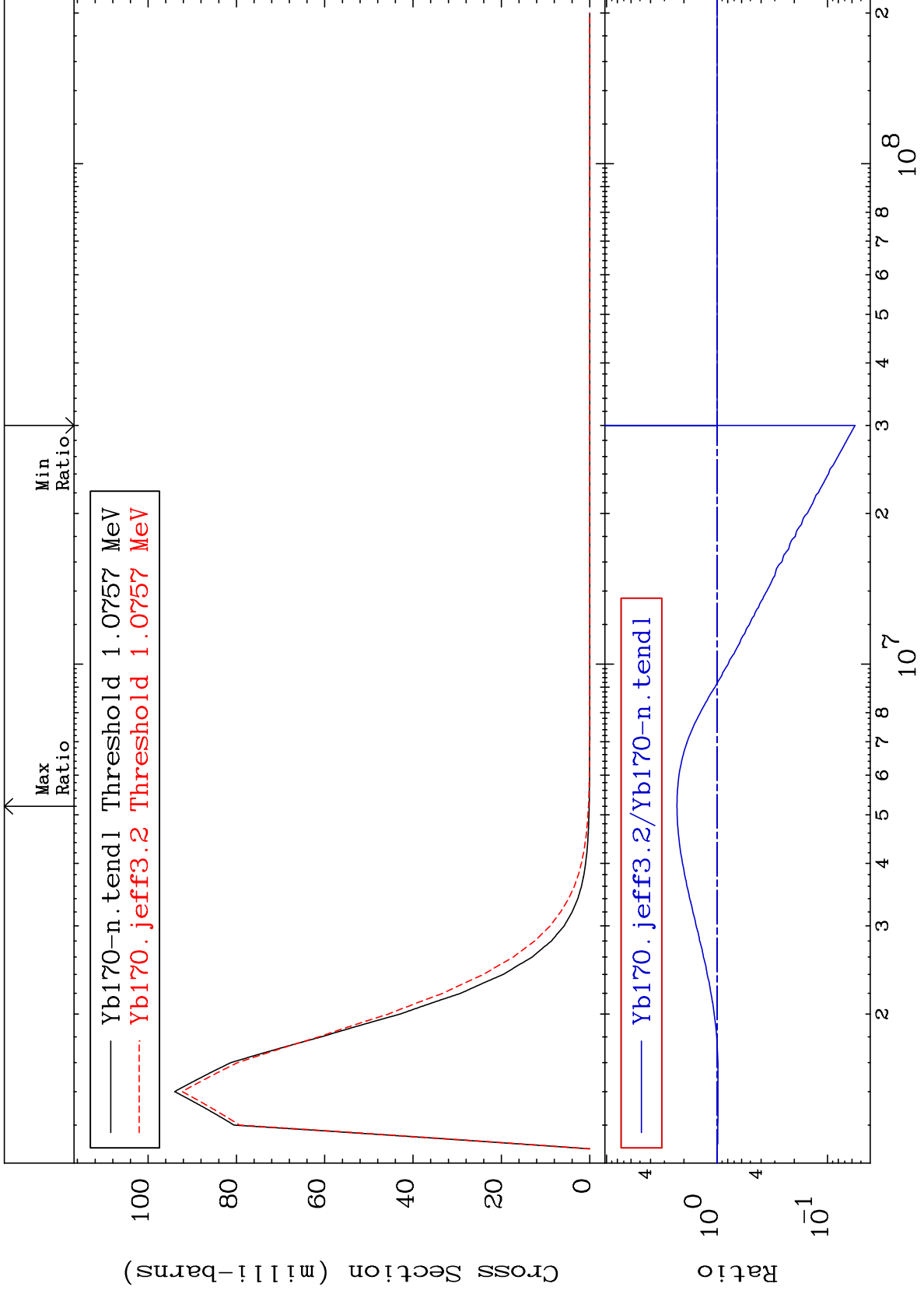
70-Yb-170
-5.626 To 75.49 %



MAT 7031

1.069 MeV (n,n') Level
Cross Section

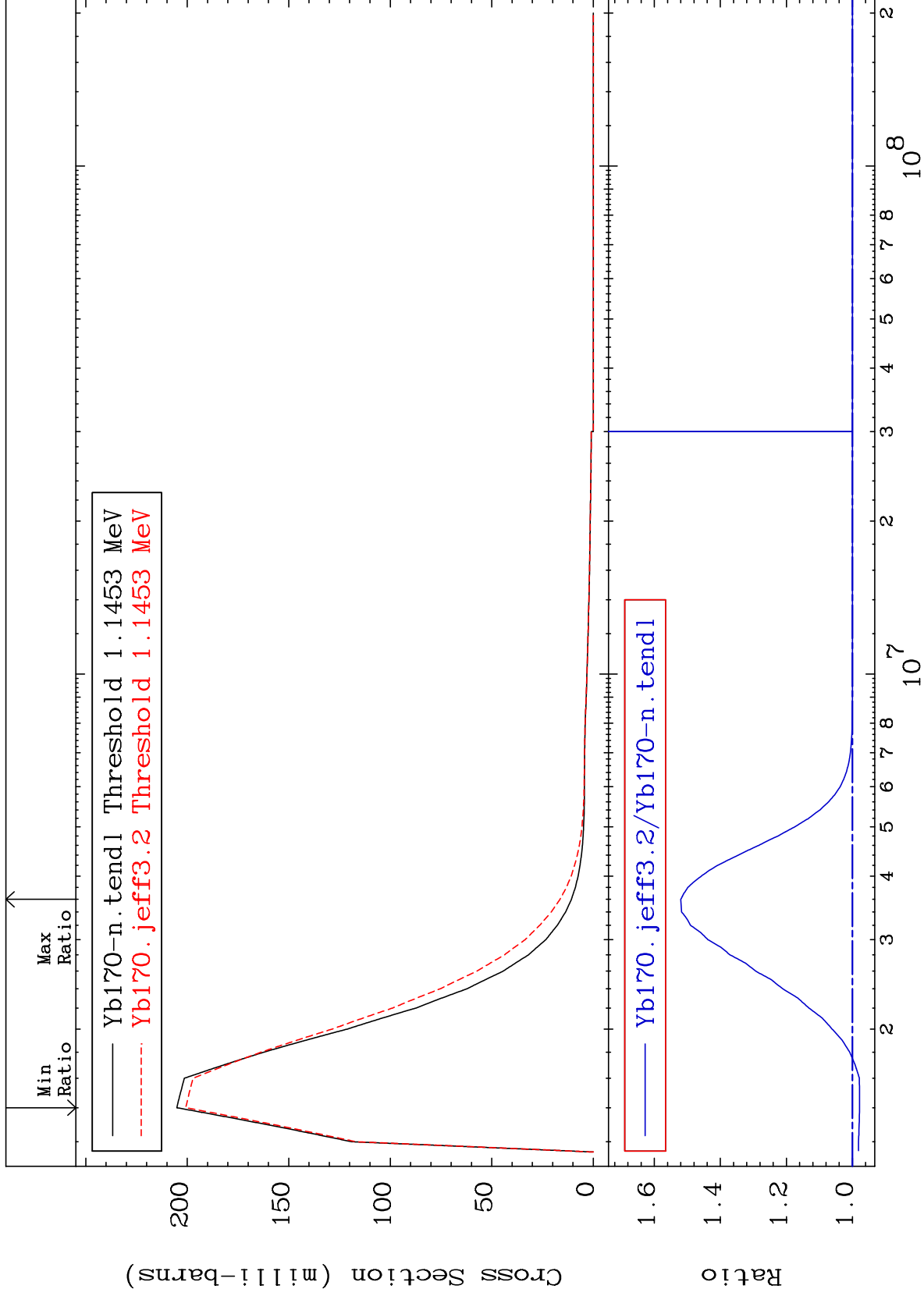
70-Yb-170
-94.37 To 131.0 %

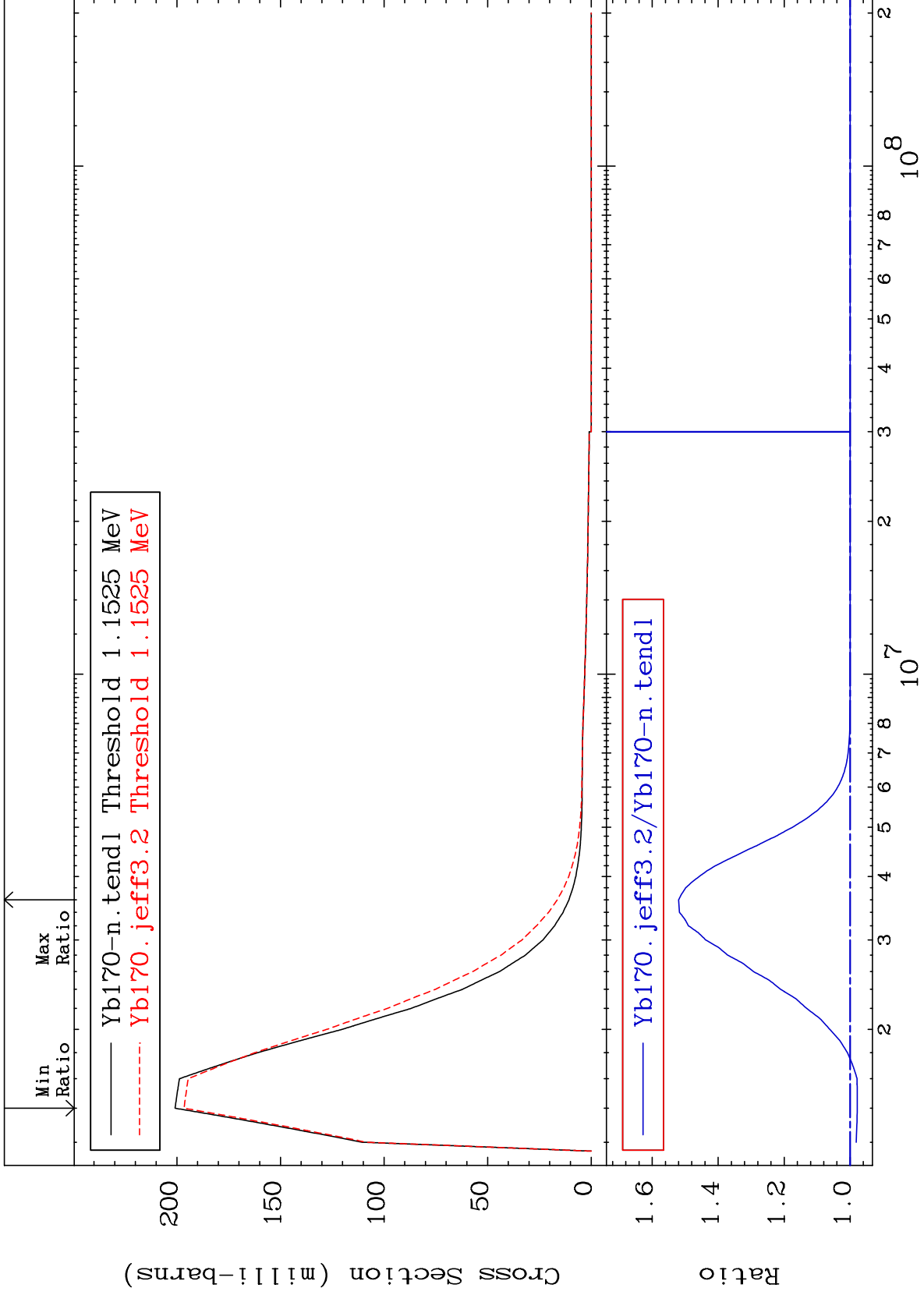


MAT 7031

1.139 MeV (n,n') Level
Cross Section

⁷⁰Yb-¹⁷⁰
-2.152 To 51.99 %

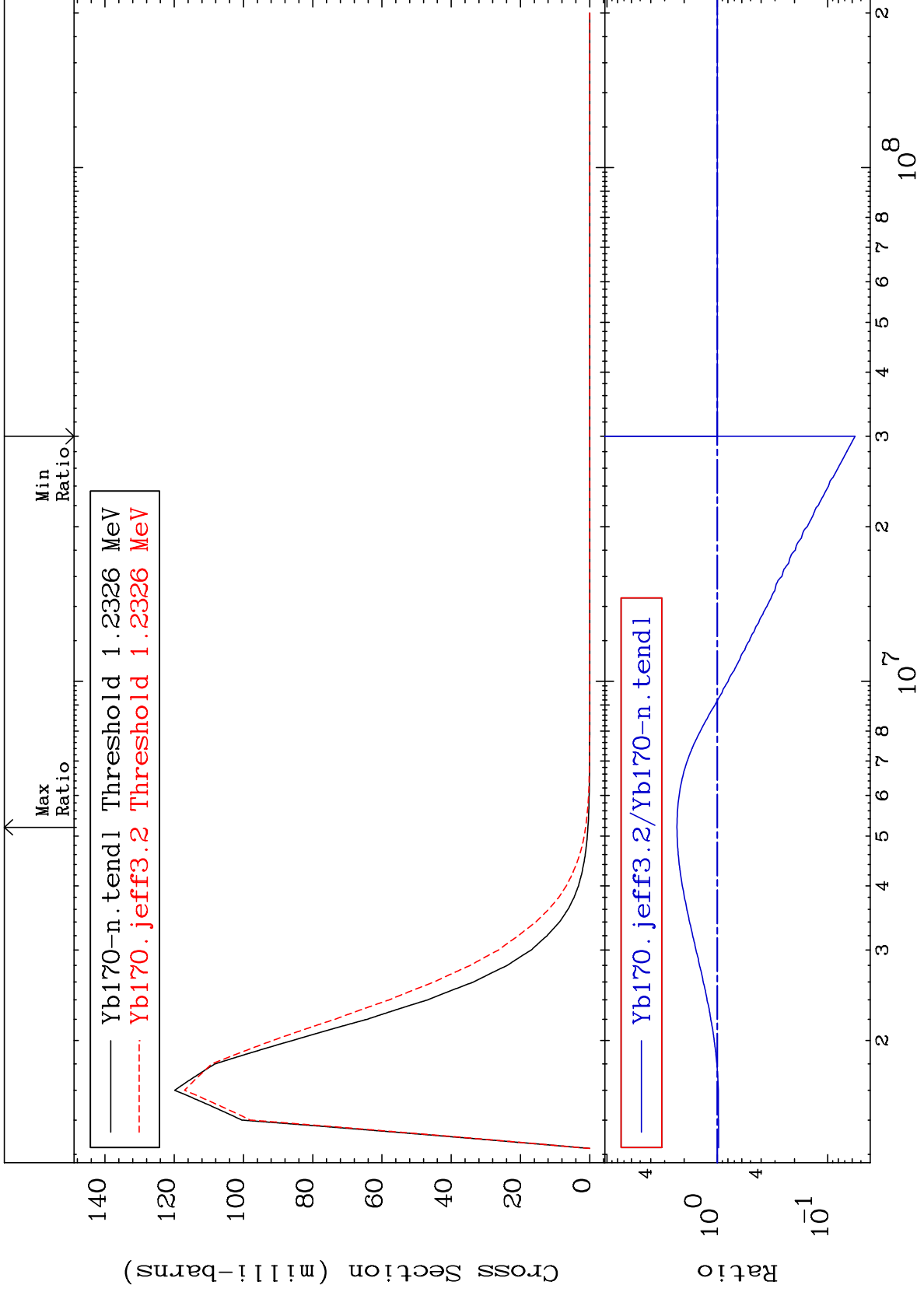




MAT 7031

1.225 MeV (n,n') Level
Cross Section

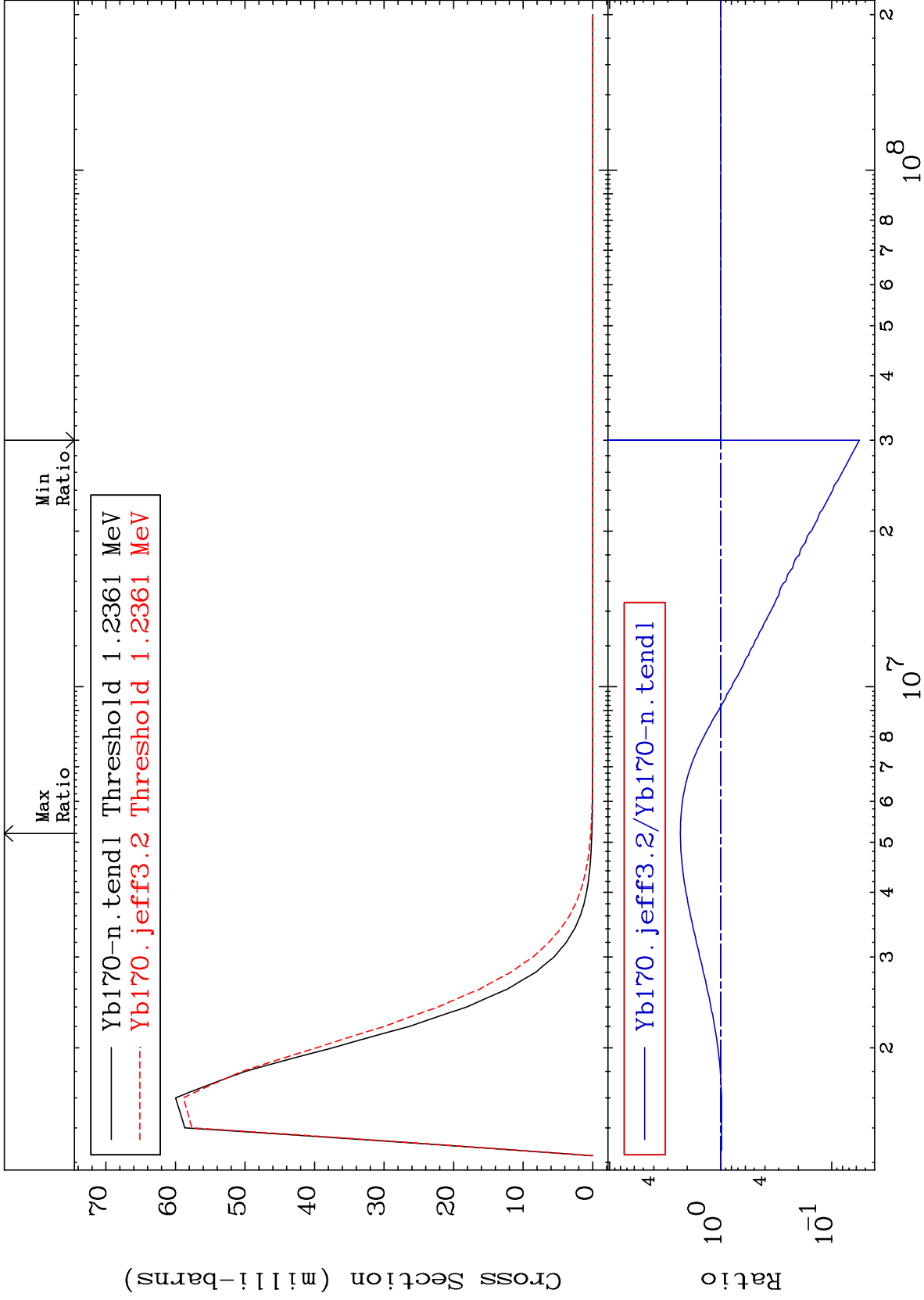
⁷⁰Yb-¹⁷⁰
-94.36 To 132.1 %



MAT 7031

1.229 MeV (n,n') Level
Cross Section

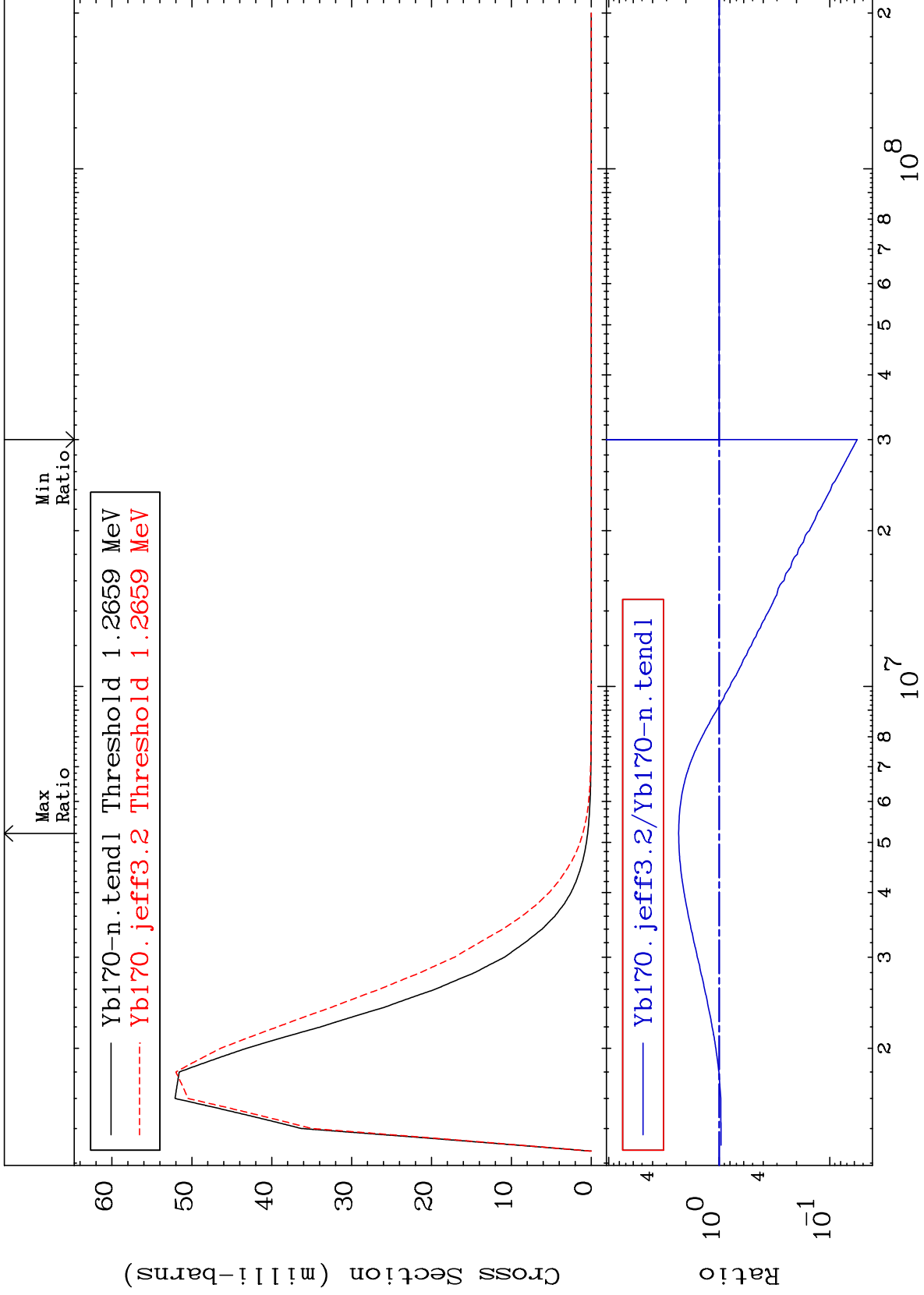
⁷⁰Yb-¹⁷⁰
-94.37 To 130.9 %



MAT 7031

1.258 MeV (n,n') Level
Cross Section

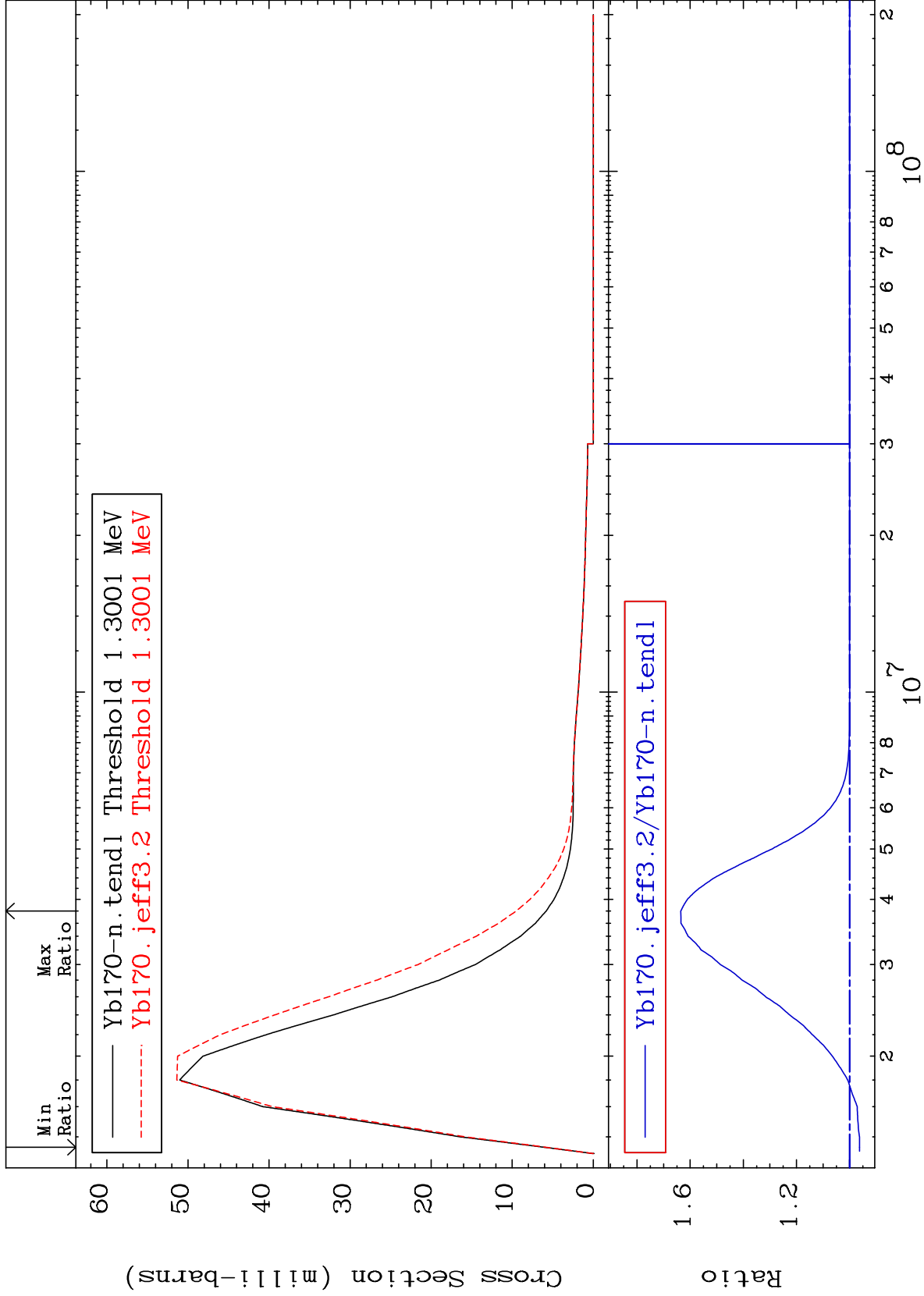
⁷⁰Yb-¹⁷⁰
-94.35 To 133.0 %



MAT 7031

1.292 MeV (n,n') Level
Cross Section

70-Yb-170
-3.730 To 63.54 %



30

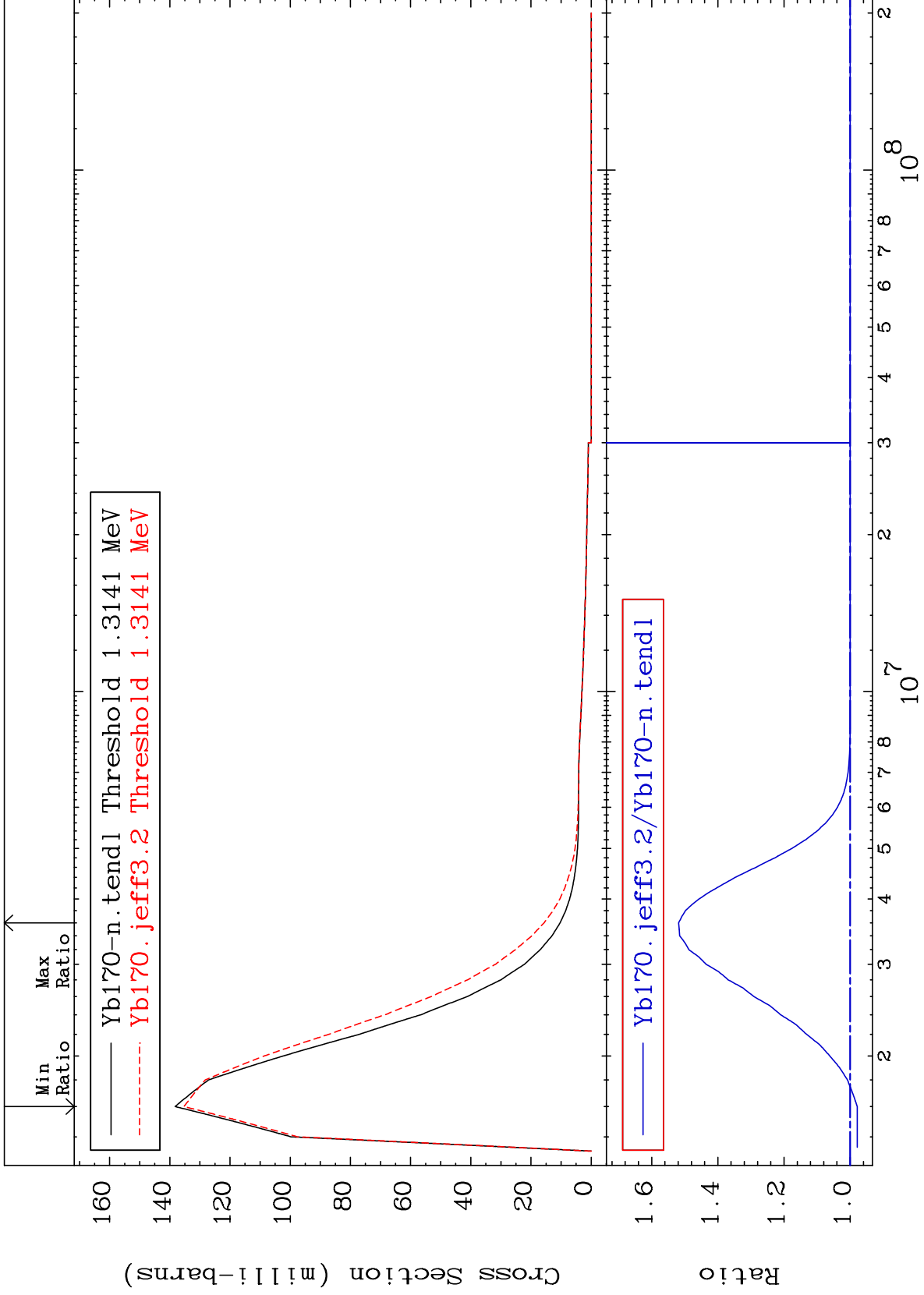
Incident Energy (eV)

70-Yb-170

MAT 7031

1.306 MeV (n,n') Level
Cross Section

⁷⁰Yb-¹⁷⁰
-2.137 To 51.85 %



Yb170.jeff3.2/Yb170-n.tendl

Ratio

31

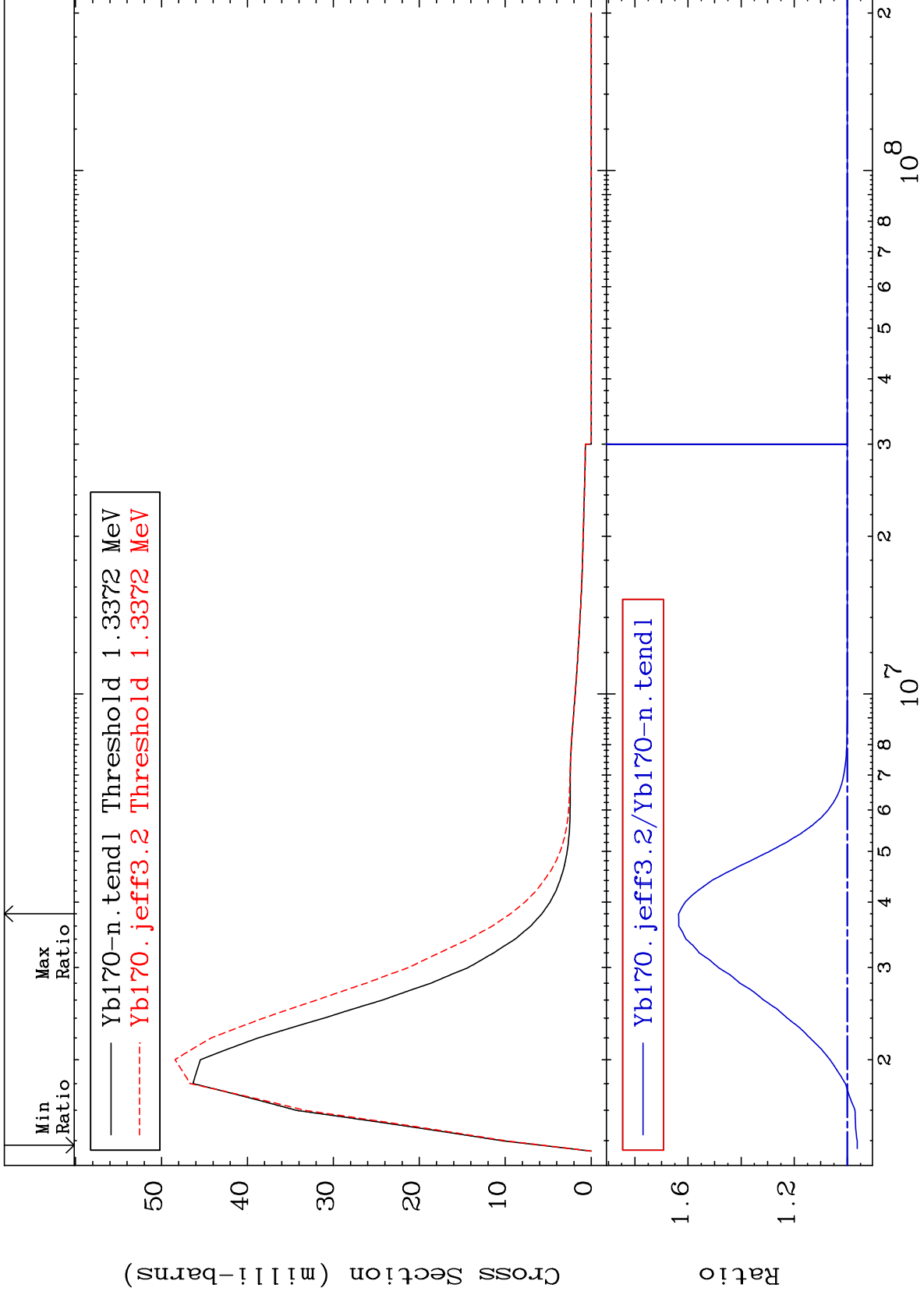
Incident Energy (eV)

⁷⁰Yb-¹⁷⁰

MAT 7031

1.329 MeV (n,n') Level
Cross Section

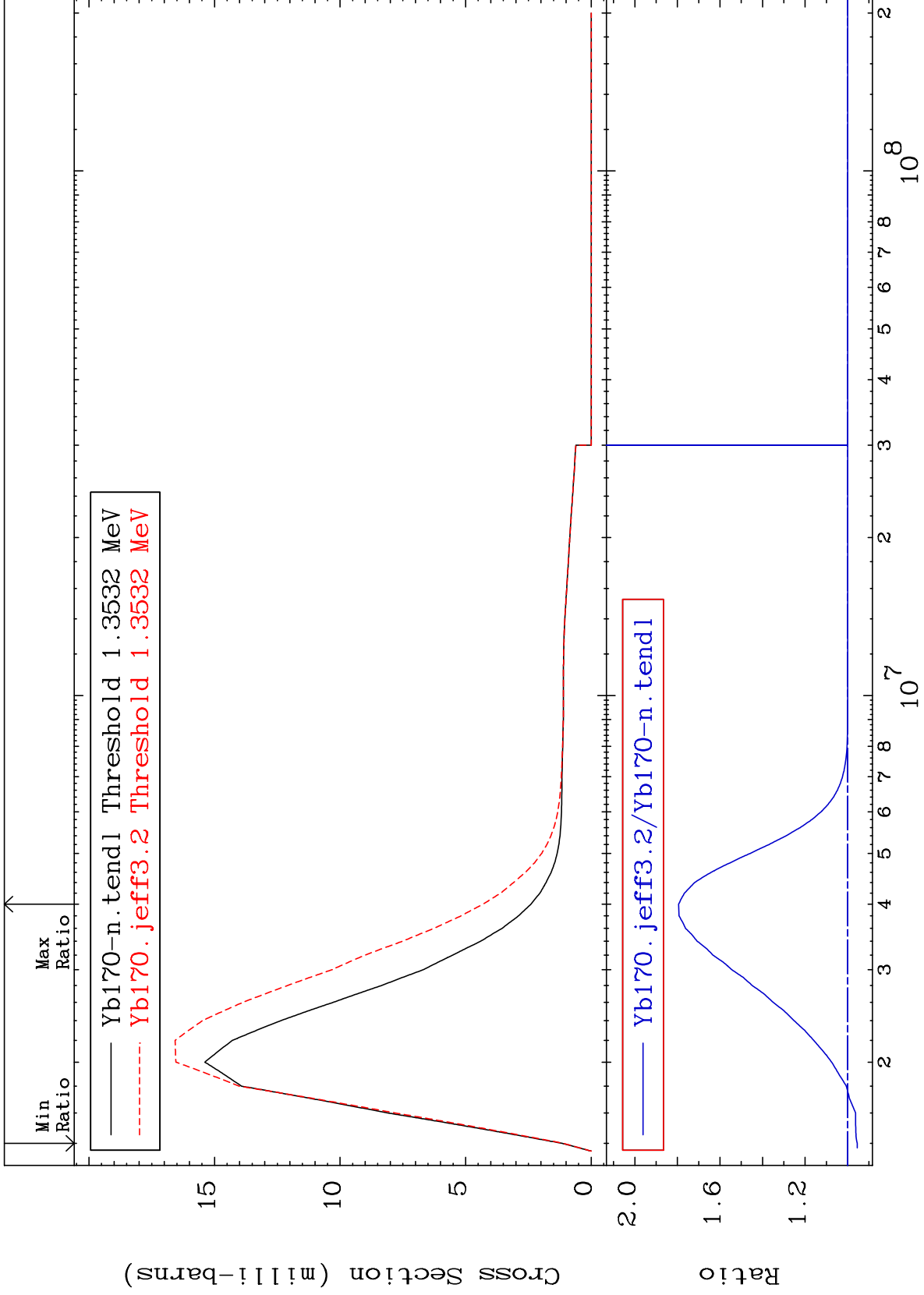
70-Yb-170
-3.767 To 63.54 %



MAT 7031

1.345 MeV (n,n') Level
Cross Section

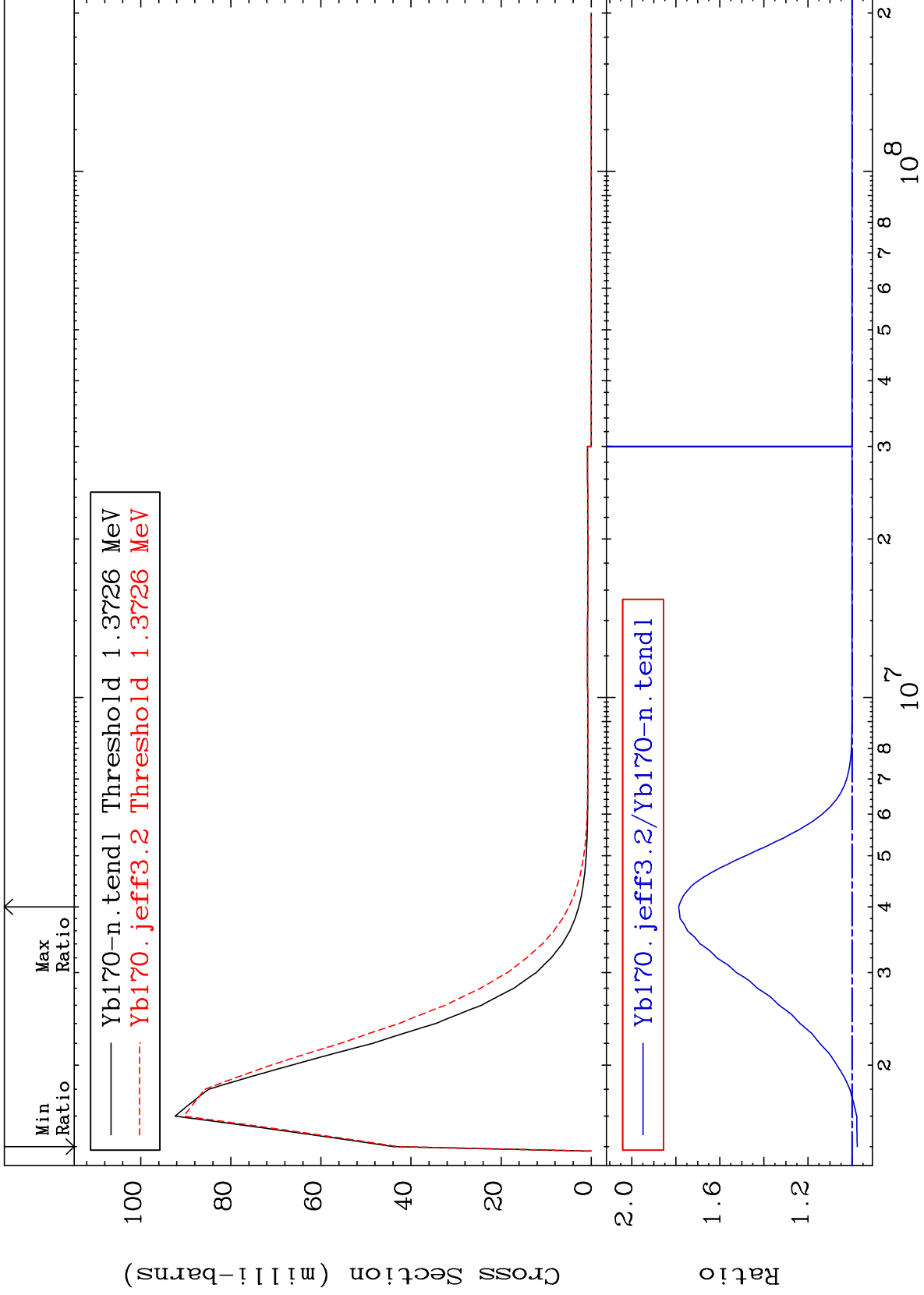
70-Yb-170
-4.485 To 79.42 %



MAT 7031

1.365 MeV (n,n') Level
Cross Section

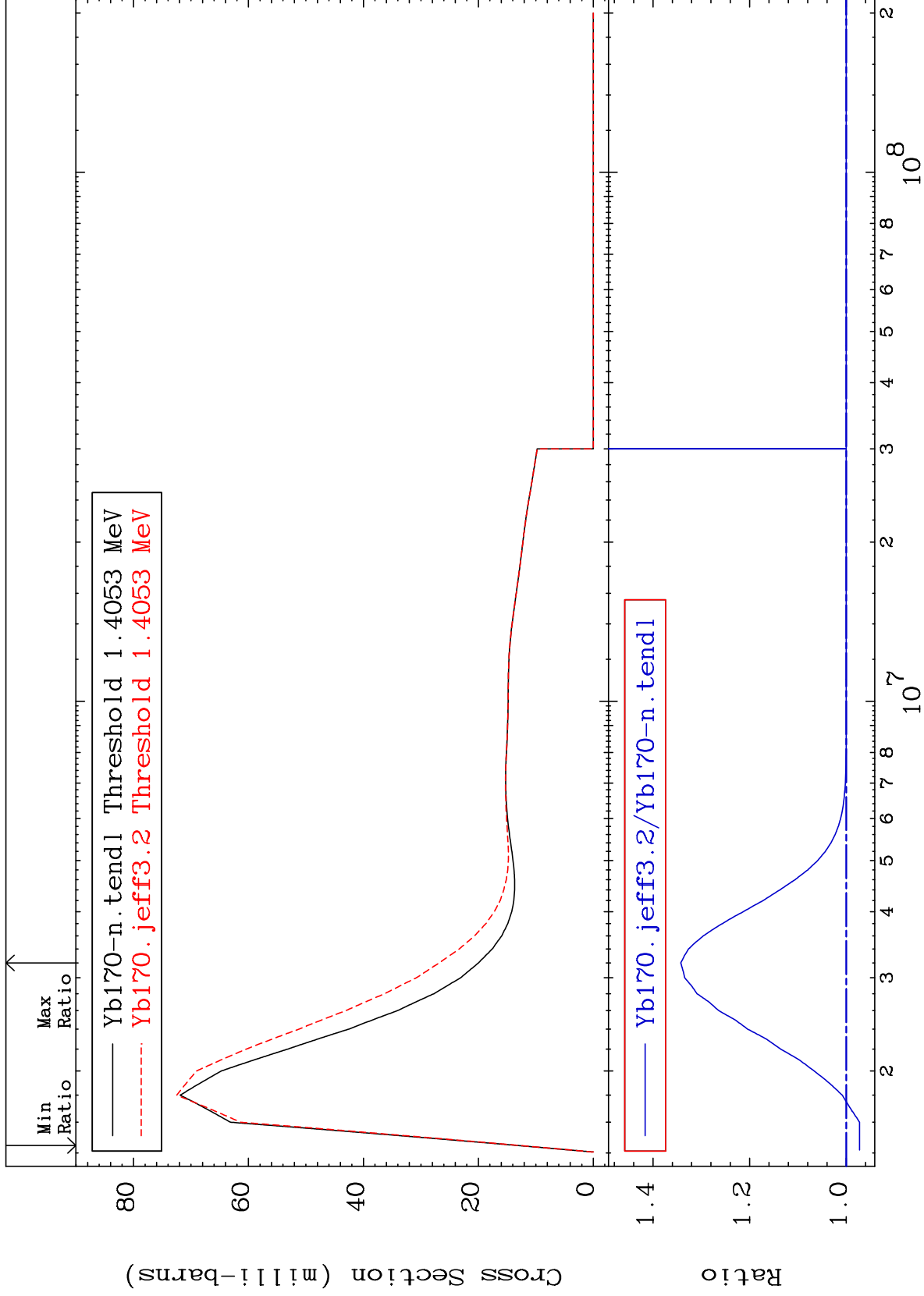
70-Yb-170
-2.385 To 78.71 %



MAT 7031

1.397 MeV (n,n') Level
Cross Section

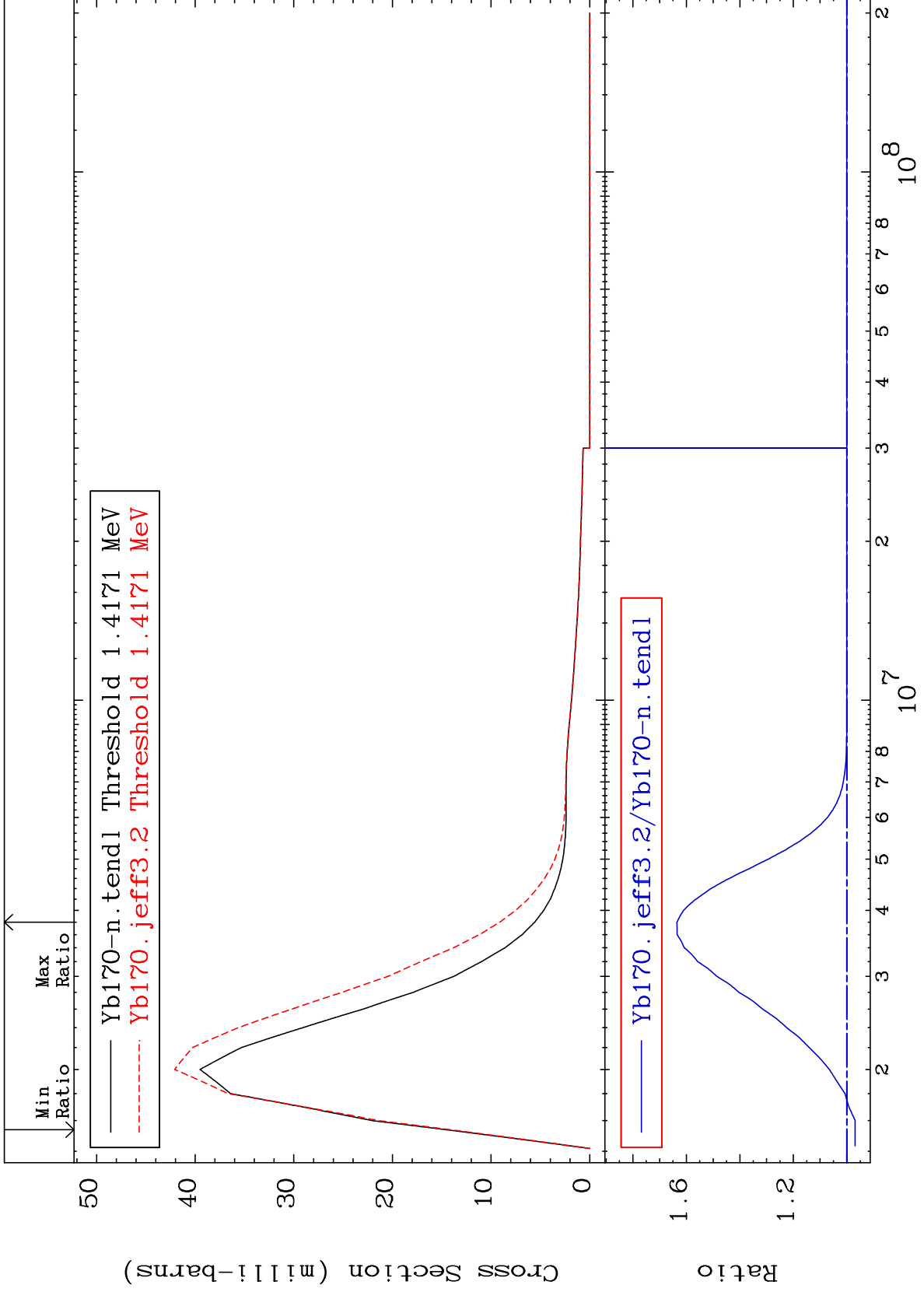
70-Yb-170
-2.739 To 34.25 %



MAT 7031

1.409 MeV (n,n') Level
Cross Section

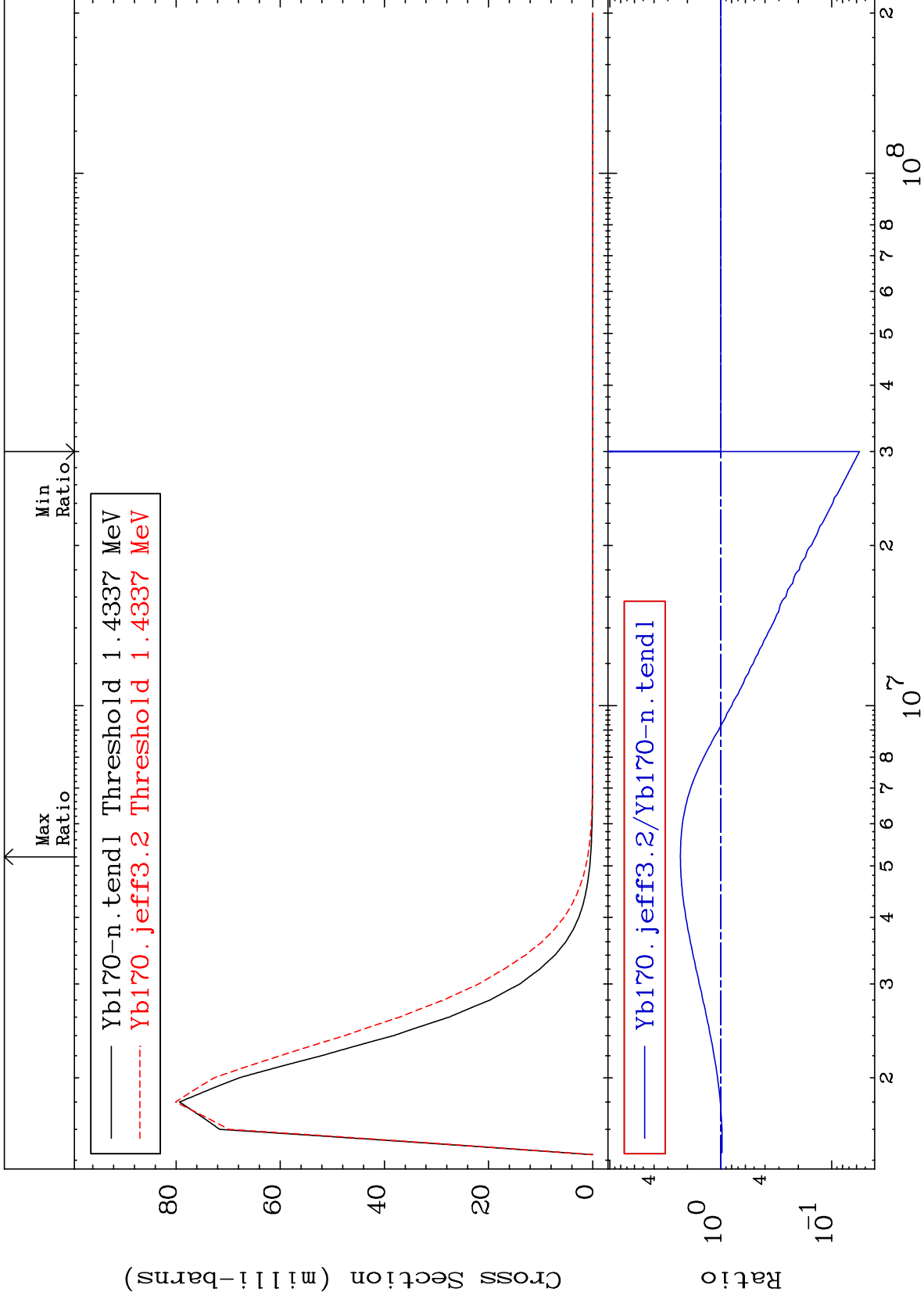
70-Yb-170
-3.091 To 63.53 %



MAT 7031

1.425 MeV (n,n') Level
Cross Section

⁷⁰Yb-¹⁷⁰
-94.36 To 131.5 %



37

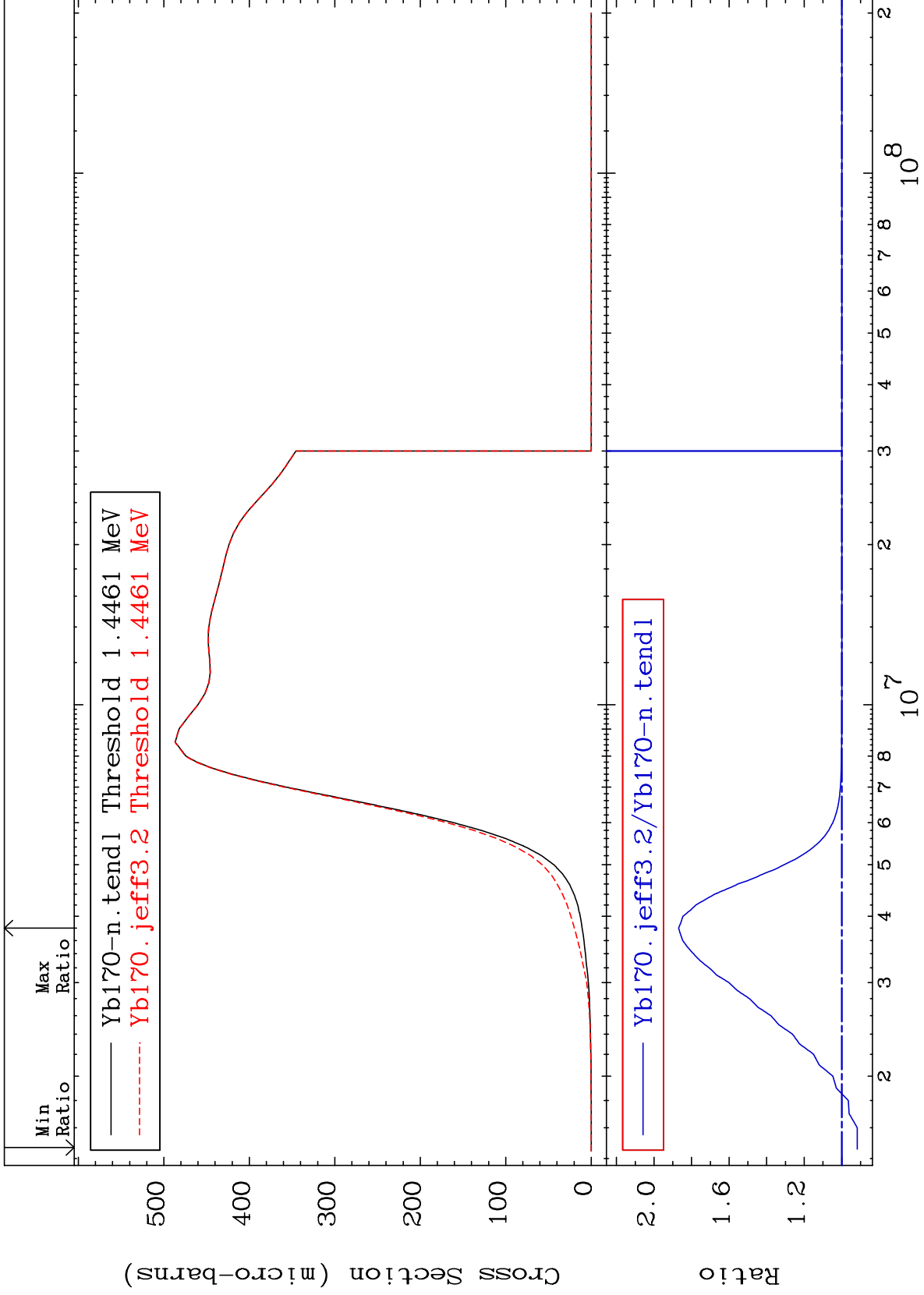
Incident Energy (eV)

⁷⁰Yb-¹⁷⁰

MAT 7031

1.438 MeV (n,n') Level
Cross Section

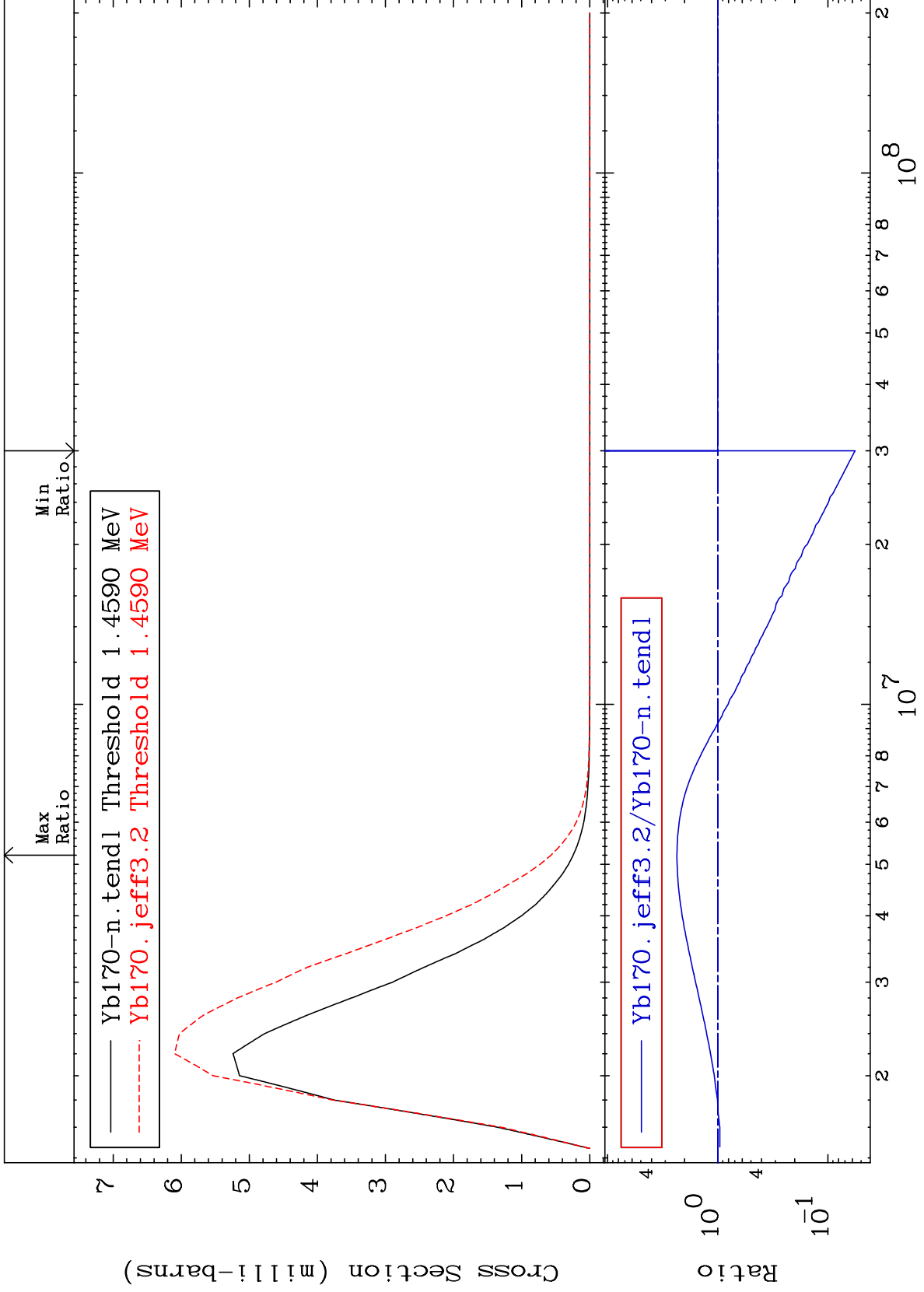
⁷⁰Yb-¹⁷⁰
-8.245 To 86.88 %



MAT 7031

1.450 MeV (n,n') Level
Cross Section

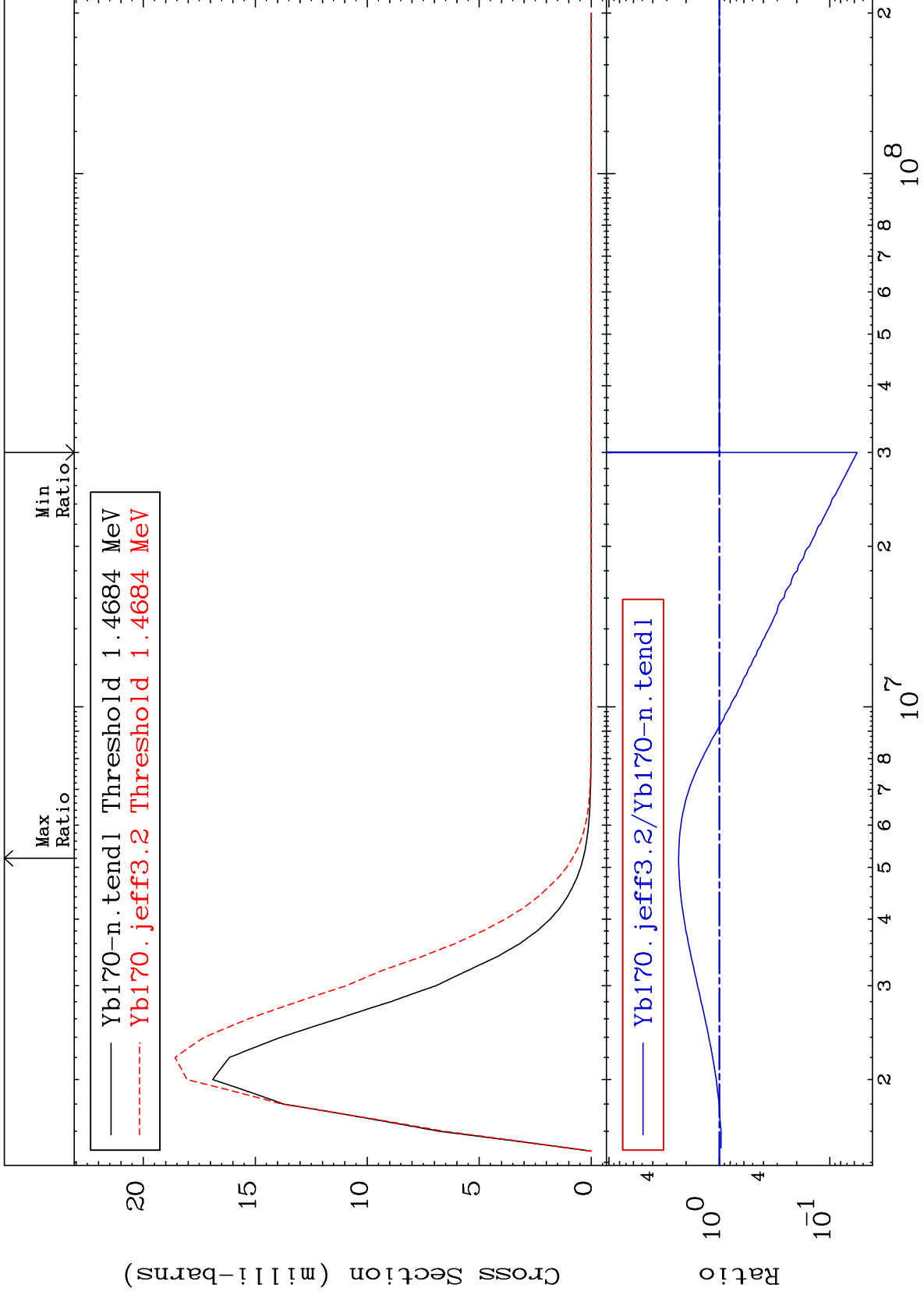
70-Yb-170
-94.34 To 135.0 %



MAT 7031

1.460 MeV (n,n') Level
Cross Section

⁷⁰Yb-¹⁷⁰
-94.35 To 133.8 %



40

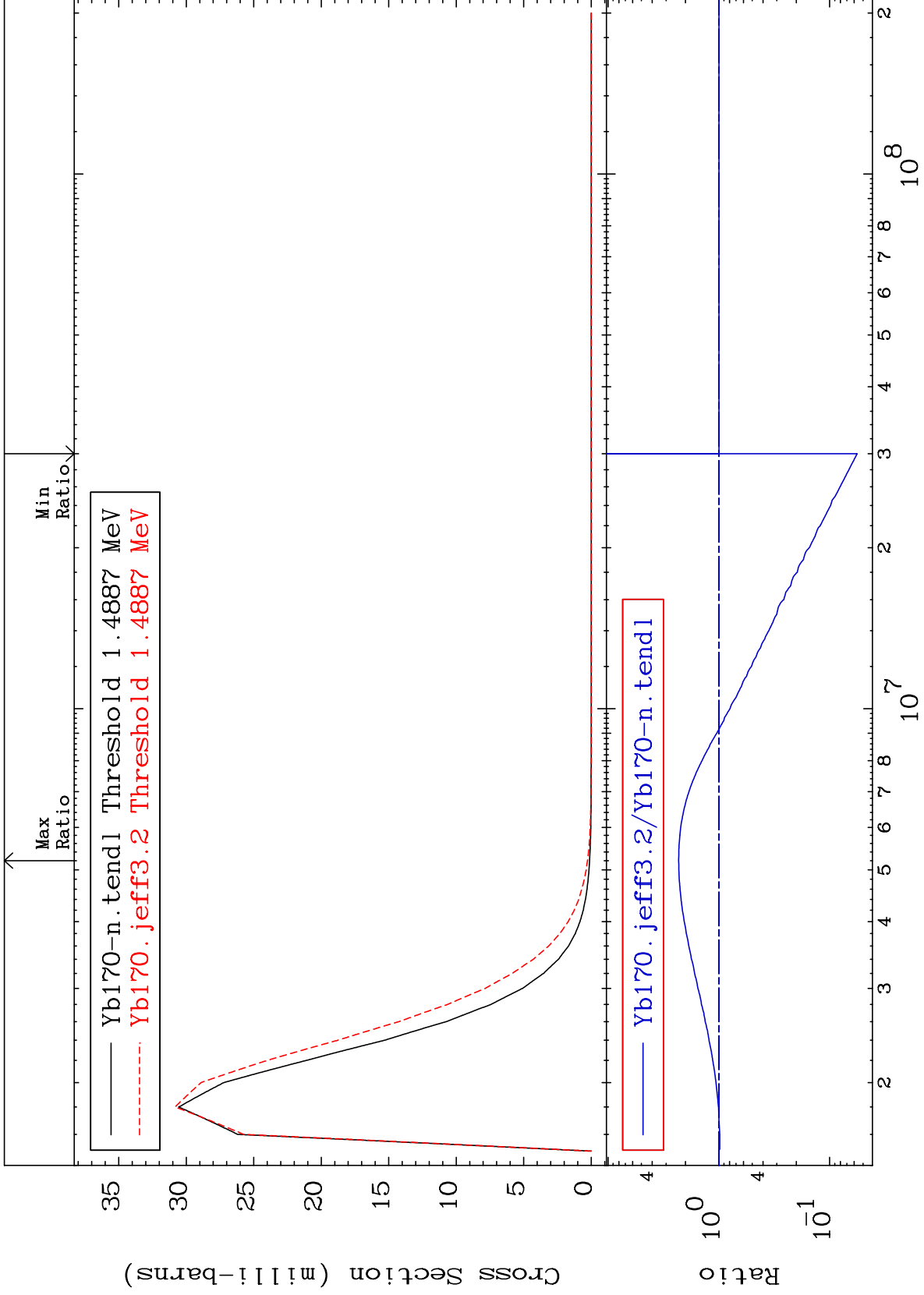
Incident Energy (eV)

⁷⁰Yb-¹⁷⁰

MAT 7031

1.480 MeV (n,n') Level
Cross Section

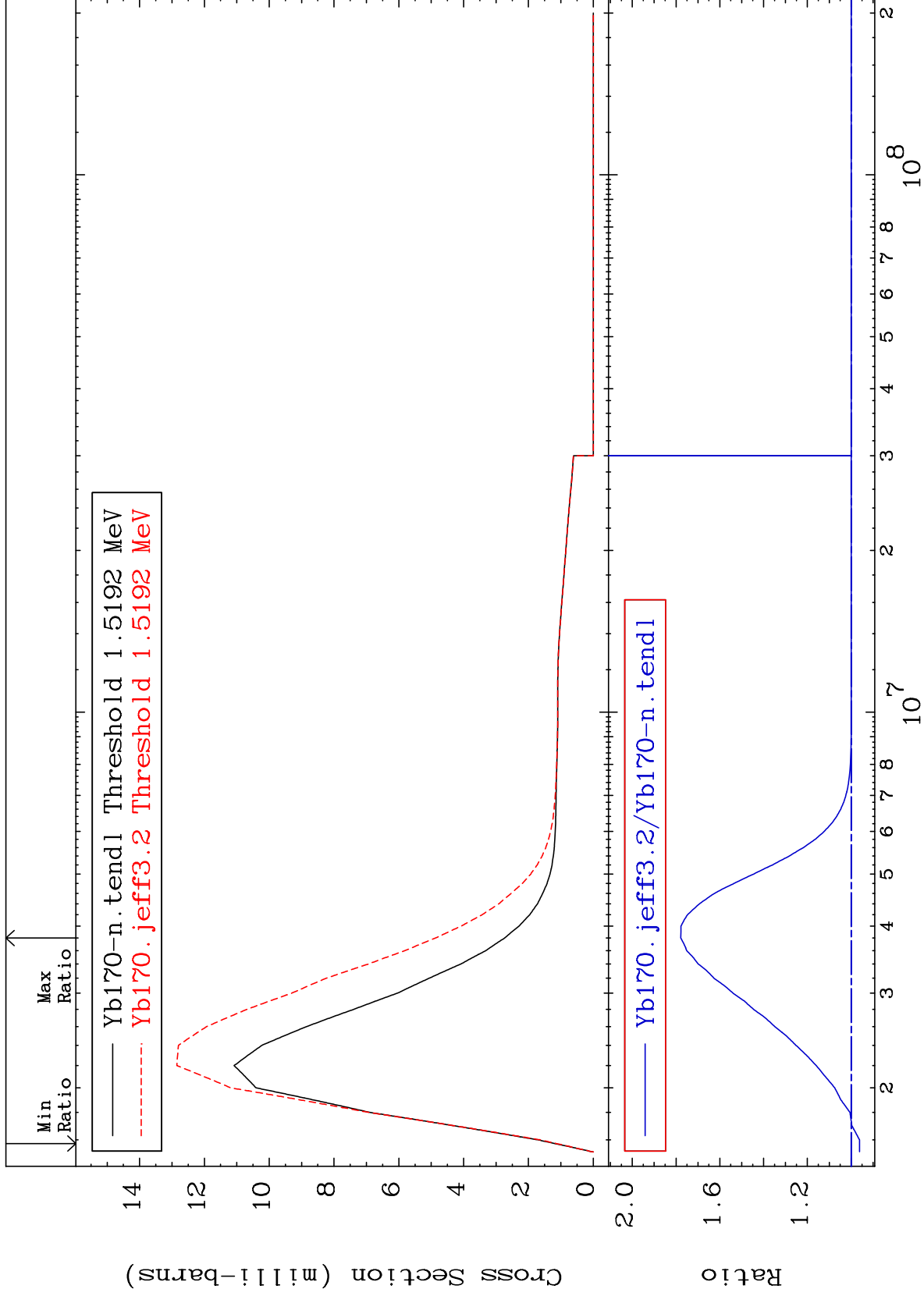
70-Yb-170
-94.37 To 130.8 %



MAT 7031

1.510 MeV (n,n') Level
Cross Section

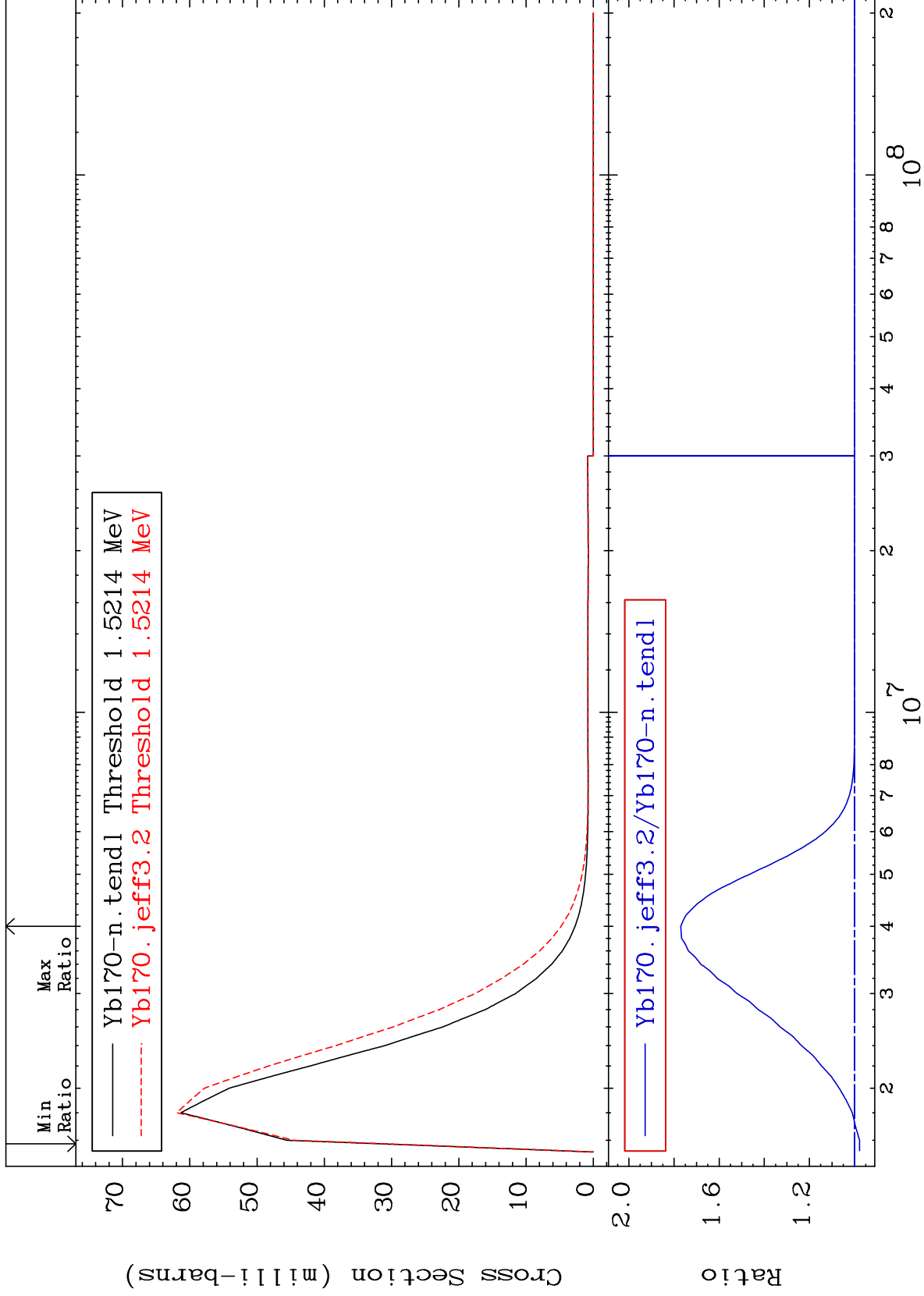
⁷⁰Yb-¹⁷⁰
-3.826 To 77.85 %



MAT 7031

1.512 MeV (n,n') Level
Cross Section

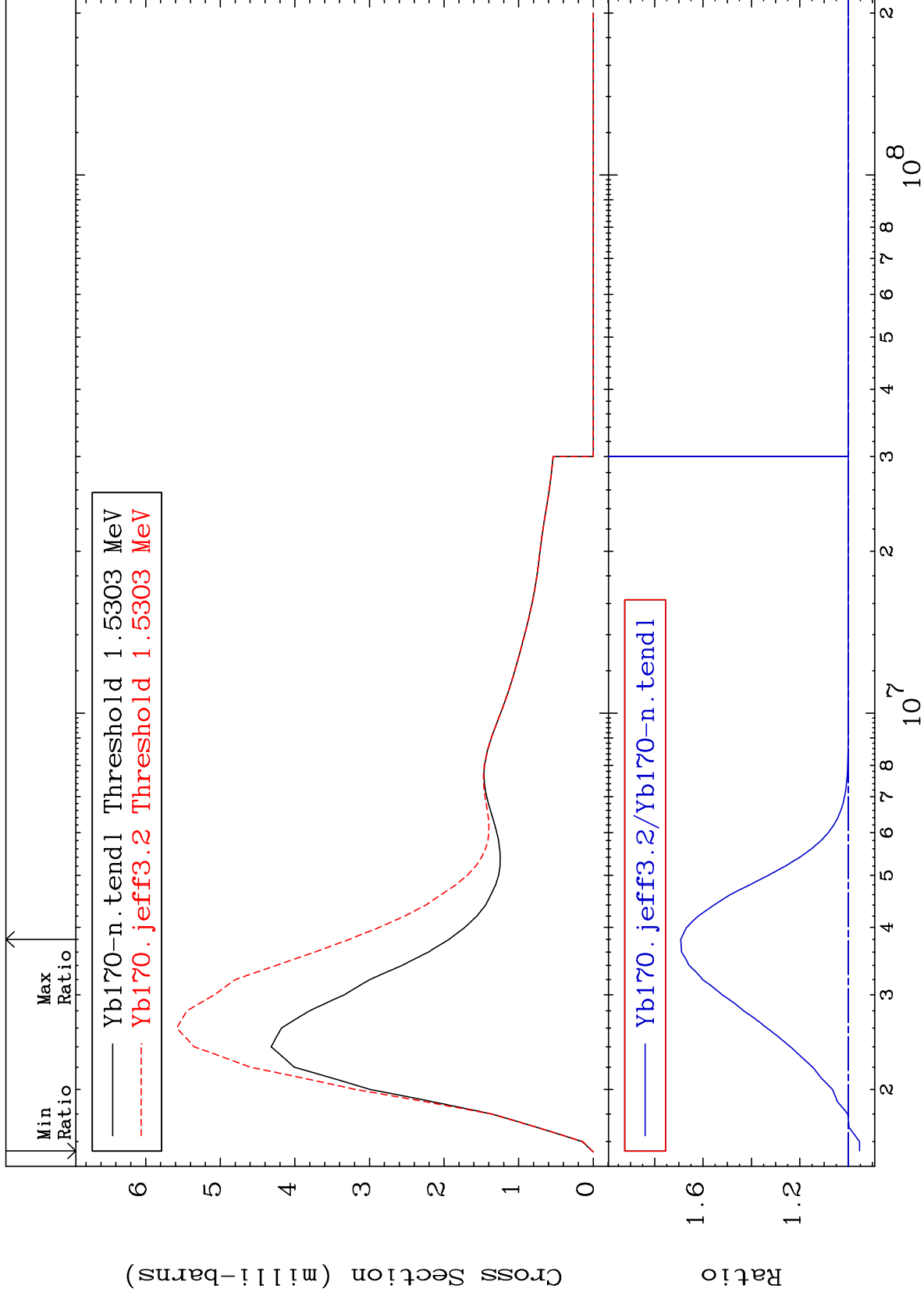
70-Yb-170
-2.213 To 77.01 %



MAT 7031

1.521 MeV (n,n') Level
Cross Section

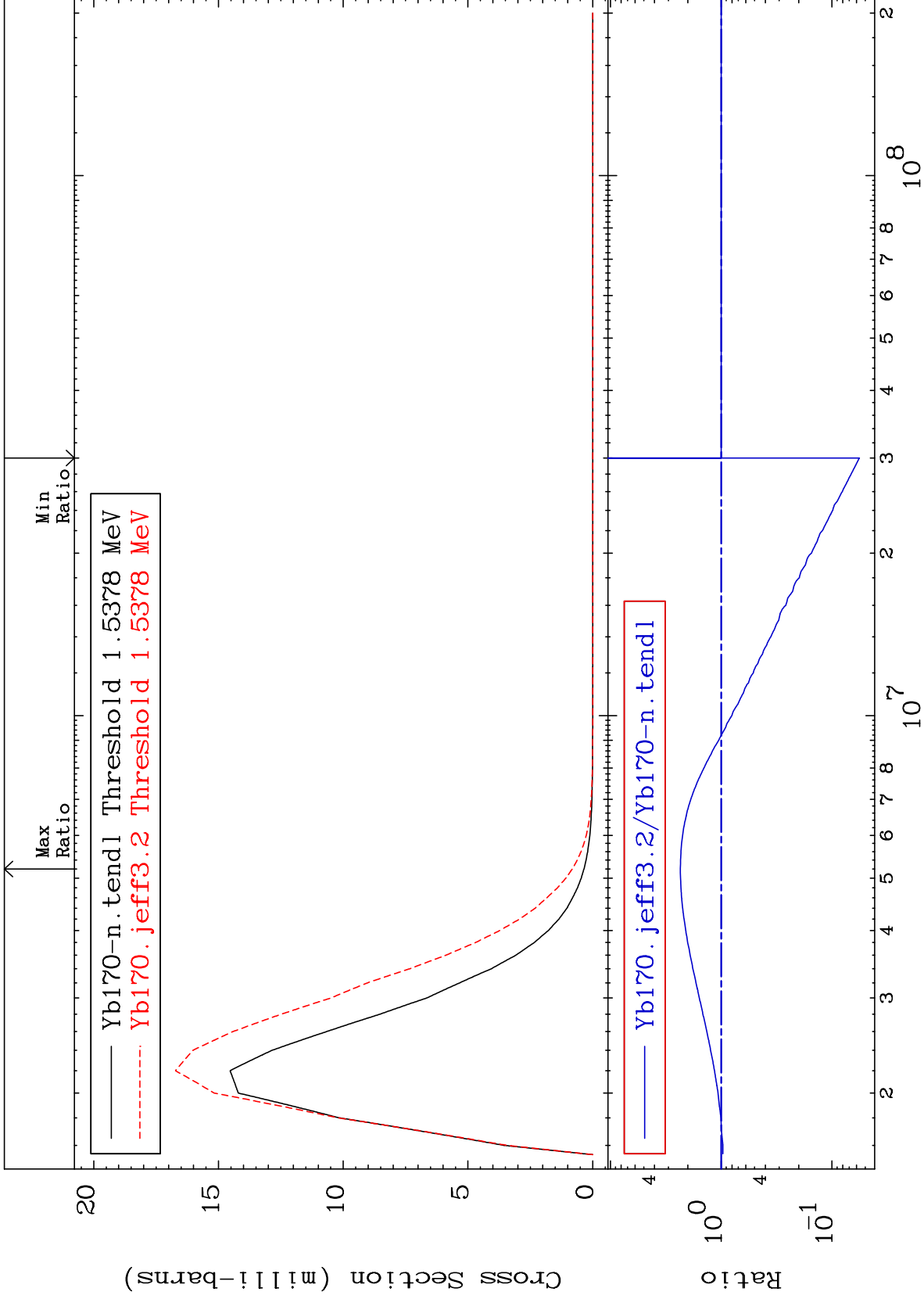
70-Yb-170
-4.652 To 69.21 %



MAT 7031

1.529 MeV (n,n') Level
Cross Section

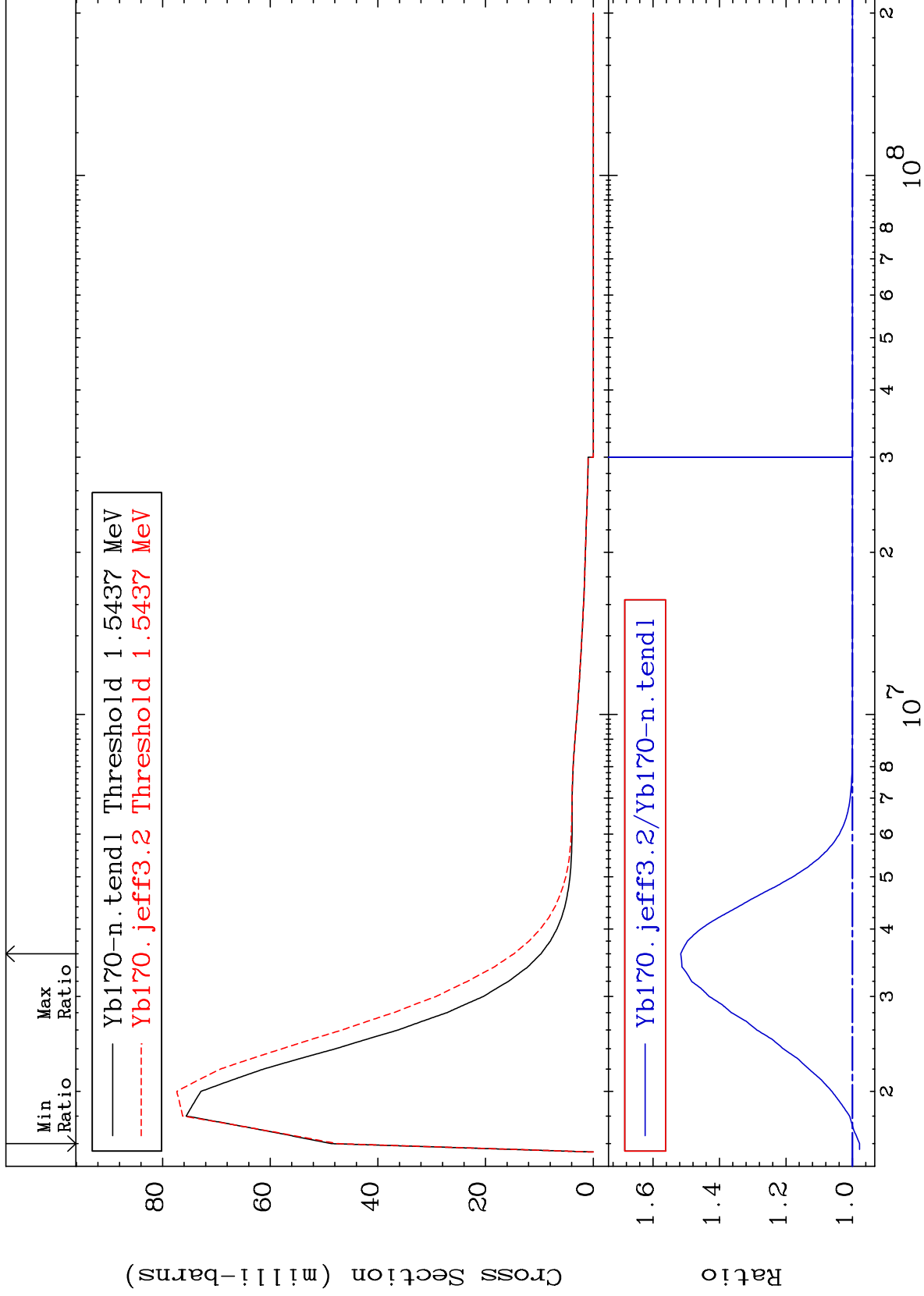
70-Yb-170
-94.35 To 133.8 %



MAT 7031

1.535 MeV (n,n') Level
Cross Section

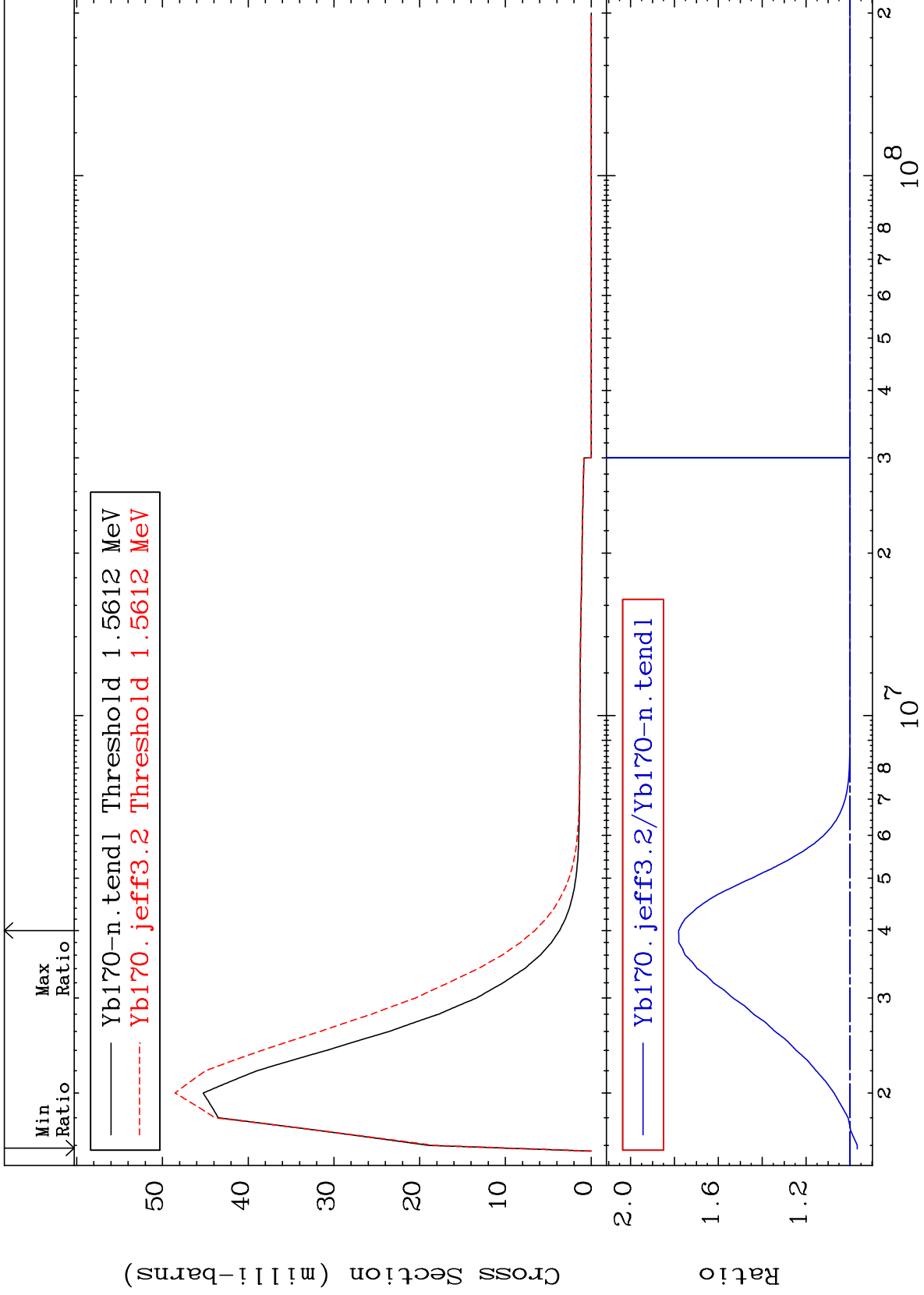
70-Yb-170
-2.139 To 51.65 %



MAT 7031

1.552 MeV (n,n') Level
Cross Section

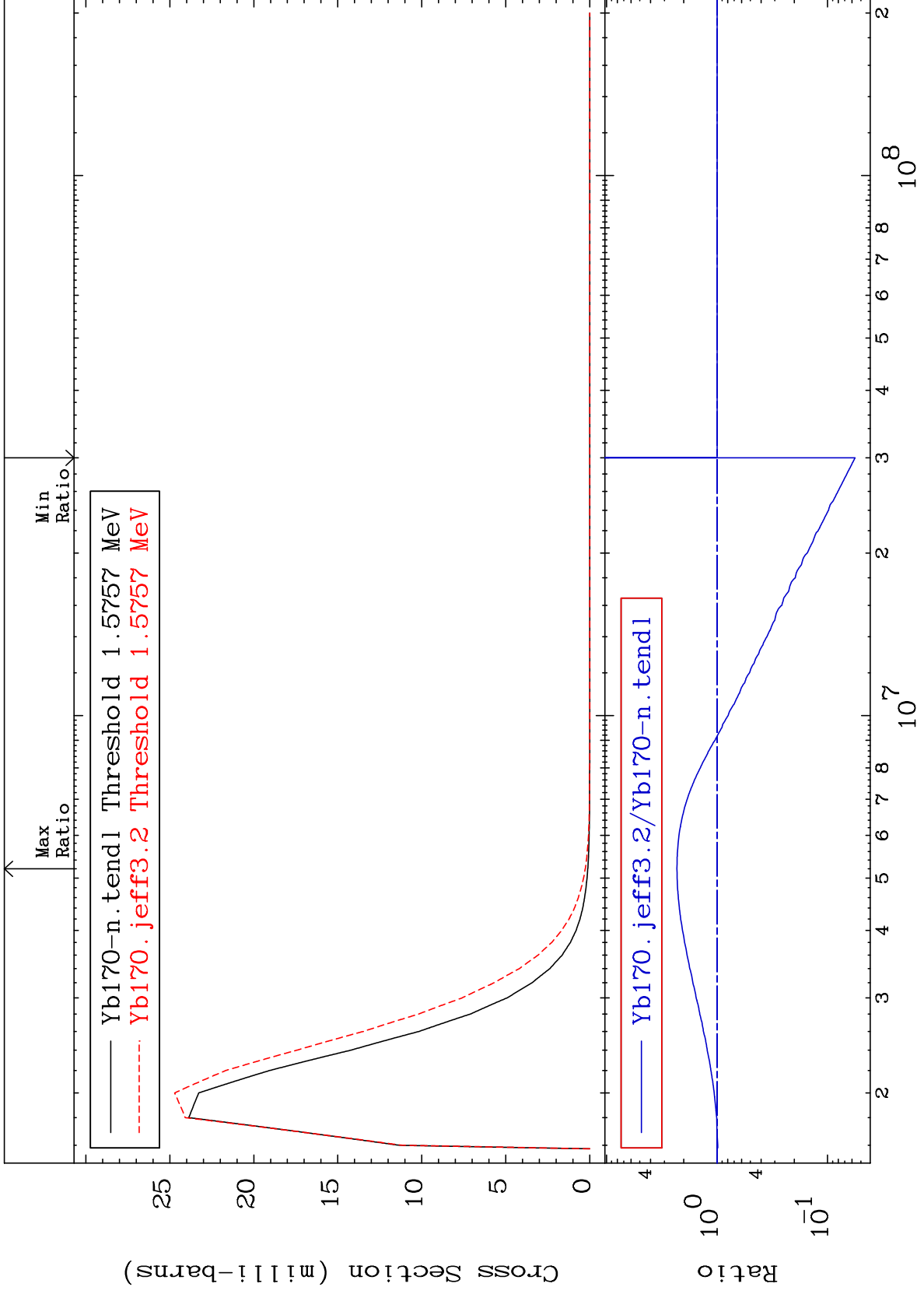
70-Yb-170
-3.313 To 78.10 %



MAT 7031

1.566 MeV (n,n') Level
Cross Section

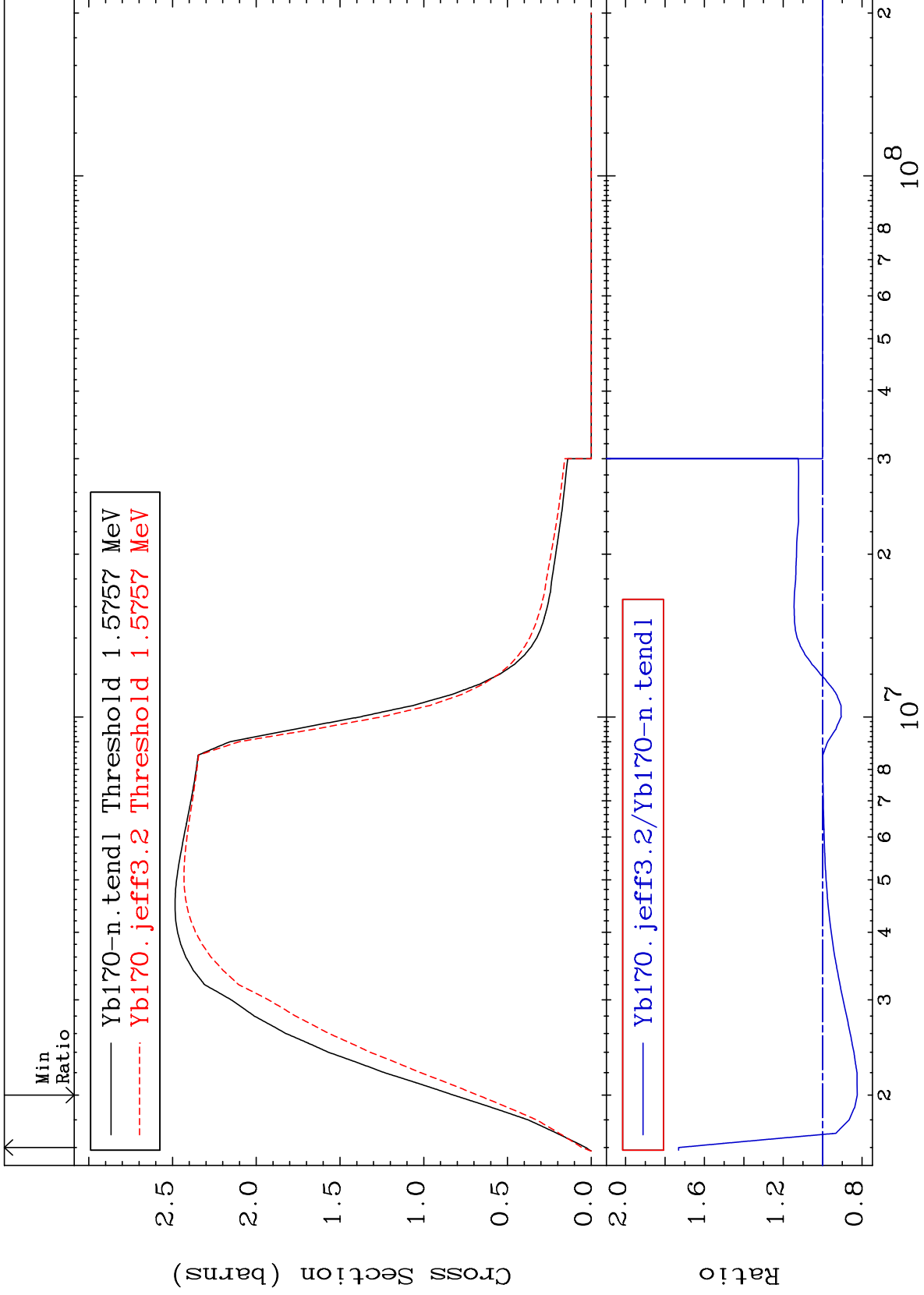
70-Yb-170
-94.37 To 130.8 %



MAT 7031

(n, n') Continuum
Cross Section

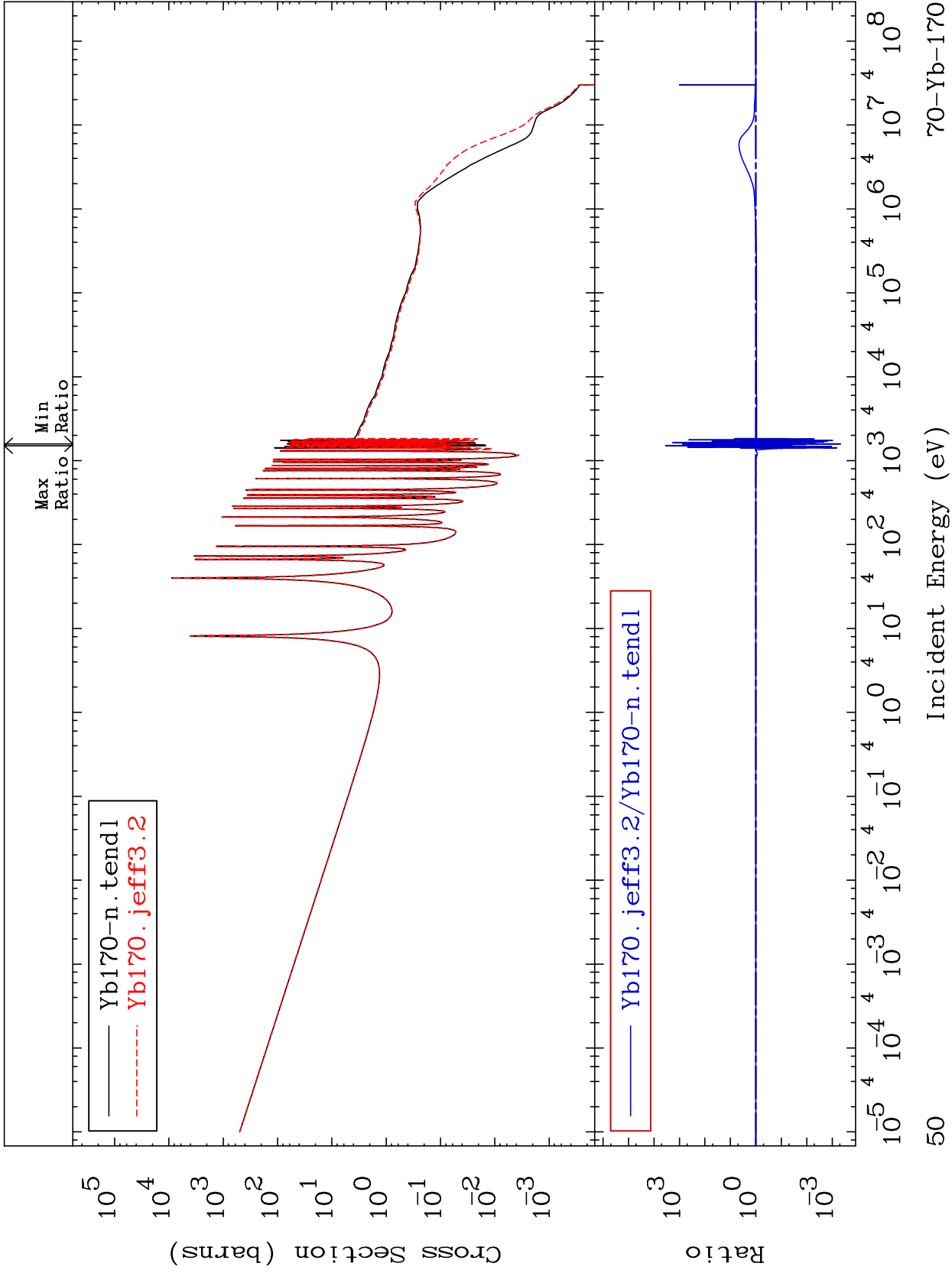
70-Yb-170
-17.60 To 73.10 %



MAT 7031

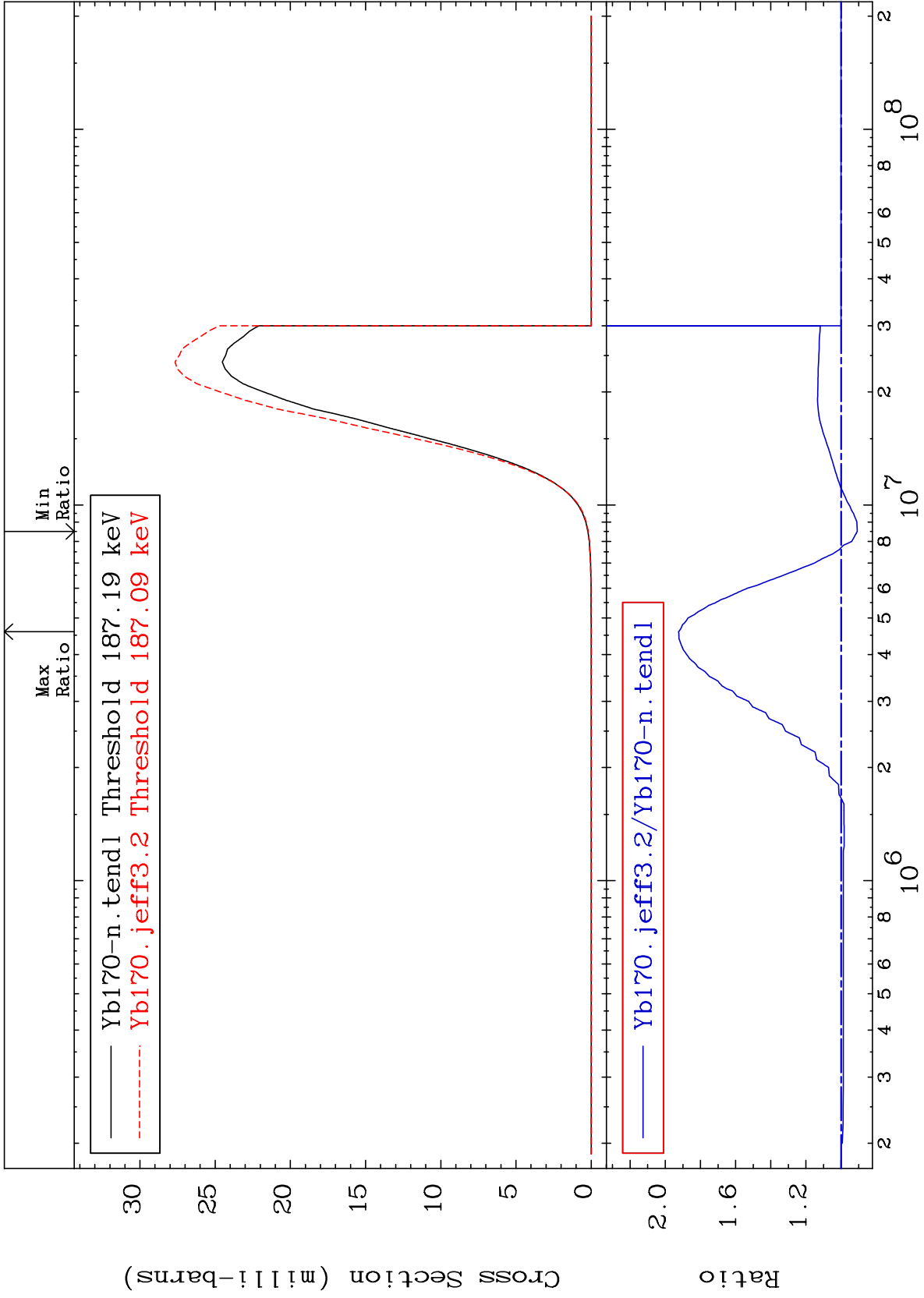
(n, γ)
Cross Section

70-Yb-170
-99.95 To 9999. %



MAT 7031

^{70}Yb -170
-9.177 To 92.40 %



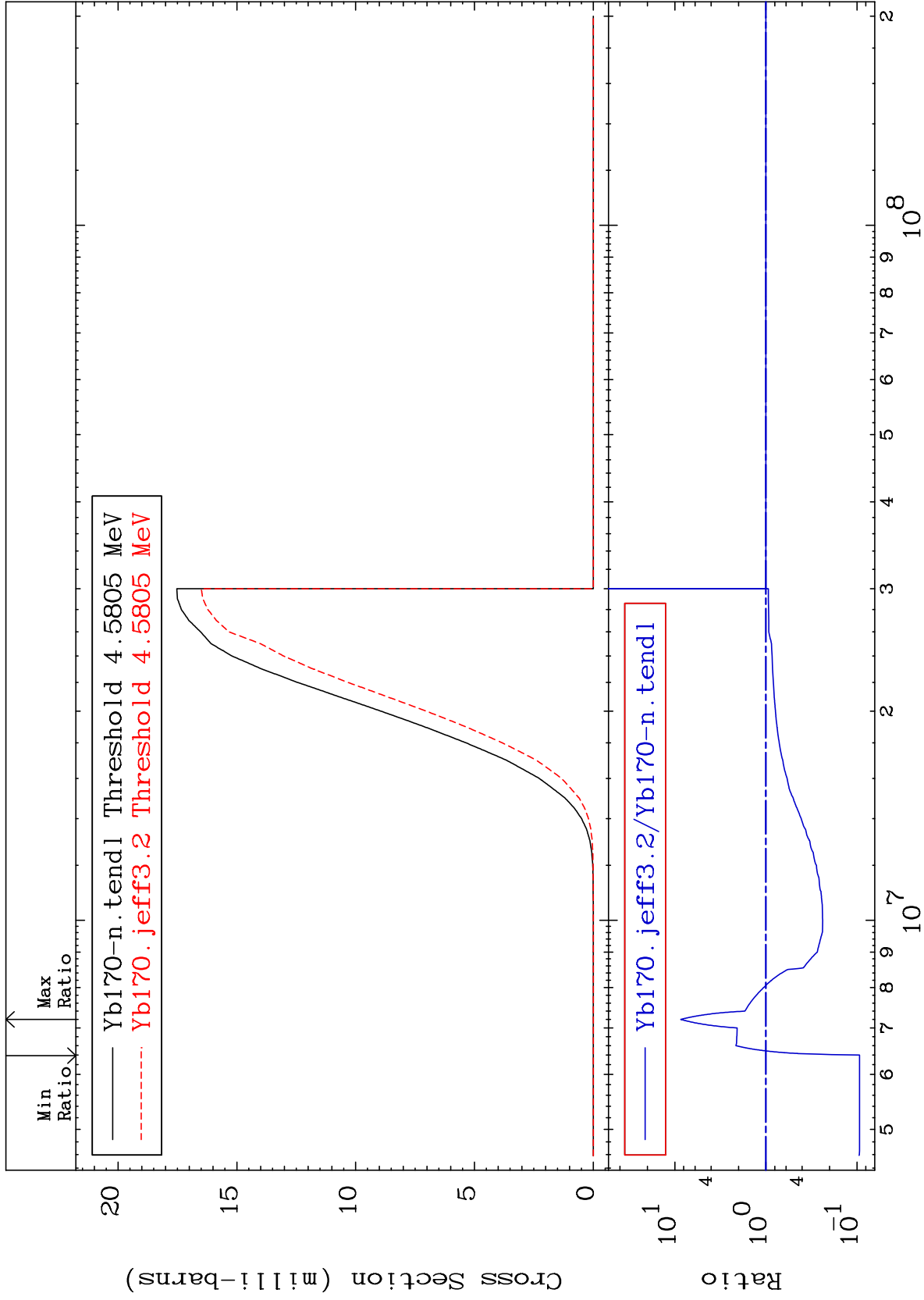
MAT 7031

(n, d)

70-Yb-170

Cross Section

-90.63 To 761.0 %



52

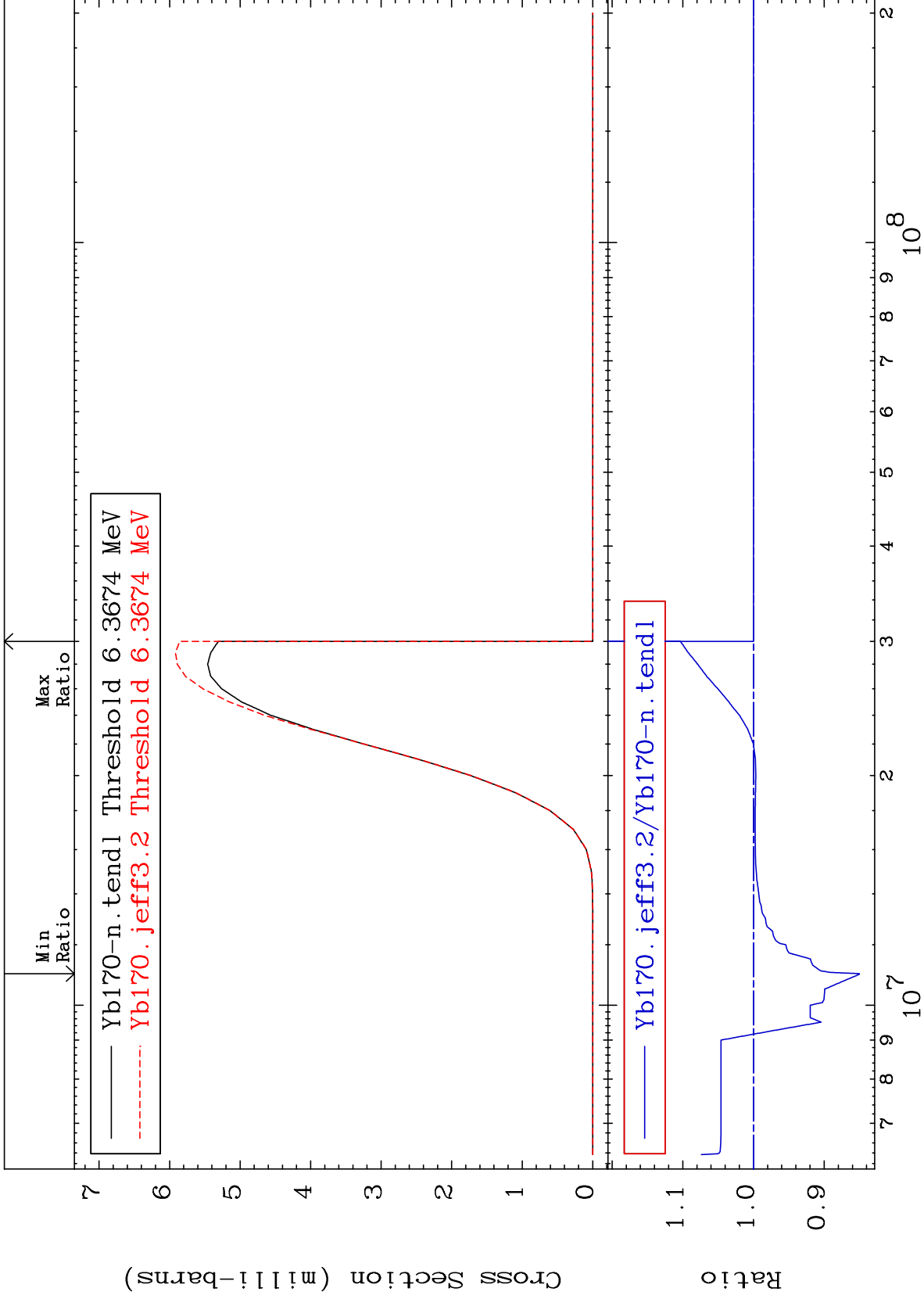
Incident Energy (eV)

70-Yb-170

MAT 7031

70-Yb-170
-14.99 To 10.34 %

(n, t)
Cross Section

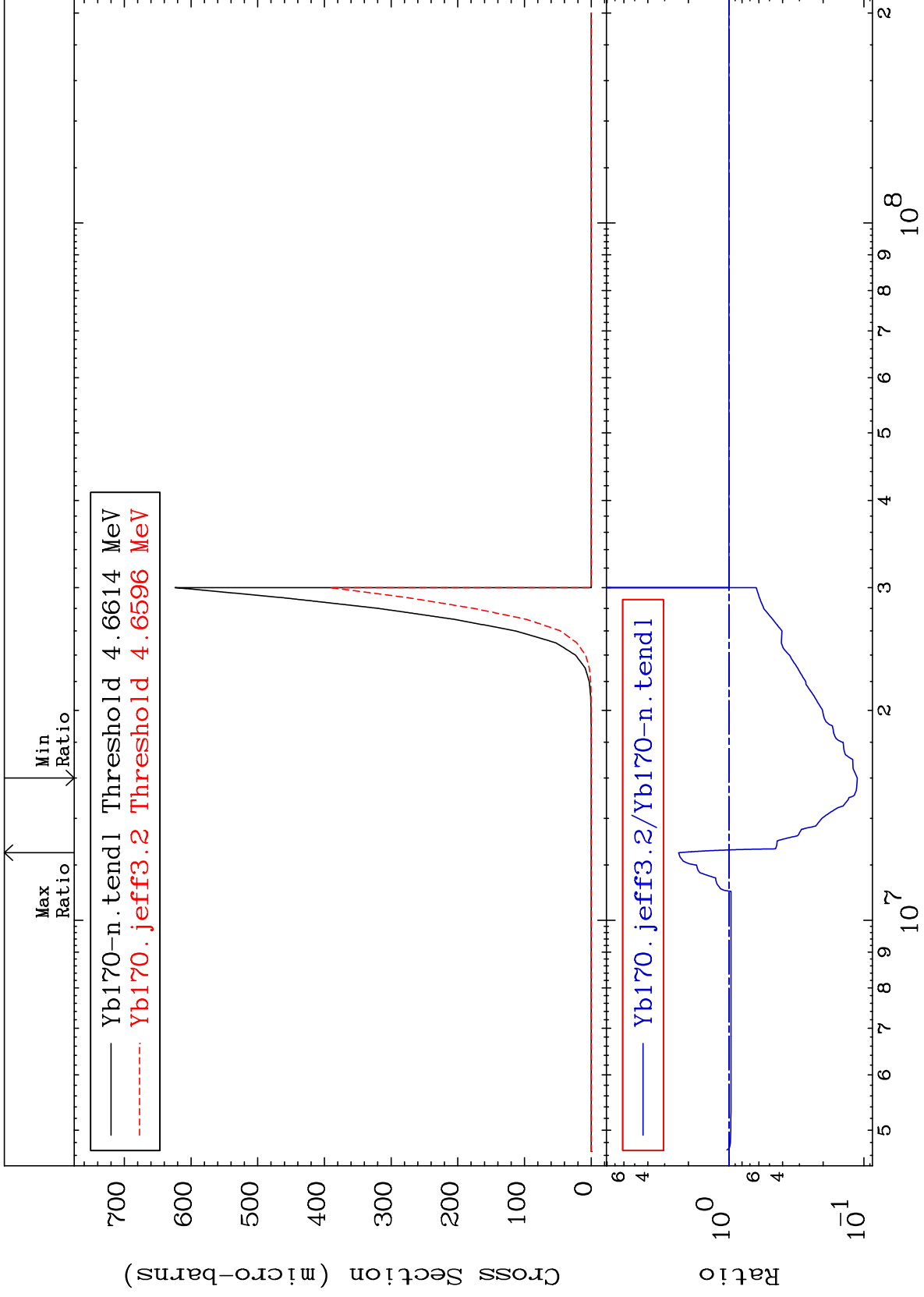


MAT 7031

(n, He-3)

70-Yb-170
-88.81 To 136.0 %

Cross Section



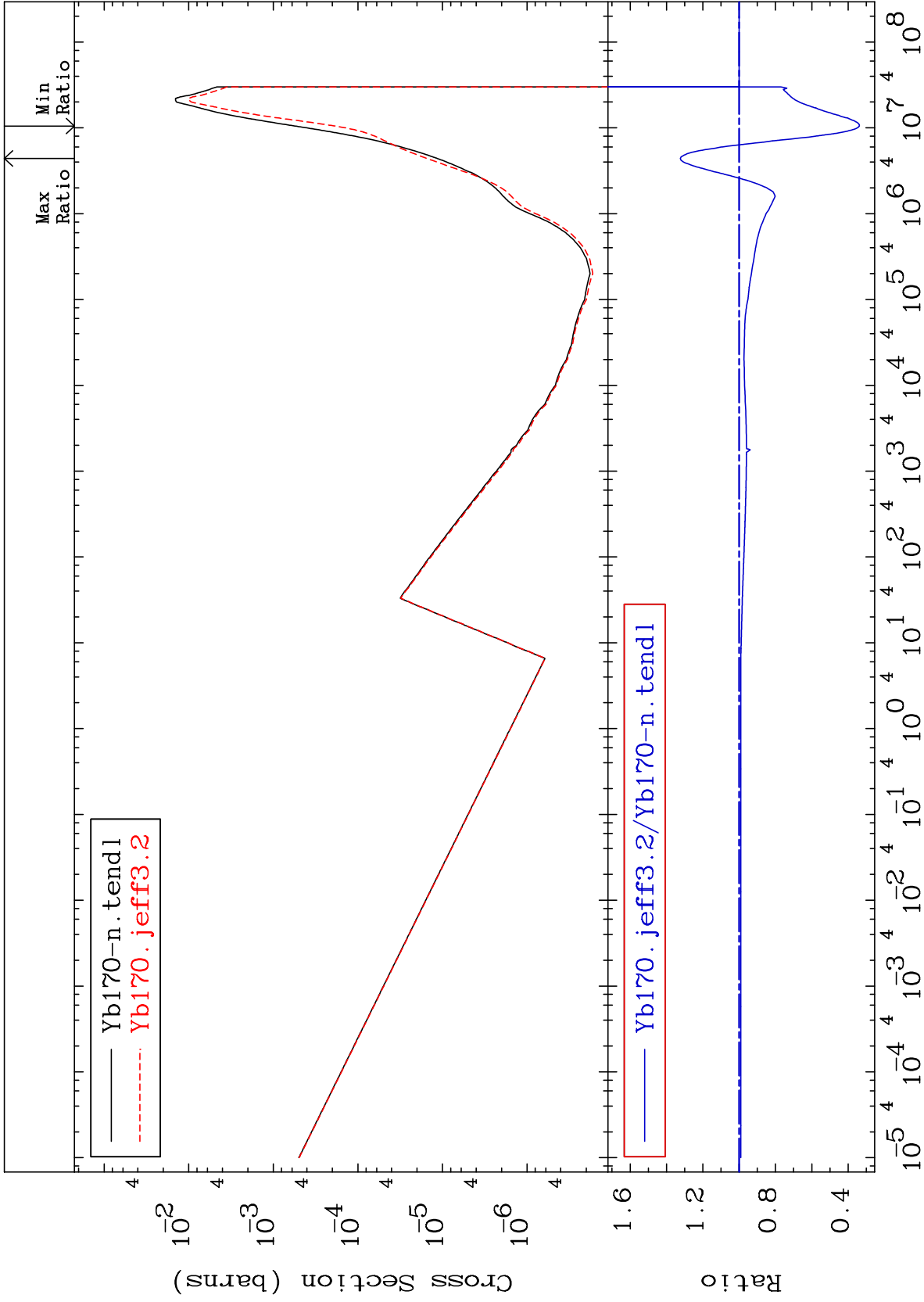
MAT 7031

(n, α)

Cross Section

70-Yb-170

-66.22 To 32.37 %



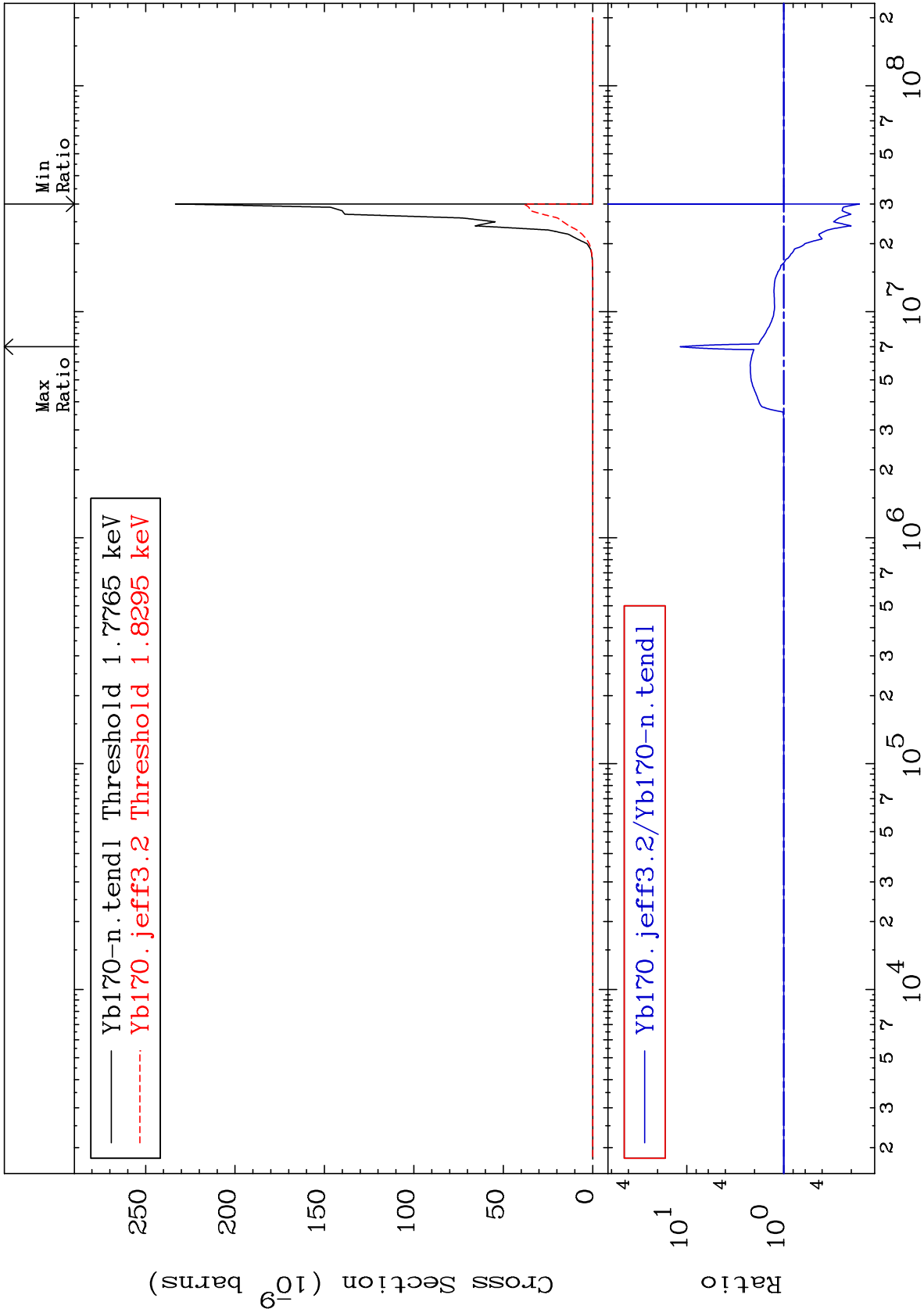
MAT 7031

(n,2α)

Cross Section

70-Yb-170

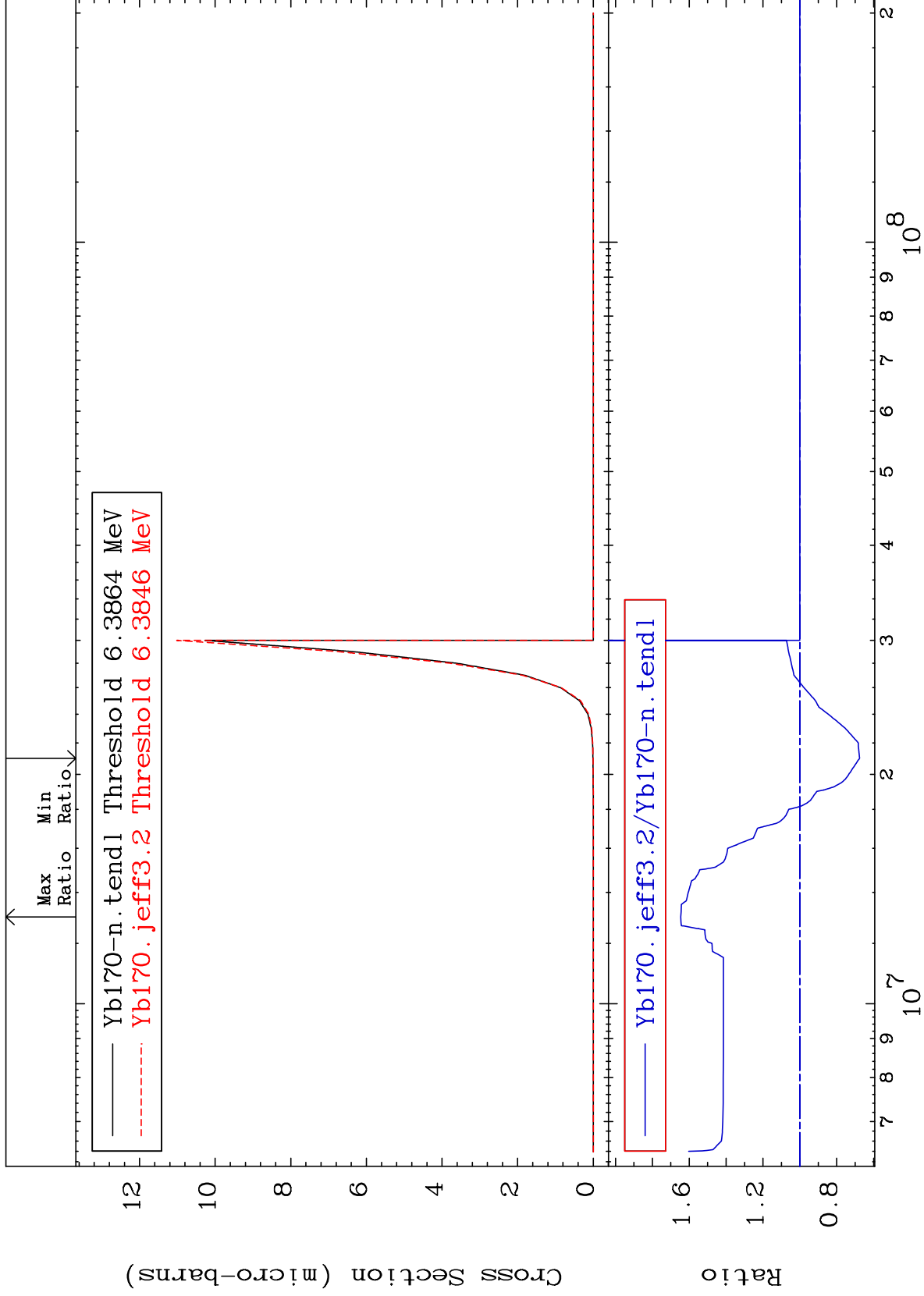
-83.50 To 1065. %



MAT 7031

(n,2p)
Cross Section

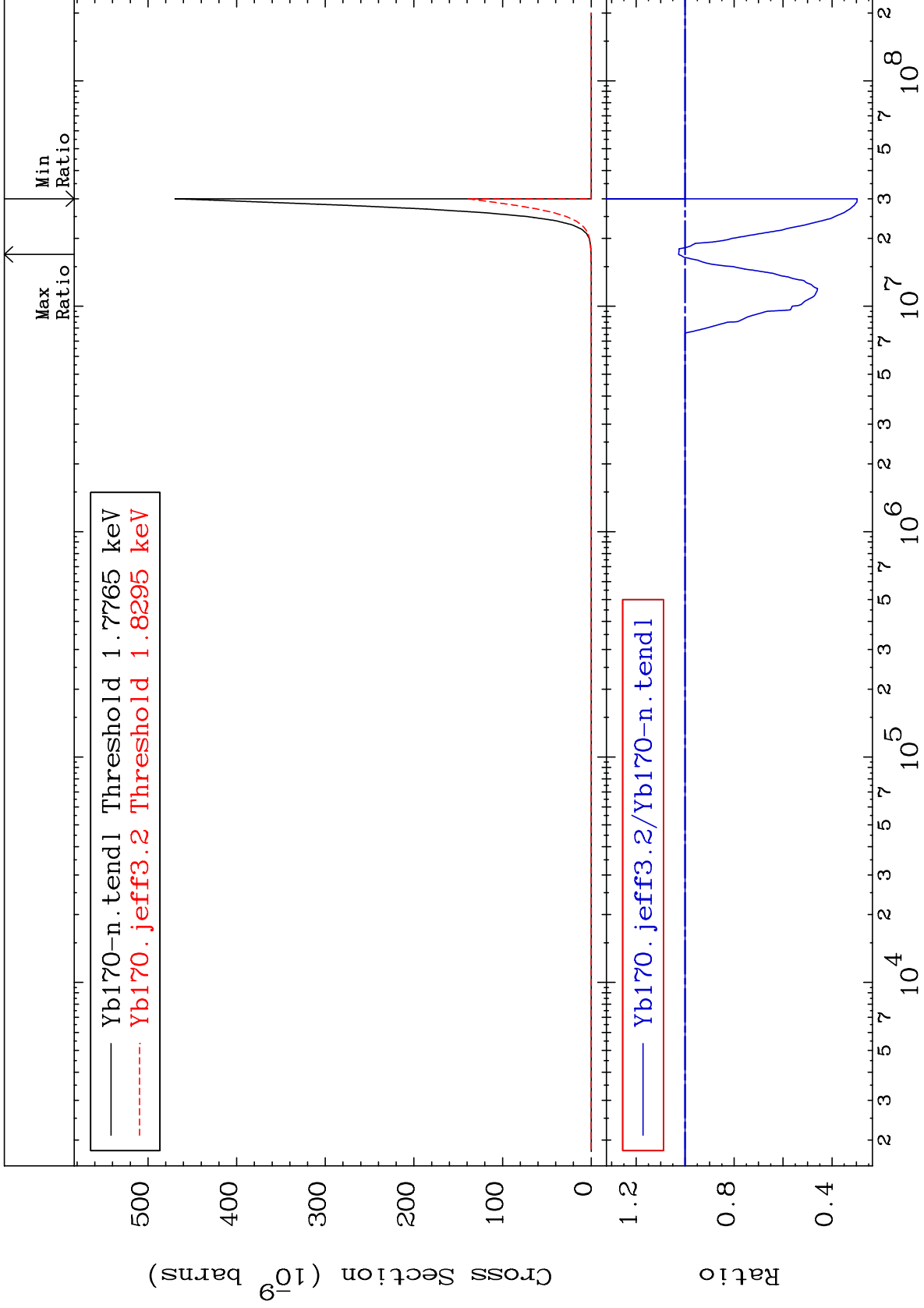
70-Yb-170
-32.38 To 64.58 %



MAT 7031

(n,p) α
Cross Section

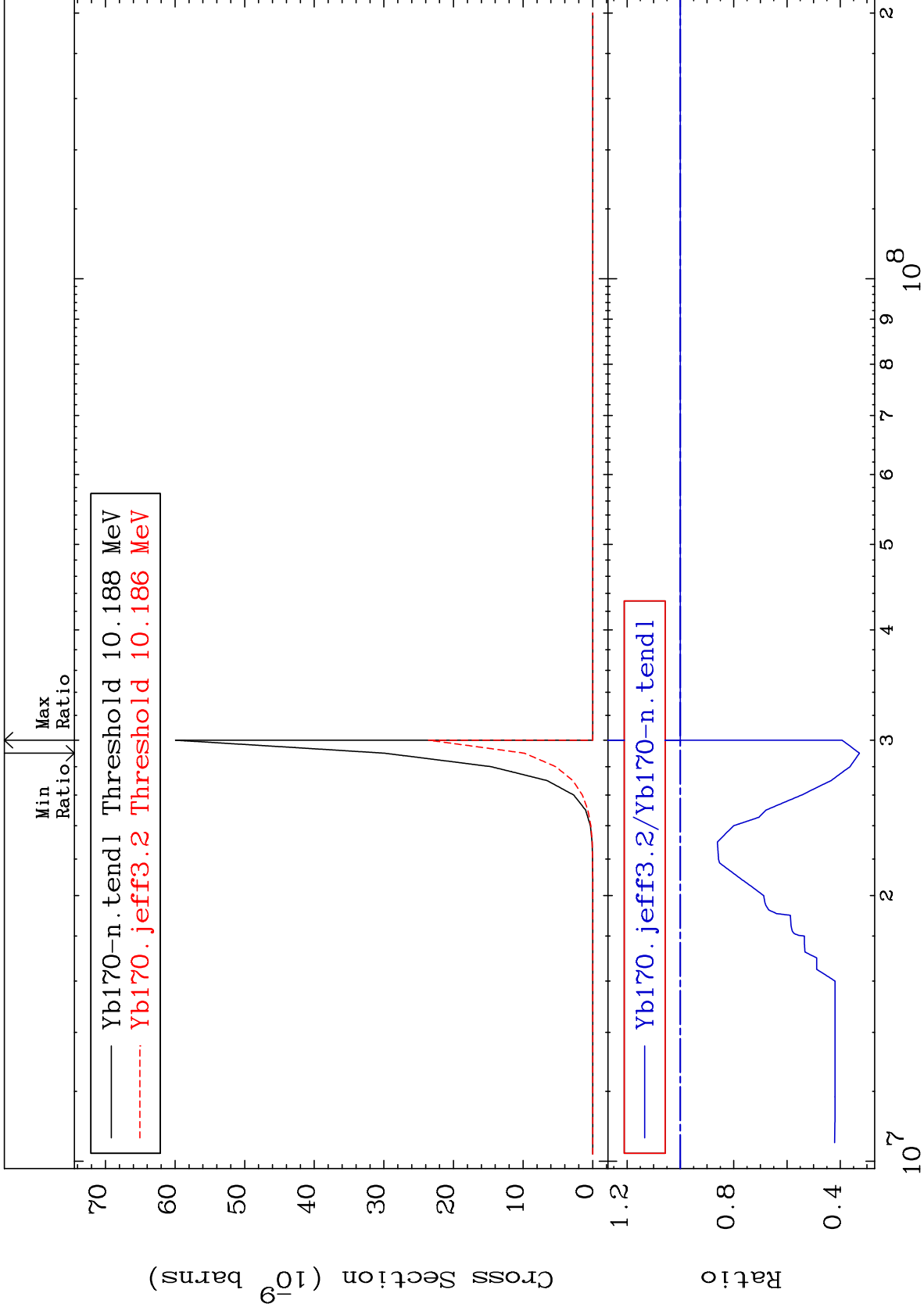
70-Yb-170
-70.32 To 2.639 %



MAT 7031

(n, p) d
Cross Section

⁷⁰Yb-¹⁷⁰
-67.18 To 0.000 %



59

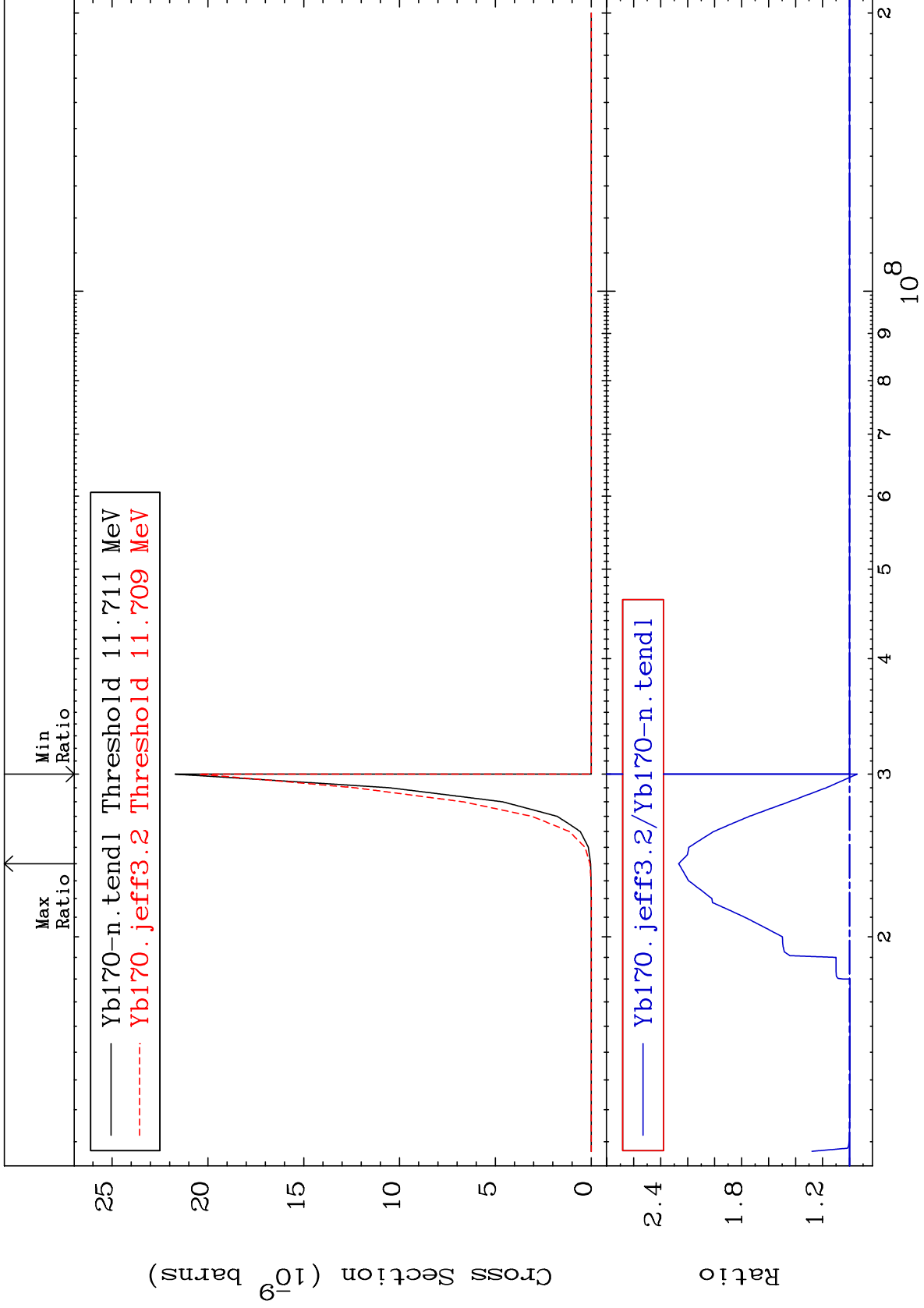
Incident Energy (eV)

⁷⁰Yb-¹⁷⁰

MAT 7031

(n, p) t
Cross Section

70-Yb-170
-5.715 To 126.7 %



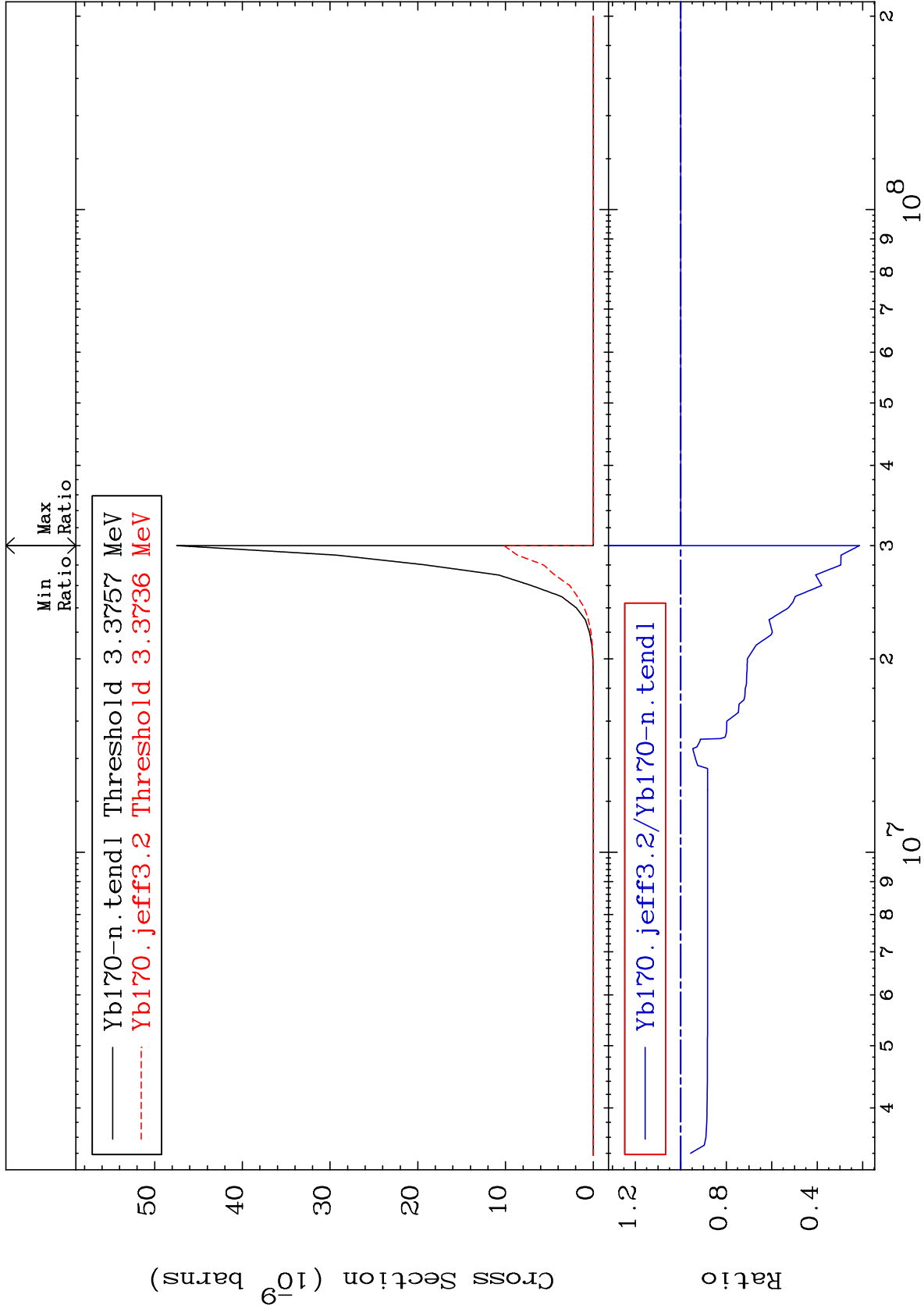
60

Incident Energy (eV)

70-Yb-170

MAT 7031

(n, d) α Cross Section
70-Yb-170
-78.59 To 0.000 %



61

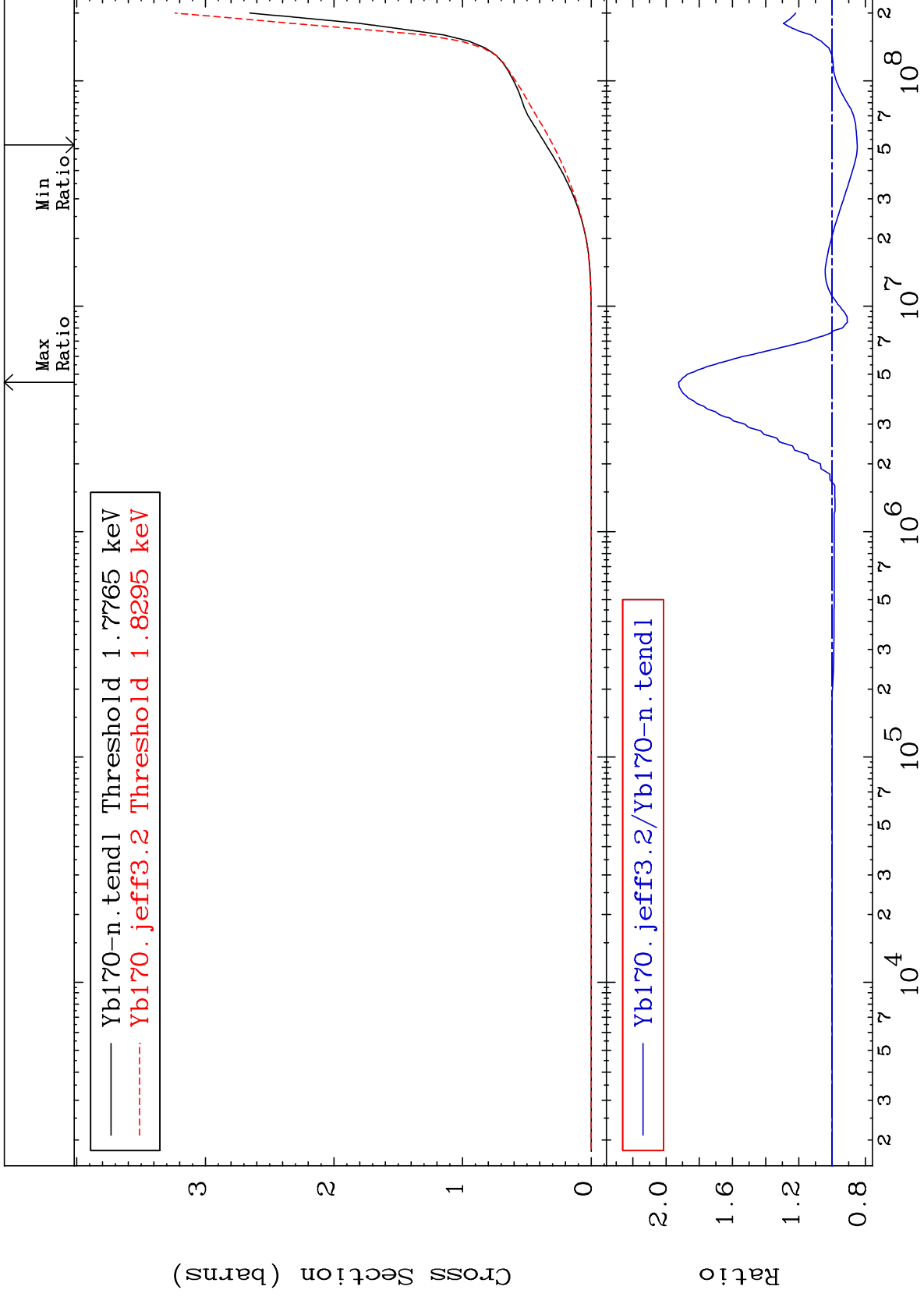
Incident Energy (eV)

70-Yb-170

MAT 7031

Hydrogen Production Cross Section

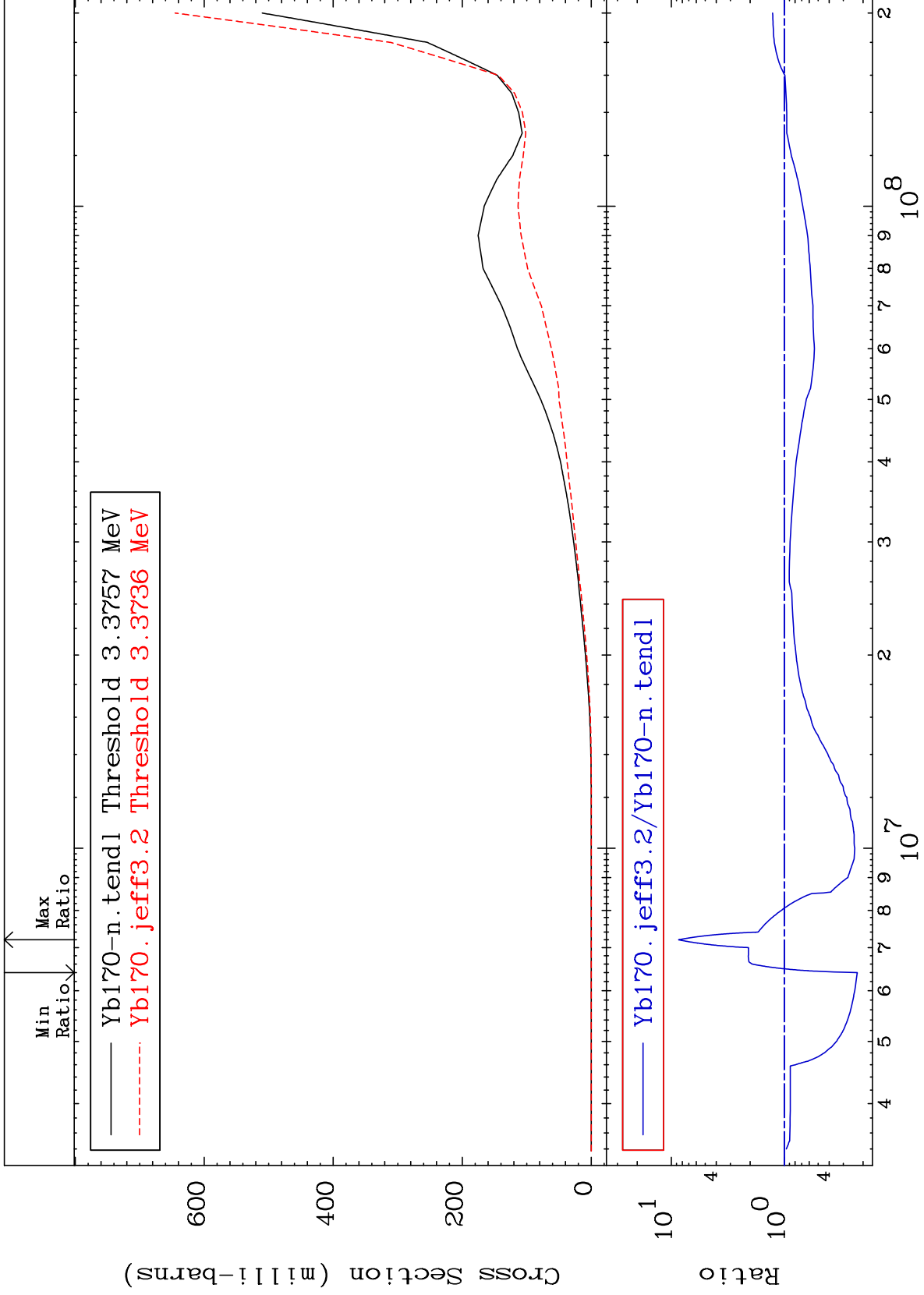
70-Yb-170
-15.12 To 92.40 %



MAT 7031

Deuterium Production
Cross Section

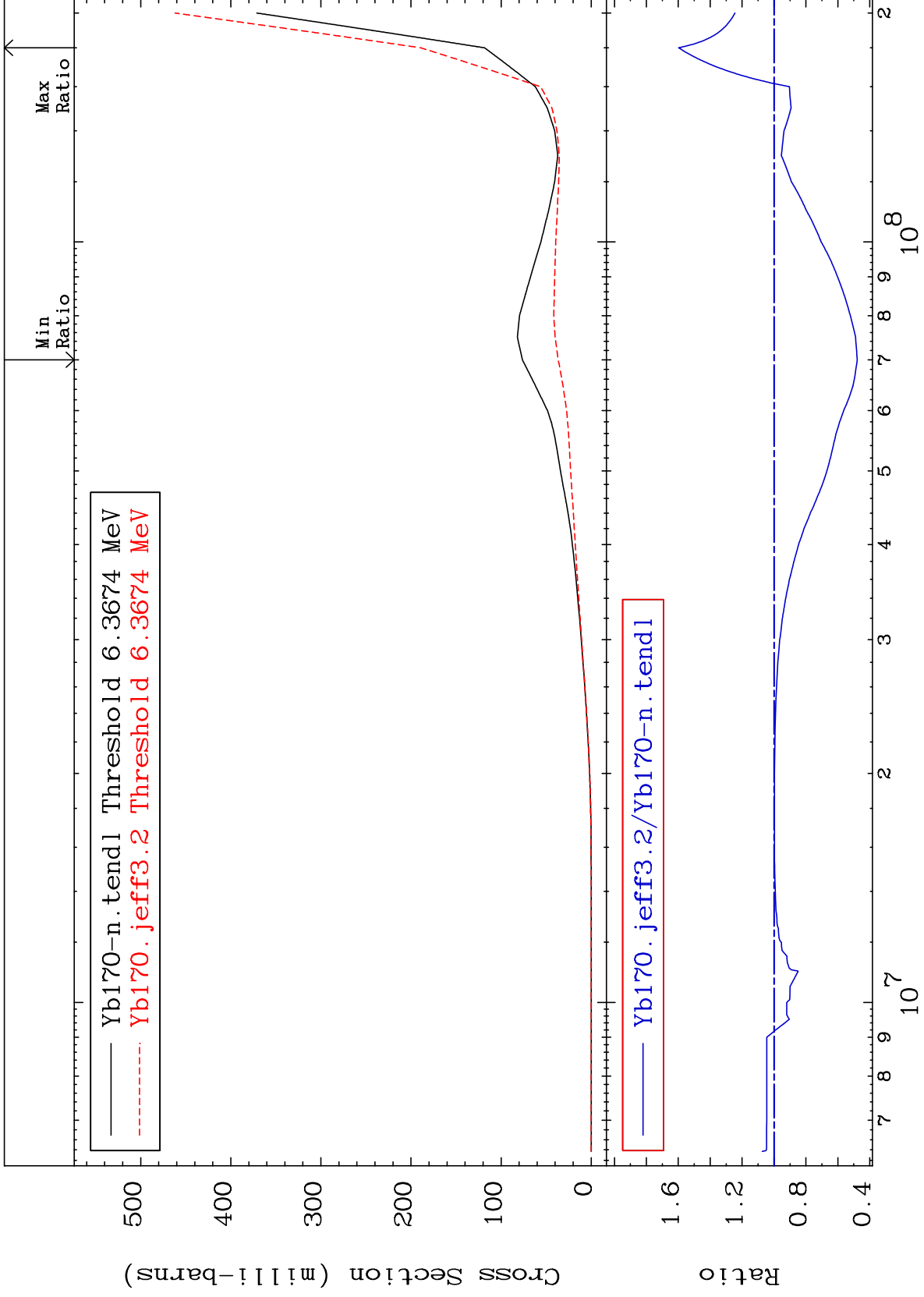
⁷⁰Yb-¹⁷⁰
-77.46 To 760.8 %



MAT 7031

Tritium Production
Cross Section

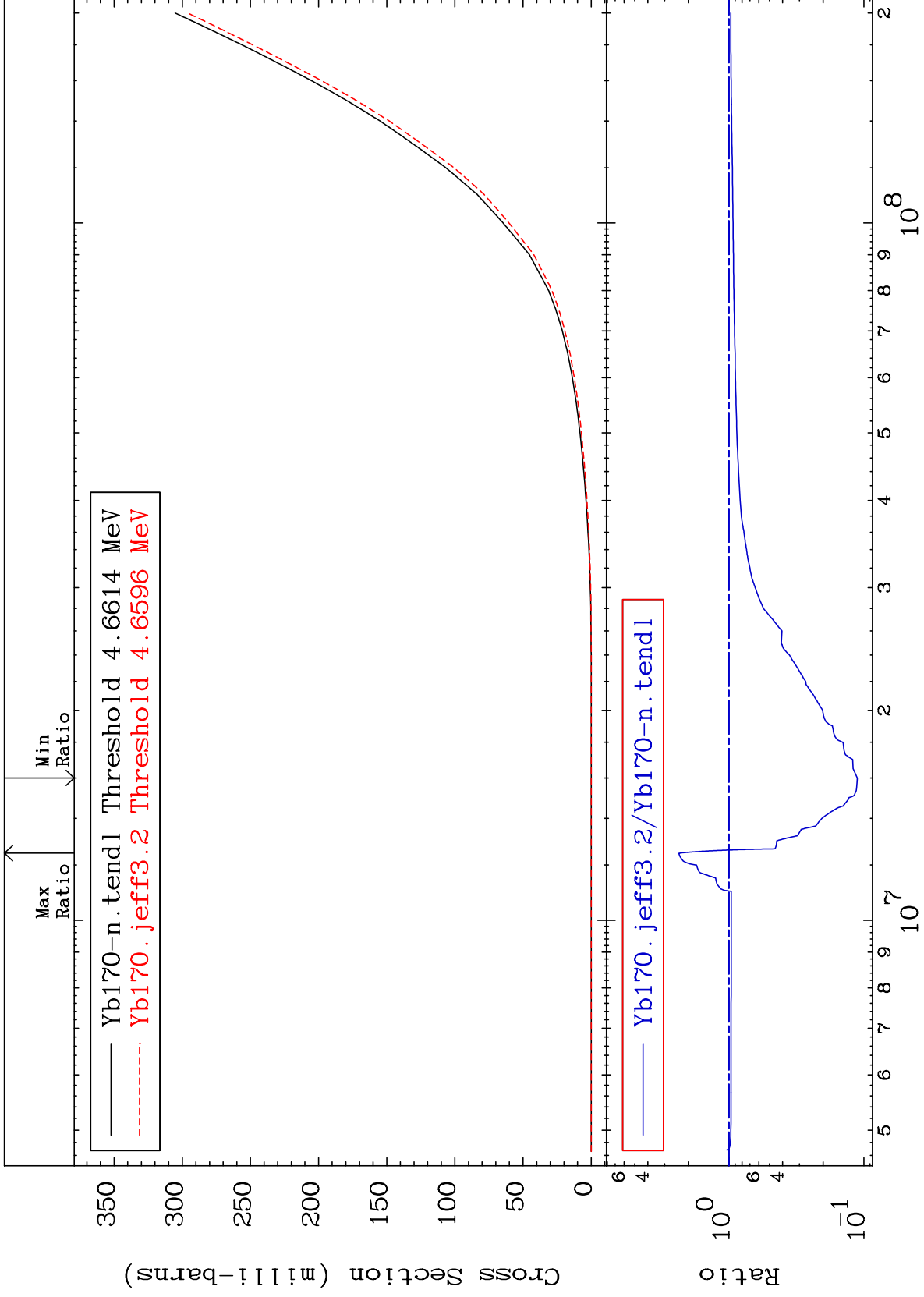
70-Yb-170
-52.16 To 59.78 %



MAT 7031

He-3 Production
Cross Section

⁷⁰Yb-¹⁷⁰
-88.81 To 136.4 %



65

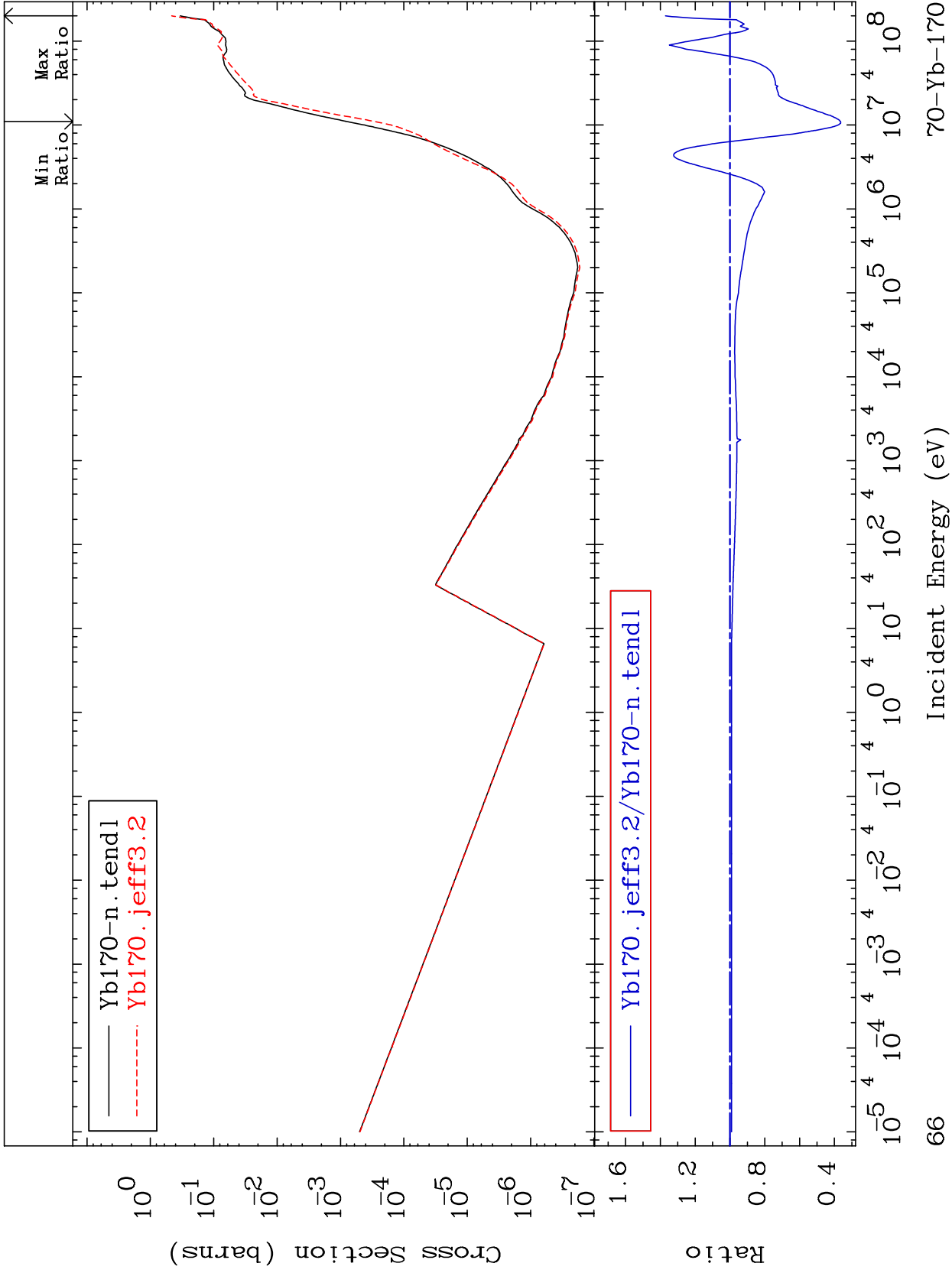
Incident Energy (eV)

⁷⁰Yb-¹⁷⁰

MAT 7031

He-4 Production
Cross Section

70-Yb-170
-63.60 To 37.03 %



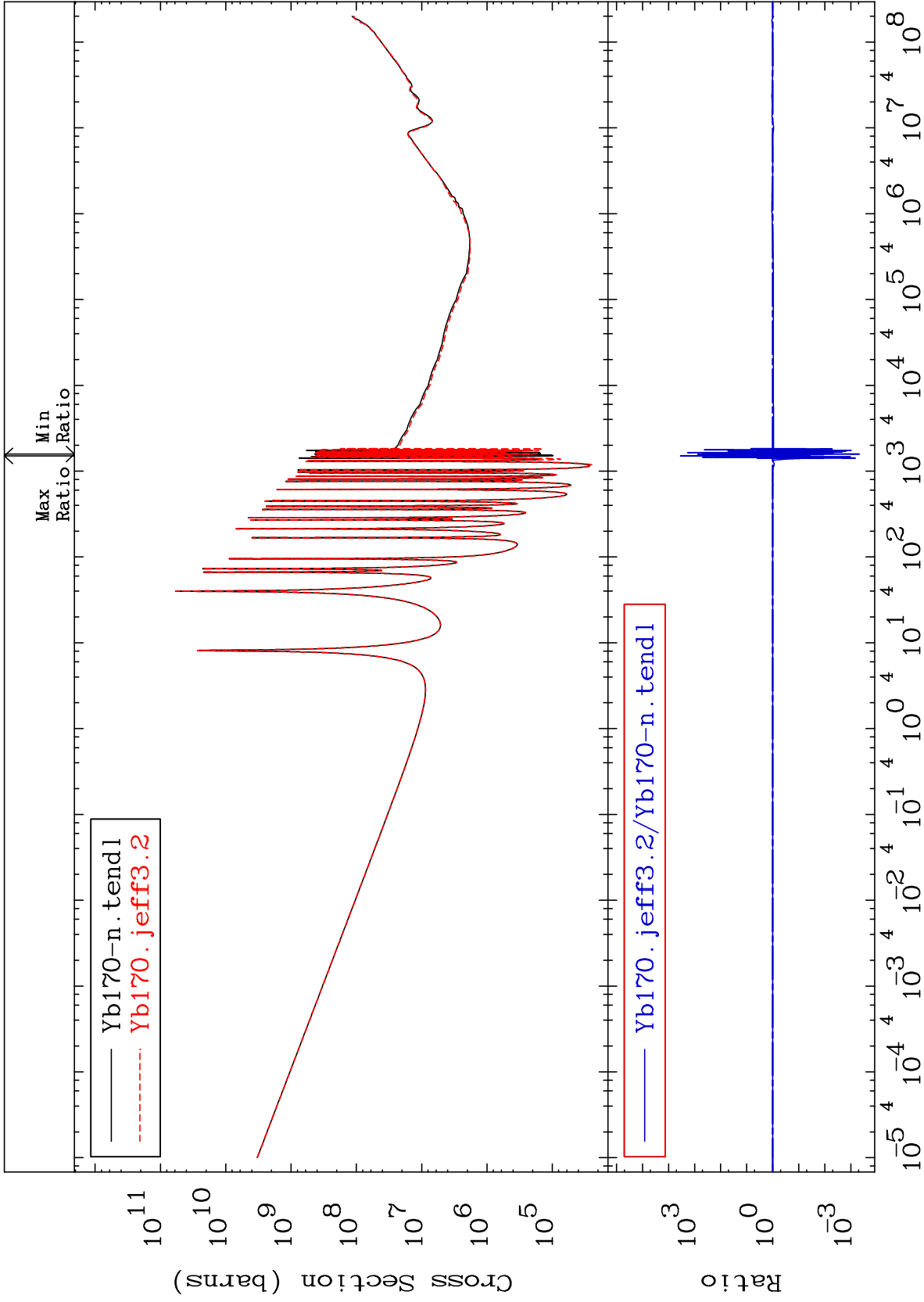
MAT 7031

Kerma total (eV-barns)

70-Yb-170

Cross Section

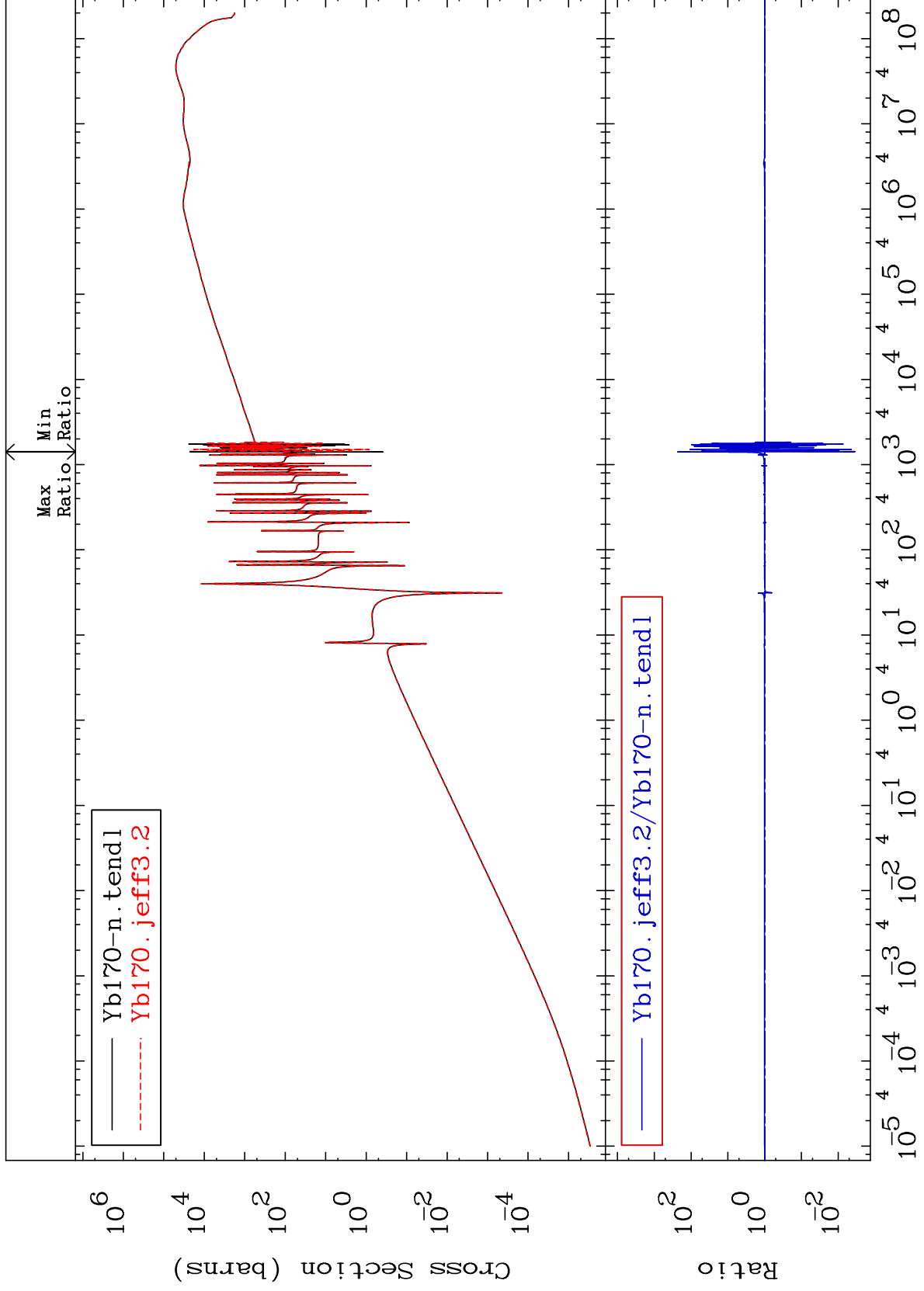
-99.95 To 9999. %



MAT 7031

Kerma elastic
Cross Section

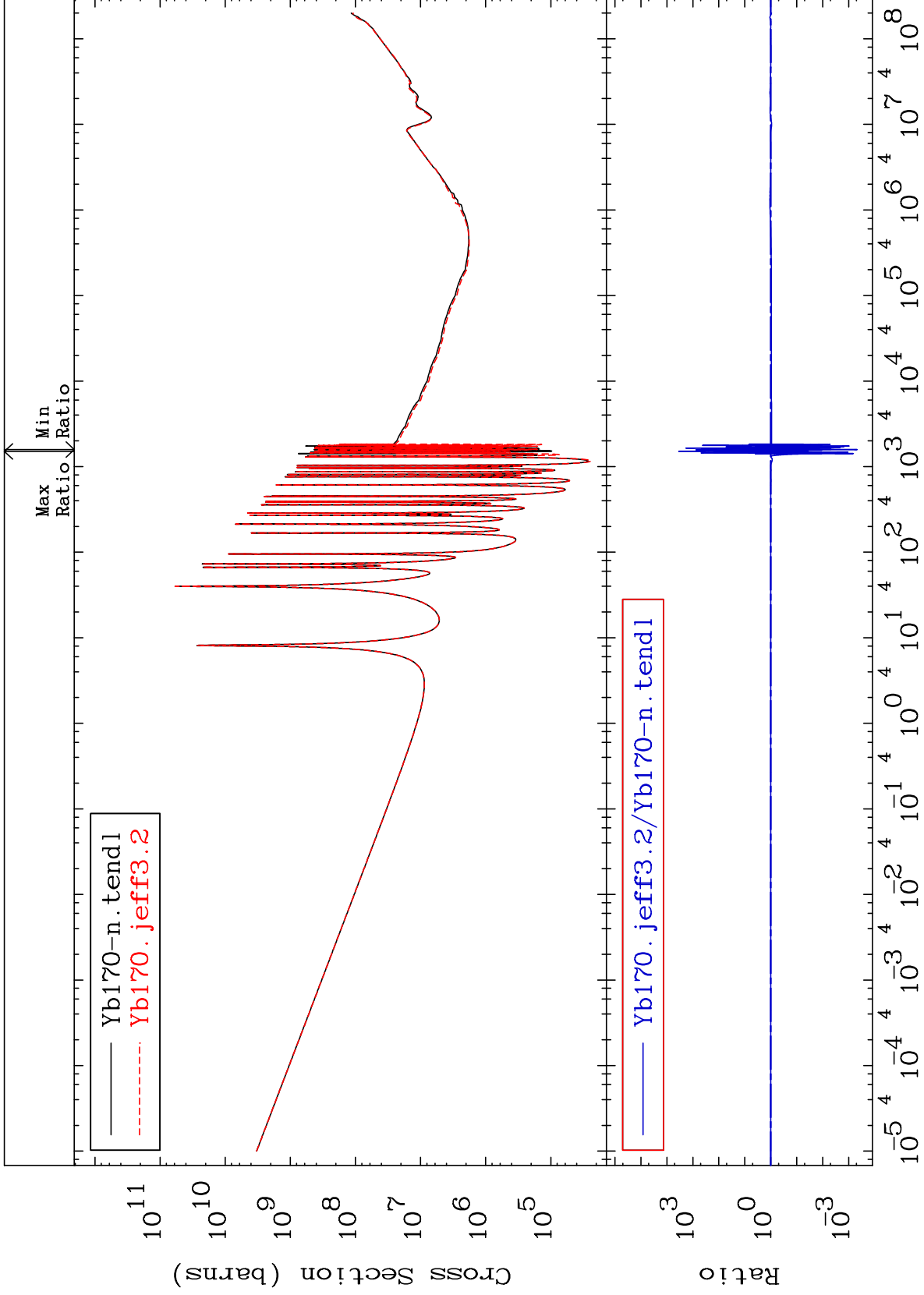
70-Yb-170
-99.65 To 9999. %



MAT 7031

Kerma non-elastic (all but mt2)
Cross Section

70-Yb-170
-99.95 To 9999. %



69

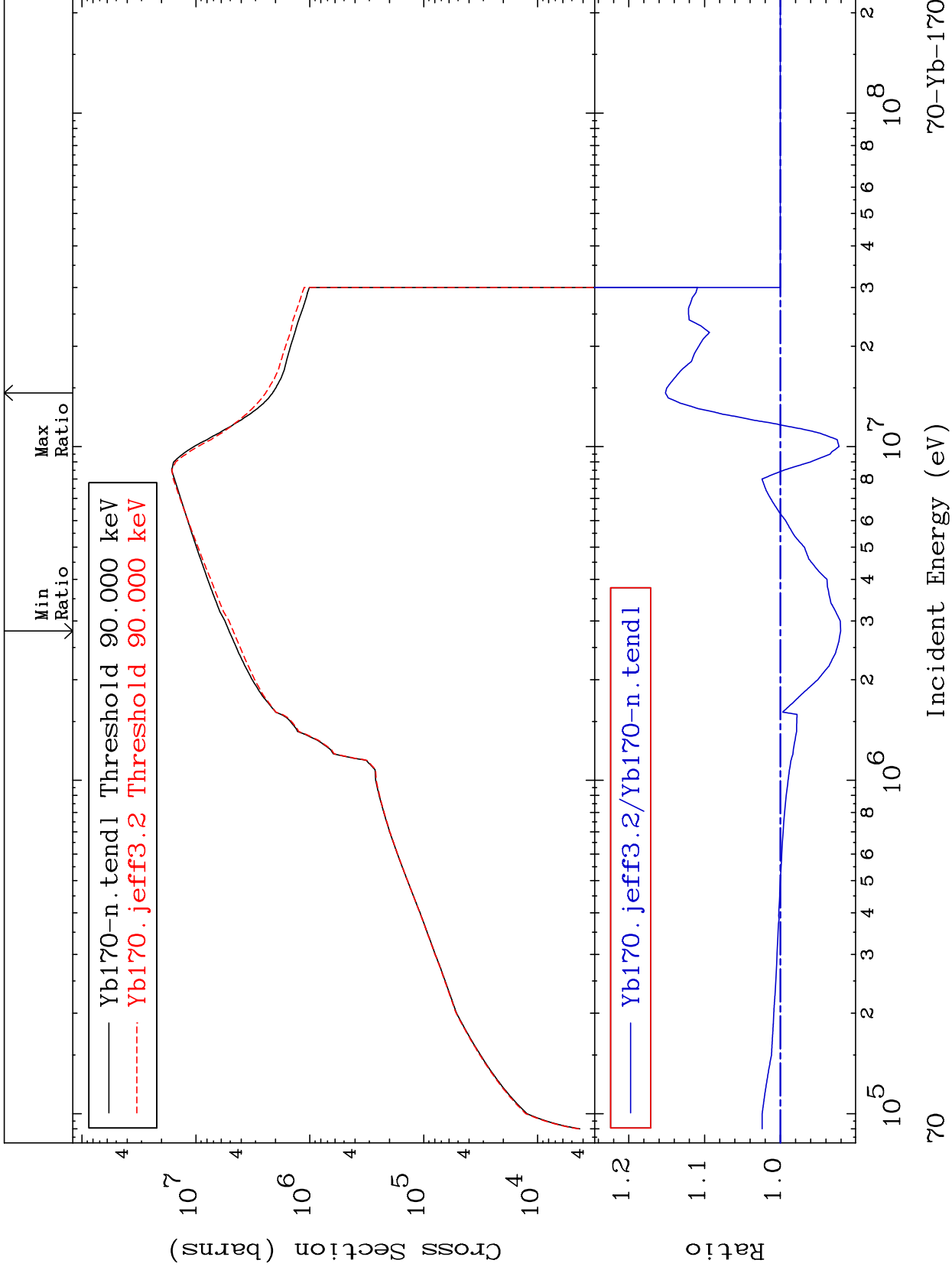
Incident Energy (eV)

70-Yb-170

MAT 7031

Kerma inelastic (mt51-91)
Cross Section

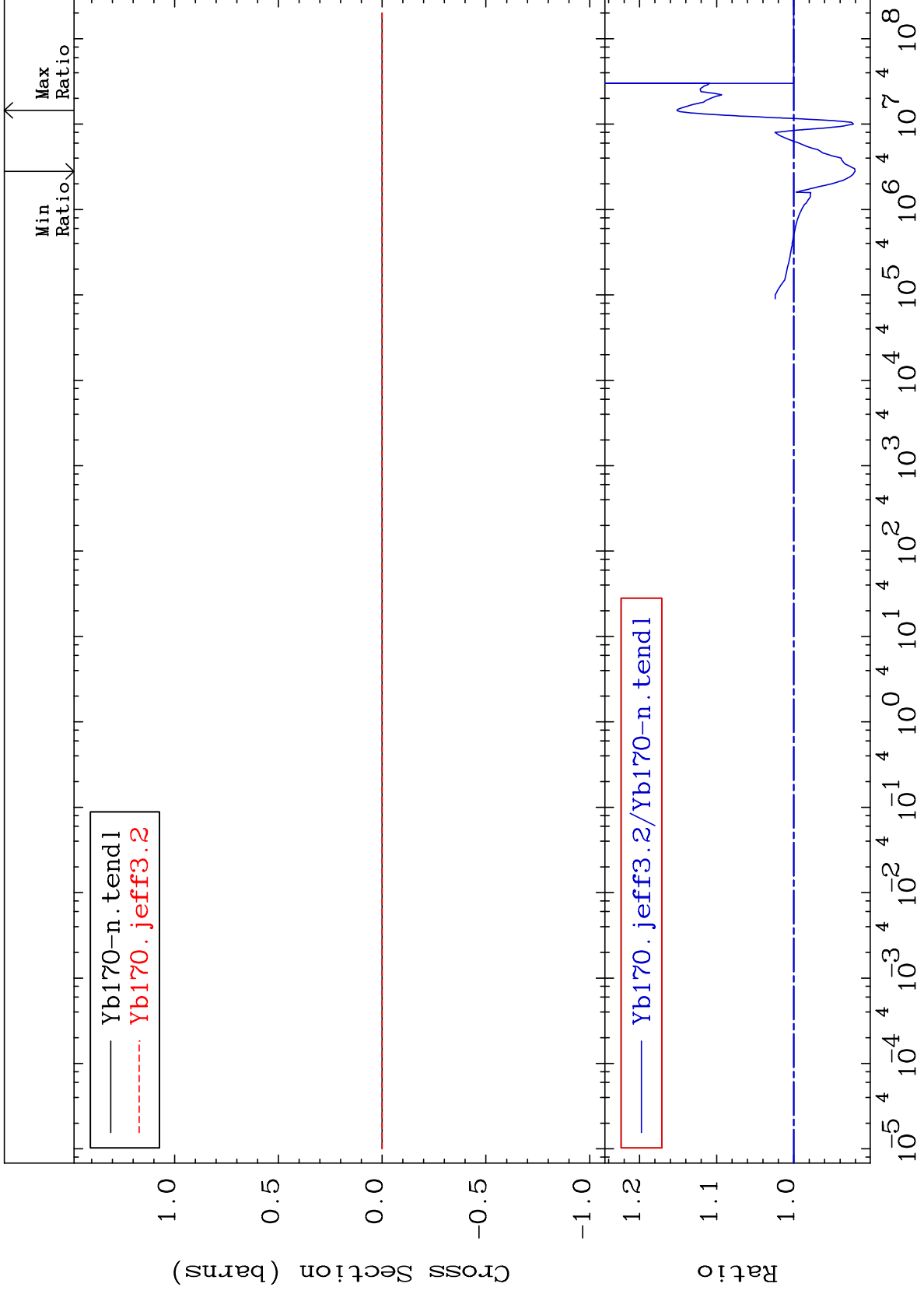
70-Yb-170
-7.949 To 15.15 %



MAT 7031

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

70-Yb-170
-7.949 To 15.15 %



71

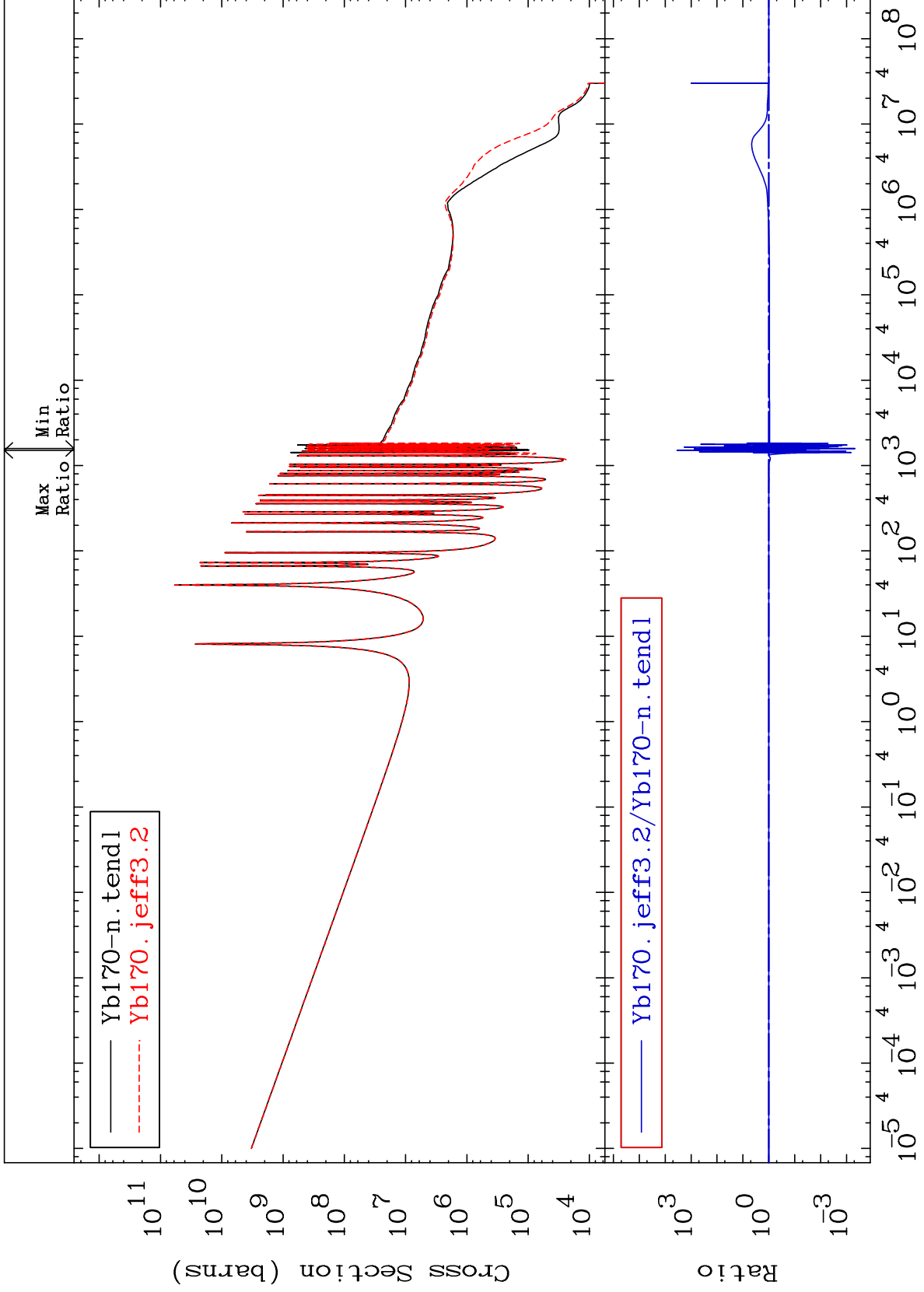
Incident Energy (eV)

70-Yb-170

MAT 7031

Kerma capture (mt102)
Cross Section

70-Yb-170
-99.95 To 9999. %



72

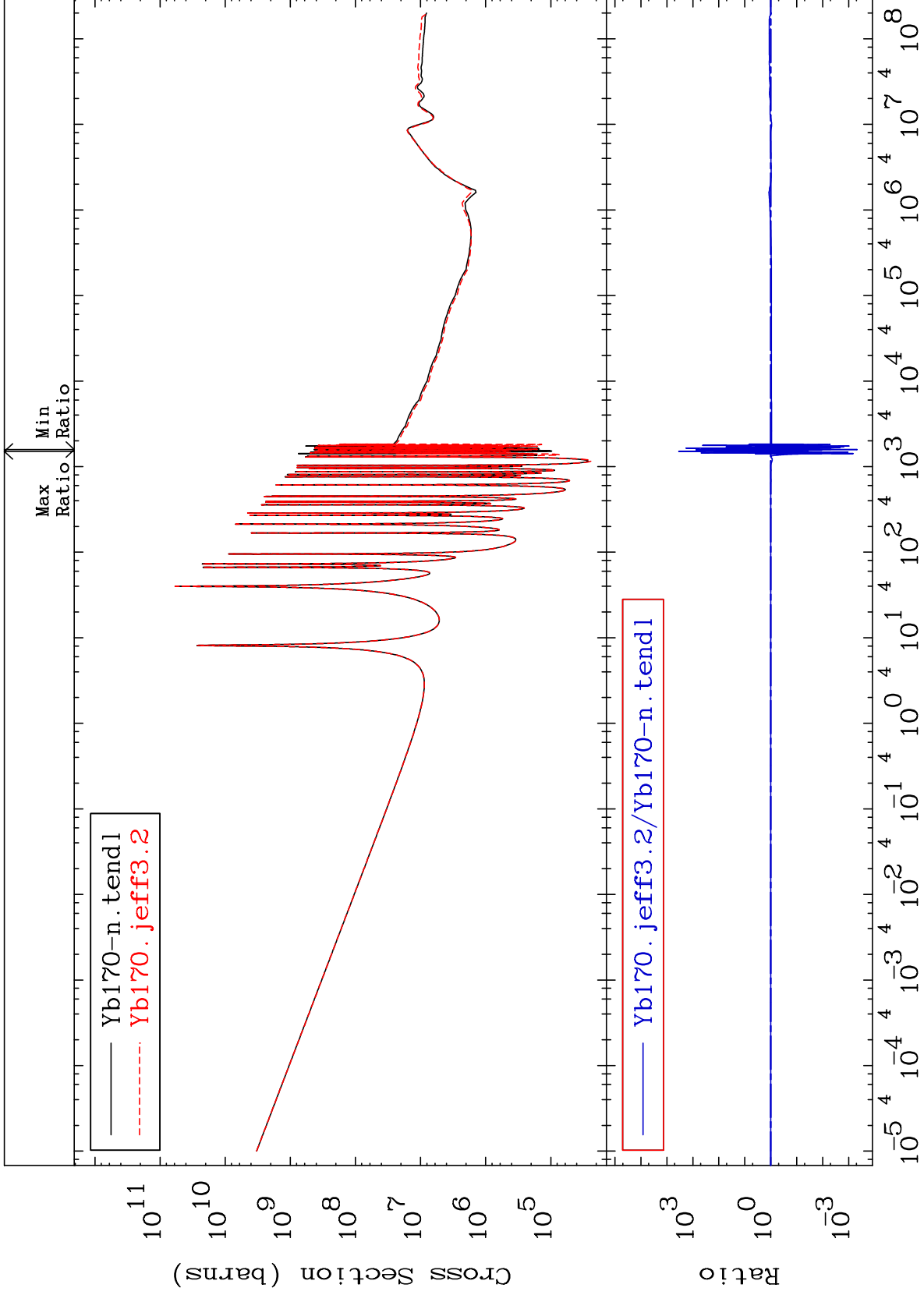
Incident Energy (eV)

70-Yb-170

MAT 7031

Total photon (eV-barns)
Cross Section

70-Yb-170
-99.95 To 9999. %



73

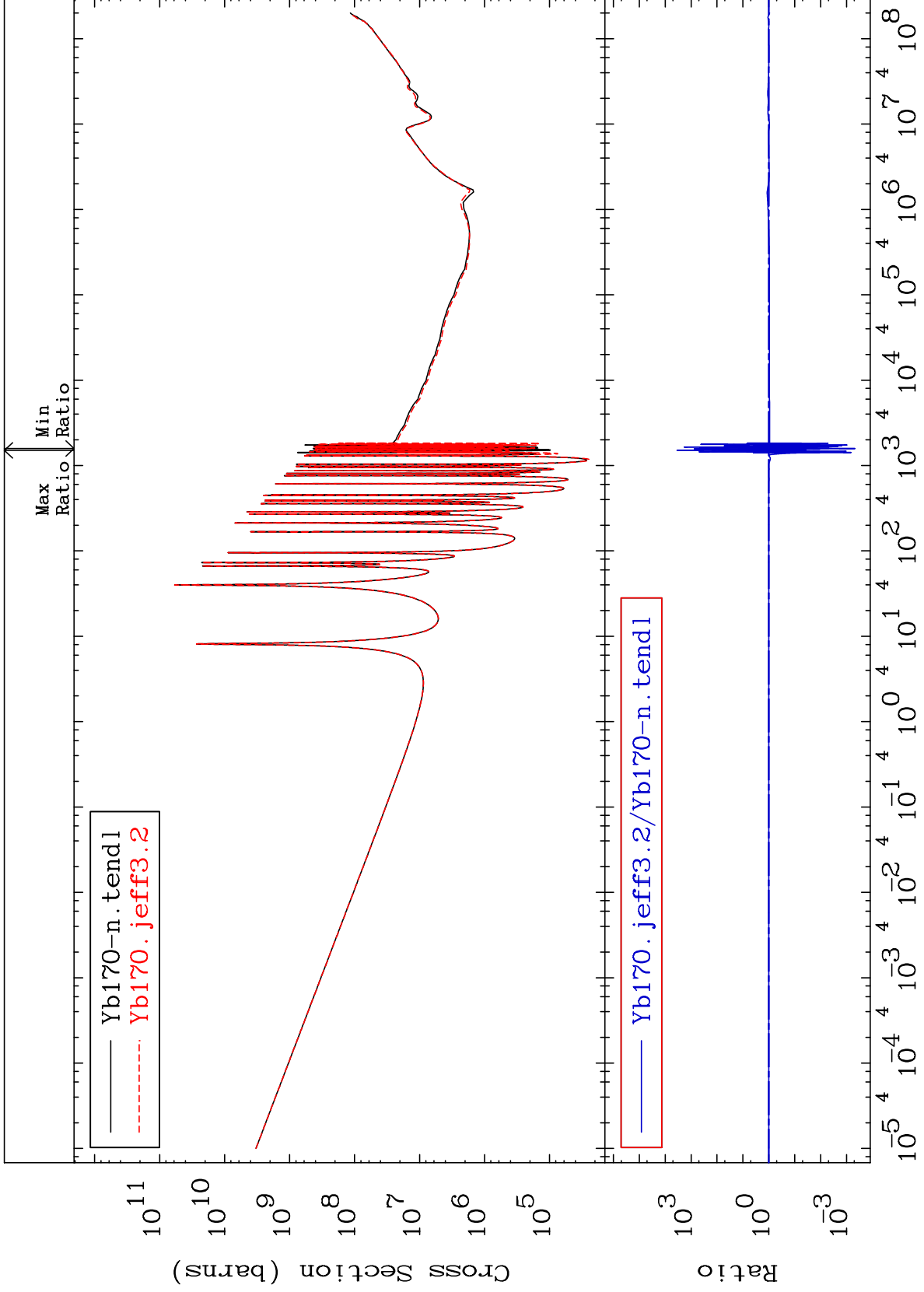
Incident Energy (eV)

70-Yb-170

MAT 7031

Total kinematic kerma (high limit)
Cross Section

70-Yb-170
-99.95 To 9999. %



74

Incident Energy (eV)

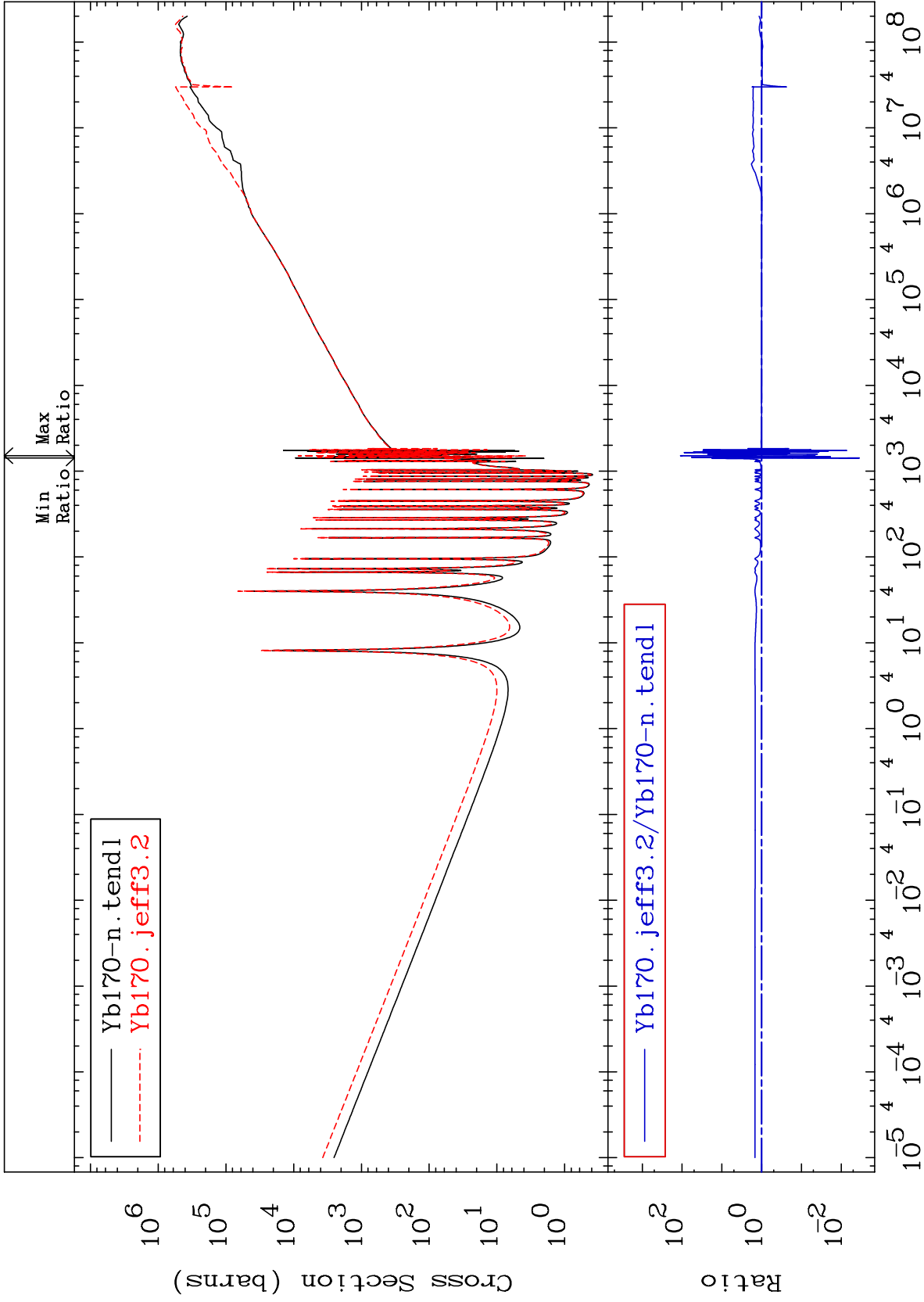
70-Yb-170

MAT 7031

Dpa total (eV-barns)

70-Yb-170

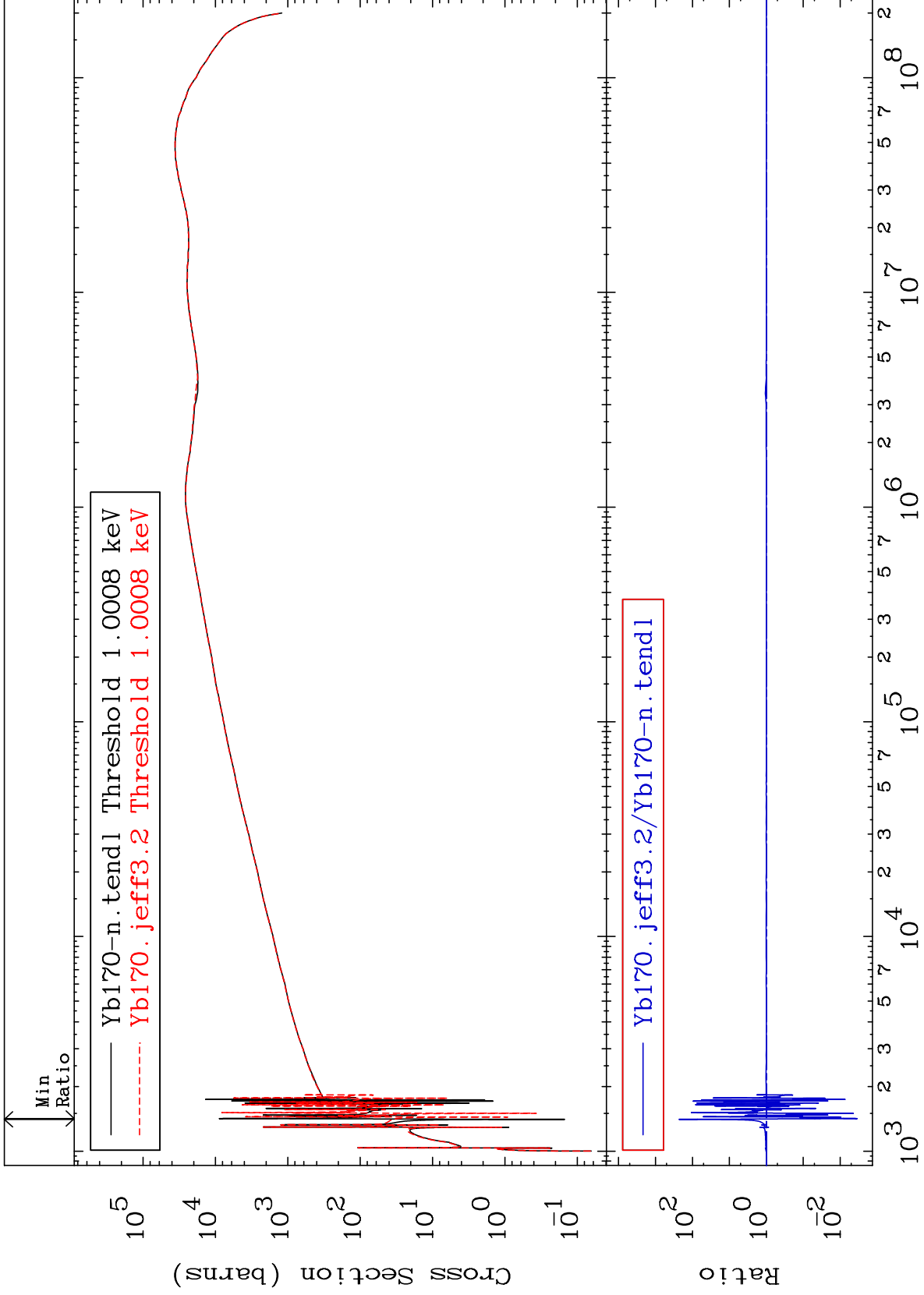
-99.65 To 9999. %



MAT 7031

Dpa elastic (mt2)
Cross Section

70-Yb-170
-99.65 To 9999. %



76

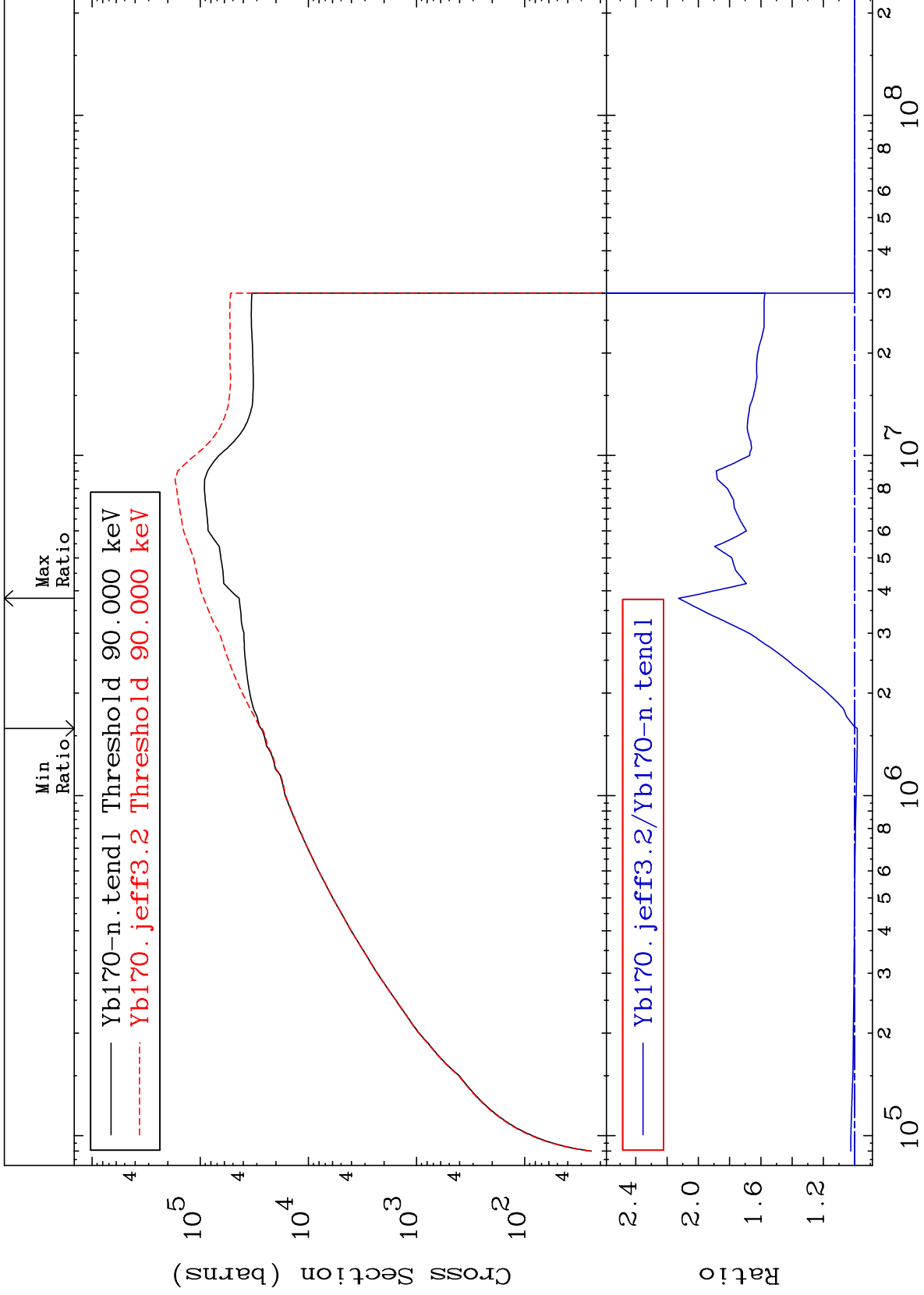
Incident Energy (eV)

70-Yb-170

MAT 7031

Dpa inelastic (mt51-91)
Cross Section

70-Yb-170
-1.678 To 112.6 %



77

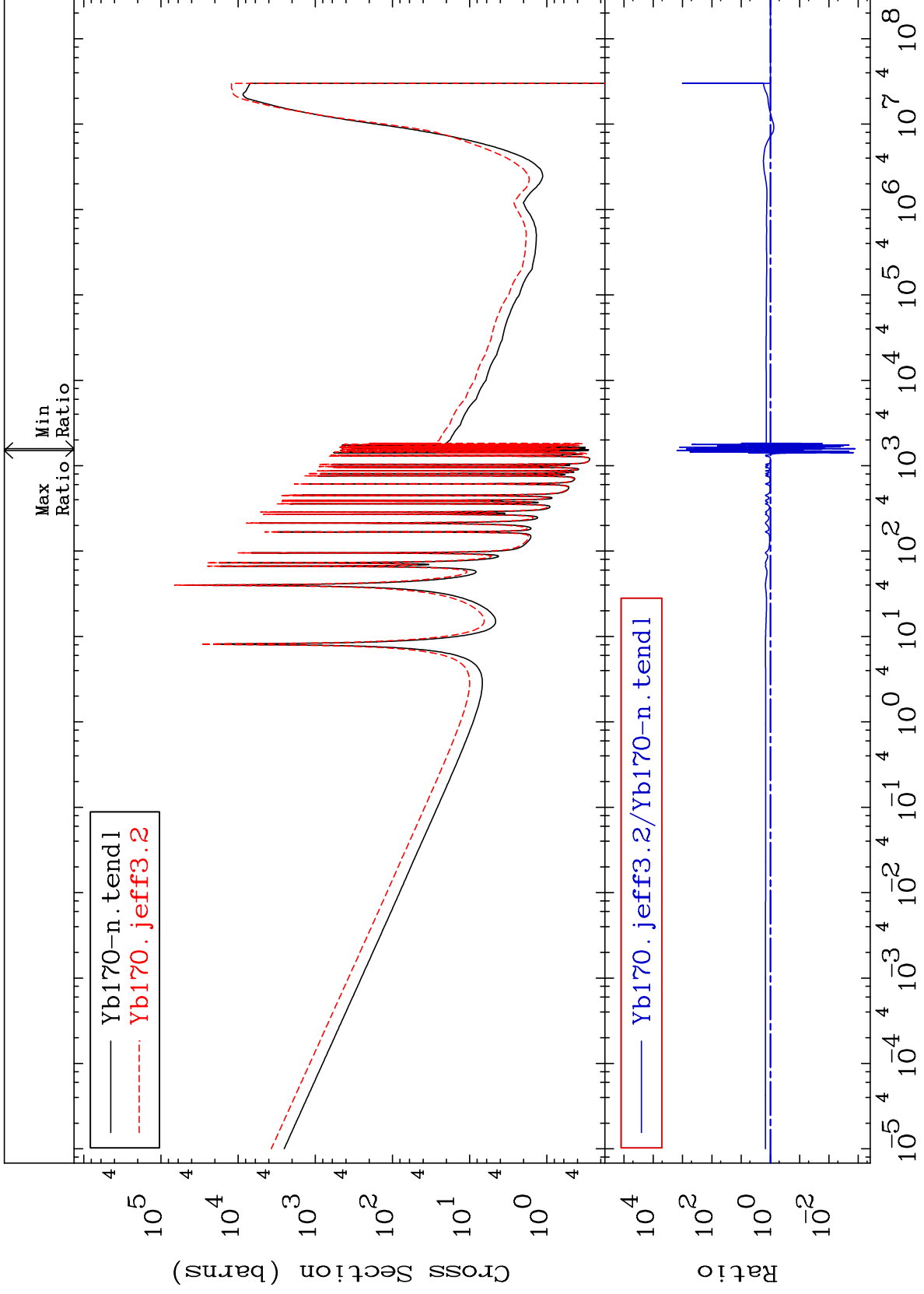
Incident Energy (eV)

70-Yb-170

MAT 7031

Dpa disappearance (mt102 -120)
Cross Section

70-Yb-170
-99.87 To 9999. %

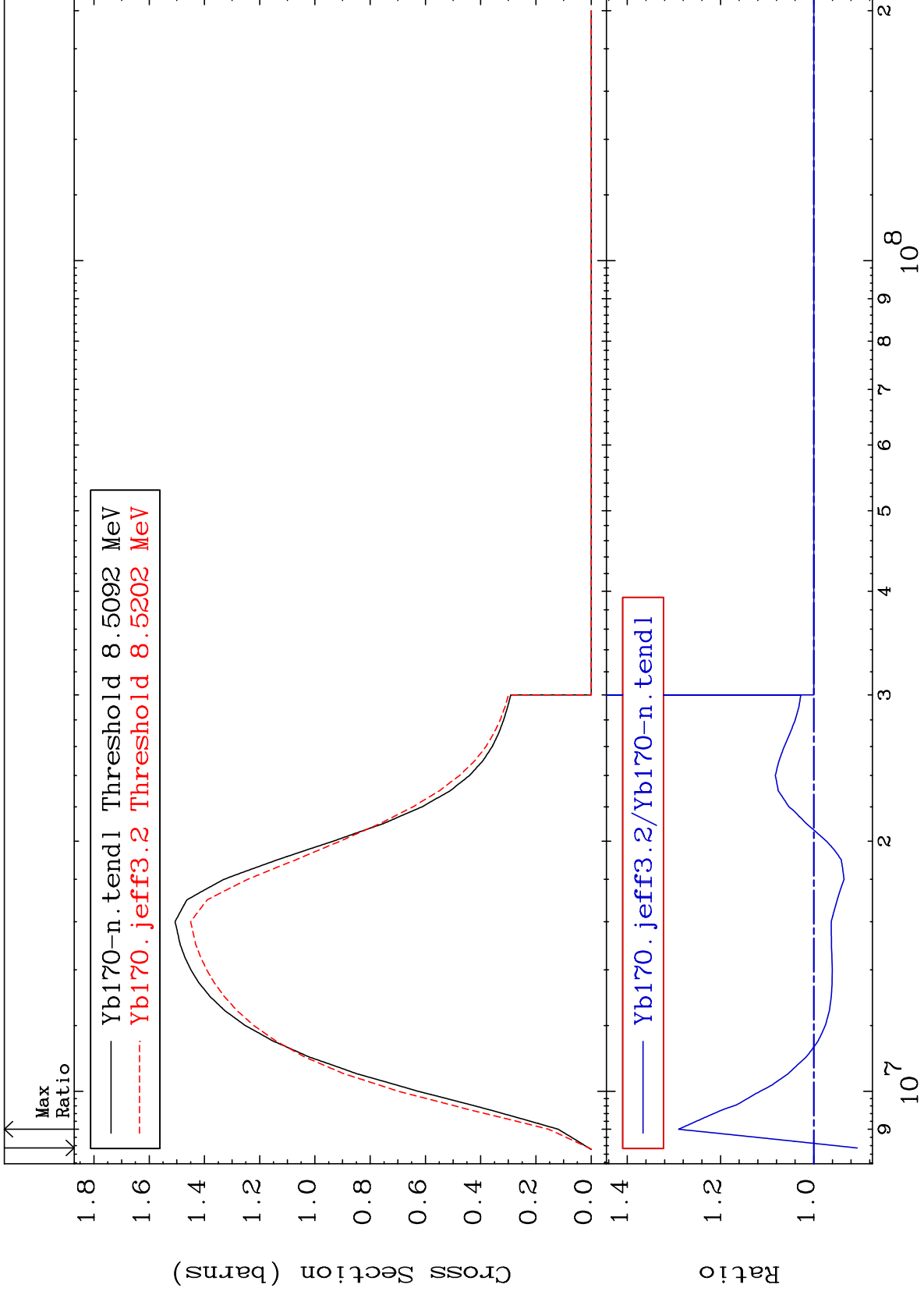


MAT 7031

(n,2n):70-Yb-169g

70-Yb-170

Radionuclide Production Cross Section -9.322 To 28.99 %



79

Incident Energy (eV)

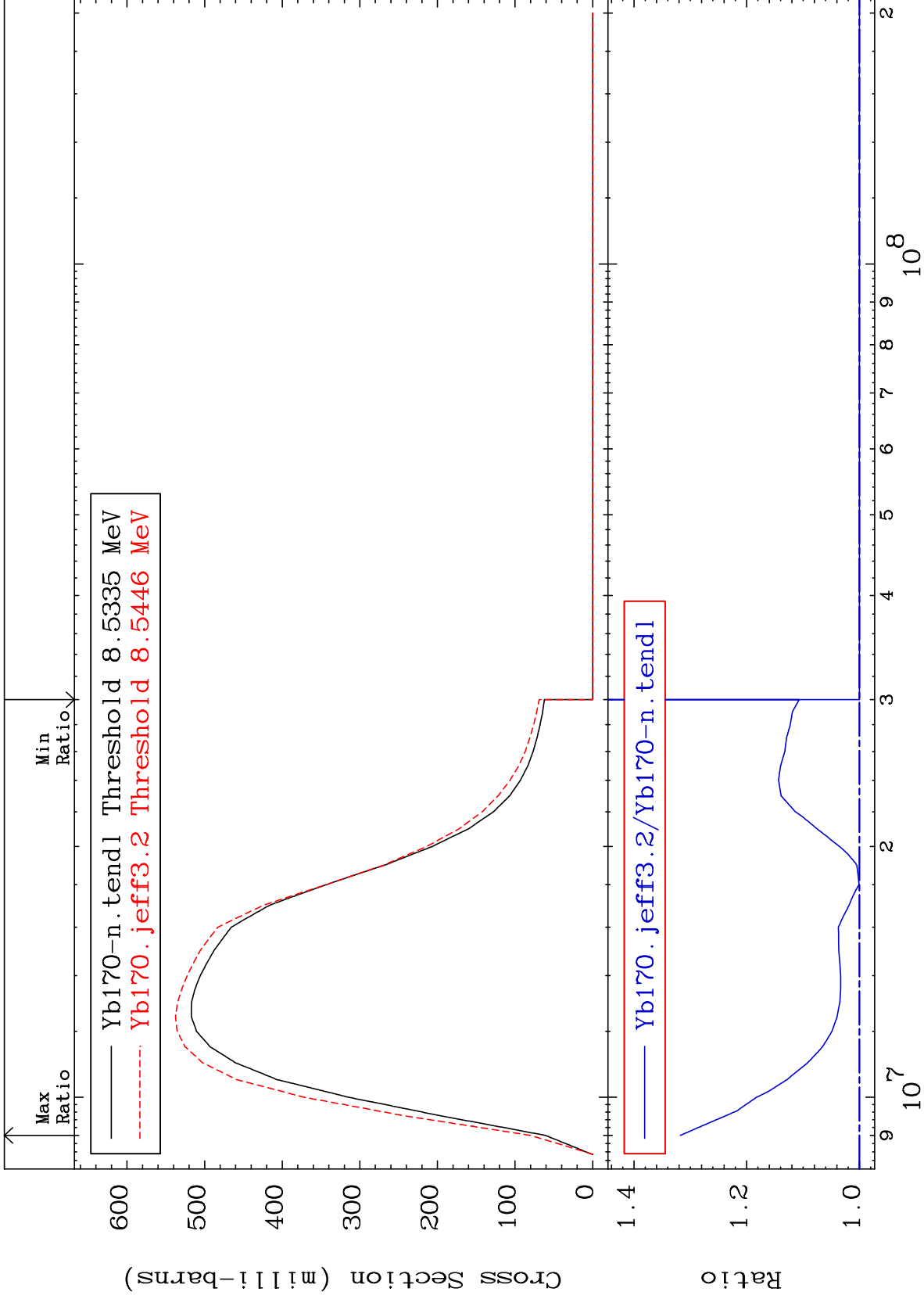
70-Yb-170

MAT 7031

(n,2n):70-Yb-169m1

70-Yb-170

Radionuclide Production Cross Section 0.000 To 31.77 %



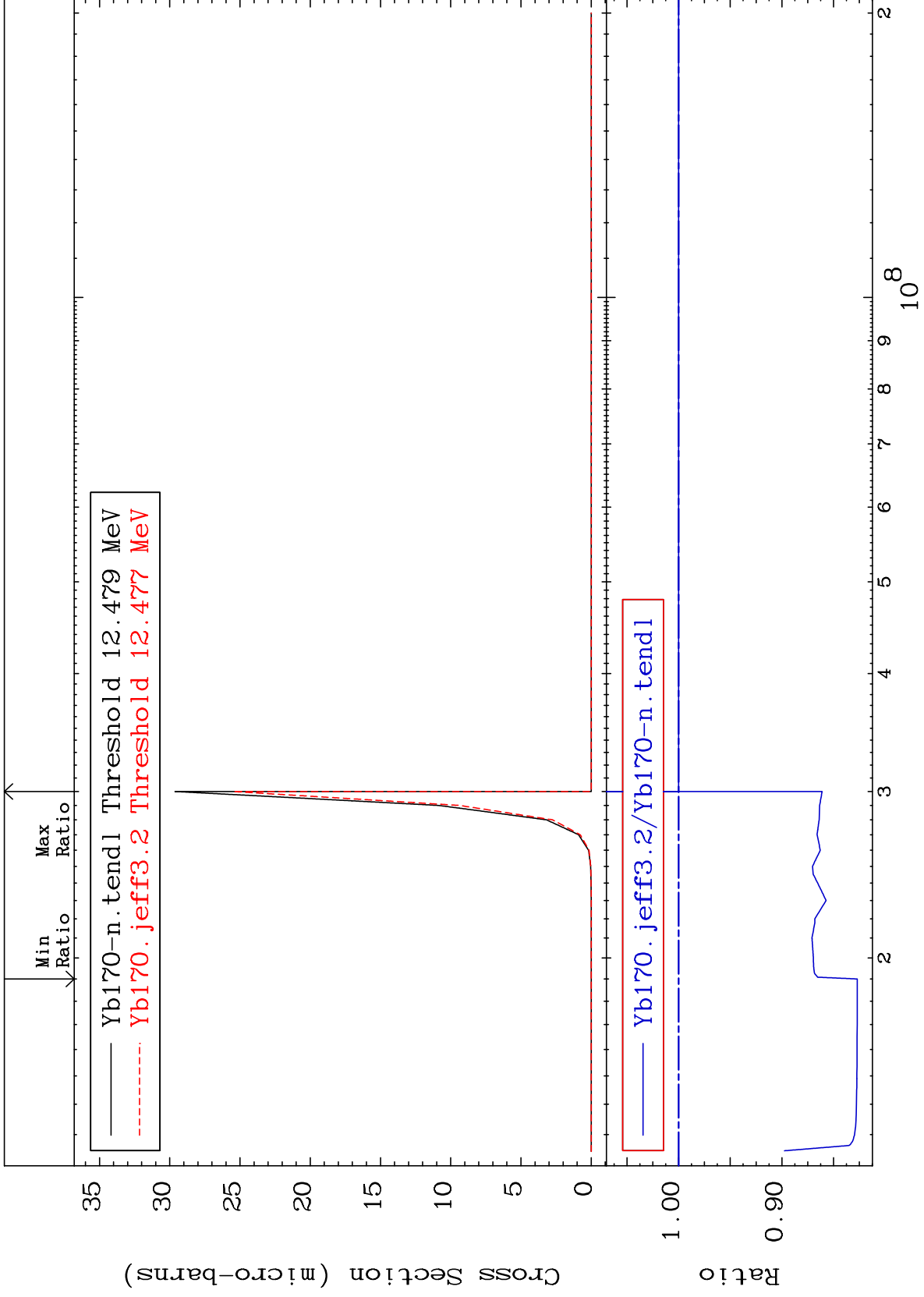
80

Incident Energy (eV)

70-Yb-170

MAT 7031

(n, n') He-3:68-Er-167g 70-Yb-170
Radionuclide Production Cross Section -17.30 To 0.000 %

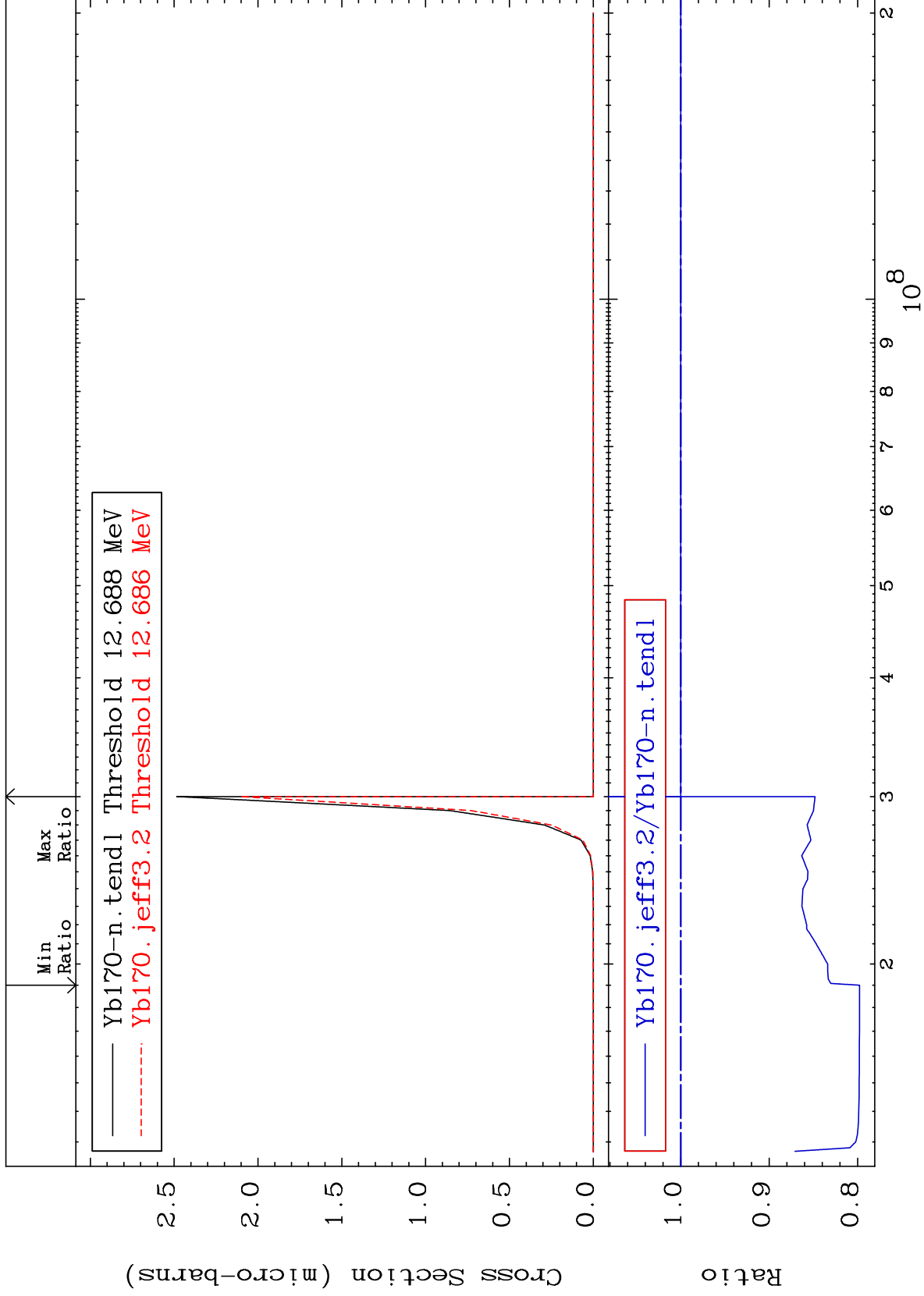


MAT 7031

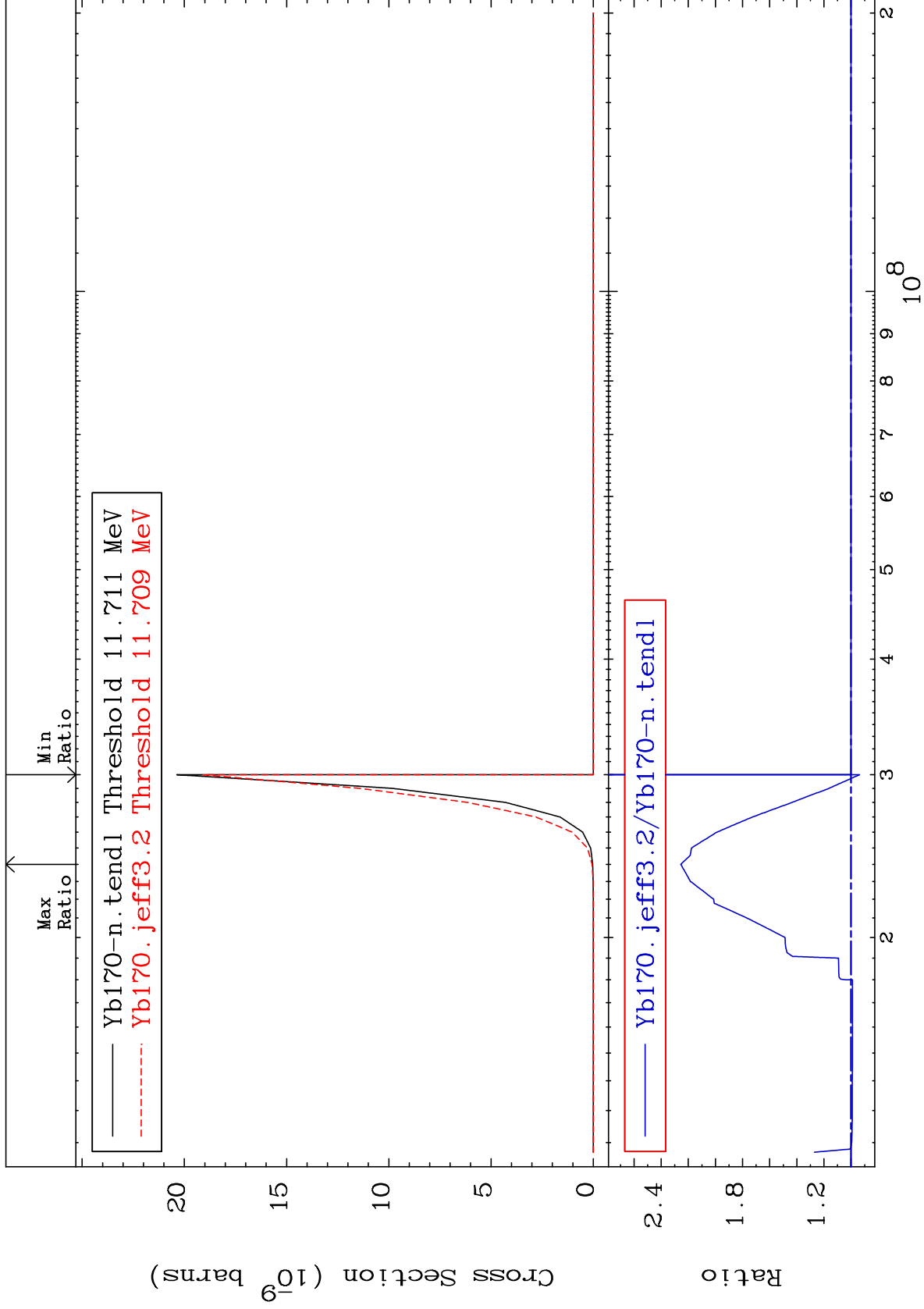
(n, n') He-3:68-Er-167m3

70-Yb-170

Radionuclide Production Cross Section -20.21 To 0.000 %



Radionuclide Production Cross Section -6.235 To 125.5 %



MAT 7031

(n, p) t:68-Er-167m3

70-Yb-170

Radionuclide Production Cross Section 0.000 To 136.5 %

