

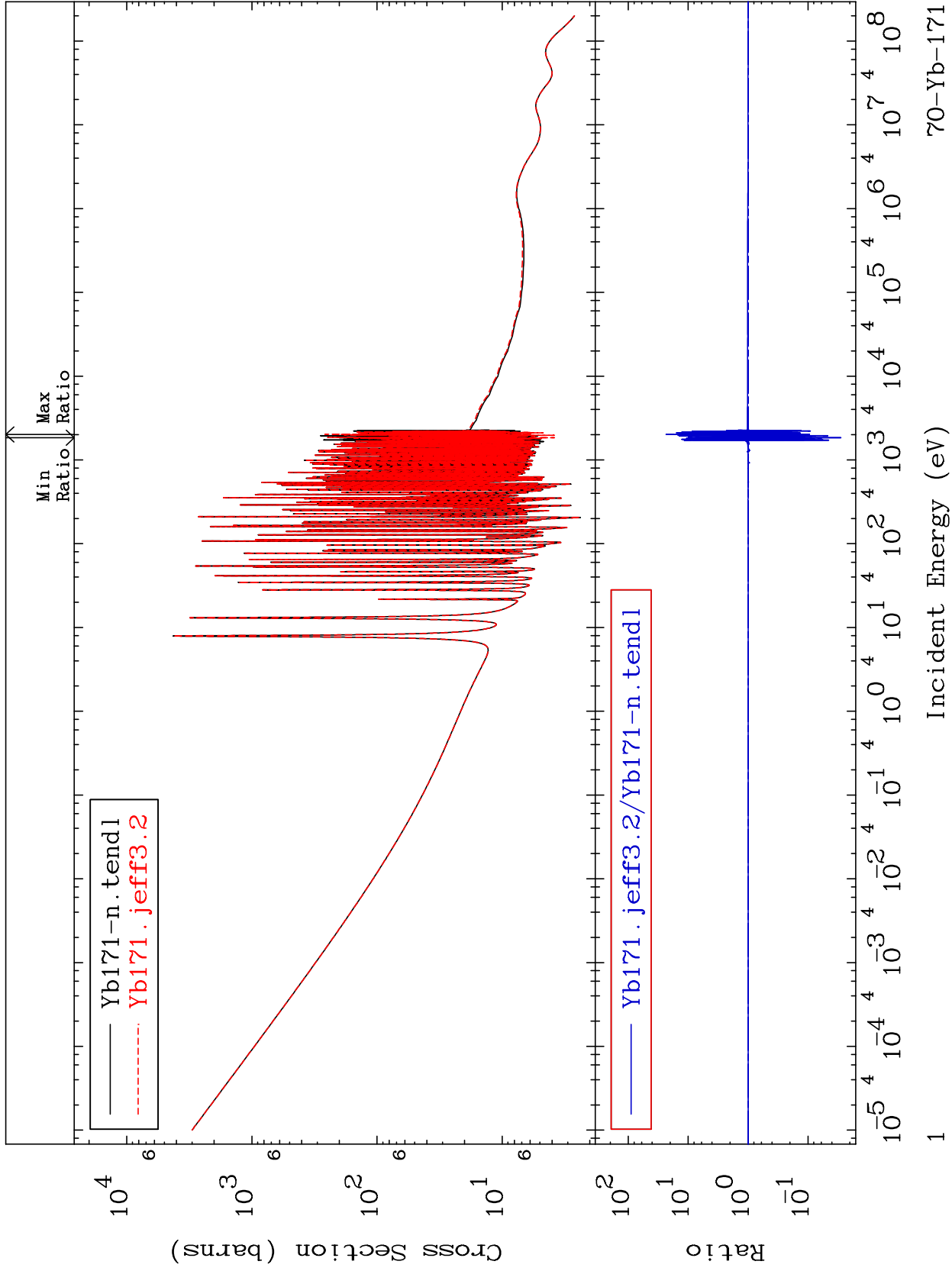
MAT 7034

Total

70-Yb-171

Cross Section

-97.17 To 2251. %



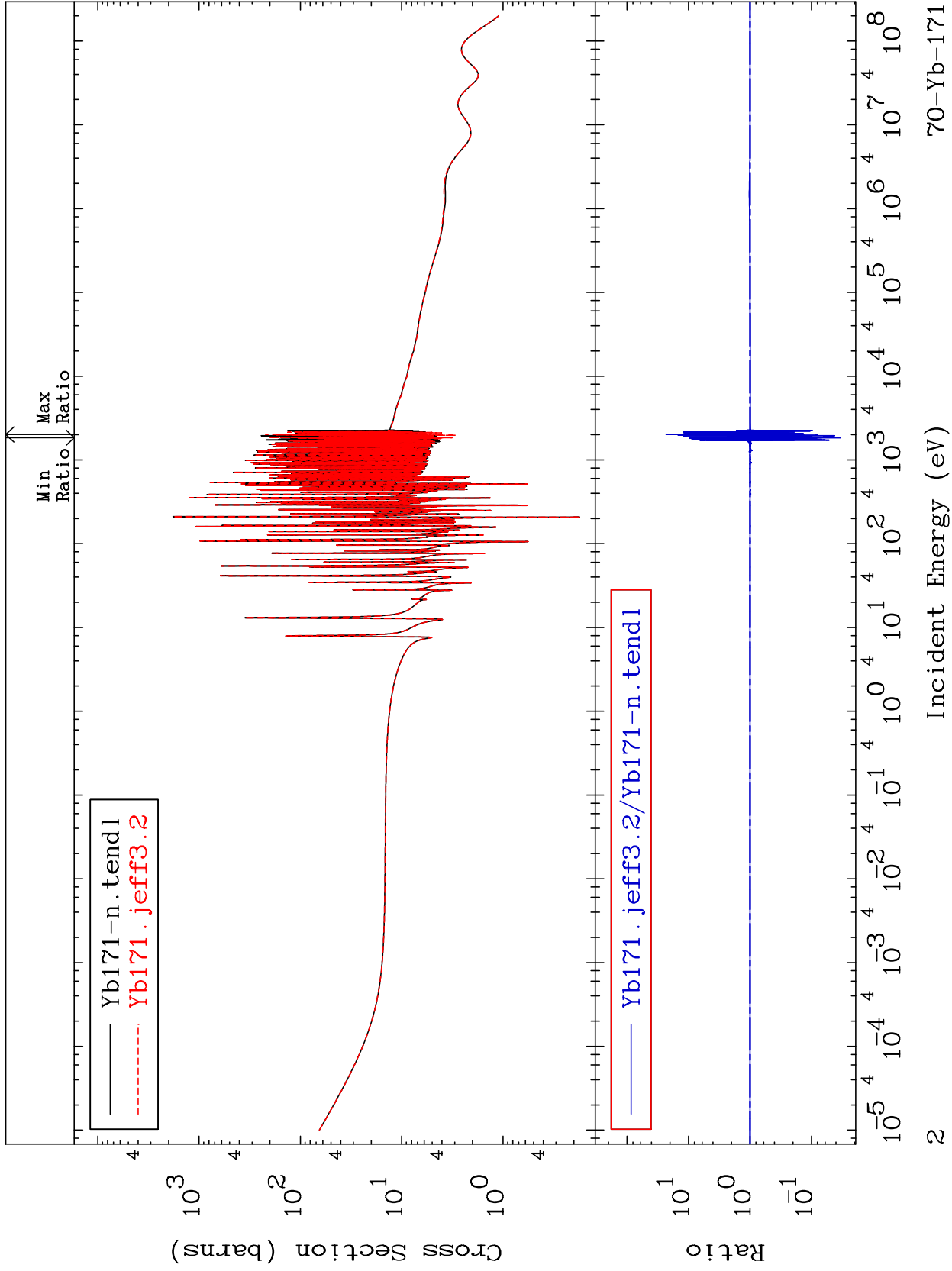
Incident Energy (eV)

70-Yb-171

MAT 7034

Elastic
Cross Section

70-Yb-171
-96.66 To 2230. %



2

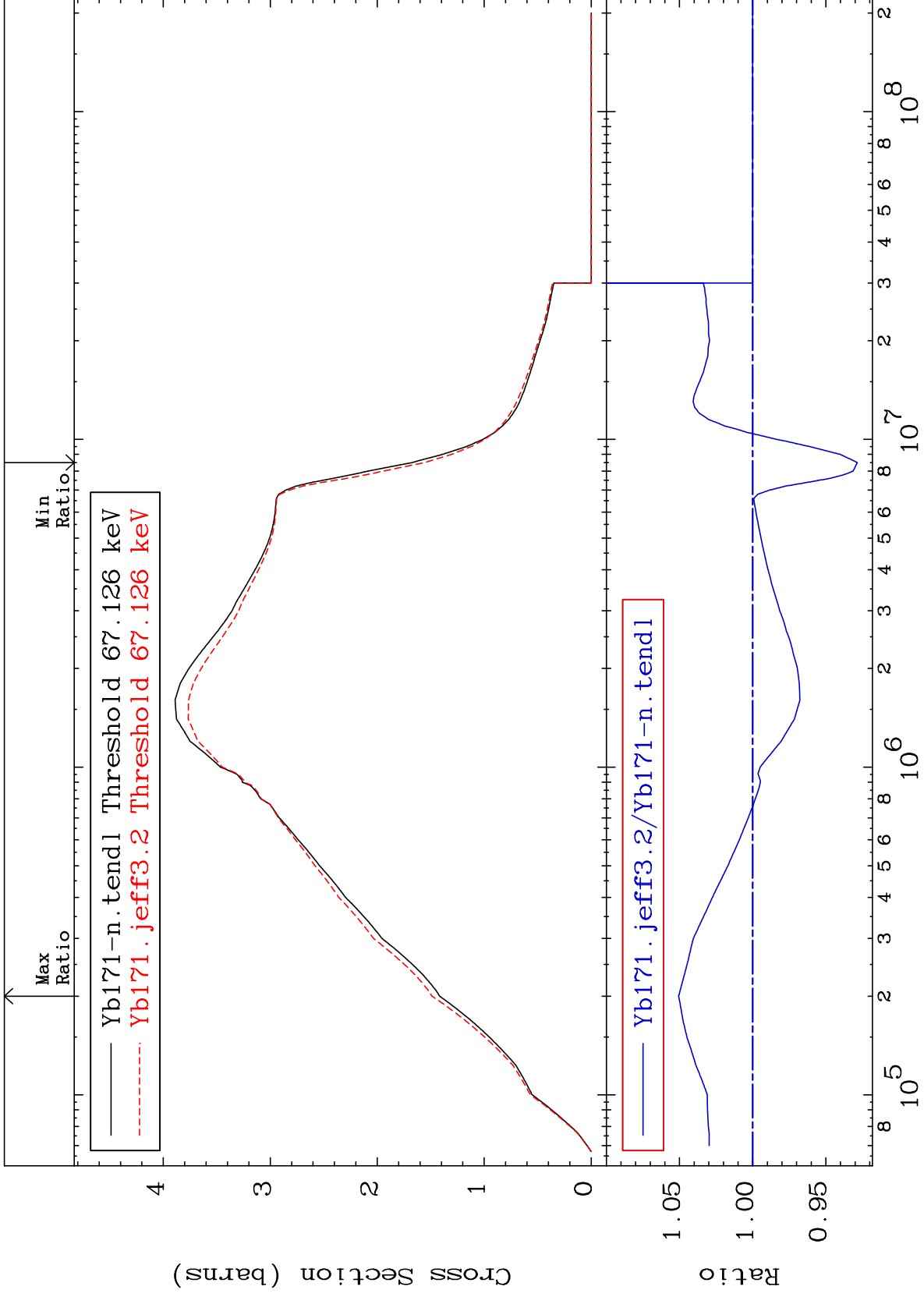
Incident Energy (eV)

70-Yb-171

MAT 7034

Inelastic
Cross Section

⁷⁰Yb-171
-7.147 To 5.060 %



3

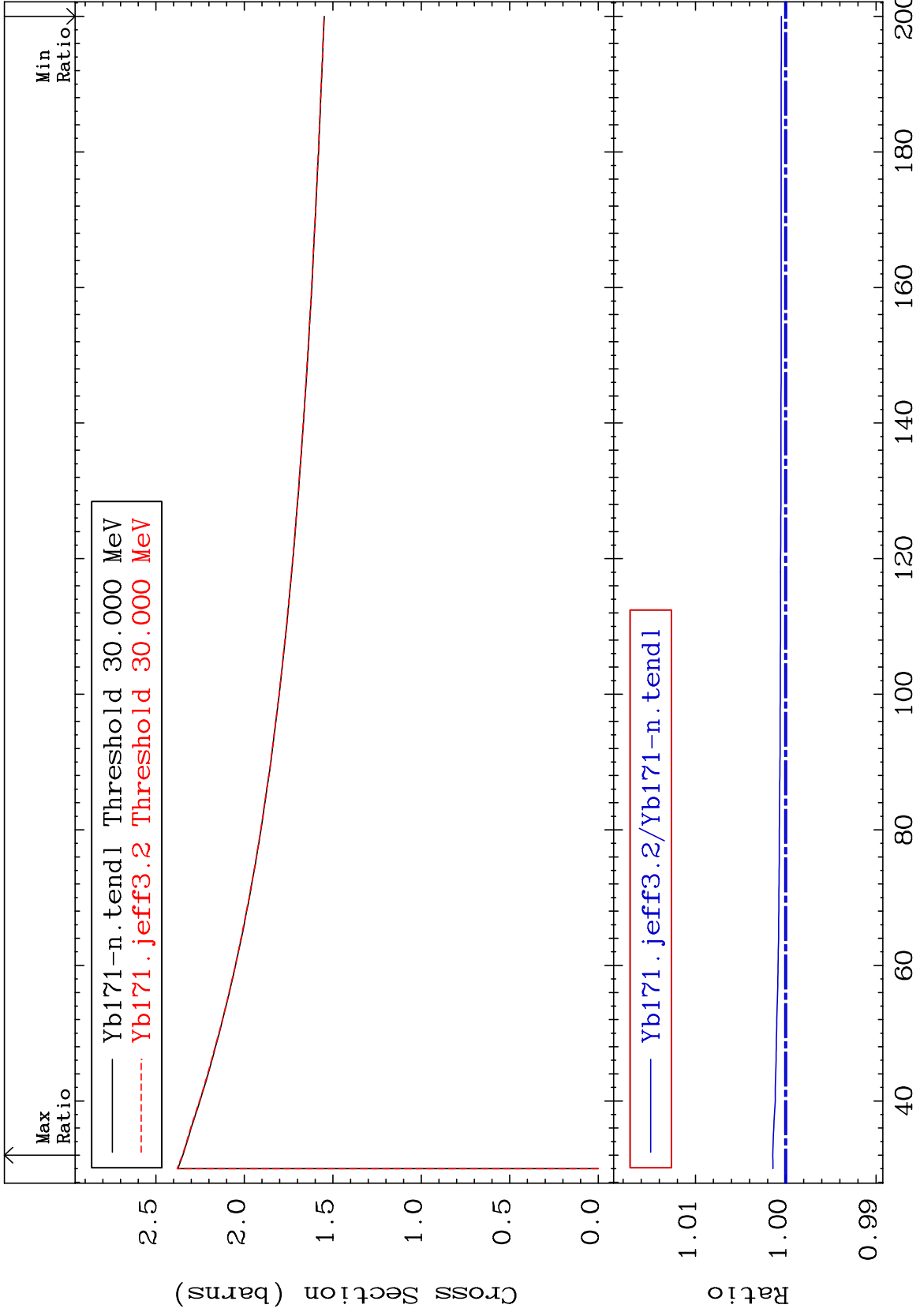
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

(n, remainder)
Cross Section

70-Yb-171
0.048 To 0.143 %



Max
Ratio

Min
Ratio

— Yb171-n.tendl Threshold 30.000 MeV
- - - Yb171.jeff3.2 Threshold 30.000 MeV

— Yb171.jeff3.2/Yb171-n.tendl

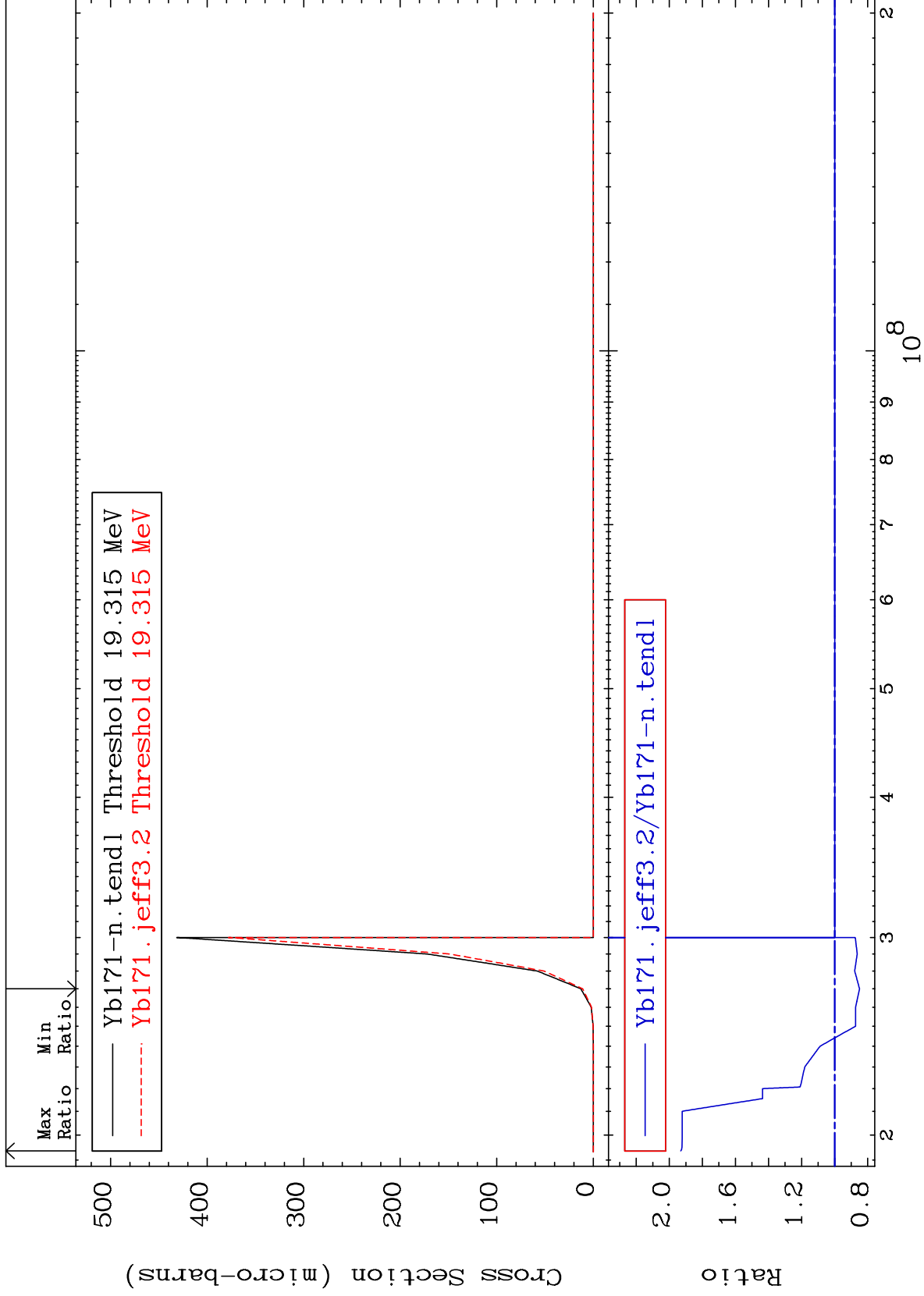
Incident Energy (MeV)

70-Yb-171

MAT 7034

(n,2n) d
Cross Section

⁷⁰Yb-171
-15.04 To 93.06 %



5

Incident Energy (eV)

⁷⁰Yb-171

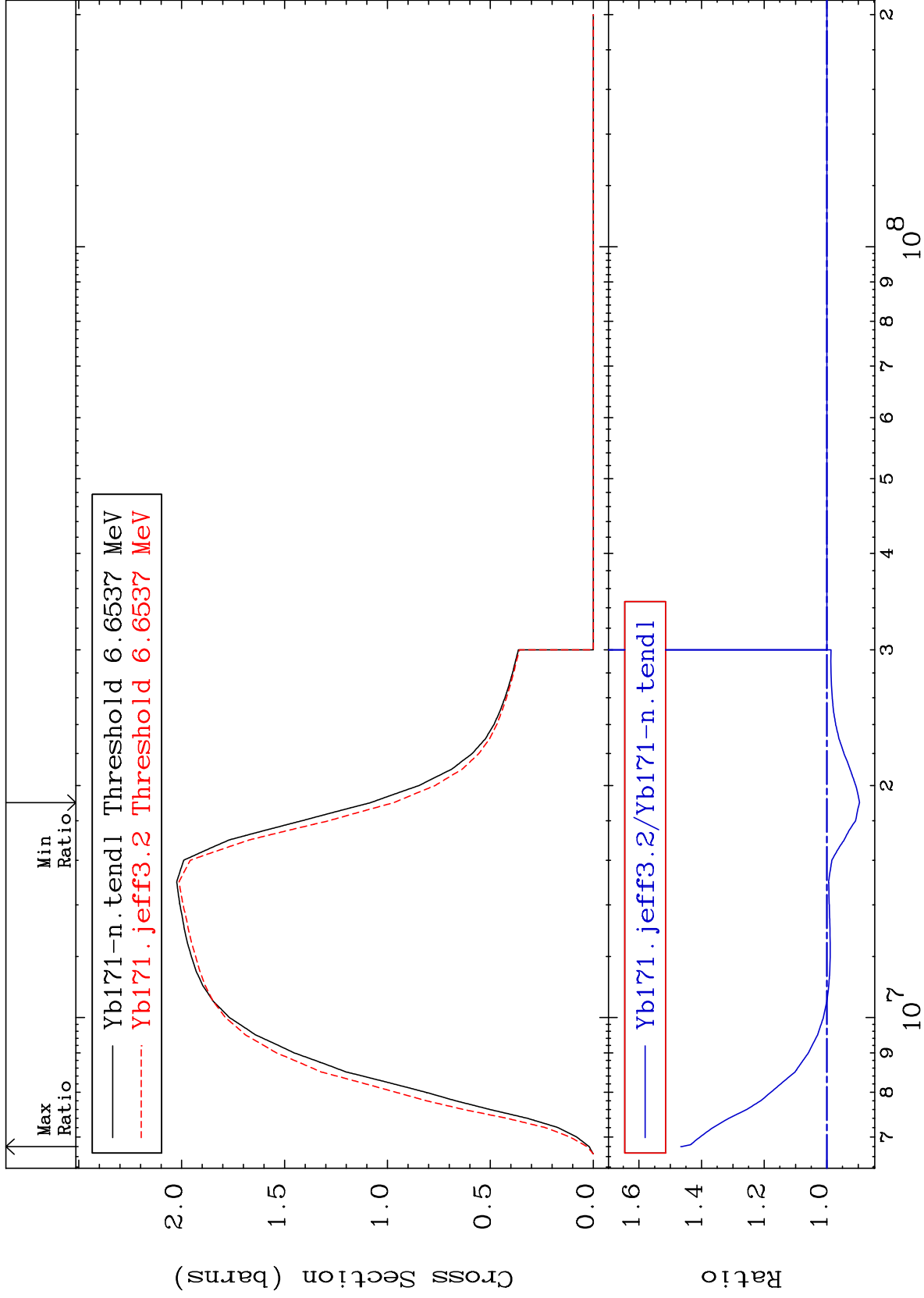
MAT 7034

(n,2n)

70-Yb-171

Cross Section

-10.43 To 46.65 %



6

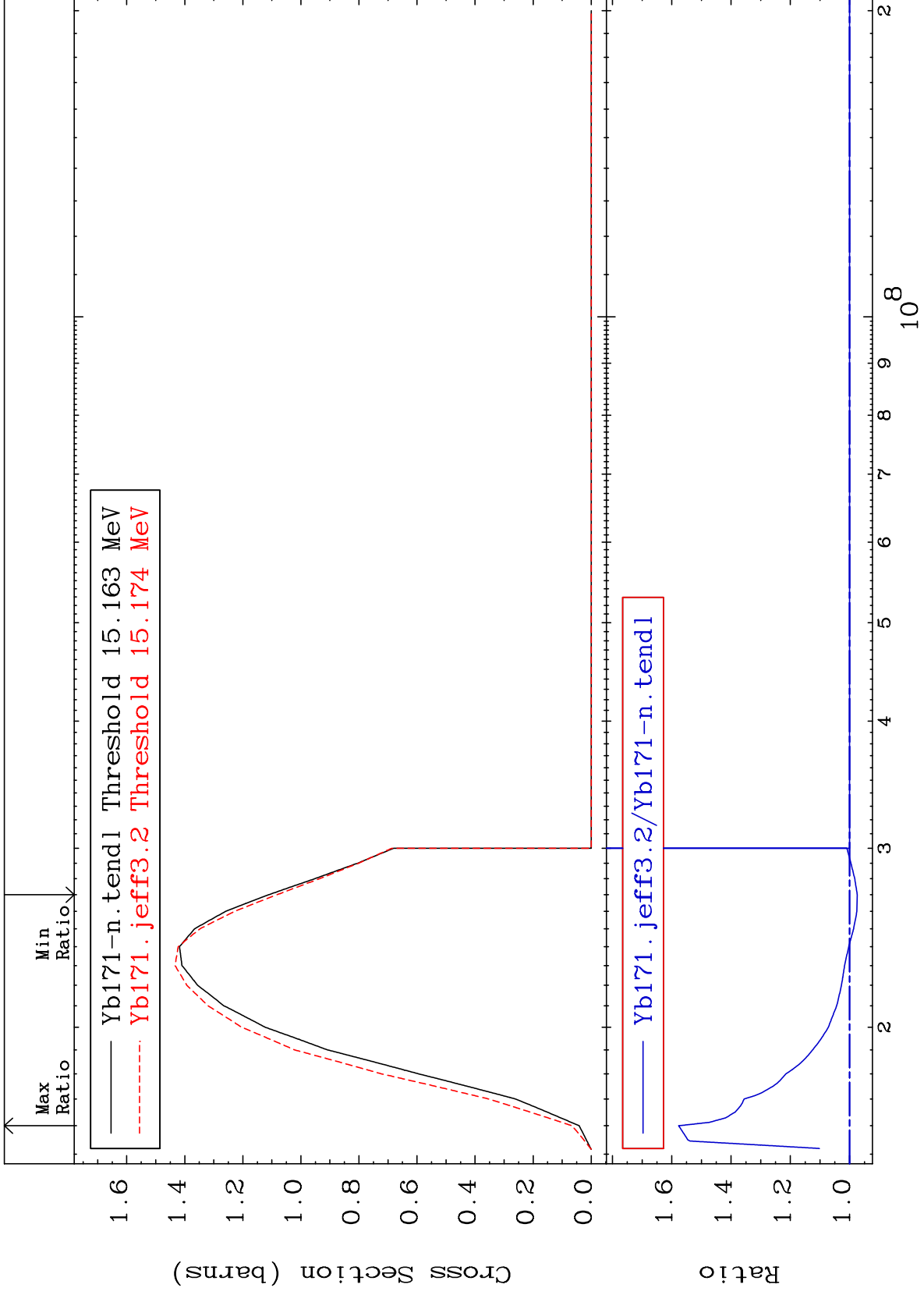
Incident Energy (eV)

70-Yb-171

MAT 7034

(n,3n)
Cross Section

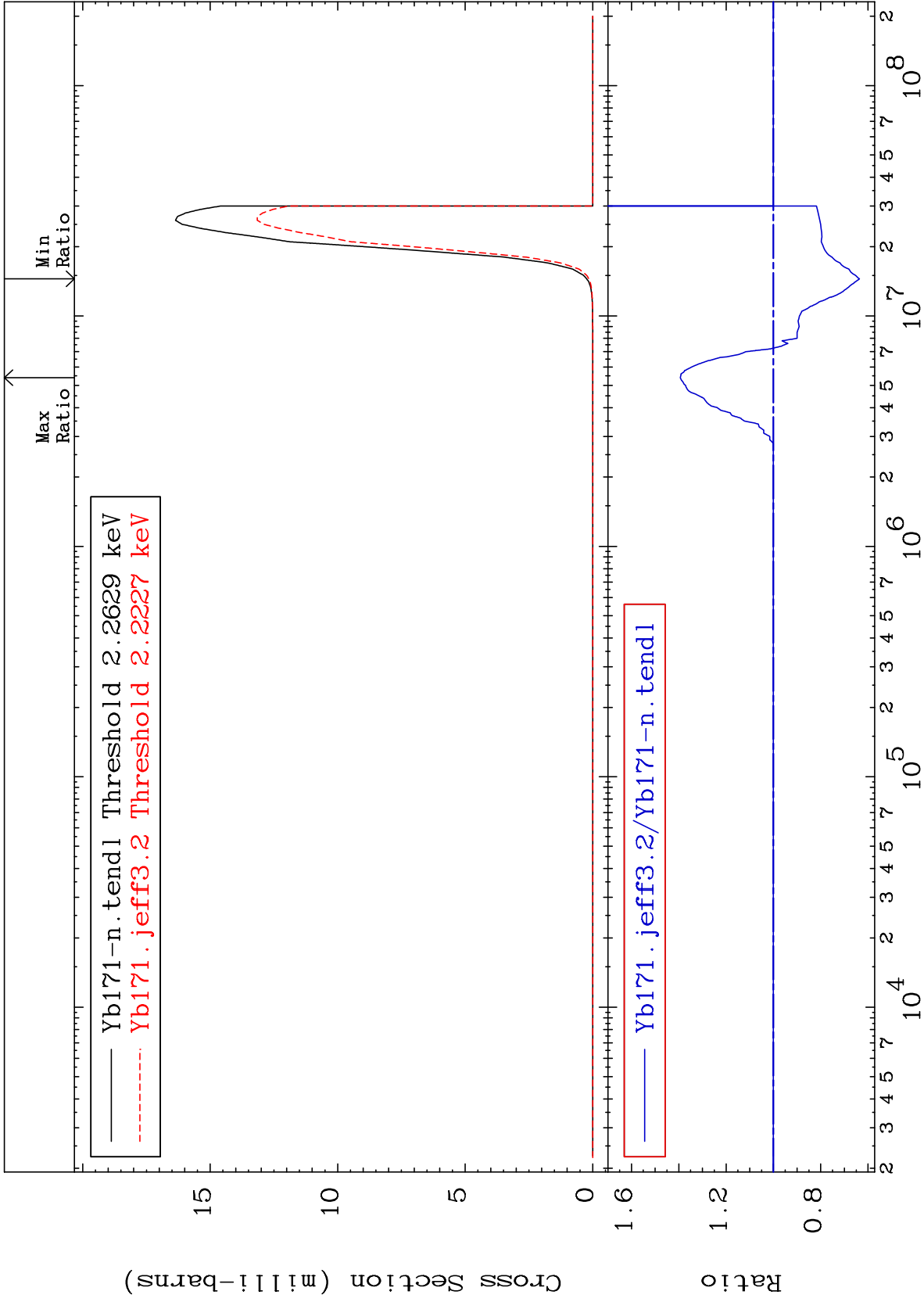
70-Yb-171
-2.574 To 57.68 %



MAT 7034

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

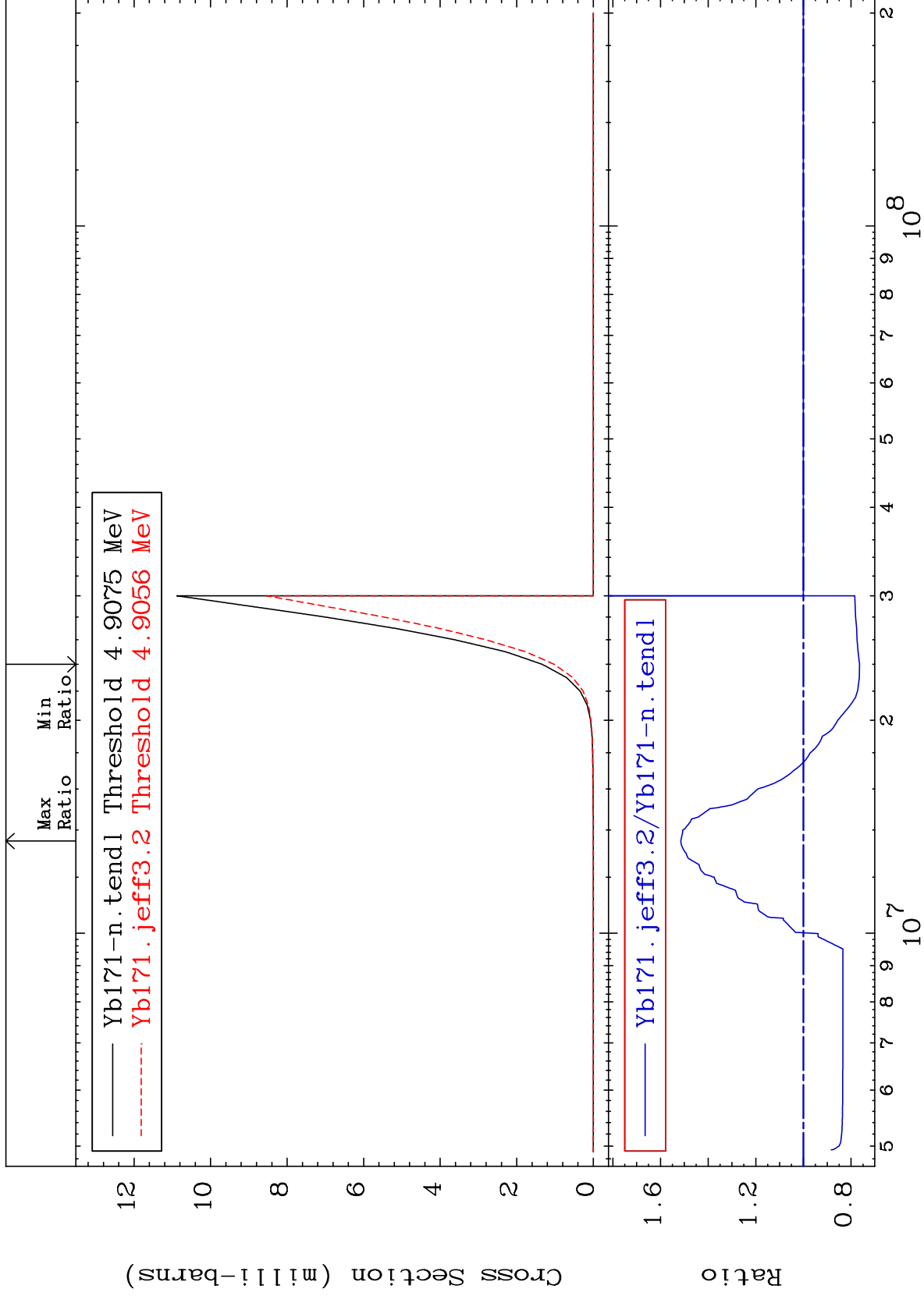
$^{70}\text{Yb}-171$
-36.35 To 39.32 %



MAT 7034

(n,2n) α
Cross Section

⁷⁰Yb-171
-23.55 To 51.48 %



9

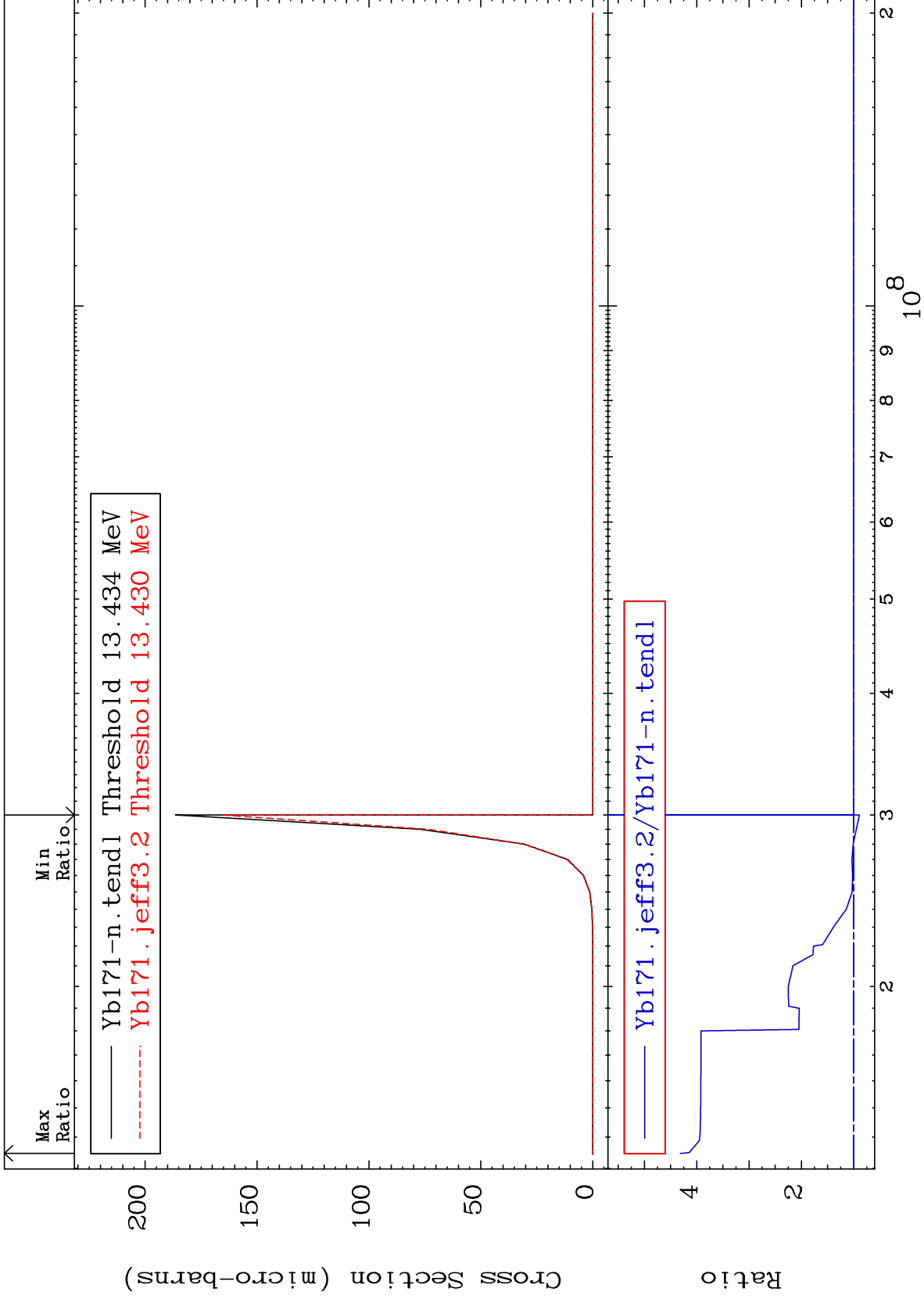
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

(n,3n) α
Cross Section

⁷⁰Yb-171
-10.98 To 331.3 %



10

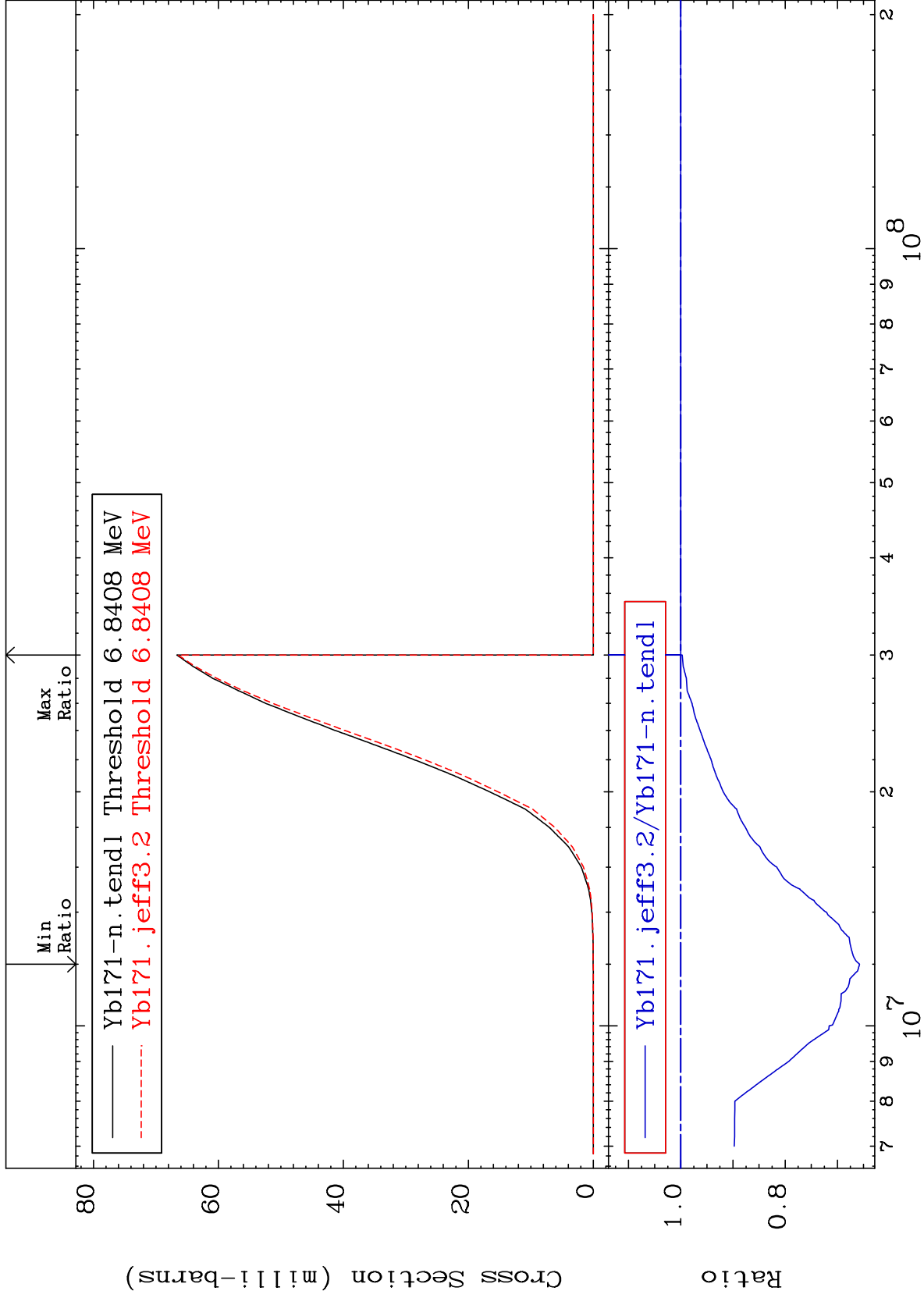
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

(n, n') p
Cross Section

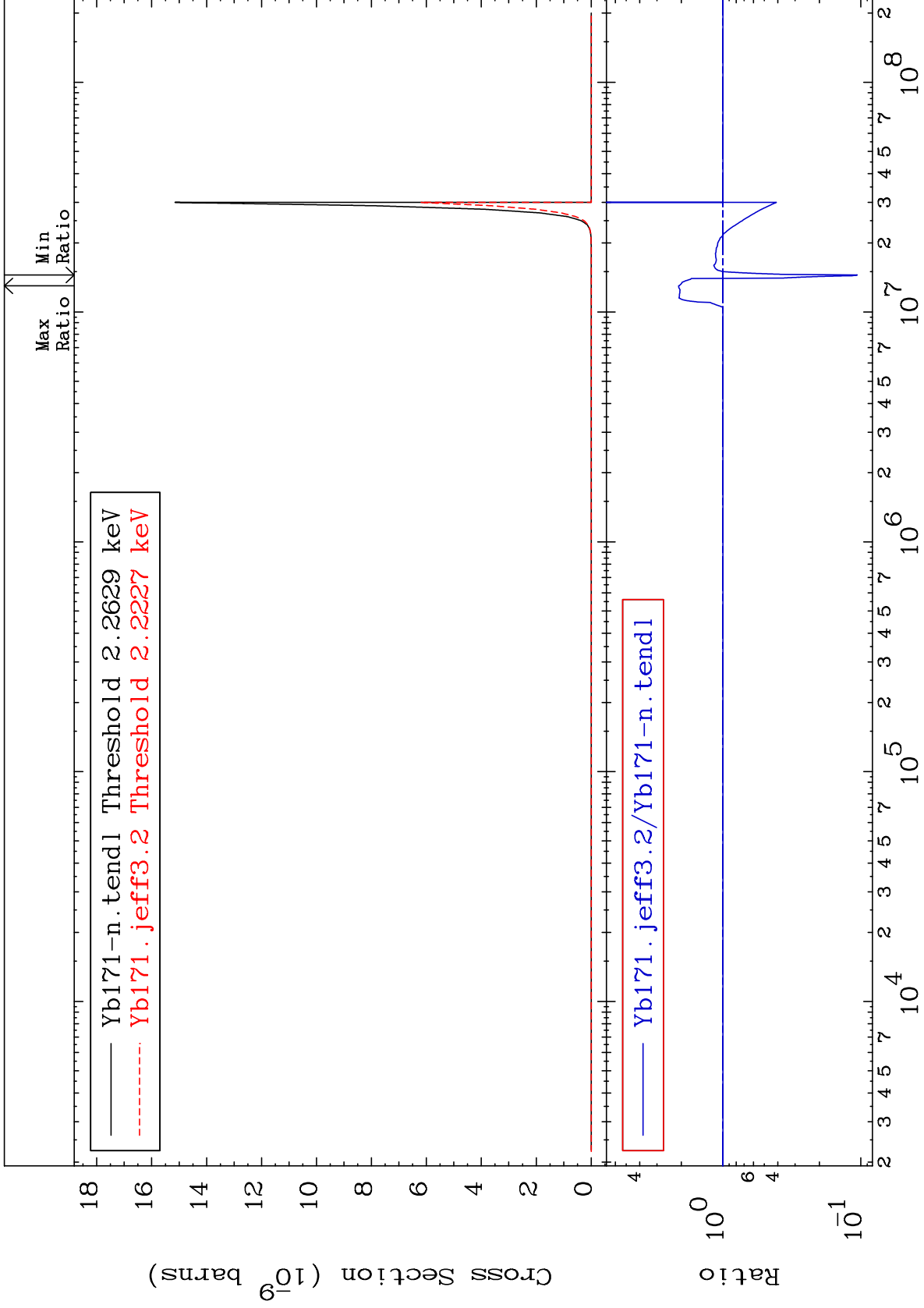
⁷⁰Yb-171
-34.24 To 0.000 %



MAT 7034

(n, n') 2α
Cross Section

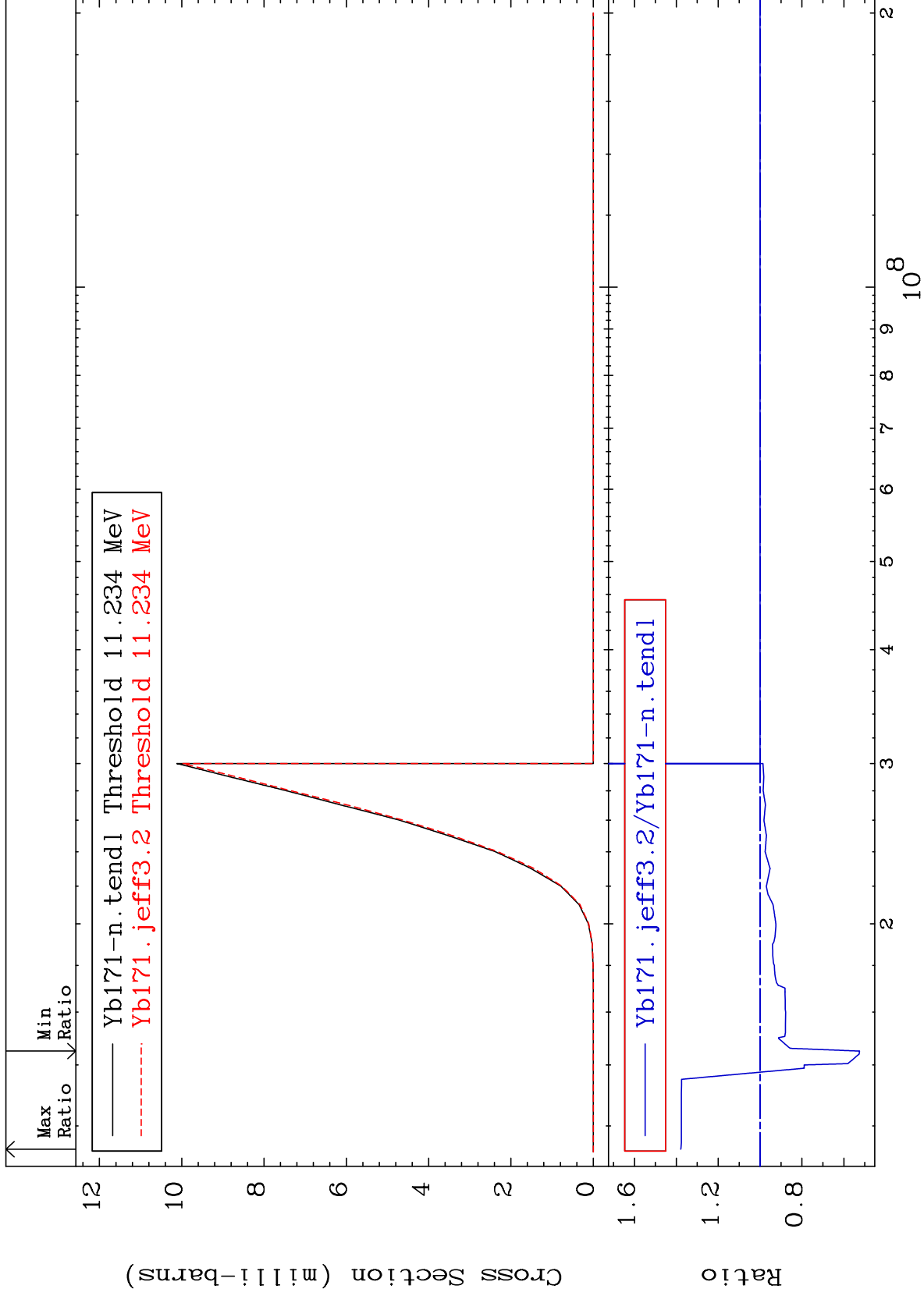
70-Yb-171
-89.38 To 108.8 %



MAT 7034

(n,n') d
Cross Section

⁷⁰Yb-171
-47.49 To 37.86 %



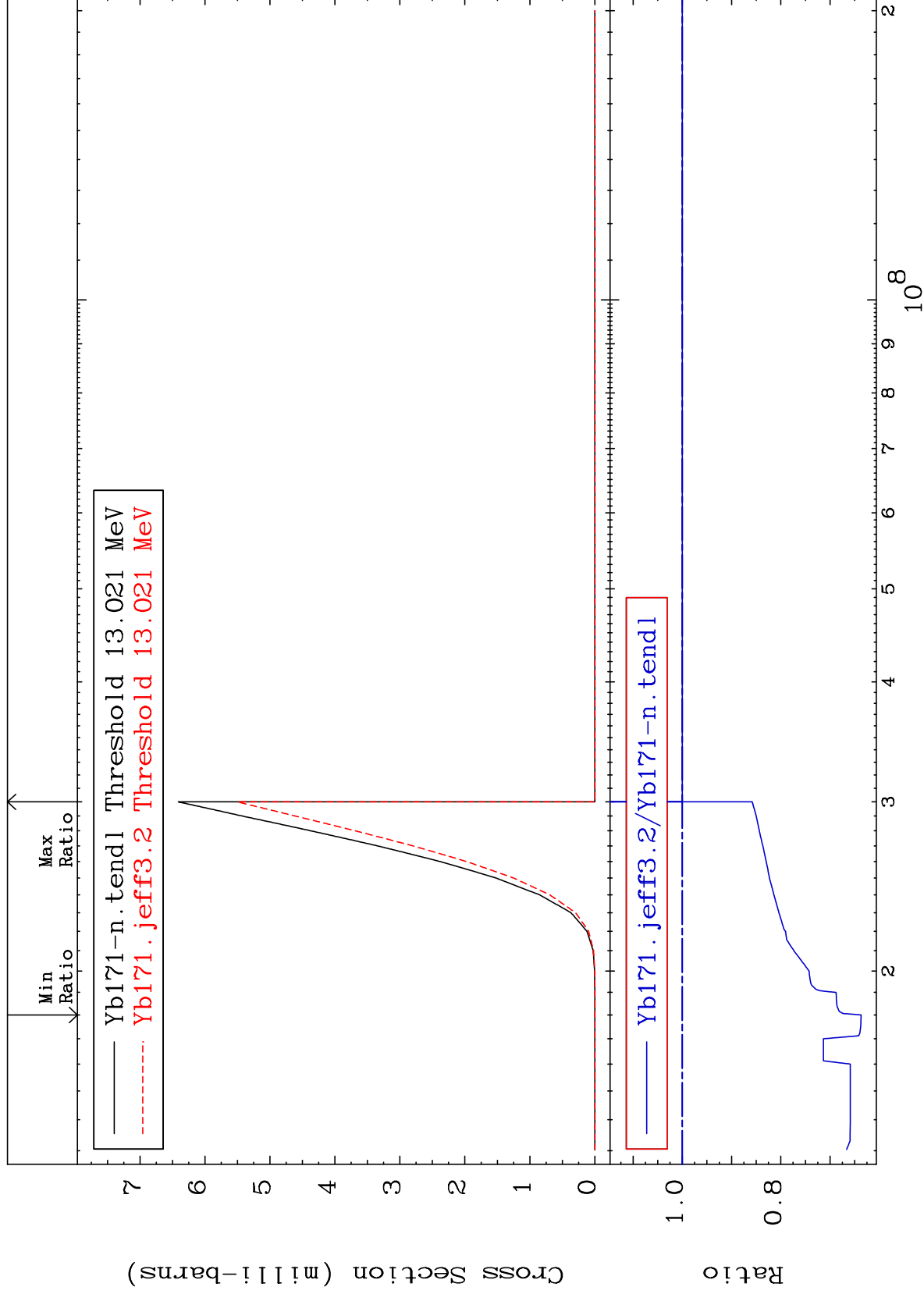
MAT 7034

(n, n') t

70-Yb-171

Cross Section

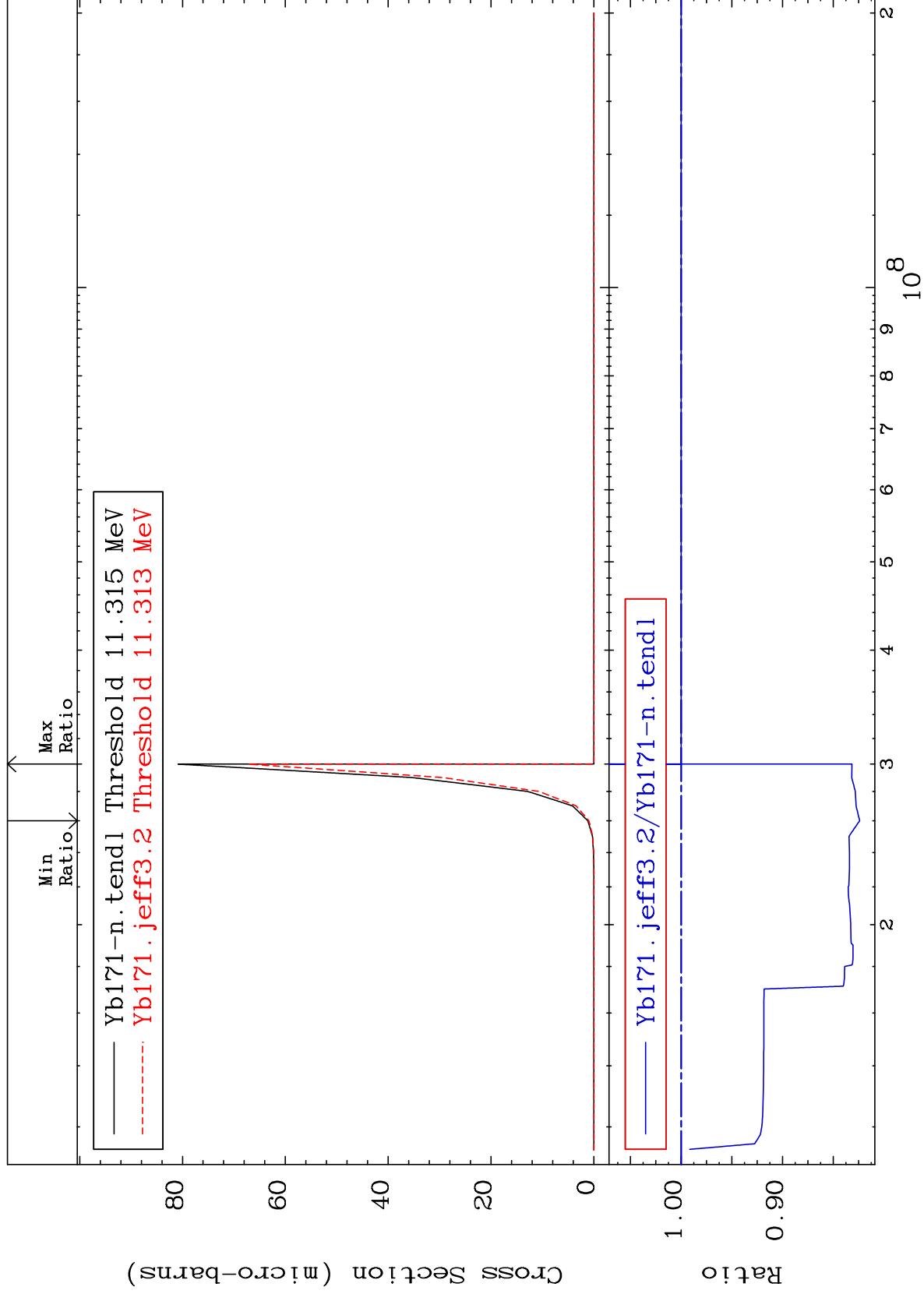
-36.30 To 0.000 %



MAT 7034

(n, n') He-3
Cross Section

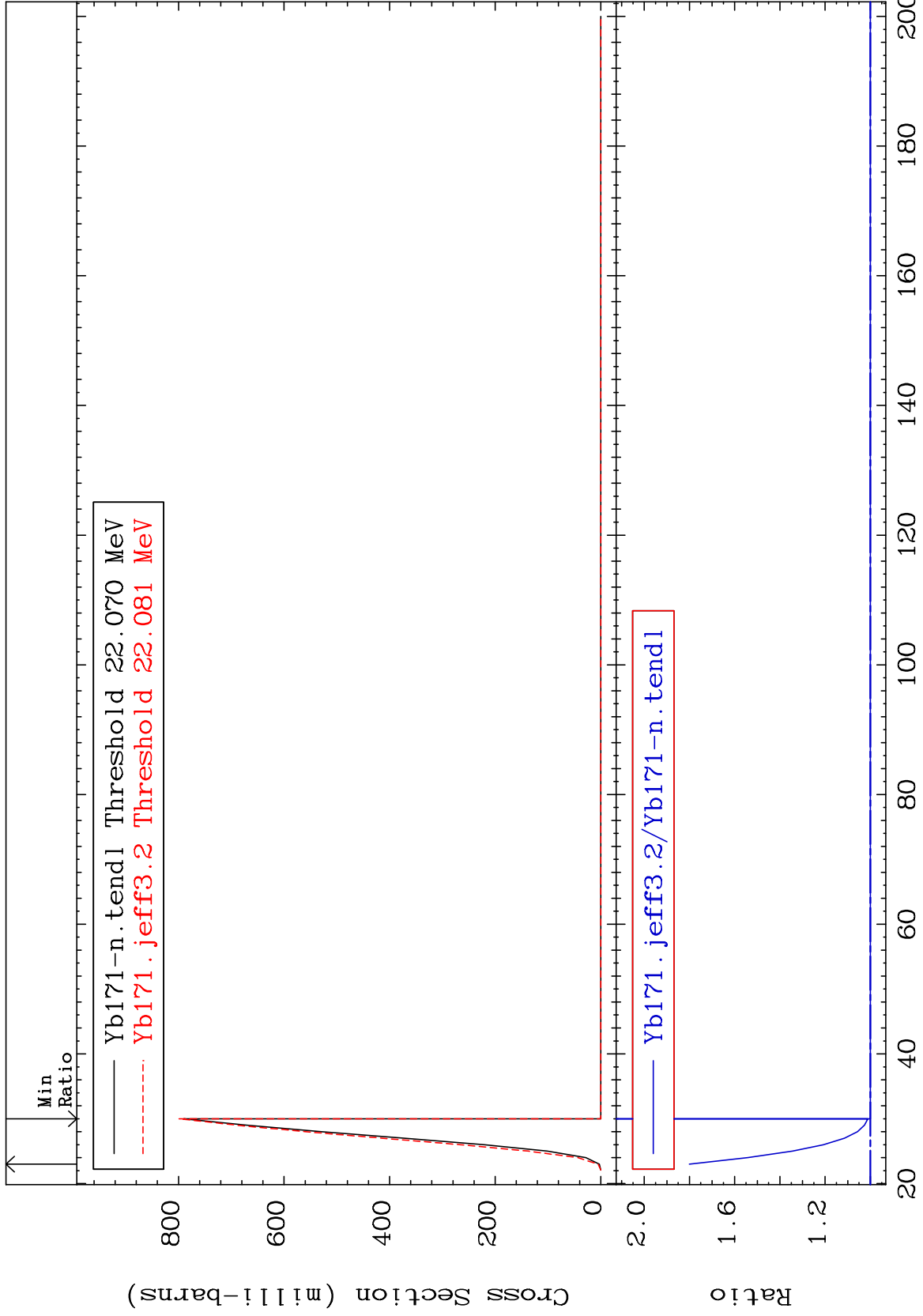
⁷⁰Yb-171
-17.60 To 0.000 %



MAT 7034

(n,4n)
Cross Section

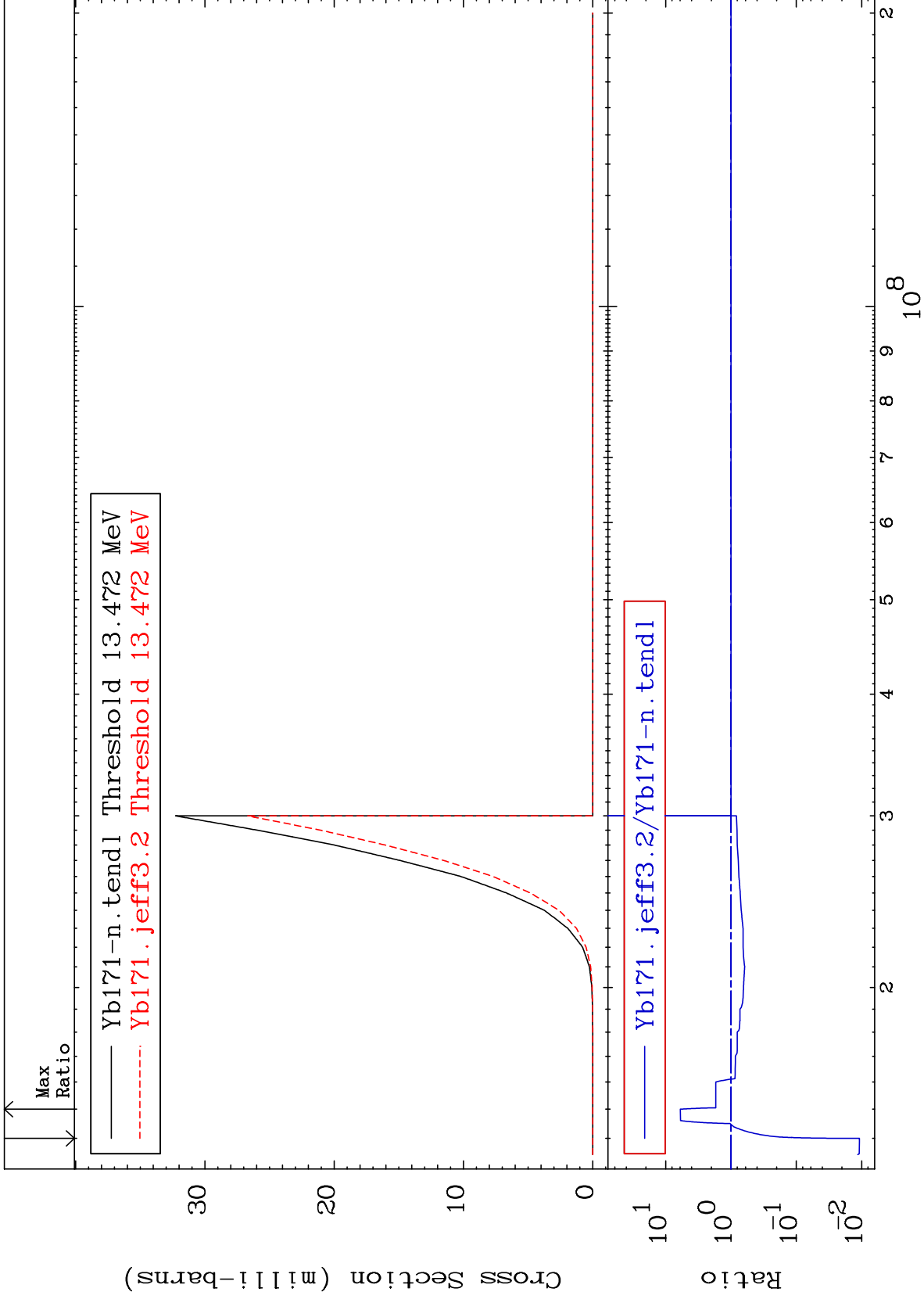
70-Yb-171
To 80.06 %



MAT 7034

(n,2n) p
Cross Section

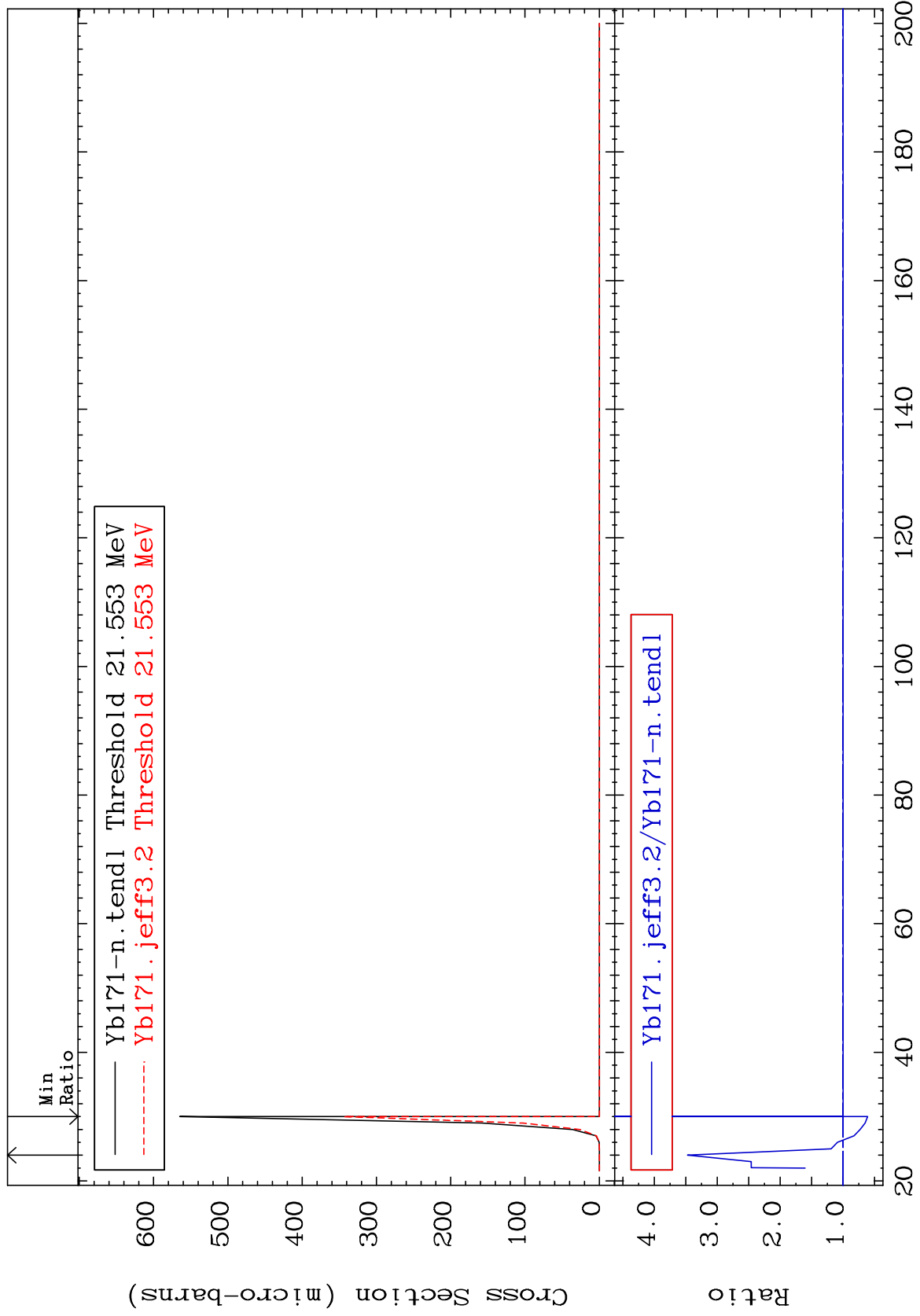
⁷⁰Yb-171
-98.92 To 495.7 %



MAT 7034

(n,3n) p
Cross Section

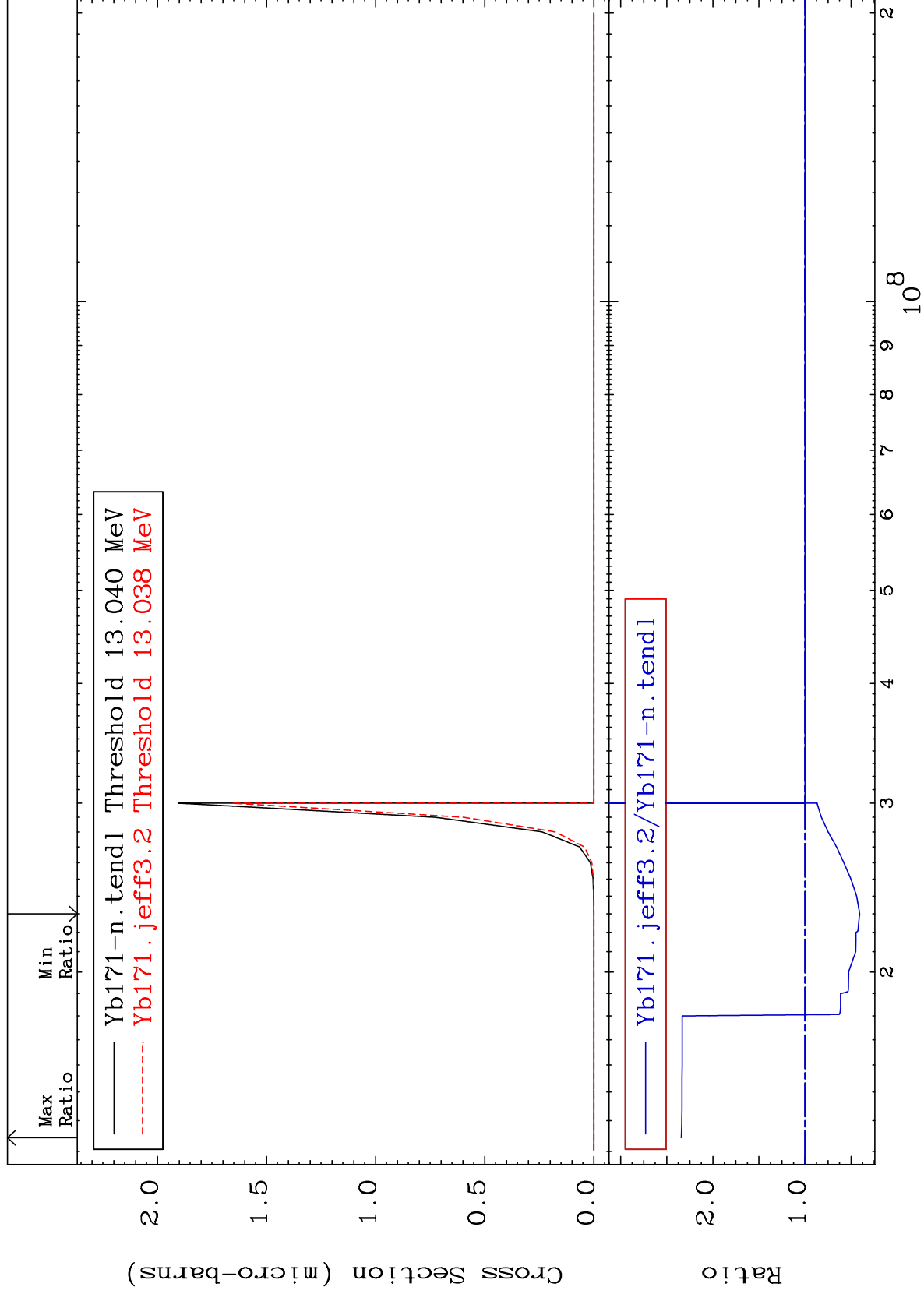
⁷⁰Yb-171
-39.09 To 247.1 %



MAT 7034

(n,2n) p
Cross Section

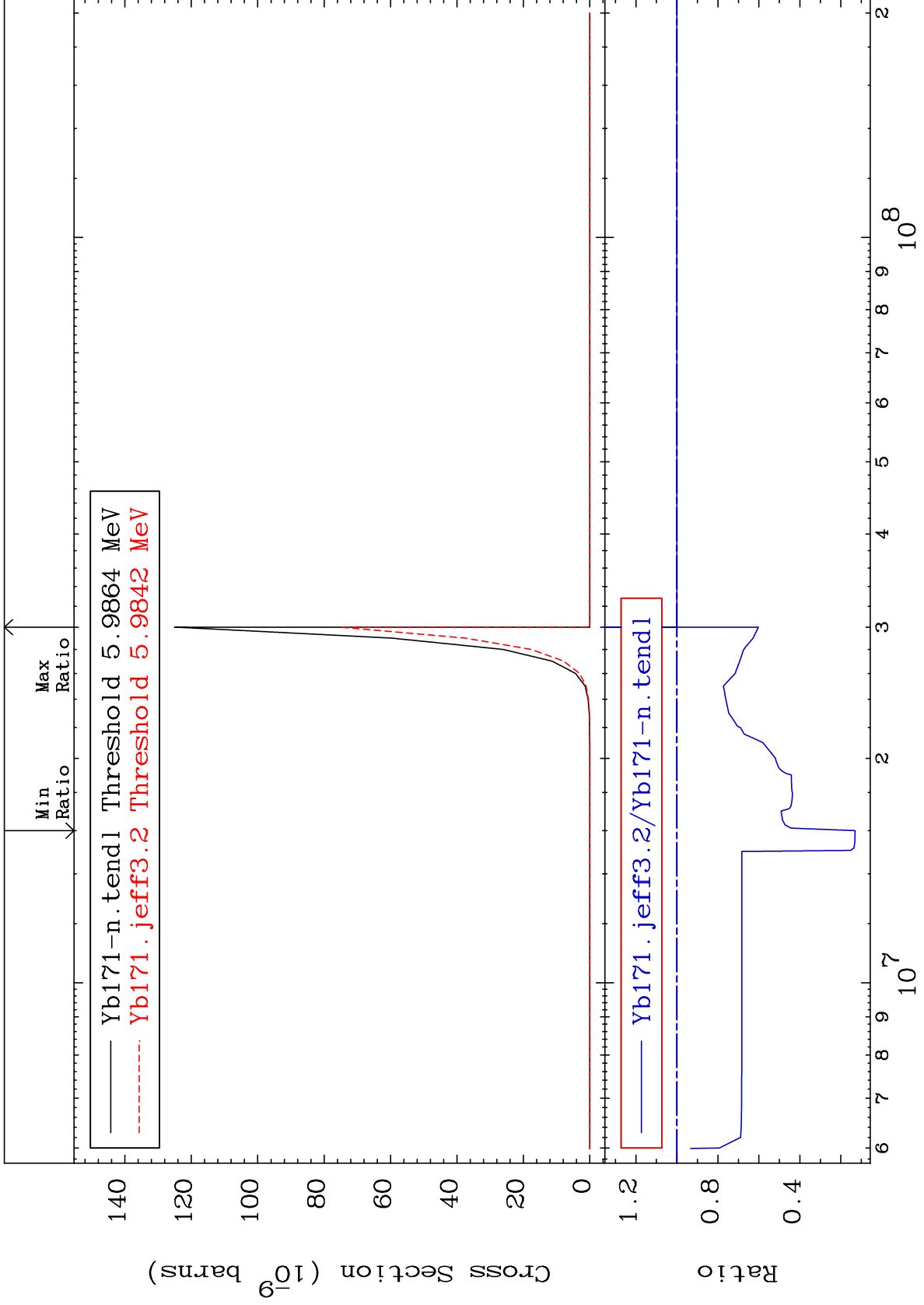
⁷⁰Yb-171
-59.29 To 134.3 %



MAT 7034

(n,n') p α
Cross Section

⁷⁰Yb-171
-86.94 To 0.000 %



20

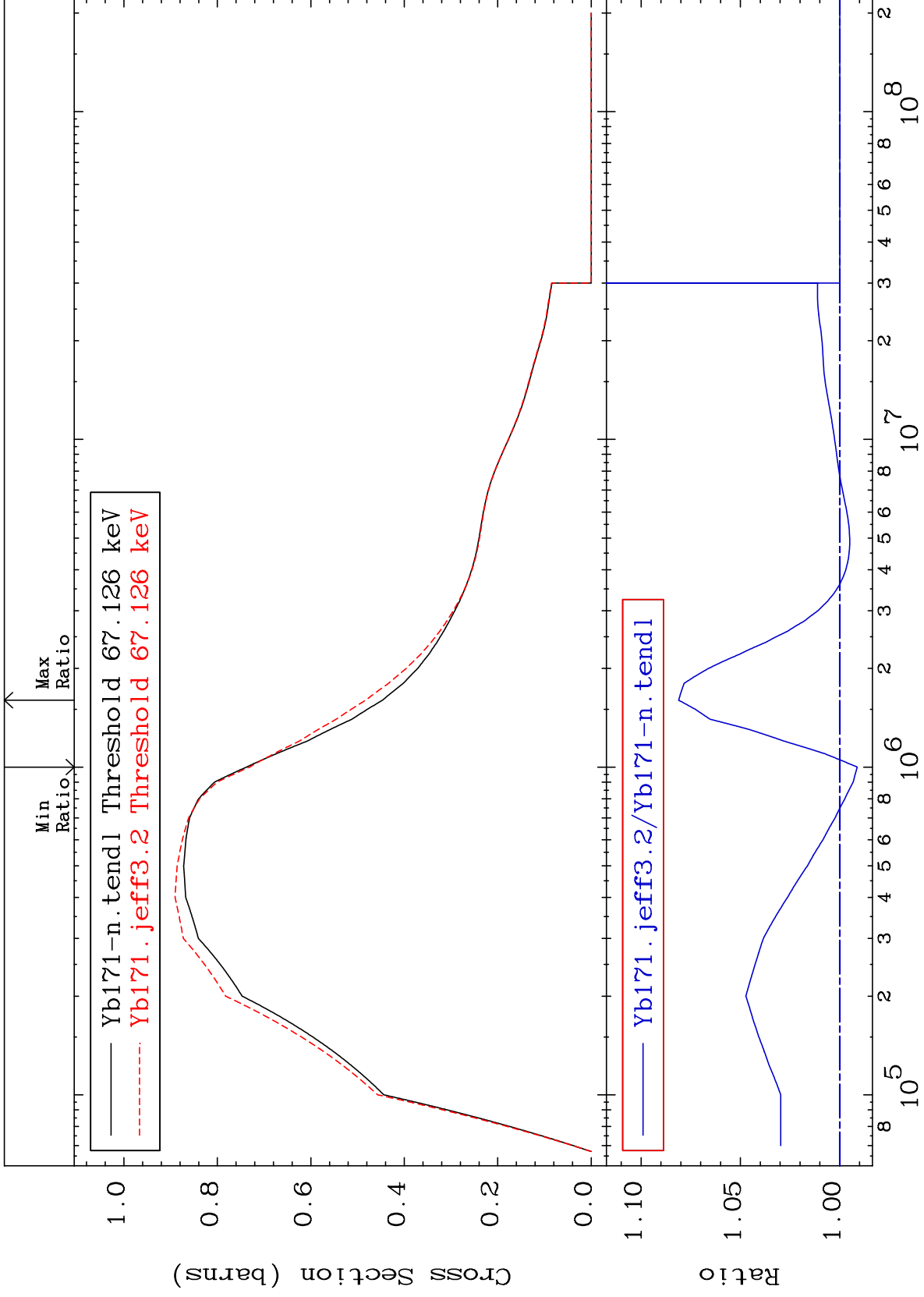
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

66.73 keV (n,n') Level
Cross Section

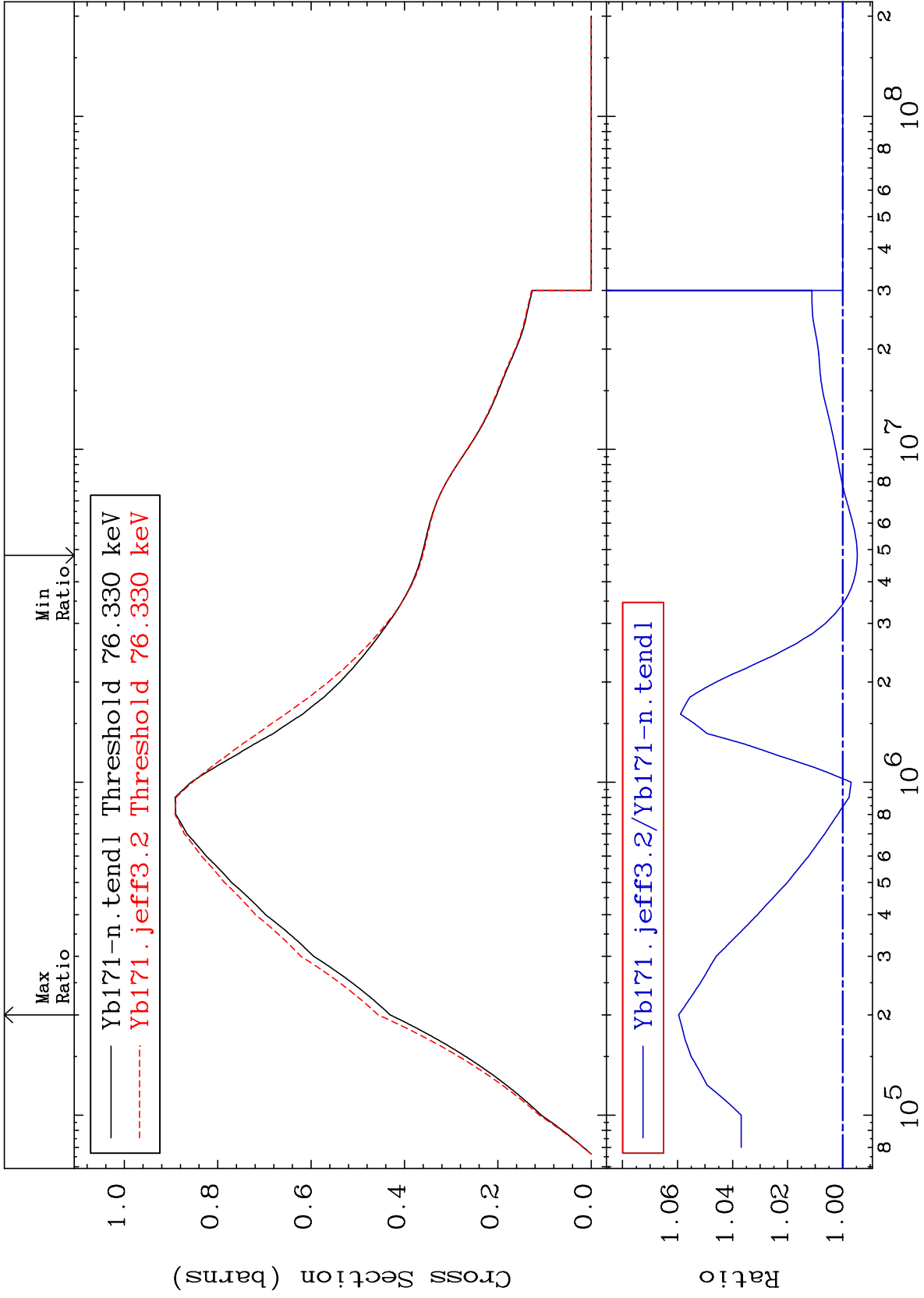
70-Yb-171
-0.884 To 8.109 %



MAT 7034

75.88 keV (n,n') Level
Cross Section

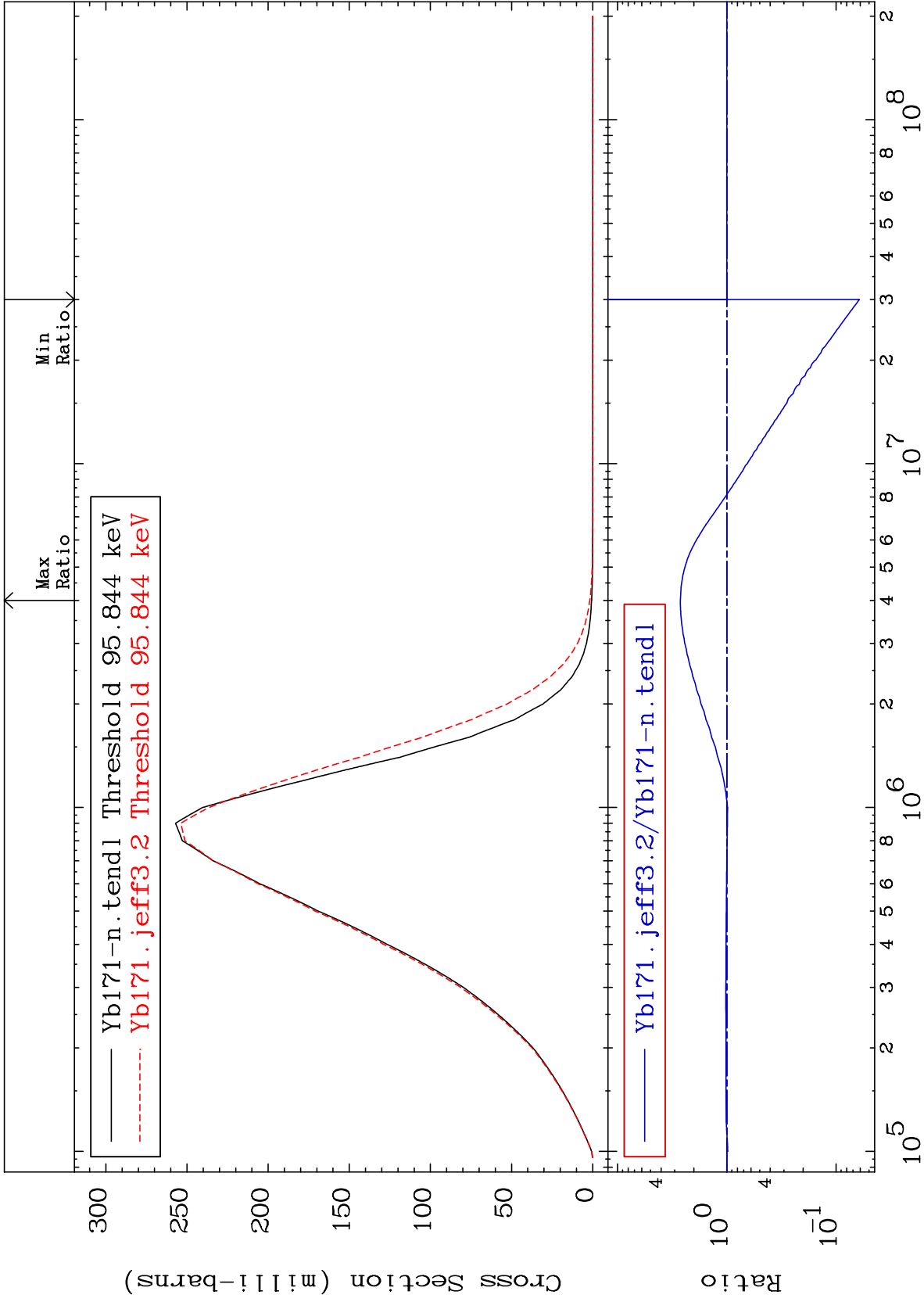
70-Yb-171
-0.530 To 5.961 %



MAT 7034

95.28 keV (n,n') Level
Cross Section

70-Yb-171
-93.89 To 166.2 %



23

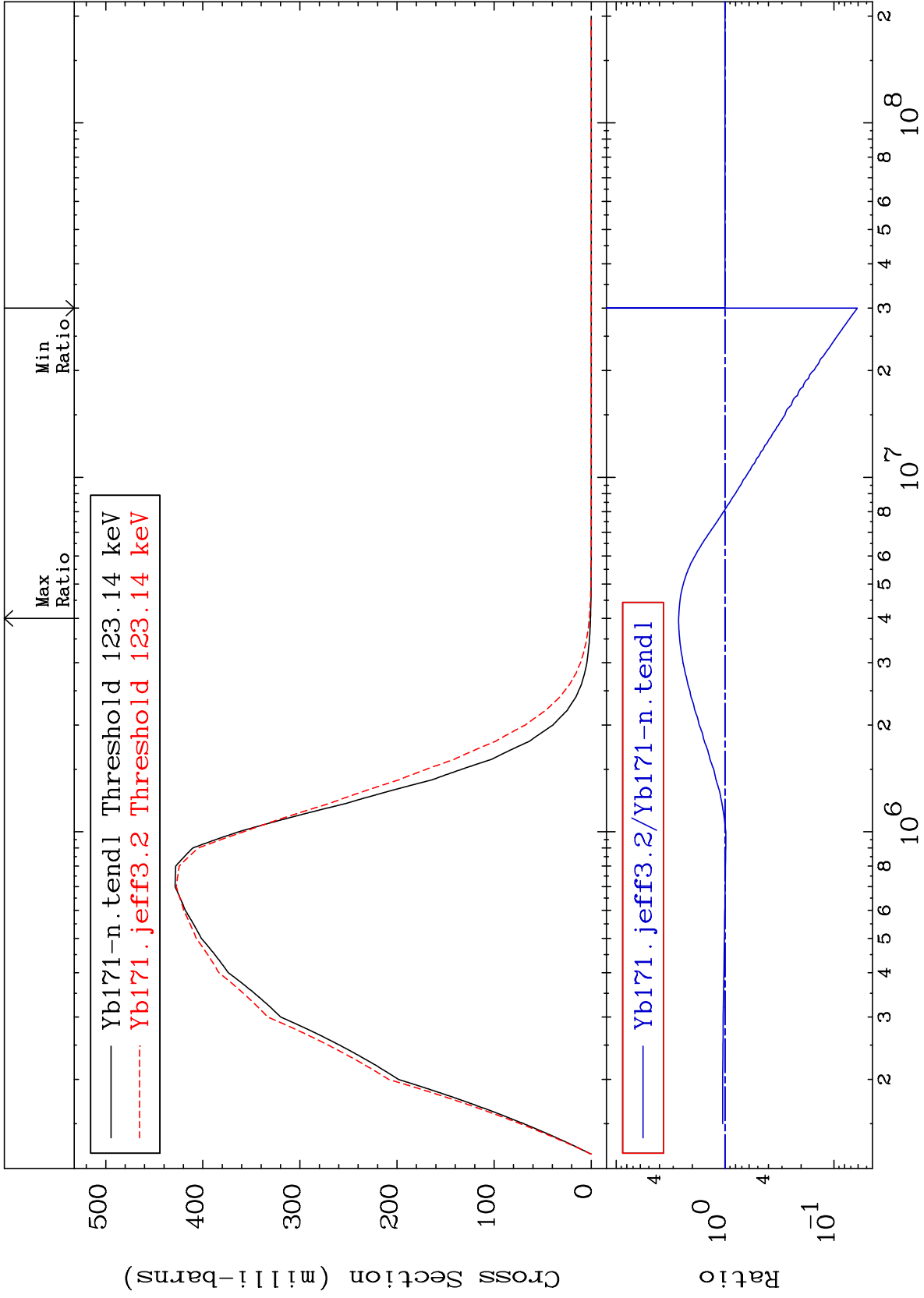
Incident Energy (eV)

70-Yb-171

MAT 7034

122.4 keV (n,n') Level
Cross Section

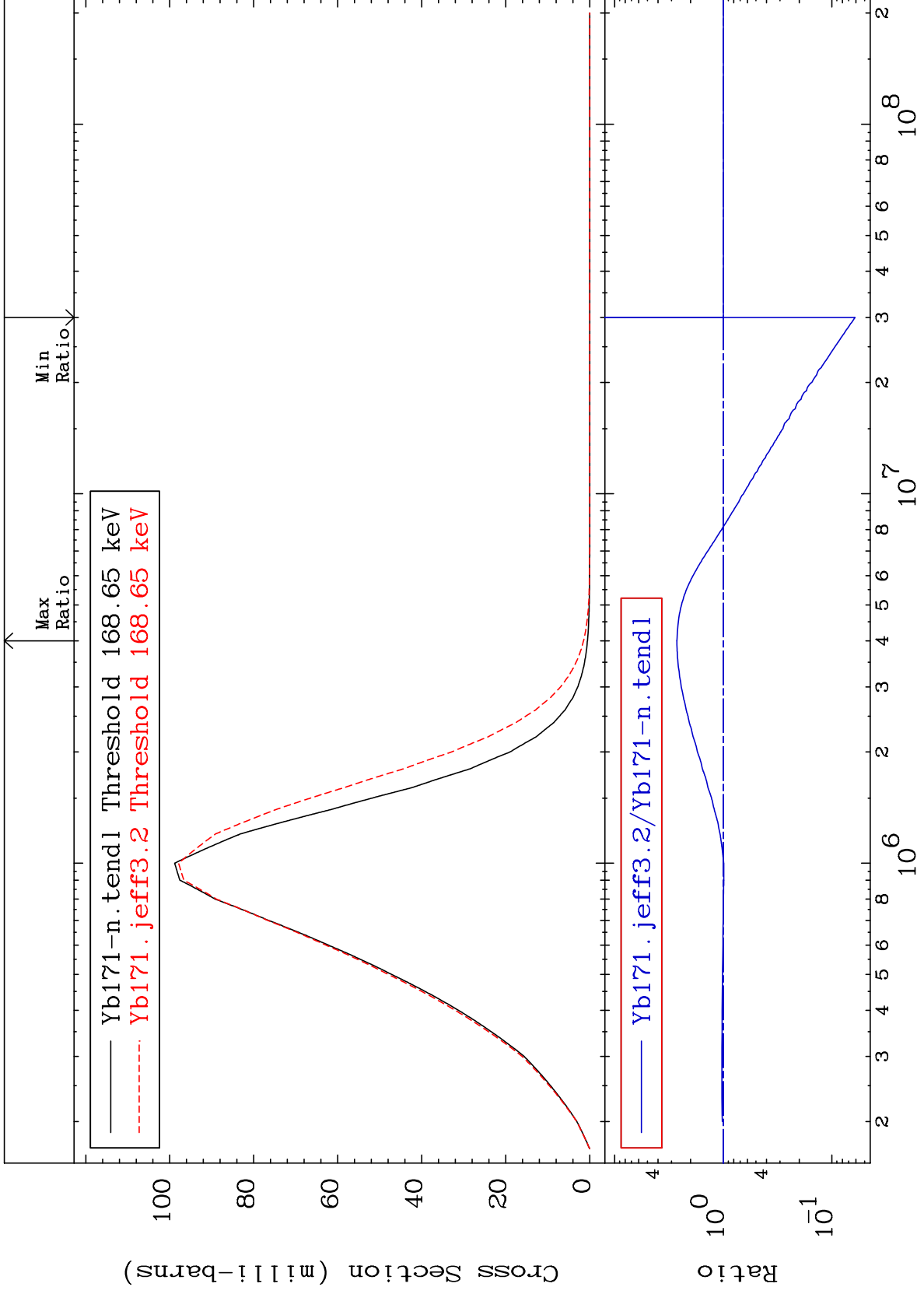
70-Yb-171
-93.90 To 166.9 %



MAT 7034

167.7 keV (n,n') Level
Cross Section

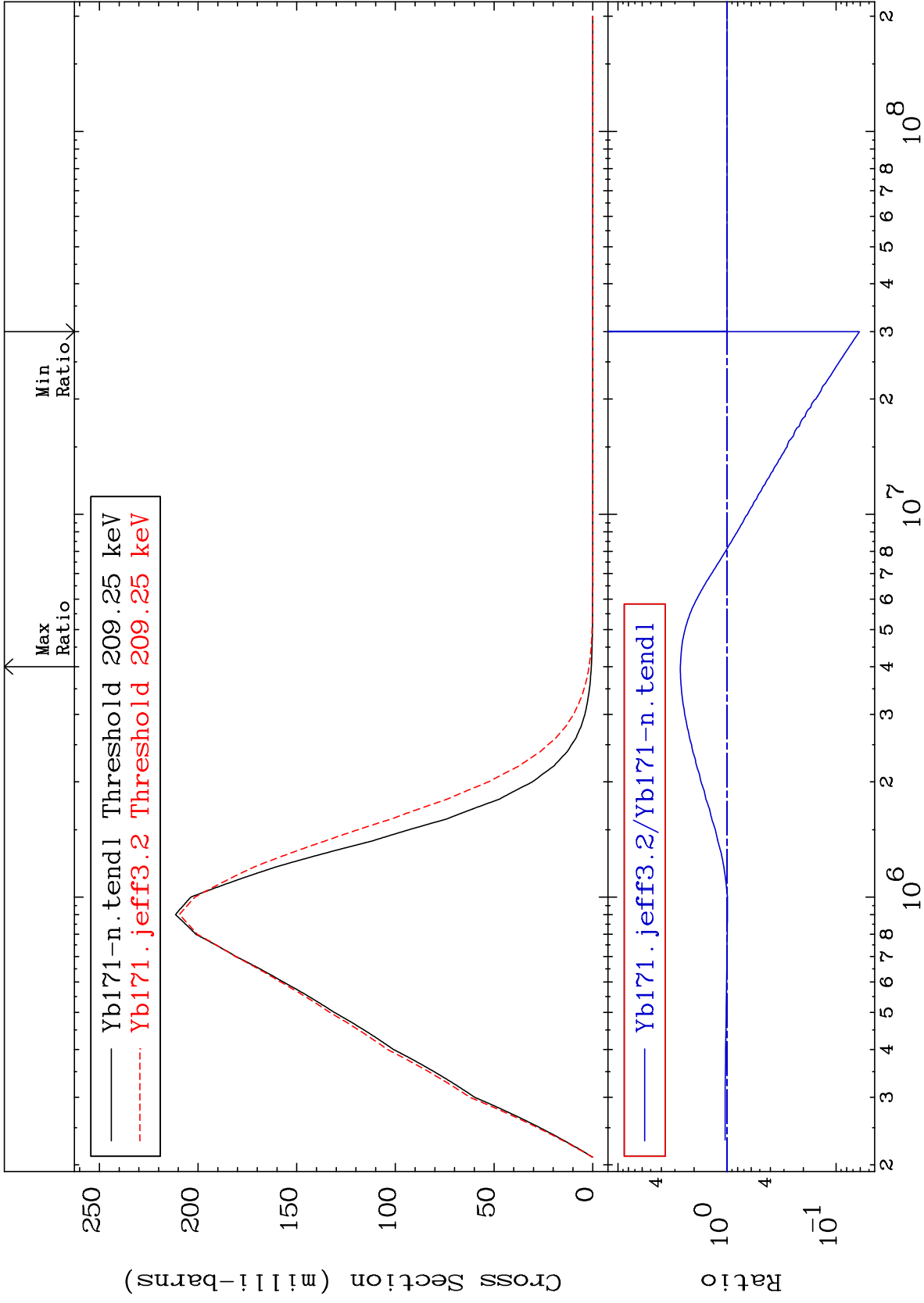
70-Yb-171
-93.88 To 167.3 %



MAT 7034

208.0 keV (n,n') Level
Cross Section

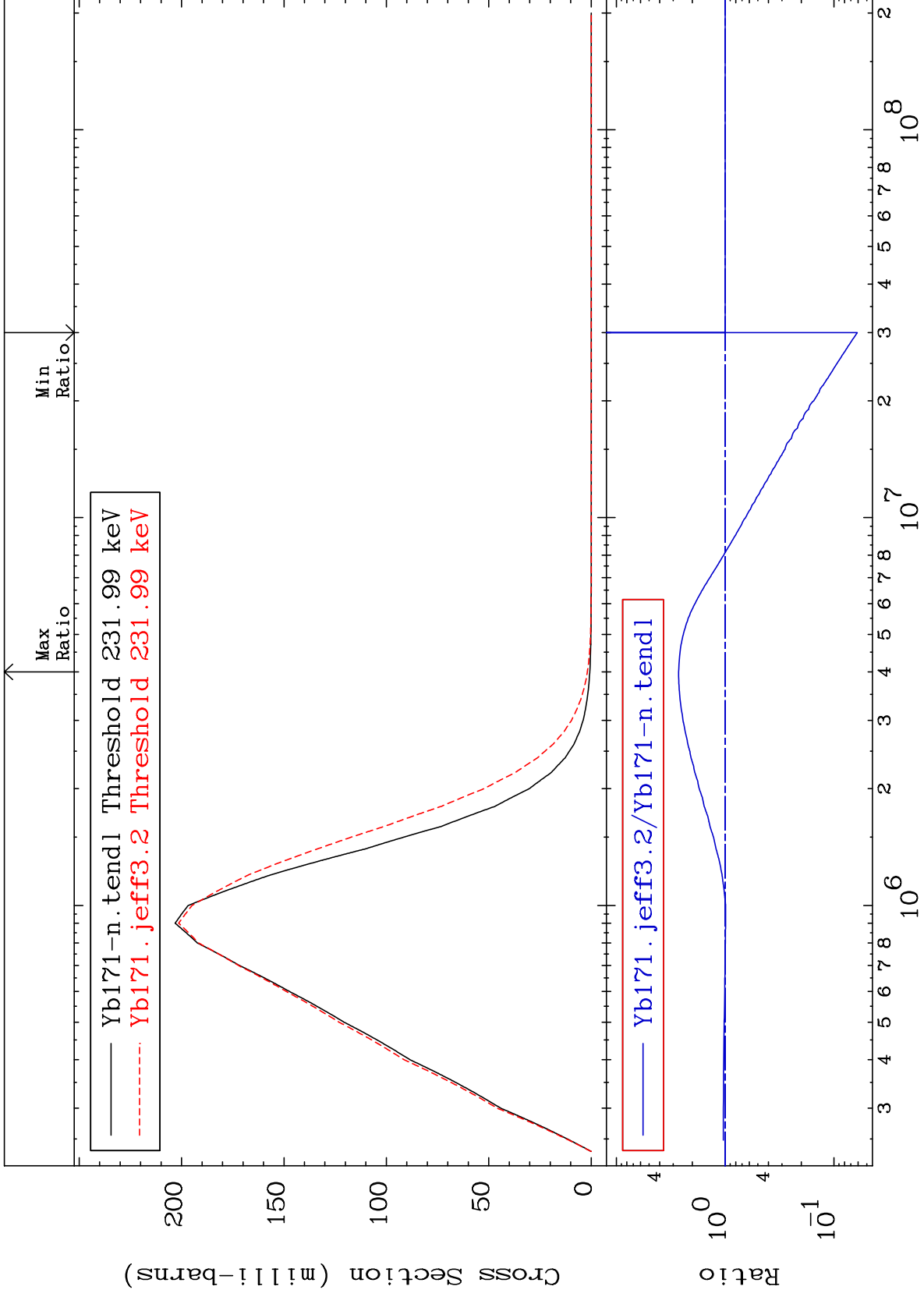
70-Yb-171
-93.89 To 167.7 %



MAT 7034

230.6 keV (n,n') Level
Cross Section

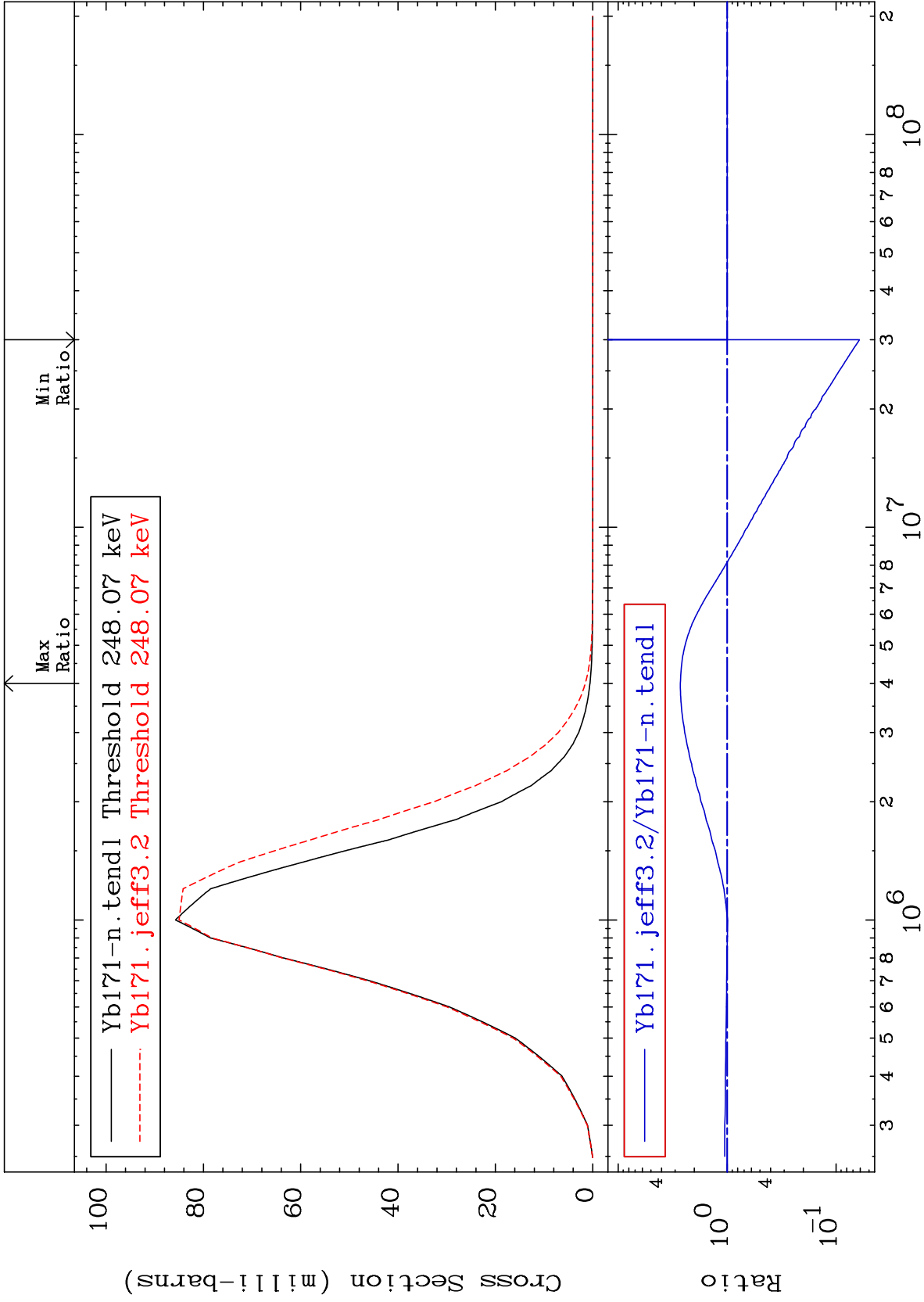
70-Yb-171
-93.89 To 167.7 %



MAT 7034

246.6 keV (n,n') Level
Cross Section

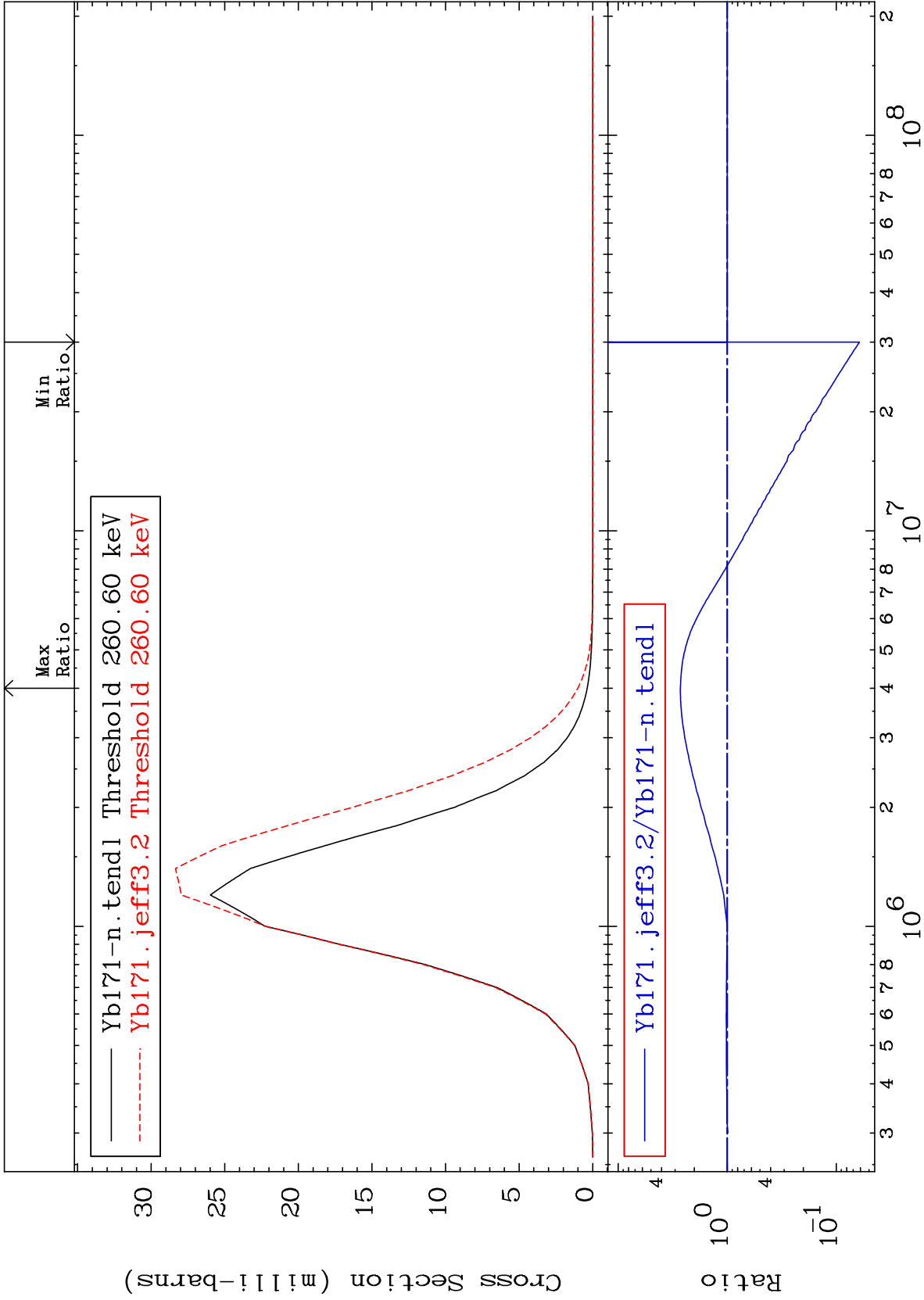
70-Yb-171
-93.88 To 168.8 %



MAT 7034

259.1 keV (n,n') Level
Cross Section

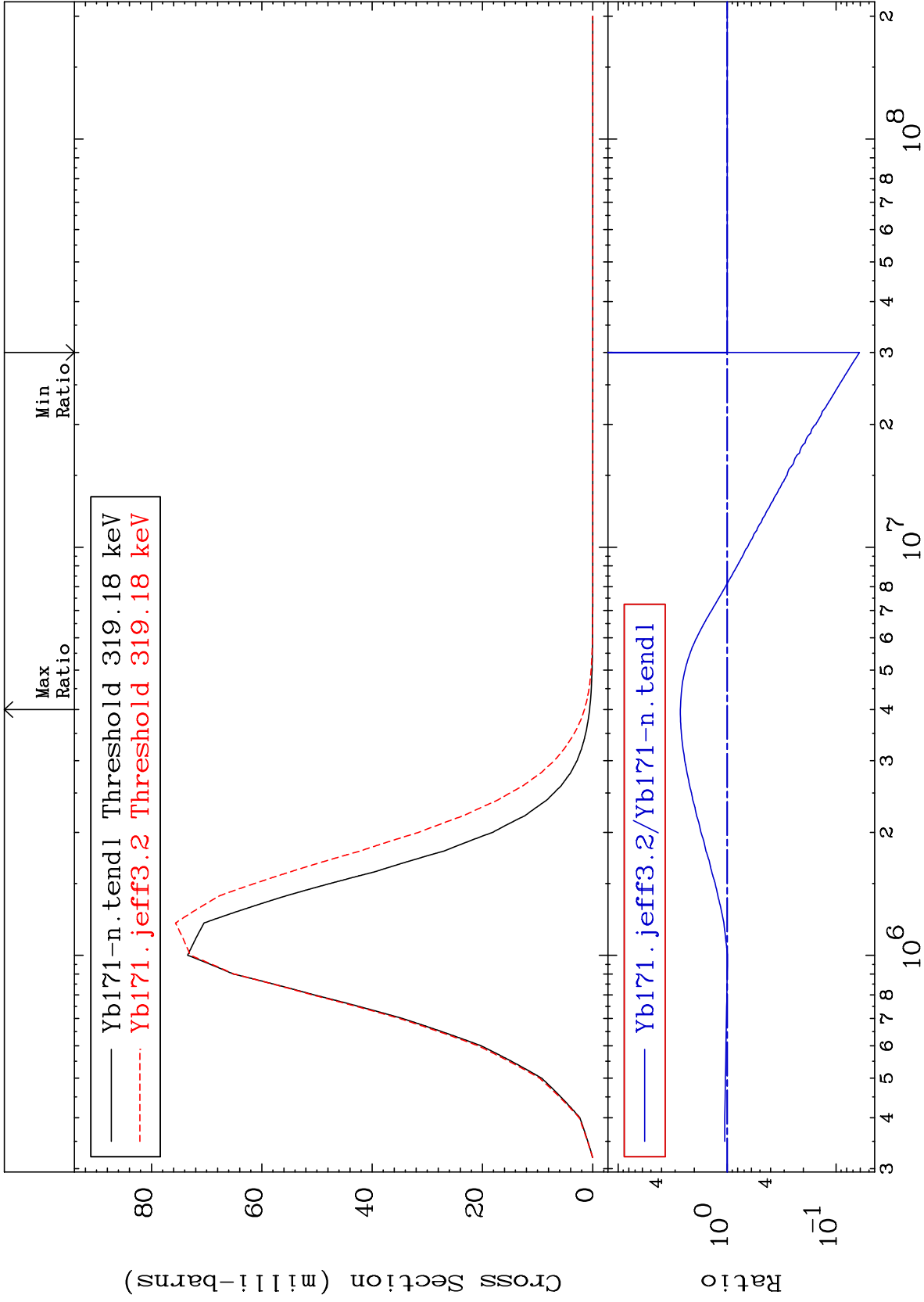
70-Yb-171
-93.88 To 168.7 %



MAT 7034

317.3 keV (n,n') Level
Cross Section

⁷⁰Yb-171
-93.88 To 168.8 %



30

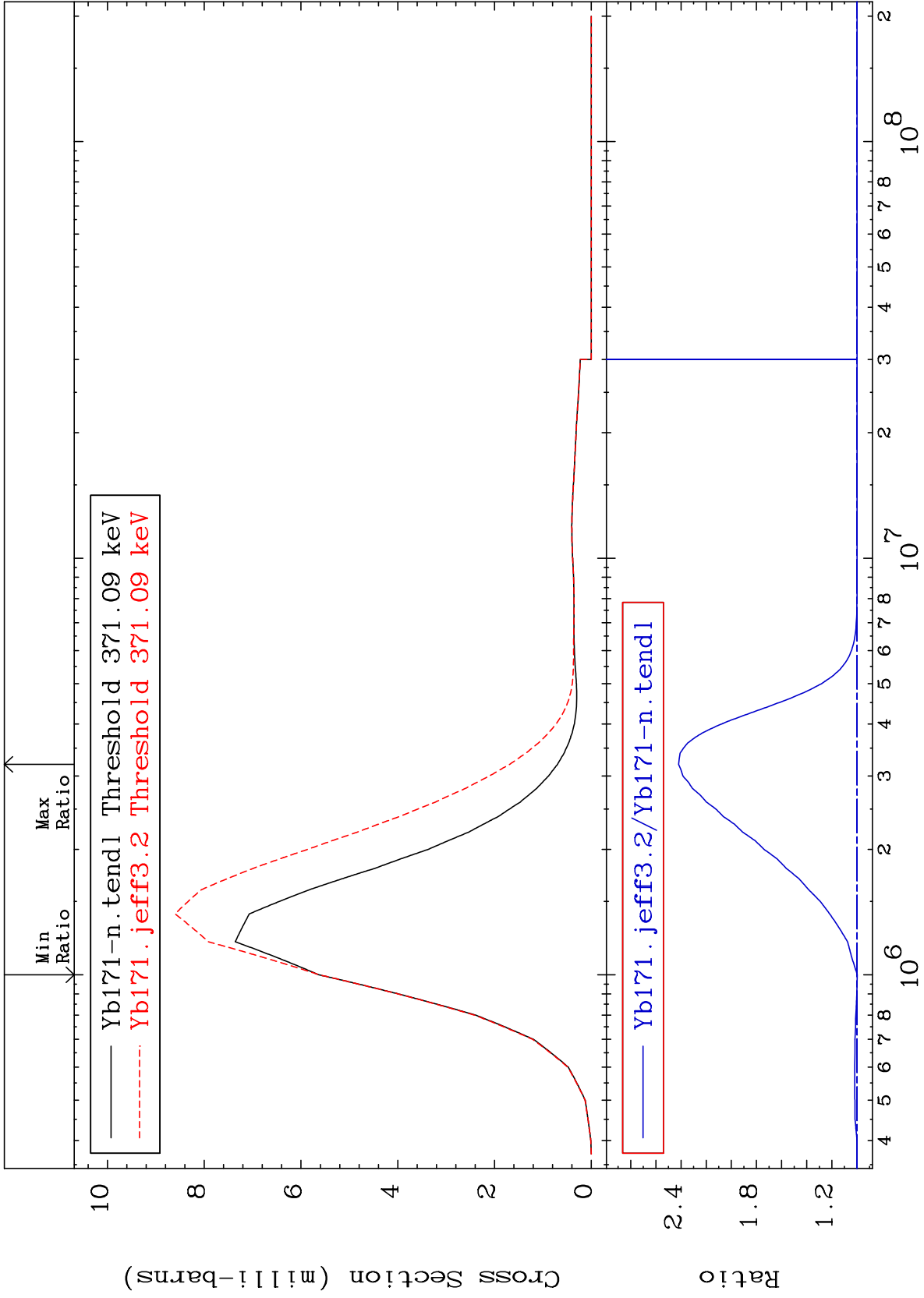
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

368.9 keV (n,n') Level
Cross Section

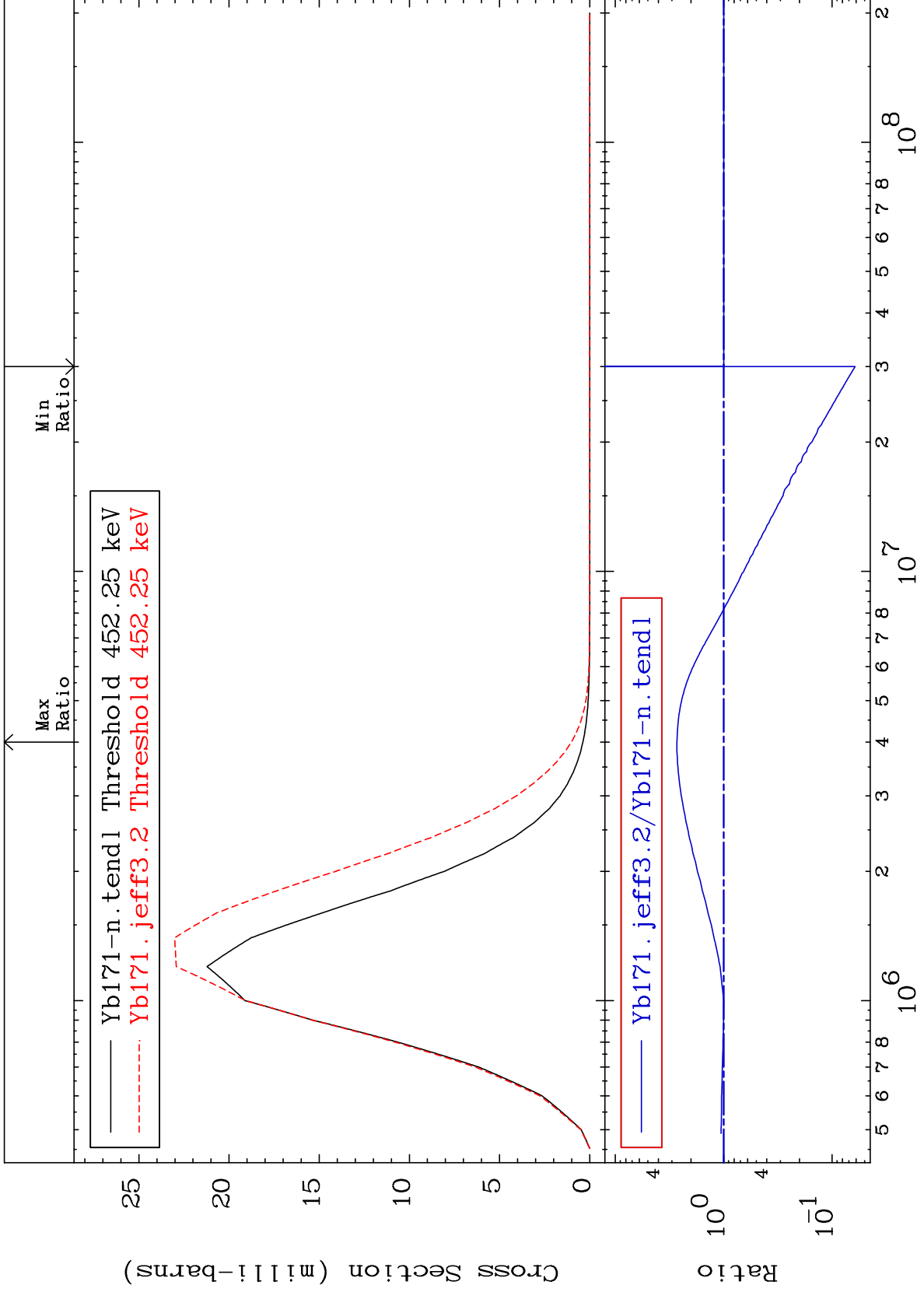
⁷⁰Yb-171
-0.194 To 141.9 %



MAT 7034

449.6 keV (n,n') Level
Cross Section

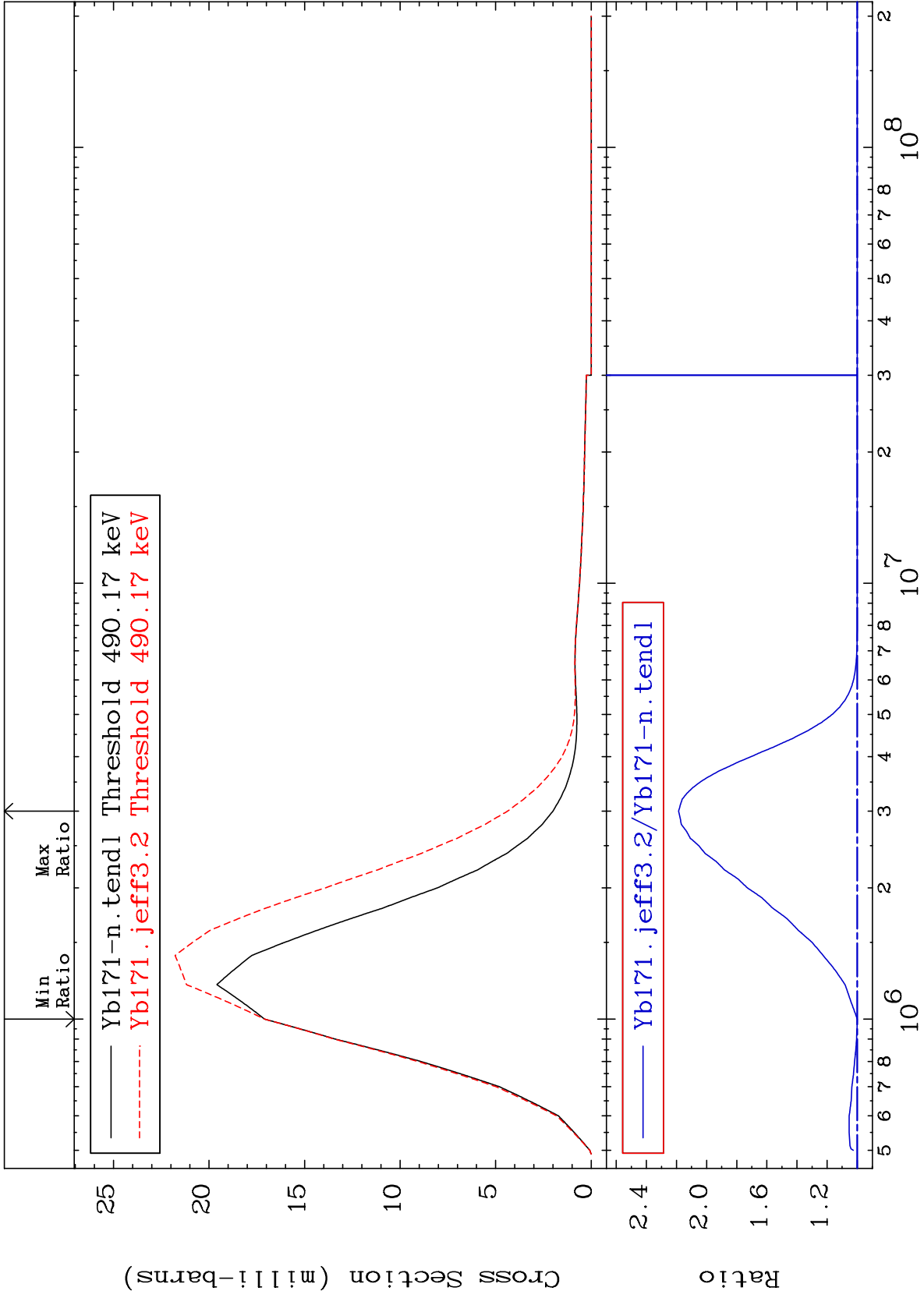
70-Yb-171
-93.88 To 170.0 %



MAT 7034

487.3 keV (n,n') Level
Cross Section

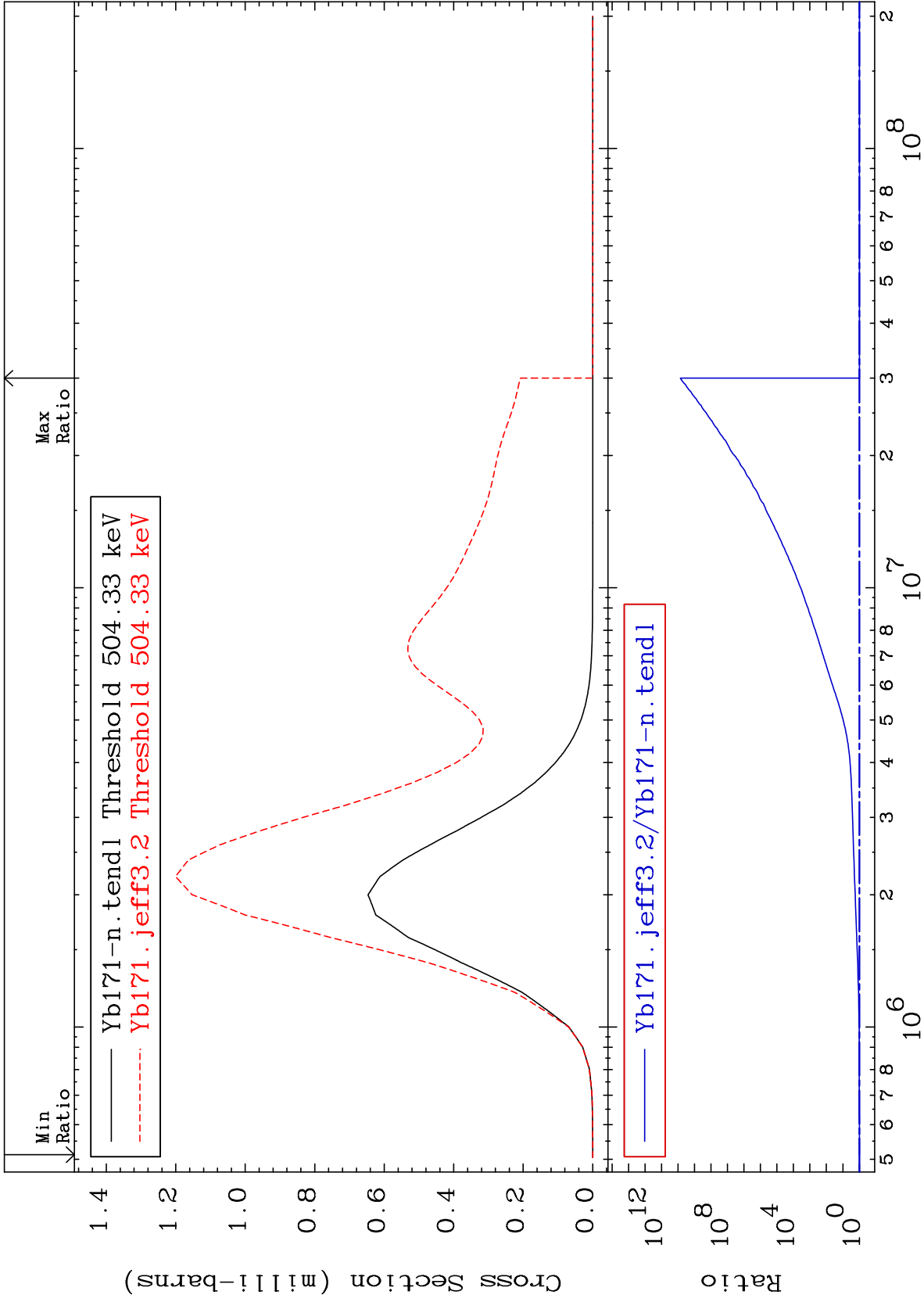
⁷⁰Yb-171
-0.025 To 118.6 %



MAT 7034

501.4 keV (n,n') Level
Cross Section

70-Yb-171
-1.356 To 9999. %



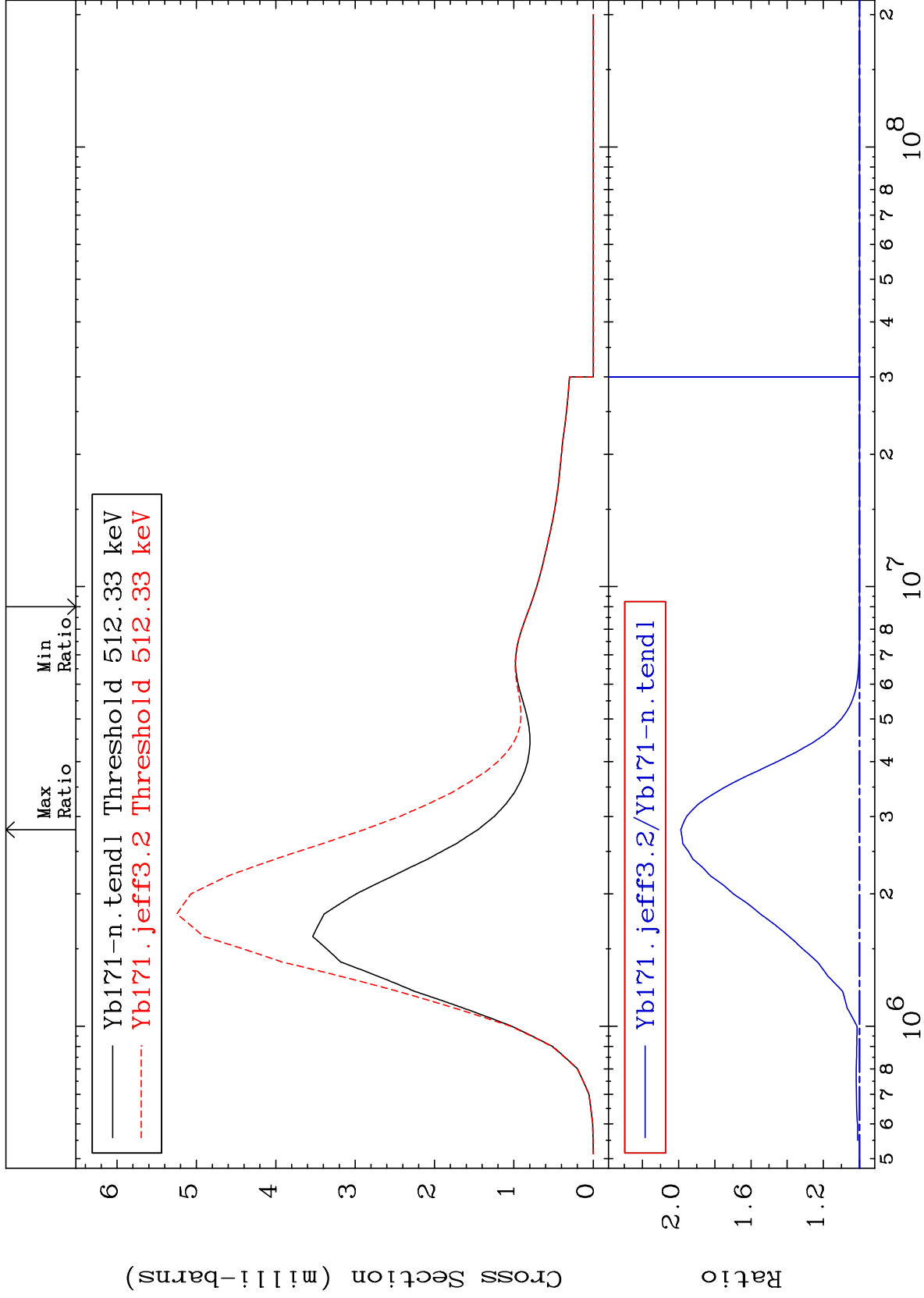
MAT 7034

509.3 keV (n,n') Level

⁷⁰Yb-171

-0.011 To 98.82 %

Cross Section



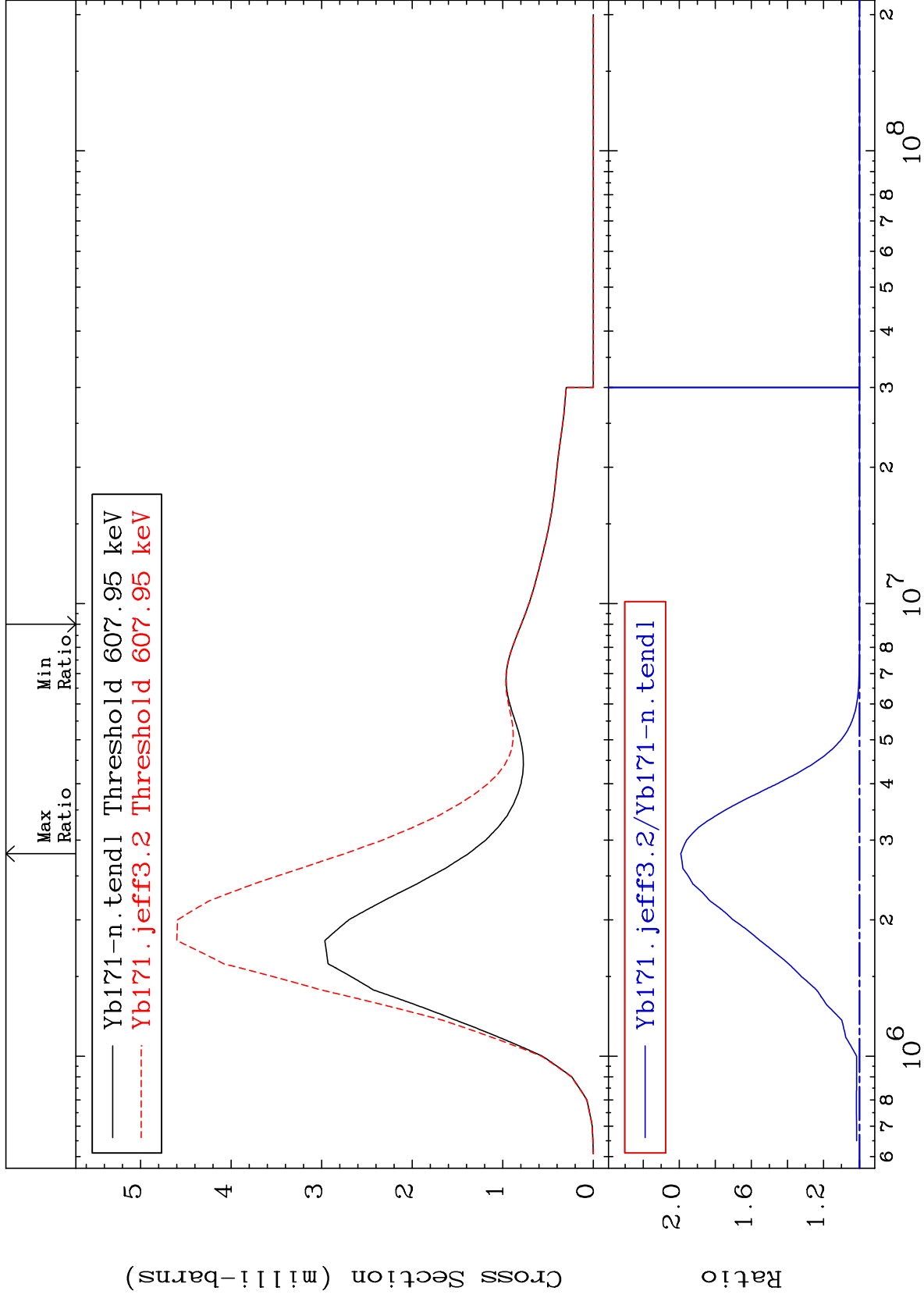
MAT 7034

604.4 keV (n,n') Level

⁷⁰Yb-171

-0.011 To 99.16 %

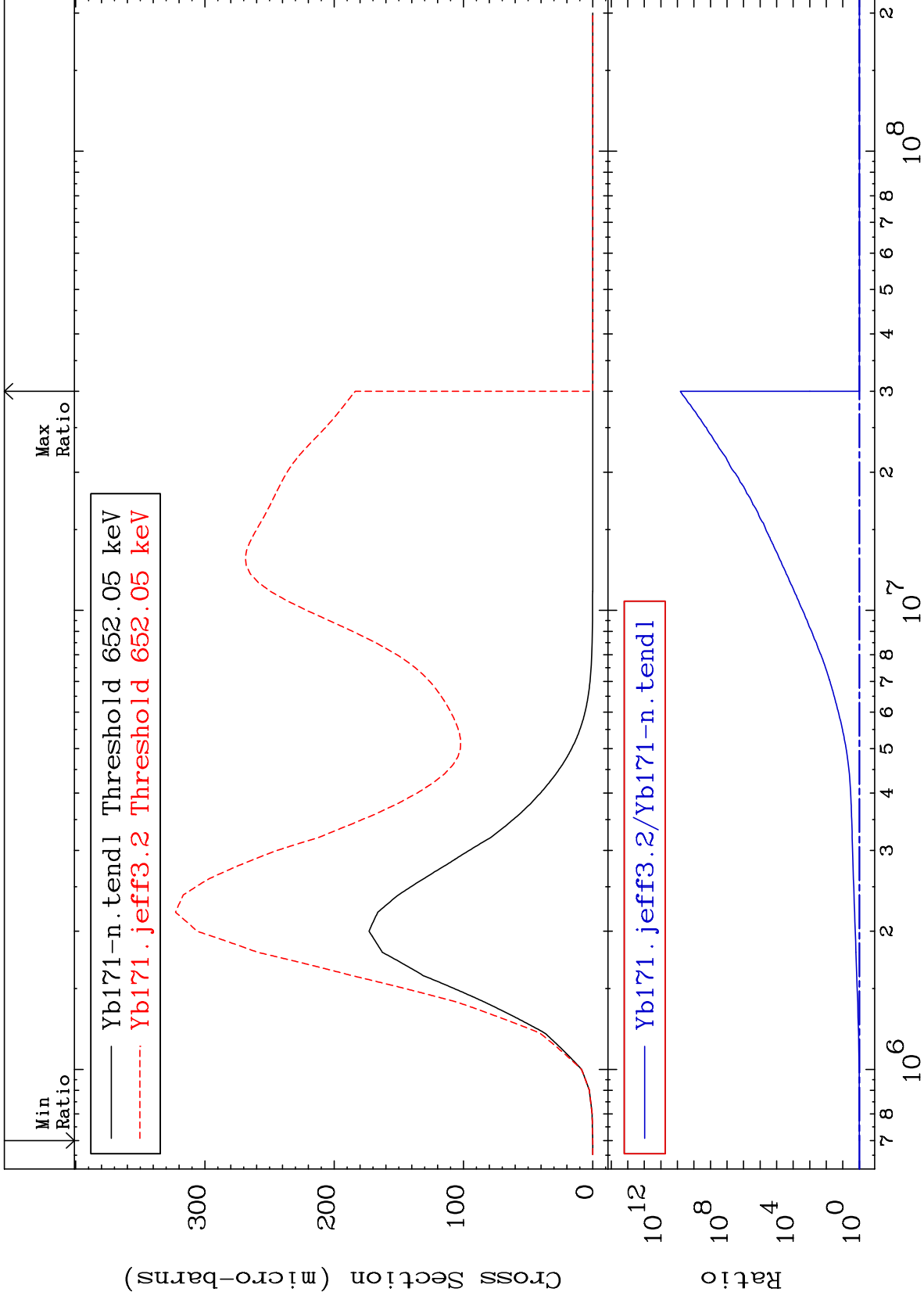
Cross Section



MAT 7034

648.2 keV (n,n') Level
Cross Section

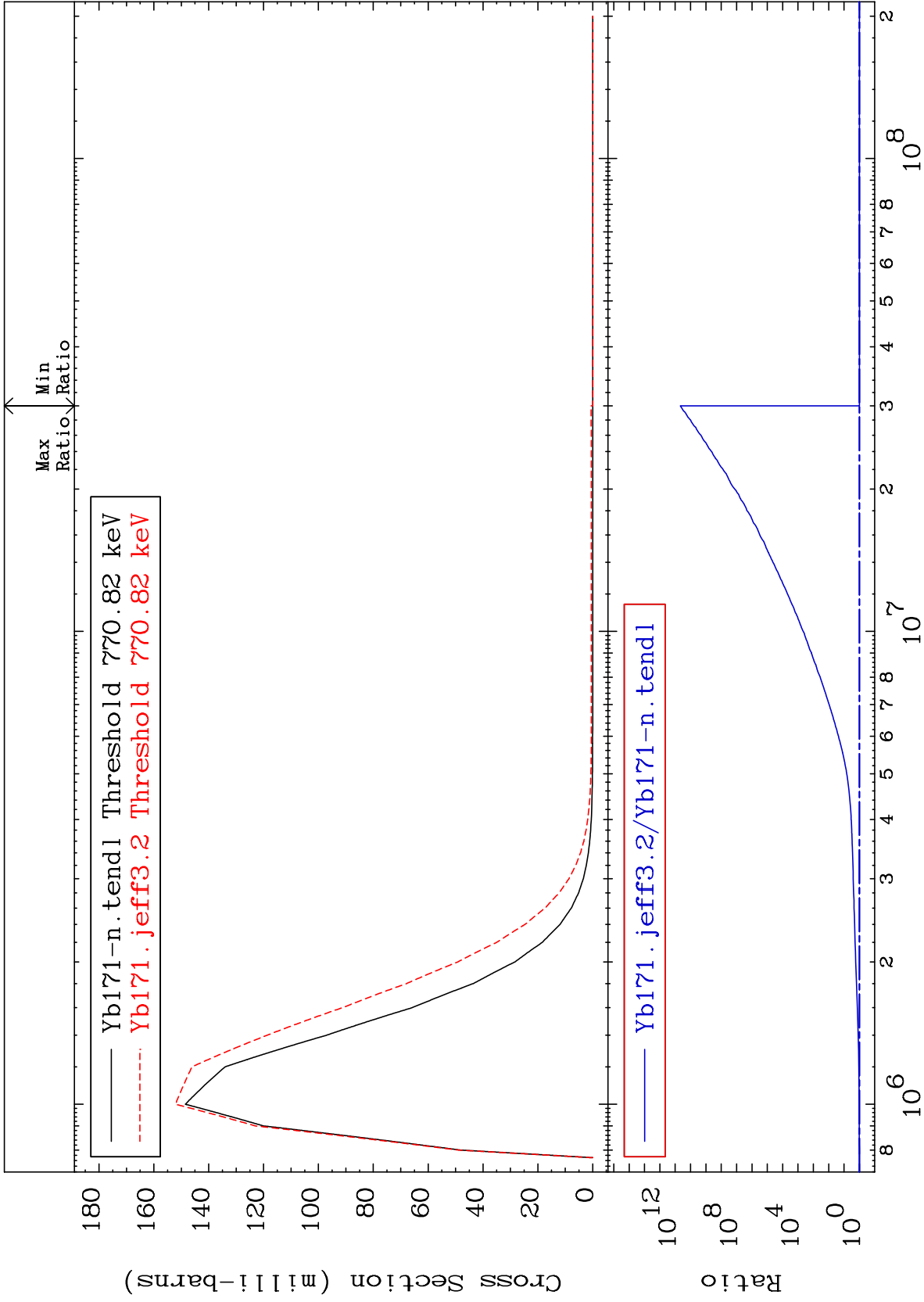
70-Yb-171
-1.475 To 9999. %



MAT 7034

766.3 keV (n,n') Level
Cross Section

70-Yb-171
To 9999. %



38

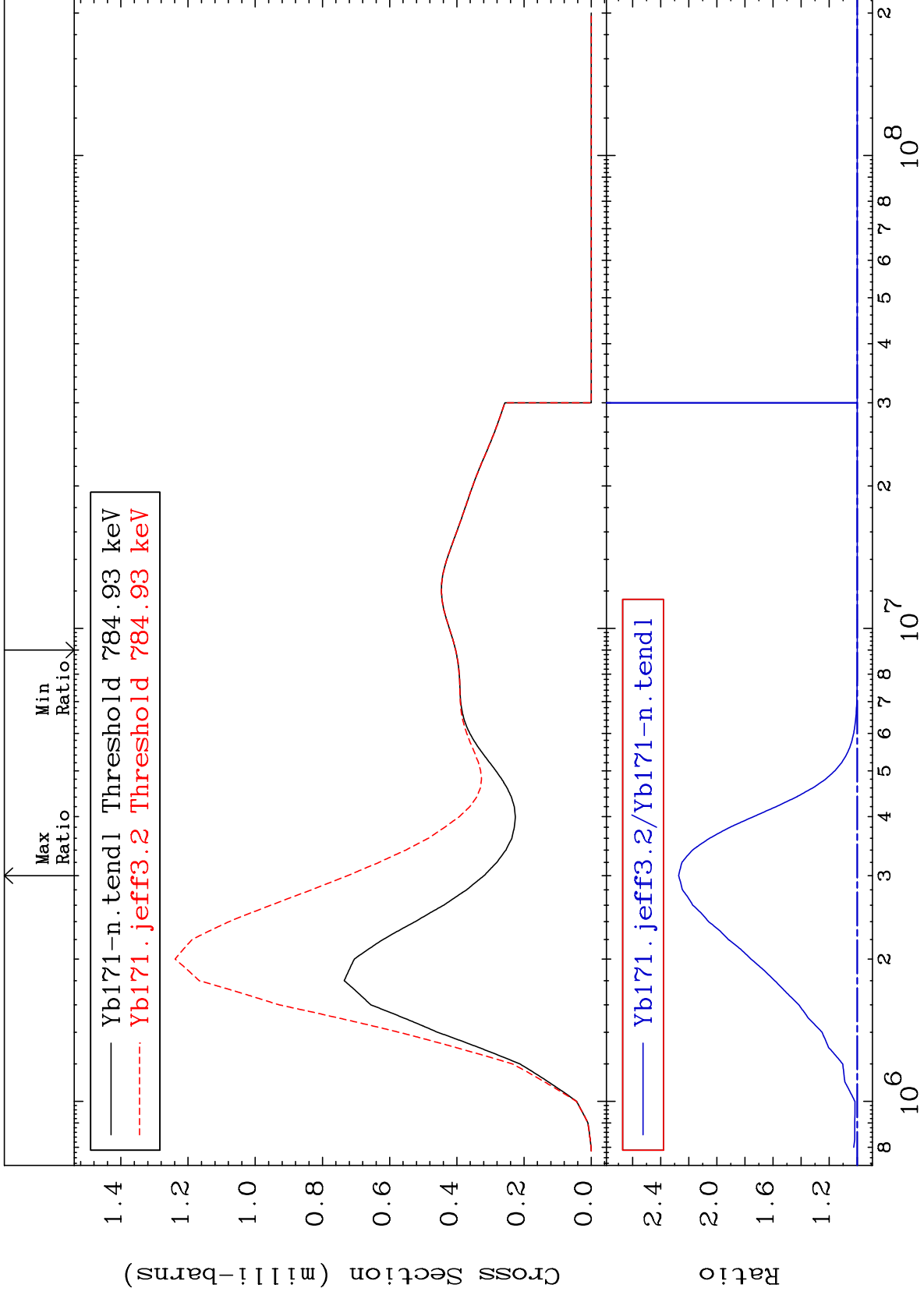
Incident Energy (eV)

70-Yb-171

MAT 7034

780.3 keV (n,n') Level
Cross Section

70-Yb-171
-0.015 To 127.2 %



39

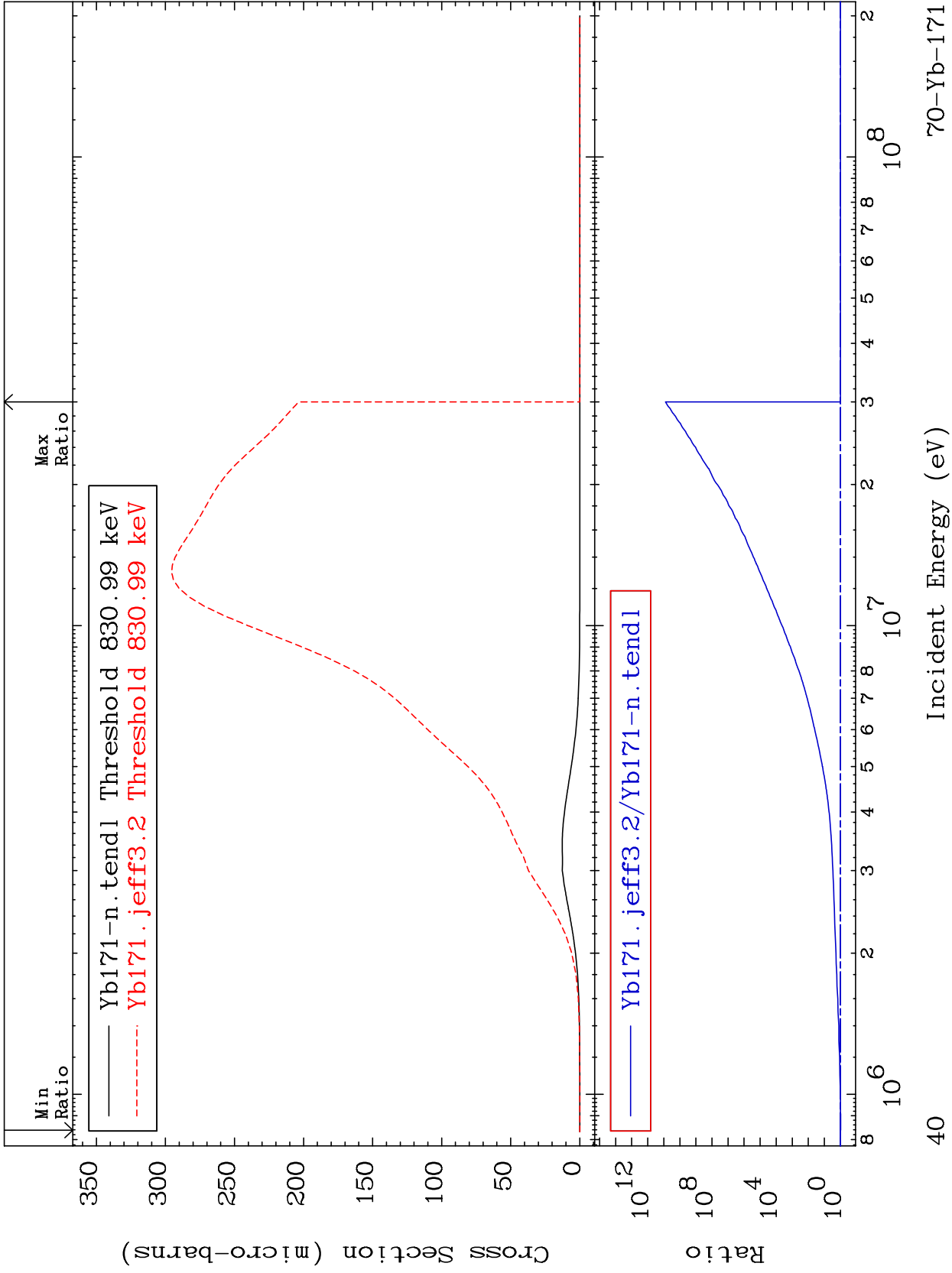
Incident Energy (eV)

70-Yb-171

MAT 7034

826.1 keV (n,n') Level
Cross Section

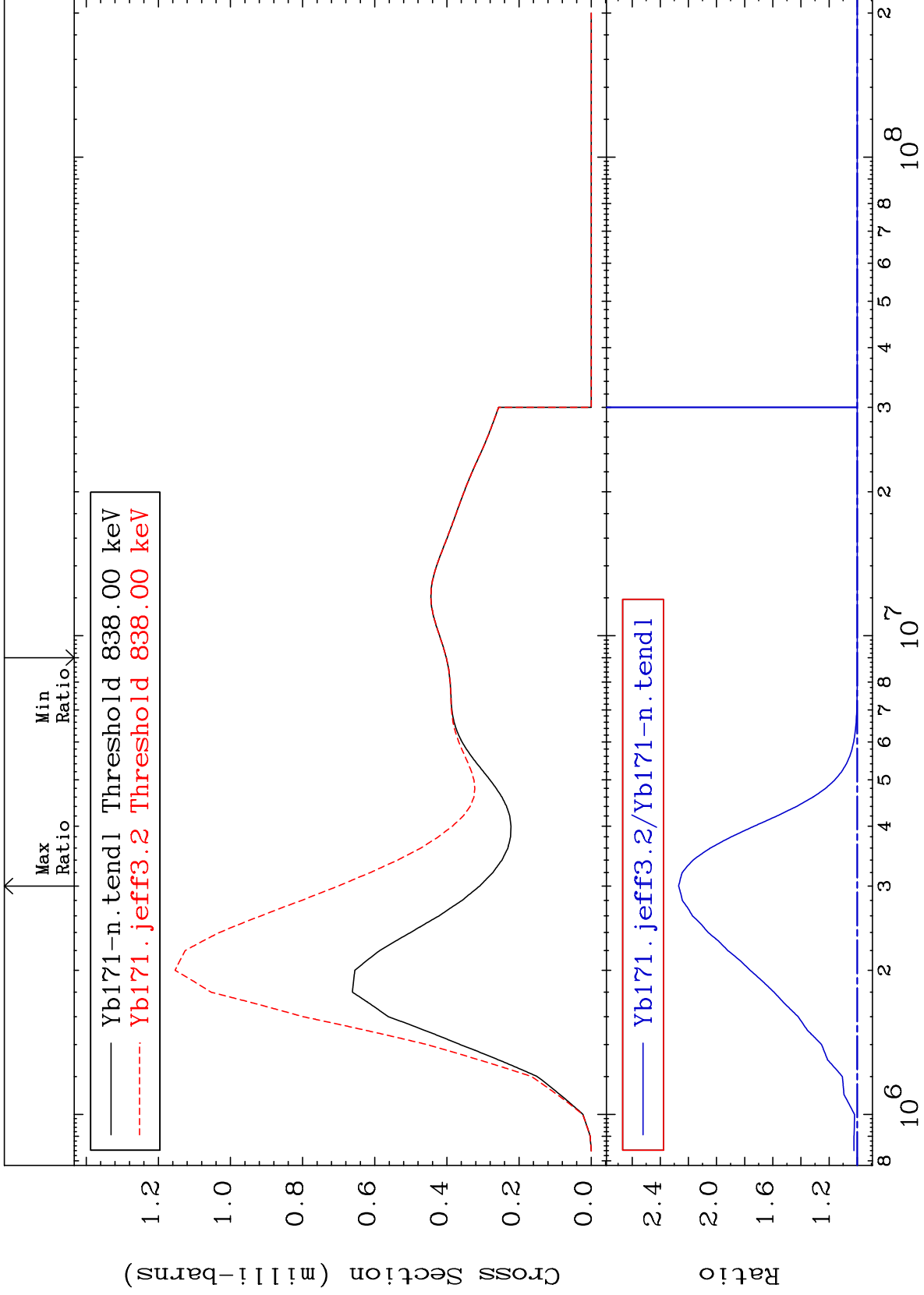
70-Yb-171
-3.240 To 9999. %



MAT 7034

833.1 keV (n,n') Level
Cross Section

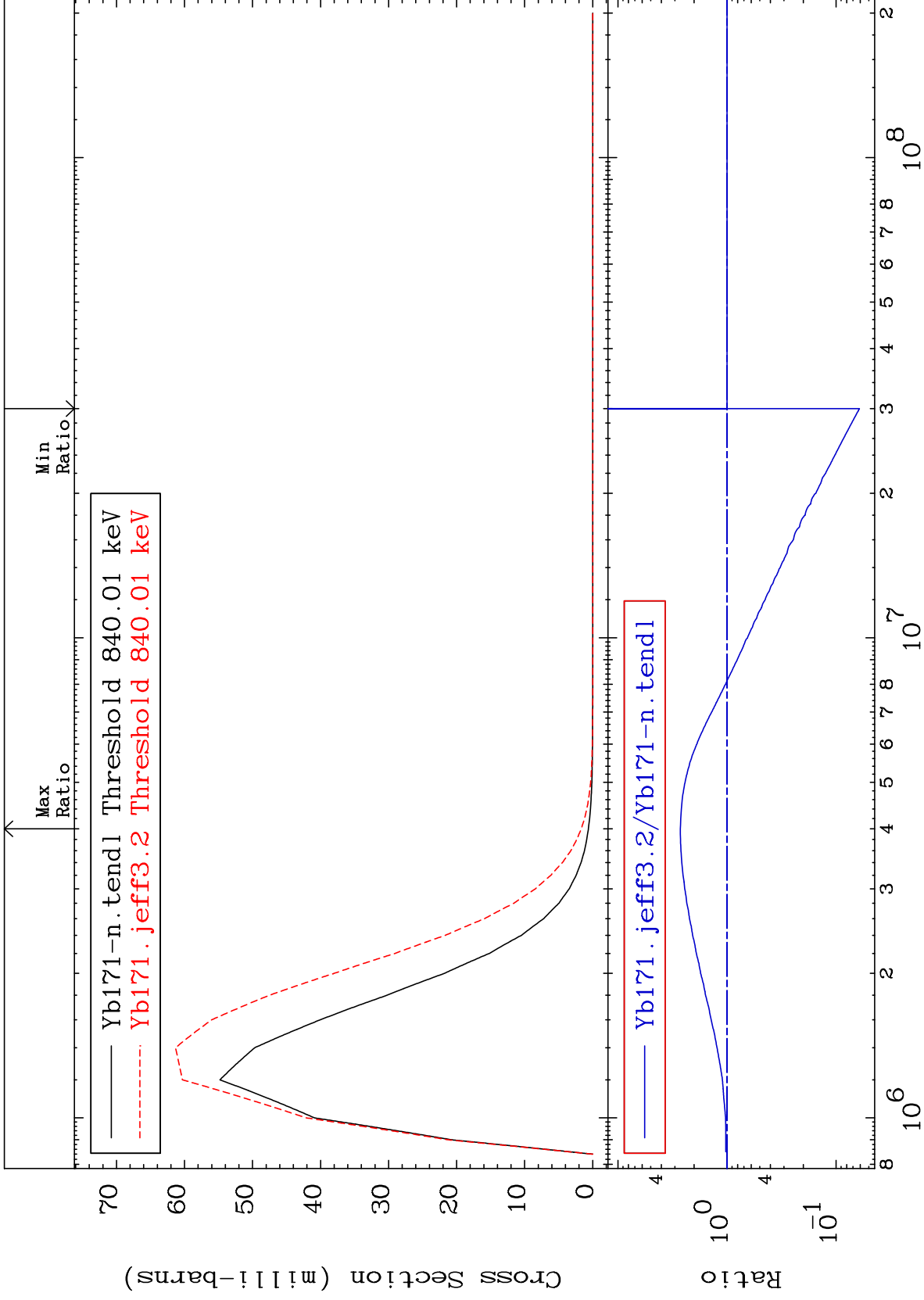
⁷⁰Yb-171
-0.015 To 126.9 %



MAT 7034

835.1 keV (n,n') Level
Cross Section

70-Yb-171
-93.89 To 167.6 %



42

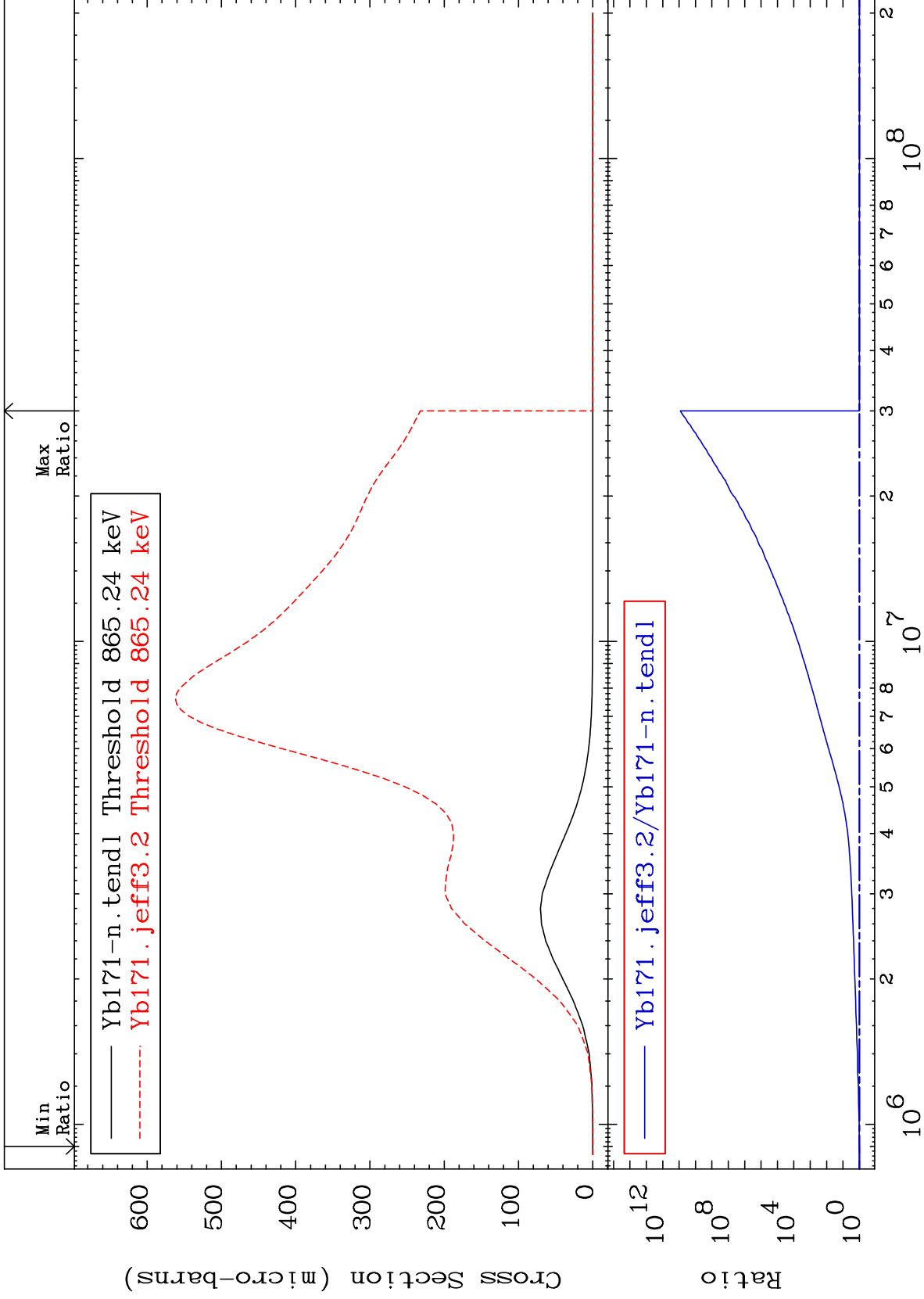
Incident Energy (eV)

70-Yb-171

MAT 7034

860.2 keV (n,n') Level
Cross Section

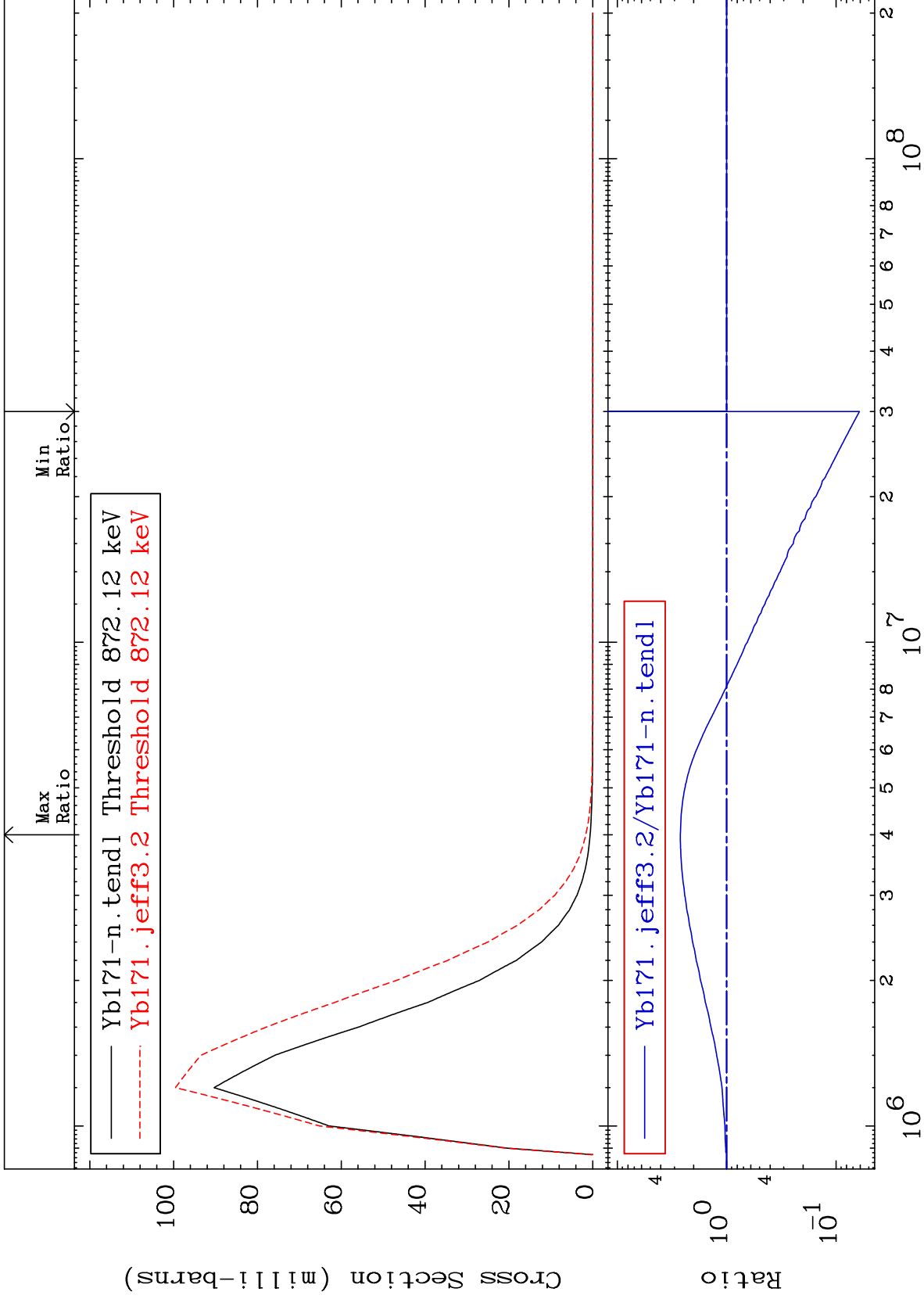
70-Yb-171
-0.280 To 9999. %



MAT 7034

867.0 keV (n,n') Level
Cross Section

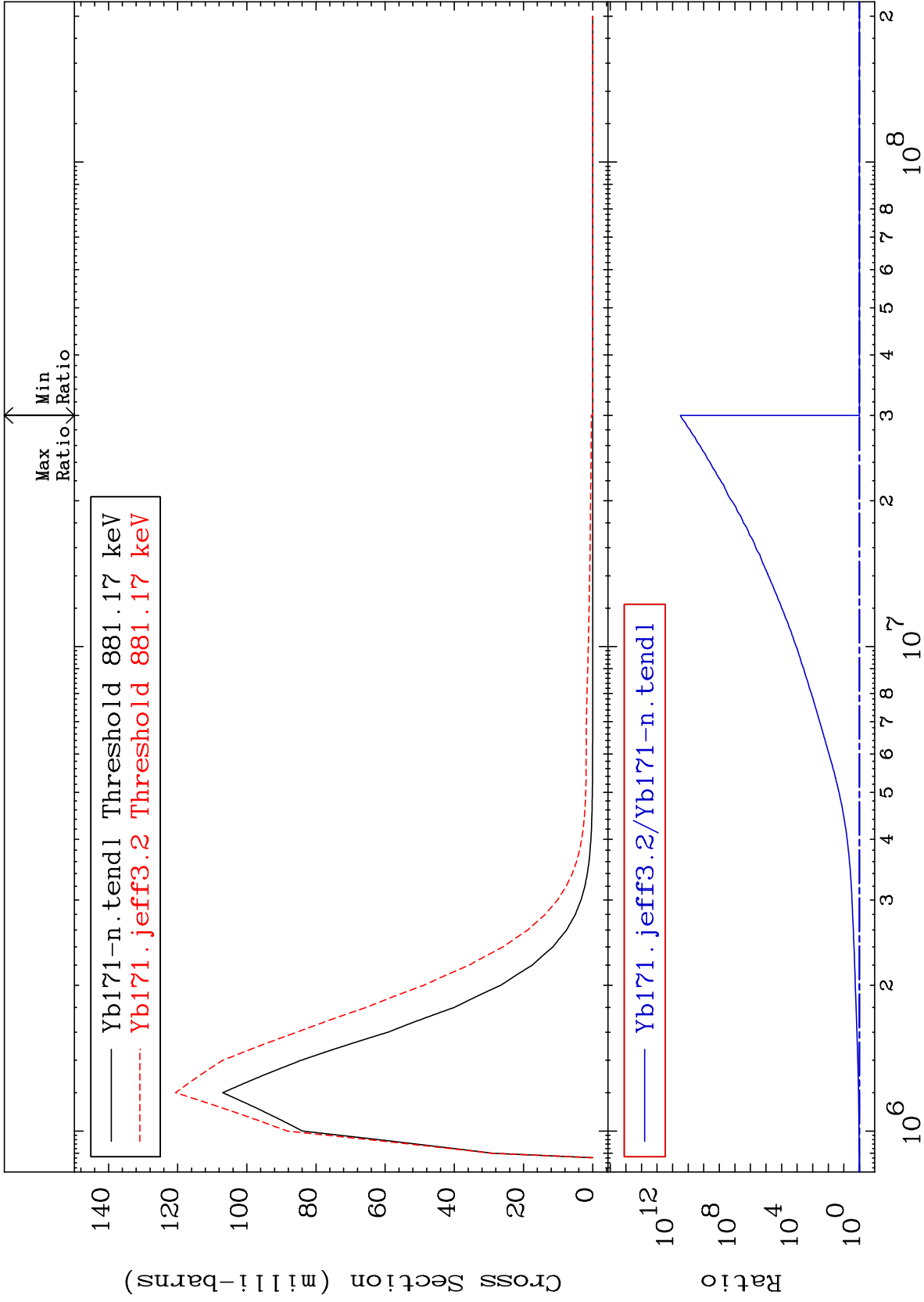
⁷⁰Yb-171
-93.90 To 164.9 %



MAT 7034

876.0 keV (n,n') Level
Cross Section

70-Yb-171
To 9999. %
0.000



45

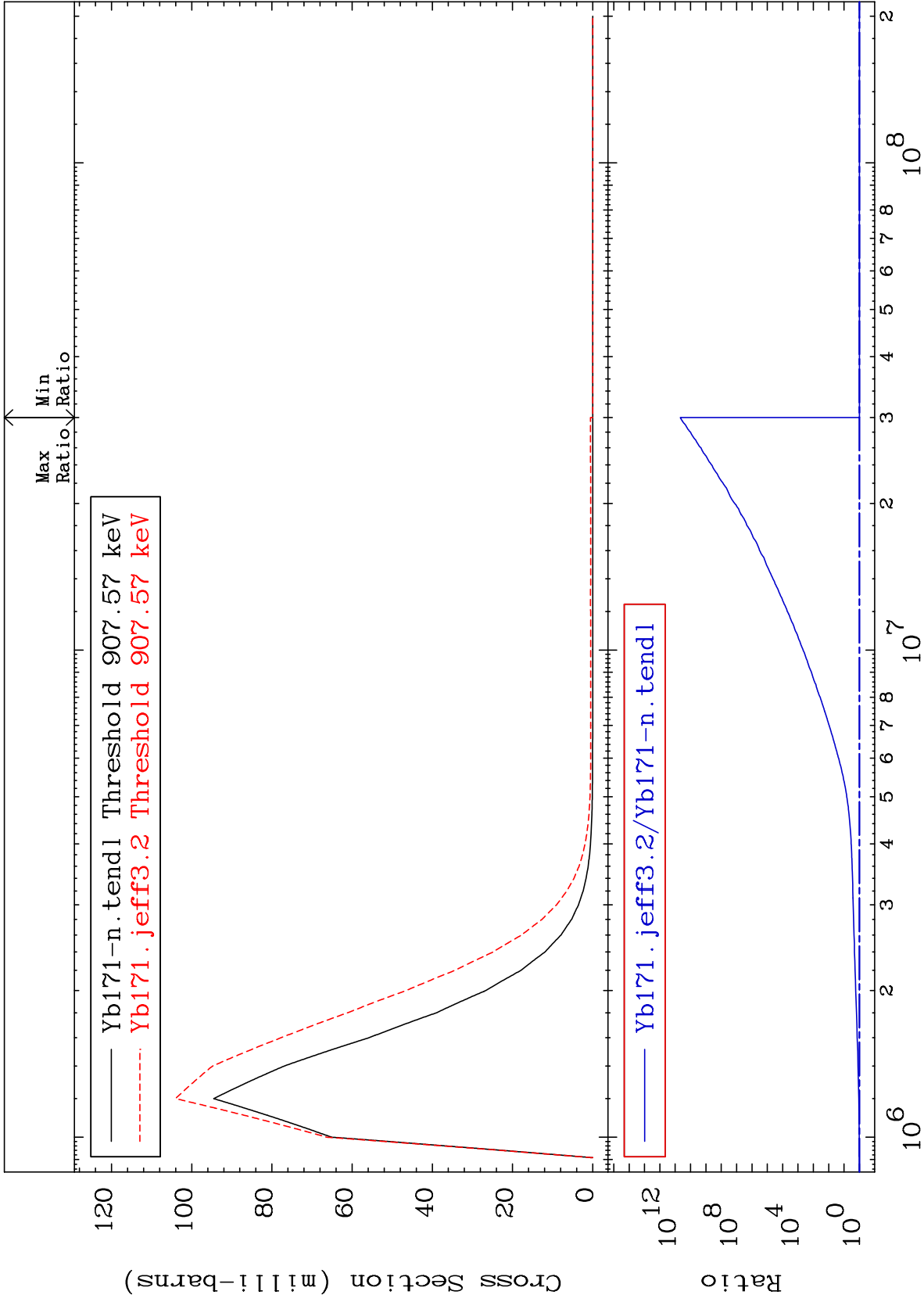
Incident Energy (eV)

70-Yb-171

MAT 7034

902.3 keV (n,n') Level
Cross Section

70-Yb-171
To 9999. %
0.000



46

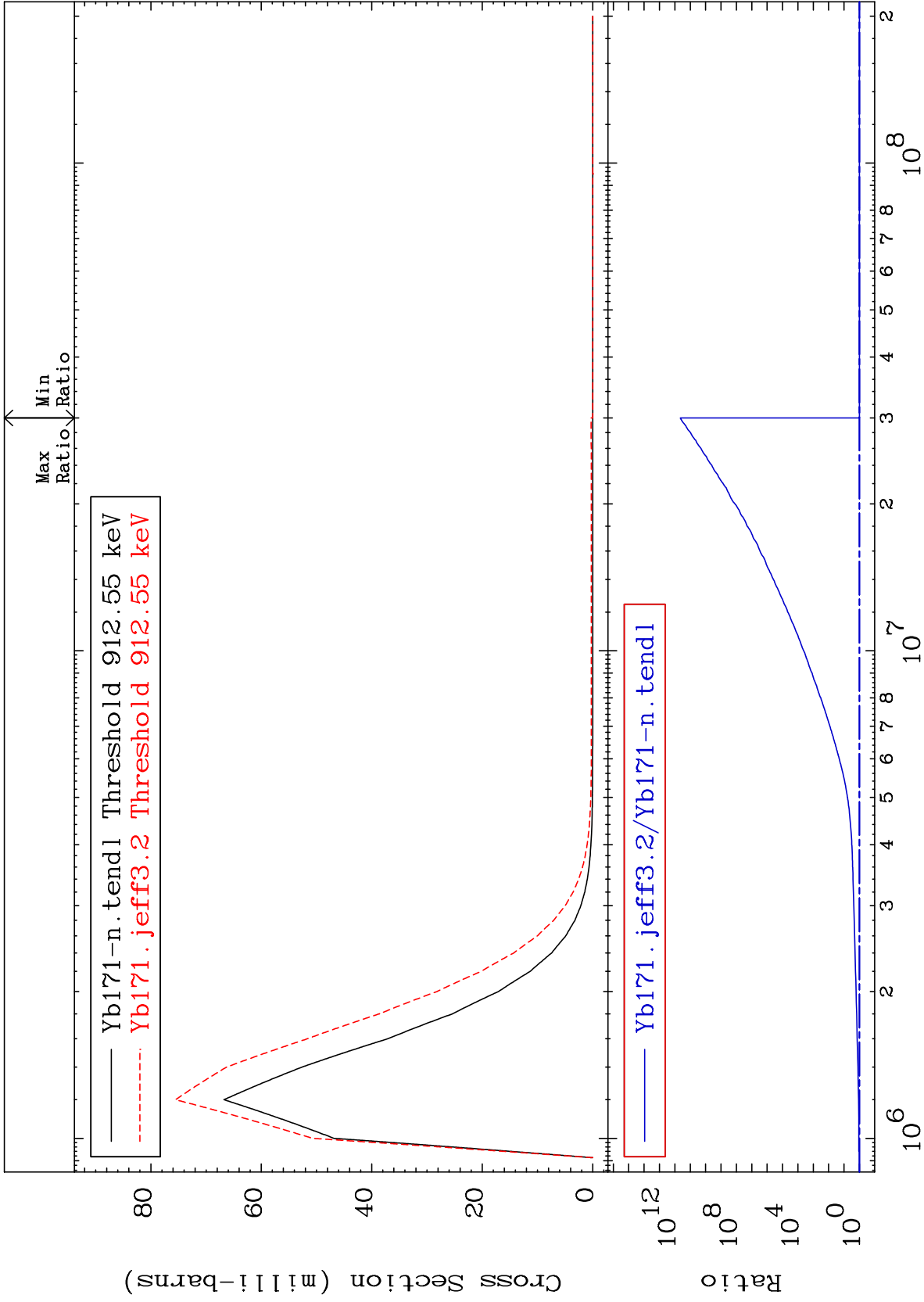
Incident Energy (eV)

70-Yb-171

MAT 7034

907.2 keV (n,n') Level
Cross Section

70-Yb-171
To 9999. %



47

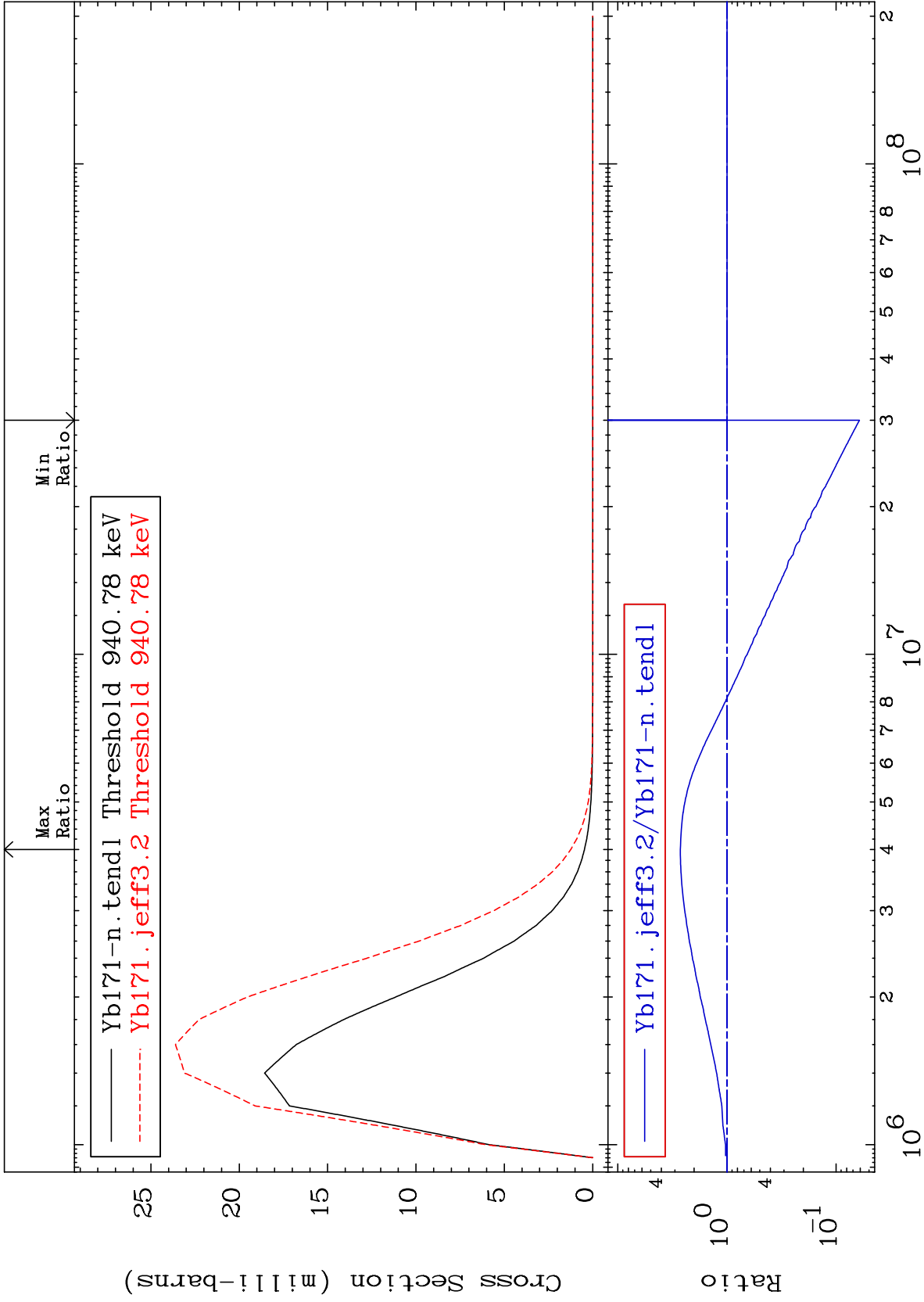
Incident Energy (eV)

70-Yb-171

MAT 7034

935.3 keV (n,n') Level
Cross Section

70-Yb-171
-93.89 To 167.2 %



48

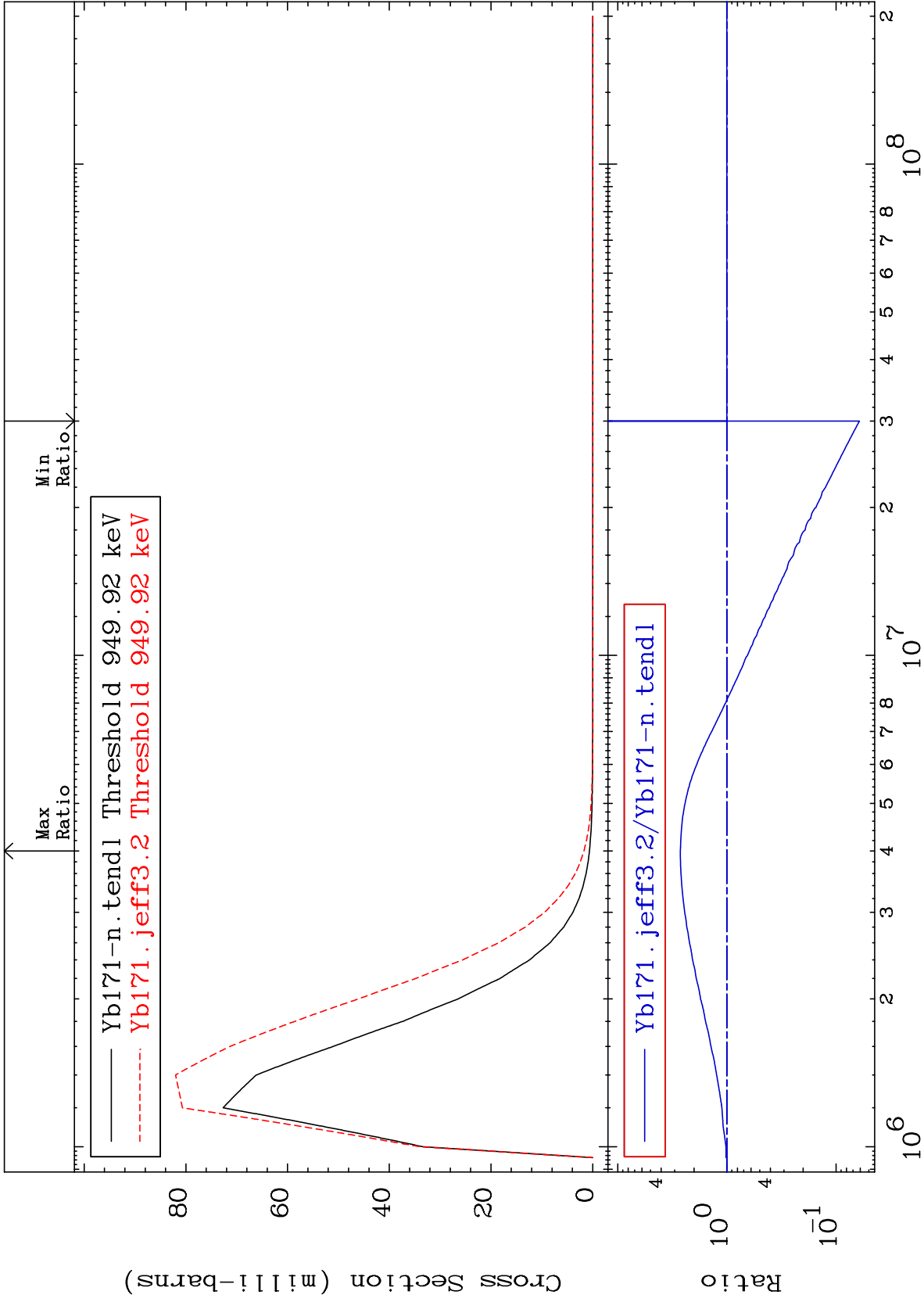
Incident Energy (eV)

70-Yb-171

MAT 7034

944.4 keV (n,n') Level
Cross Section

70-Yb-171
-93.90 To 166.6 %



— Yb171-n.tendl Threshold 949.92 keV
- - - Yb171.jeff3.2 Threshold 949.92 keV

— Yb171.jeff3.2/Yb171-n.tendl

49

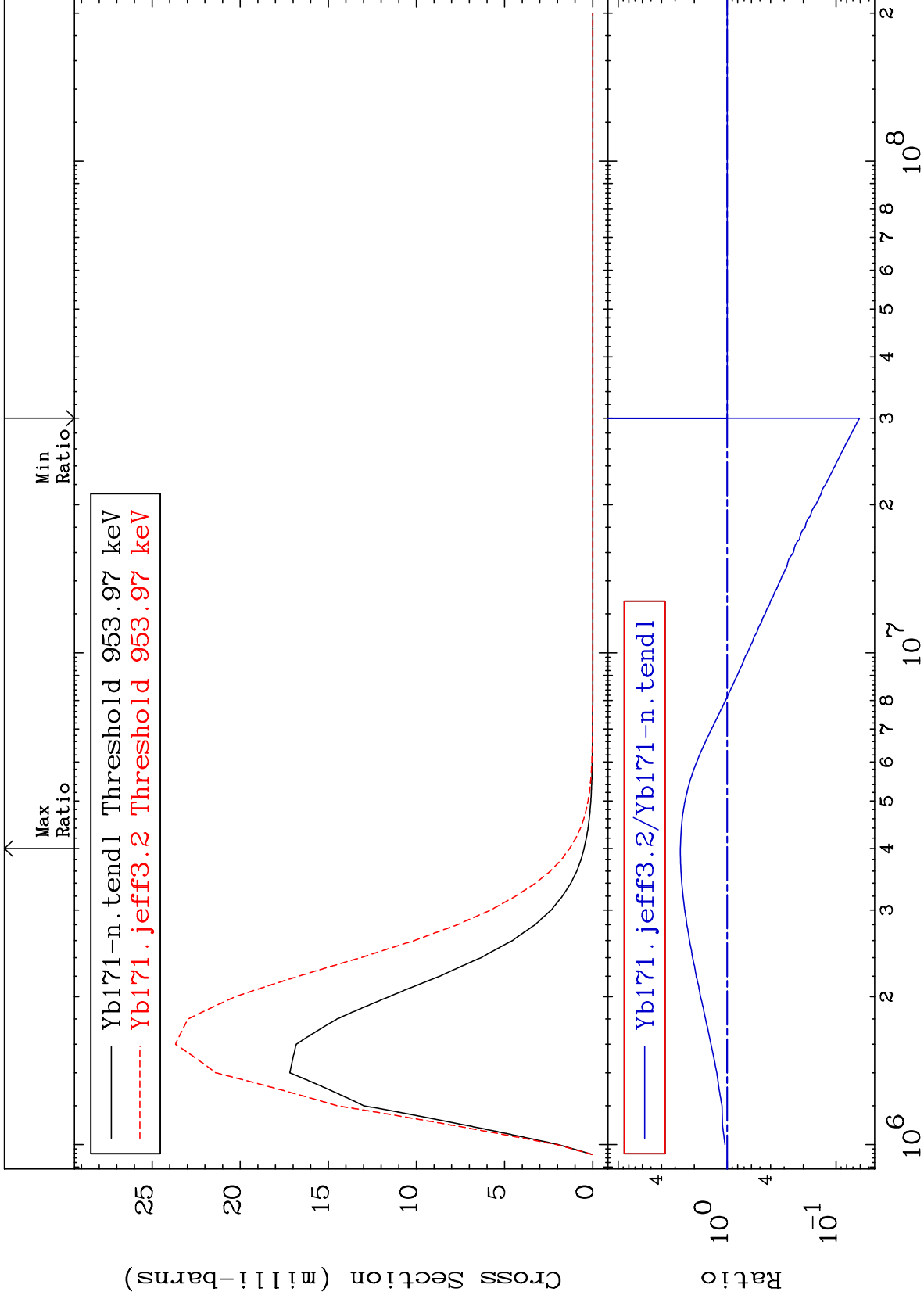
Incident Energy (eV)

70-Yb-171

MAT 7034

948.4 keV (n,n') Level
Cross Section

⁷⁰Yb-171
-93.89 To 168.8 %



50

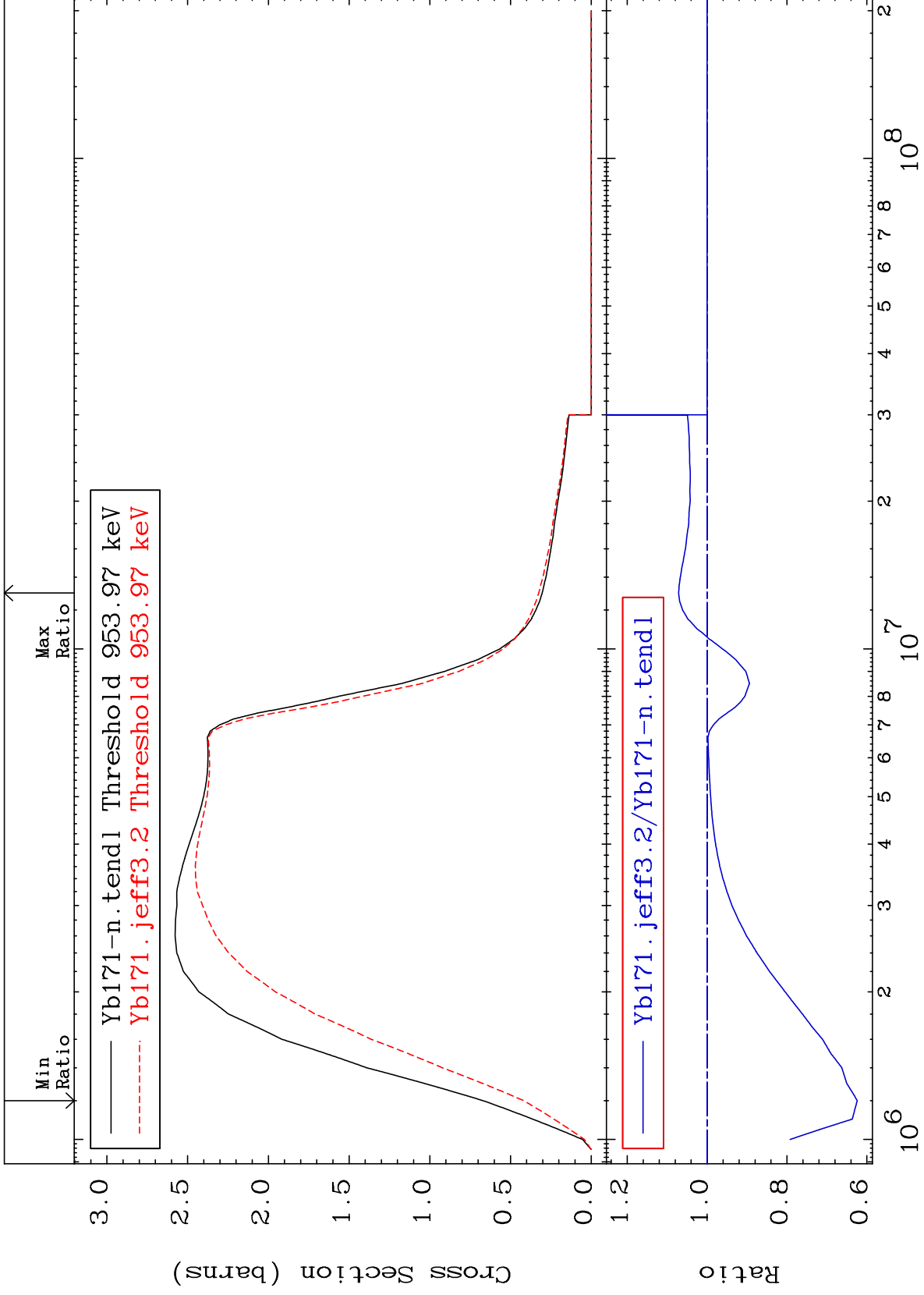
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

(n, n') Continuum
Cross Section

70-Yb-171
-37.59 To 7.130 %



51

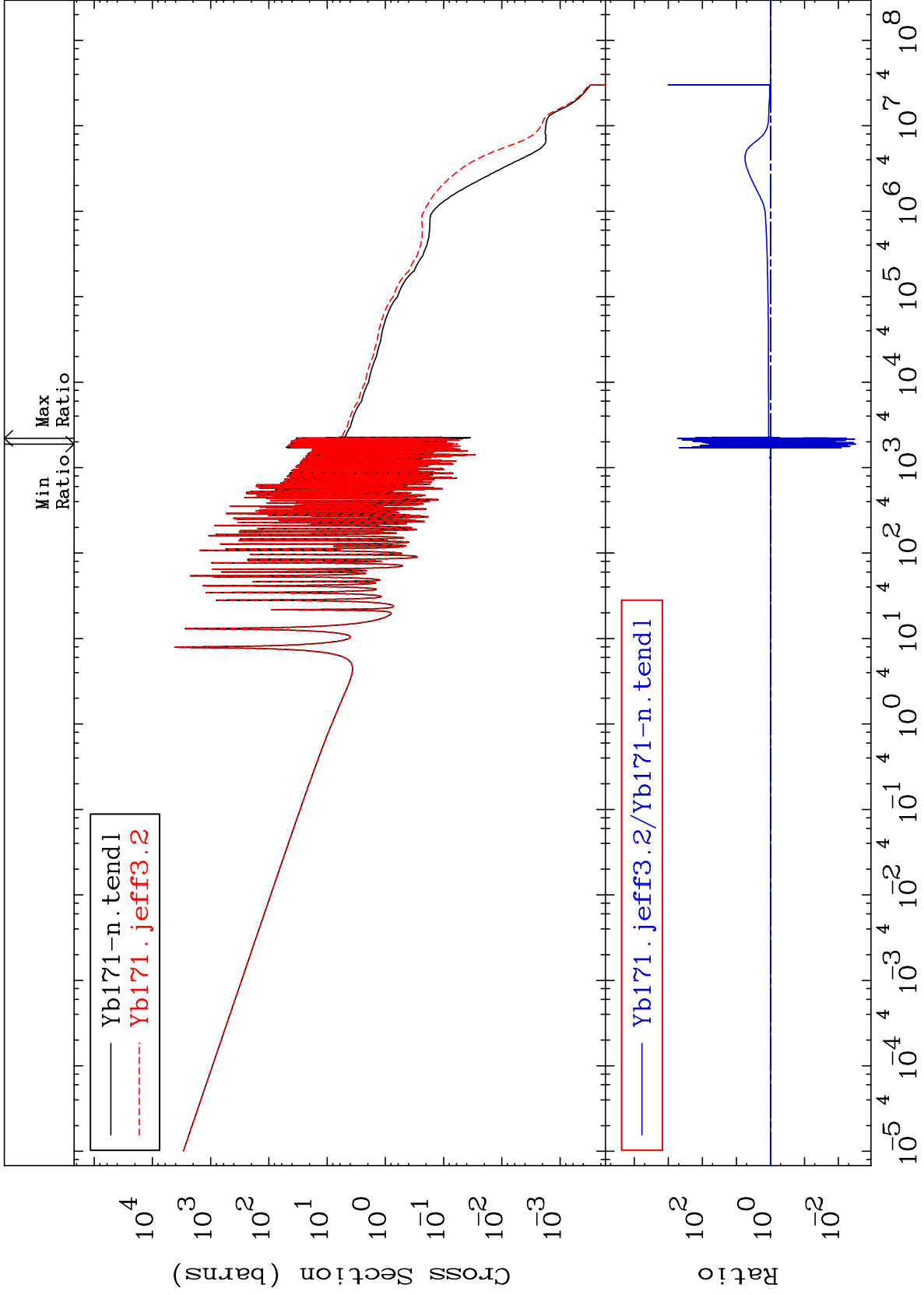
Incident Energy (eV)

70-Yb-171

MAT 7034

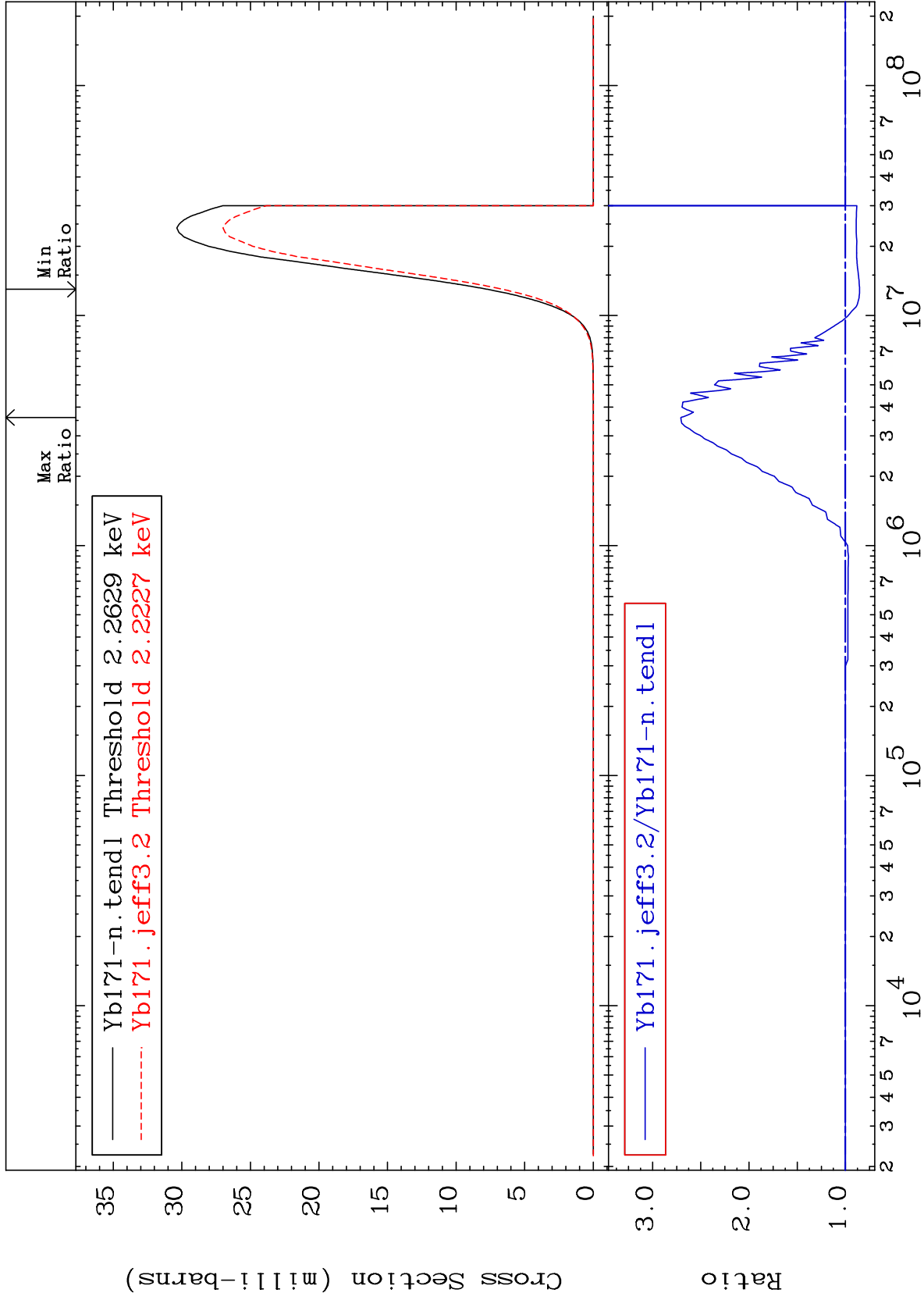
(n, γ)
Cross Section

70-Yb-171
-99.69 To 9999. %



MAT 7034

(n,p)
Cross Section
70-Yb-171
-14.59 To 170.8 %



MAT 7034

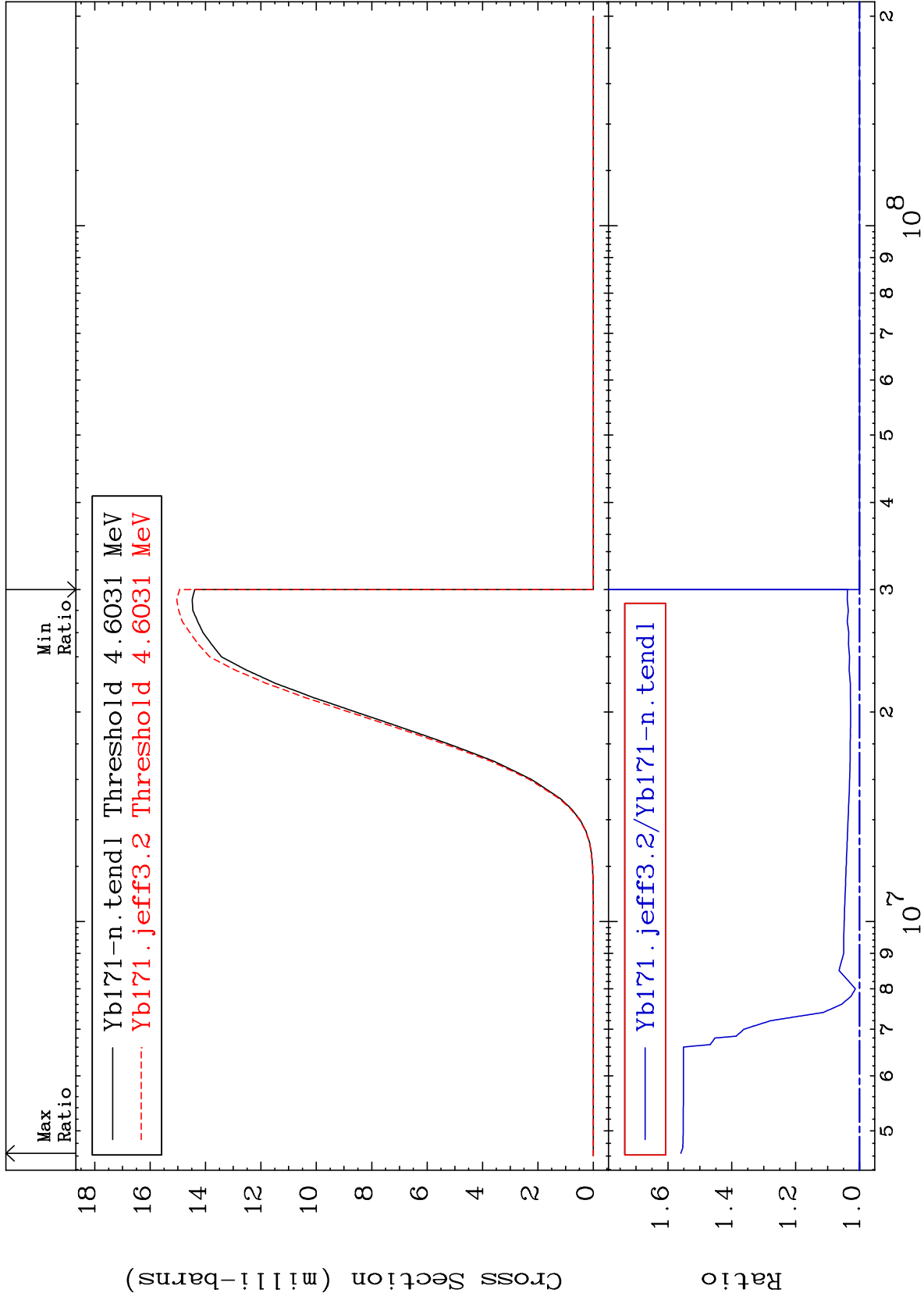
(n, d)

70-Yb-171

Cross Section

0.000

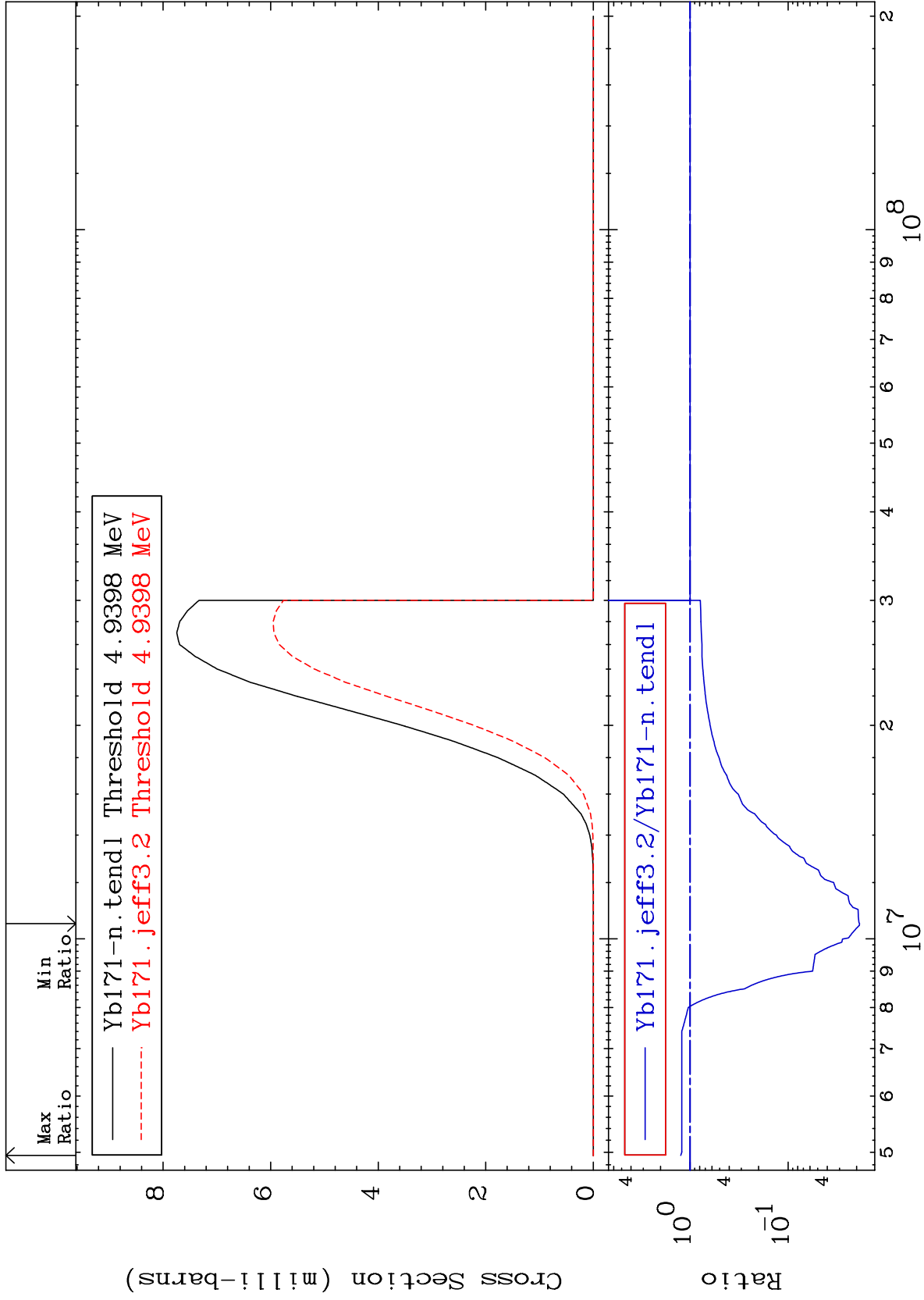
To 55.99 %



MAT 7034

(n, t)
Cross Section

70-Yb-171
-98.13 To 24.52 %



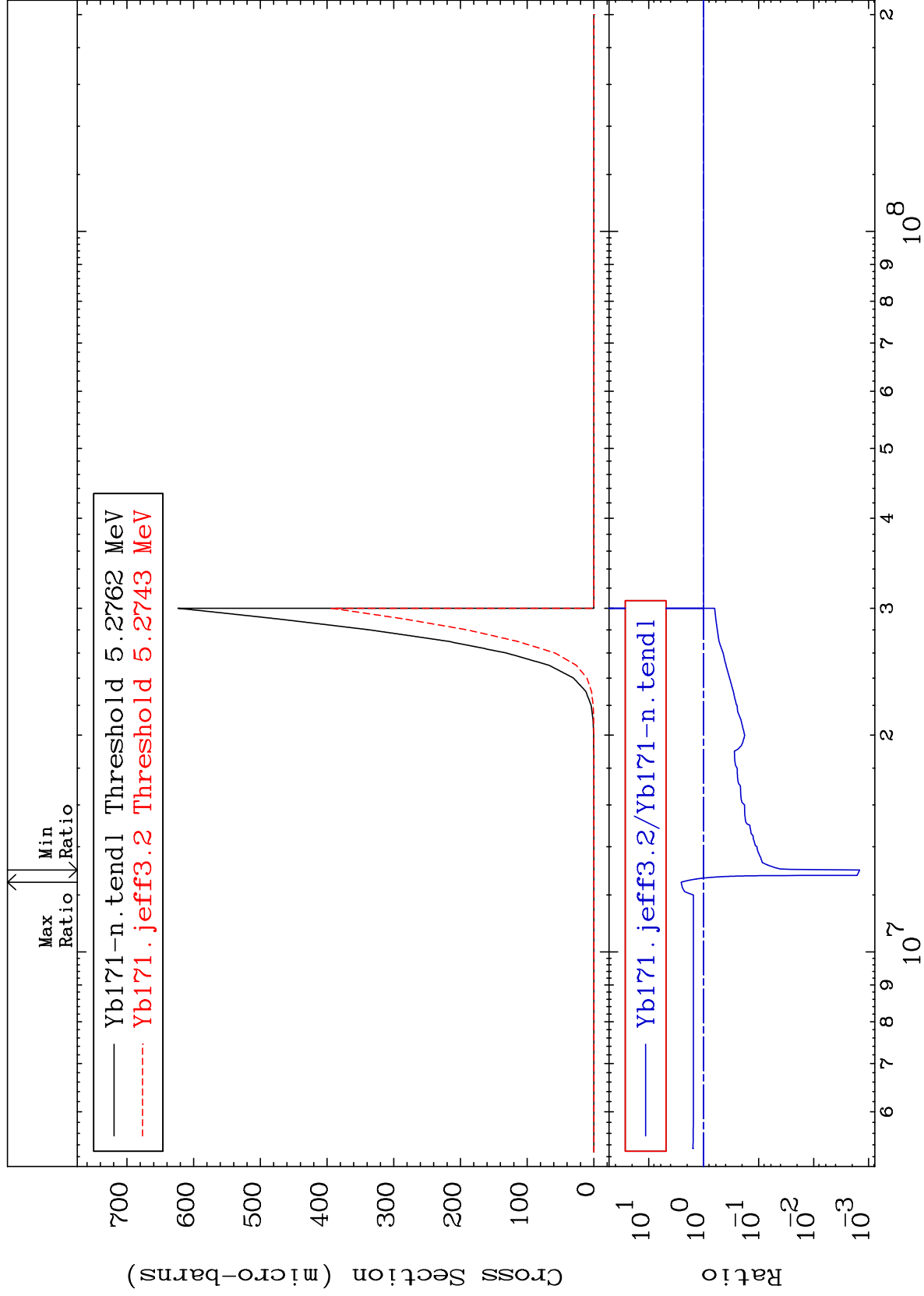
MAT 7034

(n, He-3)

⁷⁰Yb-171

Cross Section

-99.85 To 156.1 %



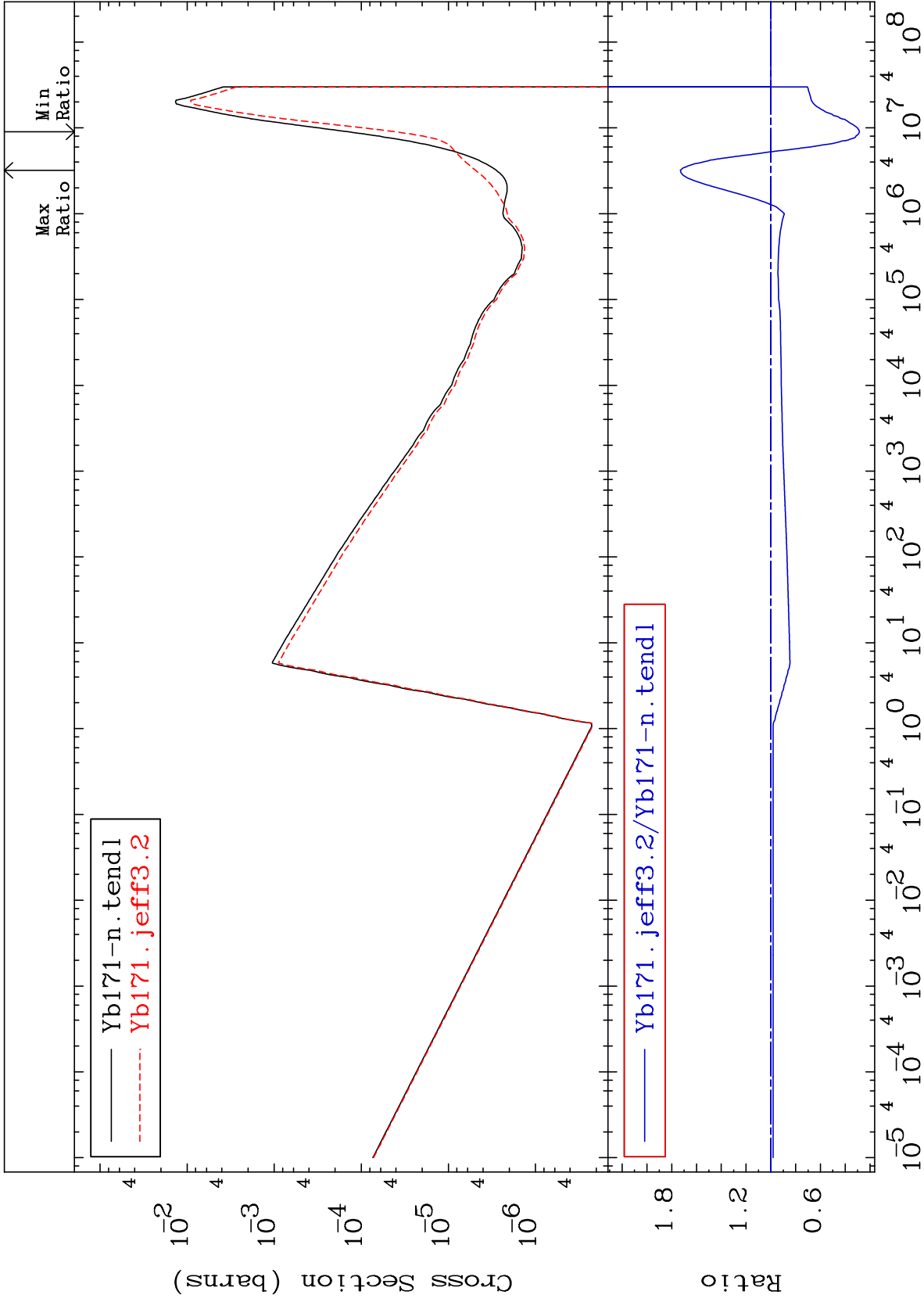
MAT 7034

(n, α)

Cross Section

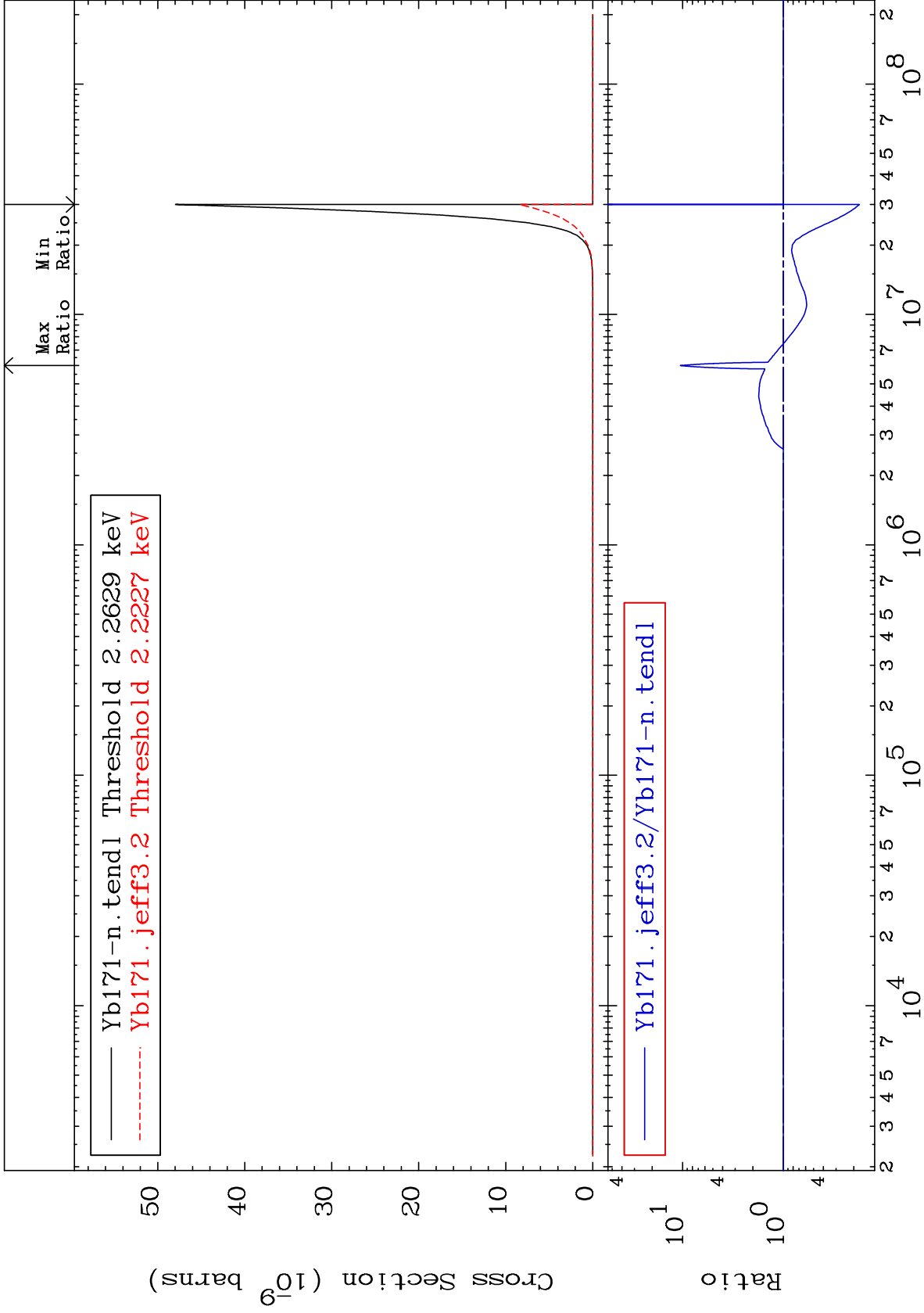
70-Yb-171

-71.46 To 73.01 %



Cross Section

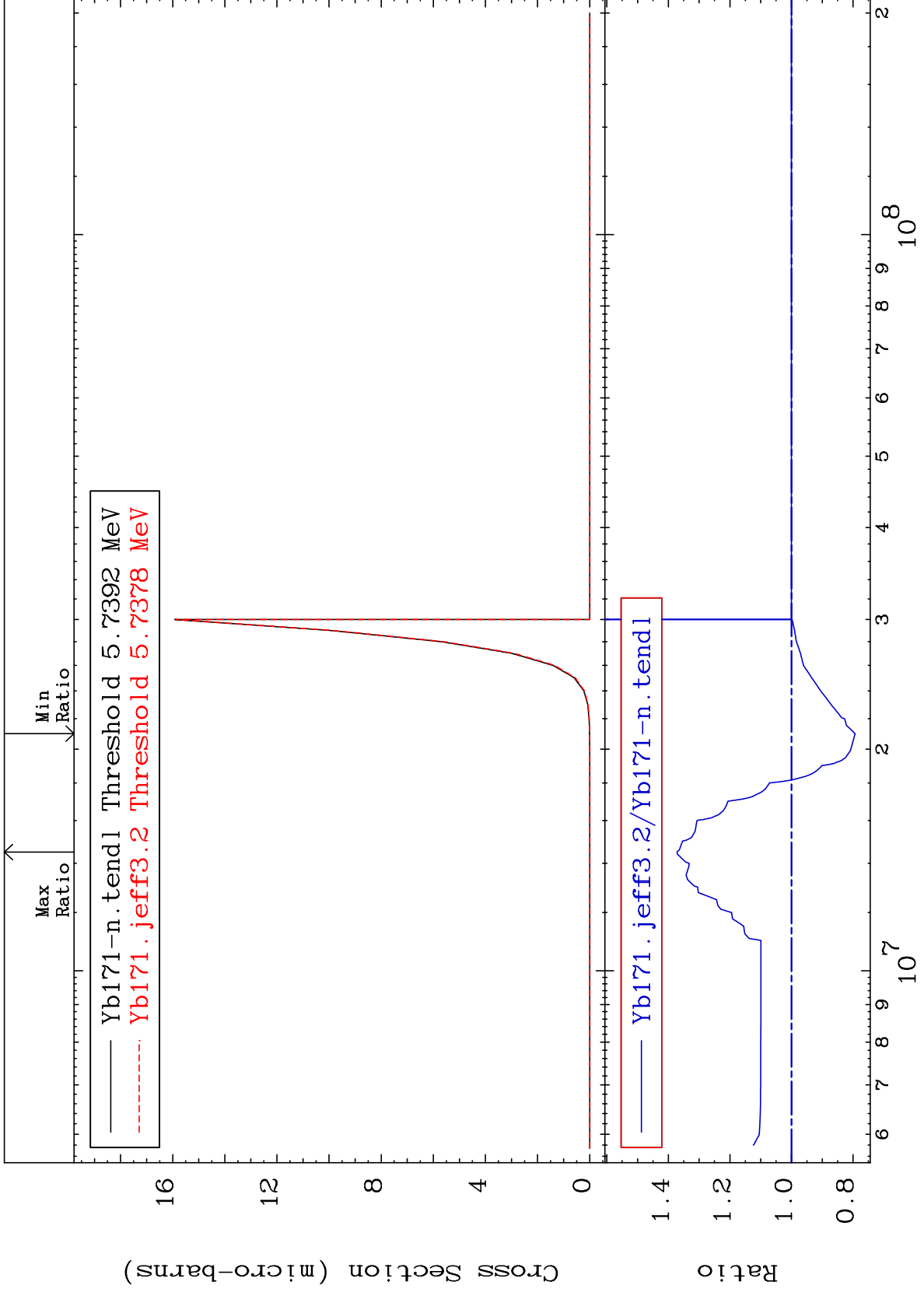
-82.45 To 951.7 %



MAT 7034

(n,2p)
Cross Section

70-Yb-171
-20.66 To 37.21 %



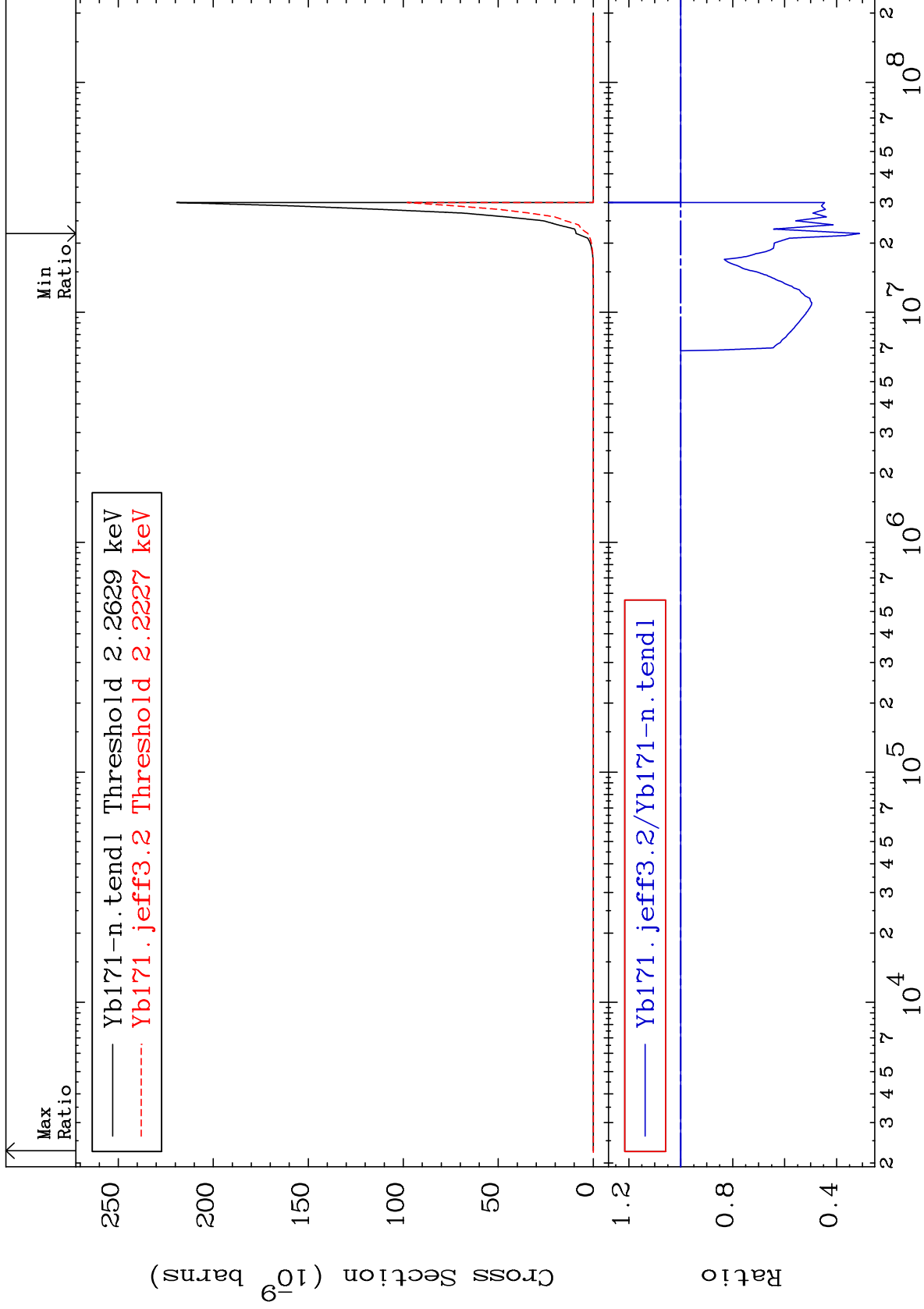
MAT 7034

(n, p) α

Cross Section

70-Yb-171

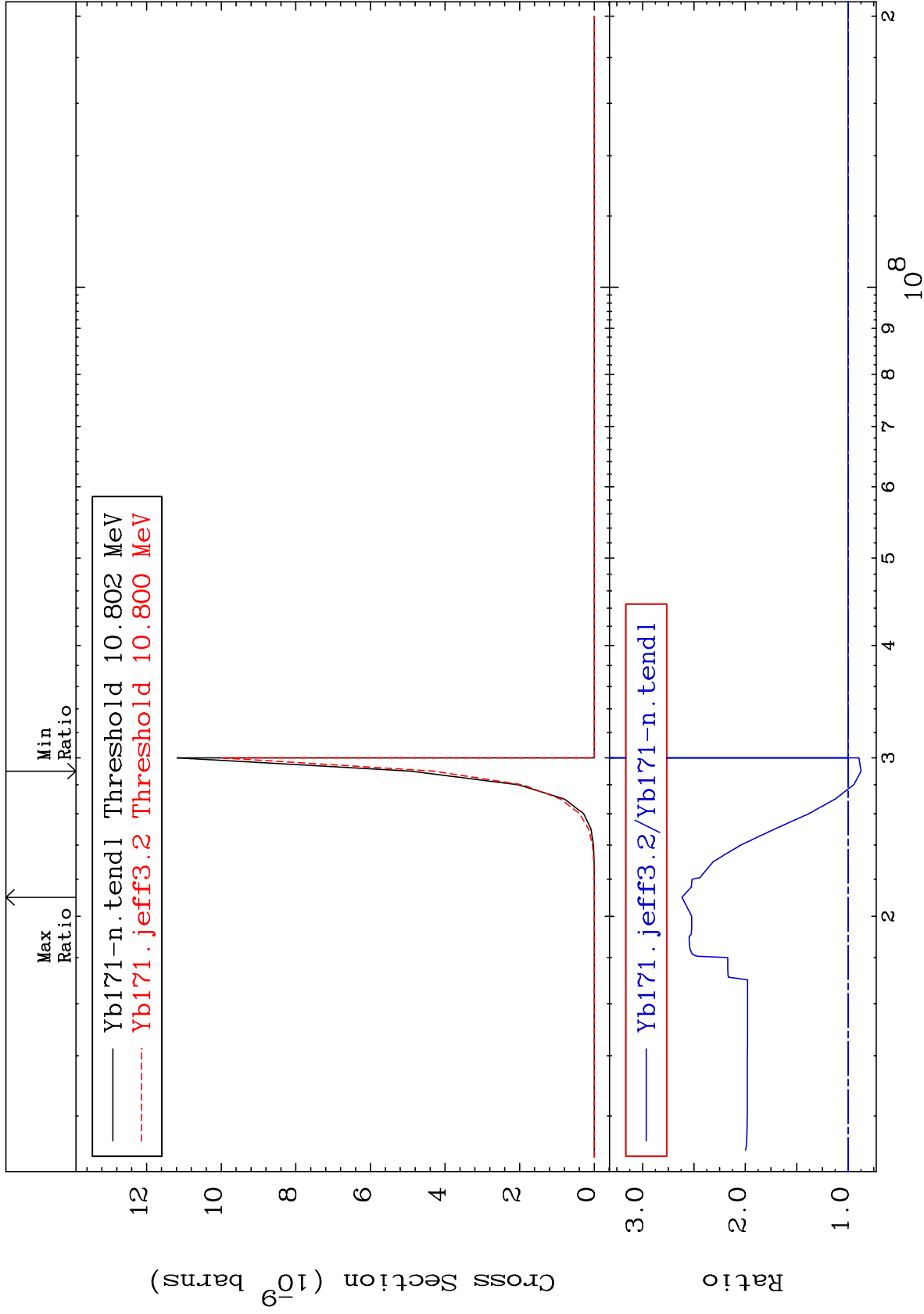
-68.84 To 0.000 %



MAT 7034

(n, p) d
Cross Section

70-Yb-171
-12.59 To 161.7 %



61

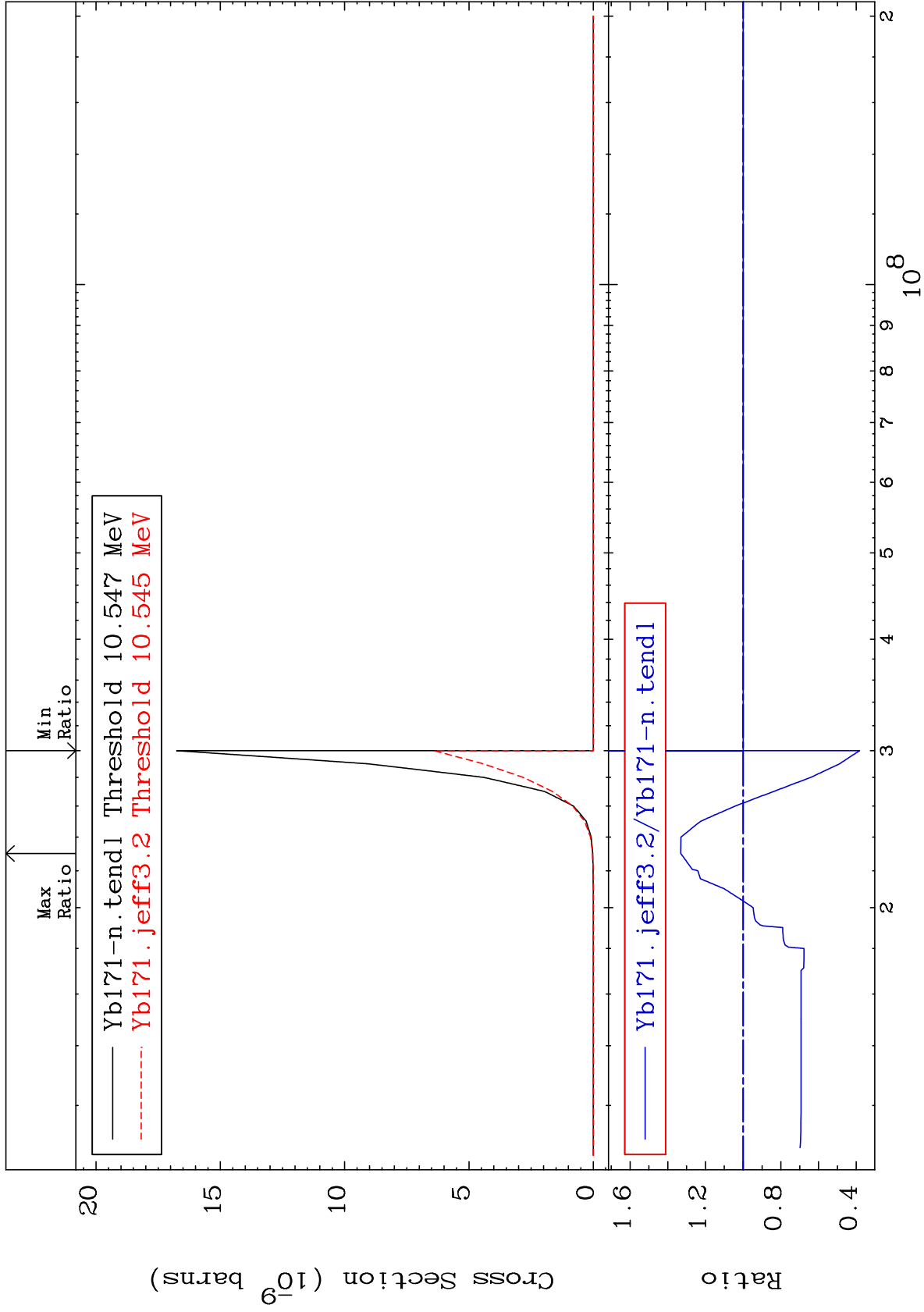
70-Yb-171

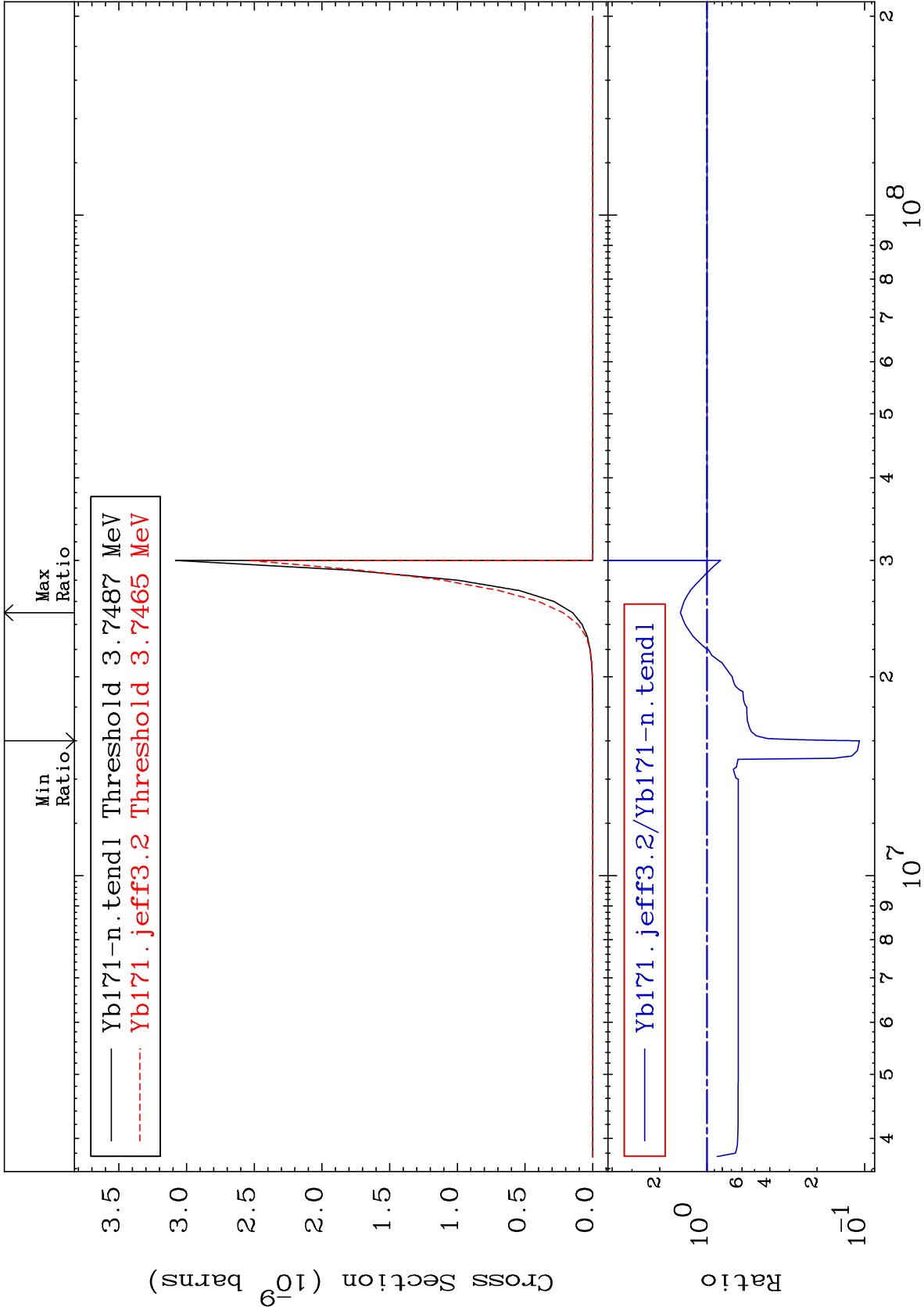
70-Yb-171

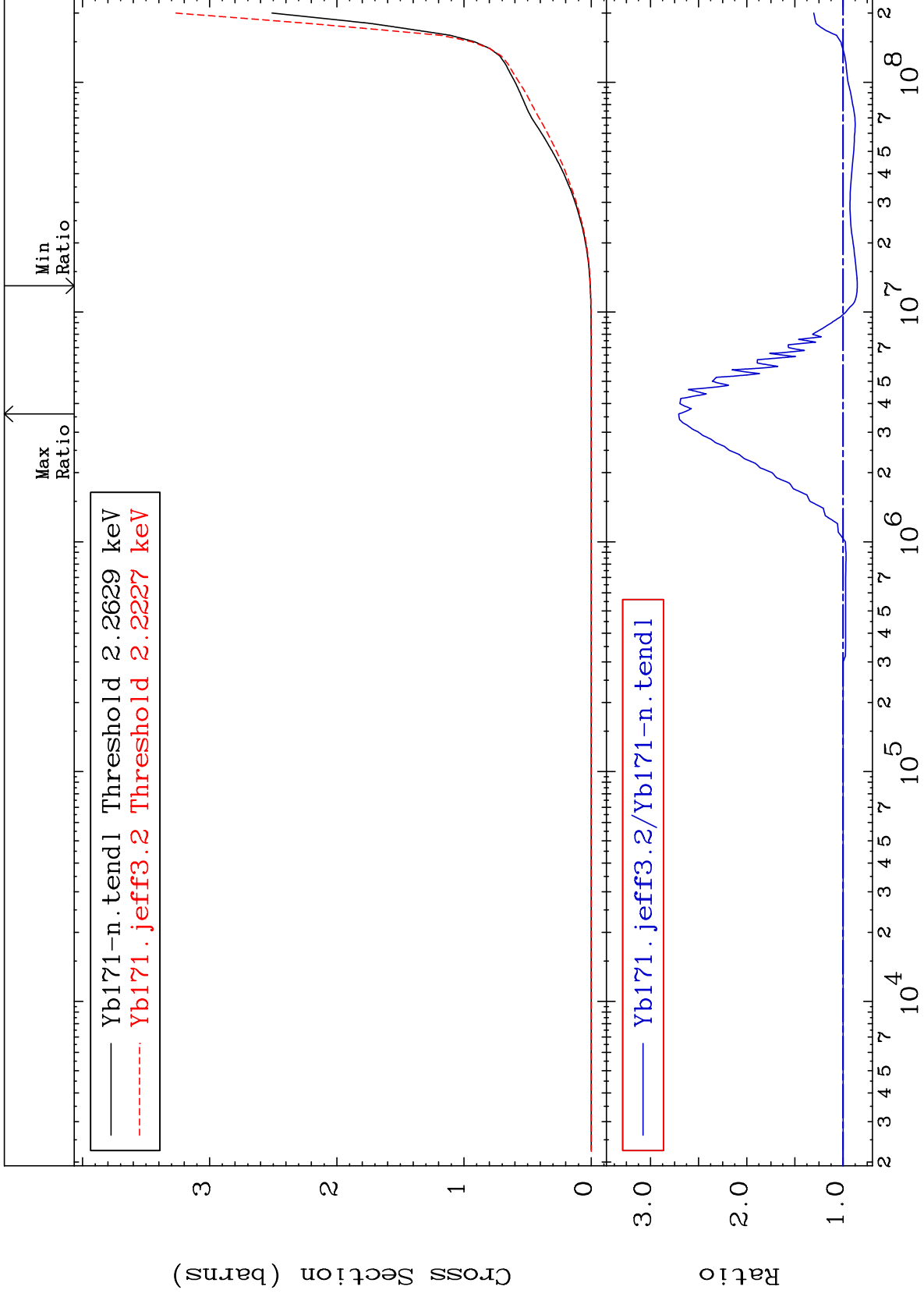
MAT 7034

(n, p) t
Cross Section

⁷⁰Yb-171
-61.73 To 33.10 %



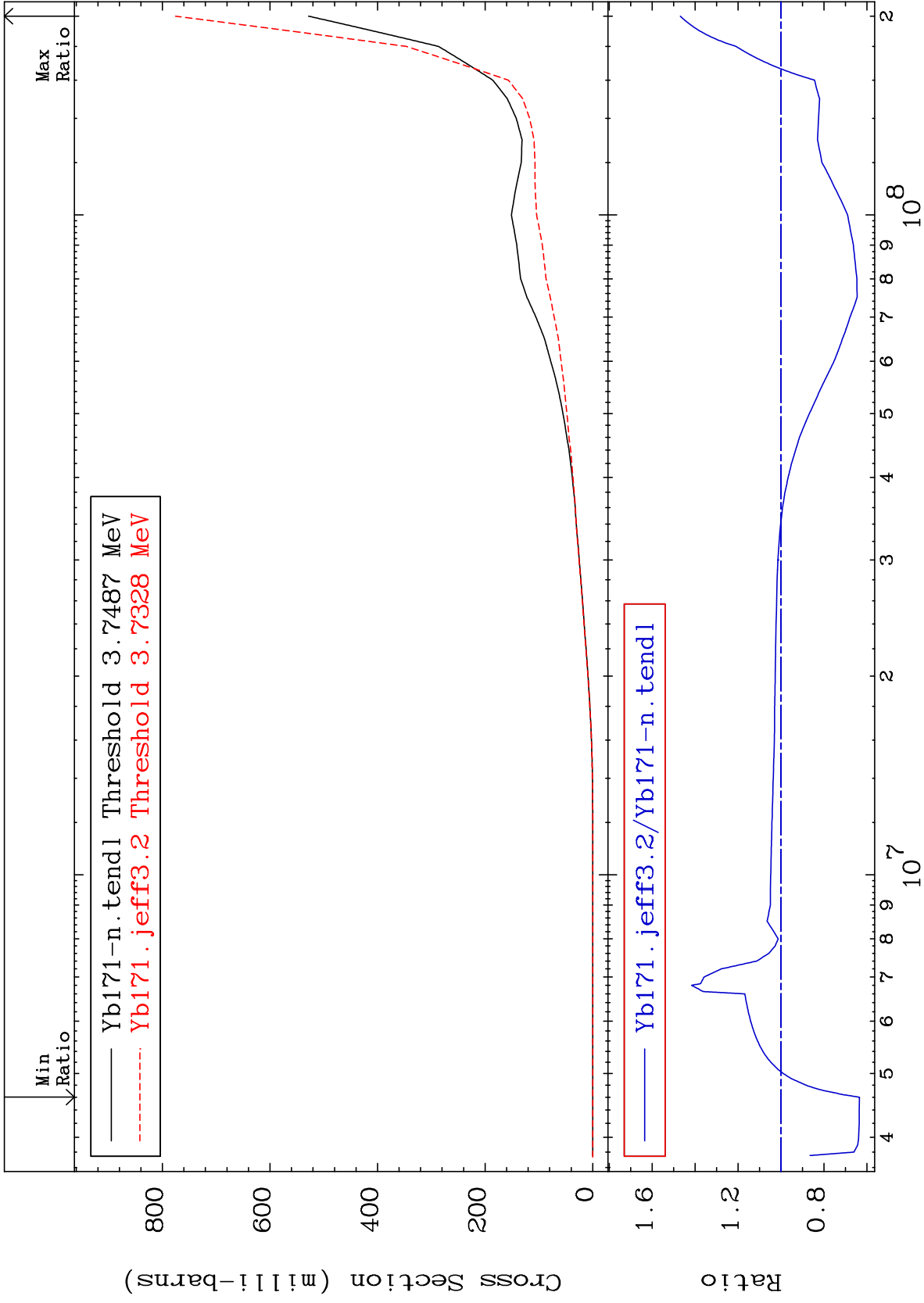




MAT 7034

Deuterium Production
Cross Section

⁷⁰Yb-171
-36.54 To 46.87 %



65

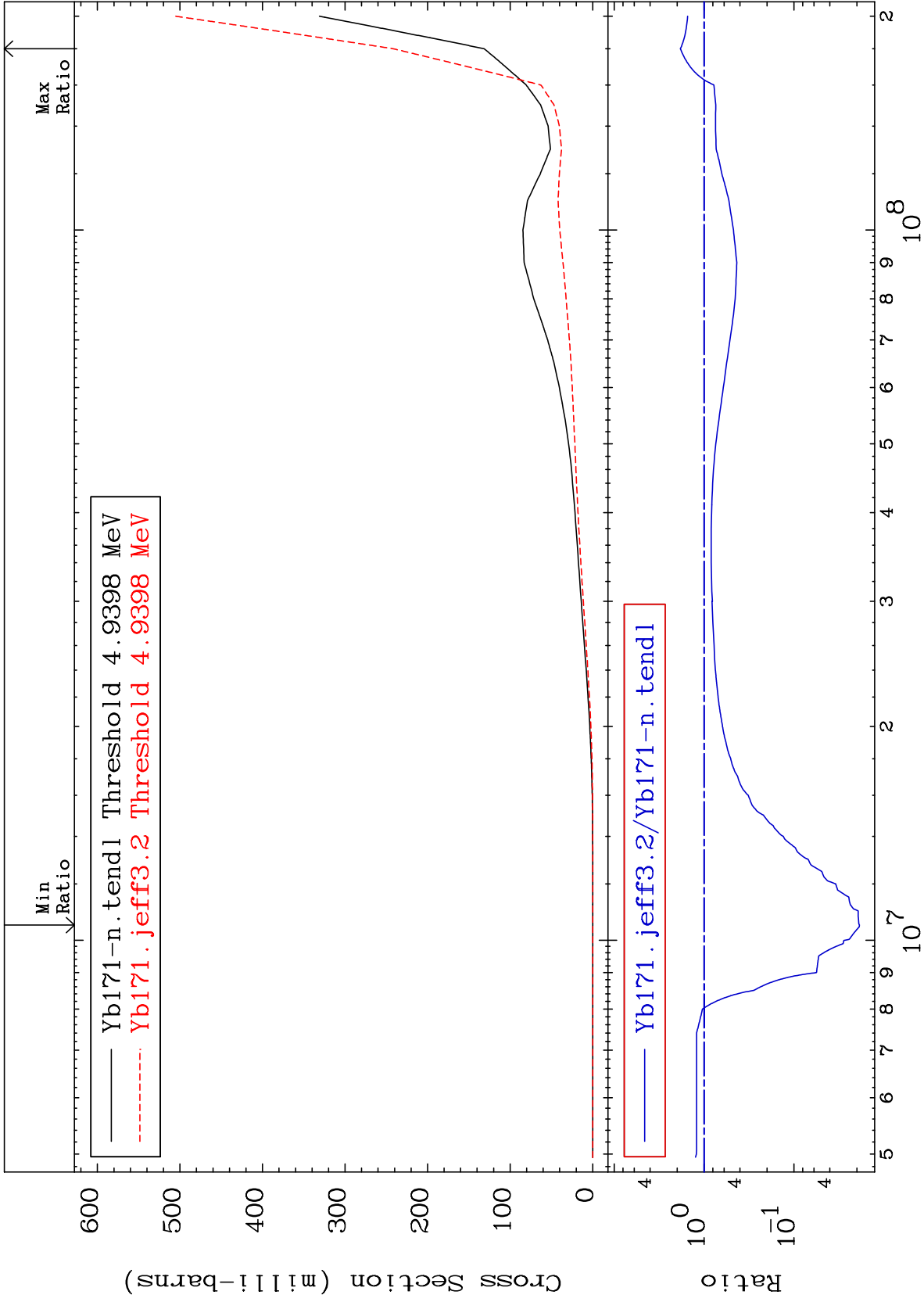
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

Tritium Production
Cross Section

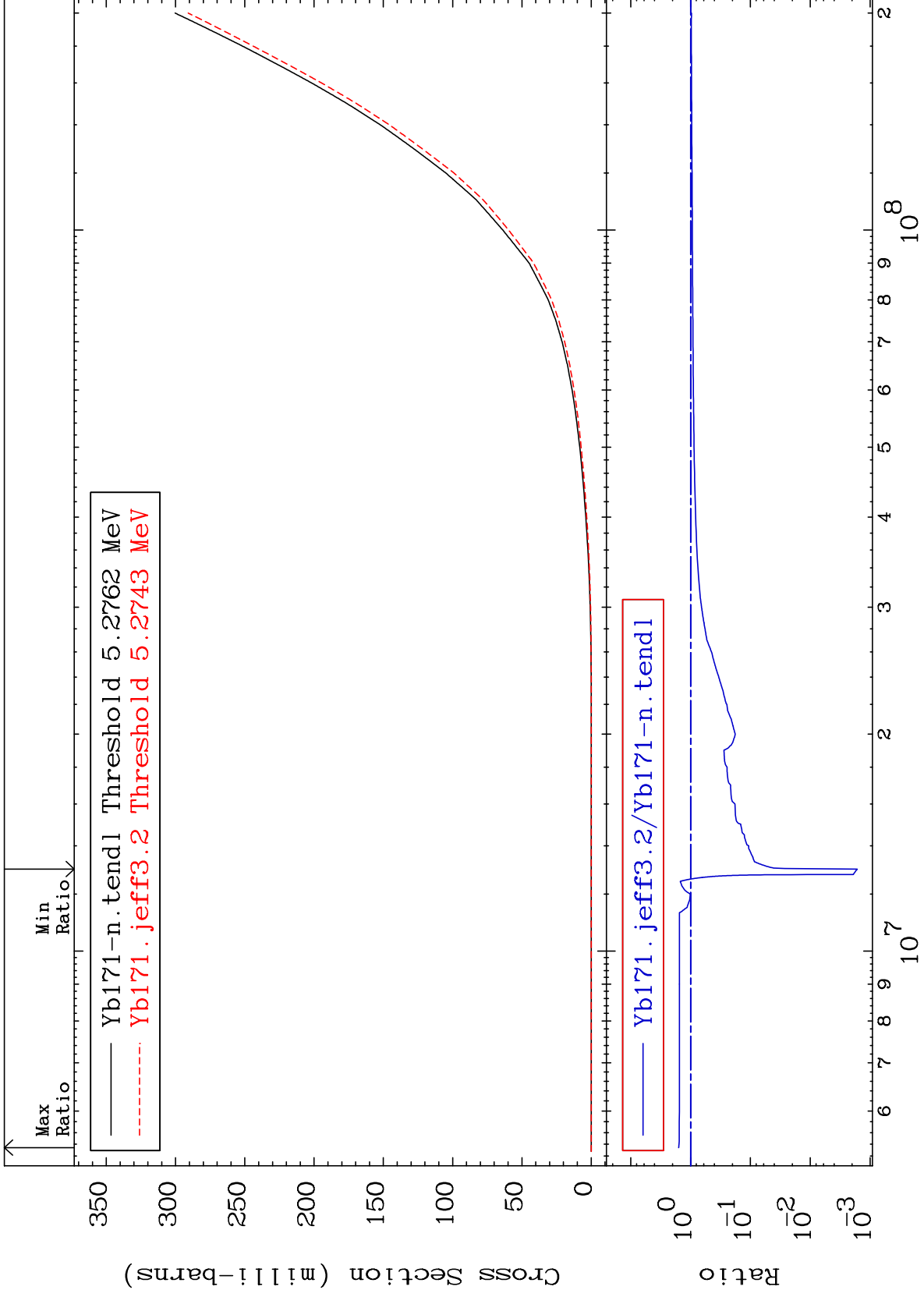
70-Yb-171
-98.13 To 84.06 %



MAT 7034

He-3 Production
Cross Section

⁷⁰Yb-171
-99.84 To 58.15 %



67

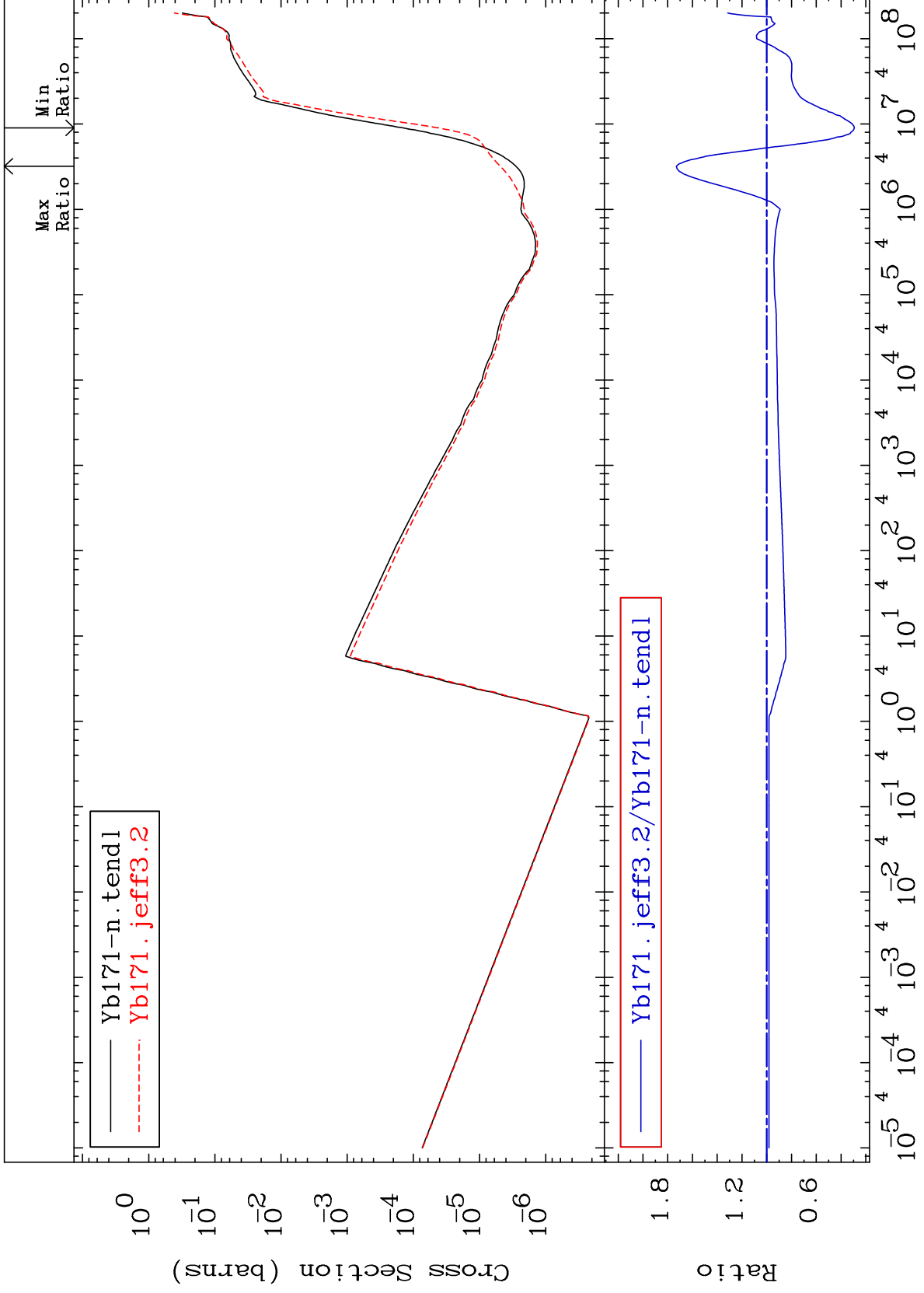
Incident Energy (eV)

⁷⁰Yb-171

MAT 7034

He-4 Production
Cross Section

70-Yb-171
-70.74 To 73.01 %



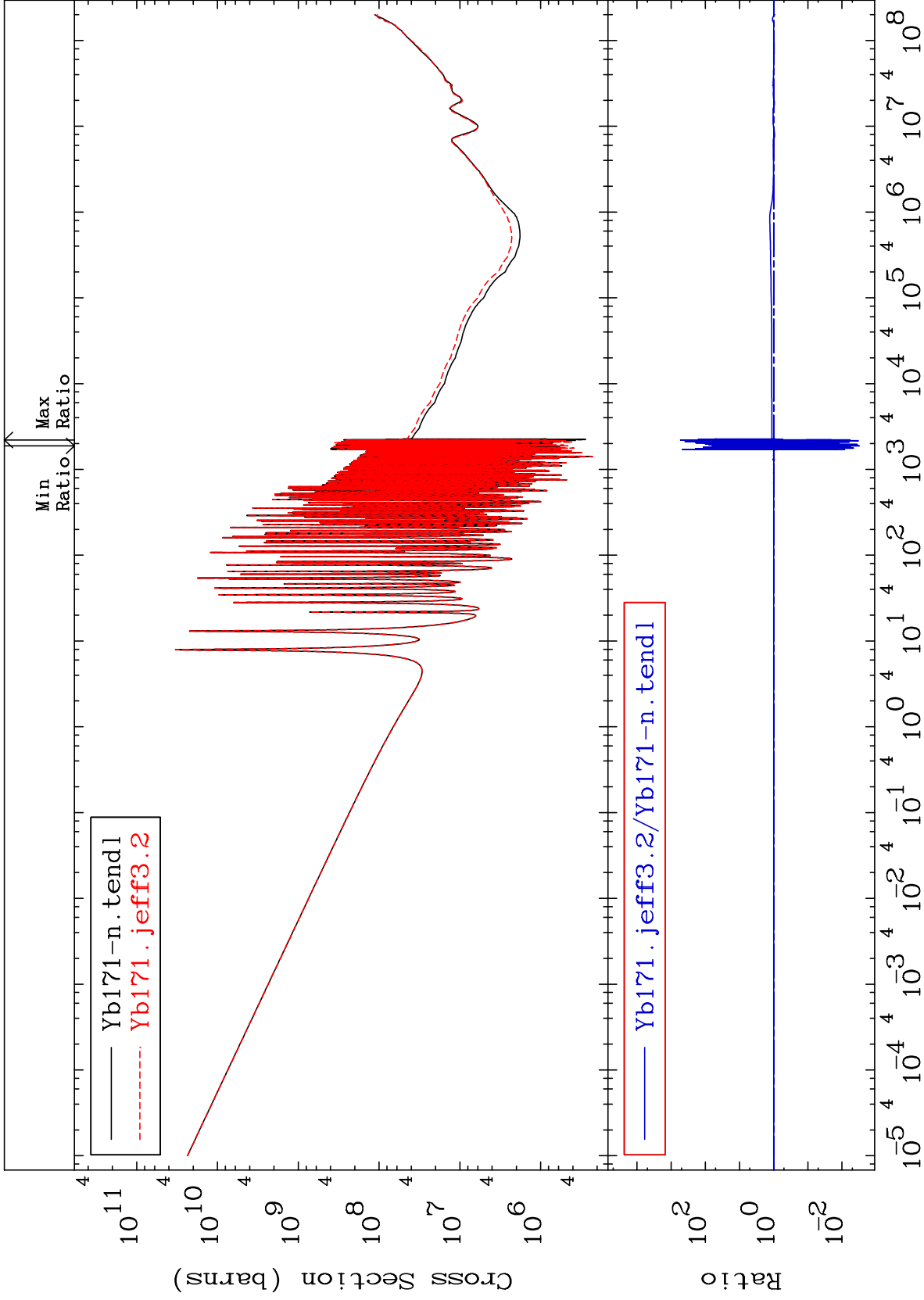
68

Incident Energy (eV)

70-Yb-171

Cross Section

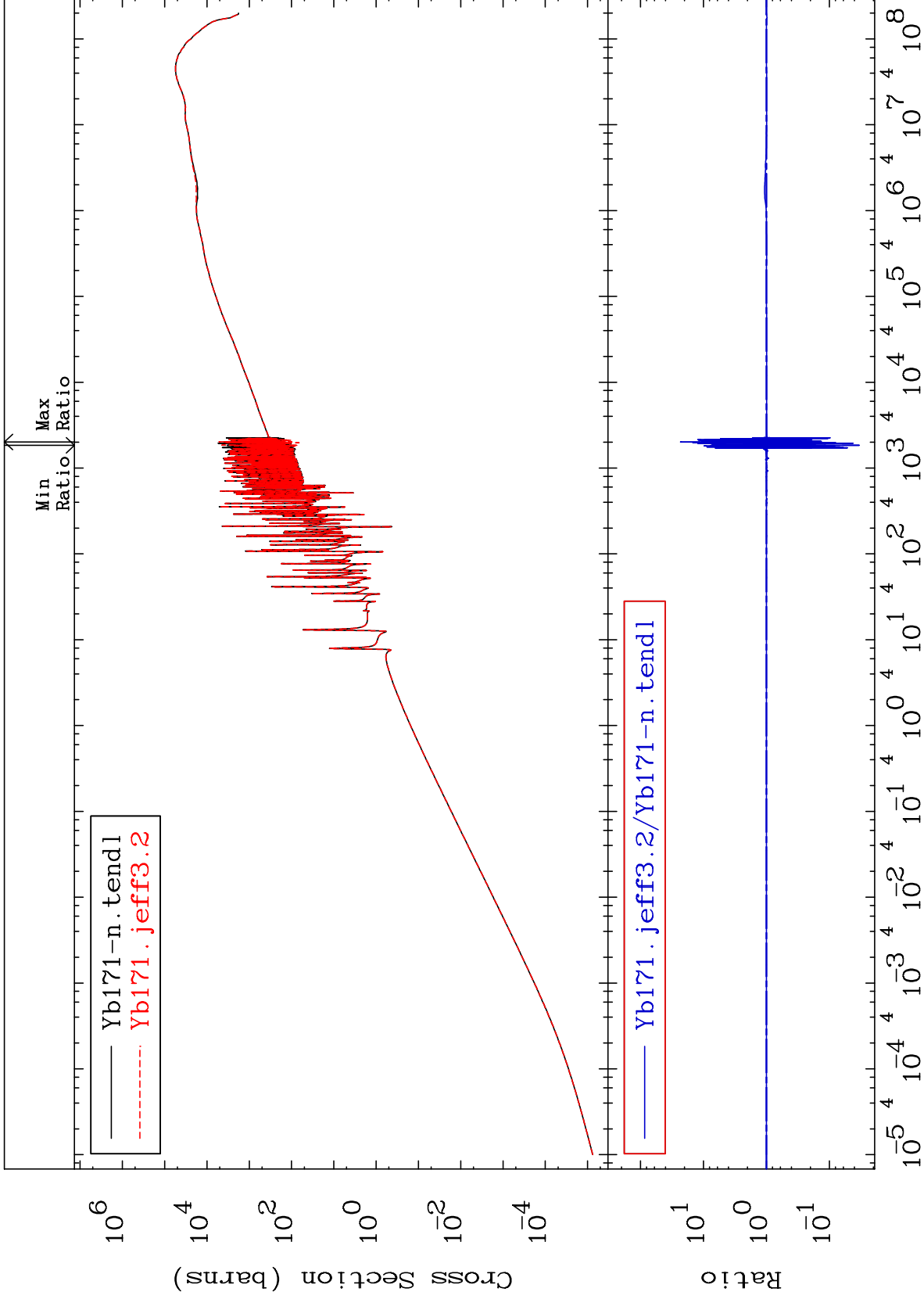
-99.69 To 9999. %



MAT 7034

Kerma elastic
Cross Section

70-Yb-171
-96.66 To 2230. %



70

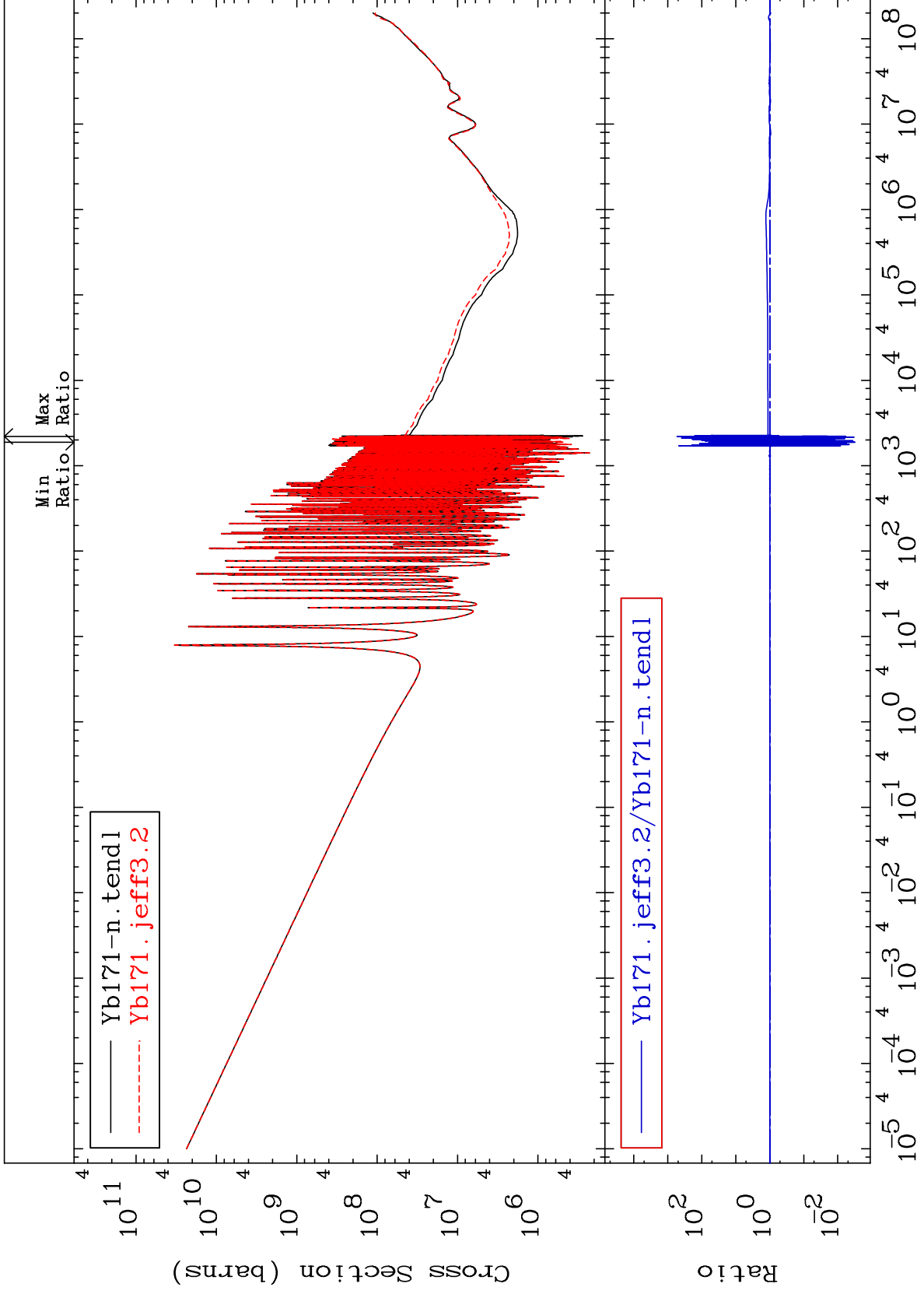
Incident Energy (eV)

70-Yb-171

MAT 7034

Kerma non-elastic (all but mt2)
Cross Section

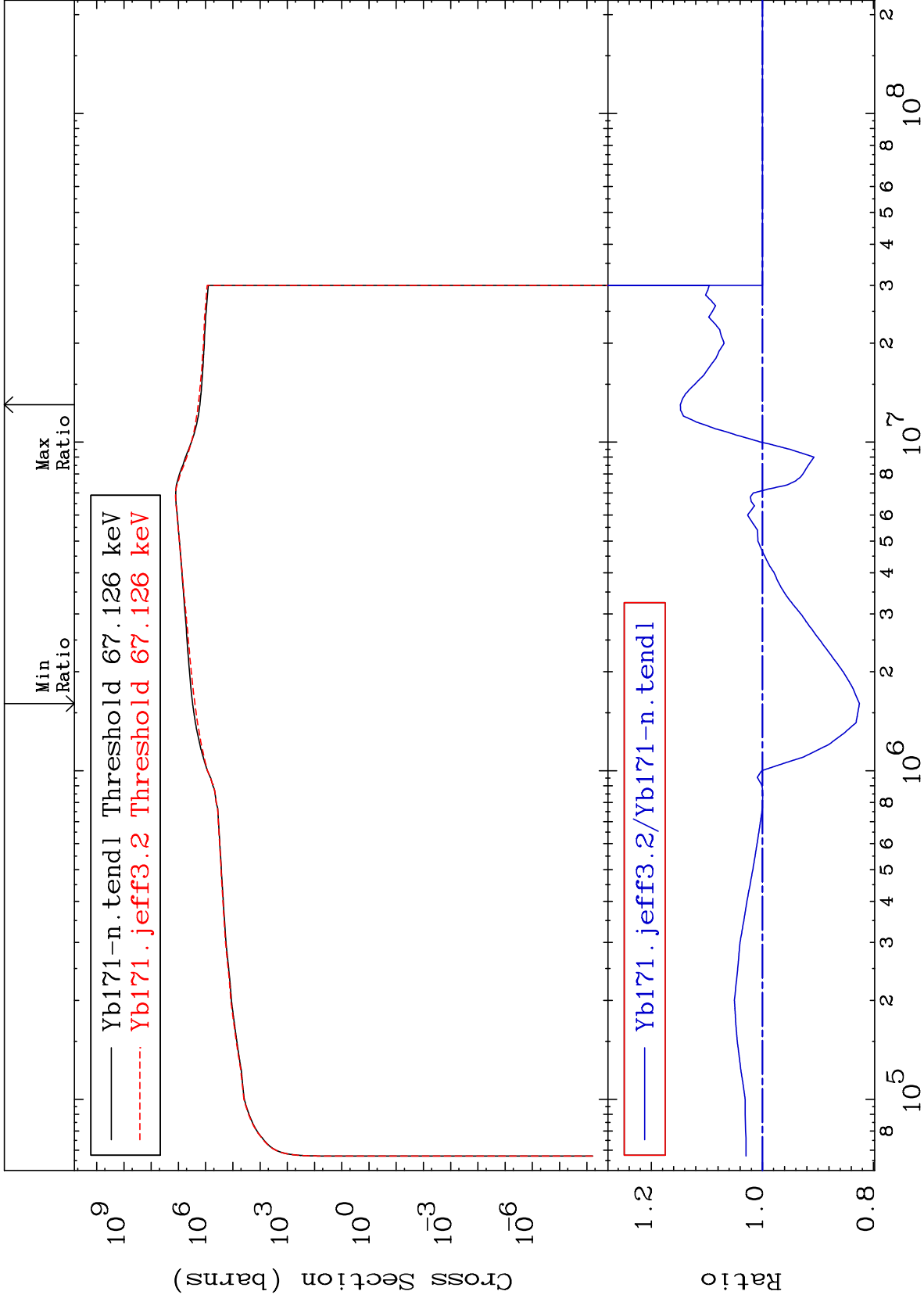
70-Yb-171
-99.69 To 9999. %



71

Incident Energy (eV)

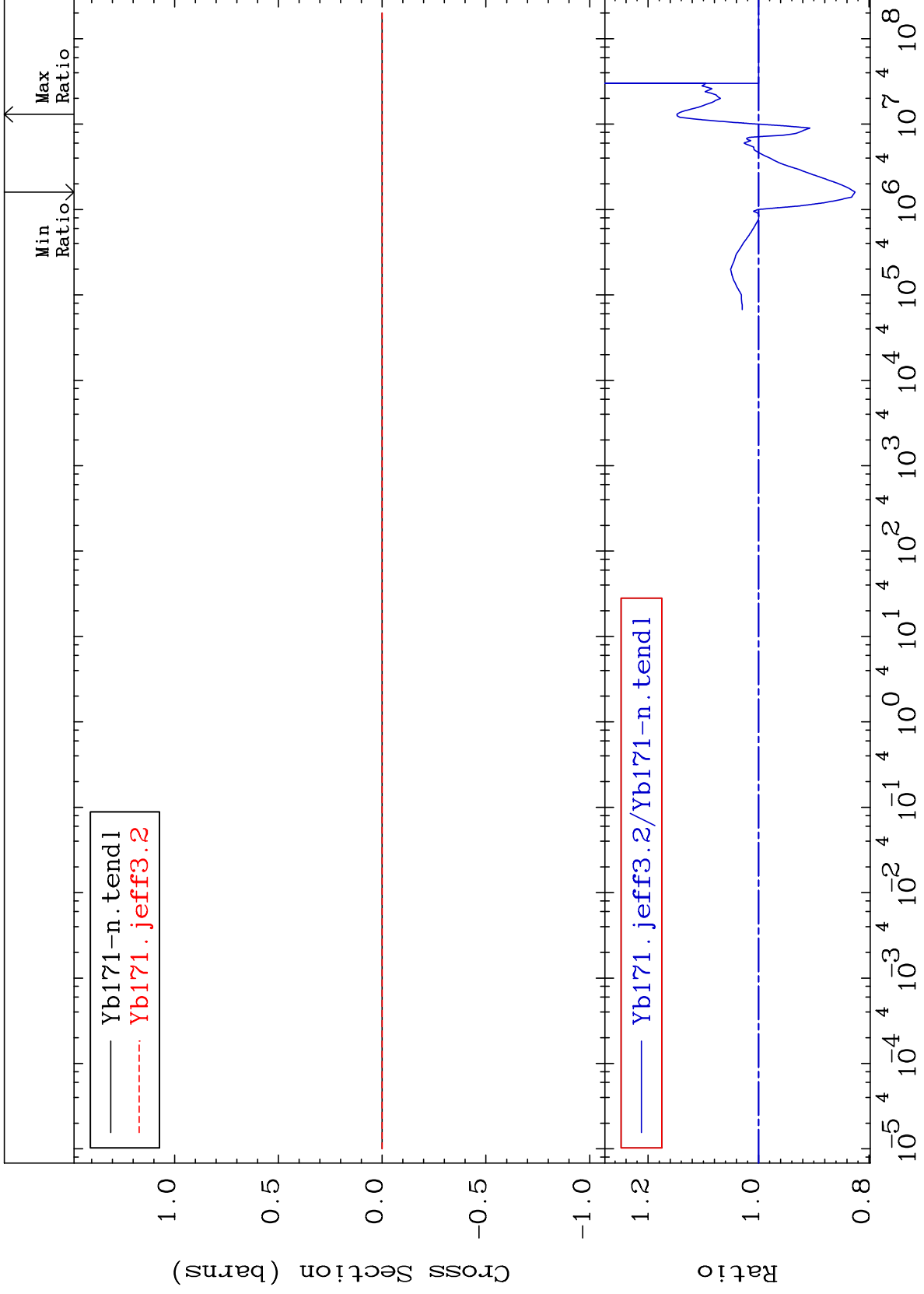
70-Yb-171



MAT 7034

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

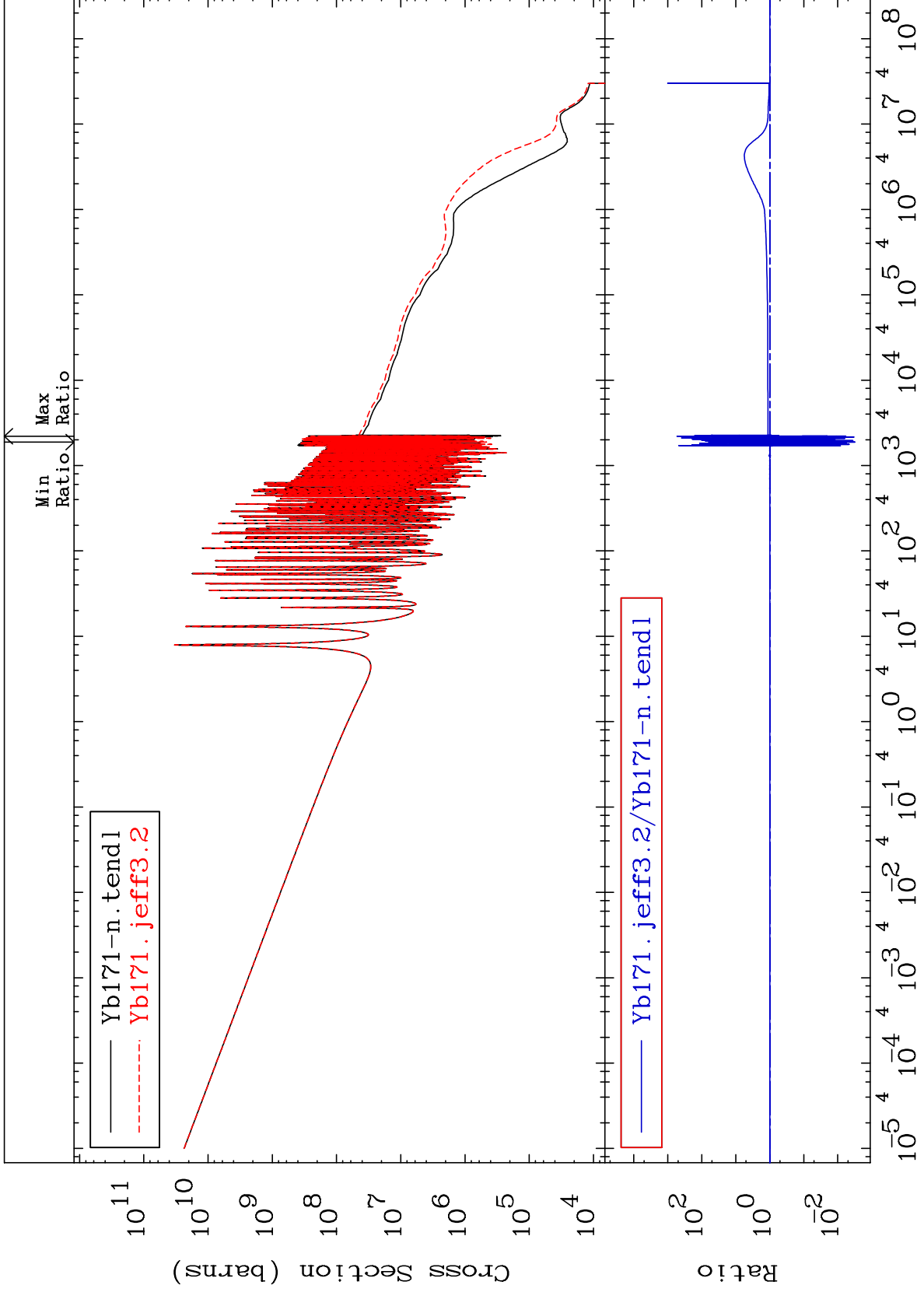
70-Yb-171
-17.47 To 14.79 %



MAT 7034

Kerma capture (mt102)
Cross Section

70-Yb-171
-99.69 To 9999. %



74

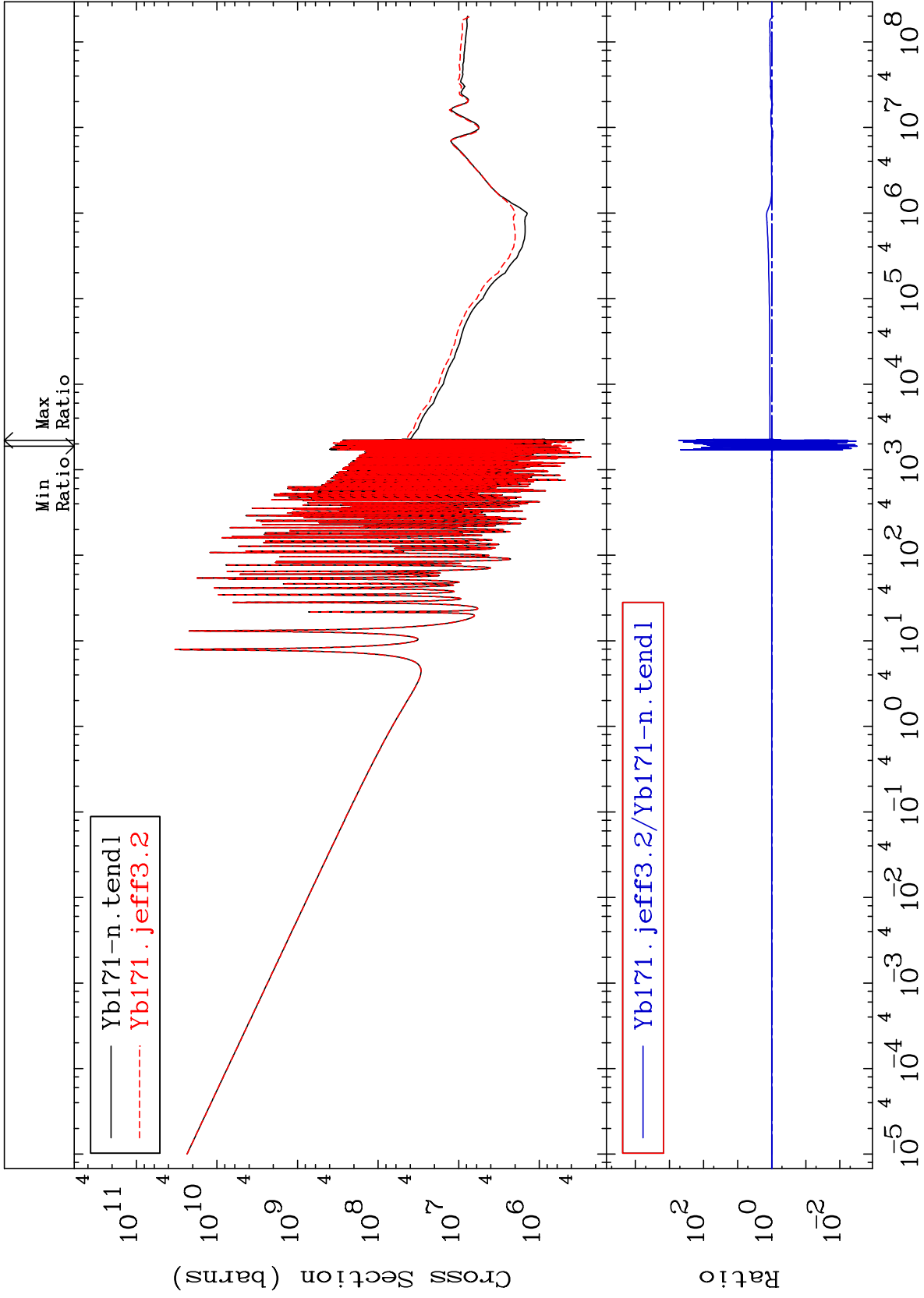
Incident Energy (eV)

70-Yb-171

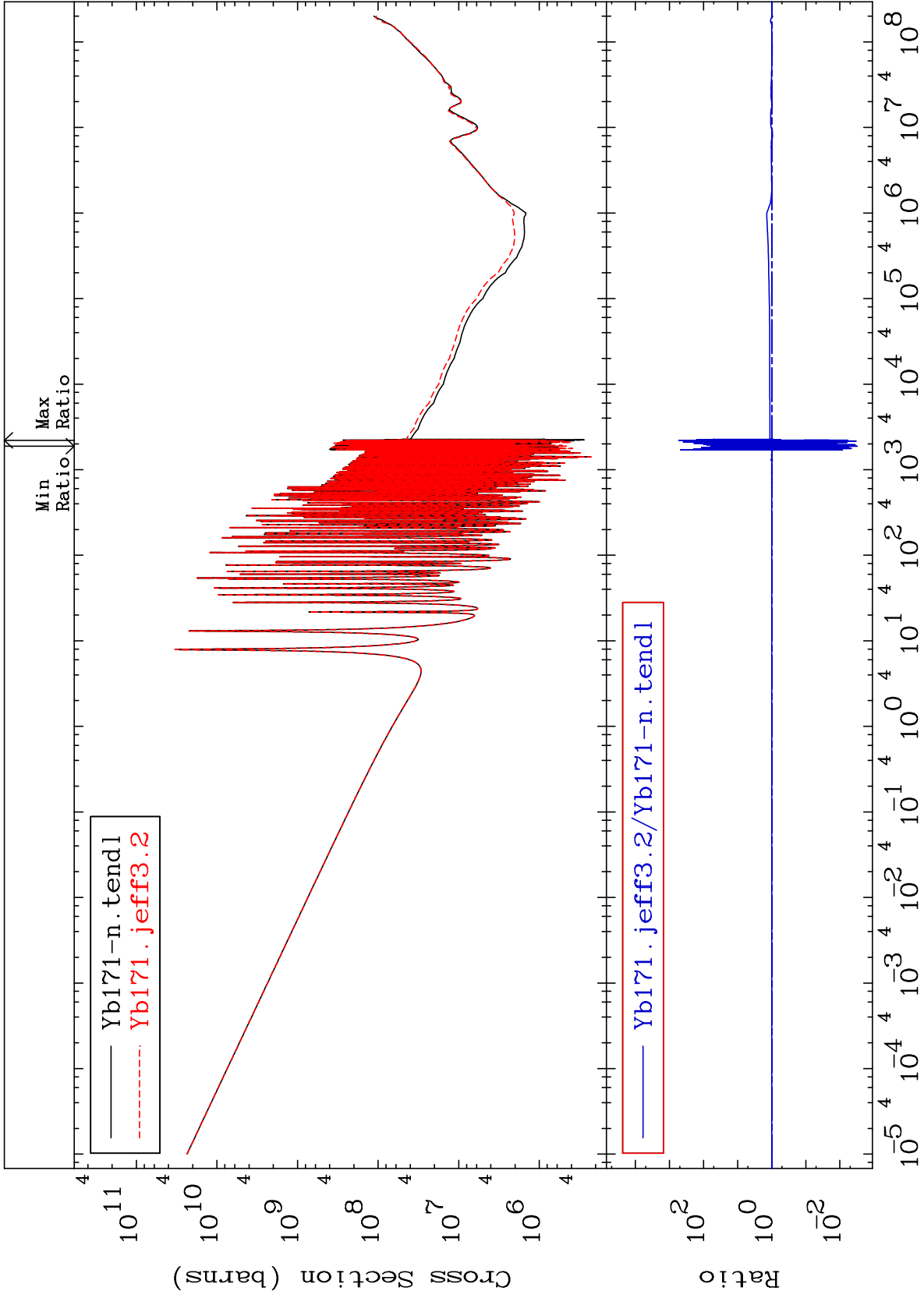
MAT 7034

Total photon (eV-barns)
Cross Section

70-Yb-171
-99.69 To 9999. %



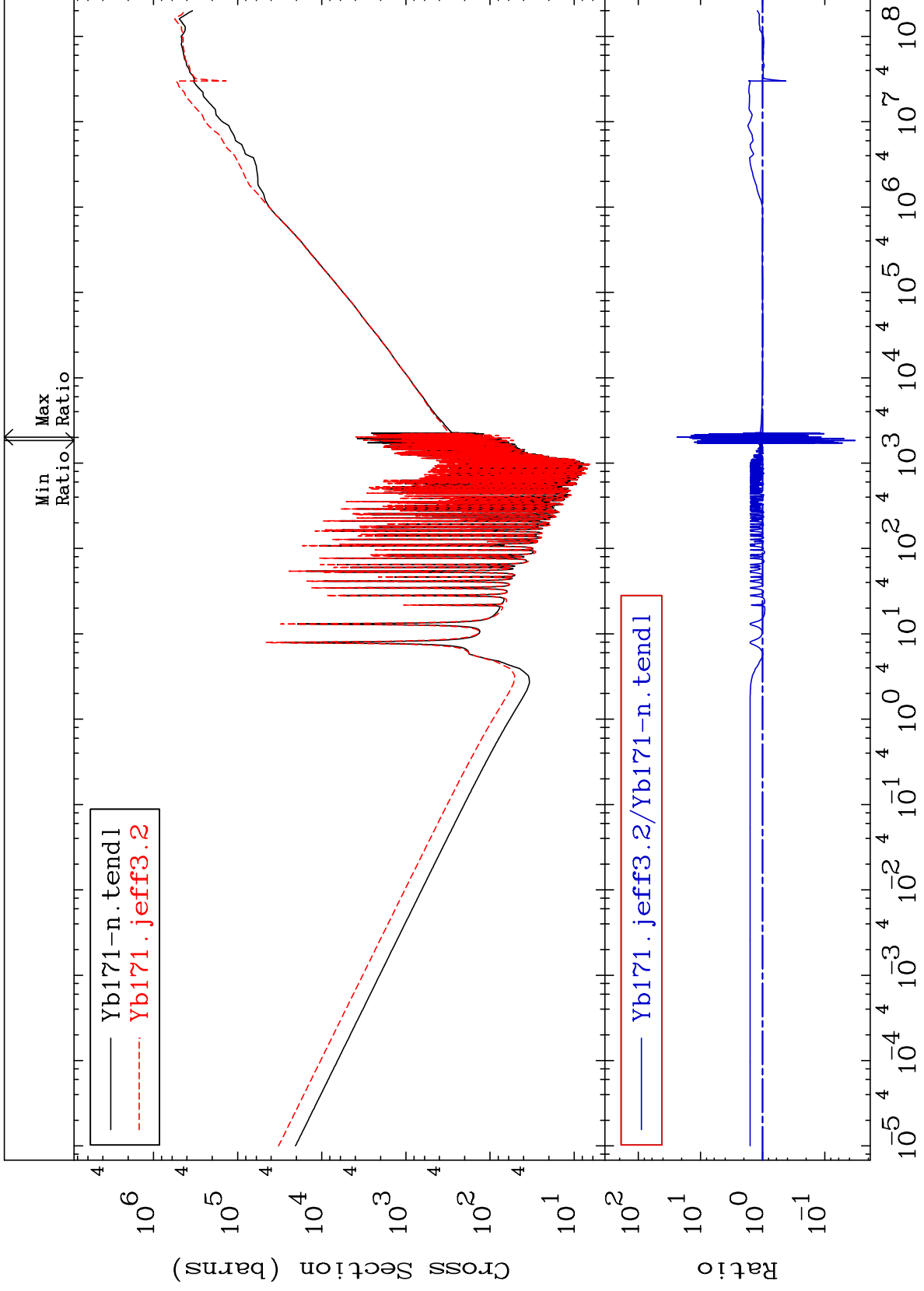
70-Yb-171



MAT 7034

Dpa total (eV-barns)
Cross Section

70-Yb-171
-96.74 To 2288. %



77

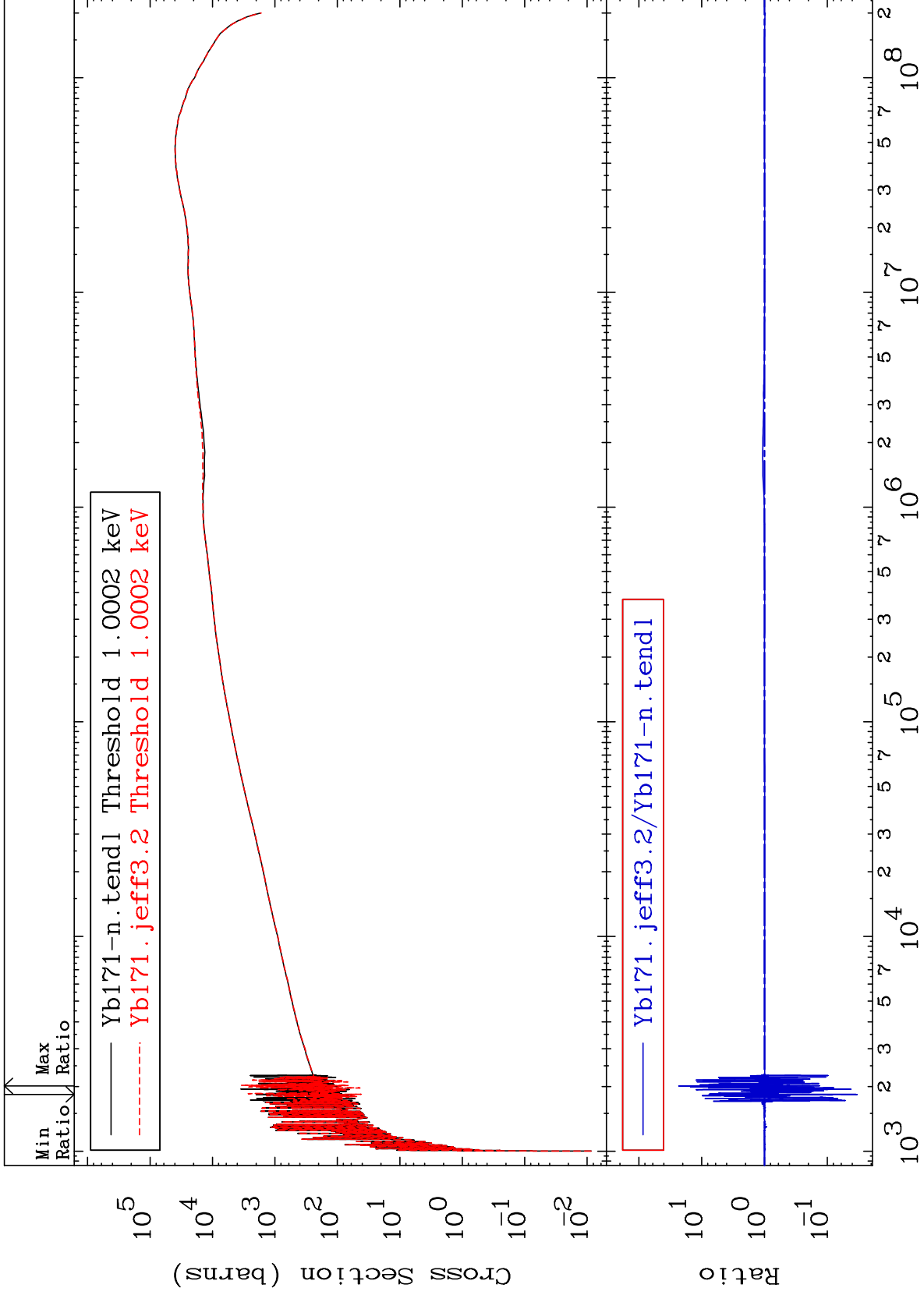
Incident Energy (eV)

70-Yb-171

MAT 7034

Dpa elastic (mt2)
Cross Section

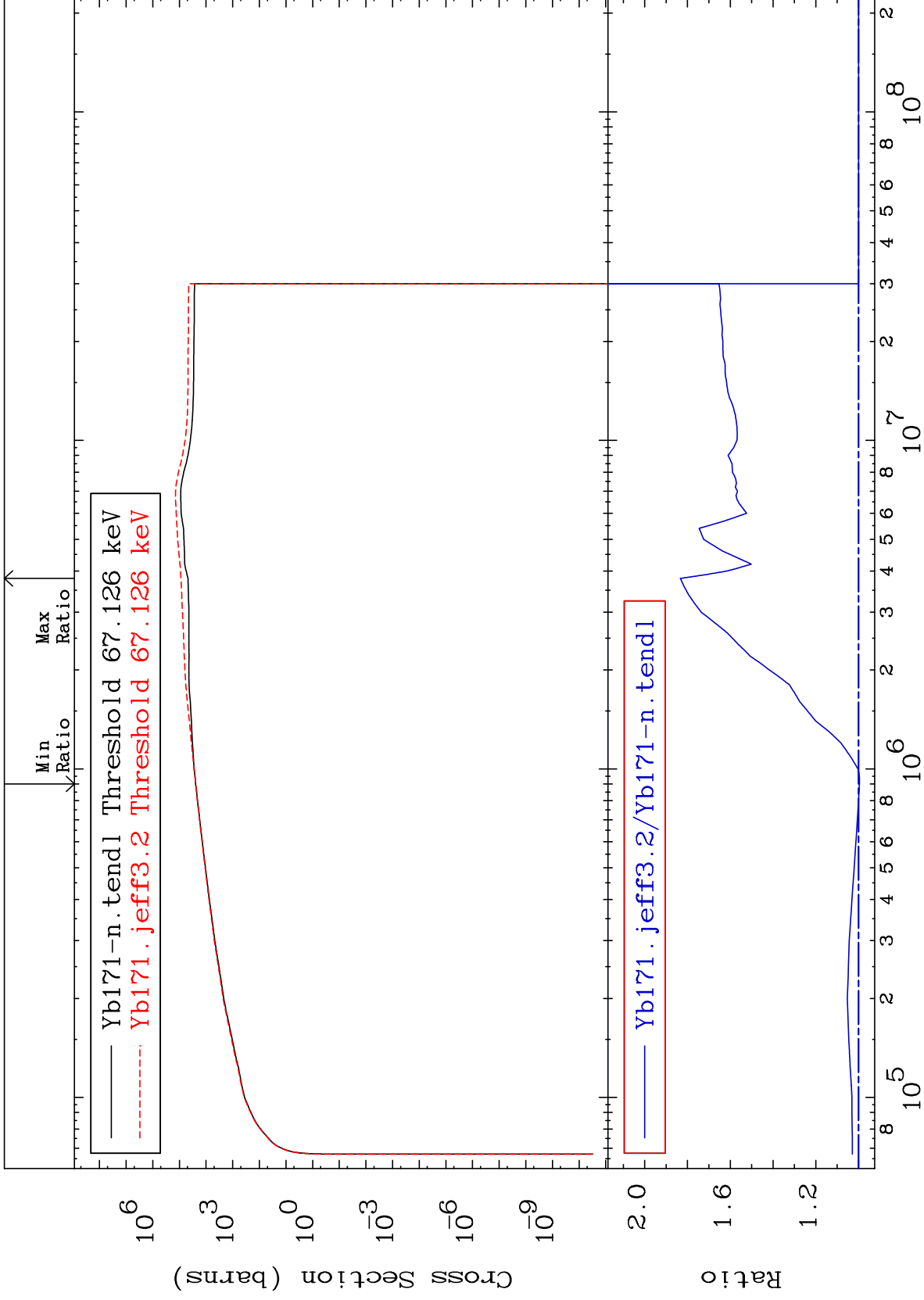
70-Yb-171
-96.66 To 2230. %



78

Incident Energy (eV)

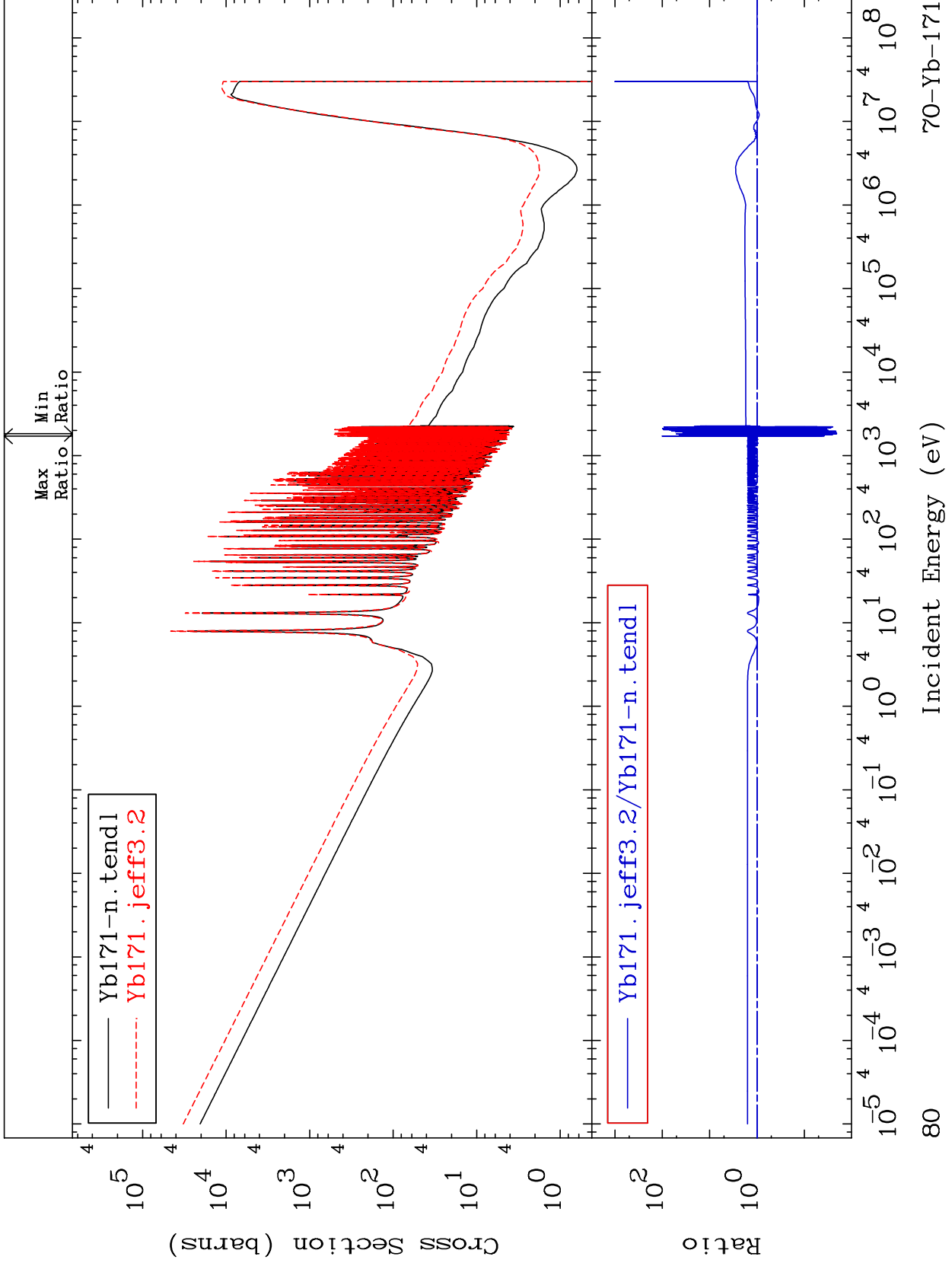
70-Yb-171

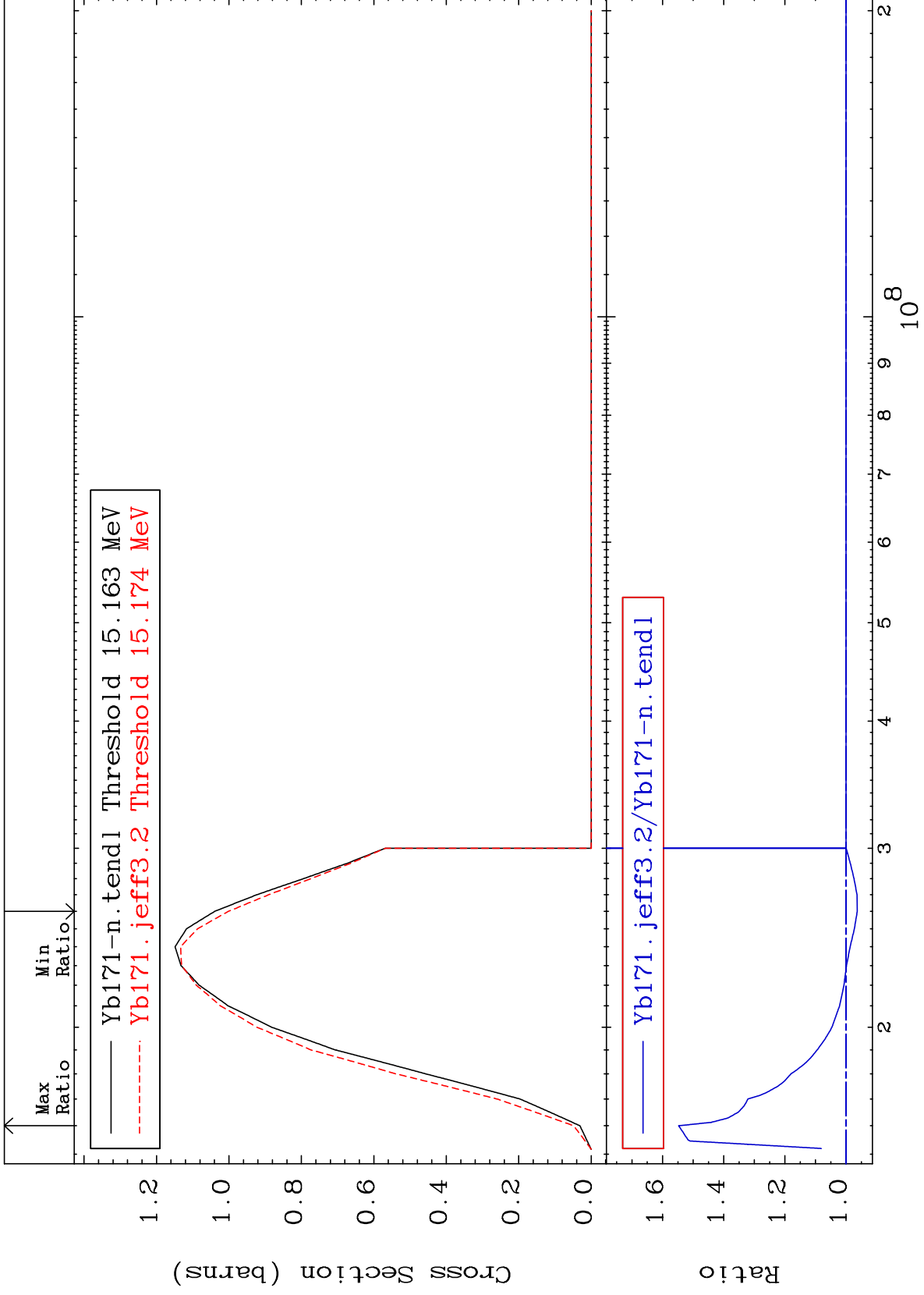


MAT 7034

Dpa disappearance (mt102 -120)
Cross Section

70-Yb-171
-97.92 To 9895. %



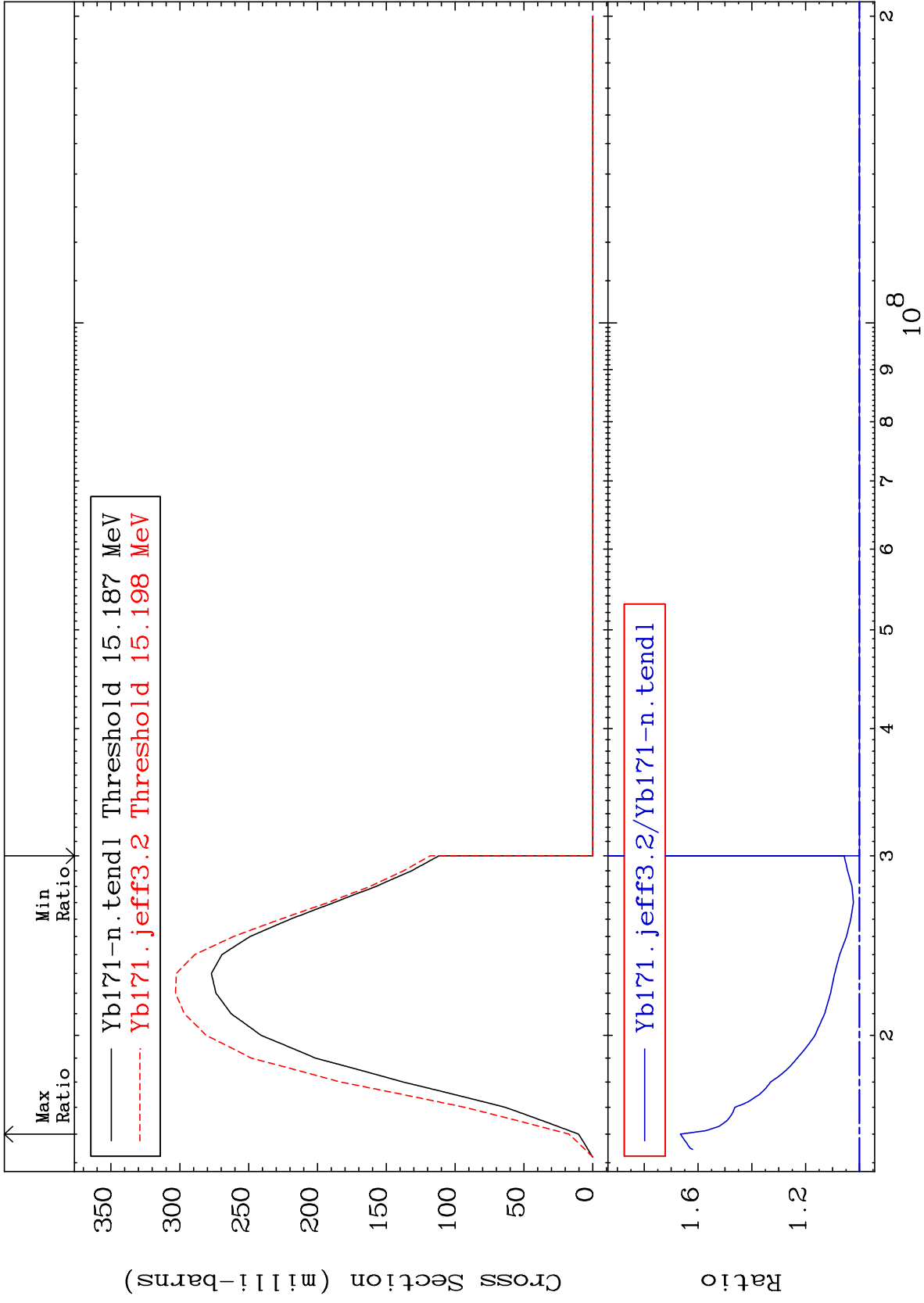


MAT 7034

(n, 3n):70-Yb-169m1

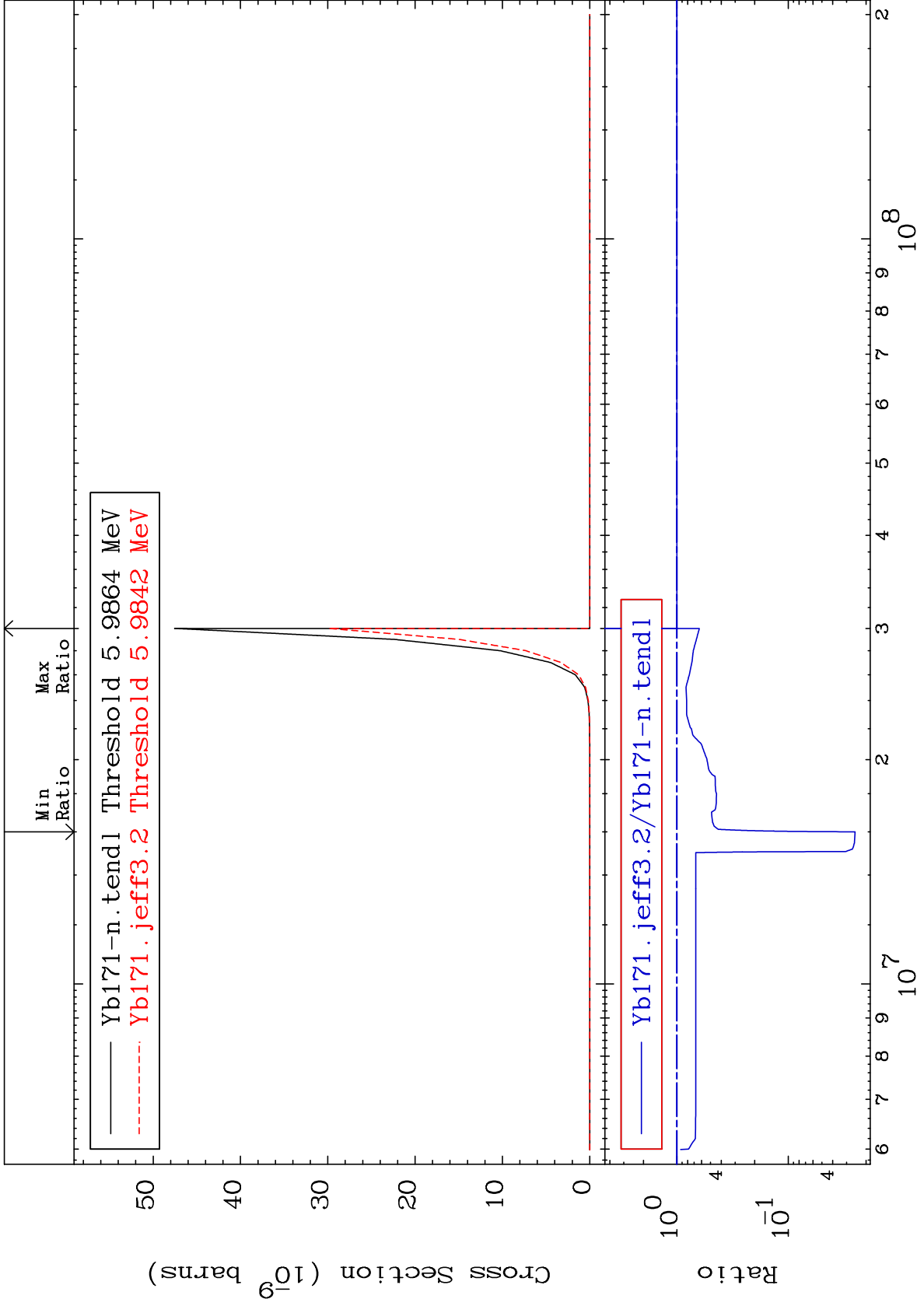
70-Yb-171

Radionuclide Production Cross Section 0.000 To 66.58 %



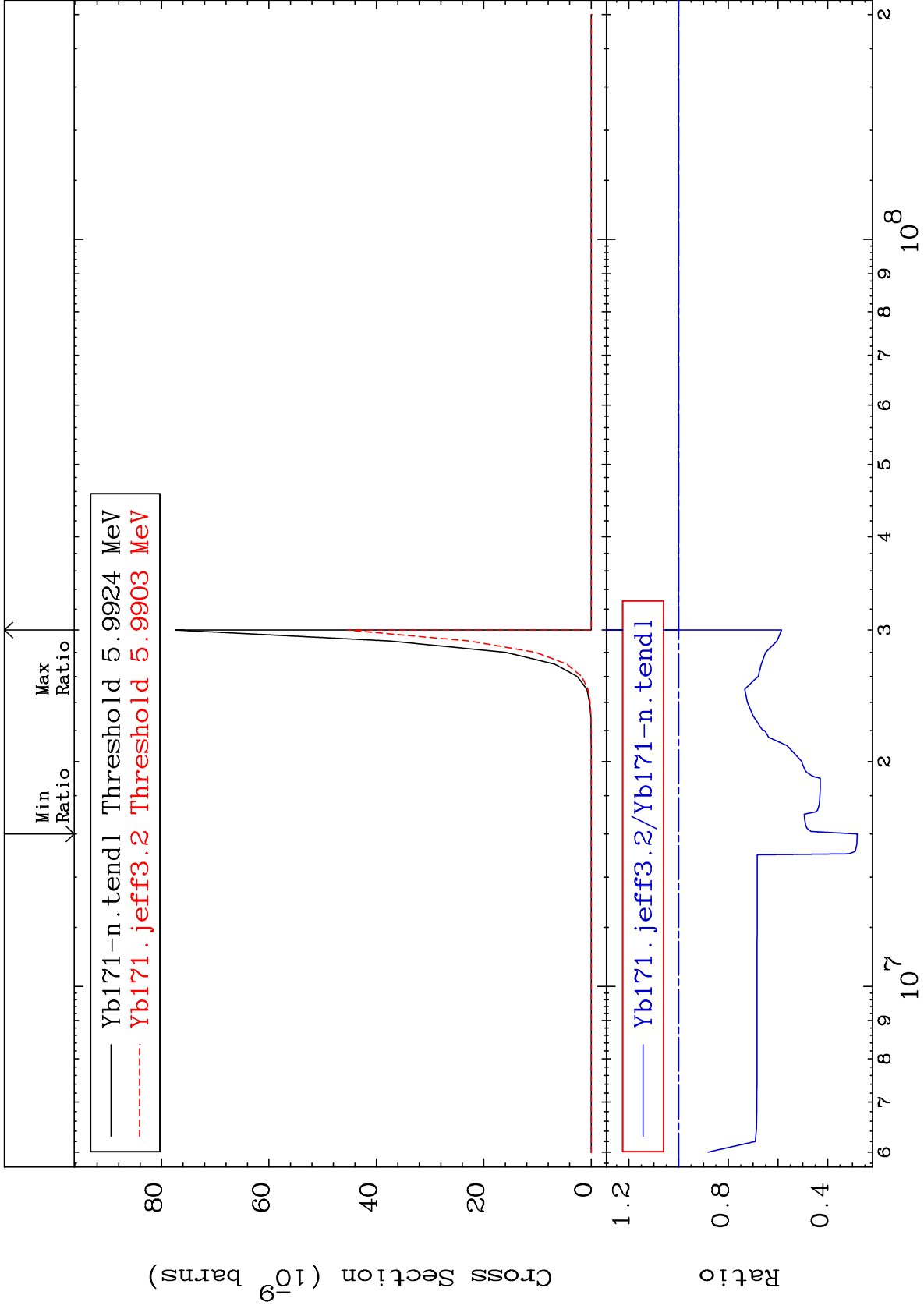
MAT 7034

(n, n') p α : 67-Ho-166g 70-Yb-171
Radionuclide Production Cross Section -97.49 To 0.000 %



MAT 7034

(n, n') p α :67-Ho-166m1 70-Yb-171
Radionuclide Production Cross Section -71.93 To 0.000 %



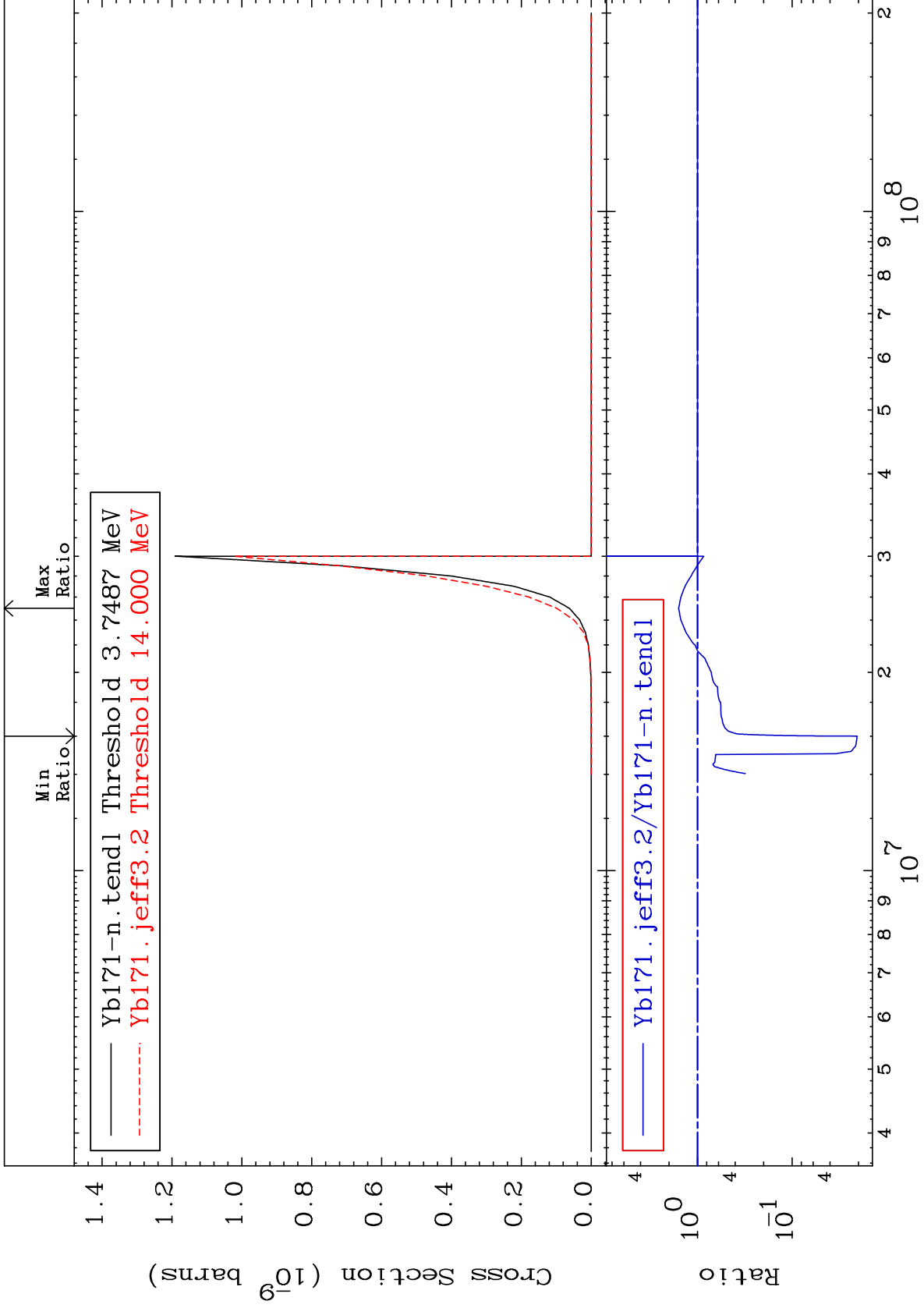
MAT 7034

(n, d) α : 67-Ho-166g

70-Yb-171

Radionuclide Production Cross Section

-97.94 To 58.46 %



MAT 7034

(n, d) α :67-Ho-166m1 70-Yb-171
Radionuclide Production Cross Section -76.80 To 39.79 %

