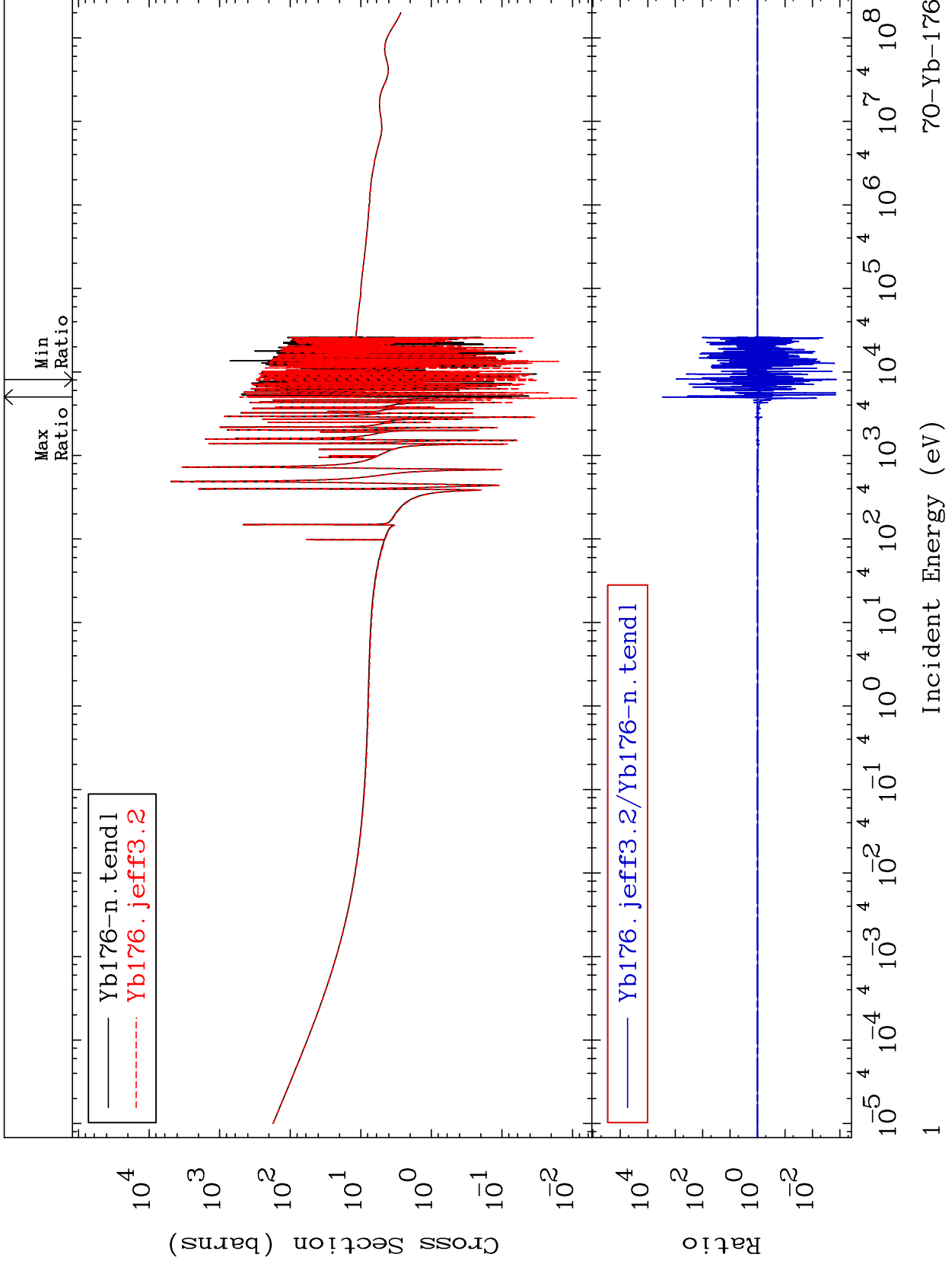


MAT 7049

Total
Cross Section

70-Yb-176
-99.87 To 9999. %

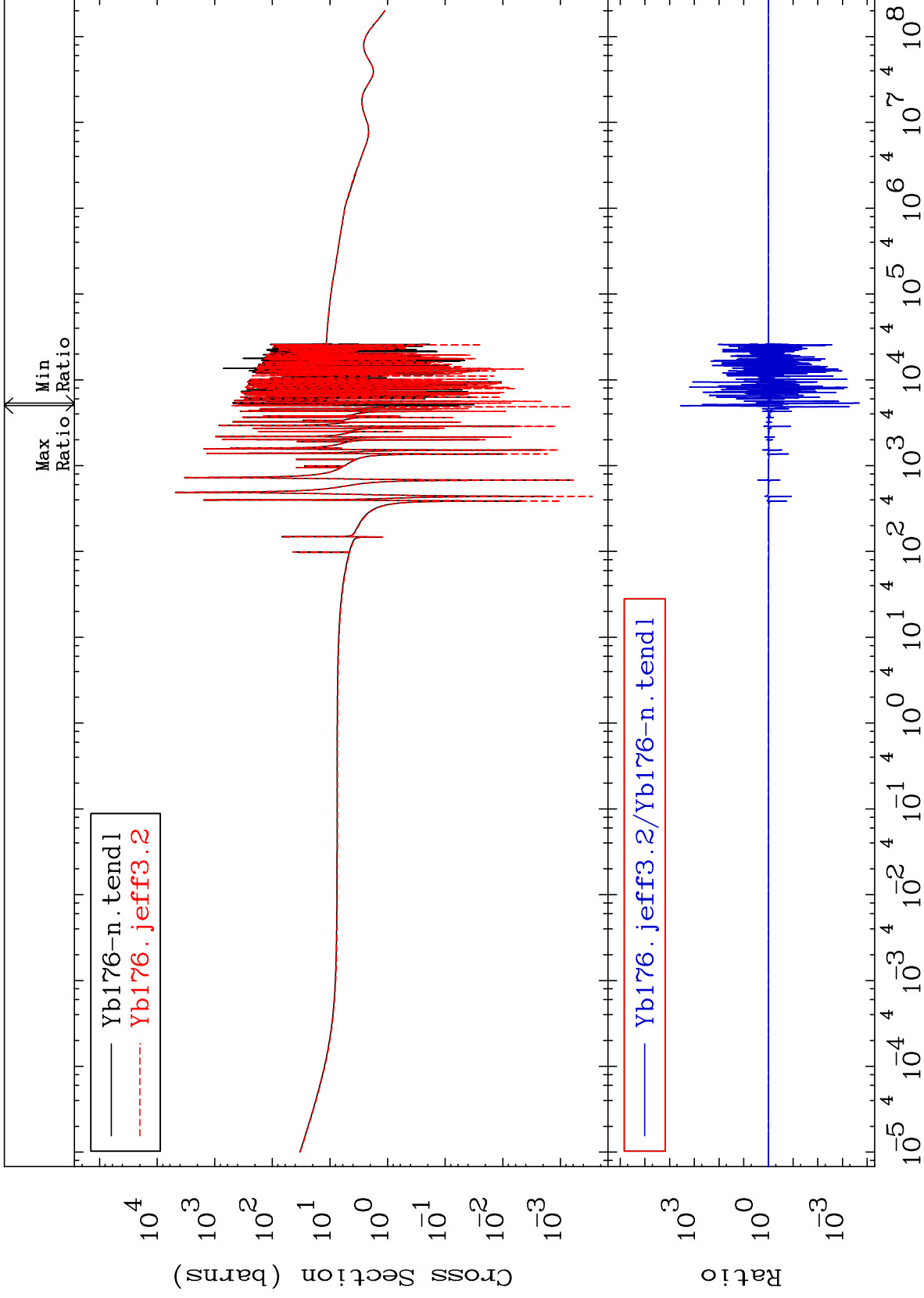


70-Yb-176

MAT 7049

Elastic
Cross Section

70-Yb-176
-99.98 To 9999. %



Incident Energy (eV)

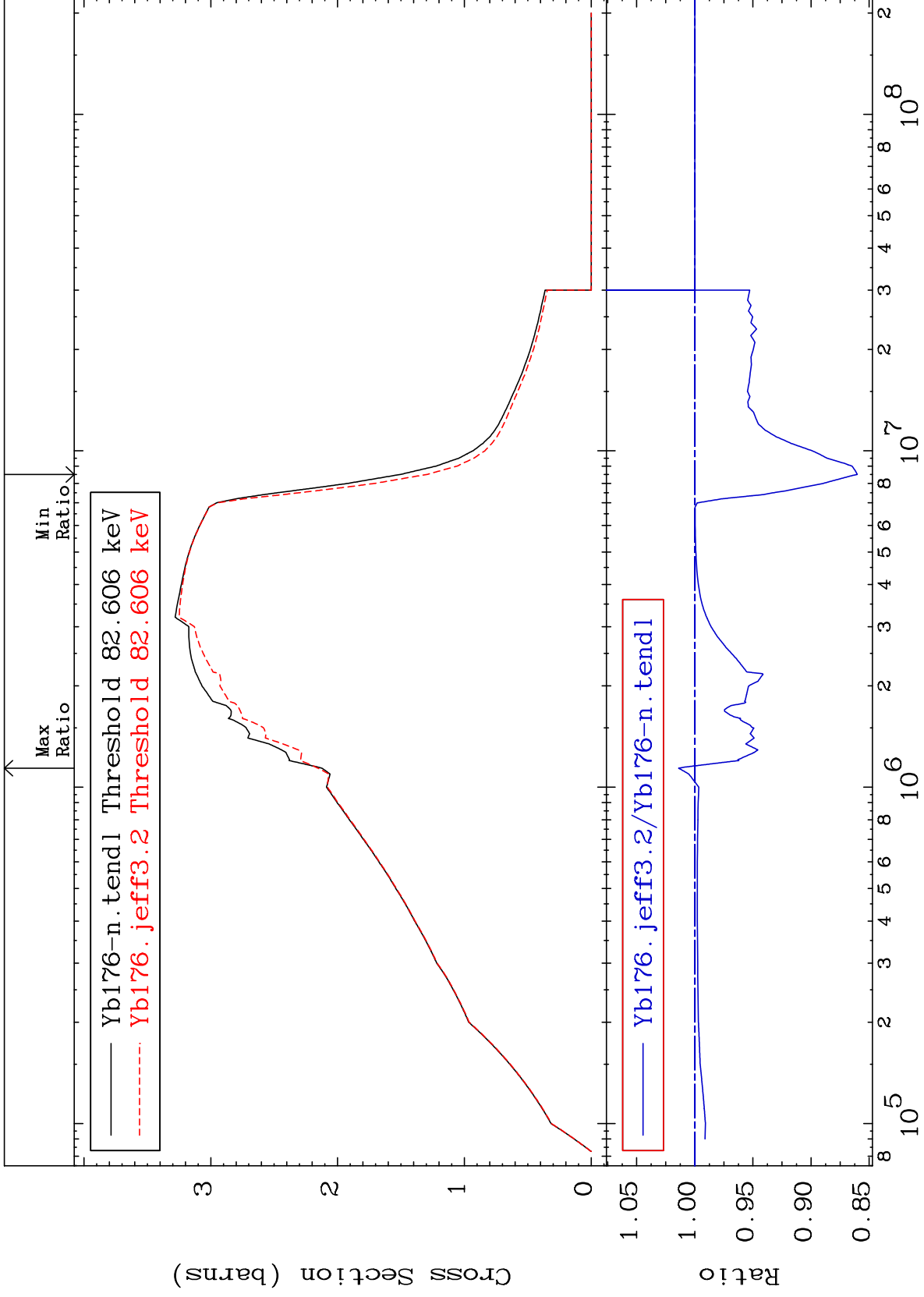
70-Yb-176

2

MAT 7049

Inelastic
Cross Section

70-Yb-176
-13.97 To 1.390 %



3

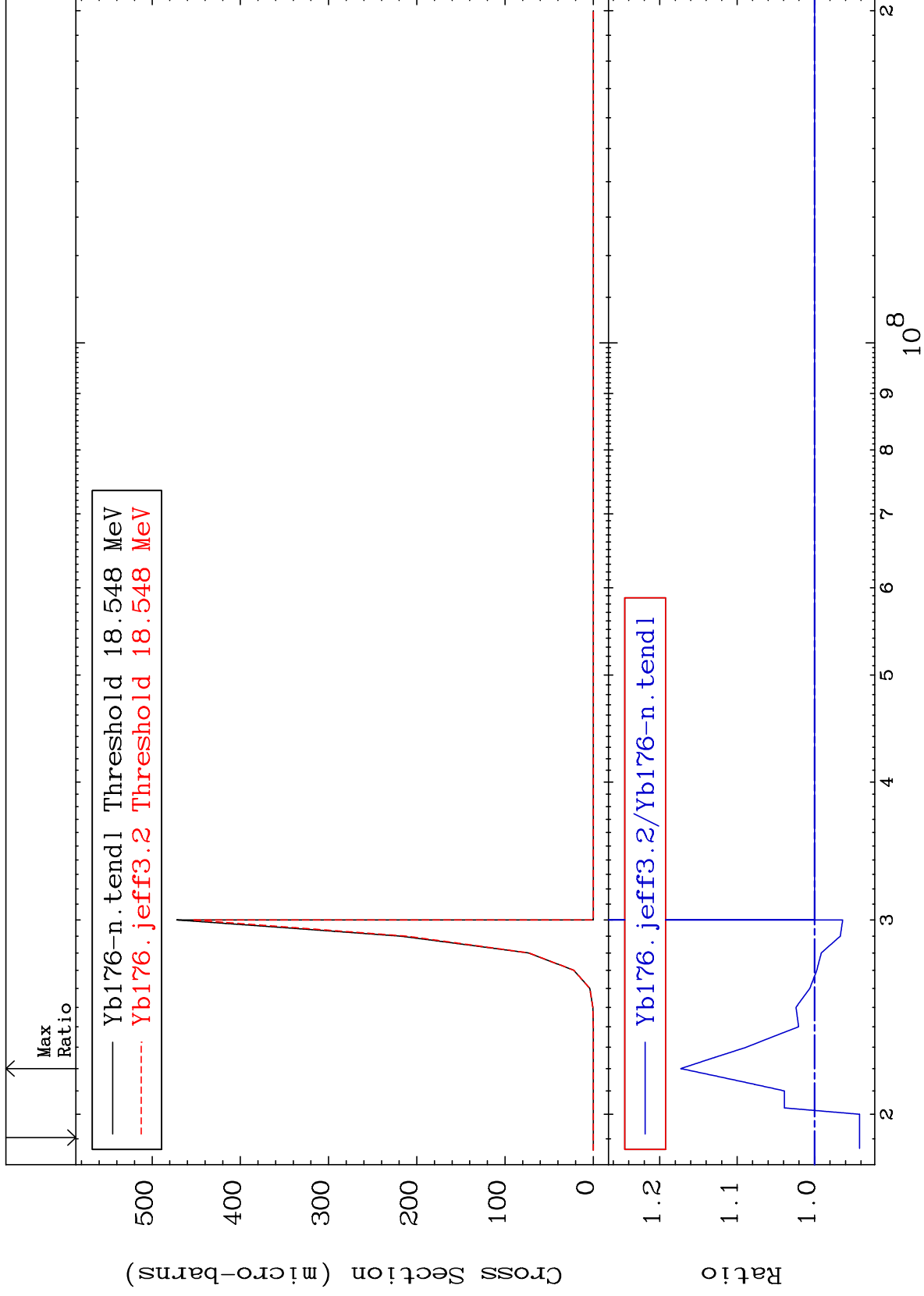
Incident Energy (eV)

70-Yb-176

MAT 7049

(n,2n) d
Cross Section

70-Yb-176
-5.816 To 17.28 %



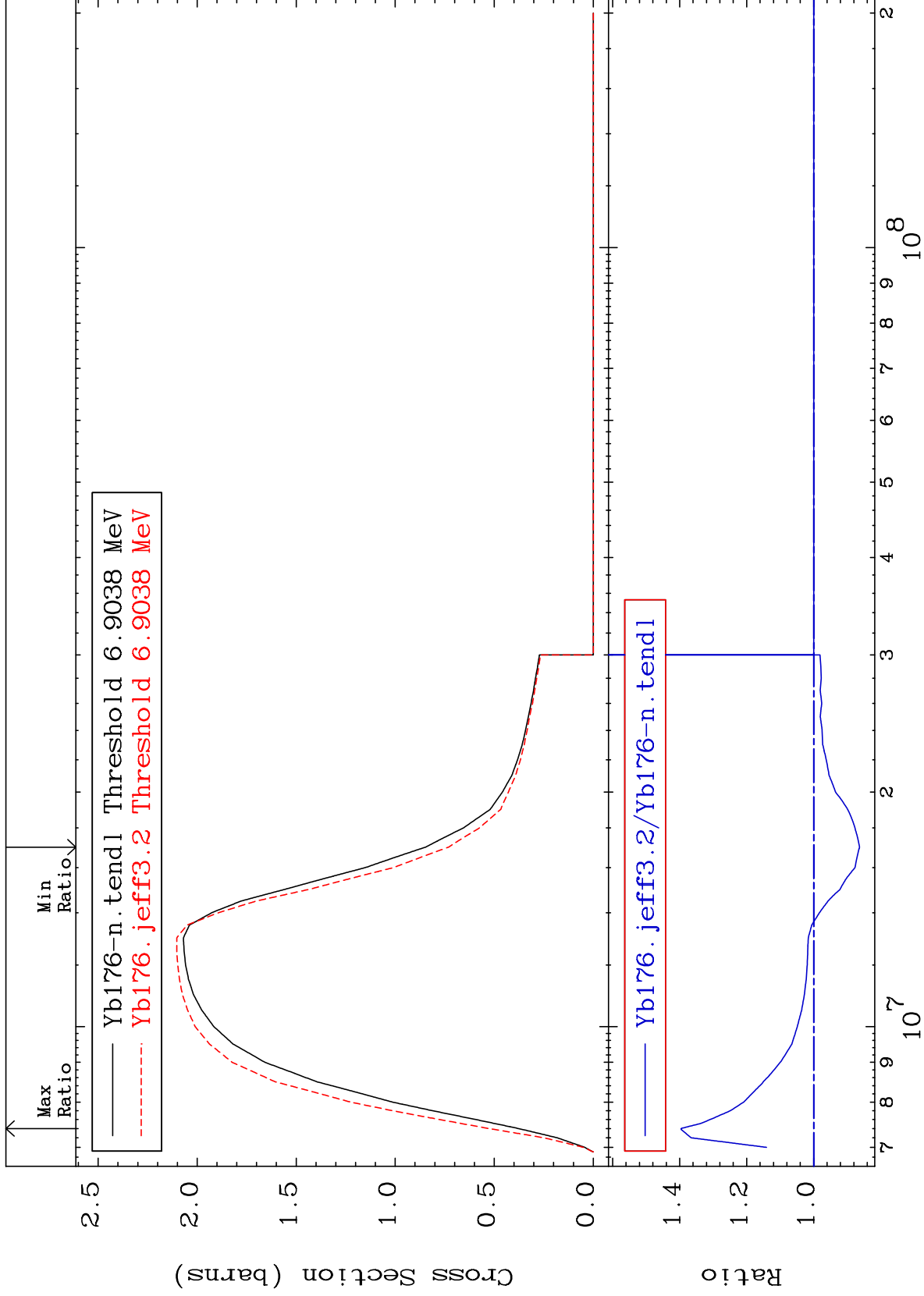
MAT 7049

(n,2n)

⁷⁰Yb-176

Cross Section

-13.69 To 39.67 %



5

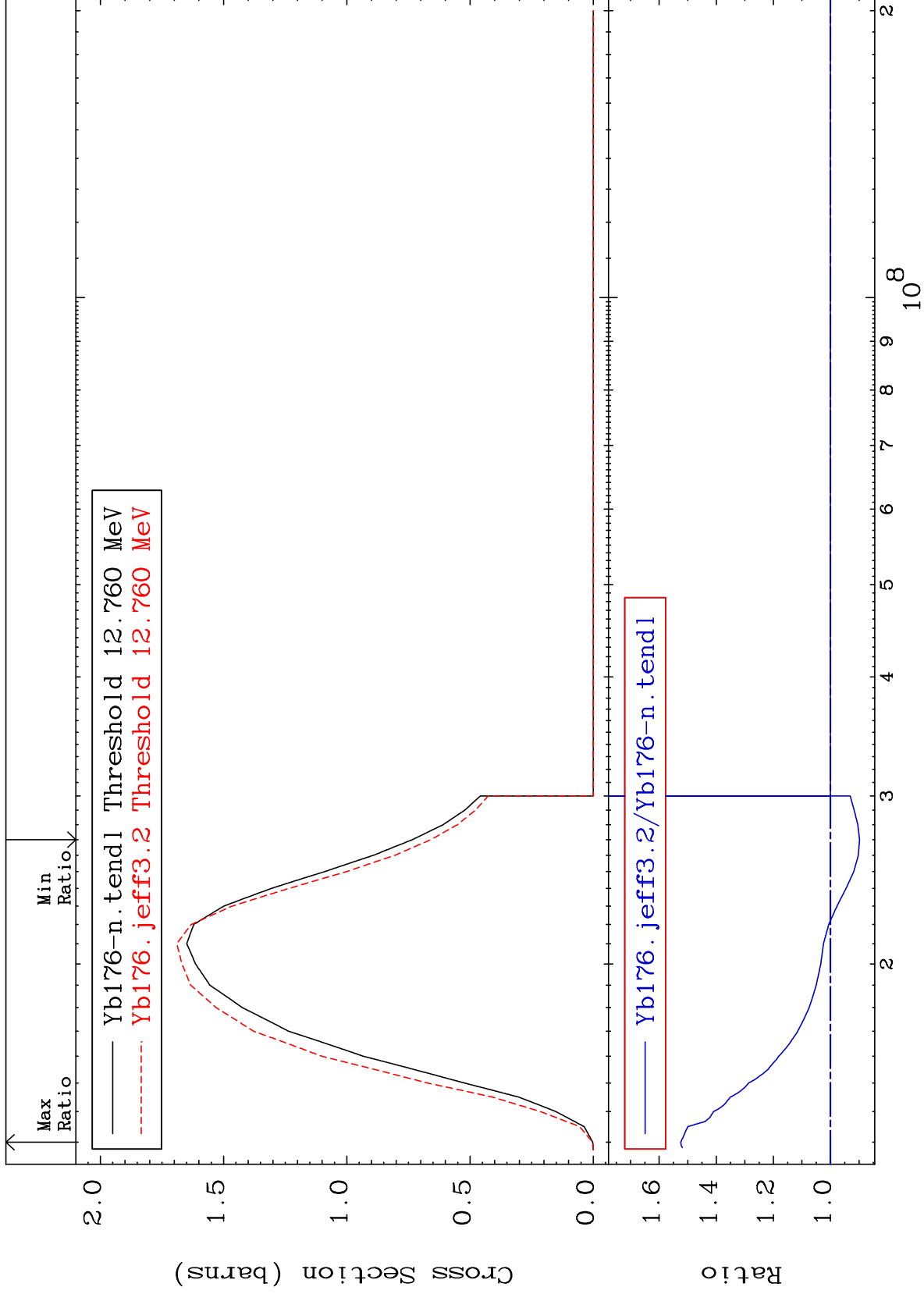
Incident Energy (eV)

⁷⁰Yb-176

MAT 7049

(n,3n)
Cross Section

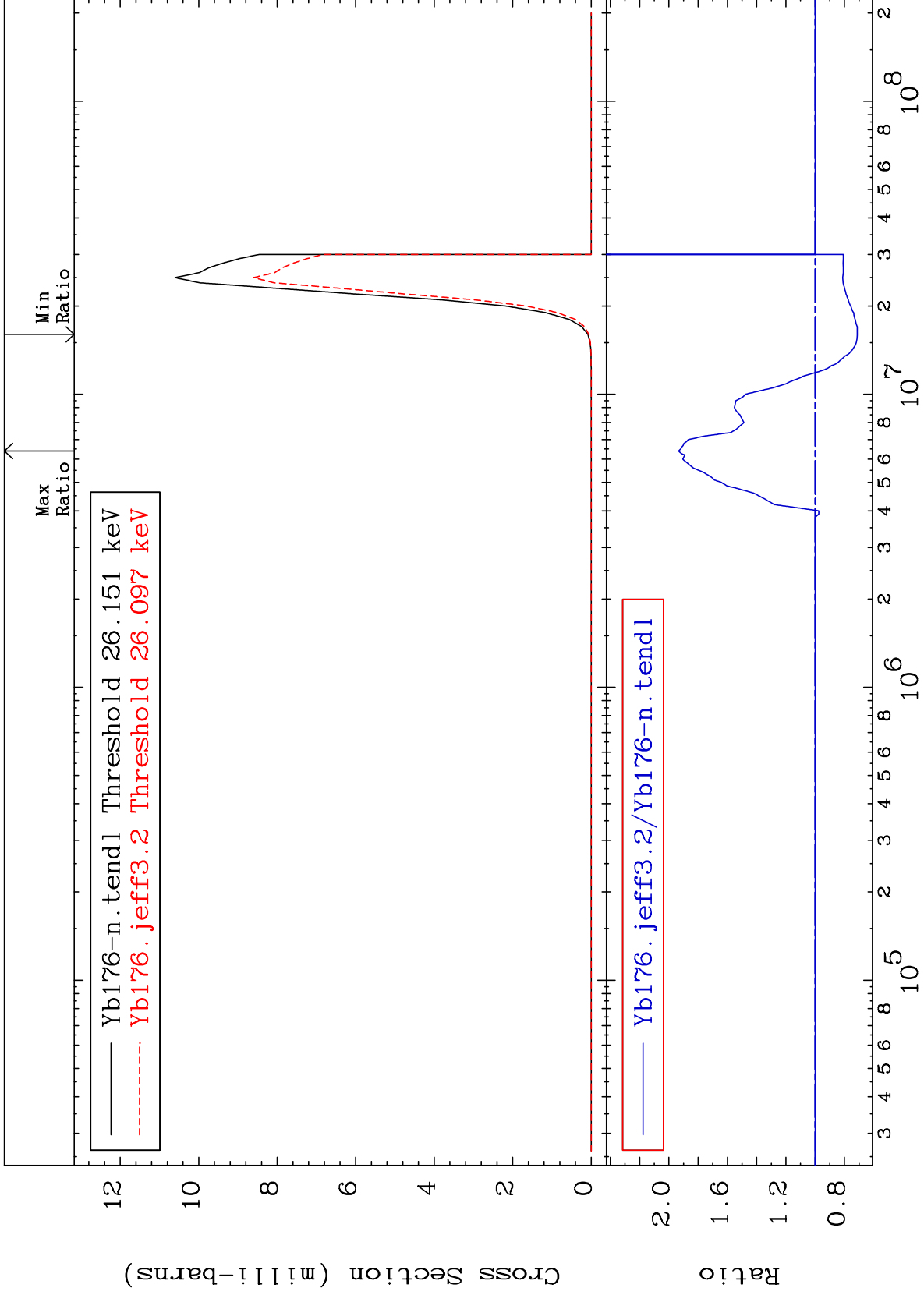
70-Yb-176
-10.17 To 52.43 %



MAT 7049

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

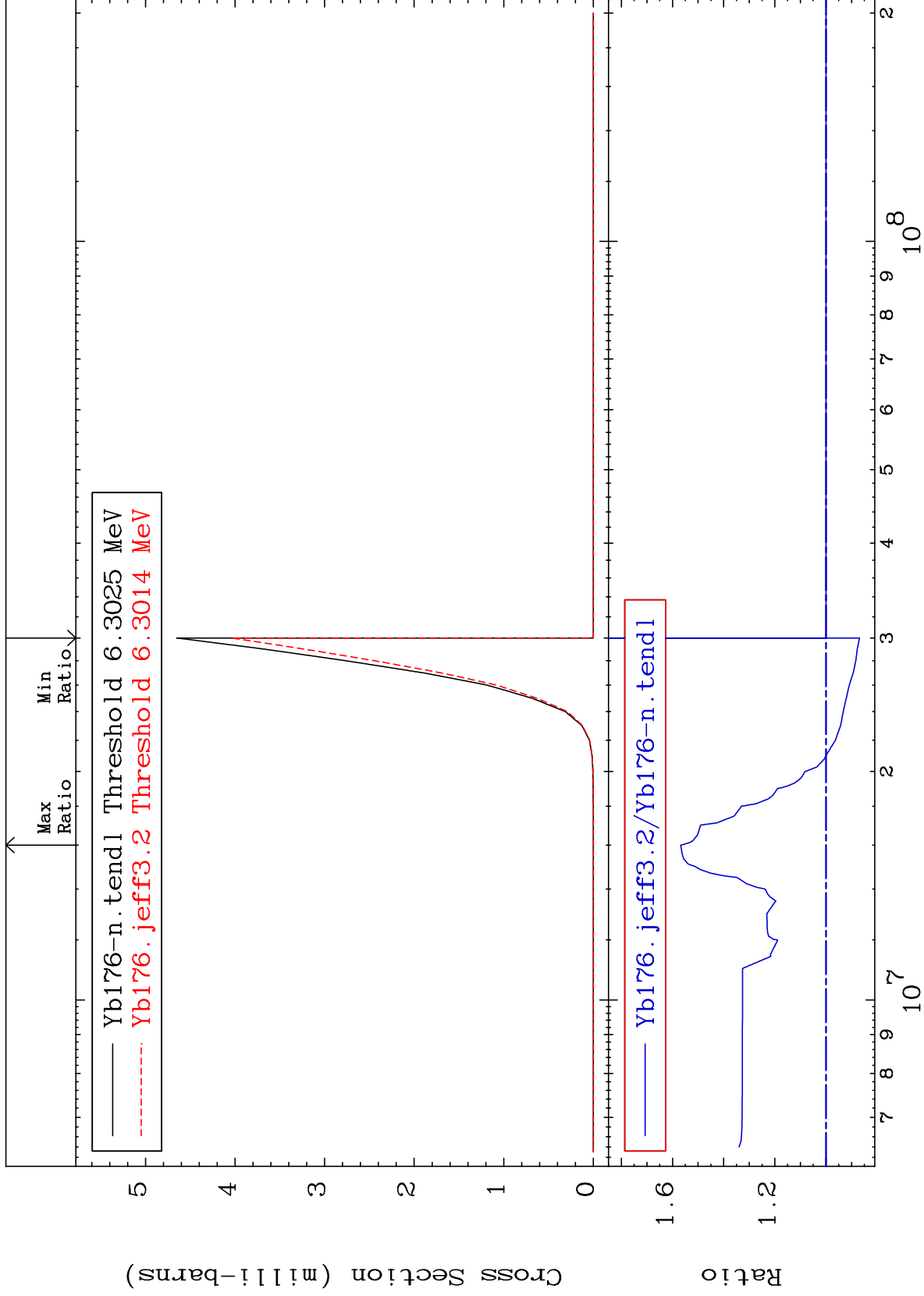
$^{70}\text{Yb-176}$
-28.76 To 93.33 %



MAT 7049

(n,2n) α
Cross Section

⁷⁰Yb-176
-13.12 To 56.77 %



8

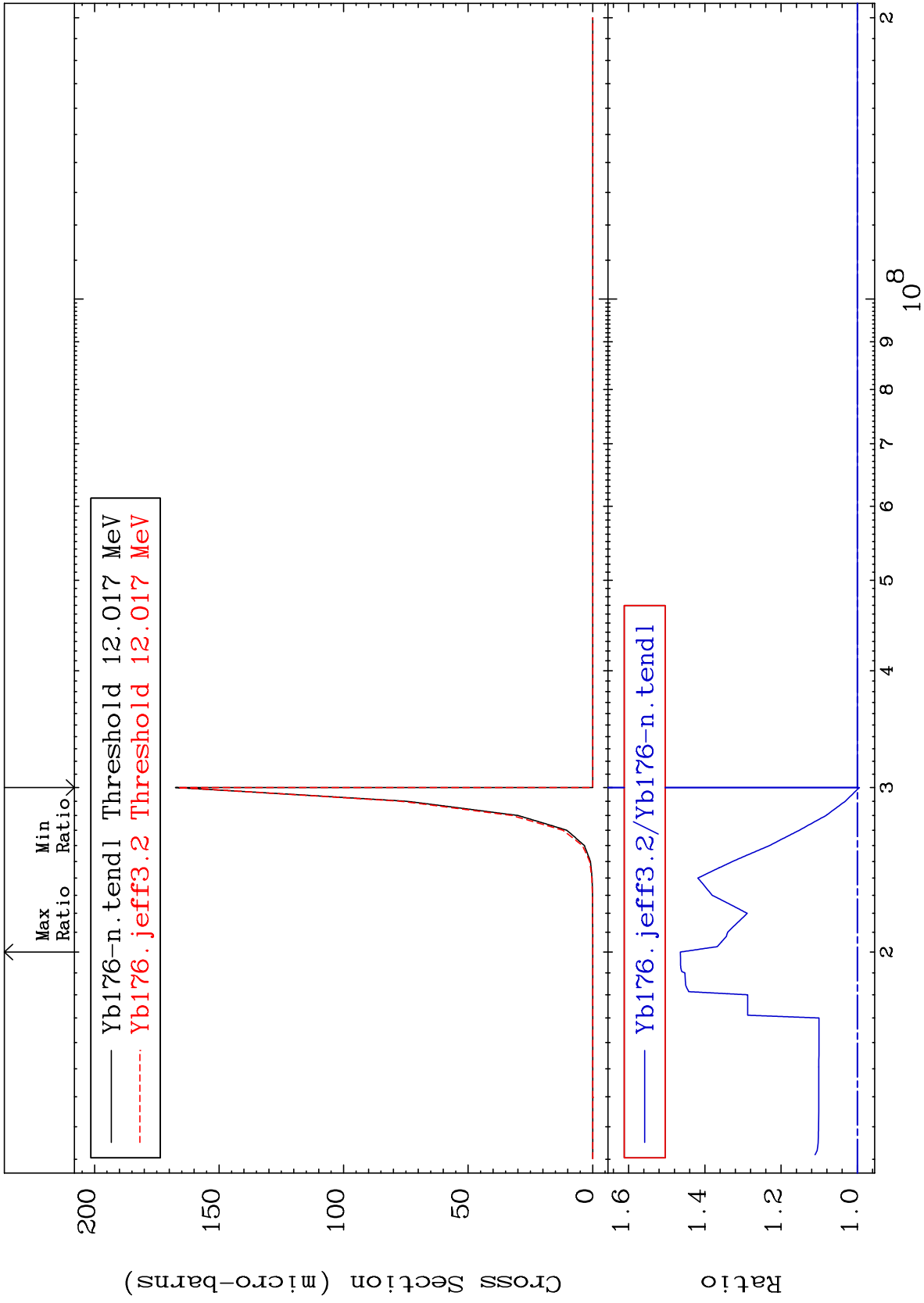
Incident Energy (eV)

⁷⁰Yb-176

MAT 7049

(n,3n) α
Cross Section

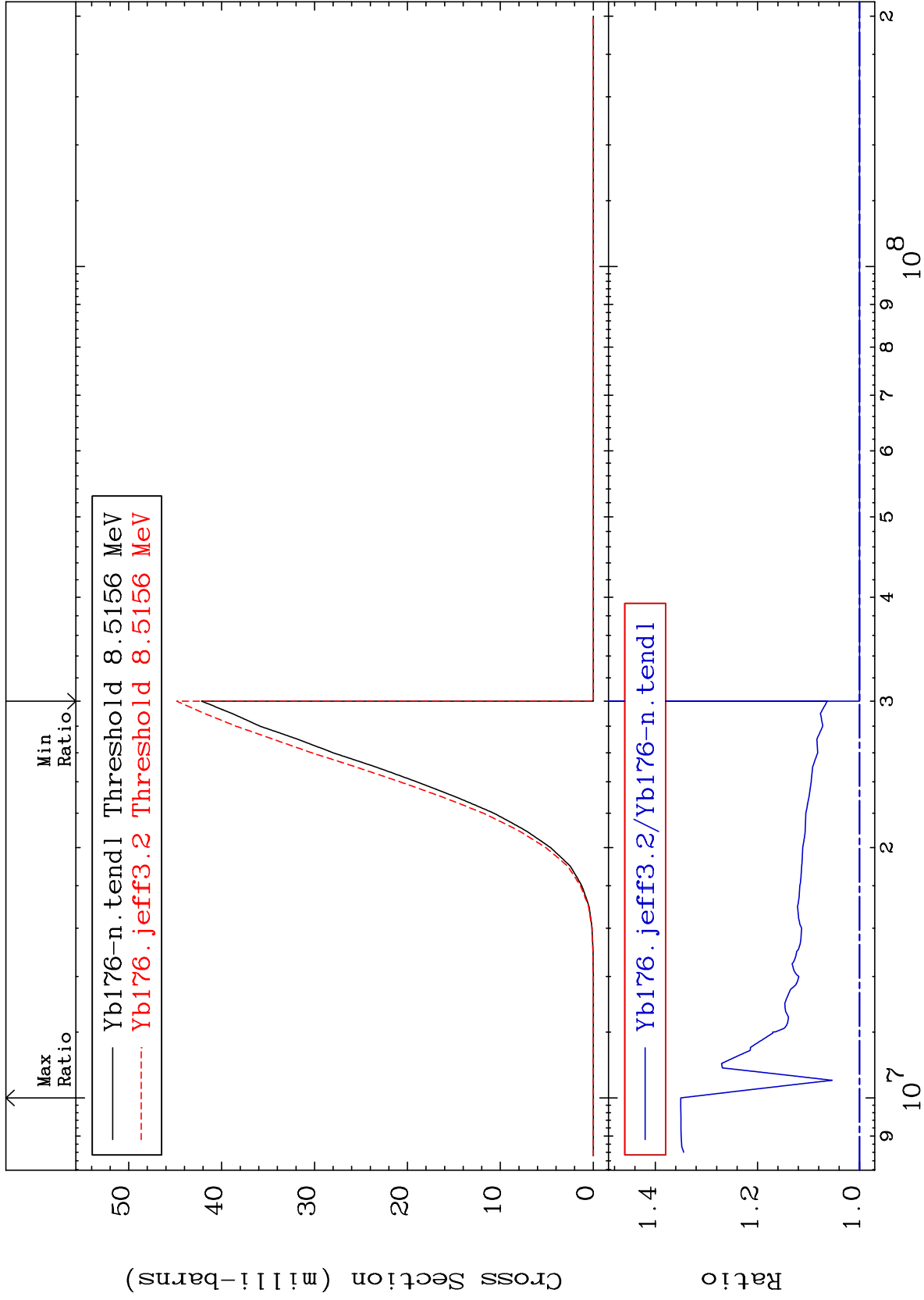
⁷⁰Yb-176
-0.542 To 46.43 %



MAT 7049

(n, n') p
Cross Section

70-Yb-176
To 35.03 %



10

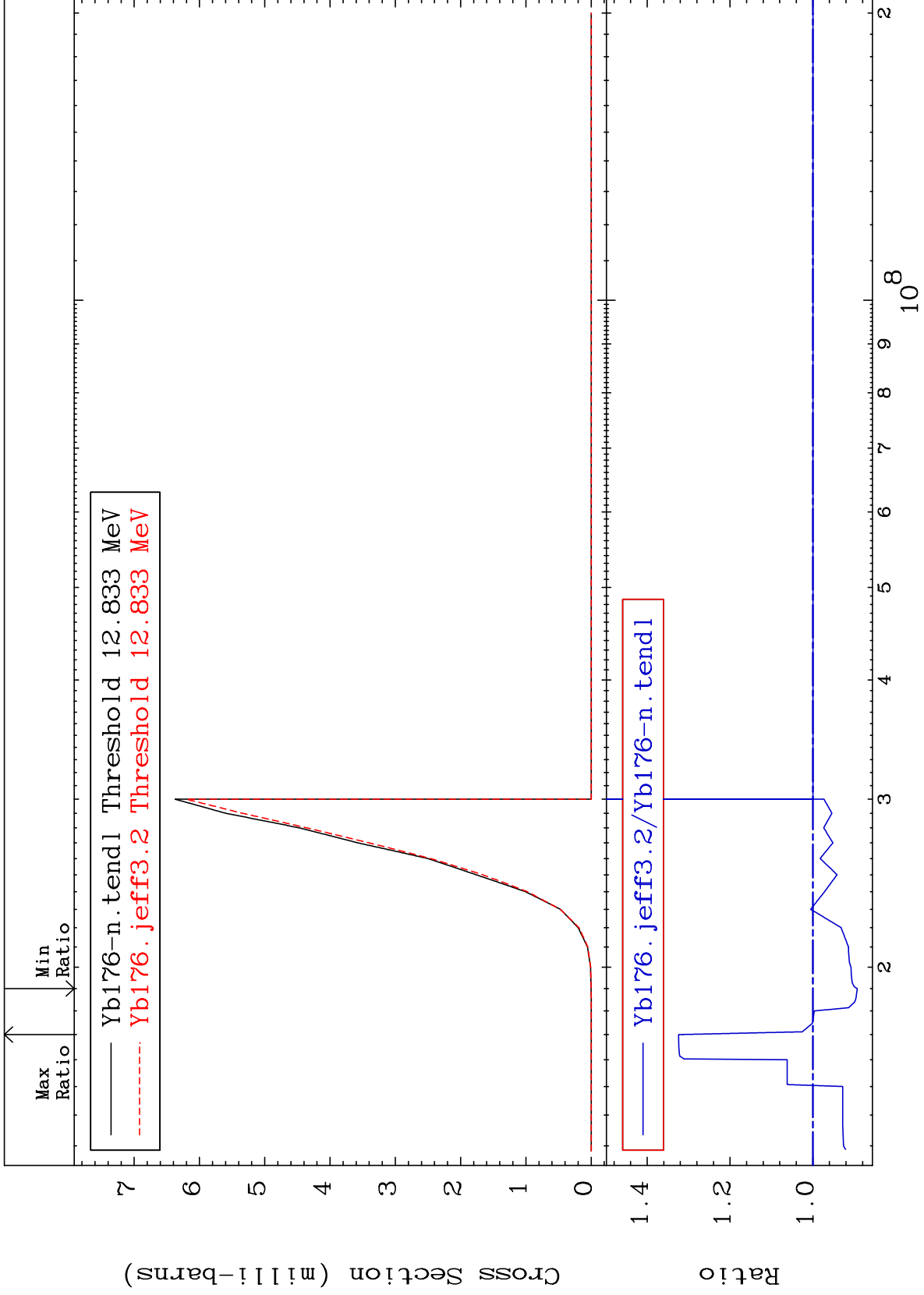
70-Yb-176

70-Yb-176

MAT 7049

(n, n') d
Cross Section

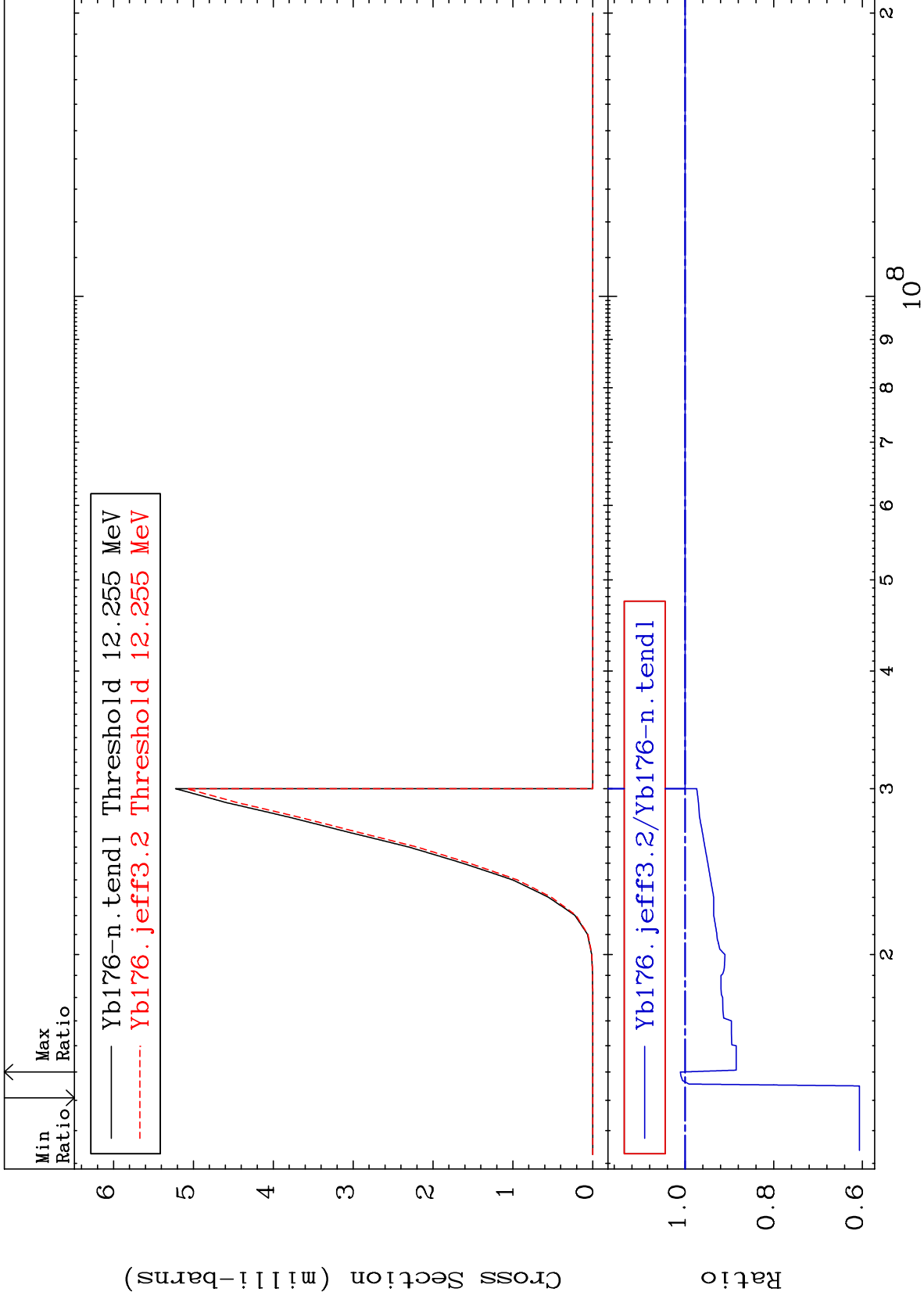
⁷⁰Yb-176
-10.72 To 32.41 %



MAT 7049

(n,n') t
Cross Section

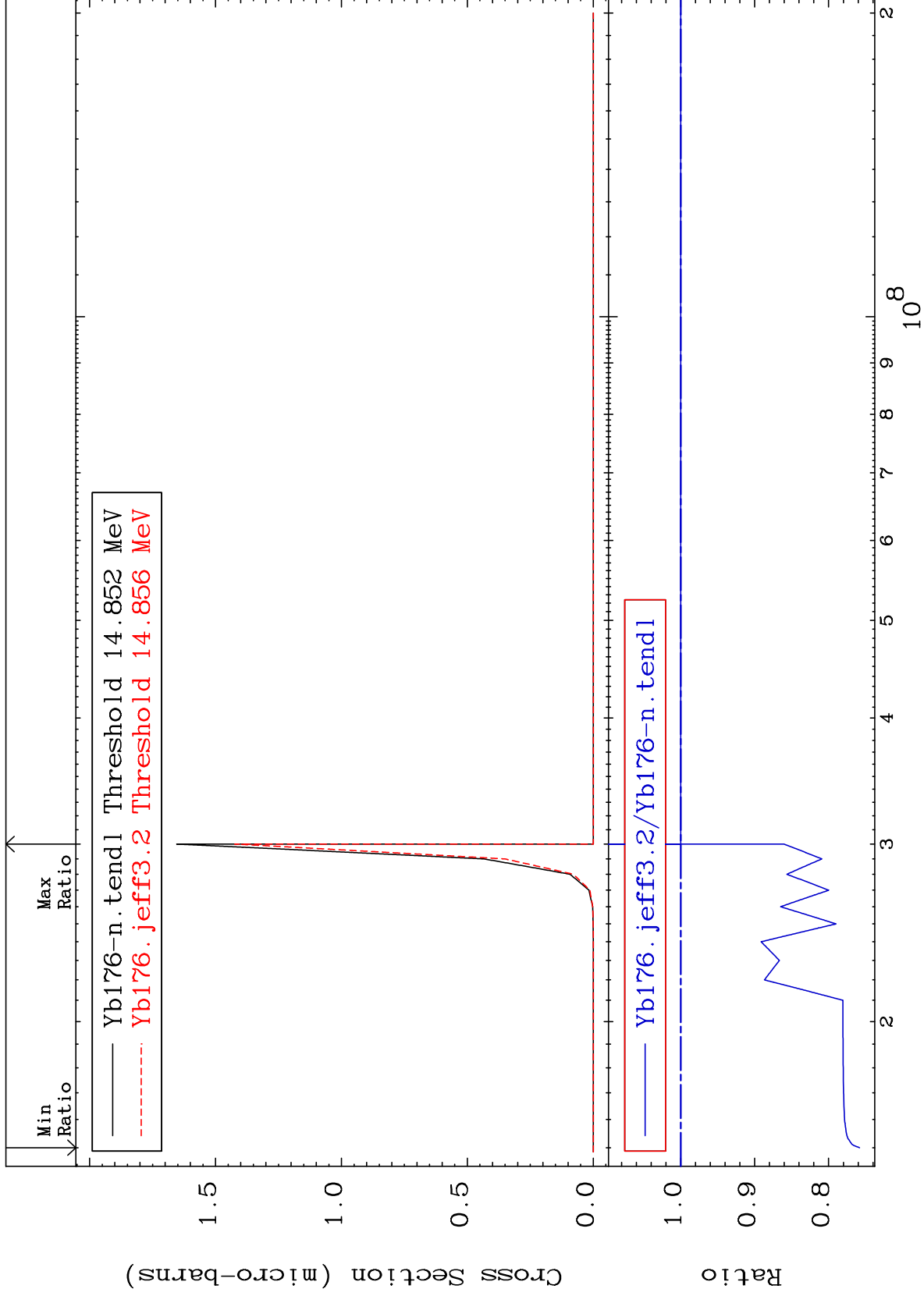
70-Yb-176
-39.33 To 1.062 %



MAT 7049

(n, n') He-3
Cross Section

⁷⁰Yb-176
-24.18 To 0.000 %



MAT 7049

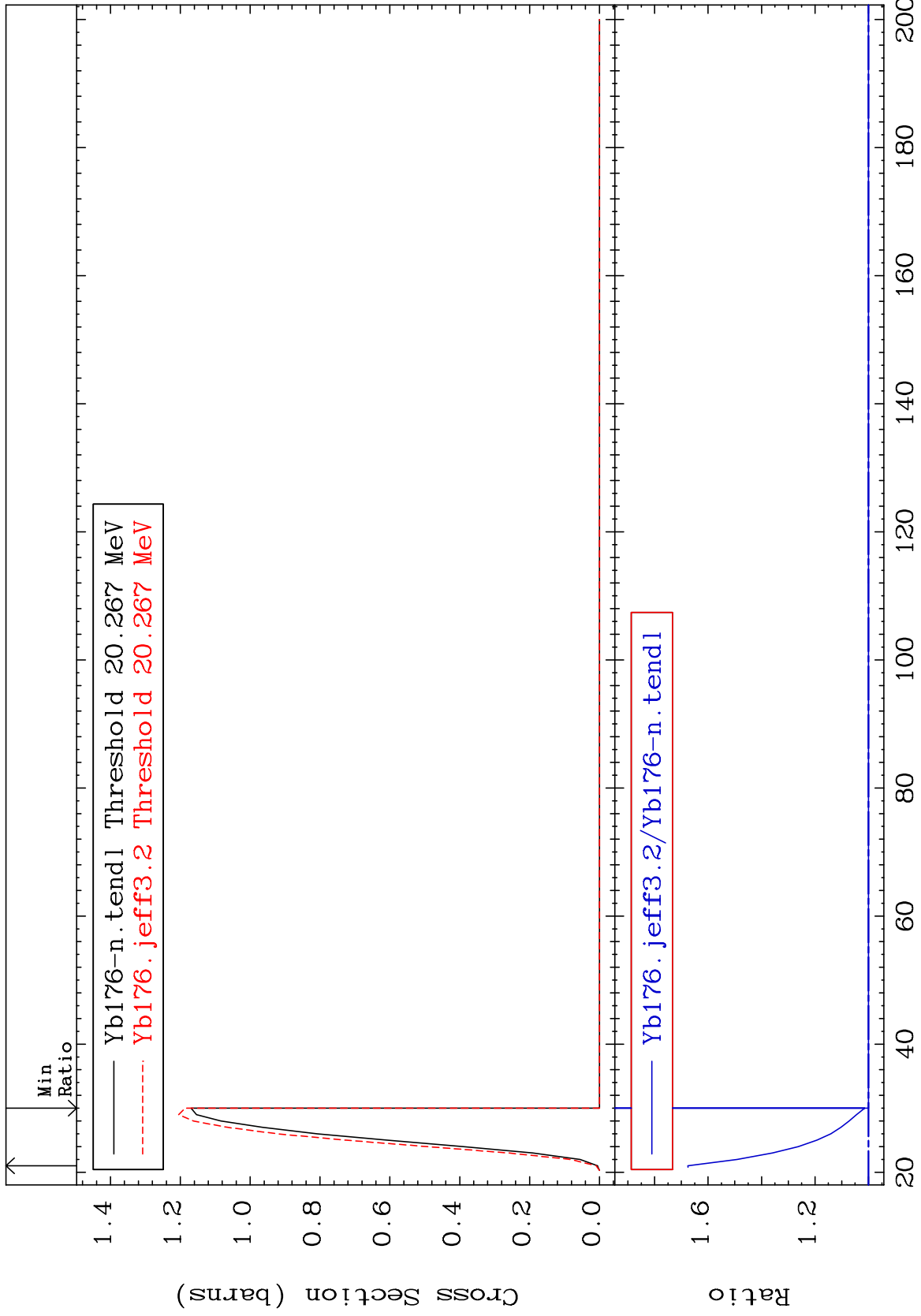
(n,4n)

⁷⁰Yb-176

Cross Section

0.000

To 67.56 %



⁷⁰Yb-176

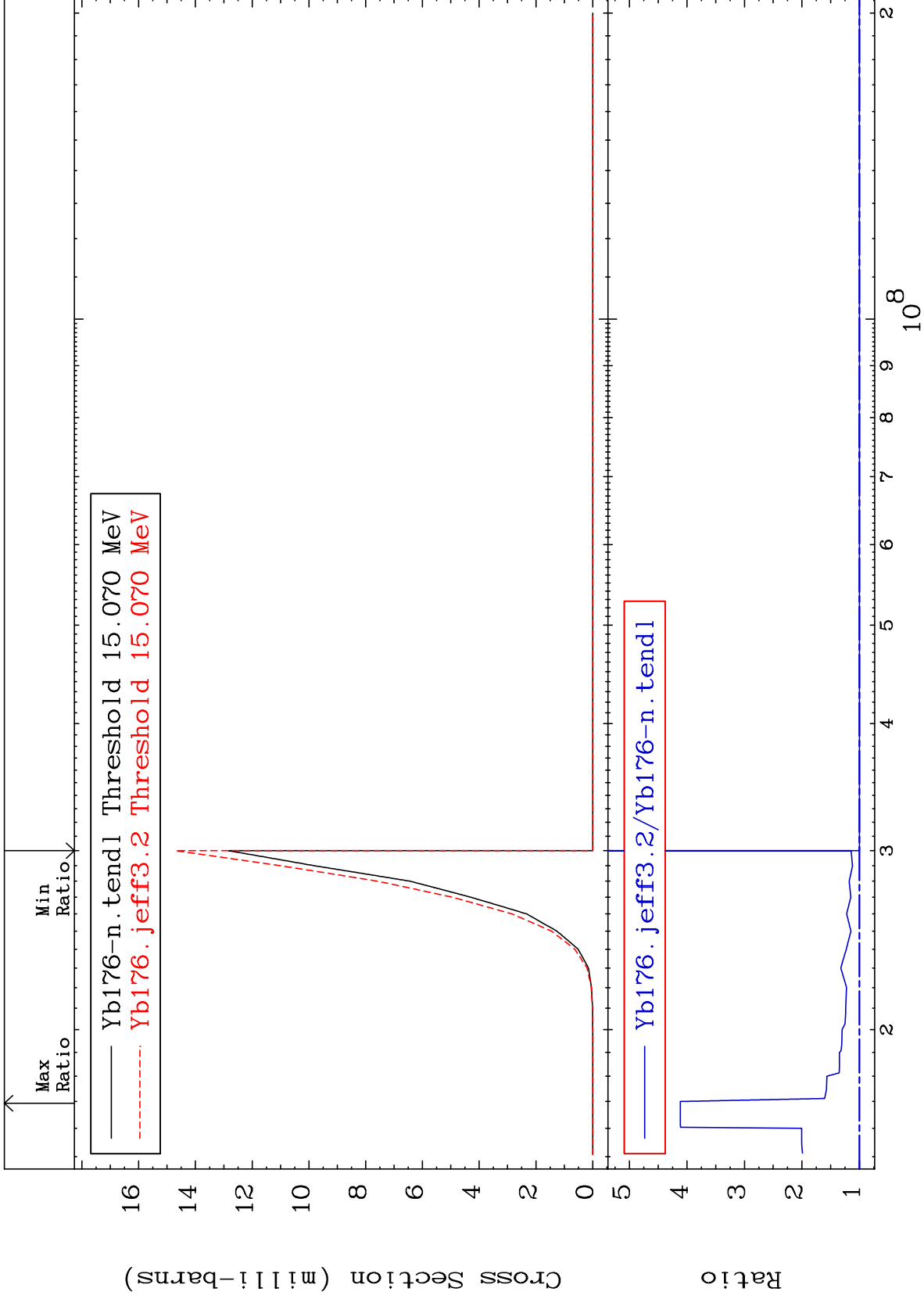
Incident Energy (MeV)

14

MAT 7049

(n,2n) p
Cross Section

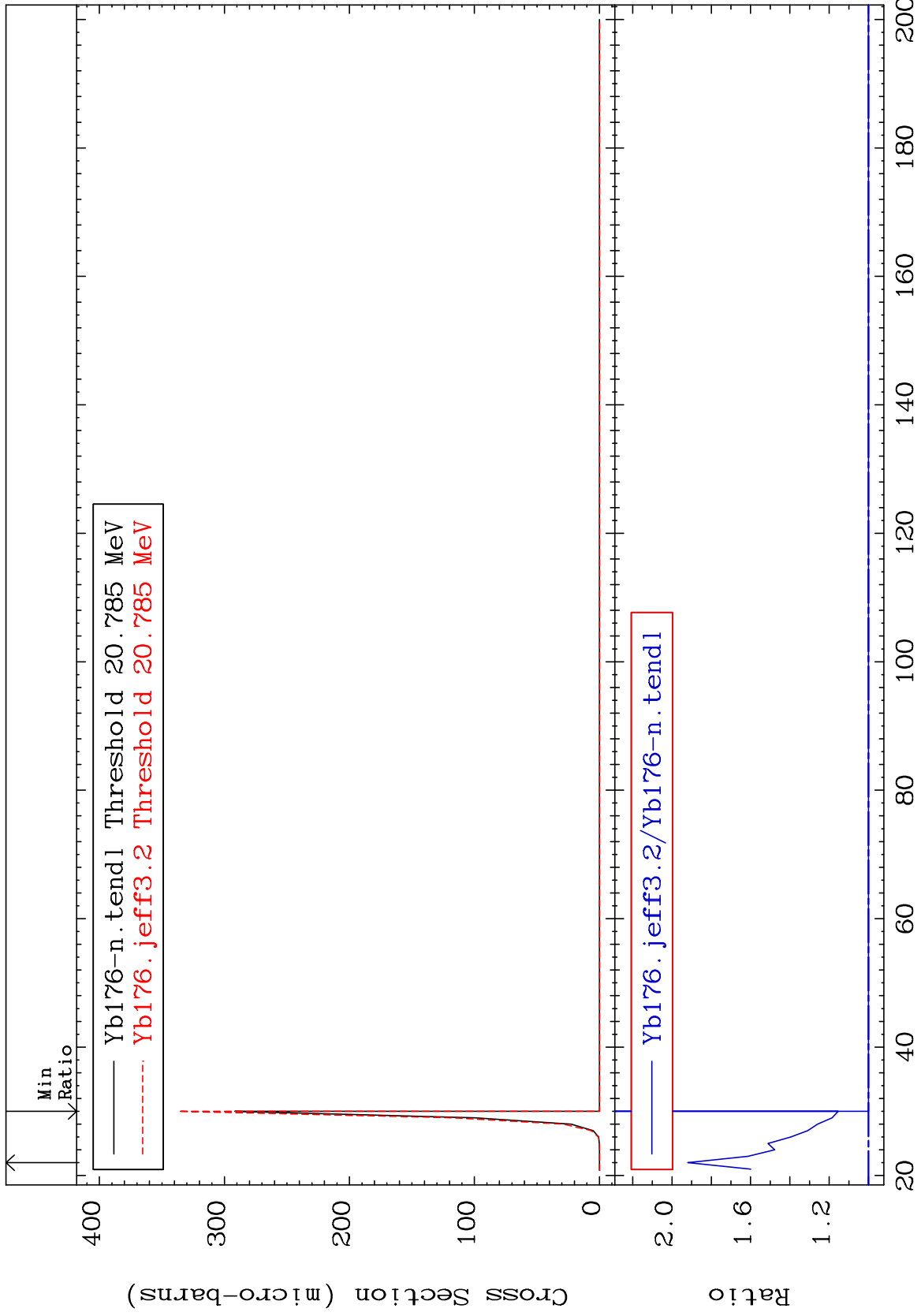
70-Yb-176
To 311.5 %
0.000



MAT 7049

(n,3n) p
Cross Section

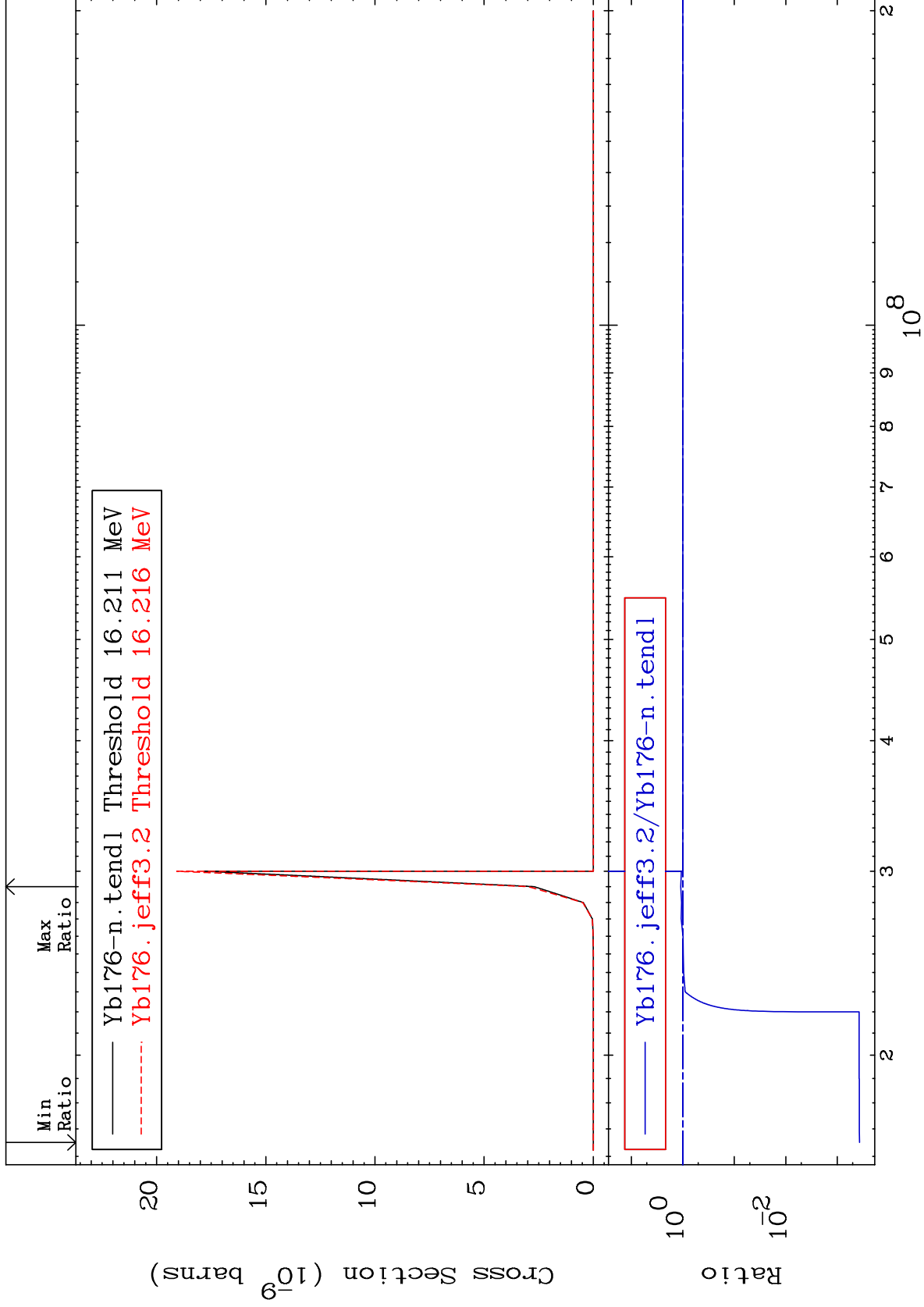
⁷⁰Yb-176
To 91.93 %
0.000



MAT 7049

(n,2n) p
Cross Section

70-Yb-176
-99.96 To 9.536 %



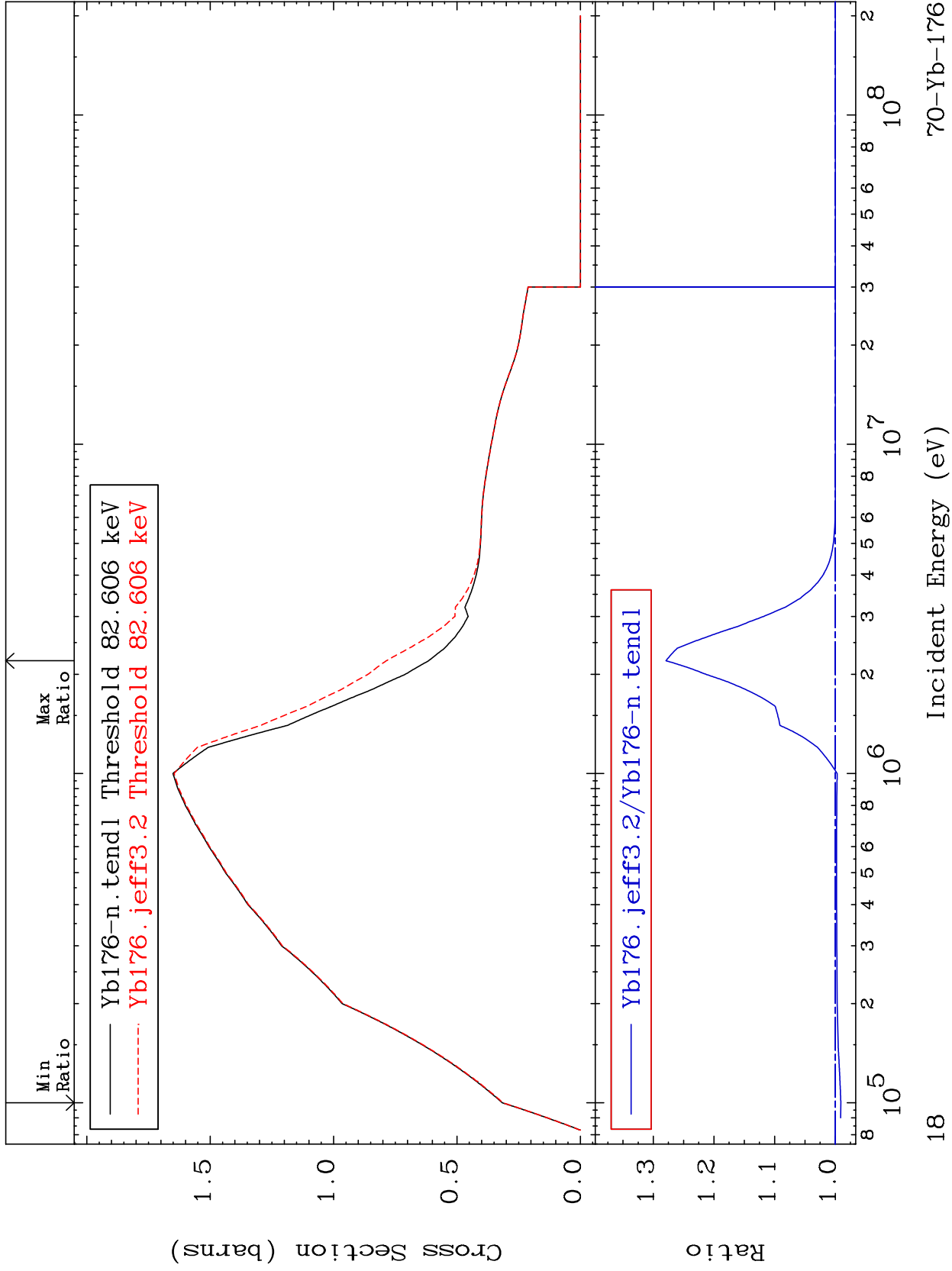
MAT 7049

82.14 keV (n,n') Level

70-Yb-176

-0.911 To 27.91 %

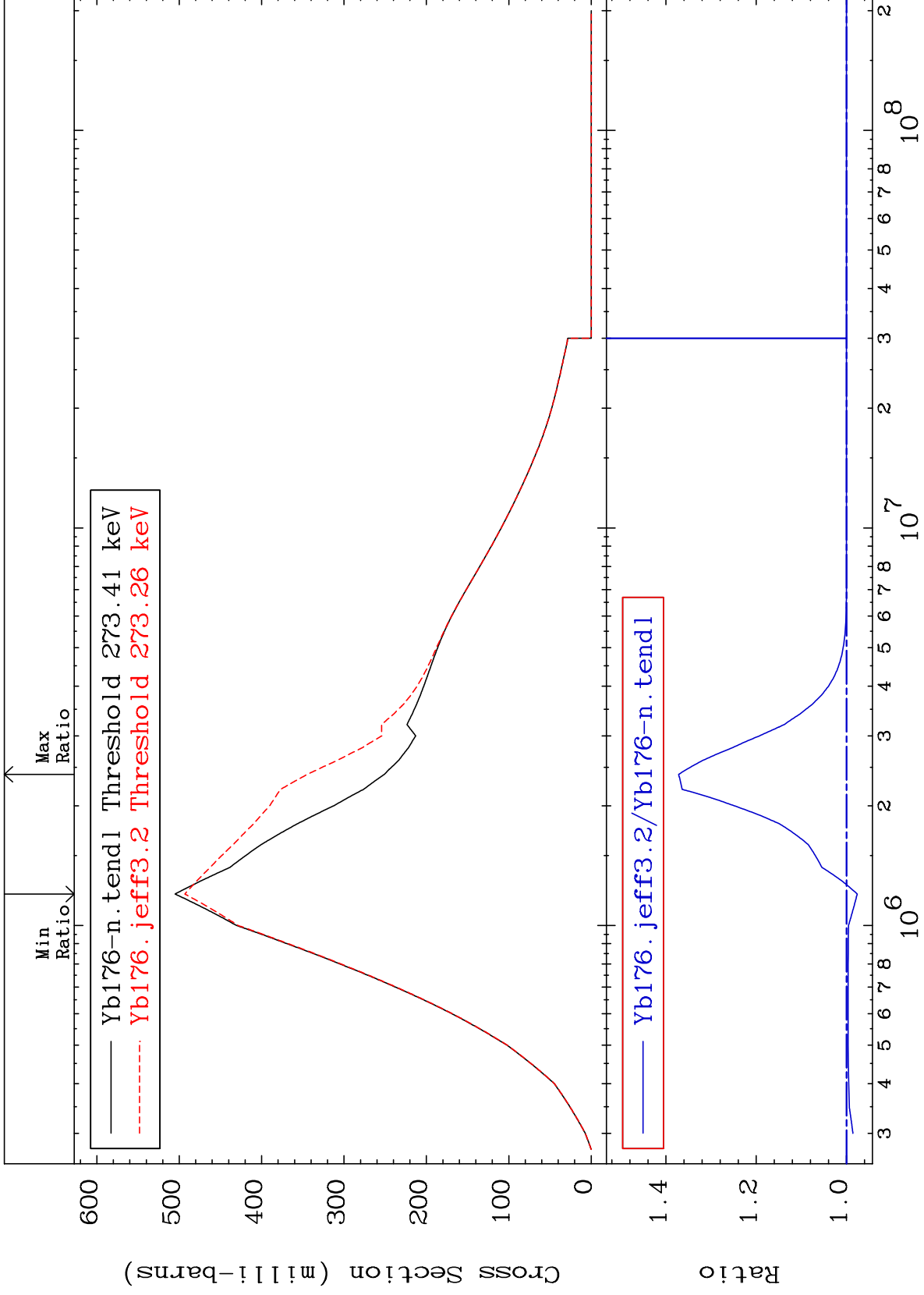
Cross Section



MAT 7049

271.8 keV (n,n') Level
Cross Section

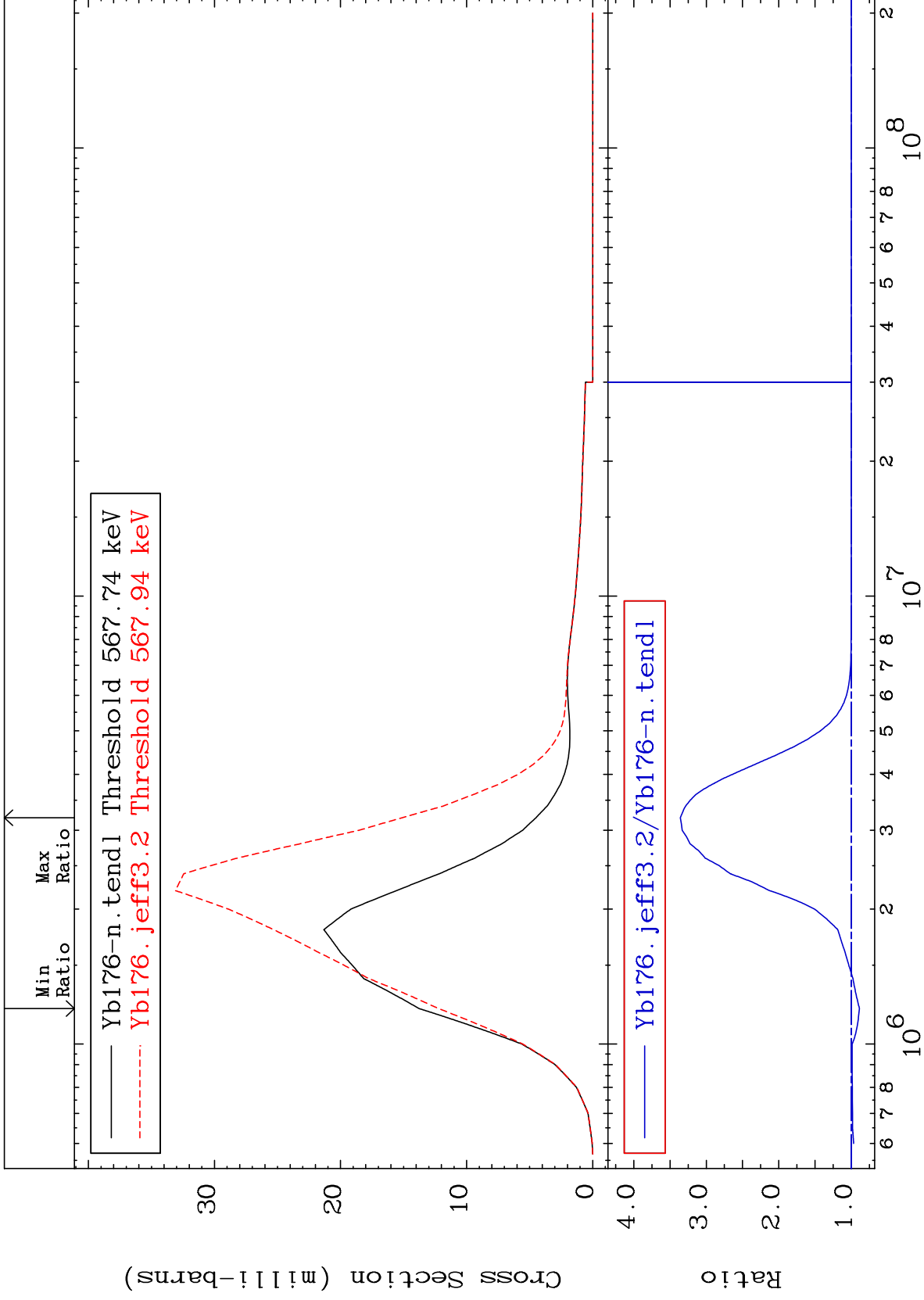
70-Yb-176
-2.376 To 37.20 %



MAT 7049

564.5 keV (n,n') Level
Cross Section

70-Yb-176
-11.20 To 235.7 %



20

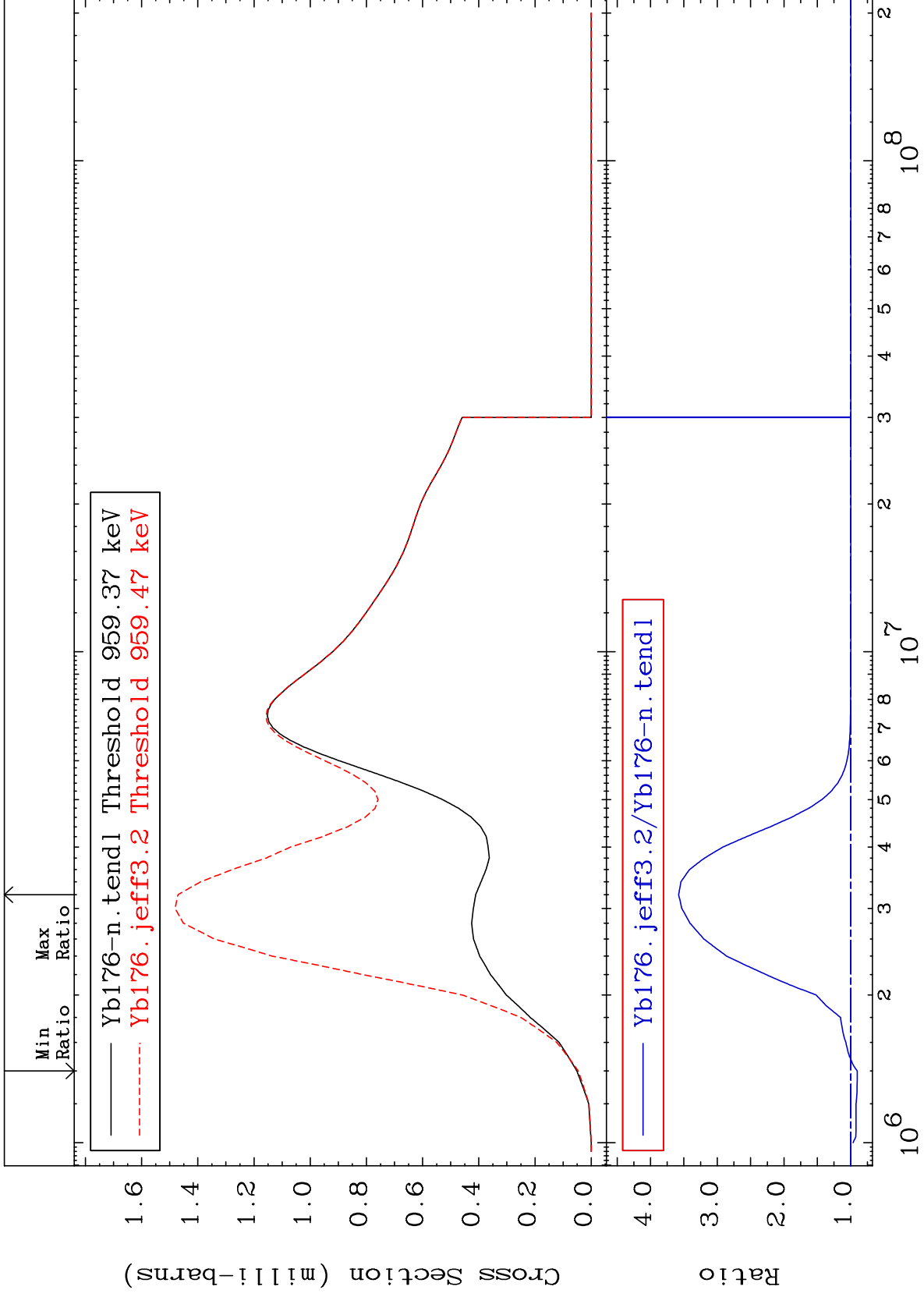
Incident Energy (eV)

70-Yb-176

MAT 7049

953.9 keV (n,n') Level
Cross Section

70-Yb-176
-9.751 To 257.9 %



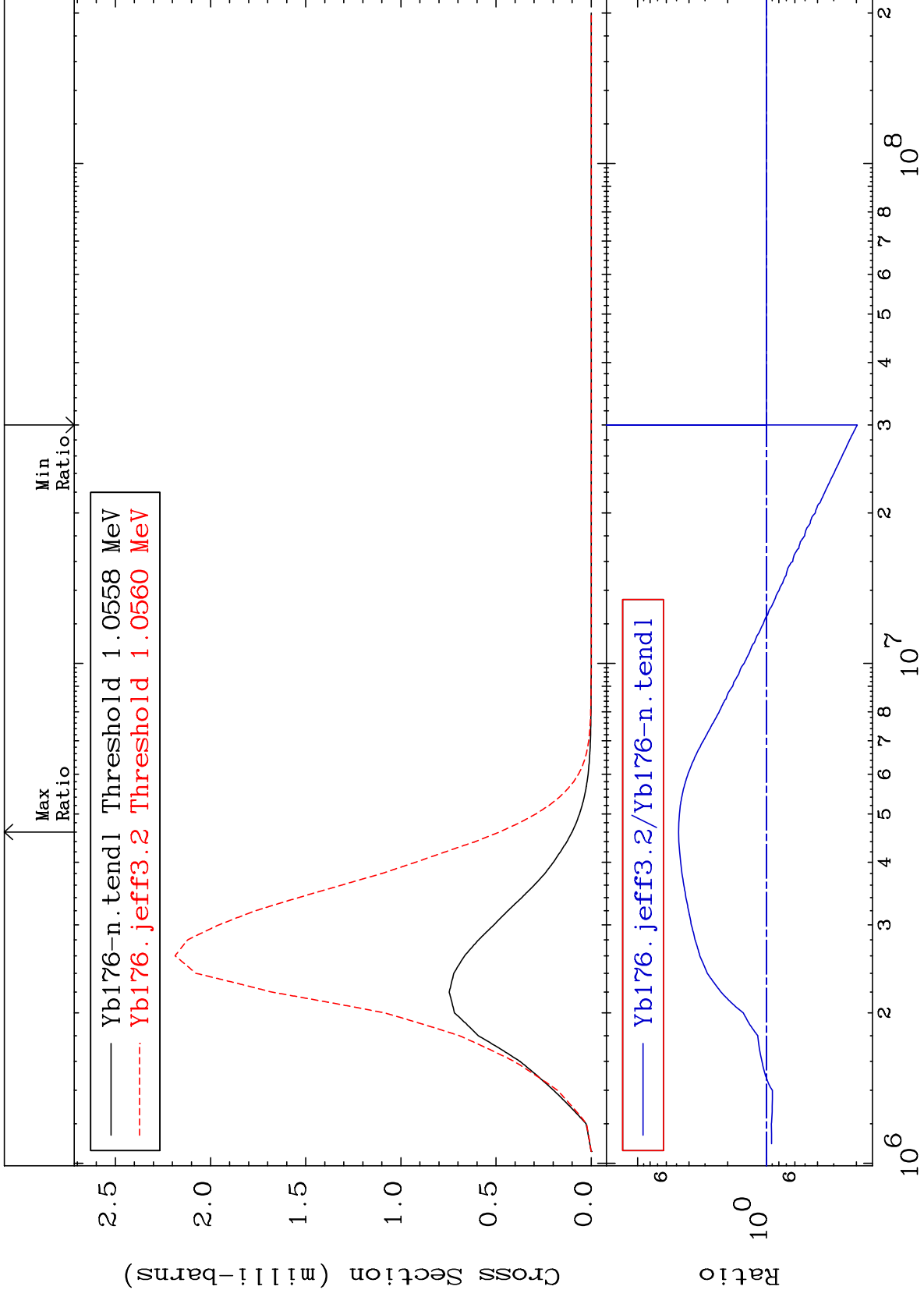
21

70-Yb-176

MAT 7049

1.050 MeV (n,n') Level
Cross Section

⁷⁰Yb-176
-80.32 To 380.6 %



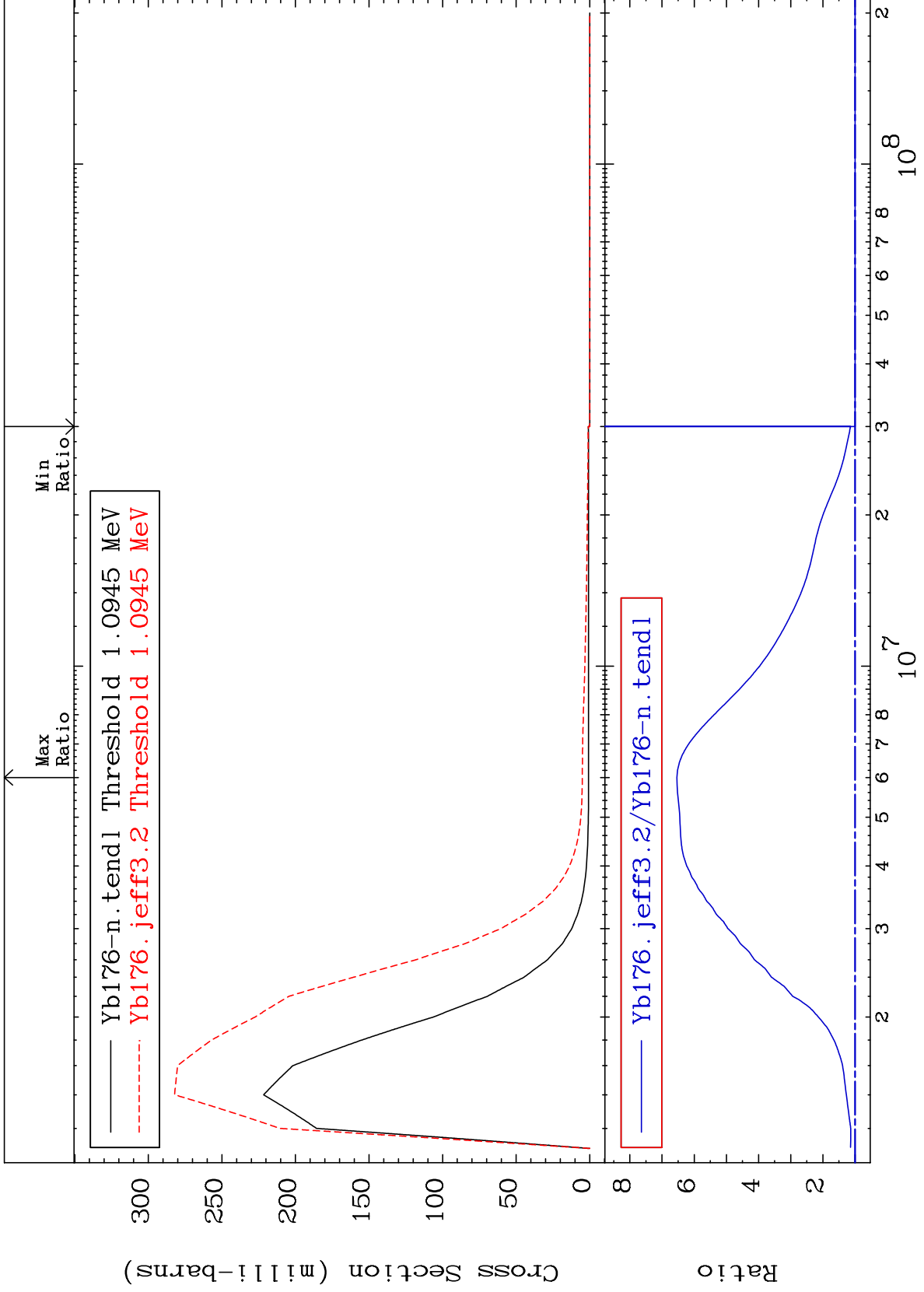
— Yb176-n.tendl Threshold 1.0558 MeV
- - - Yb176.jeff3.2 Threshold 1.0560 MeV

— Yb176.jeff3.2/Yb176-n.tendl

MAT 7049

1.088 MeV (n,n') Level
Cross Section

⁷⁰Yb-176
To 553.7 %



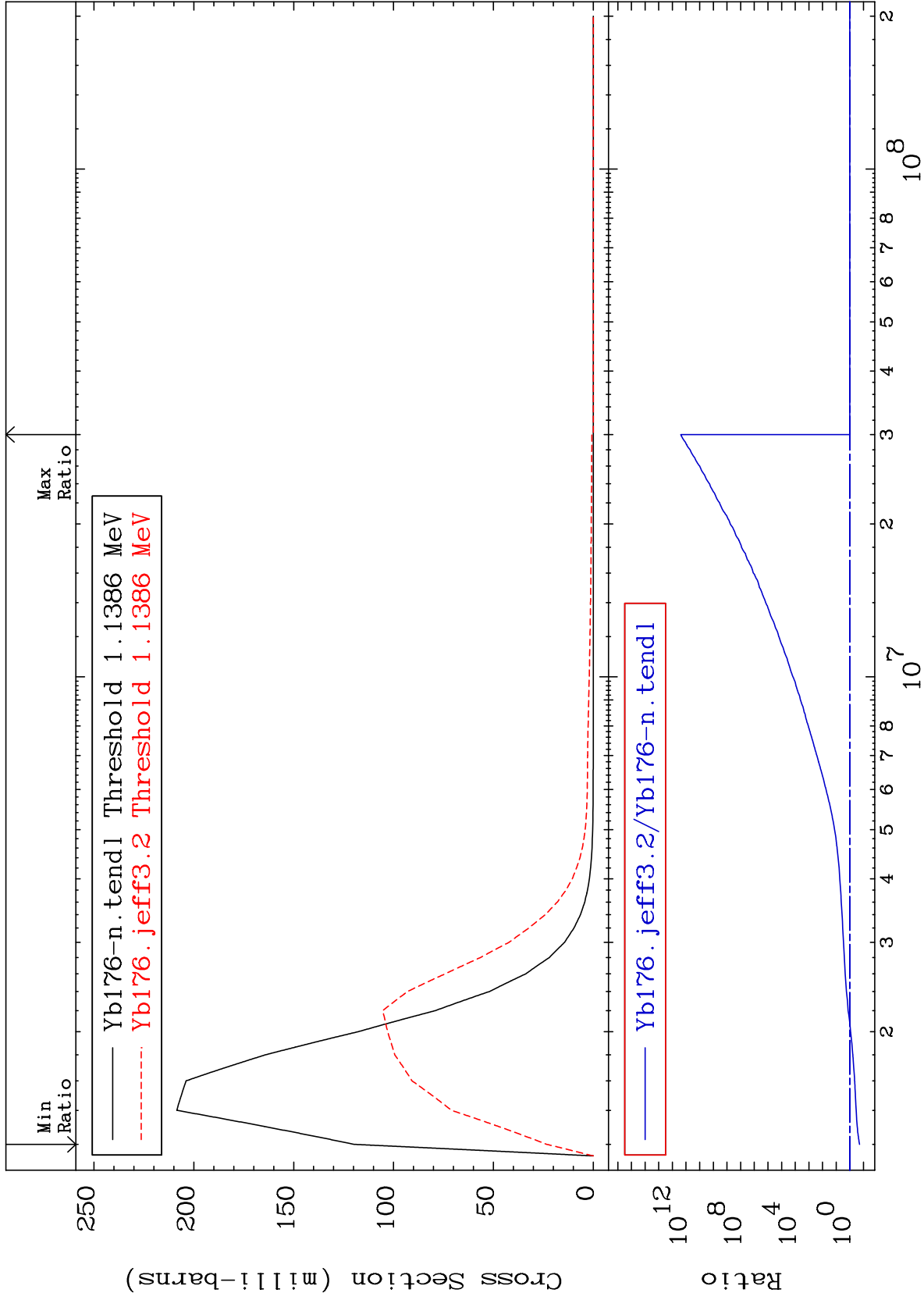
MAT 7049

1.132 MeV (n,n') Level

70-Yb-176

Cross Section

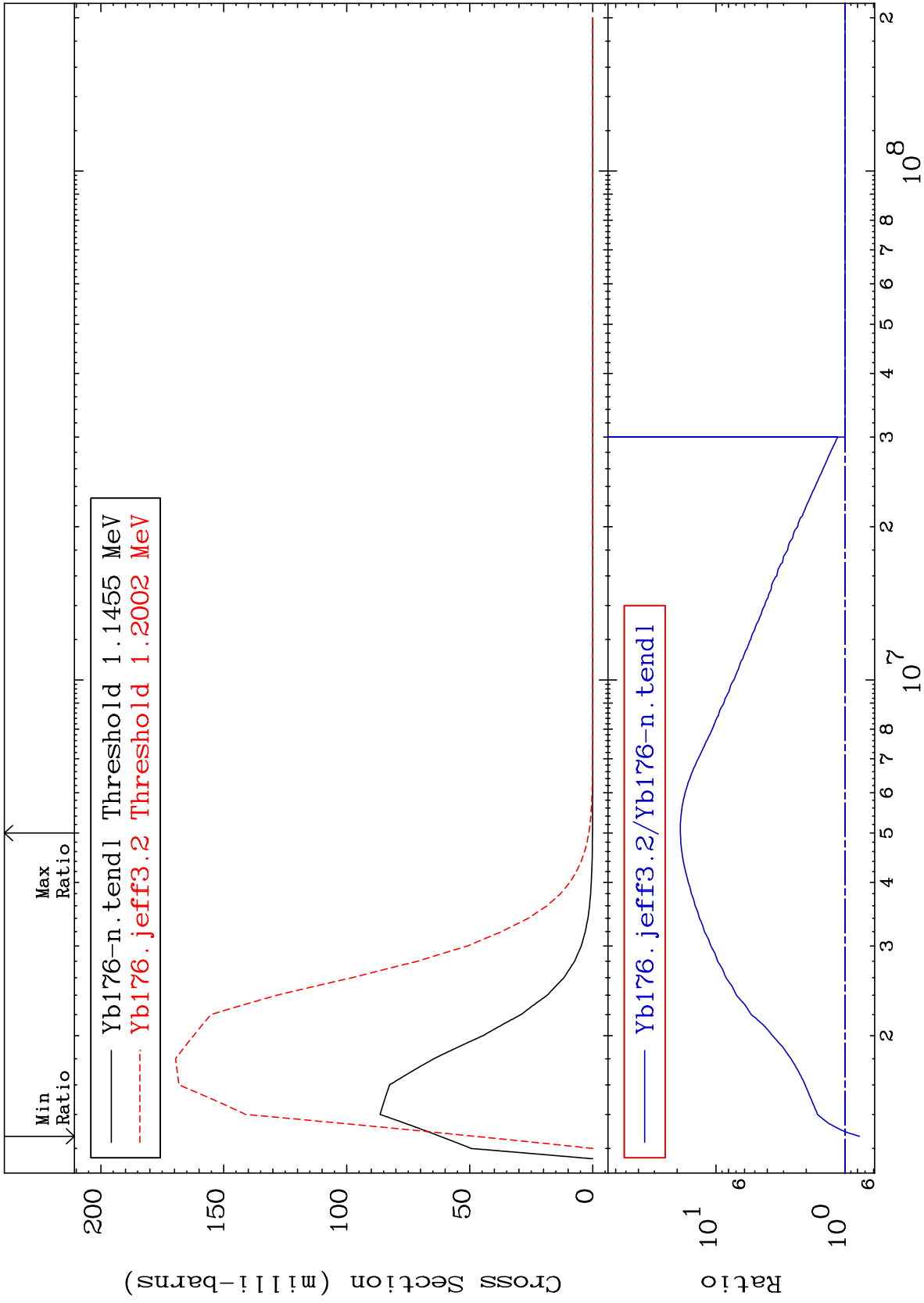
-80.55 To 9999. %

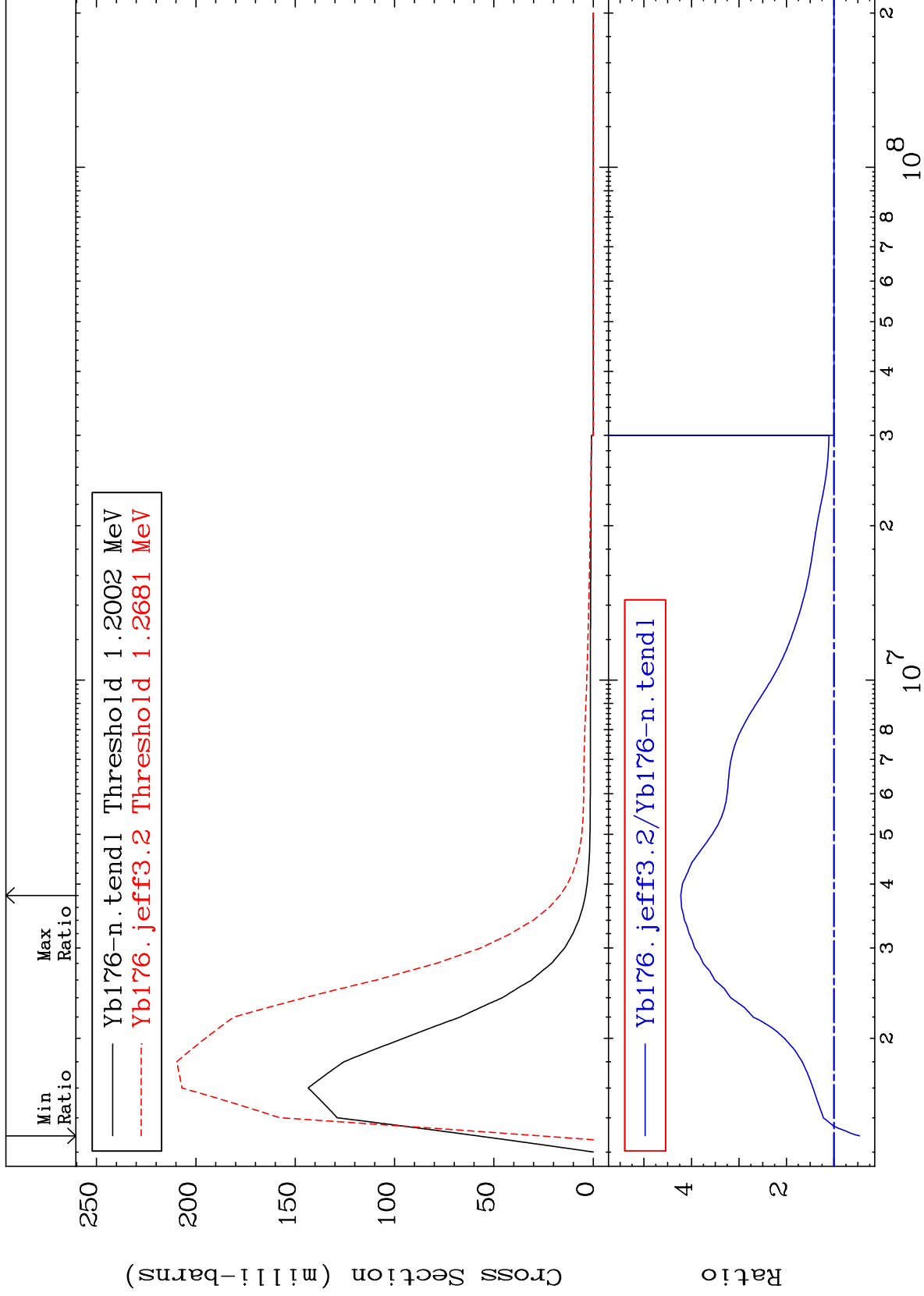


MAT 7049

1.139 MeV (n,n') Level
Cross Section

⁷⁰Yb-176
-22.70 To 1790. %

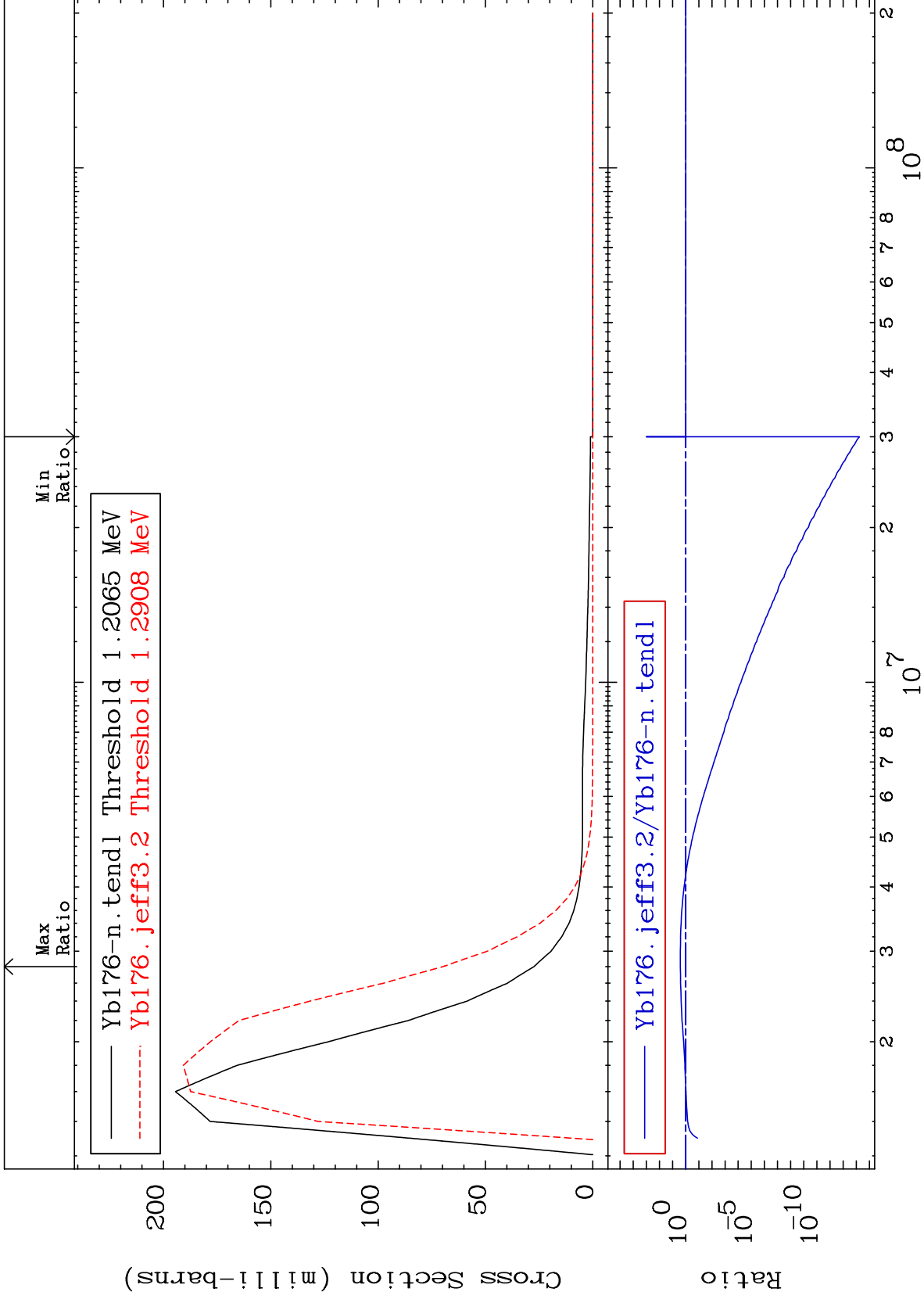


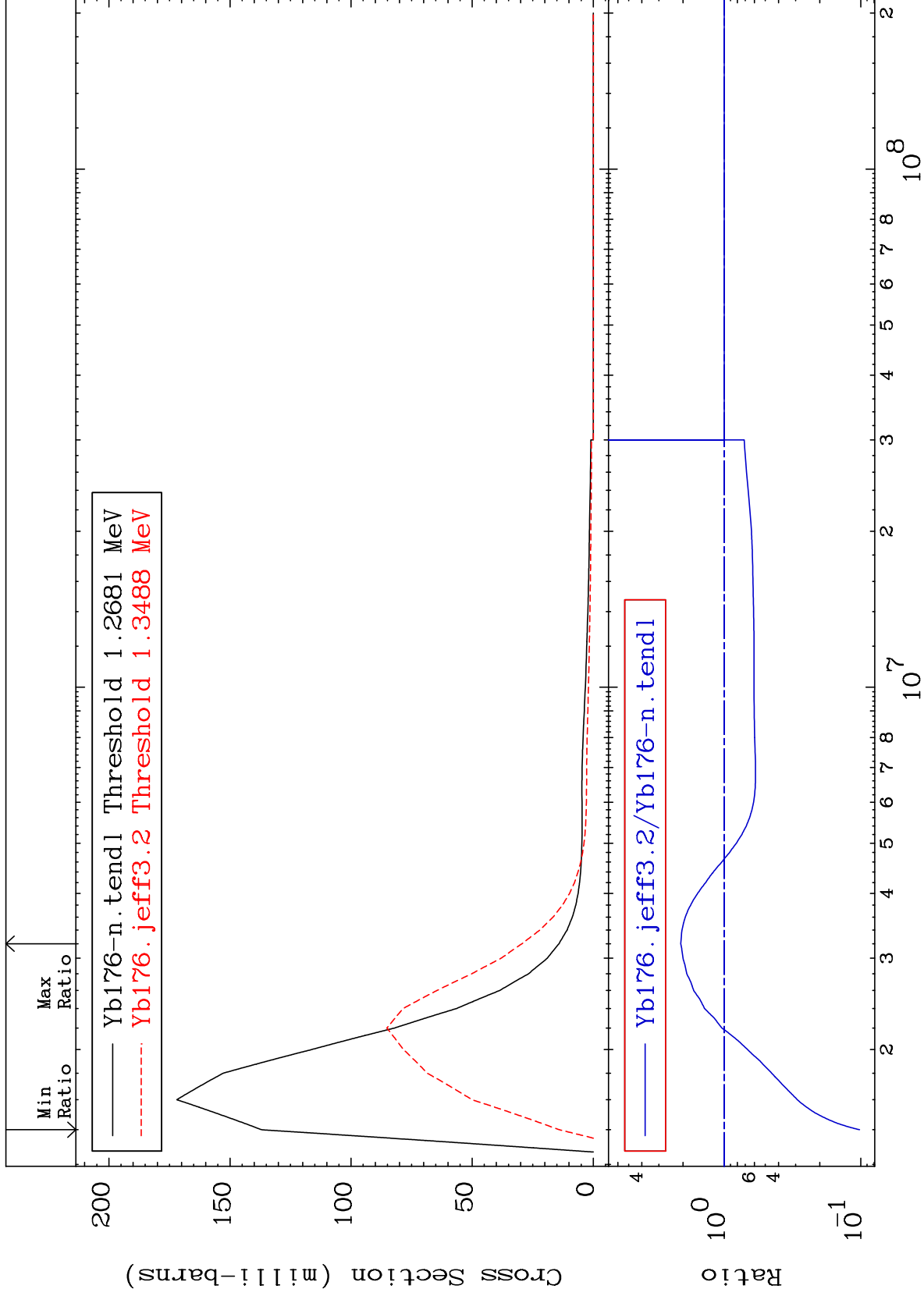


MAT 7049

1.200 MeV (n,n') Level
Cross Section

70-Yb-176
-100.0 To 154.4 %

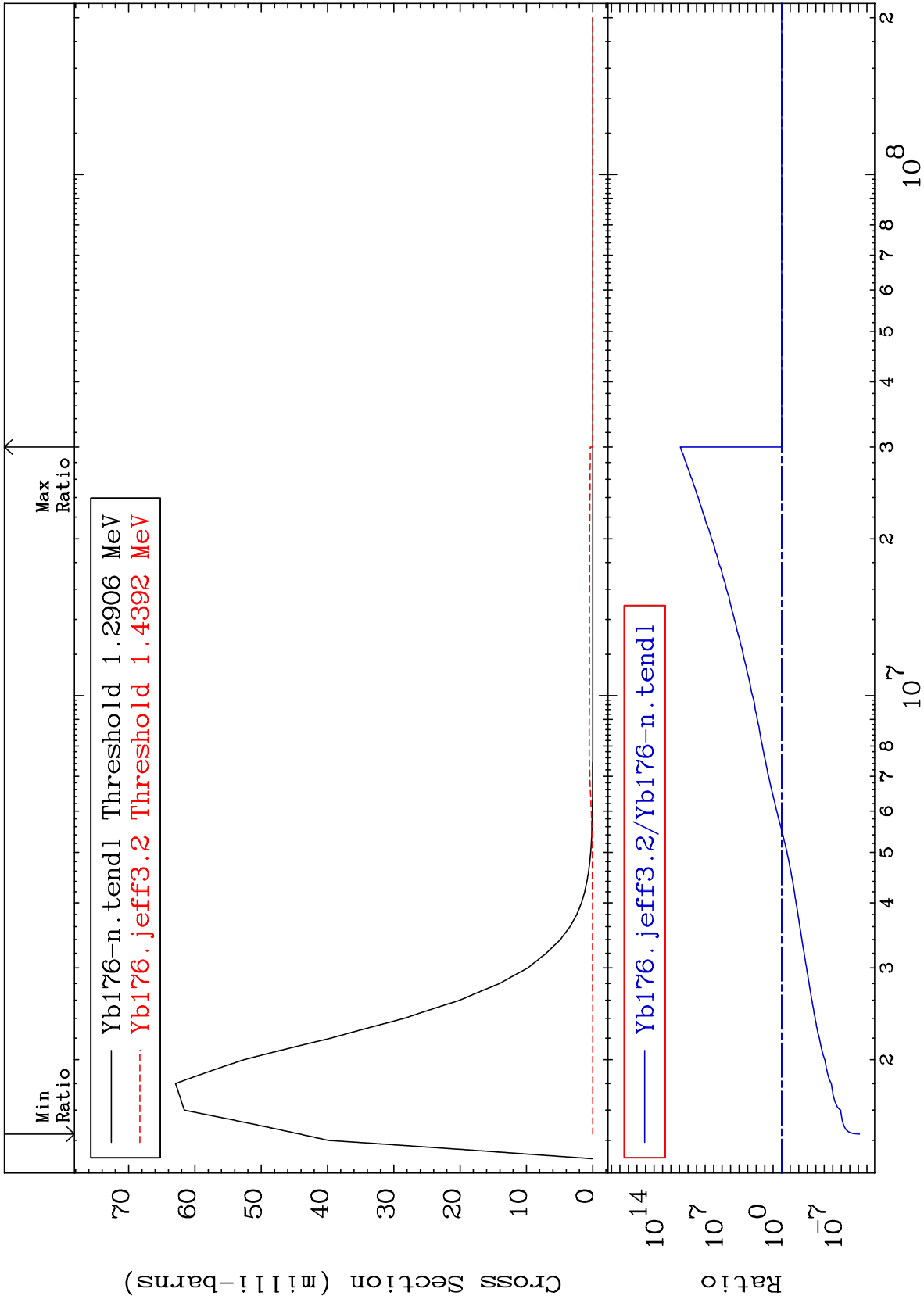




MAT 7049

1.283 MeV (n,n') Level
Cross Section

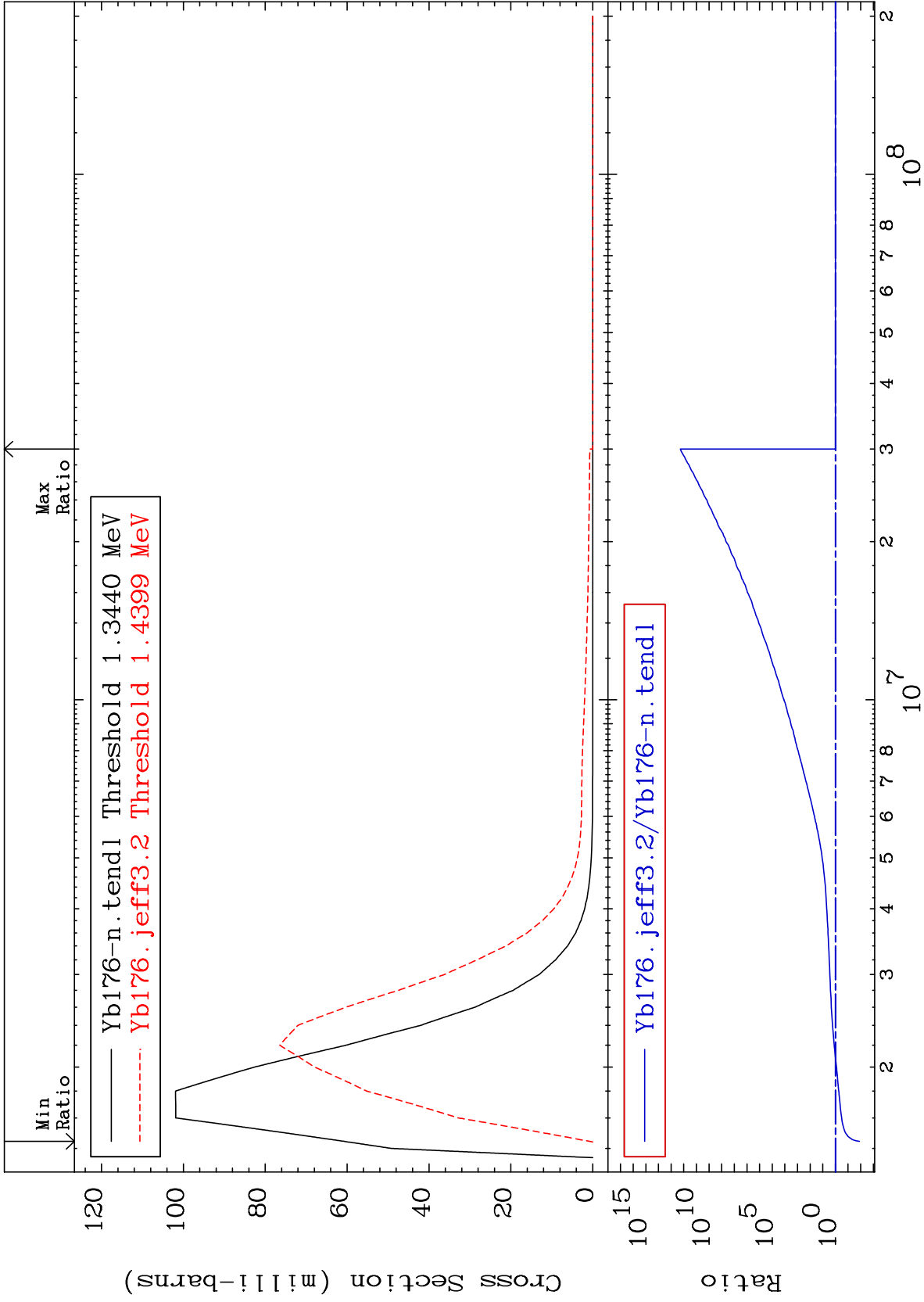
70-Yb-176
-100.0 To 9999. %



MAT 7049

1.336 MeV (n,n') Level
Cross Section

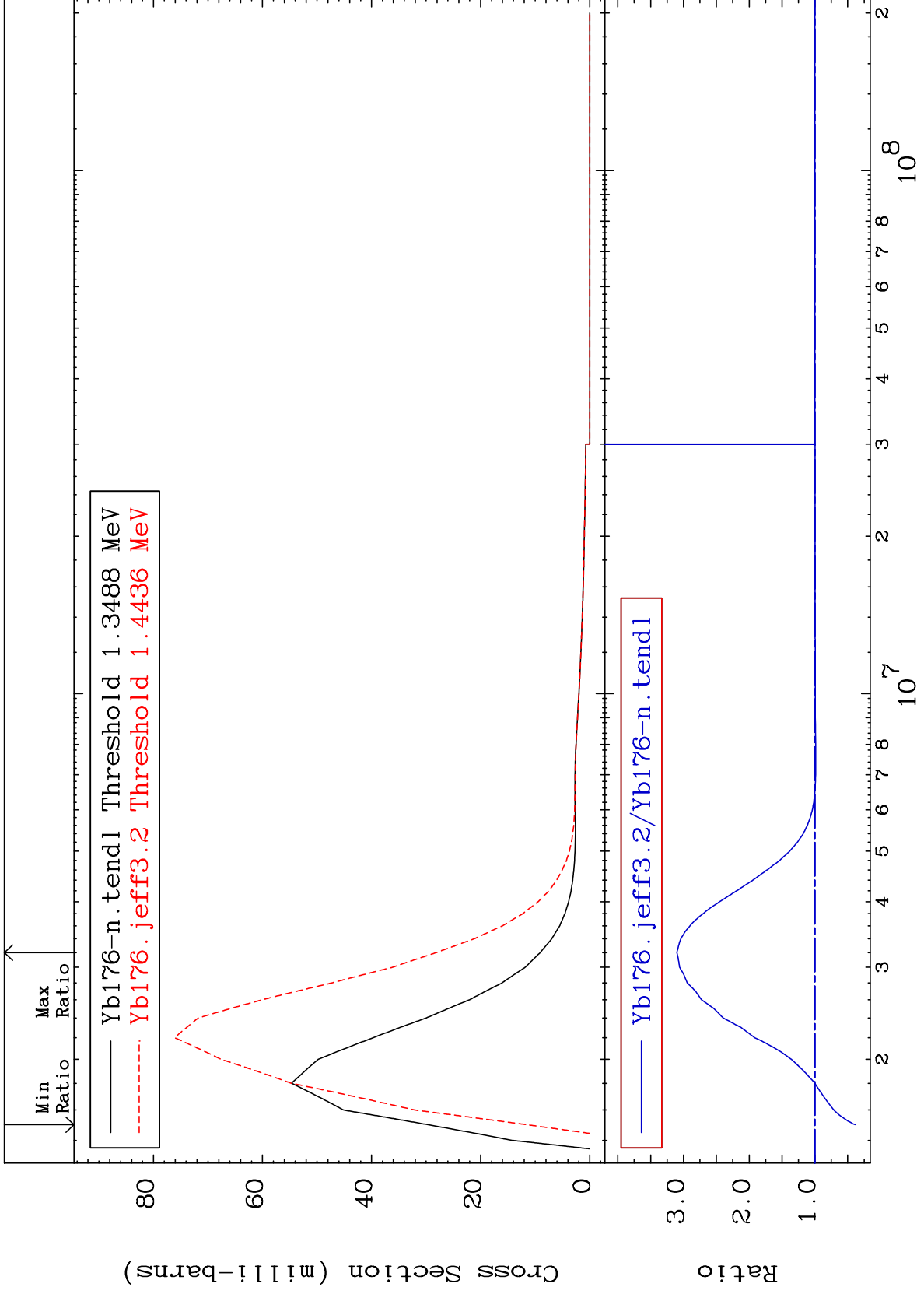
70-Yb-176
-98.74 To 9999. %



MAT 7049

1.341 MeV (n,n') Level
Cross Section

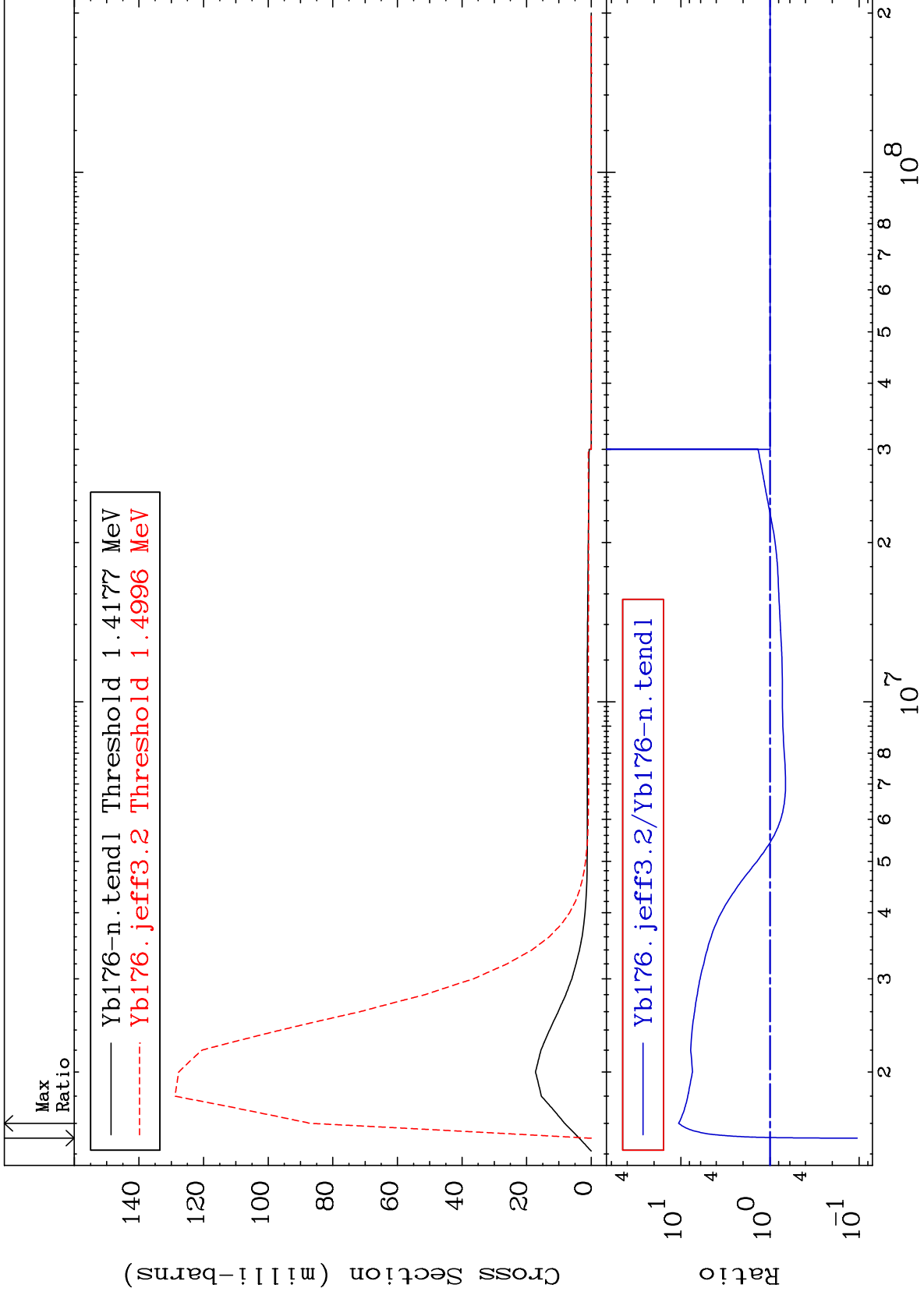
⁷⁰Yb-176
-61.22 To 210.0 %



MAT 7049

1.410 MeV (n,n') Level
Cross Section

70-Yb-176
-89.49 To 958.7 %

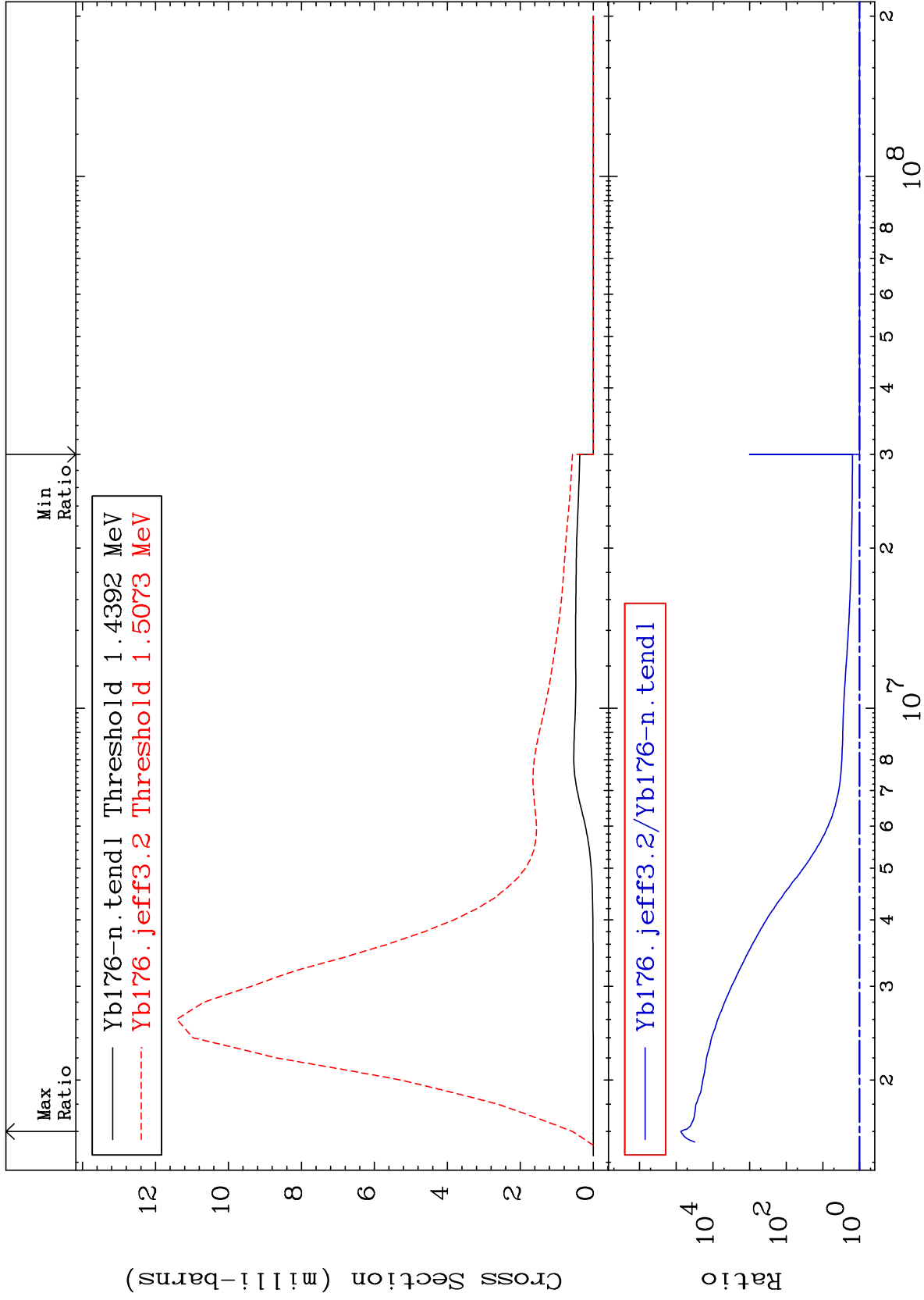


MAT 7049

1.431 MeV (n,n') Level

70-Yb-176

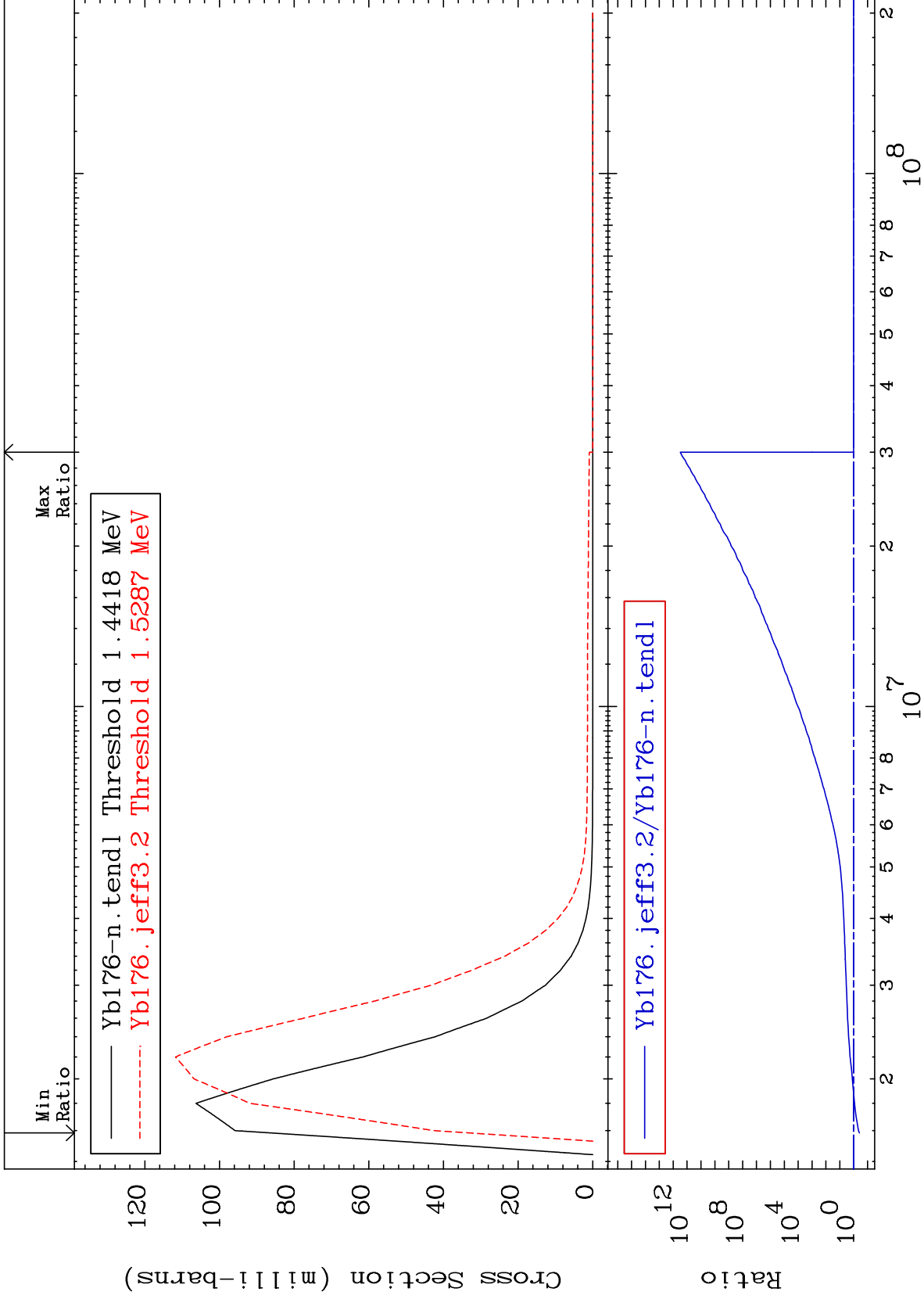
Cross Section
0.000 To 9999. %



MAT 7049

1.434 MeV (n,n') Level
Cross Section

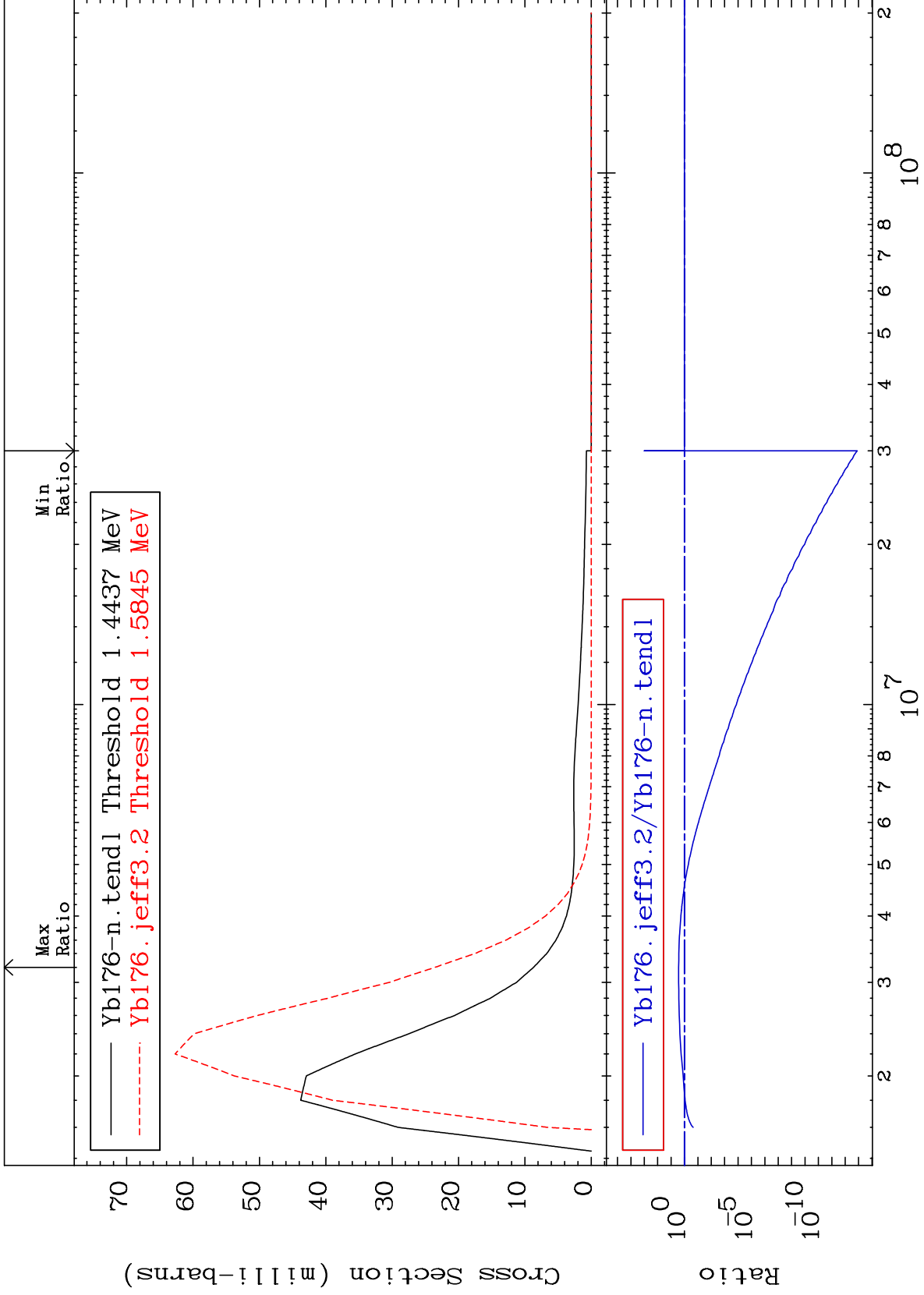
70-Yb-176
-61.40 To 9999. %

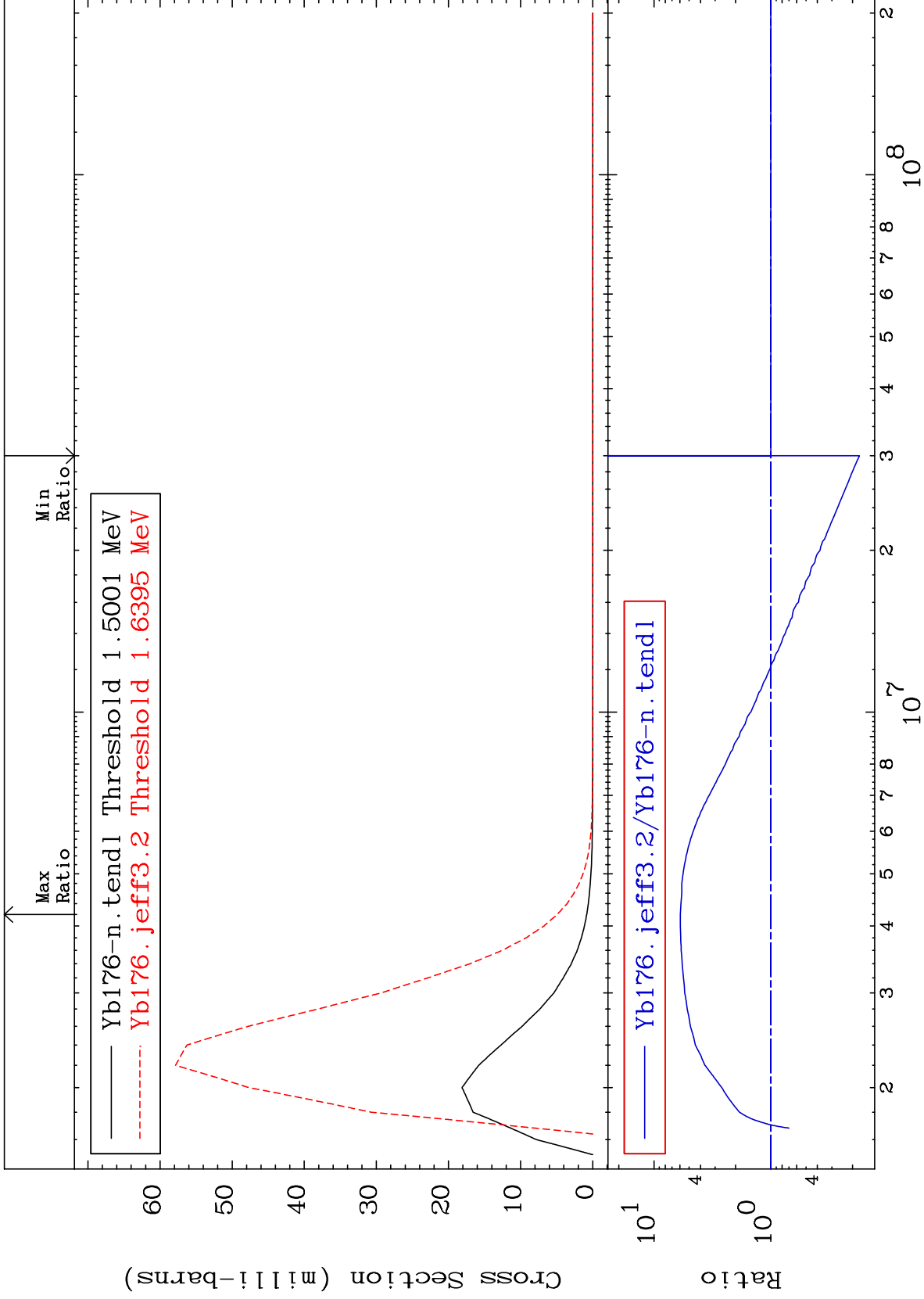


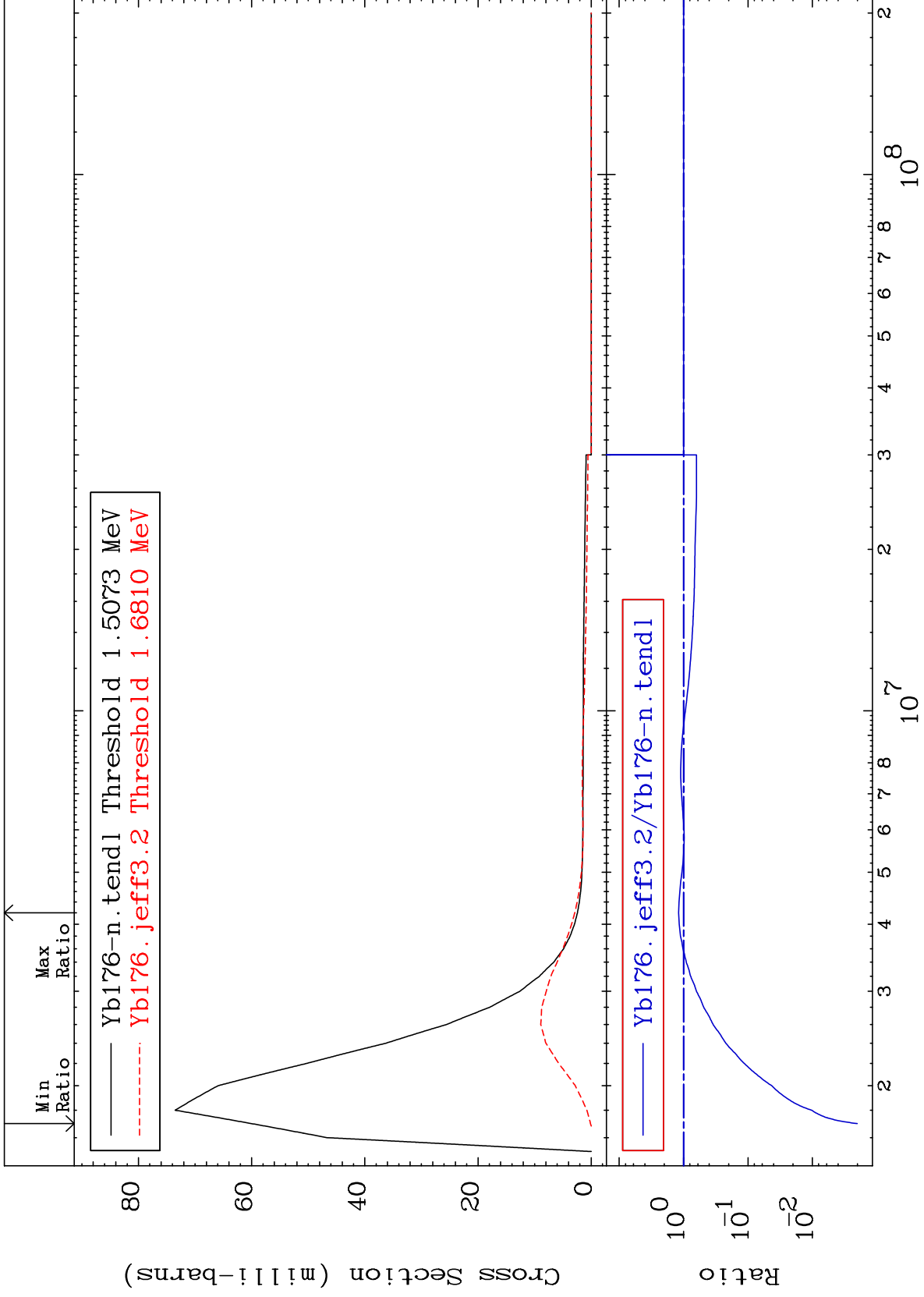
MAT 7049

1.436 MeV (n,n') Level
Cross Section

70-Yb-176
-100.0 To 171.1 %



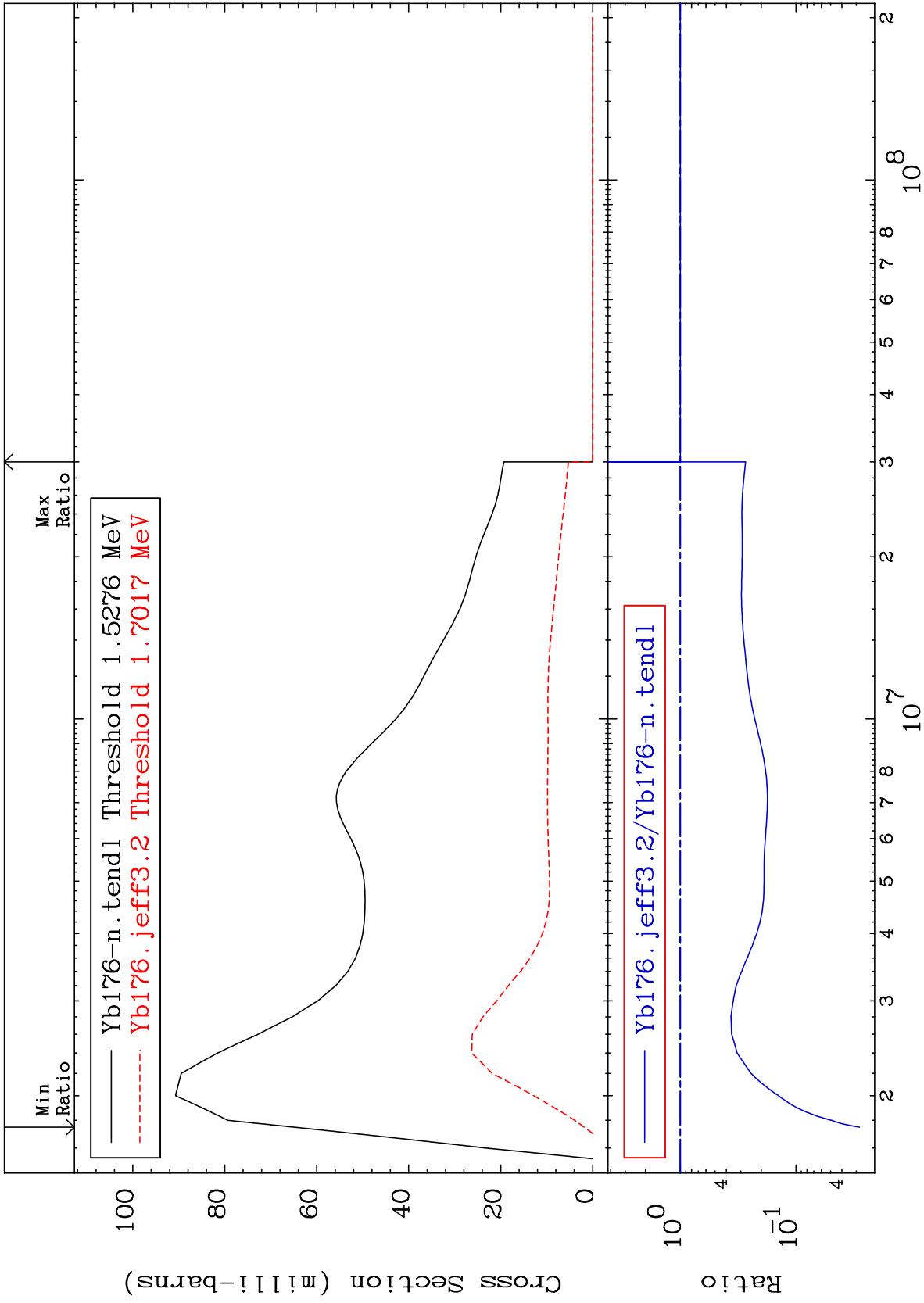


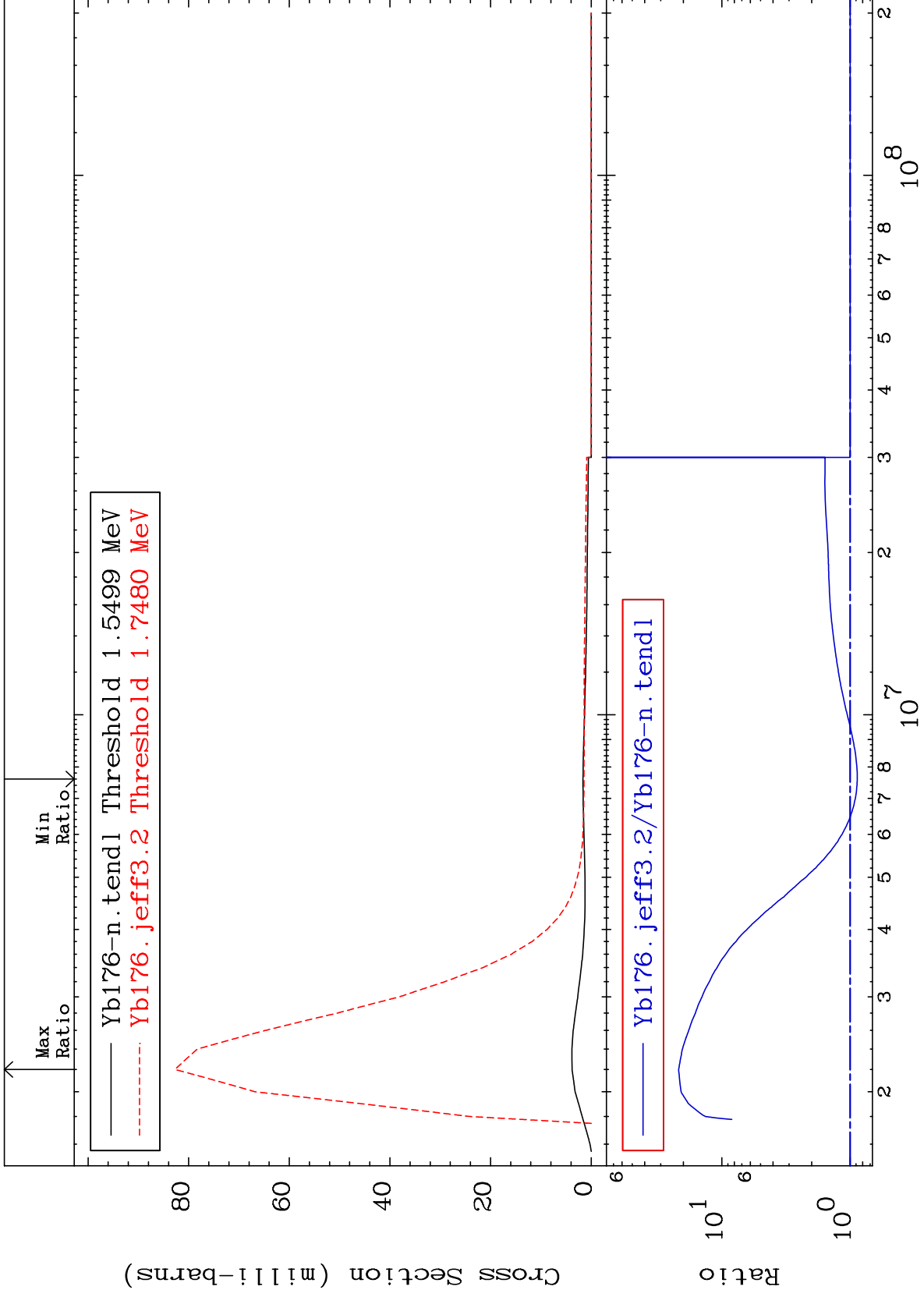


MAT 7049

1.519 MeV (n,n') Level
Cross Section

70-Yb-176
-97.18 To 0.000 %

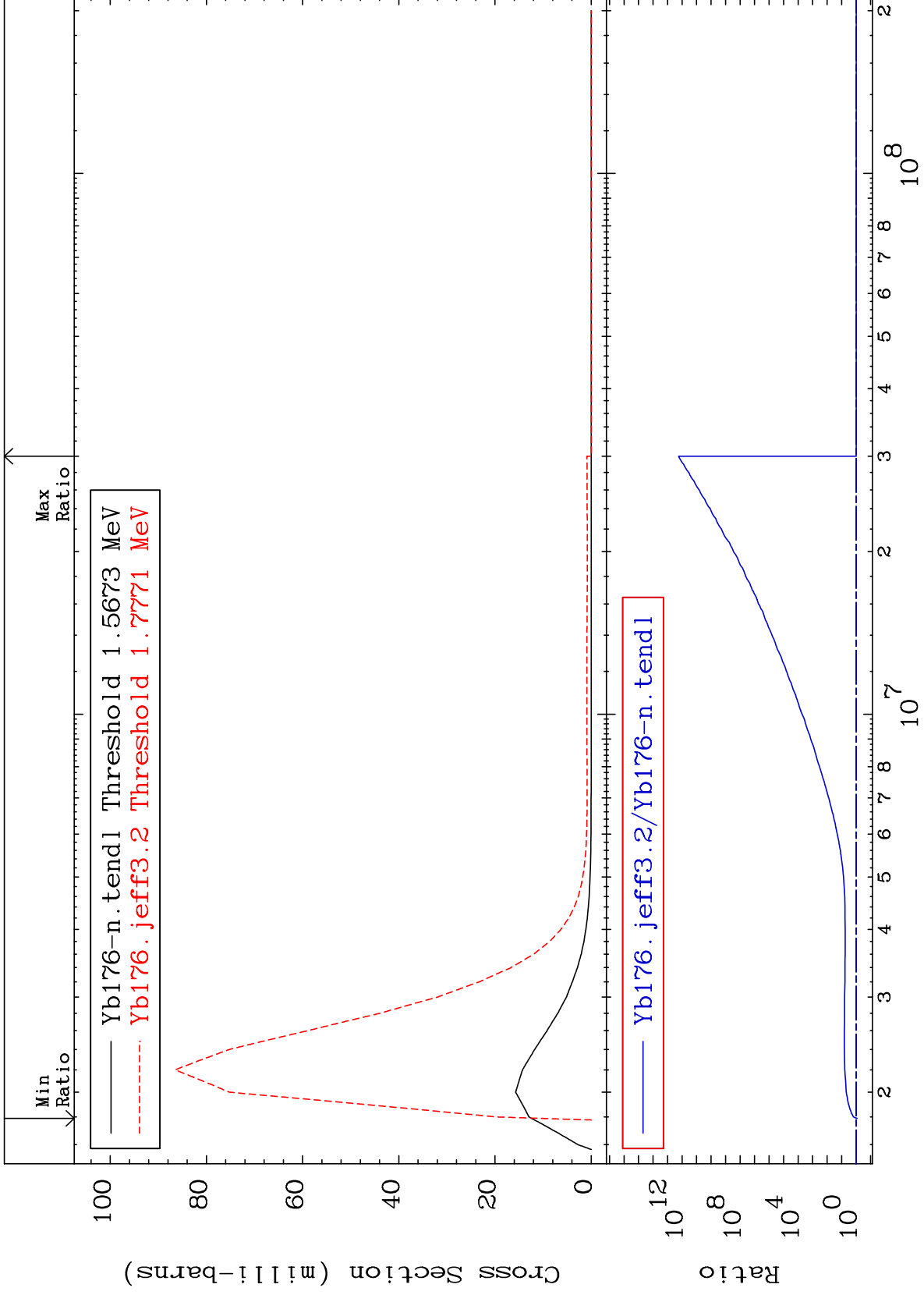




MAT 7049

1.558 MeV (n,n') Level
Cross Section

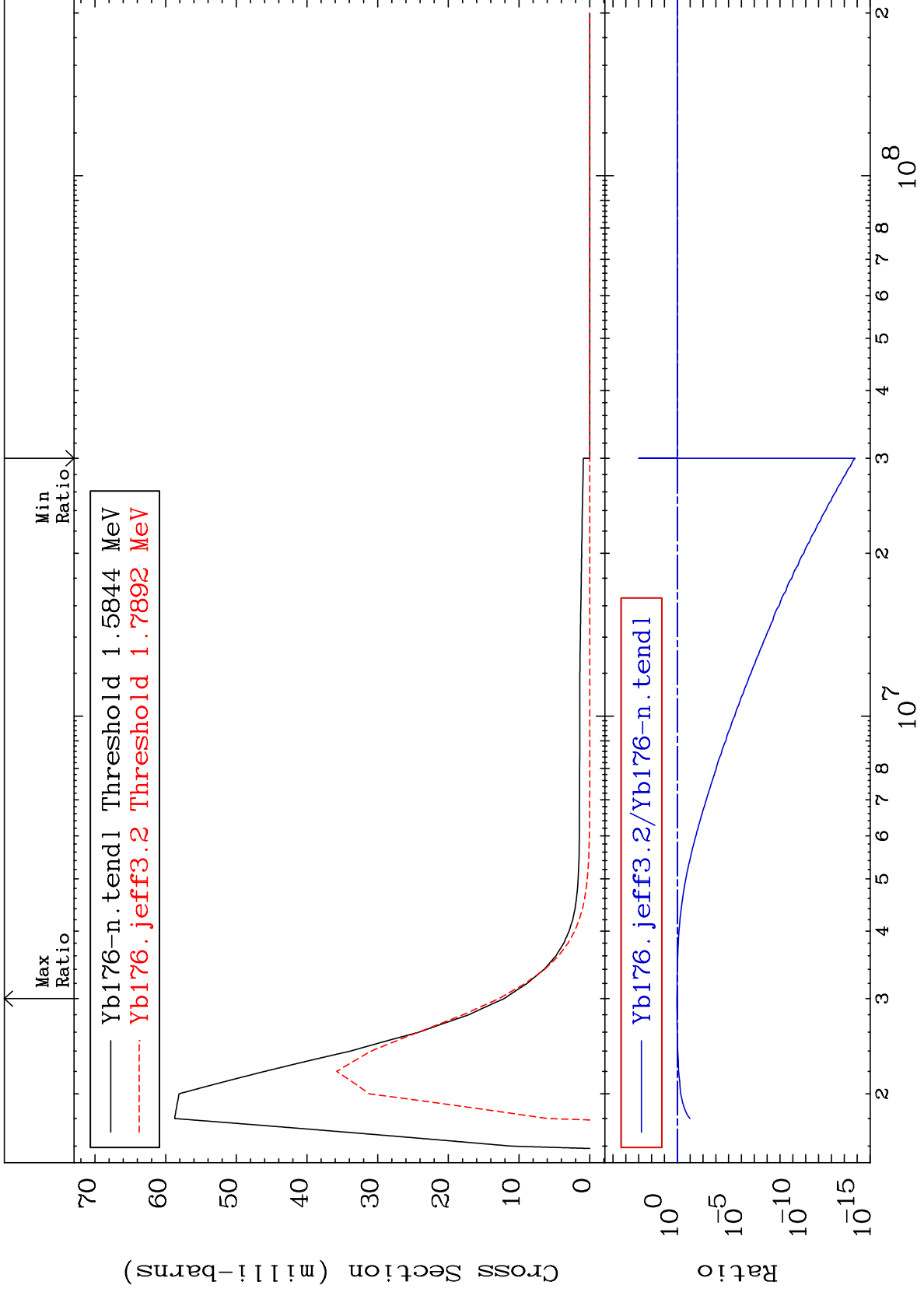
70-Yb-176
-16.22 To 9999. %



MAT 7049

1.575 MeV (n,n') Level
Cross Section

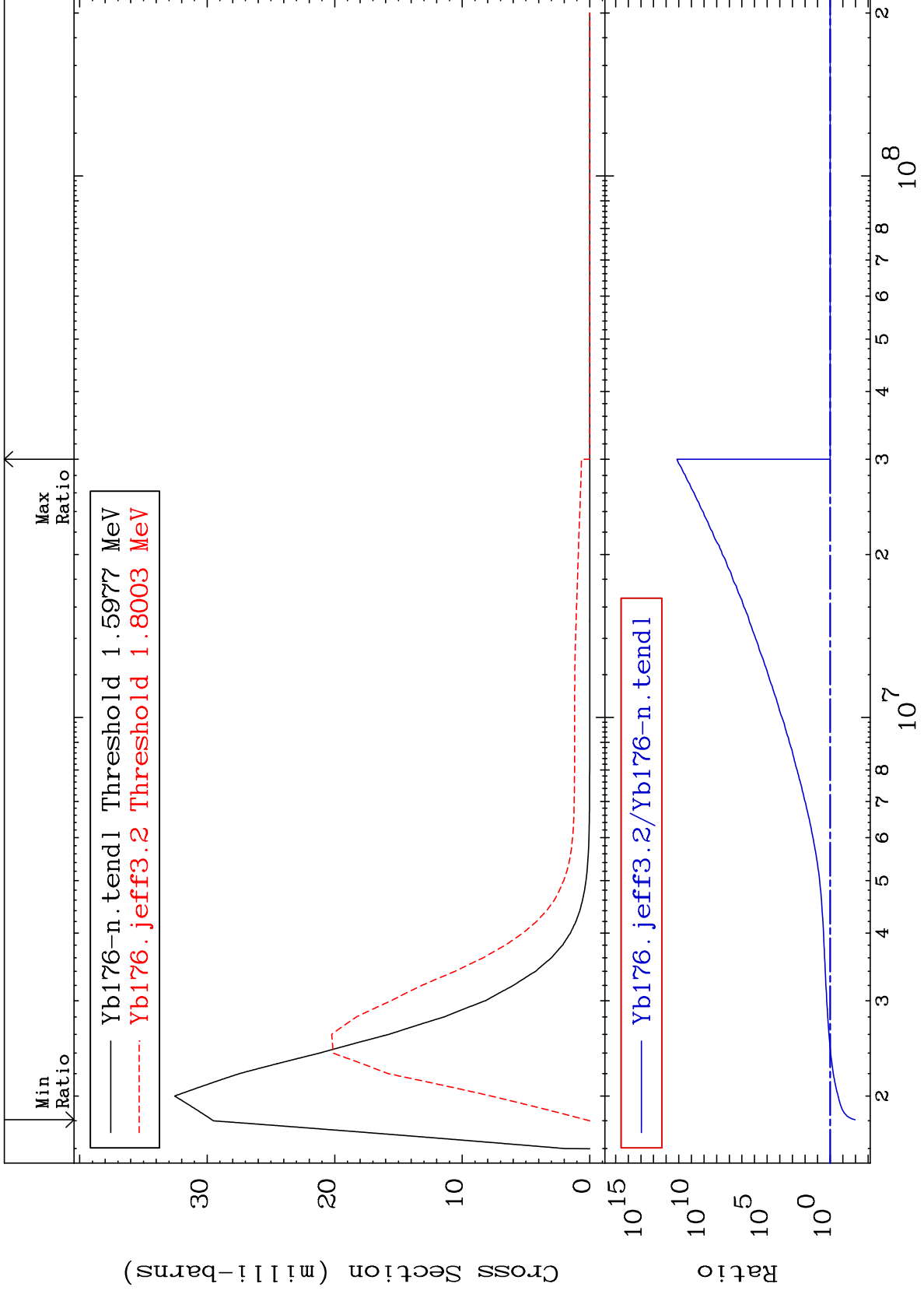
70-Yb-176
-100.0 To 5.831 %



MAT 7049

1.589 MeV (n,n') Level
Cross Section

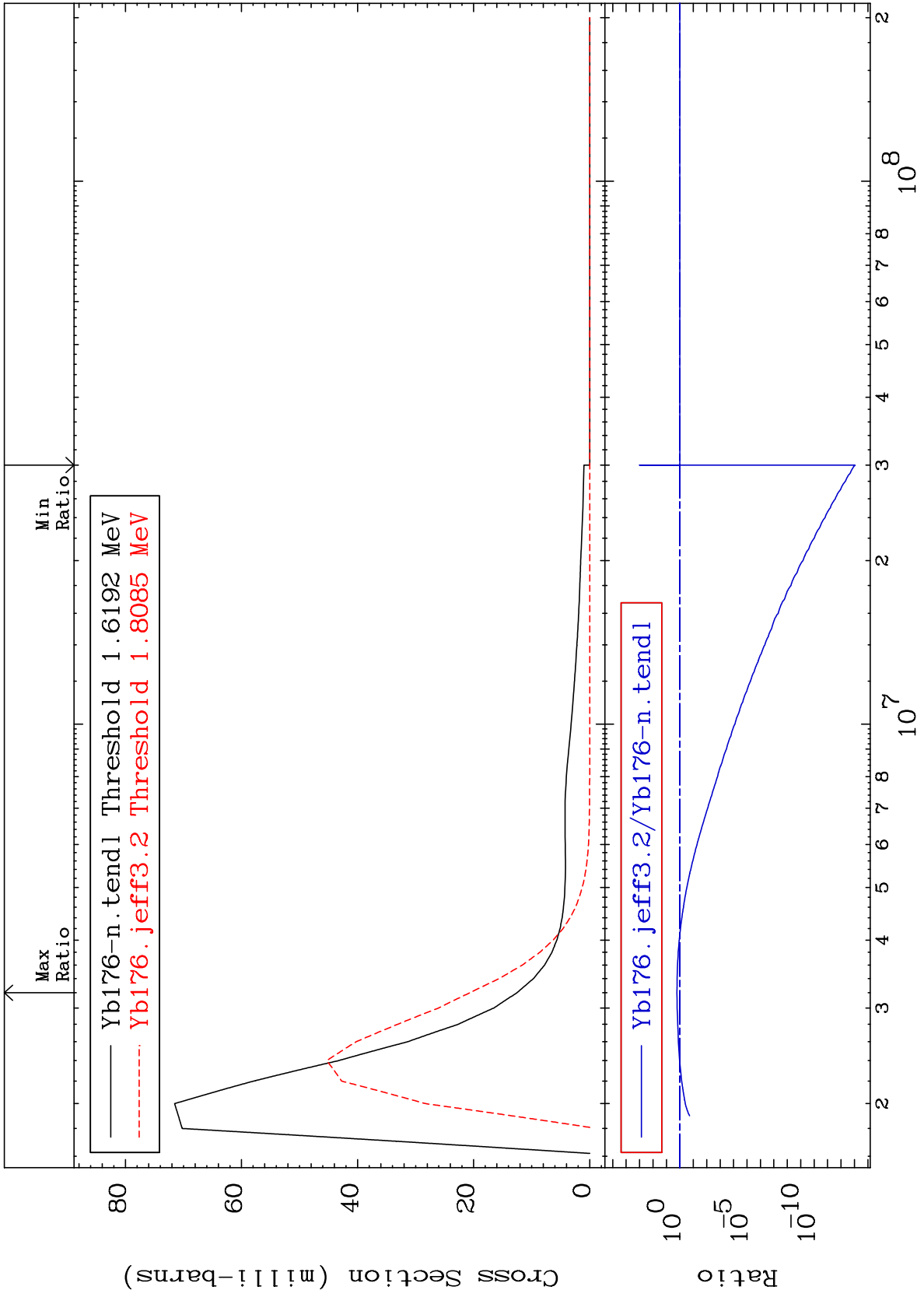
70-Yb-176
-98.92 To 9999. %



MAT 7049

1.610 MeV (n,n') Level
Cross Section

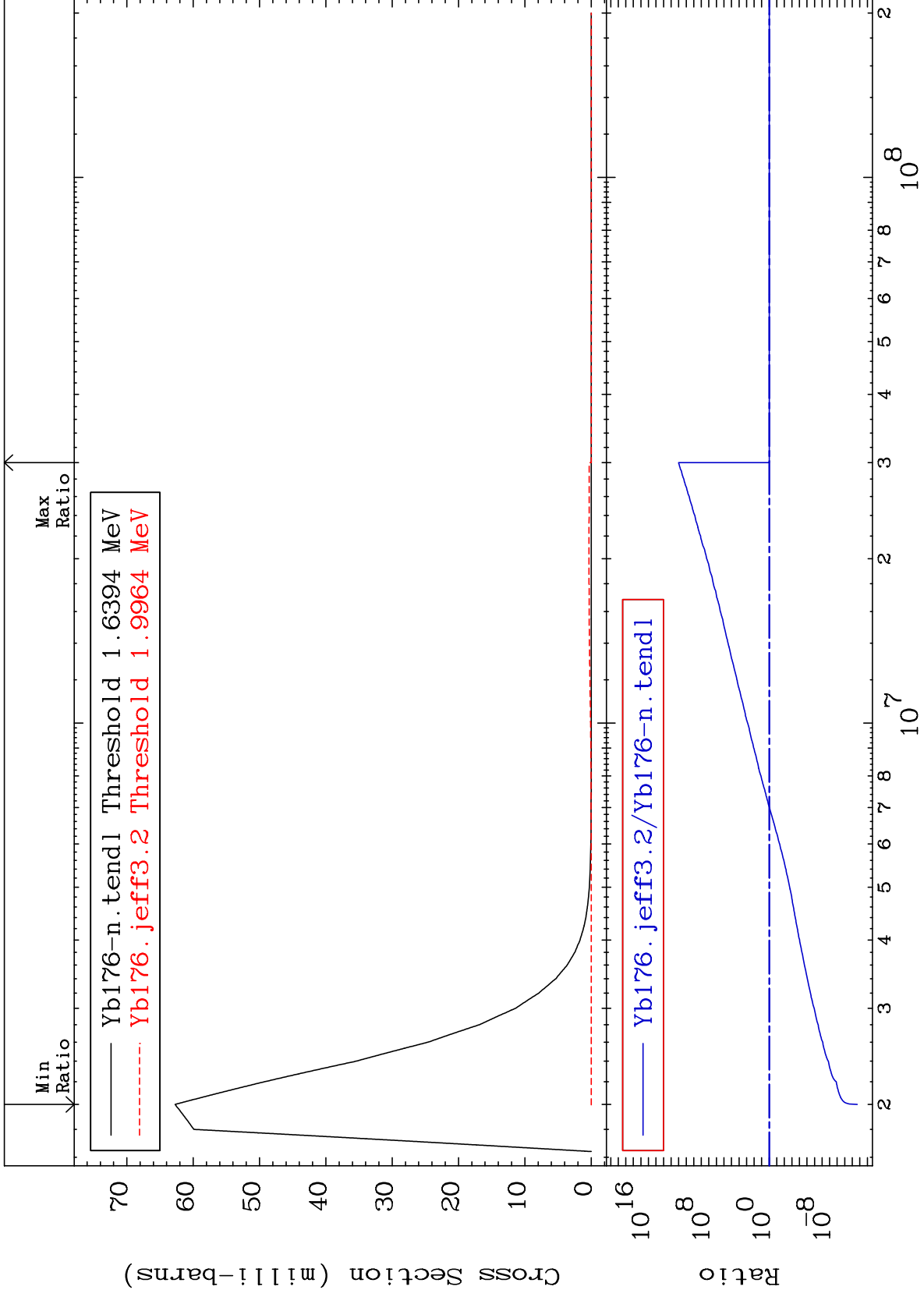
70-Yb-176
-100.0 To 64.82 %



MAT 7049

1.630 MeV (n,n') Level
Cross Section

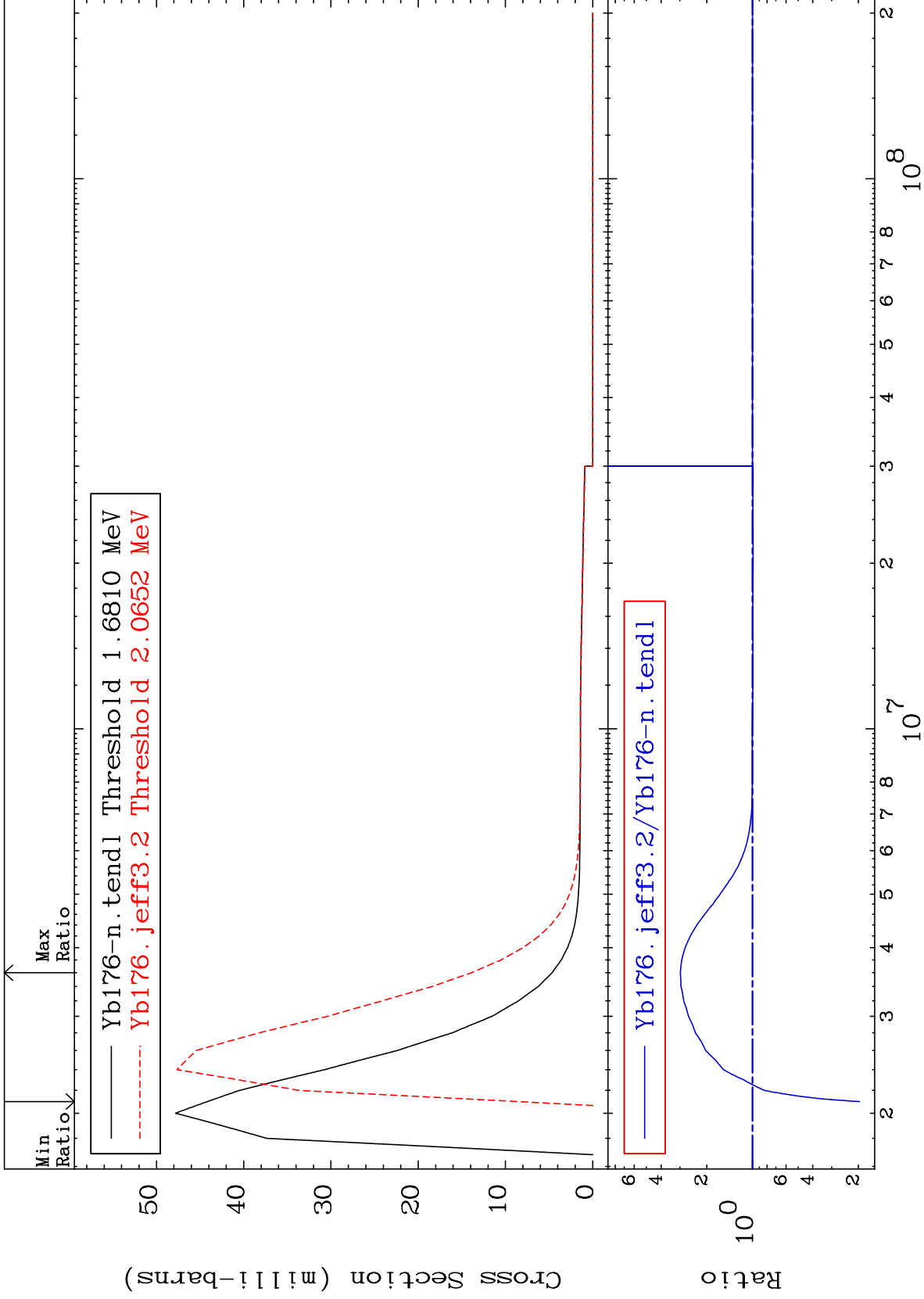
70-Yb-176
-100.0 To 9999. %



MAT 7049

1.671 MeV (n,n') Level
Cross Section

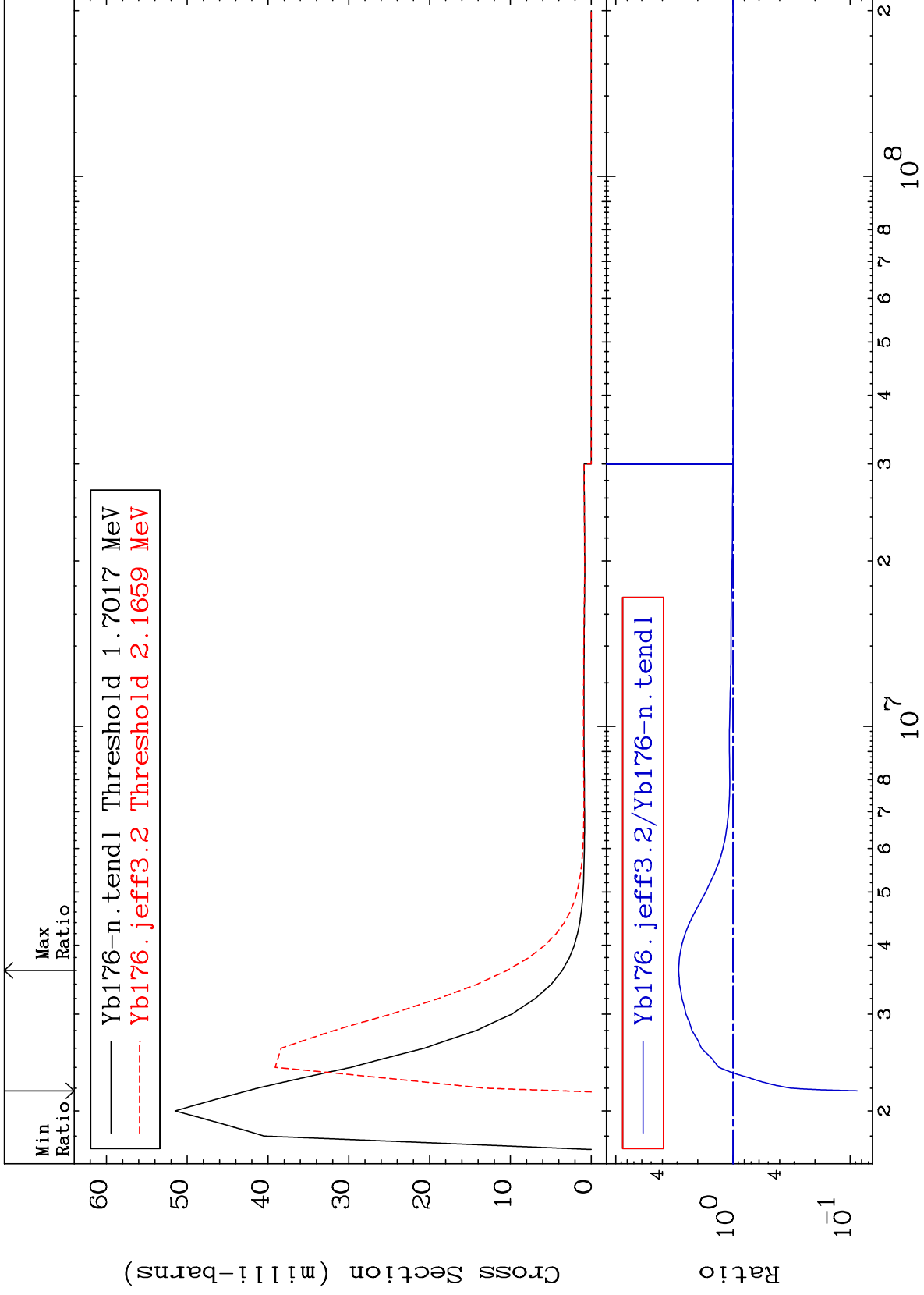
70-Yb-176
-80.30 To 198.3 %



MAT 7049

1.692 MeV (n,n') Level
Cross Section

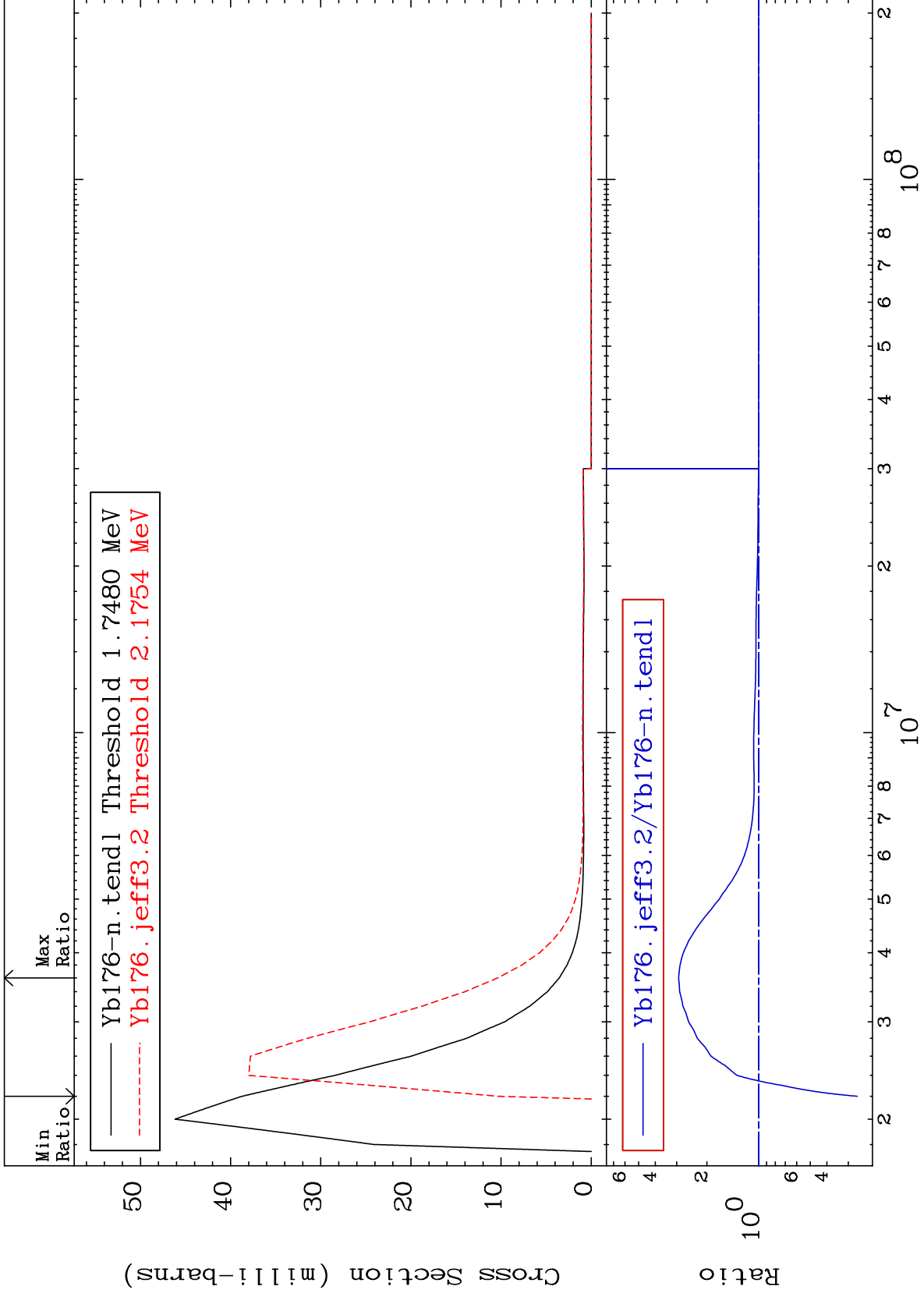
70-Yb-176
-91.29 To 190.9 %



MAT 7049

1.738 MeV (n,n') Level
Cross Section

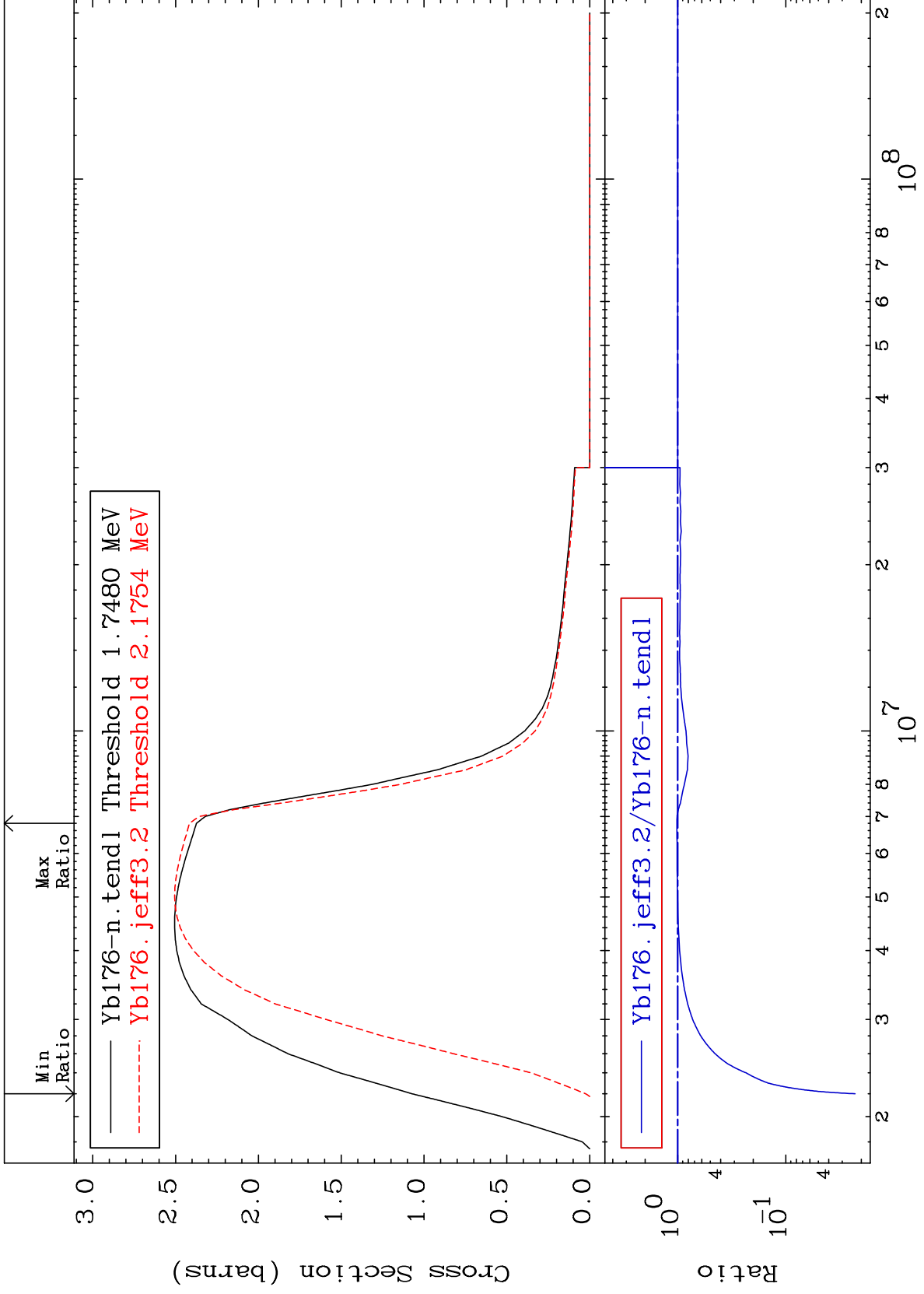
70-Yb-176
-73.35 To 192.3 %



MAT 7049

(n, n') Continuum
Cross Section

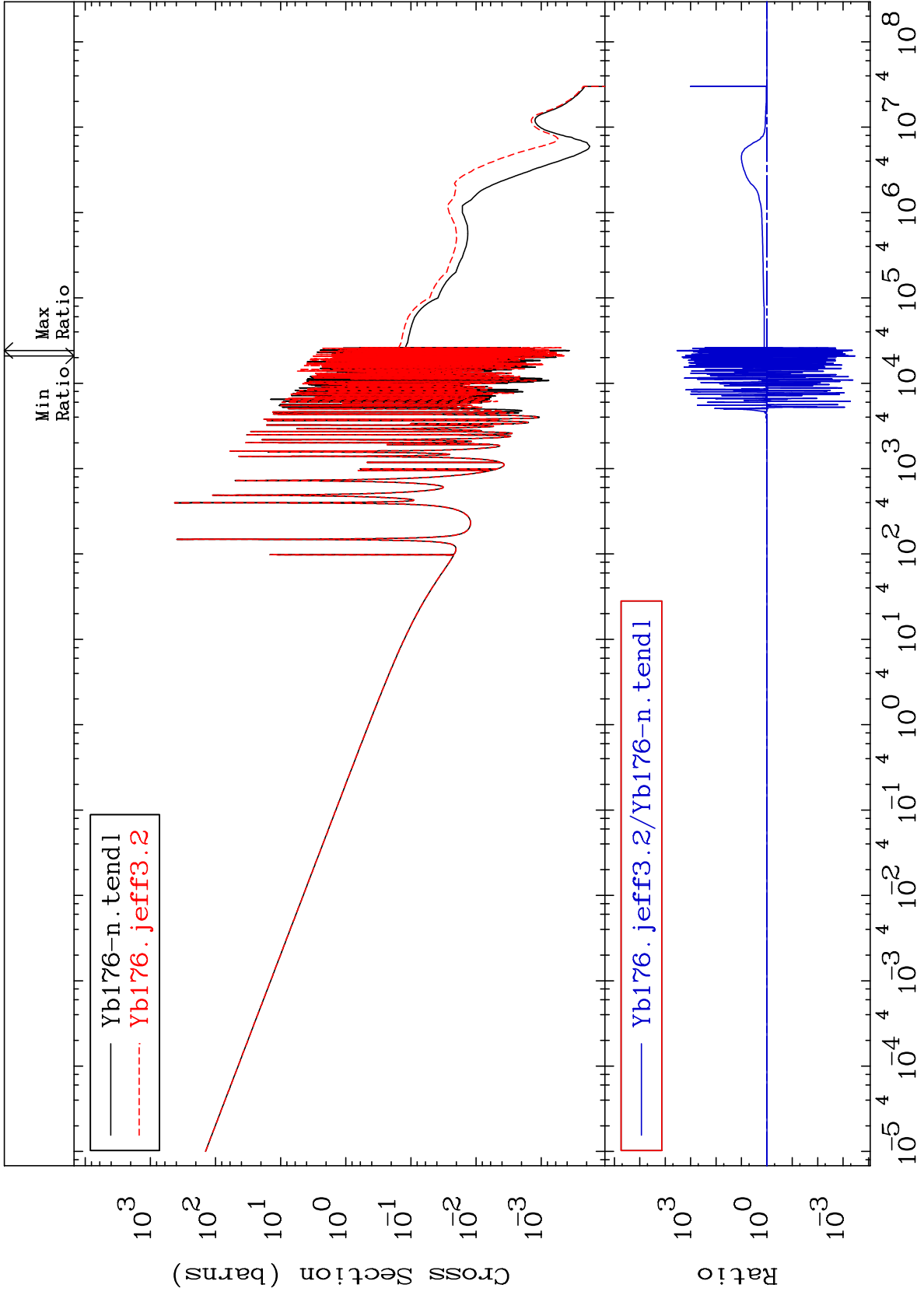
70-Yb-176
-97.72 To 1.771 %



MAT 7049

(n, γ)
Cross Section

70-Yb-176
-99.97 To 9999. %



MAT 7049

(n, p)

⁷⁰Yb-176

Cross Section

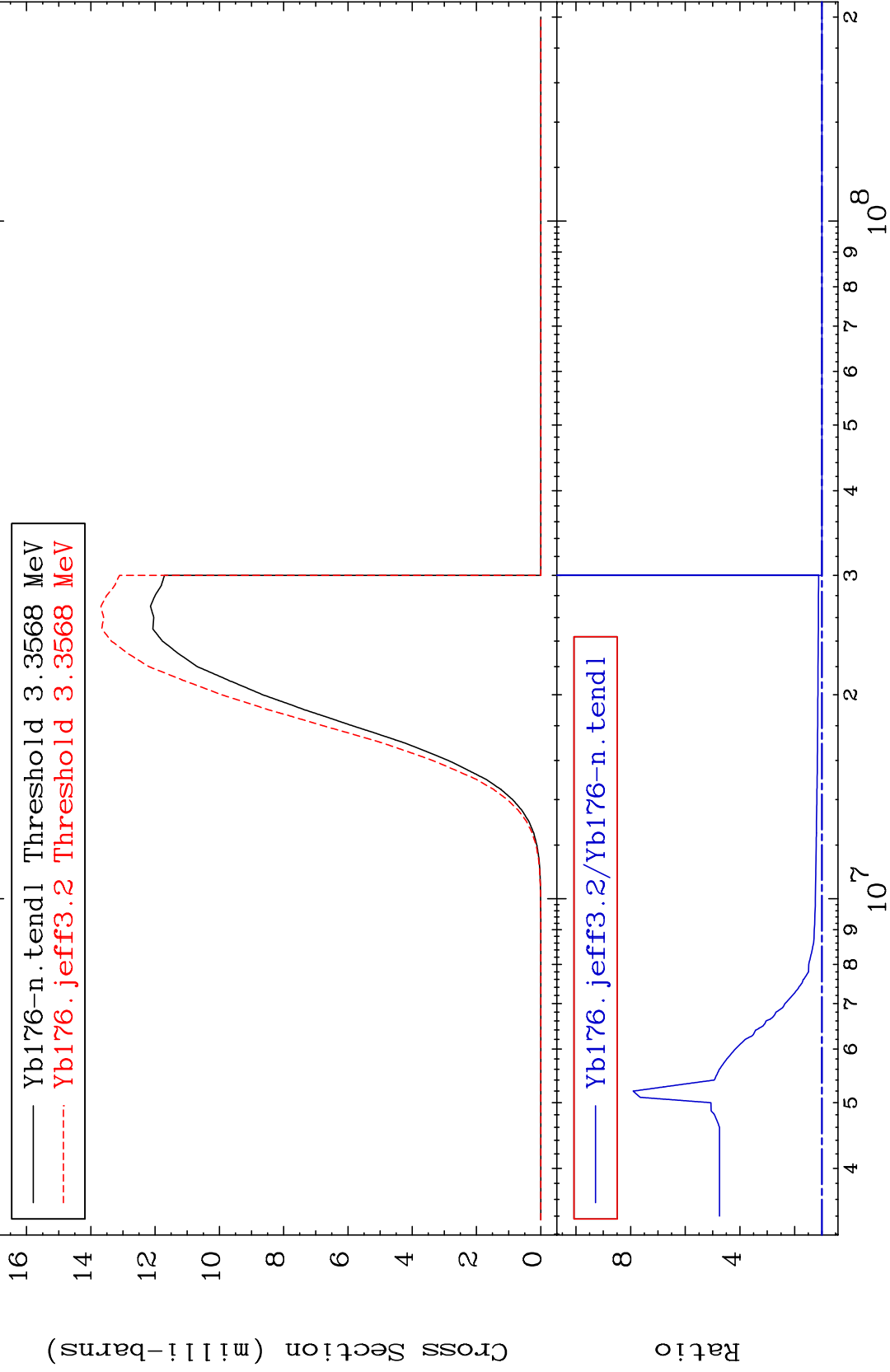
0.000

To 690.8 %

Max Ratio

Min Ratio

— Yb176-n.tendl Threshold 3.3568 MeV
- - - Yb176.jeff3.2 Threshold 3.3568 MeV



50

Incident Energy (eV)

⁷⁰Yb-176

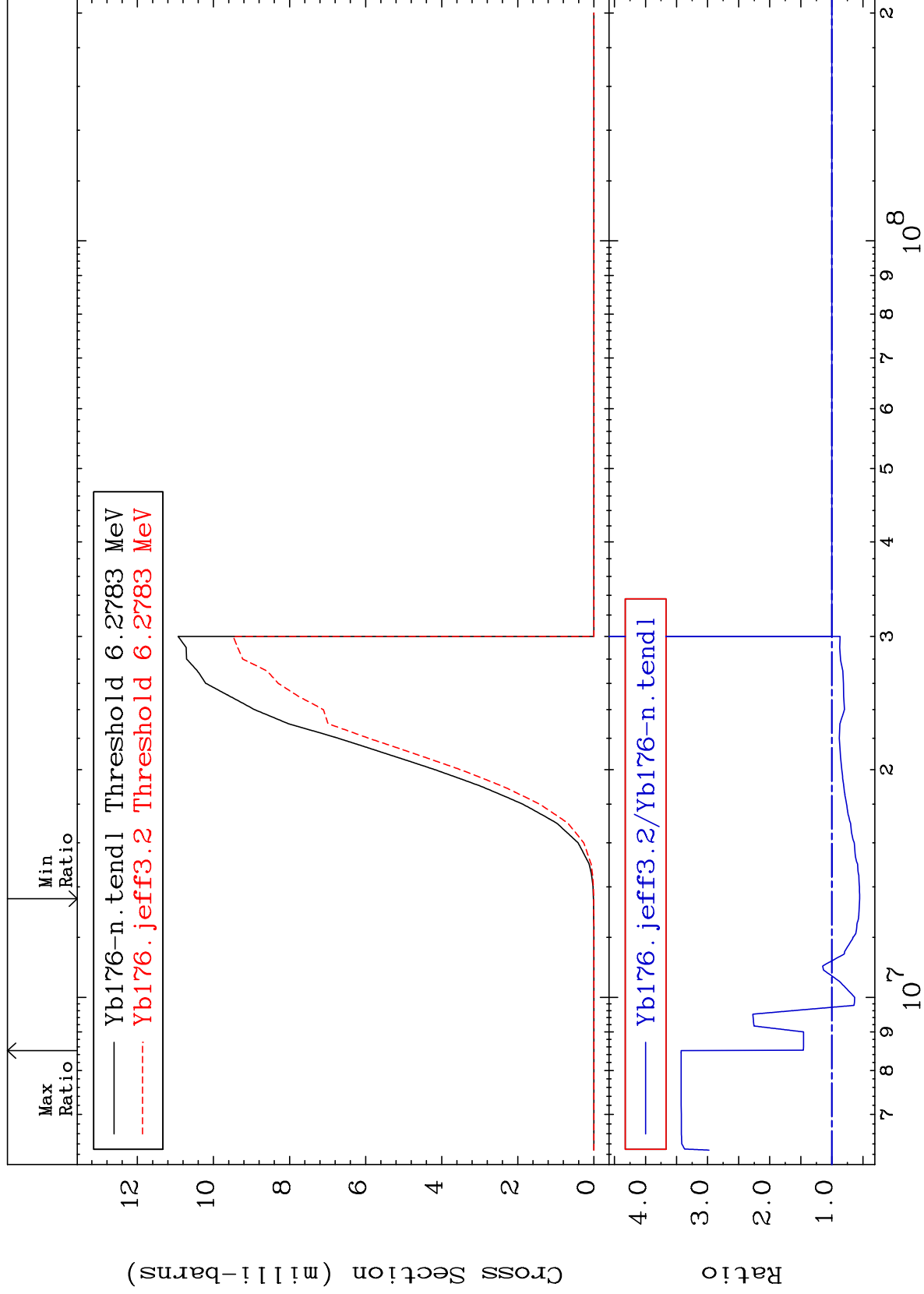
MAT 7049

(n, d)

70-Yb-176

Cross Section

-44.72 To 242.6 %



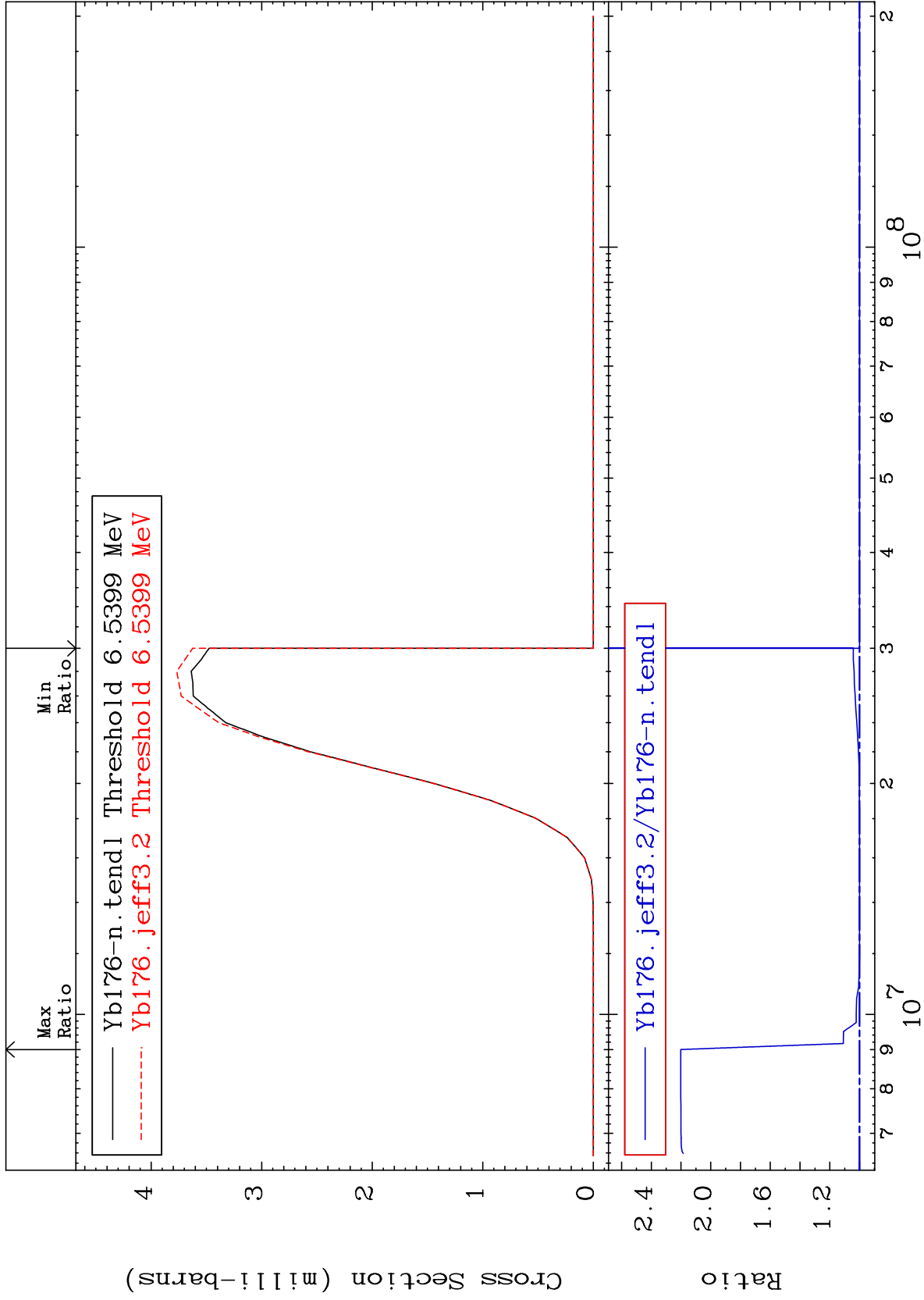
51

Incident Energy (eV)

70-Yb-176

MAT 7049

(n, t)
Cross Section
70-Yb-176
To 120.2 %
0.000



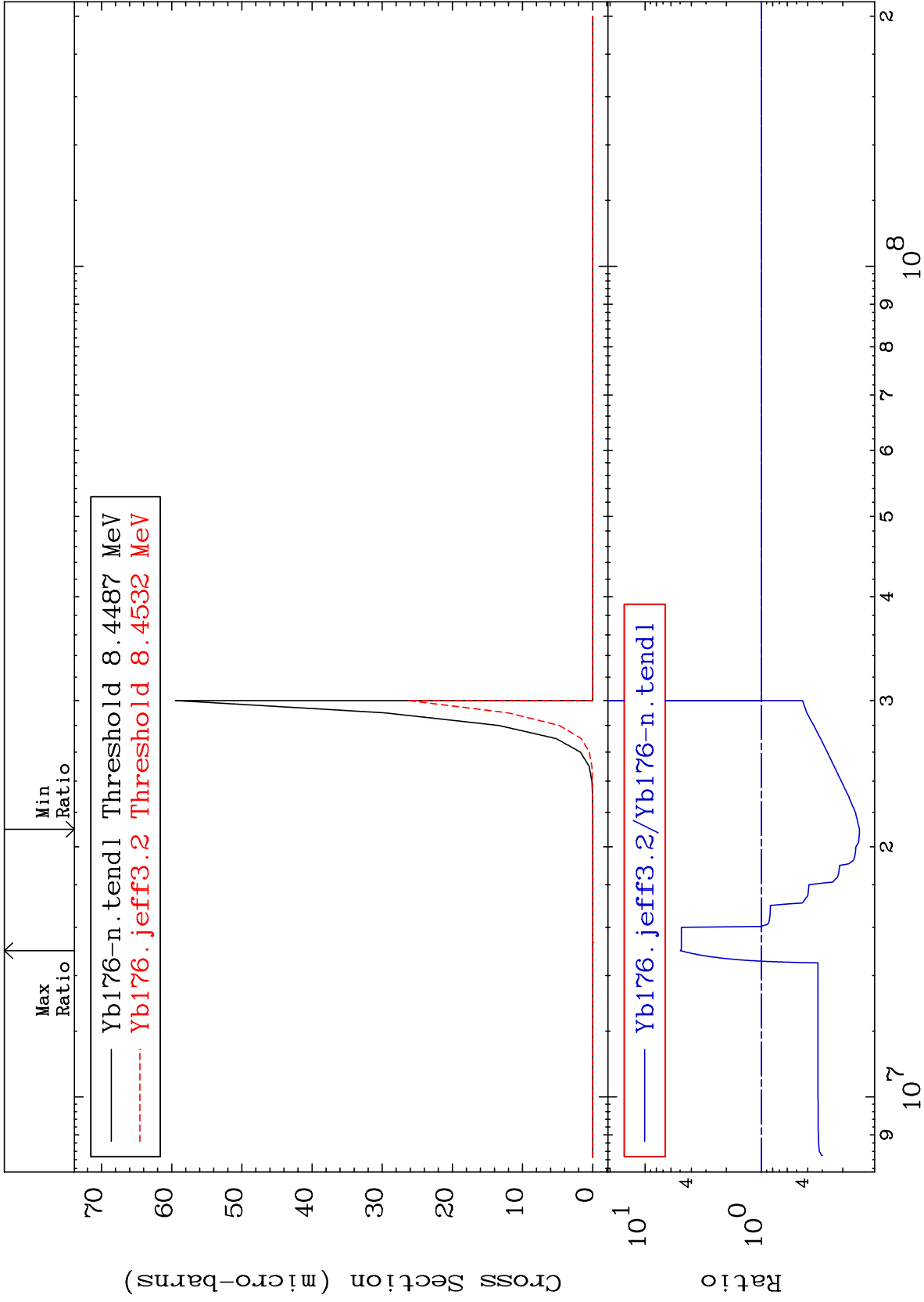
MAT 7049

(n, He-3)

⁷⁰Yb-176

Cross Section

-85.63 To 397.4 %



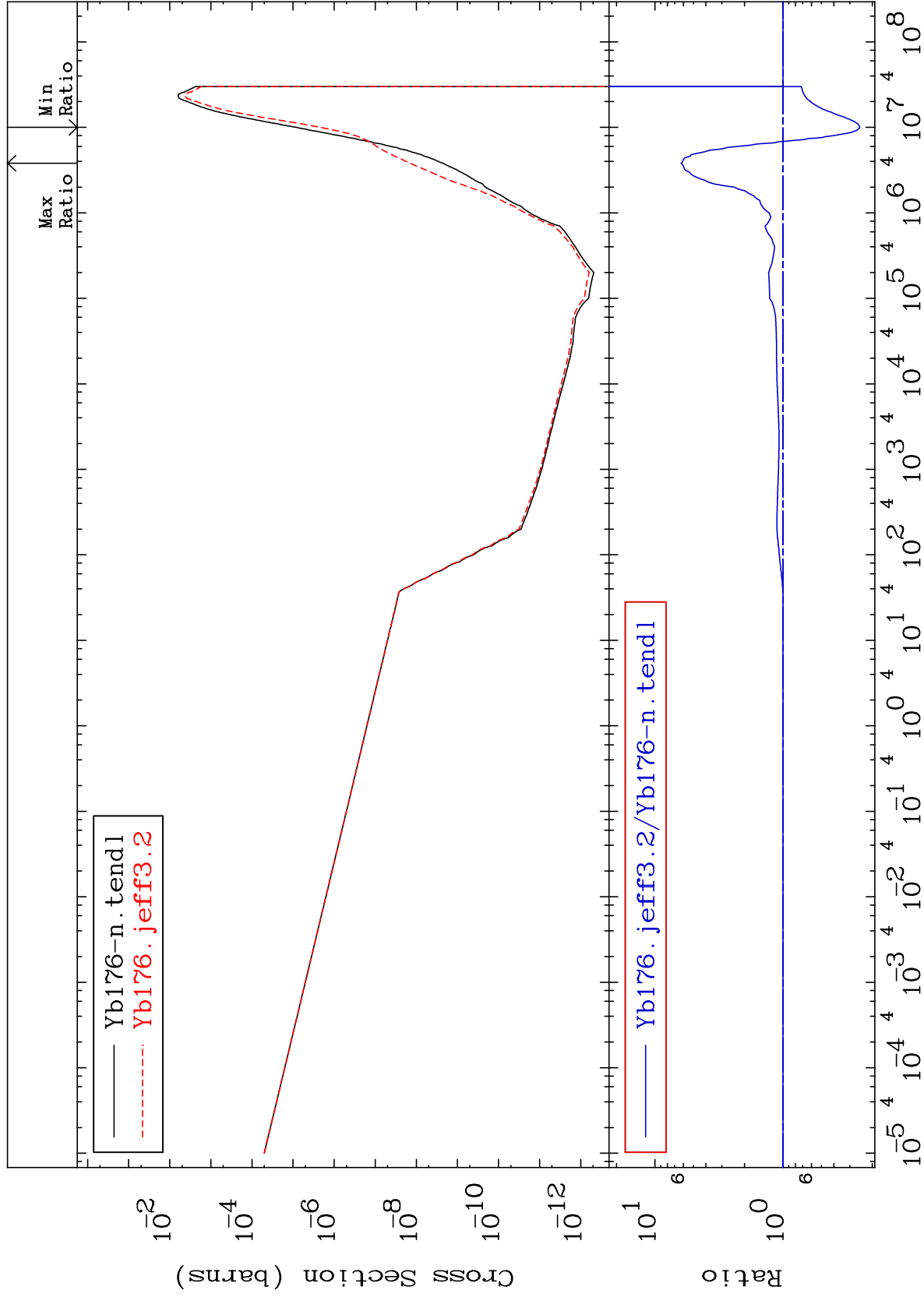
MAT 7049

(n, α)

Cross Section

70-Yb-176

-74.84 To 524.0 %



54

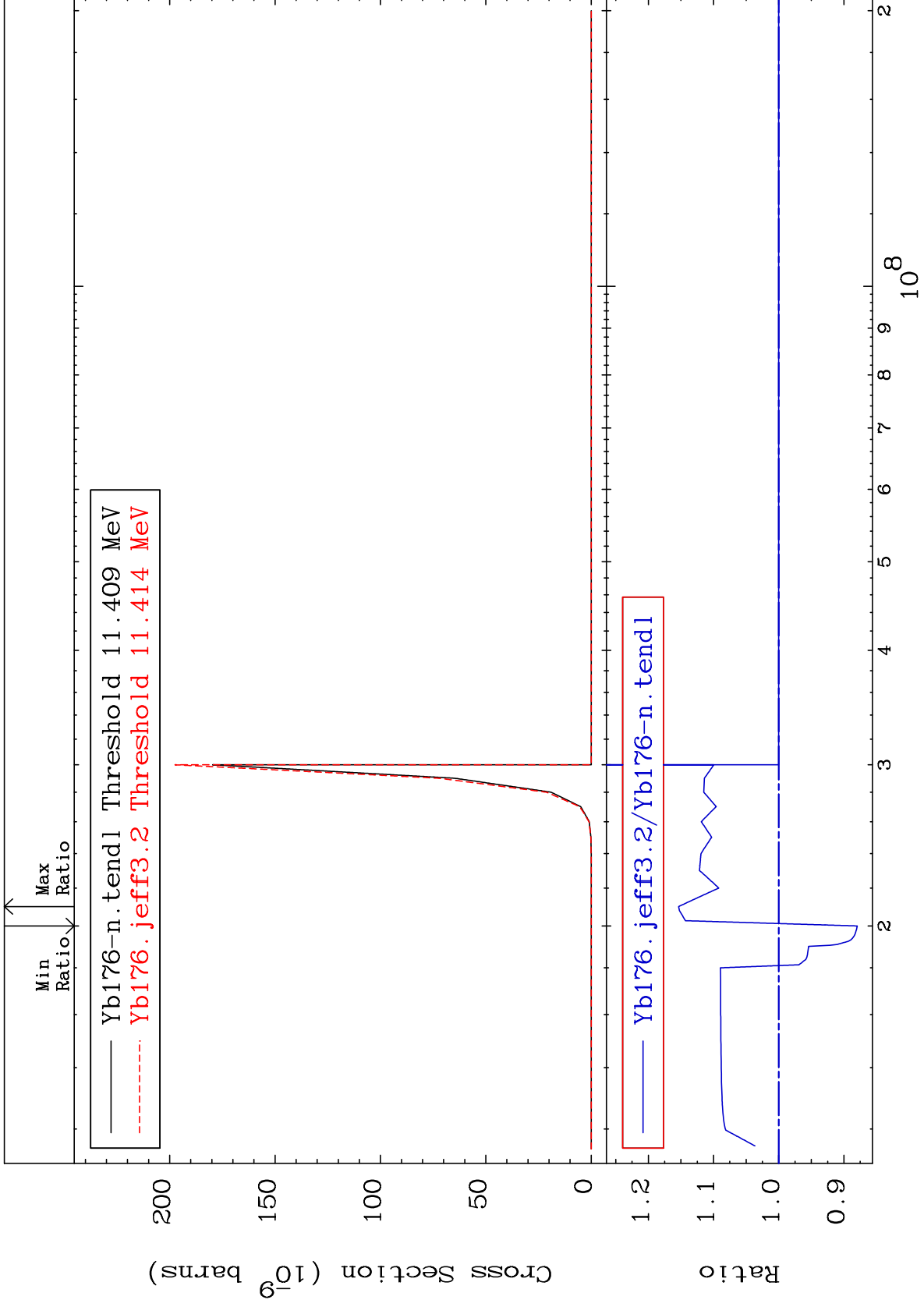
Incident Energy (eV)

70-Yb-176

MAT 7049

(n,2p)
Cross Section

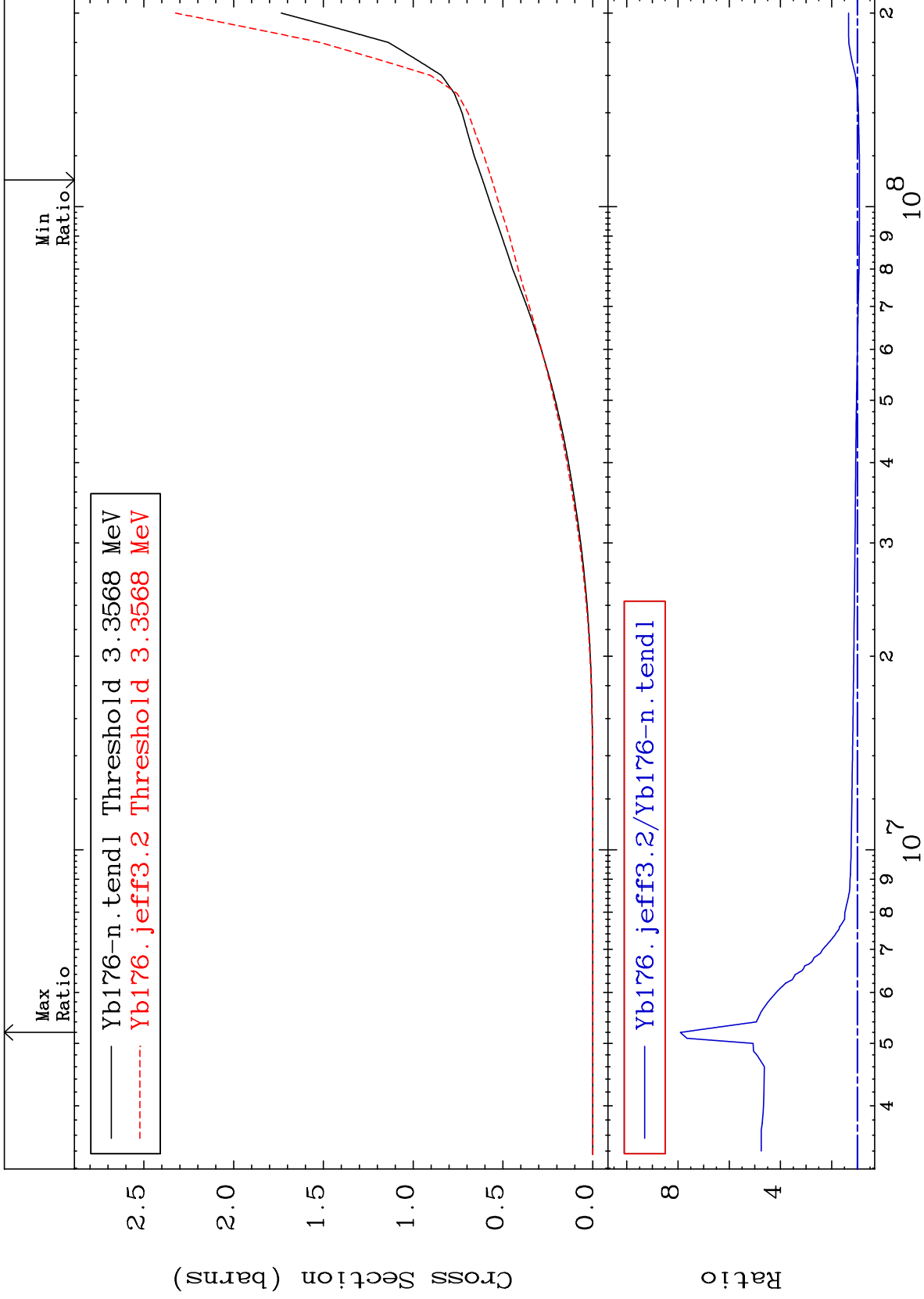
70-Yb-176
-12.05 To 15.35 %



MAT 7049

Hydrogen Production
Cross Section

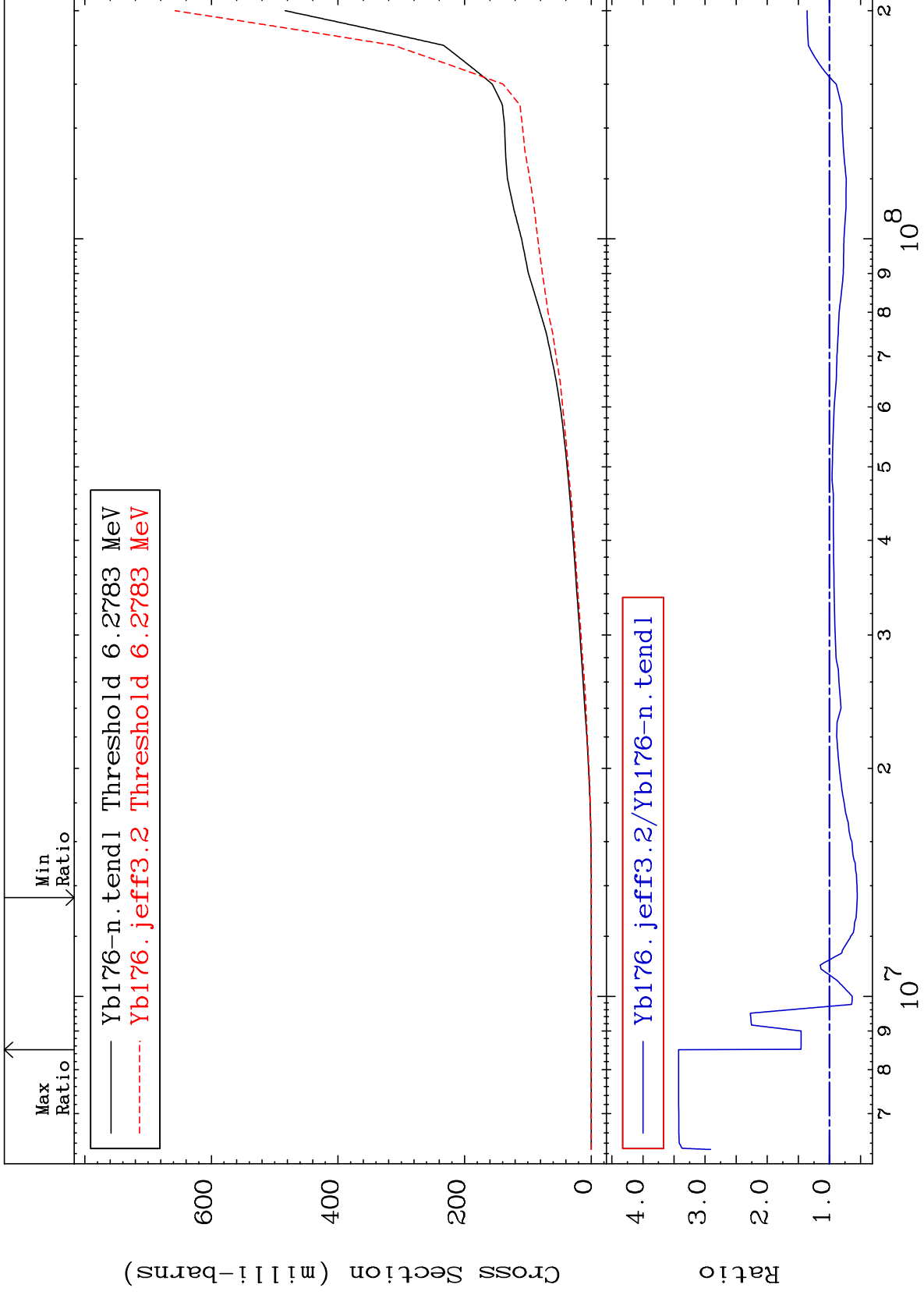
⁷⁰Yb-¹⁷⁶
-8.459 To 690.8 %



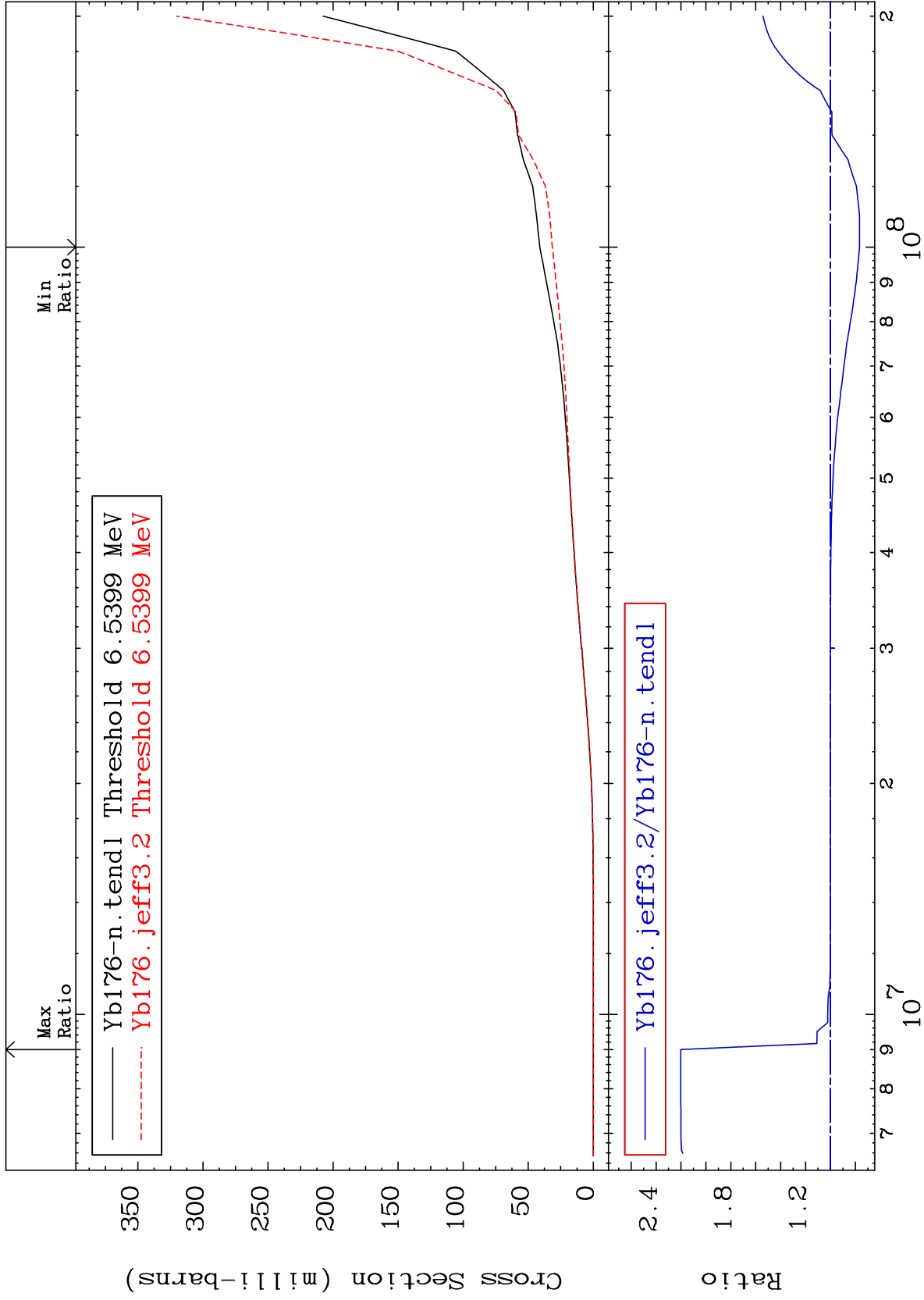
MAT 7049

Deuterium Production
Cross Section

⁷⁰Yb-¹⁷⁶
-44.72 To 242.6 %



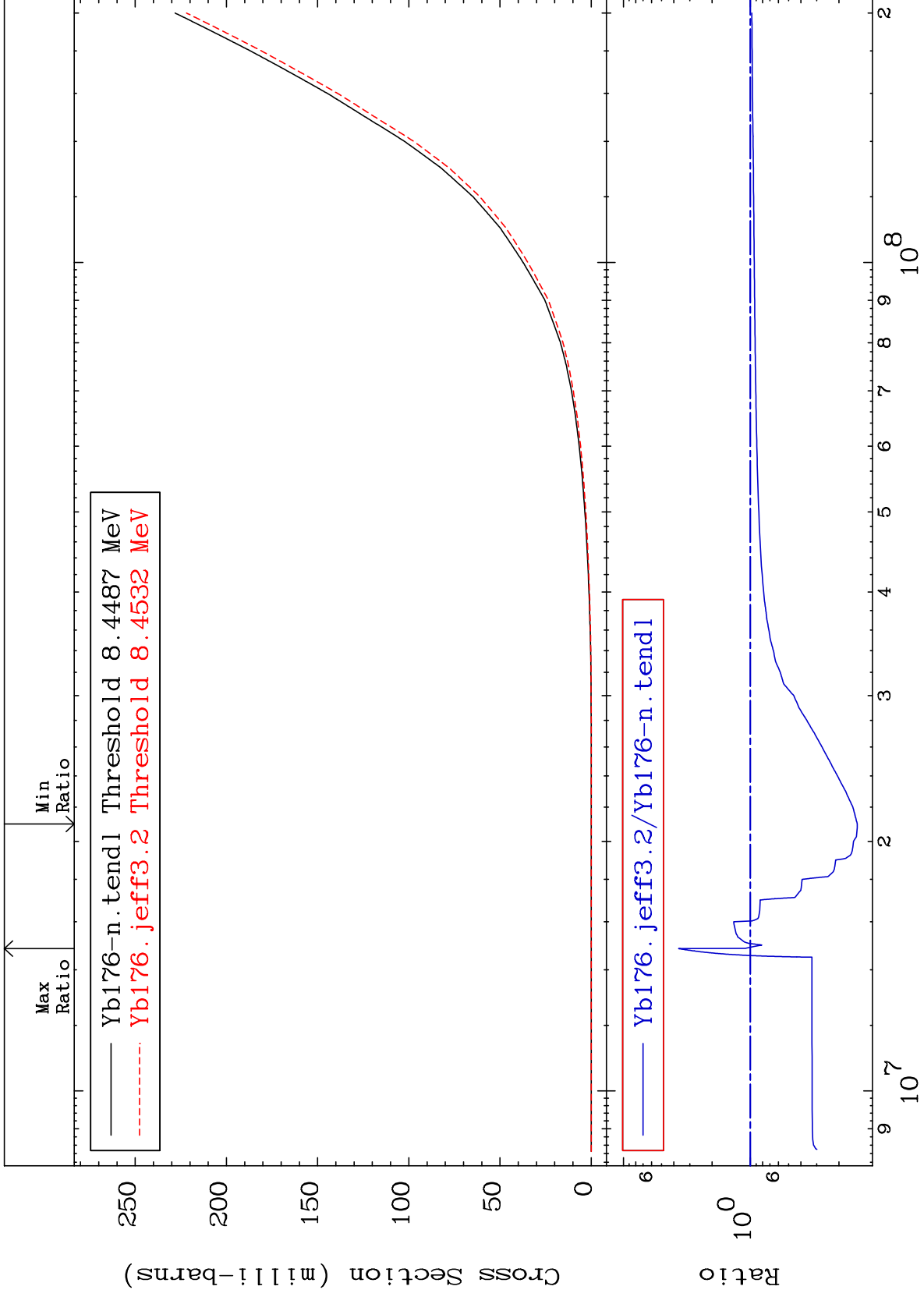
MAT 7049 Tritium Production Cross Section 70-Yb-176 -23.35 To 120.2 %



MAT 7049

He-3 Production
Cross Section

⁷⁰Yb-176
-85.63 To 267.0 %



59

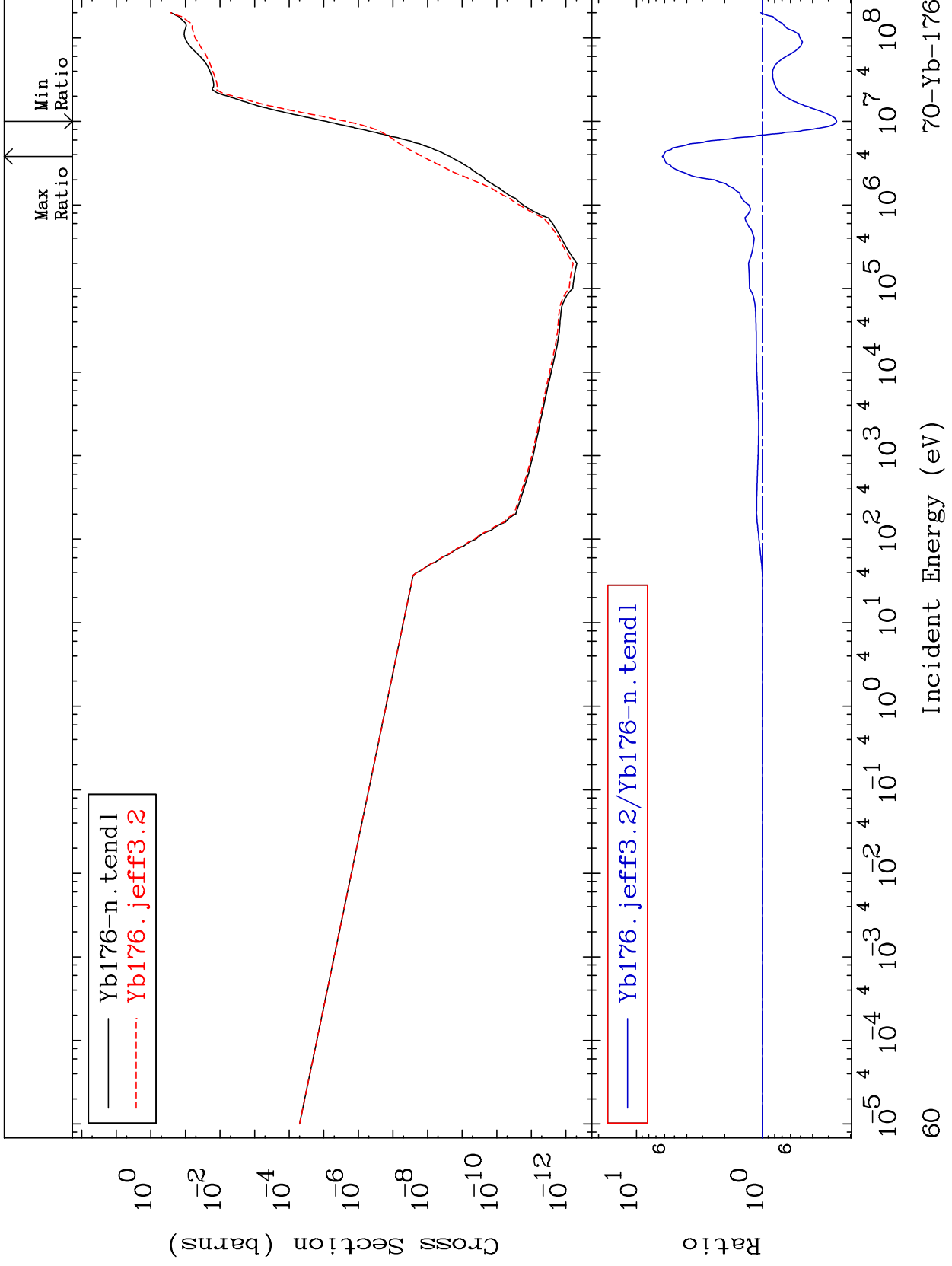
Incident Energy (eV)

⁷⁰Yb-176

MAT 7049

He-4 Production
Cross Section

70-Yb-176
-74.17 To 524.0 %

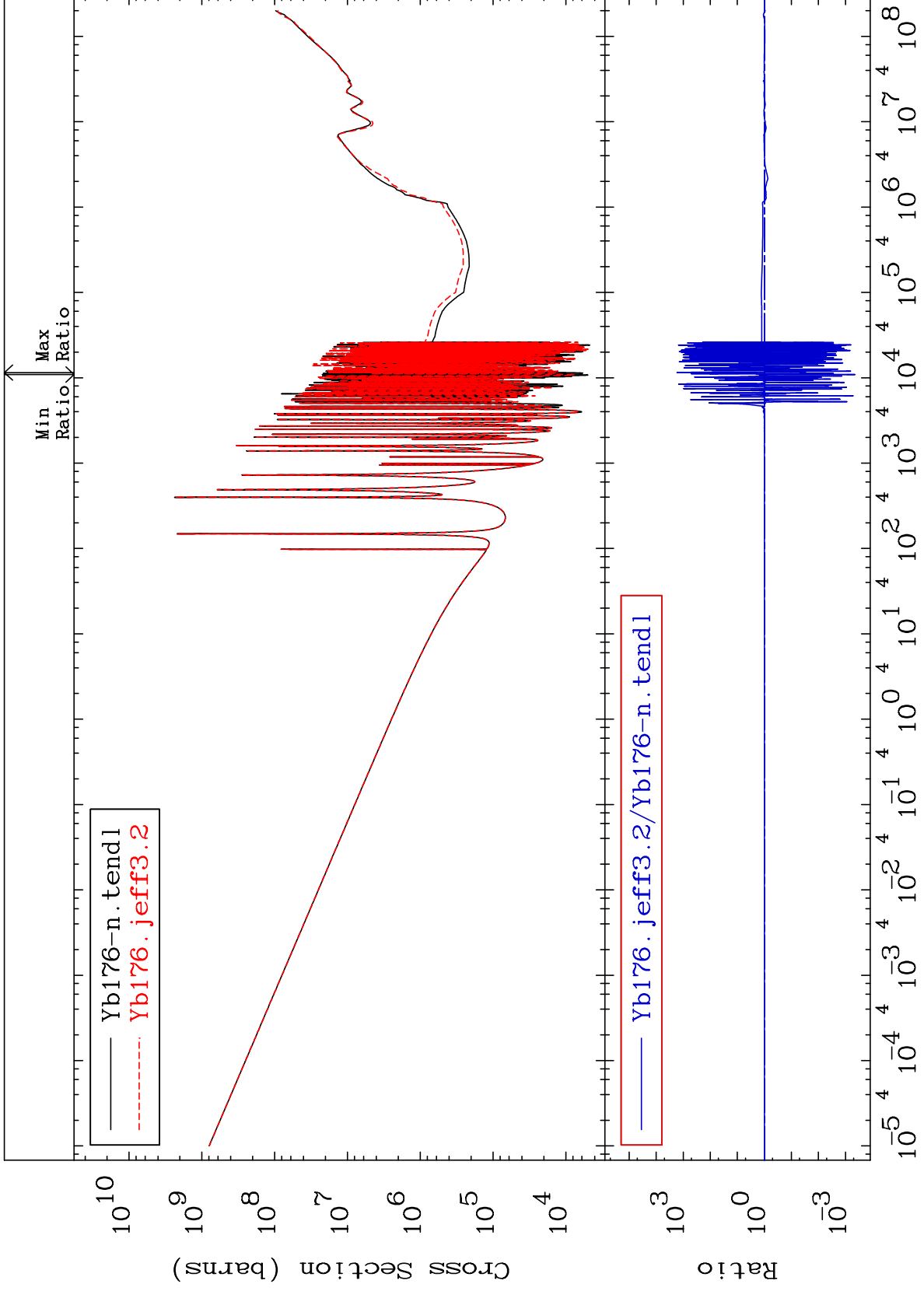


70-Yb-176

MAT 7049

Kerma total (eV-barns)
Cross Section

70-Yb-176
-99.96 To 9999. %



61

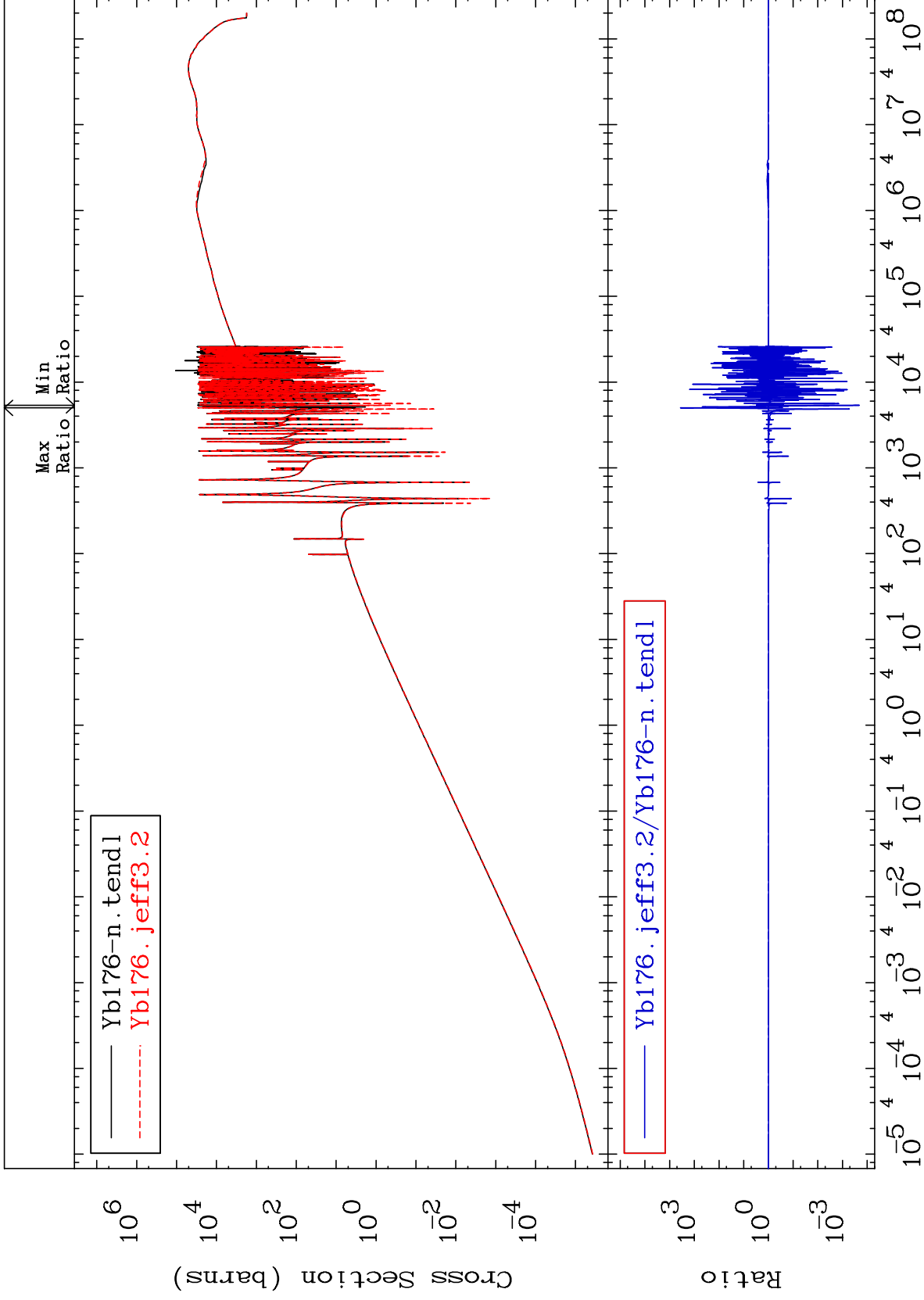
Incident Energy (eV)

70-Yb-176

MAT 7049

Kerma elastic
Cross Section

70-Yb-176
-99.98 To 9999. %



62

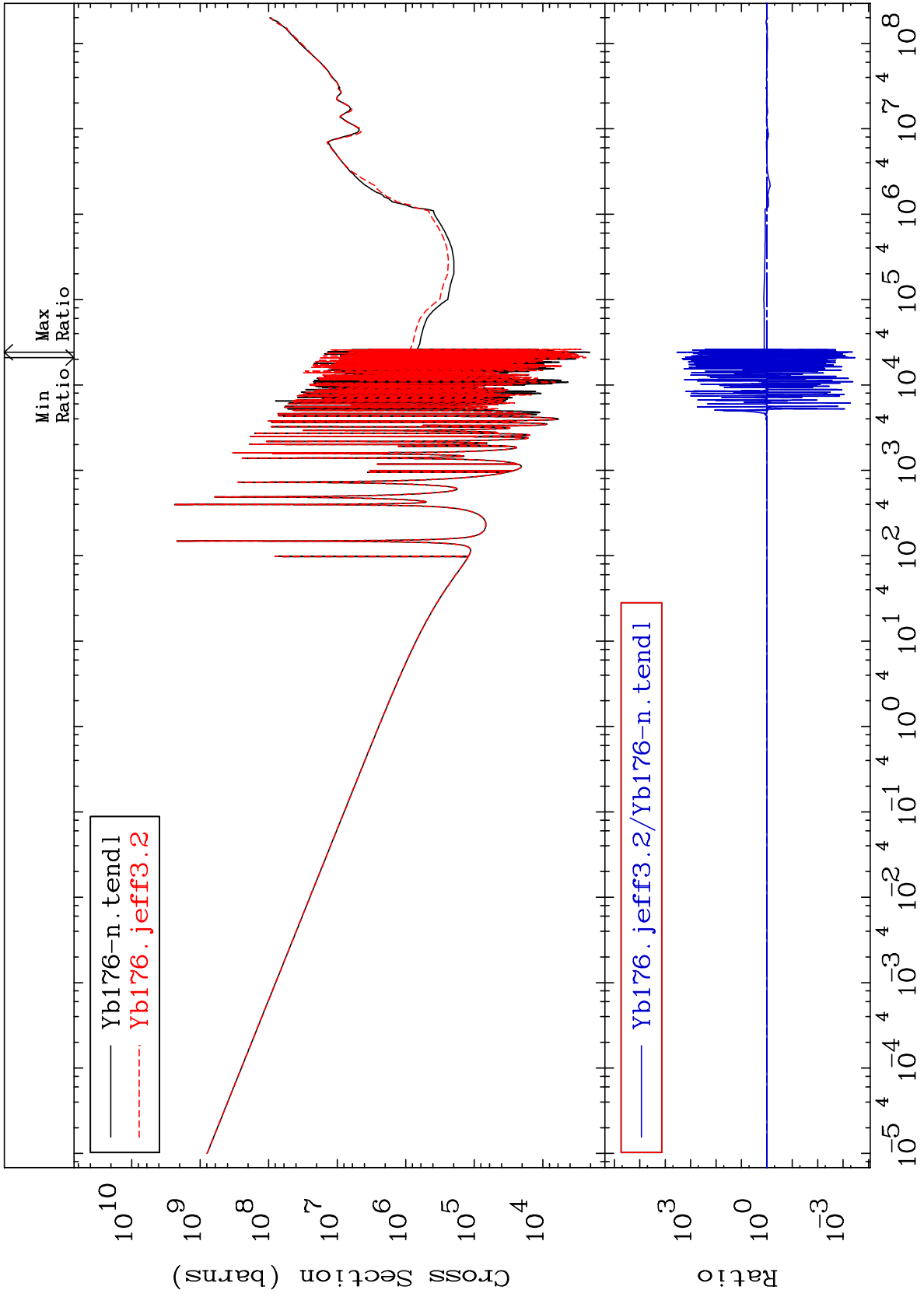
Incident Energy (eV)

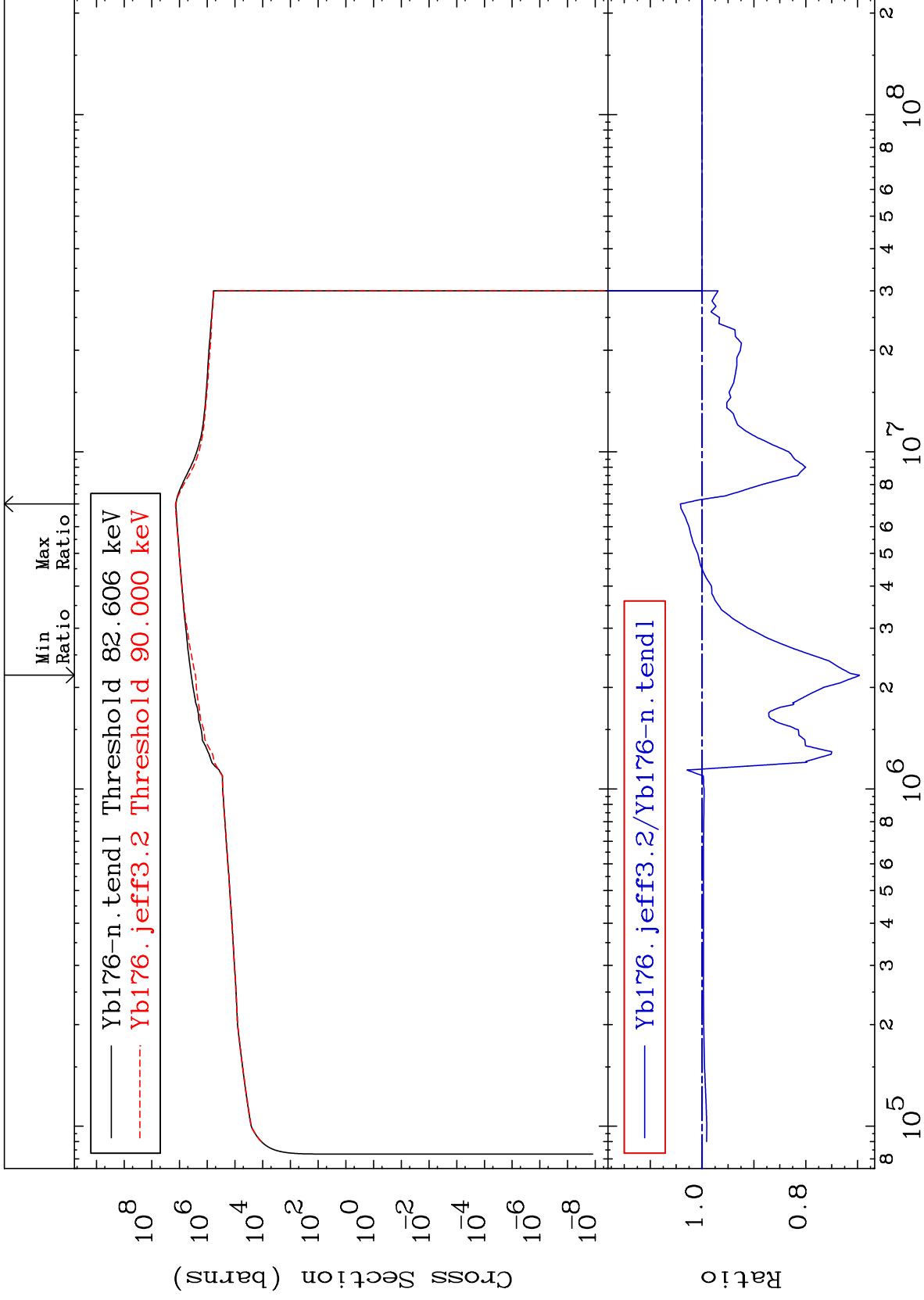
70-Yb-176

MAT 7049

Kerma non-elastic (all but mt2)
Cross Section

70-Yb-176
-99.97 To 9999. %

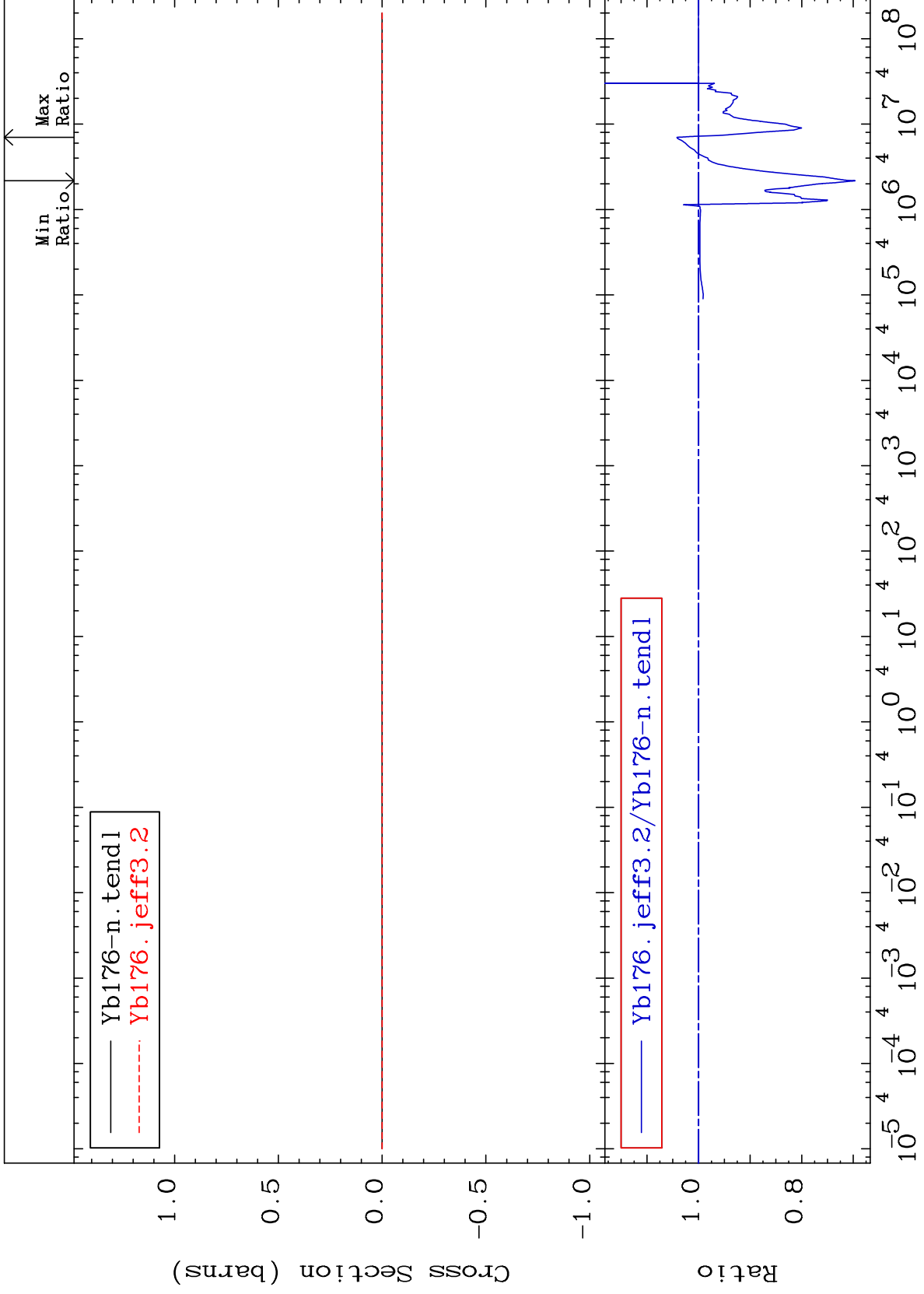




MAT 7049

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

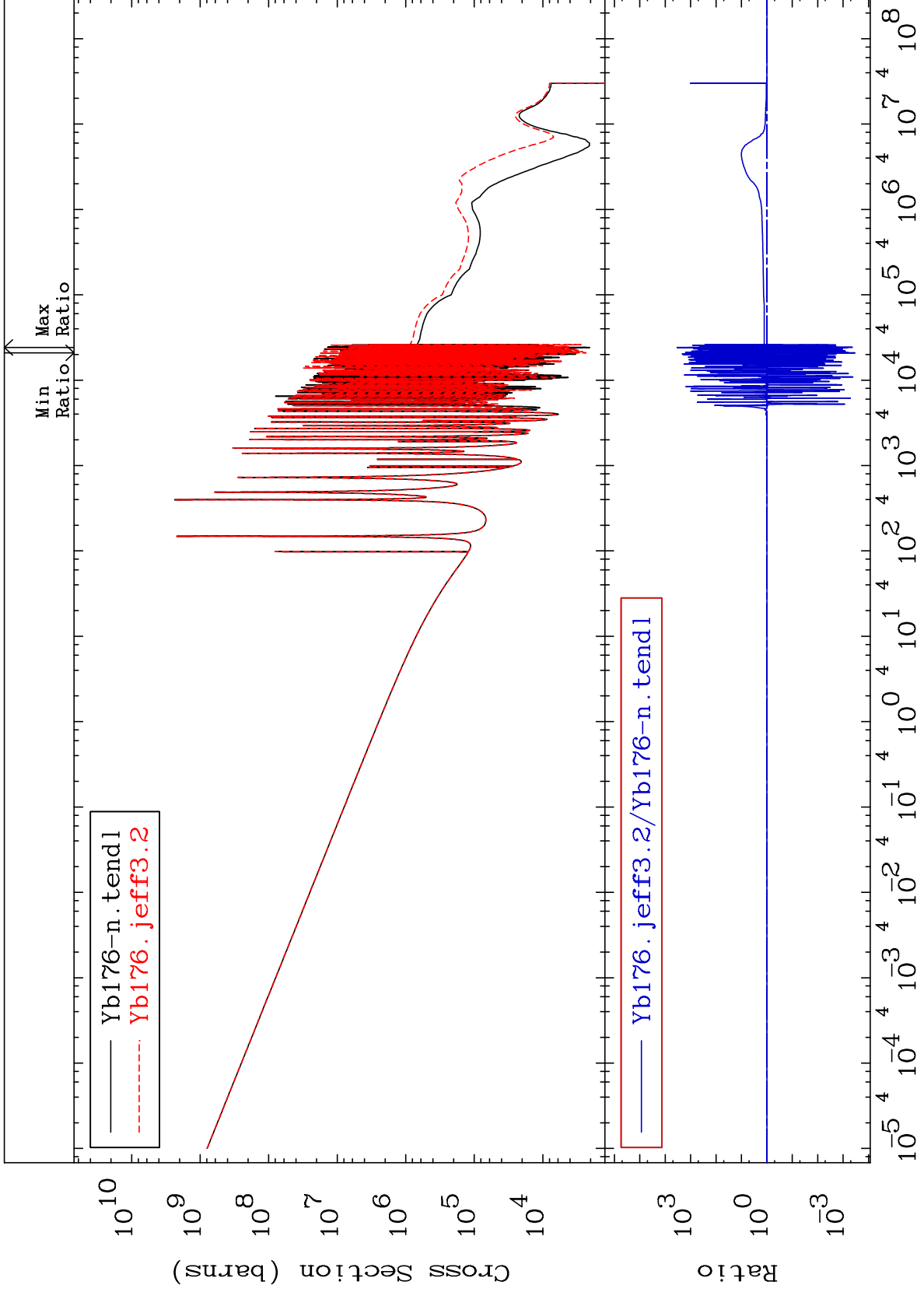
70-Yb-176
-30.36 To 4.190 %



MAT 7049

Kerma capture (mt102)
Cross Section

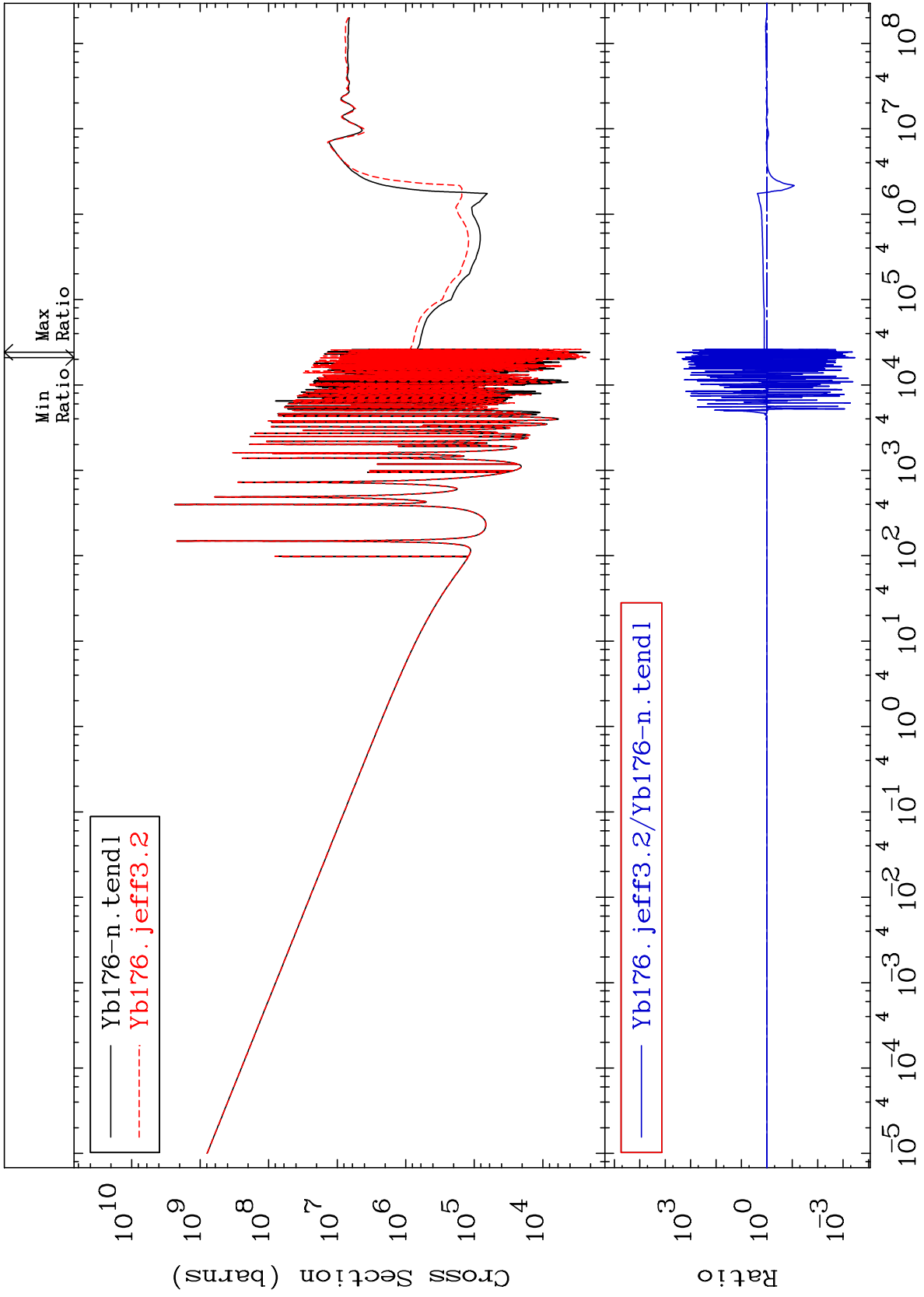
70-Yb-176
-99.97 To 9999. %



MAT 7049

Total photon (eV-barns)
Cross Section

70-Yb-176
-99.97 To 9999. %



67

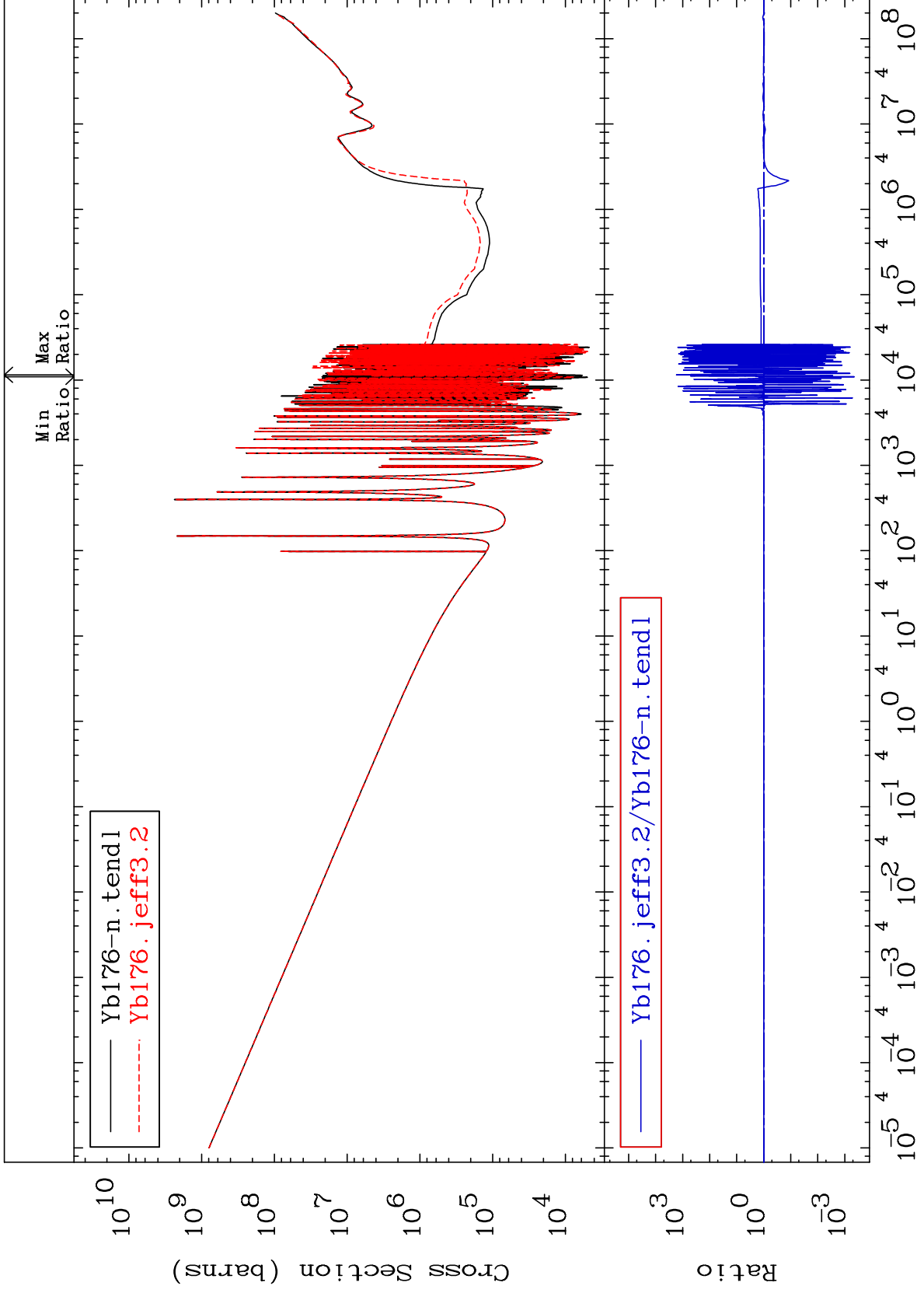
Incident Energy (eV)

70-Yb-176

MAT 7049

Total kinematic kerma (high limit)
Cross Section

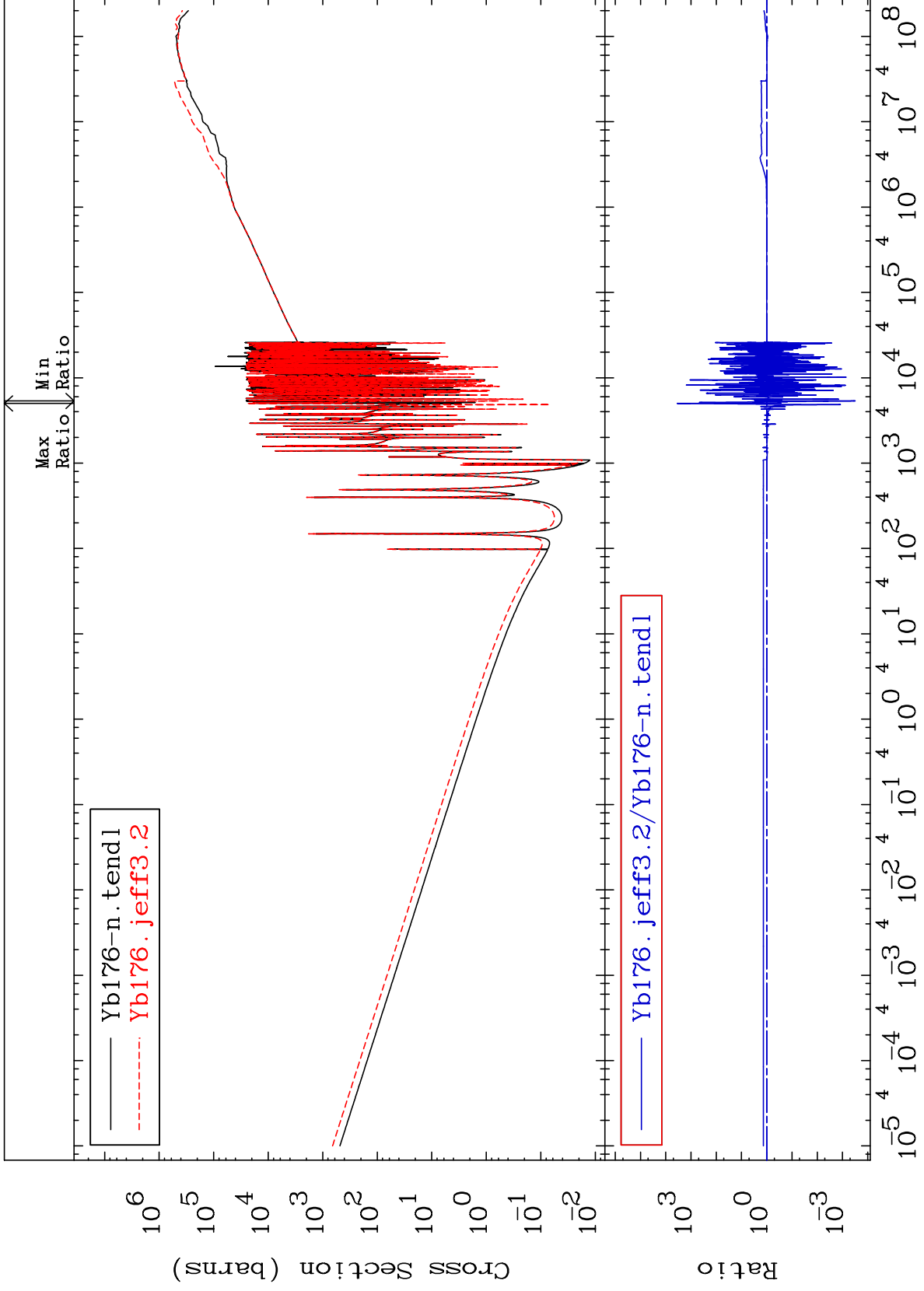
70-Yb-176
-99.96 To 9999. %



MAT 7049

Dpa total (eV-barns)
Cross Section

70-Yb-176
-99.97 To 9999. %



69

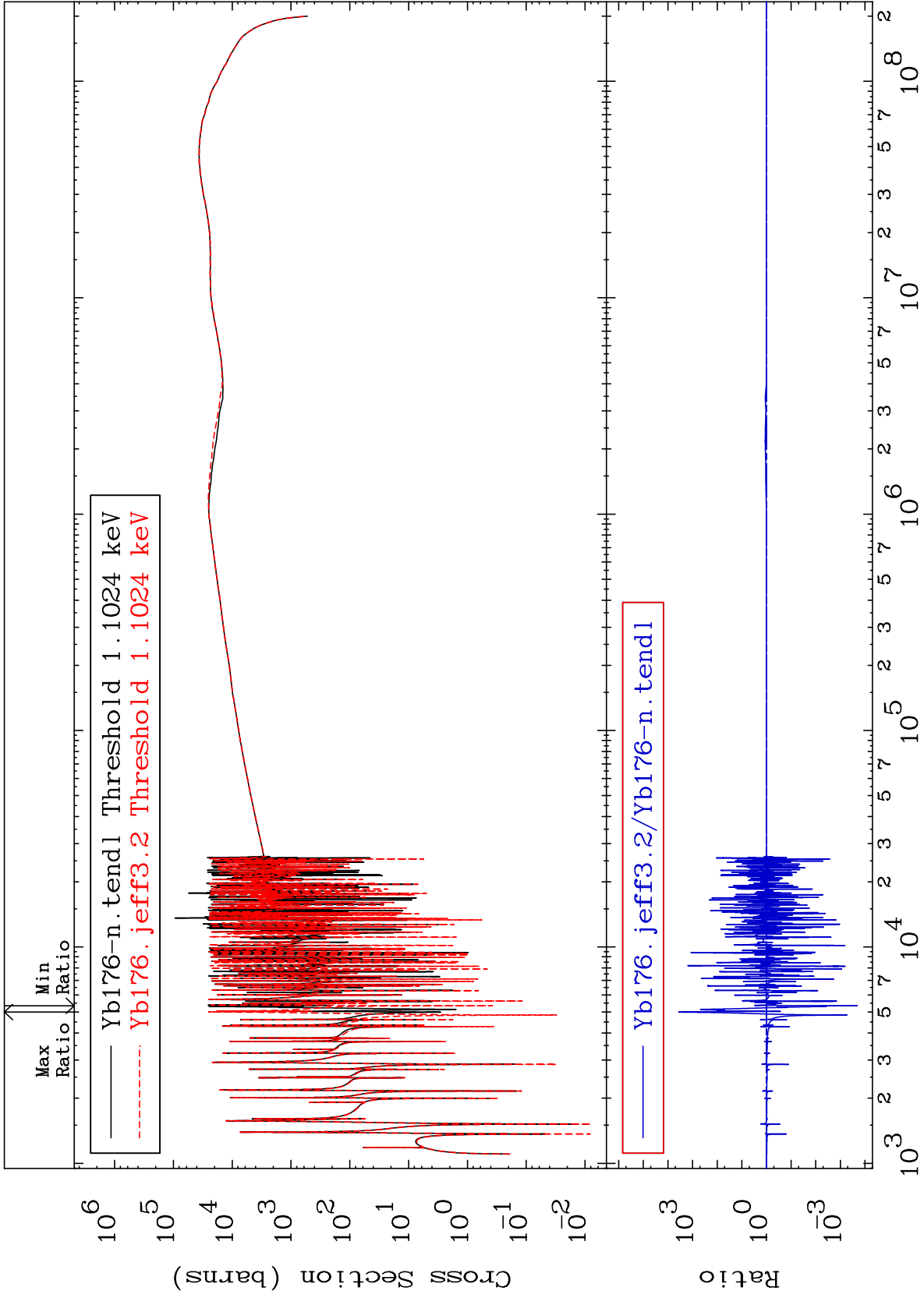
Incident Energy (eV)

70-Yb-176

MAT 7049

Dpa elastic (mt2)
Cross Section

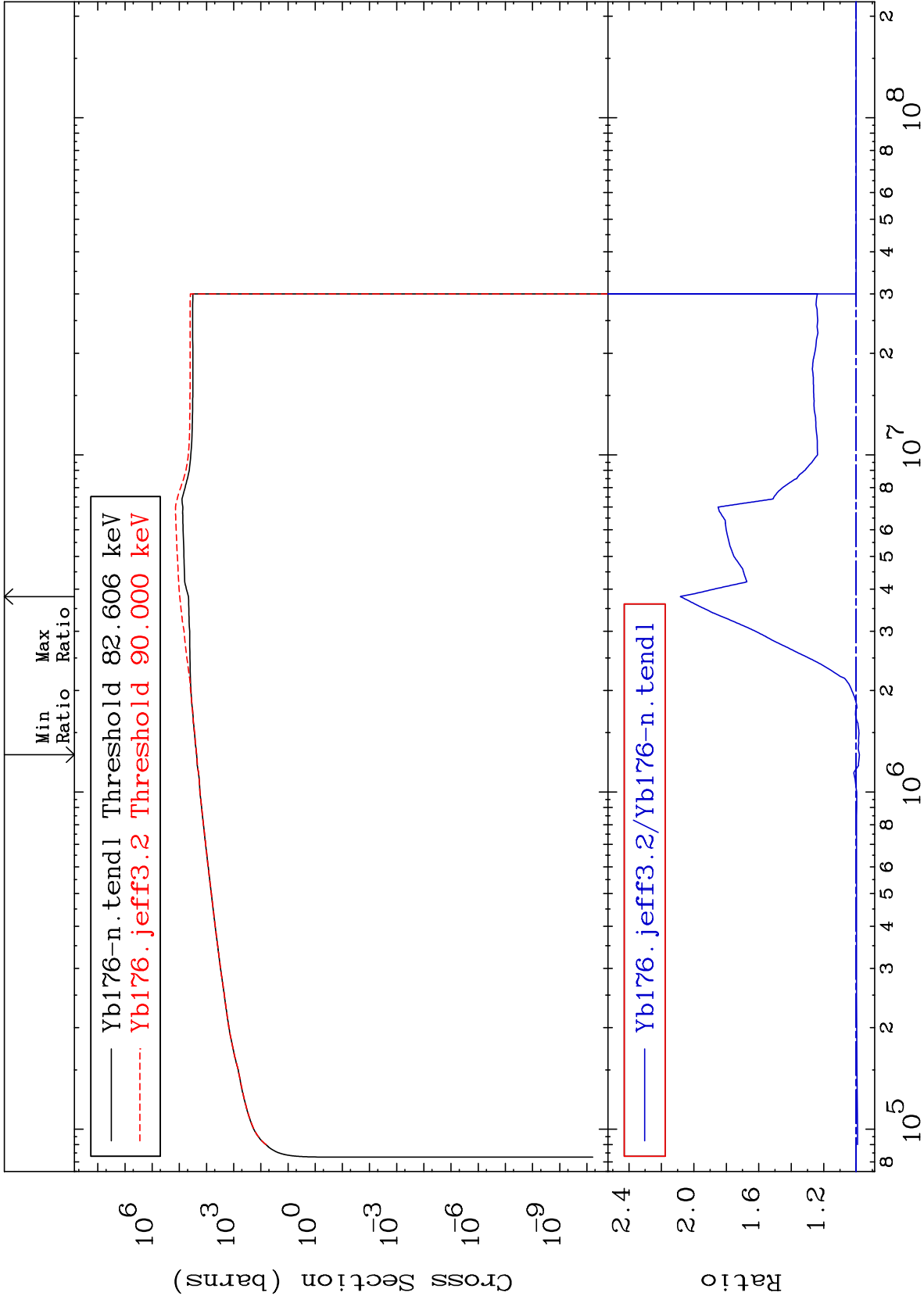
70-Yb-176
-99.98 To 9999. %



70

Incident Energy (eV)

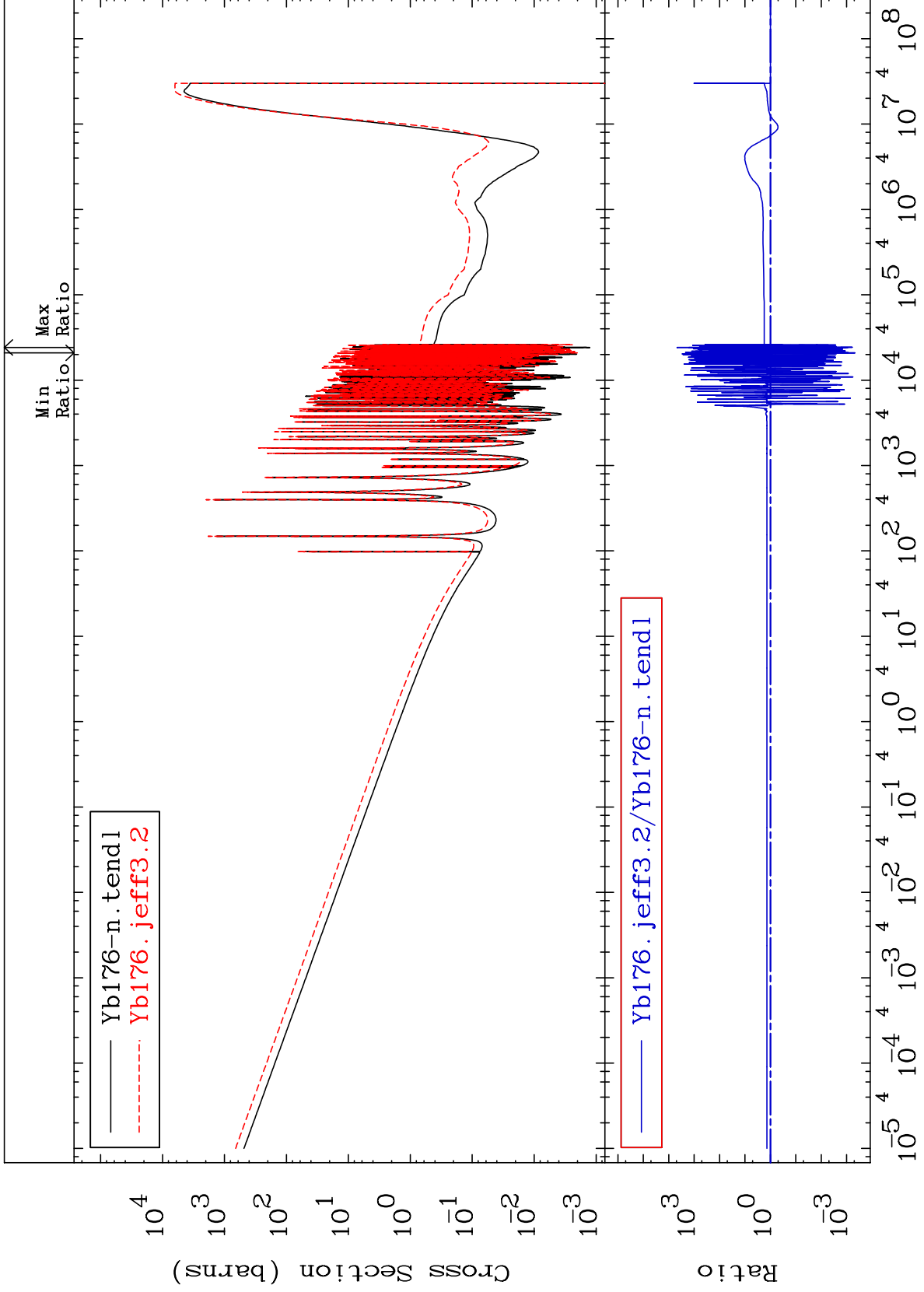
70-Yb-176



MAT 7049

Dpa disappearance (mt102 -120)
Cross Section

70-Yb-176
-99.95 To 9999. %



72

Incident Energy (eV)

70-Yb-176

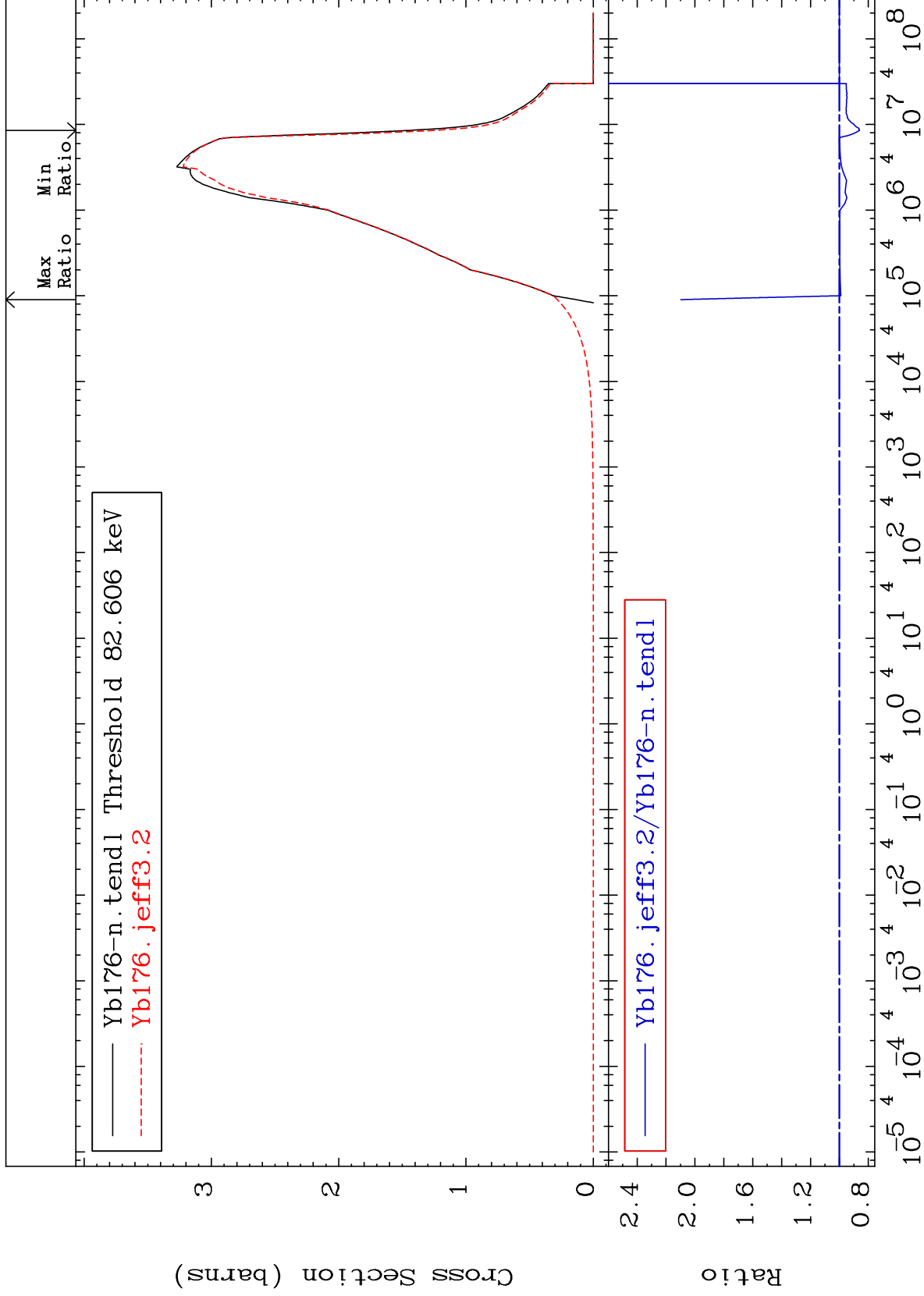
MAT 7049

Inelastic: 70-Yb-176g

70-Yb-176

Radionuclide Production Cross Section

-13.92 To 109.8 %



73

70-Yb-176

70-Yb-176

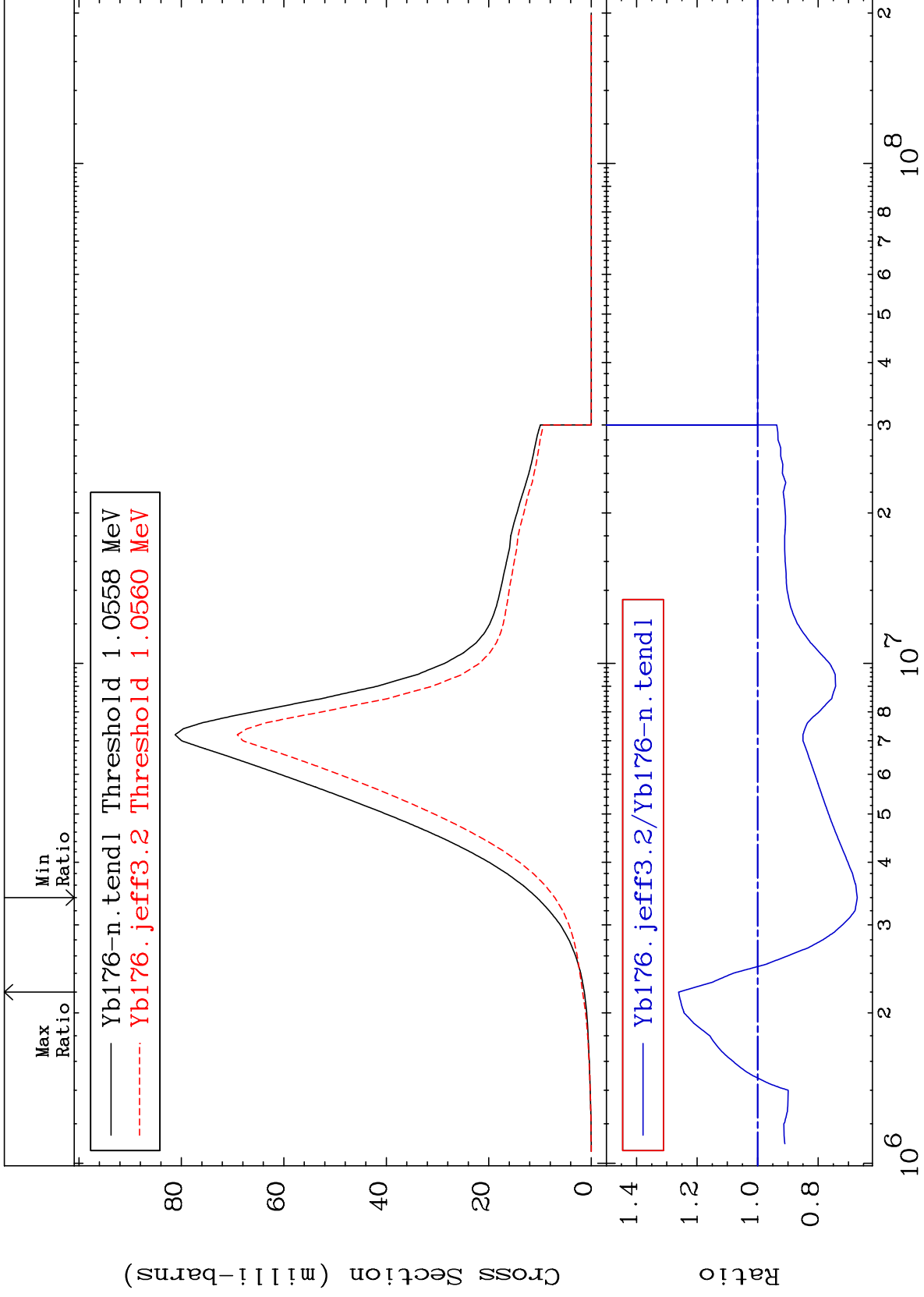
MAT 7049

Inelastic: 70-Yb-176m5

70-Yb-176

Radionuclide Production Cross Section

-32.91 To 26.09 %



74

Incident Energy (eV)

70-Yb-176