

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.

Tele: 925-443-1911

E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

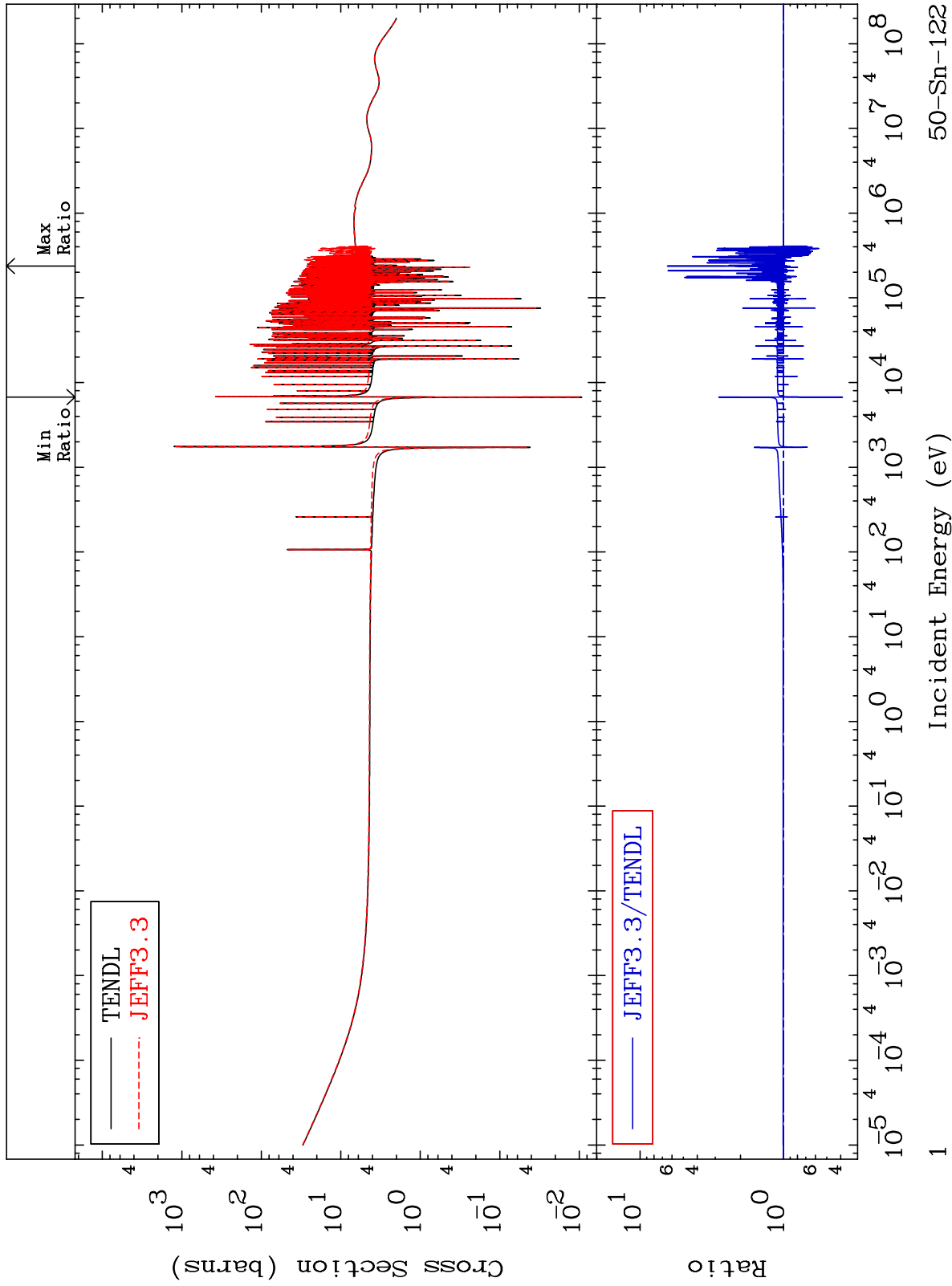
MAT 5055

Total

50-Sn-122

Cross Section

-61.22 To 543.9 %



Incident Energy (eV)

50-Sn-122

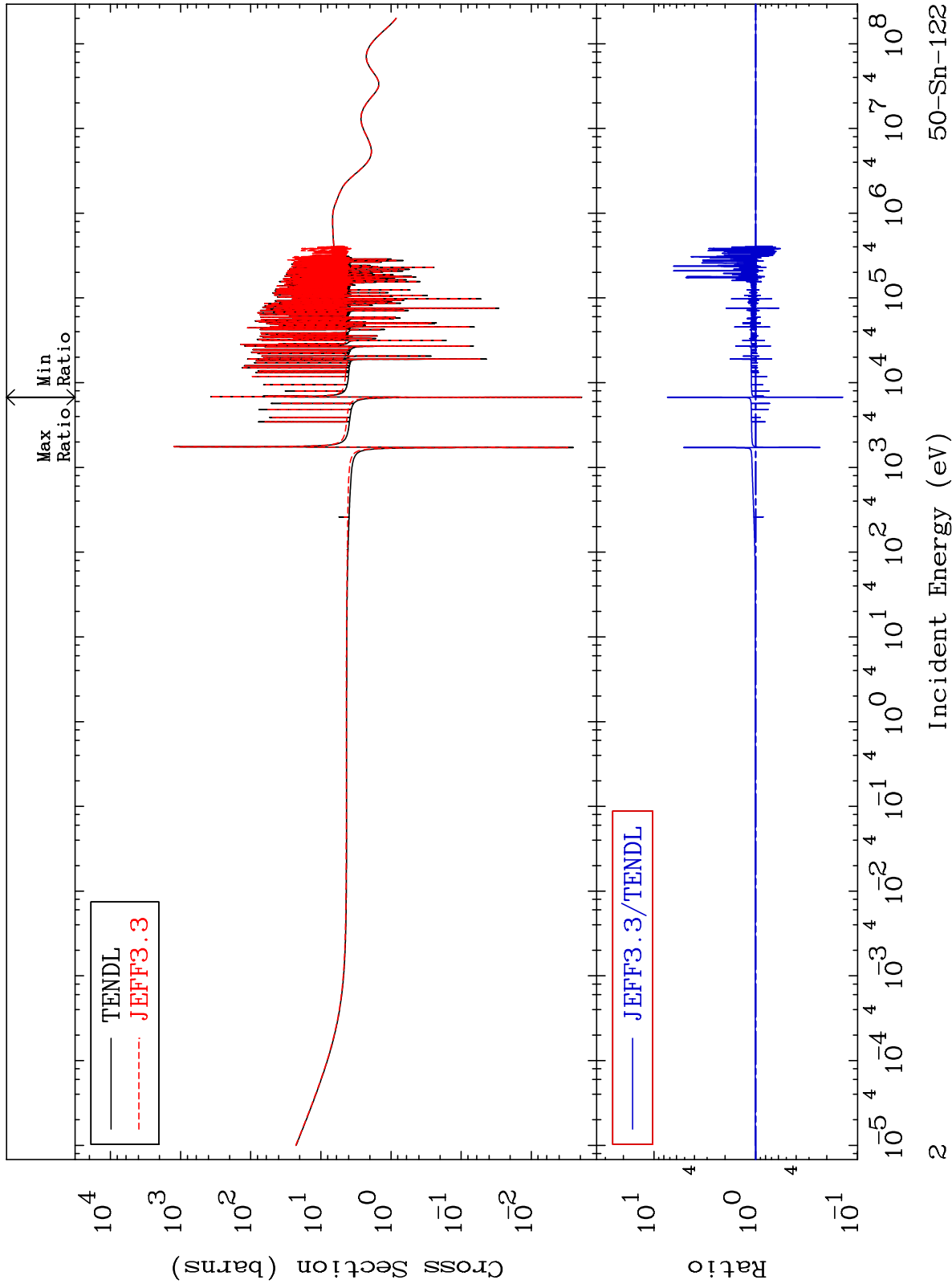
MAT 5055

Elastic

Cross Section

50-Sn-122

-86.02 To 636.0 %



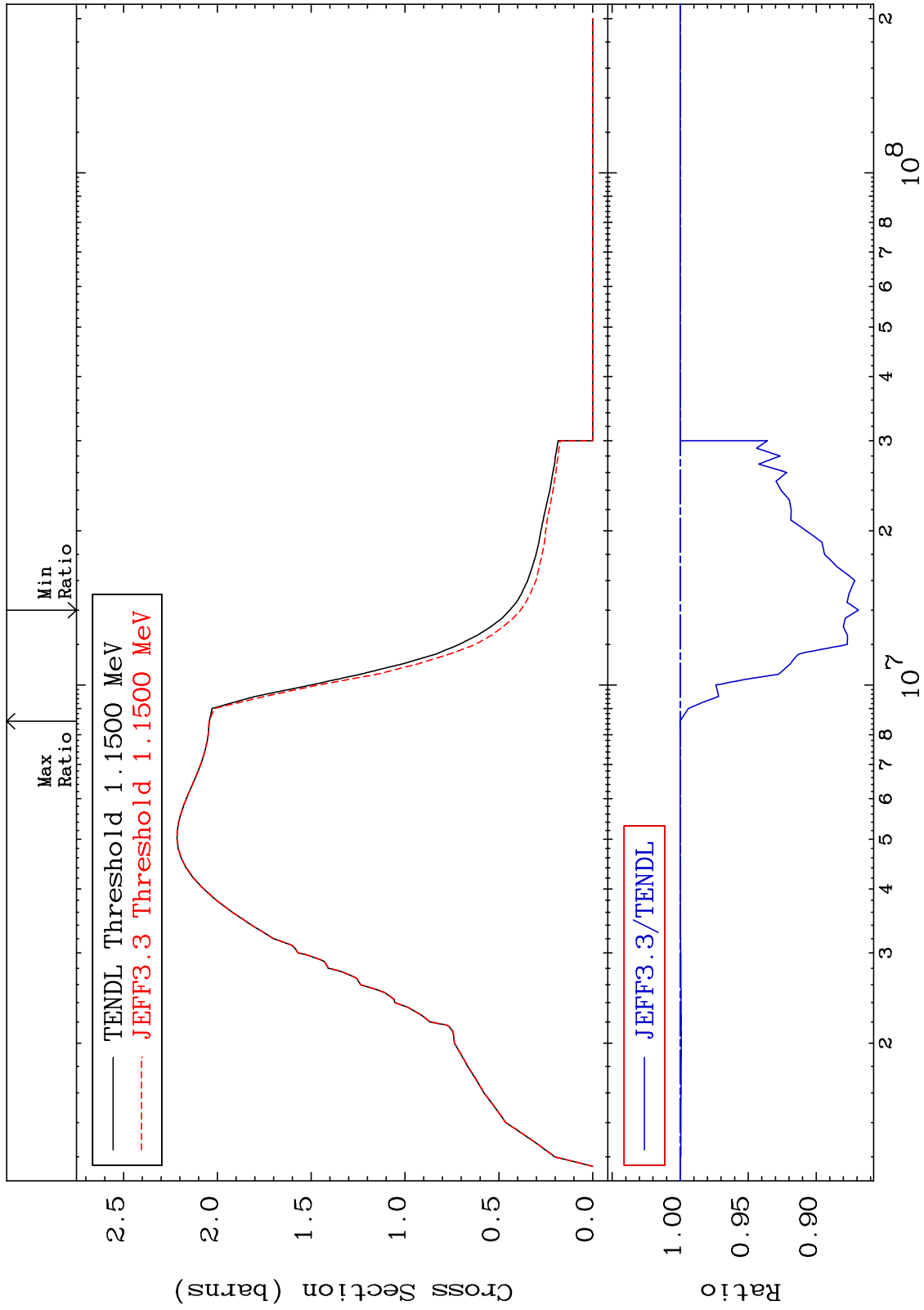
MAT 5055

Inelastic

50-Sn-122

Cross Section

-13.10 To 0.014 %



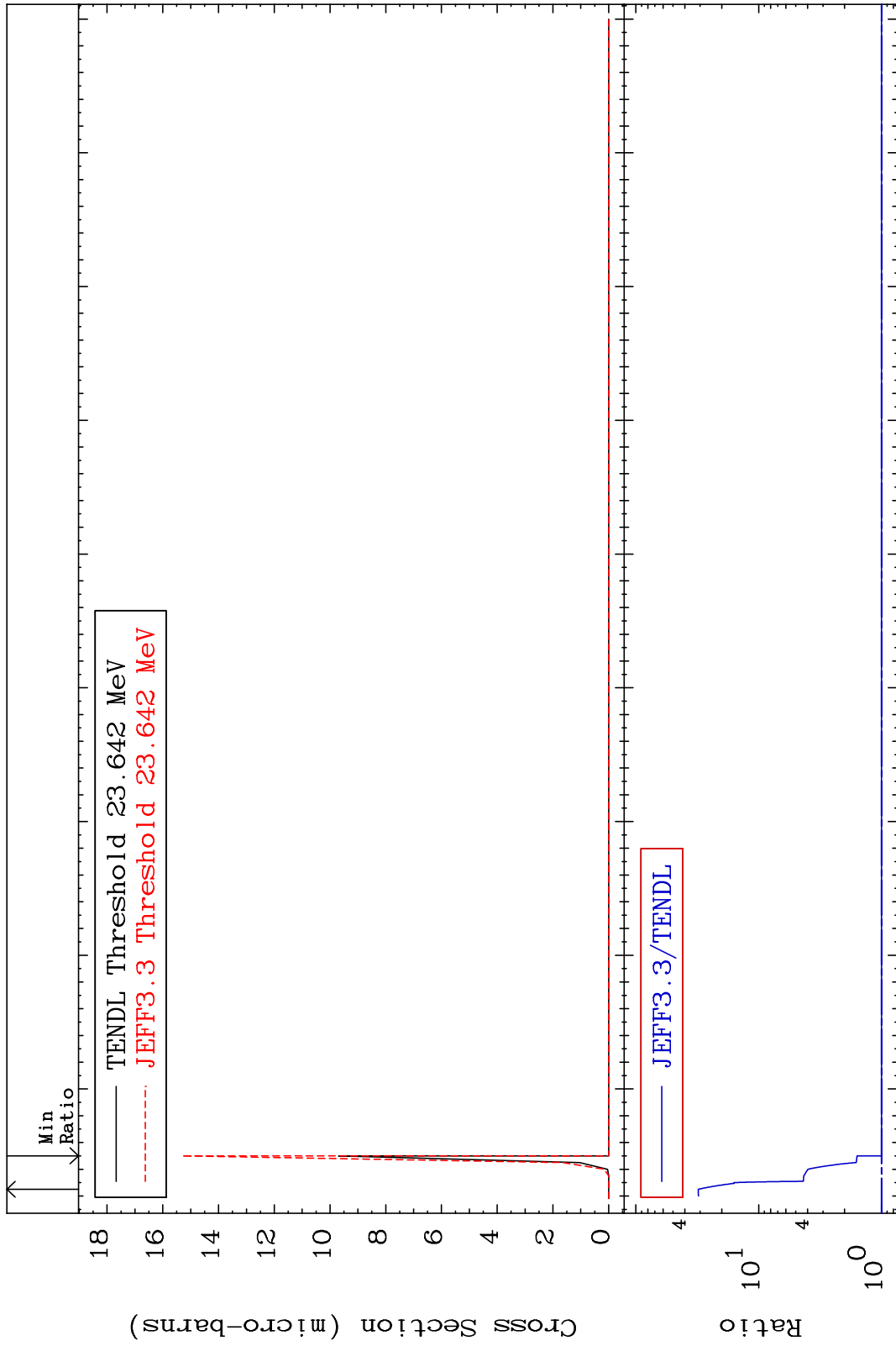
MAT 5055

(n,2n) d

50-Sn-122

Cross Section

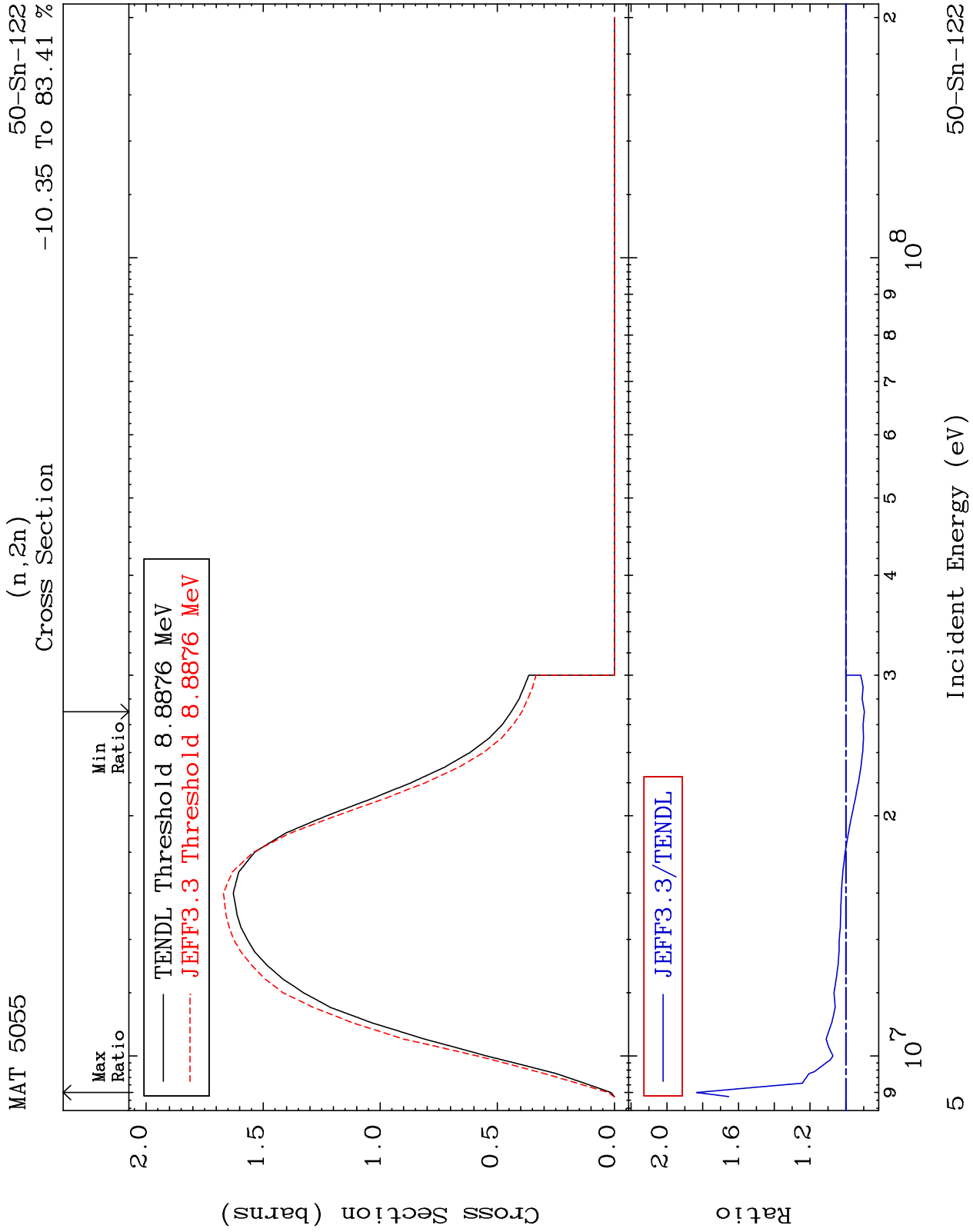
0.000 To 3001. %



4

Incident Energy (MeV)

50-Sn-122



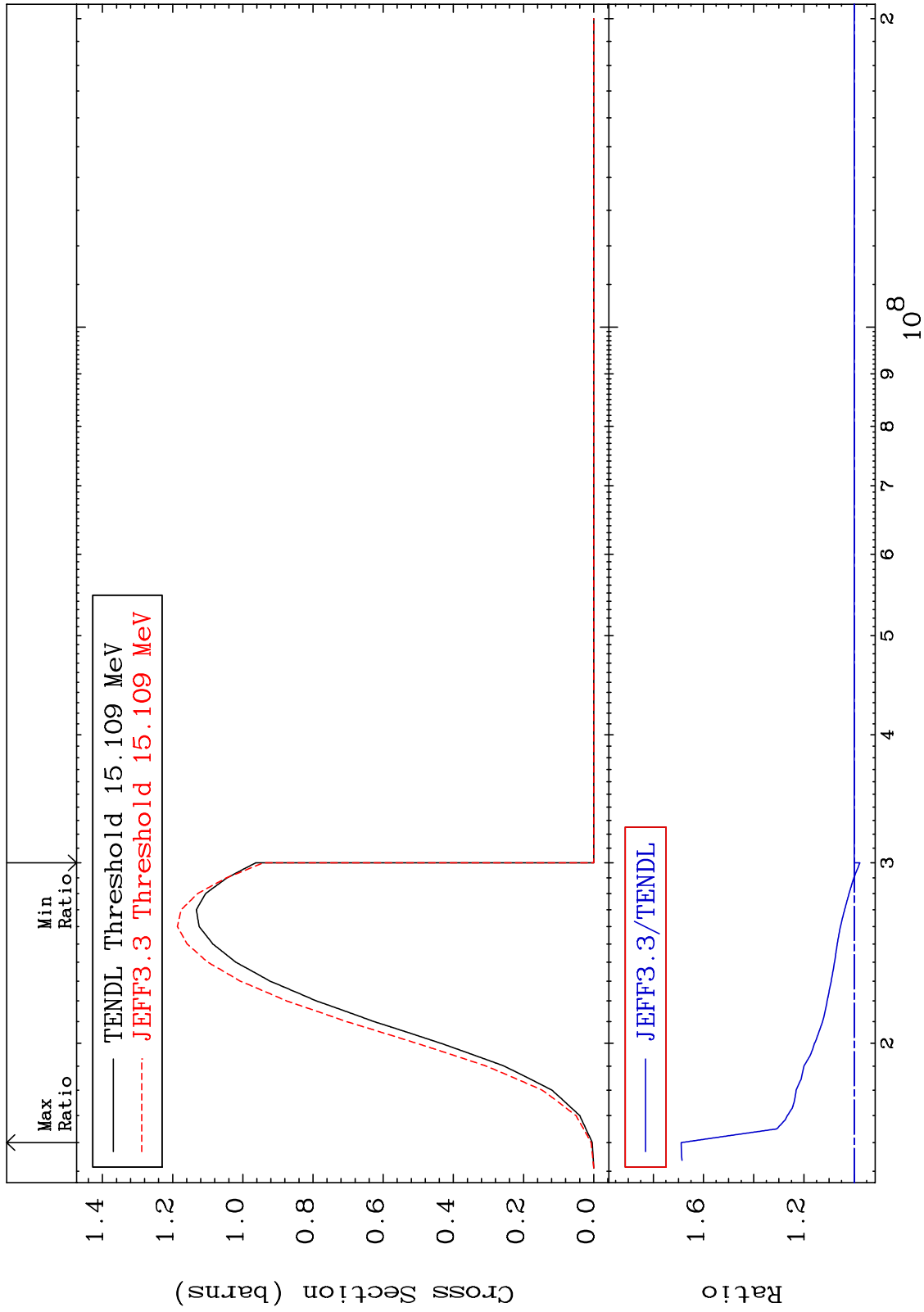
MAT 5055

(n,3n)

50-Sn-122

Cross Section

-2.295 To 68.89 %



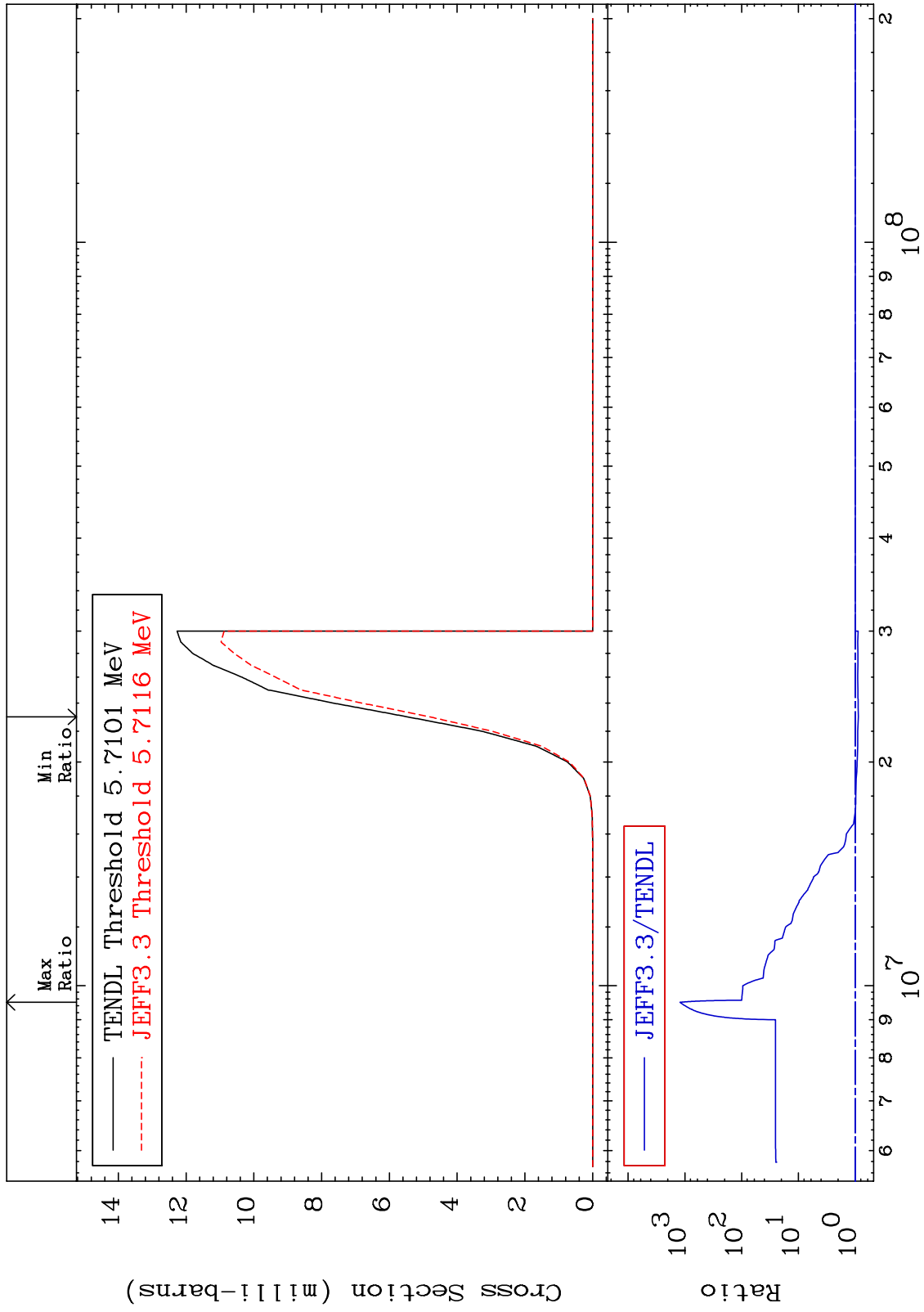
MAT 5055

(n, n') α

50-Sn-122

Cross Section

-12.02 To 9999. %



7

Incident Energy (eV)

50-Sn-122

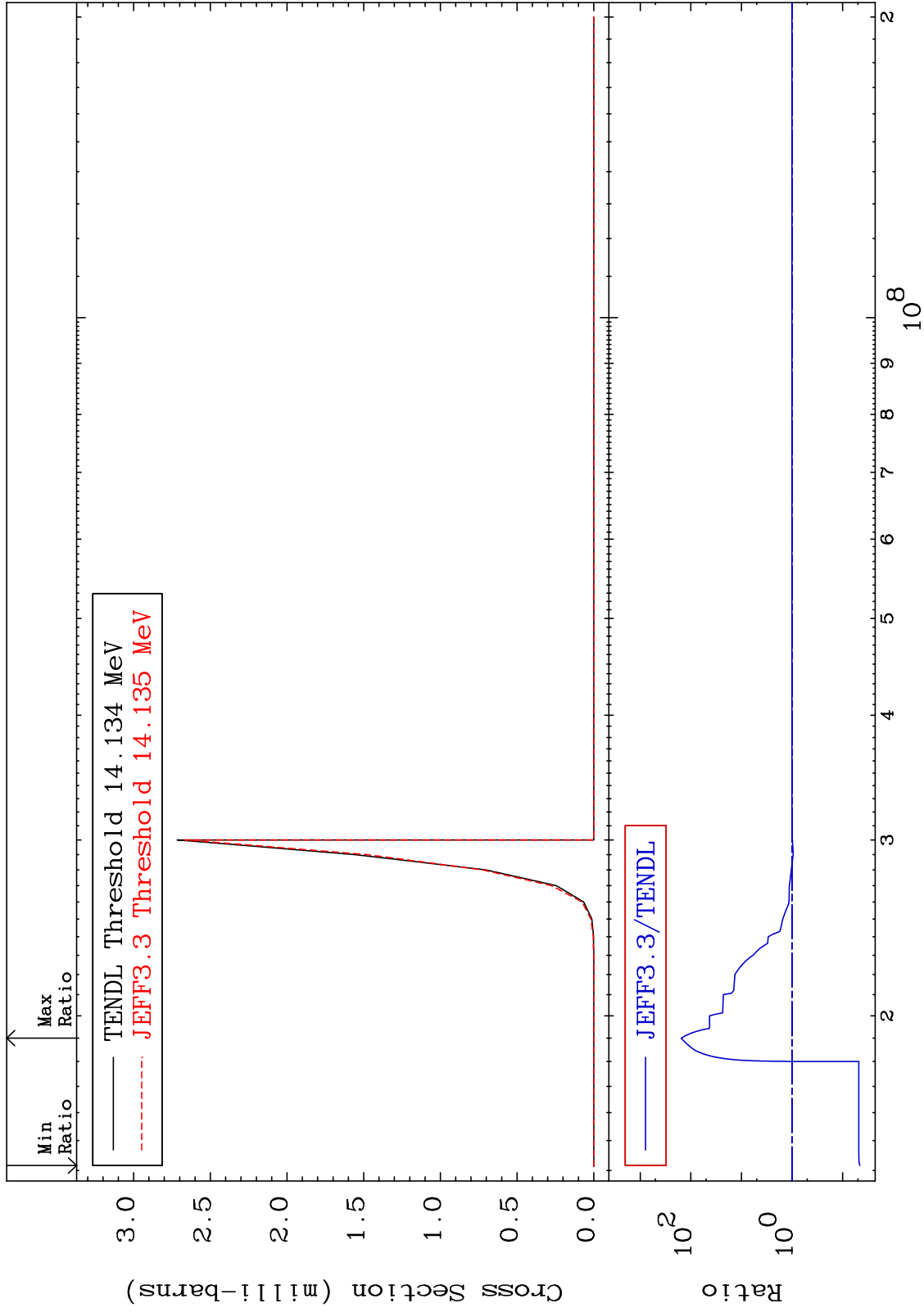
MAT 5055

(n,2n) α

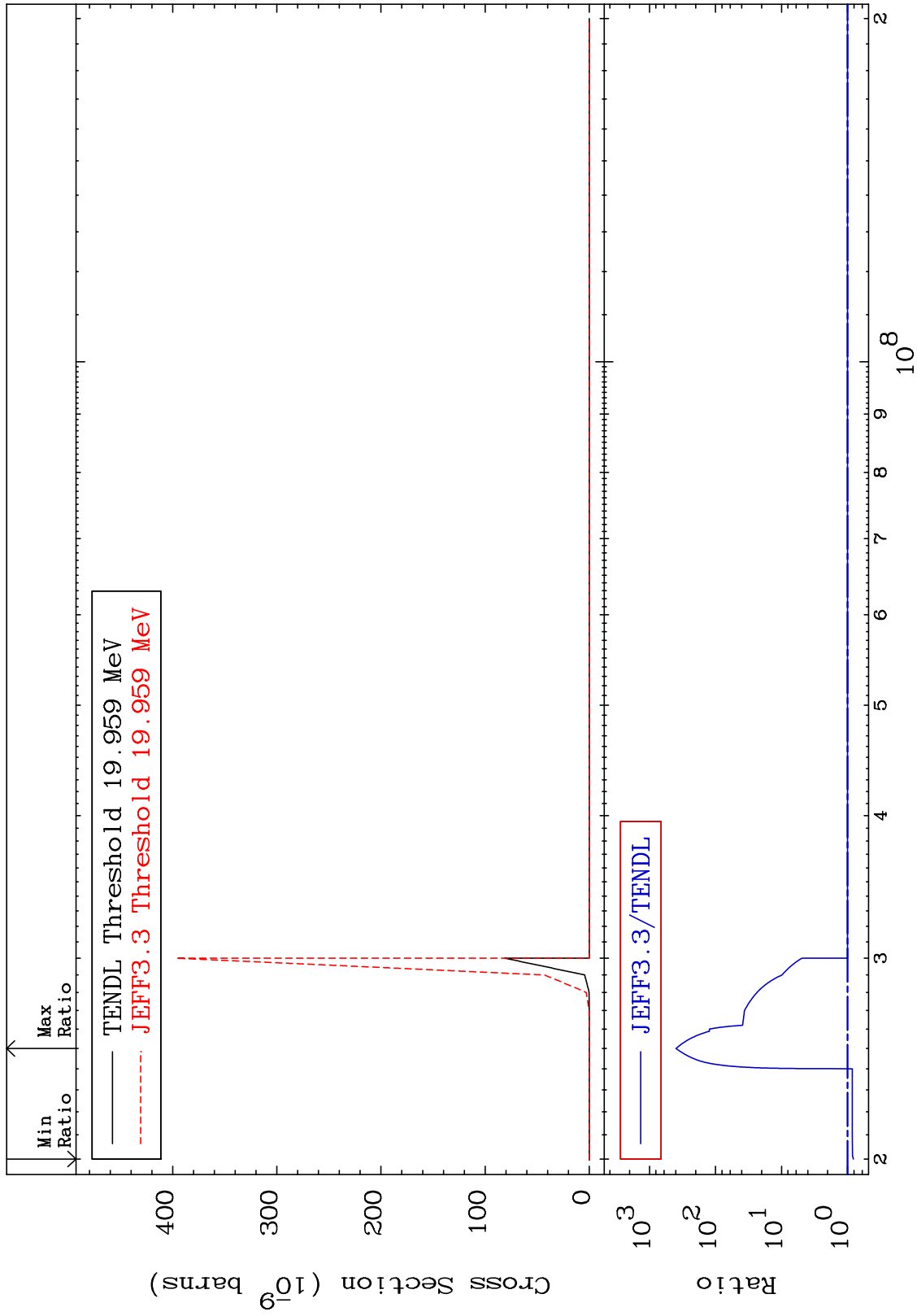
50-Sn-122

Cross Section

-95.45 To 9999. %



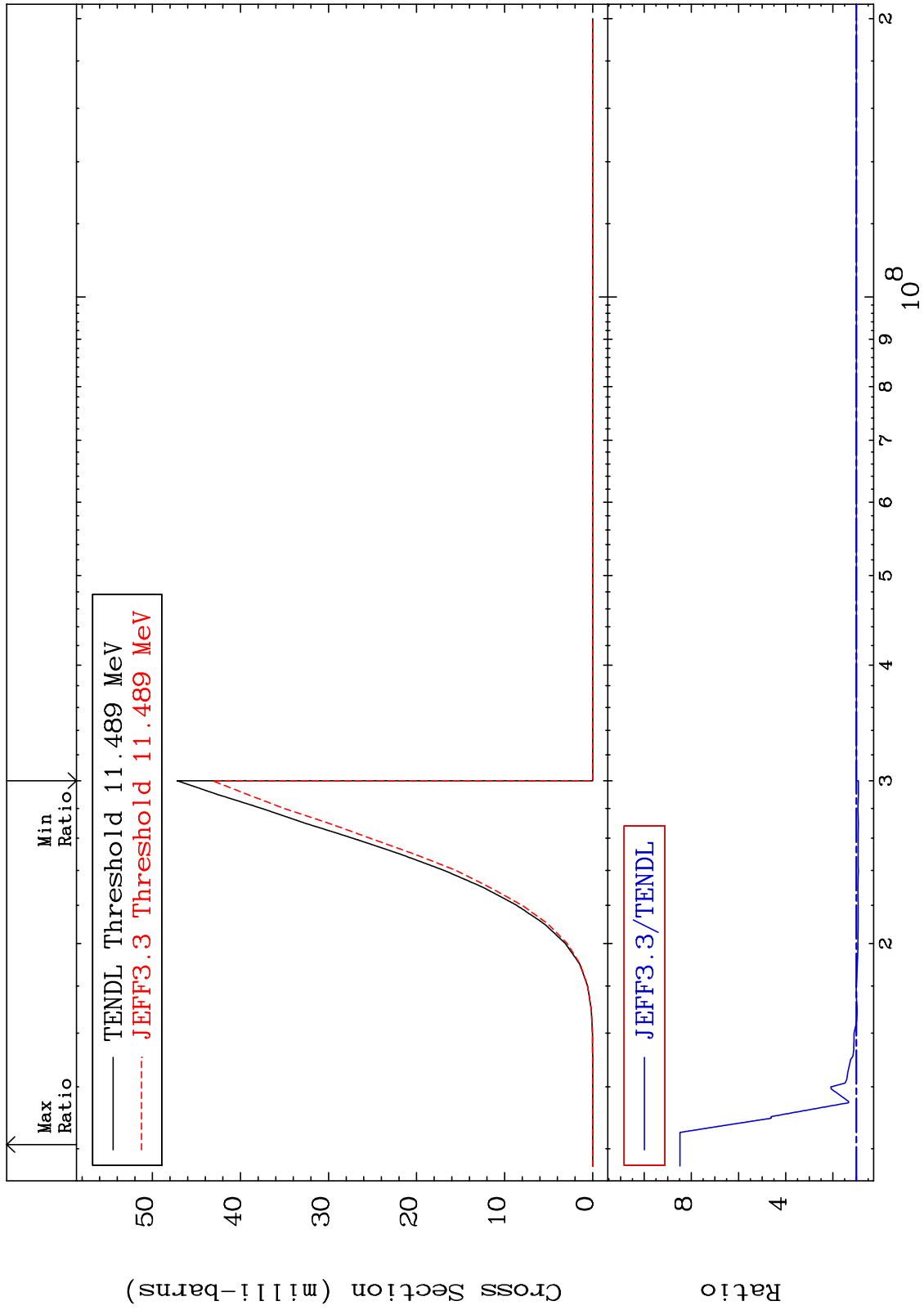
MAT 5055 (n,3n) α 50-Sn-122
Cross Section -18.60 To 9999. %



50-Sn-122

Incident Energy (eV)

MAT 5055 (n,n') p 50-Sn-122
Cross Section -8.434 To 748.1 %



10 Incident Energy (eV) 50-Sn-122

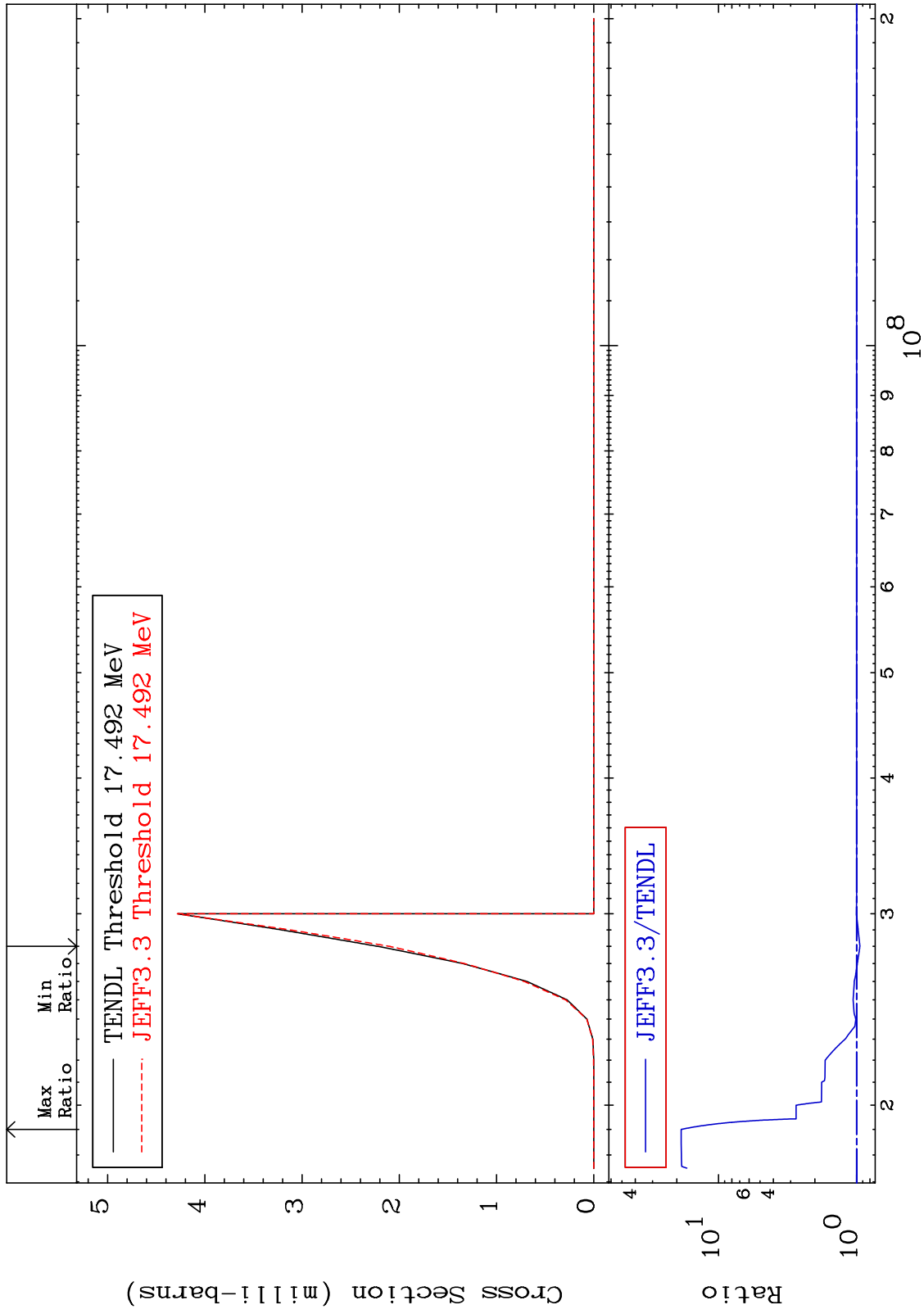
MAT 5055

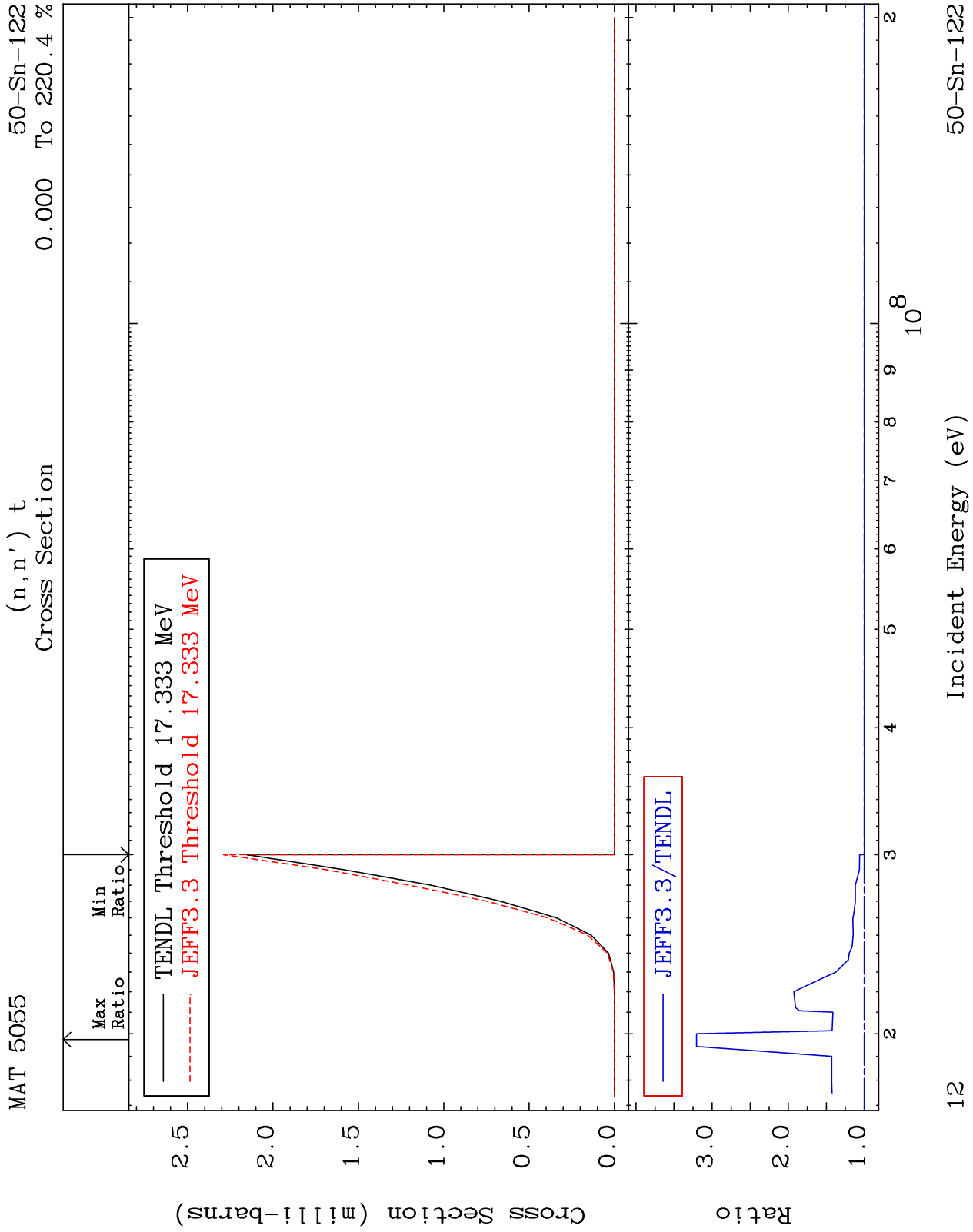
(n,n') d

50-Sn-122

Cross Section

-5.545 To 1759. %

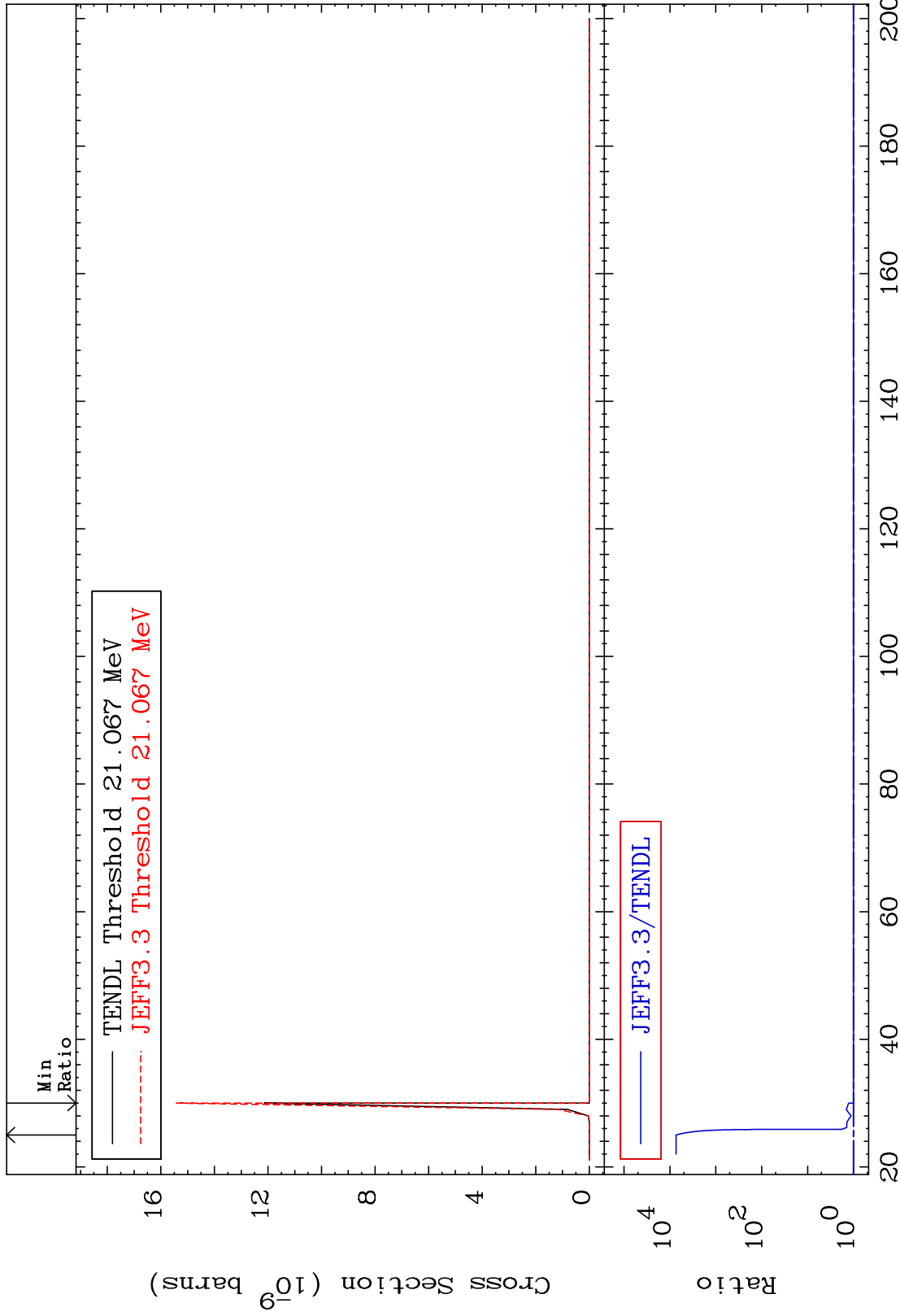




MAT 5055

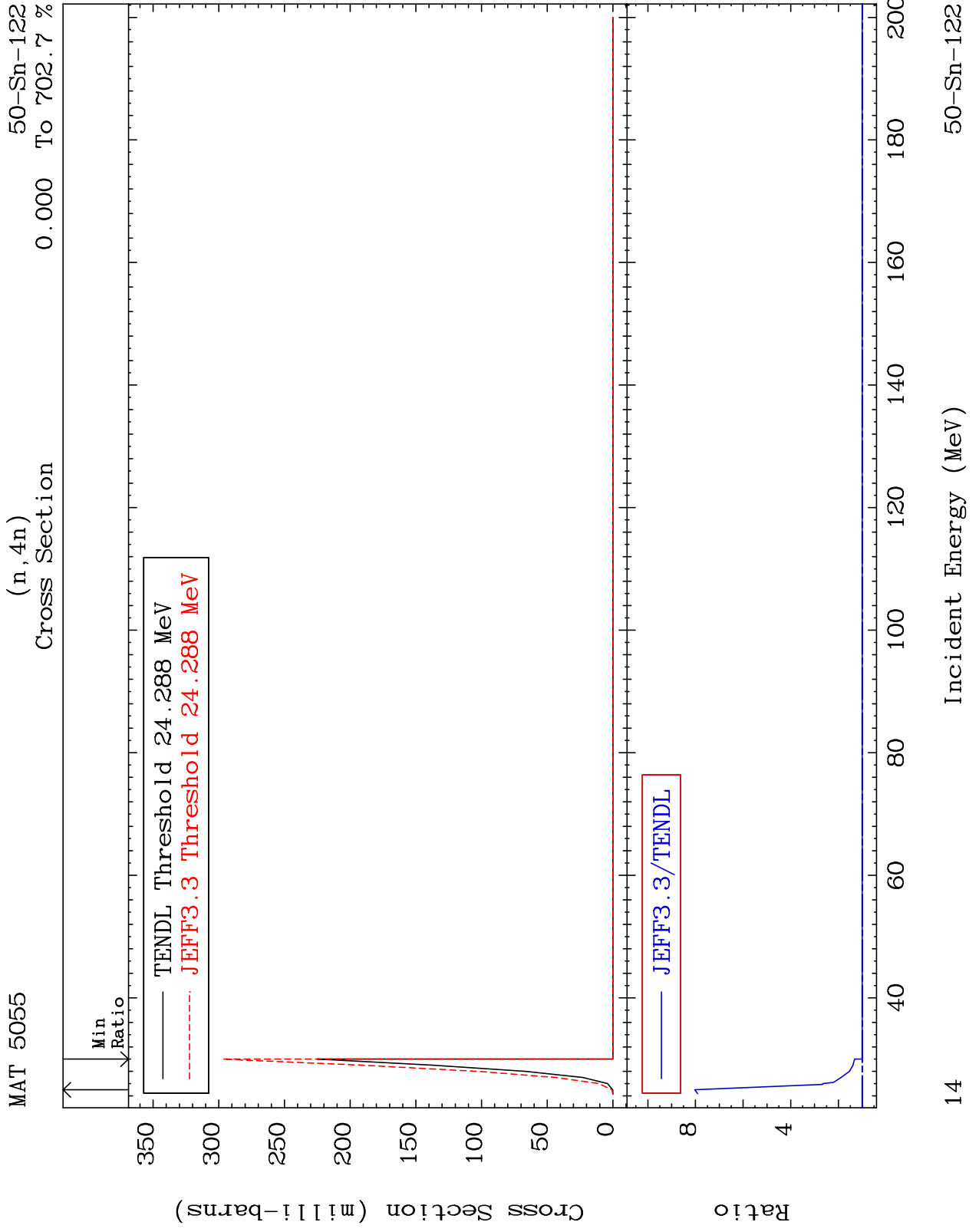
(n,n') He-3
Cross Section

50-Sn-122
To 9999. %
0.000



Incident Energy (MeV)

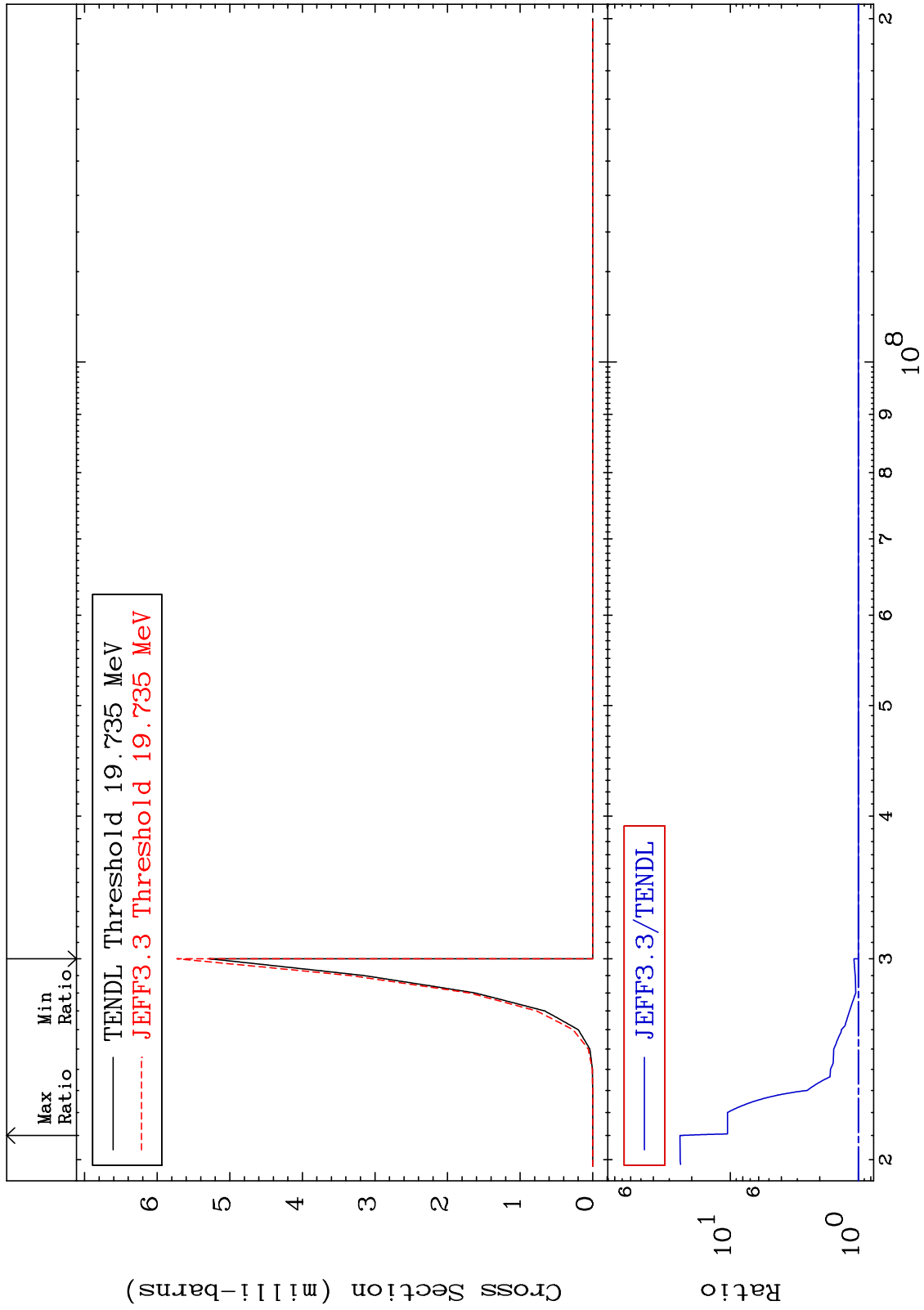
50-Sn-122



MAT 5055

(n,2n) p
Cross Section

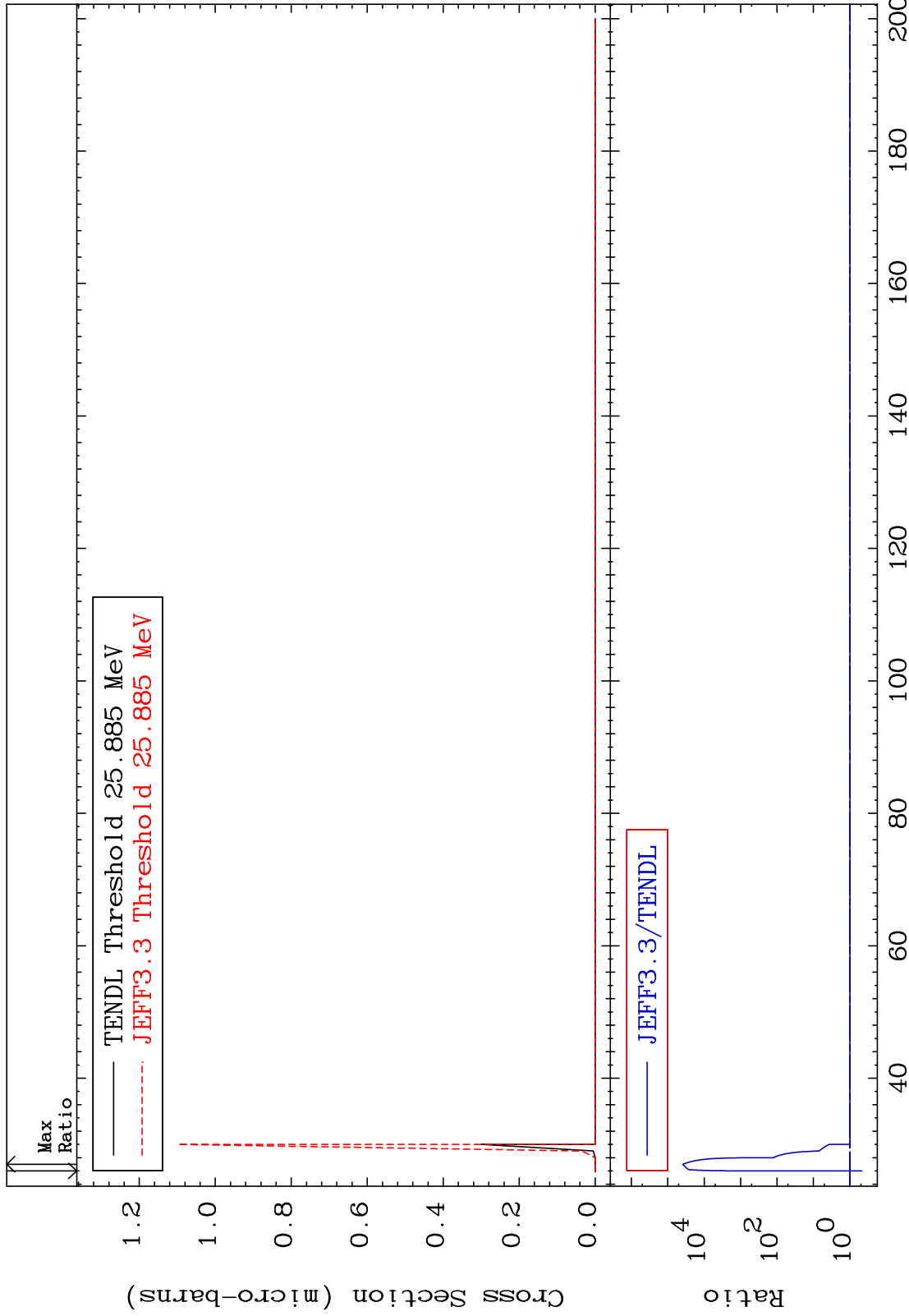
50-Sn-122
To 2373. %
0.000



MAT 5055

(n,3n) p
Cross Section

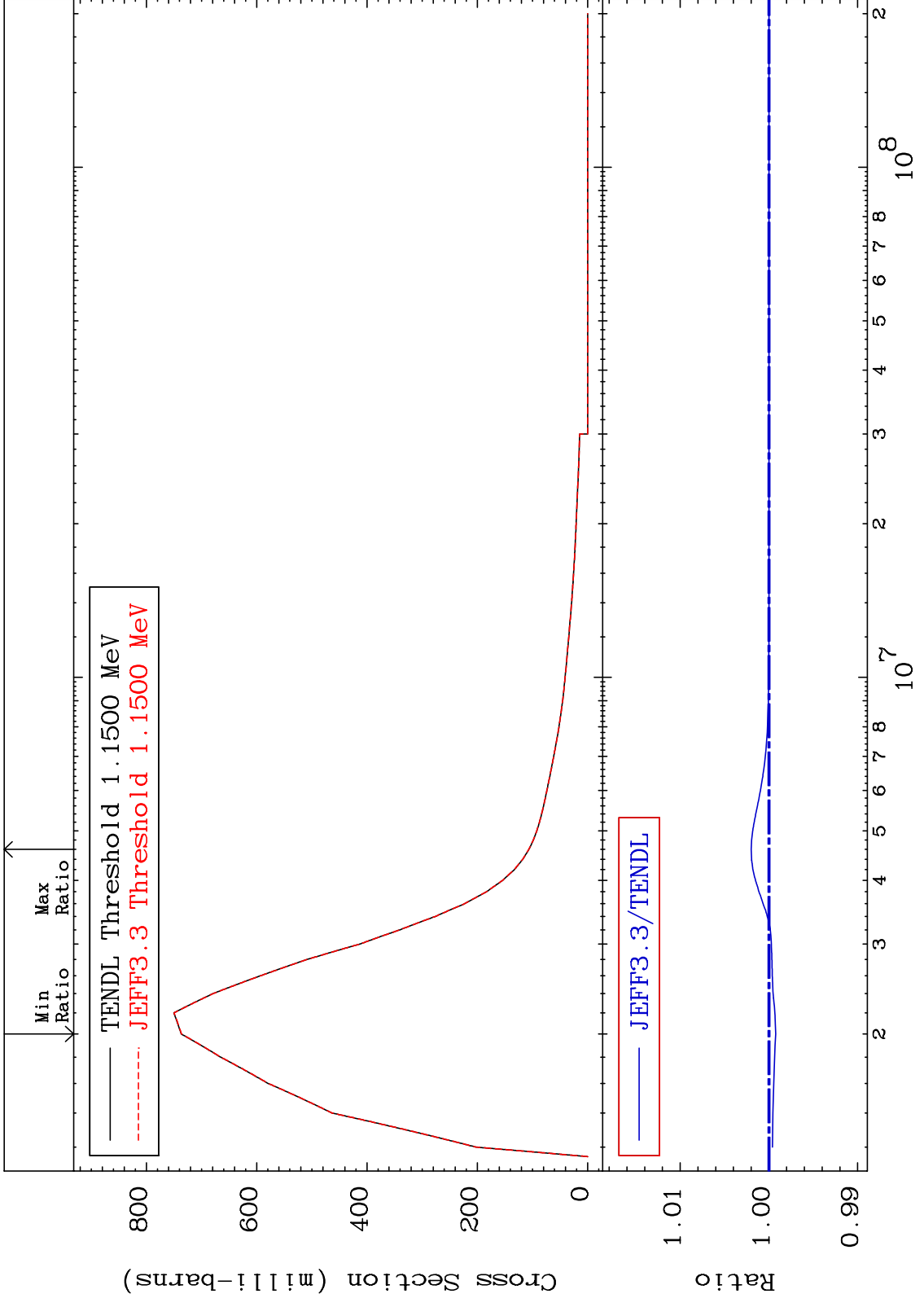
50-Sn-122
-53.68 To 9999. %



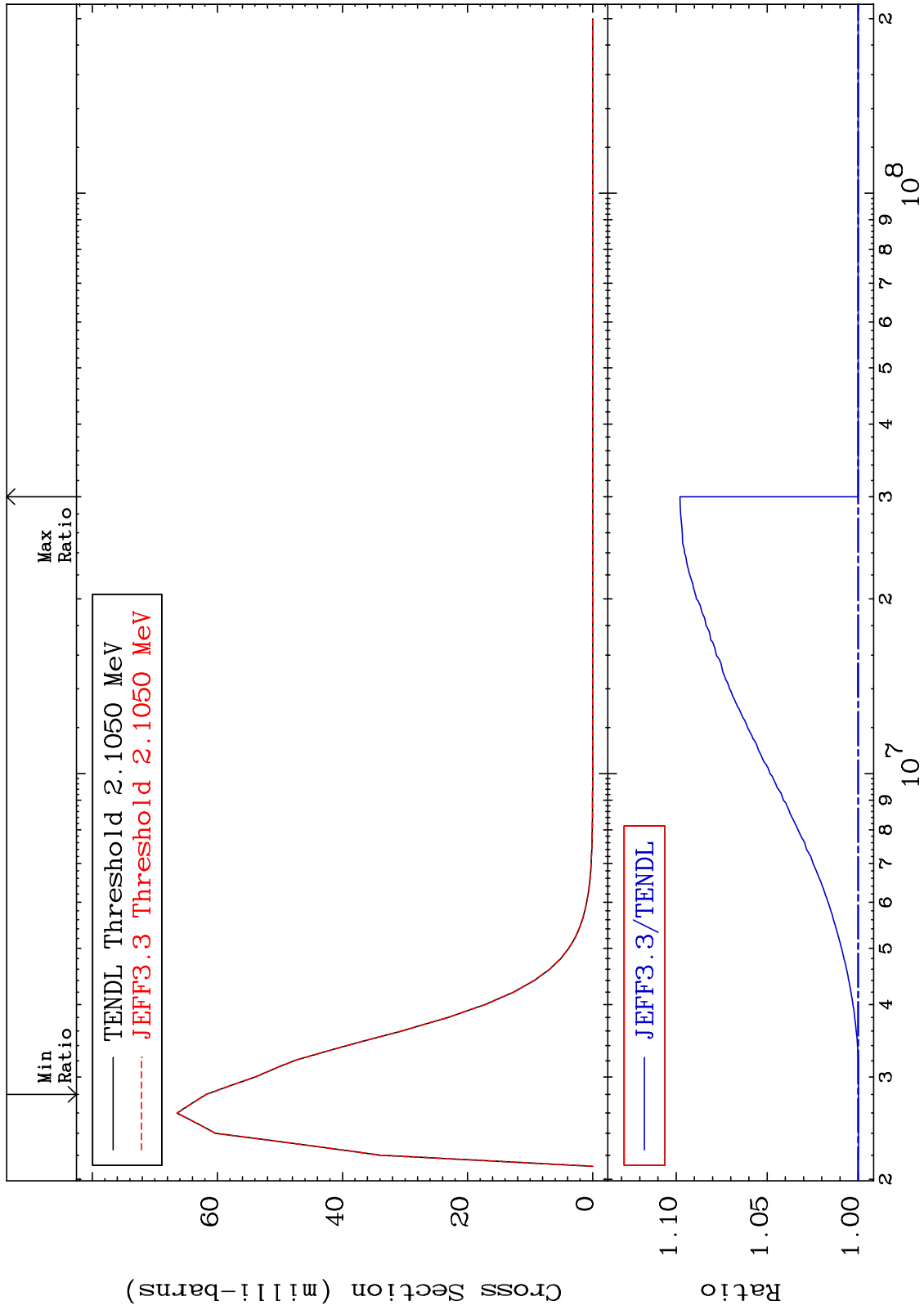
MAT 5055

MT= 51 (n,n') Level
Cross Section

50-Sn-122
-0.075 To 0.200 %



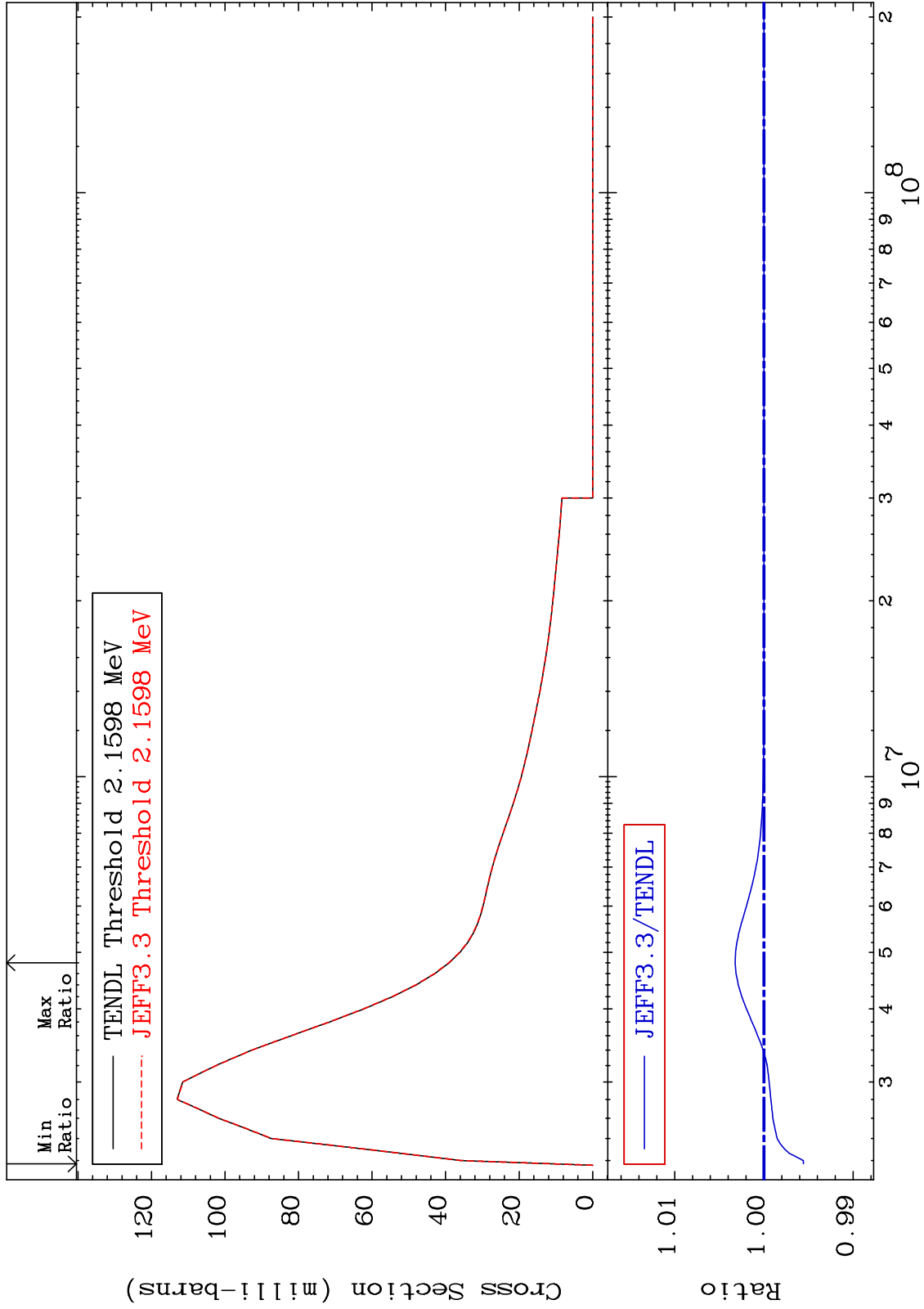
MAT 5055 MT= 52 (n, n') Level Cross Section 50-Sn-122 -0.015 To 9.789 %



MAT 5055

MT= 53 (n,n') Level
Cross Section

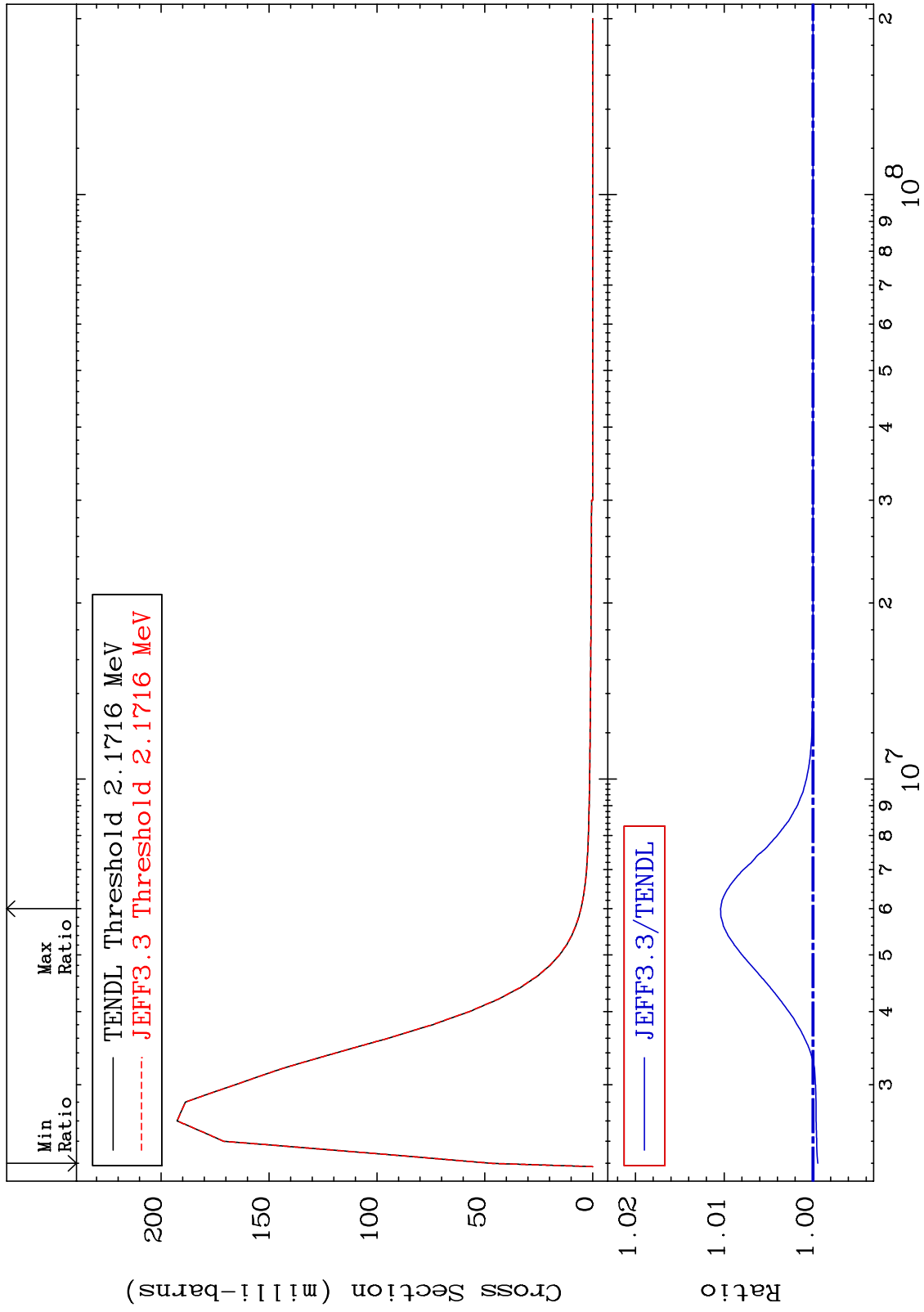
50-Sn-122
-0.441 To 0.322 %



MAT 5055

MT= 54 (n,n') Level
Cross Section

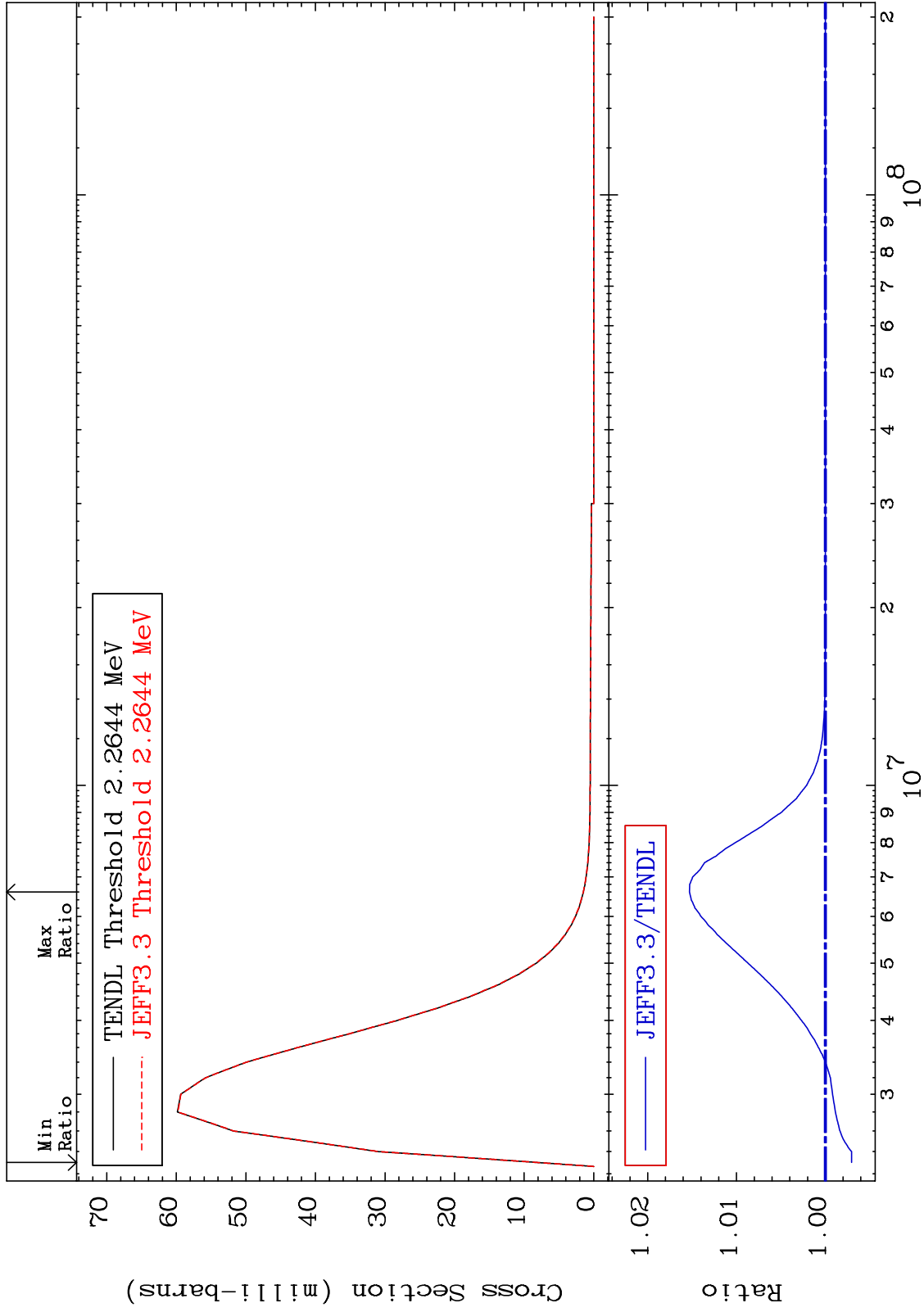
50-Sn-122
-0.055 To 1.040 %



MAT 5055

MT= 55 (n,n') Level
Cross Section

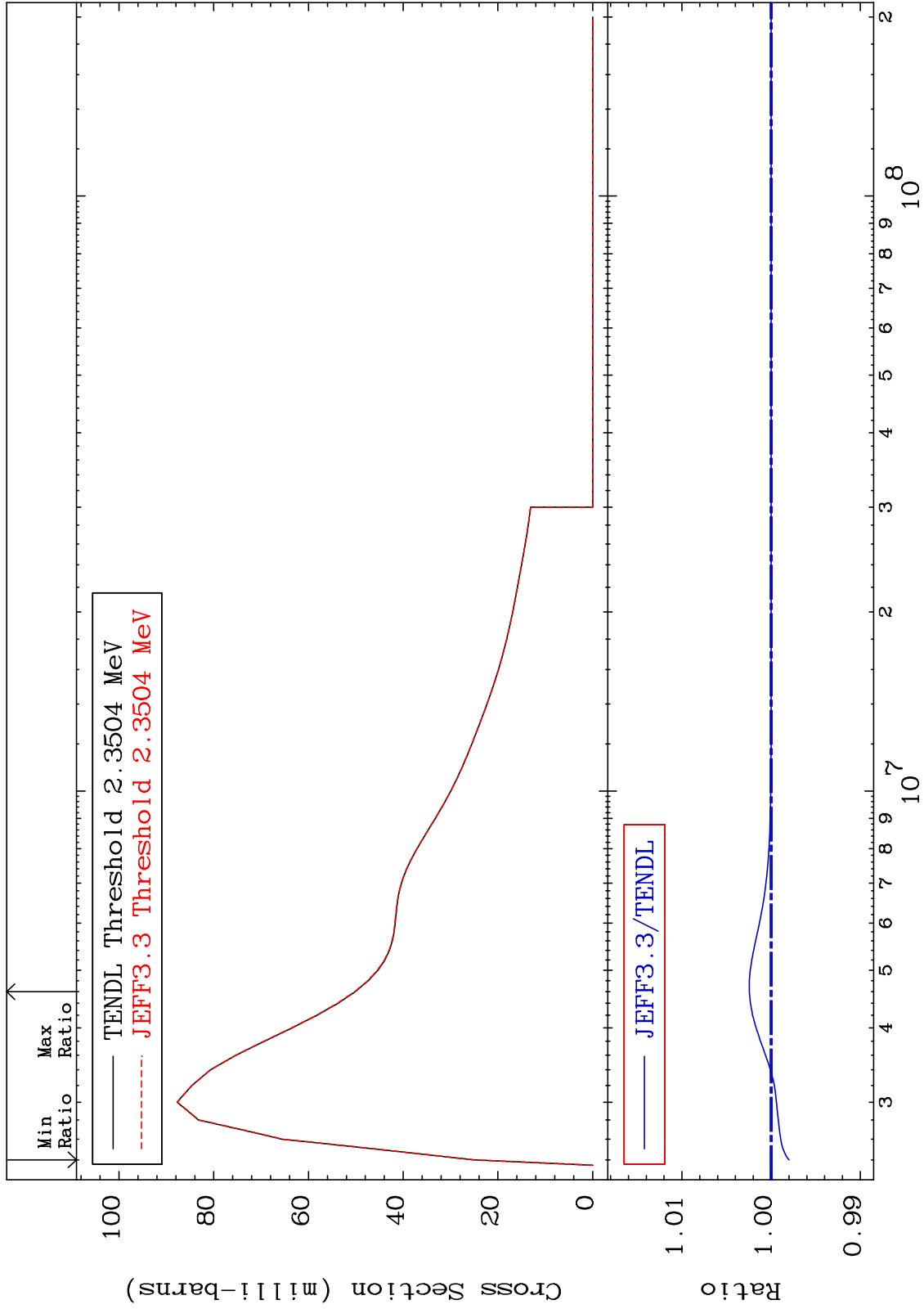
50-Sn-122
-0.296 To 1.529 %



MAT 5055

MT= 56 (n,n') Level
Cross Section

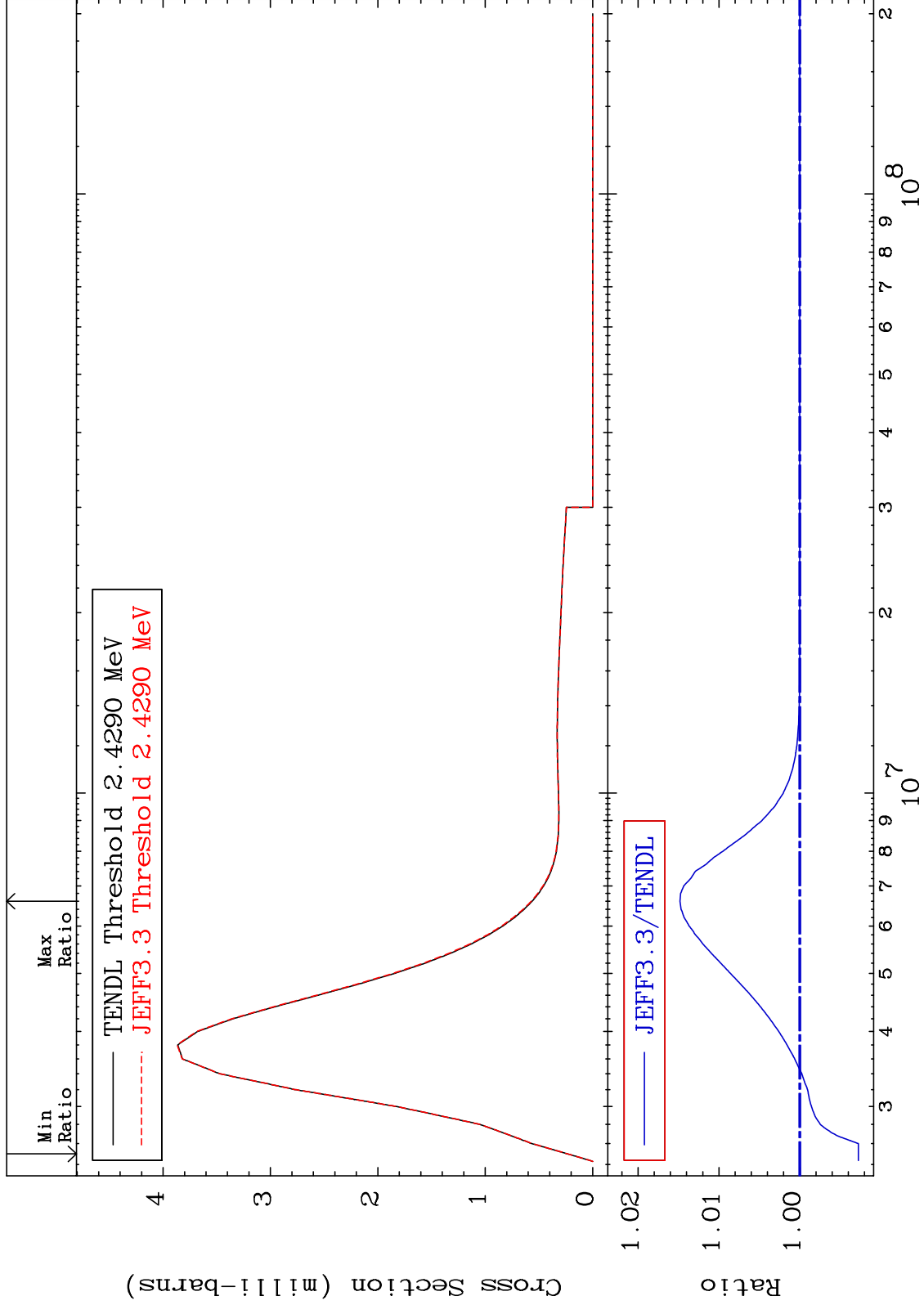
50-Sn-122
-0.201 To 0.244 %



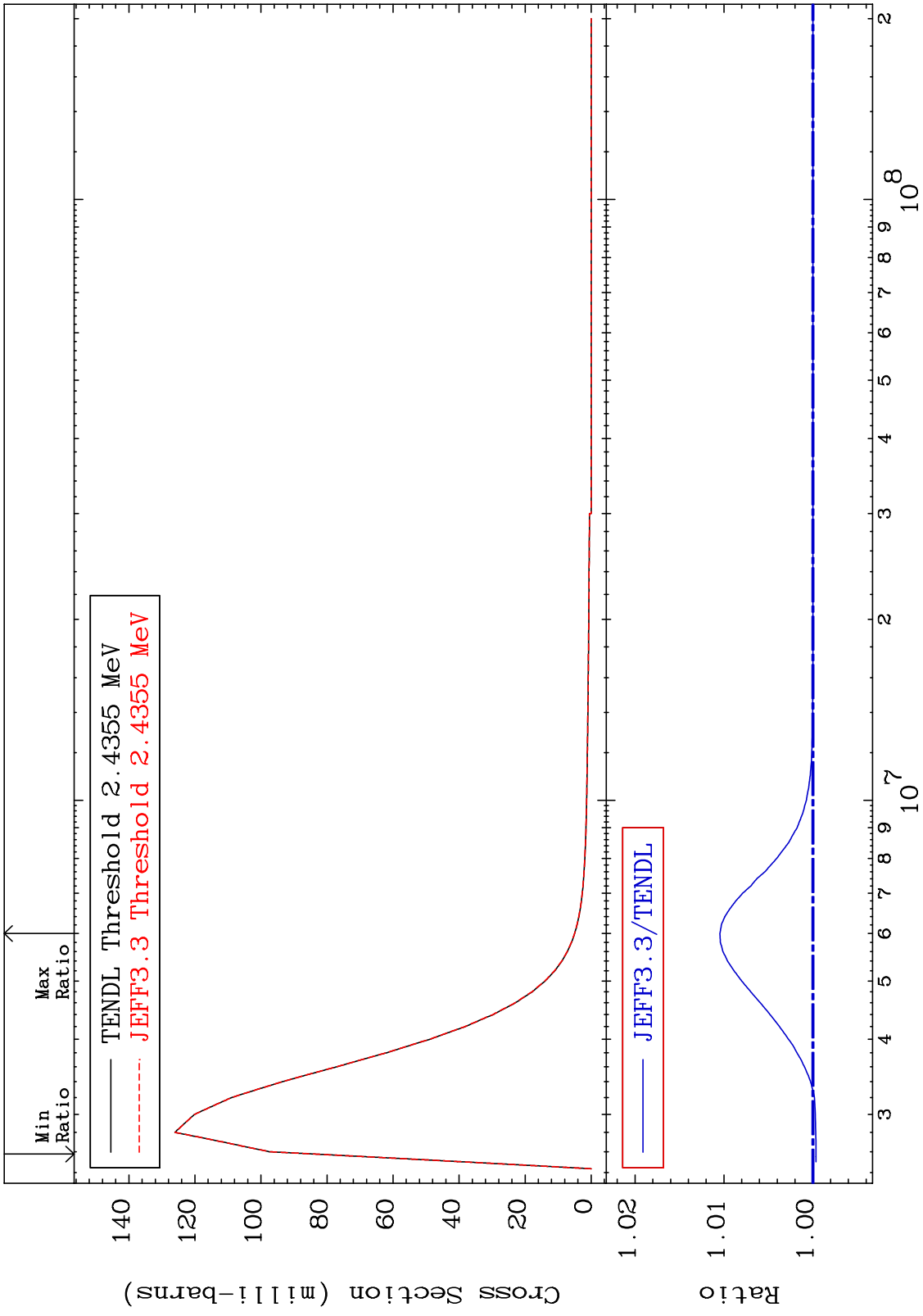
MAT 5055

MT= 57 (n,n') Level
Cross Section

50-Sn-122
-0.725 To 1.481 %



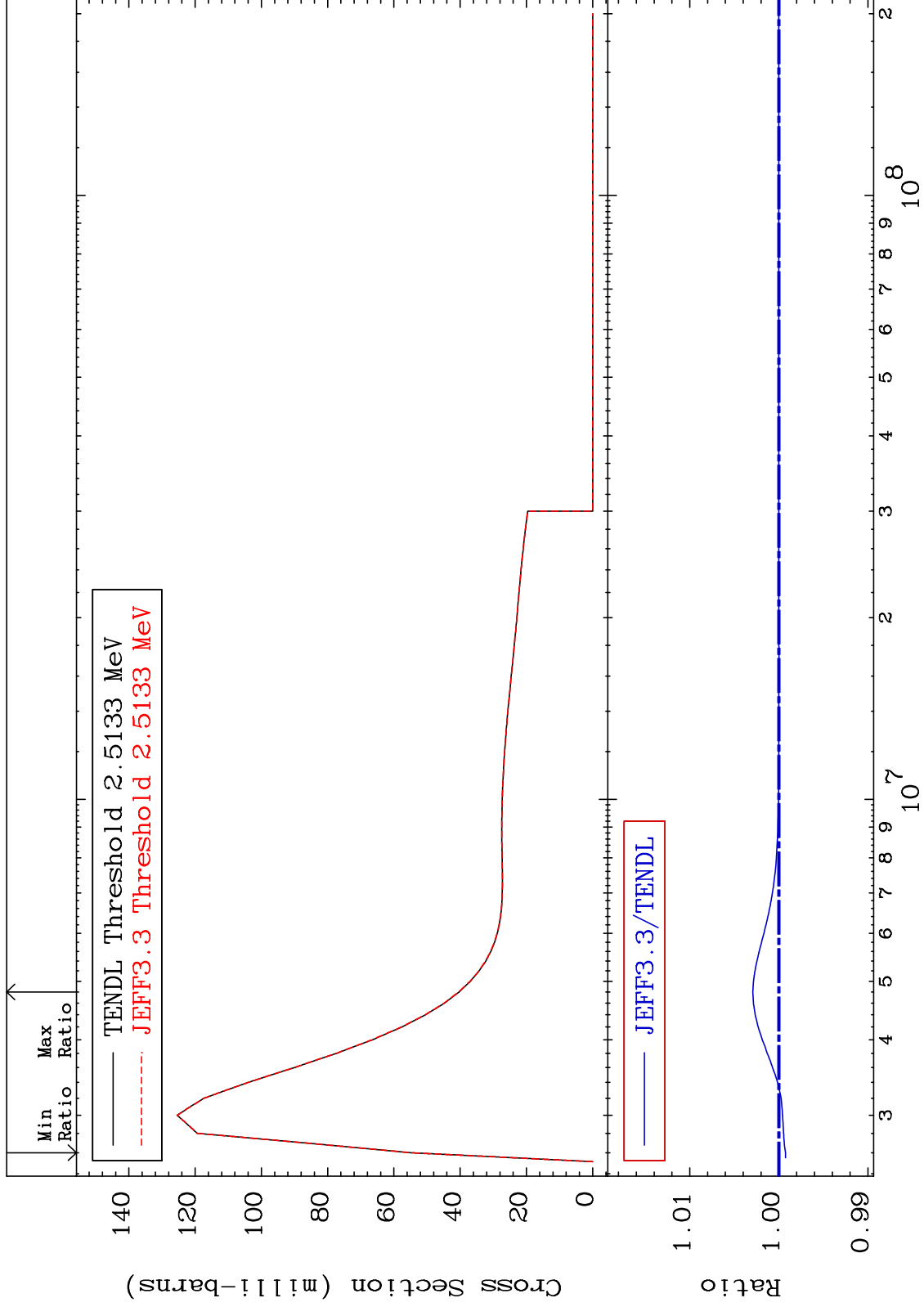
MAT 5055 MT= 58 (n,n') Level Cross Section 50-Sn-122
 -0.036 To 1.045 %



MAT 5055

MT= 59 (n, n') Level
Cross Section

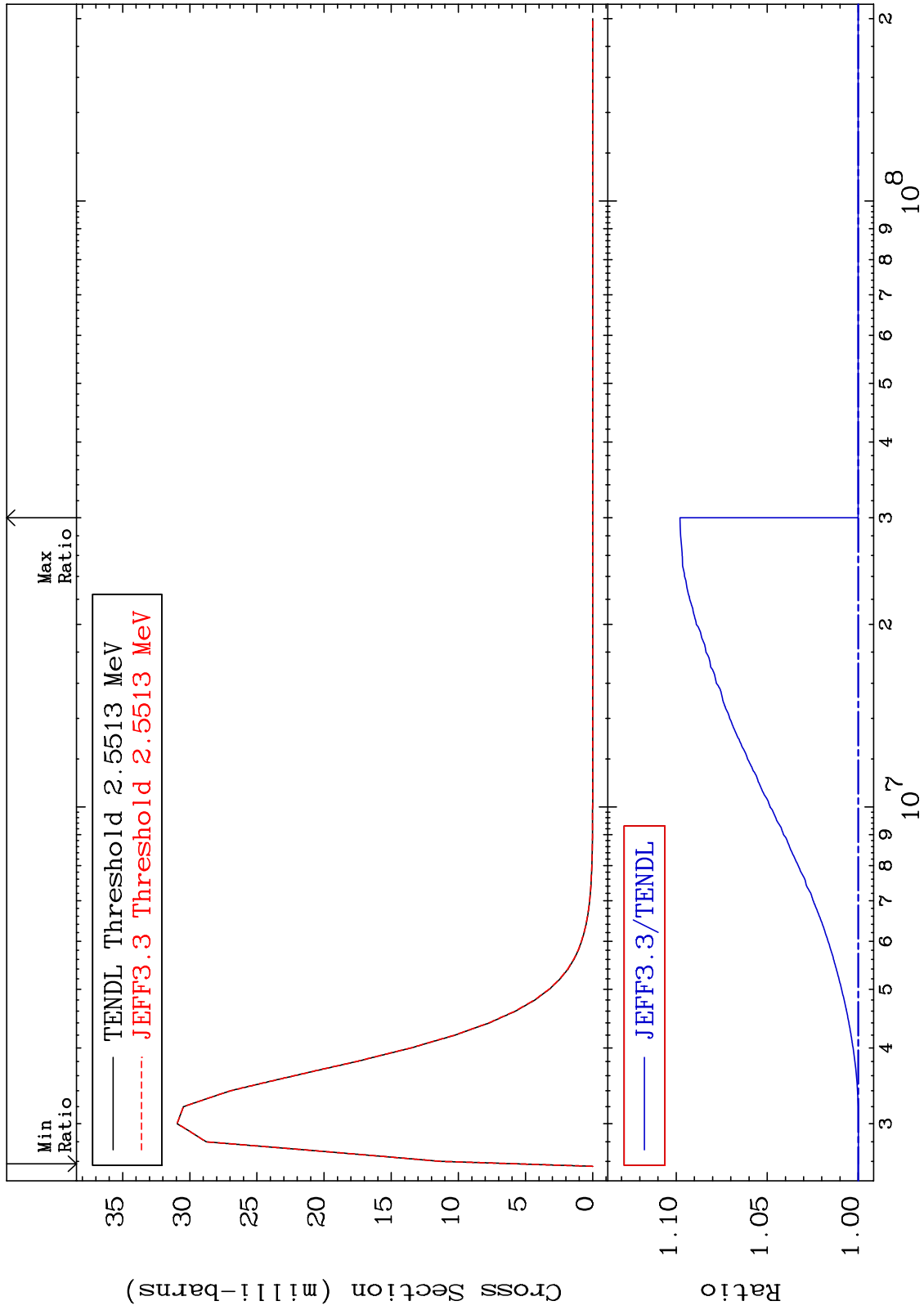
50-Sn-122
-0.075 To 0.291 %



MAT 5055

MT= 60 (n,n') Level
Cross Section

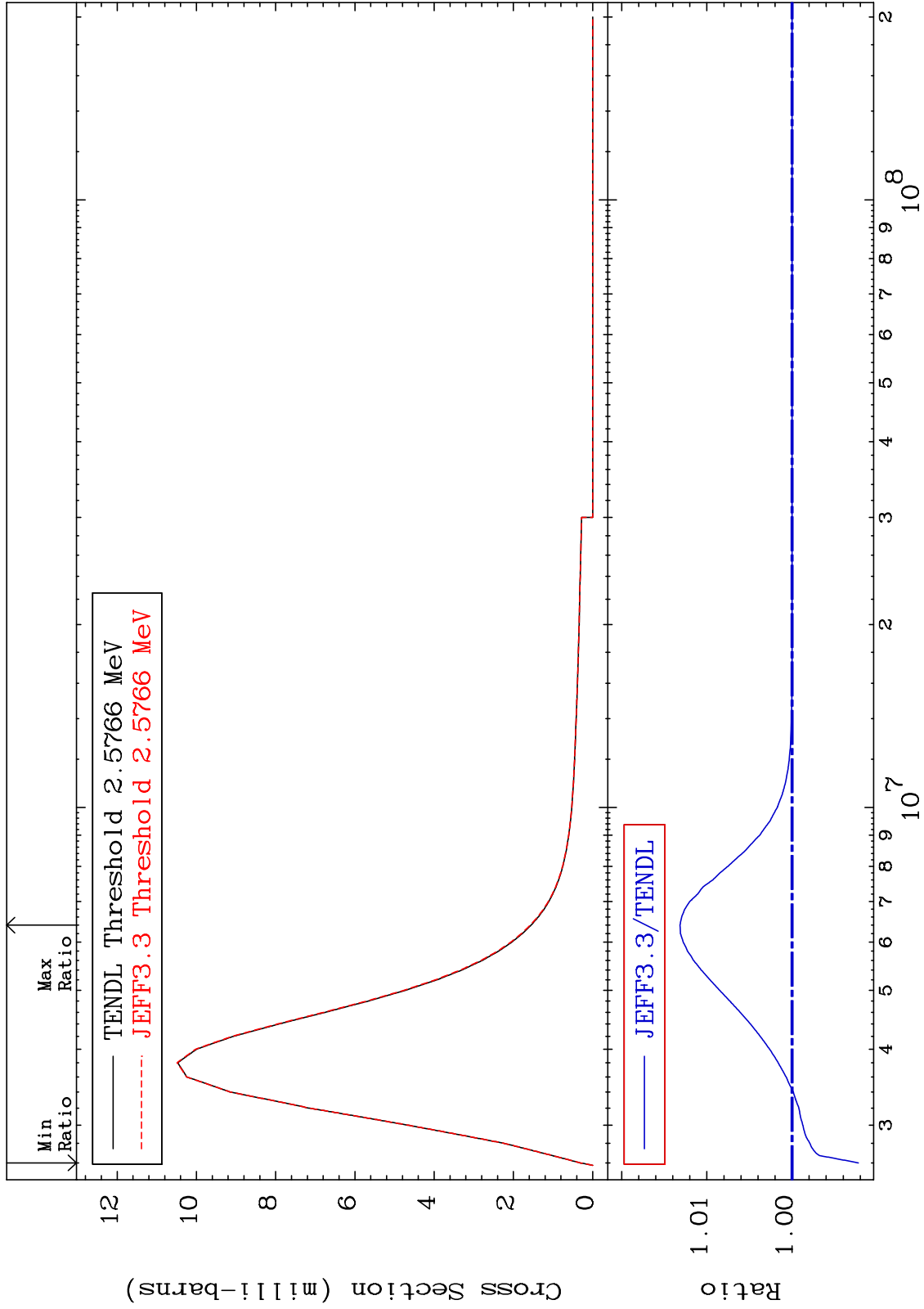
50-Sn-122
-0.010 To 9.789 %



MAT 5055

MT= 61 (n,n') Level
Cross Section

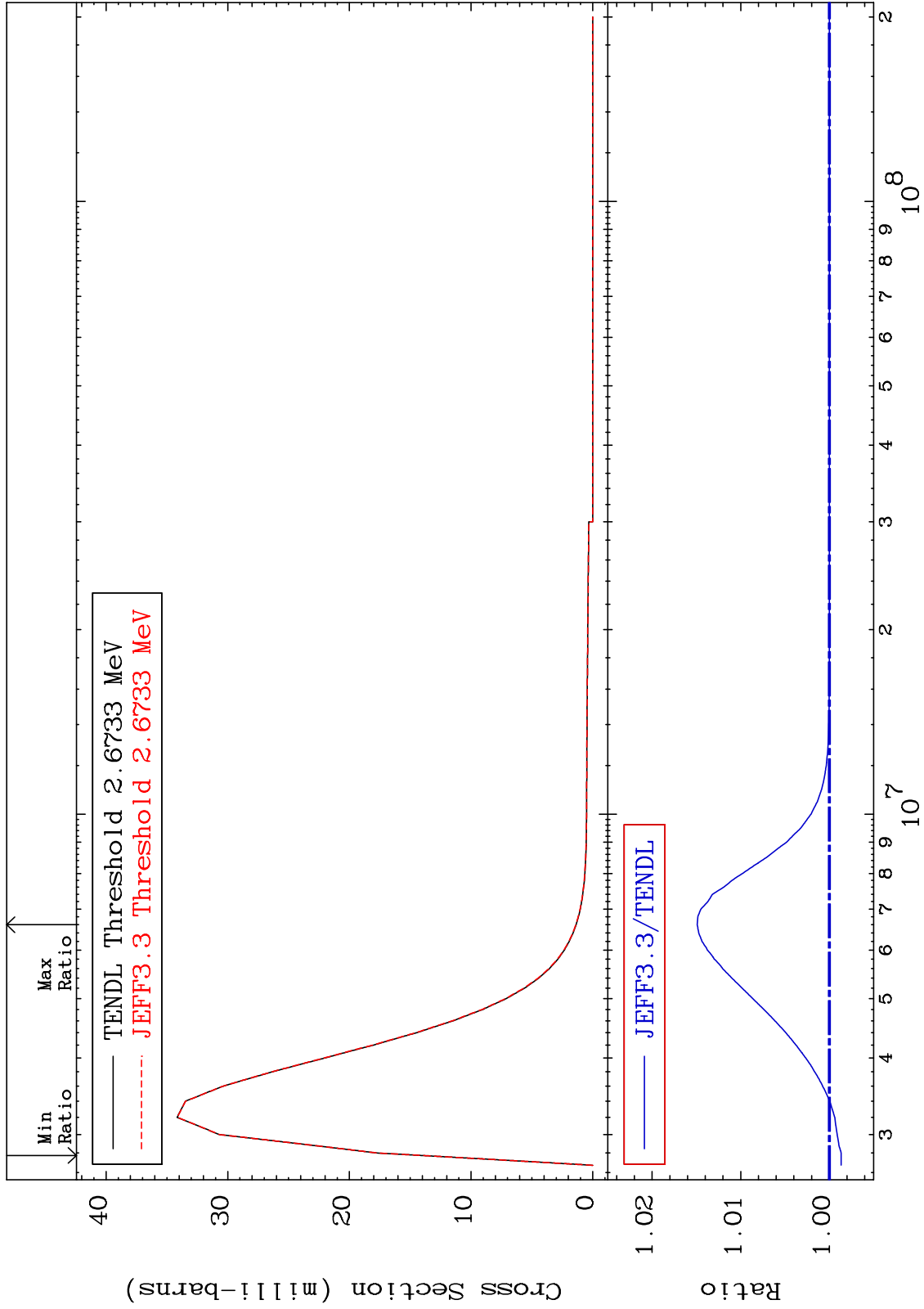
50-Sn-122
-0.778 To 1.315 %



MAT 5055

MT= 62 (n,n') Level
Cross Section

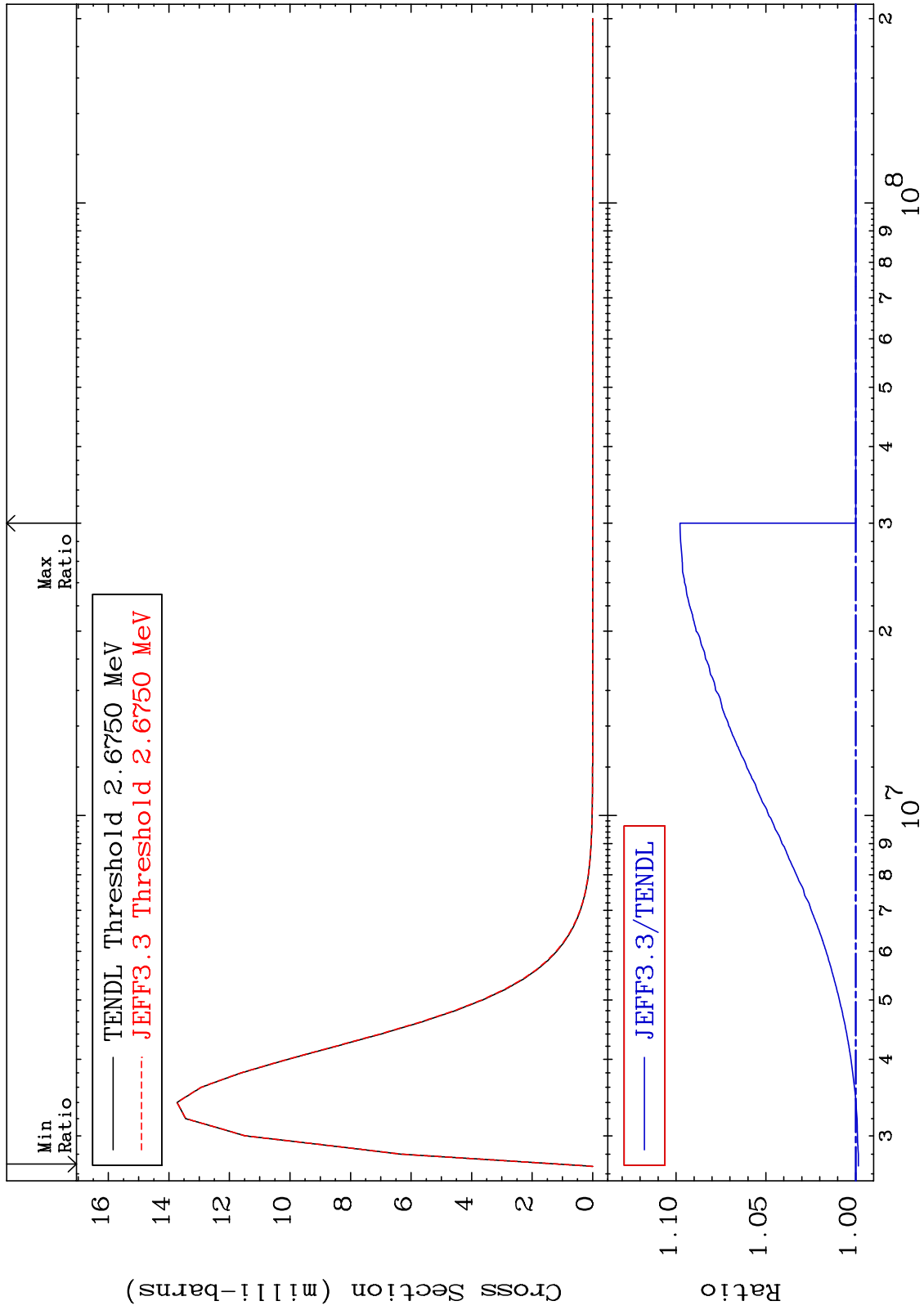
50-Sn-122
-0.134 To 1.491 %



MAT 5055

MT= 63 (n, n') Level
Cross Section

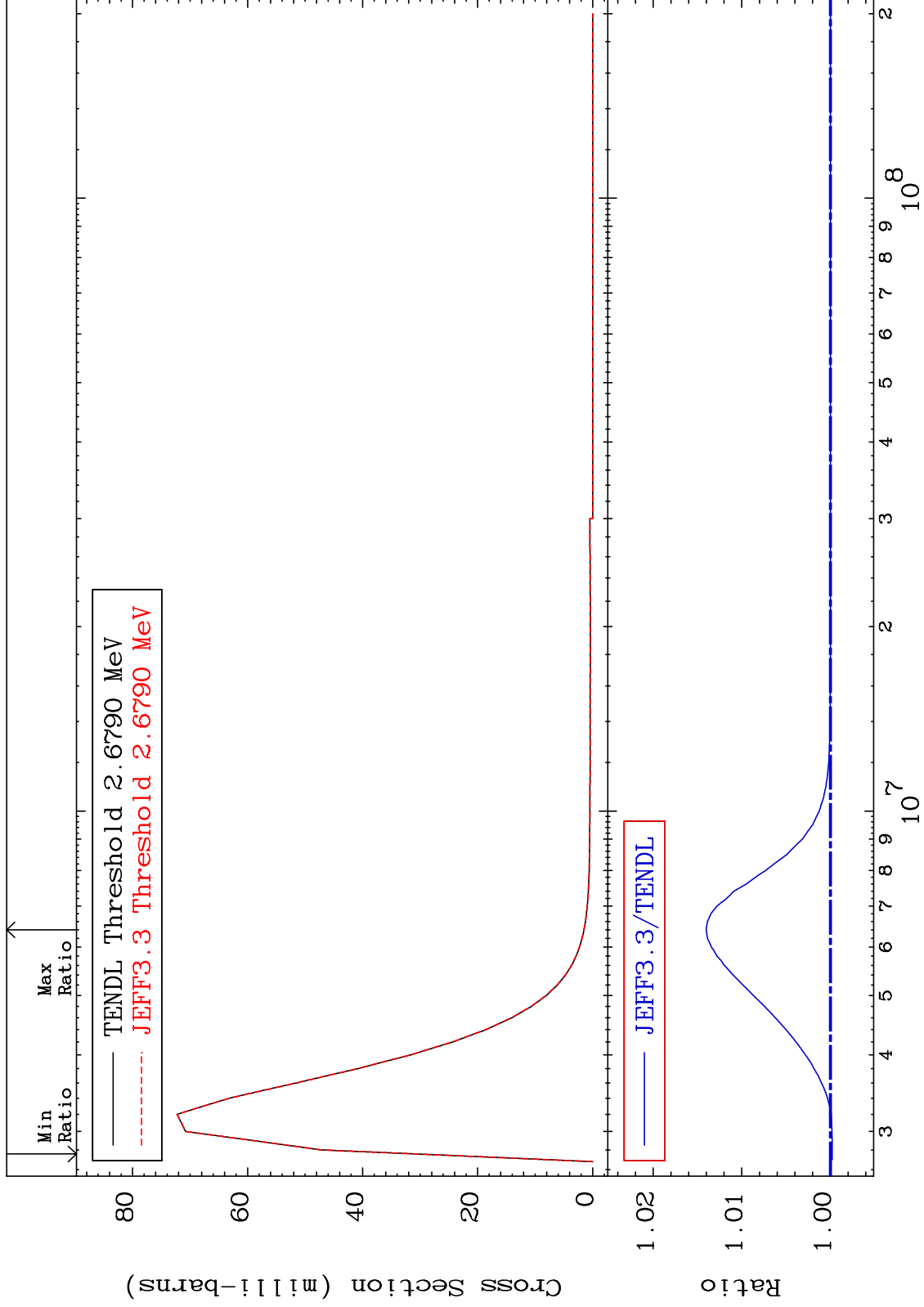
50-Sn-122
-0.150 To 9.780 %



MAT 5055

MT= 64 (n,n') Level
Cross Section

50-Sn-122
-0.021 To 1.402 %

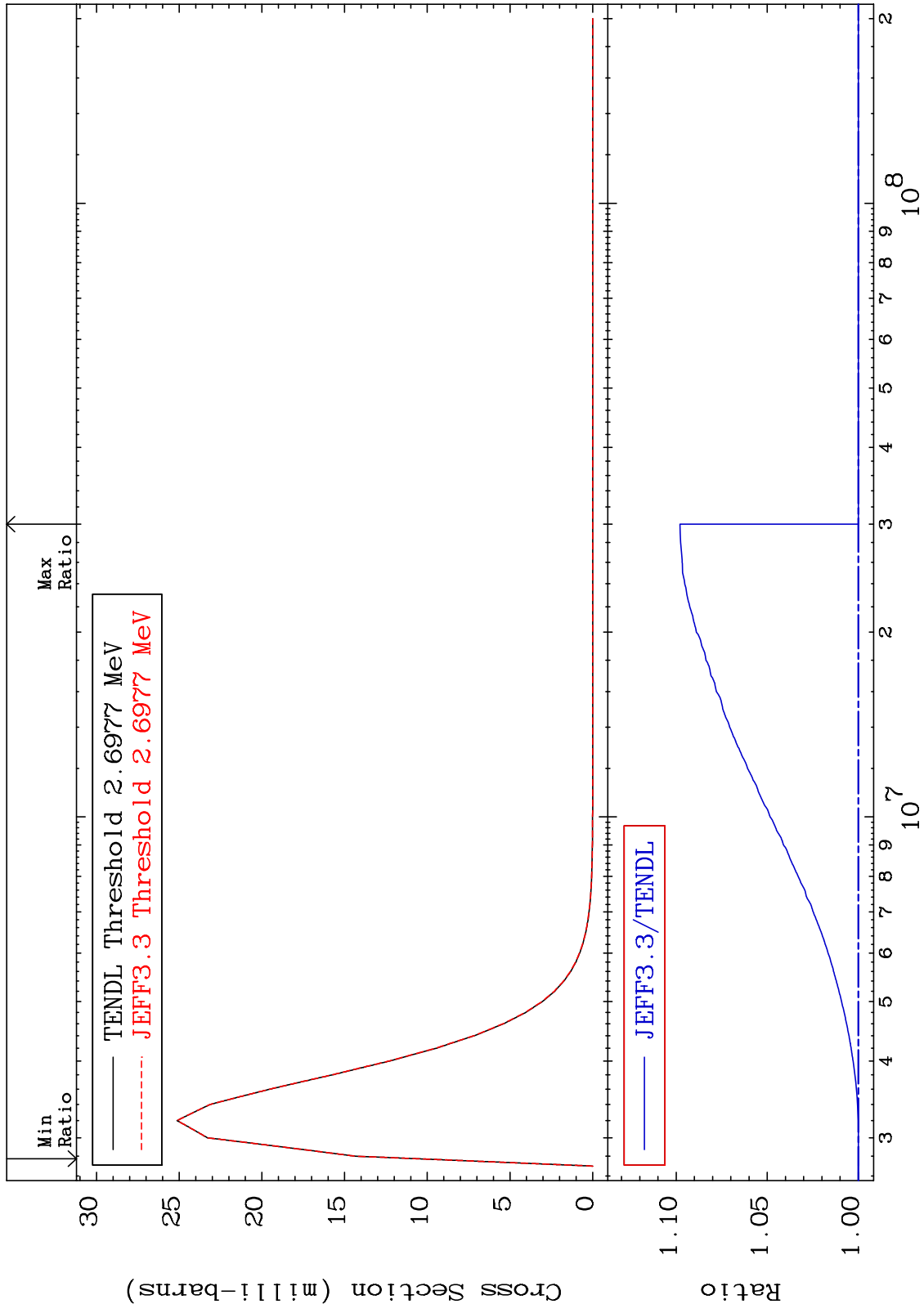


30

Incident Energy (eV)

50-Sn-122

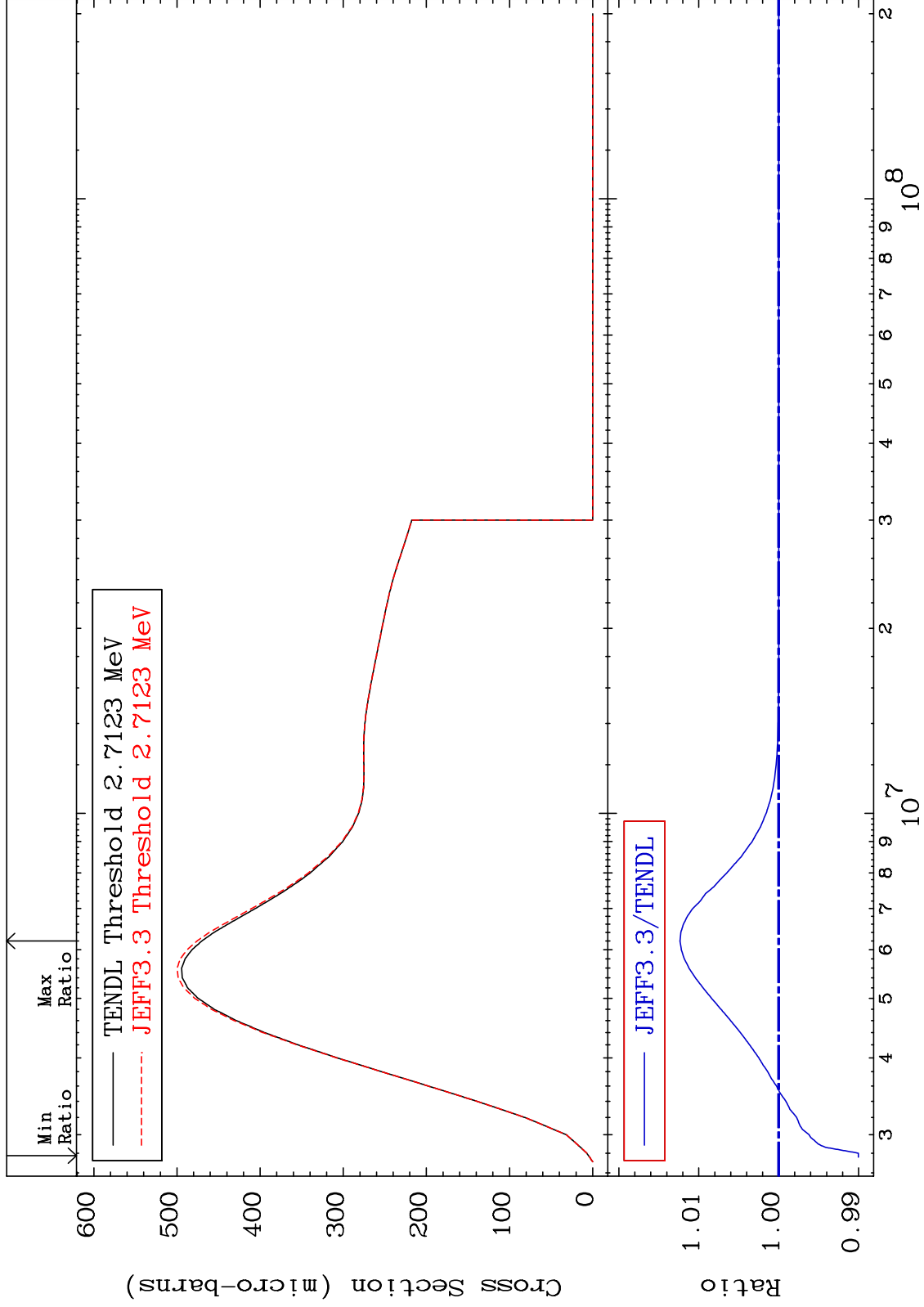
MAT 5055 MT= 65 (n, n') Level 50-Sn-122
 Cross Section -0.008 To 9.789 %



MAT 5055

MT= 66 (n,n') Level
Cross Section

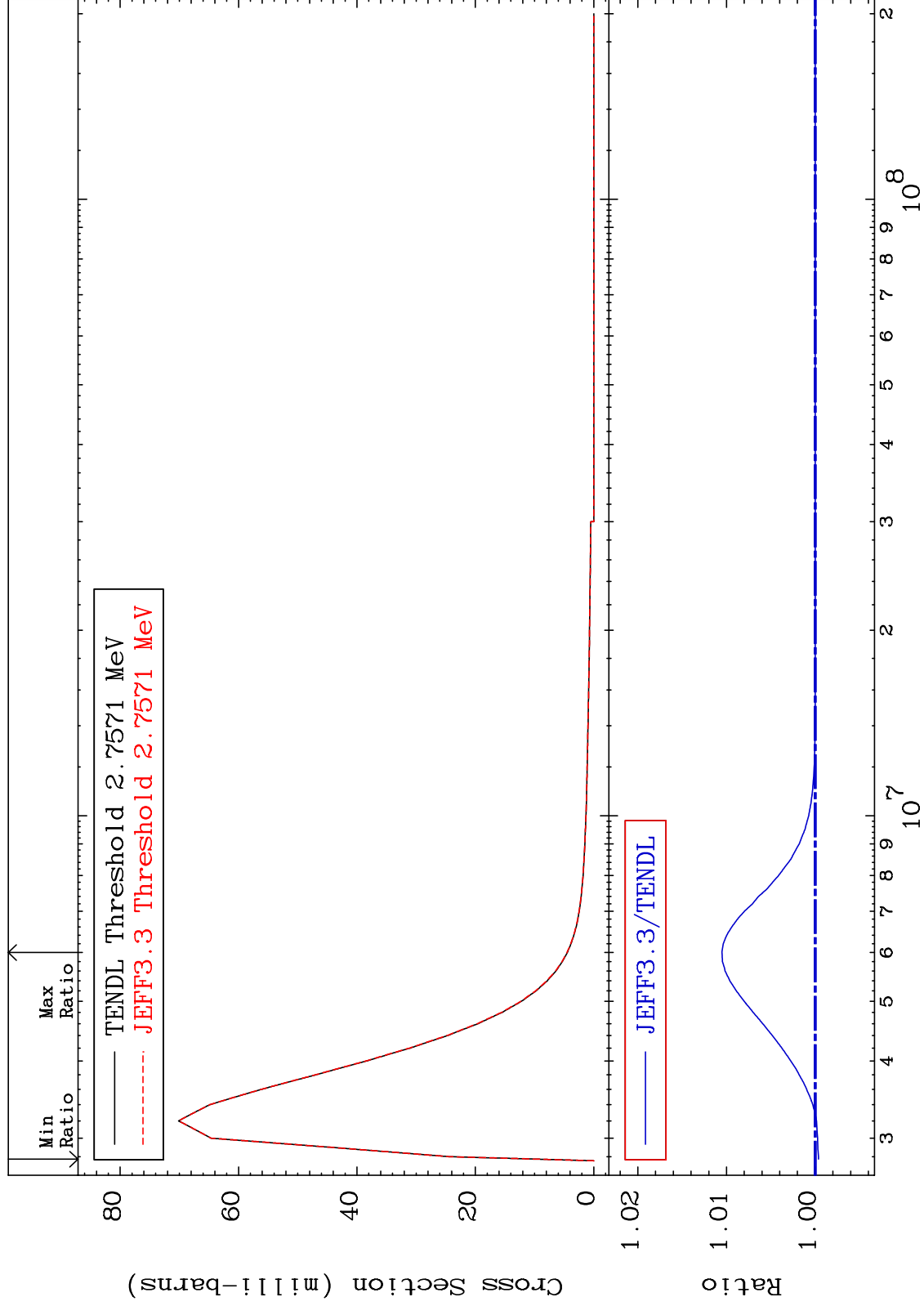
50-Sn-122
-0.998 To 1.235 %



MAT 5055

MT= 67 (n,n') Level
Cross Section

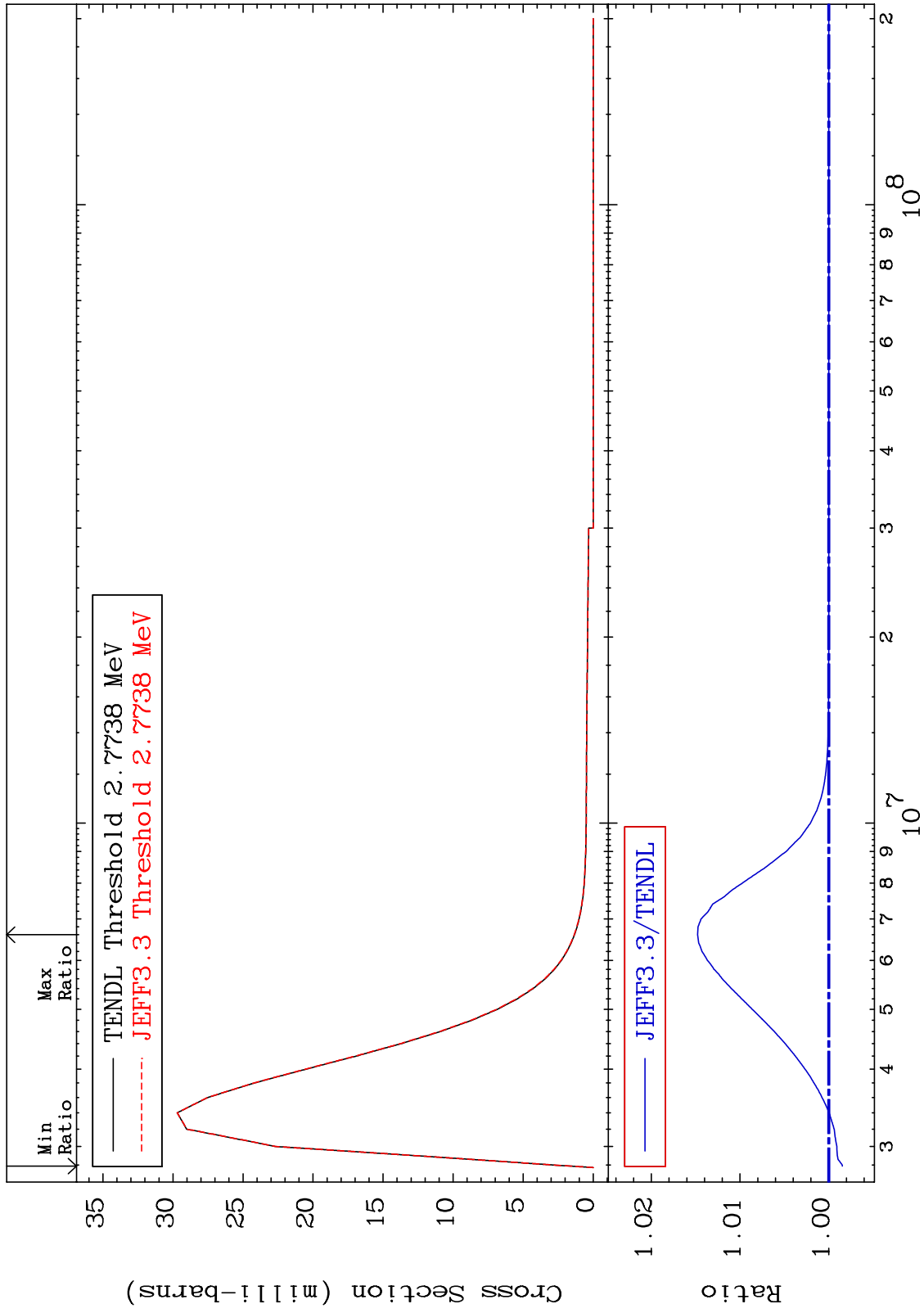
50-Sn-122
-0.036 To 1.052 %



MAT 5055

MT= 68 (n,n') Level
Cross Section

50-Sn-122
-0.153 To 1.479 %



34

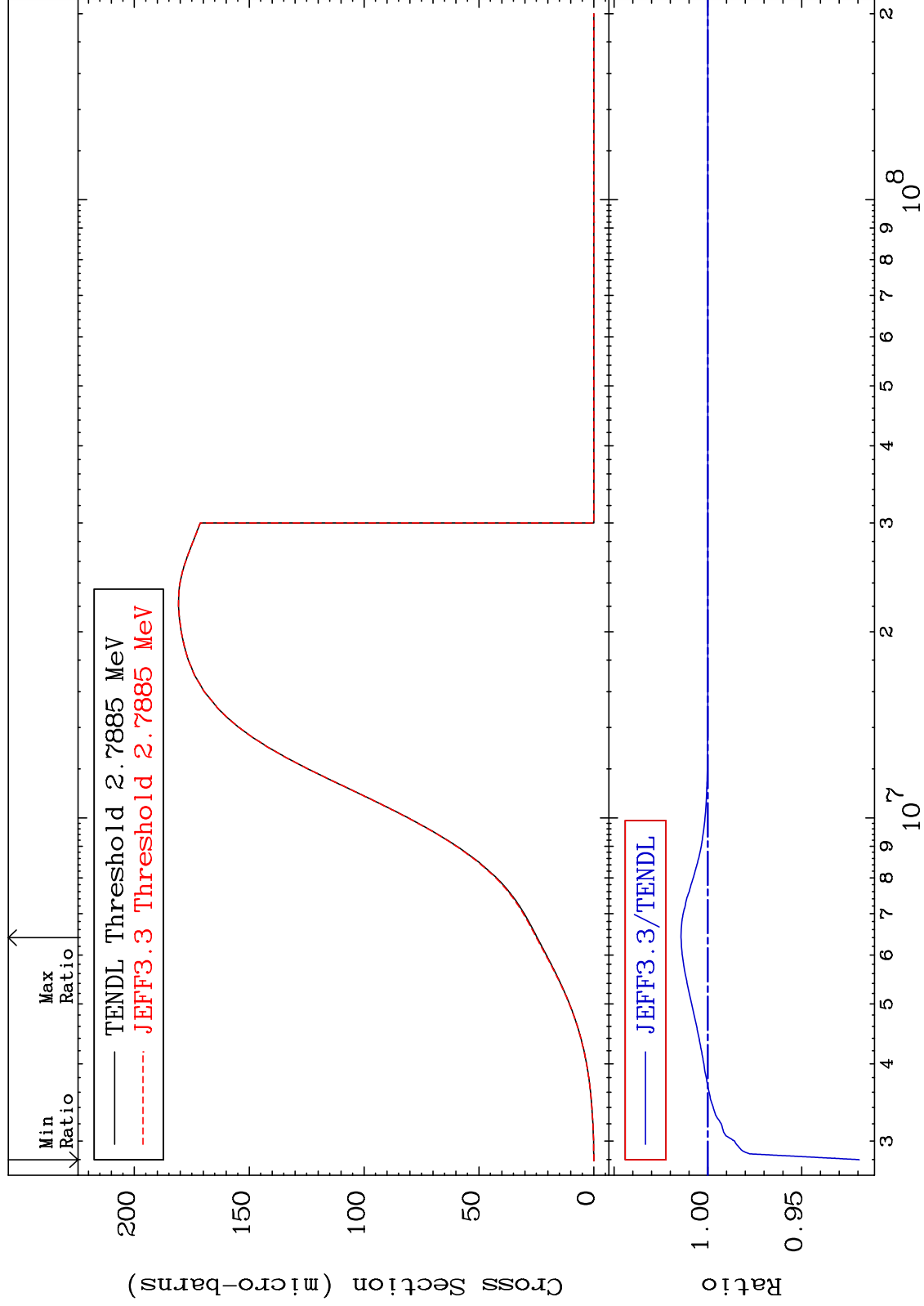
Incident Energy (eV)

50-Sn-122

MAT 5055

MT= 69 (n,n') Level
Cross Section

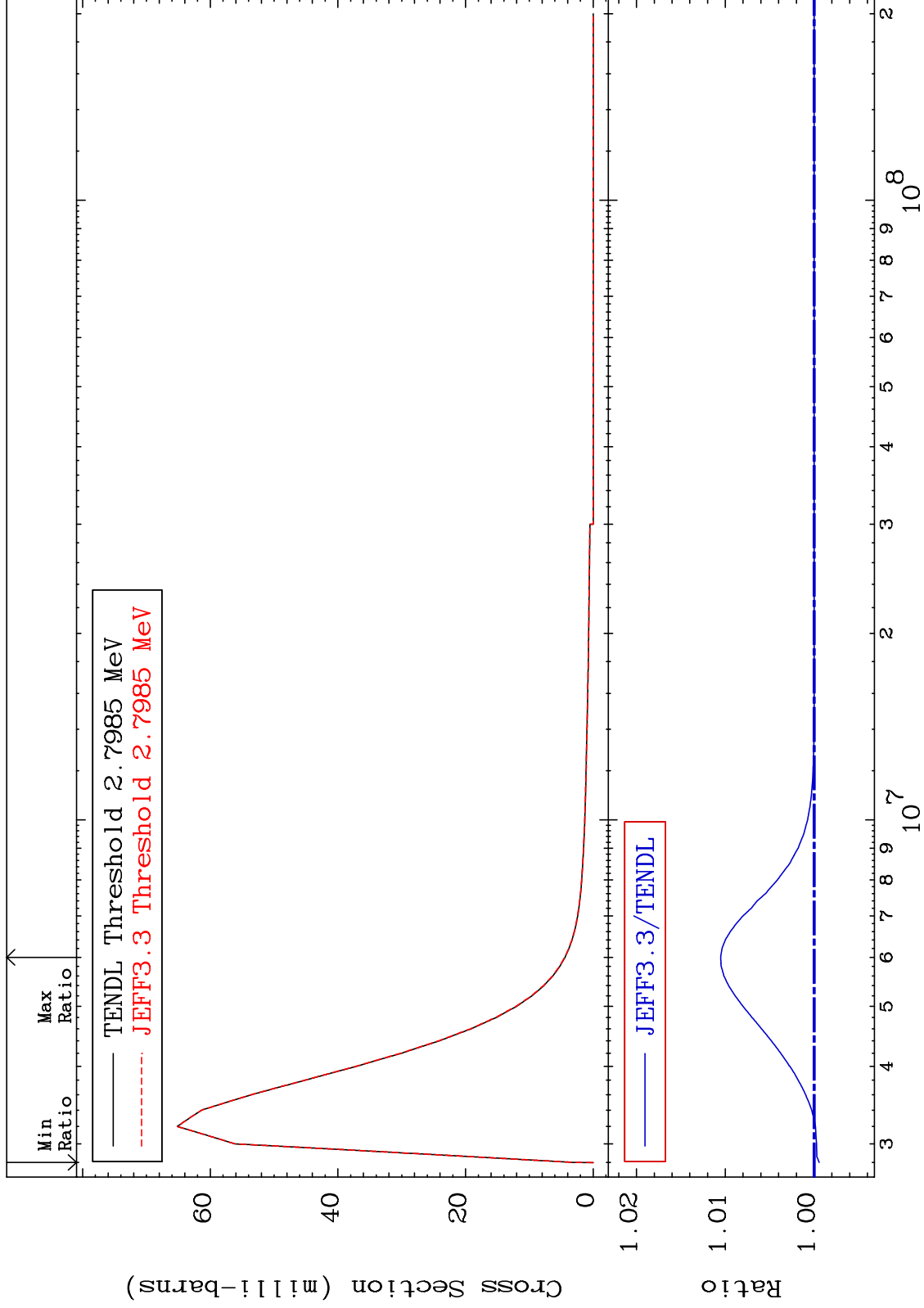
50-Sn-122
-8.074 To 1.428 %



MAT 5055

MT= 70 (n,n') Level
Cross Section

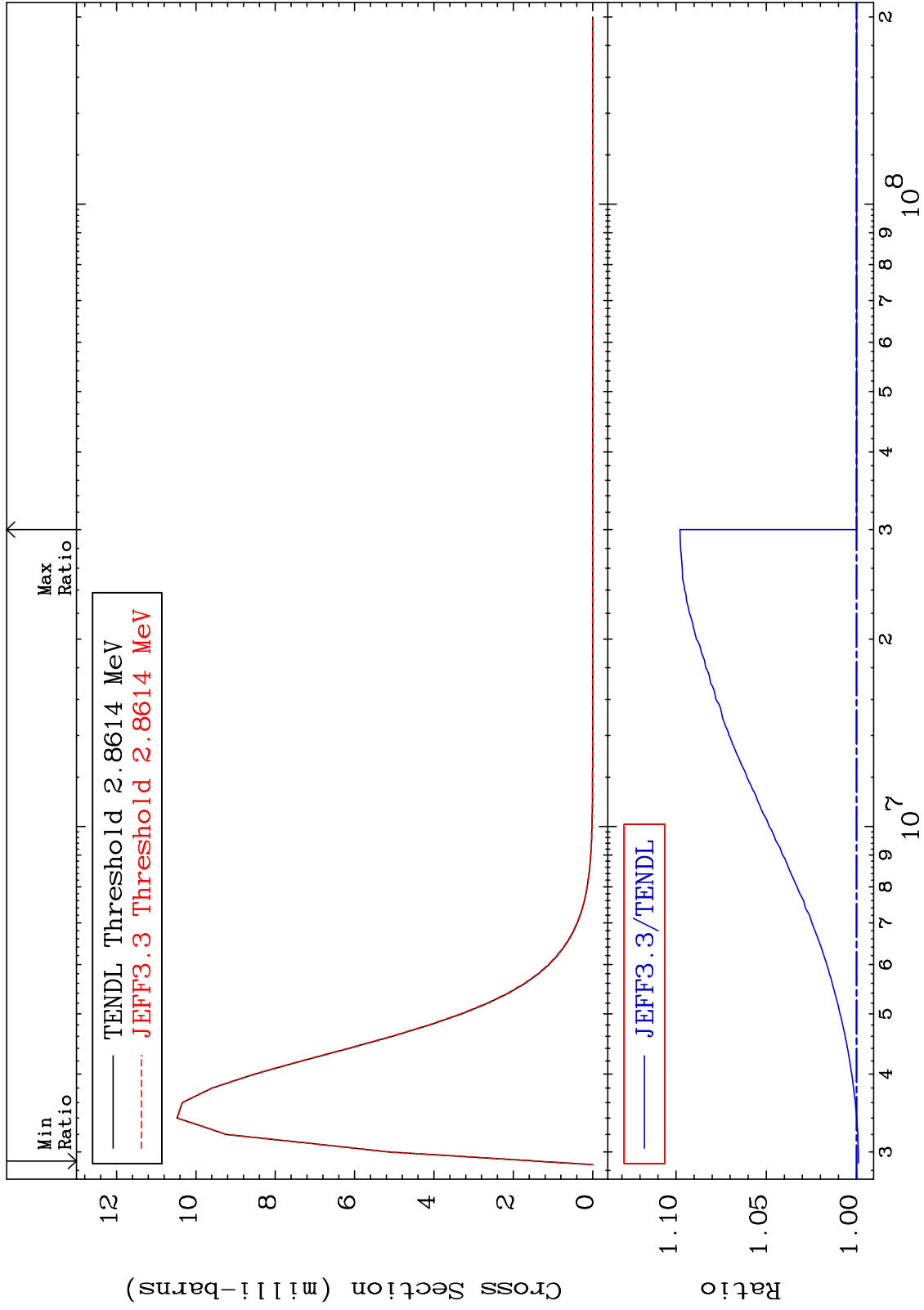
50-Sn-122
-0.056 To 1.053 %



MAT 5055

MT= 71 (n, n') Level
Cross Section

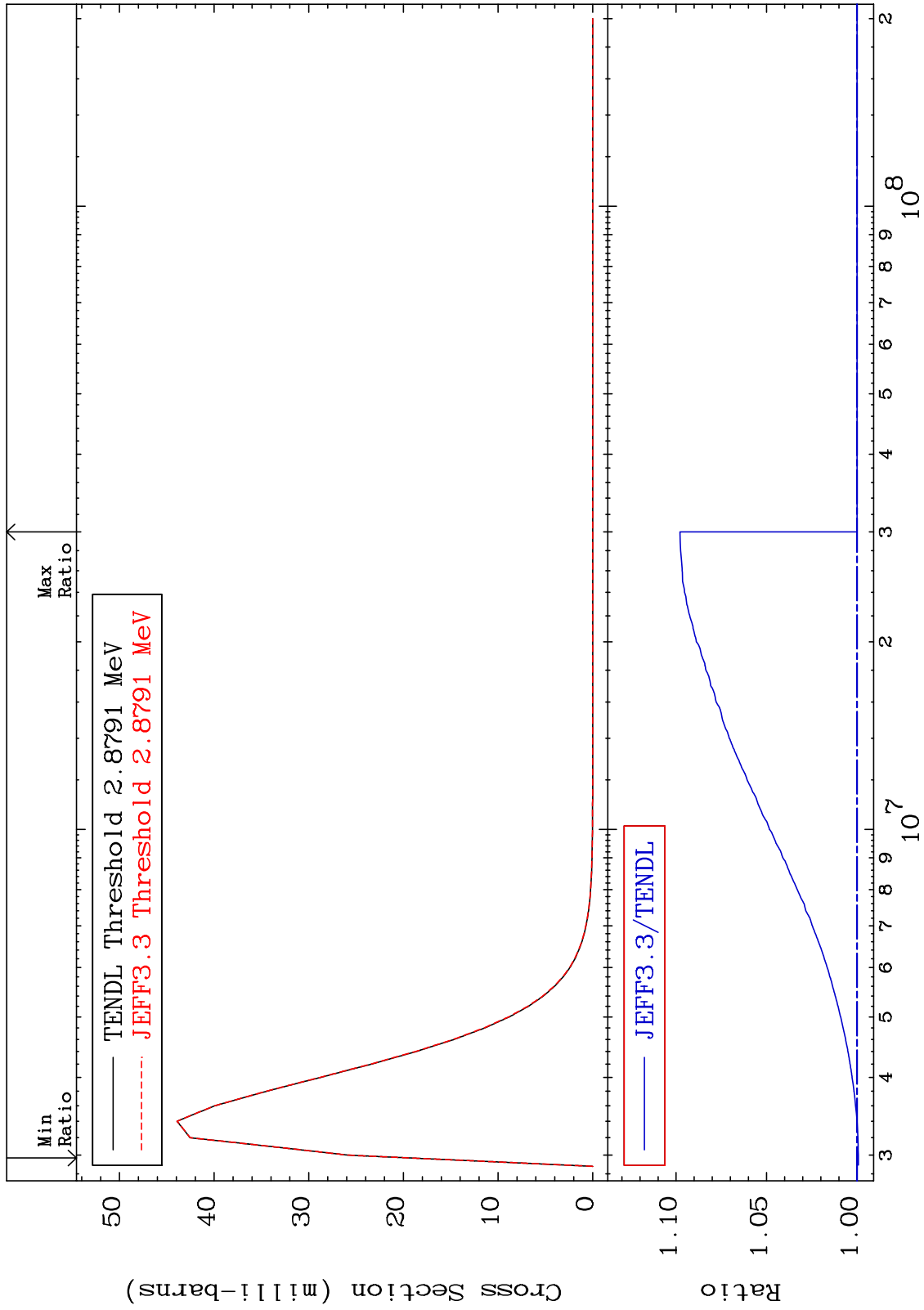
50-Sn-122
-0.104 To 9.780 %



MAT 5055

MT= 72 (n, n') Level
Cross Section

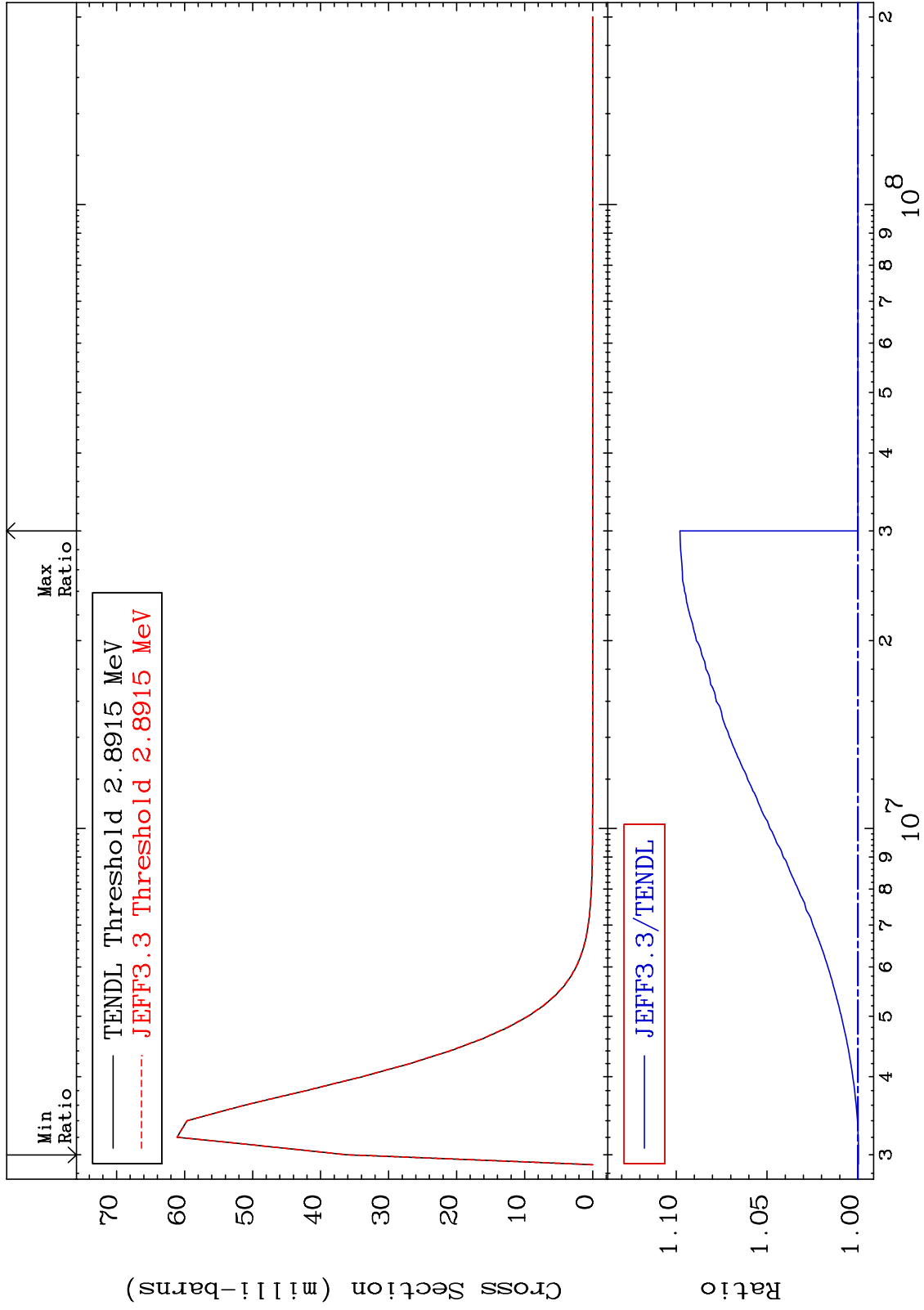
50-Sn-122
-0.073 To 9.785 %



MAT 5055

MT= 73 (n,n') Level
Cross Section

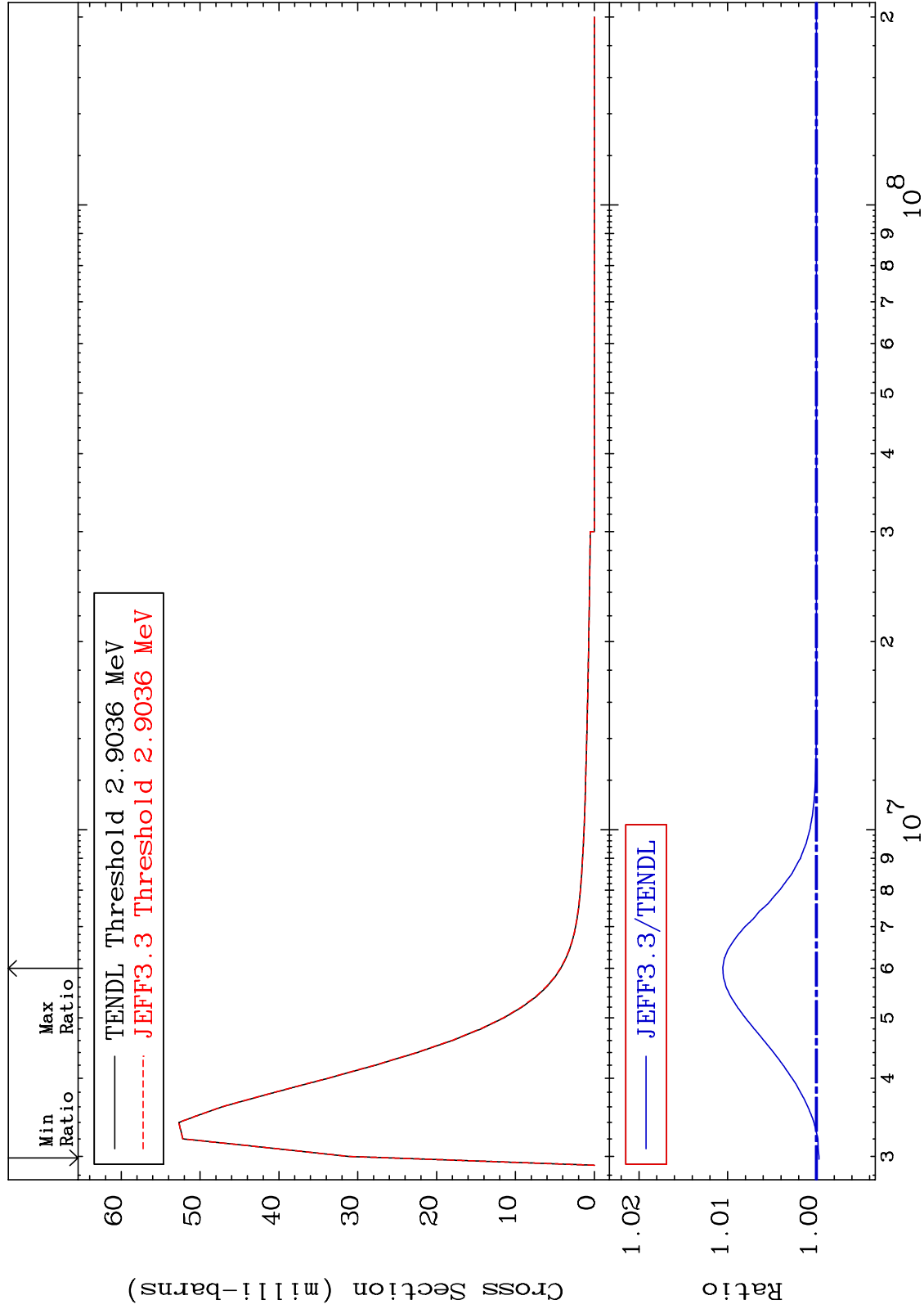
50-Sn-122
-0.028 To 9.789 %



MAT 5055

MT= 74 (n,n') Level
Cross Section

50-Sn-122
-0.028 To 1.055 %



40

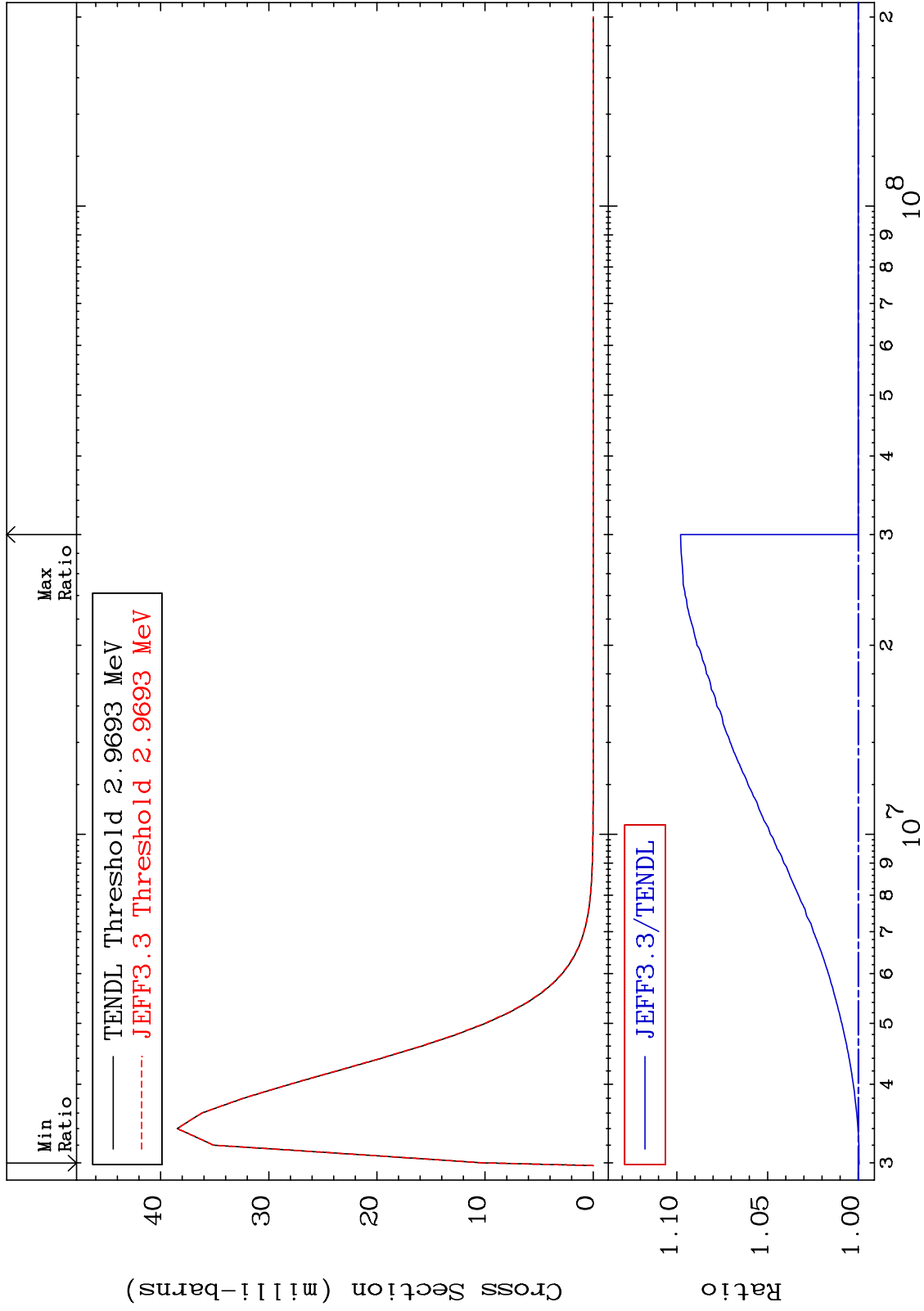
Incident Energy (eV)

50-Sn-122

MAT 5055

MT= 75 (n, n') Level
Cross Section

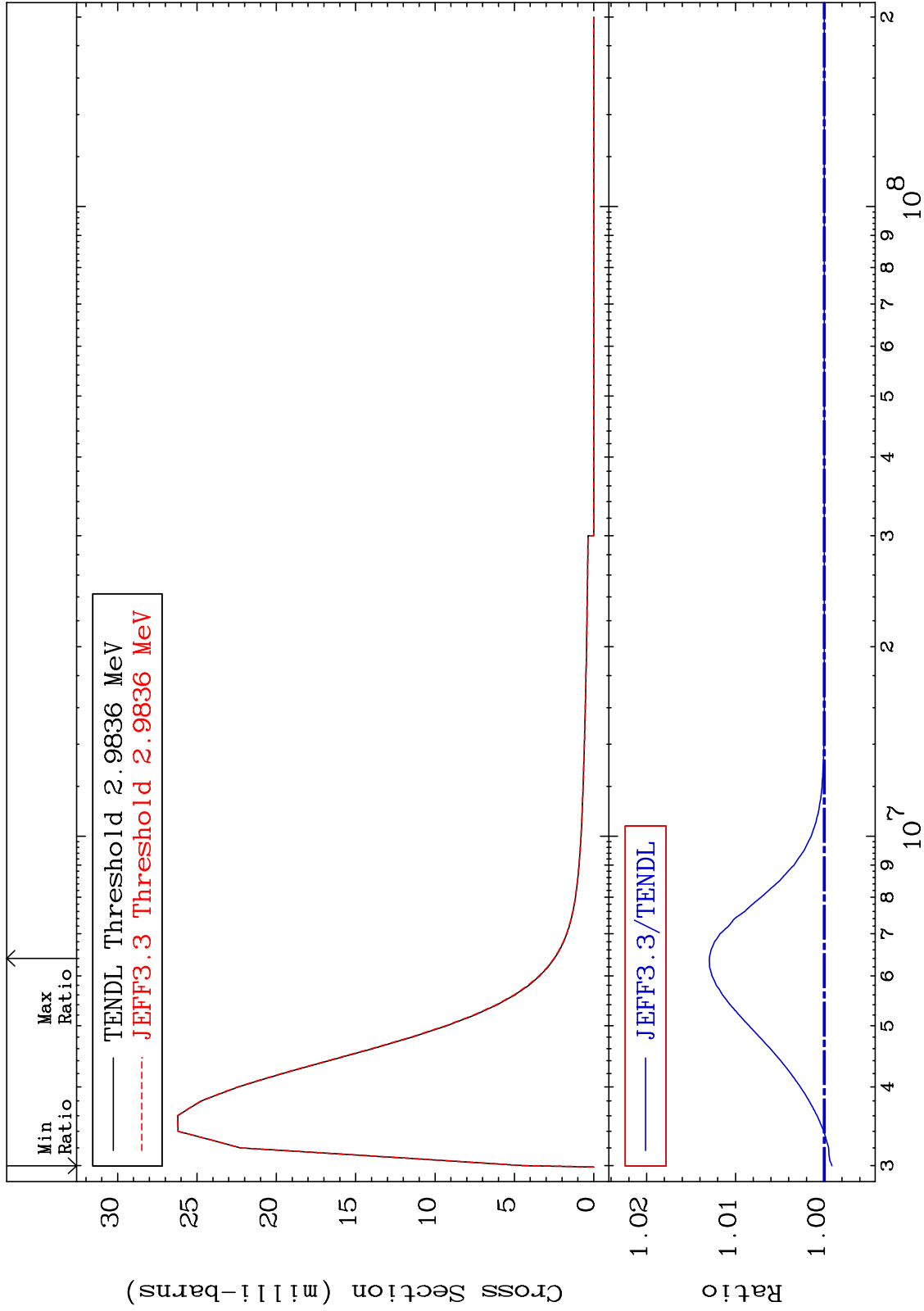
50-Sn-122
-0.045 To 9.787 %



MAT 5055

MT= 76 (n,n') Level
Cross Section

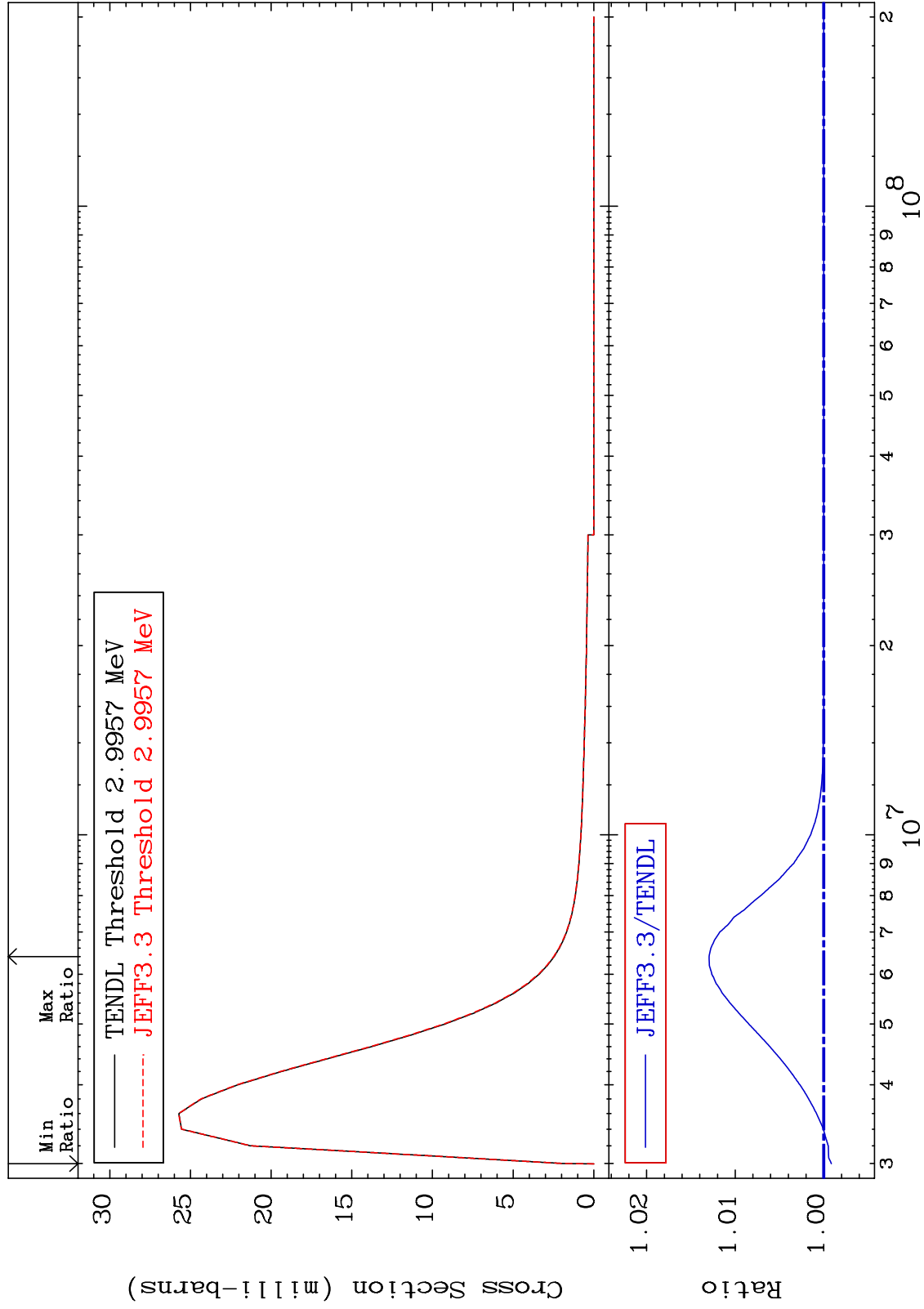
50-Sn-122
-0.086 To 1.295 %



MAT 5055

MT= 77 (n,n') Level
Cross Section

50-Sn-122
-0.084 To 1.295 %



43

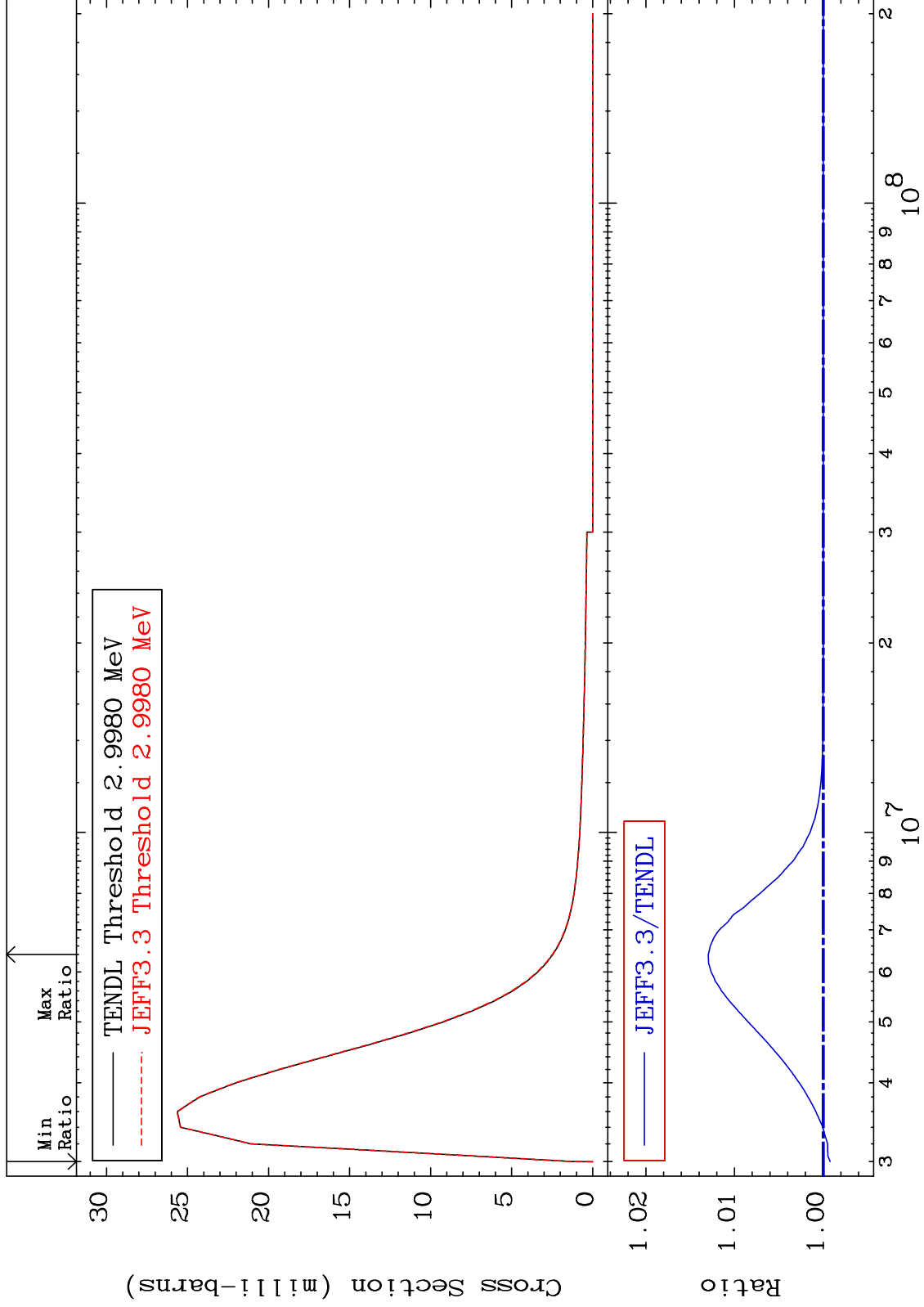
Incident Energy (eV)

50-Sn-122

MAT 5055

MT= 78 (n,n') Level
Cross Section

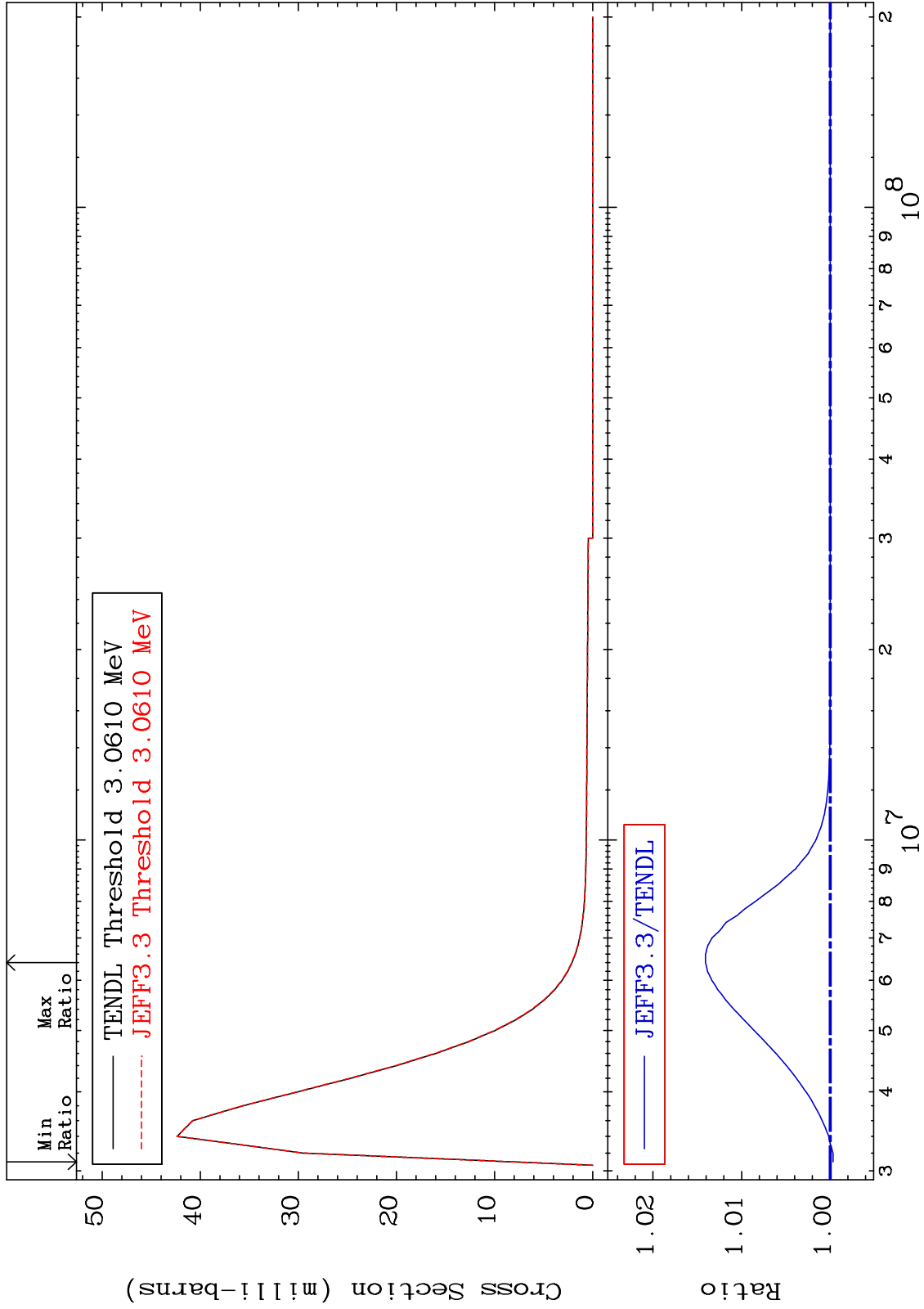
50-Sn-122
-0.078 To 1.295 %



MAT 5055

MT= 79 (n,n') Level
Cross Section

50-Sn-122
-0.032 To 1.408 %



45

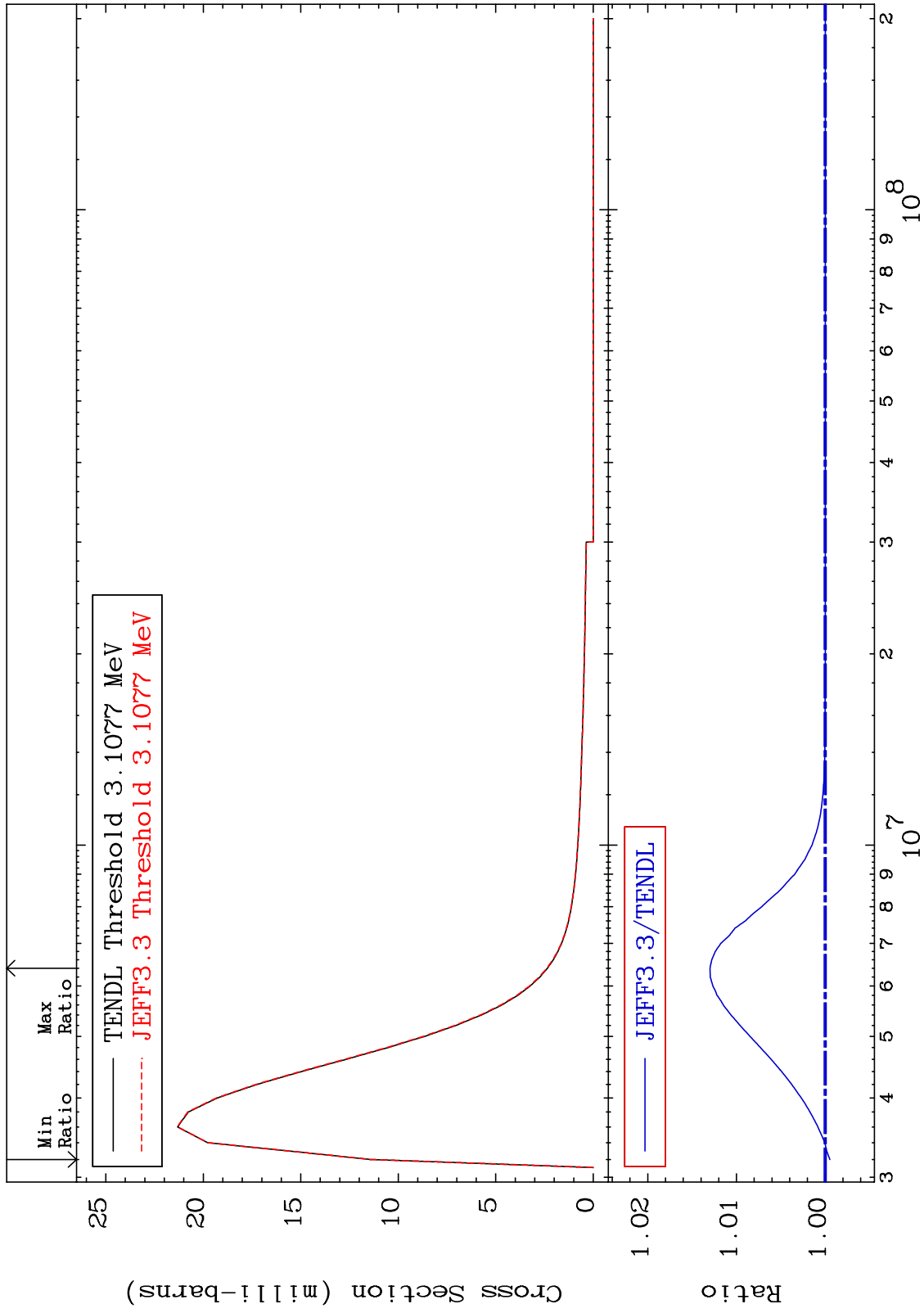
Incident Energy (eV)

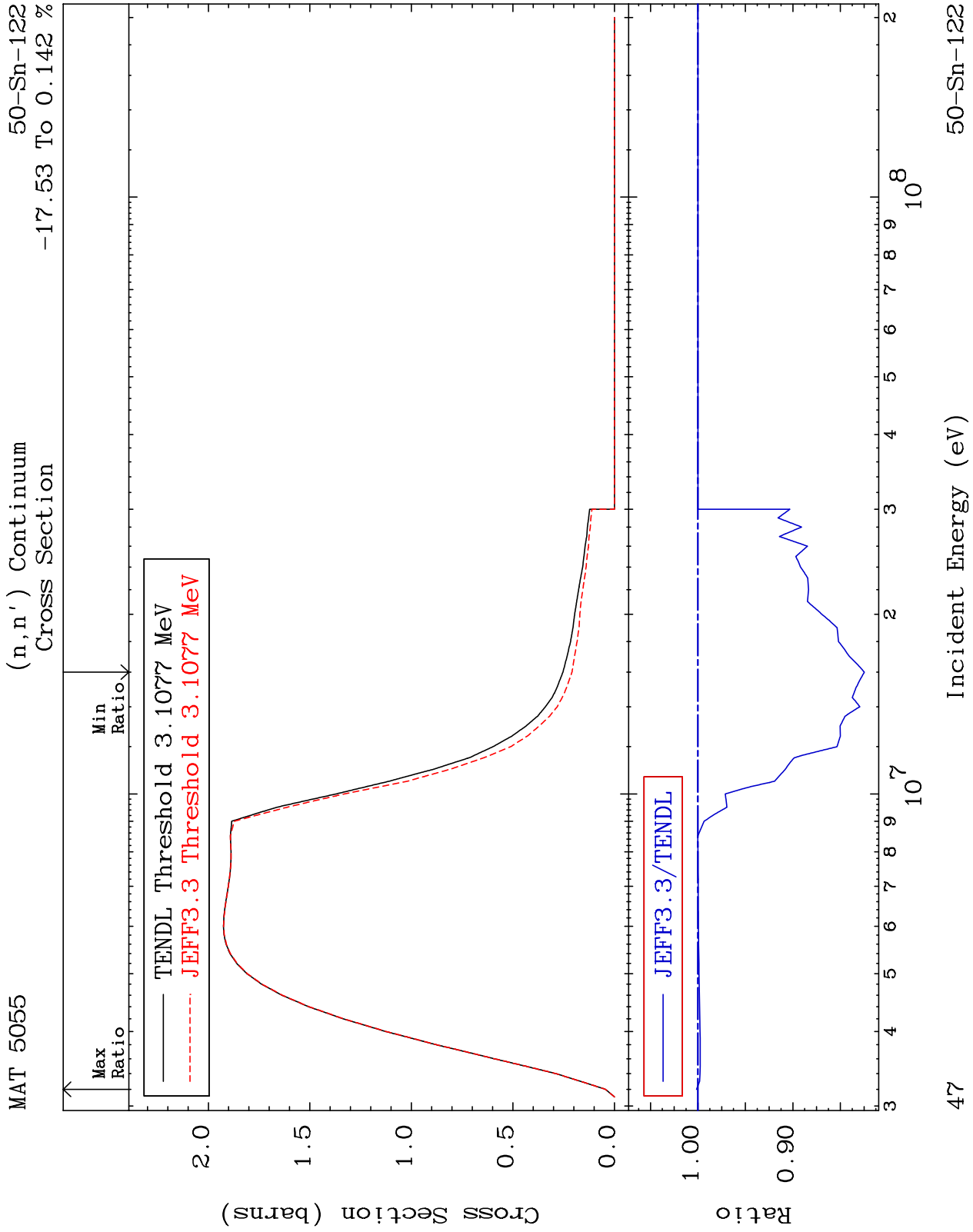
50-Sn-122

MAT 5055

MT= 80 (n,n') Level
Cross Section

50-Sn-122
-0.052 To 1.299 %





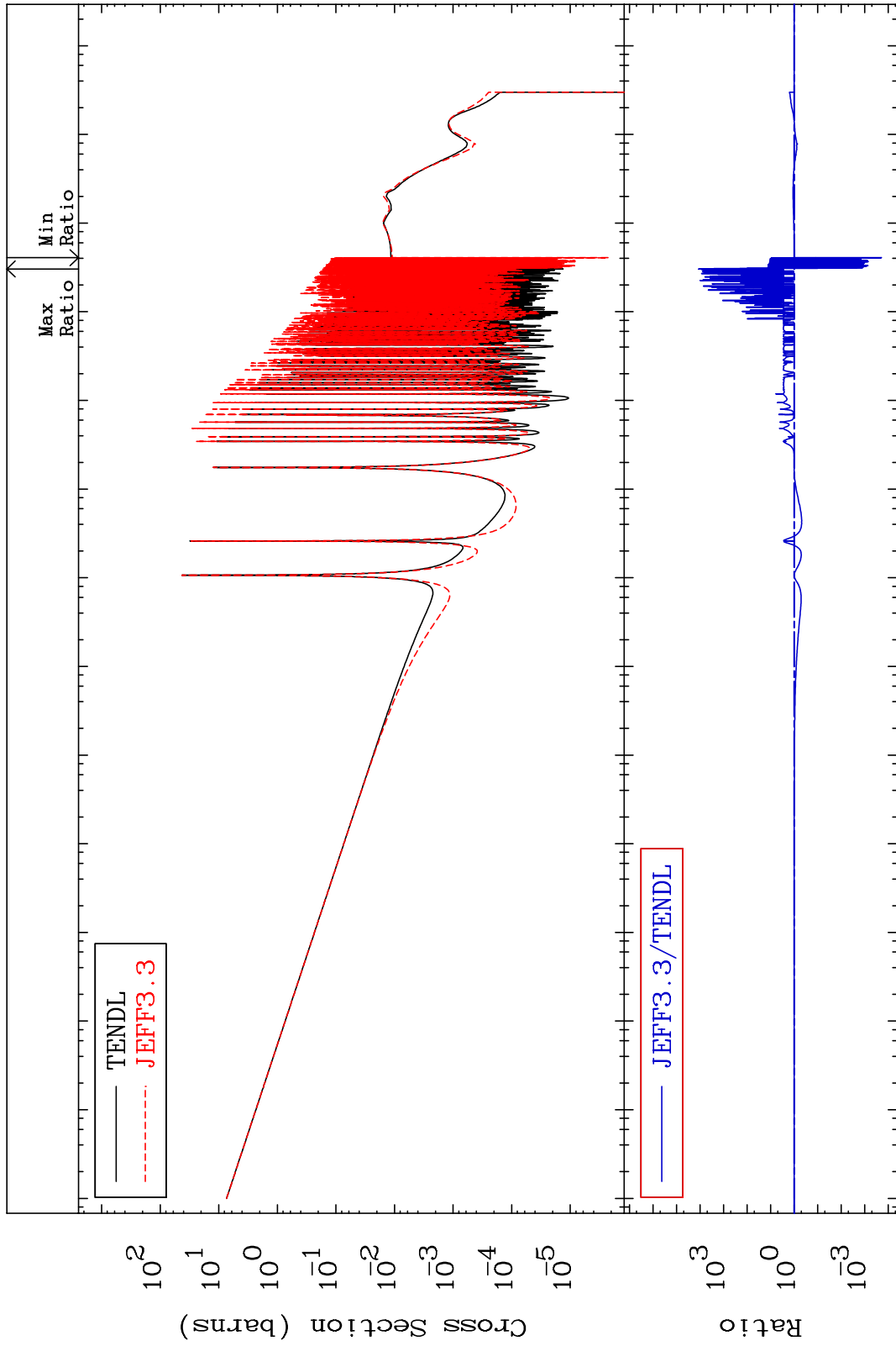
MAT 5055

(n, γ)

50-Sn-122

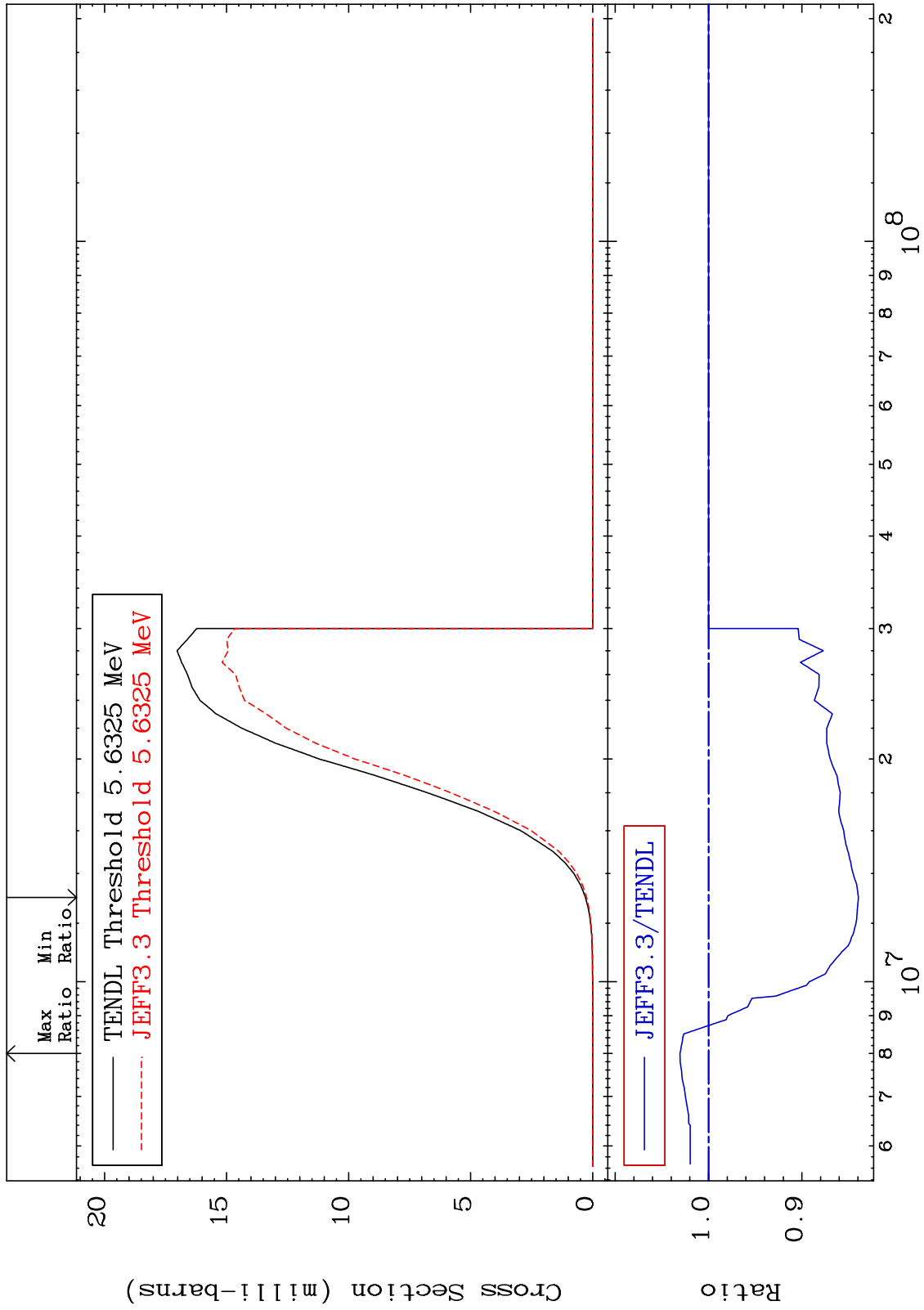
Cross Section

-99.98 To 9999. %



Incident Energy (eV) 50-Sn-122

MAT 5055 (n,p) Cross Section 50-Sn-122 -16.05 To 3.055 %



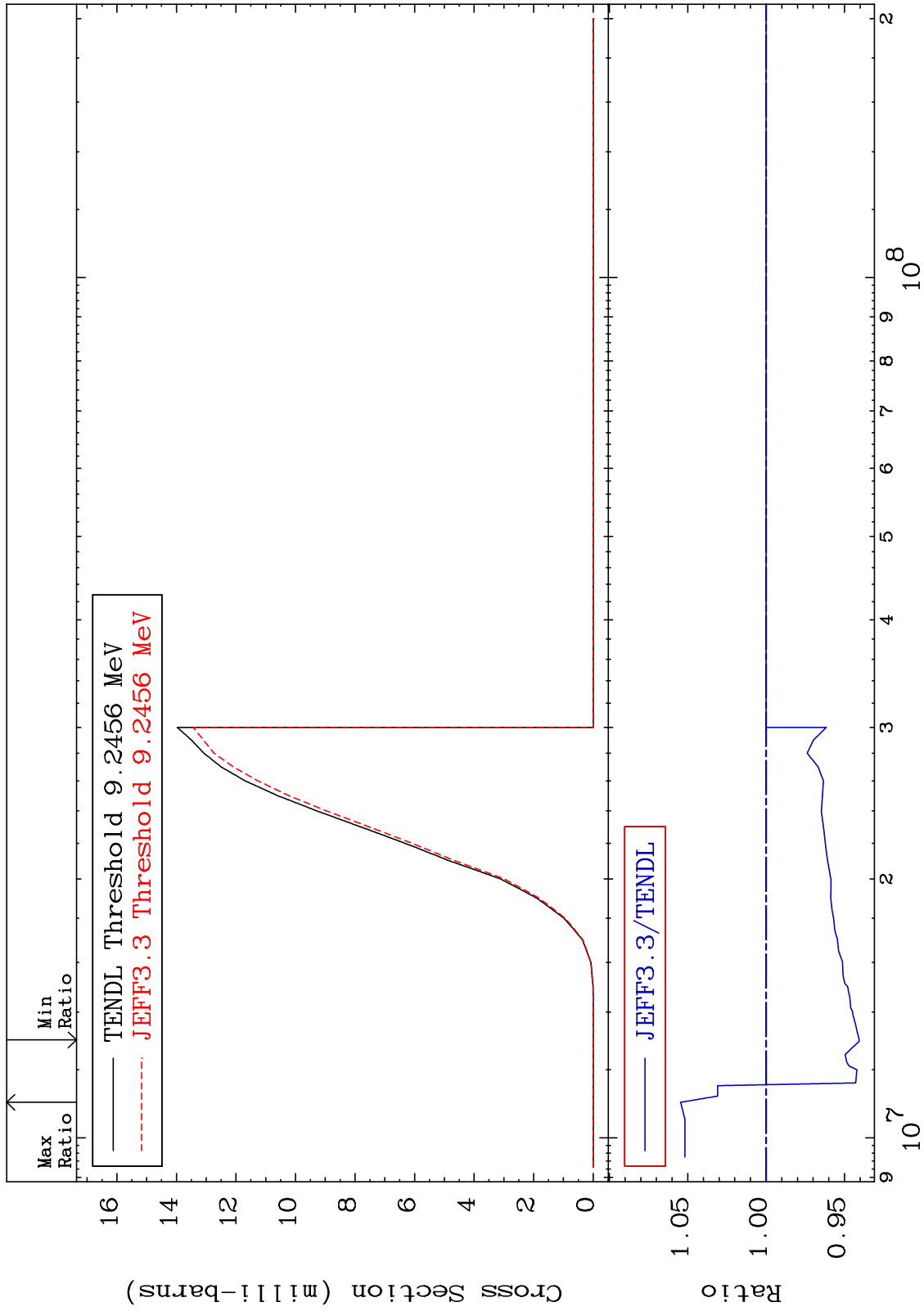
MAT 5055

(n, d)

50-Sn-122

Cross Section

-5.935 To 5.454 %



50-Sn-122

Incident Energy (eV)

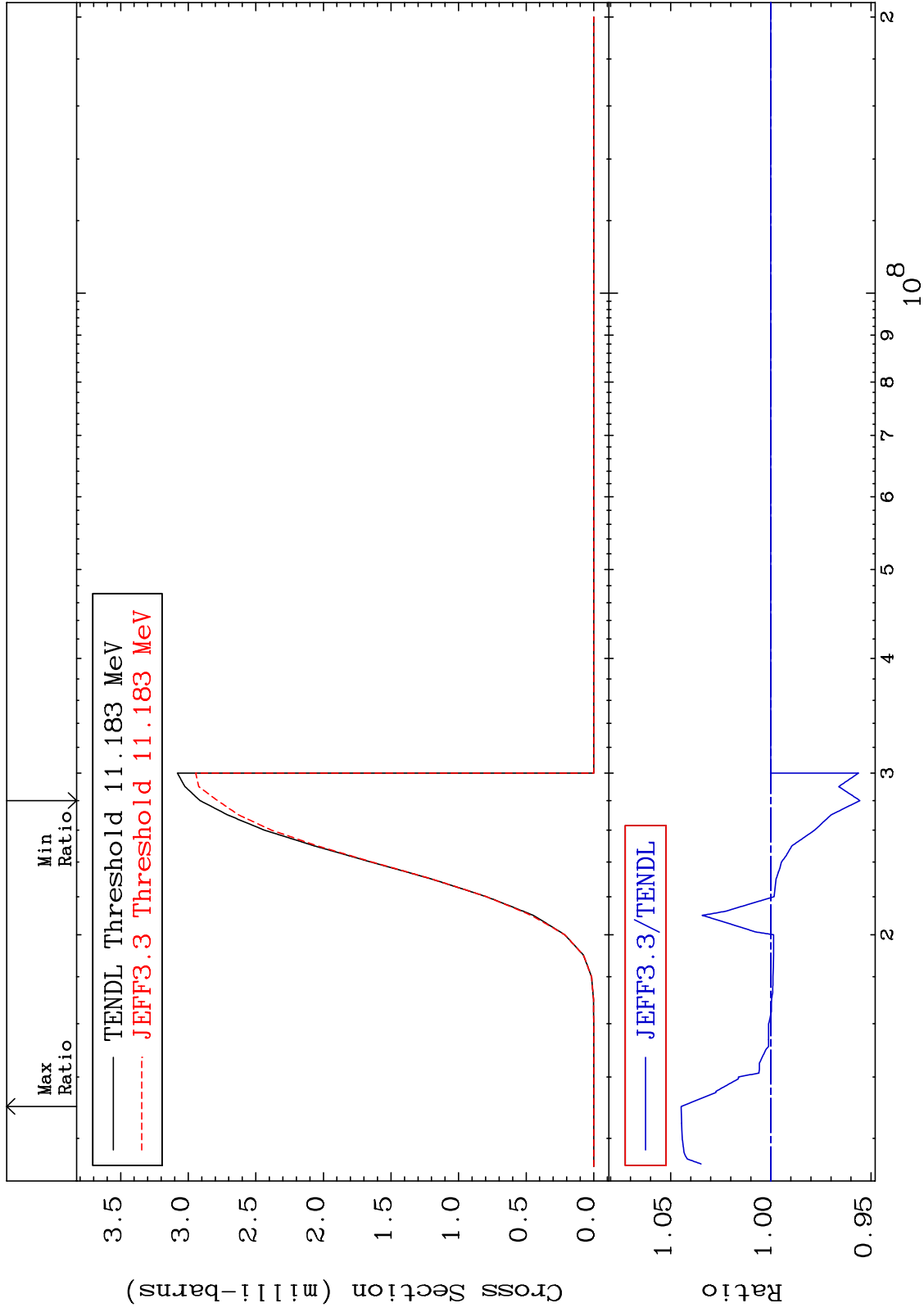
MAT 5055

(n, t)

50-Sn-122

Cross Section

-4.444 To 4.471 %



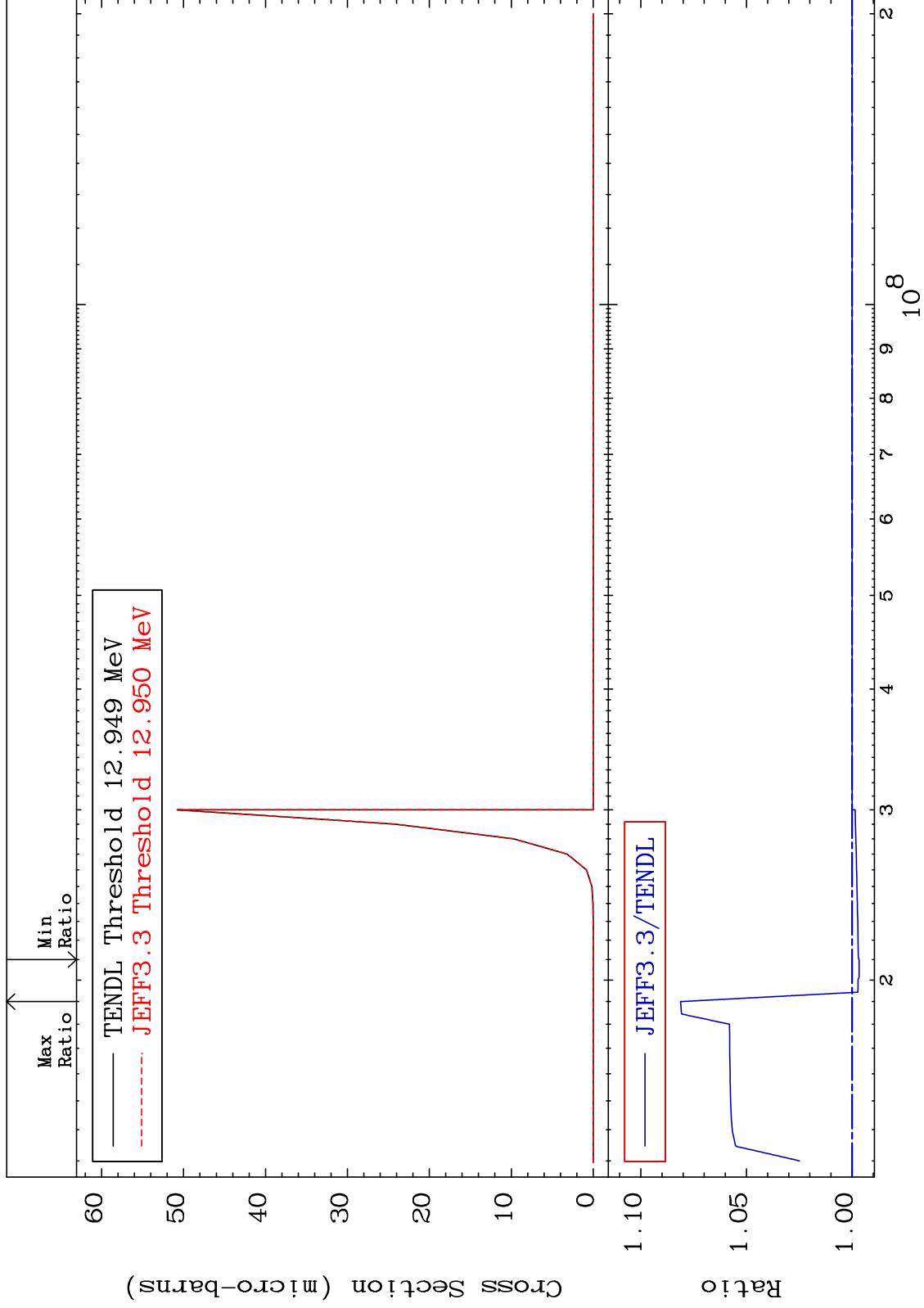
MAT 5055

(n, He-3)

50-Sn-122

Cross Section

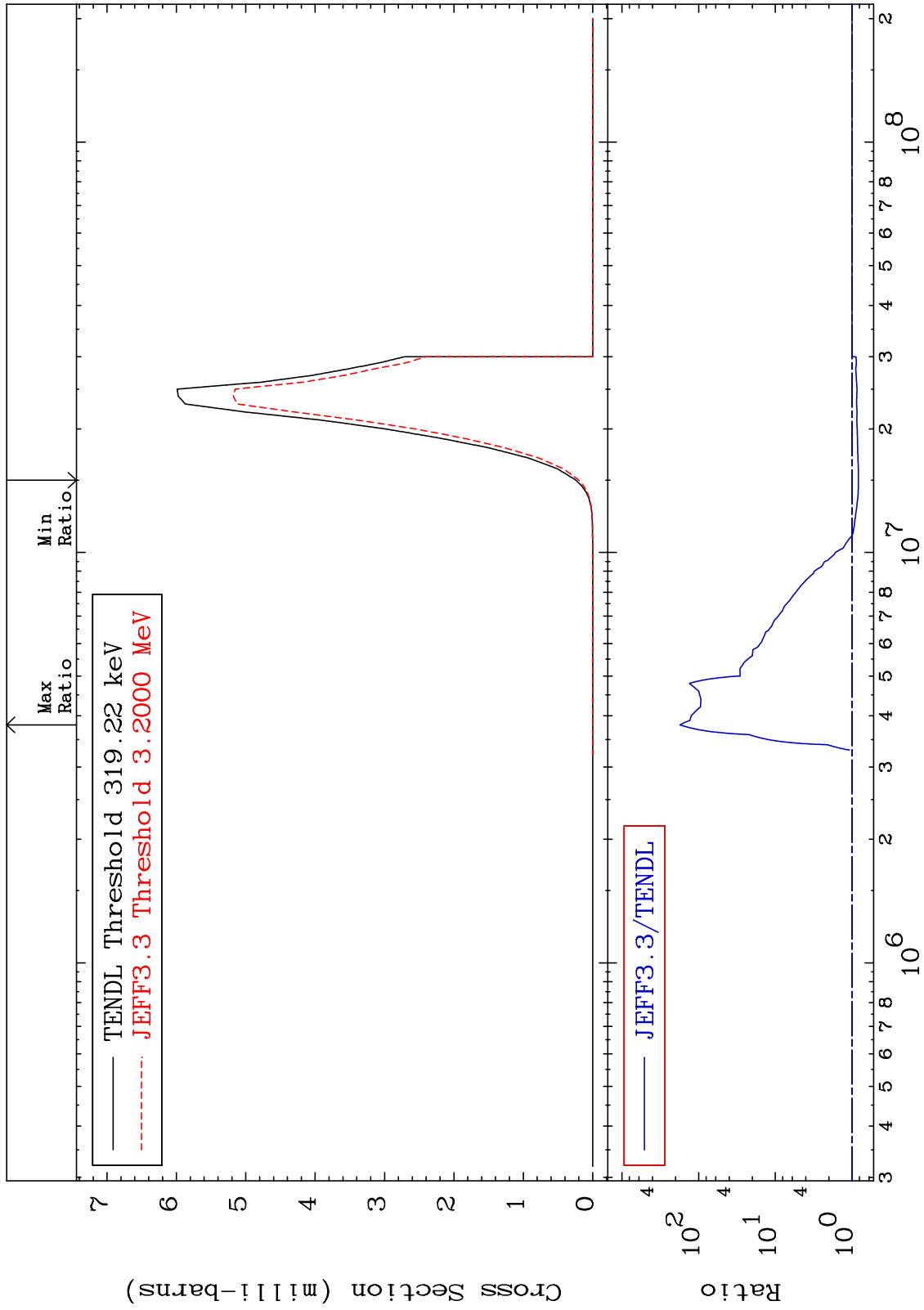
-0.334 To 8.117 %

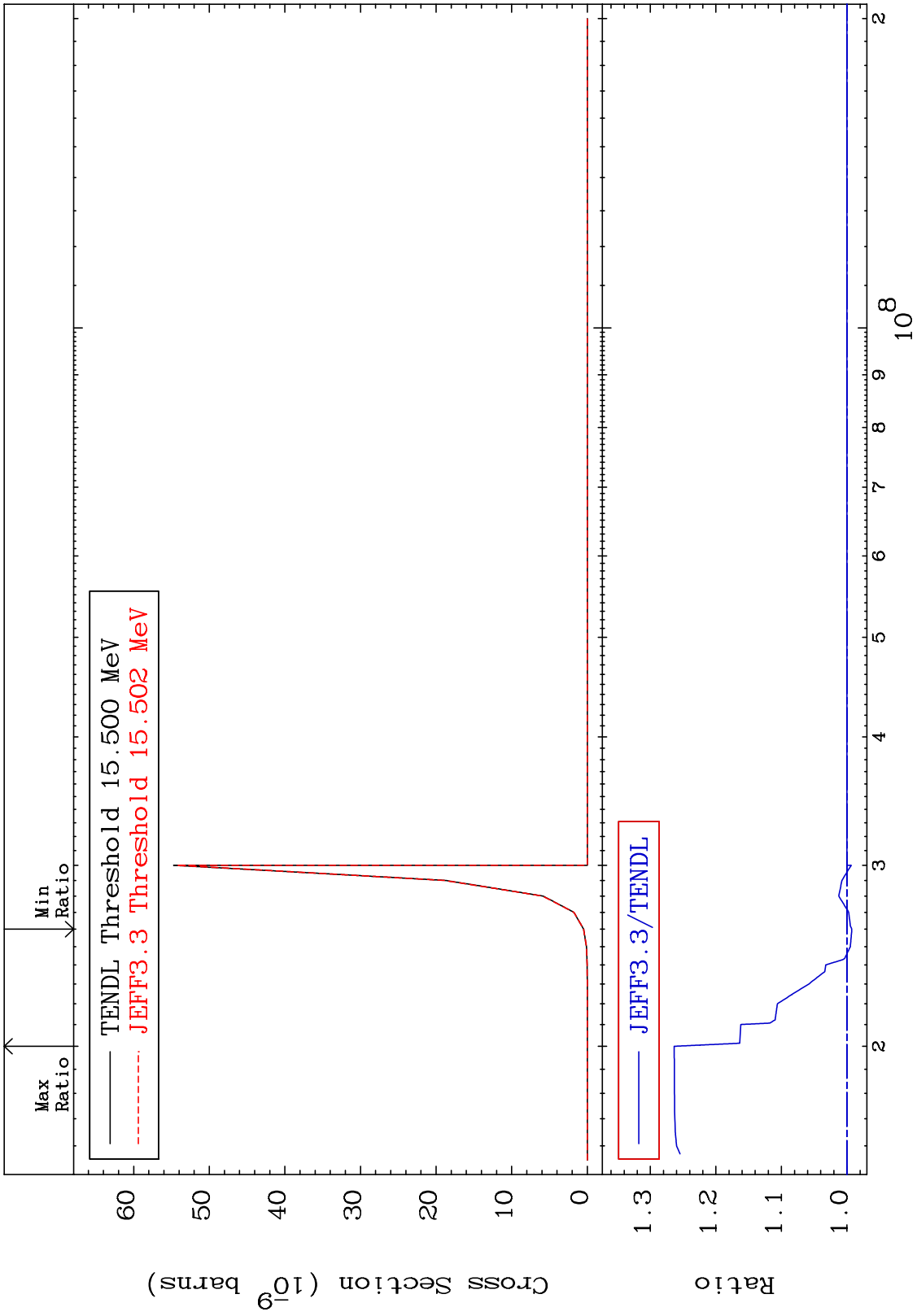


MAT 5055

(n, α)
Cross Section

50-Sn-122
-17.44 To 9999. %





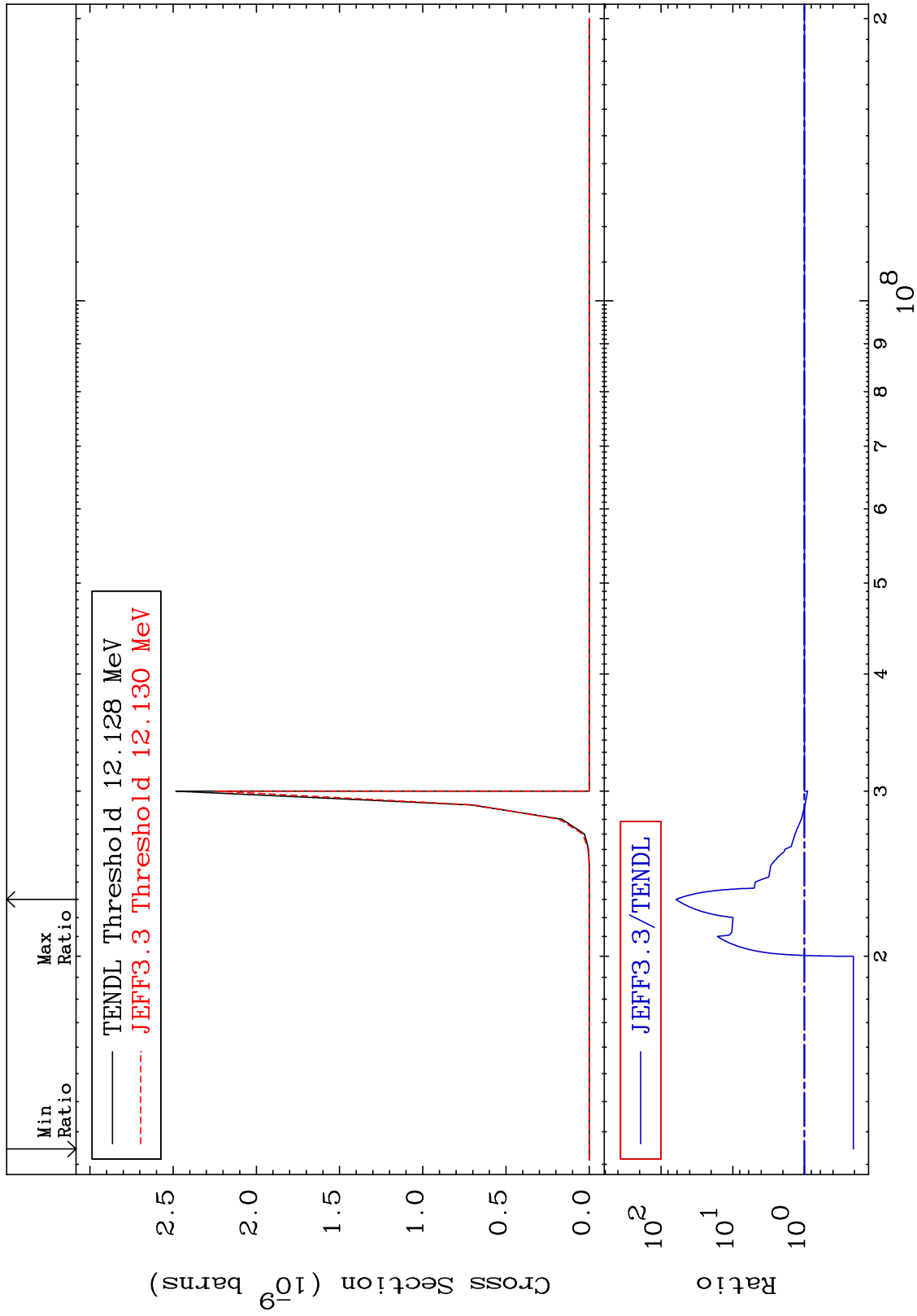
MAT 5055

(n,p) α

50-Sn-122

Cross Section

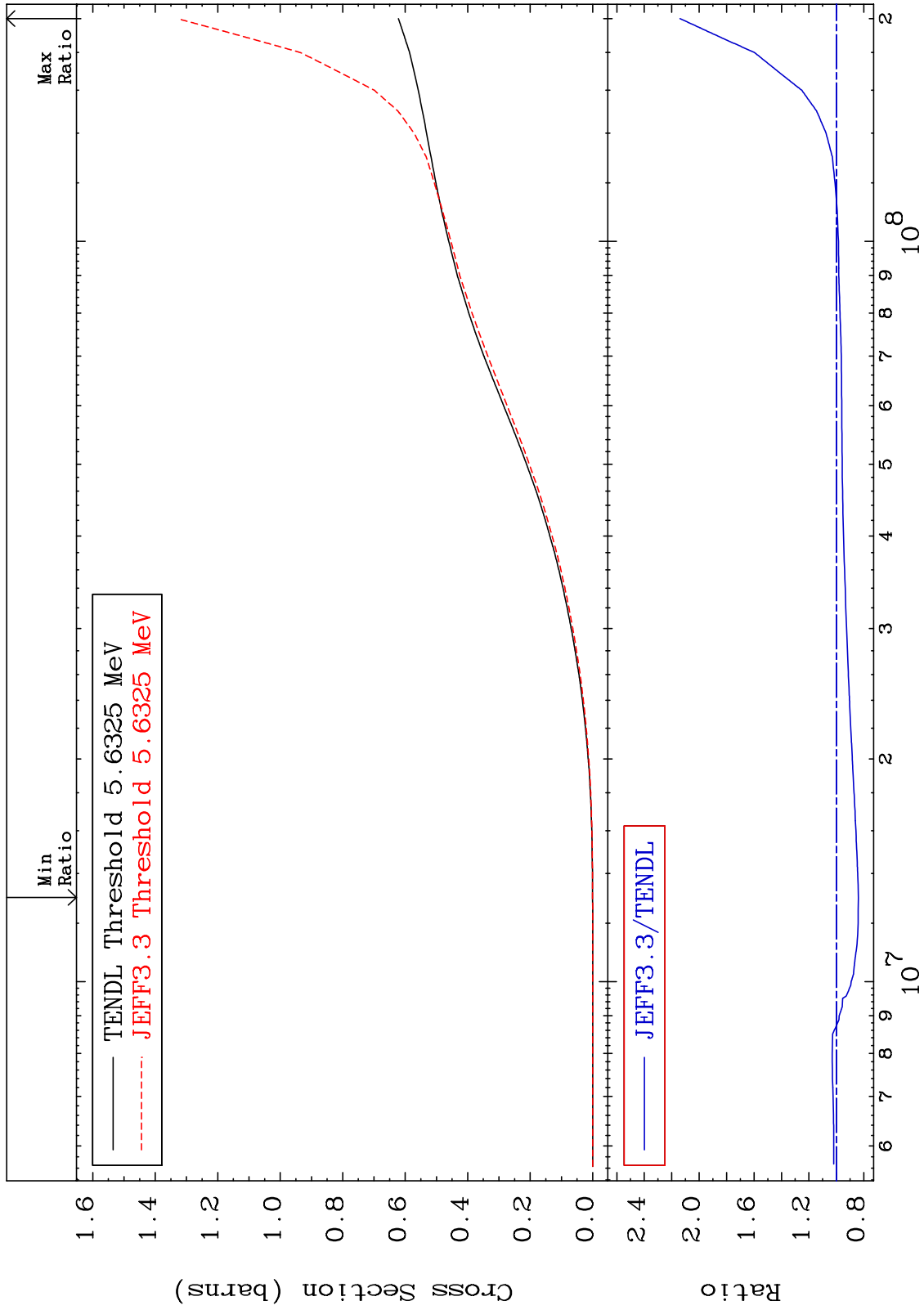
-79.29 To 6087. %



MAT 5055

Hydrogen Production
Cross Section

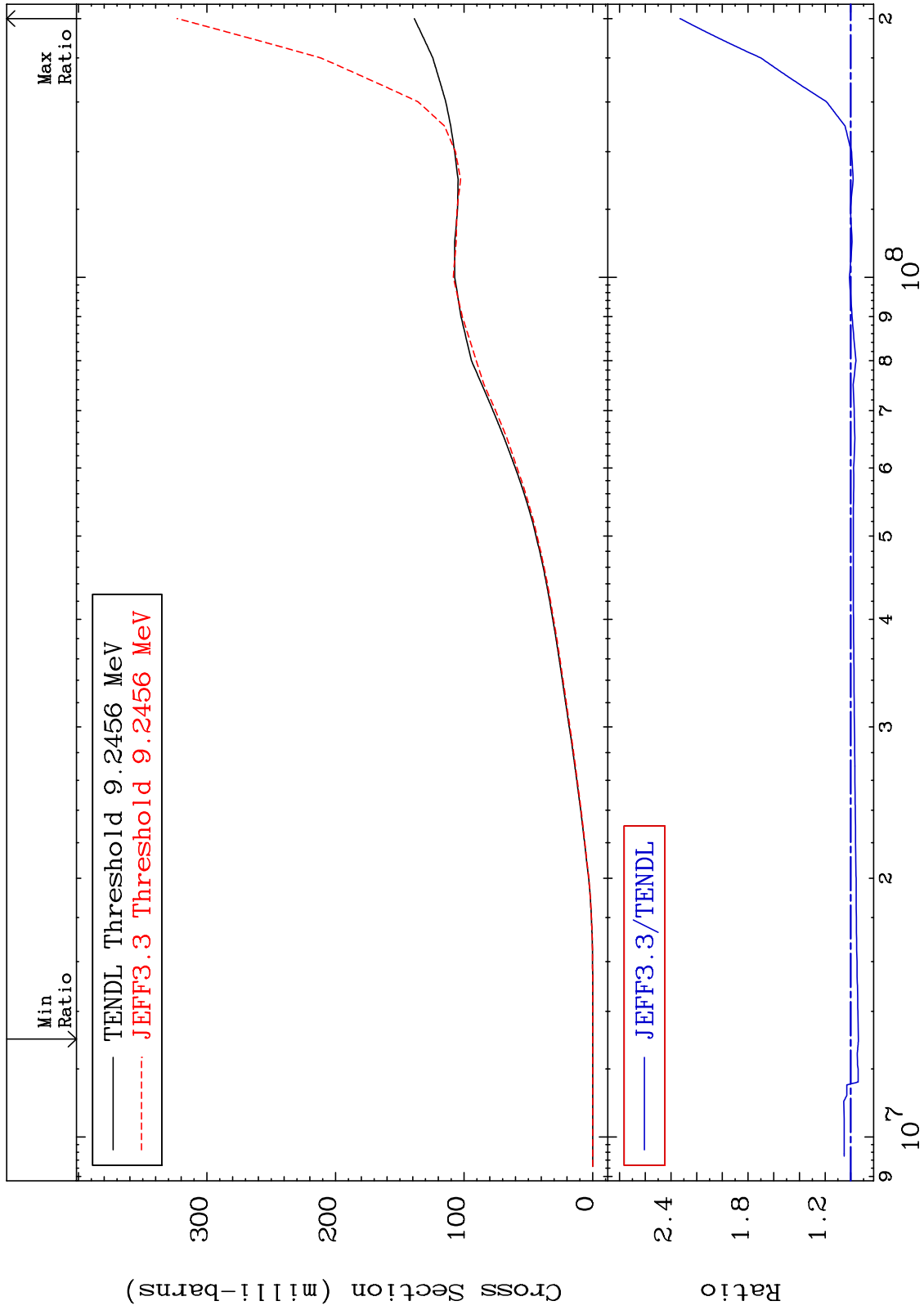
50-Sn-122
-16.05 To 113.9 %



MAT 5055

Deuterium Production
Cross Section

50-Sn-122
-5.935 To 133.0 %



57

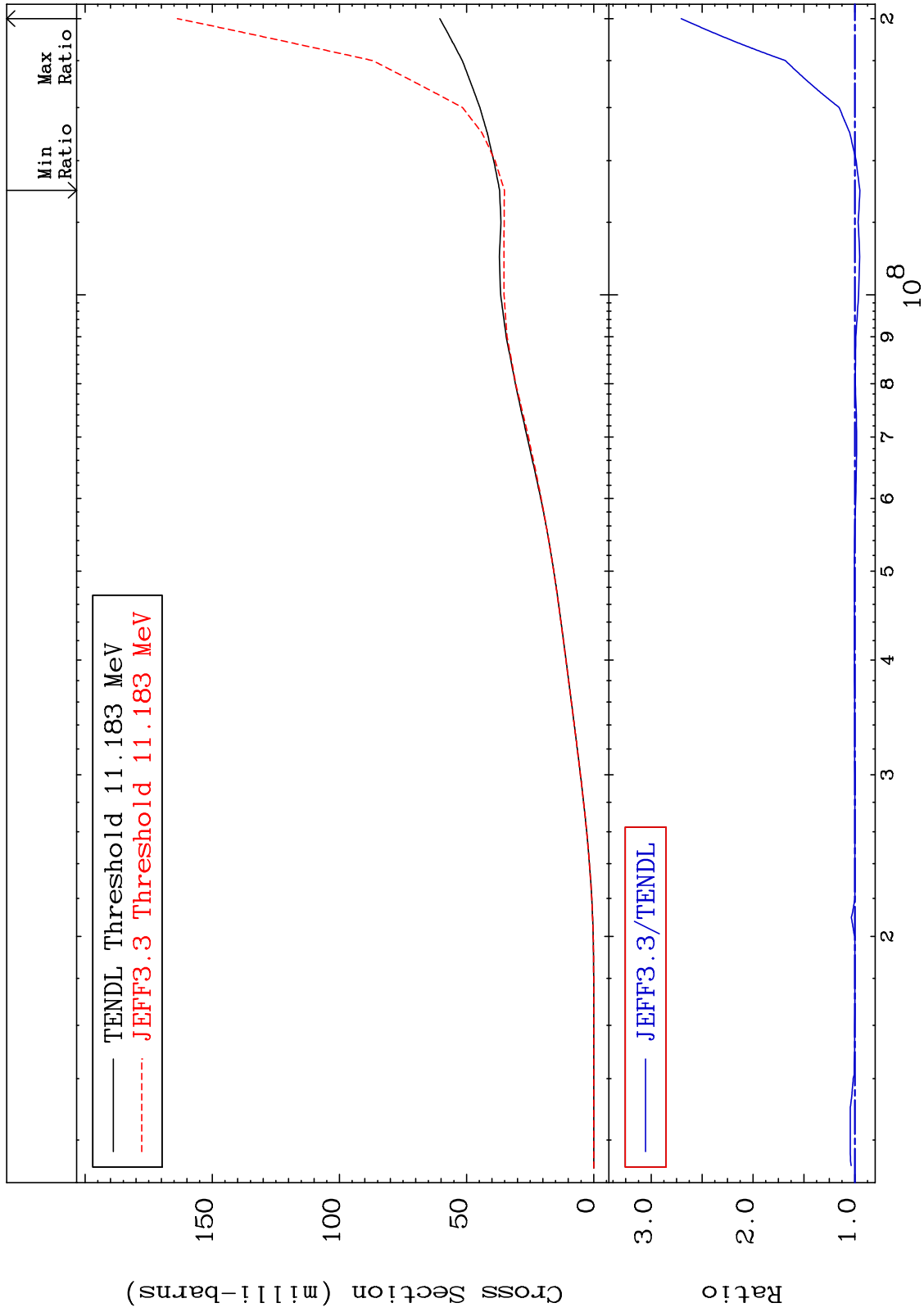
Incident Energy (eV)

50-Sn-122

MAT 5055

Tritium Production
Cross Section

50-Sn-122
-5.057 To 170.5 %



58

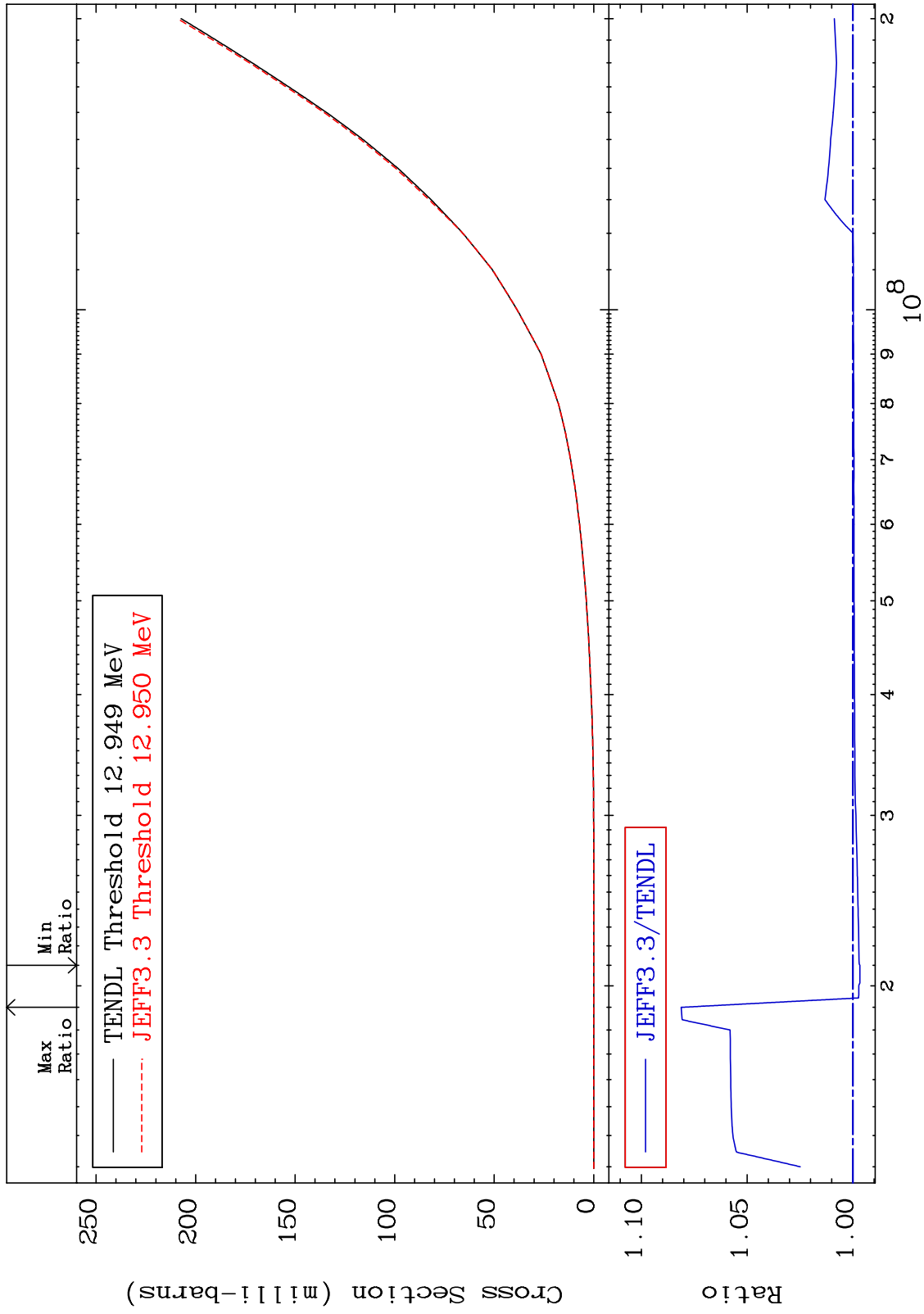
Incident Energy (eV)

50-Sn-122

MAT 5055

He-3 Production
Cross Section

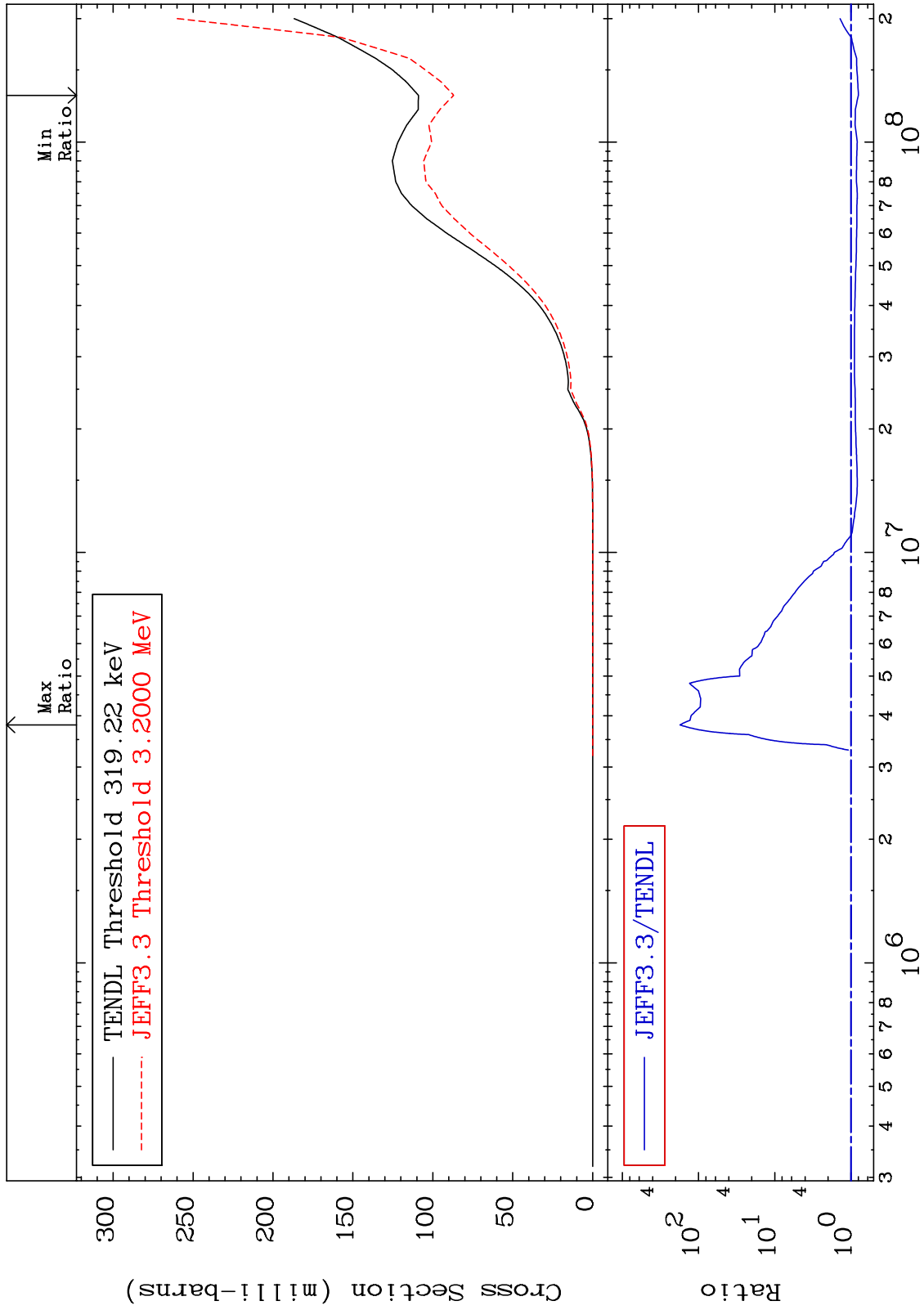
50-Sn-122
-0.334 To 8.117 %



MAT 5055

He-4 Production
Cross Section

50-Sn-122
-20.23 To 9999. %



60

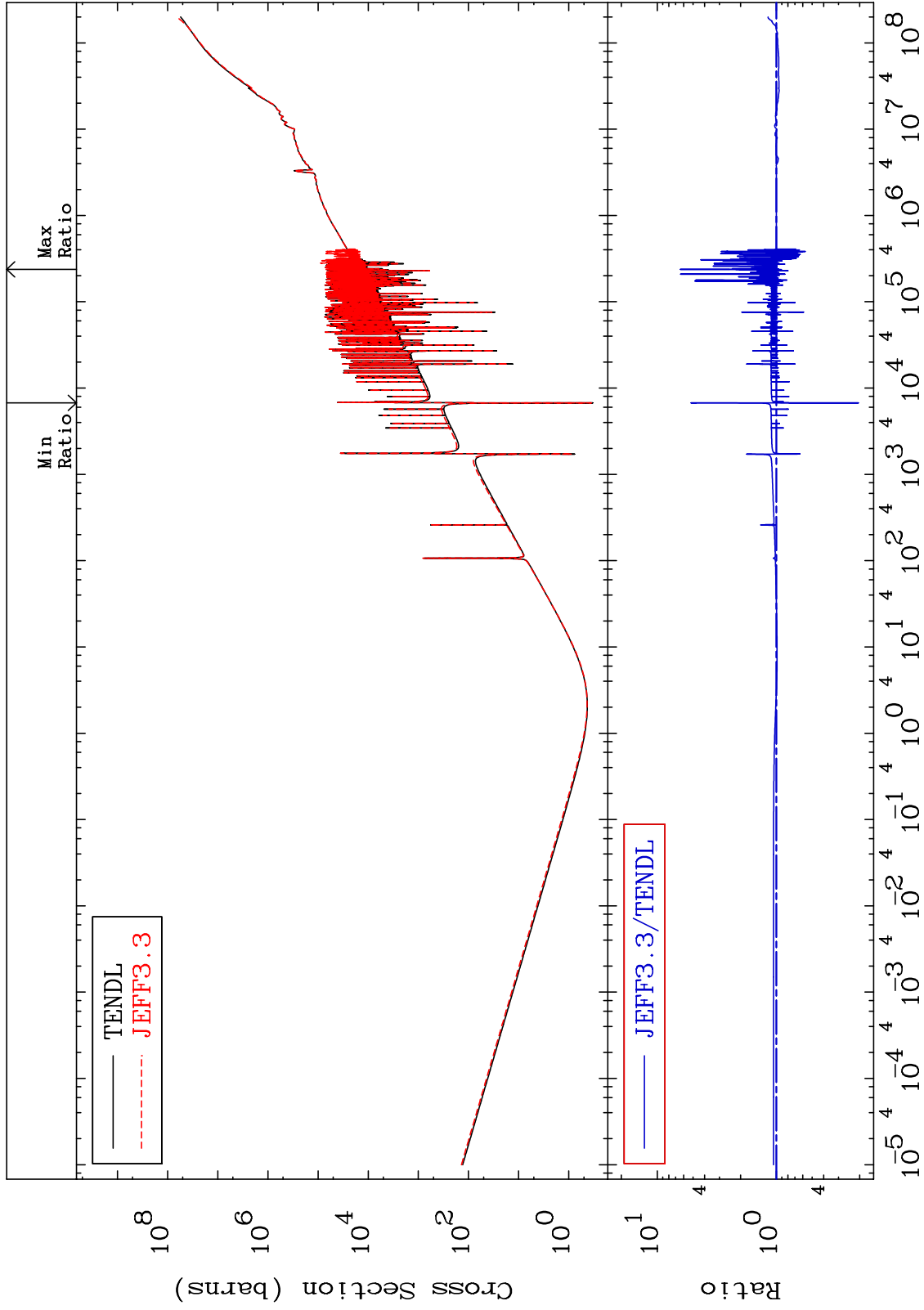
Incident Energy (eV)

50-Sn-122

MAT 5055

Kerma total (eV-barns)
Cross Section

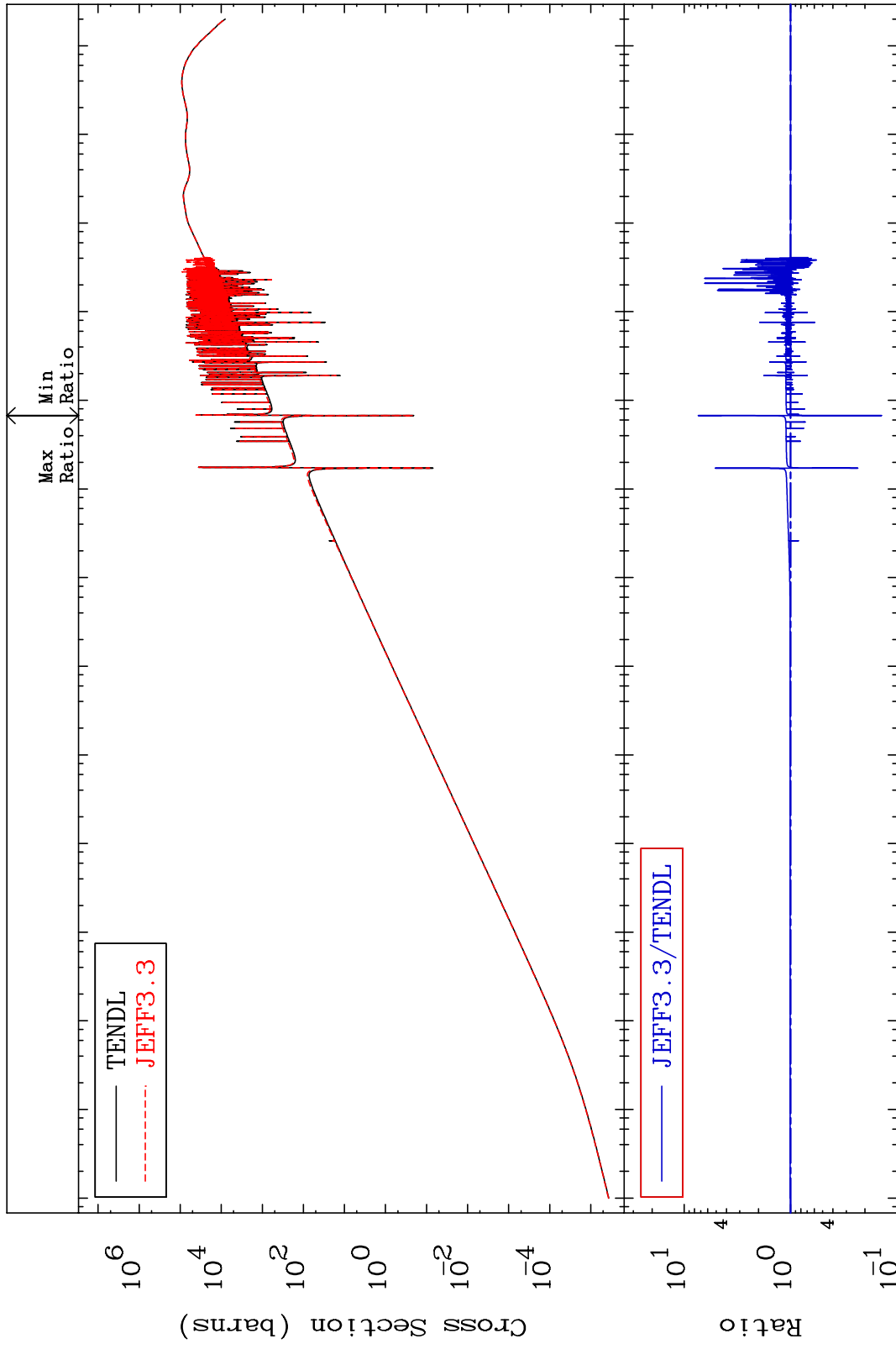
50-Sn-122
-79.54 To 543.7 %



MAT 5055

Kerma elastic
Cross Section

50-Sn-122
-86.02 To 636.0 %



62

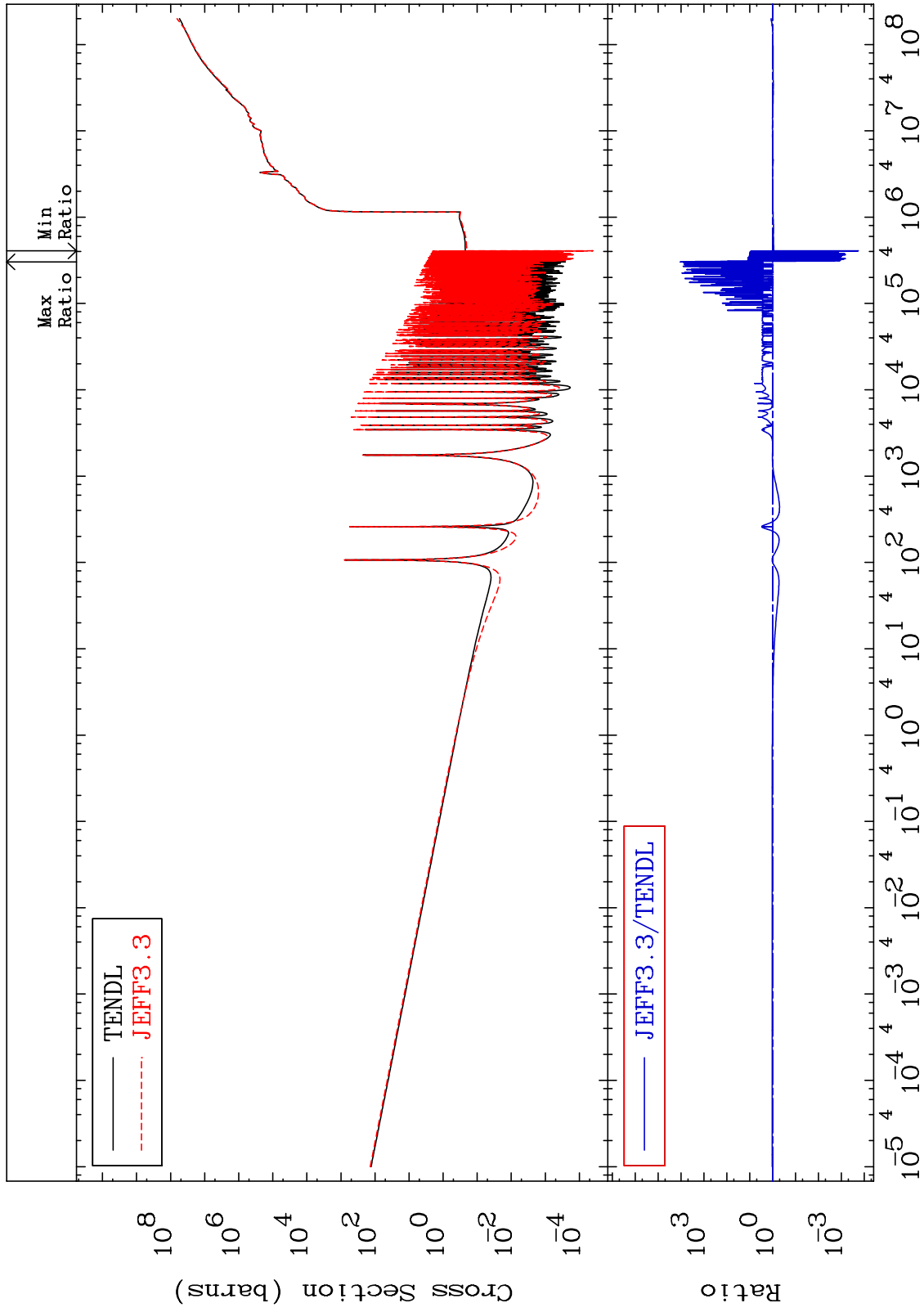
Incident Energy (eV)

50-Sn-122

MAT 5055

Kerma non-elastic (all but mt2)
Cross Section

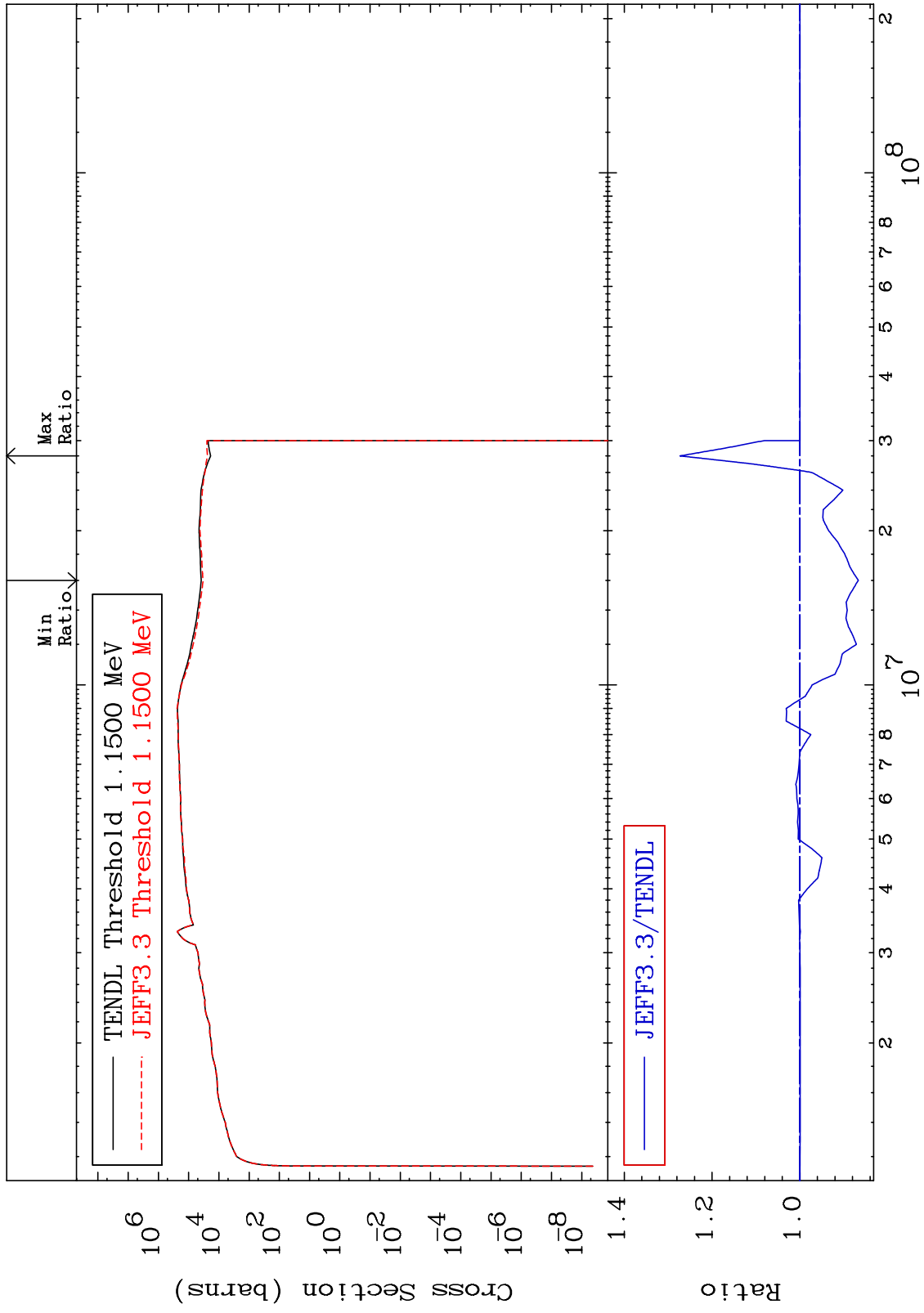
50-Sn-122
-99.98 To 9999. %



MAT 5055

Kerma inelastic (mt51-91)
Cross Section

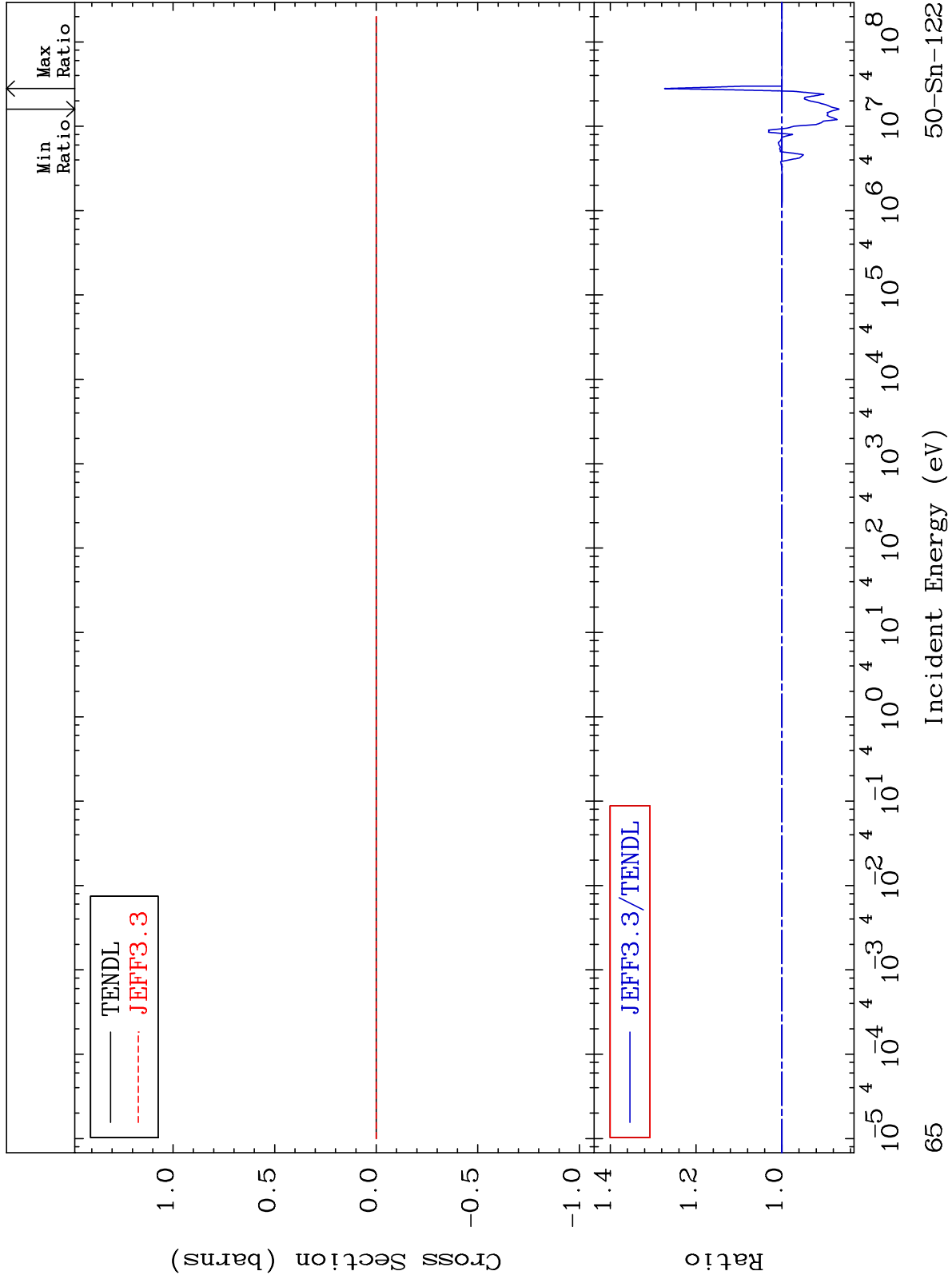
50-Sn-122
-13.35 To 27.30 %



MAT 5055

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

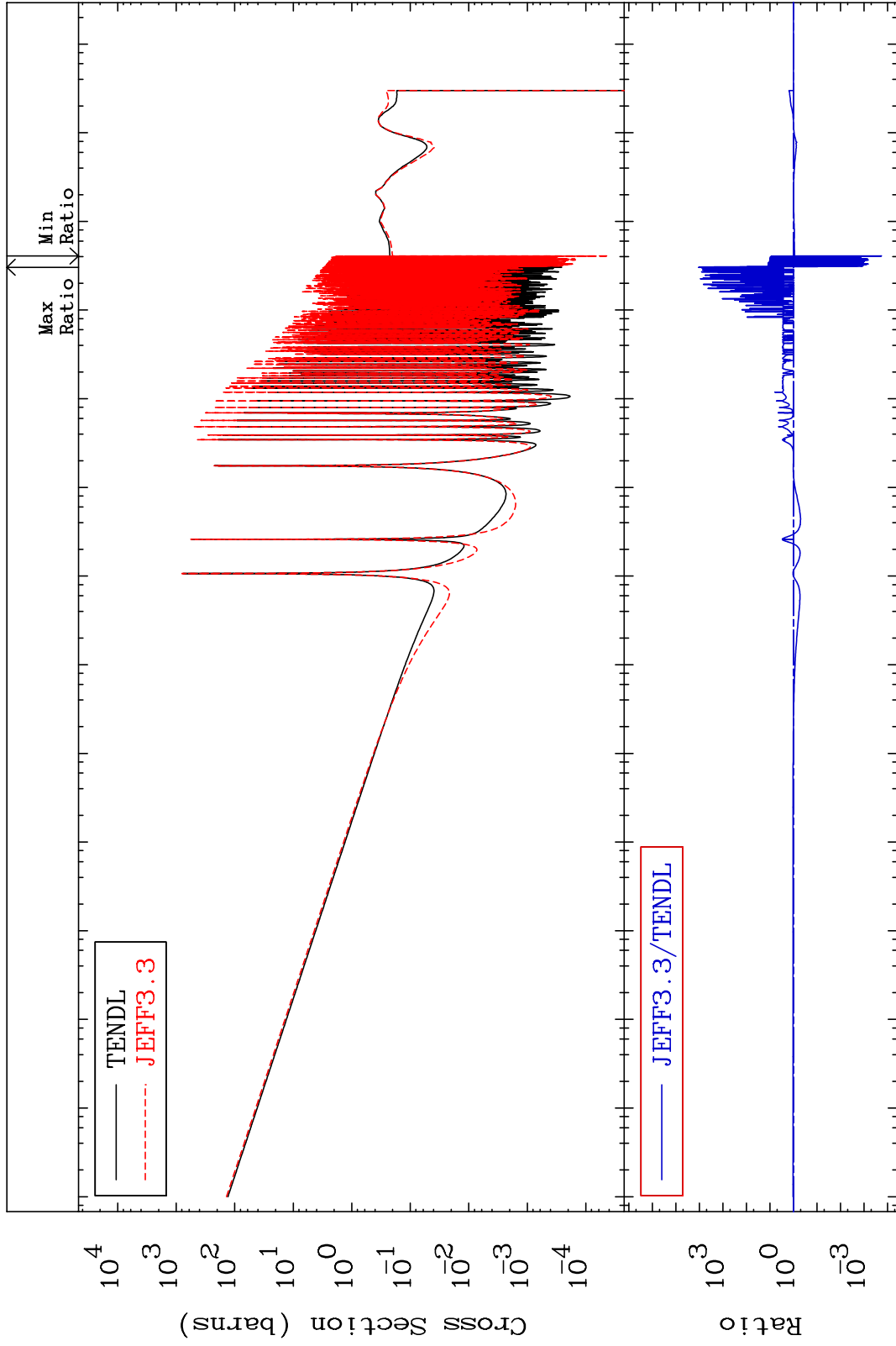
50-Sn-122
-13.35 To 27.30 %



MAT 5055

Kerma capture (mt102)
Cross Section

50-Sn-122
-99.98 To 9999. %



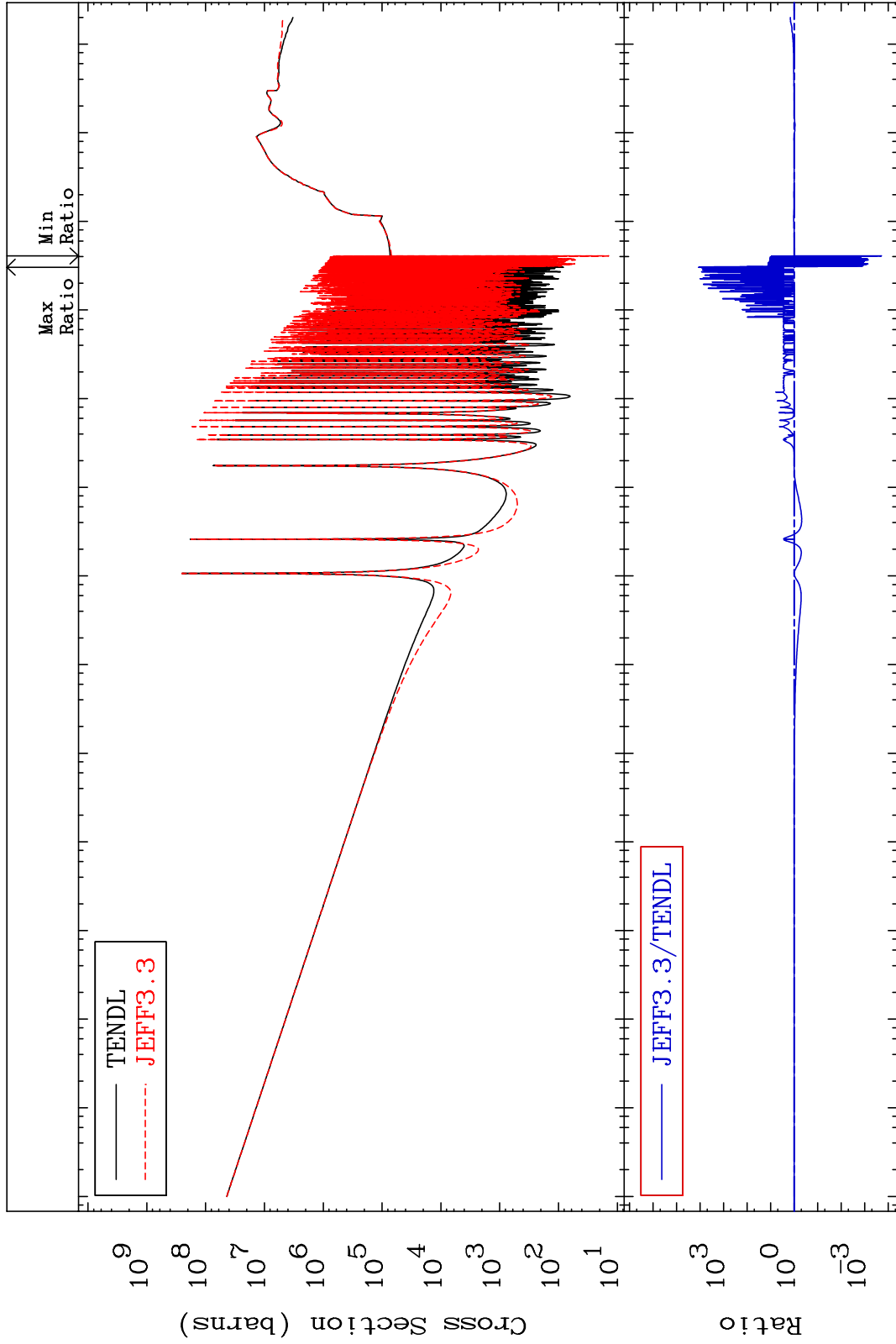
— TENDL
- - - JEFF3.3

— JEFF3.3/TENDL

MAT 5055

Total photon (eV-barns)
Cross Section

50-Sn-122
-99.98 To 9999. %



10⁹
10⁸
10⁷
10⁶
10⁵
10⁴
10³
10²
10¹
10⁰
10⁻¹
10⁻²
10⁻³
10⁻⁴
10⁻⁵

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

Ratio

10³
10⁰
10⁻³

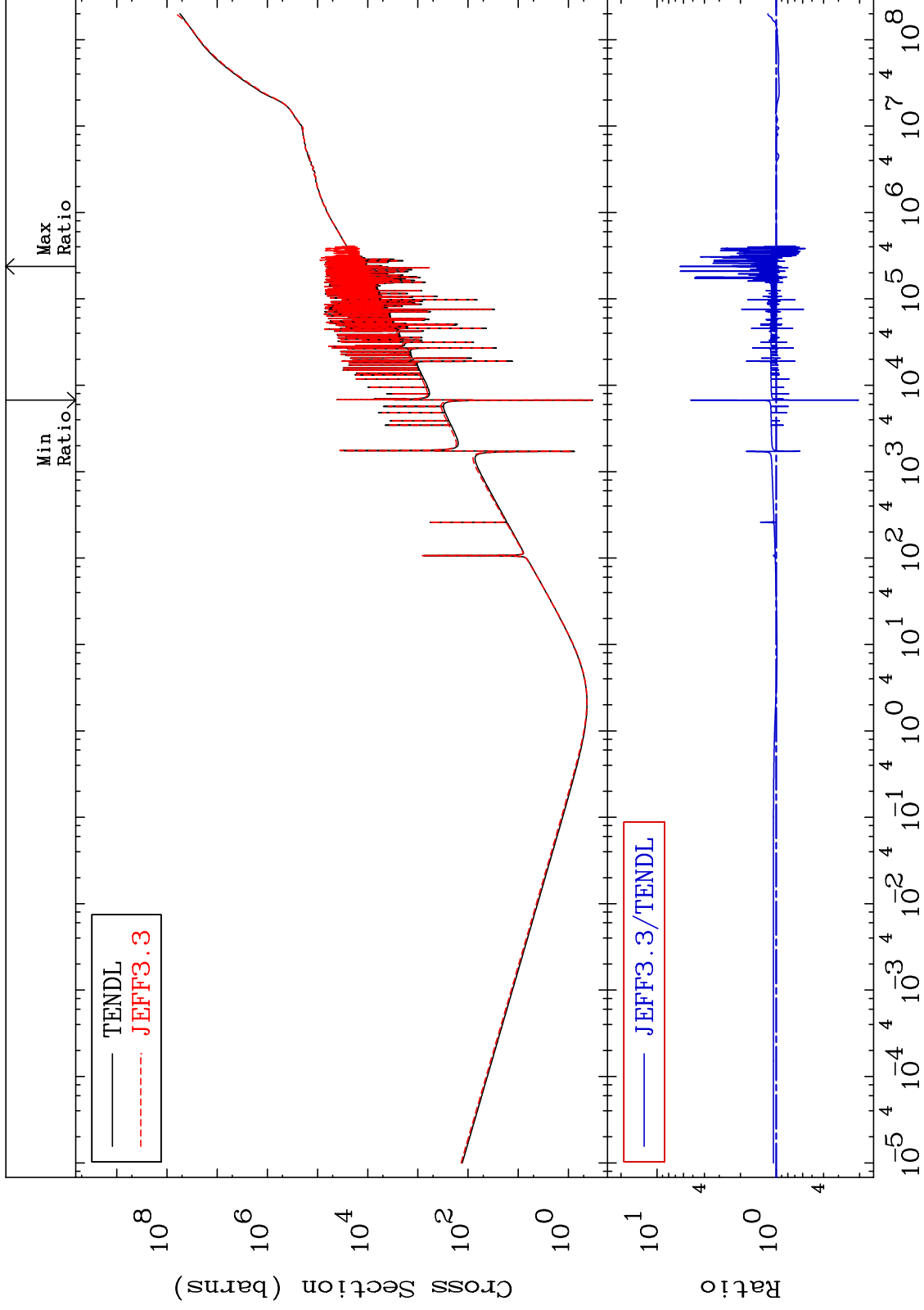
Incident Energy (eV)

50-Sn-122

MAT 5055

Total kinematic kerma (high limit)
Cross Section

50-Sn-122
-79.54 To 543.7 %



68

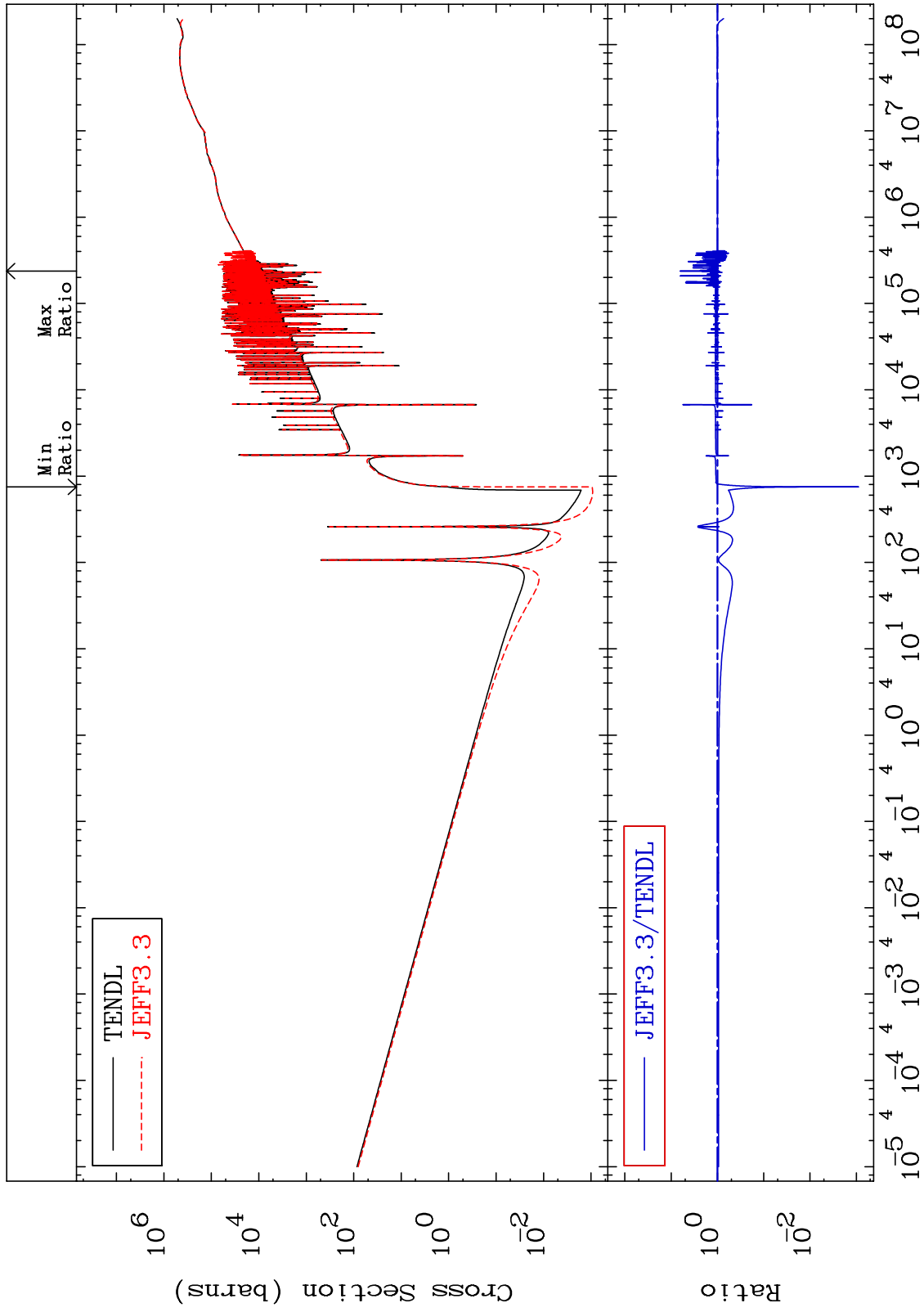
Incident Energy (eV)

50-Sn-122

MAT 5055

Dpa total (eV-barns)
Cross Section

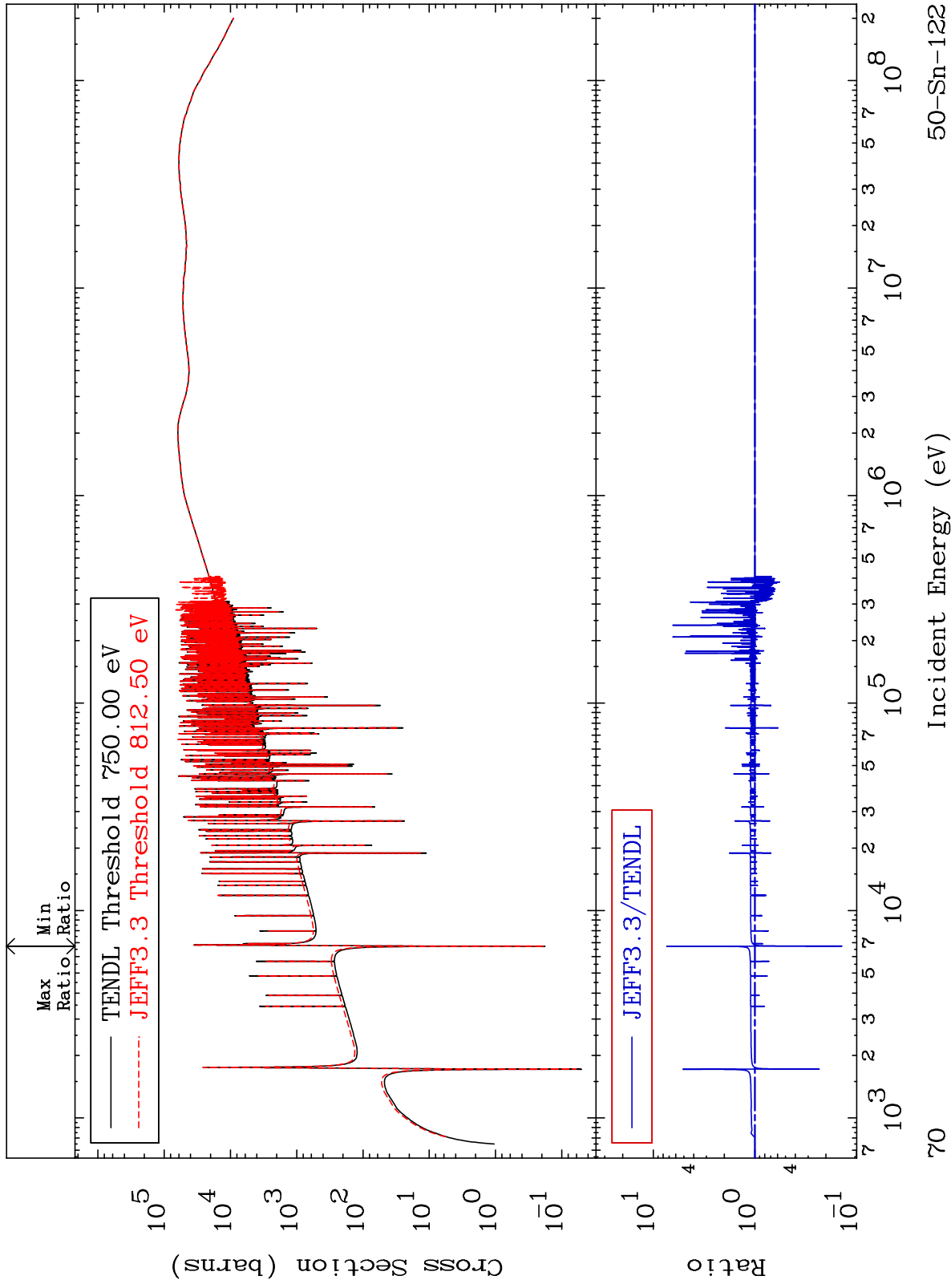
50-Sn-122
-99.91 To 543.7 %



MAT 5055

Dpa elastic (mt2)
Cross Section

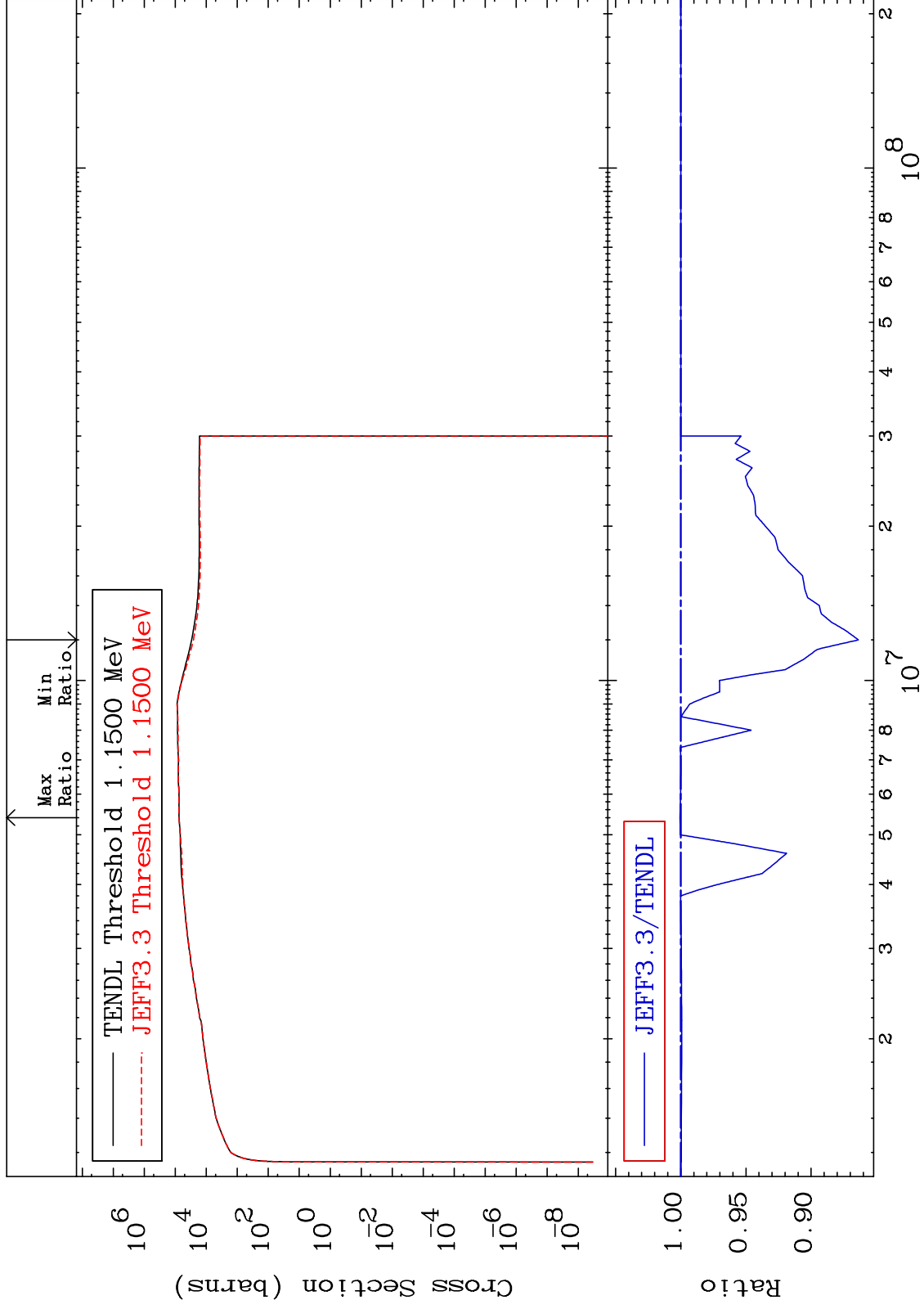
50-Sn-122
-86.02 To 636.0 %



MAT 5055

Dpa inelastic (mt51-91)
Cross Section

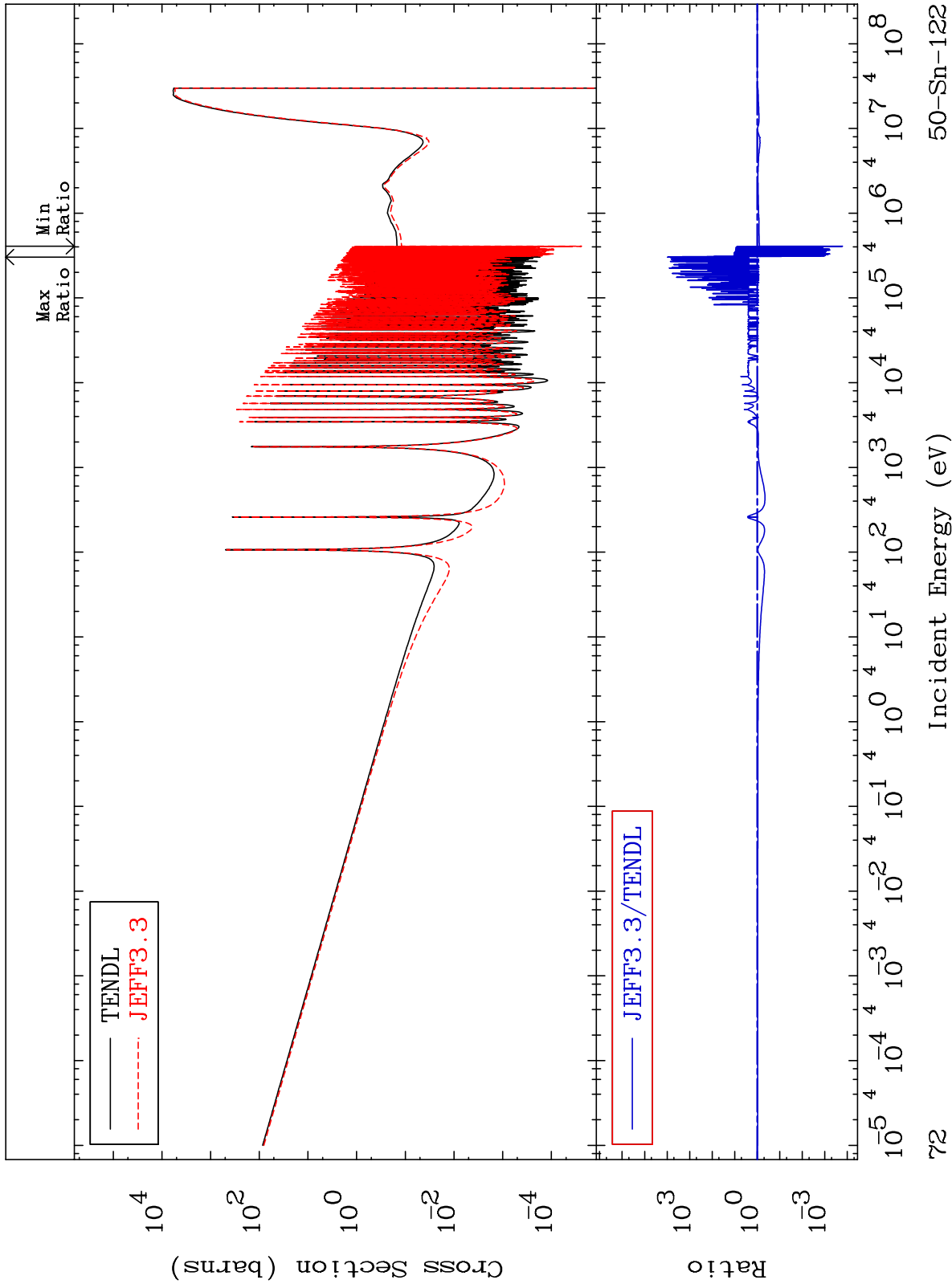
50-Sn-122
-13.63 To 0.057 %



MAT 5055

Dpa disappearance (mt102 -120)
Cross Section

50-Sn-122
-99.98 To 9999. %

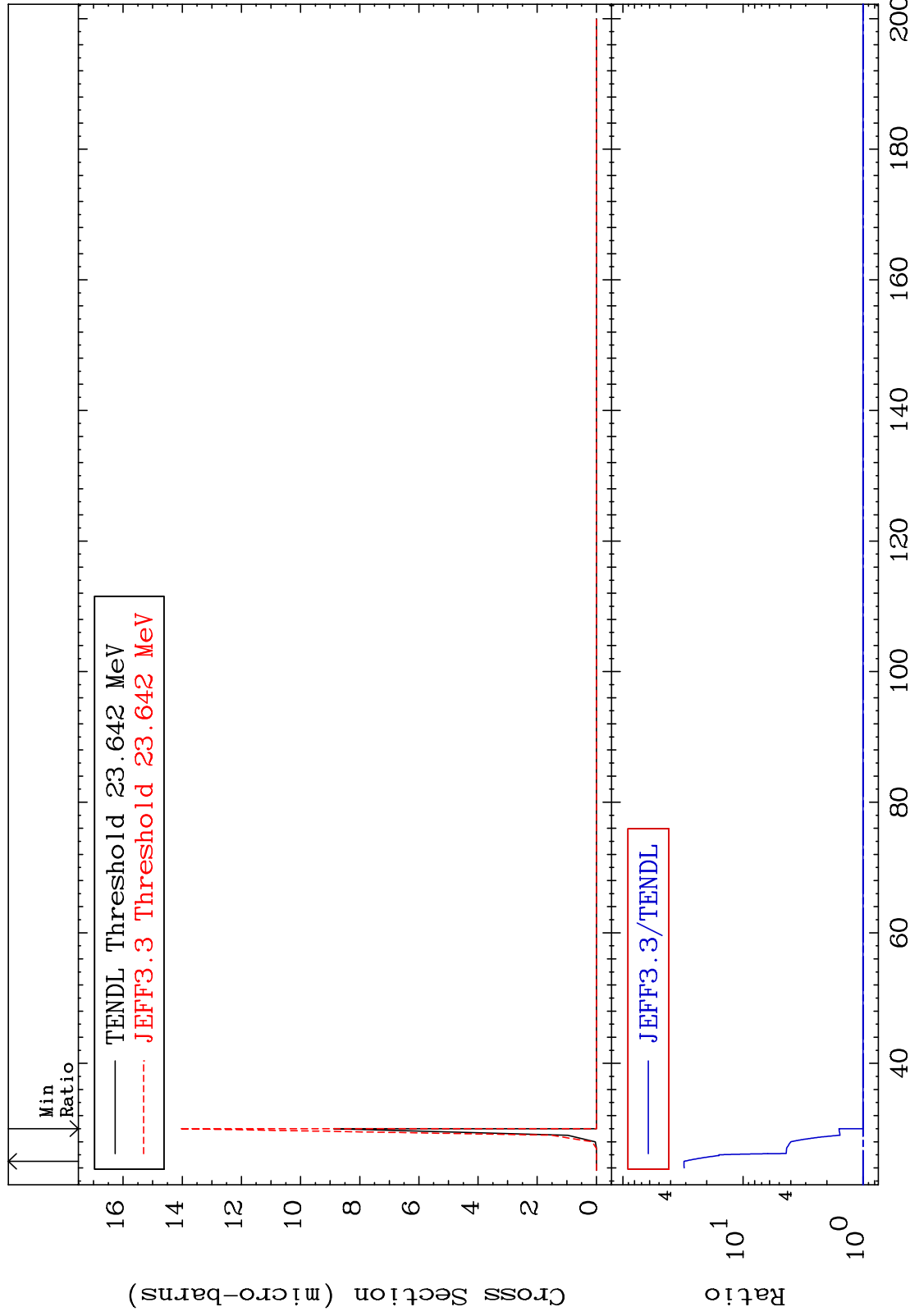


MAT 5055

(n,2n) d:49-In-119g

50-Sn-122

Radionuclide Production Cross Section 0.000 To 2995. %



73

Incident Energy (MeV)

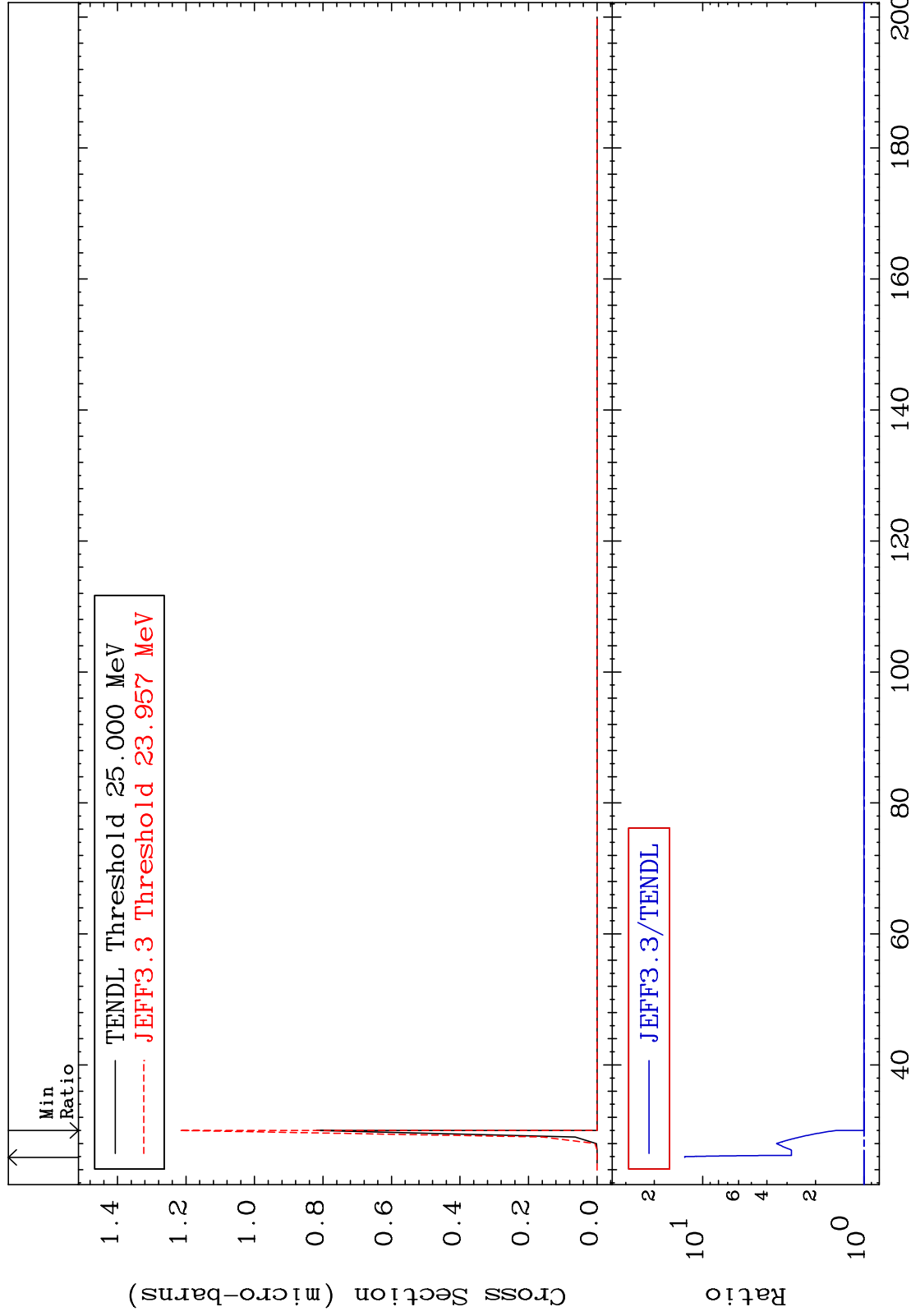
50-Sn-122

MAT 5055

(n,2n) d:49-In-119m1

50-Sn-122

Radionuclide Production Cross Section 0.000 To 1192. %



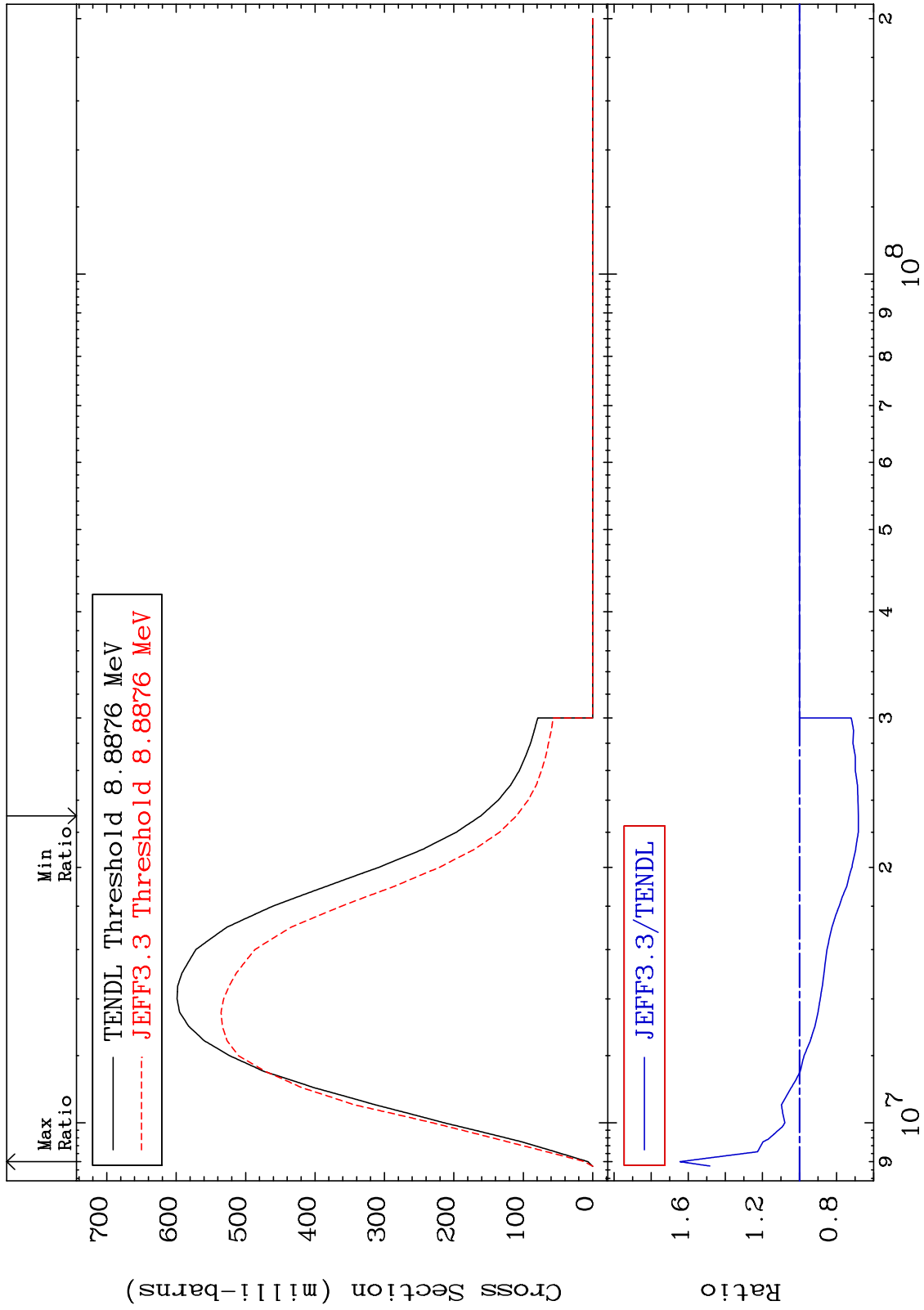
MAT 5055

(n,2n):50-Sn-121g

50-Sn-122

Radionuclide Production Cross Section

-31.82 To 64.38 %



75

Incident Energy (eV)

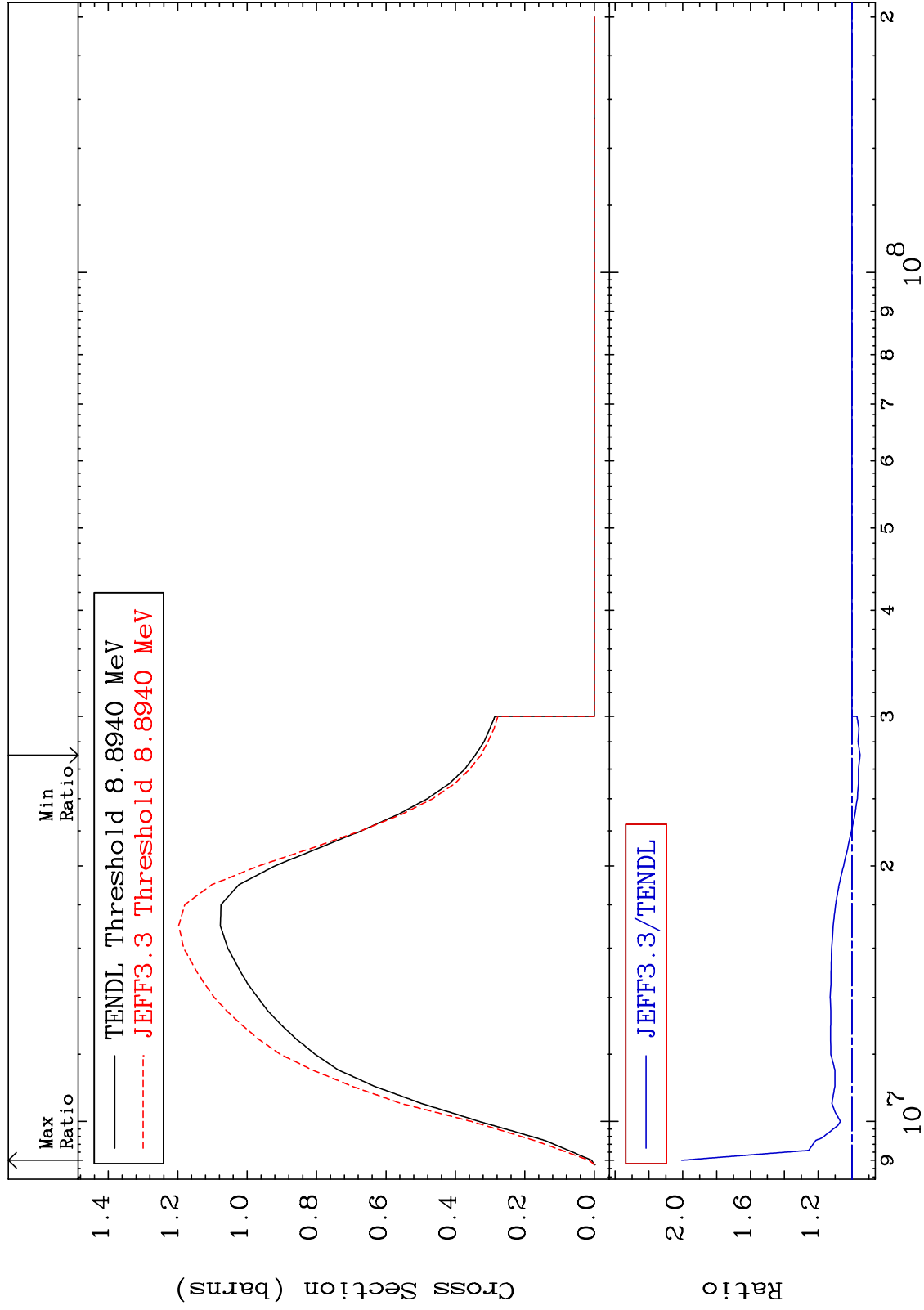
50-Sn-122

MAT 5055

(n,2n):50-Sn-121m1

50-Sn-122

Radionuclide Production Cross Section -4.744 To 100.7 %



76

Incident Energy (eV)

50-Sn-122

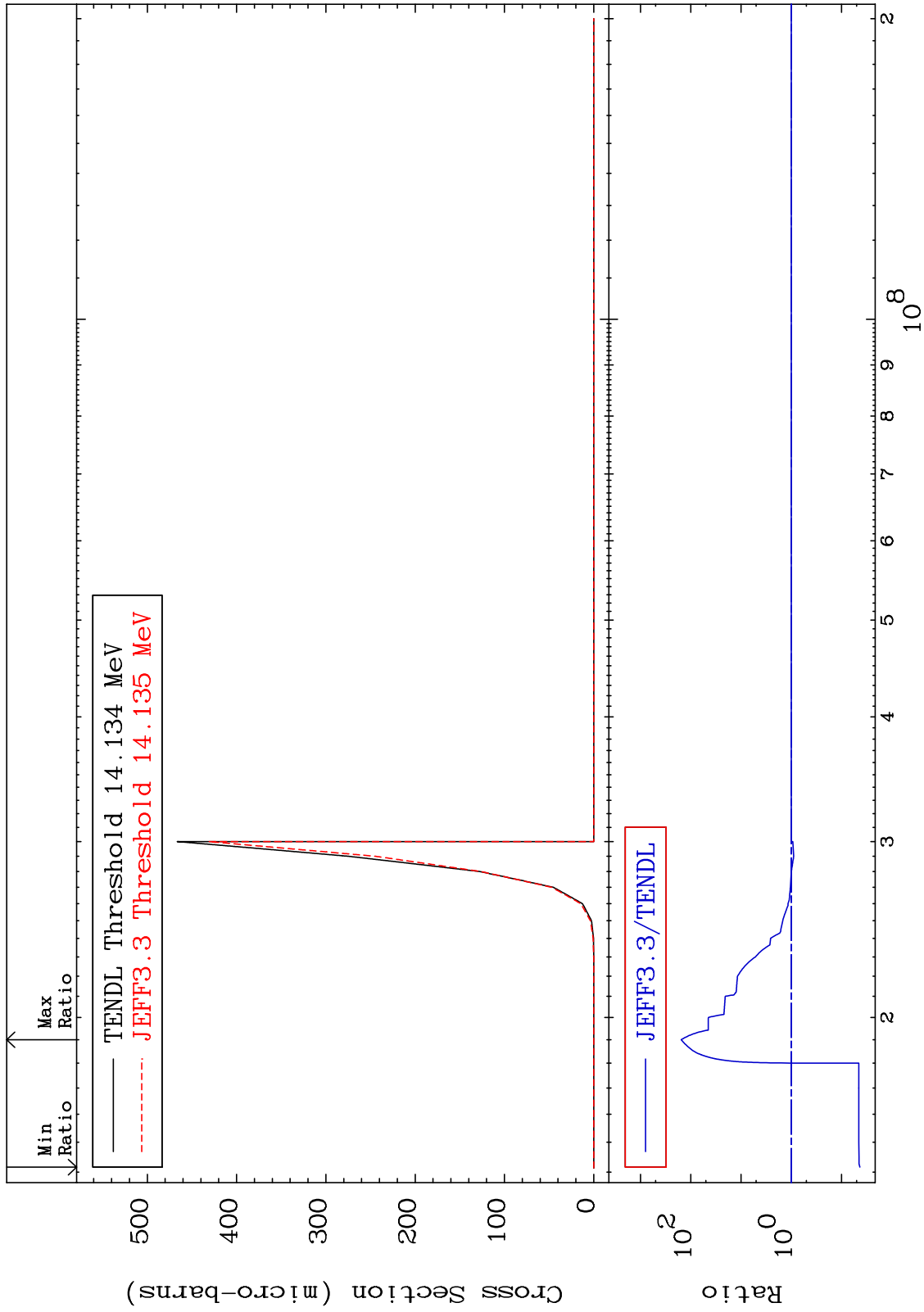
MAT 5055

(n,2n) α :48-Cd-117g

50-Sn-122

Radionuclide Production Cross Section

-95.72 To 9999. %

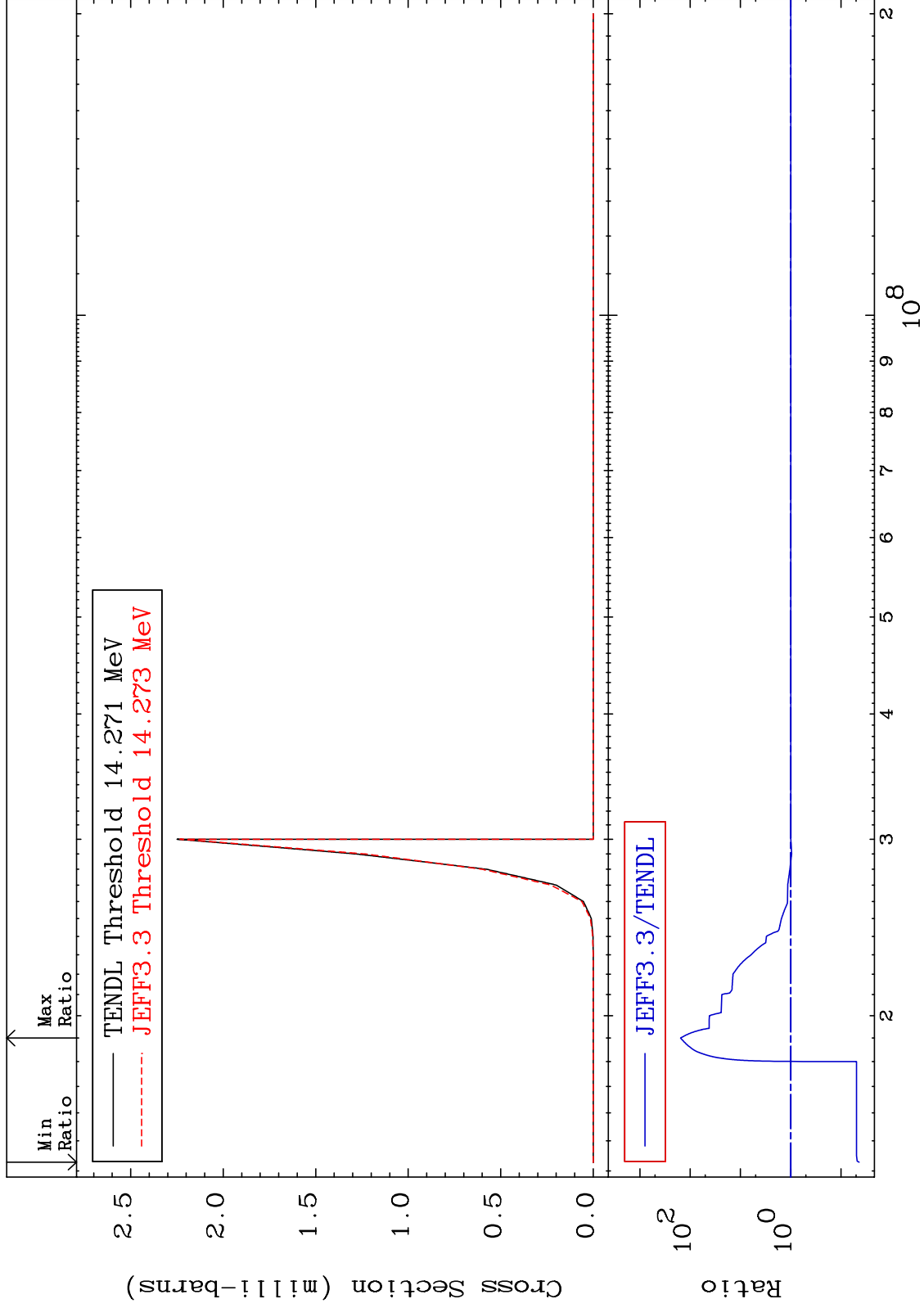


MAT 5055

(n,2n) α : 48-Cd-117m2

50-Sn-122

Radionuclide Production Cross Section -95.65 To 9999. %

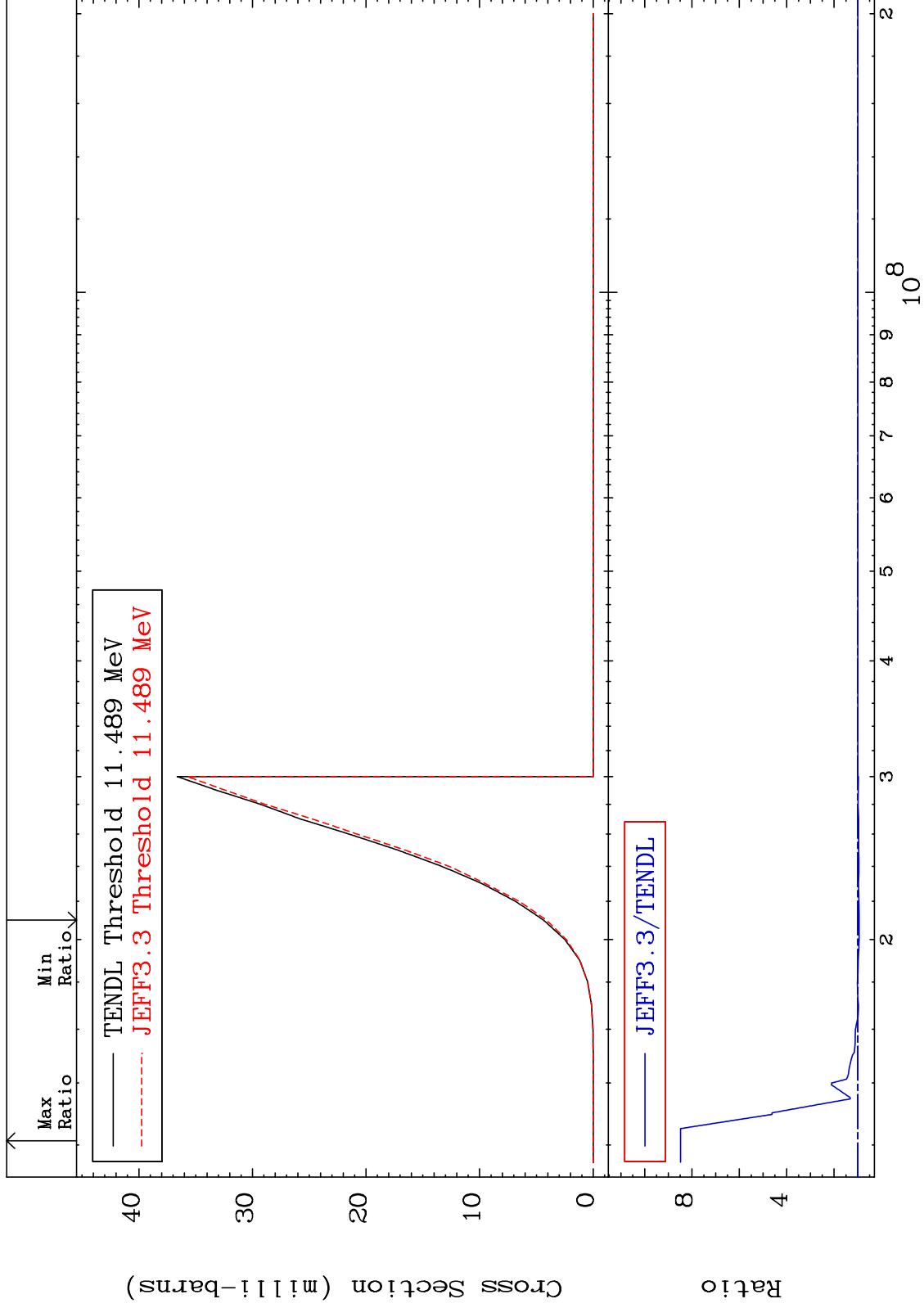


MAT 5055

(n, n') p:49-In-121g

50-Sn-122

Radionuclide Production Cross Section -5.788 To 748.1 %



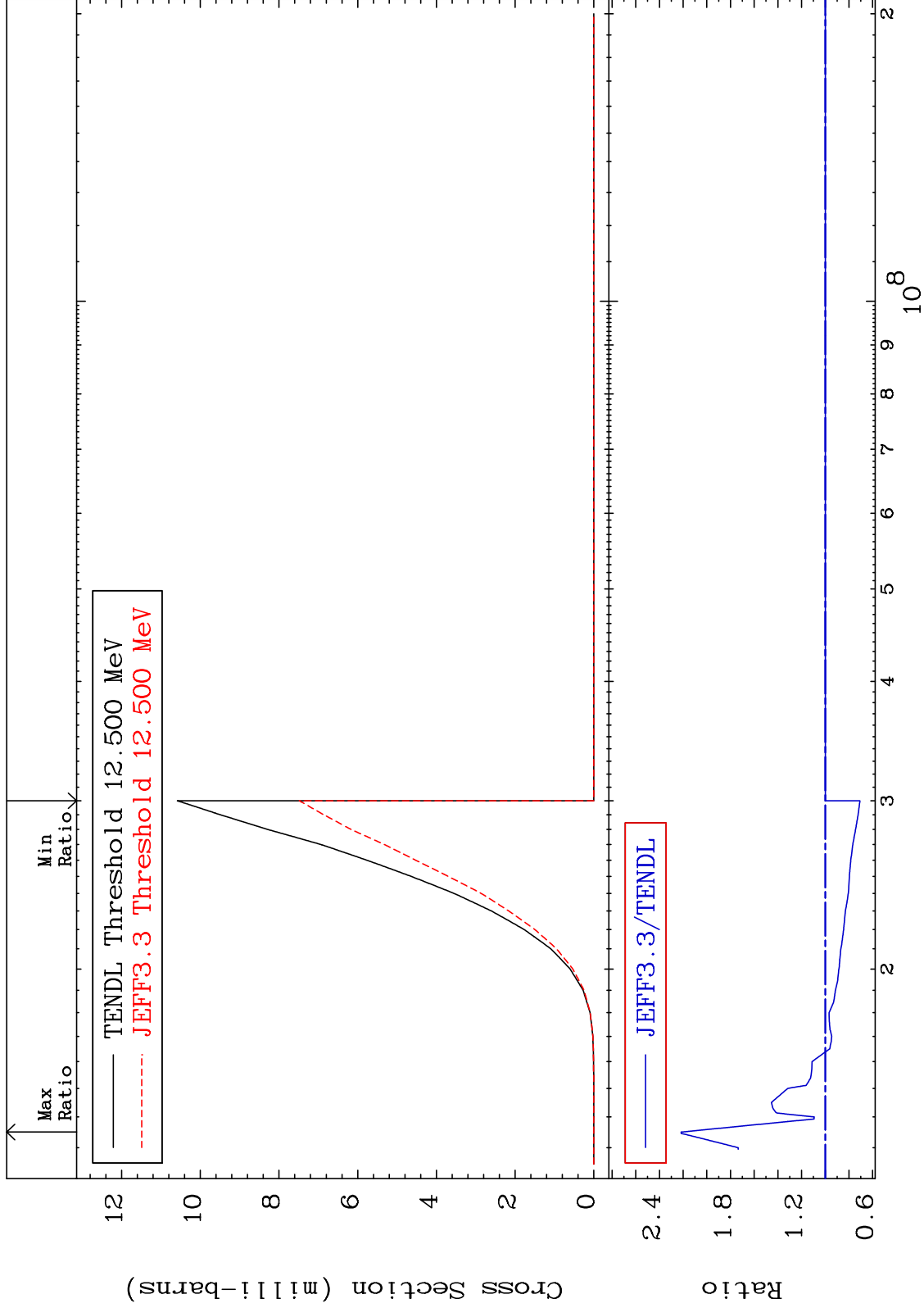
MAT 5055

(n, n') p: 49-In-121m1

50-Sn-122

Radionuclide Production Cross Section

-29.27 To 121.6 %

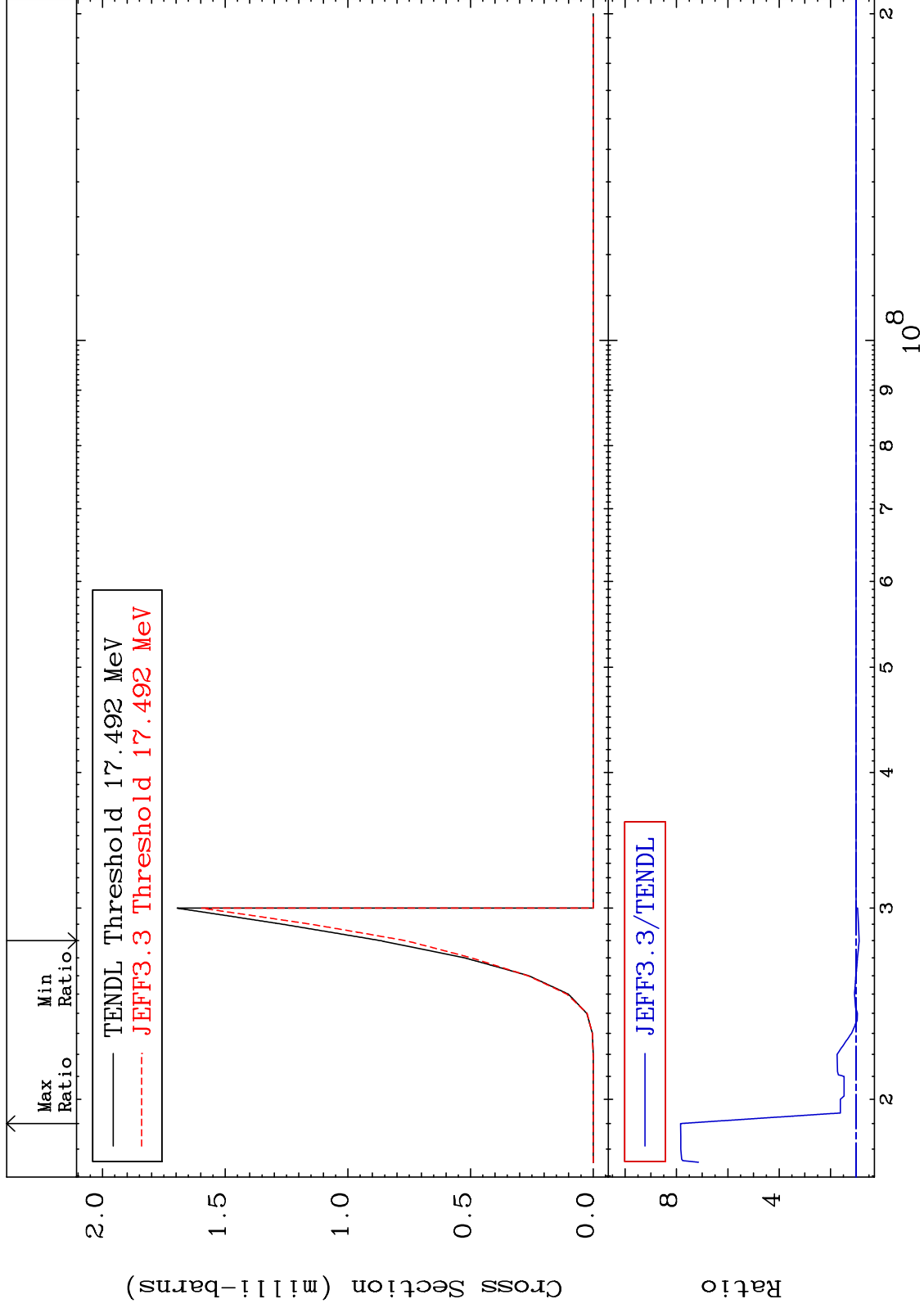


MAT 5055

(n, n') d:49-In-120g

50-Sn-122

Radionuclide Production Cross Section -11.86 To 684.0 %

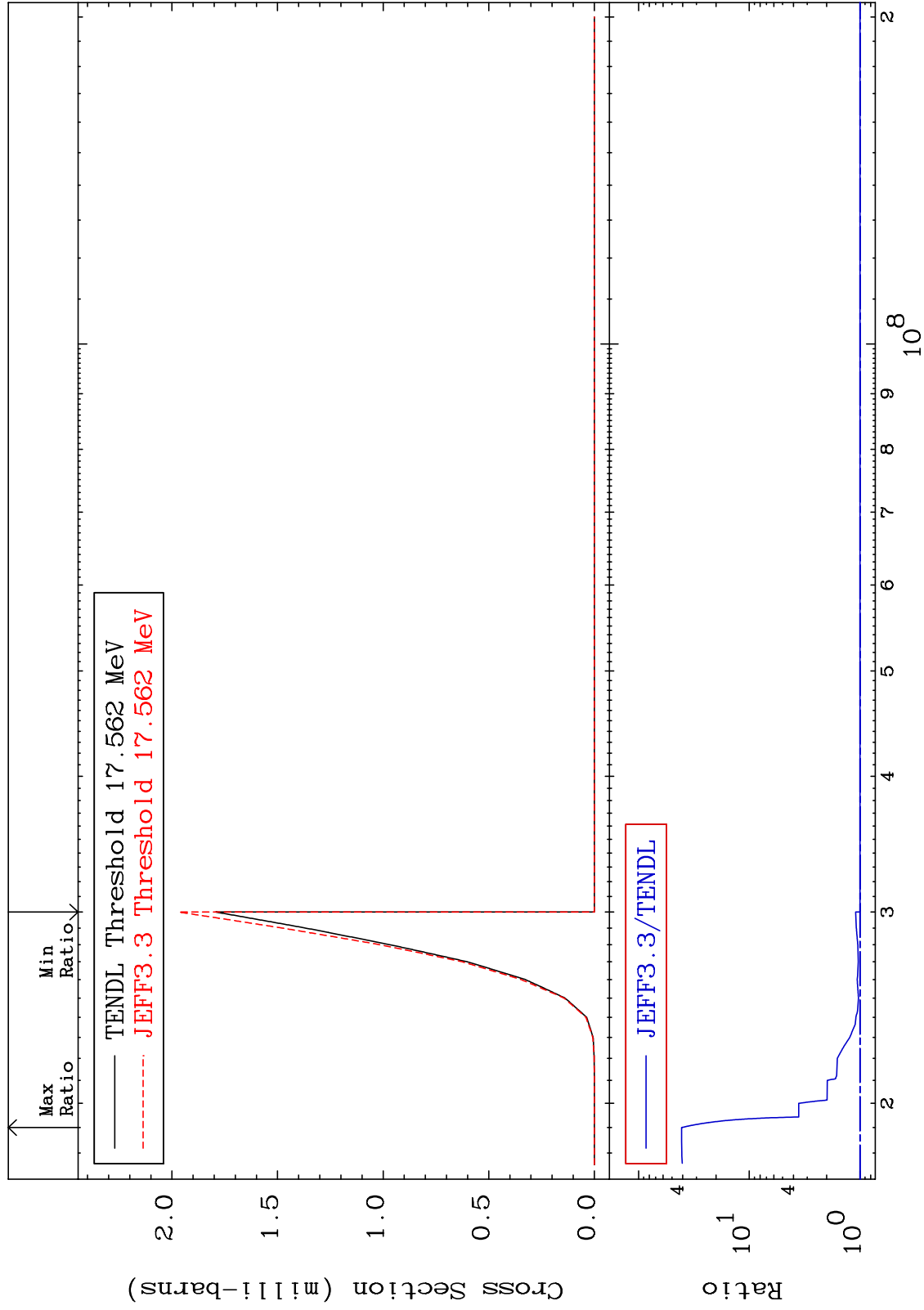


MAT 5055

(n, n') d:49-In-120m1

50-Sn-122

Radionuclide Production Cross Section 0.000 To 3982. %

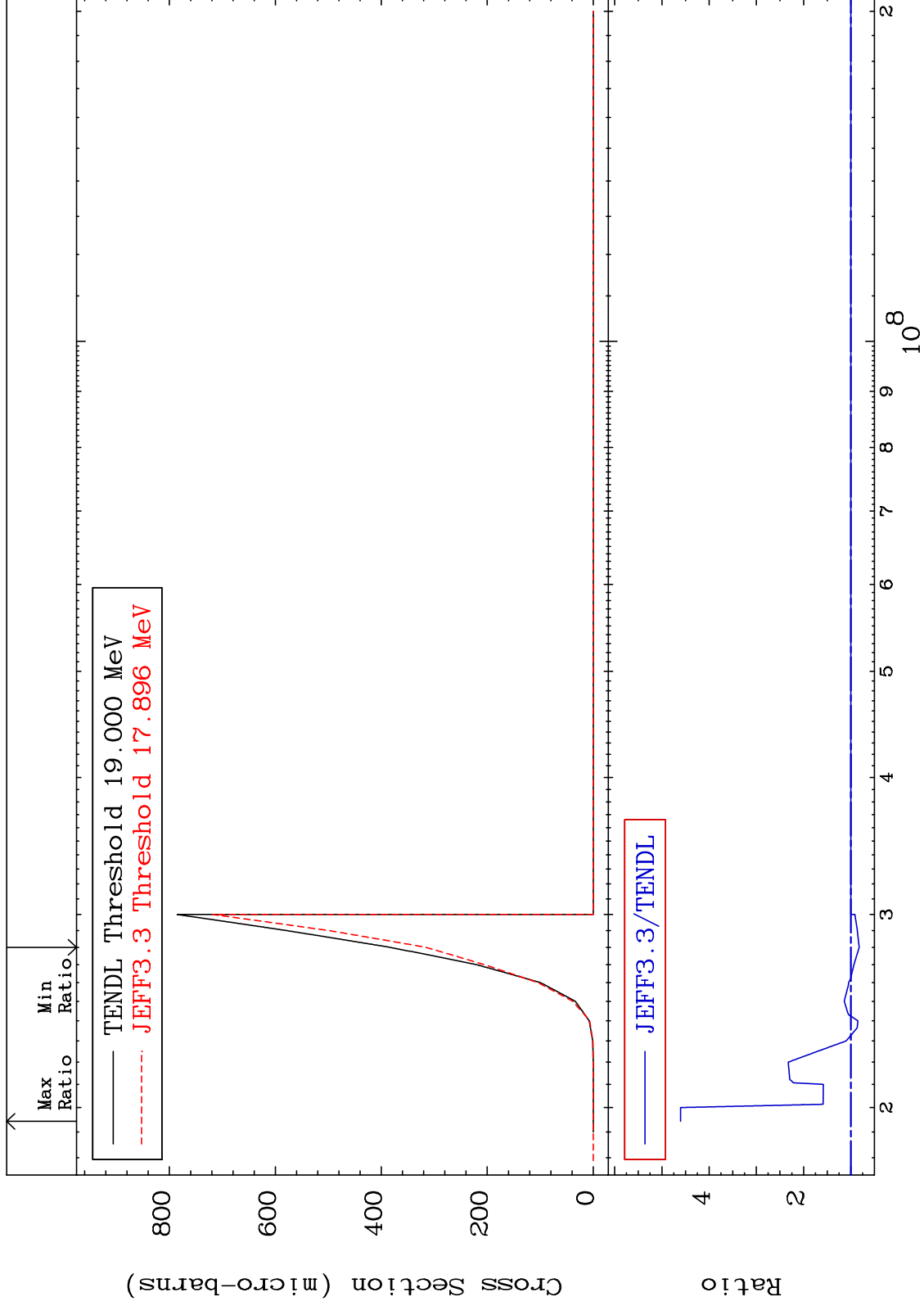


MAT 5055

(n, n') d: 49-In-120m2

50-Sn-122

Radionuclide Production Cross Section -17.65 To 360.4 %

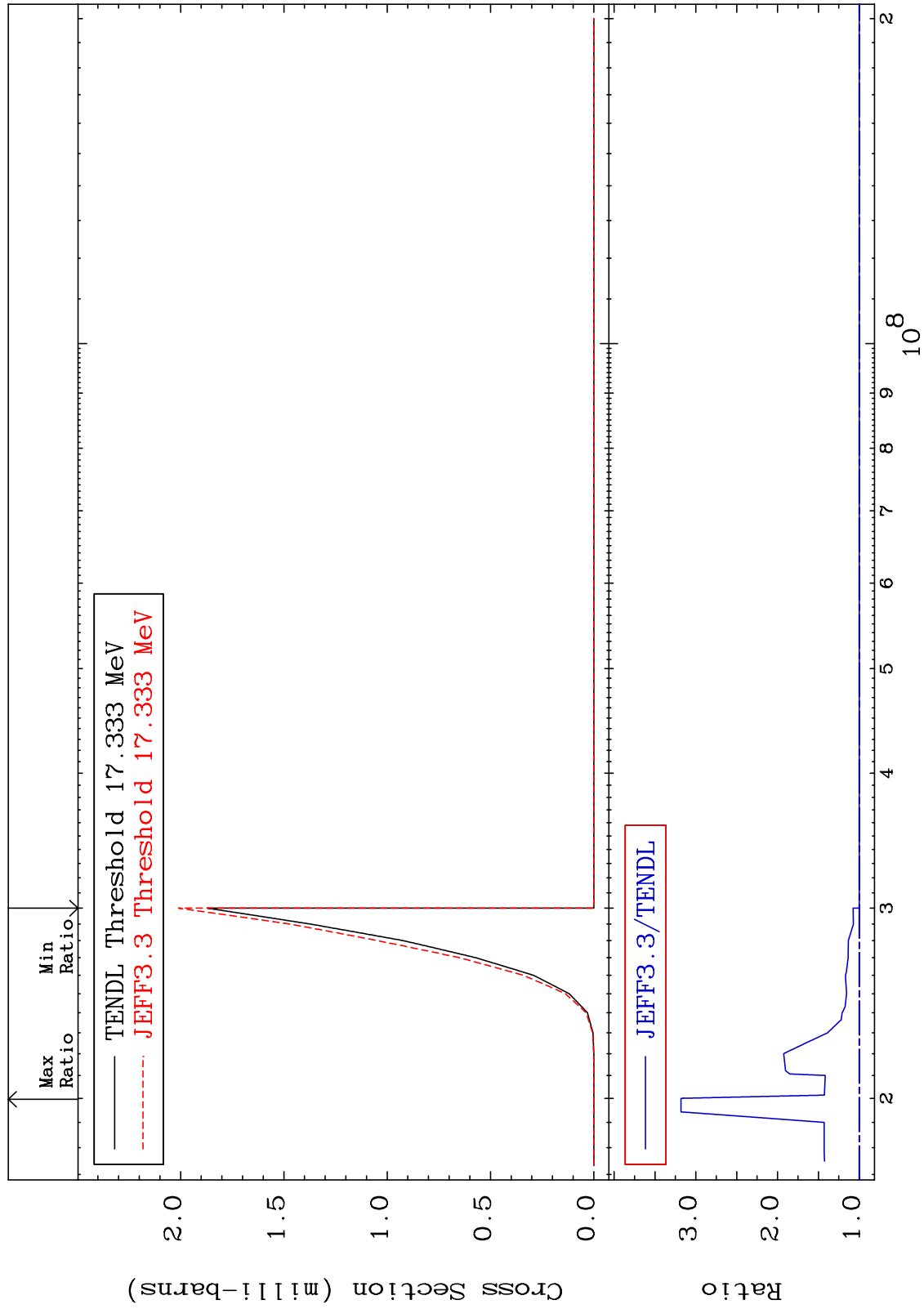


MAT 5055

(n, n') t:49-In-119g

50-Sn-122

Radionuclide Production Cross Section 0.000 To 218.1 %

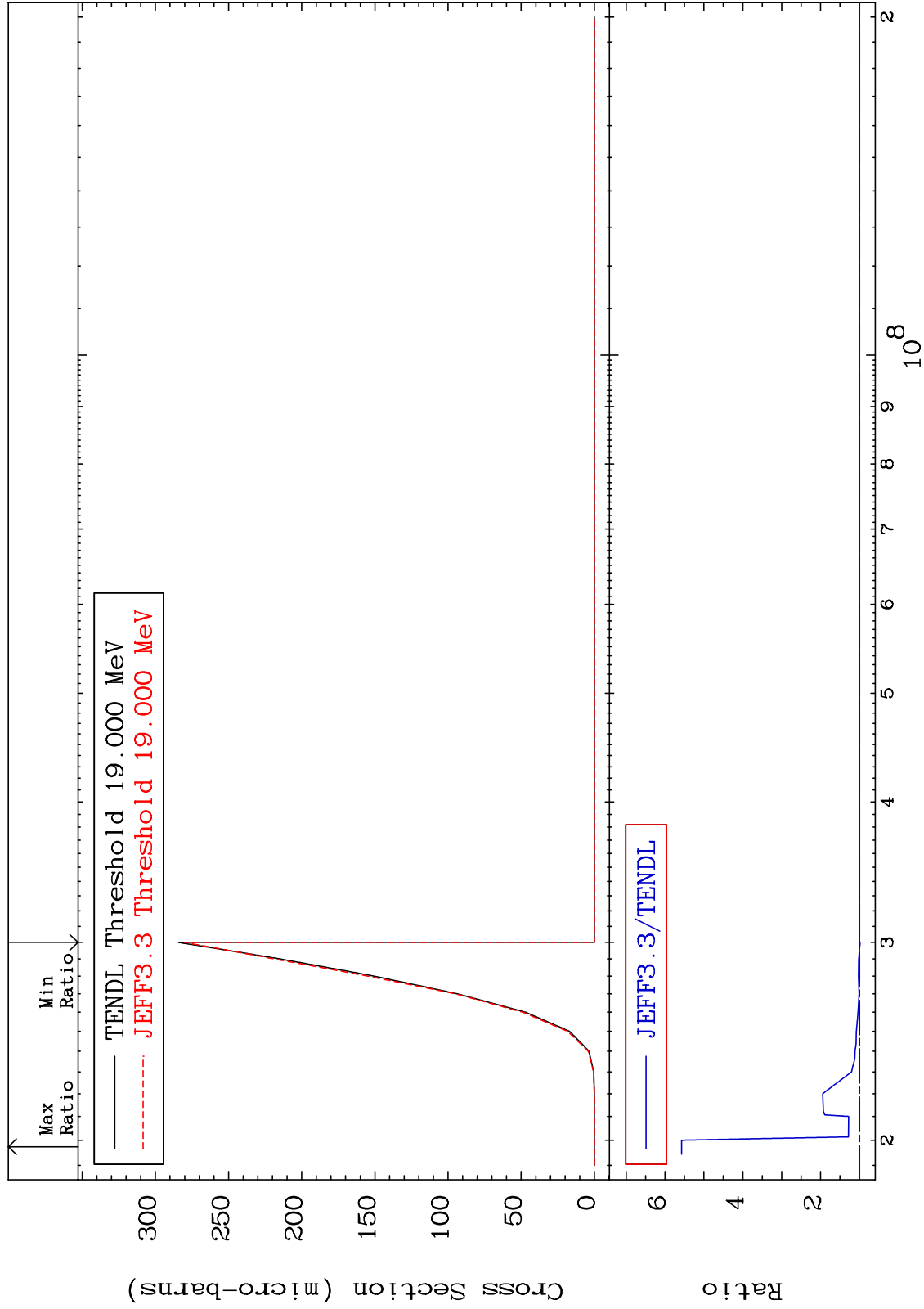


MAT 5055

(n, n') t: 49-In-119m1

50-Sn-122

Radionuclide Production Cross Section -1.430 To 457.2 %



85

Incident Energy (eV)

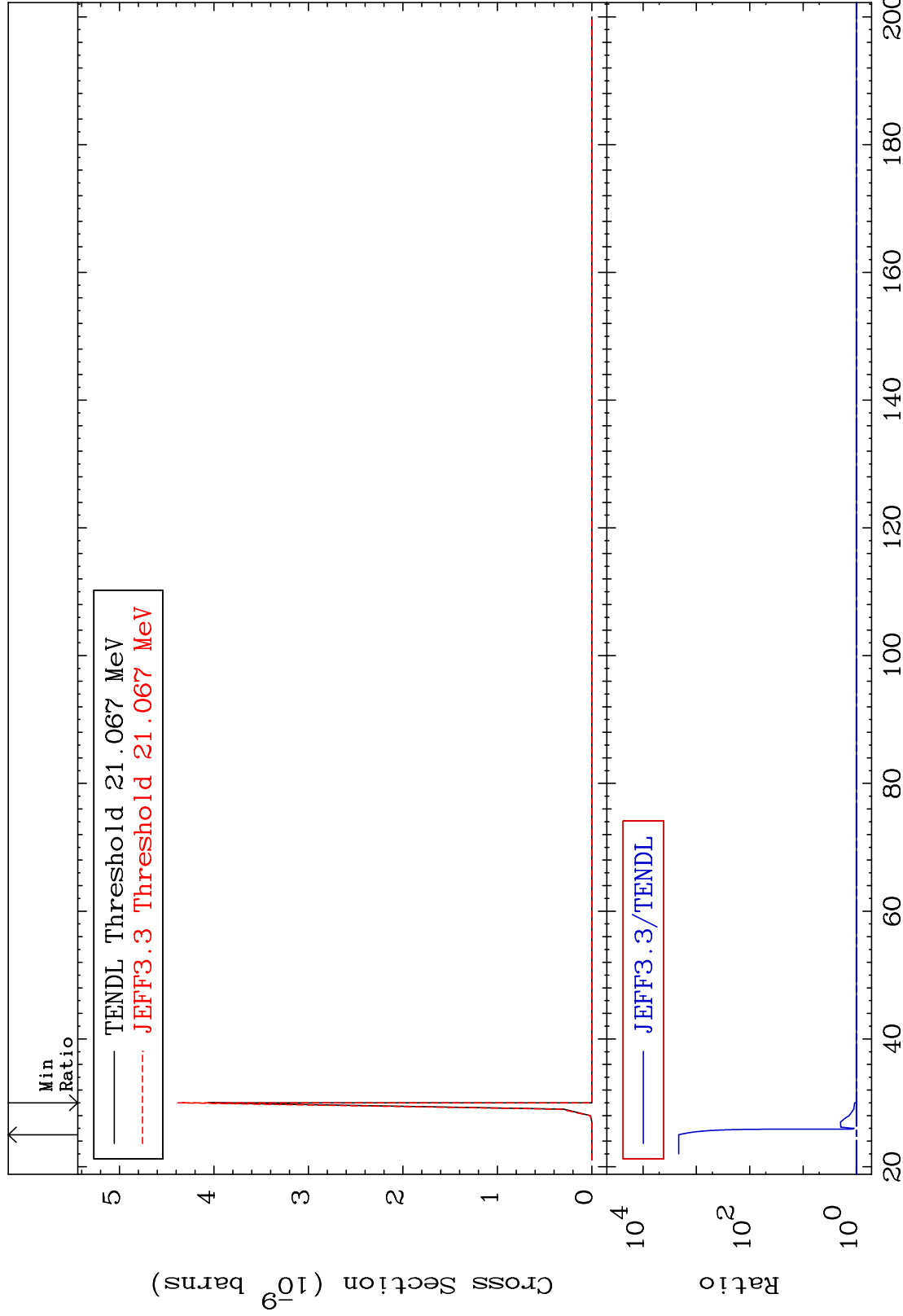
50-Sn-122

MAT 5055

(n, n') He-3:48-Cd-119g

50-Sn-122

Radionuclide Production Cross Section 0.000 To 9999. %

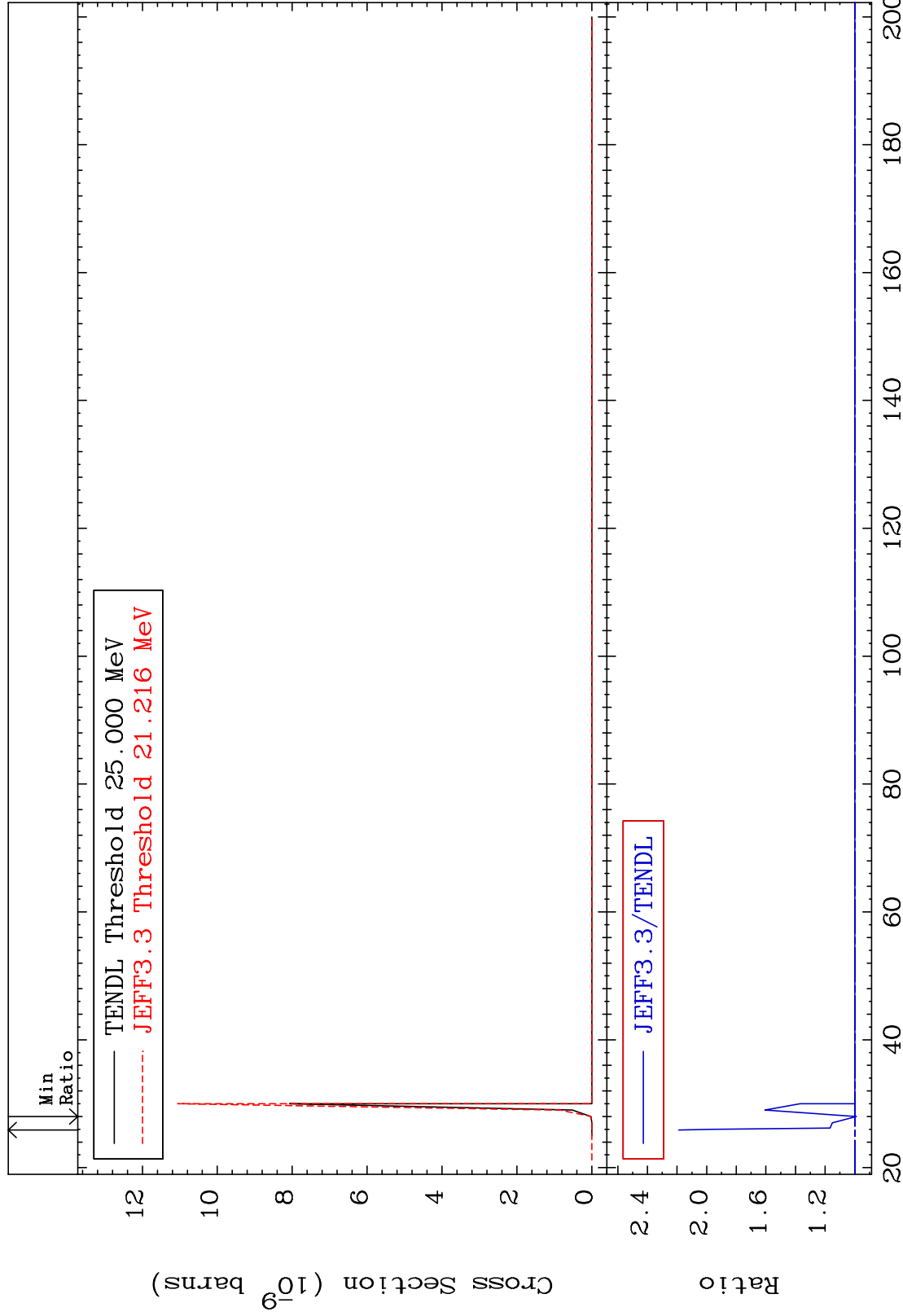


MAT 5055

(n, n') He-3: 48-Cd-119m2

50-Sn-122

Radionuclide Production Cross Section -1.115 To 118.8 %



87

Incident Energy (MeV)

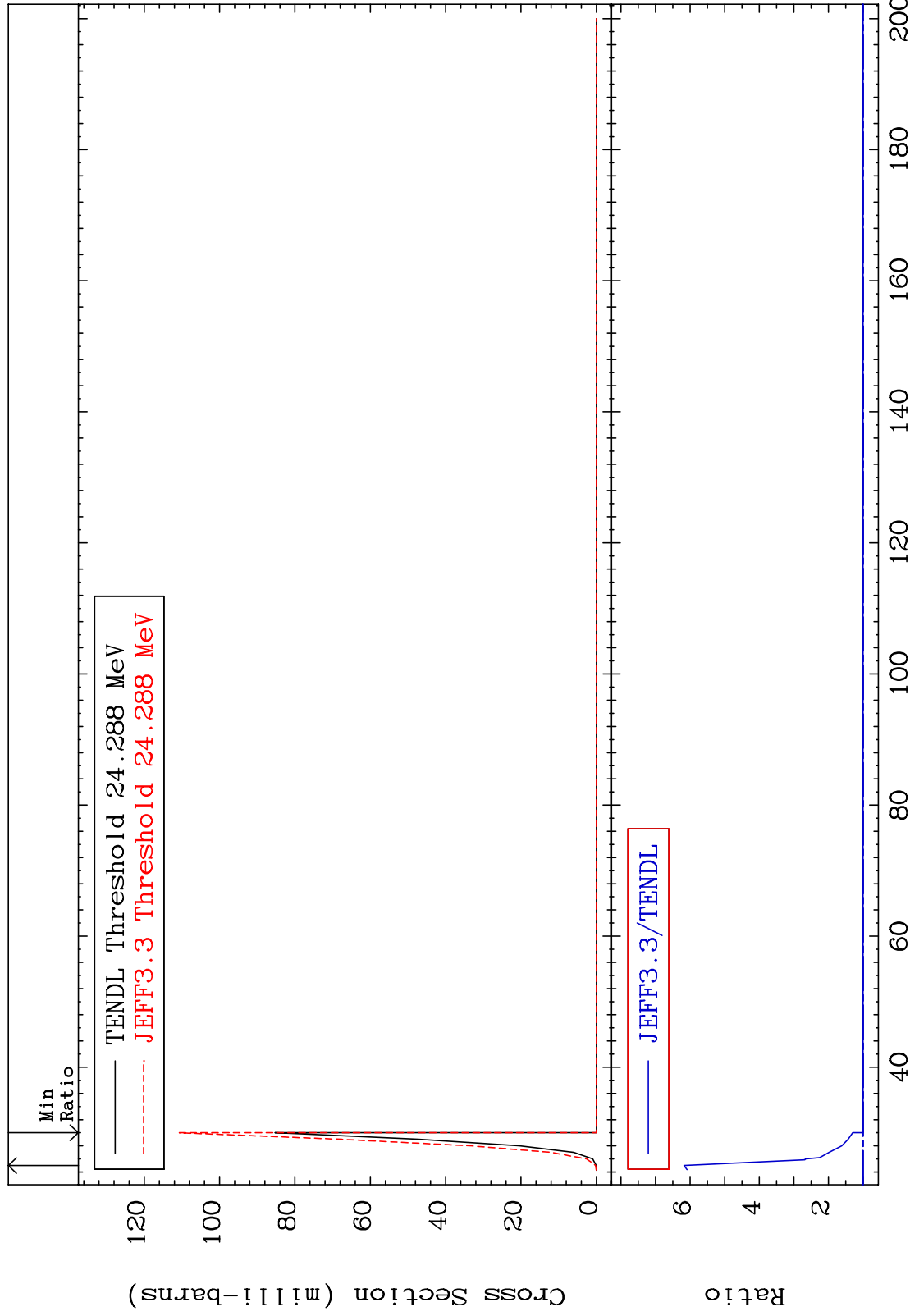
50-Sn-122

MAT 5055

(n,4n):50-Sn-119g

50-Sn-122

Radionuclide Production Cross Section 0.000 To 517.4 %

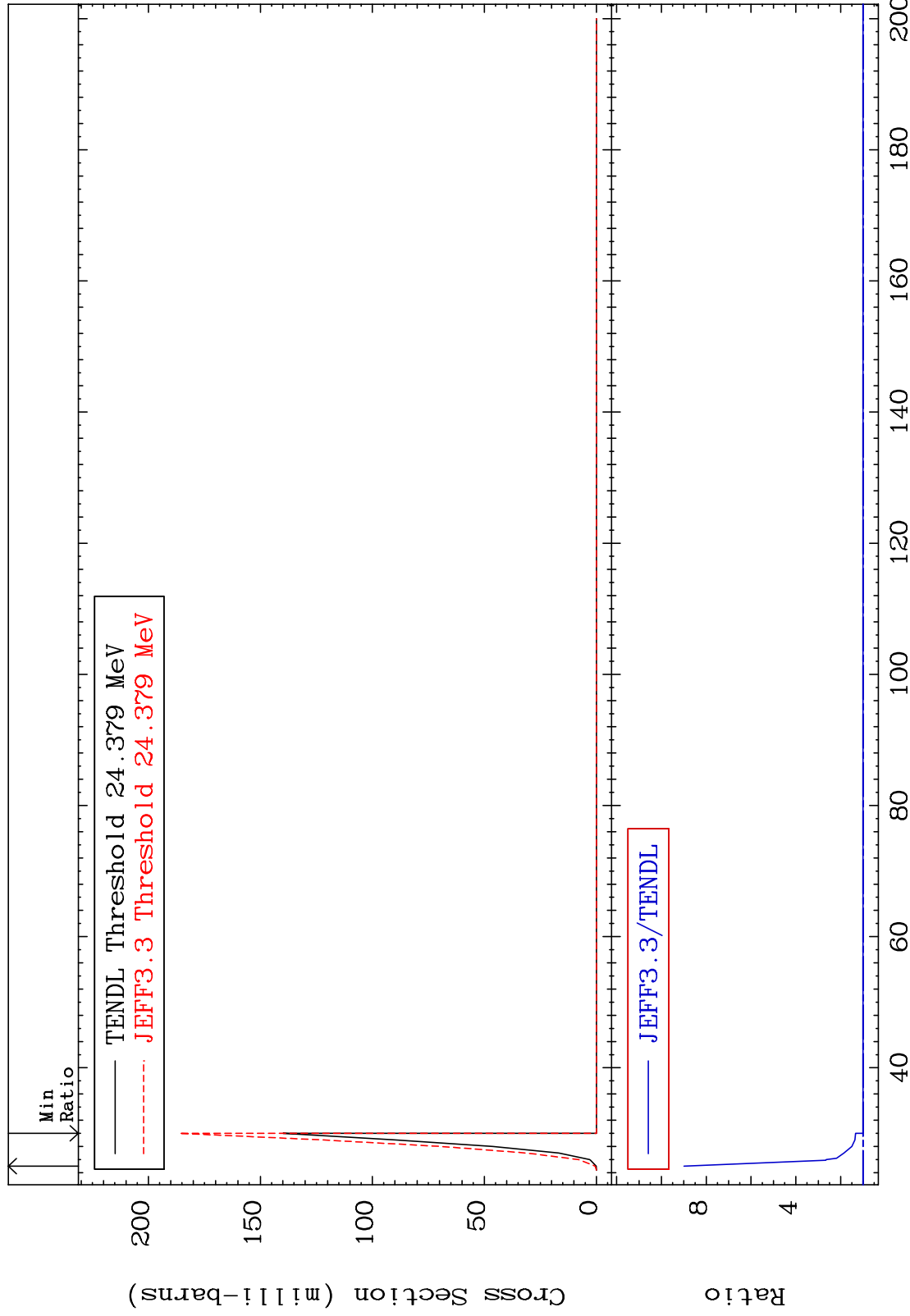


MAT 5055

(n, 4n):50-Sn-119m2

50-Sn-122

Radionuclide Production Cross Section 0.000 To 799.1 %

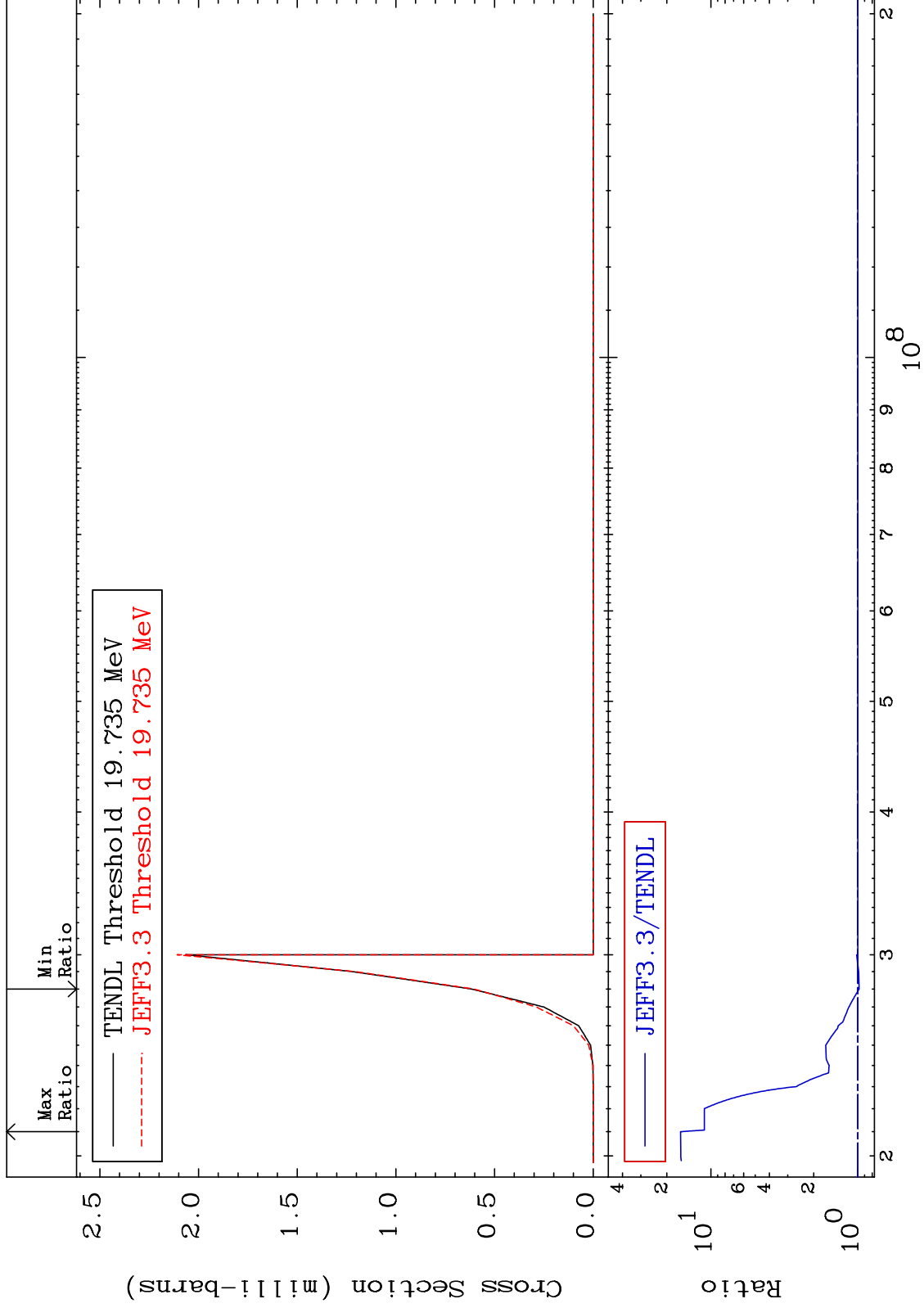


MAT 5055

(n,2n) p:49-In-120g

50-Sn-122

Radionuclide Production Cross Section -1.980 To 1508. %

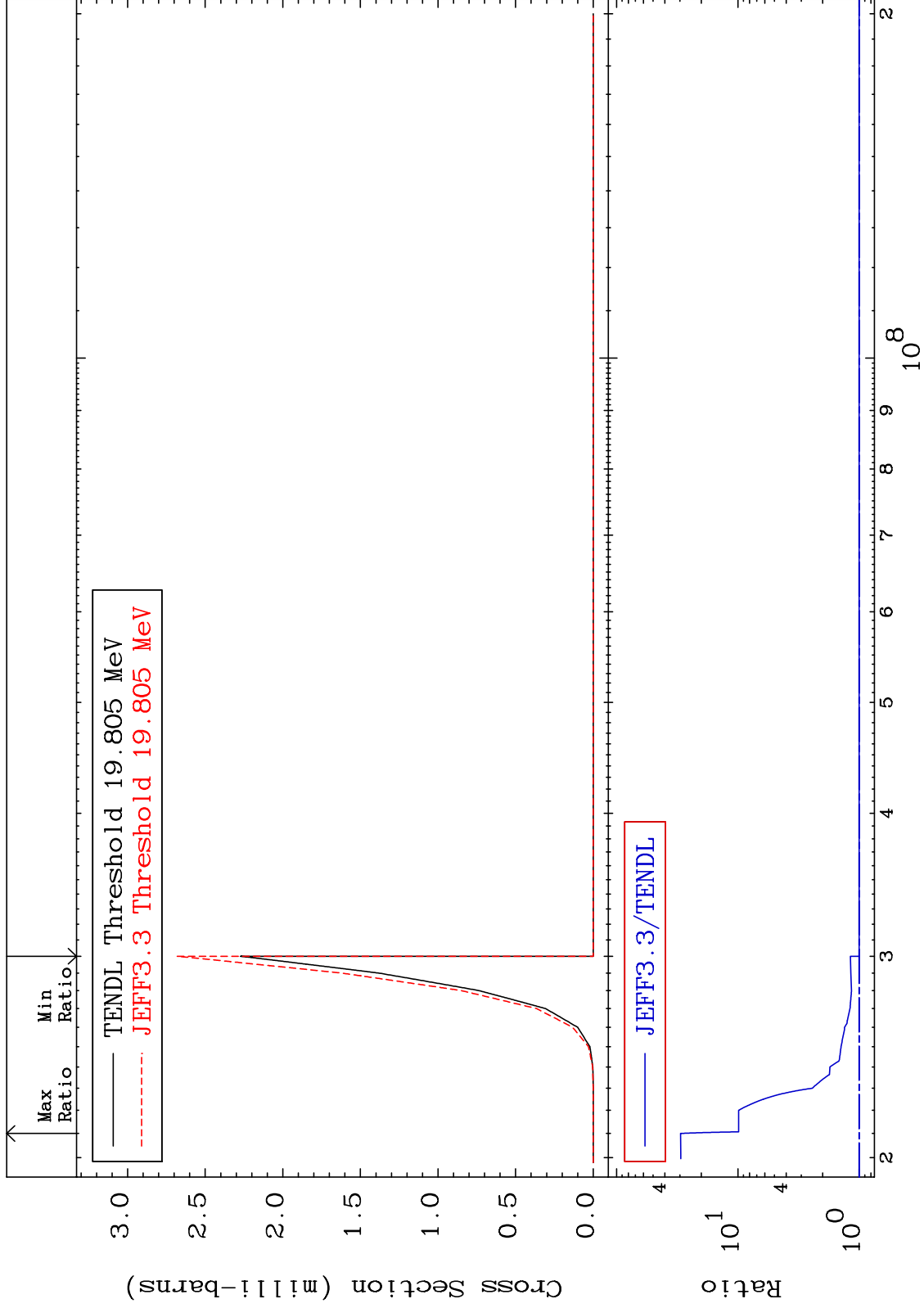


MAT 5055

(n,2n) p: 49-In-120m1

50-Sn-122

Radionuclide Production Cross Section 0.000 To 2865. %

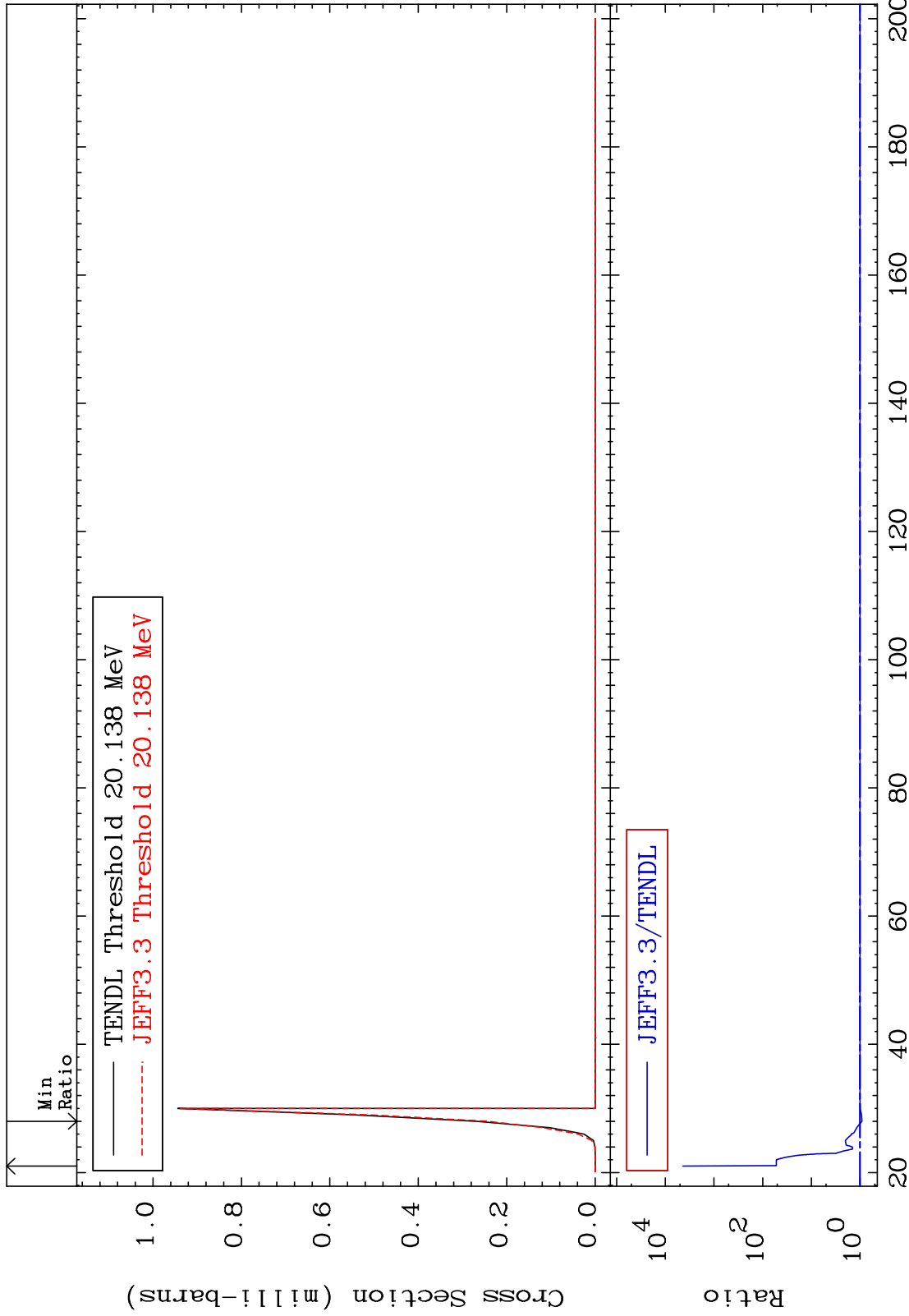


MAT 5055

(n,2n) p:49-In-120m2

50-Sn-122

Radionuclide Production Cross Section -9.073 To 9999. %



92

Incident Energy (MeV)

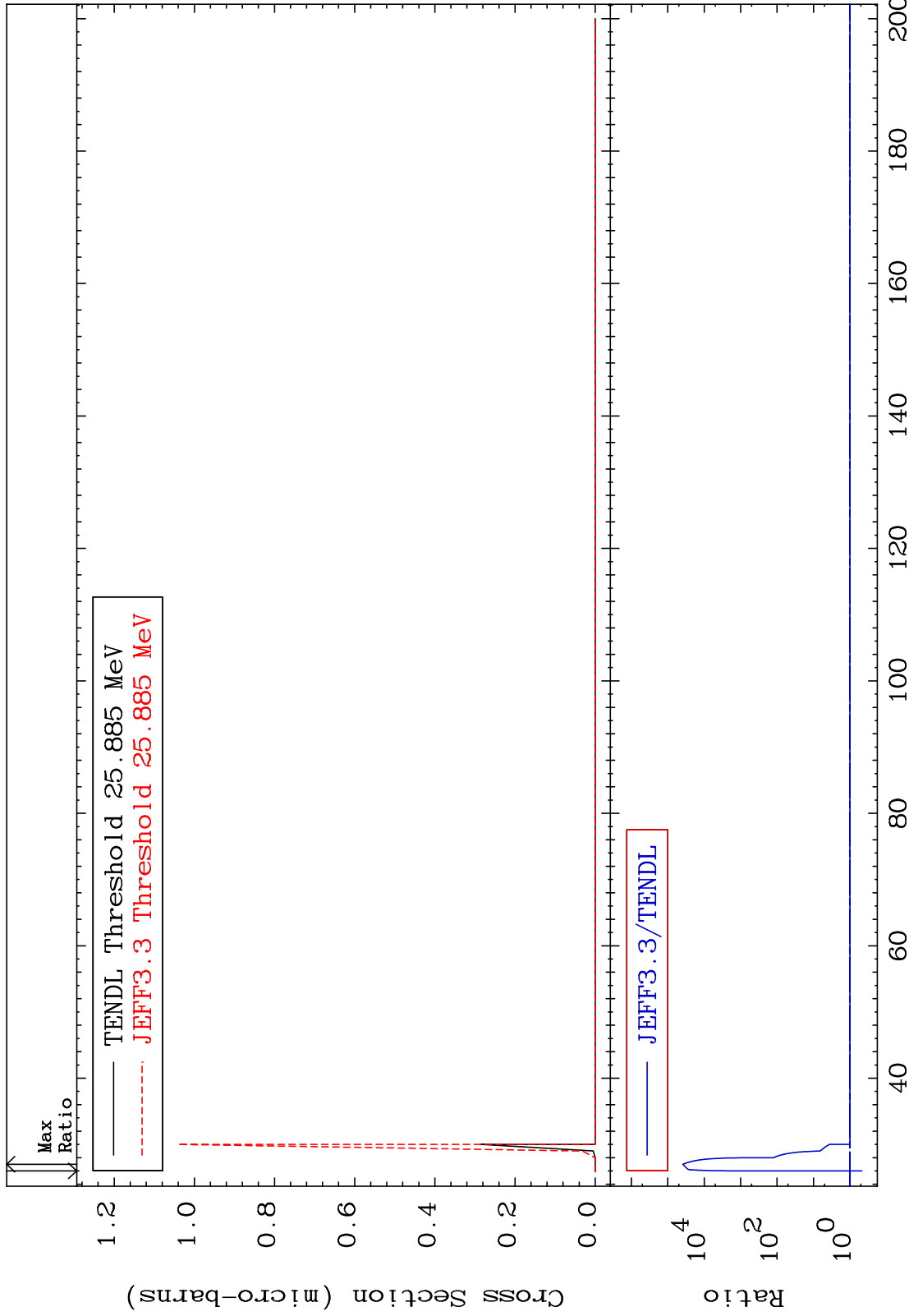
50-Sn-122

MAT 5055

(n,3n) p:49-In-119g

50-Sn-122

Radionuclide Production Cross Section -53.53 To 9999. %

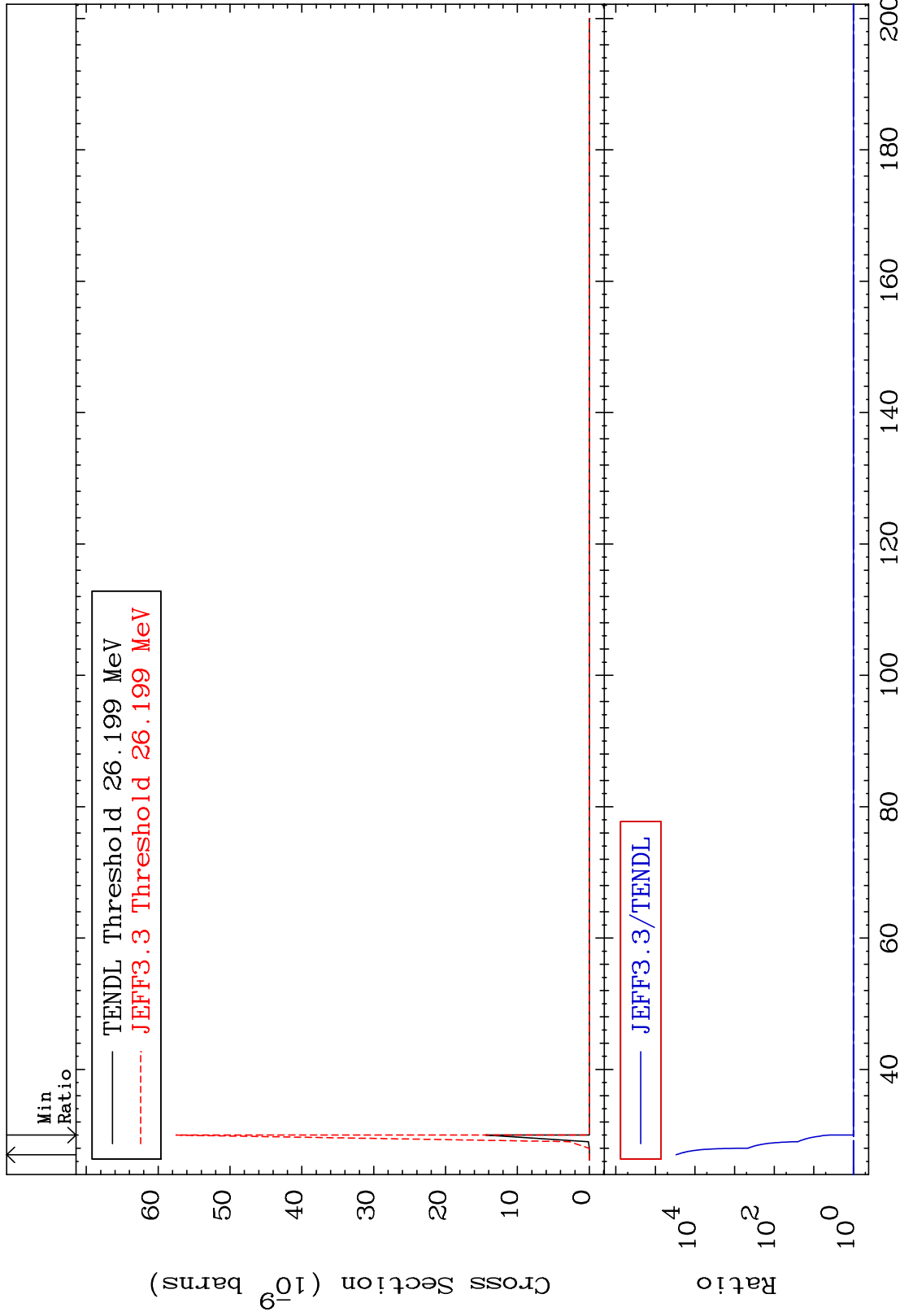


MAT 5055

(n,3n) p:49-In-119m1

50-Sn-122

Radionuclide Production Cross Section 0.000 To 9999. %

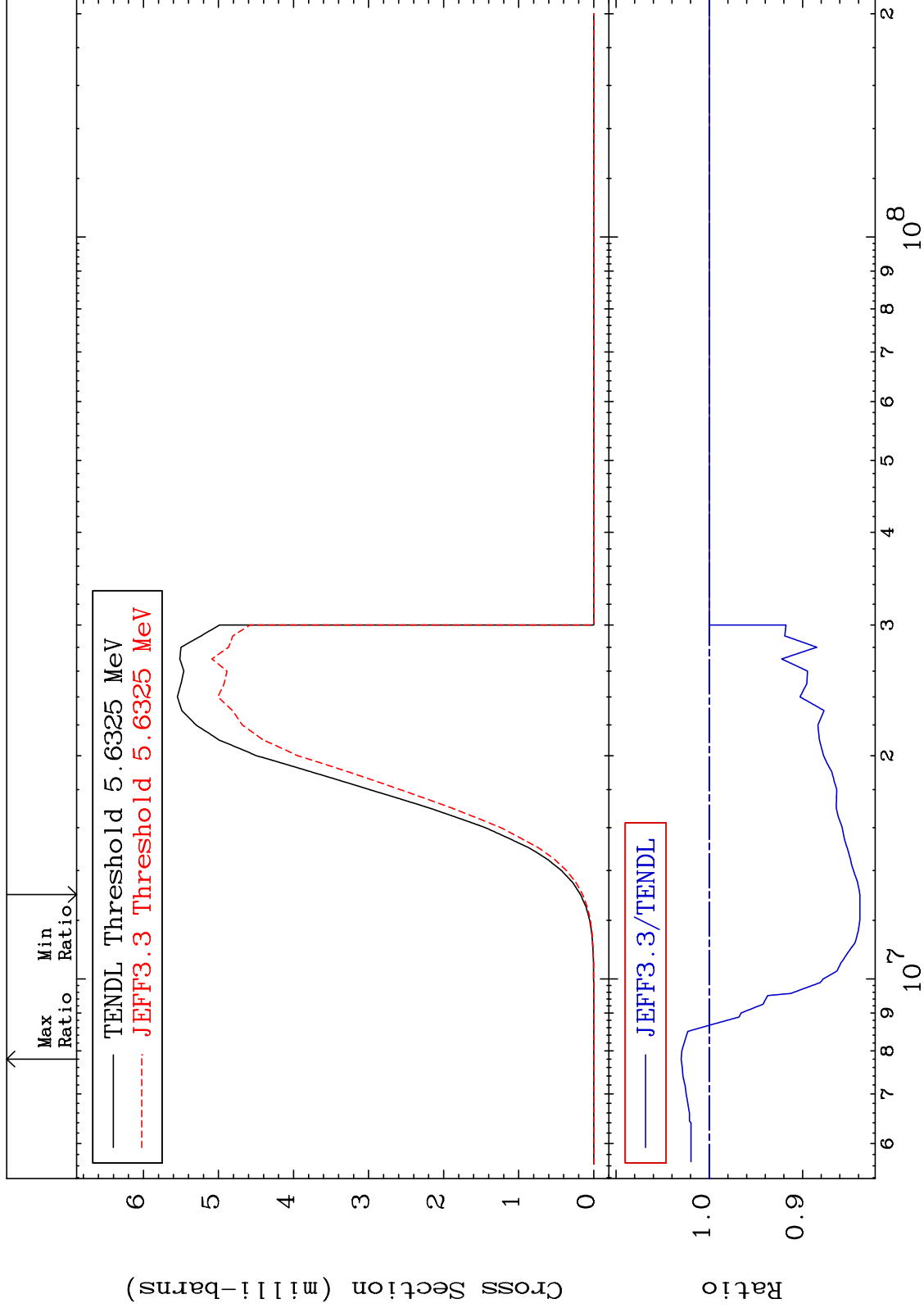


MAT 5055

(n,p): 49-In-122g

50-Sn-122

Radionuclide Production Cross Section -16.15 To 3.011 %



95

Incident Energy (eV)

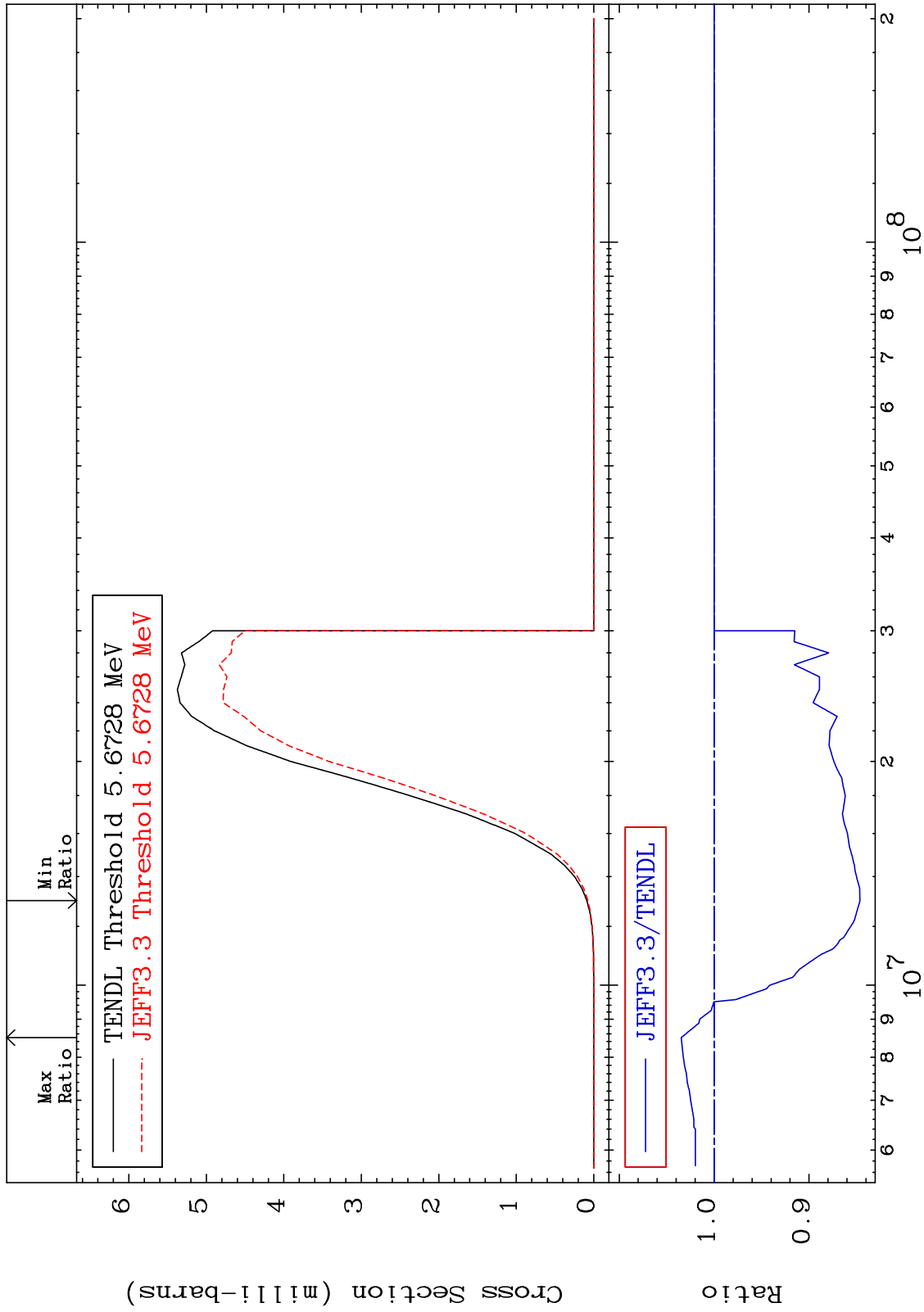
50-Sn-122

MAT 5055

(n, p) : 49-In-122m1

50-Sn-122

Radionuclide Production Cross Section -15.36 To 3.467 %

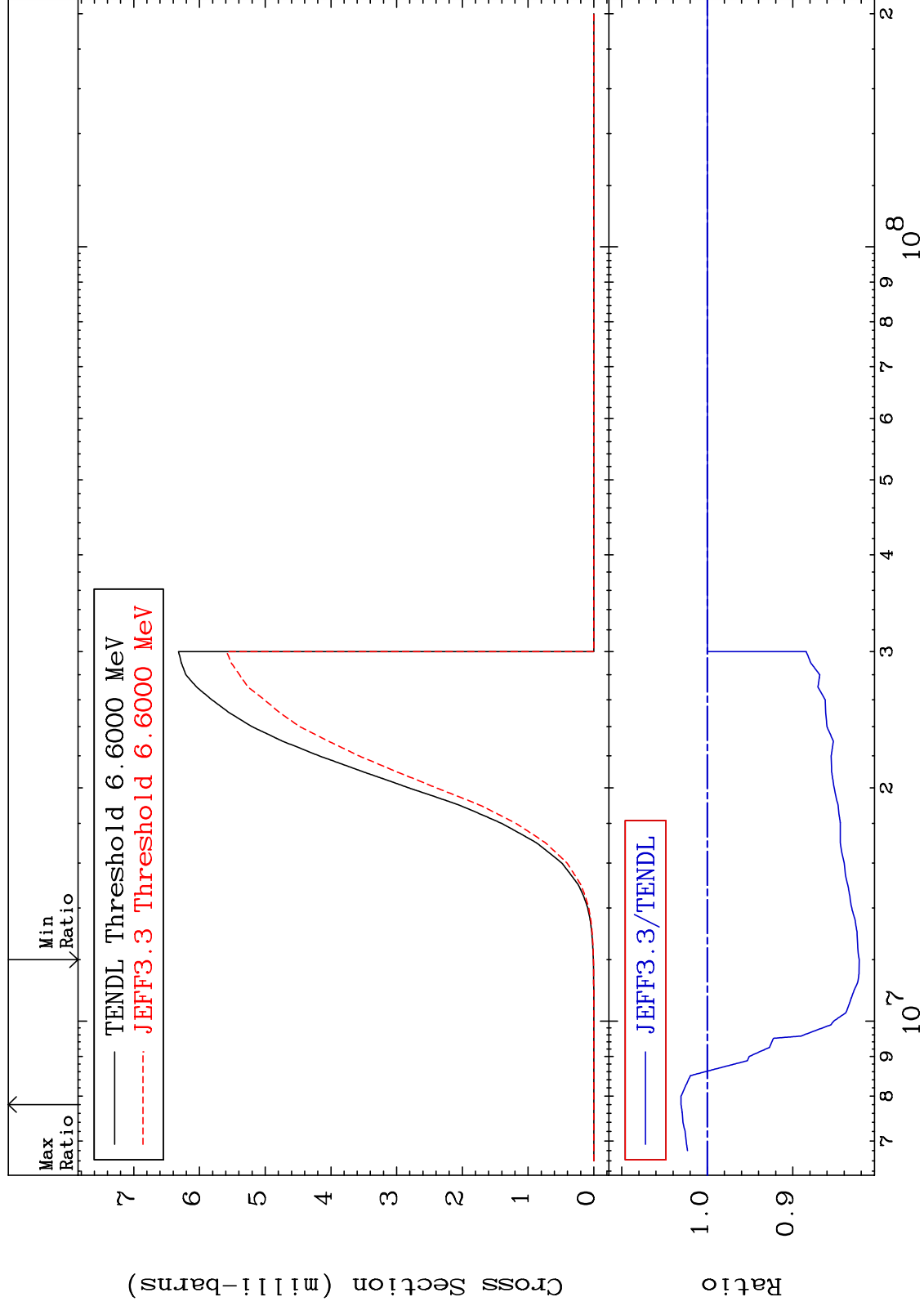


MAT 5055

(n, p) : 49-In-122m5

50-Sn-122

Radionuclide Production Cross Section -17.77 To 3.066 %



97

50-Sn-122

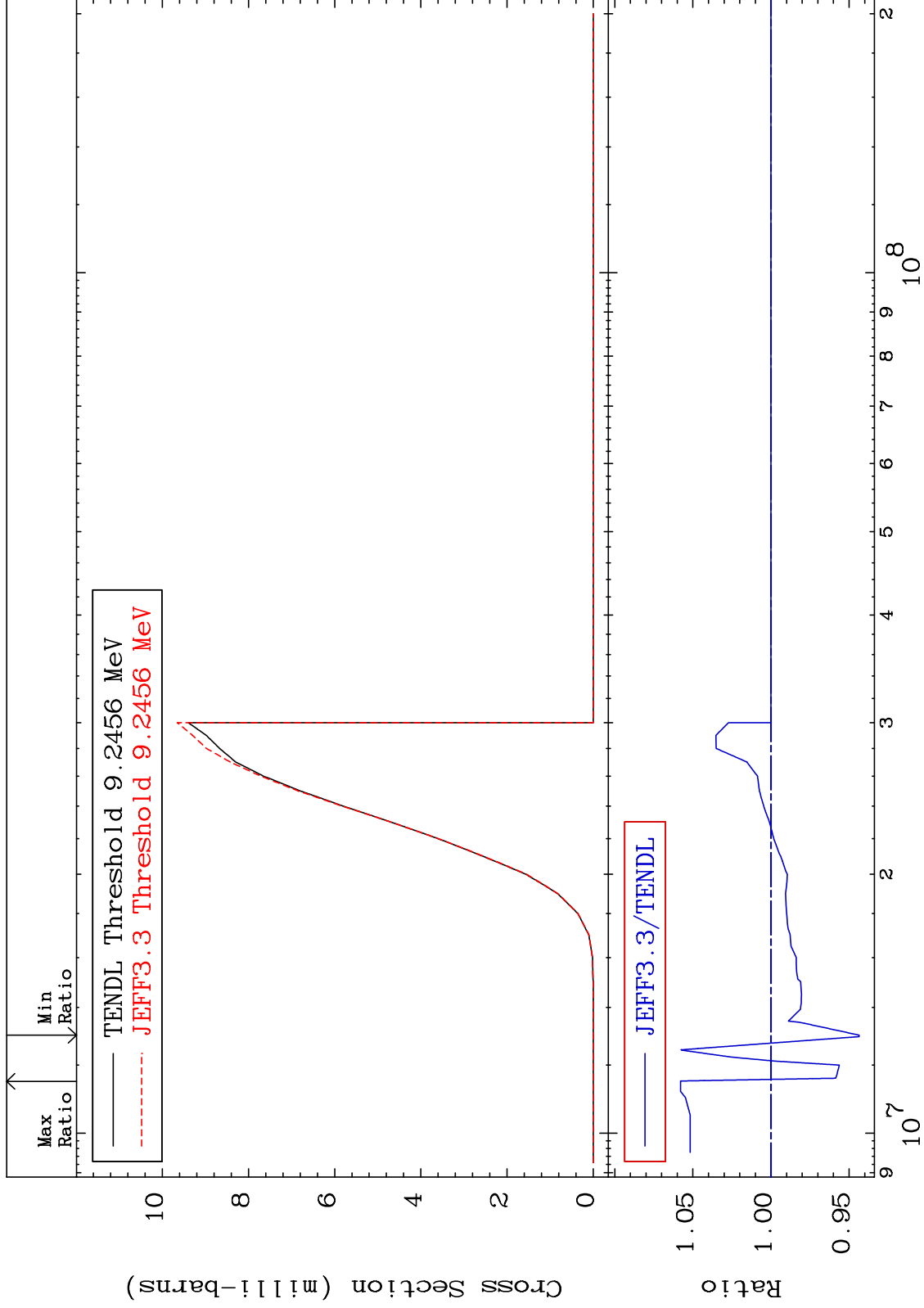
MAT 5055

(n,d): 49-In-121g

50-Sn-122

Radionuclide Production Cross Section

-5.645 To 5.784 %



98

Incident Energy (eV)

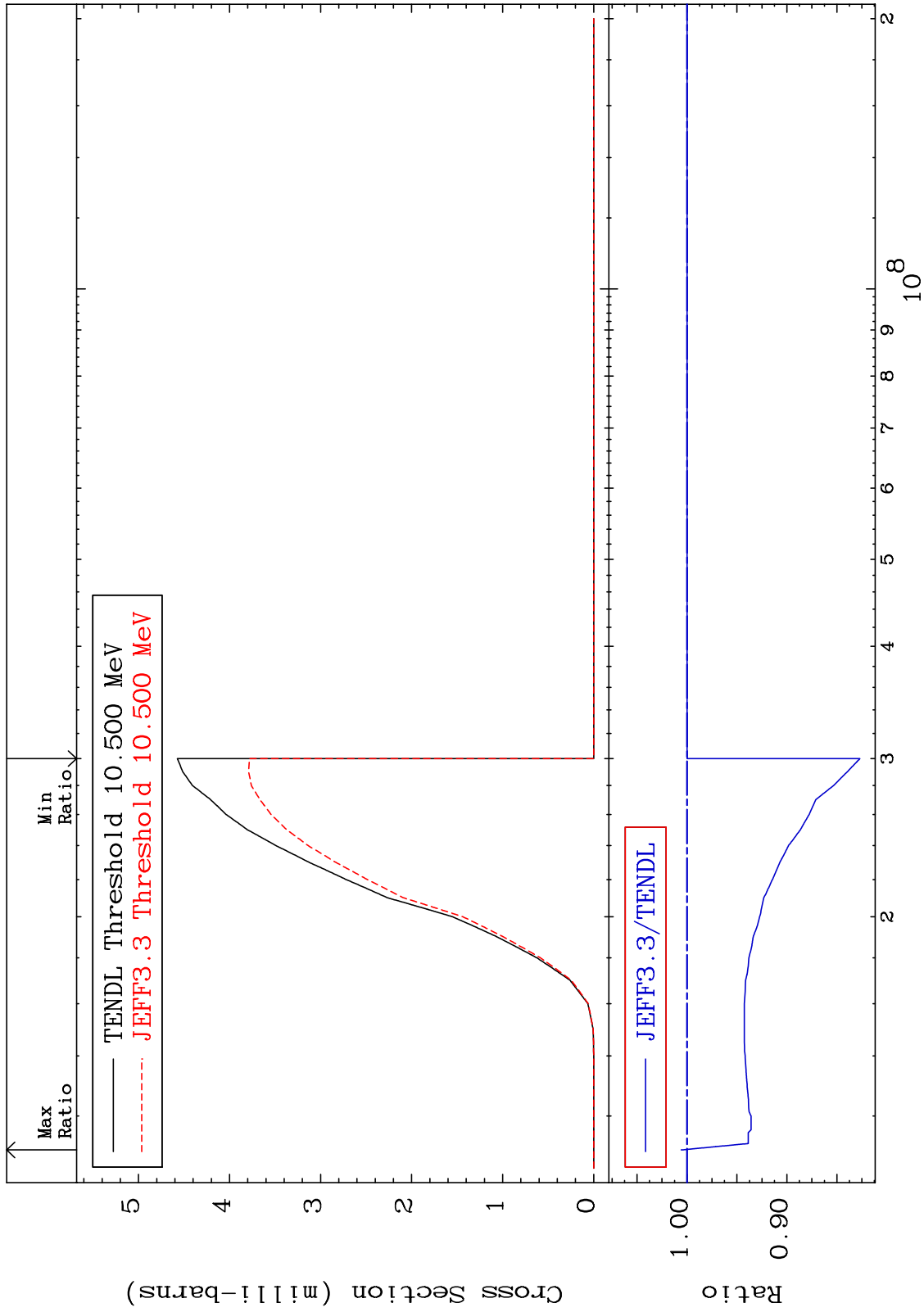
50-Sn-122

MAT 5055

(n, d) : 49-In-121m1

50-Sn-122

Radionuclide Production Cross Section -17.31 To 0.577 %

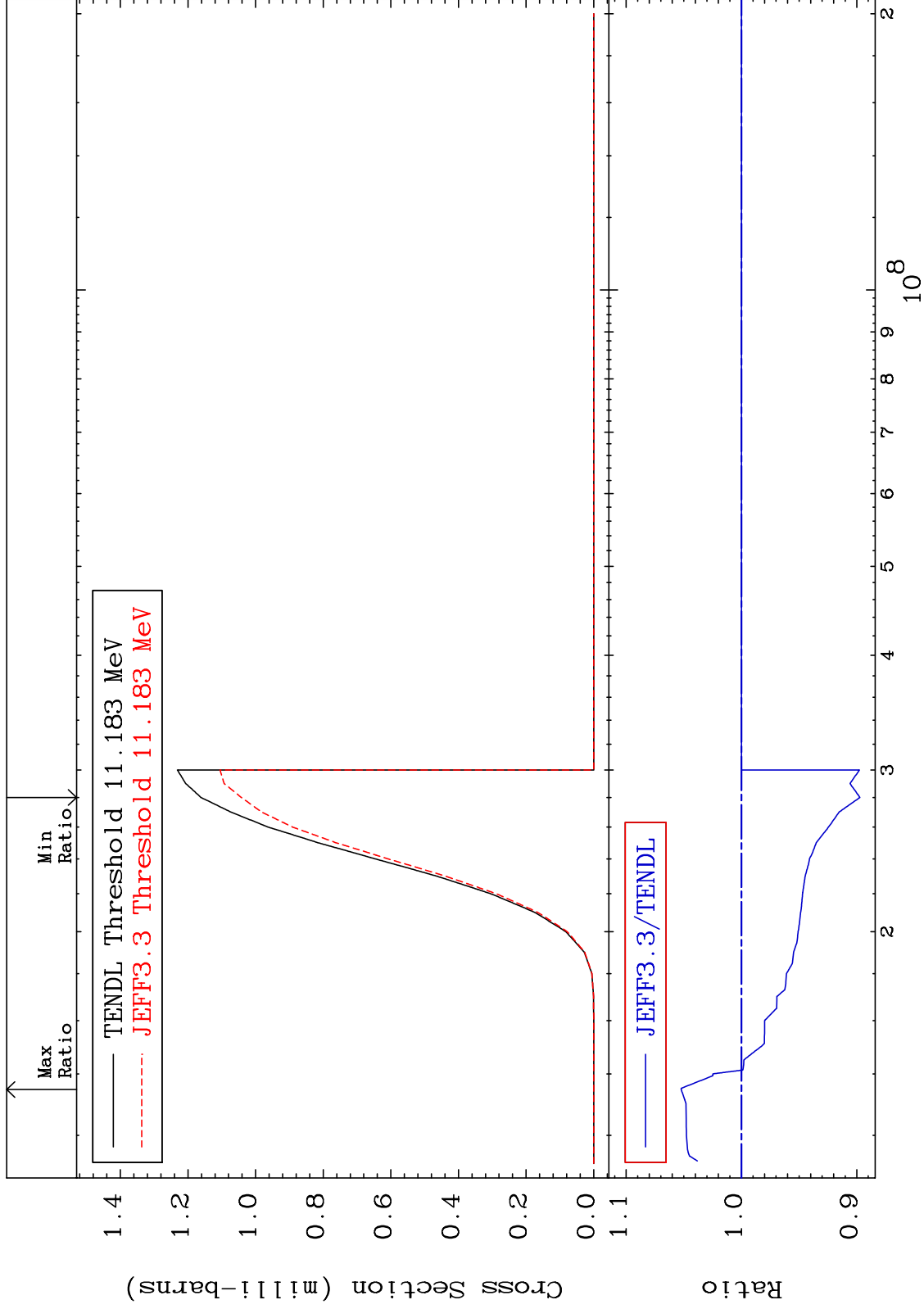


MAT 5055

(n, t) : 49-In-120g

50-Sn-122

Radionuclide Production Cross Section -10.28 To 5.224 %



100

Incident Energy (eV)

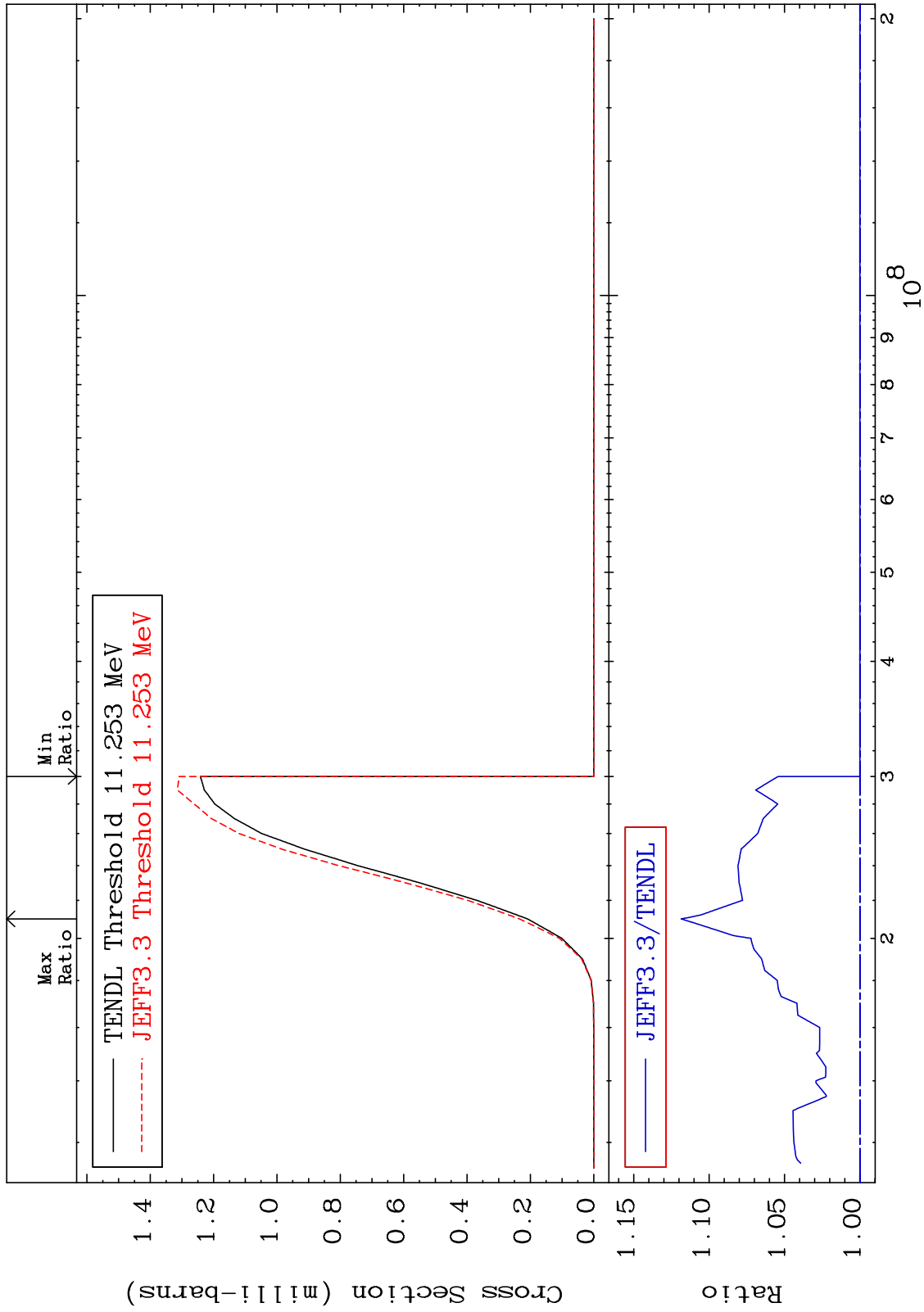
50-Sn-122

MAT 5055

(n, t) : 49-In-120m1

50-Sn-122

Radionuclide Production Cross Section 0.000 To 11.85 %

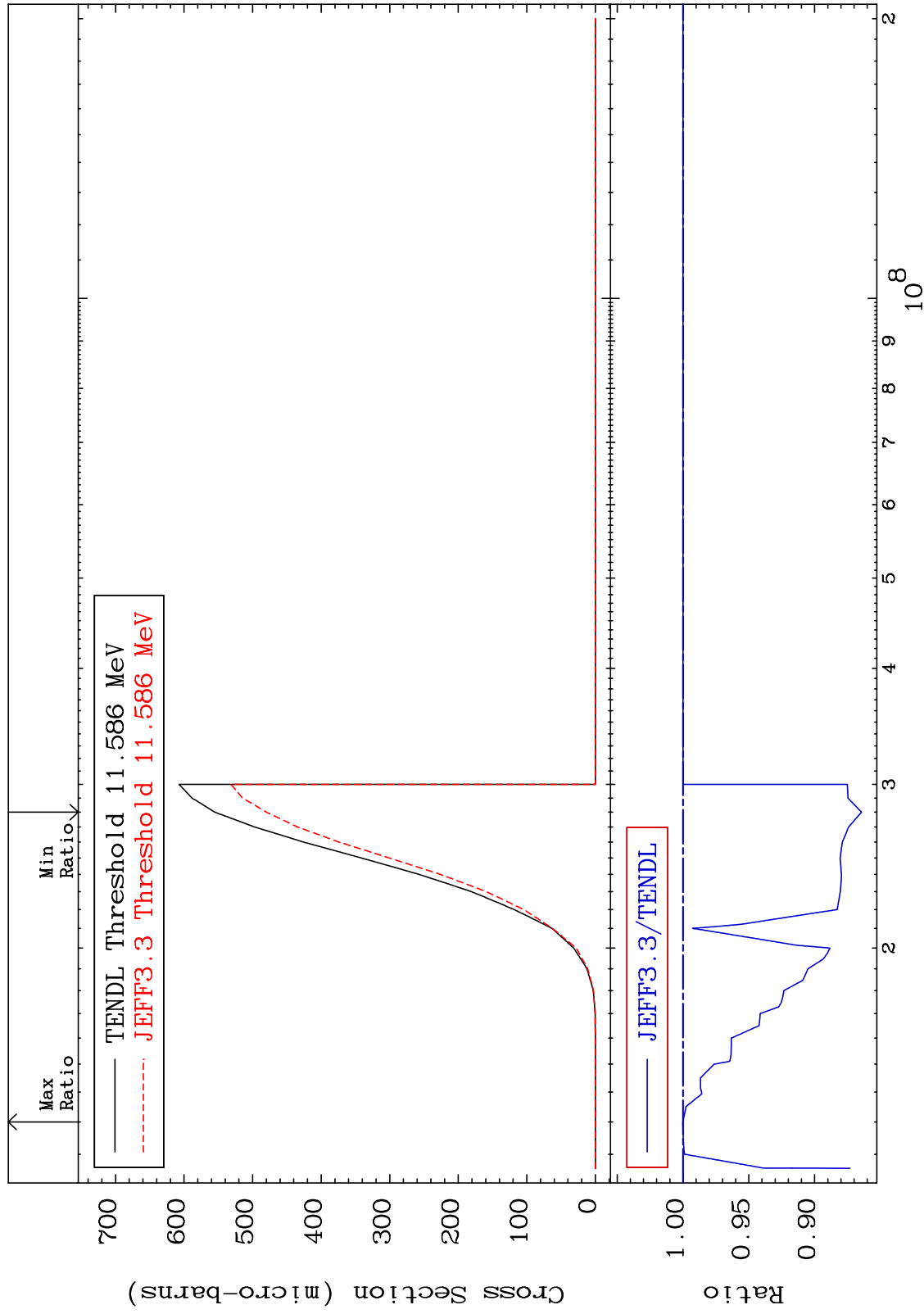


MAT 5055

(n, t) : 49-In-120m2

50-Sn-122

Radionuclide Production Cross Section -13.56 To 0.008 %

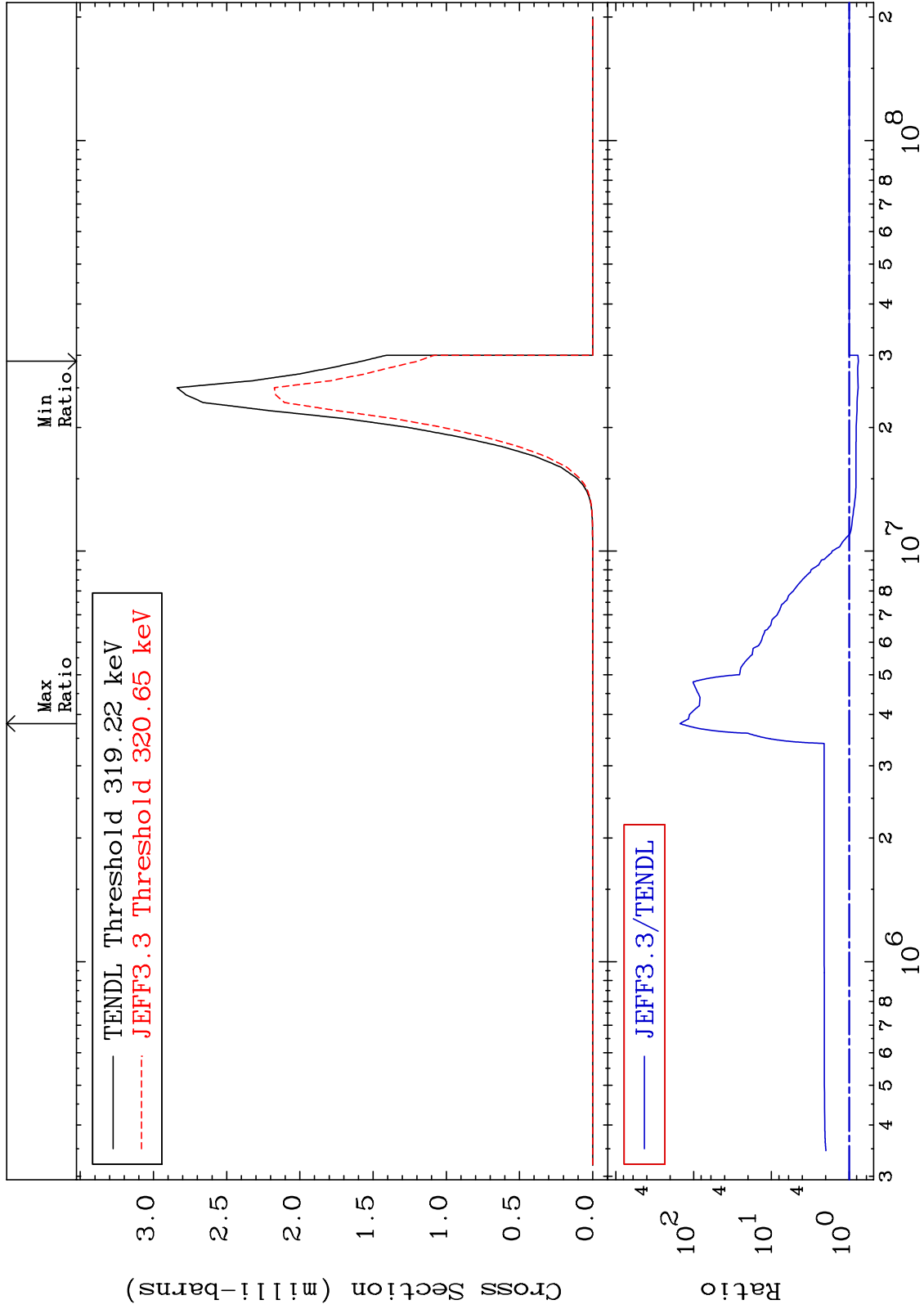


MAT 5055

(n, α): 48-Cd-119g

50-Sn-122

Radionuclide Production Cross Section -24.09 To 9999. %



103

Incident Energy (eV)

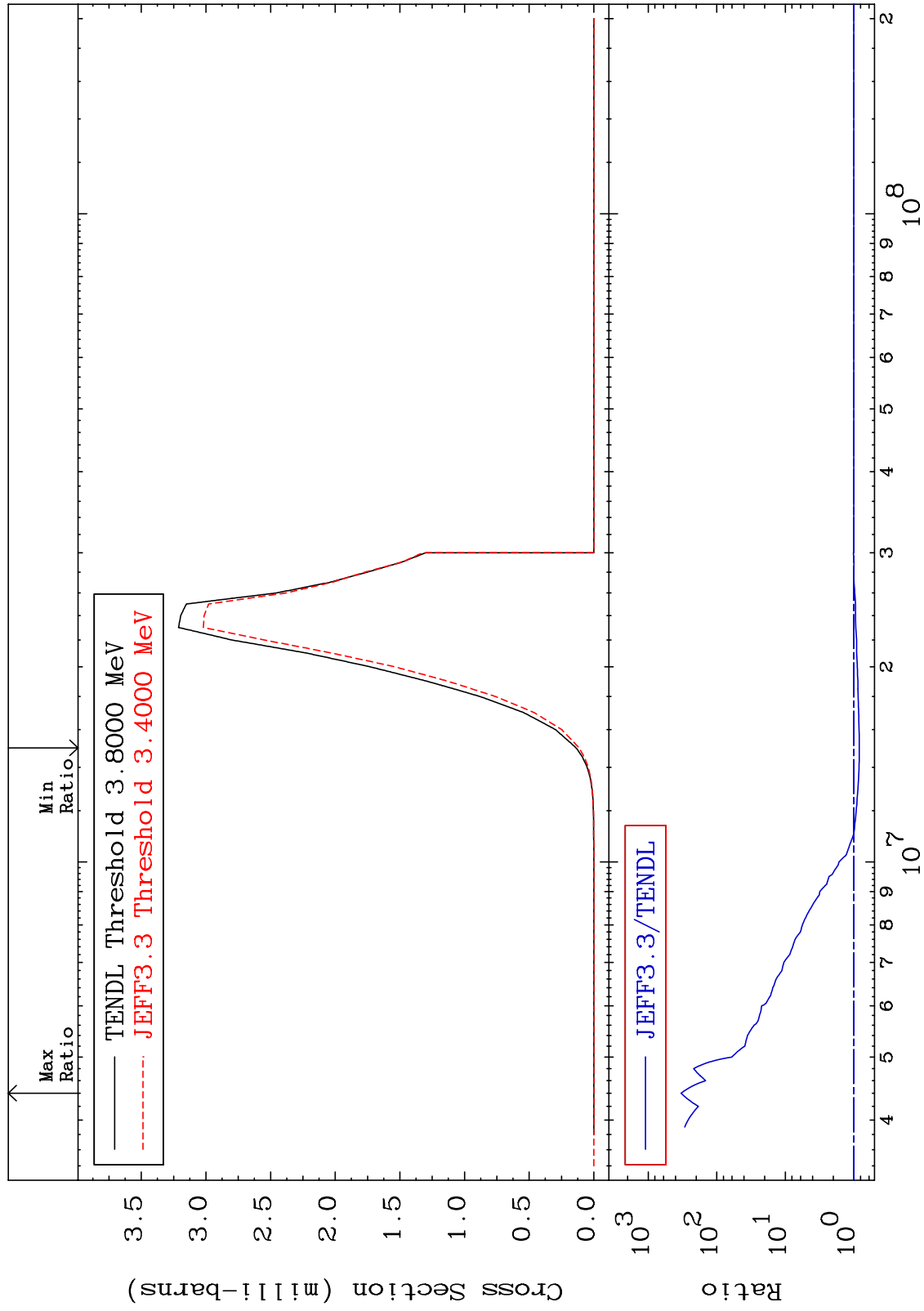
50-Sn-122

MAT 5055

(n, α): 48-Cd-119m2

50-Sn-122

Radionuclide Production Cross Section -16.66 To 9999. %



104

Incident Energy (eV)

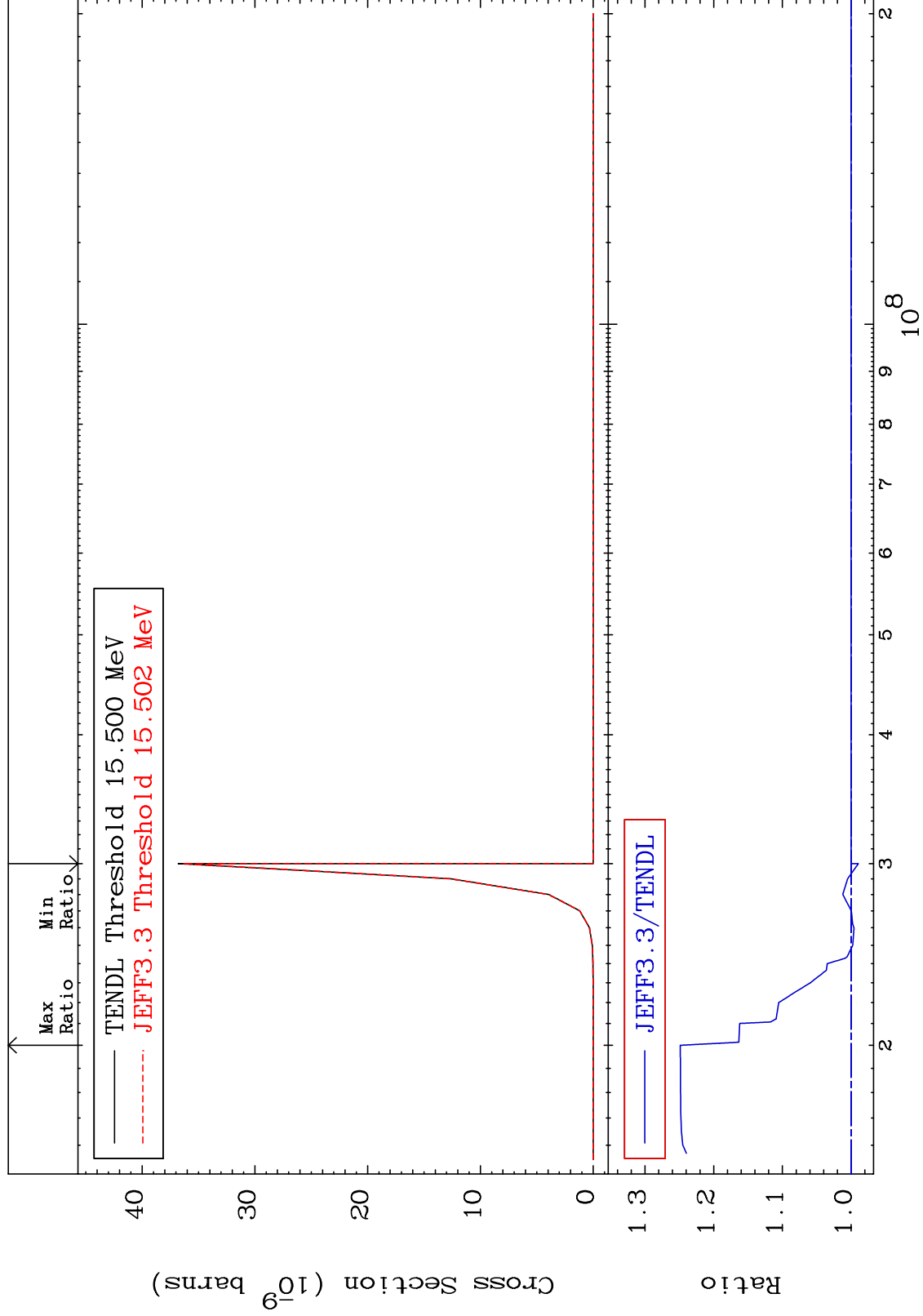
50-Sn-122

MAT 5055

(n,2p) : 48-Cd-121g

50-Sn-122

Radionuclide Production Cross Section -1.052 To 24.86 %

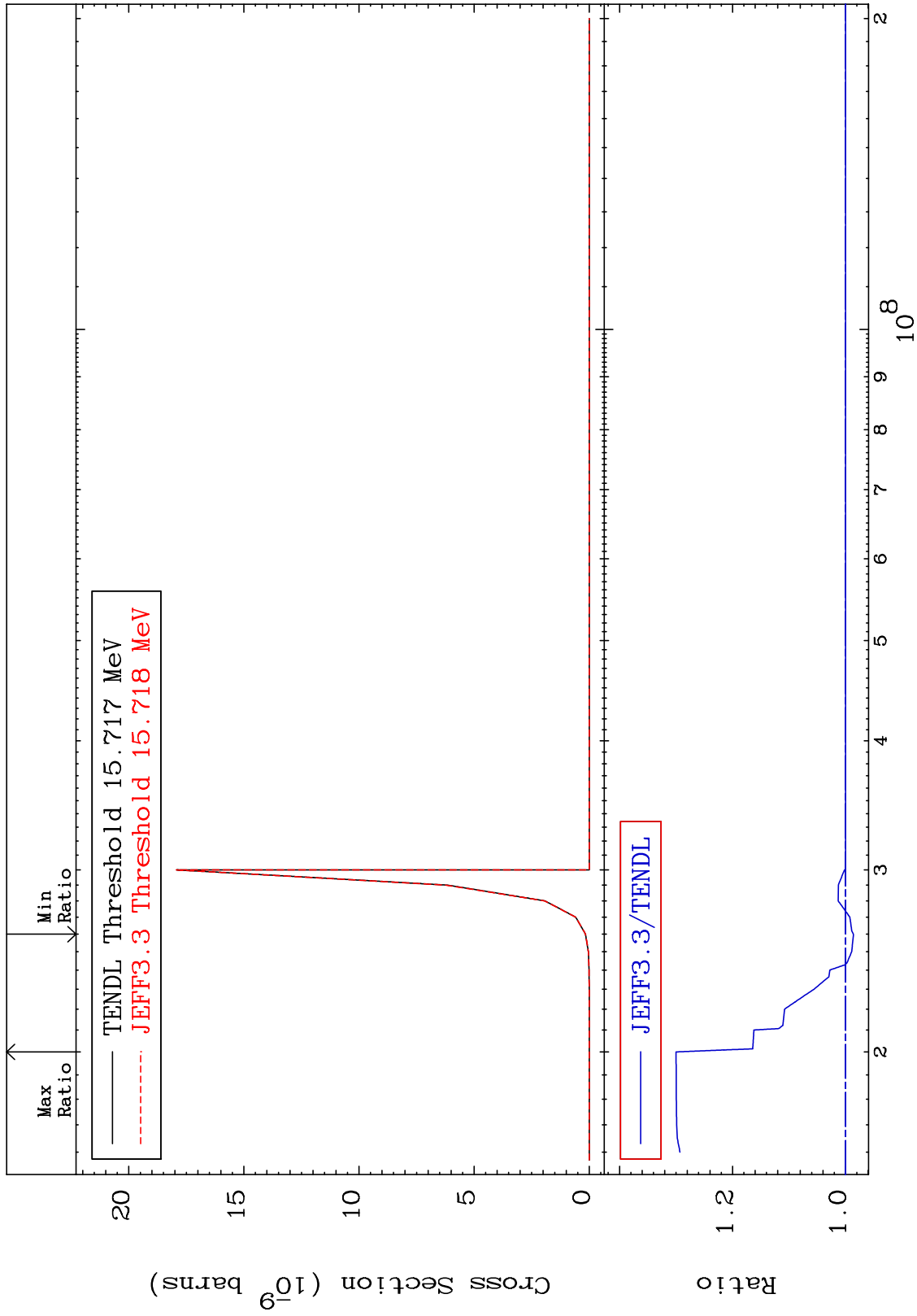


MAT 5055

(n,2p): 48-Cd-121m2

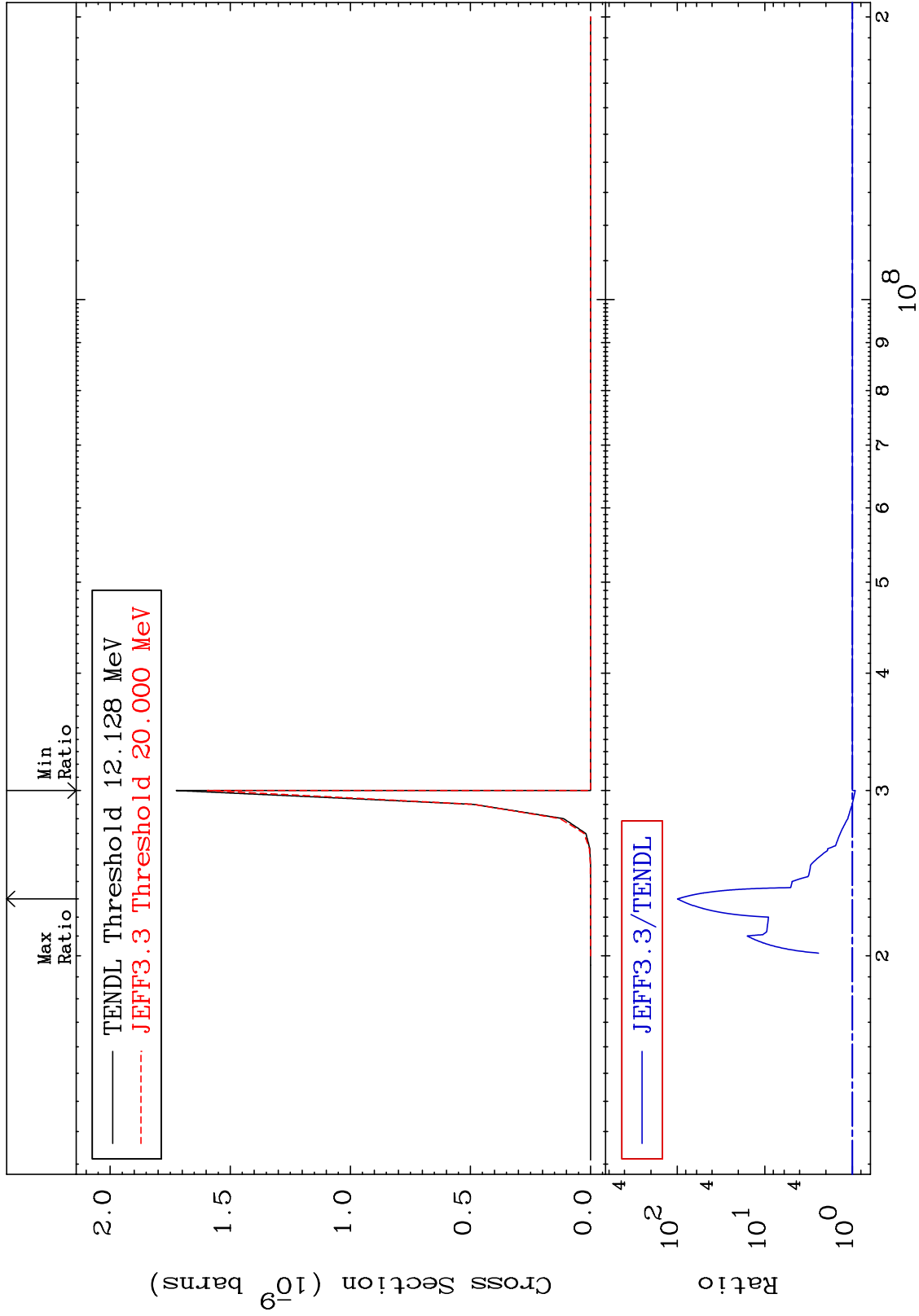
50-Sn-122

Radionuclide Production Cross Section -1.392 To 29.99 %



MAT 5055

(n, p) α : 47-Ag-118g 50-Sn-122
Radionuclide Production Cross Section -7.518 To 9816. %

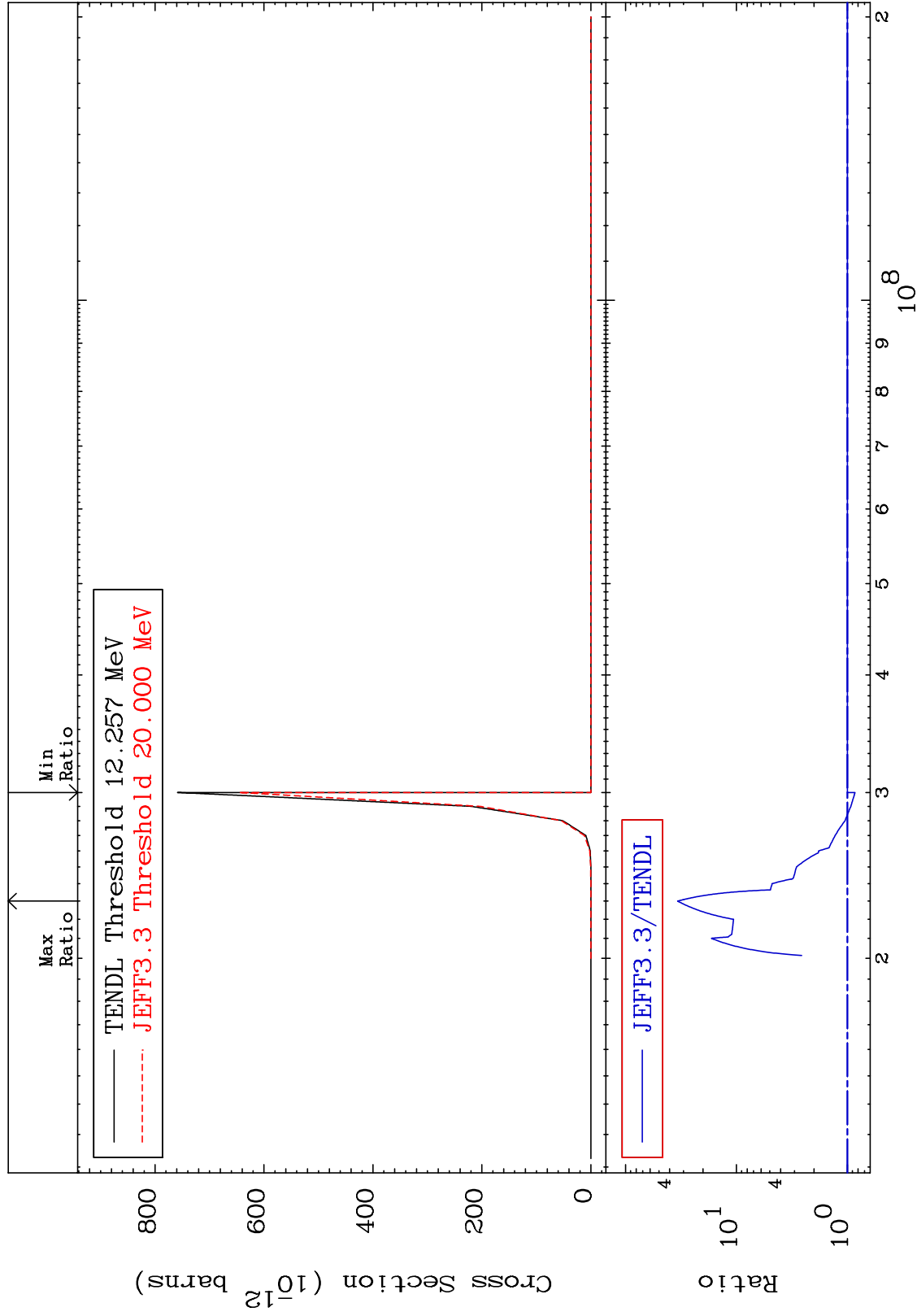


MAT 5055

(n, p) α :47-Ag-118m4

50-Sn-122

Radionuclide Production Cross Section -14.81 To 3287. %



108

Incident Energy (eV)

50-Sn-122