

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

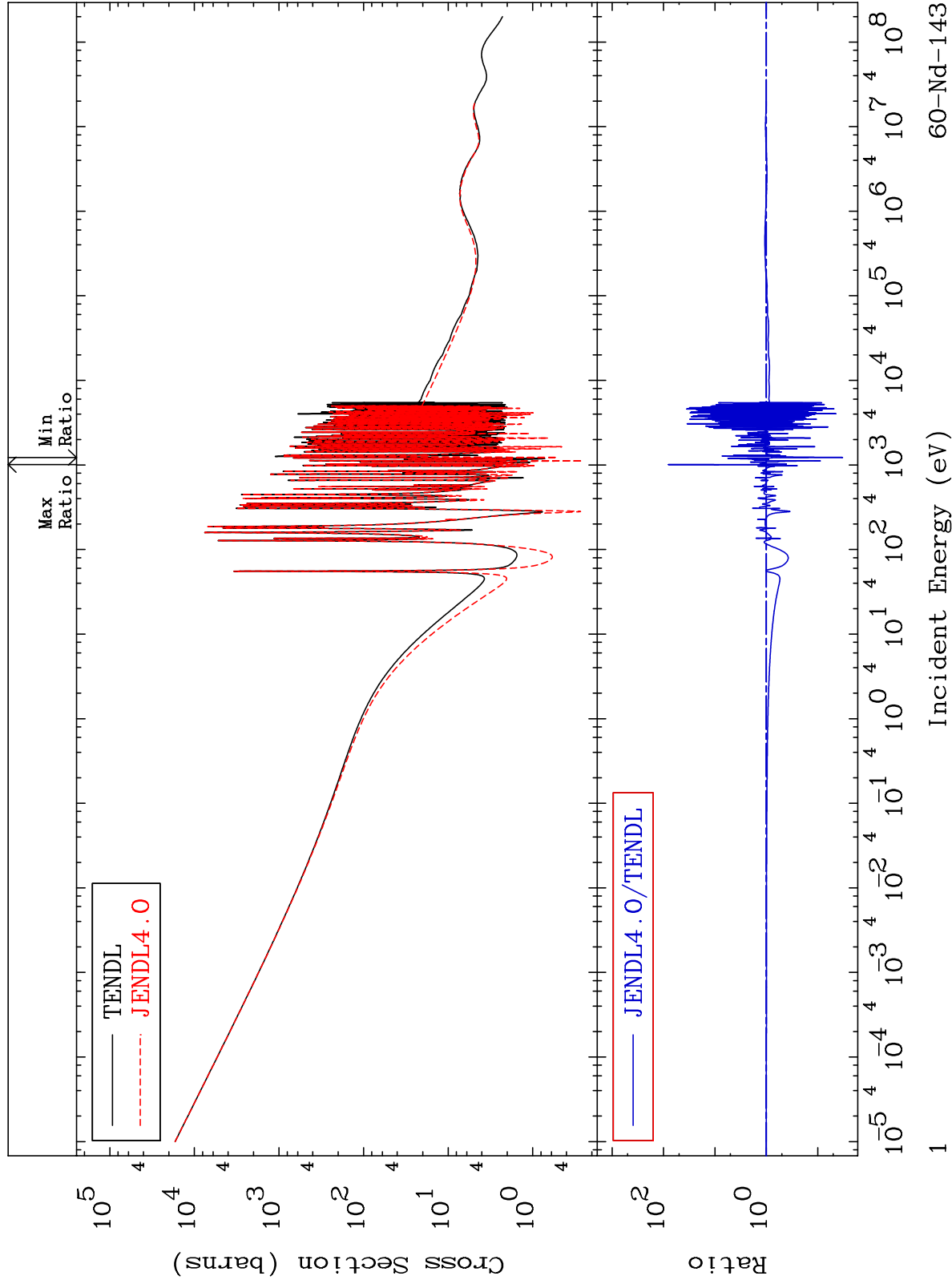
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6028

Total
Cross Section

60-Nd-143
-96.75 To 8083. %



60-Nd-143

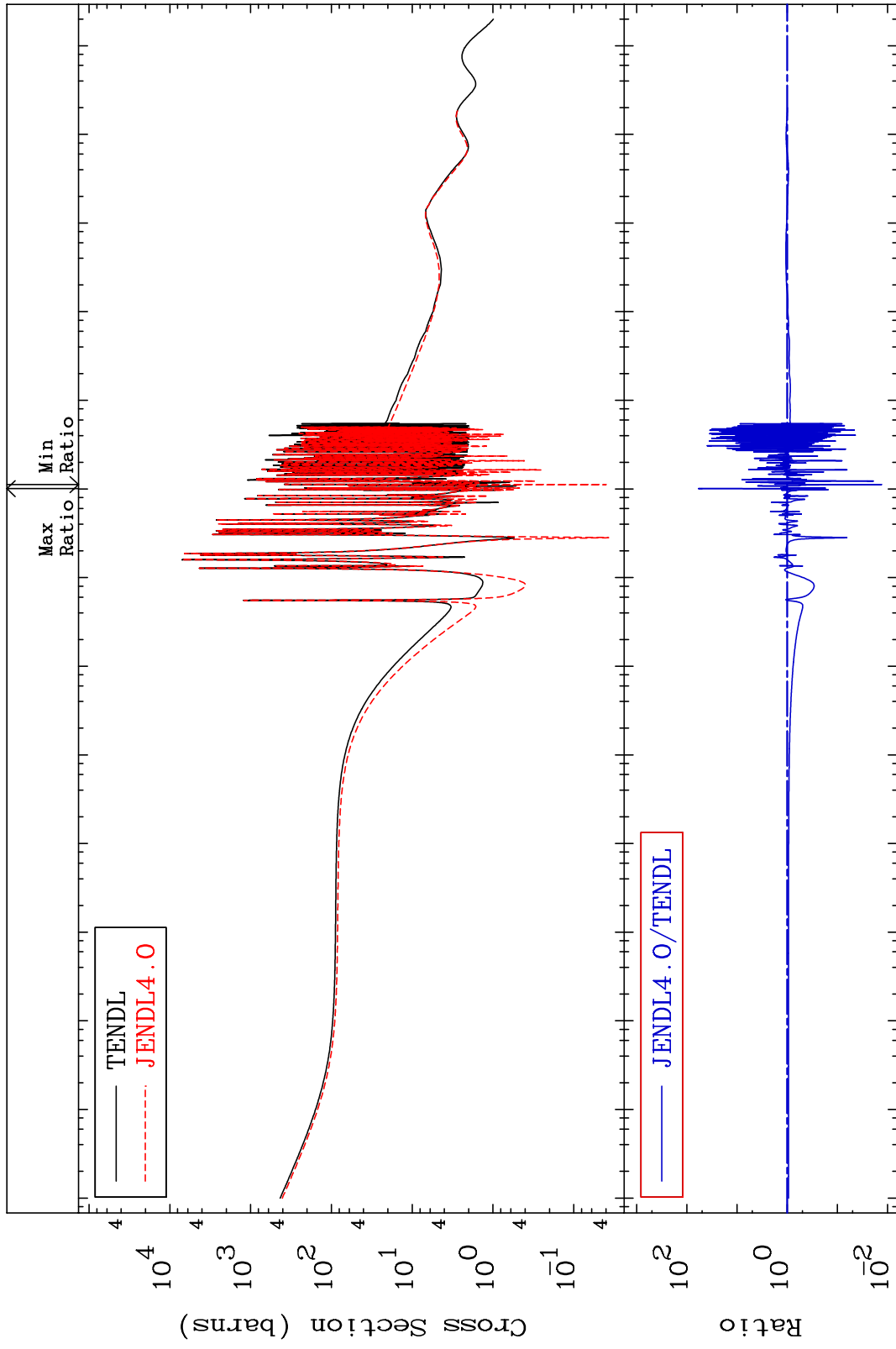
MAT 6028

Elastic

60-Nd-143

Cross Section

-98.68 To 5825. %



2

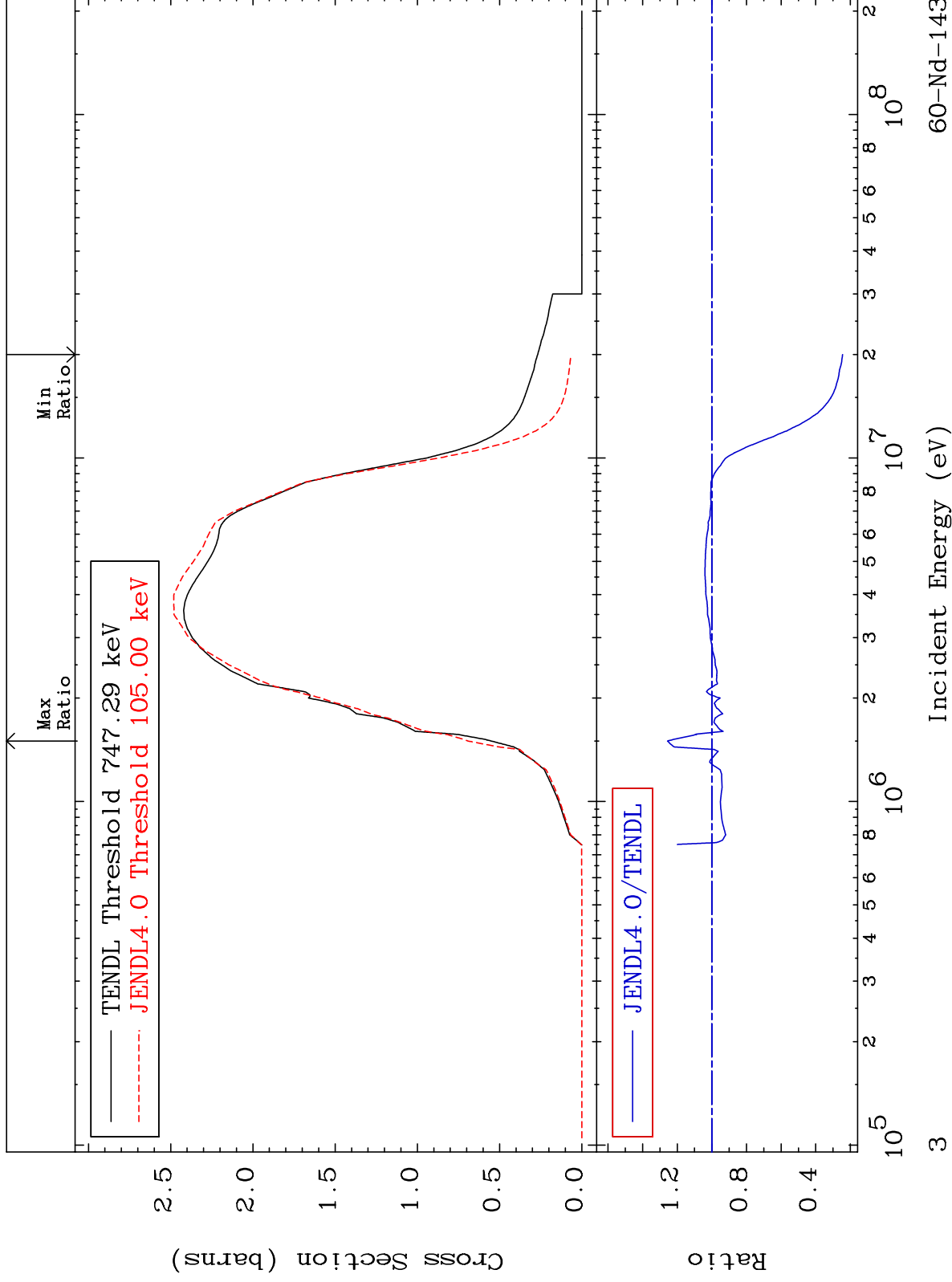
Incident Energy (eV)

60-Nd-143

MAT 6028

Inelastic
Cross Section

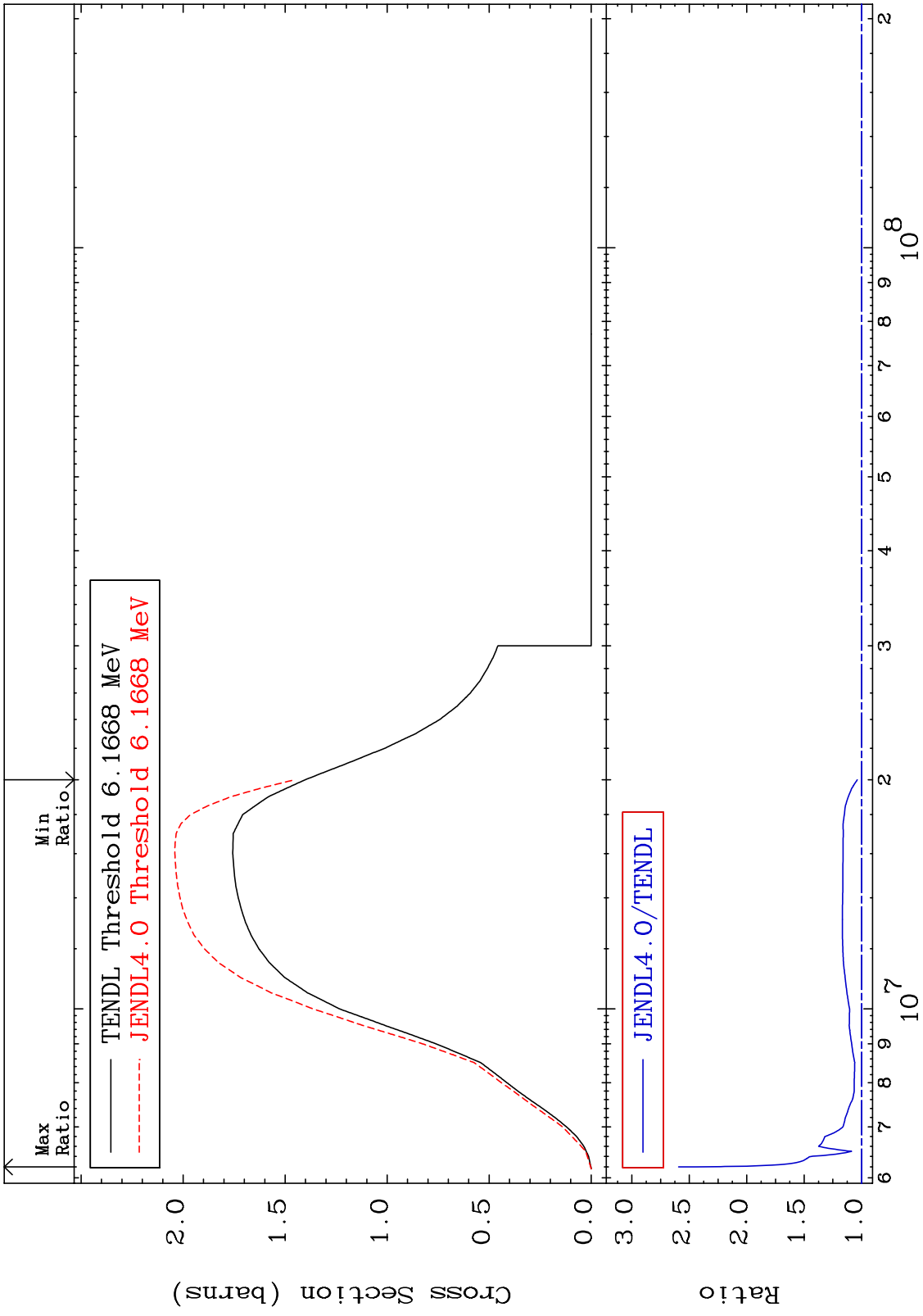
60-Nd-143
-75.55 To 25.60 %



Incident Energy (eV)

60-Nd-143

MAT 6028 (n,2n) Cross Section 60-Nd-143 To 159.3 % 3.748



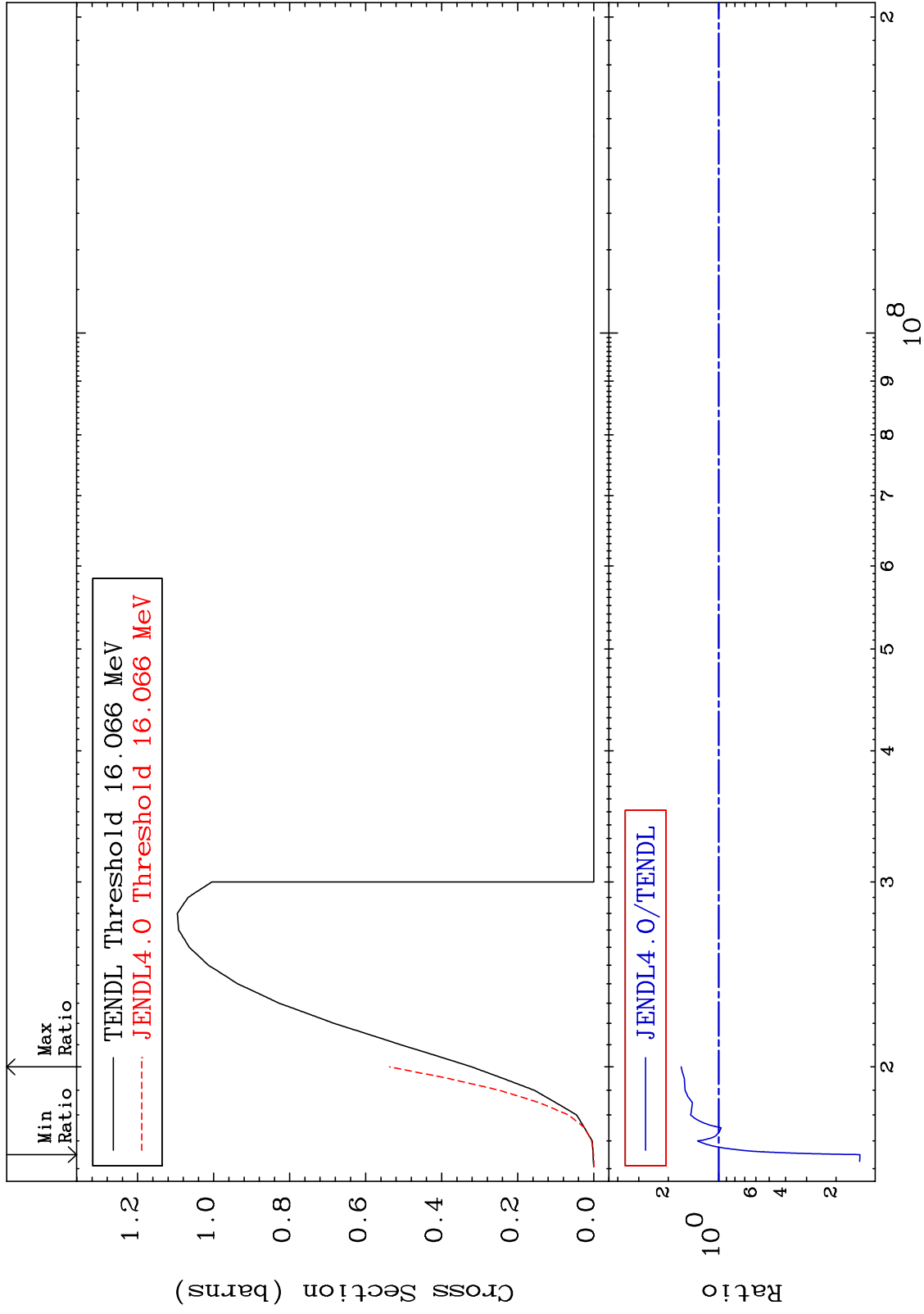
MAT 6028

(n,3n)

60-Nd-143

Cross Section

-85.59 To 67.32 %



5

Incident Energy (eV)

60-Nd-143

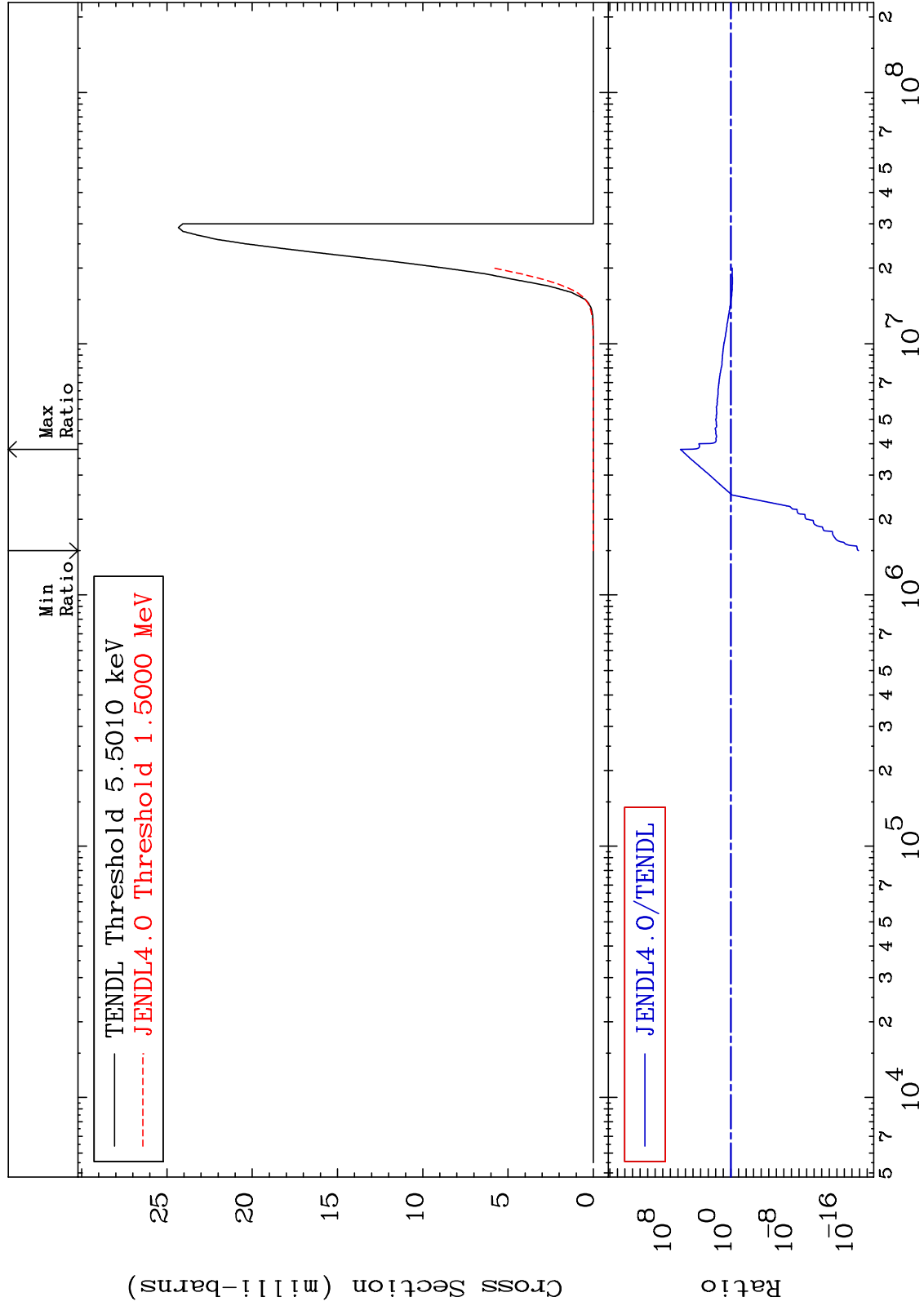
MAT 6028

(n, n') α

60-Nd-143

-100.0 To 9999. %

Cross Section



6

Incident Energy (eV)

60-Nd-143

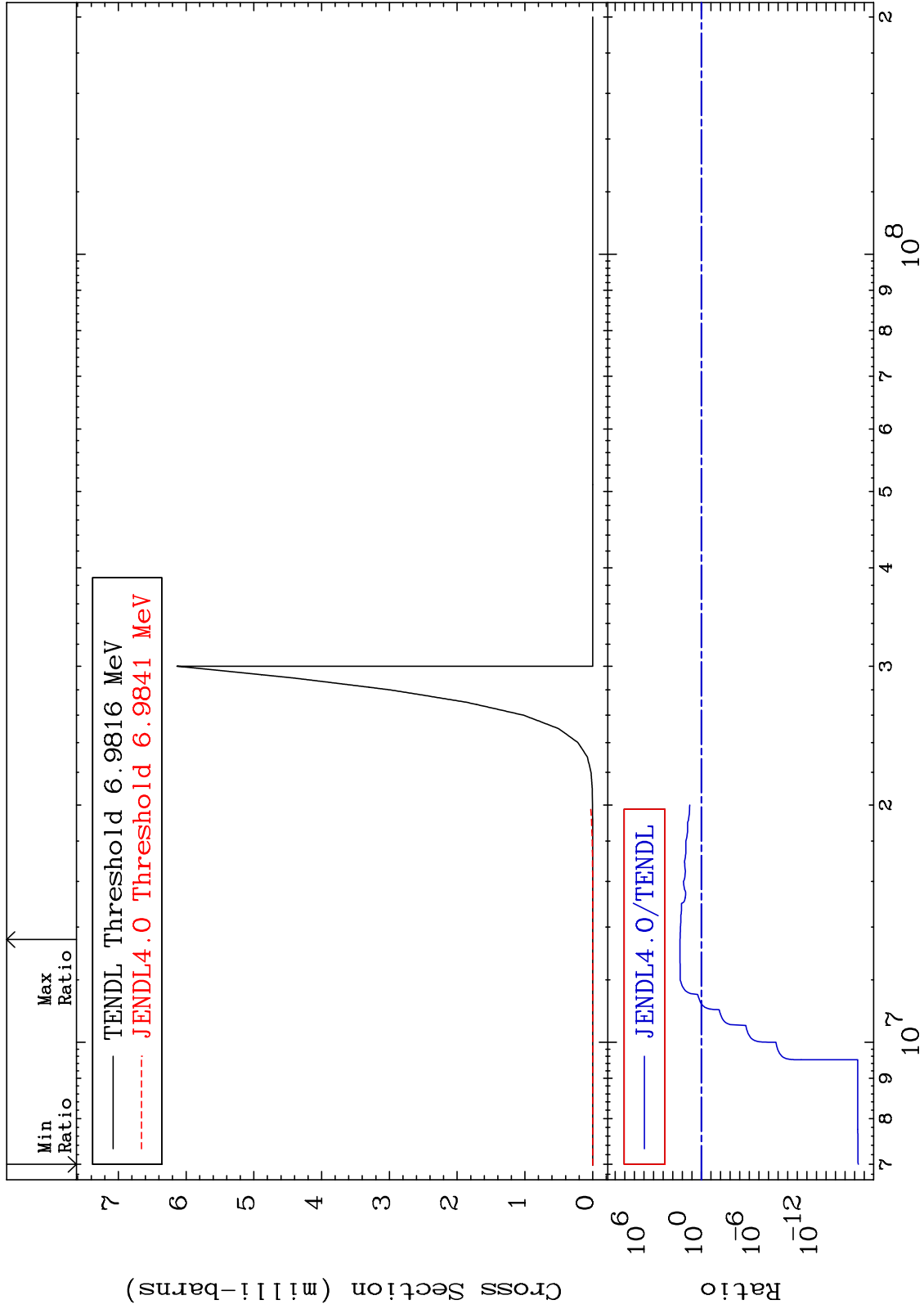
MAT 6028

(n,2n) α

60-Nd-143

-100.0 To 9999. %

Cross Section



7

Incident Energy (eV)

60-Nd-143

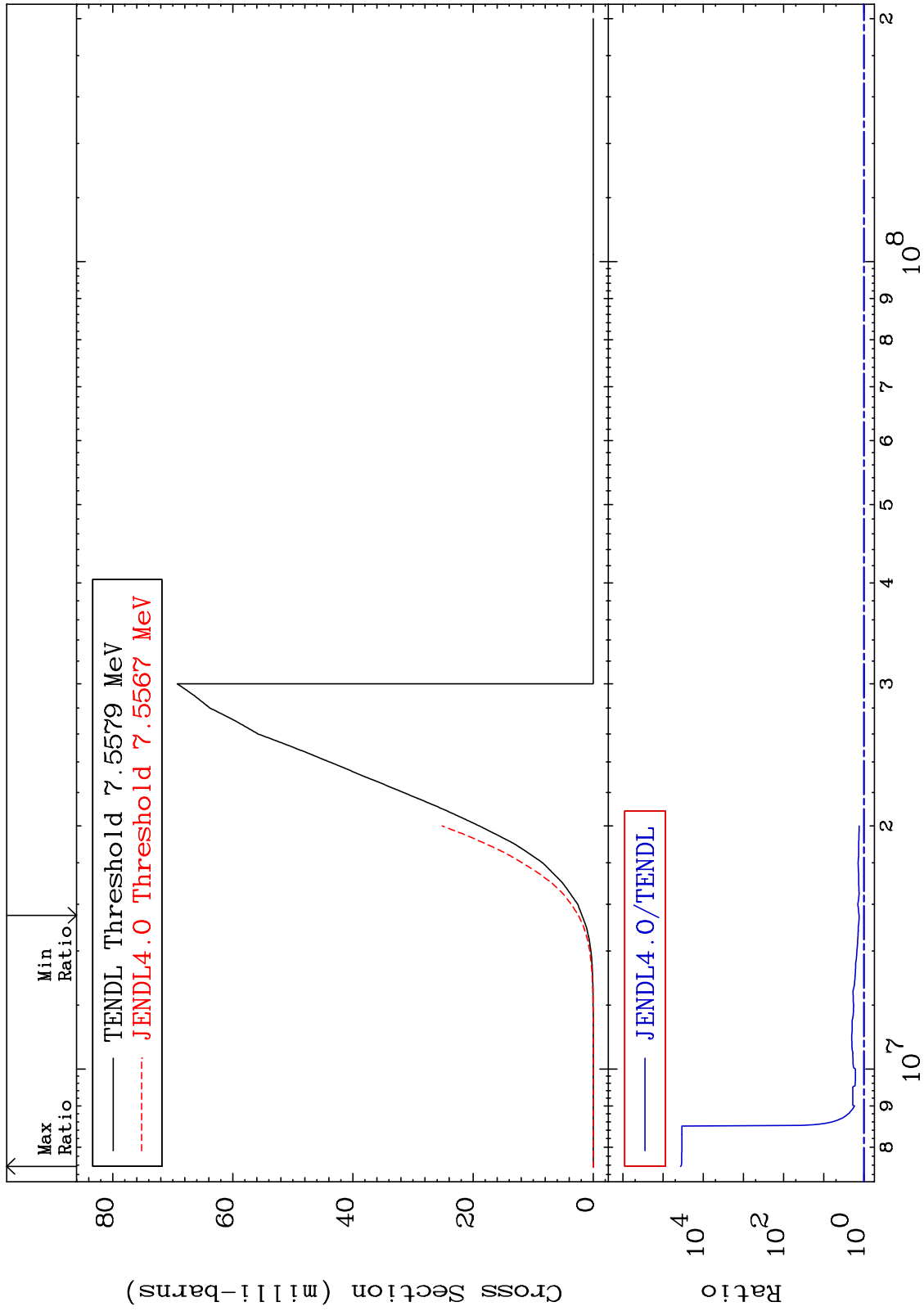
MAT 6028

(n,n') p

60-Nd-143

Cross Section

31.83 To 9999. %



60-Nd-143

Incident Energy (eV)

8

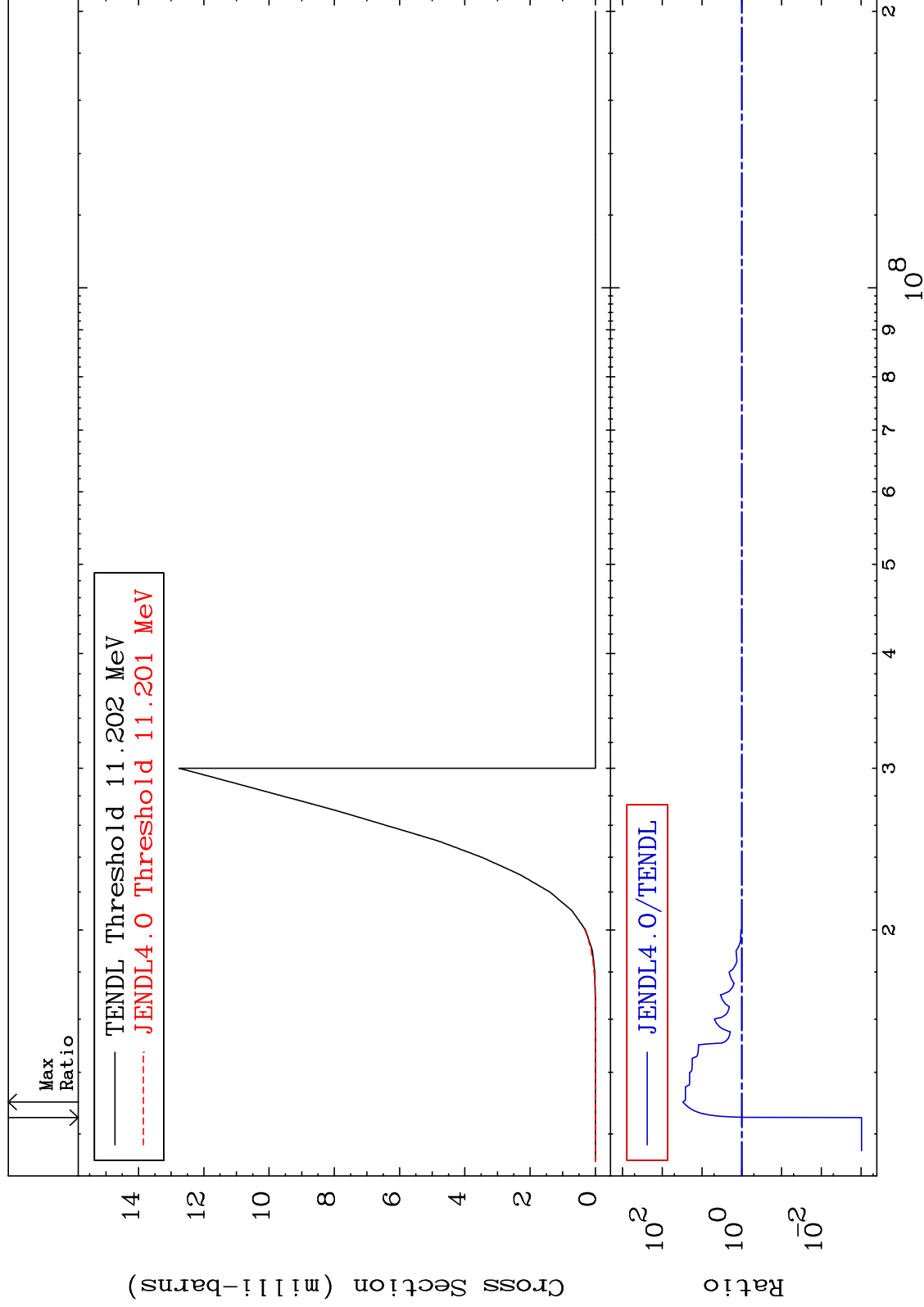
MAT 6028

(n,n') d

60-Nd-143

Cross Section

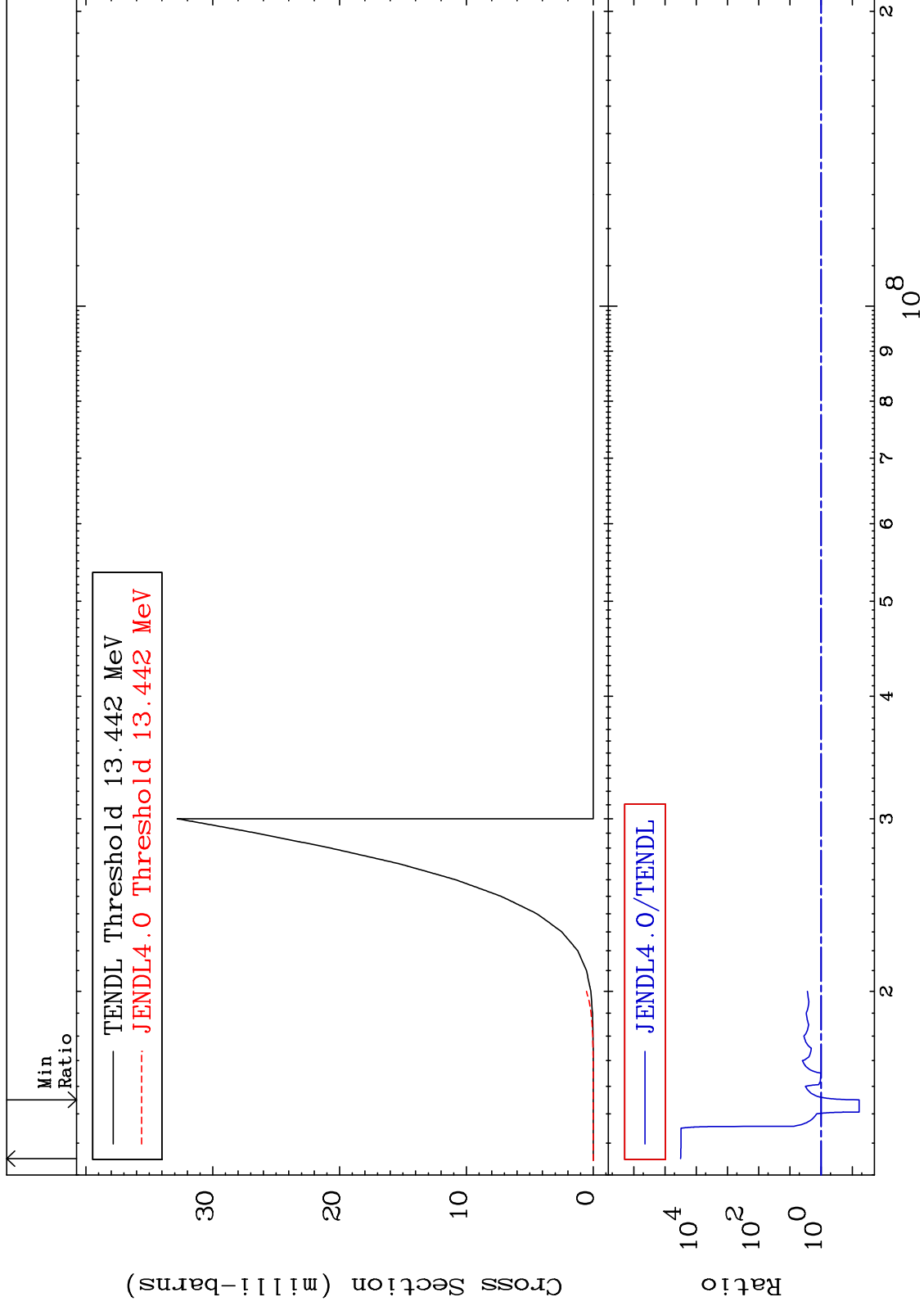
-99.90 To 2942. %



MAT 6028

(n,2n) p
Cross Section

60-Nd-143
-93.94 To 9999. %



10

Incident Energy (eV)

60-Nd-143

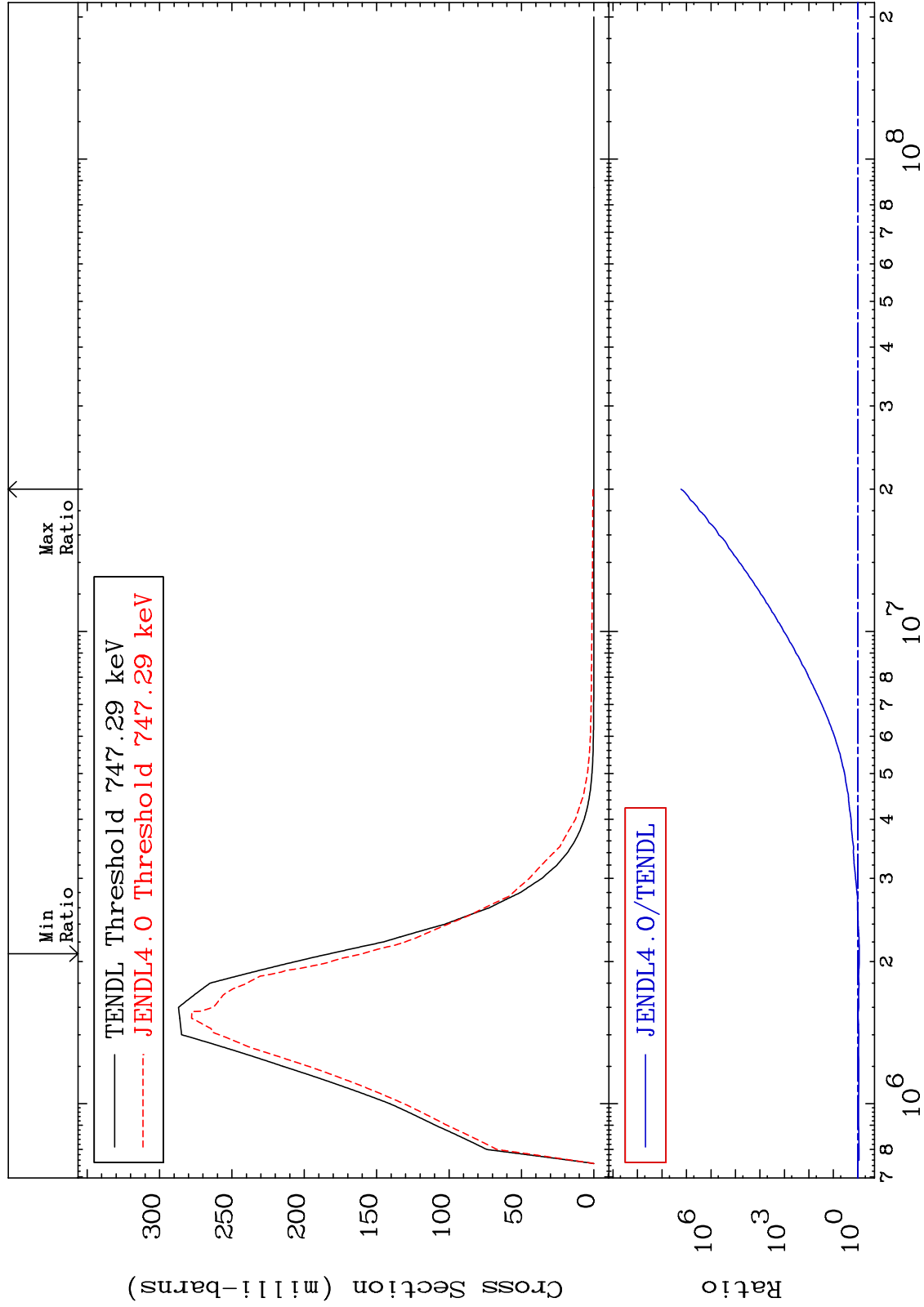
MAT 6028

MT= 51 (n,n') Level

60-Nd-143

-12.40 To 9999. %

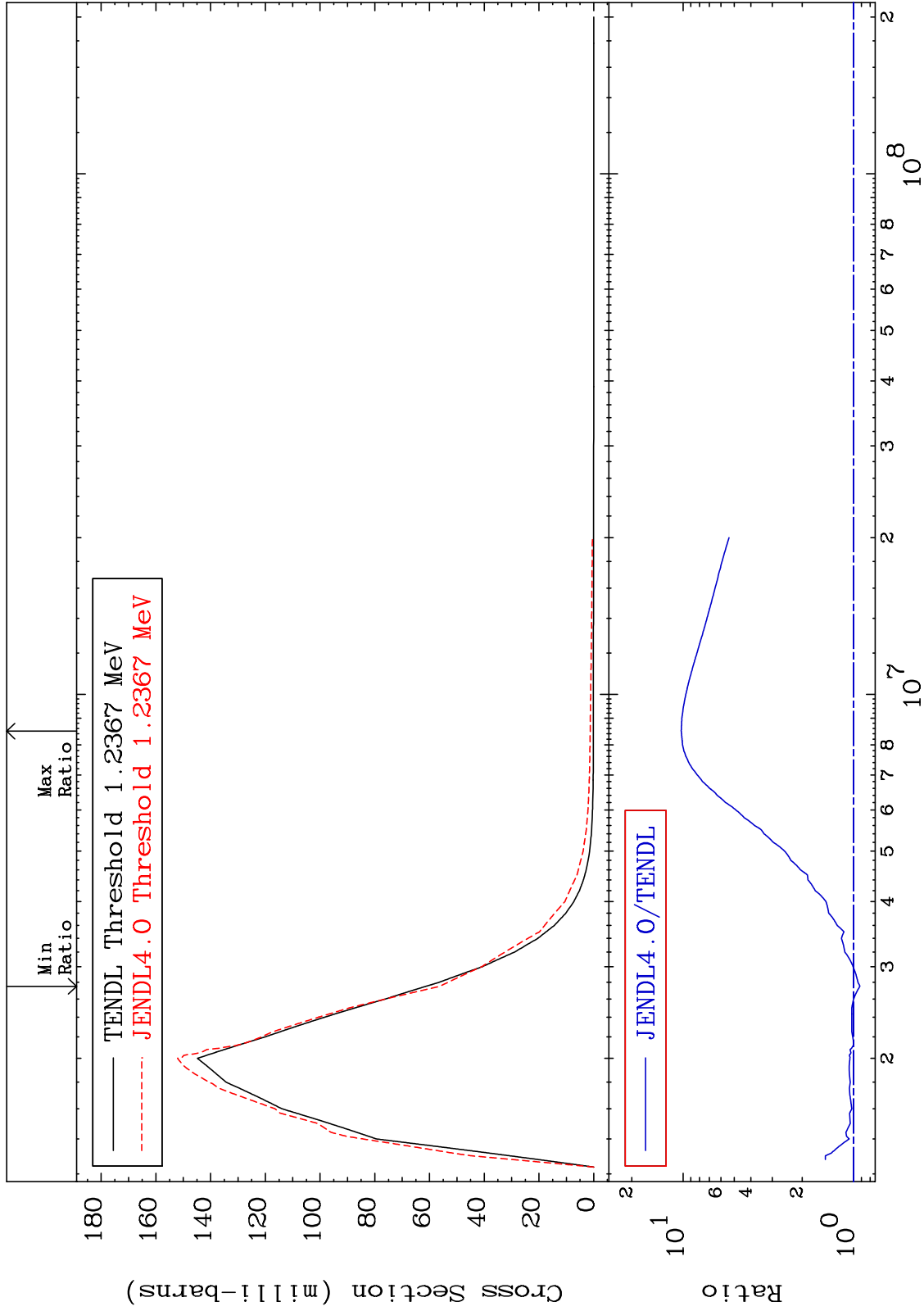
Cross Section



MAT 6028

MT= 52 (n,n') Level
Cross Section

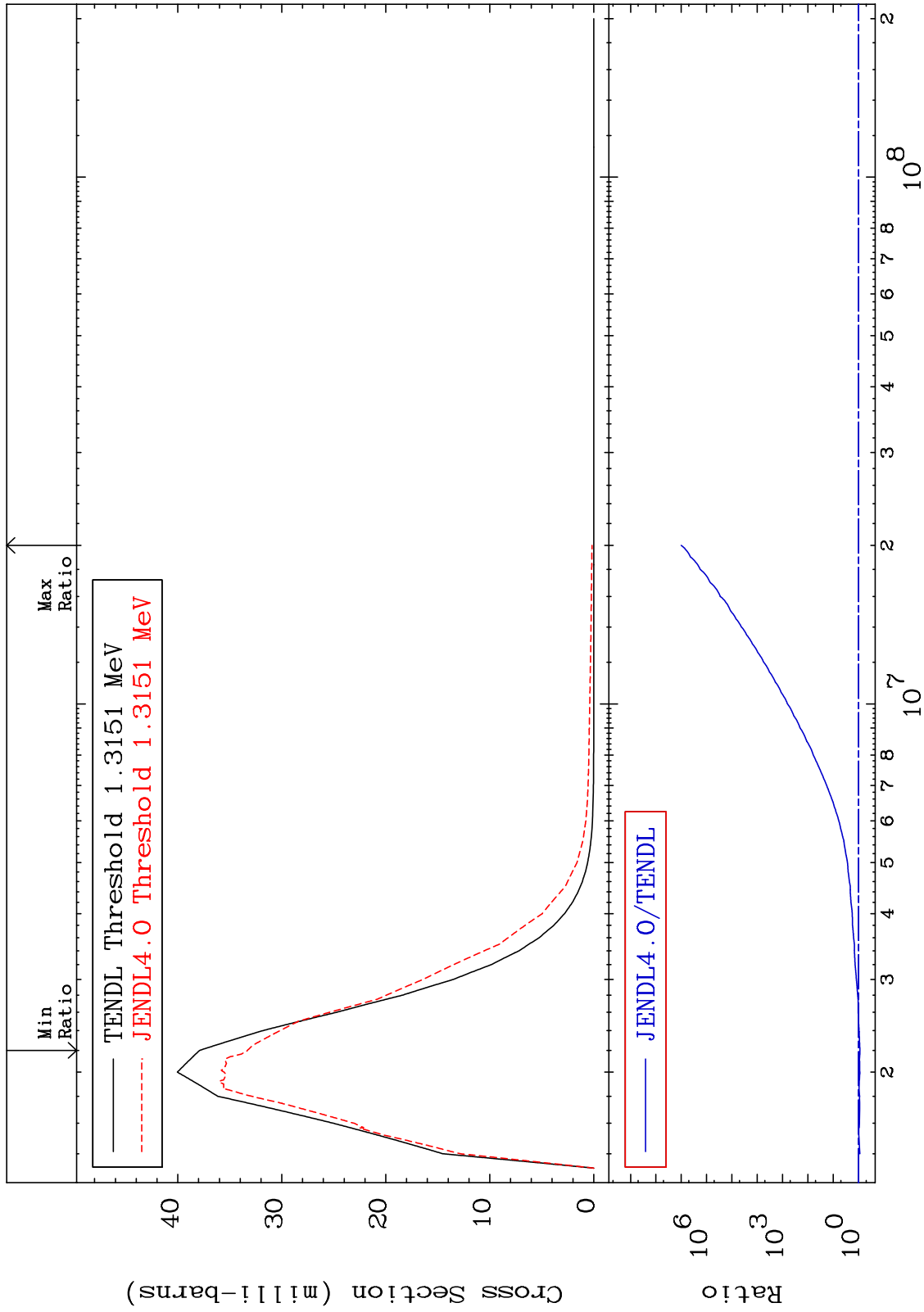
60-Nd-143
-8.278 To 924.5 %



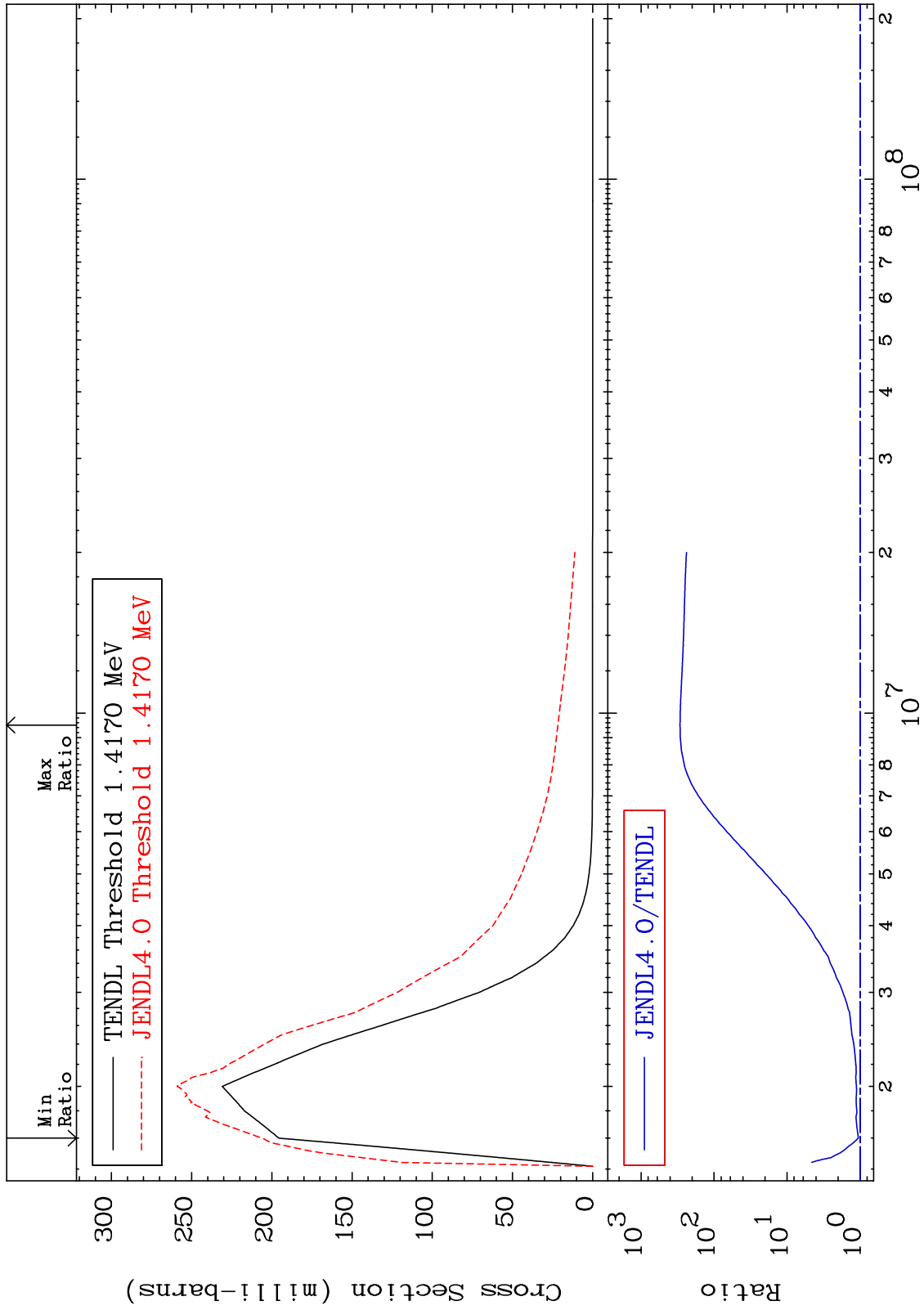
MAT 6028

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

60-Nd-143
-12.15 To 9999. %



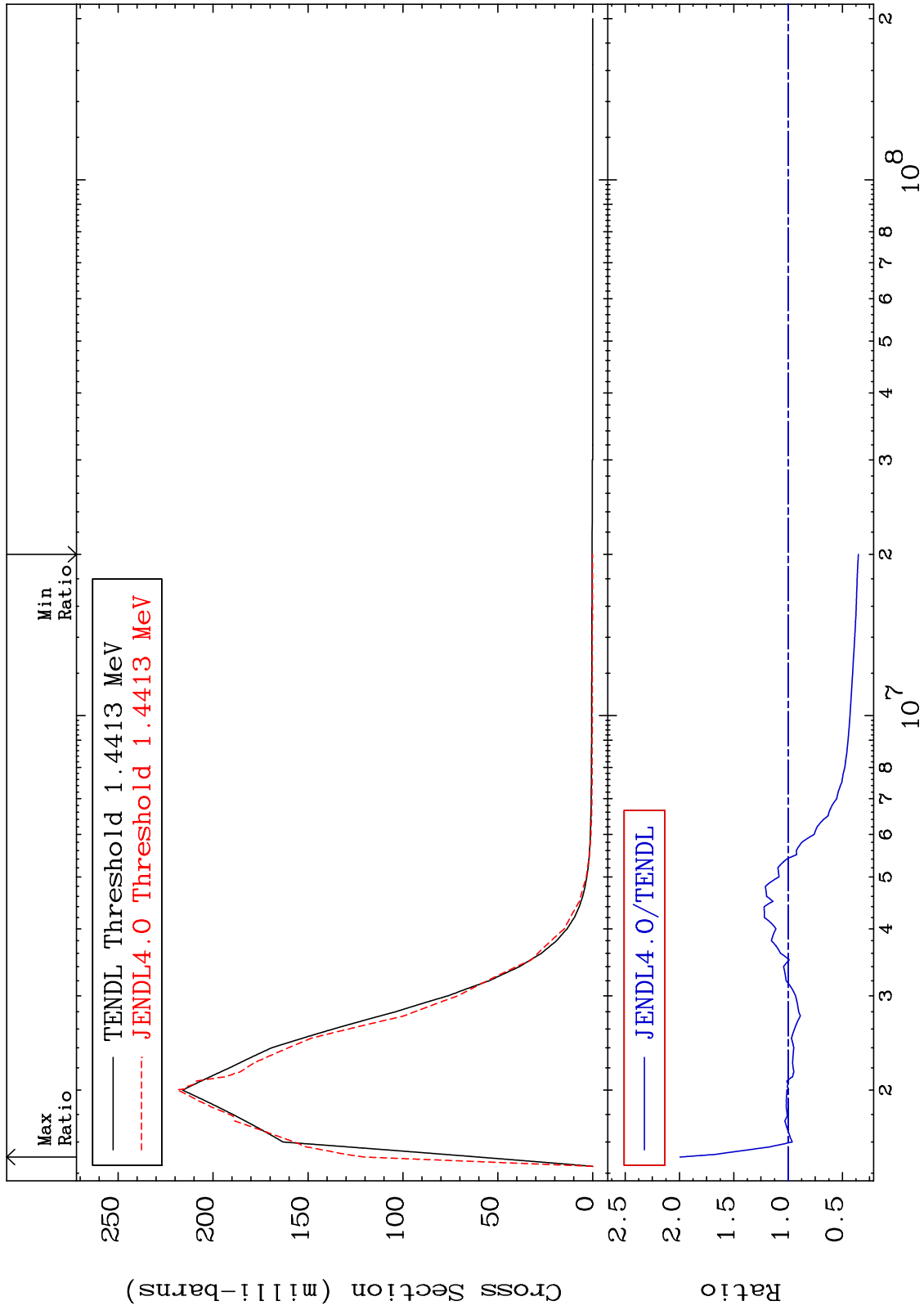
MAT 6028 MT= 54 (n,n') Level Cross Section 60-Nd-143
 5.242 To 9999. %



MAT 6028

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

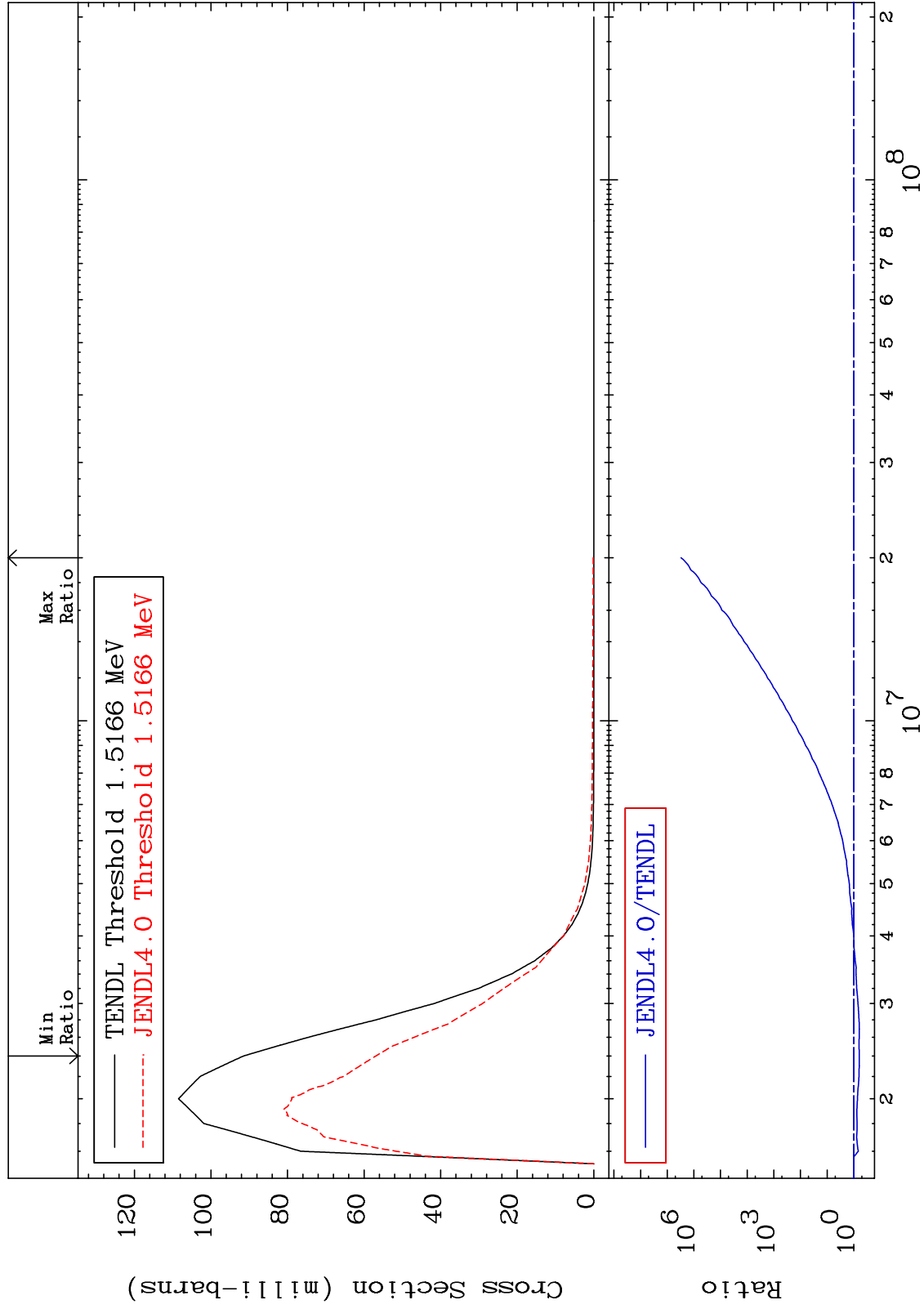
60-Nd-143
-64.72 To 99.53 %



MAT 6028

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

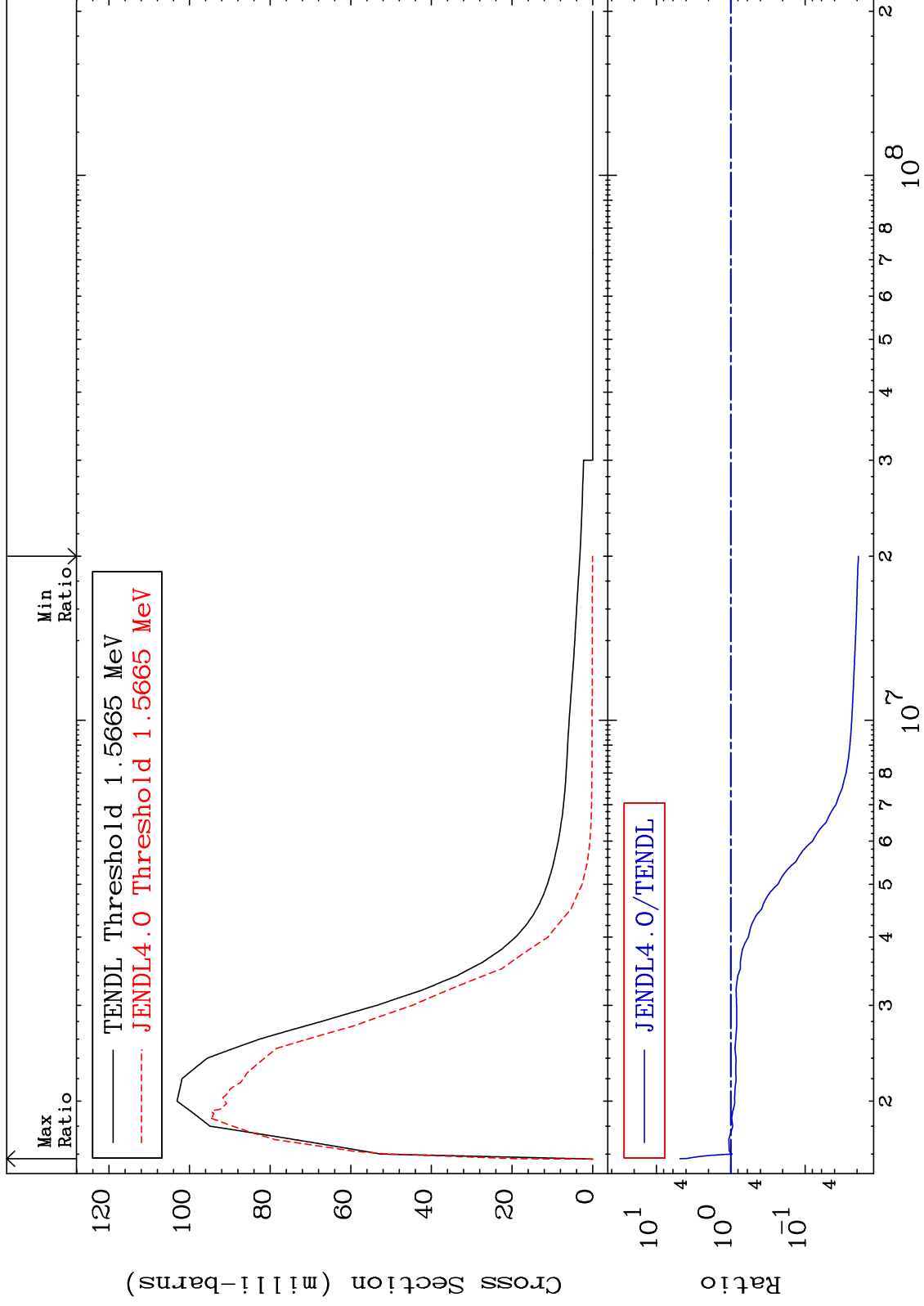
60-Nd-143
-37.77 To 9999. %



MAT 6028

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

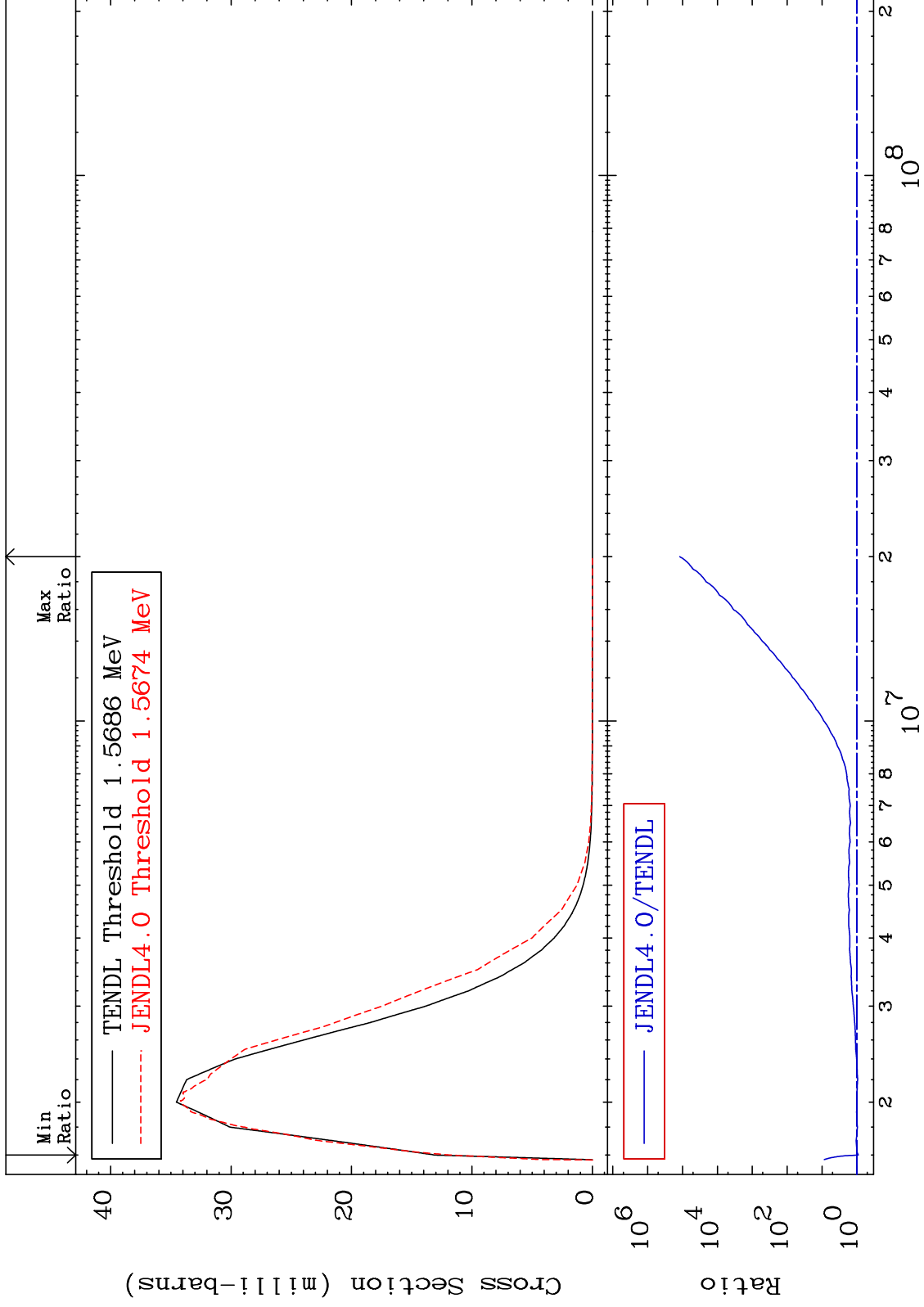
60-Nd-143
-98.08 To 382.1 %



MAT 6028

MT= 58 (n,n') Level
Cross Section

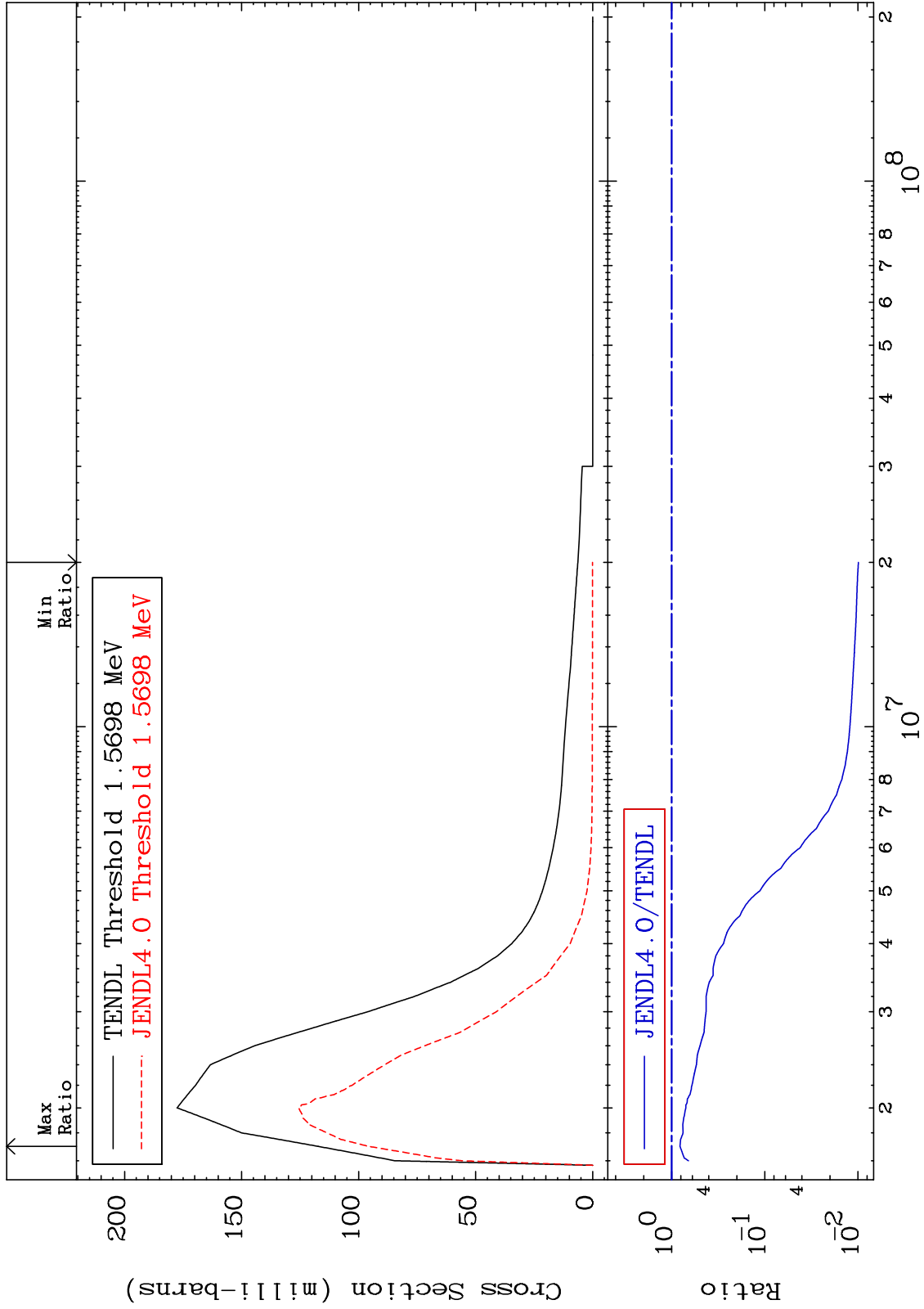
60-Nd-143
-9.430 To 9999. %



MAT 6028

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

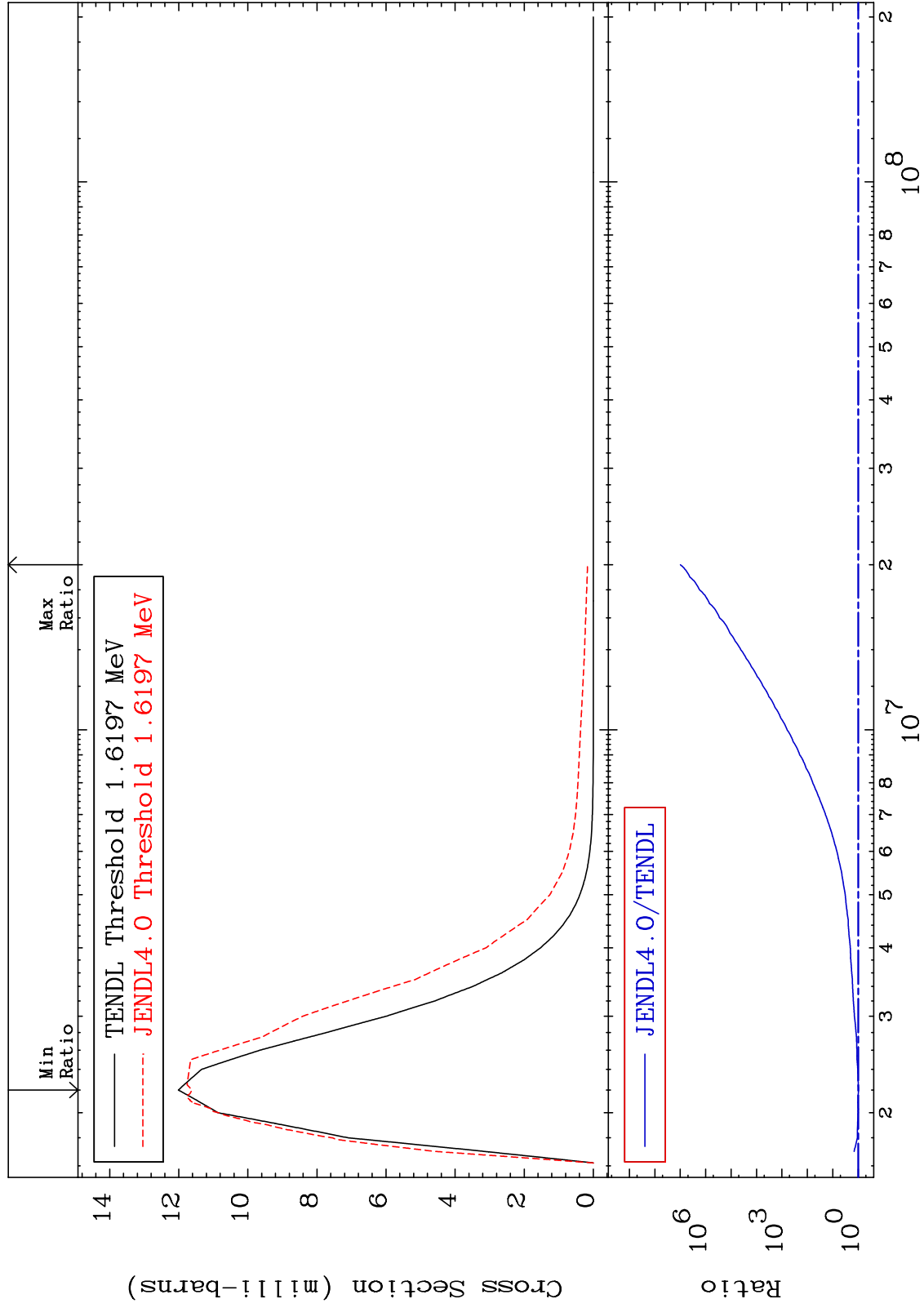
60-Nd-143
-99.01 To -18.46%



MAT 6028

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

60-Nd-143
-3.266 To 9999. %



20

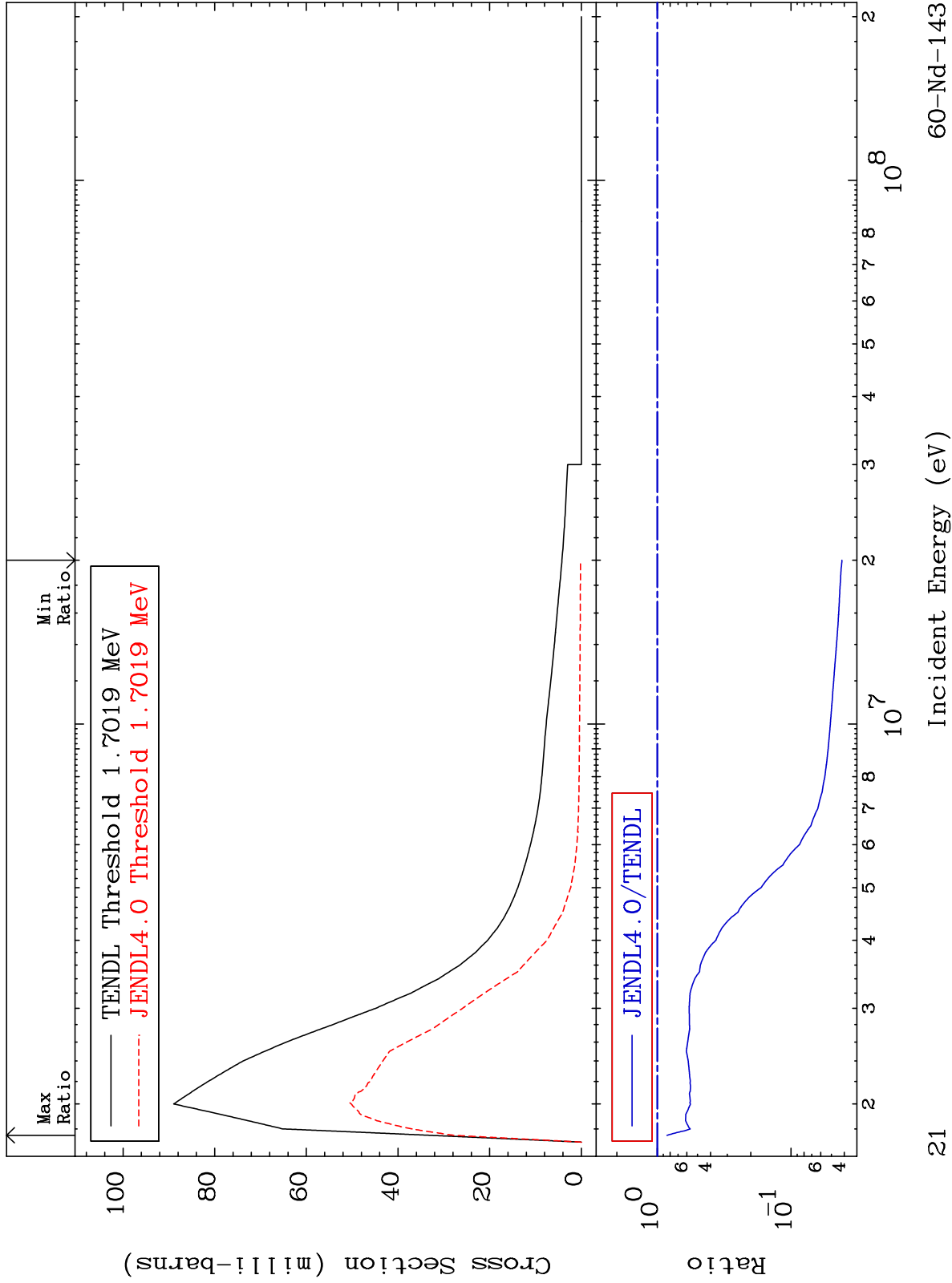
Incident Energy (eV)

60-Nd-143

MAT 6028

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

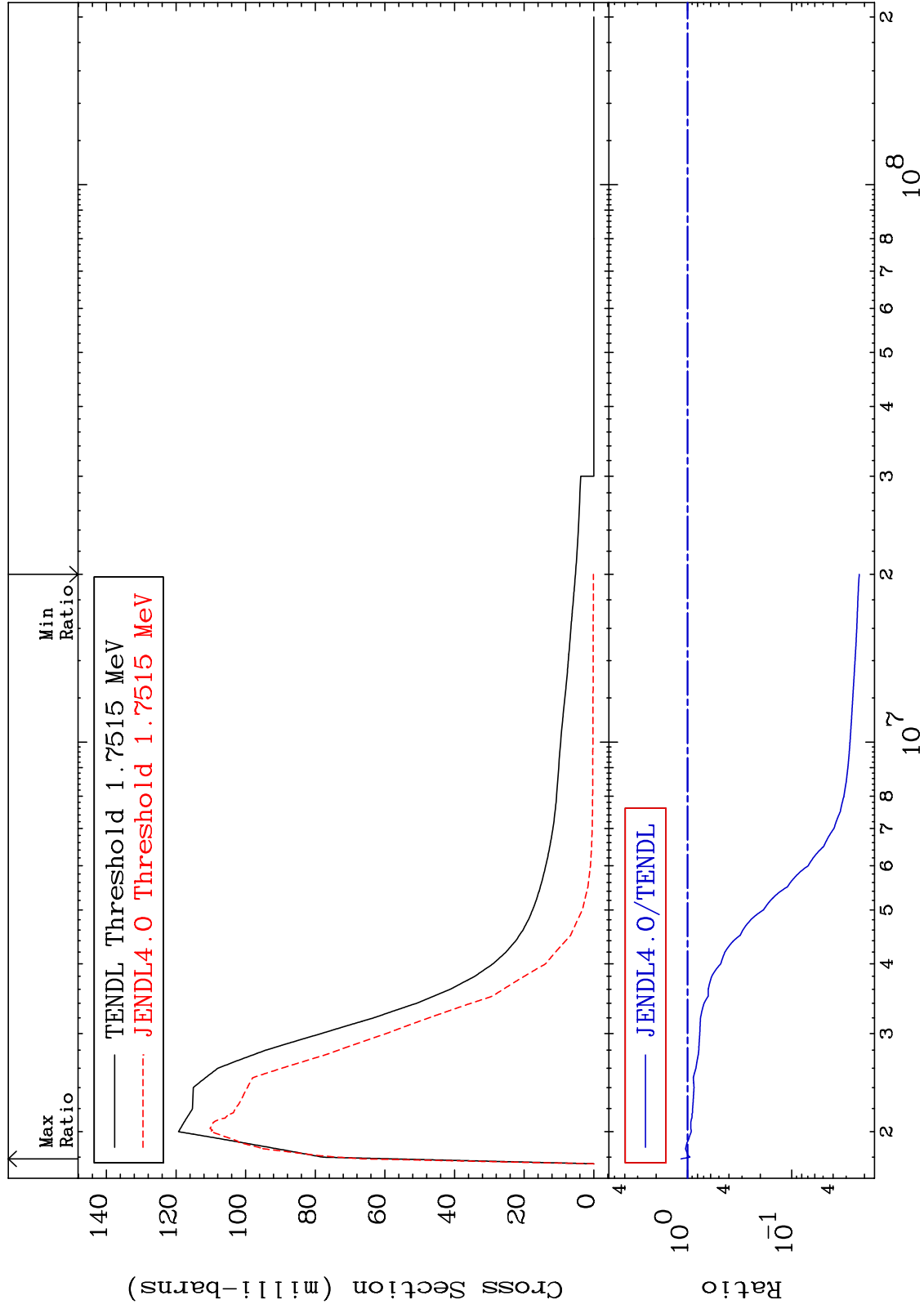
60-Nd-143
-95.83 To -15.46%



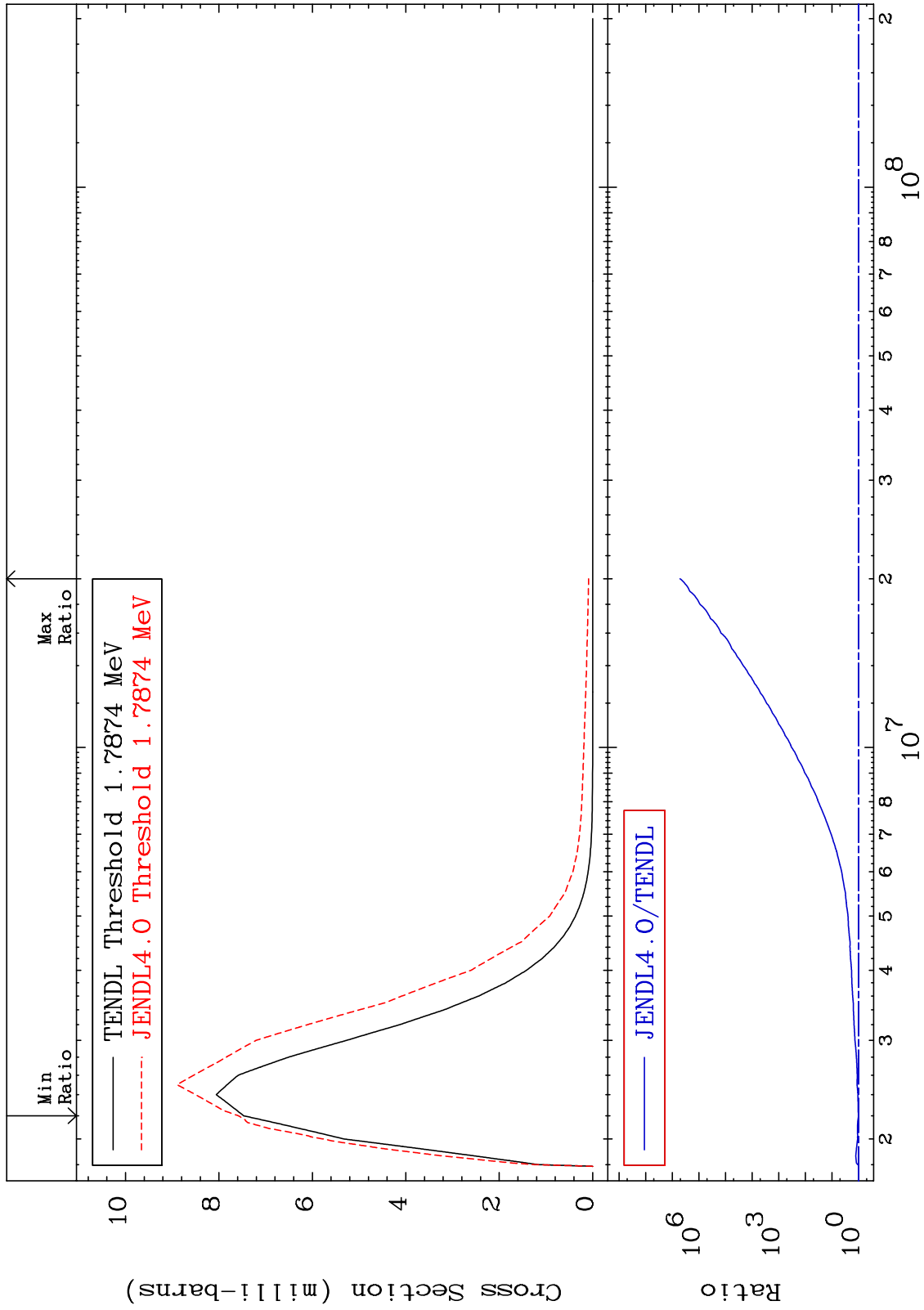
MAT 6028

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

60-Nd-143
-97.76 To 15.13 %



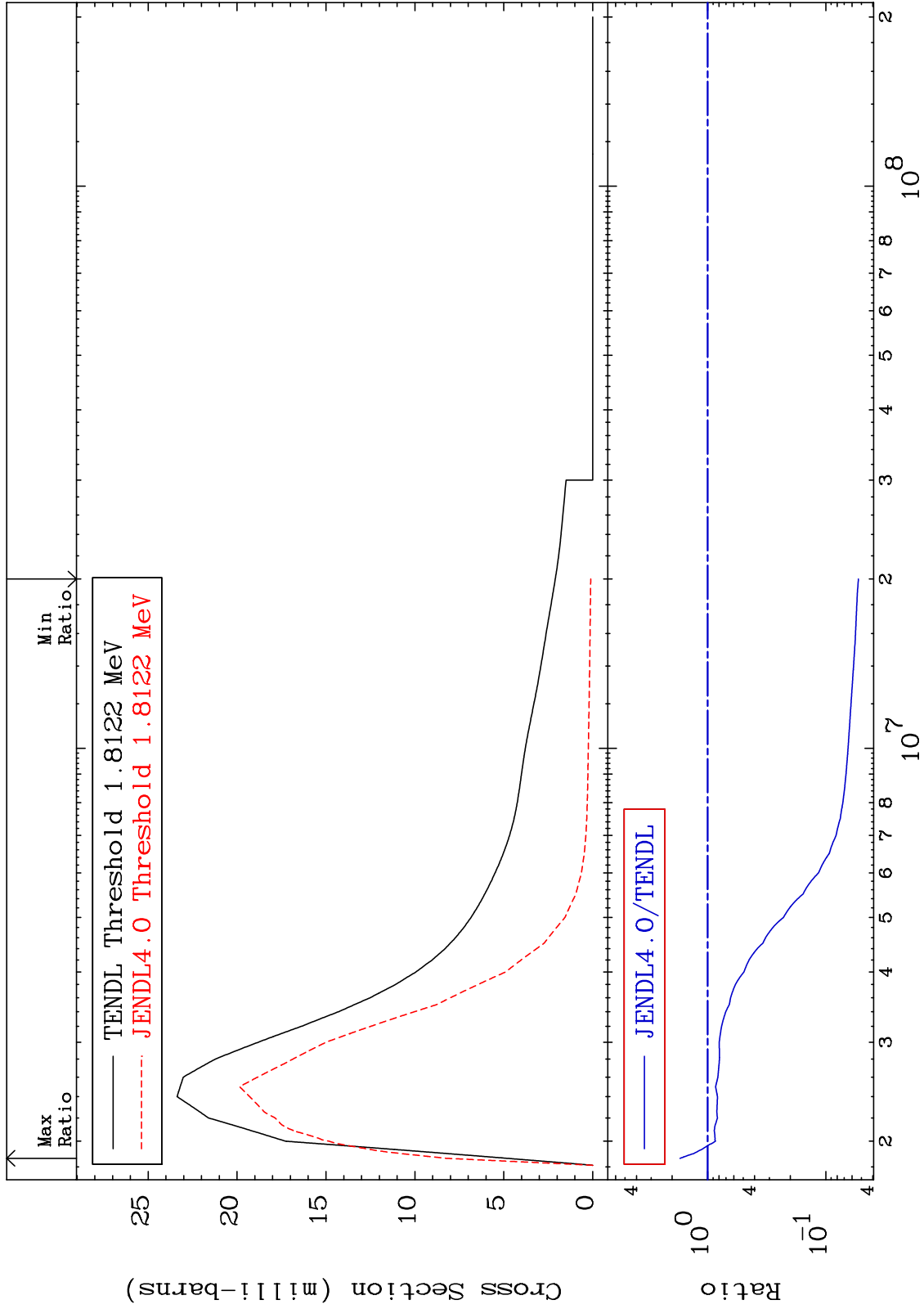
MAT 6028 MT= 63 (n,n') Level Cross Section 60-Nd-143
 1.492 To 9999. %



MAT 6028

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

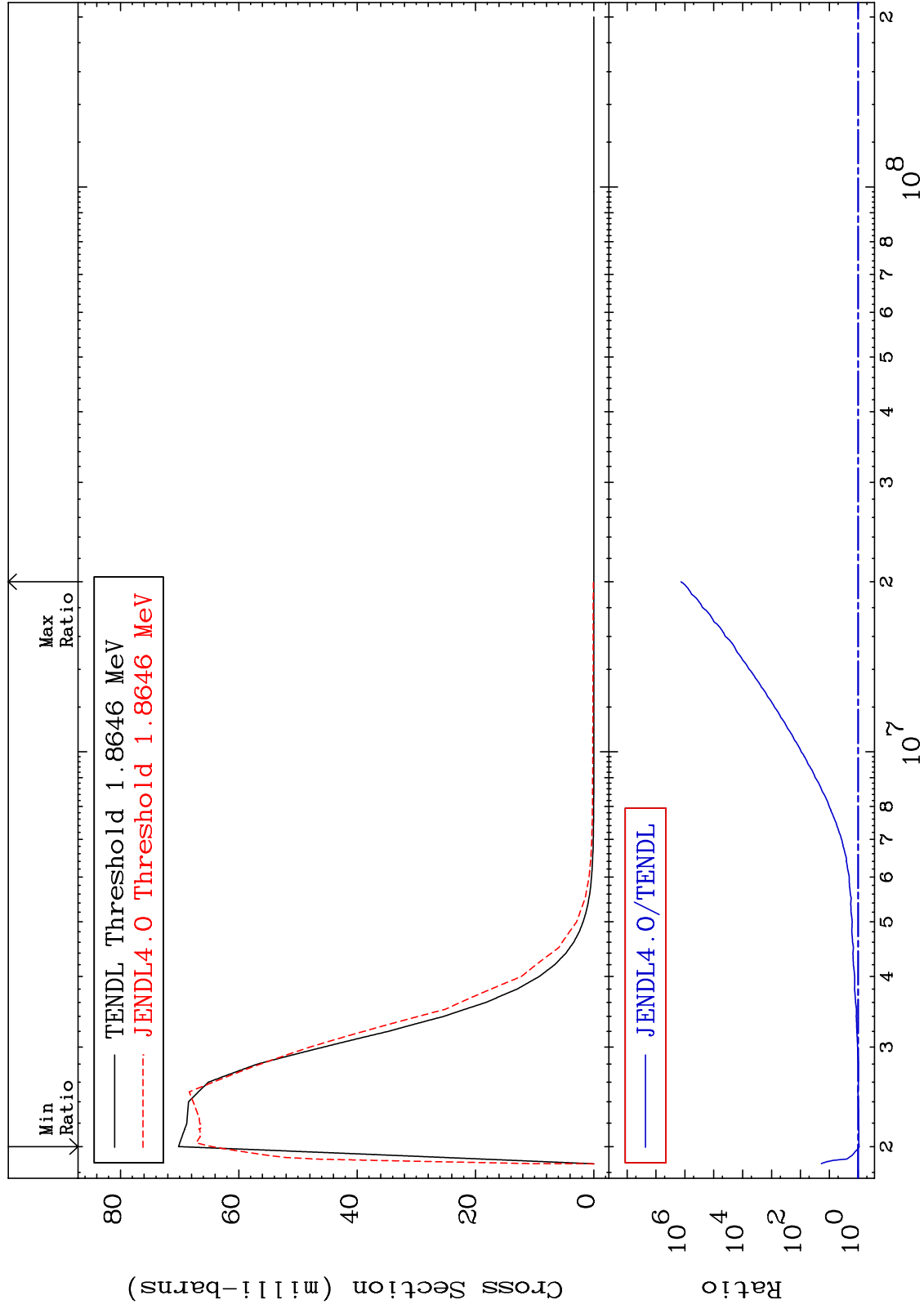
60-Nd-143
-94.70 To 71.20 %



MAT 6028

MT= 65 (n,n') Level
Cross Section

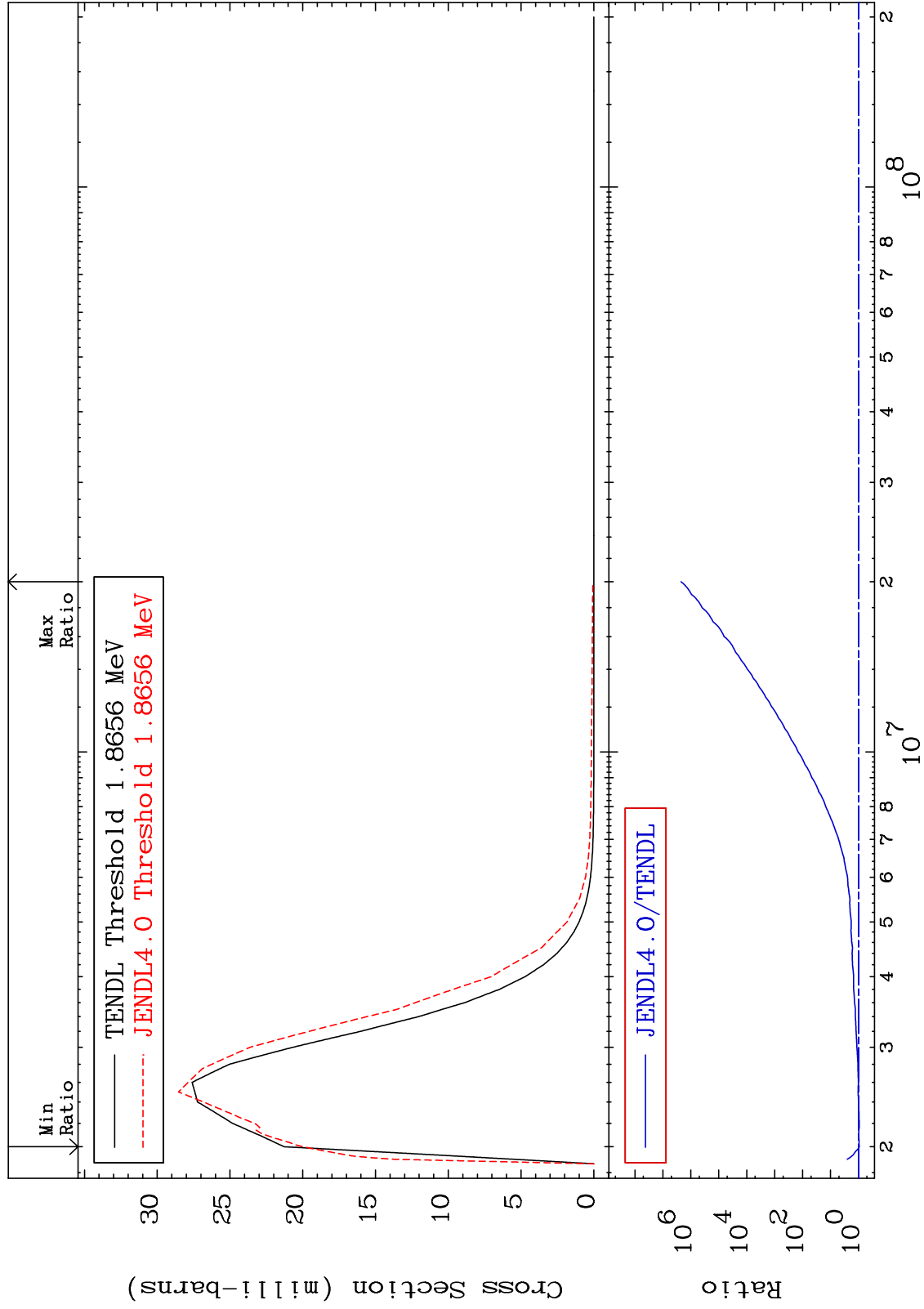
60-Nd-143
-8.058 To 9999. %



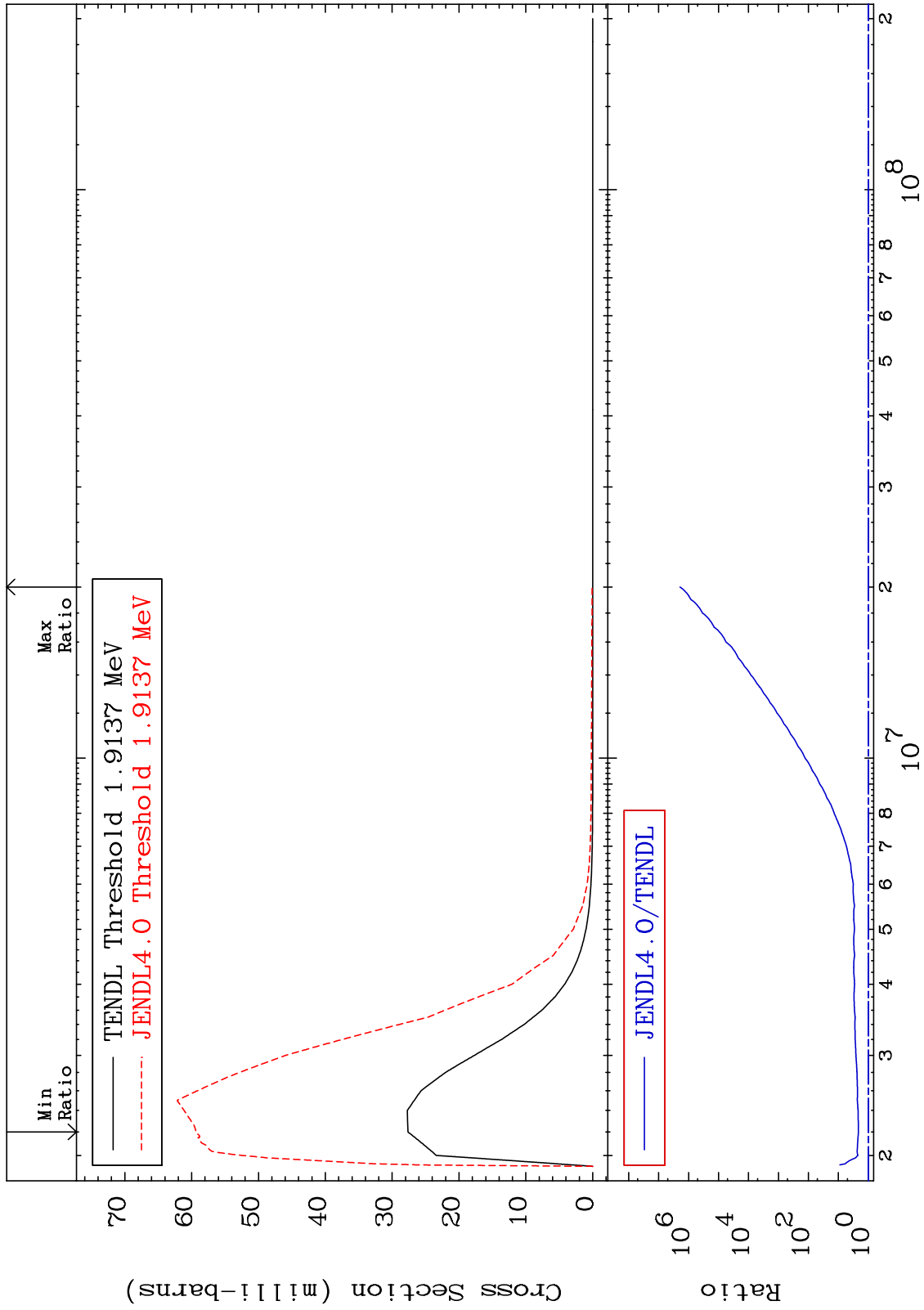
MAT 6028

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

60-Nd-143
-6.161 To 9999. %



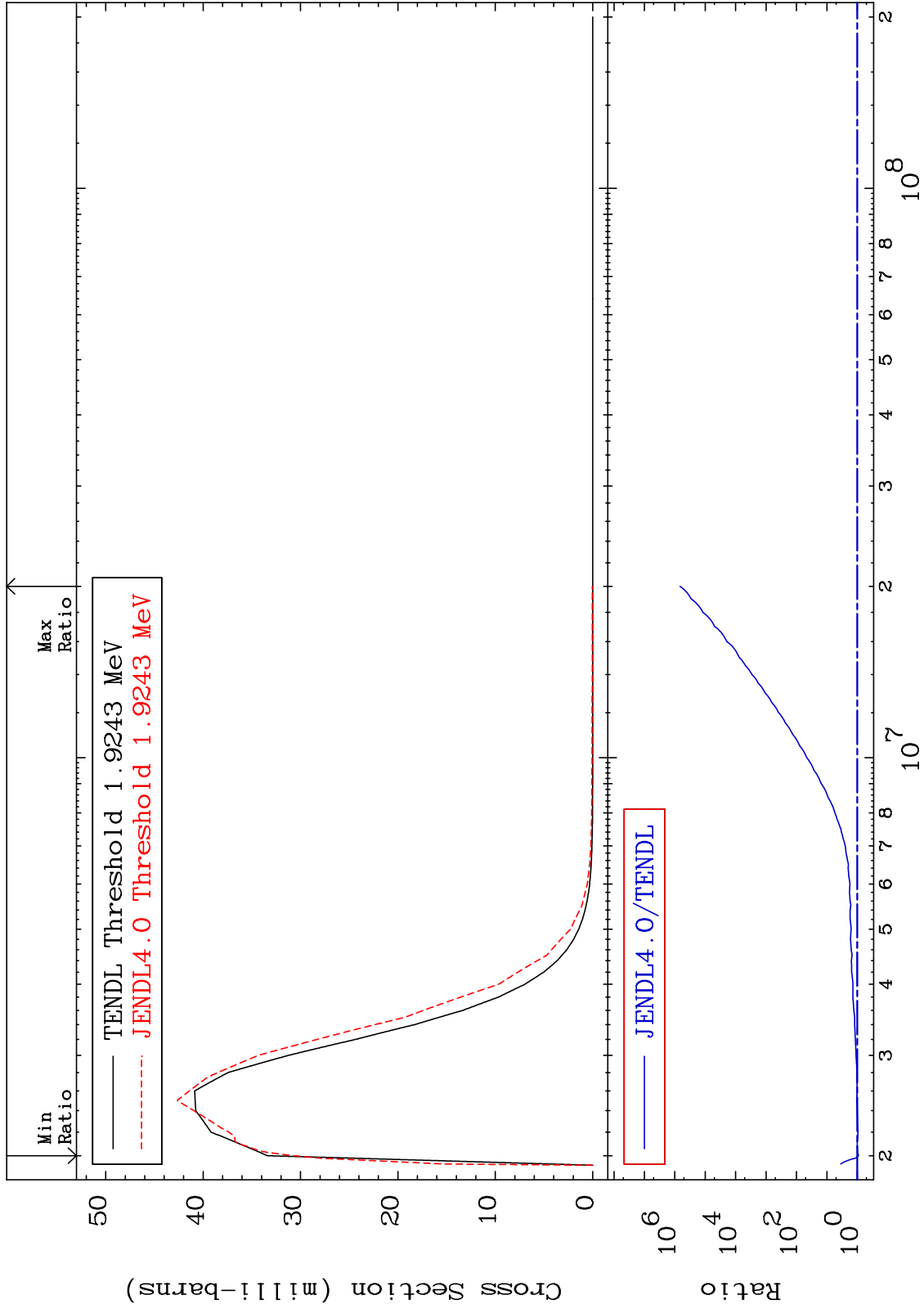
MAT 6028 MT= 67 (n, n') Level Cross Section 60-Nd-143
 114.6 To 9999. %



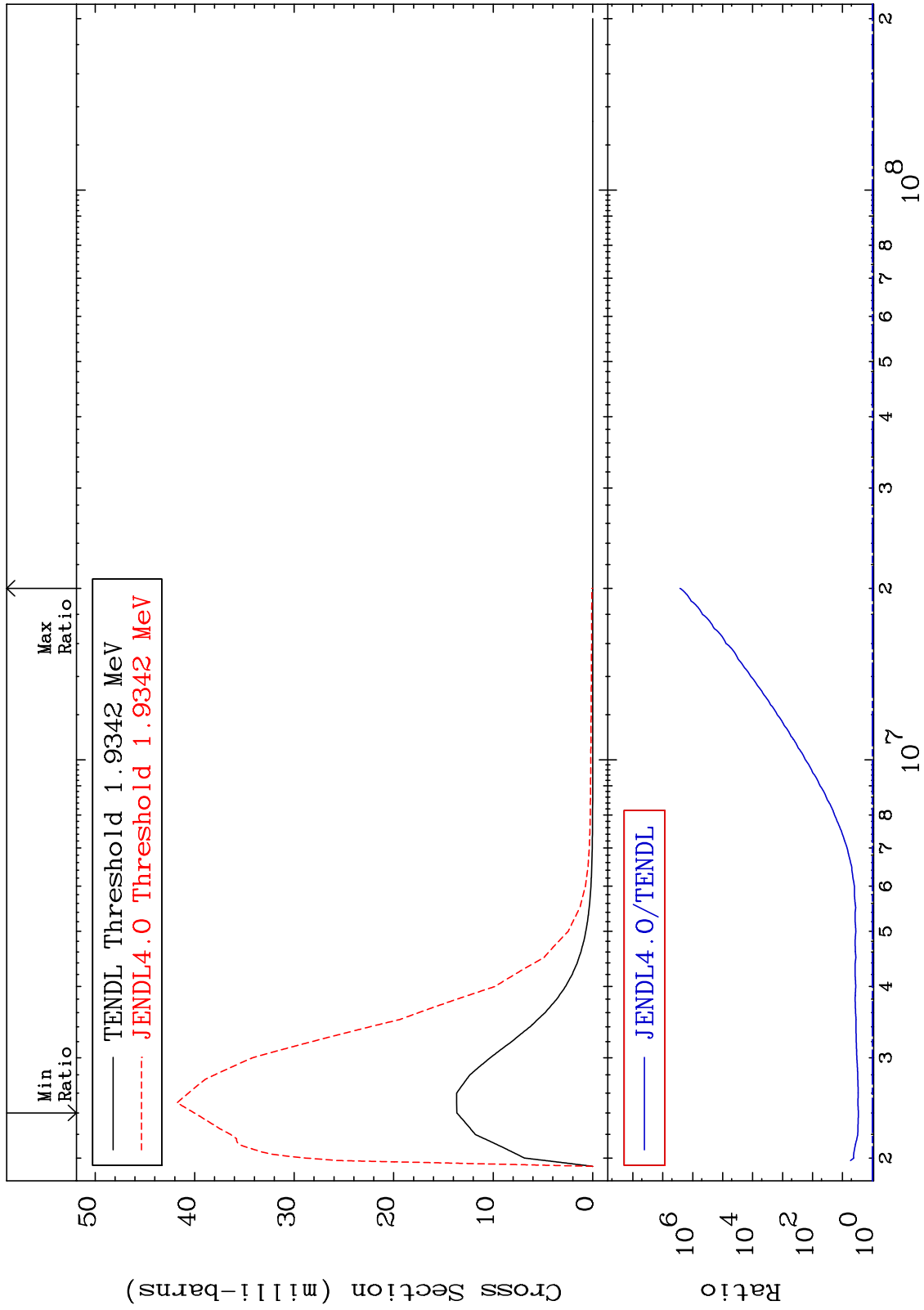
MAT 6028

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

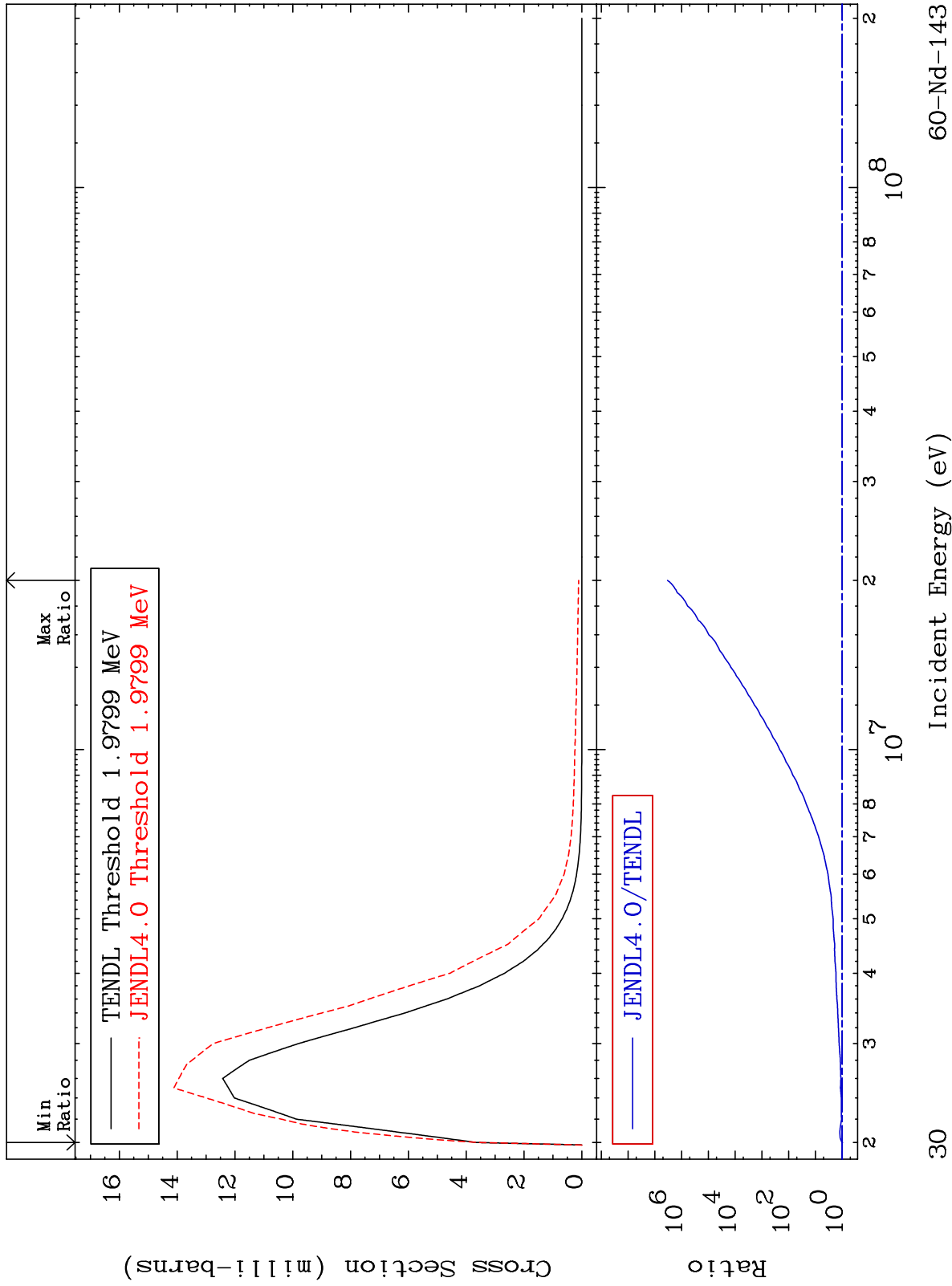
60-Nd-143
-8.080 To 9999. %



MAT 6028 MT= 69 (n,n') Level Cross Section 60-Nd-143
 193.2 To 9999. %



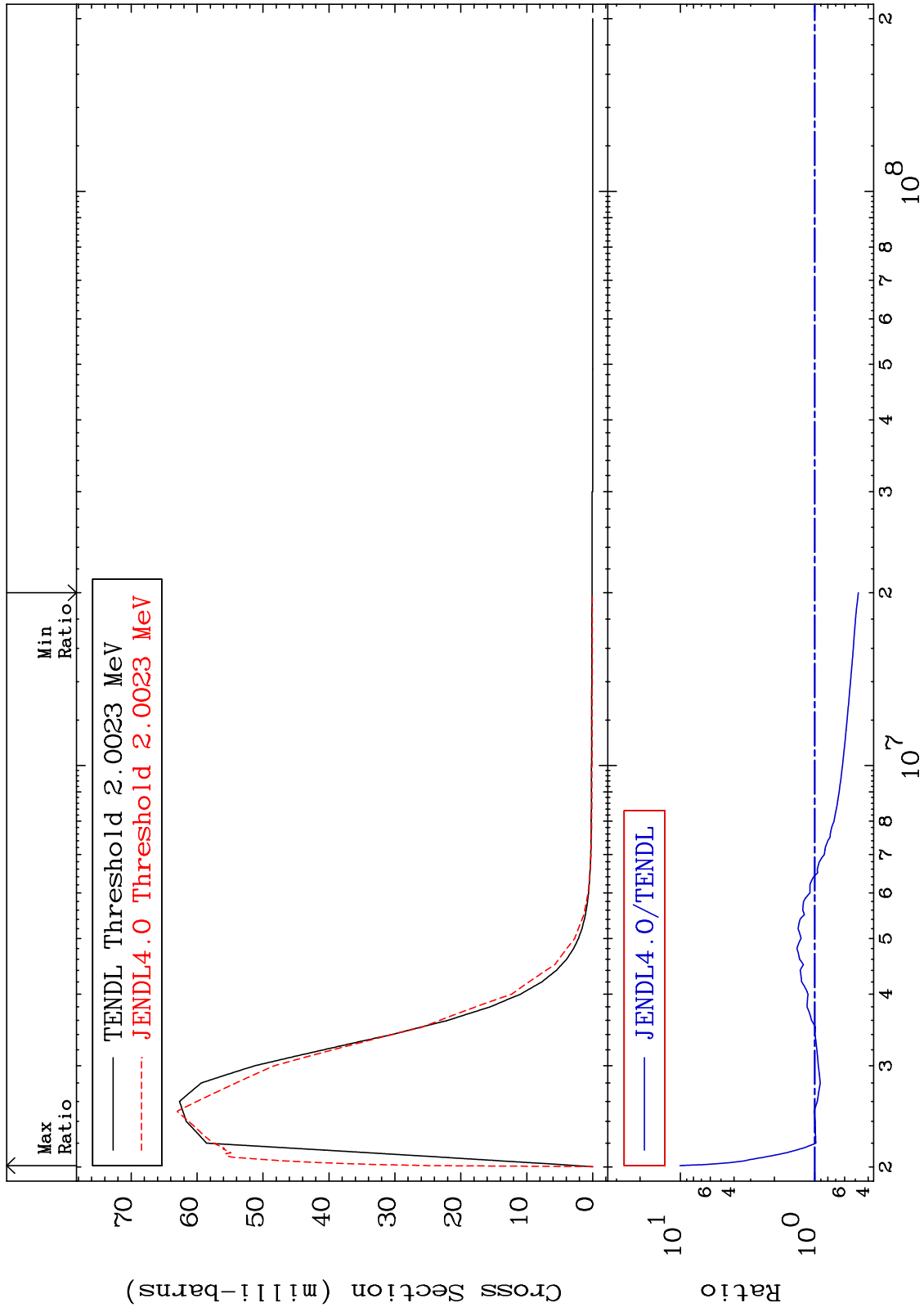
MAT 6028 MT= 70 (n,n') Level Cross Section 60-Nd-143
 -4.000 To 9999. %



MAT 6028

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

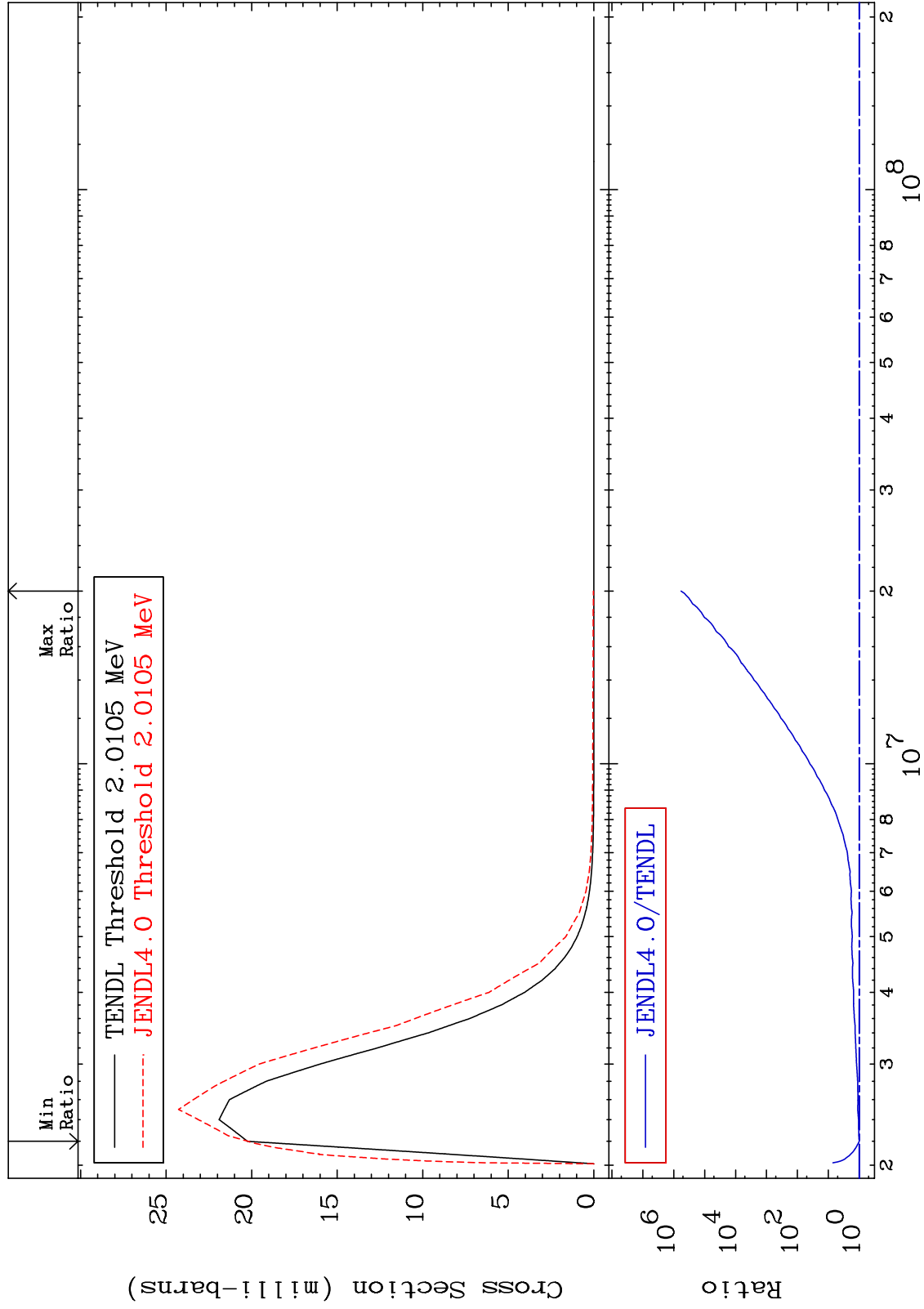
60-Nd-143
-52.64 To 908.1 %



MAT 6028

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

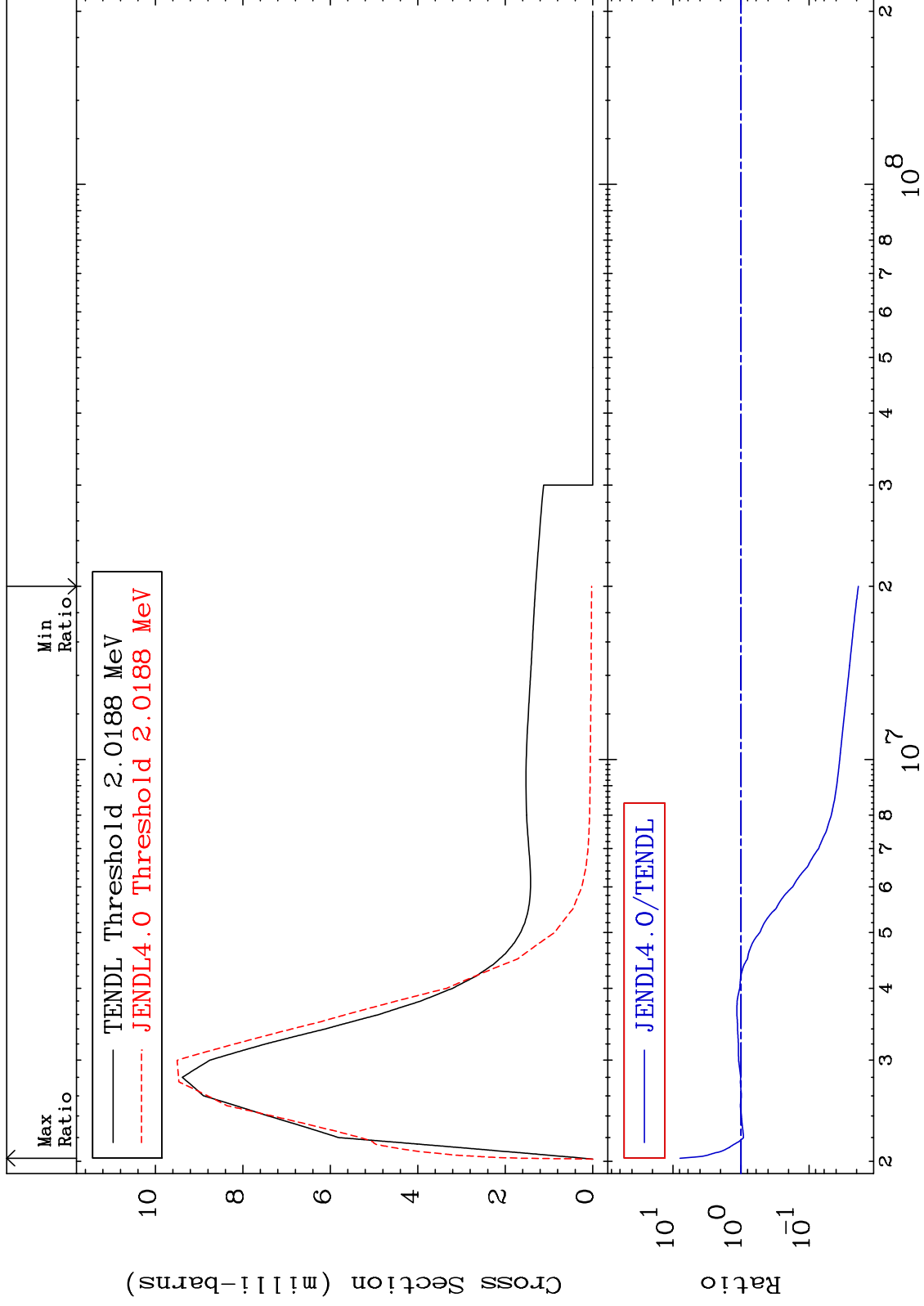
60-Nd-143
-0.241 To 9999. %



MAT 6028

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

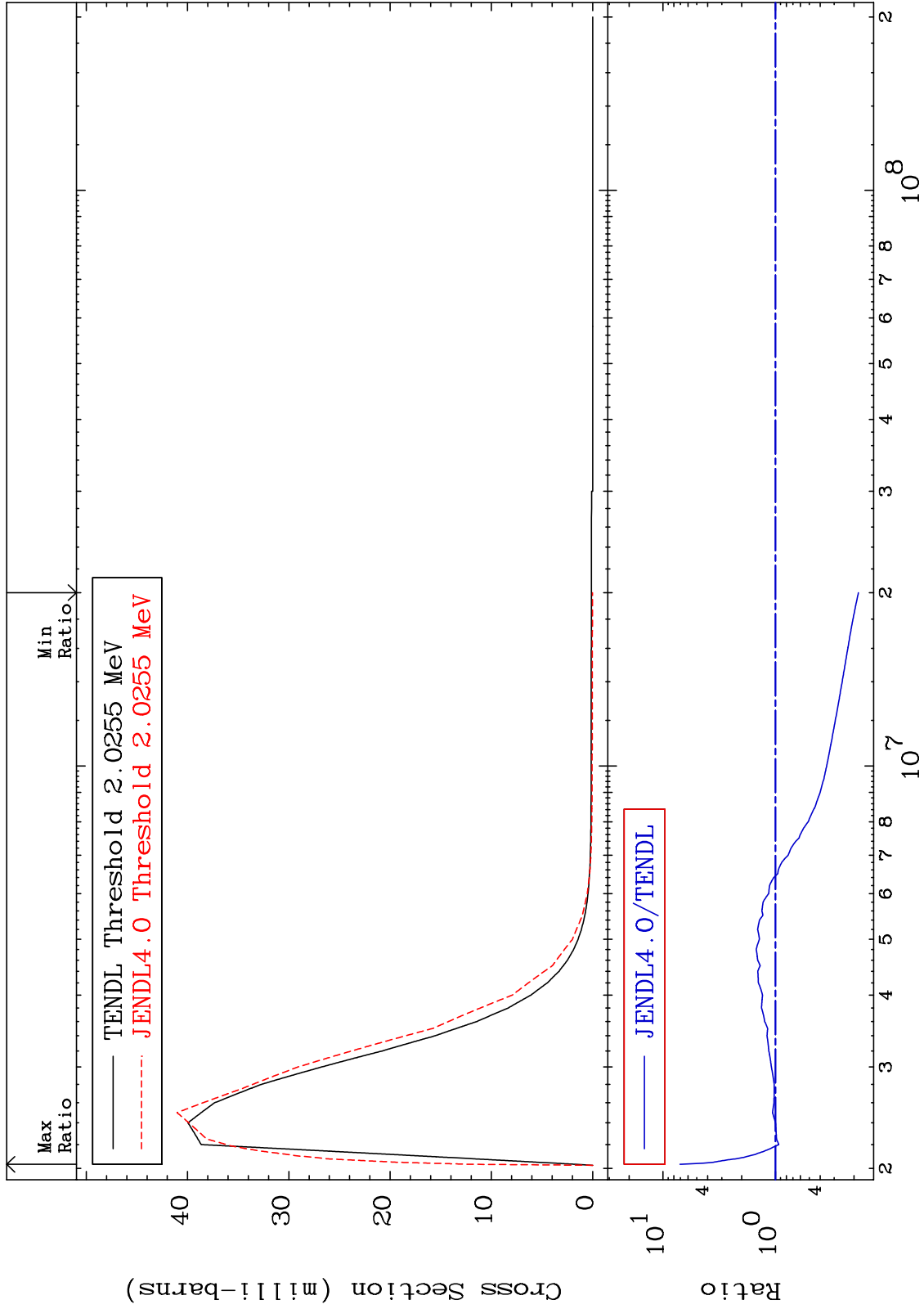
60-Nd-143
-98.11 To 686.1 %



MAT 6028

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

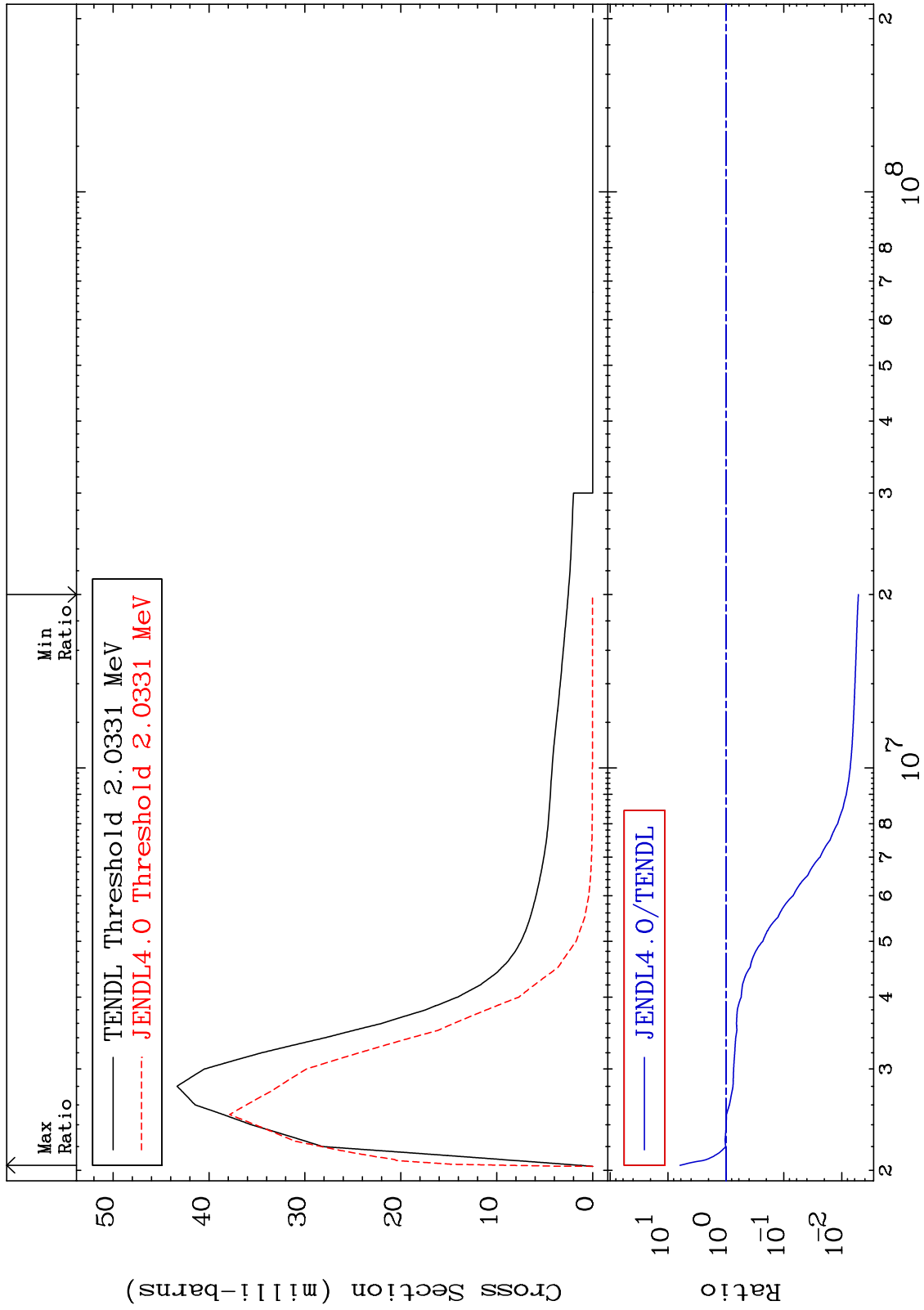
60-Nd-143
-81.71 To 605.5 %



MAT 6028

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

60-Nd-143
-99.48 To 520.8 %



35

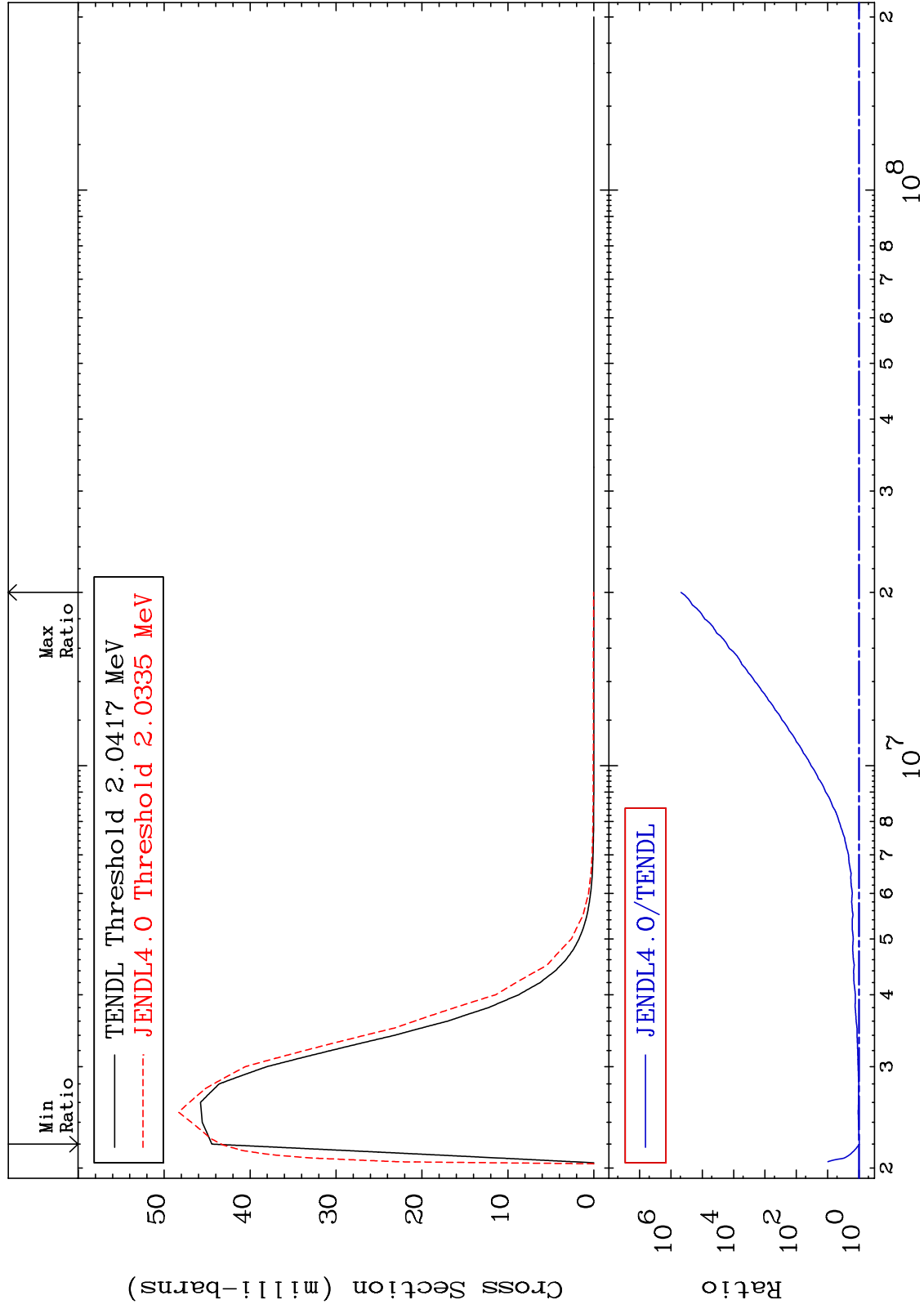
Incident Energy (eV)

60-Nd-143

MAT 6028

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

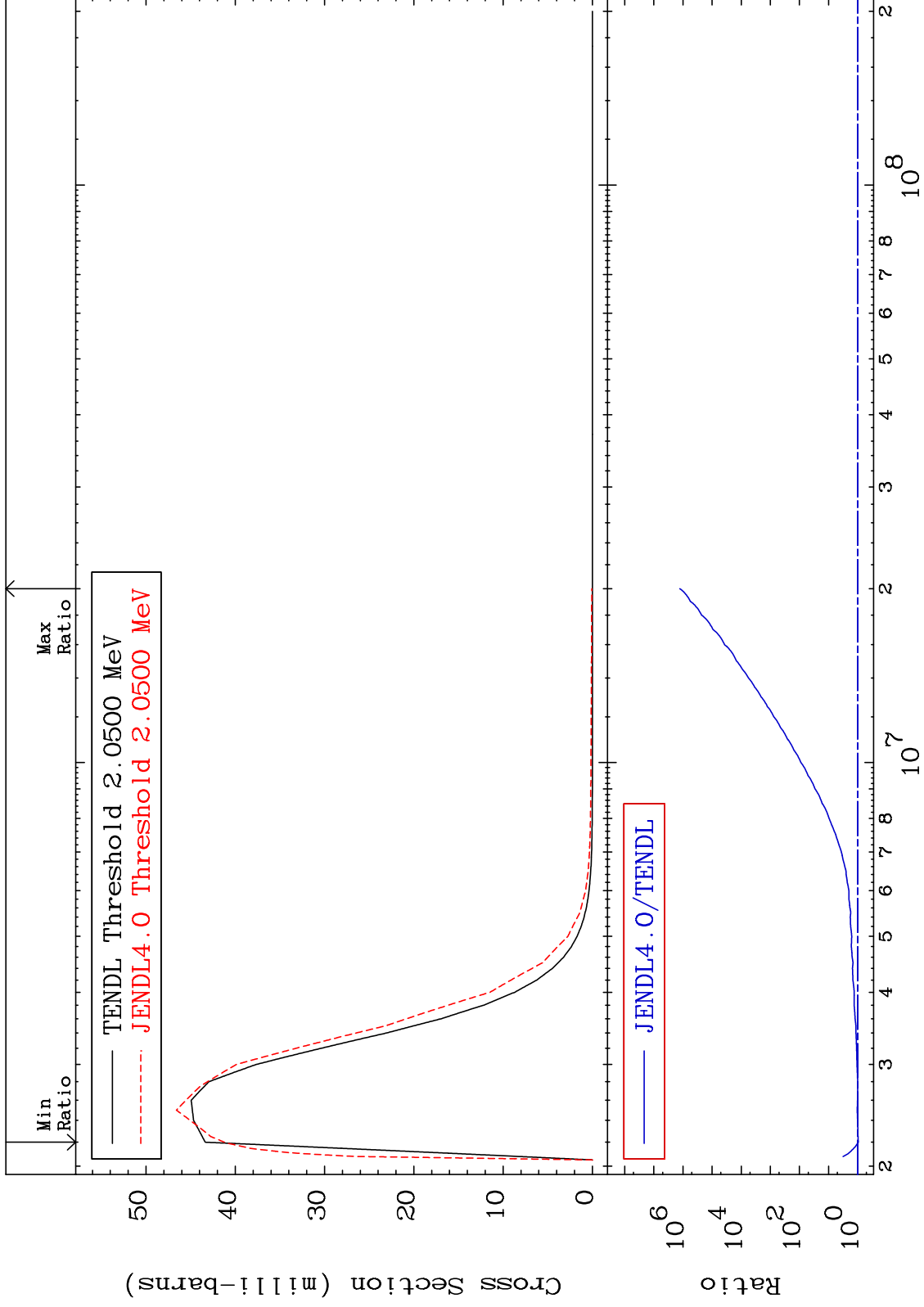
60-Nd-143
-2.449 To 9999. %



MAT 6028

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

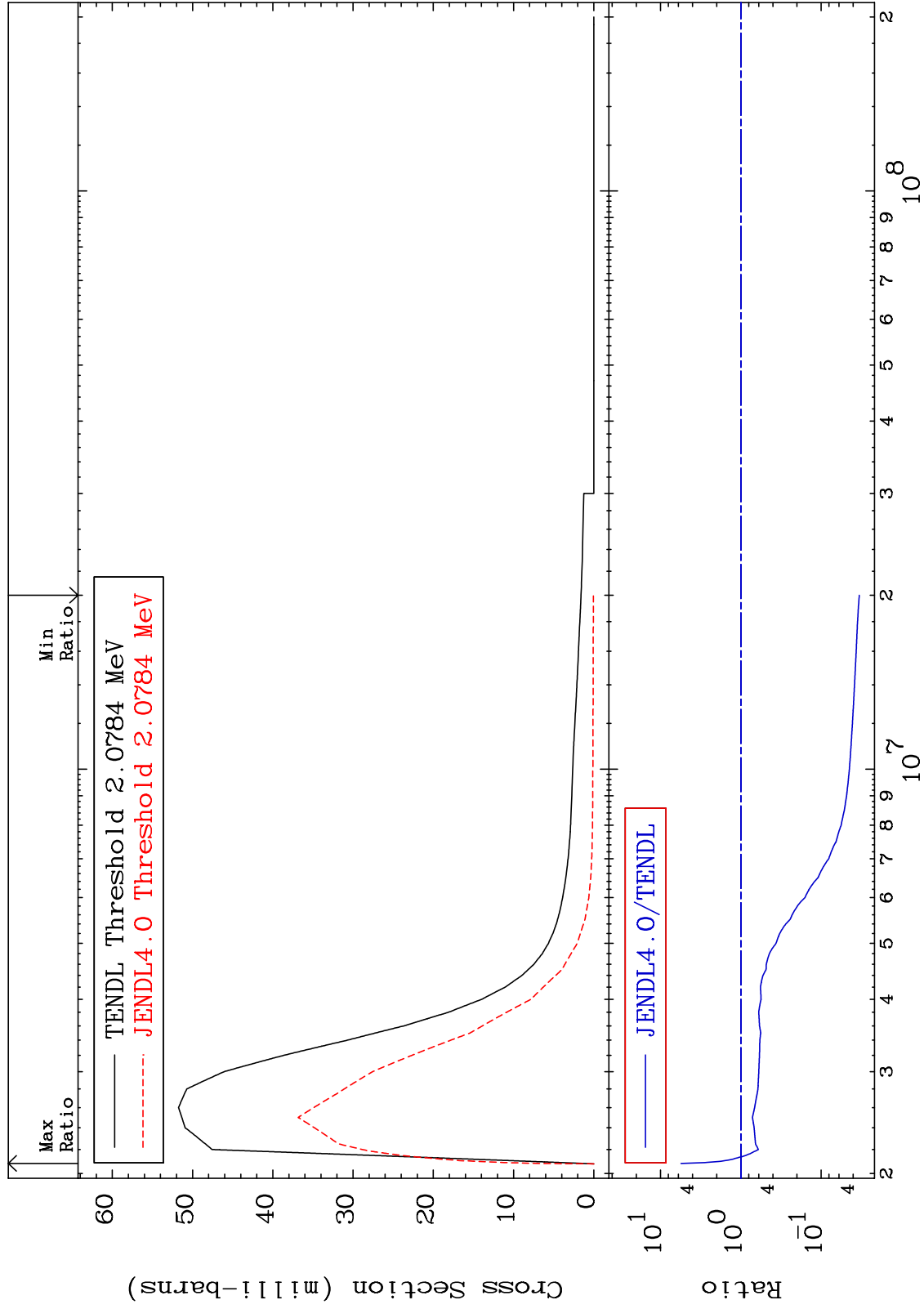
60-Nd-143
-4.978 To 9999. %



MAT 6028

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

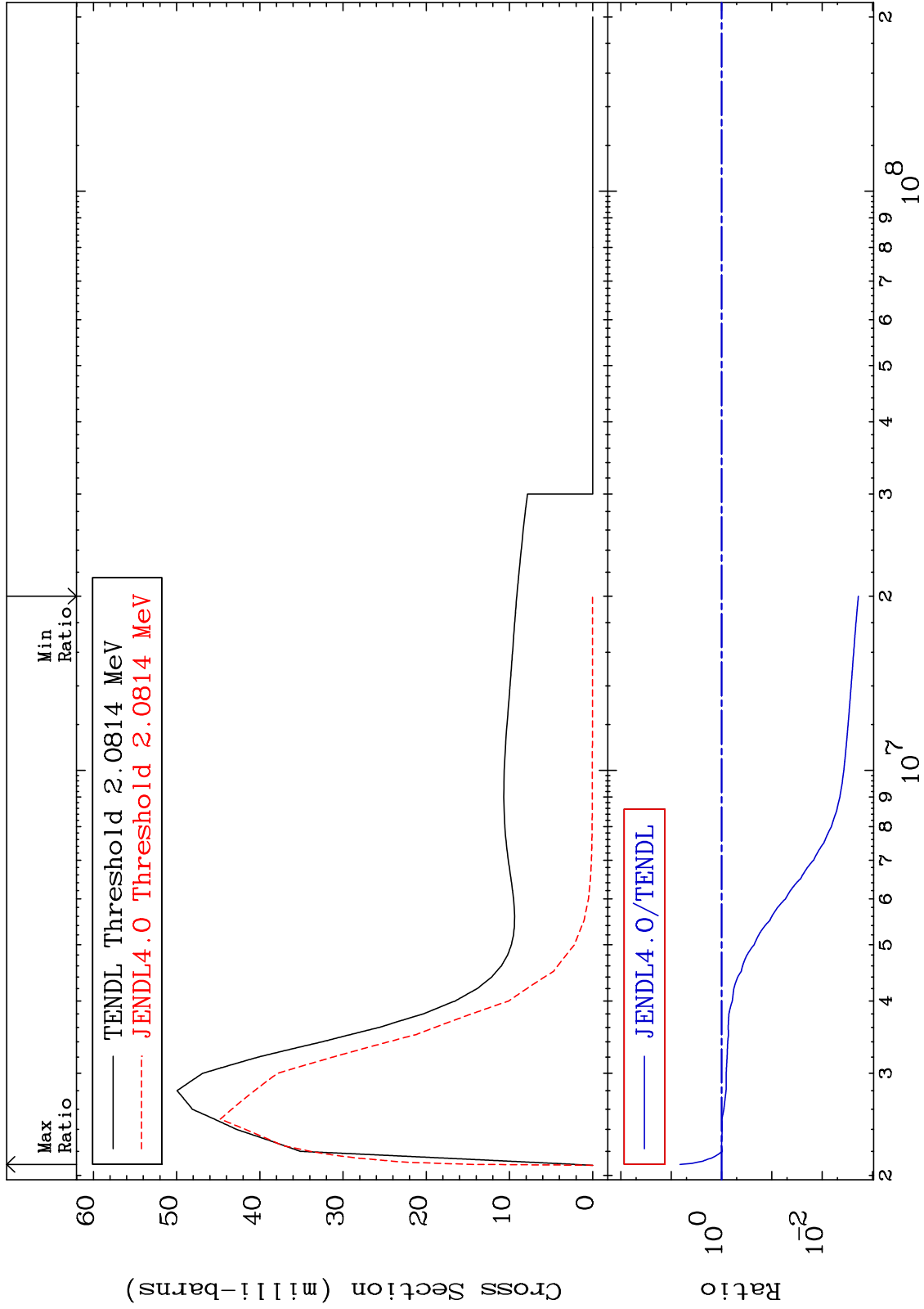
60-Nd-143
-96.64 To 455.9 %



MAT 6028

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

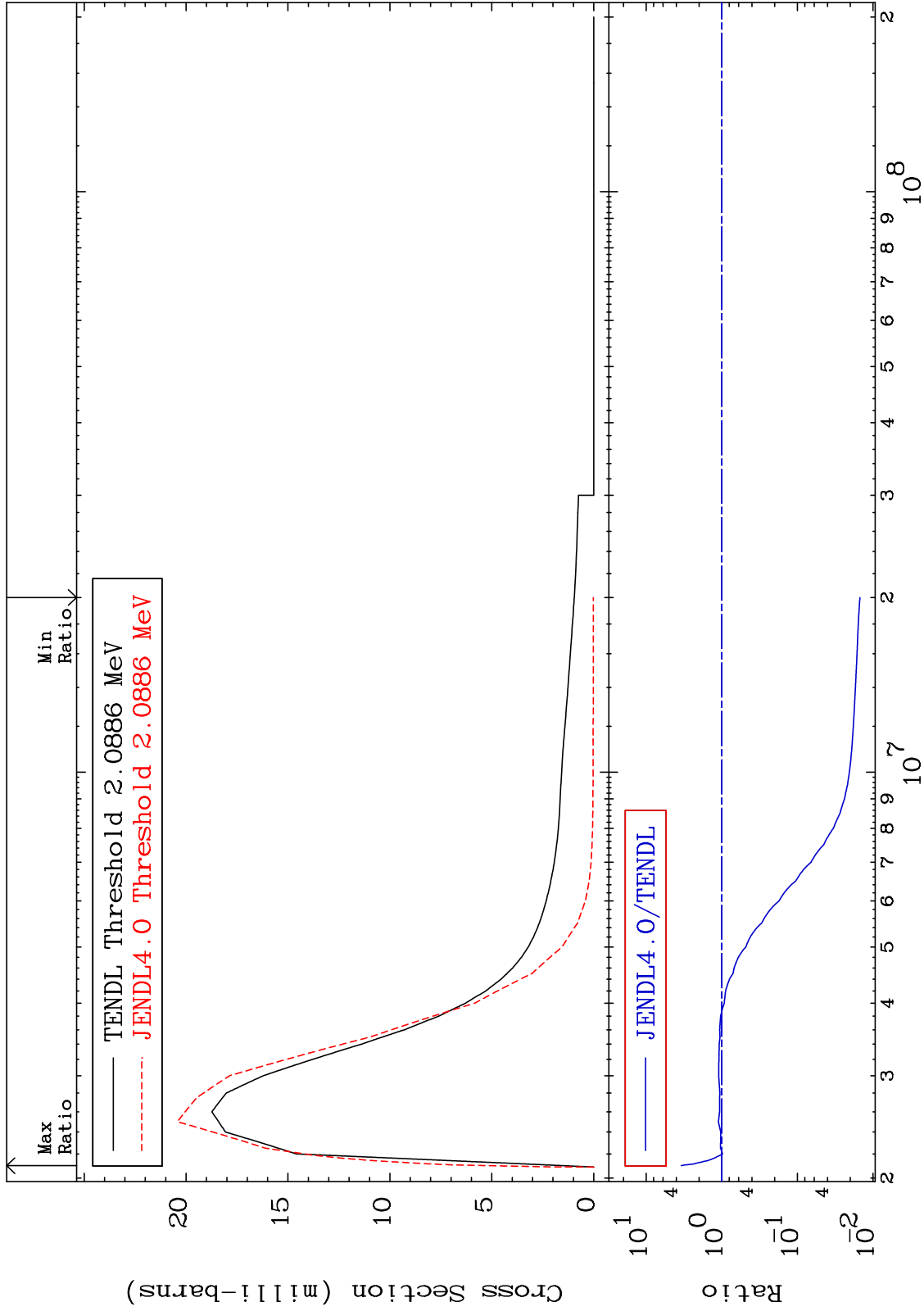
60-Nd-143
-99.81 To 569.5 %



MAT 6028

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

60-Nd-143
-98.51 To 244.3 %



40

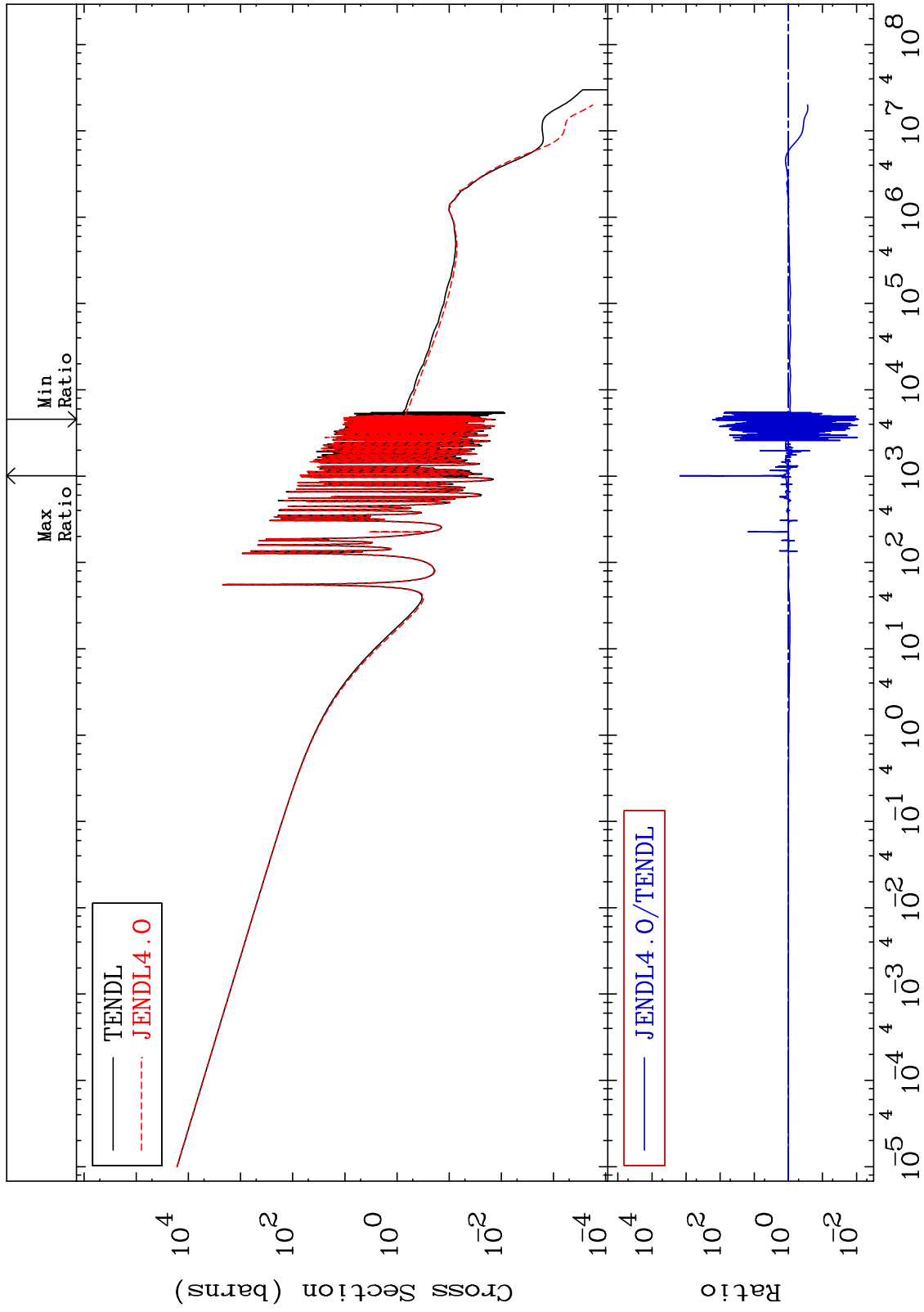
Incident Energy (eV)

60-Nd-143

MAT 6028

(n, γ)
Cross Section

60-Nd-143
-99.12 To 9999. %



Incident Energy (eV)

60-Nd-143

42

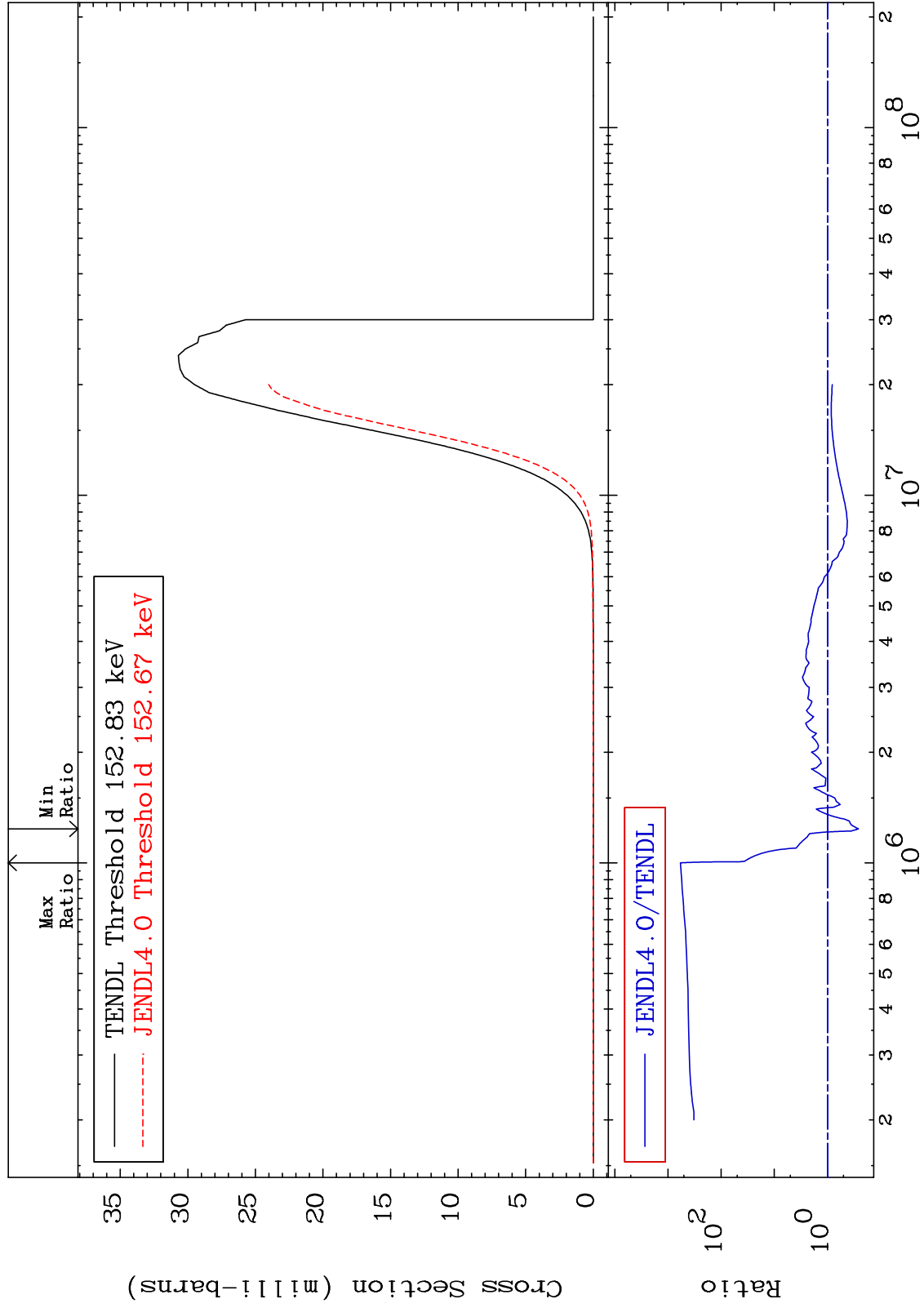
MAT 6028

(n,p)

60-Nd-143

Cross Section

-73.90 To 9999. %



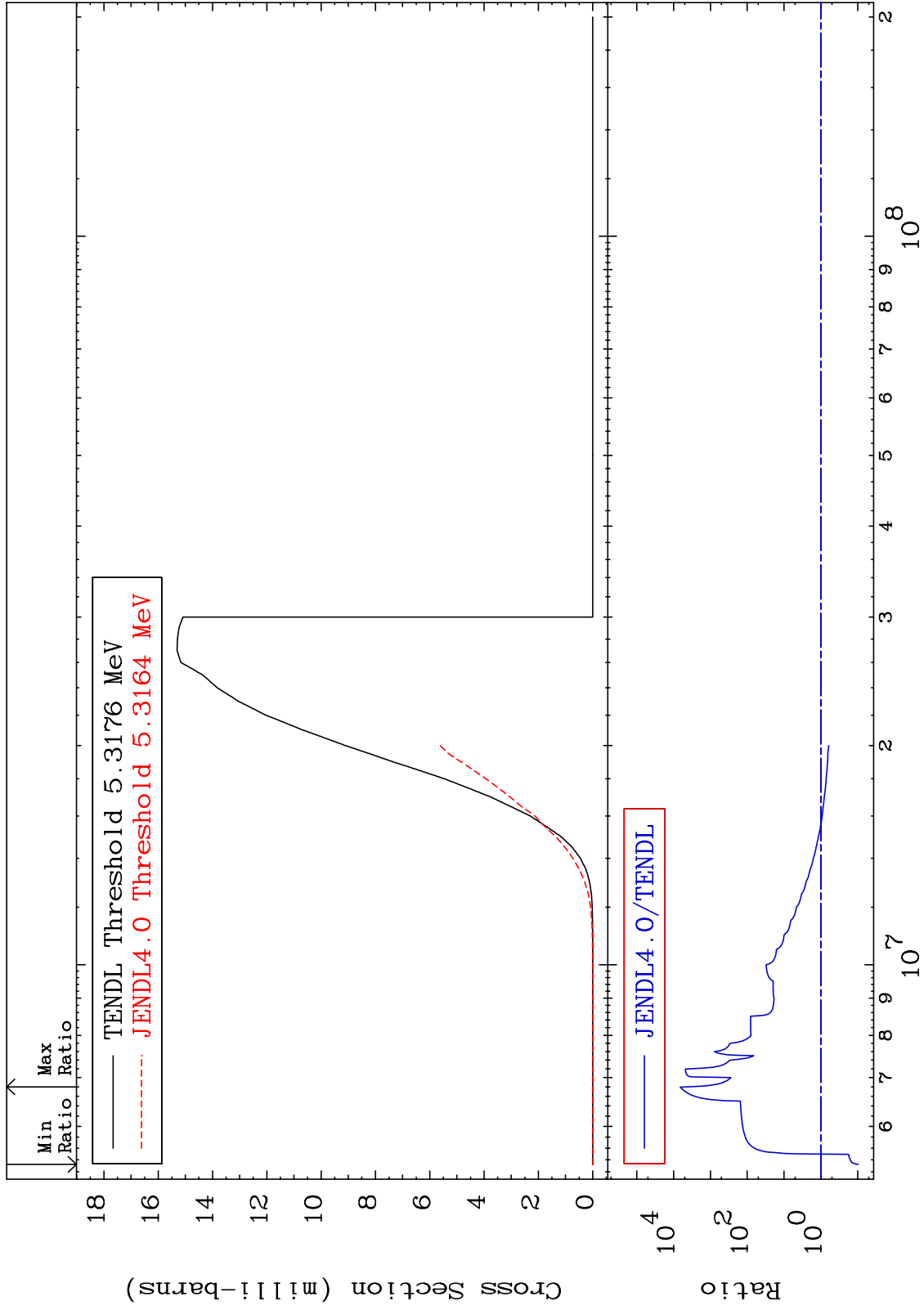
MAT 6028

(n,d)

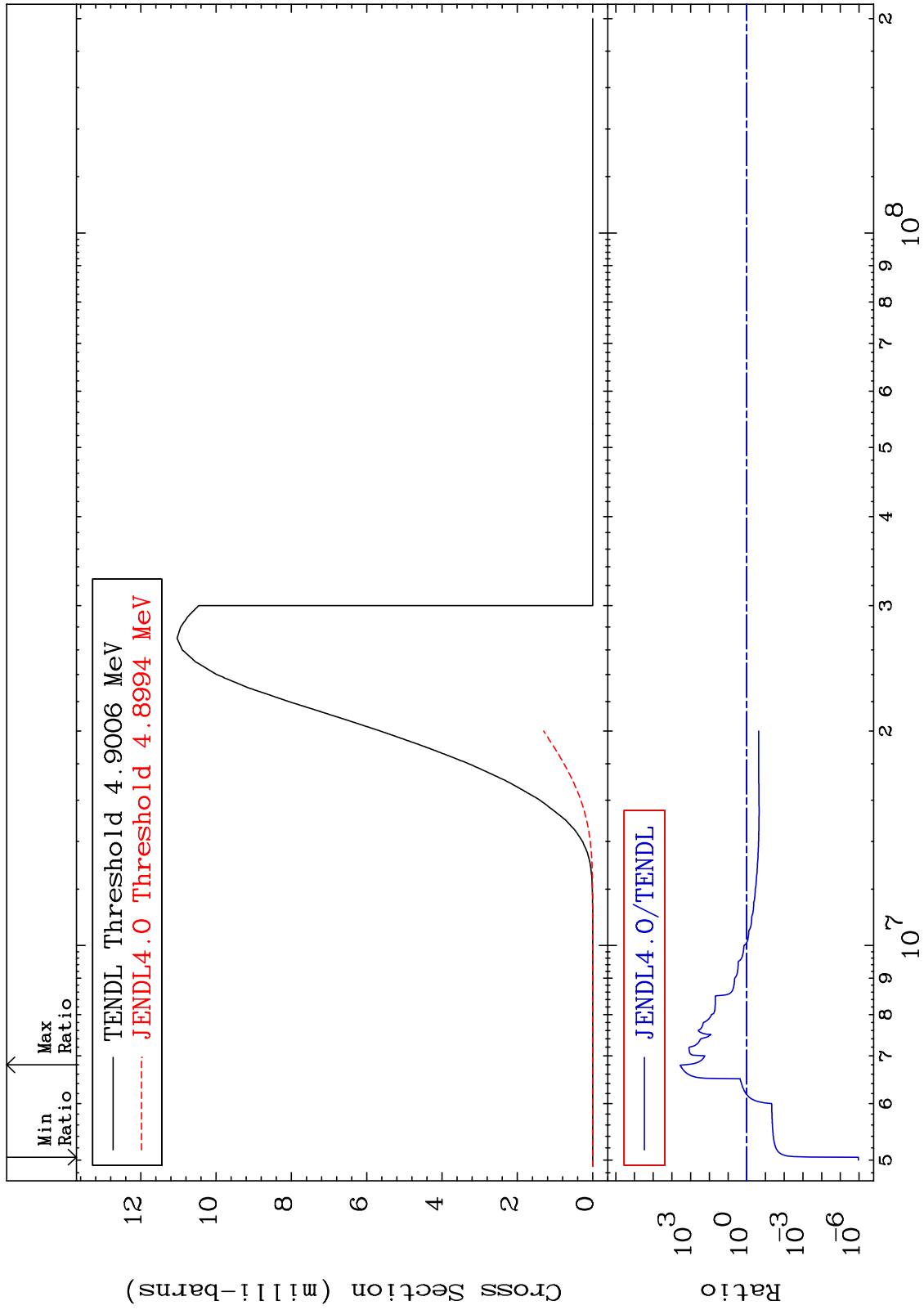
60-Nd-143

Cross Section

-90.40 To 9999. %



MAT 6028 (n, t) Cross Section 60-Nd-143 -100.0 To 9999. %



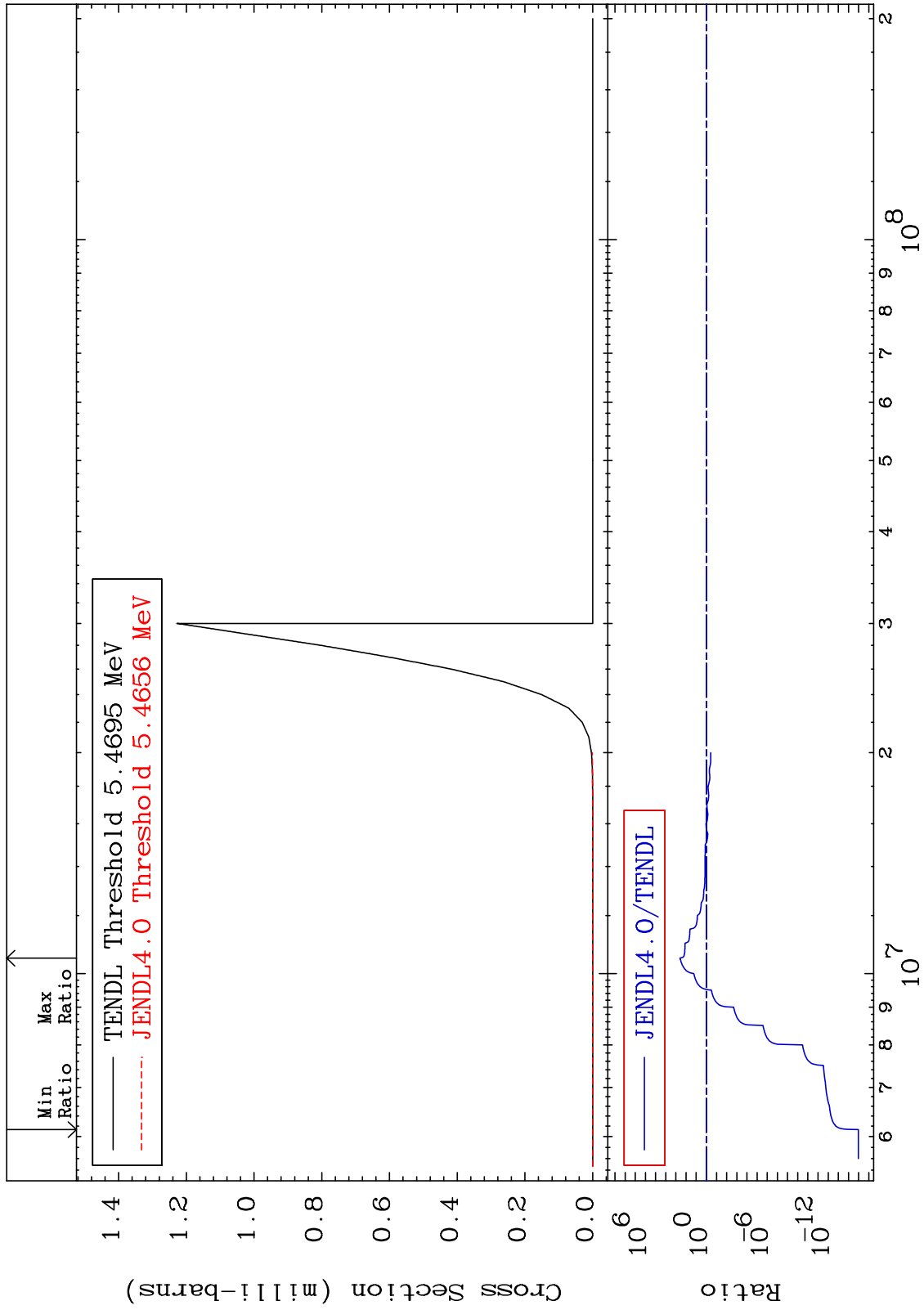
MAT 6028

(n, He-3)

60-Nd-143

Cross Section

-100.0 To 9999. %



46

Incident Energy (eV)

60-Nd-143

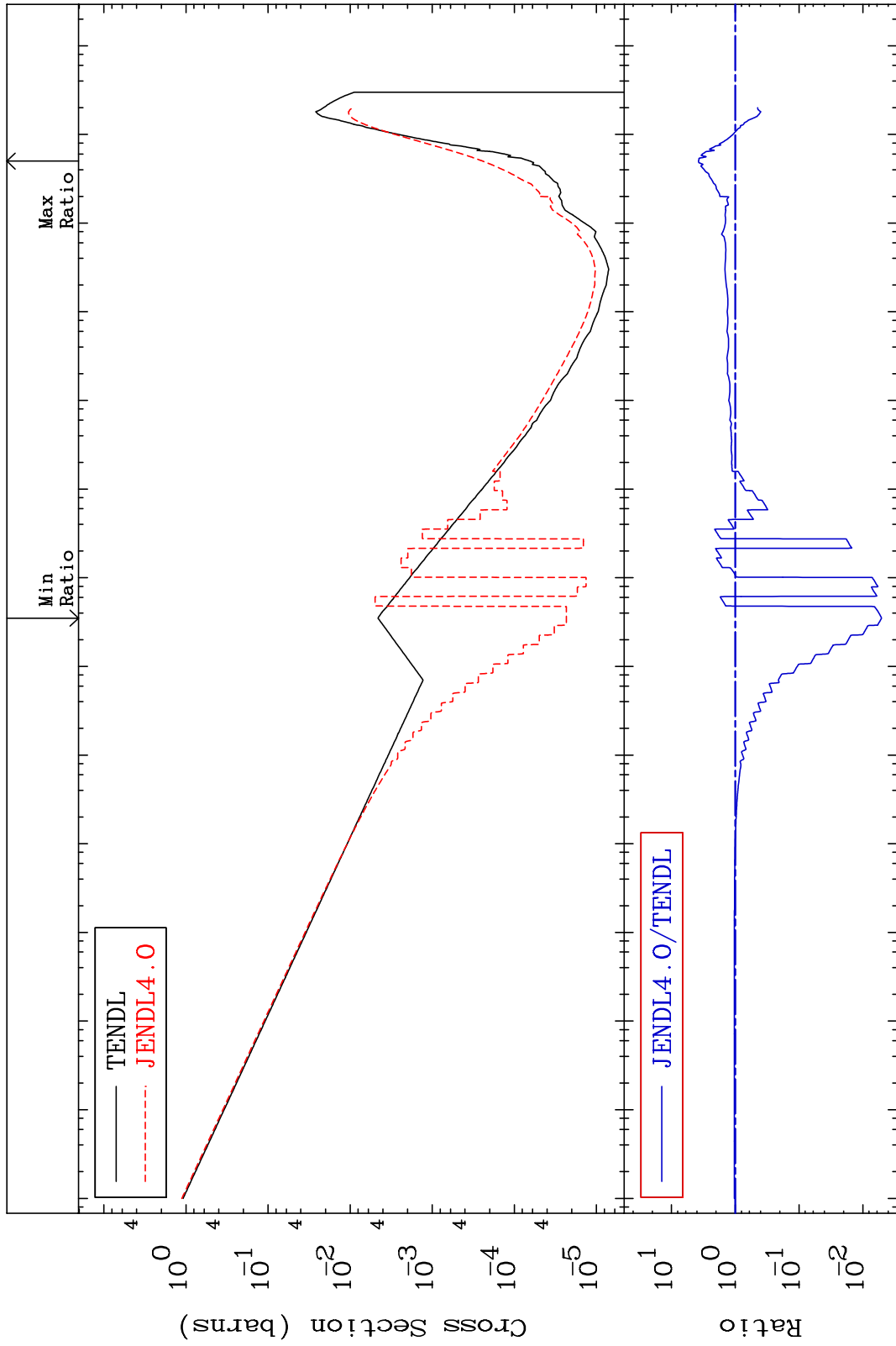
MAT 6028

(n, α)

60-Nd-143

Cross Section

-99.49 To 279.3 %



47

Incident Energy (eV)

60-Nd-143

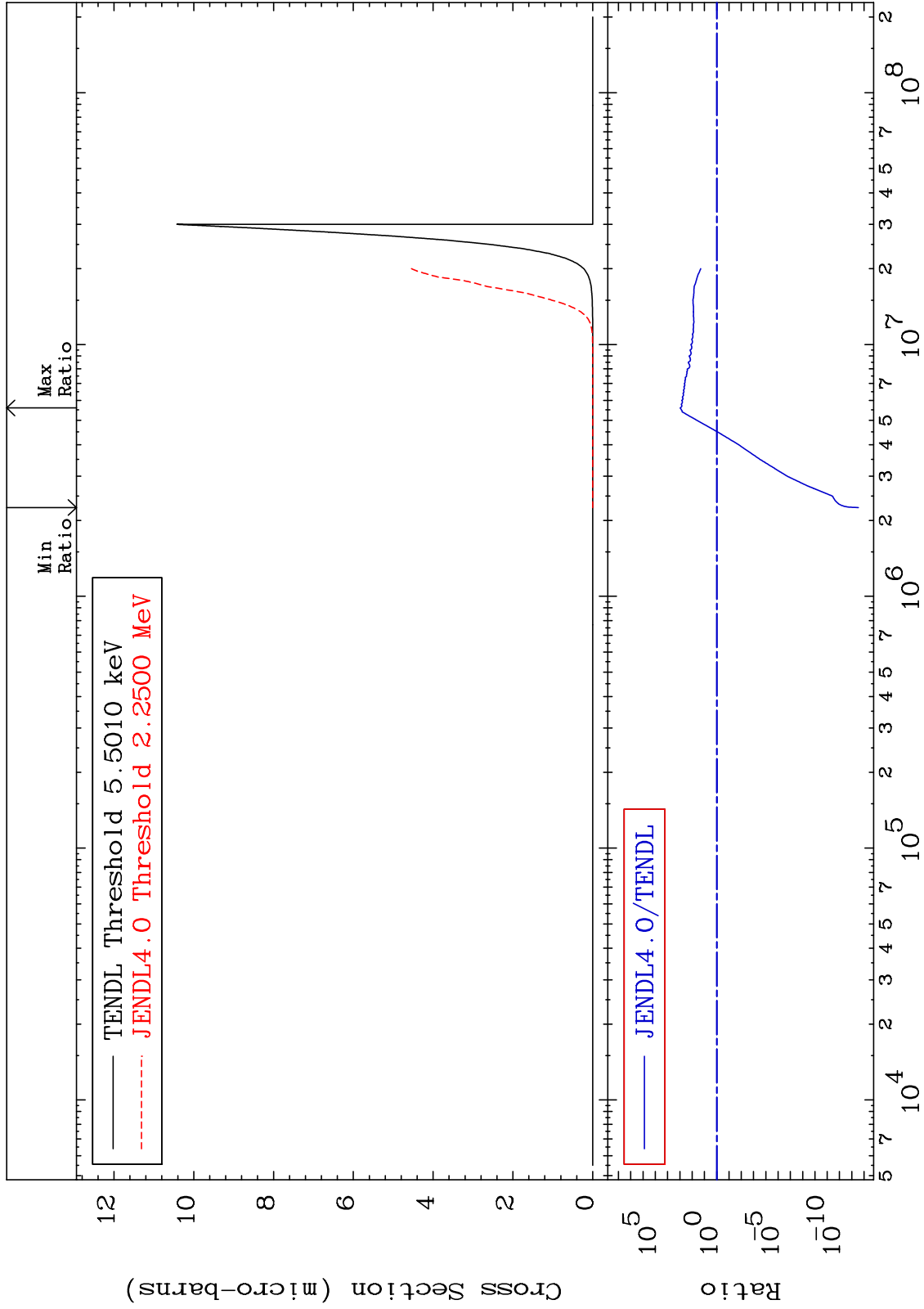
MAT 6028

(n,p) α

60-Nd-143

Cross Section

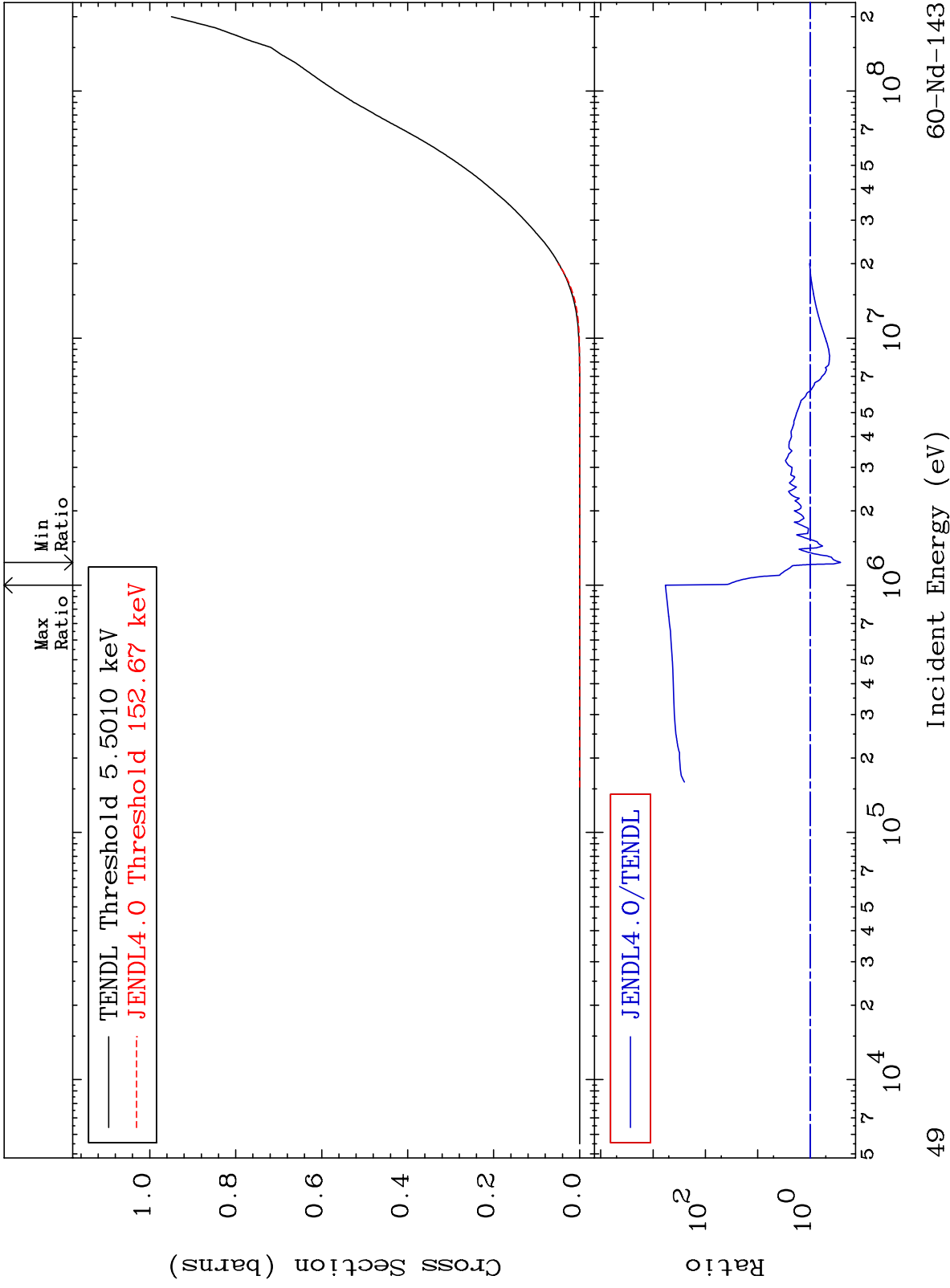
-100.0 To 9999. %



MAT 6028

Hydrogen Production
Cross Section

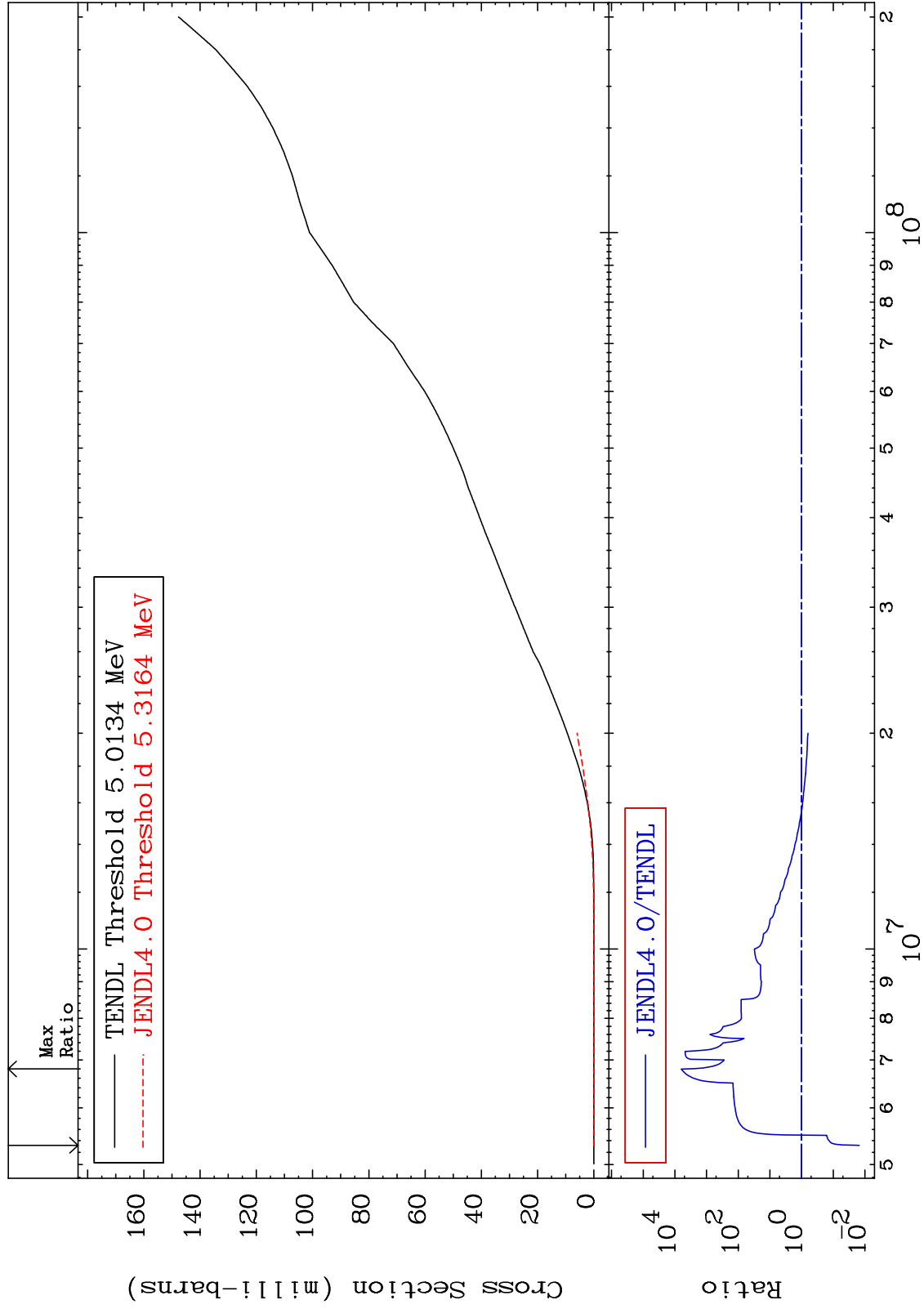
60-Nd-143
-73.90 To 9999. %



MAT 6028

Deuterium Production
Cross Section

60-Nd-143
-98.49 To 9999. %



50

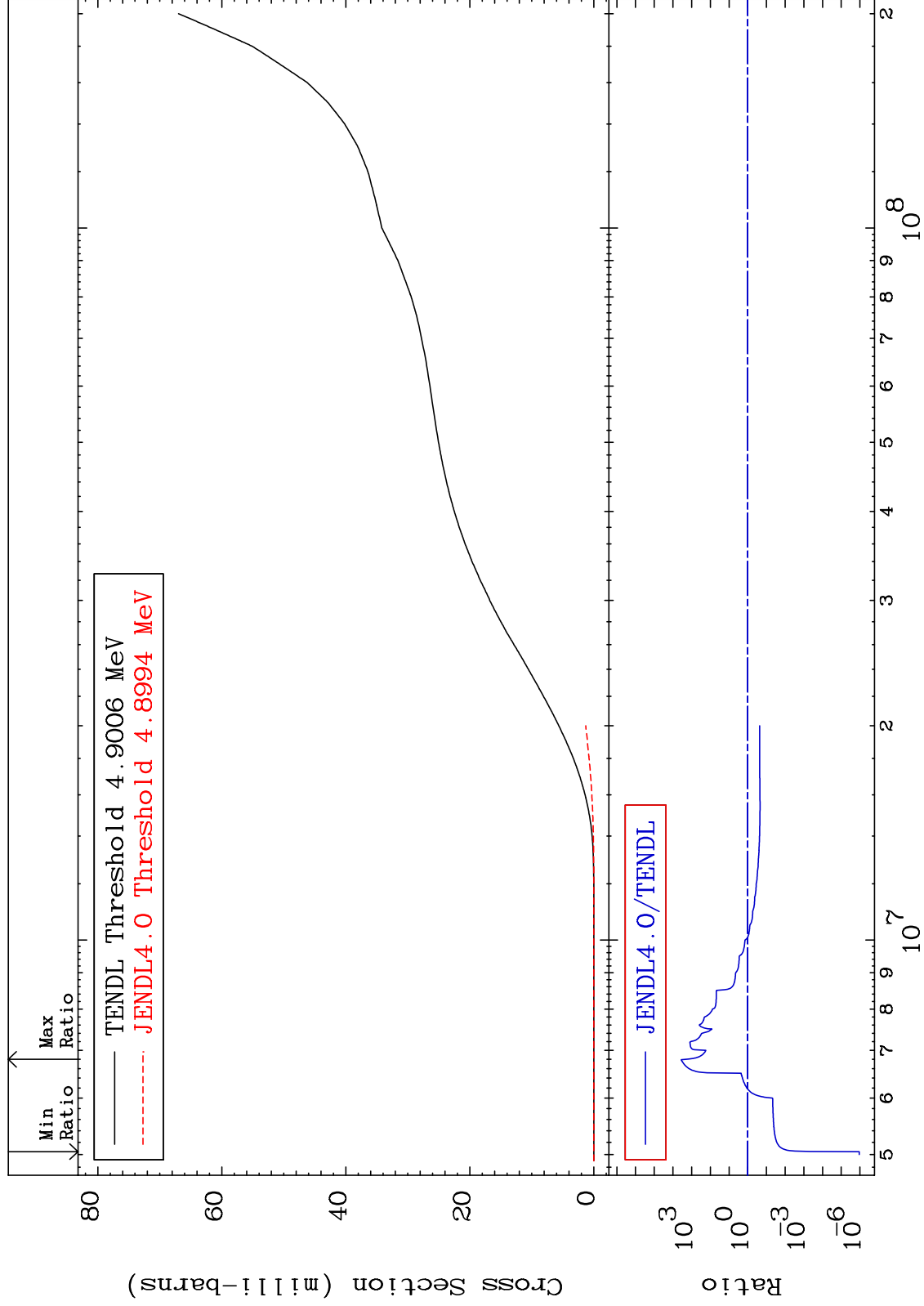
Incident Energy (eV)

60-Nd-143

MAT 6028

Tritium Production
Cross Section

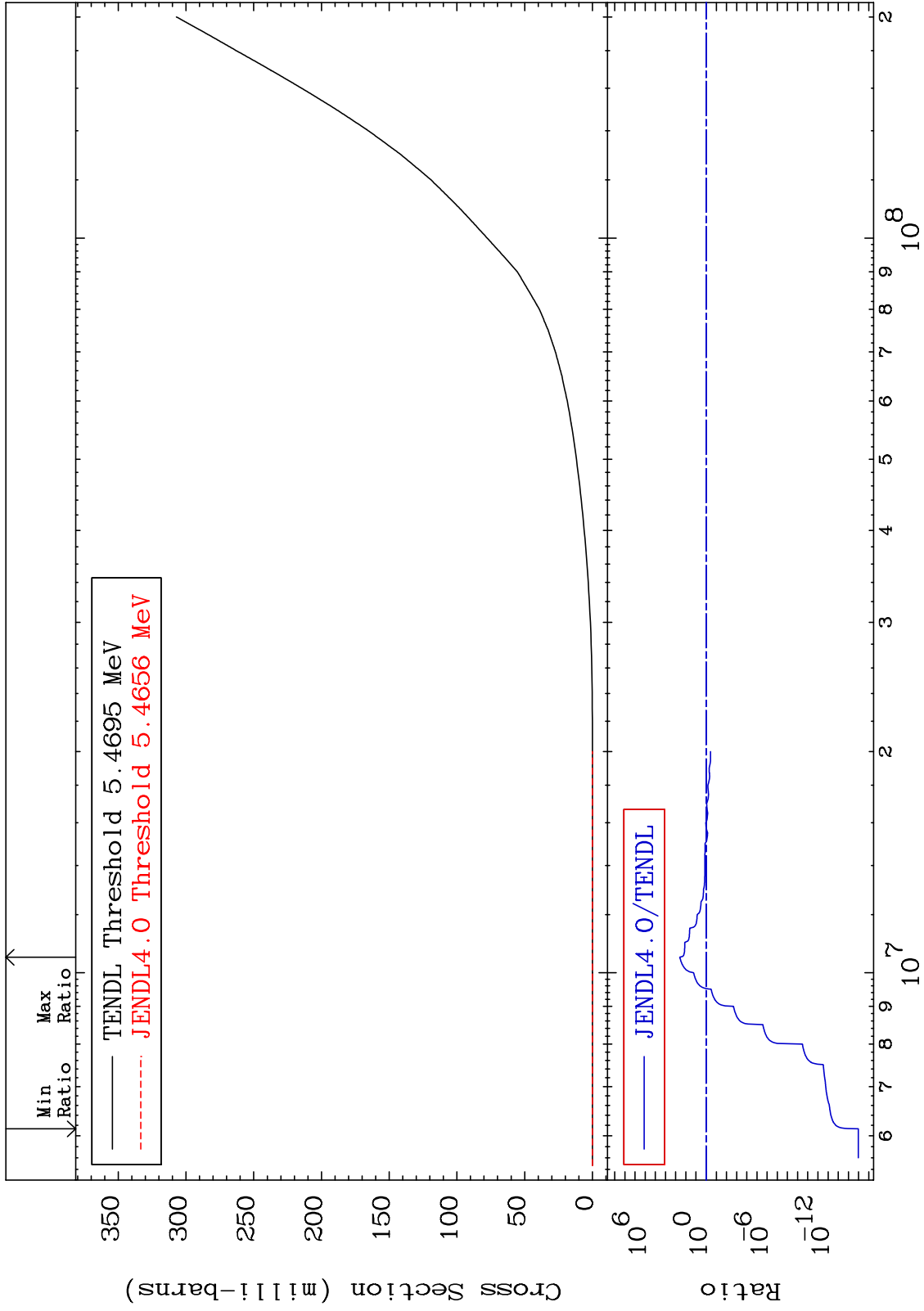
60-Nd-143
-100.0 To 9999. %



MAT 6028

He-3 Production
Cross Section

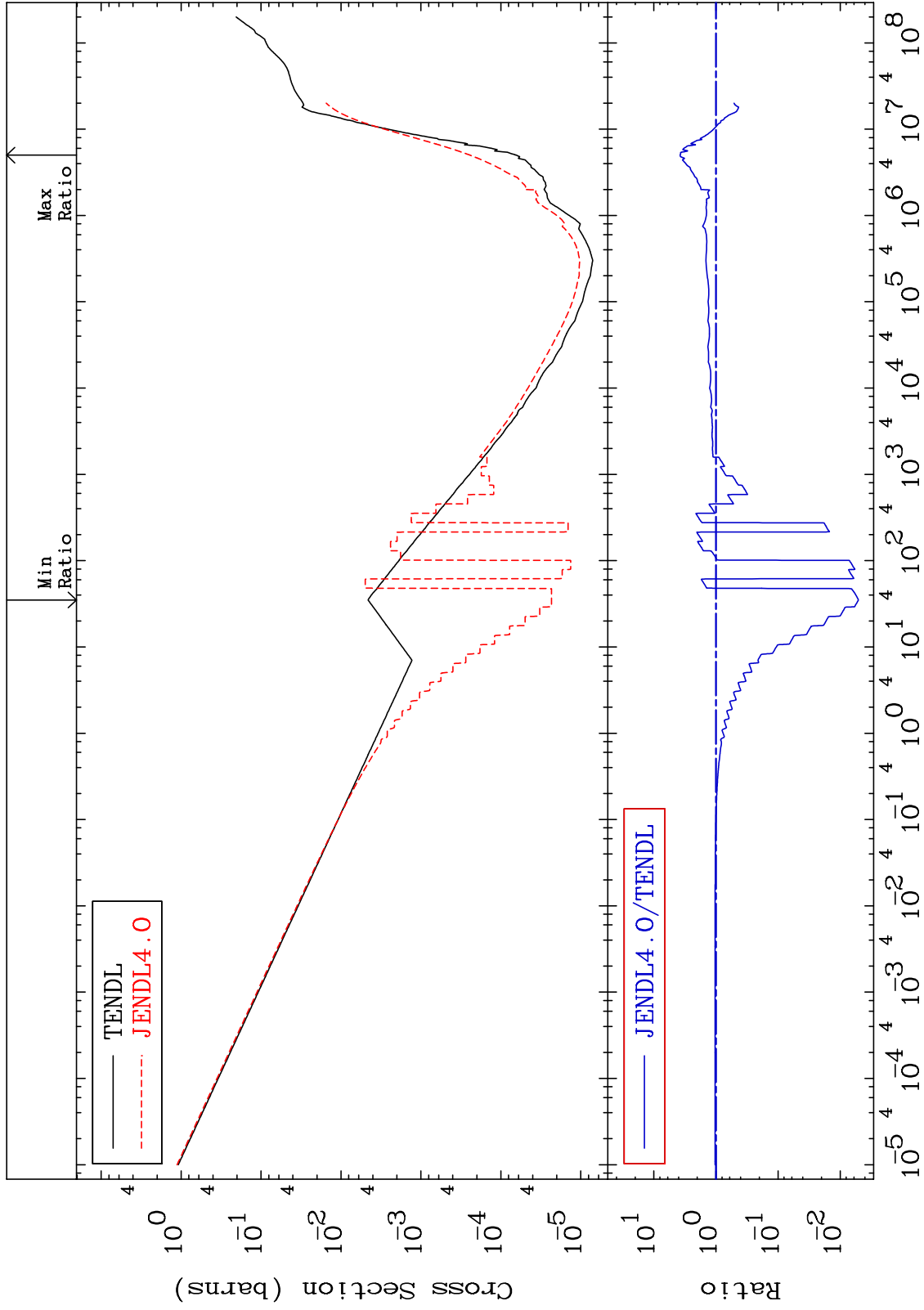
60-Nd-143
-100.0 To 9999. %



MAT 6028

He-4 Production
Cross Section

60-Nd-143
-99.49 To 279.3 %



53

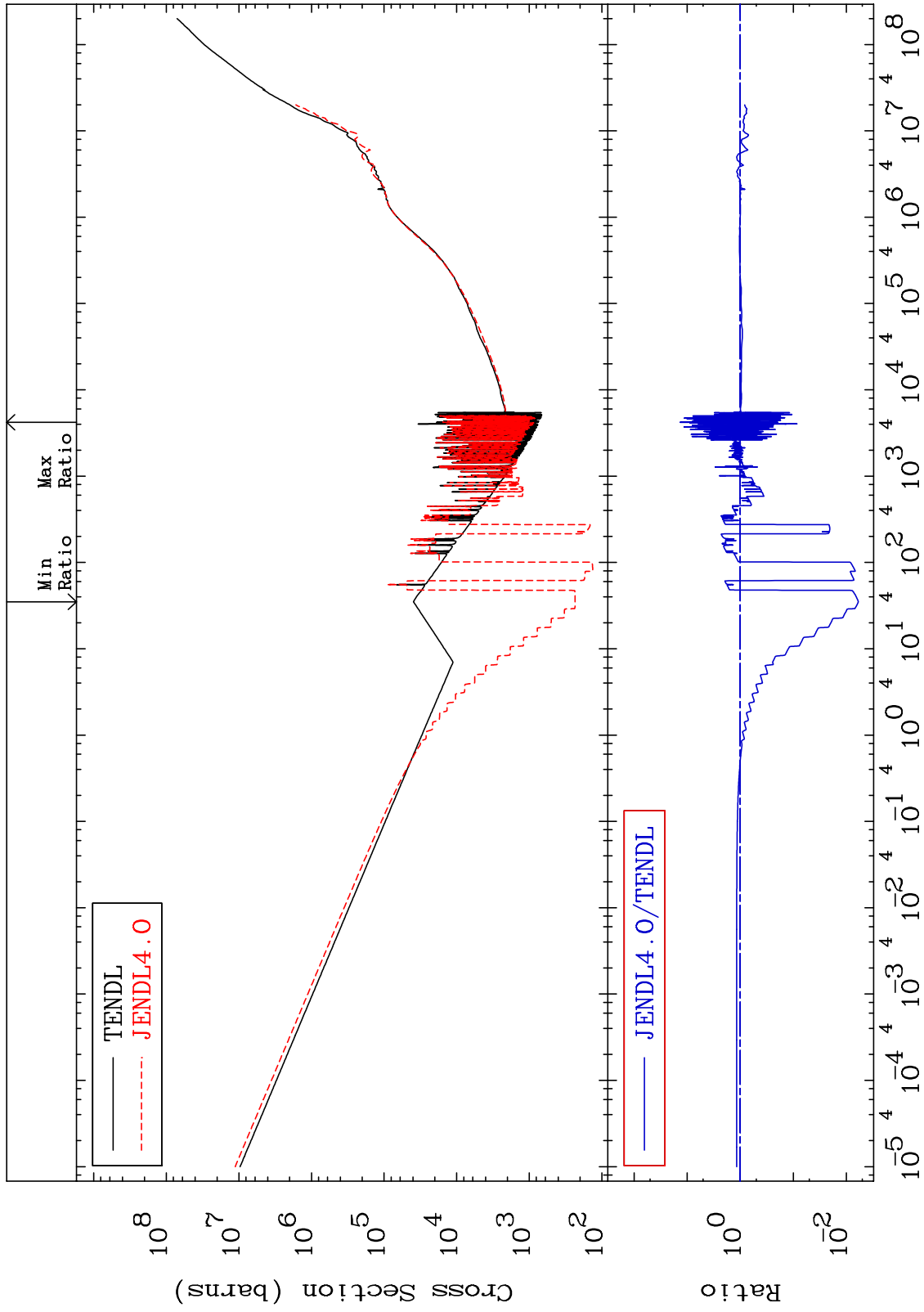
Incident Energy (eV)

60-Nd-143

MAT 6028

Kerma total (eV-barns)
Cross Section

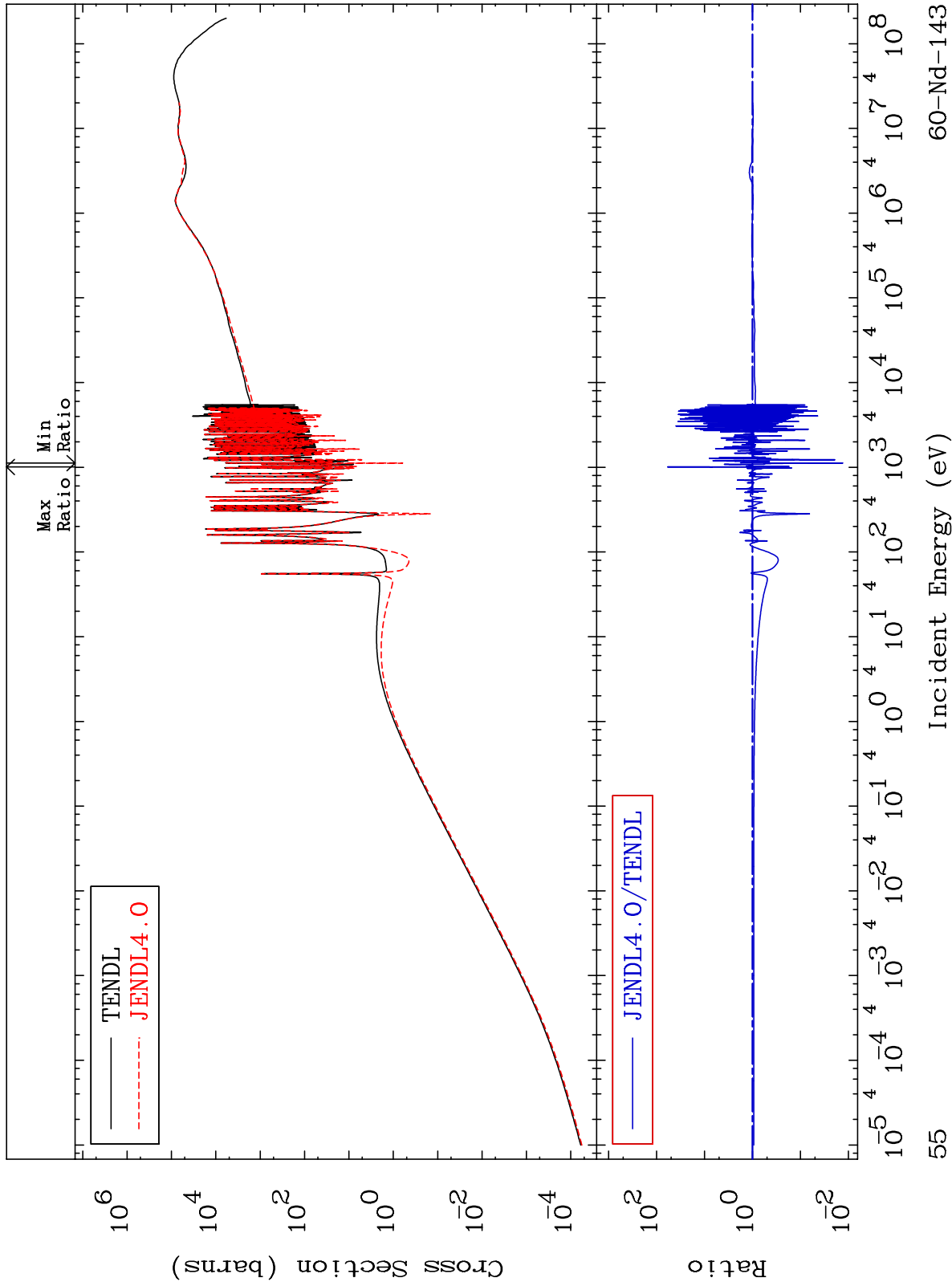
60-Nd-143
-99.41 To 1263. %



MAT 6028

Kerma elastic
Cross Section

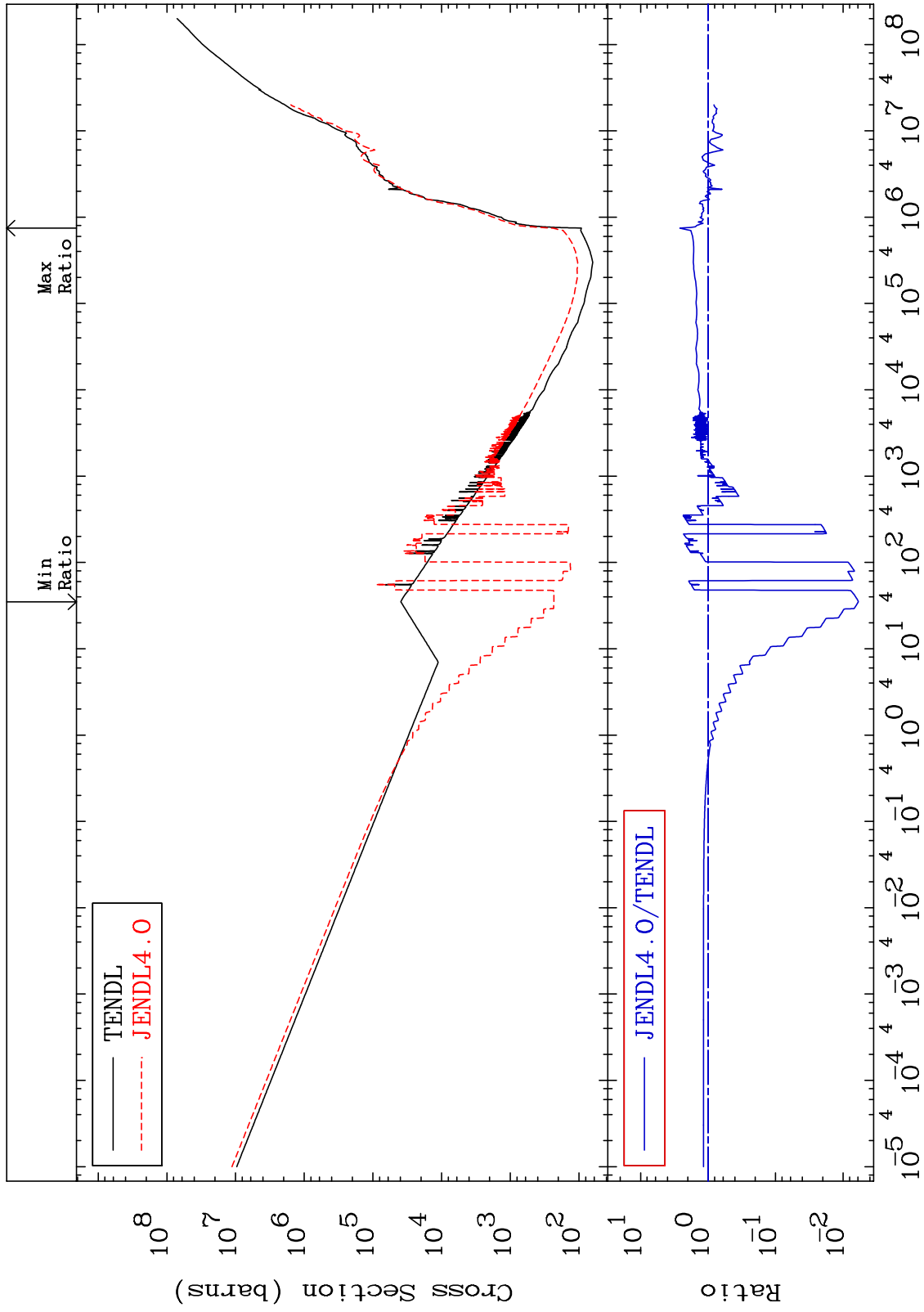
60-Nd-143
-98.68 To 5825. %



MAT 6028

Kerma non-elastic (all but mt2)
Cross Section

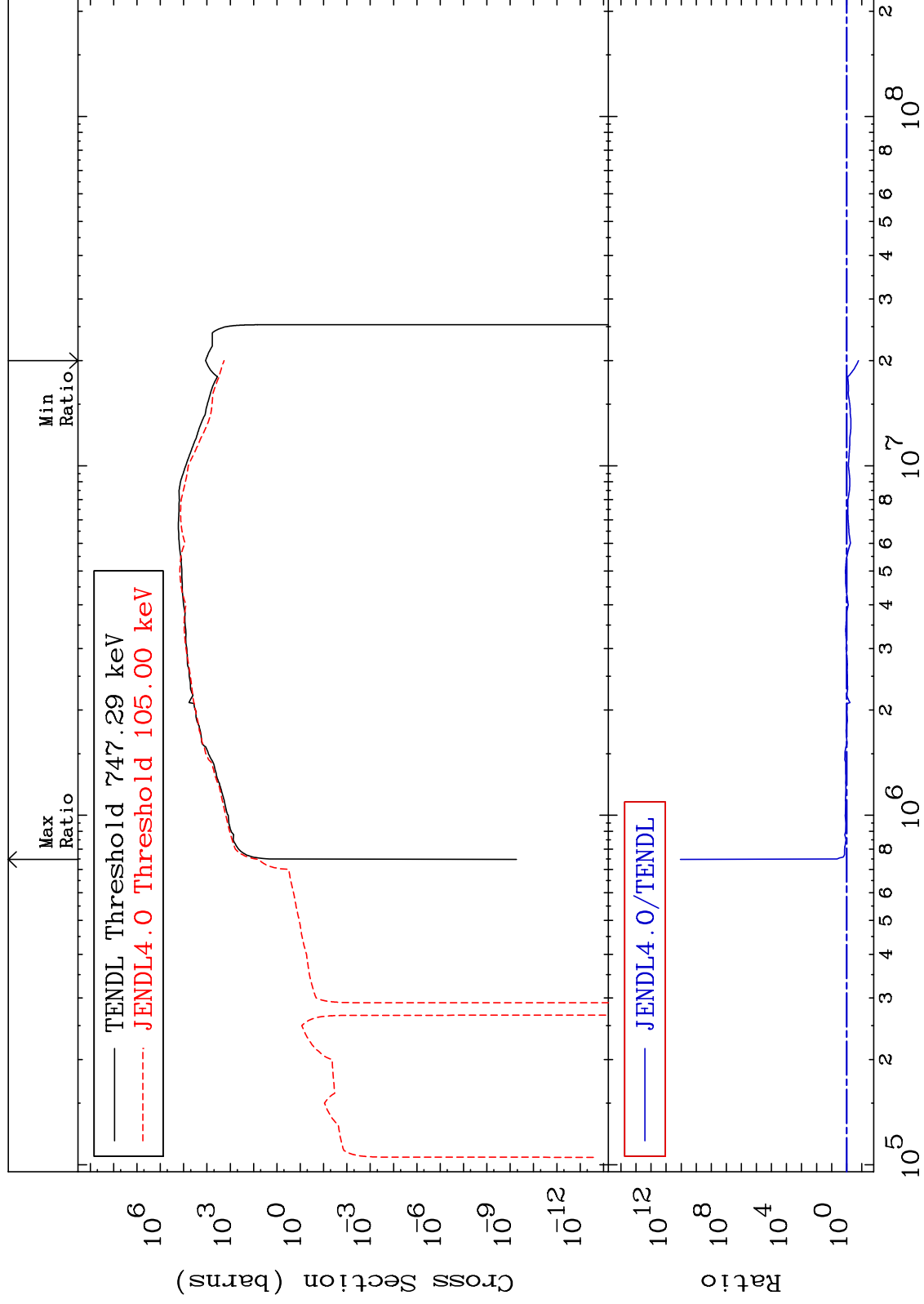
60-Nd-143
-99.41 To 160.4 %



MAT 6028

Kerma inelastic (mt51-91)
Cross Section

60-Nd-143
-83.65 To 9999. %



57

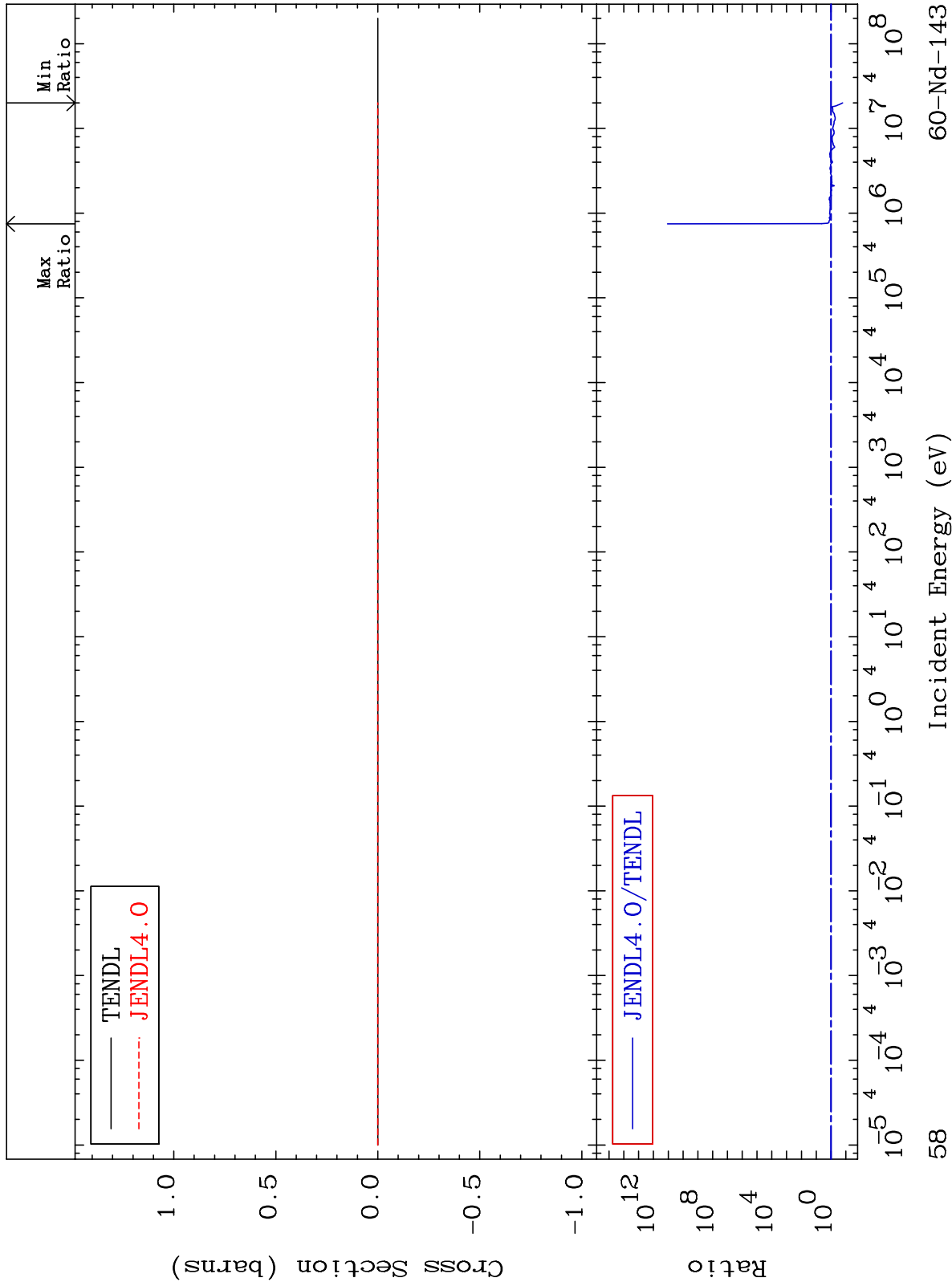
Incident Energy (eV)

60-Nd-143

MAT 6028

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

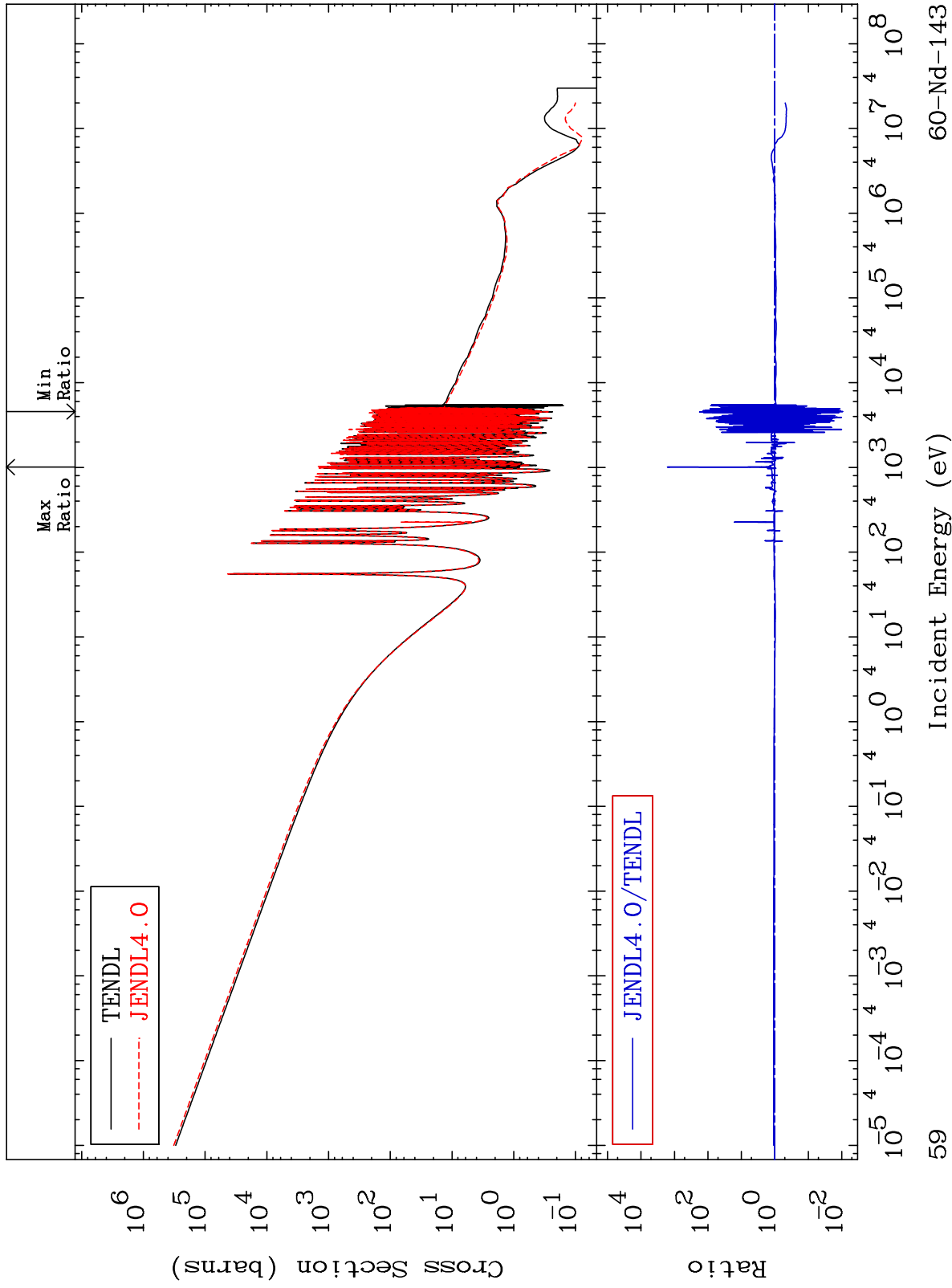
60-Nd-143
-83.65 To 9999. %



MAT 6028

Kerma capture (mt102)
Cross Section

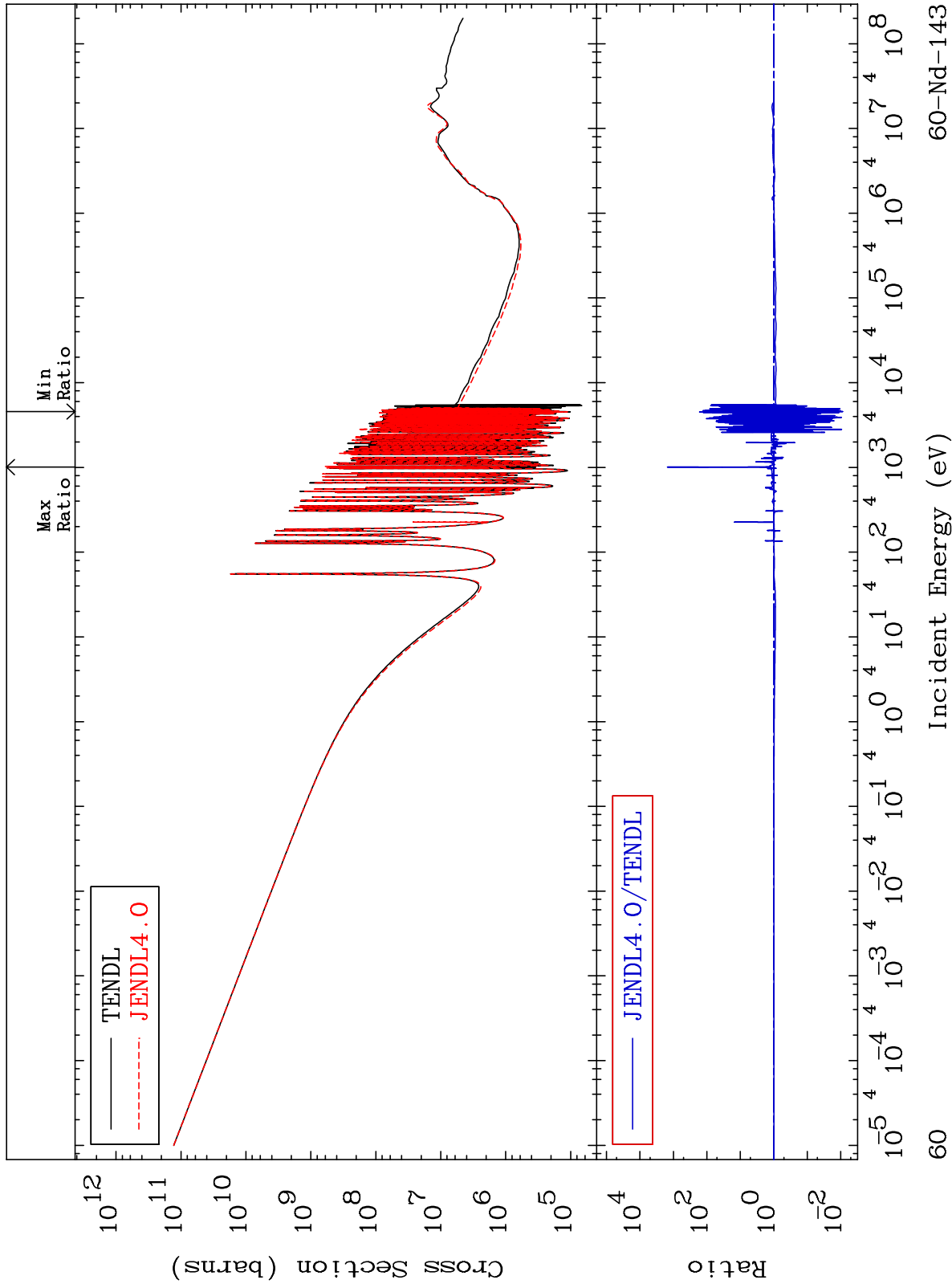
60-Nd-143
-99.06 To 9999. %



MAT 6028

Total photon (eV-barns)
Cross Section

60-Nd-143
-99.12 To 9999. %



60

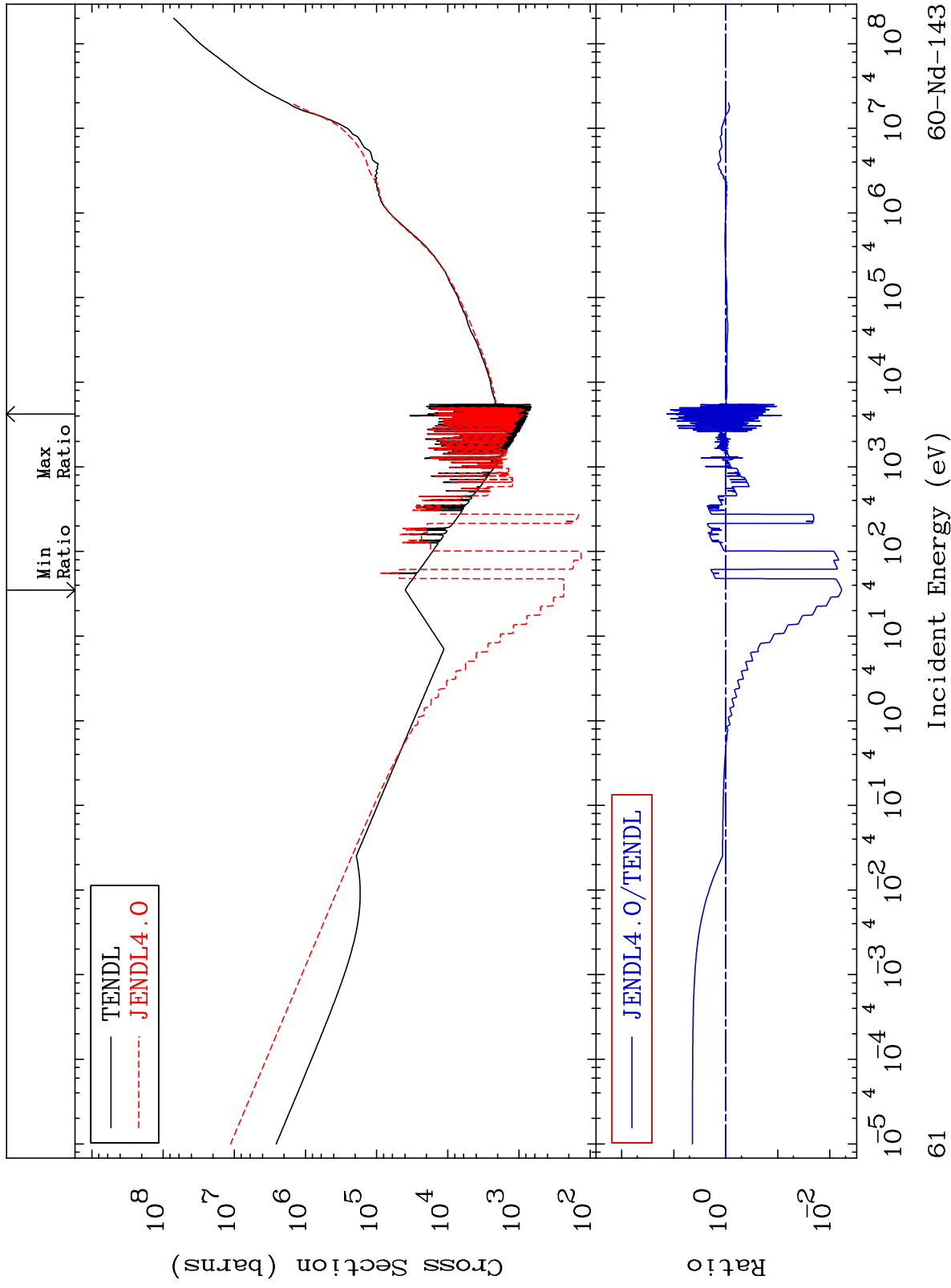
Incident Energy (eV)

60-Nd-143

MAT 6028

Total kinematic kerma (high limit)
Cross Section

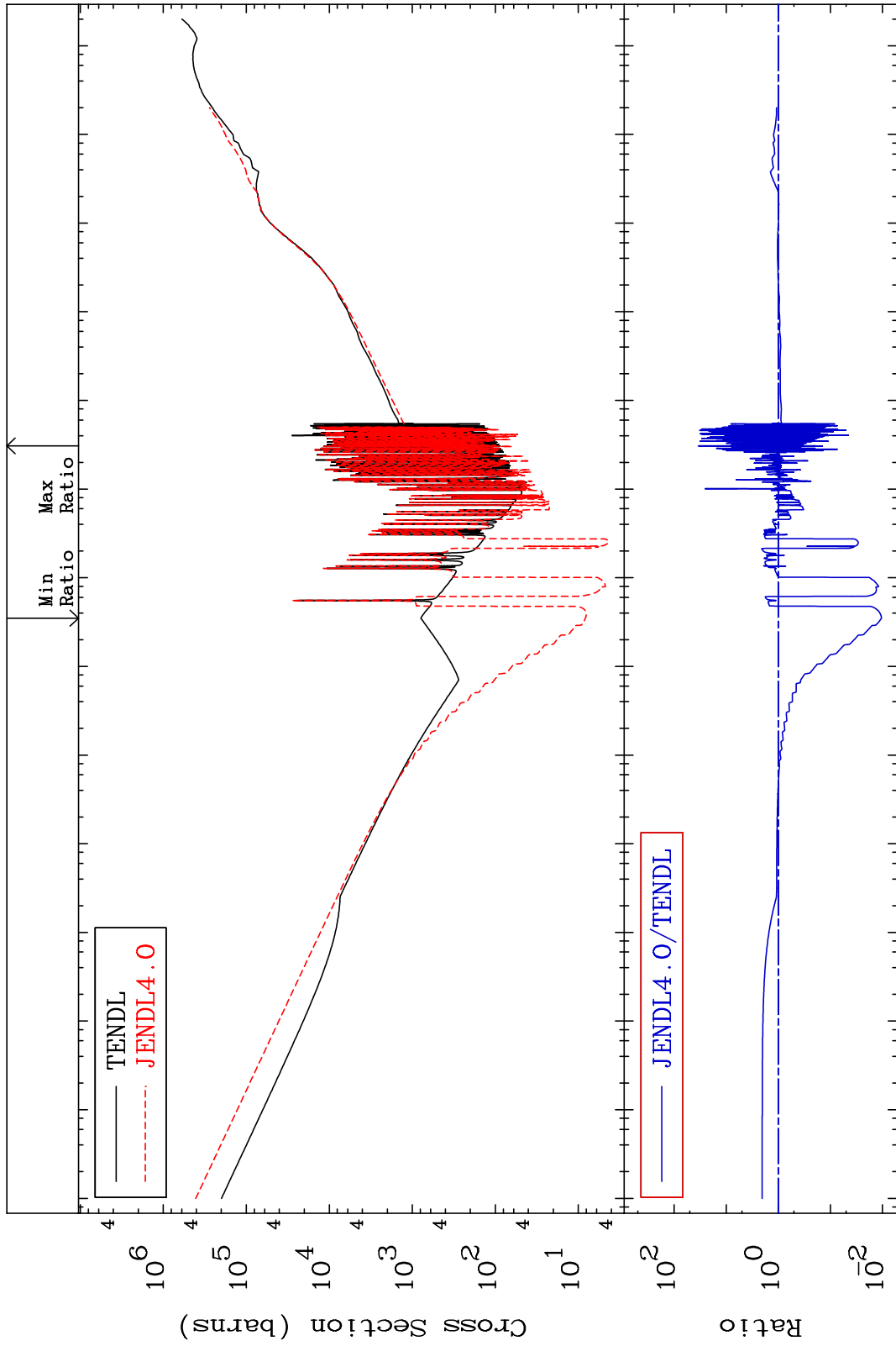
60-Nd-143
-99.41 To 1257. %



MAT 6028

Dpa total (eV-barns)
Cross Section

60-Nd-143
-98.96 To 3325. %



62

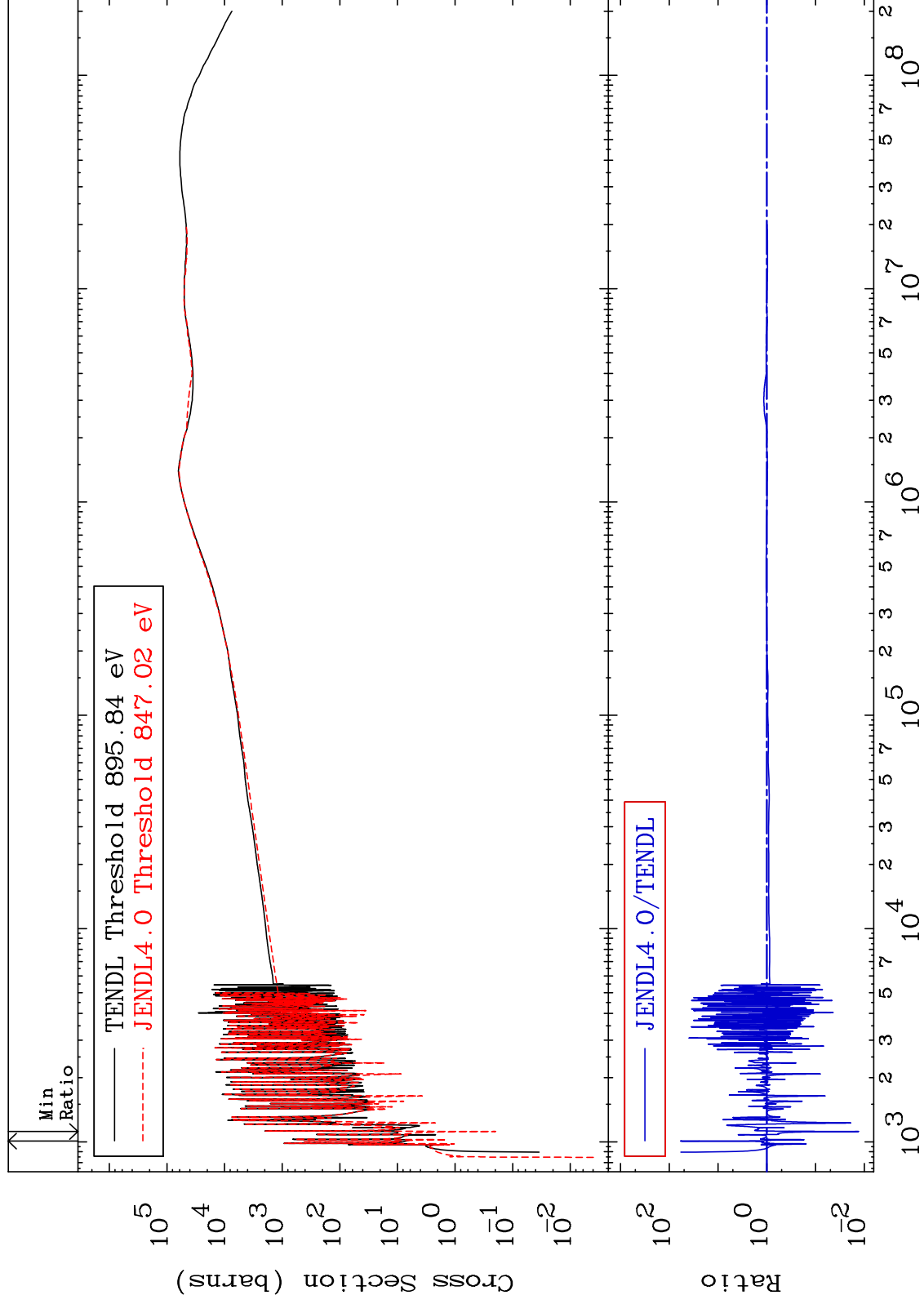
Incident Energy (eV)

60-Nd-143

MAT 6028

Dpa elastic (mt2)
Cross Section

60-Nd-143
-98.68 To 5824. %



63

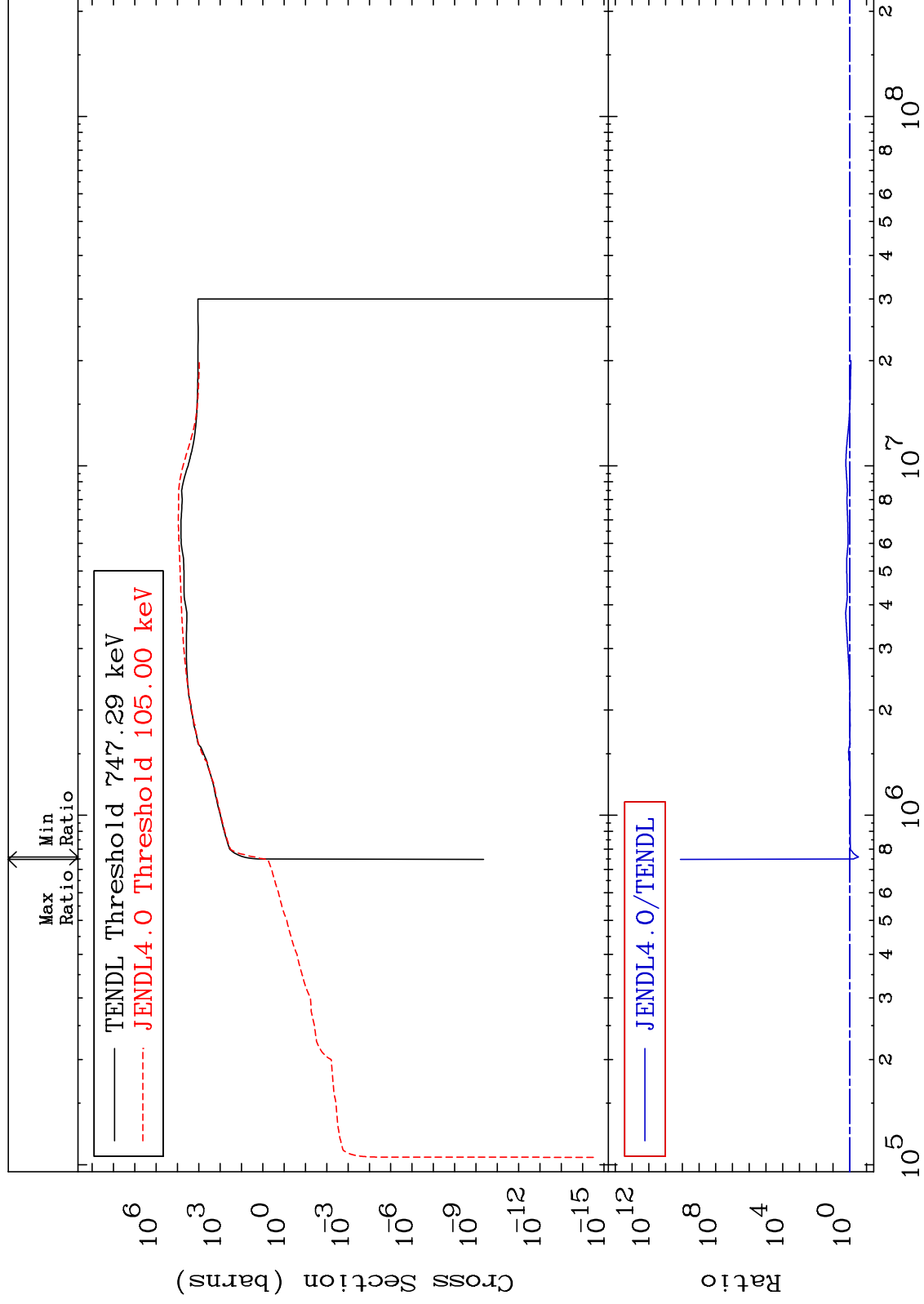
Incident Energy (eV)

60-Nd-143

MAT 6028

Dpa inelastic (mt51-91)
Cross Section

60-Nd-143
-70.04 To 9999. %



64

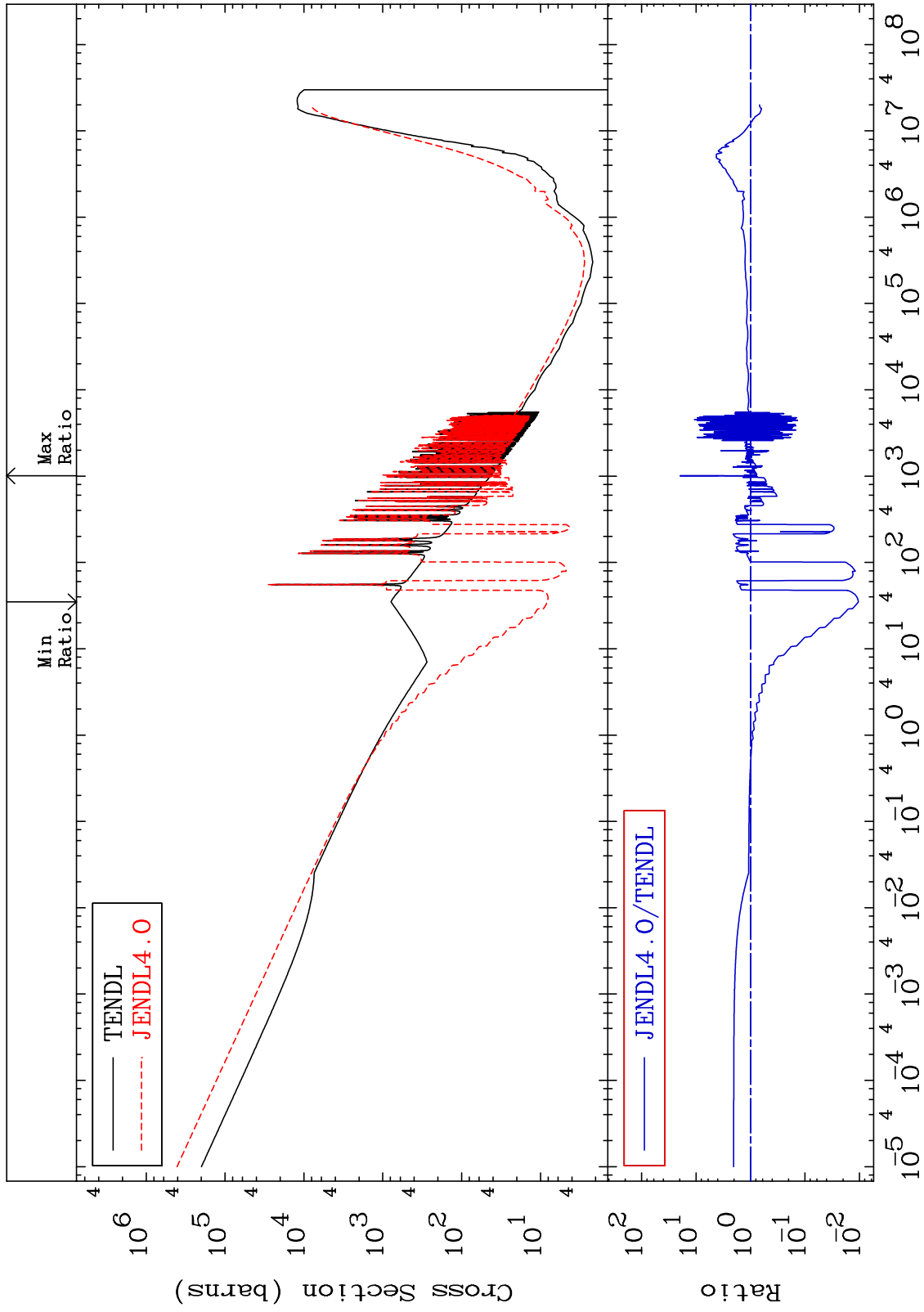
Incident Energy (eV)

60-Nd-143

MAT 6028

Dpa disappearance (mt102 -120)
Cross Section

60-Nd-143
-98.96 To 1874. %



65

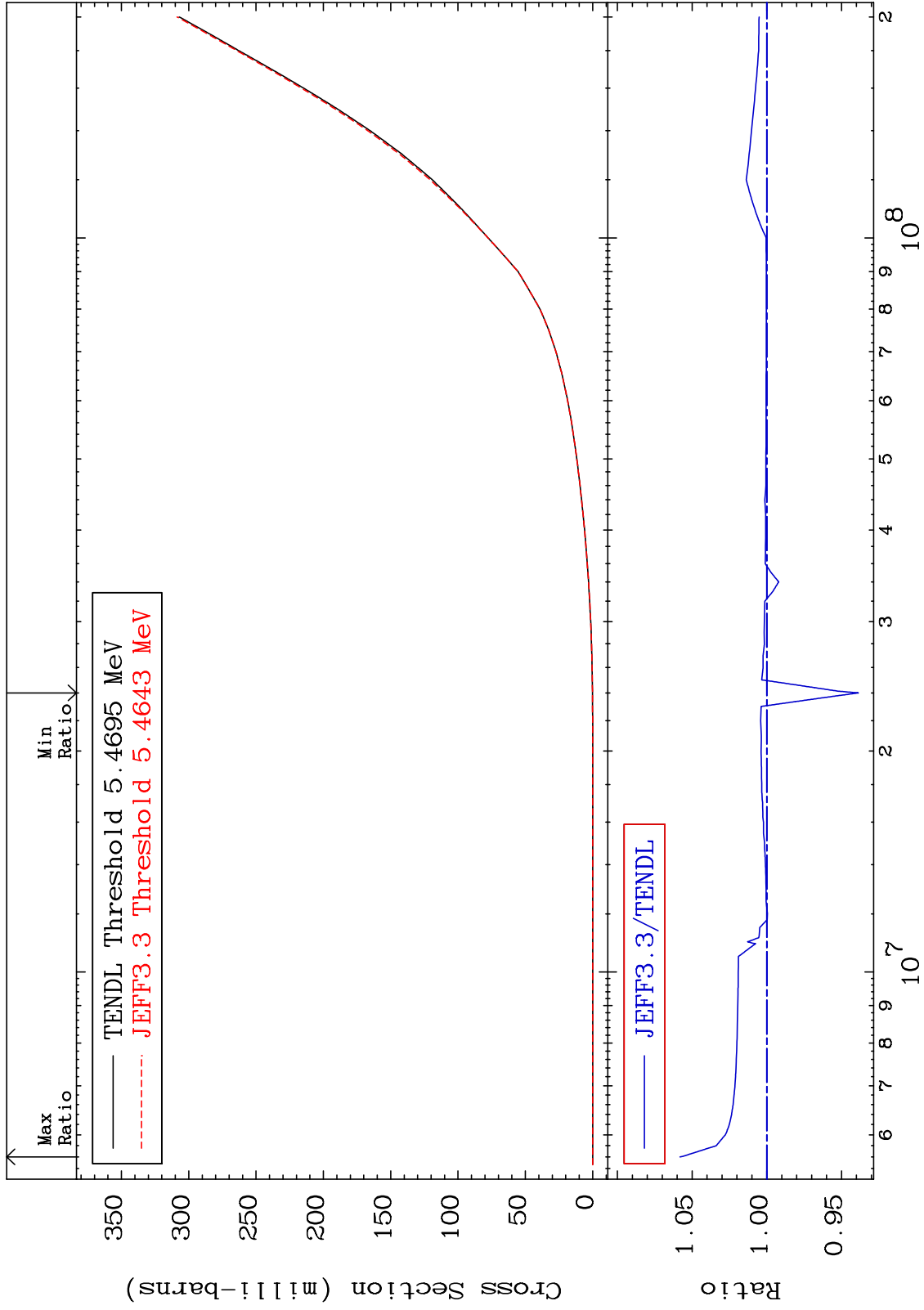
Incident Energy (eV)

60-Nd-143

MAT 6028

He-3 Production
Cross Section

60-Nd-143
-6.133 To 5.811 %



66

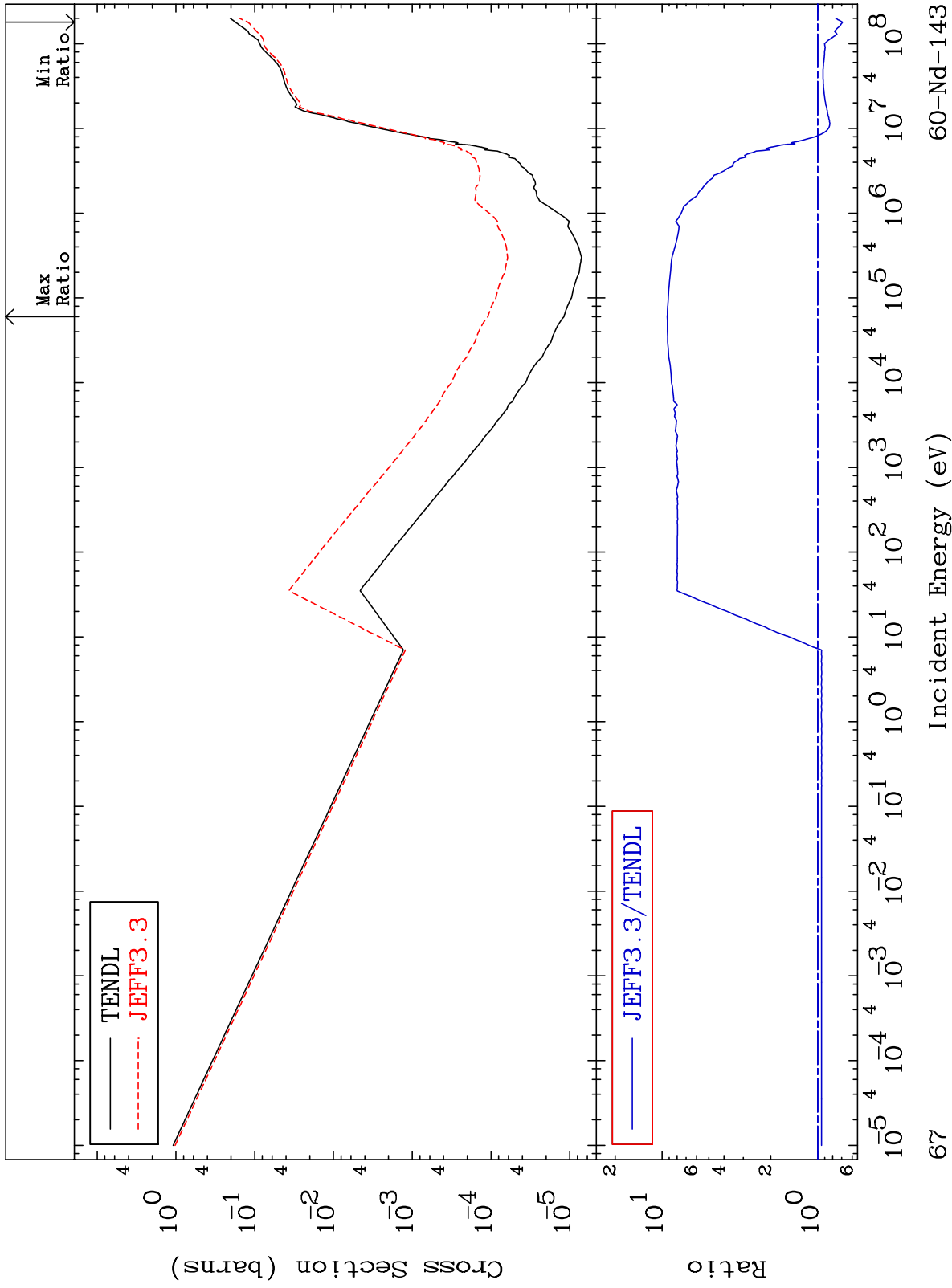
Incident Energy (eV)

60-Nd-143

MAT 6028

He-4 Production
Cross Section

60-Nd-143
-30.86 To 825.4 %



67

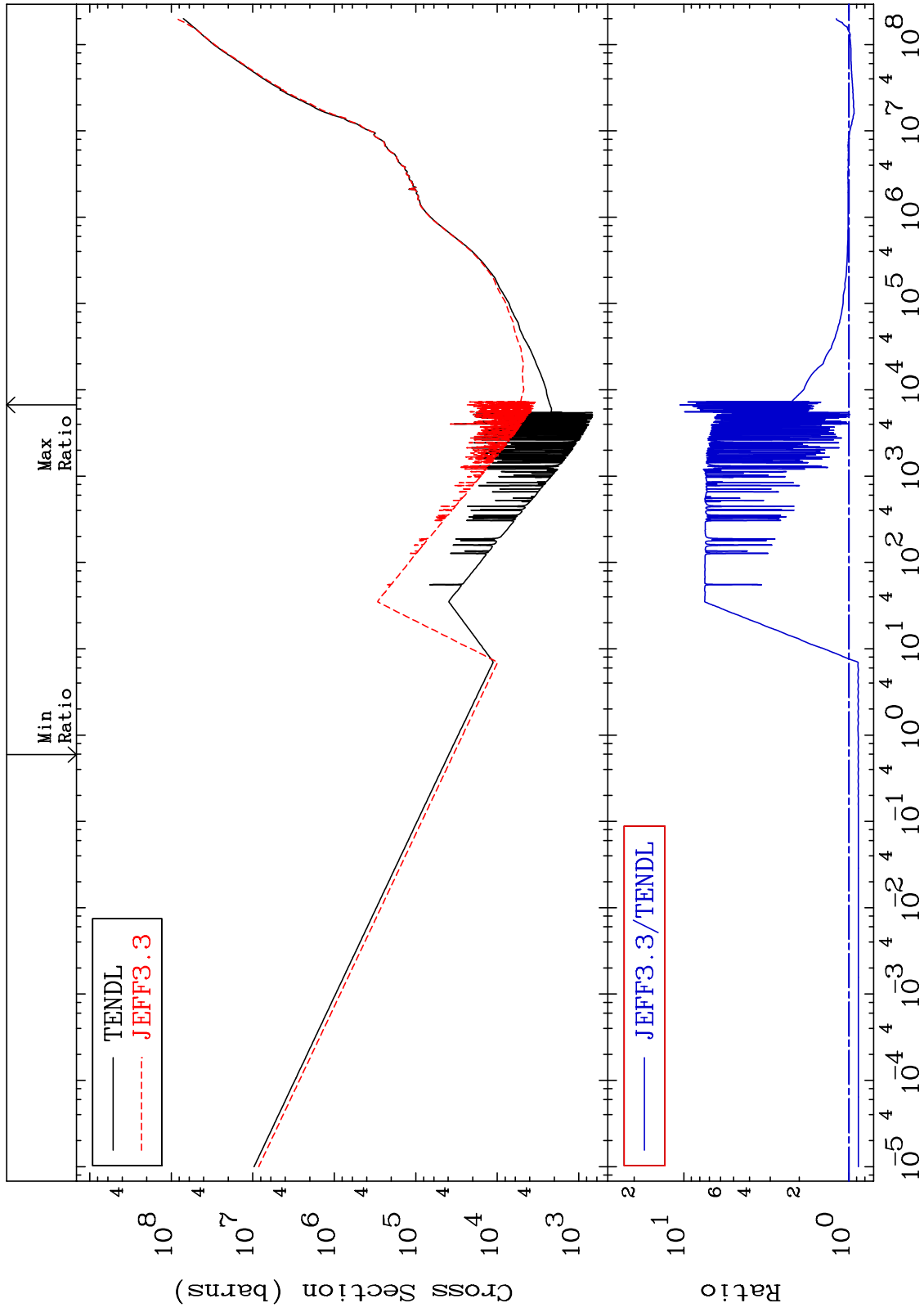
60-Nd-143

MAT 6028

Kerma total (eV-barns)
Cross Section

60-Nd-143

-12.32 To 954.3 %



68

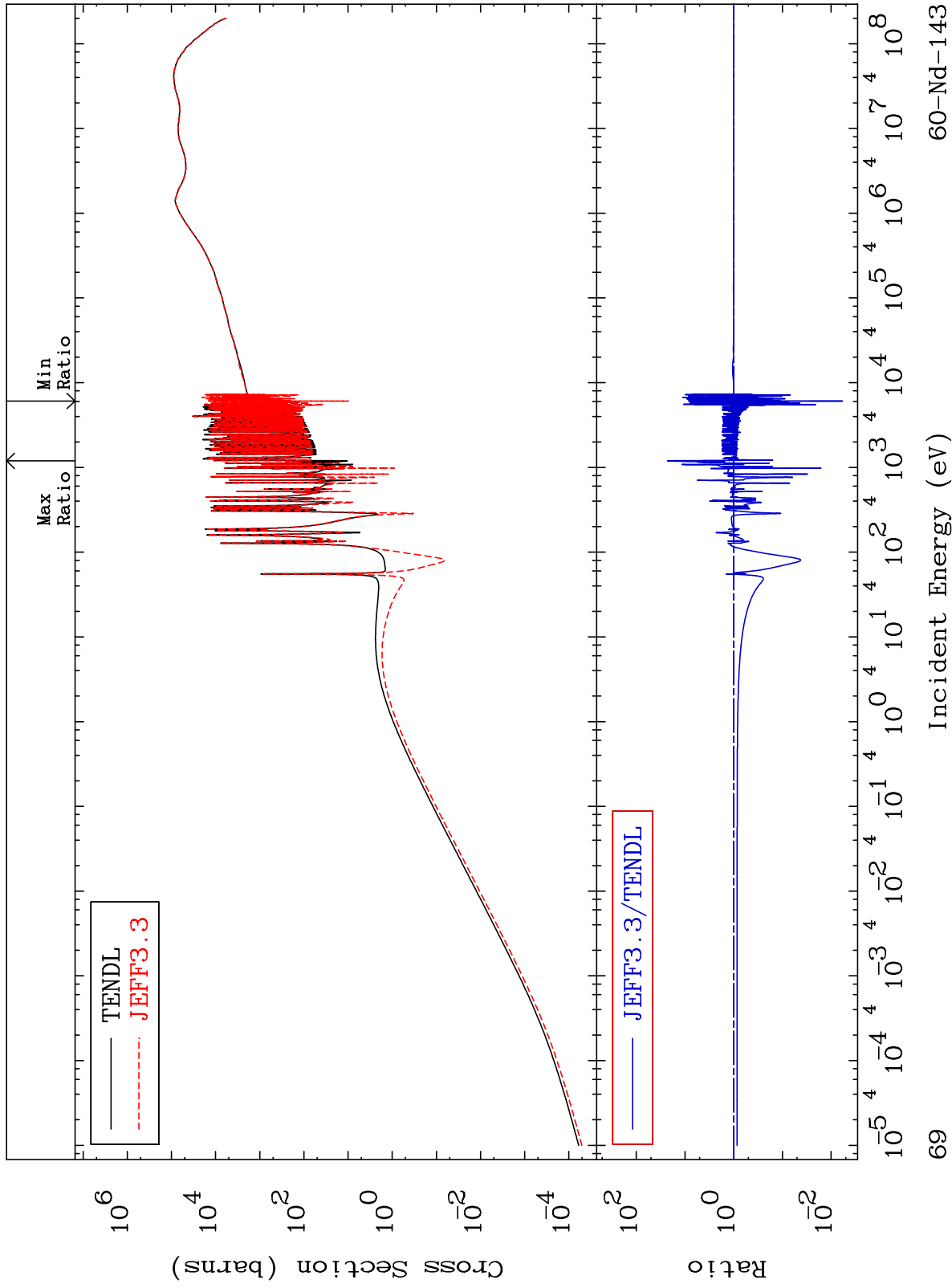
Incident Energy (eV)

60-Nd-143

MAT 6028

Kerma elastic
Cross Section

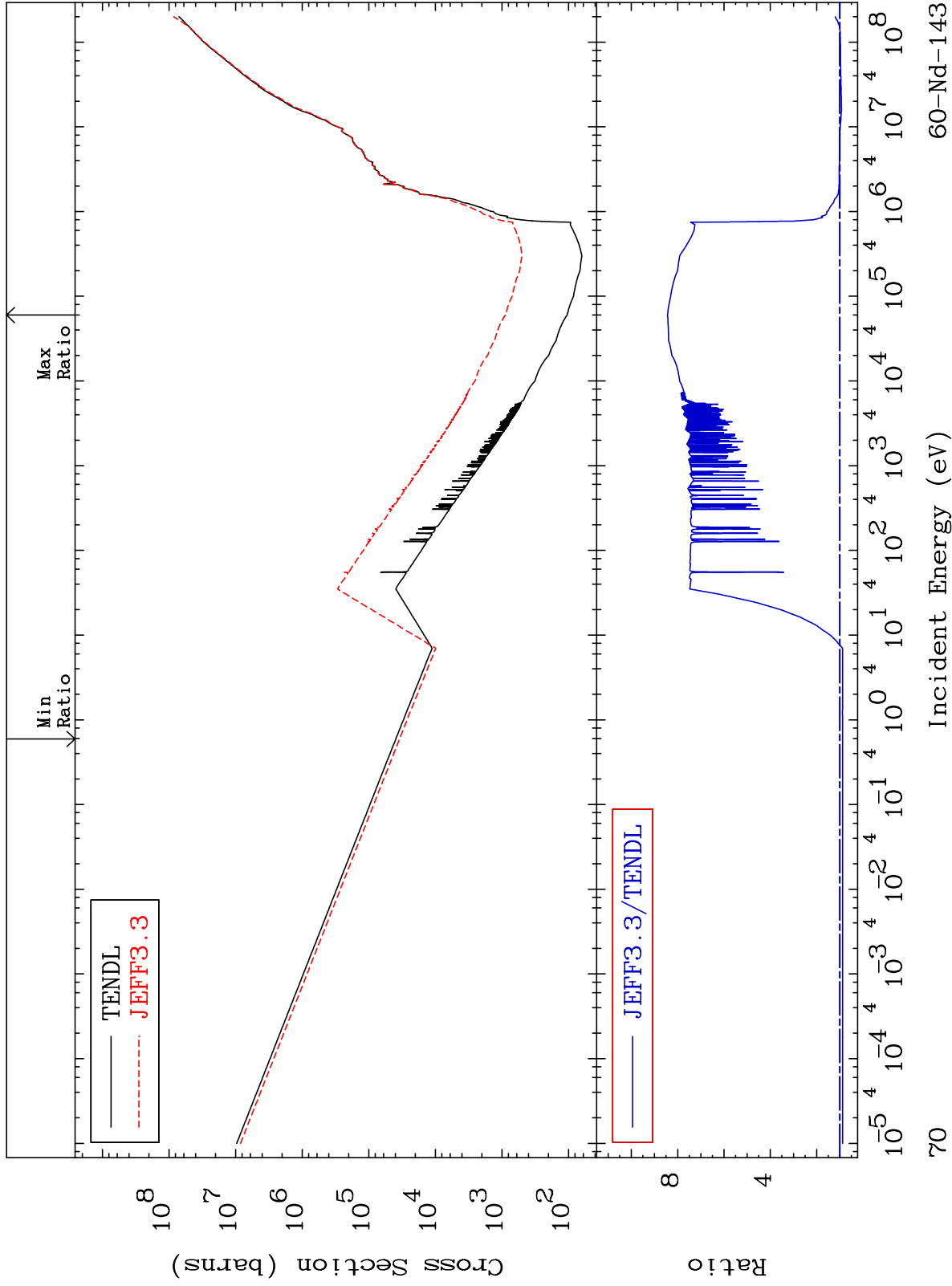
60-Nd-143
-99.42 To 2179. %



MAT 6028

Kerma non-elastic (all but mt2)
Cross Section

60-Nd-143
-12.32 To 743.7 %



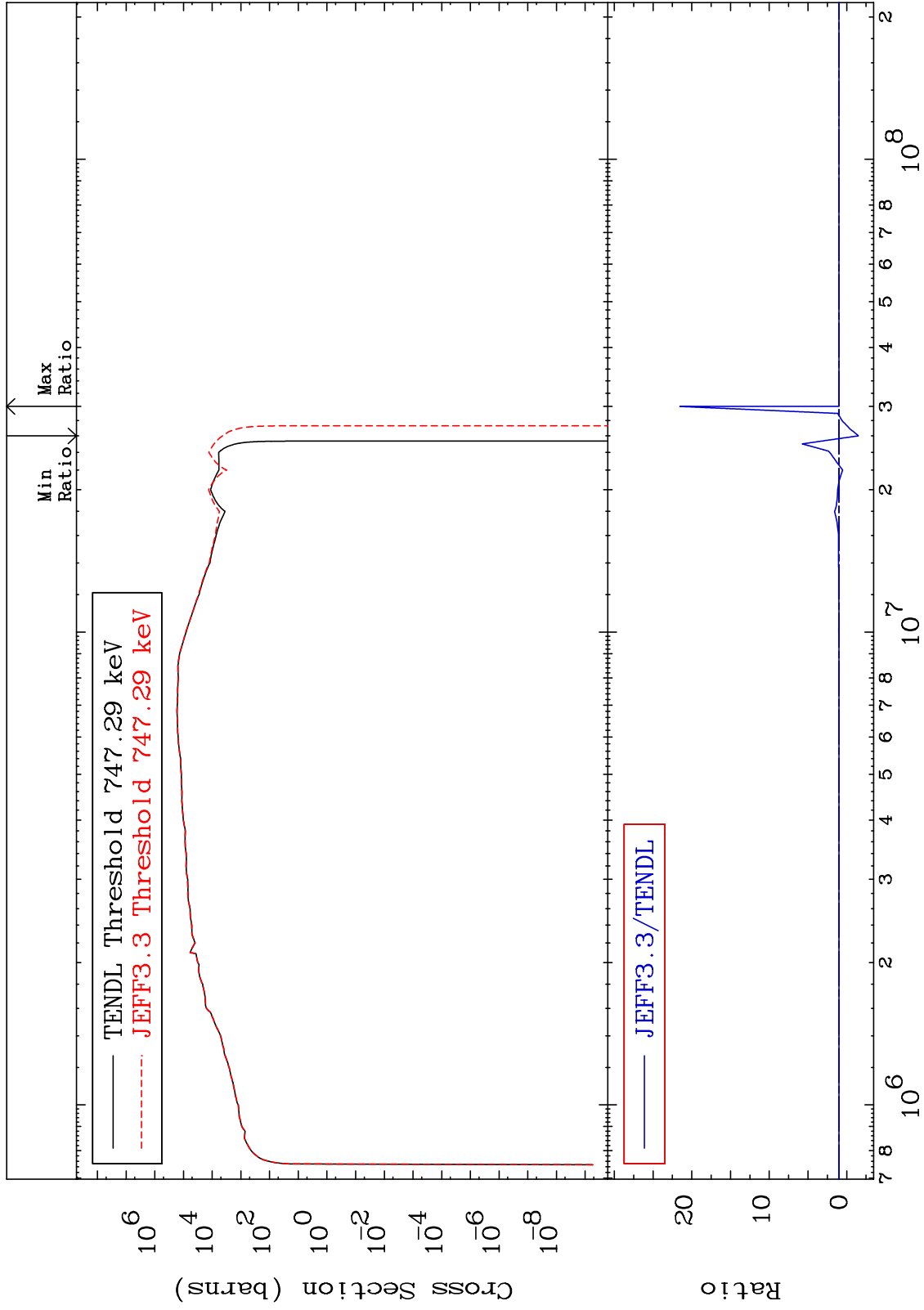
70

60-Nd-143

MAT 6028

Kerma inelastic (mt51-91)
Cross Section

60-Nd-143
-251.1 To 2052. %



71

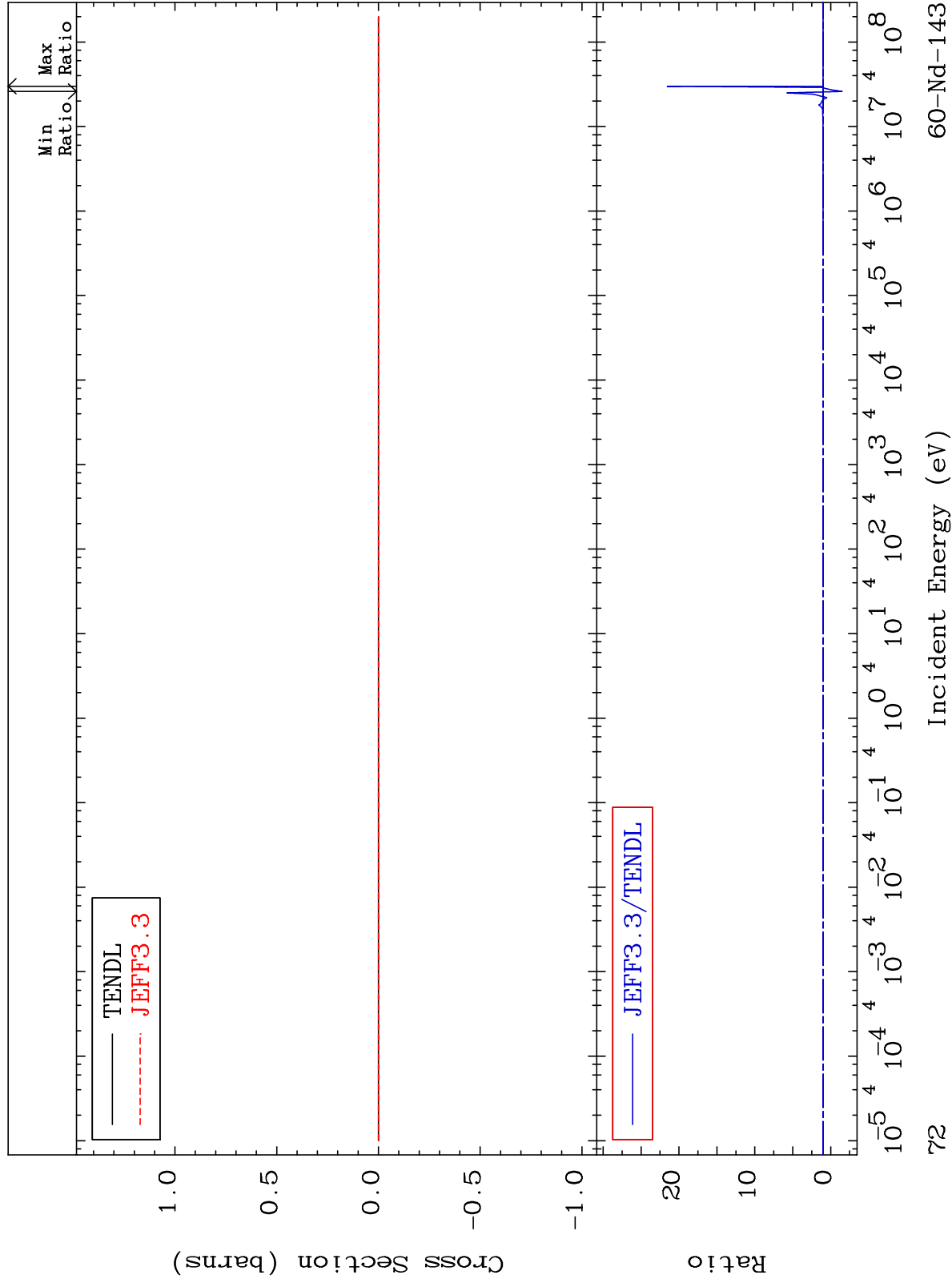
Incident Energy (eV)

60-Nd-143

MAT 6028

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

60-Nd-143
-251.1 To 2052. %



60-Nd-143

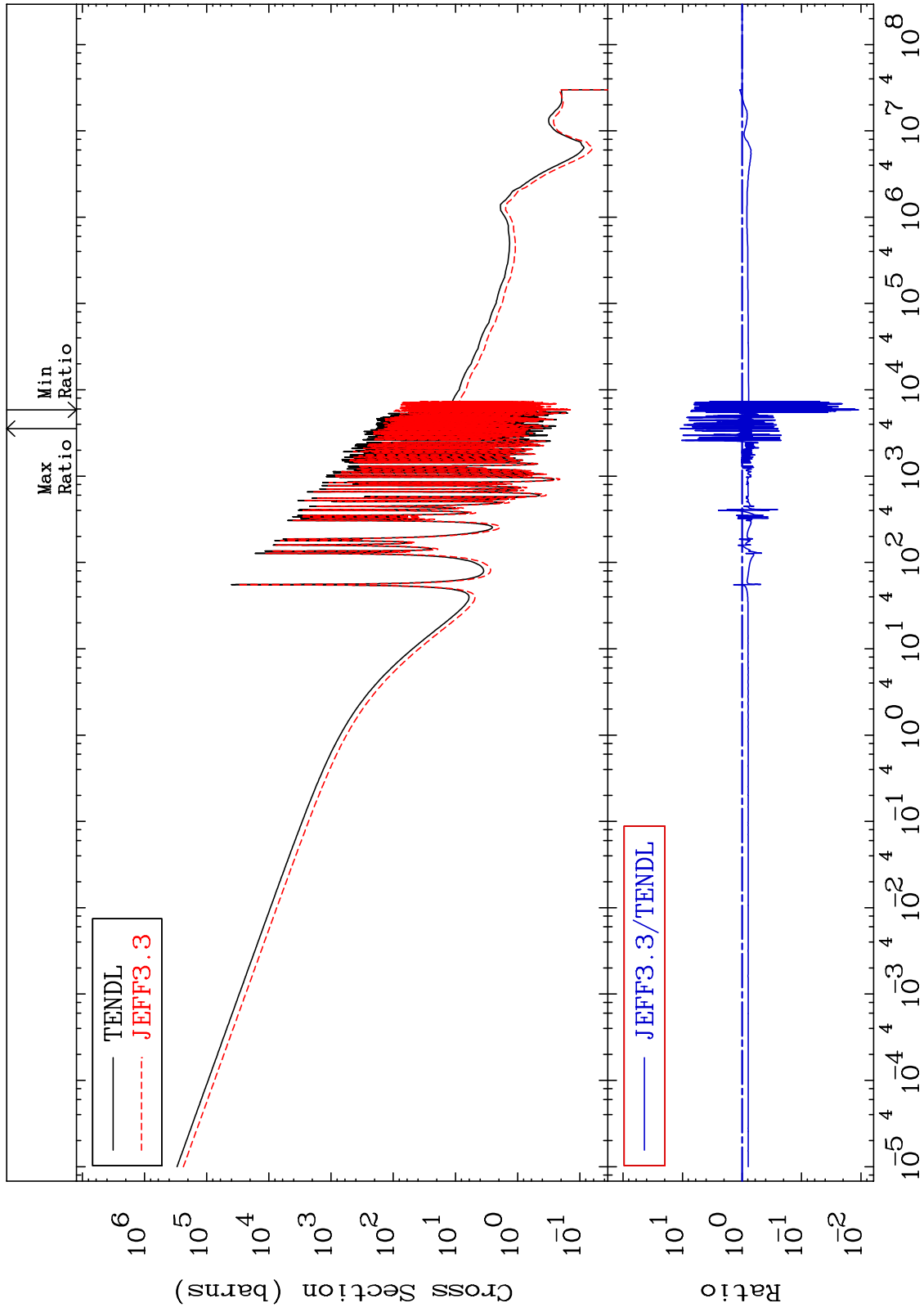
Incident Energy (eV)

72

MAT 6028

Kerma capture (mt102)
Cross Section

60-Nd-143
-98.89 To 1001. %



73

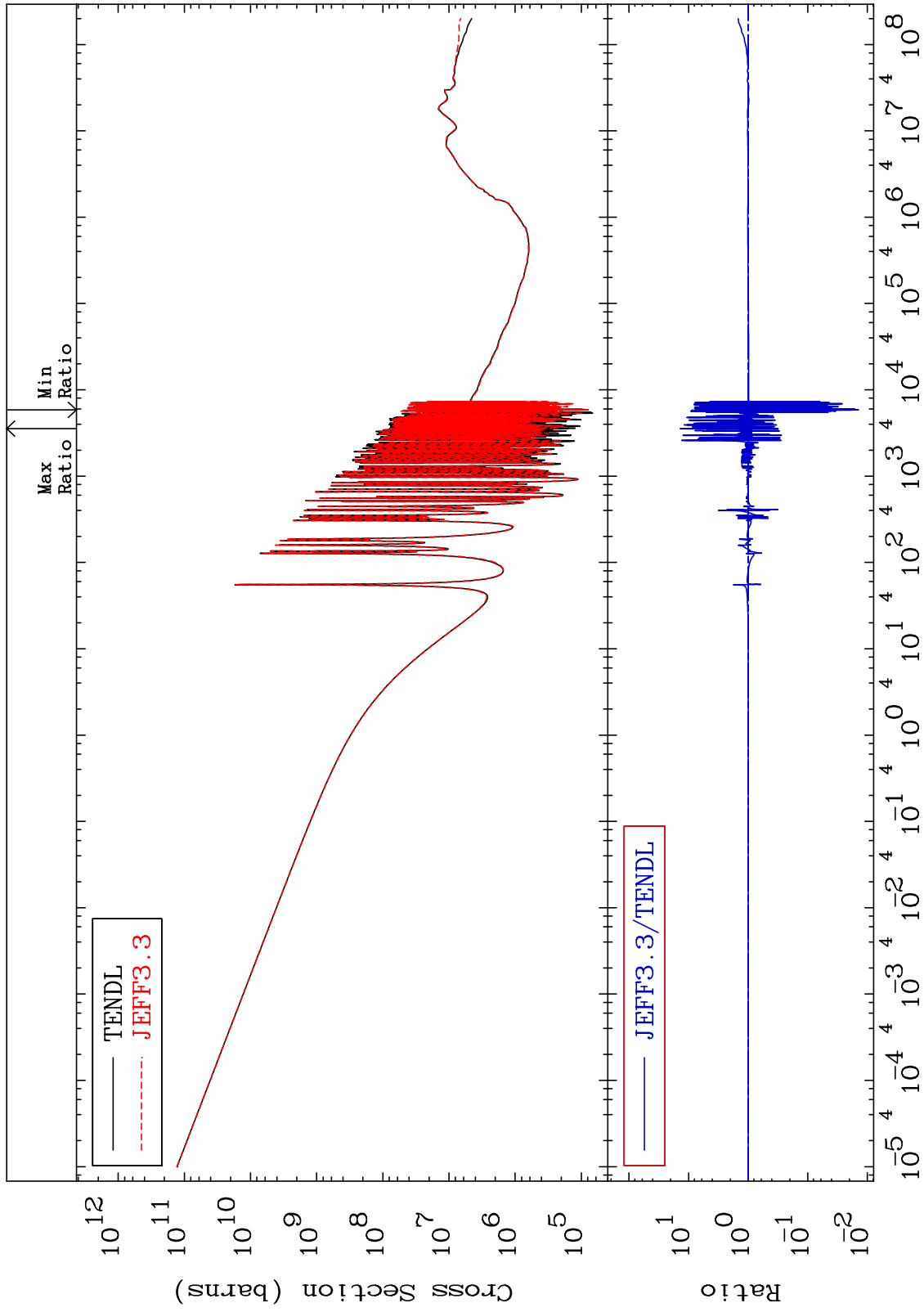
Incident Energy (eV)

60-Nd-143

MAT 6028

Total photon (eV-barns)
Cross Section

60-Nd-143
-98.59 To 1293. %



74

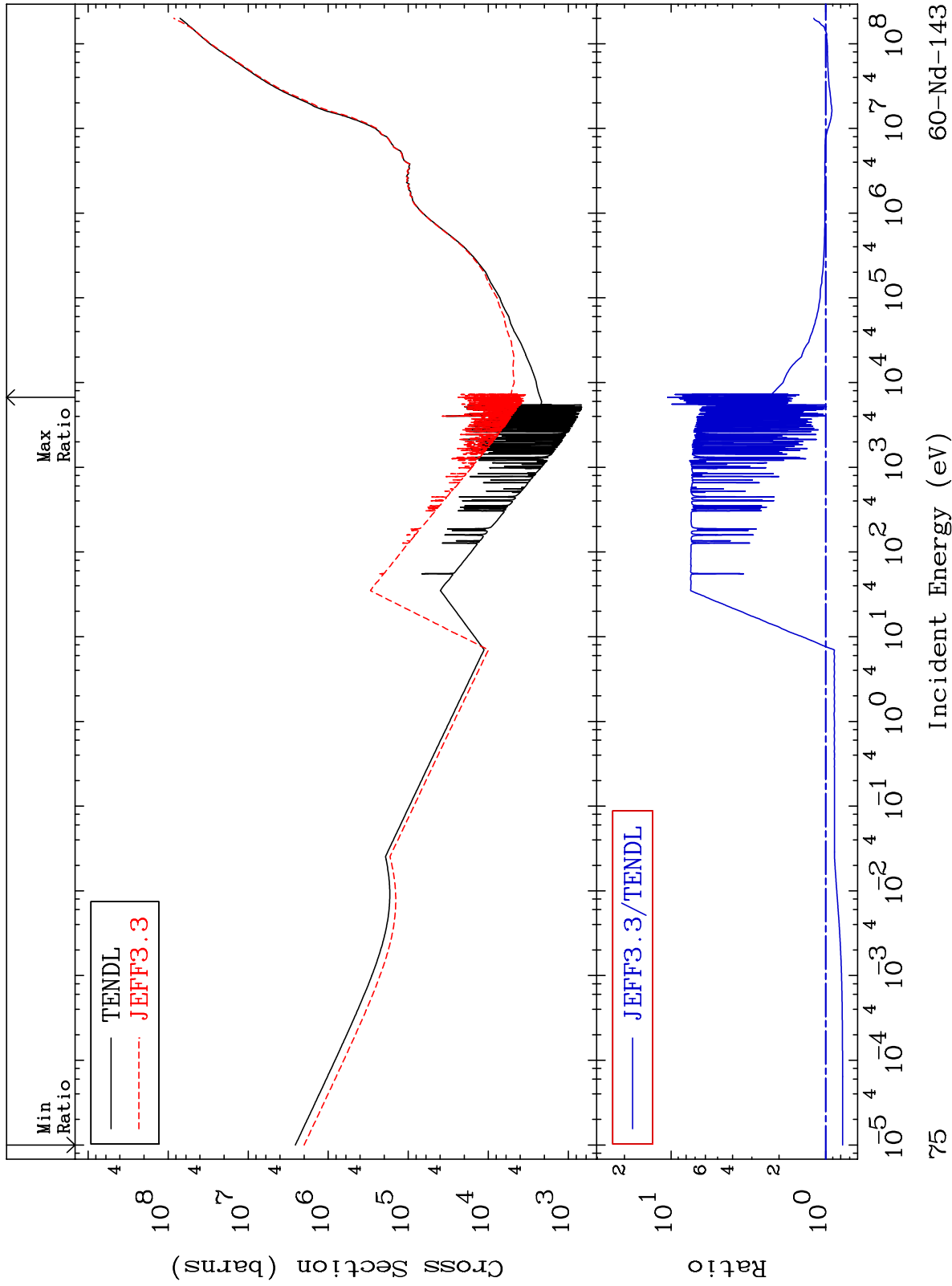
Incident Energy (eV)

60-Nd-143

MAT 6028

Total kinematic kerma (high limit)
Cross Section

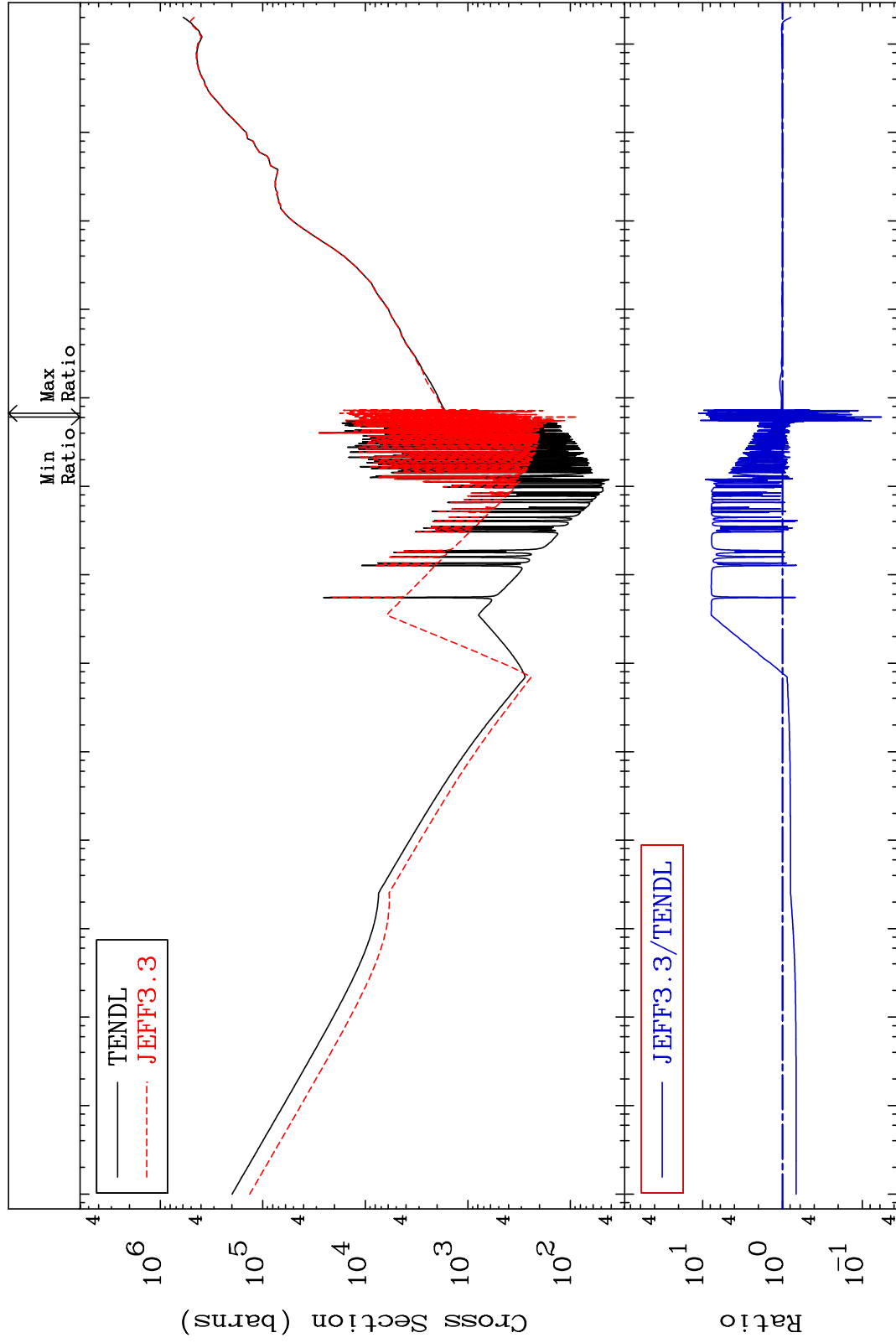
60-Nd-143
-22.36 To 953.7 %



MAT 6028

Dpa total (eV-barns)
Cross Section

60-Nd-143
-94.27 To 1019. %



76

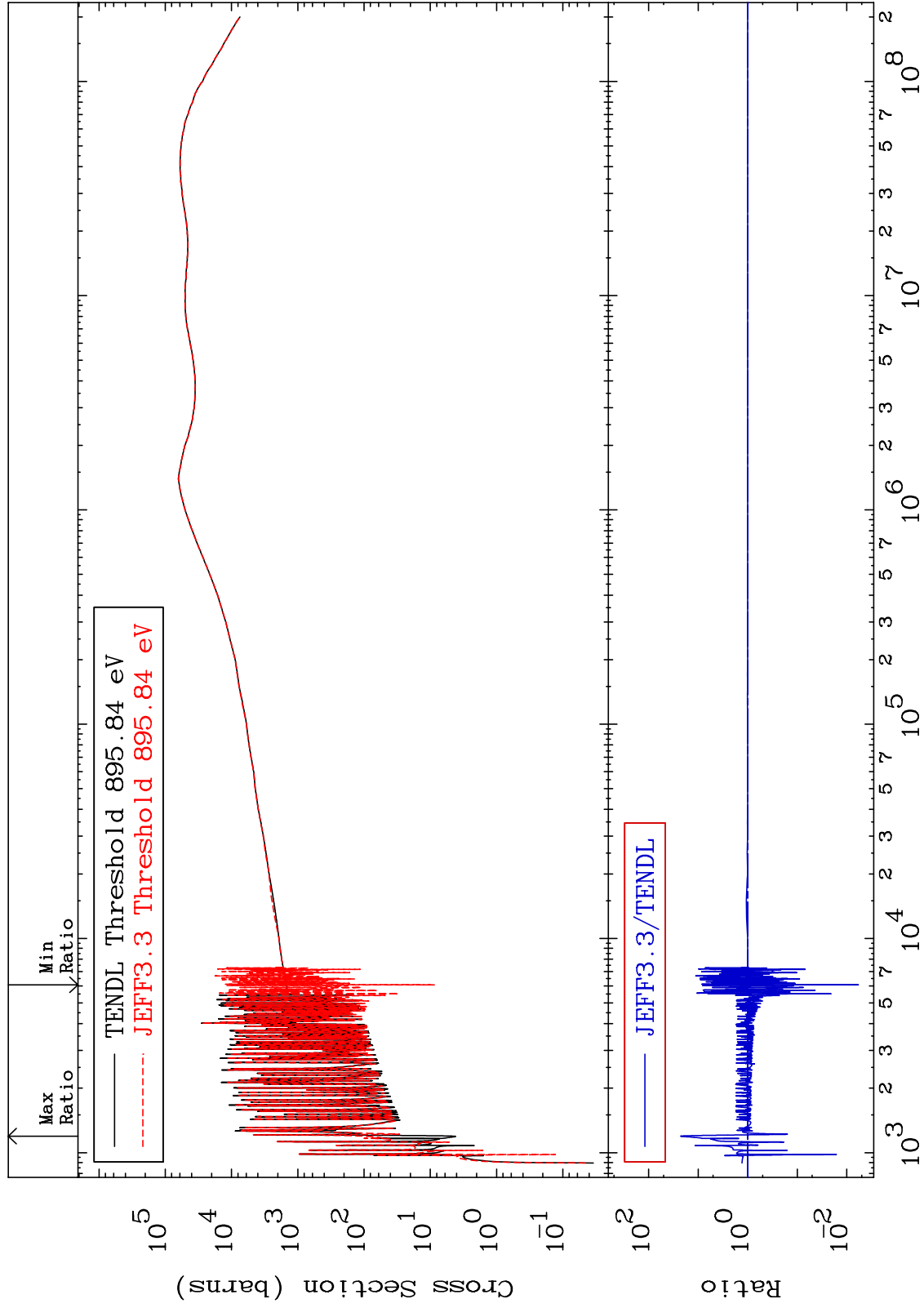
Incident Energy (eV)

60-Nd-143

MAT 6028

Dpa elastic (mt2)
Cross Section

60-Nd-143
-99.42 To 2179. %



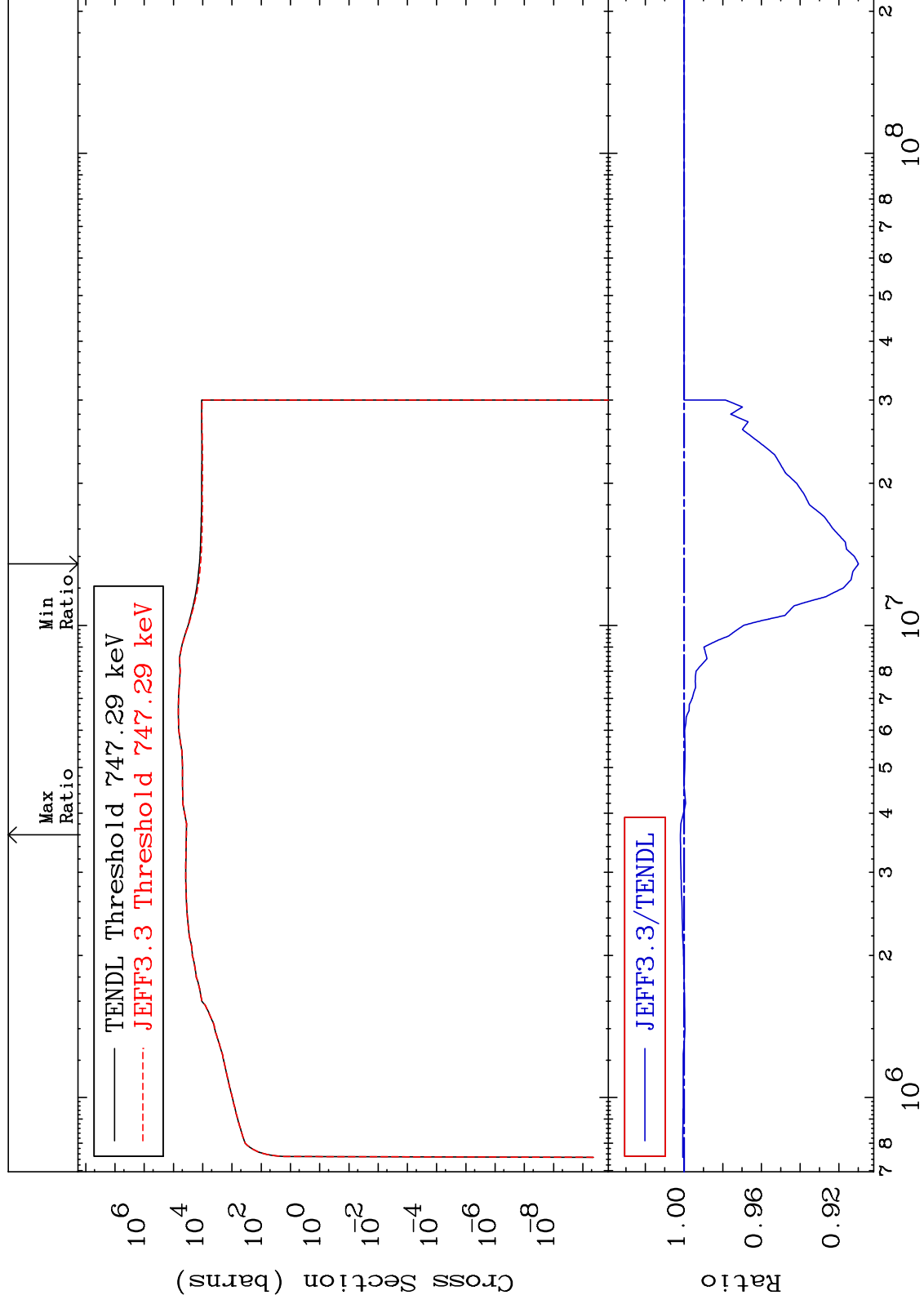
77

60-Nd-143

MAT 6028

Dpa inelastic (mt51-91)
Cross Section

60-Nd-143
-9.014 To 0.184 %



78

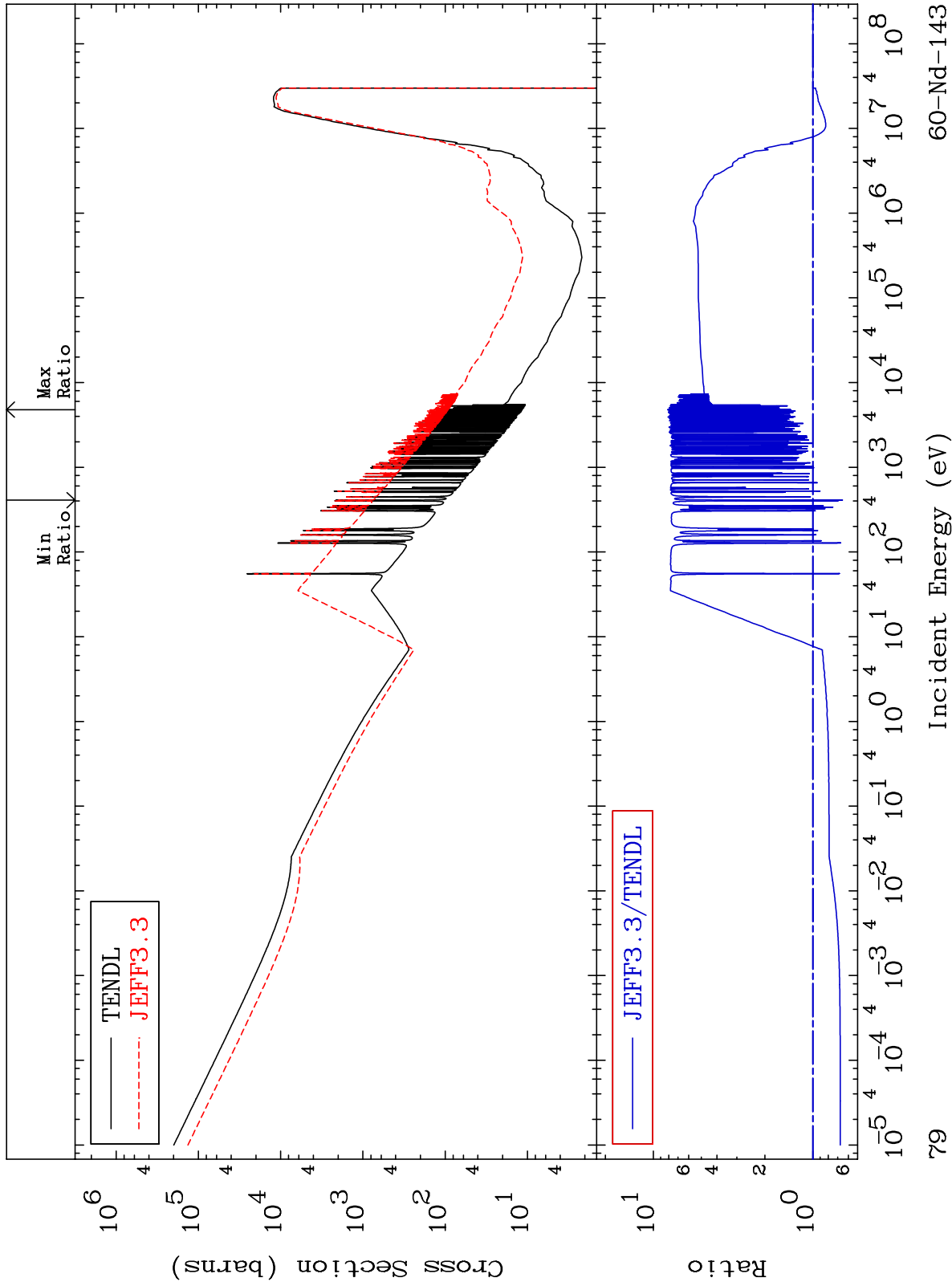
Incident Energy (eV)

60-Nd-143

MAT 6028

Dpa disappearance (mt102 -120)
Cross Section

60-Nd-143
-34.92 To 714.7 %

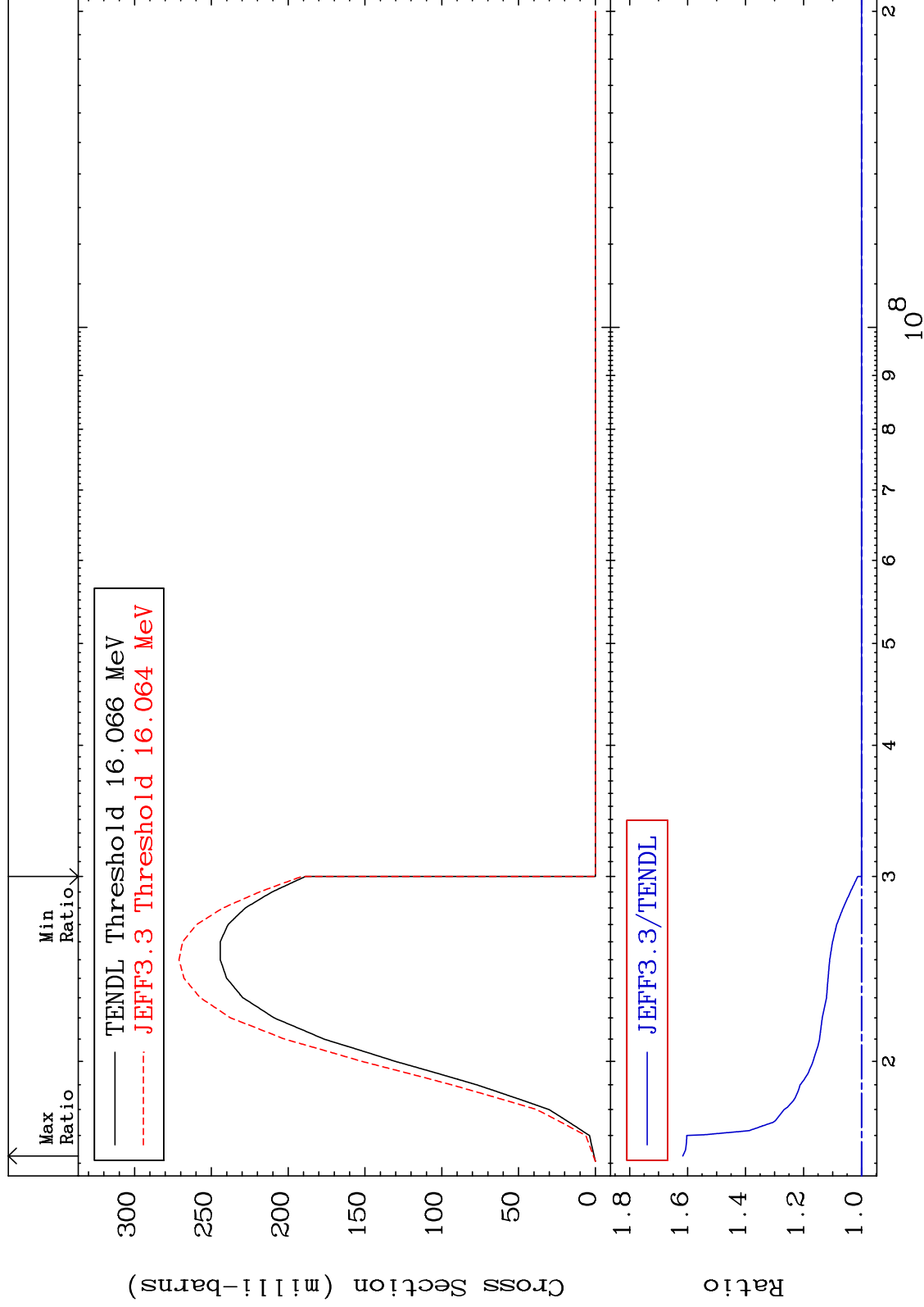


MAT 6028

(n,3n):60-Nd-141g

60-Nd-143

Radionuclide Production Cross Section 0.000 To 61.64 %



80

Incident Energy (eV)

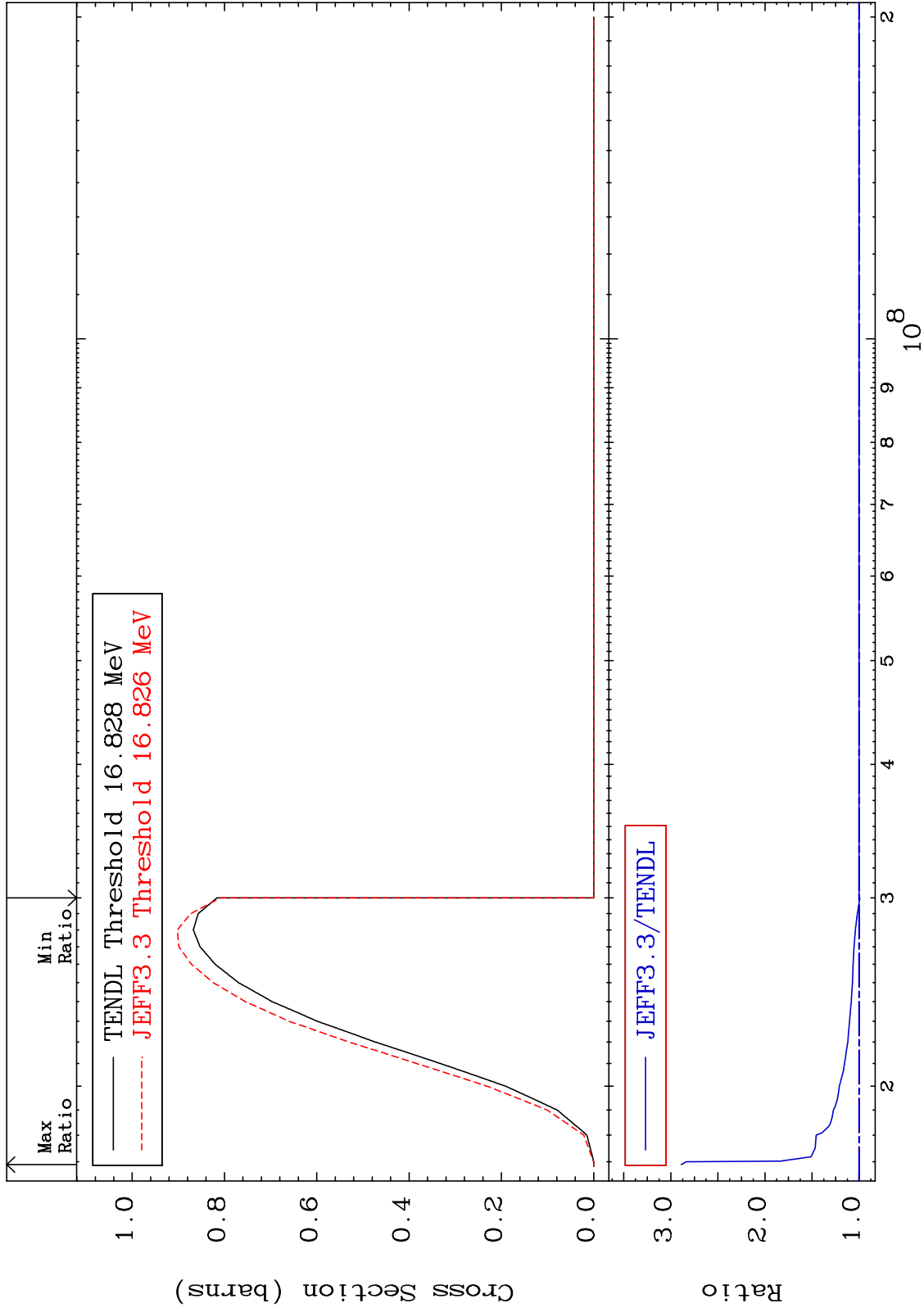
60-Nd-143

MAT 6028

(n,3n):60-Nd-141m2

60-Nd-143

Radionuclide Production Cross Section -0.865 To 189.0 %

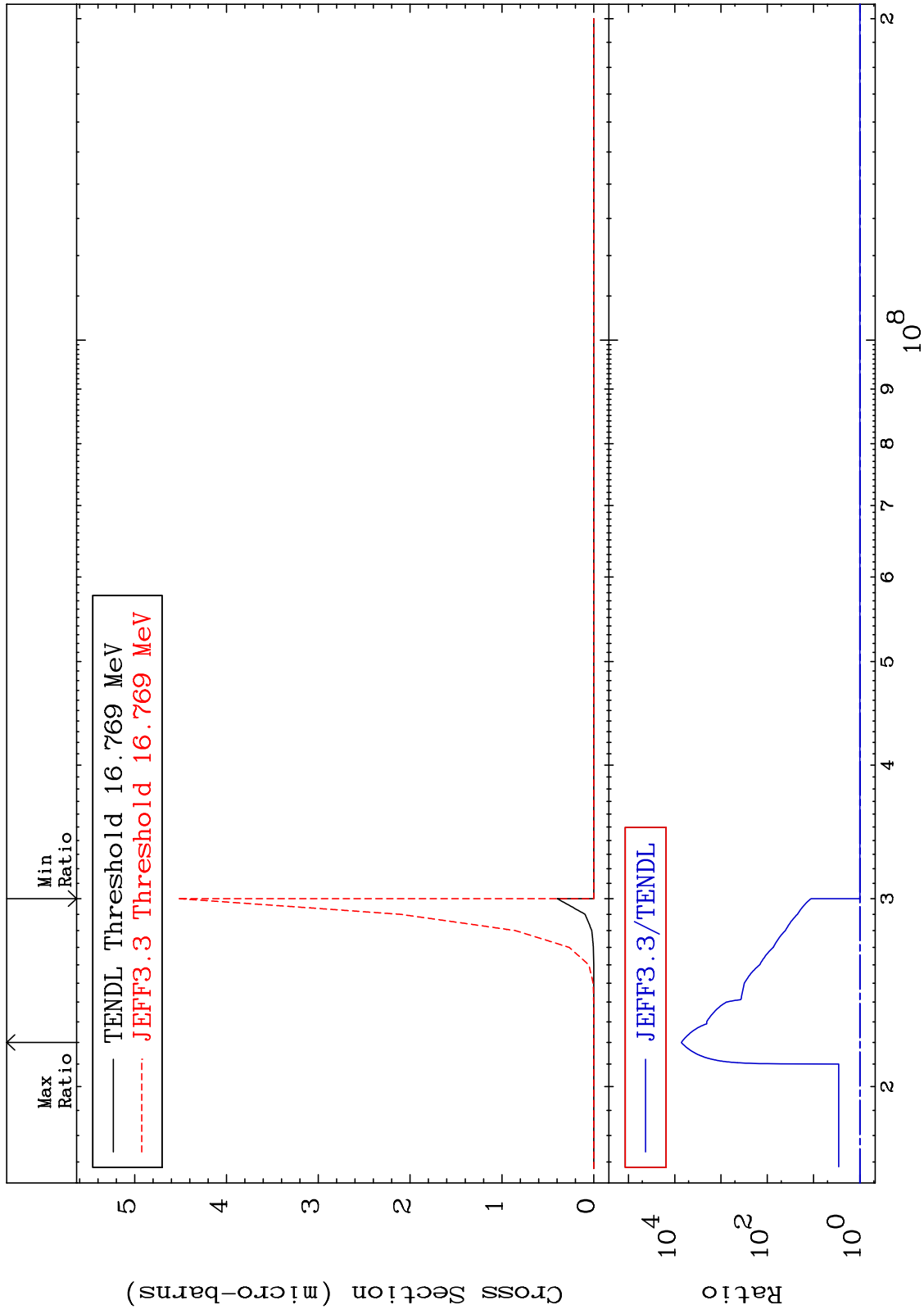


MAT 6028

(n,3n) α :58-Ce-137g

60-Nd-143

Radionuclide Production Cross Section 0.000 To 9999. %

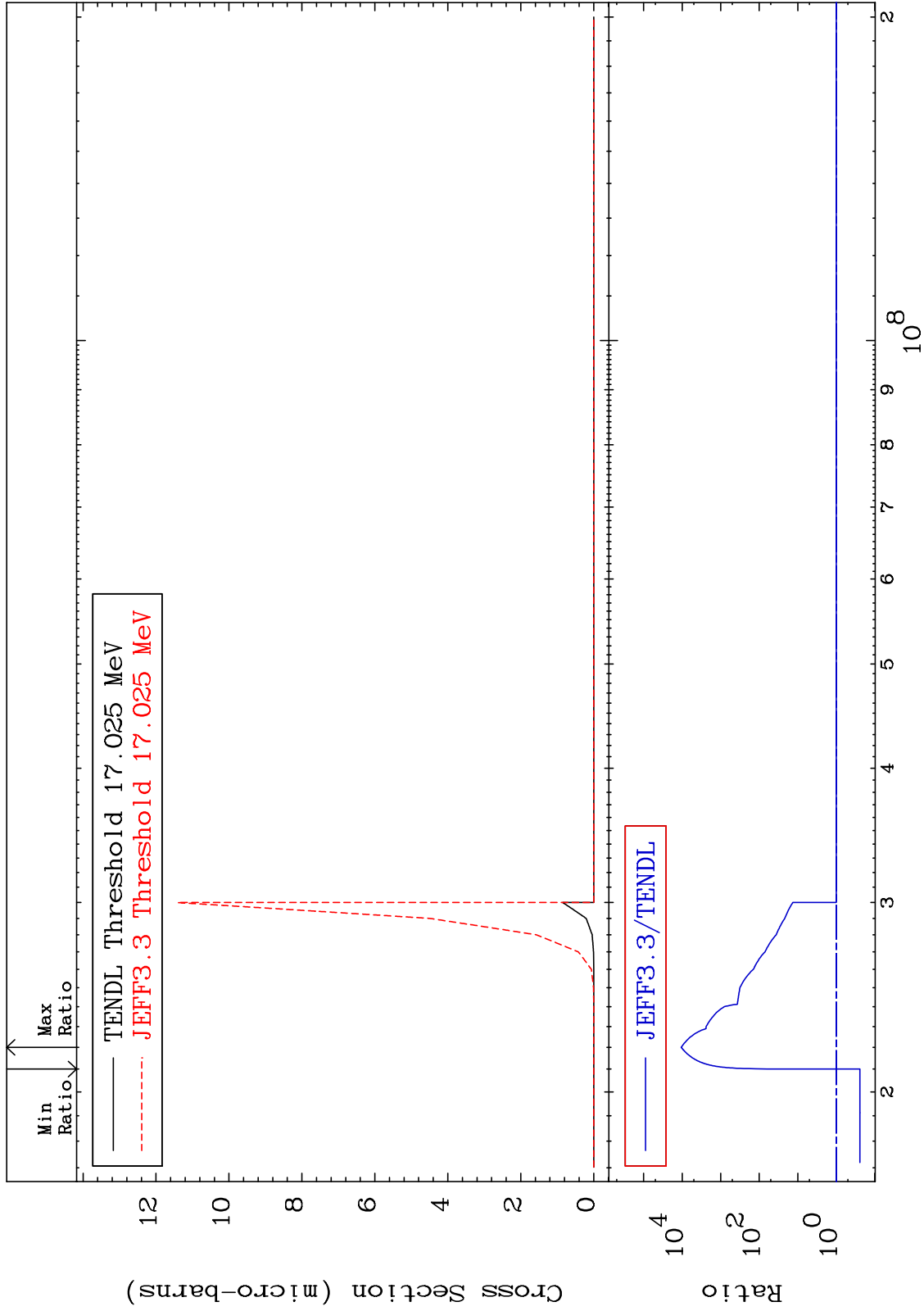


MAT 6028

(n,3n) α :58-Ce-137m2

60-Nd-143

Radionuclide Production Cross Section -75.73 To 9999. %

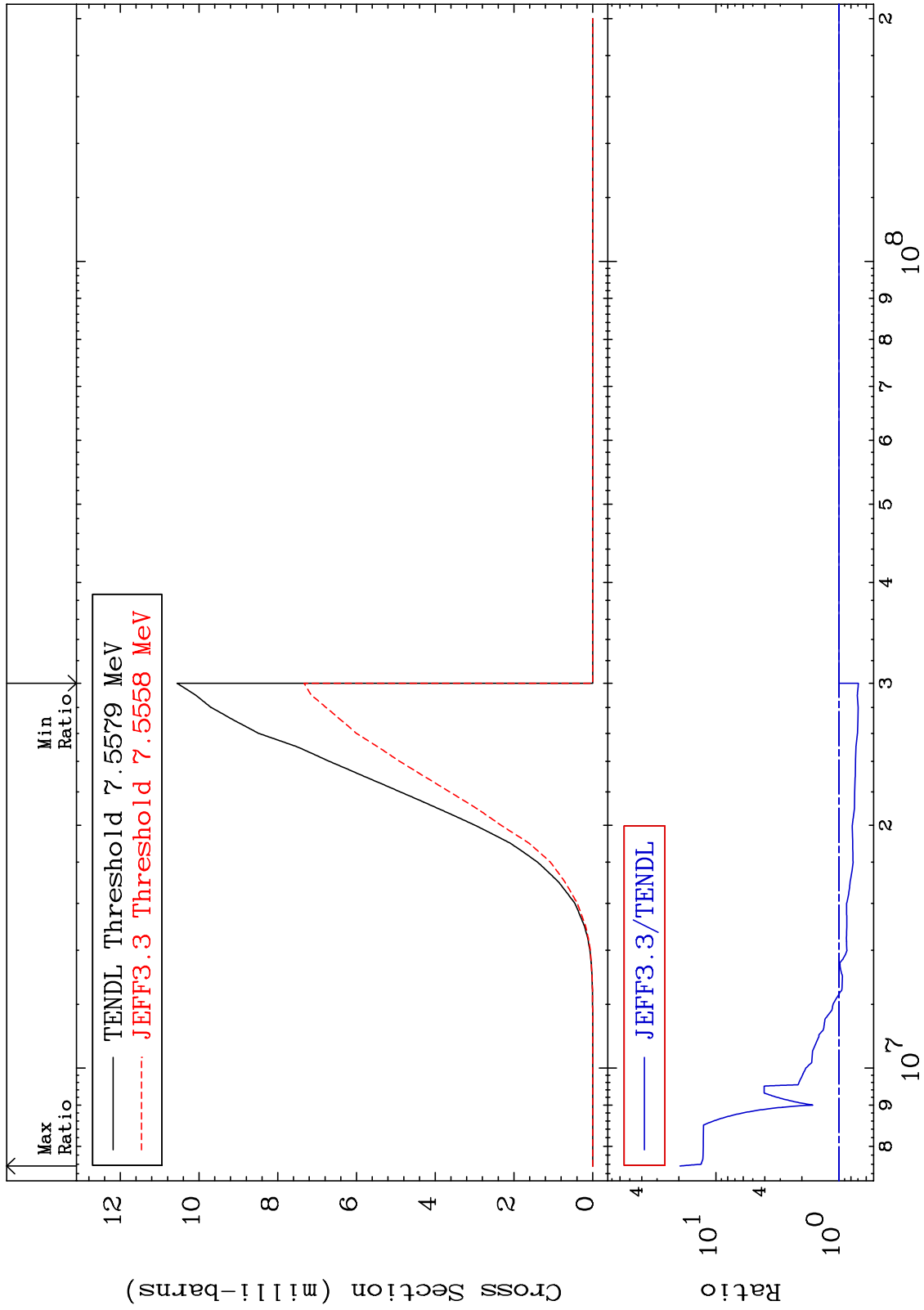


MAT 6028

(n, n') p:59-Pr-142g

60-Nd-143

Radionuclide Production Cross Section -30.54 To 1855. %



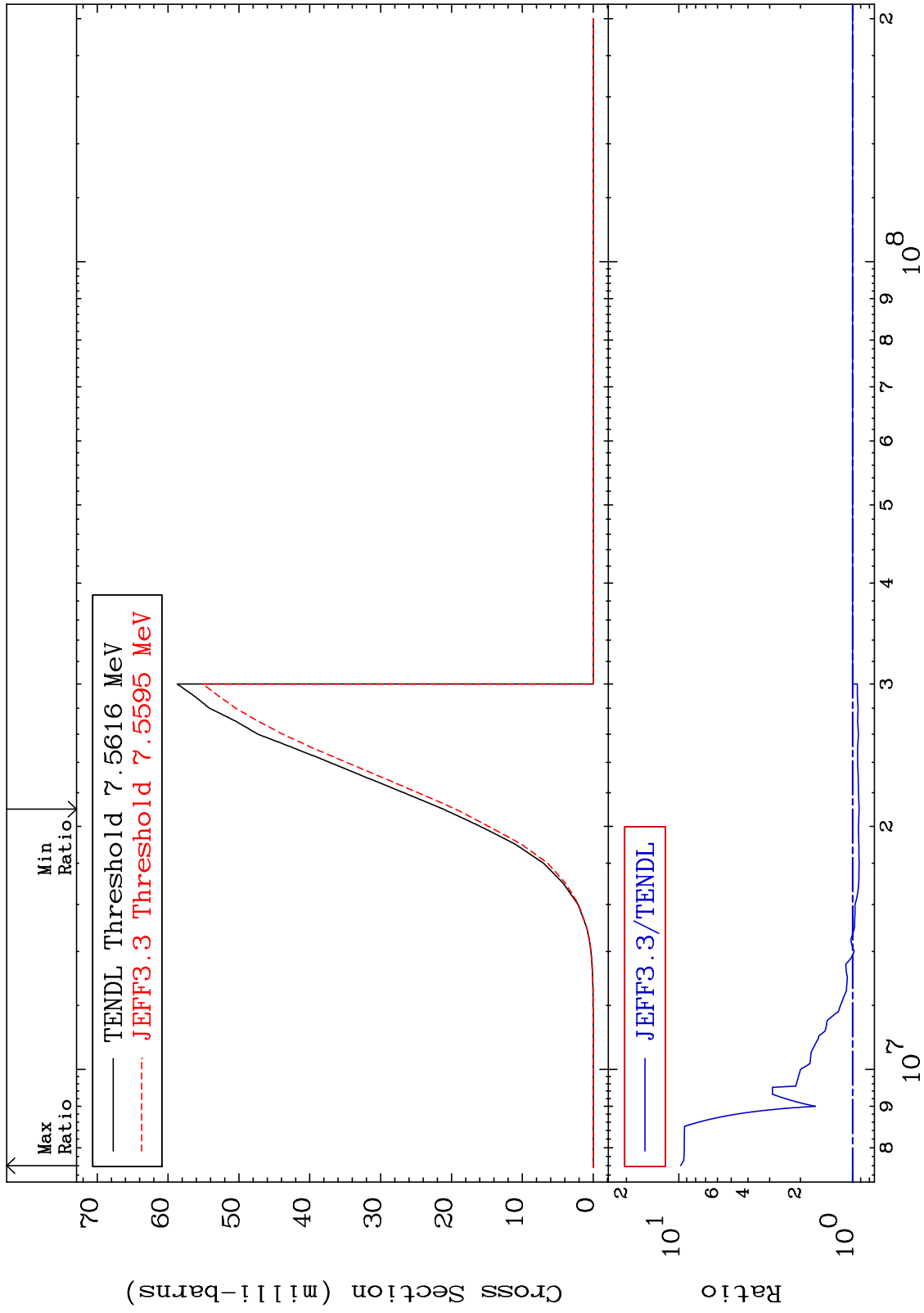
MAT 6028

(n, n') p:59-Pr-142m1

60-Nd-143

Radionuclide Production Cross Section

-8.292 To 876.1 %



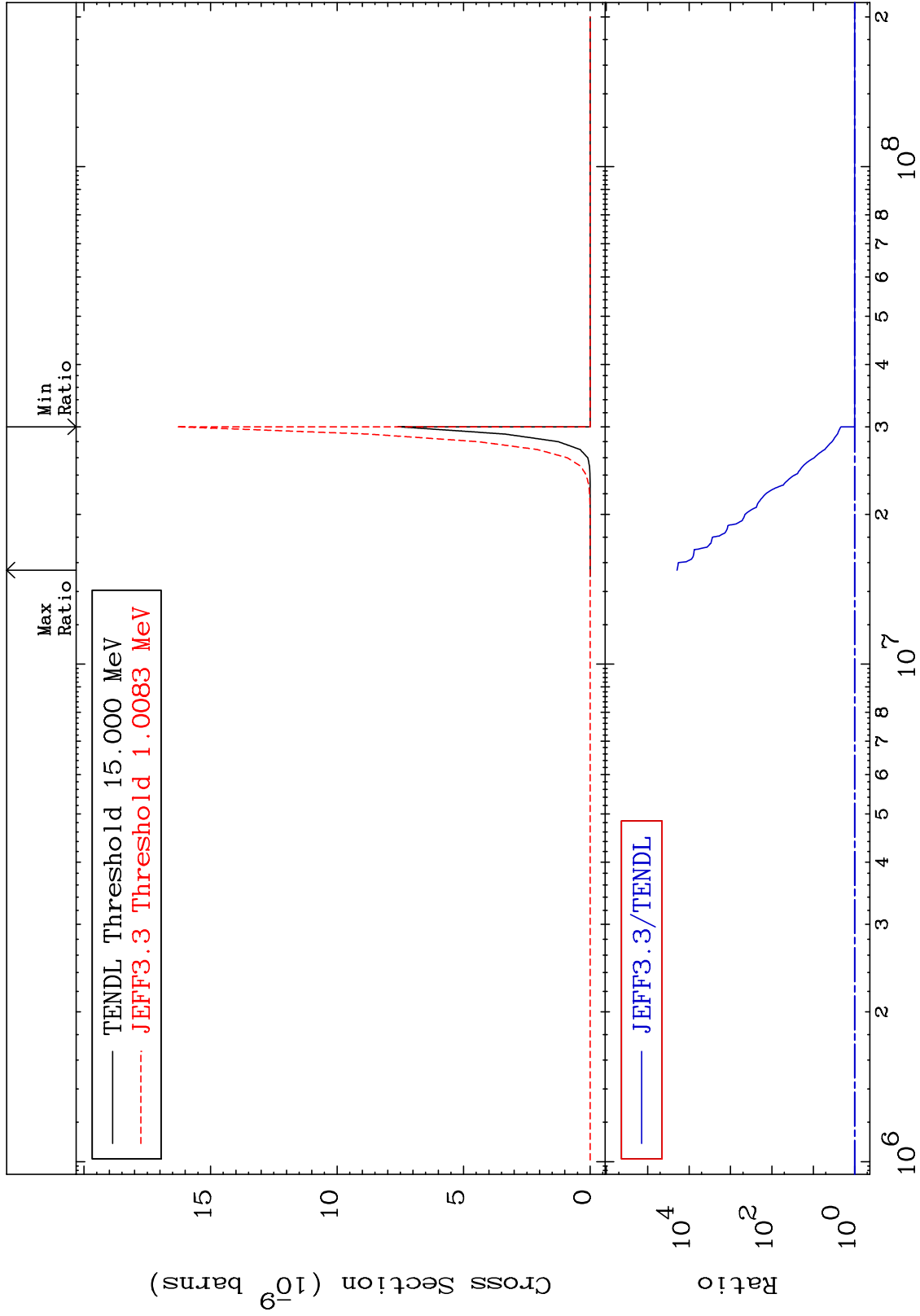
85

Incident Energy (eV)

60-Nd-143

MAT 6028

(n, n') 2α:56-Ba-135g 60-Nd-143
Radionuclide Production Cross Section 0.000 To 9999. %



86

Incident Energy (eV)

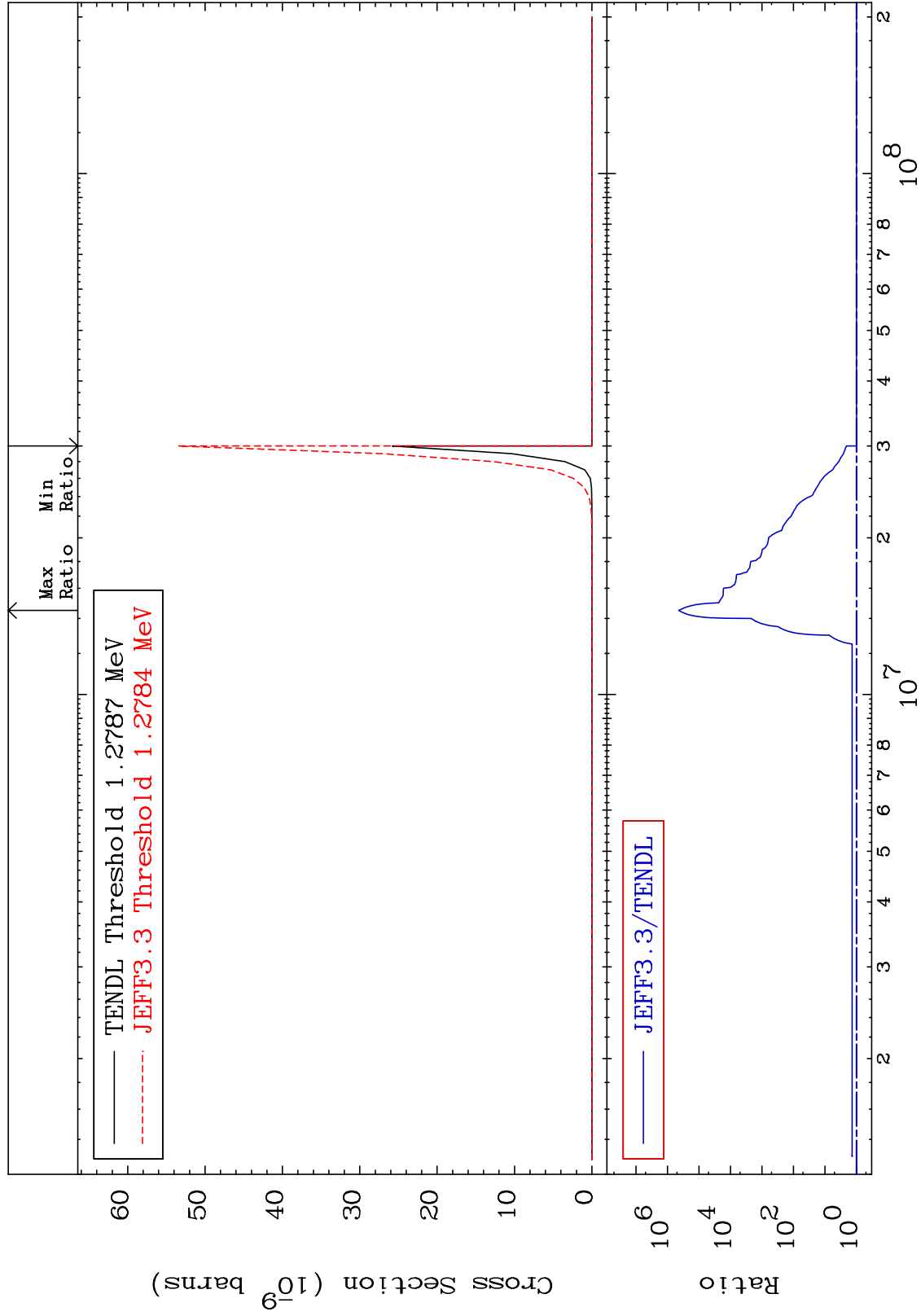
60-Nd-143

MAT 6028

(n, n') 2α:56-Ba-135m2

60-Nd-143

Radionuclide Production Cross Section 0.000 To 9999. %



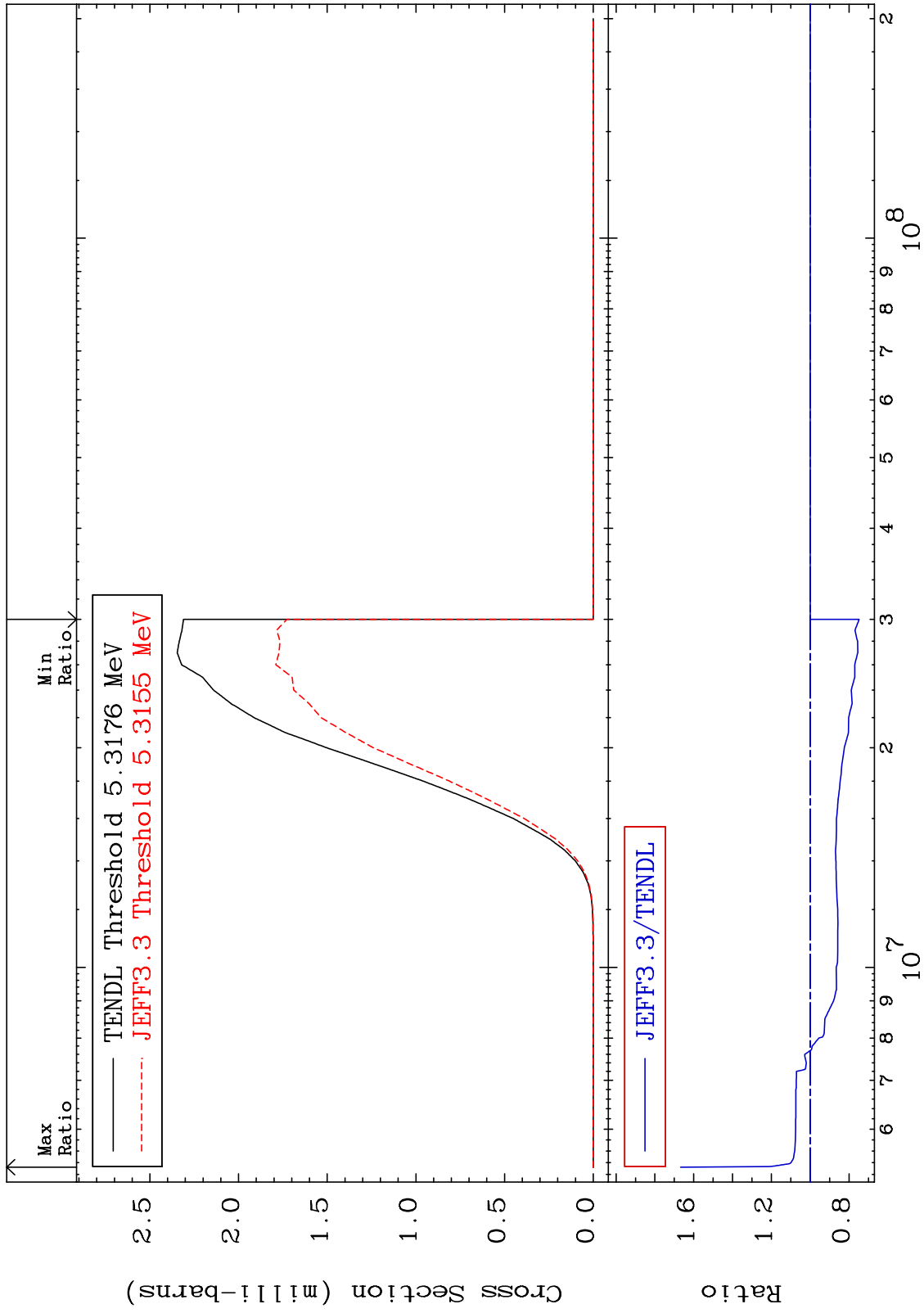
MAT 6028

(n,d):59-Pr-142g

60-Nd-143

Radionuclide Production Cross Section

-25.21 To 66.75 %



88

Incident Energy (eV)

60-Nd-143

MAT 6028

(n, d) : 59-Pr-142m1

60-Nd-143

Radionuclide Production Cross Section -0.834 To 23.03 %

