

Program Complot
(Version 2018-1)

by

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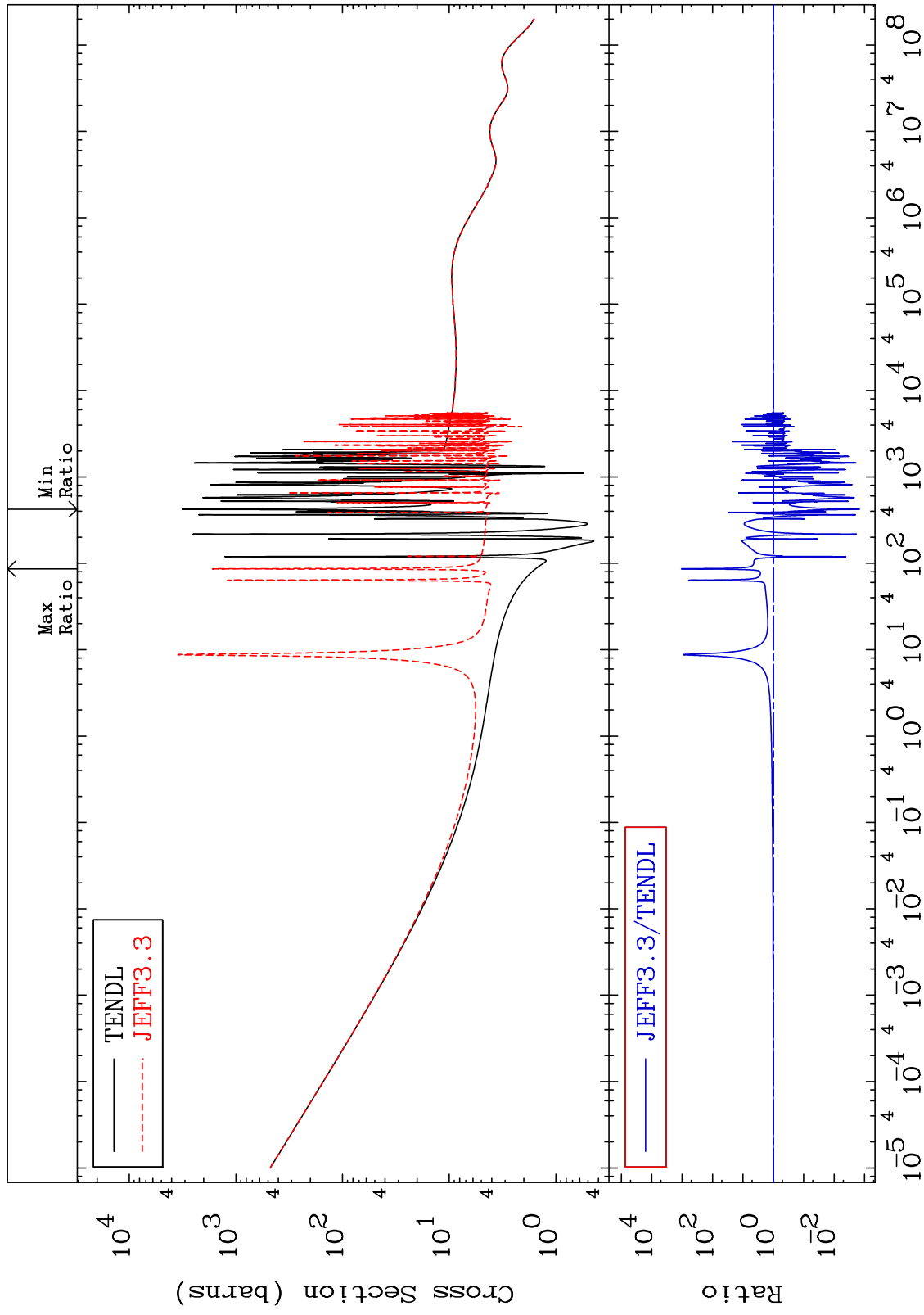
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4119

Total
Cross Section

41-Nb-91
-99.86 To 9999. %



1

Incident Energy (eV)

41-Nb-91

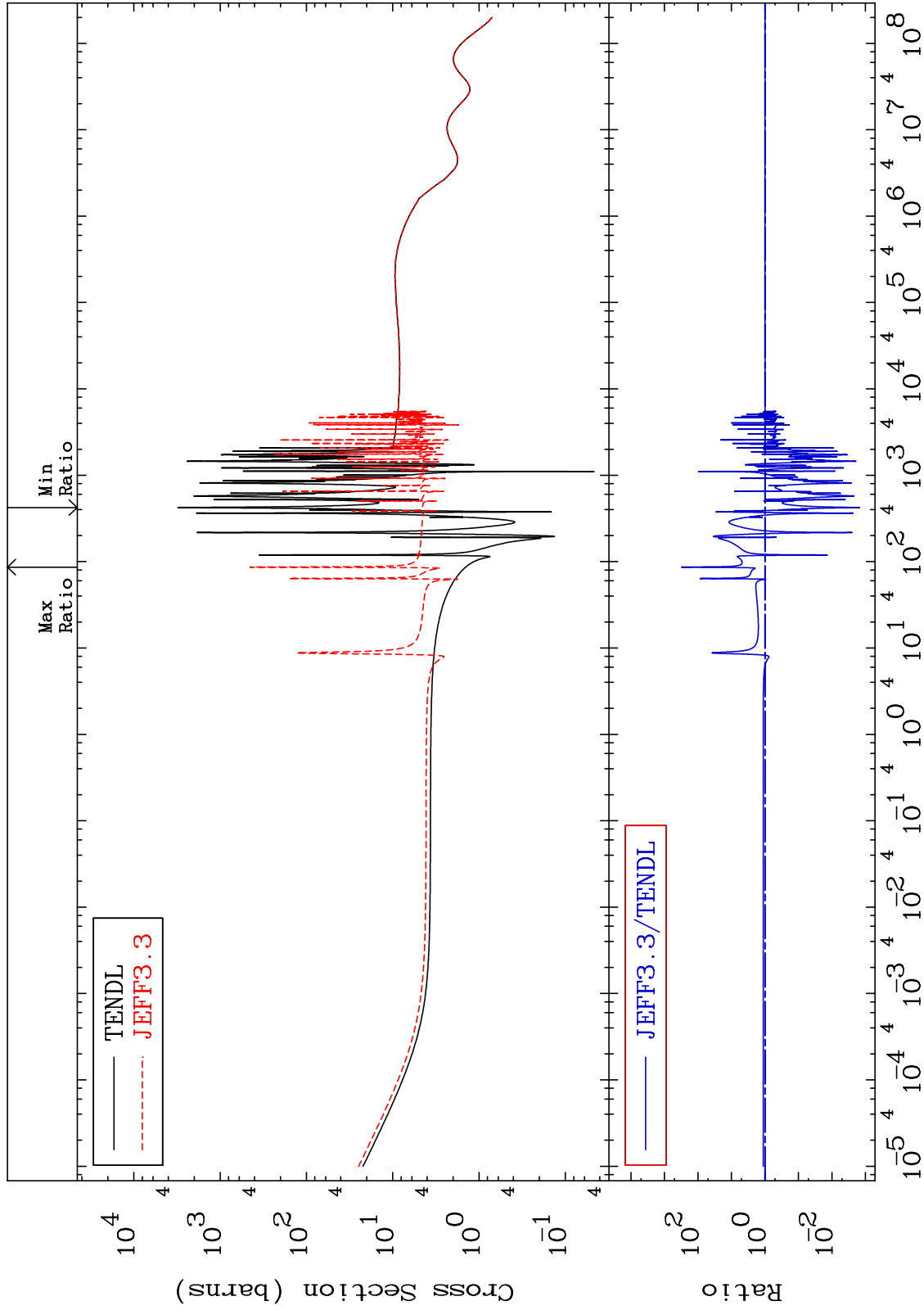
MAT 4119

Elastic

41-Nb-91

Cross Section

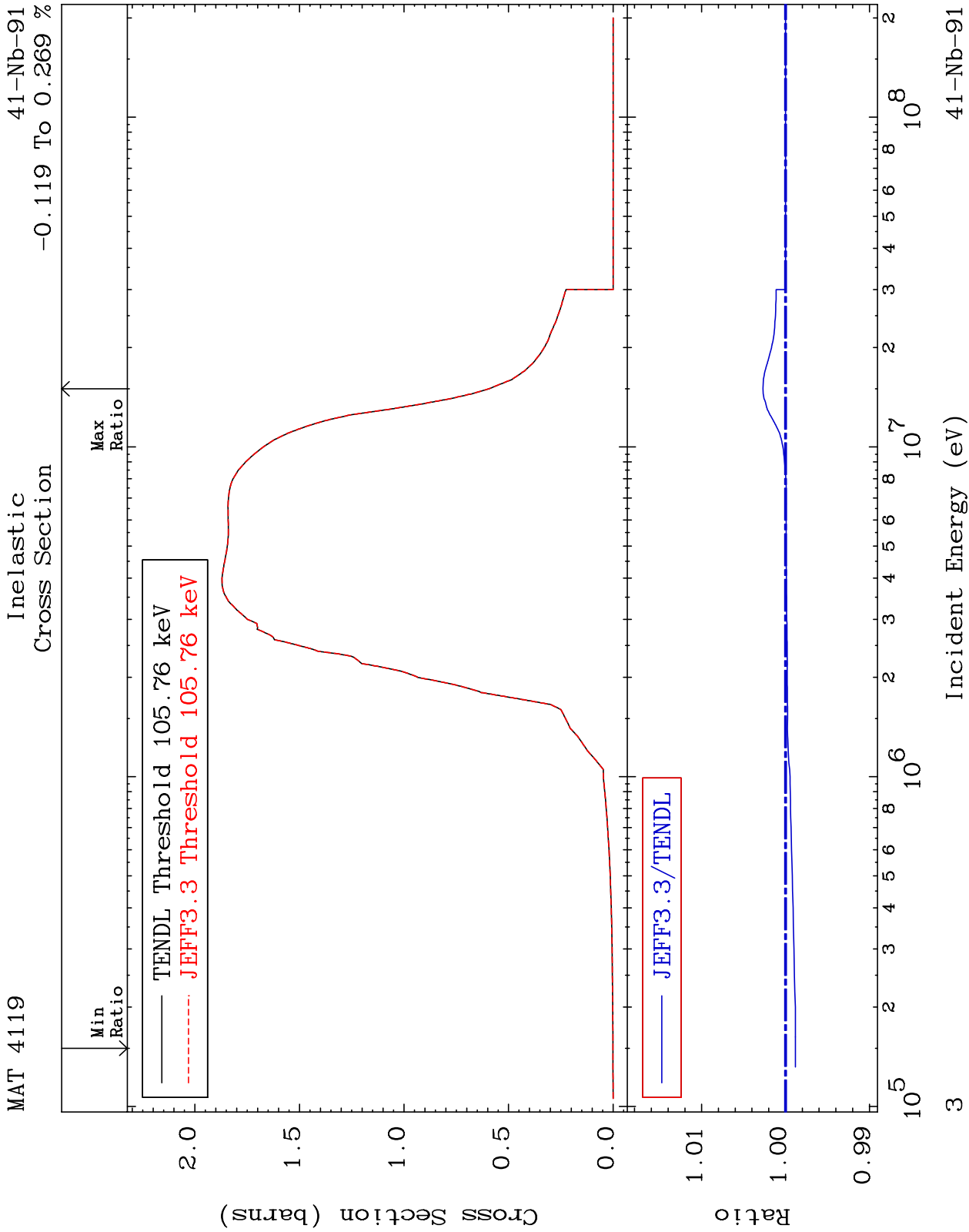
-99.85 To 9999. %



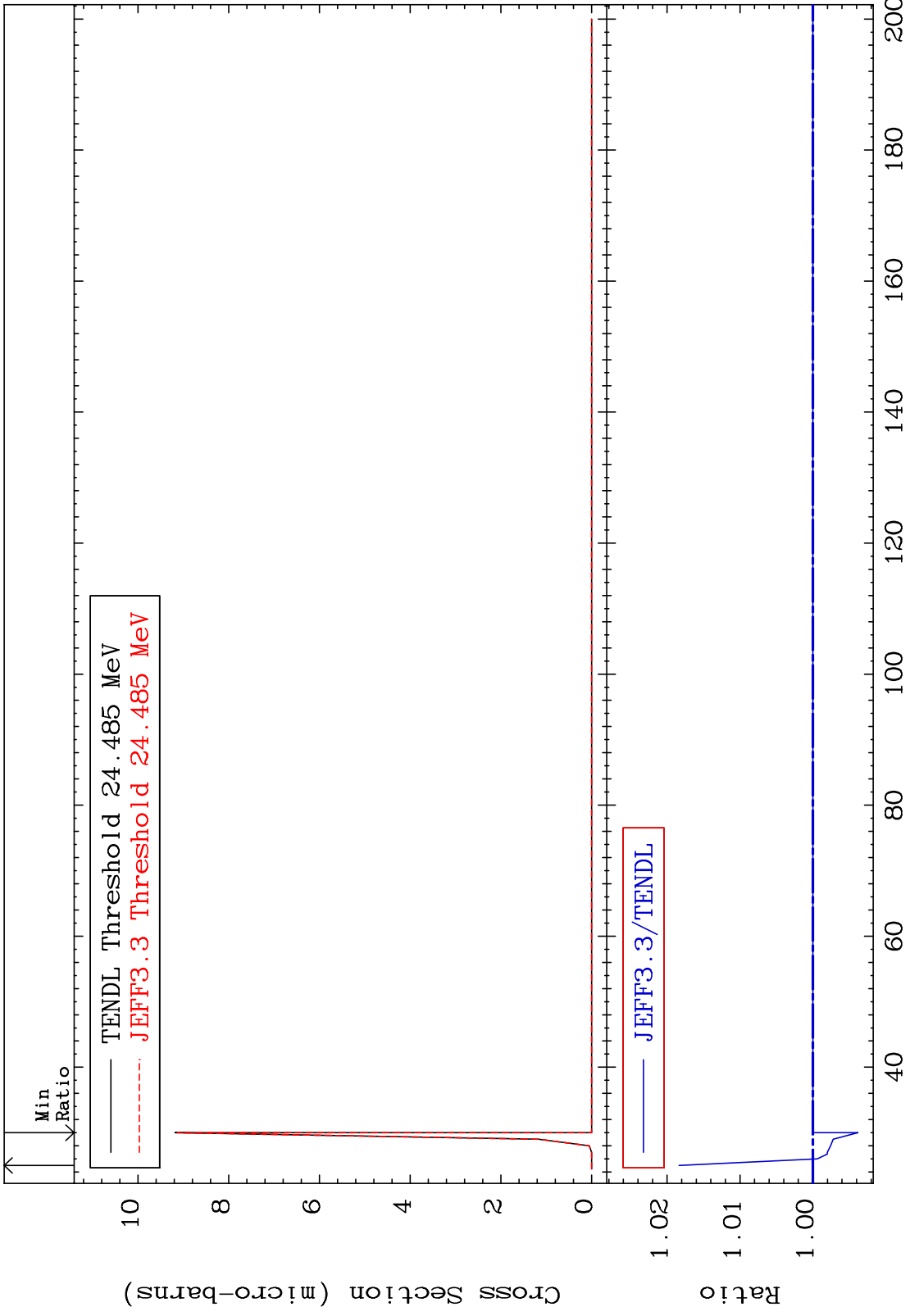
2

Incident Energy (eV)

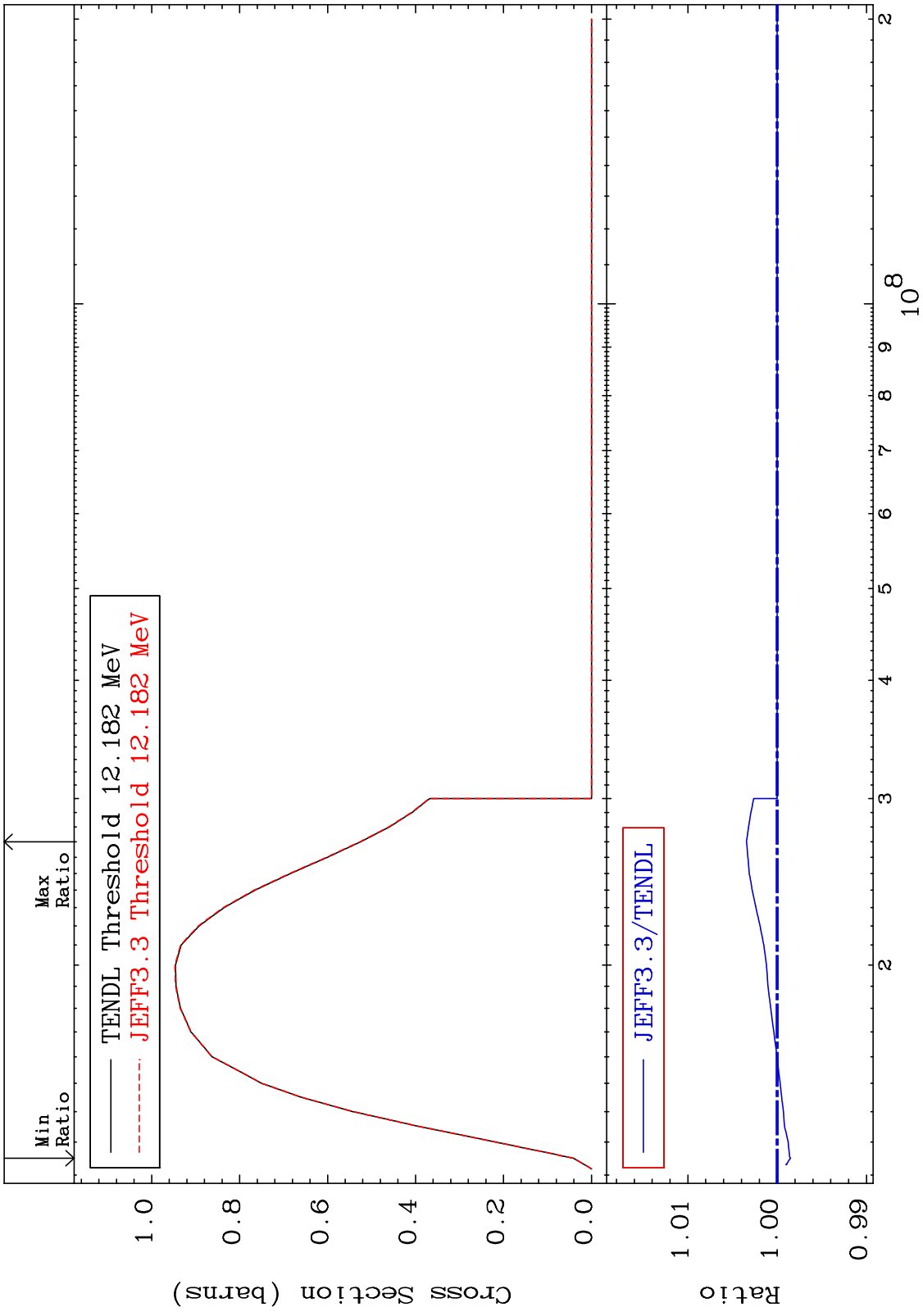
41-Nb-91



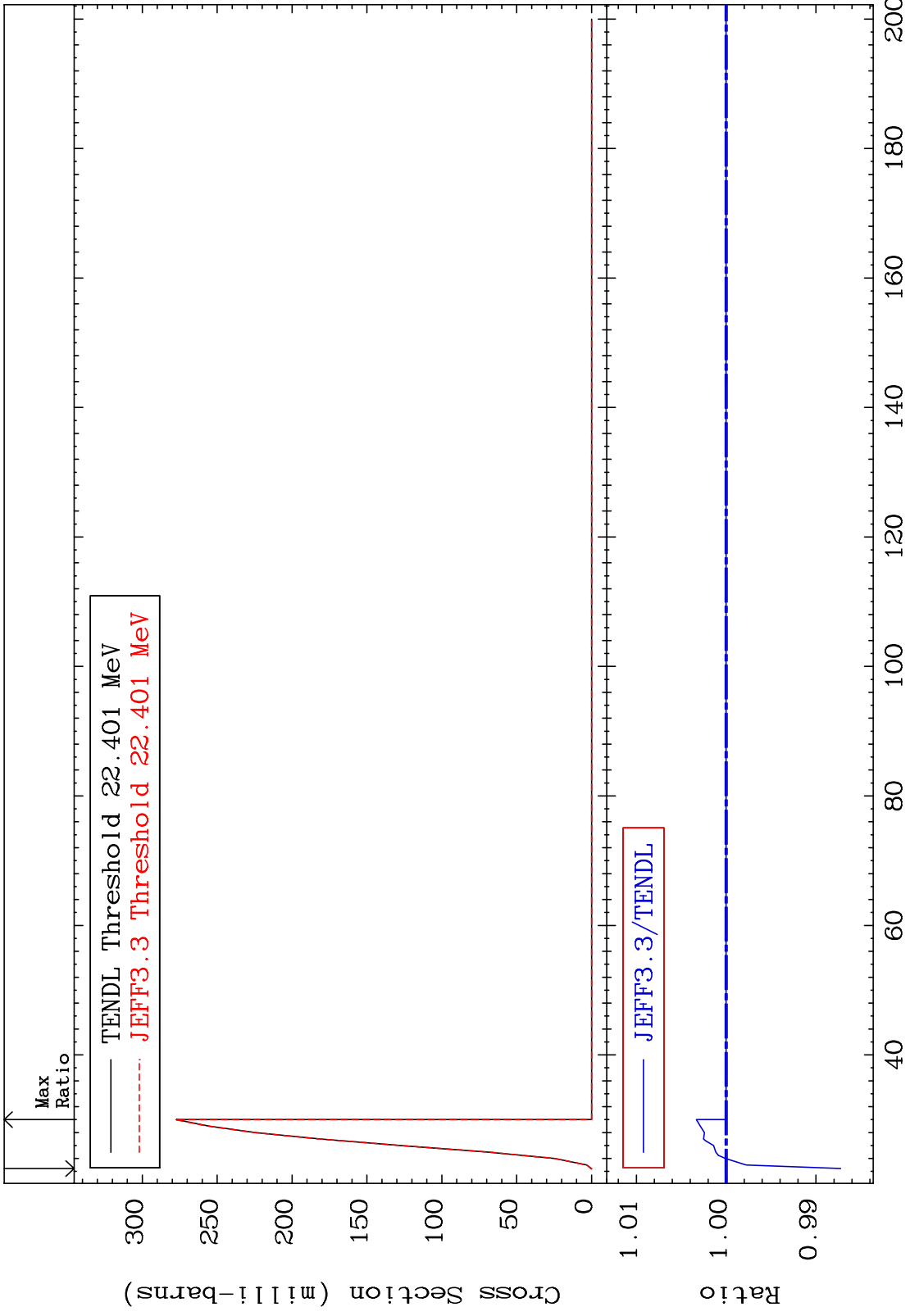
MAT 4119 (n,2n) d 41-Nb-91
Cross Section -0.618 To 1.835 %



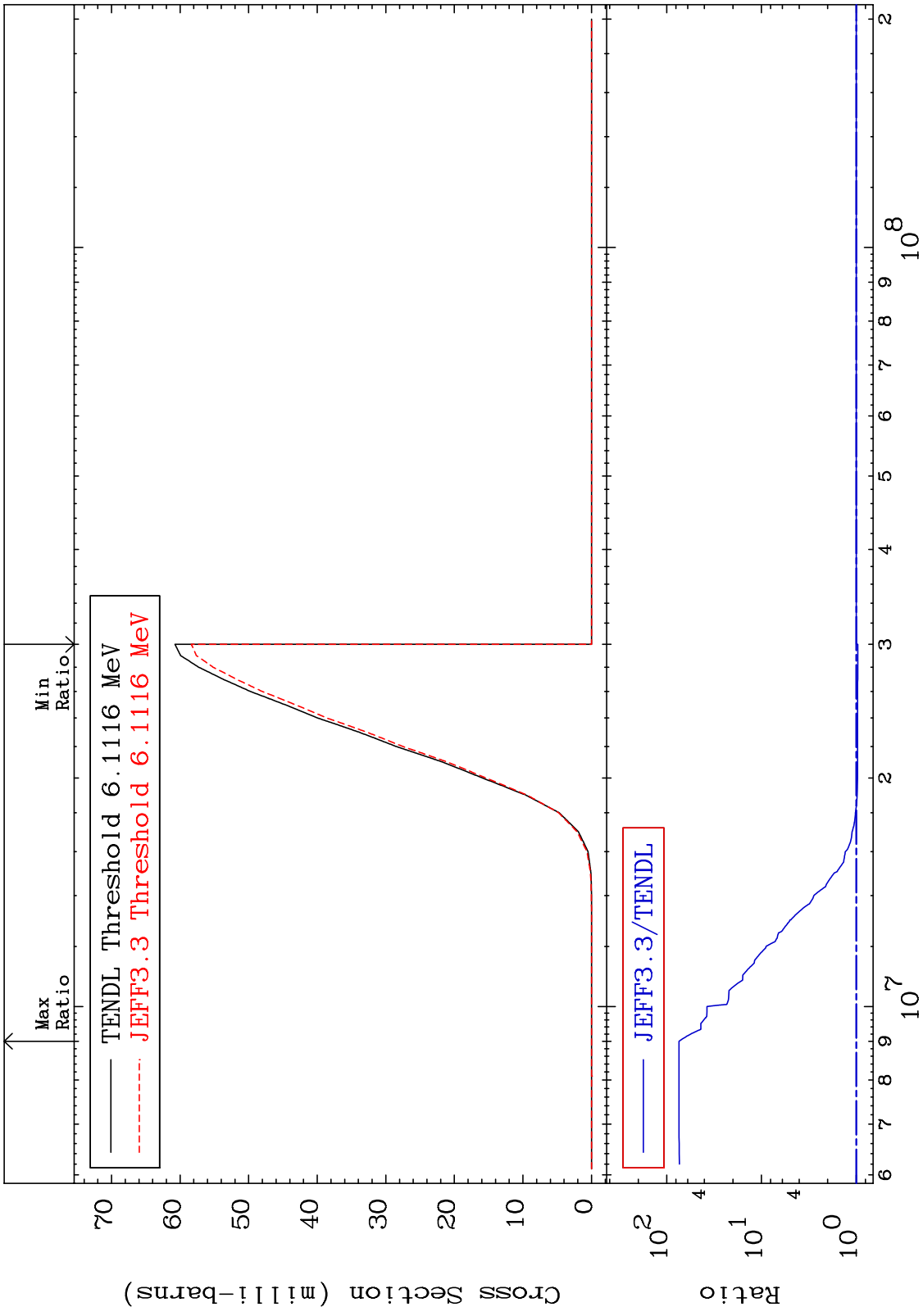
MAT 4119 41-Nb-91
(n,2n) -0.148 To 0.344 %
Cross Section



MAT 4119 (n,3n) 41-Nb-91
 Cross Section -1.275 To 0.331 %

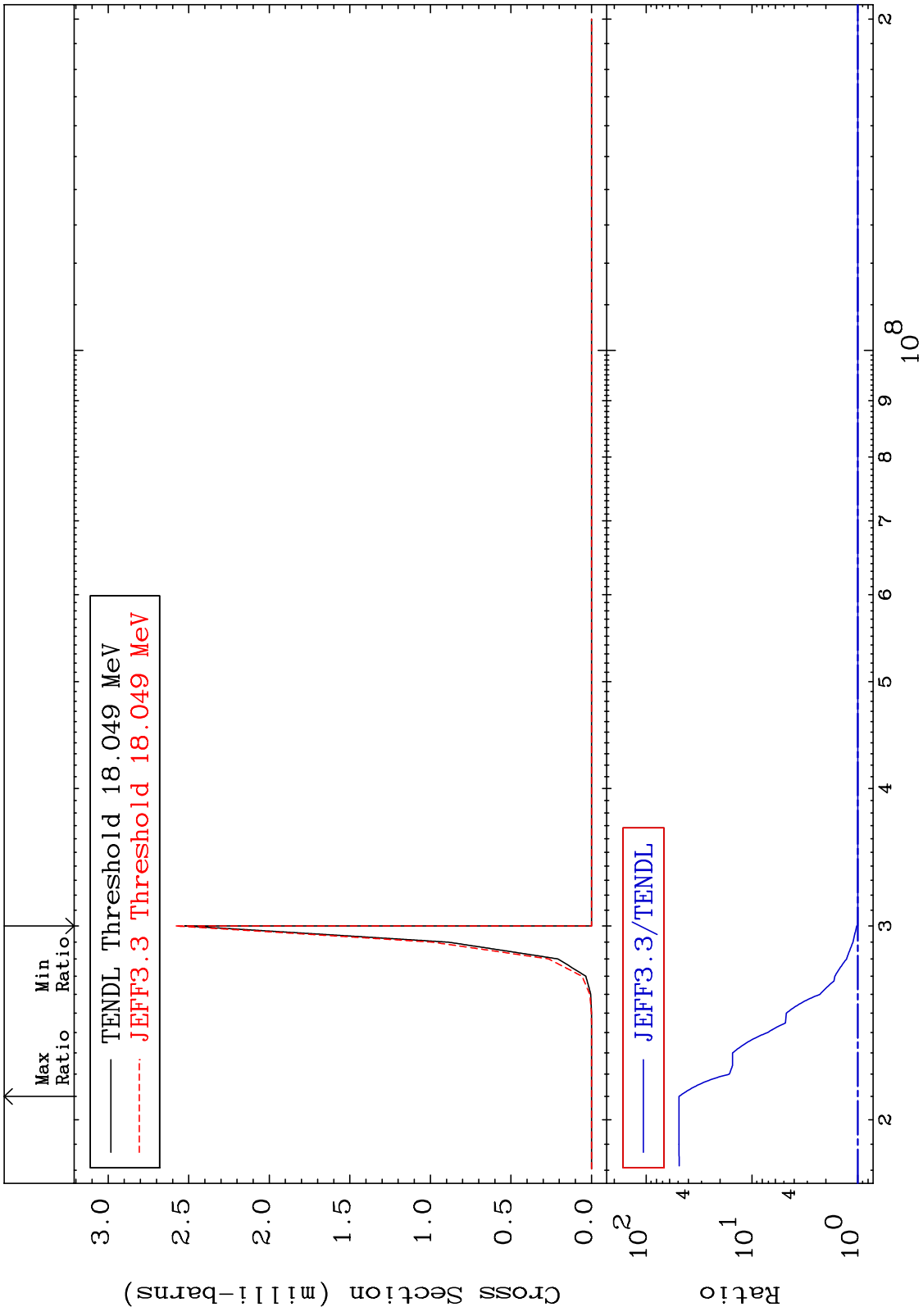


MAT 4119 $(n, n') \alpha$ 41-Nb-91
 Cross Section -3.945 To 7313. %



7 Incident Energy (eV) 41-Nb-91

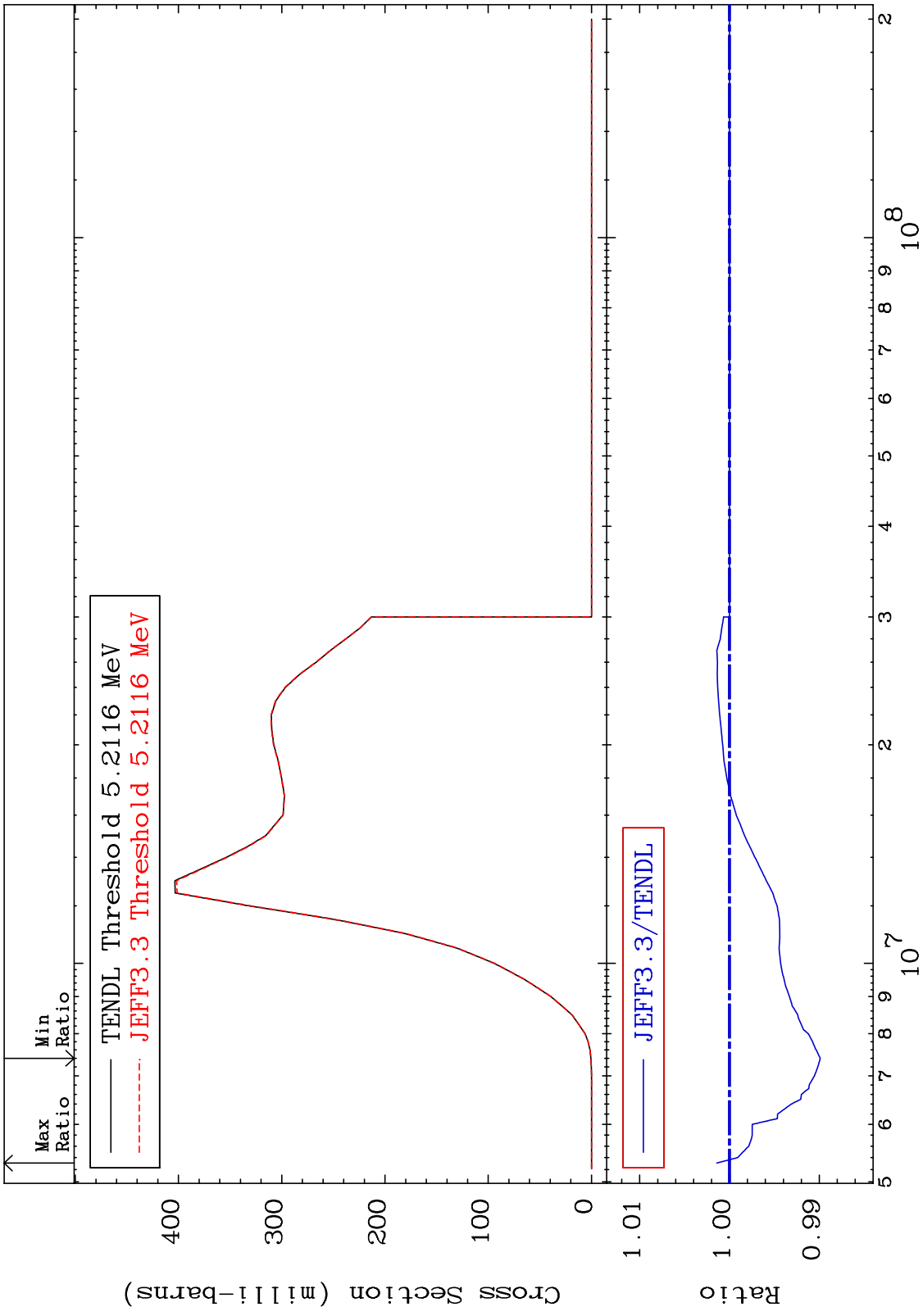
MAT 4119 (n,2n) α 41-Nb-91
 Cross Section 0.000 To 4791. %



41-Nb-91

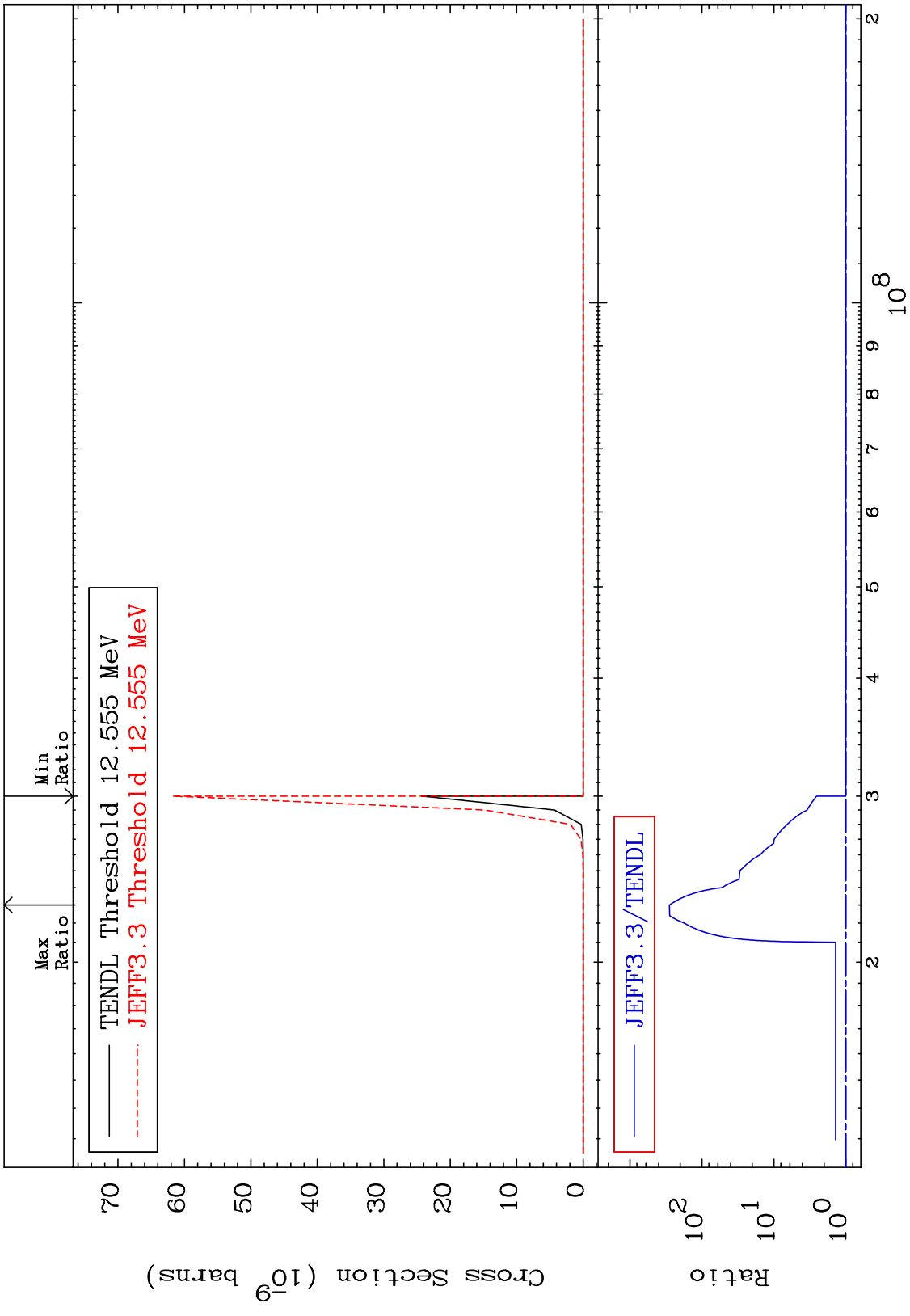
Incident Energy (eV)

MAT 4119 (n,n') p 41-Nb-91
Cross Section -1.009 To 0.142 %

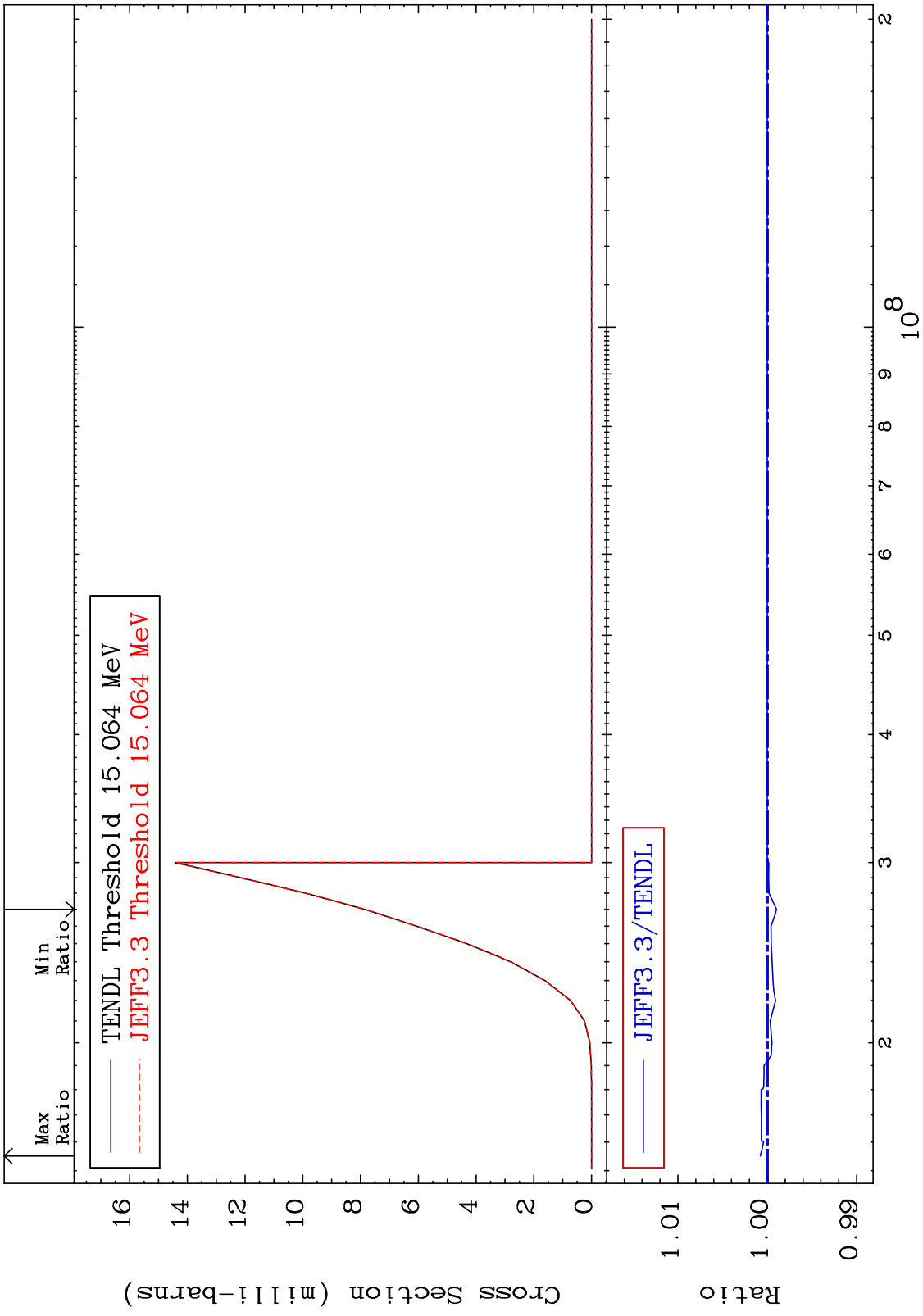


9 41-Nb-91

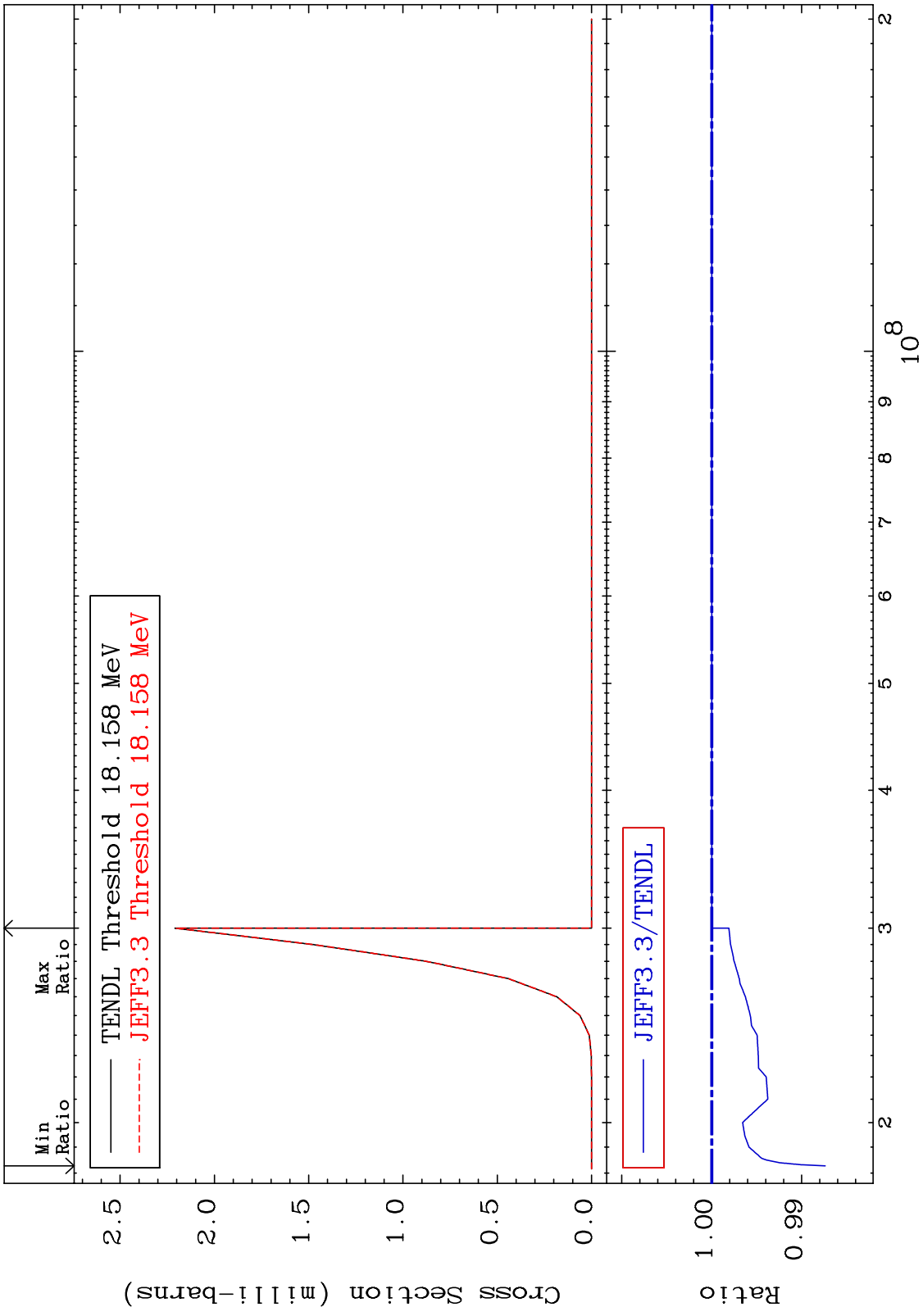
MAT 4119 (n,n') 2α Cross Section 41-Nb-91 To 9999. %



MAT 4119 (n, n') d 41-Nb-91
 Cross Section -0.103 To 0.078 %



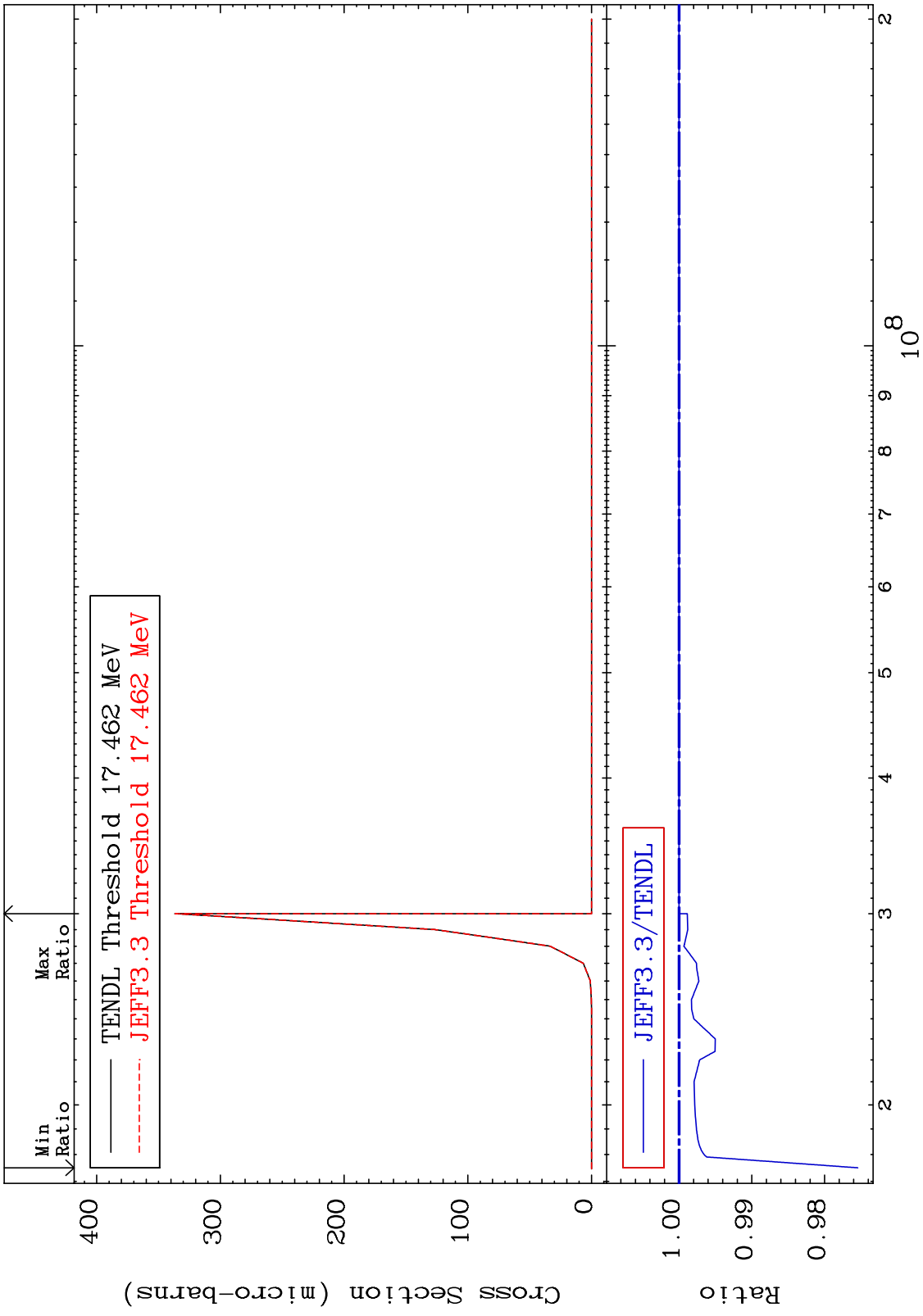
MAT 4119 (n,n') t 41-Nb-91
Cross Section -1.261 To 0.000 %



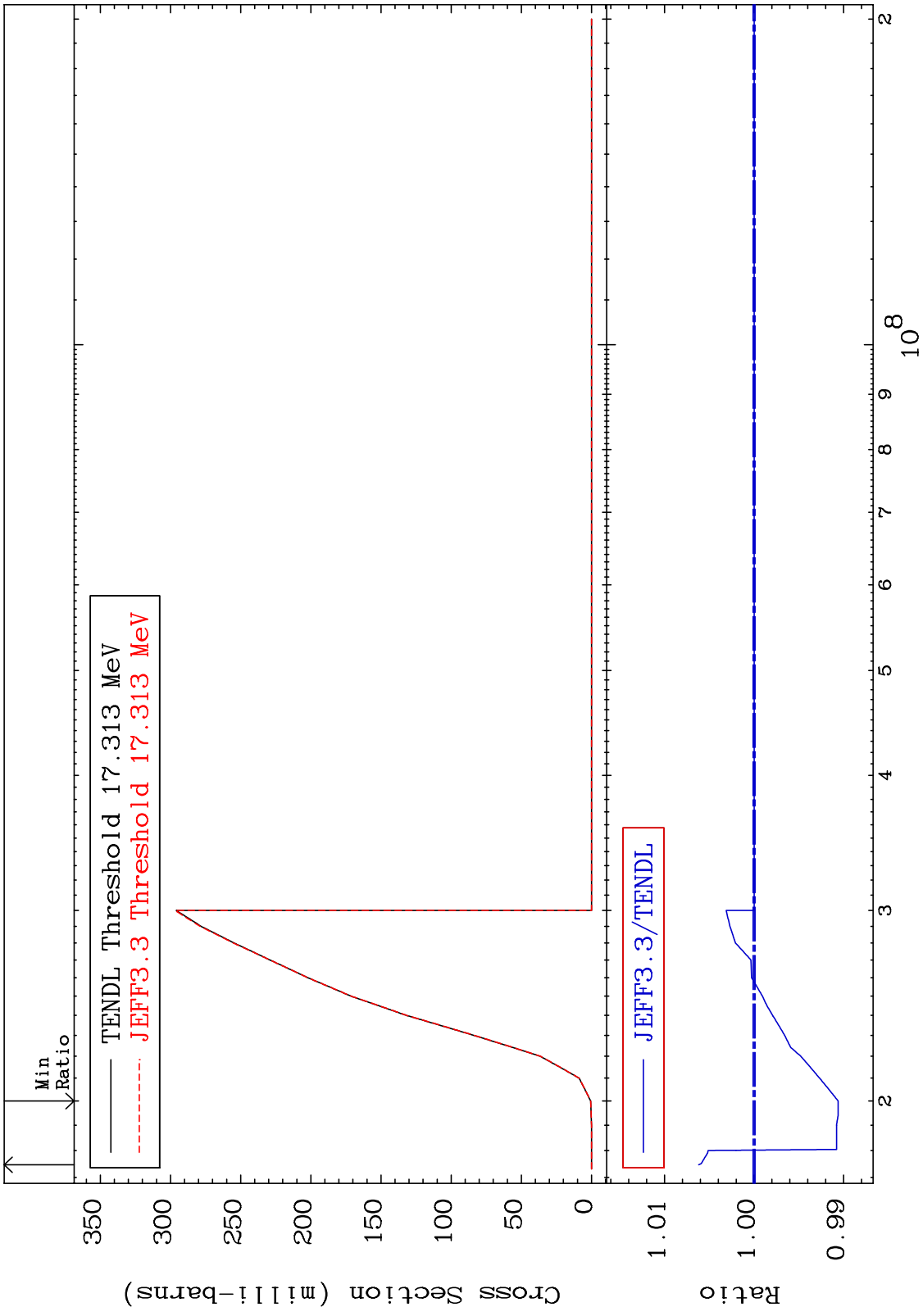
41-Nb-91

Incident Energy (eV)

MAT 4119 (n, n') He-3 41-Nb-91
 Cross Section -2.457 To 0.000 %



MAT 4119 (n,2n) p 41-Nb-91
 Cross Section -0.940 To 0.619 %



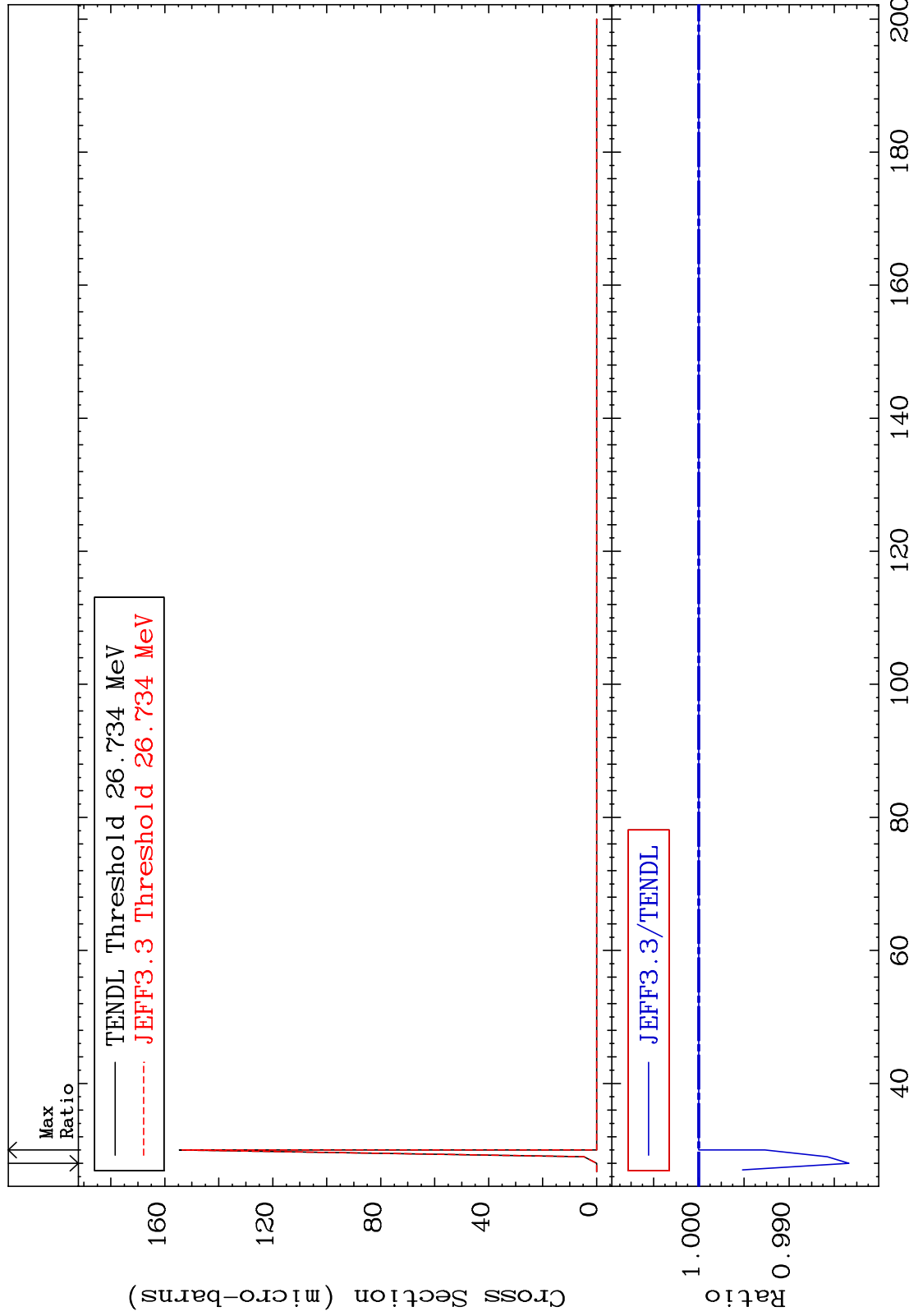
MAT 4119

(n,3n) p

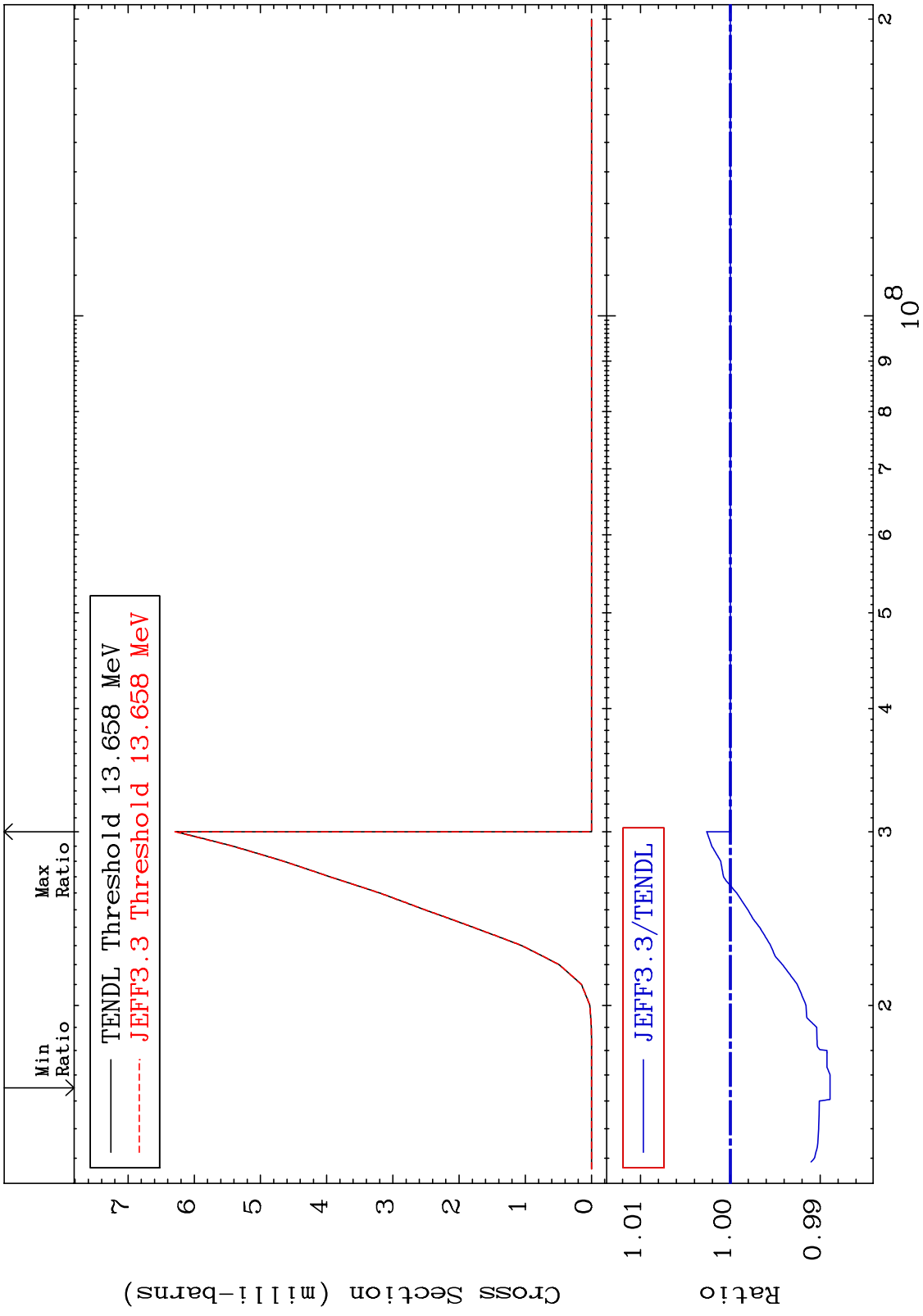
41-Nb-91

Cross Section

-1.663 To 0.000 %



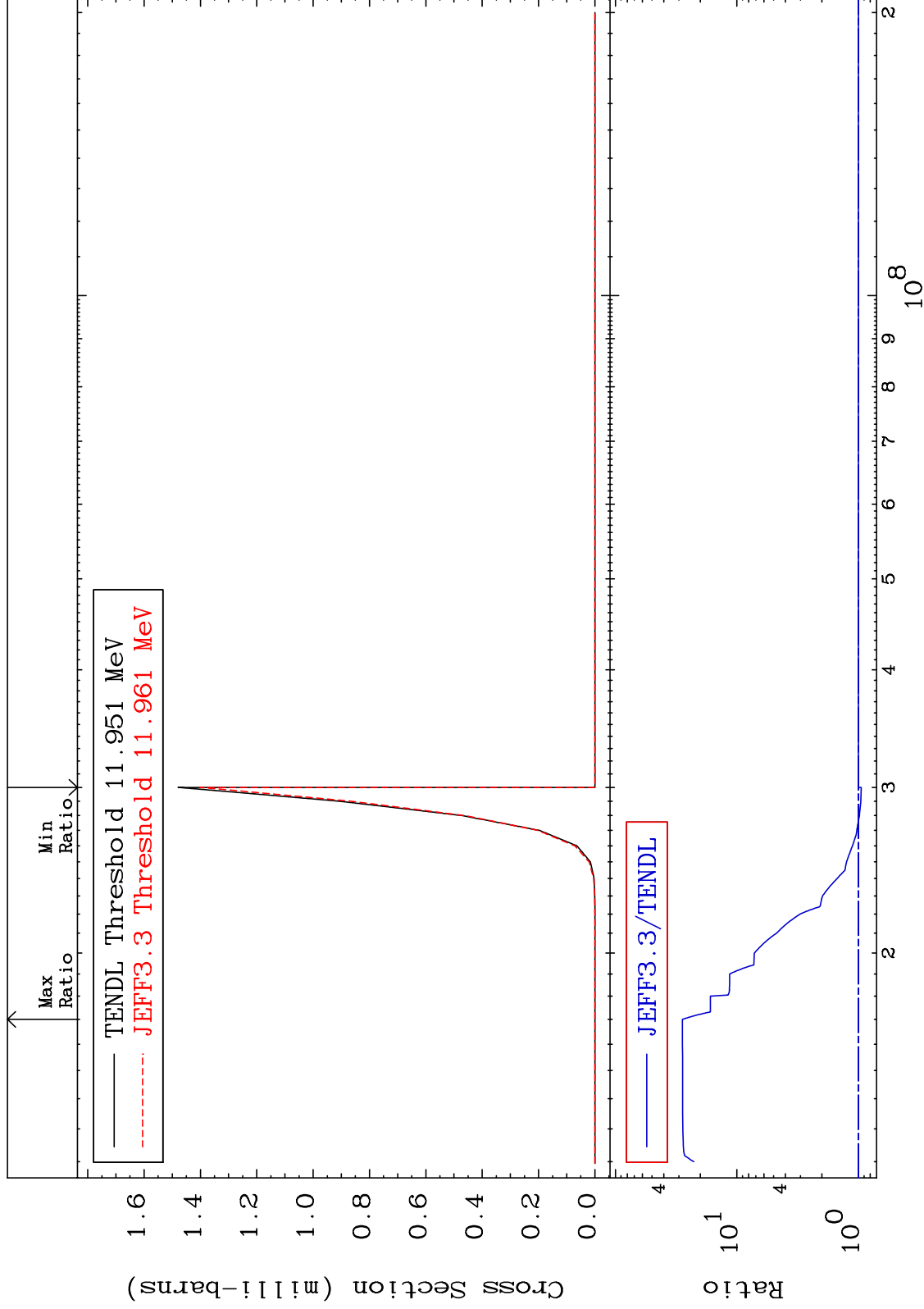
MAT 4119 (n,2n) p 41-Nb-91
 Cross Section -1.112 To 0.262 %



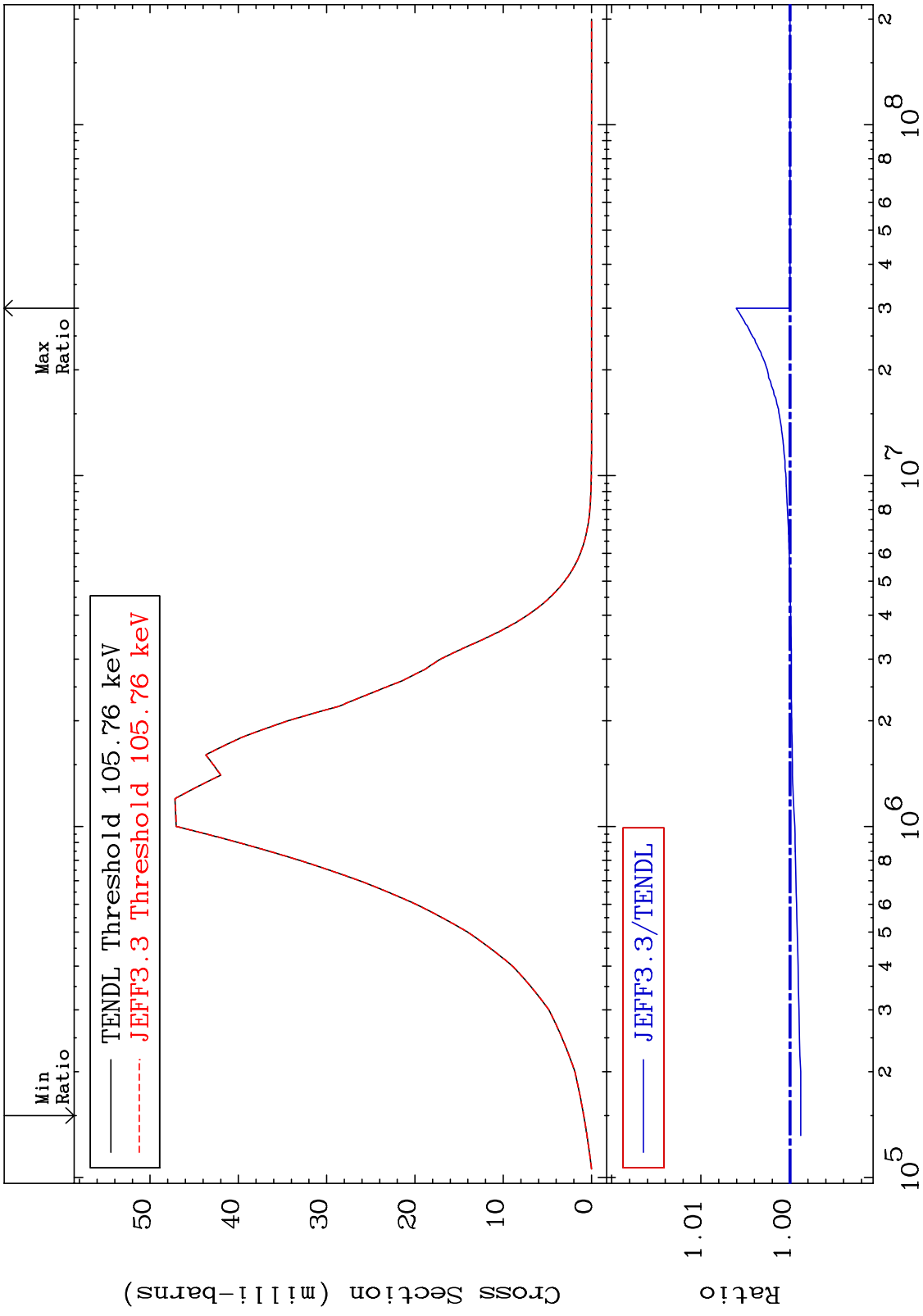
MAT 4119

(n,n') p α
Cross Section

41-Nb-91
-5.298 To 2708. %

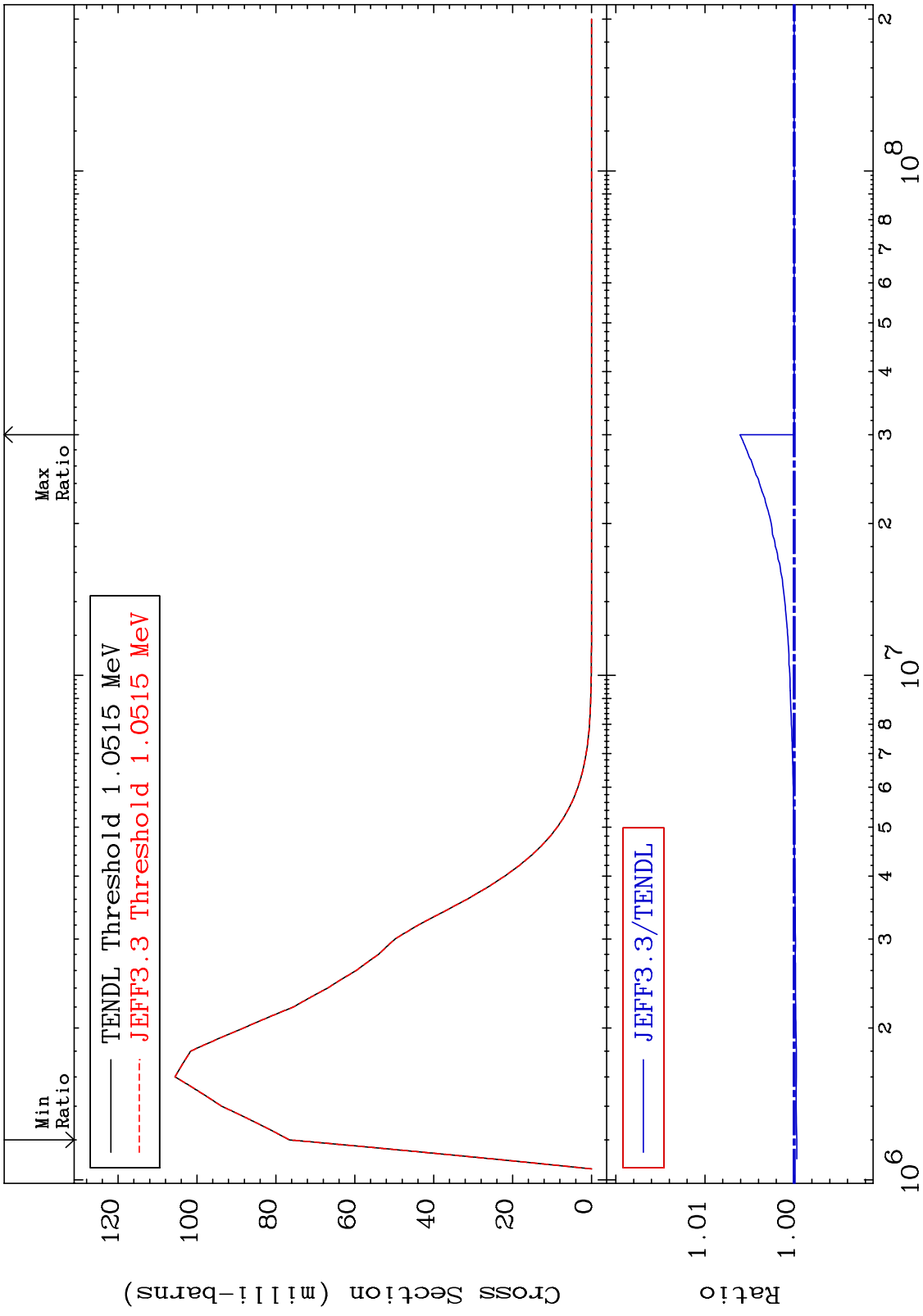


MAT 4119 MT= 51 (n,n') Level Cross Section 41-Nb-91
 -0.119 To 0.604 %

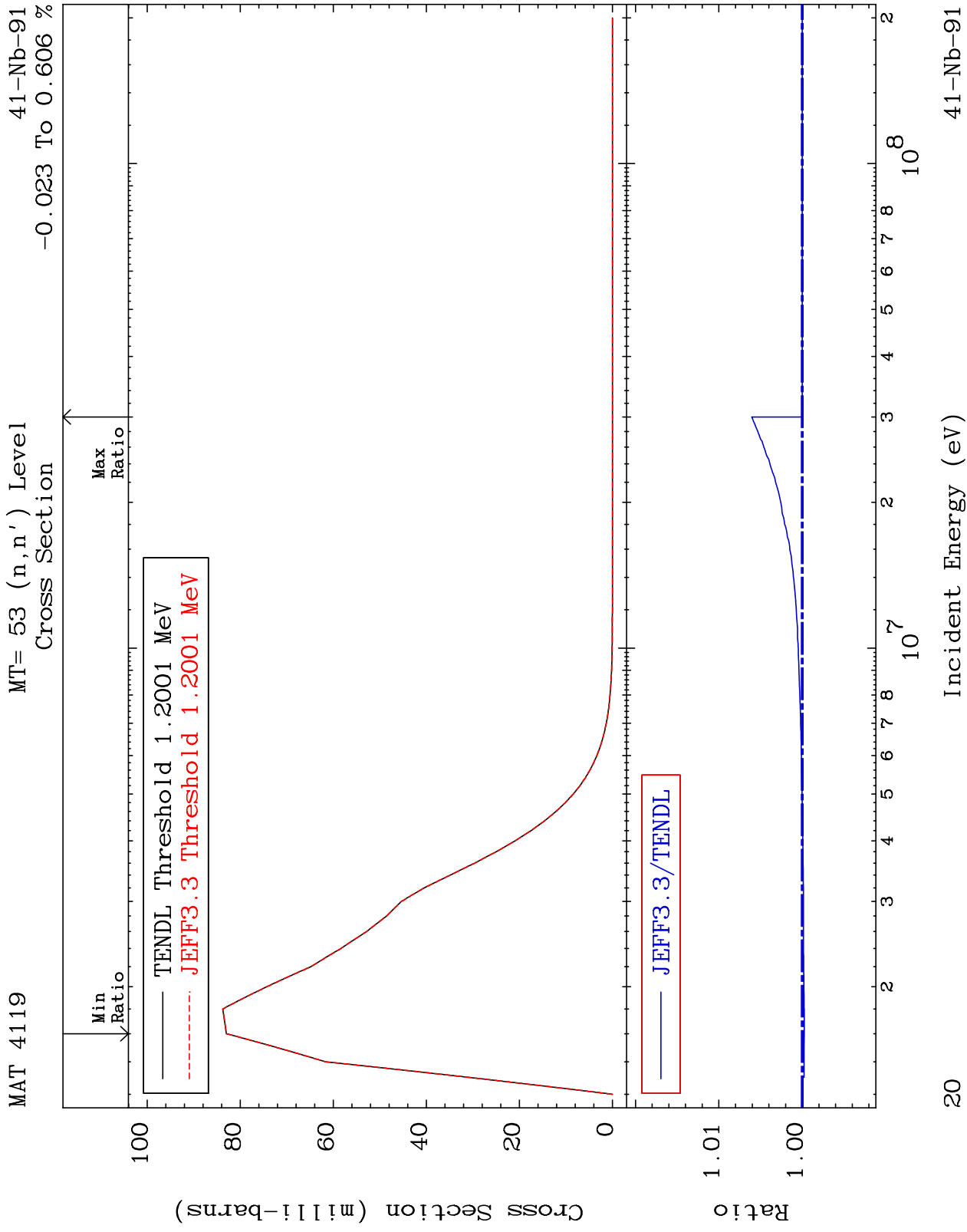


18 41-Nb-91

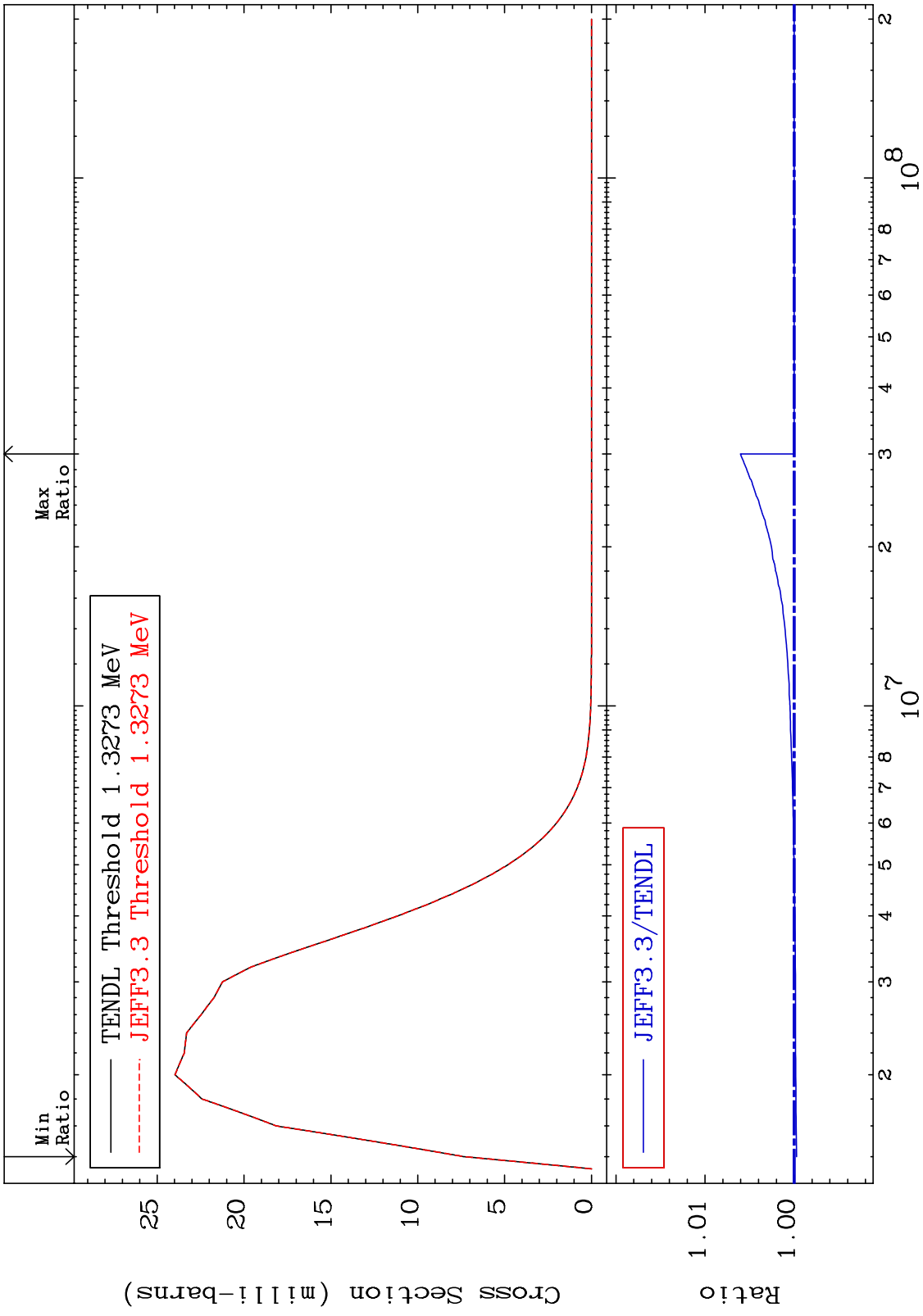
MAT 4119 MT= 52 (n,n') Level Cross Section 41-Nb-91 -0.031 To 0.606 %



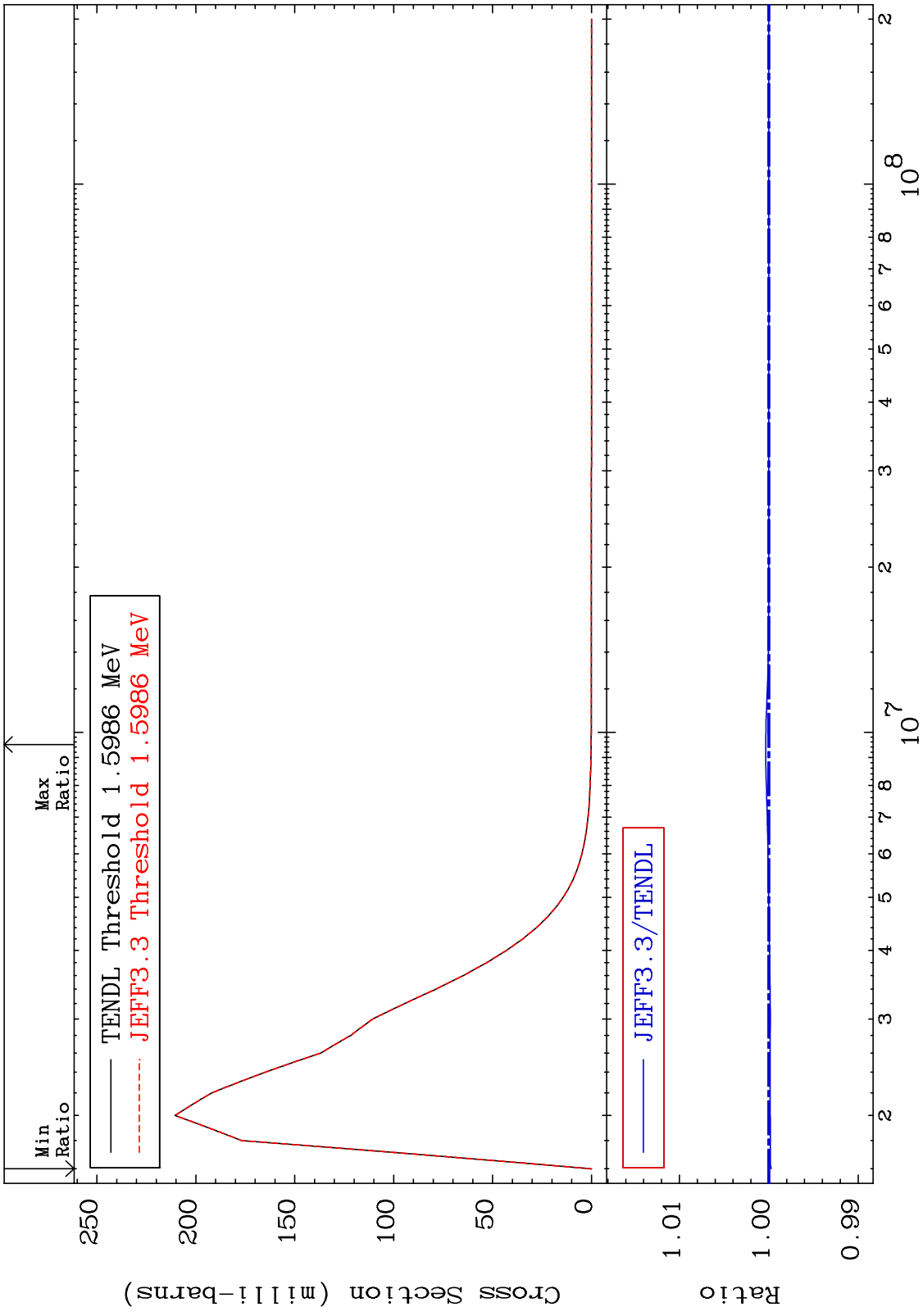
19 Incident Energy (eV) 41-Nb-91

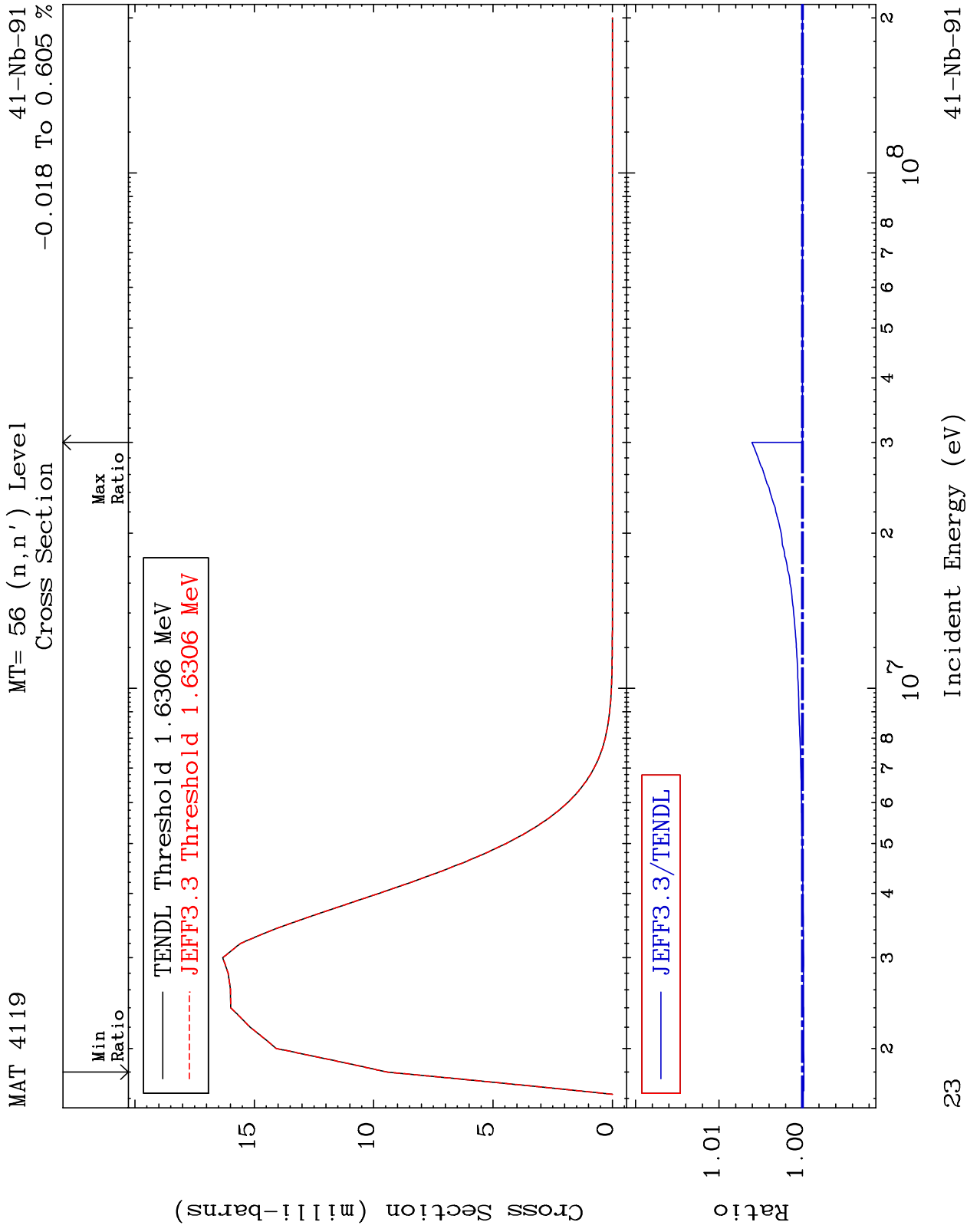


MAT 4119 MT= 54 (n,n') Level Cross Section 41-Nb-91
 -0.026 To 0.605 %



MAT 4119 MT= 55 (n,n') Level Cross Section 41-Nb-91 -0.027 To 0.034 %

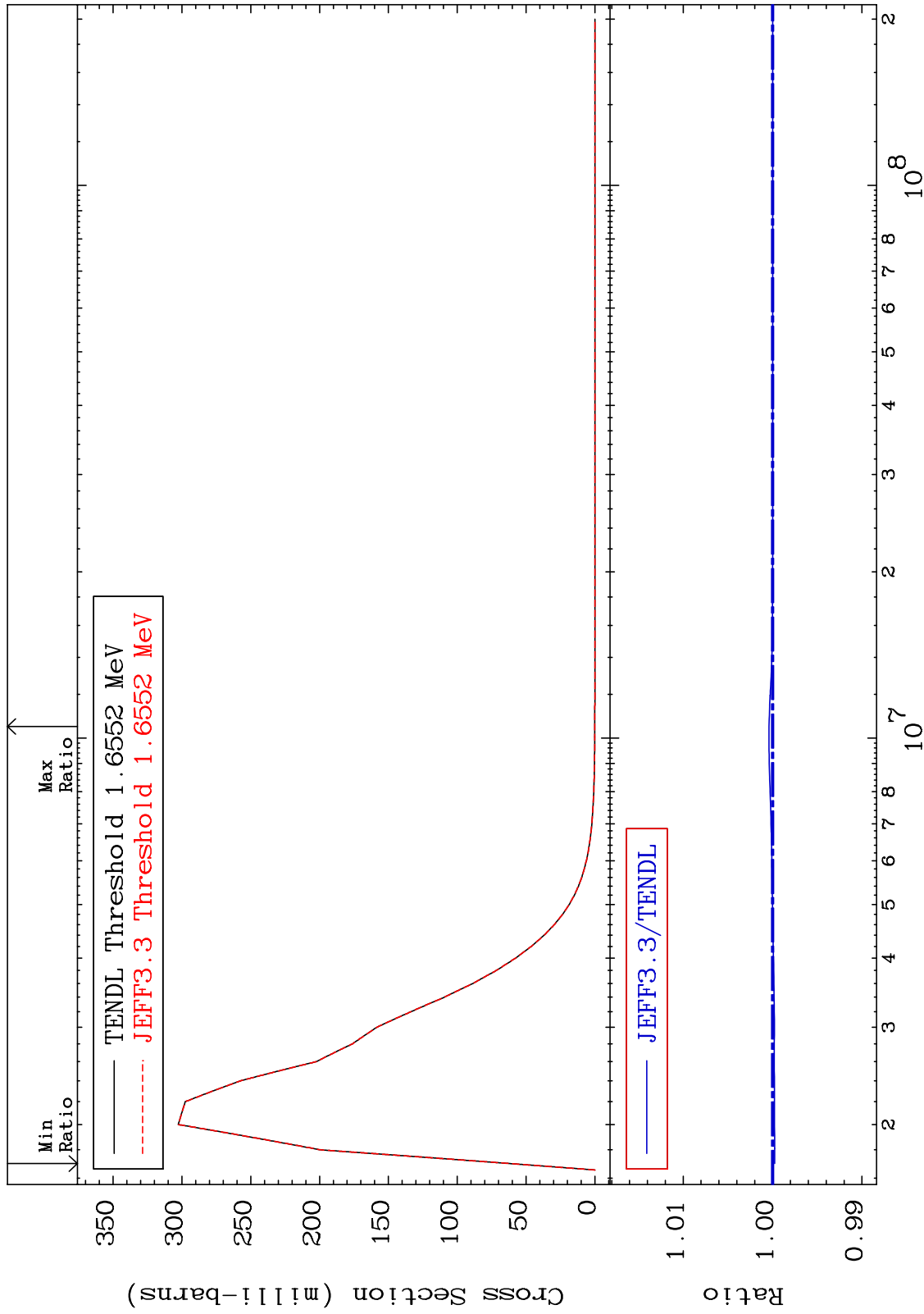




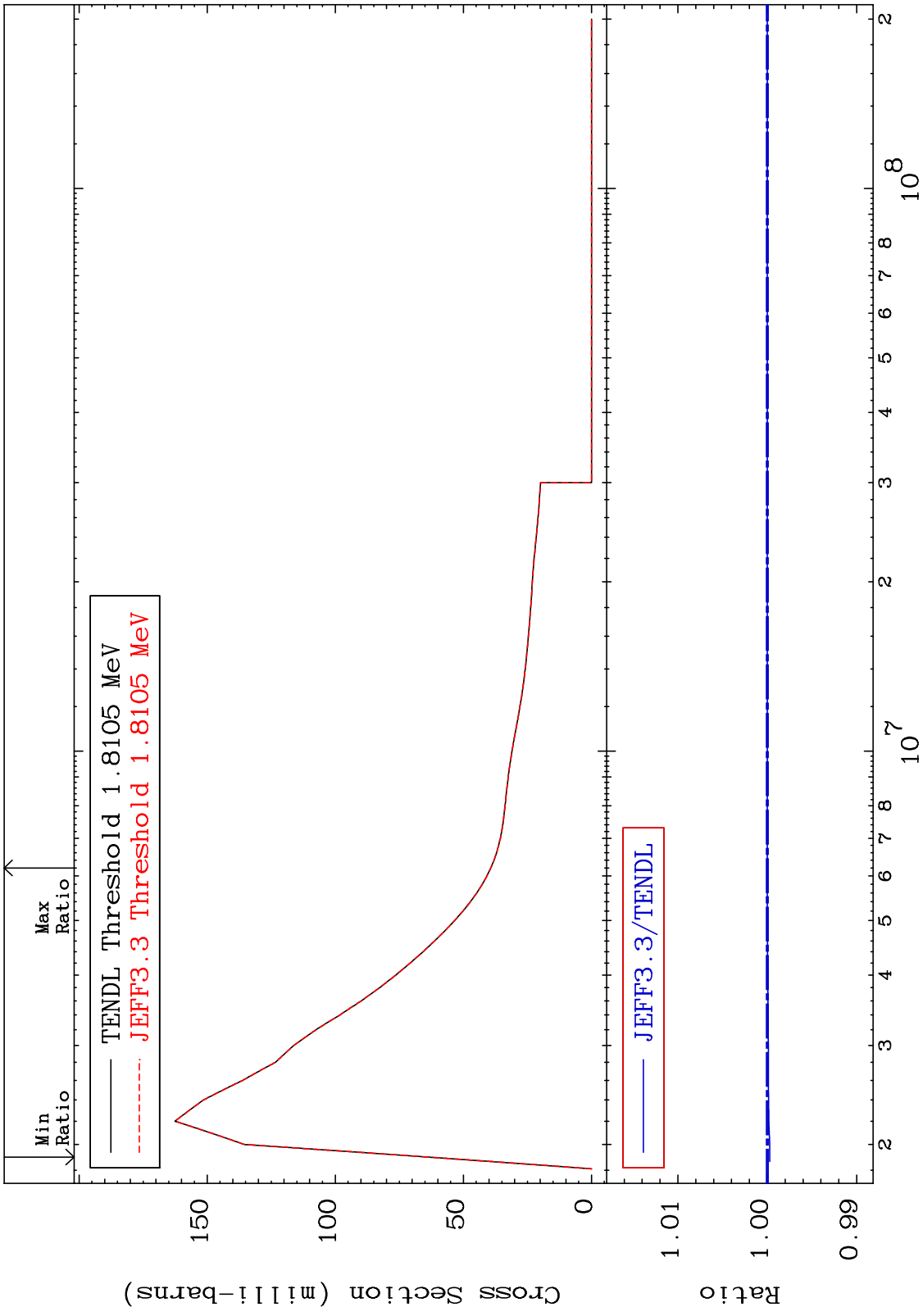
MAT 4119

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

41-Nb-91
-0.024 To 0.040 %

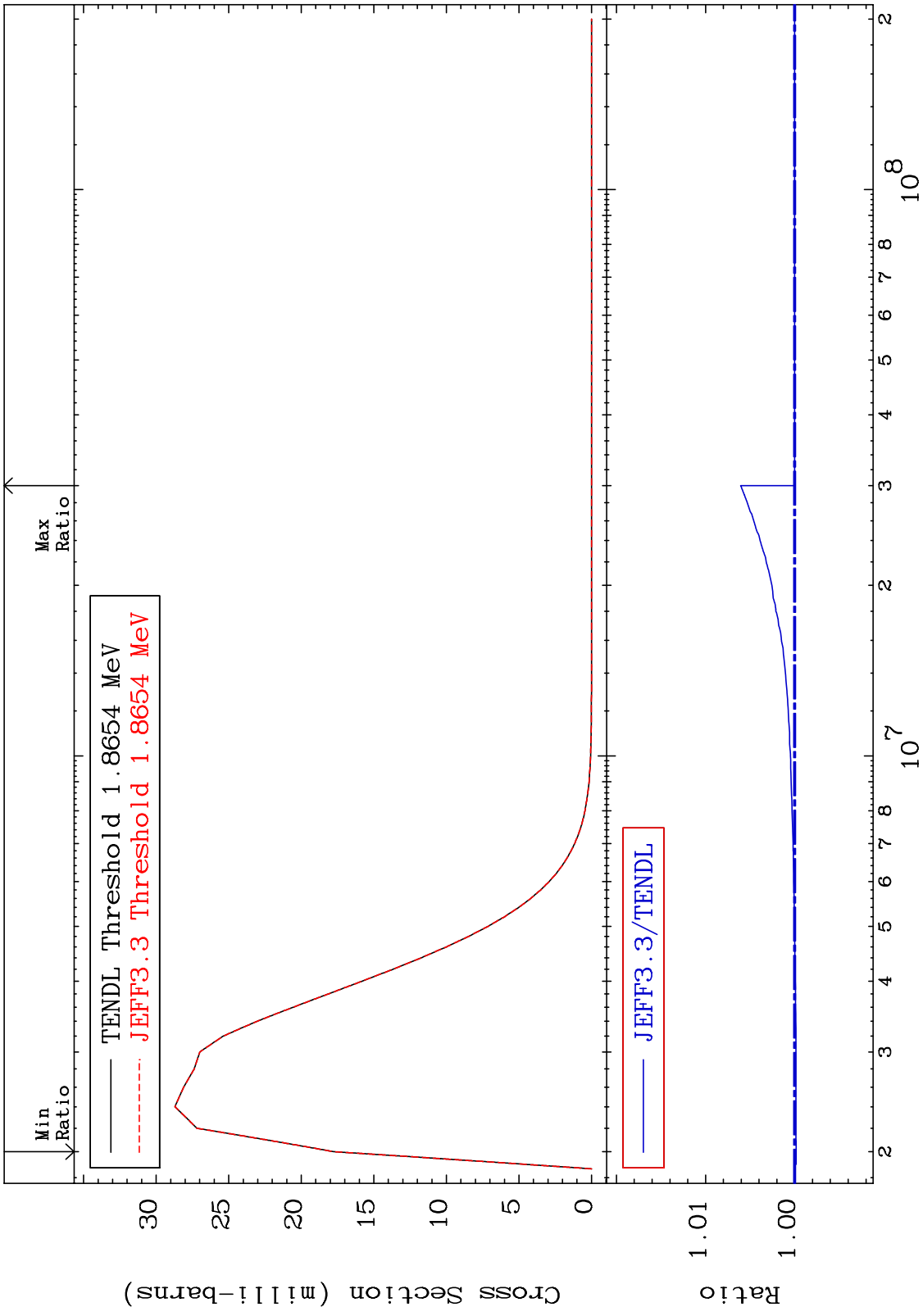


MAT 4119 MT= 58 (n,n') Level Cross Section 41-Nb-91 -0.027 To 0.001 %



25 41-Nb-91 Incident Energy (eV)

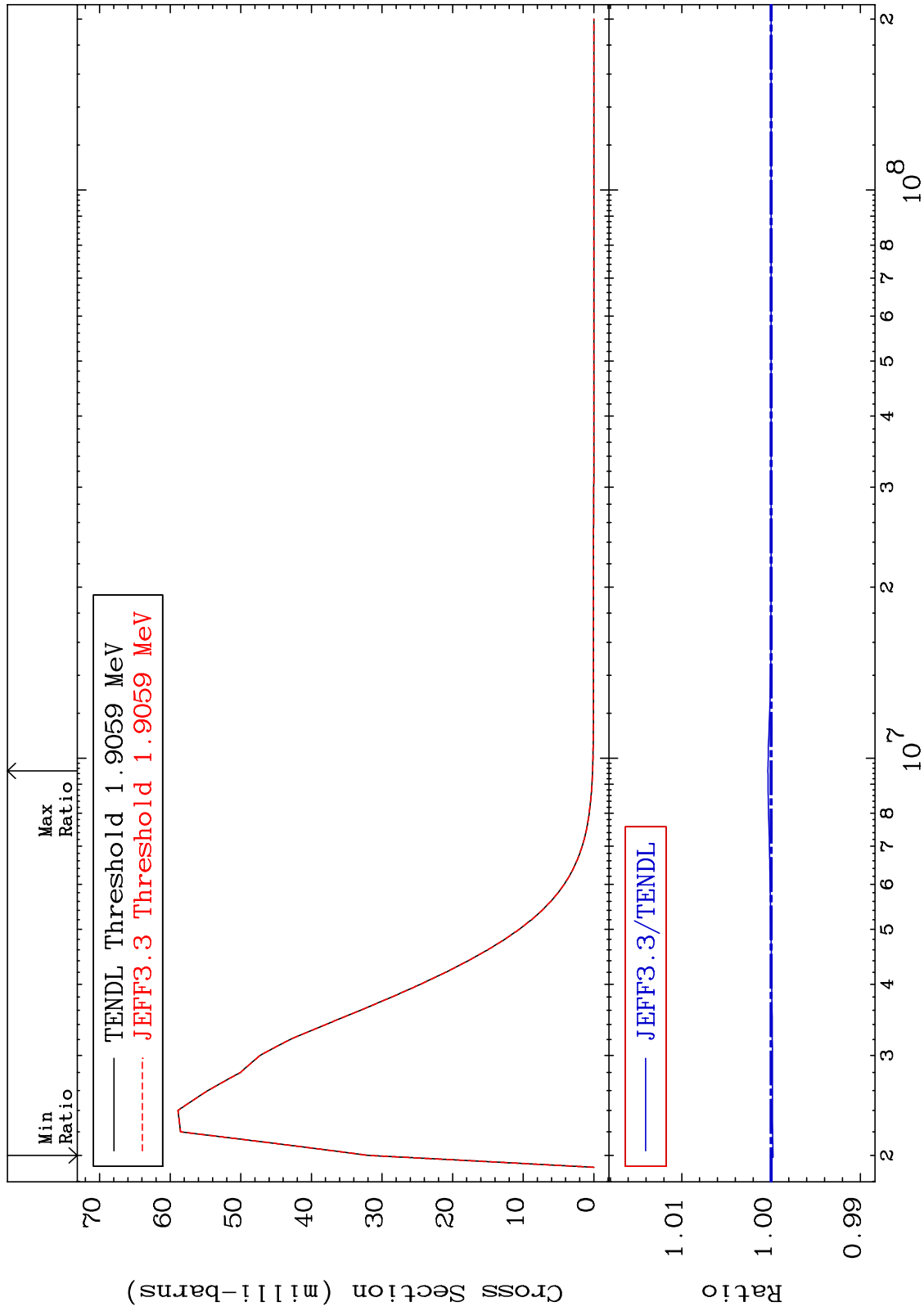
MAT 4119 MT= 59 (n,n') Level Cross Section 41-Nb-91
 -0.017 To 0.606 %



MAT 4119

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

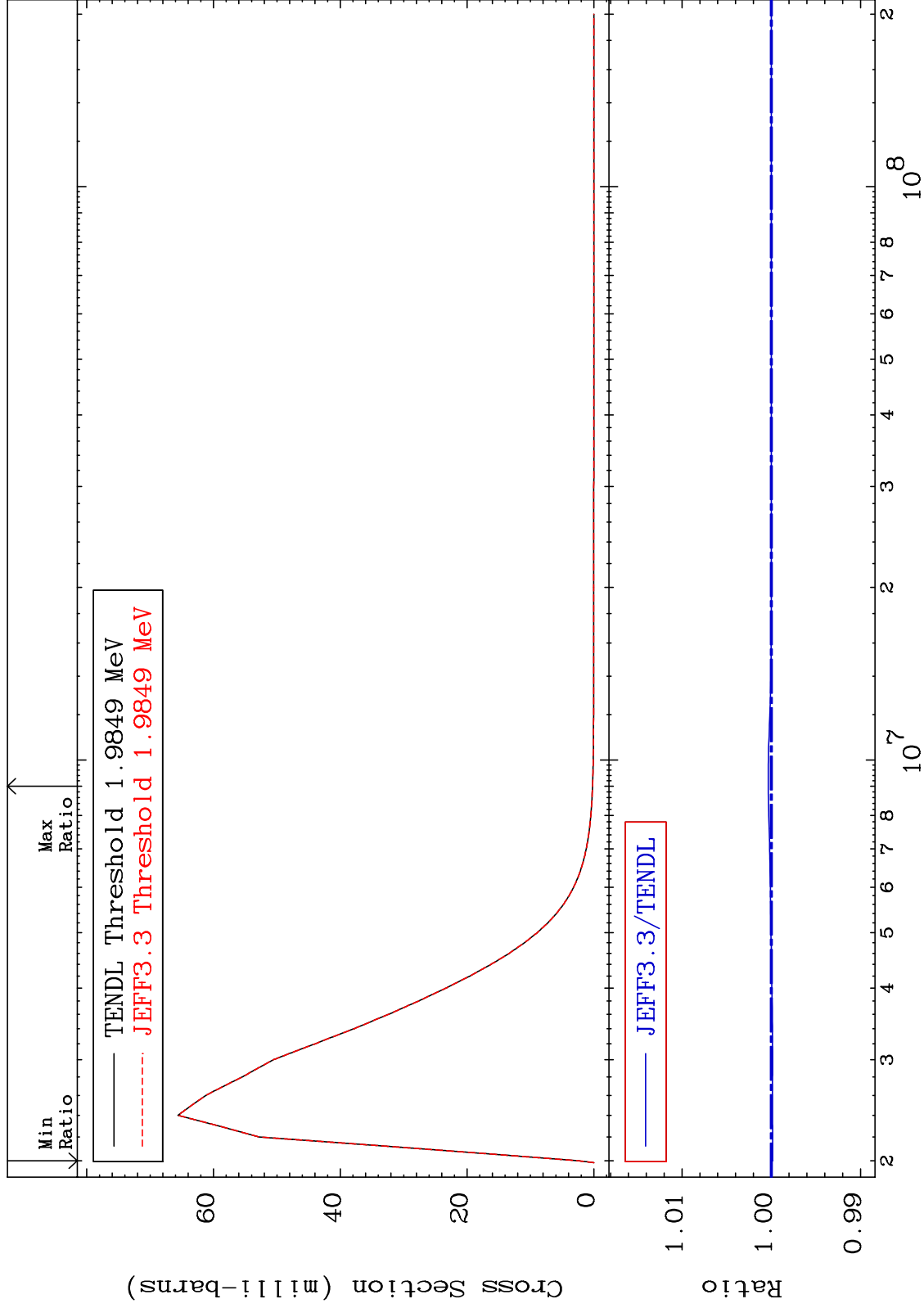
41-Nb-91
-0.023 To 0.035 %



MAT 4119

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

41-Nb-91
-0.018 To 0.034 %



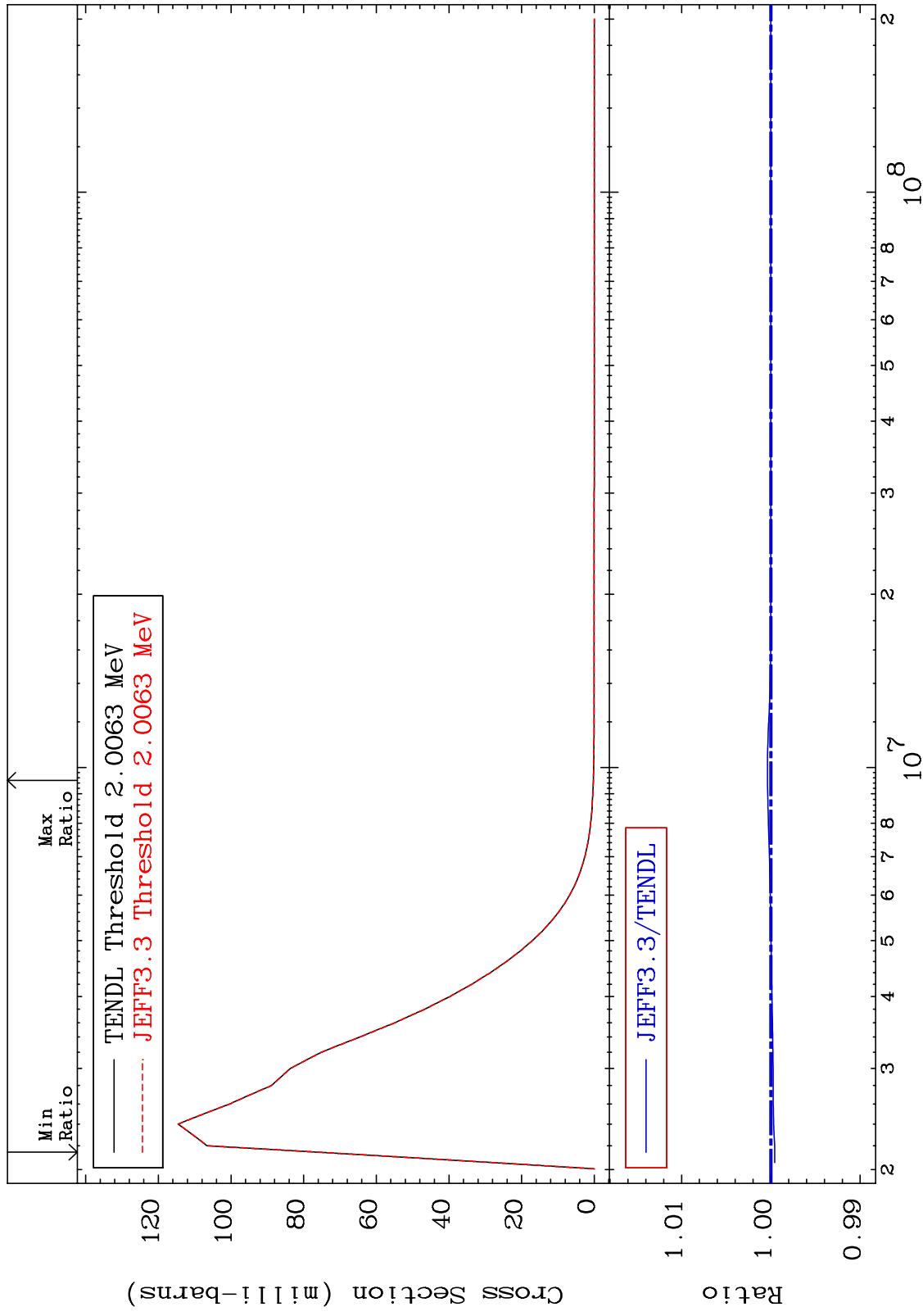
28

41-Nb-91

MAT 4119

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

41-Nb-91
-0.042 To 0.038 %



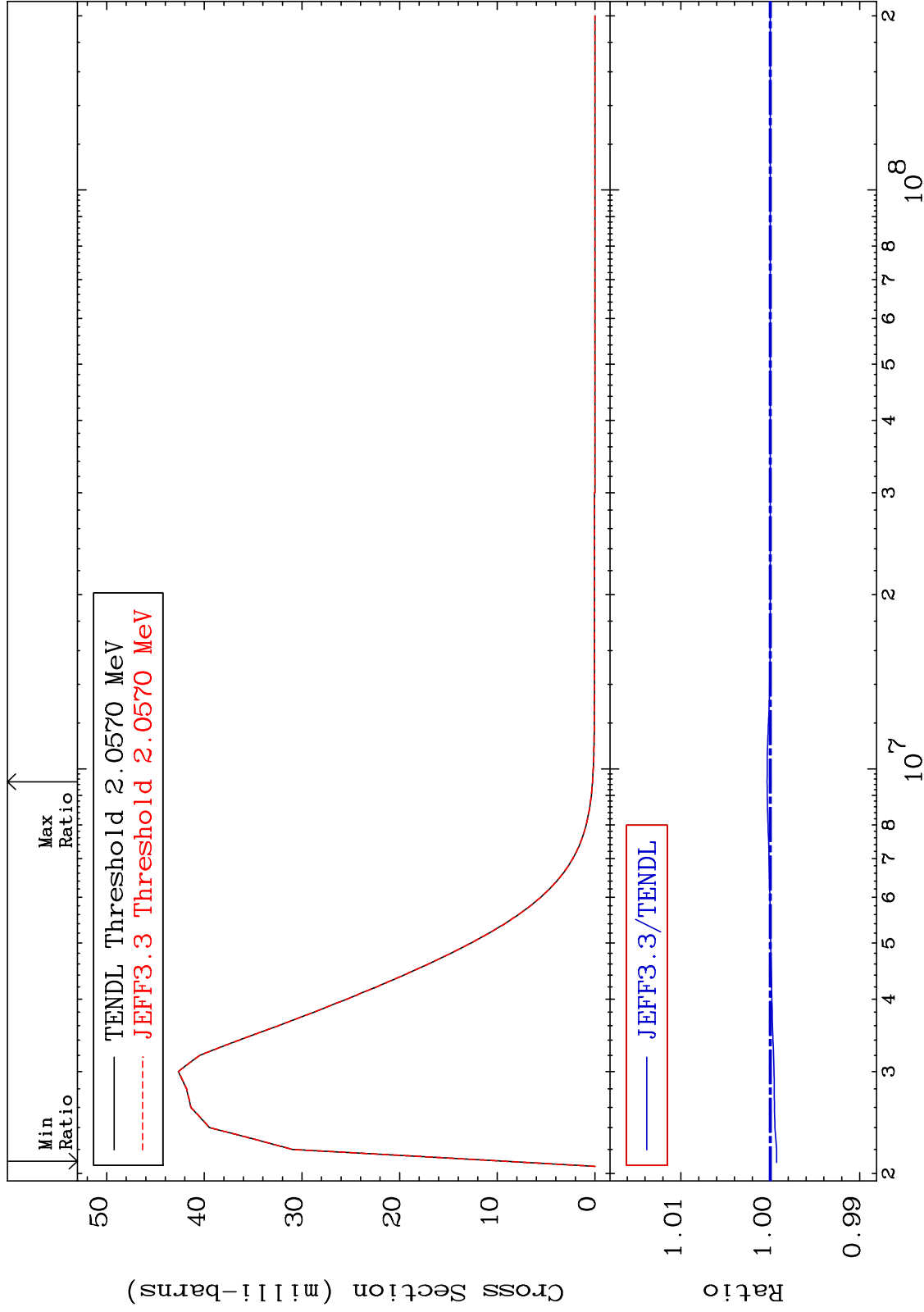
29

41-Nb-91

MAT 4119

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

41-Nb-91
-0.071 To 0.036 %

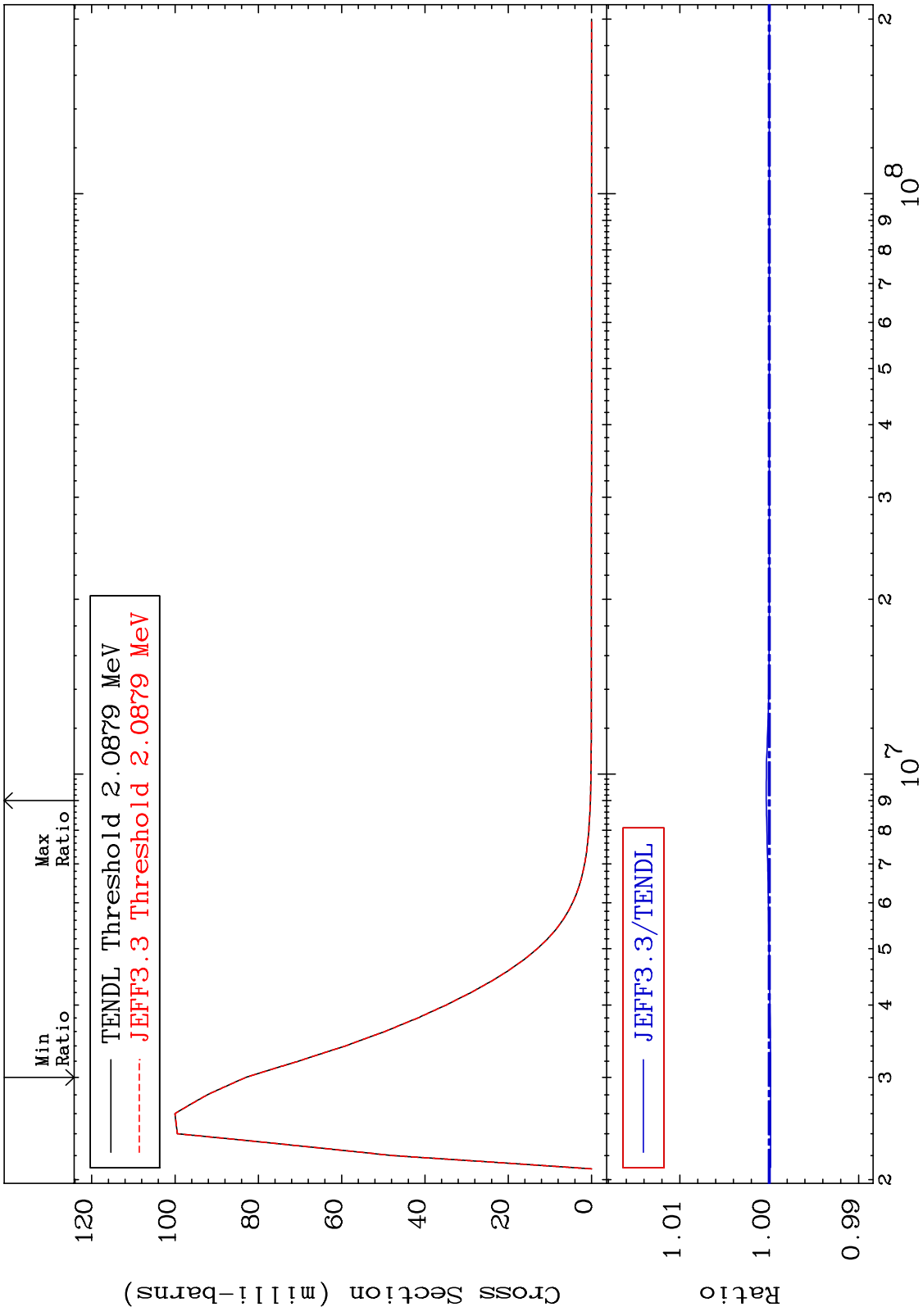


30

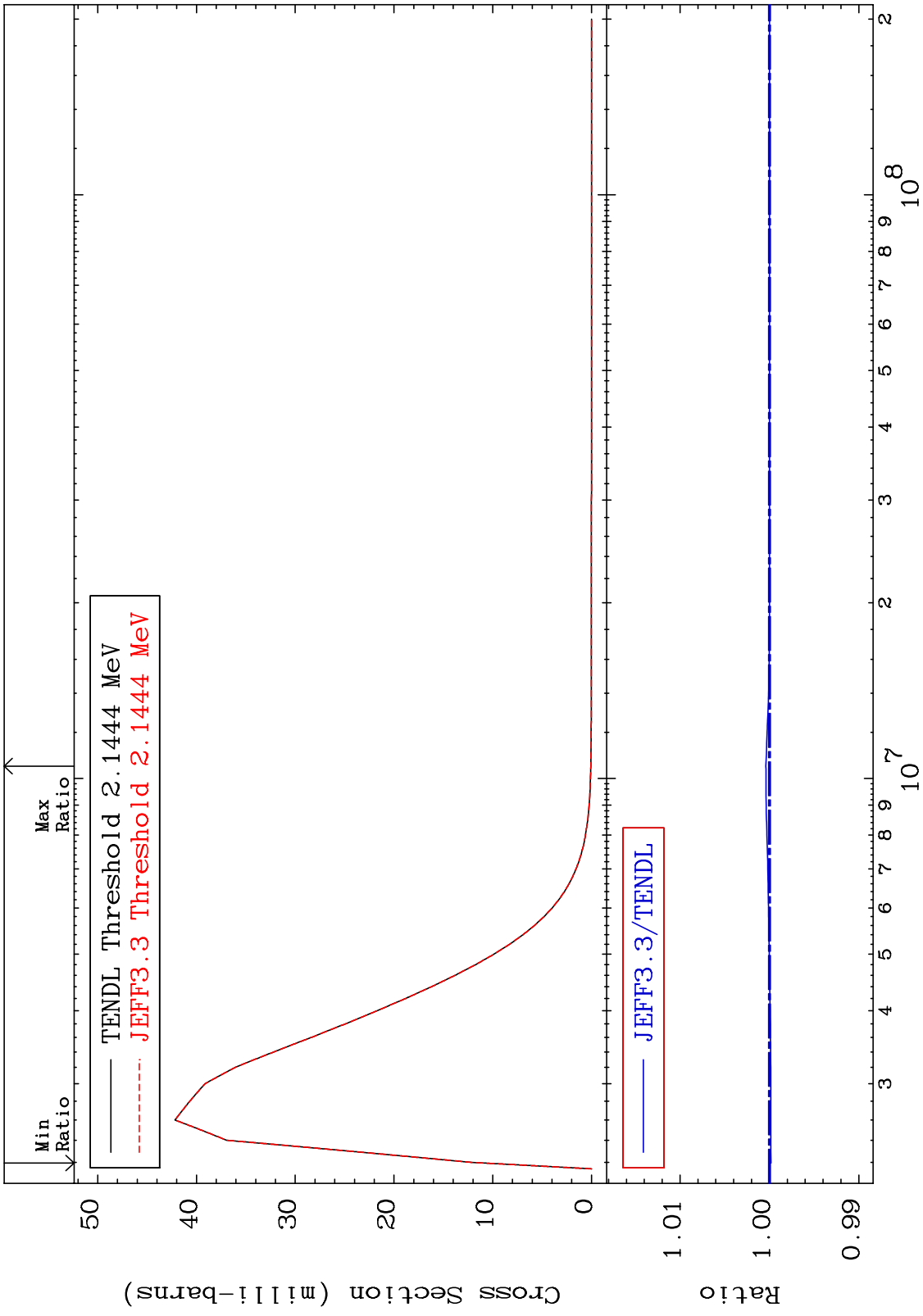
Incident Energy (eV)

41-Nb-91

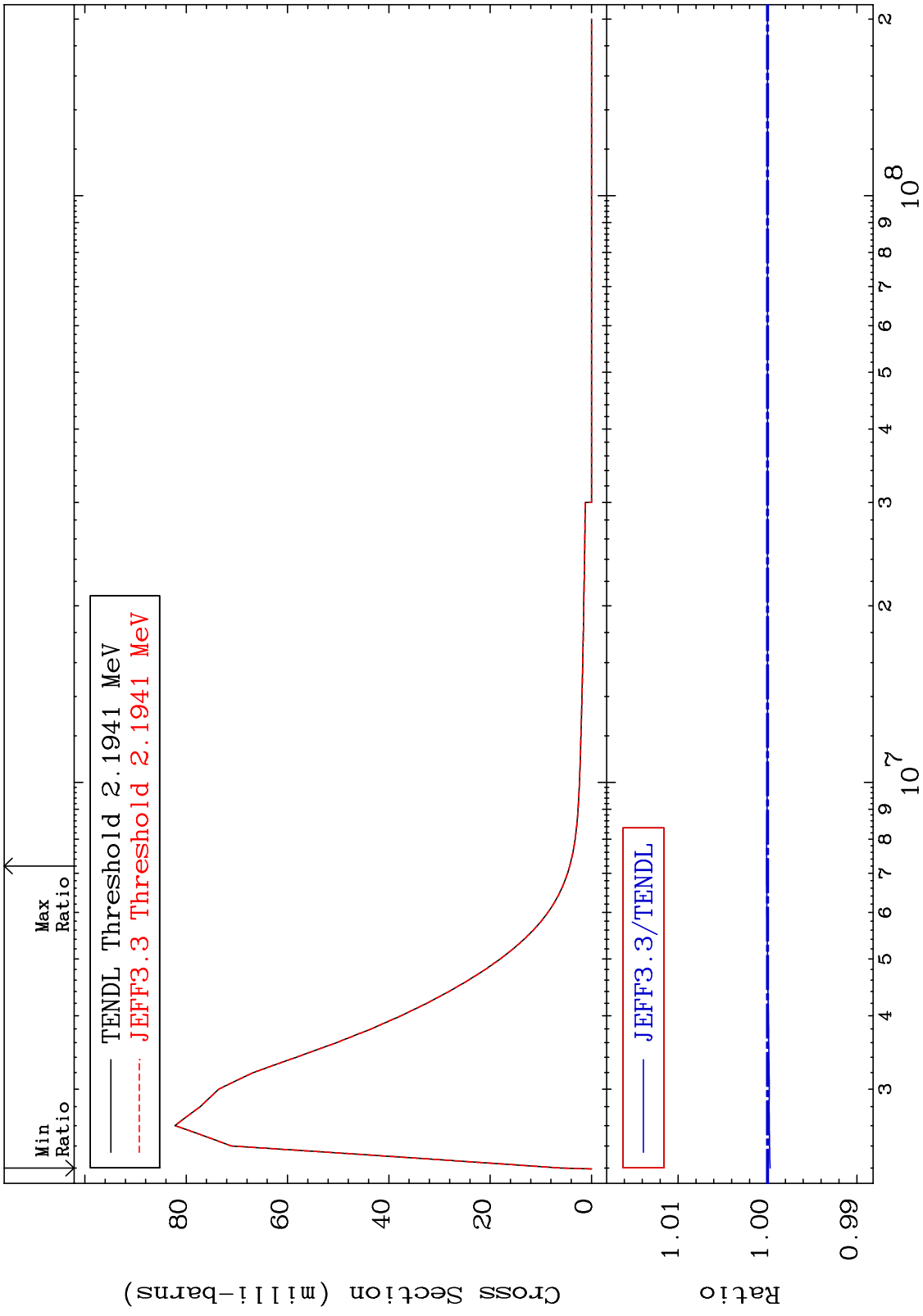
MAT 4119 MT= 64 (n,n') Level Cross Section 41-Nb-91
 -0.016 To 0.034 %



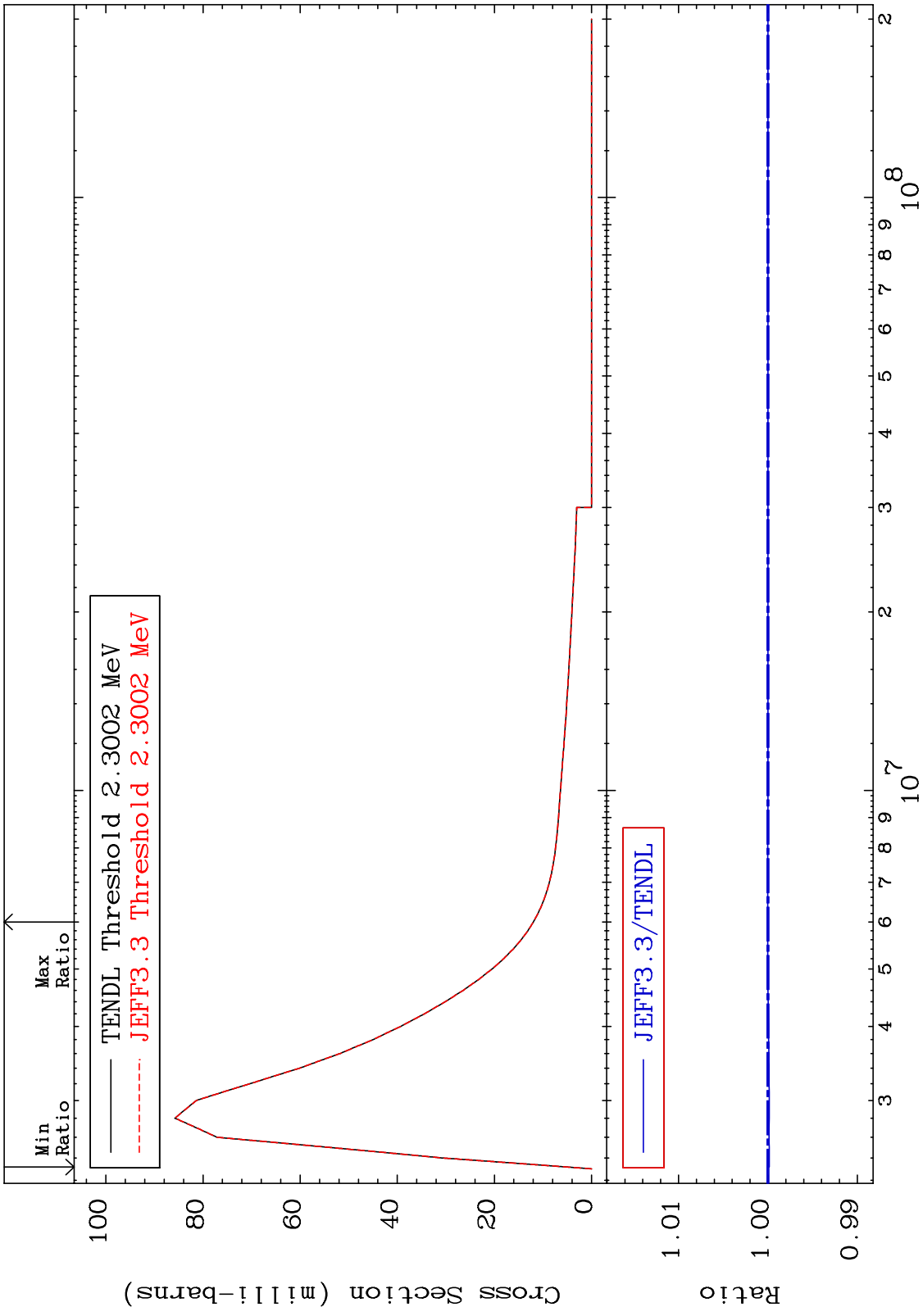
MAT 4119 MT= 65 (n,n') Level Cross Section 41-Nb-91 -0.018 To 0.040 %



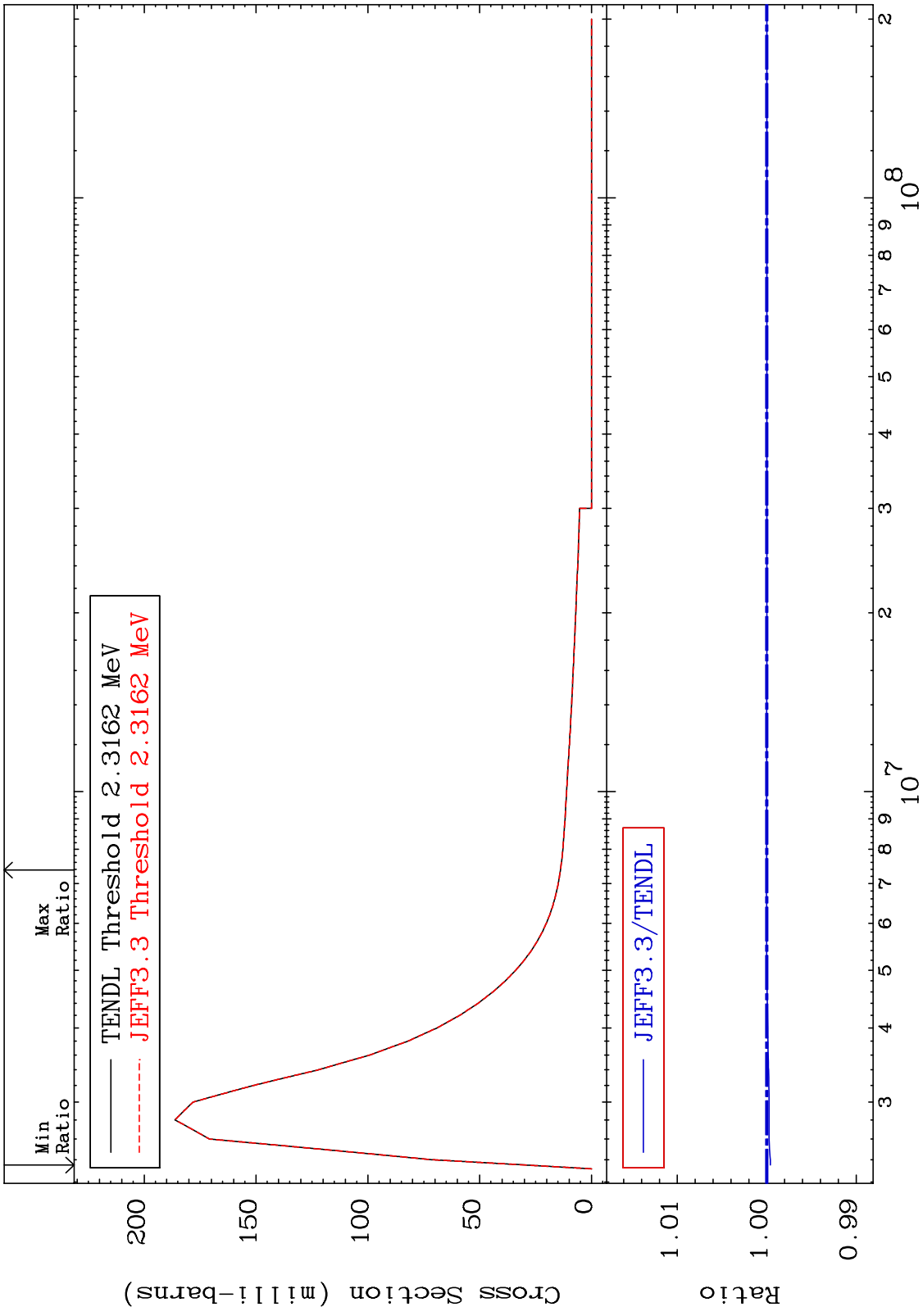
MAT 4119 MT= 66 (n,n') Level Cross Section 41-Nb-91 -0.031 To 0.009 %



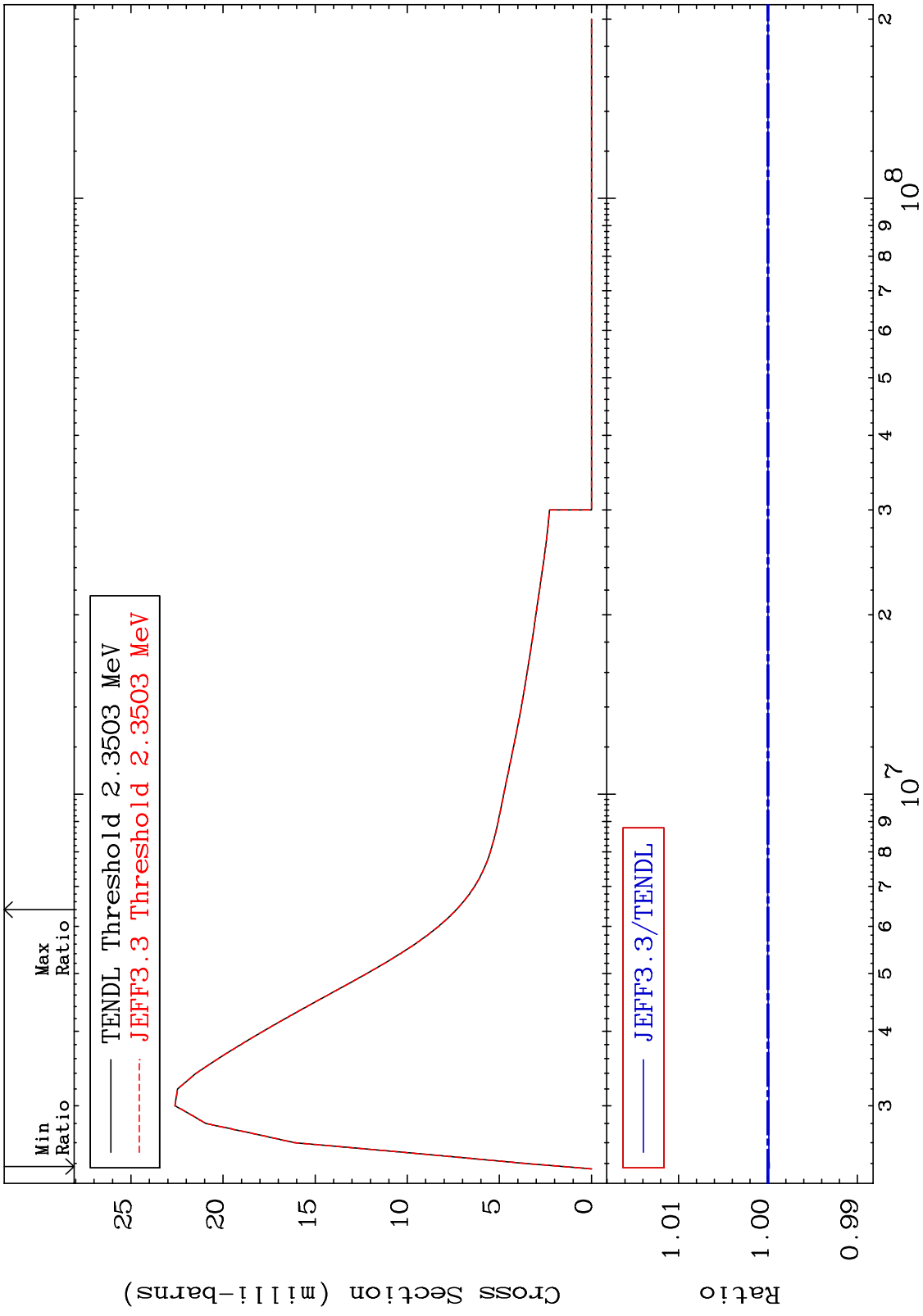
MAT 4119 MT= 67 (n,n') Level Cross Section 41-Nb-91 -0.015 To 0.004 %



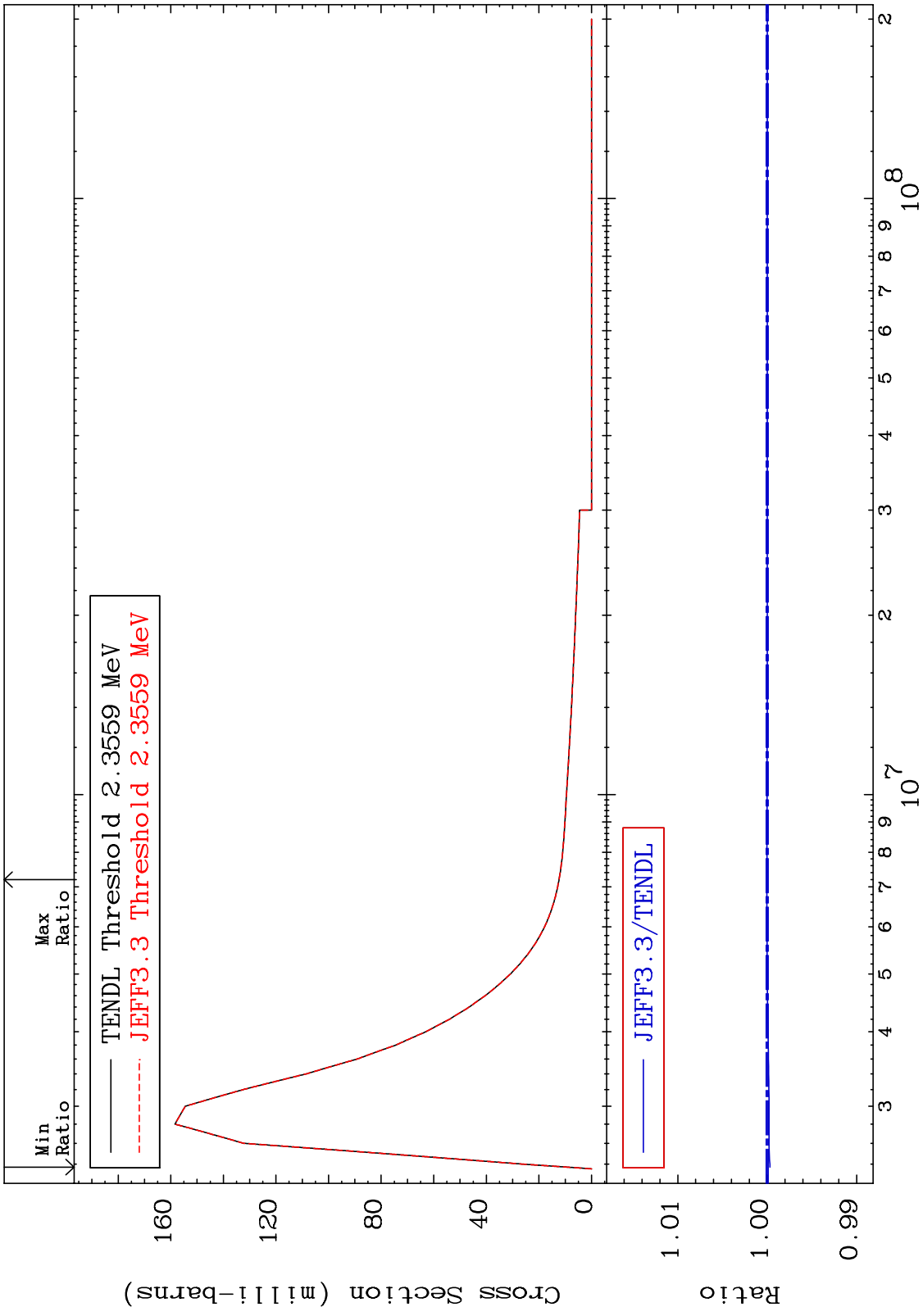
MAT 4119 MT= 68 (n,n') Level Cross Section 41-Nb-91 -0.041 To 0.003 %



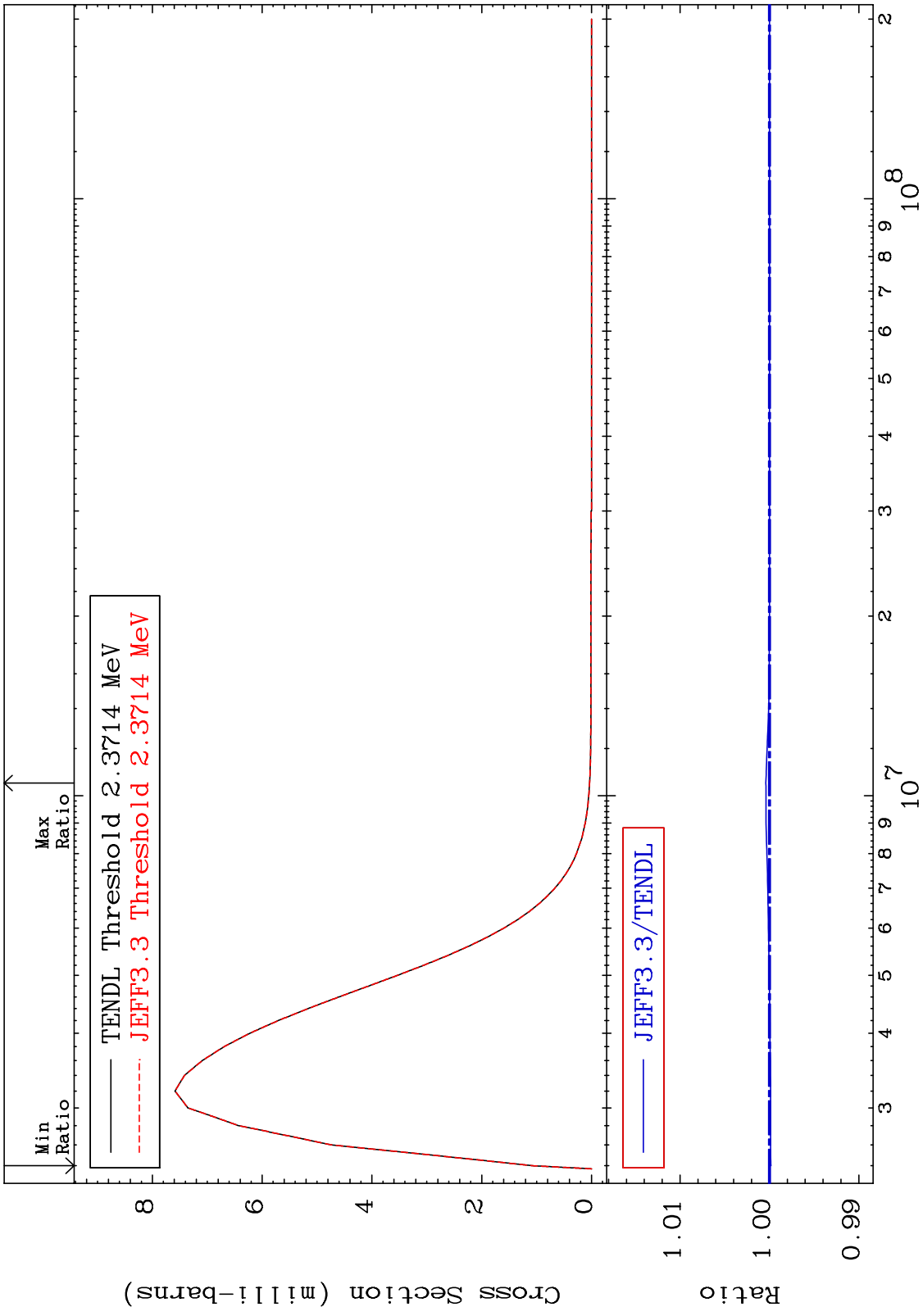
MAT 4119 MT= 69 (n,n') Level Cross Section 41-Nb-91 -0.014 To 0.003 %



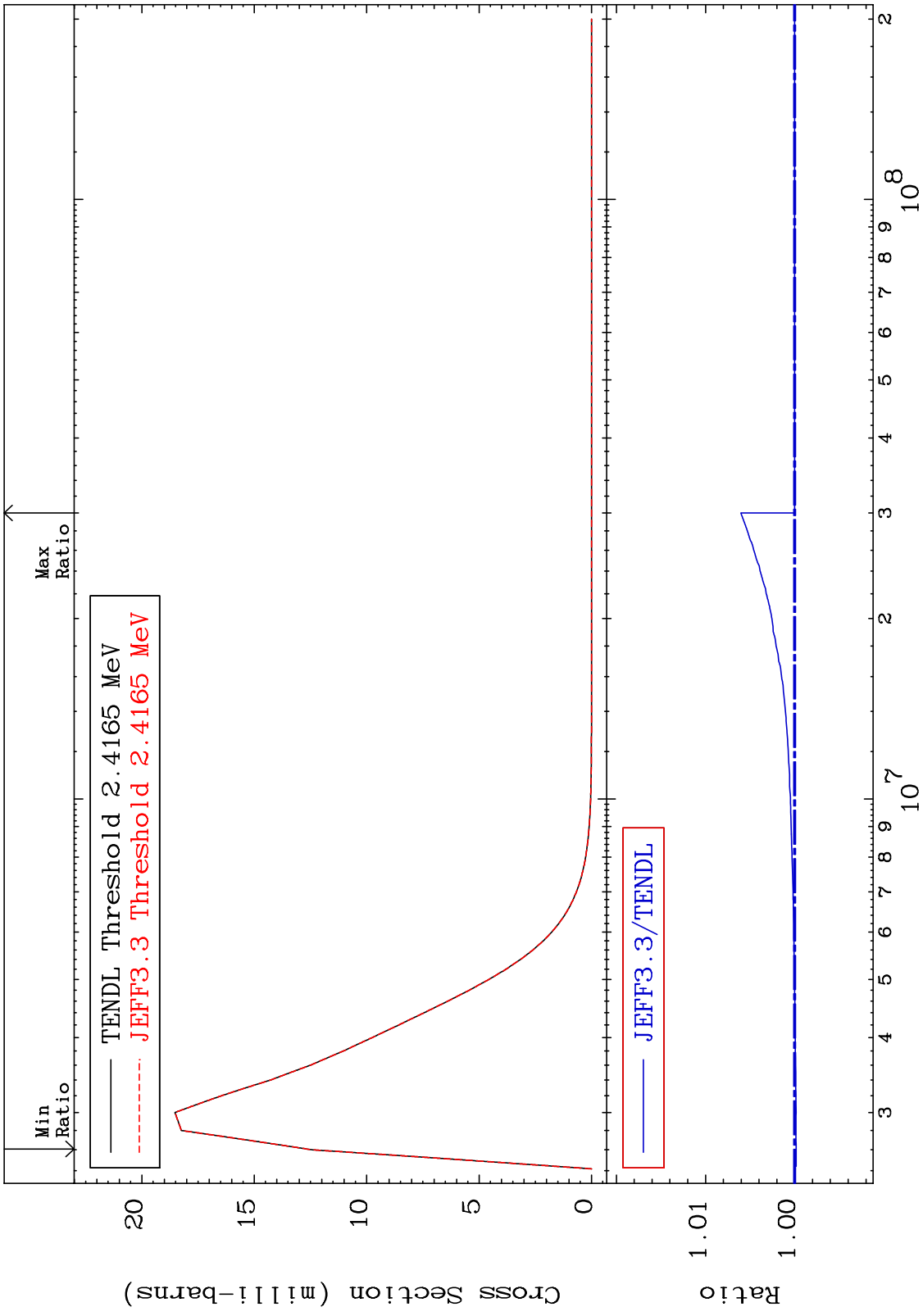
MAT 4119 MT= 70 (n,n') Level Cross Section 41-Nb-91 -0.031 To 0.003 %



MAT 4119 MT= 71 (n,n') Level Cross Section 41-Nb-91 -0.018 To 0.040 %



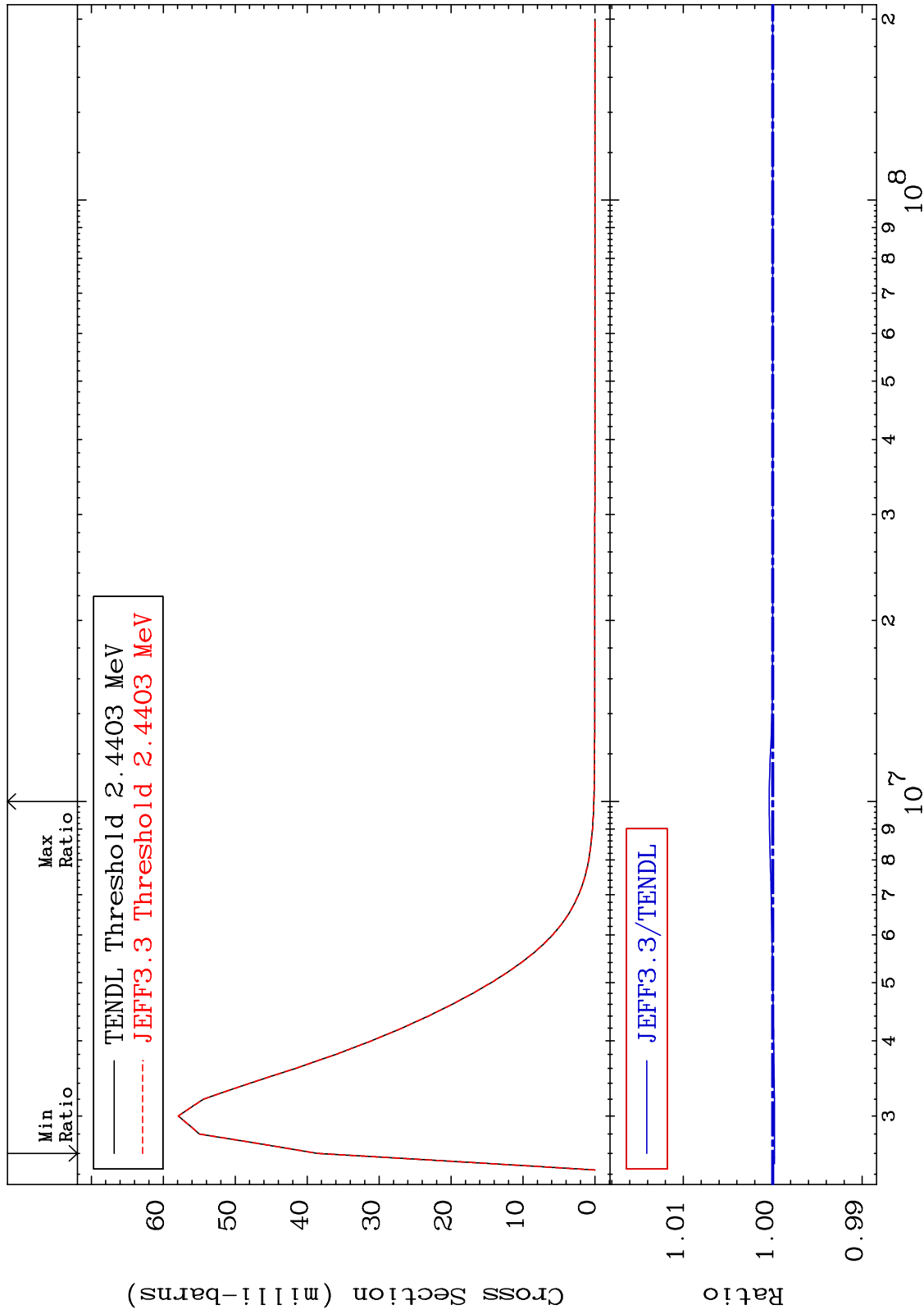
MAT 4119 MT= 72 (n,n') Level Cross Section 41-Nb-91
 -0.015 To 0.604 %



MAT 4119

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

41-Nb-91
-0.021 To 0.039 %



40

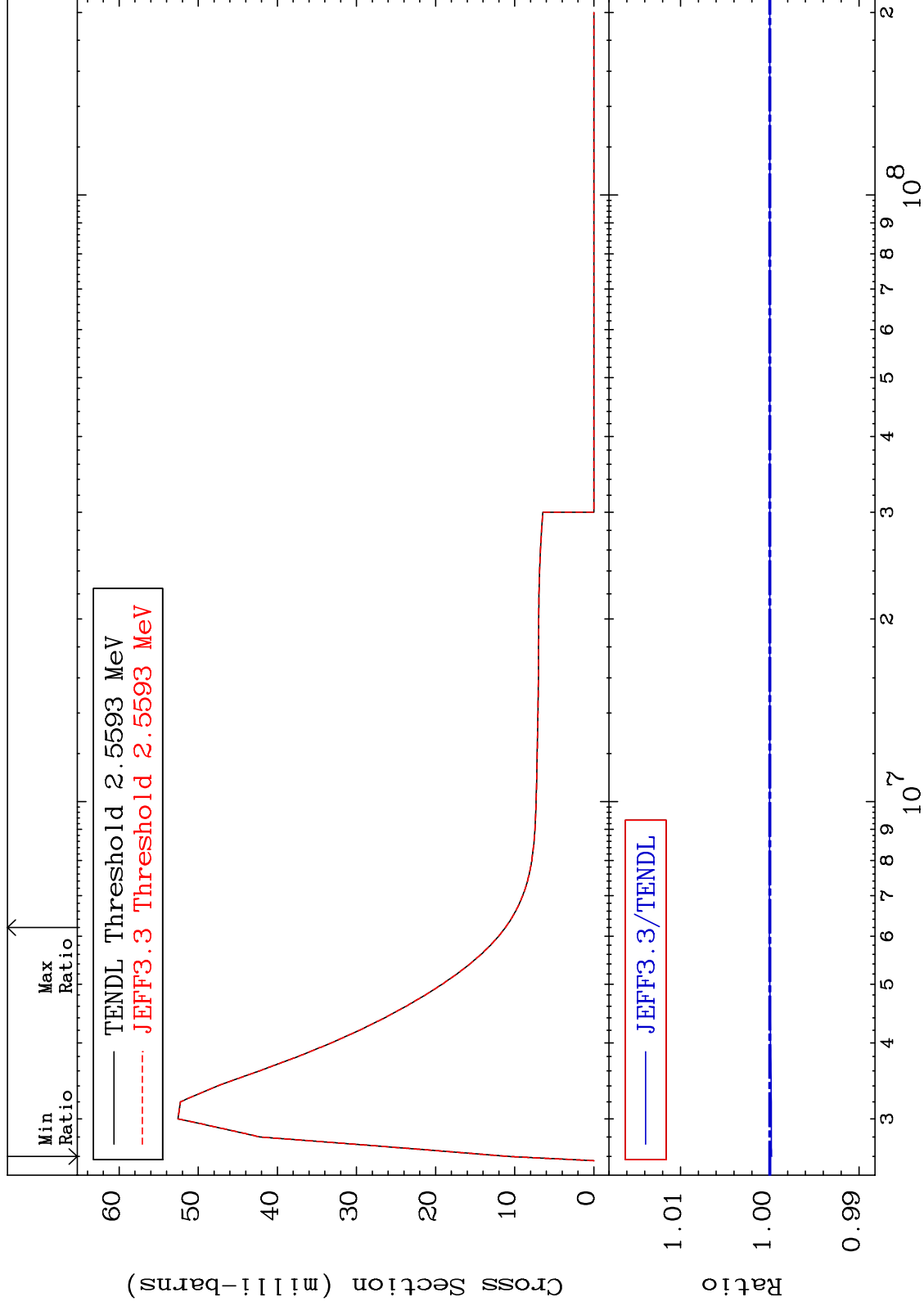
Incident Energy (eV)

41-Nb-91

MAT 4119

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

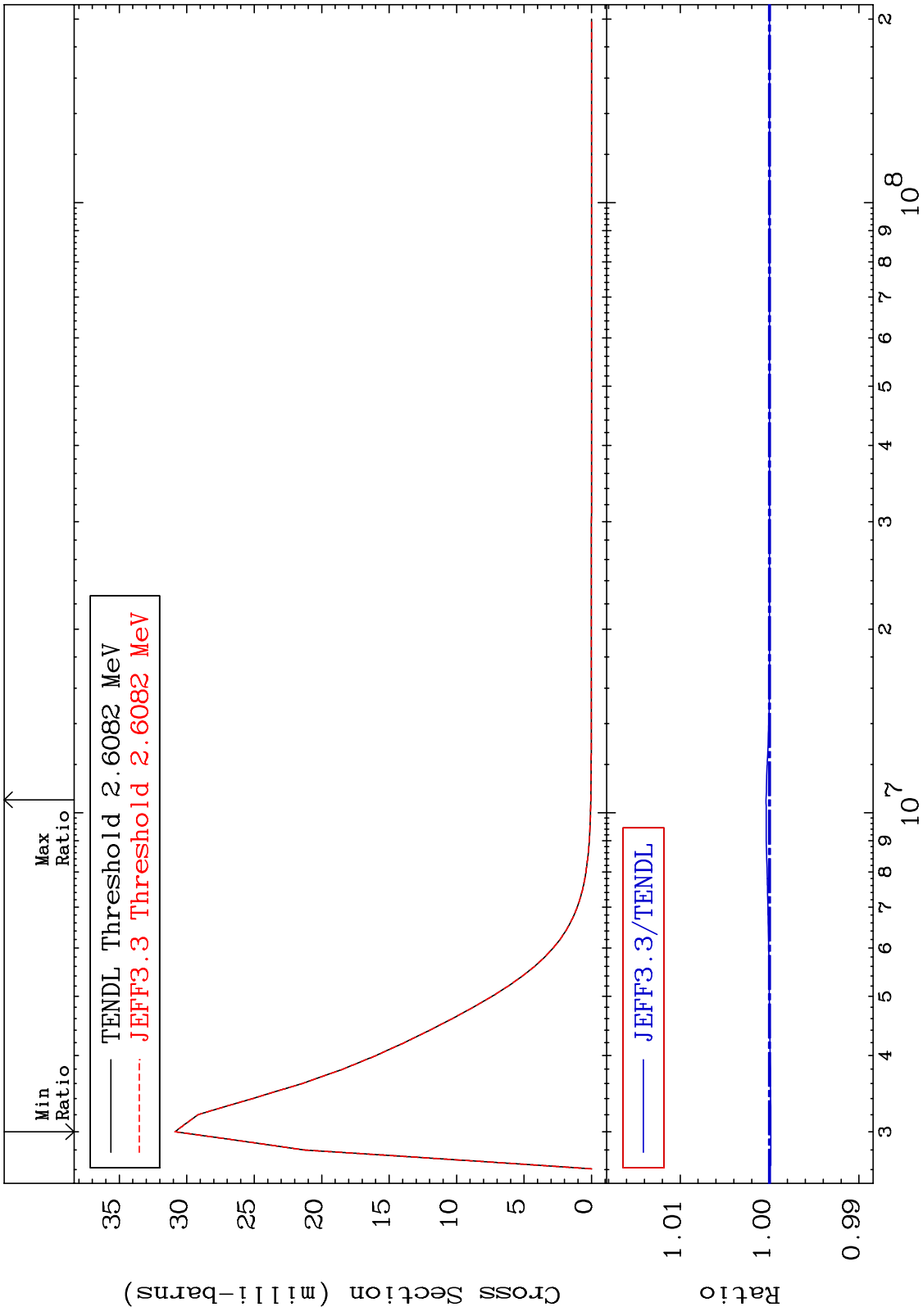
41-Nb-91
-0.022 To 0.004 %



41

41-Nb-91

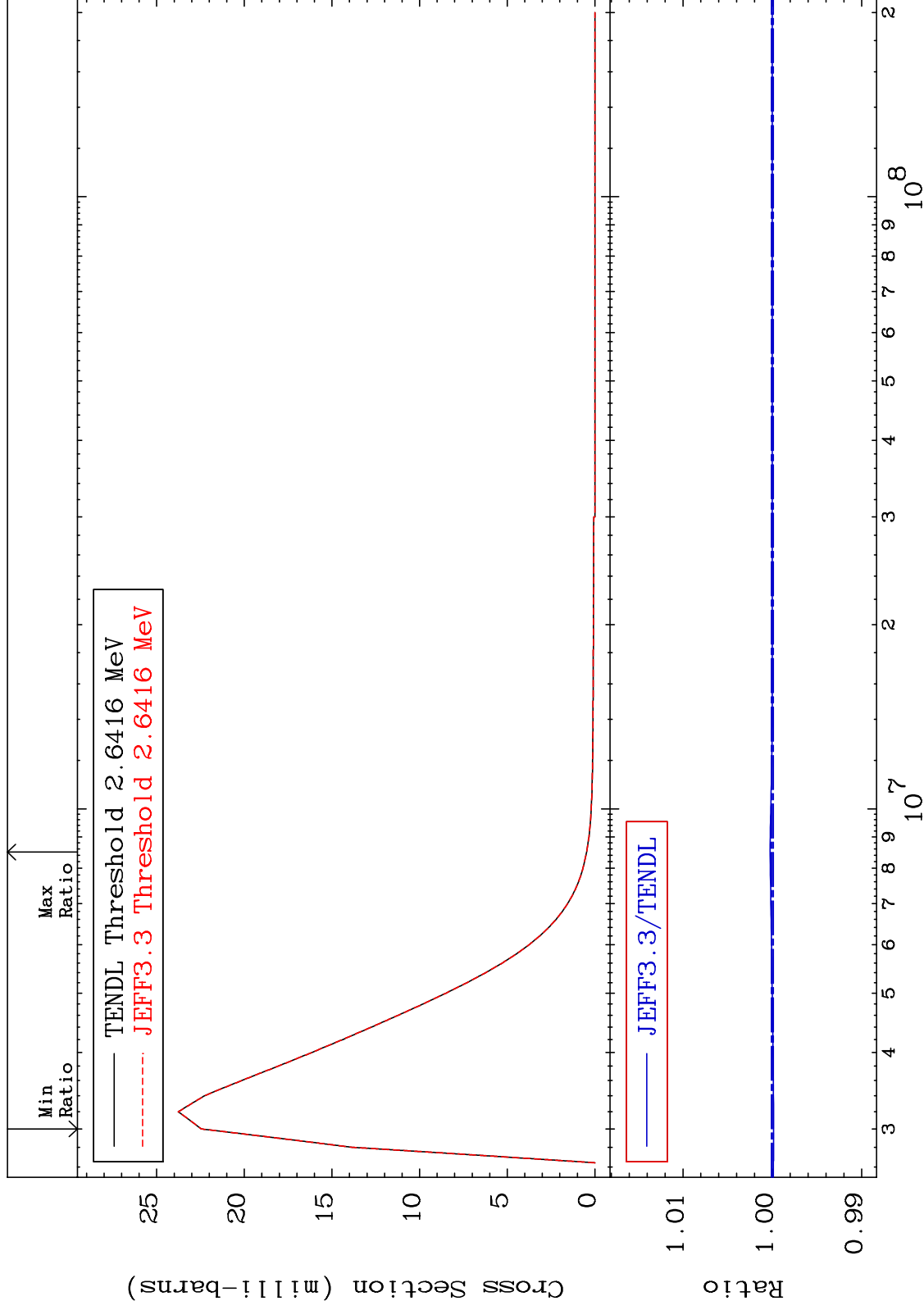
MAT 4119 MT= 75 (n,n') Level Cross Section 41-Nb-91
 -0.015 To 0.040 %



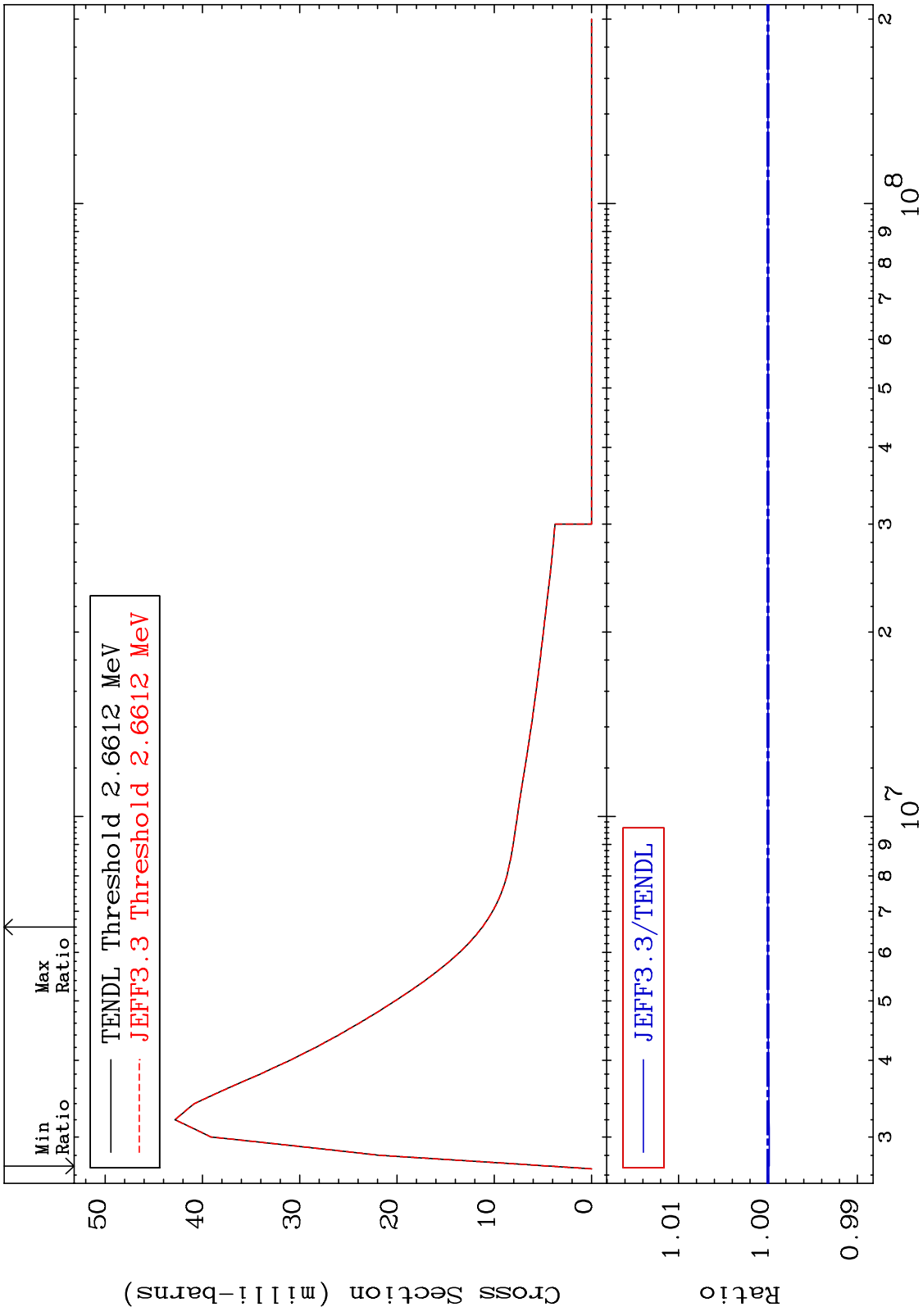
MAT 4119

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

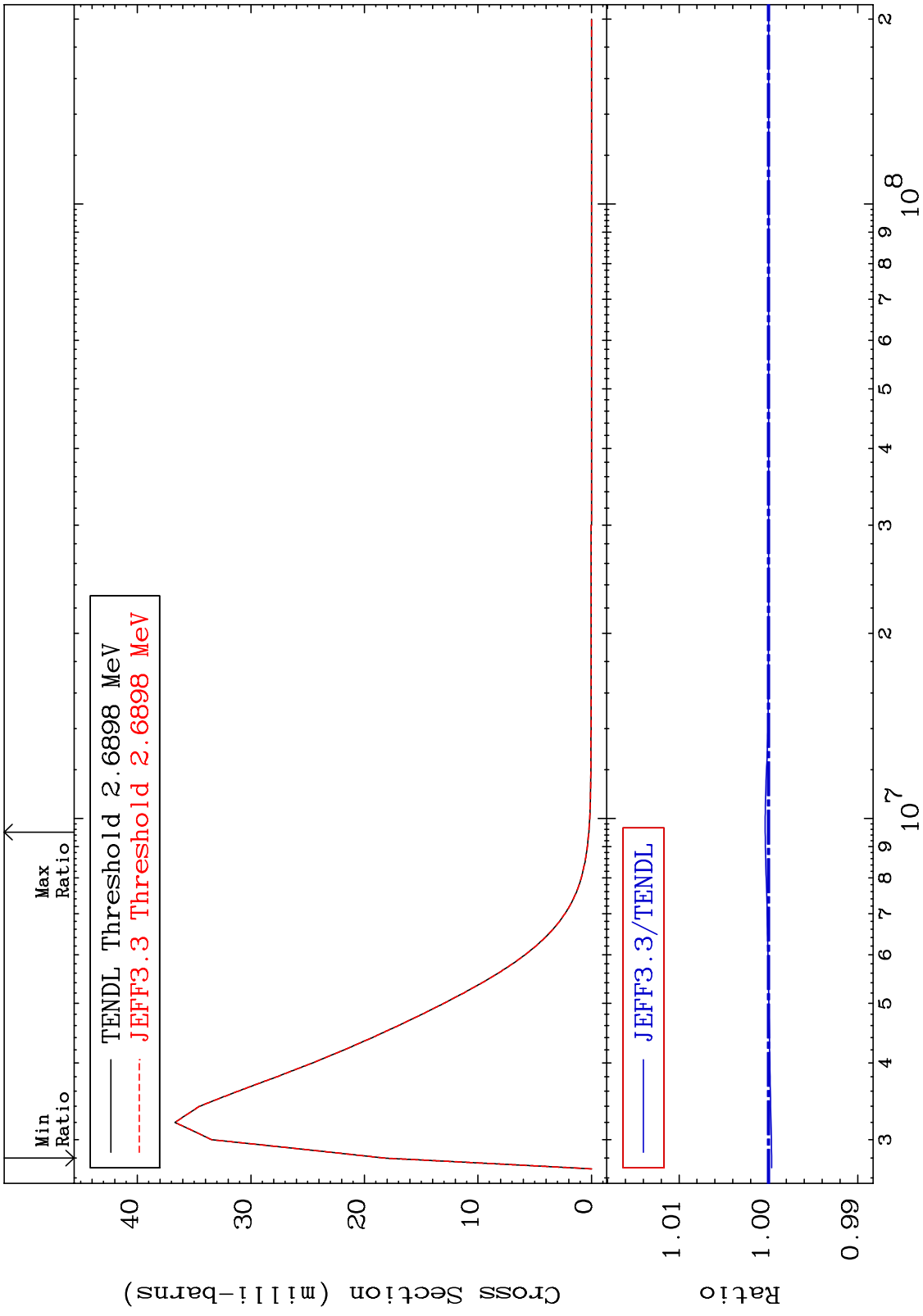
41-Nb-91
-0.014 To 0.025 %



MAT 4119 MT= 77 (n,n') Level Cross Section 41-Nb-91 -0.014 To 0.004 %



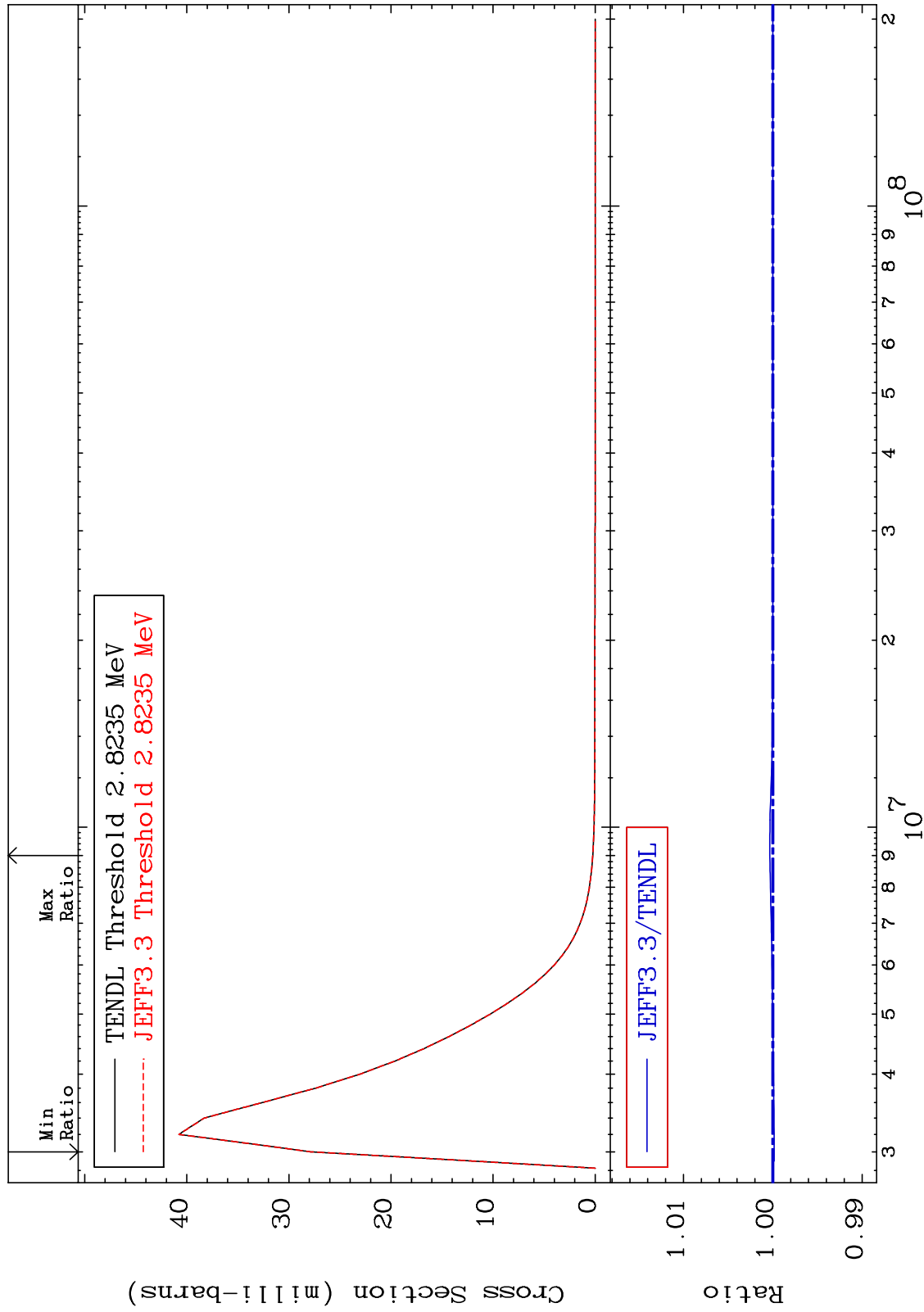
MAT 4119 MT= 78 (n,n') Level Cross Section 41-Nb-91 -0.036 To 0.037 %



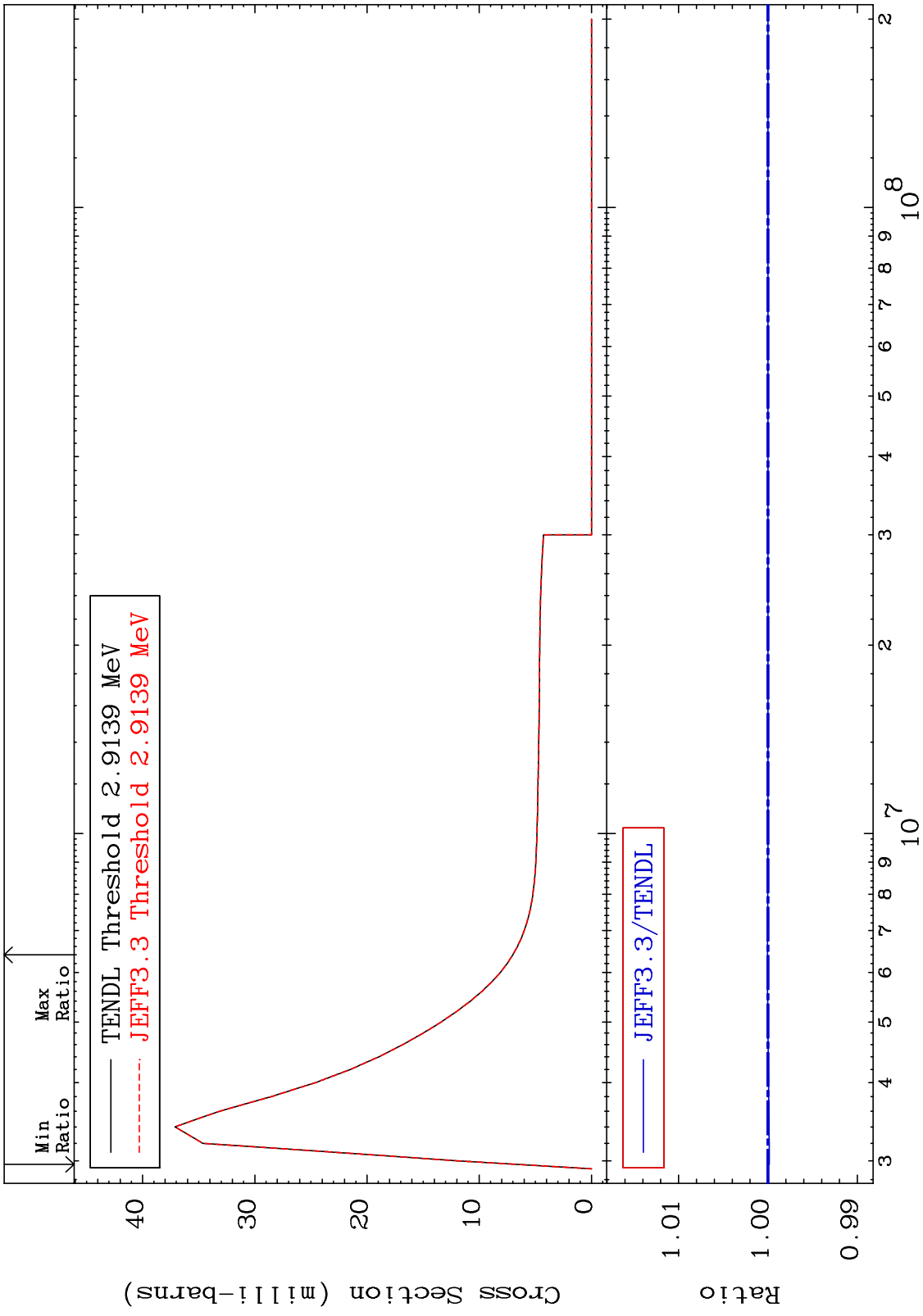
MAT 4119

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

41-Nb-91
-0.016 To 0.034 %



MAT 4119 MT= 80 (n,n') Level Cross Section 41-Nb-91 -0.015 To 0.005 %

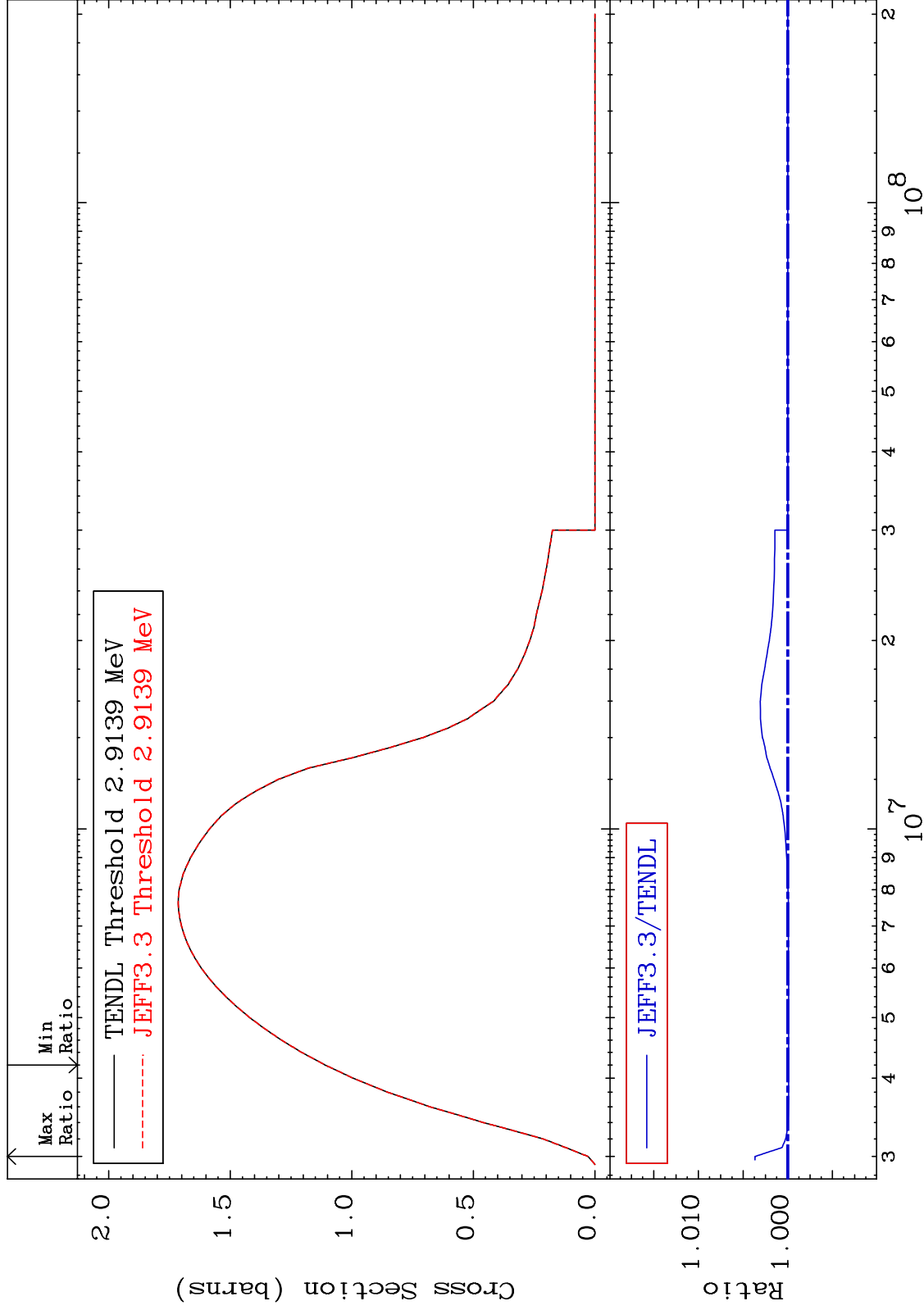


47 41-Nb-91

MAT 4119

(n,n') Continuum
Cross Section

41-Nb-91
-0.011 To 0.366 %



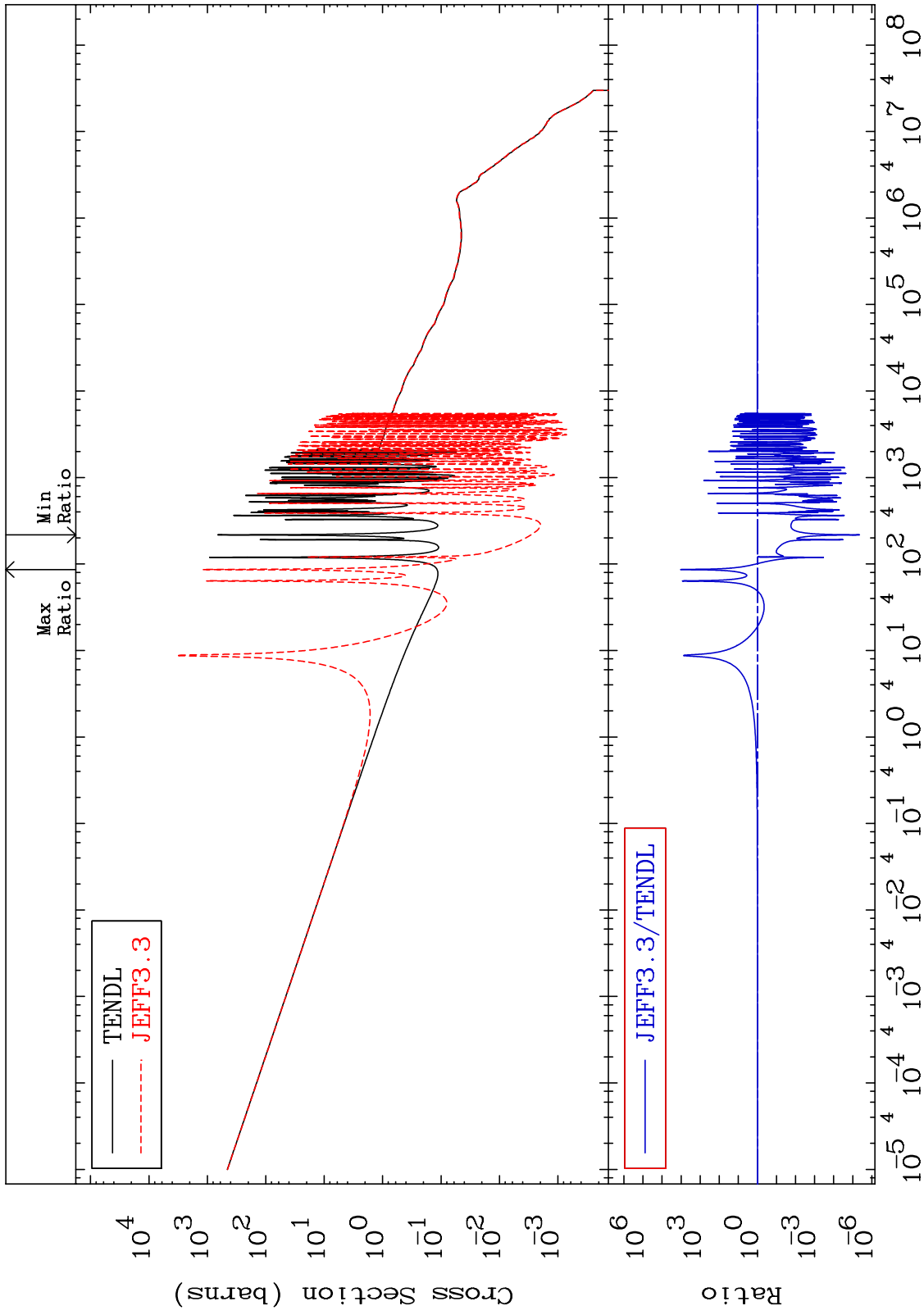
48

Incident Energy (eV)

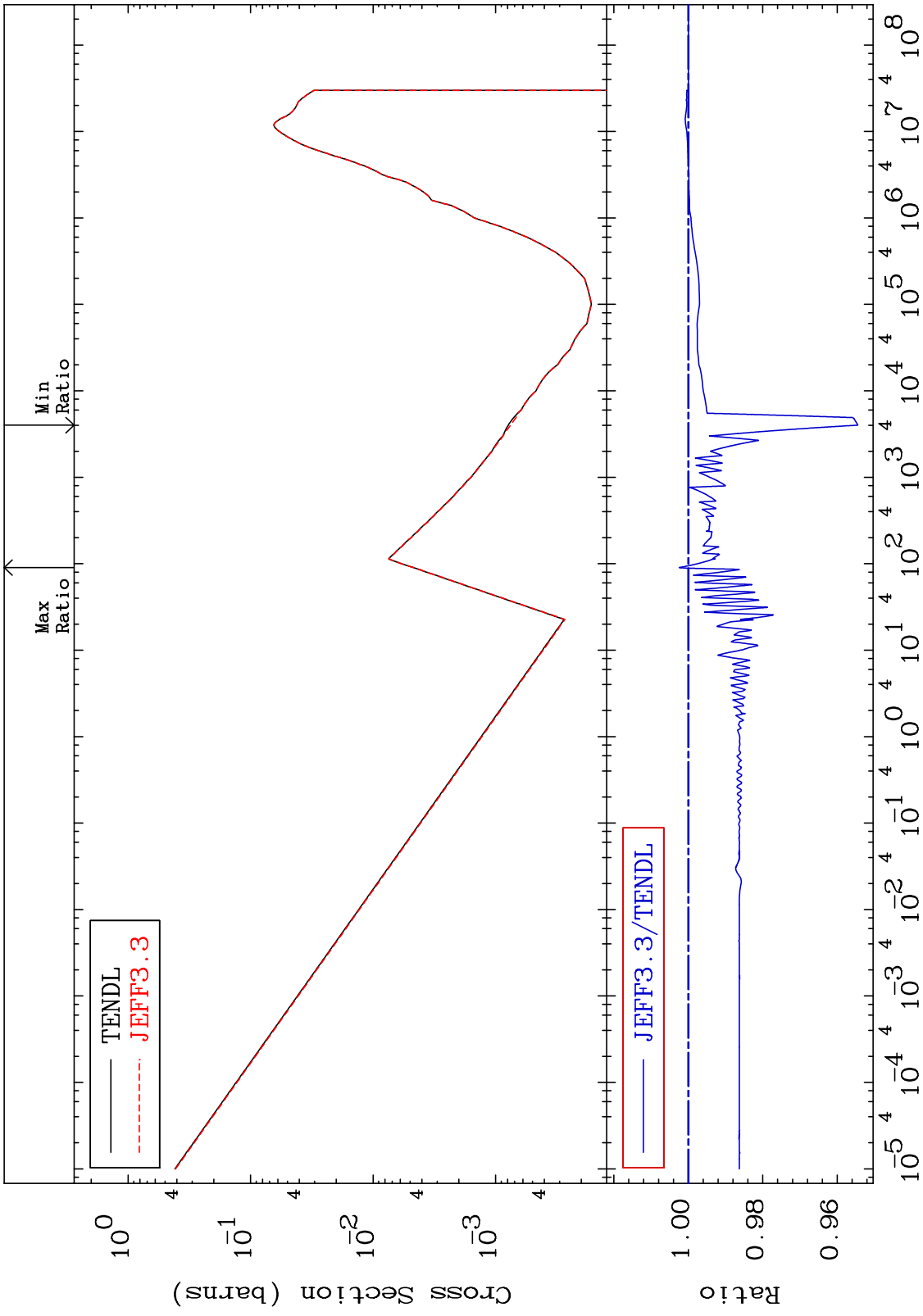
41-Nb-91

MAT 4119

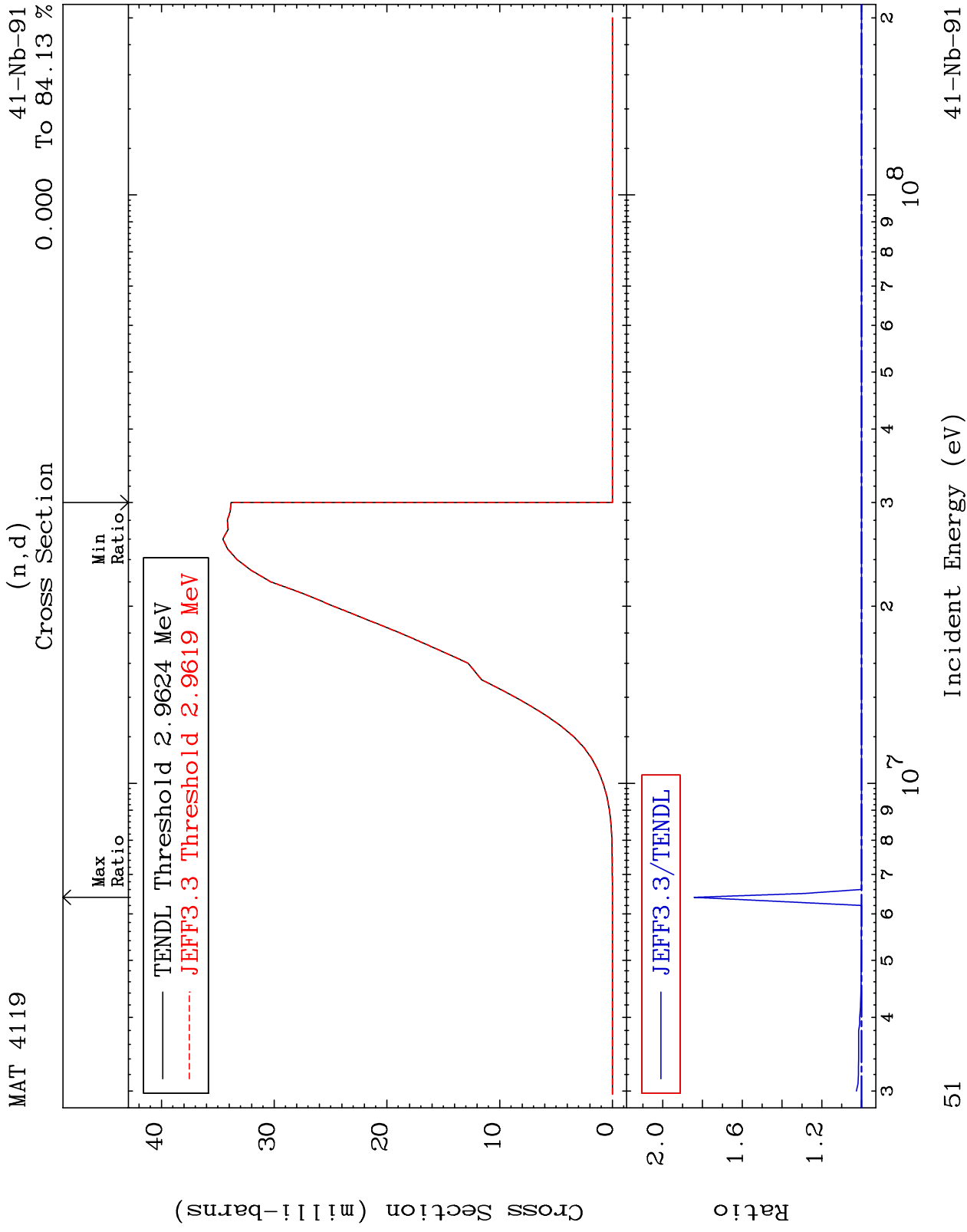
(n, γ) Cross Section
41-Nb-91
-100.0 To 9999. %



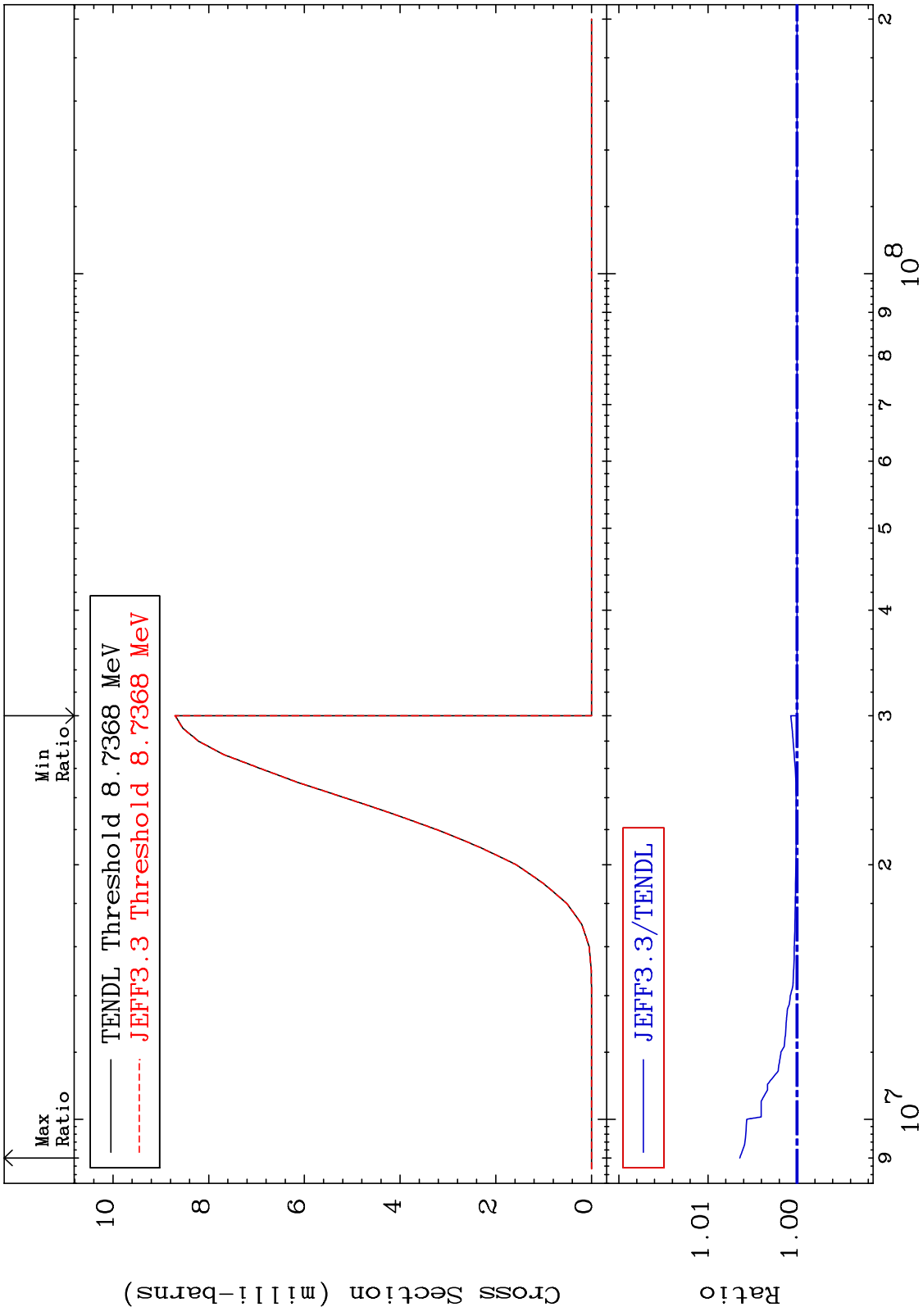
MAT 4119 (n,p) 41-Nb-91
 Cross Section -4.554 To 0.250 %
 Min Ratio

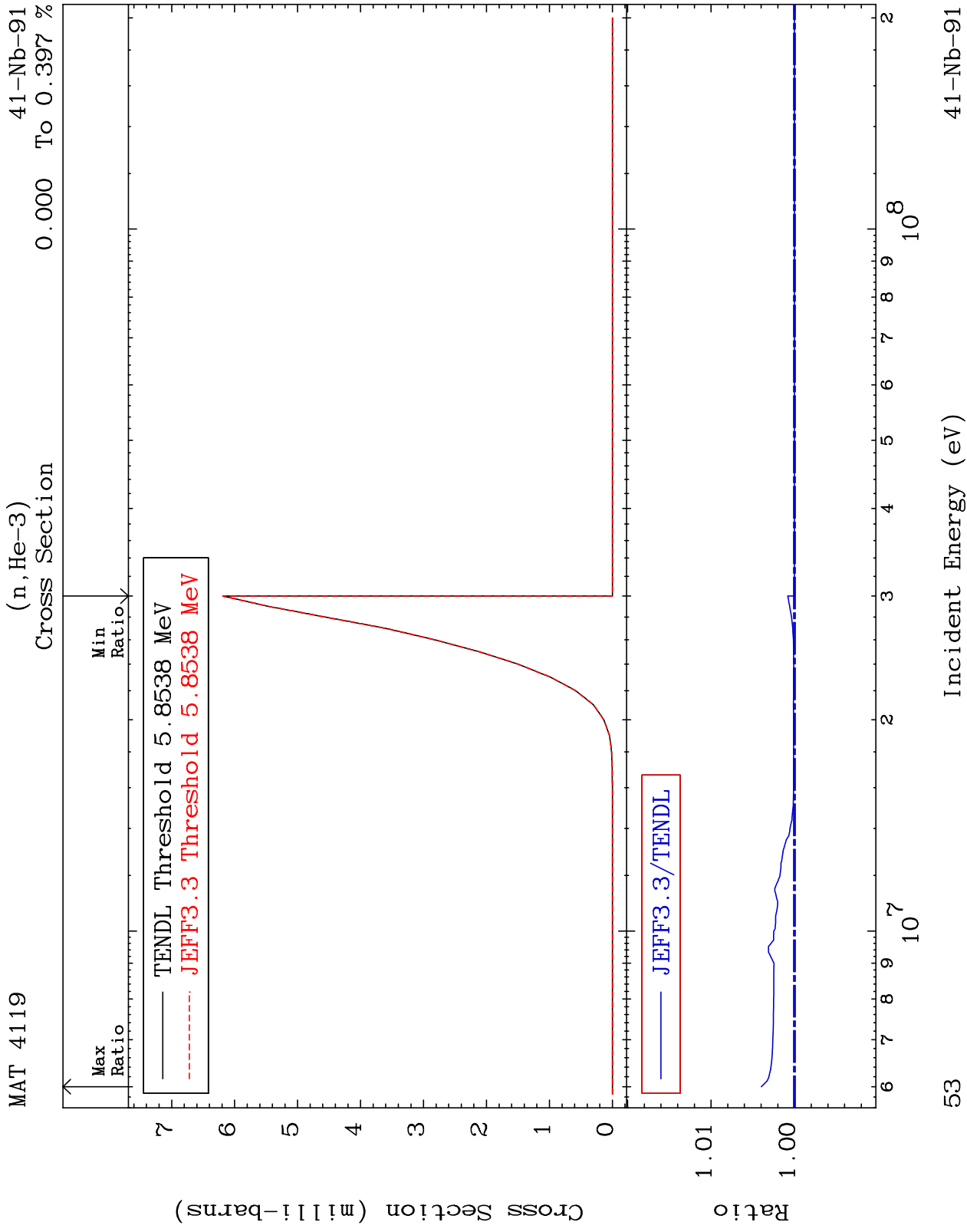


50 41-Nb-91

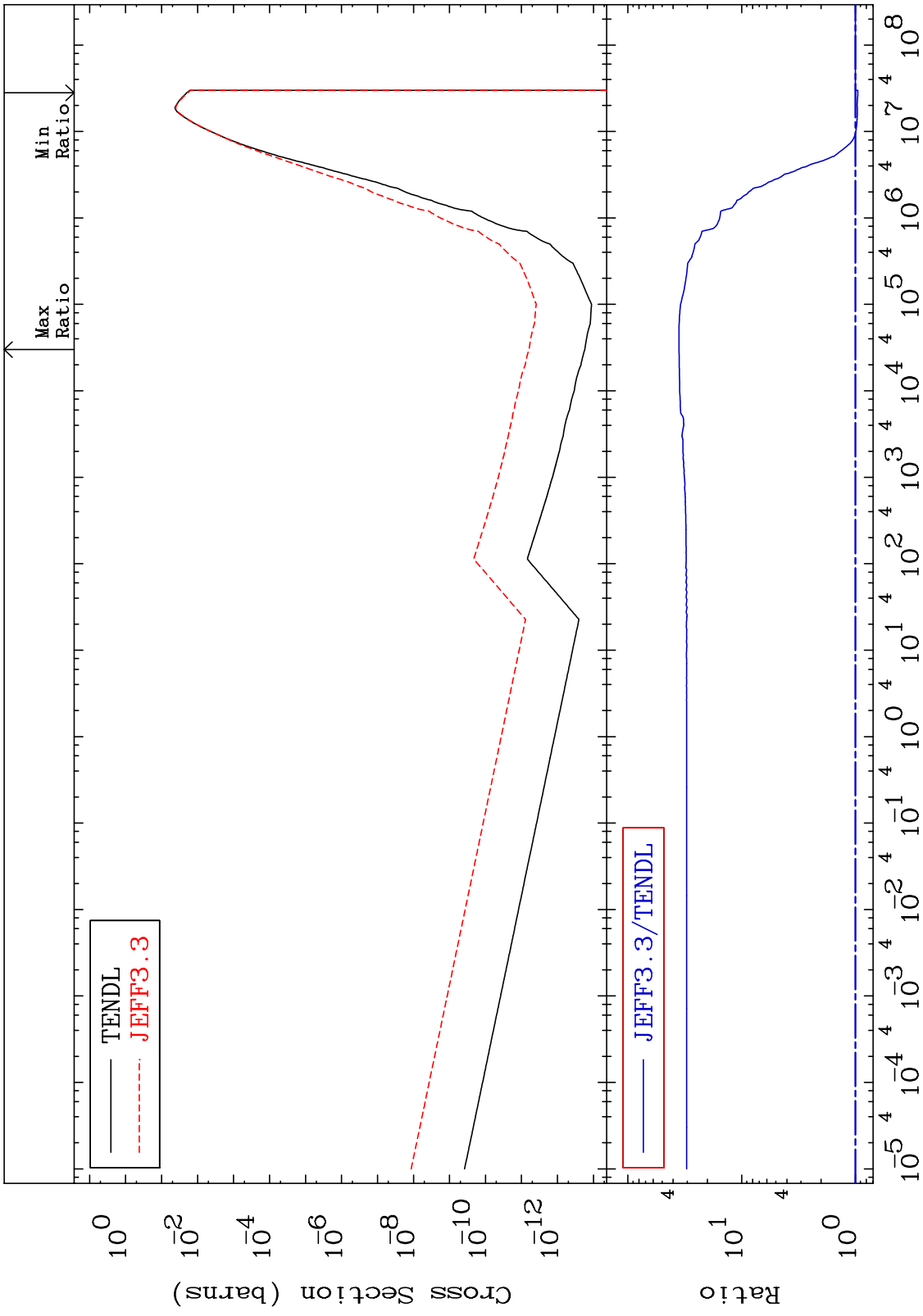


MAT 4119 (n,t) 41-Nb-91
Cross Section 0.000 To 0.643 %





MAT 4119 (n, α) Cross Section 41-Nb-91
 -4.988 To 3450. %

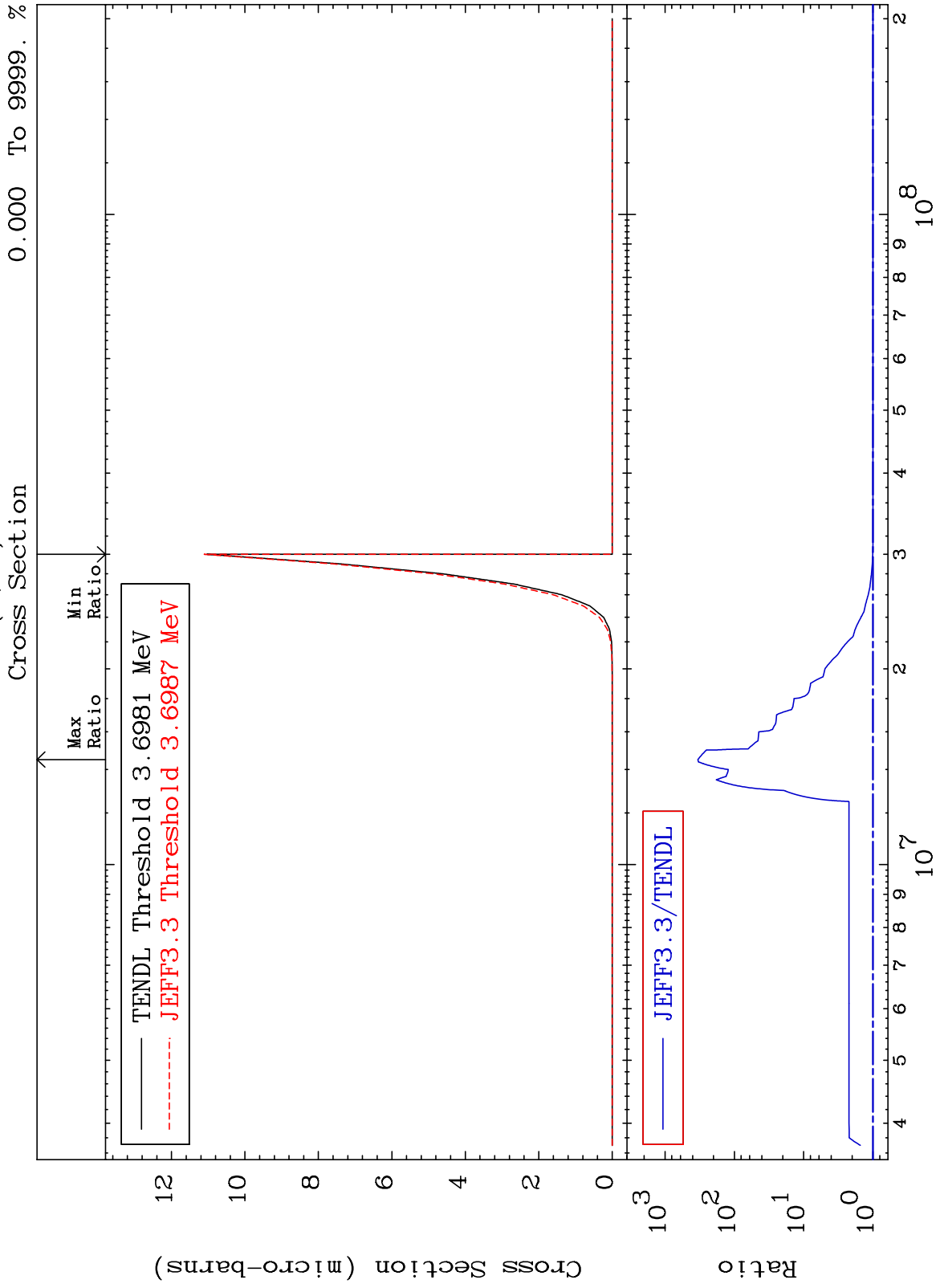


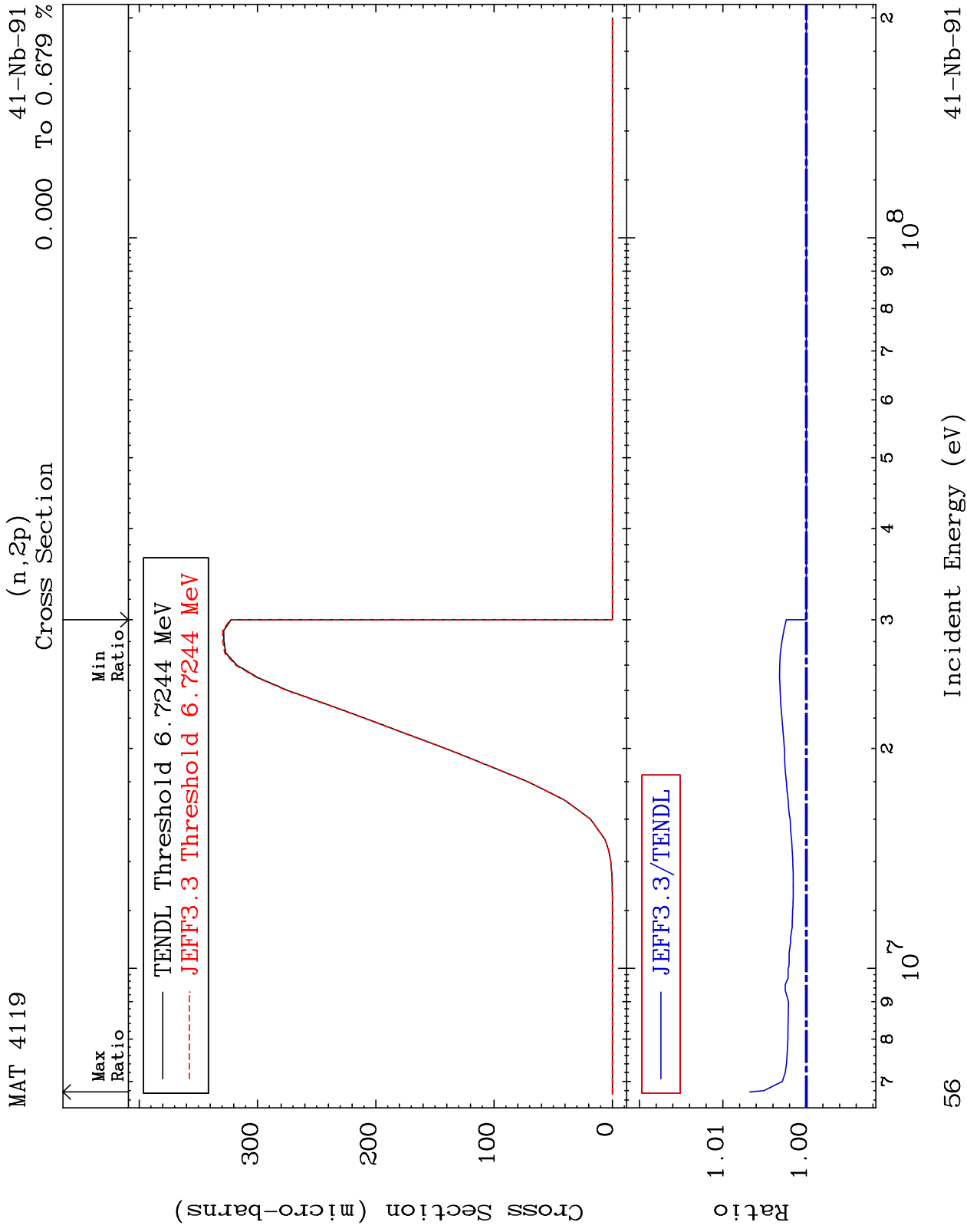
54 41-Nb-91

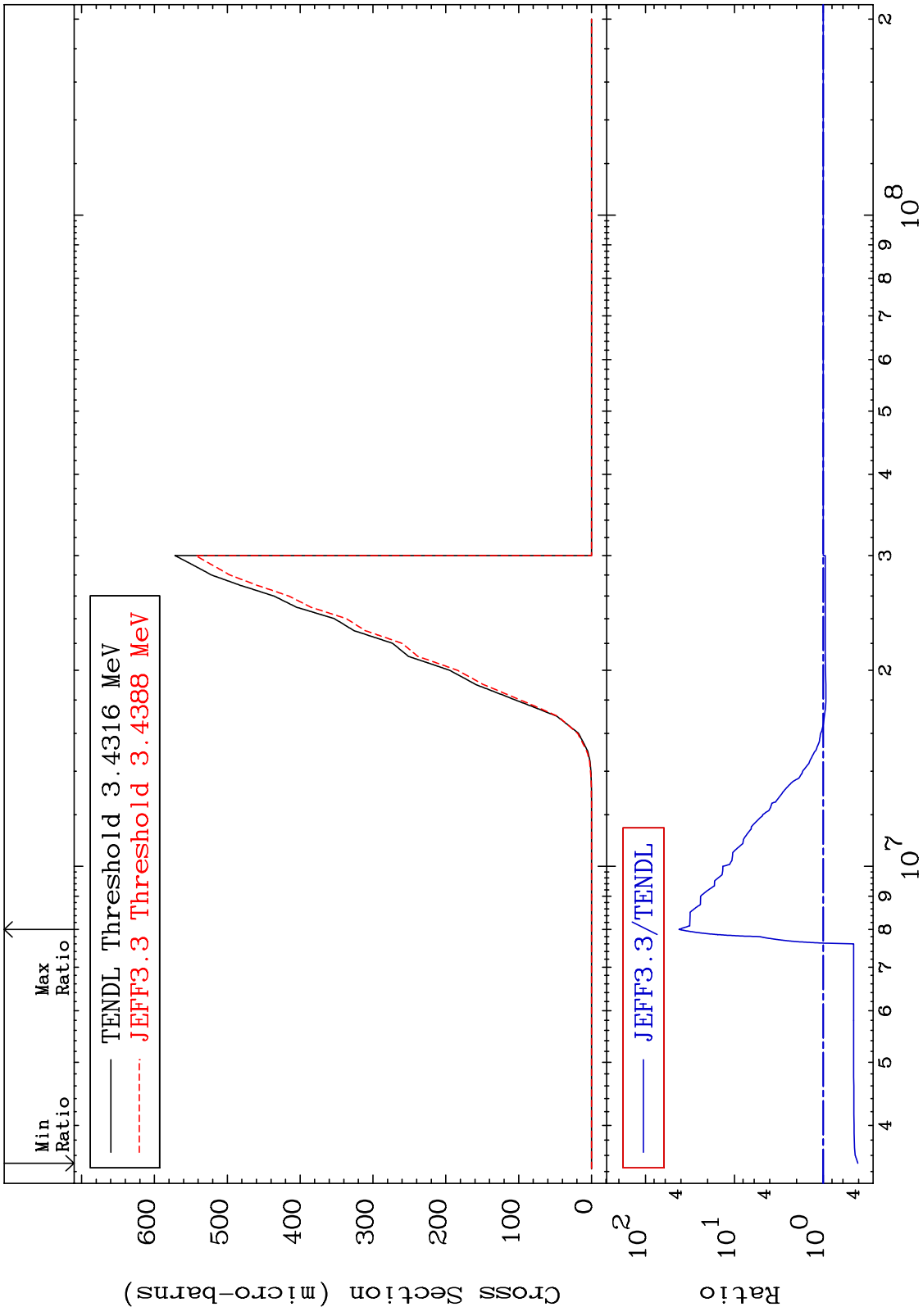
MAT 4119

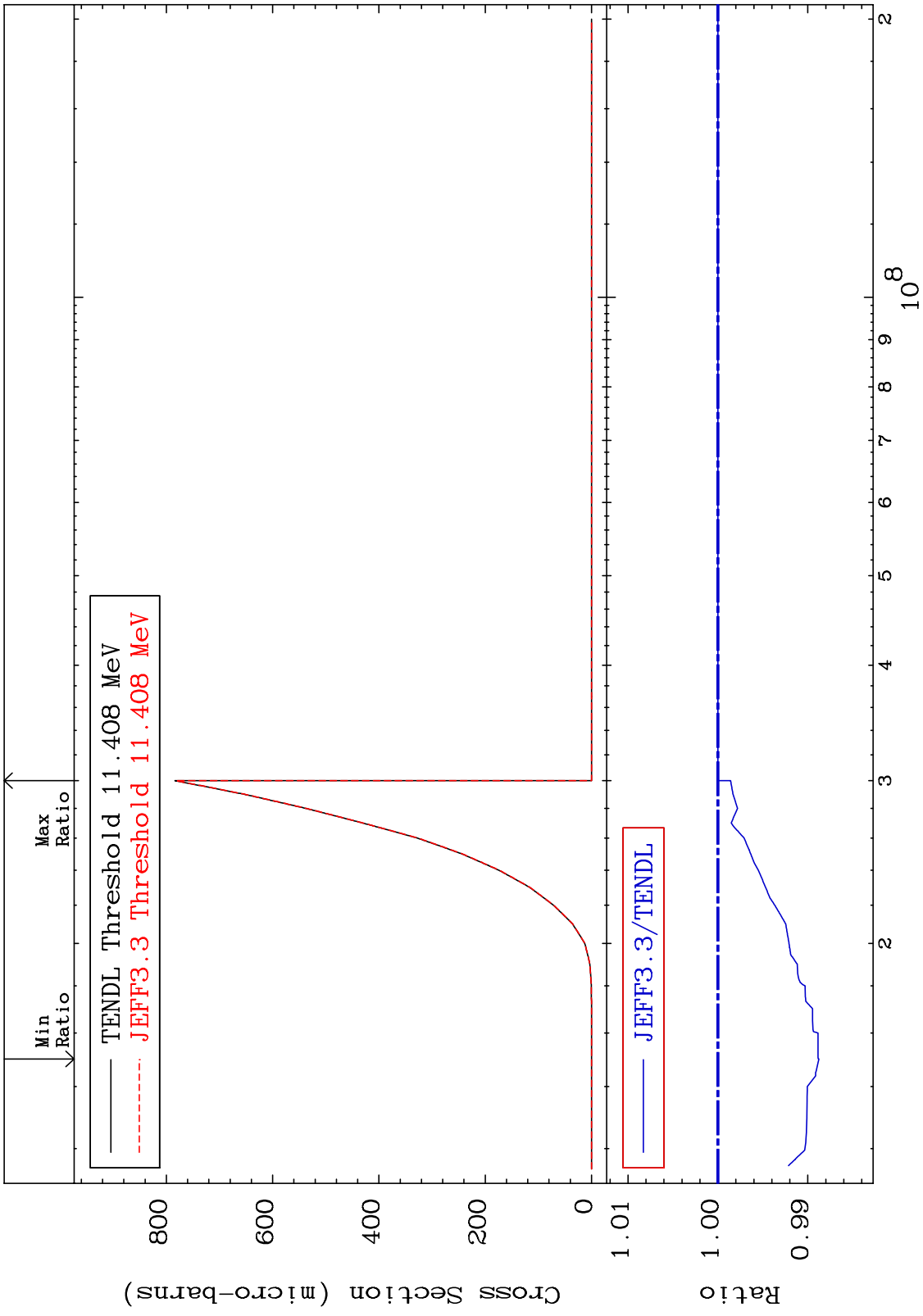
(n,2α)

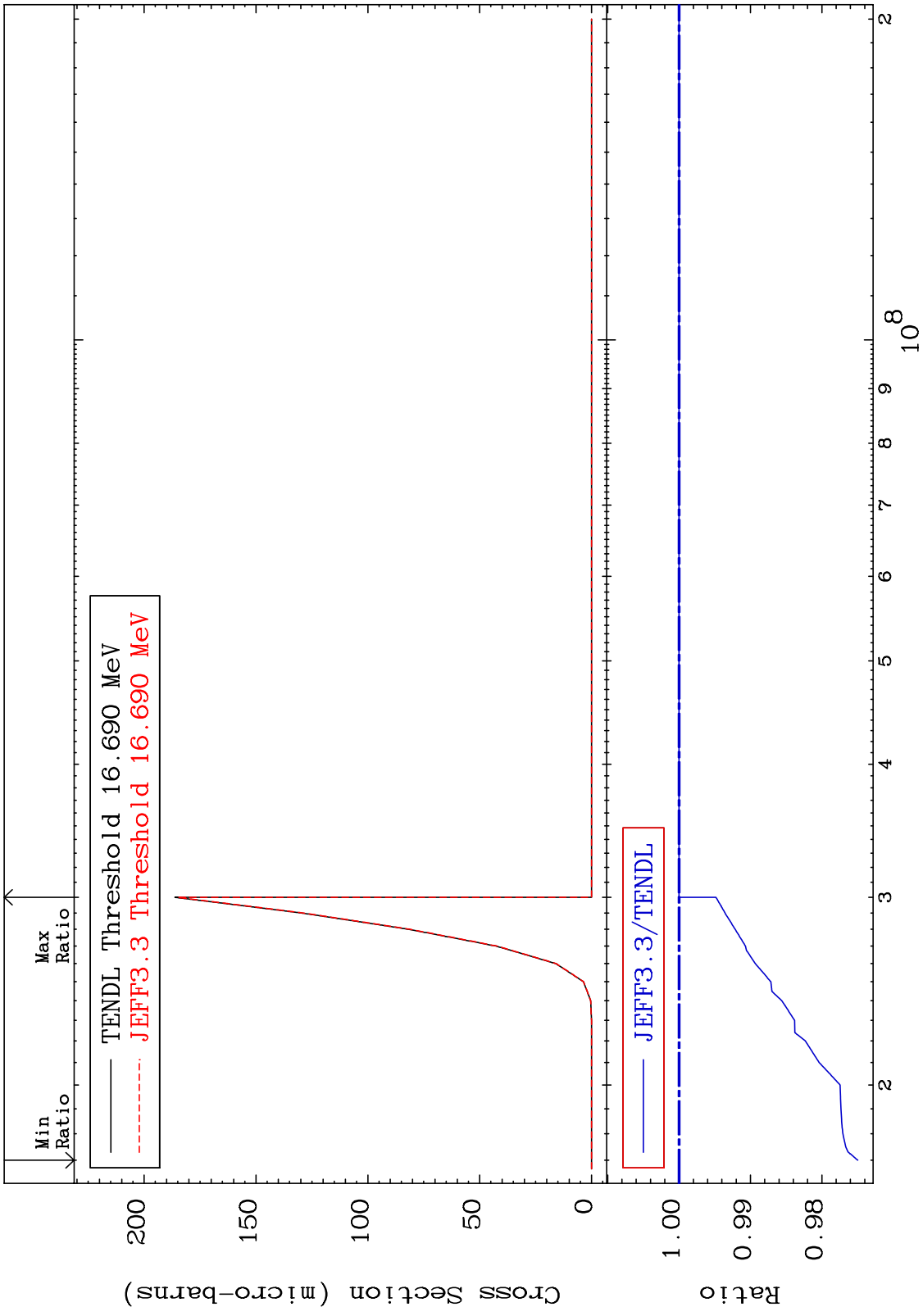
41-Nb-91
0.000 To 9999. %



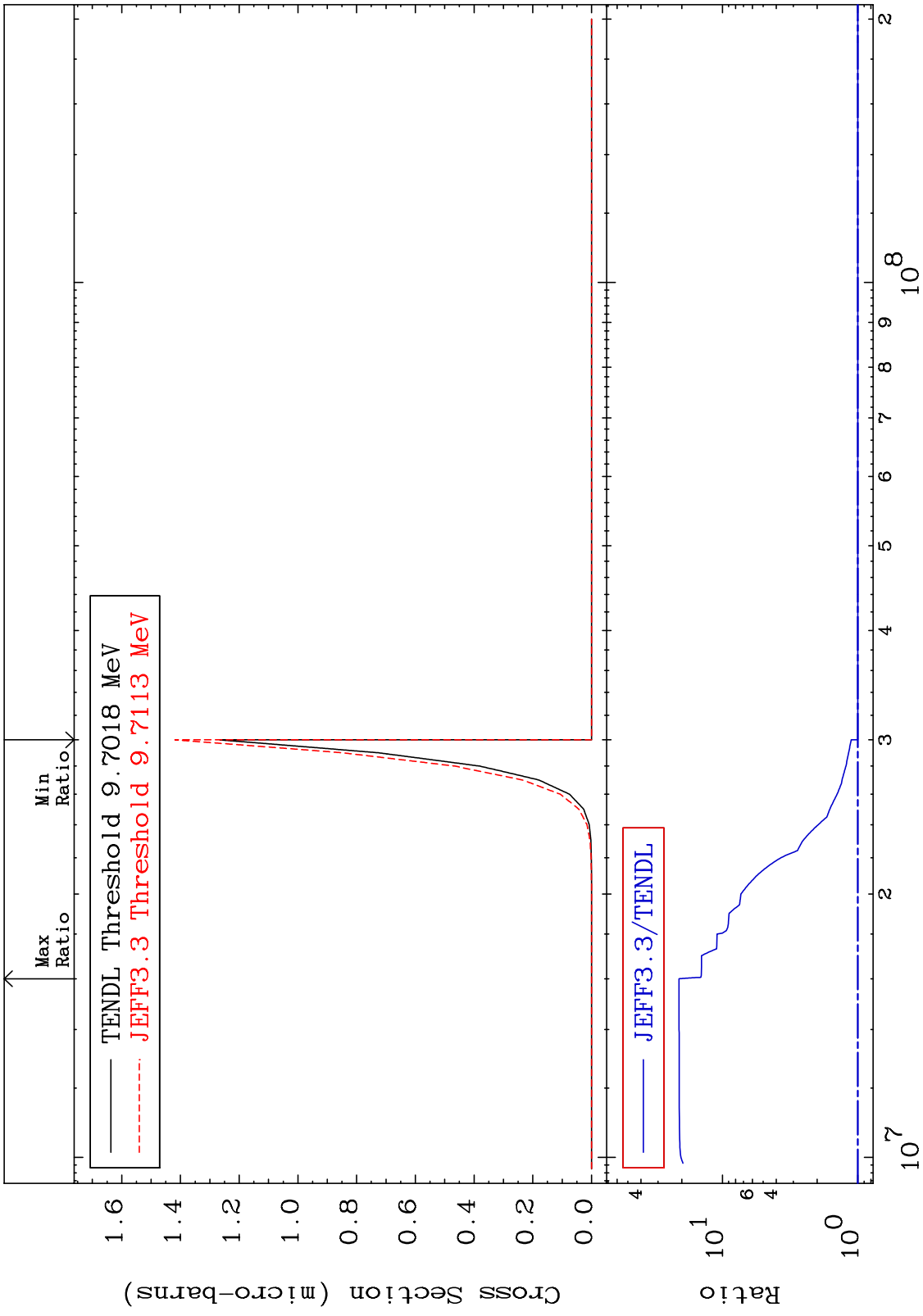








MAT 4119 (n,d) α 41-Nb-91
 Cross Section 0.000 To 1993. %

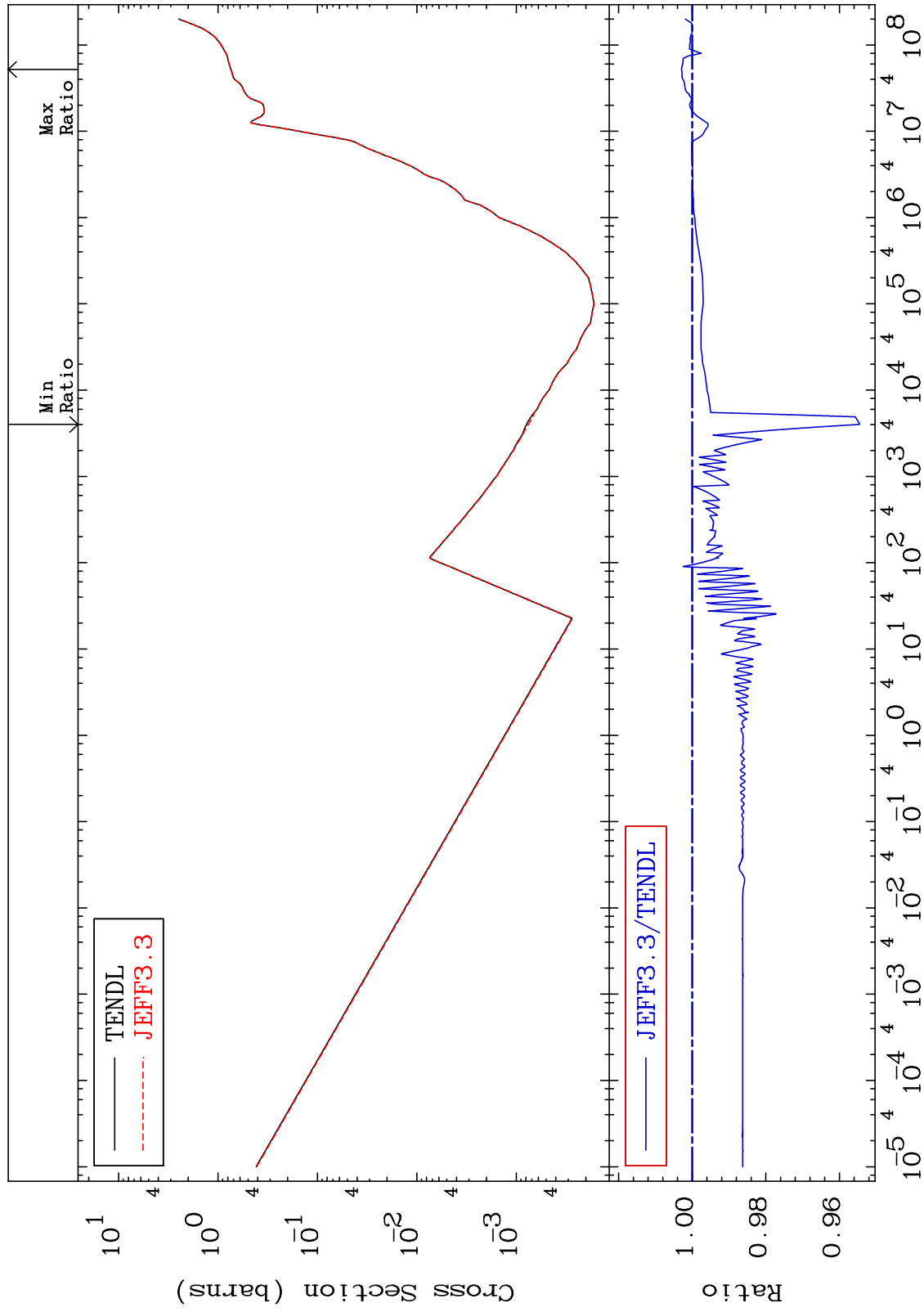


60 Incident Energy (eV) 41-Nb-91

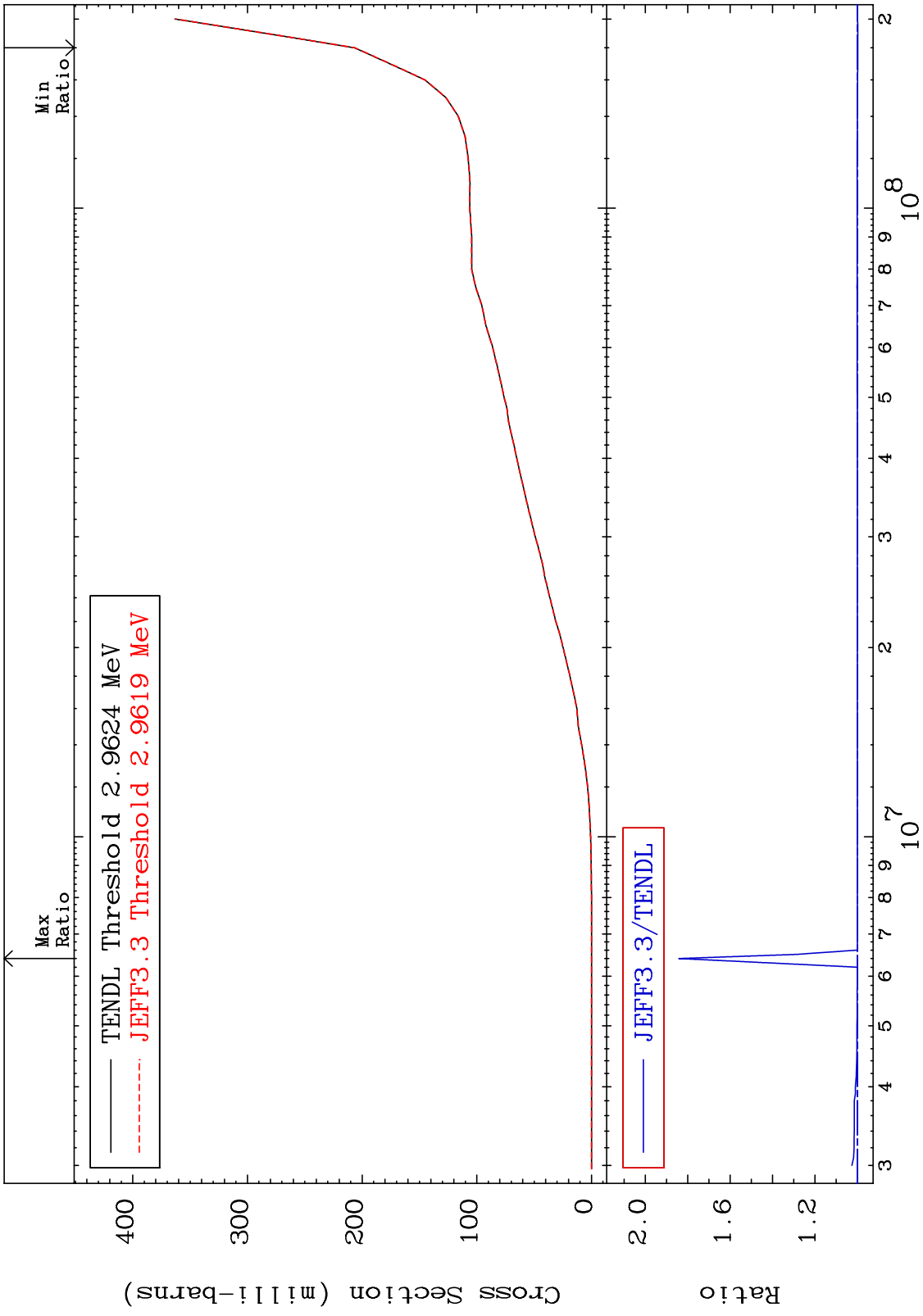
MAT 4119

Hydrogen Production Cross Section

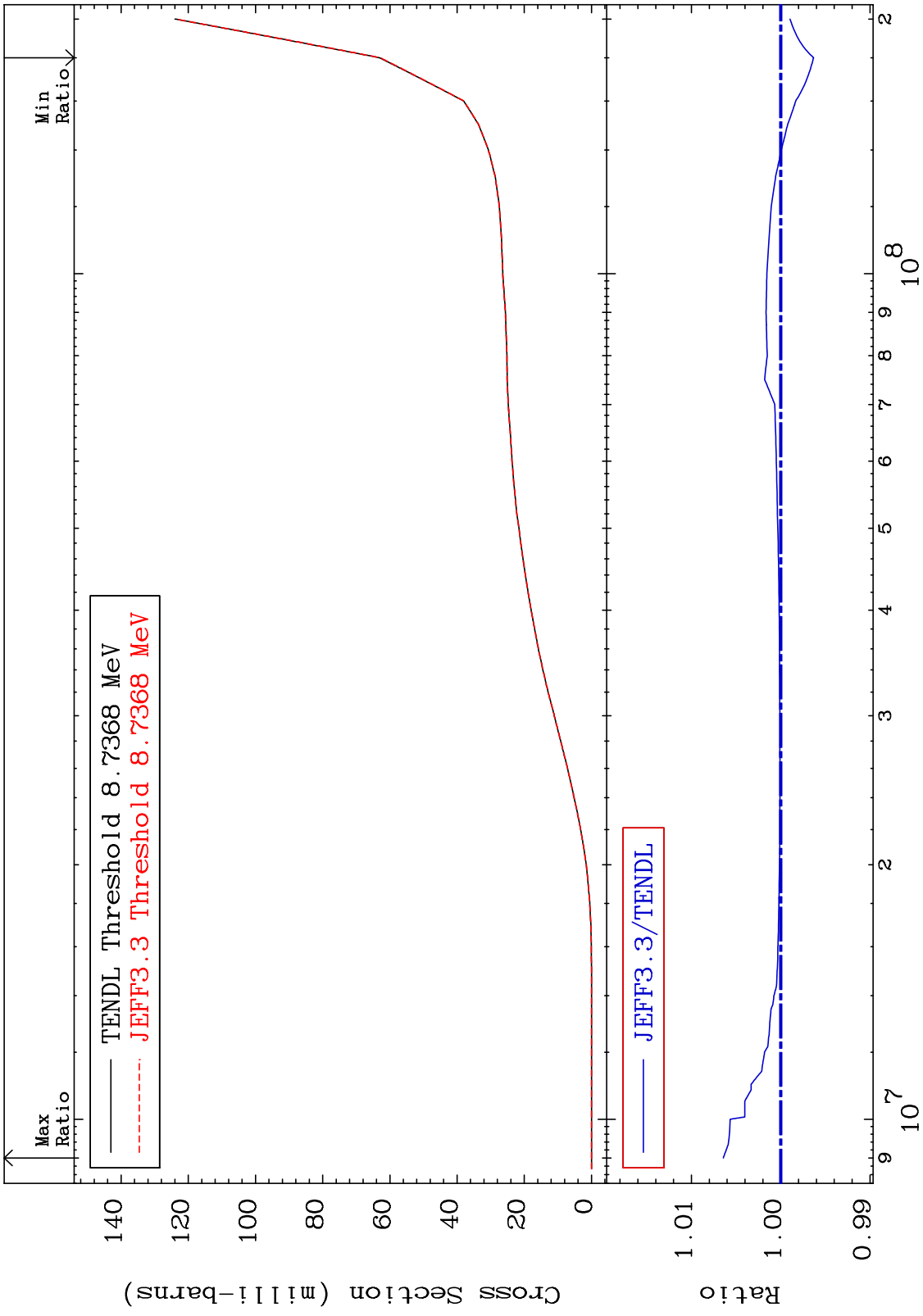
41-Nb-91
-4.554 To 0.292 %



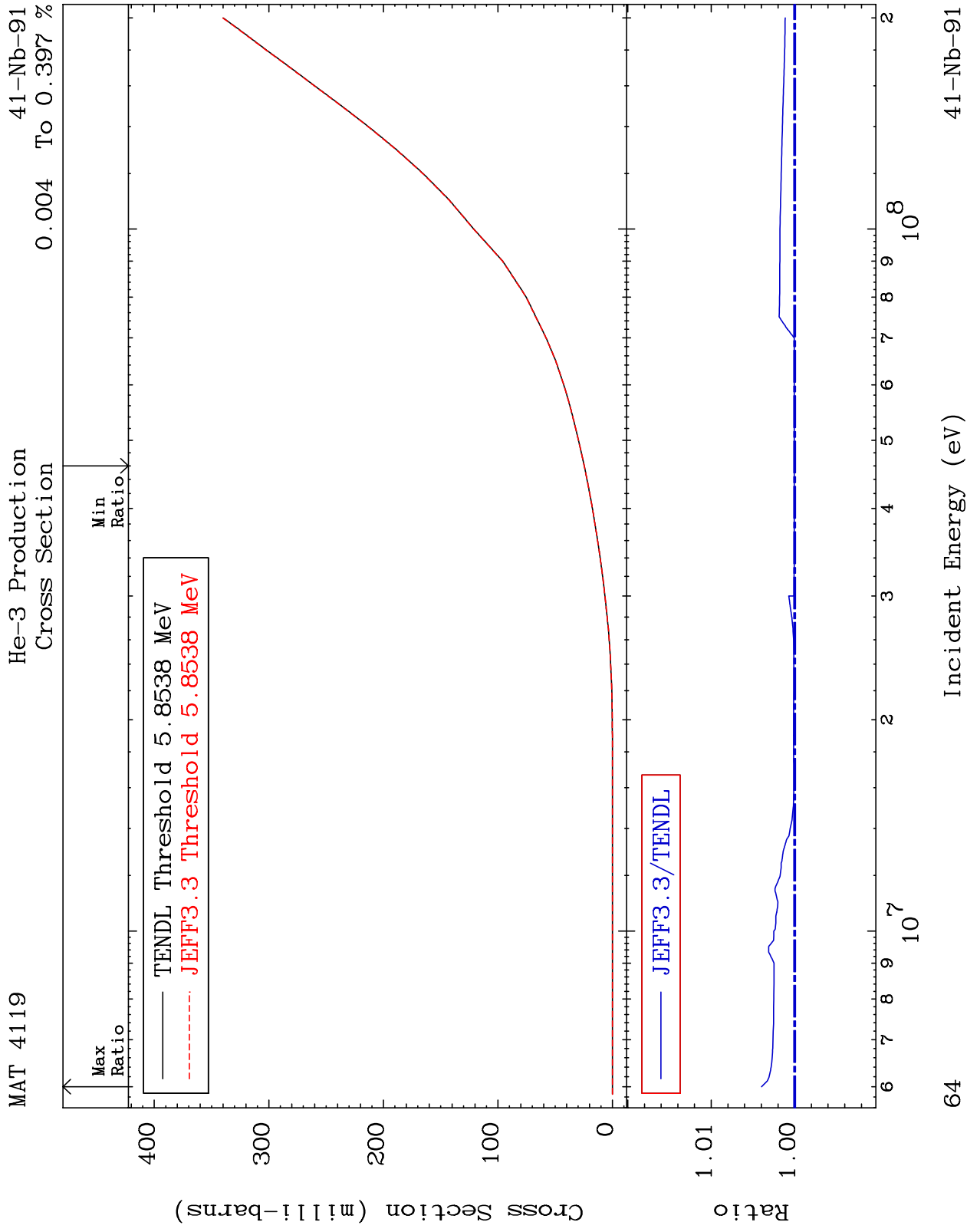
MAT 4119 Deuterium Production Cross Section 41-Nb-91 -0.208 To 84.13 %



MAT 4119 Tritium Production Cross Section 41-Nb-91 -0.368 To 0.643 %



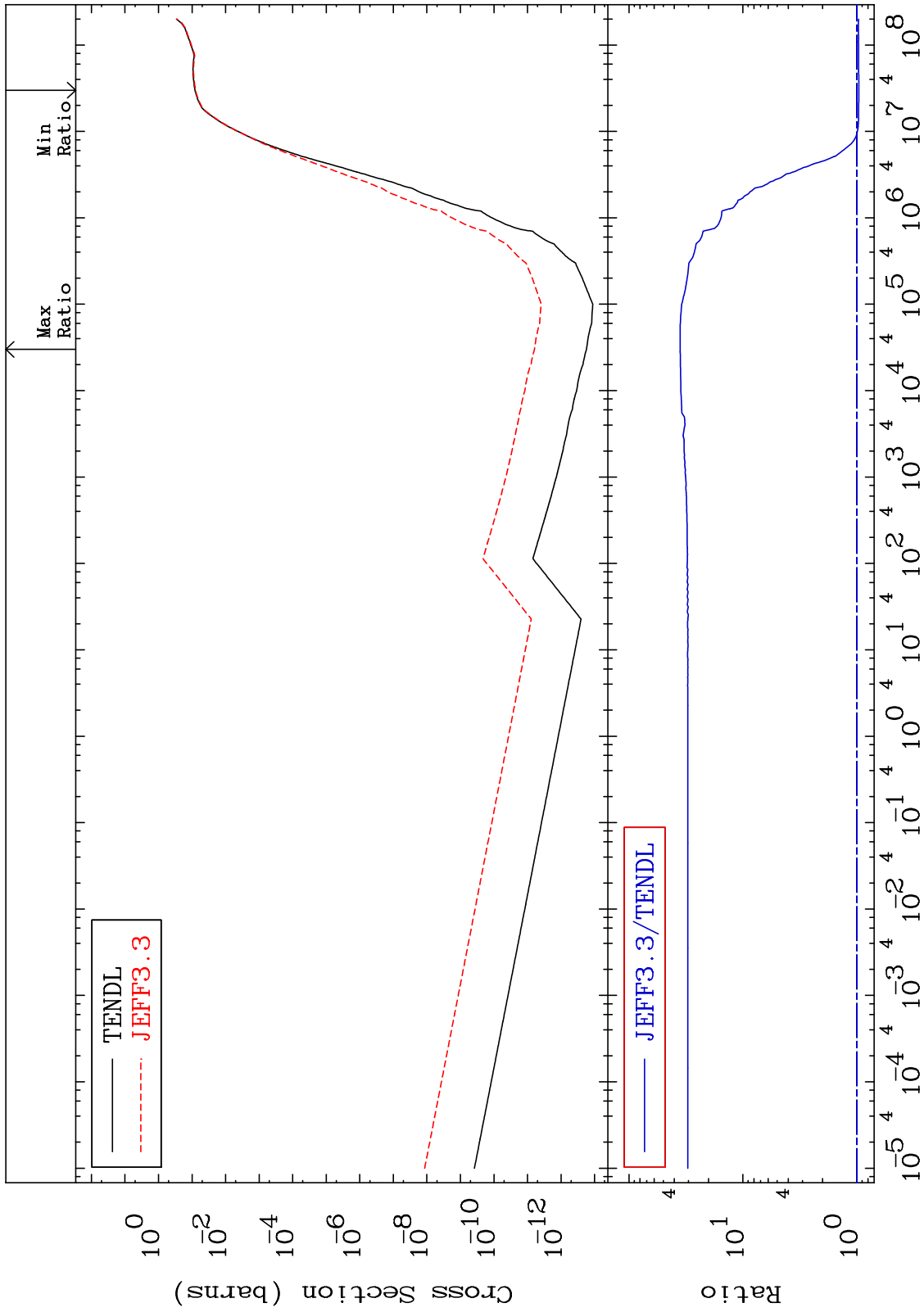
63 41-Nb-91



MAT 4119

He-4 Production
Cross Section

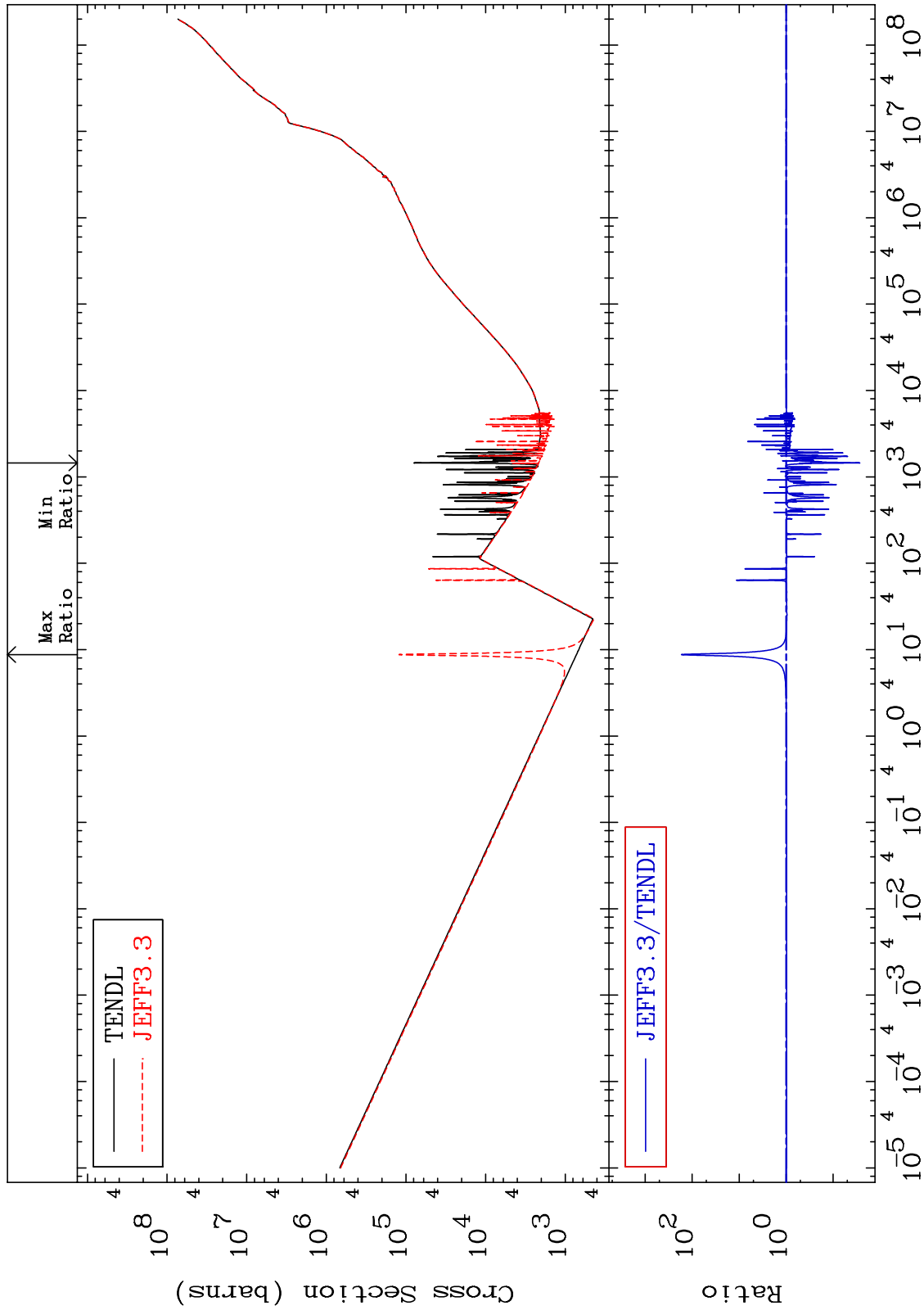
41-Nb-91
-3.967 To 3450. %



MAT 4119

Kerma total (eV-barns)
Cross Section

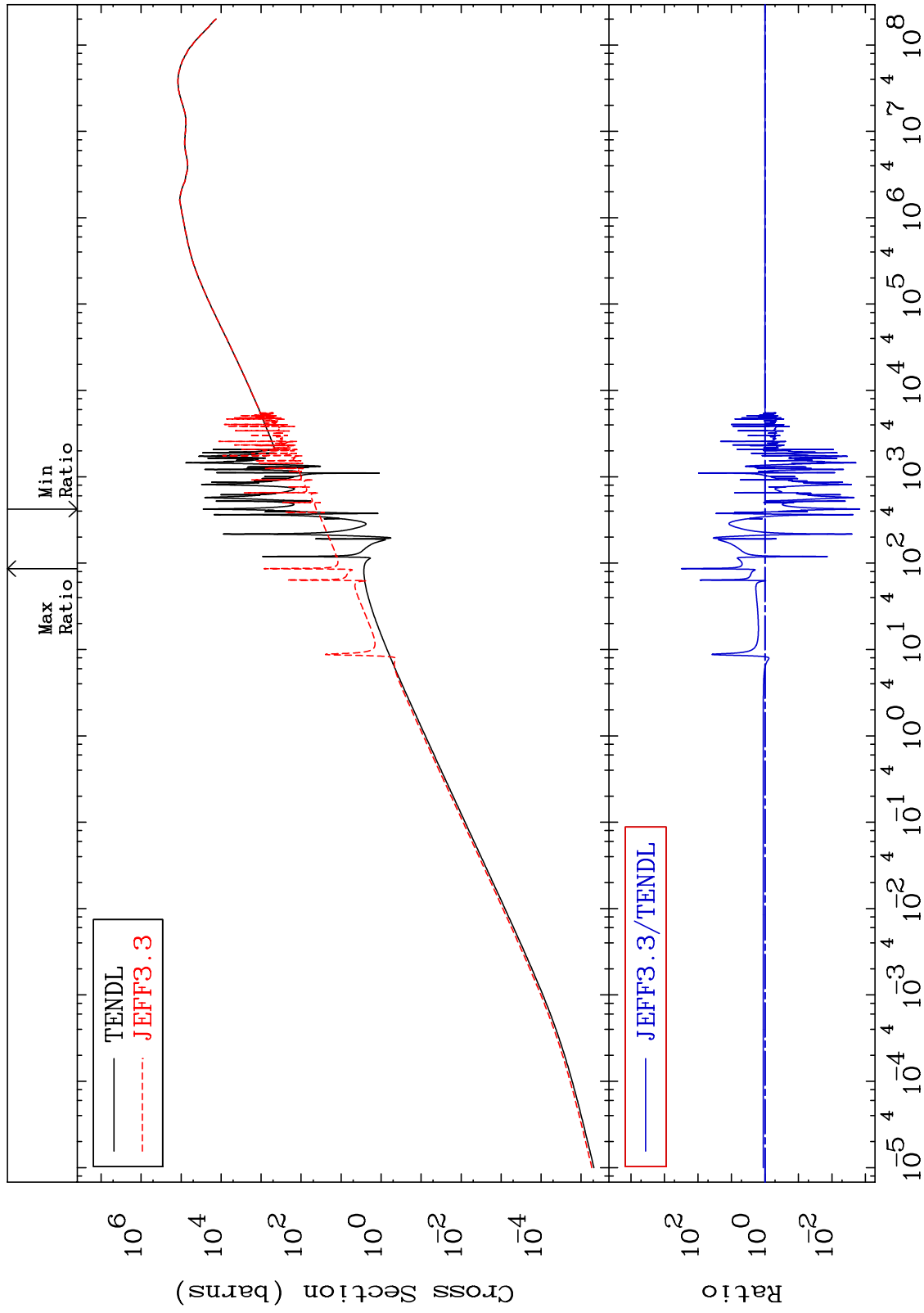
41-Nb-91
-97.28 To 9999. %



MAT 4119

Kerma elastic
Cross Section

41-Nb-91
-99.85 To 9999. %

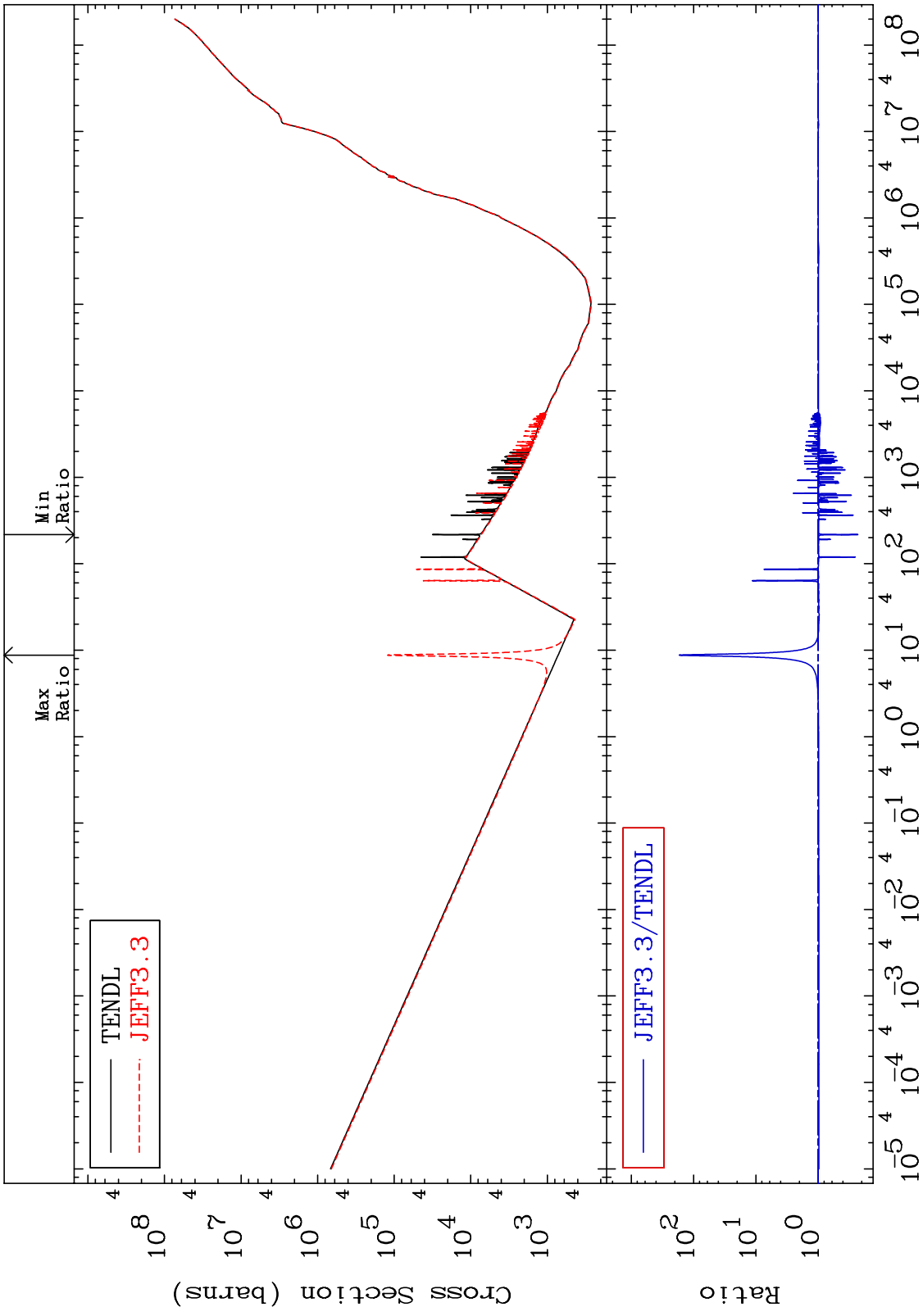


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Incident Energy (eV)

41-Nb-91

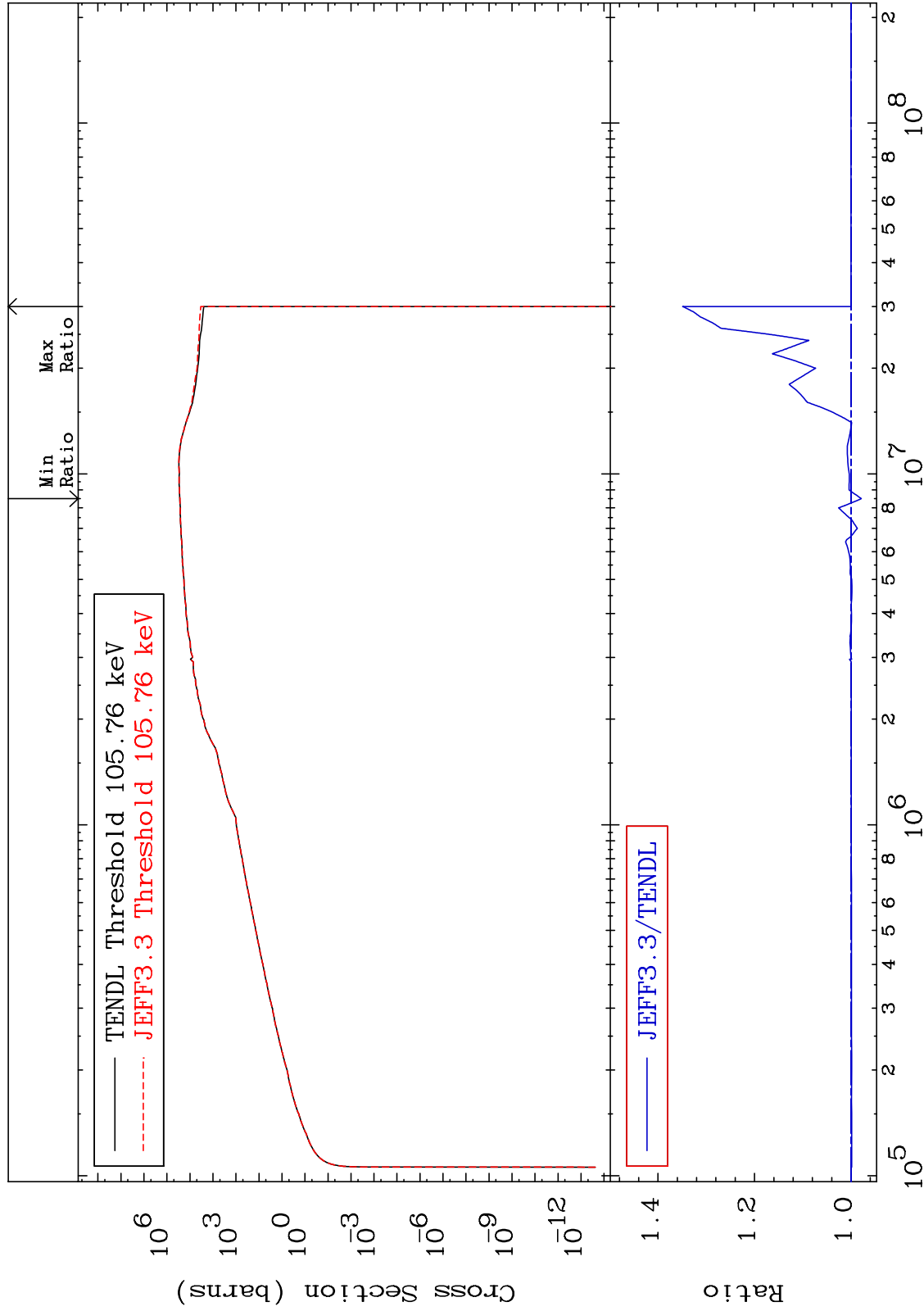
MAT 4119 Kerma non-elastic (all but mt2) 41-Nb-91
 Cross Section -76.96 To 9999. %



MAT 4119

Kerma inelastic (mt51-91)
Cross Section

41-Nb-91
-2.132 To 34.88 %



69

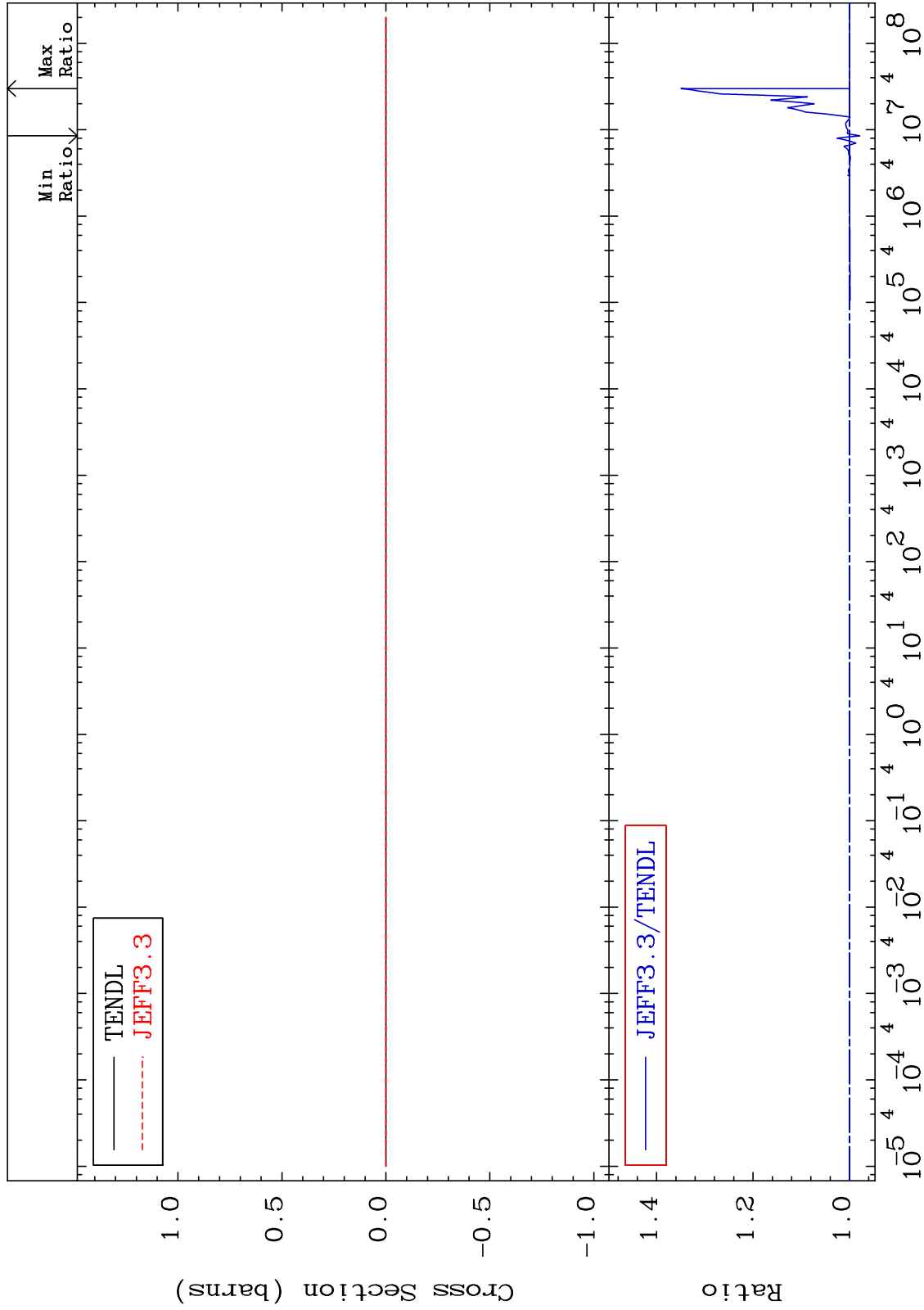
Incident Energy (eV)

41-Nb-91

MAT 4119

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

41-Nb-91
-2.132 To 34.88 %



70

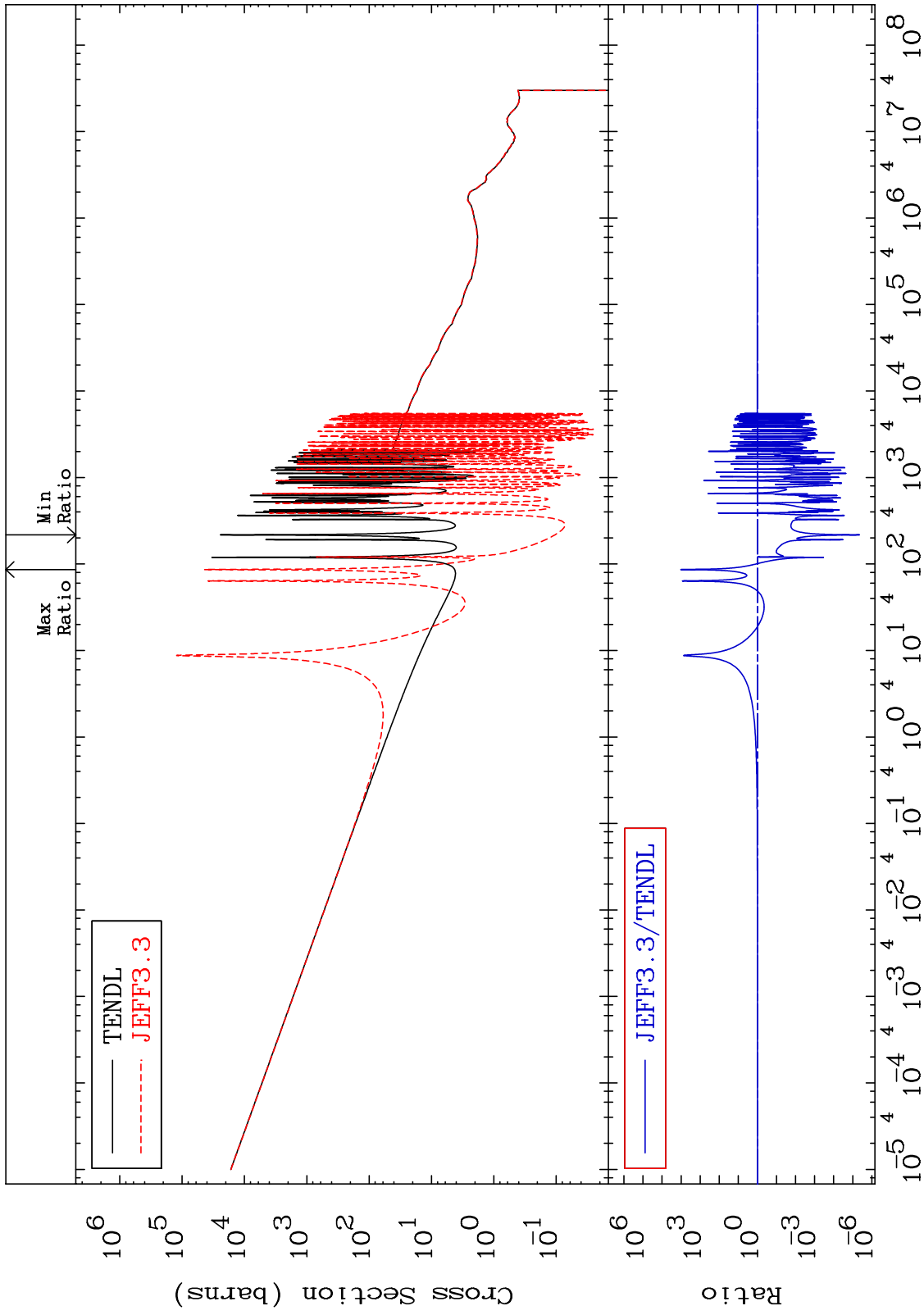
Incident Energy (eV)

41-Nb-91

MAT 4119

Kerma capture (mt102)
Cross Section

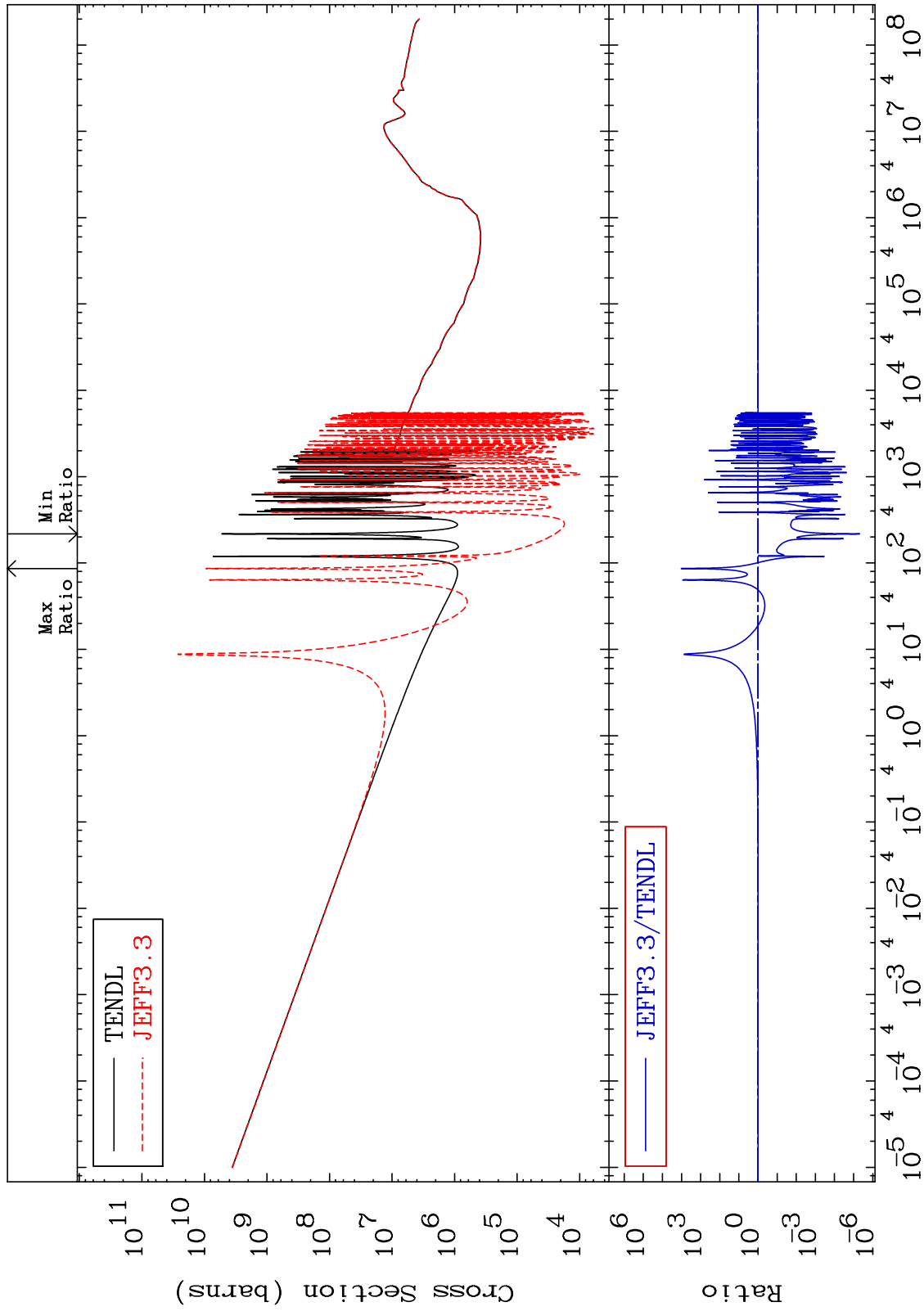
41-Nb-91
-100.0 To 9999. %



MAT 4119

Total photon (eV-barns)
Cross Section

41-Nb-91
-100.0 To 9999. %

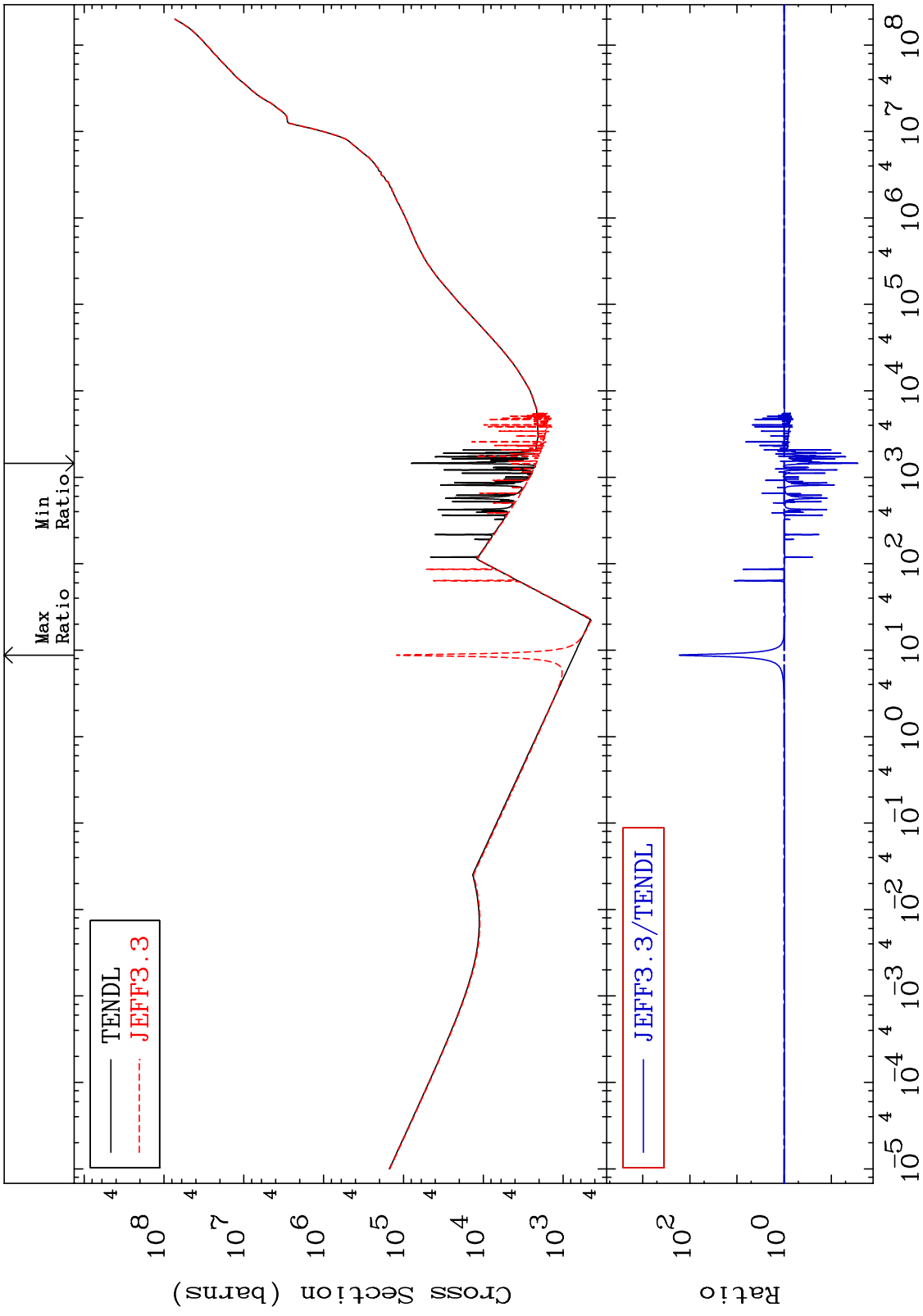


72

Incident Energy (eV)

41-Nb-91

MAT 4119 Total kinematic kerma (high limit) Cross Section 41-Nb-91 -97.26 To 9999. %

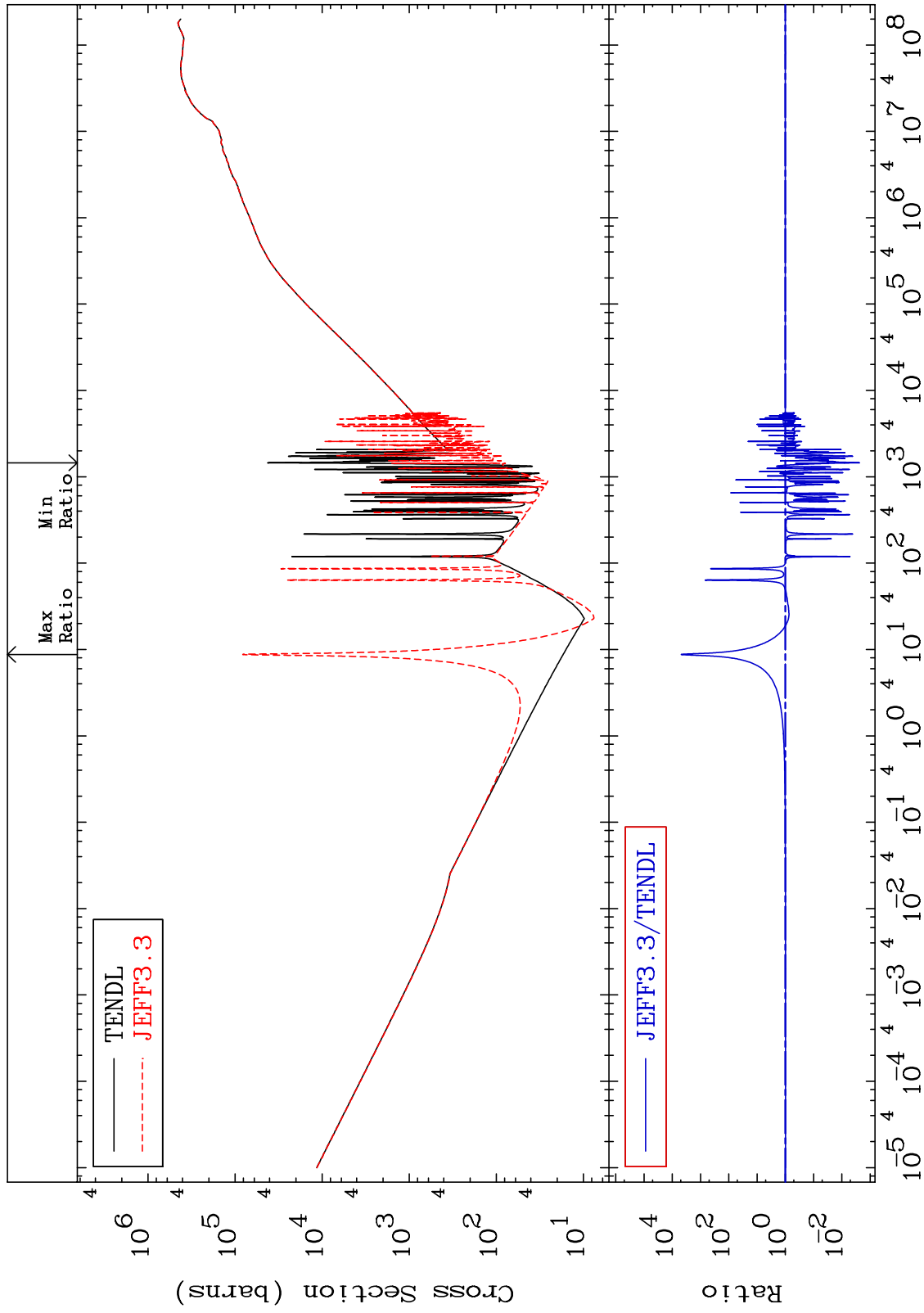


73 Incident Energy (eV) 41-Nb-91

MAT 4119

Dpa total (eV-barns)
Cross Section

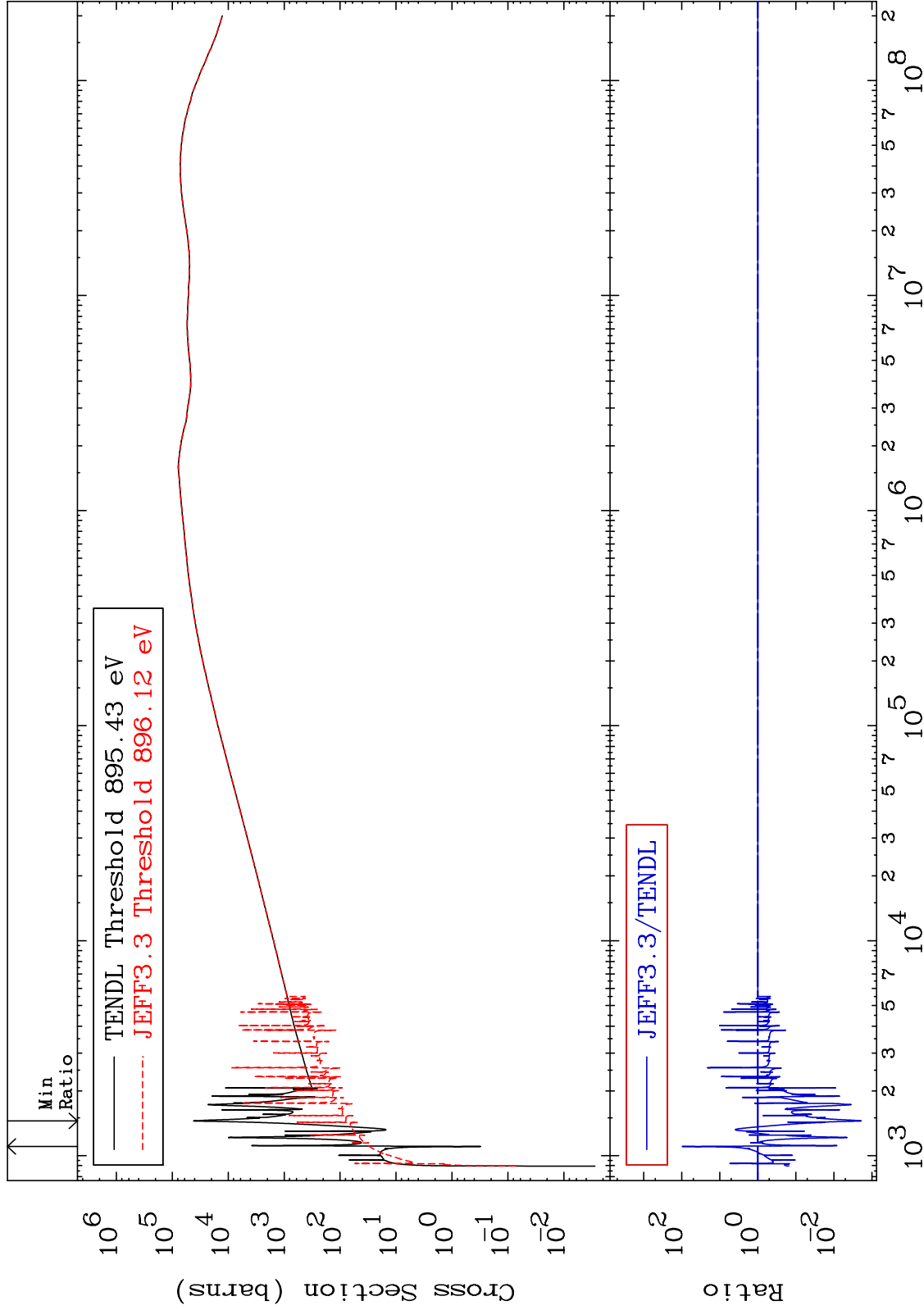
41-Nb-91
-99.77 To 9999. %



MAT 4119

Dpa elastic (mt2)
Cross Section

41-Nb-91
-99.81 To 9493. %

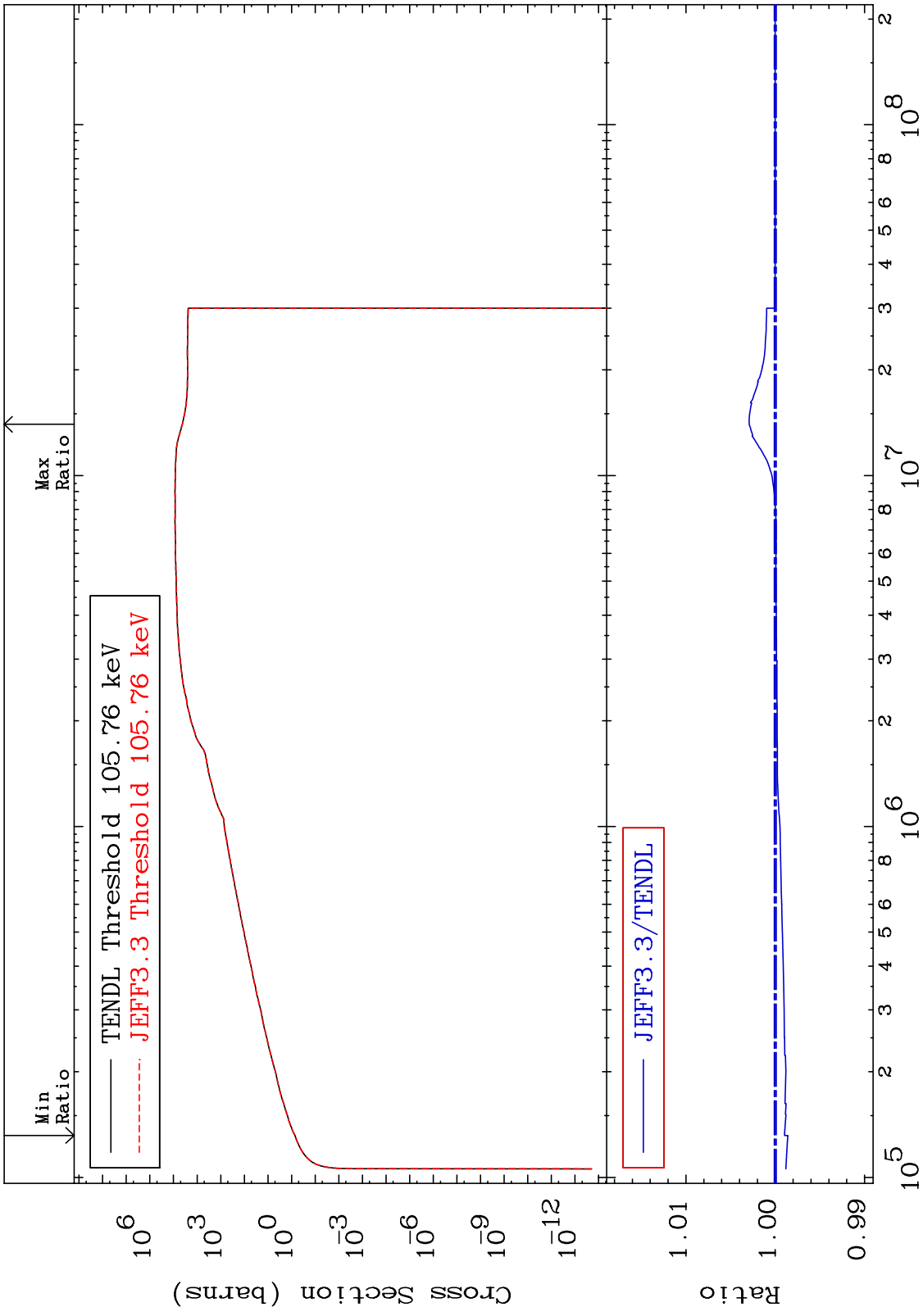


75

Incident Energy (eV)

41-Nb-91

MAT 4119 Dpa inelastic (mt51-91) 41-Nb-91
Cross Section -0.140 To 0.293 %

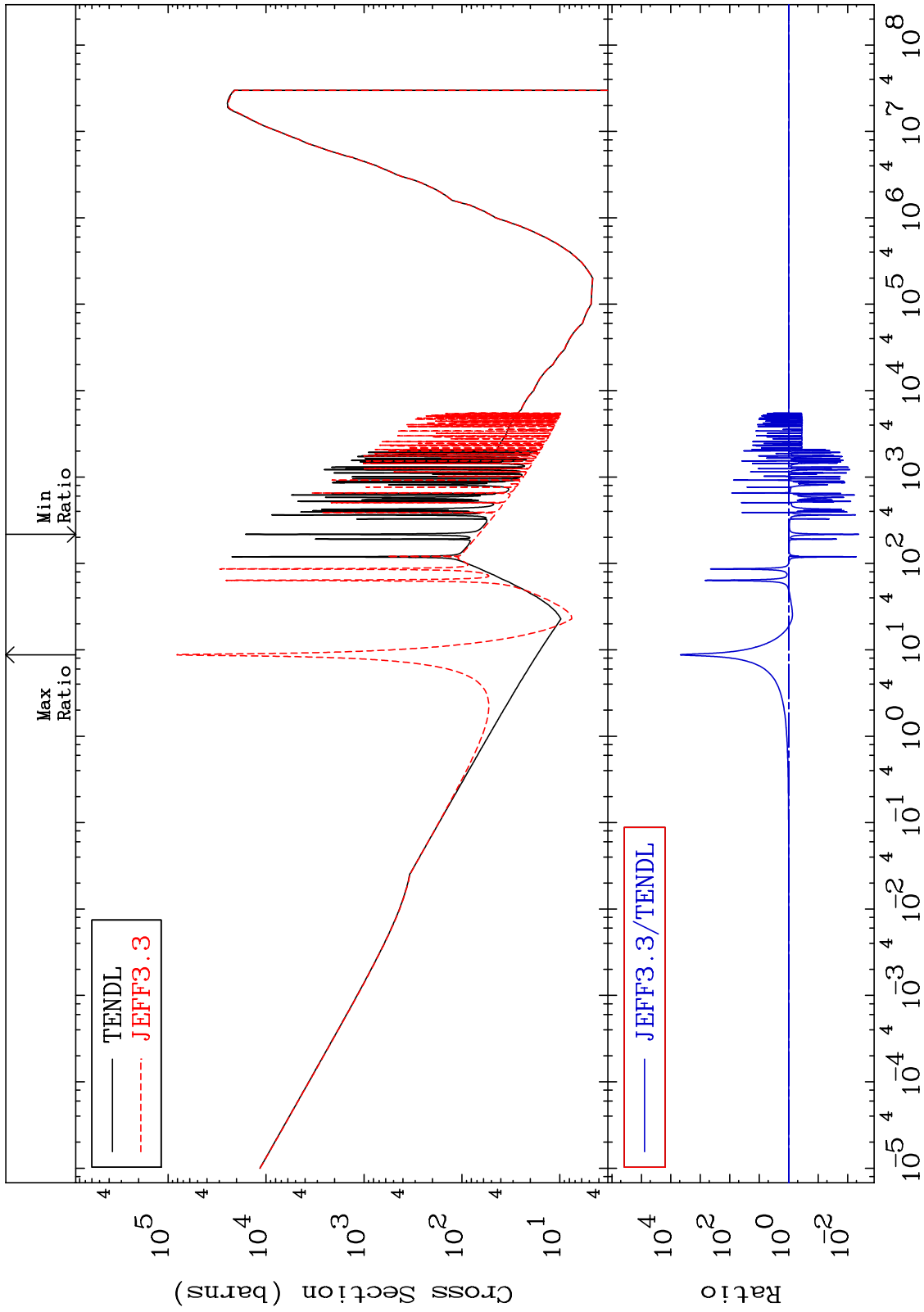


76 41-Nb-91

MAT 4119

Dpa disappearance (mt102 -120)
Cross Section

41-Nb-91
-99.59 To 9999. %

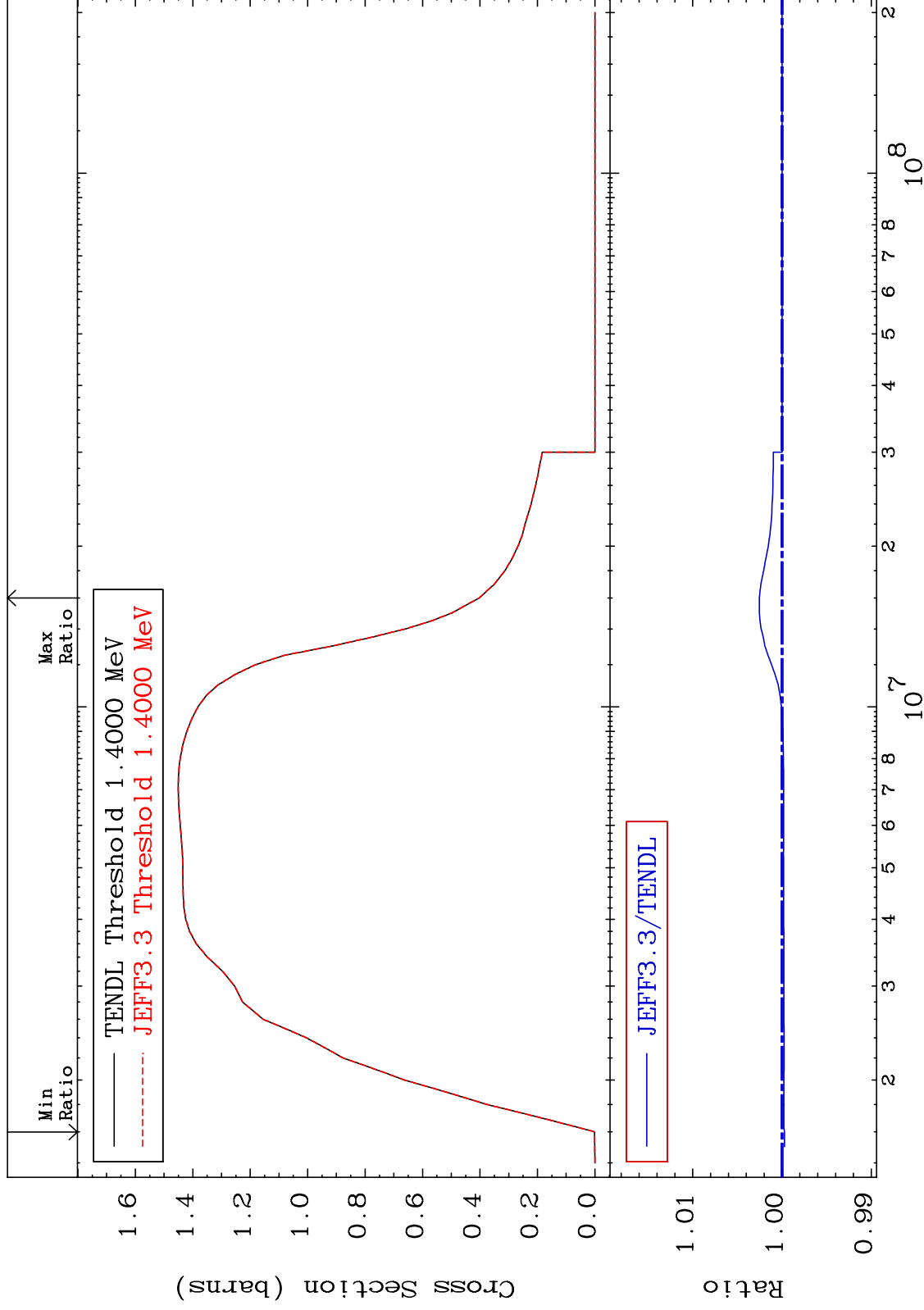


MAT 4119

Inelastic: 41-Nb-91g

41-Nb-91

Radionuclide Production Cross Section -0.027 To 0.254 %

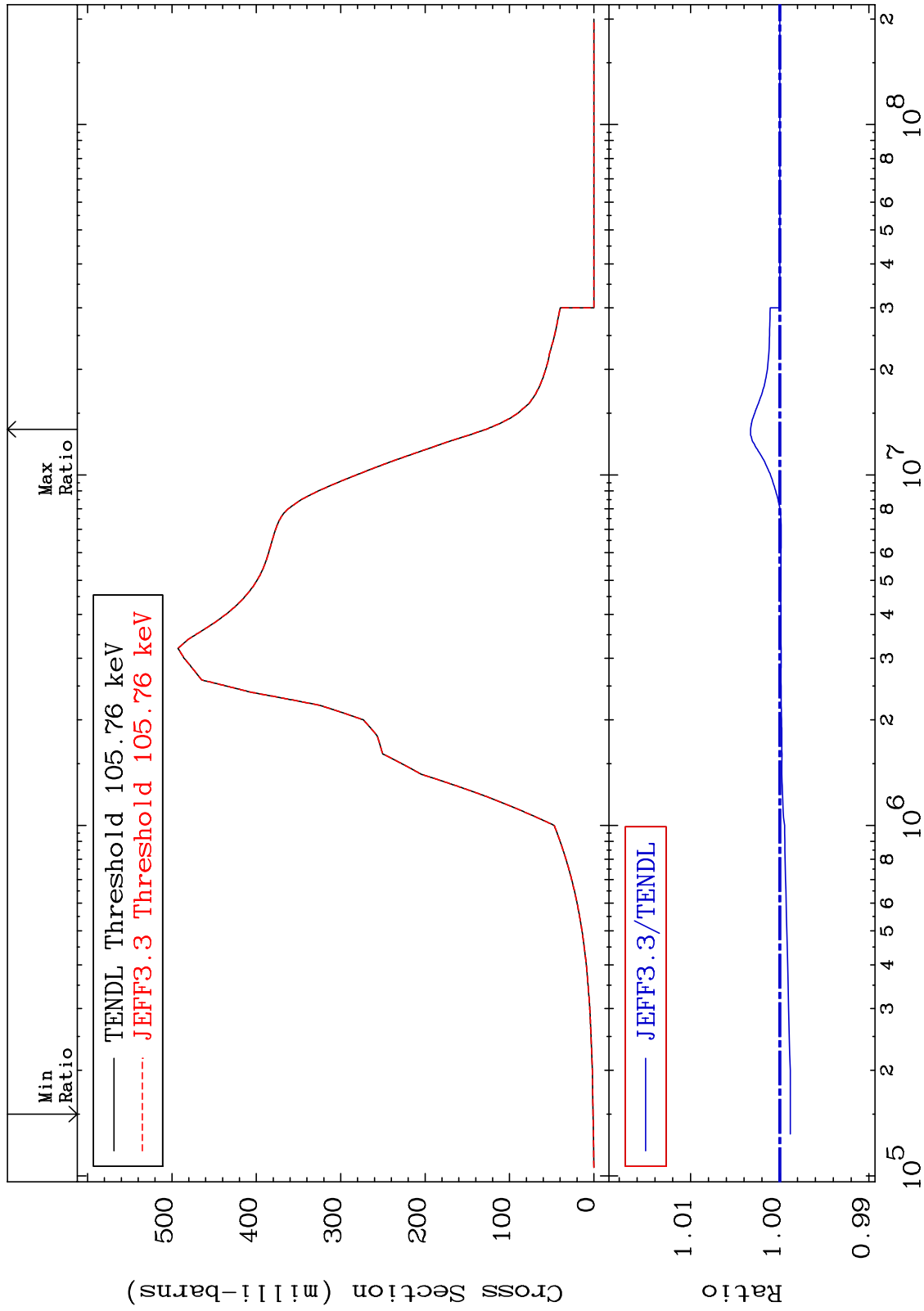


78

Incident Energy (eV)

41-Nb-91

MAT 4119 Inelastic:41-Nb-91m1 41-Nb-91
Radionuclide Production Cross Section -0.119 To 0.326 %



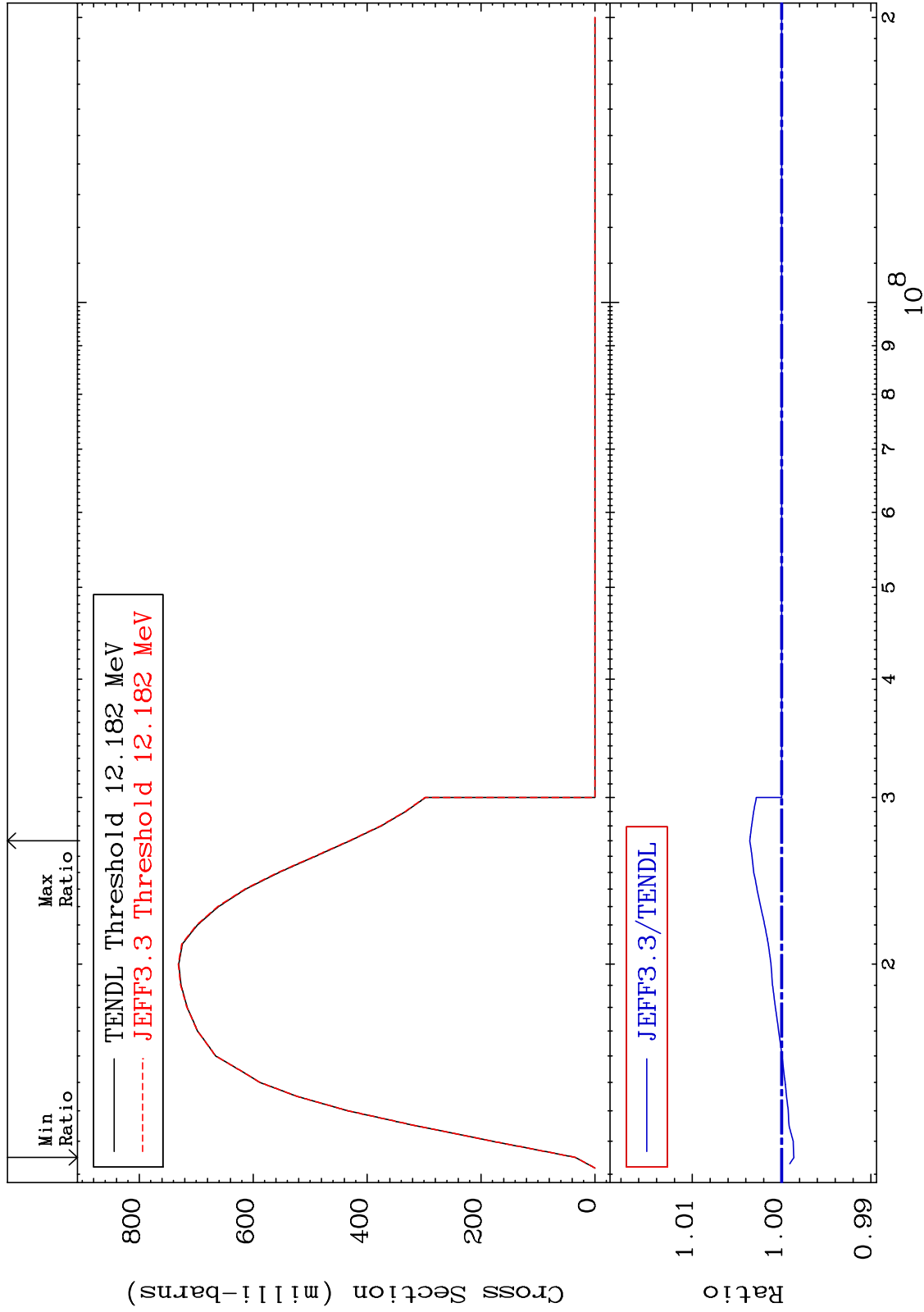
79 41-Nb-91

MAT 4119

(n,2n) : 41-Nb-90g

41-Nb-91

Radionuclide Production Cross Section -0.139 To 0.357 %

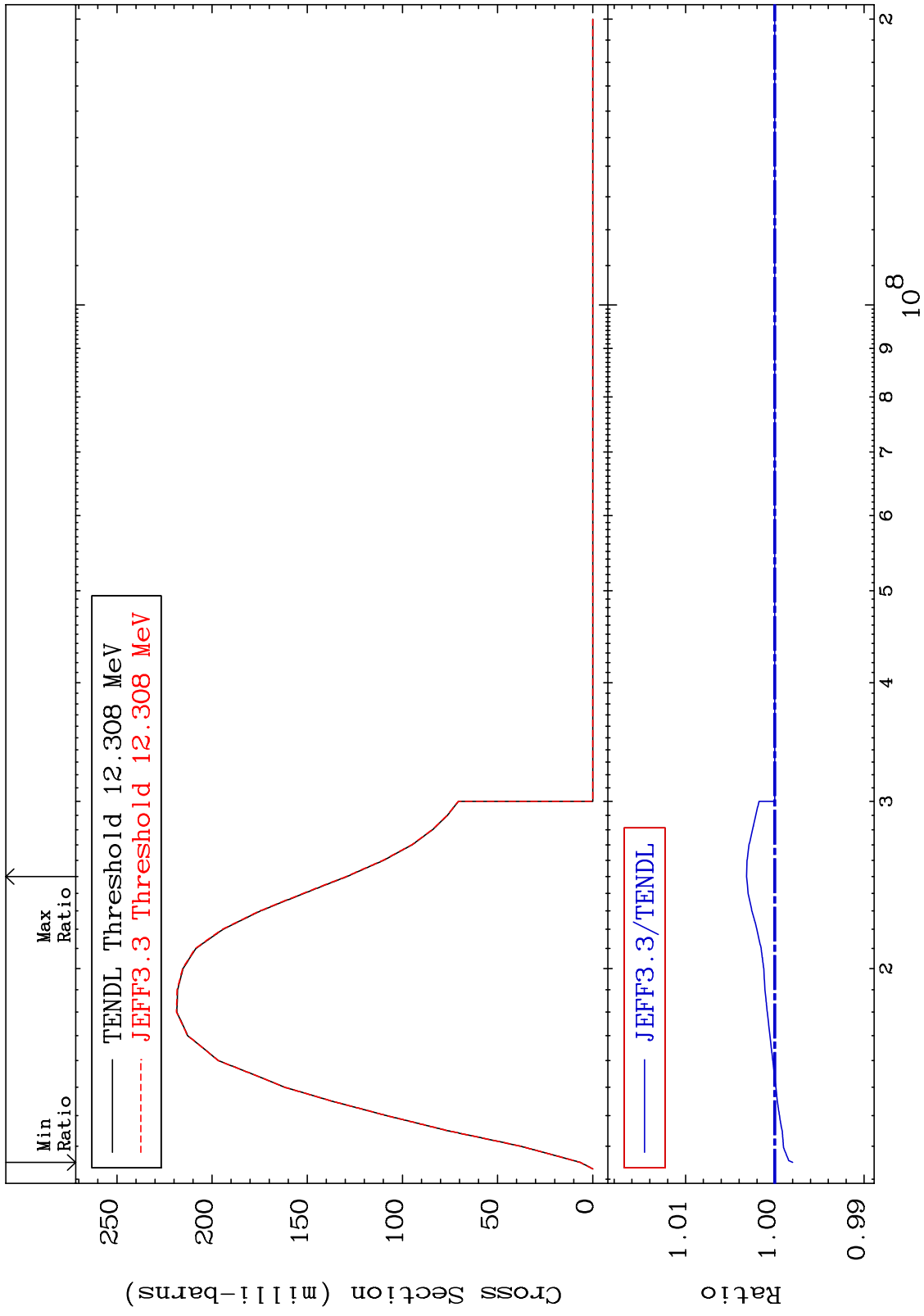


MAT 4119

(n,2n):41-Nb-90m2

41-Nb-91

Radionuclide Production Cross Section -0.200 To 0.317 %

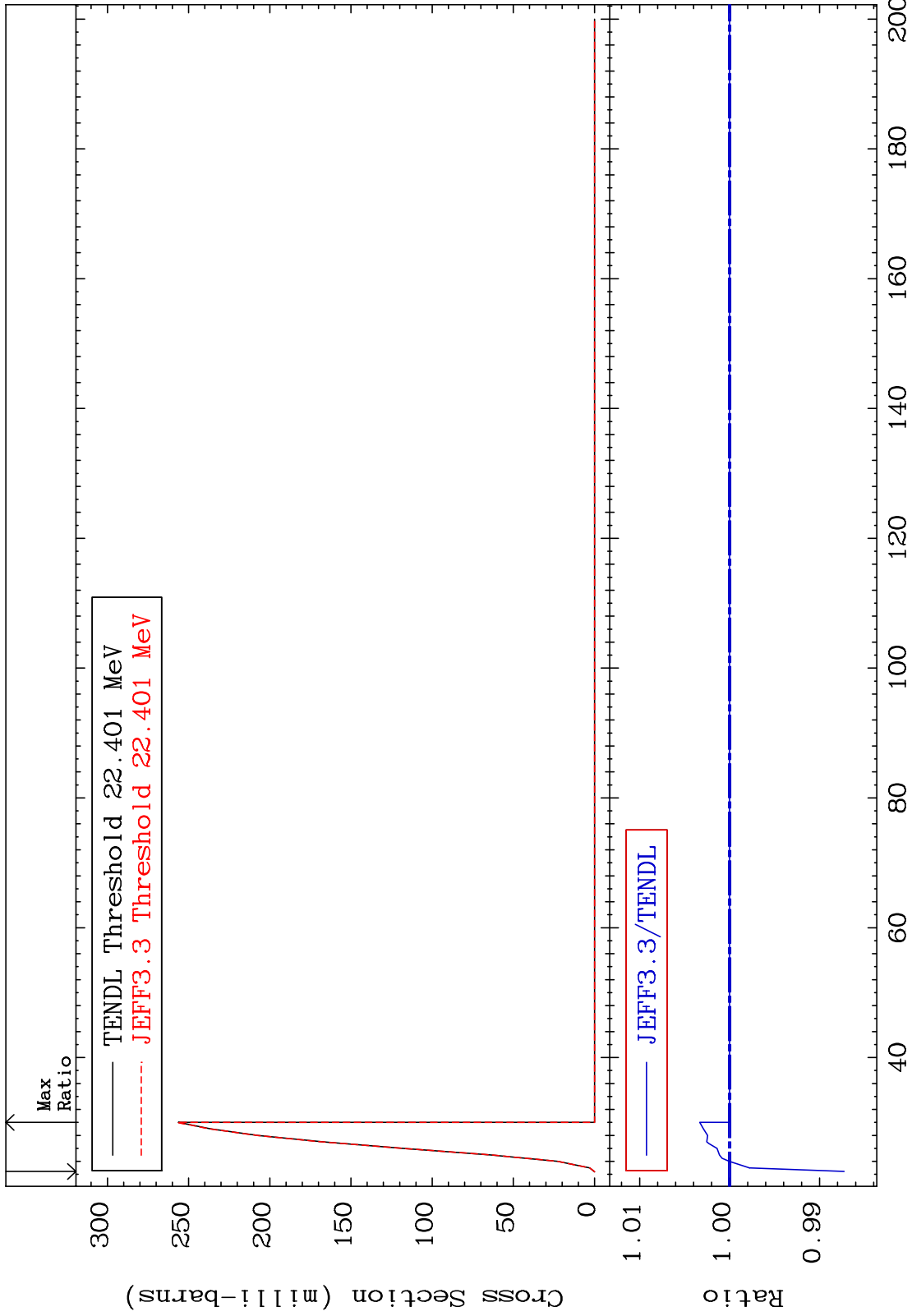


MAT 4119

(n,3n):41-Nb-89g

41-Nb-91

Radionuclide Production Cross Section -1.271 To 0.333 %

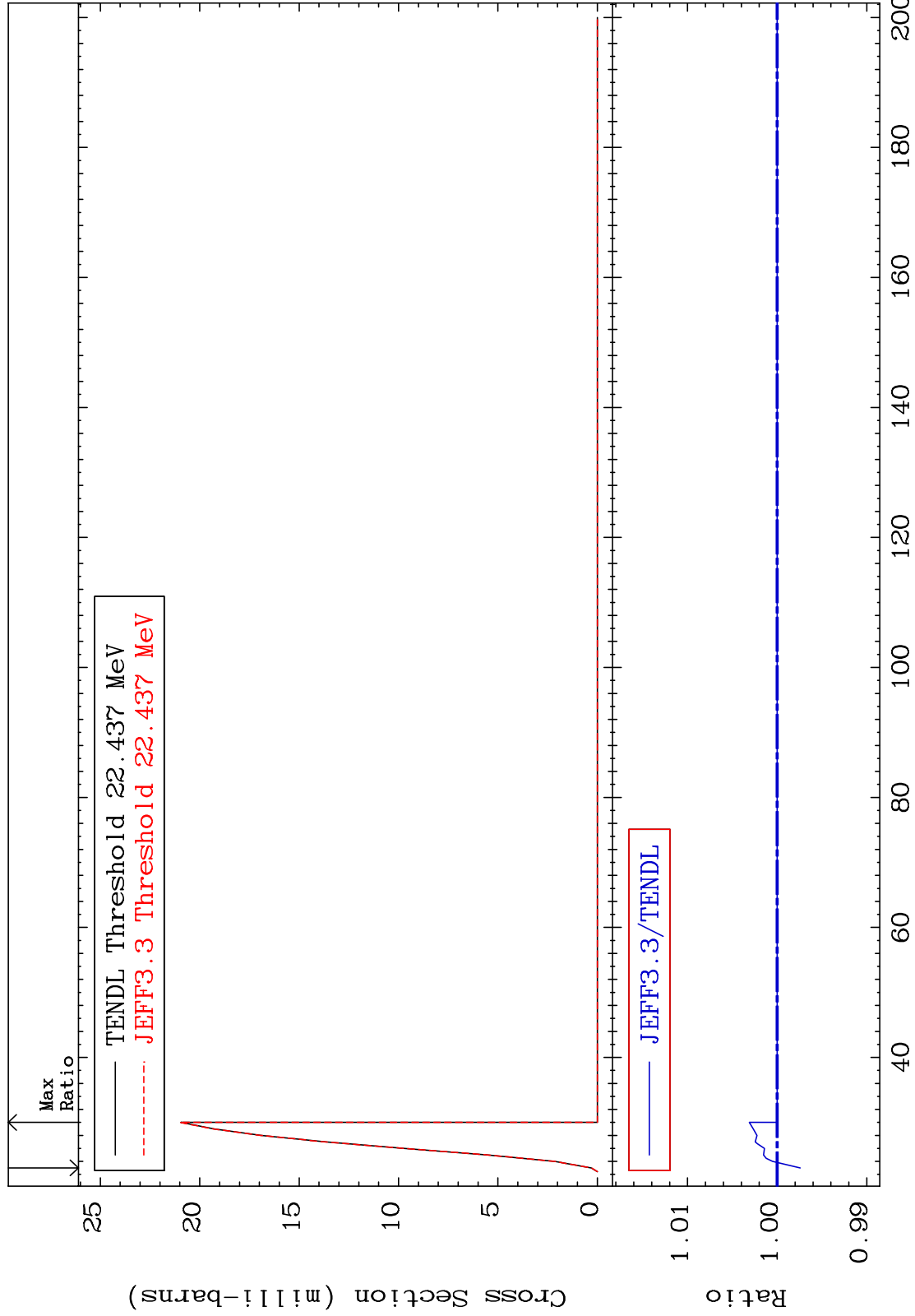


MAT 4119

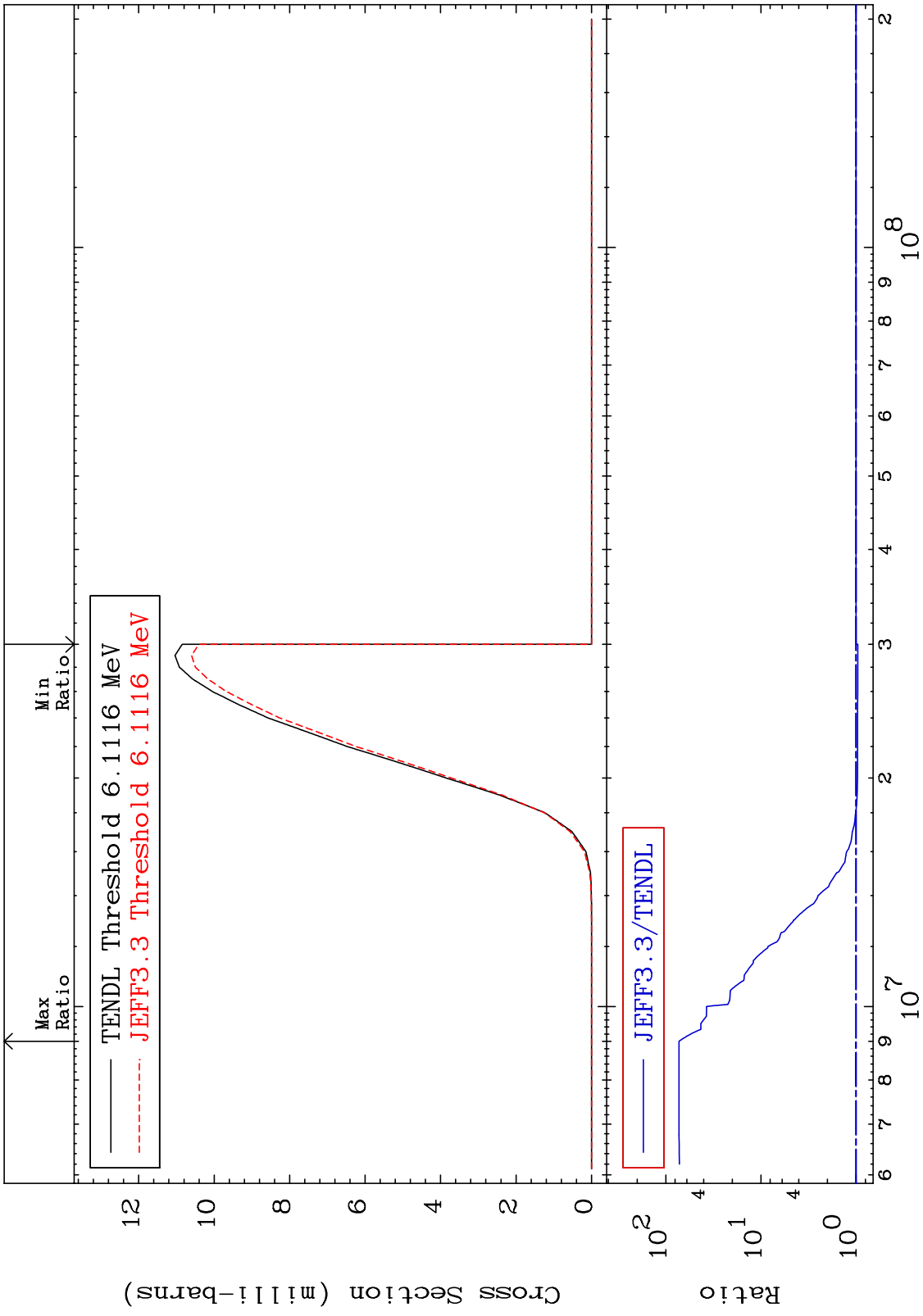
(n,3n):41-Nb-89m1

41-Nb-91

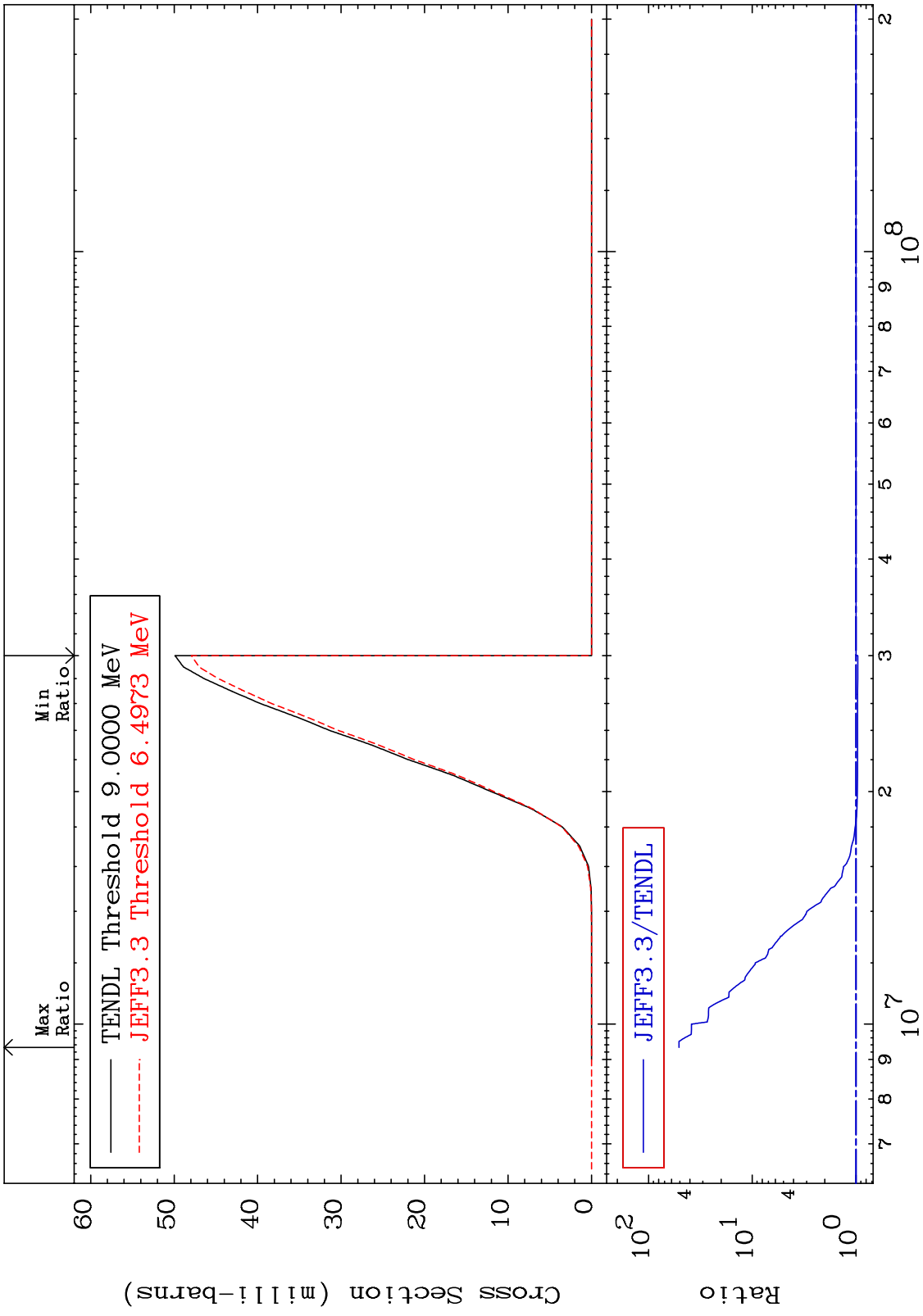
Radionuclide Production Cross Section -0.257 To 0.311 %



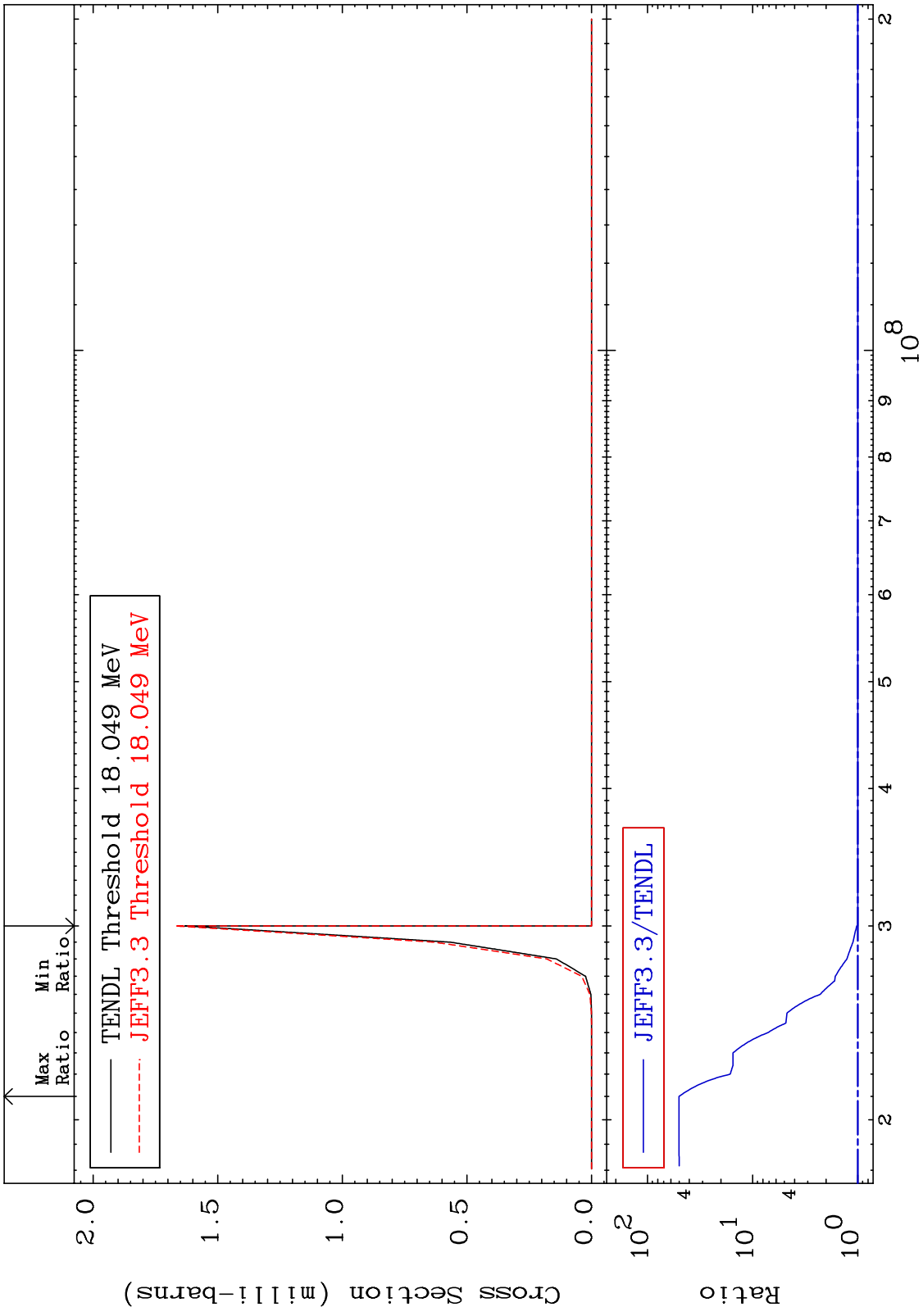
MAT 4119 (n, n') α : 39-Y -87g 41-Nb-91
 Radionuclide Production Cross Section -4.050 To 7154. %



MAT 4119 (n, n') α :39-Y -87m1 41-Nb-91
 Radionuclide Production Cross Section -3.923 To 4985. %



MAT 4119 (n,2n) α :39-Y -86g 41-Nb-91
 Radionuclide Production Cross Section 0.000 To 4911. %

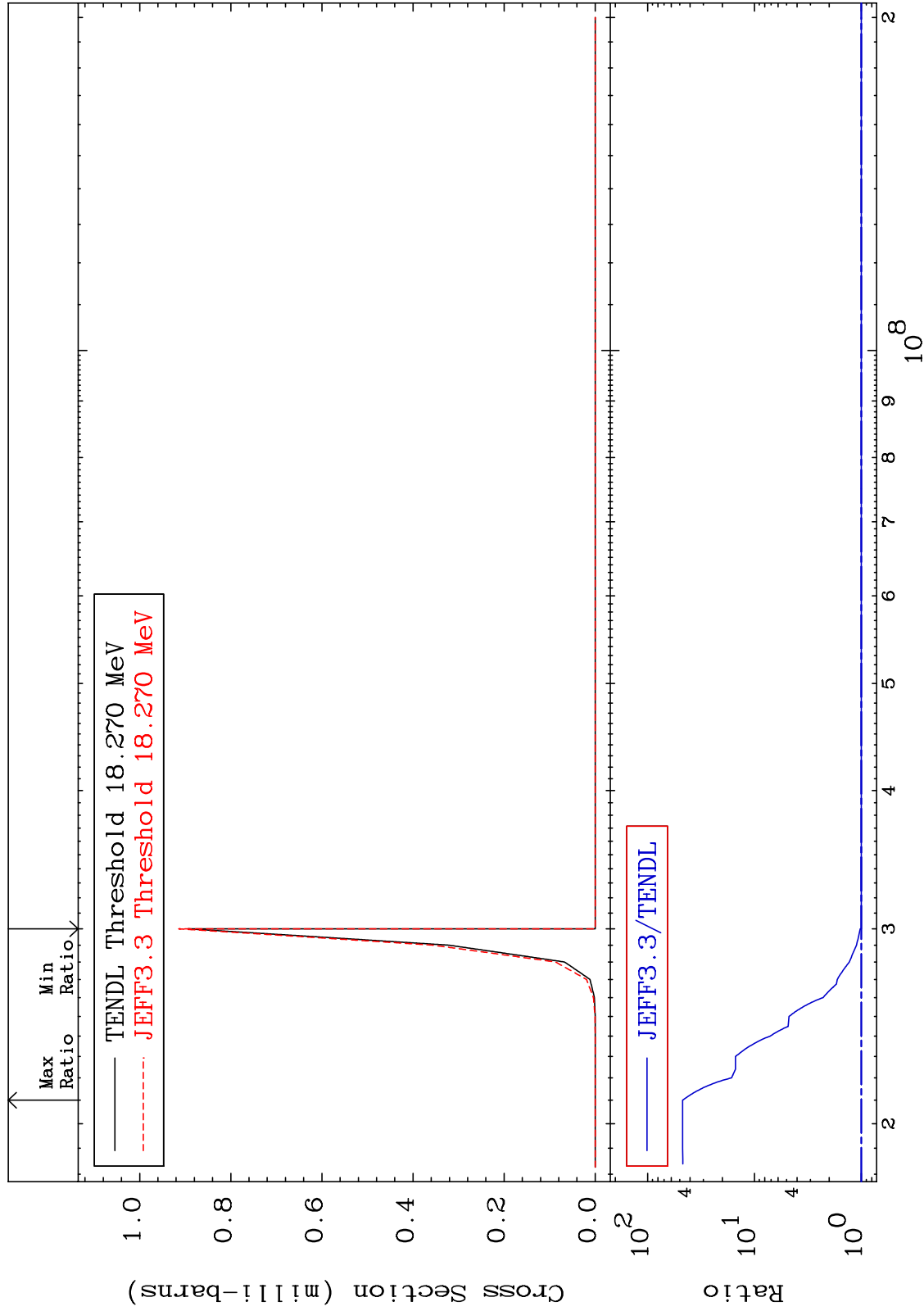


MAT 4119

(n,2n) α :39-Y -86m2

41-Nb-91

Radionuclide Production Cross Section 0.000 To 4595. %

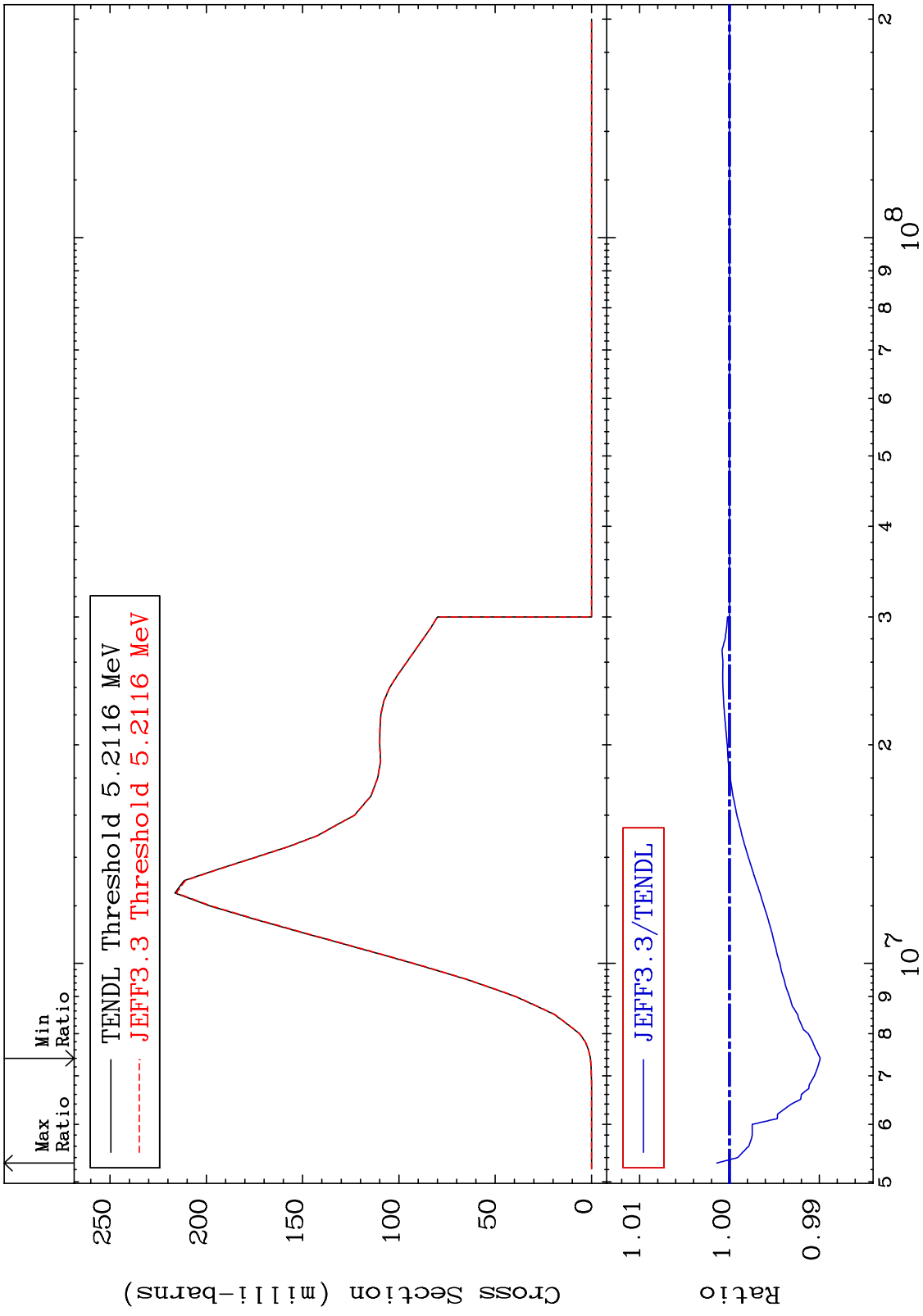


87

Incident Energy (eV)

41-Nb-91

MAT 4119 (n,n') p:40-Zr-90g 41-Nb-91
 Radionuclide Production Cross Section -1.009 To 0.142 %

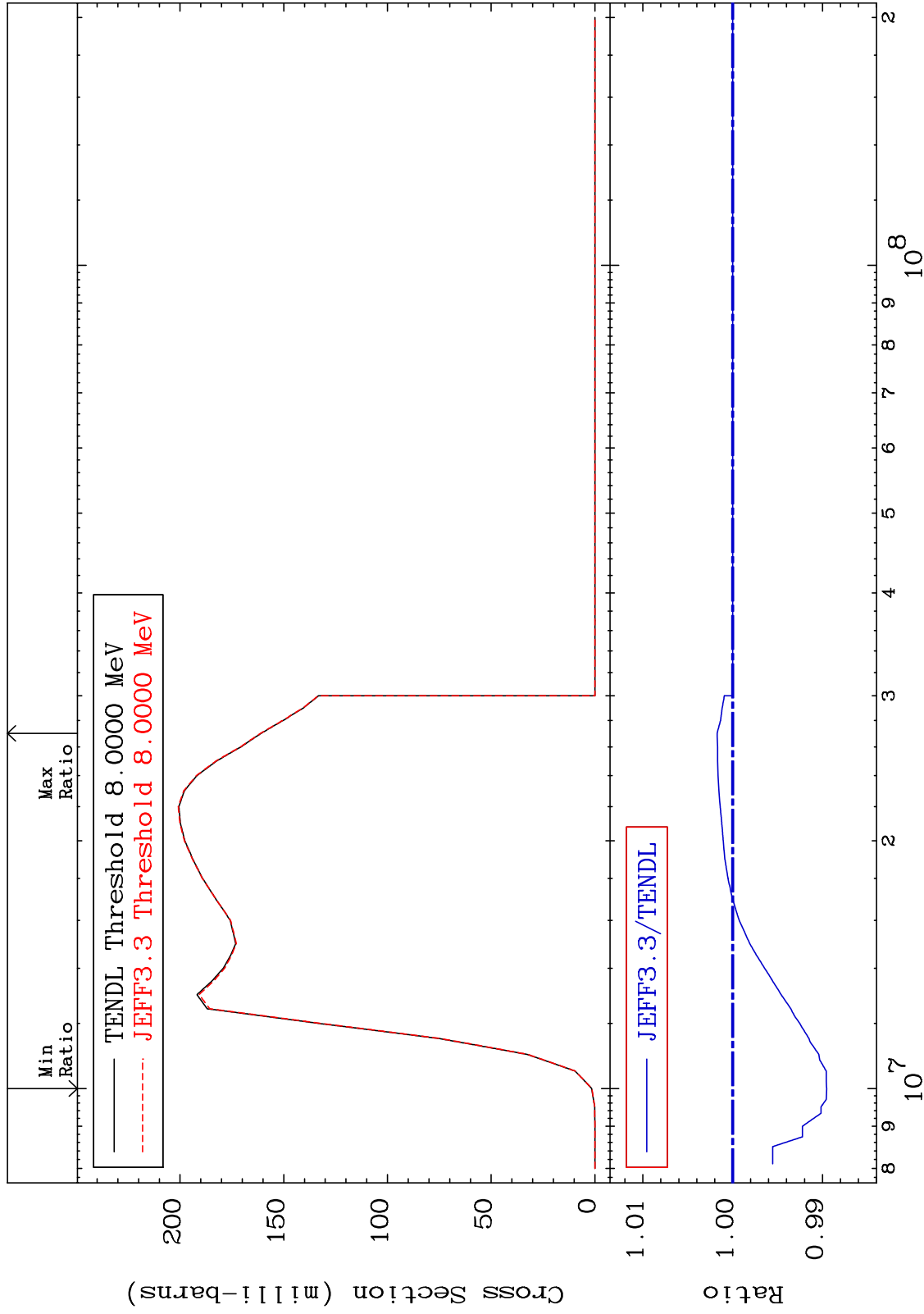


MAT 4119

(n, n') p:40-Zr-90m3

41-Nb-91

Radionuclide Production Cross Section -1.047 To 0.174 %



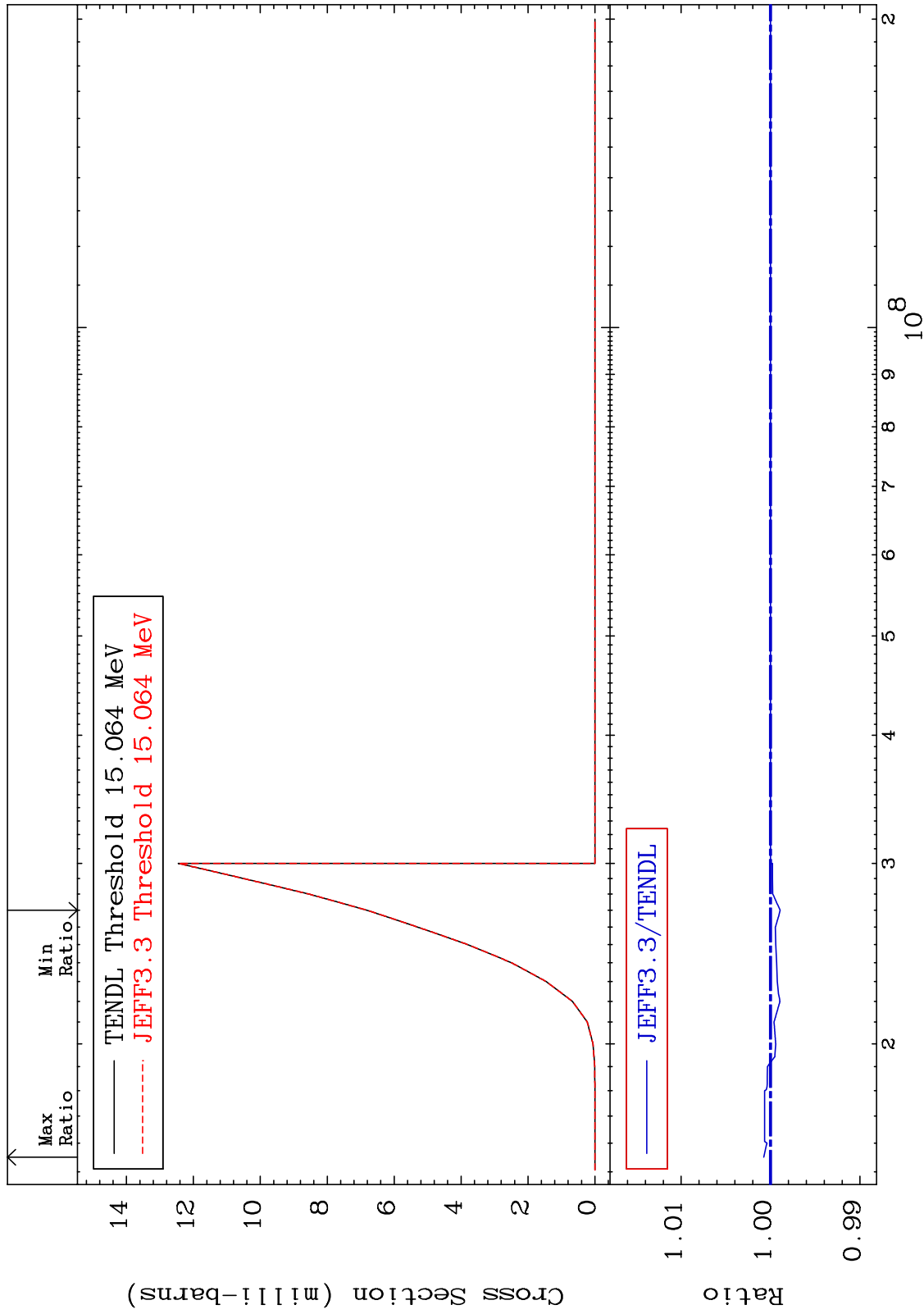
89

Incident Energy (eV)

41-Nb-91

MAT 4119

(n, n') d:40-Zr-89g 41-Nb-91
Radionuclide Production Cross Section -0.107 To 0.078 %

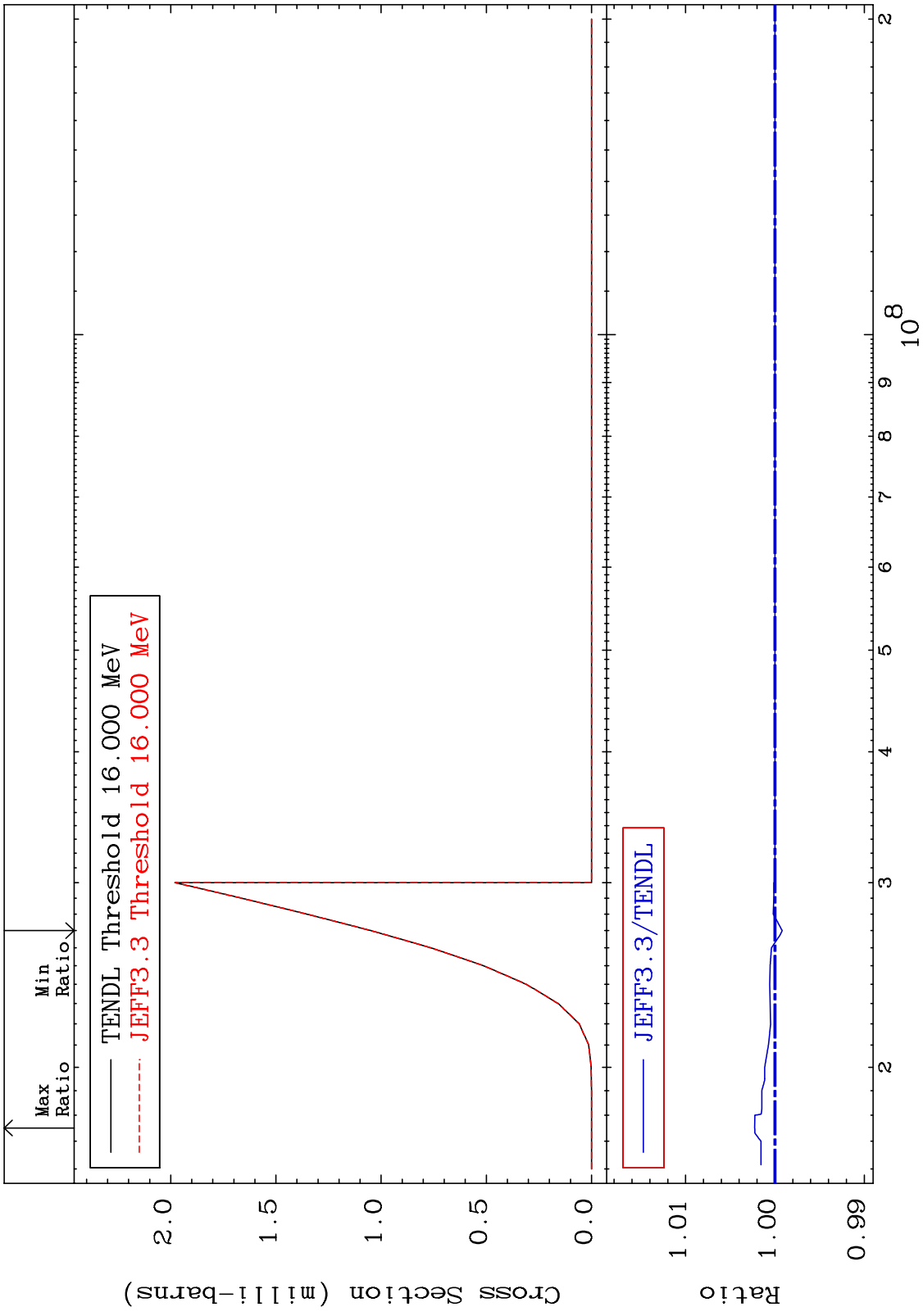


90

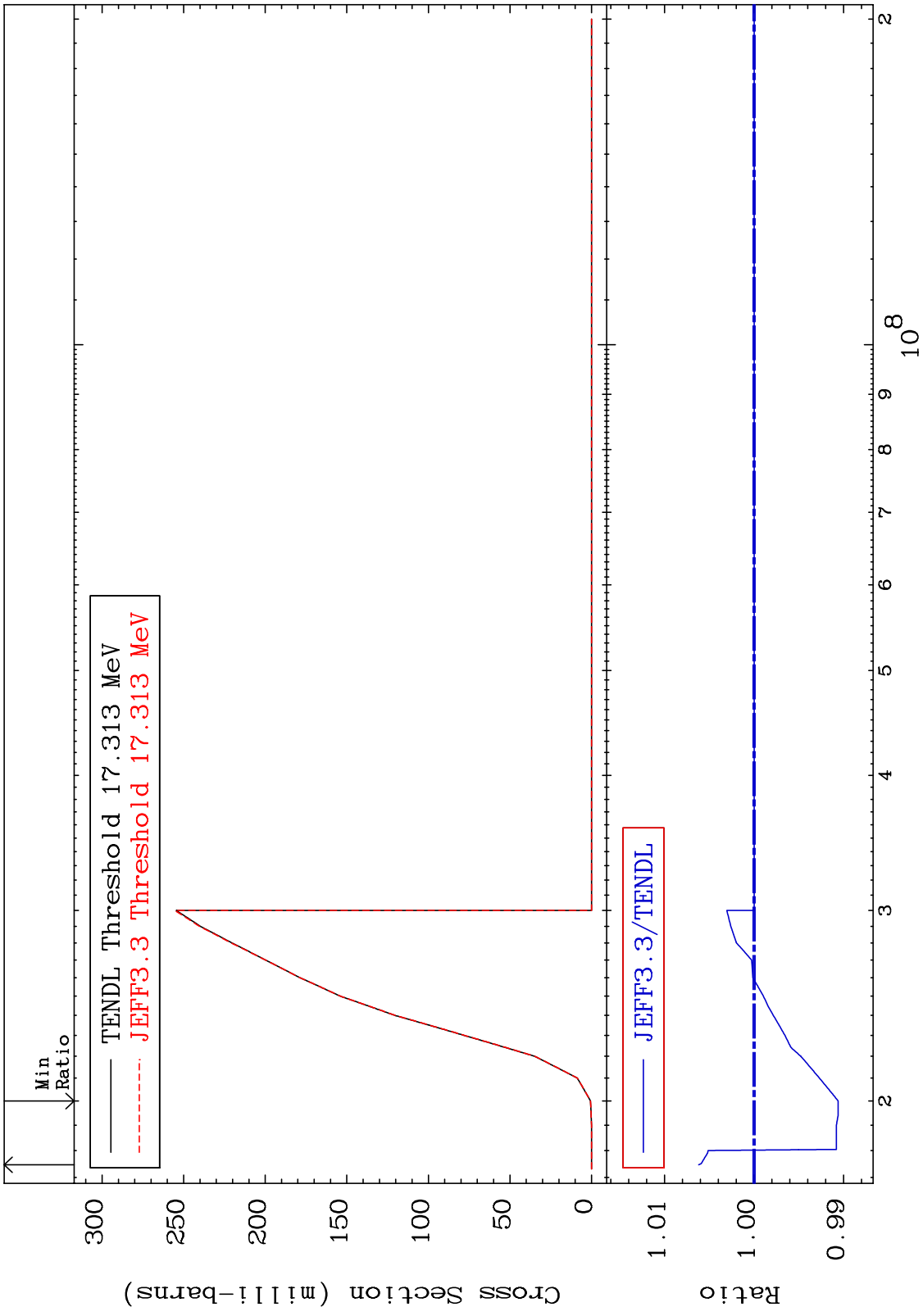
Incident Energy (eV)

41-Nb-91

MAT 4119 (n, n') d:40-Zr-89m1 41-Nb-91
 Radionuclide Production Cross Section -0.081 To 0.226 %



MAT 4119 (n,2n) p:40-Zr-89g 41-Nb-91
 Radionuclide Production Cross Section -0.939 To 0.619 %

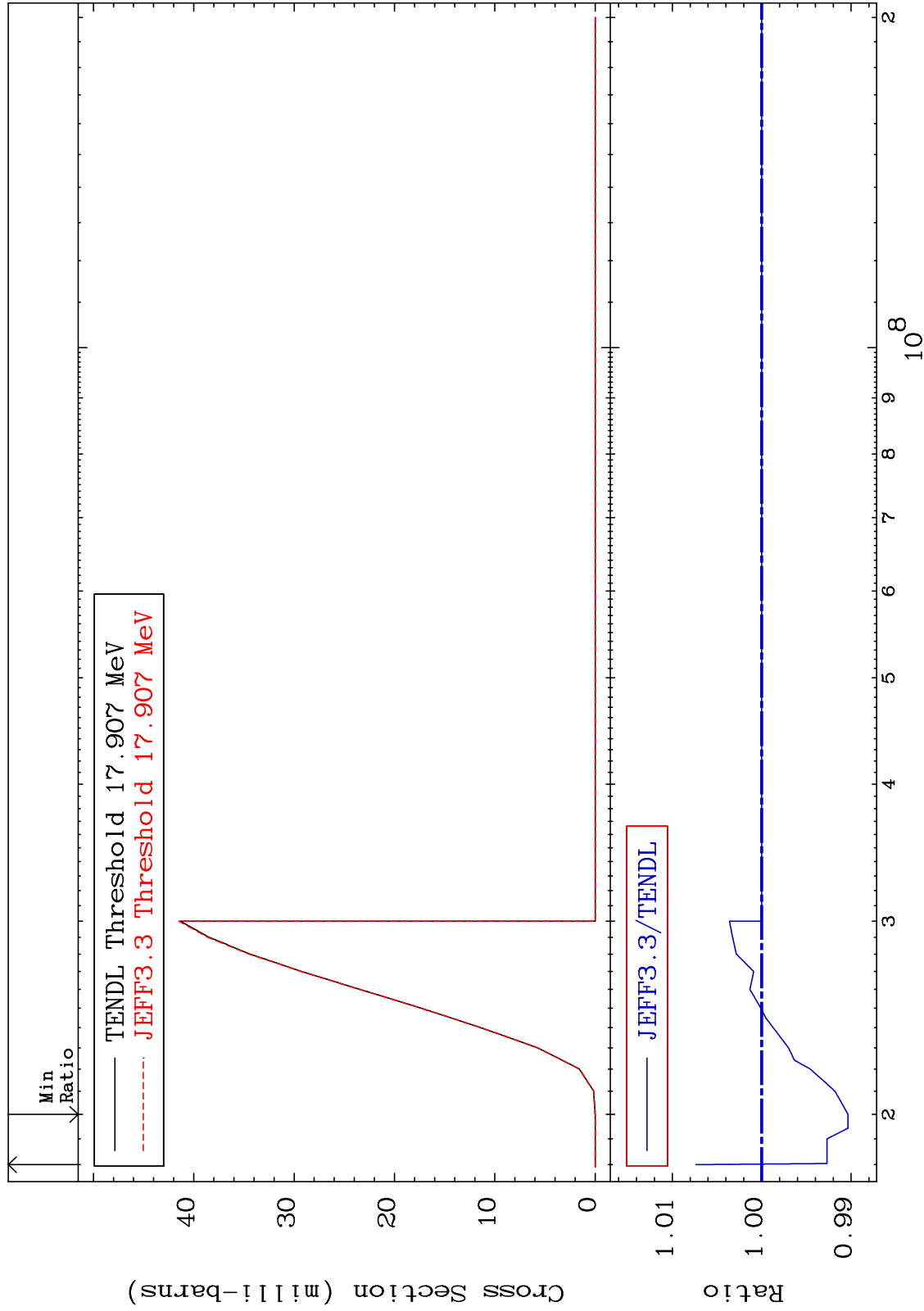


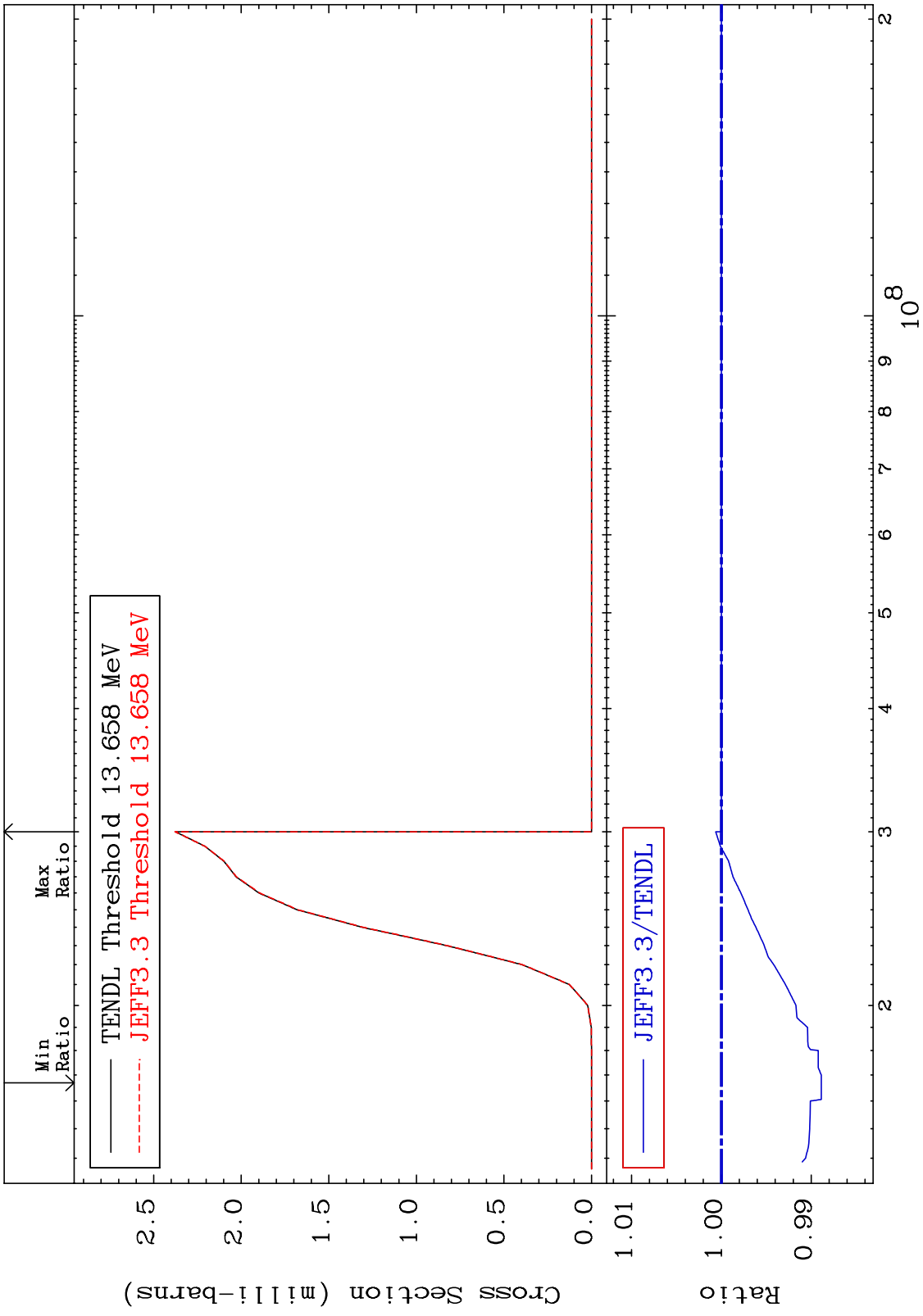
MAT 4119

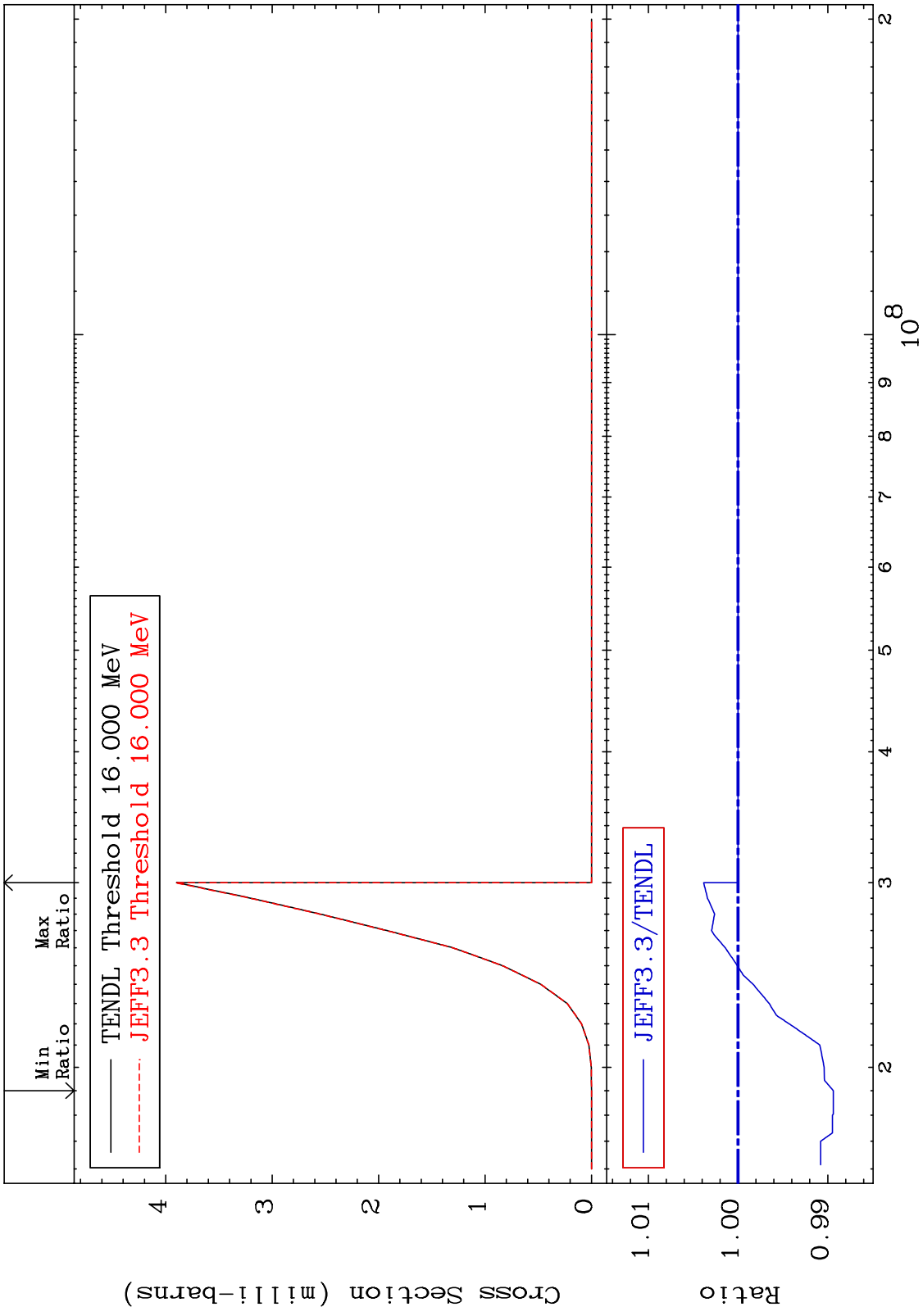
(n,2n) p:40-Zr-89m1

41-Nb-91

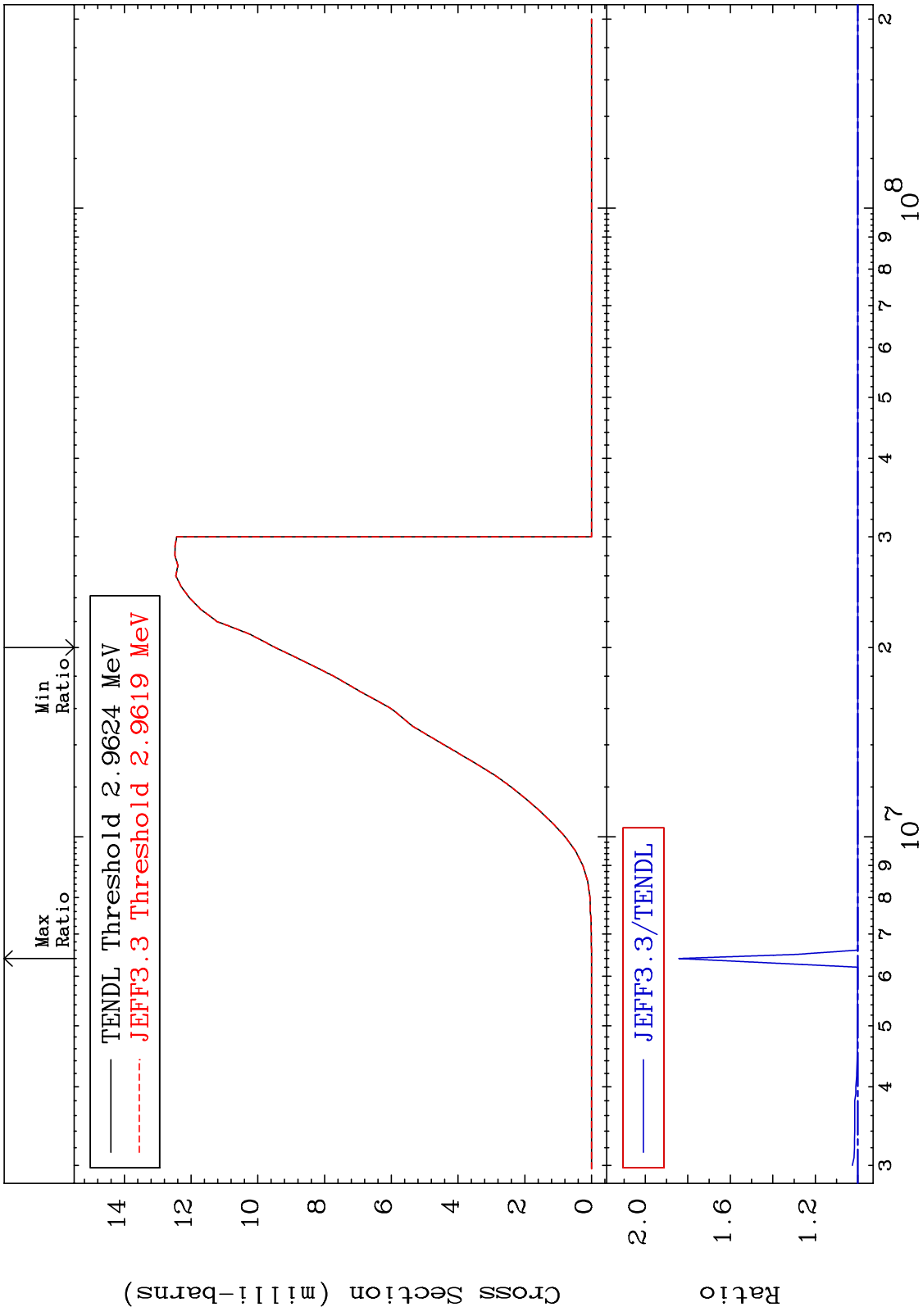
Radionuclide Production Cross Section -0.965 To 0.734 %



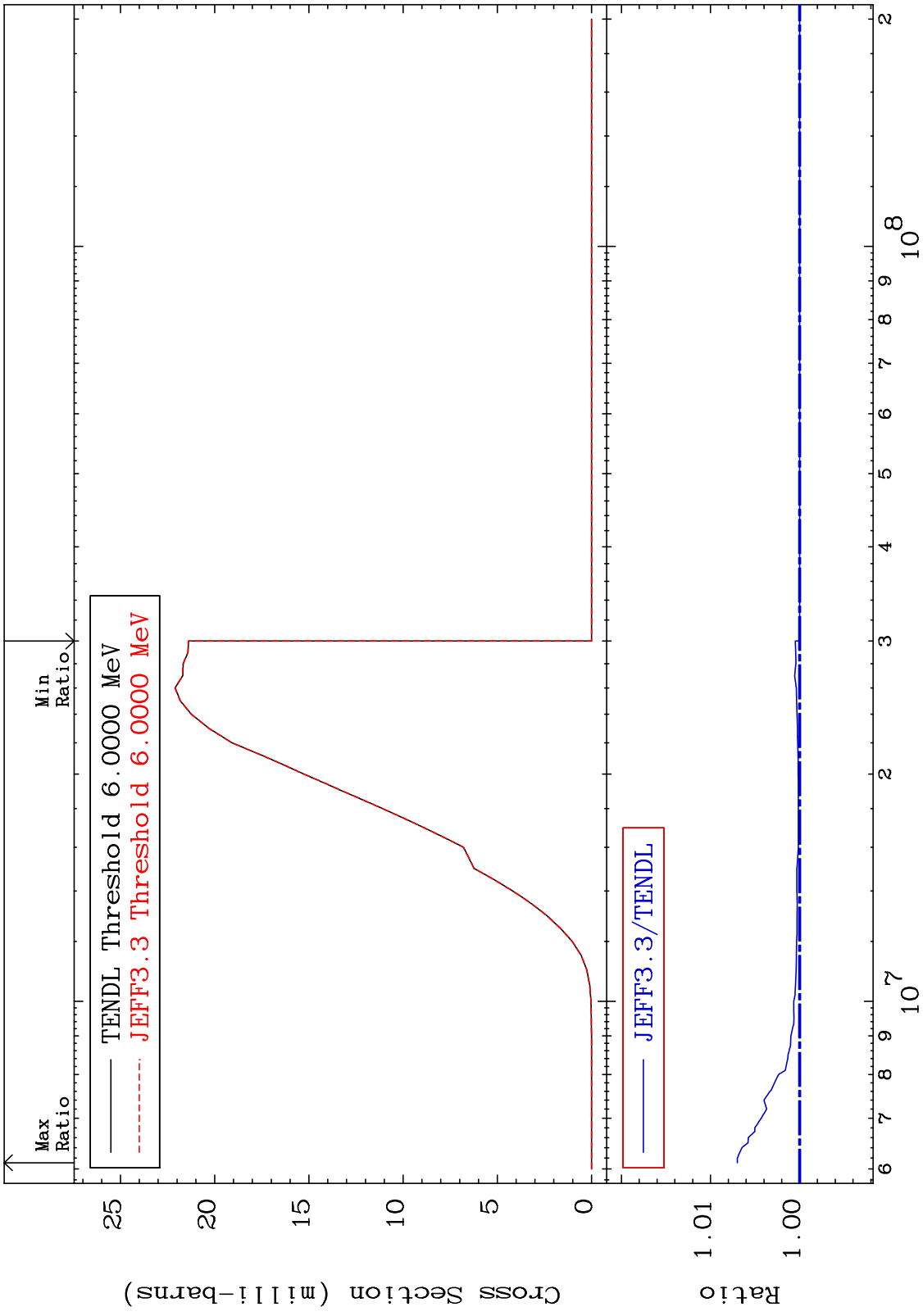




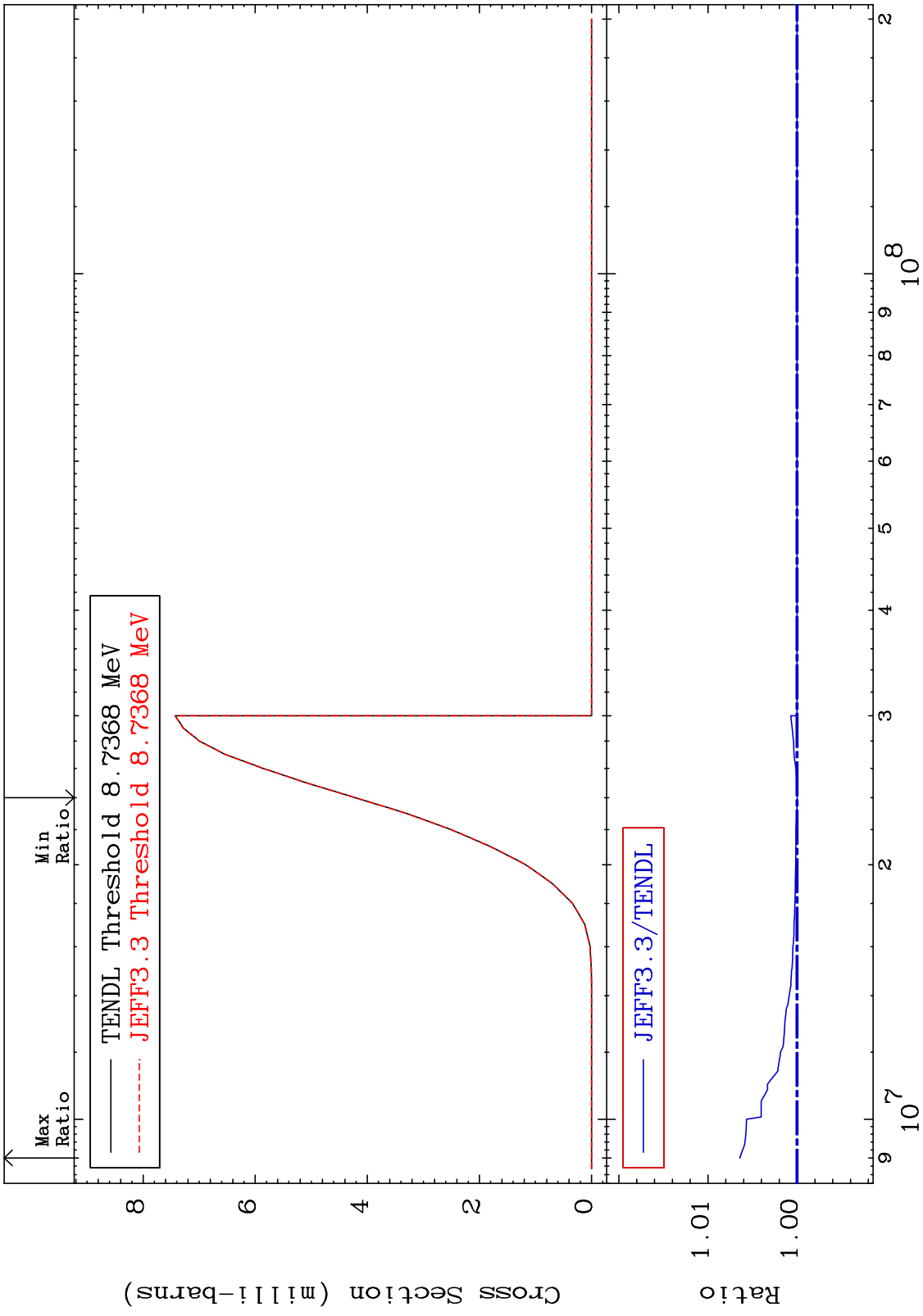
MAT 4119 (n,d):40-Zr-90g 41-Nb-91
 Radionuclide Production Cross Section 0.000 To 84.13 %



MAT 4119 (n,d):40-Zr-90m3 41-Nb-91
 Radionuclide Production Cross Section 0.000 To 0.699 %



MAT 4119 (n,t):40-Zr-89g 41-Nb-91
Radionuclide Production Cross Section 0.000 To 0.644 %



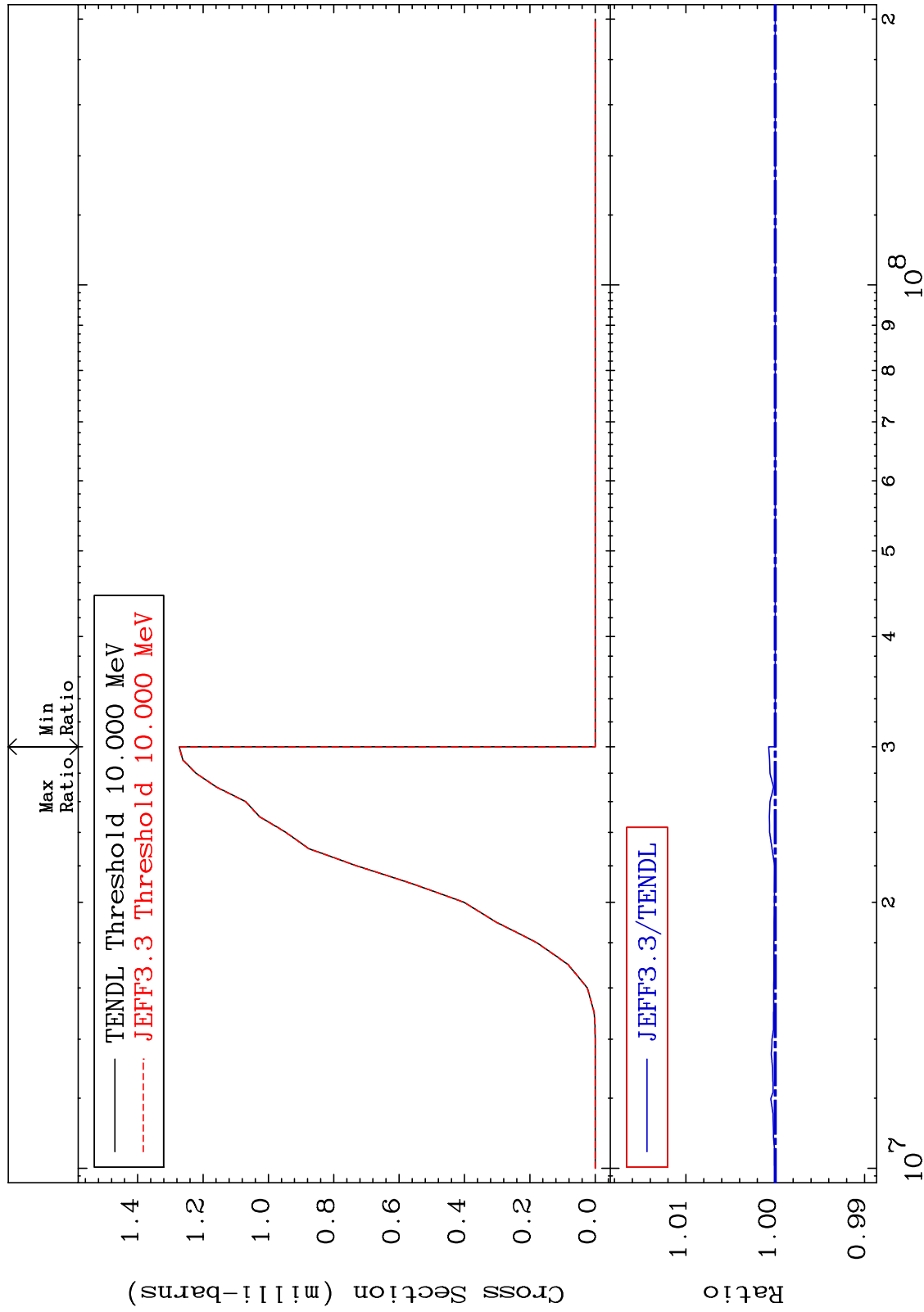
98 41-Nb-91

MAT 4119

(n,t):40-Zr-89m1

41-Nb-91

Radionuclide Production Cross Section 0.000 To 0.072 %

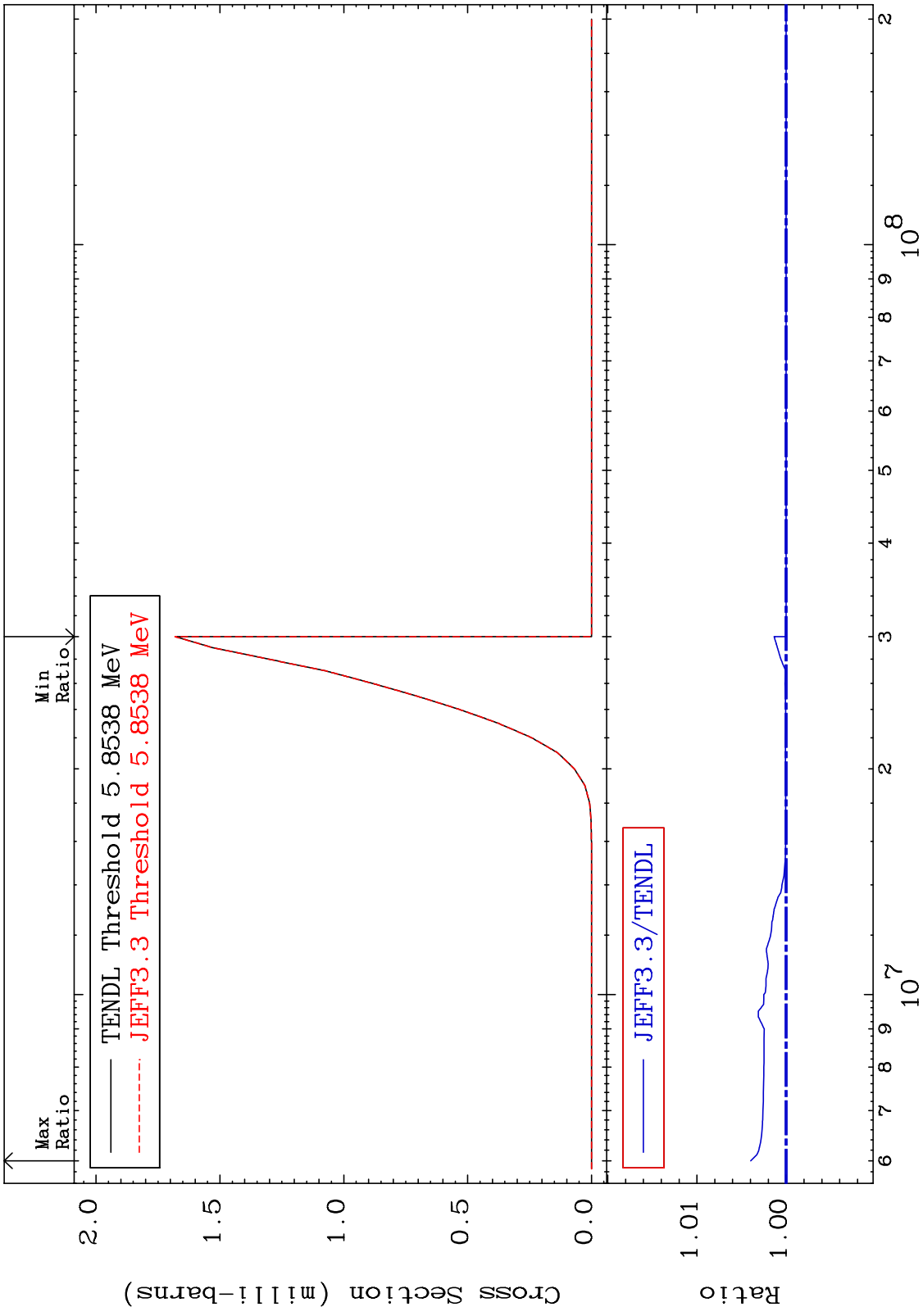


41-Nb-91

Incident Energy (eV)

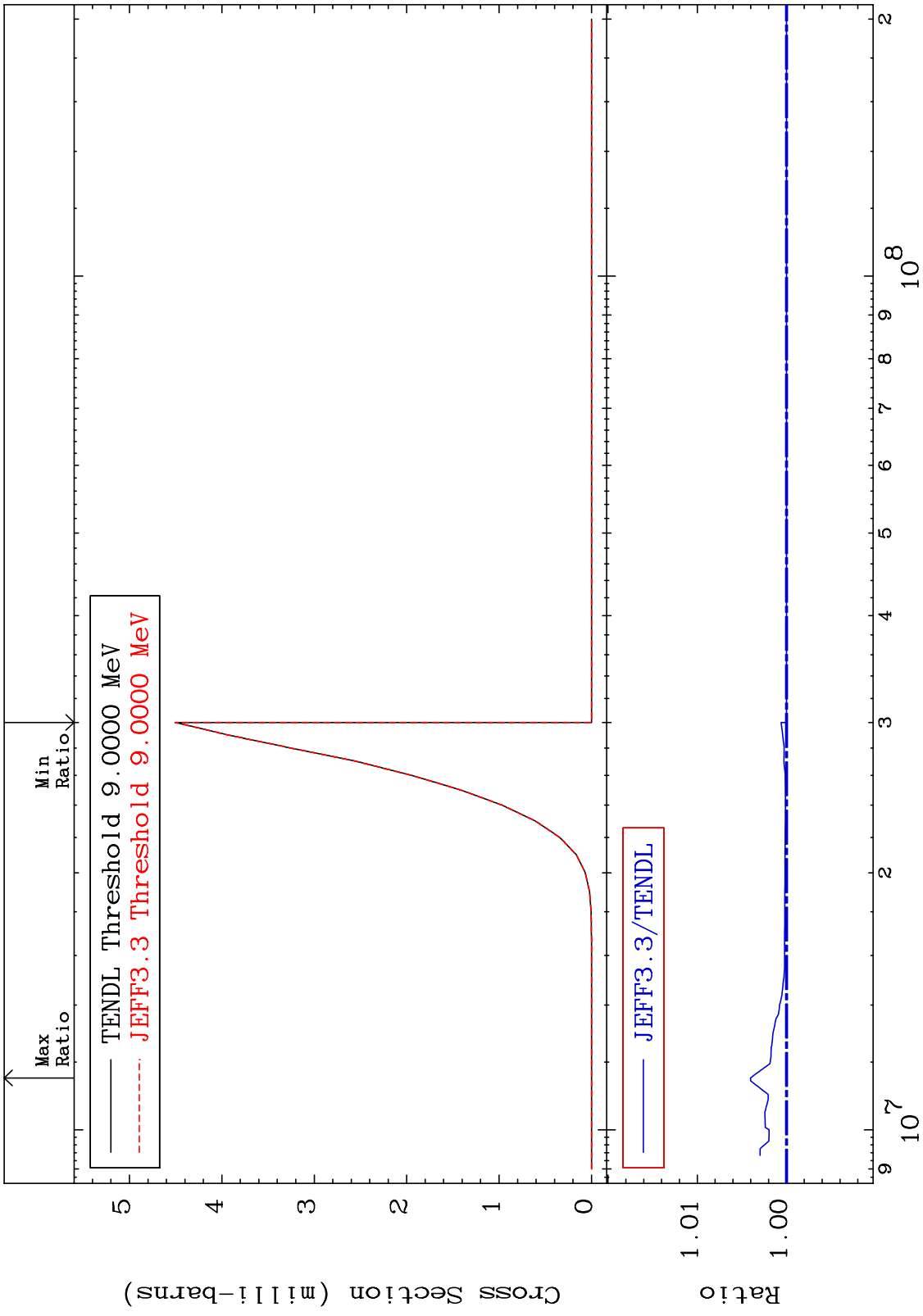
99

MAT 4119 (n,He-3):39-Y -89g 41-Nb-91
 Radionuclide Production Cross Section 0.000 To 0.397 %



100 41-Nb-91

MAT 4119 (n,He-3):39-Y -89m1 41-Nb-91
 Radionuclide Production Cross Section 0.000 To 0.404 %



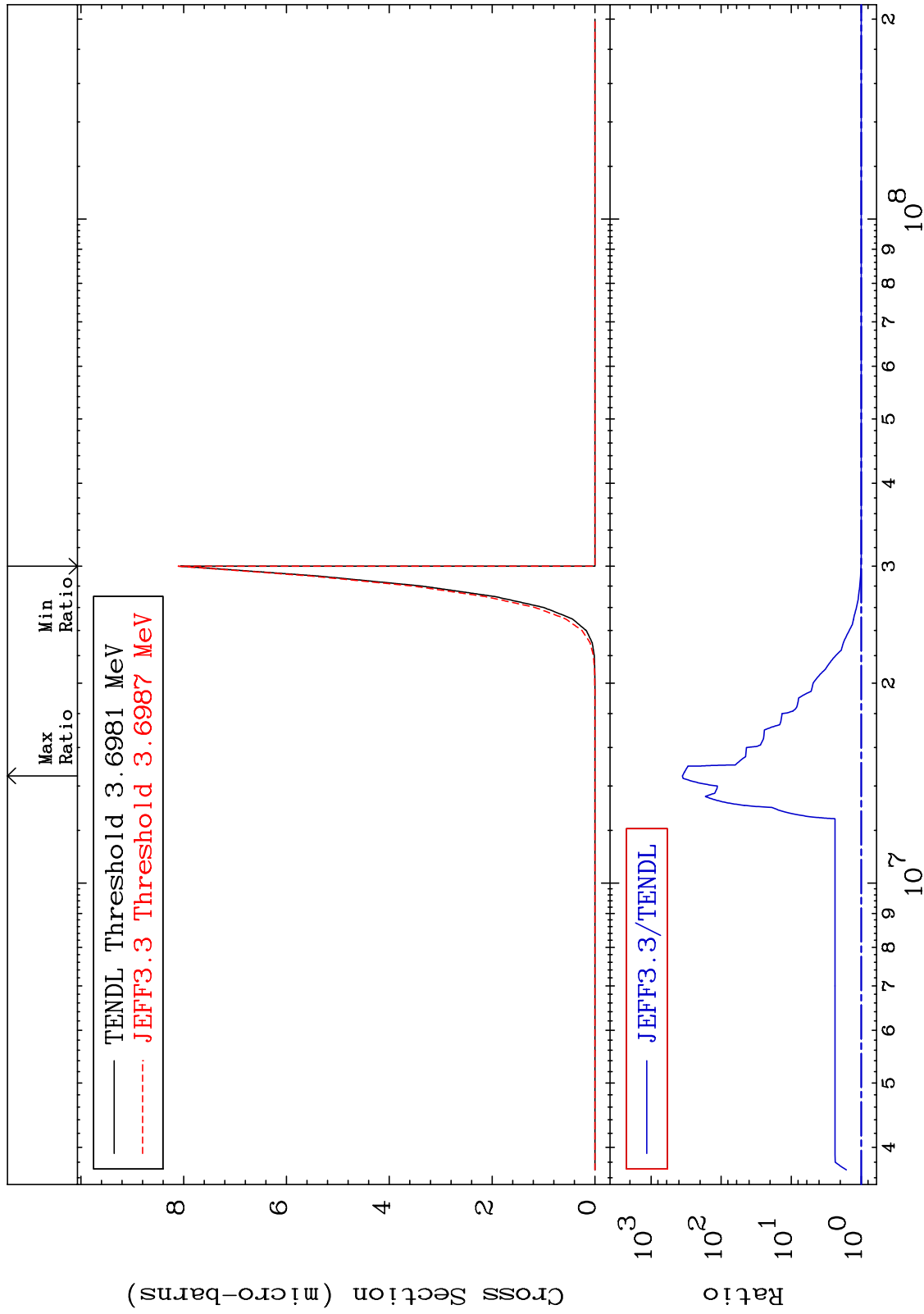
101 41-Nb-91

MAT 4119

(n,2α):37-Rb-84g

41-Nb-91

Radionuclide Production Cross Section 0.000 To 9999. %



102

Incident Energy (eV)

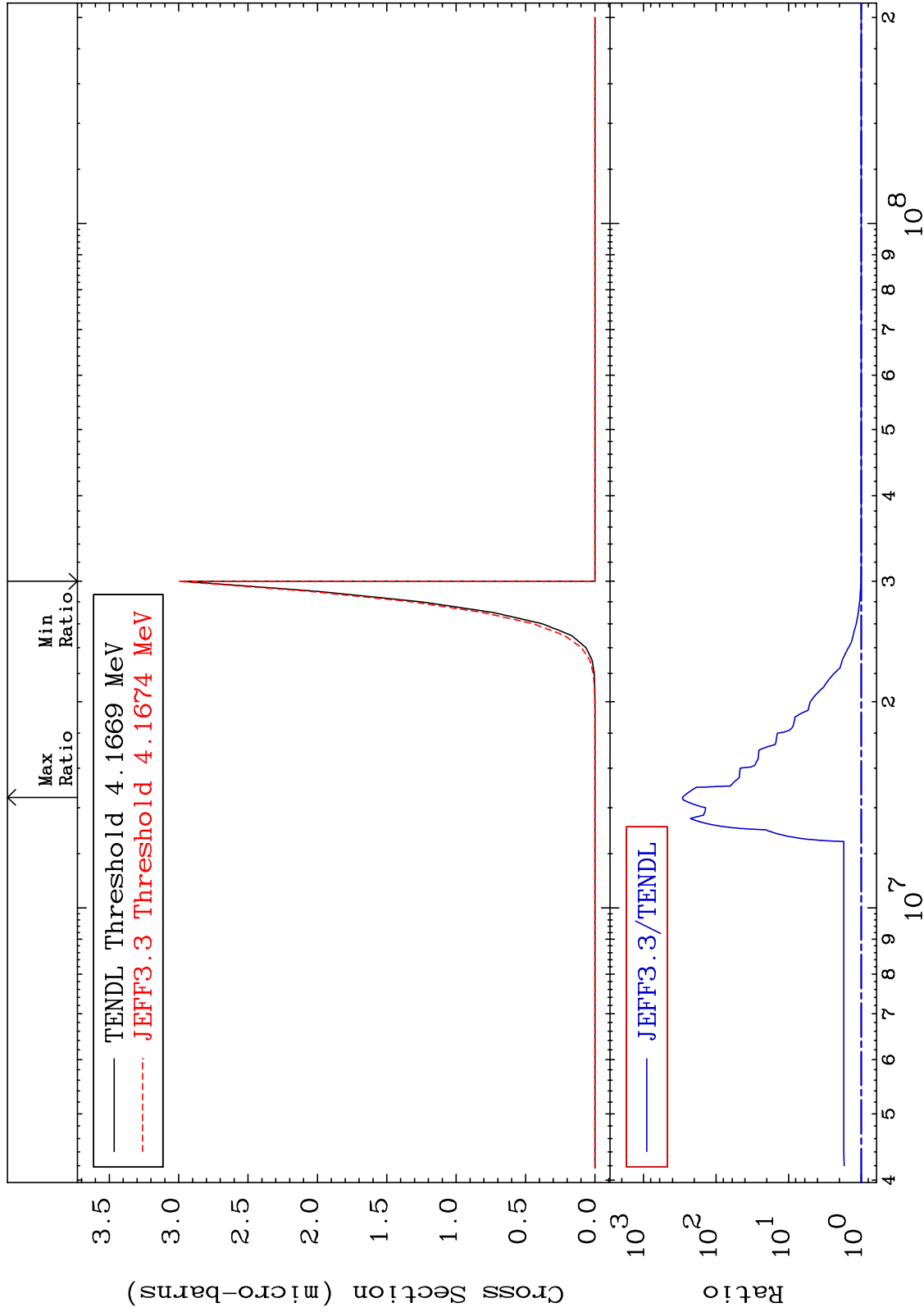
41-Nb-91

MAT 4119

(n,2α):37-Rb-84m2

41-Nb-91

Radionuclide Production Cross Section 0.000 To 9999. %

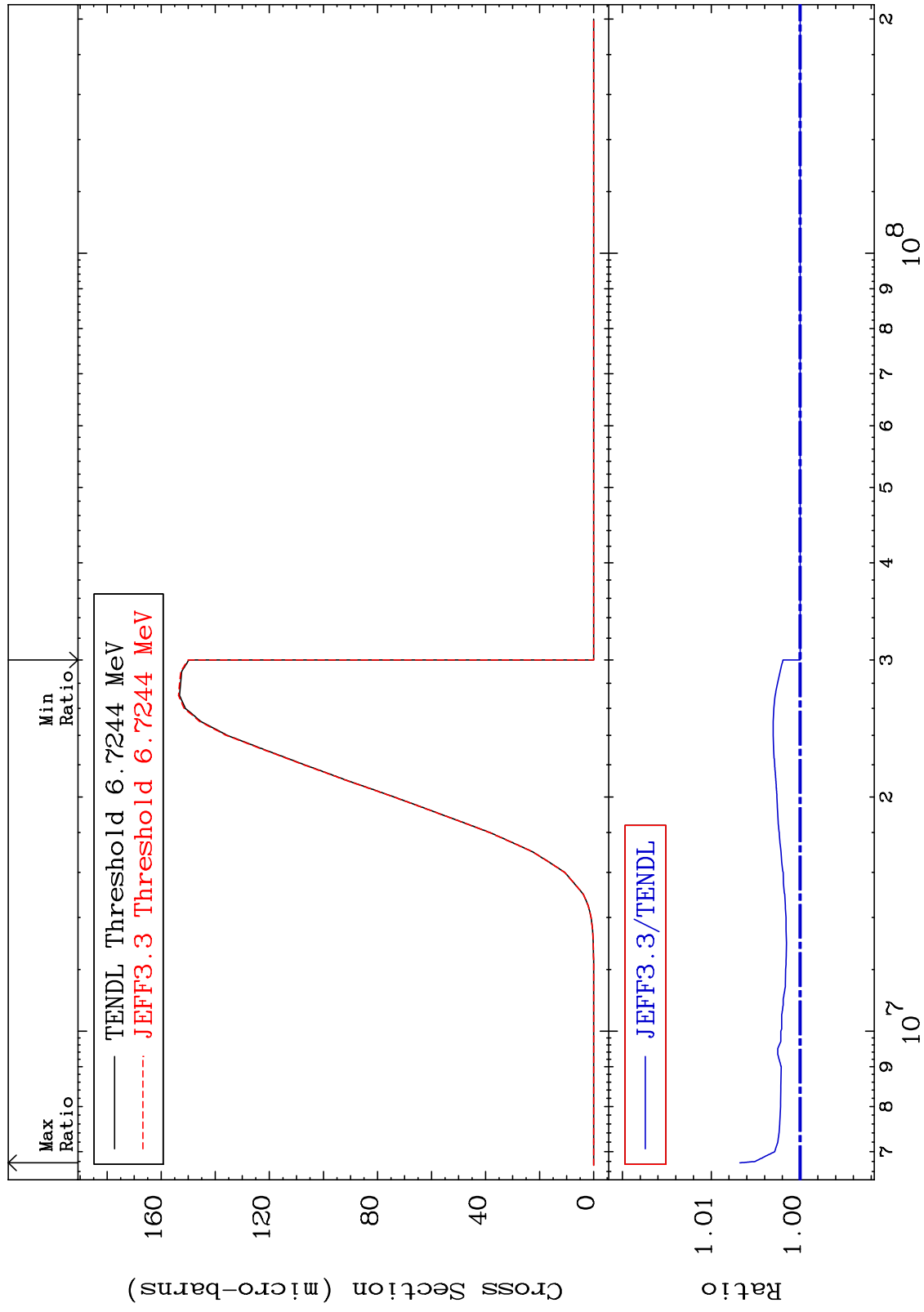


103

Incident Energy (eV)

41-Nb-91

MAT 4119 (n,2p):39-Y -90g 41-Nb-91
Radionuclide Production Cross Section 0.000 To 0.679 %

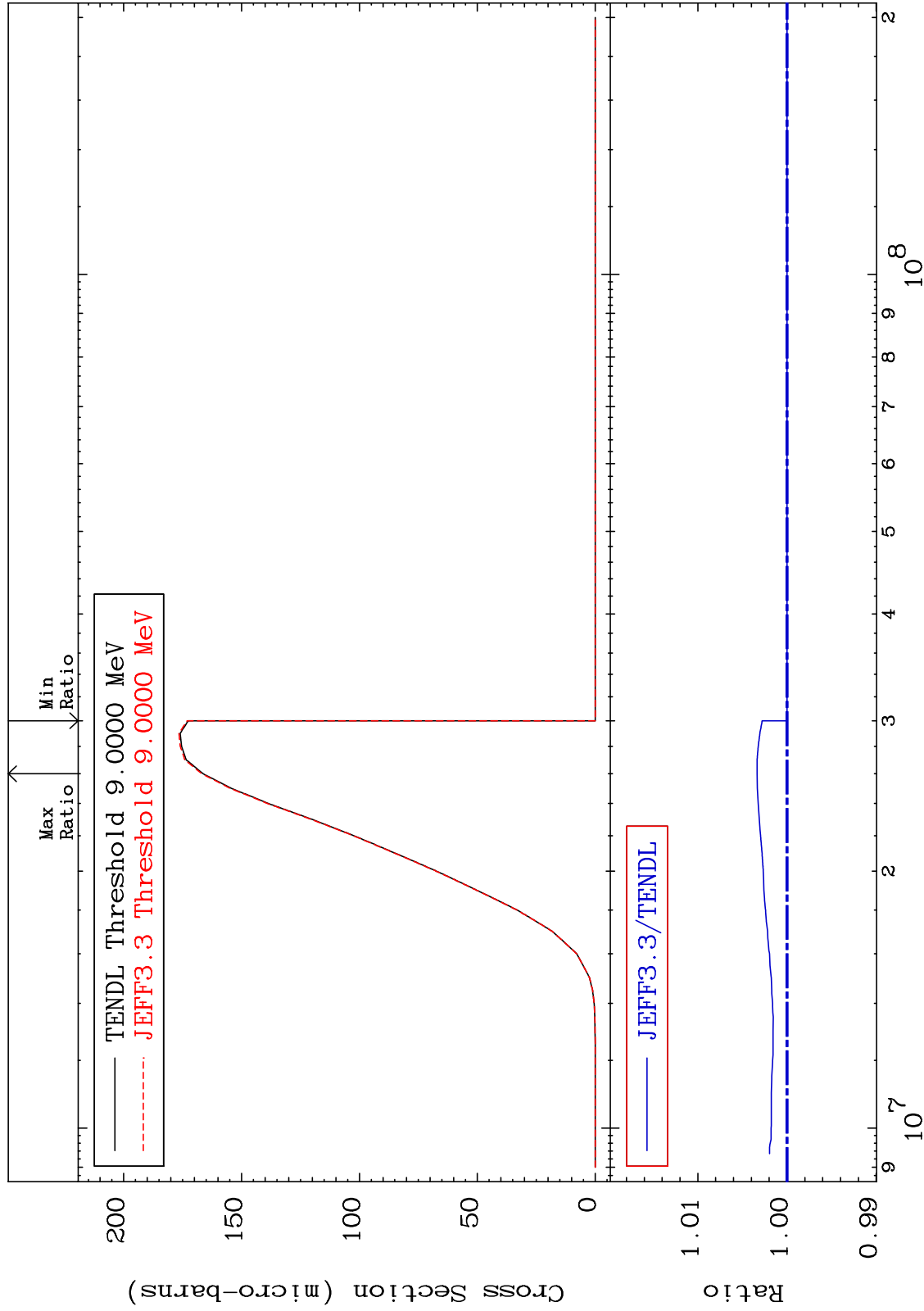


MAT 4119

(n,2p):39-Y -90m2

41-Nb-91

Radionuclide Production Cross Section 0.000 To 0.337 %



105

Incident Energy (eV)

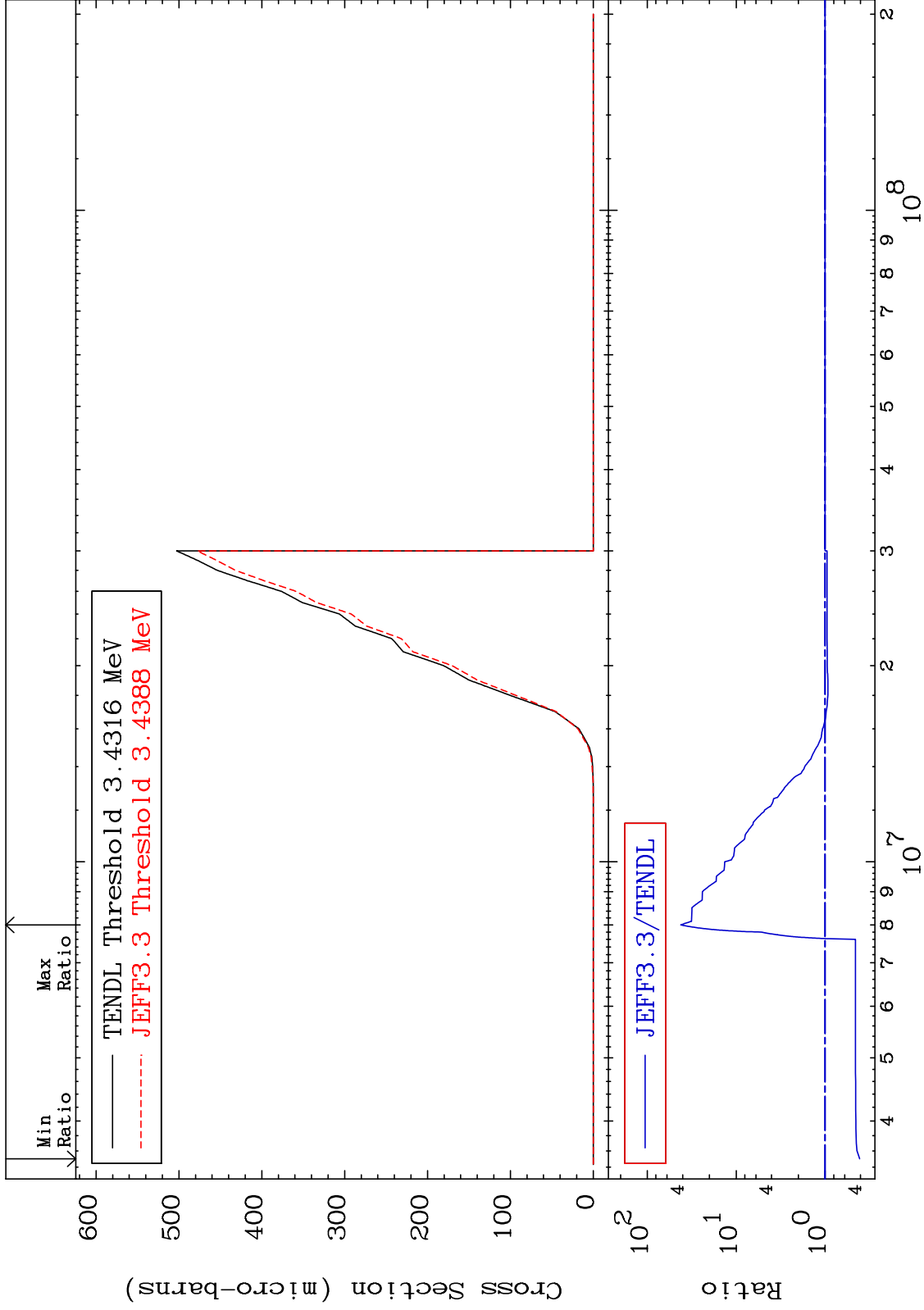
41-Nb-91

MAT 4119

(n,p) α :38-Sr-87g

41-Nb-91

Radionuclide Production Cross Section -59.13 To 4098. %



106

Incident Energy (eV)

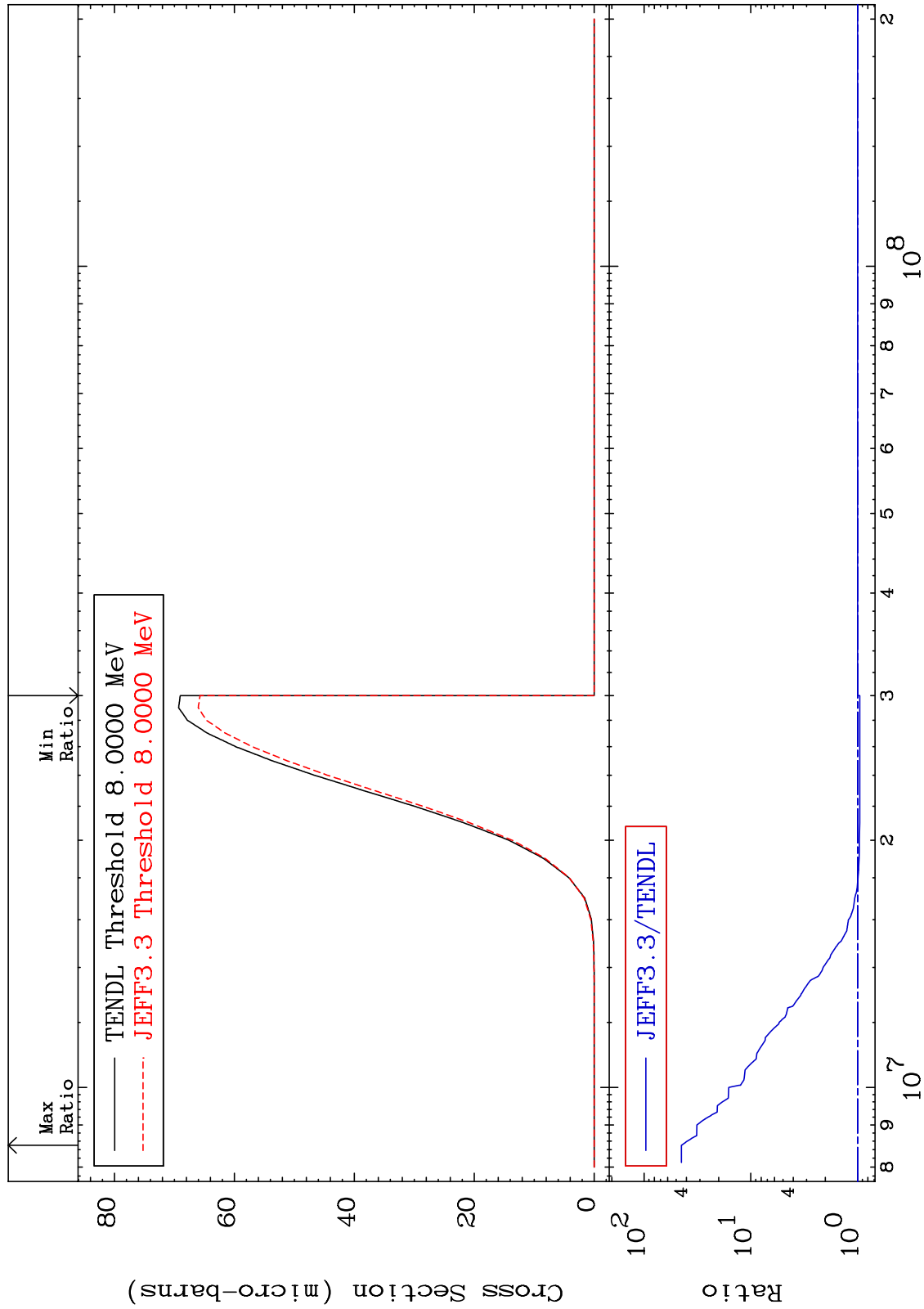
41-Nb-91

MAT 4119

(n,p) α :38-Sr-87m1

41-Nb-91

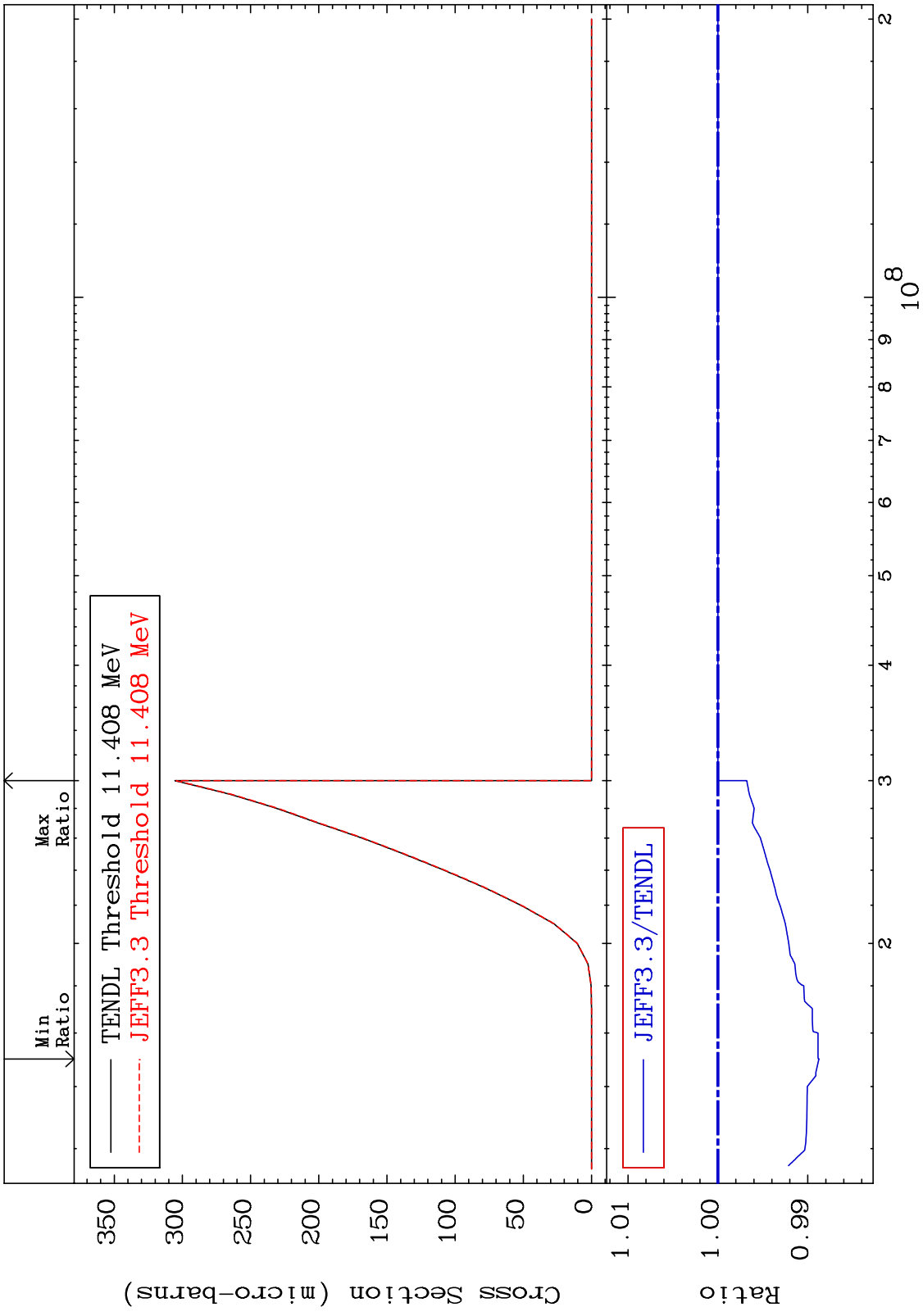
Radionuclide Production Cross Section -4.778 To 4361. %



107

Incident Energy (eV)

41-Nb-91

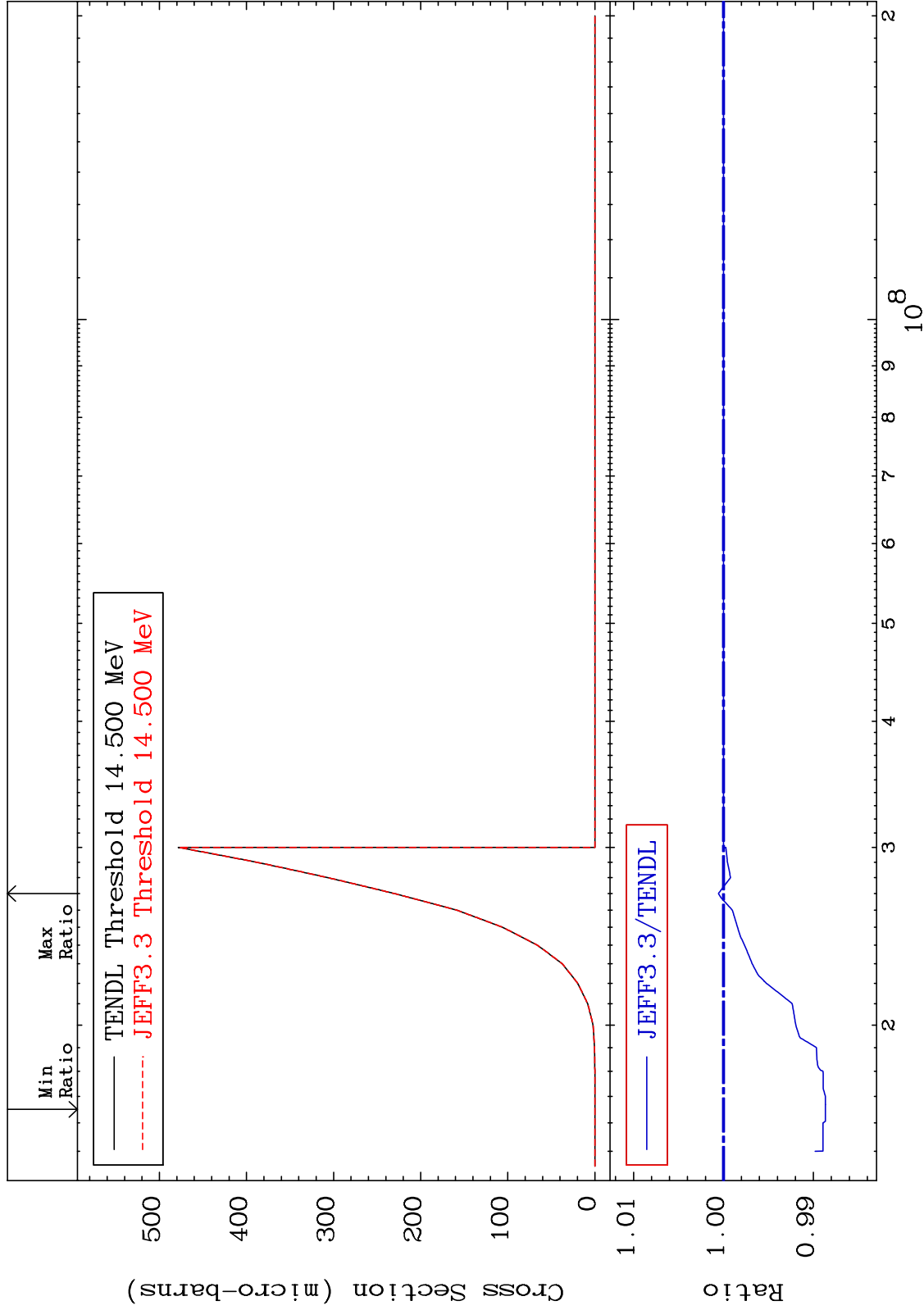


MAT 4119

(n,p) d:39-Y -89m1

41-Nb-91

Radionuclide Production Cross Section -1.133 To 0.056 %



109

Incident Energy (eV)

41-Nb-91