

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

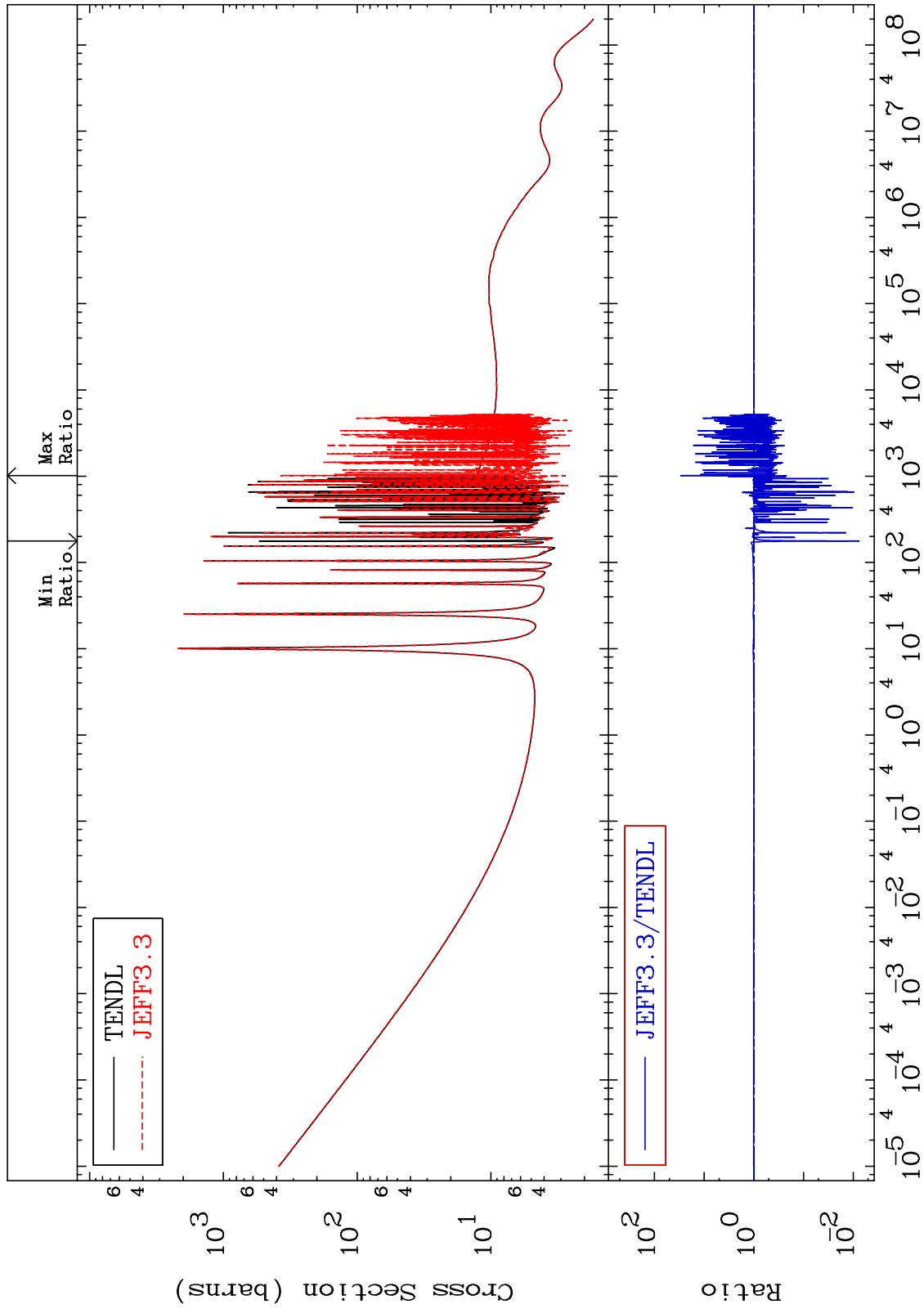
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4434

Total
Cross Section

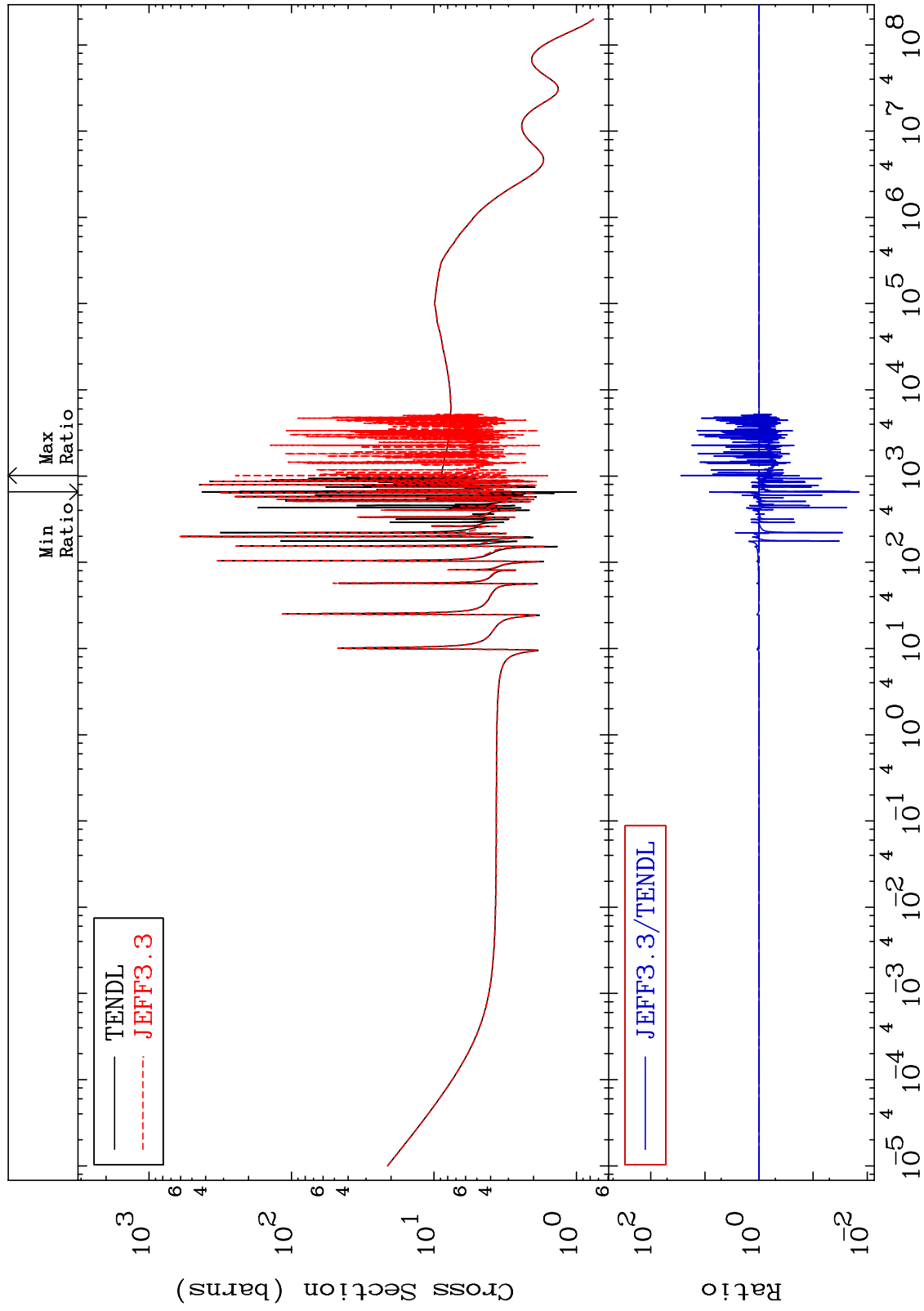
44-Ru-99
-99.24 To 2871. %



MAT 4434

Elastic
Cross Section

44-Ru-99
-98.59 To 2680. %



2

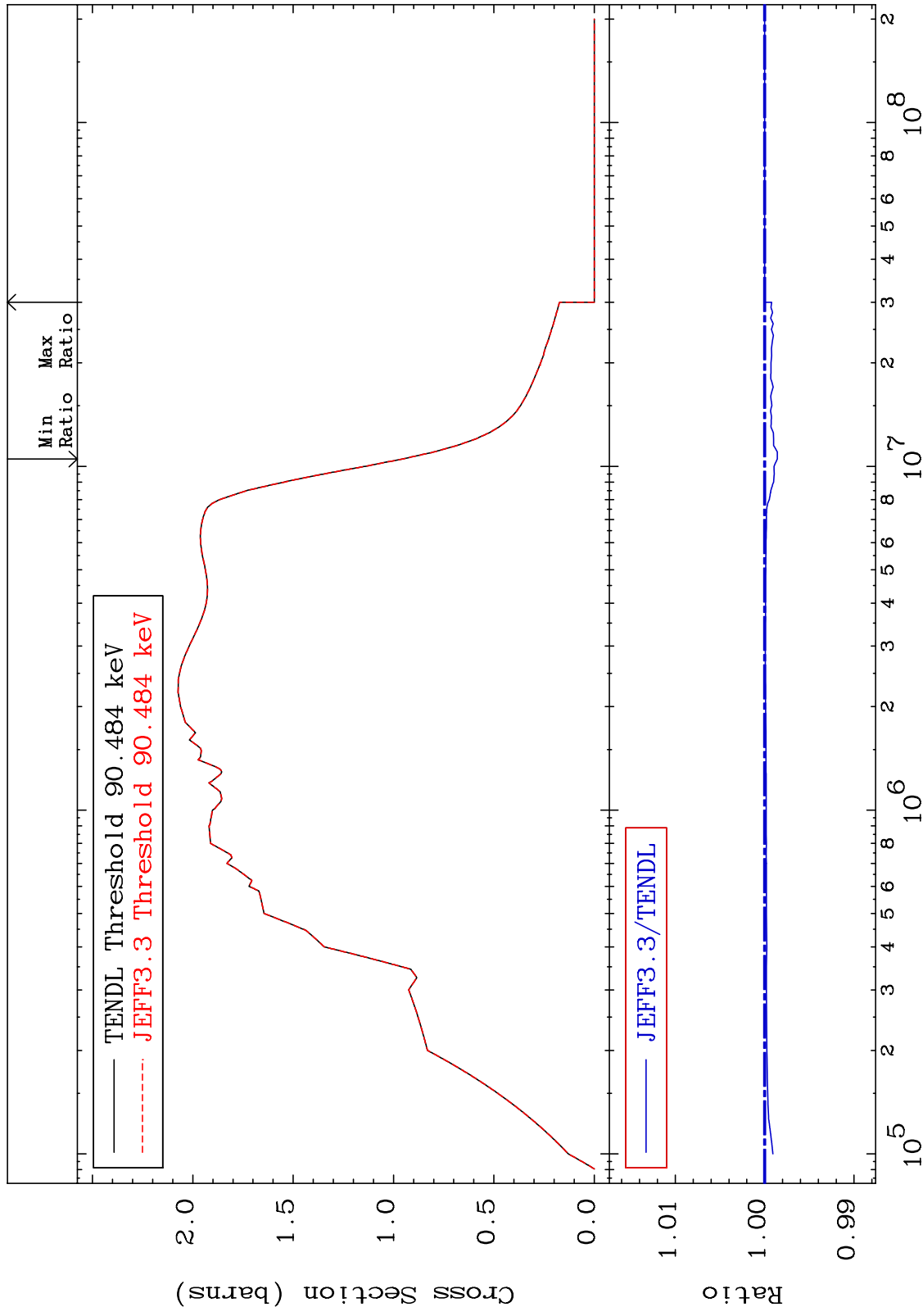
Incident Energy (eV)

44-Ru-99

MAT 4434

Inelastic
Cross Section

44-Ru-99
-0.142 To 0.000 %



3

Incident Energy (eV)

44-Ru-99

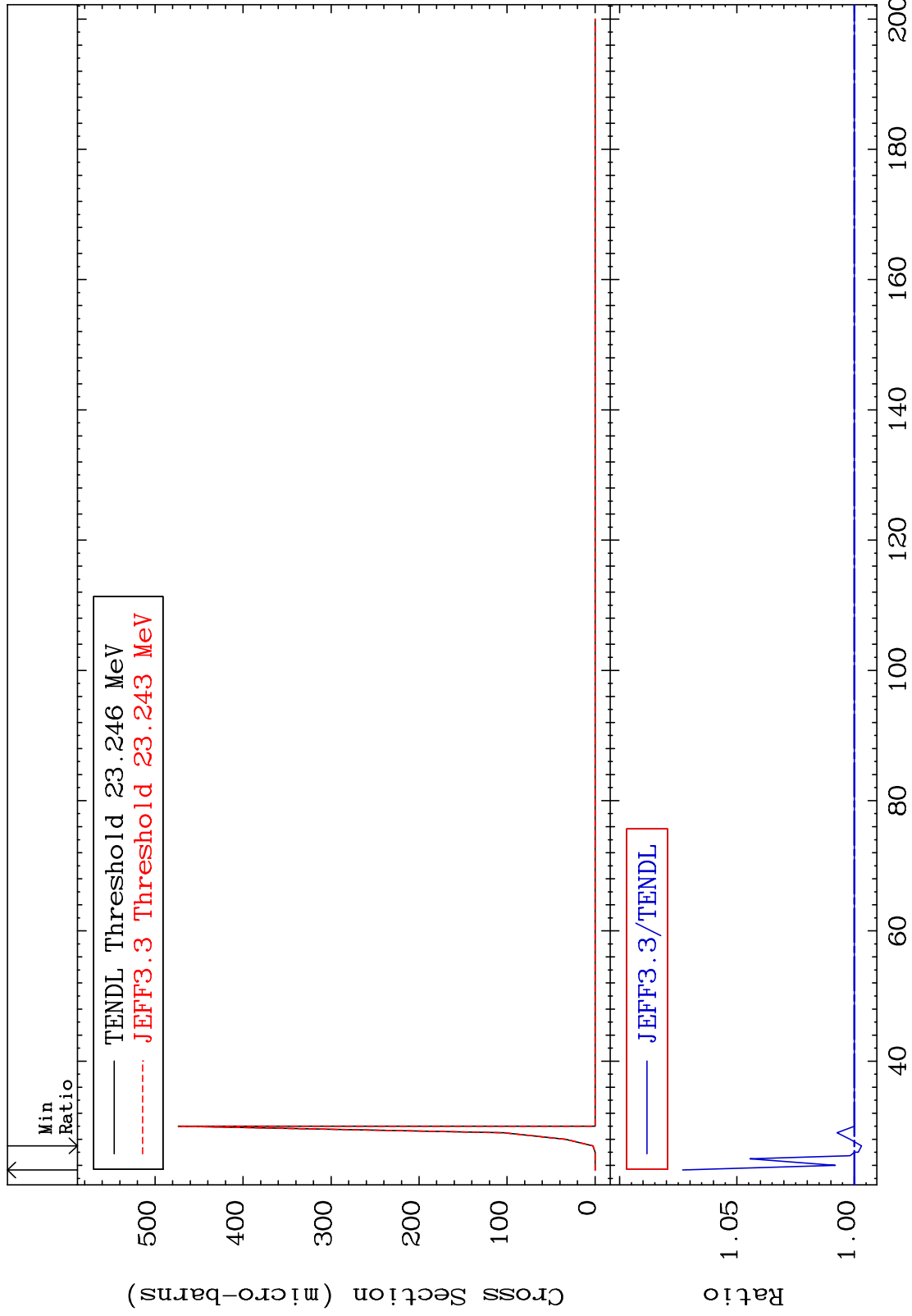
MAT 4434

(n,2n) d

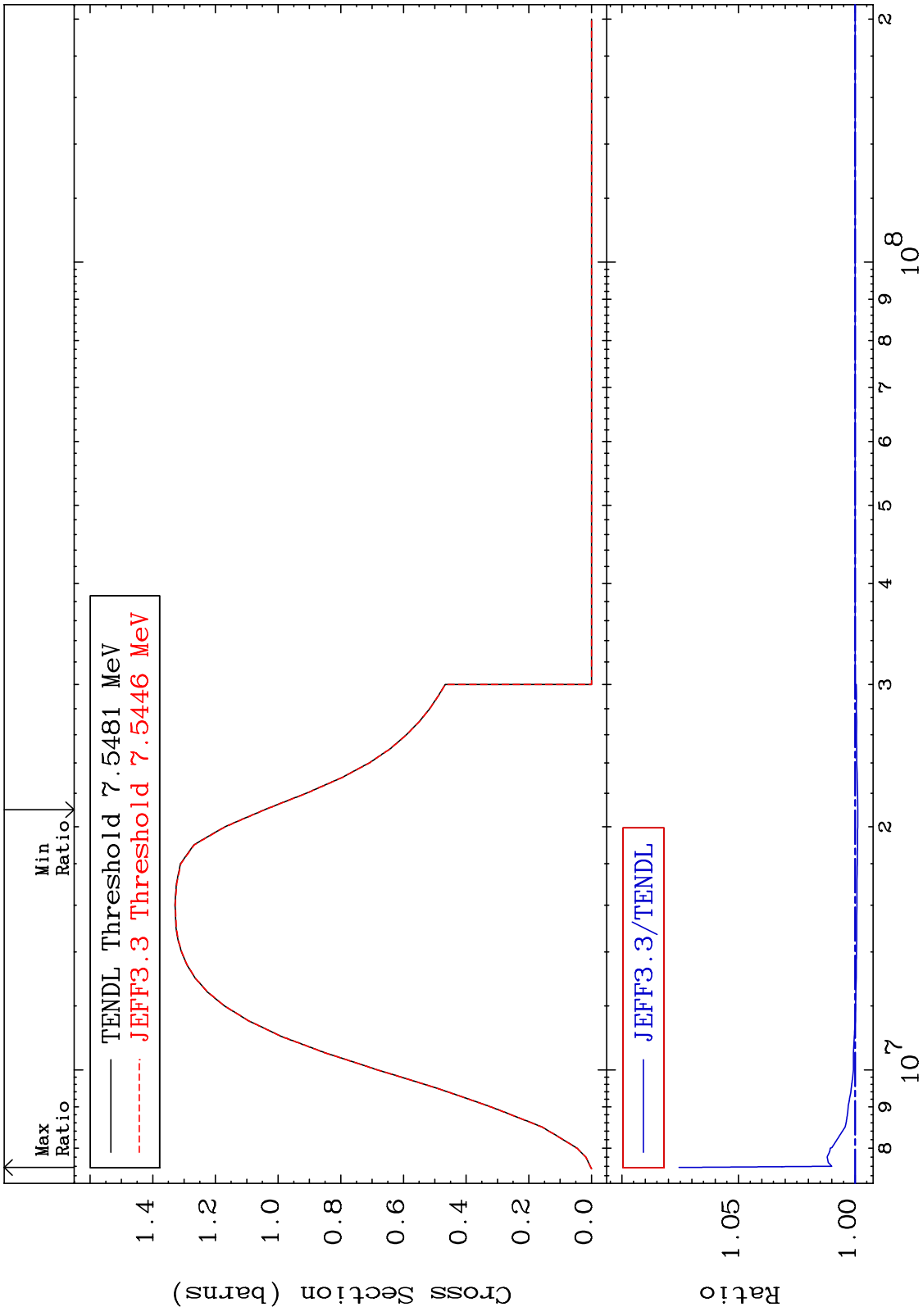
44-Ru-99

Cross Section

-0.309 To 7.312 %

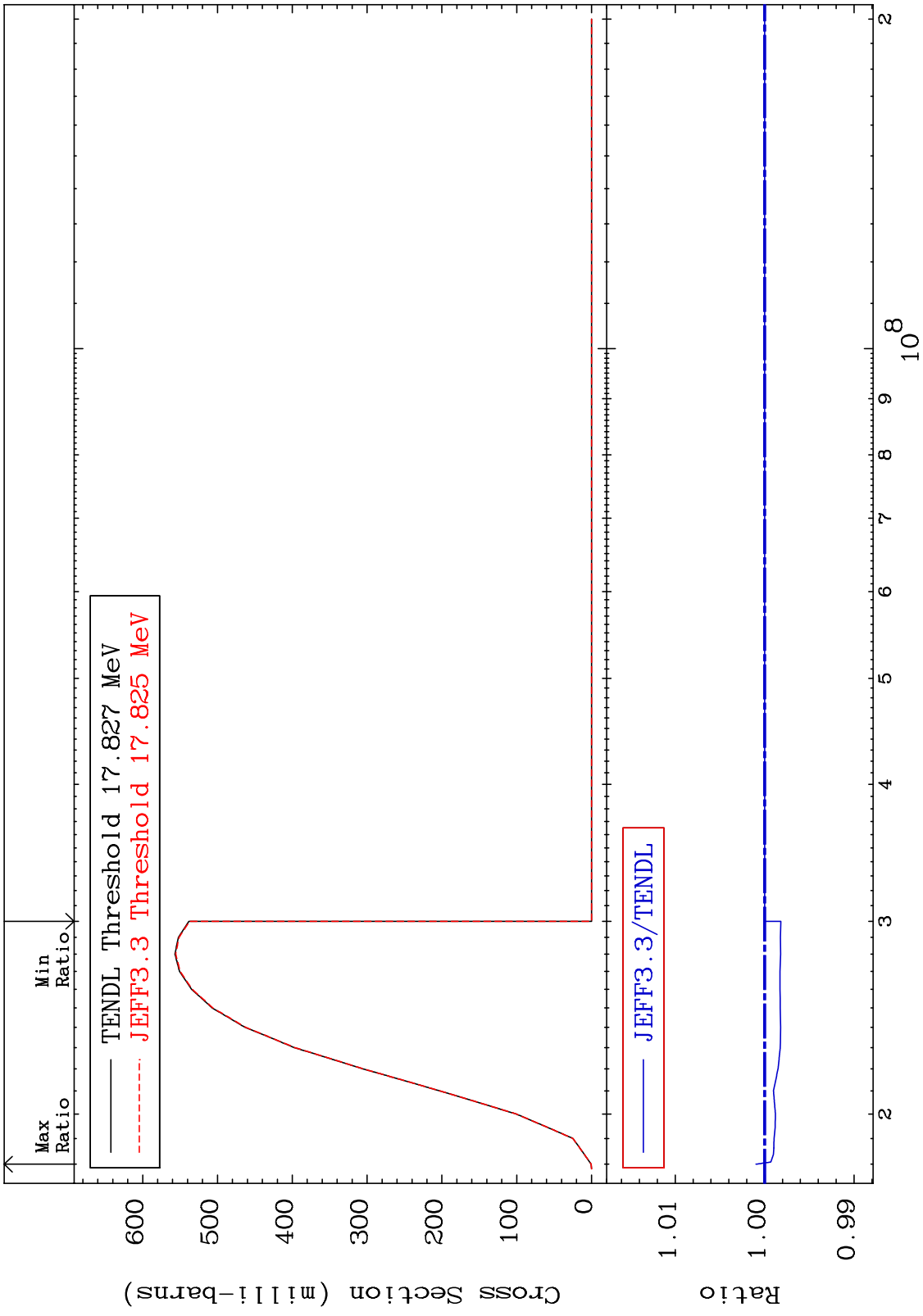


MAT 4434 (n,2n) Cross Section 44-Ru-99 -0.116 To 7.551 %



5 44-Ru-99

MAT 4434 (n,3n) 44-Ru-99
 Cross Section -0.182 To 0.096 %



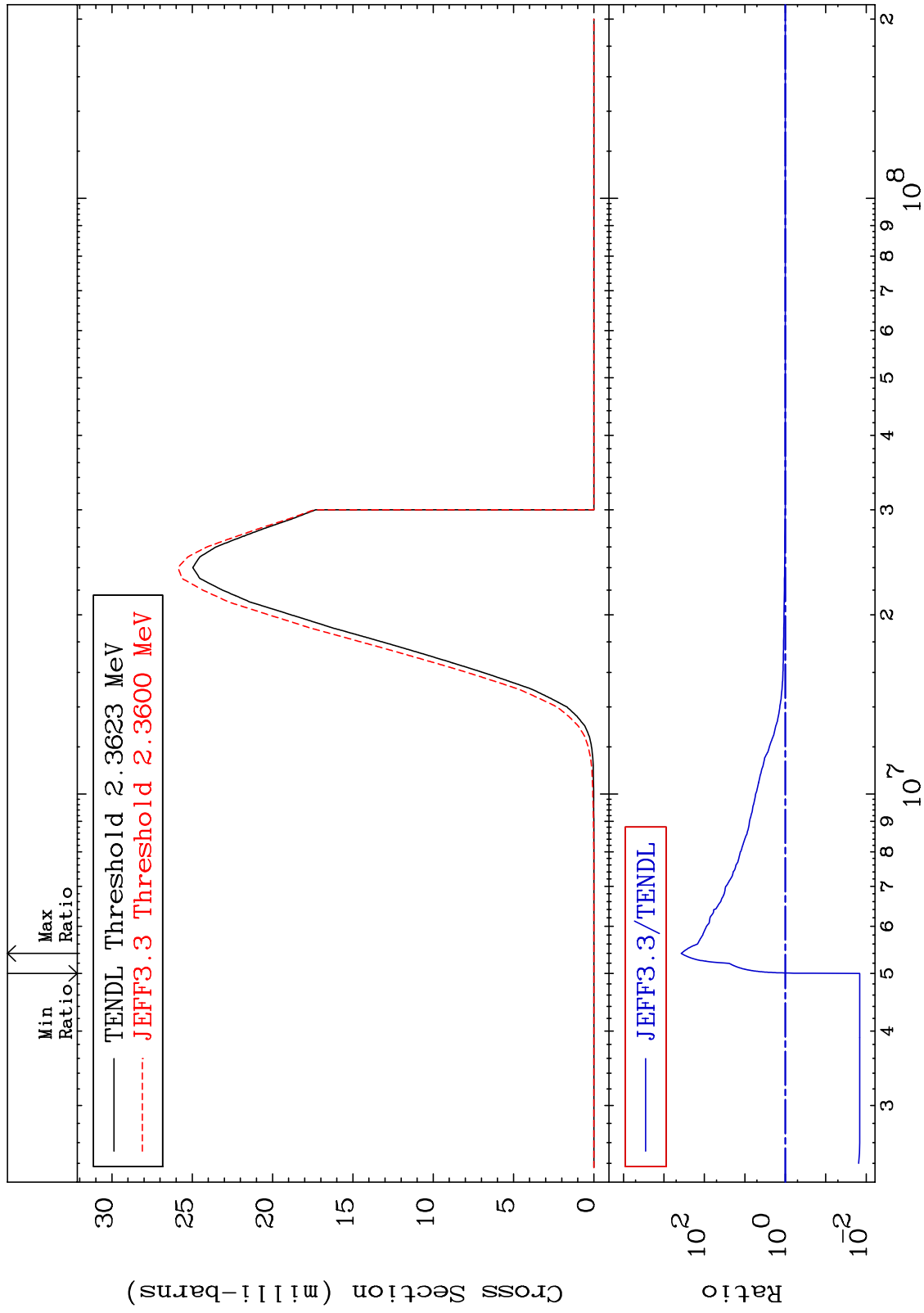
MAT 4434

(n, n') α

44-Ru-99

Cross Section

-98.56 To 9999. %

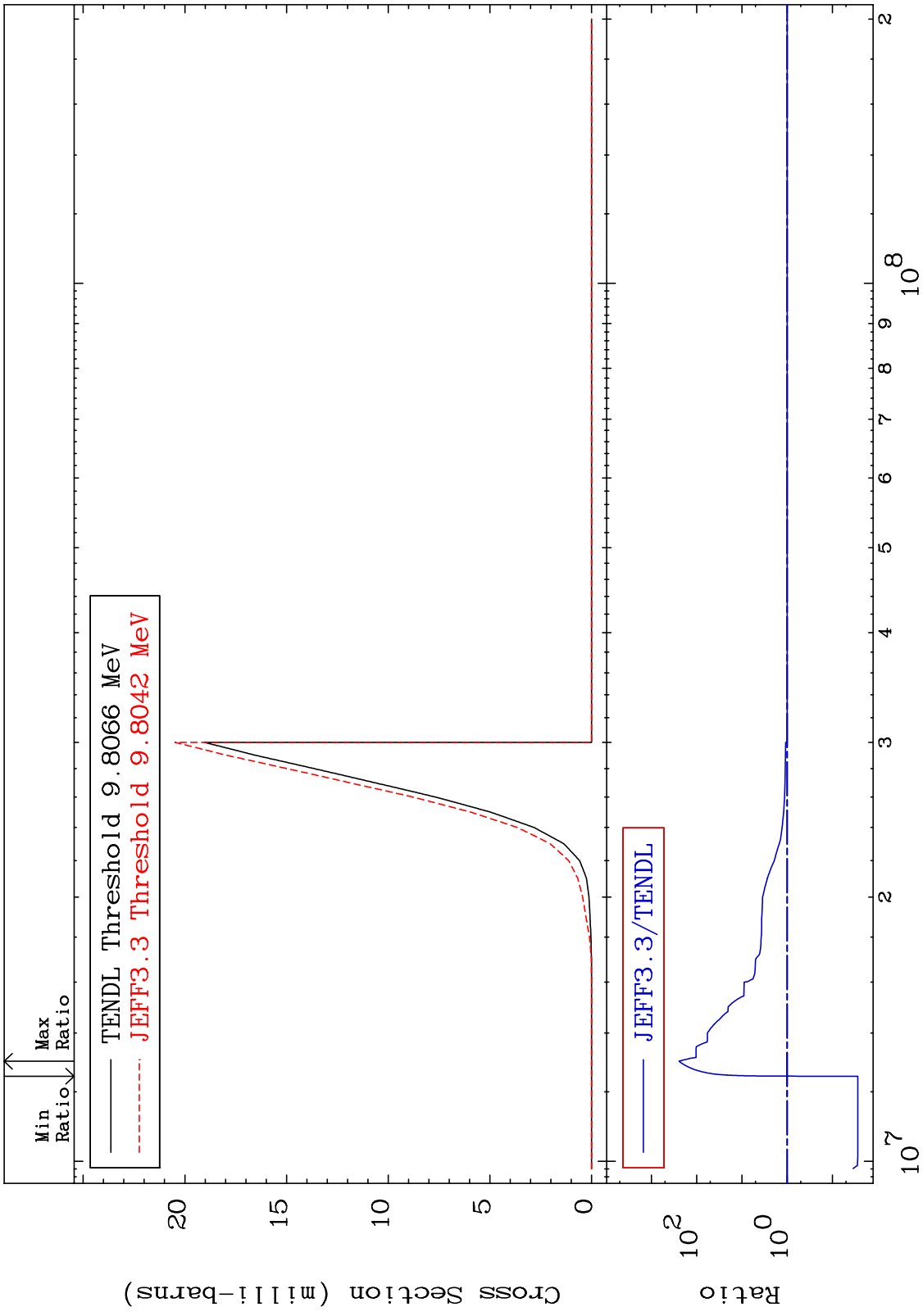


7

44-Ru-99

44-Ru-99

MAT 4434 (n,2n) α 44-Ru-99
 Cross Section -97.26 To 9999. %



44-Ru-99

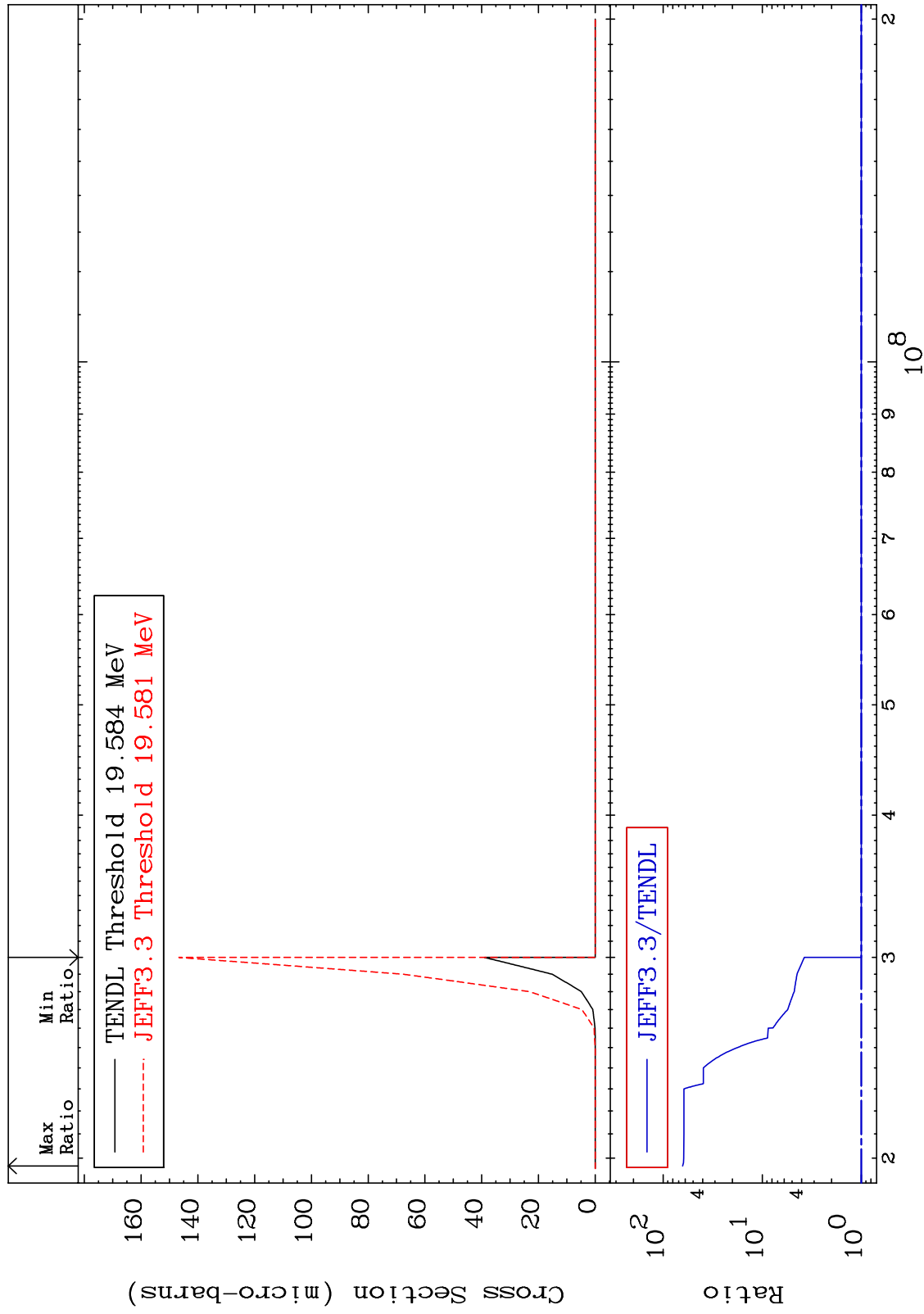
MAT 4434

(n,3n) α

44-Ru-99

Cross Section

0.000 To 6265. %



9

Incident Energy (eV)

44-Ru-99

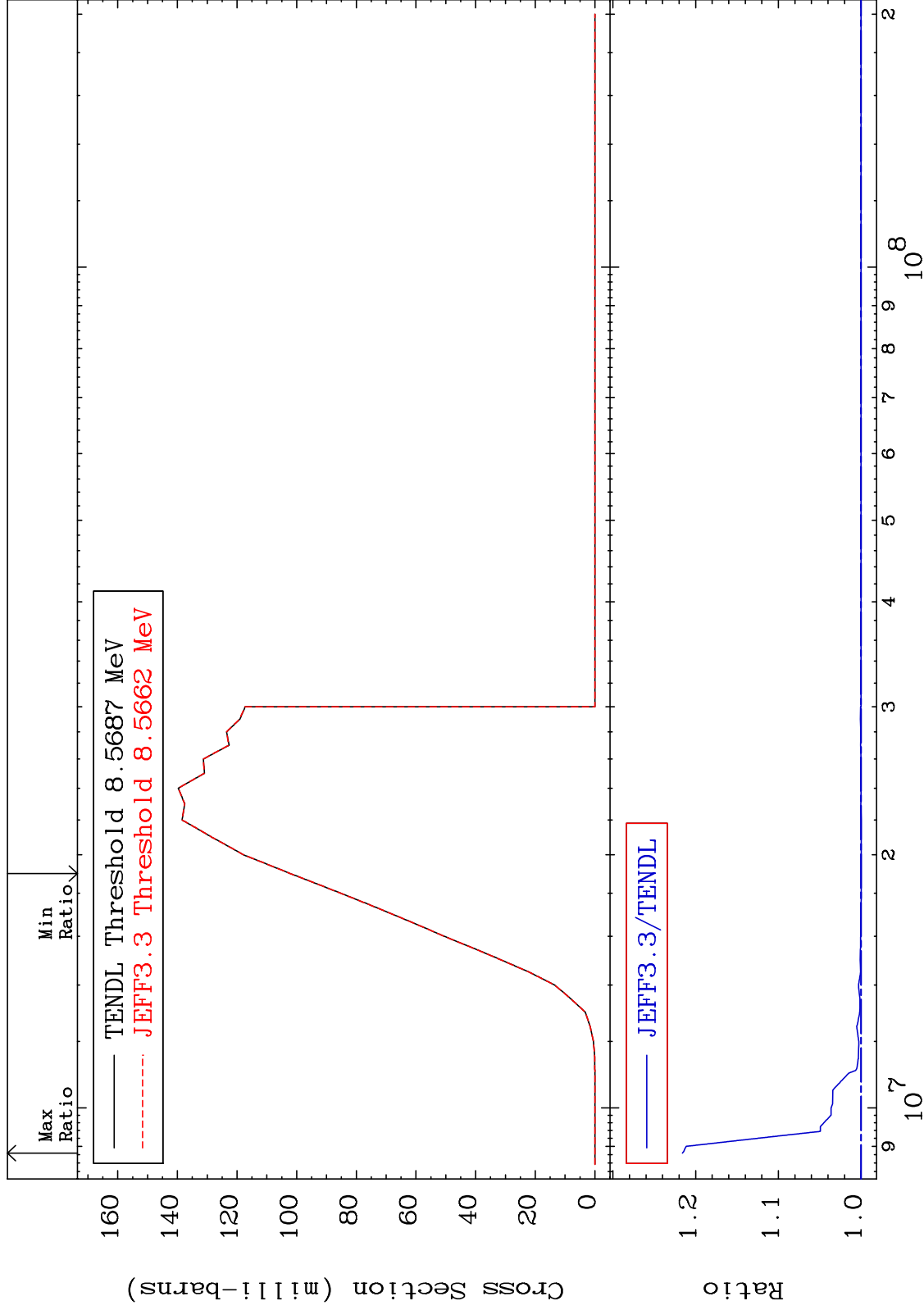
MAT 4434

(n, n') p

44-Ru-99

Cross Section

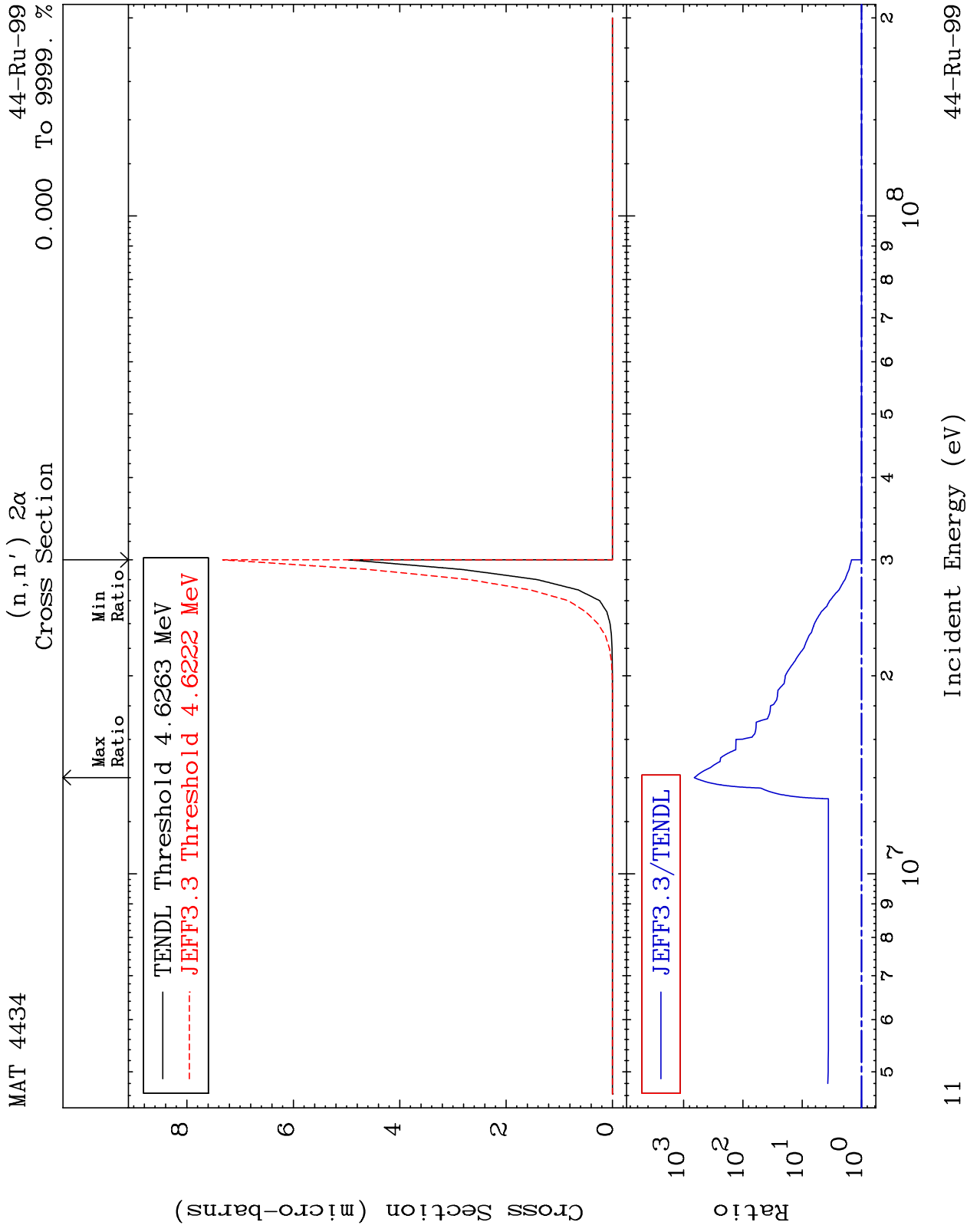
-0.020 To 21.59 %



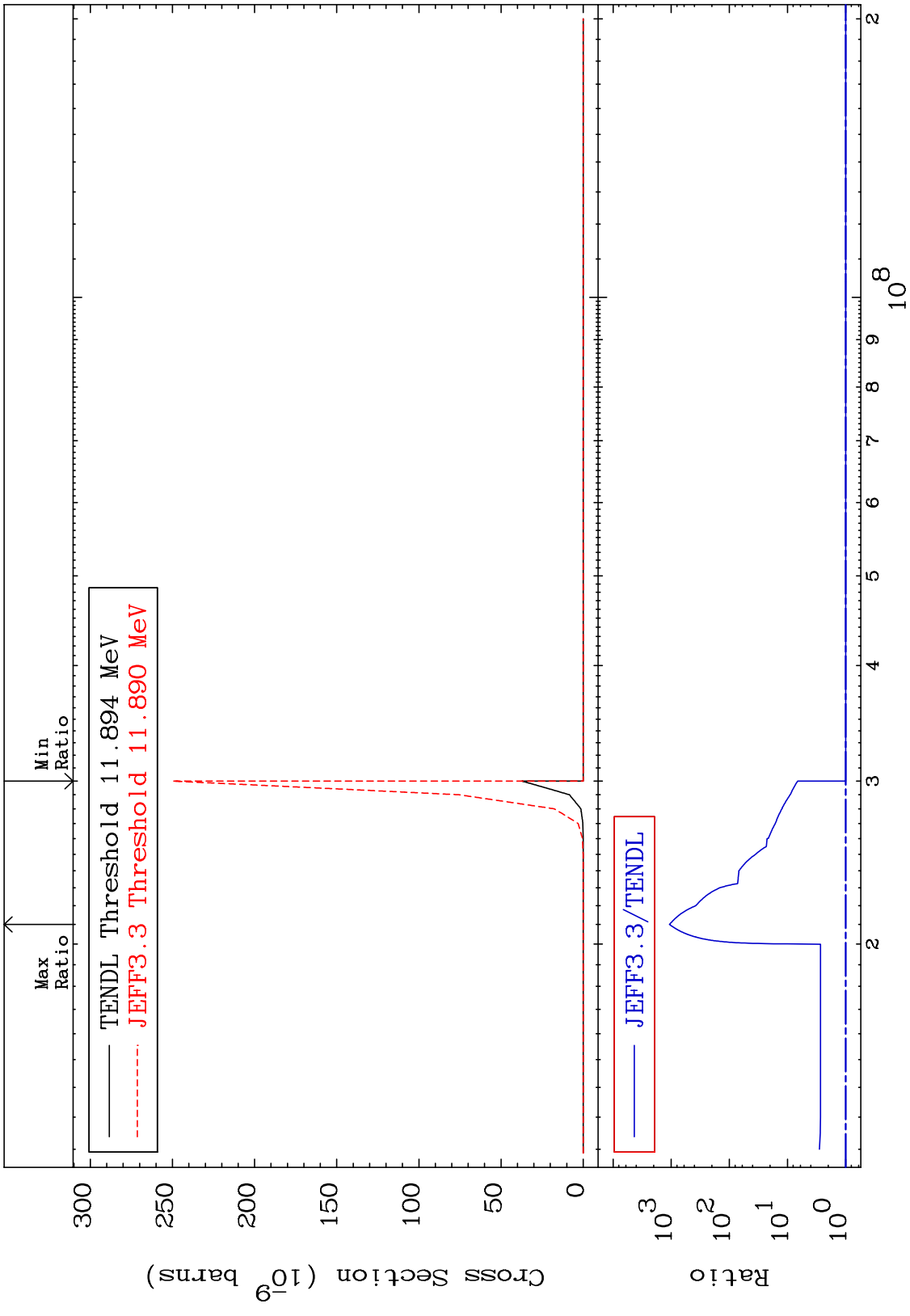
10

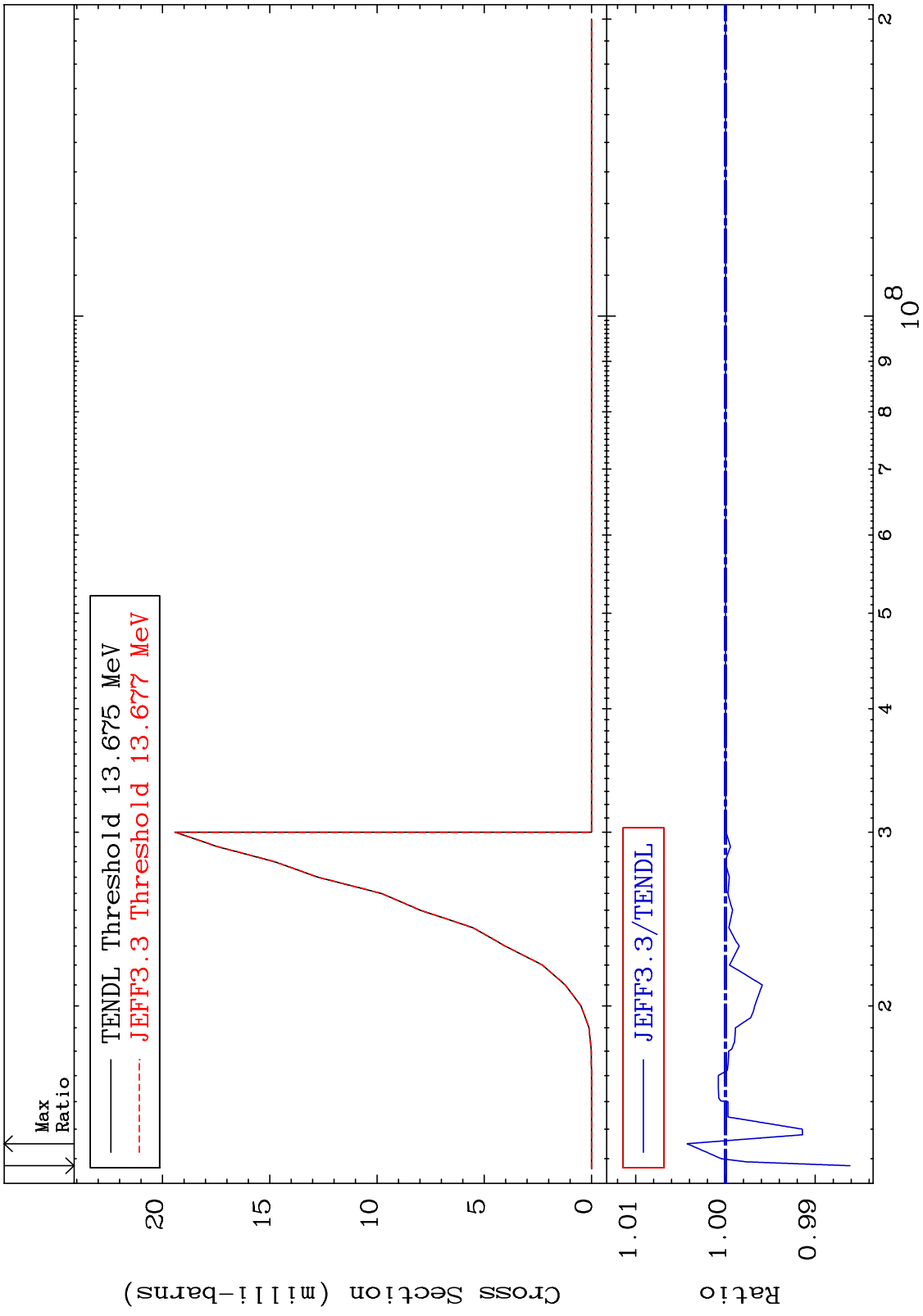
Incident Energy (eV)

44-Ru-99

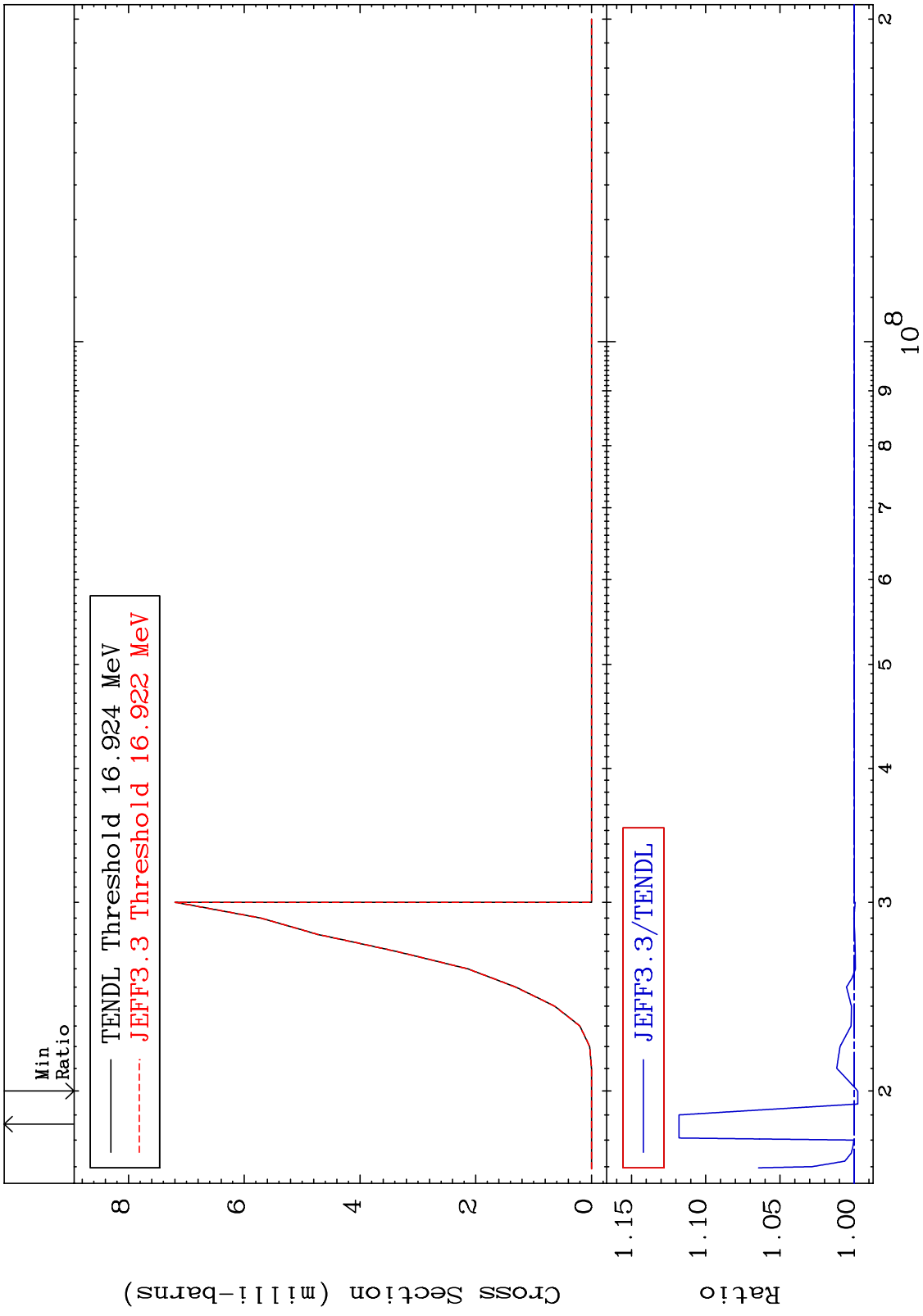


MAT 4434 (n,2n) 2α 44-Ru-99
 Cross Section 0.000 To 9999. %

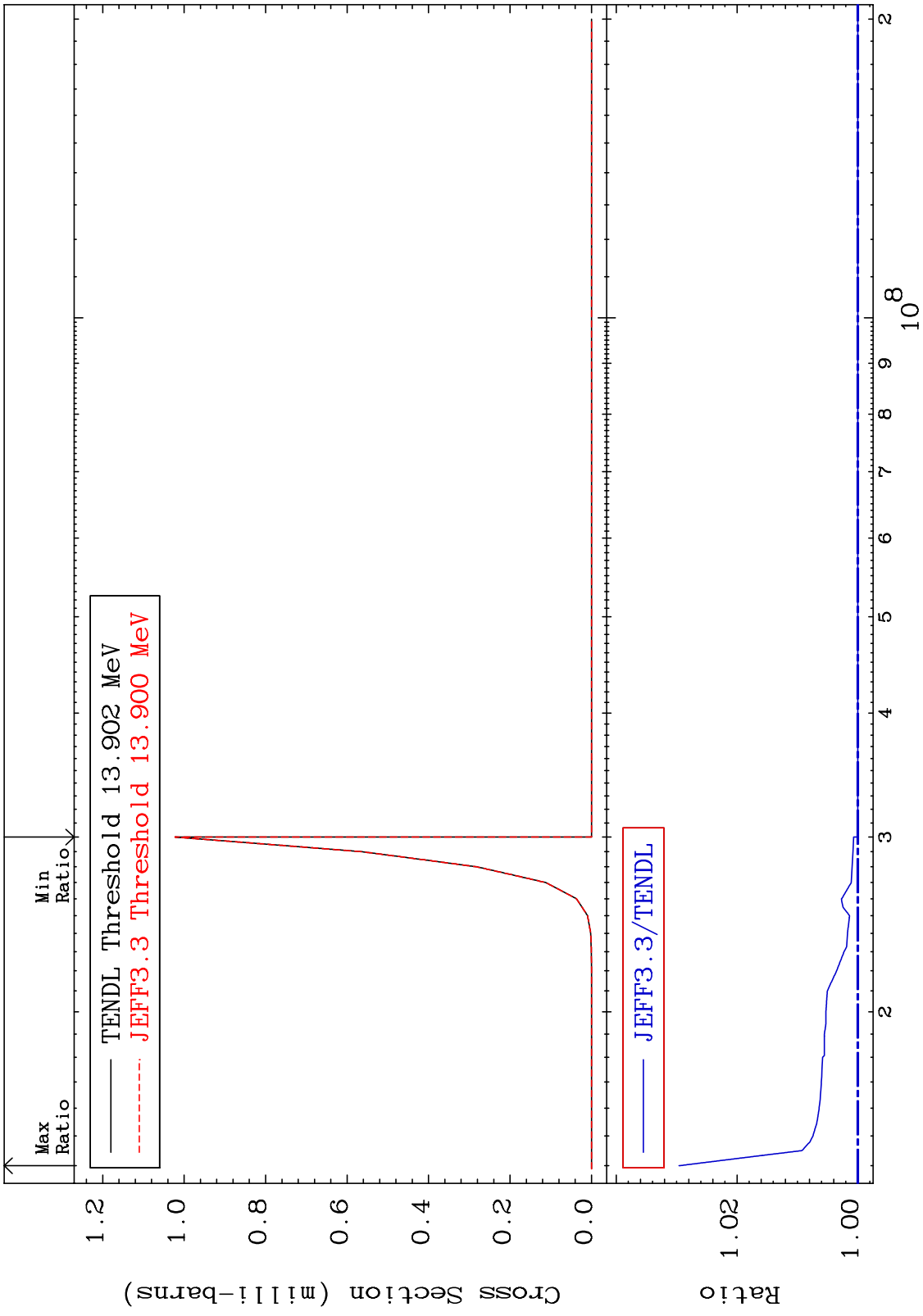




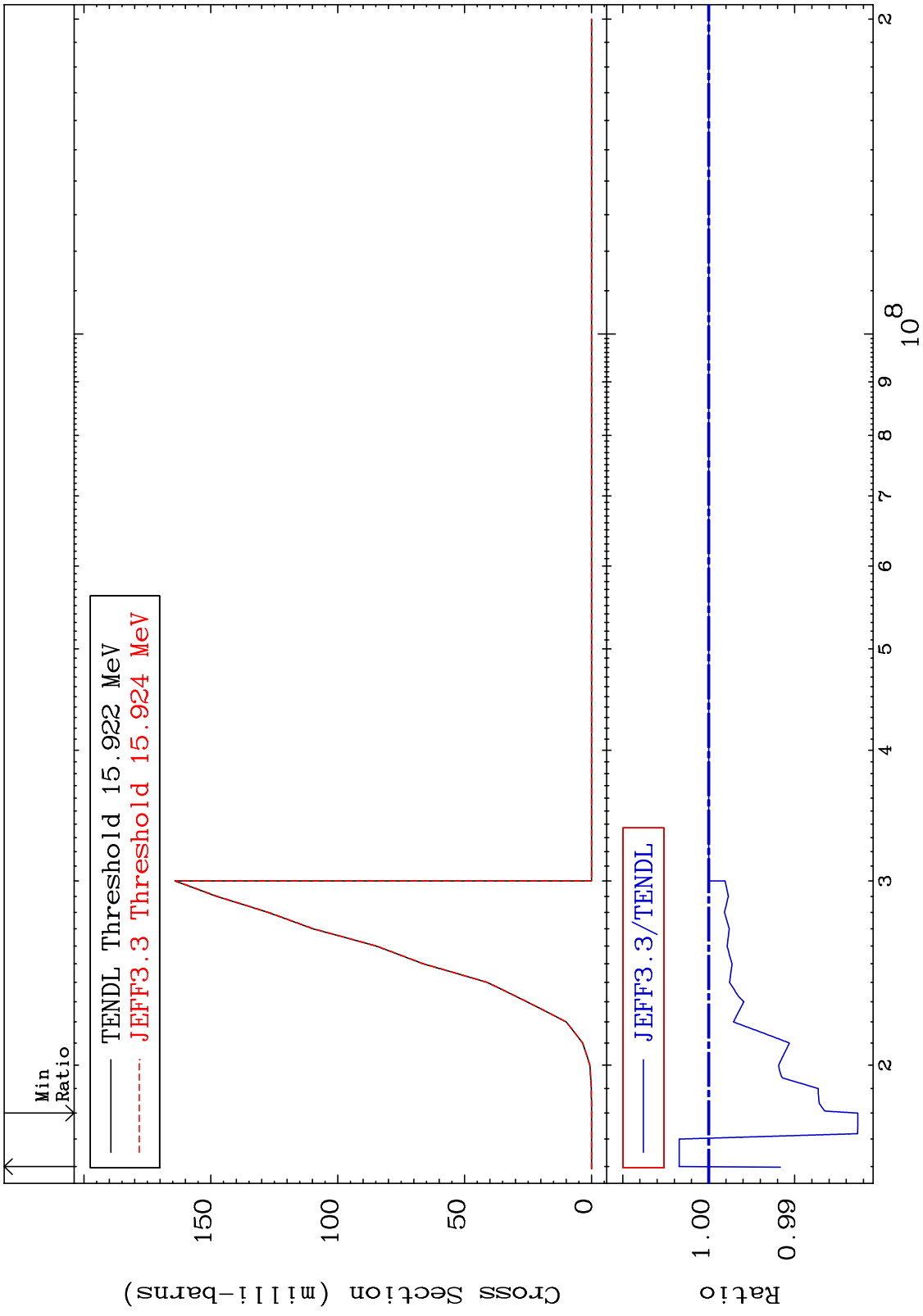
MAT 4434 (n, n') t 44-Ru-99
 Cross Section -0.246 To 11.79 %



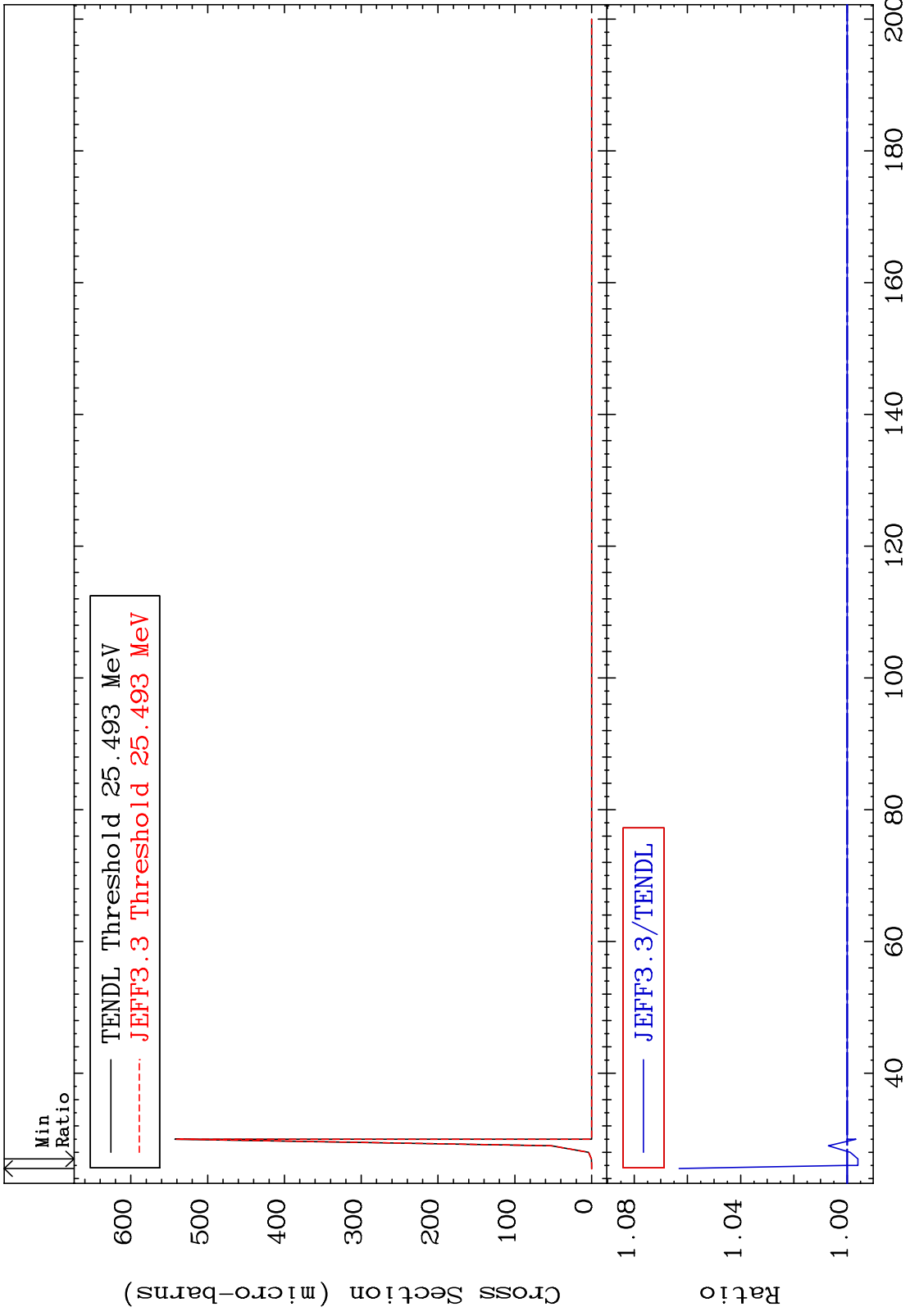
MAT 4434 (n, n') He-3 44-Ru-99
 Cross Section 0.000 To 2.961 %



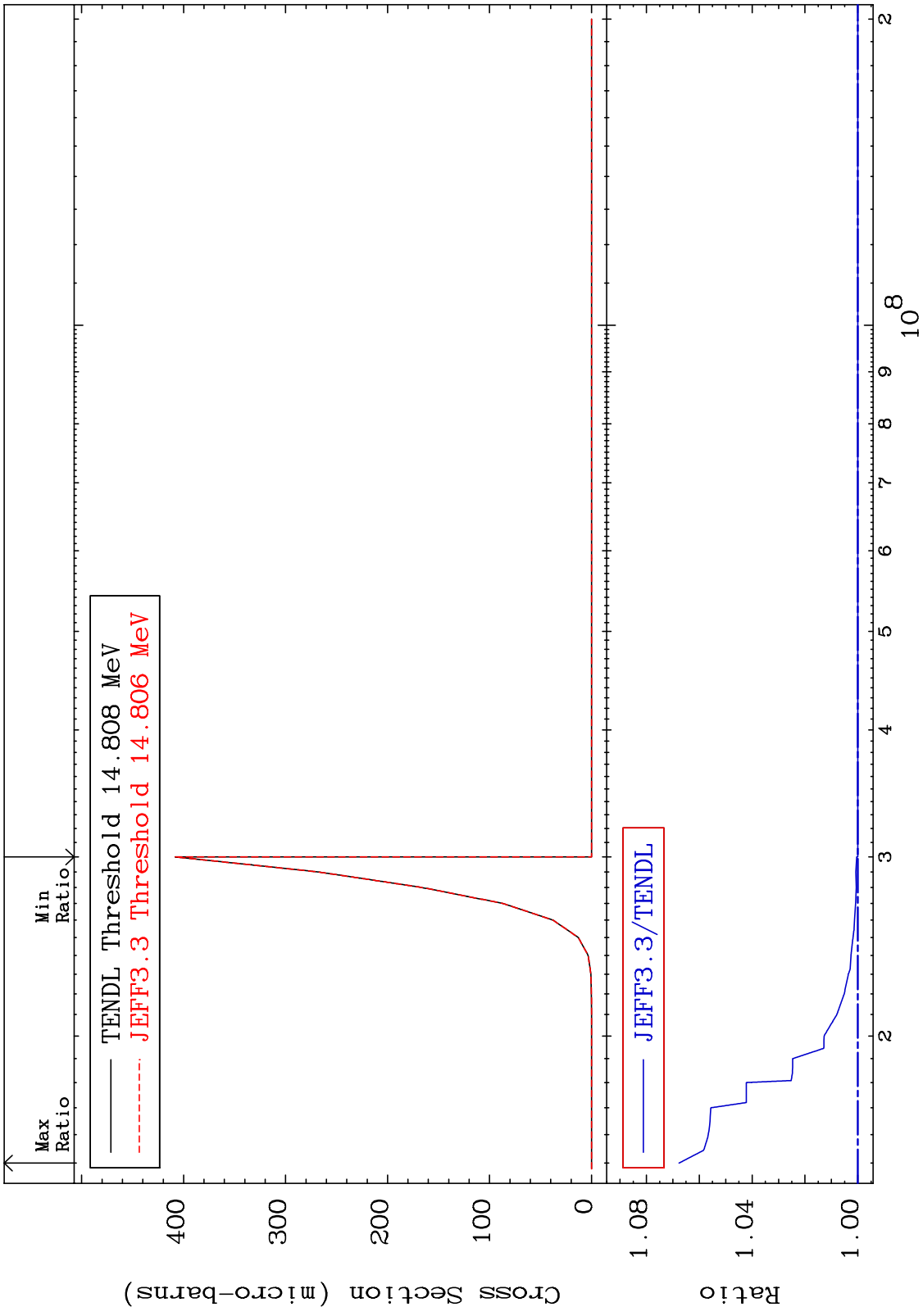
MAT 4434 (n,2n) p 44-Ru-99
Cross Section -1.734 To 0.345 %



MAT 4434 (n,3n) p 44-Ru-99
Cross Section -0.406 To 6.311 %



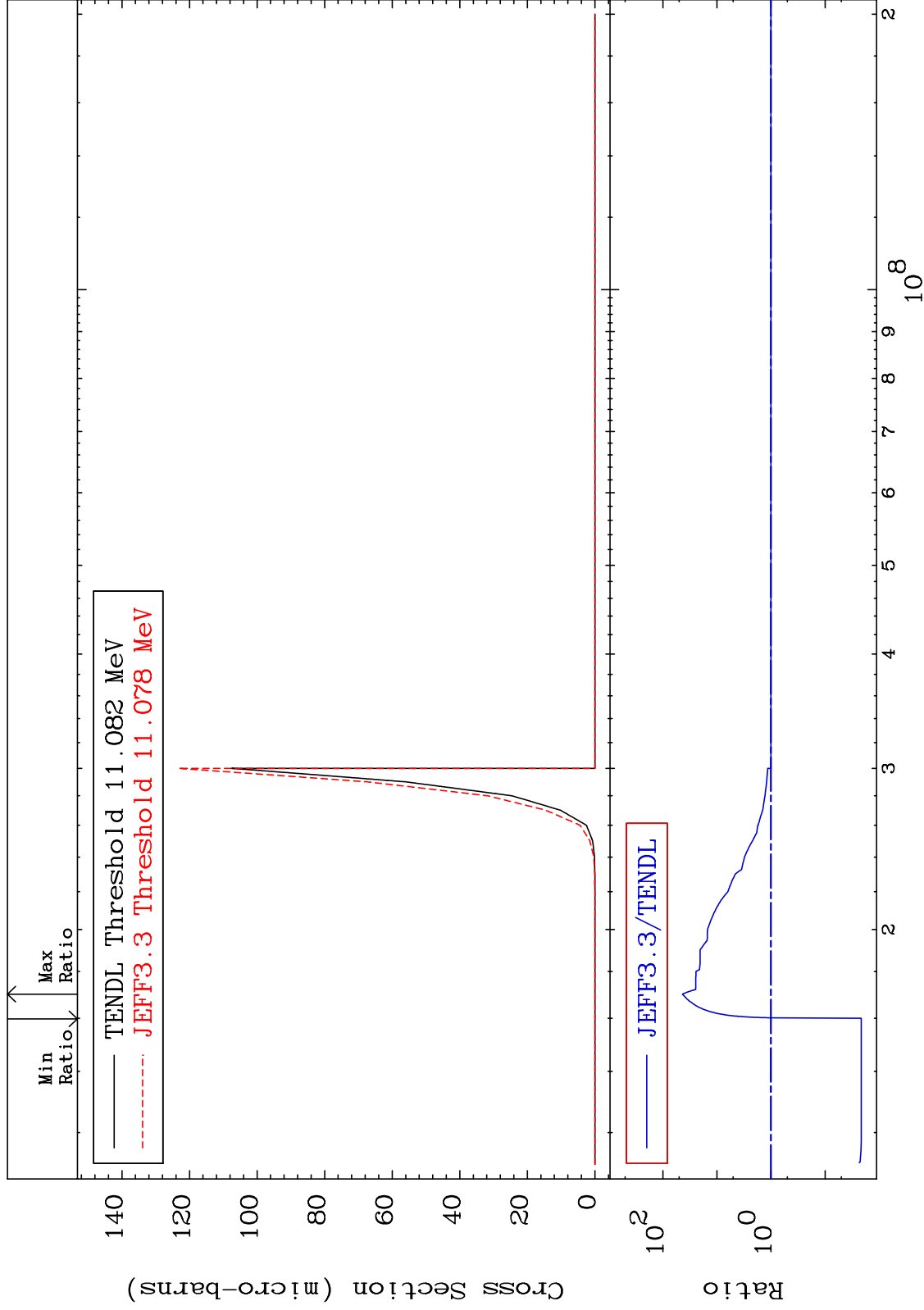
MAT 4434 (n,2n) p 44-Ru-99
 Cross Section 0.000 To 6.766 %



MAT 4434

(n,n') p α
Cross Section

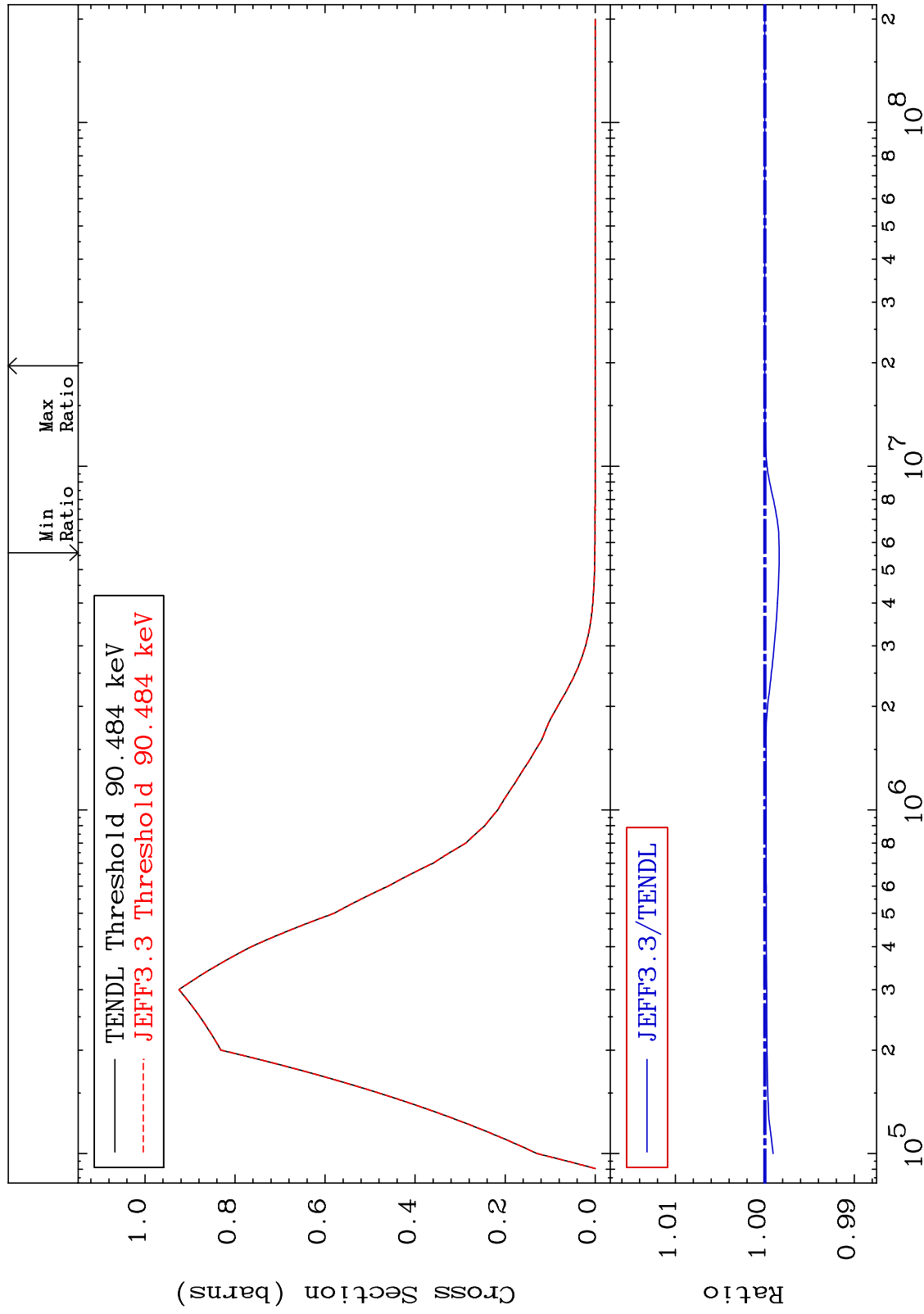
44-Ru-99
-97.86 To 4235. %



MAT 4434

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

44-Ru-99
-0.161 To 0.000 %

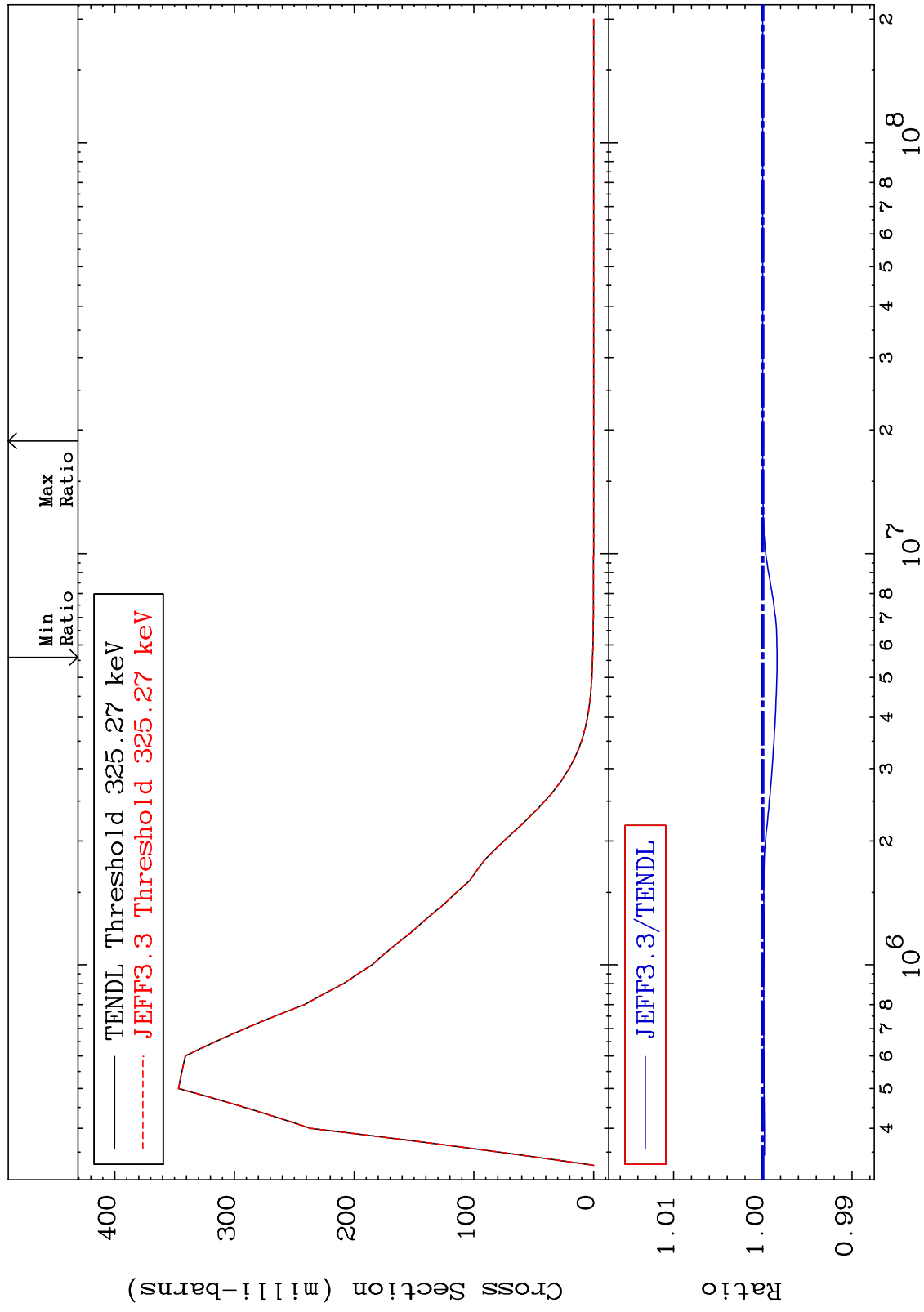


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Incident Energy (eV)

44-Ru-99

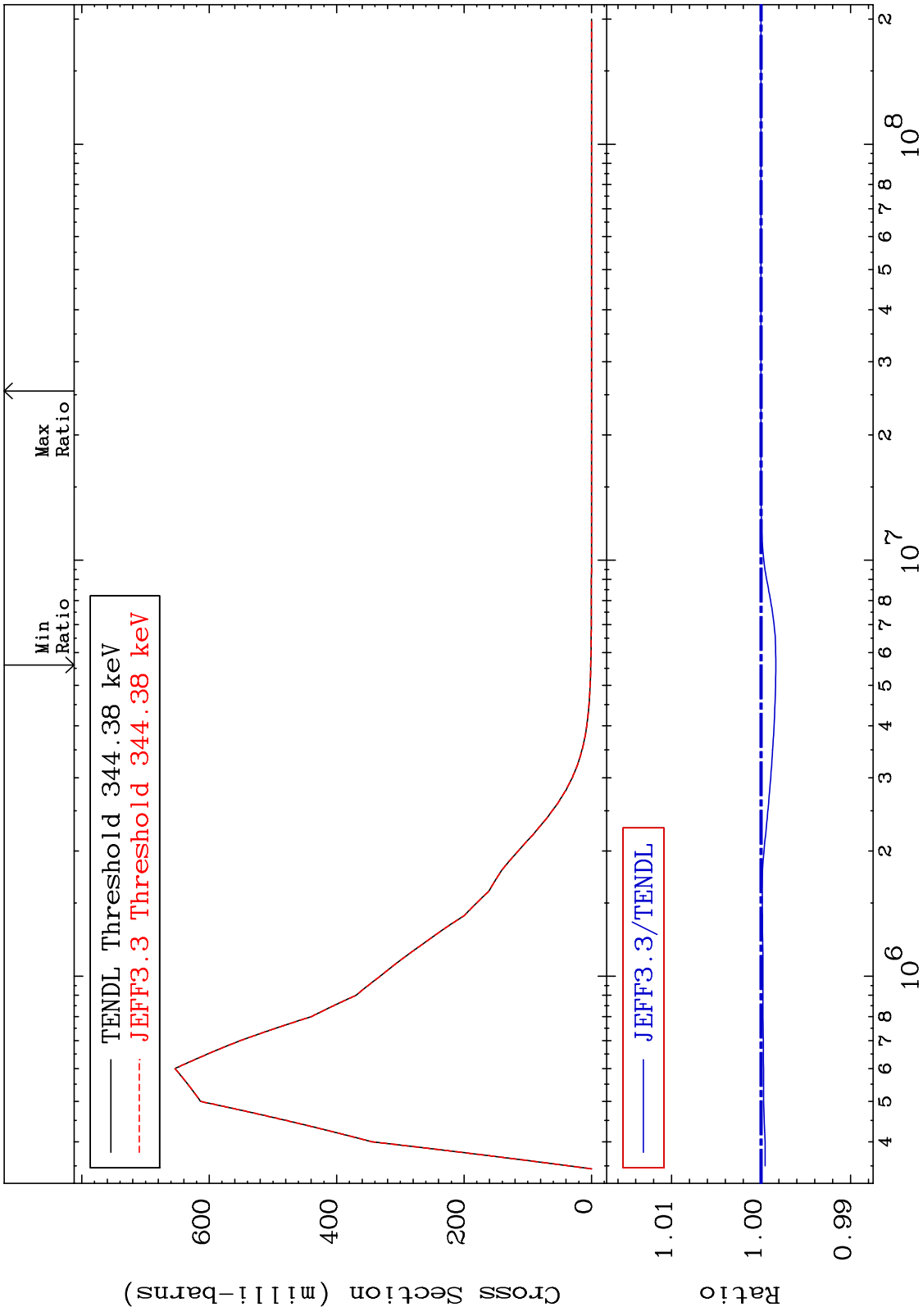
MAT 4434 MT= 52 (n,n') Level Cross Section -0.160 To 0.000 % 44-Ru-99



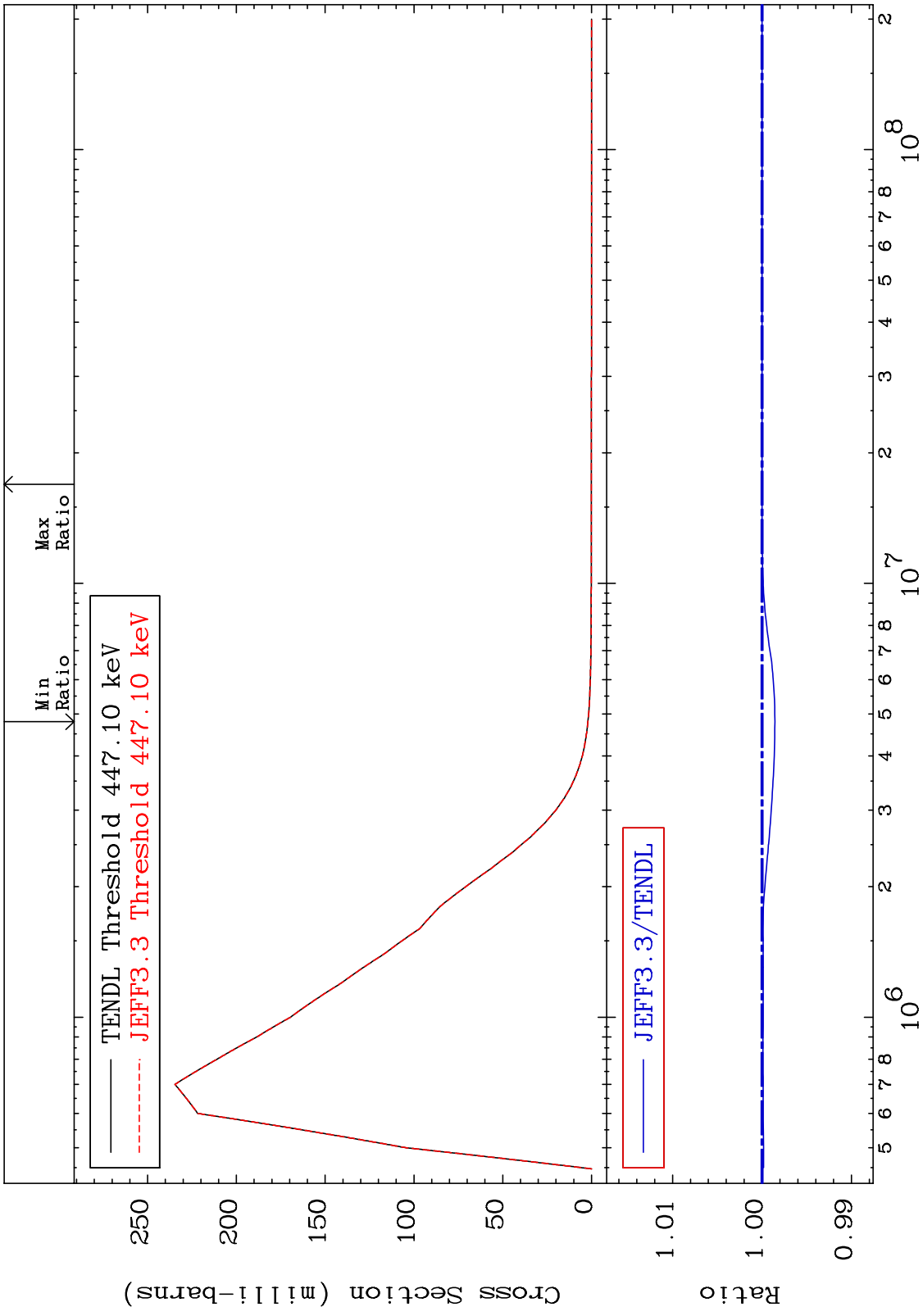
44-Ru-99

Incident Energy (eV)

MAT 4434 MT= 53 (n,n') Level Cross Section -0.165 To 0.000 % 44-Ru-99



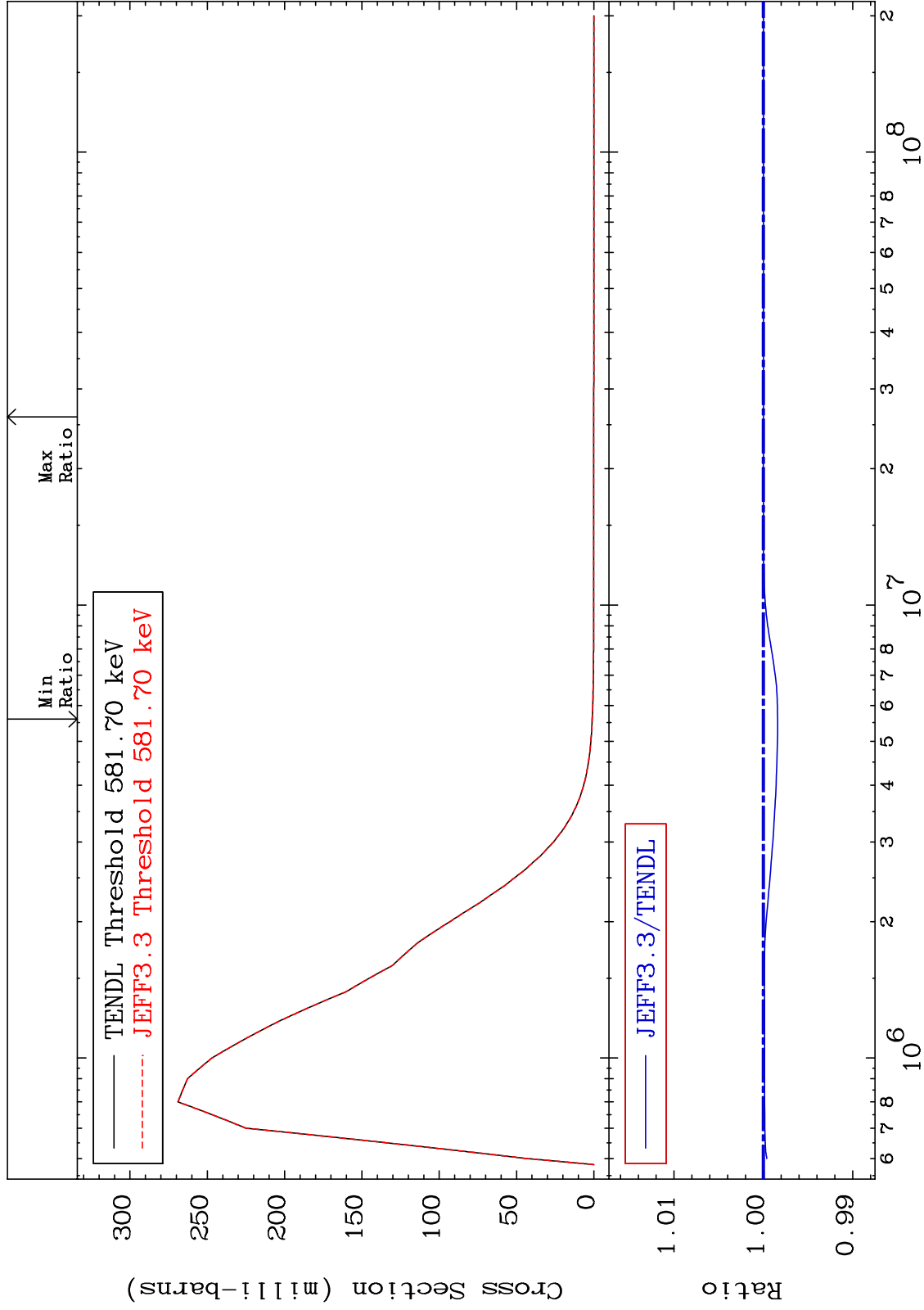
MAT 4434 MT= 54 (n,n') Level Cross Section -0.143 To 0.000 % 44-Ru-99



MAT 4434

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

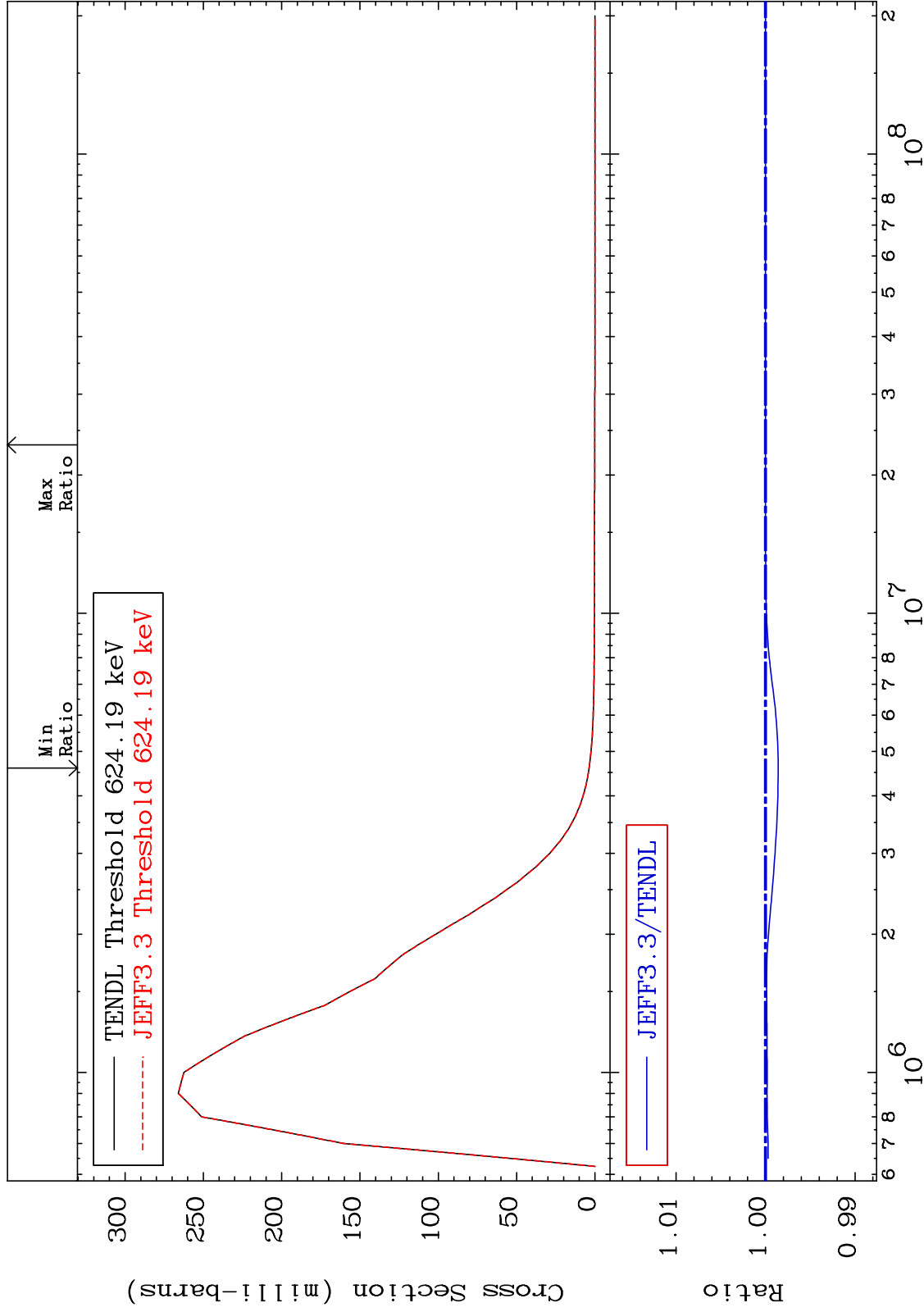
44-Ru-99
-0.160 To 0.000 %



MAT 4434

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

44-Ru-99
-0.142 To 0.000 %

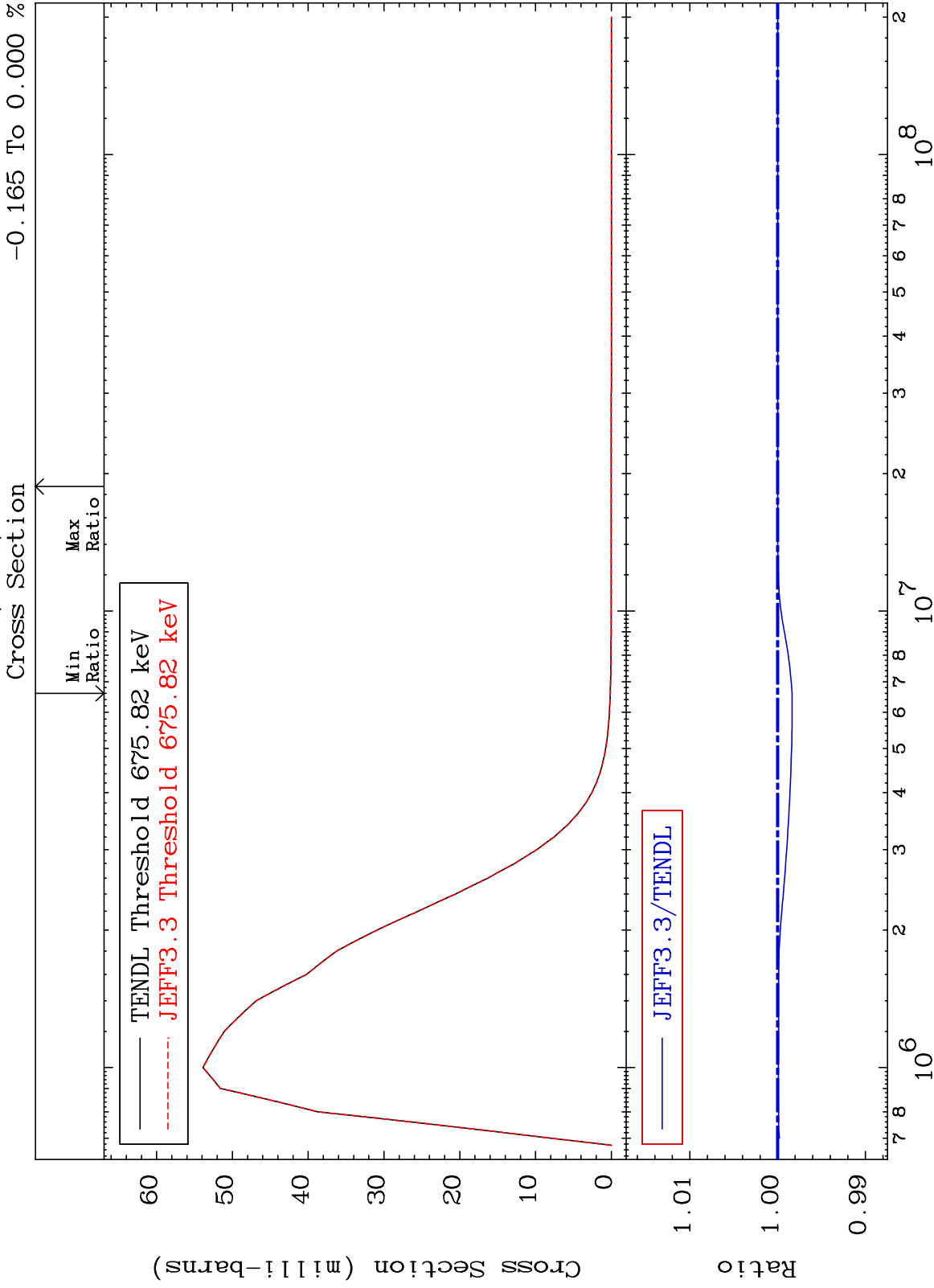


MAT 4434

MT= 57 (n,n') Level

44-Ru-99

-0.165 To 0.000 %



27

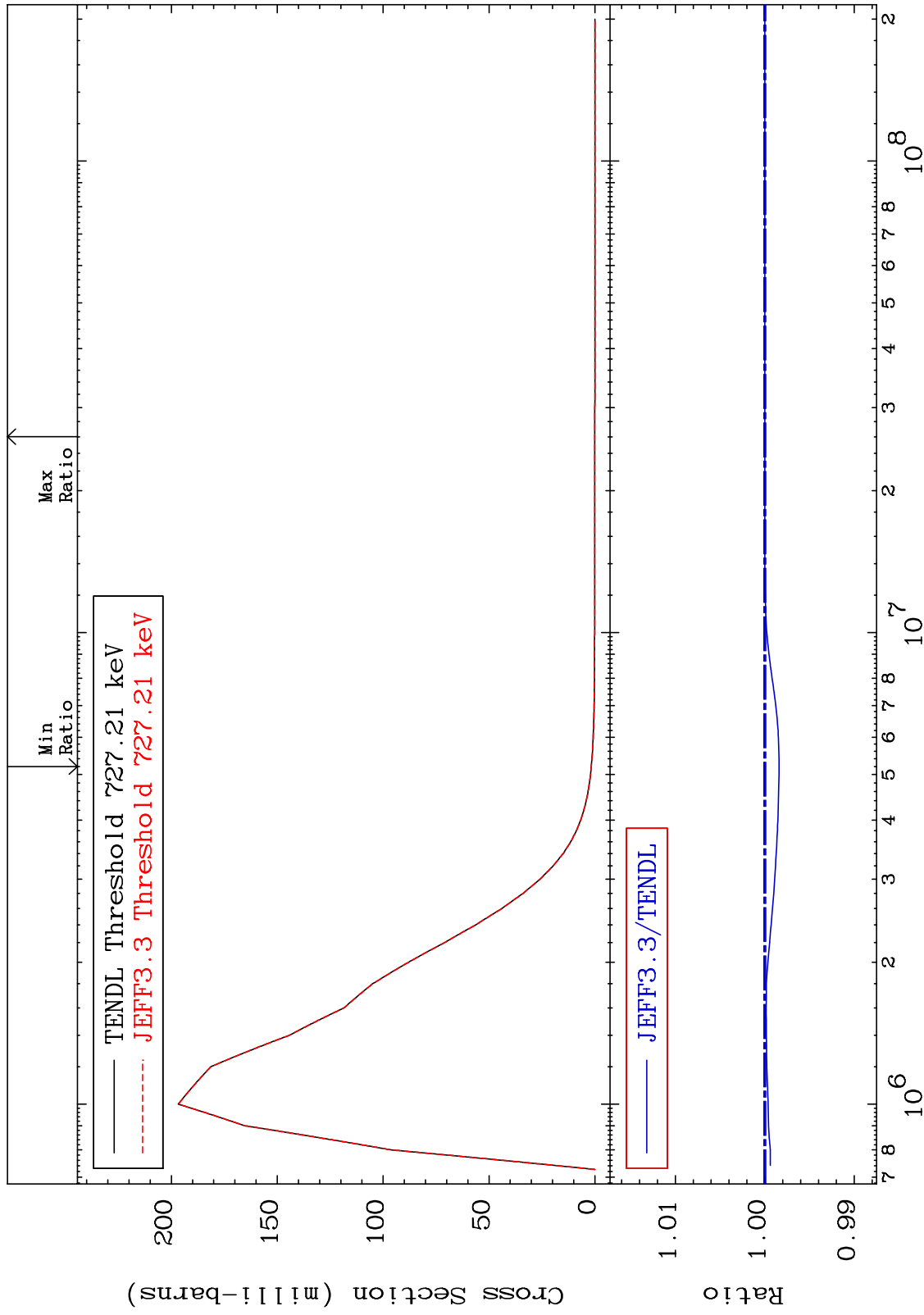
Incident Energy (eV)

44-Ru-99

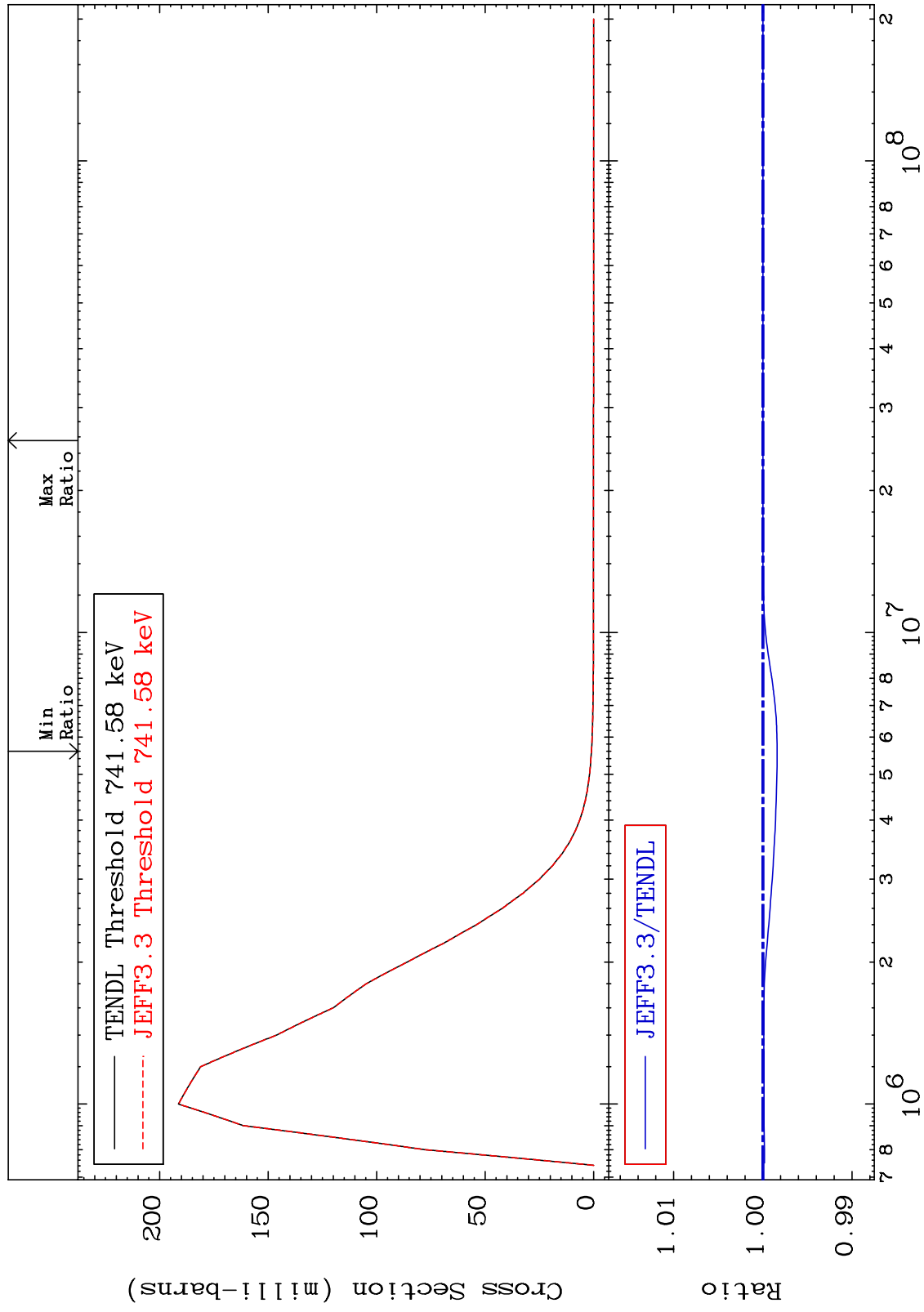
MAT 4434

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

44-Ru-99
-0.158 To 0.000 %



MAT 4434 MT= 59 (n,n') Level Cross Section 44-Ru-99 -0.160 To 0.000 %



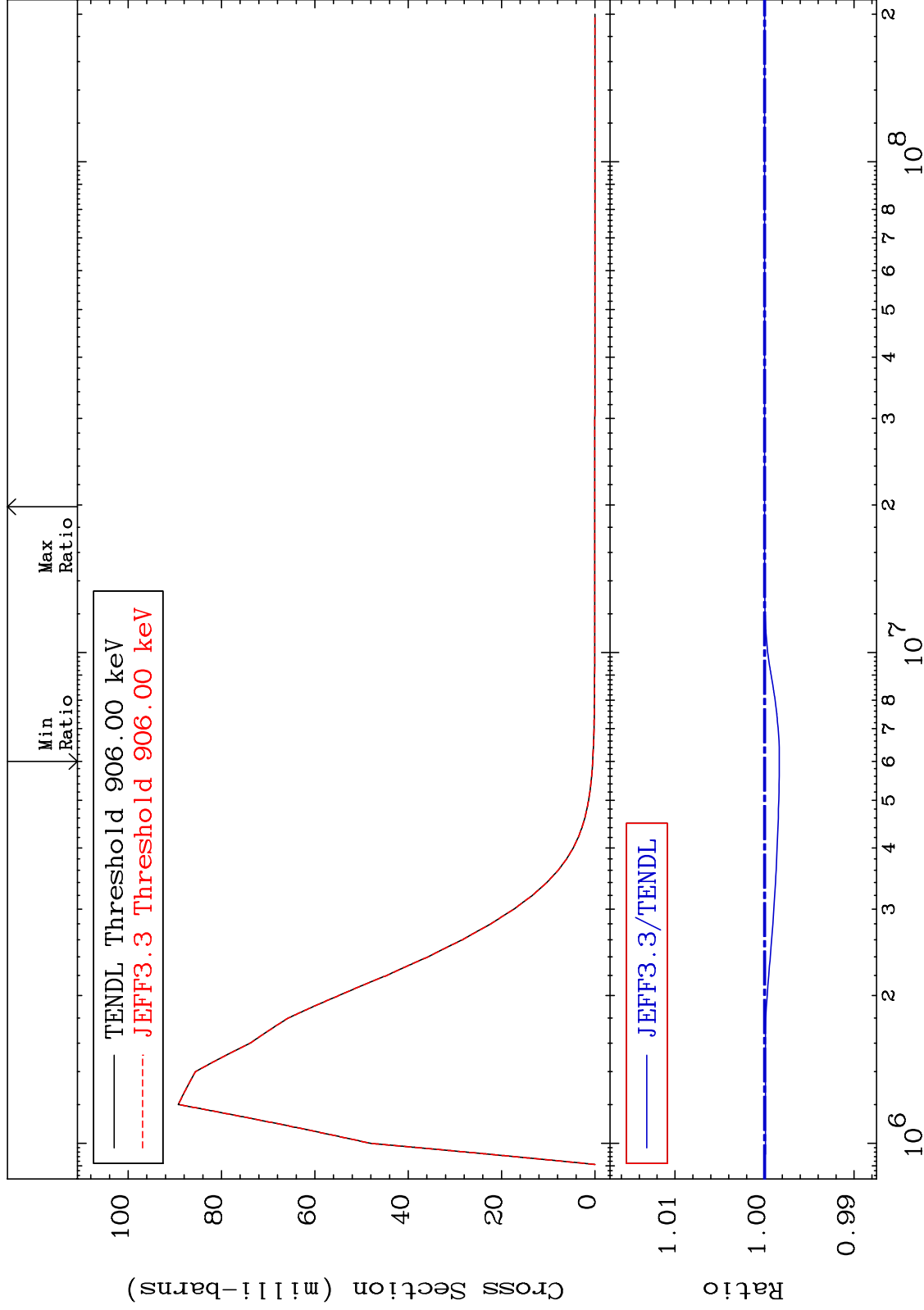
44-Ru-99

Incident Energy (eV)

MAT 4434

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

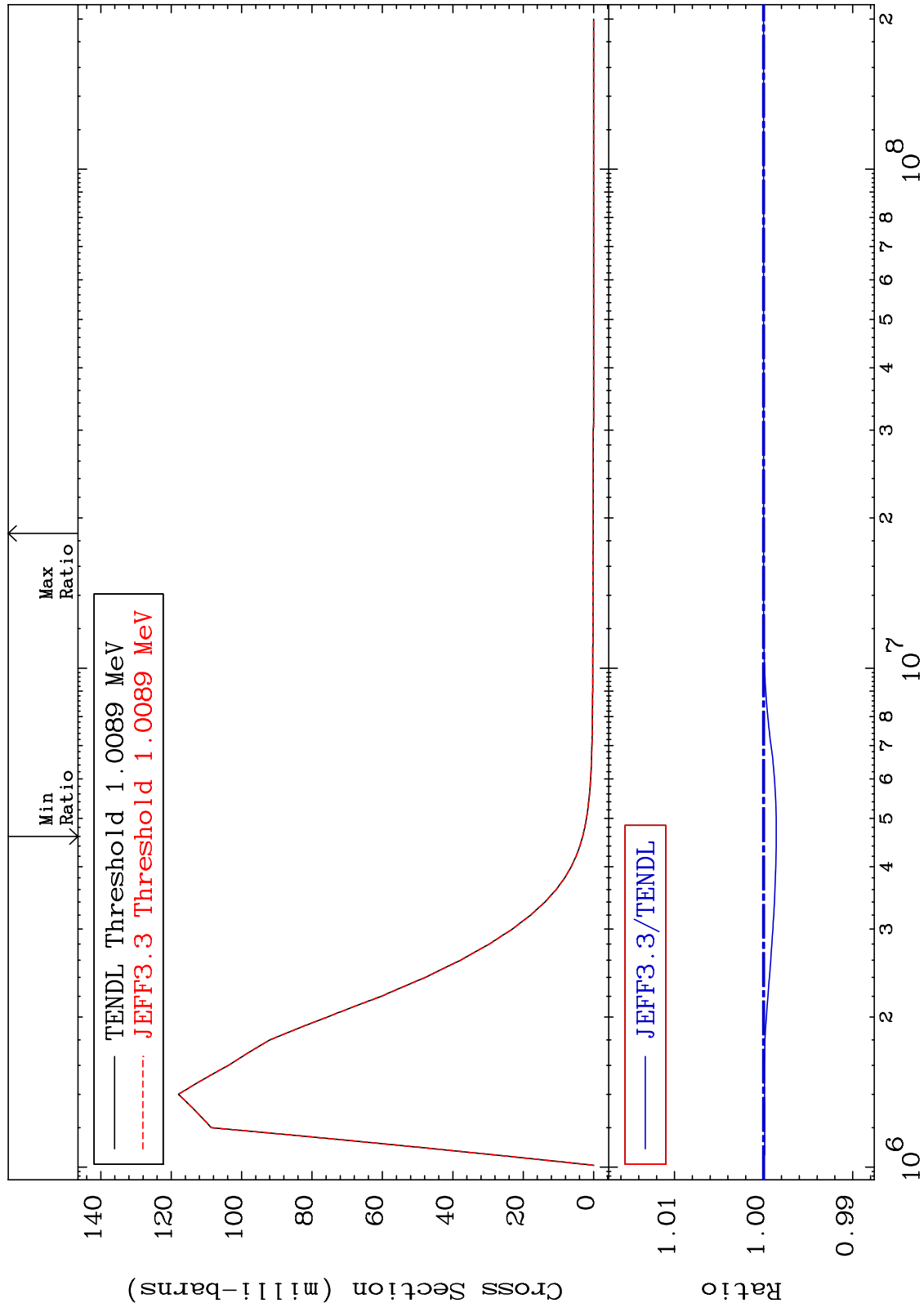
44-Ru-99
-0.164 To 0.000 %



Incident Energy (eV)

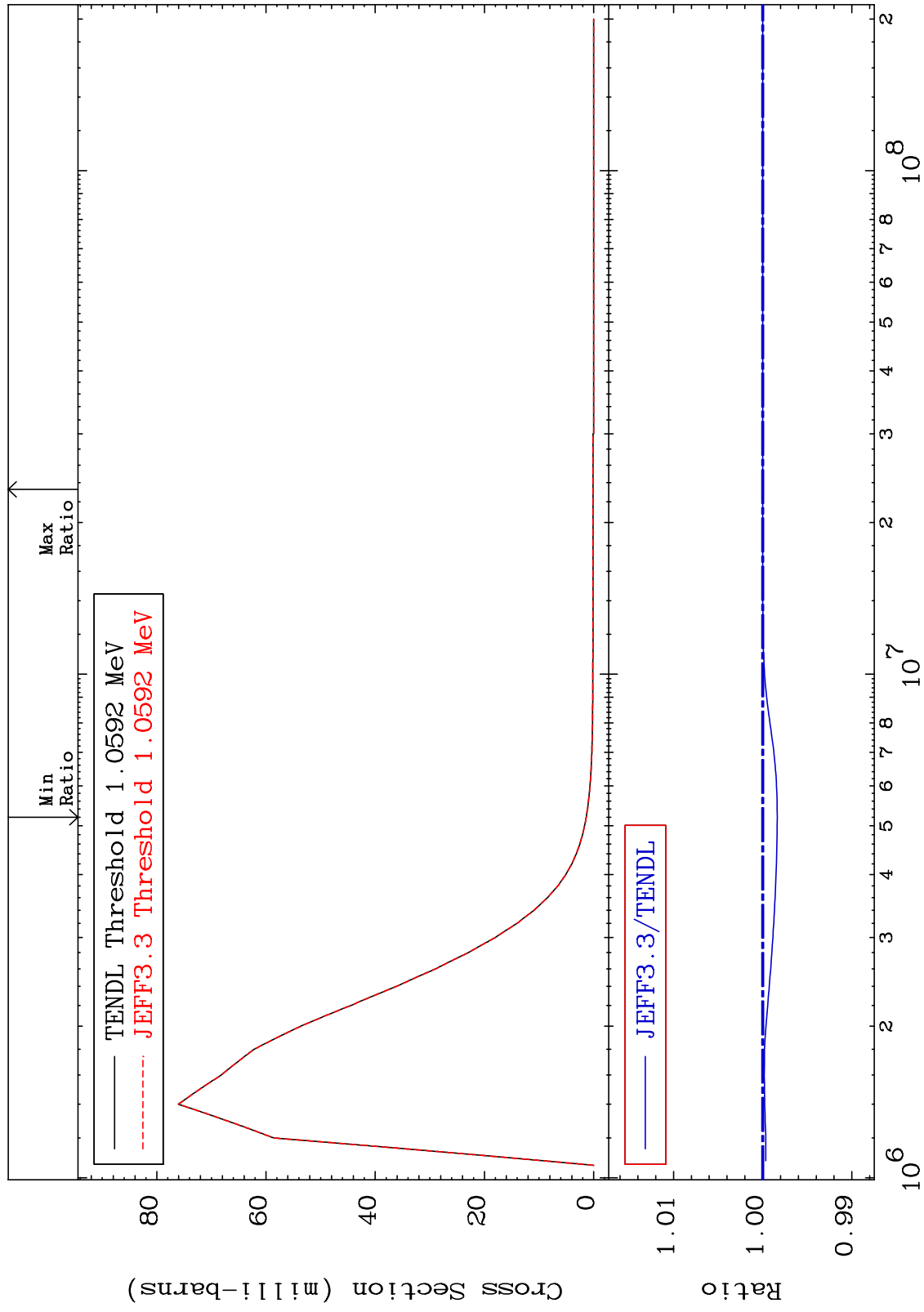
44-Ru-99

MAT 4434 MT= 61 (n,n') Level Cross Section 44-Ru-99 -0.143 To 0.000 %



31 Incident Energy (eV) 44-Ru-99

MAT 4434 MT= 62 (n,n') Level Cross Section -0.162 To 0.000 % 44-Ru-99



44-Ru-99

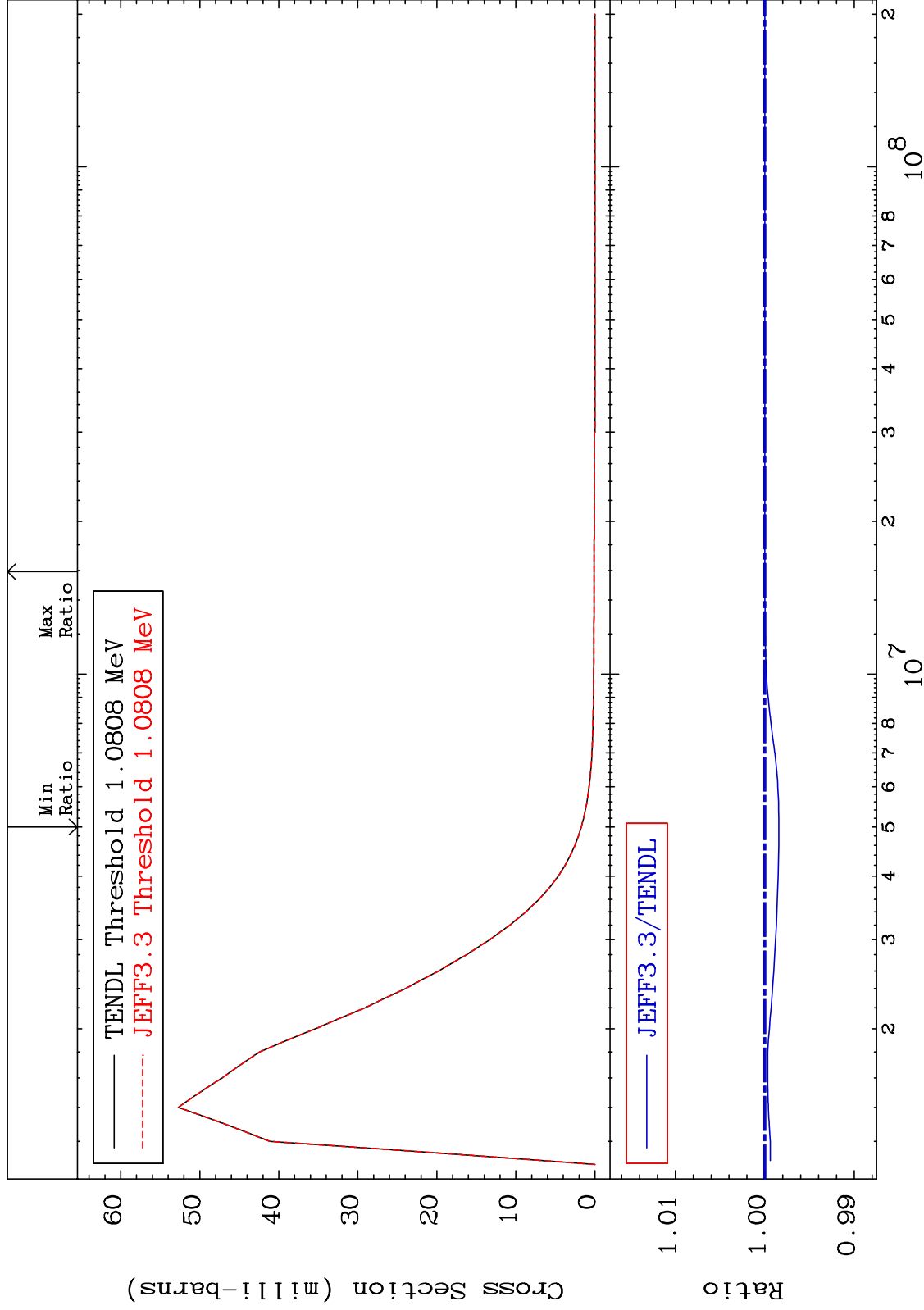
Incident Energy (eV)

32

MAT 4434

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

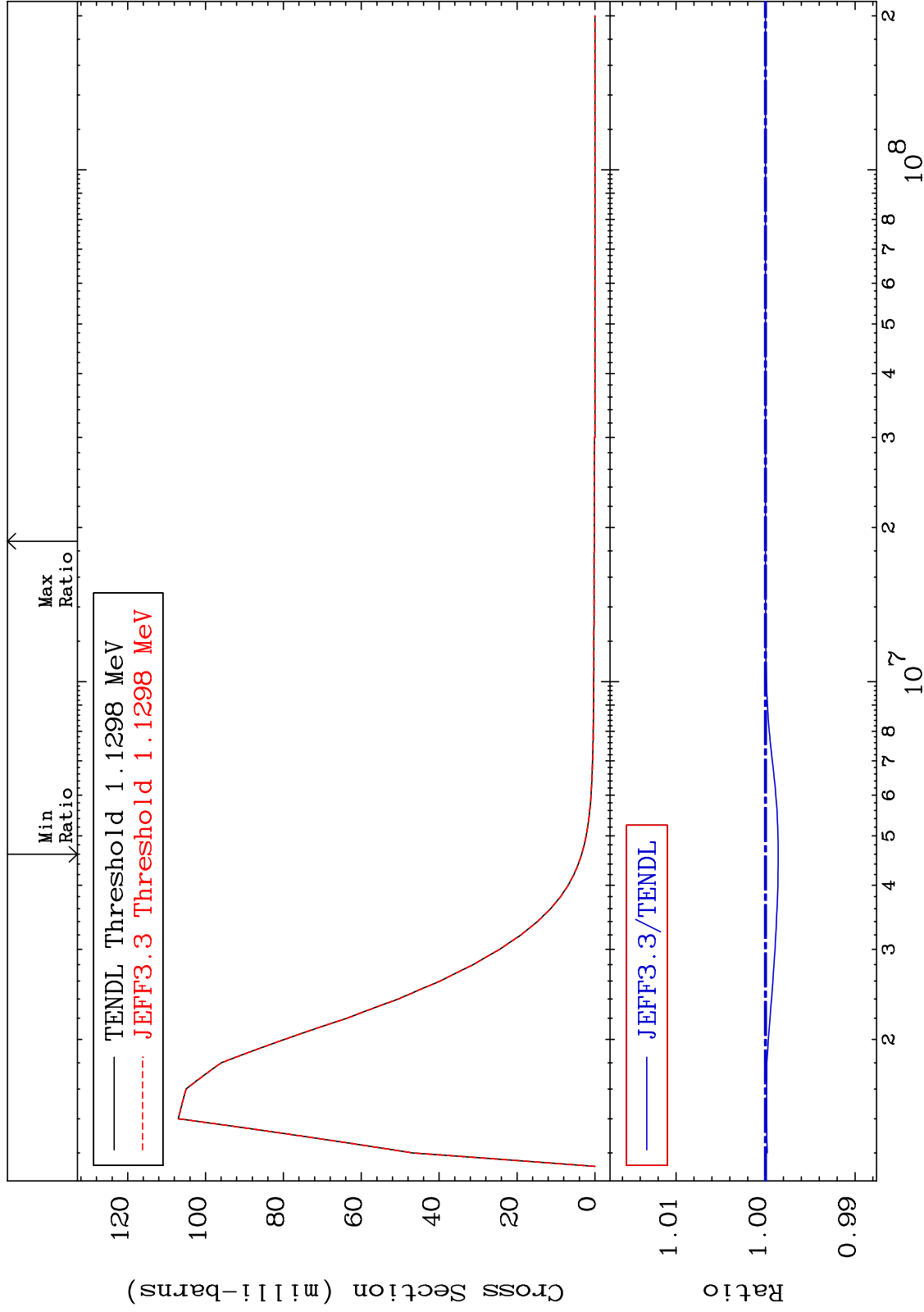
44-Ru-99
-0.157 To 0.000 %



MAT 4434

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

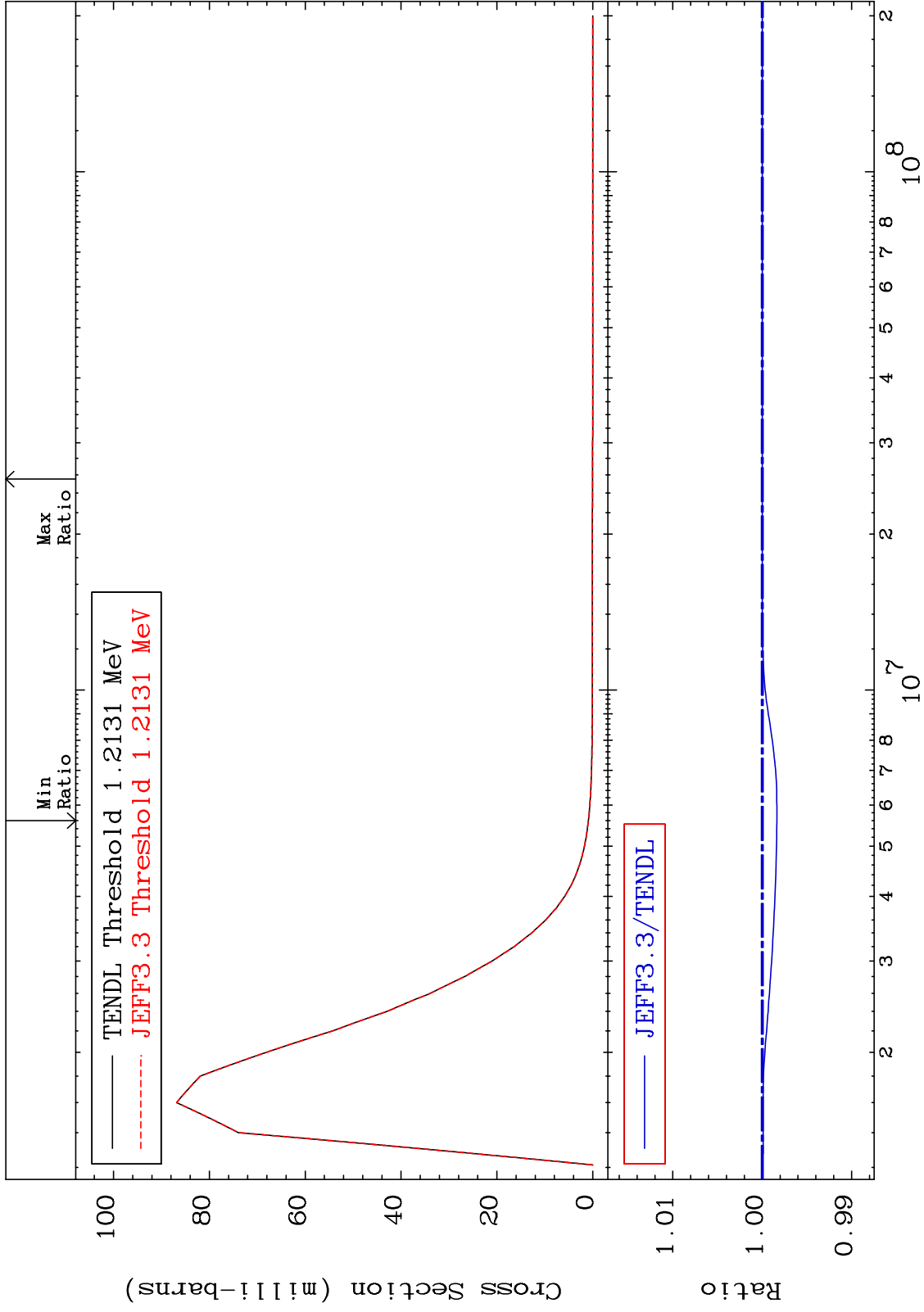
44-Ru-99
-0.141 To 0.000 %



MAT 4434

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

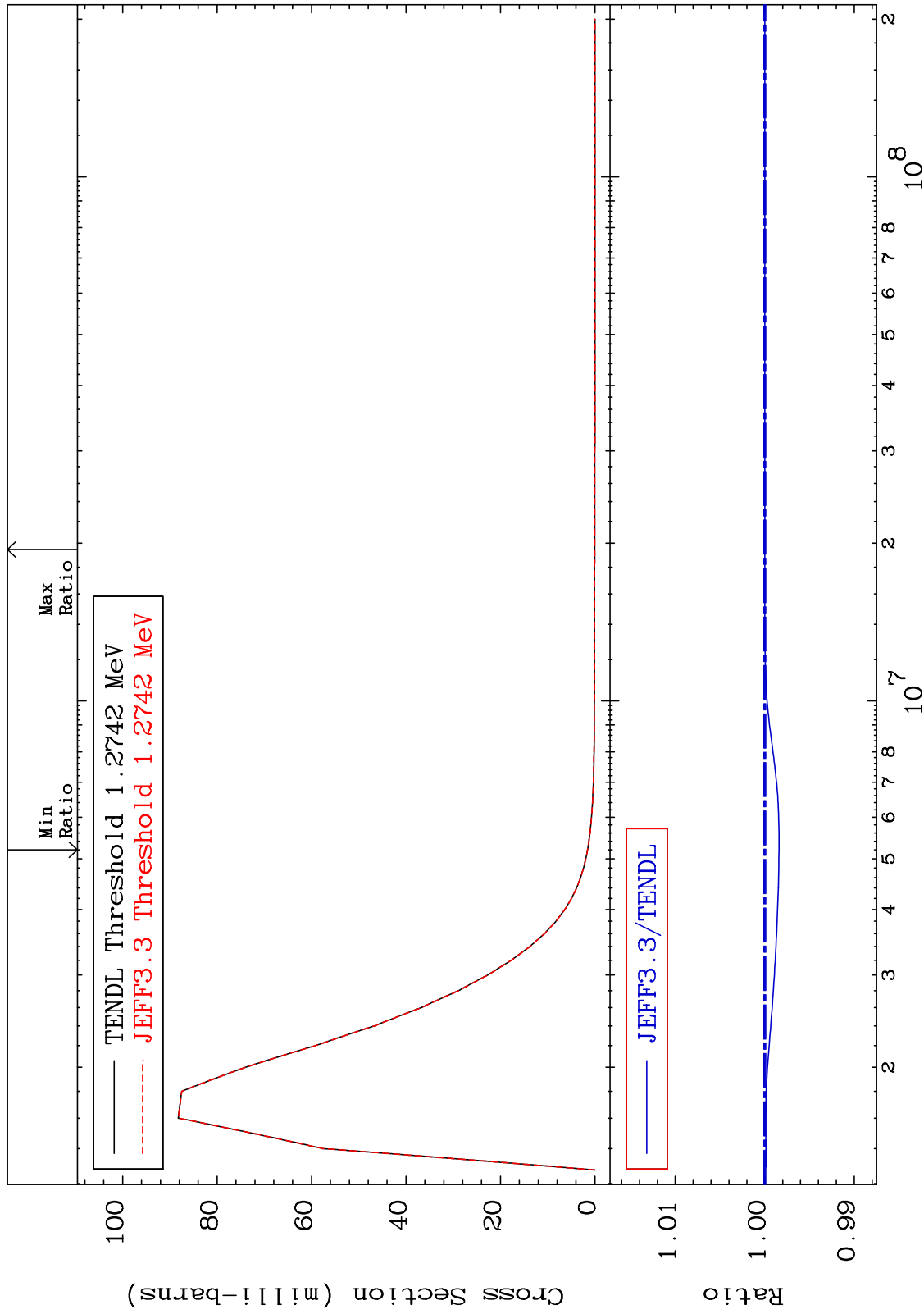
44-Ru-99
-0.164 To 0.000 %



MAT 4434

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

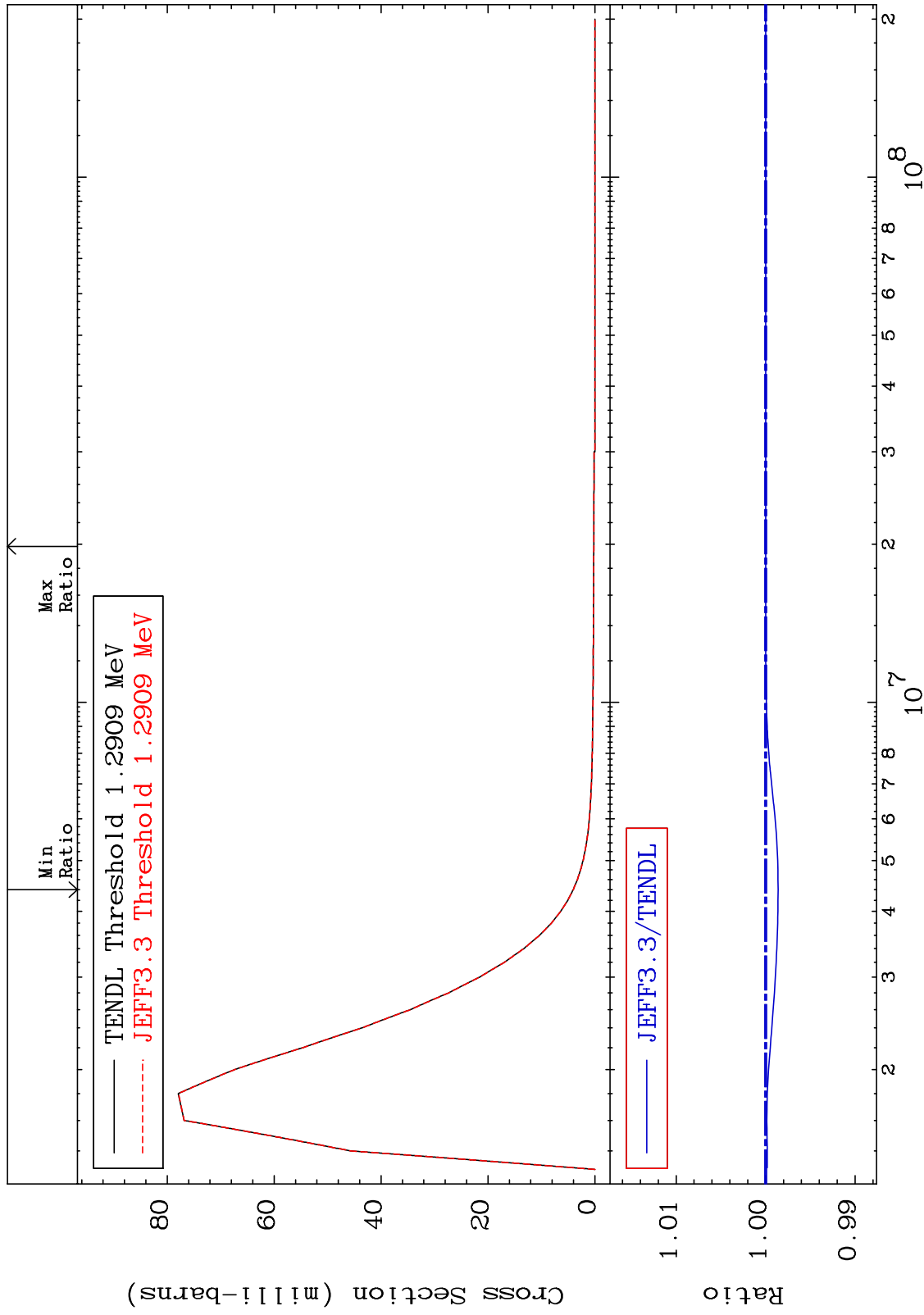
44-Ru-99
-0.159 To 0.000 %



MAT 4434

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

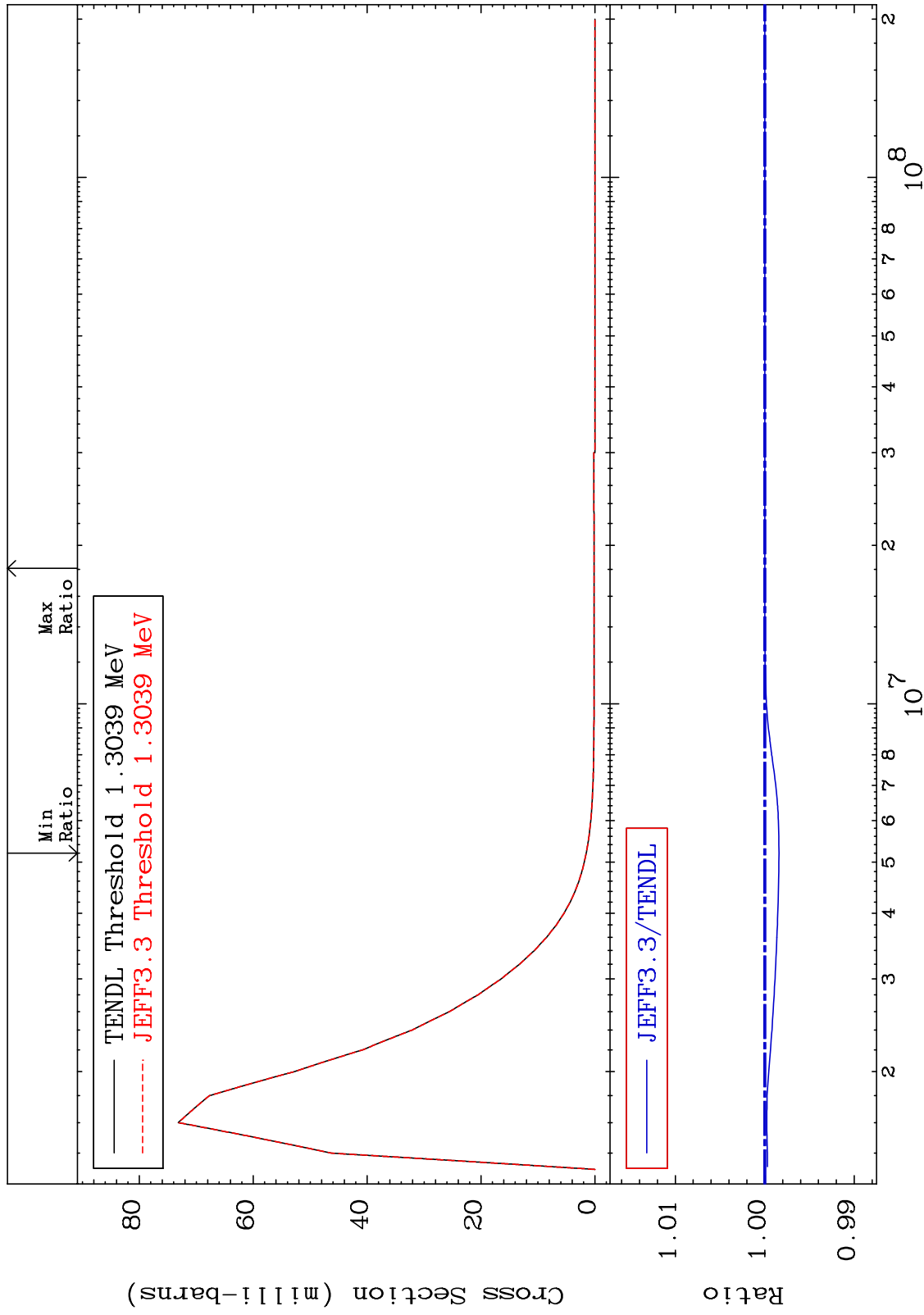
44-Ru-99
-0.139 To 0.000 %



MAT 4434

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

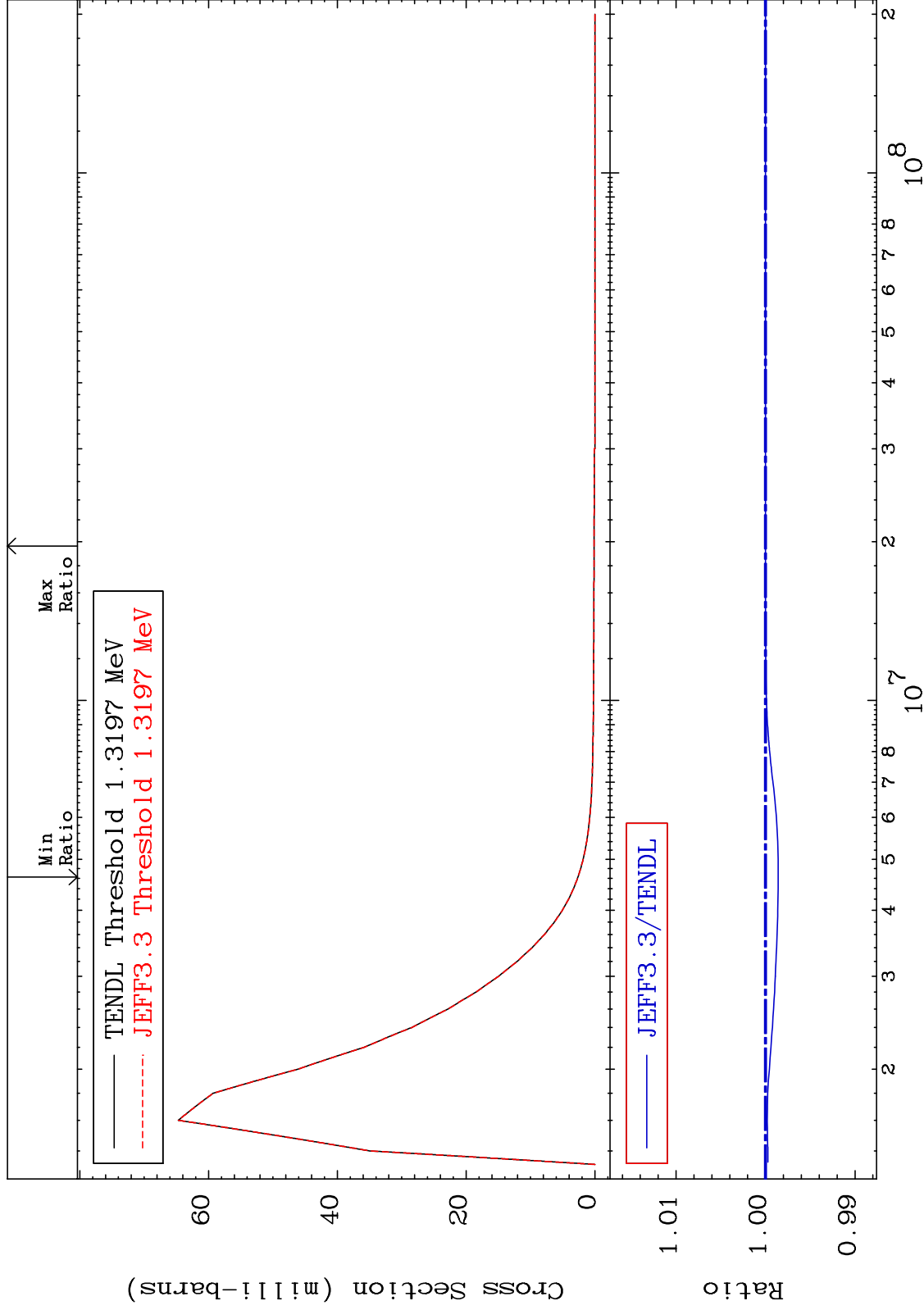
44-Ru-99
-0.158 To 0.000 %



MAT 4434

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

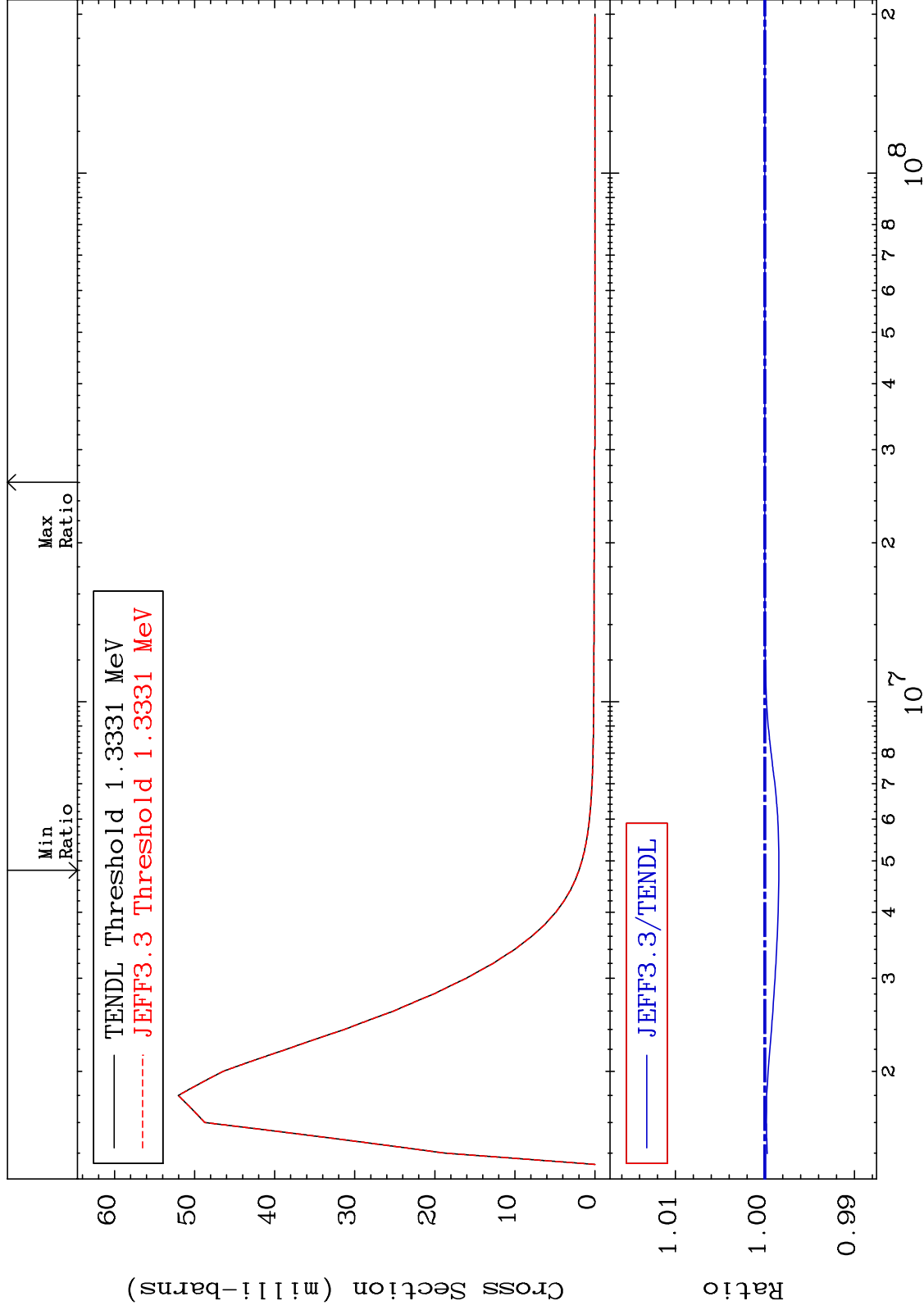
44-Ru-99
-0.142 To 0.000 %



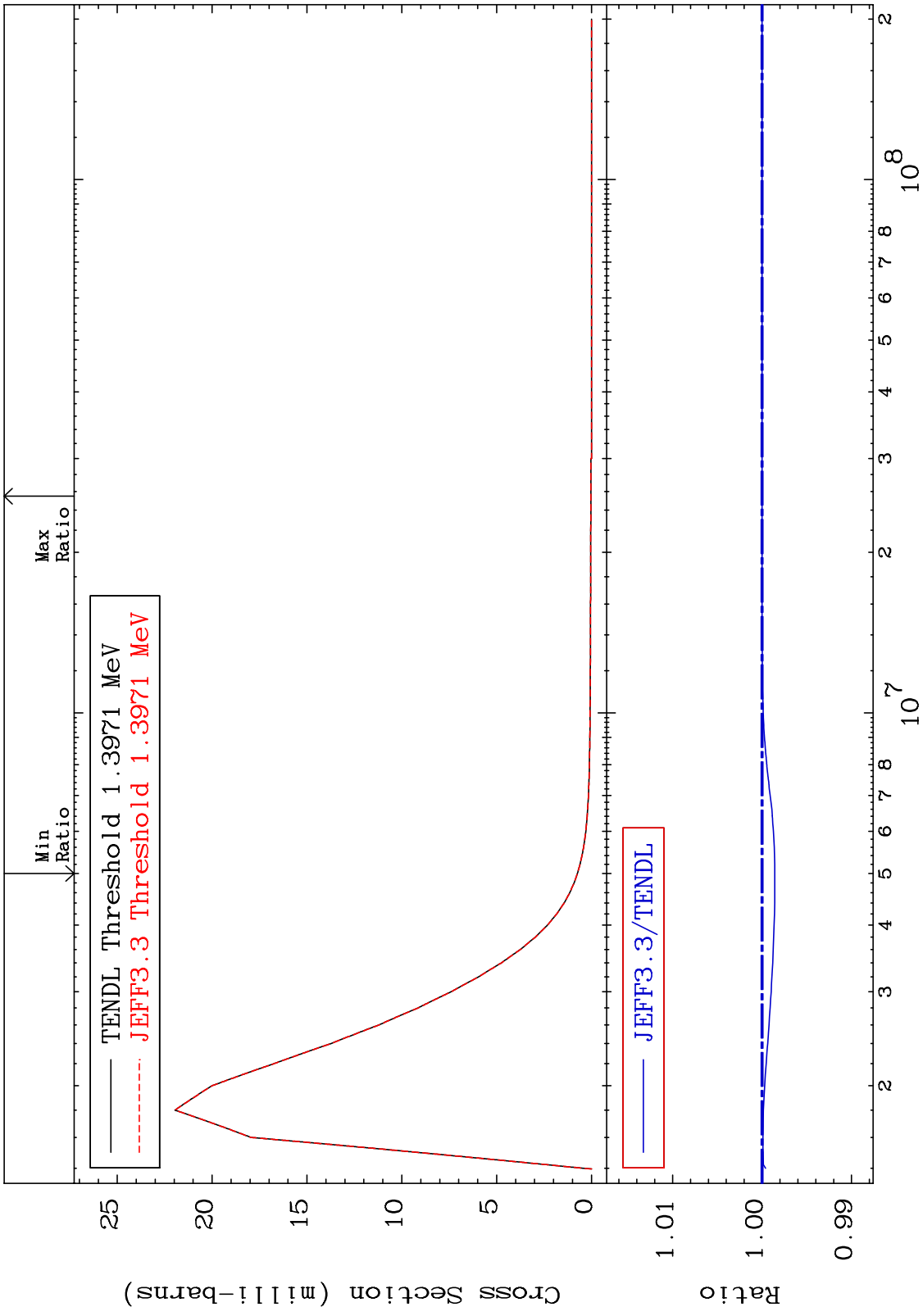
MAT 4434

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

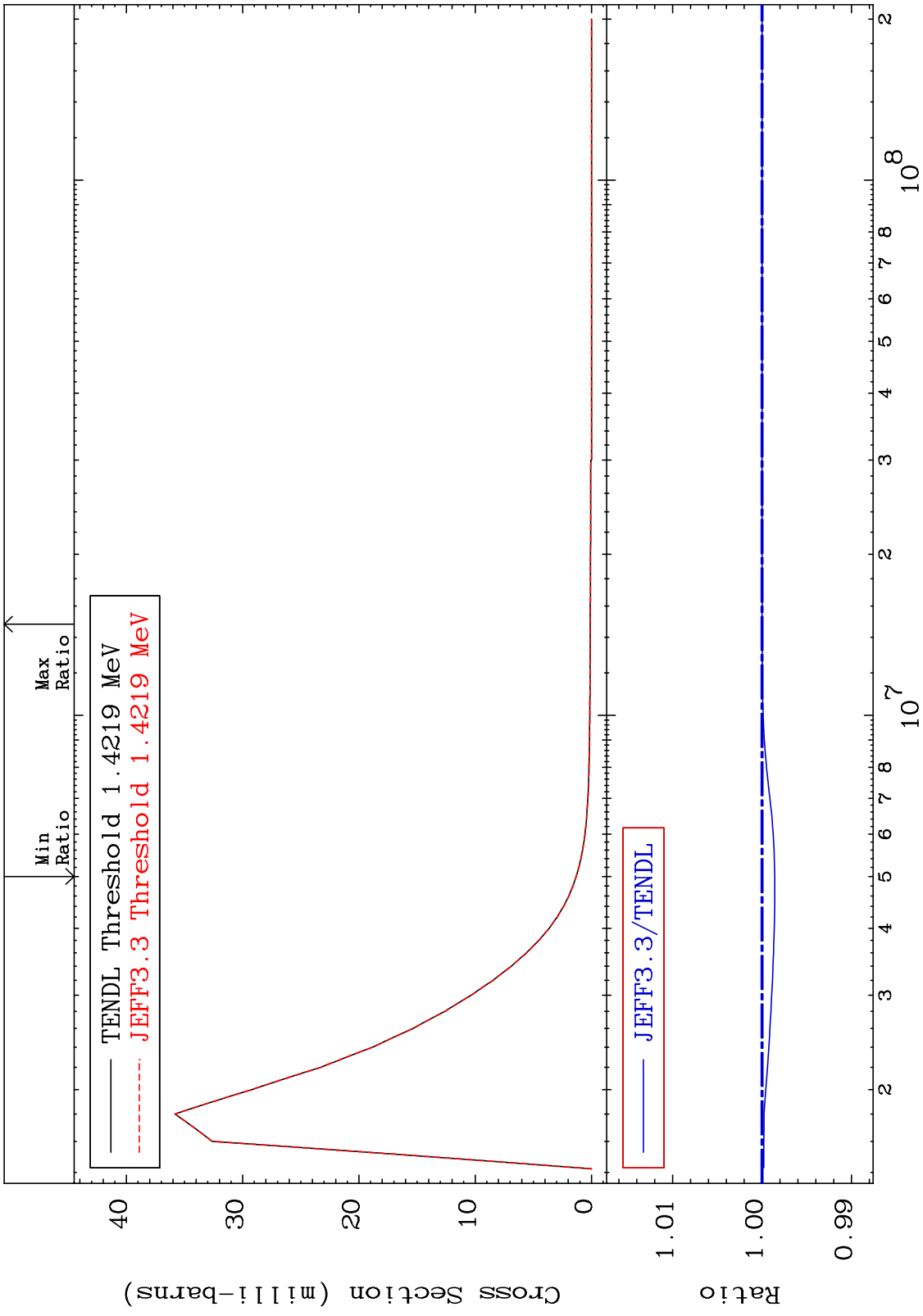
44-Ru-99
-0.156 To 0.000 %



MAT 4434 MT= 71 (n,n') Level Cross Section 44-Ru-99
 -0.142 To 0.000 %



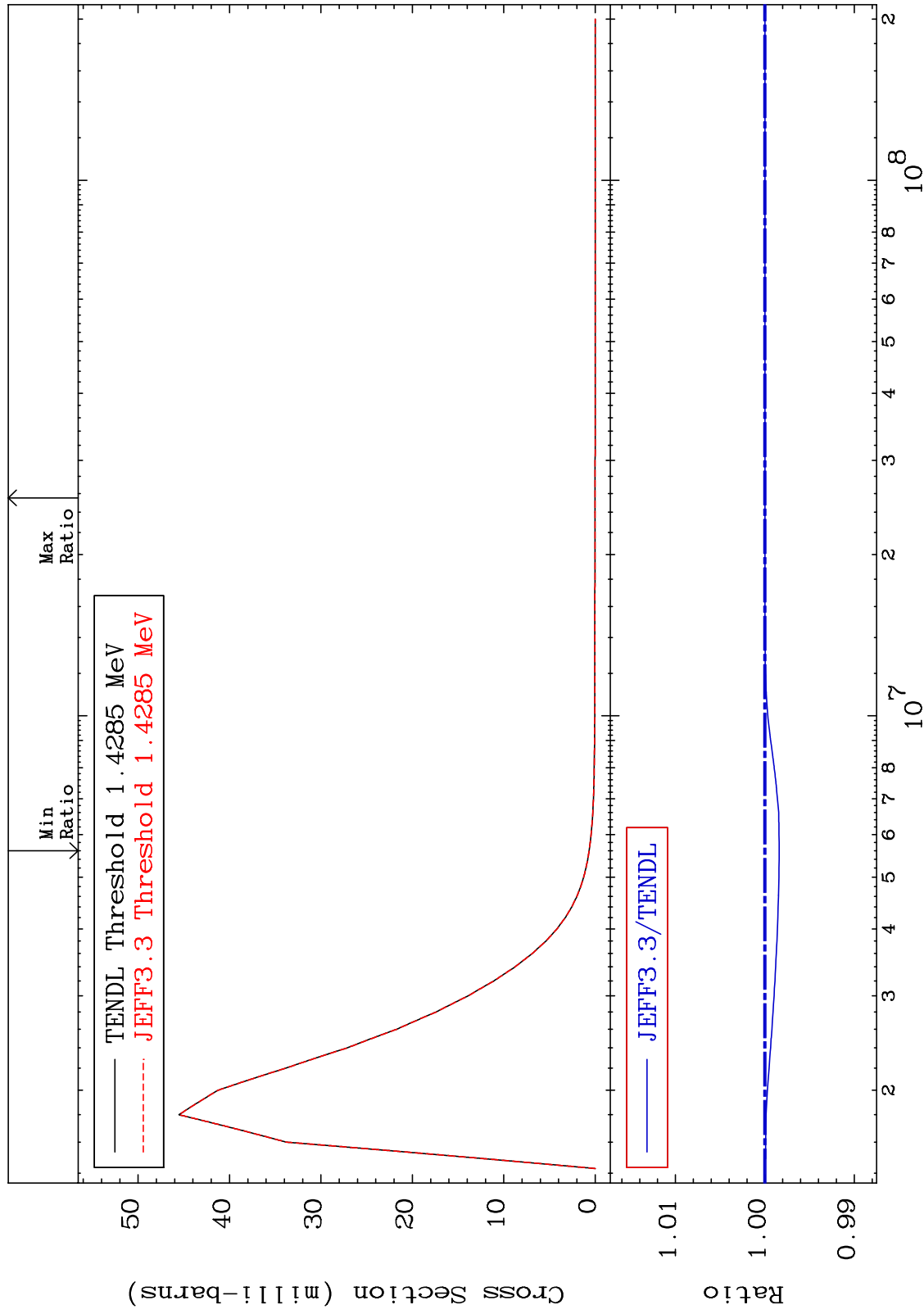
MAT 4434 MT= 72 (n,n') Level Cross Section 44-Ru-99
 -0.142 To 0.000 %



MAT 4434

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

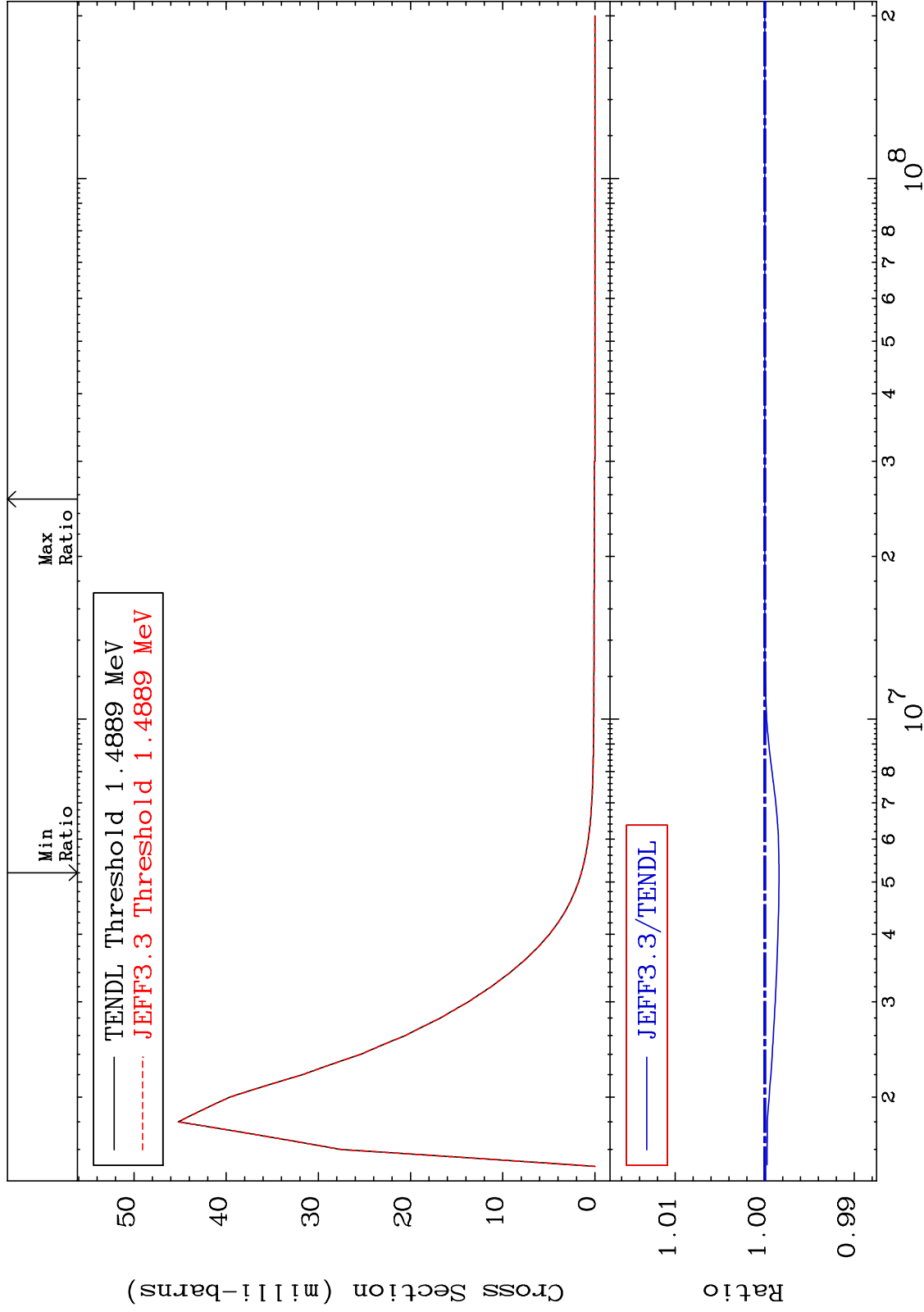
44-Ru-99
-0.160 To 0.000 %



MAT 4434

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

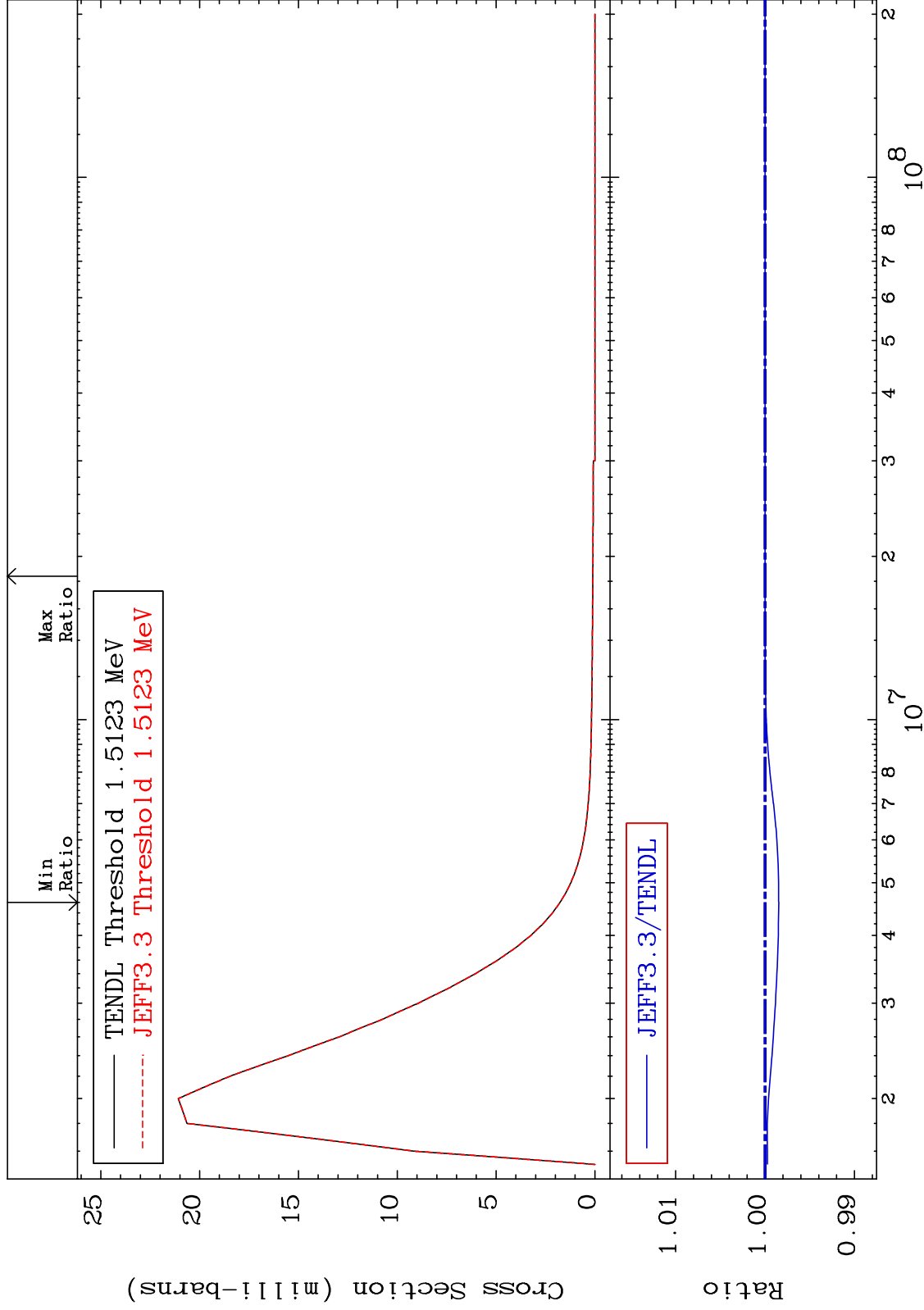
44-Ru-99
-0.159 To 0.000 %



MAT 4434

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

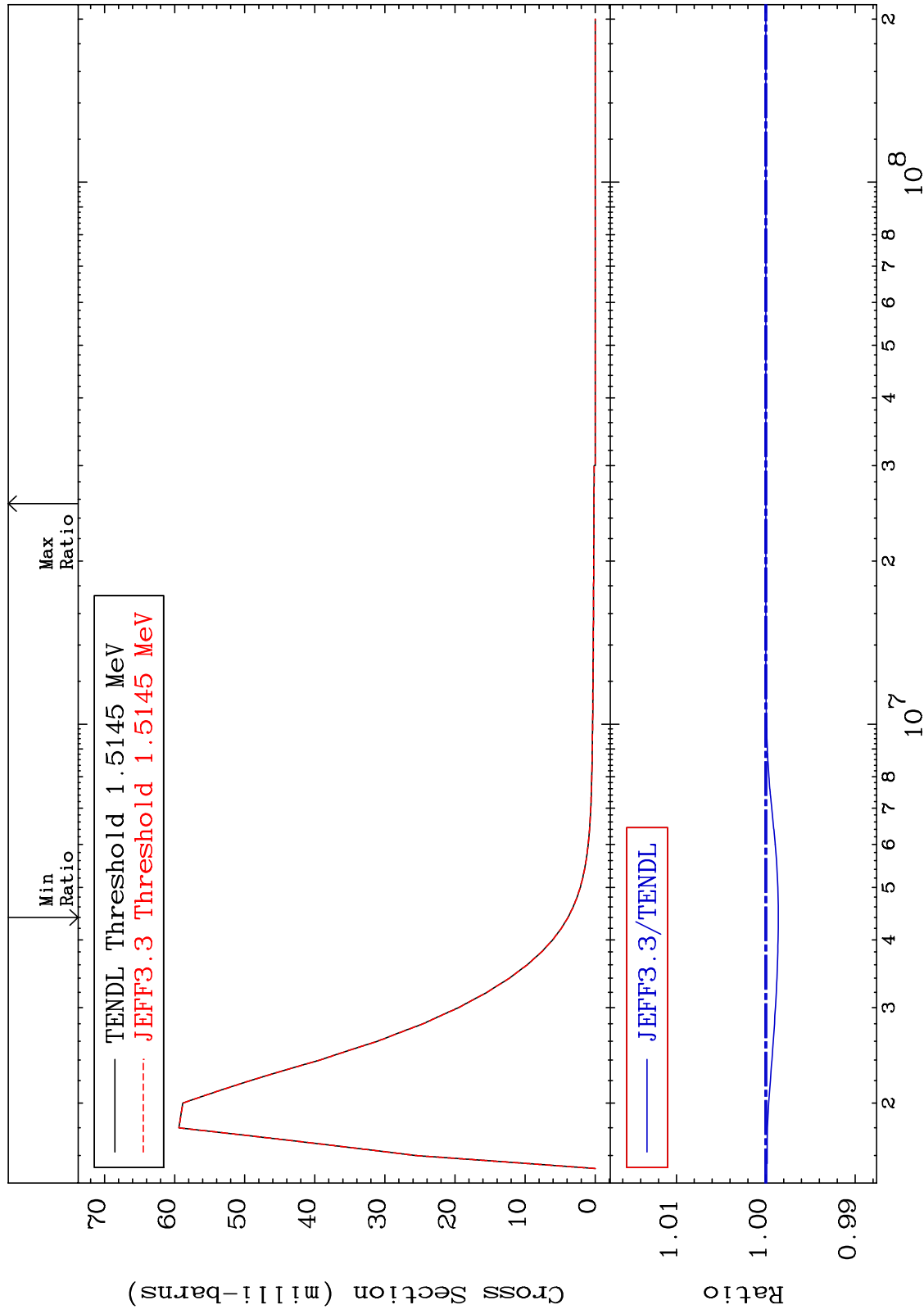
44-Ru-99
-0.153 To 0.000 %



MAT 4434

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

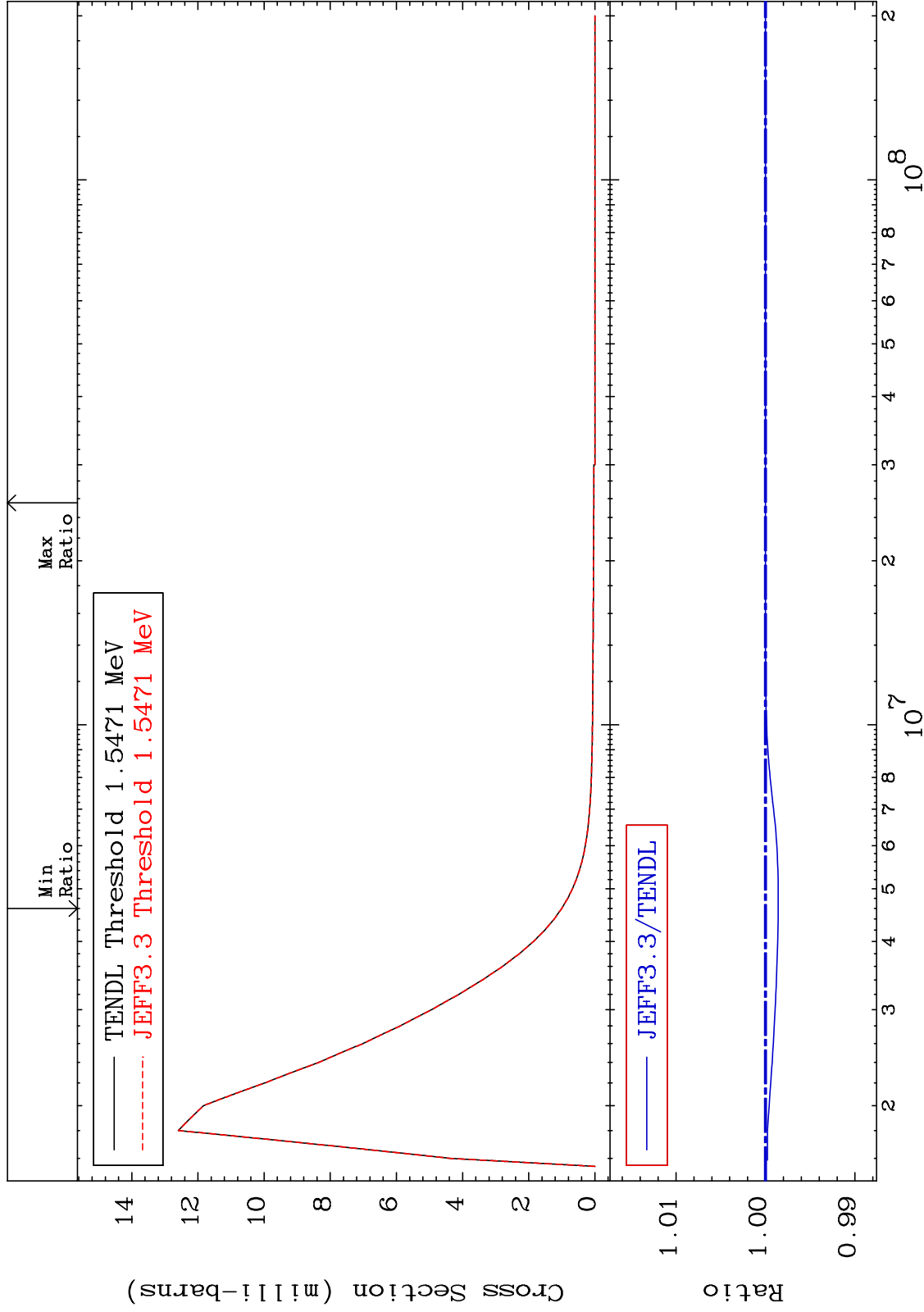
44-Ru-99
-0.139 To 0.000 %



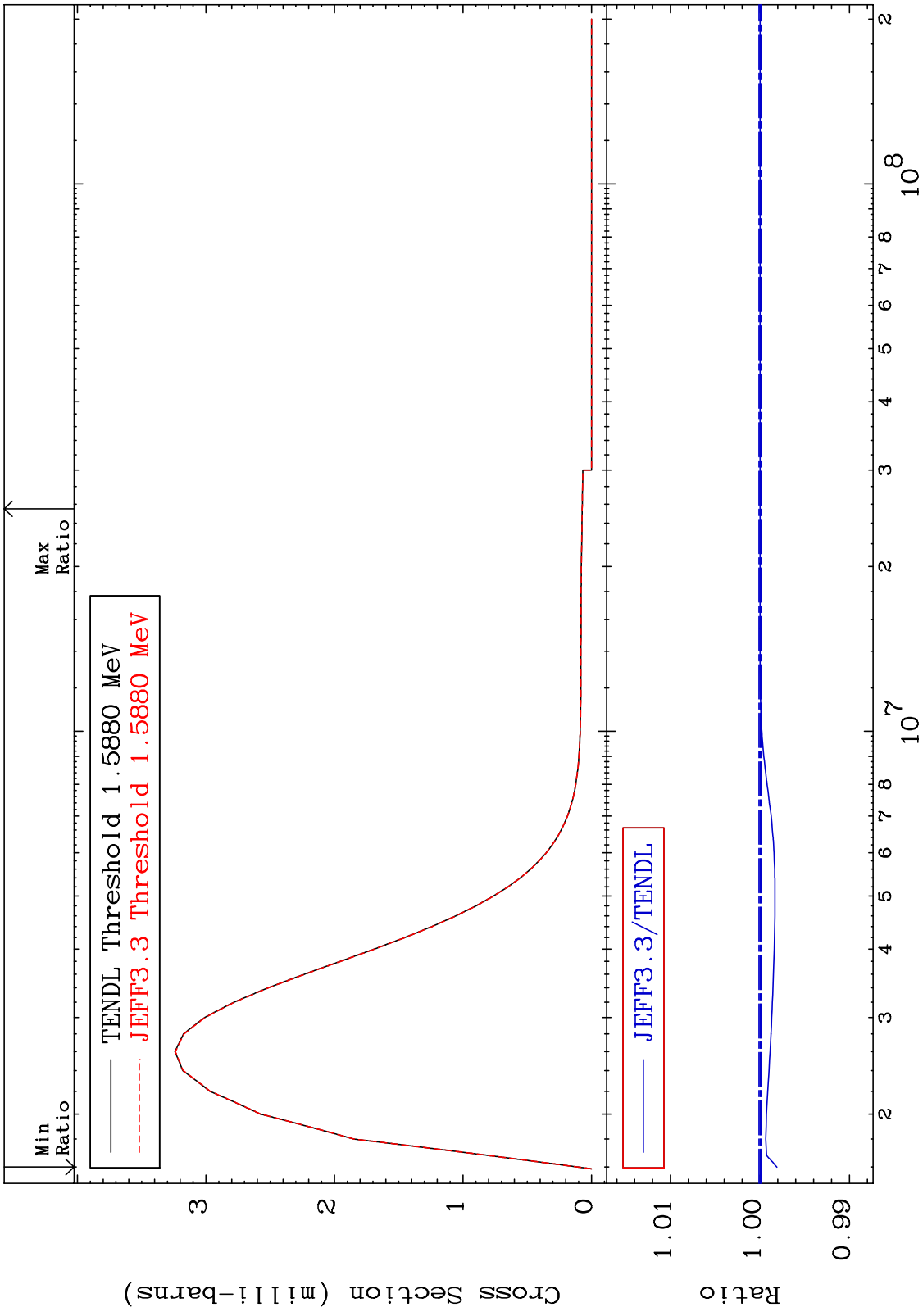
MAT 4434

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

44-Ru-99
-0.142 To 0.000 %



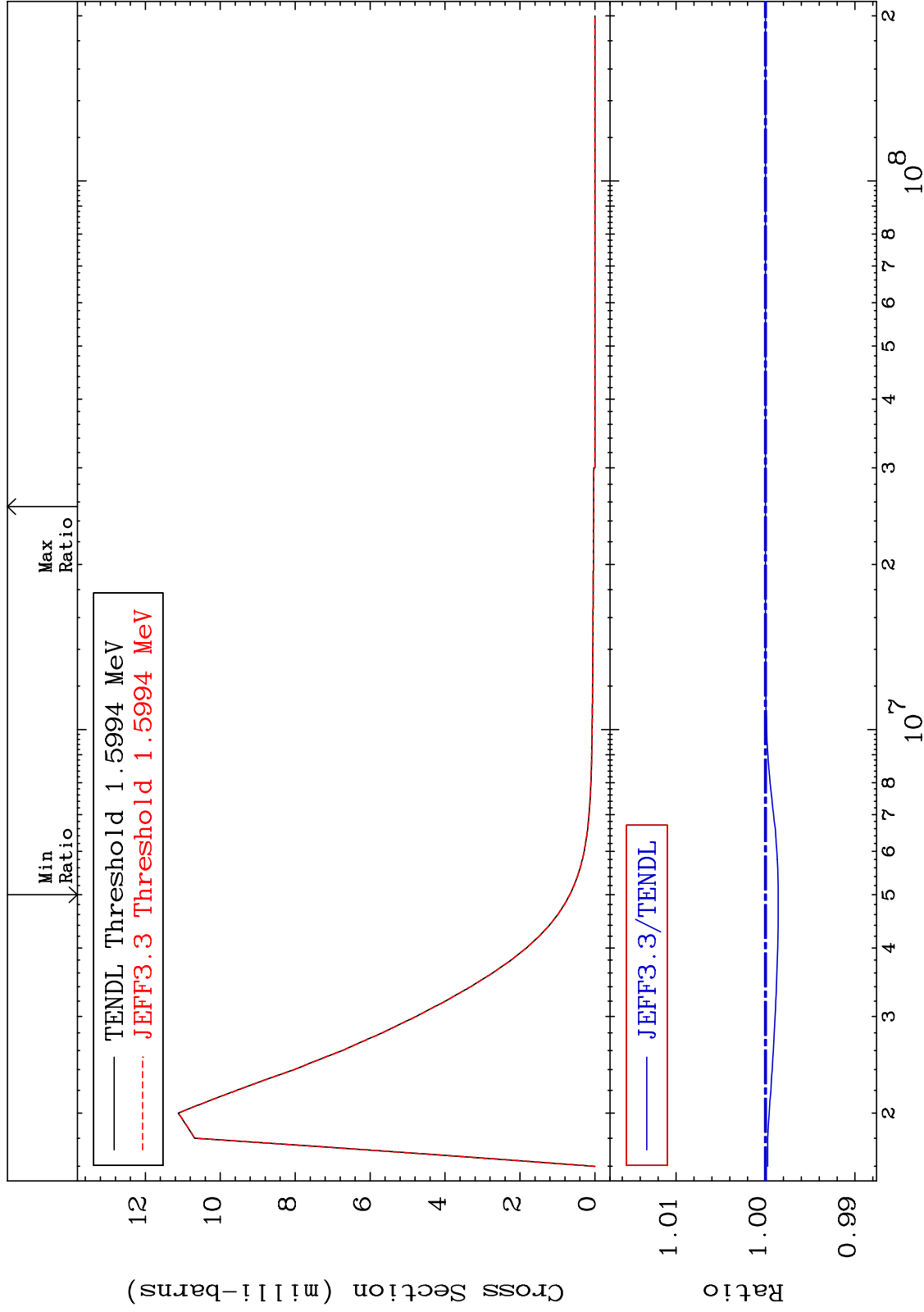
MAT 4434 MT= 78 (n,n') Level Cross Section 44-Ru-99
 -0.189 To 0.000 %



MAT 4434

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

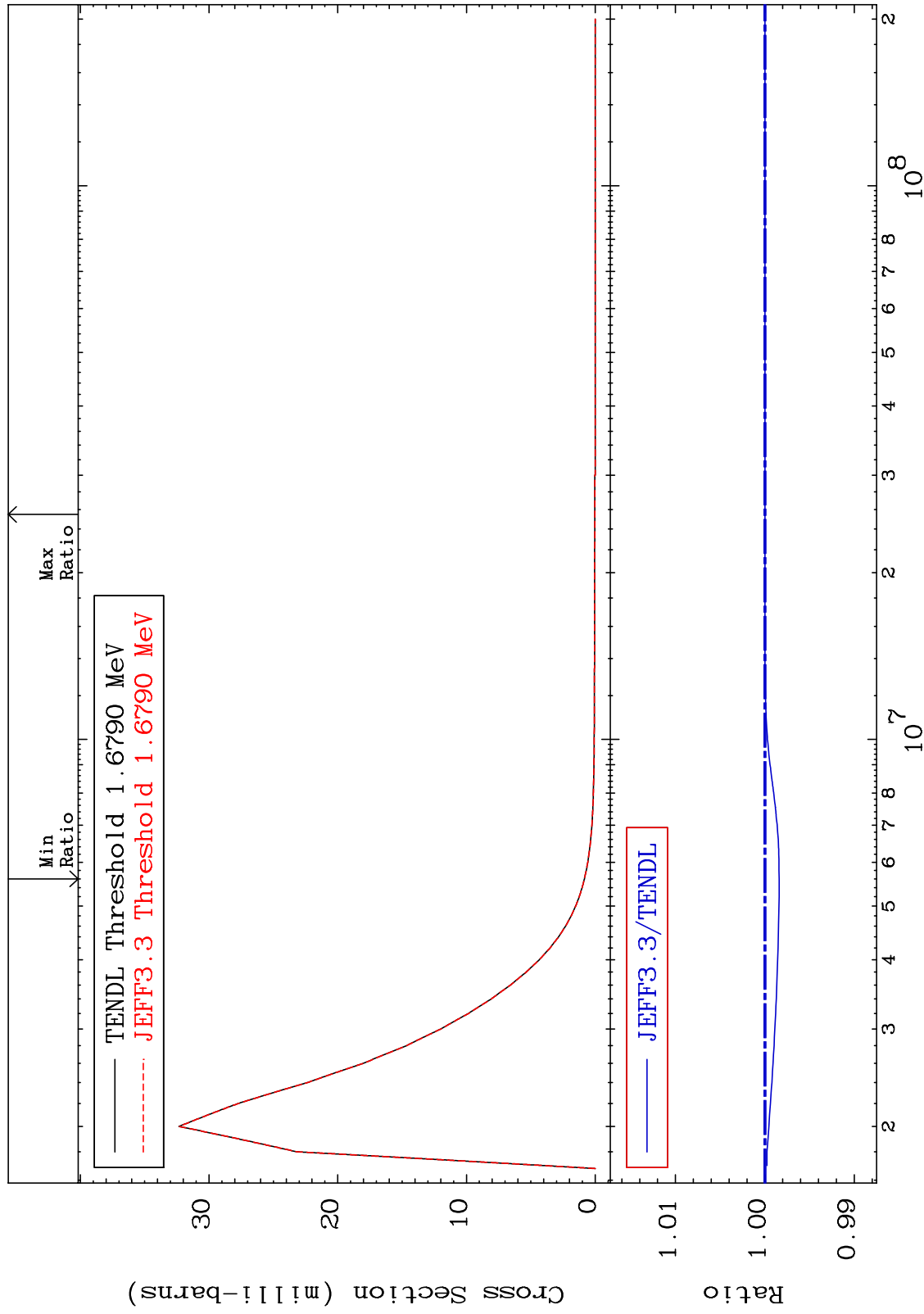
44-Ru-99
-0.142 To 0.000 %



MAT 4434

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

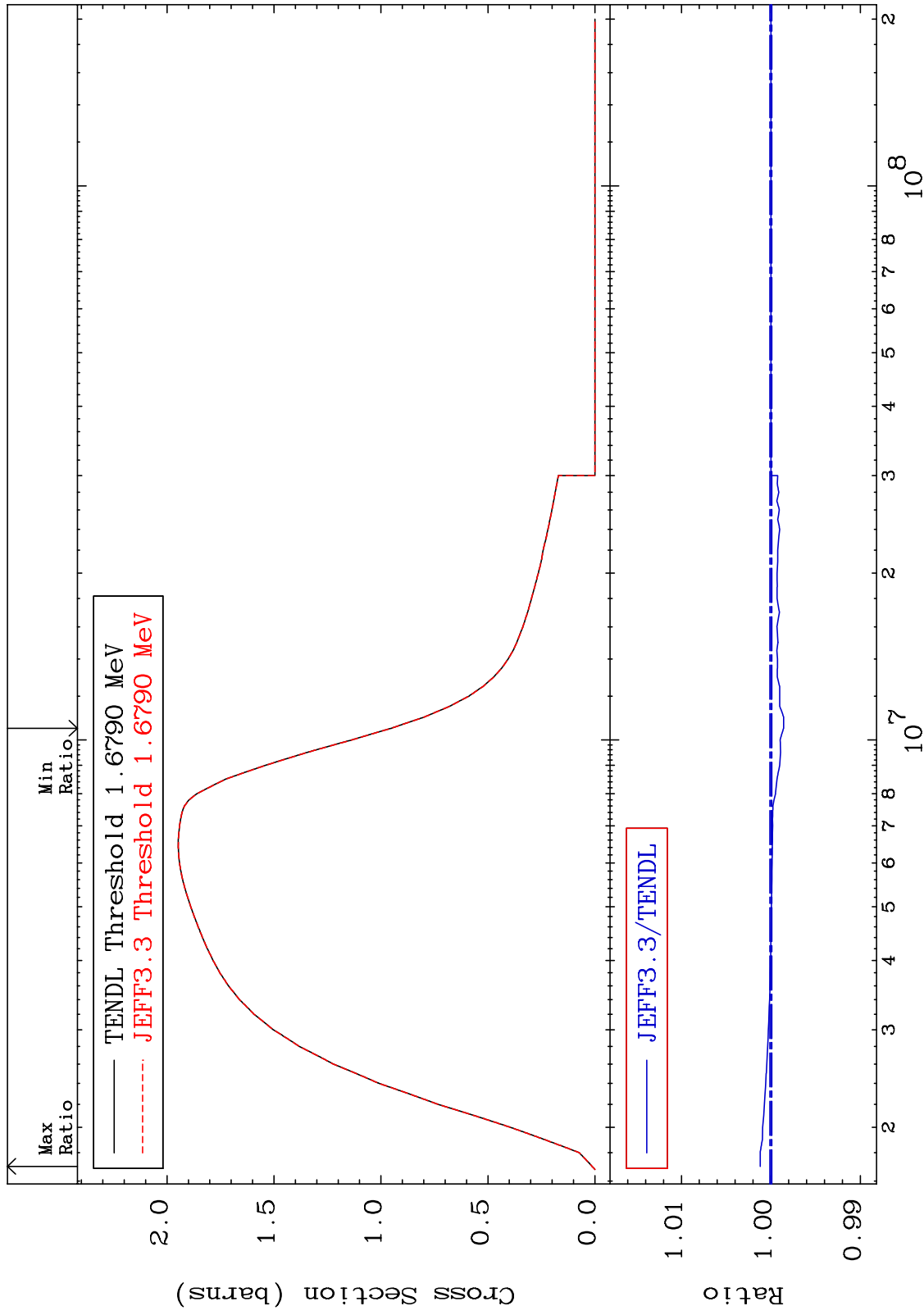
44-Ru-99
-0.160 To 0.000 %



MAT 4434

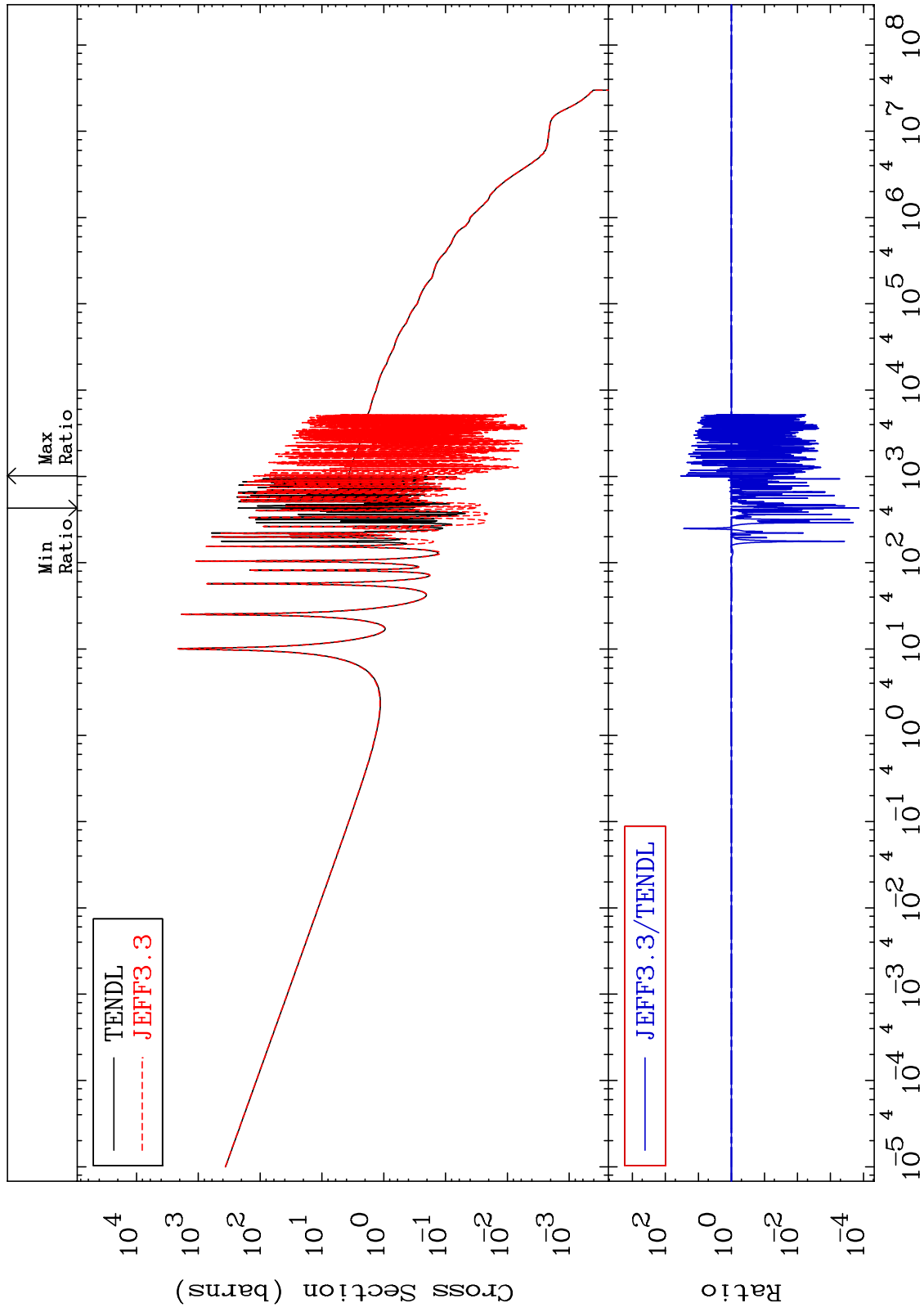
(n, n') Continuum
Cross Section

44-Ru-99
-0.143 To 0.119 %

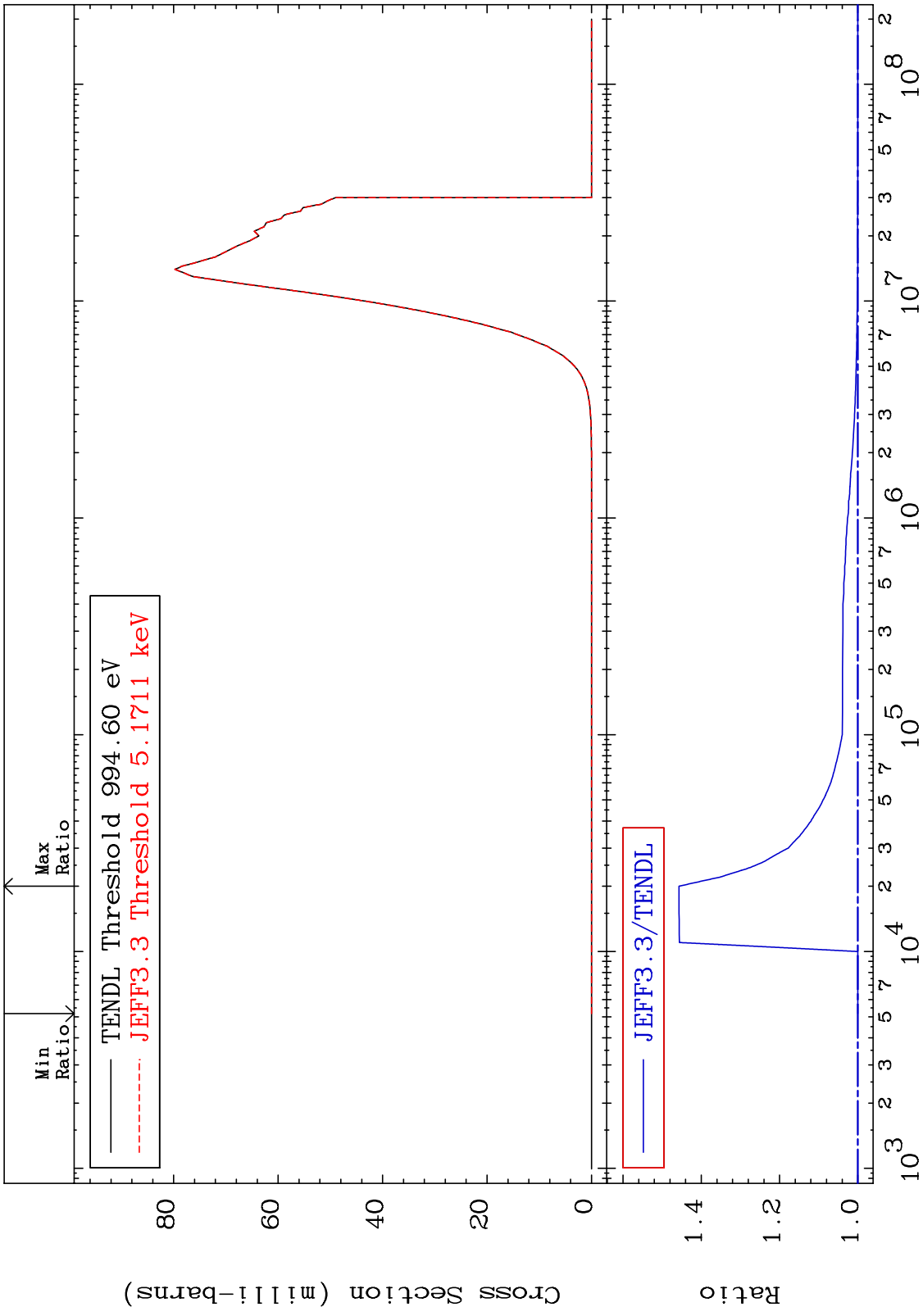


MAT 4434

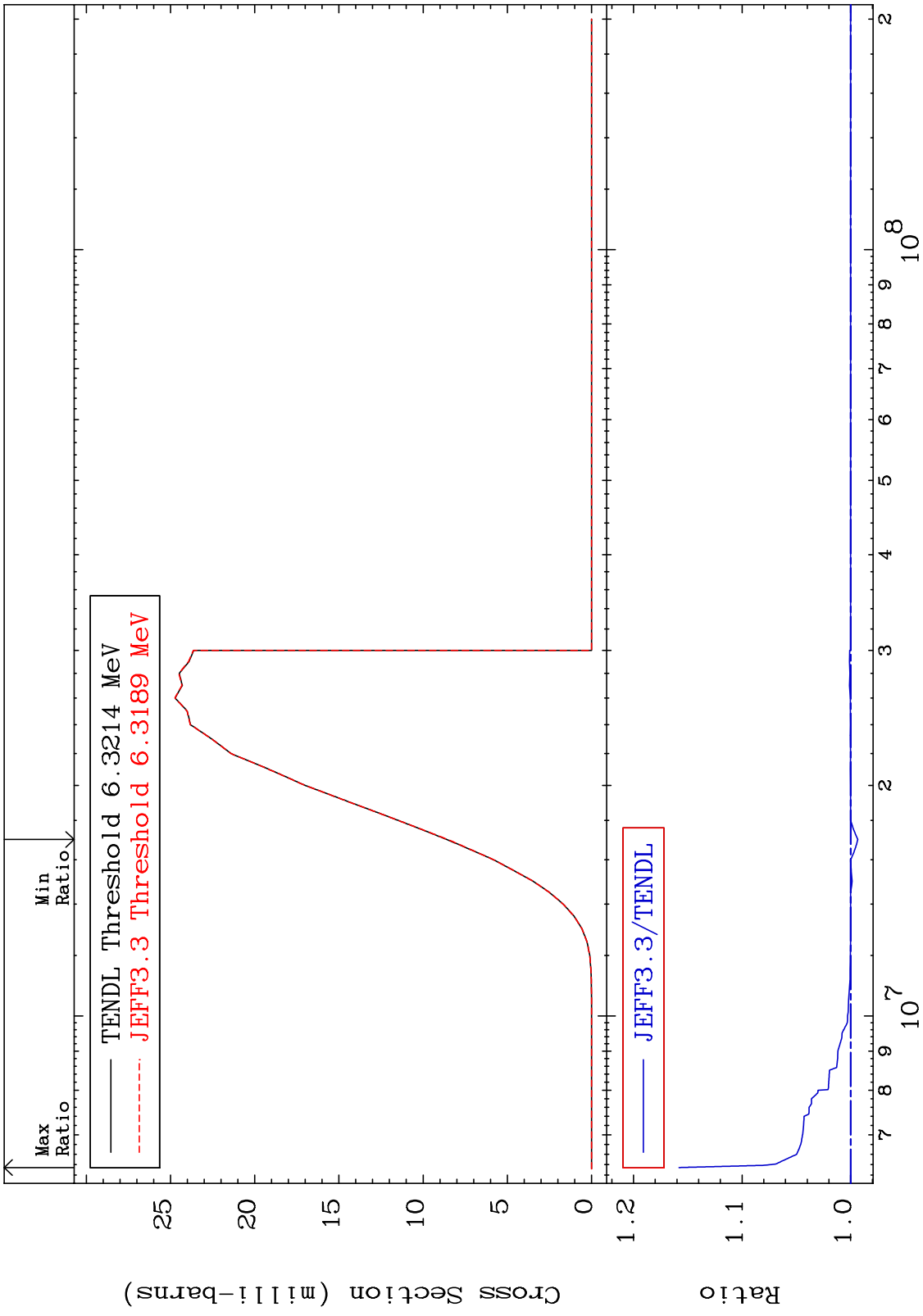
(n, γ) Cross Section
44-Ru-99
-99.99 To 3345. %



MAT 4434 (n,p) Cross Section 44-Ru-99 To 45.68 %



MAT 4434 (n,d) 44-Ru-99
Cross Section -0.661 To 15.81 %



MAT 4434

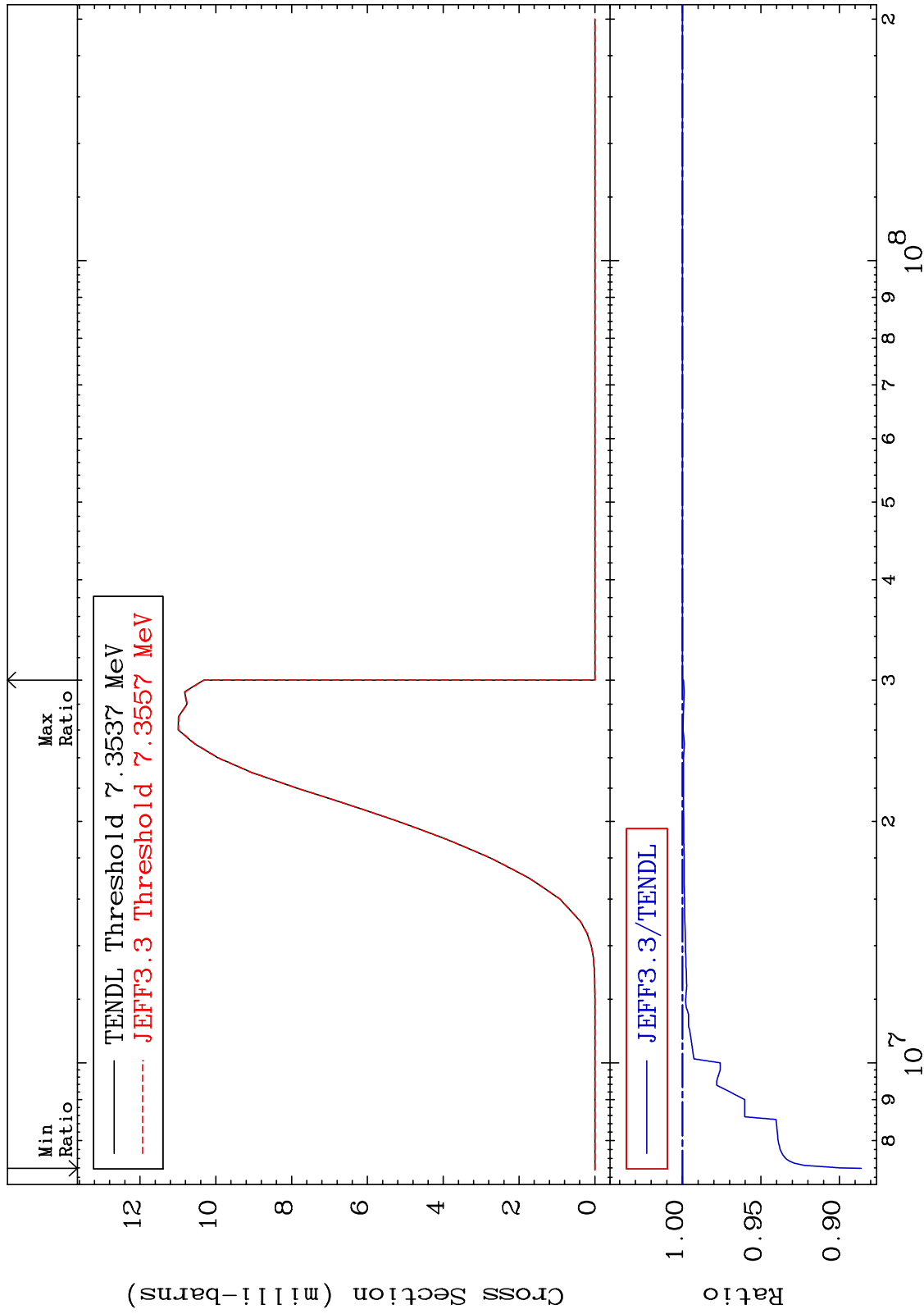
44-Ru-99

(n, t)

Cross Section

Cross Section

-11.40 To 0.000 %



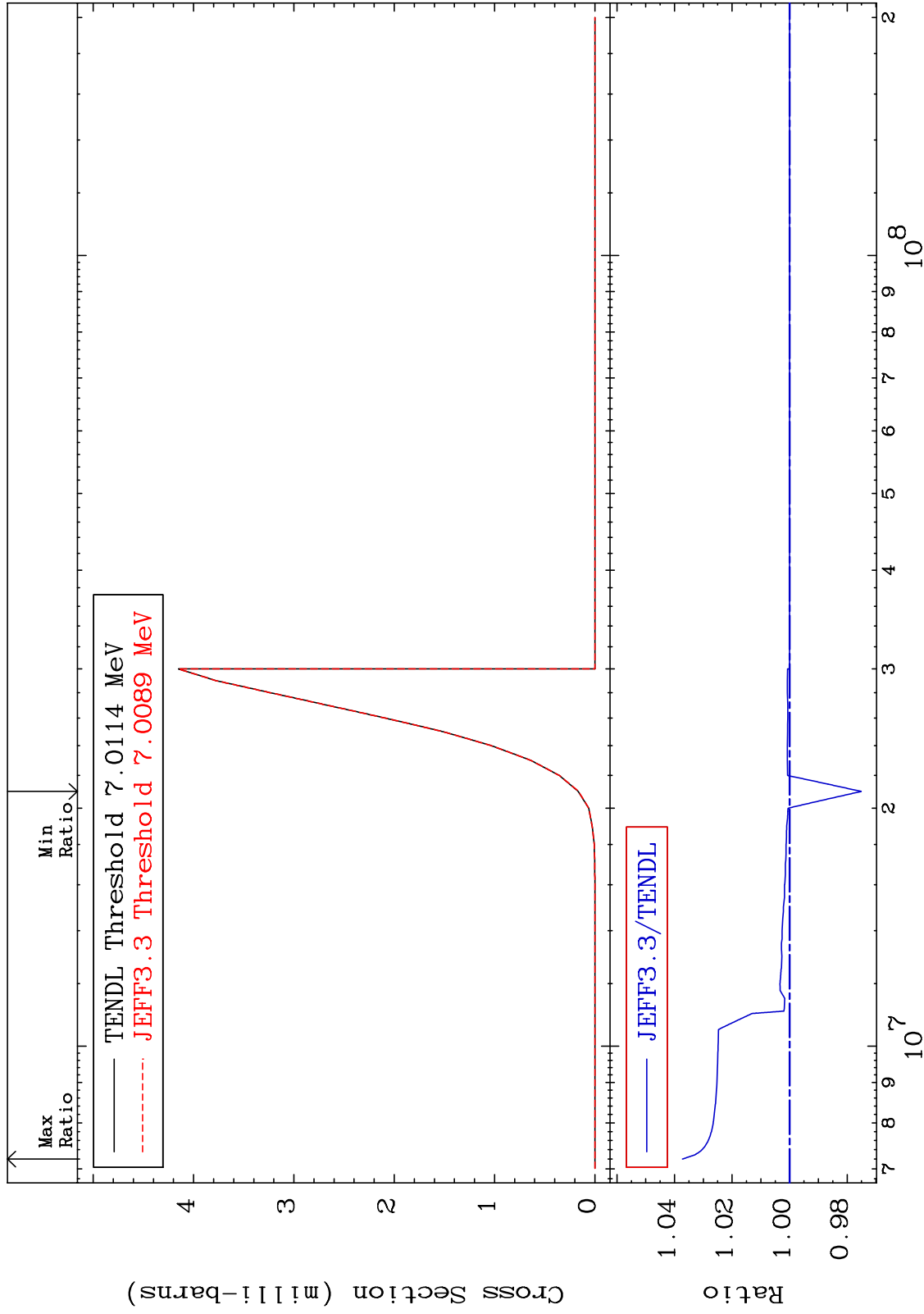
MAT 4434

(n, He-3)

44-Ru-99

Cross Section

-2.491 To 3.724 %



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Incident Energy (eV)

44-Ru-99

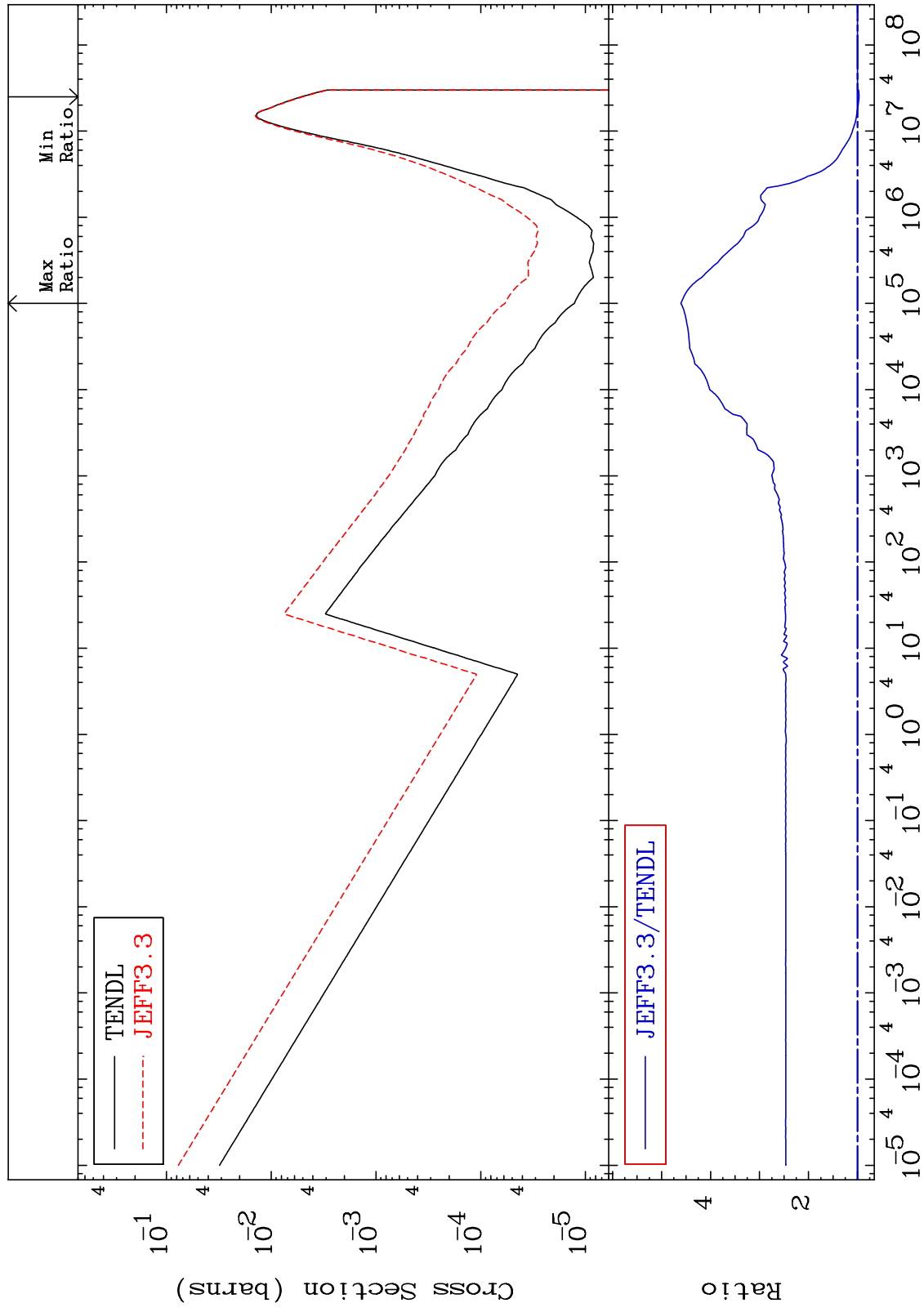
MAT 4434

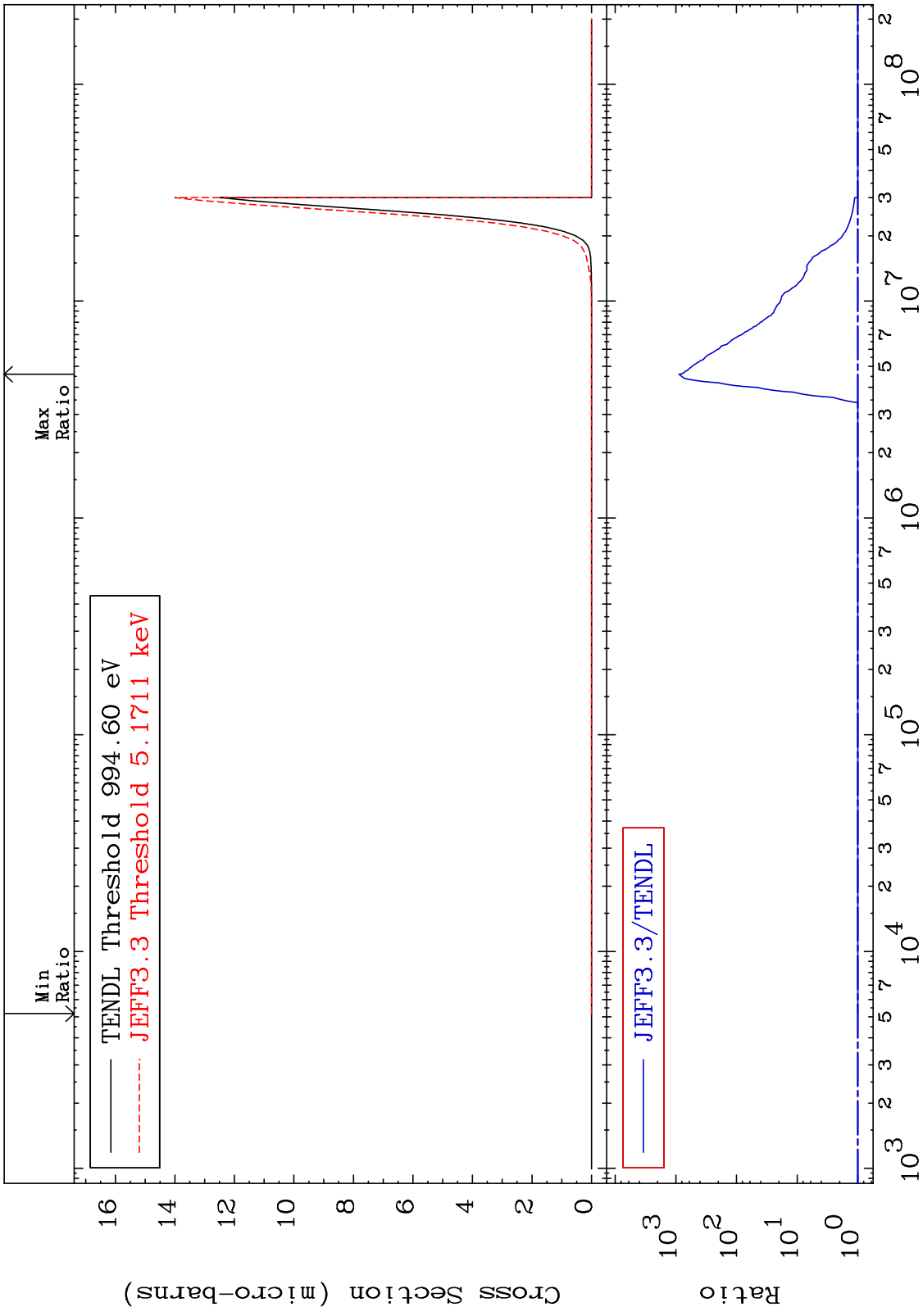
(n, α)

44-Ru-99

Cross Section

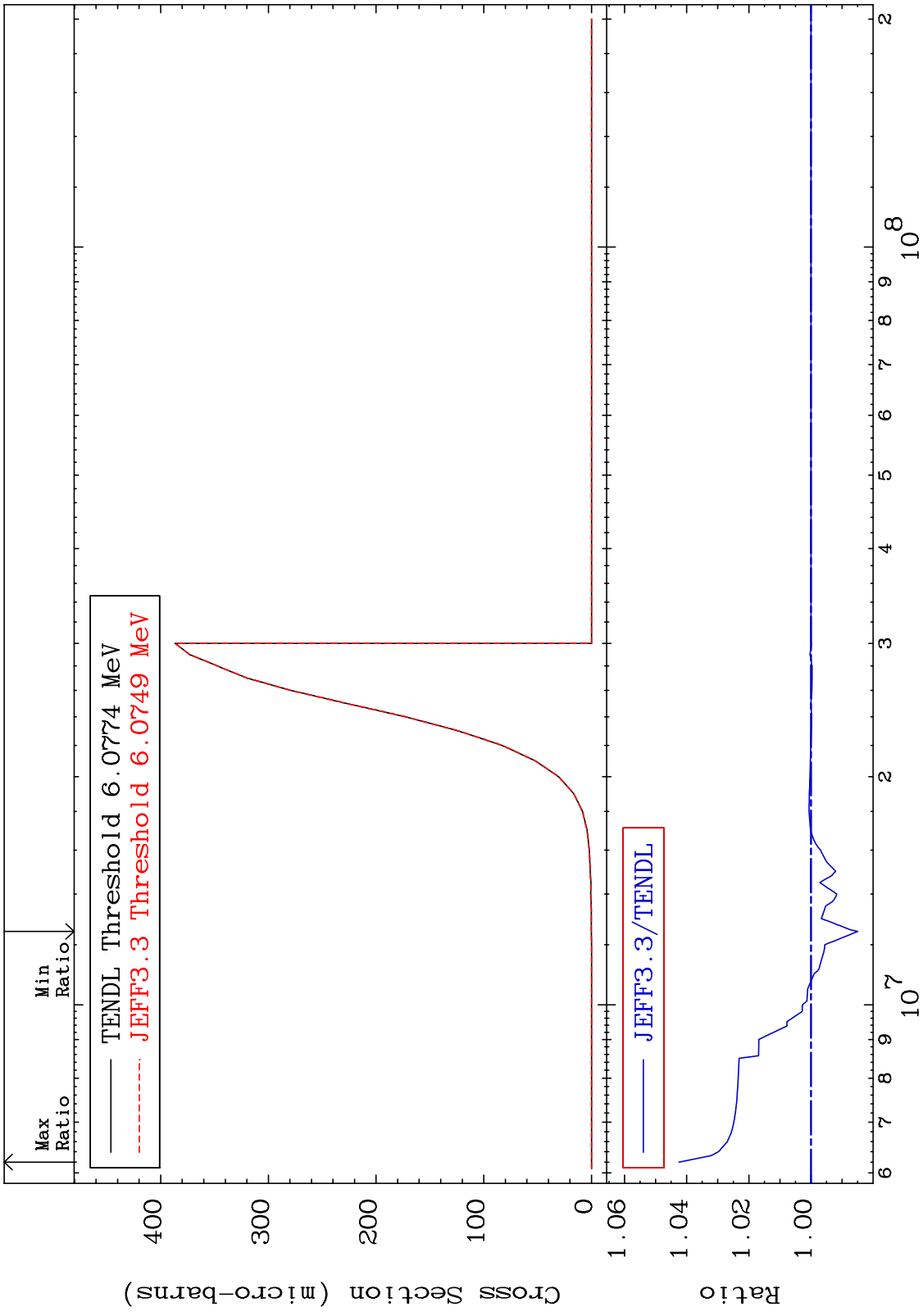
-3.122 To 360.6 %





Min Ratio
 TENDL Threshold 994.60 eV
 JEFF3.3 Threshold 5.1711 keV

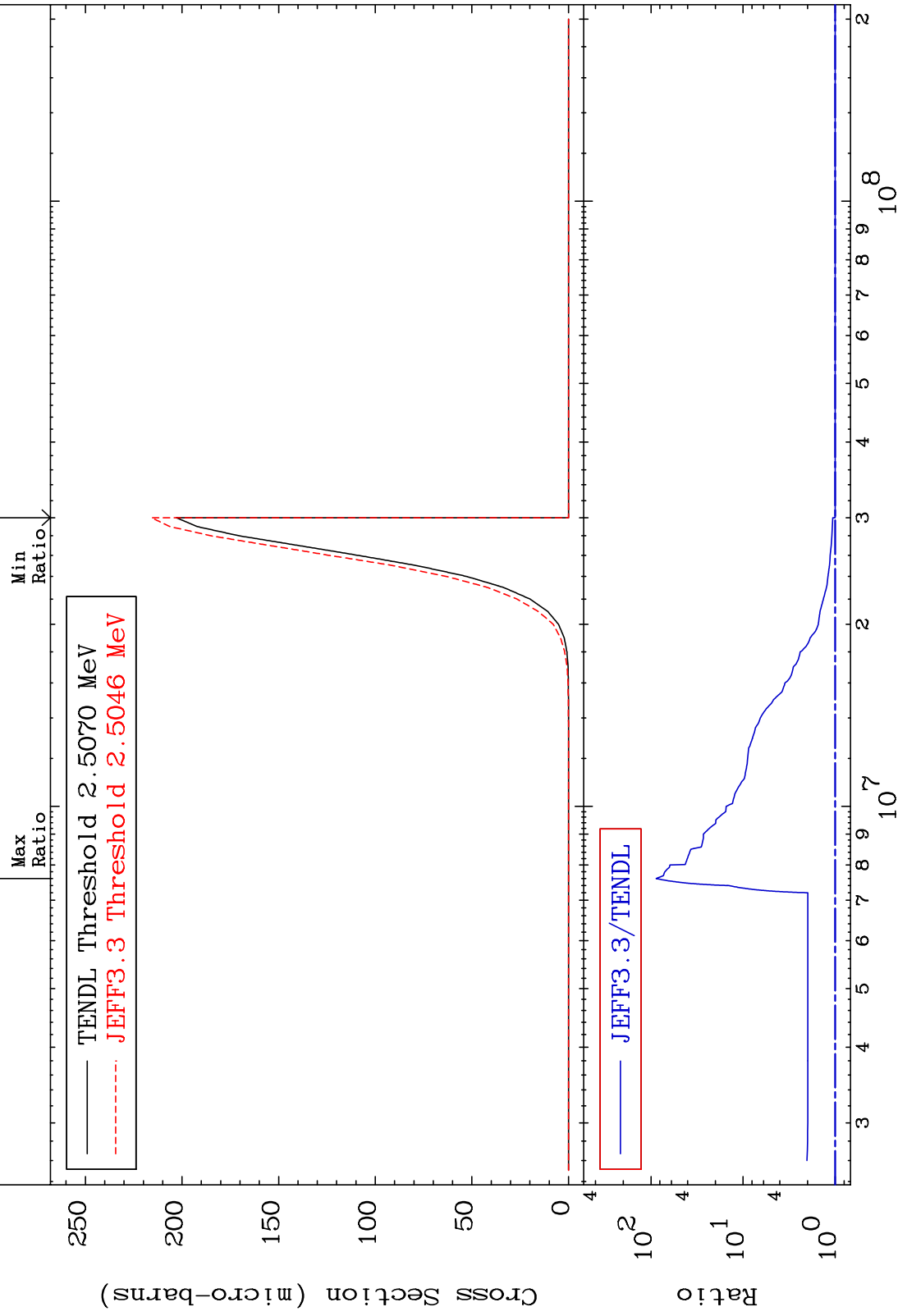
JEFF3.3/TENDL



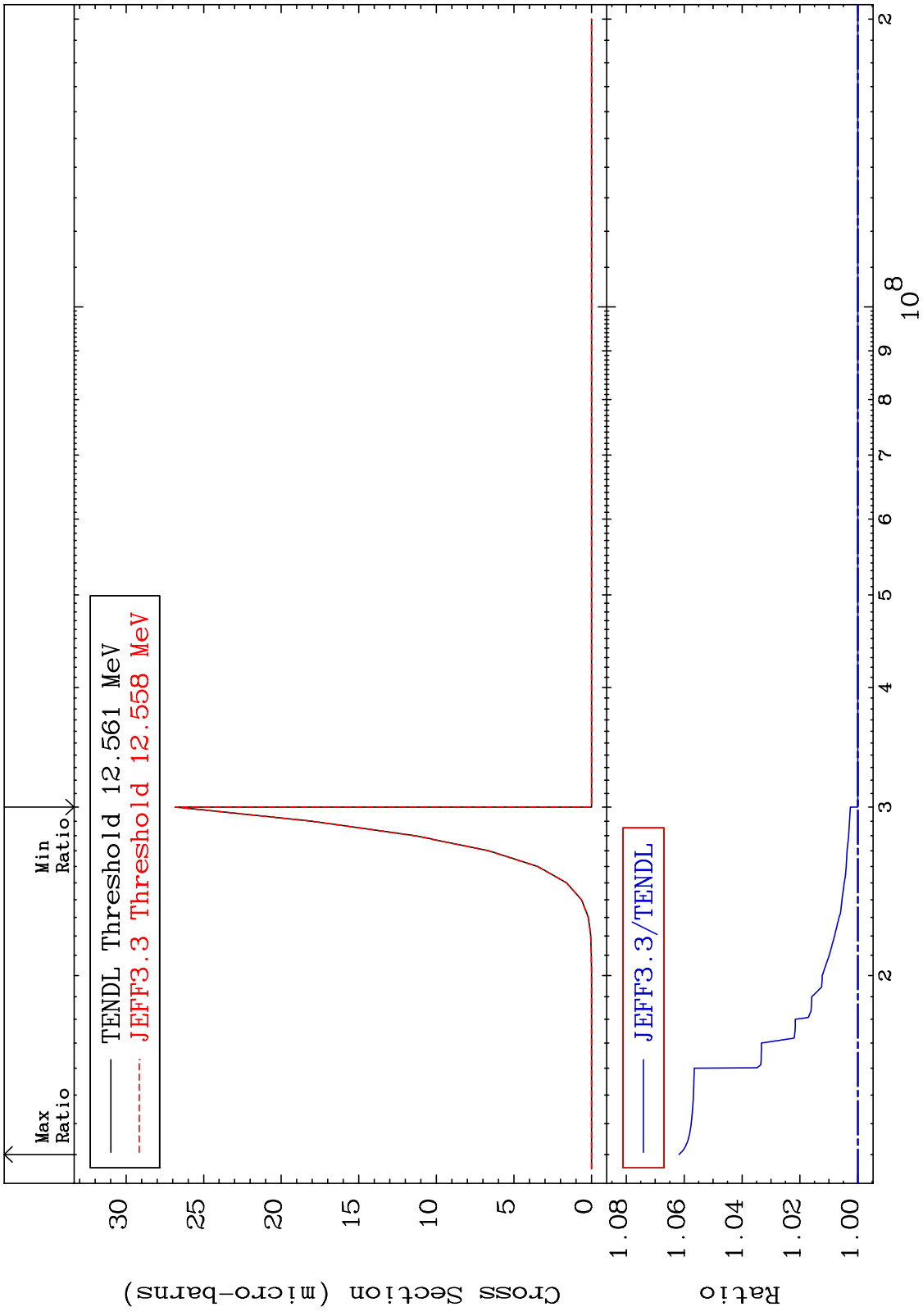
MAT 4434

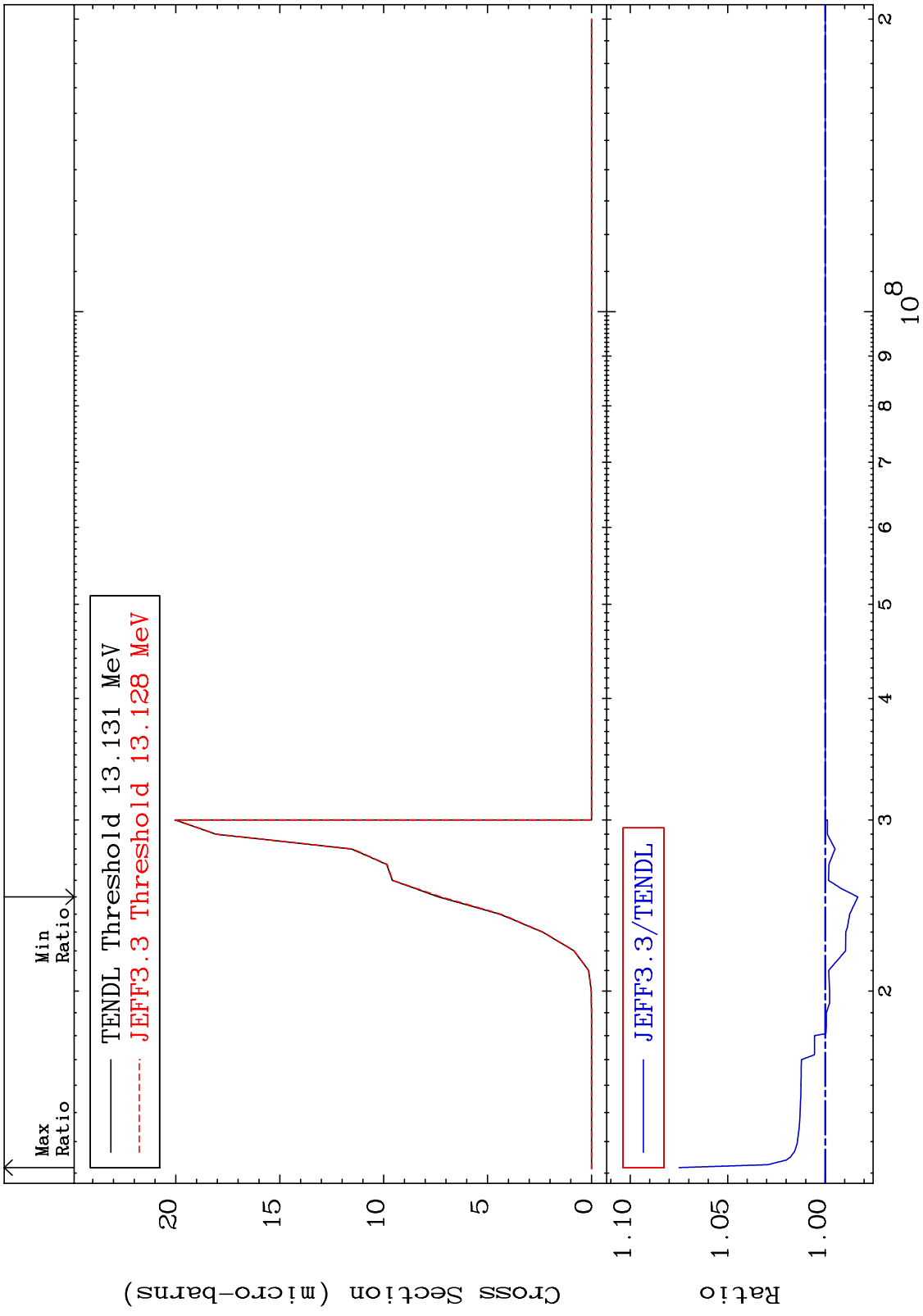
(n,p) α
Cross Section

44-Ru-99
0.000 To 8683. %



MAT 4434 (n,p) d 44-Ru-99
 Cross Section 0.000 To 6.178 %





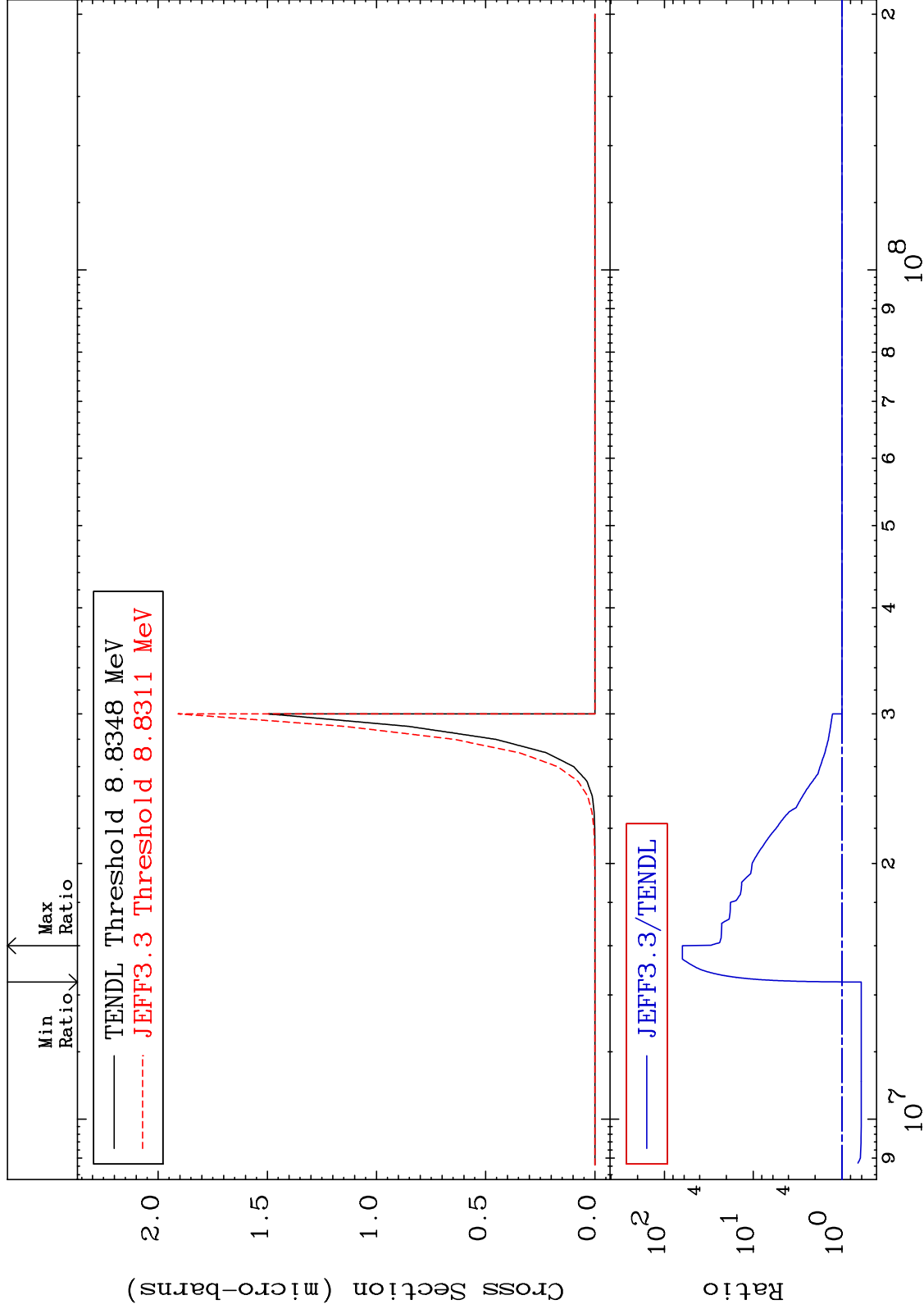
MAT 4434

(n,d) α

44-Ru-99

Cross Section

-39.49 To 6157. %



63

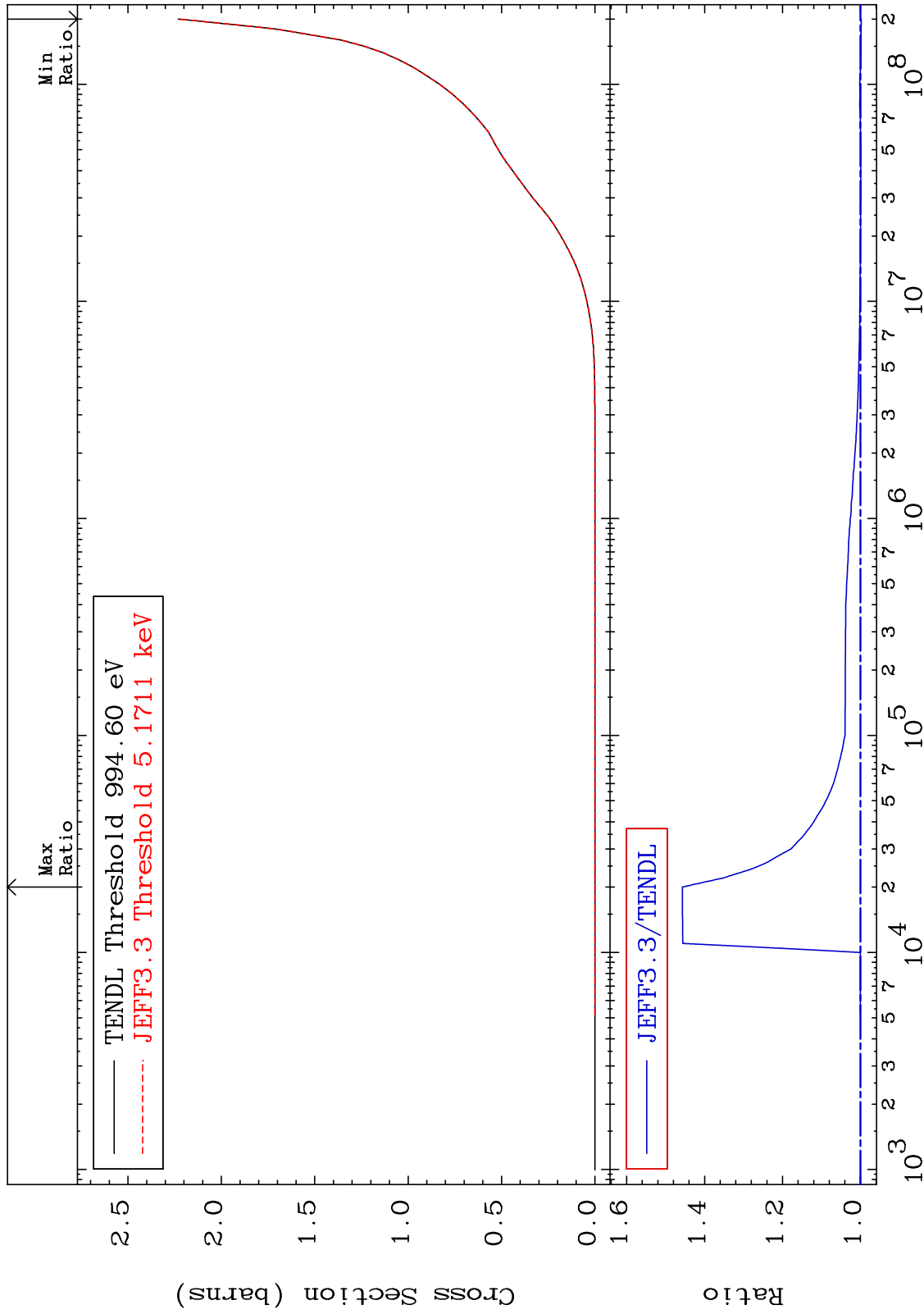
Incident Energy (eV)

44-Ru-99

MAT 4434

Hydrogen Production
Cross Section

44-Ru-99
-0.212 To 45.68 %

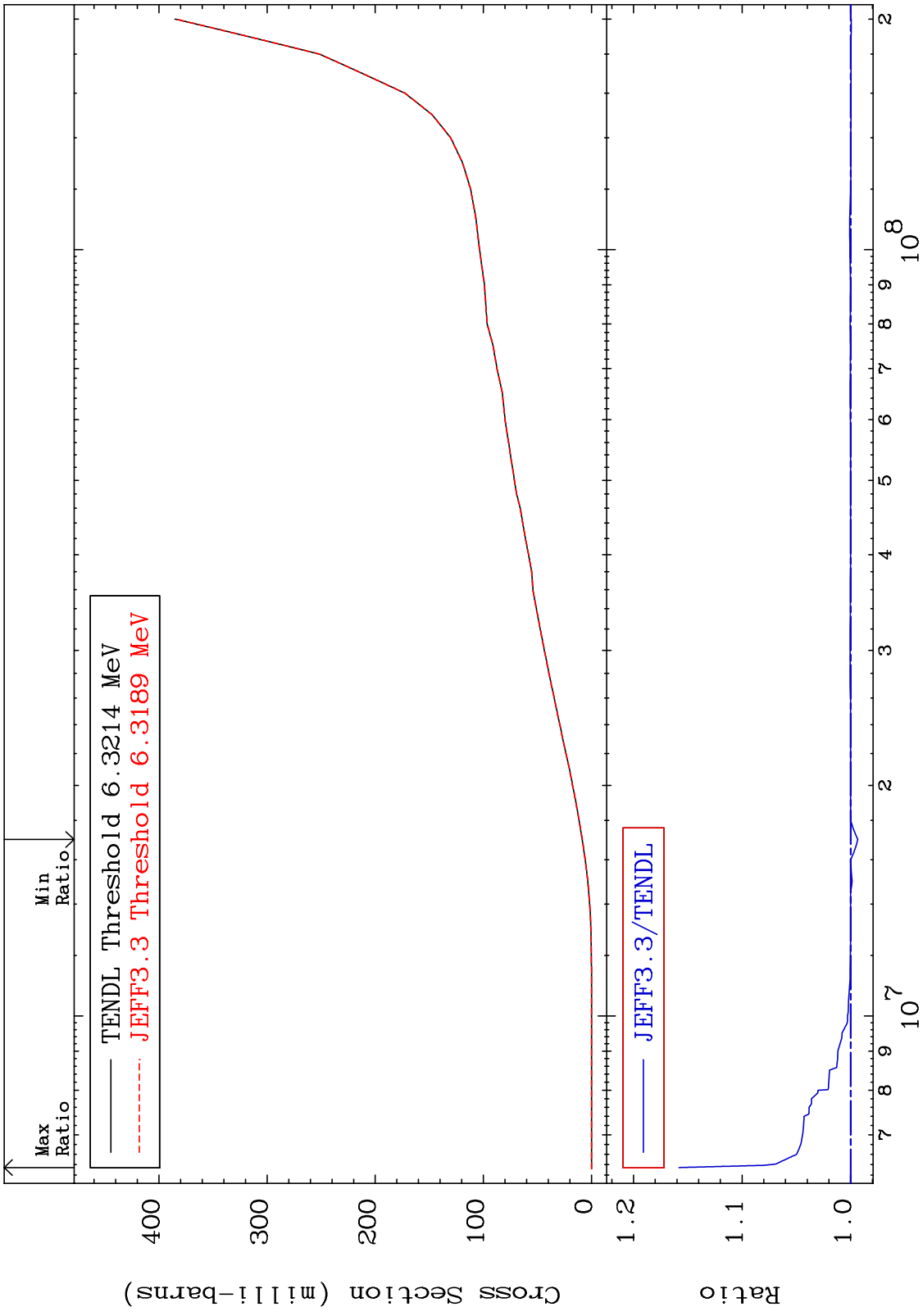


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Incident Energy (eV)

44-Ru-99

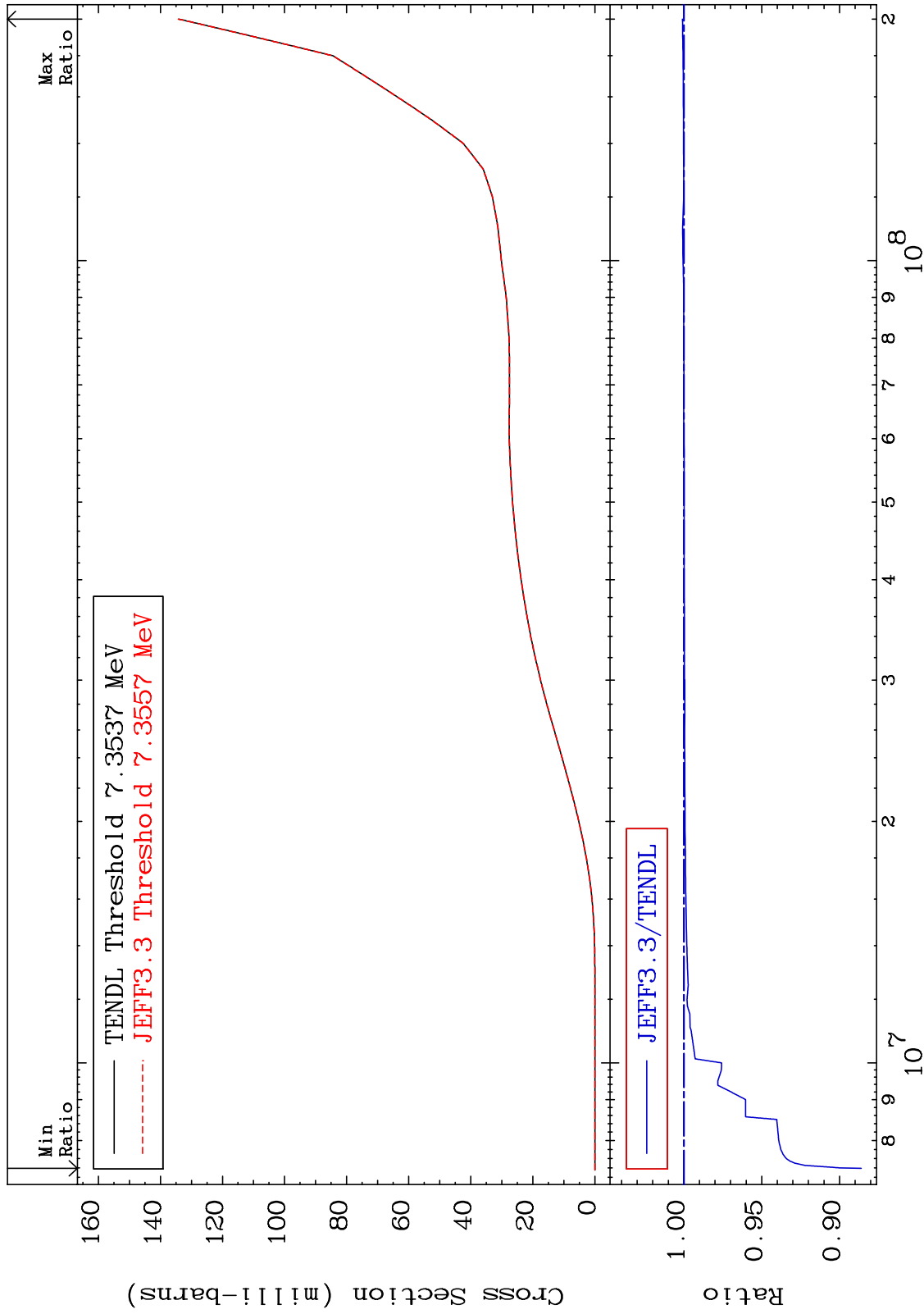
MAT 4434 Deuterium Production Cross Section 44-Ru-99 -0.661 To 15.81 %



MAT 4434

Tritium Production
Cross Section

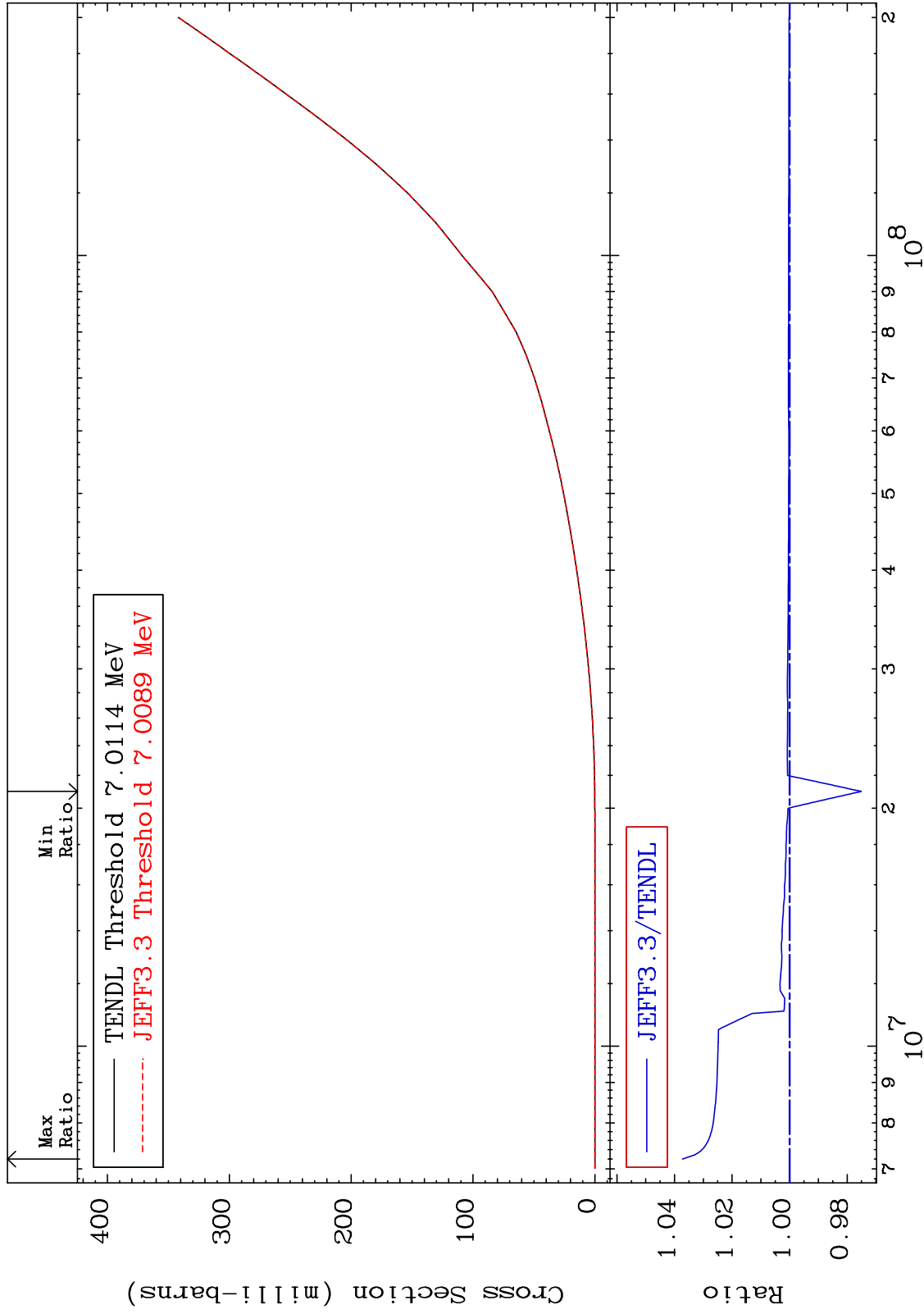
44-Ru-99
-11.40 To 0.092 %



MAT 4434

He-3 Production
Cross Section

44-Ru-99
-2.491 To 3.724 %



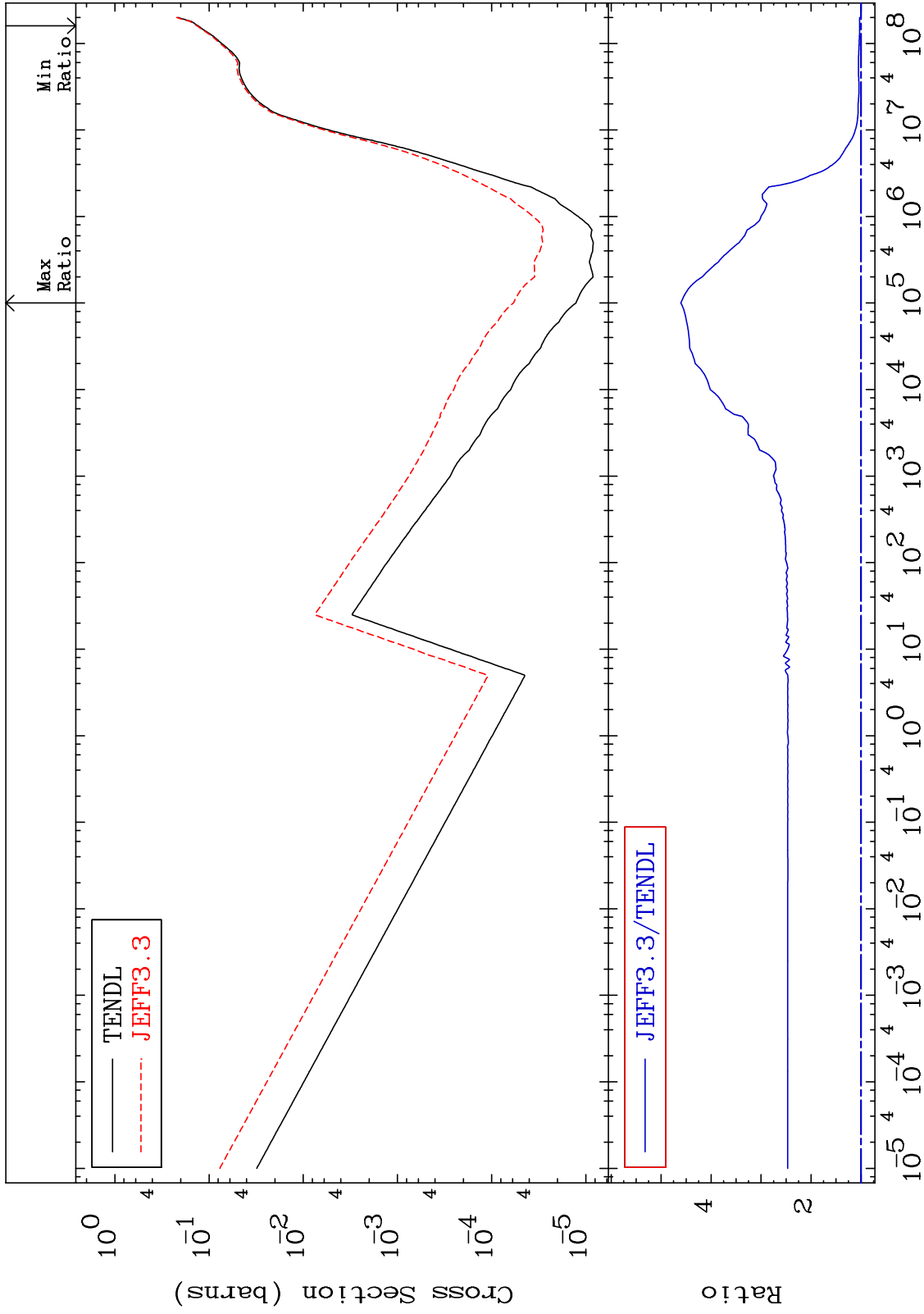
67

44-Ru-99

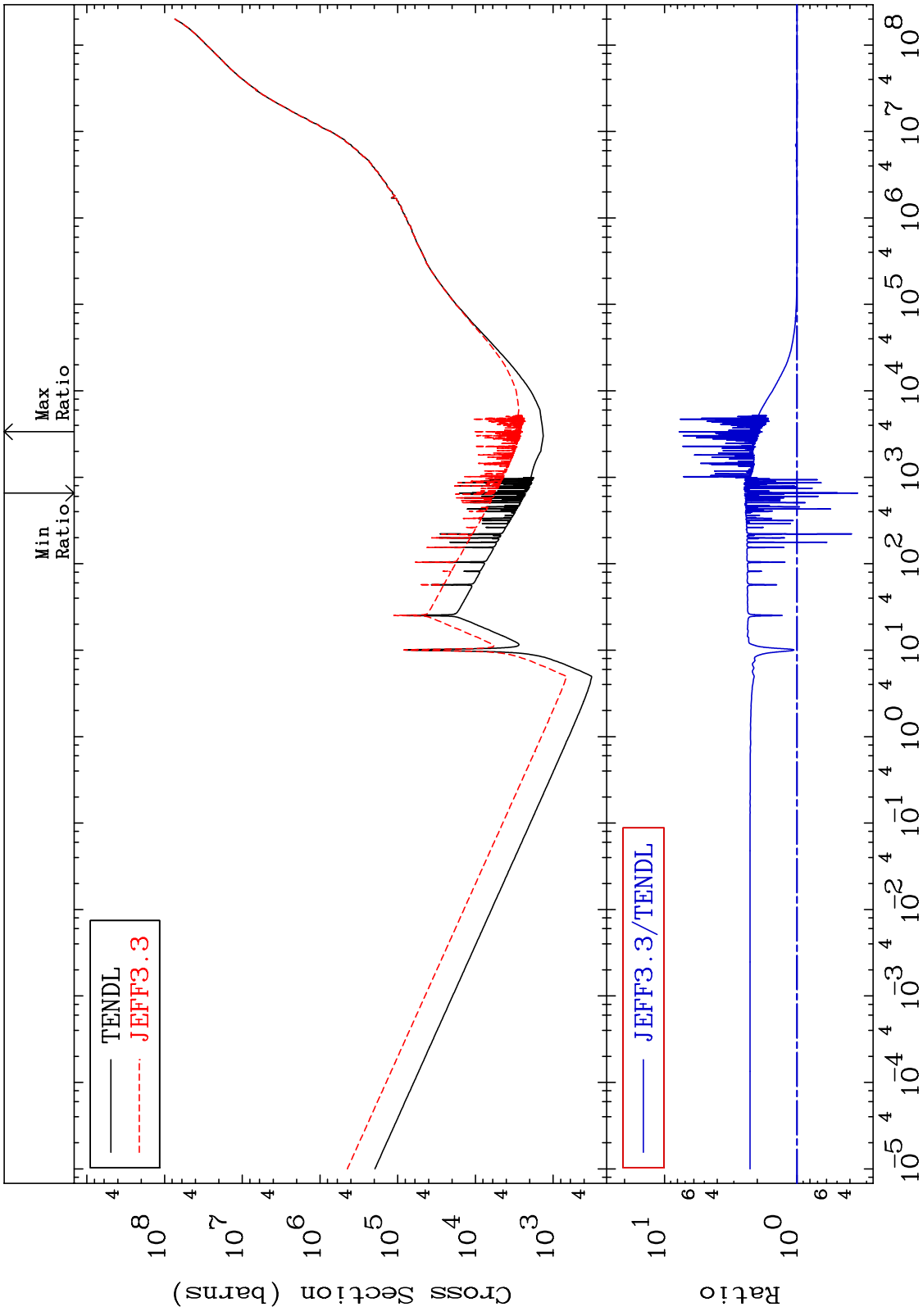
MAT 4434

He-4 Production
Cross Section

44-Ru-99
2.756 To 360.6 %



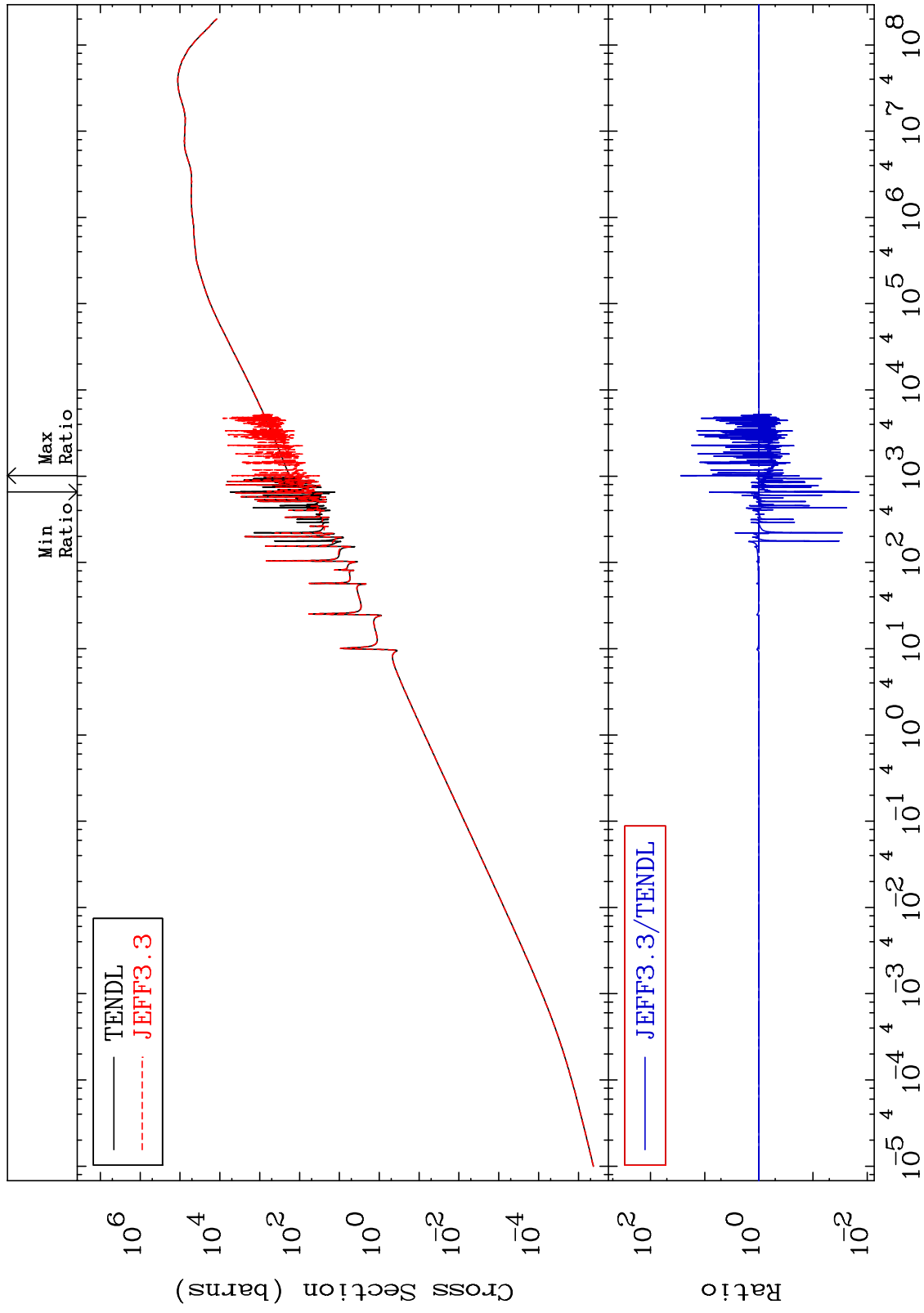
MAT 4434 Kerma total (eV-barns) 44-Ru-99
 -65.15 To 676.9 %
 Cross Section



MAT 4434

Kerma elastic
Cross Section

44-Ru-99
-98.59 To 2681. %

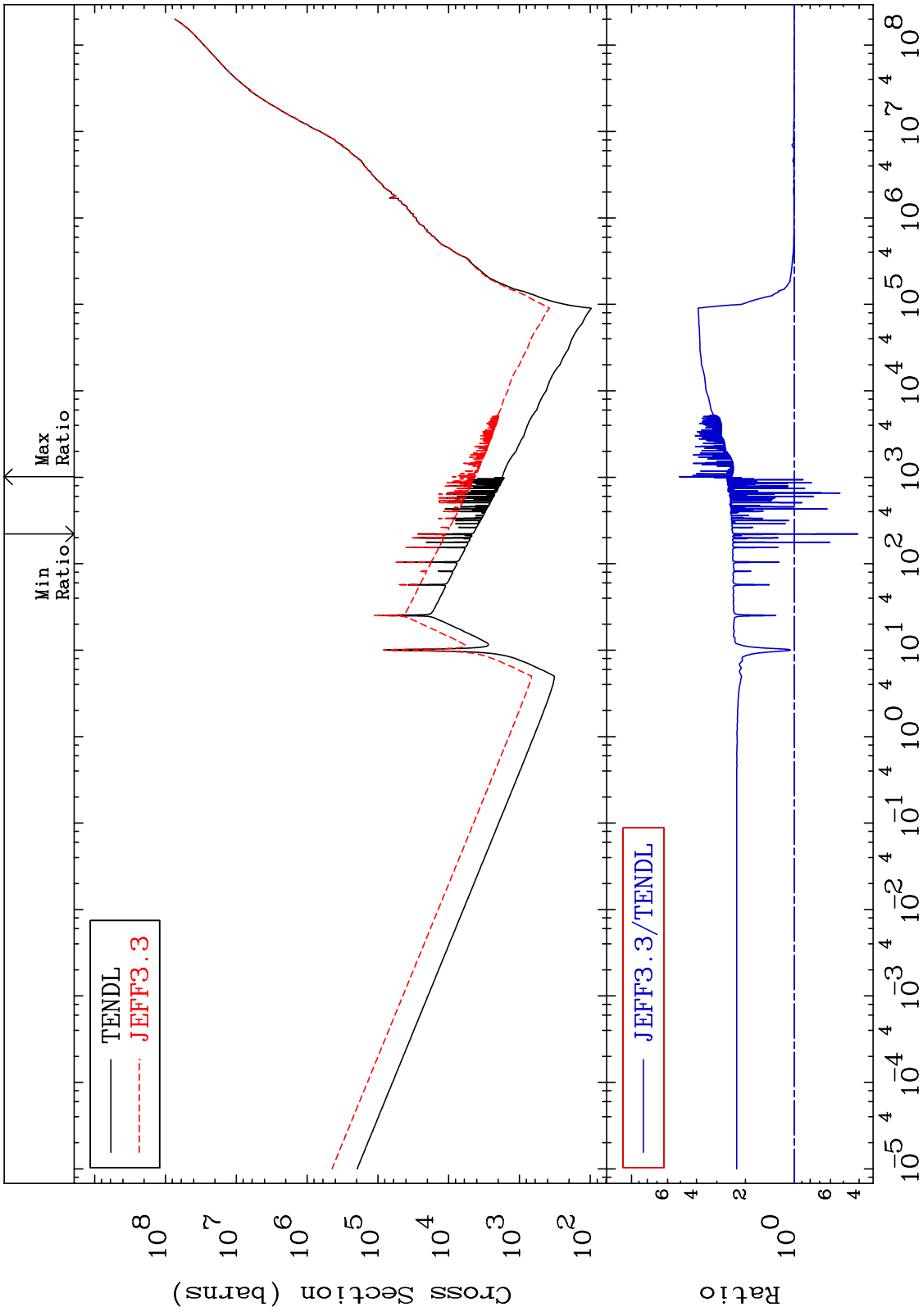


70

Incident Energy (eV)

44-Ru-99

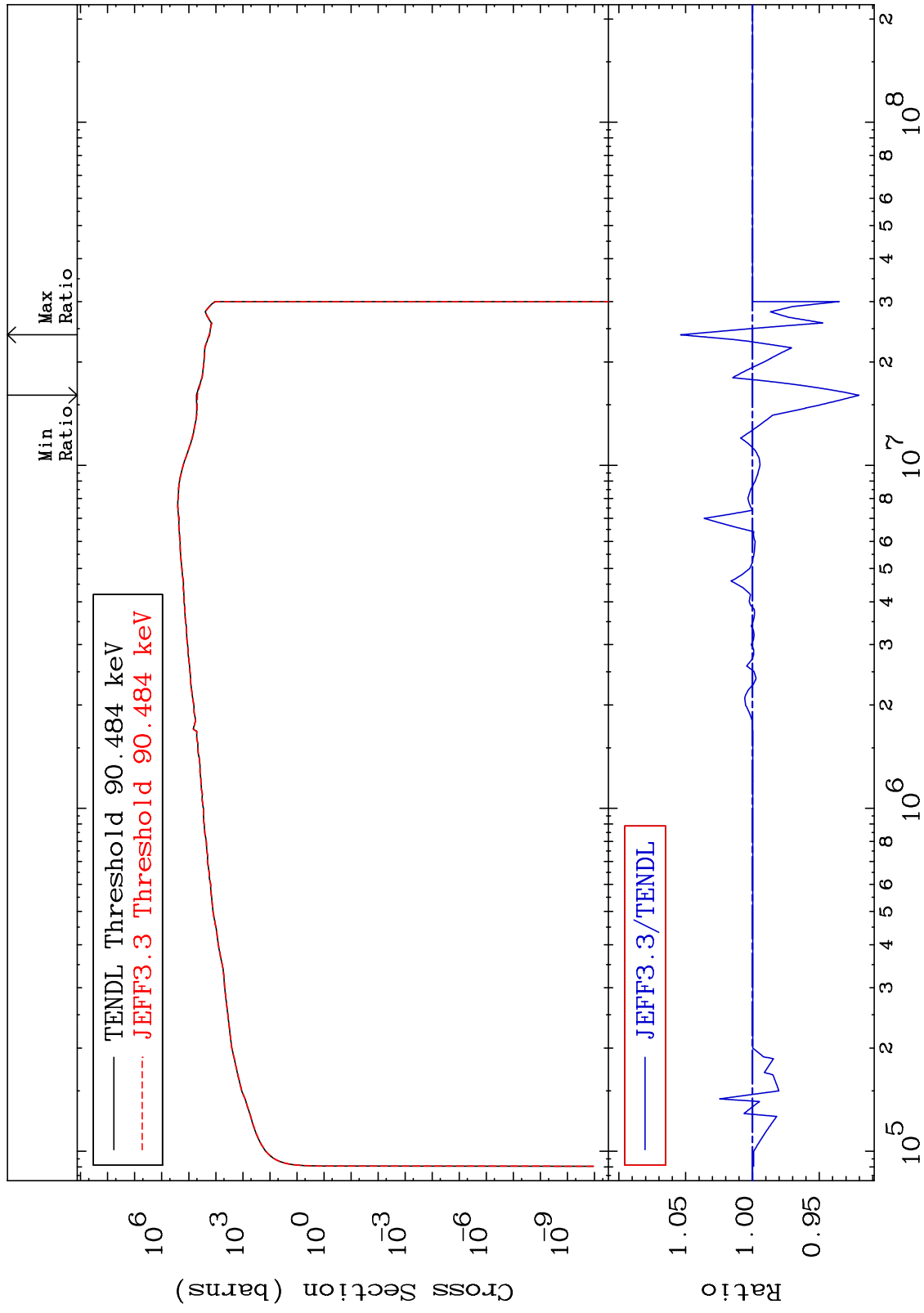
MAT 4434 Kerma non-elastic (all but mt2) 44-Ru-99
 -59.28 To 411.1 %
 Cross Section



MAT 4434

Kerma inelastic (mt51-91)
Cross Section

44-Ru-99
-7.972 To 5.377 %



72

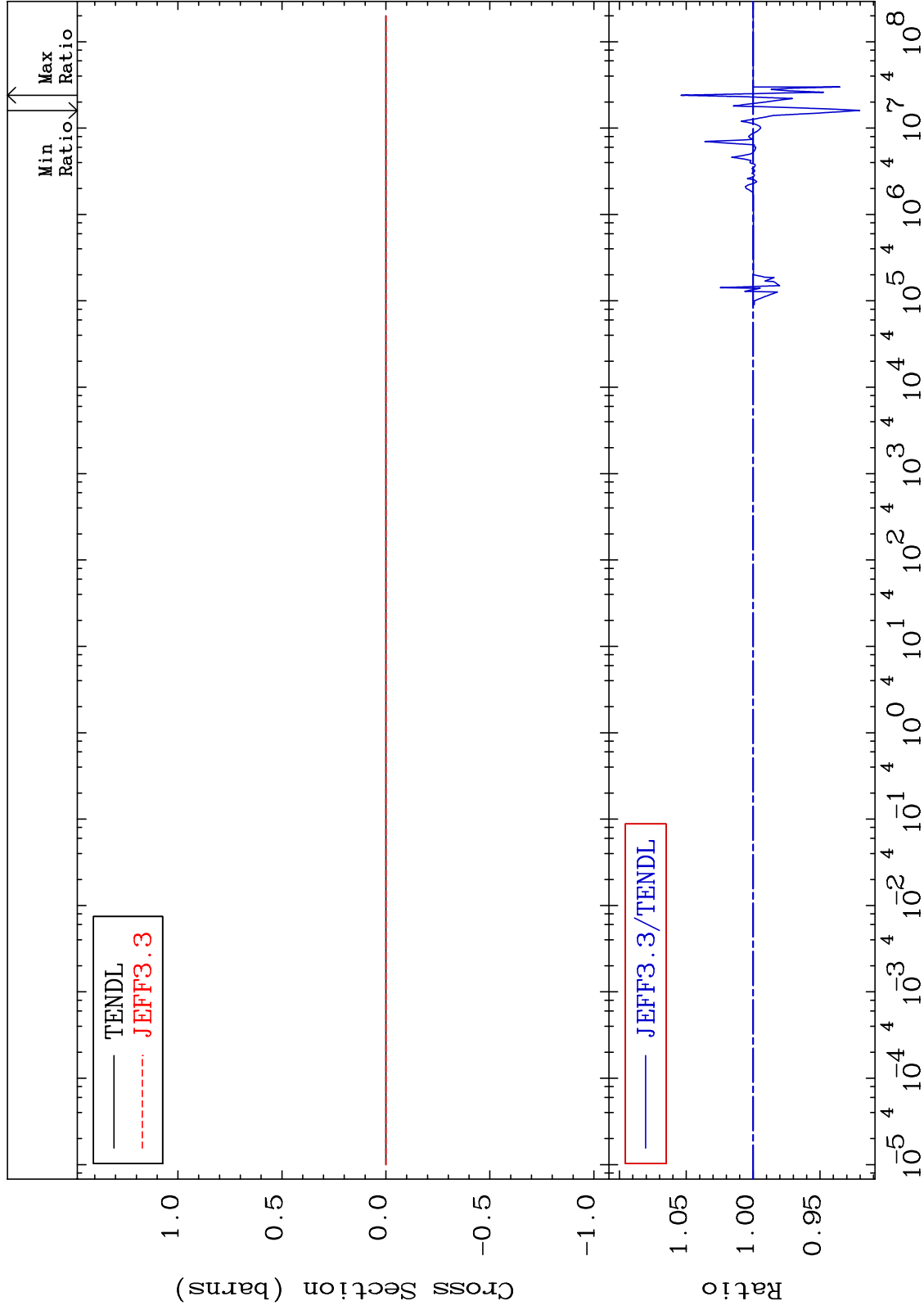
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-7.972 To 5.377 %



73

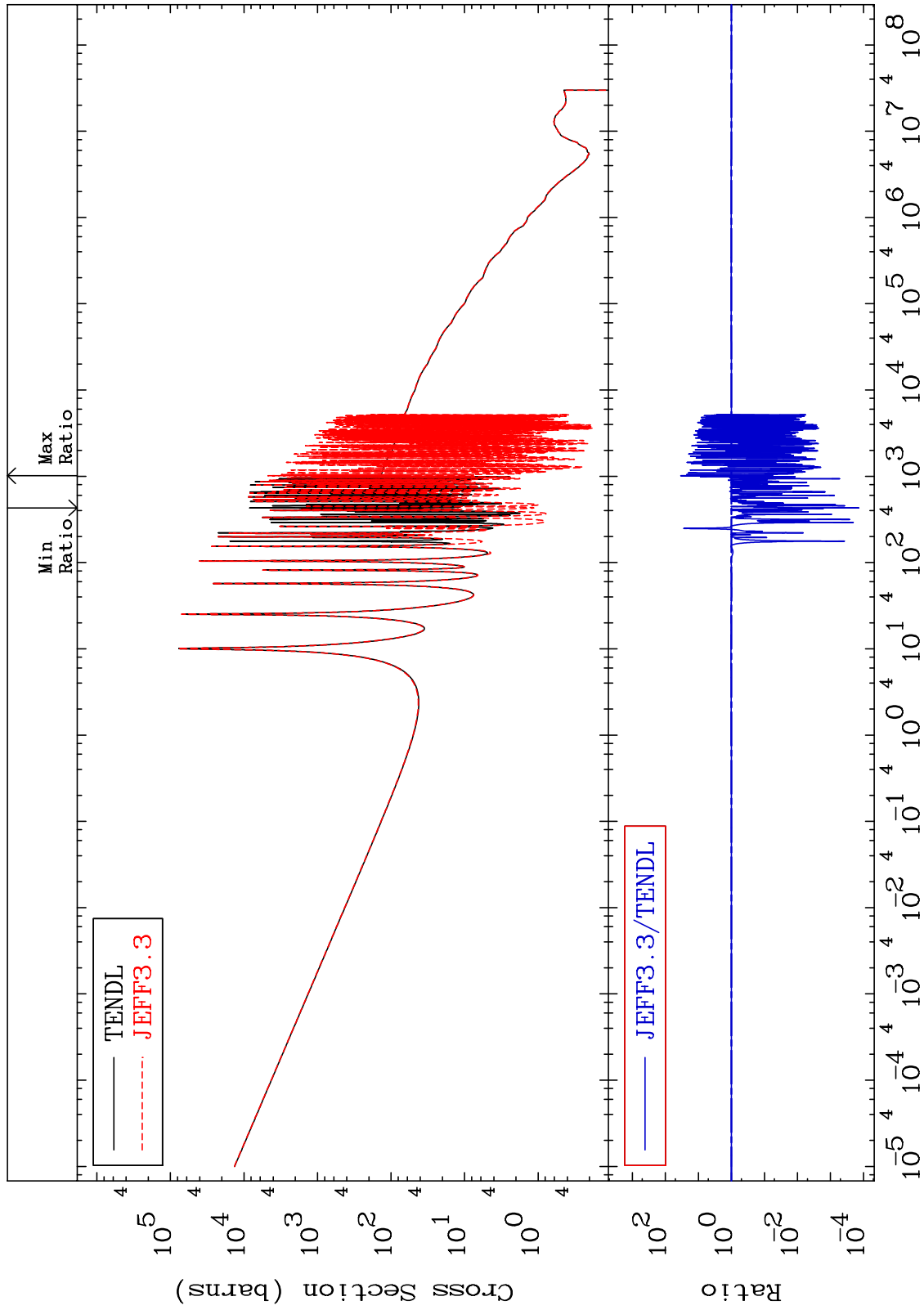
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma capture (mt102)
Cross Section

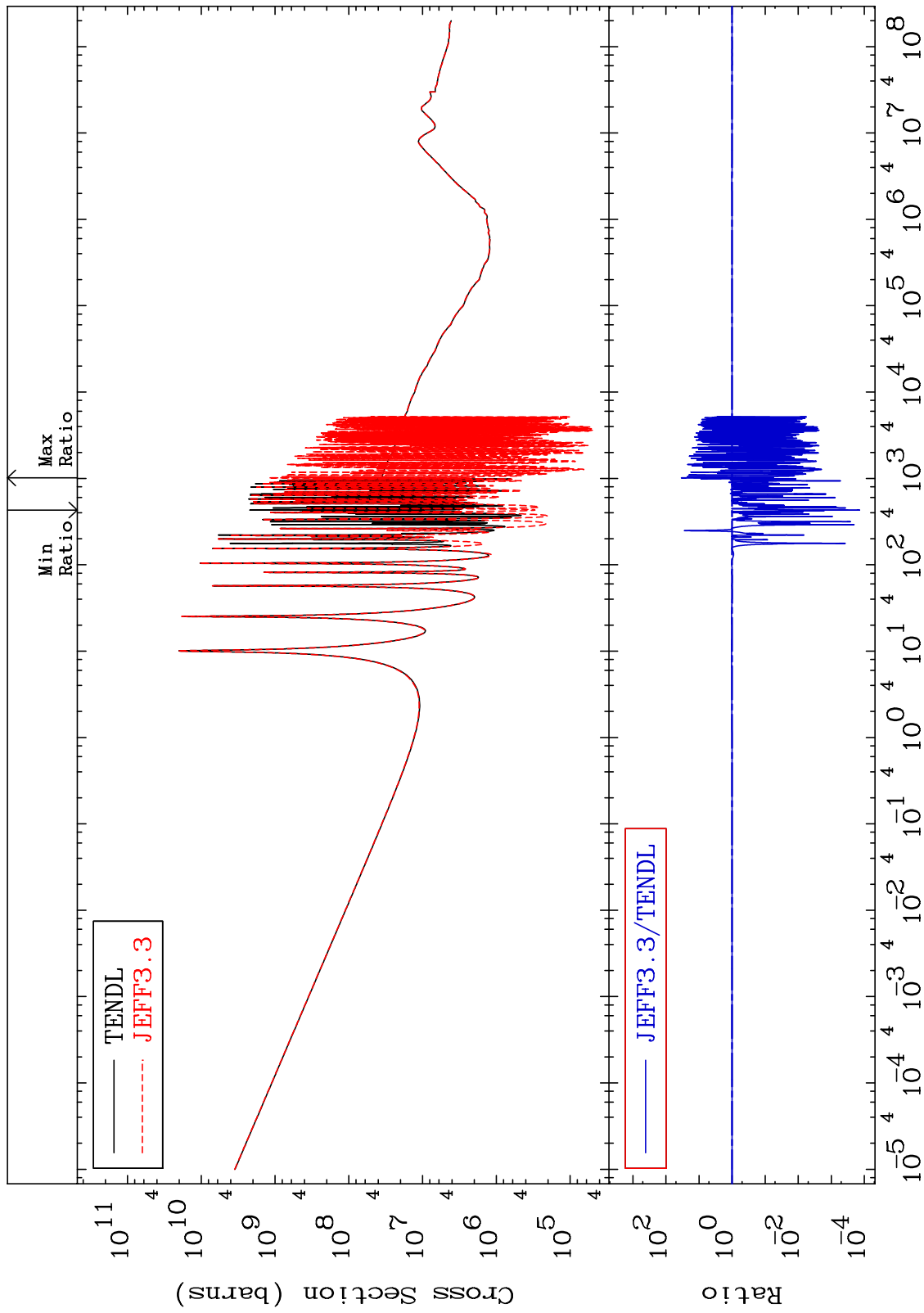
44-Ru-99
-99.99 To 3345. %



MAT 4434

Total photon (eV-barns)
Cross Section

44-Ru-99
-99.99 To 3345. %

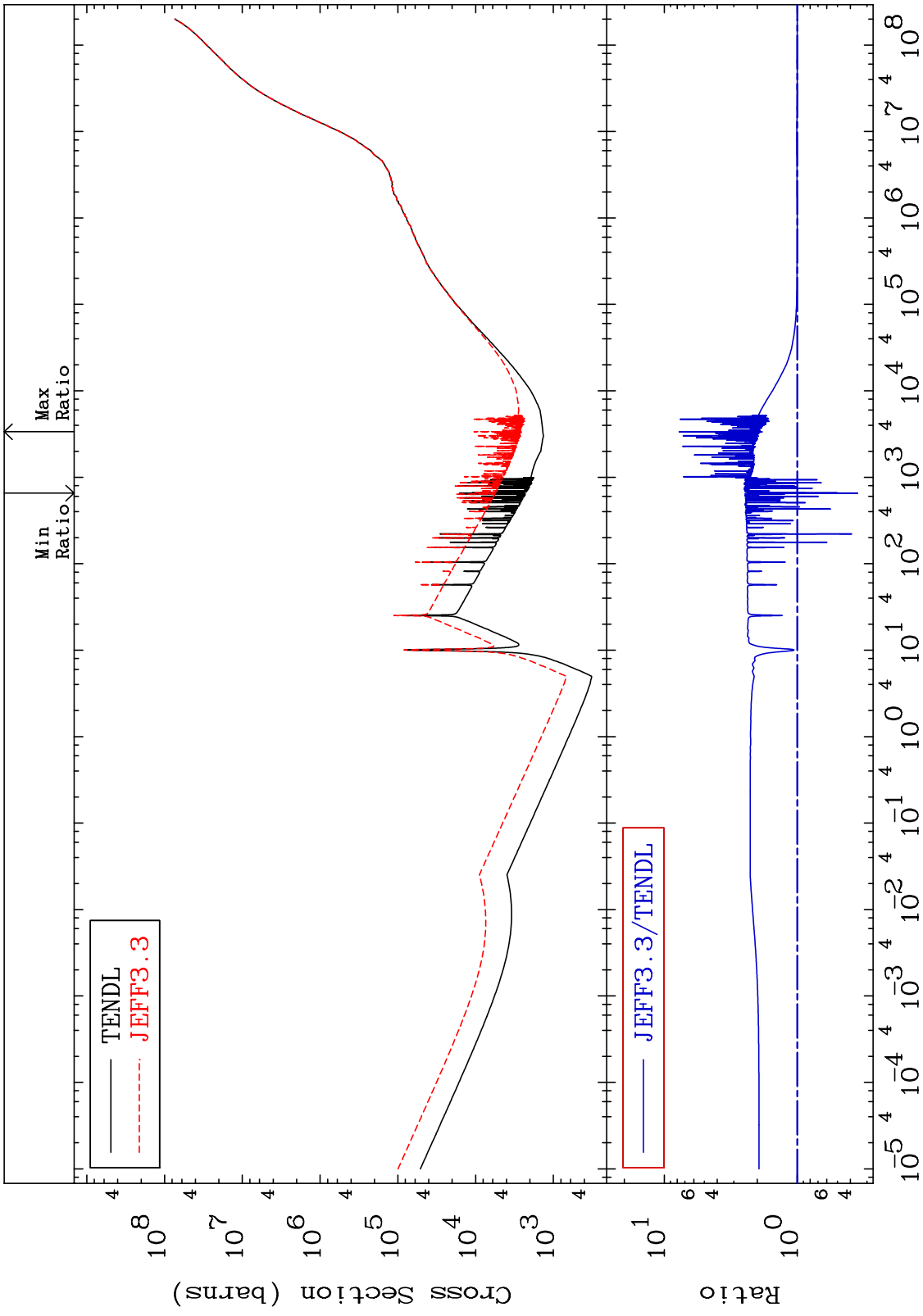


75

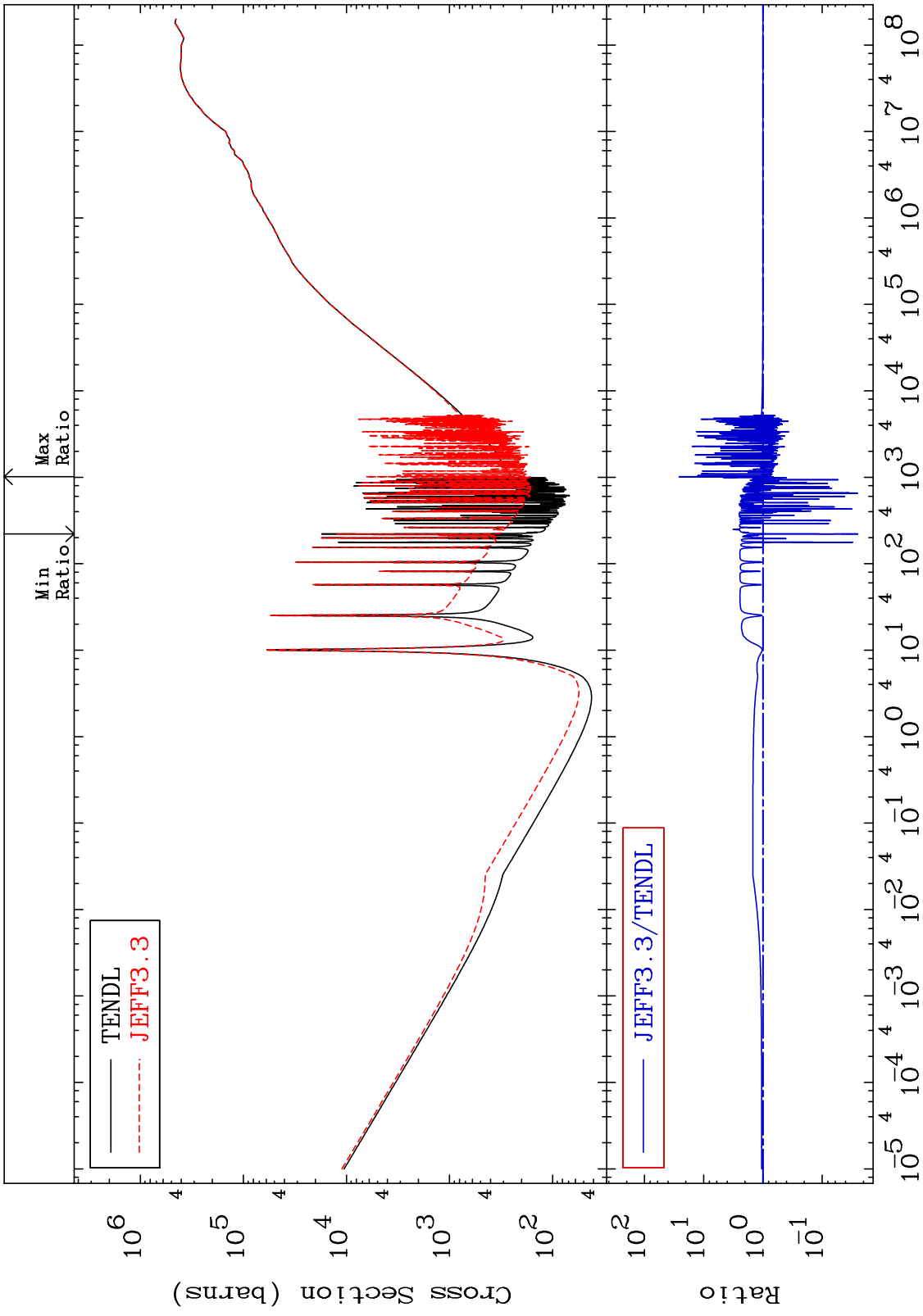
Incident Energy (eV)

44-Ru-99

MAT 4434 Total kinematic kerma (high limit) 44-Ru-99
 -64.92 To 674.5 %
 Cross Section



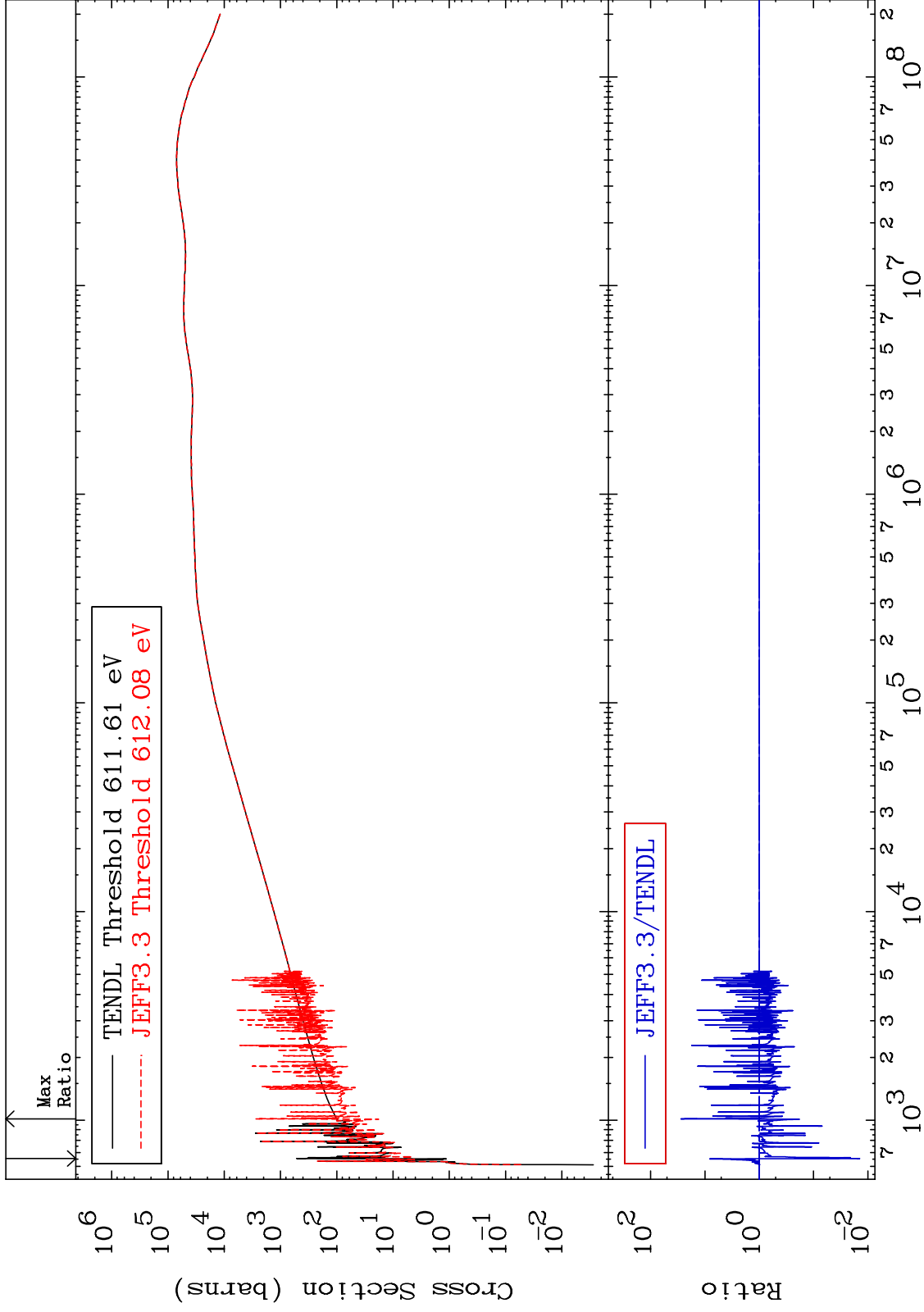
MAT 4434 Dpa total (eV-barns) 44-Ru-99
 -97.51 To 2506. %
 Cross Section



MAT 4434

Dpa elastic (mt2)
Cross Section

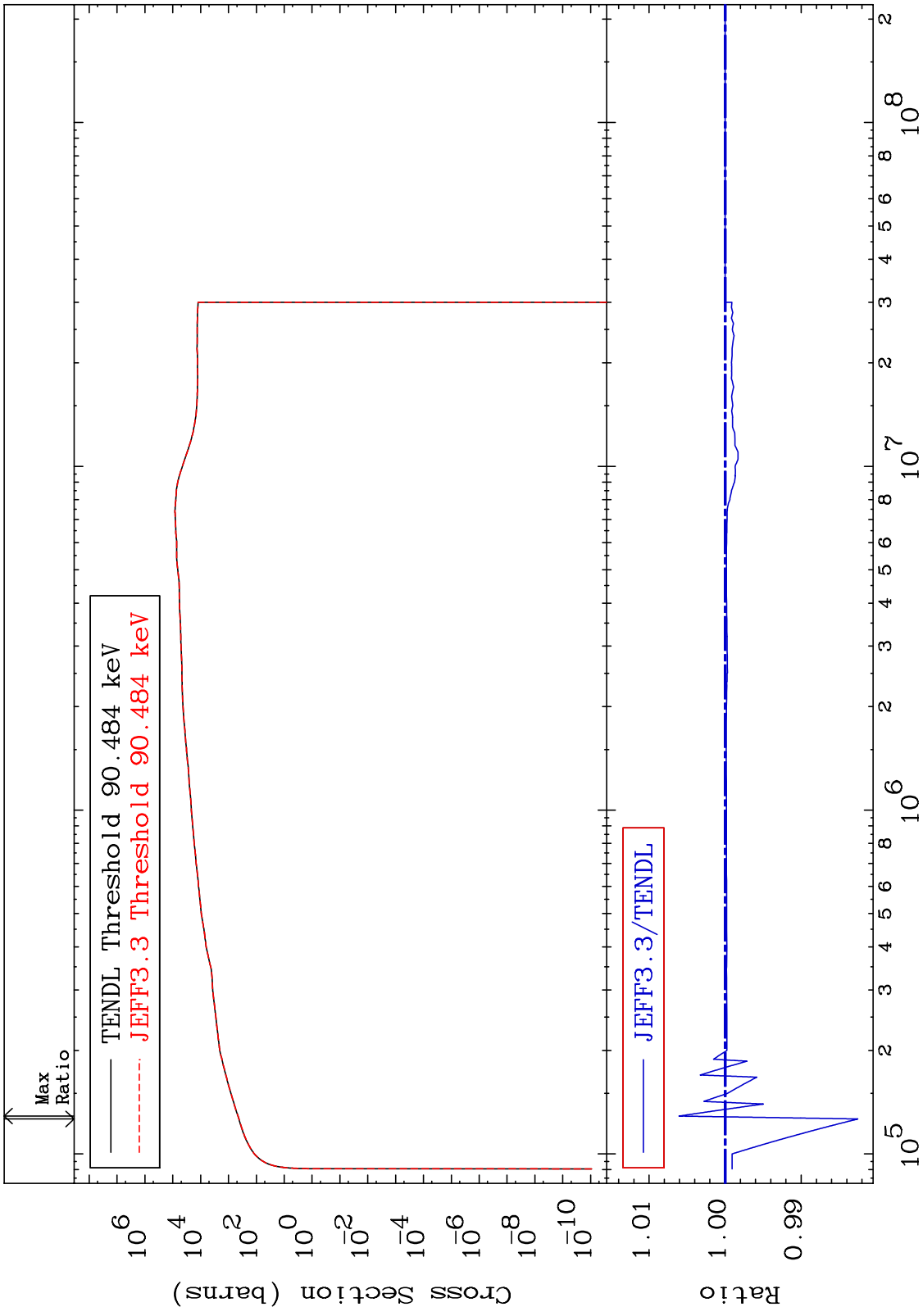
44-Ru-99
-98.59 To 2678. %



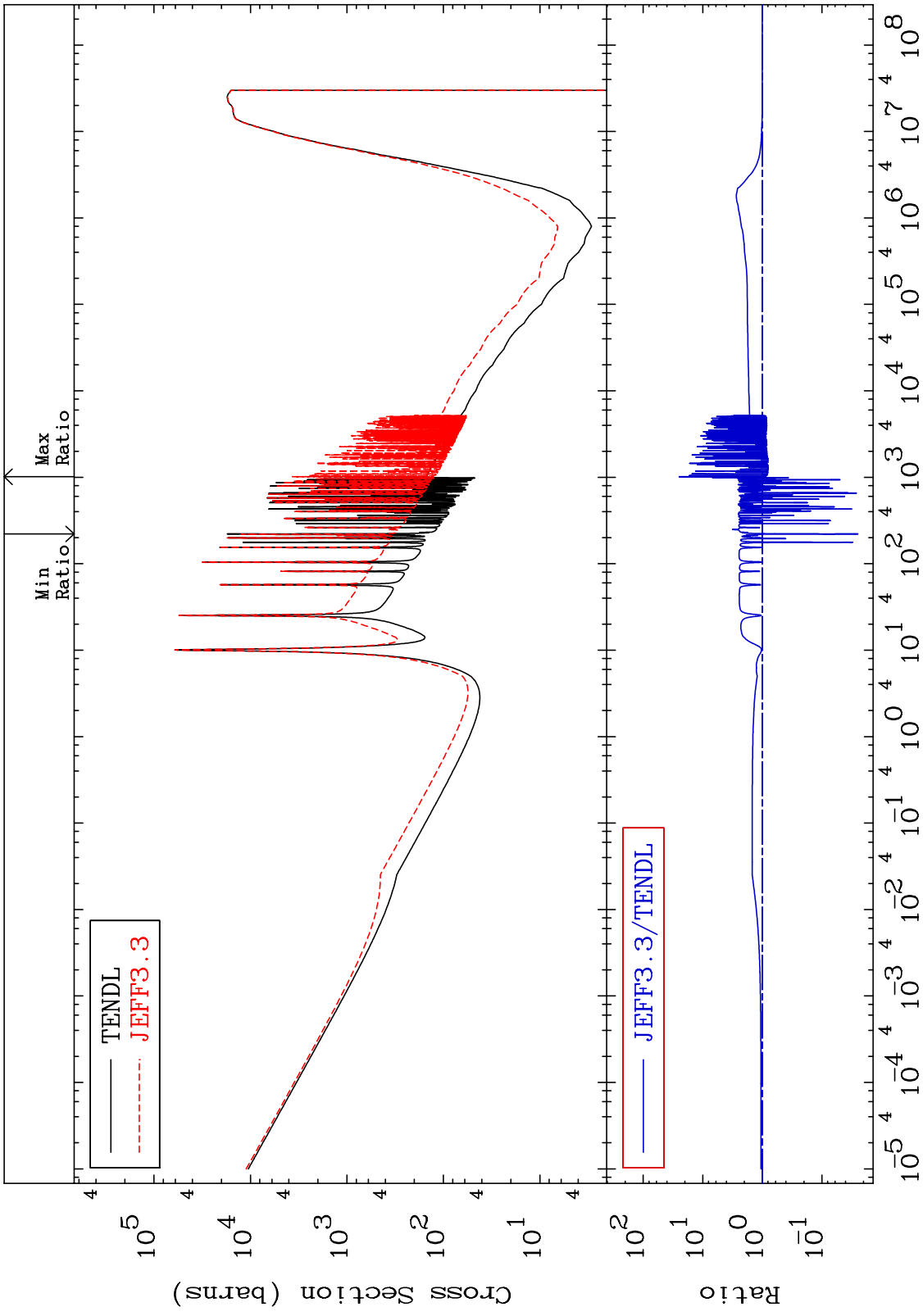
78

Incident Energy (eV)

44-Ru-99



MAT 4434 Dpa disappearance (mt102 -120) 44-Ru-99
 Cross Section -97.51 To 2397. %

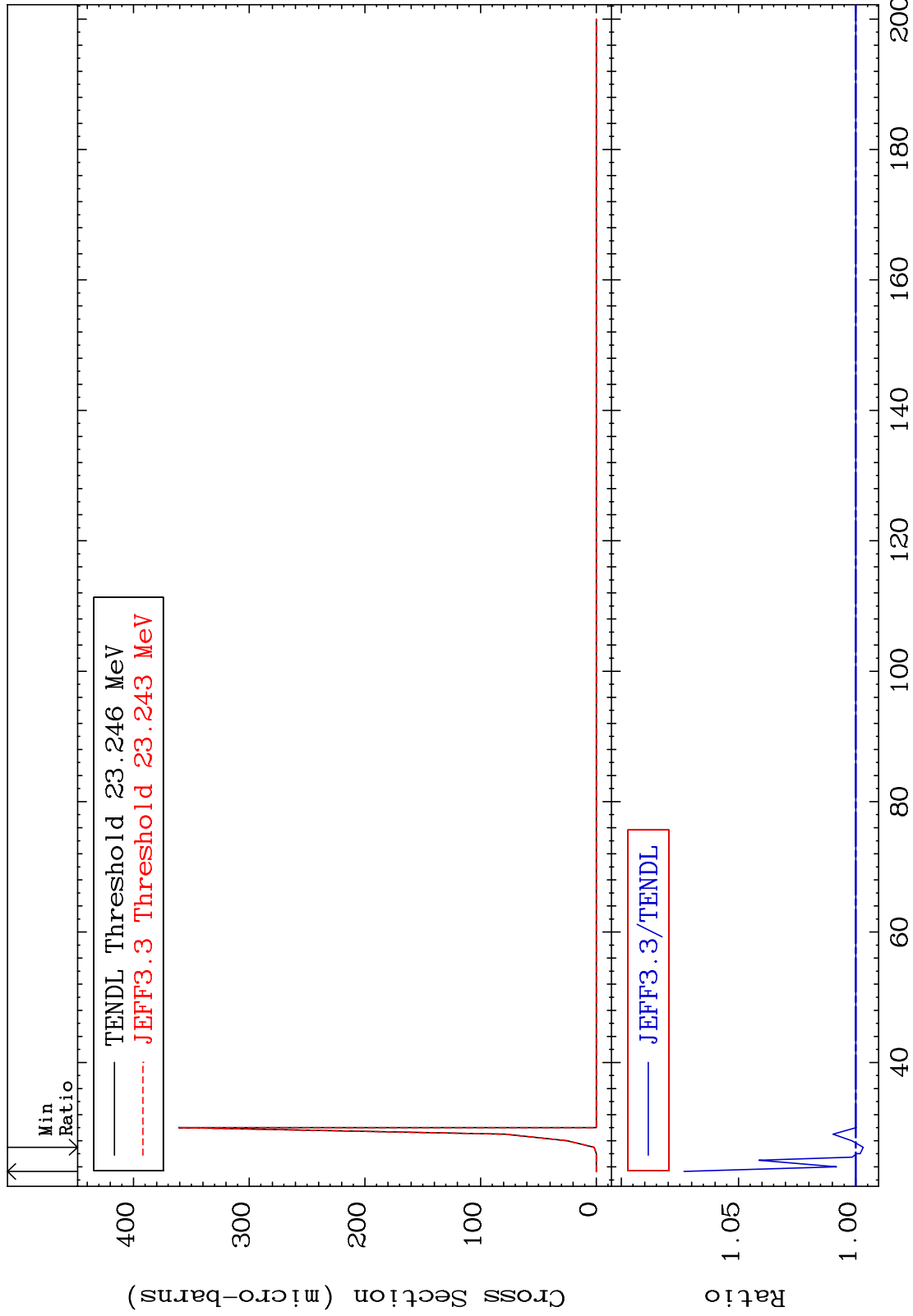


MAT 4434

(n,2n) d:43-Tc-96g

44-Ru-99

Radionuclide Production Cross Section -0.319 To 7.322 %

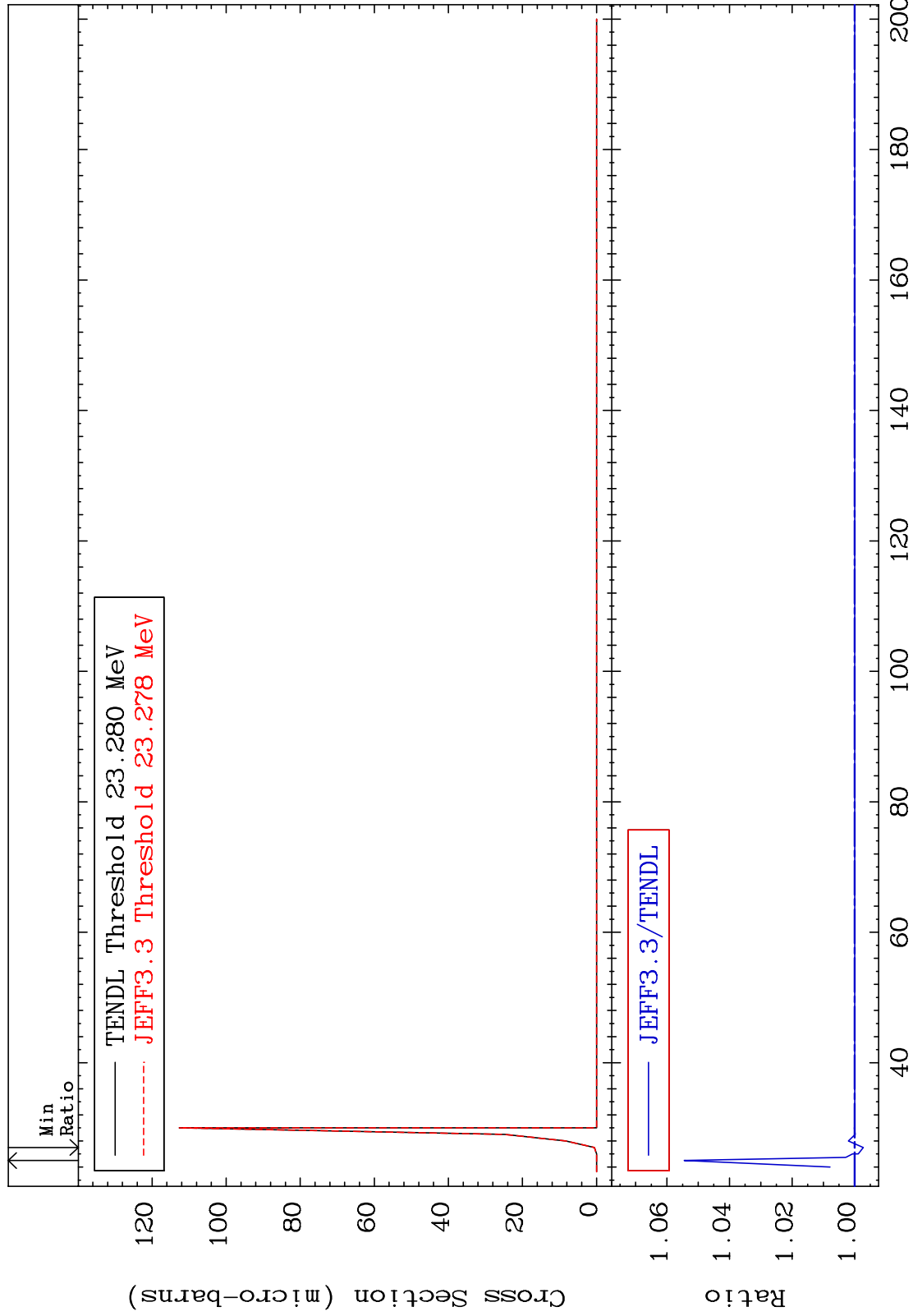


MAT 4434

(n,2n) d:43-Tc-96m1

44-Ru-99

Radionuclide Production Cross Section -0.278 To 5.446 %

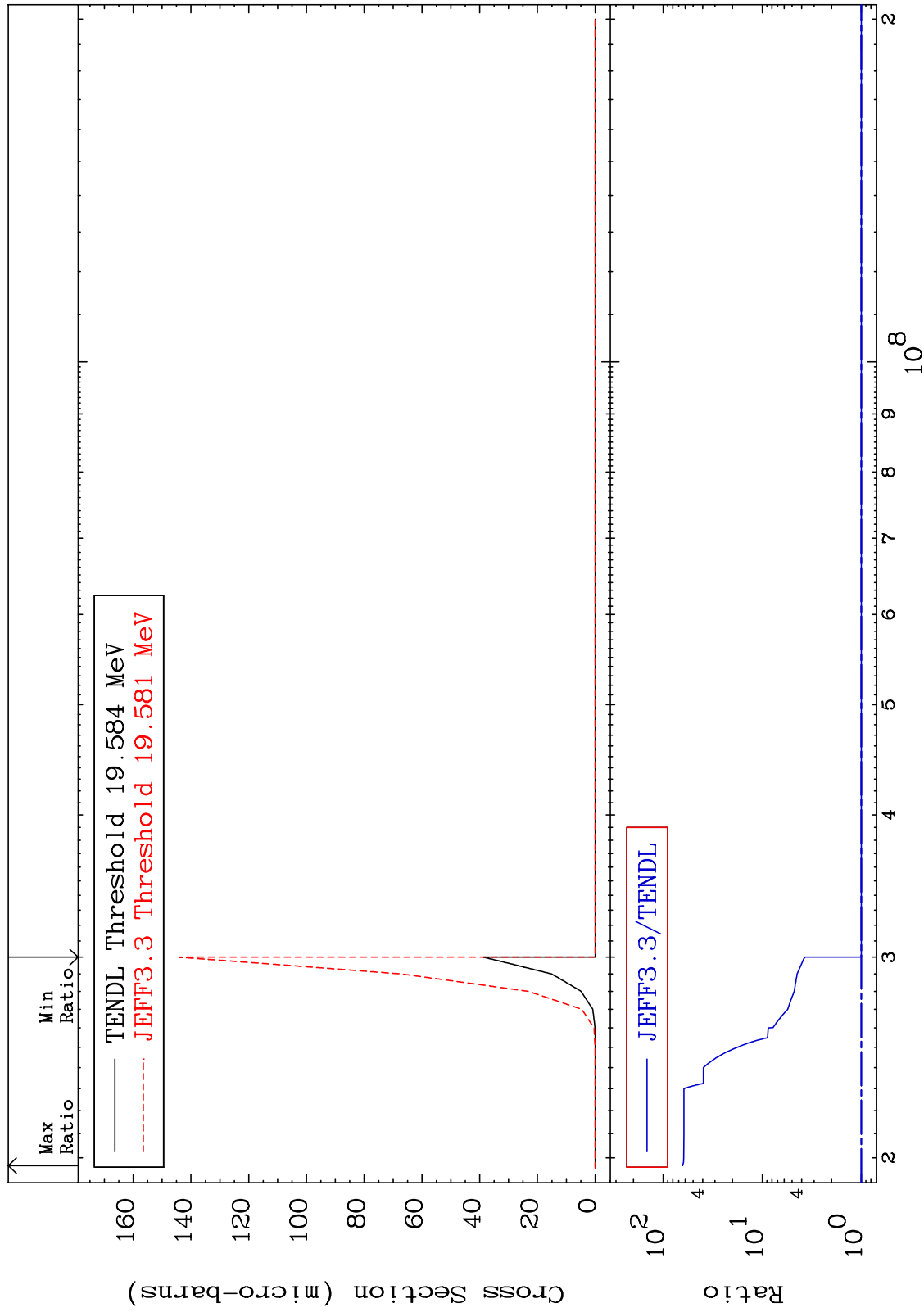


MAT 4434

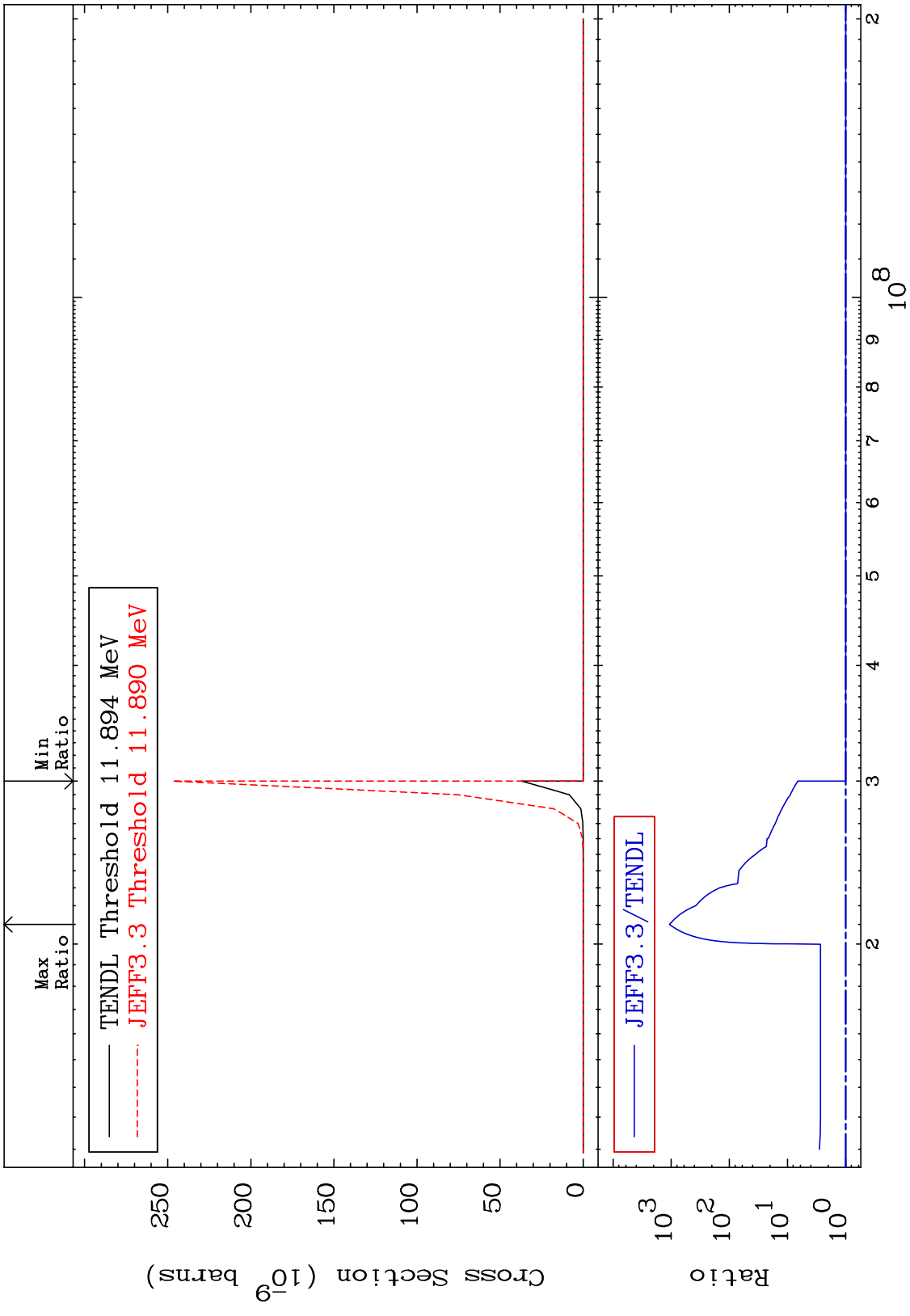
(n,3n) α : 42-Mo-93g

44-Ru-99

Radionuclide Production Cross Section 0.000 To 6265. %



MAT 4434 (n,2n) 2α:40-Zr-90g 44-Ru-99
 Radionuclide Production Cross Section 0.000 To 9999. %

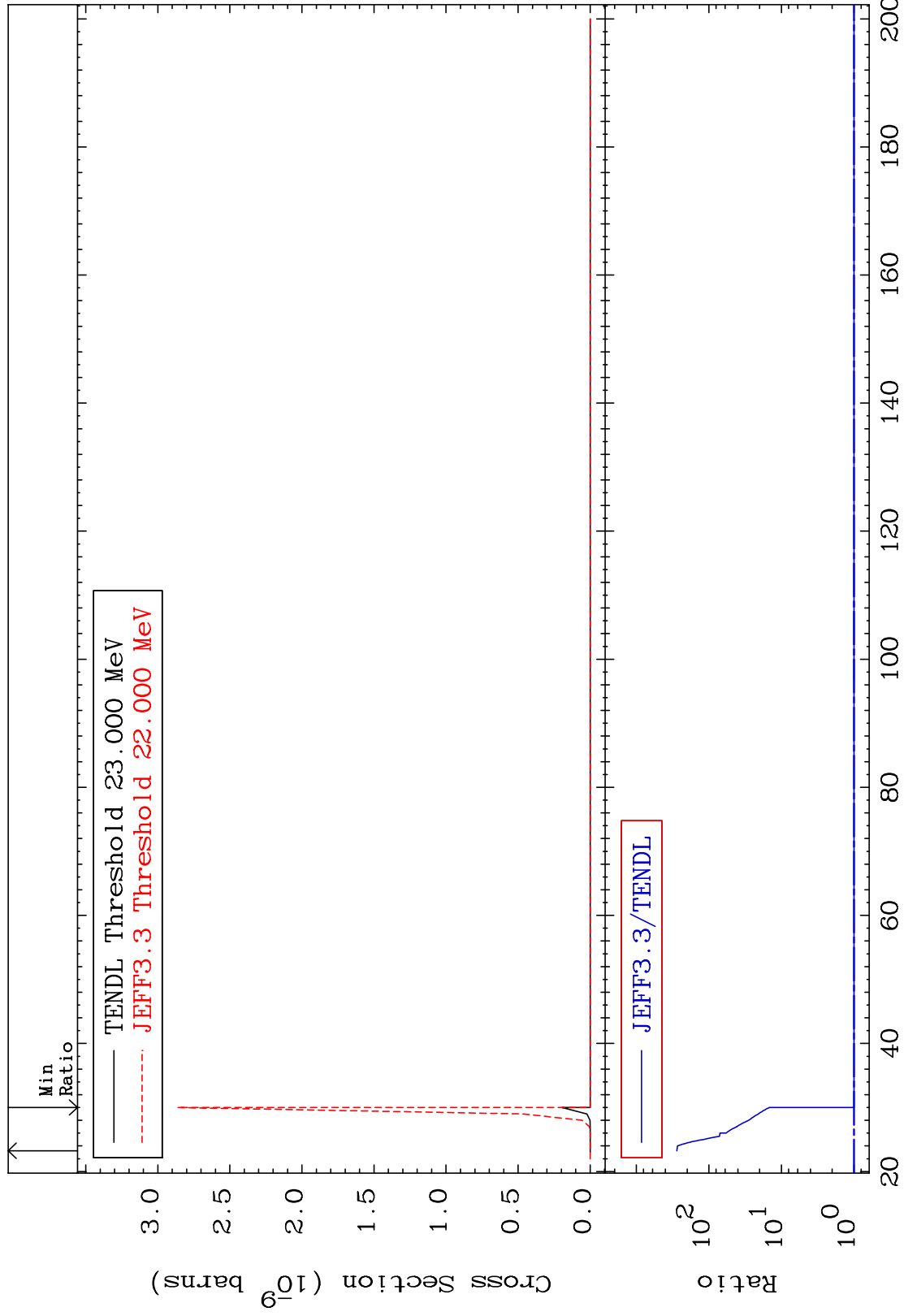


MAT 4434

(n,2n) 2α:40-Zr-90m3

44-Ru-99

Radionuclide Production Cross Section 0.000 To 9999. %



85

Incident Energy (MeV)

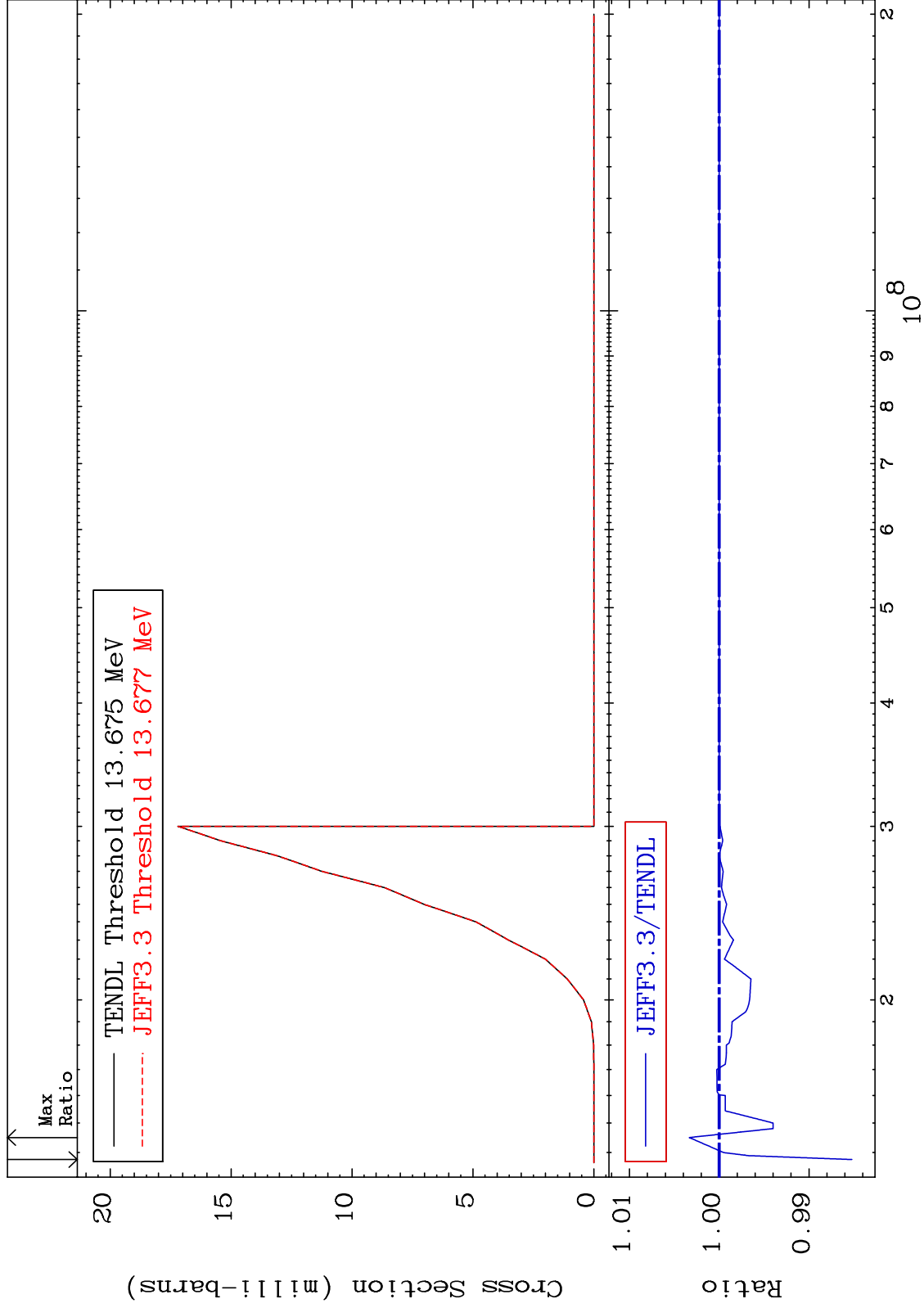
44-Ru-99

MAT 4434

(n, n') d:43-Tc-97g

44-Ru-99

Radionuclide Production Cross Section -1.477 To 0.335 %



86

Incident Energy (eV)

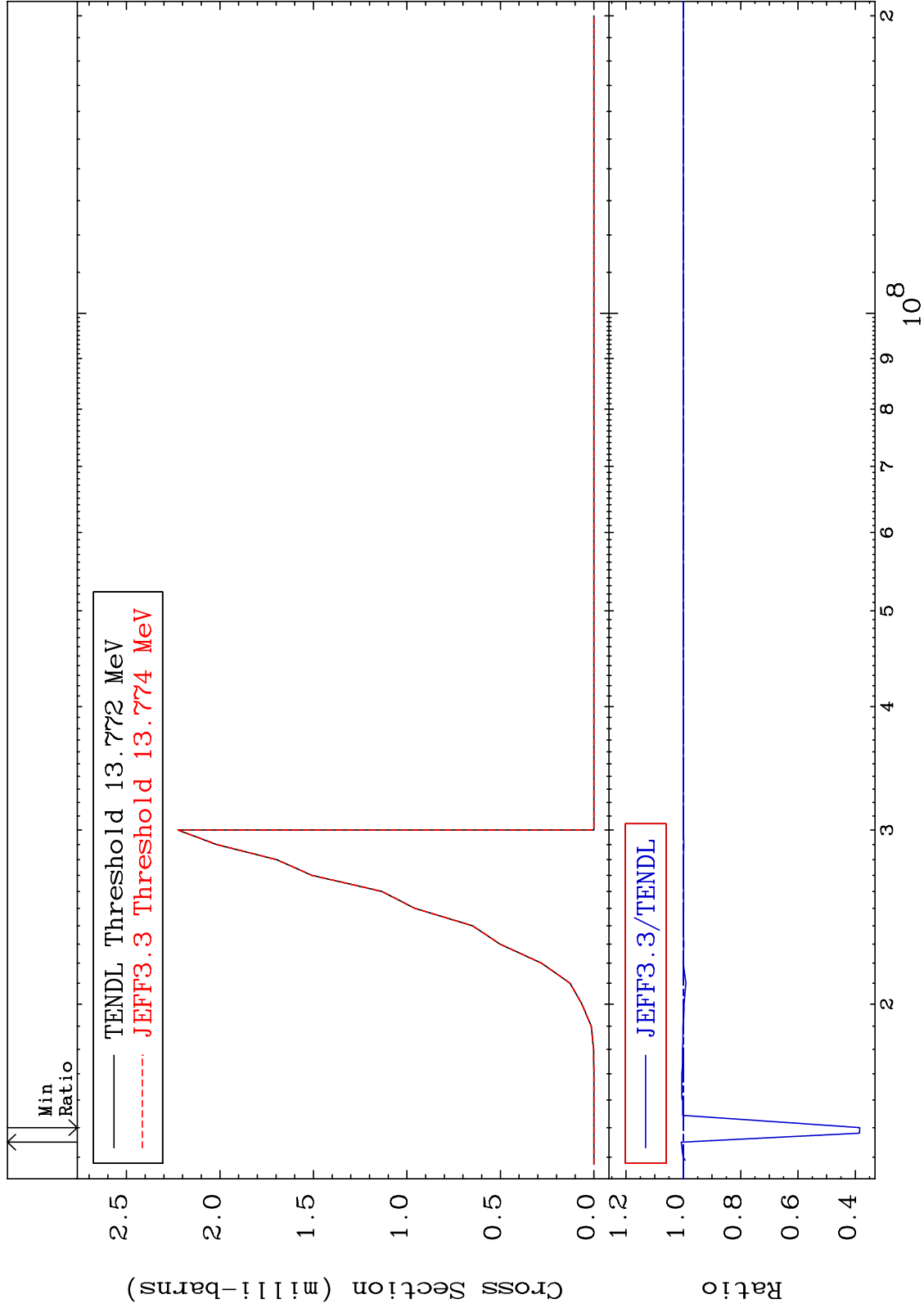
44-Ru-99

MAT 4434

(n, n') d:43-Tc-97m1

44-Ru-99

Radionuclide Production Cross Section -61.56 To 0.732 %



87

Incident Energy (eV)

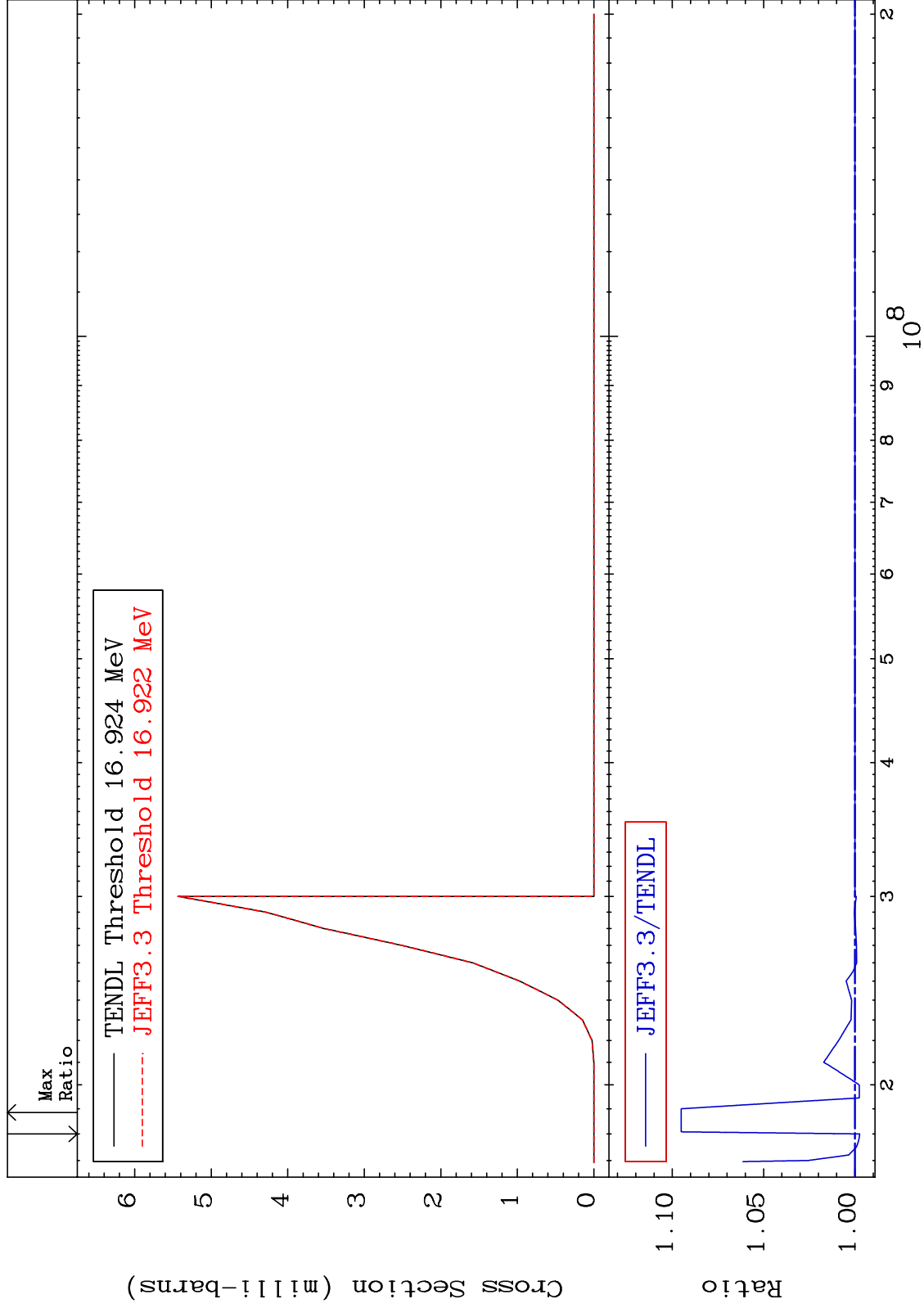
44-Ru-99

MAT 4434

(n, n') t: 43-Tc-96g

44-Ru-99

Radionuclide Production Cross Section -0.263 To 9.511 %

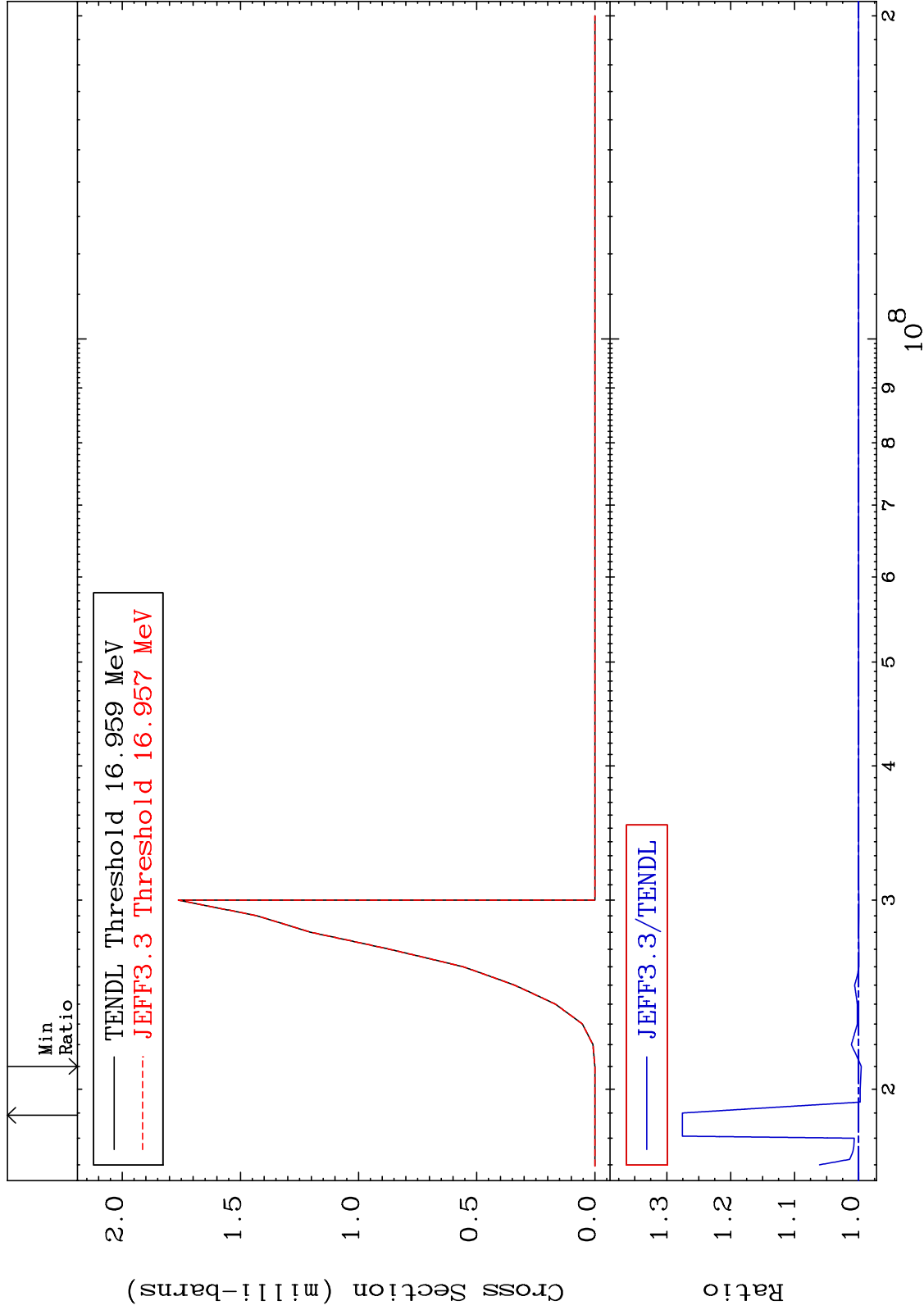


MAT 4434

(n, n') t:43-Tc-96m1

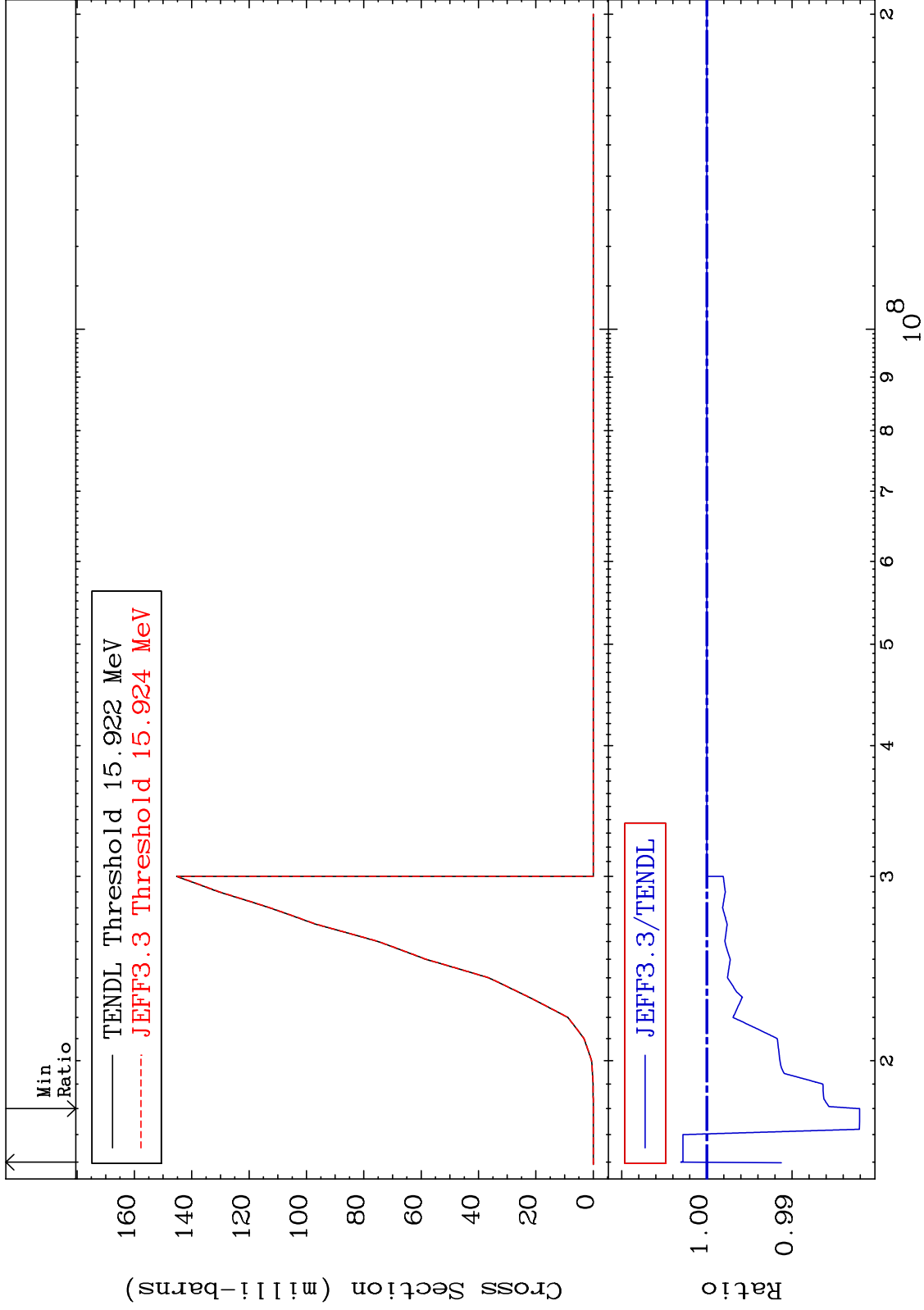
44-Ru-99

Radionuclide Production Cross Section -0.427 To 27.55 %



MAT 4434

(n,2n) p:43-Tc-97g 44-Ru-99
Radionuclide Production Cross Section -1.793 To 0.306 %



90

Incident Energy (eV)

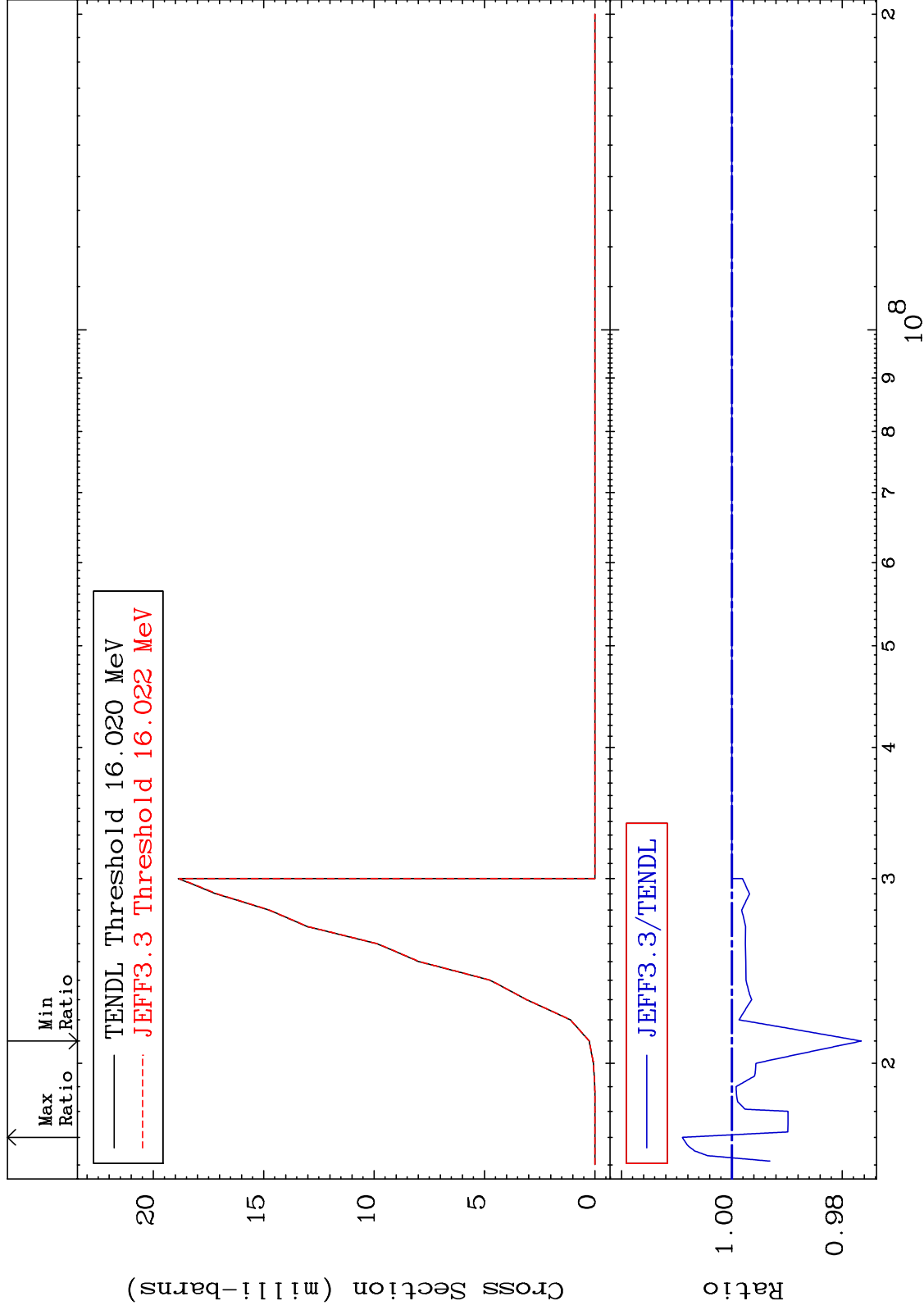
44-Ru-99

MAT 4434

(n,2n) p:43-Tc-97m1

44-Ru-99

Radionuclide Production Cross Section -2.344 To 0.896 %

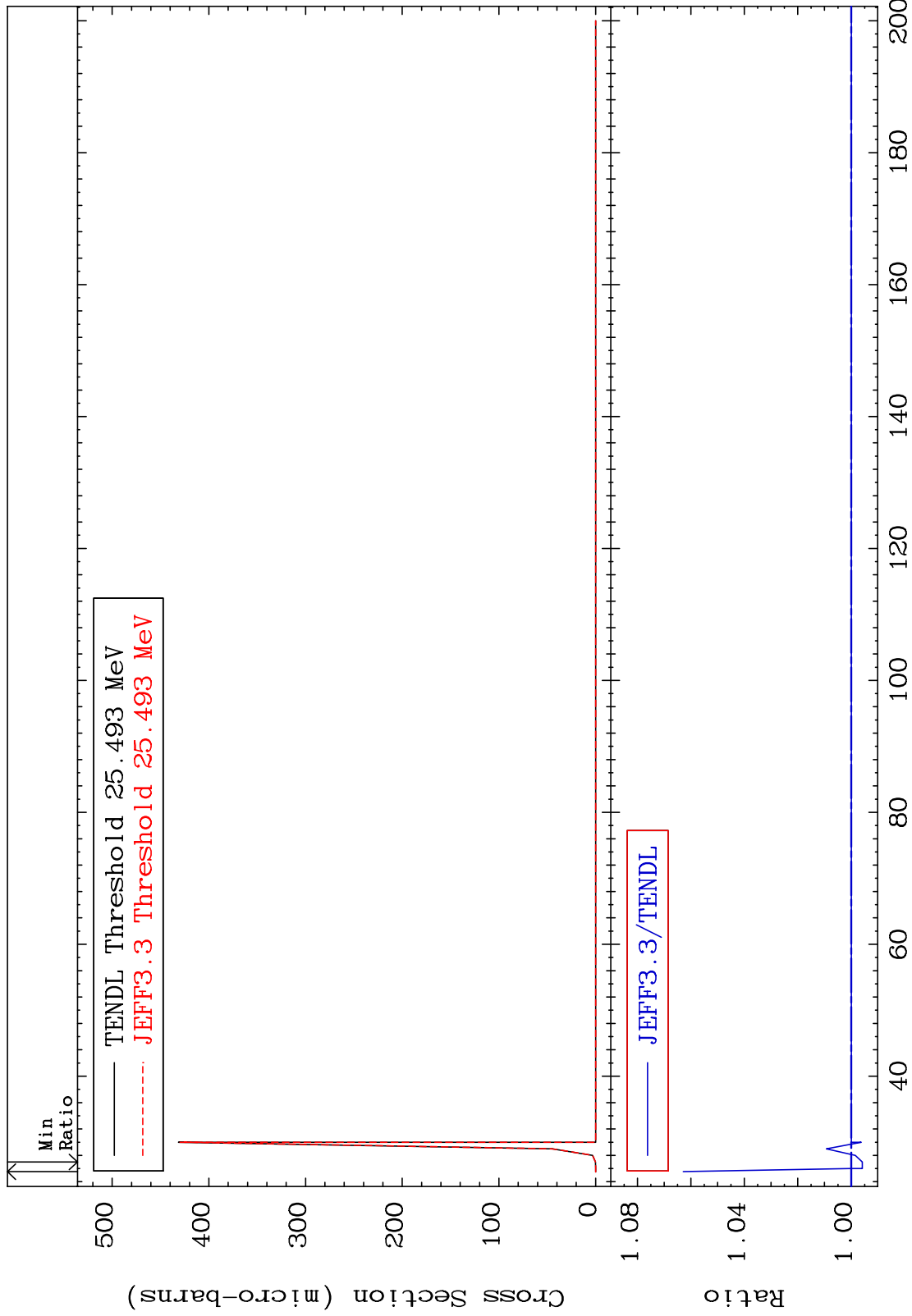


MAT 4434

(n, 3n) p:43-Tc-96g

44-Ru-99

Radionuclide Production Cross Section -0.415 To 6.287 %



92

Incident Energy (MeV)

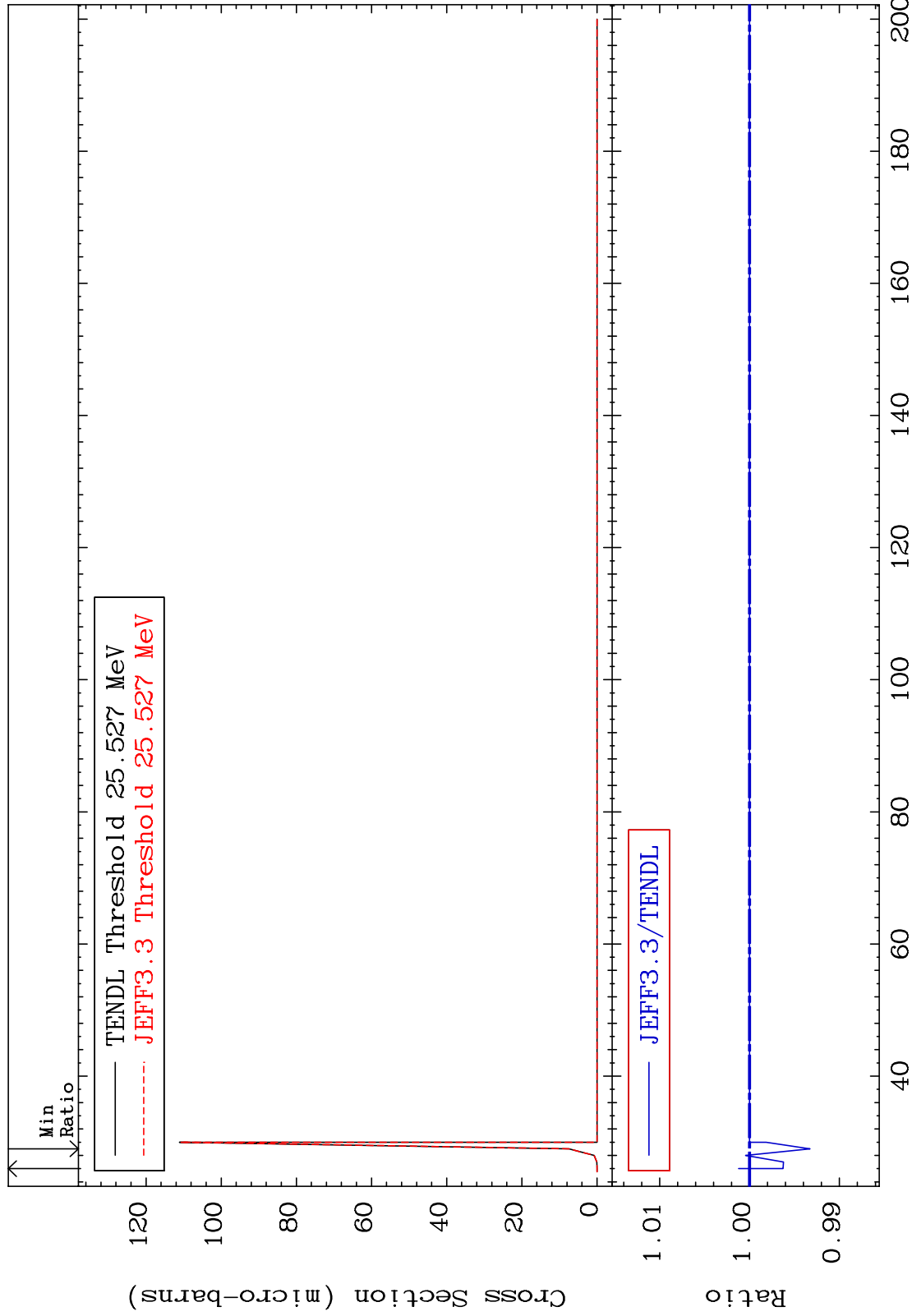
44-Ru-99

MAT 4434

(n,3n) p:43-Tc-96m1

44-Ru-99

Radionuclide Production Cross Section -0.673 To 0.123 %

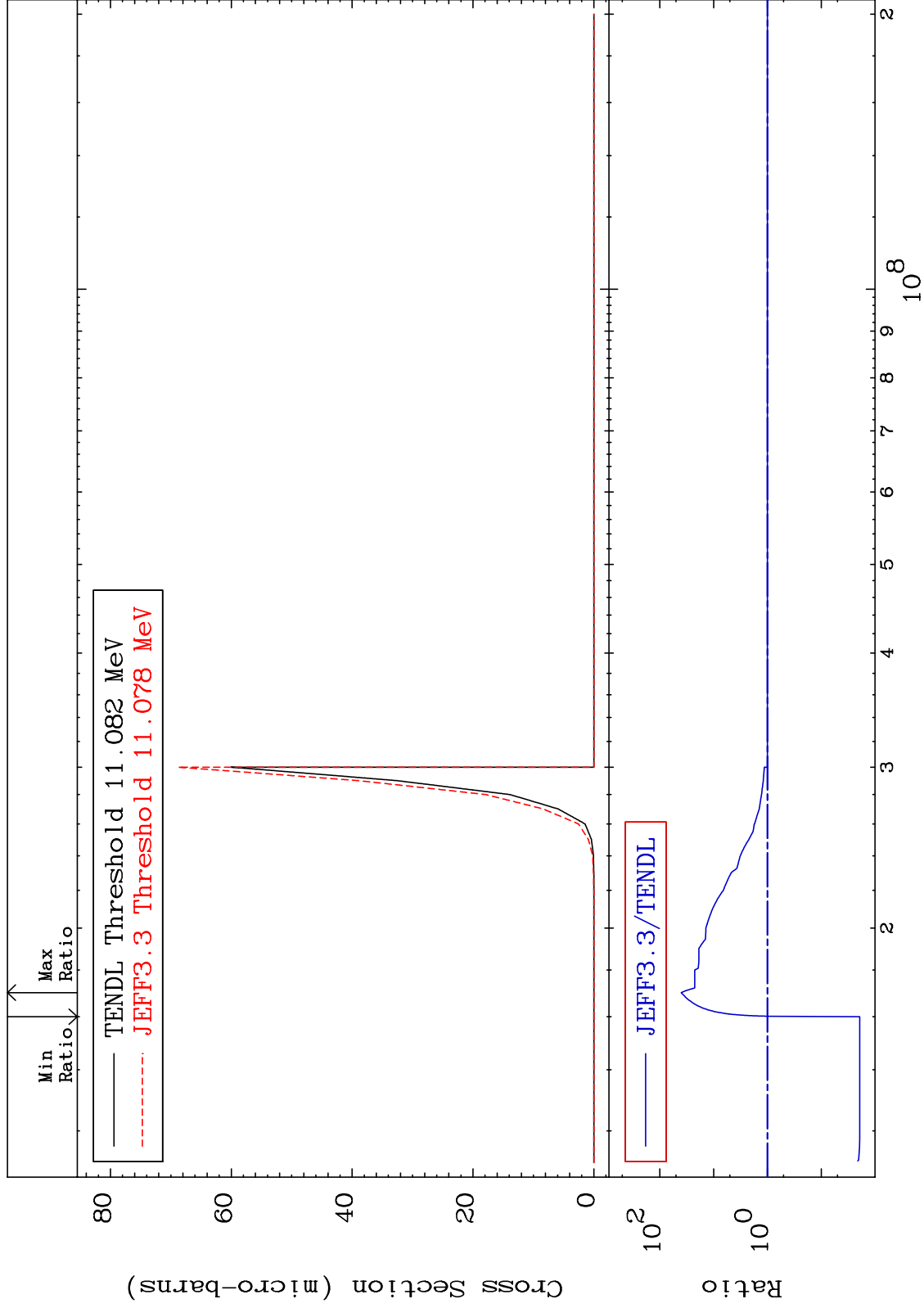


MAT 4434

(n,n') p α :41-Nb-94g

44-Ru-99

Radionuclide Production Cross Section -98.08 To 3898. %



94

Incident Energy (eV)

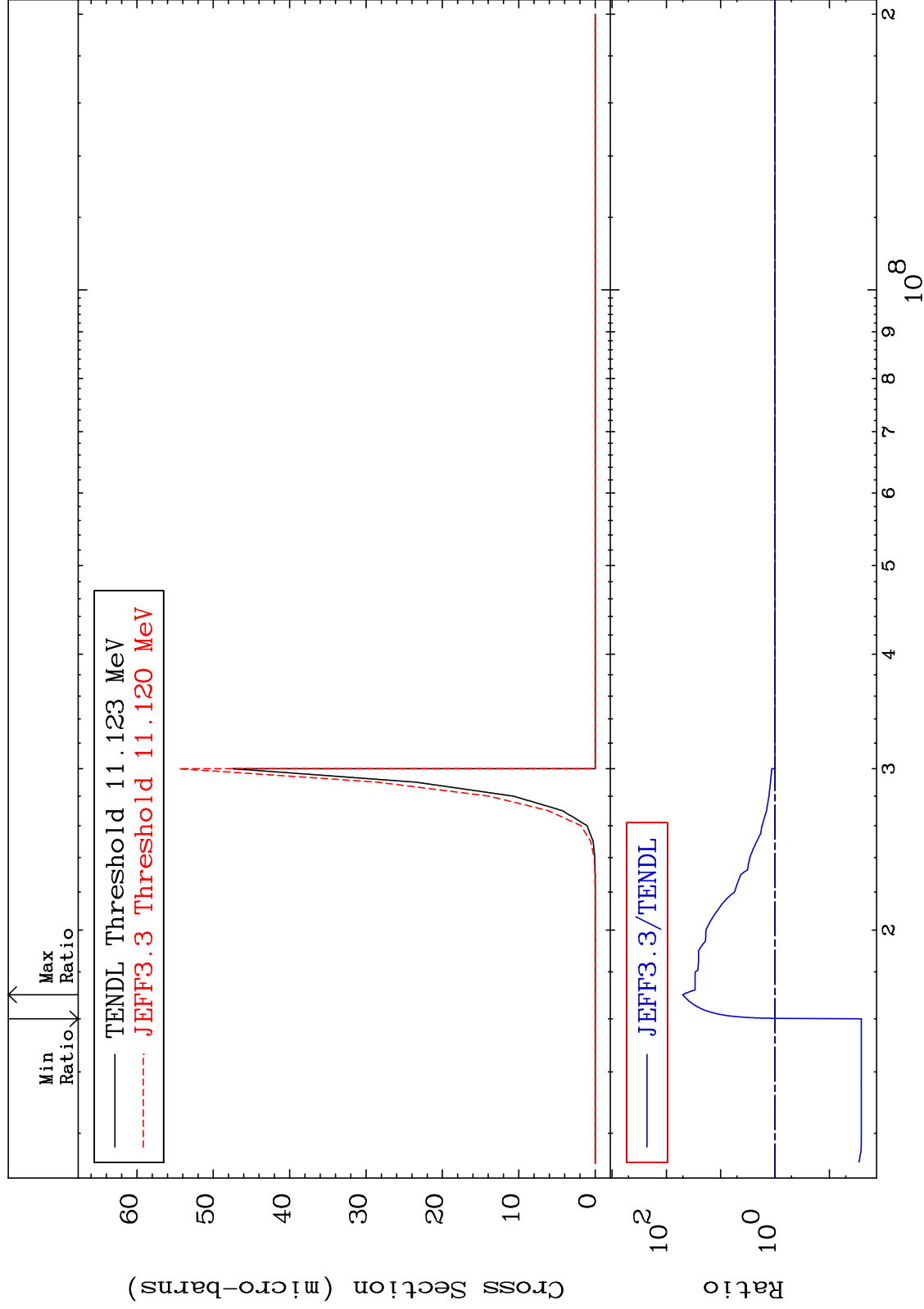
44-Ru-99

MAT 4434

(n,n') p α :41-Nb-94m1

44-Ru-99

Radionuclide Production Cross Section -97.42 To 4915. %



95

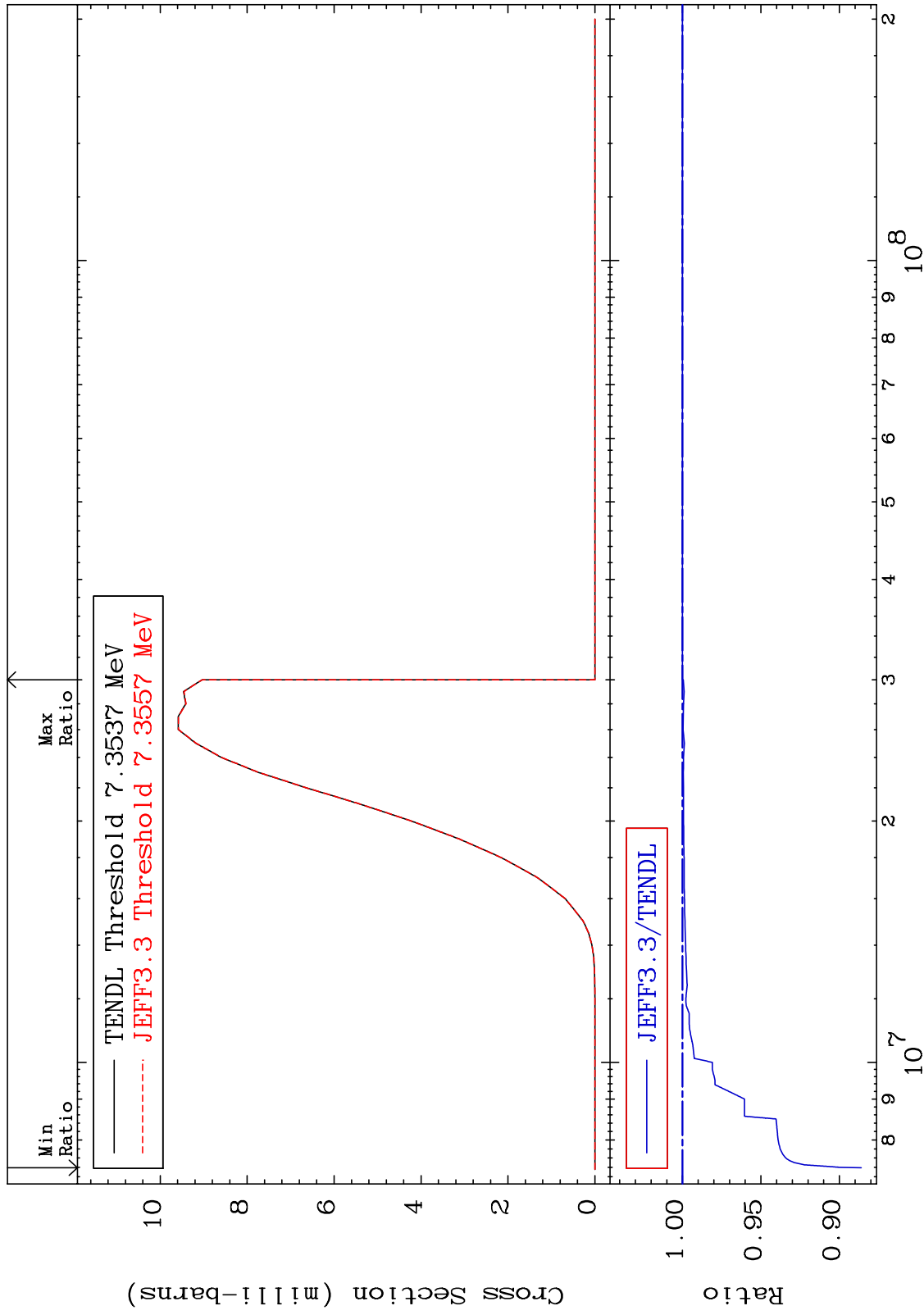
Incident Energy (eV)

44-Ru-99

MAT 4434

(n, t) : 43-Tc-97g
Radionuclide Production Cross Section -11.39 To 0.000 %

44-Ru-99



96

Incident Energy (eV)

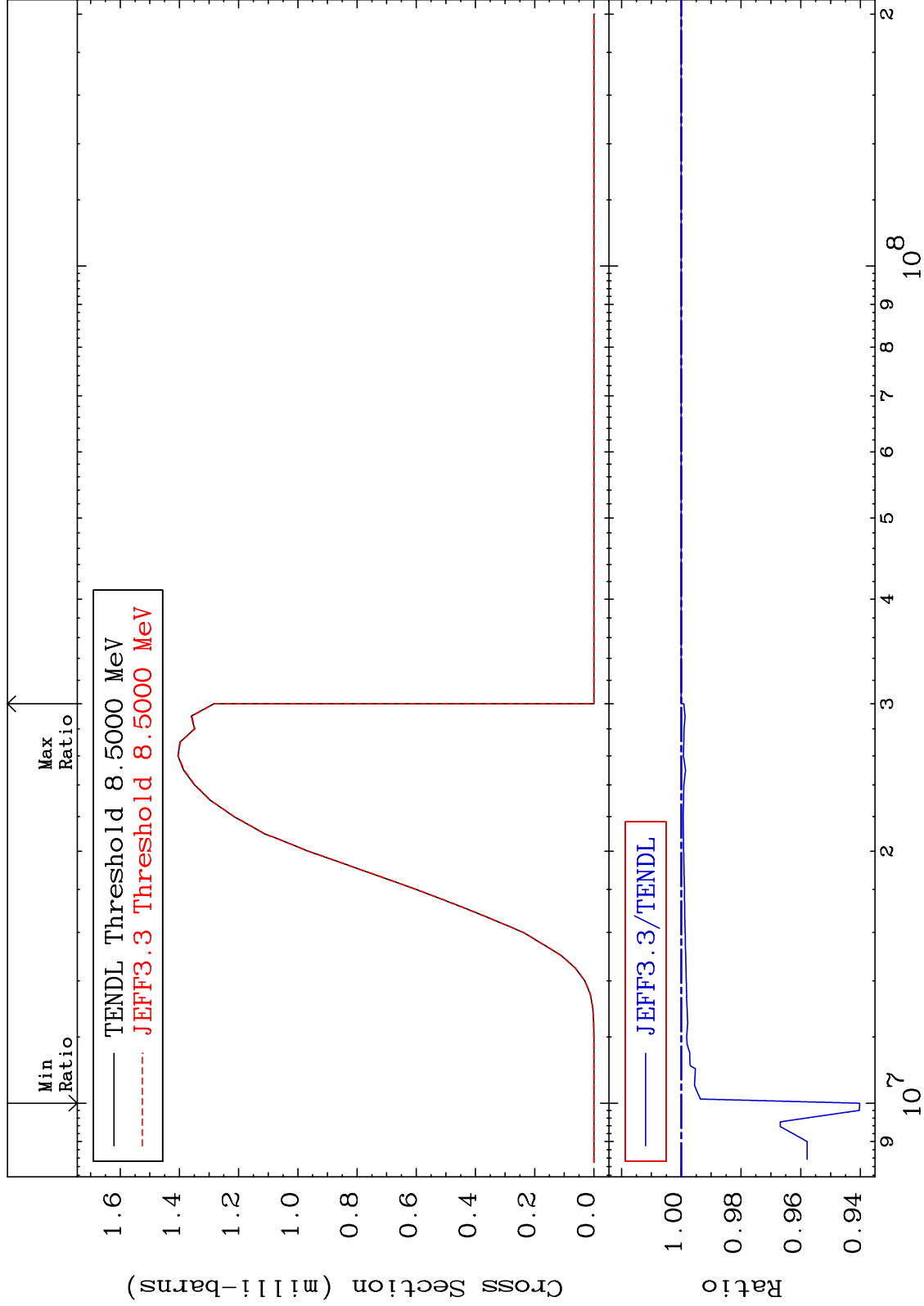
44-Ru-99

MAT 4434

(n, t) : 43-Tc-97m1

44-Ru-99

Radionuclide Production Cross Section -5.976 To 0.000 %



97

Incident Energy (eV)

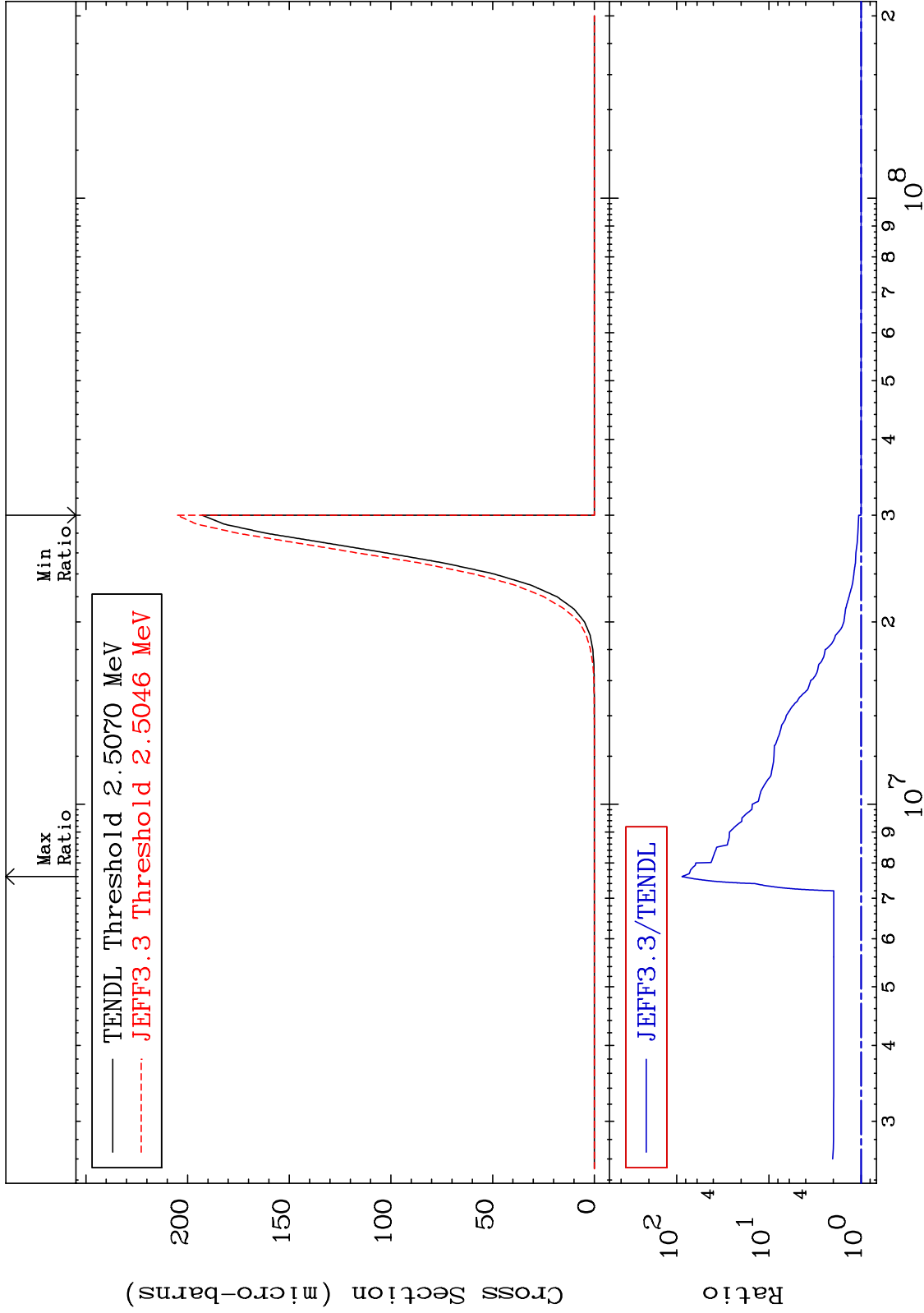
44-Ru-99

MAT 4434

(n, p) α : 41-Nb-95g

44-Ru-99

Radionuclide Production Cross Section 0.000 To 8650. %

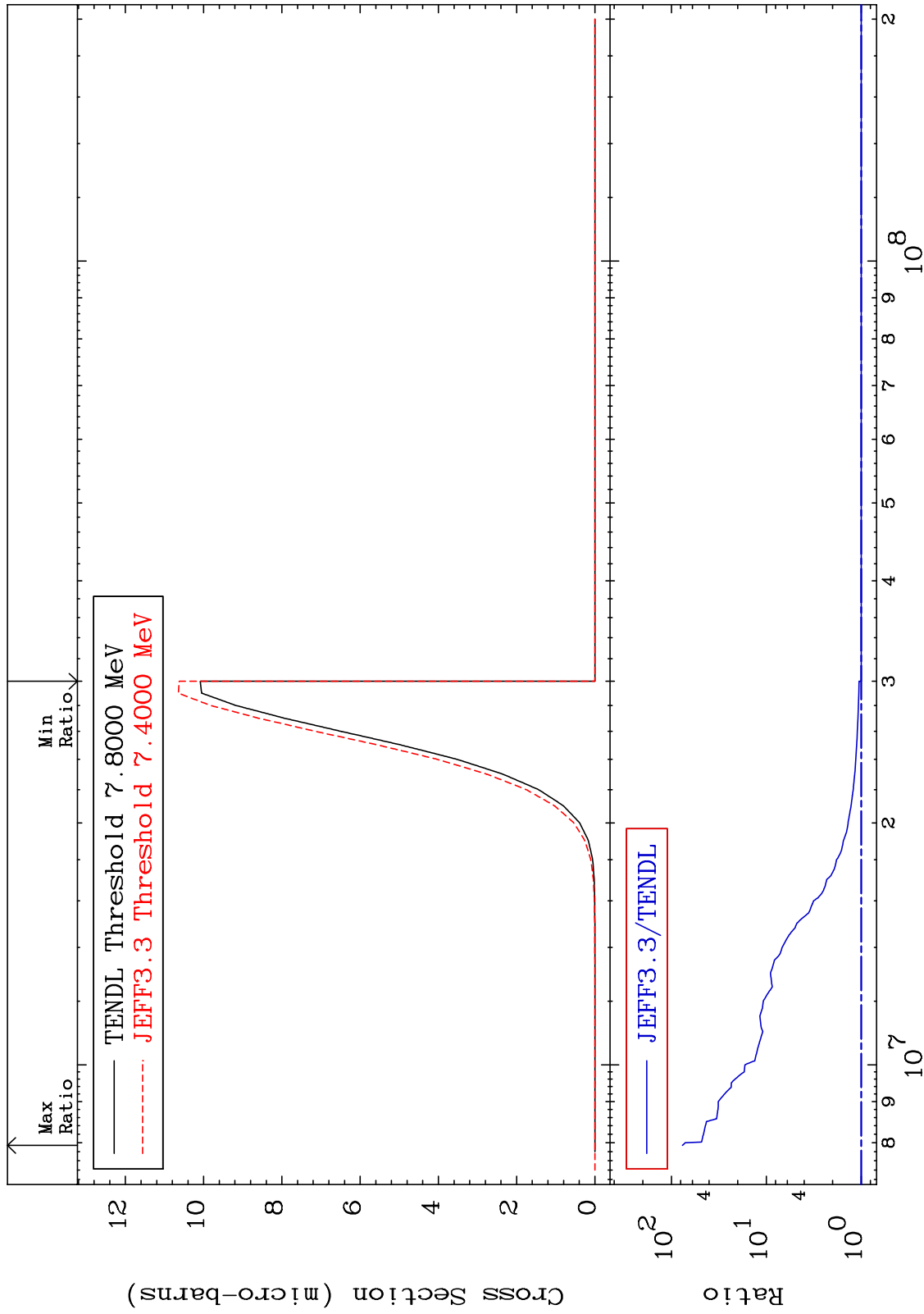


MAT 4434

(n,p) α : 41-Nb-95m1

44-Ru-99

Radionuclide Production Cross Section 0.000 To 7540. %



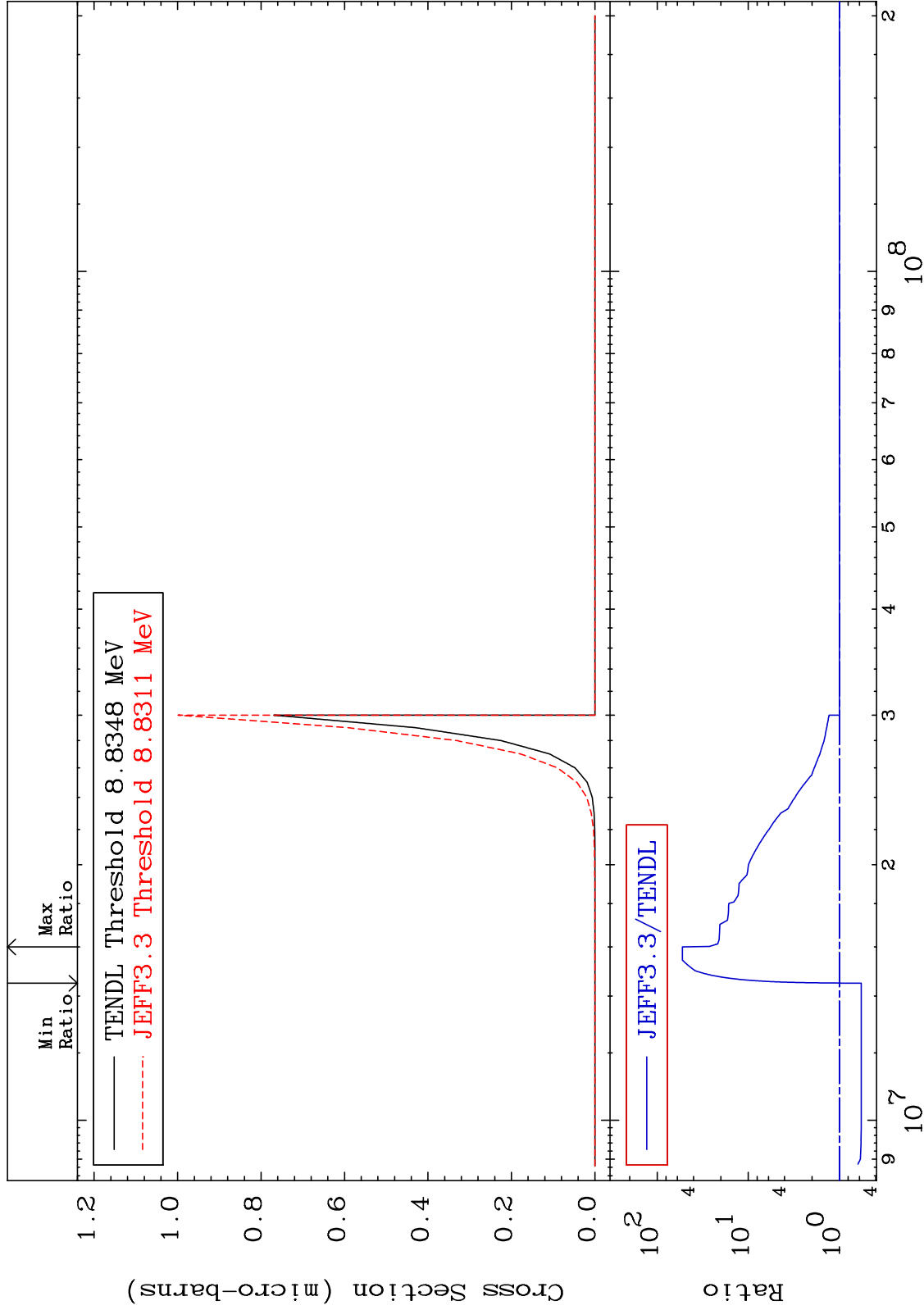
99

MAT 4434

(n, d) α : 41-Nb-94g

44-Ru-99

Radionuclide Production Cross Section -42.55 To 5183. %



100

Incident Energy (eV)

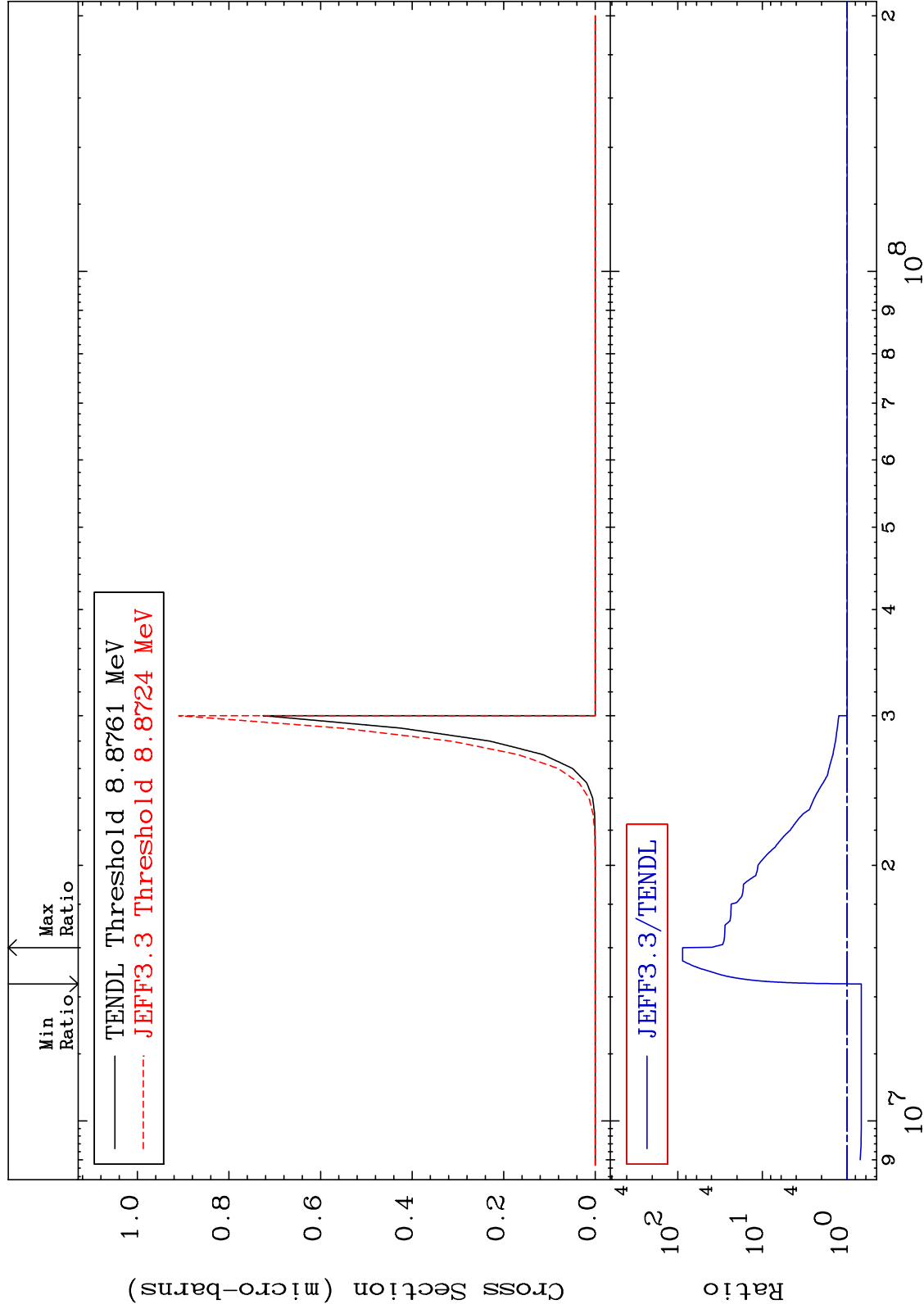
44-Ru-99

MAT 4434

(n, d) α : 41-Nb-94m1

44-Ru-99

Radionuclide Production Cross Section -32.03 To 8645. %



101

Incident Energy (eV)

44-Ru-99