

Program Complot
(Version 2018-1)

by

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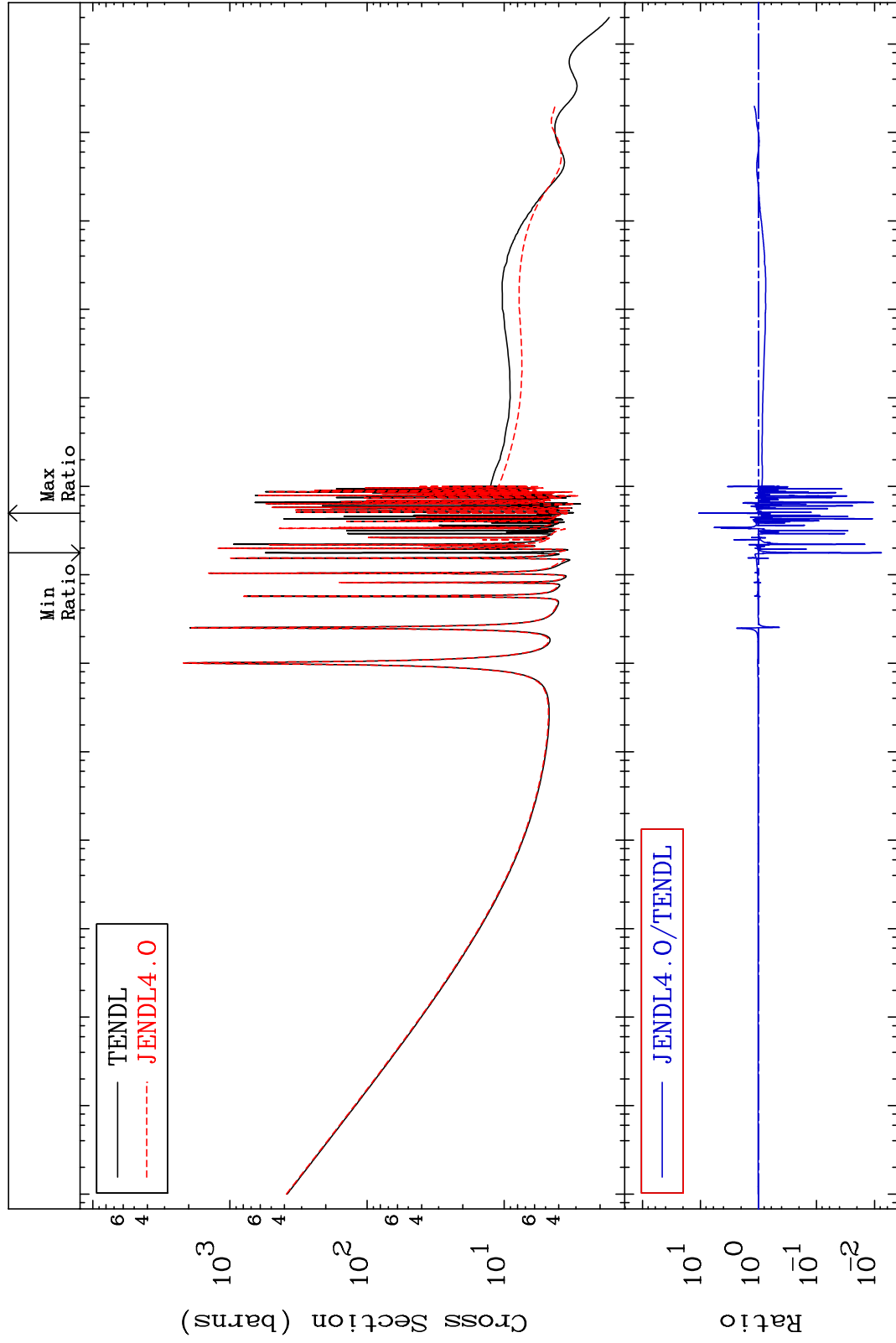
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4434

Total
Cross Section

44-Ru-99
-99.24 To 972.7 %



44-Ru-99

Incident Energy (eV)

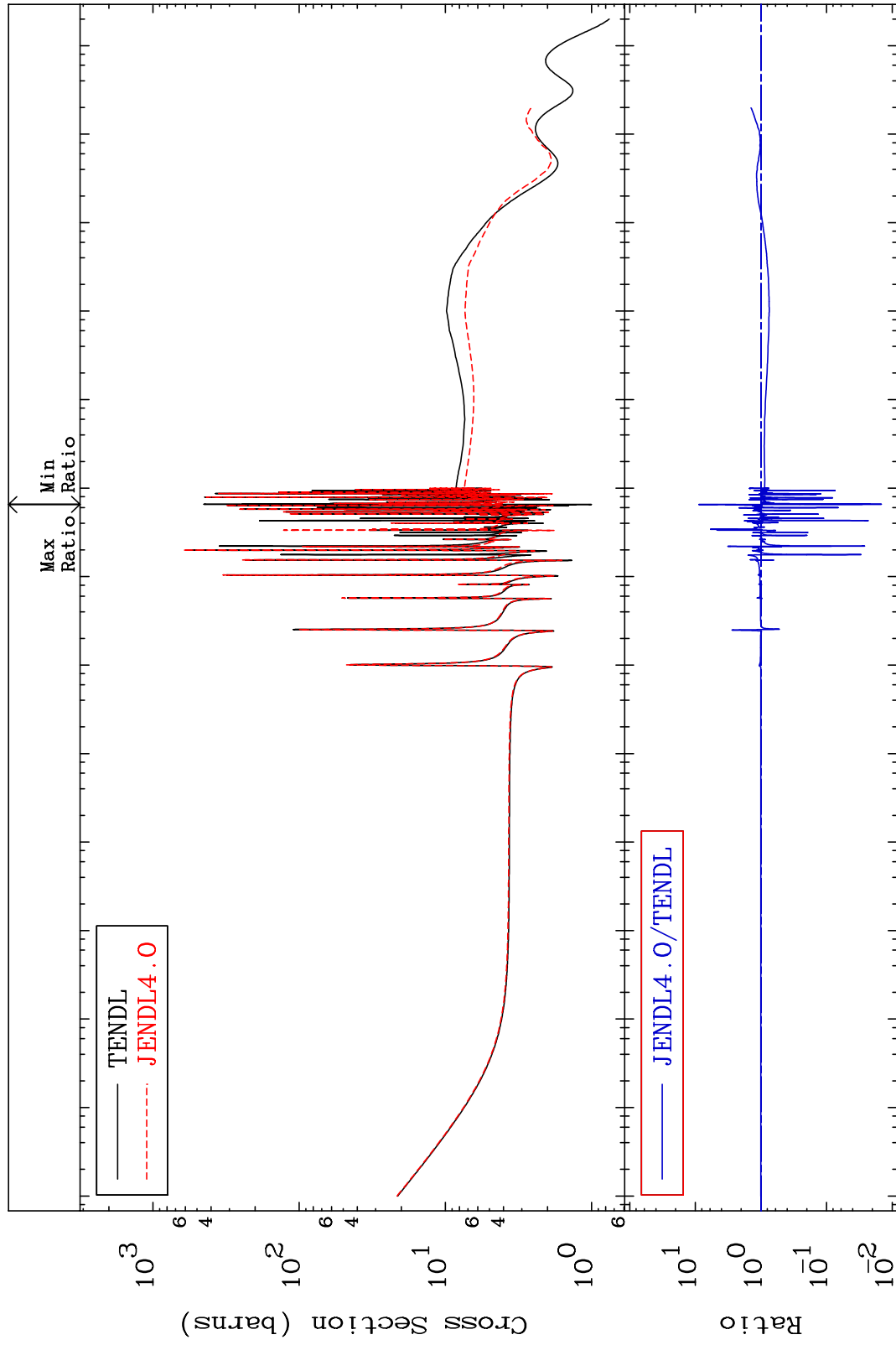
MAT 4434

Elastic

44-Ru-99

Cross Section

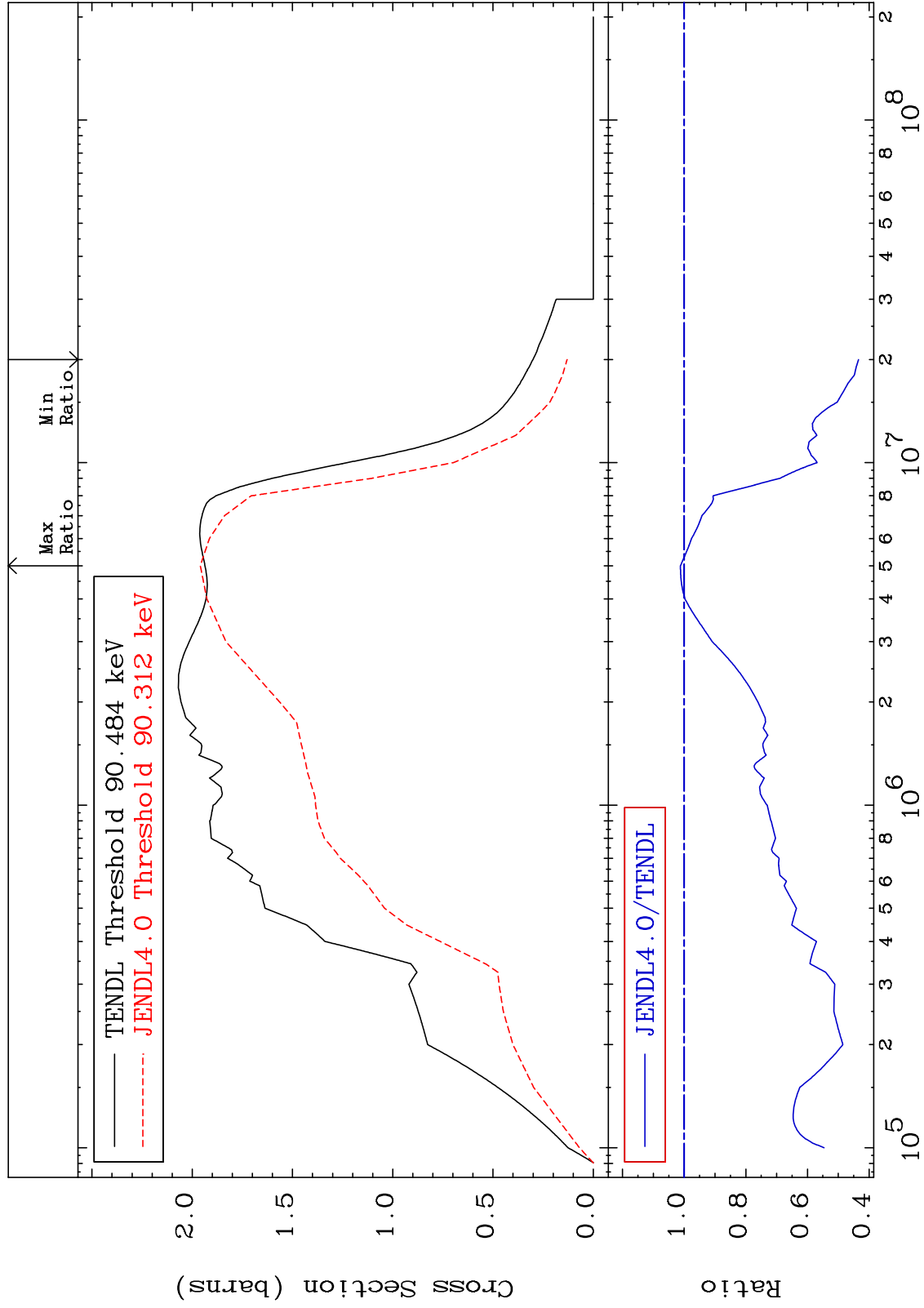
-98.55 To 789.6 %



MAT 4434

Inelastic
Cross Section

44-Ru-99
-56.57 To 1.209 %



3

Incident Energy (eV)

44-Ru-99

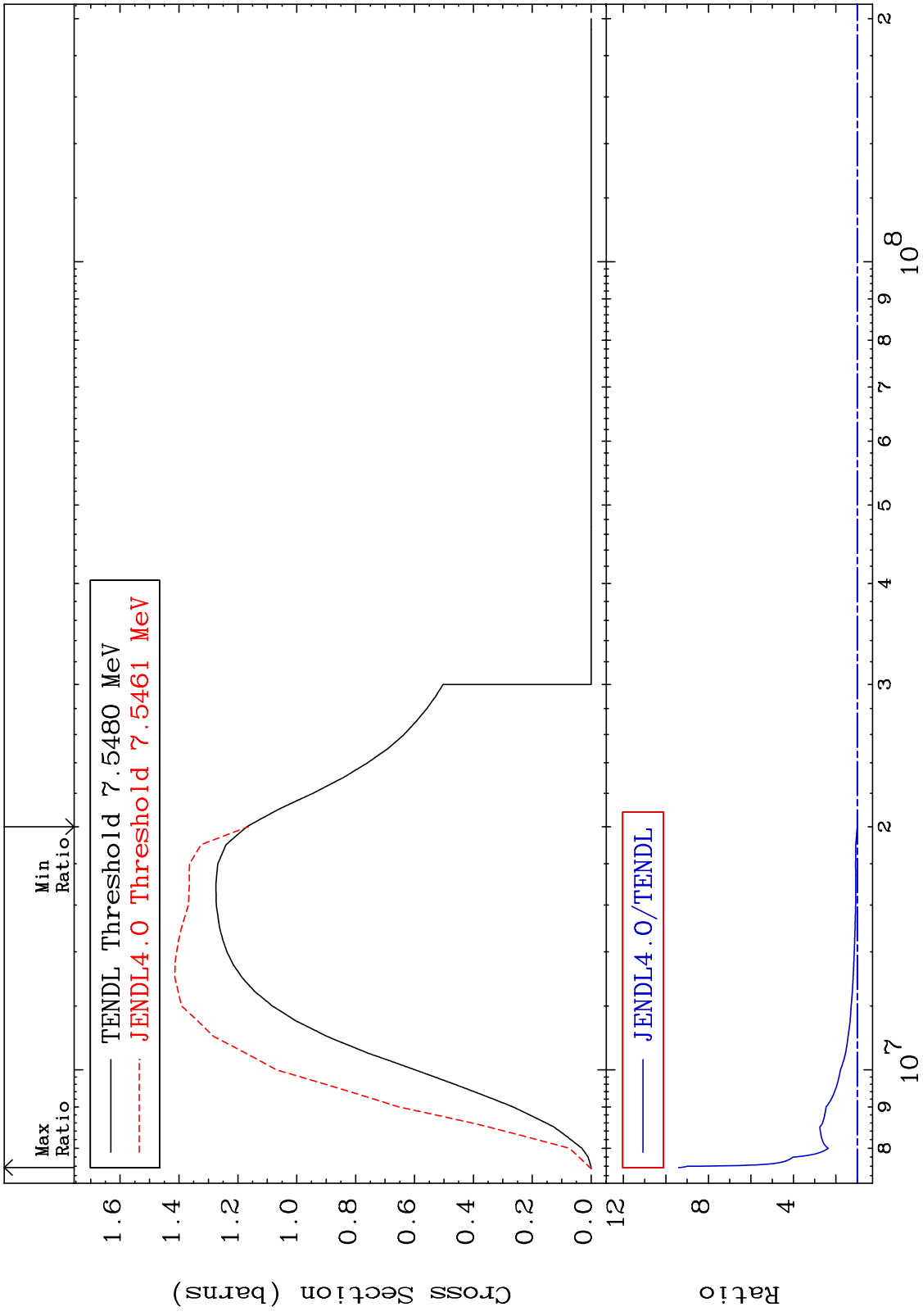
MAT 4434

(n,2n)

44-Ru-99

Cross Section

-0.440 To 840.0 %



4

Incident Energy (eV)

44-Ru-99

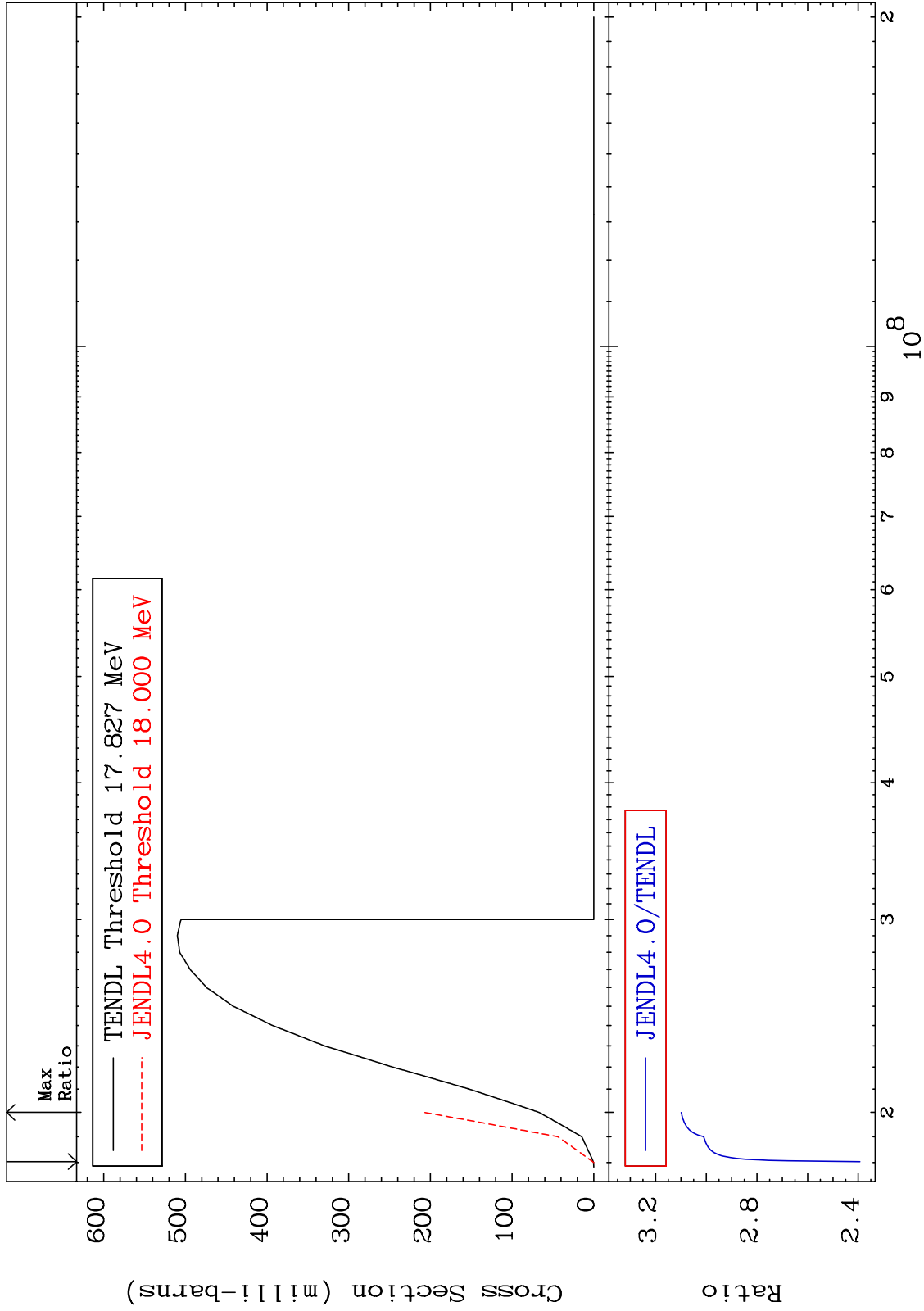
MAT 4434

(n,3n)

44-Ru-99

Cross Section

139.3 To 209.9 %



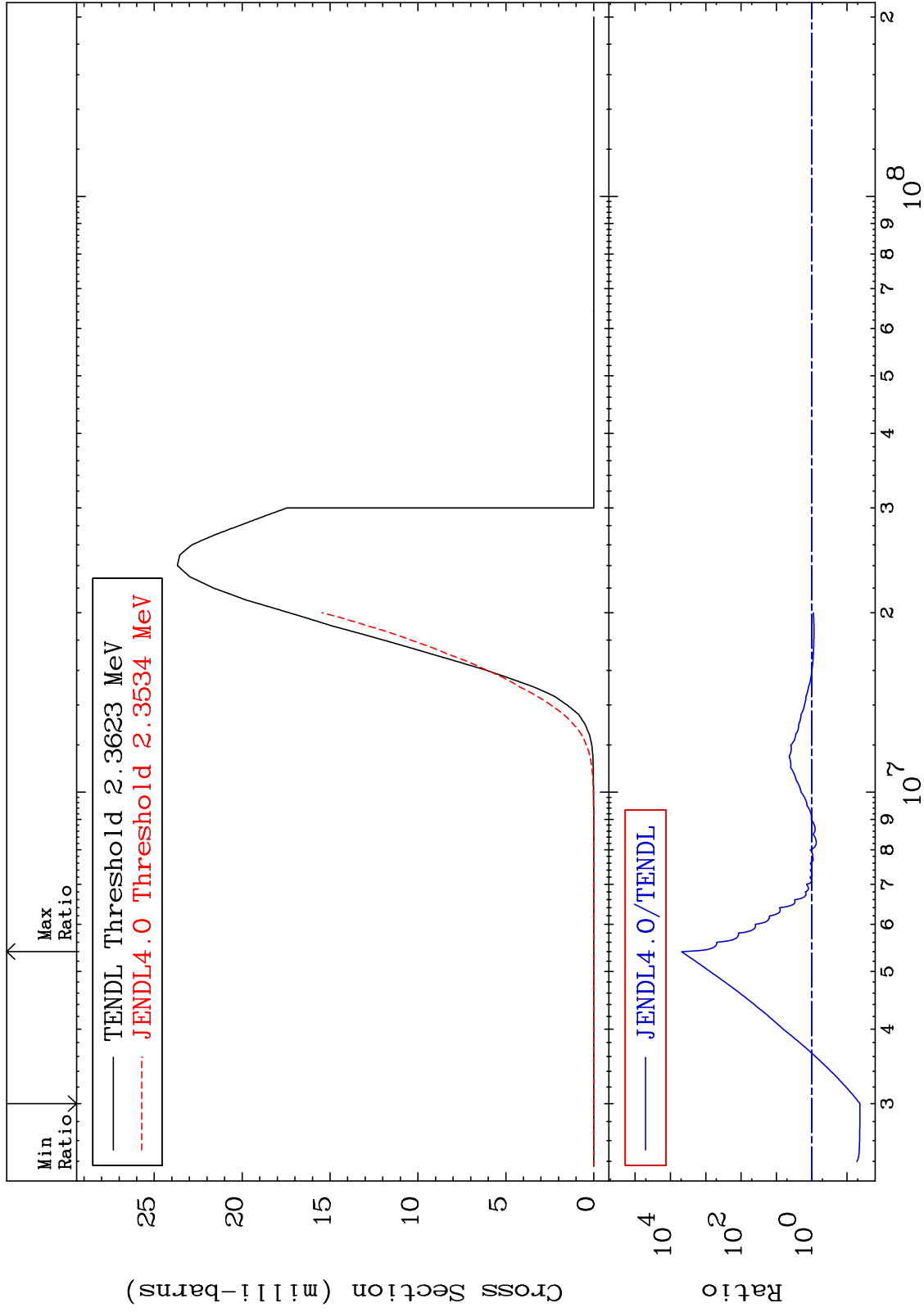
MAT 4434

(n,n') α

44-Ru-99

Cross Section

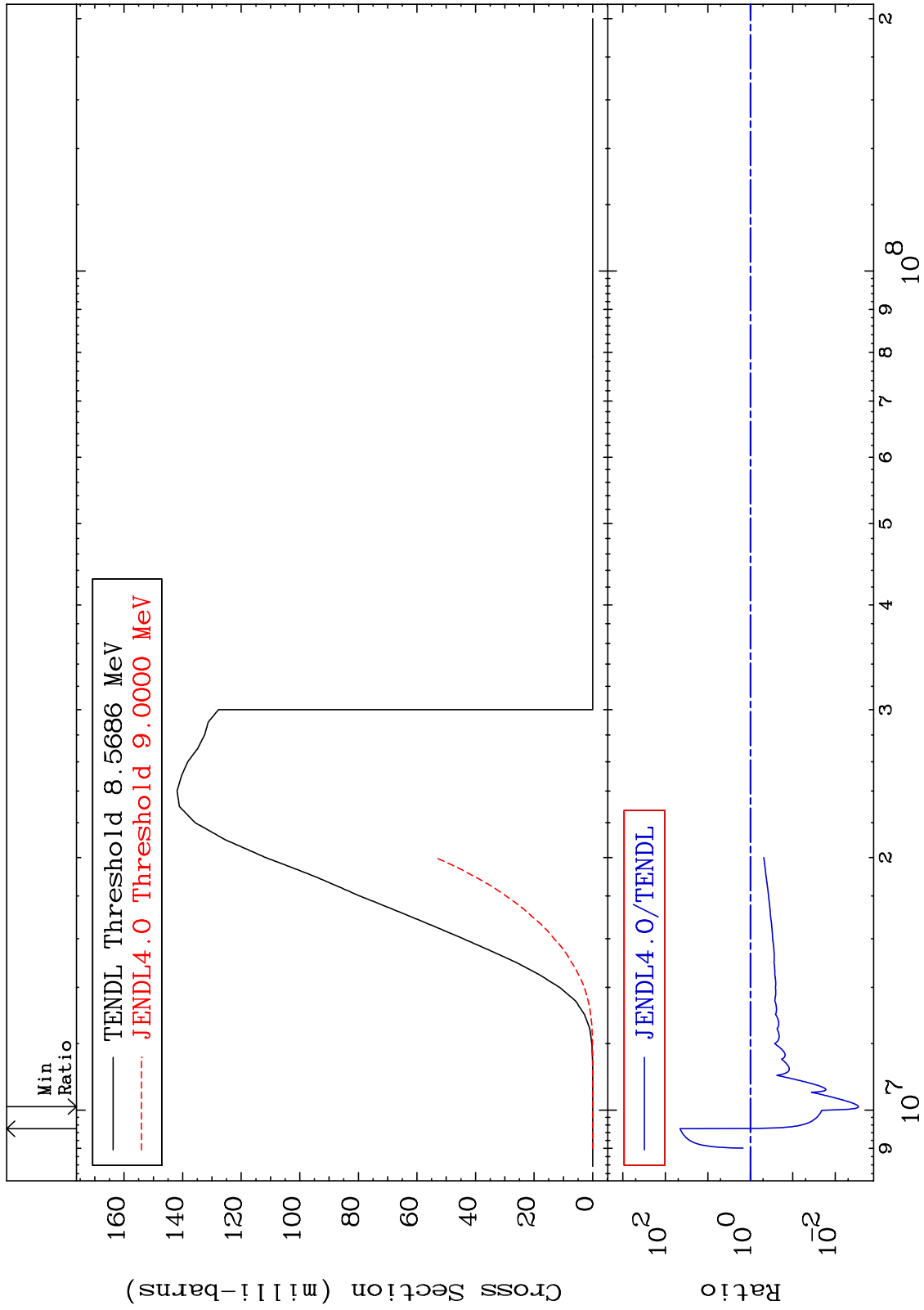
-95.70 To 9999. %



MAT 4434

(n,n') p
Cross Section

44-Ru-99
-99.71 To 4409. %



7

Incident Energy (eV)

44-Ru-99

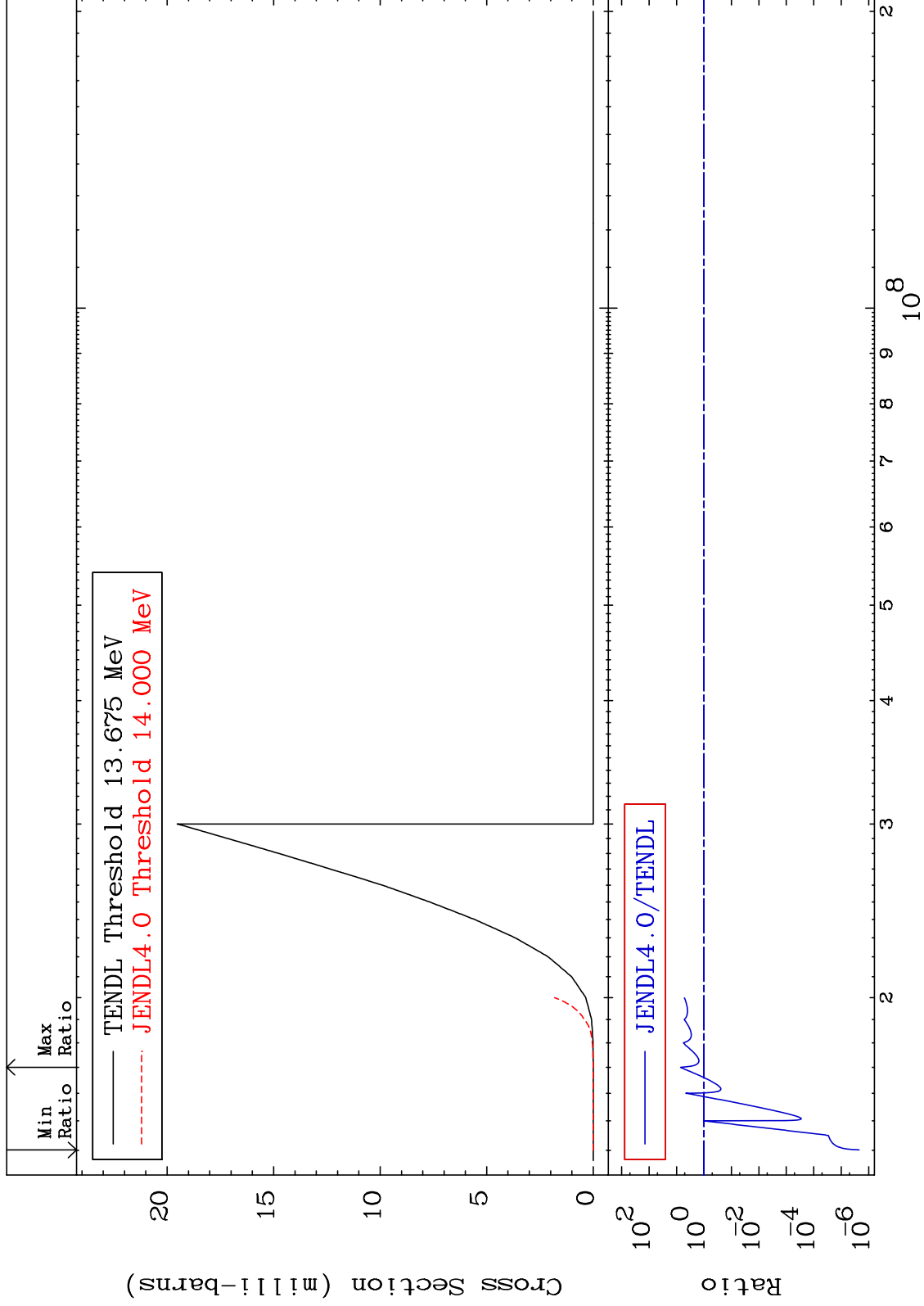
MAT 4434

(n, n') d

44-Ru-99

Cross Section

-100.0 To 609.1 %



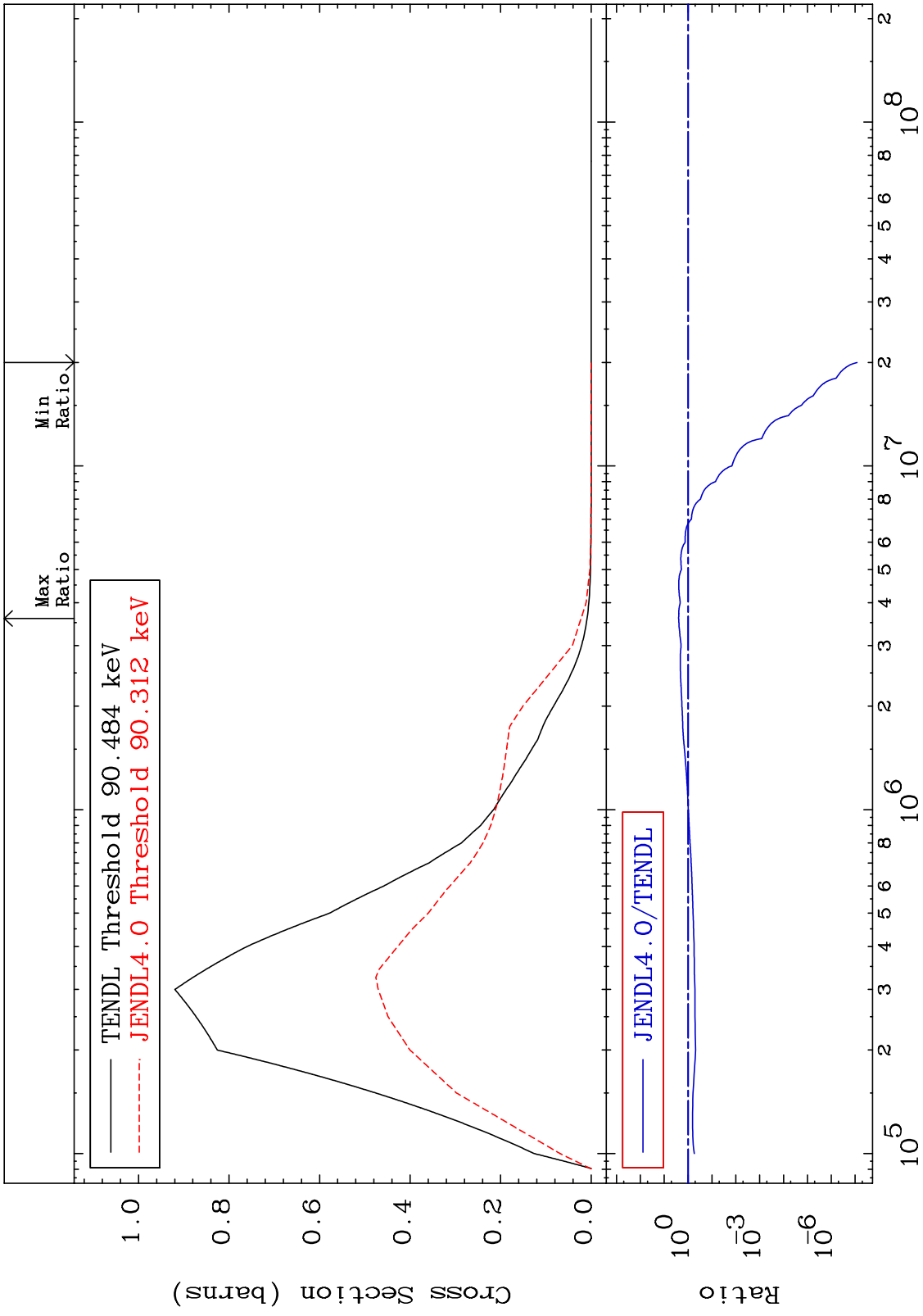
MAT 4434

MT= 51 (n, n') Level

44-Ru-99

-100.0 To 149.1 %

Cross Section



9

44-Ru-99

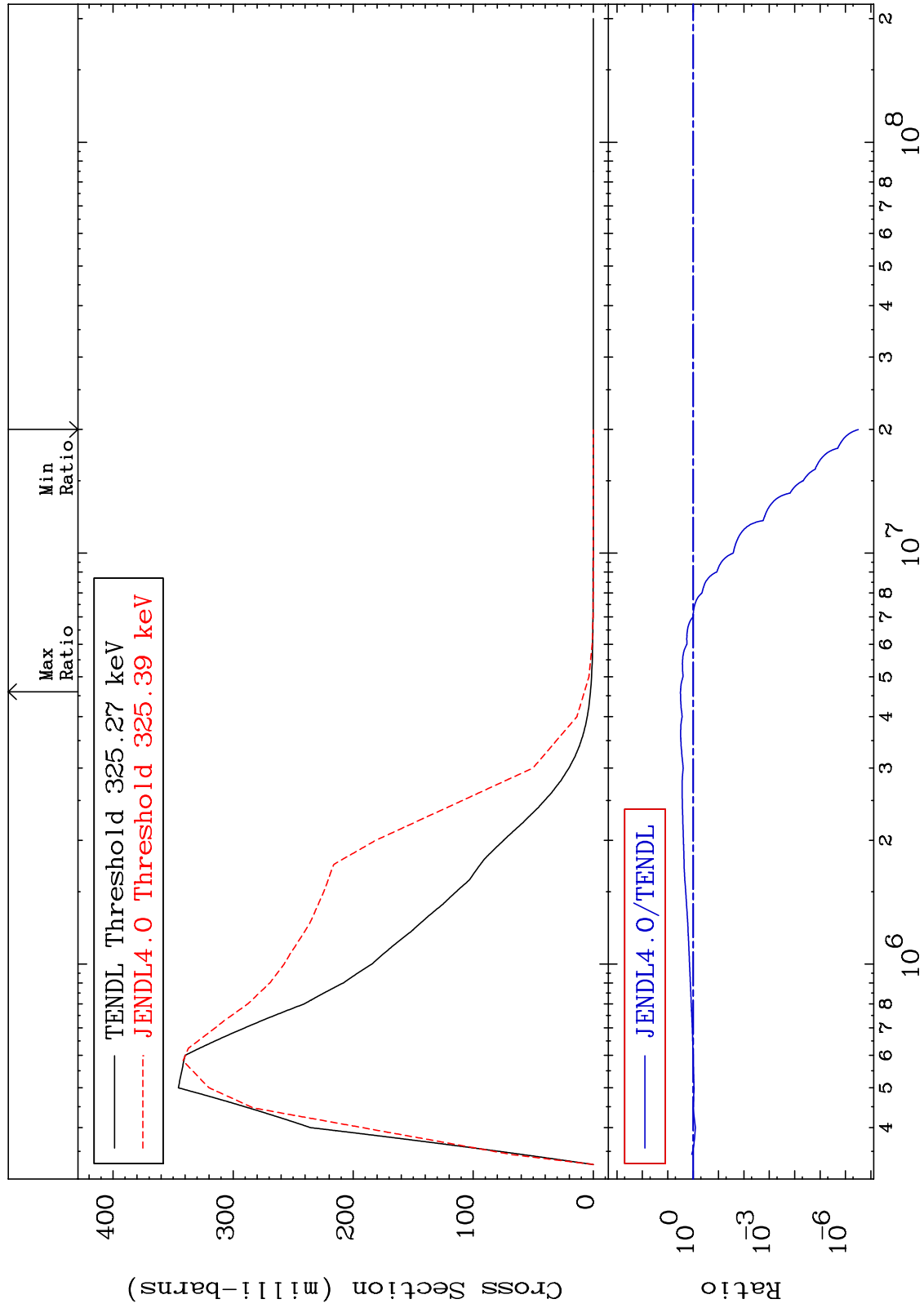
MAT 4434

MT= 52 (n,n') Level

44-Ru-99

-100.0 To 216.6 %

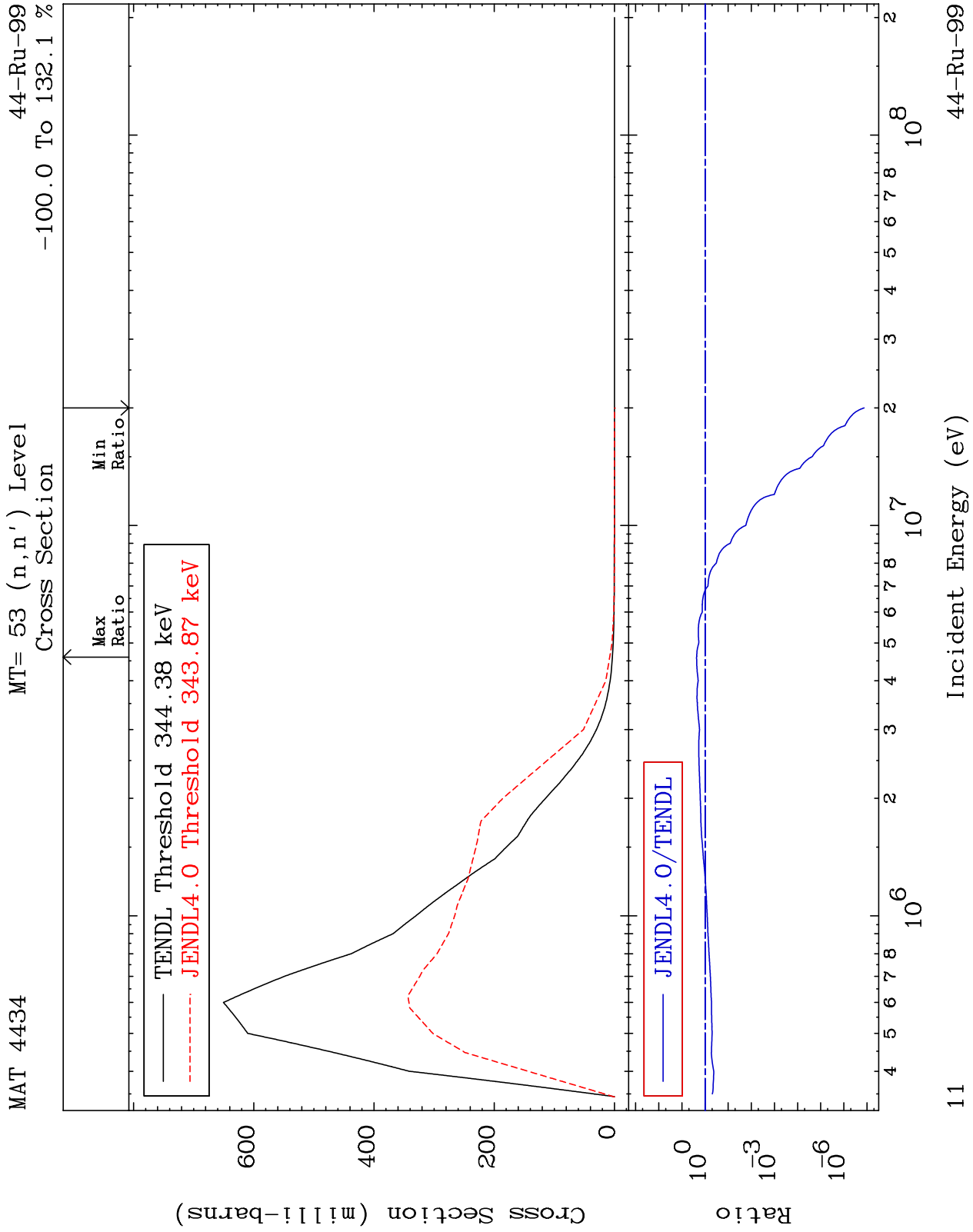
Cross Section



10

44-Ru-99

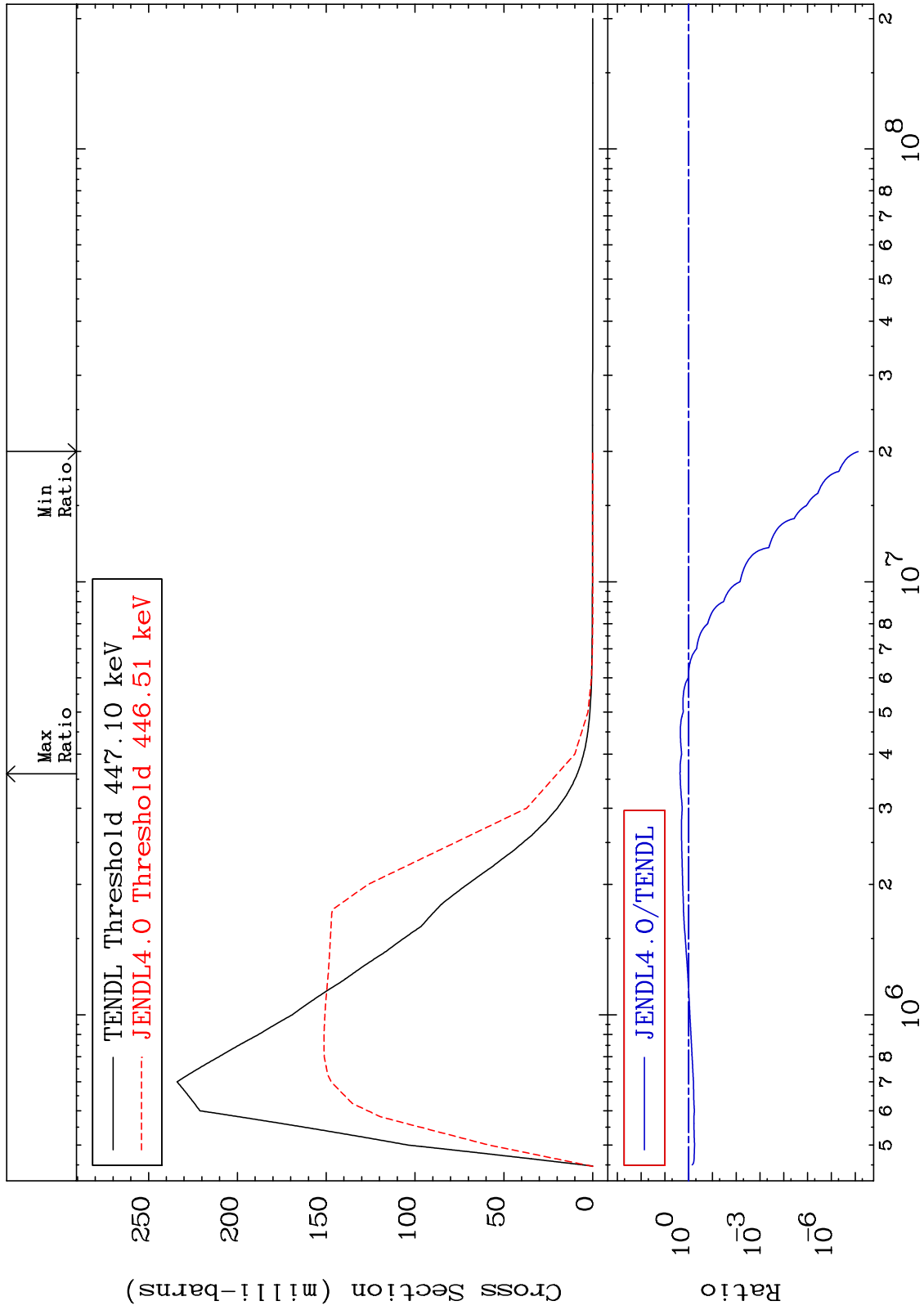
44-Ru-99



MAT 4434

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

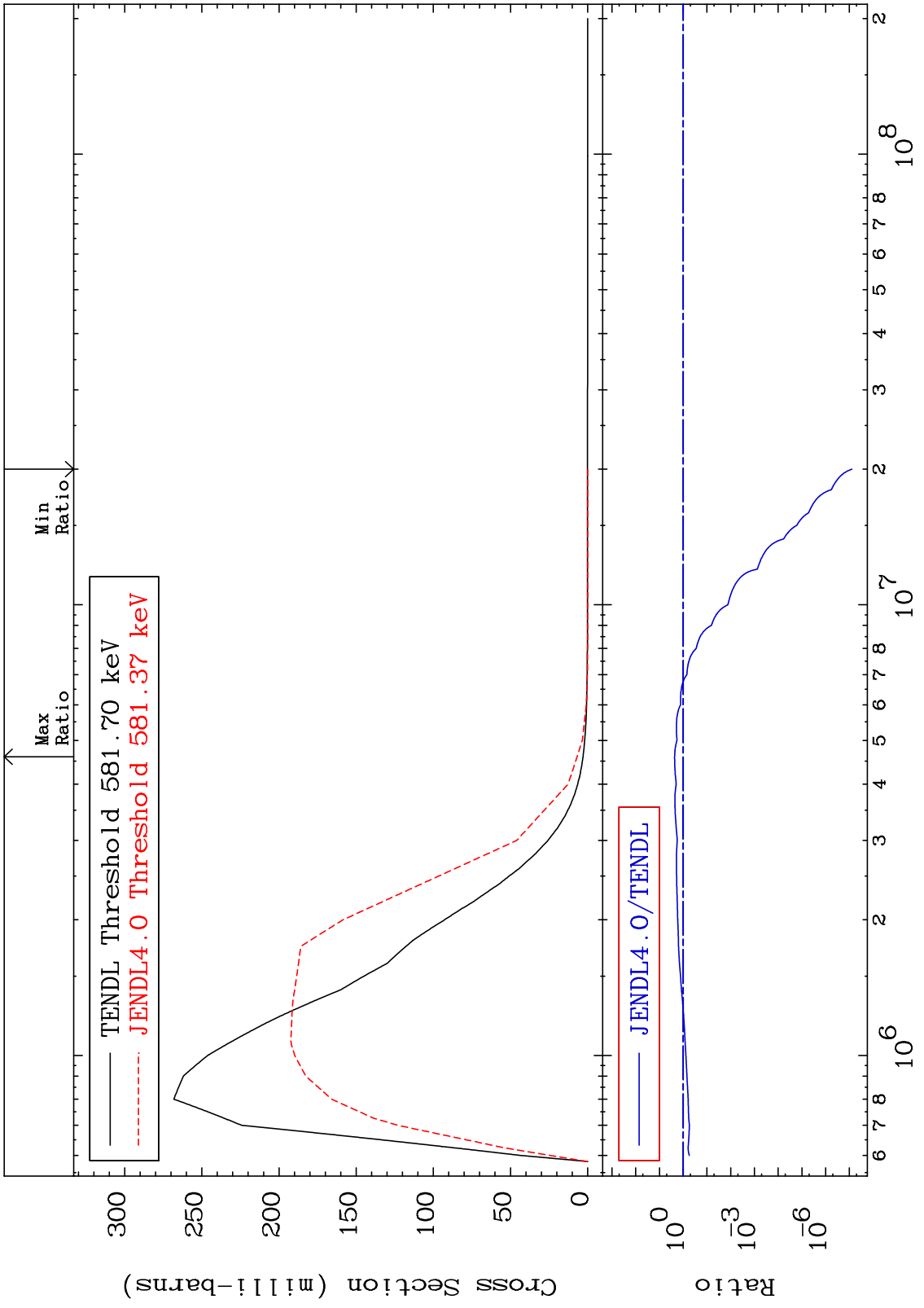
44-Ru-99
-100.0 To 130.8 %



MAT 4434

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

44-Ru-99
-100.0 To 130.8 %



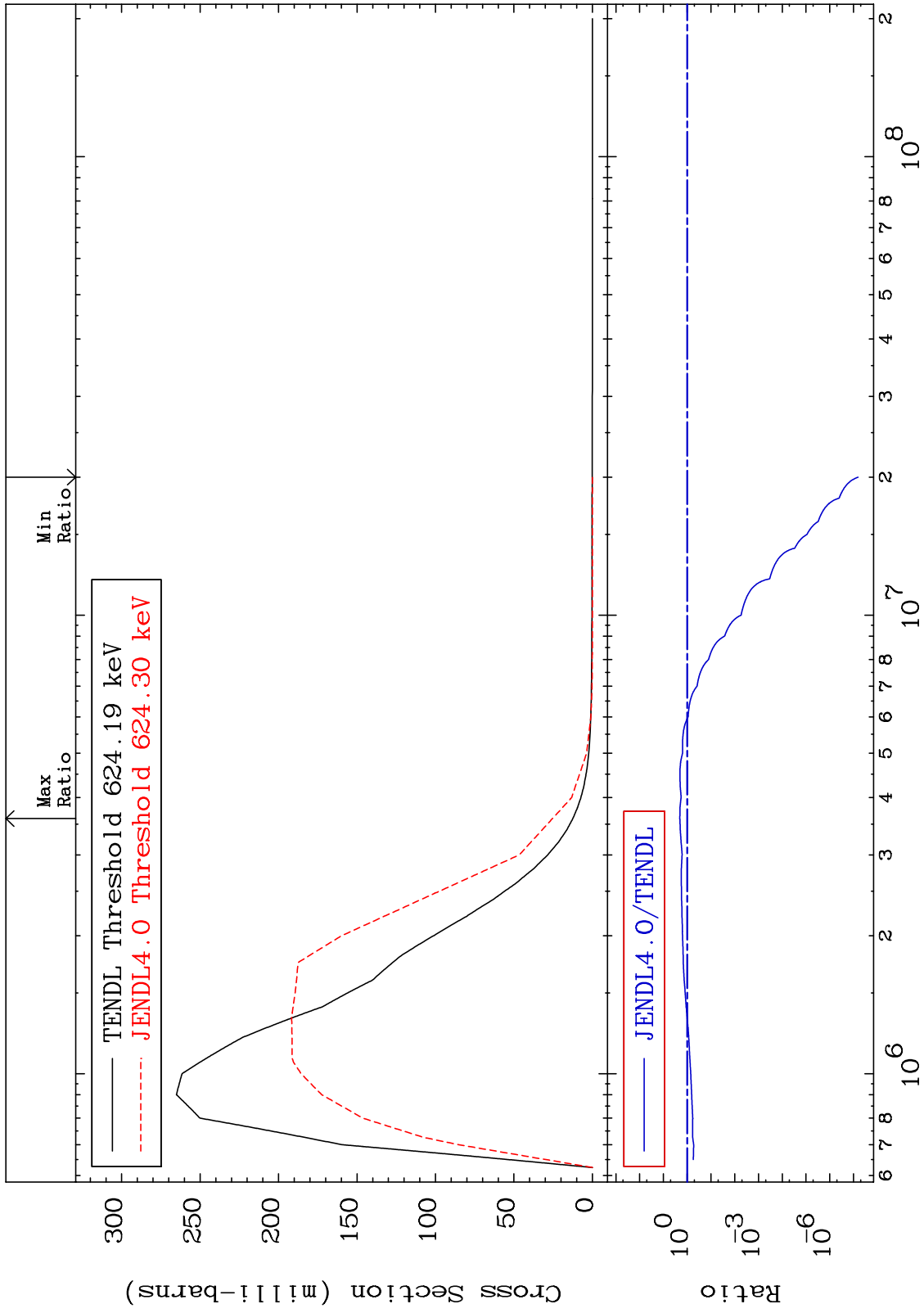
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-100.0 To 104.8 %



14

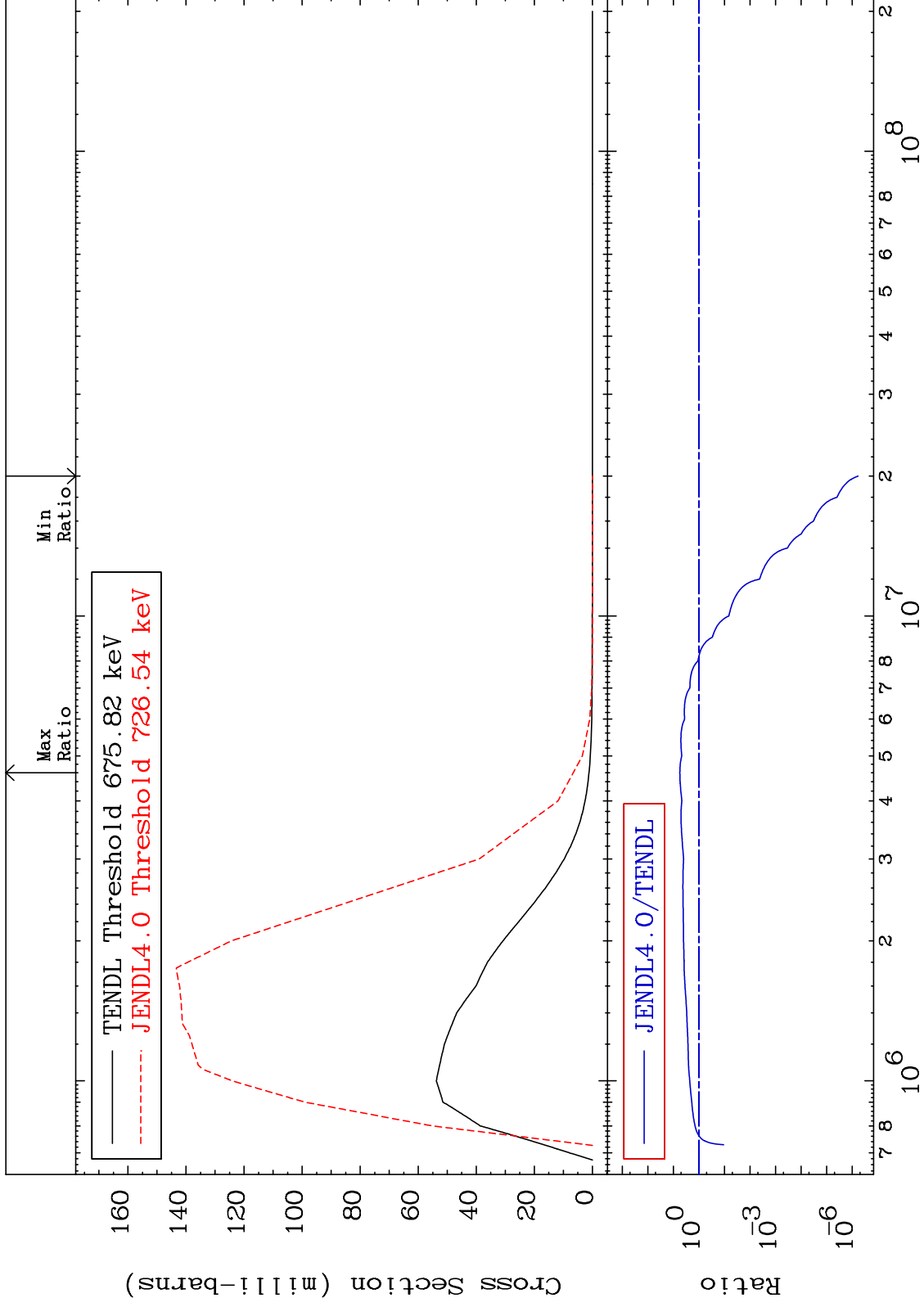
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-100.0 To 464.6 %



15

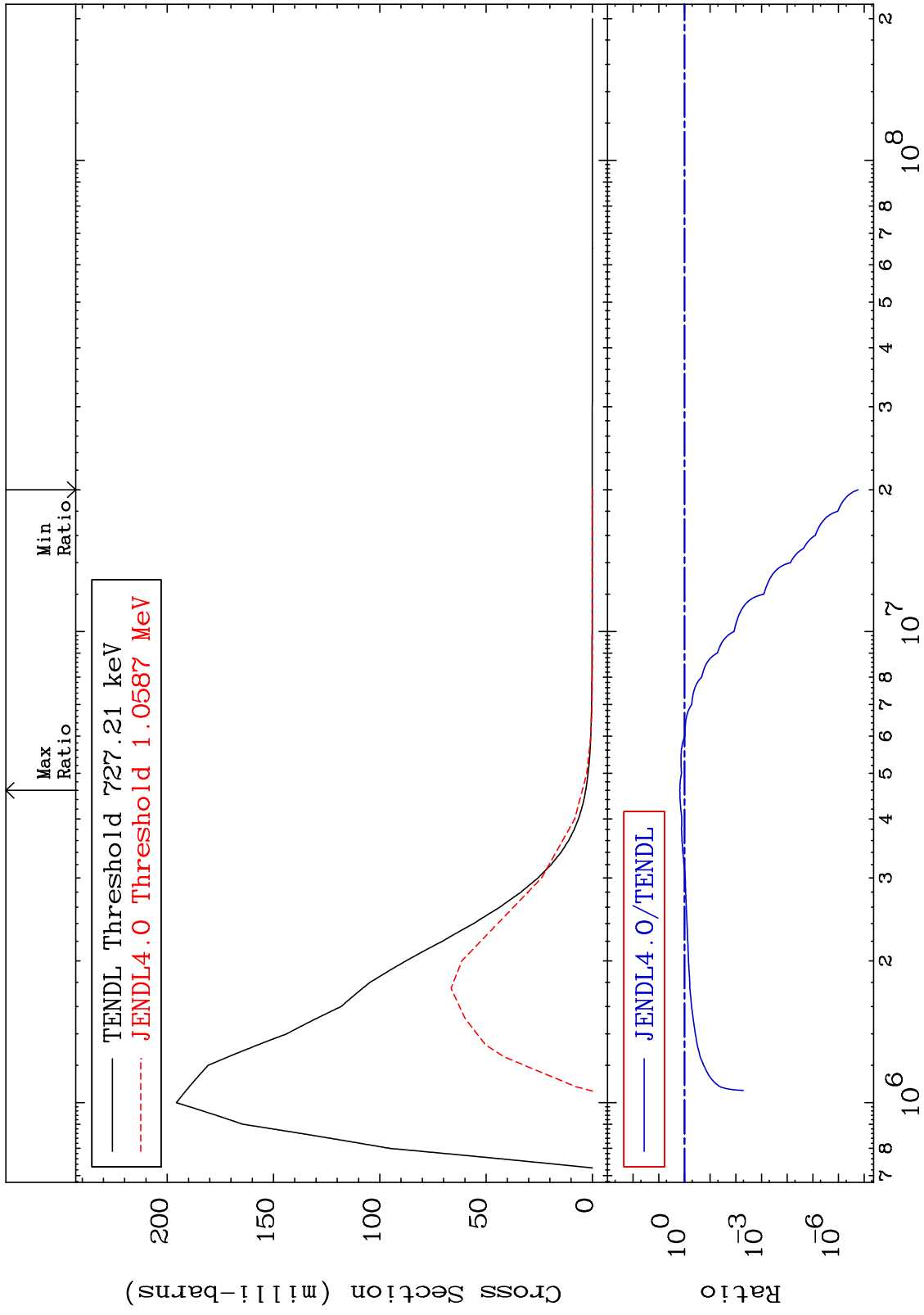
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-100.0 To 51.77 %



16

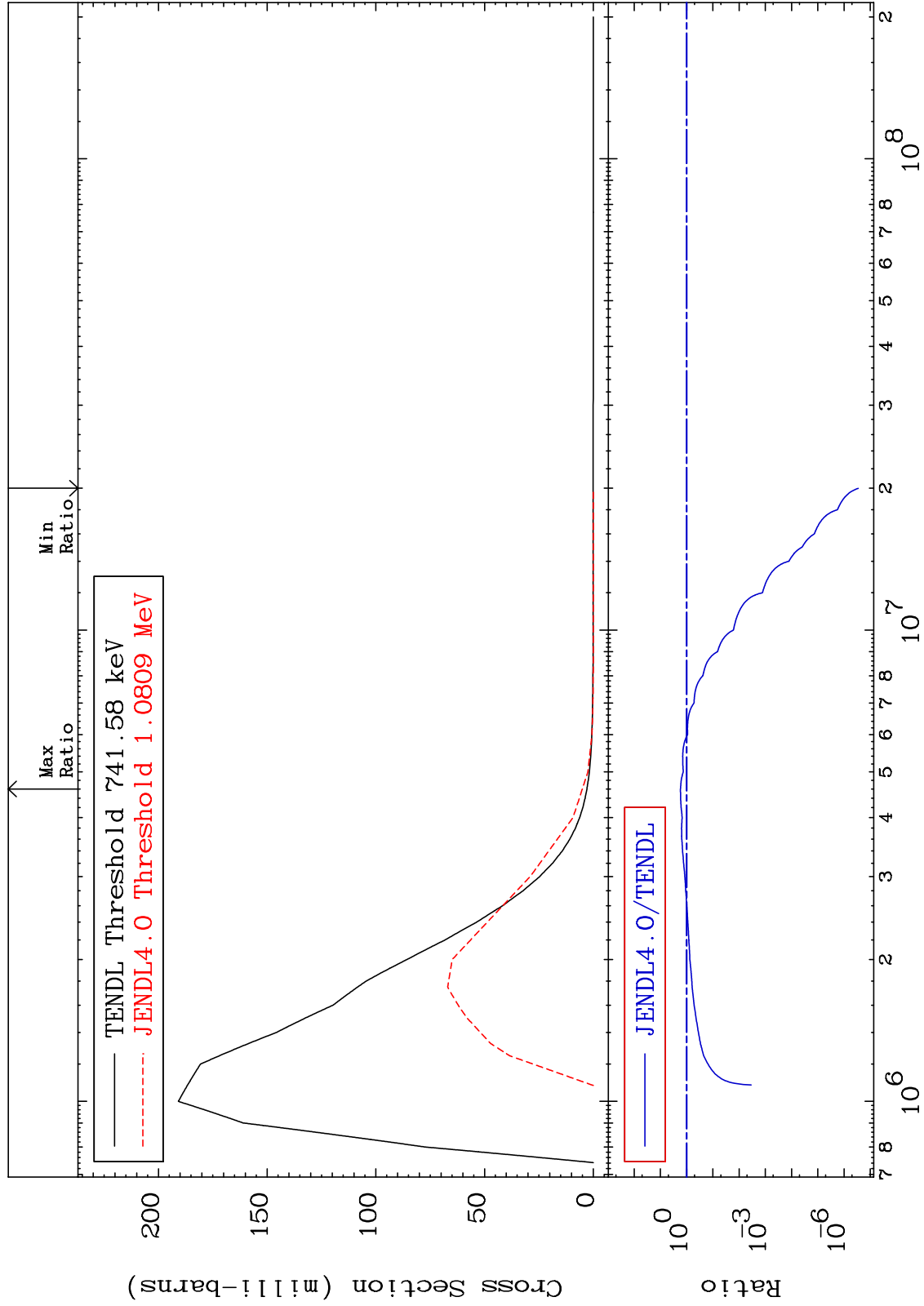
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-100.0 To 72.46 %



17

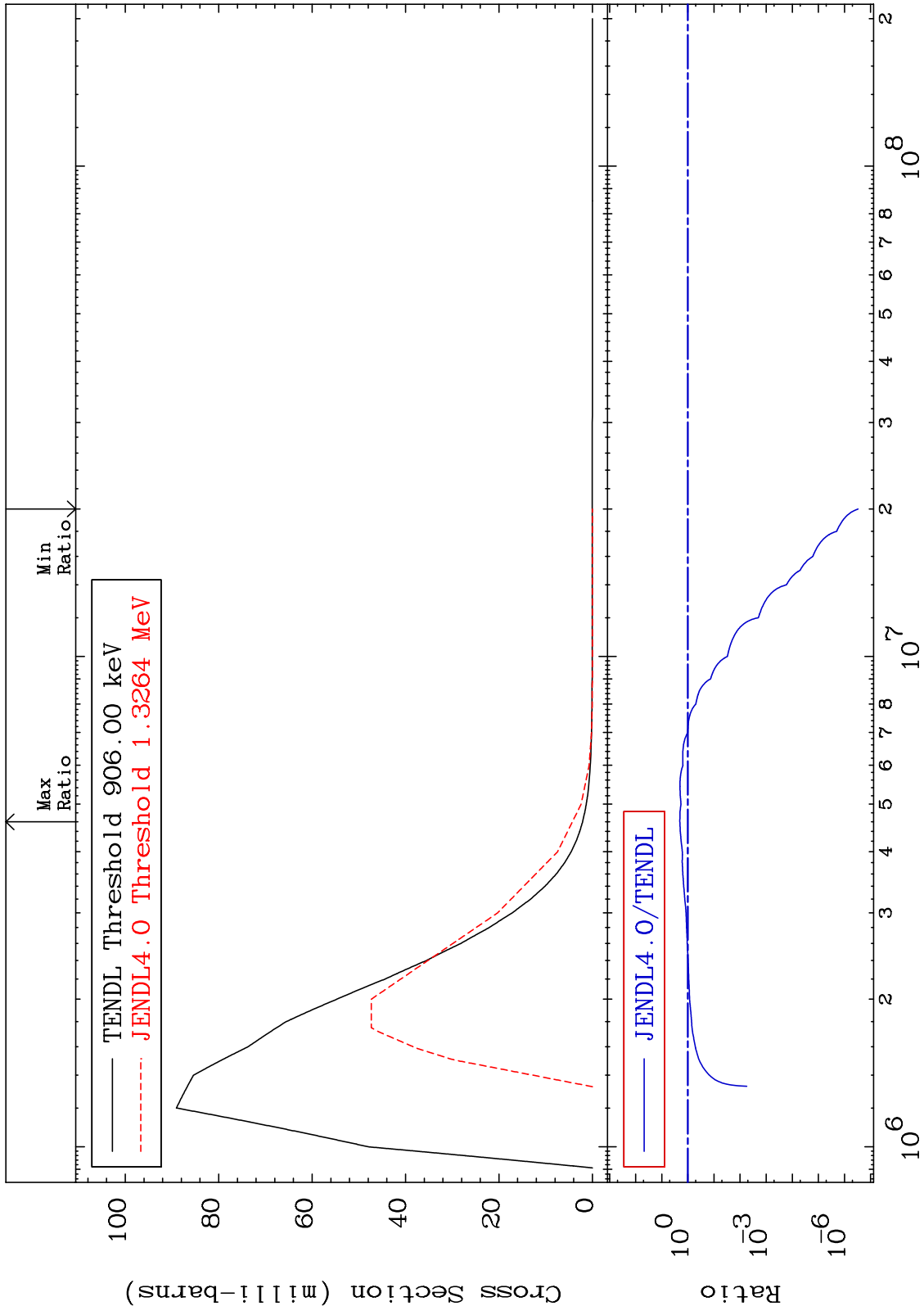
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-100.0 To 104.0 %



18

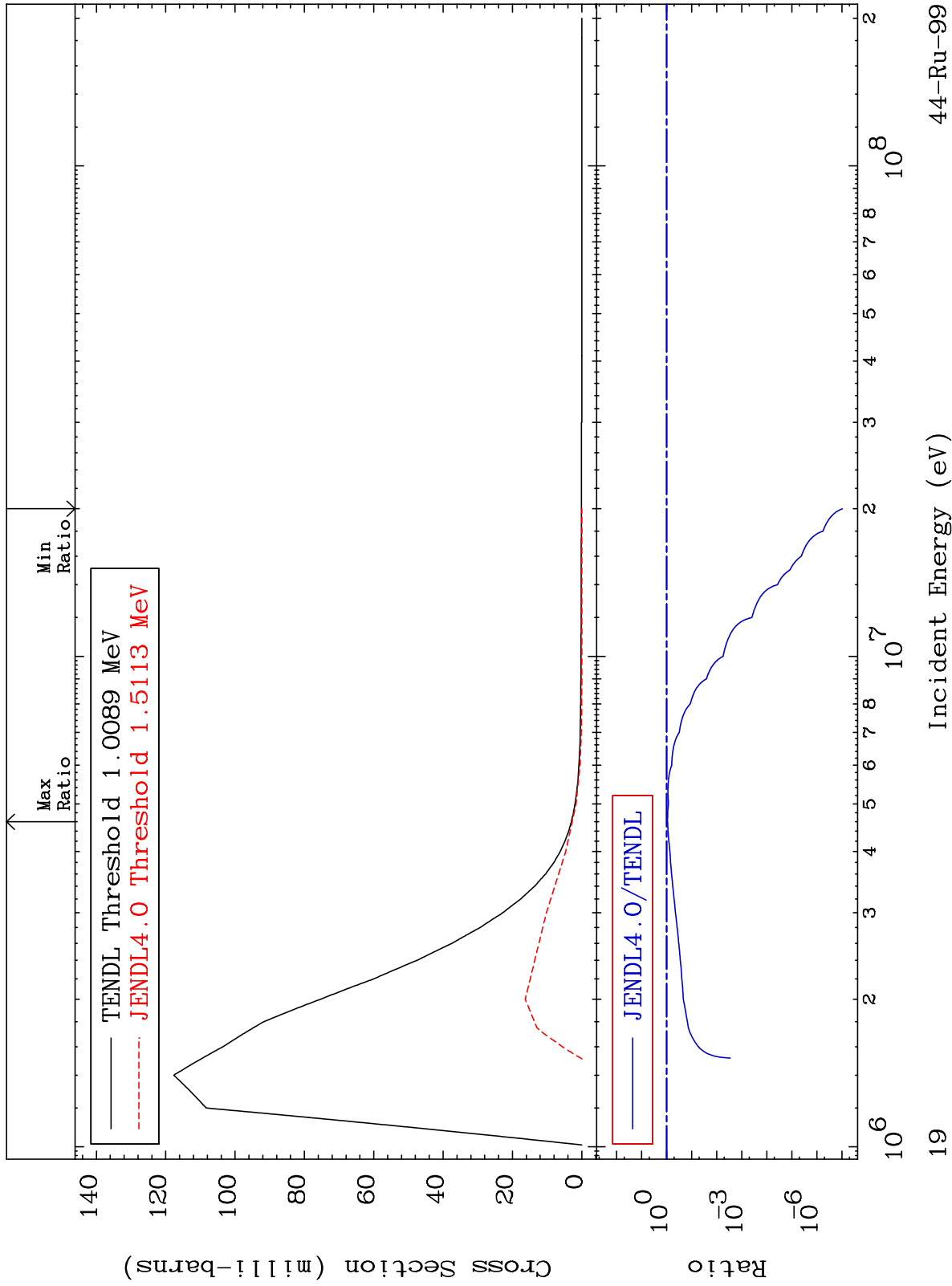
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-100.0 To -7.600%

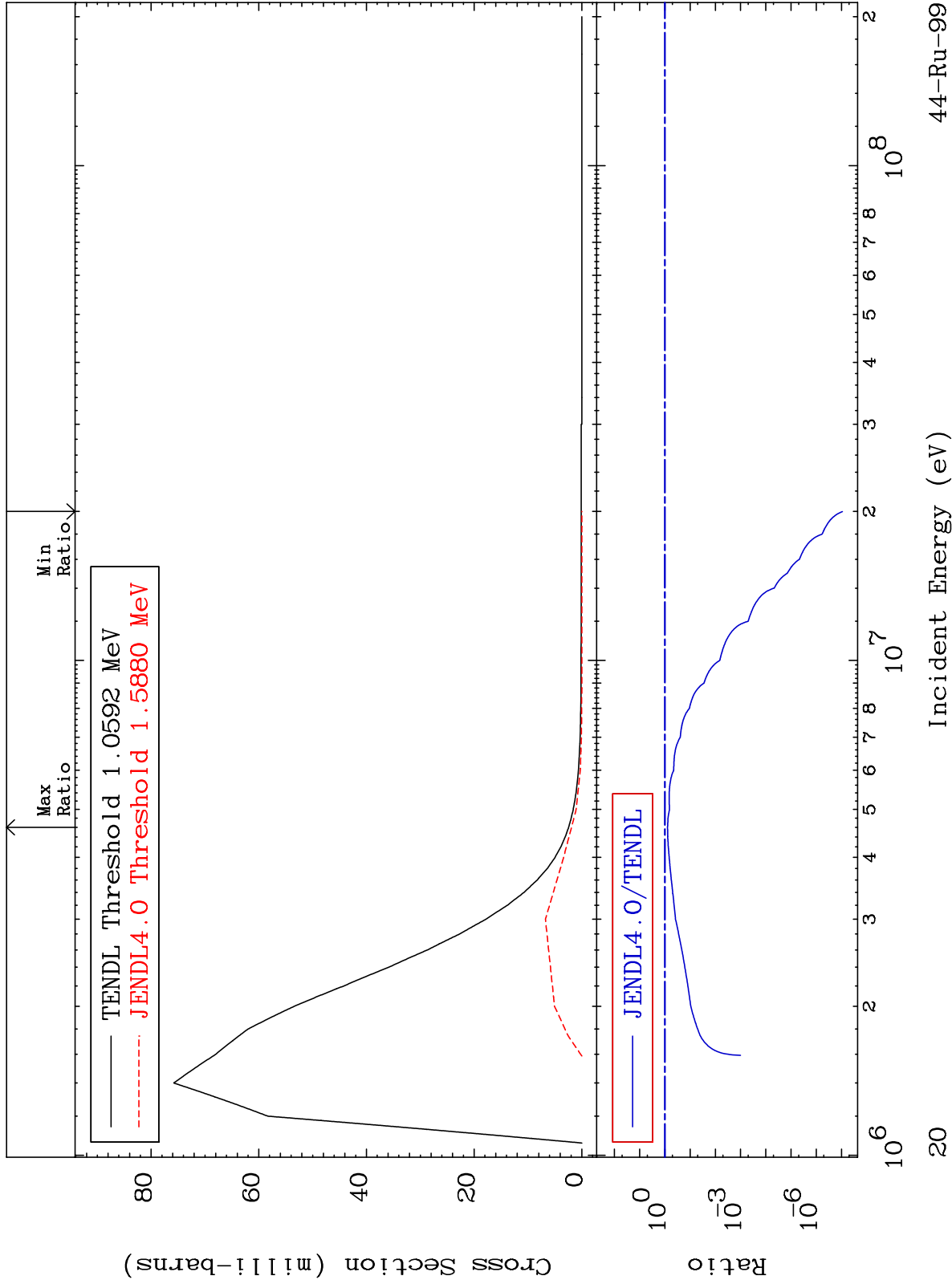


19

MAT 4434

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

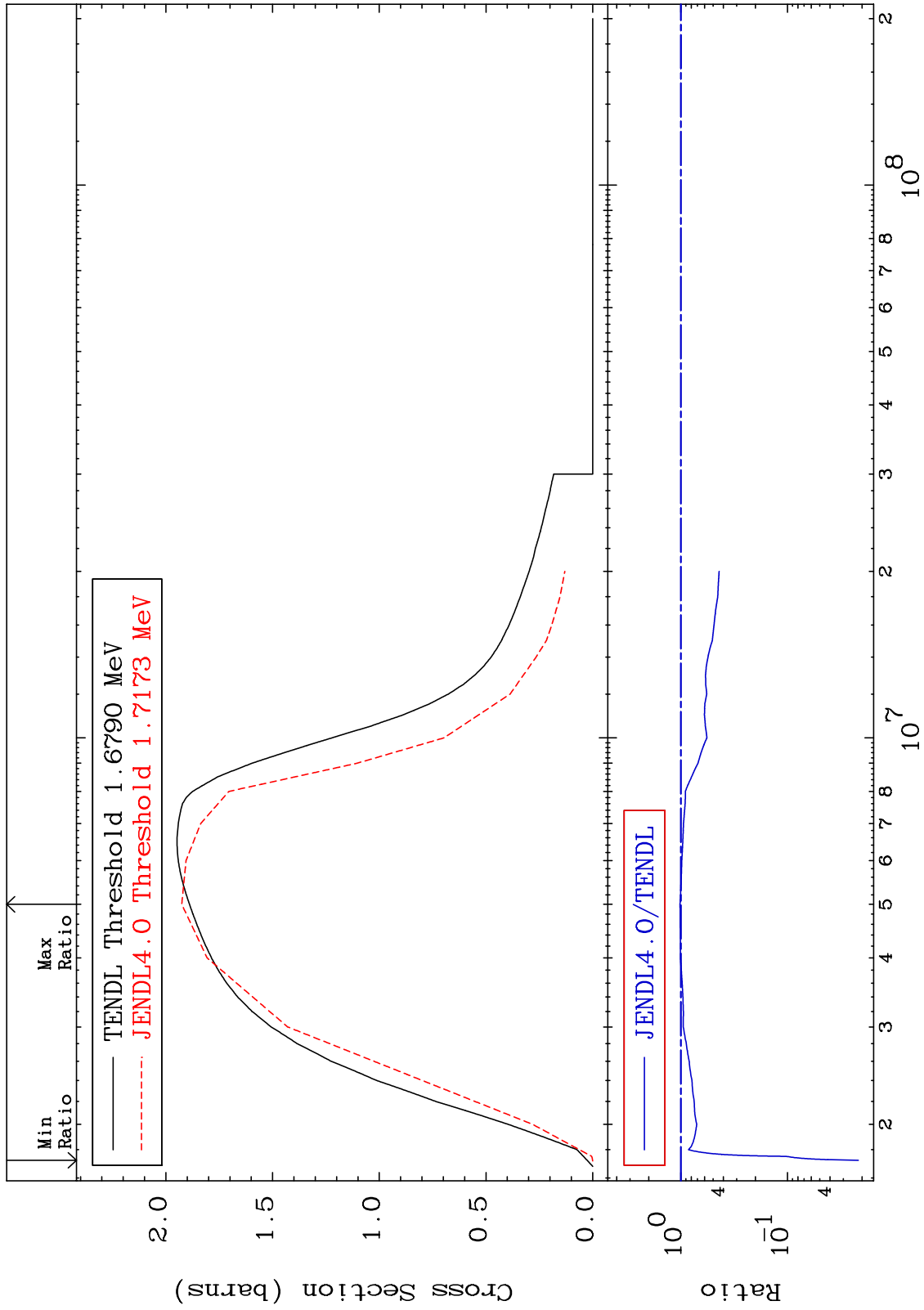
44-Ru-99
-100.0 To -21.49%



MAT 4434

(n,n') Continuum
Cross Section

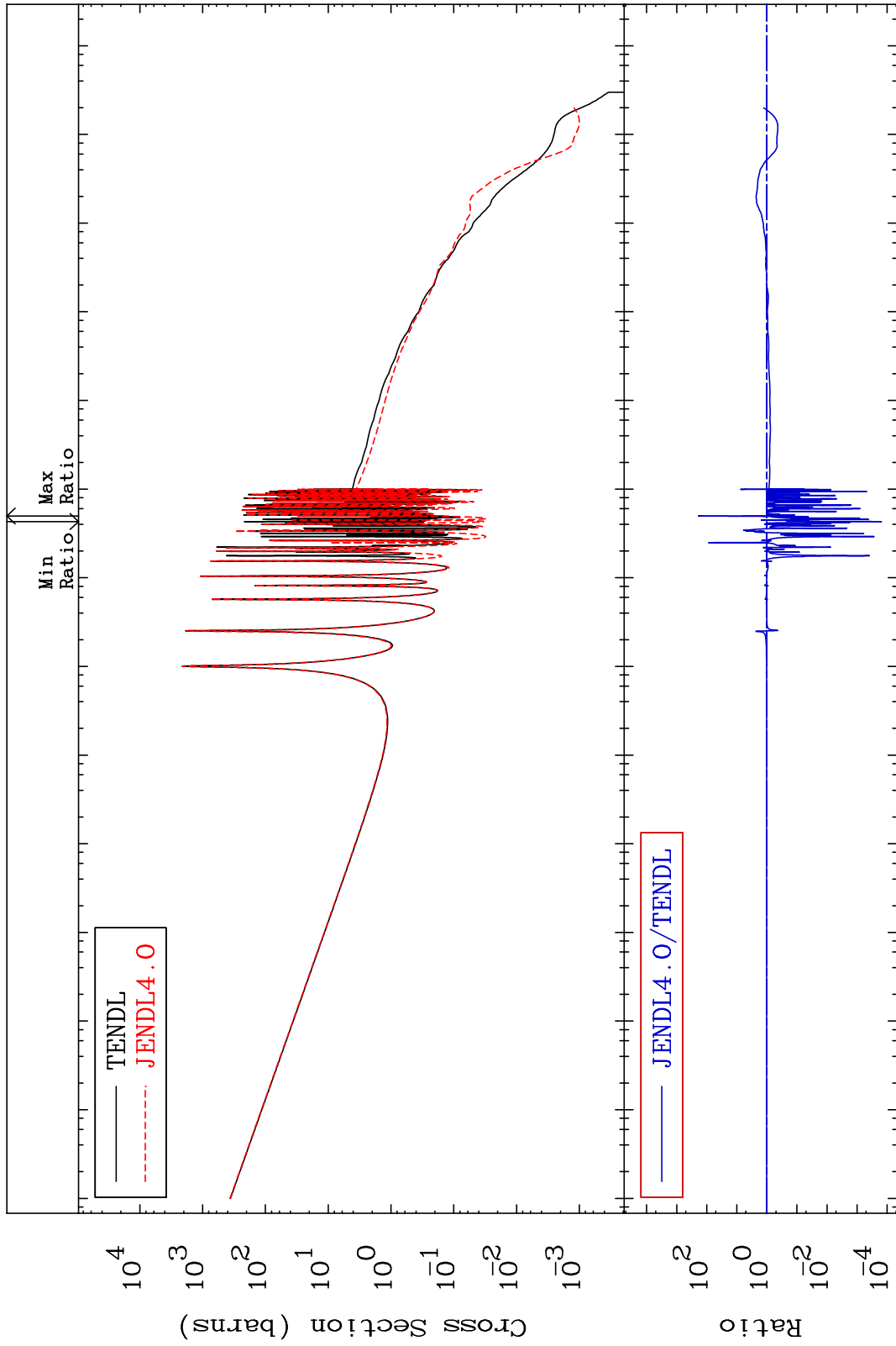
44-Ru-99
-97.83 To 1.912 %



MAT 4434

(n, γ)
Cross Section

44-Ru-99
-99.98 To 9999. %

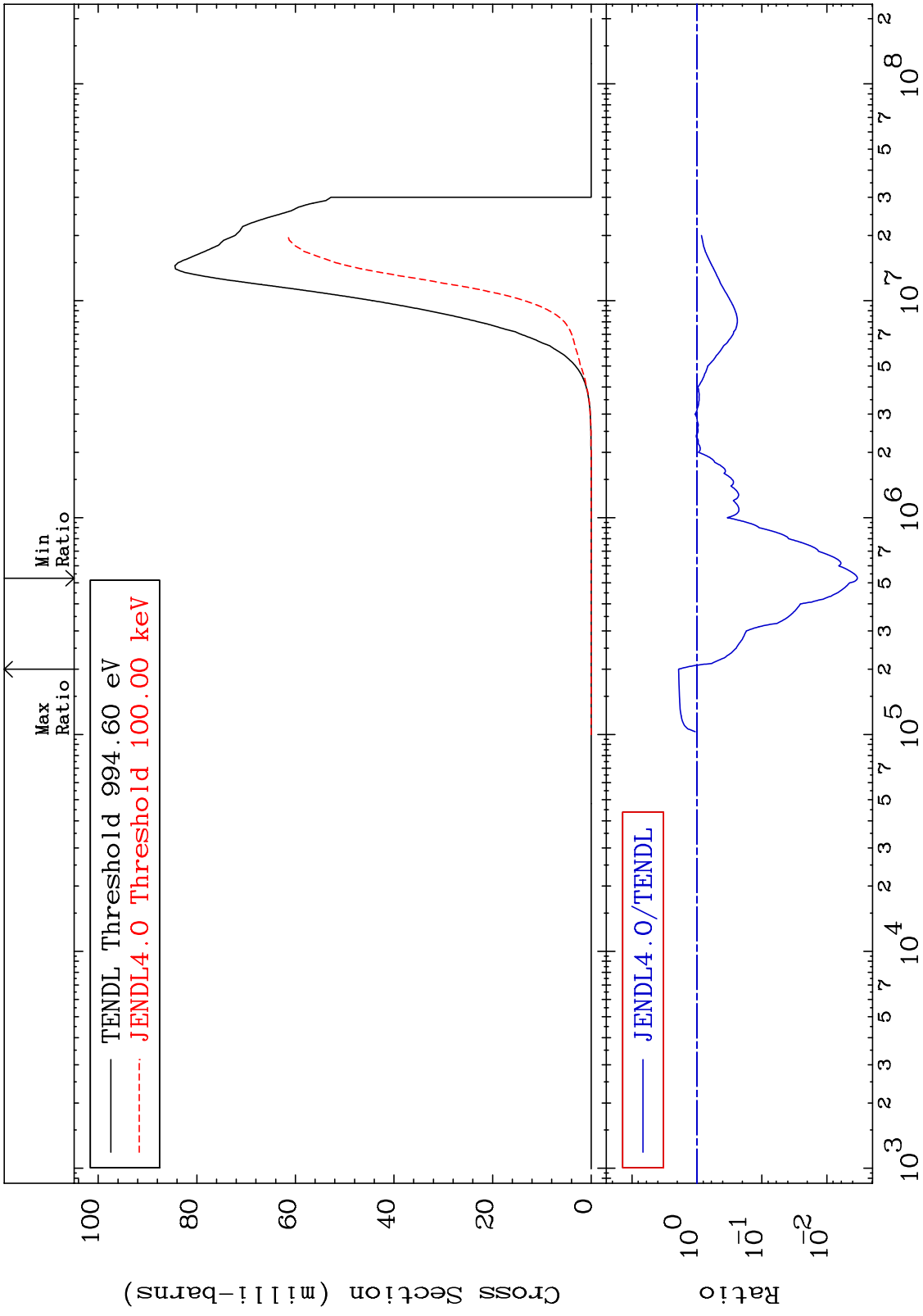


MAT 4434

44-Ru-99

-99.66 To 91.14 %

(n,p)
Cross Section



44-Ru-99

Incident Energy (eV)

23

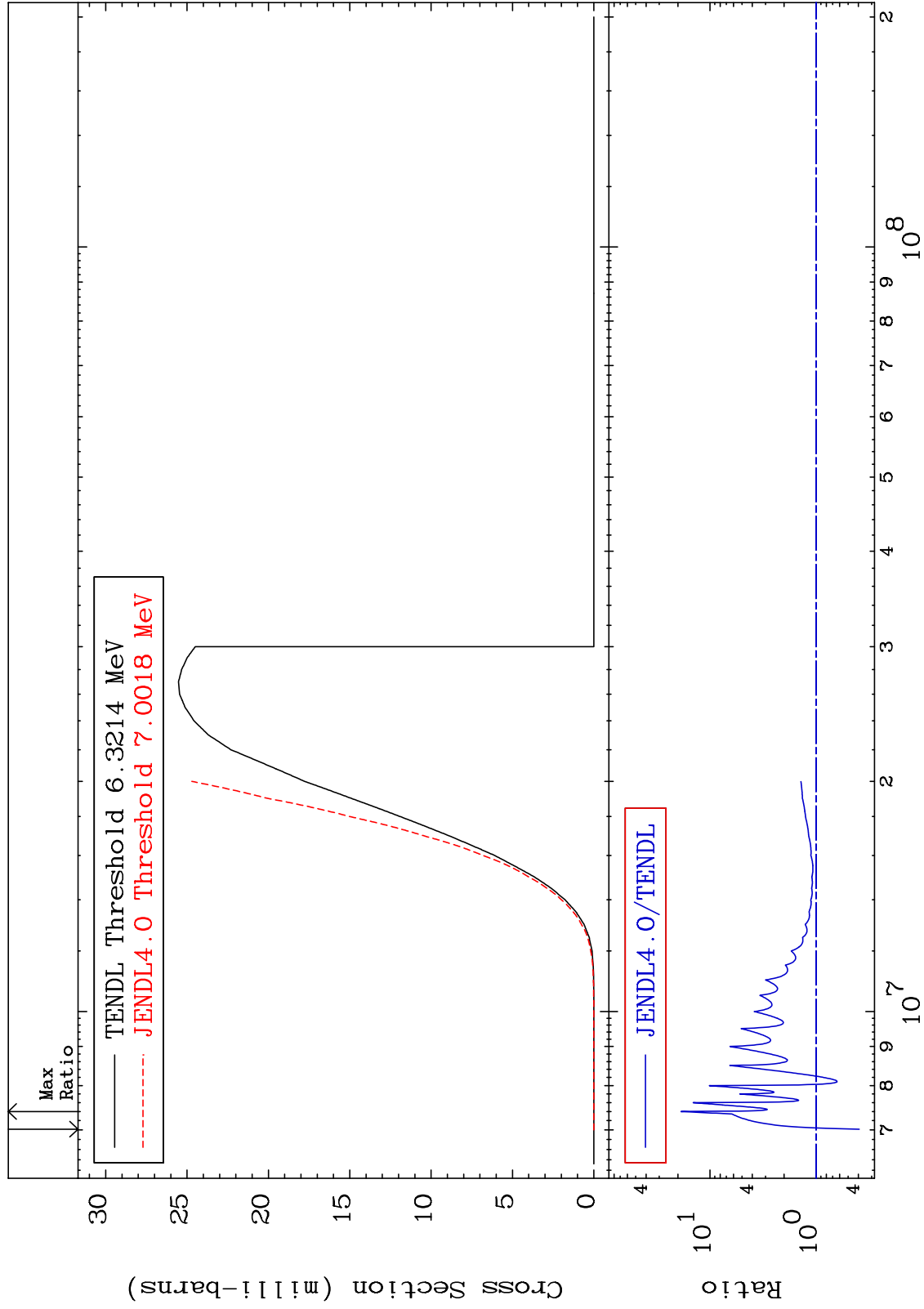
MAT 4434

(n, d)

44-Ru-99

Cross Section

-60.80 To 1771. %



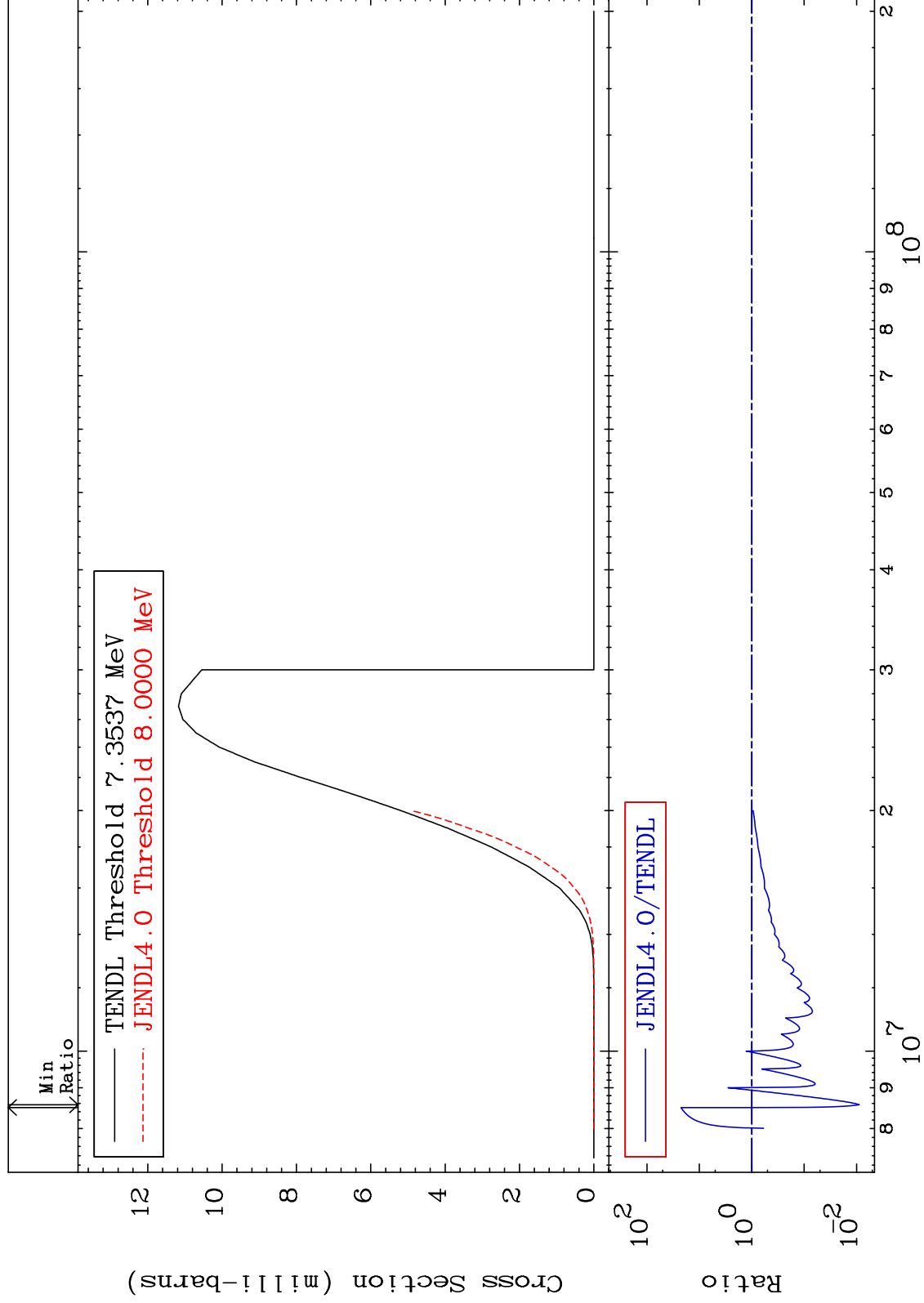
MAT 4434

(n, t)

44-Ru-99

Cross Section

-99.11 To 2136. %



25

Incident Energy (eV)

44-Ru-99

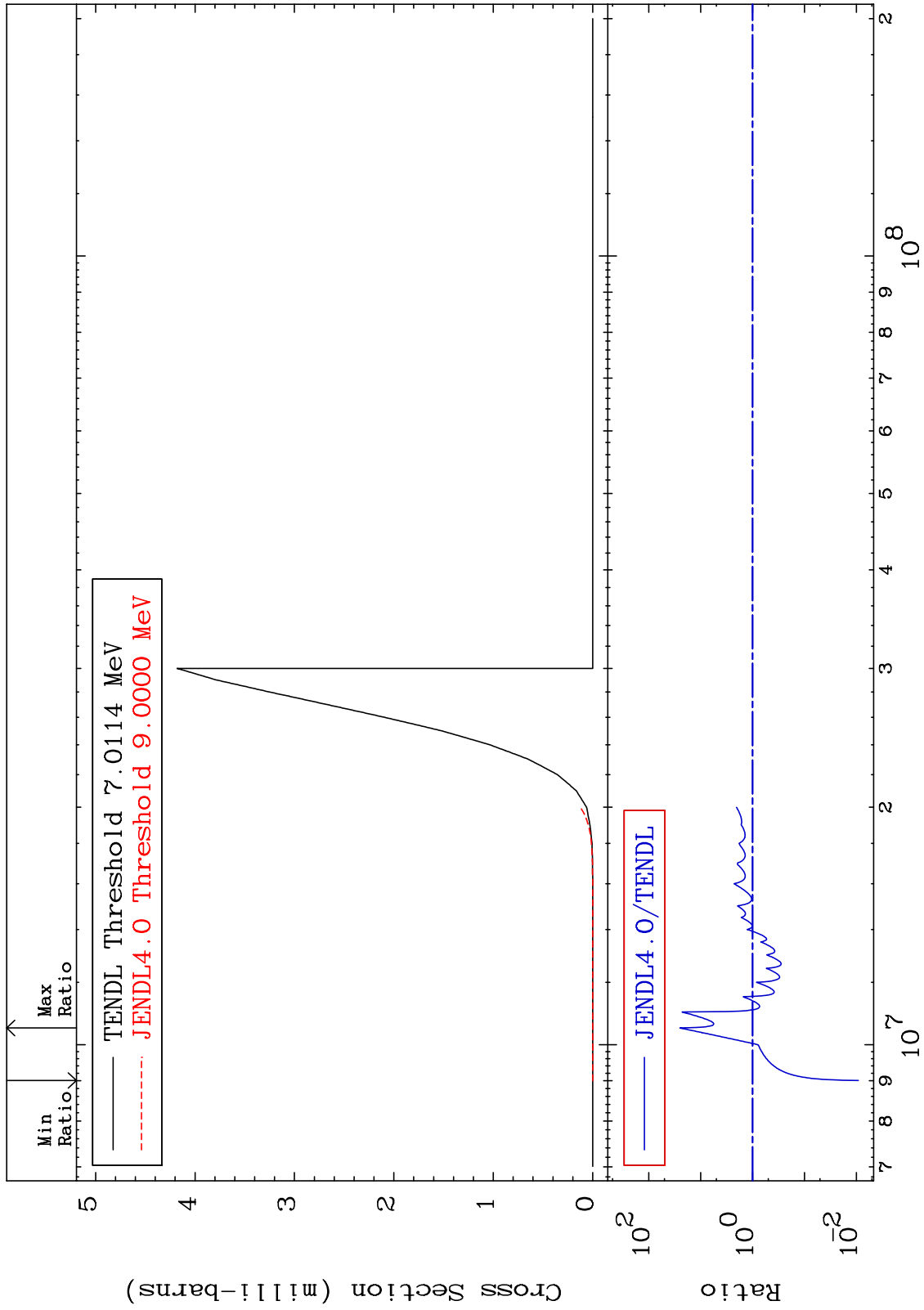
MAT 4434

(n, He-3)

44-Ru-99

Cross Section

-99.09 To 2407. %



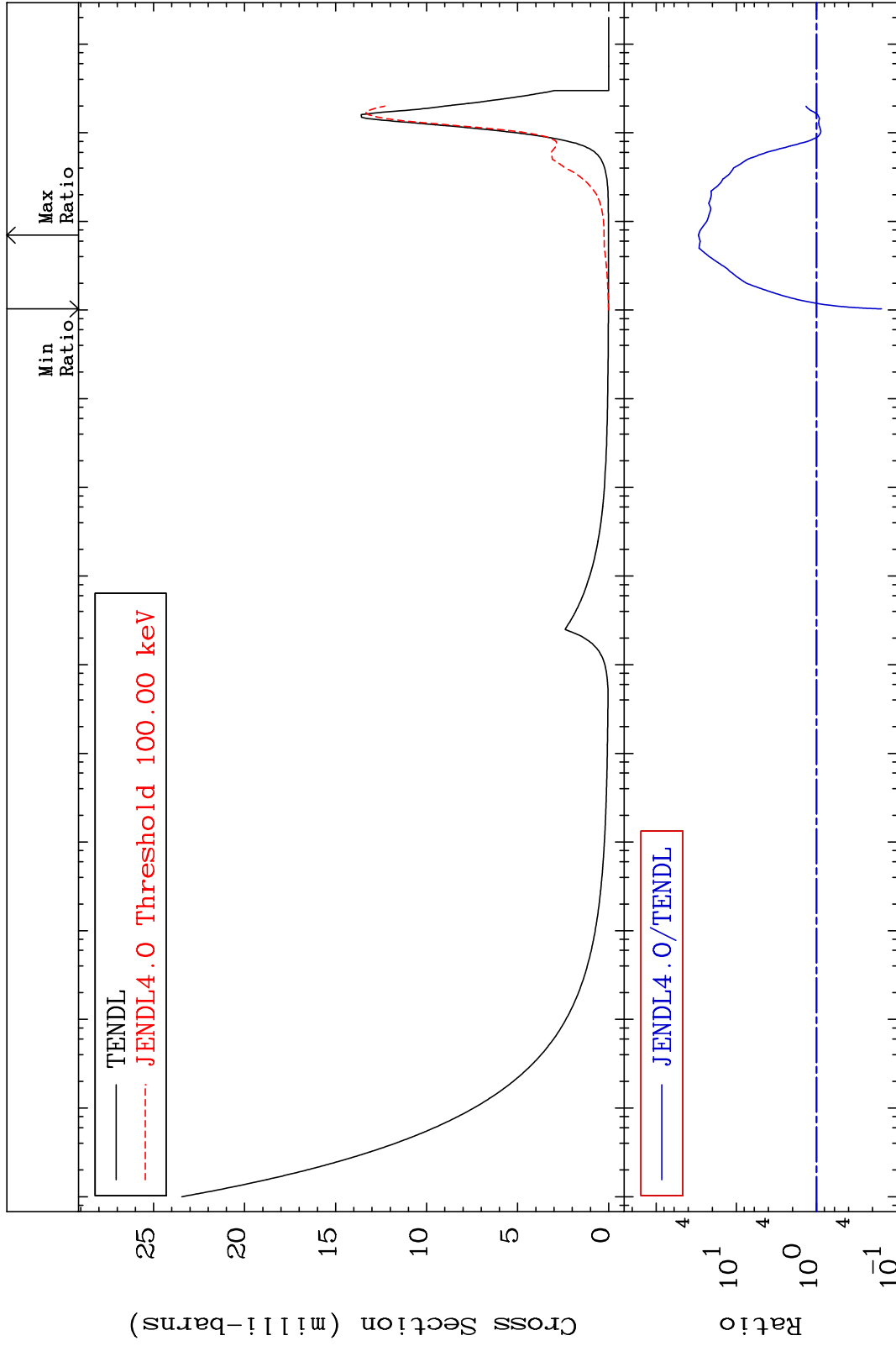
MAT 4434

(n, α)

44-Ru-99

Cross Section

-84.51 To 2884. %



27

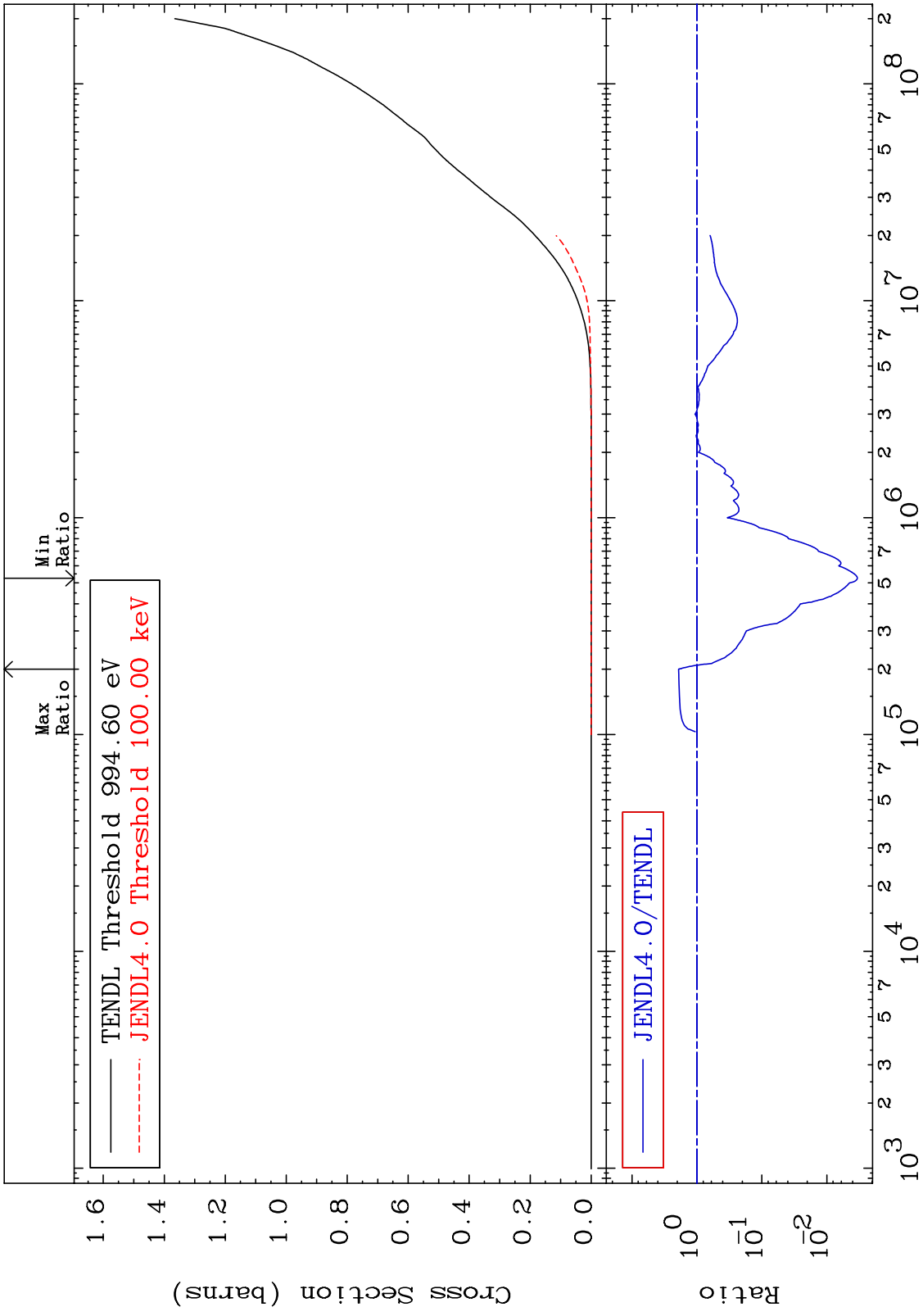
Incident Energy (eV)

44-Ru-99

MAT 4434

Hydrogen Production
Cross Section

44-Ru-99
-99.66 To 91.14 %



28

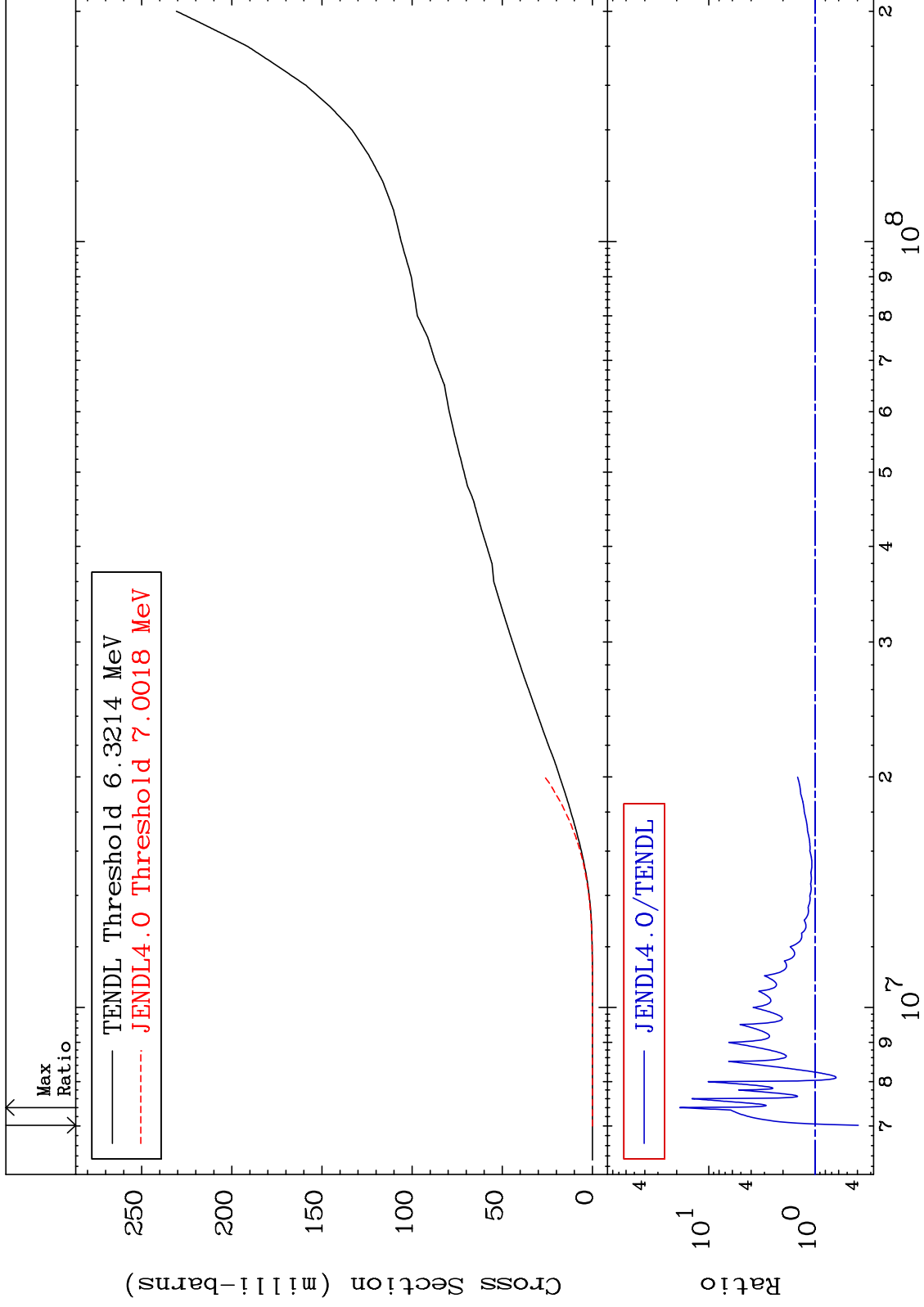
Incident Energy (eV)

44-Ru-99

MAT 4434

Deuterium Production
Cross Section

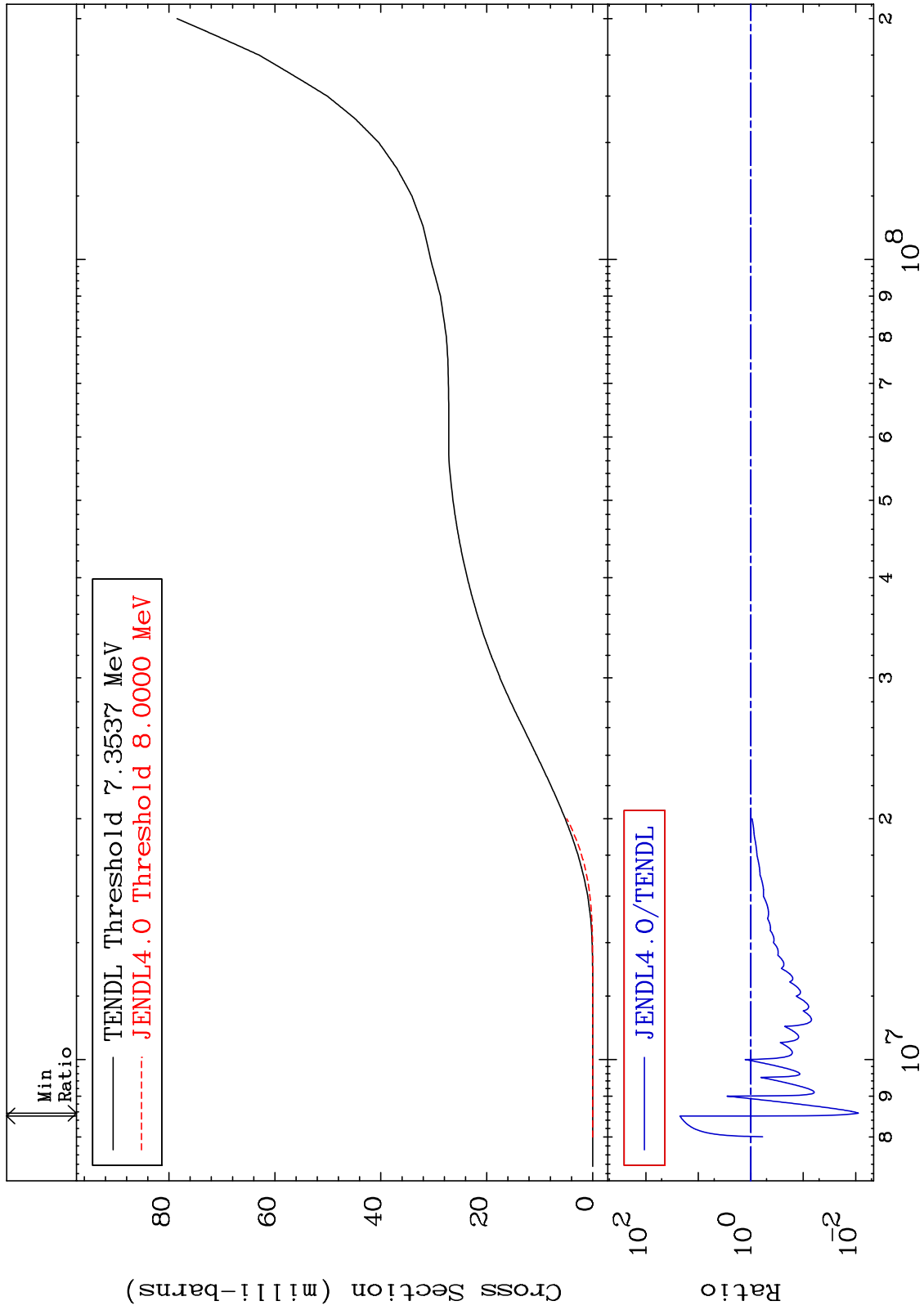
44-Ru-99
-60.80 To 1771. %



MAT 4434

Tritium Production
Cross Section

44-Ru-99
-99.11 To 2136. %



30

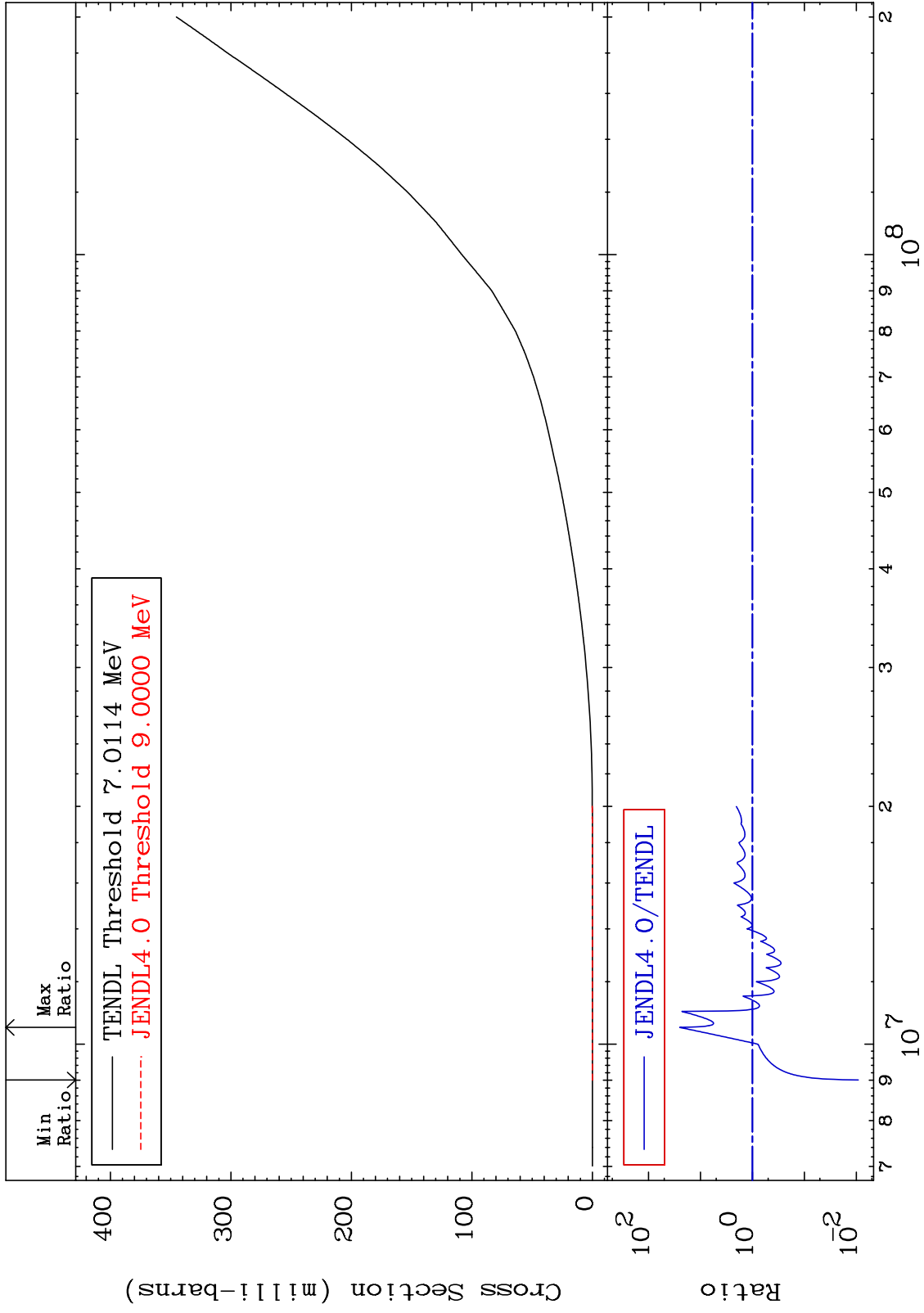
Incident Energy (eV)

44-Ru-99

MAT 4434

He-3 Production
Cross Section

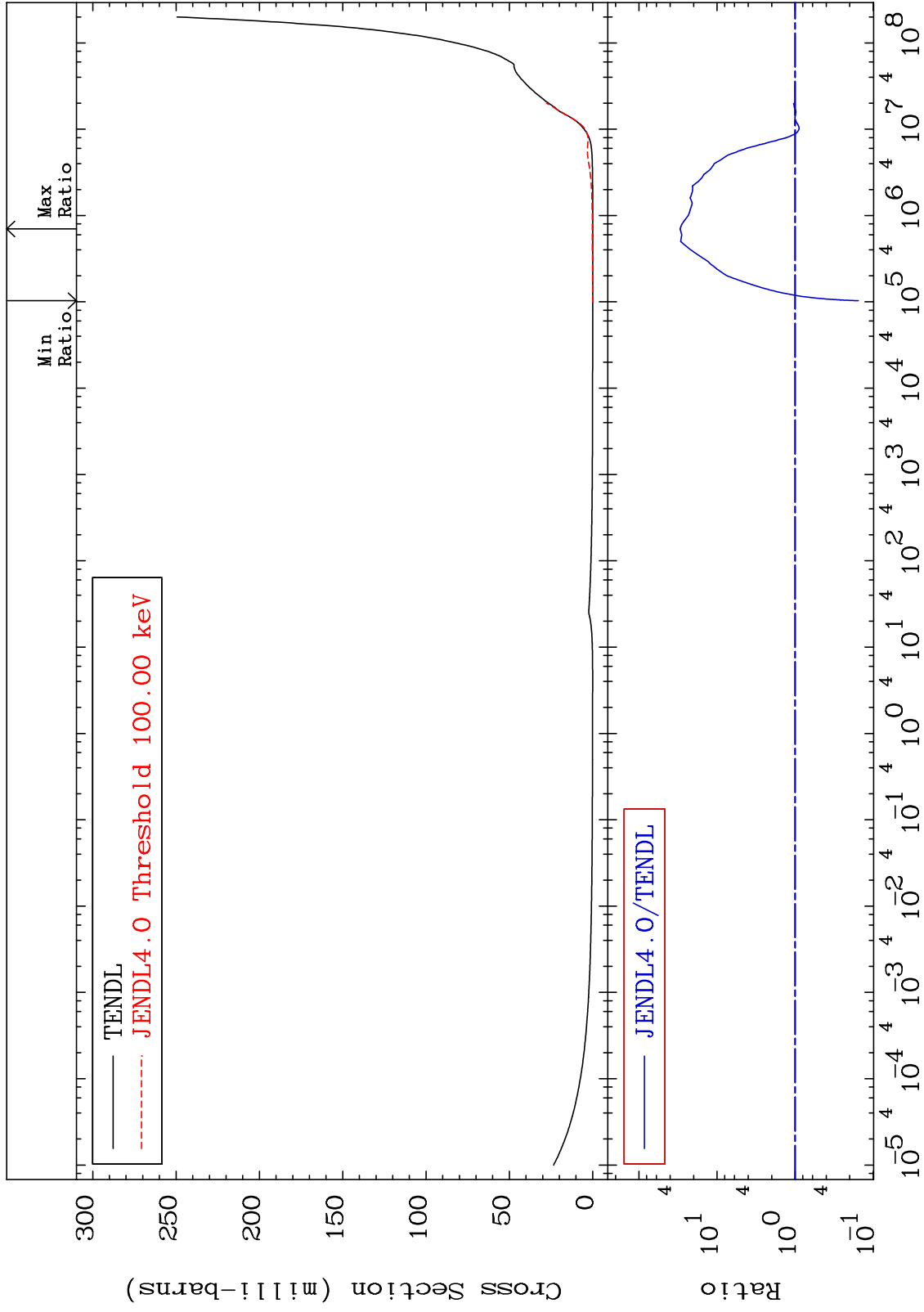
44-Ru-99
-99.09 To 2407. %



MAT 4434

He-4 Production
Cross Section

44-Ru-99
-84.51 To 2884. %



32

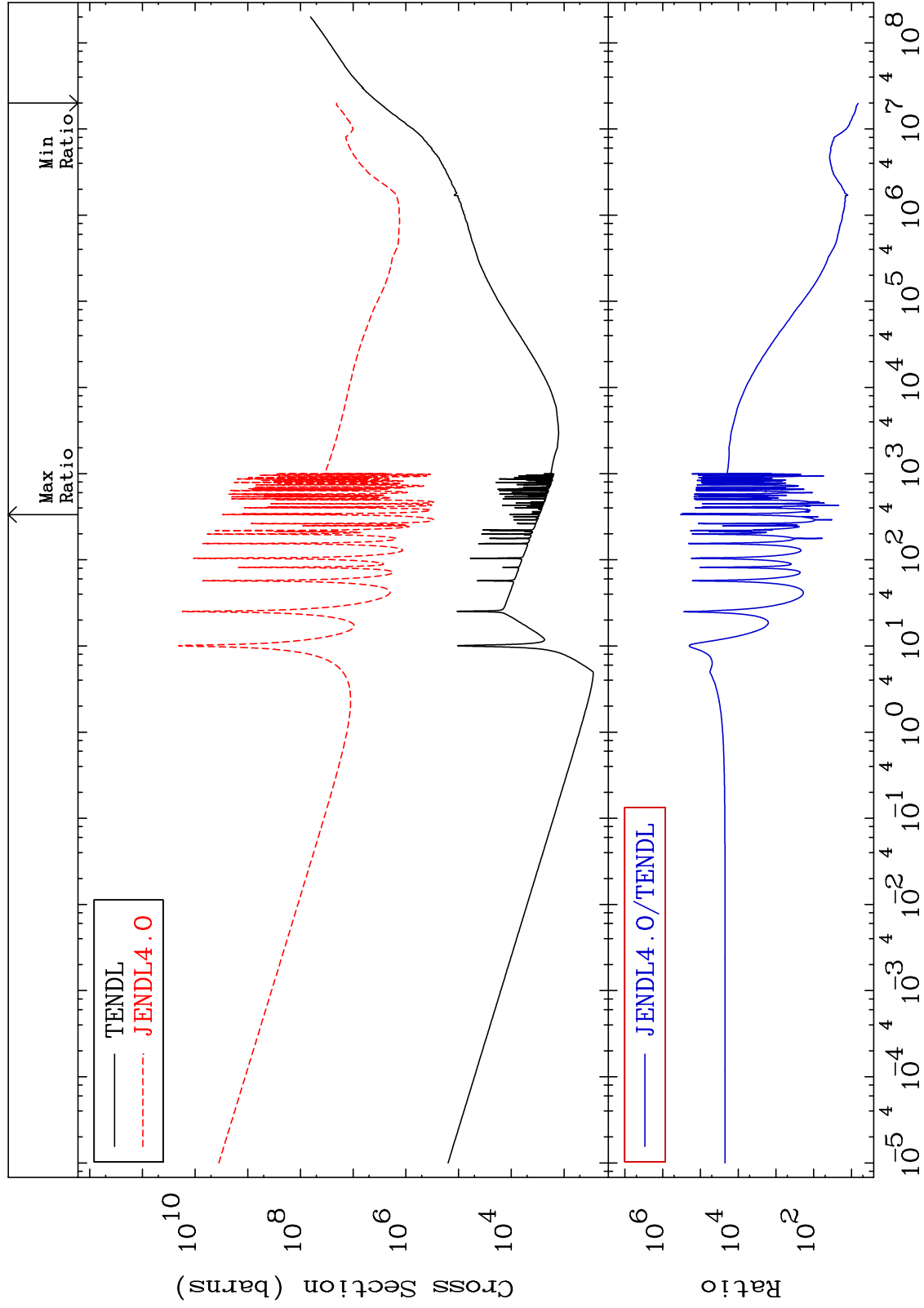
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma total (eV-barns)
Cross Section

44-Ru-99
549.7 To 9999. %



33

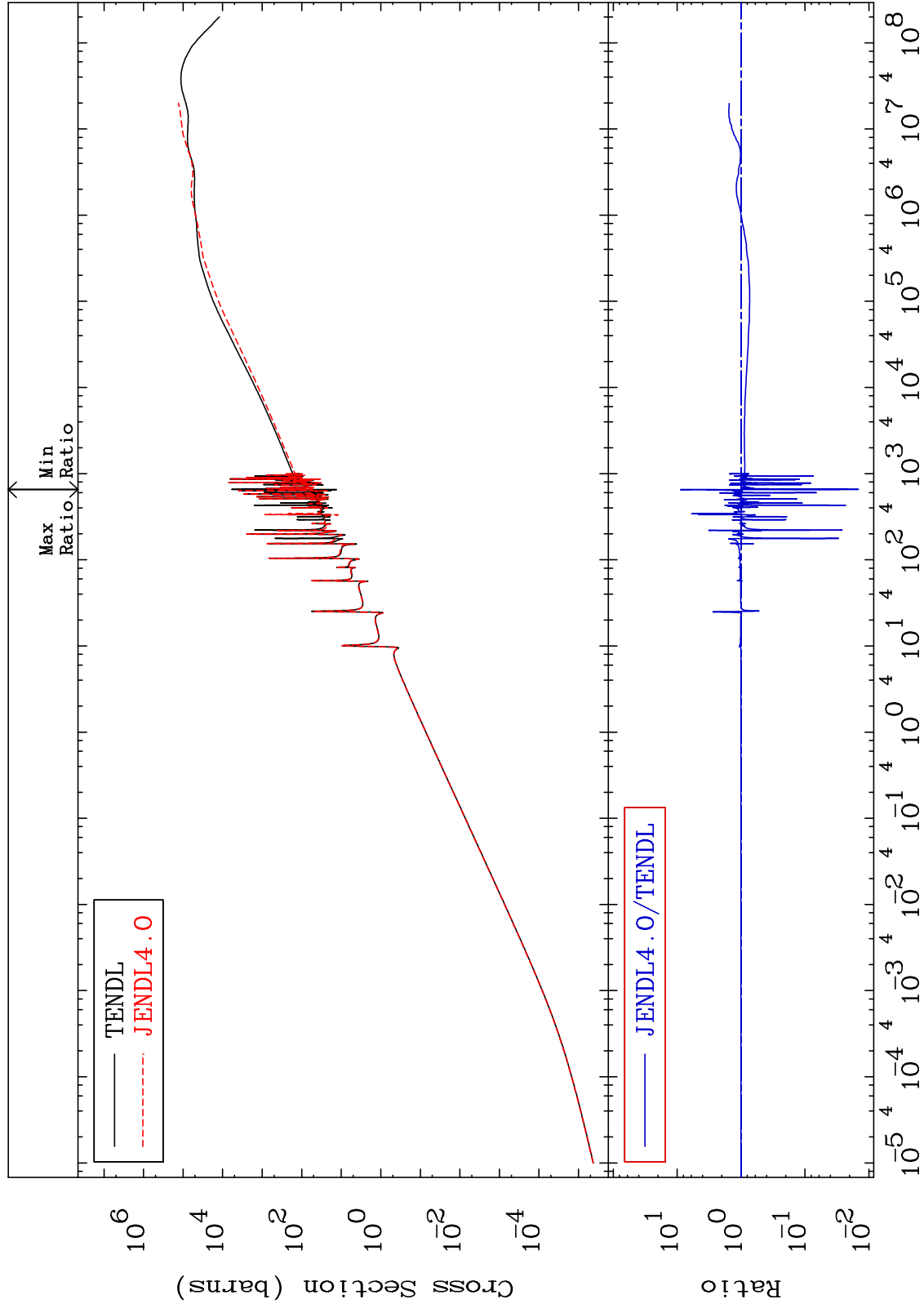
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma elastic
Cross Section

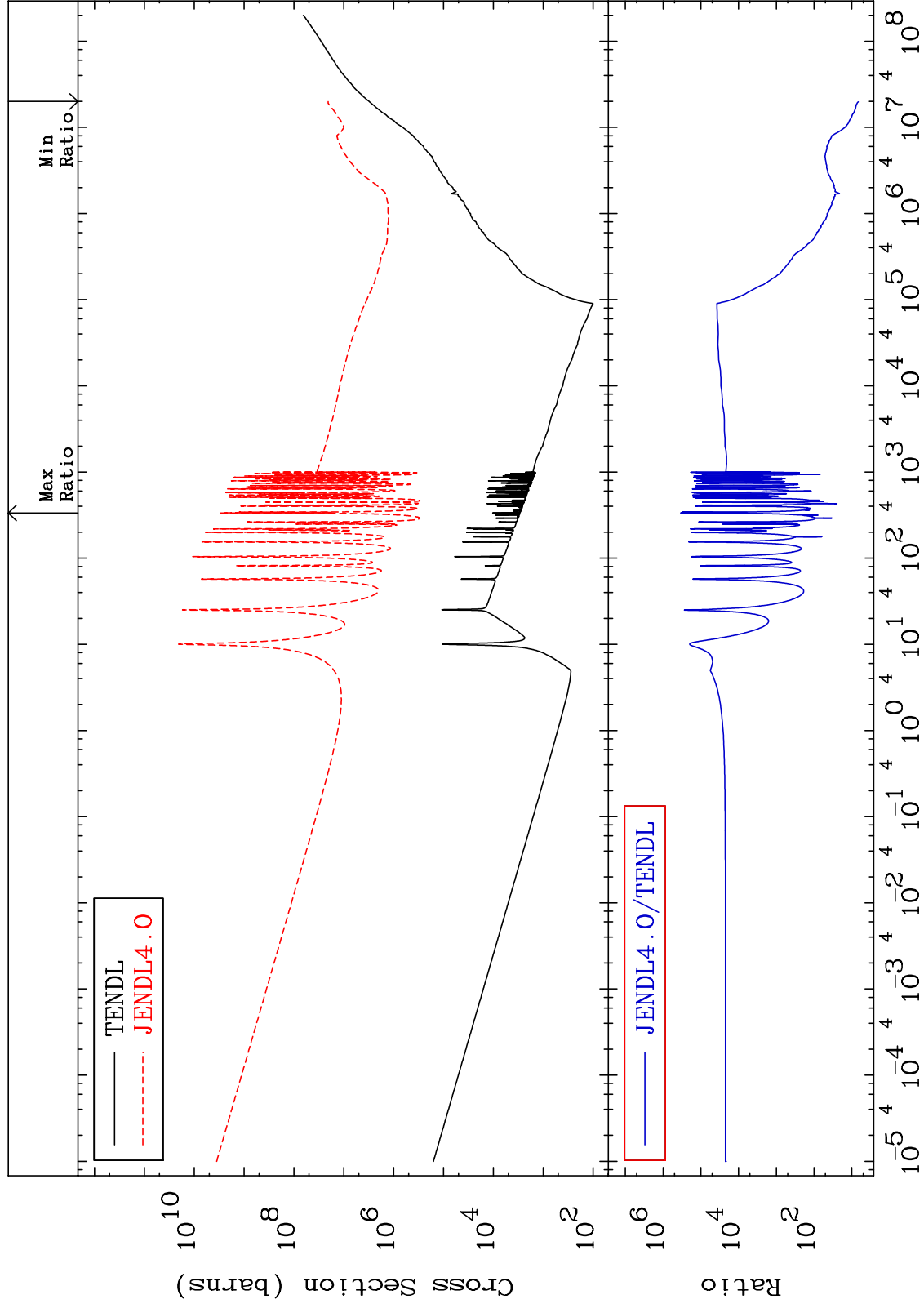
44-Ru-99
-98.55 To 789.3 %



MAT 4434

Kerma non-elastic (all but mt2)
Cross Section

44-Ru-99
563.4 To 9999. %



35

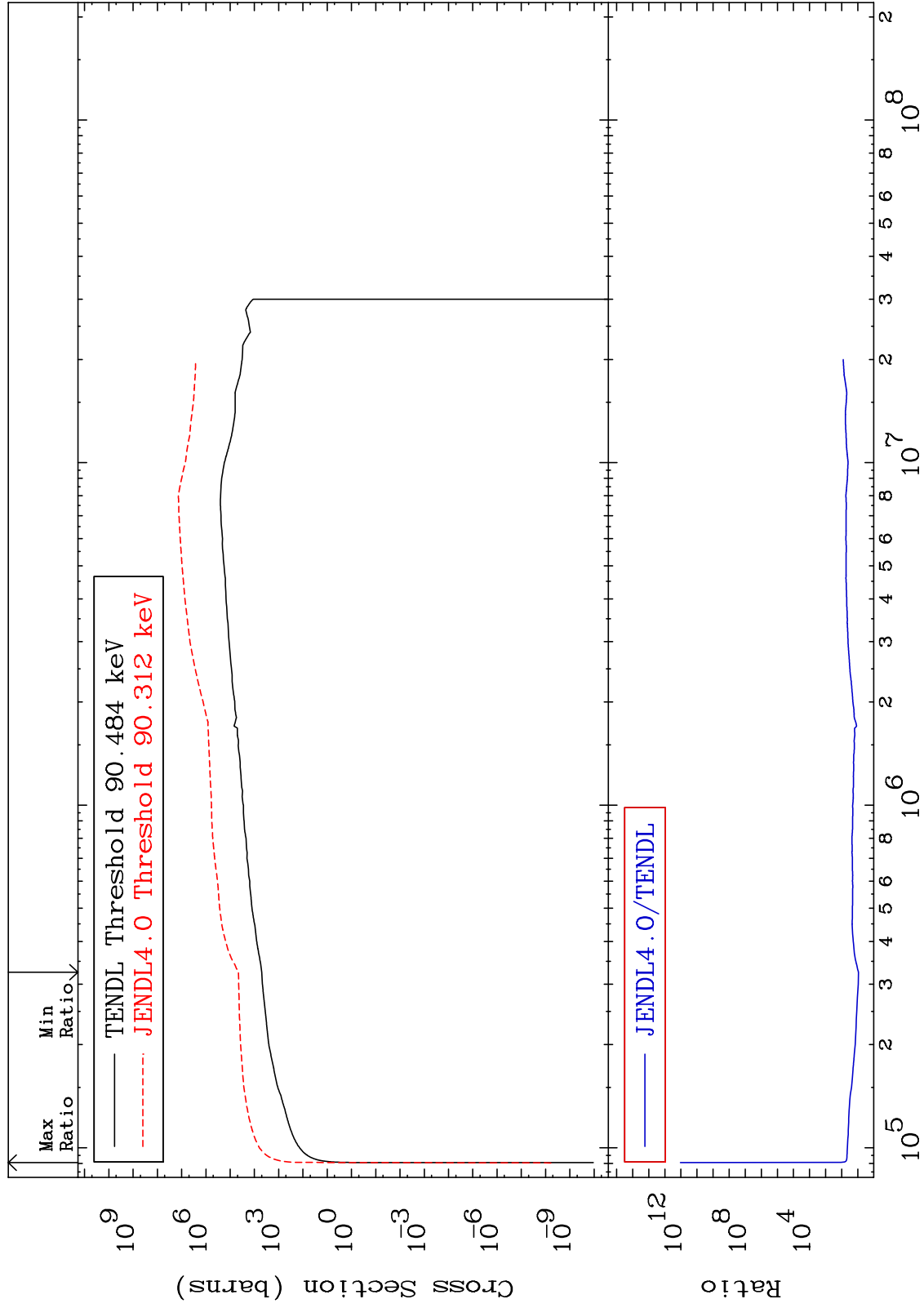
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma inelastic (mt51-91)
Cross Section

44-Ru-99
802.3 To 9999. %



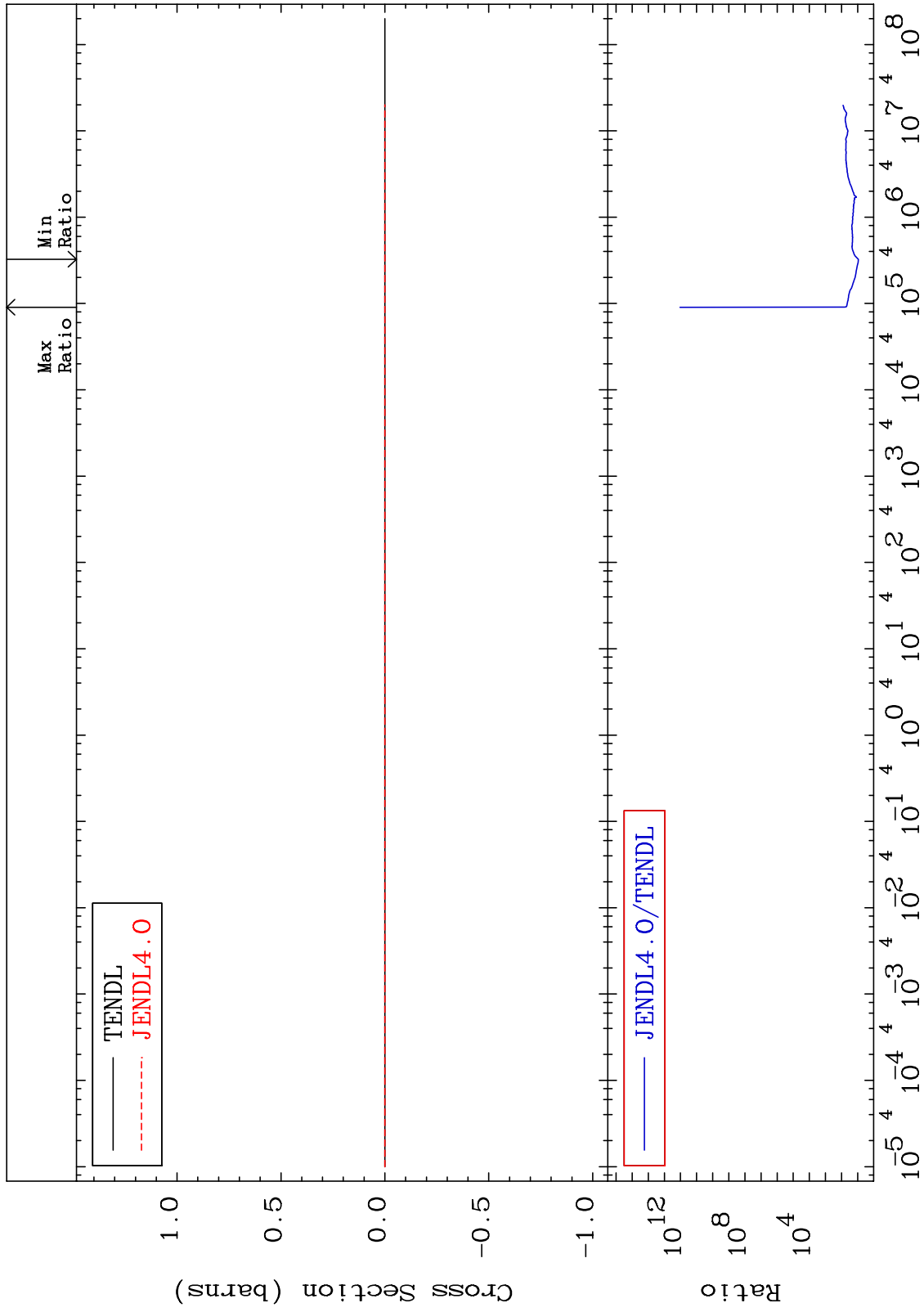
36

44-Ru-99

MAT 4434

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

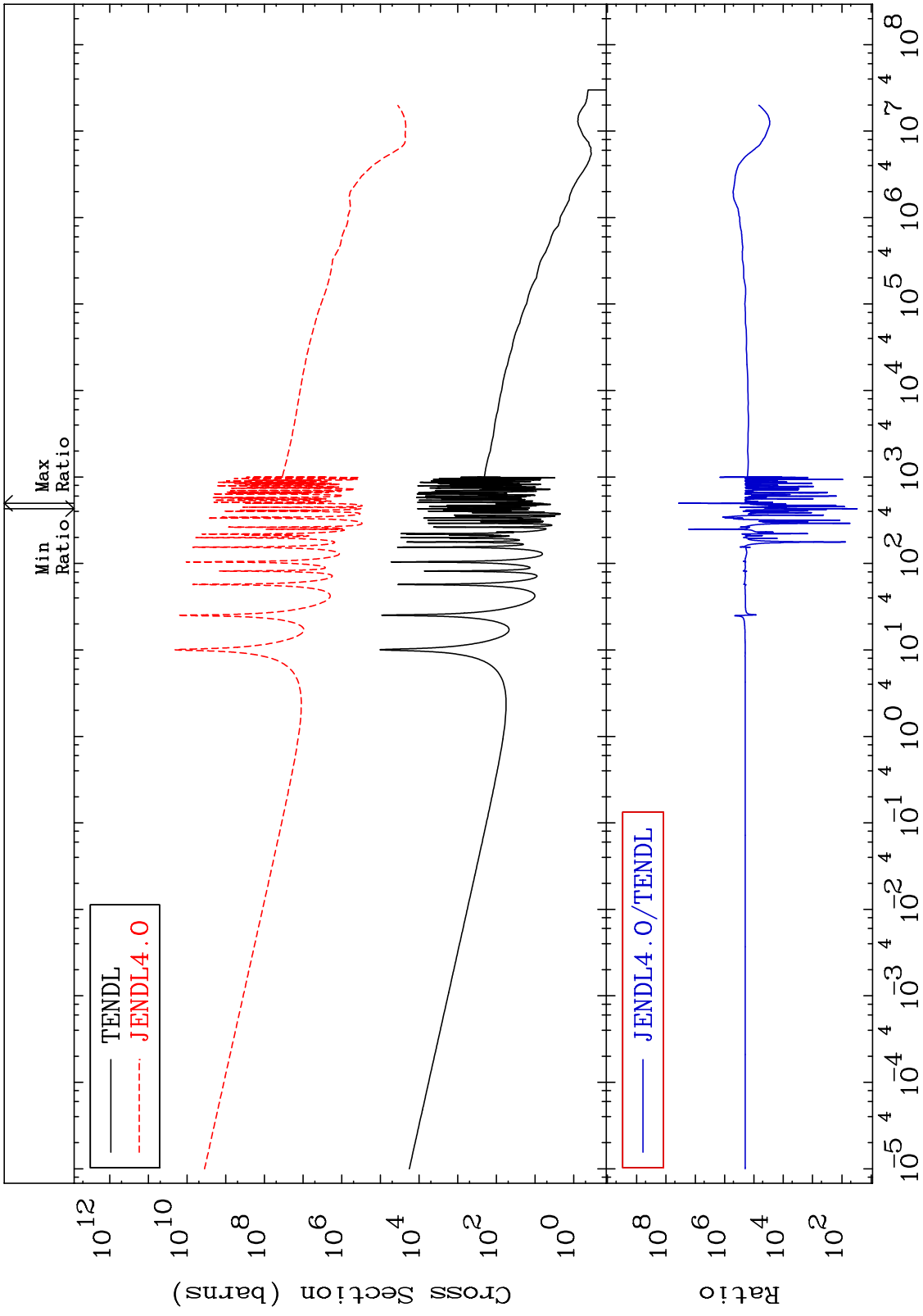
44-Ru-99
802.3 To 9999. %



MAT 4434

Kerma capture (mt102)
Cross Section

44-Ru-99
2880. To 9999. %



38

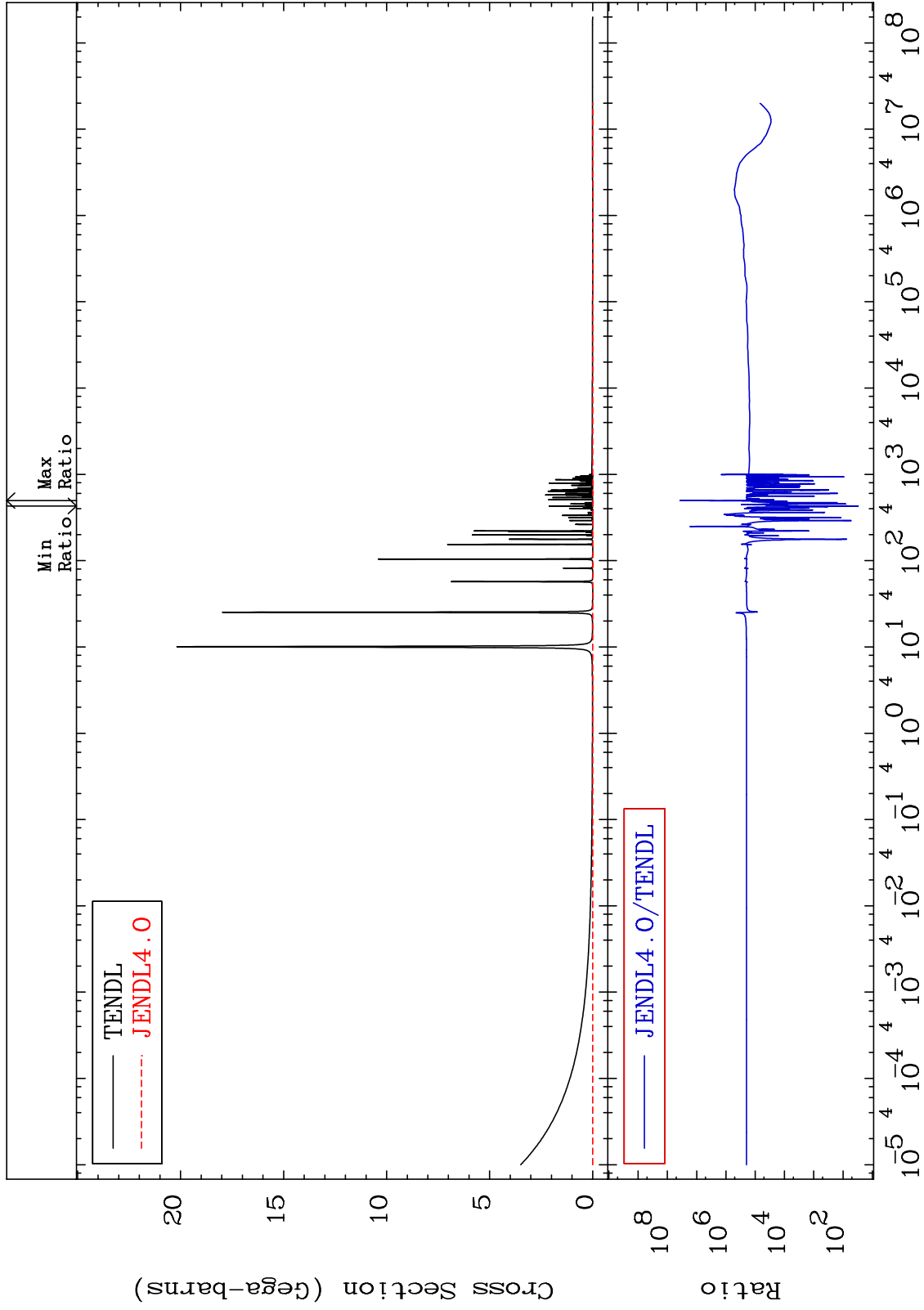
Incident Energy (eV)

44-Ru-99

MAT 4434

Total photon (eV-barns)
Cross Section

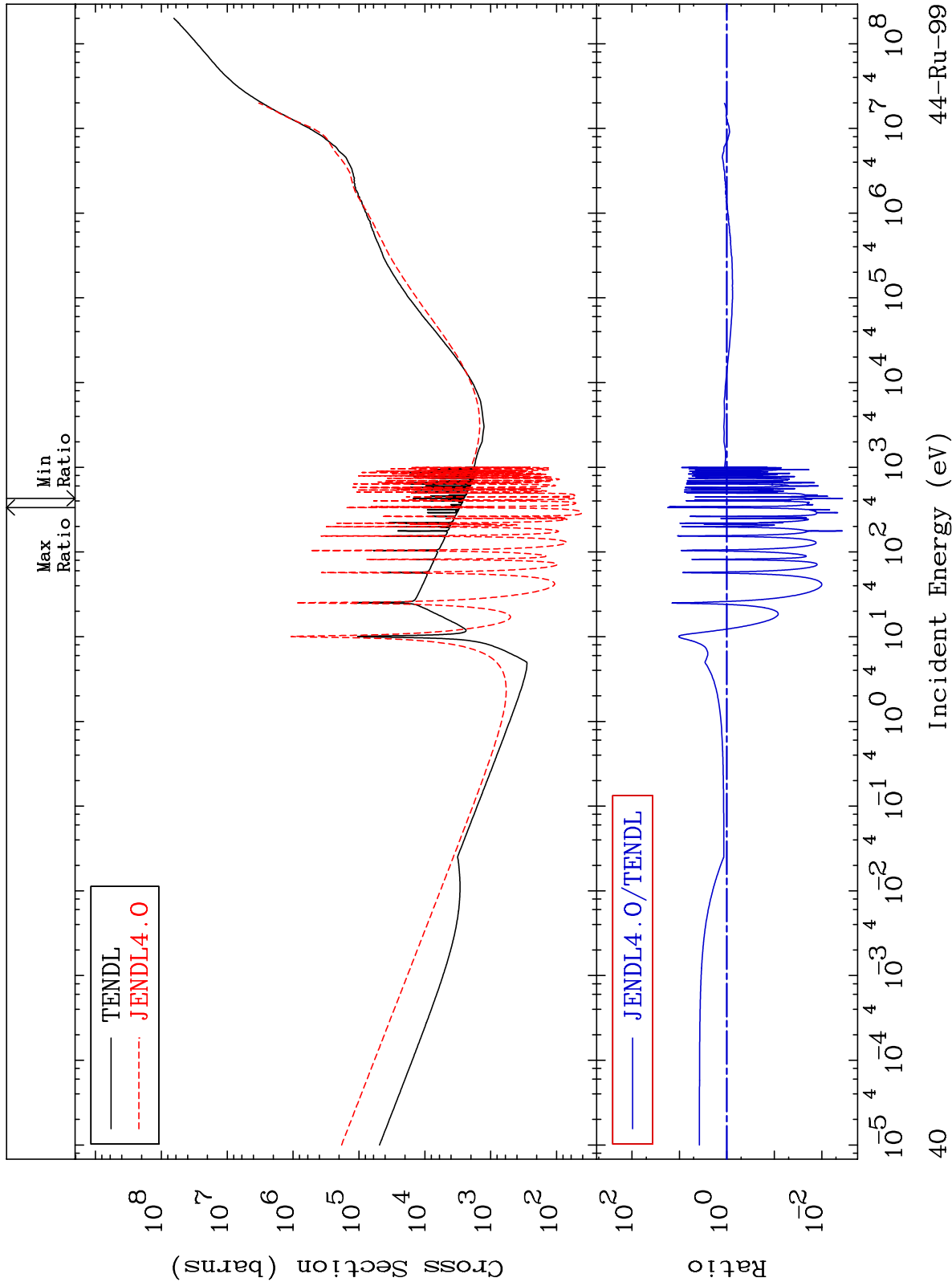
44-Ru-99
2880. To 9999. %



MAT 4434

Total kinematic kerma (high limit)
Cross Section

44-Ru-99
-99.64 To 1675. %



40

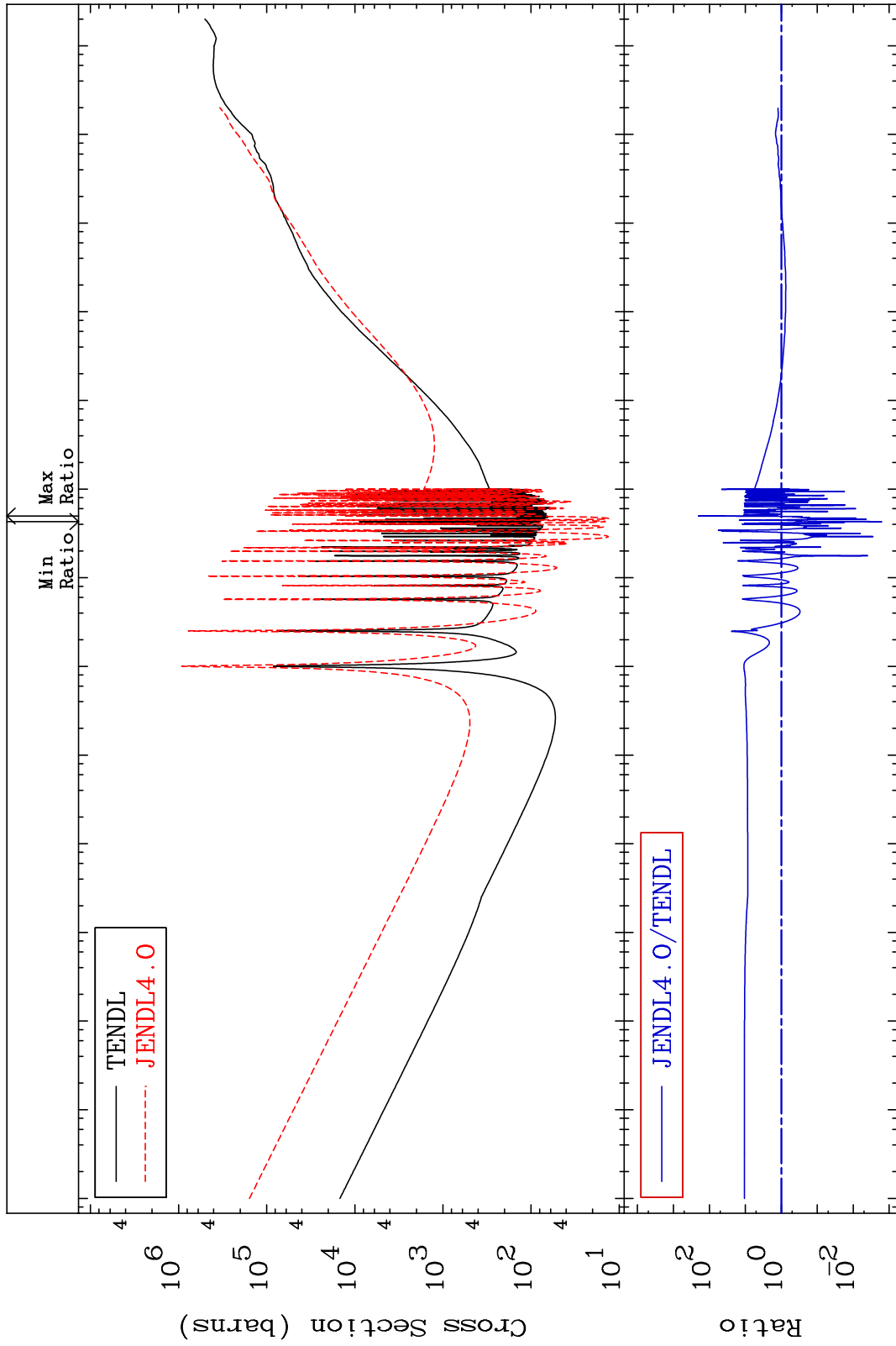
Incident Energy (eV)

44-Ru-99

MAT 4434

Dpa total (eV-barns)
Cross Section

44-Ru-99
-99.84 To 9999. %



41

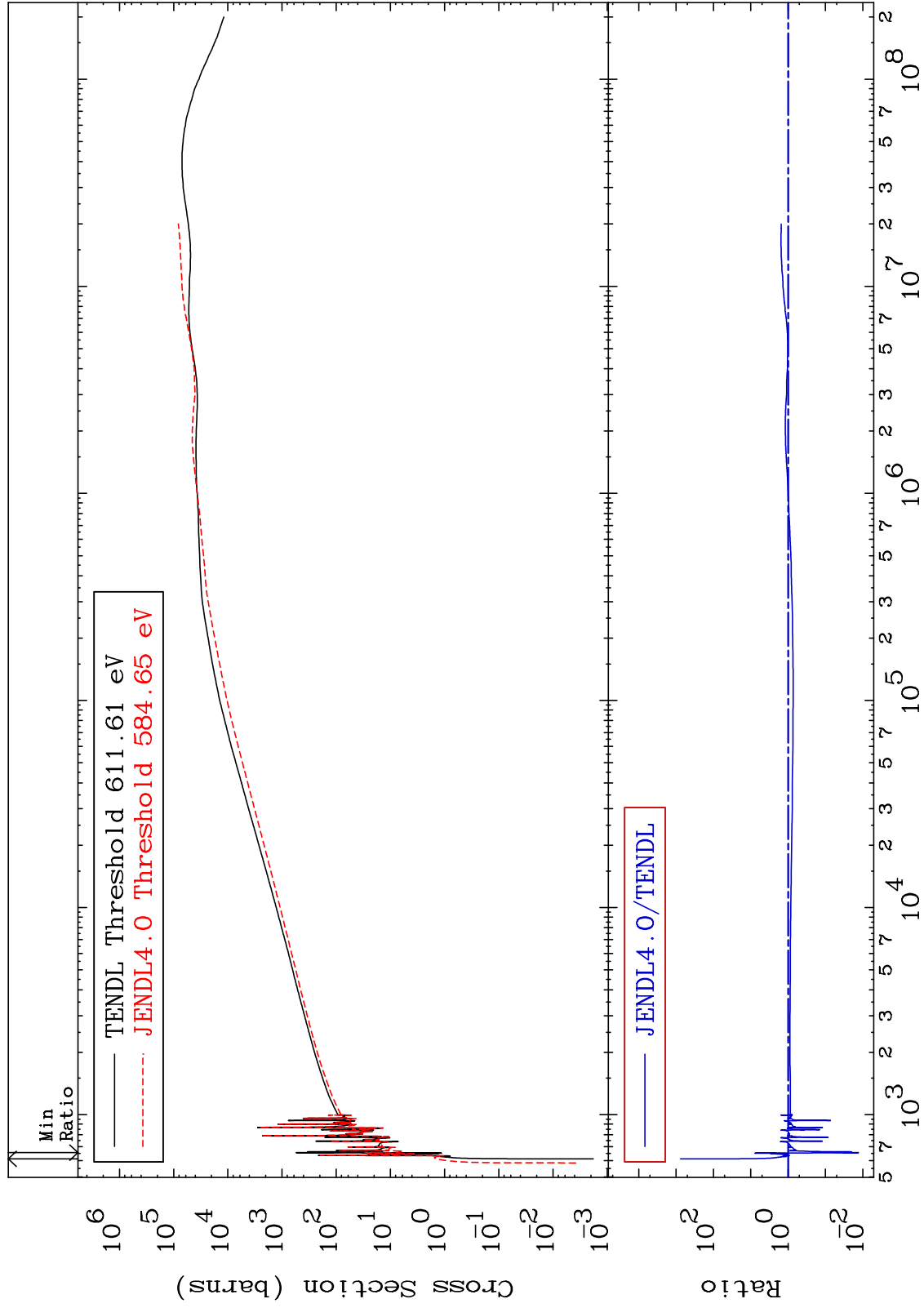
Incident Energy (eV)

44-Ru-99

MAT 4434

Dpa elastic (mt2)
Cross Section

44-Ru-99
-98.70 To 9999. %



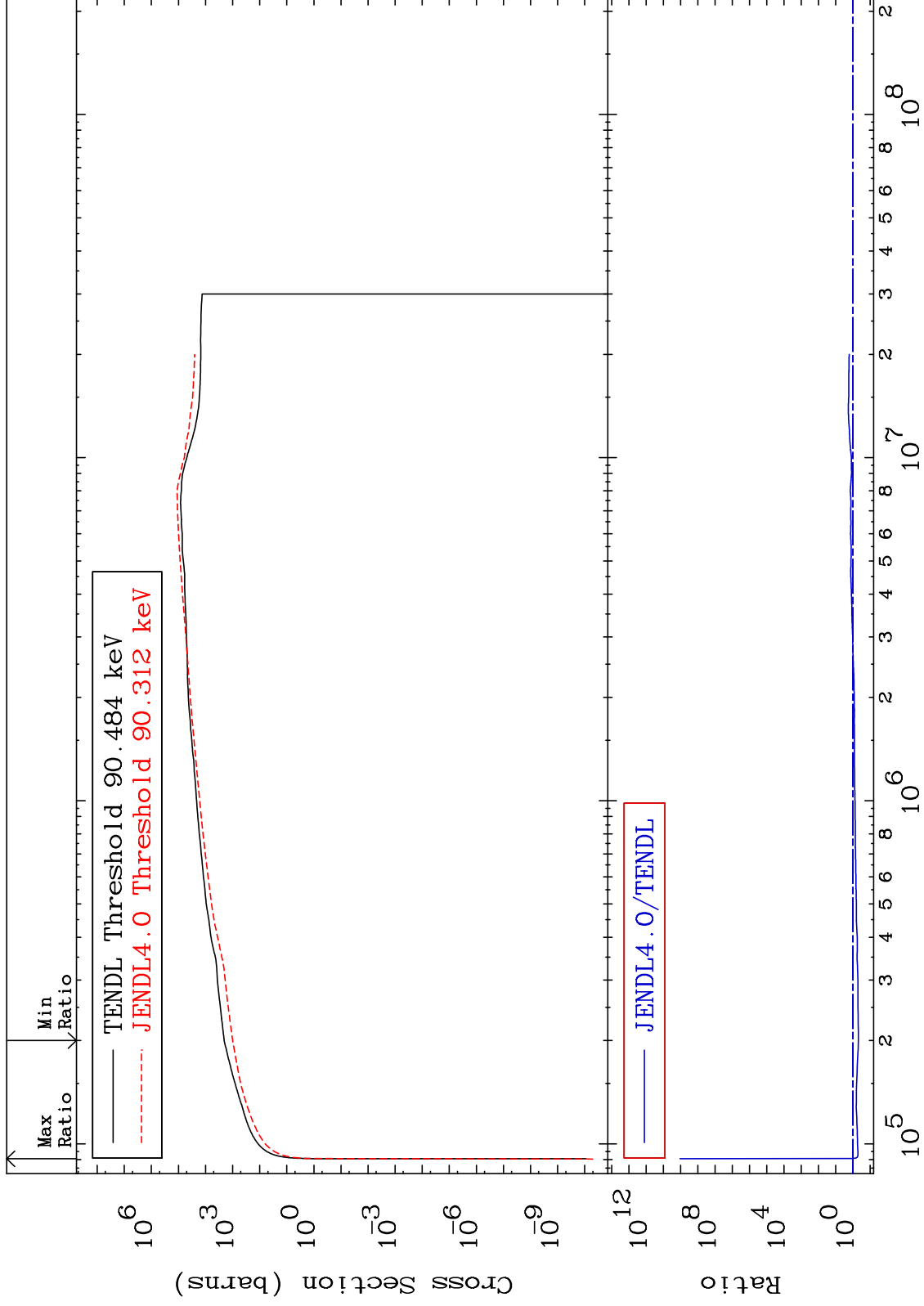
42

44-Ru-99

MAT 4434

Dpa inelastic (mt51-91)
Cross Section

44-Ru-99
-51.48 To 9999. %



43

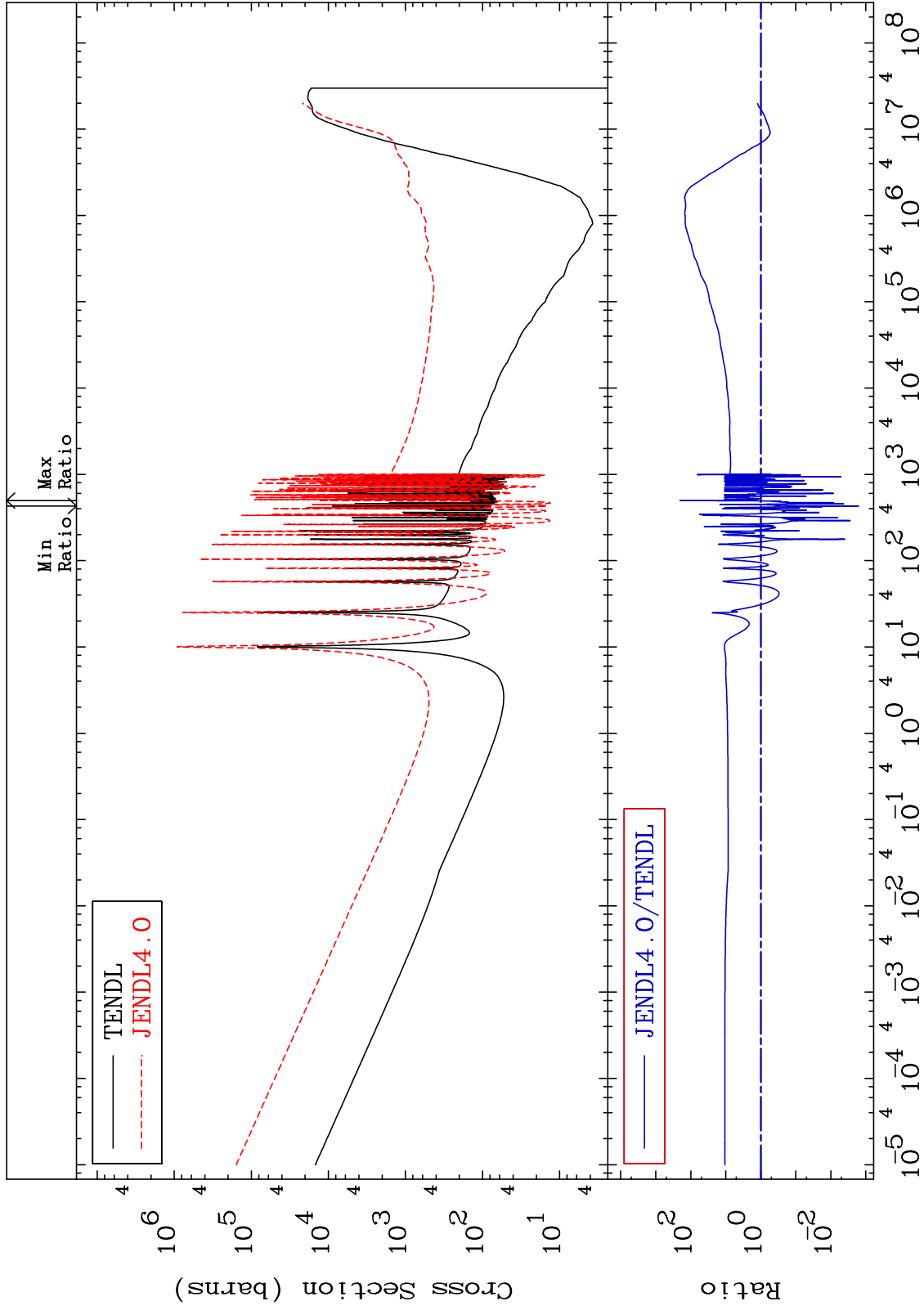
Incident Energy (eV)

44-Ru-99

MAT 4434

Dpa disappearance (mt102 -120)
Cross Section

44-Ru-99
-99.84 To 9999. %



44

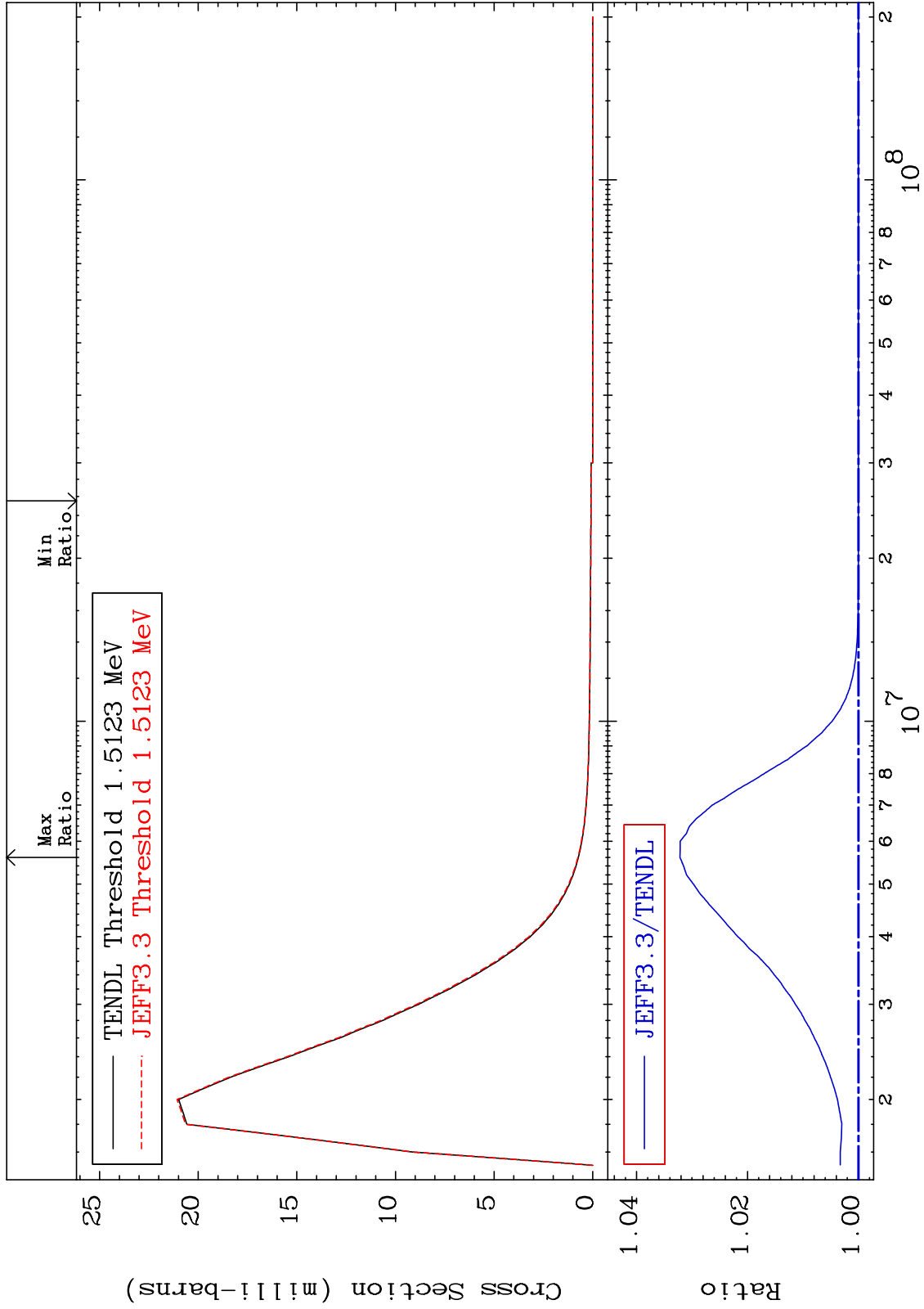
Incident Energy (eV)

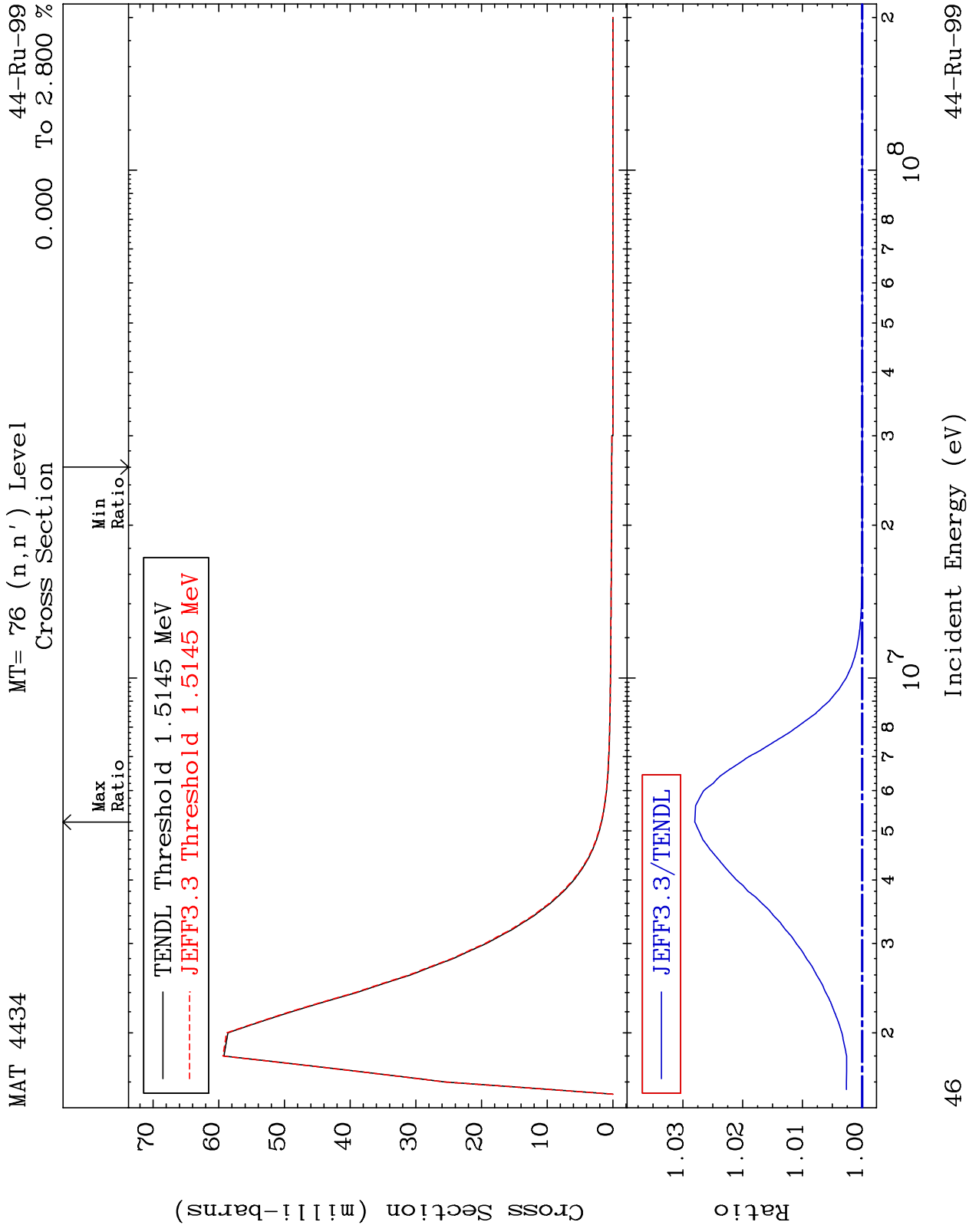
44-Ru-99

MAT 4434

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

44-Ru-99
0.000 To 3.217 %

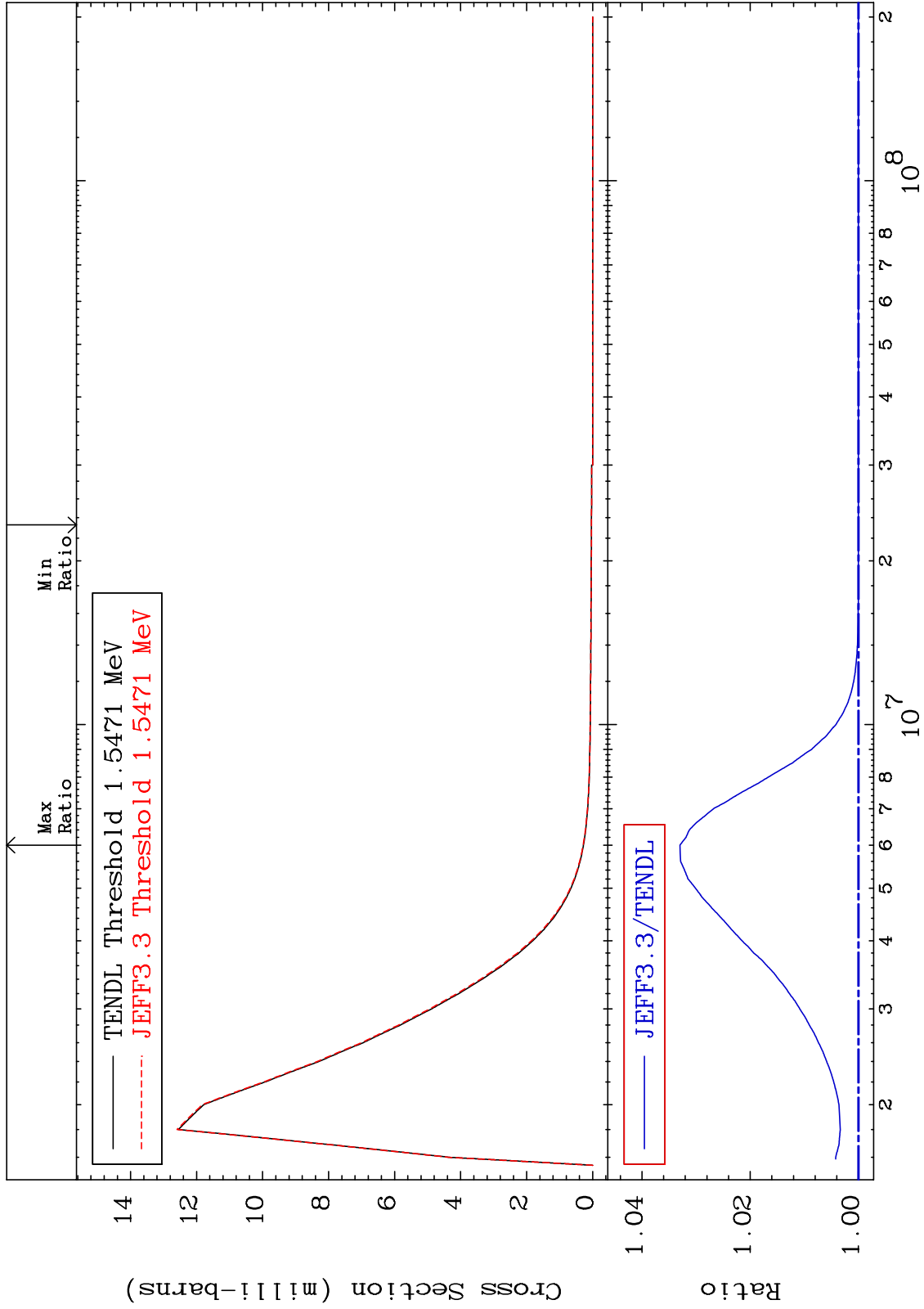




MAT 4434

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

44-Ru-99
0.000 To 3.297 %



47

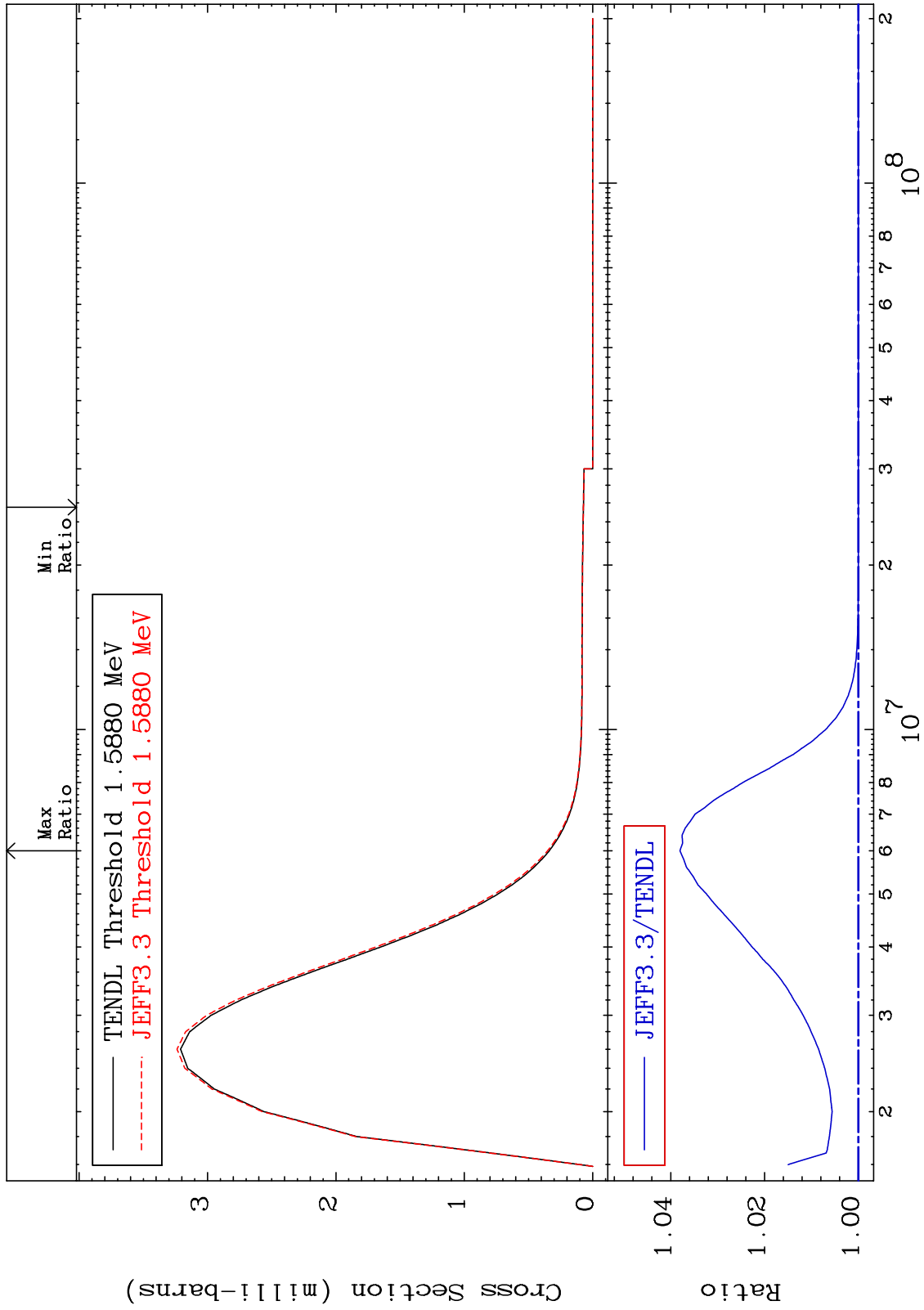
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
0.000 To 3.801 %



48

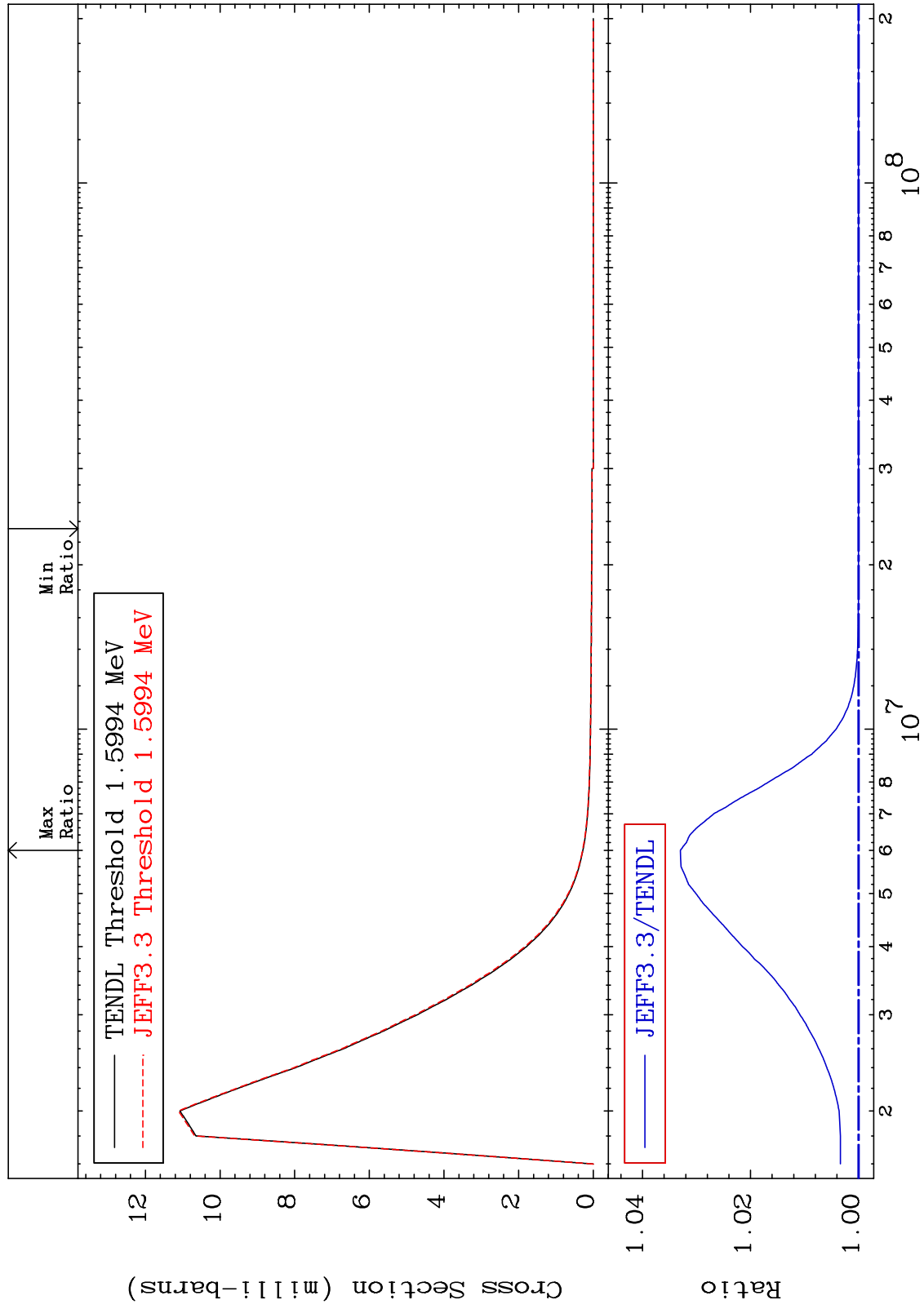
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
0.000 To 3.298 %



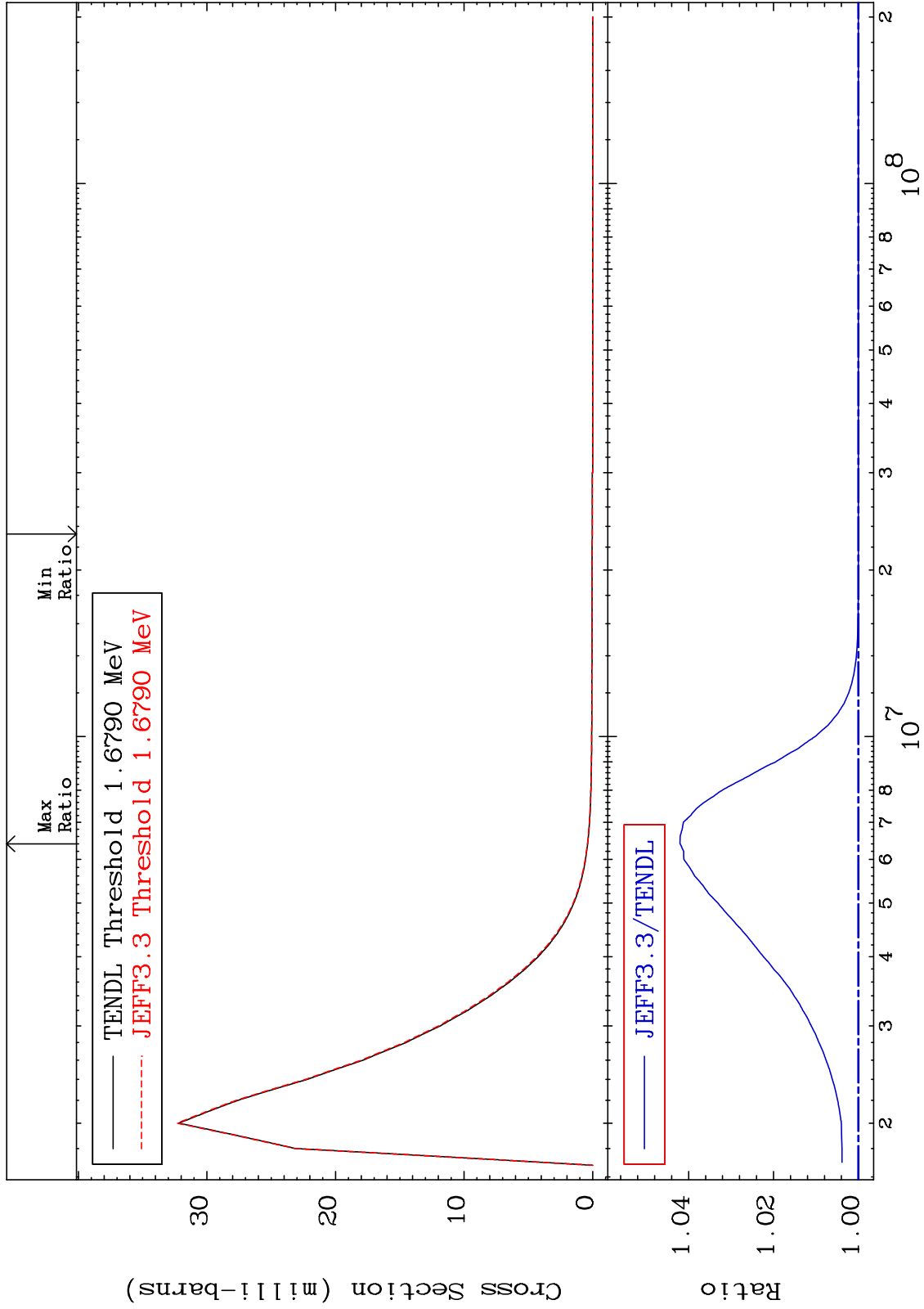
49

44-Ru-99

MAT 4434

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

0.000 To 4.203 %
44-Ru-99



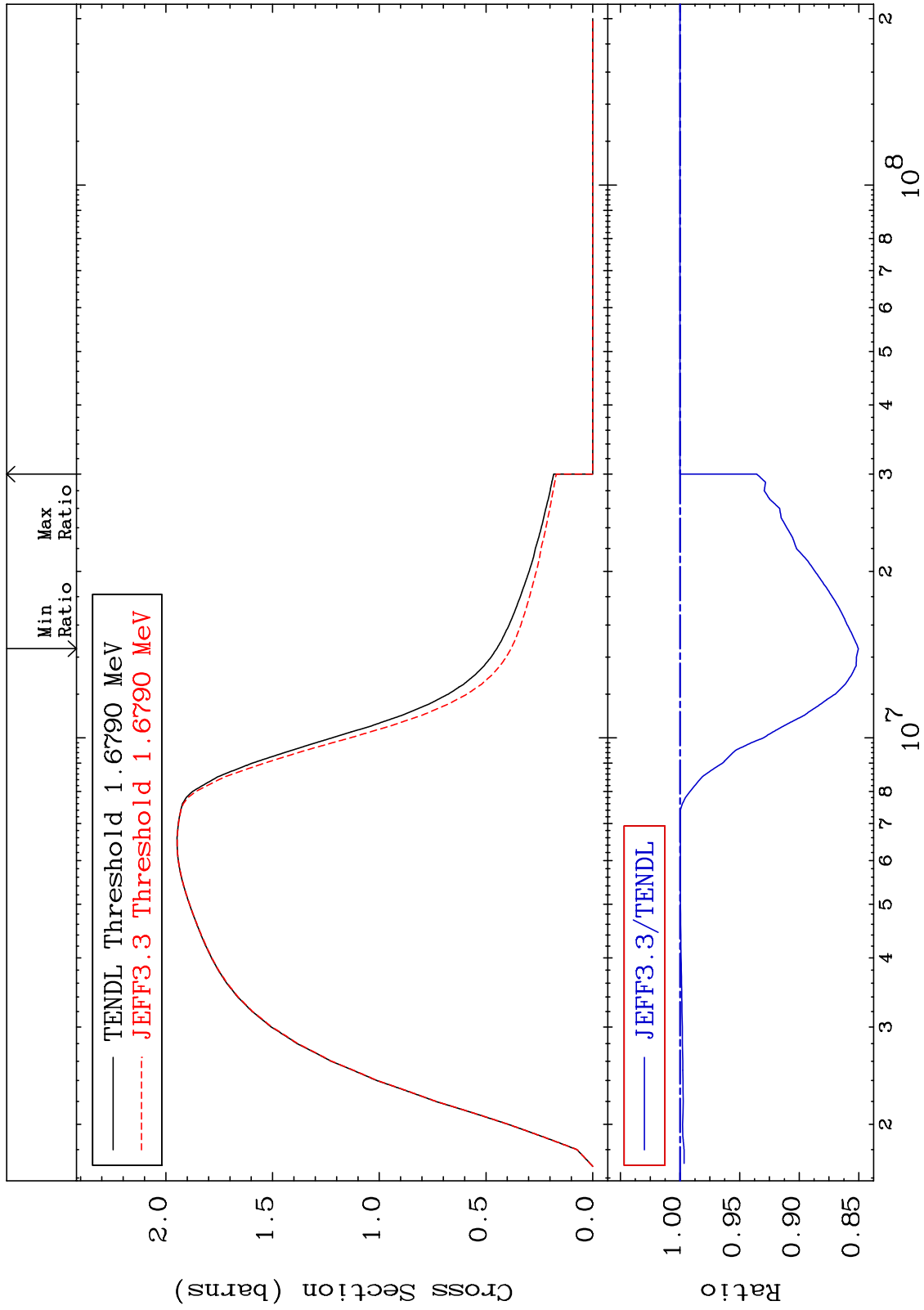
50

44-Ru-99

MAT 4434

(n, n') Continuum
Cross Section

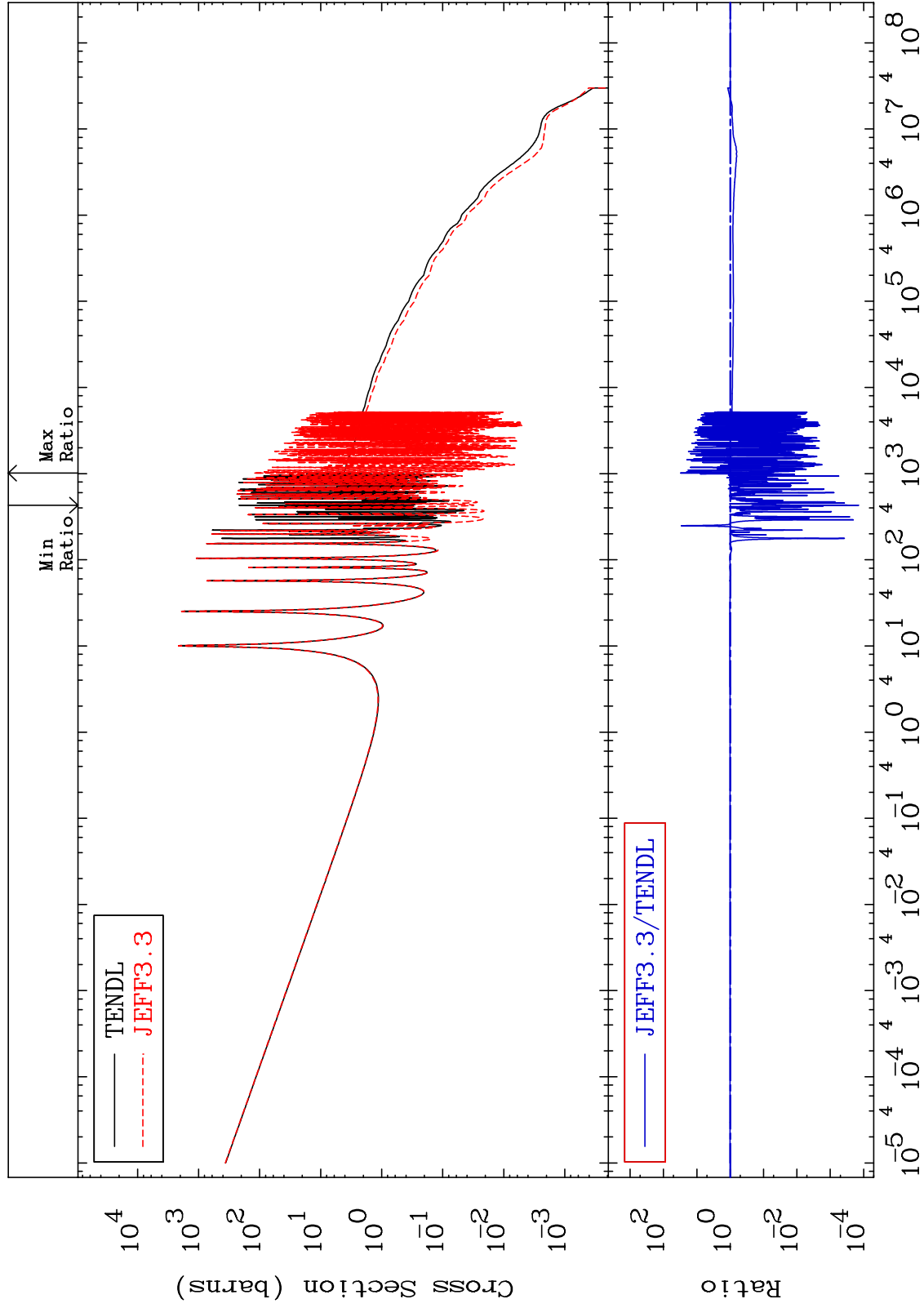
44-Ru-99
-14.97 To 0.000 %



MAT 4434

(n, γ)
Cross Section

44-Ru-99
-99.99 To 2998. %



52

Incident Energy (eV)

44-Ru-99

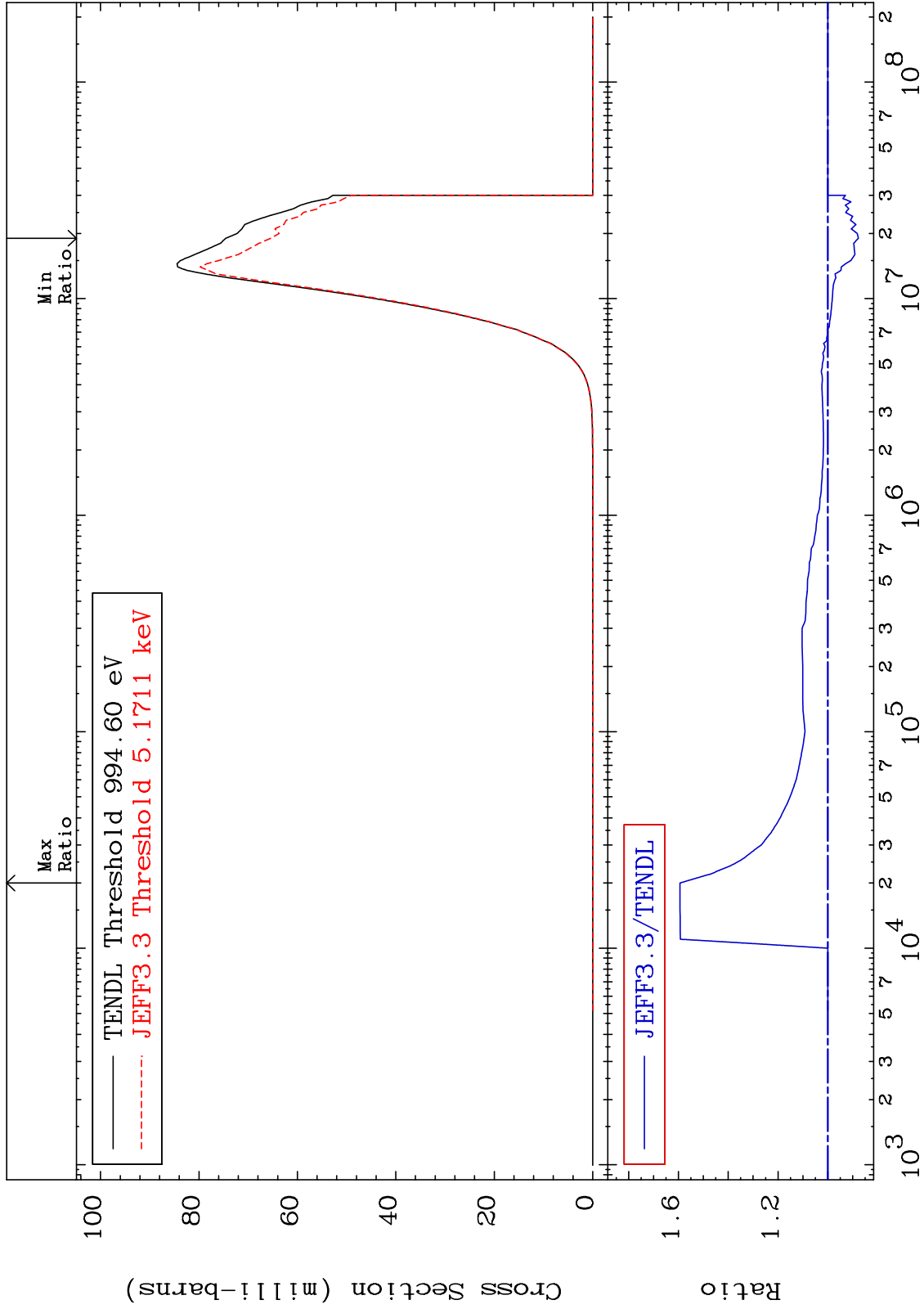
MAT 4434

(n, p)

44-Ru-99

Cross Section

-12.29 To 59.36 %



53

44-Ru-99

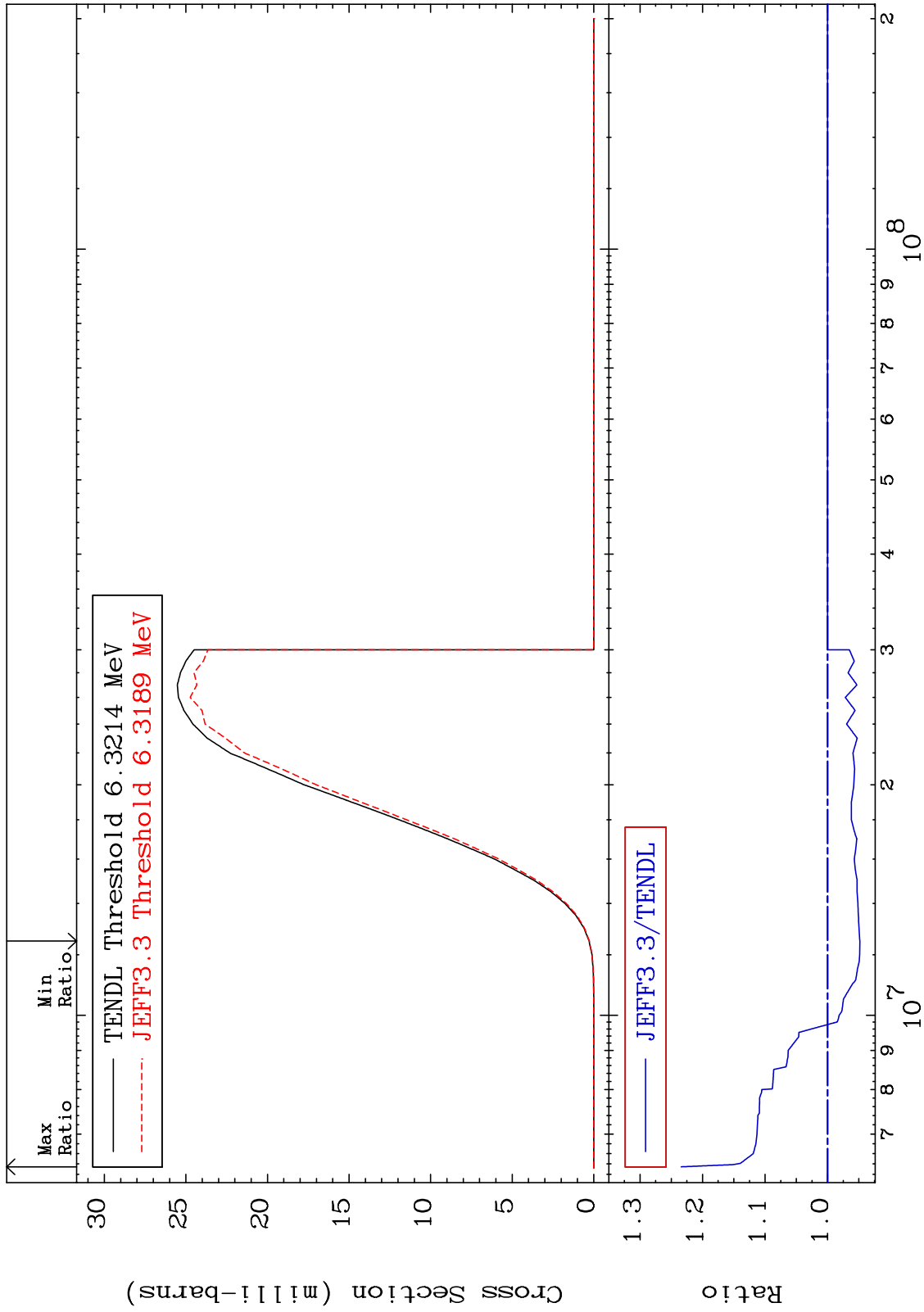
MAT 4434

(n, d)

44-Ru-99

Cross Section

-5.169 To 23.41 %



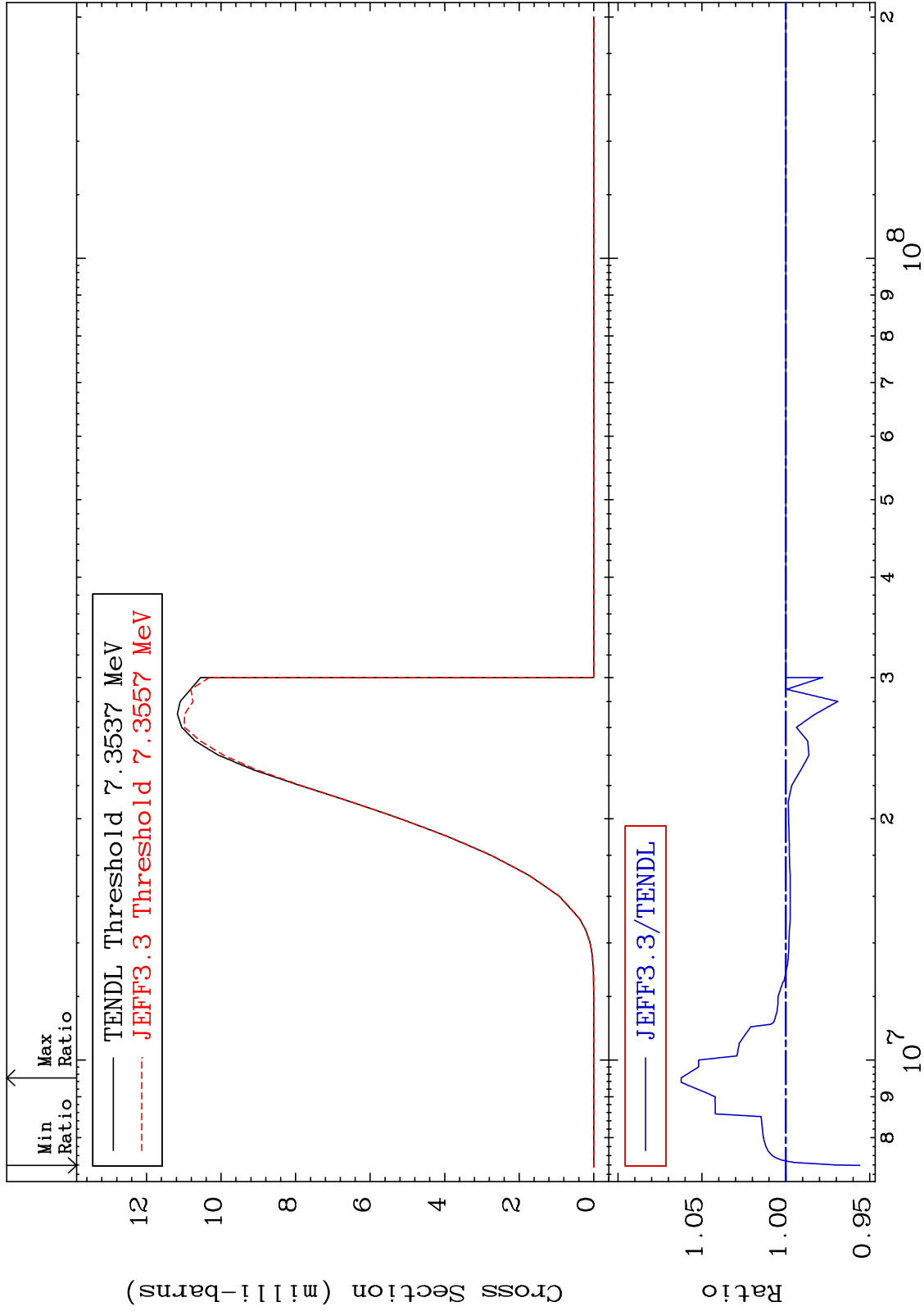
MAT 4434

(n, t)

44-Ru-99

Cross Section

-4.413 To 6.235 %



55

Incident Energy (eV)

44-Ru-99

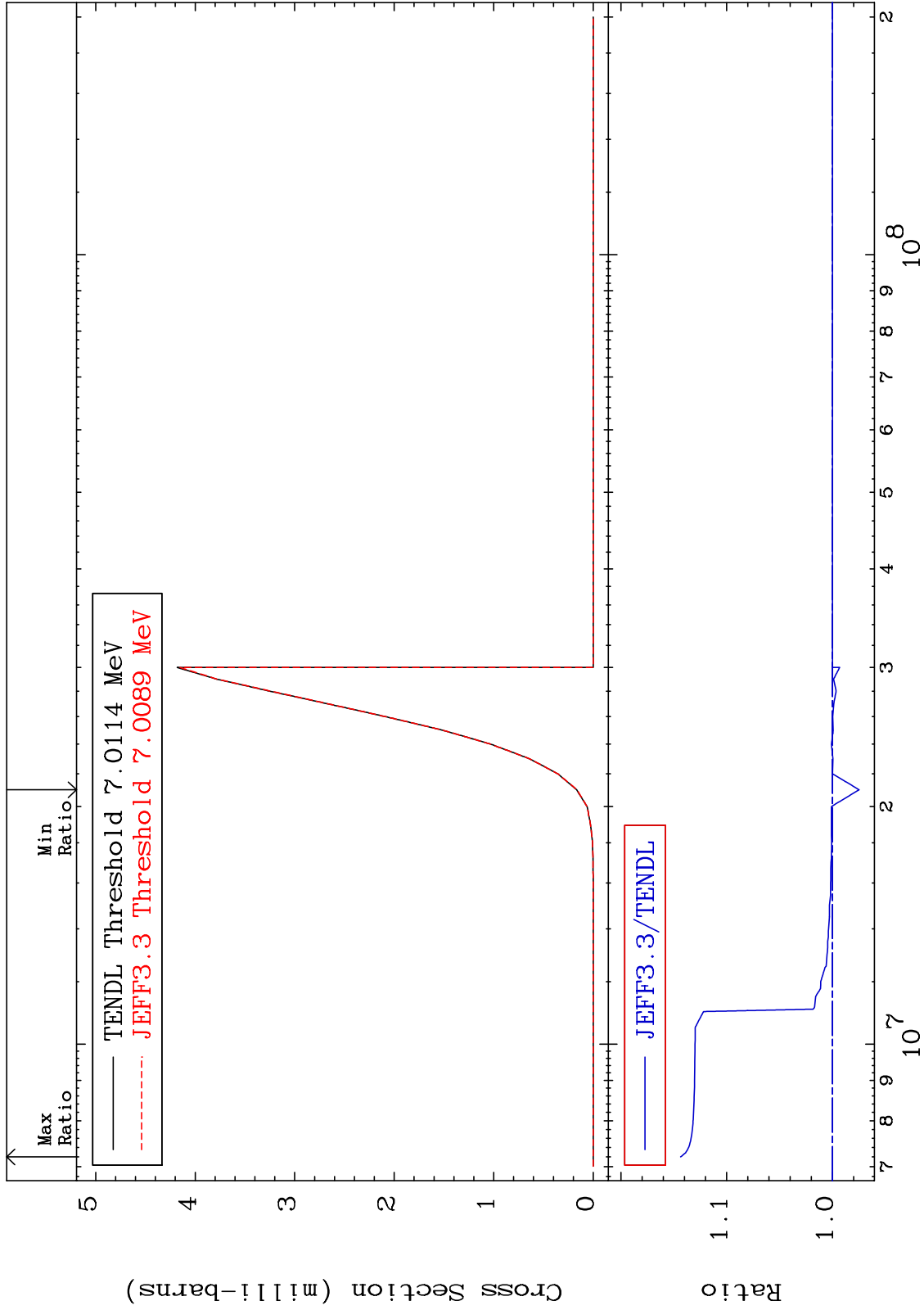
MAT 4434

(n, He-3)

44-Ru-99

Cross Section

-2.522 To 14.36 %



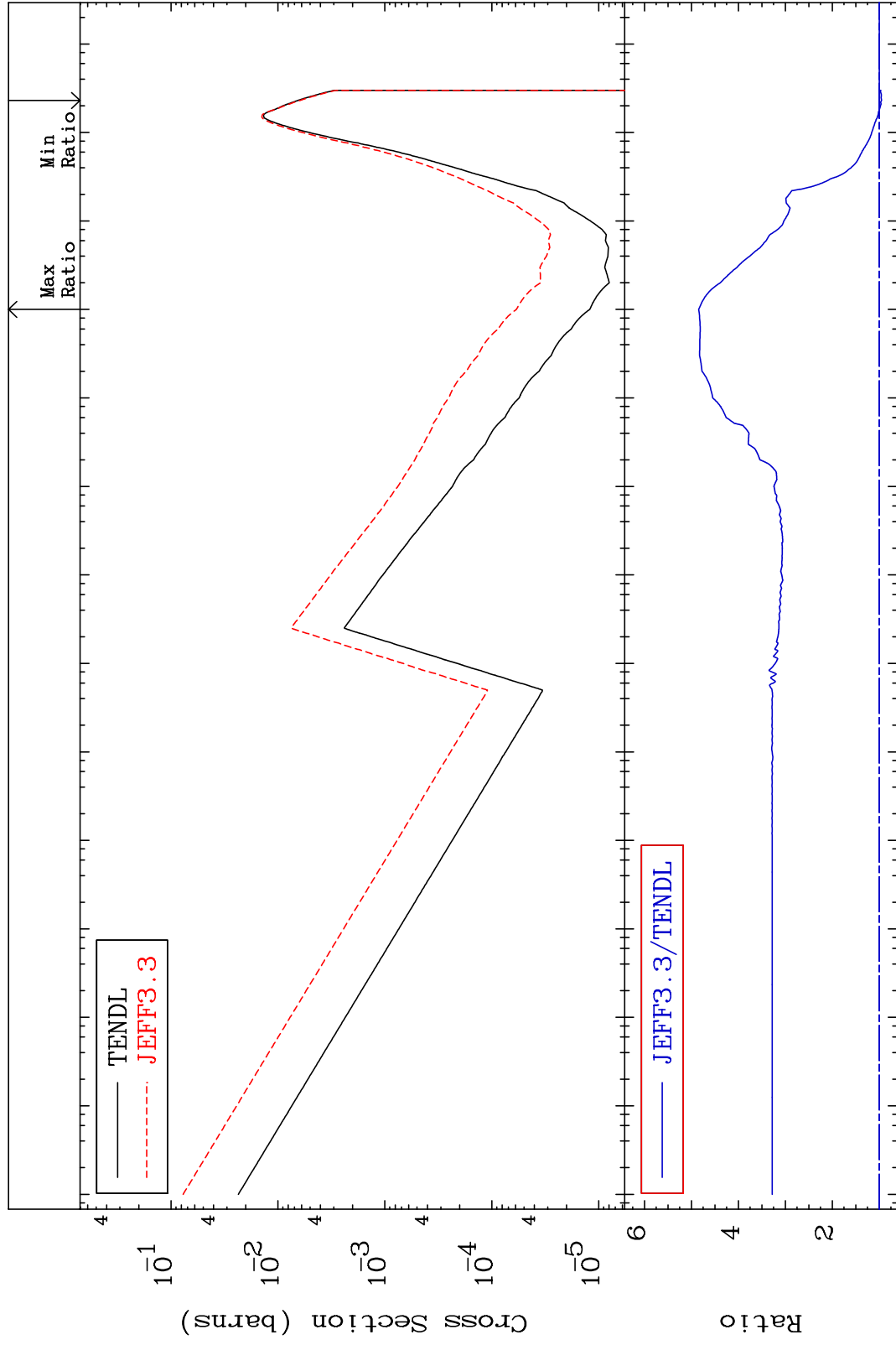
MAT 4434

(n, α)

44-Ru-99

Cross Section

-4.925 To 384.5 %



57

Incident Energy (eV)

44-Ru-99

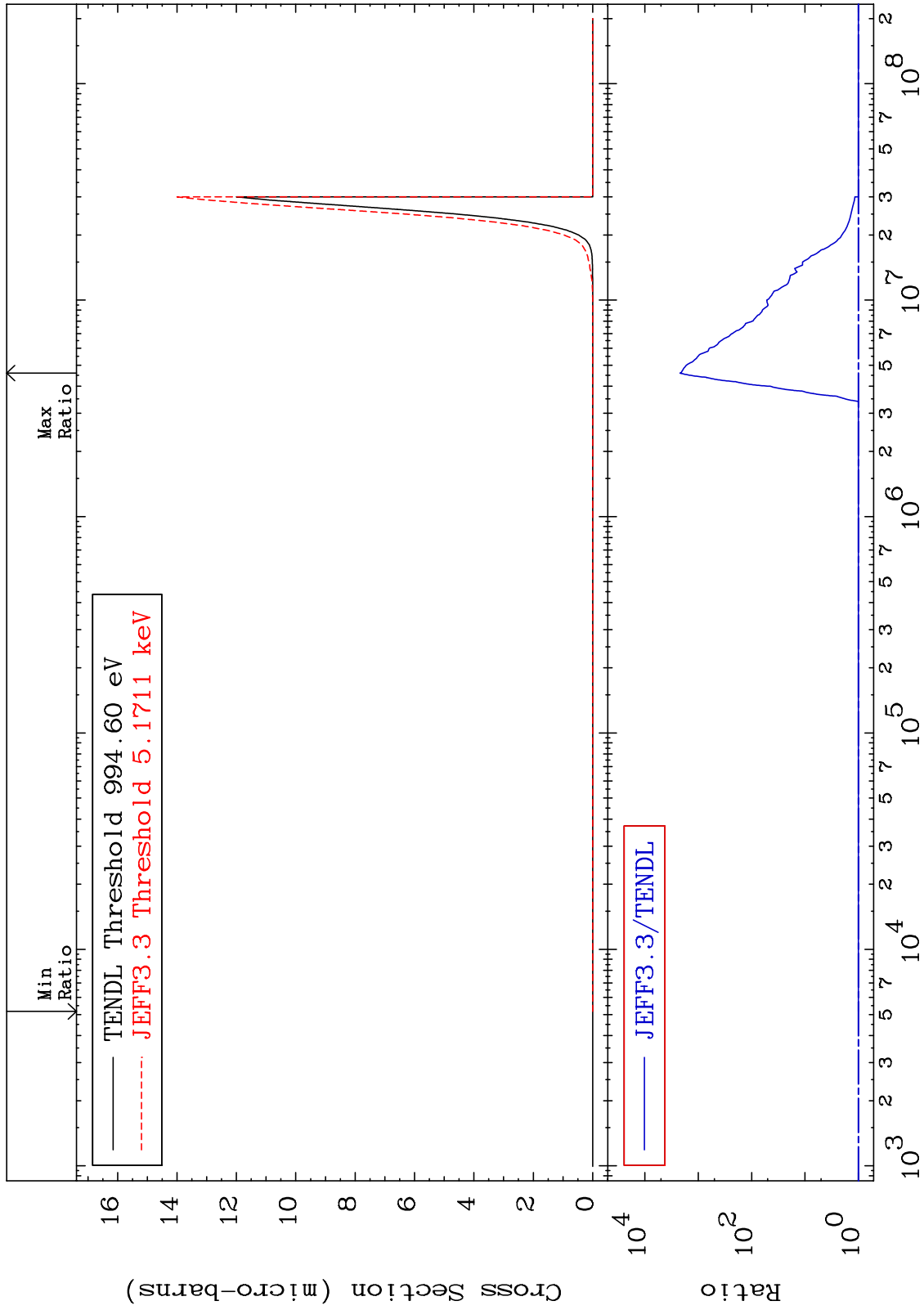
MAT 4434

(n,2α)

44-Ru-99

Cross Section

0.000 To 9999. %



58

44-Ru-99

44-Ru-99

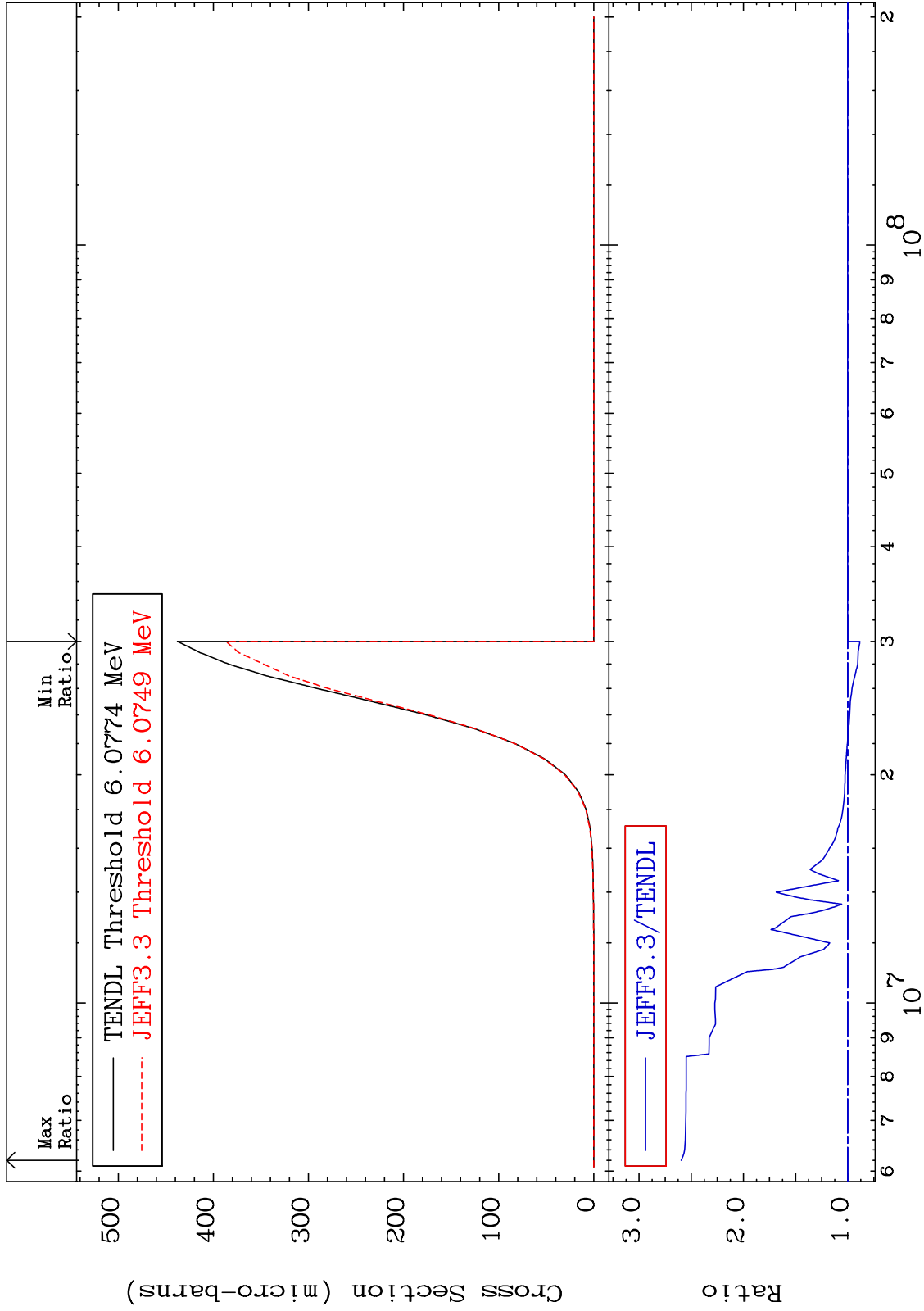
MAT 4434

(n,2p)

44-Ru-99

Cross Section

-11.68 To 159.6 %



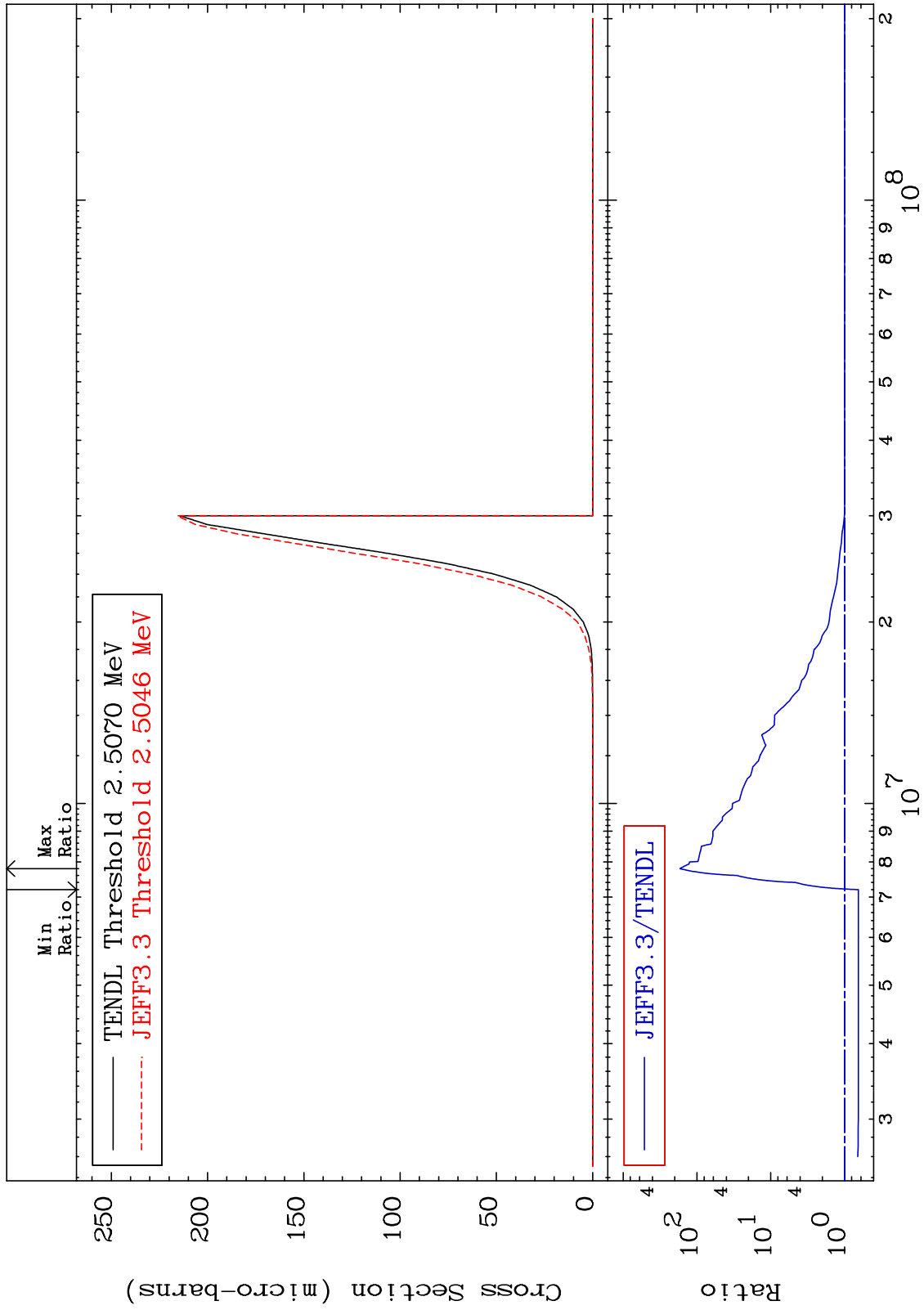
MAT 4434

(n,p) α

44-Ru-99

Cross Section

-35.15 To 9999. %



Min Ratio

Max Ratio

— TENDL Threshold 2.5070 MeV
- - - JEFF3.3 Threshold 2.5046 MeV

JEFF3.3/TENDL

60

Incident Energy (eV)

44-Ru-99

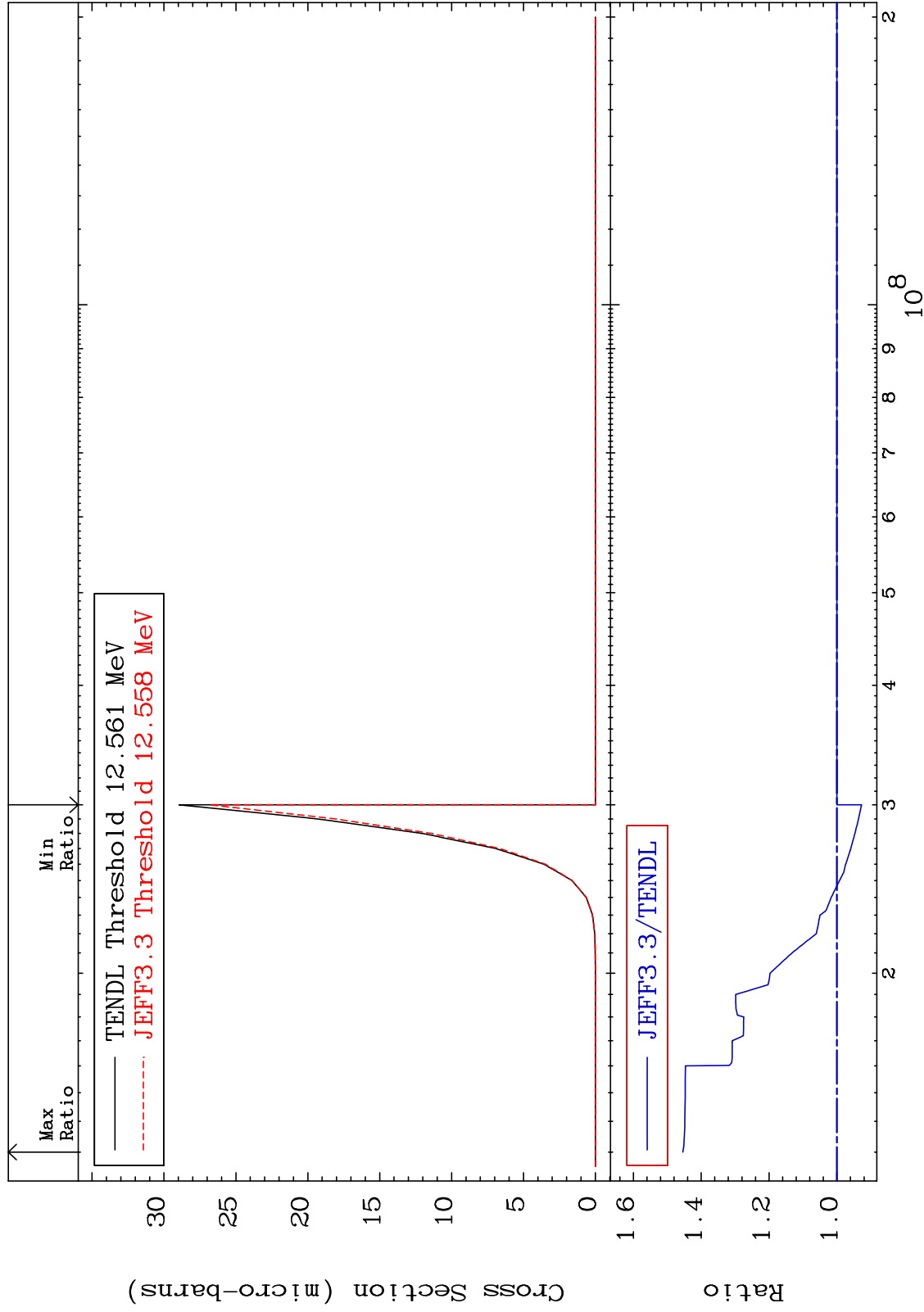
MAT 4434

(n,p) d

44-Ru-99

Cross Section

-7.271 To 45.41 %



61

Incident Energy (eV)

44-Ru-99

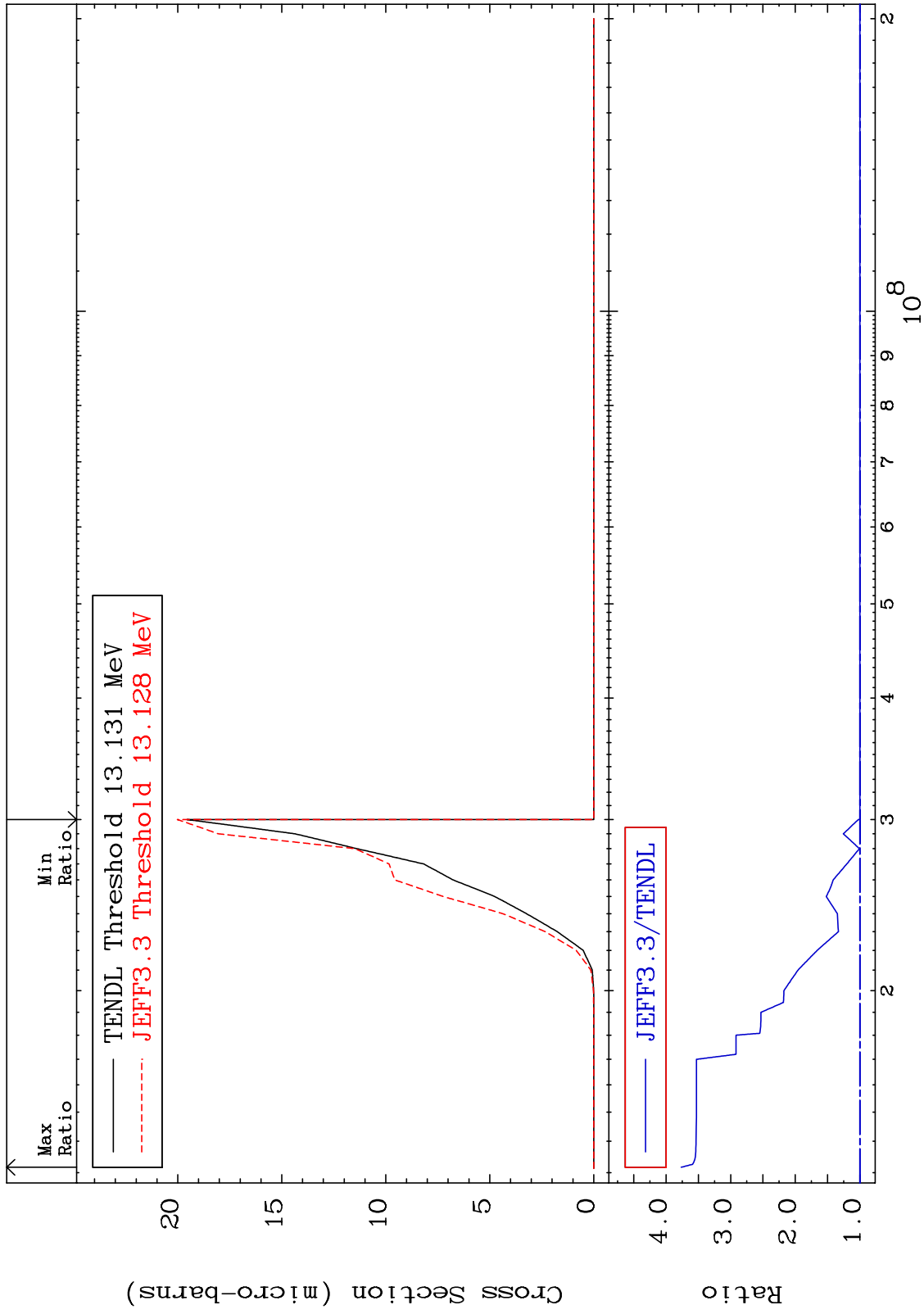
MAT 4434

(n,p) t

44-Ru-99

Cross Section

0.000 To 276.5 %



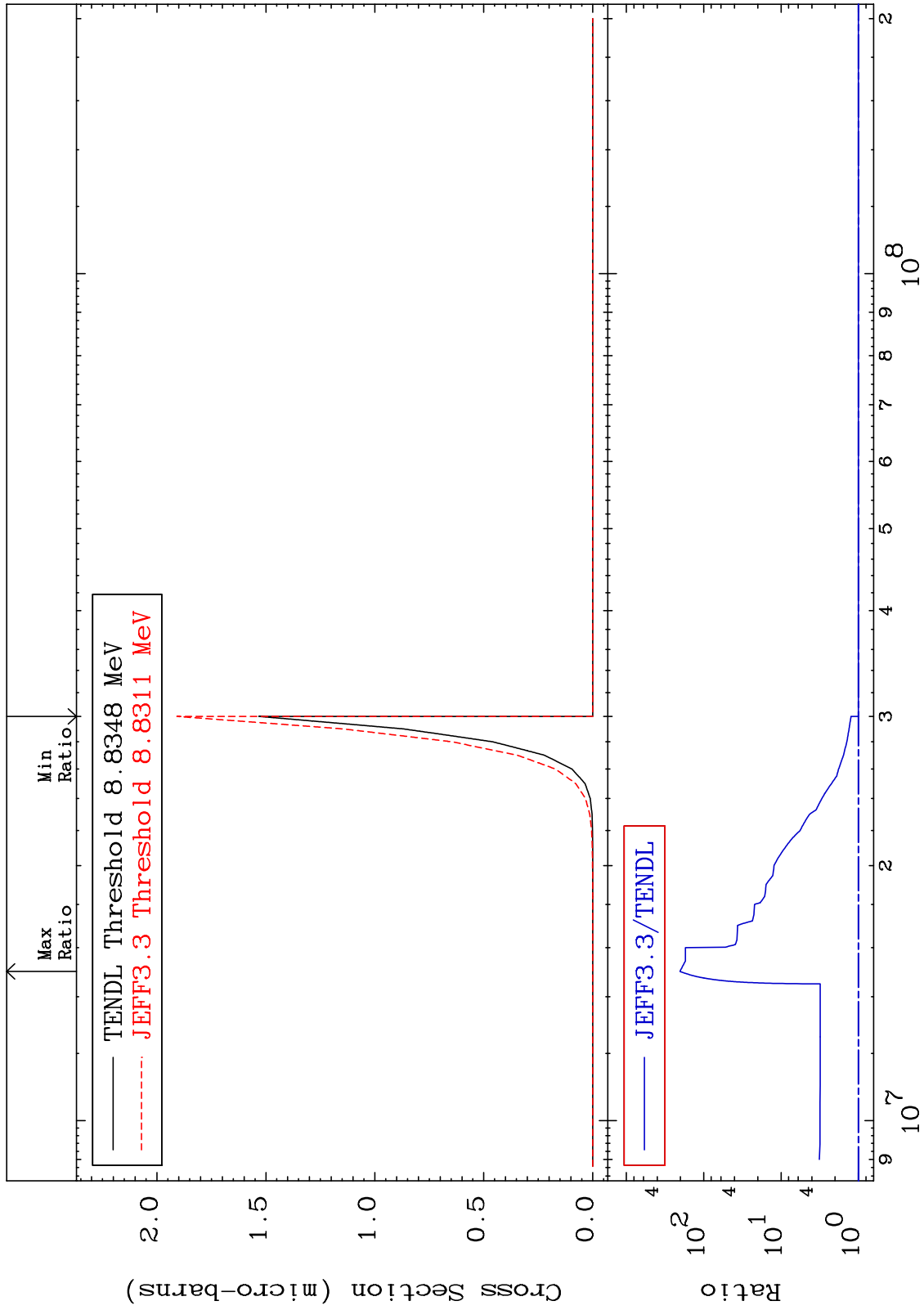
MAT 4434

(n,d) α

44-Ru-99

Cross Section

0.000 To 9999. %



63

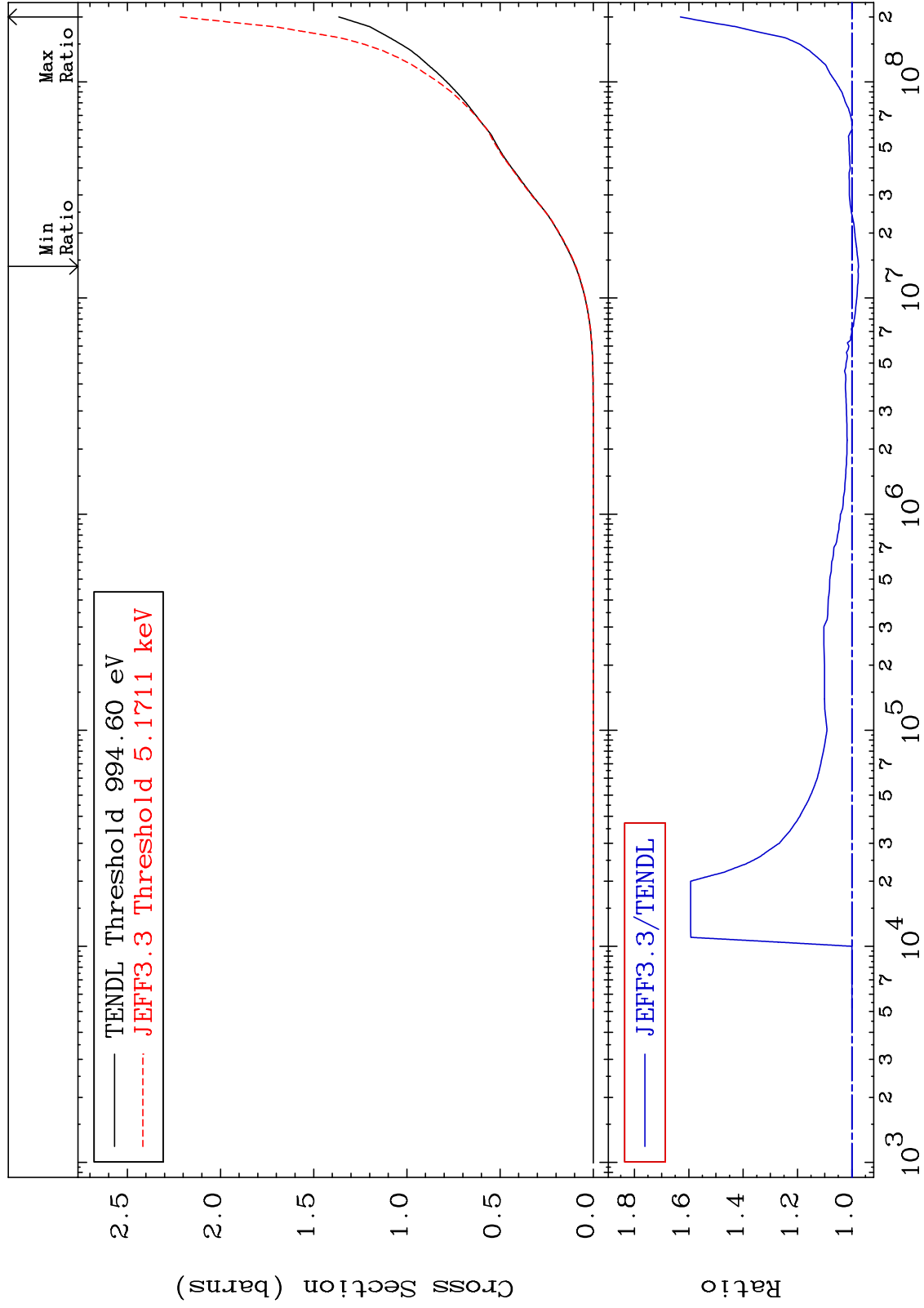
Incident Energy (eV)

44-Ru-99

MAT 4434

Hydrogen Production
Cross Section

44-Ru-99
-2.438 To 63.06 %



64

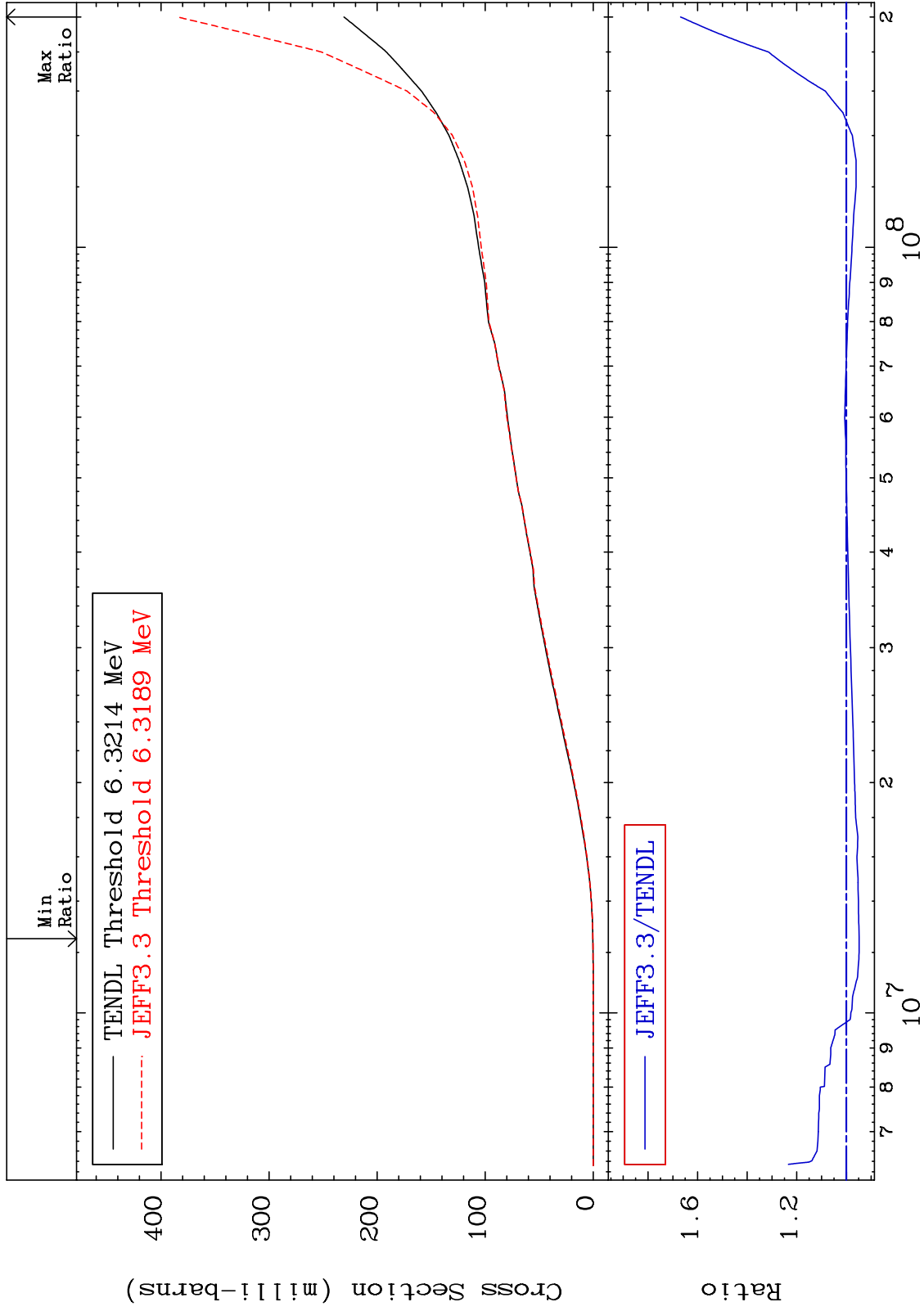
Incident Energy (eV)

44-Ru-99

MAT 4434

Deuterium Production
Cross Section

44-Ru-99
-5.169 To 66.85 %



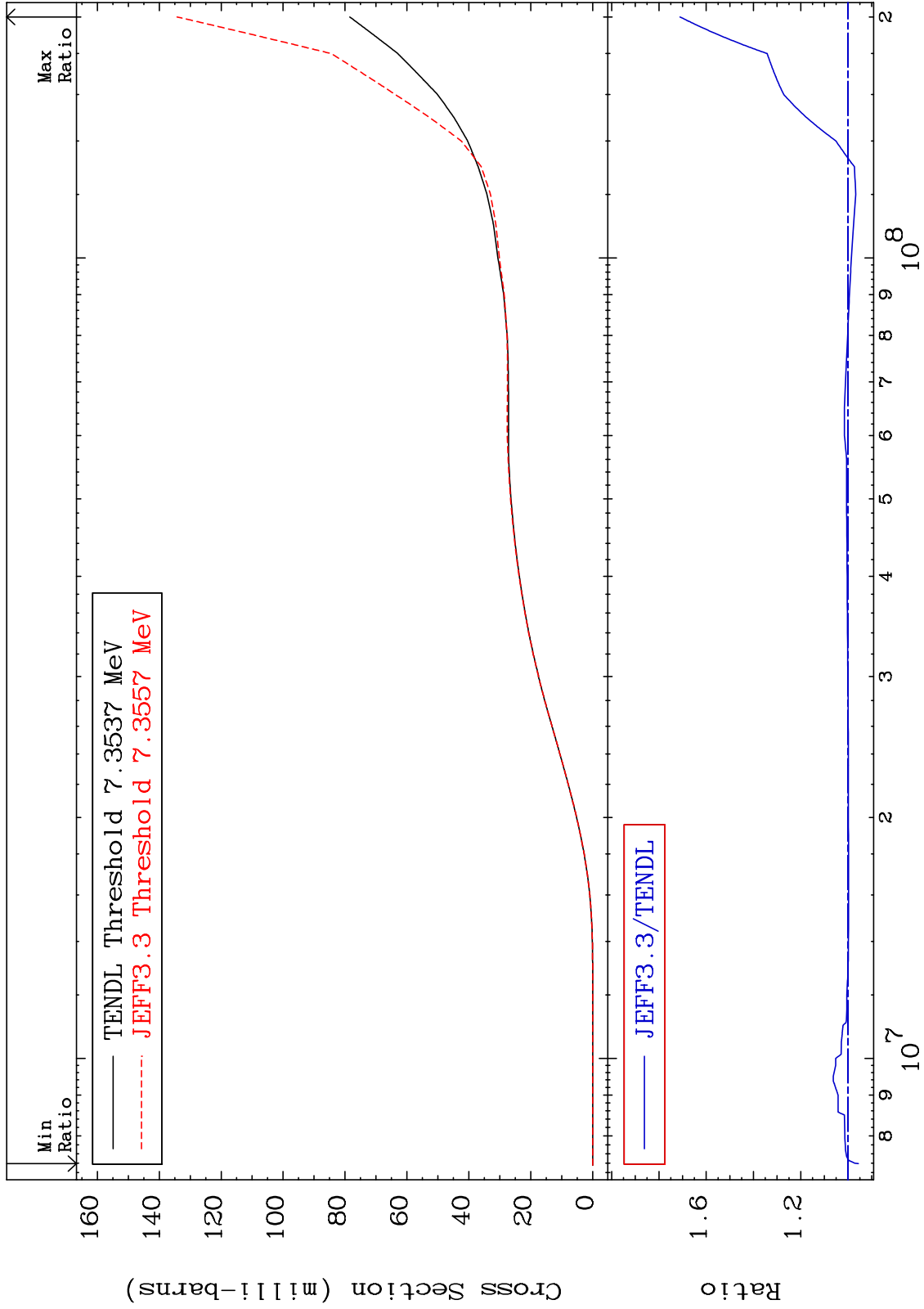
65

44-Ru-99

MAT 4434

Tritium Production
Cross Section

44-Ru-99
-4.413 To 71.08 %



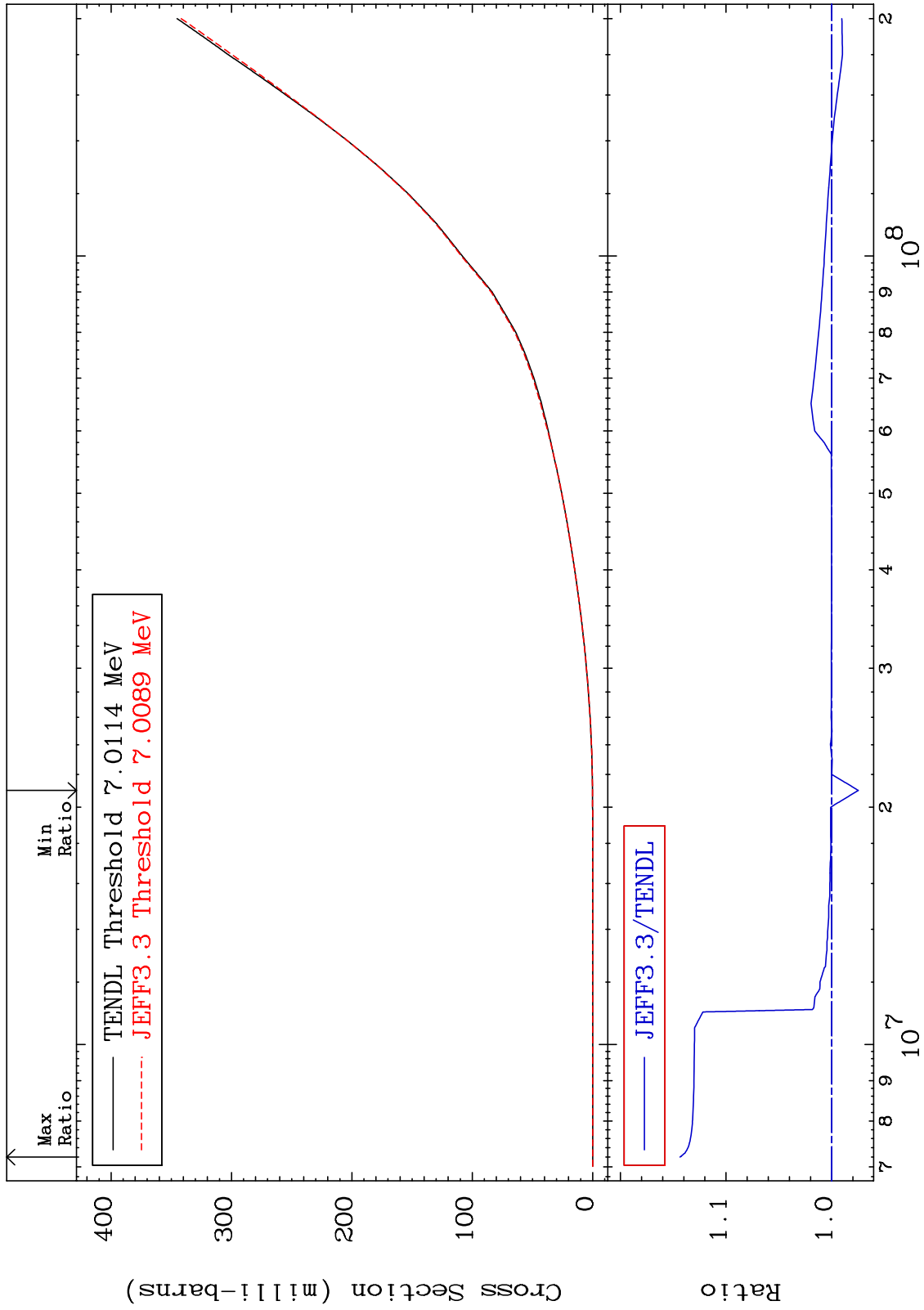
66

44-Ru-99

MAT 4434

He-3 Production
Cross Section

44-Ru-99
-2.522 To 14.36 %



67

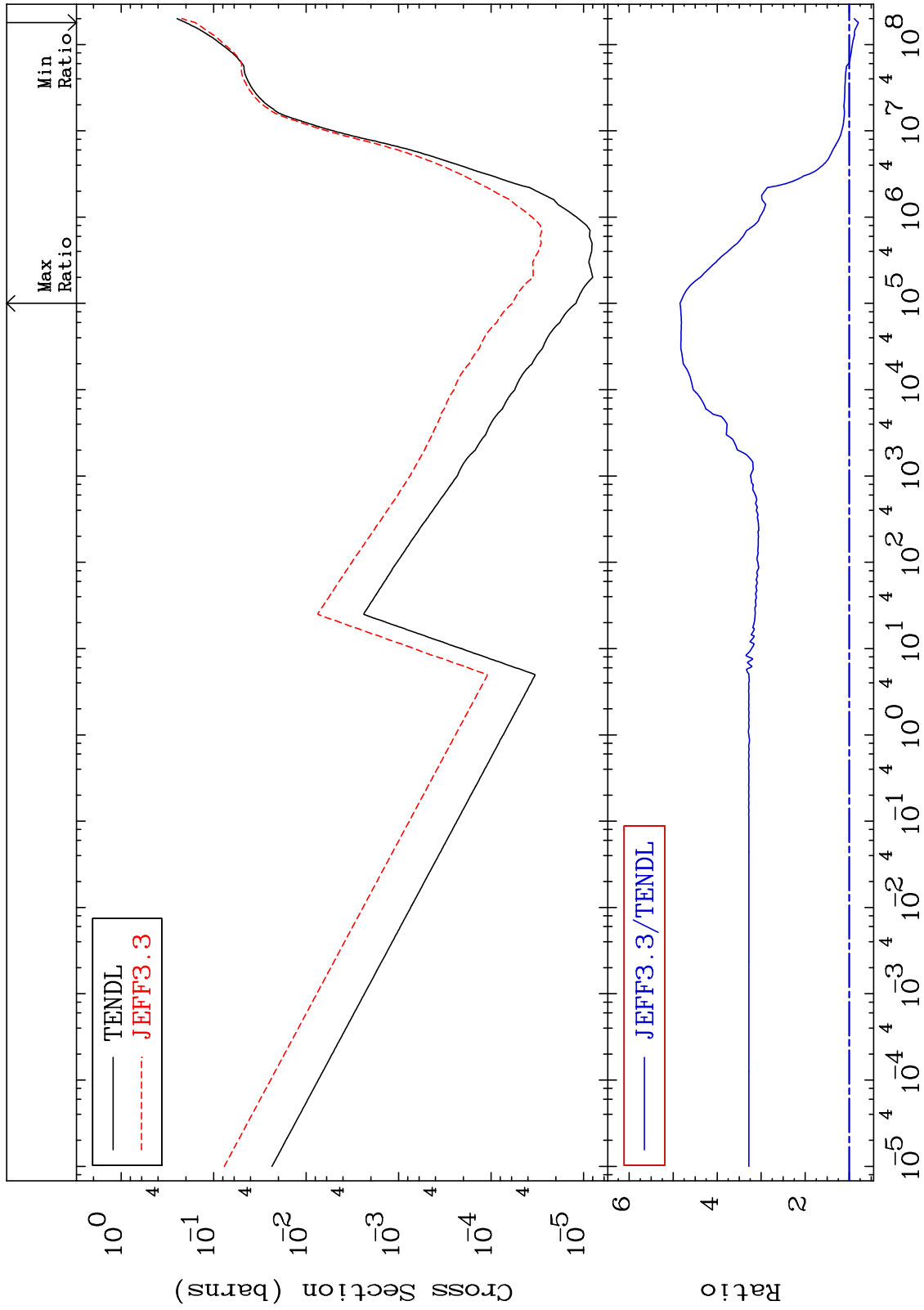
Incident Energy (eV)

44-Ru-99

MAT 4434

He-4 Production
Cross Section

44-Ru-99
-20.94 To 384.5 %



68

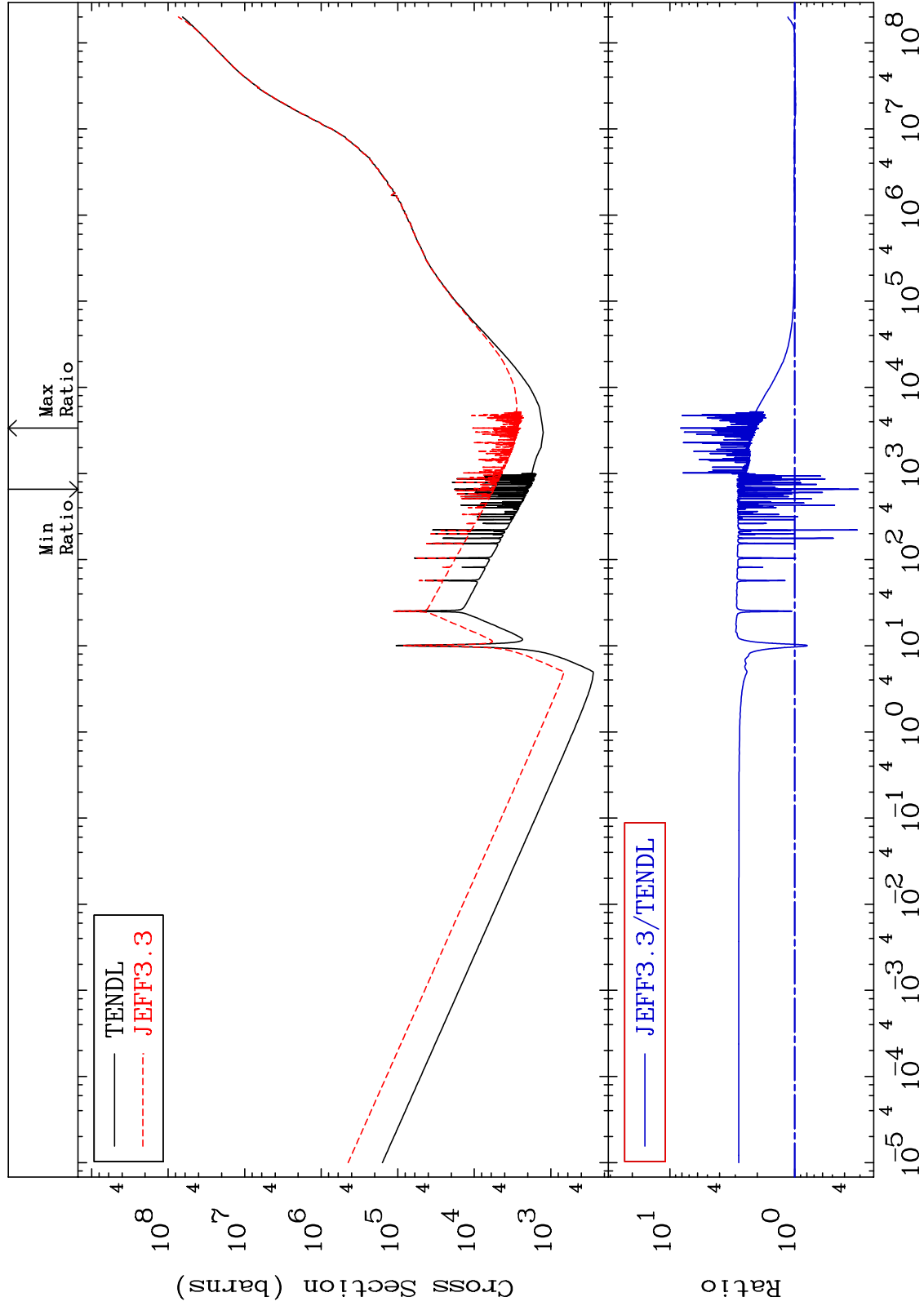
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma total (eV-barns)
Cross Section

44-Ru-99
-69.12 To 722.3 %



69

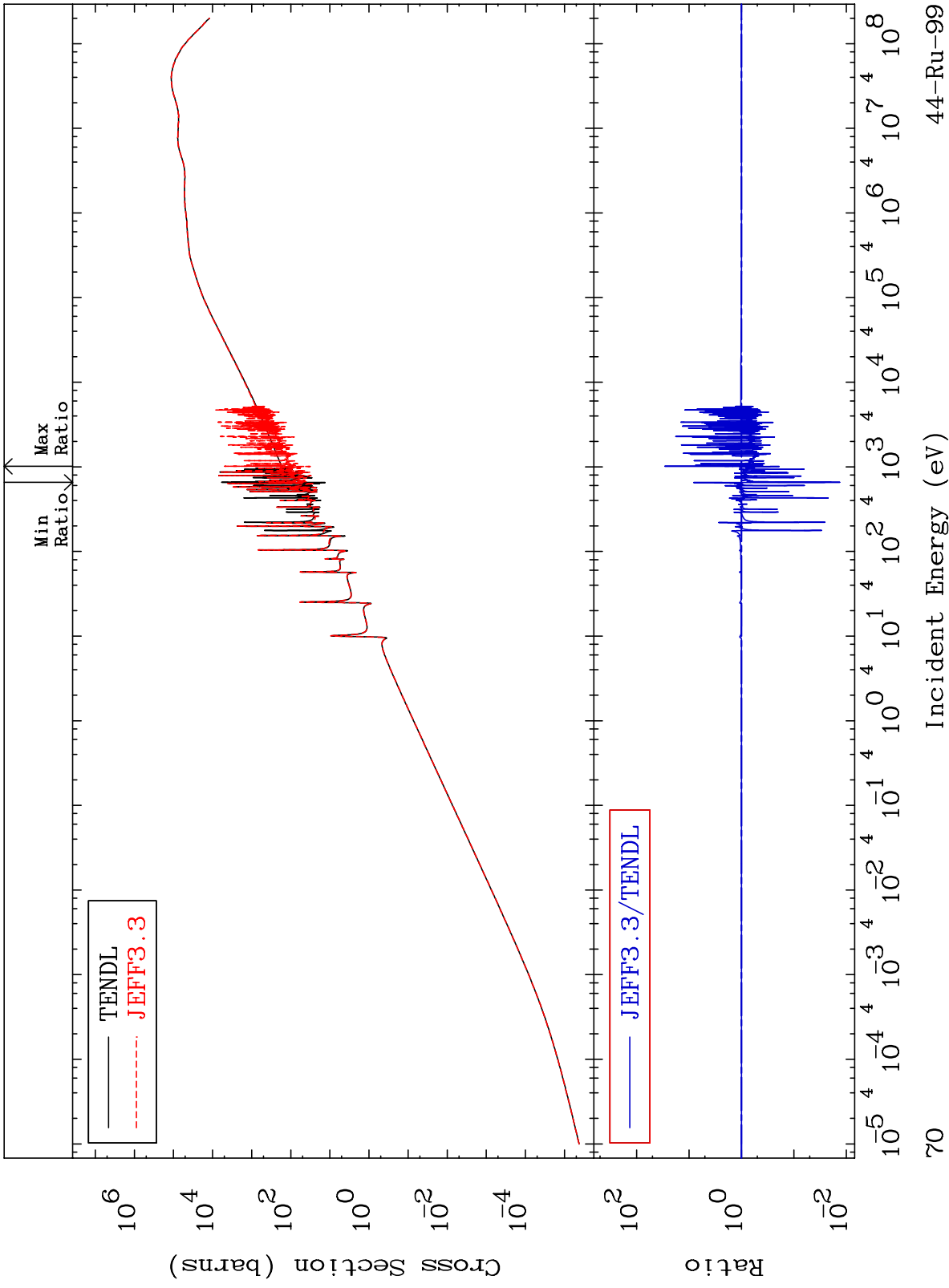
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma elastic
Cross Section

44-Ru-99
-98.67 To 2814. %



70

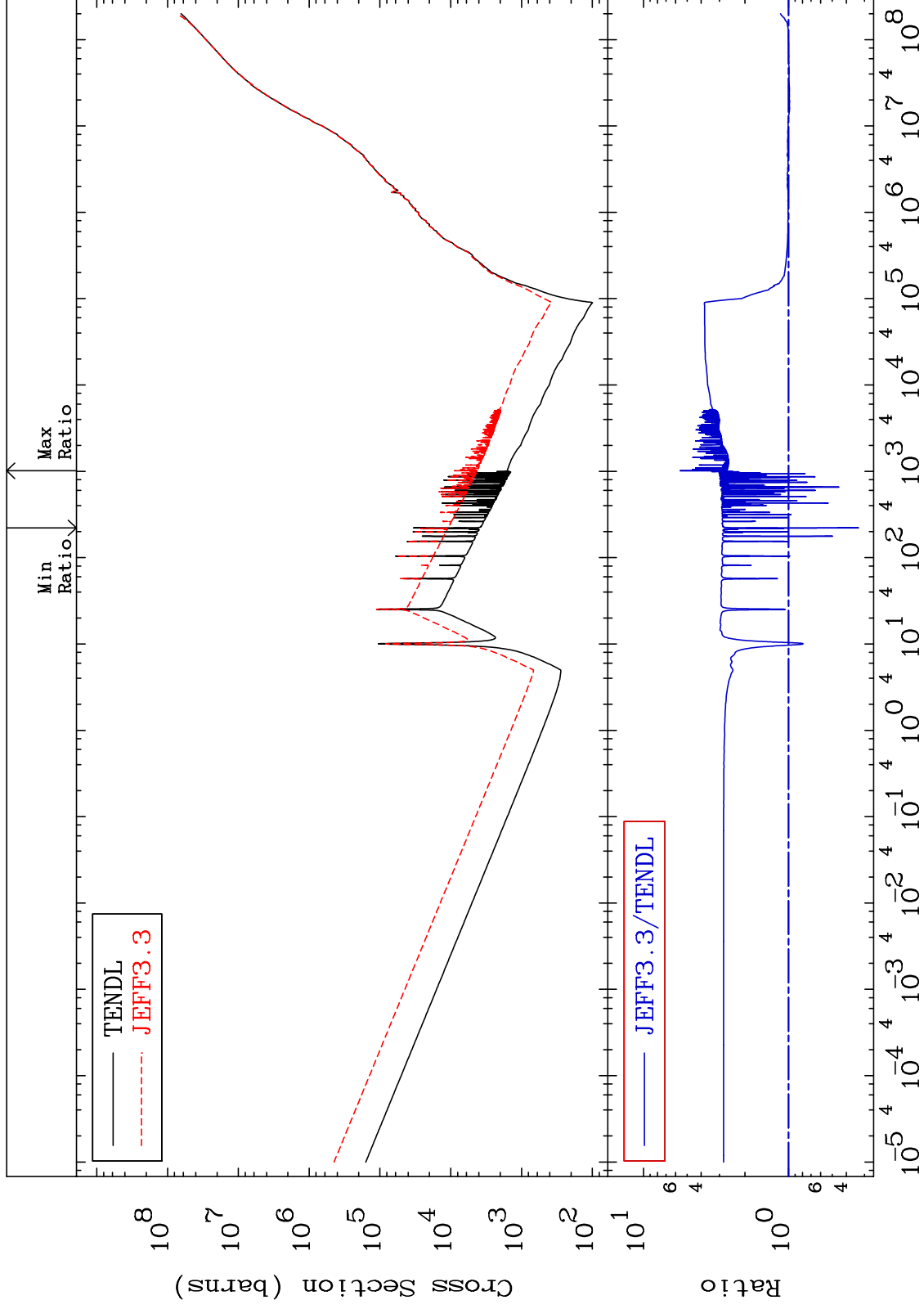
44-Ru-99

MAT 4434

Kerma non-elastic (all but mt2)
Cross Section

44-Ru-99

-67.01 To 459.9 %



71

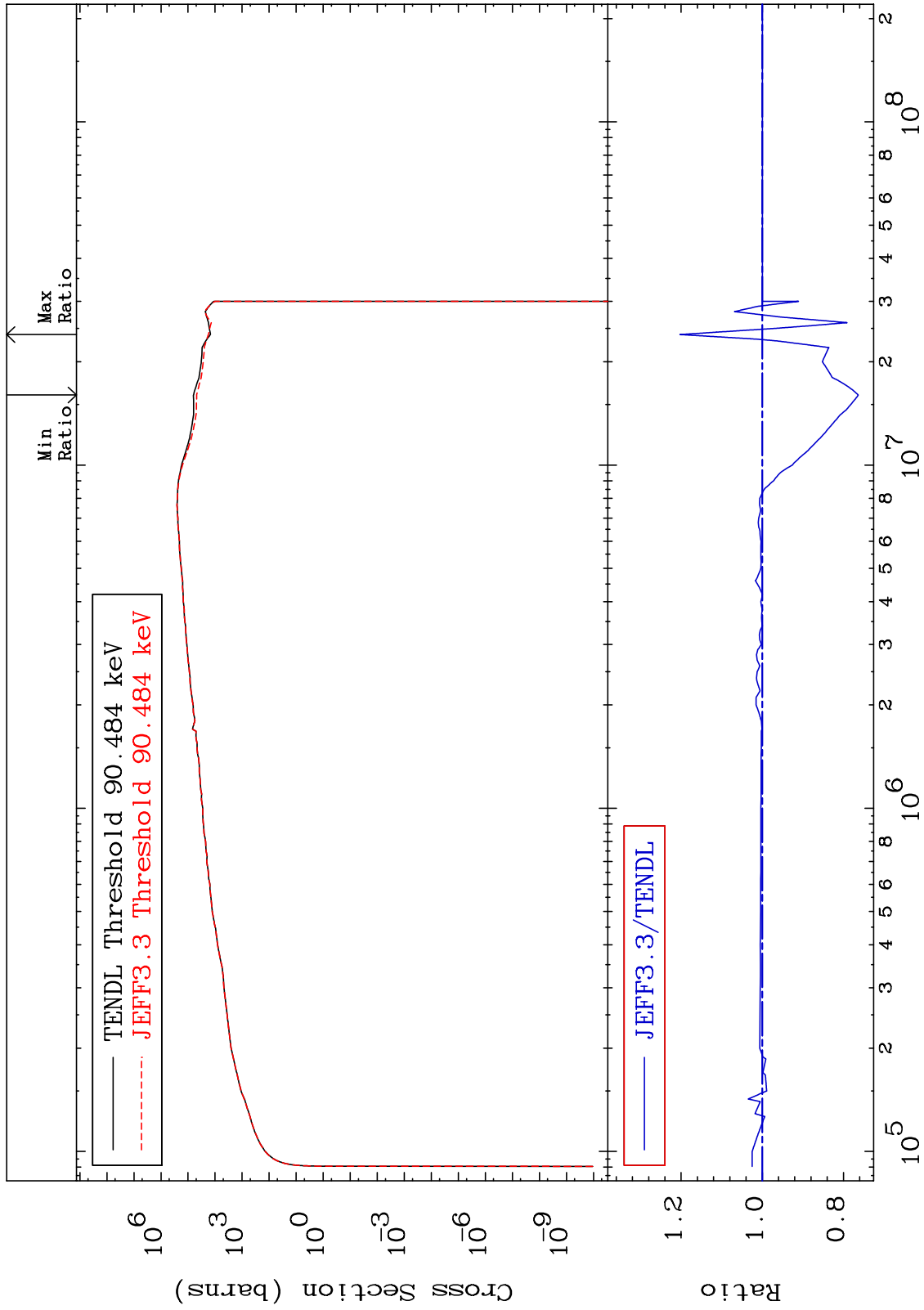
Incident Energy (eV)

44-Ru-99

MAT 4434

Kerma inelastic (mt51-91)
Cross Section

44-Ru-99
-23.69 To 20.28 %



72

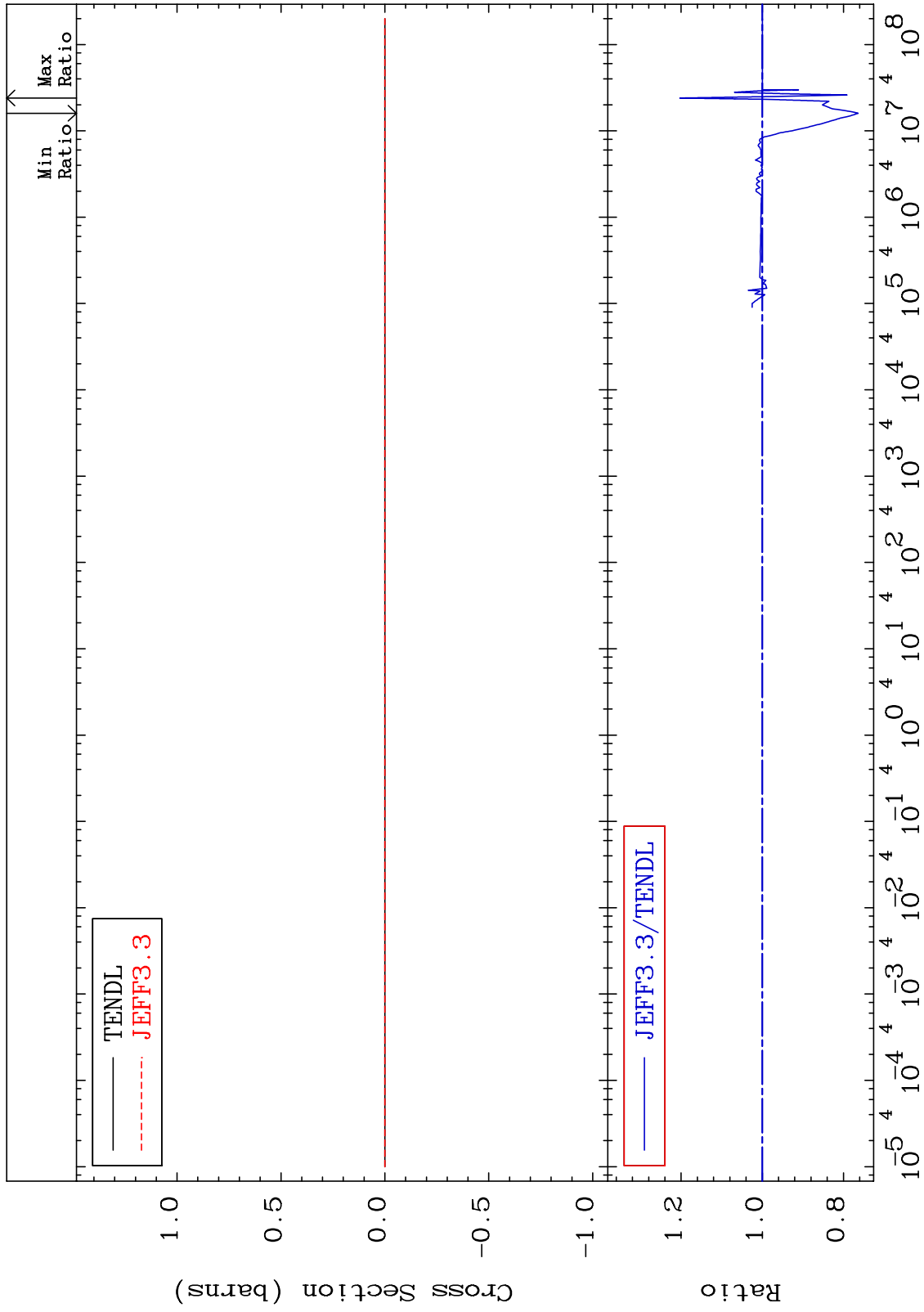
Incident Energy (eV)

44-Ru-99

MAT 4434

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

44-Ru-99
-23.69 To 20.28 %



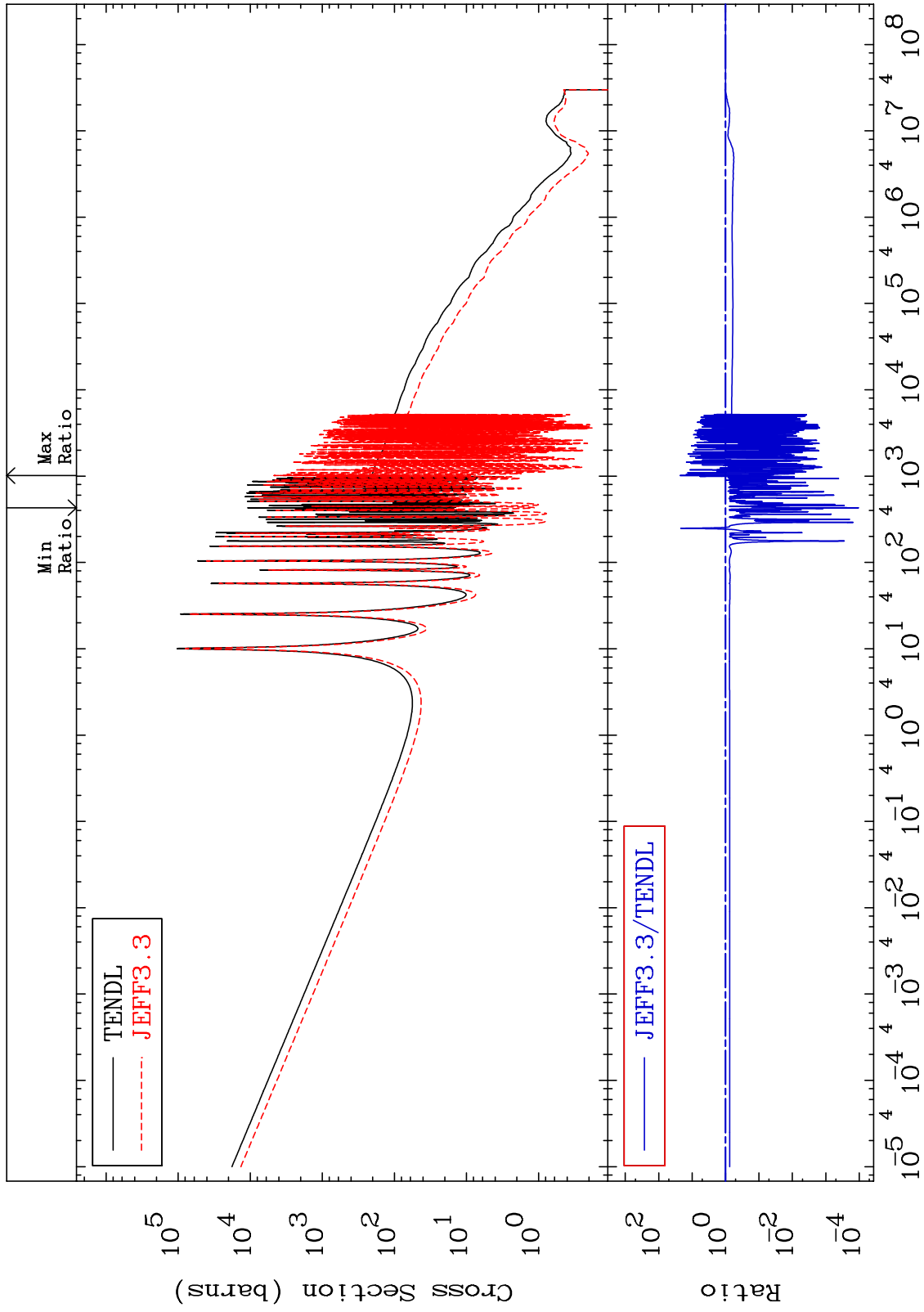
73

44-Ru-99

MAT 4434

Kerma capture (mt102)
Cross Section

44-Ru-99
-99.99 To 2203. %



74

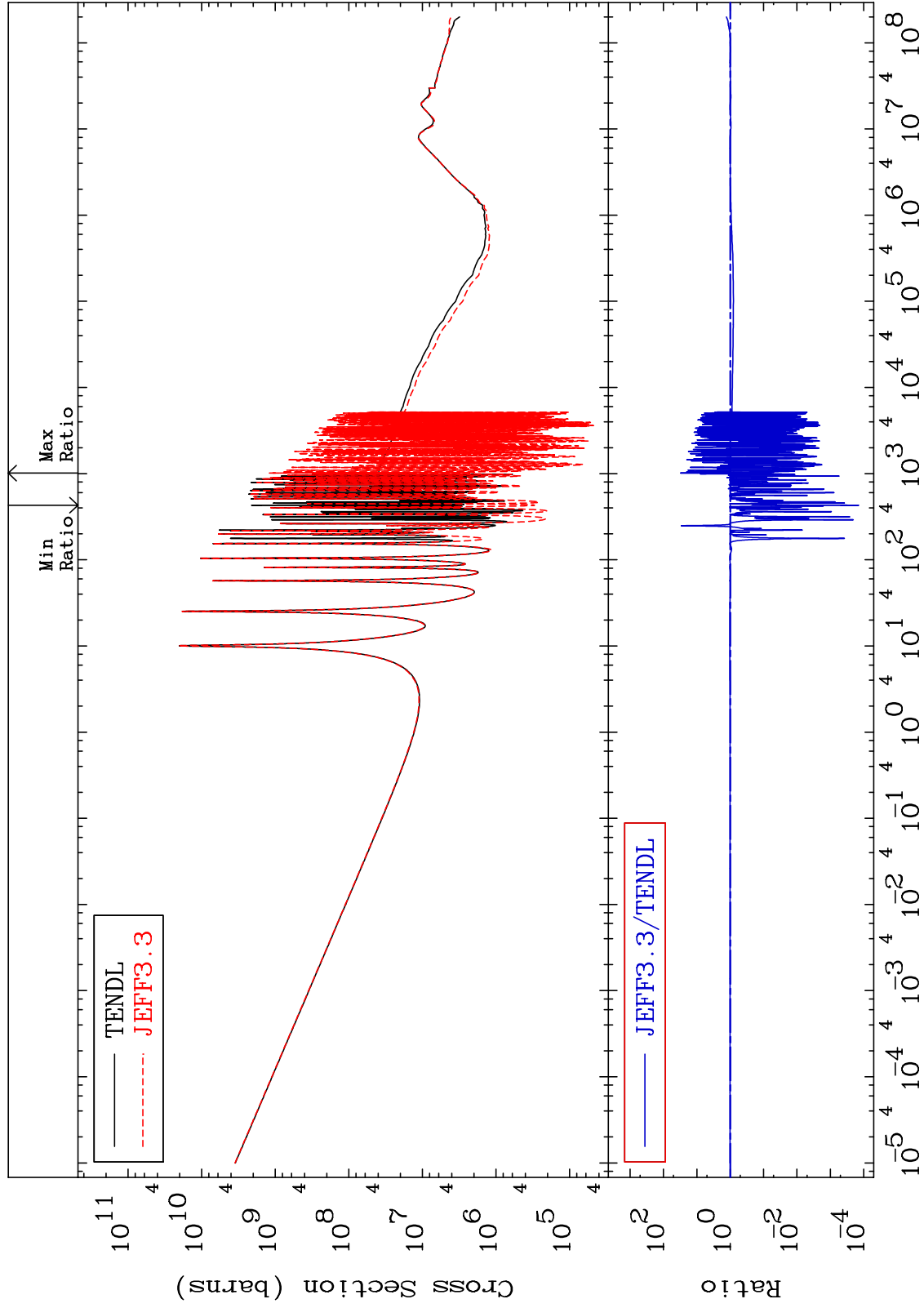
Incident Energy (eV)

44-Ru-99

MAT 4434

Total photon (eV-barns)
Cross Section

44-Ru-99
-99.99 To 2998. %



75

Incident Energy (eV)

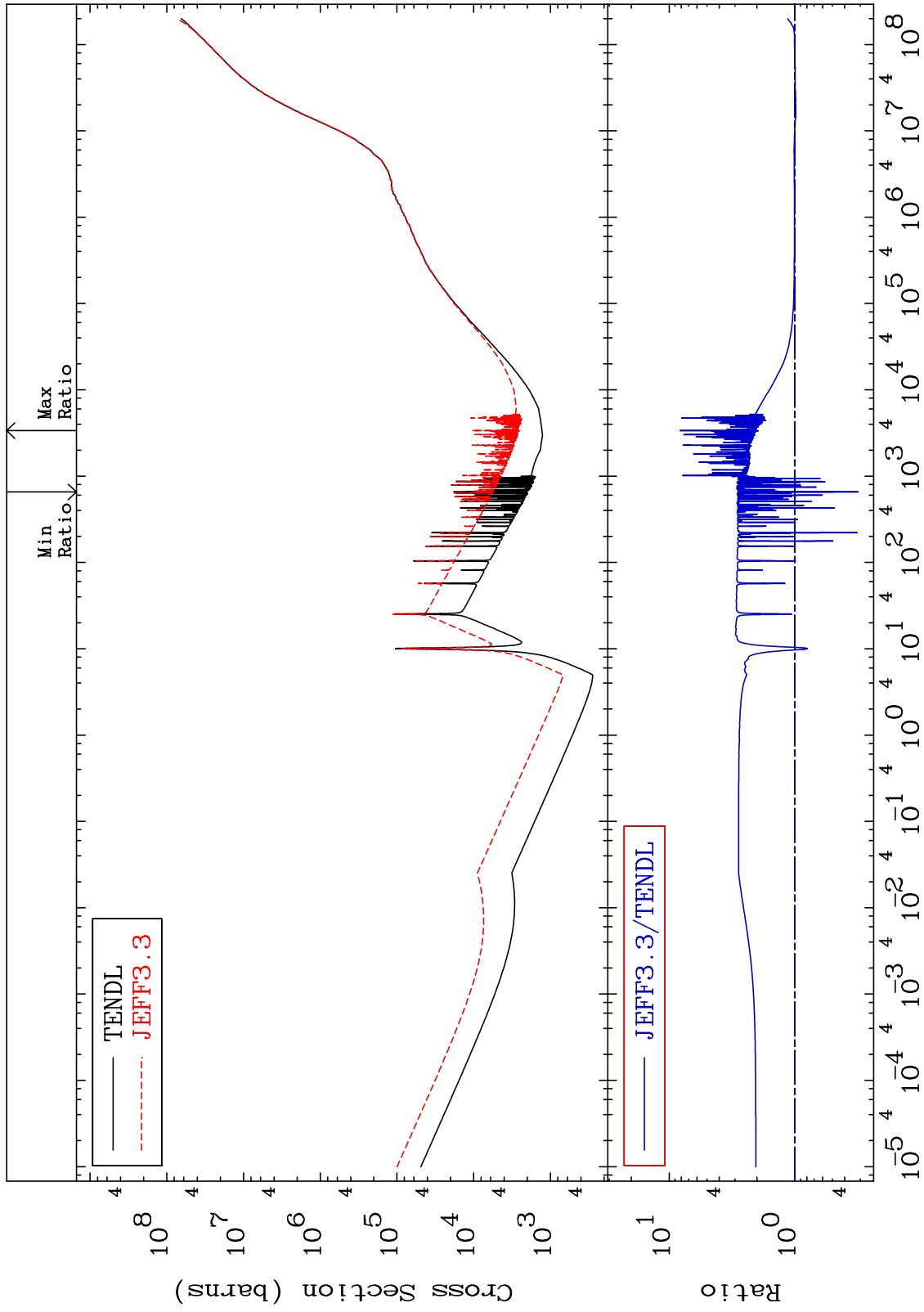
44-Ru-99

MAT 4434

Total kinematic kerma (high limit)
Cross Section

44-Ru-99

-68.91 To 720.0 %



76

Incident Energy (eV)

44-Ru-99

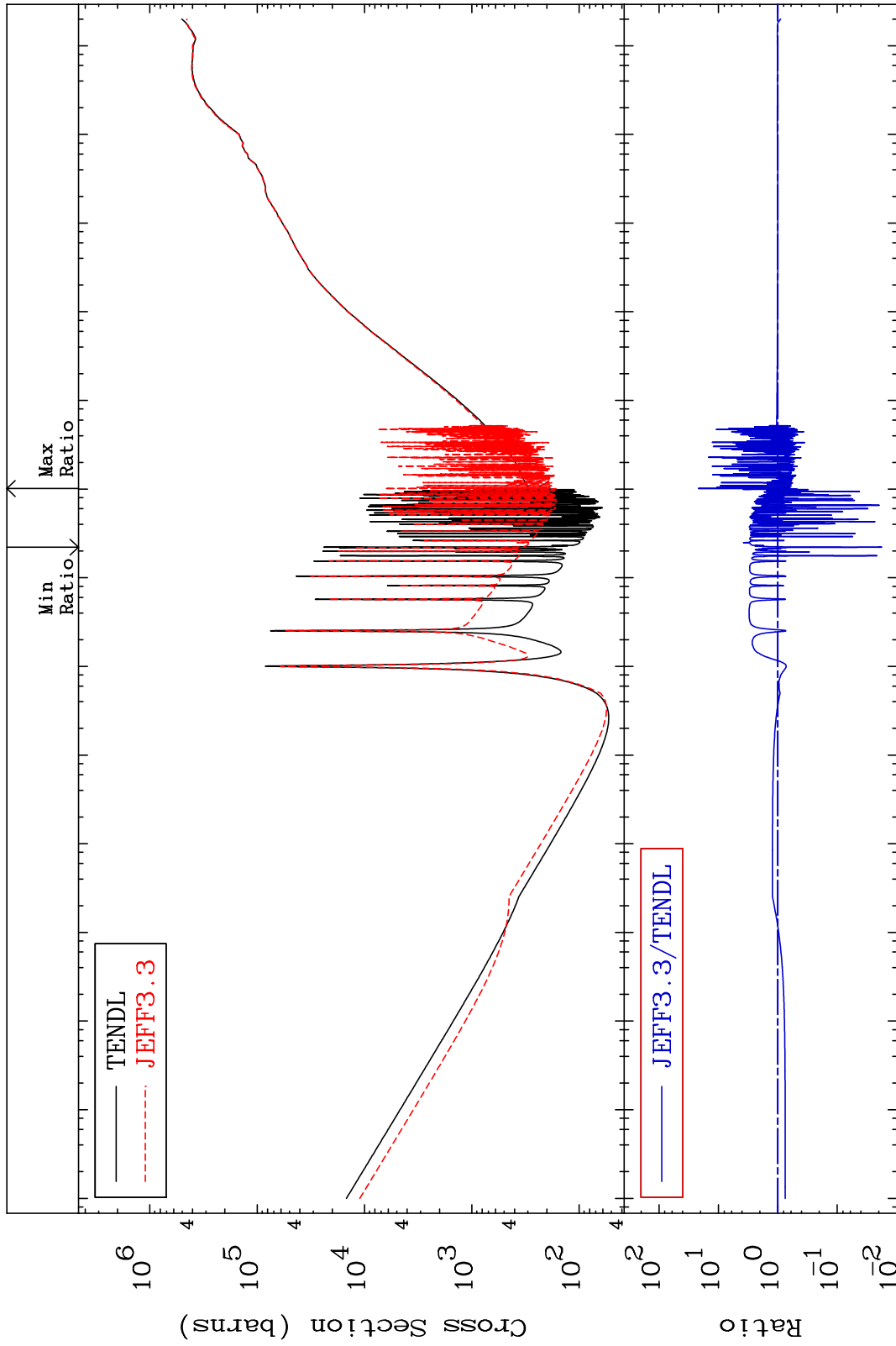
MAT 4434

Dpa total (eV-barns)

44-Ru-99

-98.21 To 2075. %

Cross Section



77

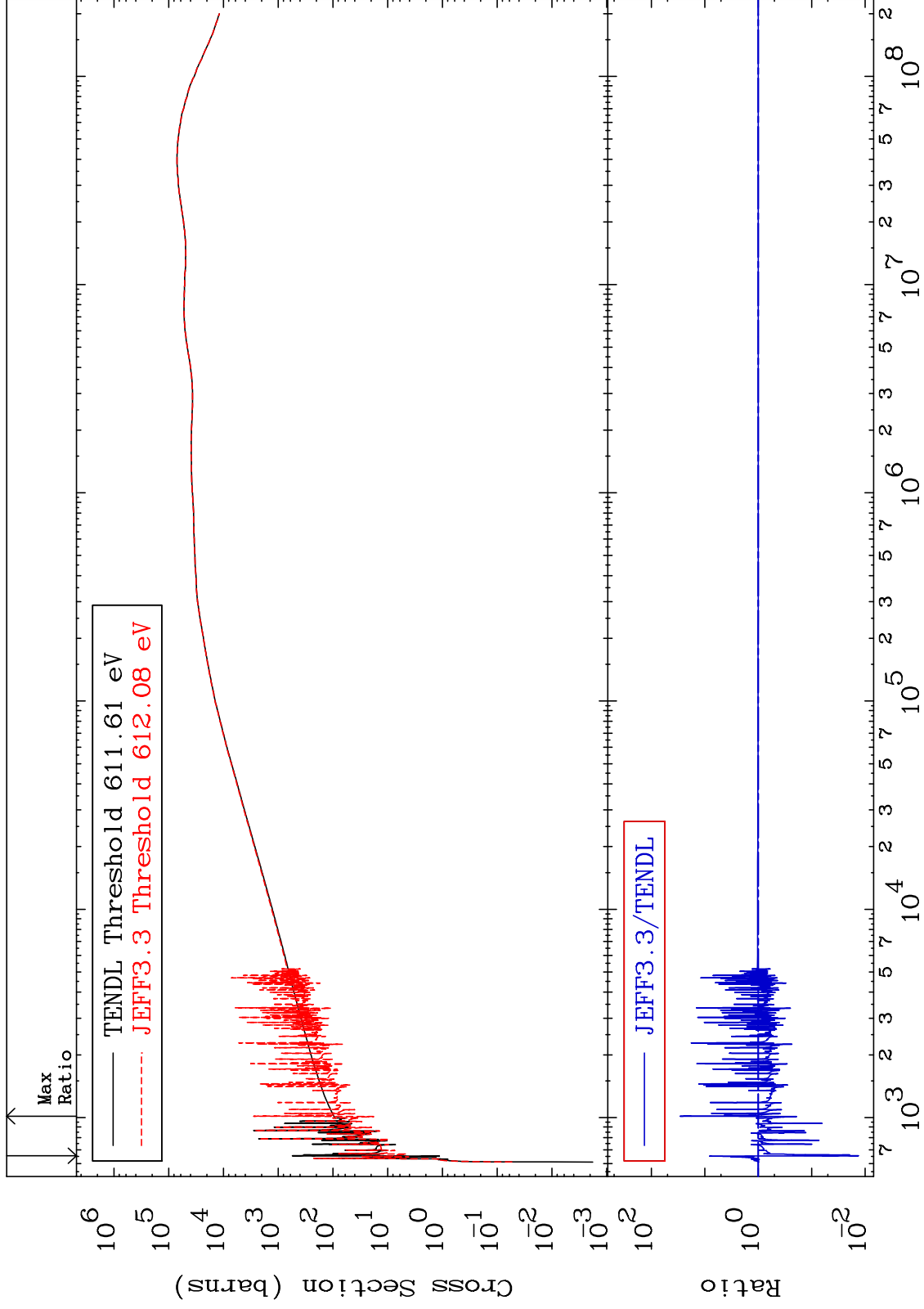
Incident Energy (eV)

44-Ru-99

MAT 4434

Dpa elastic (mt2)
Cross Section

44-Ru-99
-98.67 To 2812. %



78

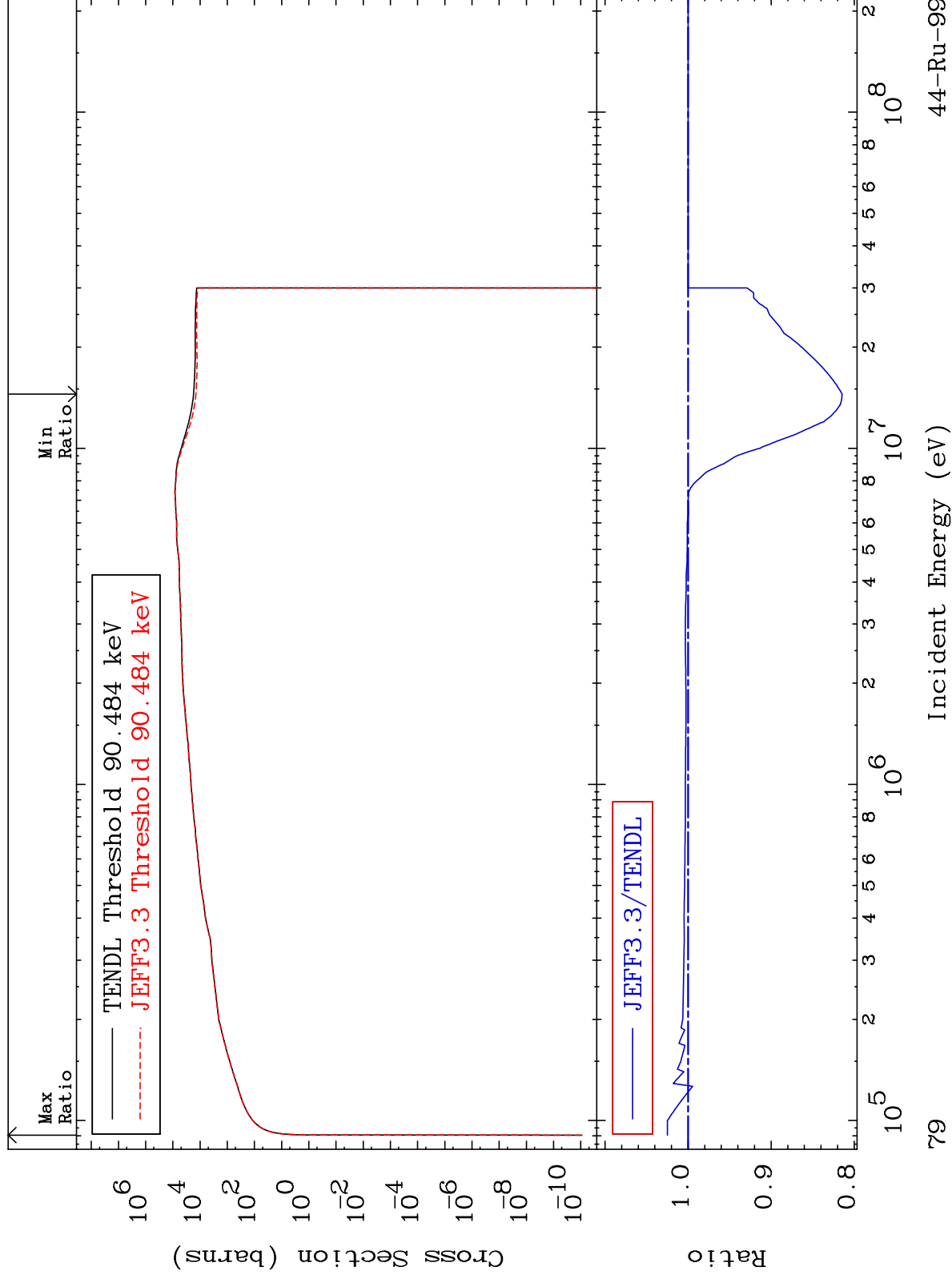
44-Ru-99

44-Ru-99

MAT 4434

Dpa inelastic (mt51-91)
Cross Section

44-Ru-99
-18.55 To 2.485 %



79

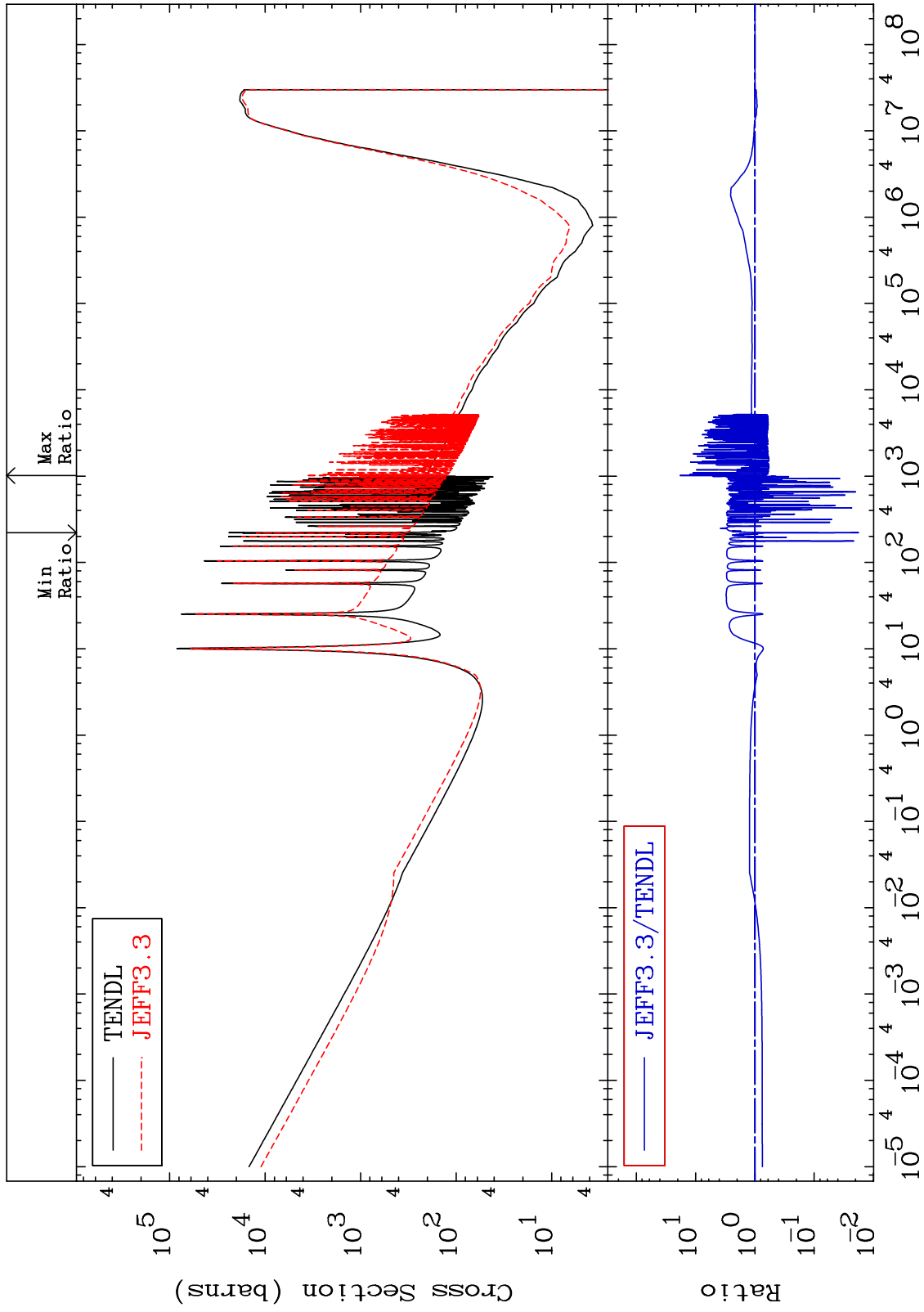
Incident Energy (eV)

44-Ru-99

MAT 4434

Dpa disappearance (mt102 -120)
Cross Section

44-Ru-99
-98.21 To 1730. %



80

Incident Energy (eV)

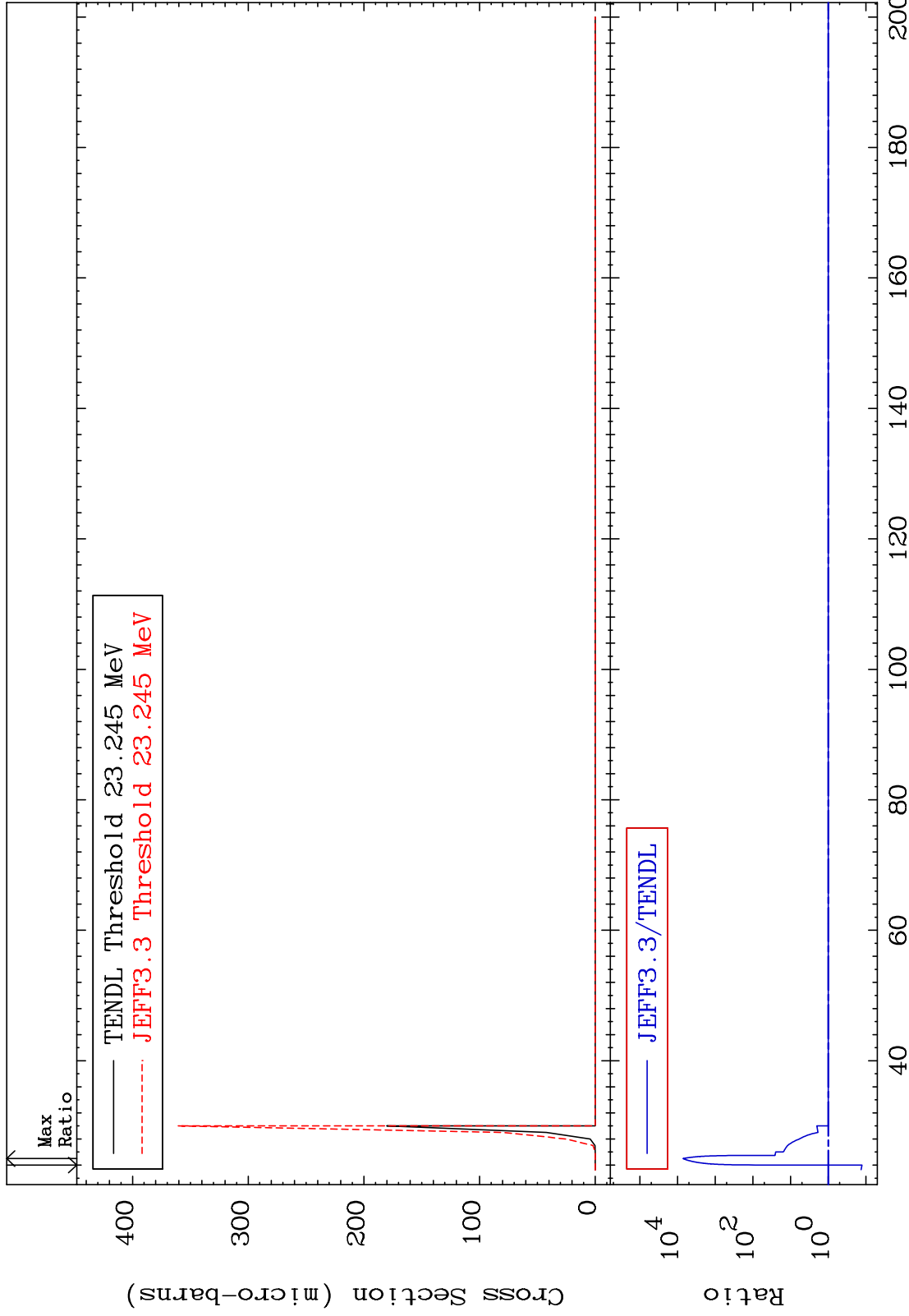
44-Ru-99

MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -87.28 To 9999. %

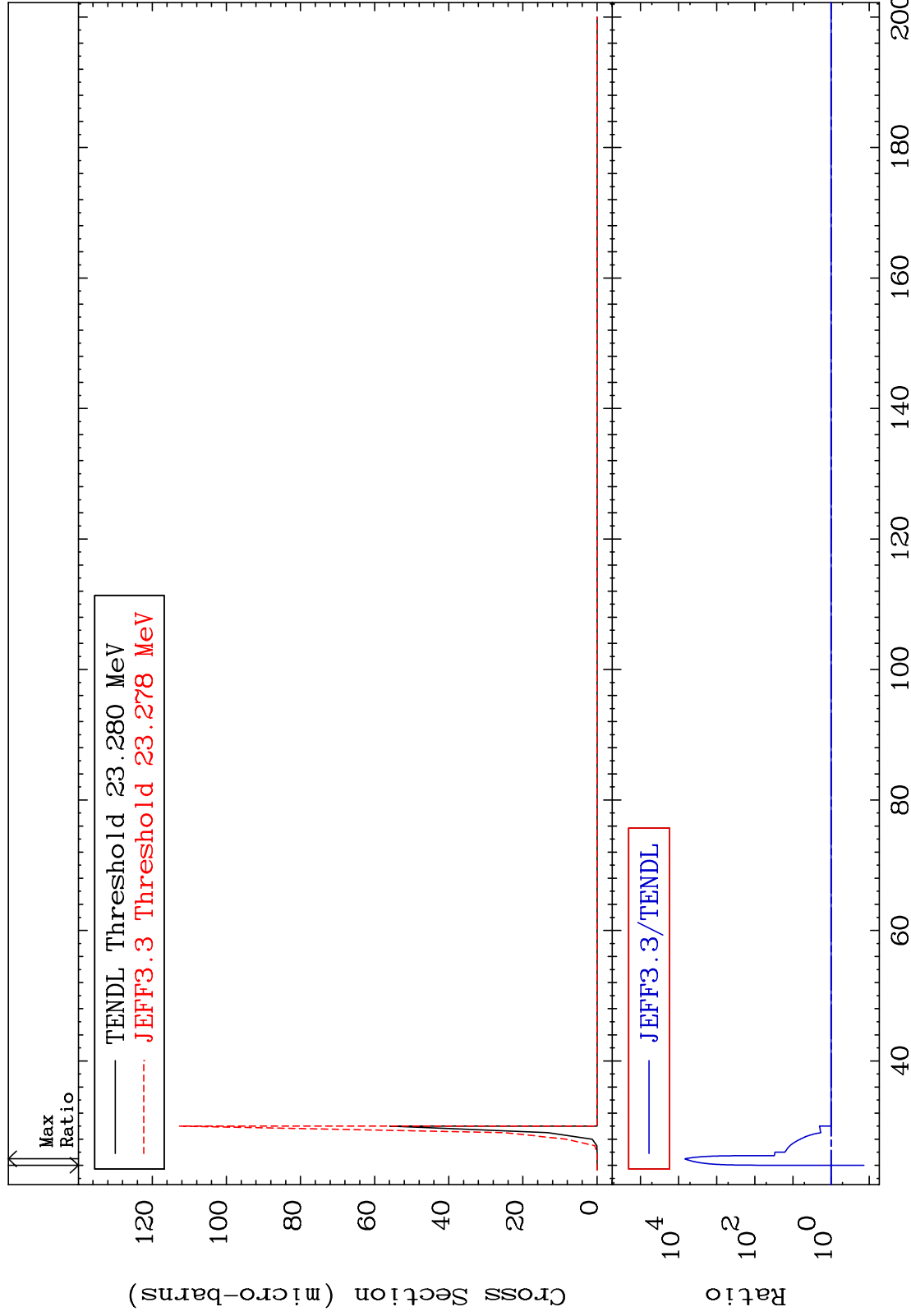


MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -86.30 To 9999. %

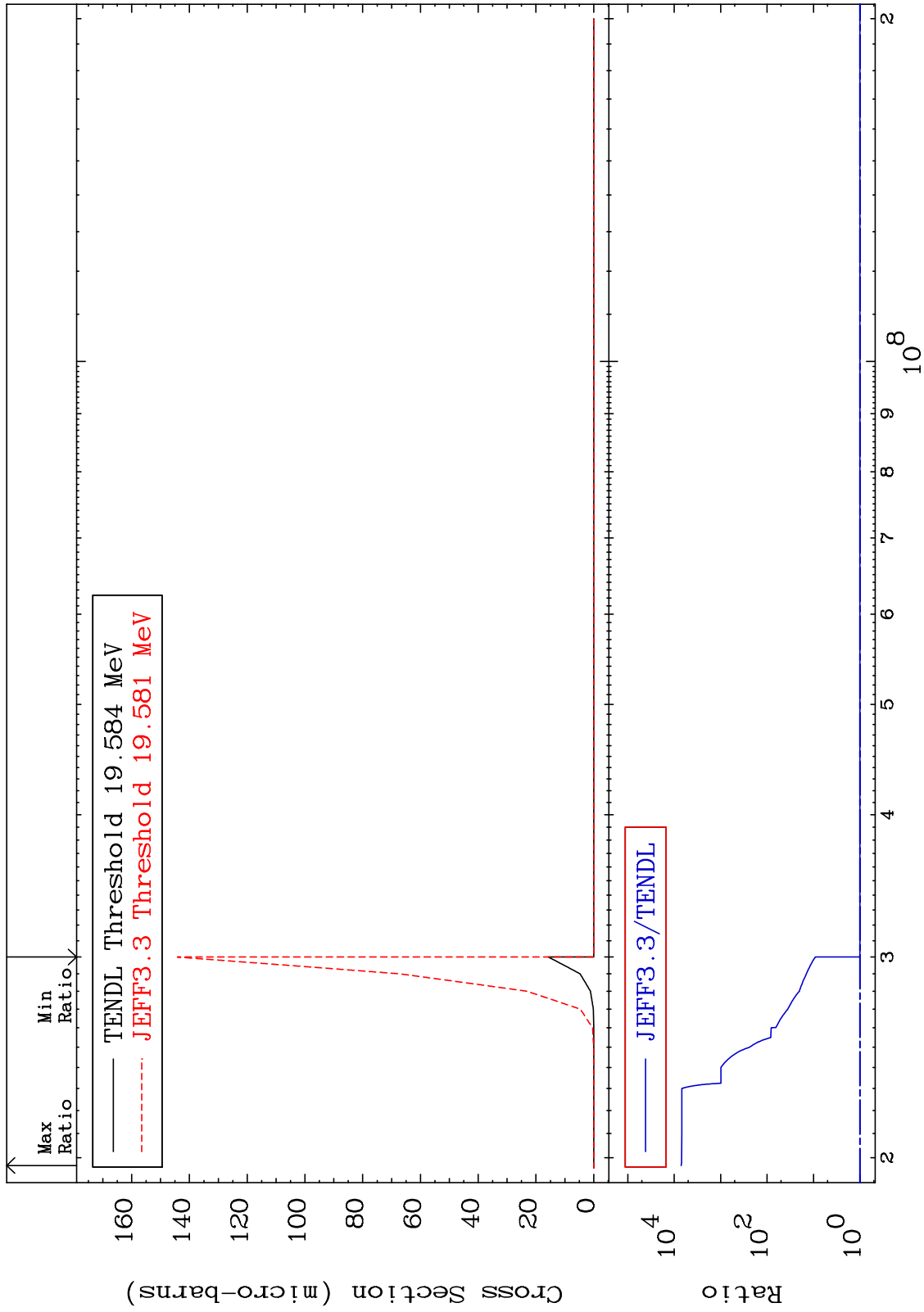


MAT 4434

(n,3n) α : 42-Mo-93g

44-Ru-99

Radionuclide Production Cross Section 0.000 To 9999. %

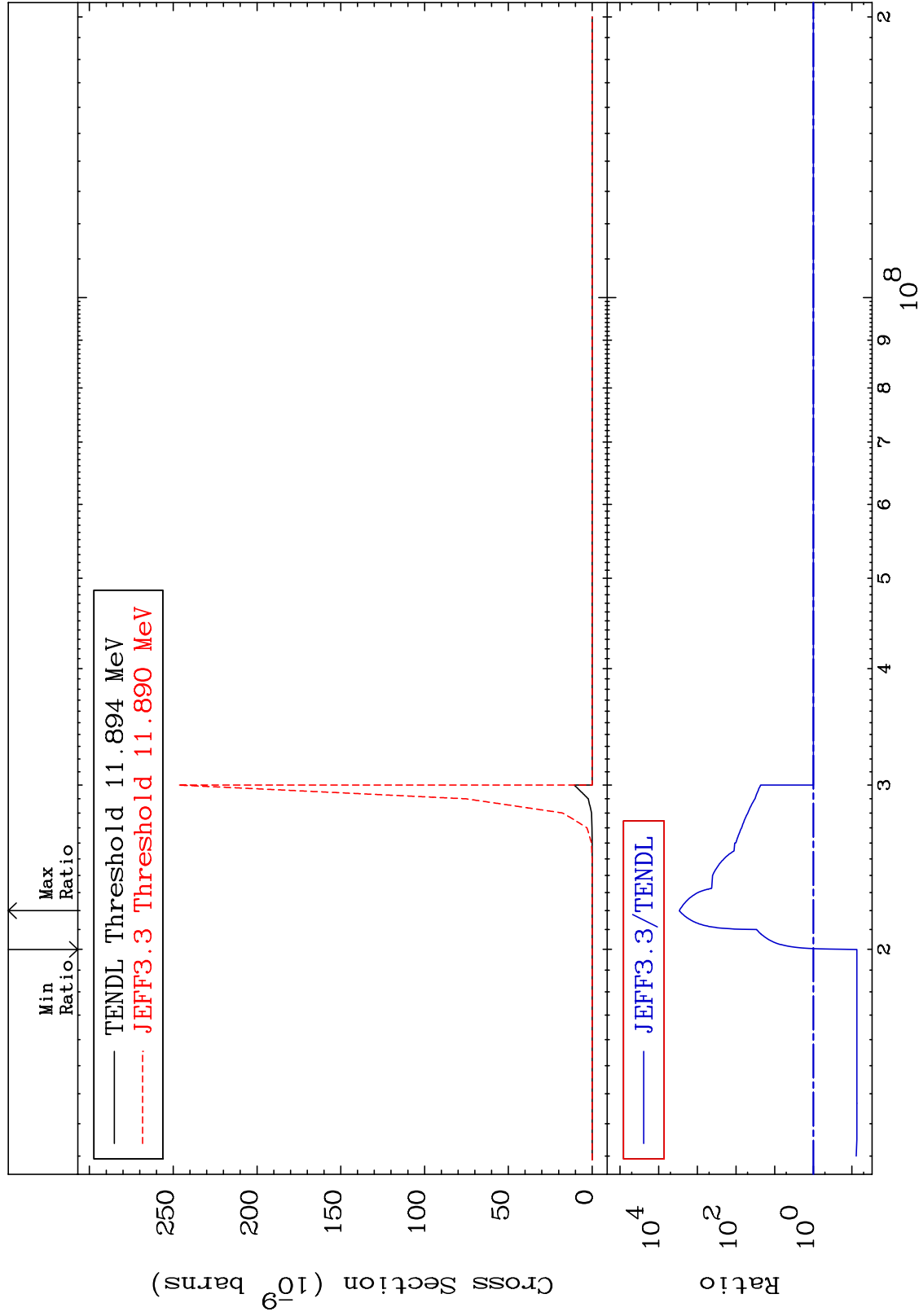


MAT 4434

(n,2n) $^{2\alpha}$: 40-Zr-90g

44-Ru-99

Radionuclide Production Cross Section -92.56 To 9999. %

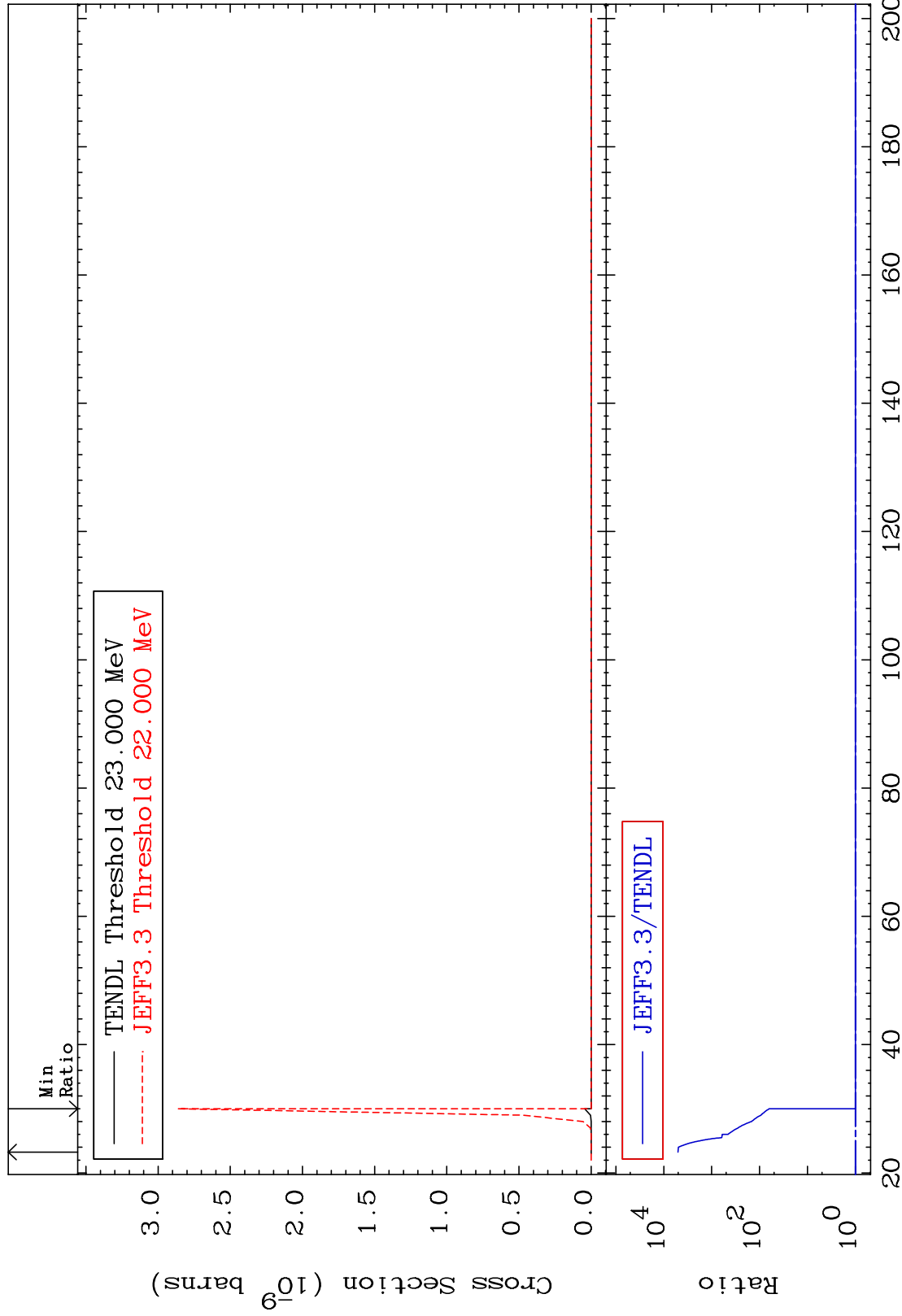


MAT 4434

(n,2n) 2α: 40-Zr-90m3

44-Ru-99

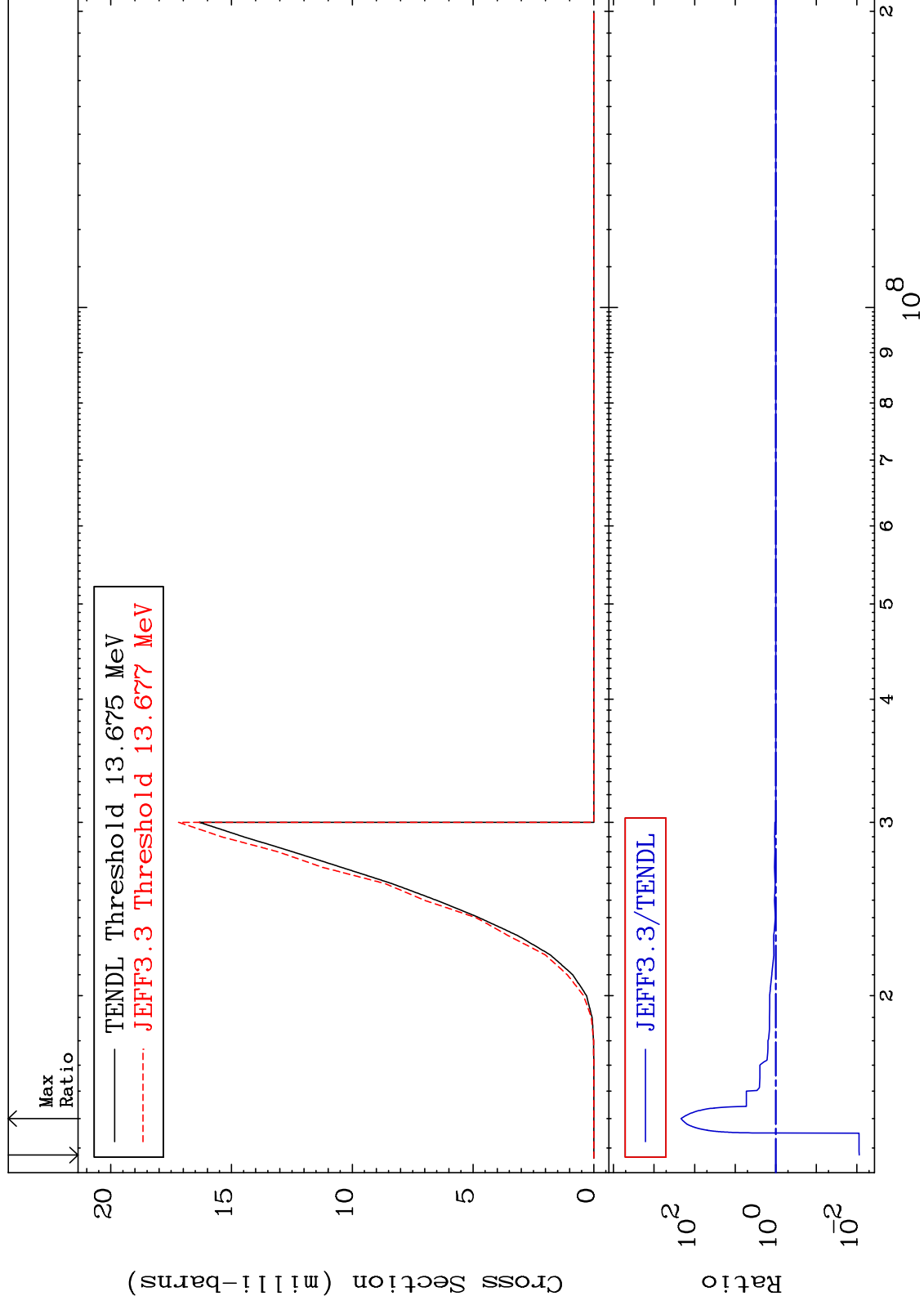
Radionuclide Production Cross Section 0.000 To 9999. %



85

Incident Energy (MeV)

44-Ru-99

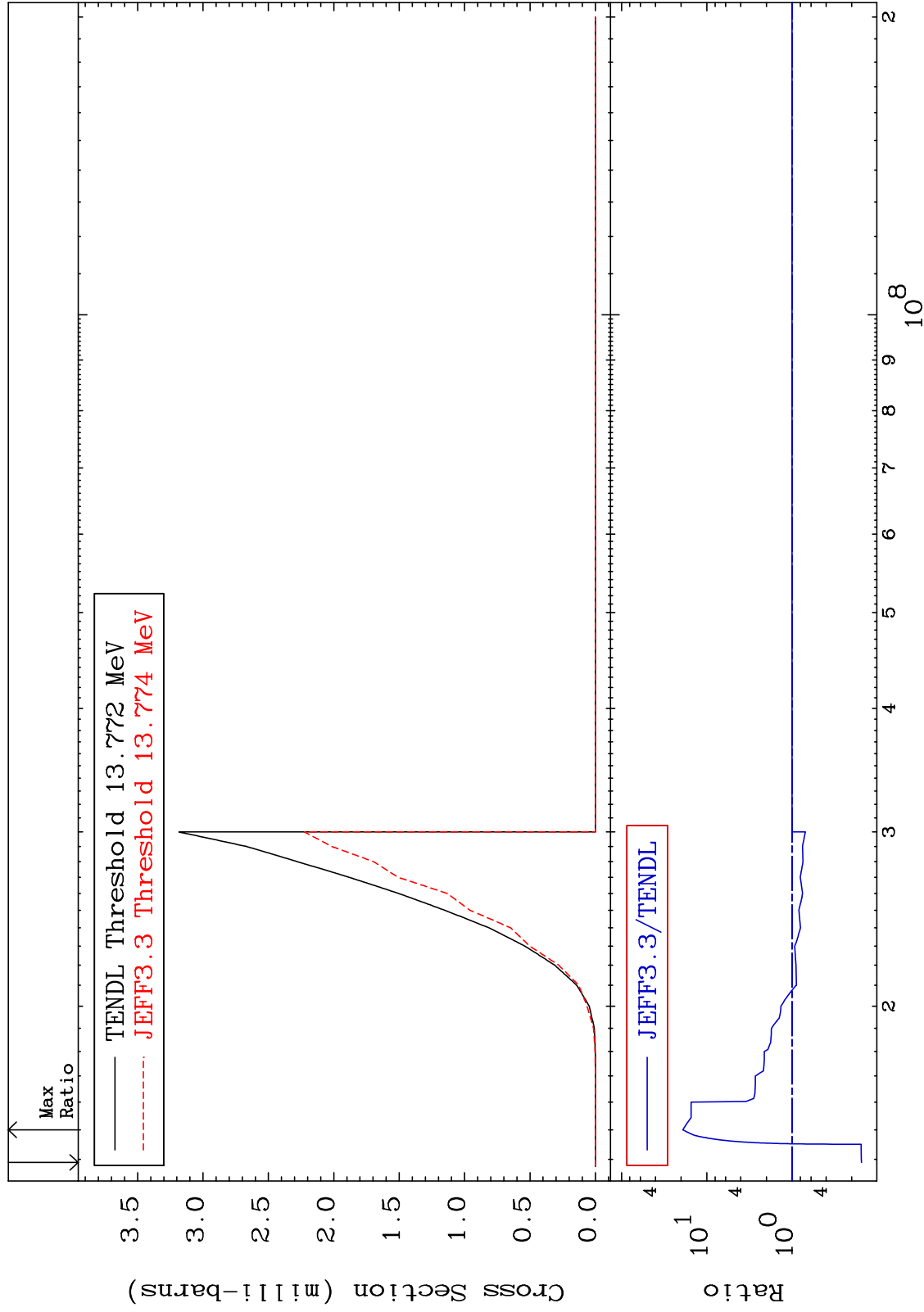


MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -84.68 To 1809. %

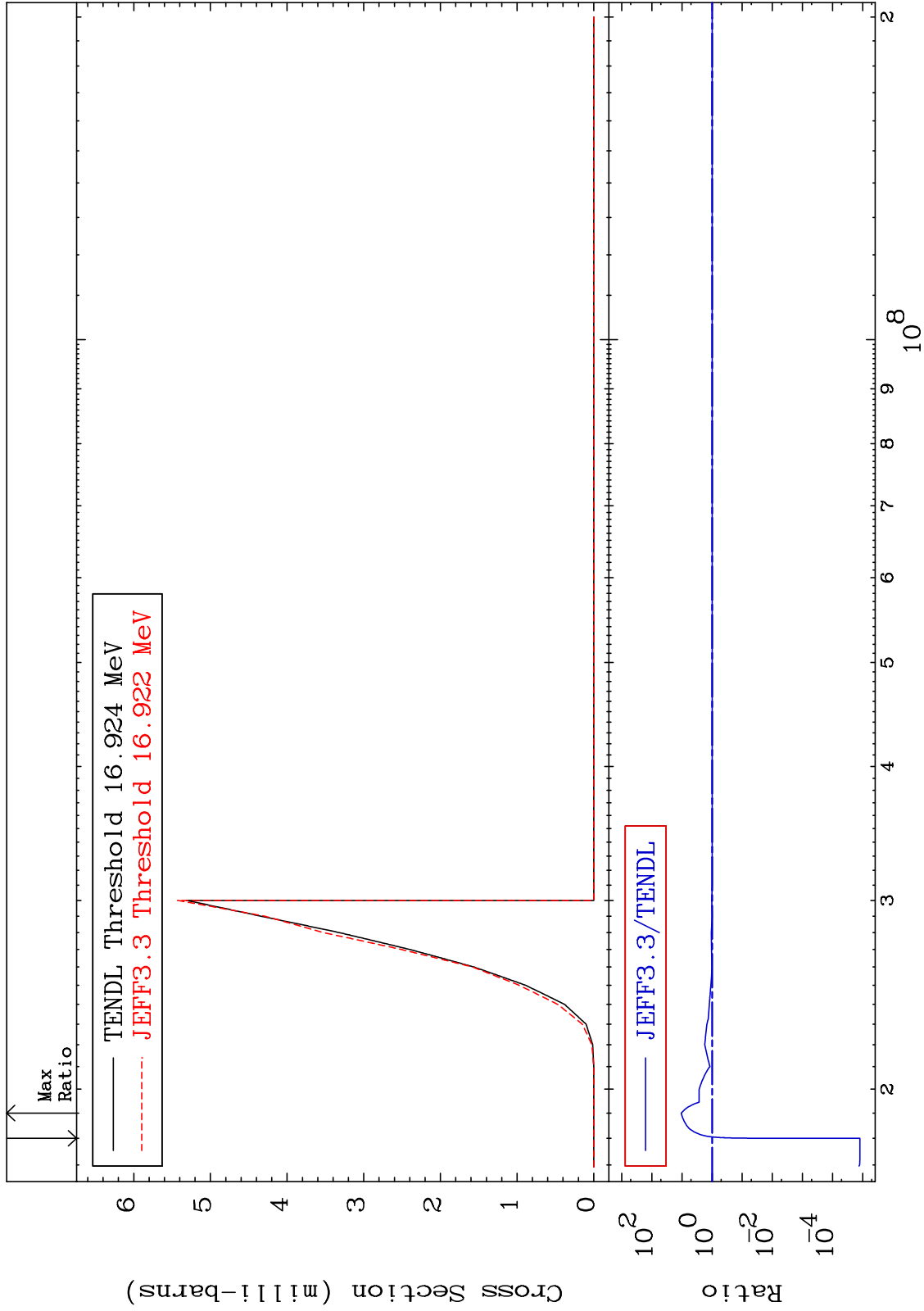


MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -100.0 To 957.8 %

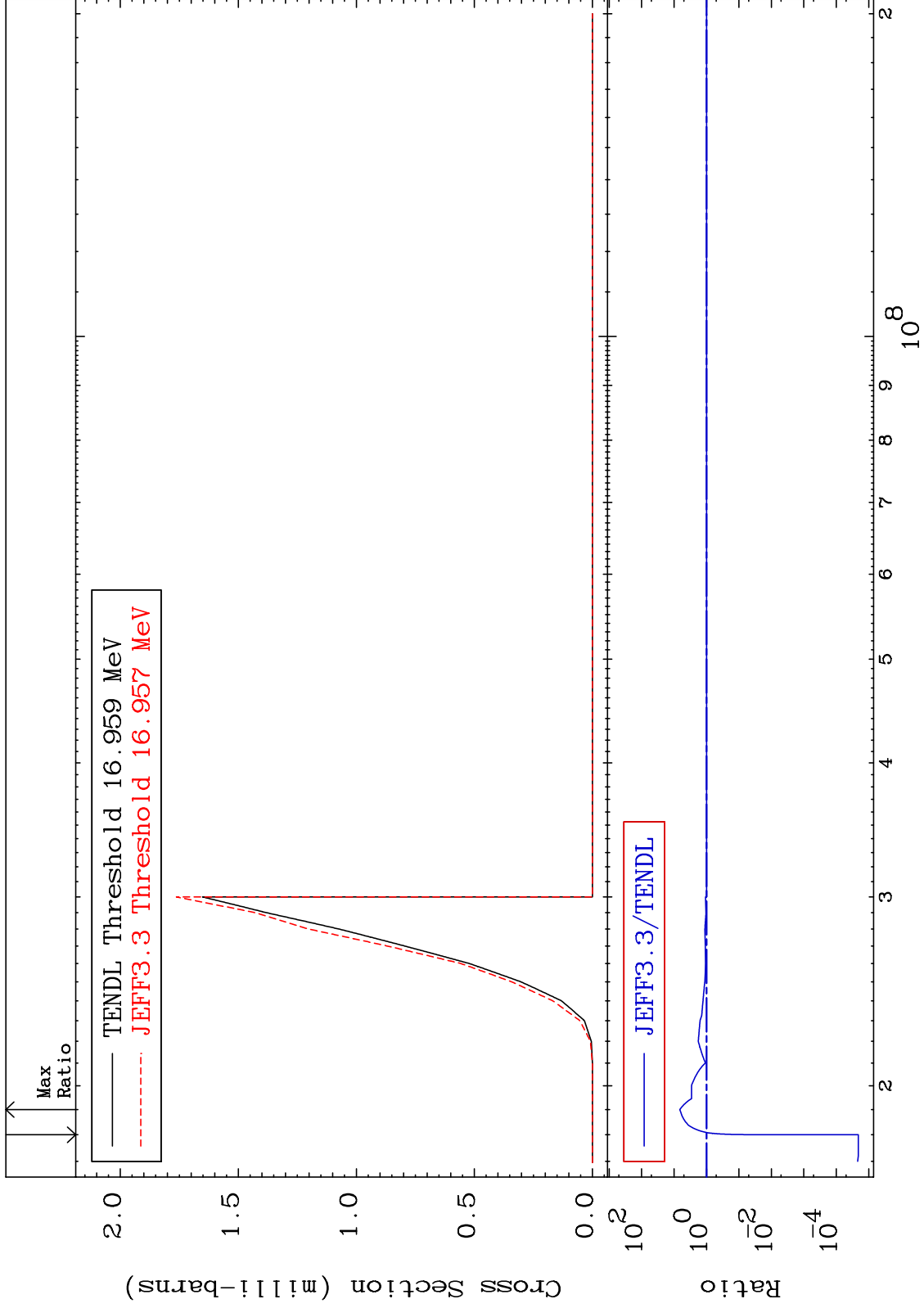


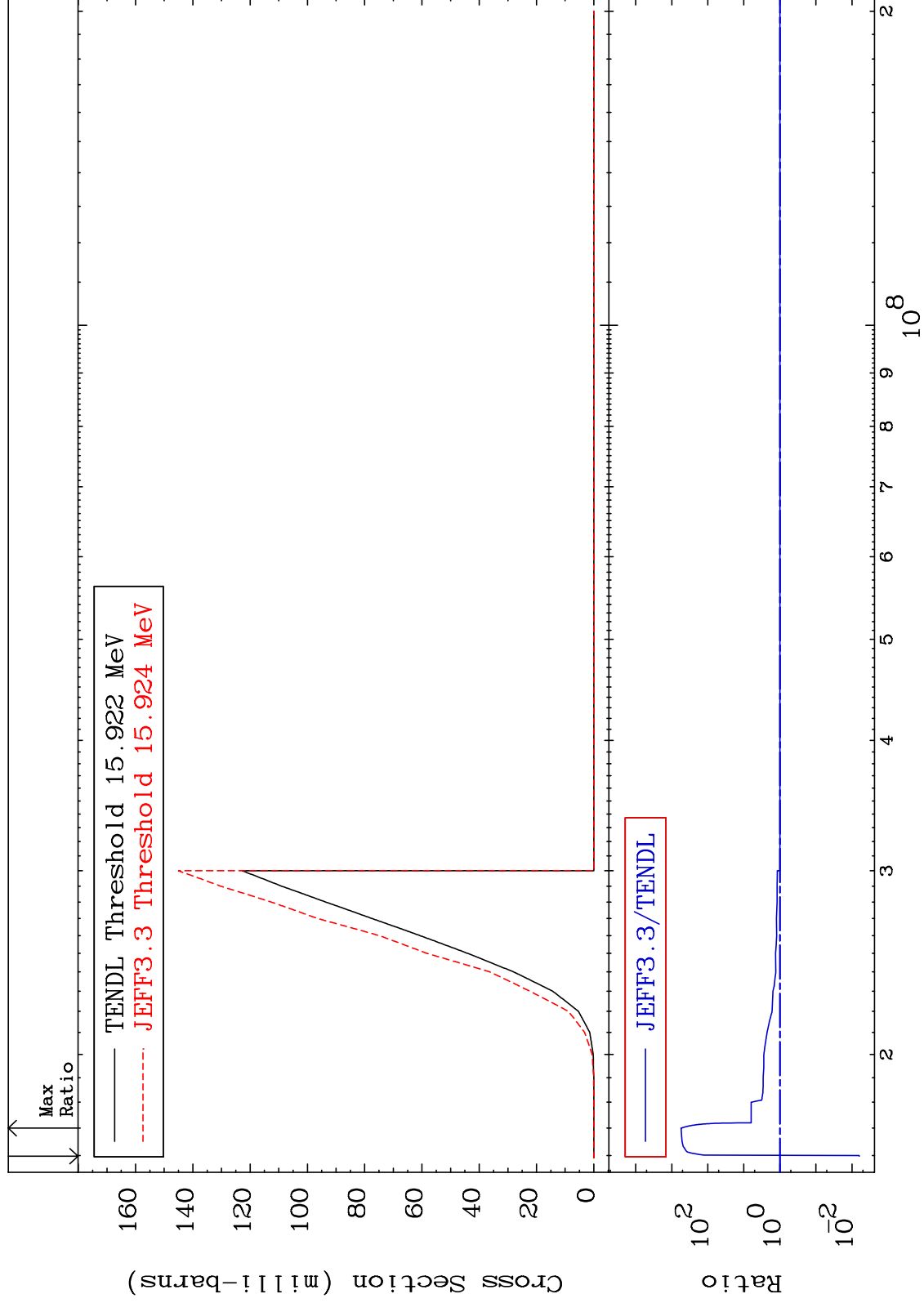
MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -100.0 To 564.7 %



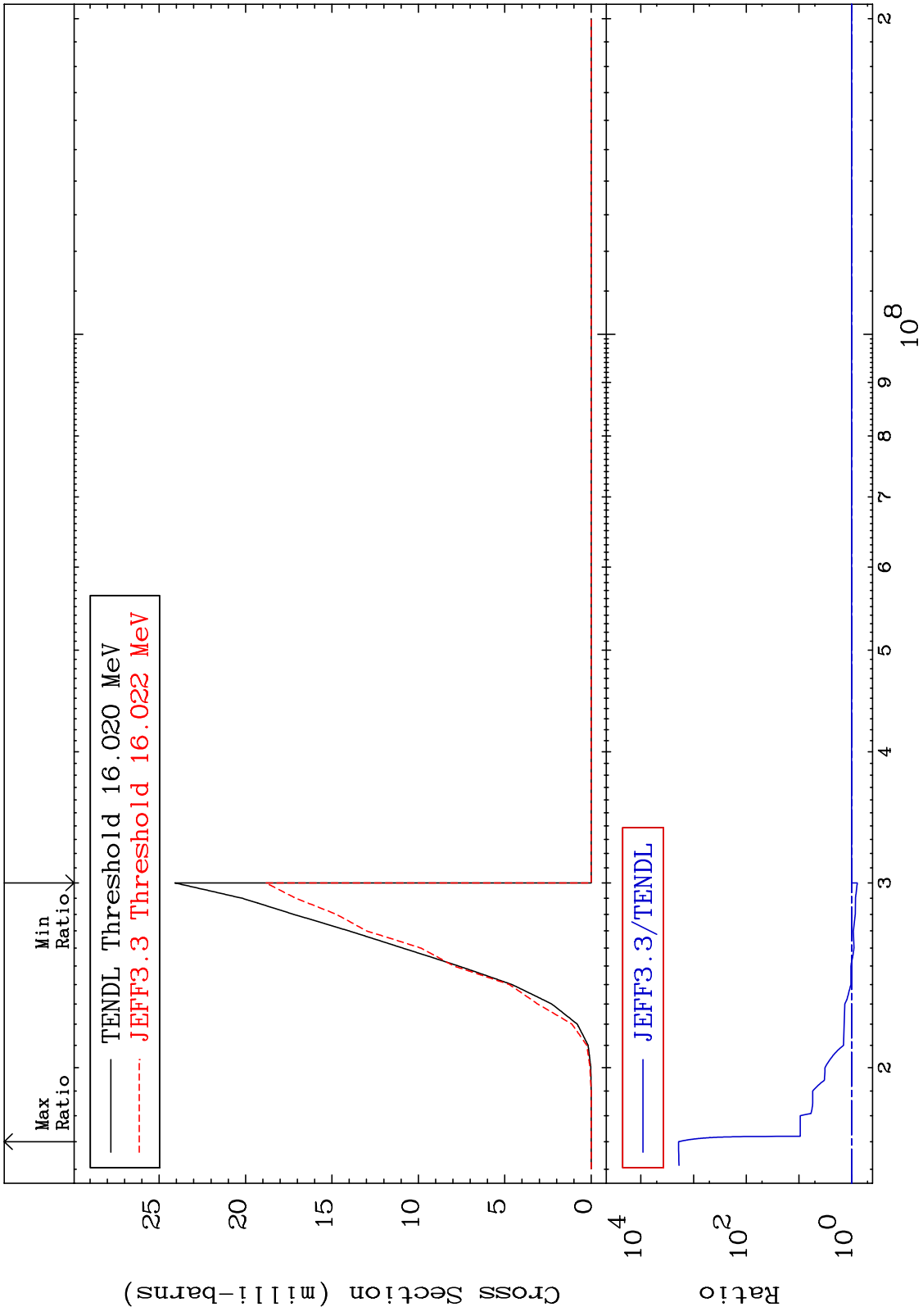


MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -21.82 To 9999. %

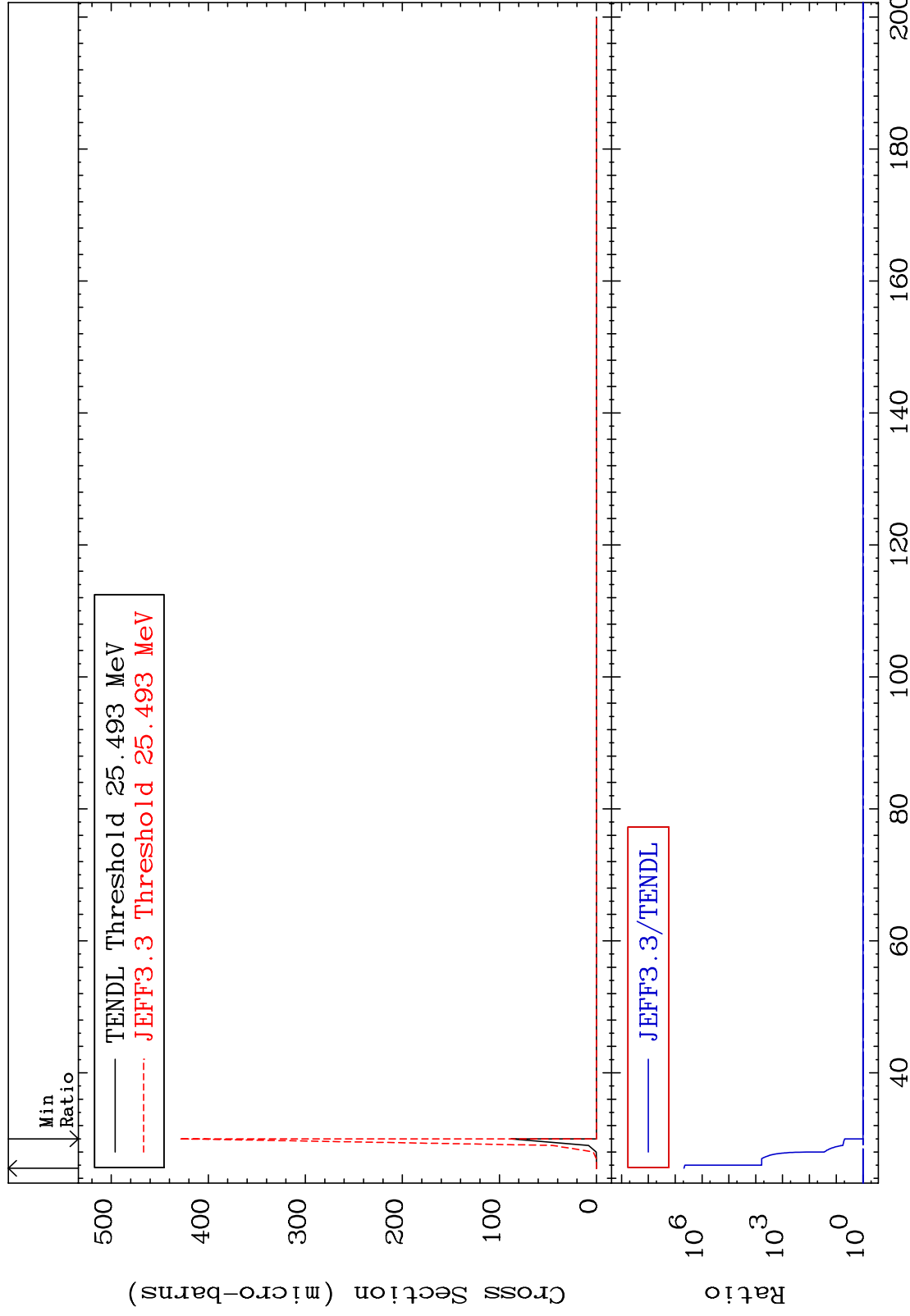


MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section 0.000 To 9999. %



92

Incident Energy (MeV)

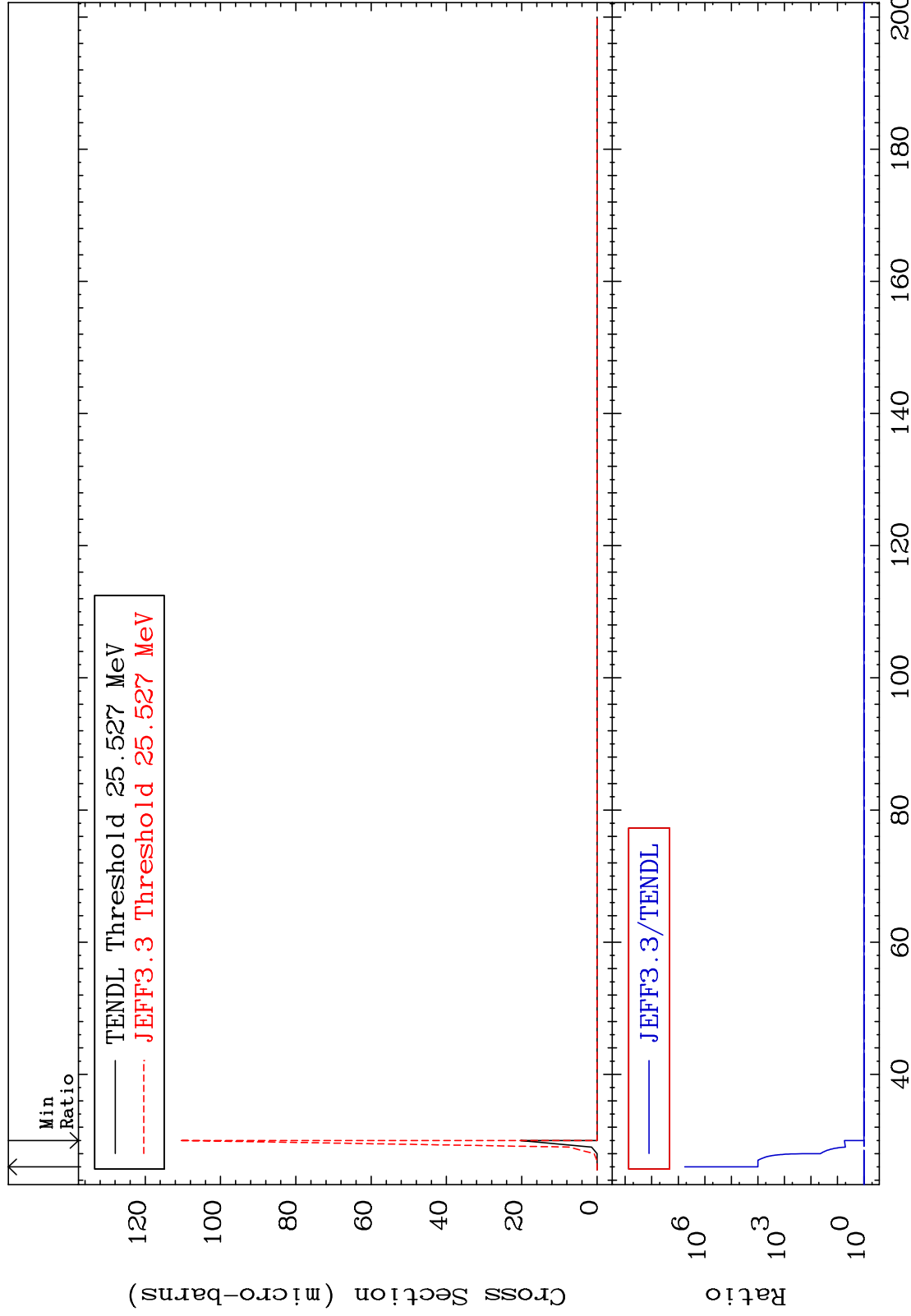
44-Ru-99

MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section 0.000 To 9999. %



93

Incident Energy (MeV)

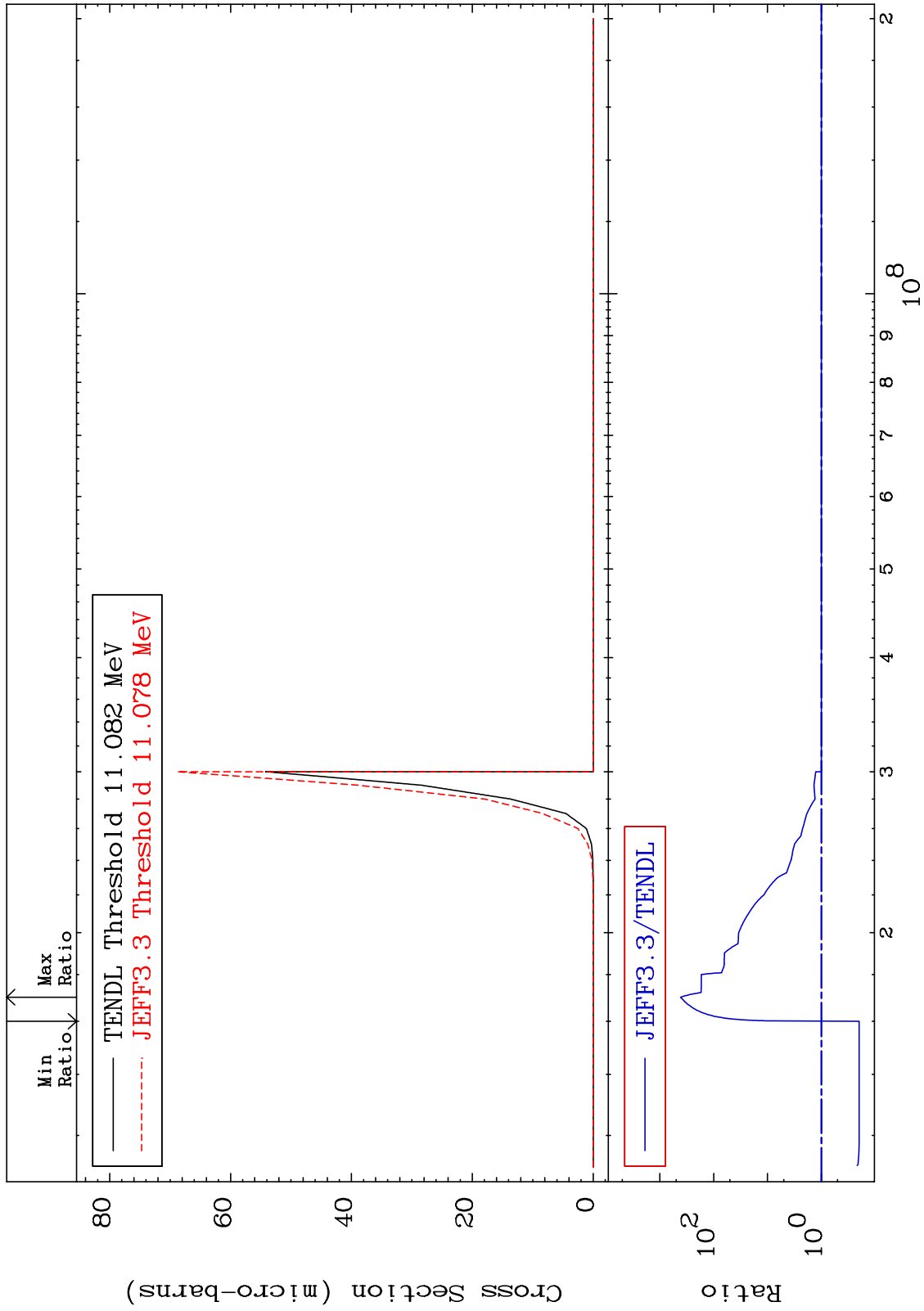
44-Ru-99

MAT 4434

(n, n') p α : 41-Nb-94g

44-Ru-99

Radionuclide Production Cross Section -80.19 To 9999. %



94

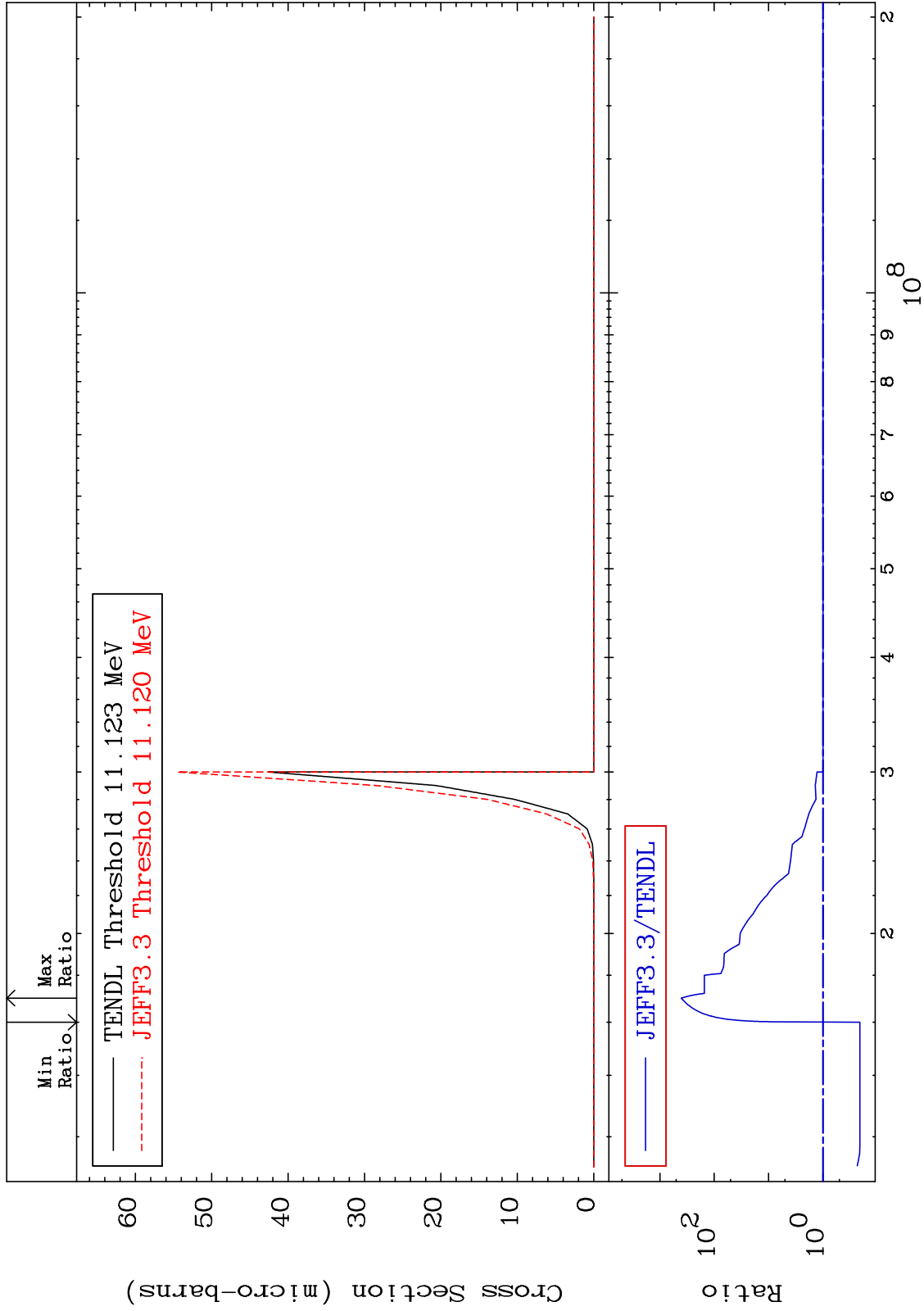
44-Ru-99

MAT 4434

(n, n') p α : 41-Nb-94m1

44-Ru-99

Radionuclide Production Cross Section -79.19 To 9999. %

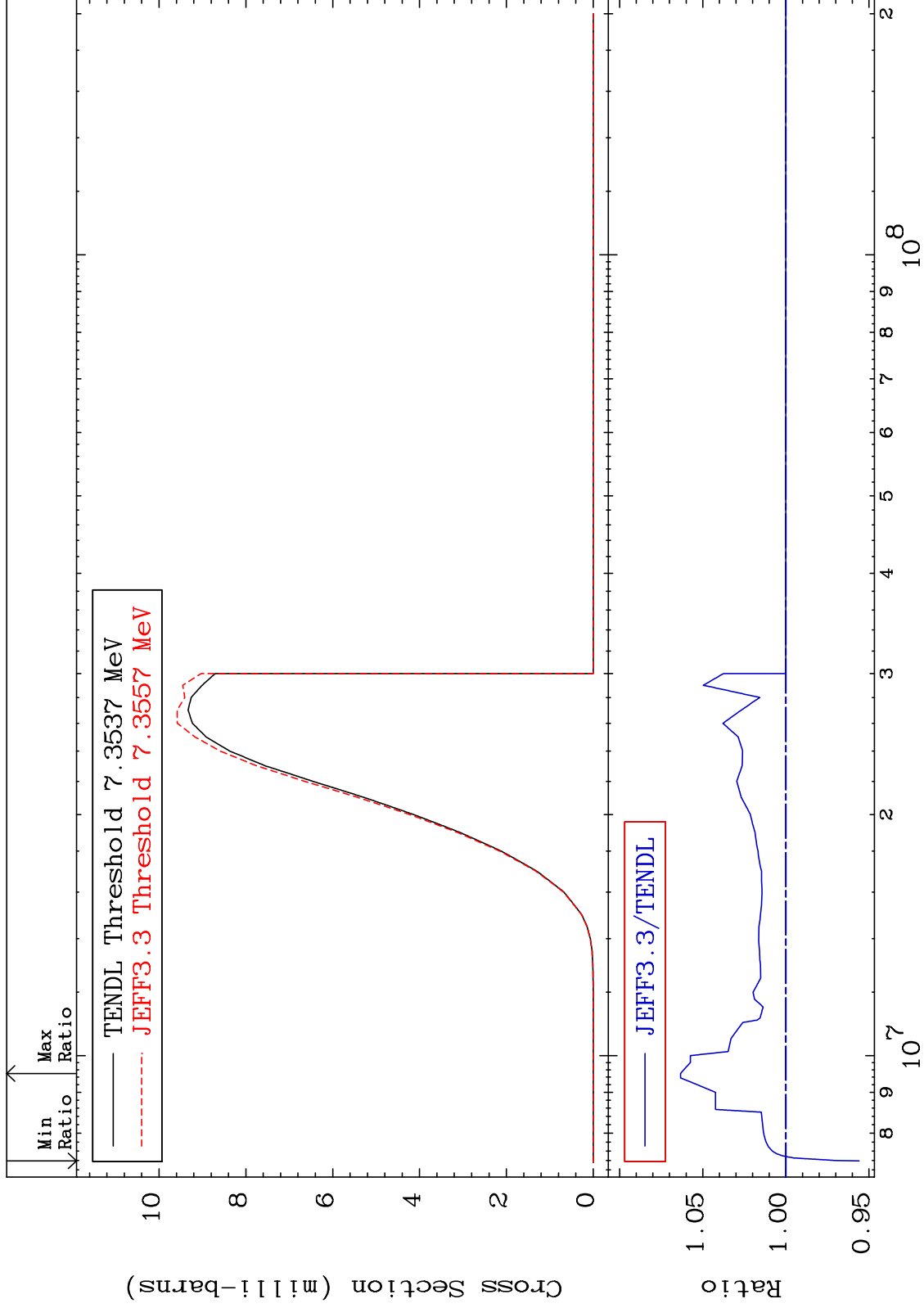


MAT 4434

44-Ru-99

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

Radionuclide Production Cross Section -4.411 To 6.332 %



96

Incident Energy (eV)

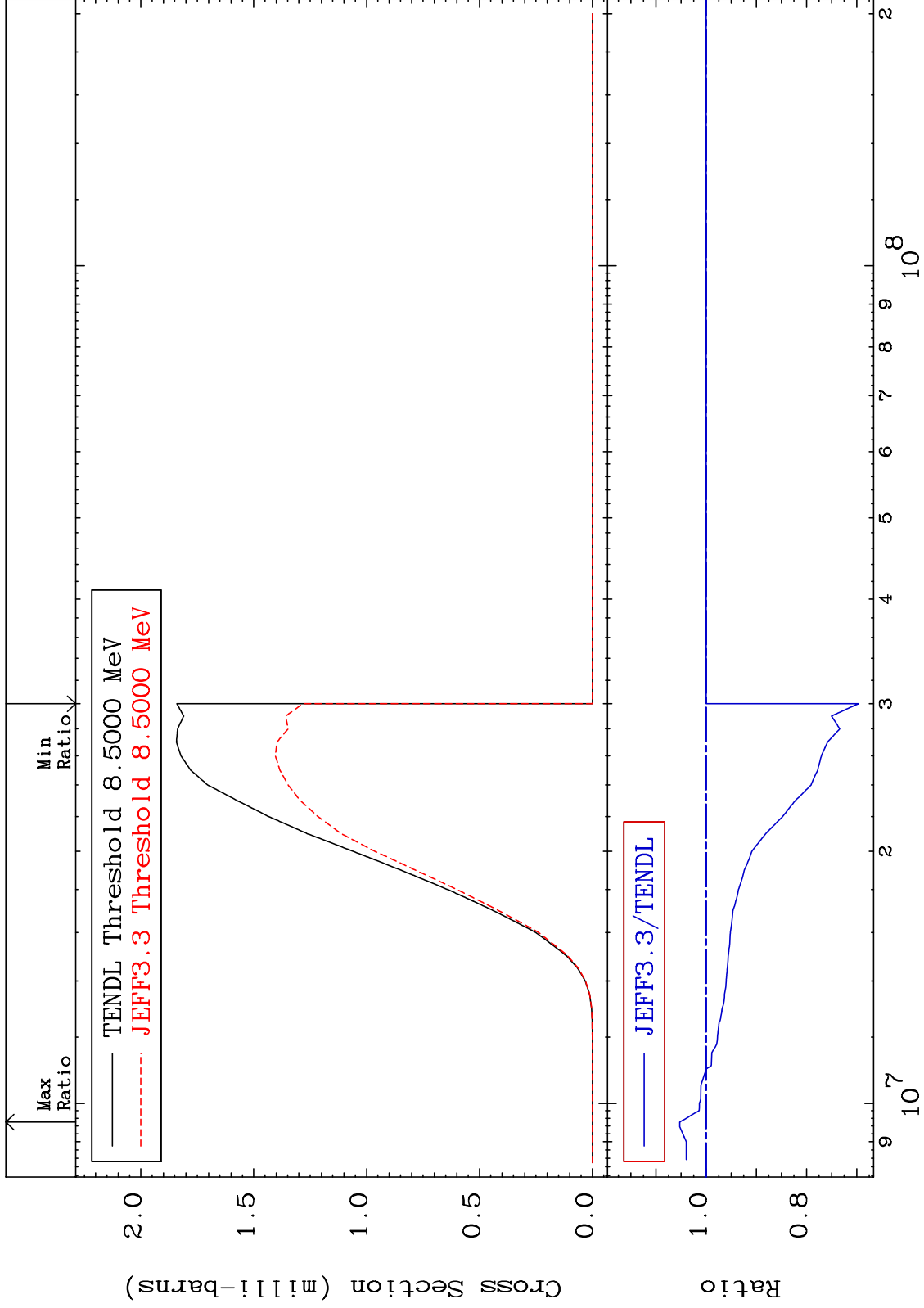
44-Ru-99

MAT 4434

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

44-Ru-99

Radionuclide Production Cross Section -30.33 To 5.256 %



97

Incident Energy (eV)

44-Ru-99

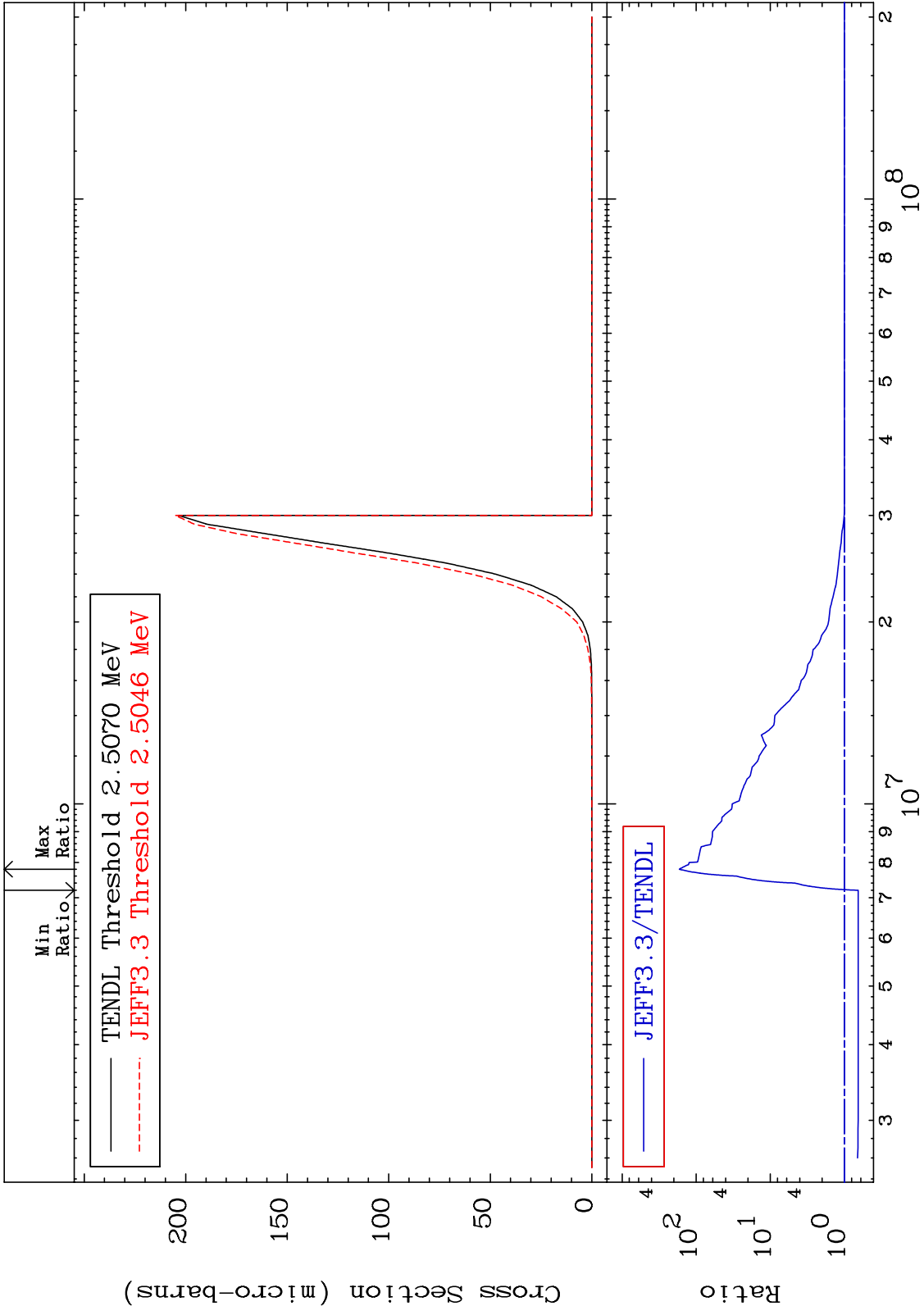
MAT 4434

(n, p) α :41-Nb-95g

44-Ru-99

Radionuclide Production Cross Section

-34.93 To 9999. %

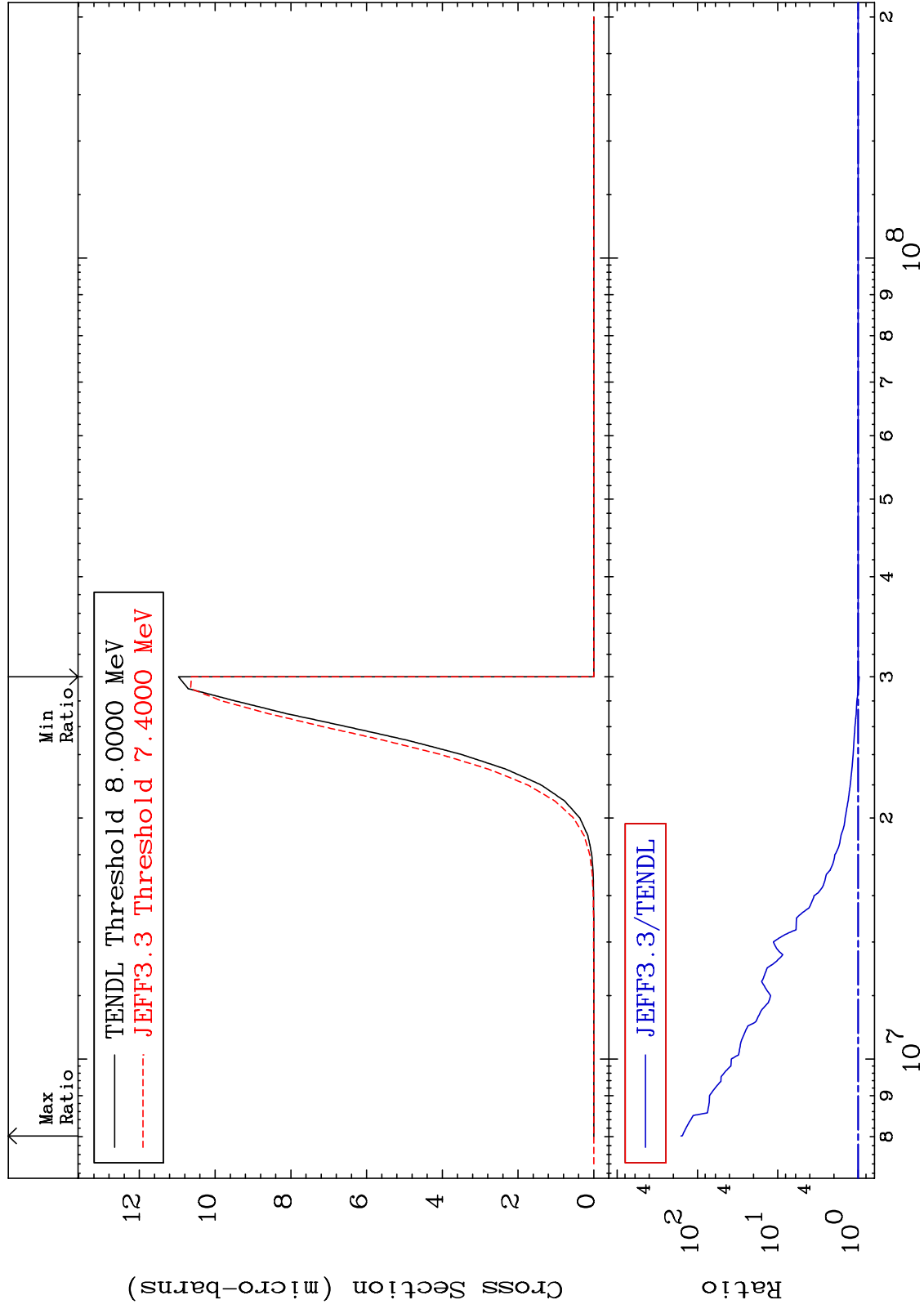


MAT 4434

(n, p) α : 41-Nb-95m1

44-Ru-99

Radionuclide Production Cross Section -3.119 To 9999. %



99

Incident Energy (eV)

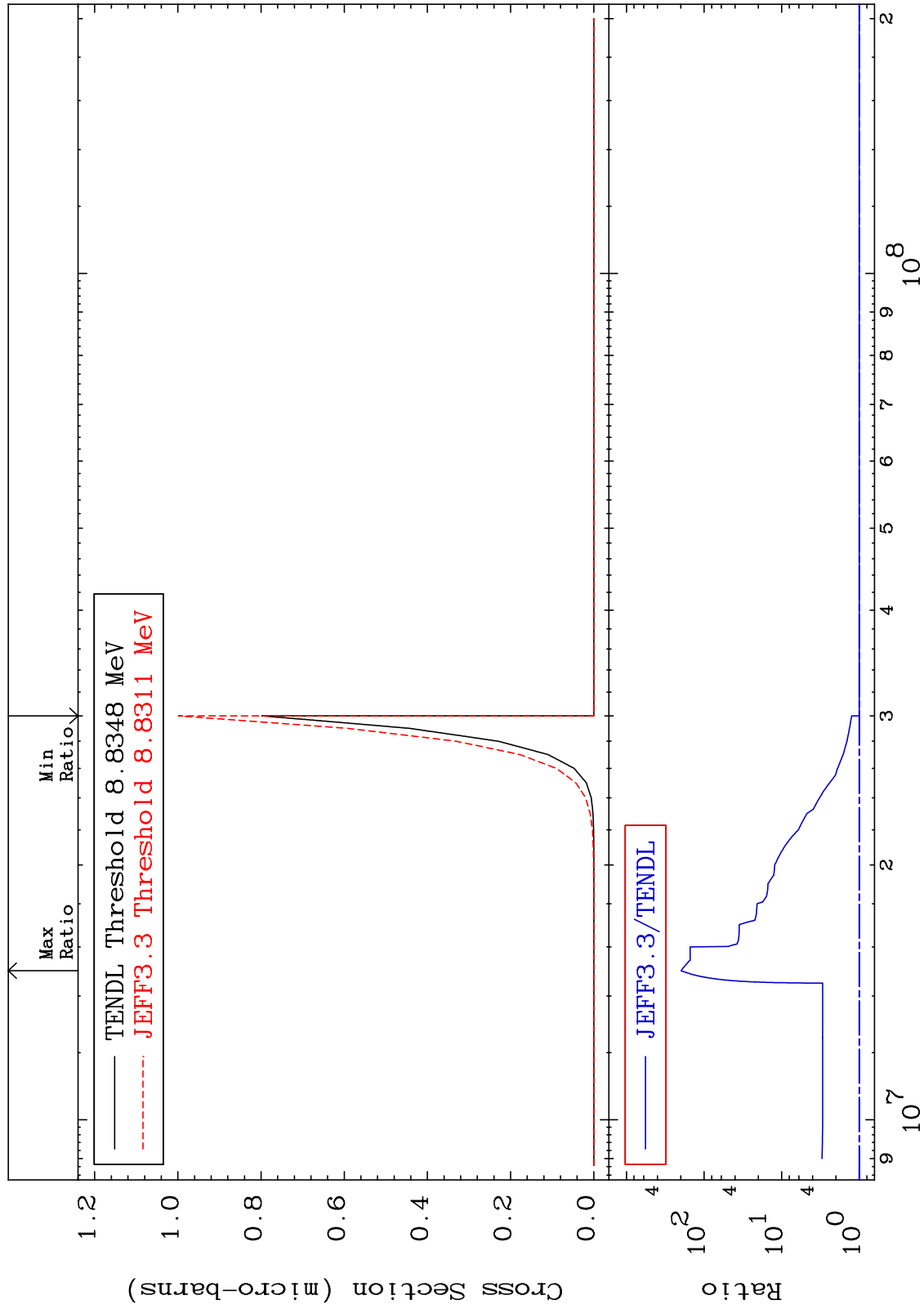
44-Ru-99

MAT 4434

(n,d) α :41-Nb-94g

44-Ru-99

Radionuclide Production Cross Section 0.000 To 9999. %



44-Ru-99

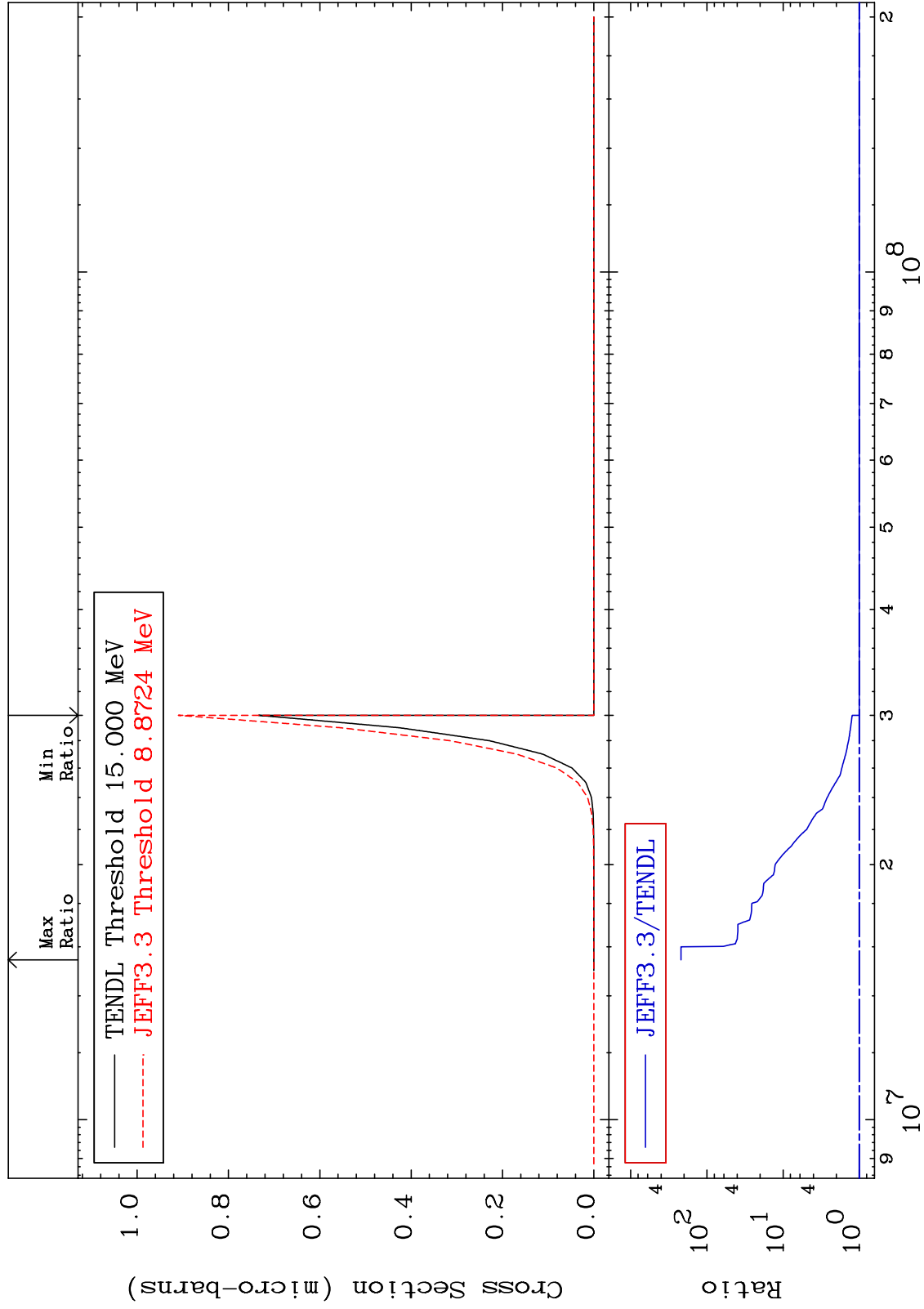
Incident Energy (eV)

MAT 4434

(n, d) α : 41-Nb-94m1

44-Ru-99

Radionuclide Production Cross Section 0.000 To 9999. %



44-Ru-99

Incident Energy (eV)

101