

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](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

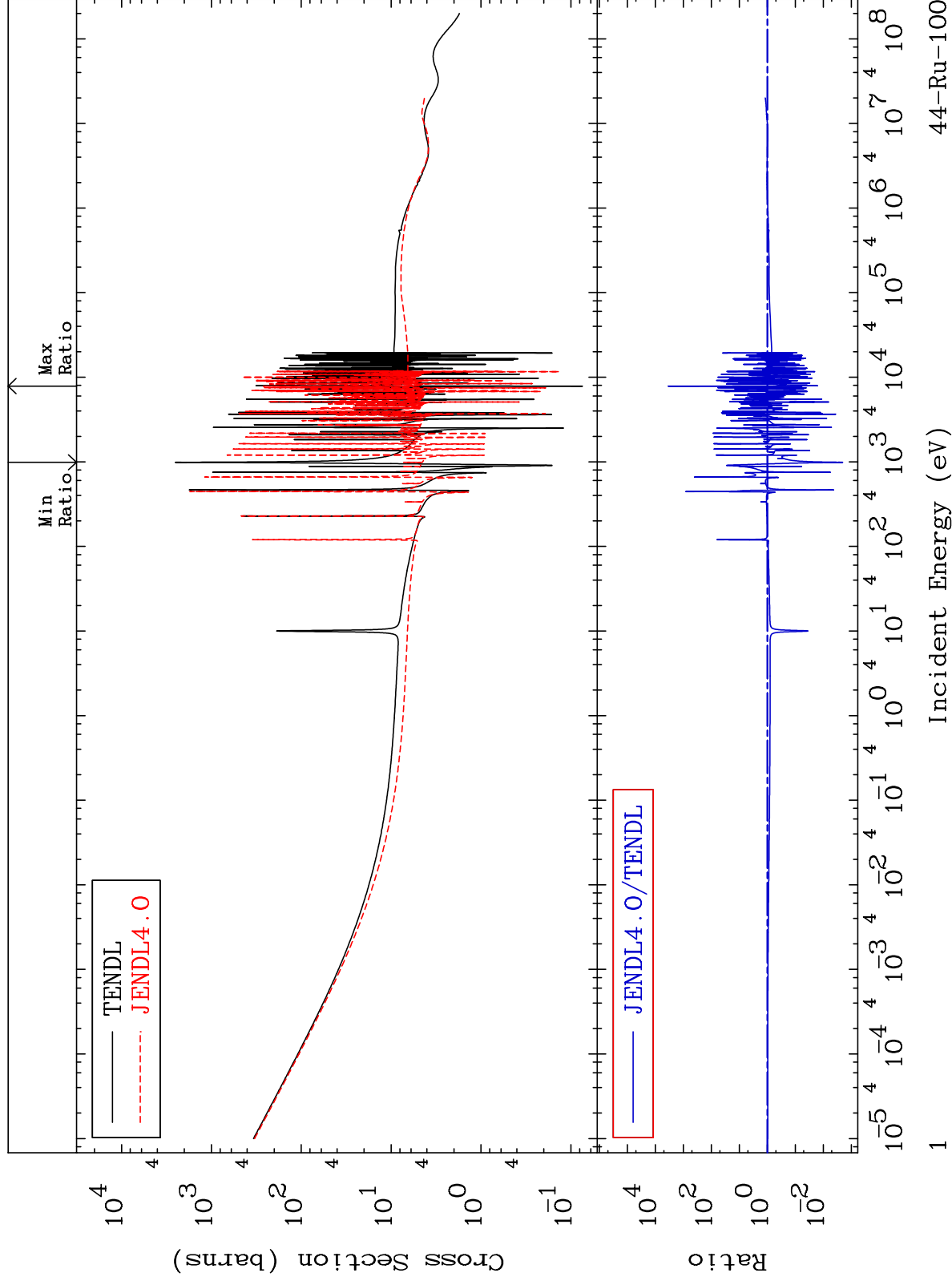
MAT 4437

Total

44-Ru-100

Cross Section

-99.80 To 9999. %

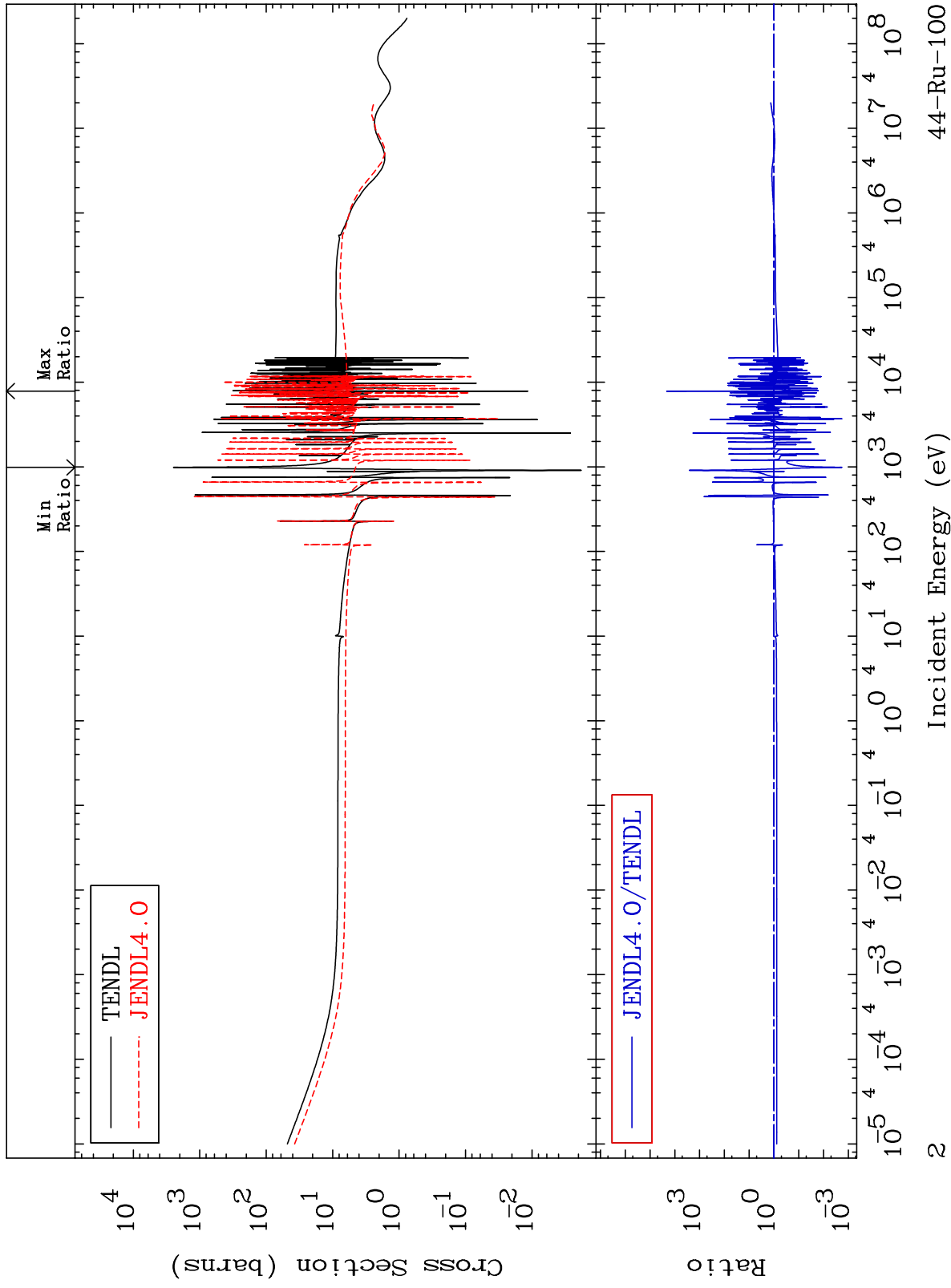


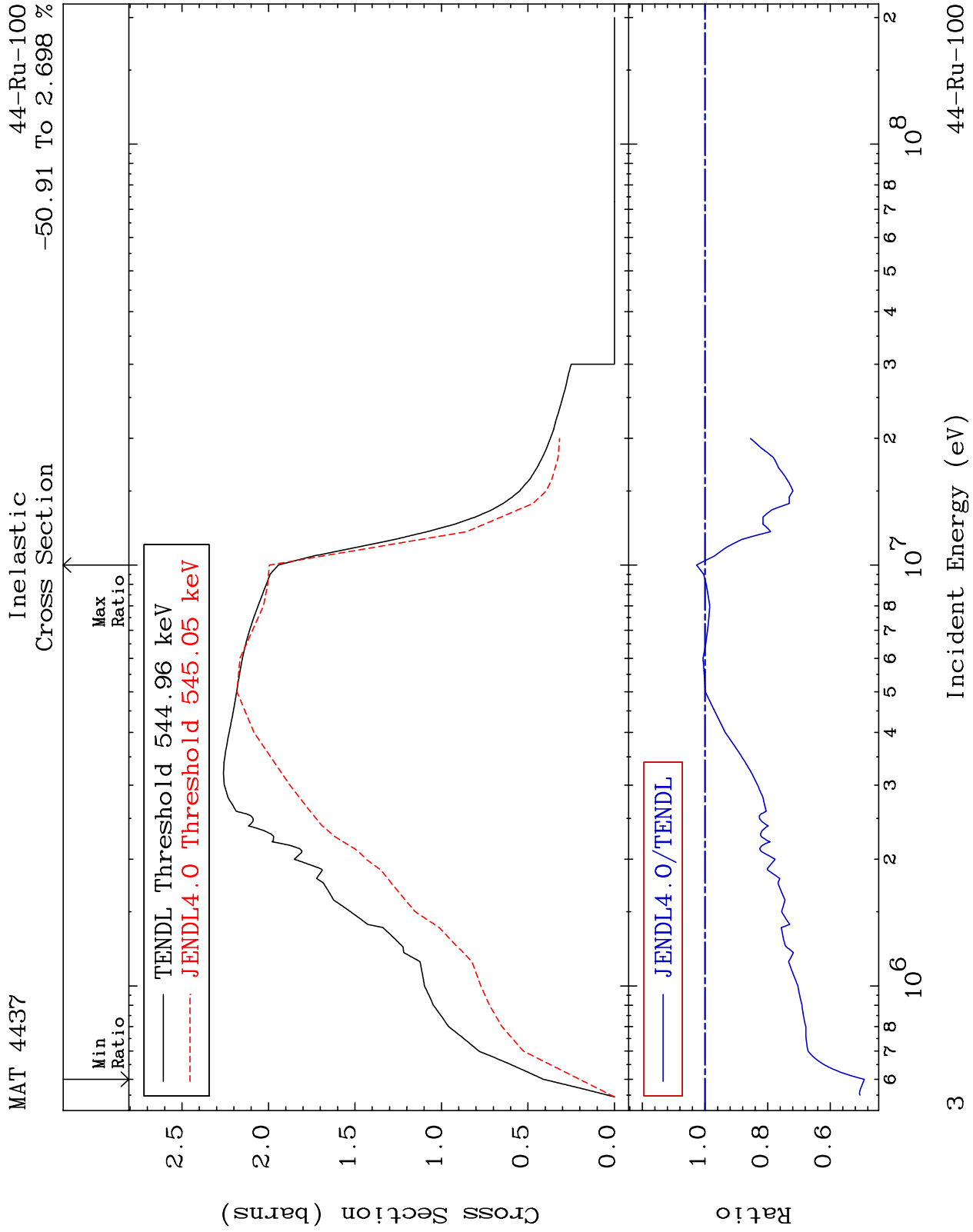
44-Ru-100

MAT 4437

Elastic  
Cross Section

44-Ru-100  
-99.82 To 9999. %





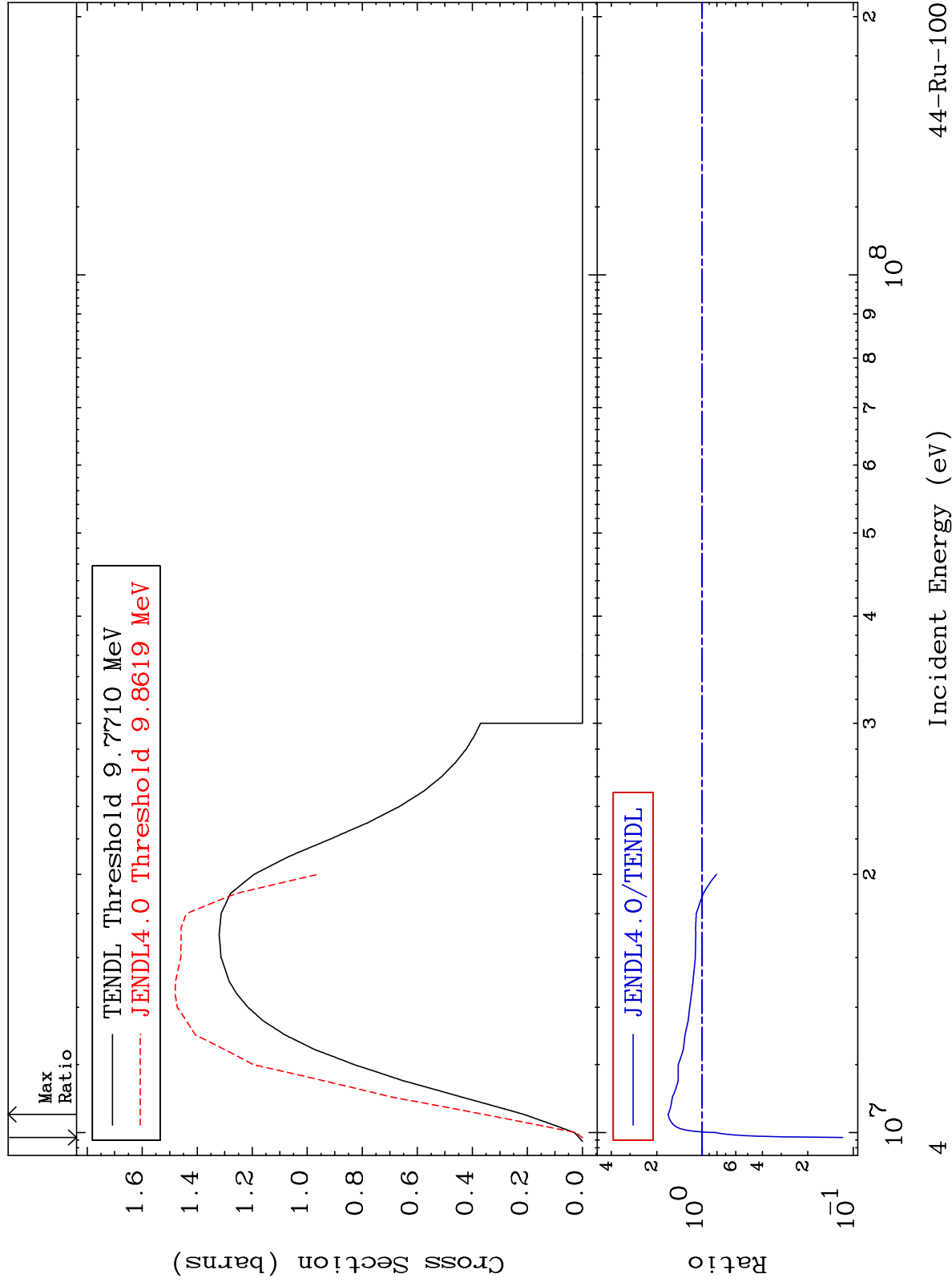
MAT 4437

(n,2n)

44-Ru-100

Cross Section

-88.28 To 68.52 %



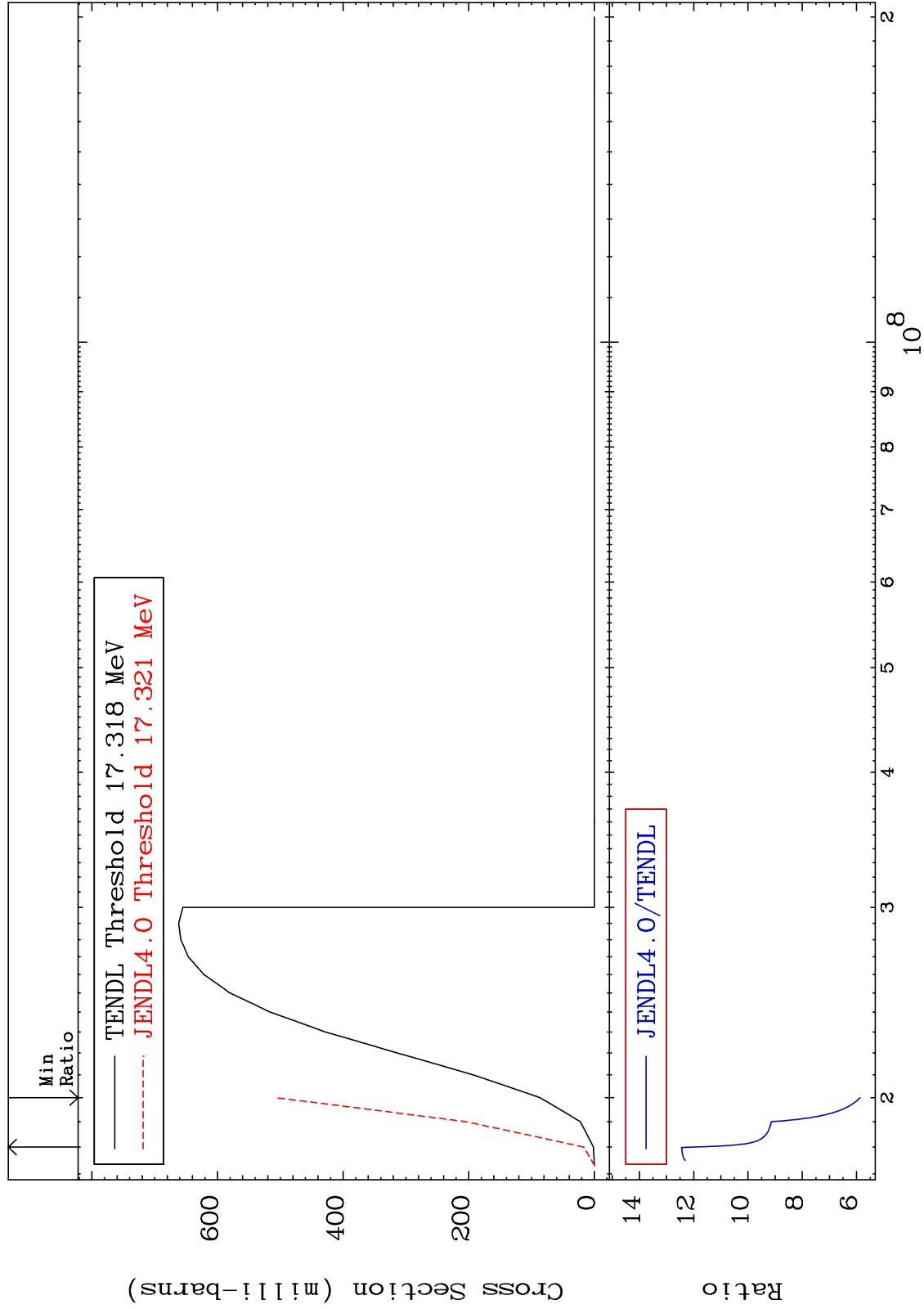
MAT 4437

(n,3n)

44-Ru-100

Cross Section

487.3 To 1144. %



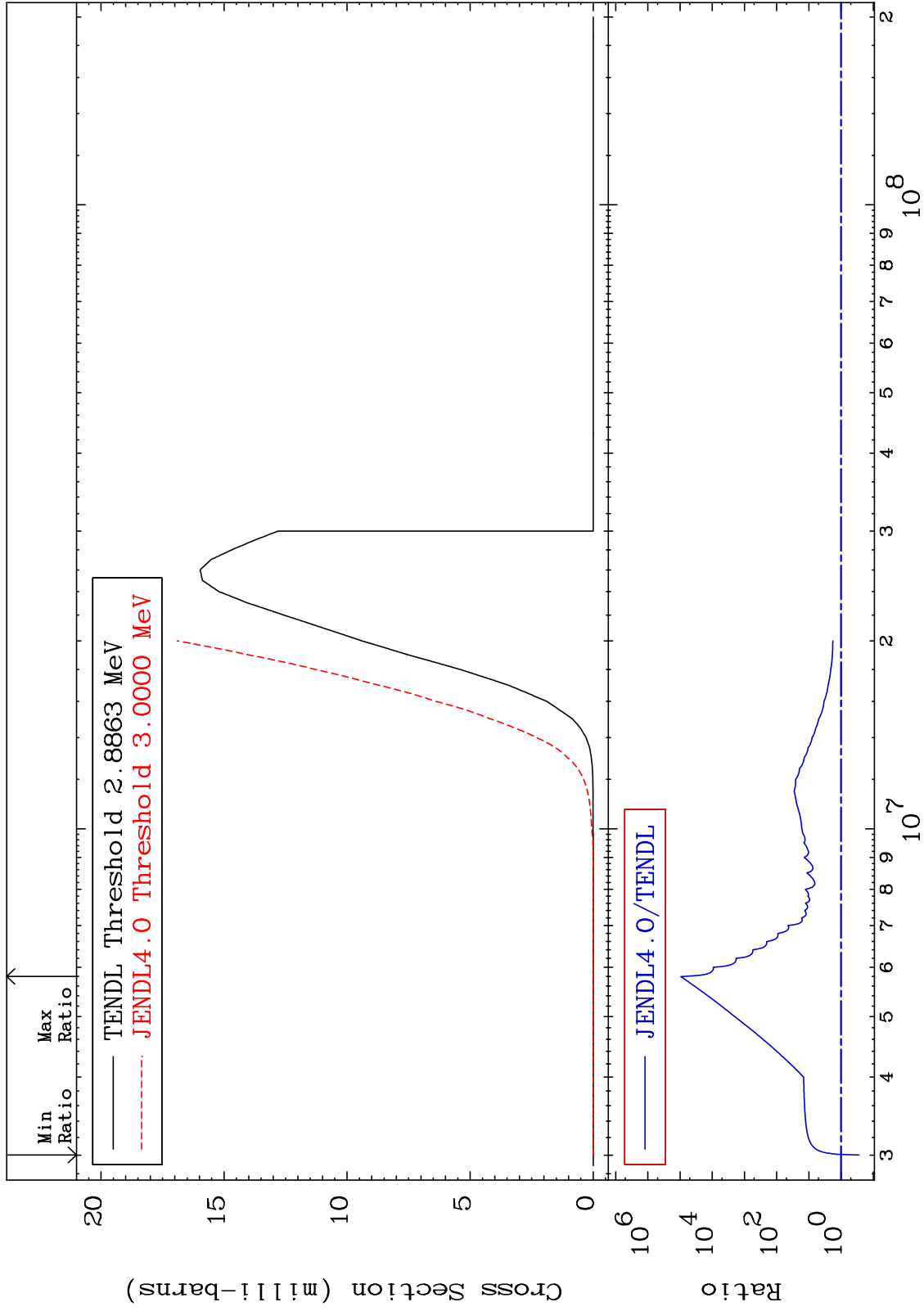
MAT 4437

(n,n')  $\alpha$

44-Ru-100

-72.61 To 9999. %

Cross Section



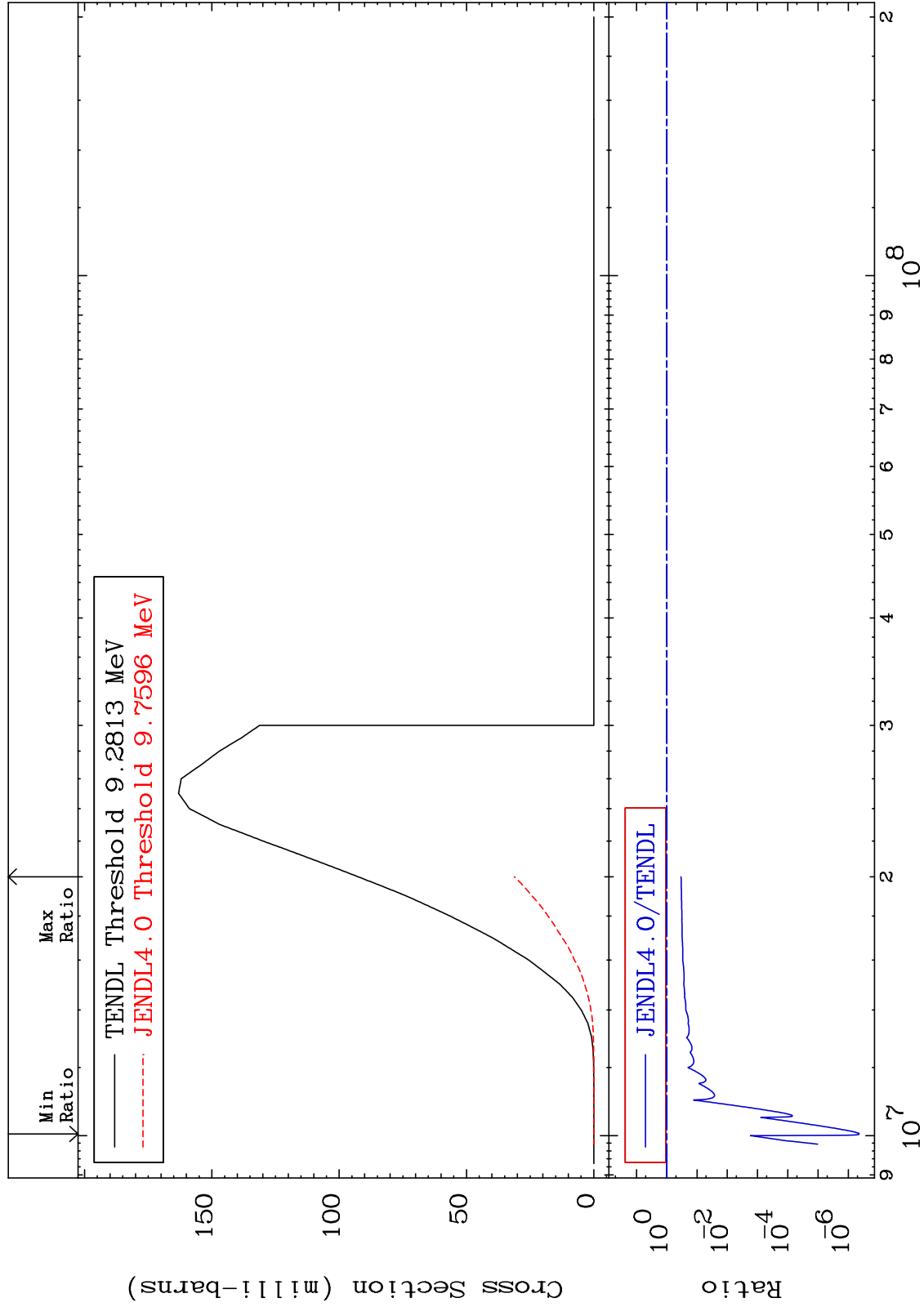
MAT 4437

(n,n') p

44-Ru-100

Cross Section

-100.0 To -66.29%



44-Ru-100

44-Ru-100



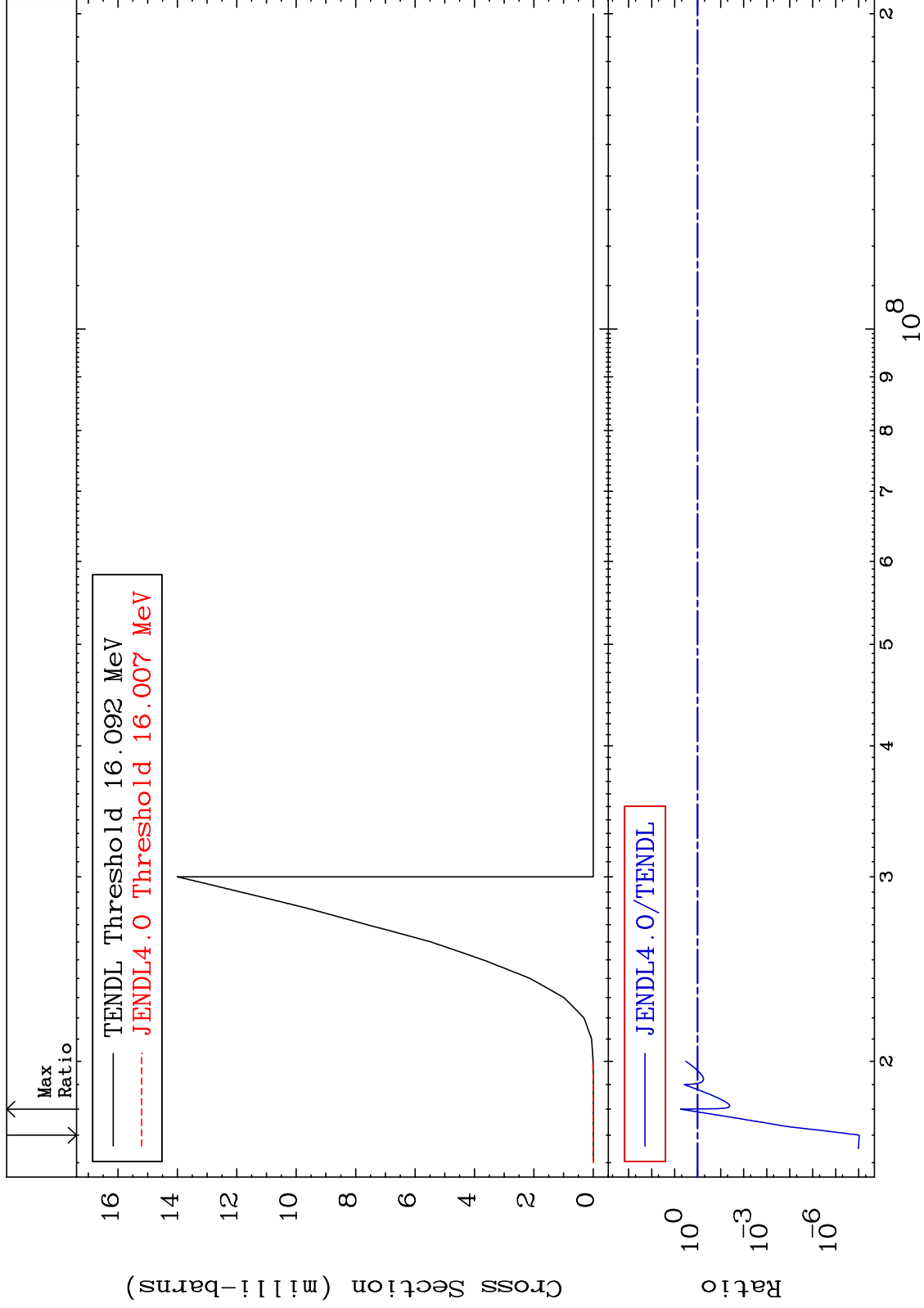
MAT 4437

(n, n') d

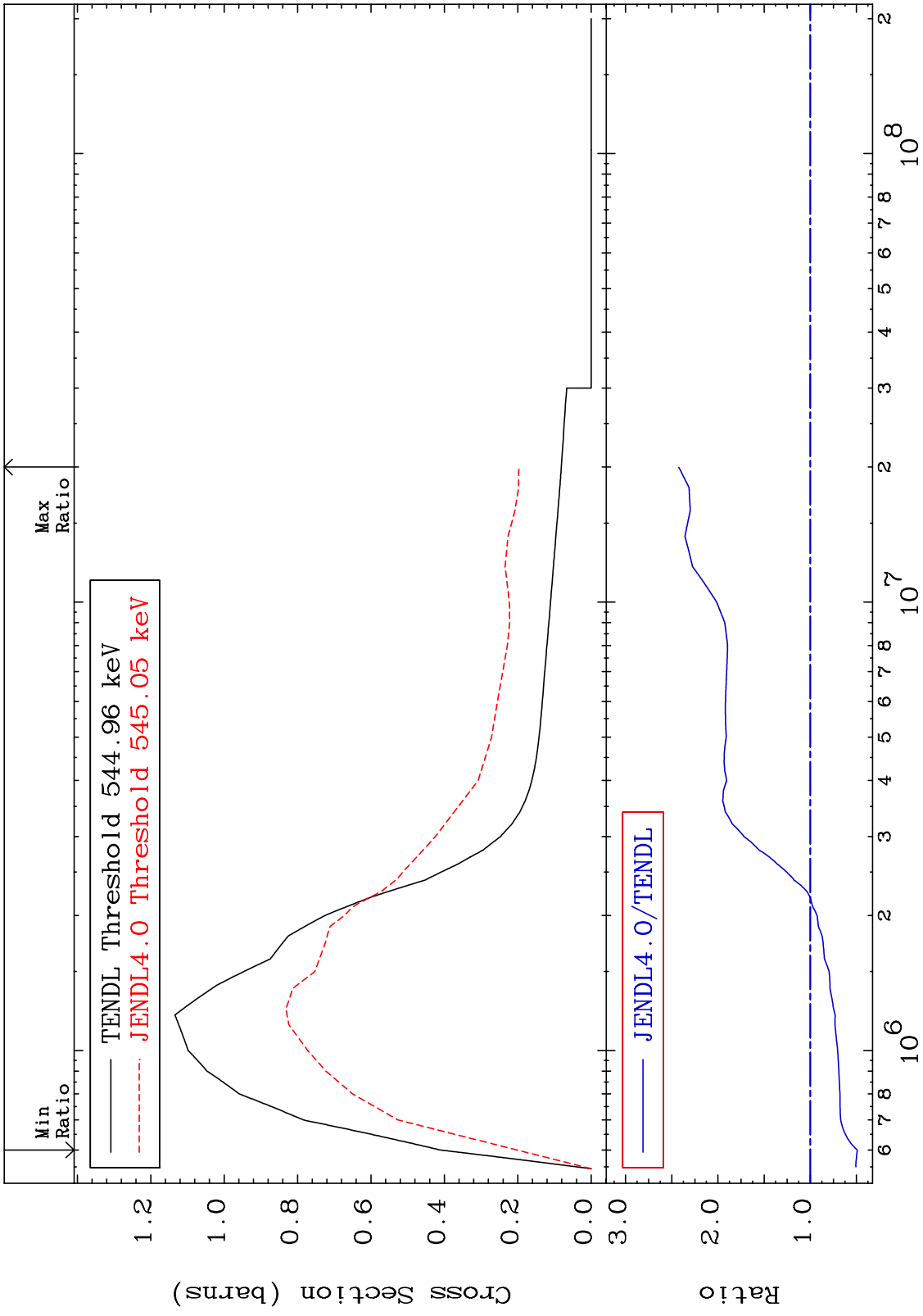
44-Ru-100

Cross Section

-100.0 To 450.0 %



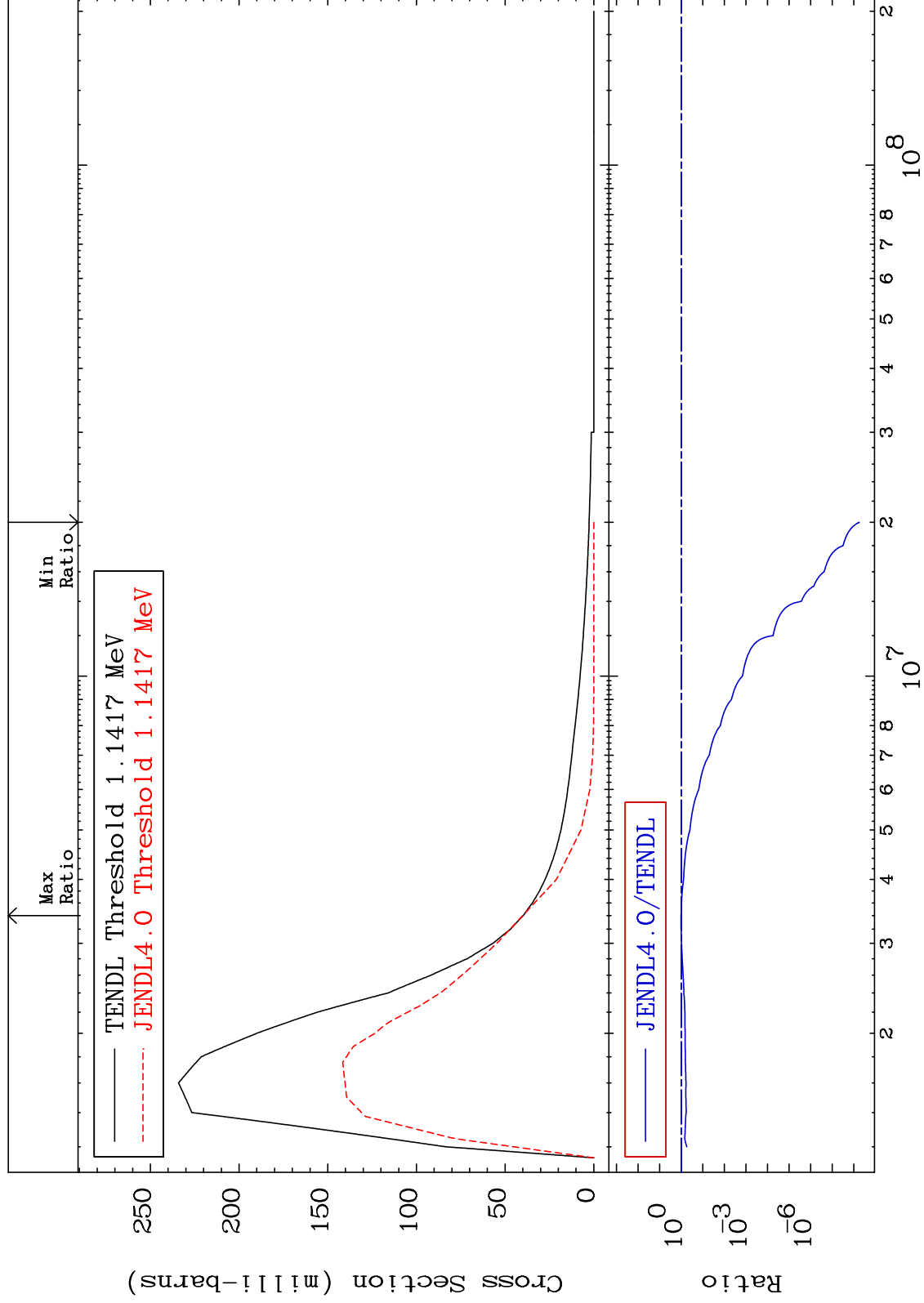
MAT 4437      MT= 51 (n,n') Level      44-Ru-100  
 Cross Section      -50.91 To 142.6 %



MAT 4437

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

44-Ru-100  
-100.0 To 0.698 %



10

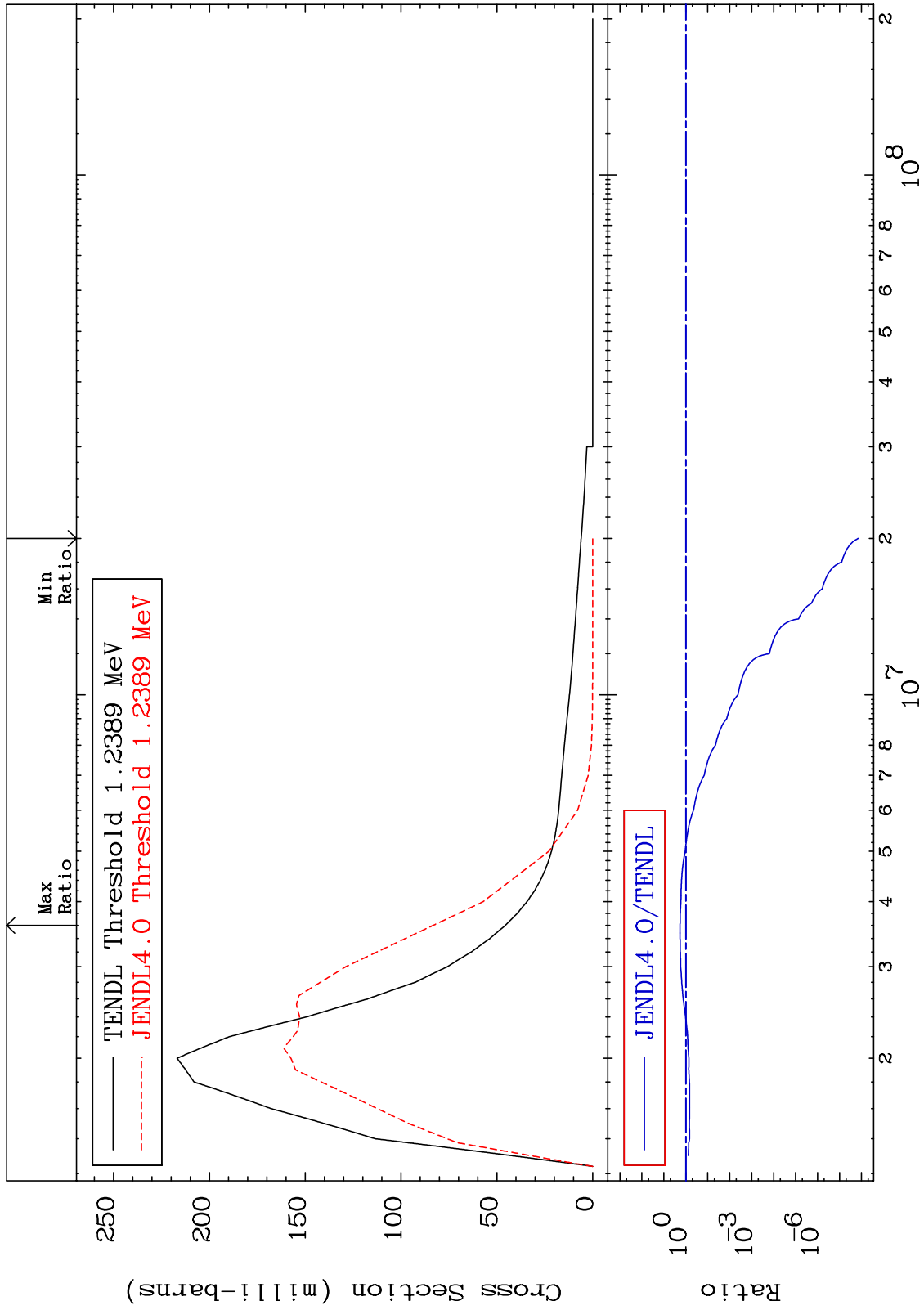
Incident Energy (eV)

44-Ru-100

MAT 4437

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

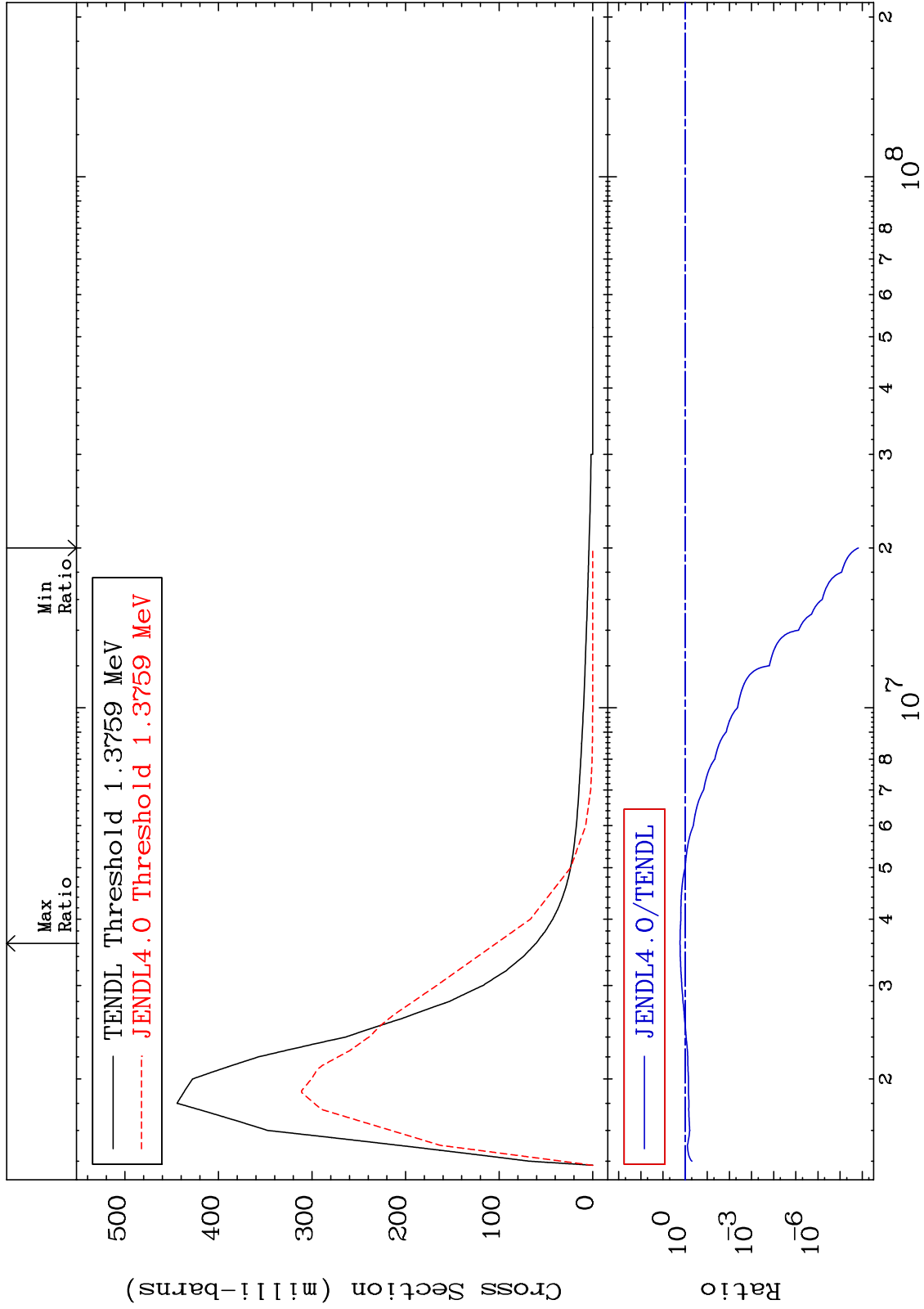
44-Ru-100  
-100.0 To 82.70 %



MAT 4437

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

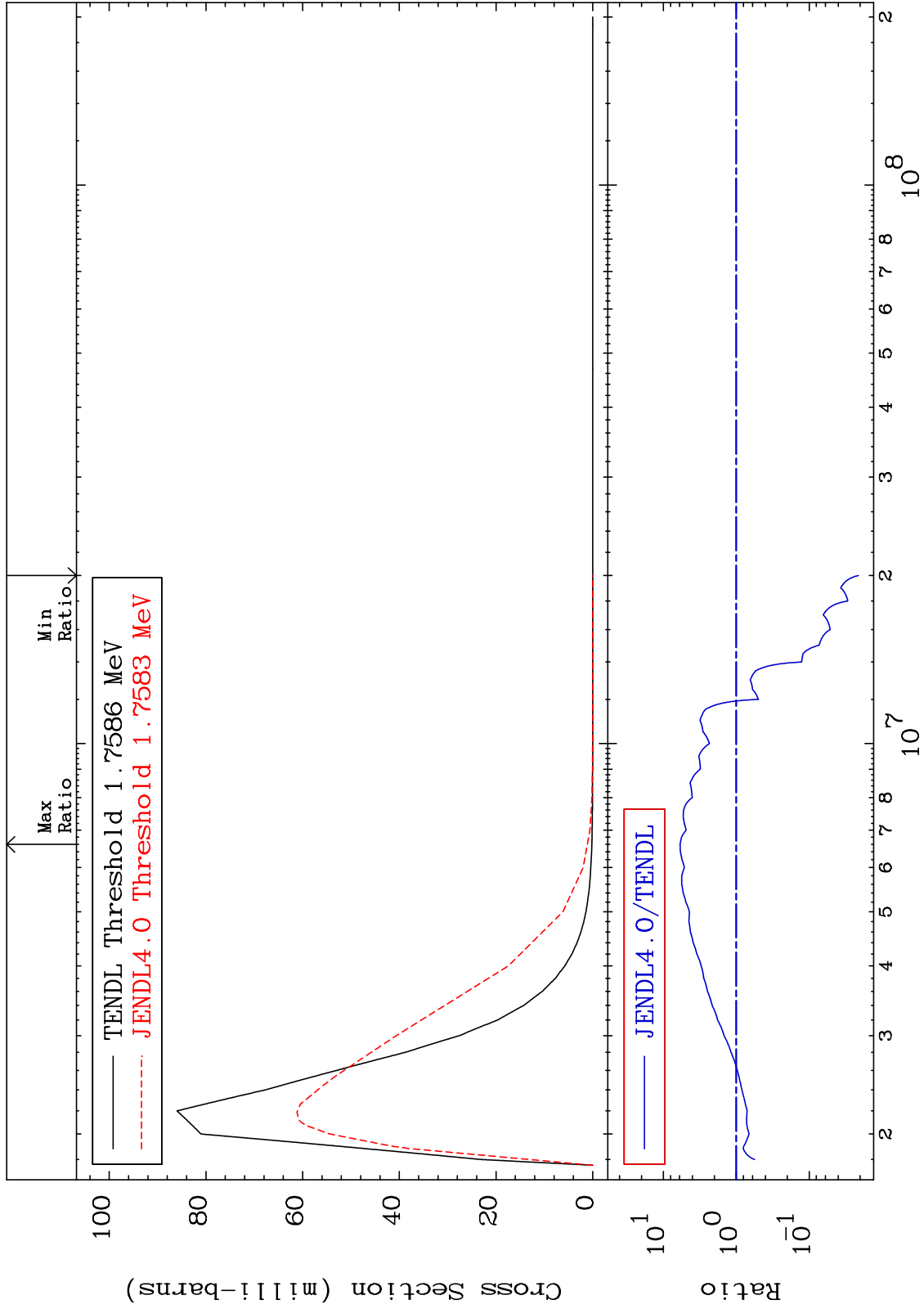
44-Ru-100  
-100.0 To 70.11 %



MAT 4437

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

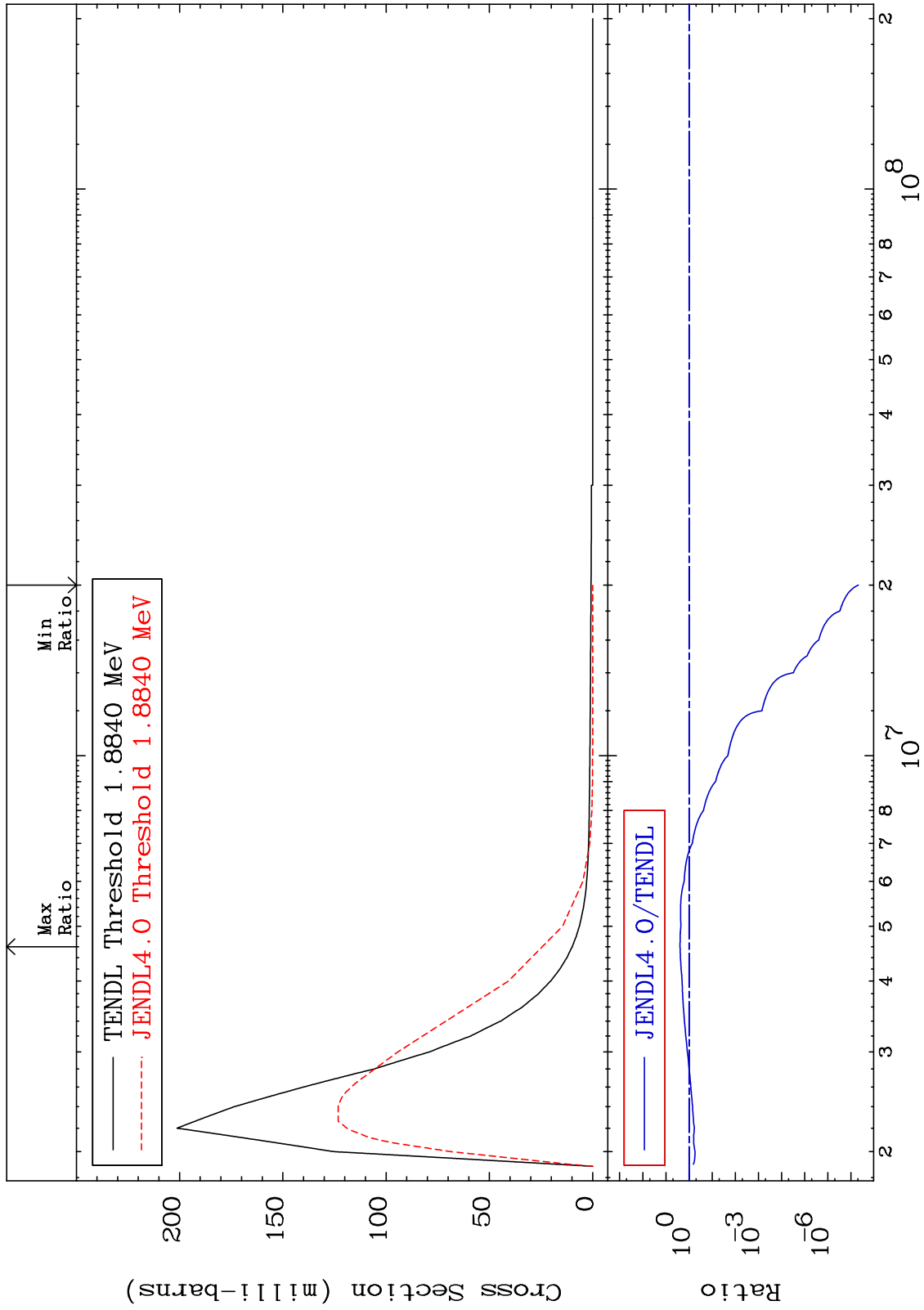
44-Ru-100  
-97.88 To 491.9 %



MAT 4437

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

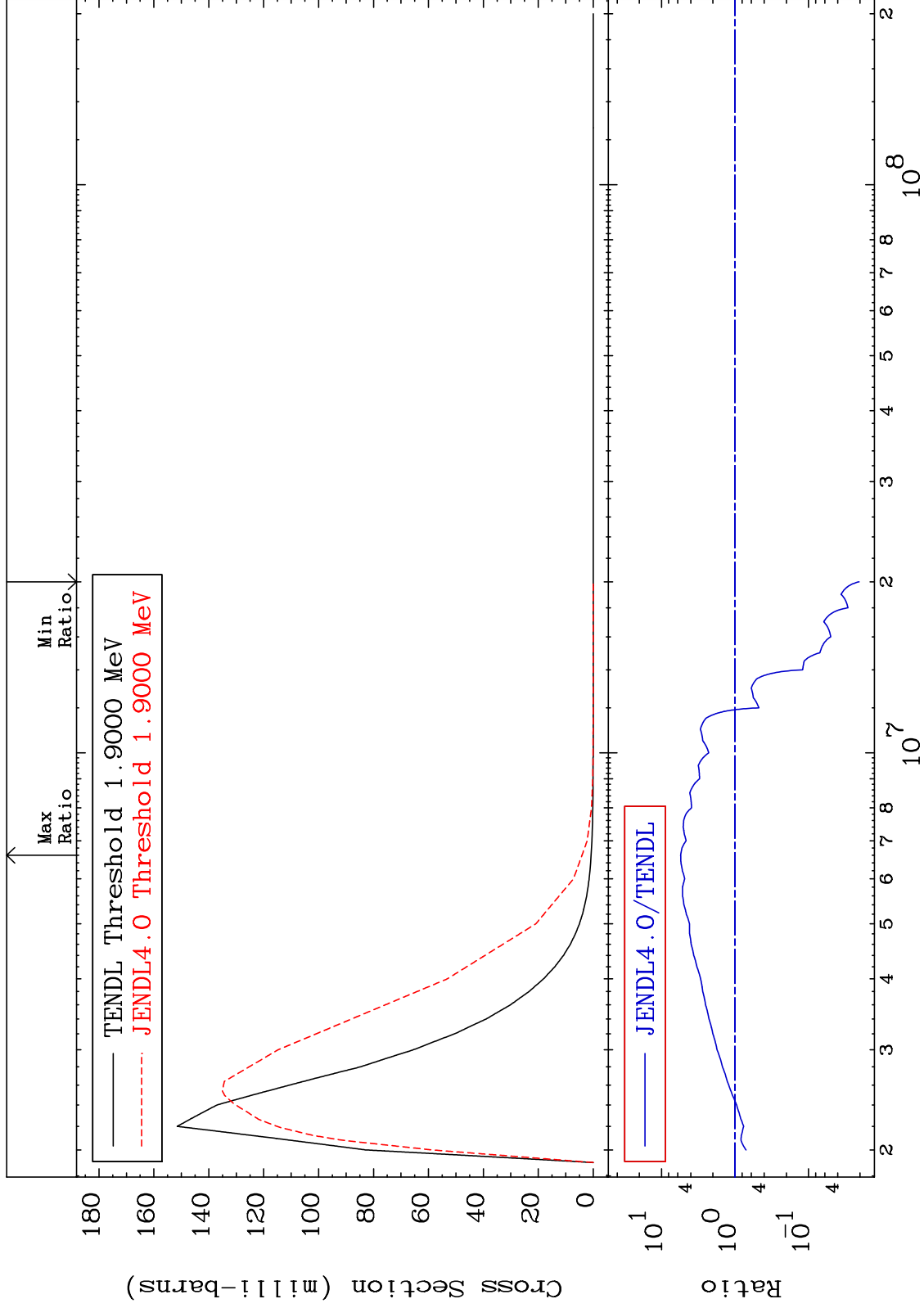
44-Ru-100  
-100.0 To 145.8 %



MAT 4437

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

44-Ru-100  
-97.95 To 448.8 %

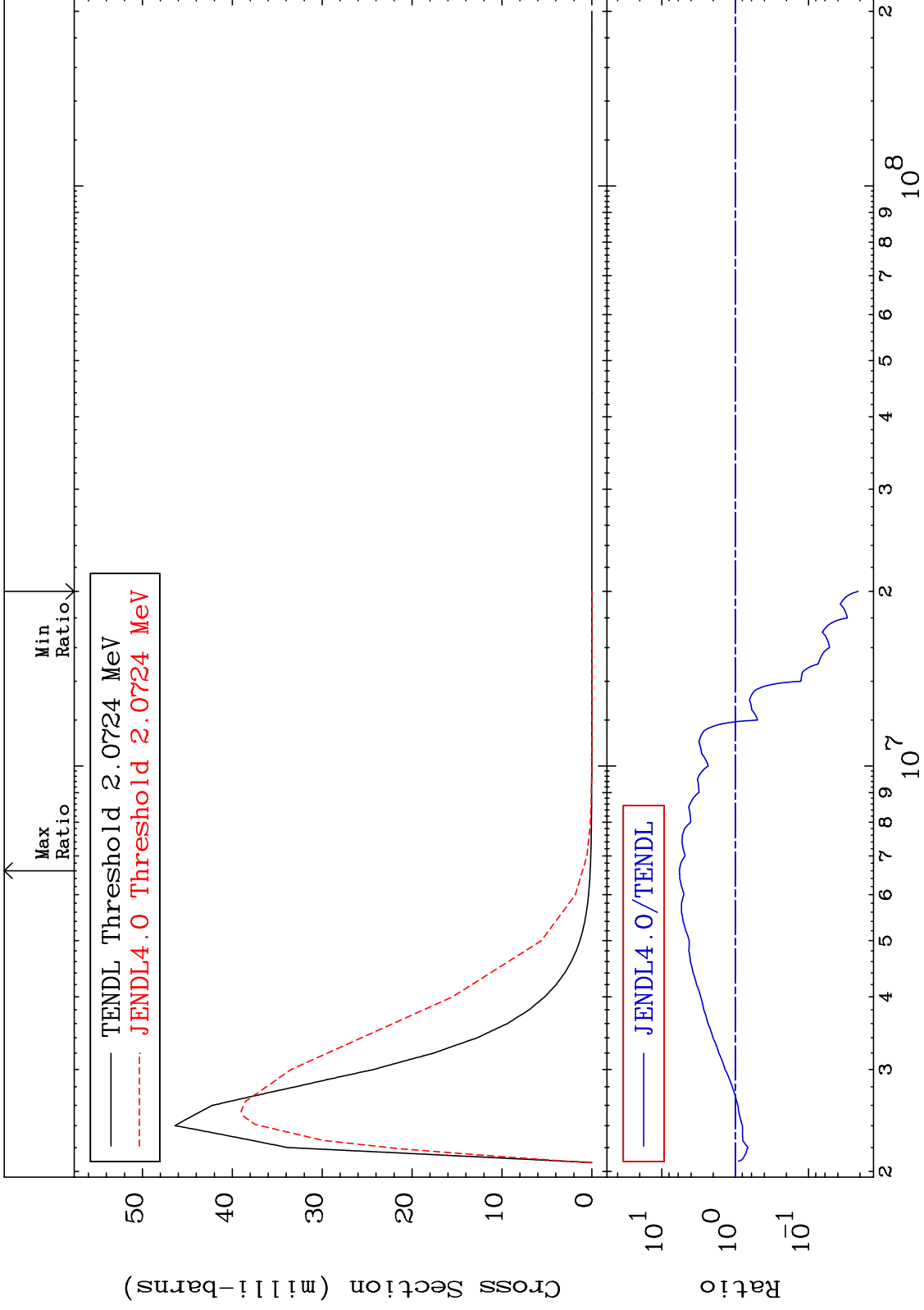




MAT 4437

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

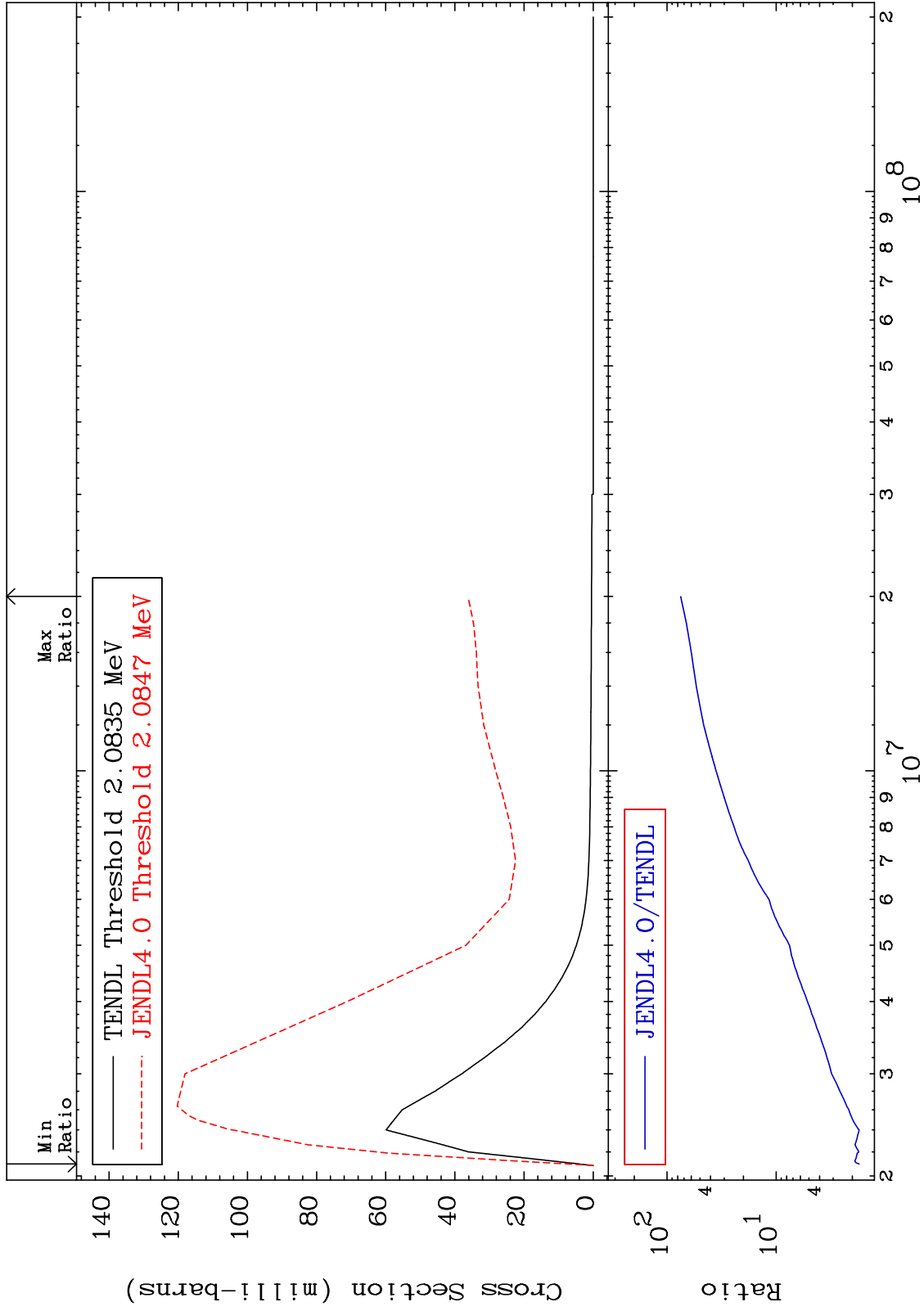
44-Ru-100  
-97.89 To 477.6 %



MAT 4437

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

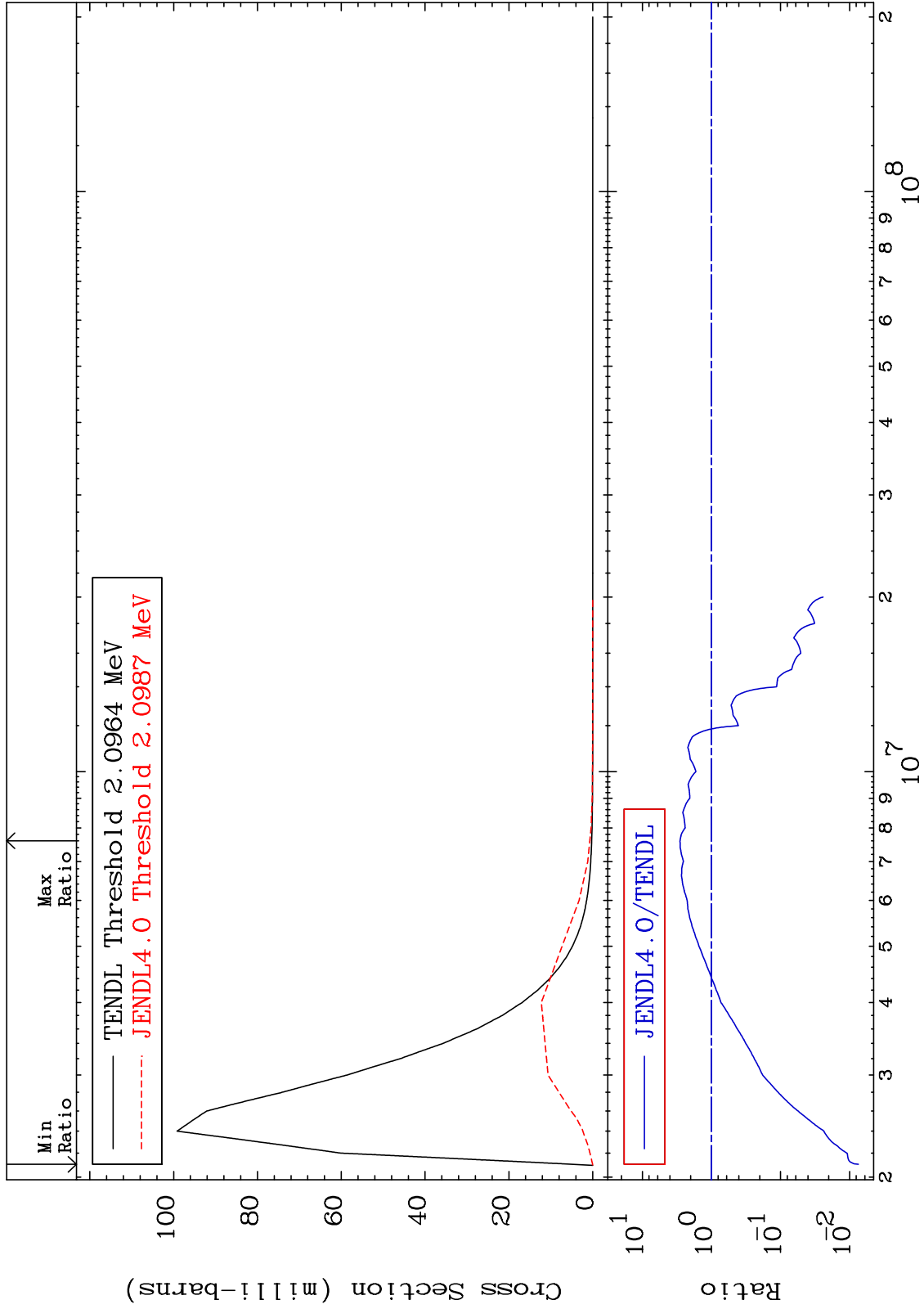
44-Ru-100  
73.37 To 7419. %



MAT 4437

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

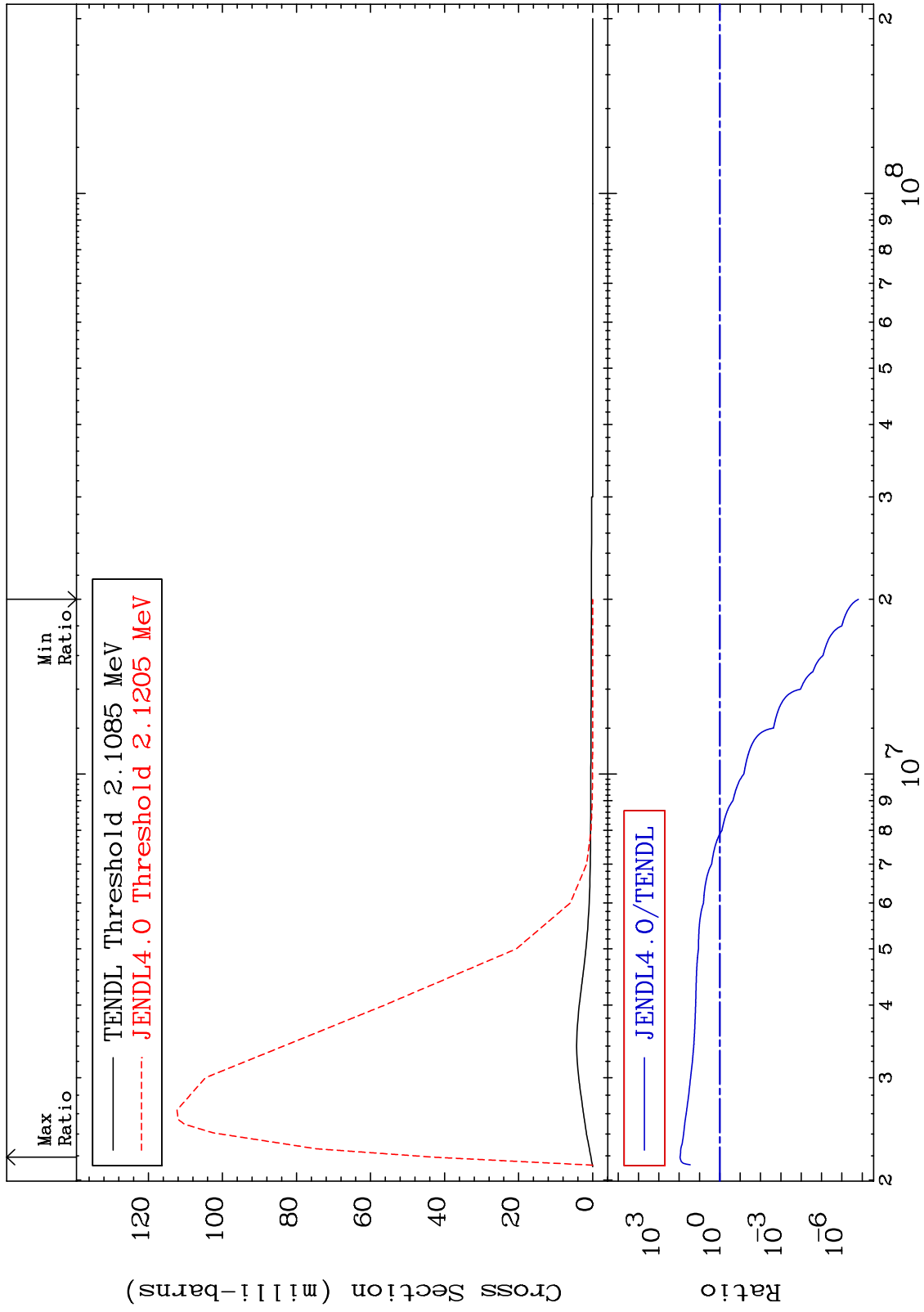
44-Ru-100  
-99.26 To 184.8 %



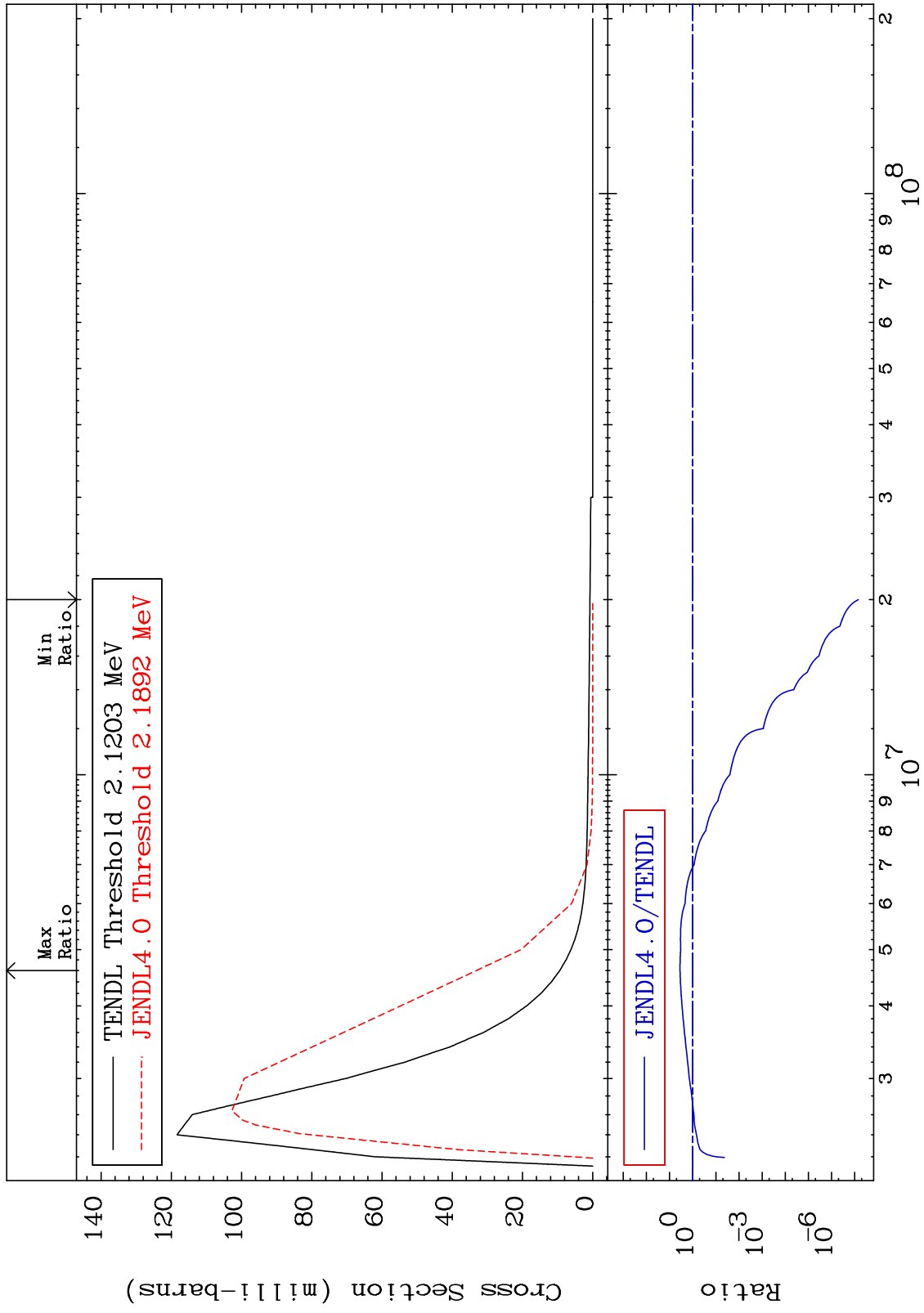
MAT 4437

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

44-Ru-100  
-100.0 To 8988. %



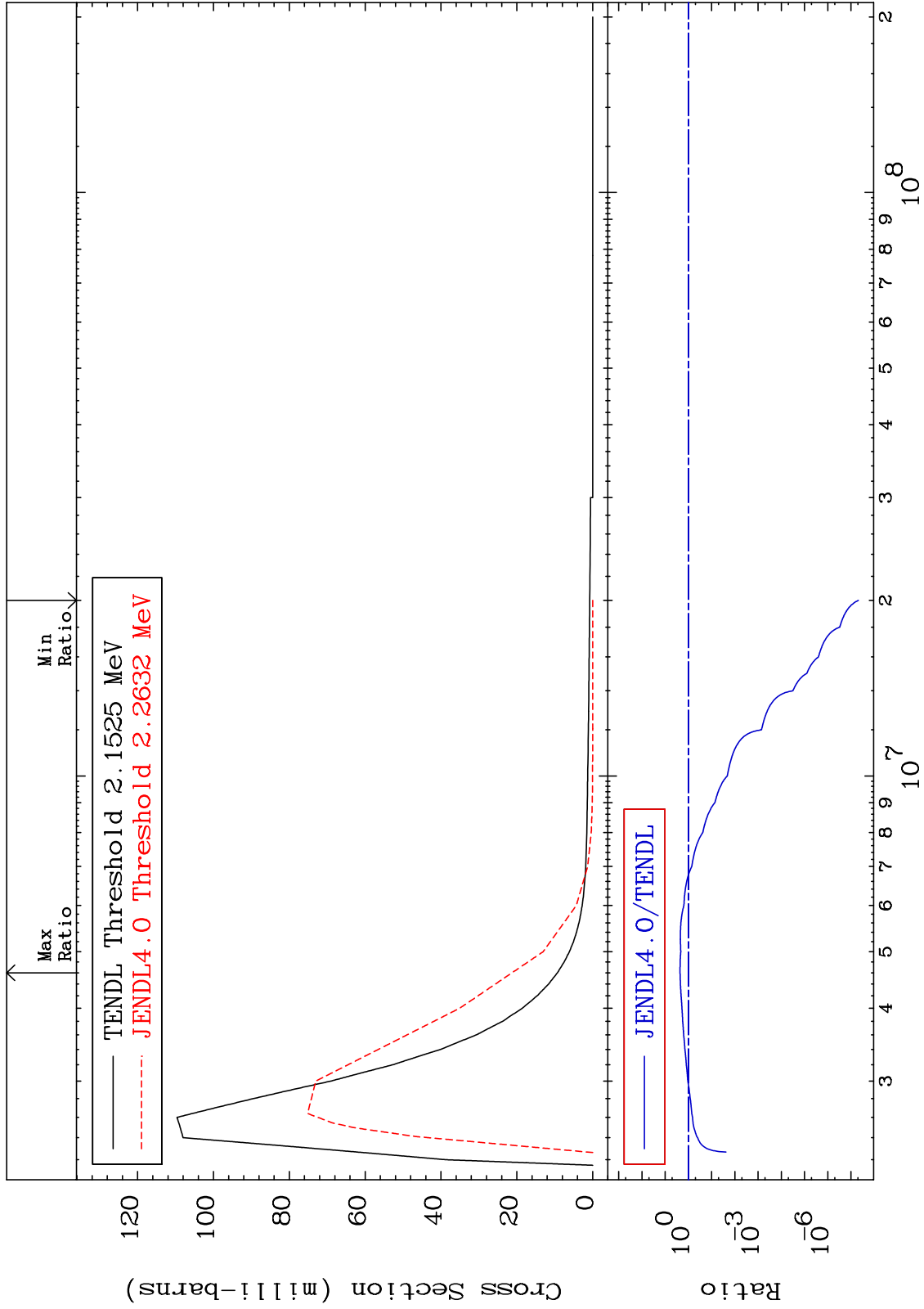
MAT 4437      MT= 62 (n,n') Level      44-Ru-100  
 Cross Section      -100.0 To 253.5 %



MAT 4437

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

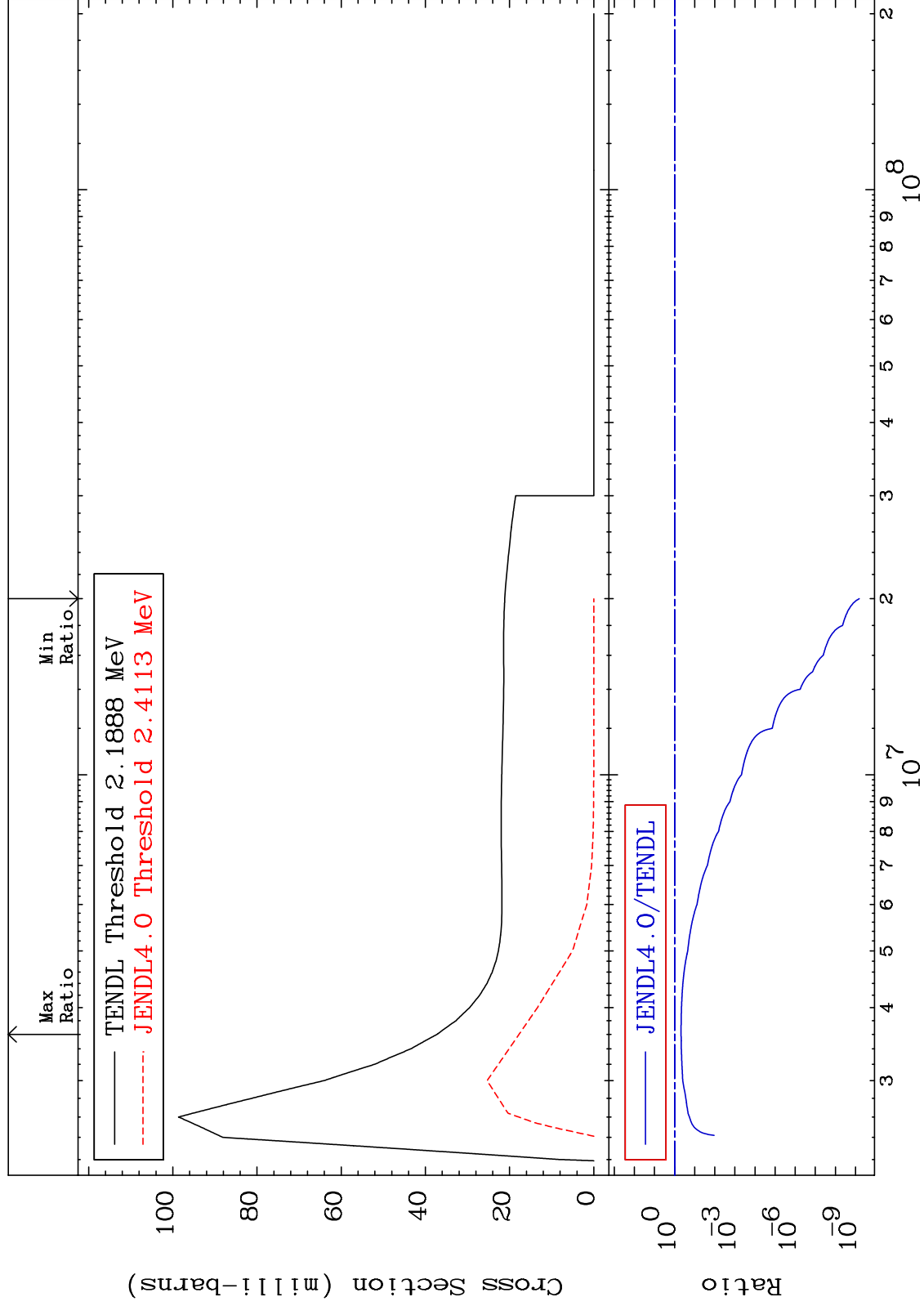
44-Ru-100  
-100.0 To 128.7 %



MAT 4437

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

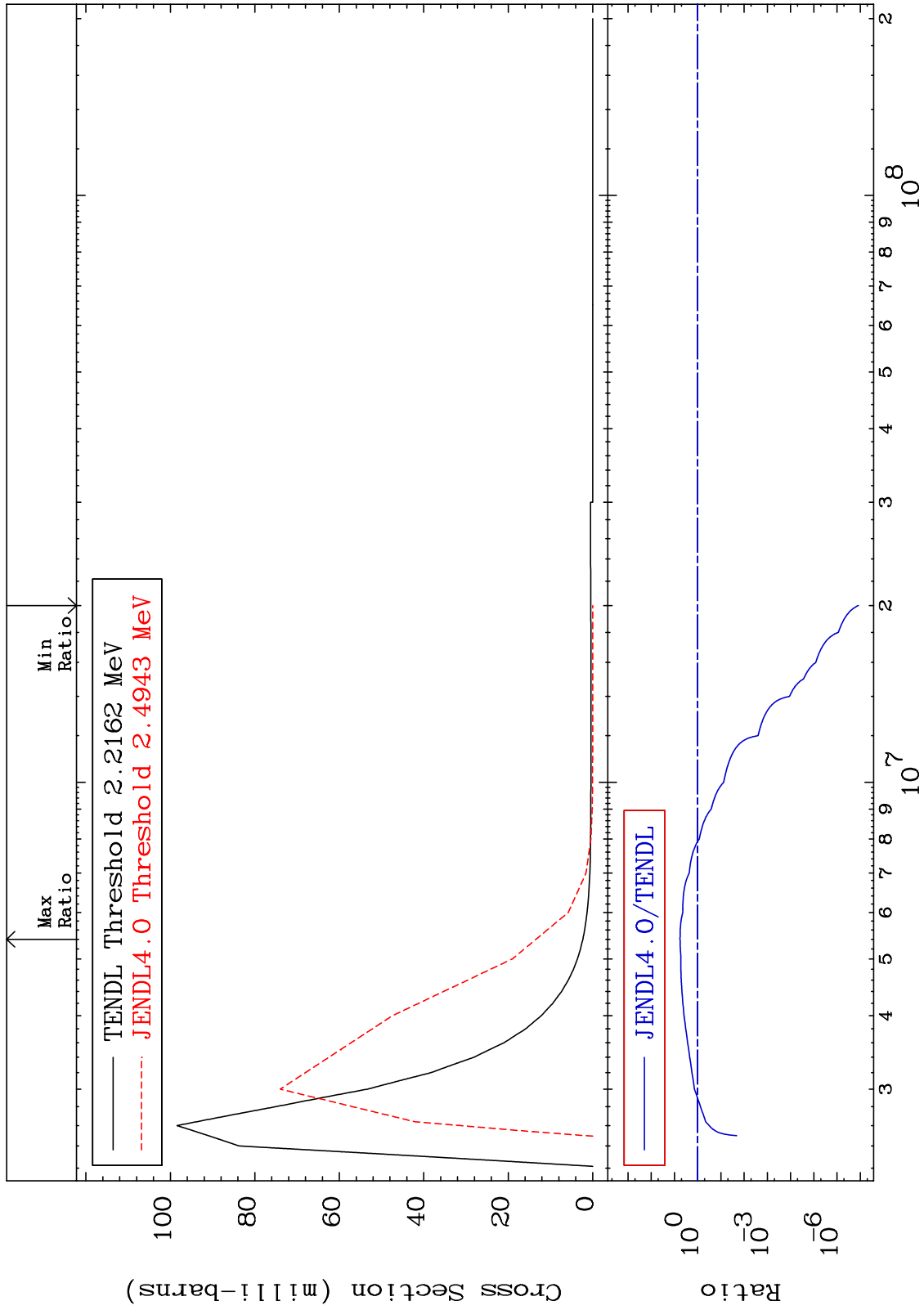
44-Ru-100  
-100.0 To -52.31%



MAT 4437

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

44-Ru-100  
-100.0 To 476.8 %

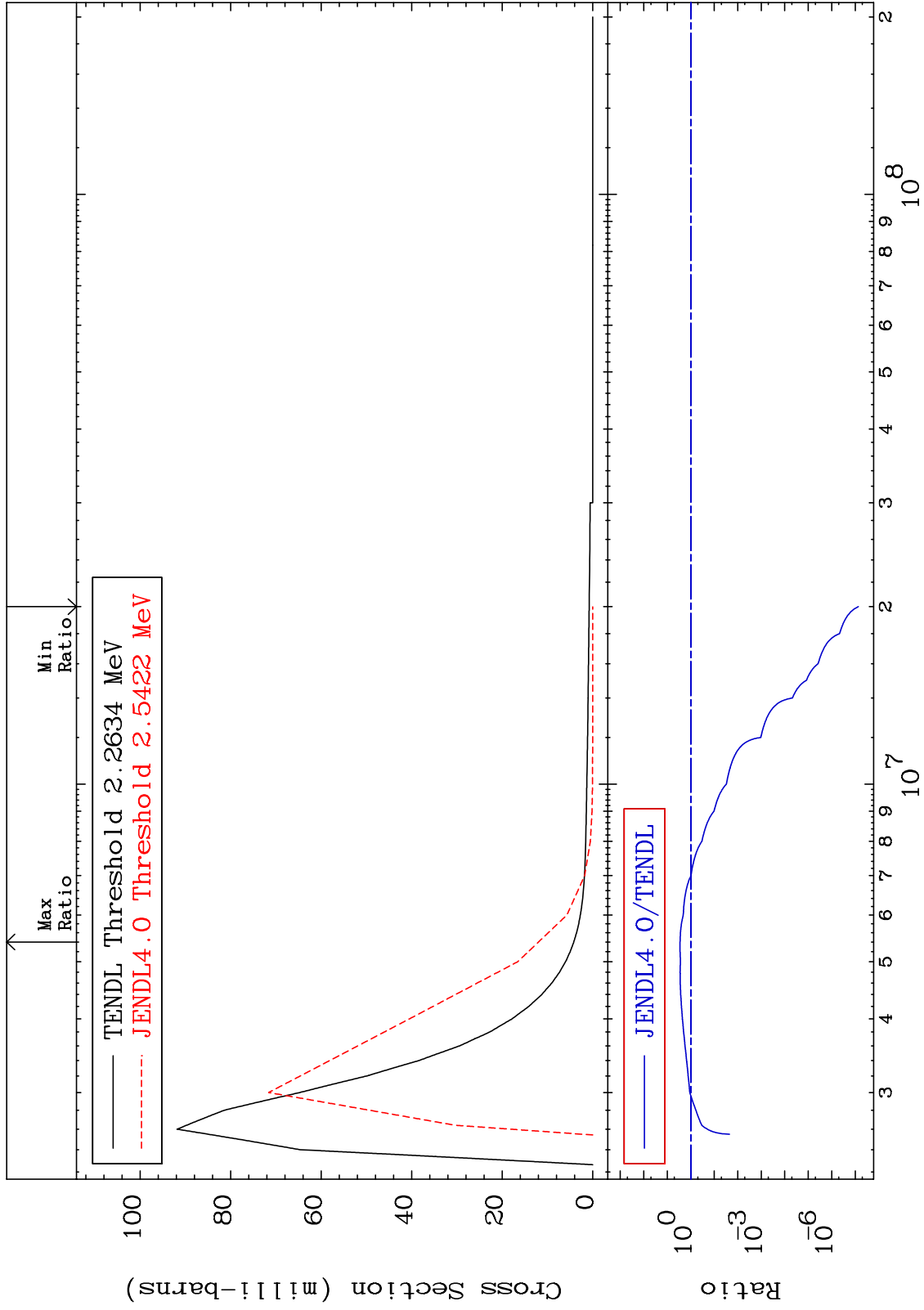




MAT 4437

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

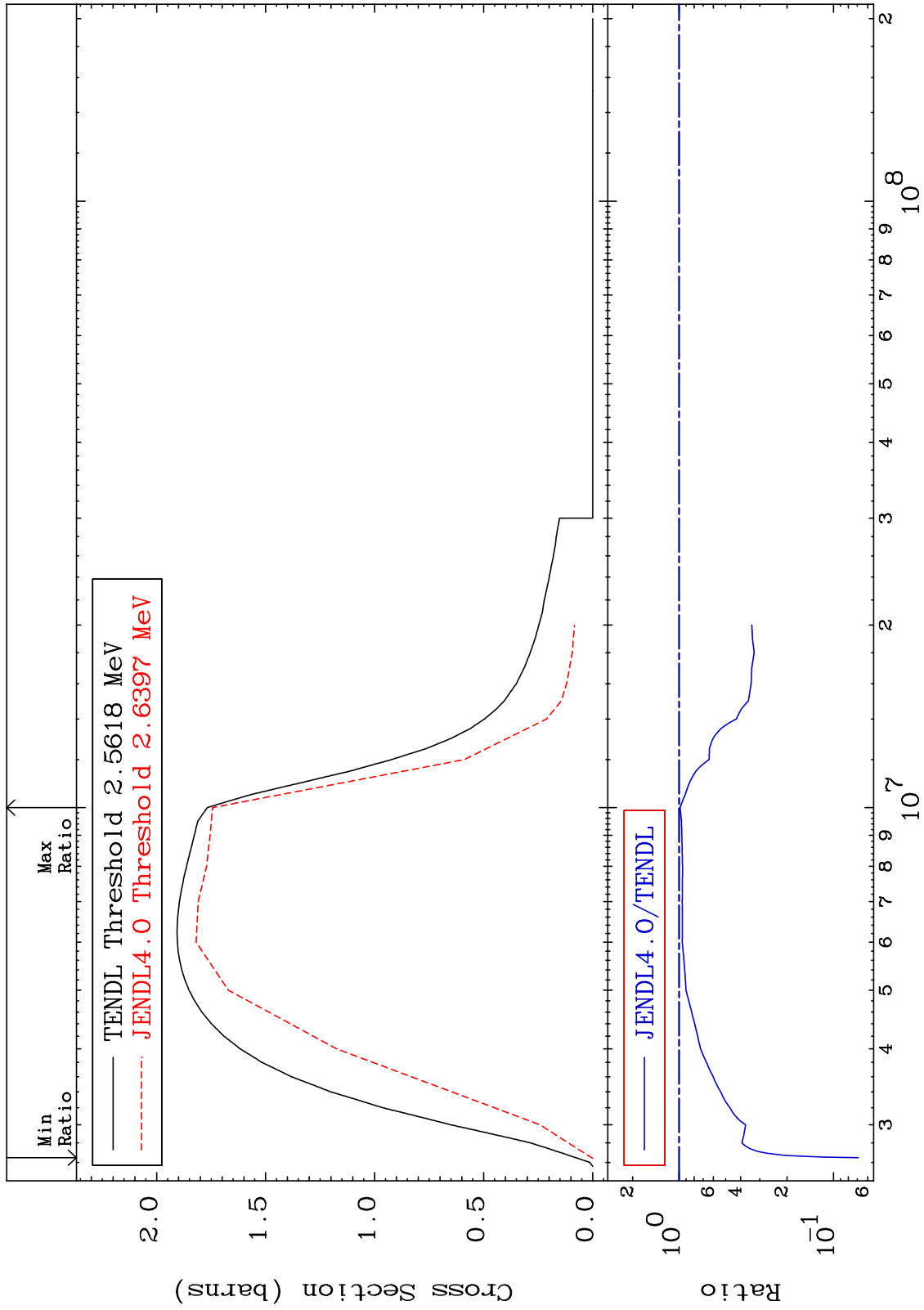
44-Ru-100  
-100.0 To 186.9 %



MAT 4437

(n, n') Continuum  
Cross Section

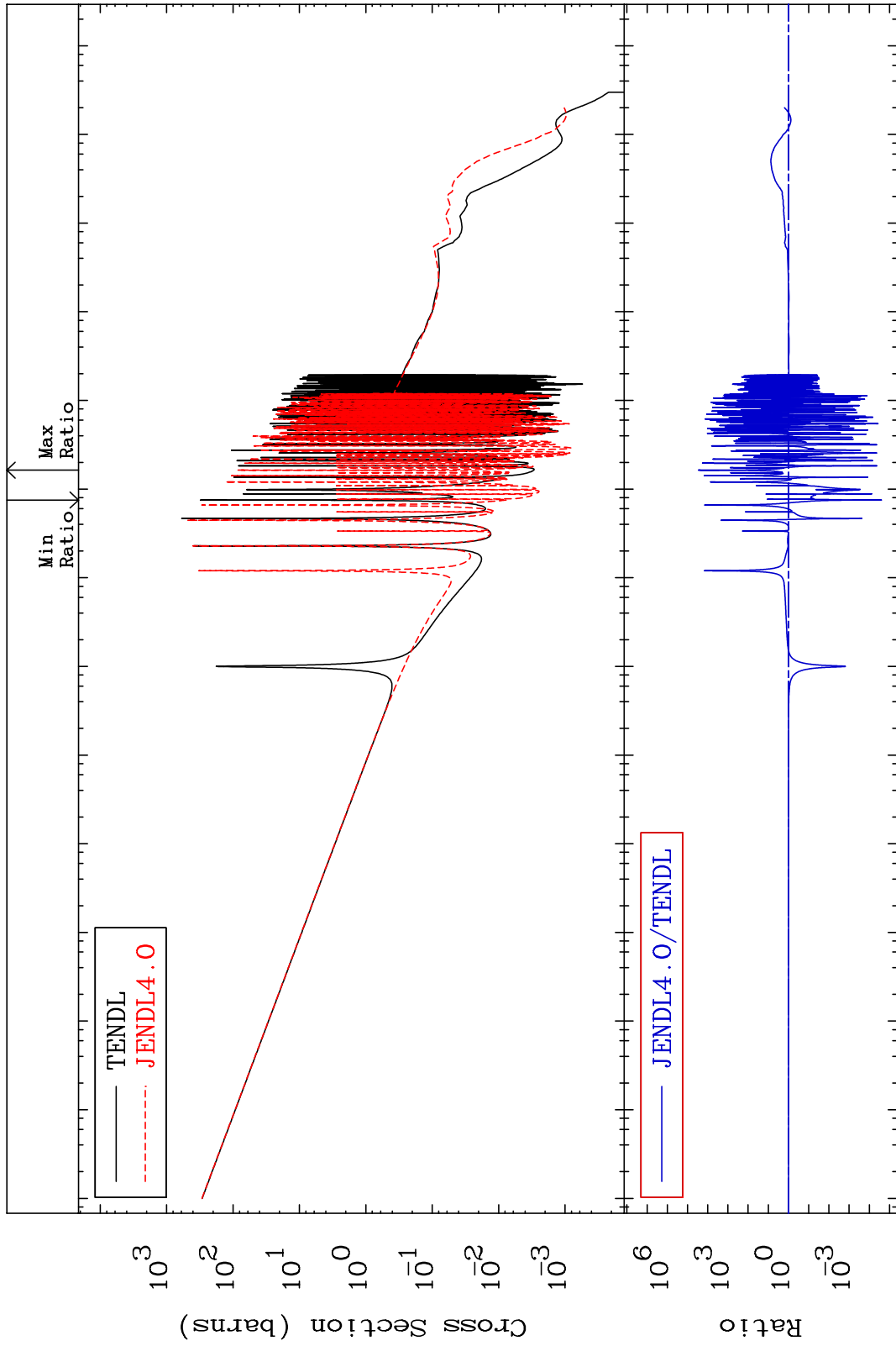
44-Ru-100  
-93.11 To -1.361%



MAT 4437

(n,  $\gamma$ )  
Cross Section

44-Ru-100  
-100.0 To 9999. %



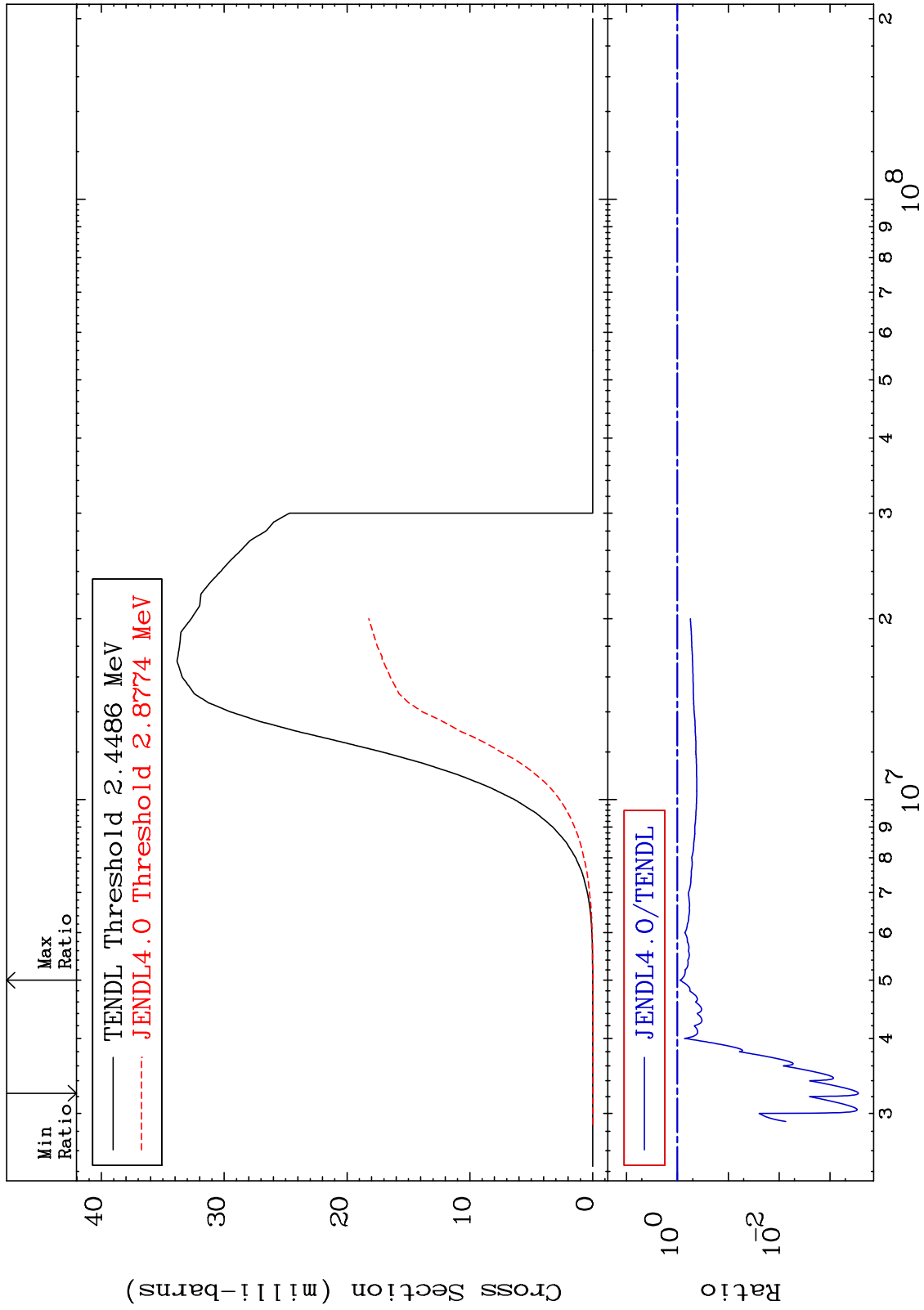
MAT 4437

(n, p)

44-Ru-100

Cross Section

-99.97 To -11.11%



27

44-Ru-100

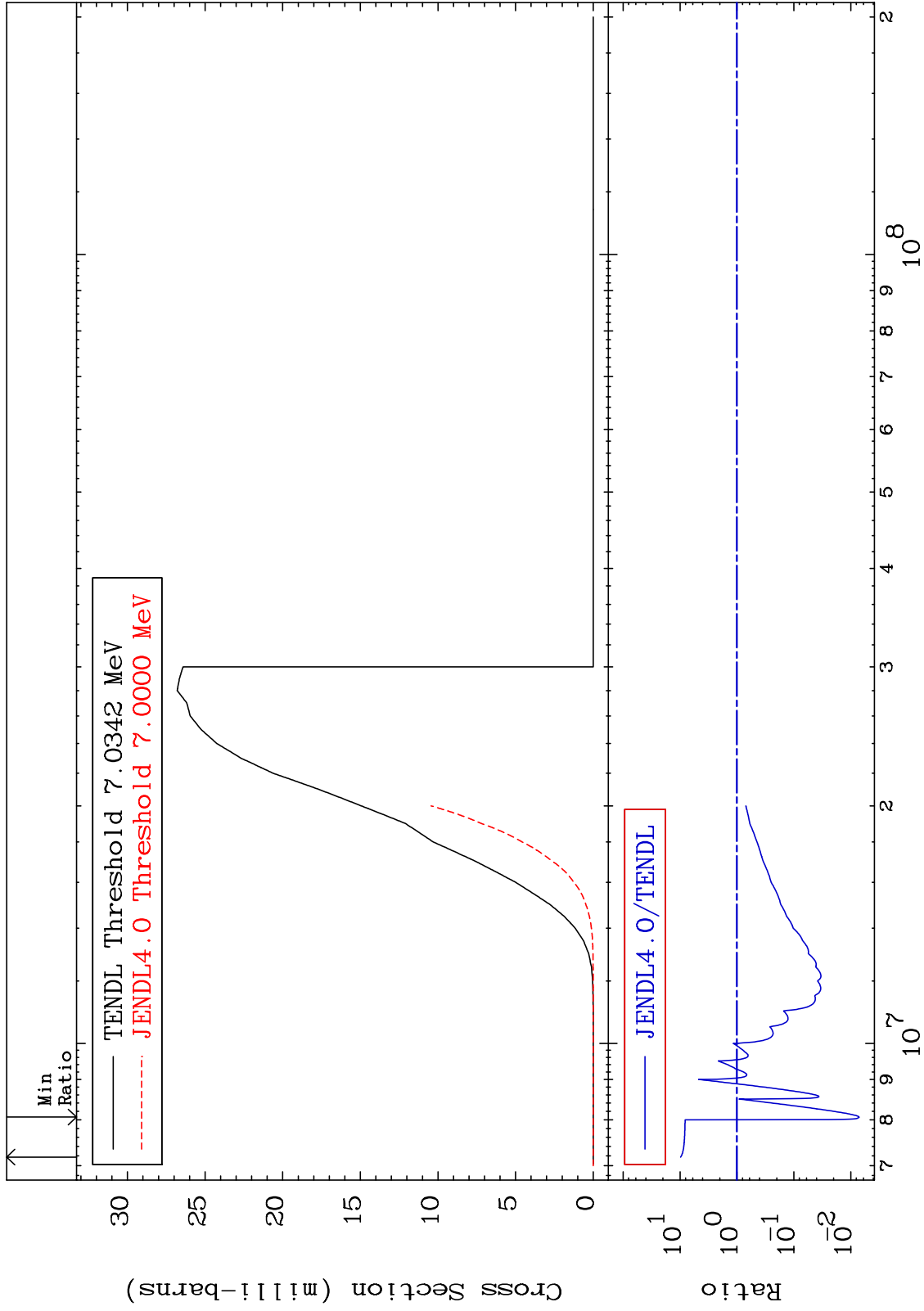
MAT 4437

(n, d)

44-Ru-100

Cross Section

-99.29 To 877.7 %



28

Incident Energy (eV)

44-Ru-100

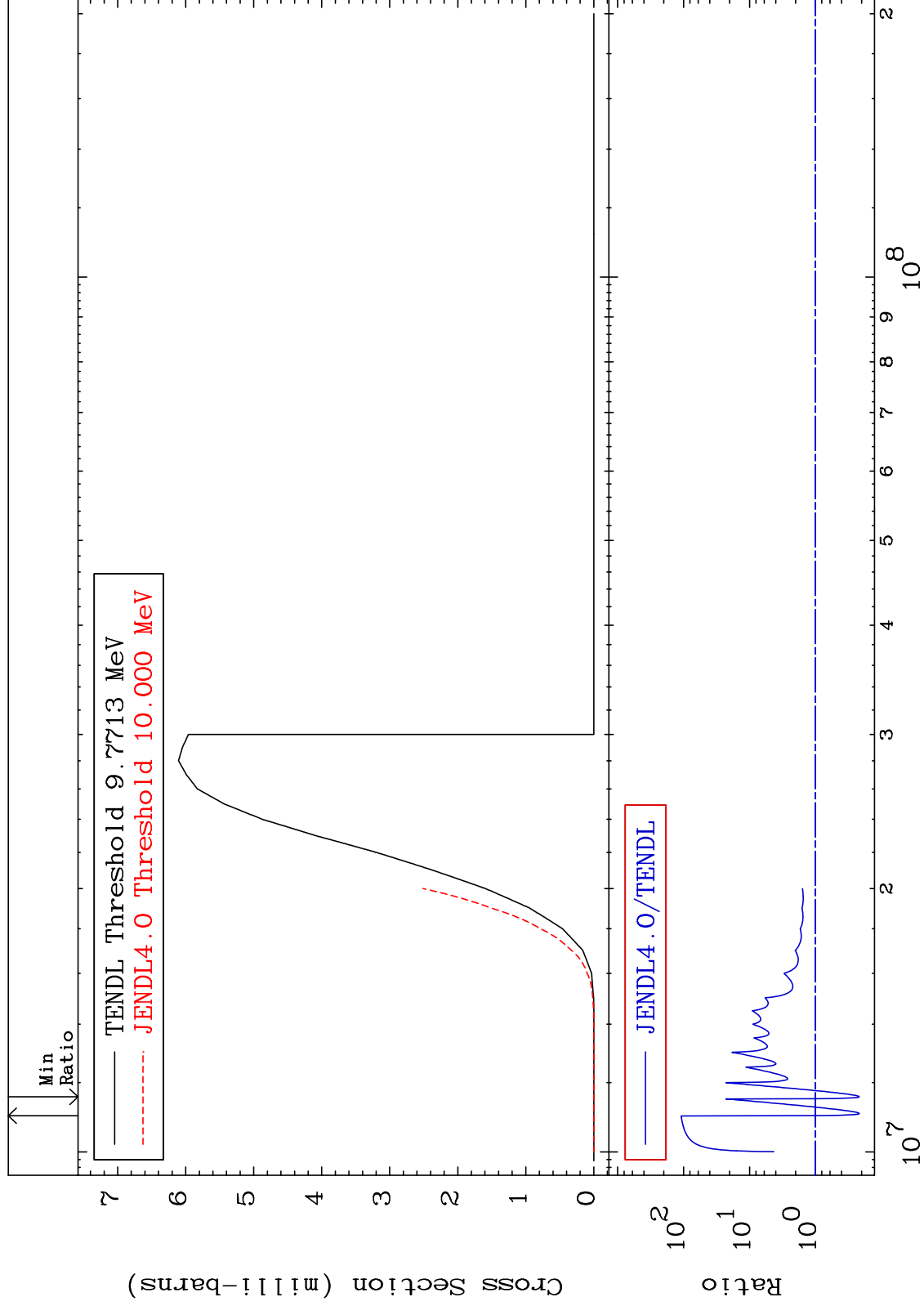
MAT 4437

(n, t)

44-Ru-100

Cross Section

-78.36 To 9999. %



29

Incident Energy (eV)

44-Ru-100

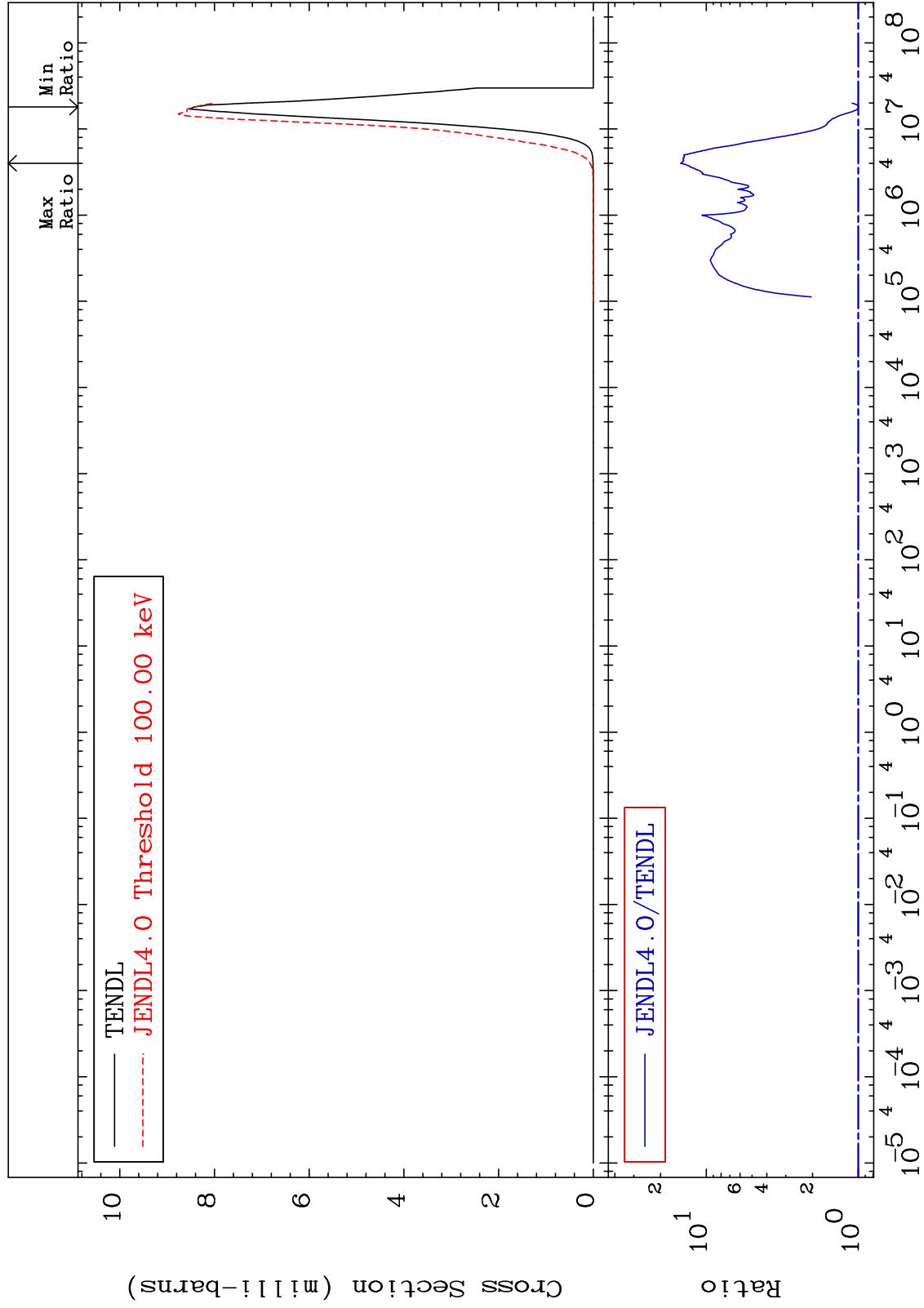
MAT 4437

(n,  $\alpha$ )

44-Ru-100

Cross Section

-0.374 To 1379. %



30

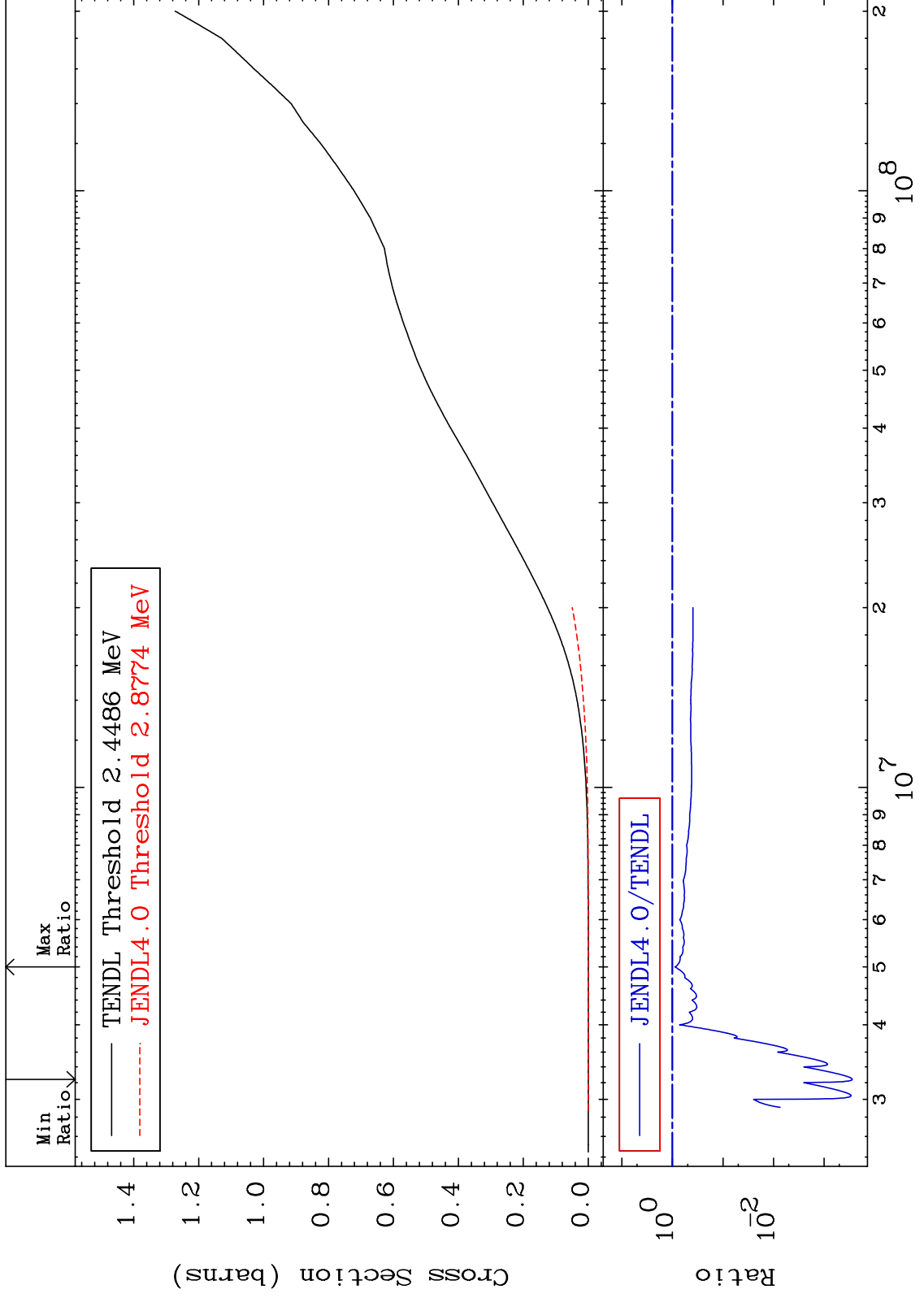
Incident Energy (eV)

44-Ru-100

MAT 4437

Hydrogen Production  
Cross Section

44-Ru-100  
-99.97 To -11.11%

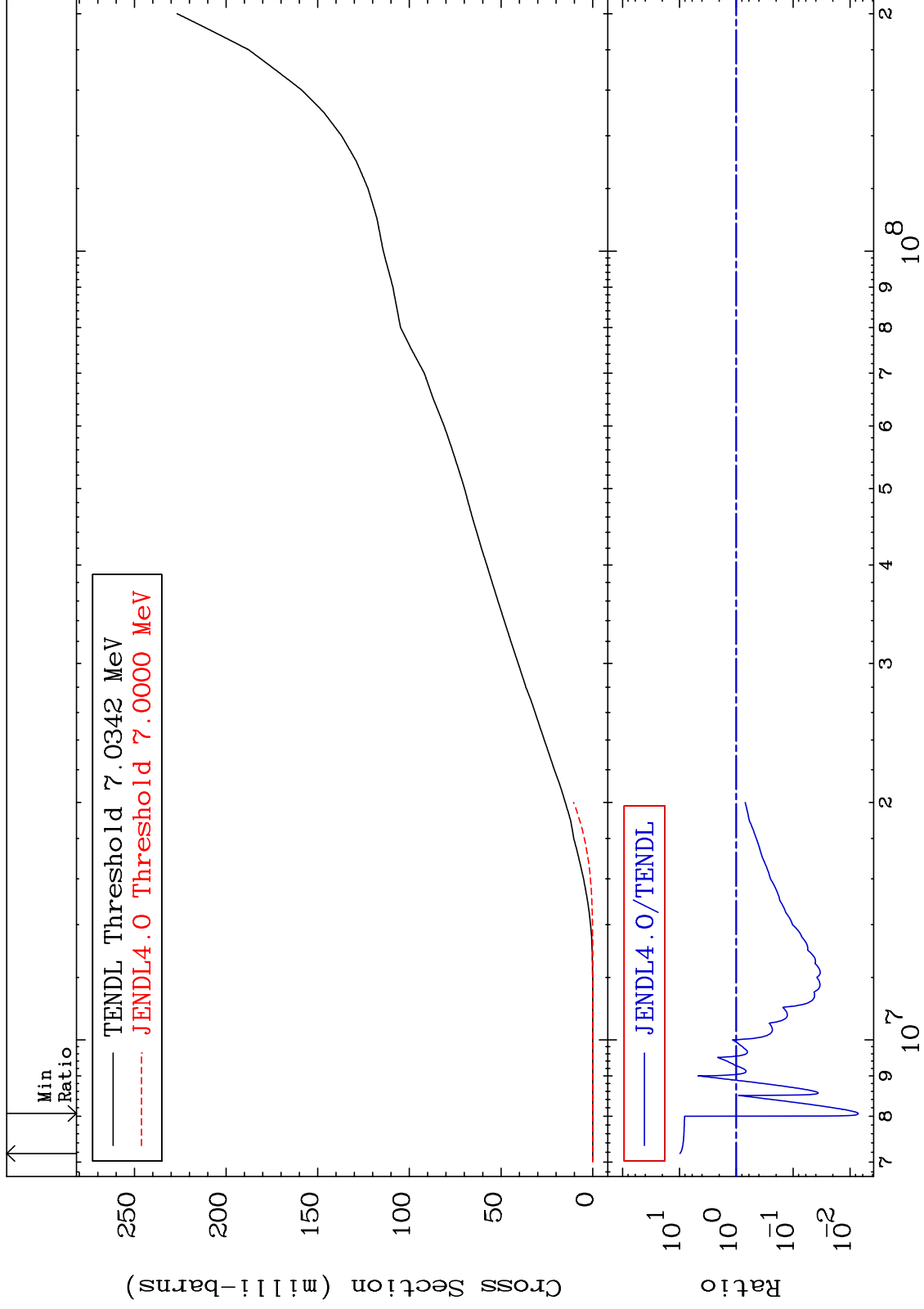




MAT 4437

Deuterium Production  
Cross Section

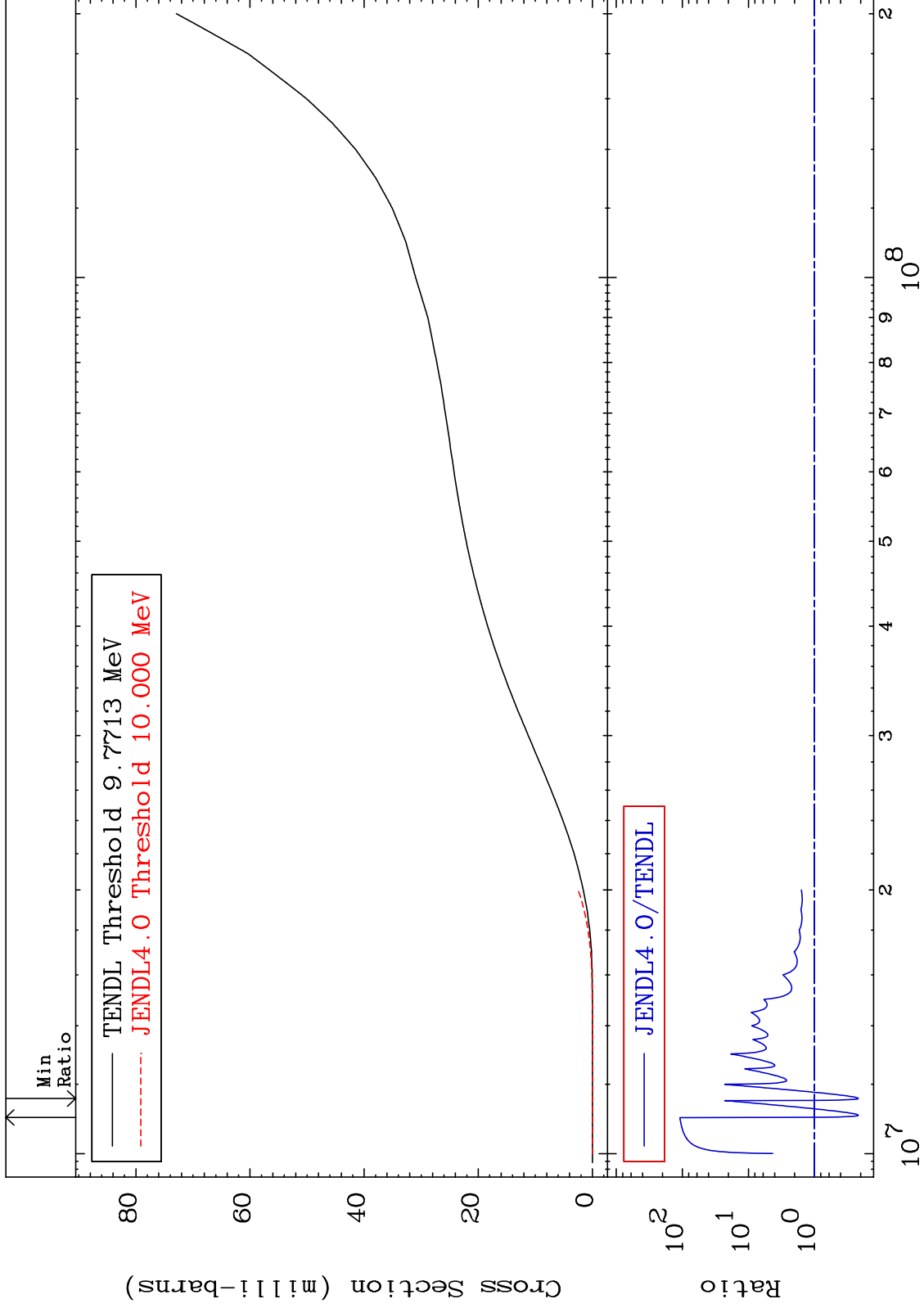
44-Ru-100  
-99.29 To 877.7 %



MAT 4437

Tritium Production  
Cross Section

44-Ru-100  
-78.36 To 9999. %



Incident Energy (eV)

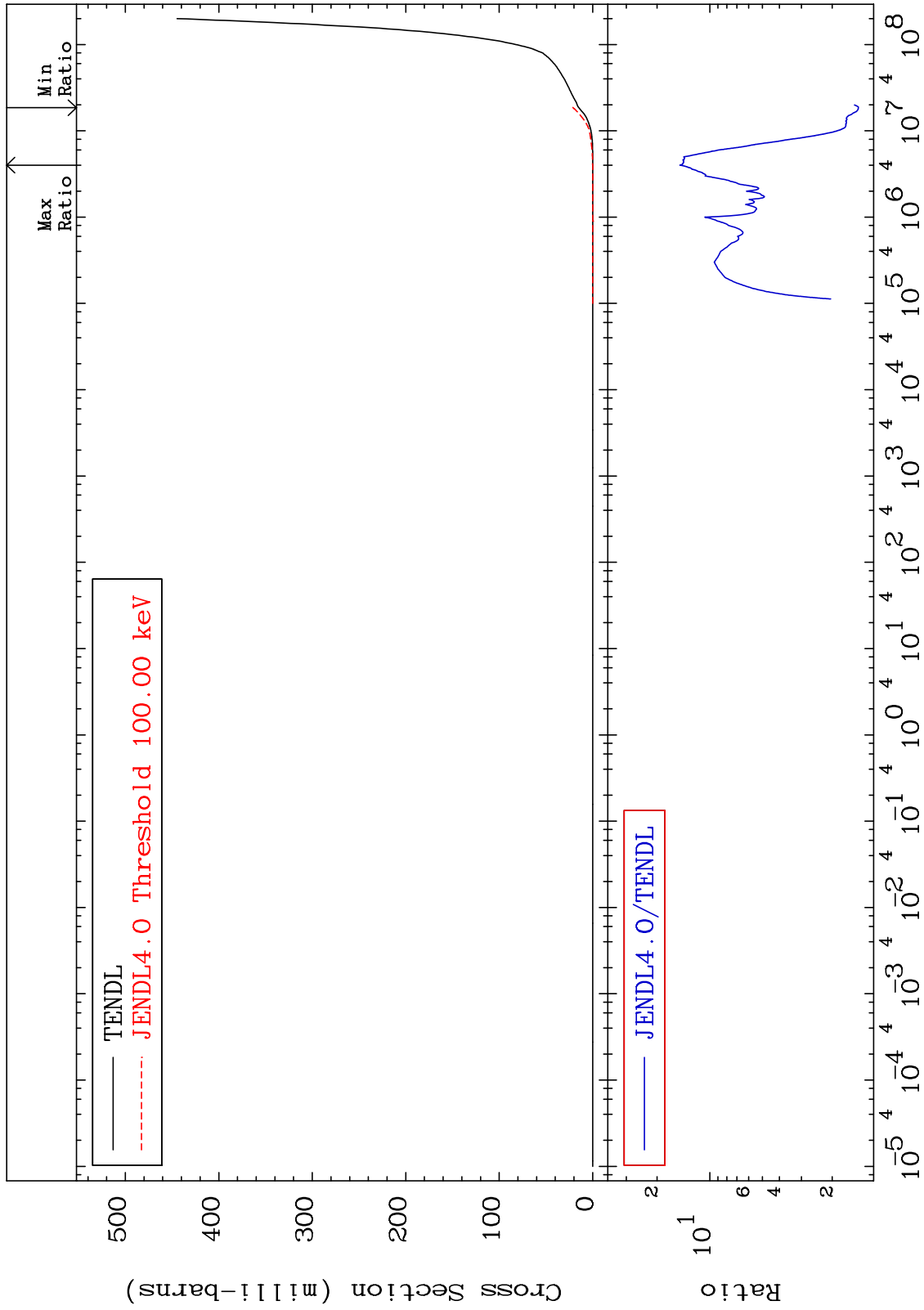
44-Ru-100

33

MAT 4437

He-4 Production  
Cross Section

44-Ru-100  
41.63 To 1379. %



34

Incident Energy (eV)

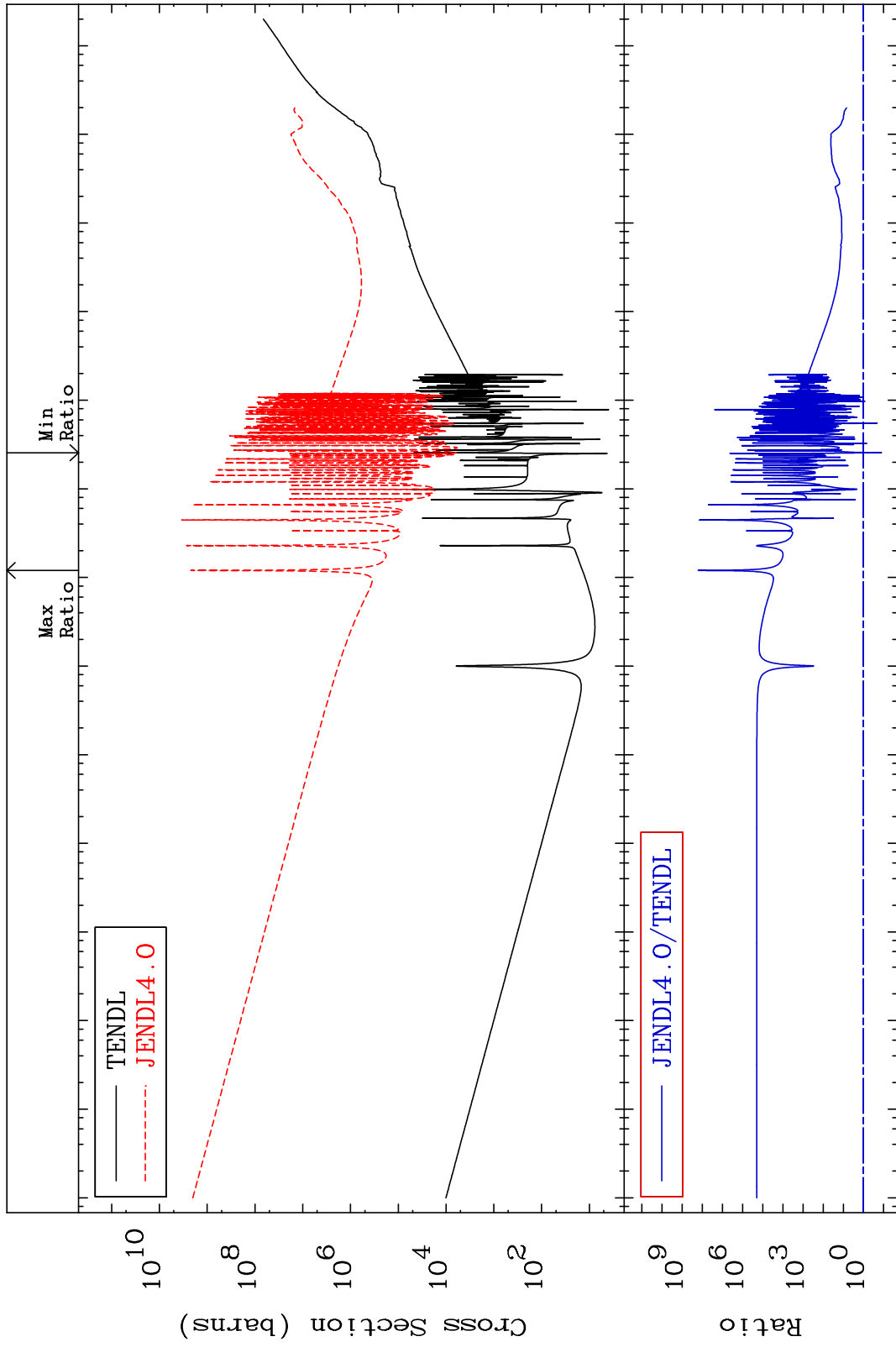
44-Ru-100

MAT 4437

Kerma total (eV-barns)  
Cross Section

44-Ru-100

-87.36 To 9999. %



Ratio

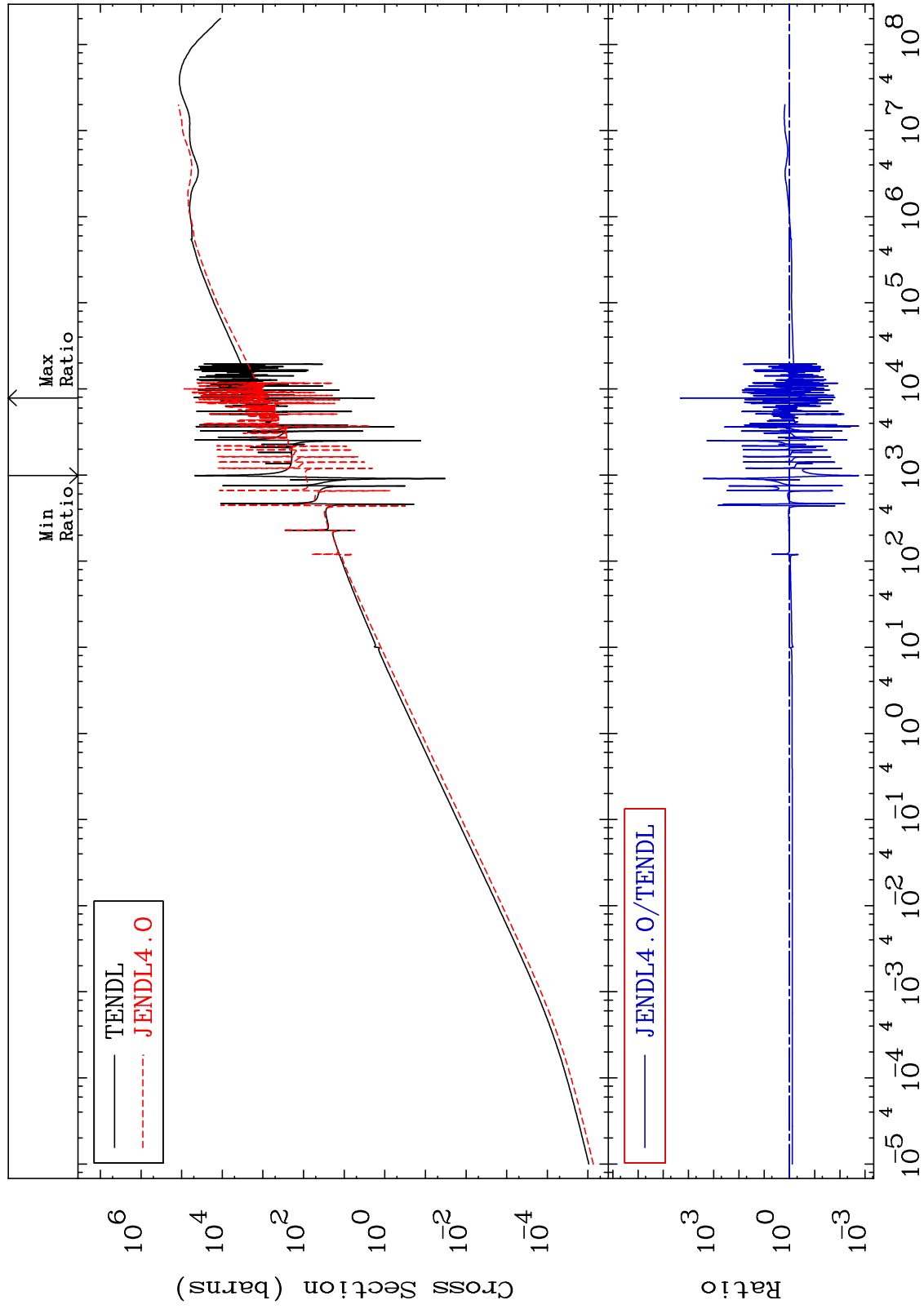
Incident Energy (eV)

44-Ru-100

MAT 4437

Kerma elastic  
Cross Section

44-Ru-100  
-99.82 To 9999. %



36

Incident Energy (eV)

44-Ru-100

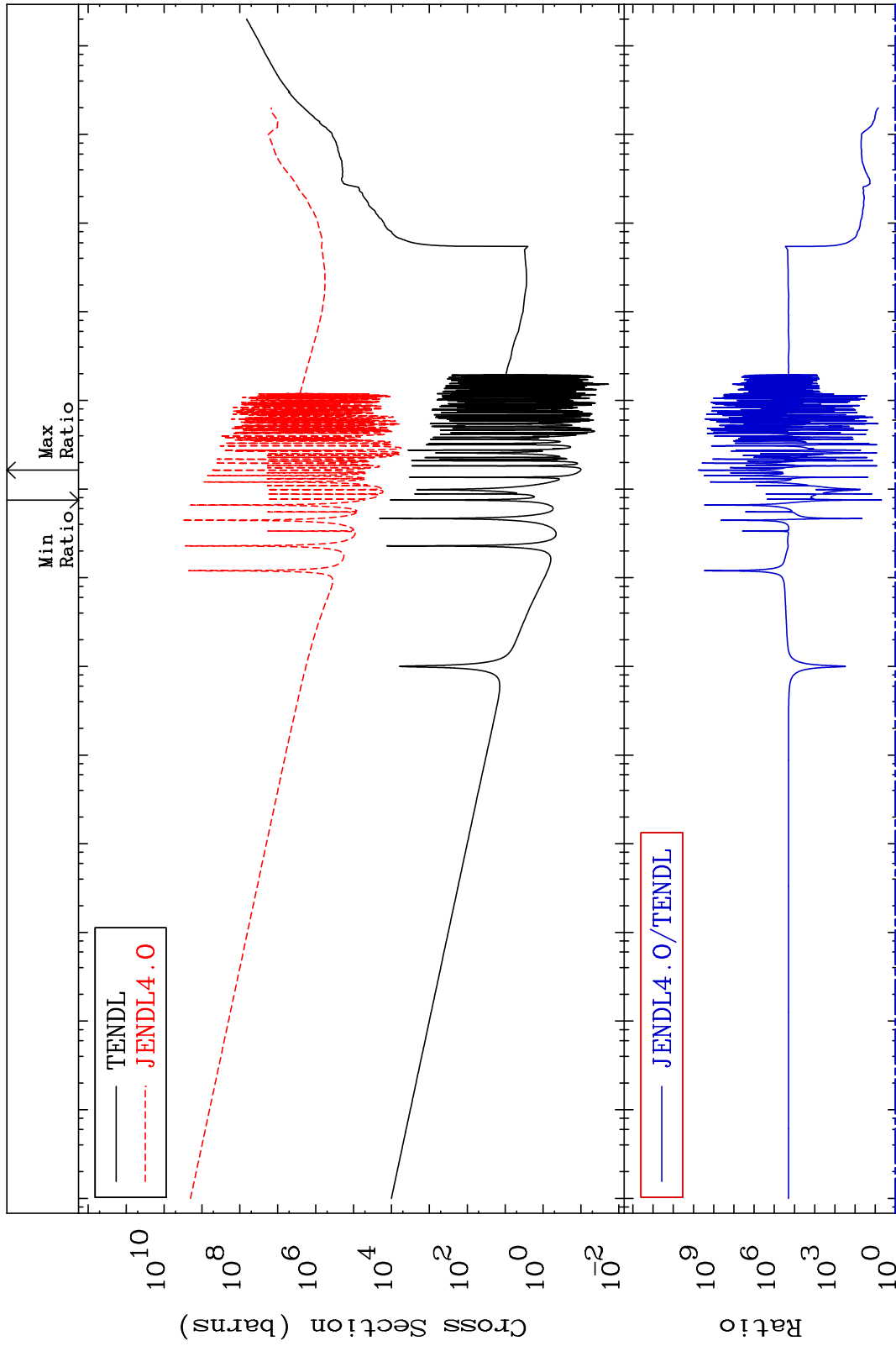
MAT 4437

Kerma non-elastic (all but mt2)

44-Ru-100

389.6 To 9999. %

Cross Section



37

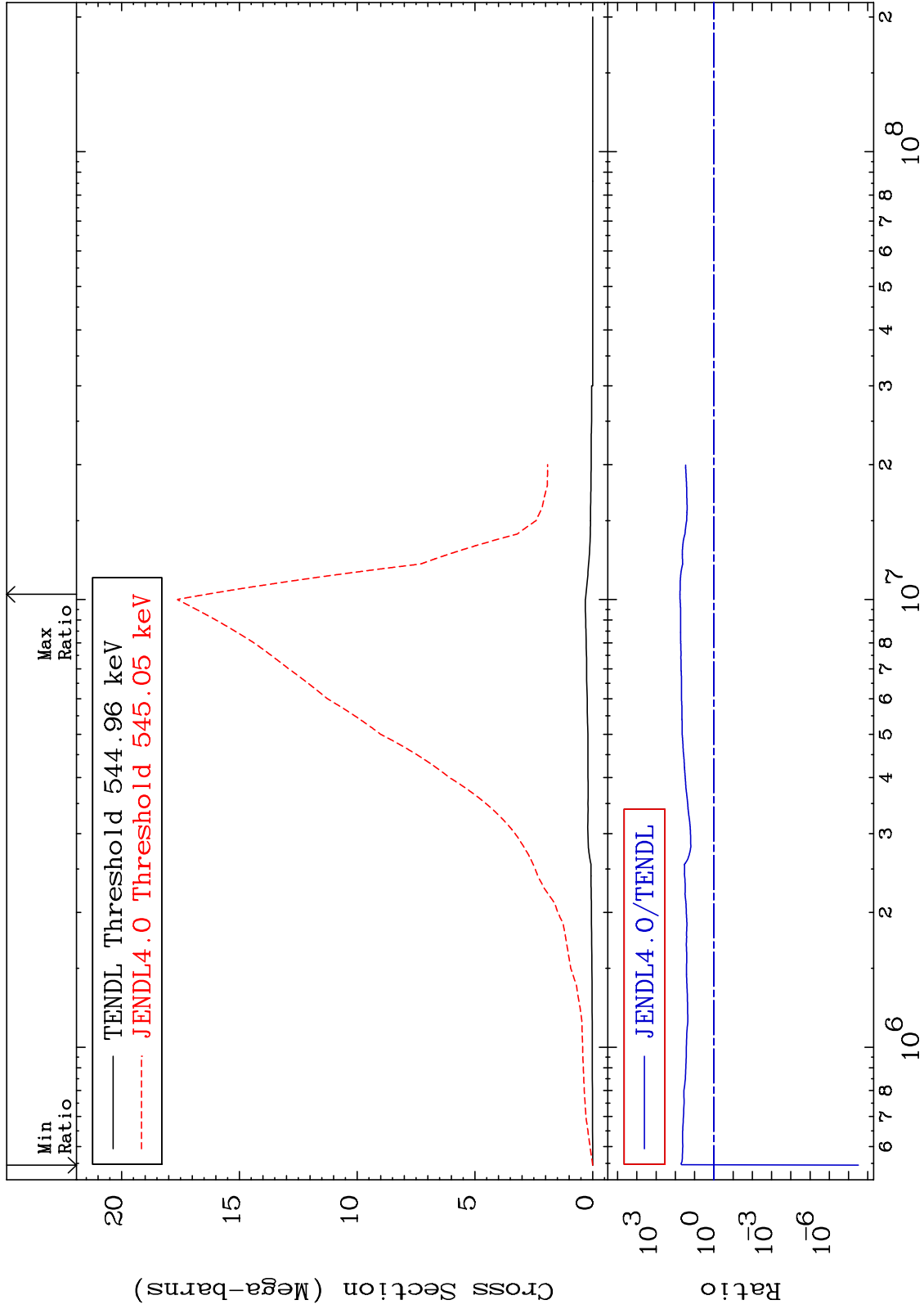
Incident Energy (eV)

44-Ru-100

MAT 4437

Kerma inelastic (mt51-91)  
Cross Section

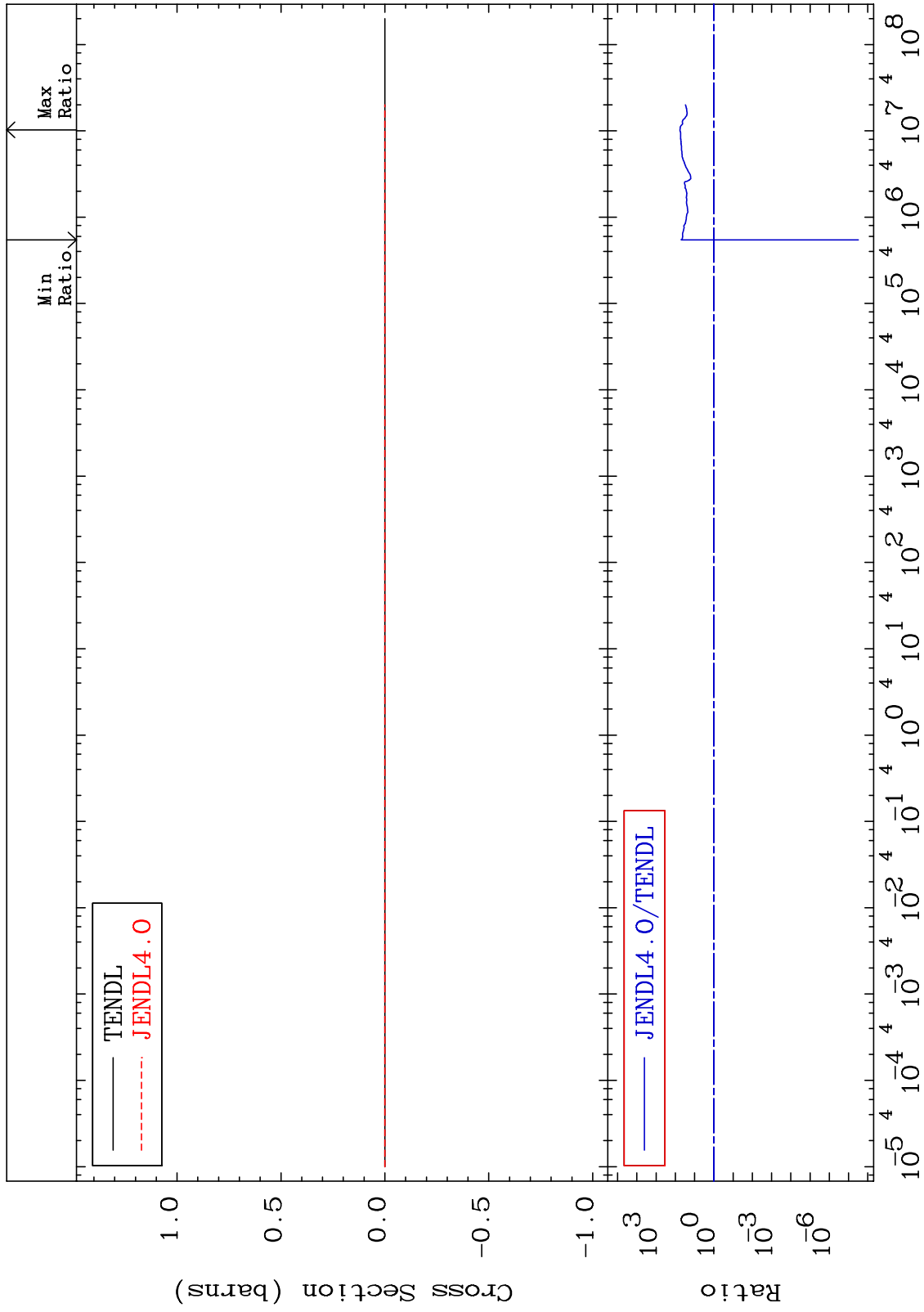
44-Ru-100  
-100.0 To 5625. %



MAT 4437

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

44-Ru-100  
-100.0 To 5625. %



39

Incident Energy (eV)

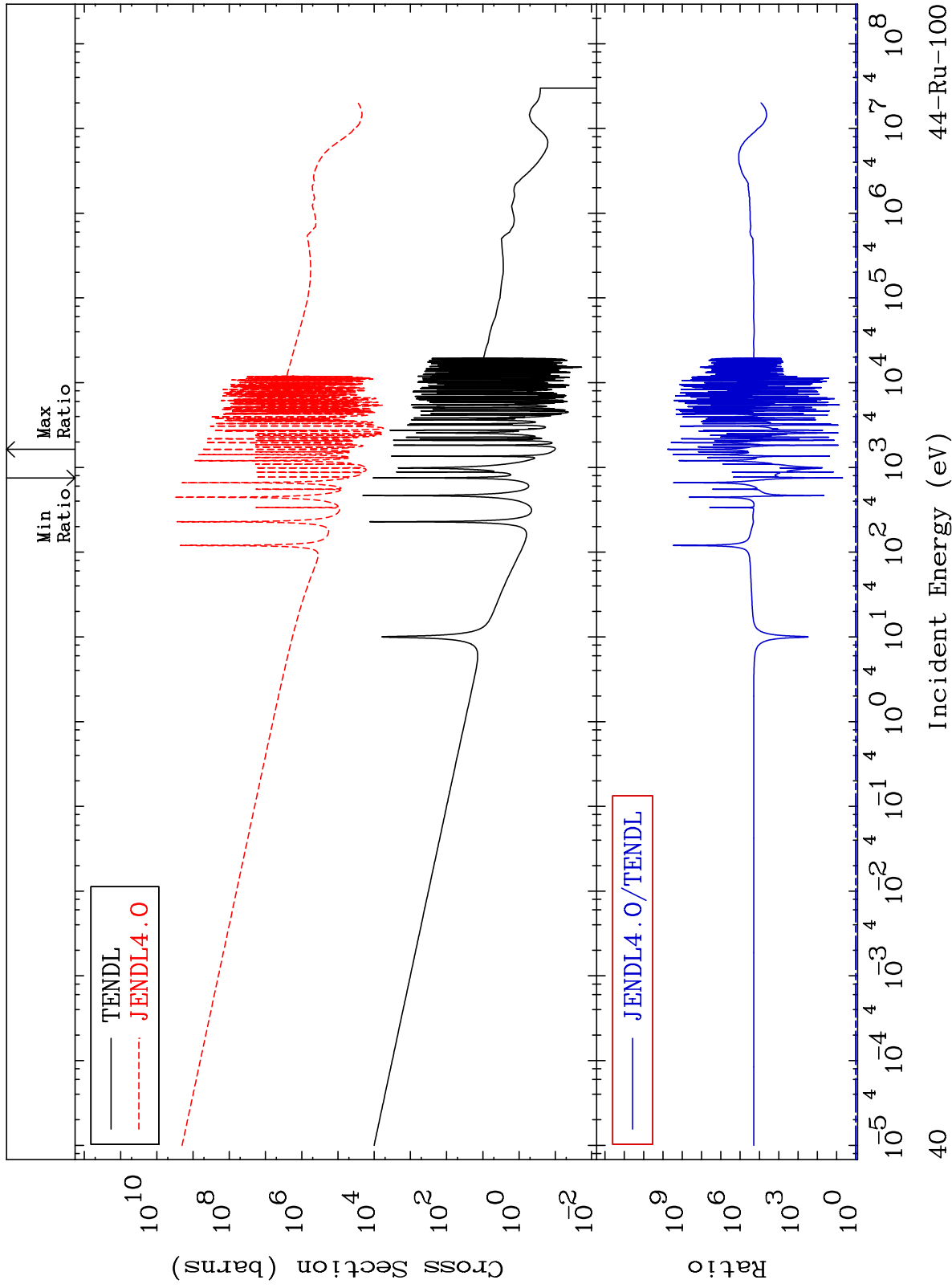
44-Ru-100



MAT 4437

Kerma capture (mt102)  
Cross Section

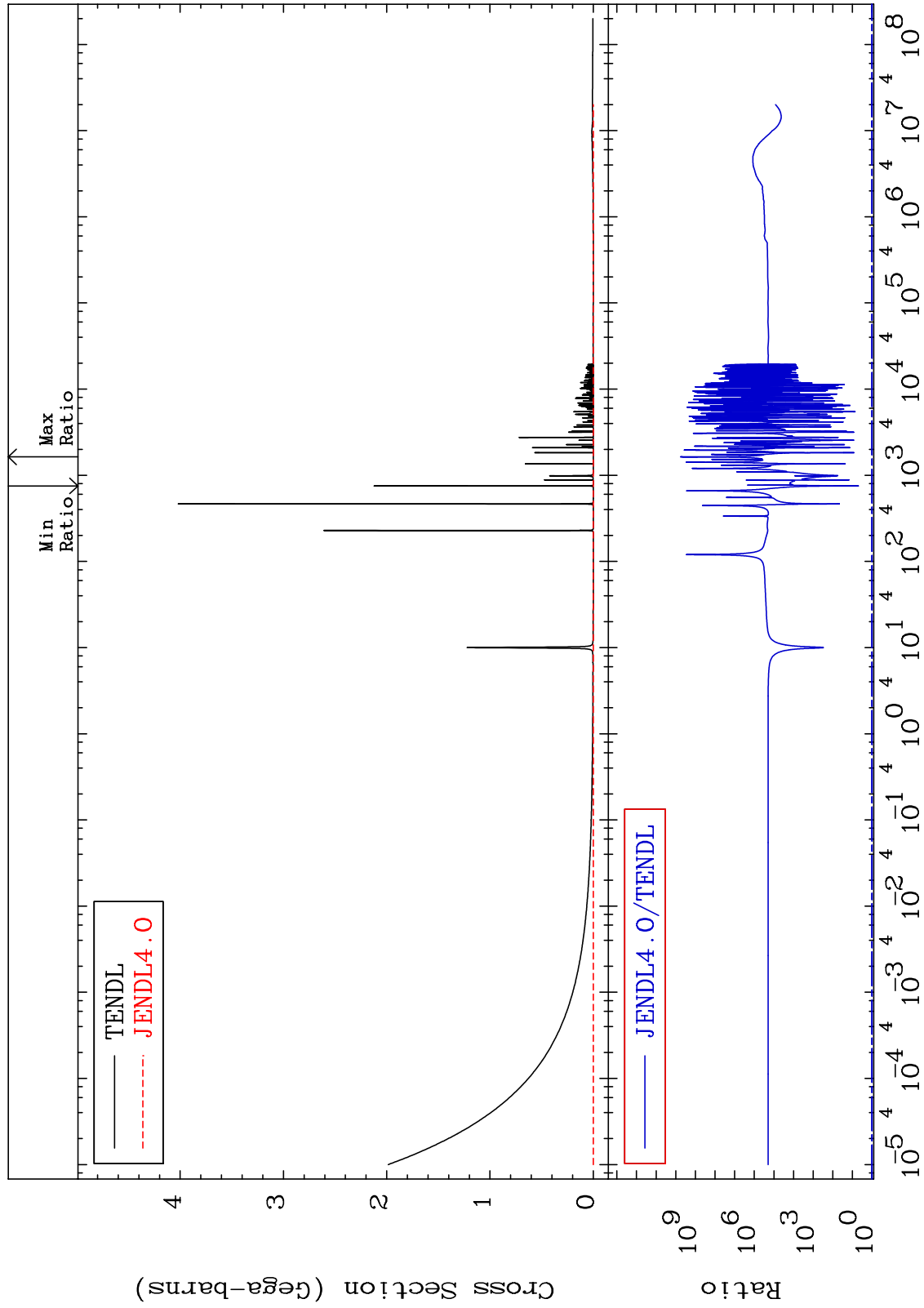
44-Ru-100  
389.6 To 9999. %



MAT 4437

Total photon (eV-barns)  
Cross Section

44-Ru-100  
389.6 To 9999. %



41

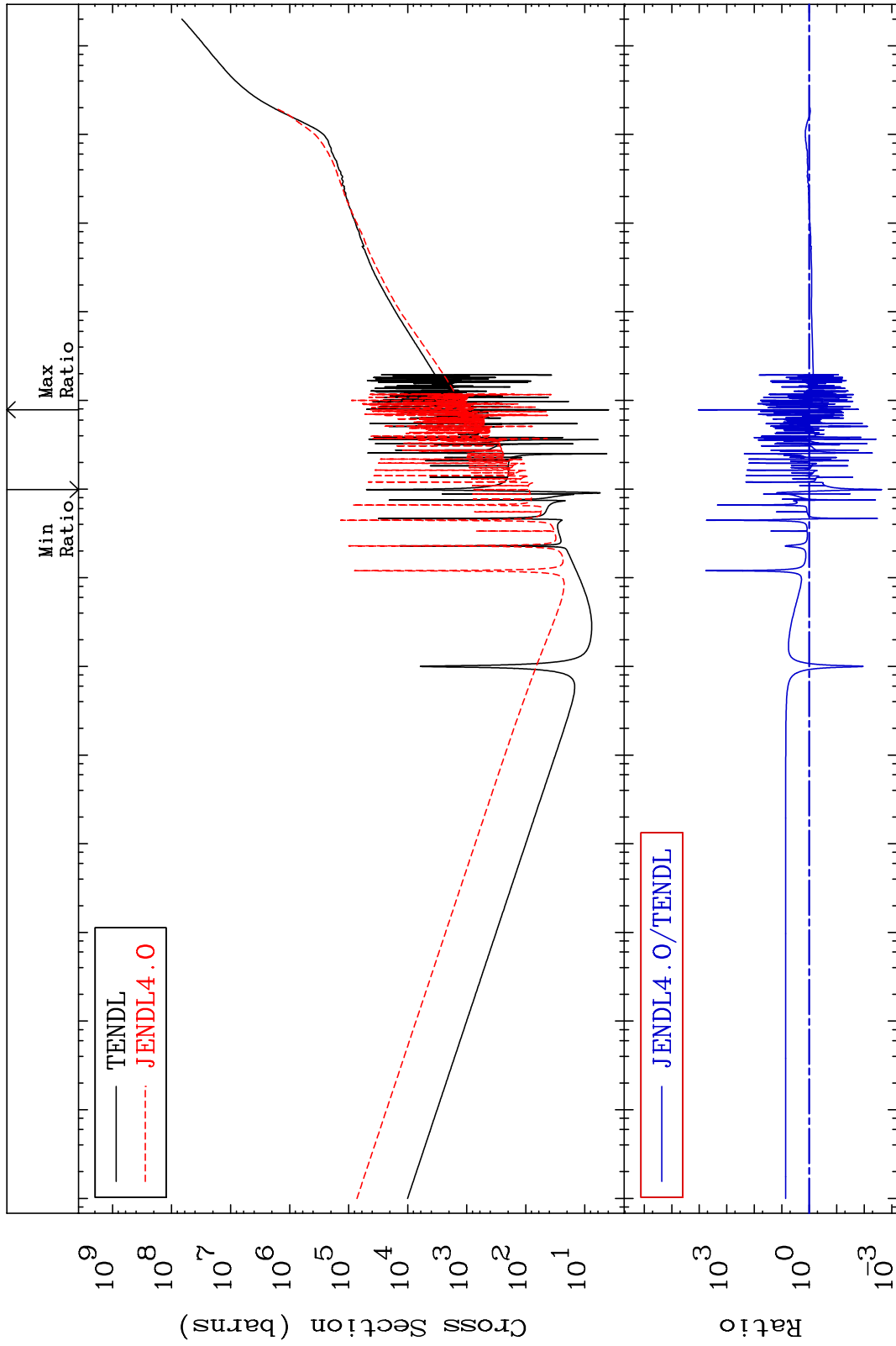
Incident Energy (eV)

44-Ru-100

MAT 4437

Total kinematic kerma (high limit)  
Cross Section

44-Ru-100  
-99.76 To 9999. %



42

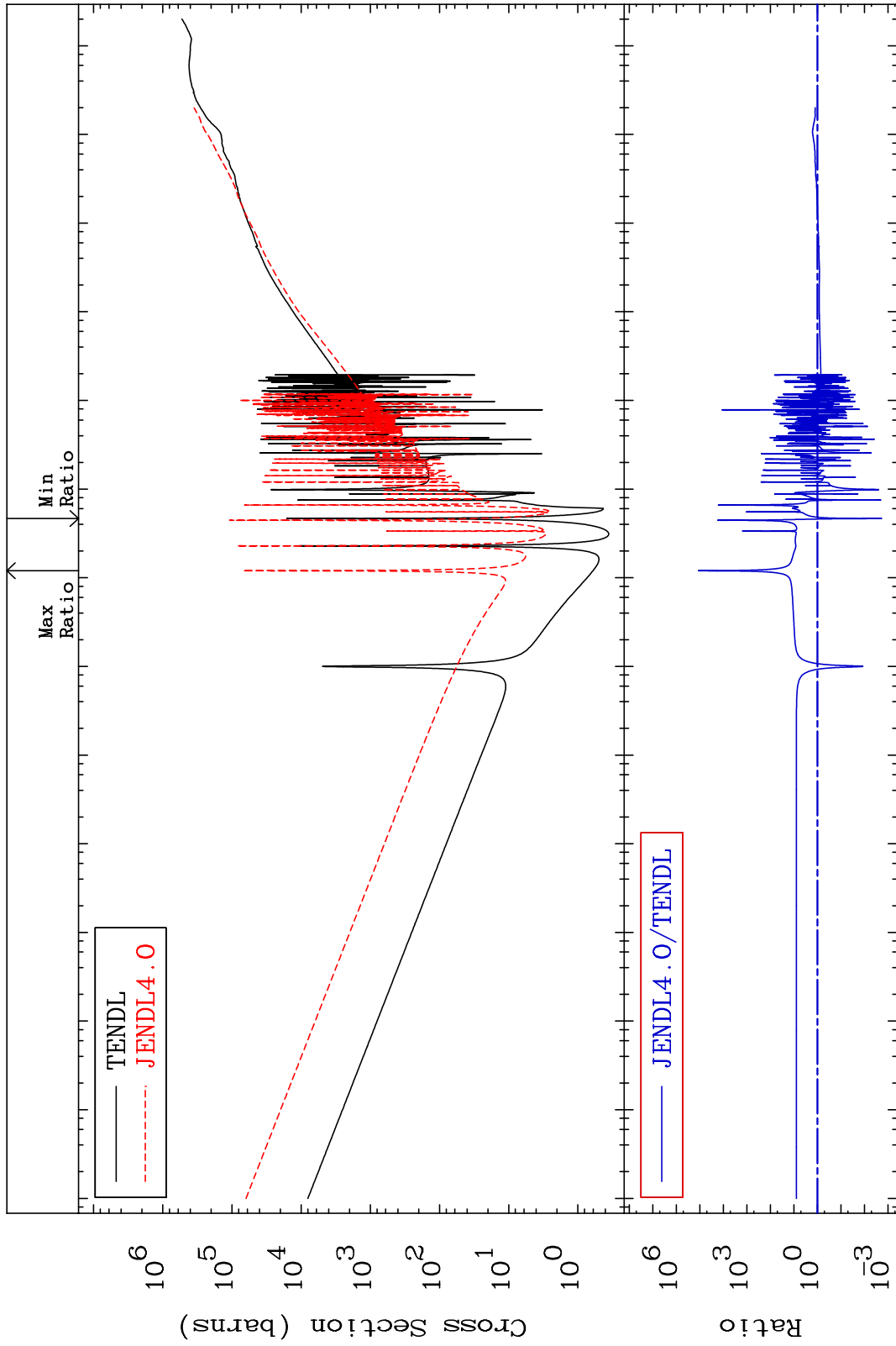
Incident Energy (eV)

44-Ru-100

MAT 4437

Dpa total (eV-barns)  
Cross Section

44-Ru-100  
-99.81 To 9999. %



43

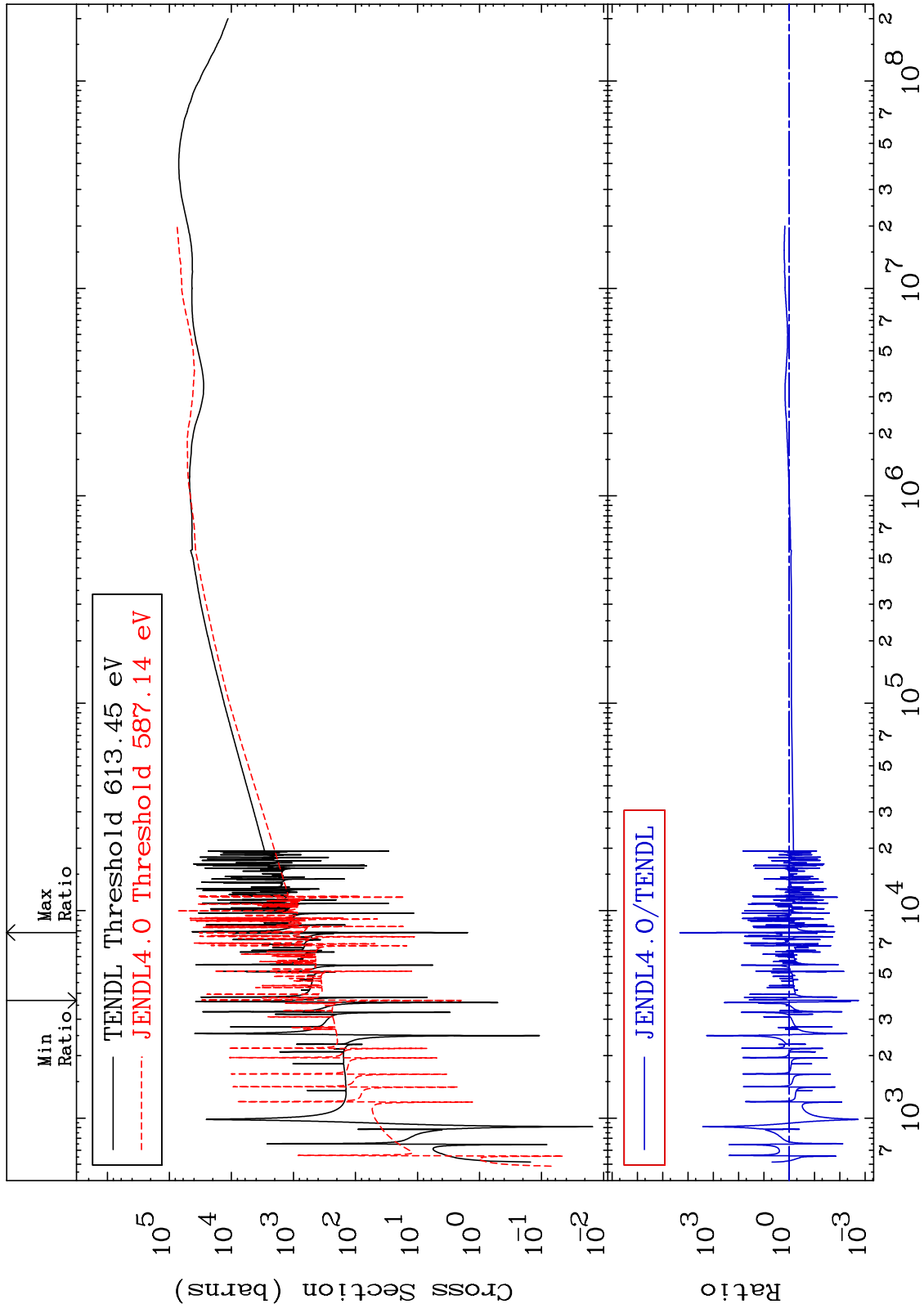
Incident Energy (eV)

44-Ru-100

MAT 4437

Dpa elastic (mt2)  
Cross Section

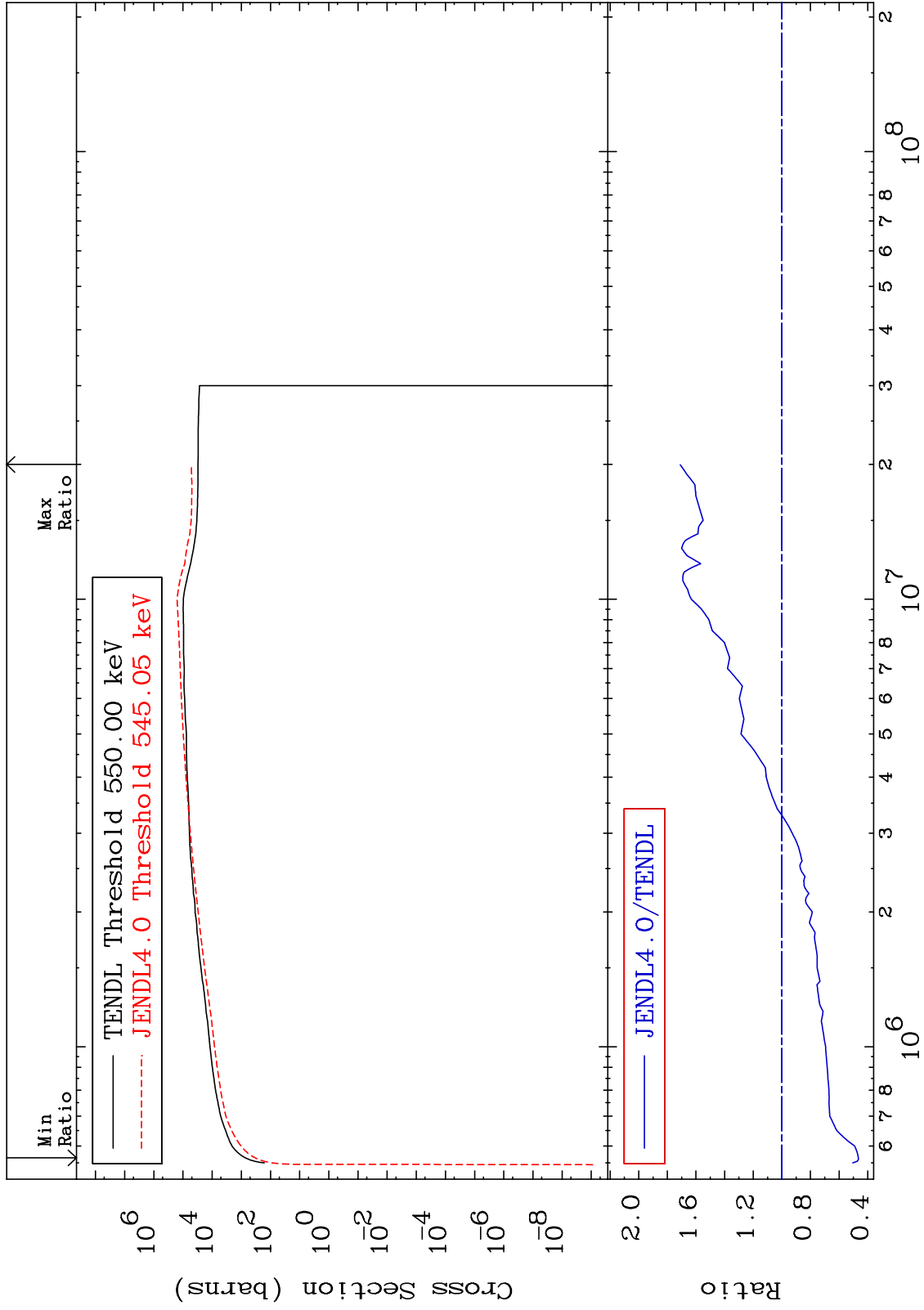
44-Ru-100  
-99.81 To 9999. %



MAT 4437

Dpa inelastic (mt51-91)  
Cross Section

44-Ru-100  
-53.50 To 71.14 %



45

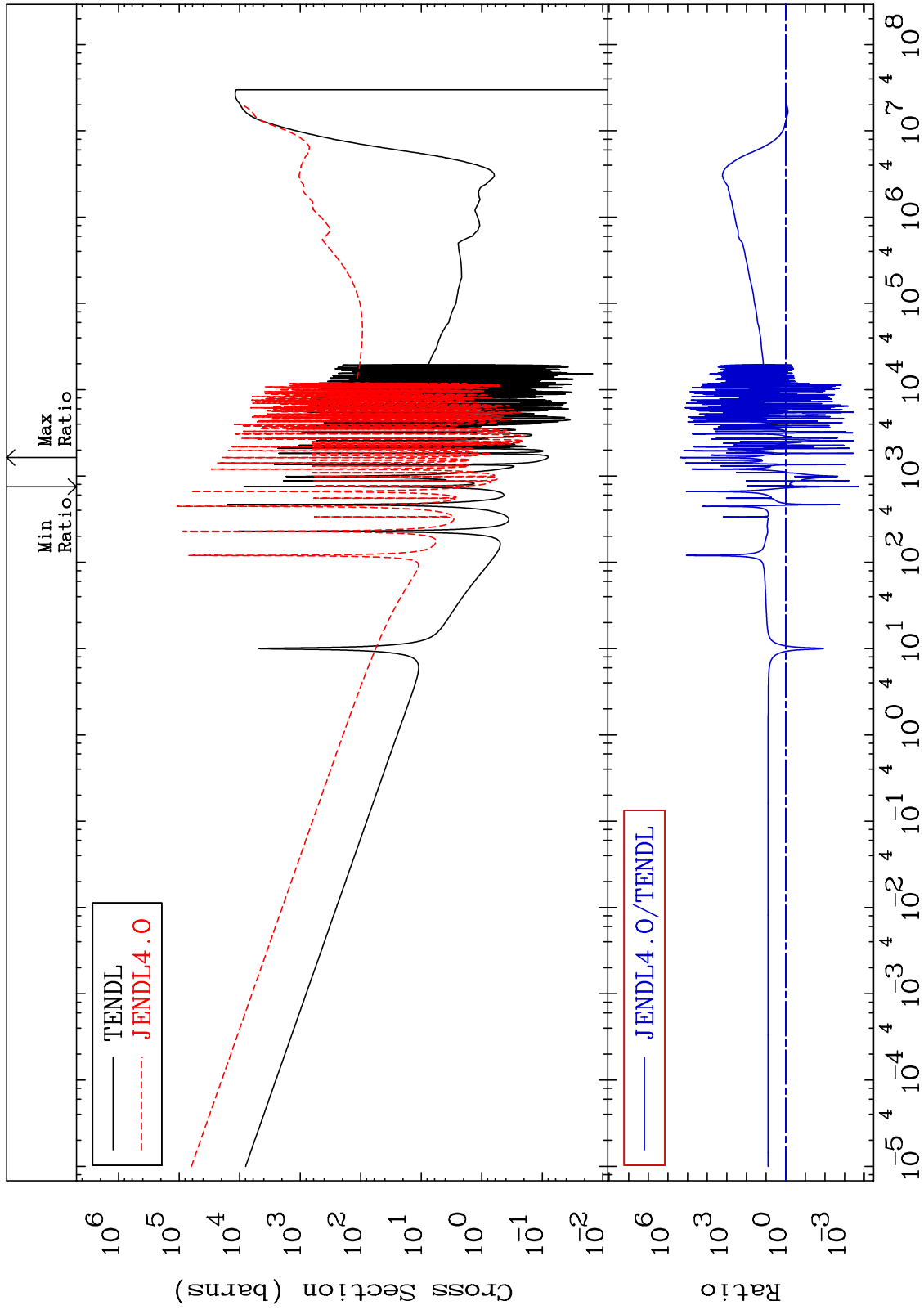
Incident Energy (eV)

44-Ru-100

MAT 4437

Dpa disappearance (mt102 -120)  
Cross Section

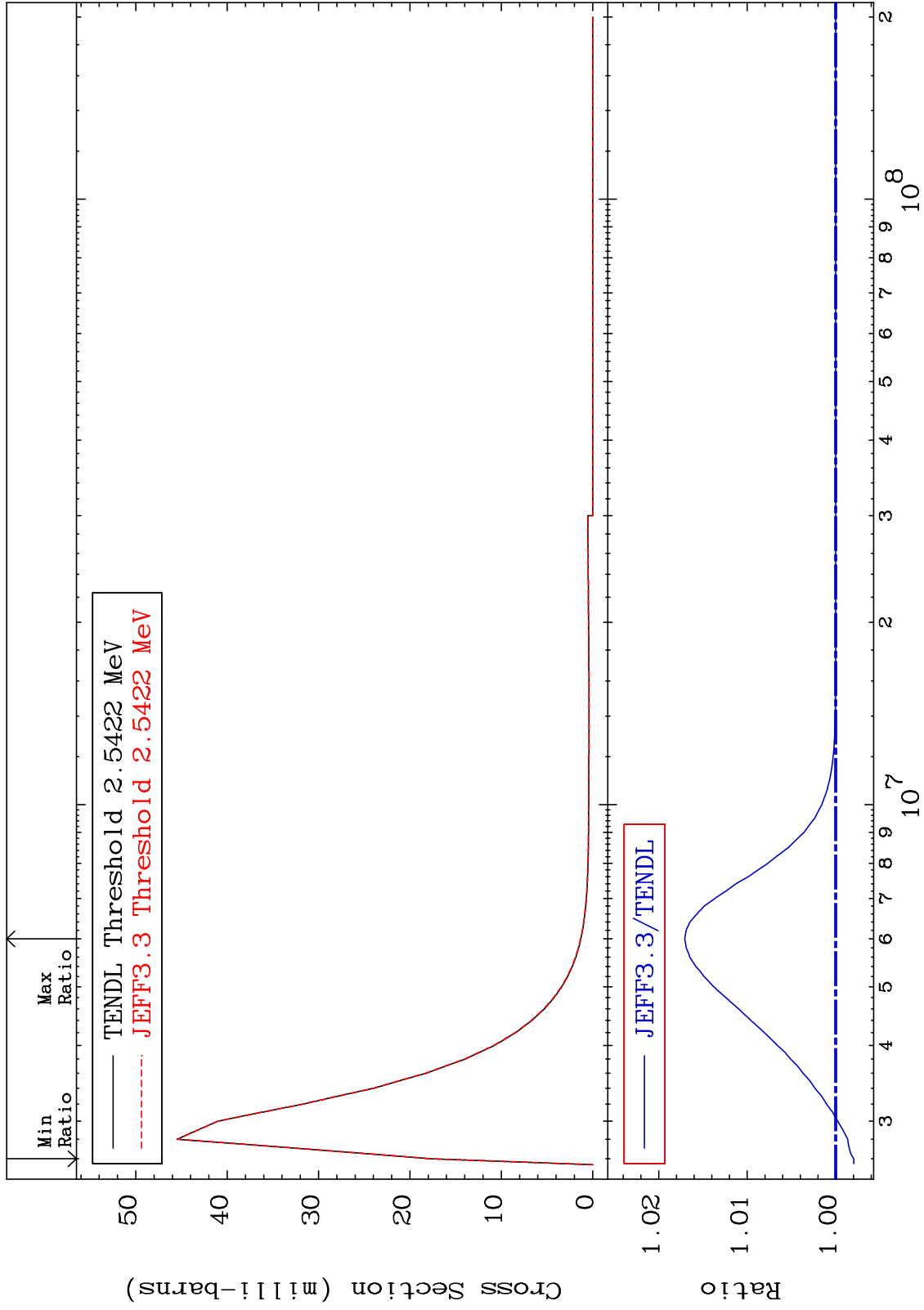
44-Ru-100  
-99.98 To 9999. %



MAT 4437

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

44-Ru-100  
-0.203 To 1.706 %



47

Incident Energy (eV)

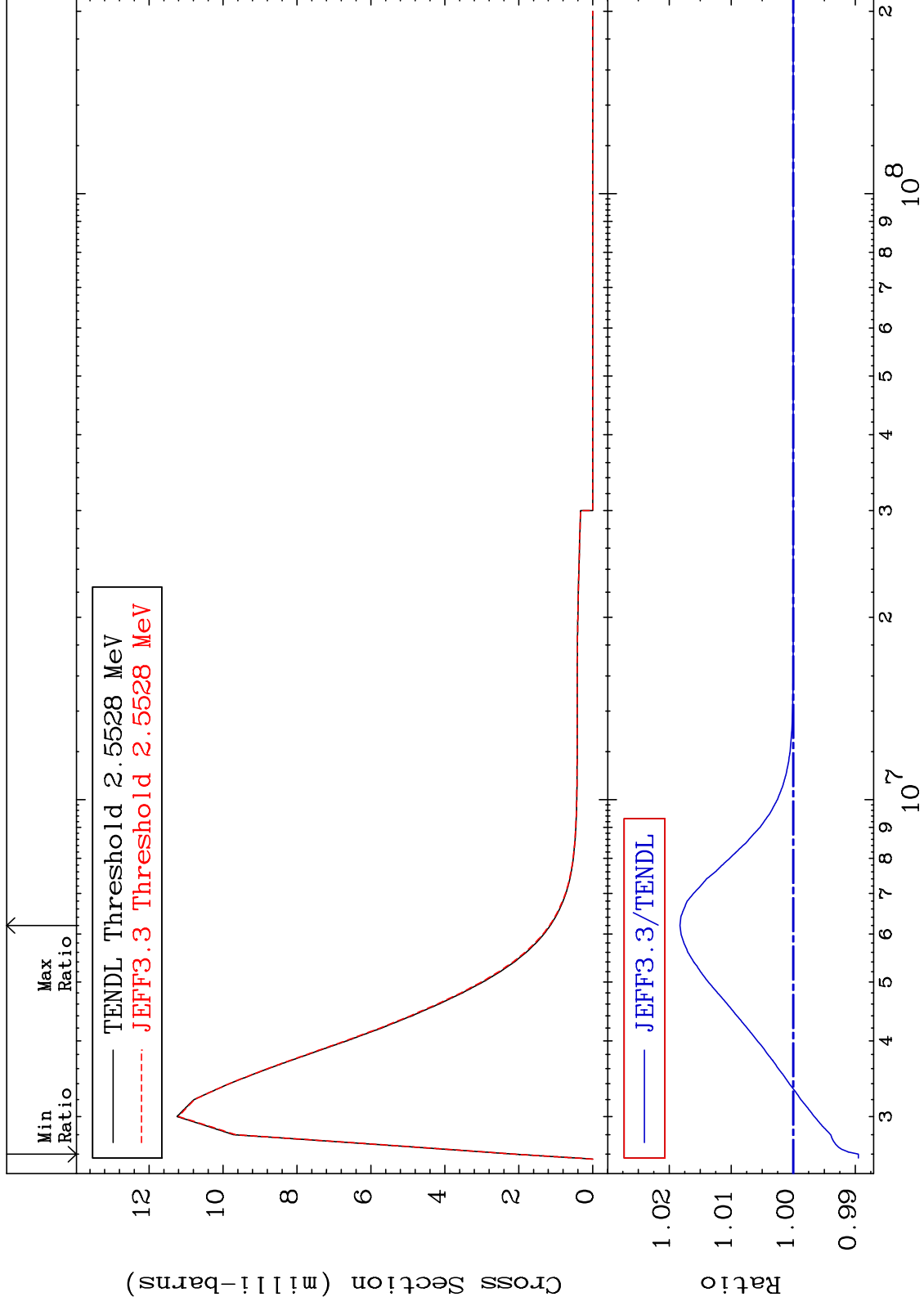
44-Ru-100



MAT 4437

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

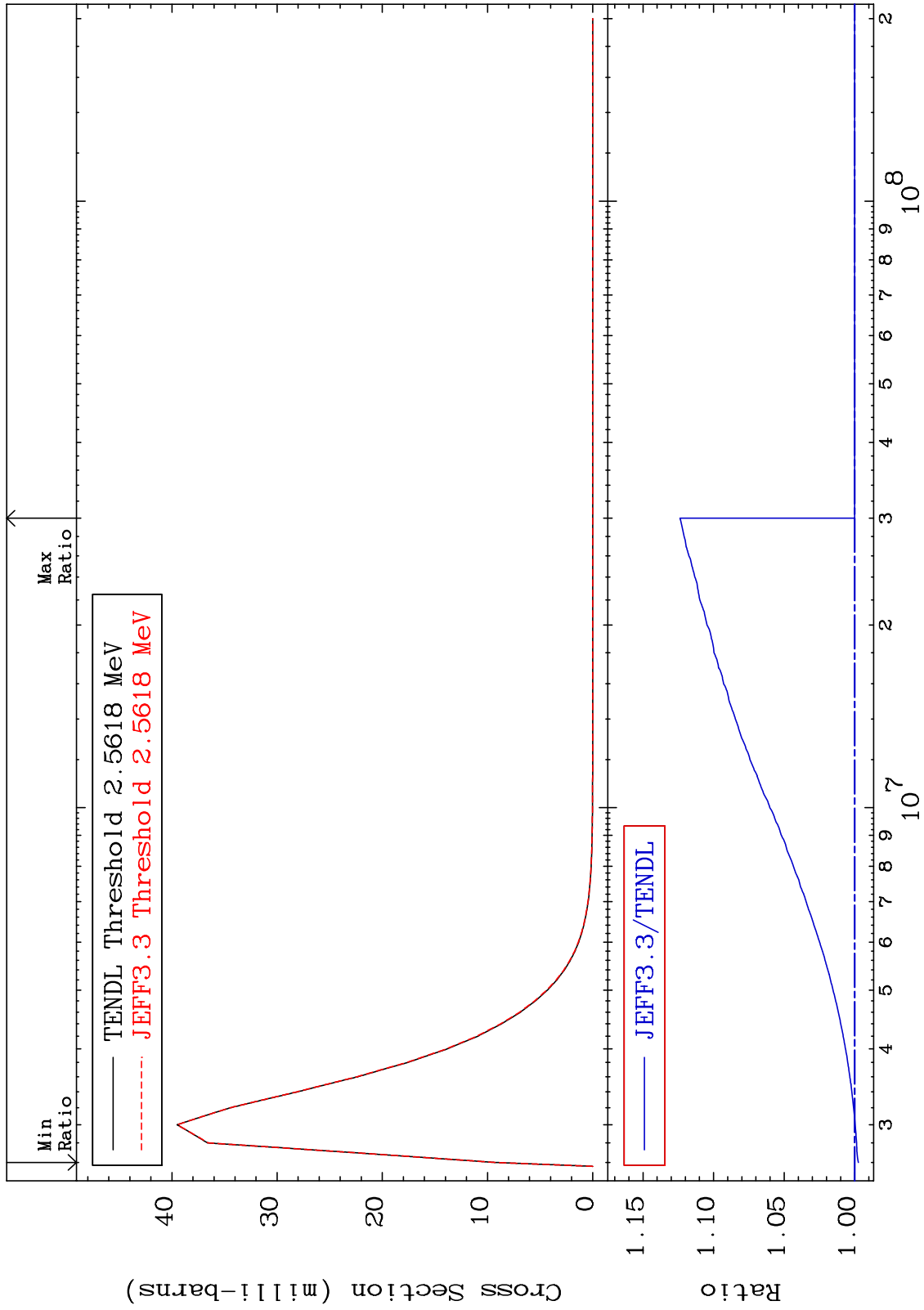
44-Ru-100  
-1.051 To 1.826 %



MAT 4437

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

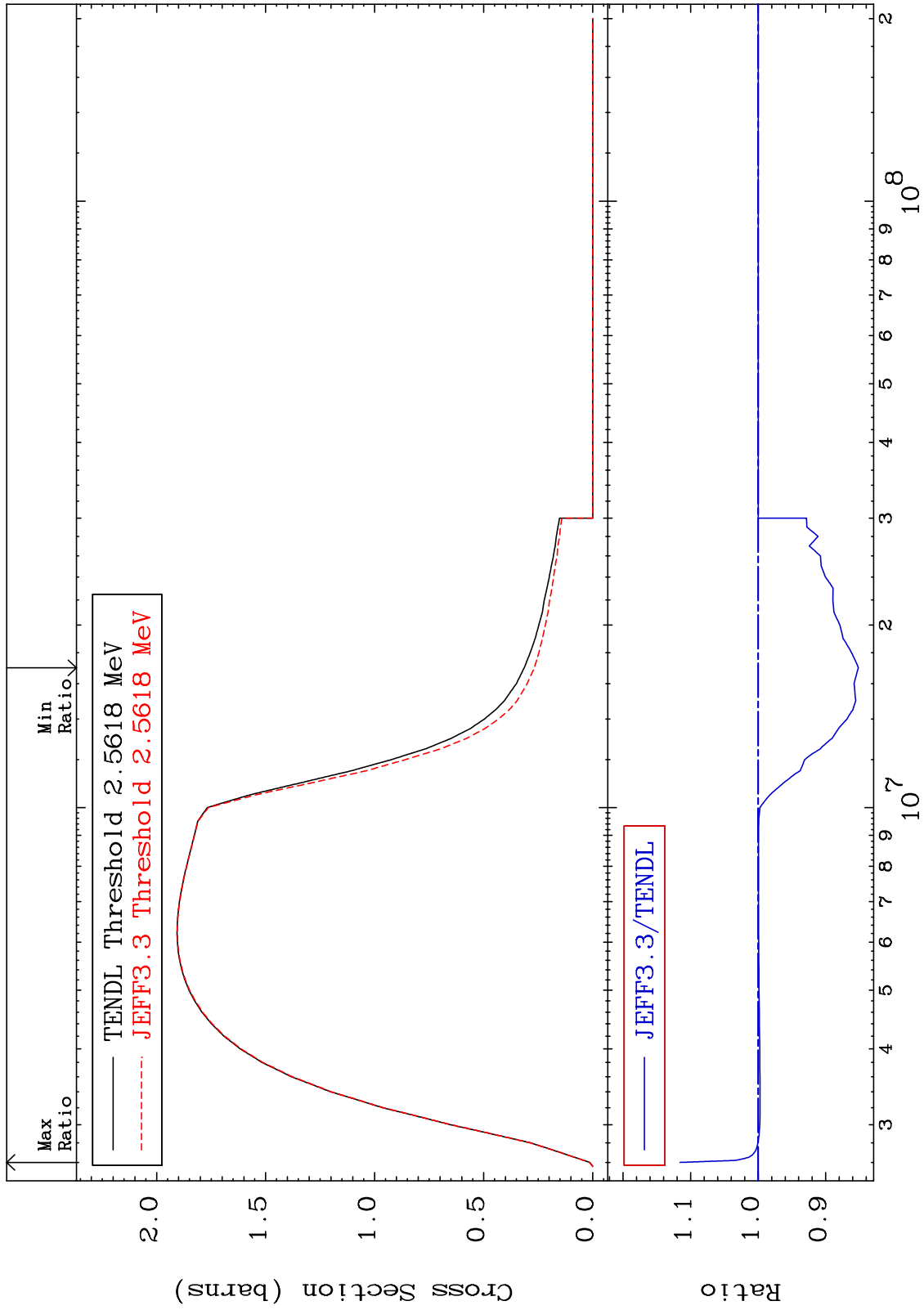
44-Ru-100  
-0.259 To 12.38 %



MAT 4437

(n, n') Continuum  
Cross Section

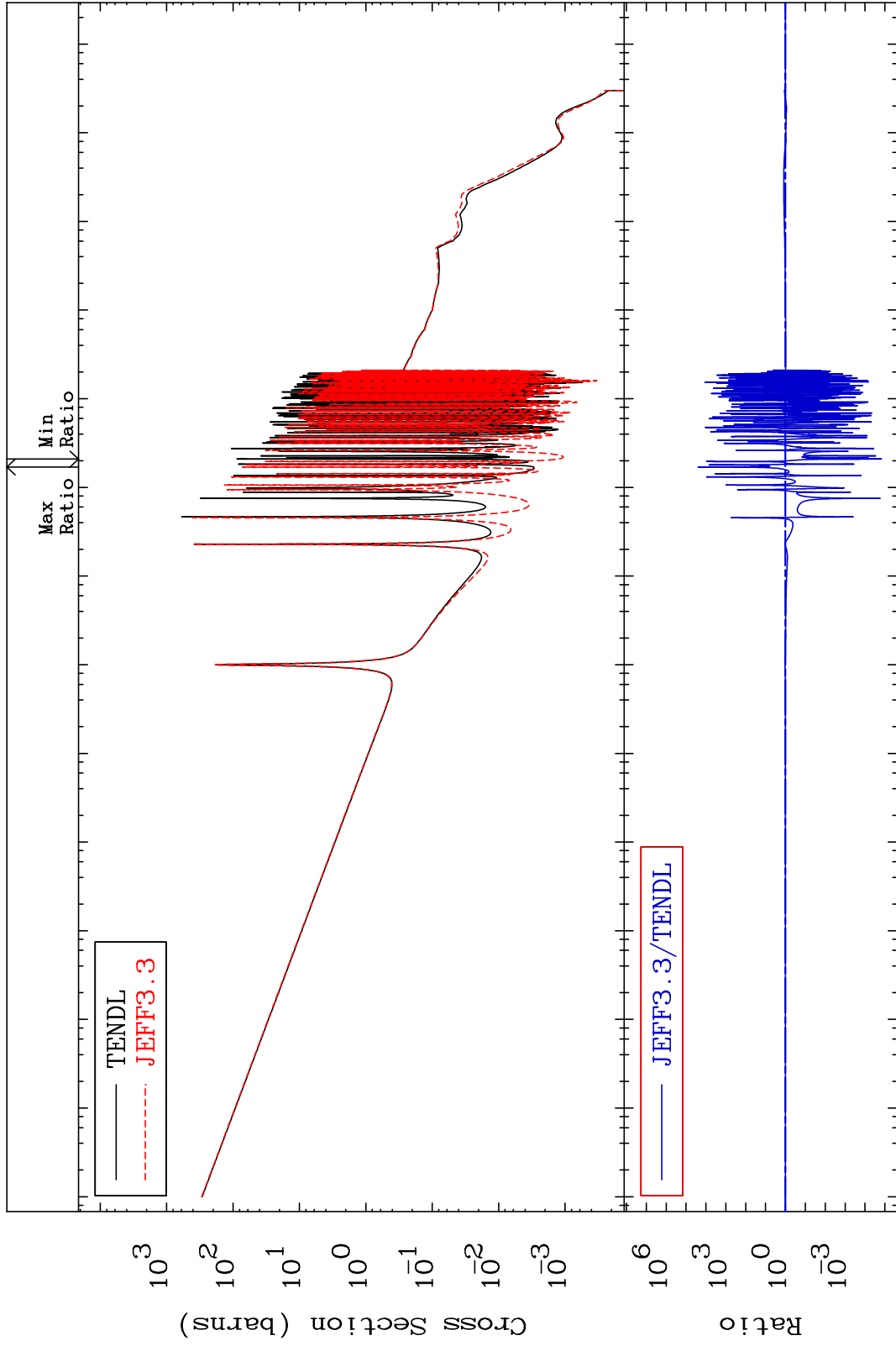
44-Ru-100  
-14.84 To 11.57 %



MAT 4437

(n,  $\gamma$ )  
Cross Section

44-Ru-100  
-100.0 To 9999. %



Incident Energy (eV)

44-Ru-100

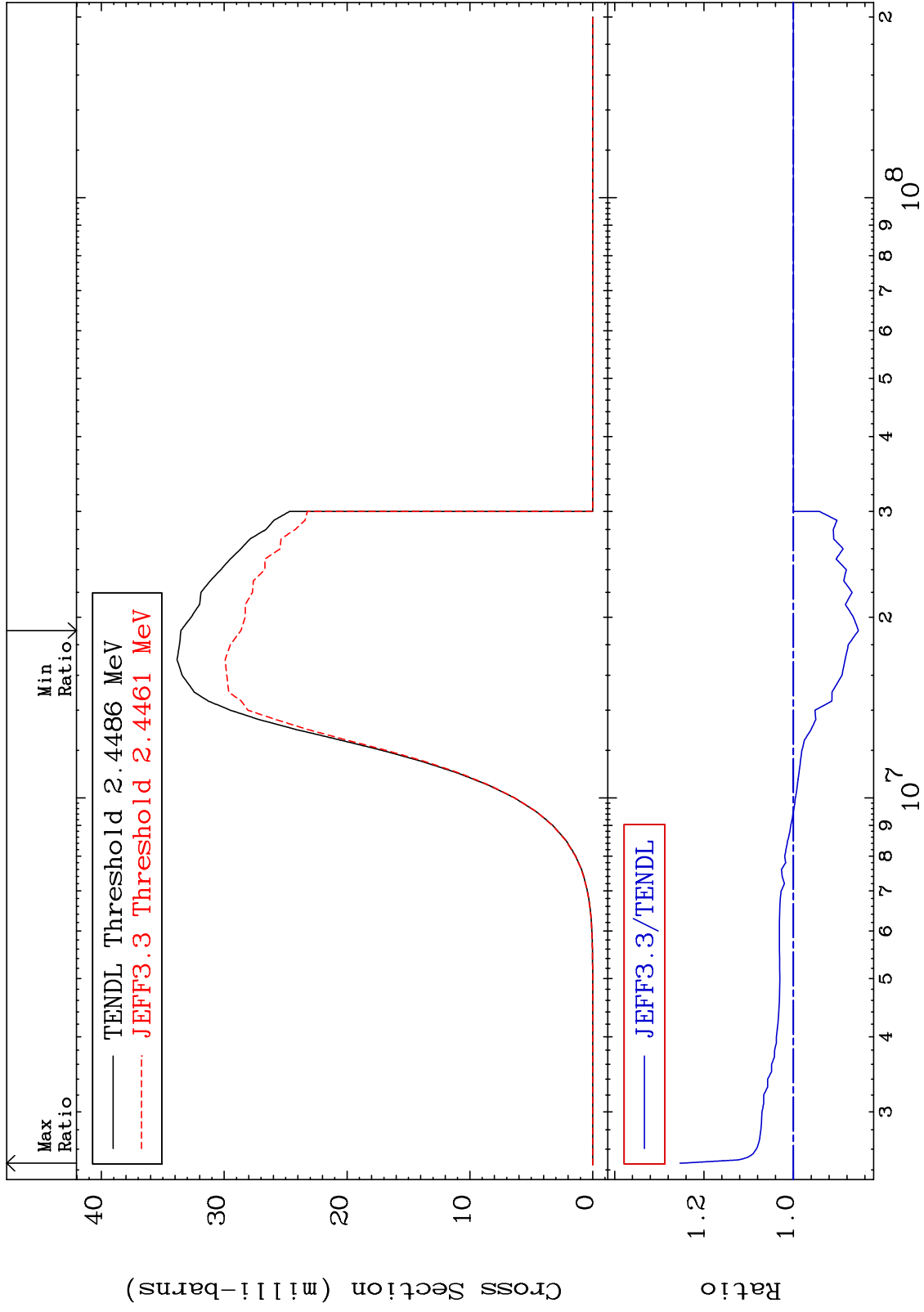
MAT 4437

(n, p)

44-Ru-100

Cross Section

-14.56 To 25.37 %



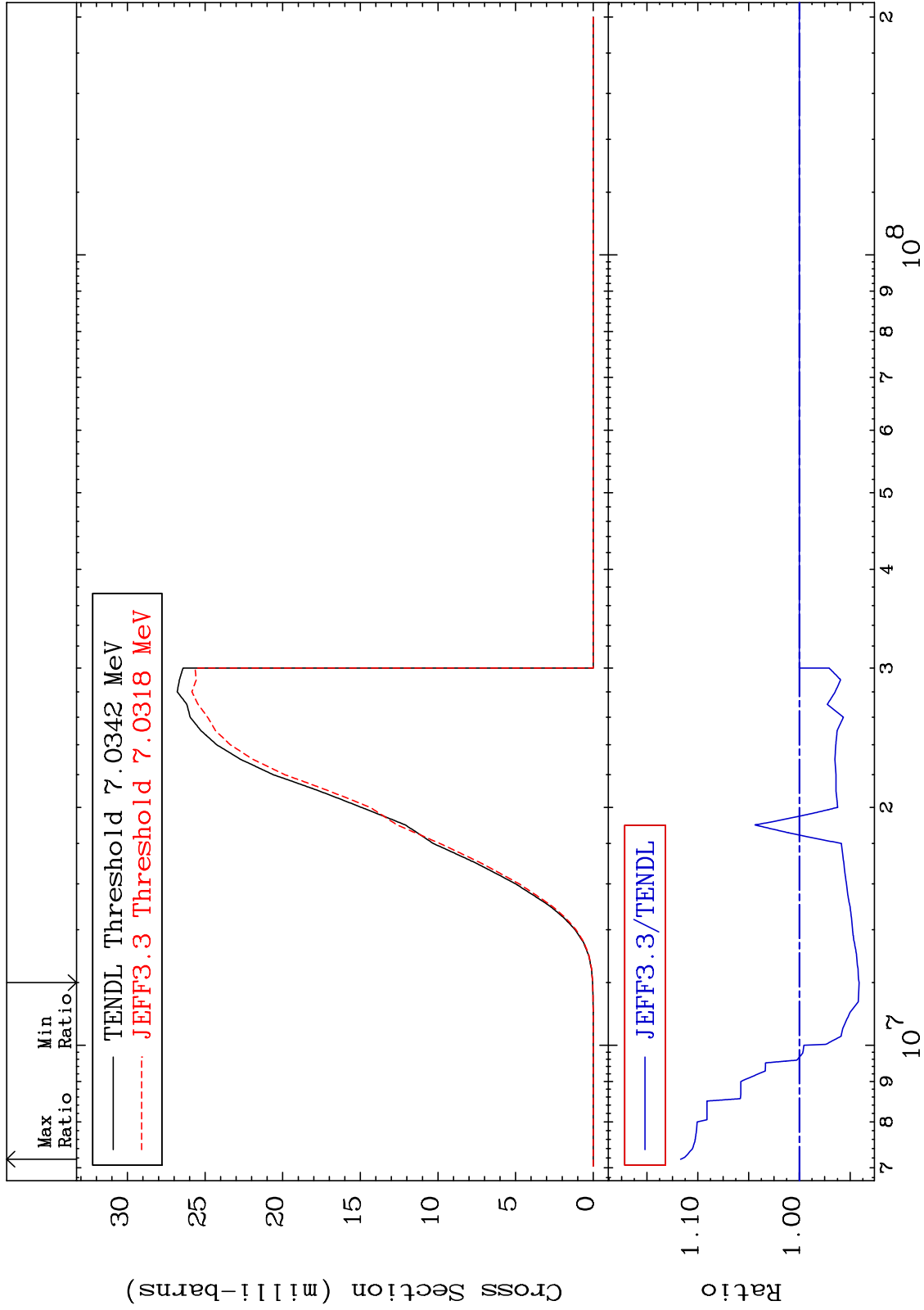
MAT 4437

(n, d)

44-Ru-100

Cross Section

-5.890 To 11.69 %



53

Incident Energy (eV)

44-Ru-100

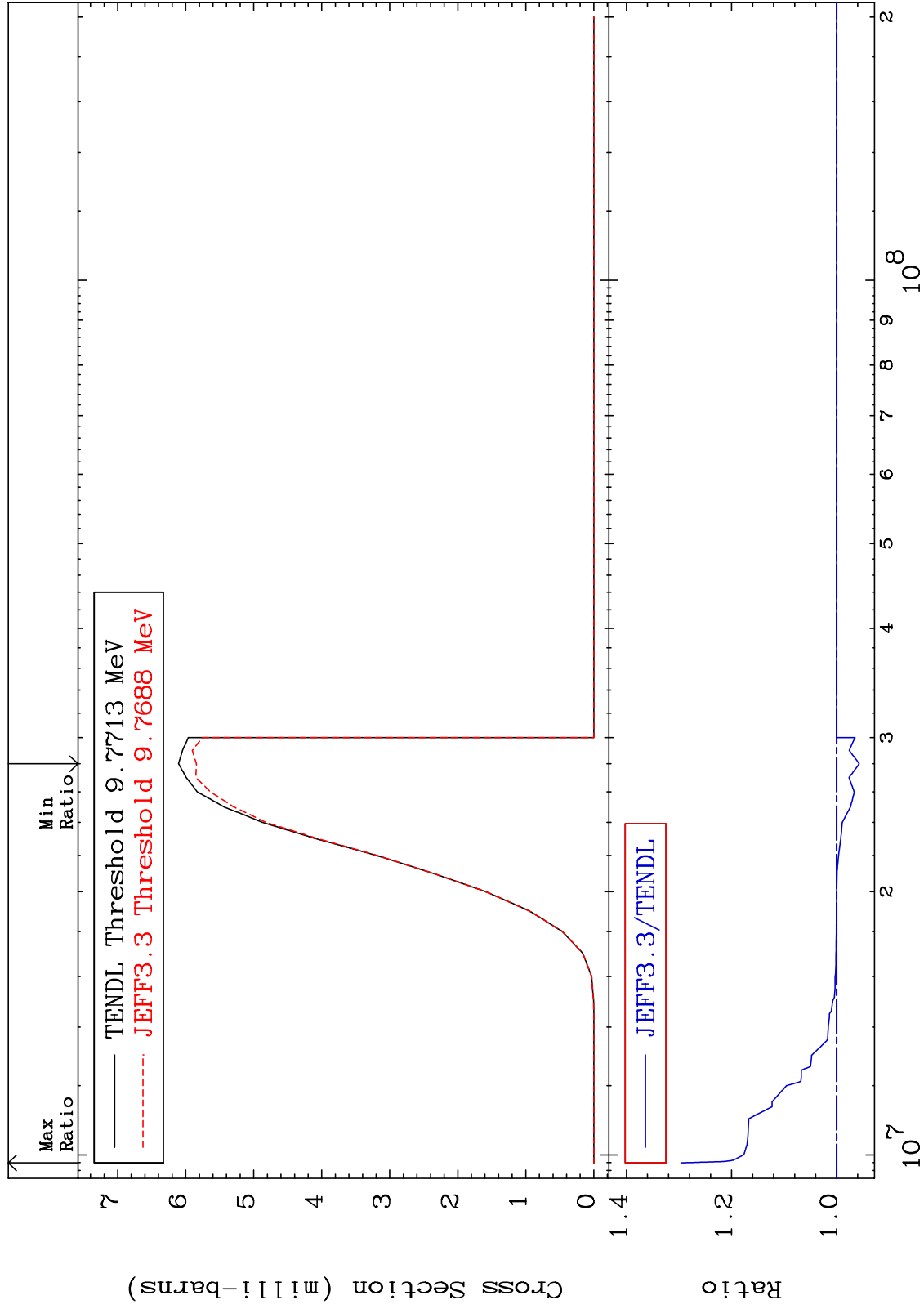
MAT 4437

(n, t)

44-Ru-100

Cross Section

-4.303 To 29.61 %



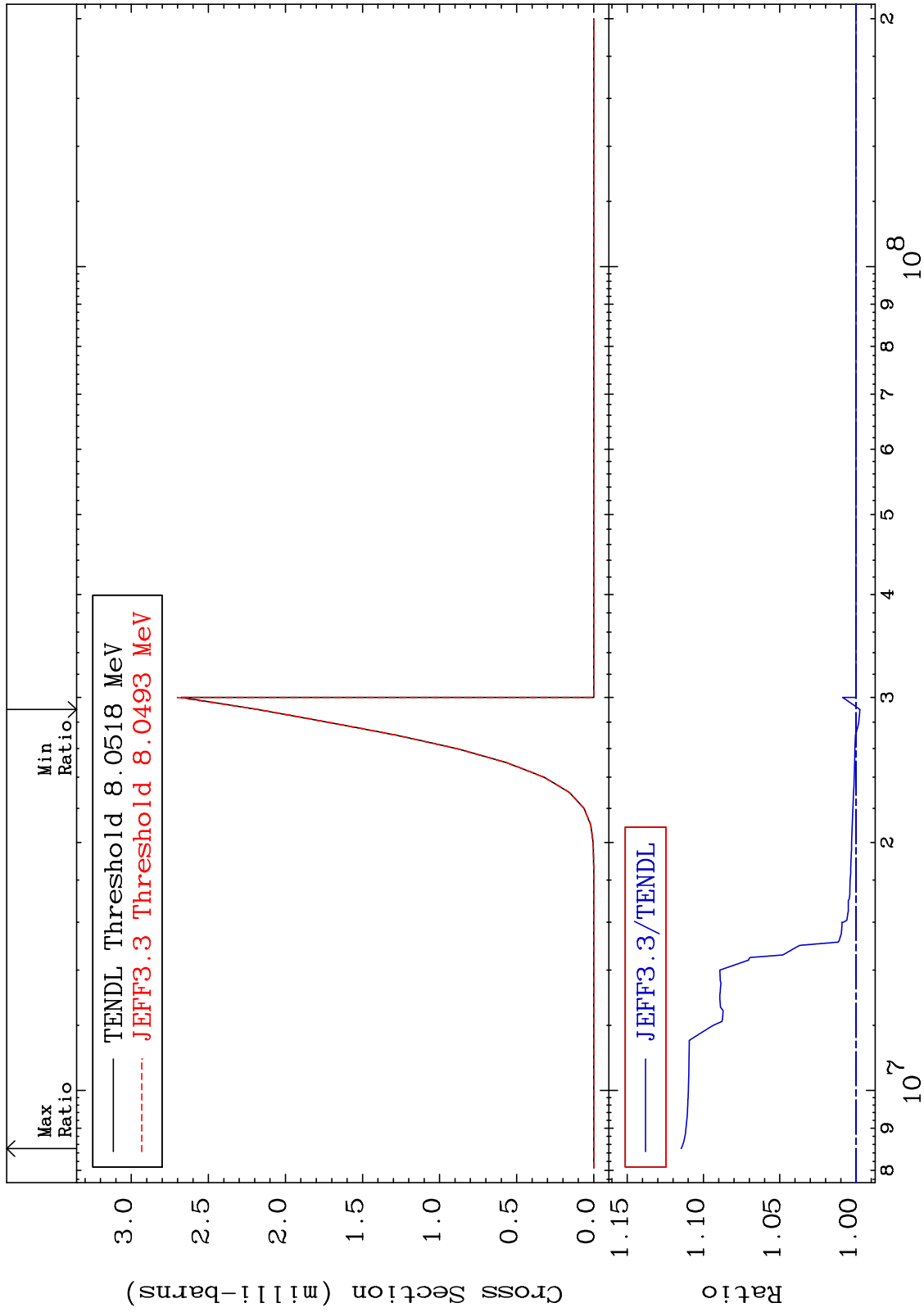
MAT 4437

(n, He-3)

44-Ru-100

Cross Section

-0.255 To 11.46 %



55

Incident Energy (eV)

44-Ru-100

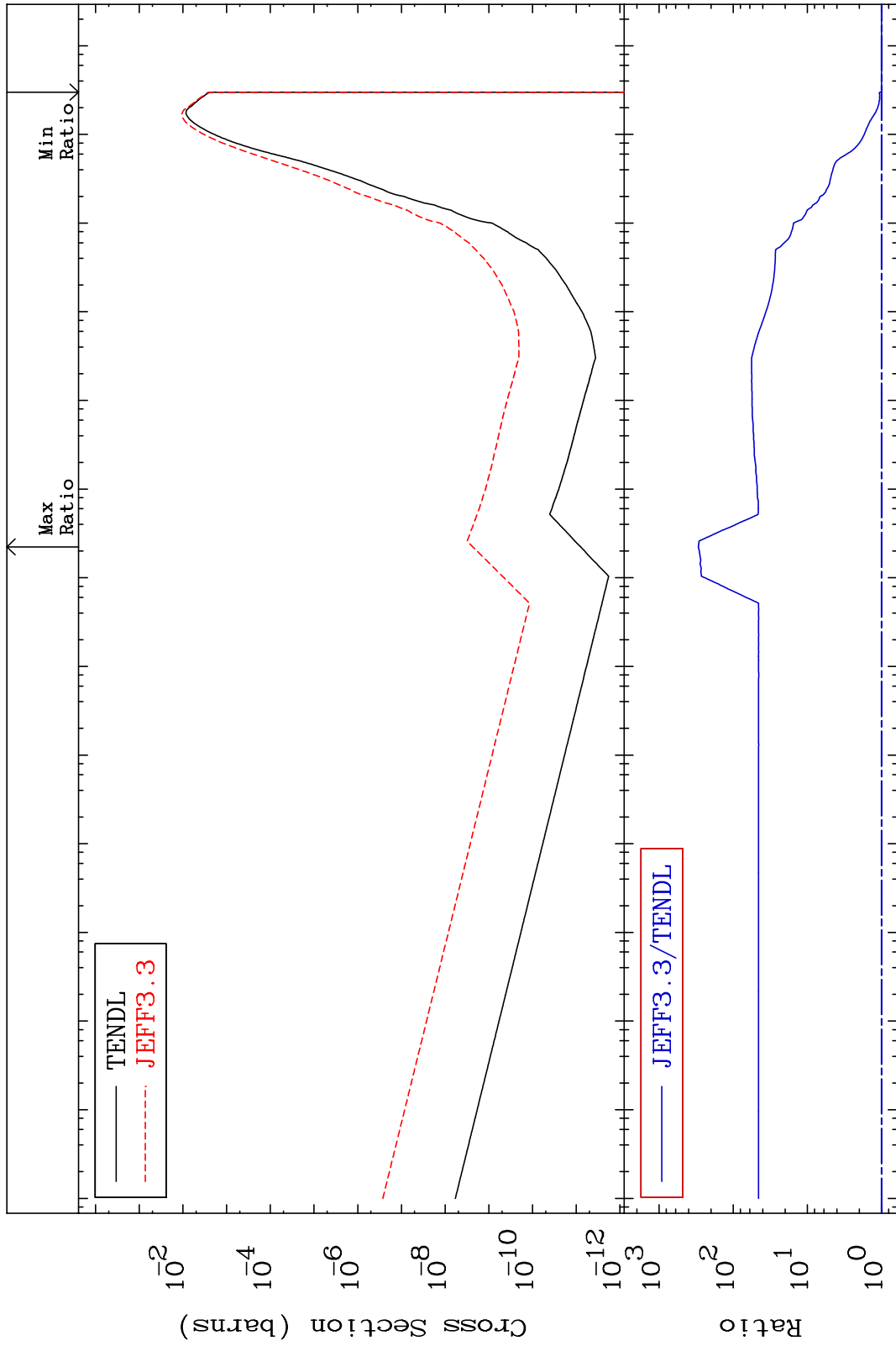


MAT 4437

(n,  $\alpha$ )  
Cross Section

0.000 To 9999. %

44-Ru-100



Incident Energy (eV)

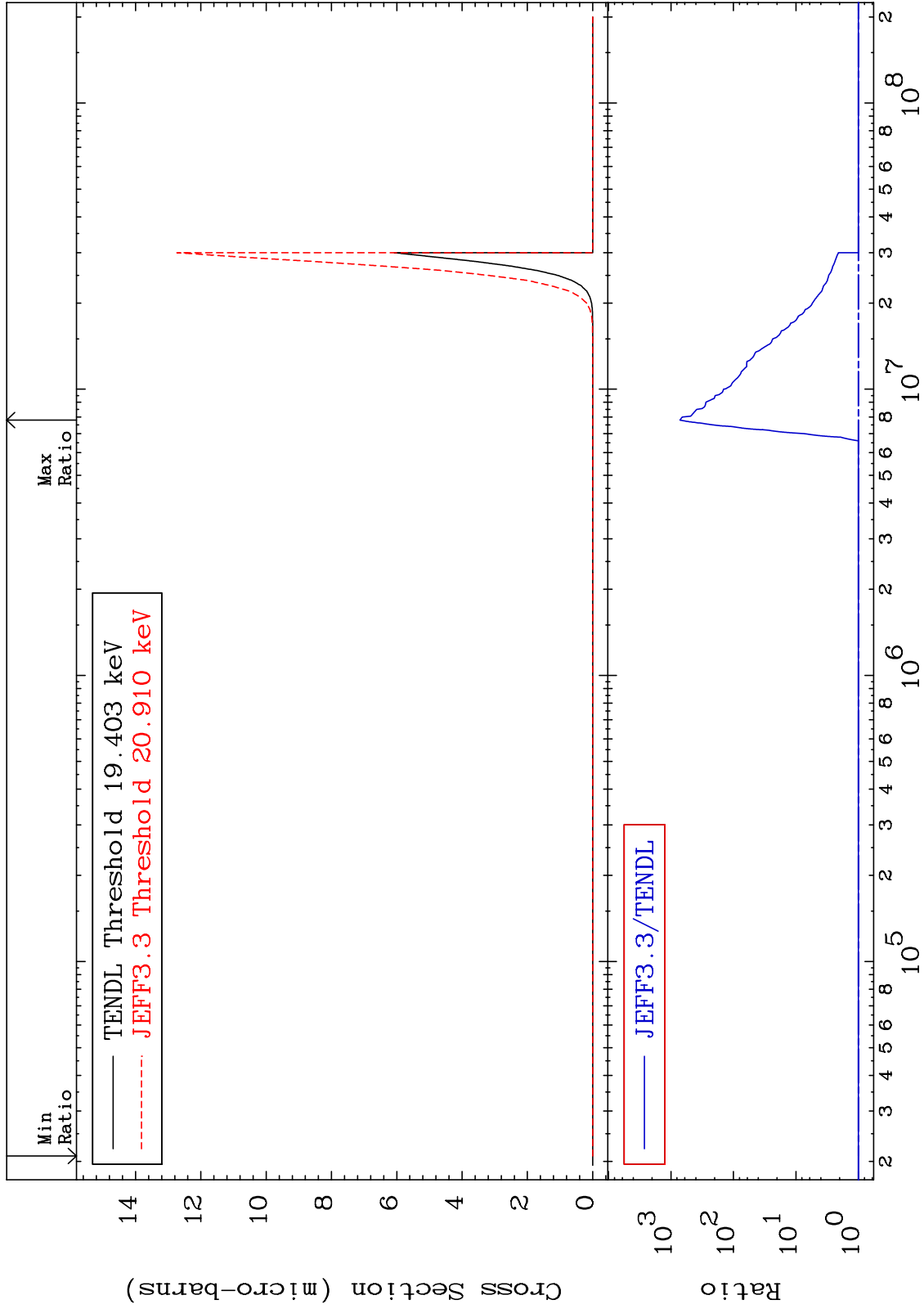
MAT 4437

(n, 2α)

44-Ru-100

Cross Section

0.000 To 9999. %



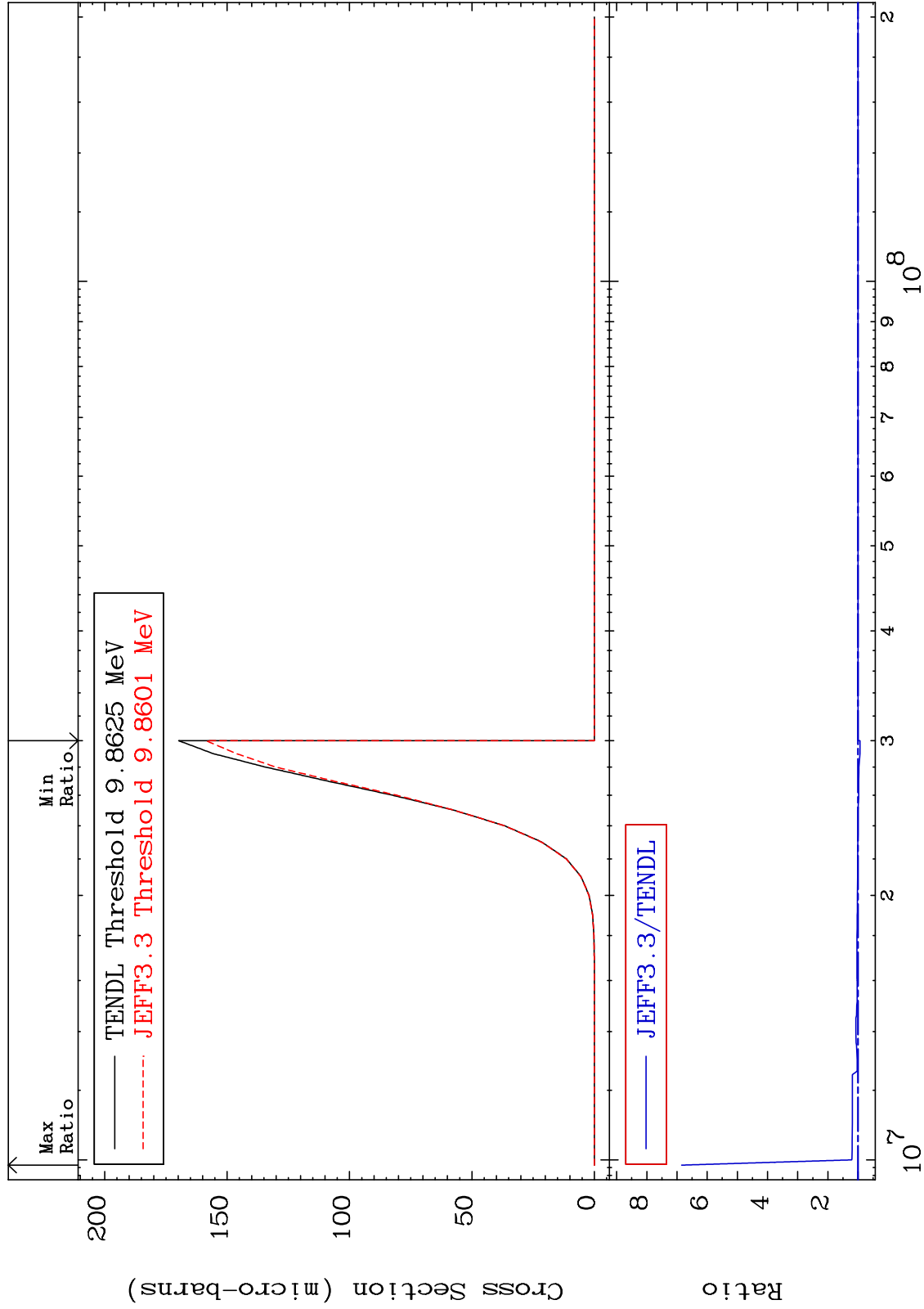
MAT 4437

(n,2p)

44-Ru-100

Cross Section

-6.618 To 584.6 %



58

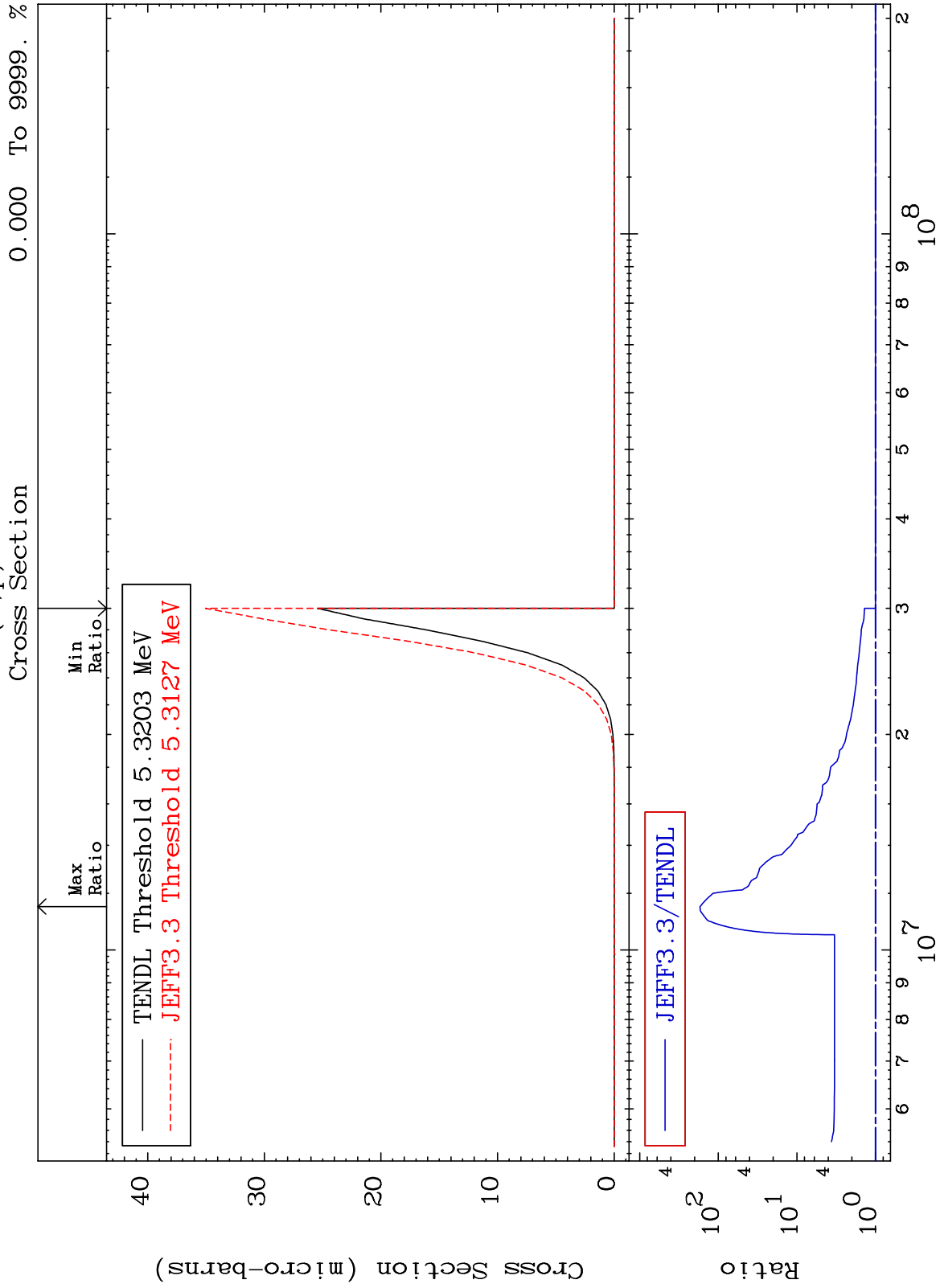
Incident Energy (eV)

44-Ru-100

MAT 4437

(n,p)  $\alpha$

44-Ru-100  
To 9999. %  
0.000



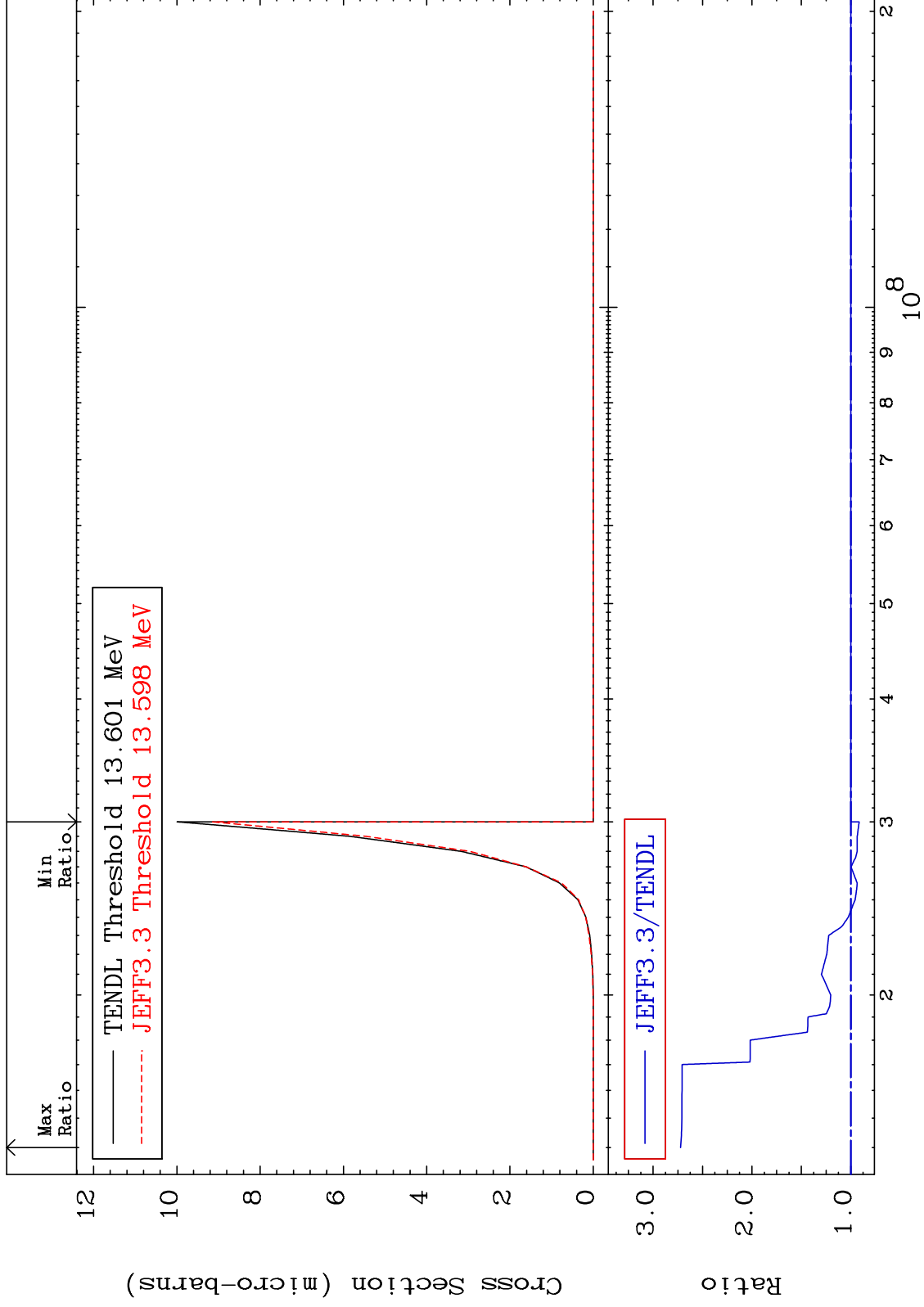
MAT 4437

(n,p) d

44-Ru-100

Cross Section

-8.504 To 172.2 %



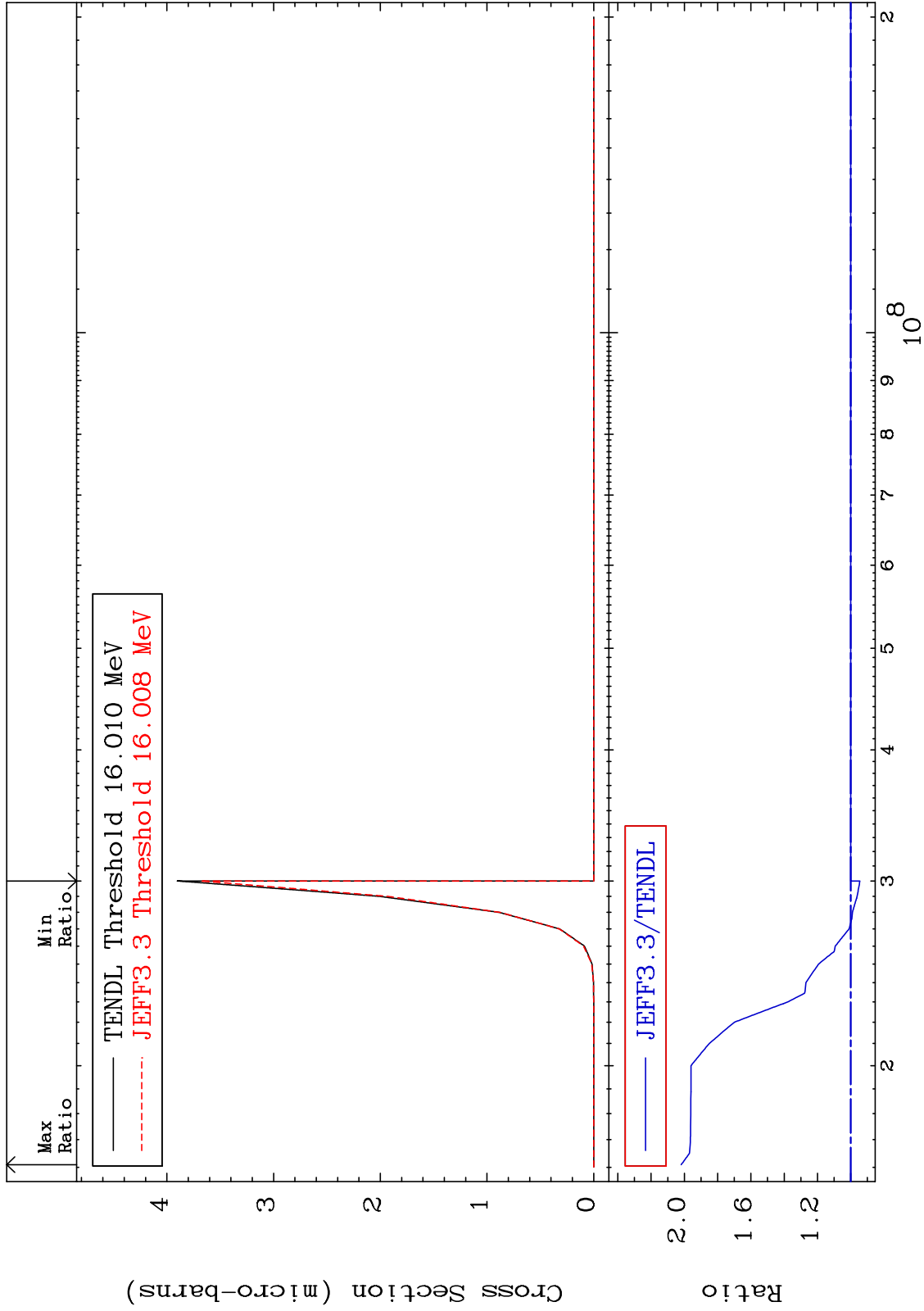
MAT 4437

(n,p) t

44-Ru-100

Cross Section

-5.516 To 101.9 %



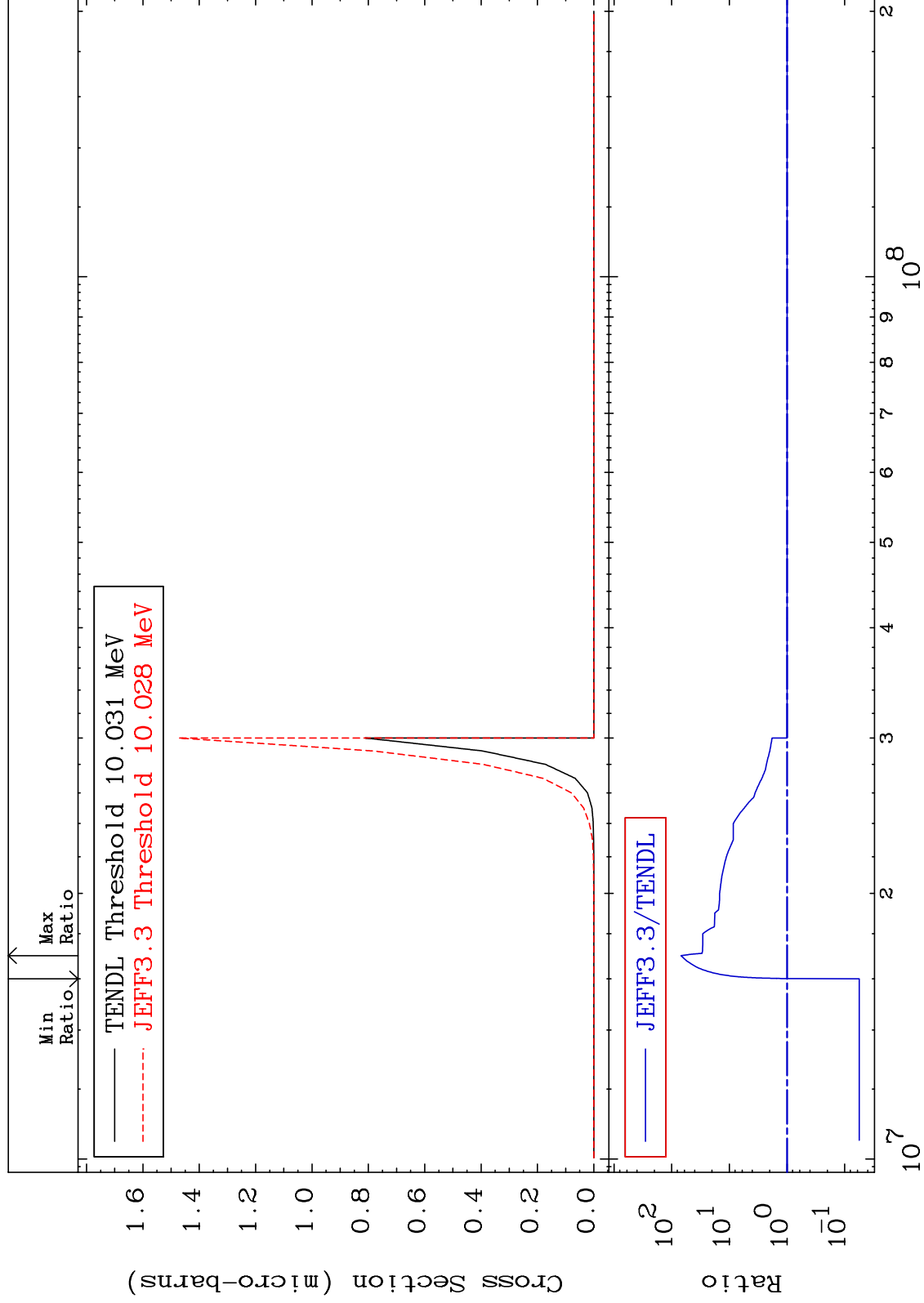
MAT 4437

(n,d)  $\alpha$

44-Ru-100

Cross Section

-94.41 To 6789. %



Incident Energy (eV)

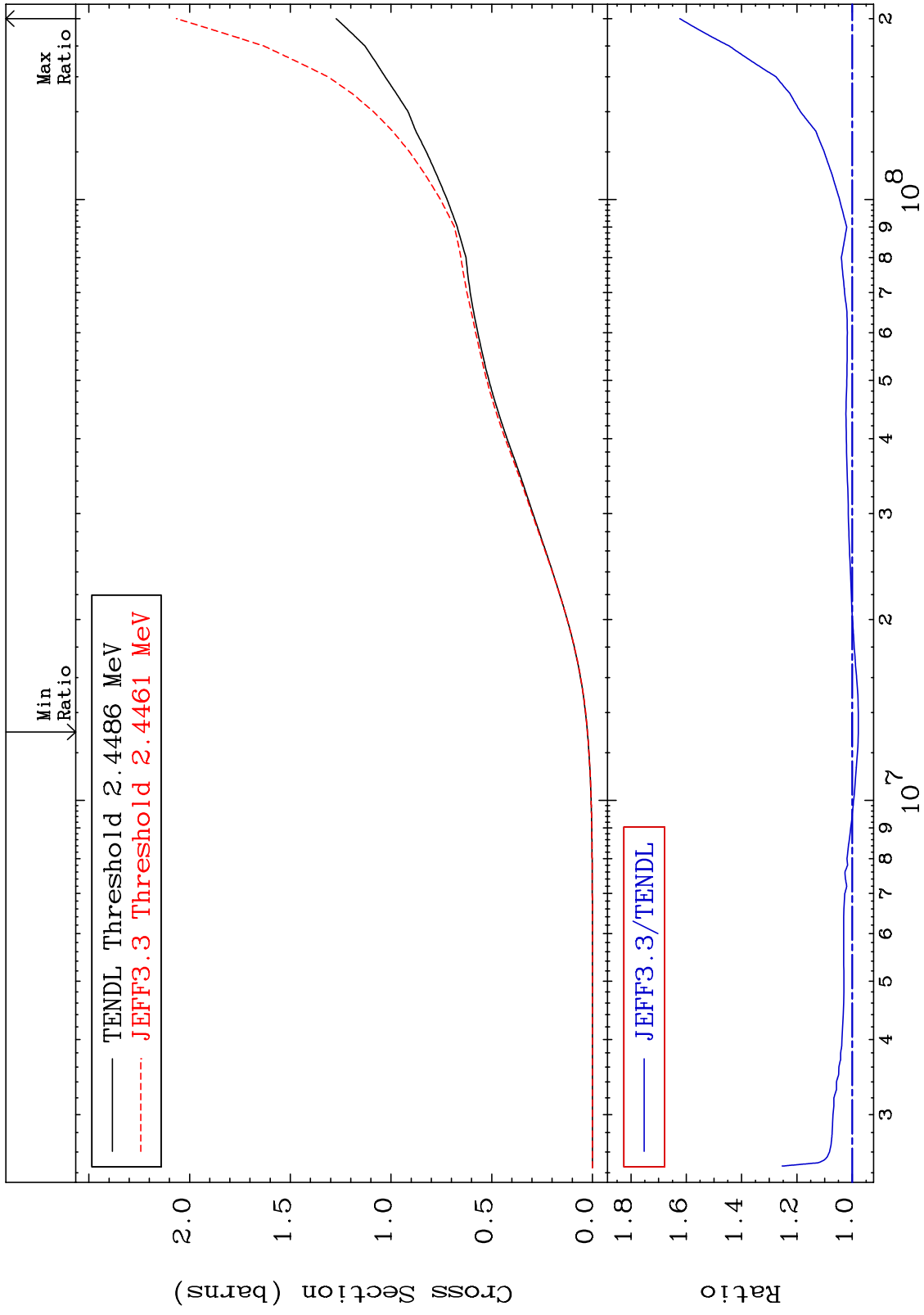
44-Ru-100

62

MAT 4437

Hydrogen Production  
Cross Section

44-Ru-100  
-2.188 To 62.34 %

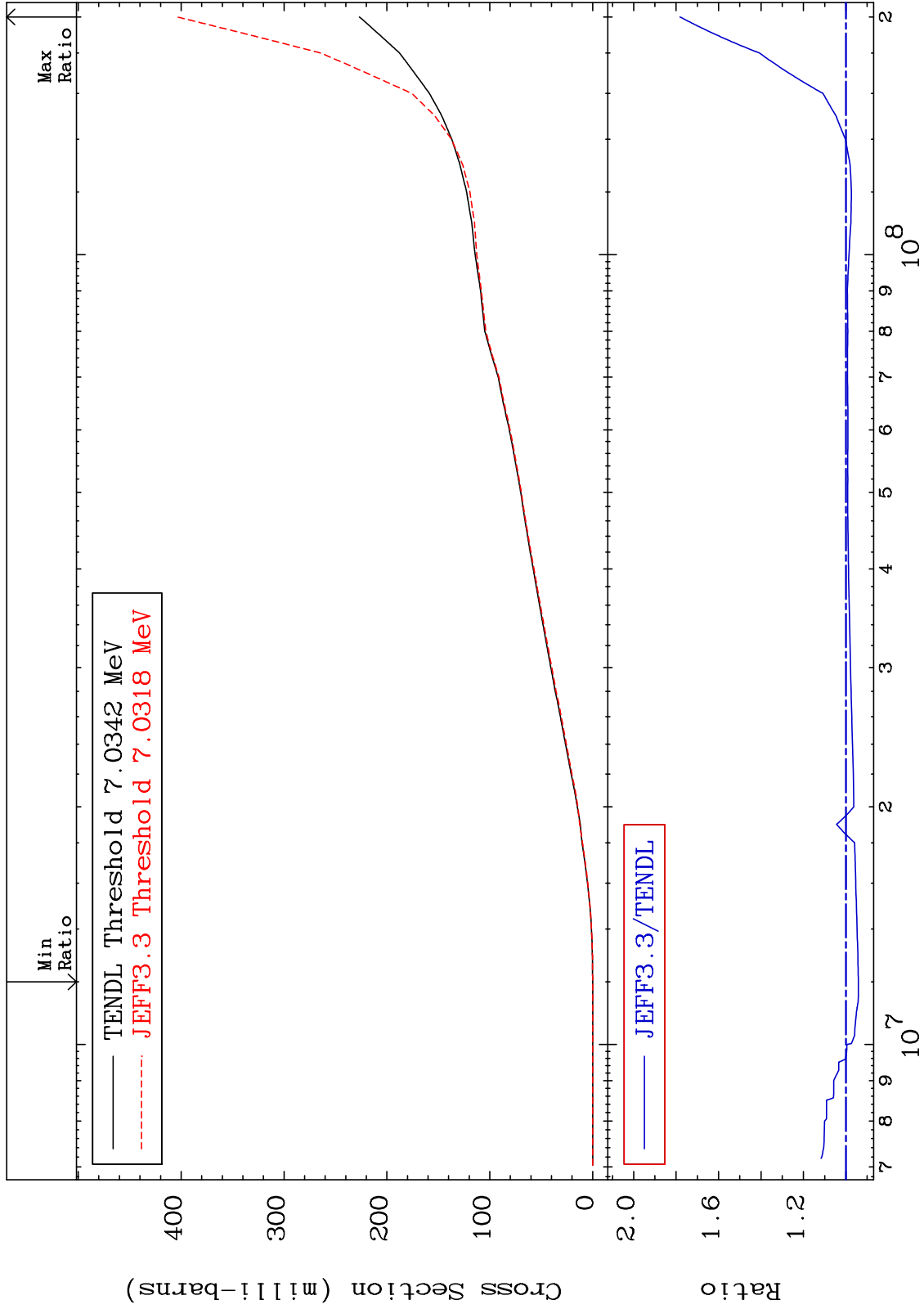




MAT 4437

Deuterium Production  
Cross Section

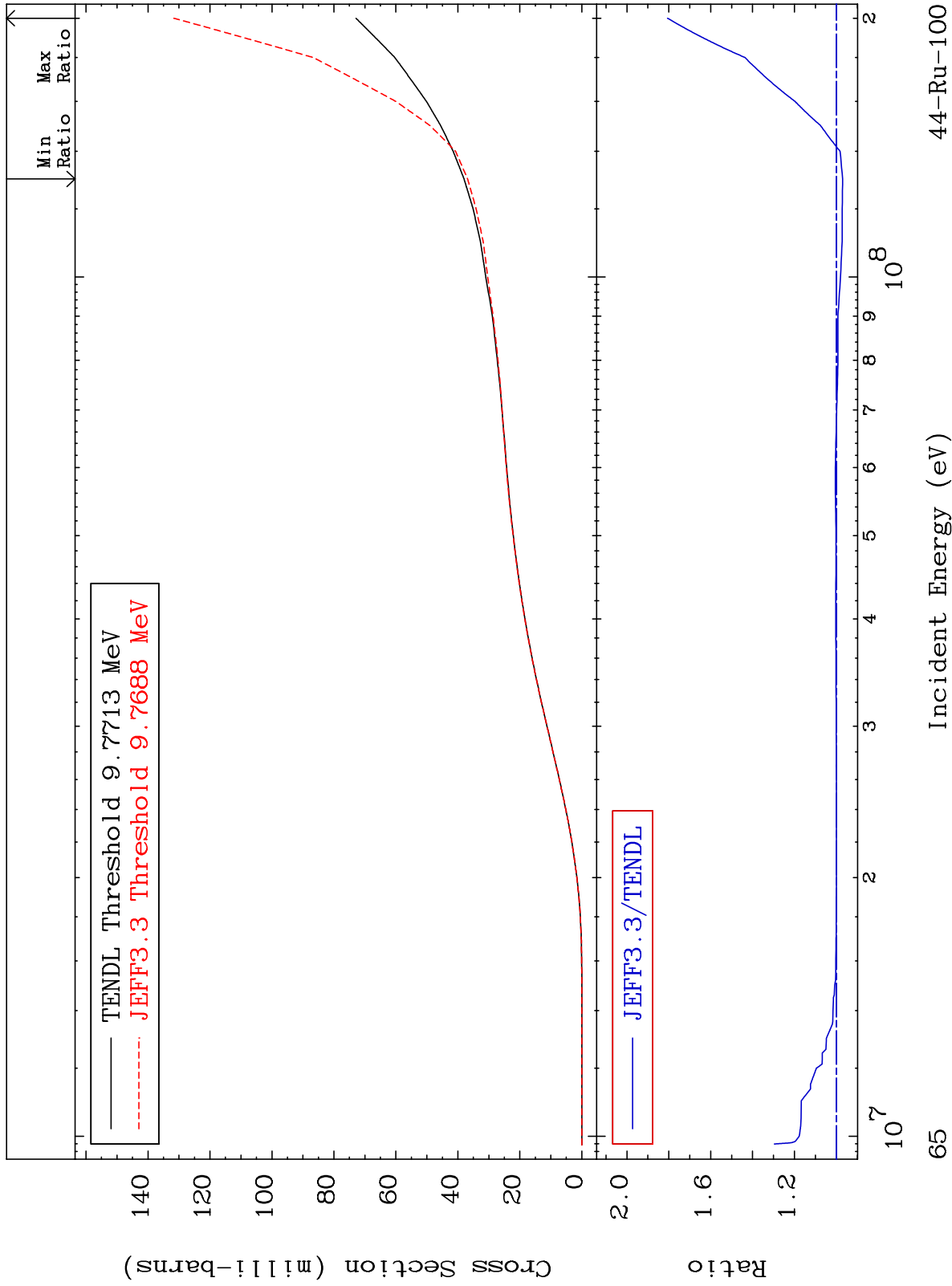
44-Ru-100  
-5.890 To 78.16 %



MAT 4437

Tritium Production  
Cross Section

44-Ru-100  
-3.018 To 80.60 %



65

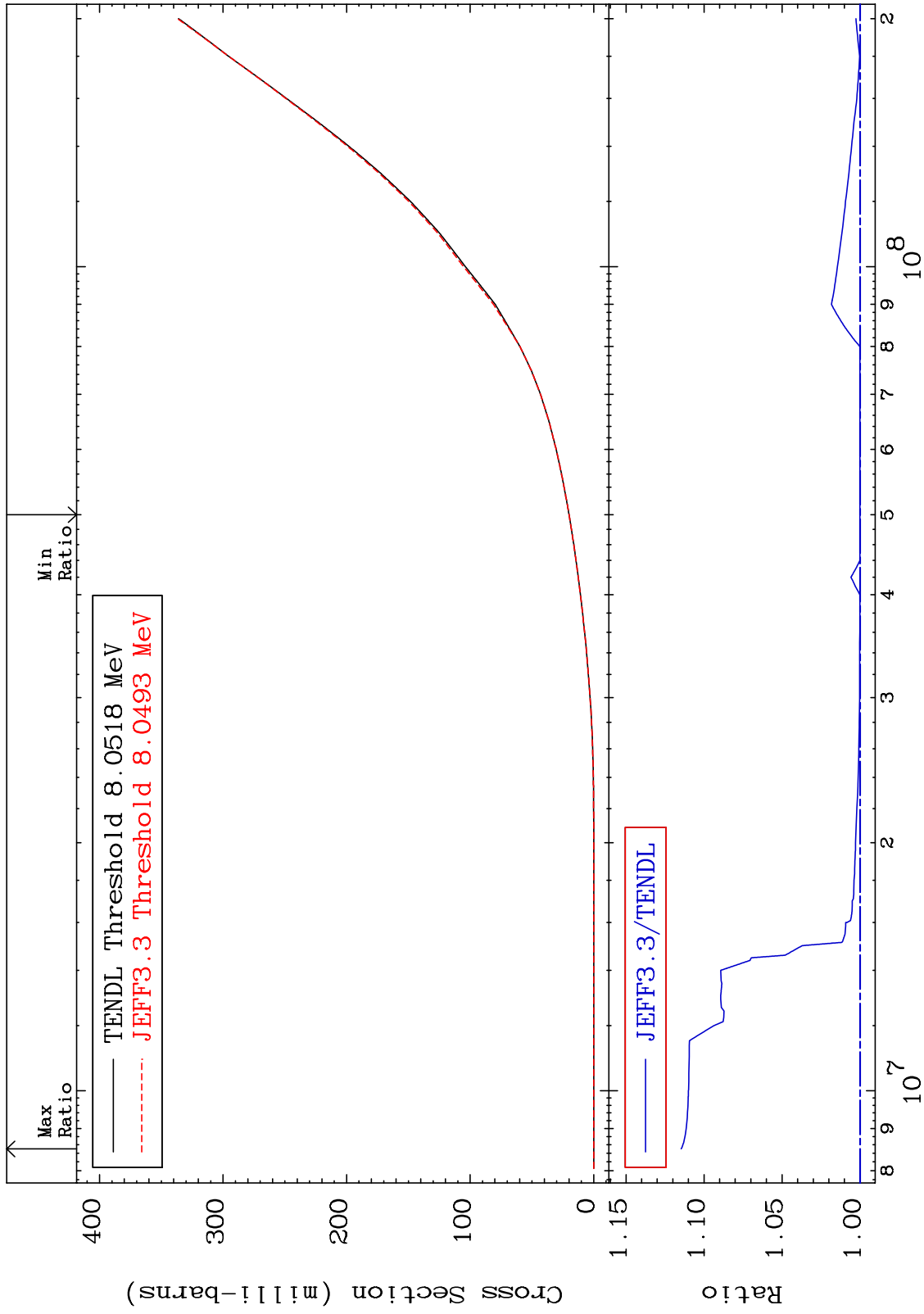
Incident Energy (eV)

44-Ru-100

MAT 4437

He-3 Production  
Cross Section

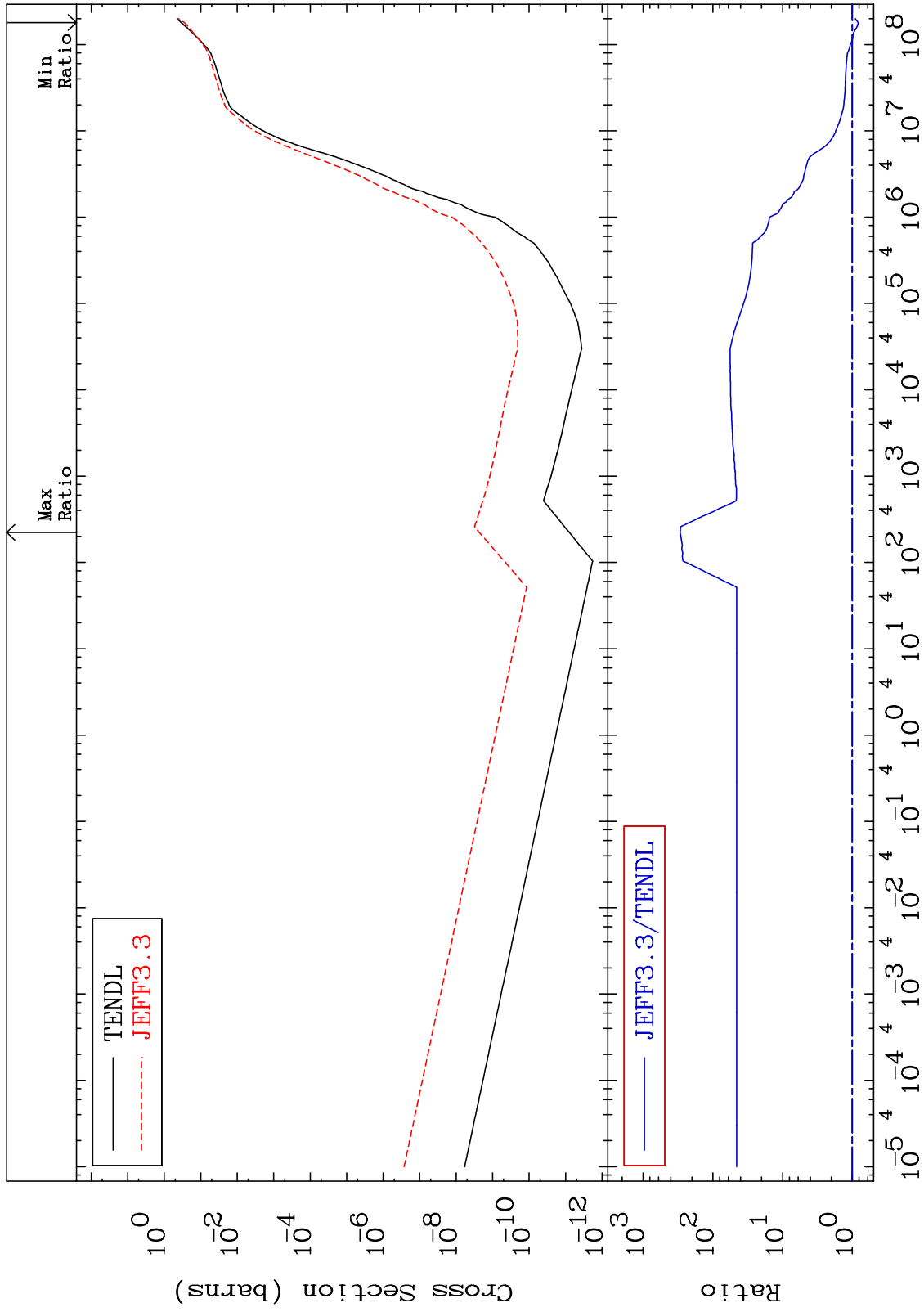
44-Ru-100  
0.009 To 11.46 %



MAT 4437

He-4 Production  
Cross Section

44-Ru-100  
-18.19 To 9999. %



67

Incident Energy (eV)

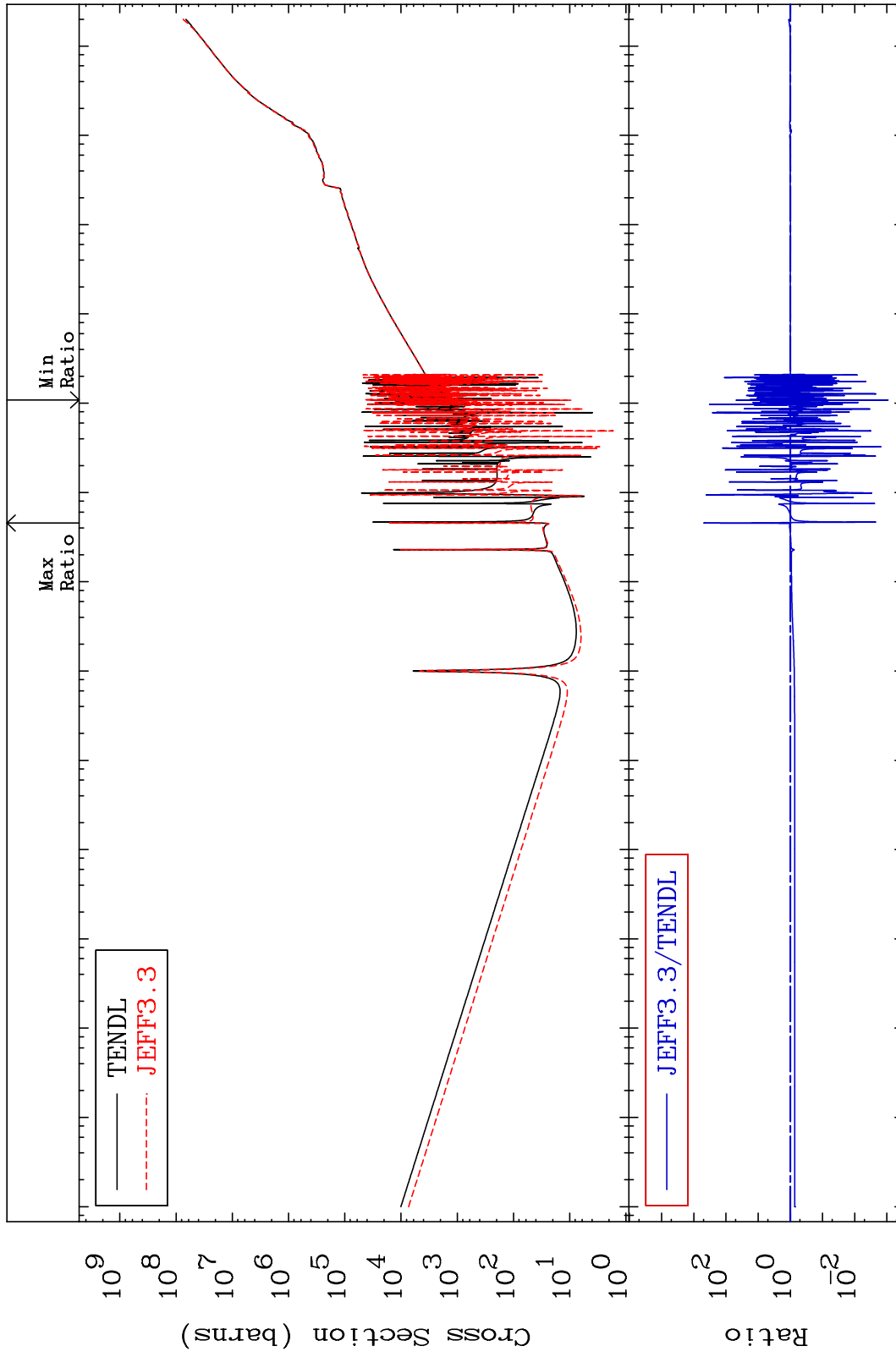
44-Ru-100

MAT 4437

Kerma total (eV-barns)  
Cross Section

44-Ru-100

-99.91 To 9999. %



Ratio

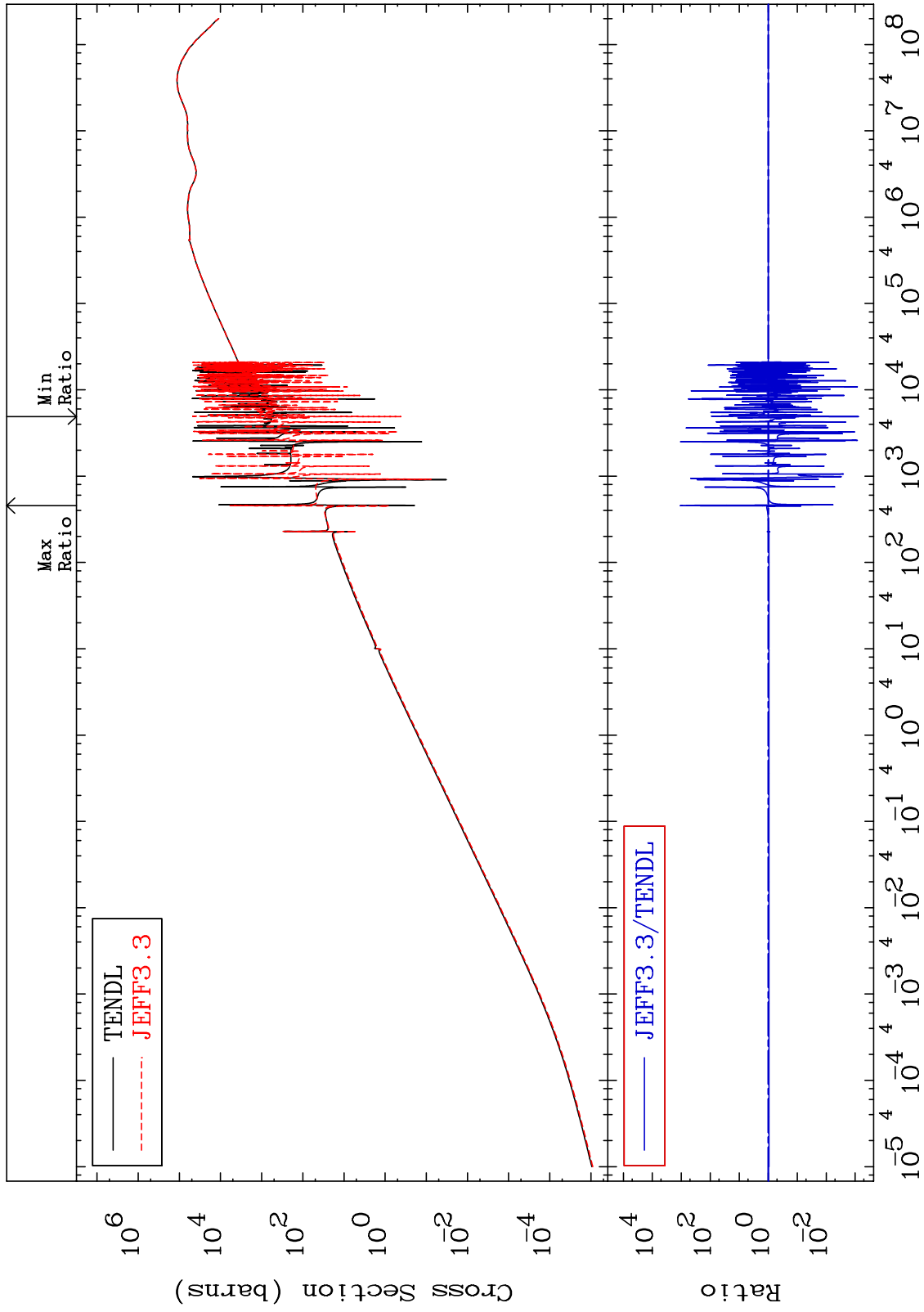
Incident Energy (eV)

44-Ru-100

MAT 4437

Kerma elastic  
Cross Section

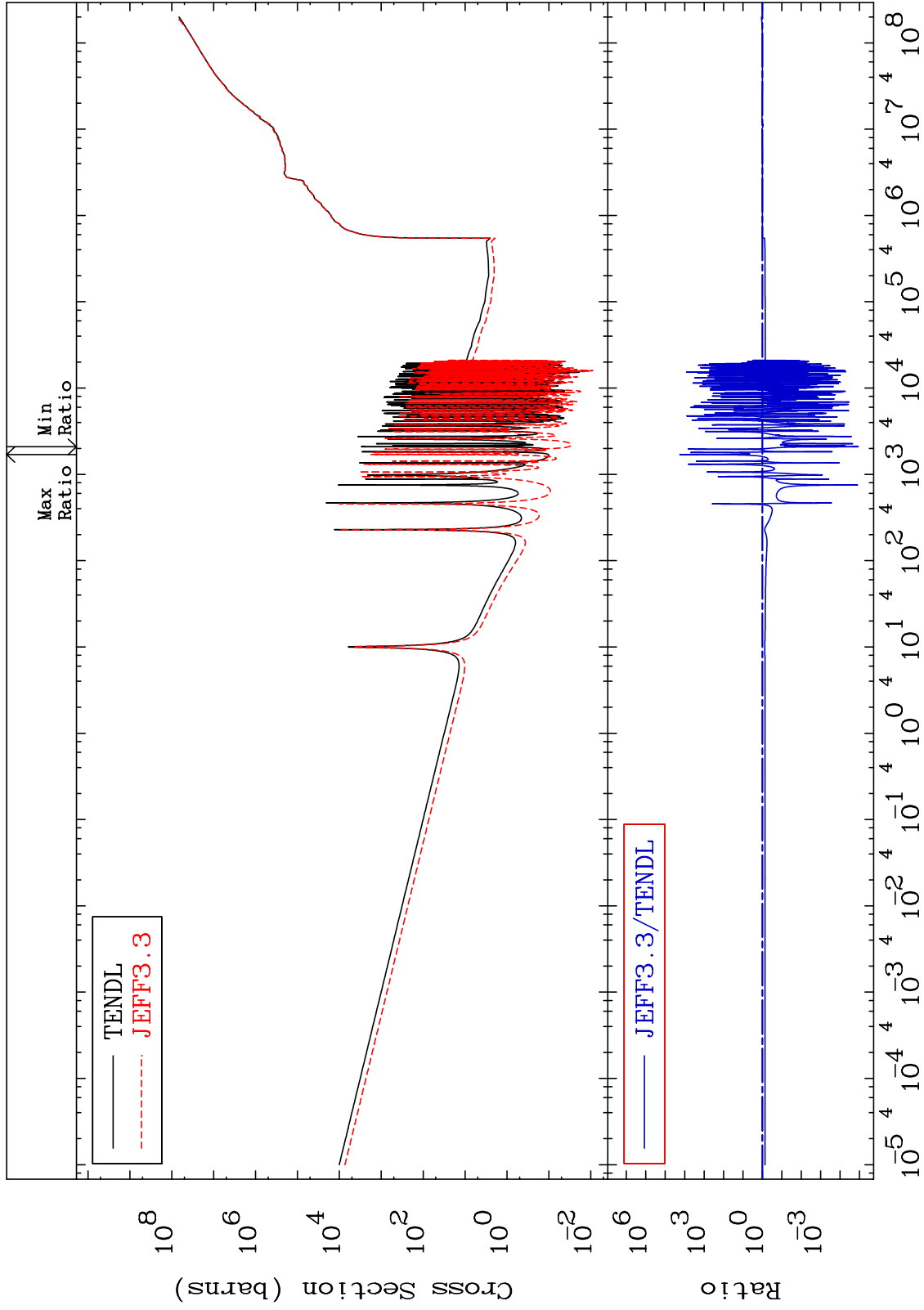
44-Ru-100  
-99.92 To 9999. %



MAT 4437

Kerma non-elastic (all but mt2)  
Cross Section

44-Ru-100  
-100.0 To 9999. %



70

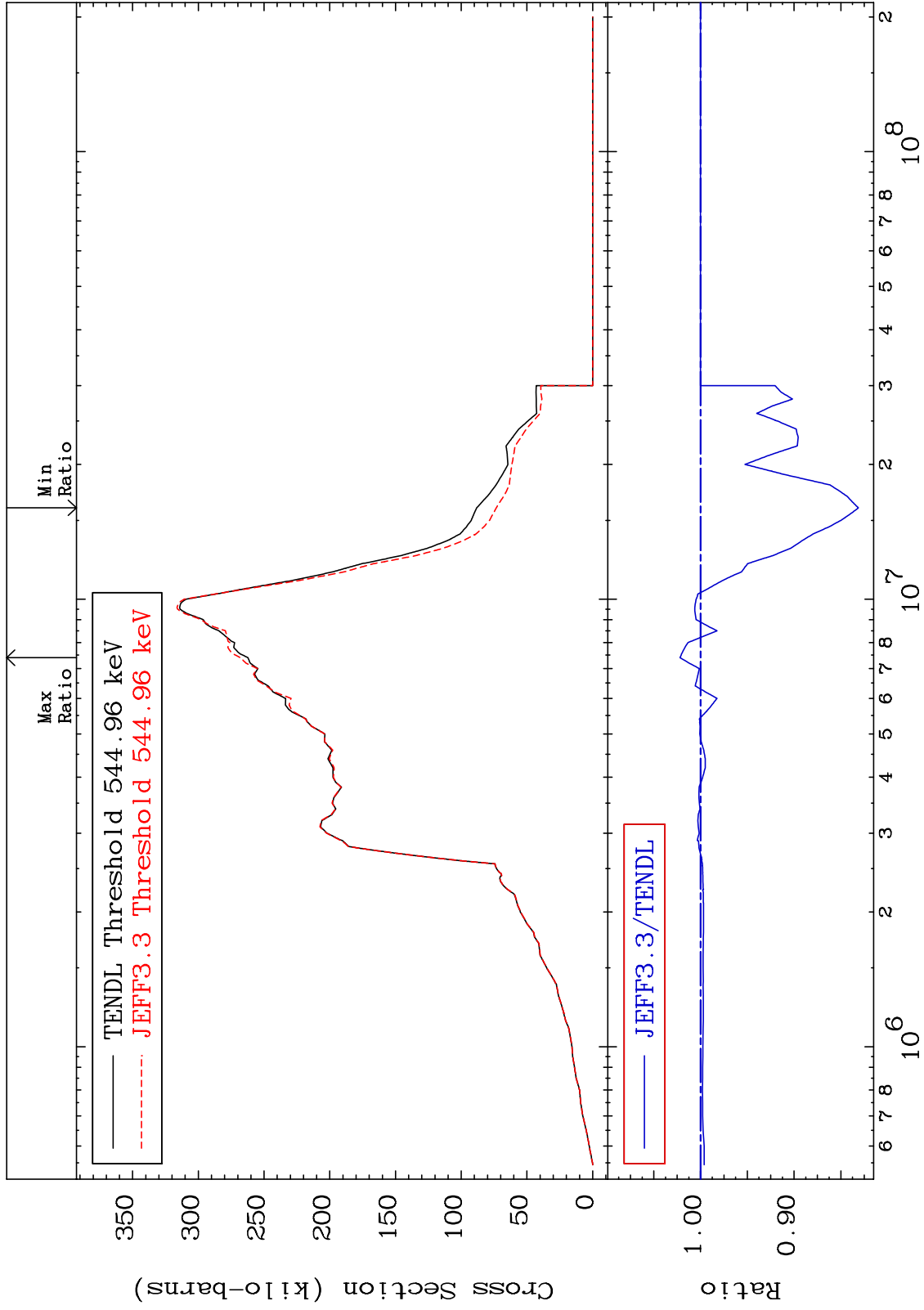
Incident Energy (eV)

44-Ru-100

MAT 4437

Kerma inelastic (mt51-91)  
Cross Section

44-Ru-100  
-16.88 To 2.196 %



71

Incident Energy (eV)

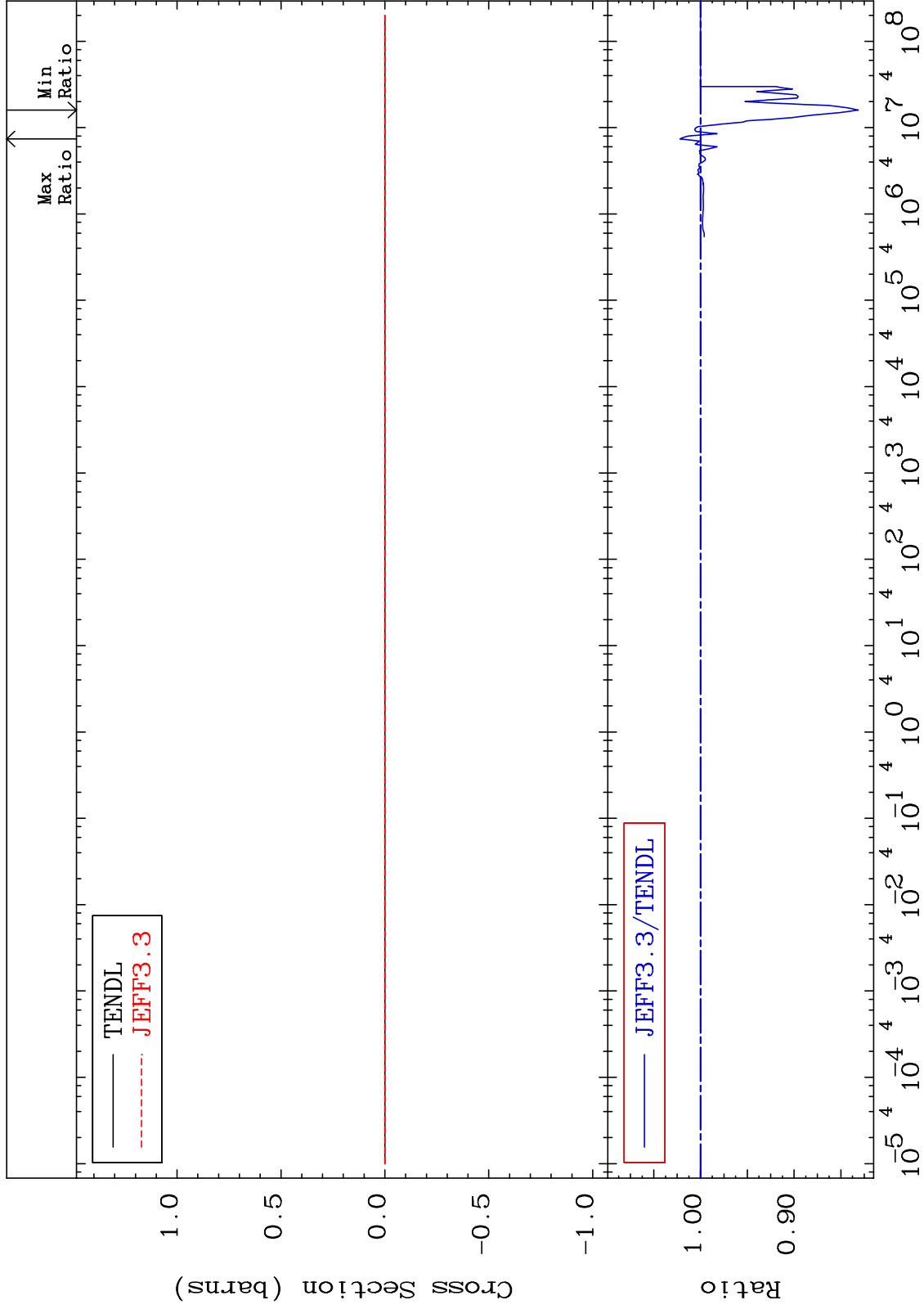
44-Ru-100



MAT 4437

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

44-Ru-100  
-16.88 To 2.196 %



72

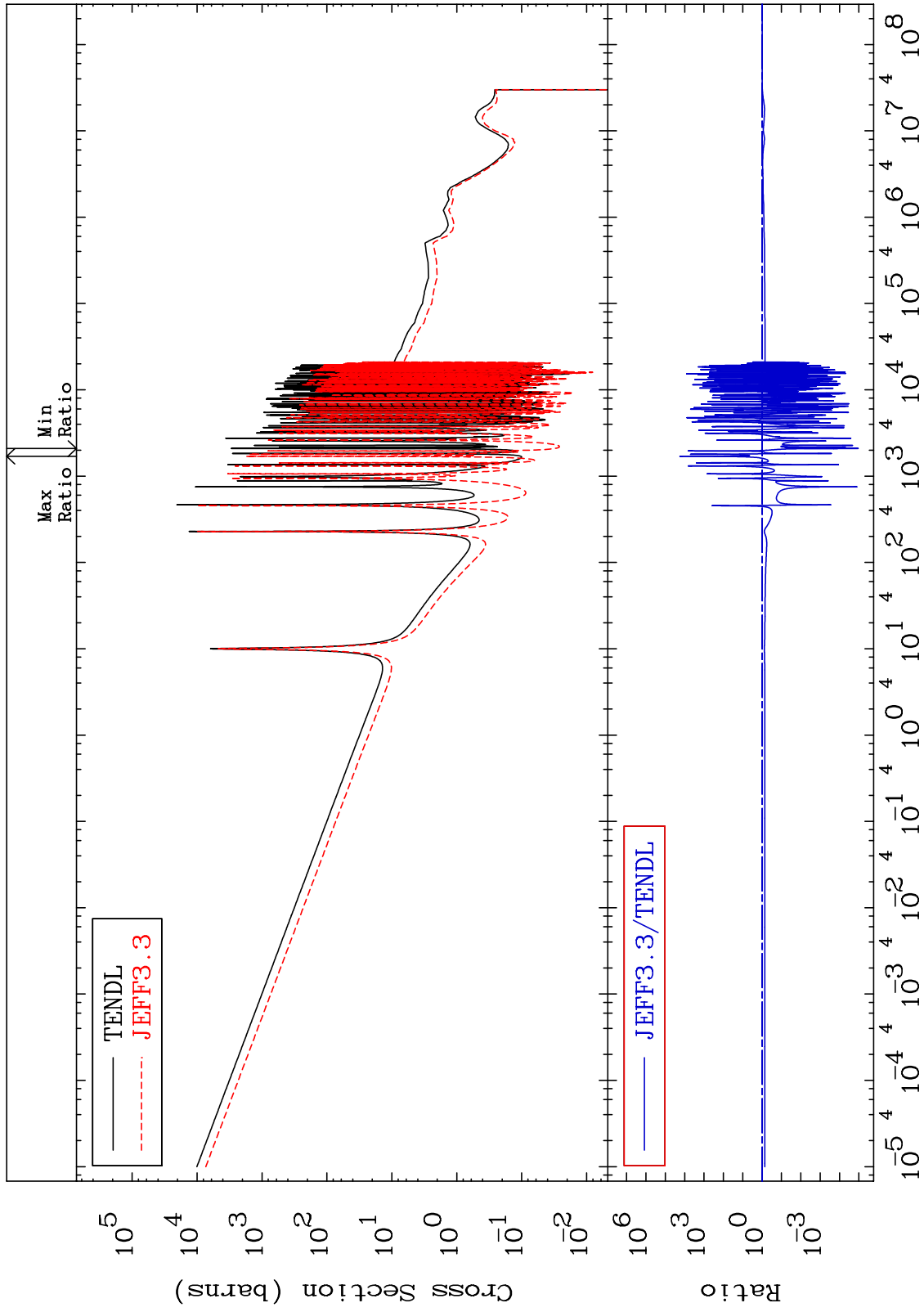
Incident Energy (eV)

44-Ru-100

MAT 4437

Kerma capture (mt102)  
Cross Section

44-Ru-100  
-100.0 To 9999. %



73

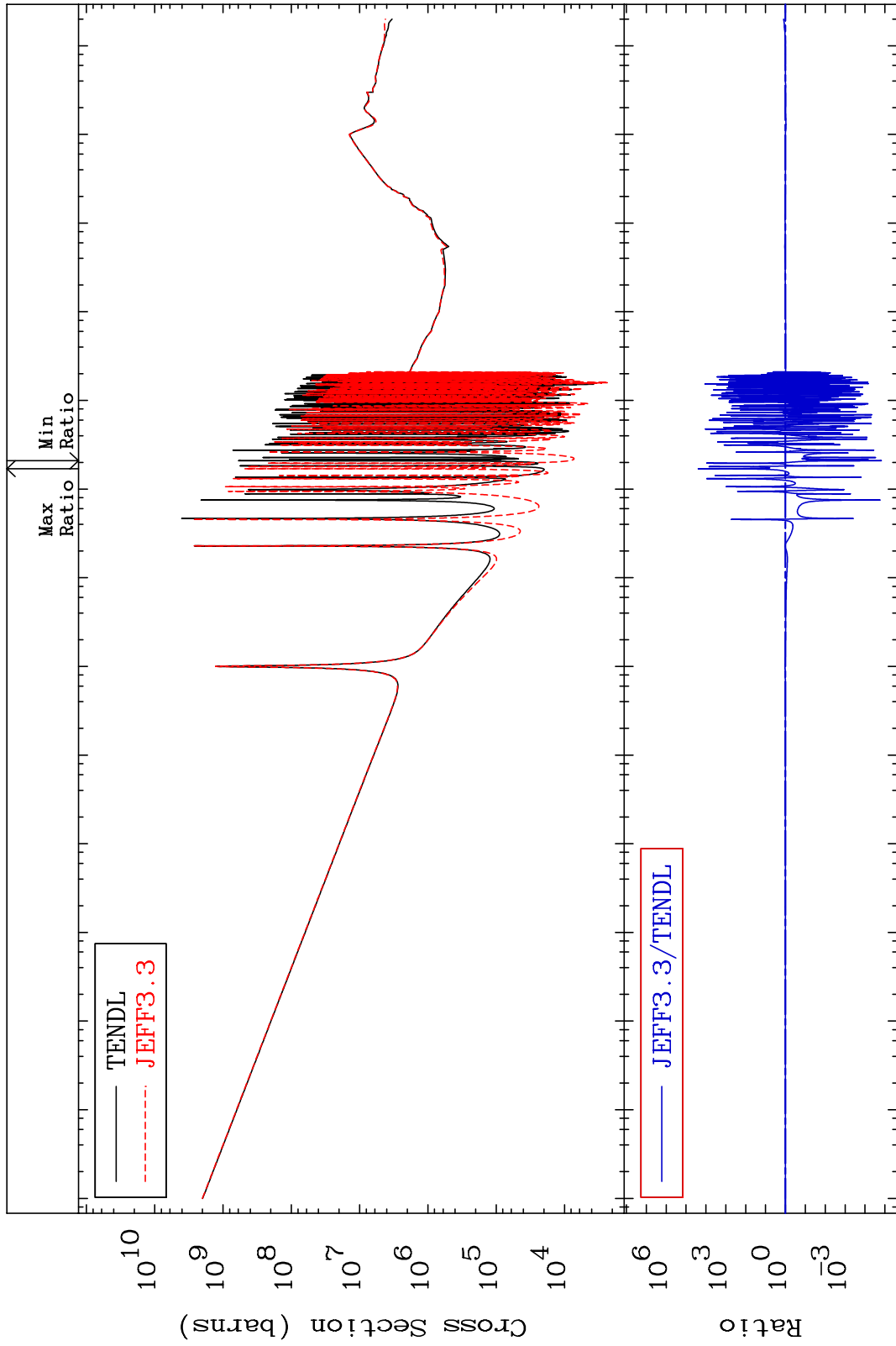
Incident Energy (eV)

44-Ru-100

MAT 4437

Total photon (eV-barns)  
Cross Section

44-Ru-100  
-100.0 To 9999. %



74

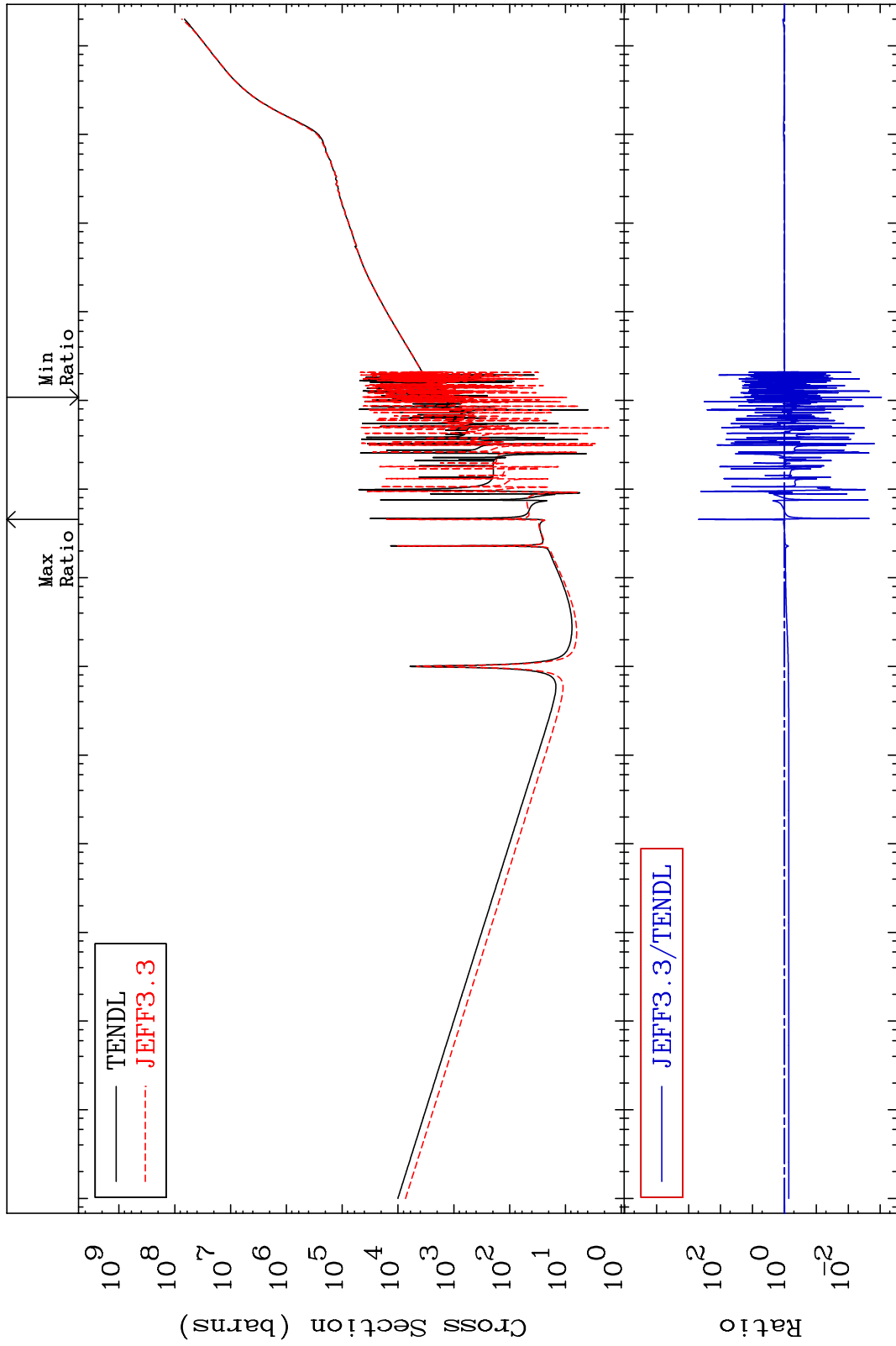
Incident Energy (eV)

44-Ru-100

MAT 4437

Total kinematic kerma (high limit)  
Cross Section

44-Ru-100  
-99.91 To 9999. %



75

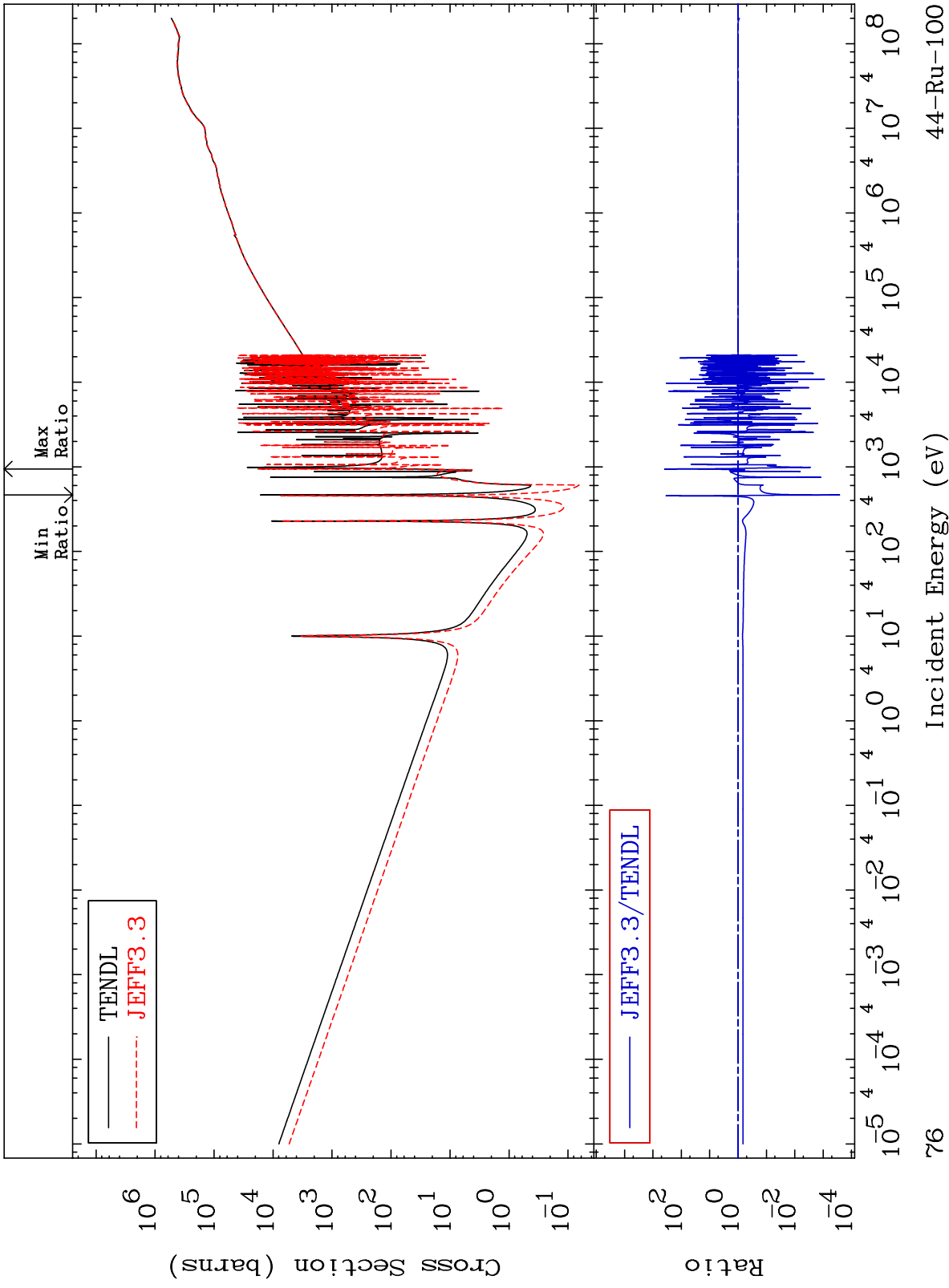
Incident Energy (eV)

44-Ru-100

MAT 4437

Dpa total (eV-barns)  
Cross Section

44-Ru-100  
-99.97 To 9999. %



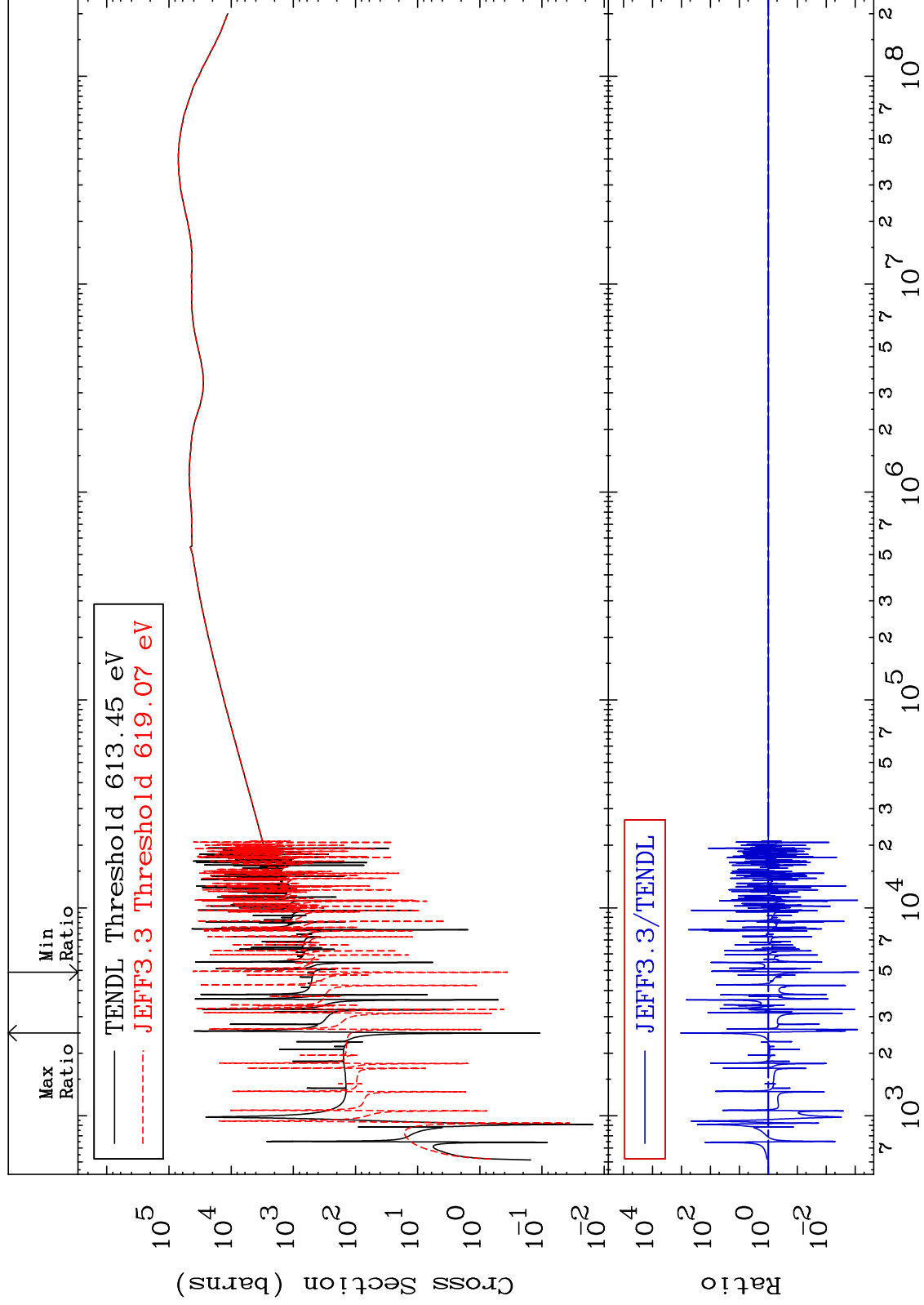
76

44-Ru-100

MAT 4437

Dpa elastic (mt2)  
Cross Section

44-Ru-100  
-99.92 To 9999. %



77

44-Ru-100

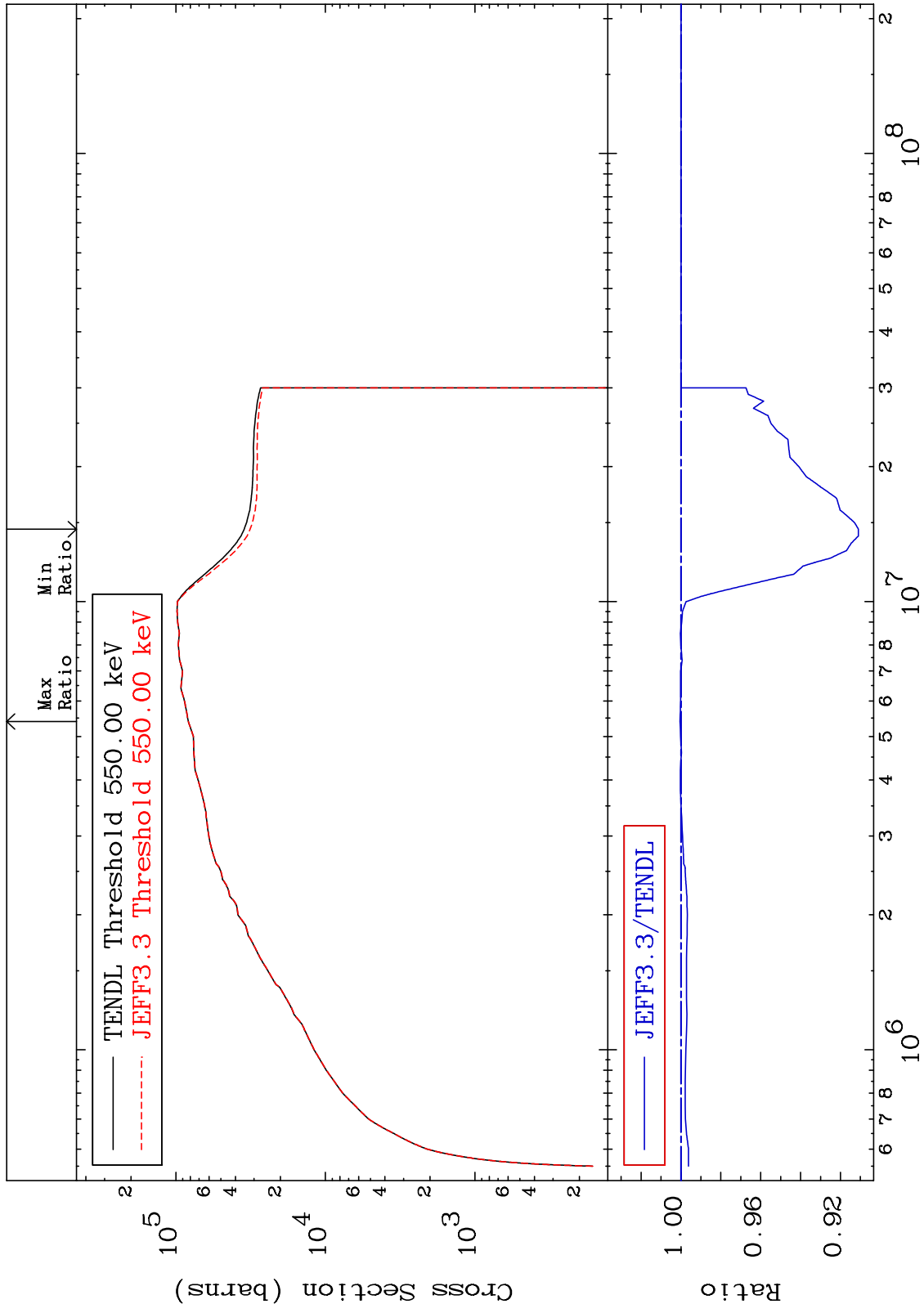
MAT 4437

Dpa inelastic (mt51-91)

44-Ru-100

-8.900 To 0.046 %

Cross Section



78

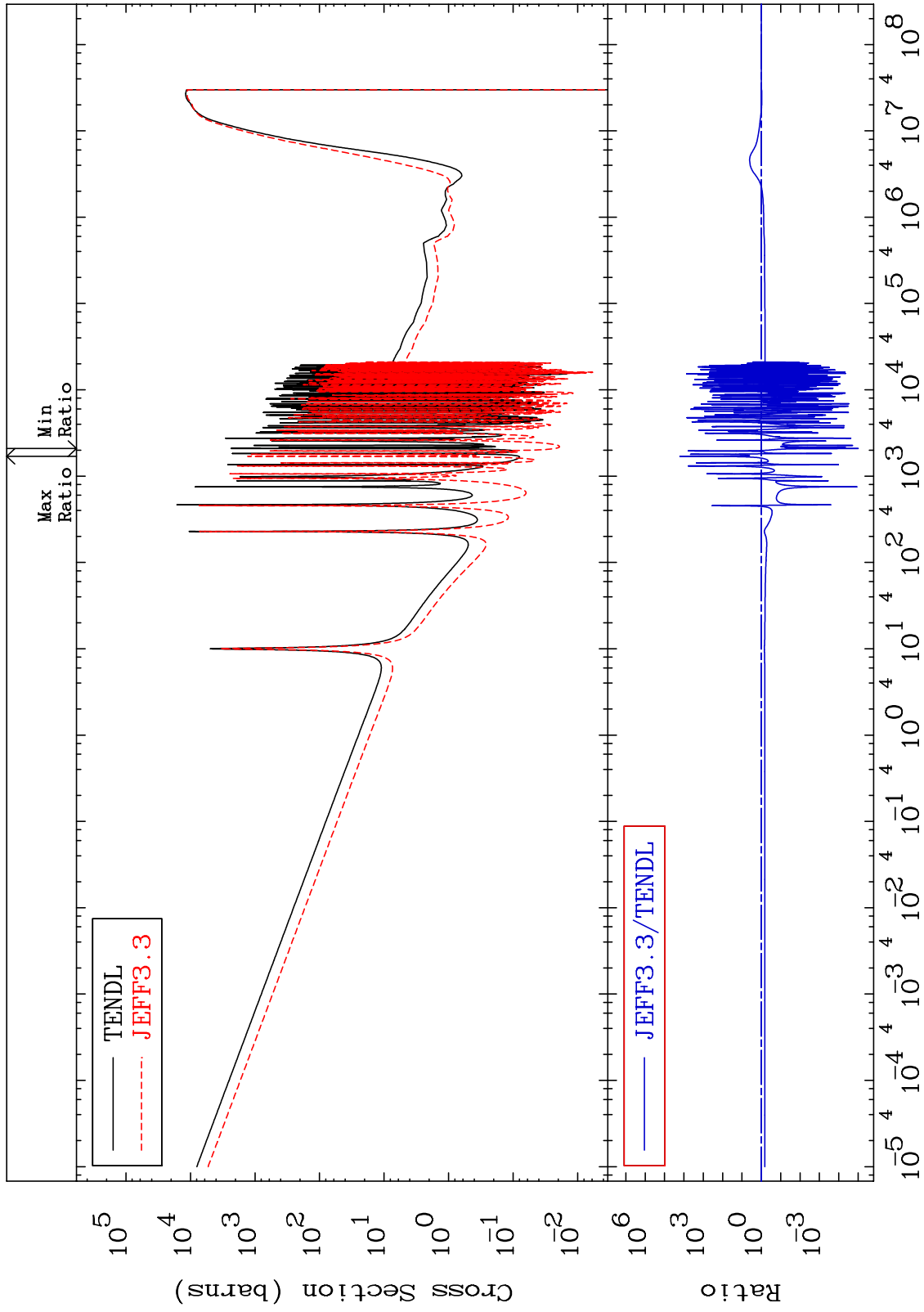
Incident Energy (eV)

44-Ru-100

MAT 4437

Dpa disappearance (mt102 -120)  
Cross Section

44-Ru-100  
-100.0 To 9999. %



79

Incident Energy (eV)

44-Ru-100

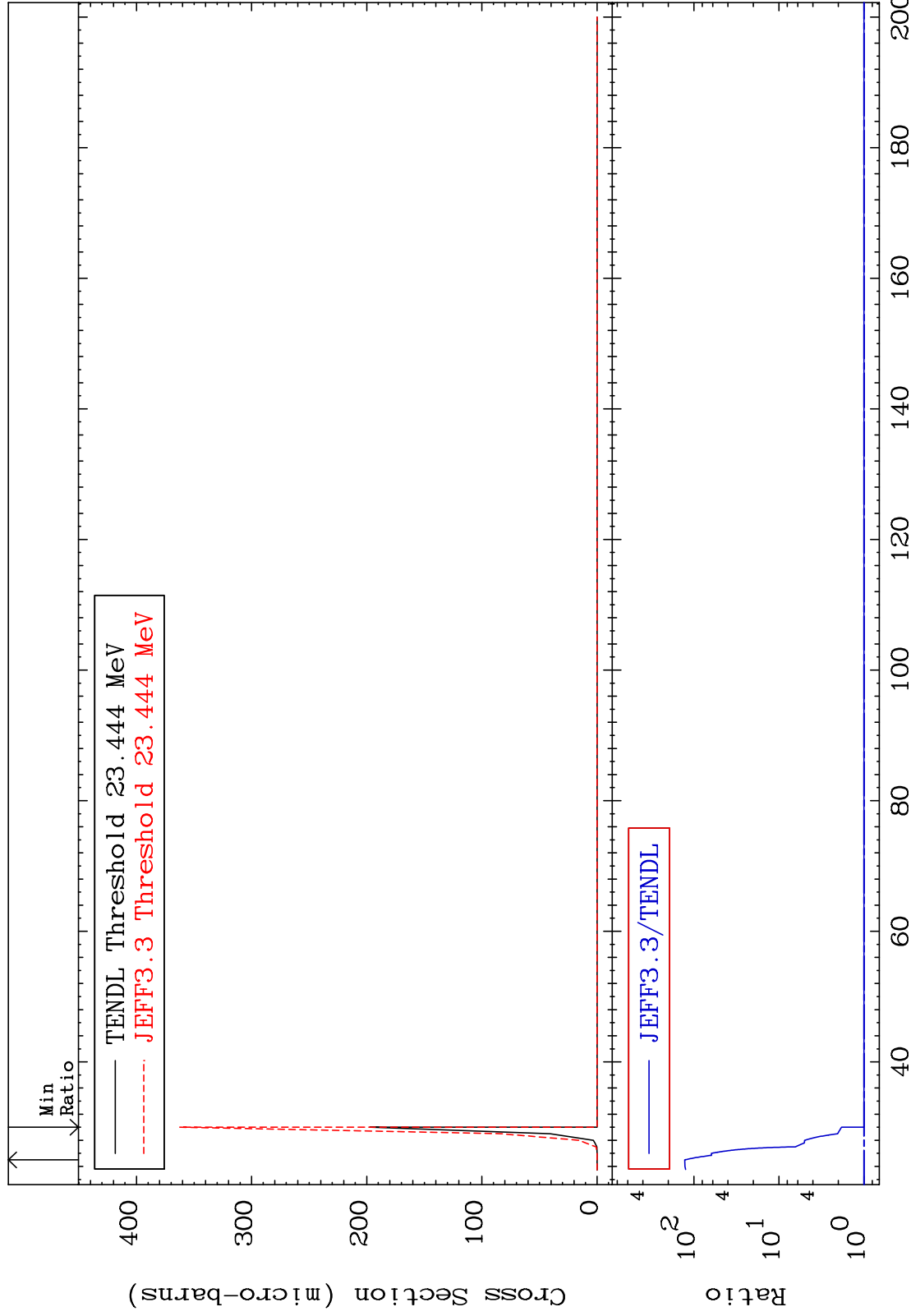


MAT 4437

(n,2n) d: 43-Tc-97g

44-Ru-100

Radionuclide Production Cross Section 0.000 To 9999. %



80

Incident Energy (MeV)

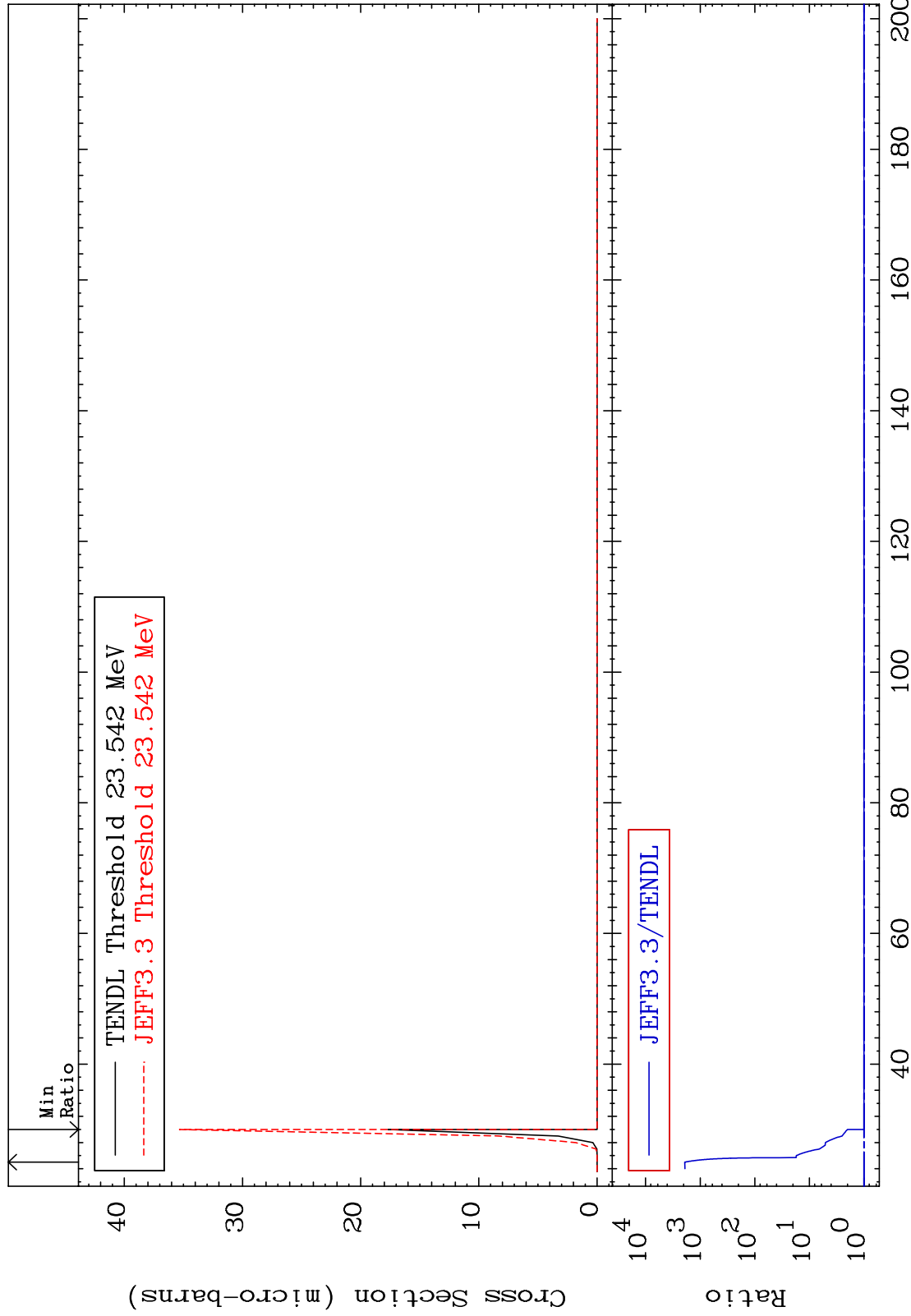
44-Ru-100

MAT 4437

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

44-Ru-100

Radionuclide Production Cross Section 0.000 To 9999. %

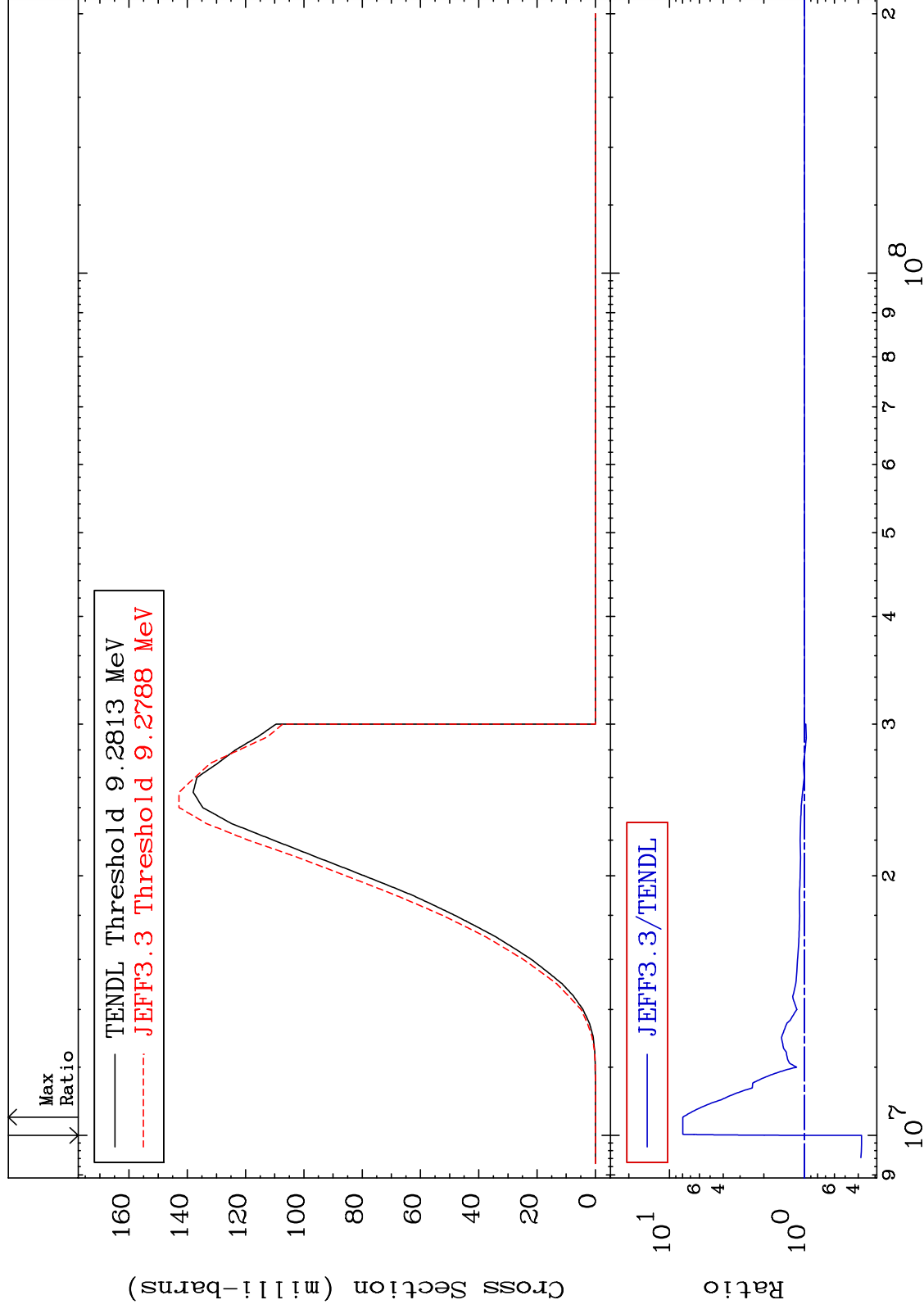


MAT 4437

(n, n') p: 43-Tc-99g

44-Ru-100

Radionuclide Production Cross Section -62.16 To 696.8 %



82

Incident Energy (eV)

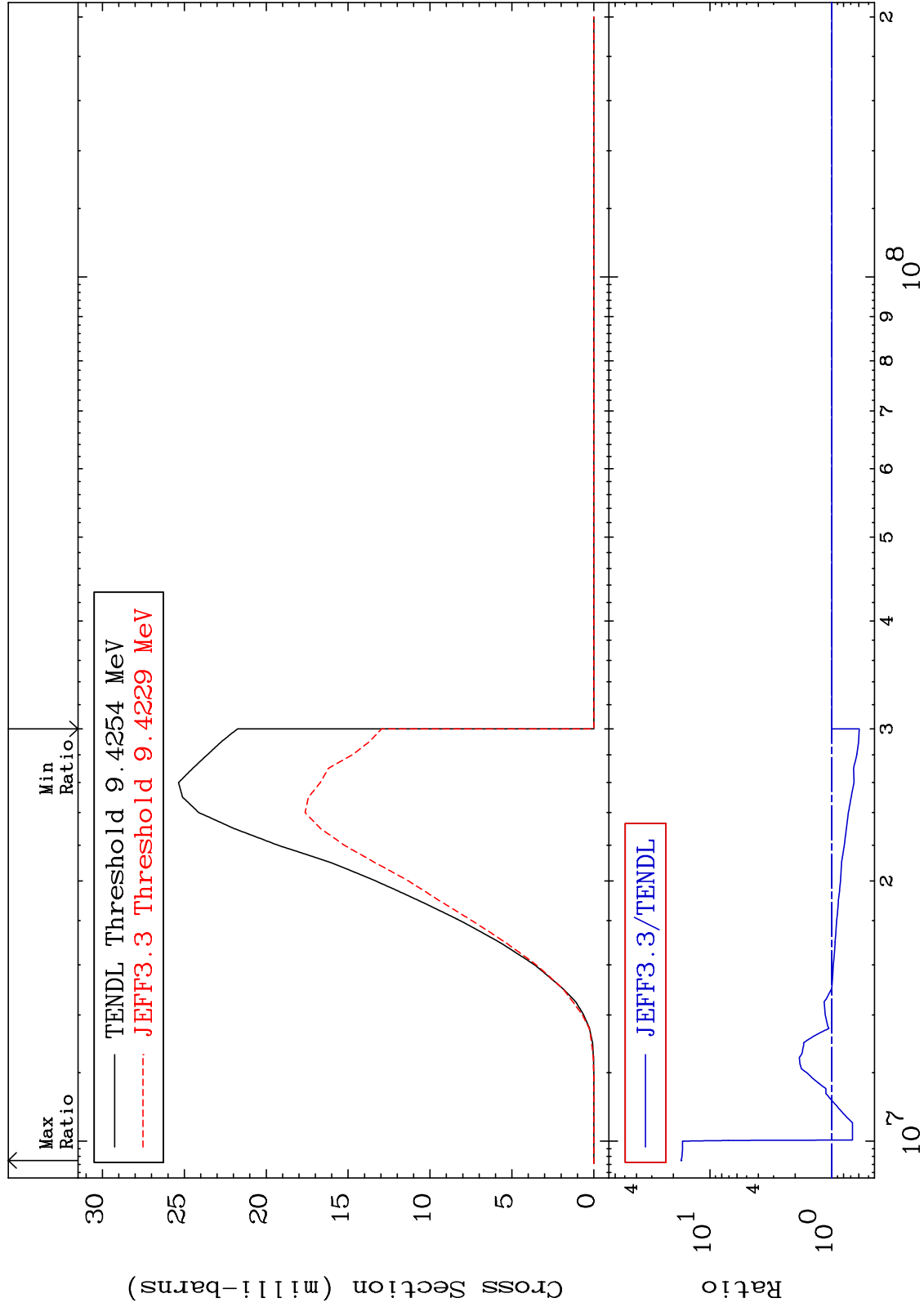
44-Ru-100

MAT 4437

(n, n') p:43-Tc-99m2

44-Ru-100

Radionuclide Production Cross Section -40.48 To 1626. %



83

Incident Energy (eV)

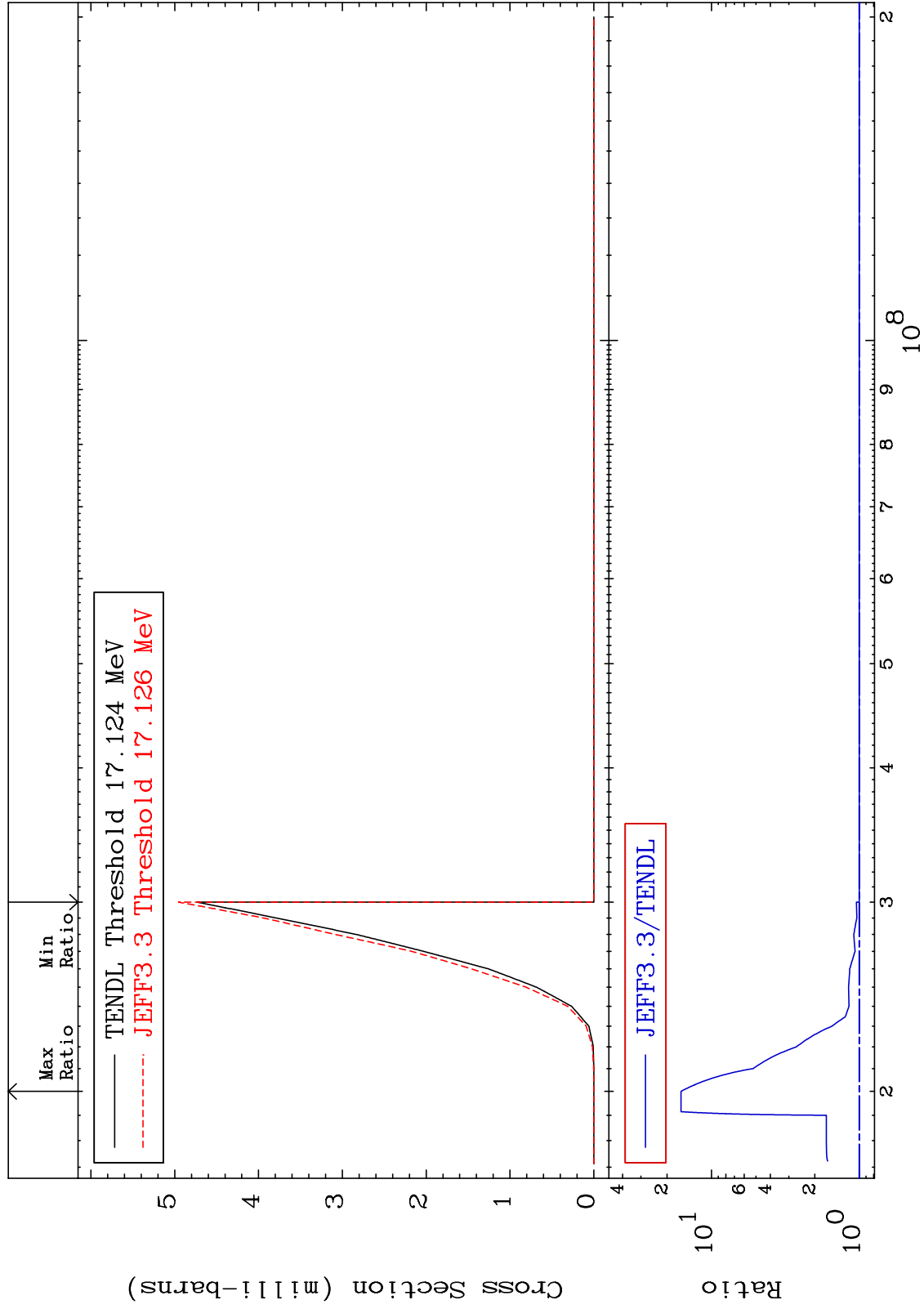
44-Ru-100

MAT 4437

(n, n') t: 43-Tc-97g

44-Ru-100

Radionuclide Production Cross Section 0.000 To 1507. %

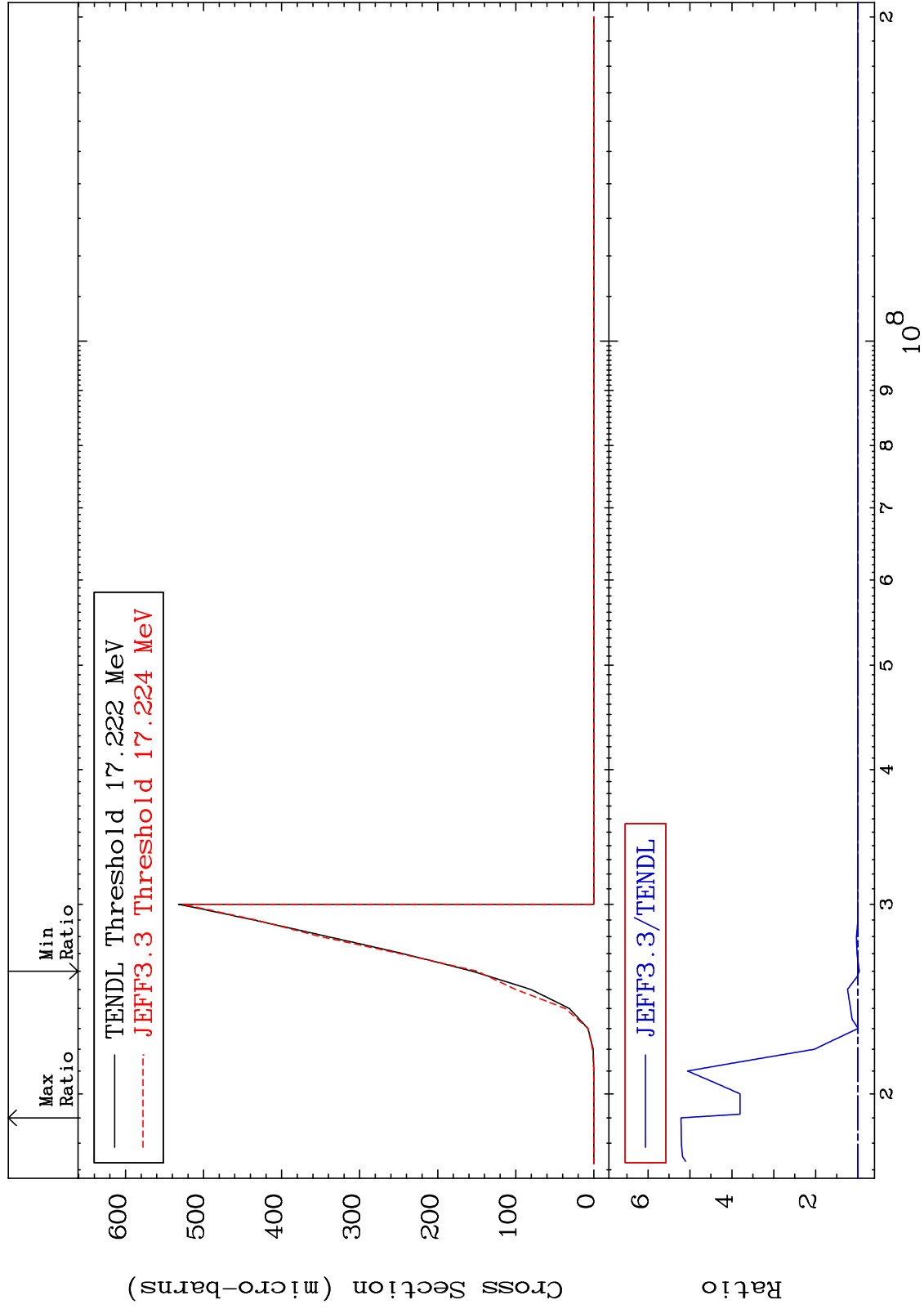


MAT 4437

(n, n') t:43-Tc-97m1

44-Ru-100

Radionuclide Production Cross Section -3.868 To 421.2 %



85

Incident Energy (eV)

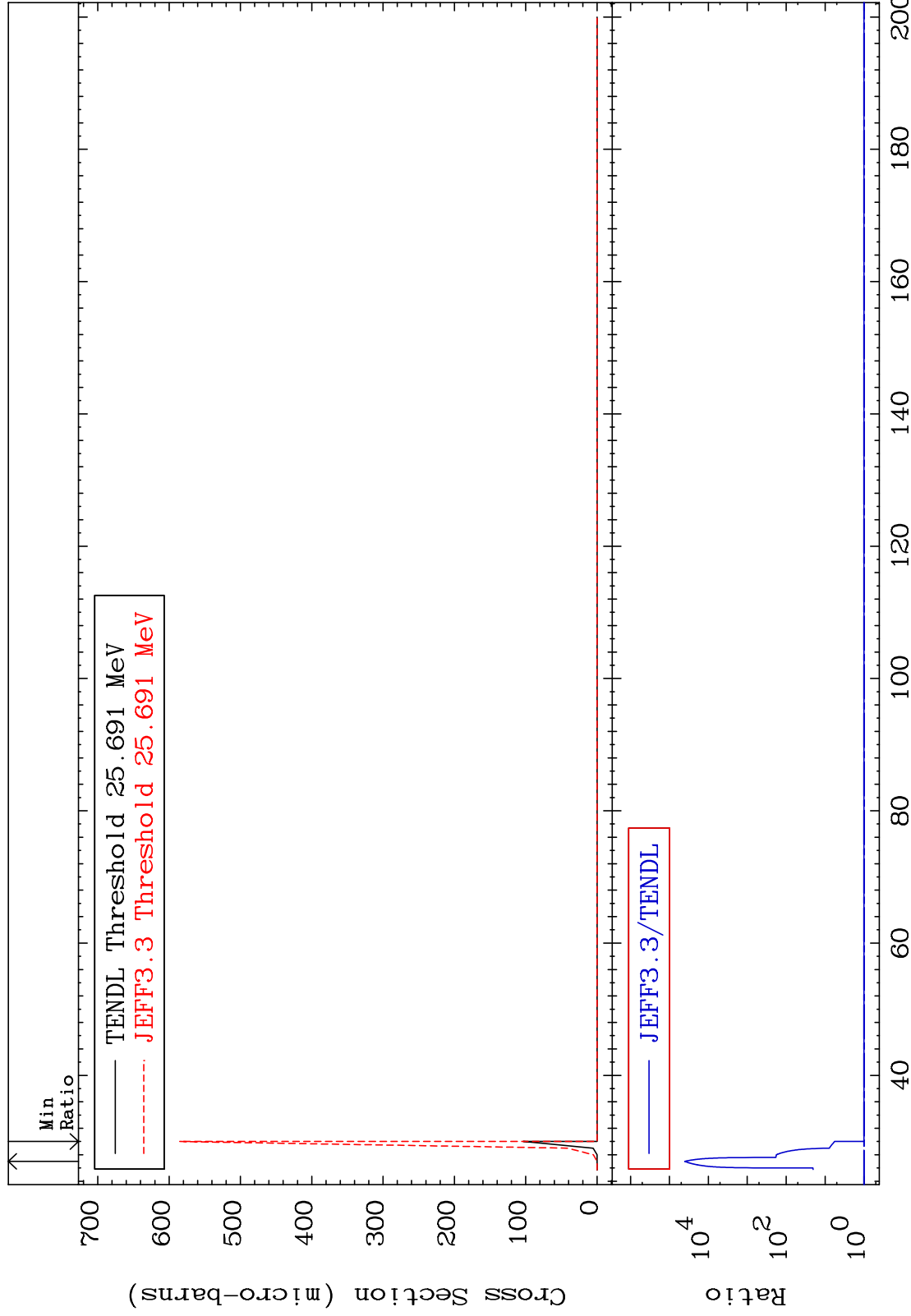
44-Ru-100

MAT 4437

(n,3n) p: 43-Tc-97g

44-Ru-100

Radionuclide Production Cross Section 0.000 To 9999. %

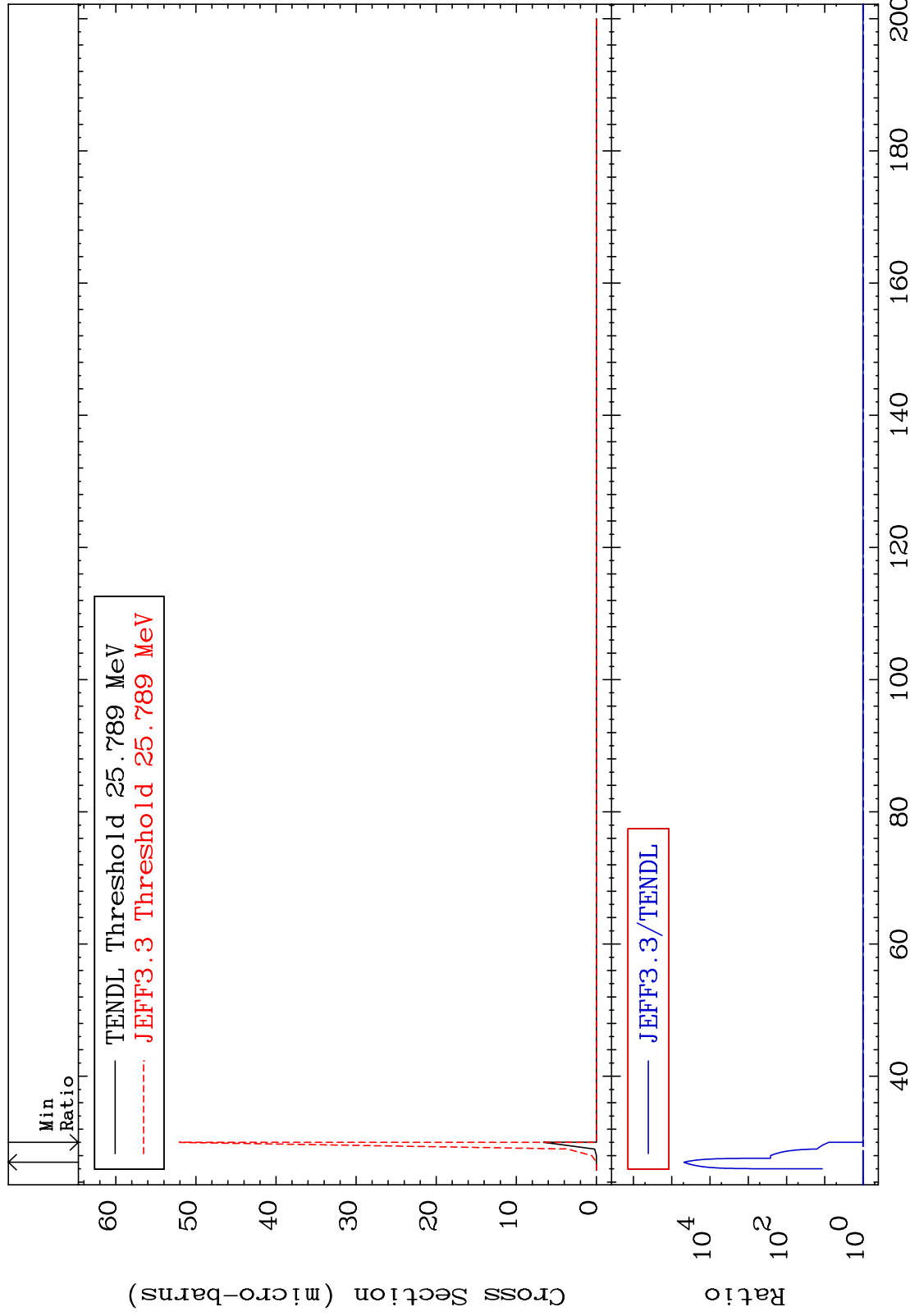


MAT 4437

(n,3n) p:43-Tc-97m1

44-Ru-100

Radionuclide Production Cross Section 0.000 To 9999. %



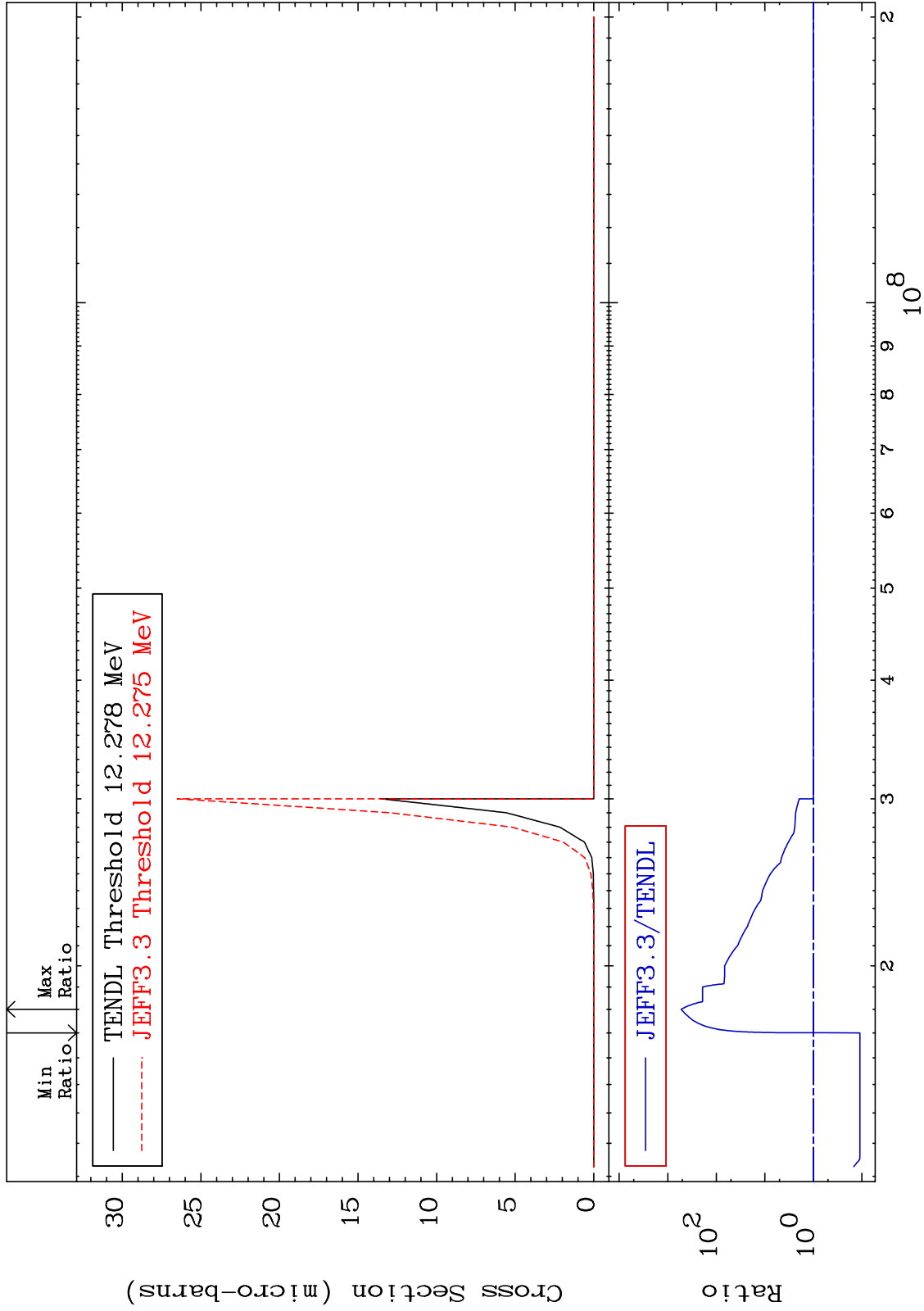


MAT 4437

(n, n') p  $\alpha$ : 41-Nb-95g

44-Ru-100

Radionuclide Production Cross Section -89.02 To 9999. %

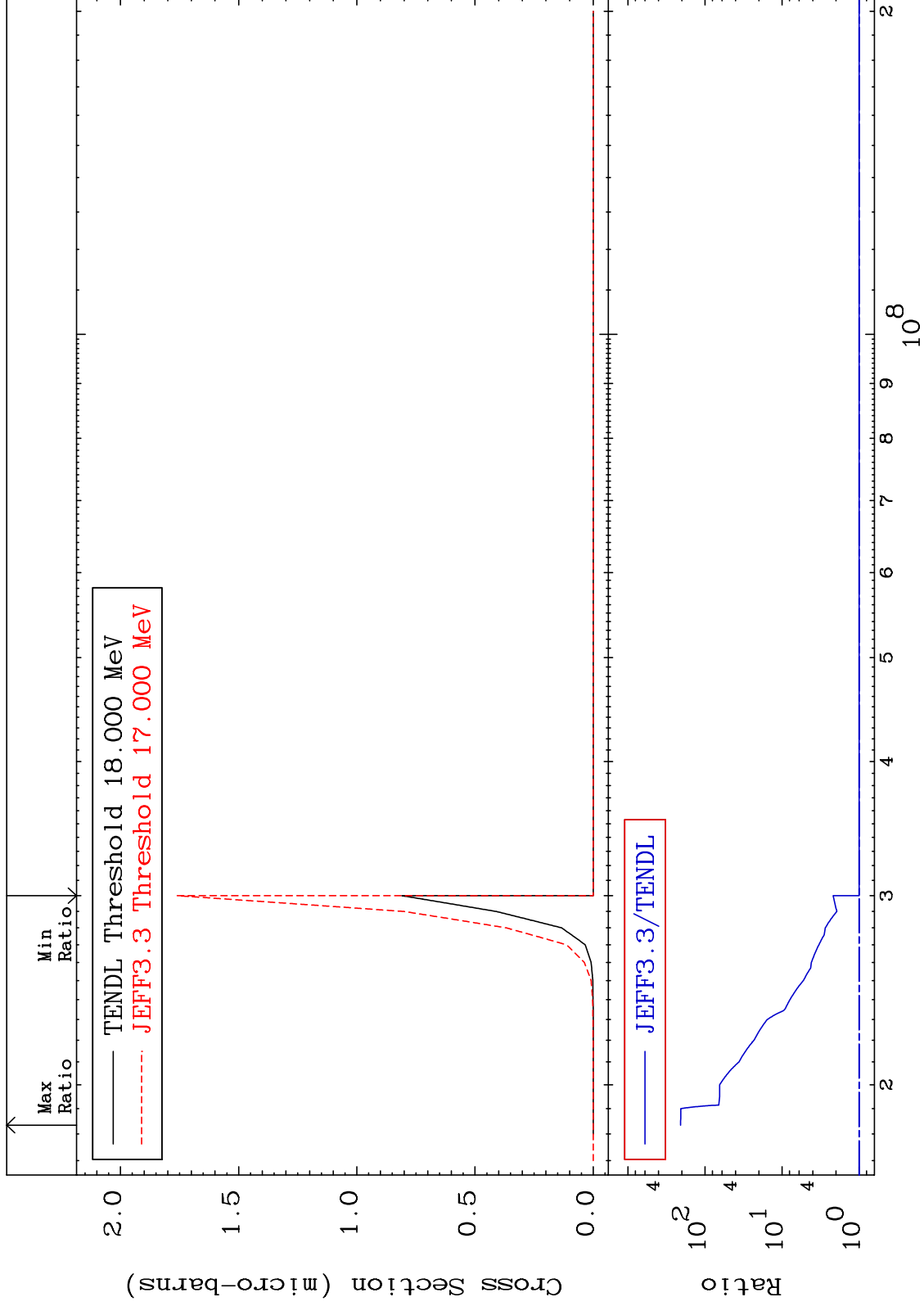


MAT 4437

(n, n') p  $\alpha$ : 41-Nb-95m1

44-Ru-100

Radionuclide Production Cross Section 0.000 To 9999. %



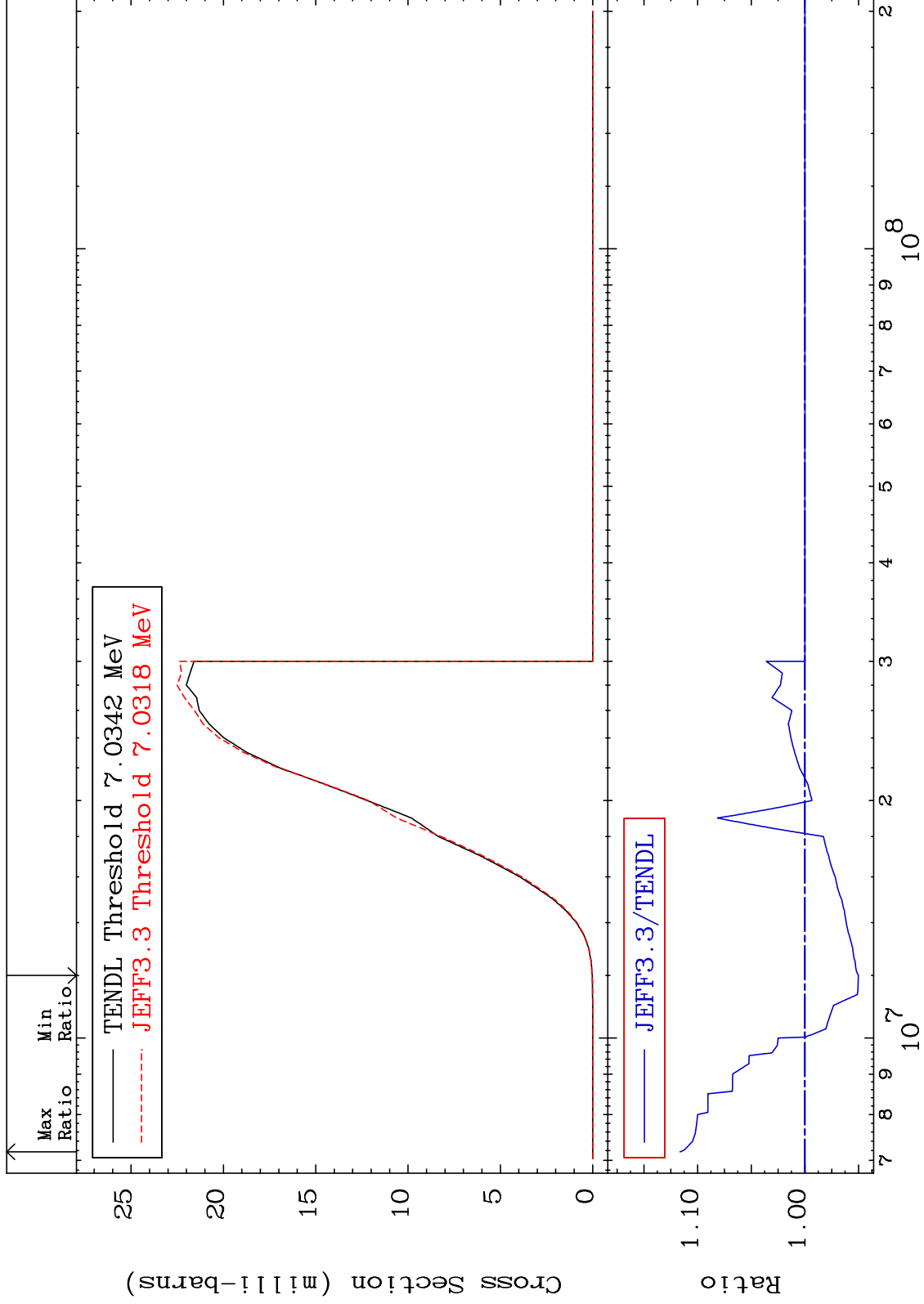
MAT 4437

(n, d) : 43-Tc-99g

44-Ru-100

Radionuclide Production Cross Section

-4.987 To 11.63 %



90

Incident Energy (eV)

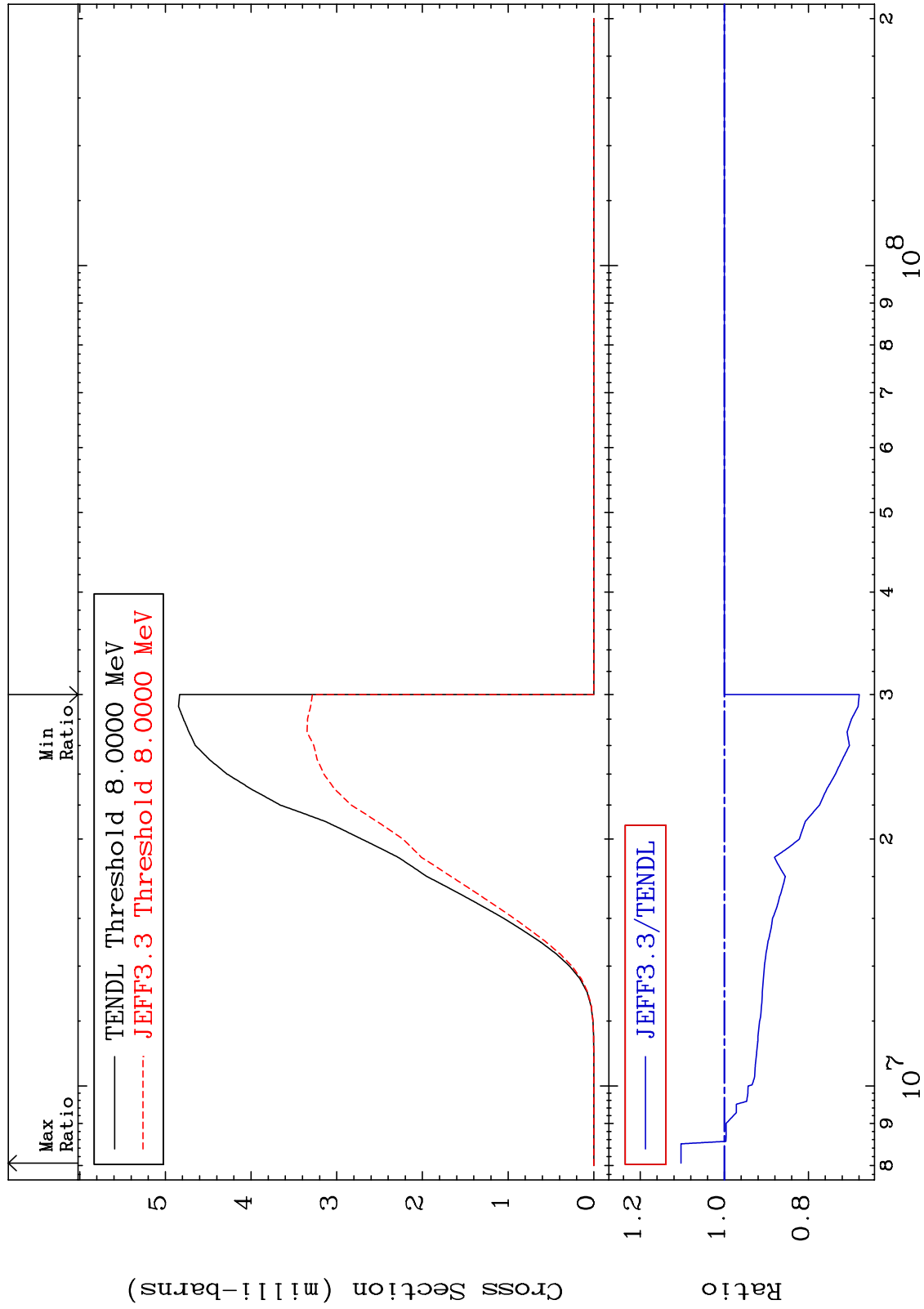
44-Ru-100

MAT 4437

(n, d) : 43-Tc-99m2

44-Ru-100

Radionuclide Production Cross Section -32.07 To 10.31 %



91

Incident Energy (eV)

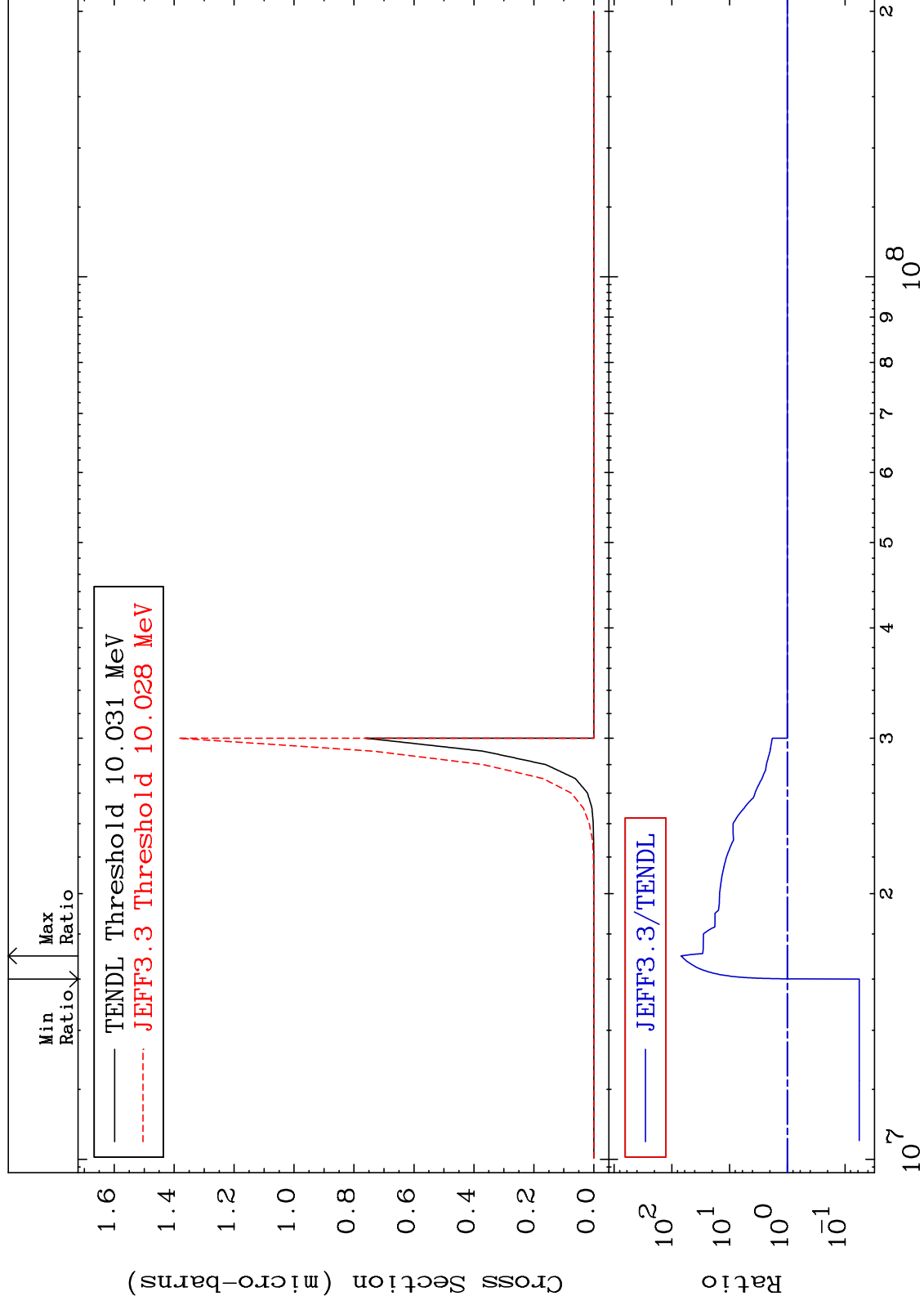
44-Ru-100

MAT 4437

(n,d)  $\alpha$ :41-Nb-95g

44-Ru-100

Radionuclide Production Cross Section -94.34 To 6821. %



Incident Energy (eV)

44-Ru-100

92

MAT 4437

(n, d)  $\alpha$ : 41-Nb-95m1

44-Ru-100

Radionuclide Production Cross Section -44.99 To 5991. %

