

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

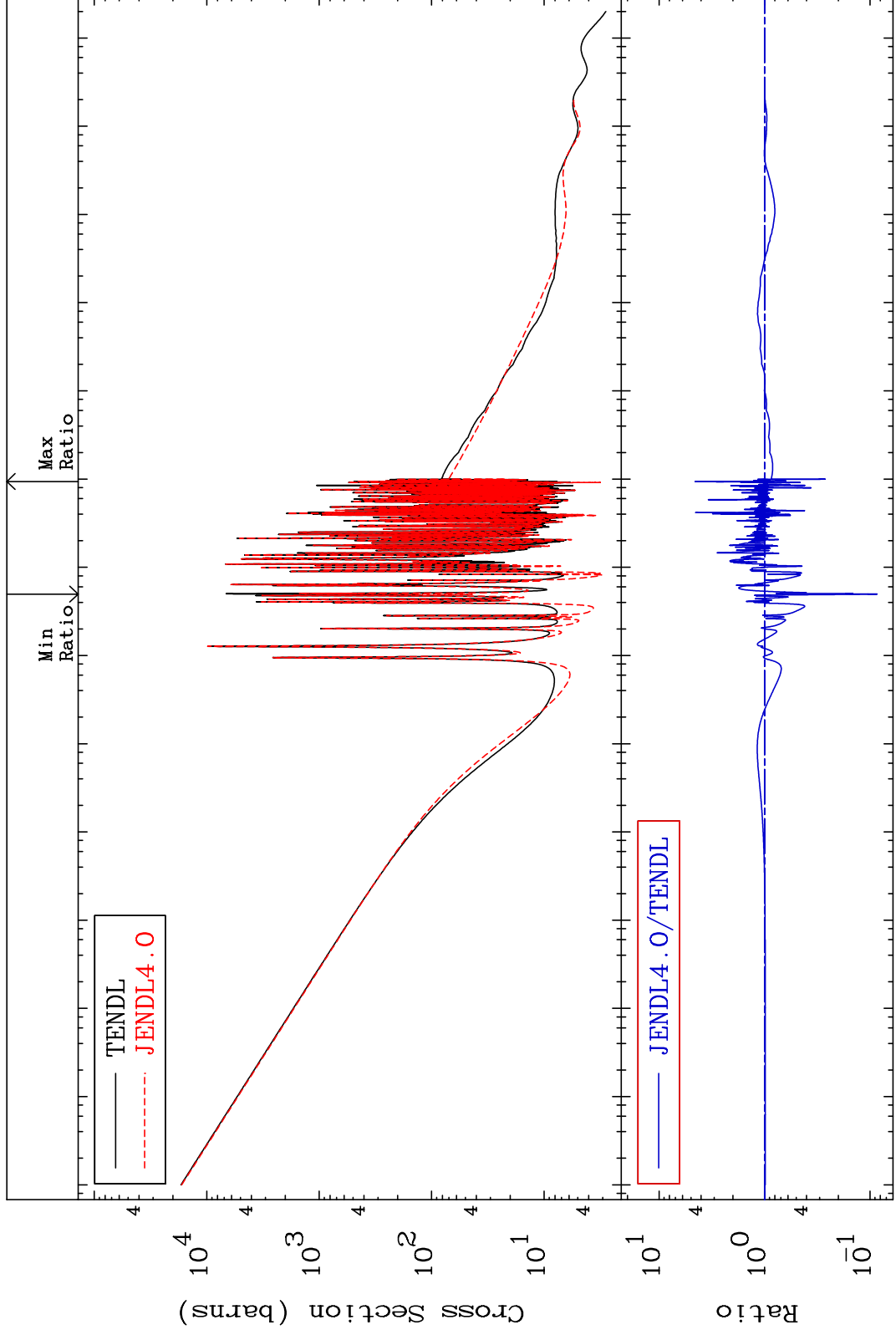
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 7634

Total  
Cross Section

76-0s-187  
-91.50 To 356.4 %



Incident Energy (eV)

76-0s-187

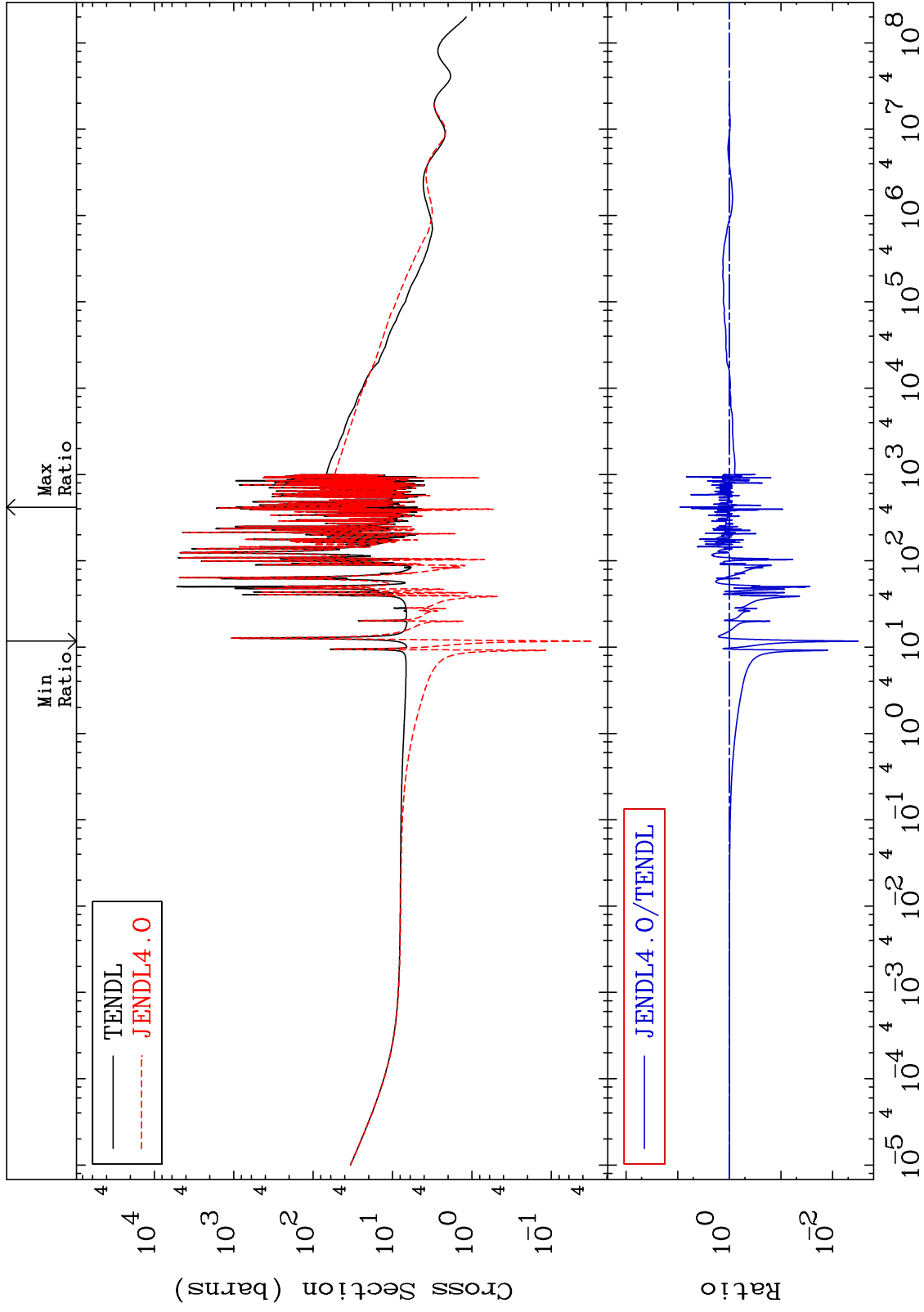
MAT 7634

Elastic

76-0s-187

Cross Section

-99.68 To 801.5 %



Incident Energy (eV)

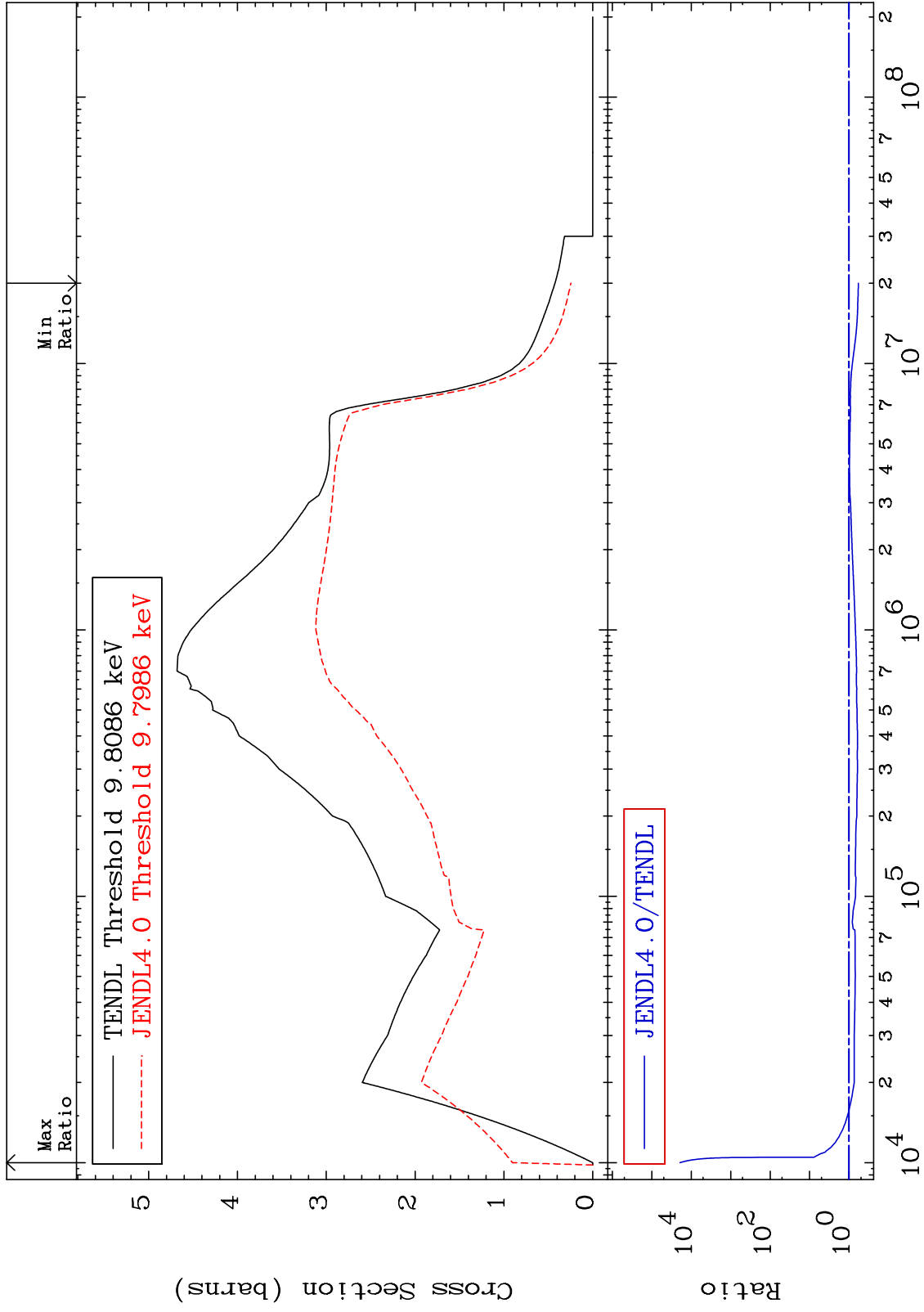
76-0s-187

2

MAT 7634

Inelastic  
Cross Section

76-0s-187  
-42.14 To 9999. %



76-0s-187

76-0s-187

3

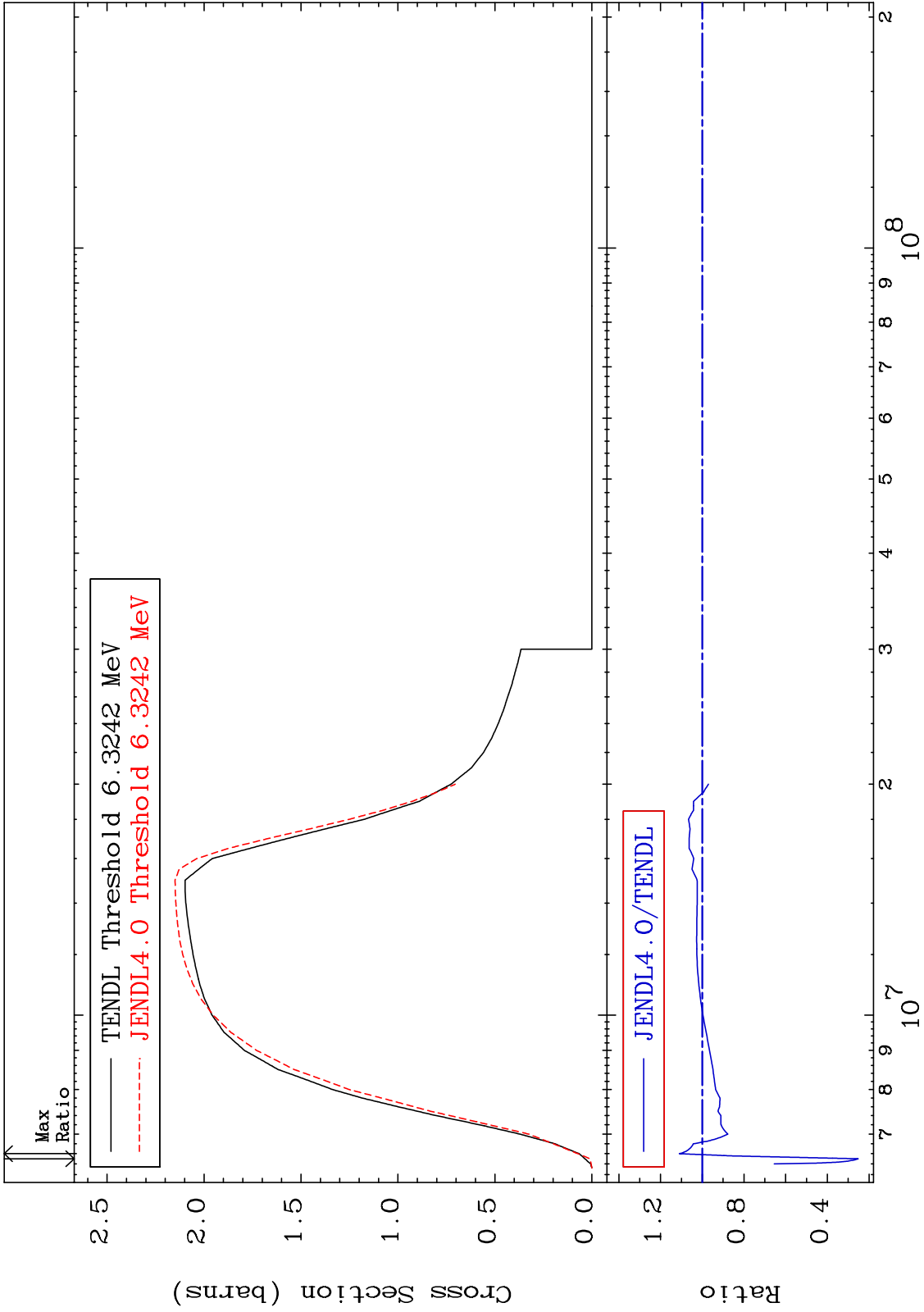
MAT 7634

(n,2n)

76-0s-187

Cross Section

-74.81 To 11.00 %



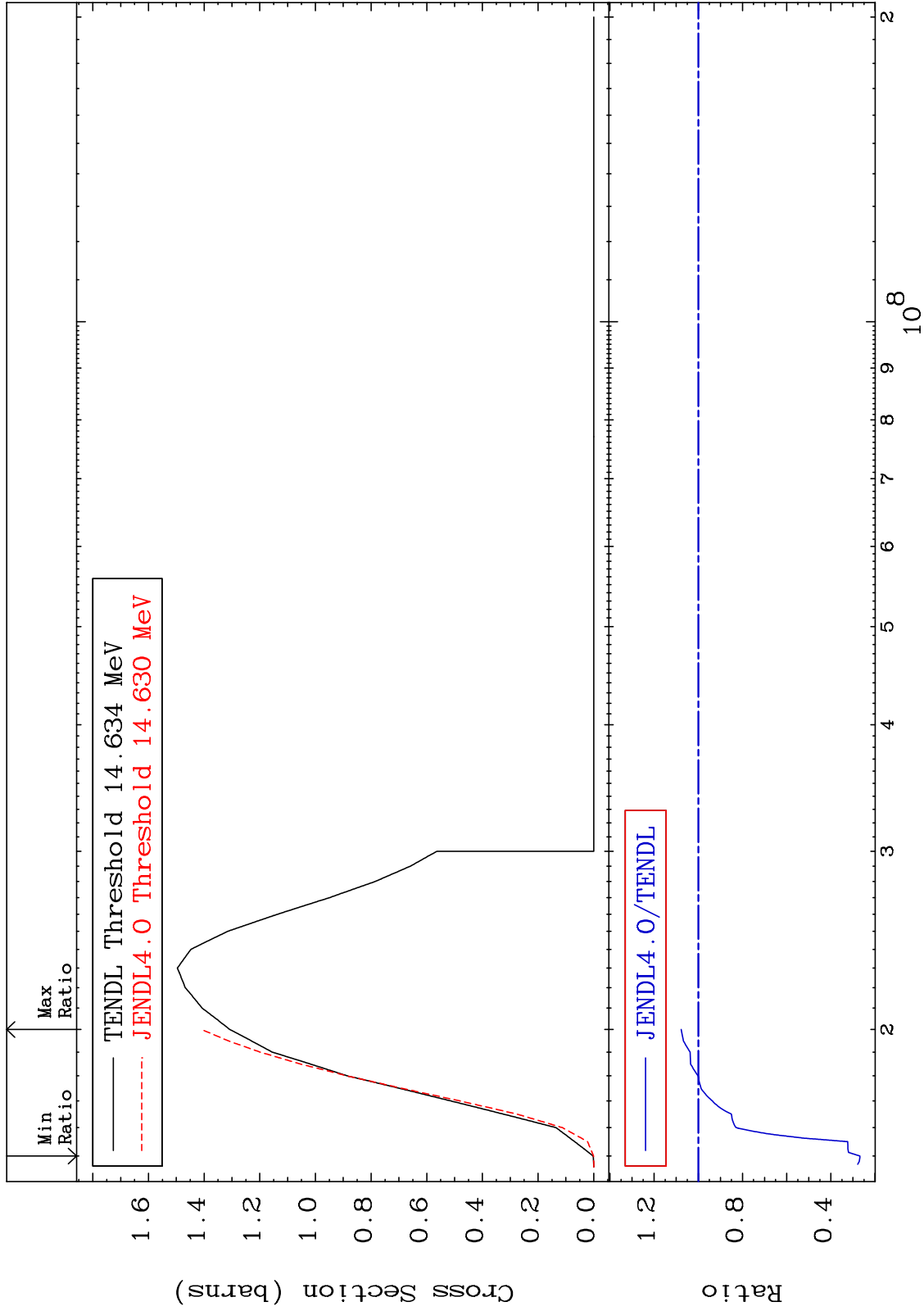
MAT 7634

(n, 3n)

76-0s-187

Cross Section

-73.15 To 7.734 %



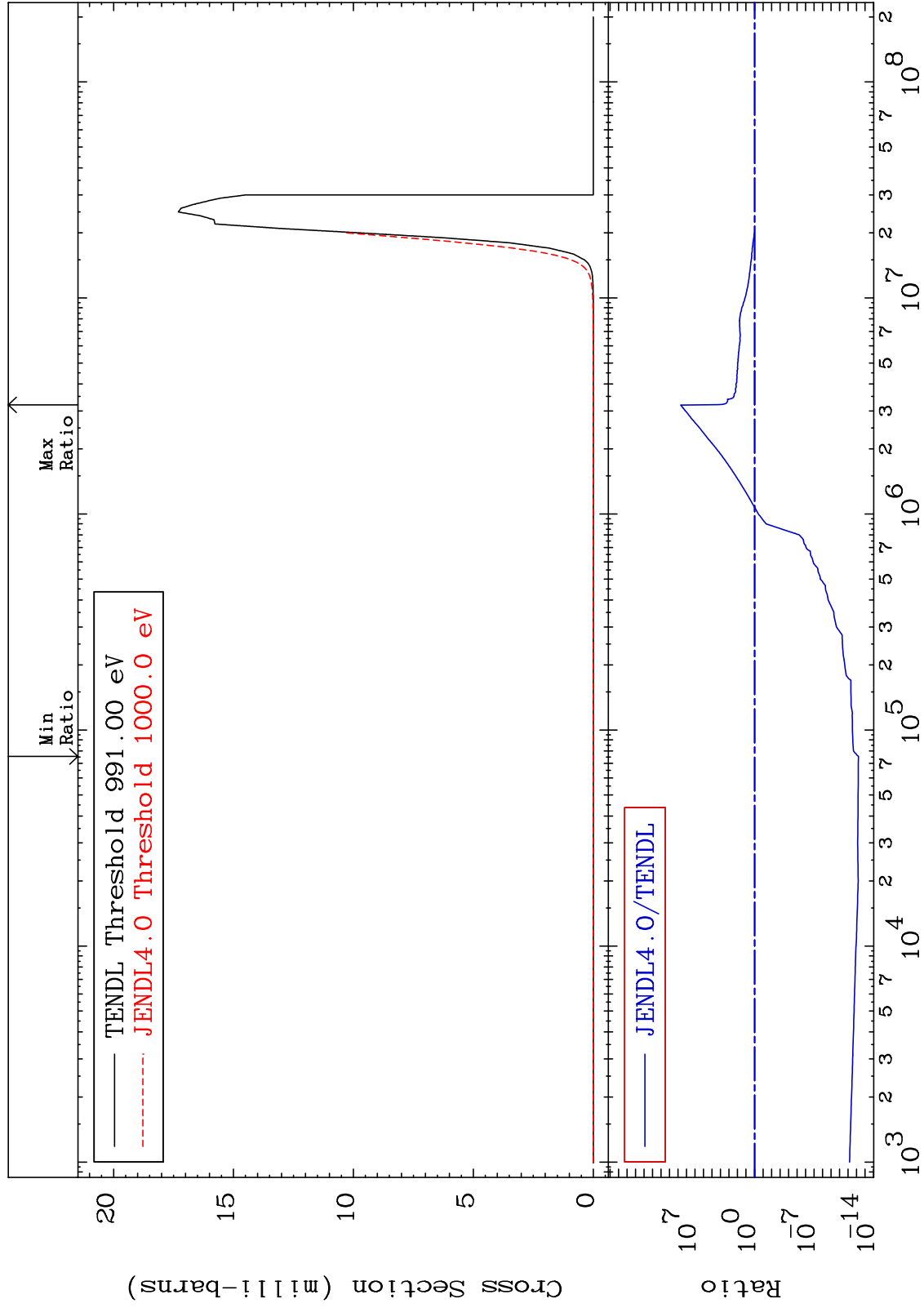
MAT 7634

(n,n')  $\alpha$

76-0s-187

Cross Section

-100.0 To 9999. %



76-0s-187

Incident Energy (eV)

6

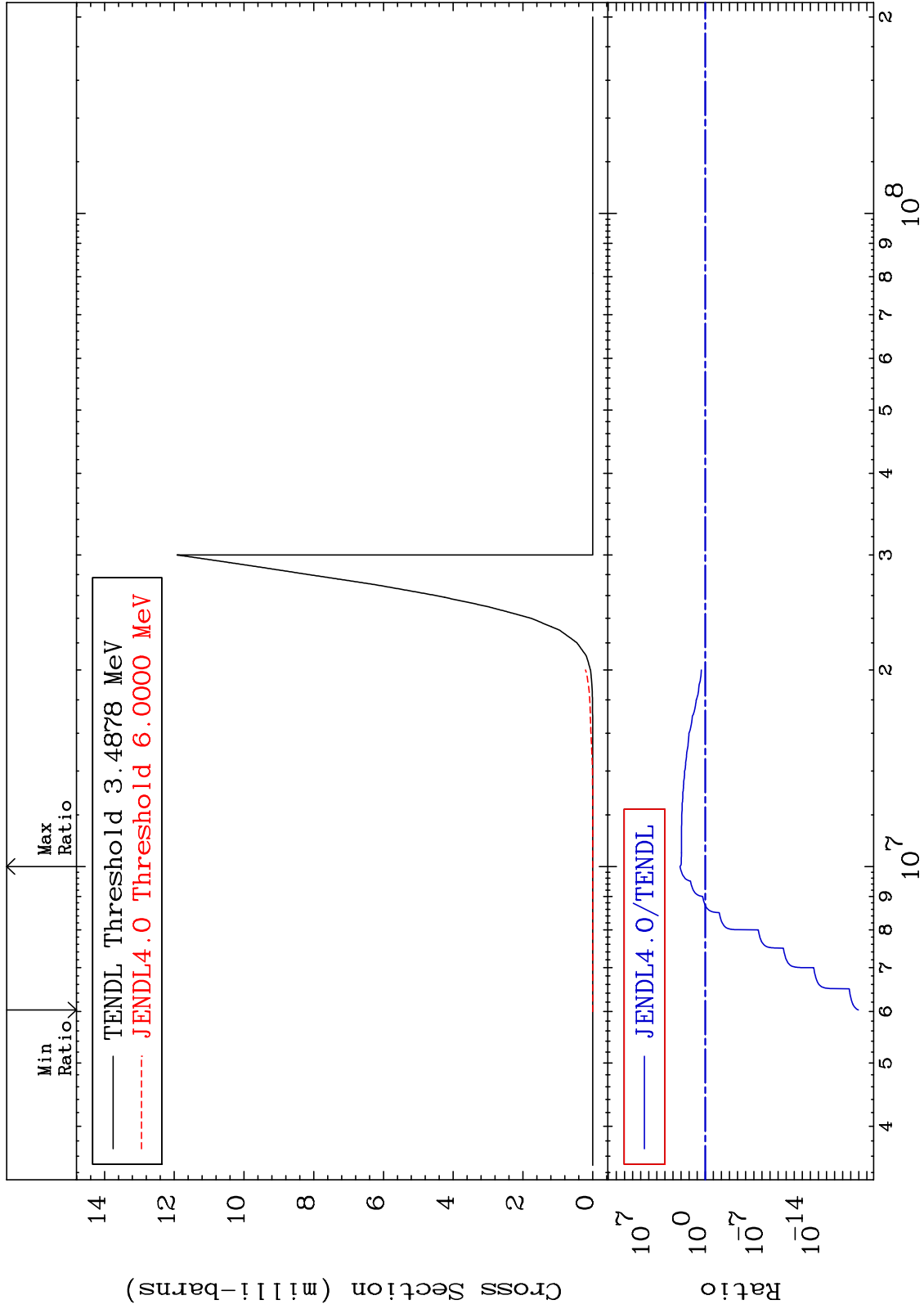
MAT 7634

(n,2n)  $\alpha$

76-0s-187

Cross Section

-100.0 To 9999. %

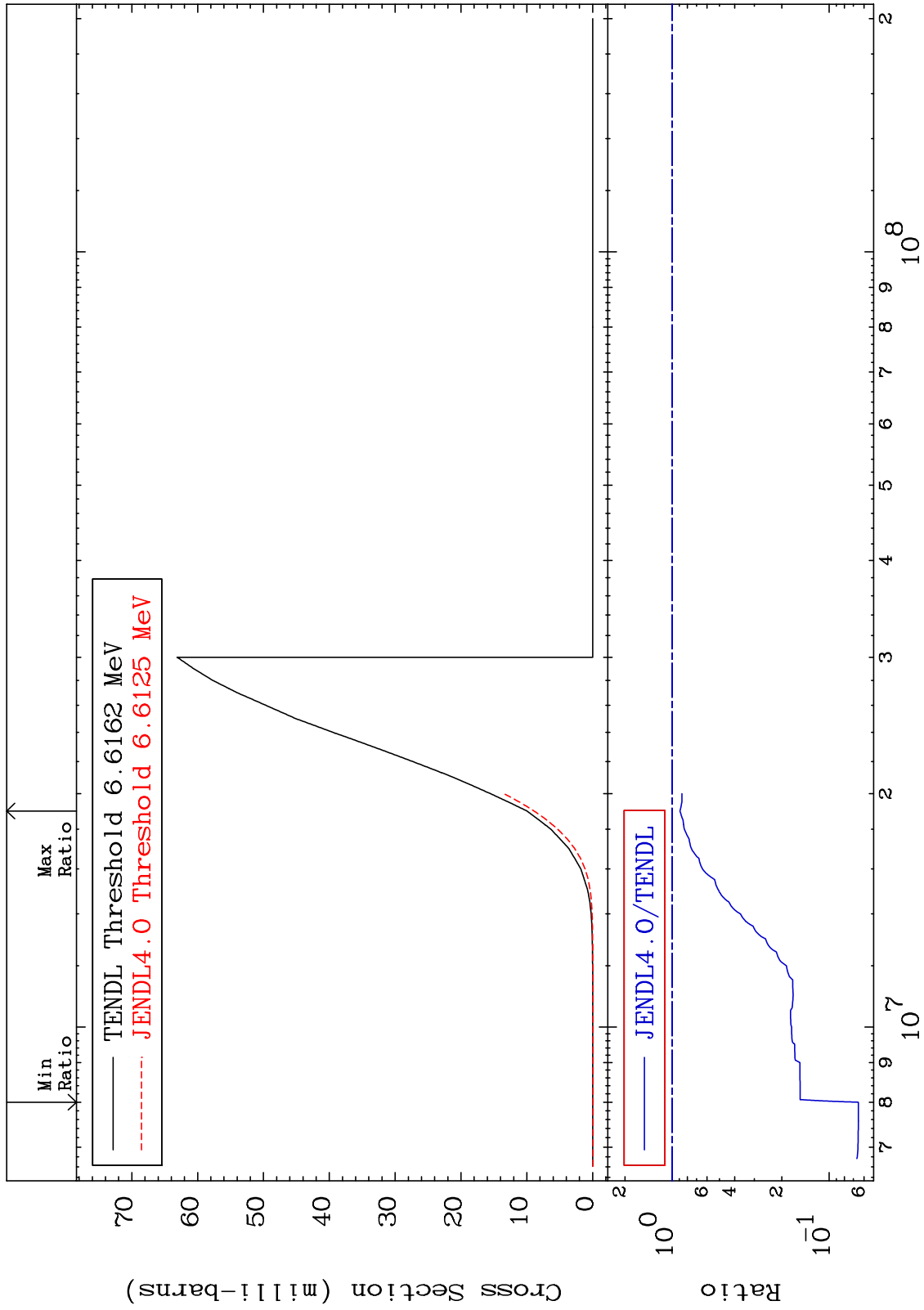




MAT 7634

(n,n') p  
Cross Section

76-0s-187  
-93.49 To -10.88%



8

Incident Energy (eV)

76-0s-187

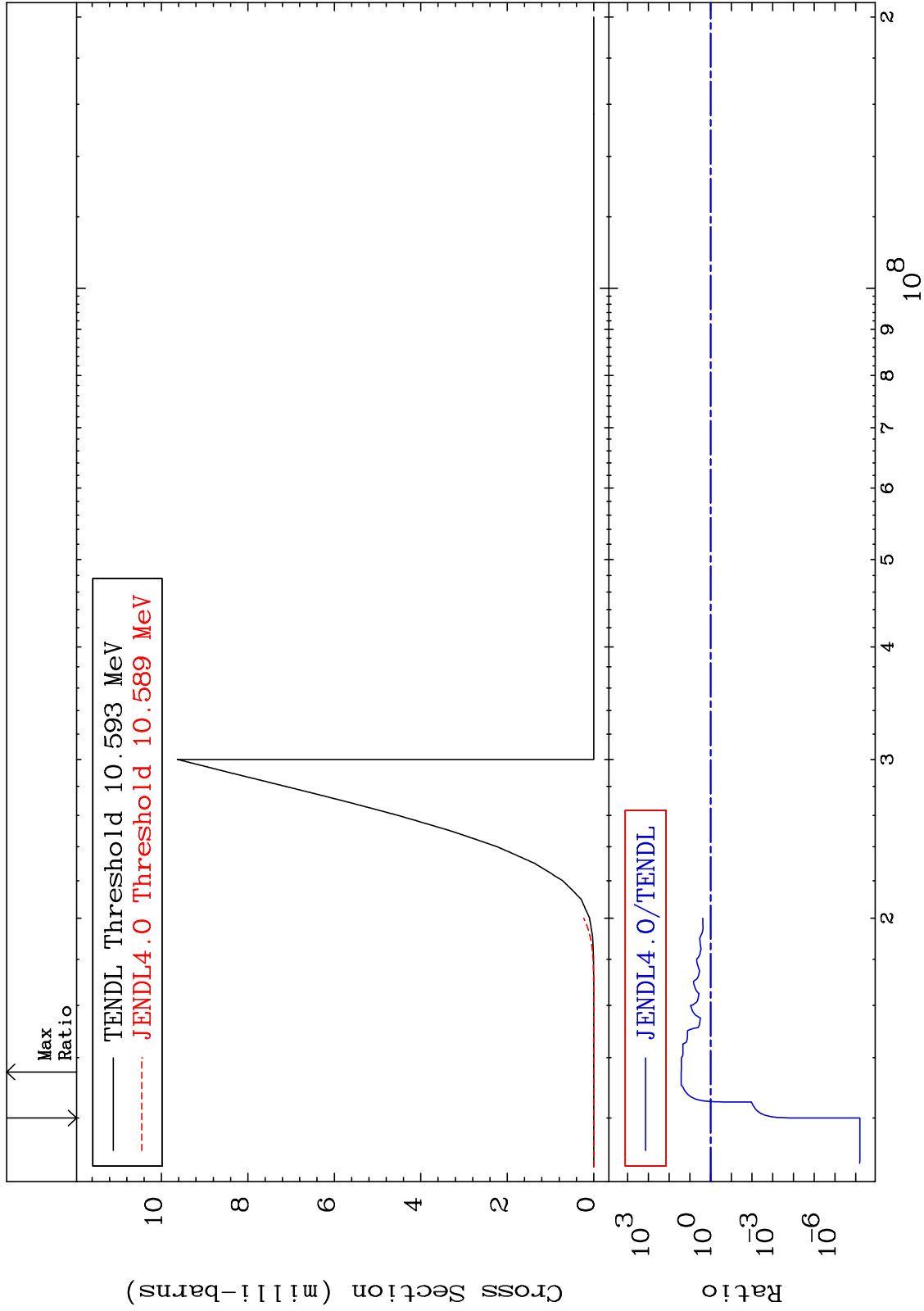
MAT 7634

(n,n') d

76-0s-187

Cross Section

-100.0 To 2502. %



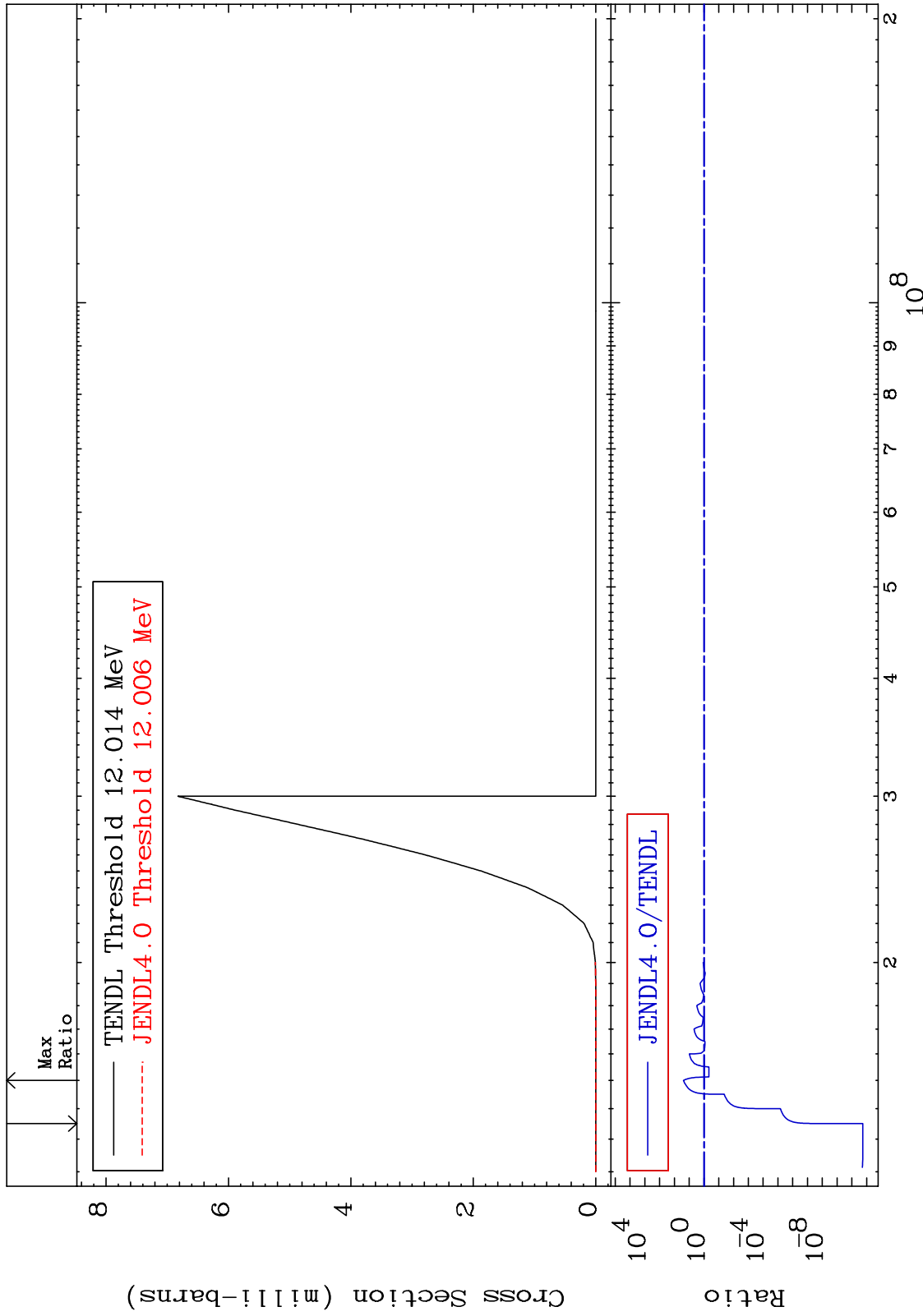
MAT 7634

(n,n') t

76-0s-187

Cross Section

-100.0 To 2326. %



10

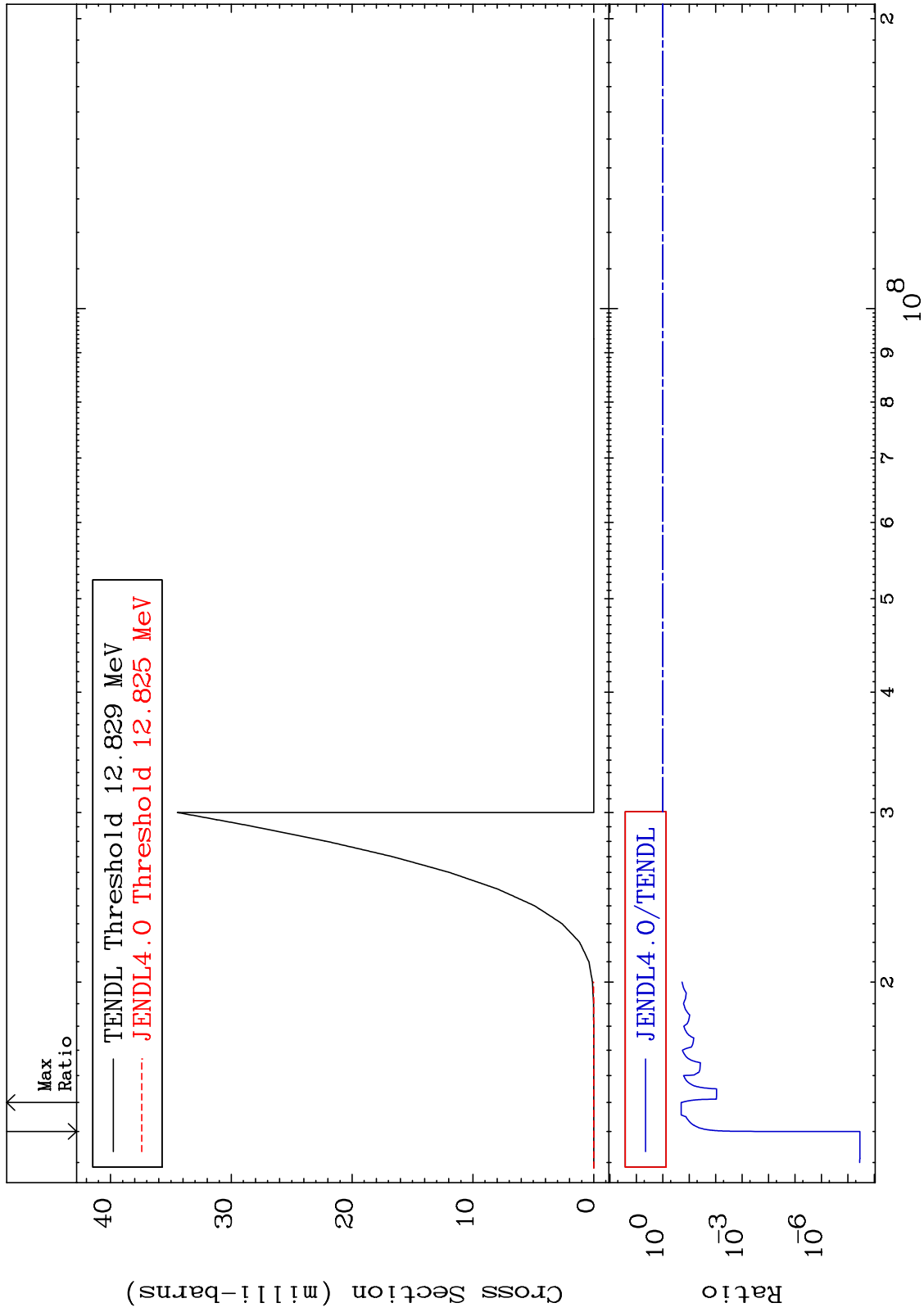
Incident Energy (eV)

76-0s-187

MAT 7634

(n,2n) p  
Cross Section

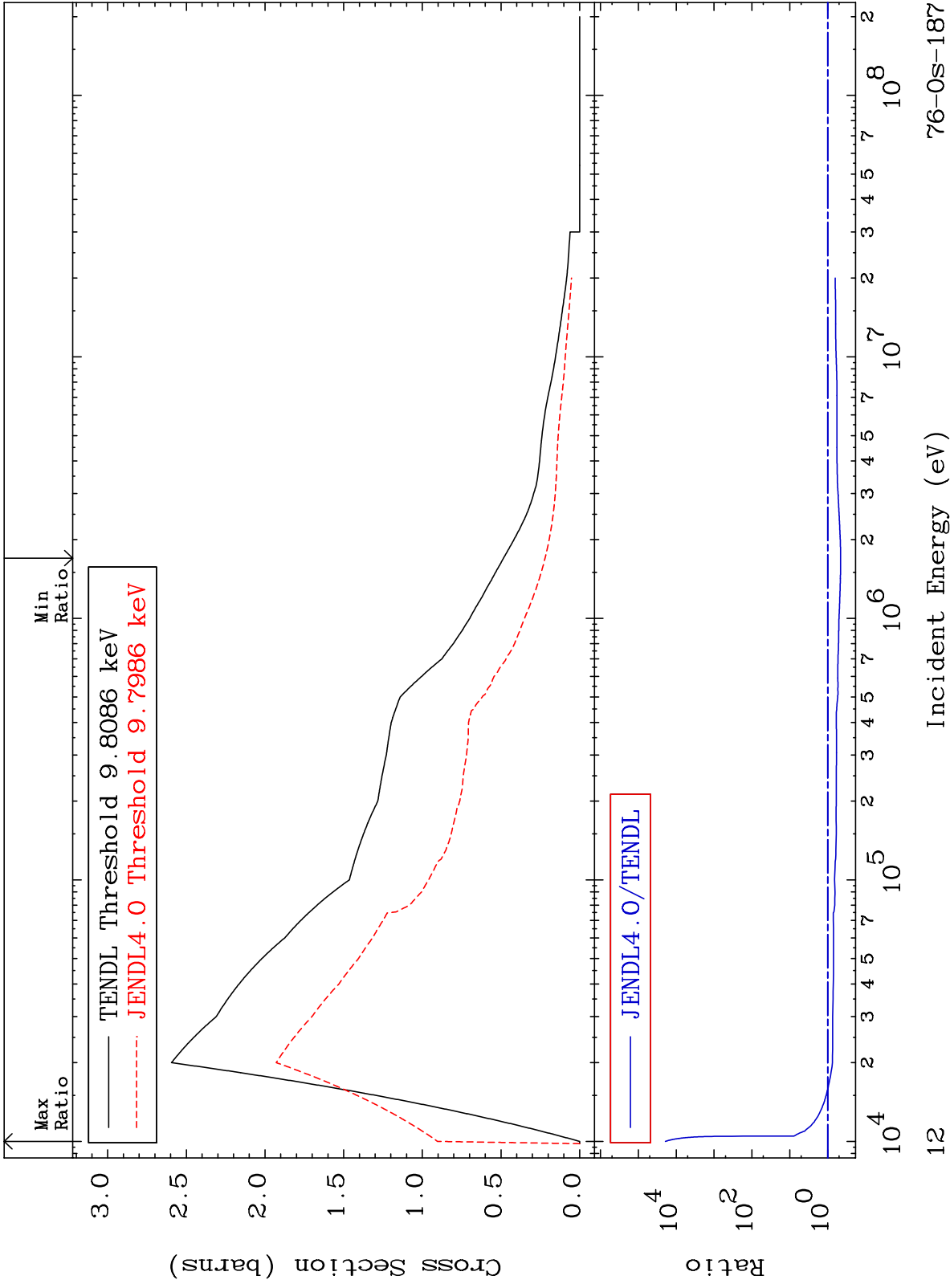
76-0s-187  
-100.0 To -80.03%



MAT 7634

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

76-0s-187  
-54.60 To 9999. %



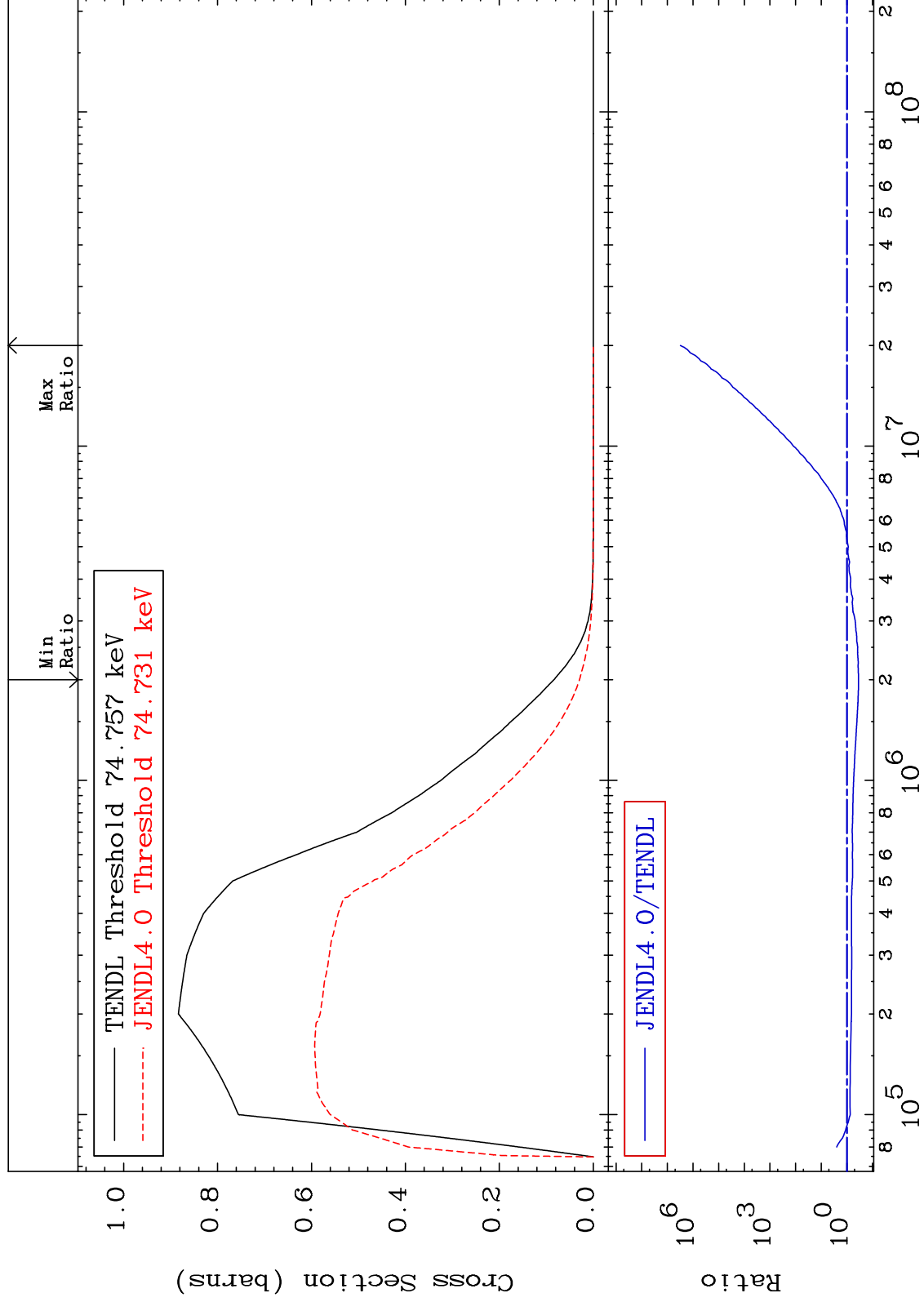
MAT 7634

MT= 52 (n,n') Level

76-0s-187

-64.96 To 9999. %

Cross Section



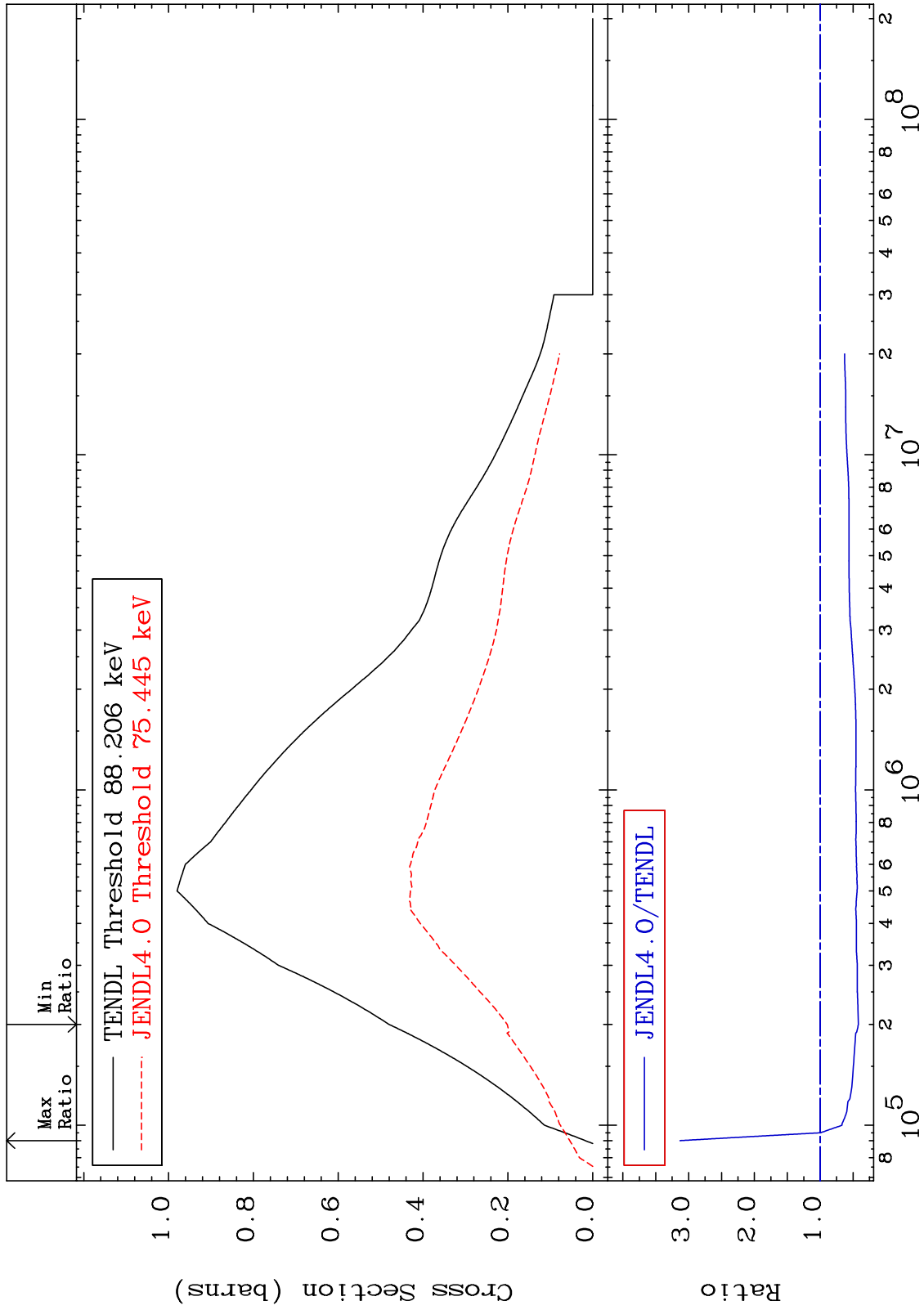
13

76-0s-187

MAT 7634

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

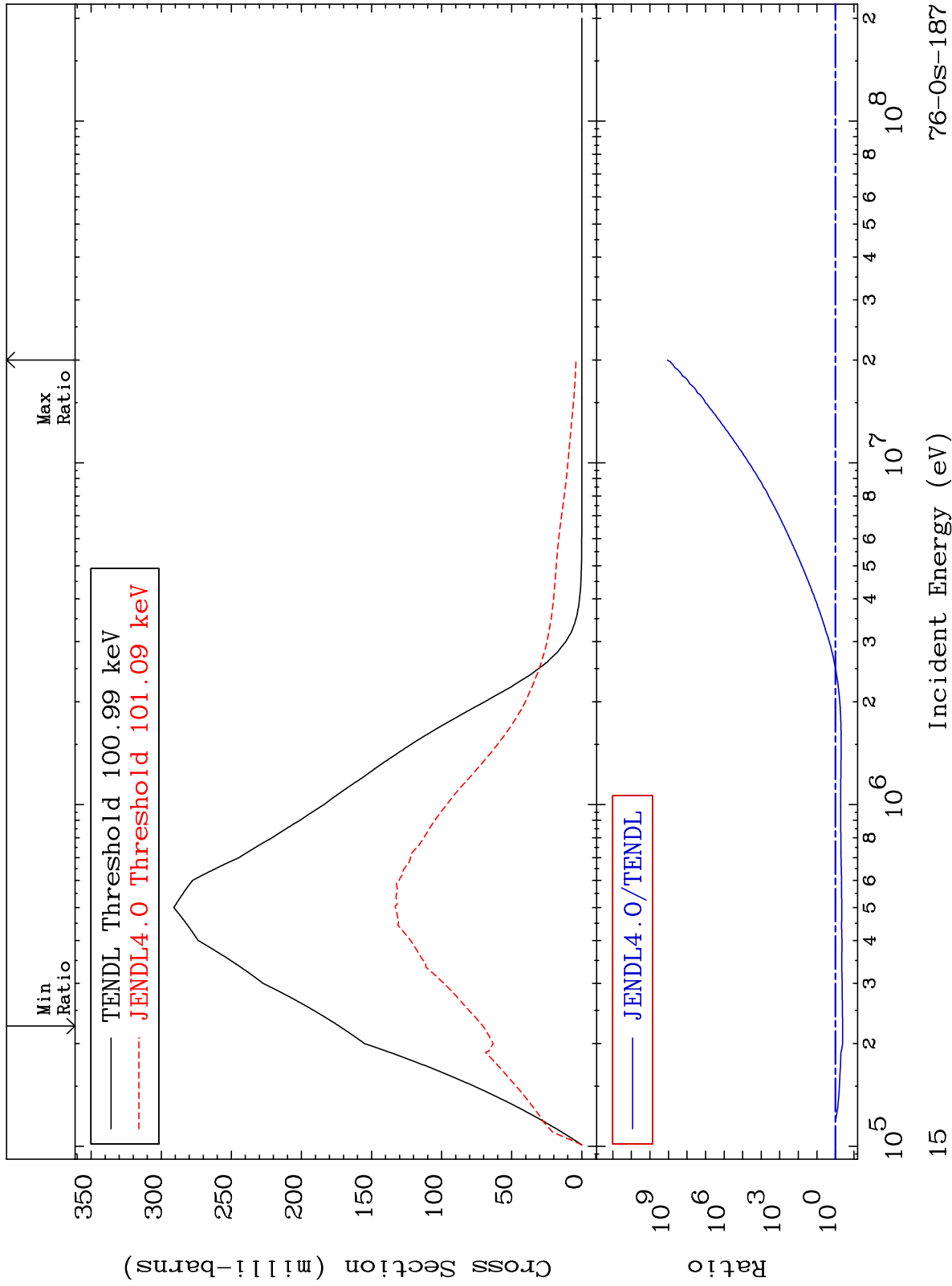
76-0s-187  
-58.08 To 213.1 %



MAT 7634

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

76-0s-187  
-59.30 To 9999. %



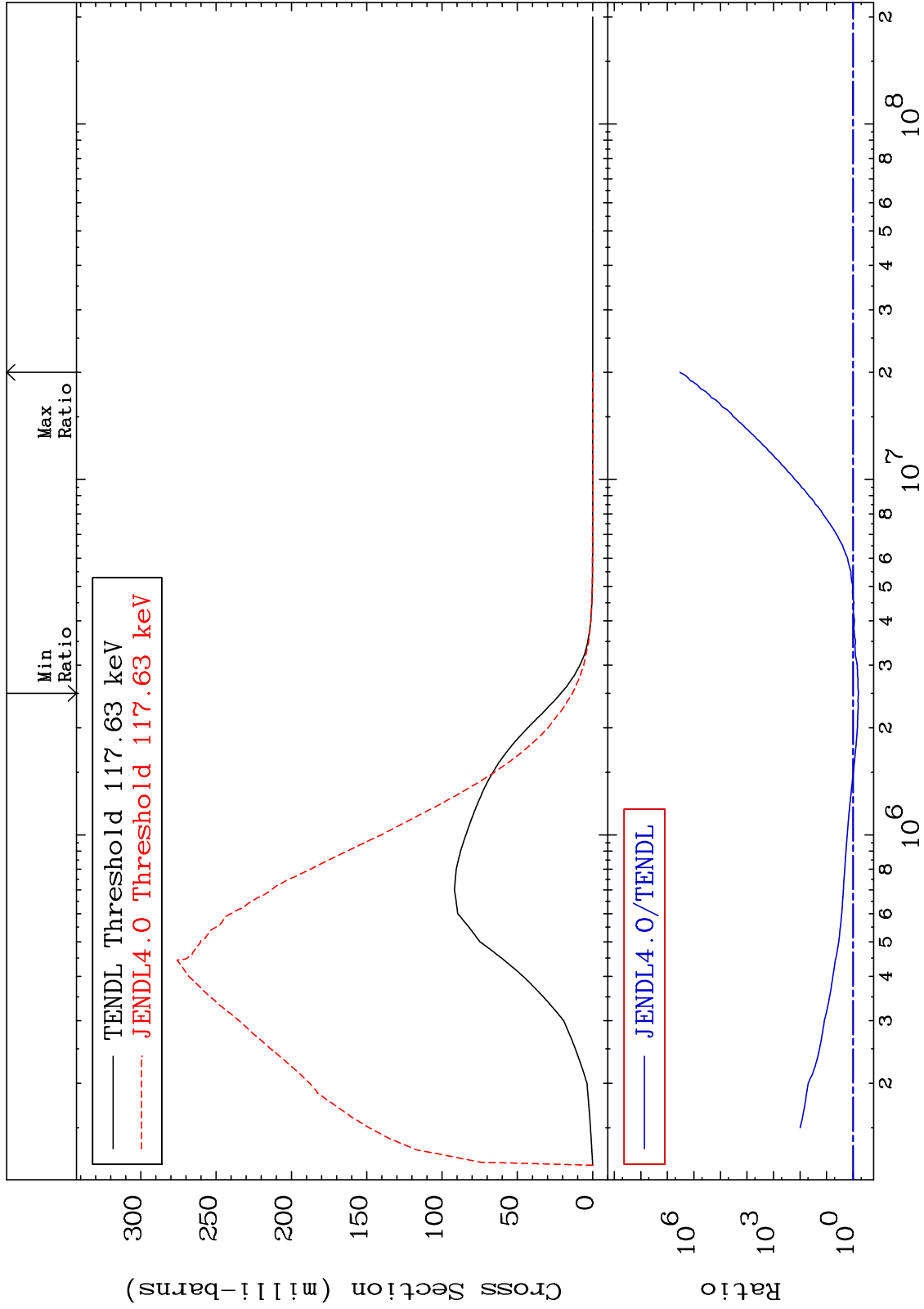
76-0s-187



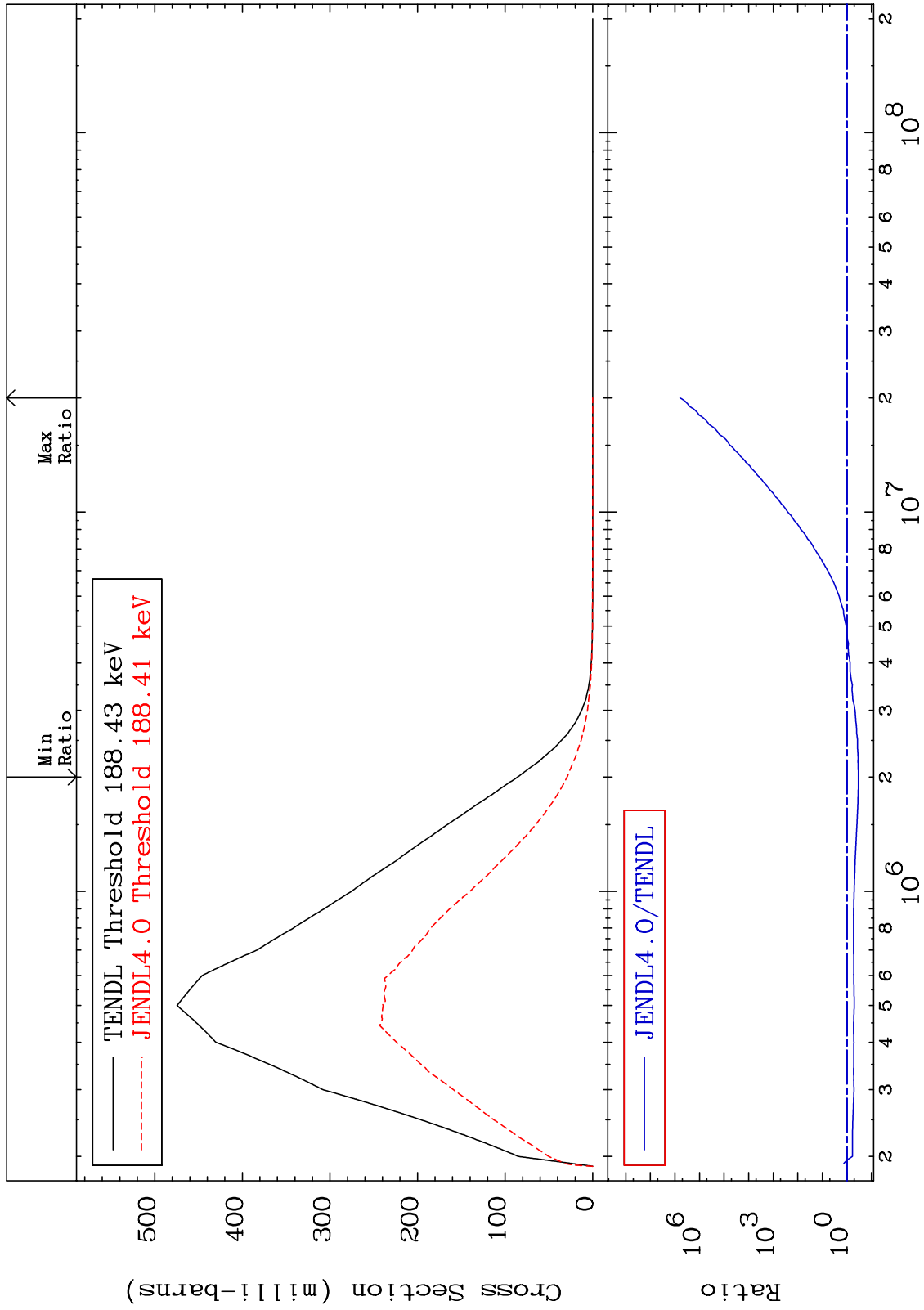
MAT 7634

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

76-0s-187  
-36.78 To 9999. %



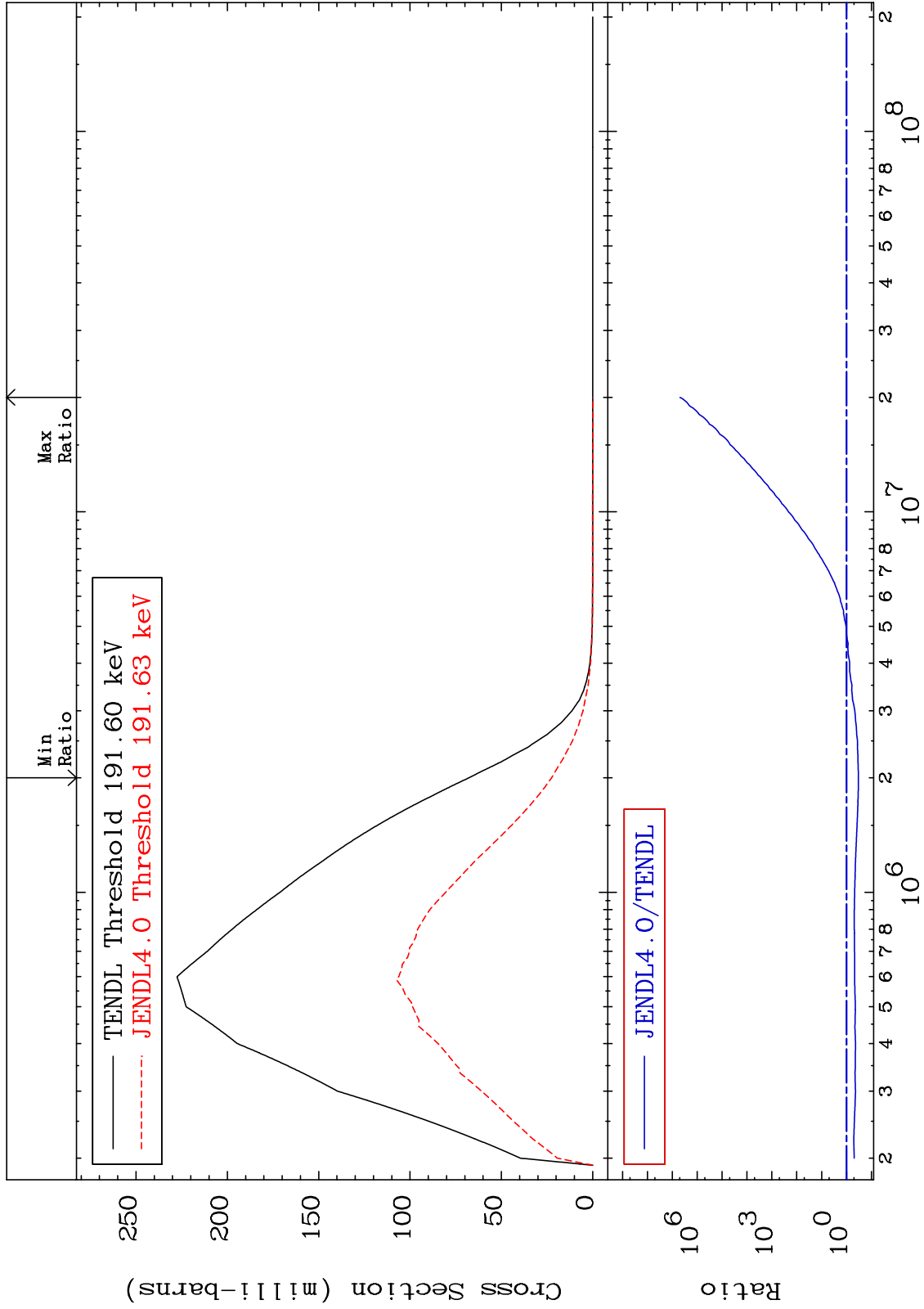
MAT 7634 MT= 56 (n,n') Level Cross Section 76-0s-187  
 -65.92 To 9999. %



MAT 7634

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

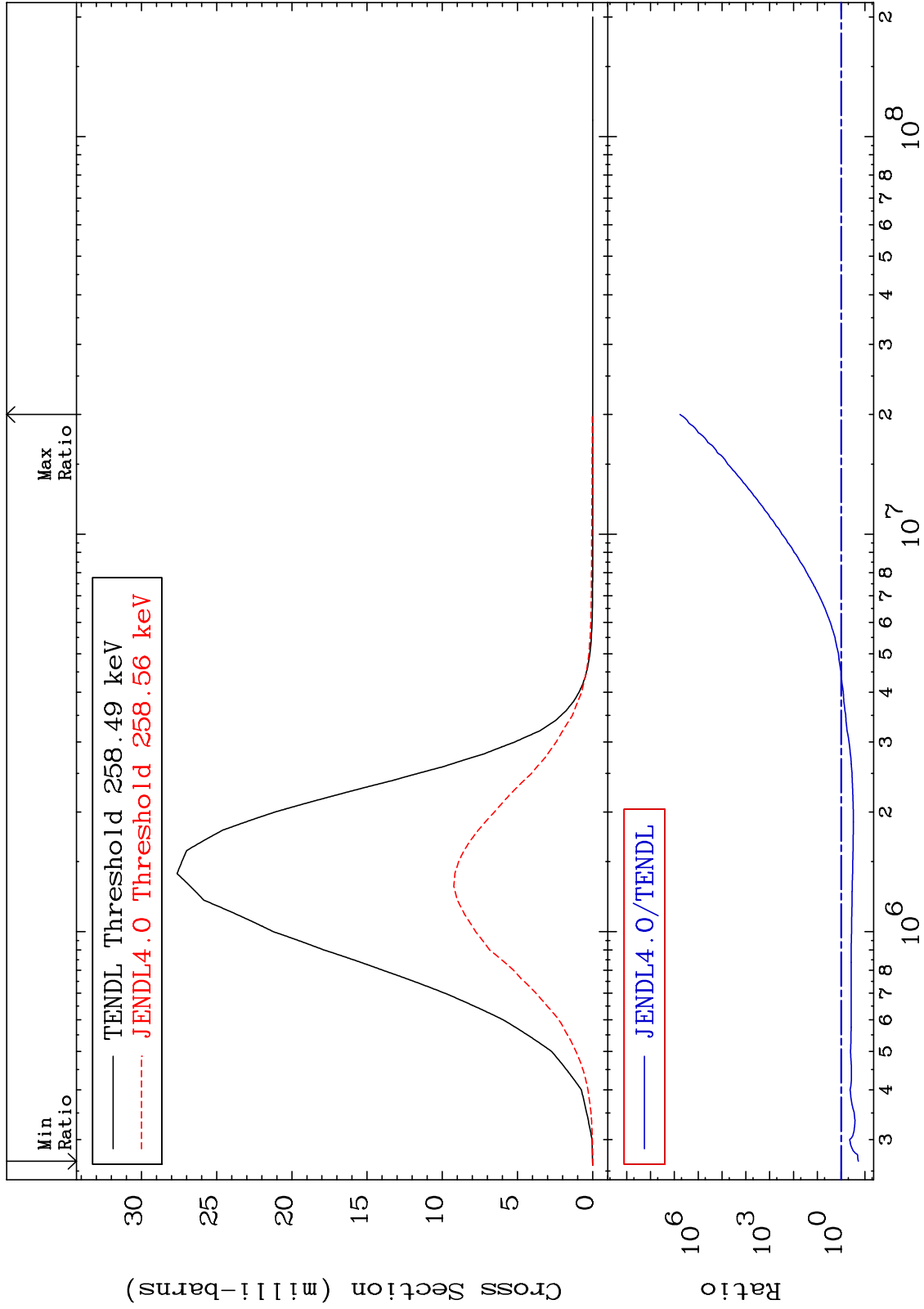
76-0s-187  
-66.77 To 9999. %



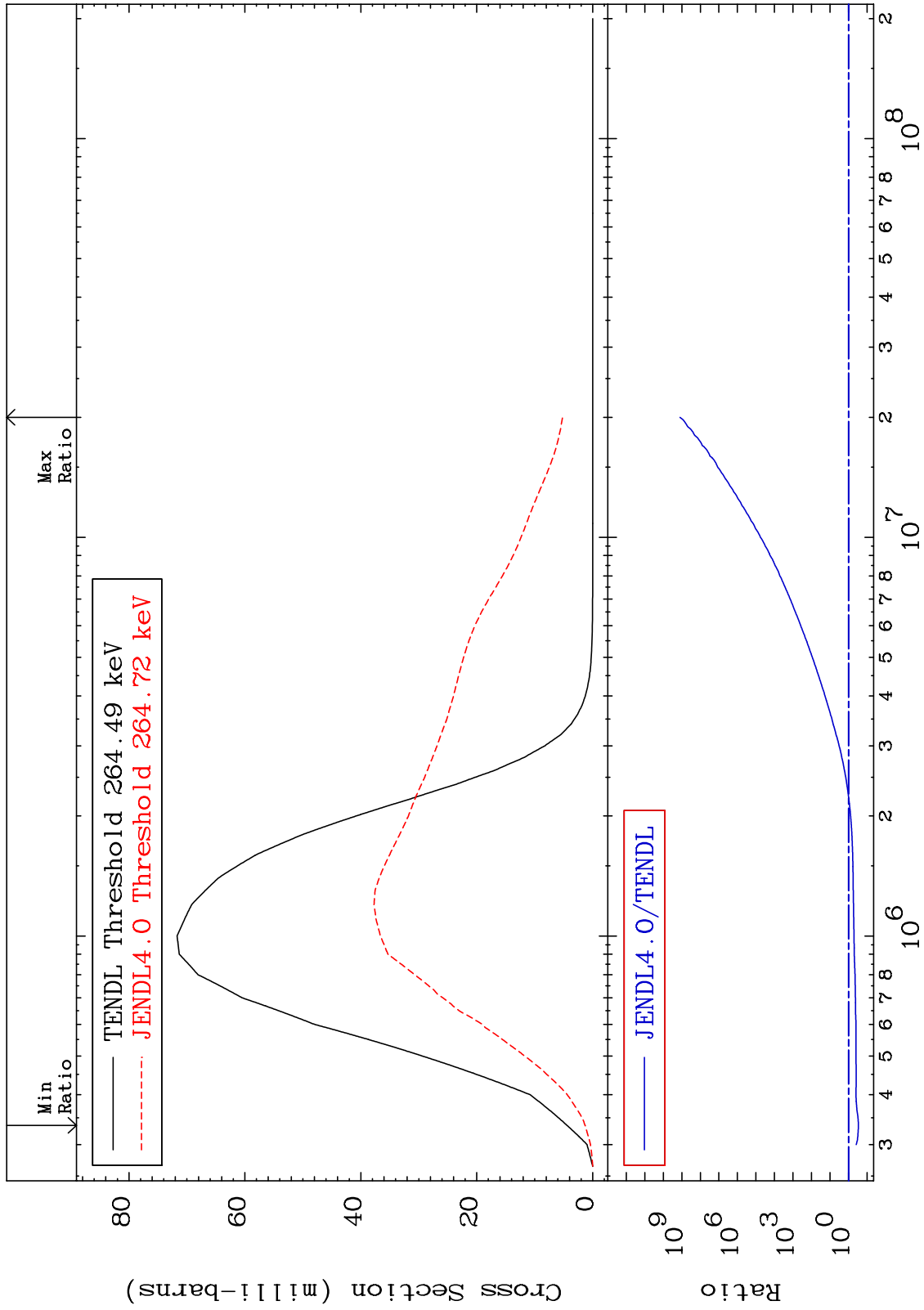
MAT 7634

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

76-0s-187  
-81.10 To 9999. %



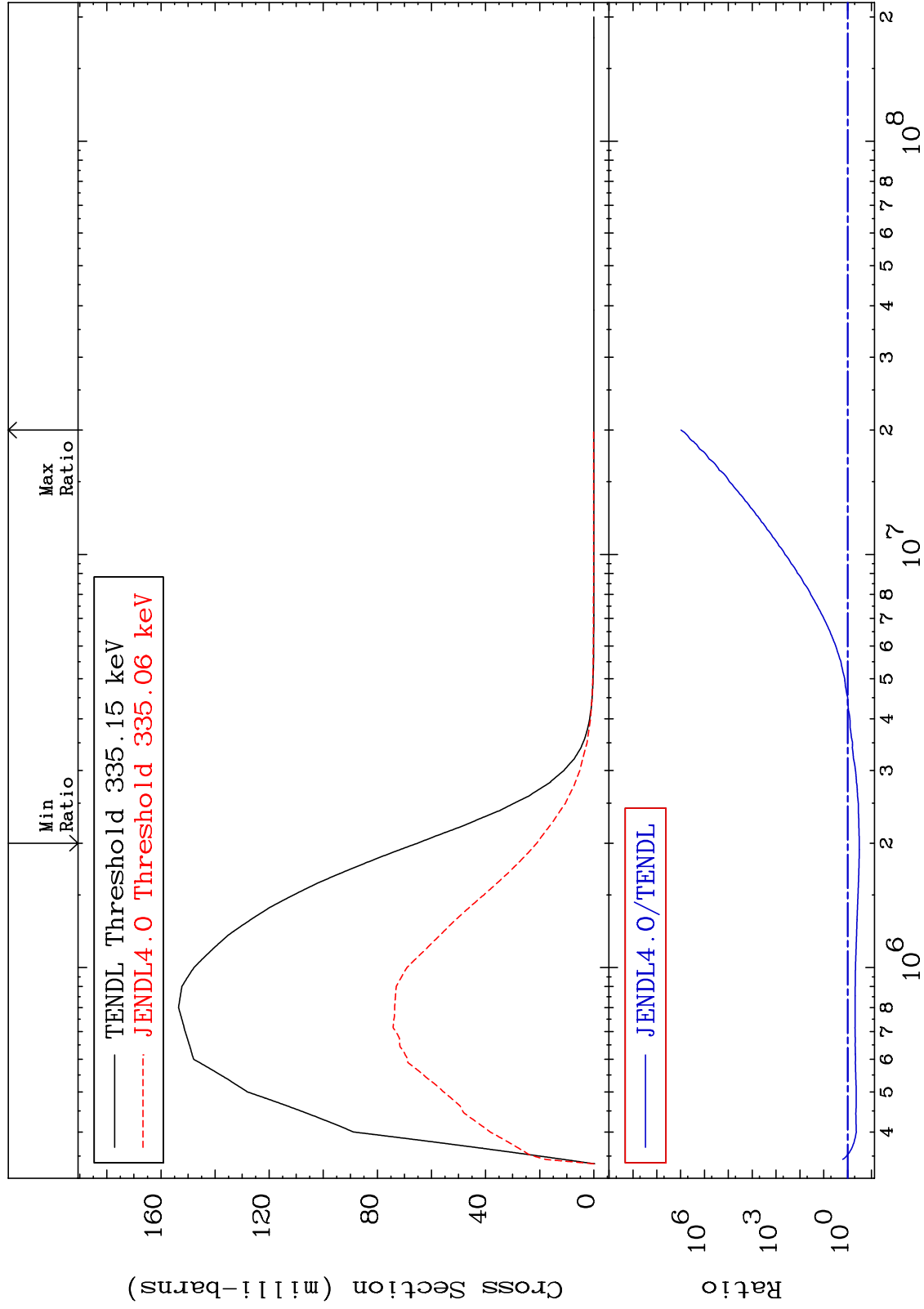
MAT 7634 MT= 59 (n,n') Level Cross Section 76-0s-187  
 -70.44 To 9999. %



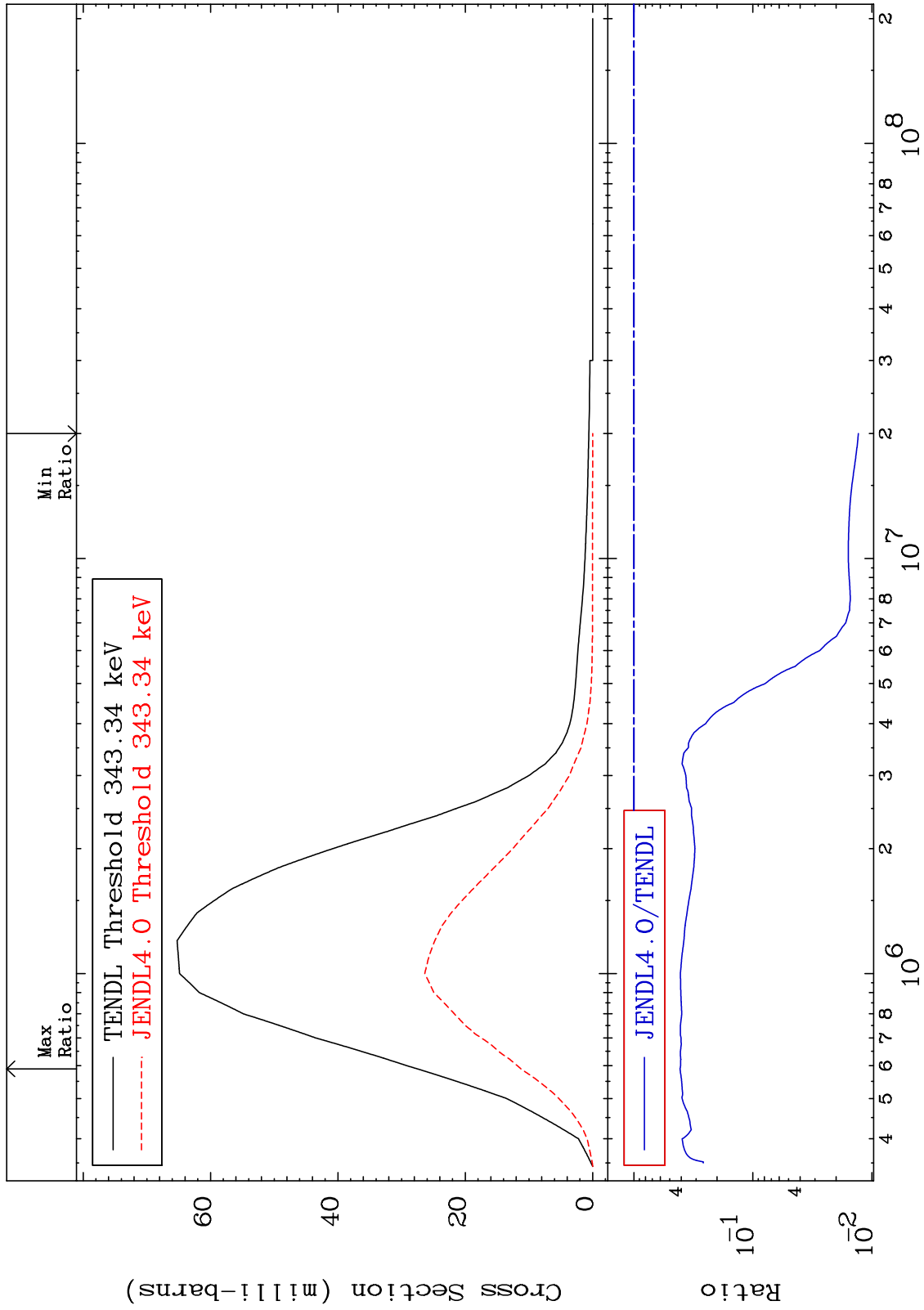
MAT 7634

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

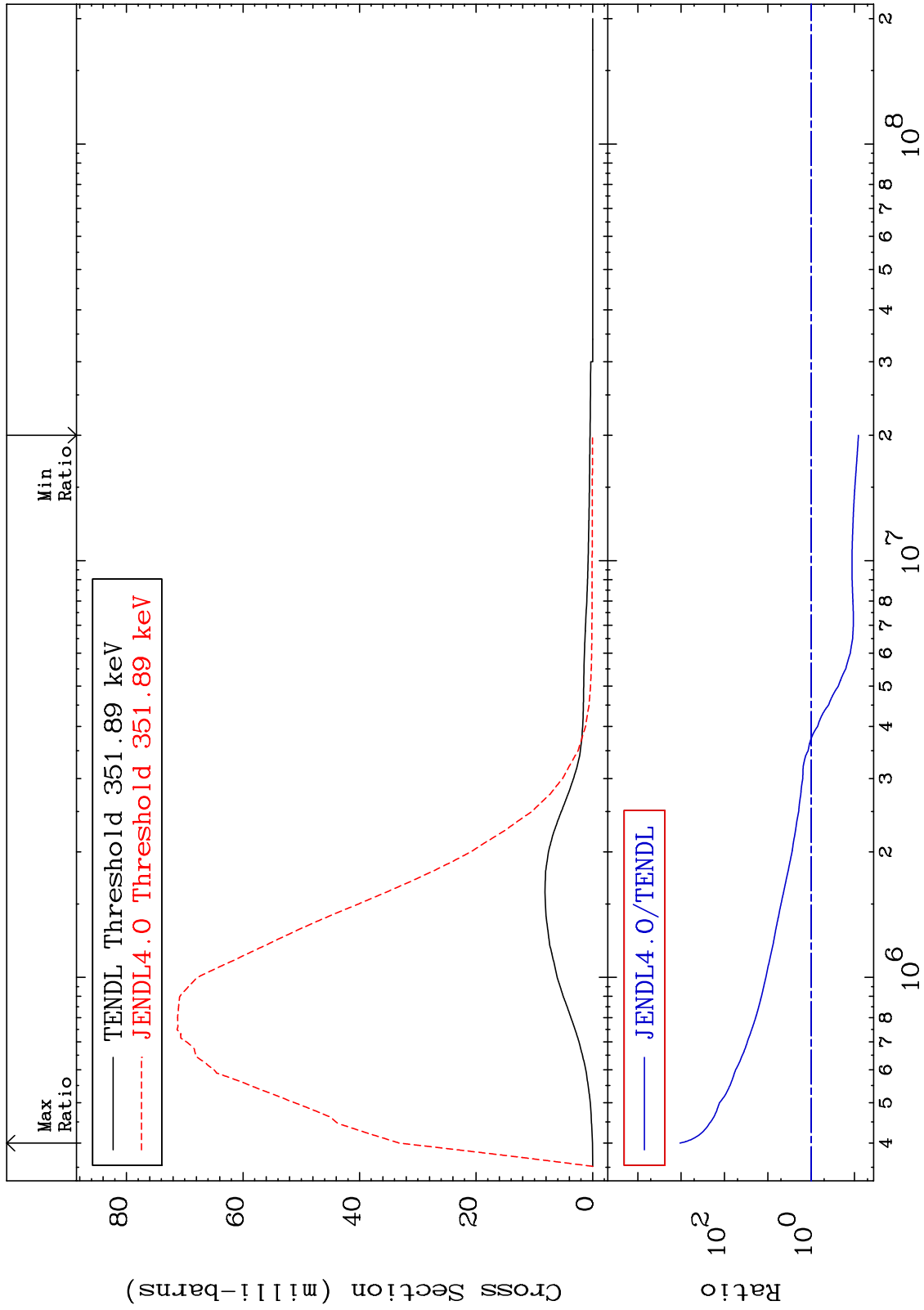
76-0s-187  
-67.67 To 9999. %



MAT 7634 MT= 61 (n,n') Level Cross Section 76-0s-187  
 -98.70 To -59.05%



MAT 7634 MT= 62 (n,n') Level Cross Section 76-0s-187  
 -91.87 To 9999. %

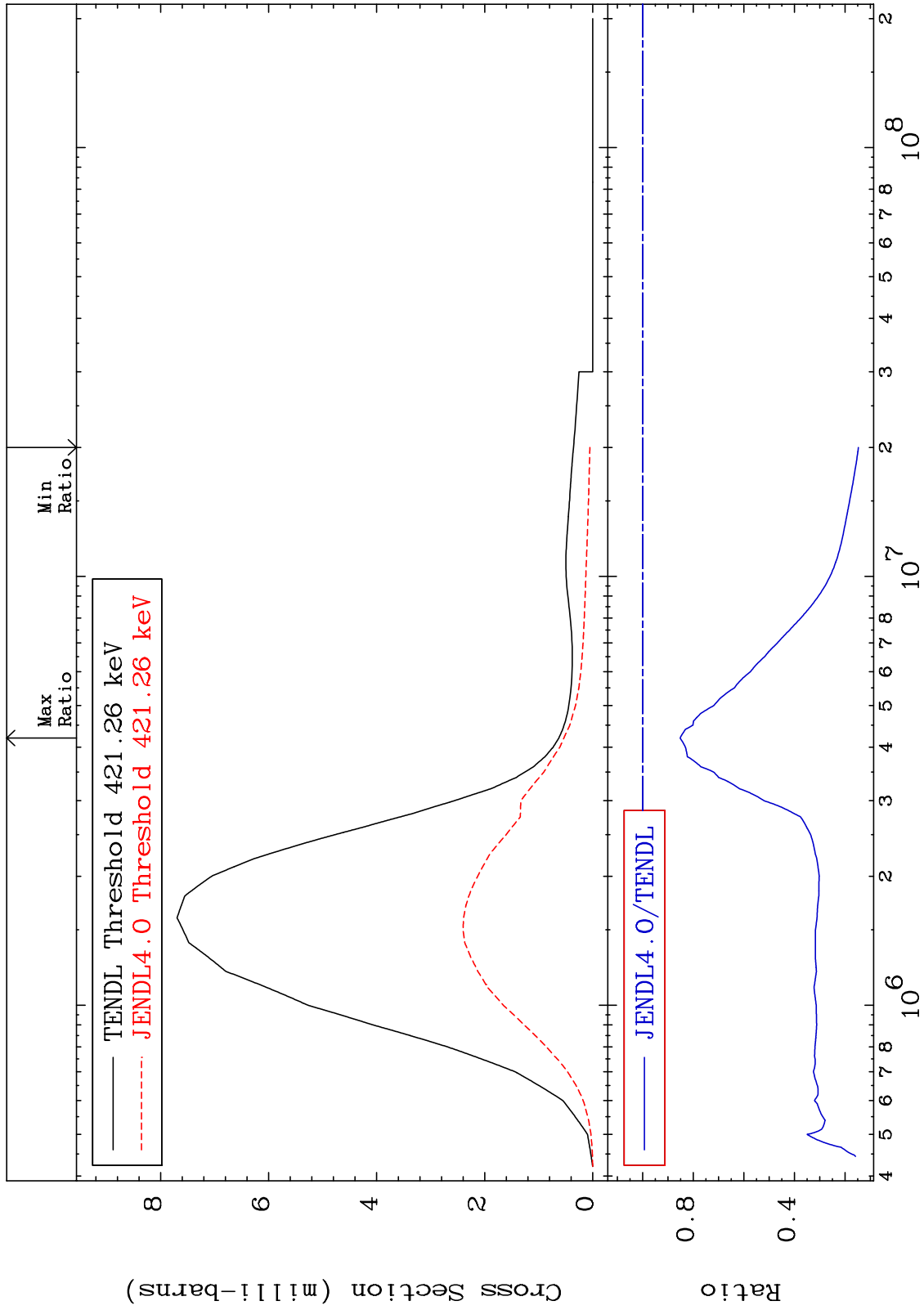




MAT 7634

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

76-0s-187  
-85.31 To -14.80%

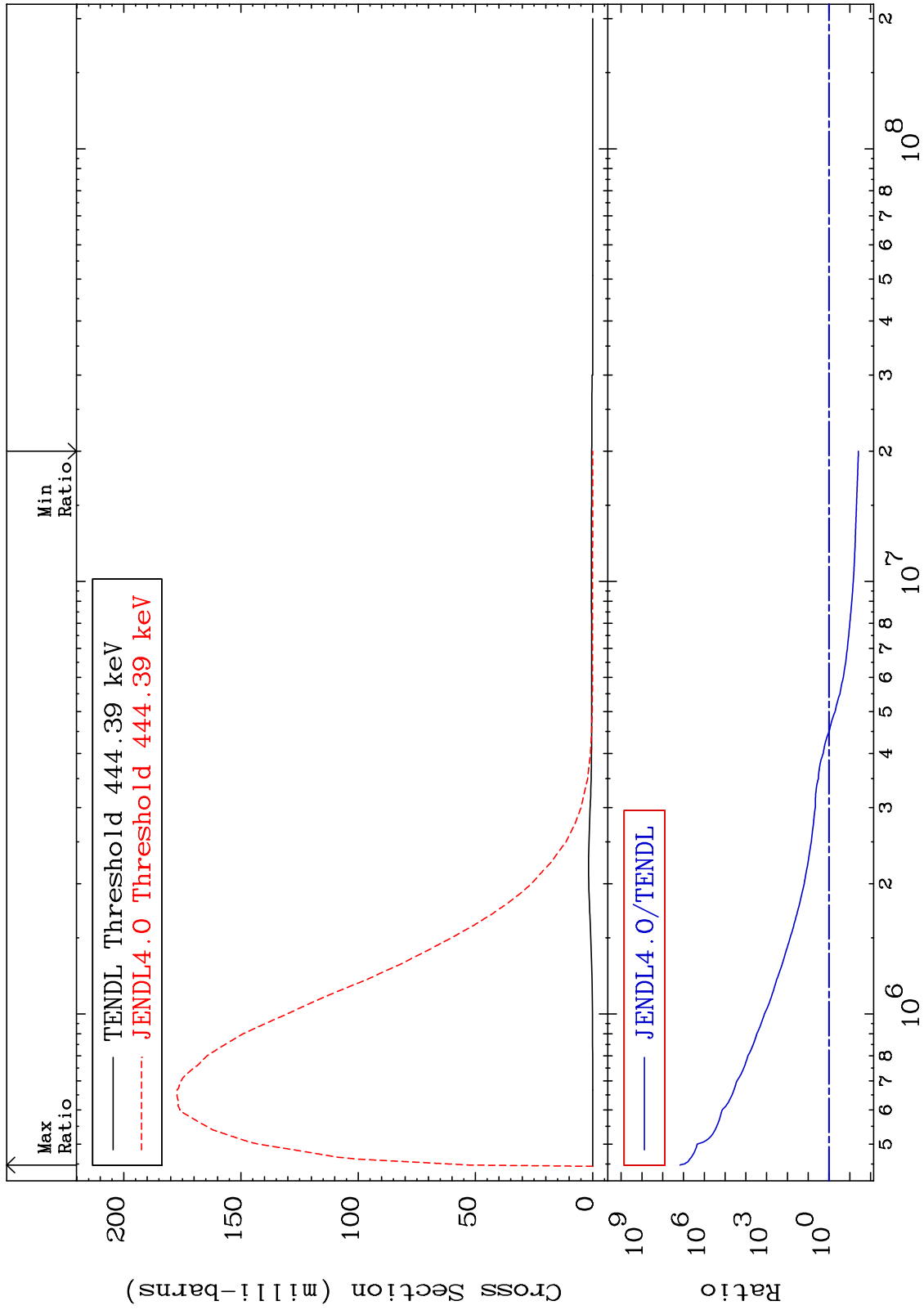


24

Incident Energy (eV)

76-0s-187

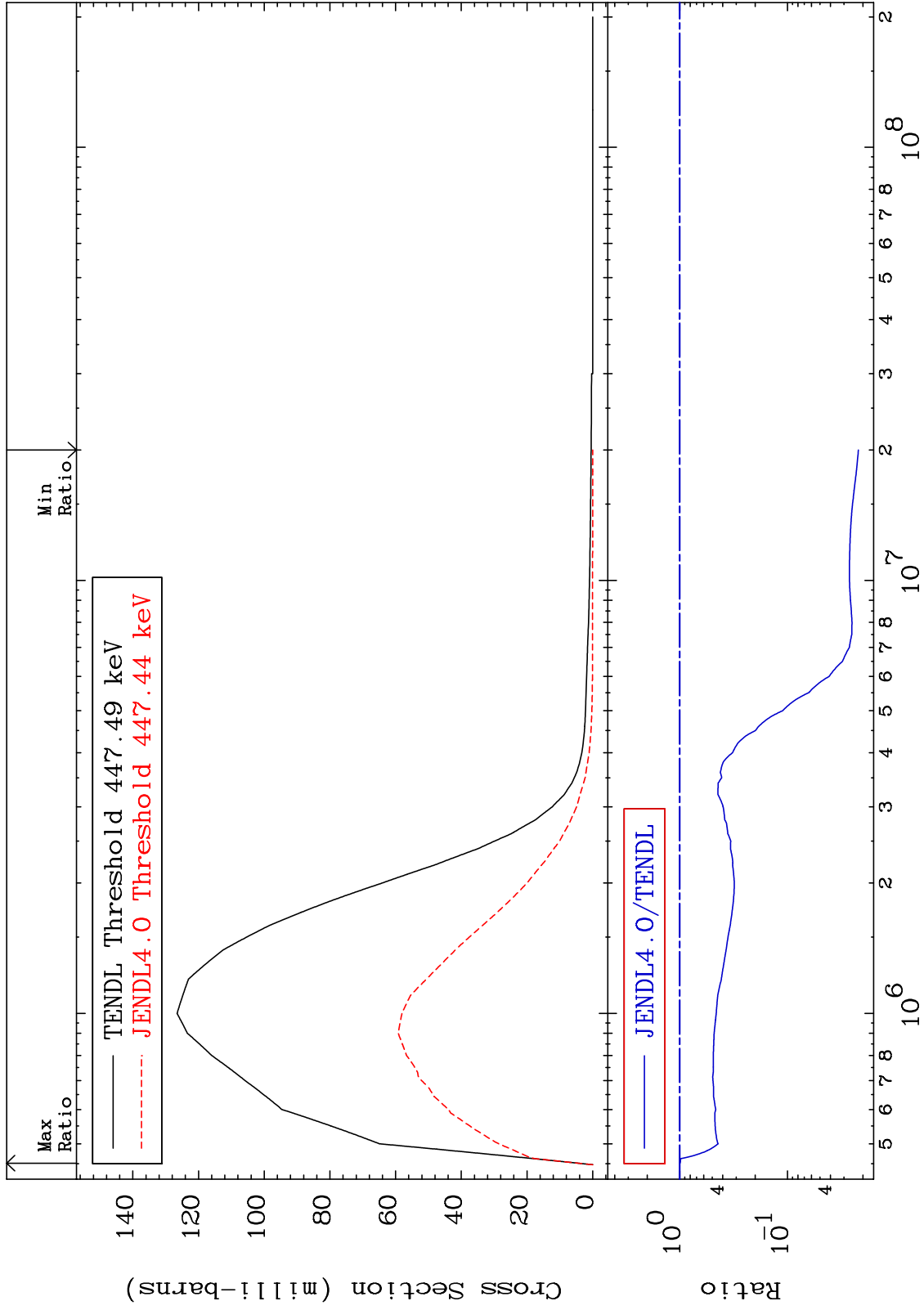
MAT 7634 MT= 64 (n,n') Level Cross Section 76-0s-187 -96.17 To 9999. %



MAT 7634

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

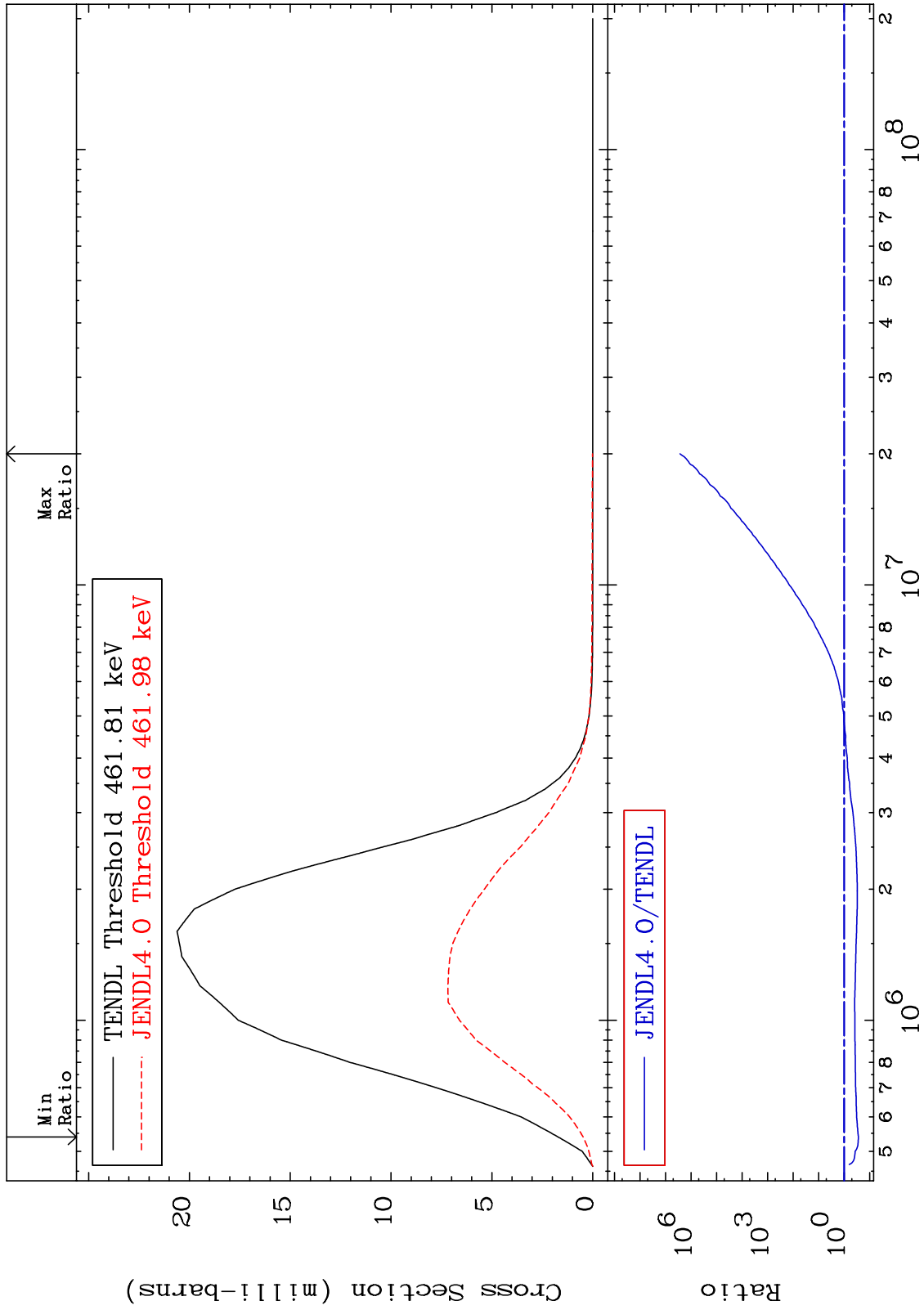
76-0s-187  
-97.80 To -0.616%



MAT 7634

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

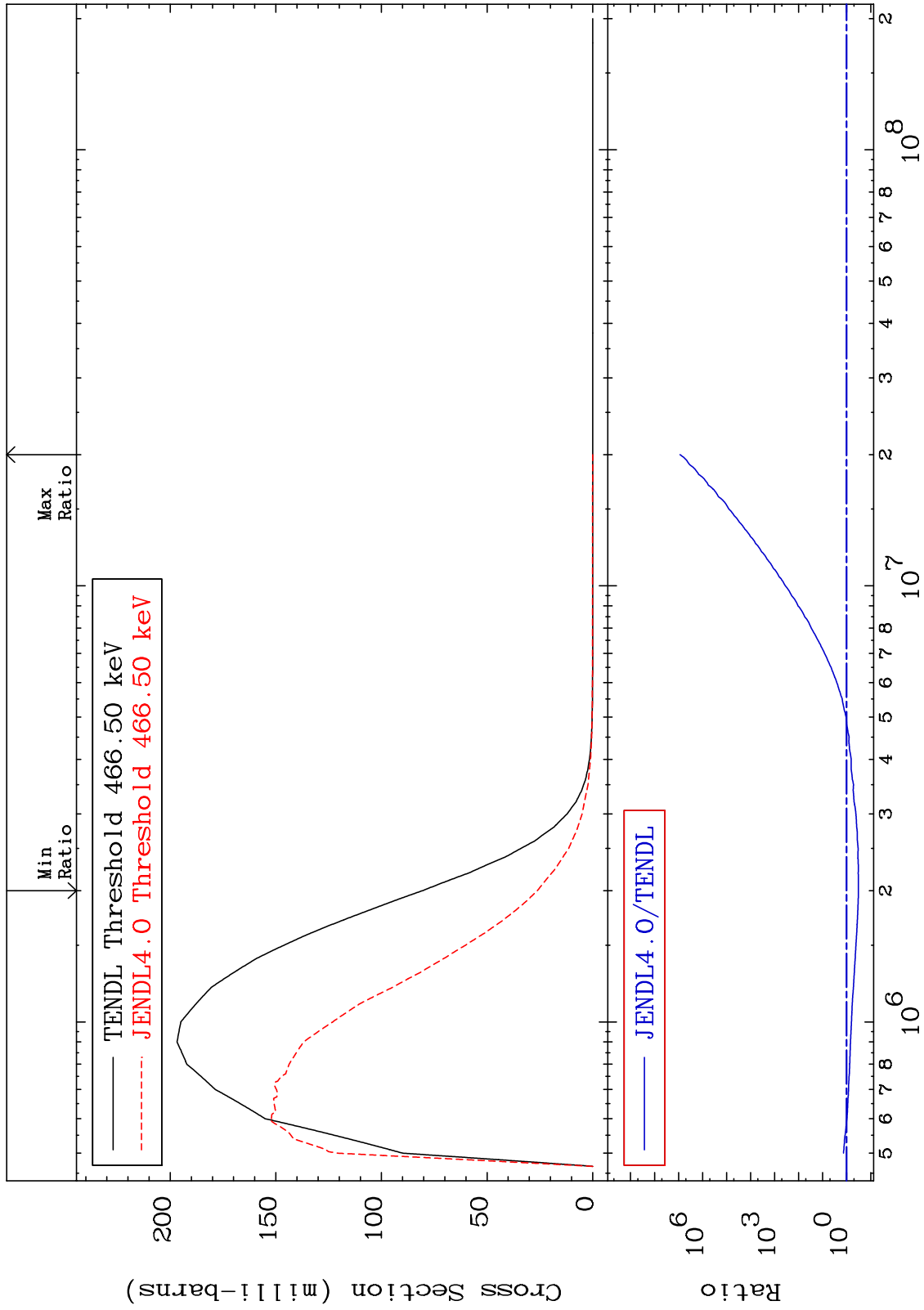
76-0s-187  
-72.55 To 9999. %



MAT 7634

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

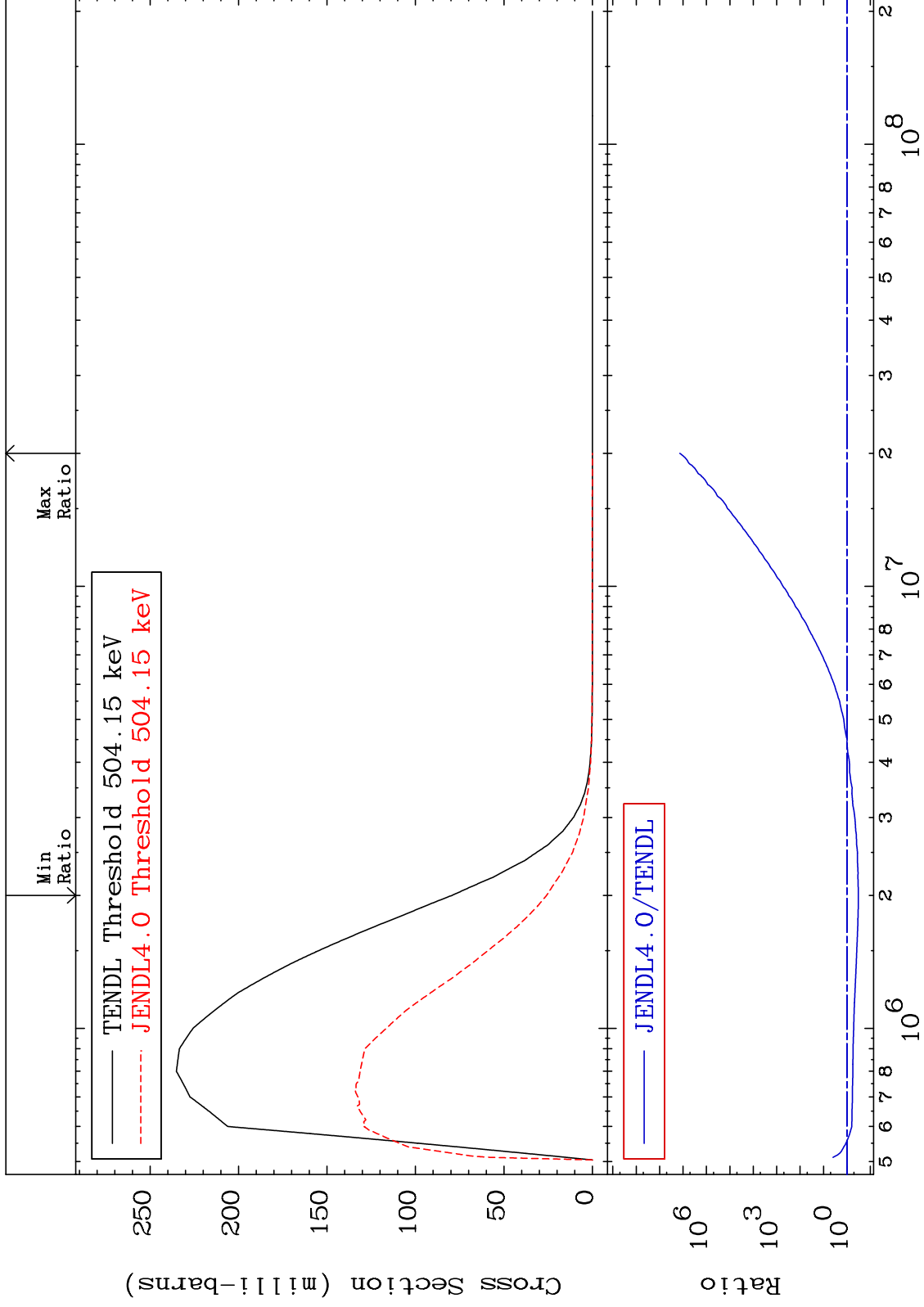
76-0s-187  
-67.50 To 9999. %



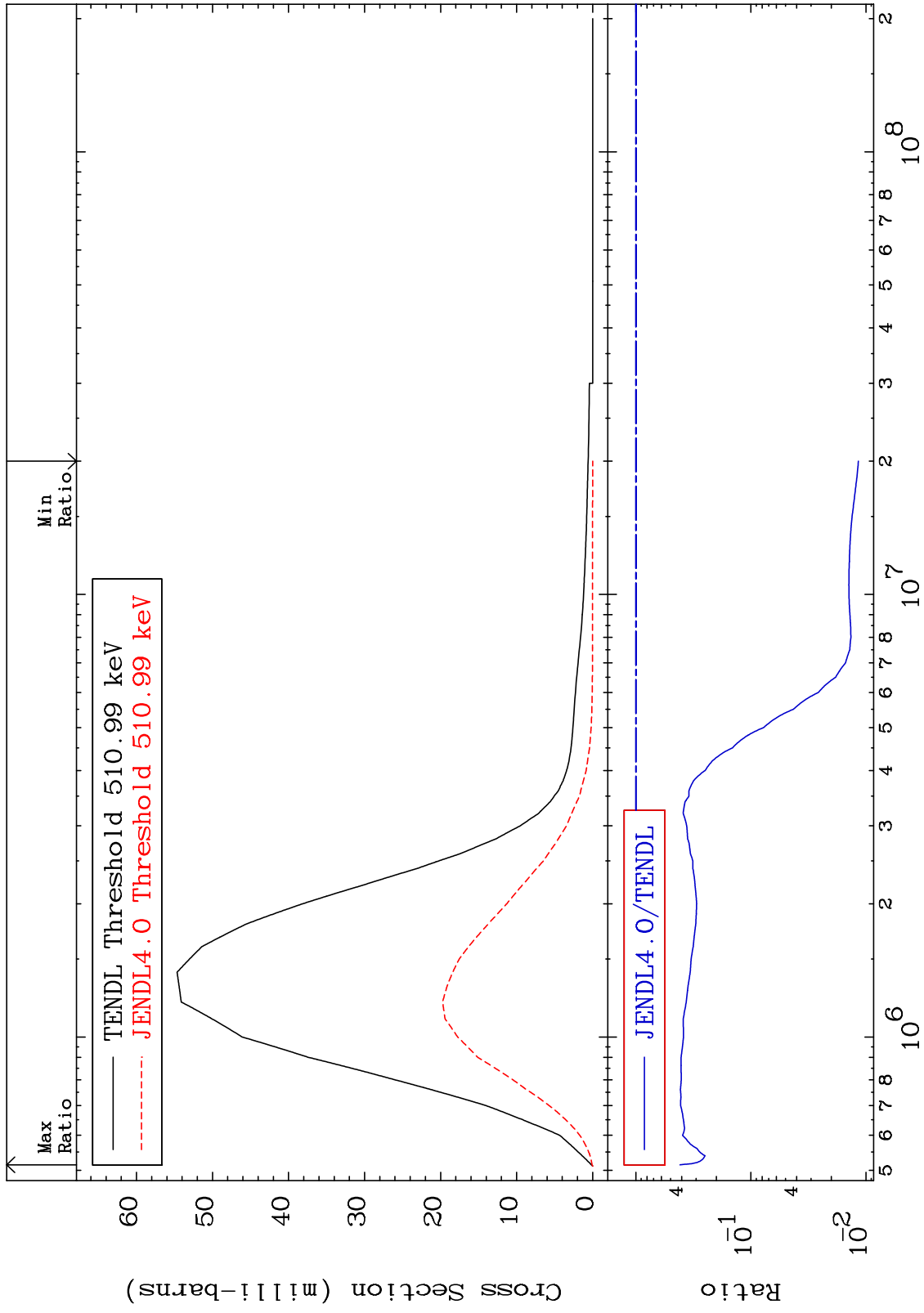
MAT 7634

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

76-0s-187  
-67.38 To 9999. %



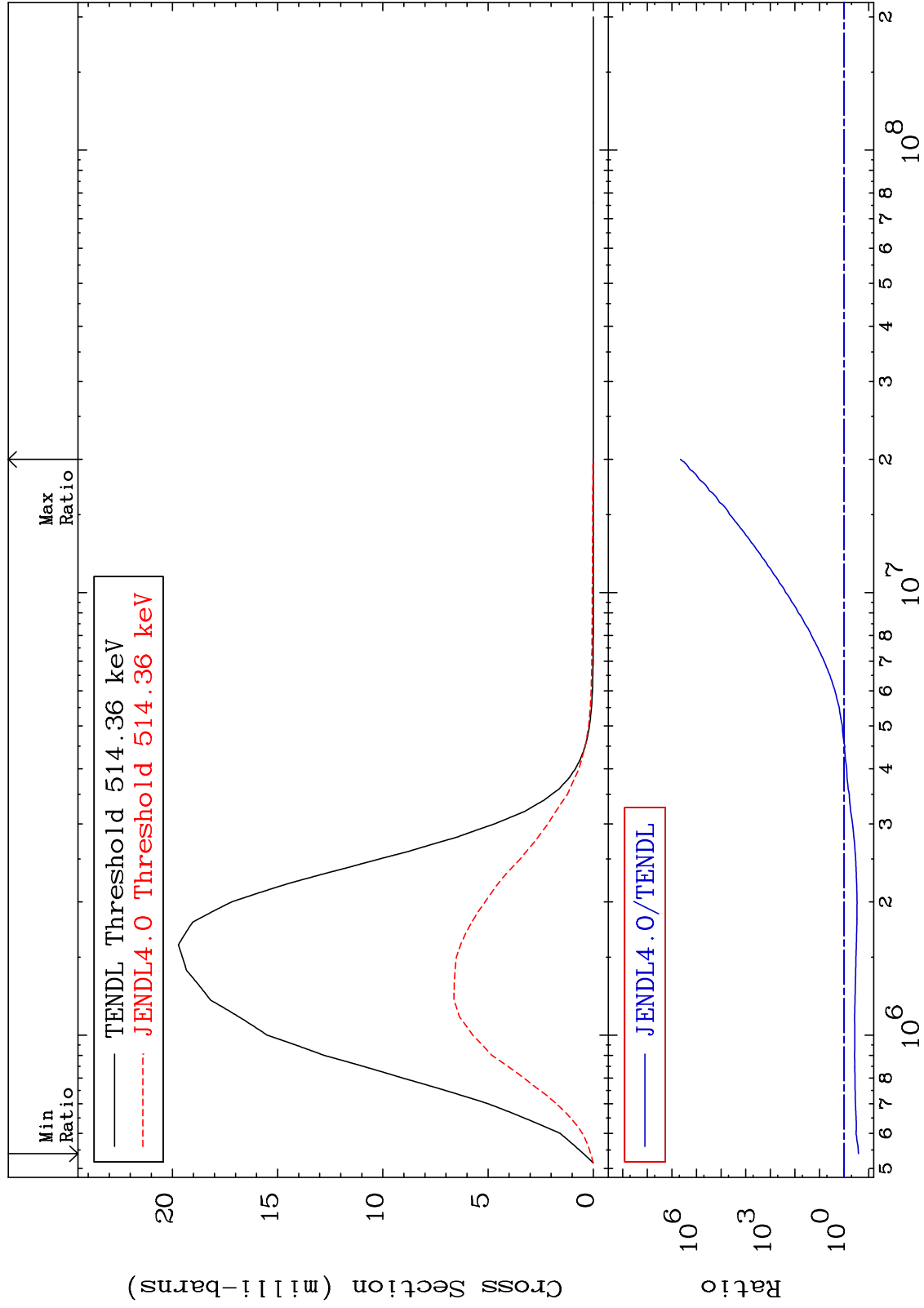
MAT 7634 MT= 69 (n,n') Level Cross Section 76-0s-187 -98.84 To -58.68%



MAT 7634

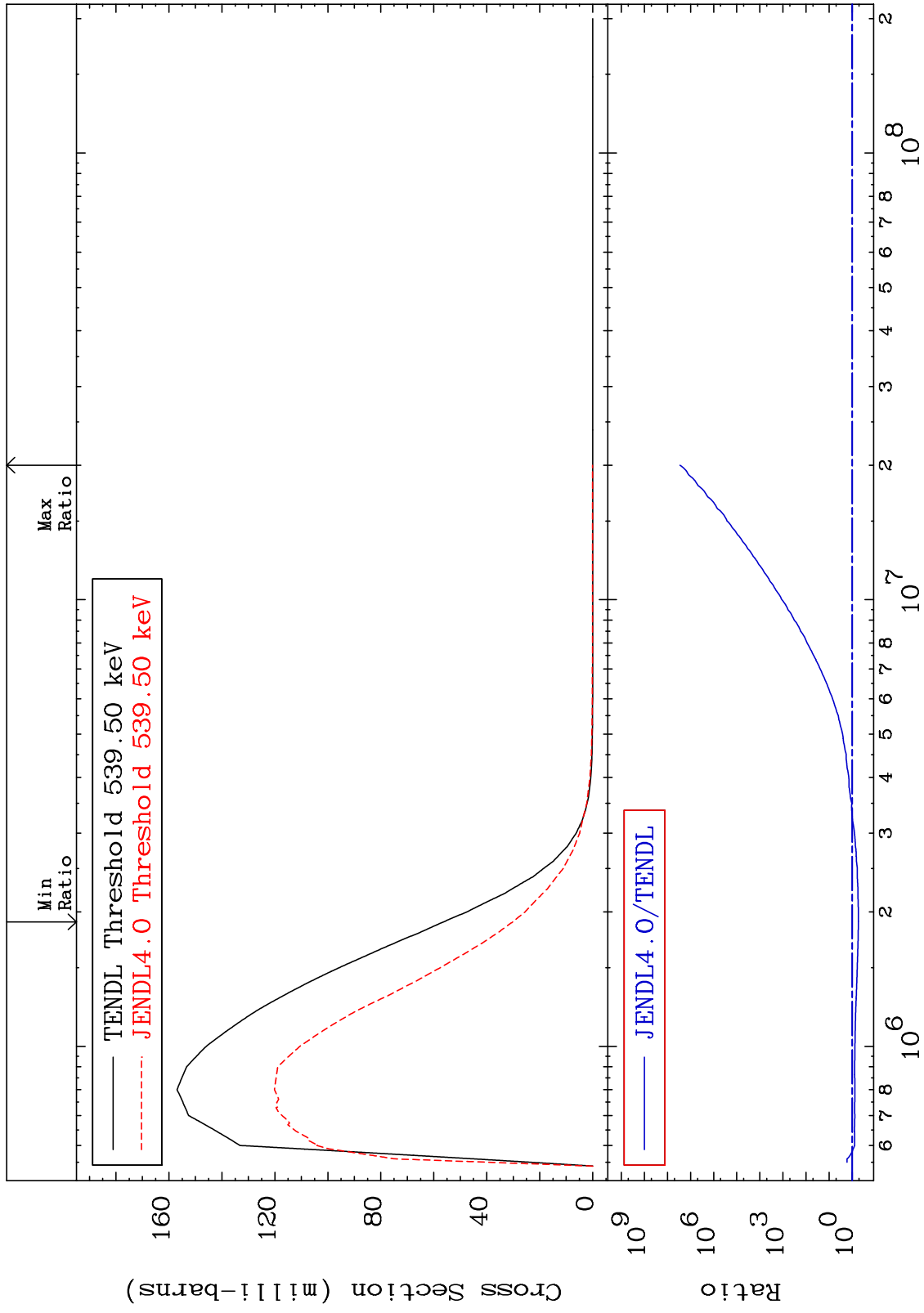
MT= 70 (n,n') Level  
Cross Section

76-0s-187  
-73.86 To 9999. %





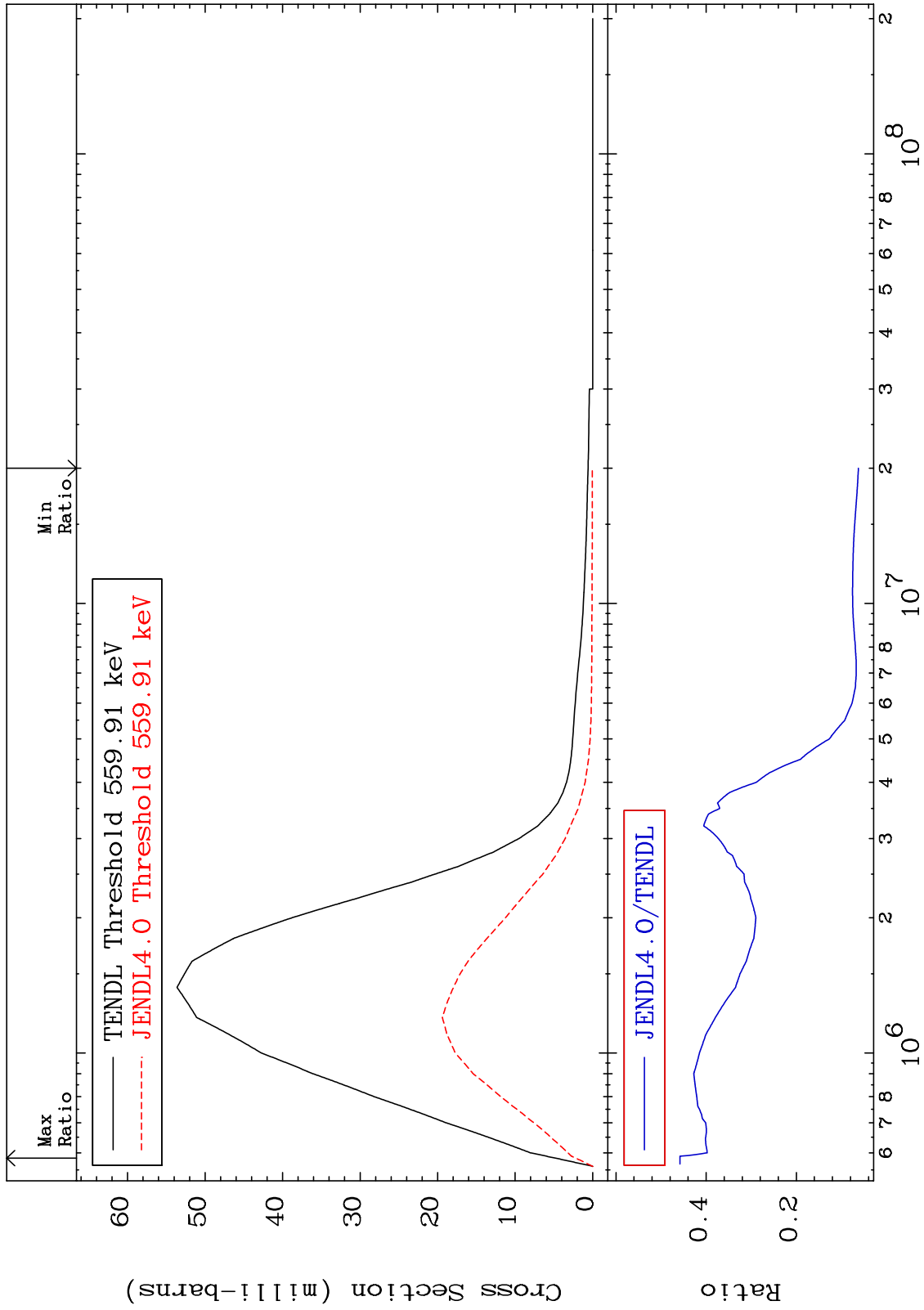
MAT 7634 MT= 71 (n,n') Level Cross Section 76-0s-187  
 -46.44 To 9999. %



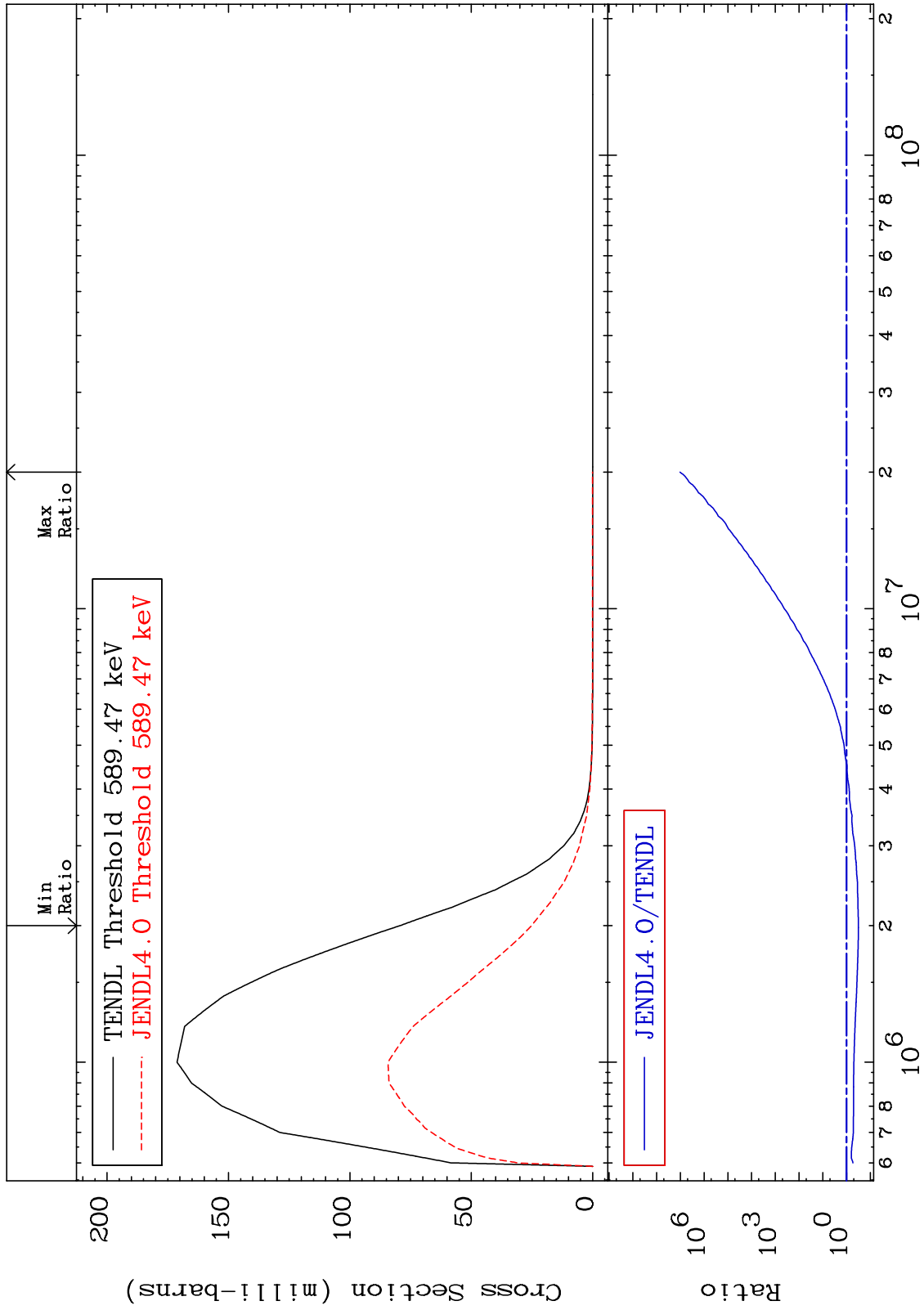
MAT 7634

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

76-0s-187  
-93.76 To -54.20%



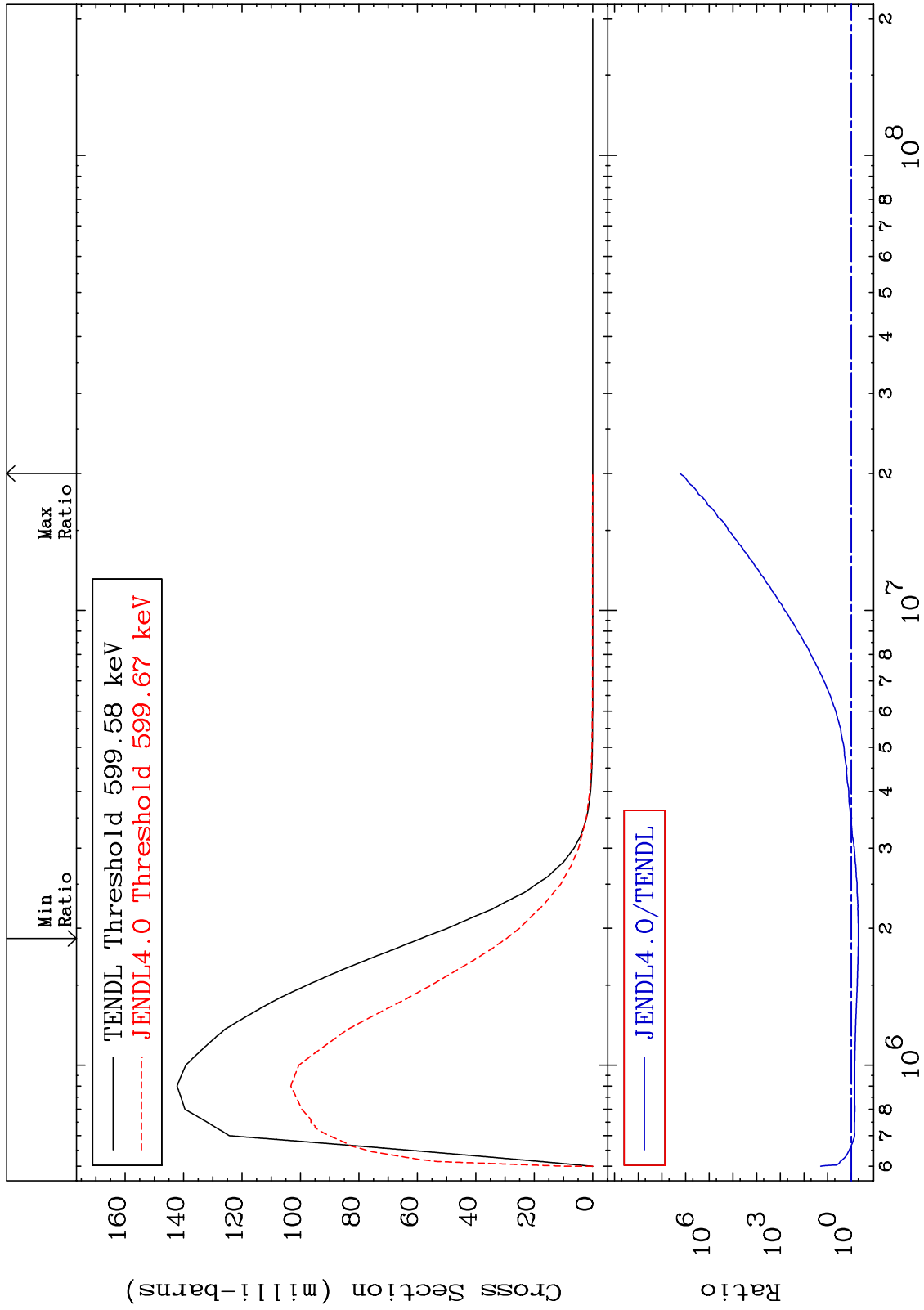
MAT 7634 MT= 73 (n,n') Level Cross Section 76-0s-187  
 -68.31 To 9999. %



MAT 7634

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

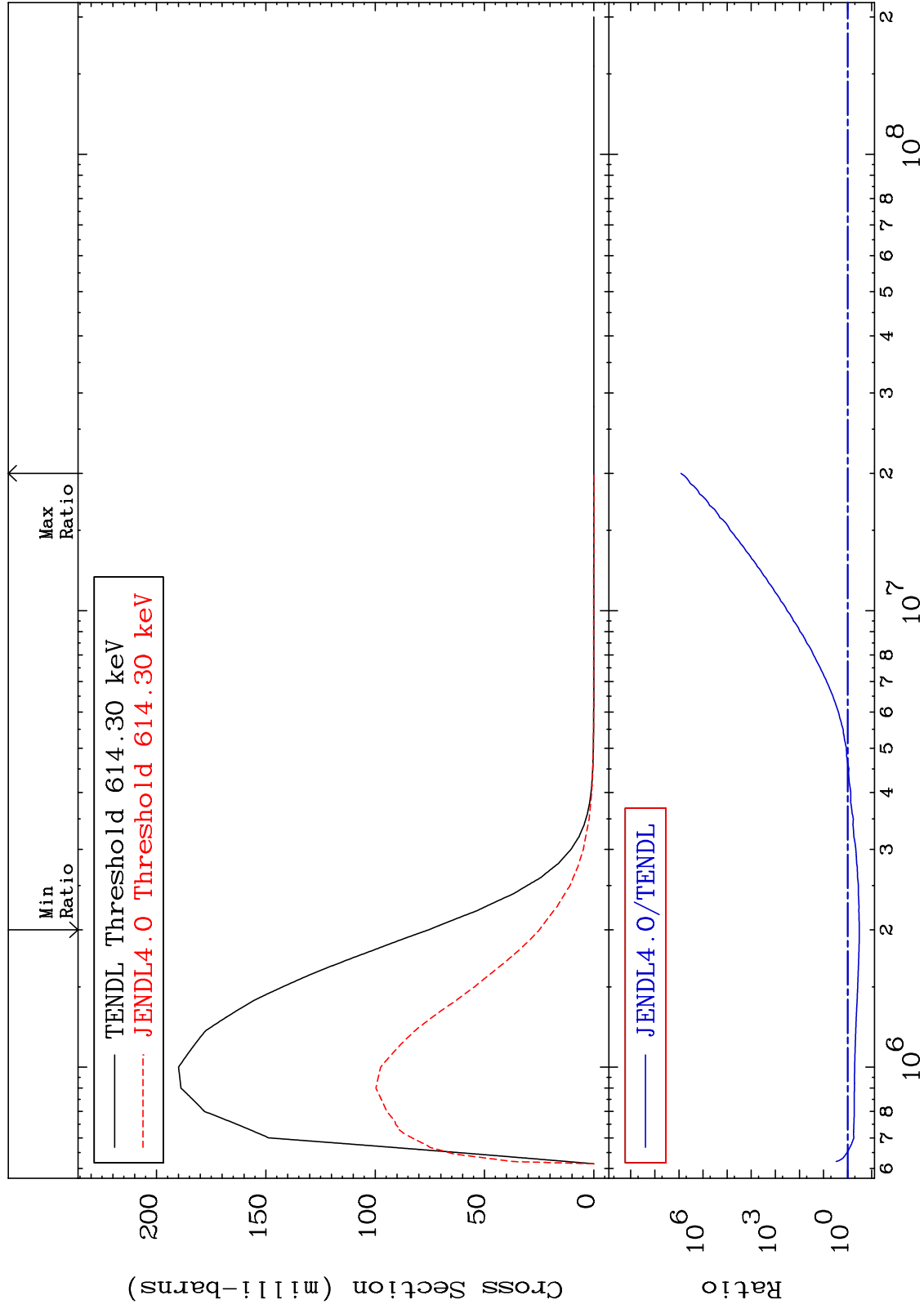
76-0s-187  
-49.80 To 9999. %



MAT 7634

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

76-0s-187  
-67.07 To 9999. %



36

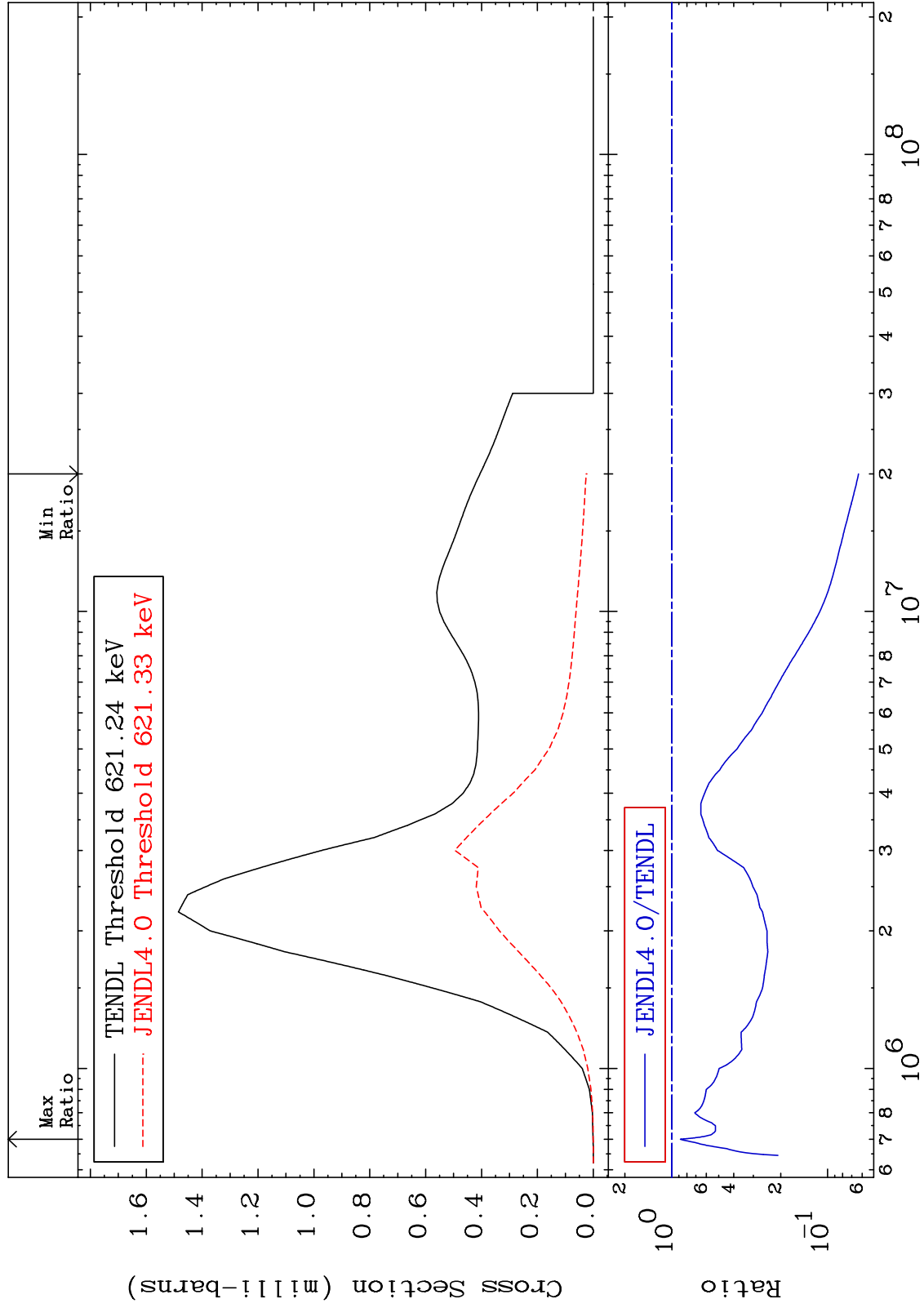
Incident Energy (eV)

76-0s-187

MAT 7634

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

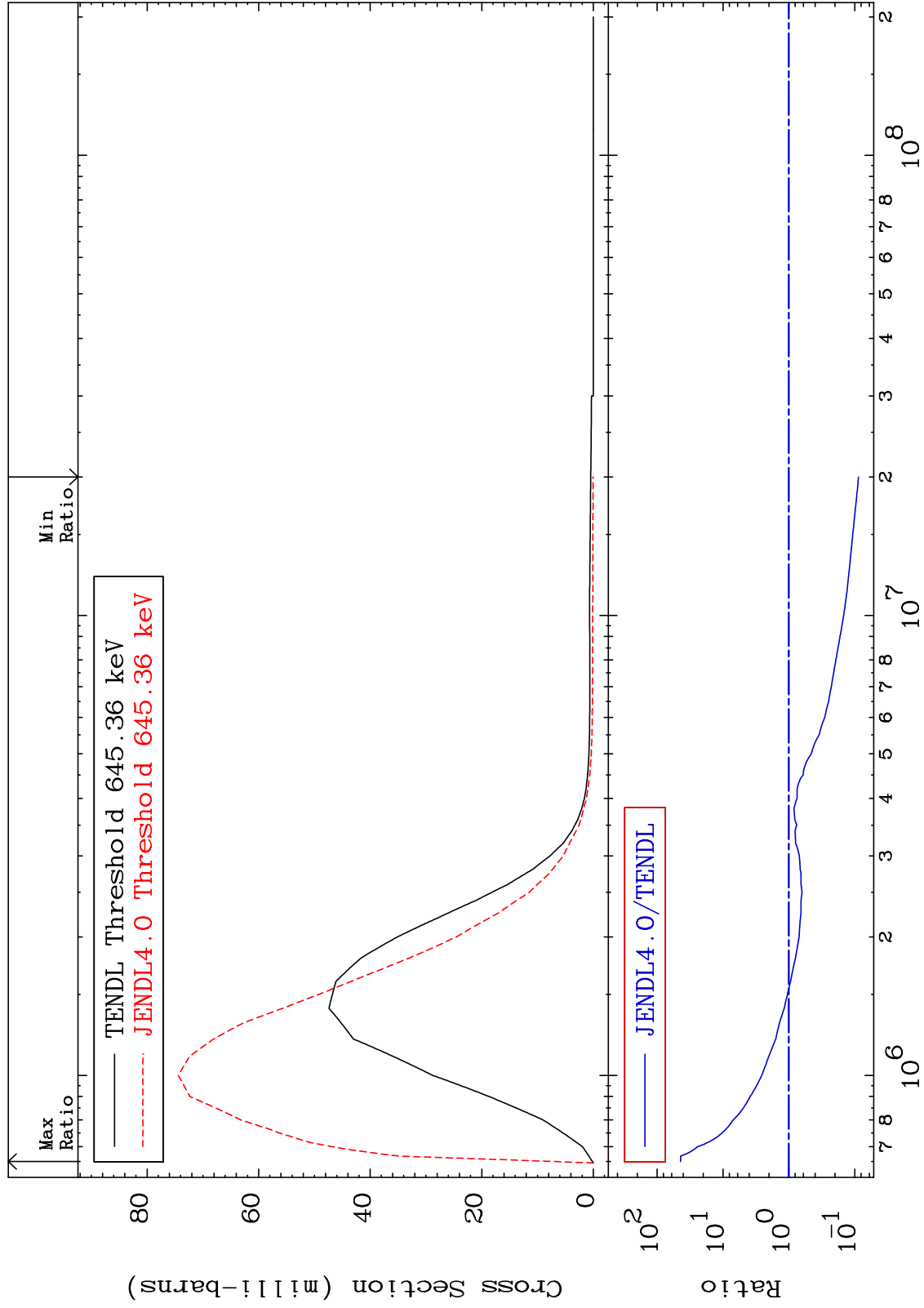
76-0s-187  
-93.67 To -11.99%



MAT 7634

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

76-0s-187  
-91.25 To 4321. %

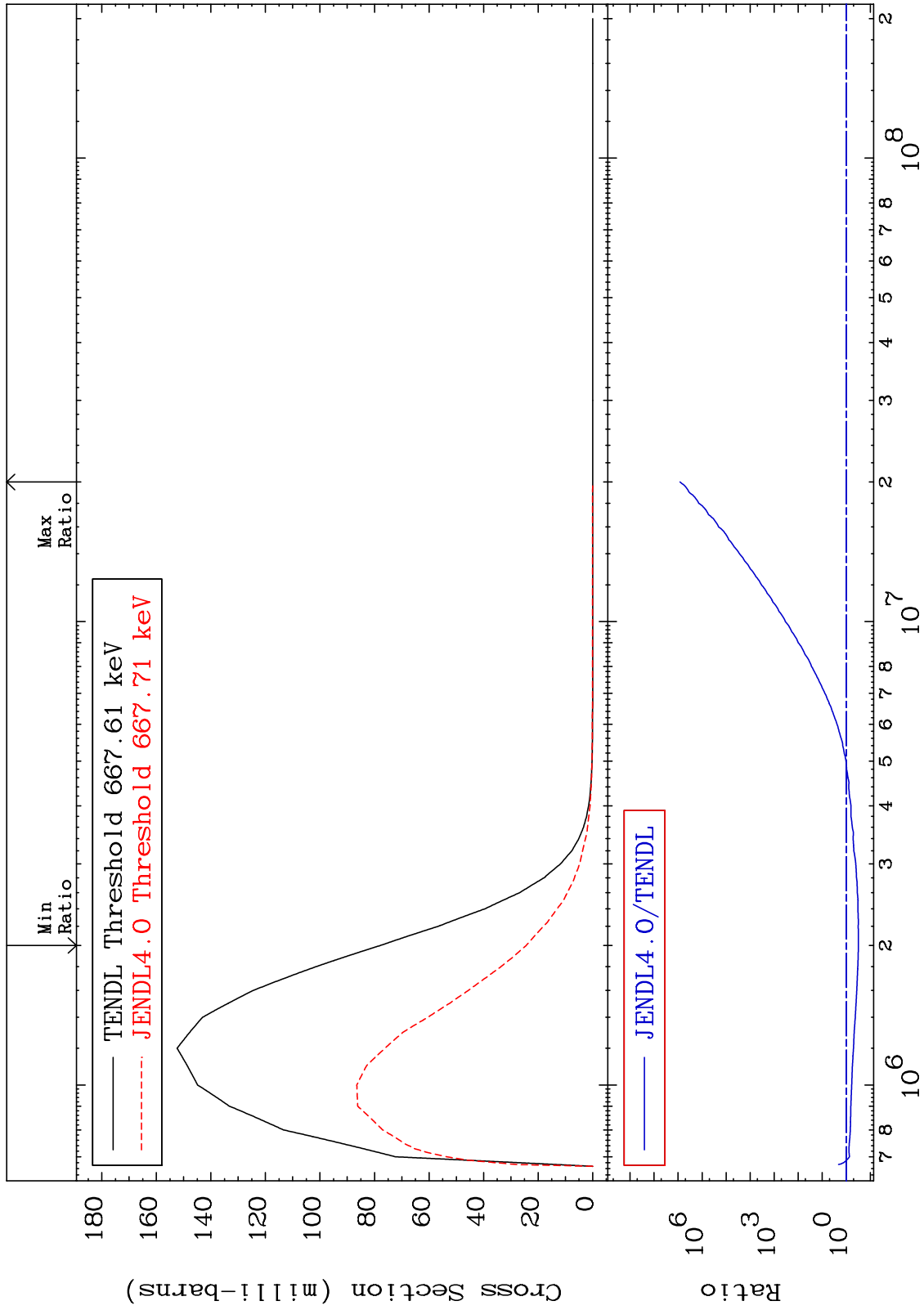


38

Incident Energy (eV)

76-0s-187

MAT 7634 MT= 78 (n,n') Level Cross Section 76-0s-187  
 -68.69 To 9999. %

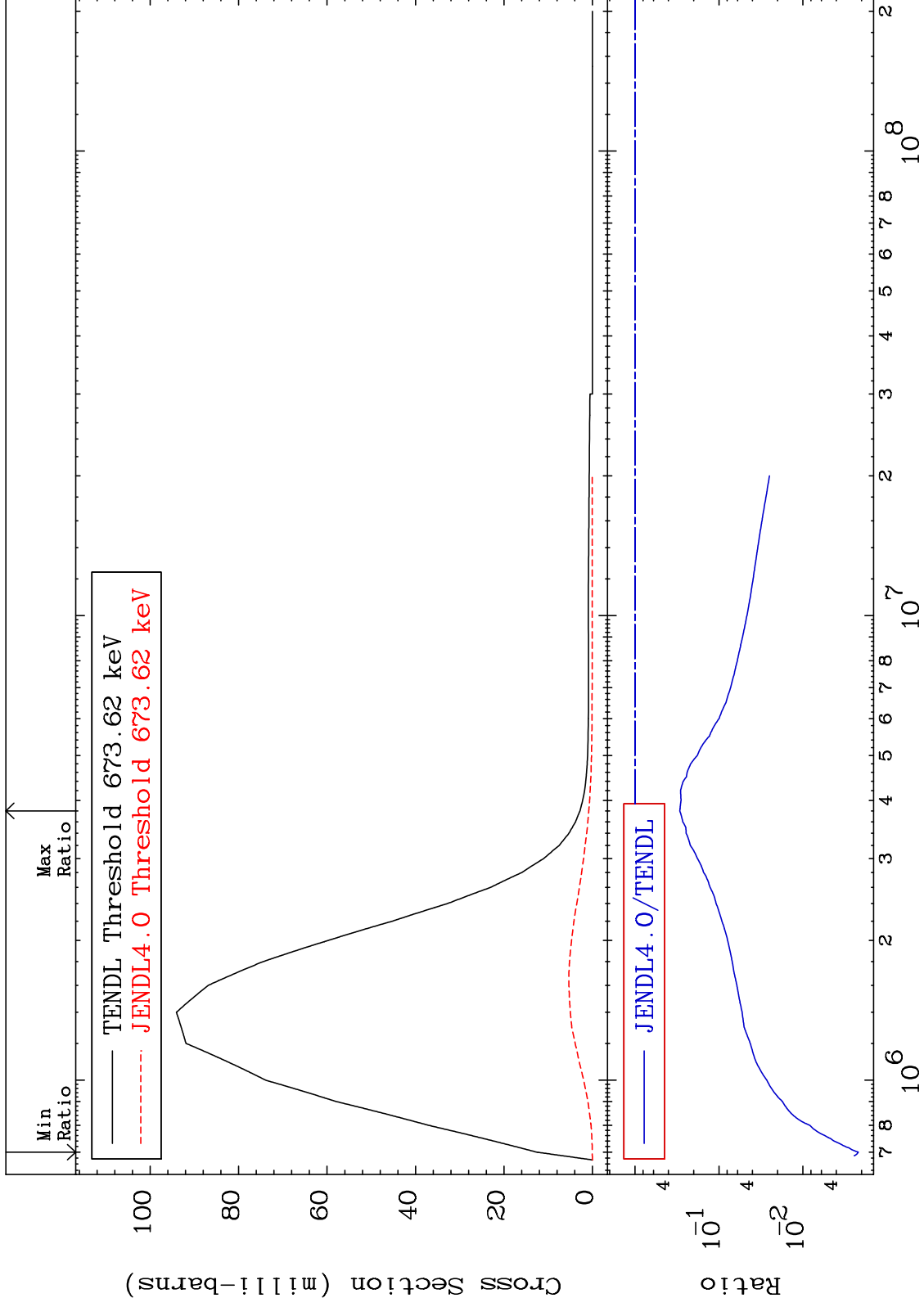




MAT 7634

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

76-0s-187  
-99.78 To -70.74%



40

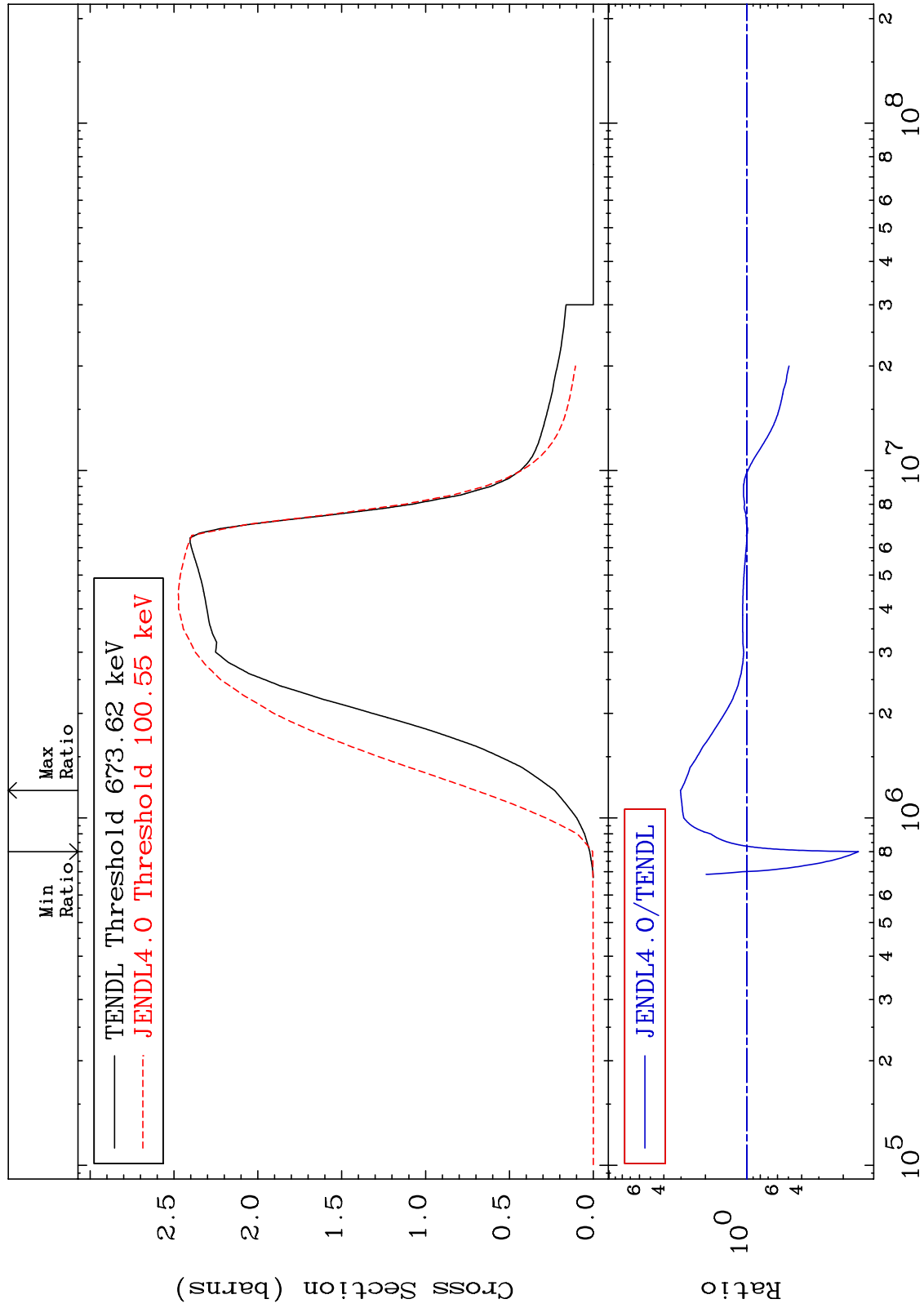
Incident Energy (eV)

76-0s-187

MAT 7634

(n, n') Continuum  
Cross Section

76-0s-187  
-84.50 To 203.0 %



41

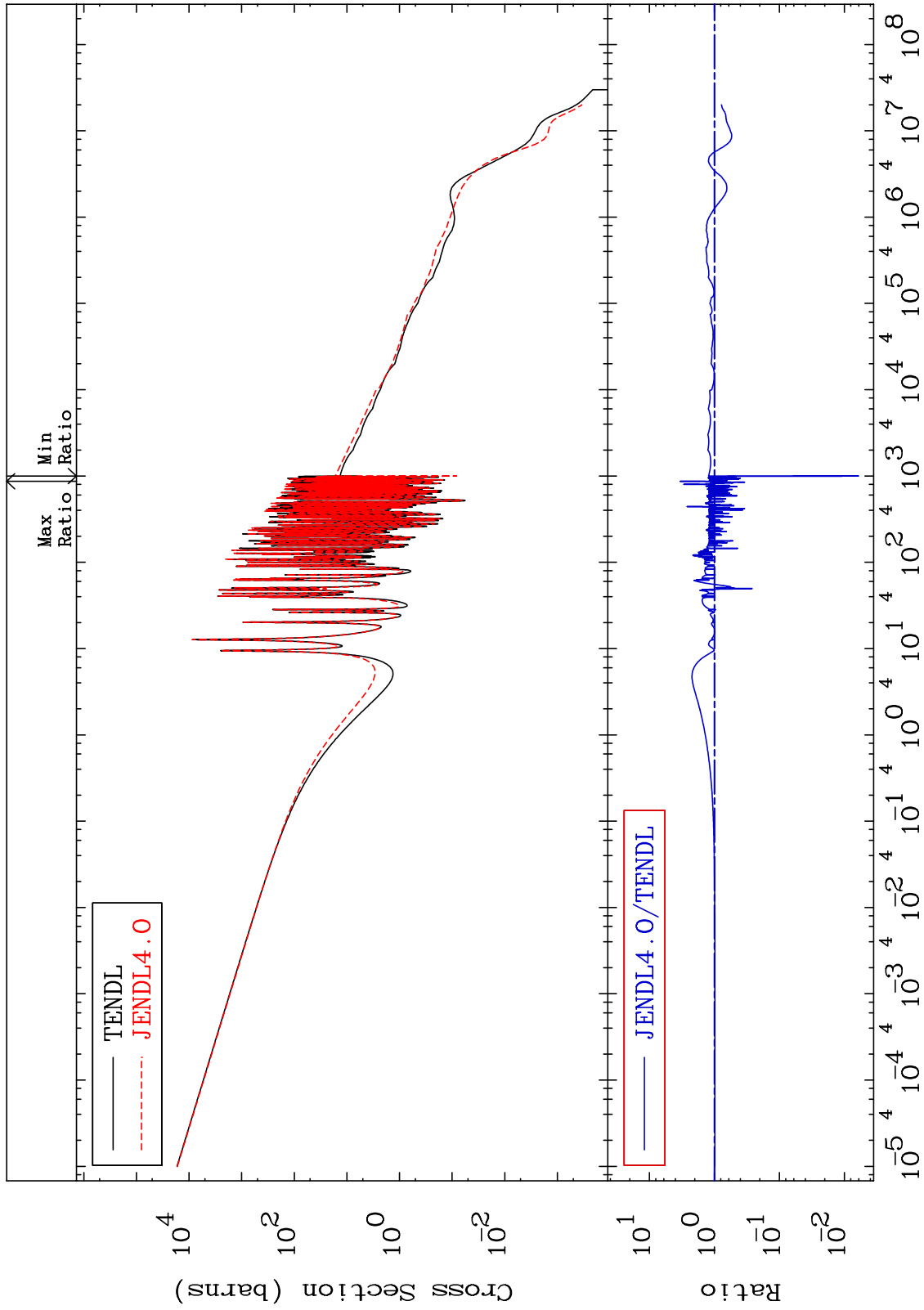
Incident Energy (eV)

76-0s-187

MAT 7634

(n,  $\gamma$ )  
Cross Section

76-0s-187  
-99.39 To 238.6 %



42

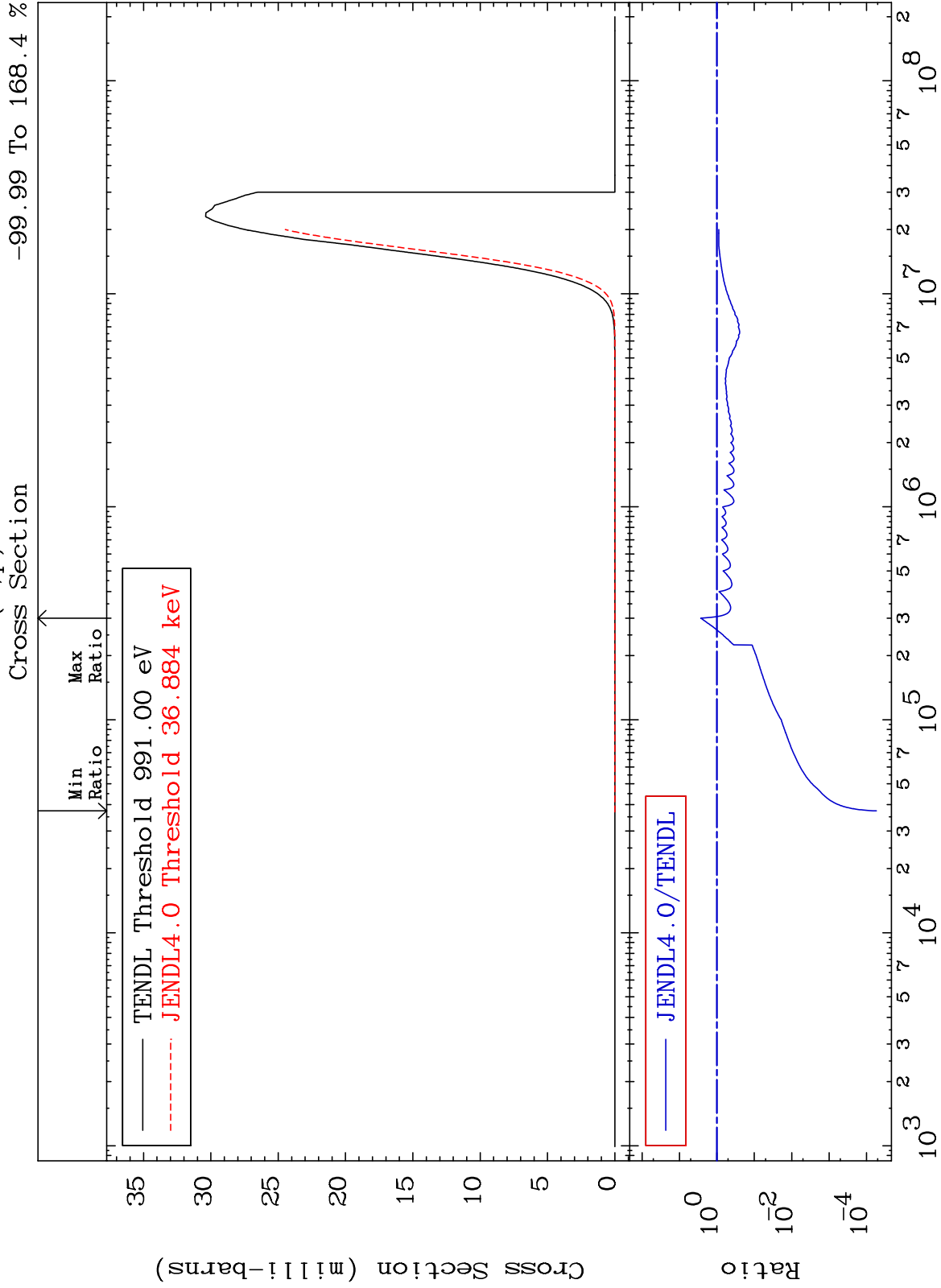
Incident Energy (eV)

76-0s-187

MAT 7634

(n, p)

76-0s-187  
-99.99 To 168.4 %



43

Incident Energy (eV)

76-0s-187

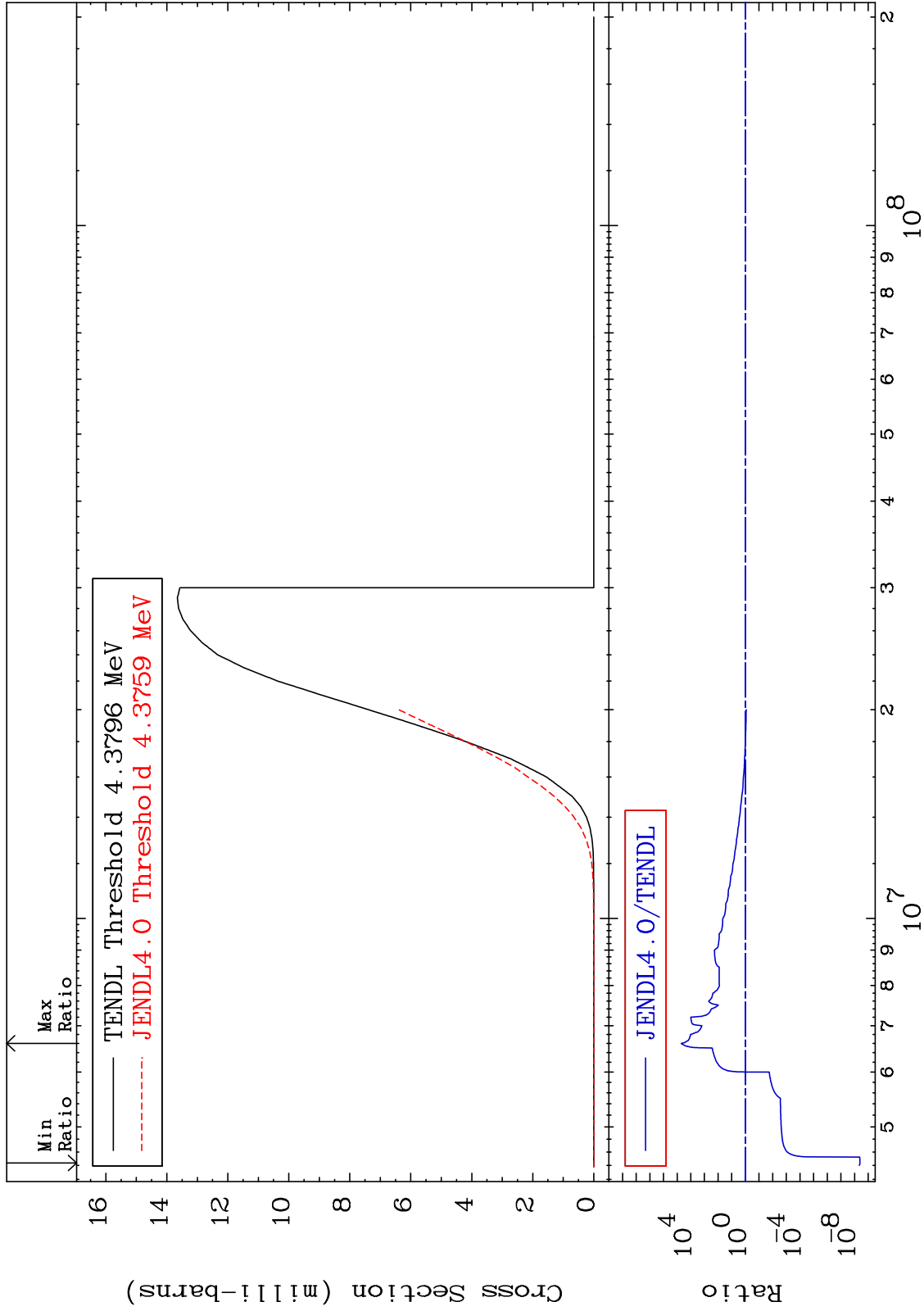
MAT 7634

(n, d)

76-0s-187

Cross Section

-100.0 To 9999. %



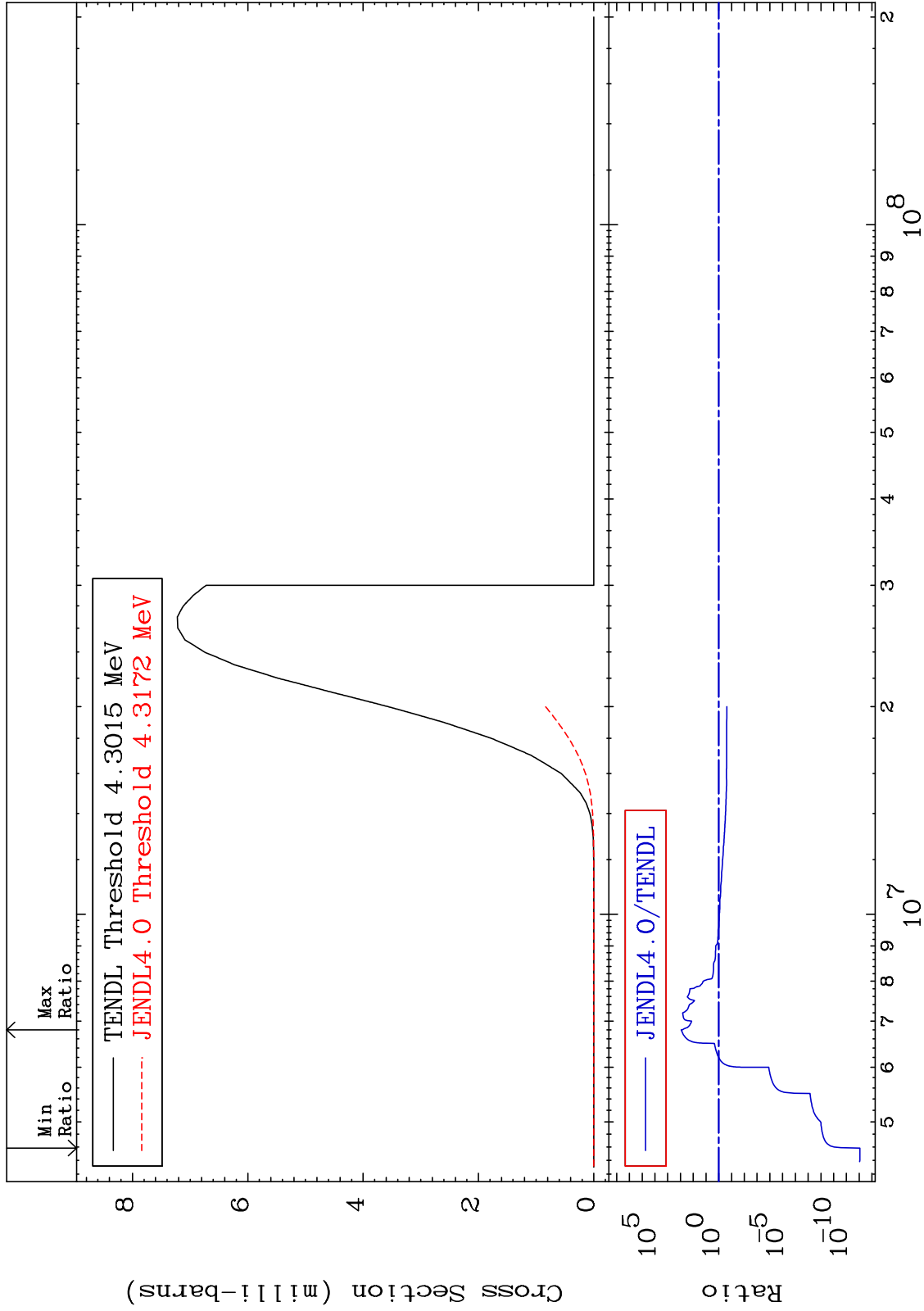
MAT 7634

(n, t)

76-0s-187

Cross Section

-100.0 To 9999. %



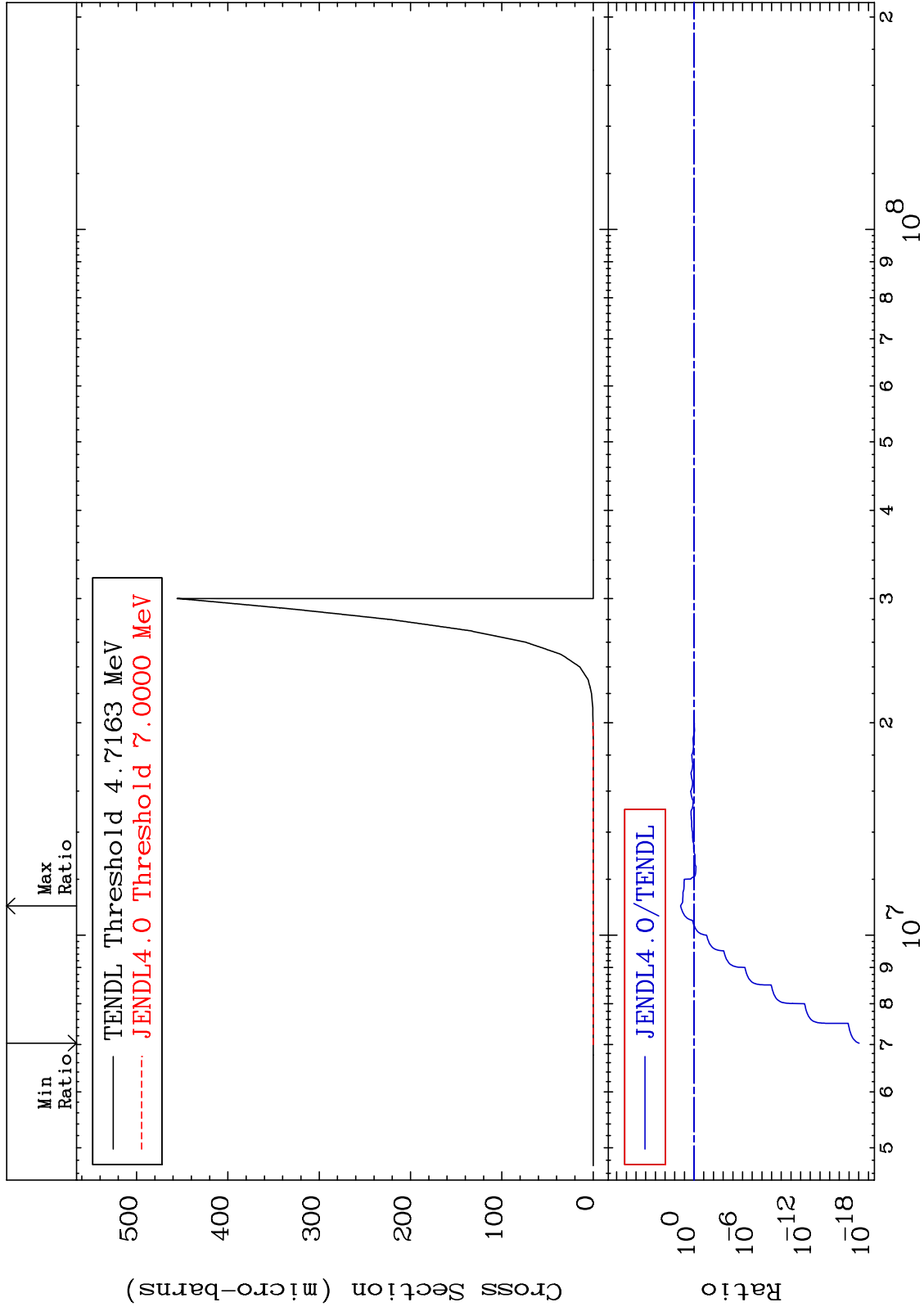
MAT 7634

(n, He-3)

76-0s-187

Cross Section

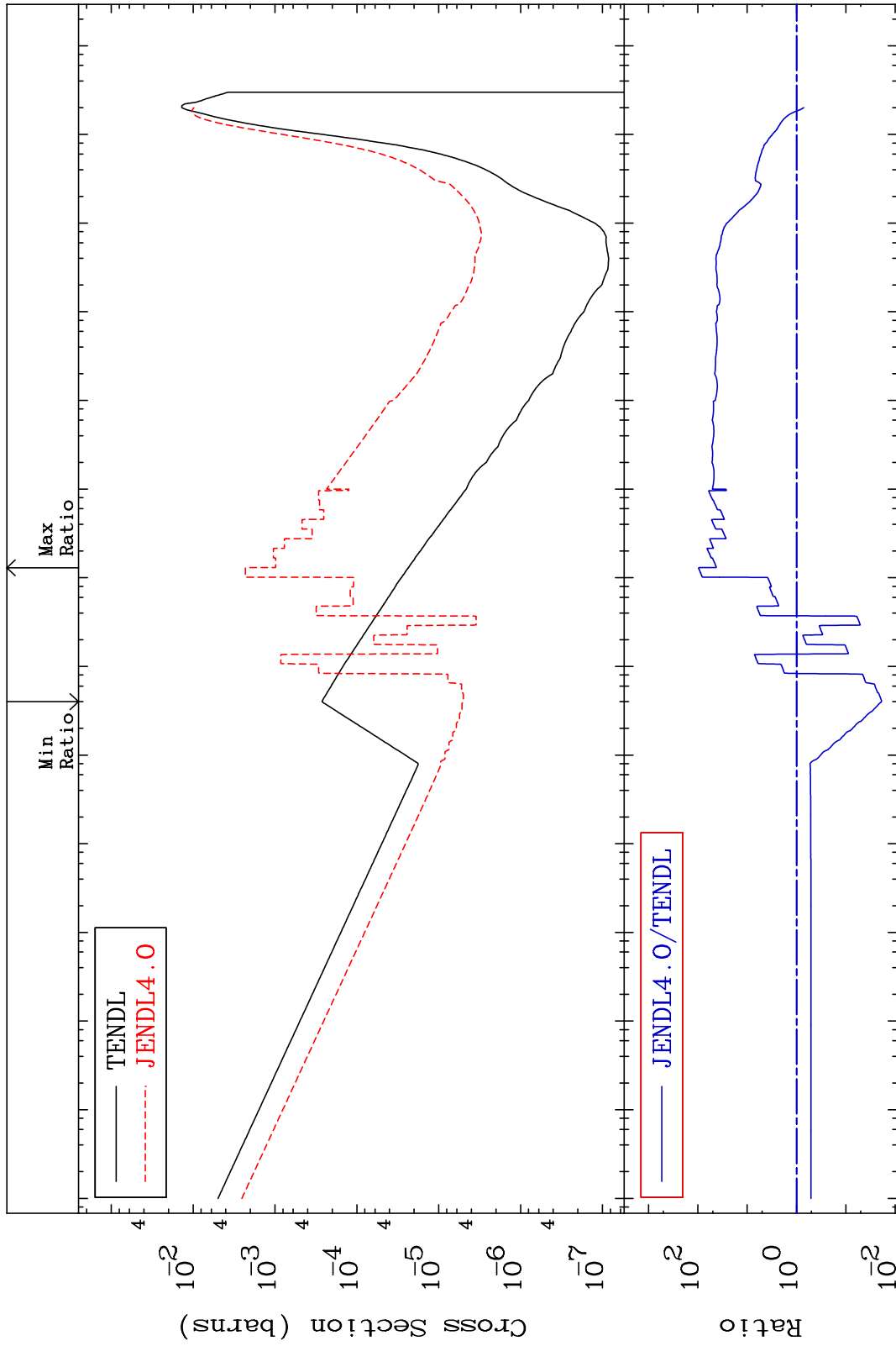
-100.0 To 2372. %



MAT 7634

(n,  $\alpha$ )  
Cross Section

76-0s-187  
-98.11 To 9688. %



Incident Energy (eV)

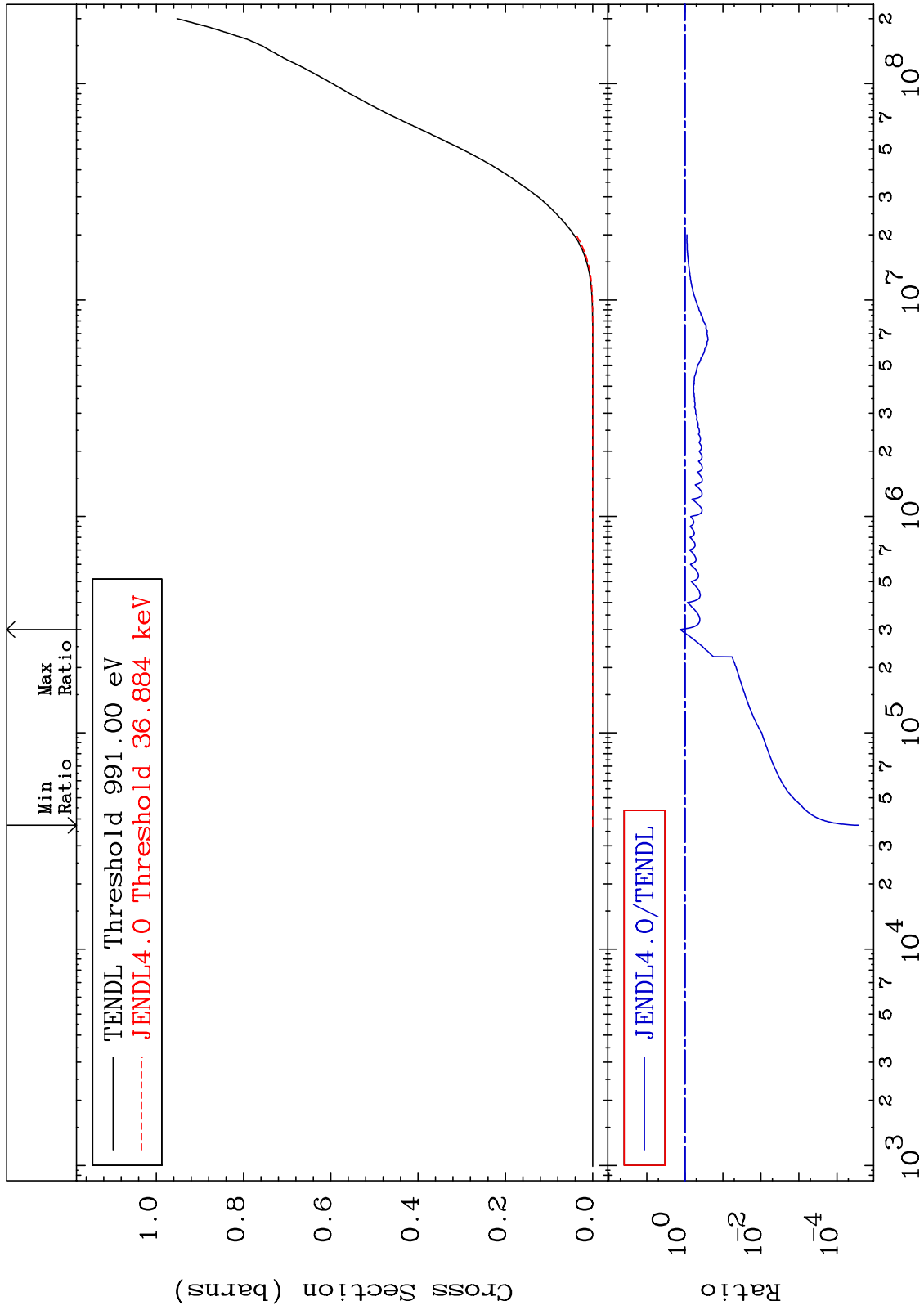
76-0s-187



MAT 7634

### Hydrogen Production Cross Section

76-0s-187  
-100.0 To 34.22 %



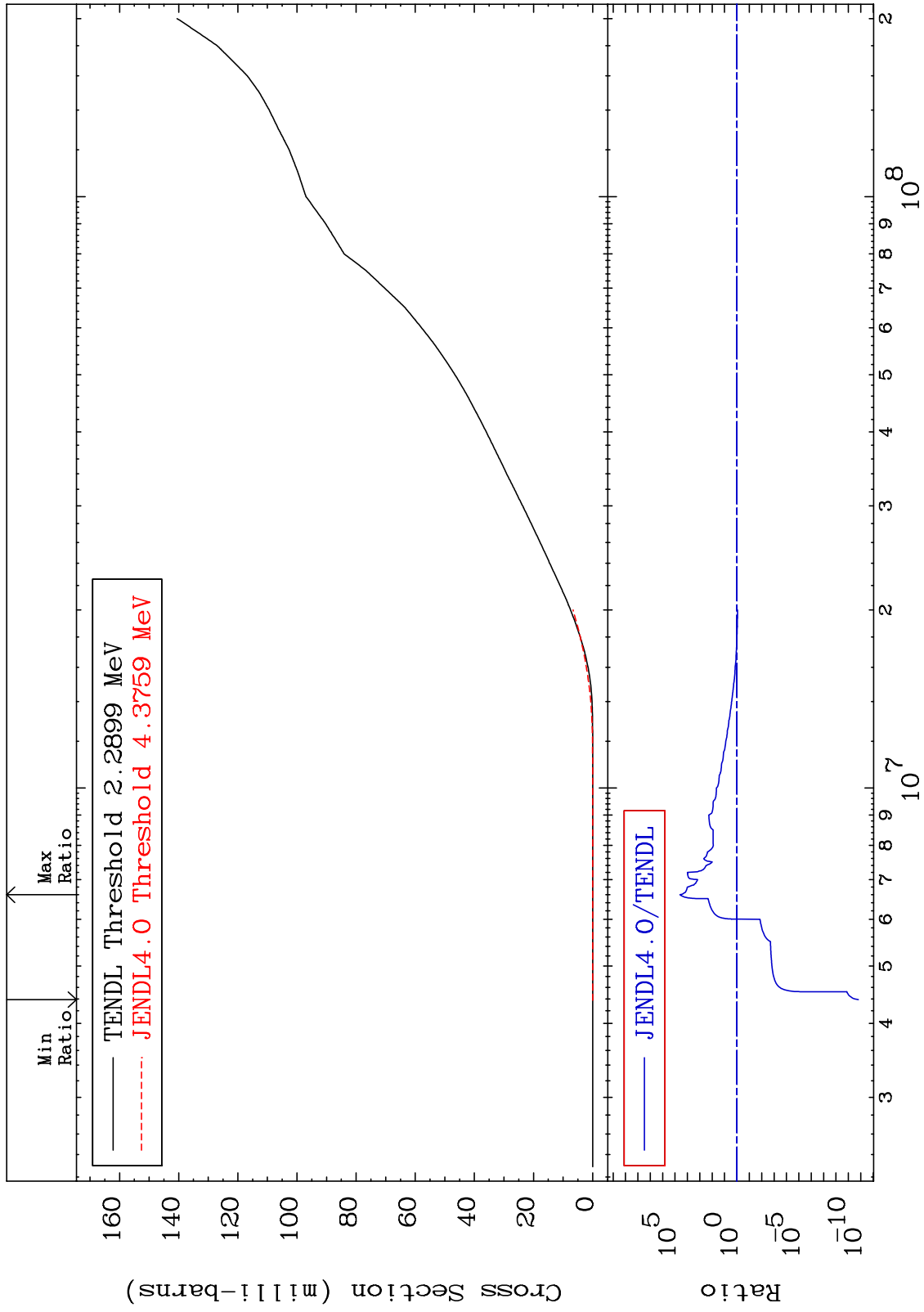
Min Ratio Max Ratio  
TENDL Threshold 991.00 eV  
JENDL4.0 Threshold 36.884 keV

JENDL4.0/TENDL

MAT 7634

Deuterium Production  
Cross Section

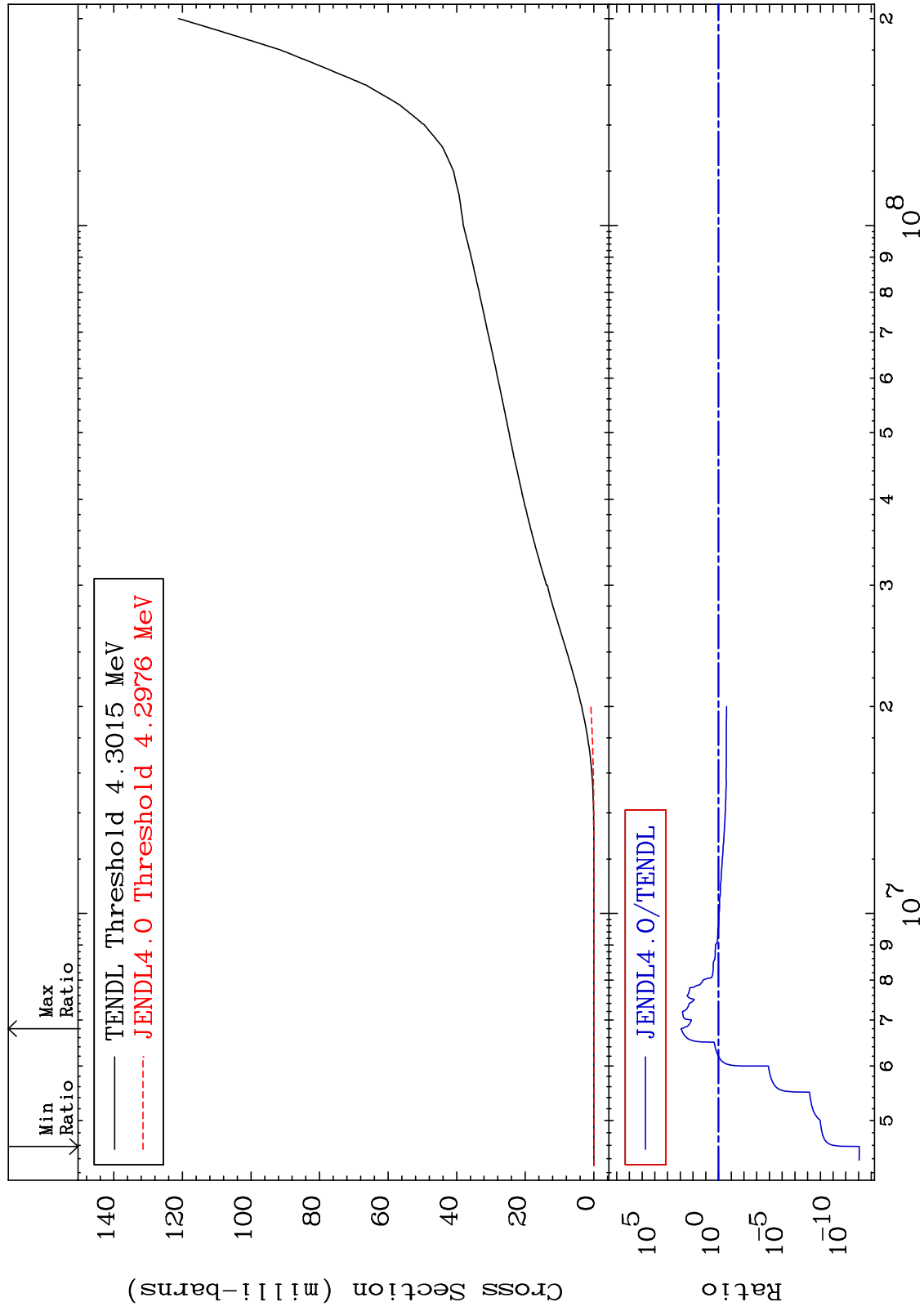
76-0s-187  
-100.0 To 9999. %



MAT 7634

Tritium Production  
Cross Section

76-0s-187  
-100.0 To 9999. %



50

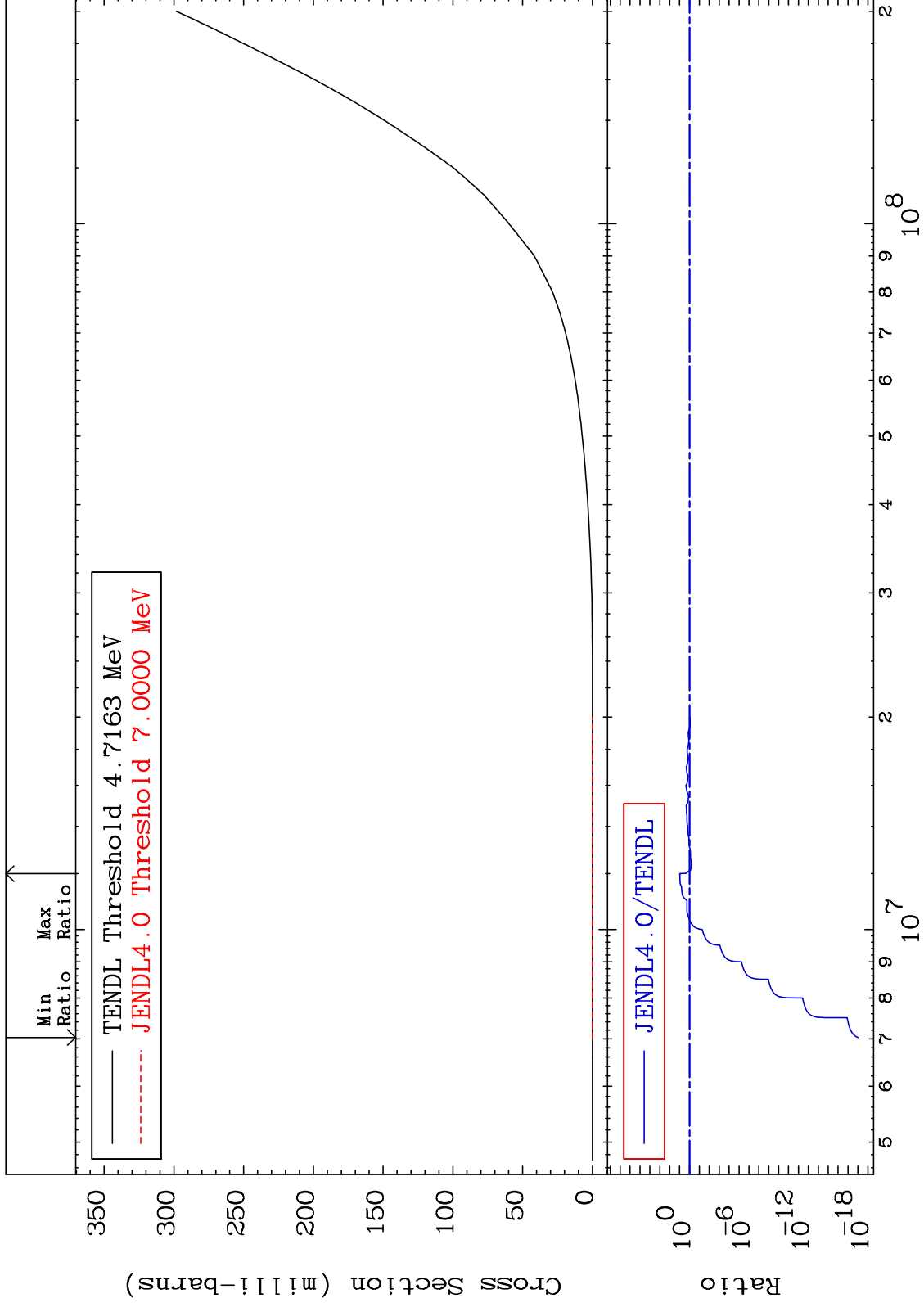
Incident Energy (eV)

76-0s-187

MAT 7634

He-3 Production  
Cross Section

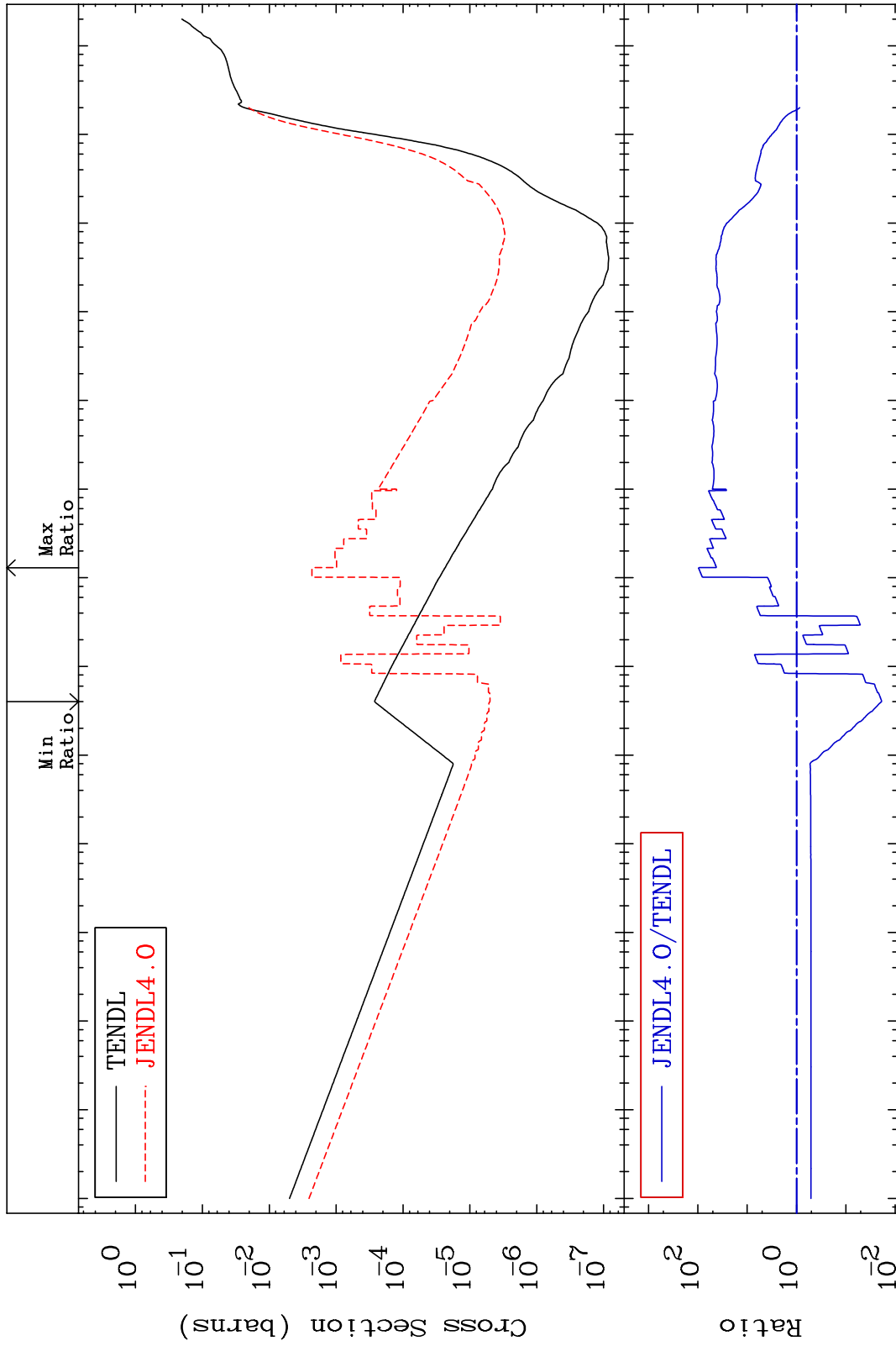
76-Os-187  
-100.0 To 849.1 %



MAT 7634

He-4 Production  
Cross Section

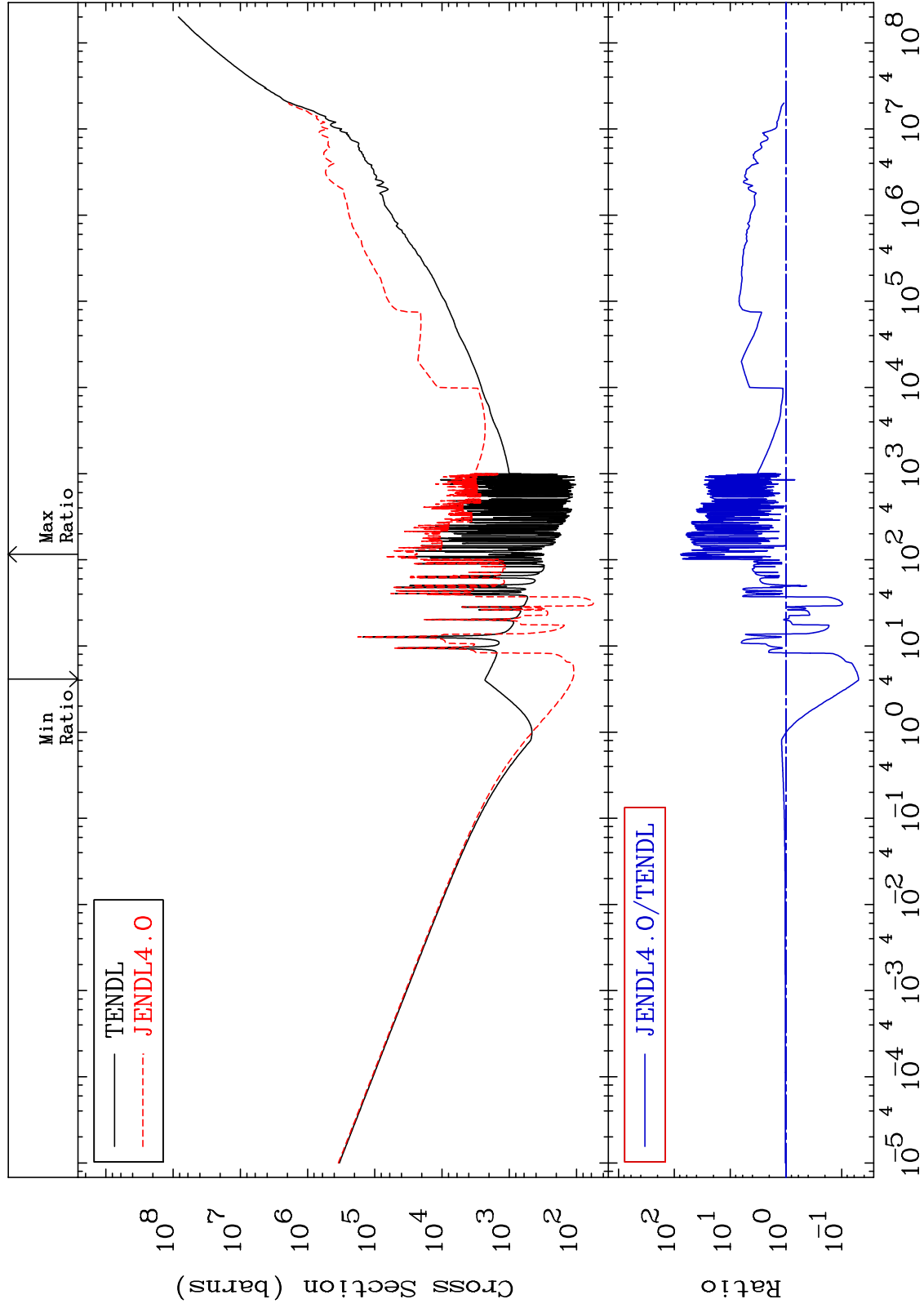
76-0s-187  
-98.11 To 9688. %



MAT 7634

Kerma total (eV-barns)  
Cross Section

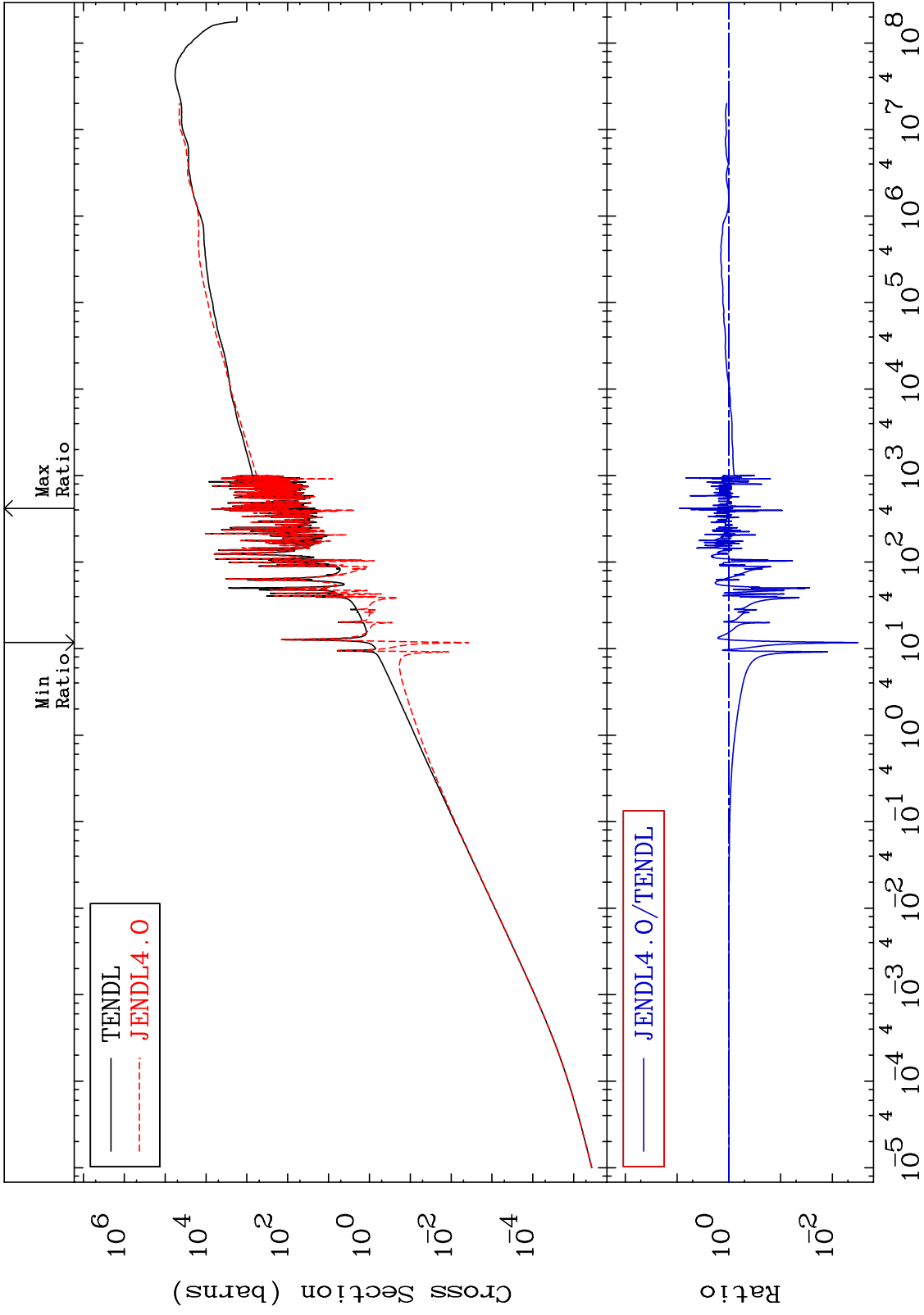
76-0s-187  
-94.98 To 7678. %



MAT 7634

Kerma elastic  
Cross Section

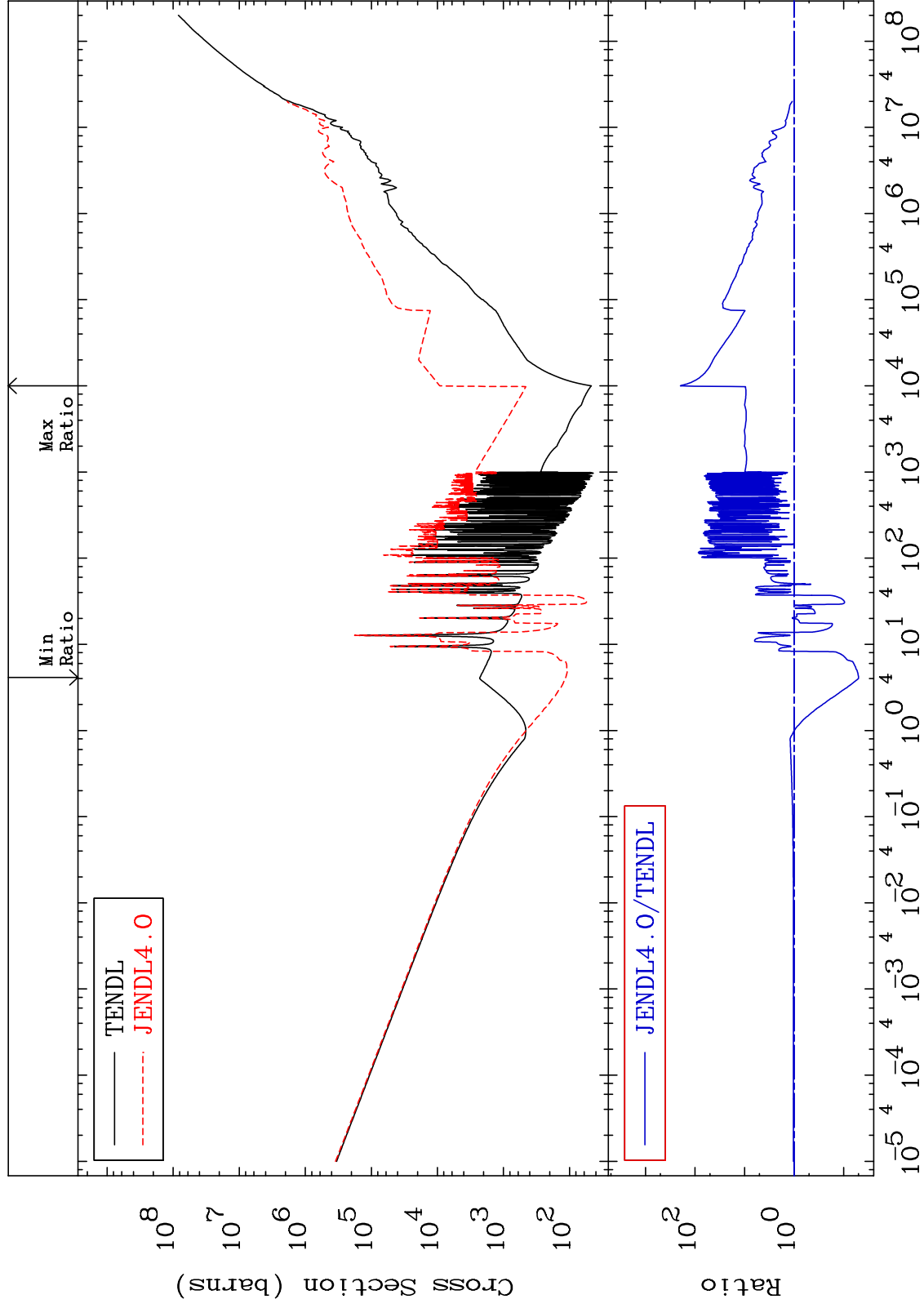
76-0s-187  
-99.68 To 801.5 %



MAT 7634

Kerma non-elastic (all but mt2)  
Cross Section

76-0s-187  
-94.99 To 9999. %



55

Incident Energy (eV)

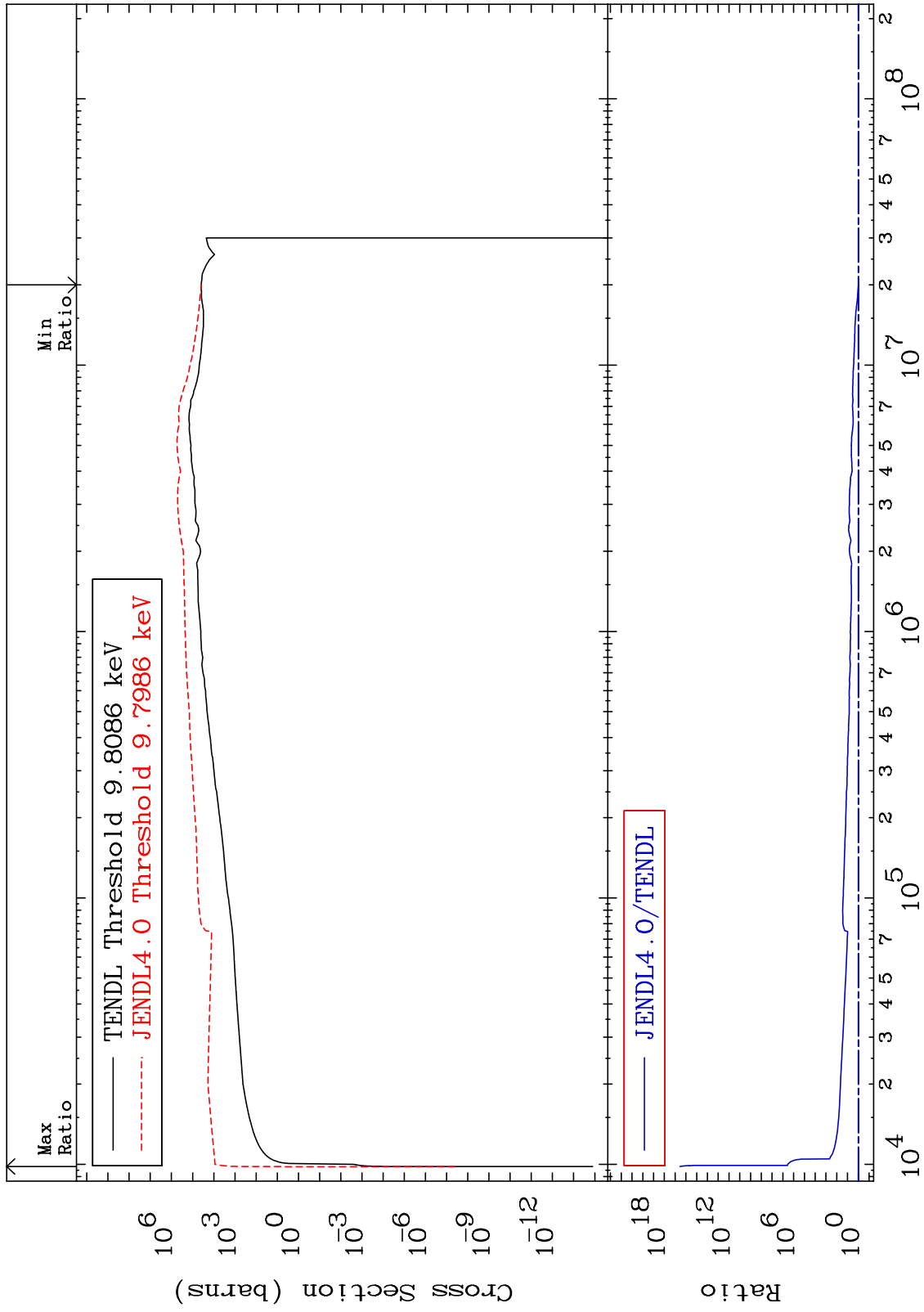
76-0s-187



MAT 7634

Kerma inelastic (mt51-91)  
Cross Section

76-0s-187  
-2.347 To 9999. %



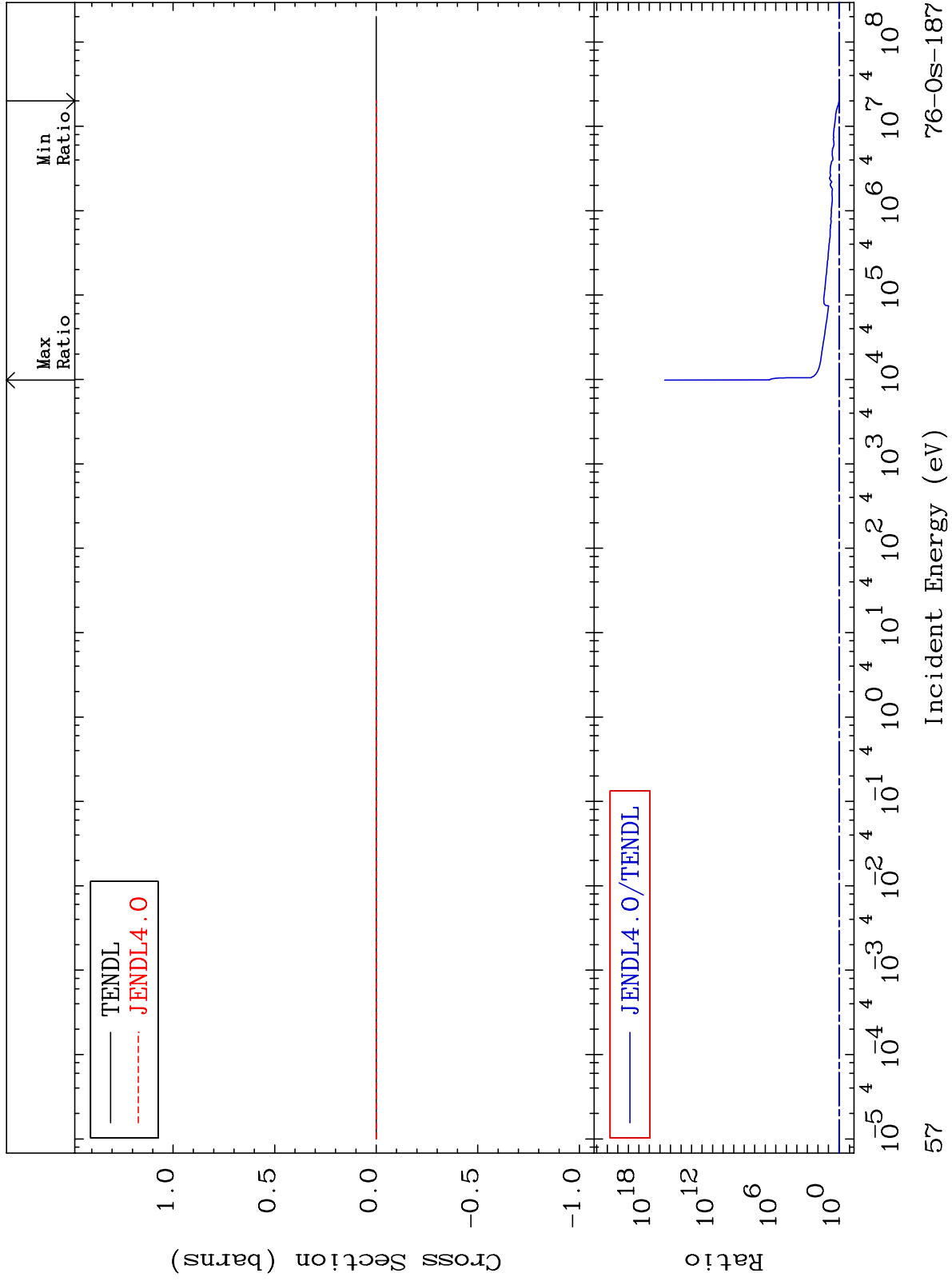
56

76-0s-187

MAT 7634

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

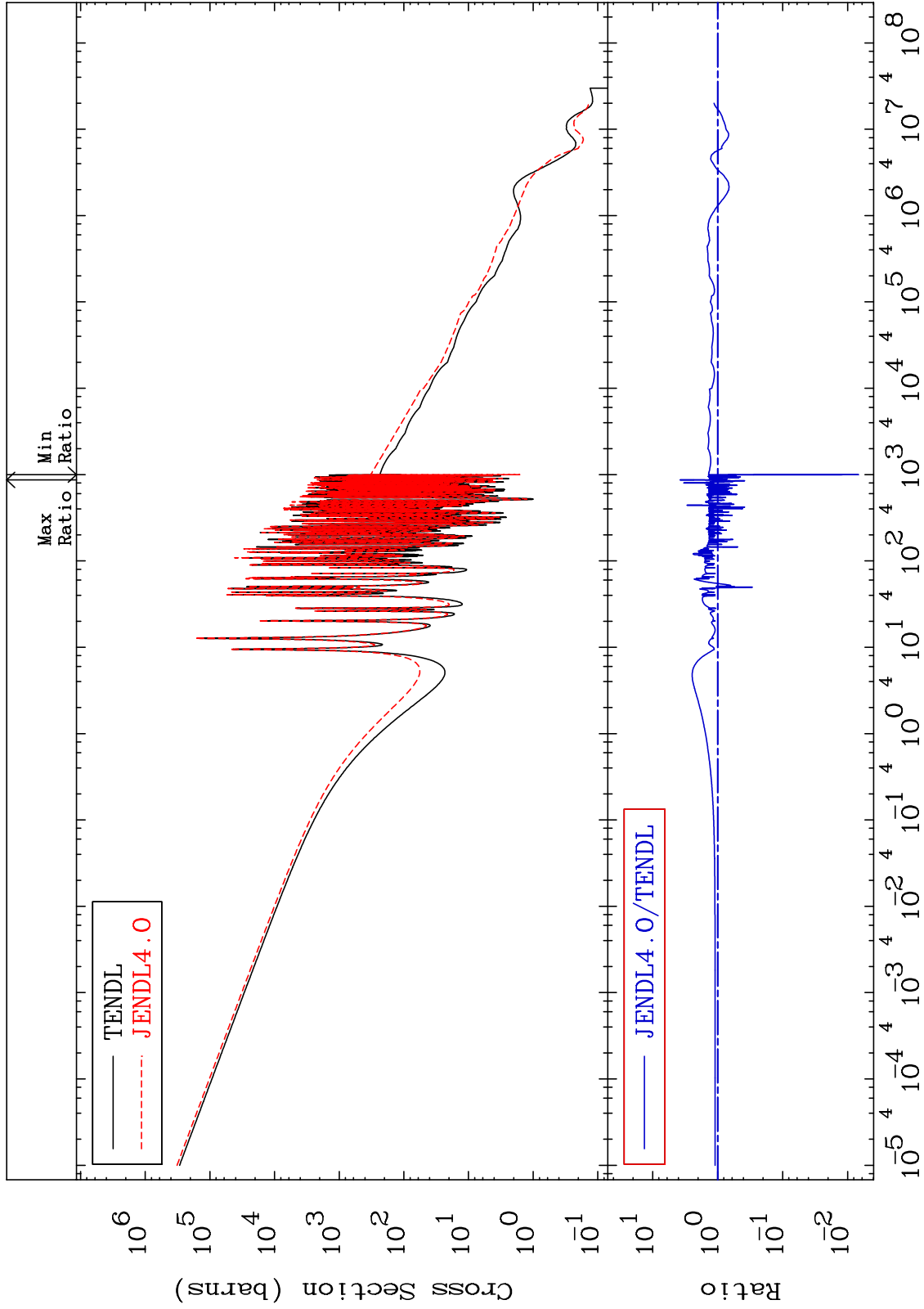
76-0s-187  
-2.347 To 9999. %



MAT 7634

Kerma capture (mt102)  
Cross Section

76-0s-187  
-99.32 To 278.6 %



58

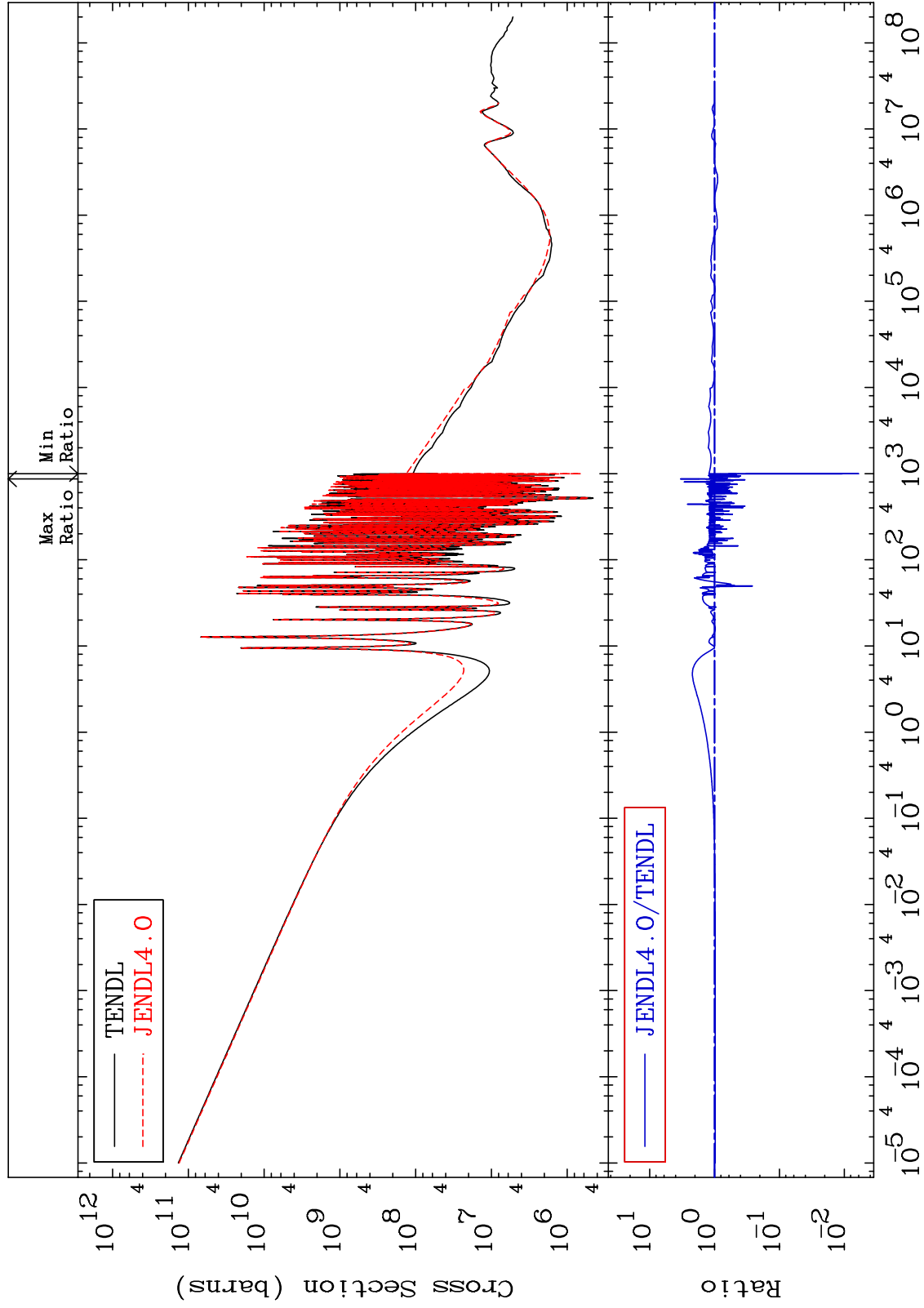
Incident Energy (eV)

76-0s-187

MAT 7634

Total photon (eV-barns)  
Cross Section

76-0s-187  
-99.40 To 235.9 %



59

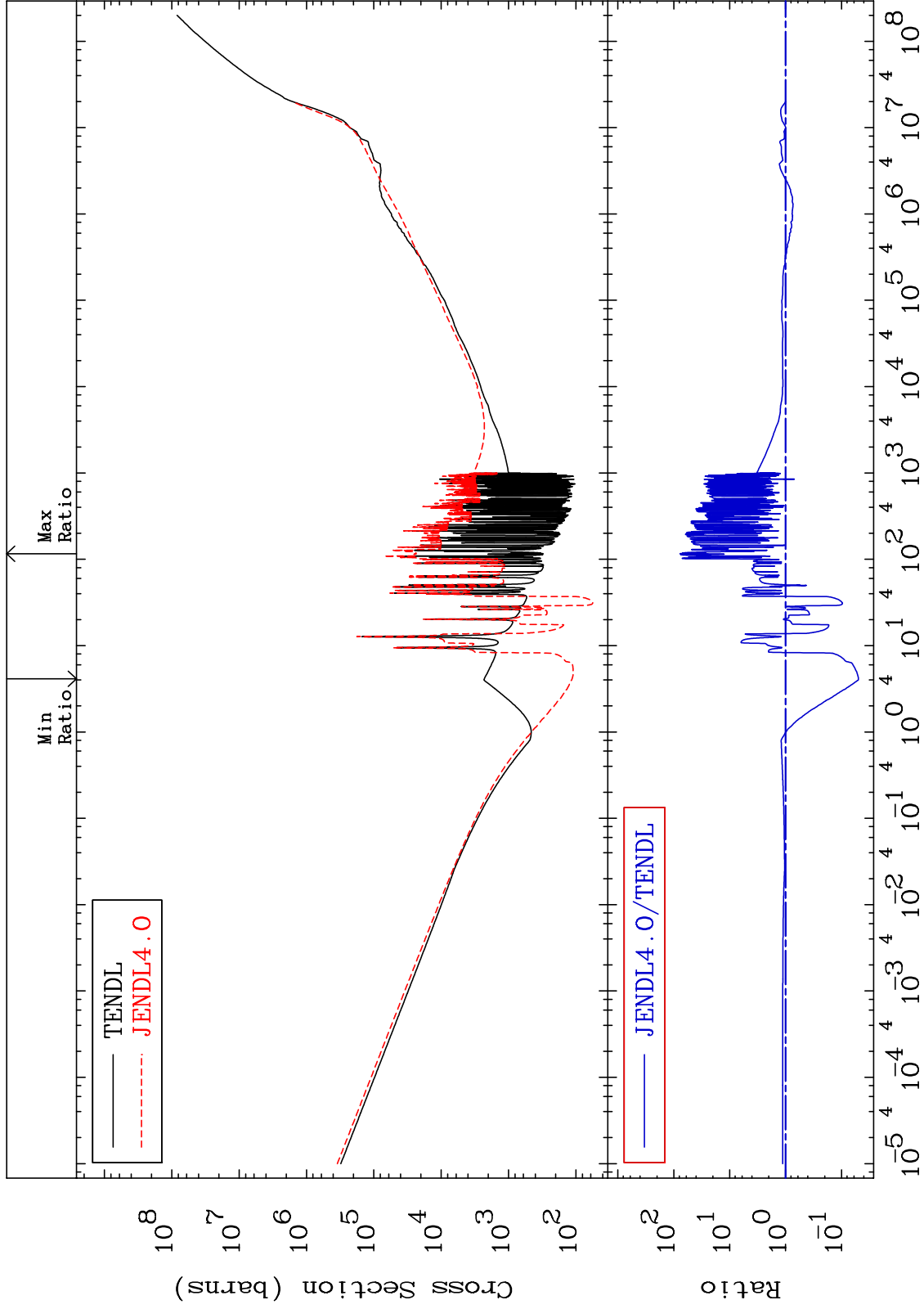
Incident Energy (eV)

76-0s-187

MAT 7634

Total kinematic kerma (high limit)  
Cross Section

76-0s-187  
-95.02 To 7637. %



60

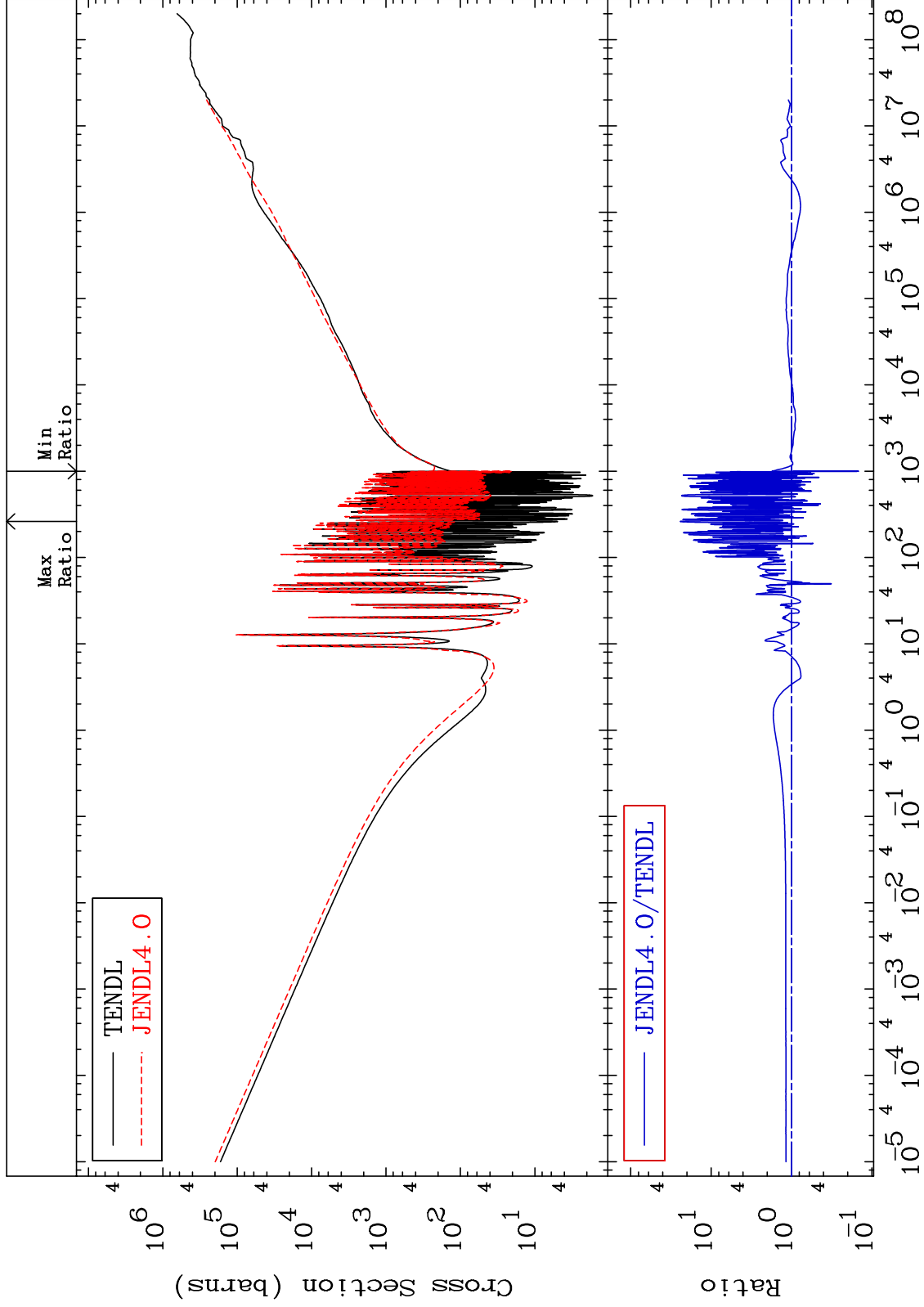
Incident Energy (eV)

76-0s-187

MAT 7634

Dpa total (eV-barns)  
Cross Section

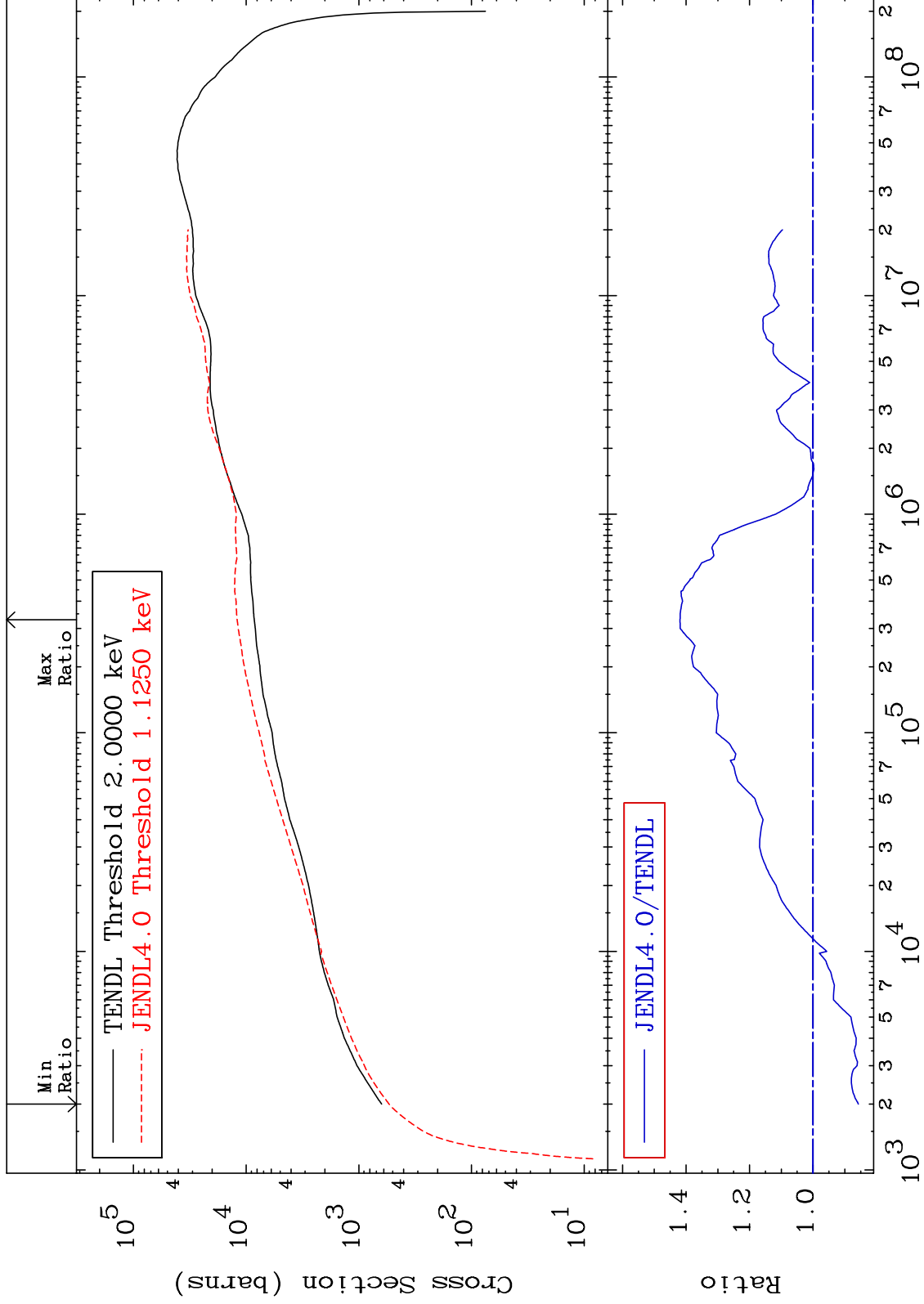
76-0s-187  
-85.30 To 2334. %



MAT 7634

Dpa elastic (mt2)  
Cross Section

76-0s-187  
-14.29 To 41.91 %



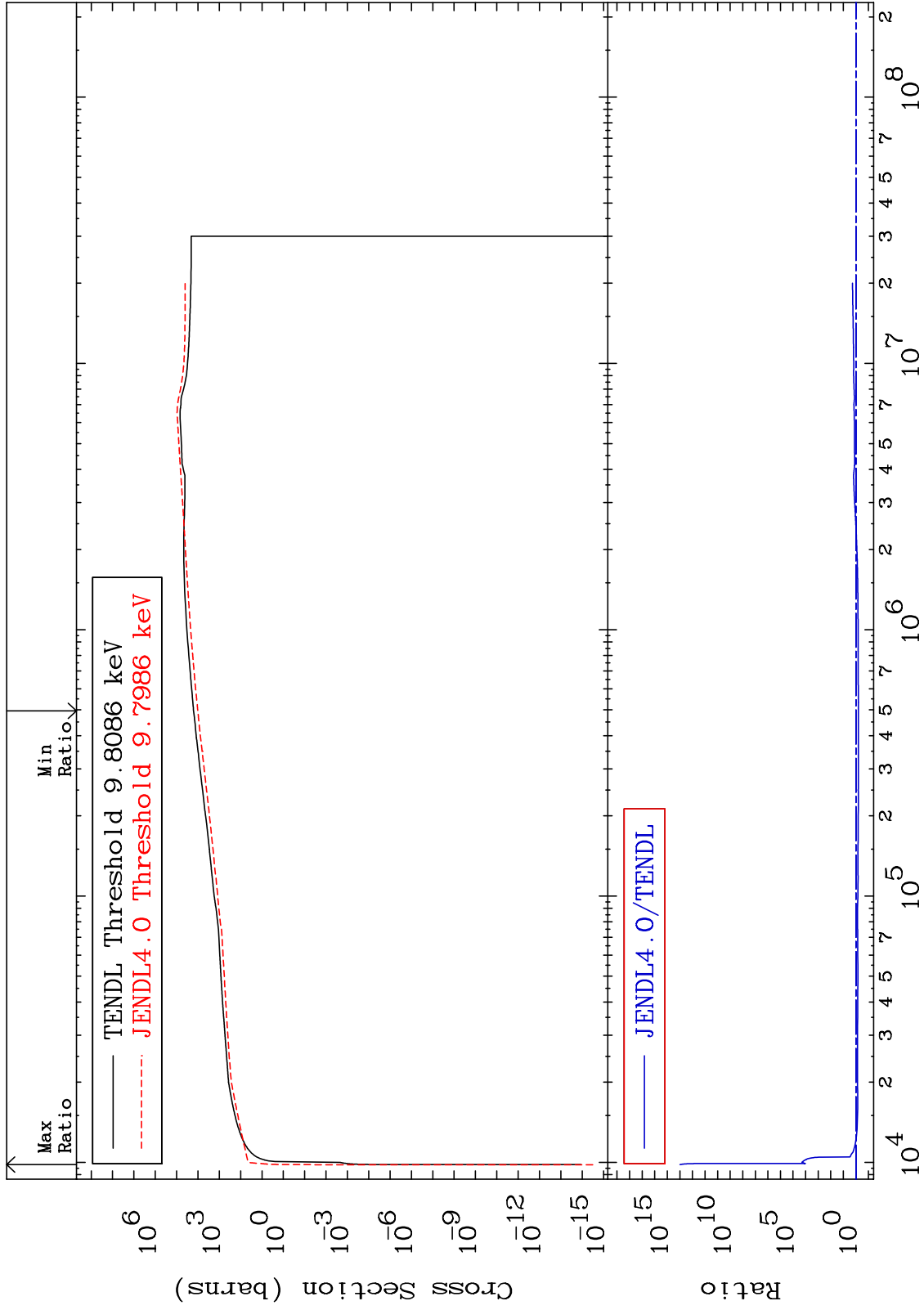
62

76-0s-187

MAT 7634

Dpa inelastic (mt51-91)  
Cross Section

76-0s-187  
-36.81 To 9999. %



63

Incident Energy (eV)

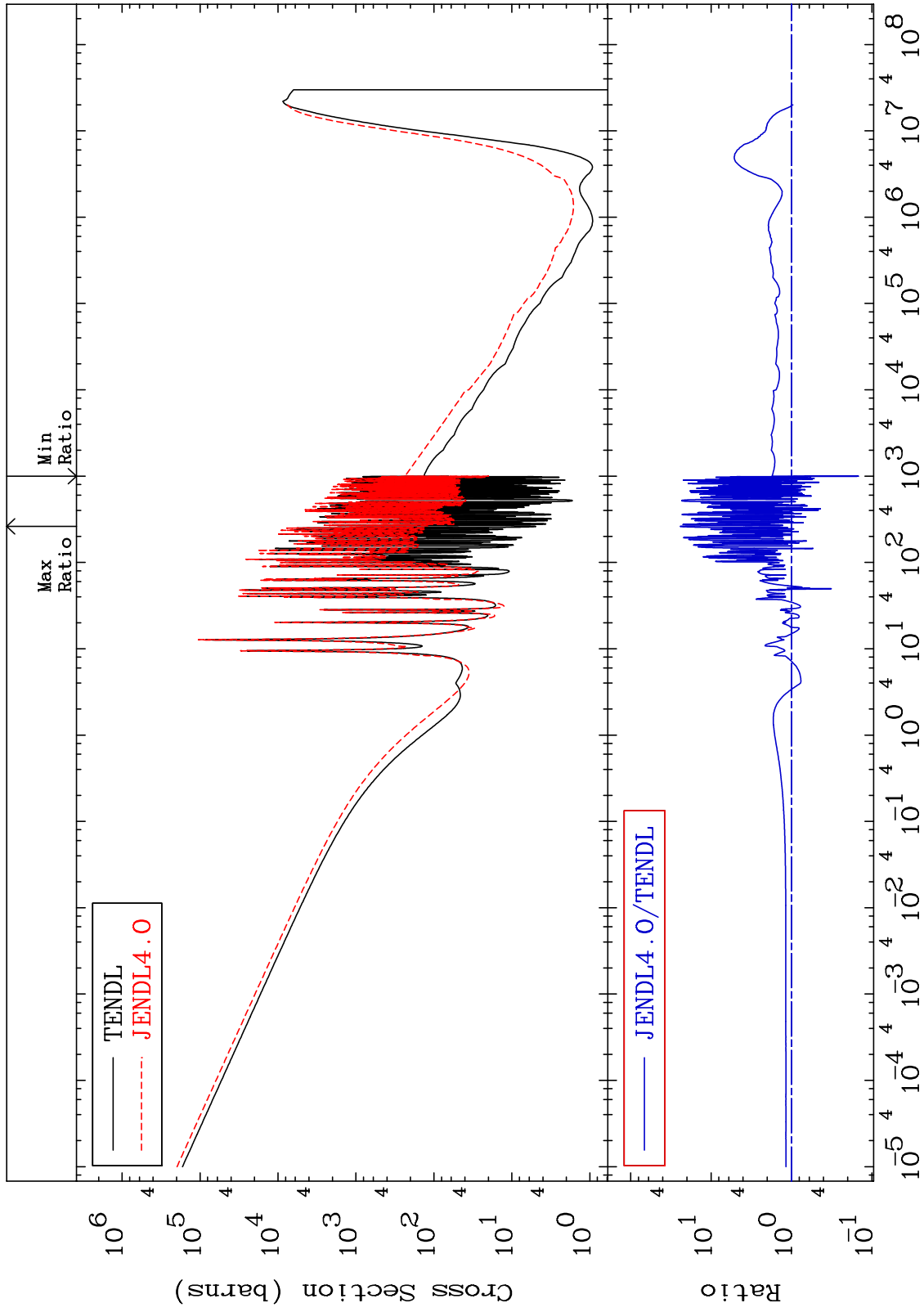
76-0s-187



MAT 7634

Dpa disappearance (mt102 -120)  
Cross Section

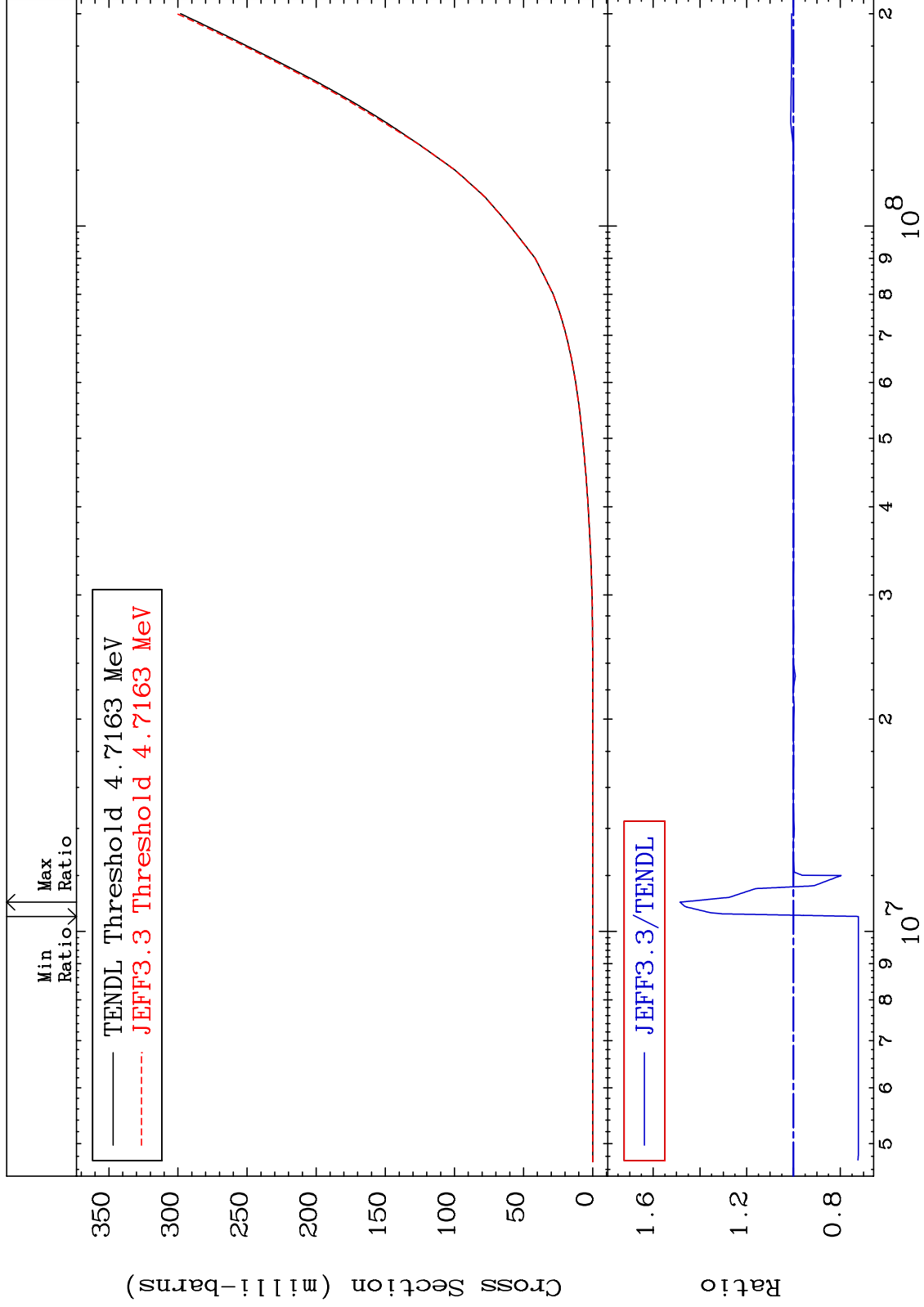
76-0s-187  
-85.30 To 2334. %



MAT 7634

He-3 Production  
Cross Section

76-0s-187  
-27.76 To 48.51 %



65

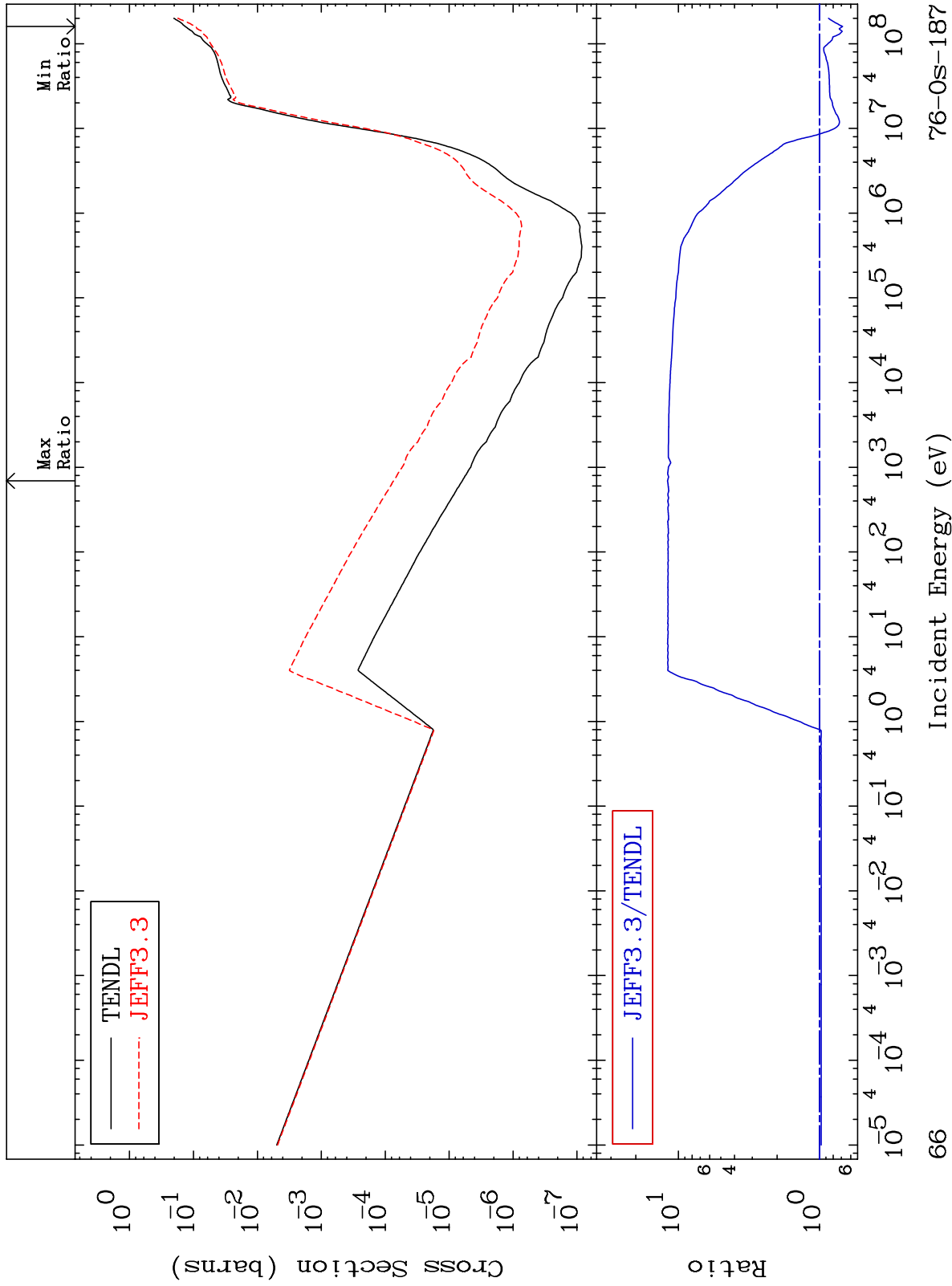
Incident Energy (eV)

76-0s-187

MAT 7634

He-4 Production  
Cross Section

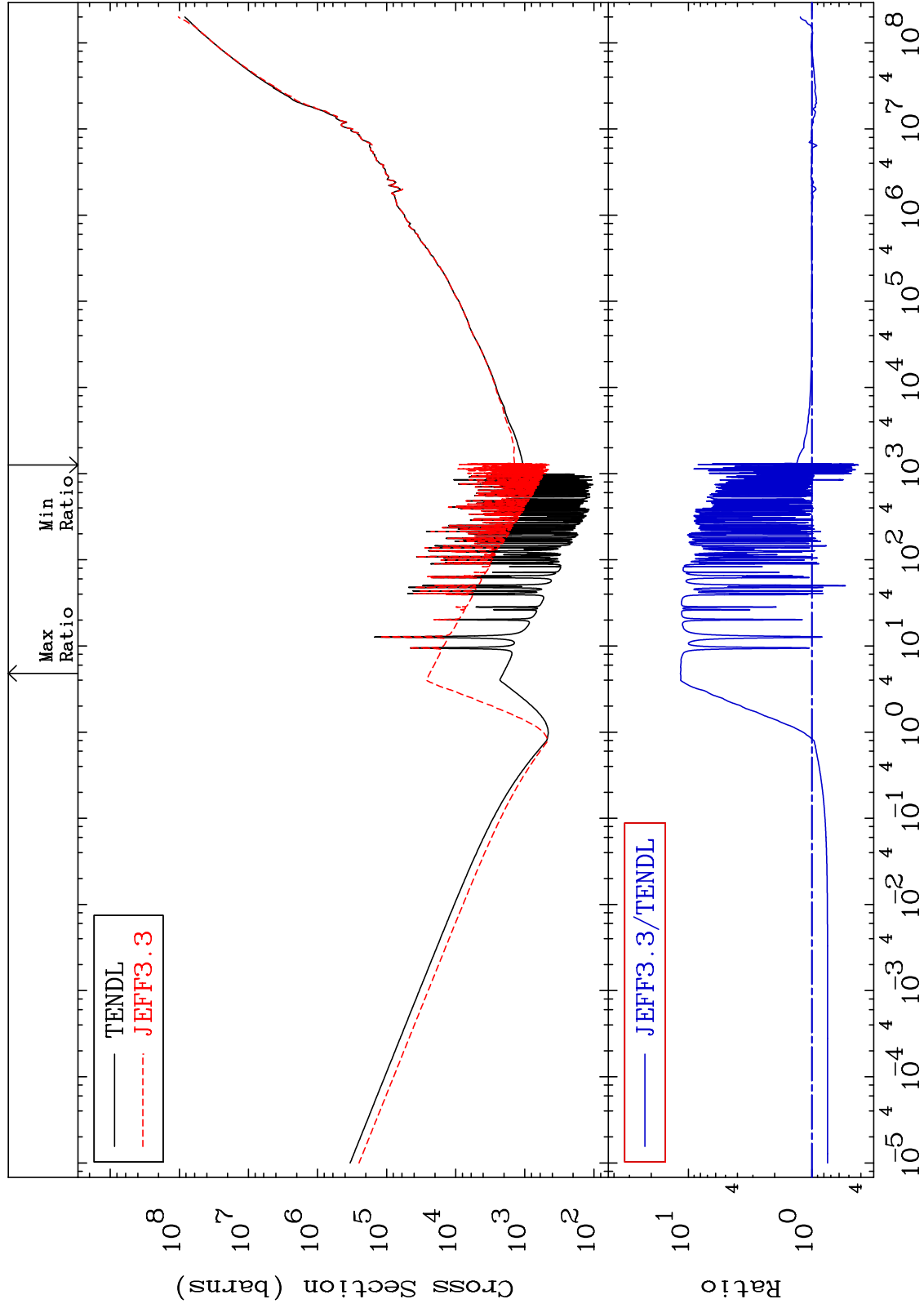
76-0s-187  
-31.42 To 1093. %



MAT 7634

Kerma total (eV-barns)  
Cross Section

76-0s-187  
-58.18 To 1059. %



67

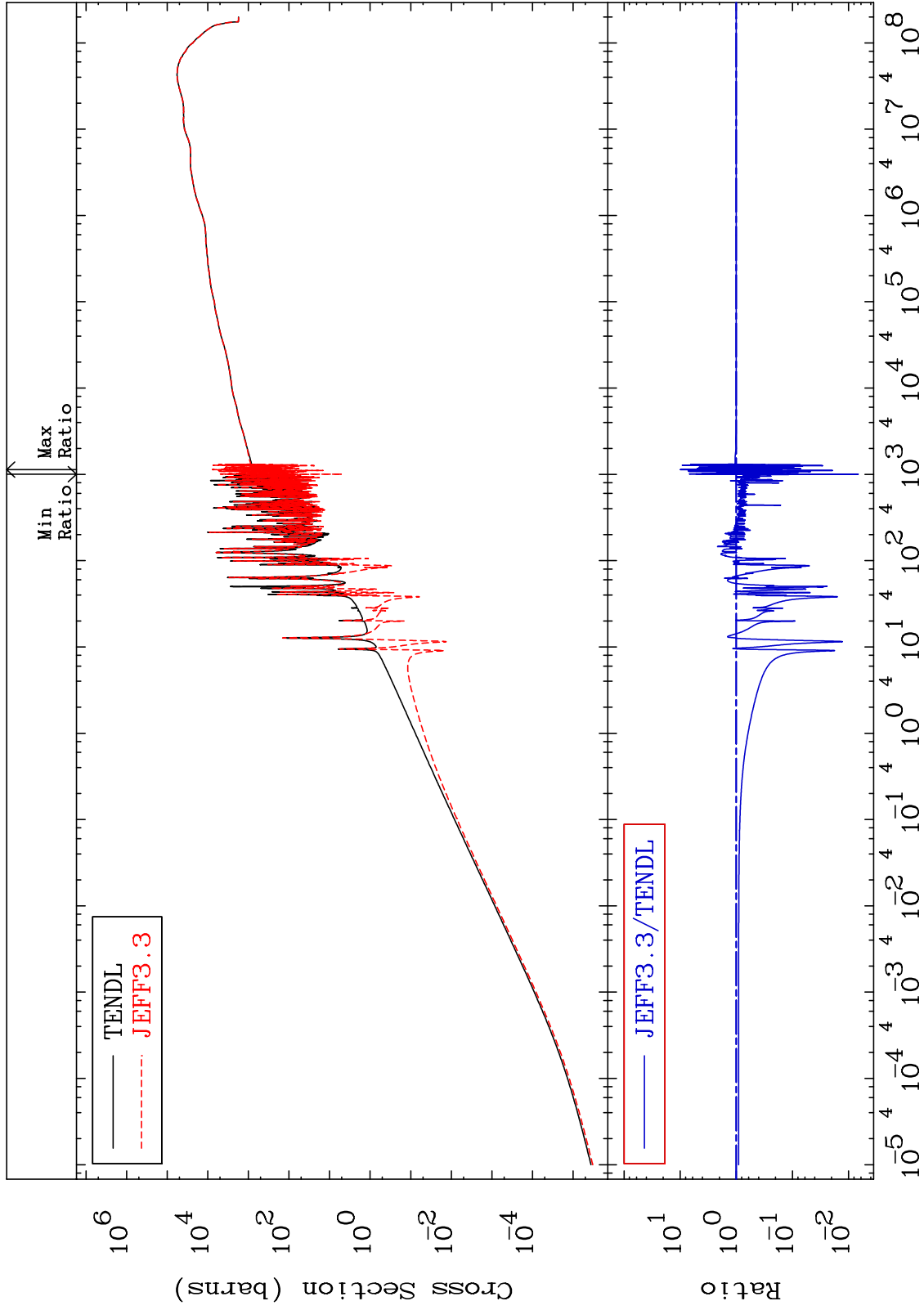
Incident Energy (eV)

76-0s-187

MAT 7634

Kerma elastic  
Cross Section

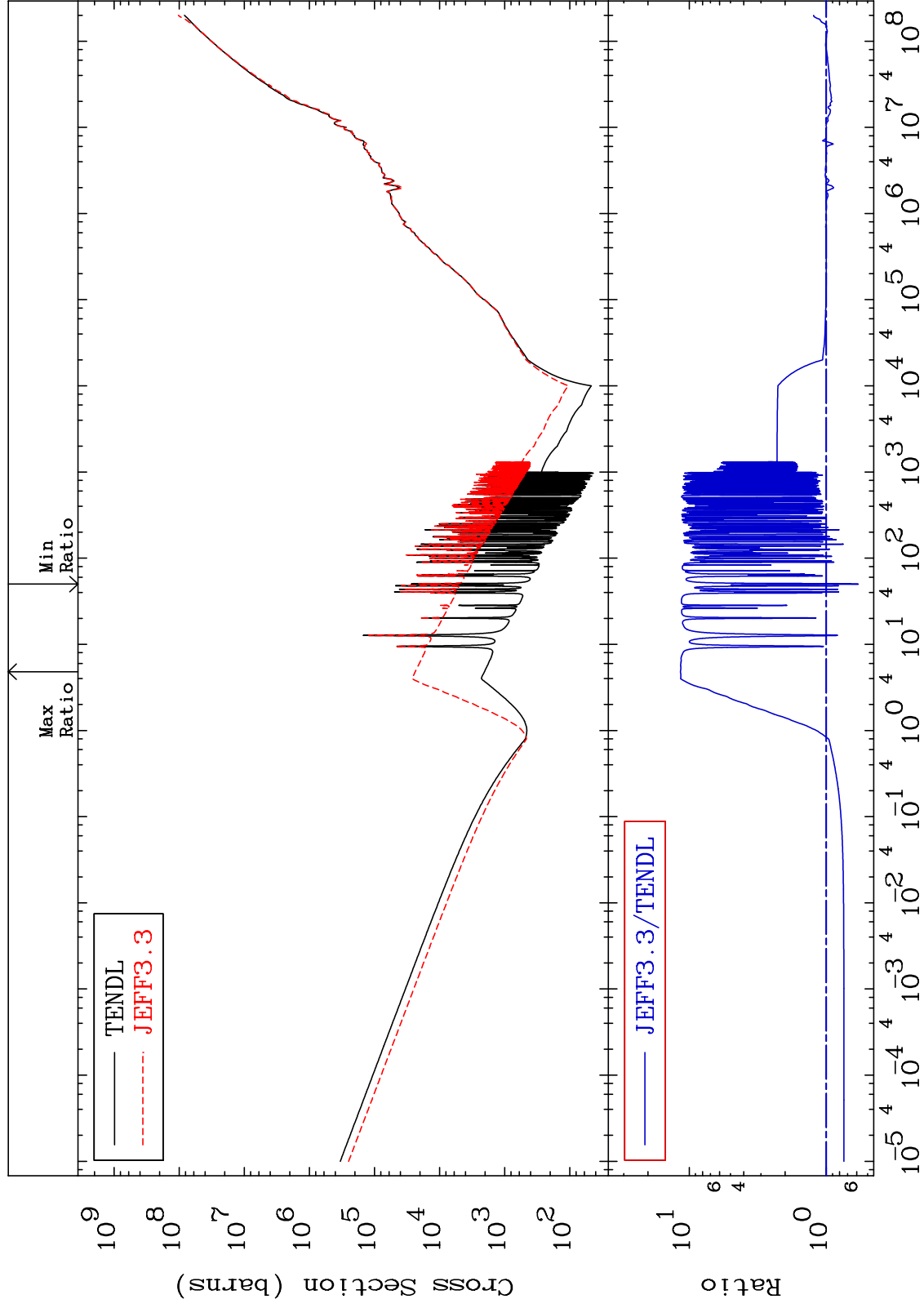
76-0s-187  
-99.33 To 905.0 %



MAT 7634

Kerma non-elastic (all but mt2)  
Cross Section

76-0s-187  
-41.81 To 1059. %



69

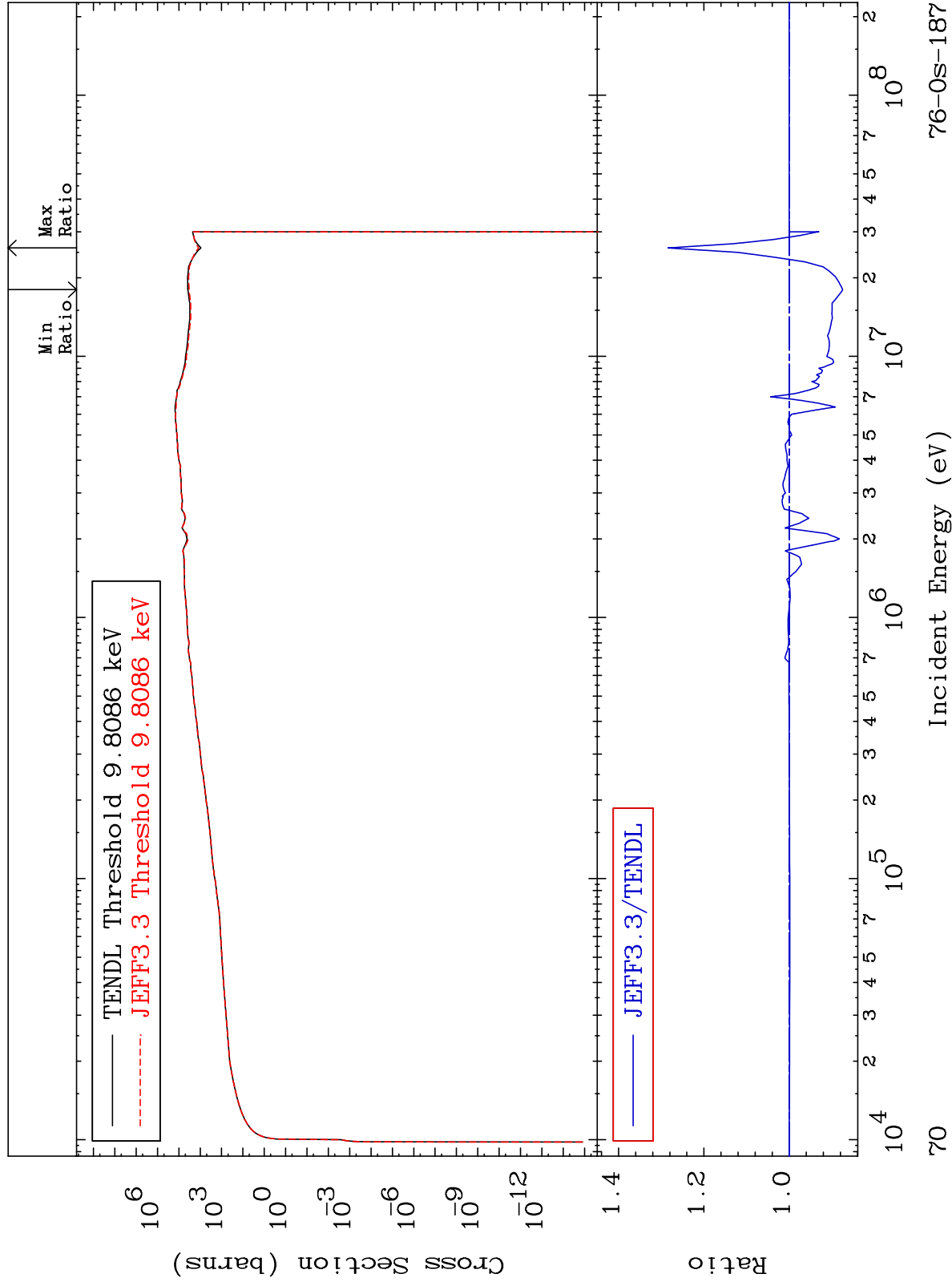
Incident Energy (eV)

76-0s-187

MAT 7634

Kerma inelastic (mt51-91)  
Cross Section

76-0s-187  
-12.56 To 28.41 %

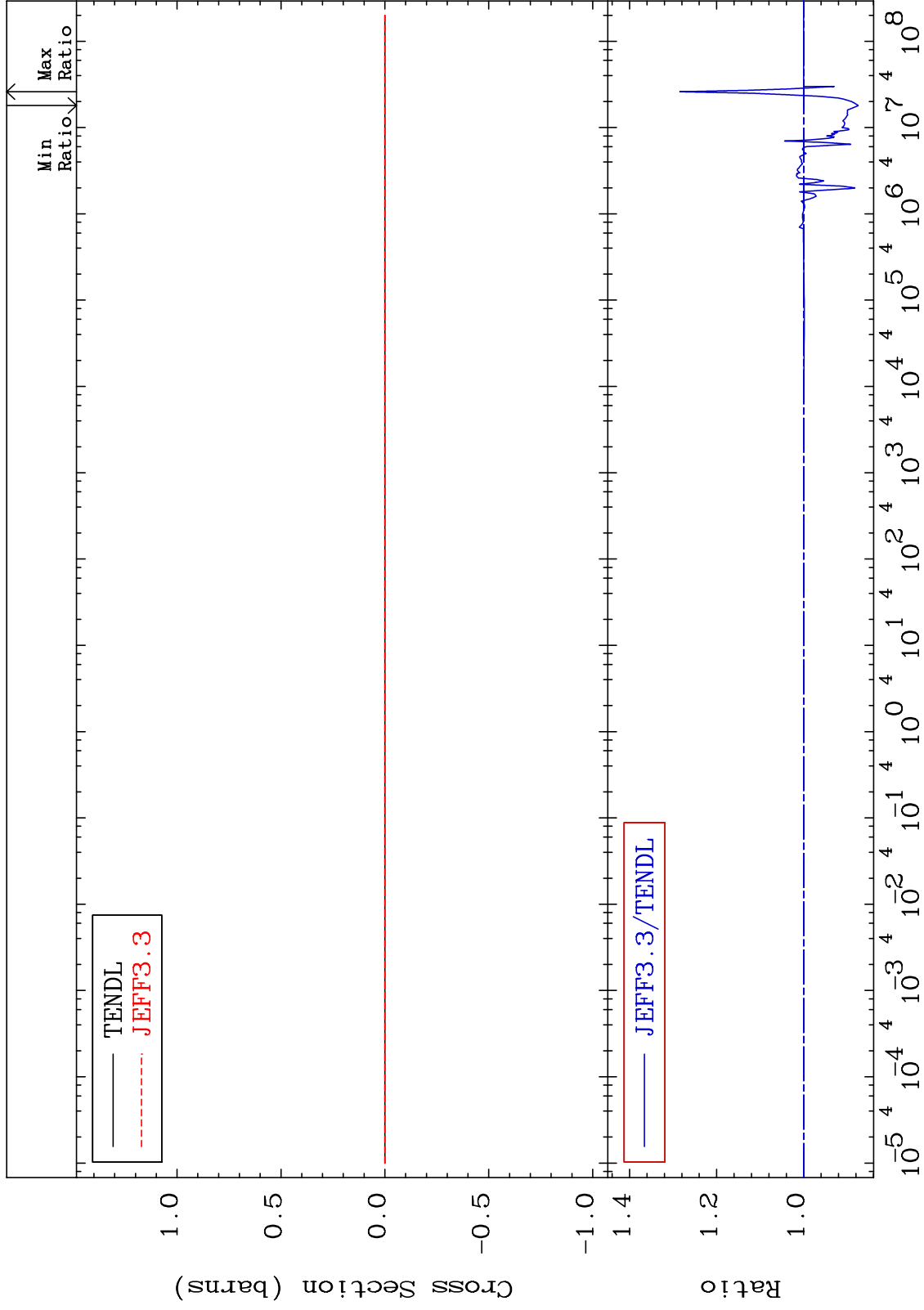


76-0s-187

MAT 7634

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

76-0s-187  
-12.56 To 28.41 %



71

Incident Energy (eV)

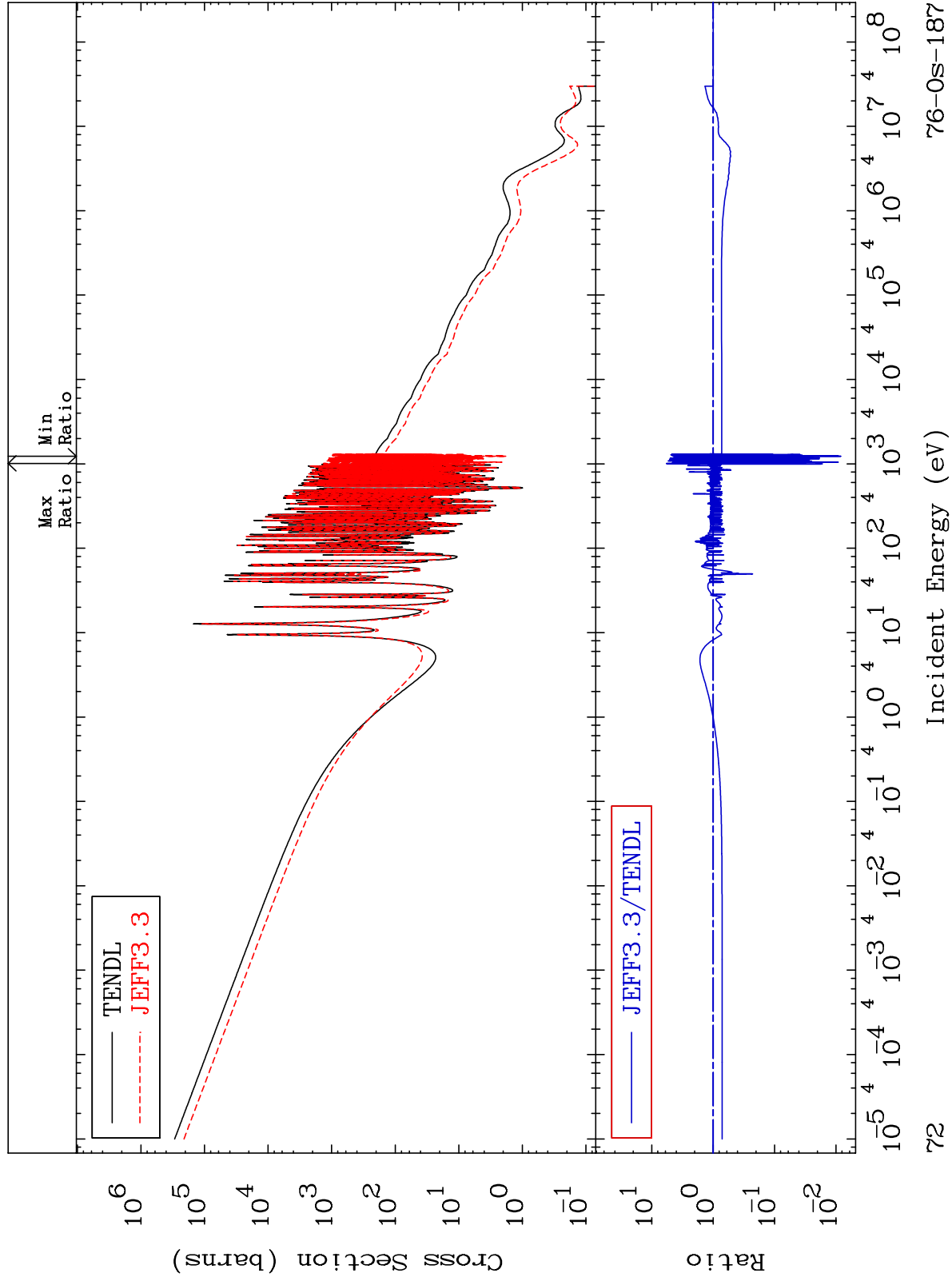
76-0s-187



MAT 7634

Kerma capture (mt102)  
Cross Section

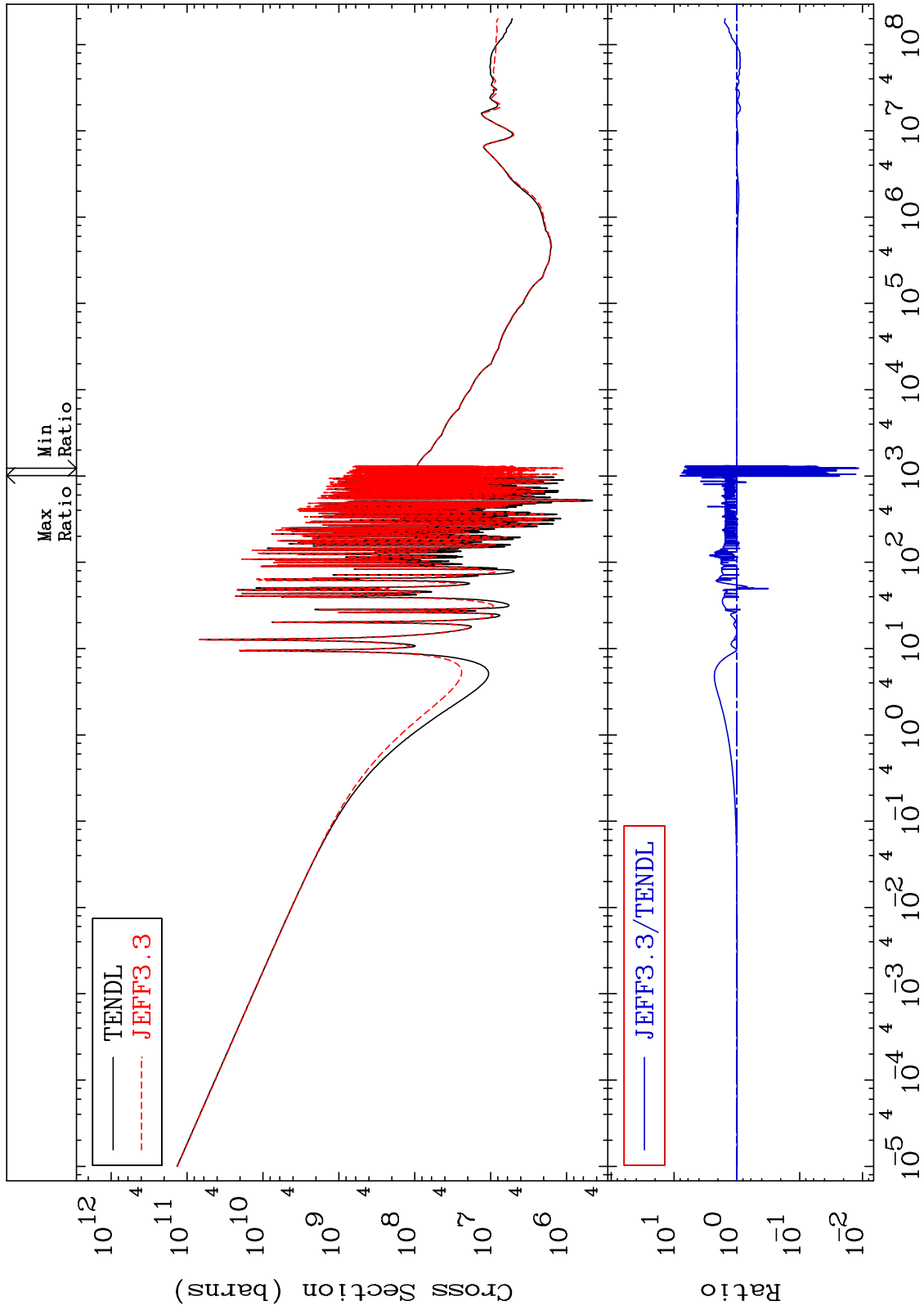
76-0s-187  
-99.16 To 478.9 %



MAT 7634

Total photon (eV-barns)  
Cross Section

76-0s-187  
-98.84 To 703.1 %



73

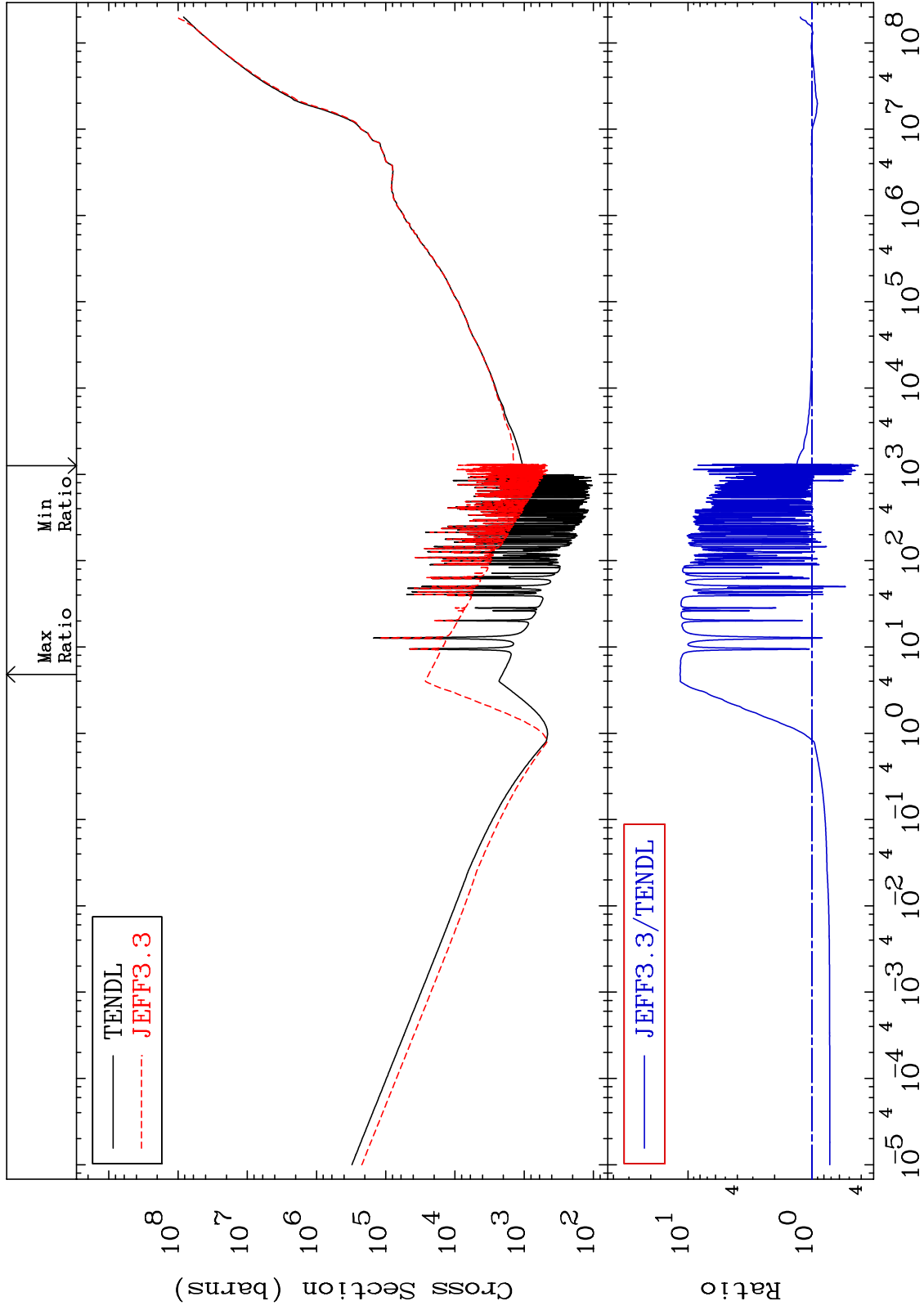
Incident Energy (eV)

76-0s-187

MAT 7634

Total kinematic kerma (high limit)  
Cross Section

76-0s-187  
-57.89 To 1059. %



74

Incident Energy (eV)

76-0s-187

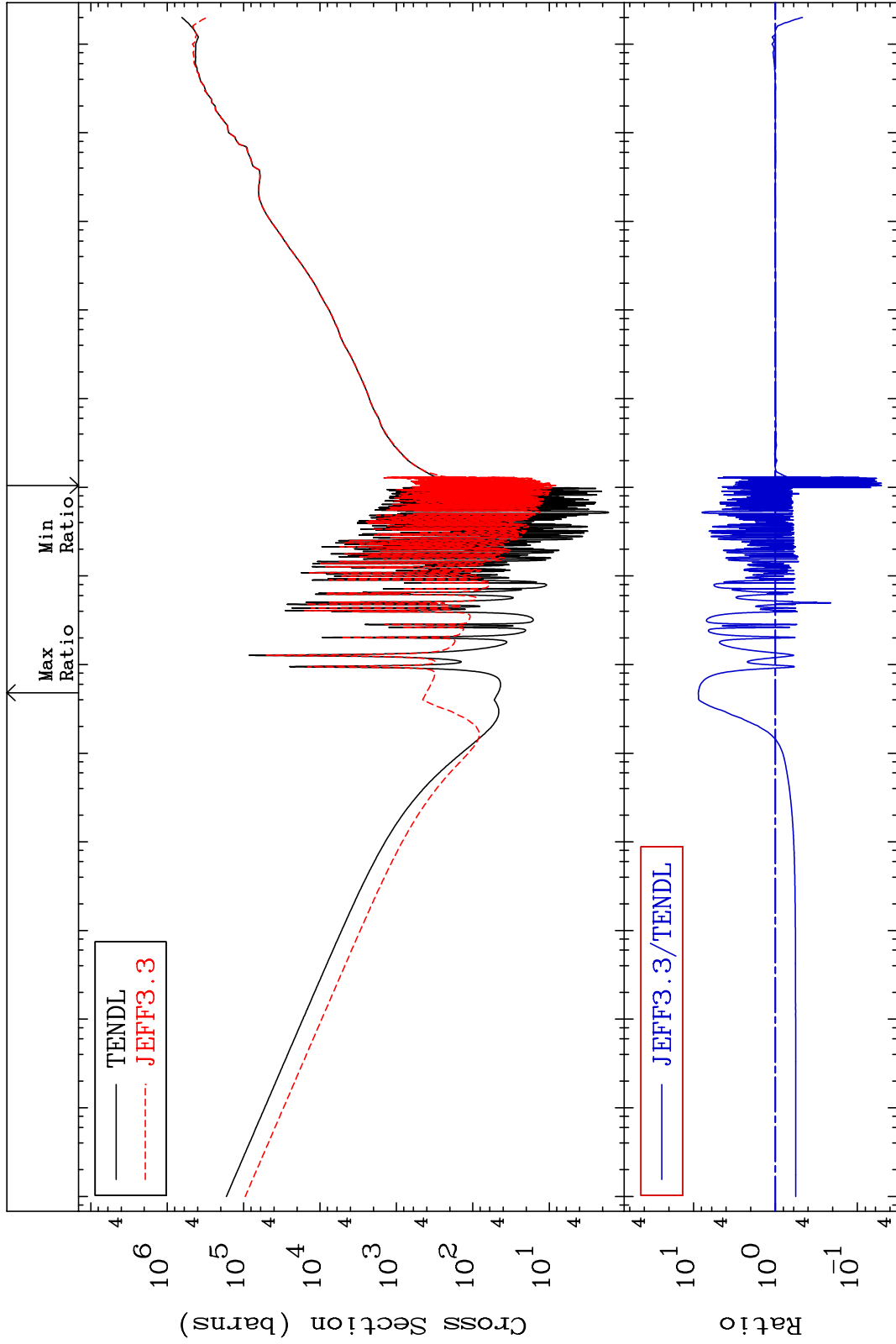
MAT 7634

Dpa total (eV-barns)

76-0s-187

Cross Section

-94.94 To 773.3 %



75

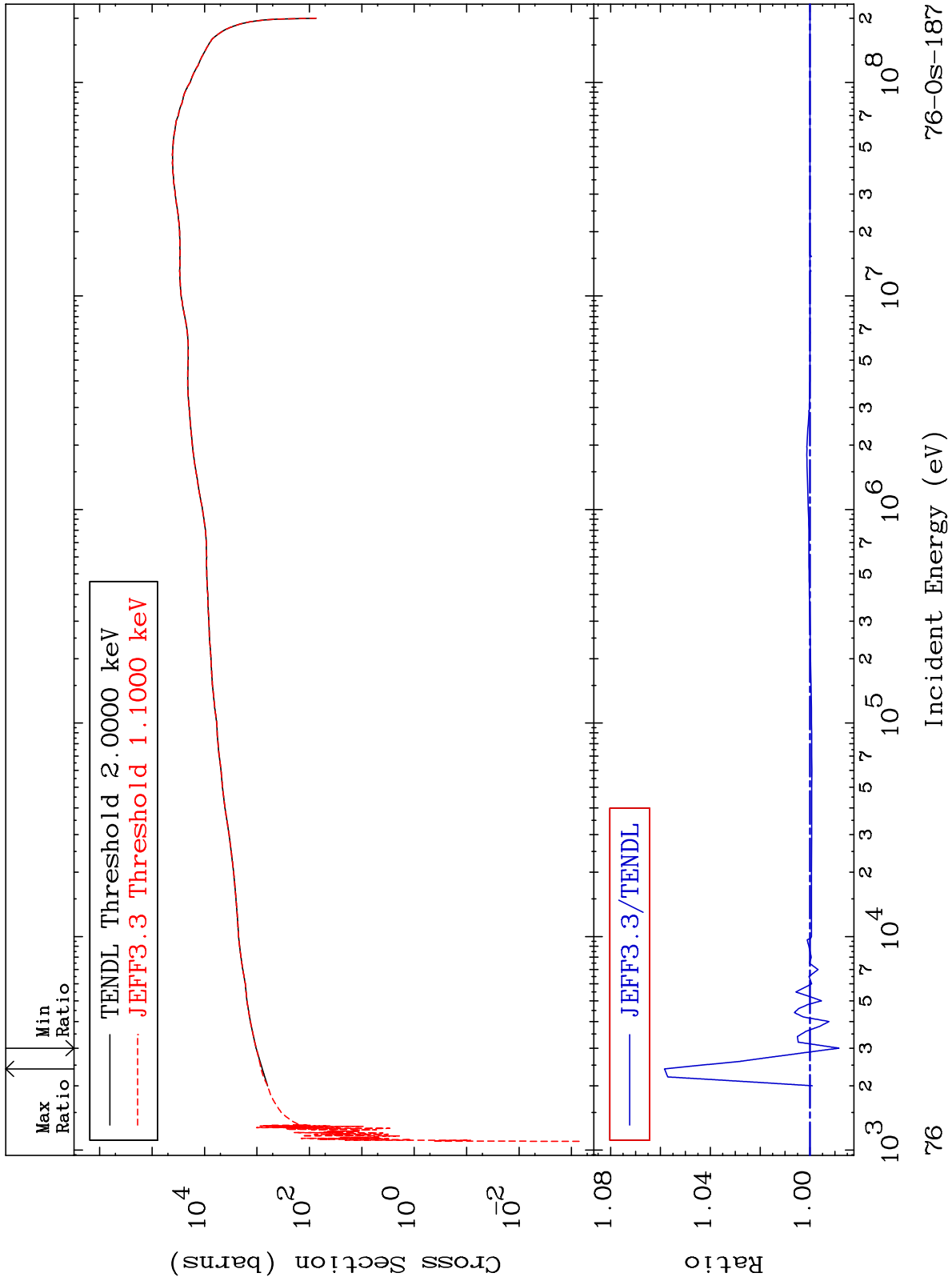
Incident Energy (eV)

76-0s-187

MAT 7634

Dpa elastic (mt2)  
Cross Section

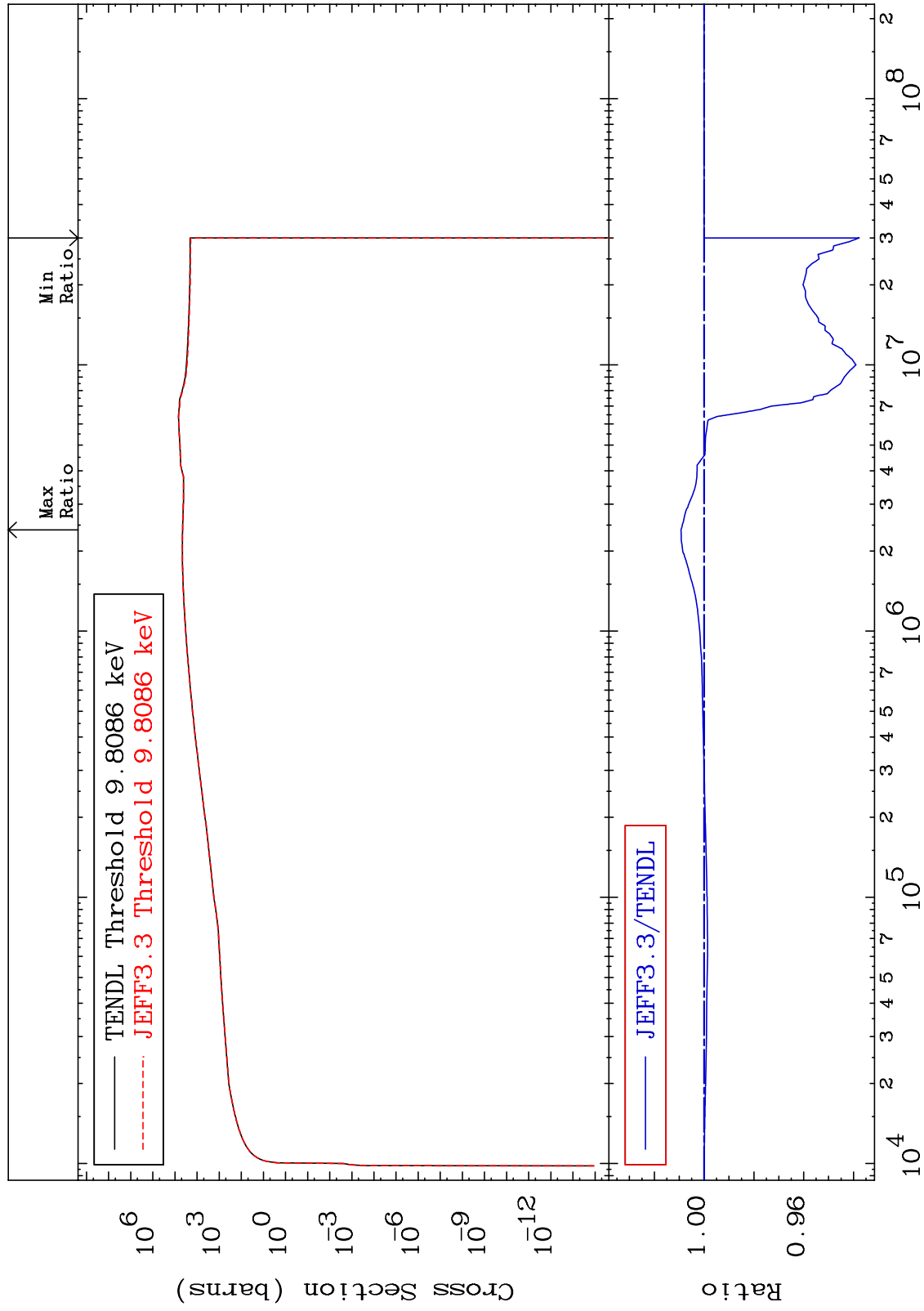
76-0s-187  
-1.164 To 5.837 %



MAT 7634

Dpa inelastic (mt51-91)  
Cross Section

76-0s-187  
-6.232 To 0.927 %



77

76-0s-187

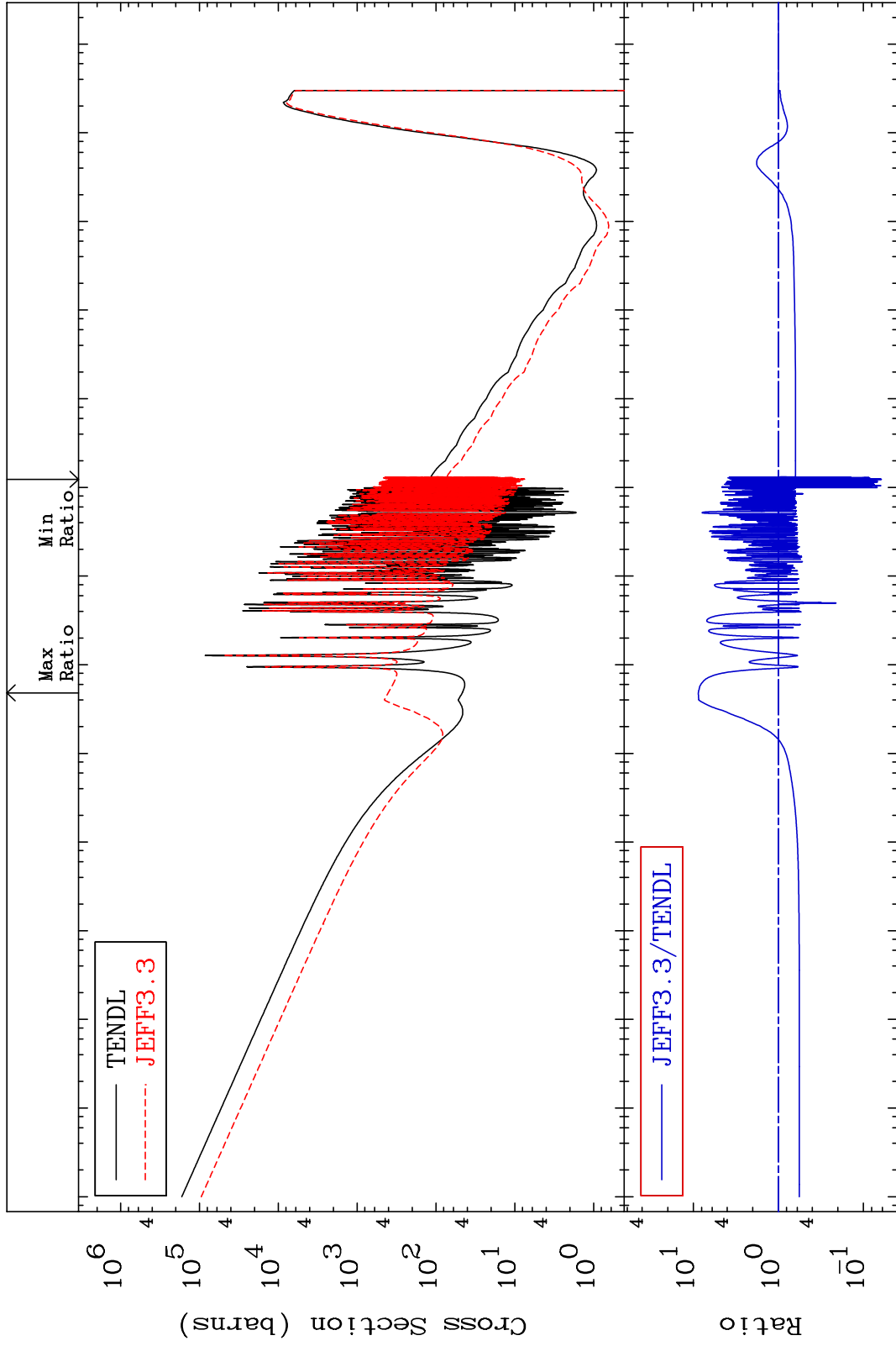
MAT 7634

Dpa disappearance (mt102 -120)

76-0s-187

-93.88 To 773.3 %

Cross Section



Incident Energy (eV)

78

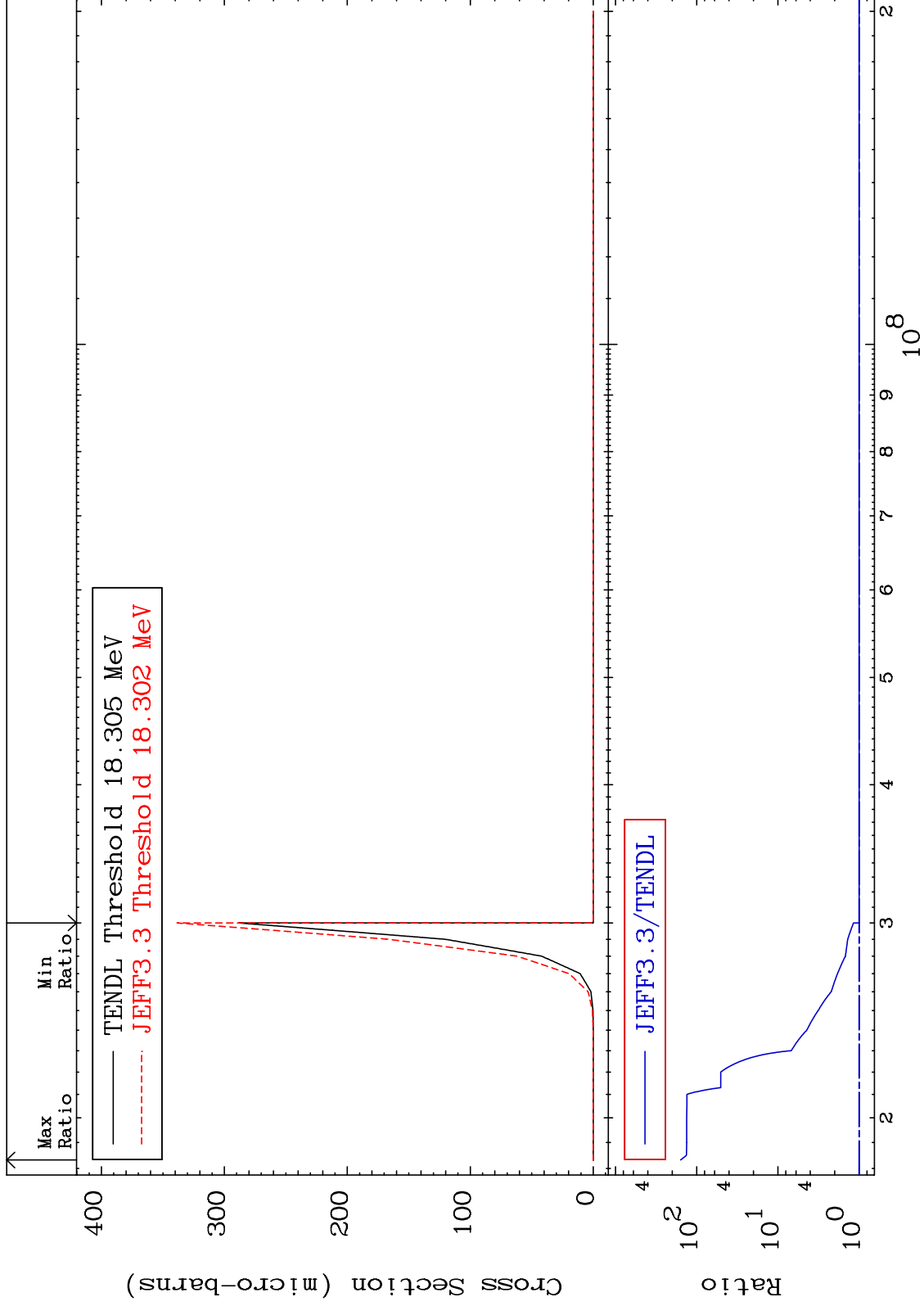
76-0s-187

MAT 7634

(n,2n) d:75-Re-184g

76-0s-187

Radionuclide Production Cross Section 0.000 To 9999. %



79

Incident Energy (eV)

76-0s-187

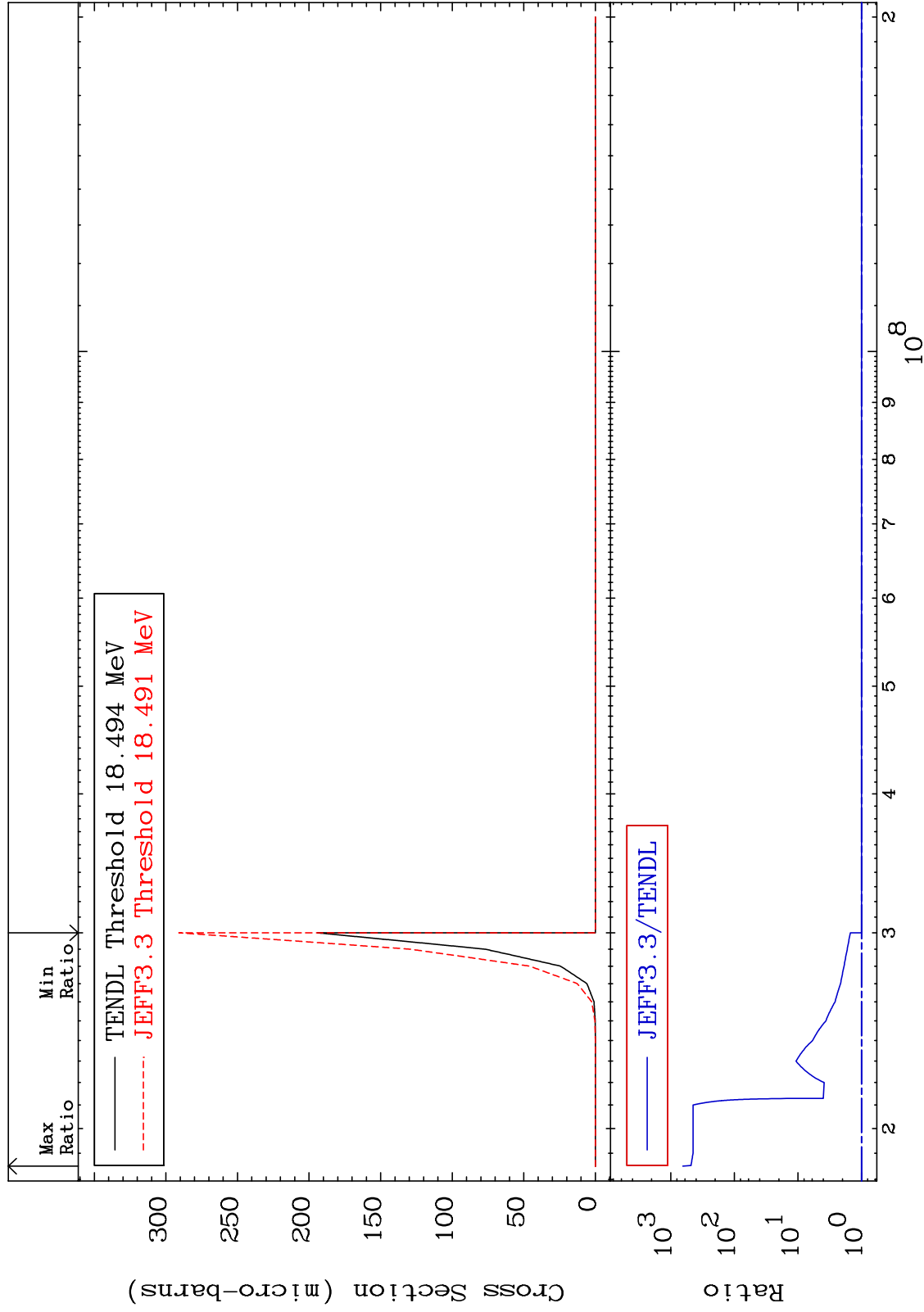


MAT 7634

(n,2n) d:75-Re-184m5

76-0s-187

Radionuclide Production Cross Section 0.000 To 9999. %



80

Incident Energy (eV)

76-0s-187

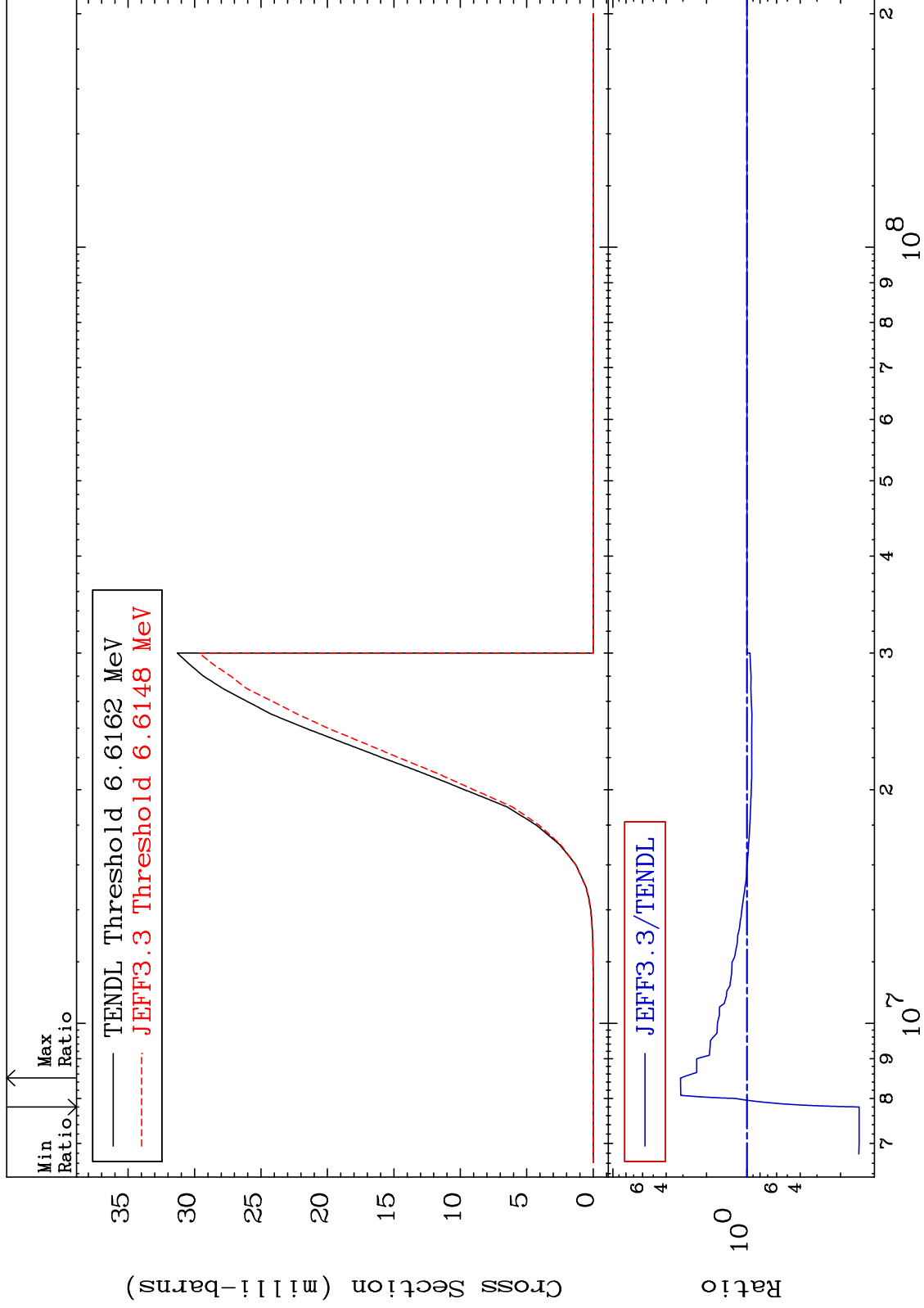
MAT 7634

(n, n') p:75-Re-186g

76-0s-187

Radionuclide Production Cross Section

-85.46 To 212.3 %

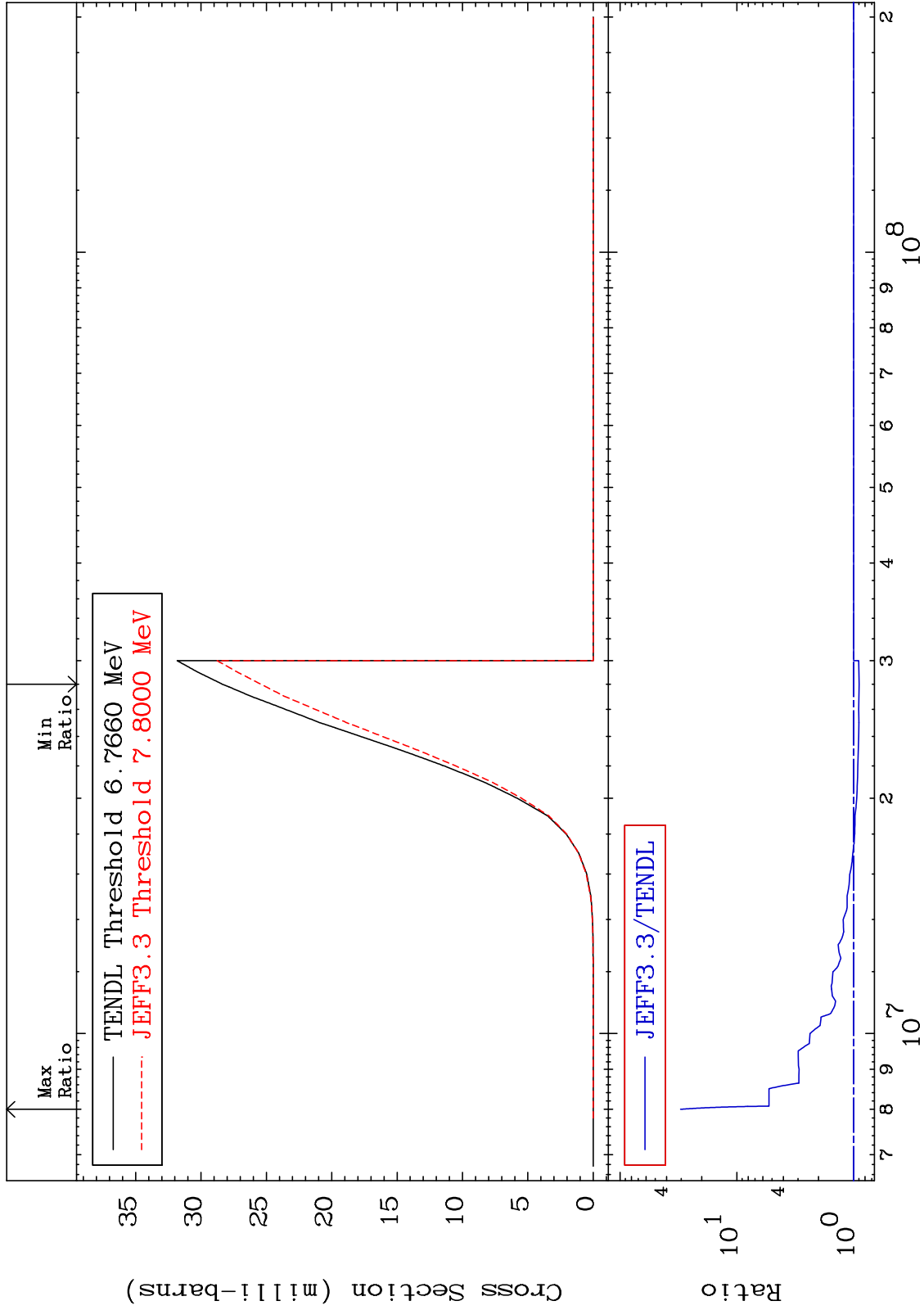


MAT 7634

(n, n') p:75-Re-186m4

76-0s-187

Radionuclide Production Cross Section -10.36 To 2931. %

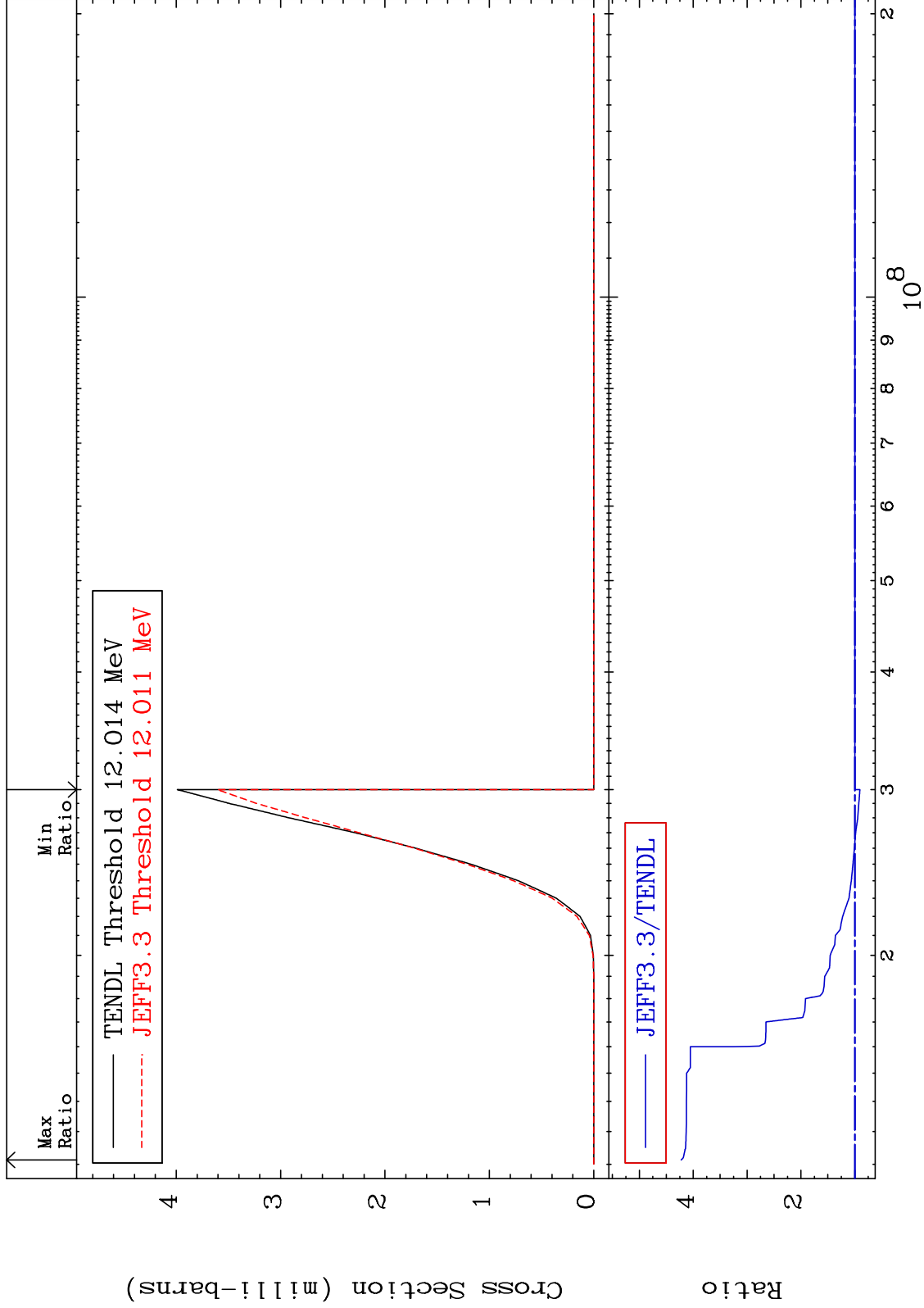


MAT 7634

(n, n') t:75-Re-184g

76-0s-187

Radionuclide Production Cross Section -9.543 To 322.3 %

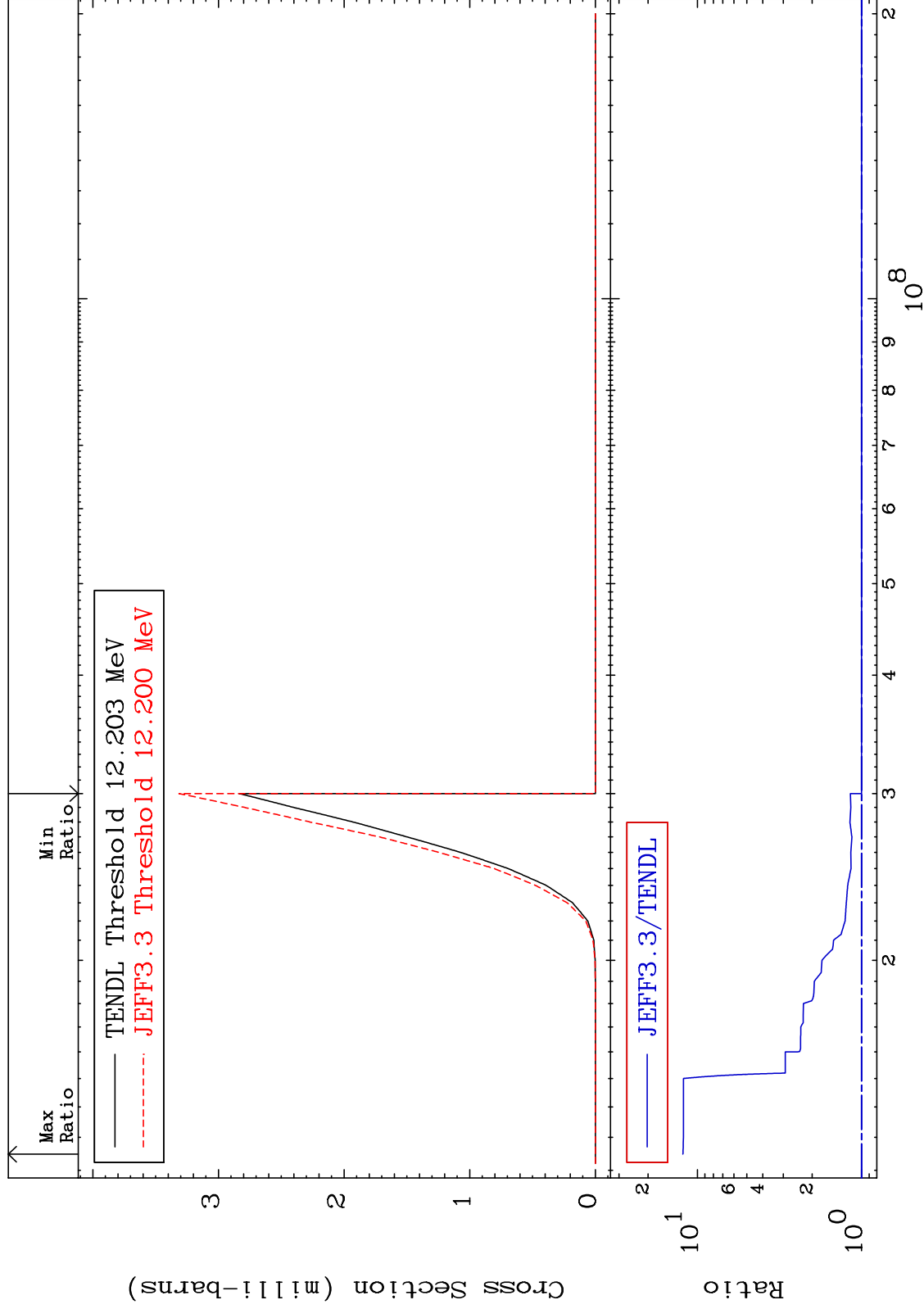


MAT 7634

(n, n') t:75-Re-184m5

76-0s-187

Radionuclide Production Cross Section 0.000 To 1126. %

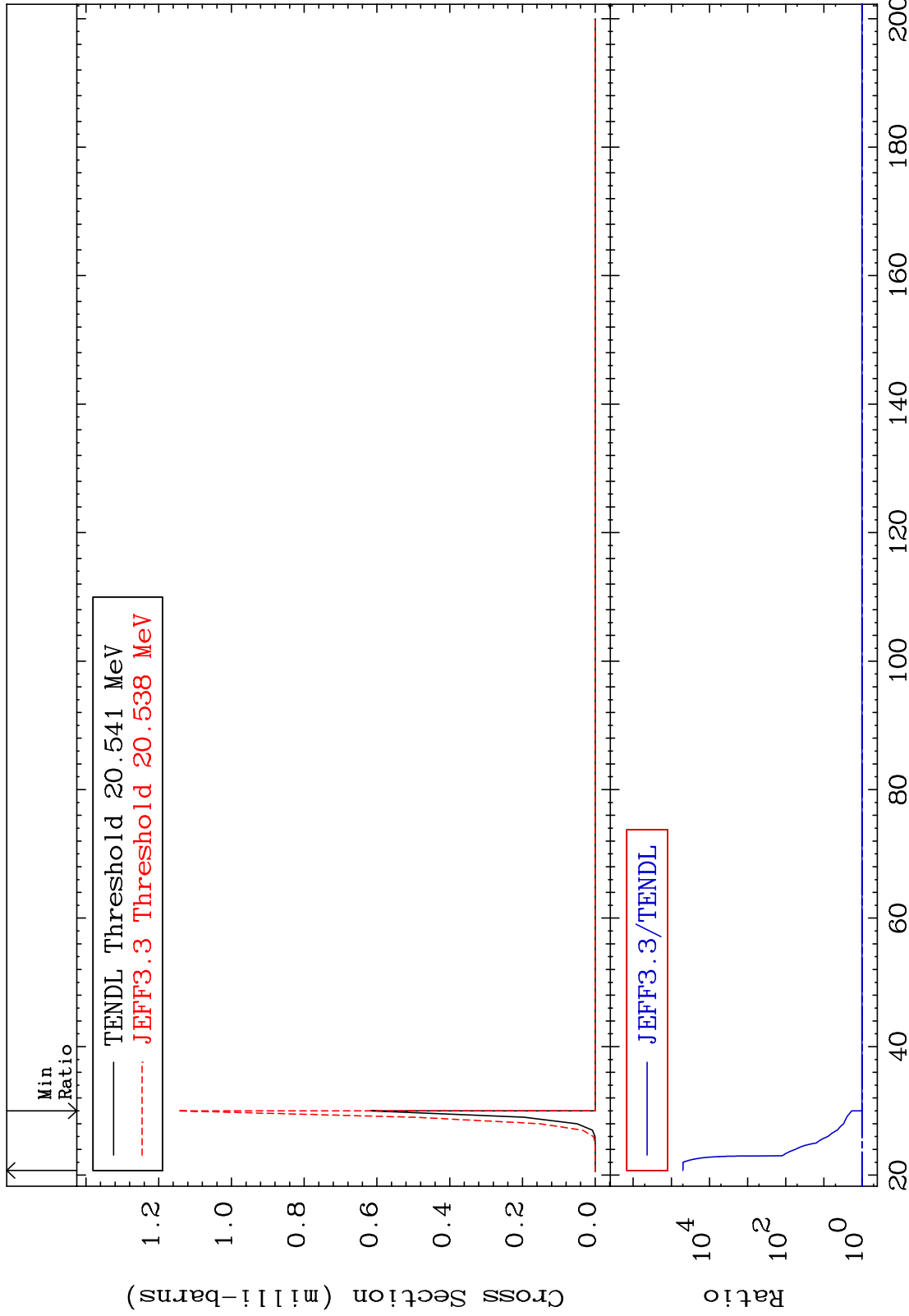


MAT 7634

(n,3n) p:75-Re-184g

76-0s-187

Radionuclide Production Cross Section 0.000 To 9999. %



85

Incident Energy (MeV)

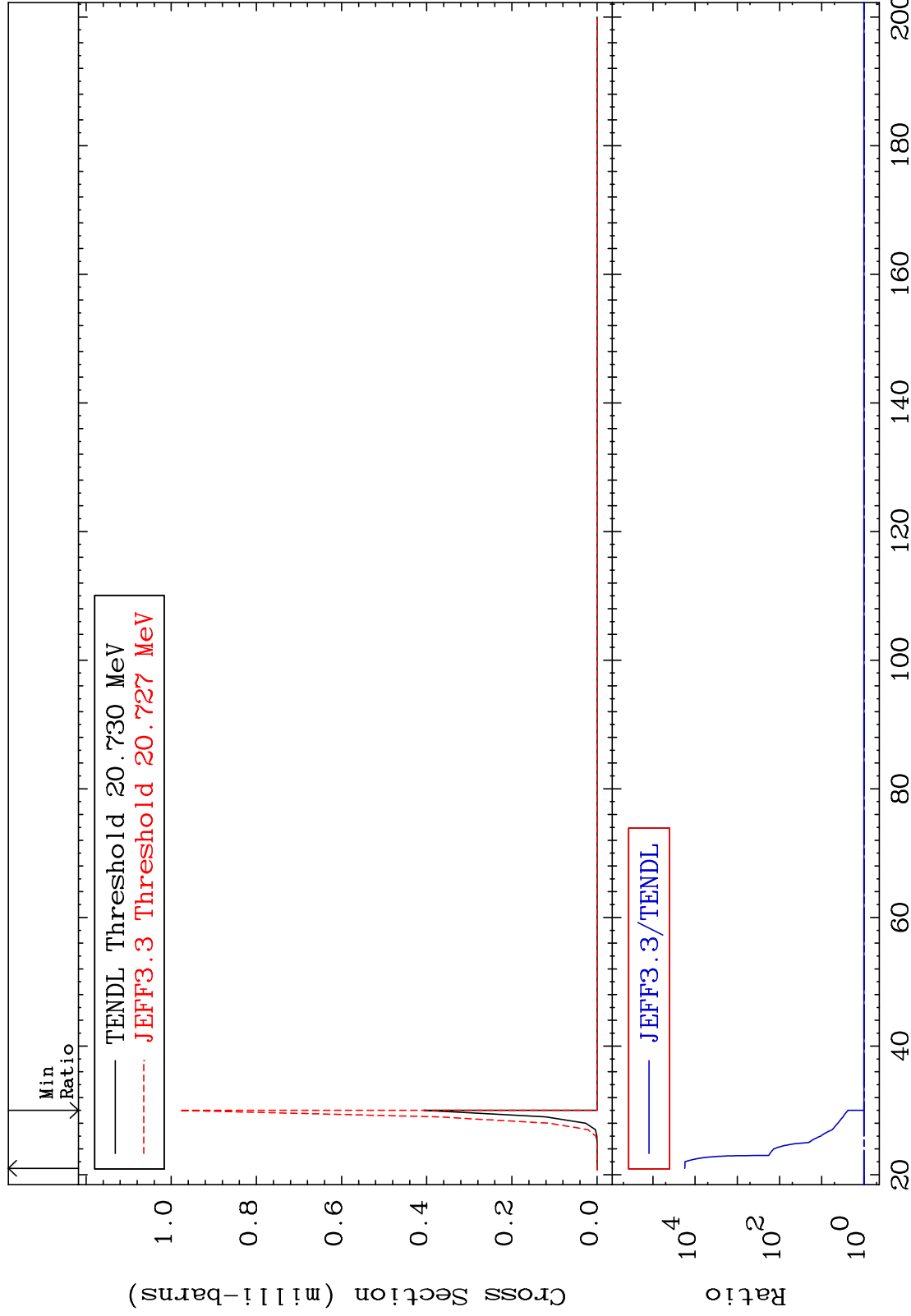
76-0s-187

MAT 7634

(n,3n) p:75-Re-184m5

76-0s-187

Radionuclide Production Cross Section 0.000 To 9999. %



86

Incident Energy (MeV)

76-0s-187

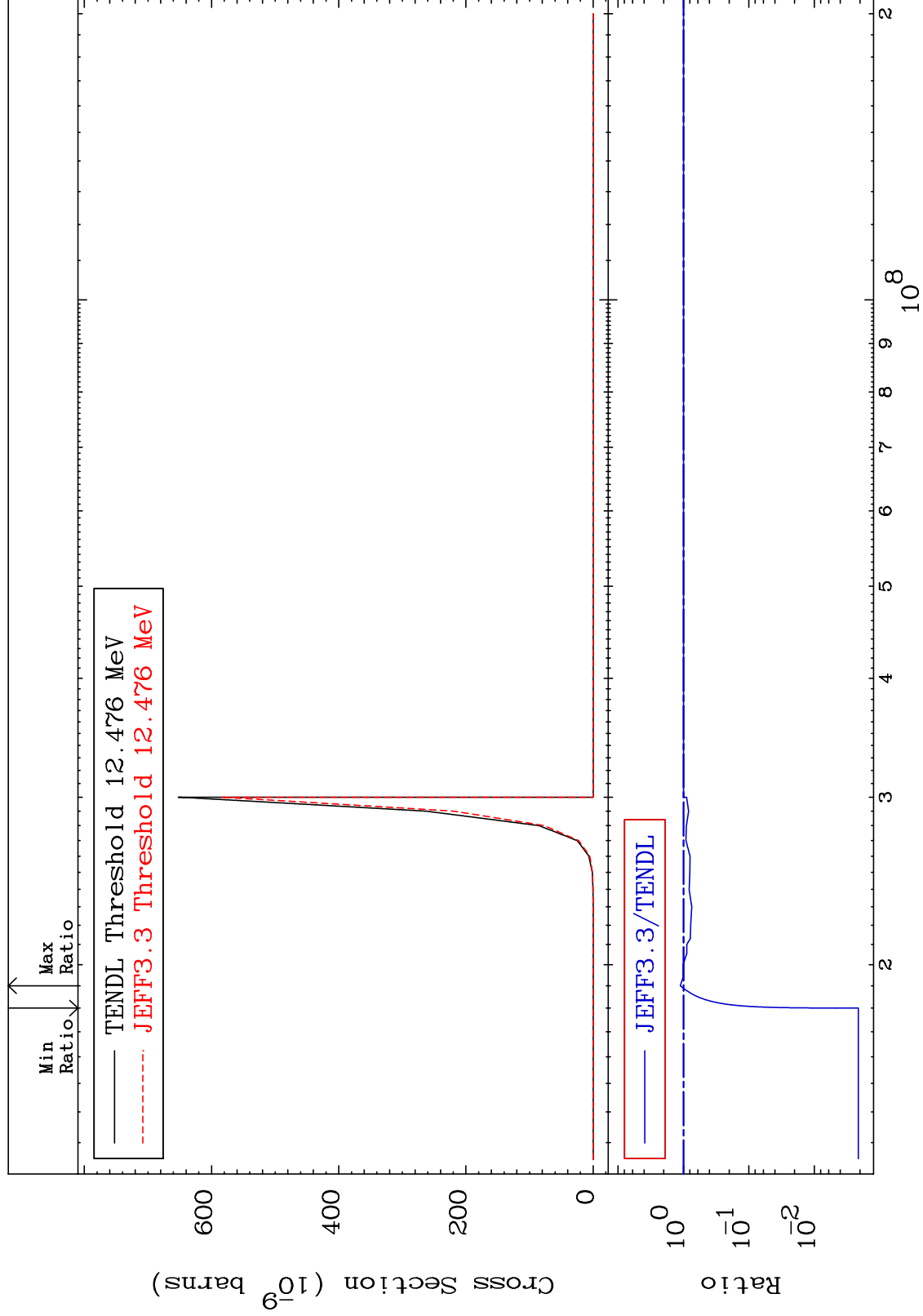
MAT 7634

(n,2n) p:74-W -185g

76-0s-187

Radionuclide Production Cross Section

-99.79 To 11.73 %



87

Incident Energy (eV)

76-0s-187

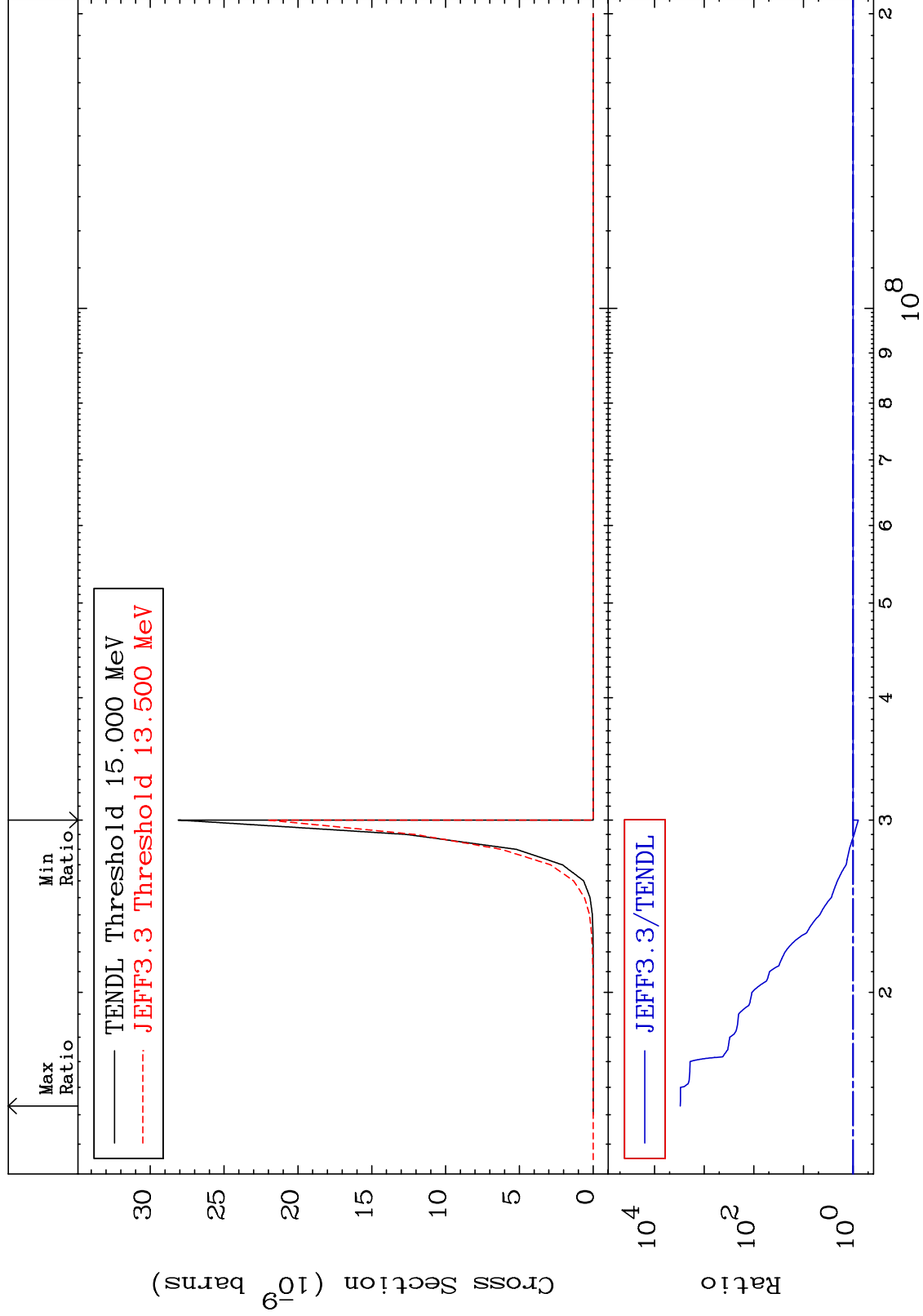


MAT 7634

(n, n') p  $\alpha$ : 73-Ta-182g

76-0s-187

Radionuclide Production Cross Section -21.46 To 9999. %

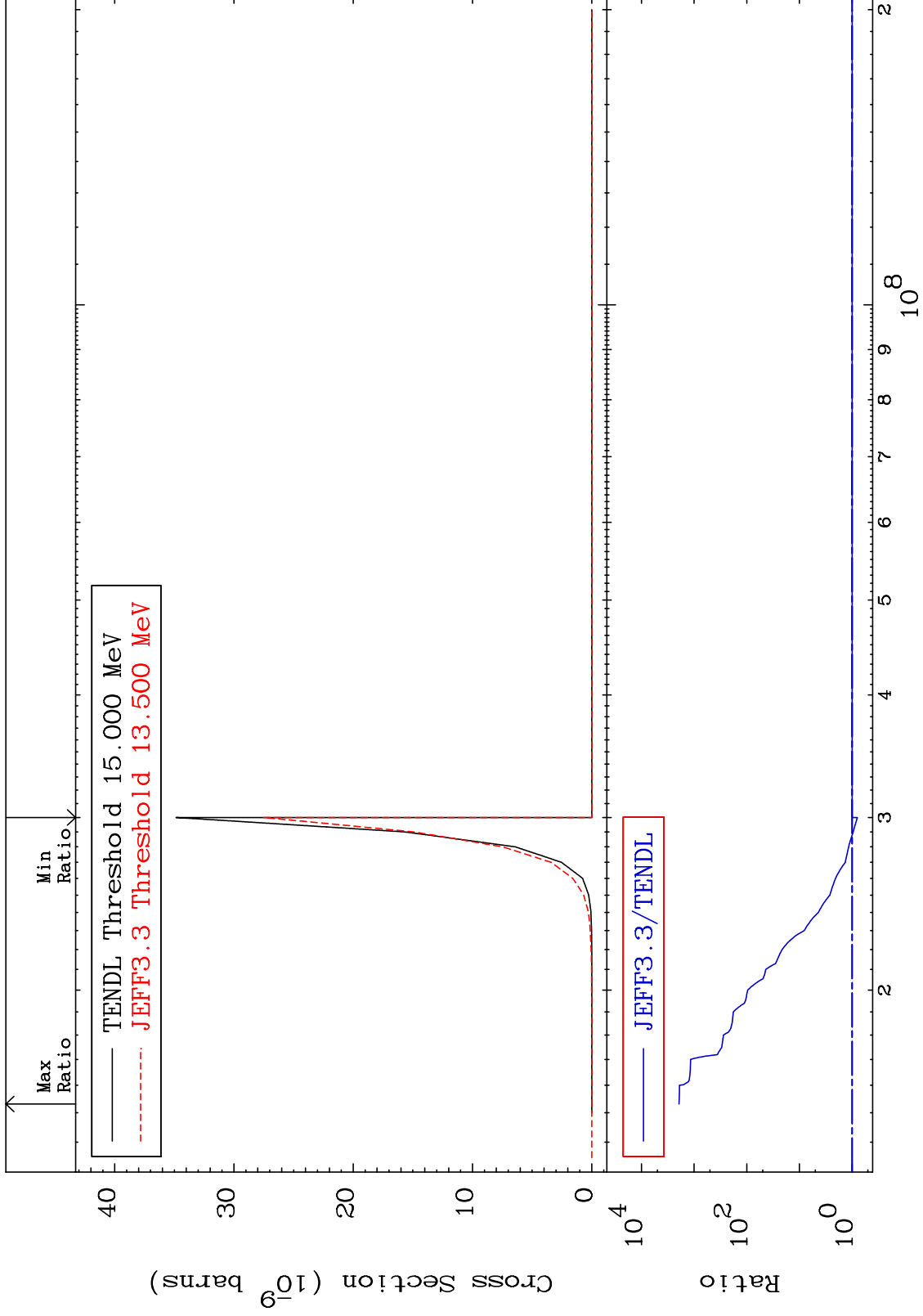


MAT 7634

(n, n') p  $\alpha$ : 73-Ta-182m1

76-Os-187

Radionuclide Production Cross Section -20.96 To 9999. %



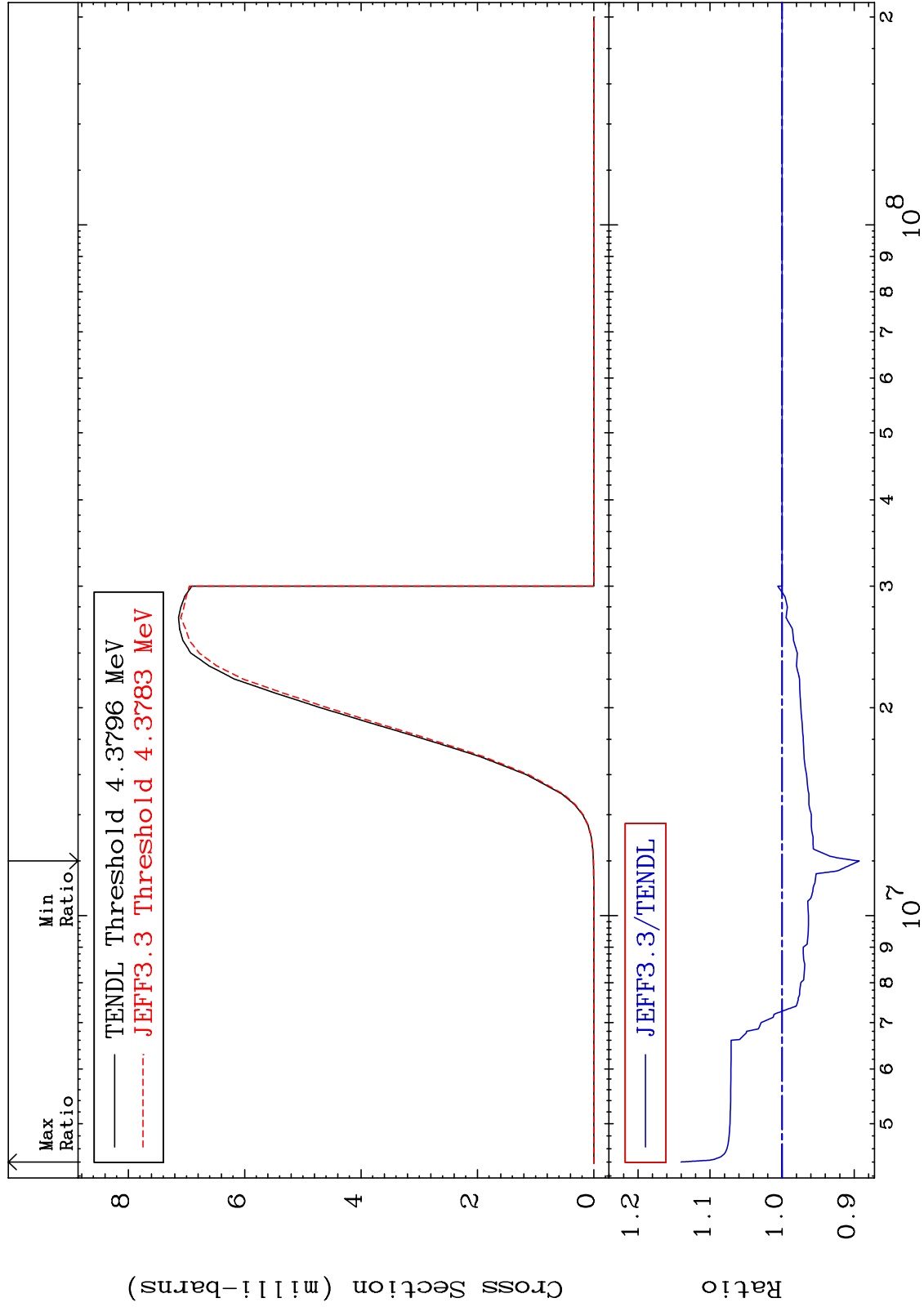
MAT 7634

(n,d): 75-Re-186g

76-Os-187

Radionuclide Production Cross Section

-10.71 To 14.03 %



90

Incident Energy (eV)

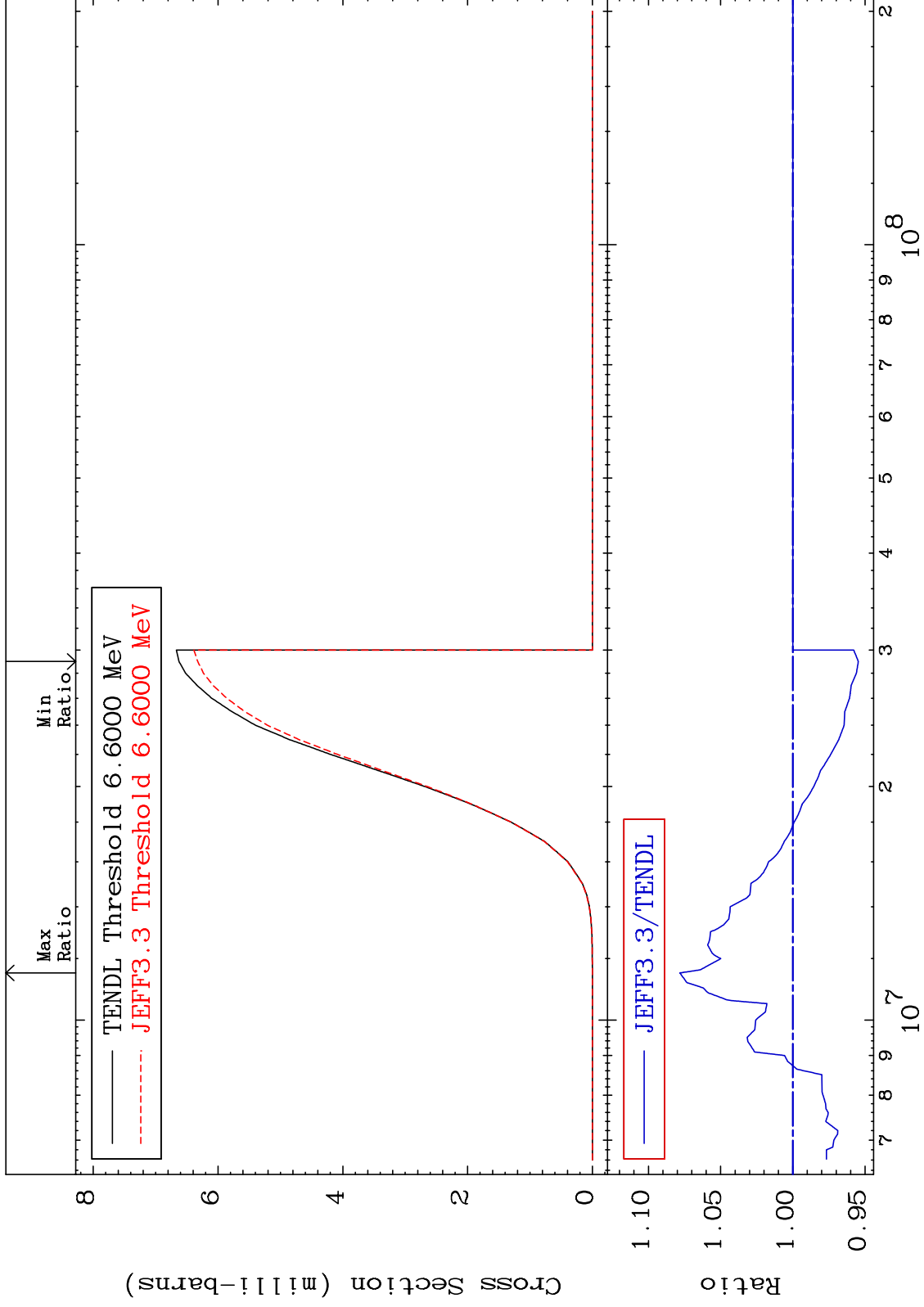
76-Os-187

MAT 7634

(n, d) : 75-Re-186m4

76-0s-187

Radionuclide Production Cross Section -4.536 To 7.827 %



91

Incident Energy (eV)

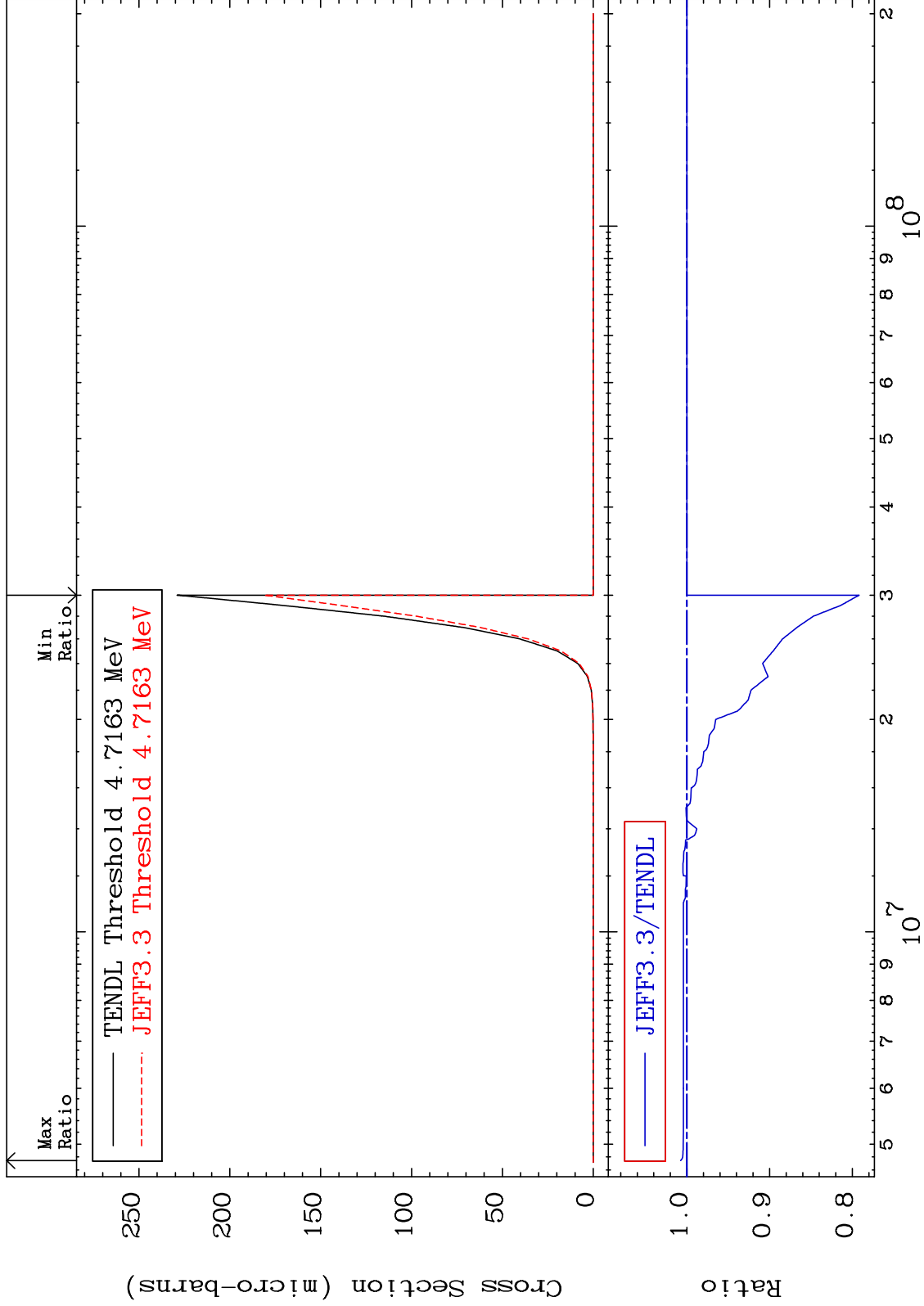
76-0s-187

MAT 7634

(n, He-3):74-W -185g

76-0s-187

Radionuclide Production Cross Section -20.82 To 0.758 %



92

Incident Energy (eV)

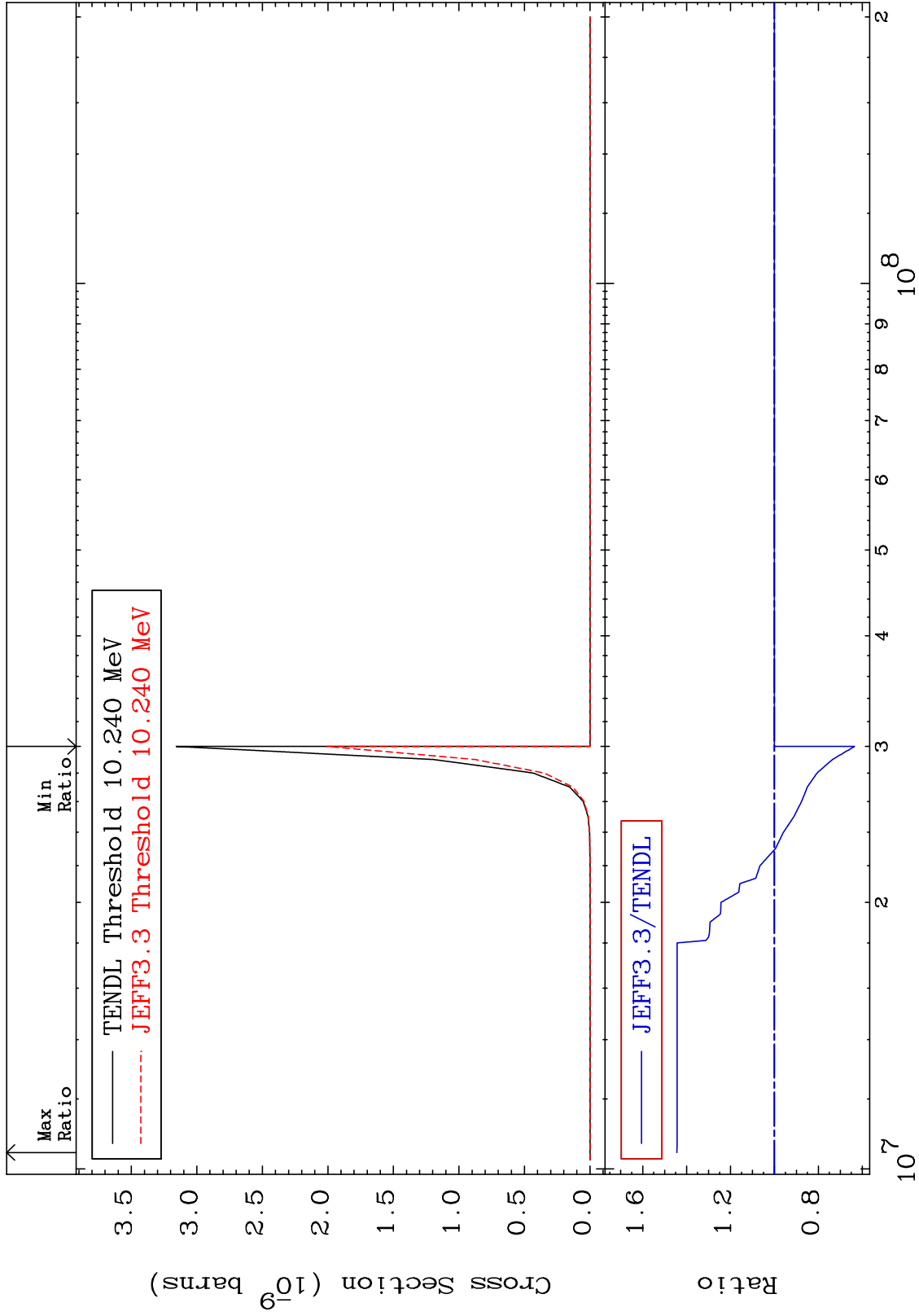
76-0s-187

MAT 7634

(n, p) d:74-W -185g

76-0s-187

Radionuclide Production Cross Section -36.47 To 44.40 %



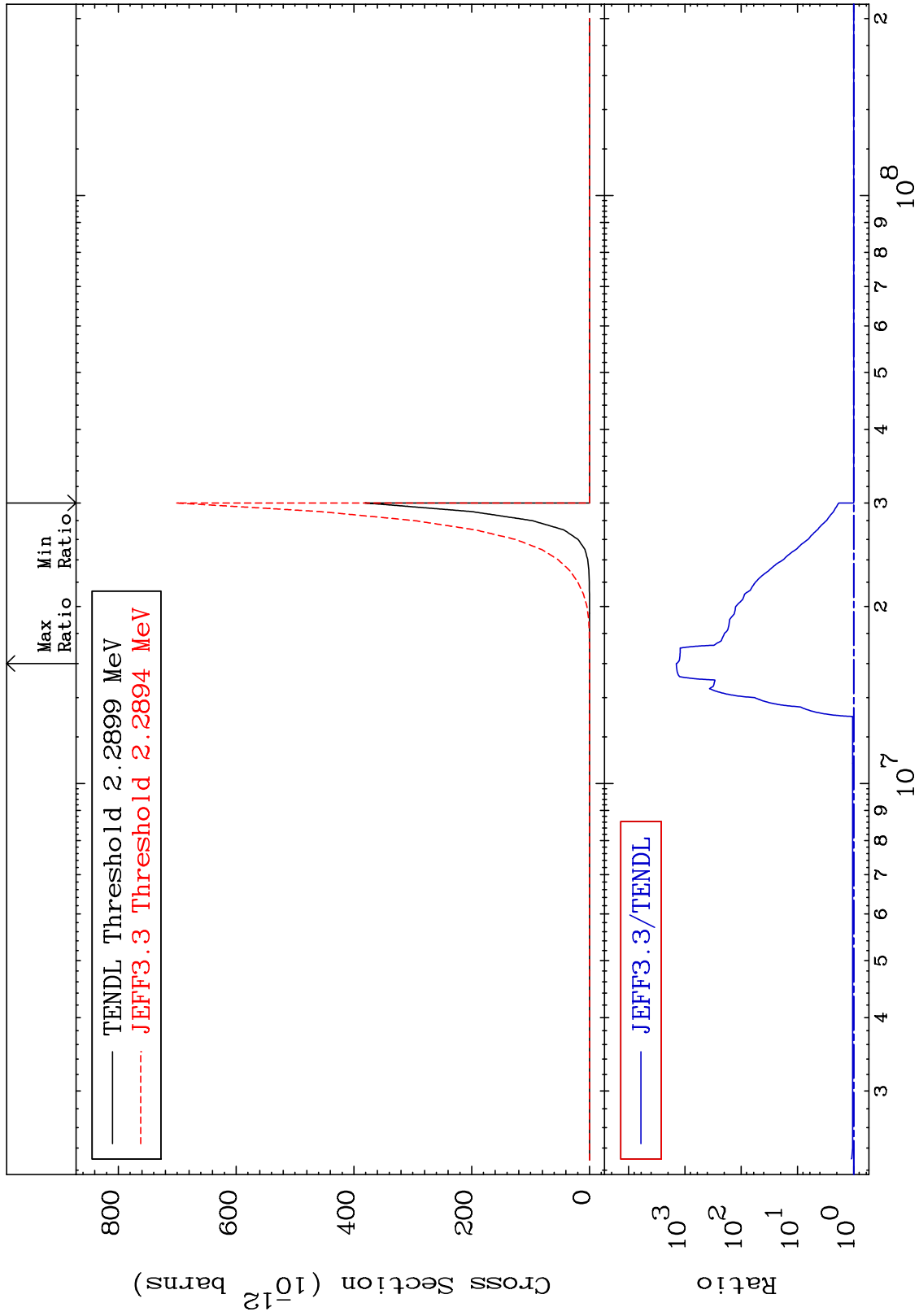
93

Incident Energy (eV)

76-0s-187

MAT 7634

(n, d)  $\alpha$ : 73-Ta-182g 76-Os-187  
Radionuclide Production Cross Section 0.000 To 9999. %



MAT 7634

(n, d)  $\alpha$ : <sup>73</sup>Ta-182m1 <sup>76</sup>Os-187  
Radionuclide Production Cross Section -2.329 To 9999. %

