

Program Complot  
(Version 2018-1)

by

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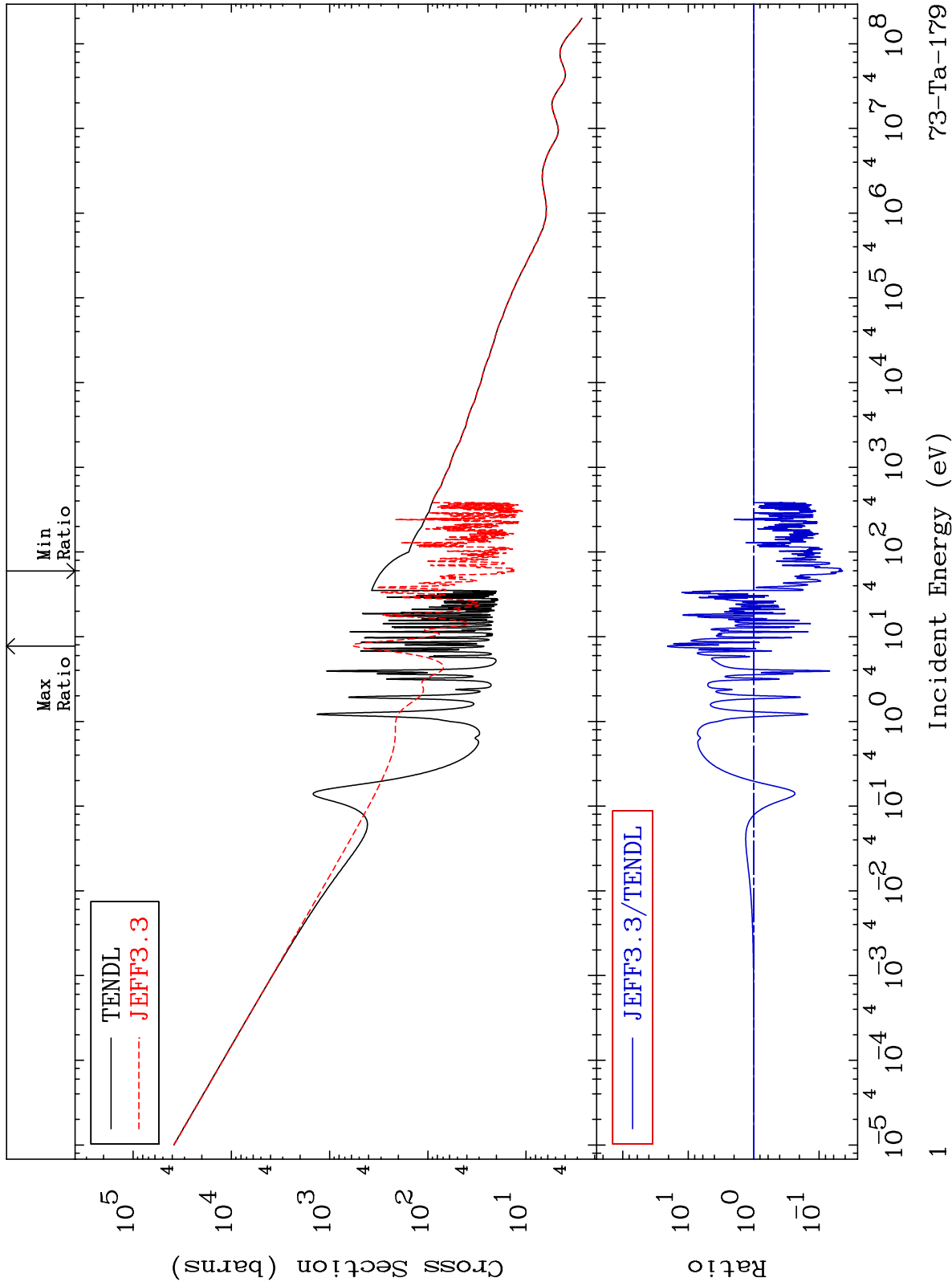
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 7322

73-Ta-179  
-95.63 To 1972. %

Total  
Cross Section



73-Ta-179

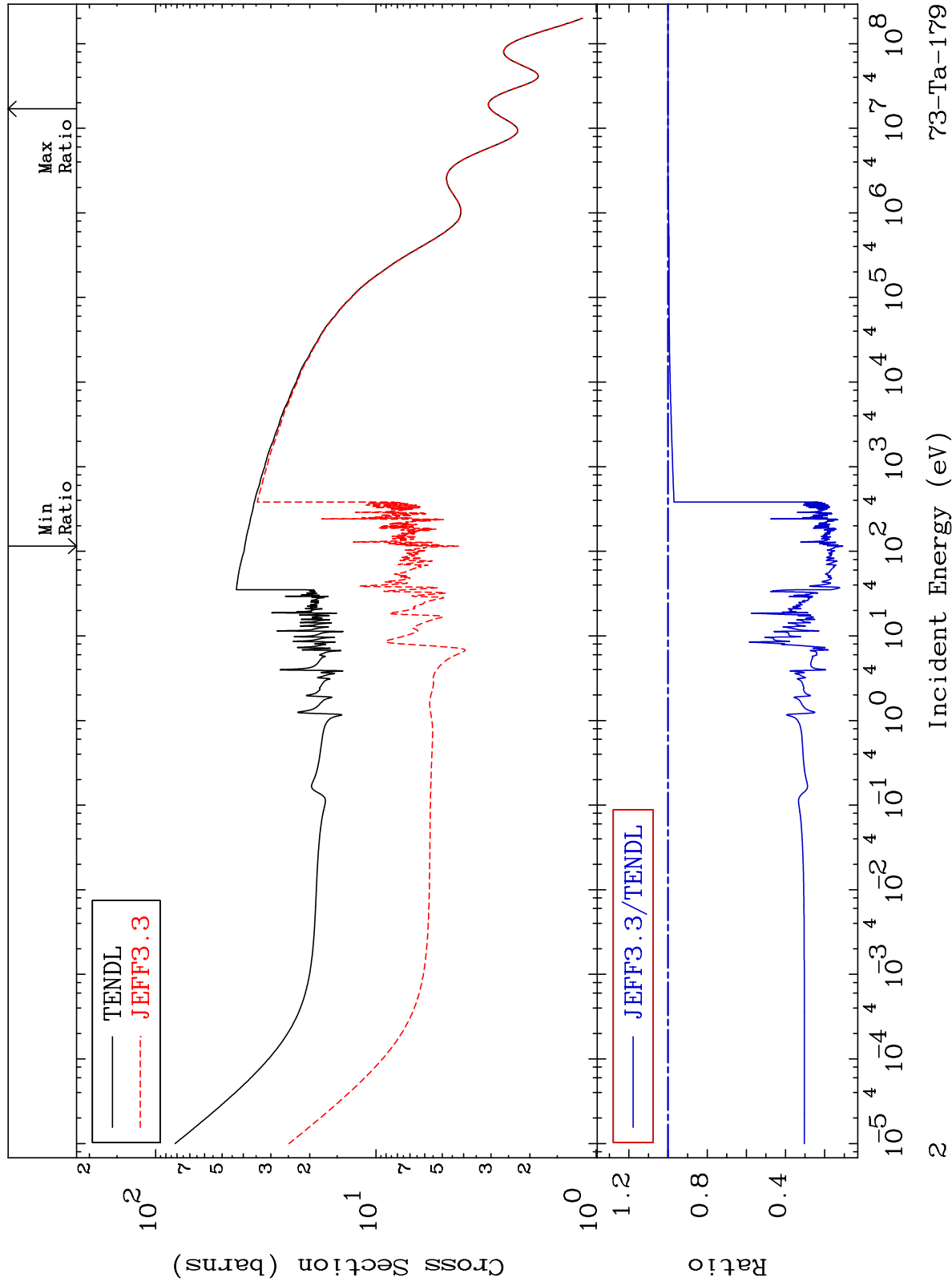
Incident Energy (eV)

1

MAT 7322

Elastic  
Cross Section

$^{73}\text{Ta-179}$   
-89.30 To 0.005 %



$^{73}\text{Ta-179}$

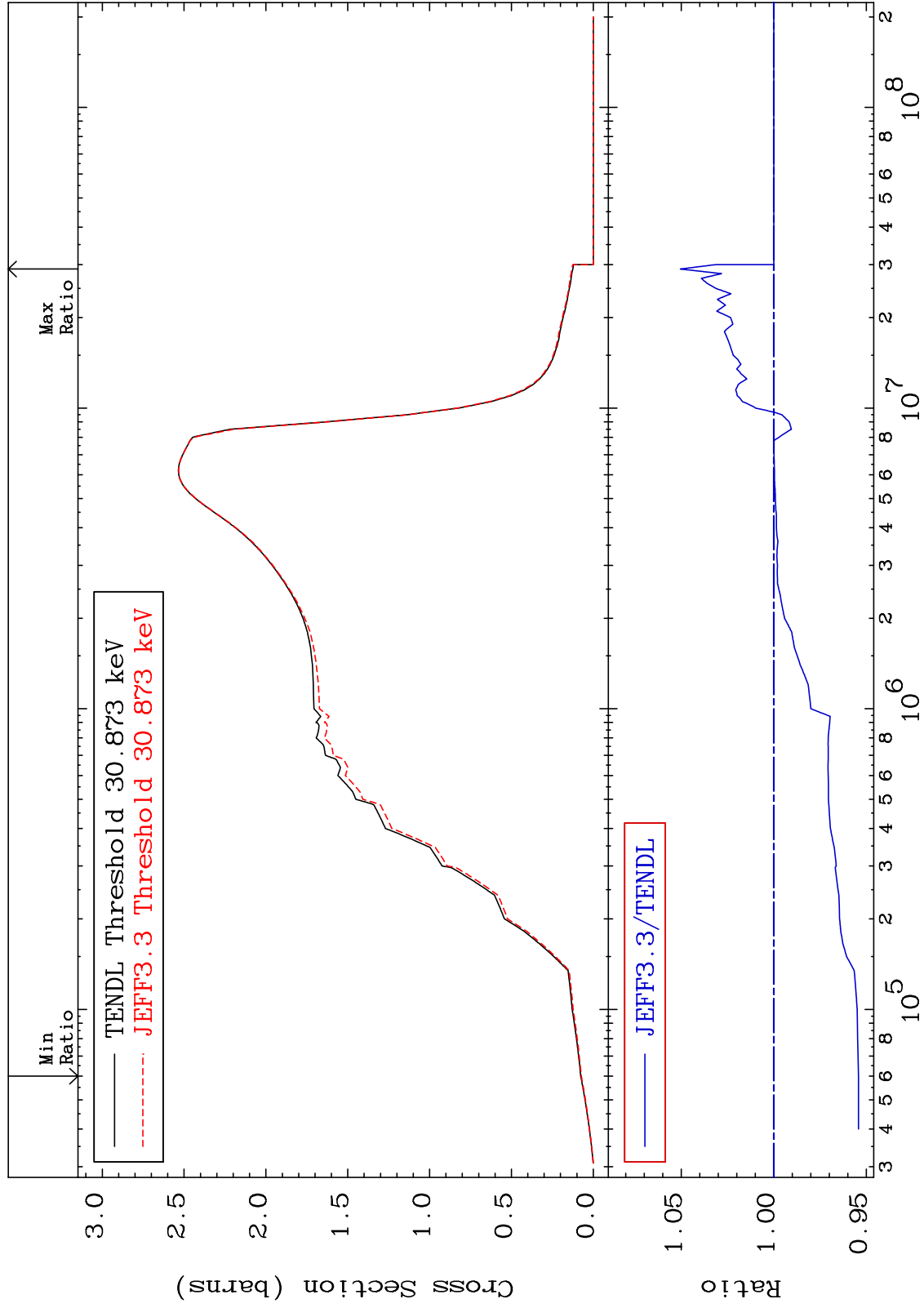
Incident Energy (eV)

2

MAT 7322

Inelastic  
Cross Section

$^{73}\text{Ta-179}$   
-4.582 To 5.039 %



3

Incident Energy (eV)

$^{73}\text{Ta-179}$

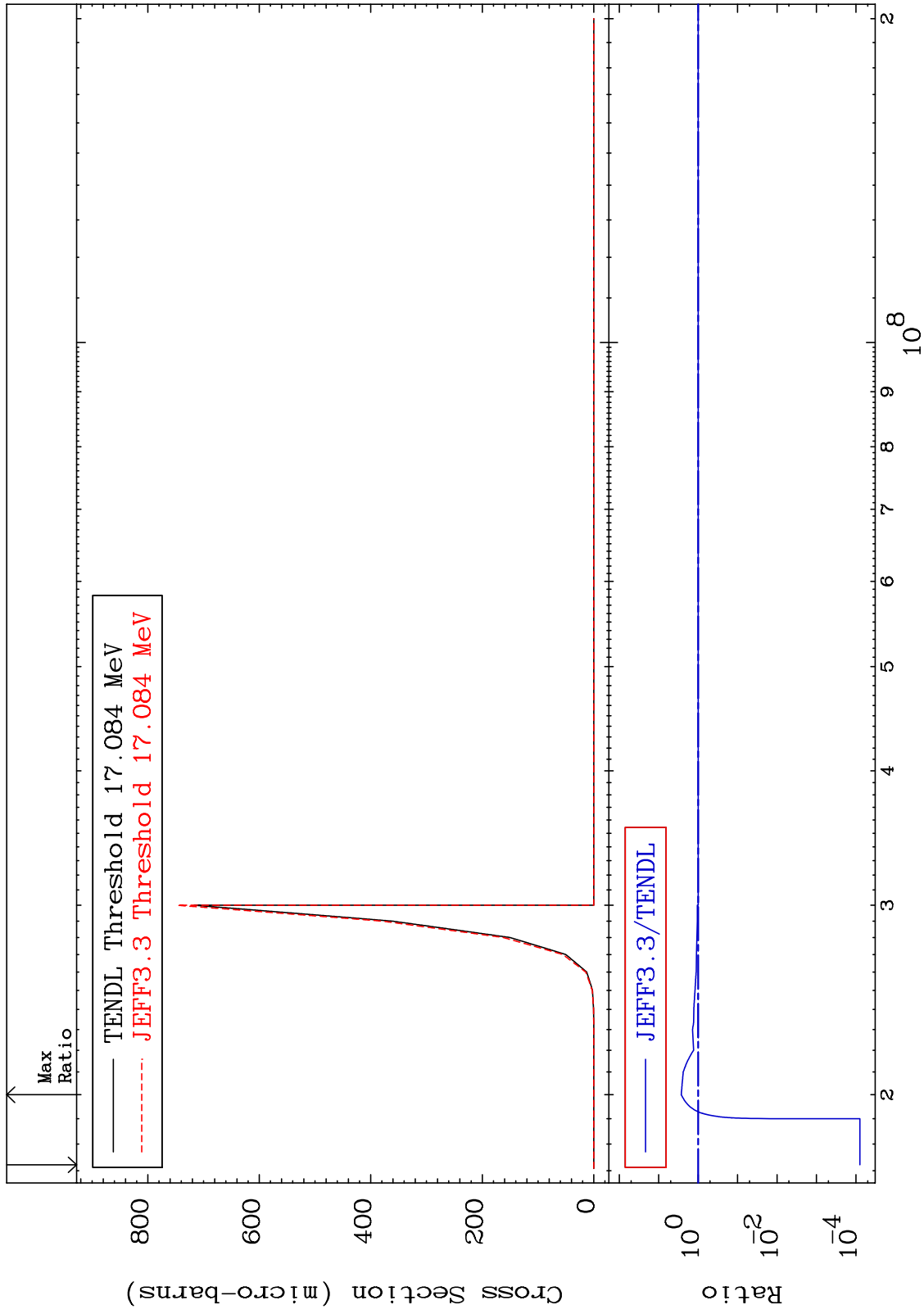
MAT 7322

(n,2n) d

<sup>73</sup>Ta-179

Cross Section

-99.99 To 168.4 %



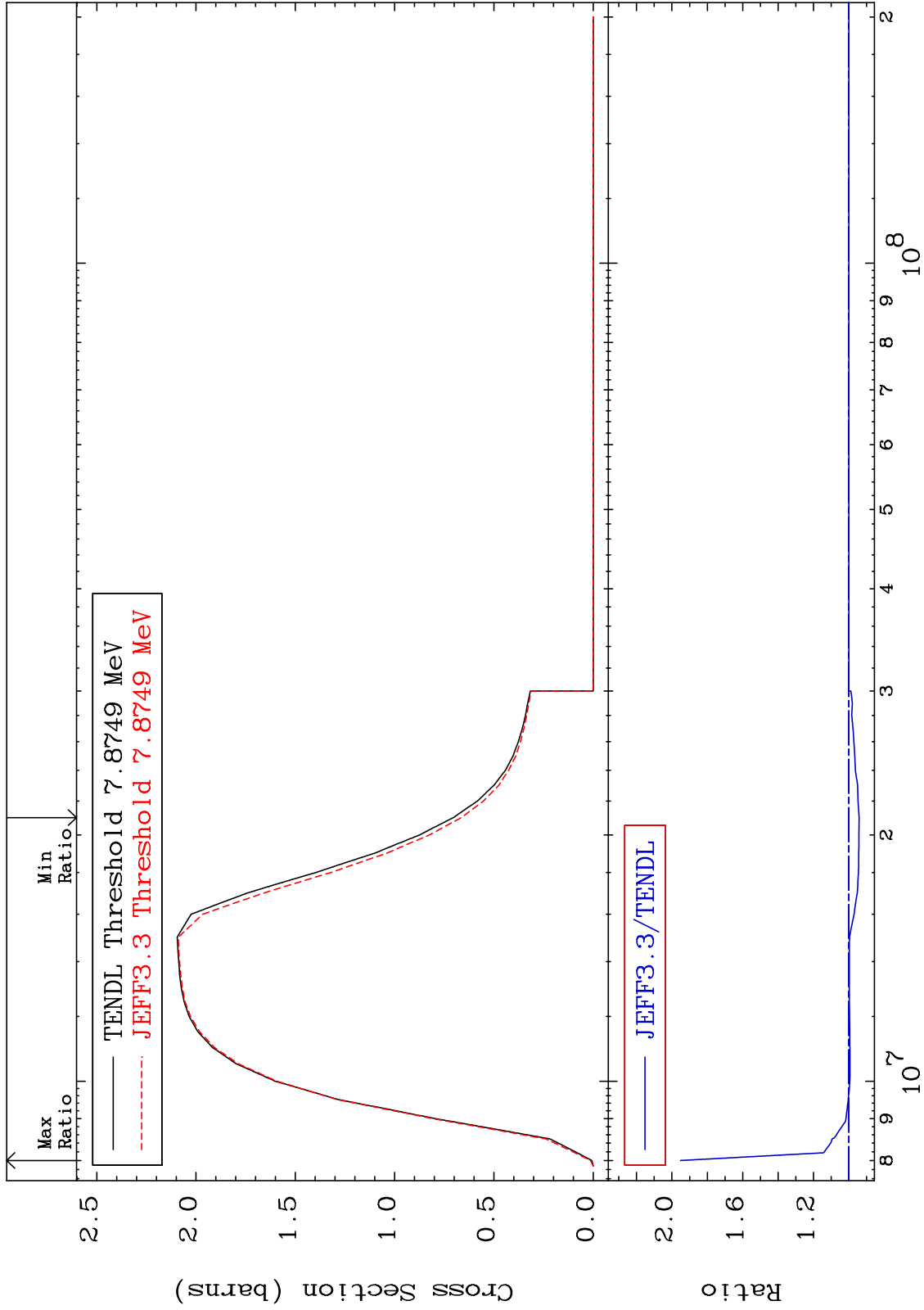
MAT 7322

(n, 2n)

<sup>73</sup>Ta-179

Cross Section

-5.788 To 95.09 %



<sup>73</sup>Ta-179

Incident Energy (eV)

5

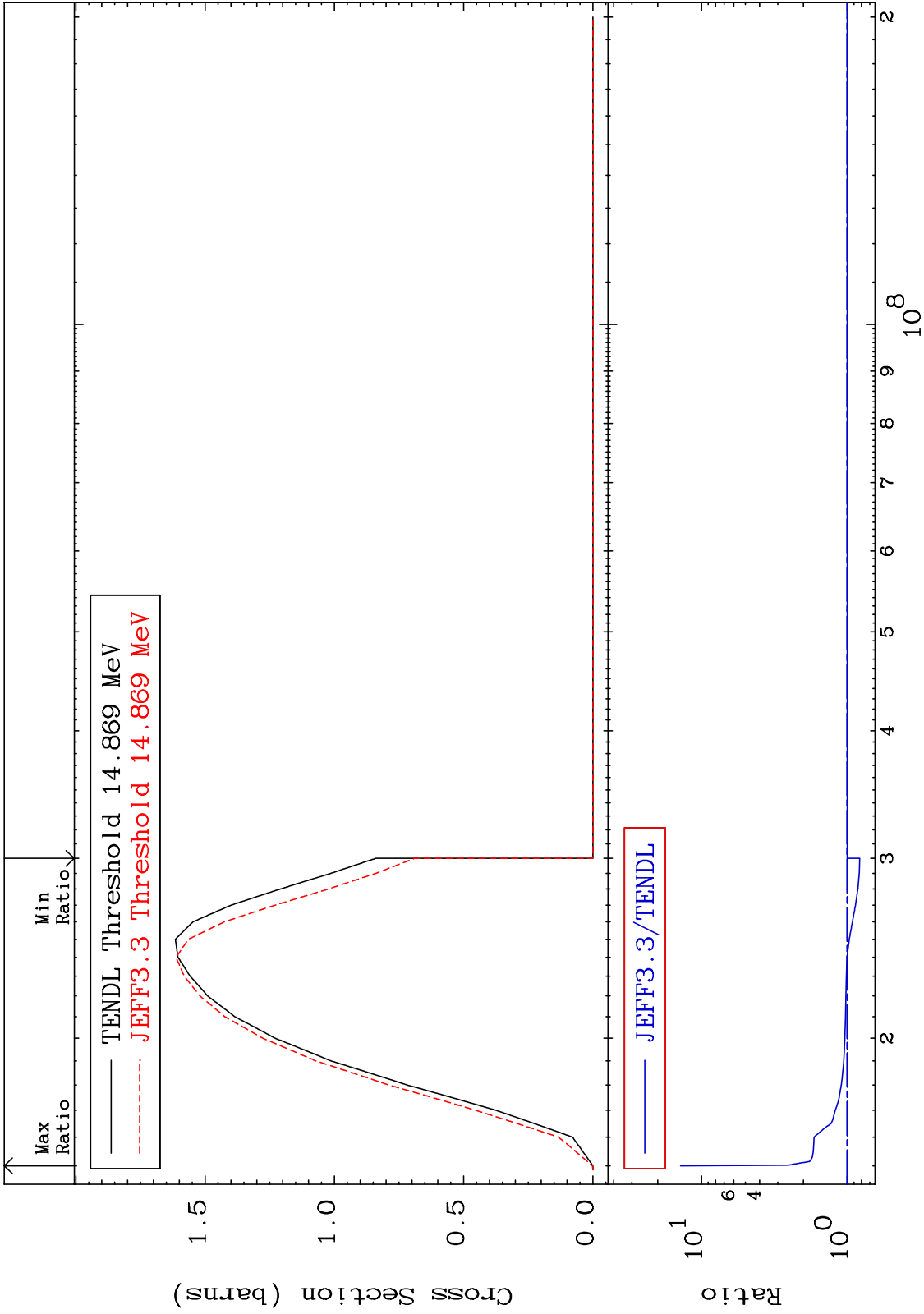
MAT 7322

(n, 3n)

<sup>73</sup>Ta-179

Cross Section

-17.91 To 1292. %



6

Incident Energy (eV)

<sup>73</sup>Ta-179

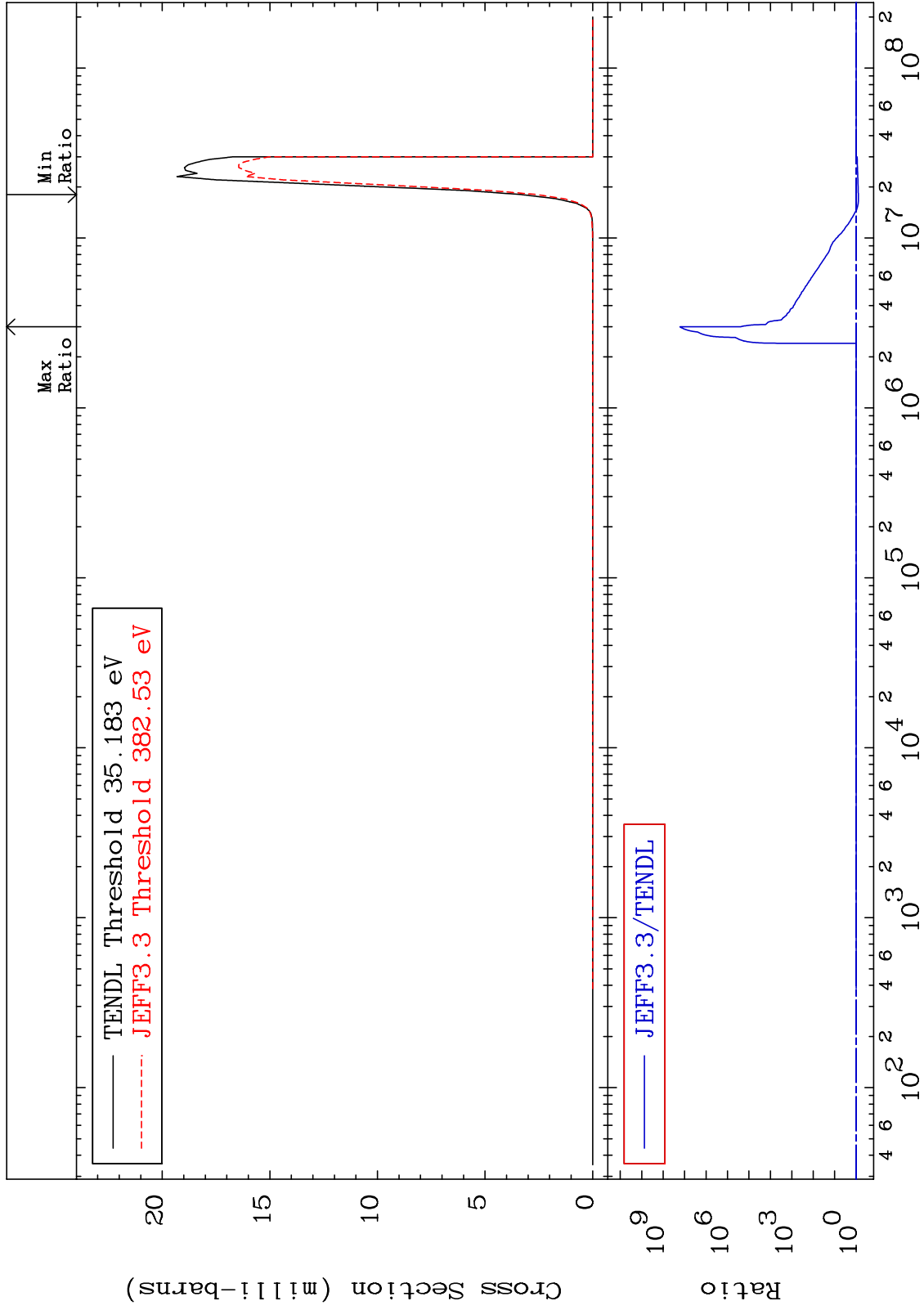
MAT 7322

(n, n')  $\alpha$

<sup>73</sup>Ta-179

Cross Section

-21.74 To 9999. %





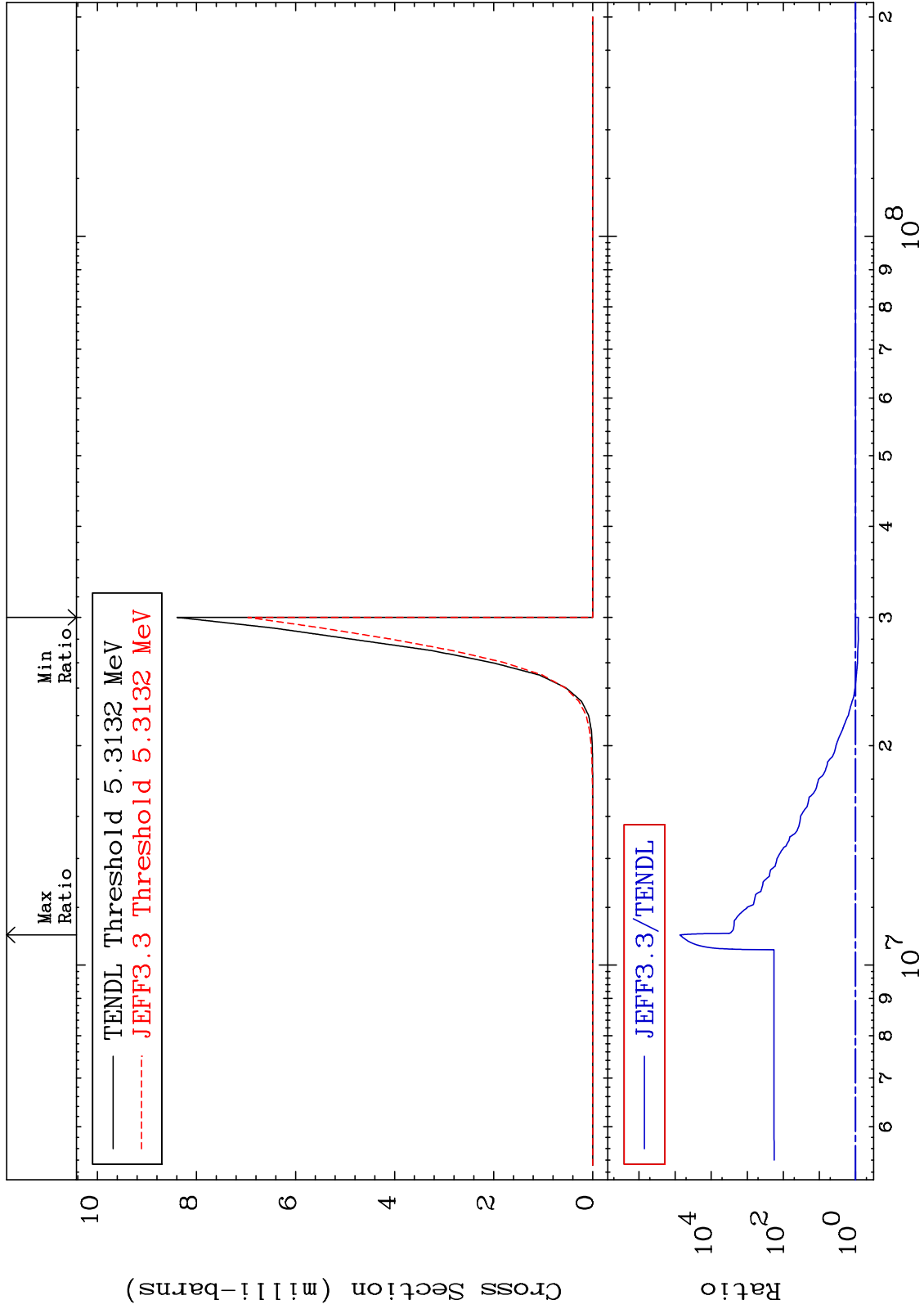
MAT 7322

(n,2n)  $\alpha$

<sup>73</sup>Ta-179

-17.05 To 9999. %

Cross Section



8

Incident Energy (eV)

<sup>73</sup>Ta-179

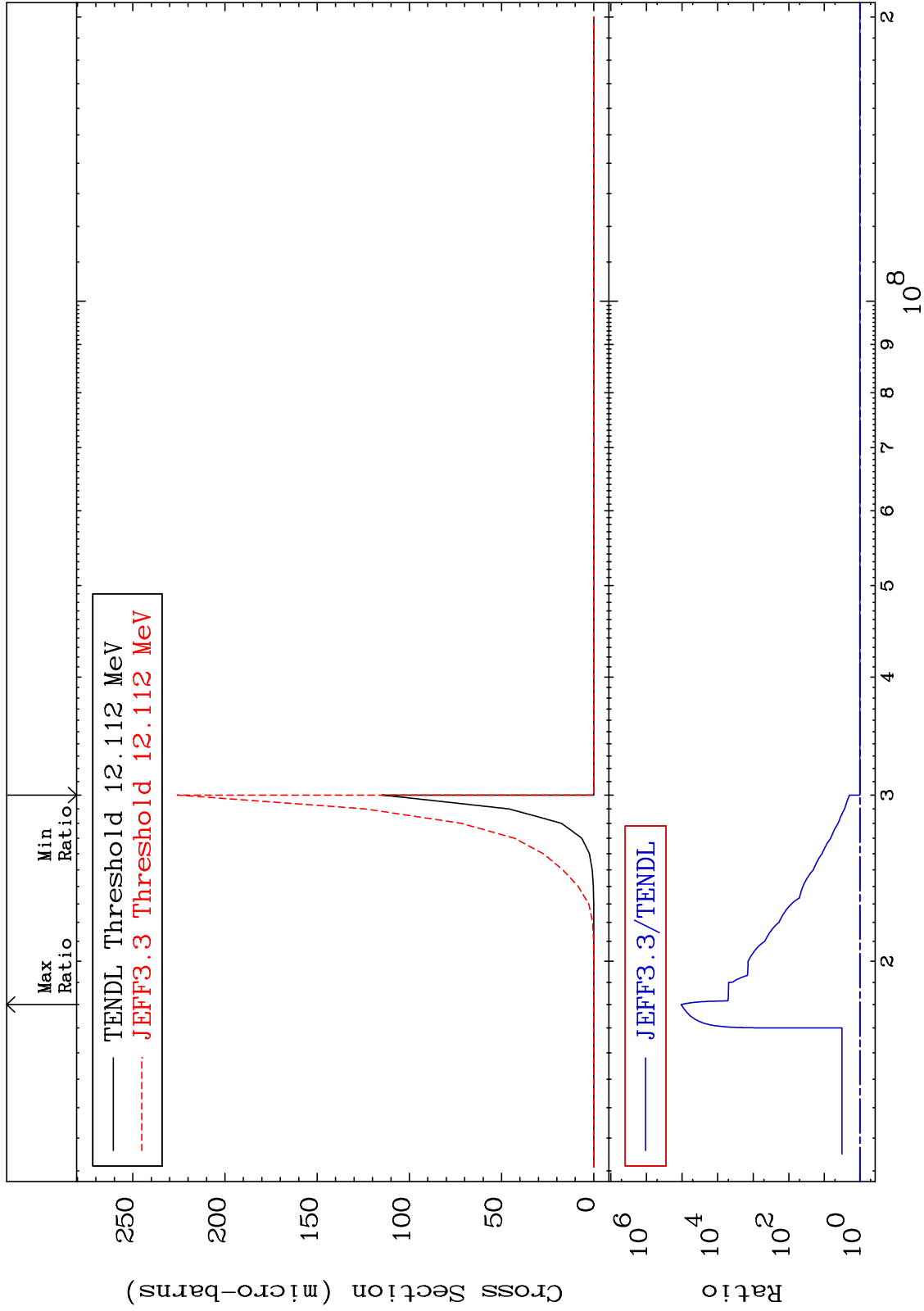
MAT 7322

(n, 3n)  $\alpha$

<sup>73</sup>Ta-179

Cross Section

0.000 To 9999. %



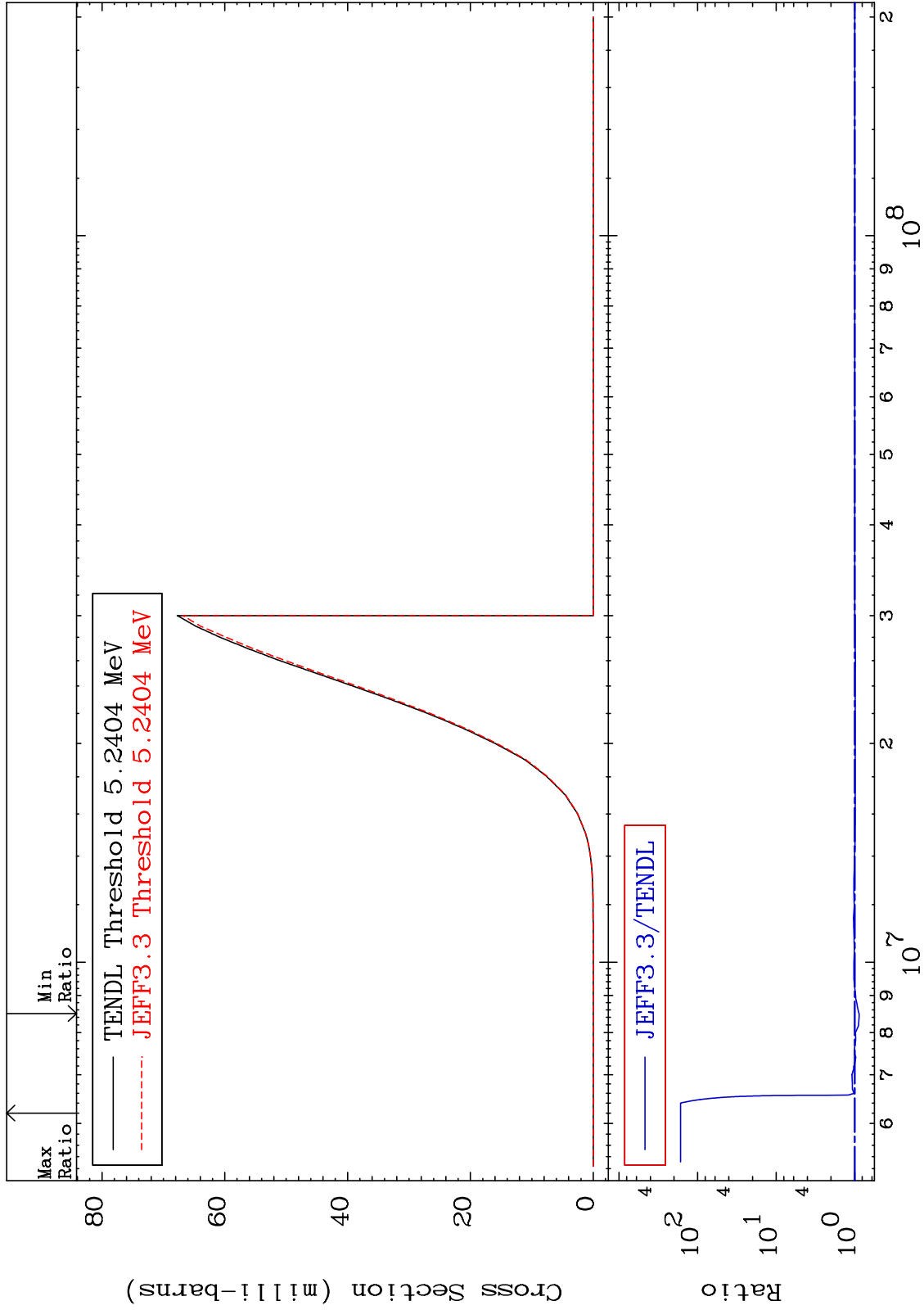
MAT 7322

(n,n') p

<sup>73</sup>Ta-179

Cross Section

-12.34 To 9999. %



10

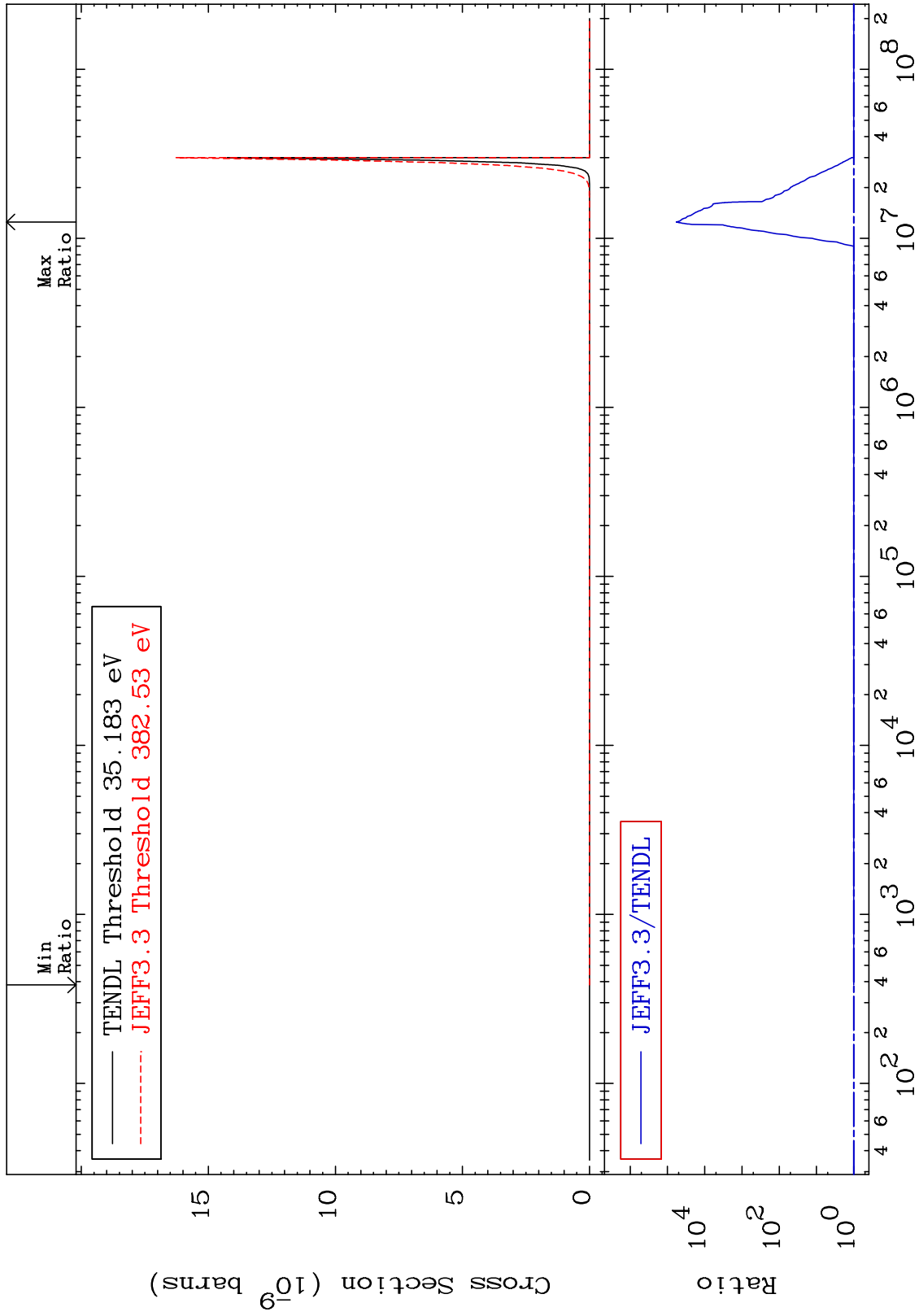
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

(n,n')  $2\alpha$   
Cross Section

73-Ta-179  
To 9999. %



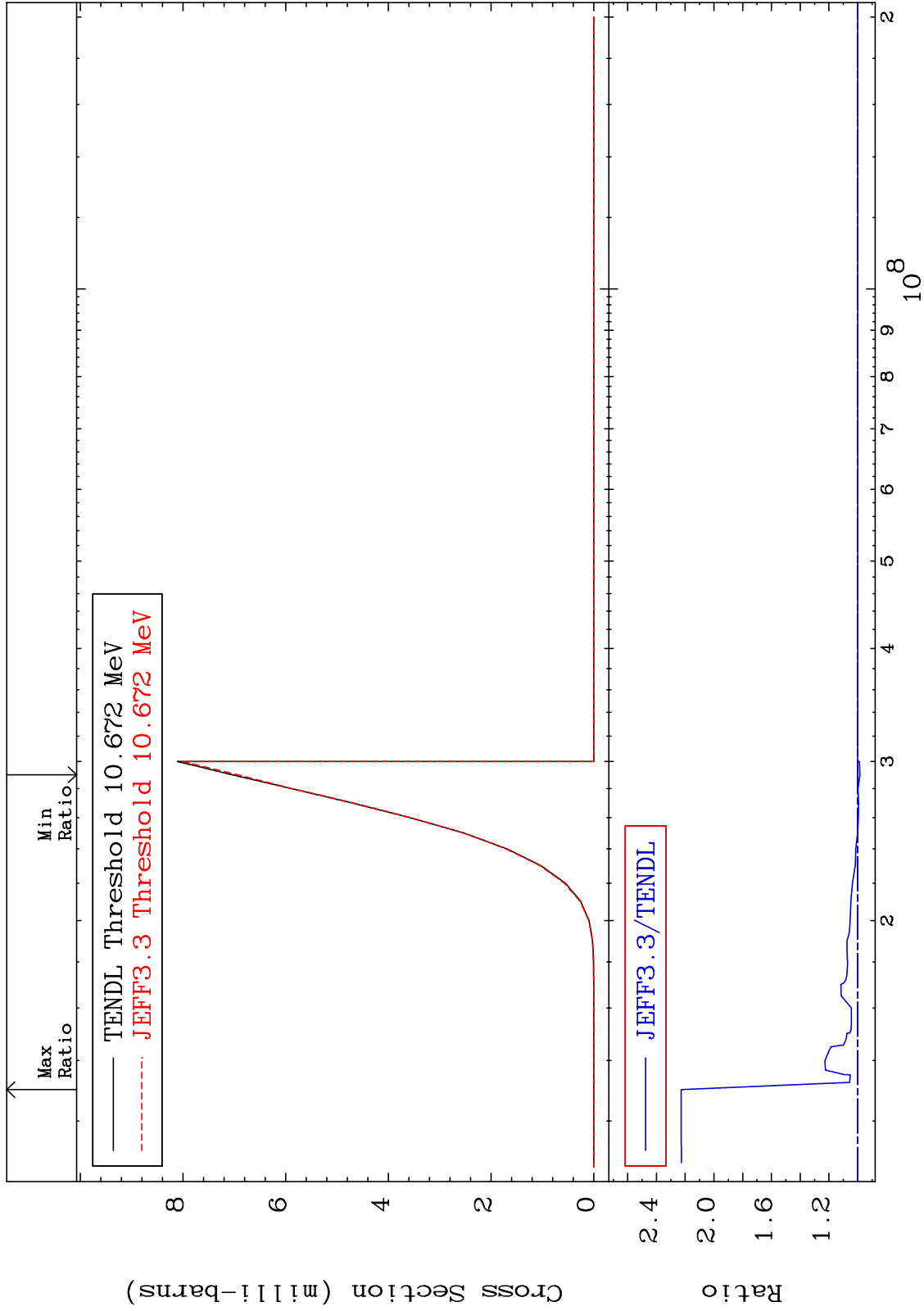
MAT 7322

(n, n') d

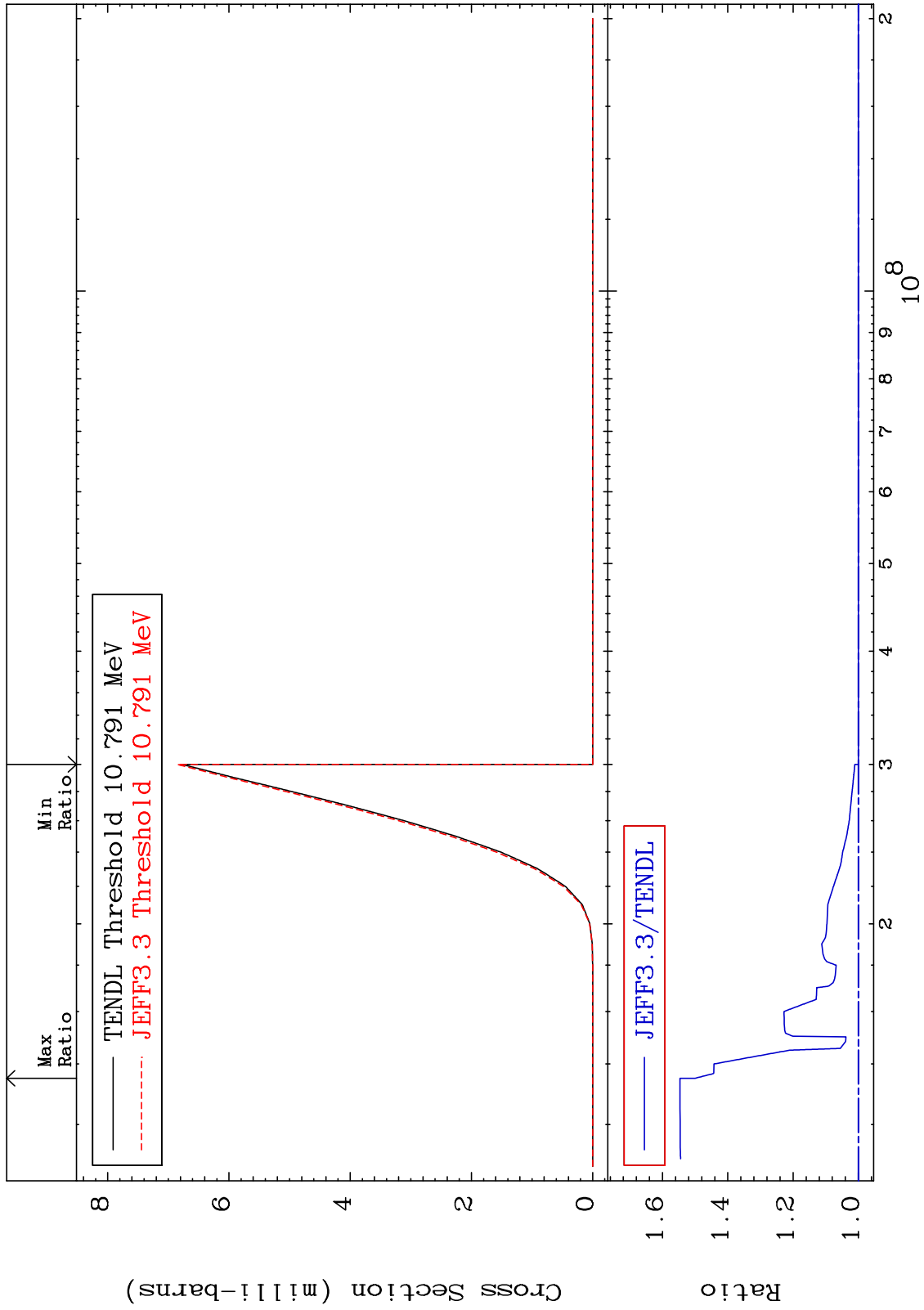
<sup>73</sup>Ta-179

Cross Section

-1.567 To 122.8 %



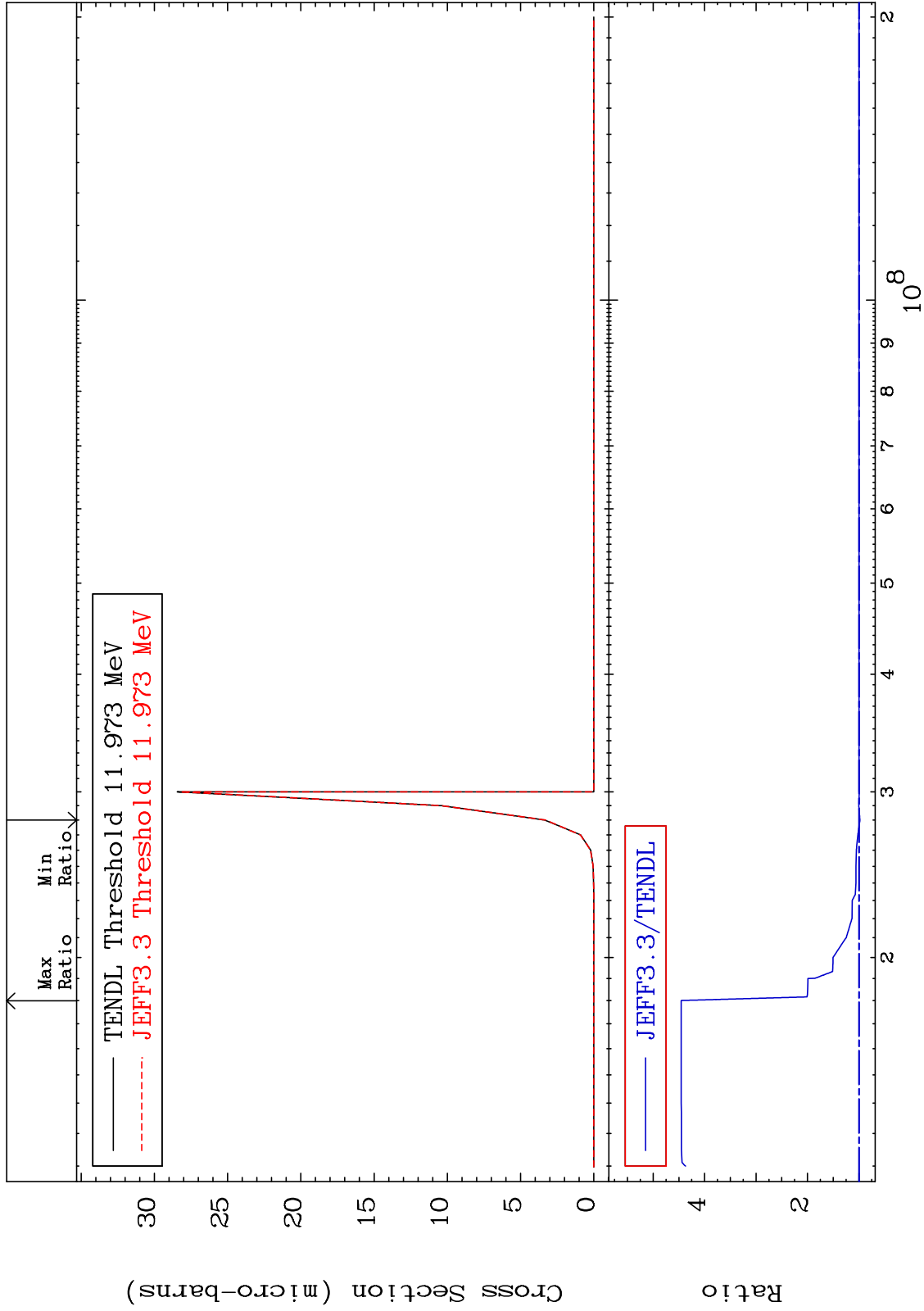
MAT 7322  $(n, n') t$   $^{73}\text{Ta-179}$   
 Cross Section 0.000 To 54.64 %



MAT 7322

(n, n') He-3  
Cross Section

<sup>73</sup>Ta-179  
-1.950 To 345.4 %



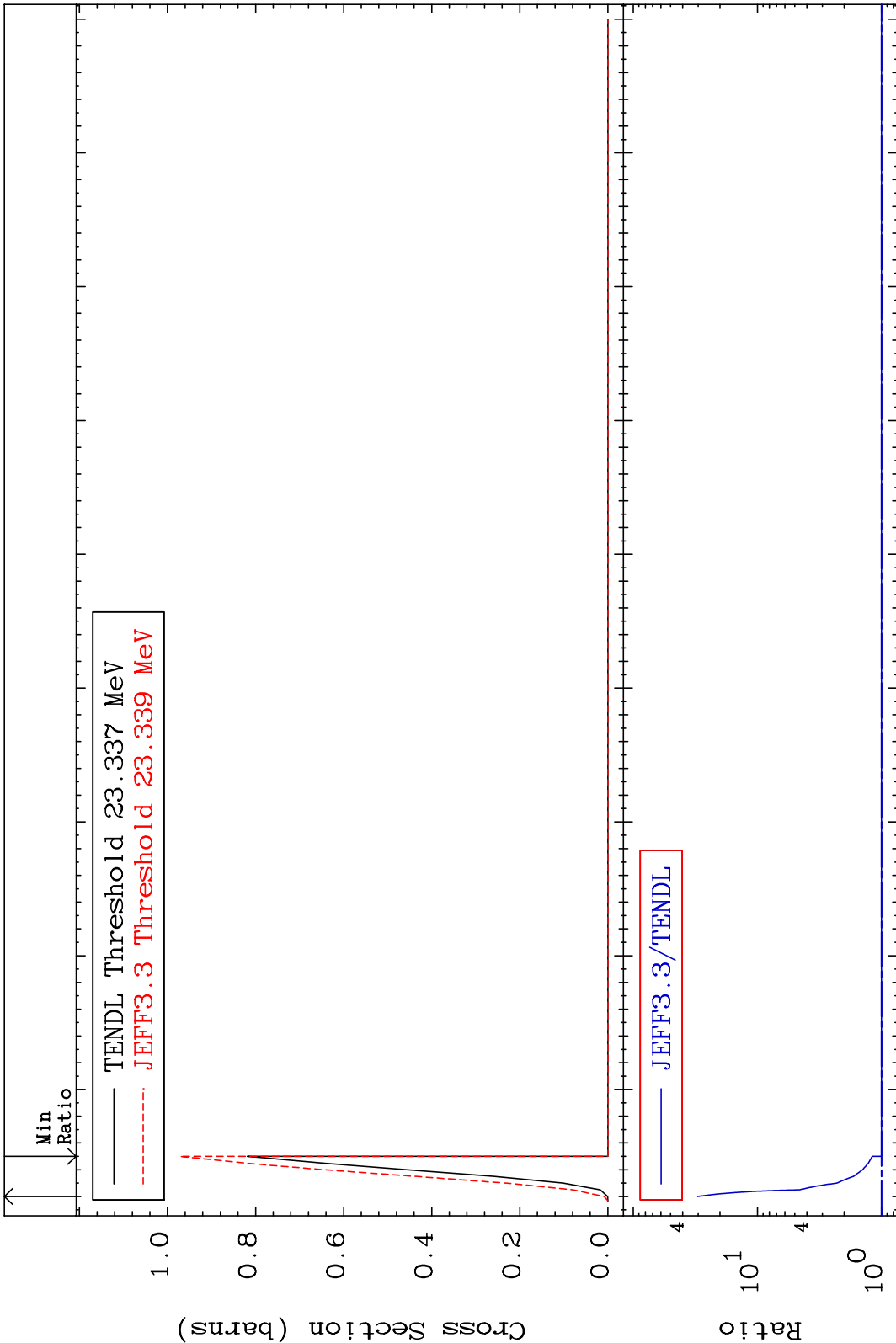
MAT 7322

(n, 4n)

<sup>73</sup>Ta-179

Cross Section

0.000 To 2922. %

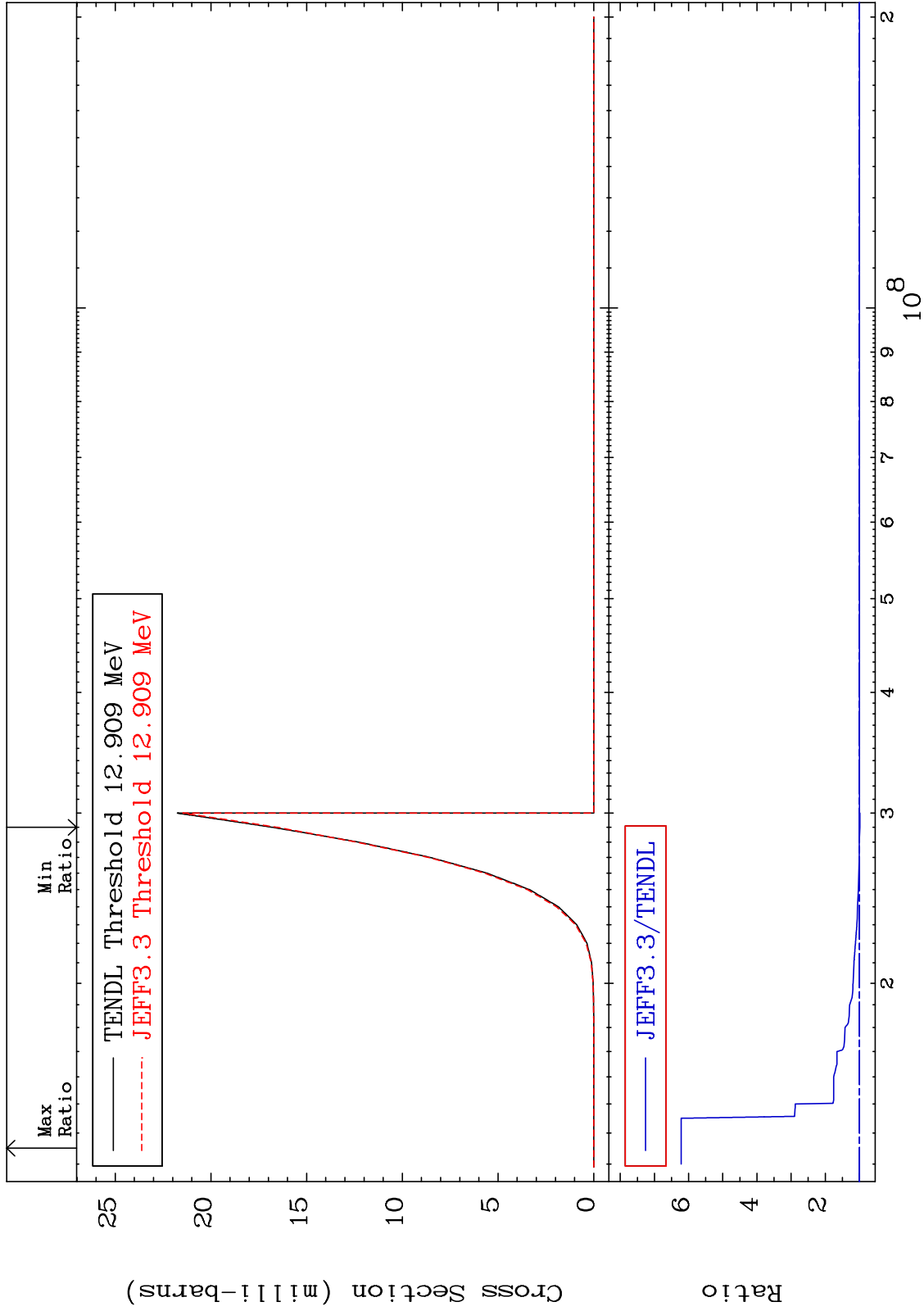




MAT 7322

(n,2n) p  
Cross Section

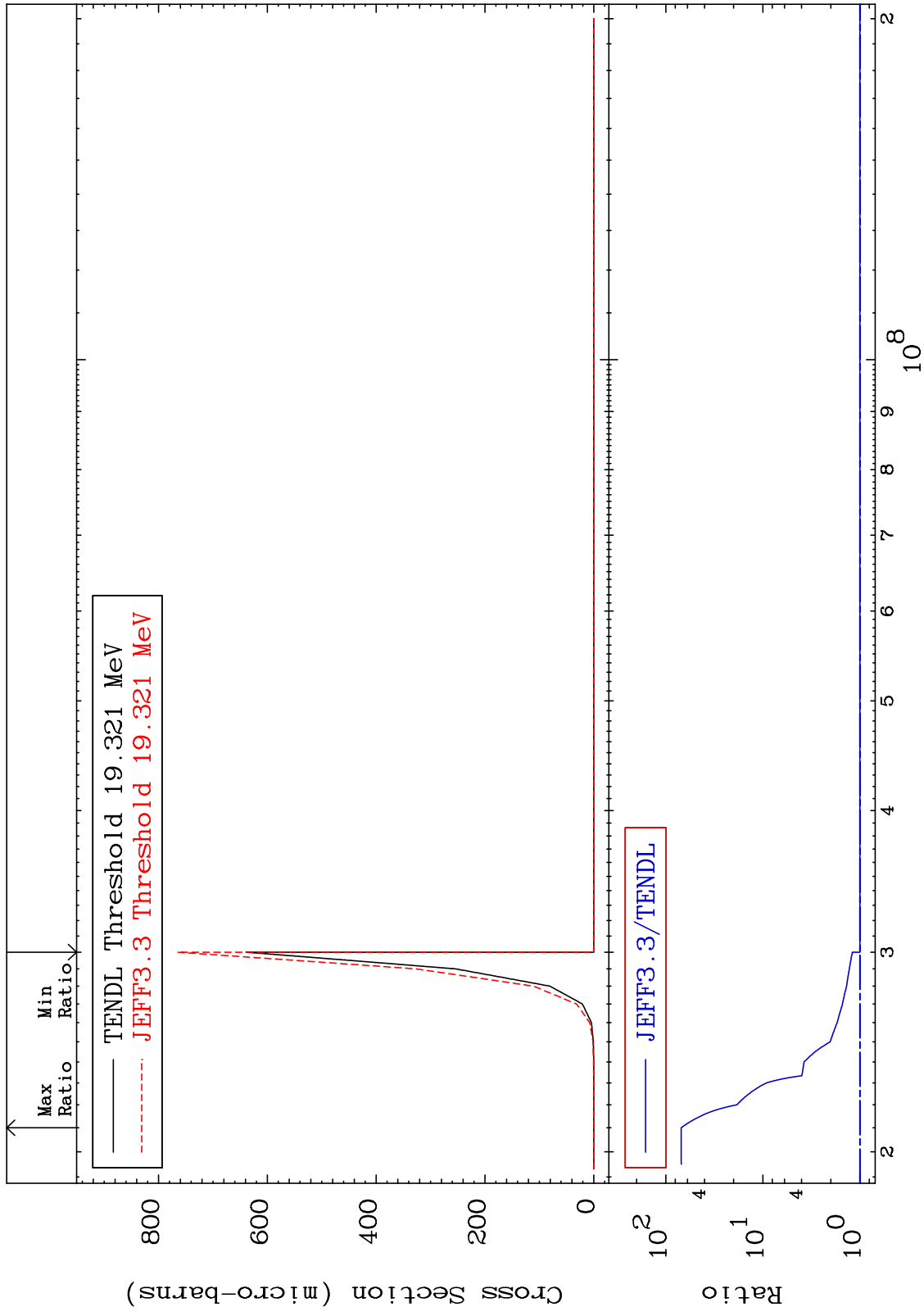
<sup>73</sup>Ta-179  
-1.492 To 521.6 %

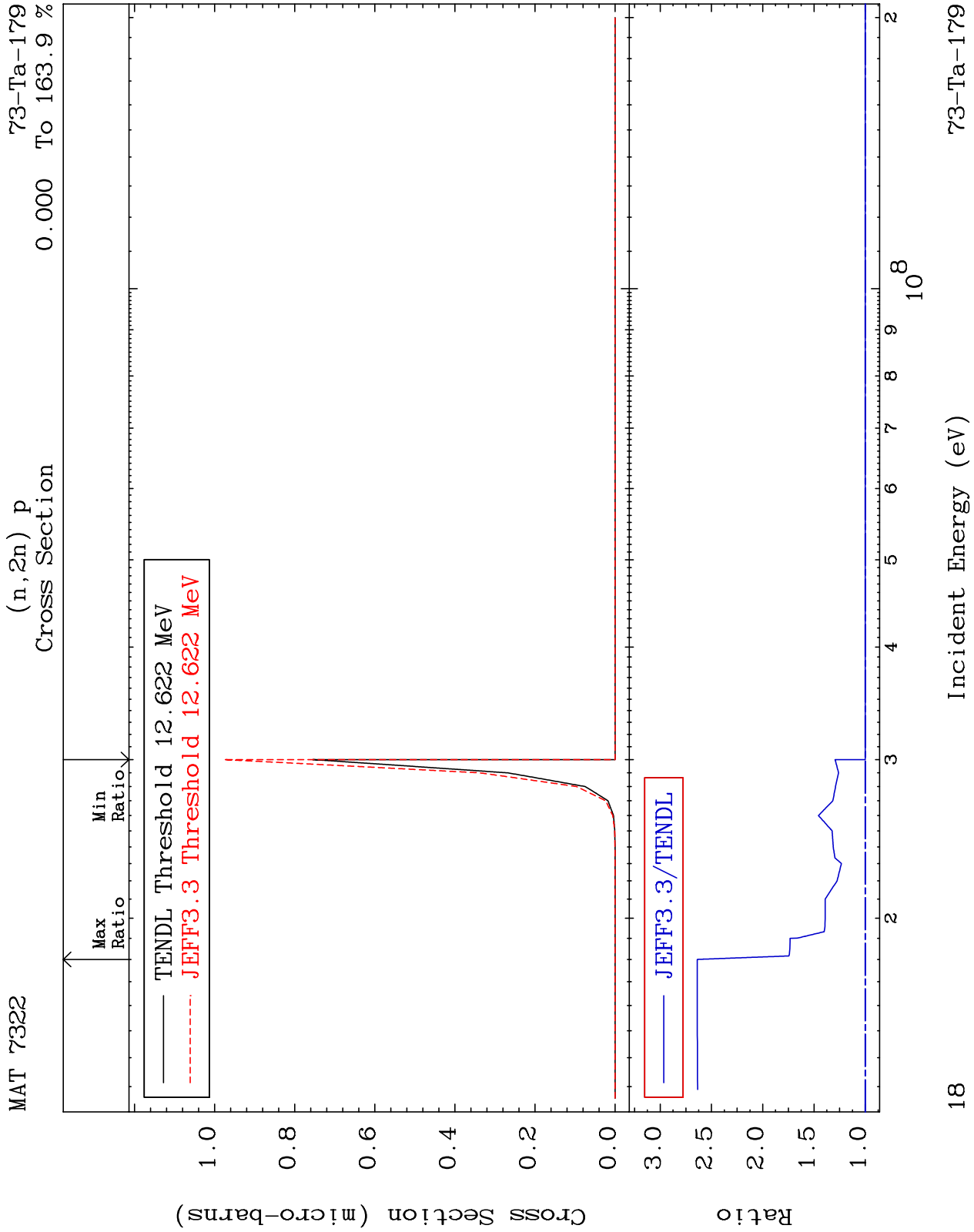


MAT 7322

(n,3n) p  
Cross Section

<sup>73</sup>Ta-179  
0.000 To 6845. %

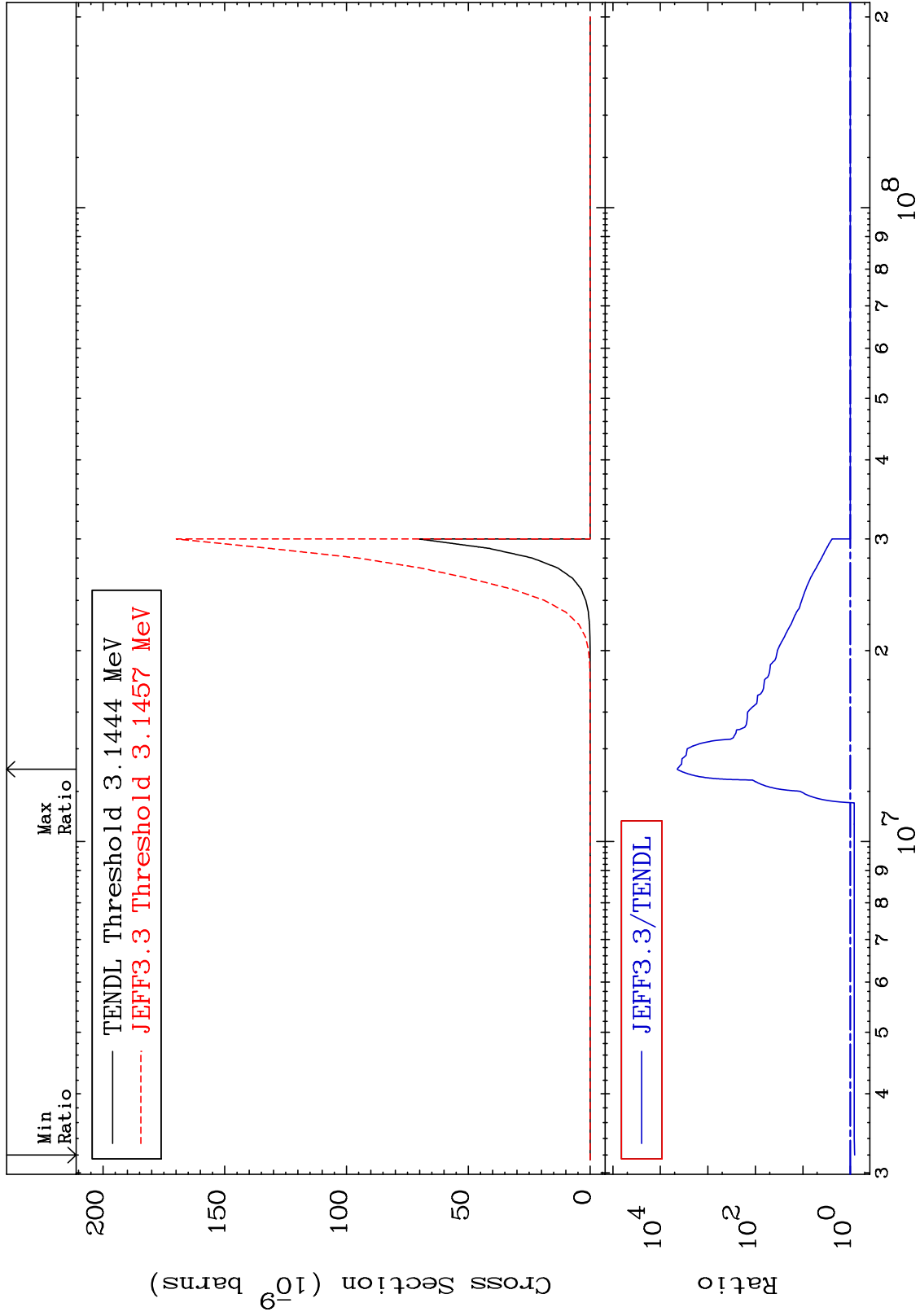




MAT 7322

(n,n') p  $\alpha$   
Cross Section

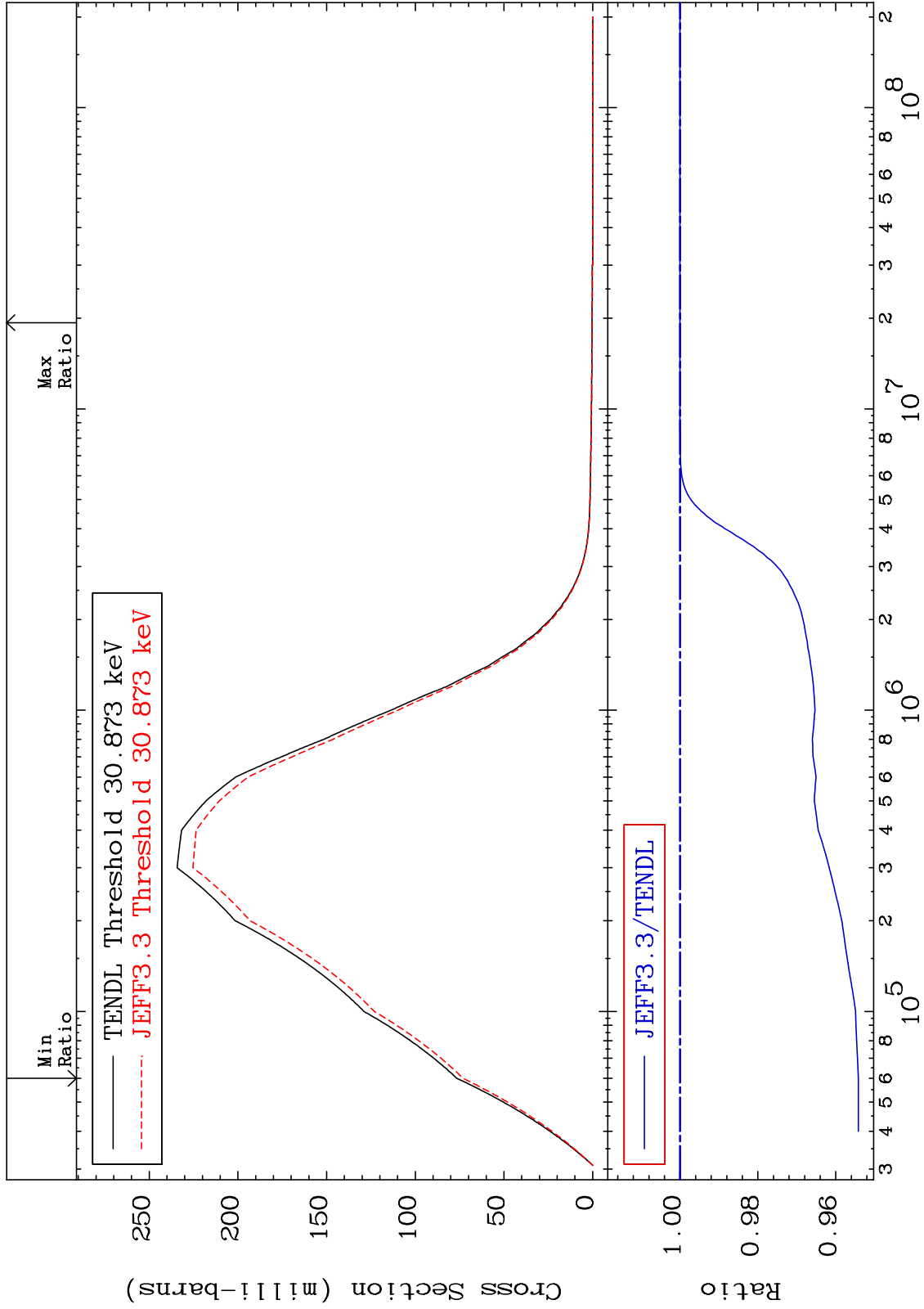
<sup>73</sup>Ta-179  
-18.90 To 9999. %



MAT 7322

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

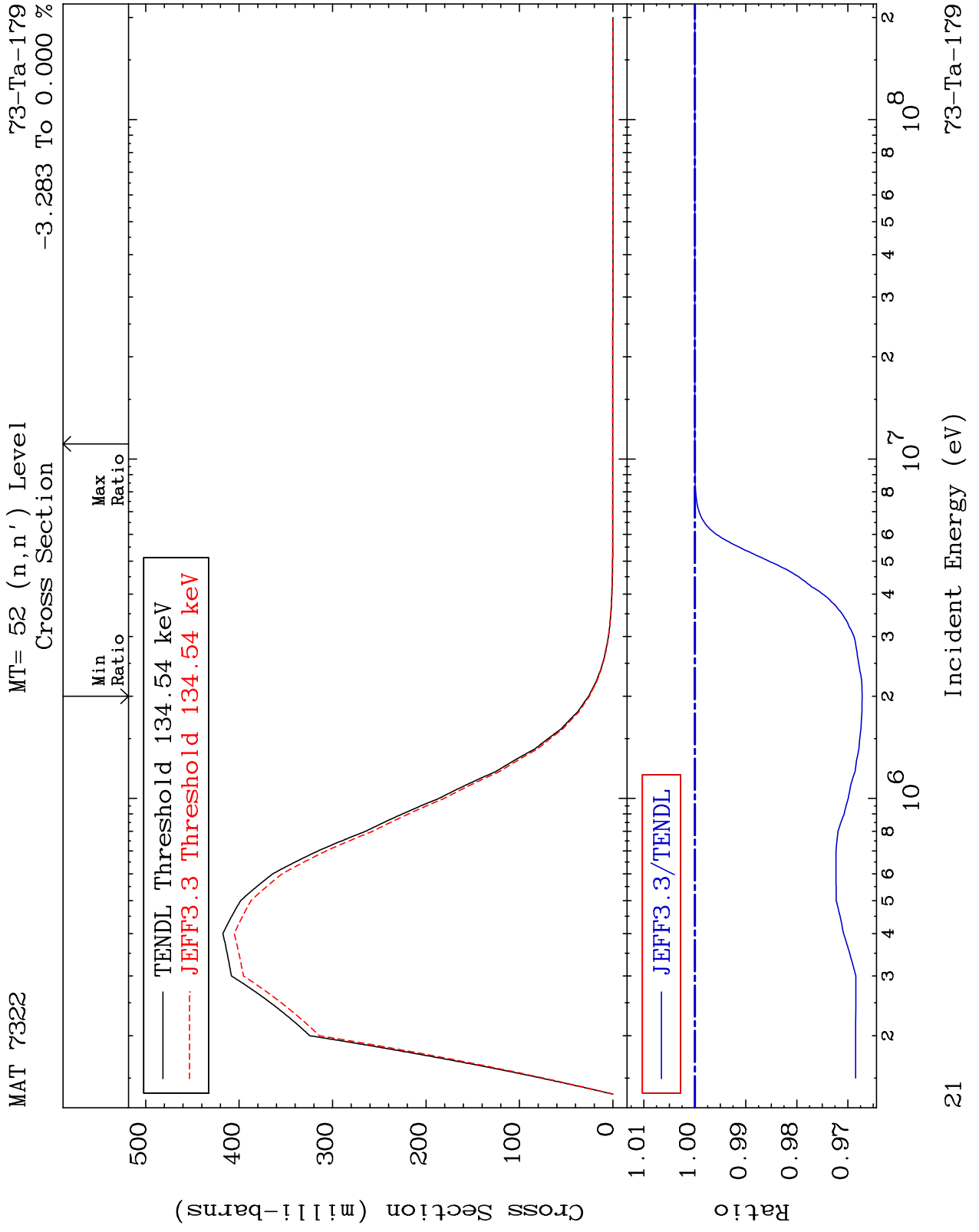
73-Ta-179  
-4.582 To 0.000 %



20

Incident Energy (eV)

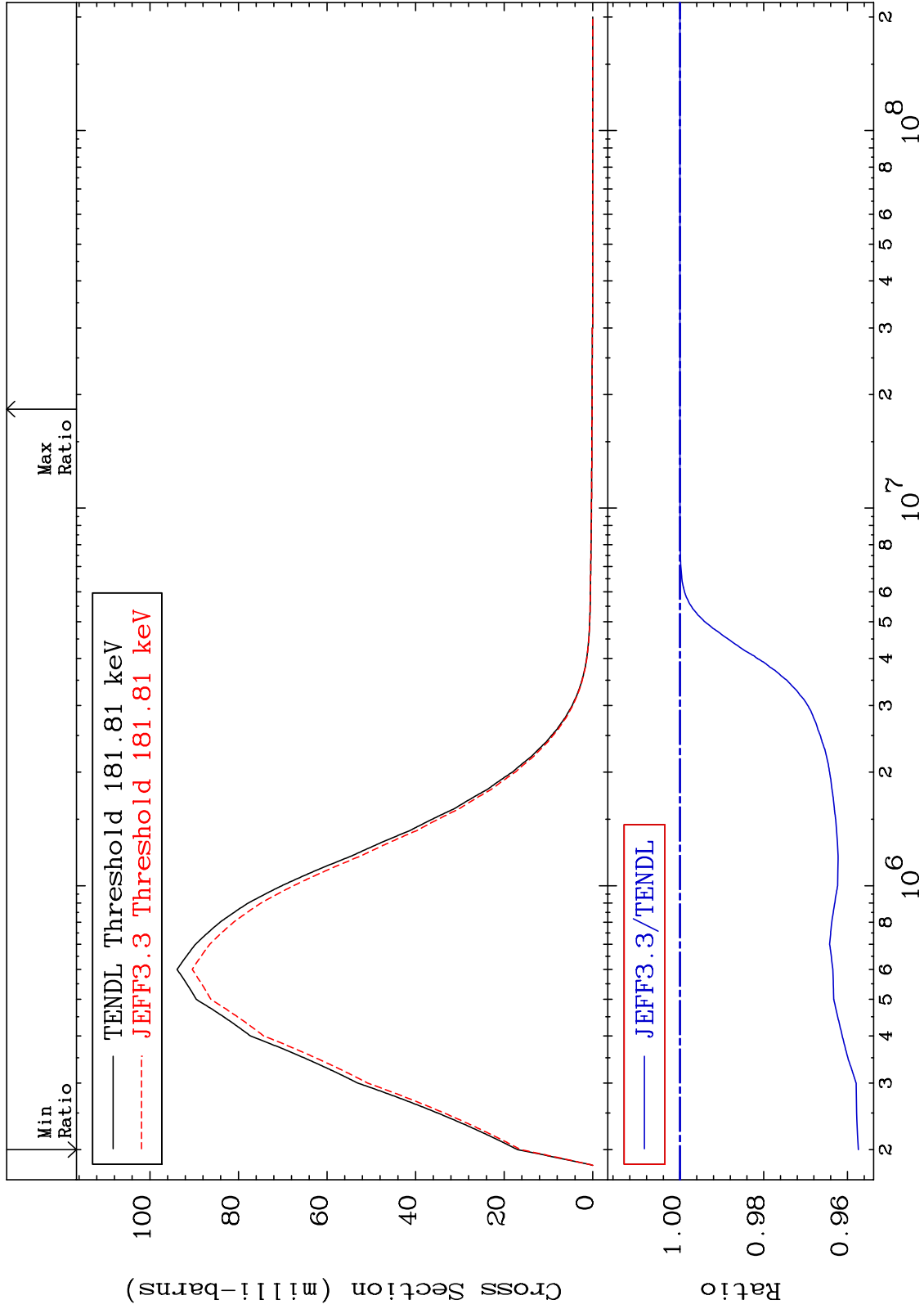
73-Ta-179



MAT 7322

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

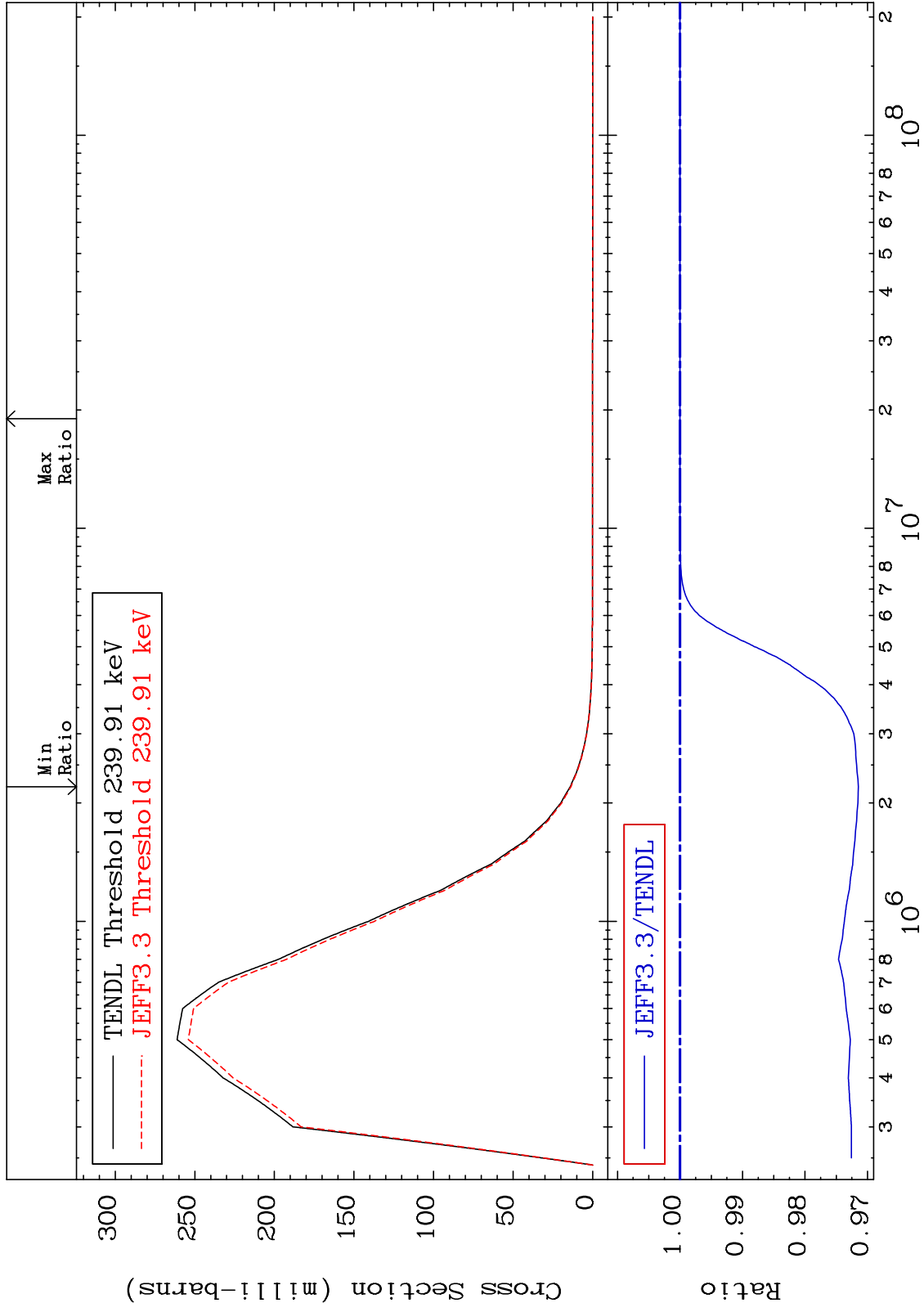
73-Ta-179  
-4.262 To 0.000 %



MAT 7322

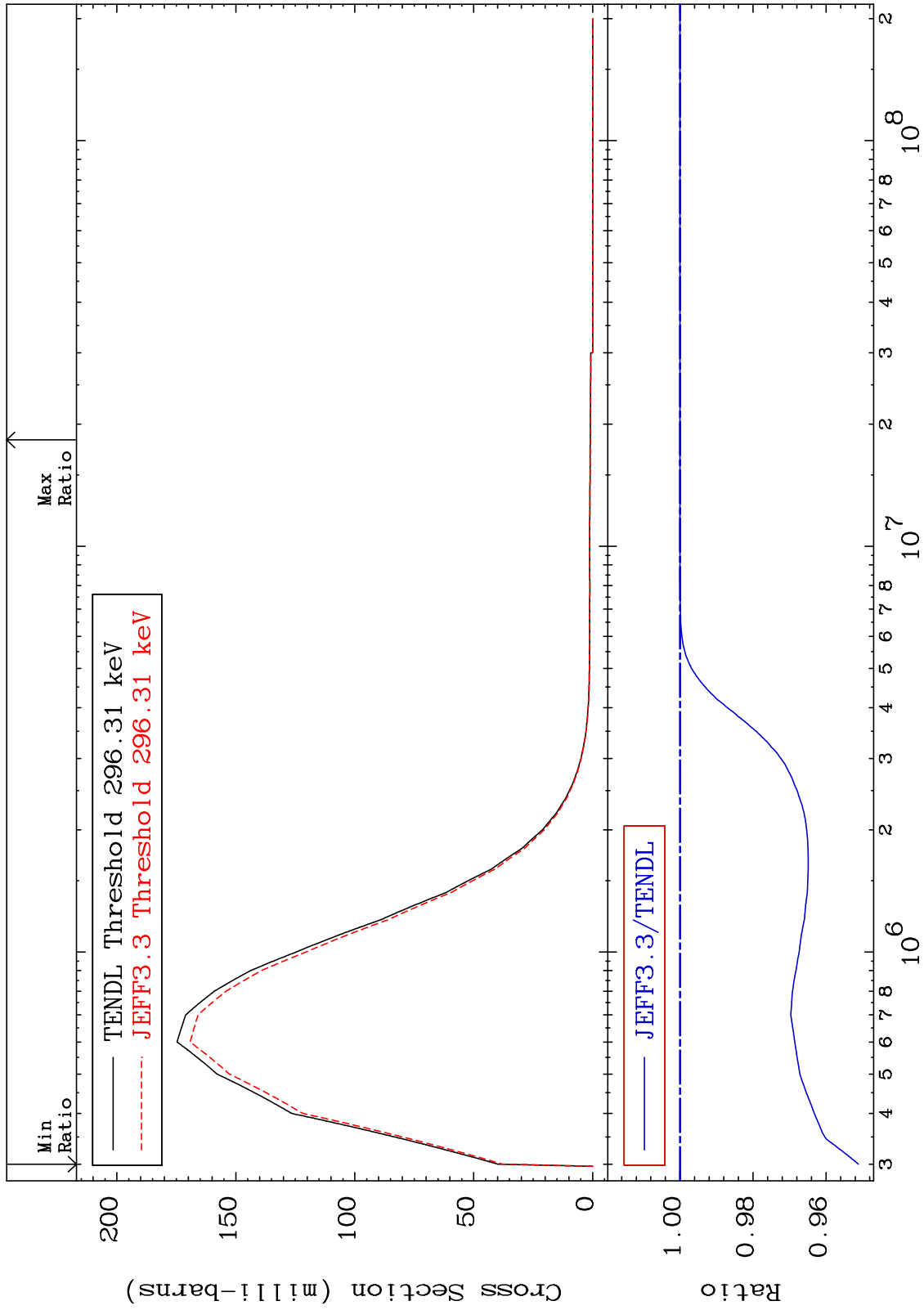
MT= 54 (n,n') Level  
Cross Section

<sup>73</sup>Ta-179  
-2.854 To 0.000 %





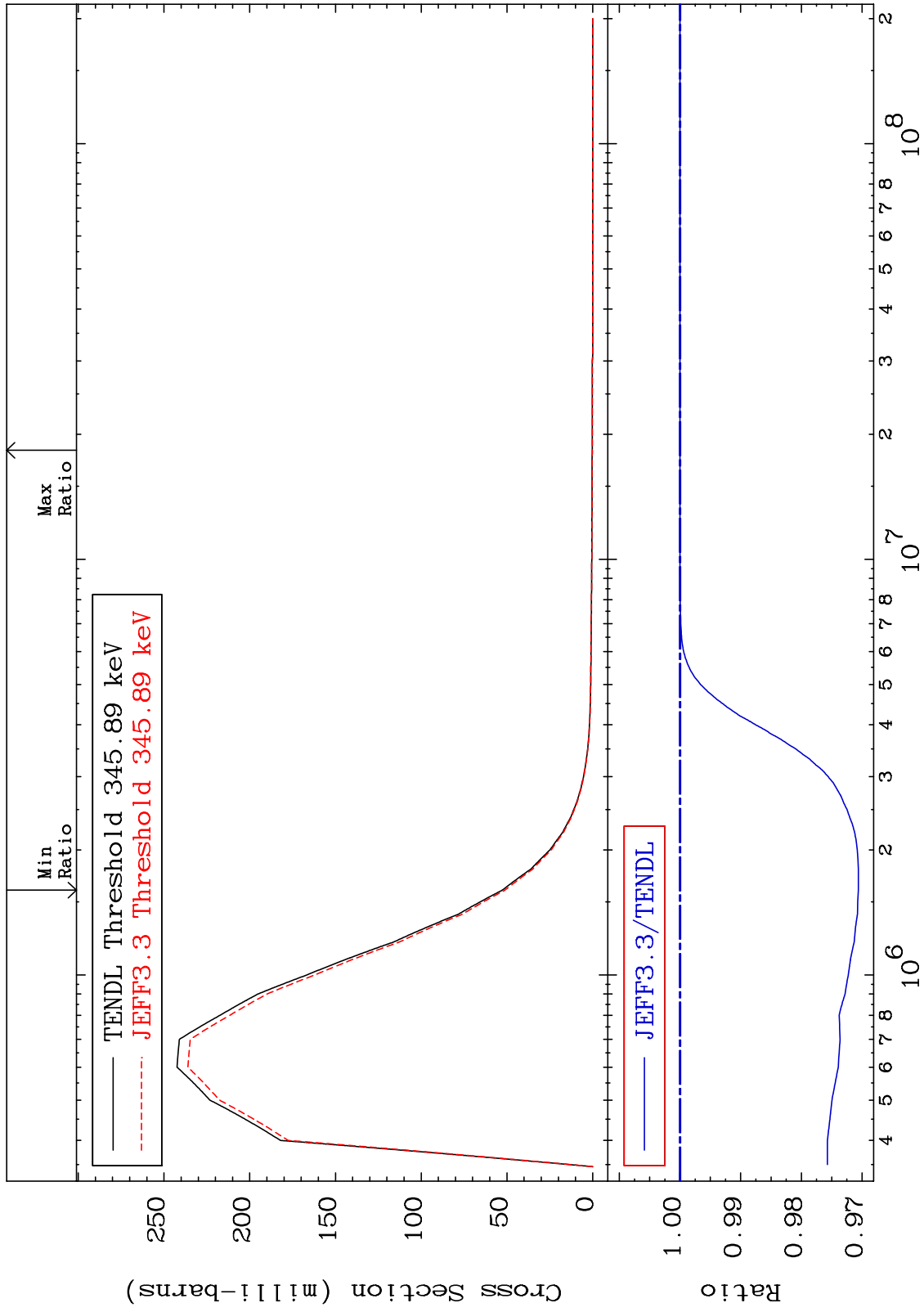
MAT 7322 MT= 55 (n,n') Level Cross Section -4.888 To 0.000 % 73-Ta-179

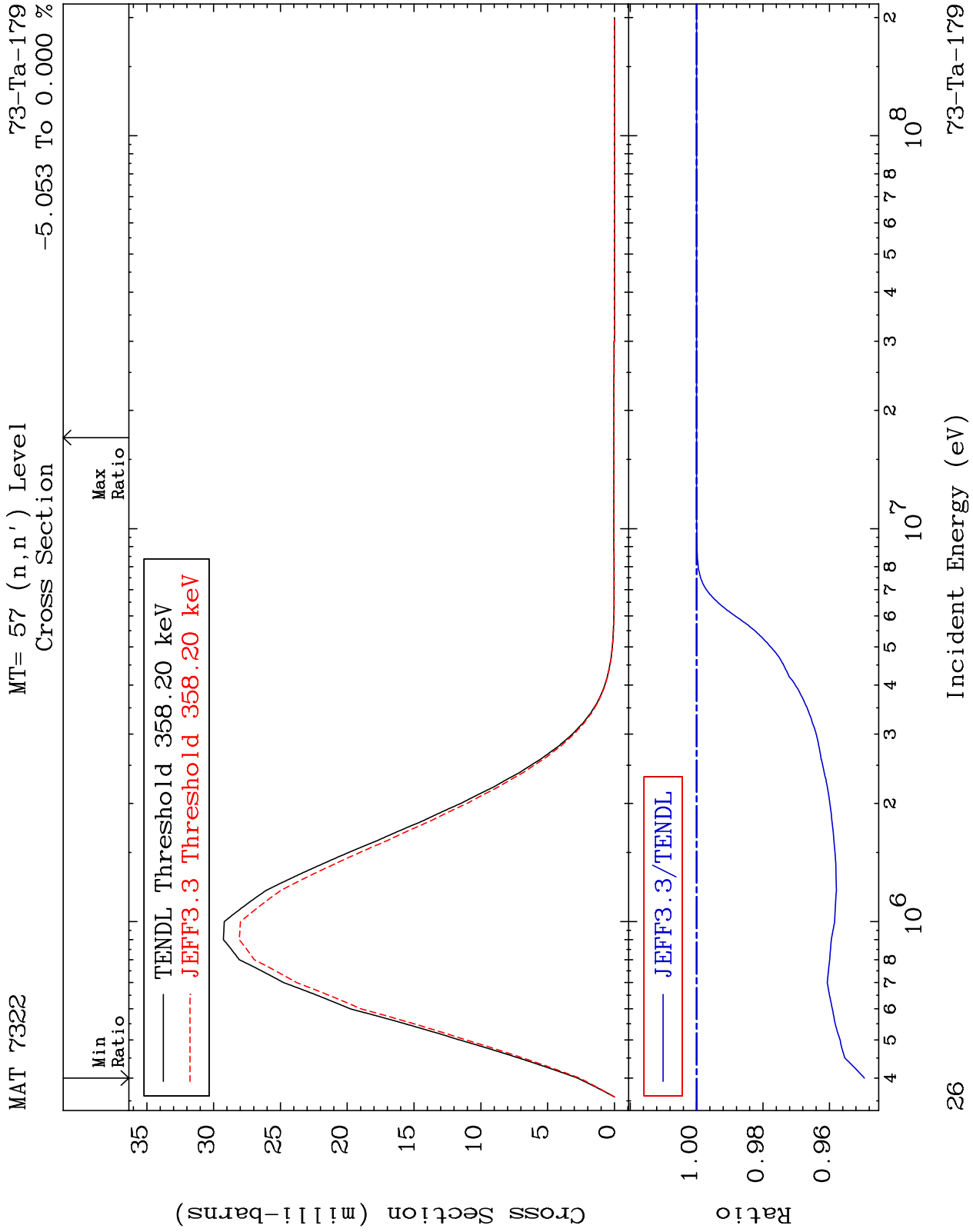


MAT 7322

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

<sup>73</sup>Ta-179  
-2.941 To 0.000 %

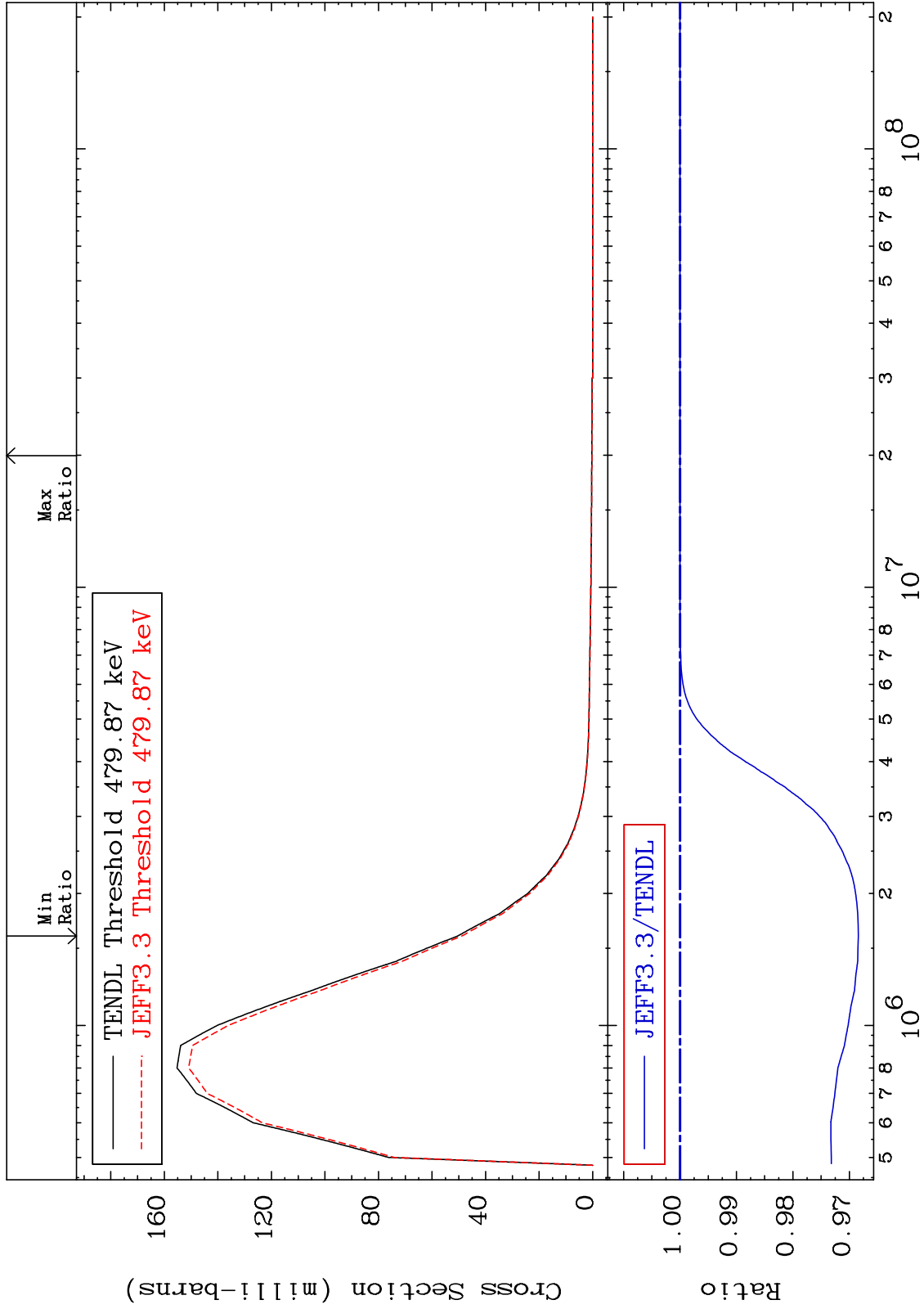




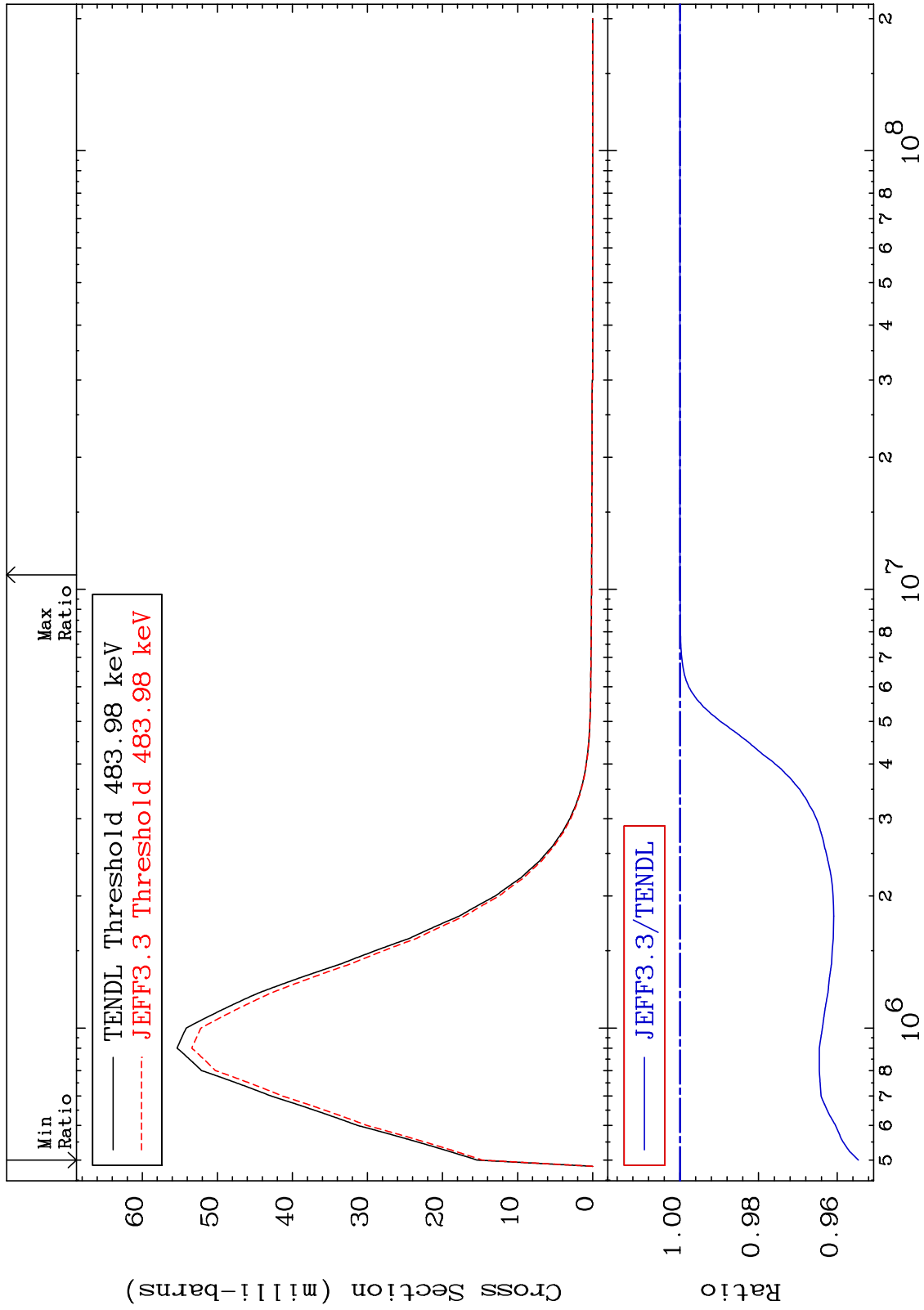
MAT 7322

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

<sup>73</sup>Ta-179  
-3.161 To 0.000 %



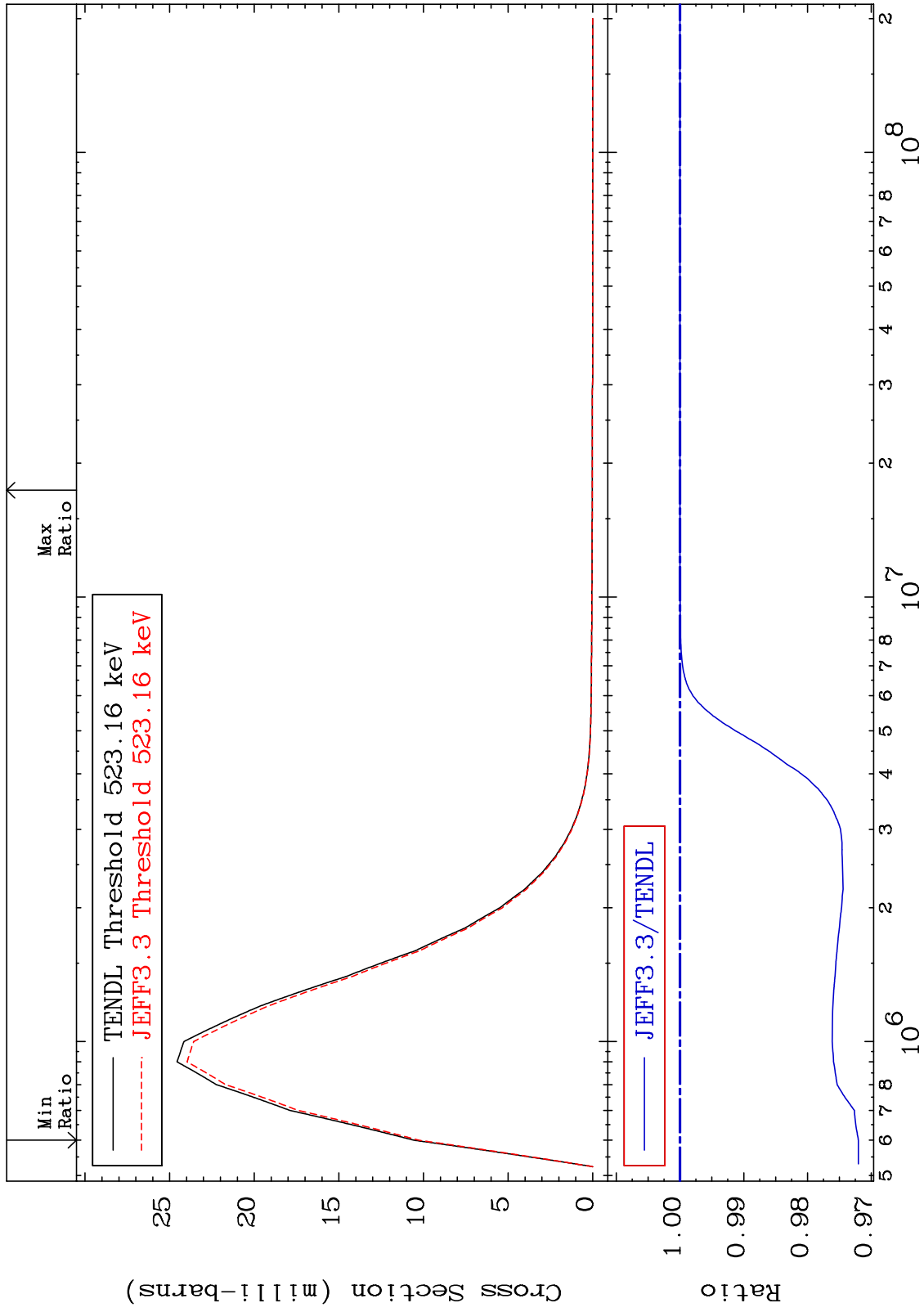
MAT 7322 MT= 59 (n,n') Level Cross Section -4.542 To 0.000 % <sup>73</sup>Ta-179



MAT 7322

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

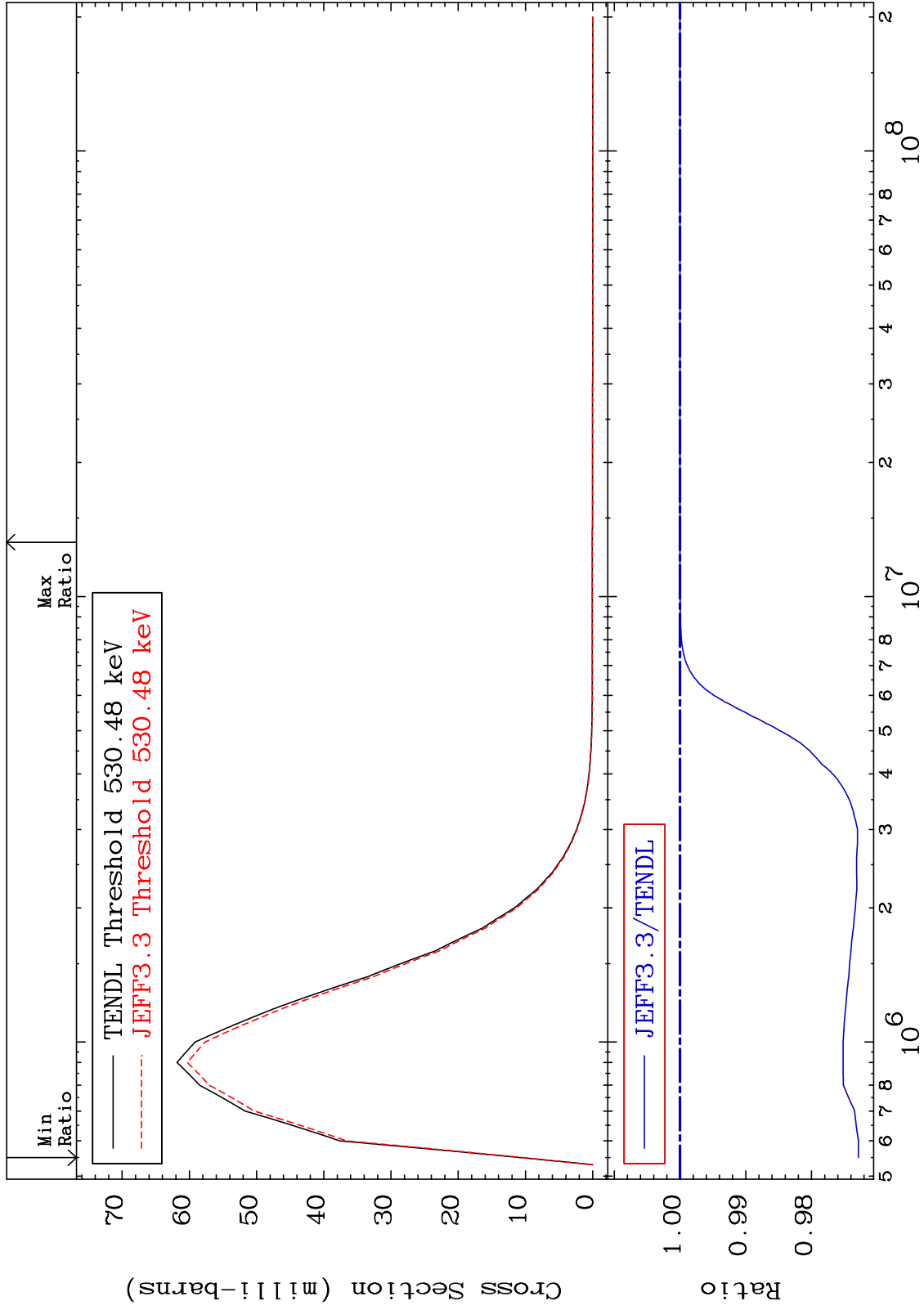
<sup>73</sup>Ta-179  
-2.799 To 0.000 %



MAT 7322

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

<sup>73</sup>Ta-179  
-2.713 To 0.000 %

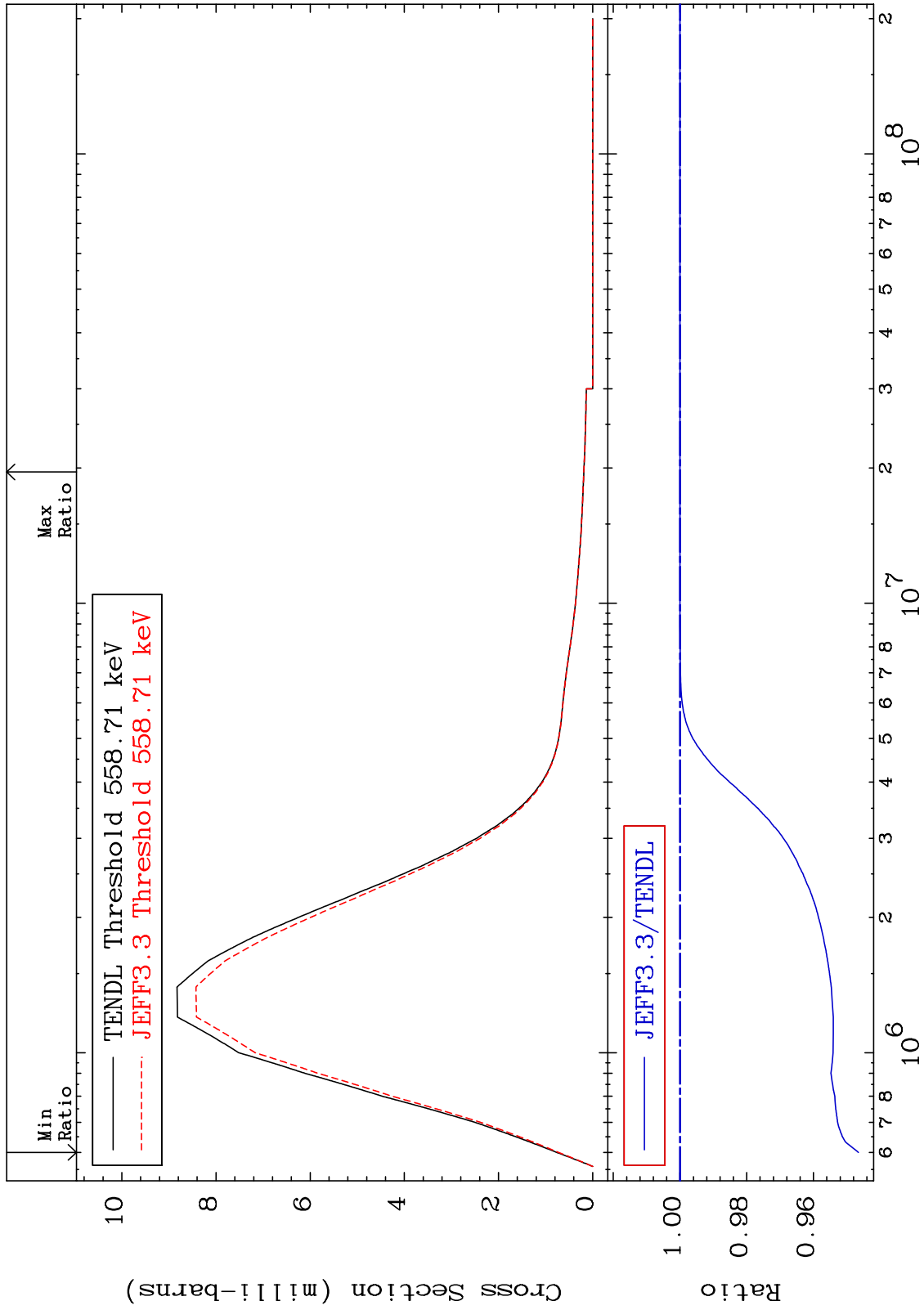


30

Incident Energy (eV)

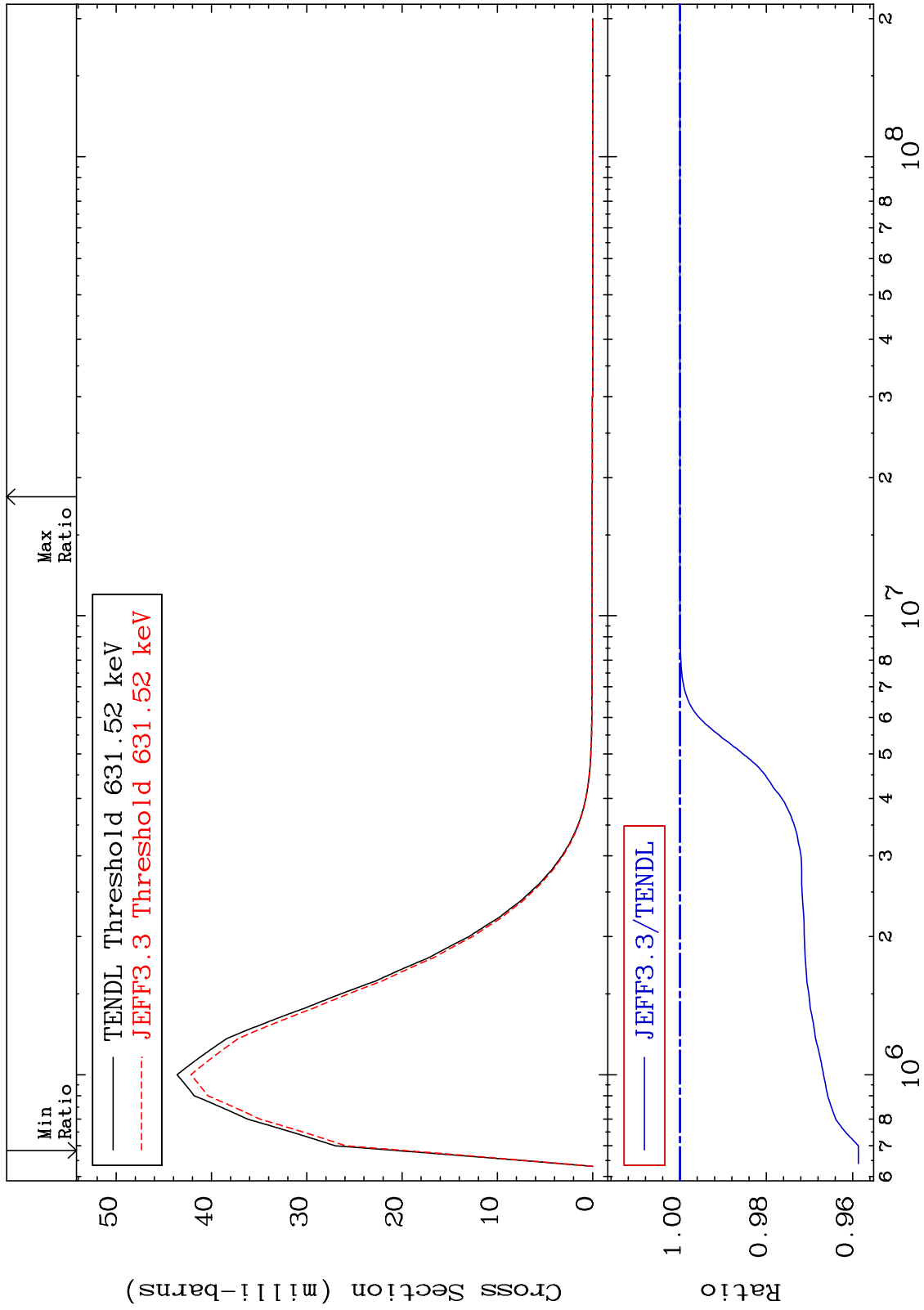
<sup>73</sup>Ta-179

MAT 7322 MT= 62 (n,n') Level Cross Section -5.347 To 0.000 % <sup>73</sup>Ta-179





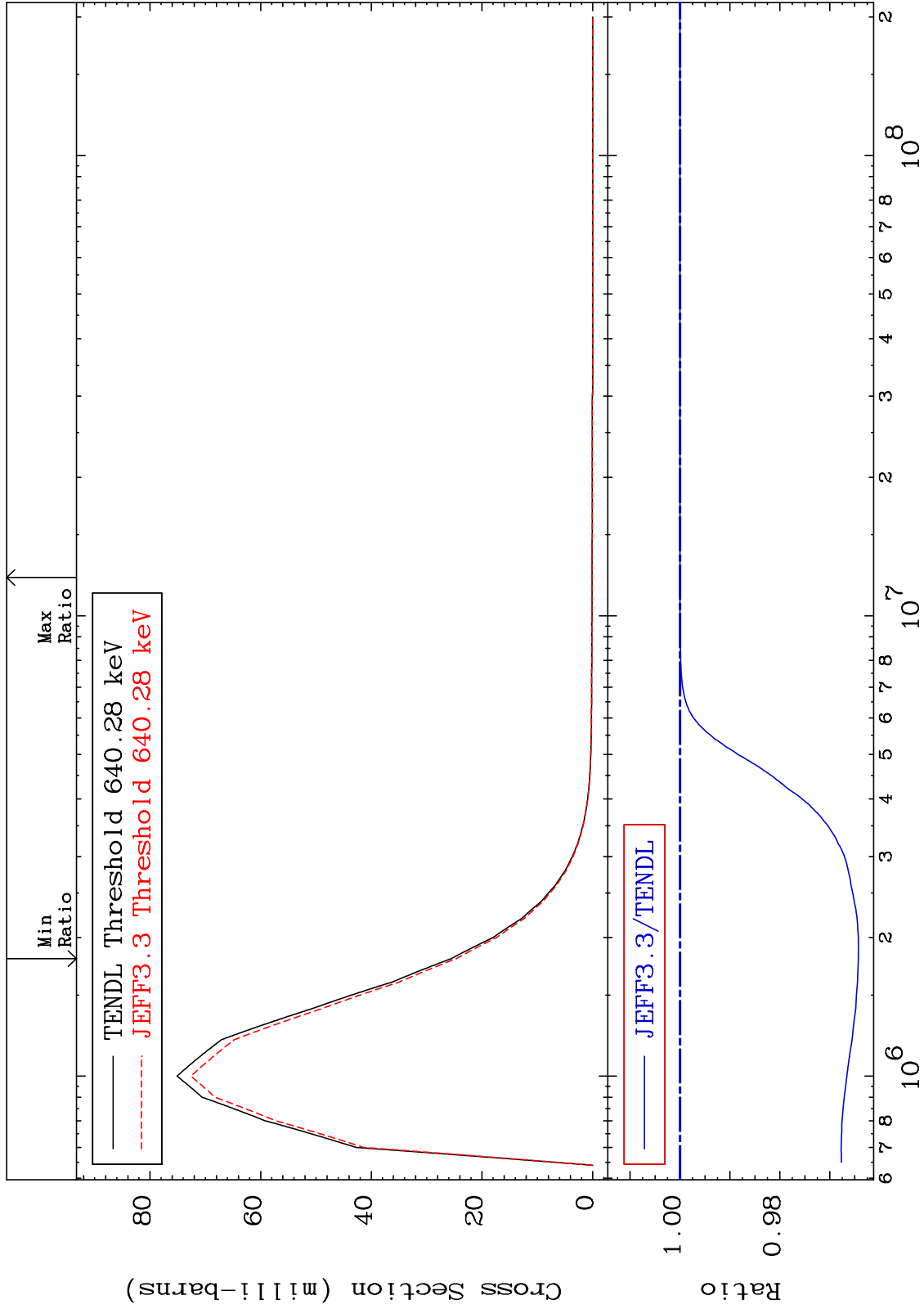
MAT 7322 MT= 63 (n,n') Level Cross Section -4.135 To 0.000 % <sup>73</sup>Ta-179



MAT 7322

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

<sup>73</sup>Ta-179  
-3.574 To 0.000 %

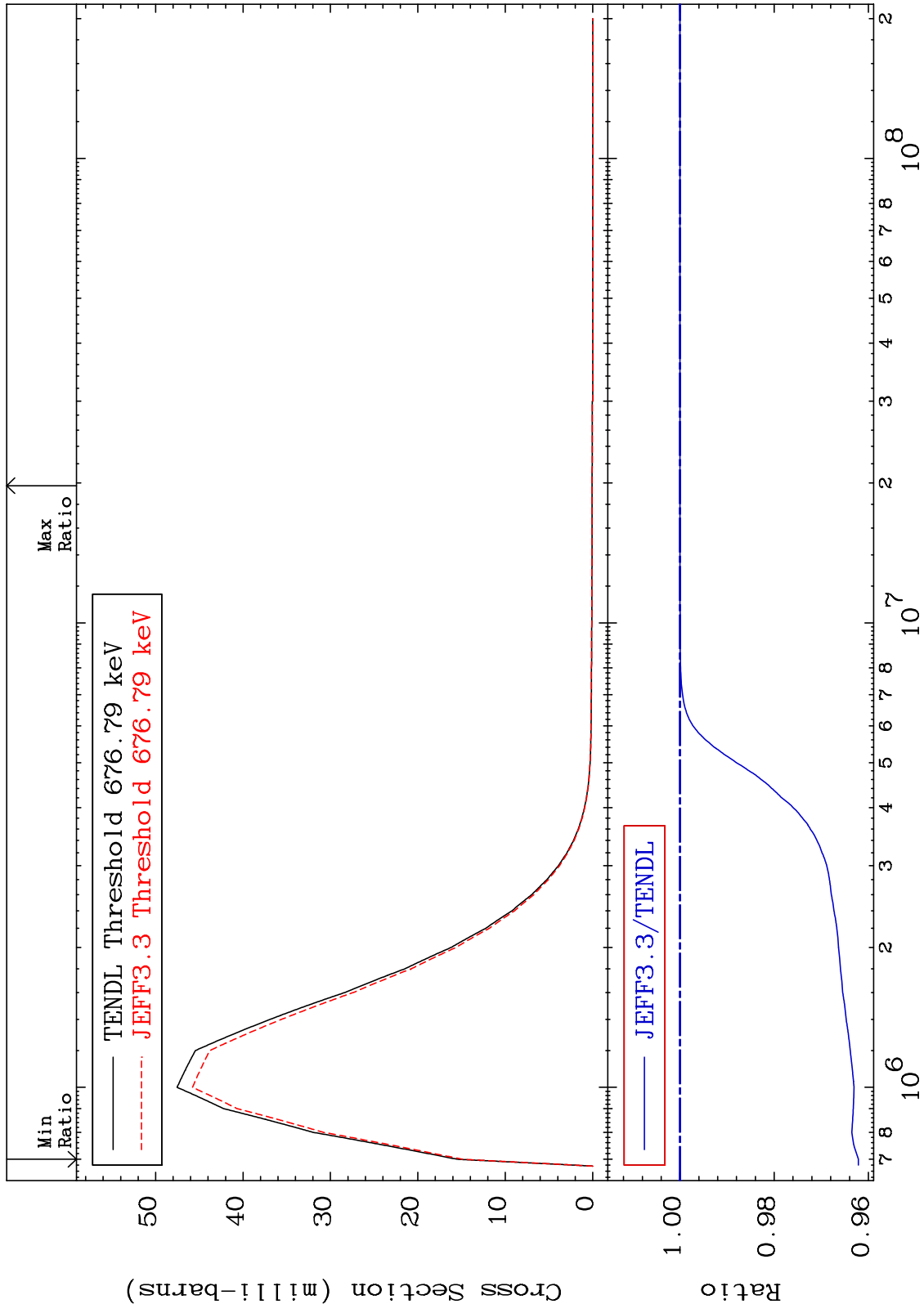


Incident Energy (eV)

<sup>73</sup>Ta-179

33

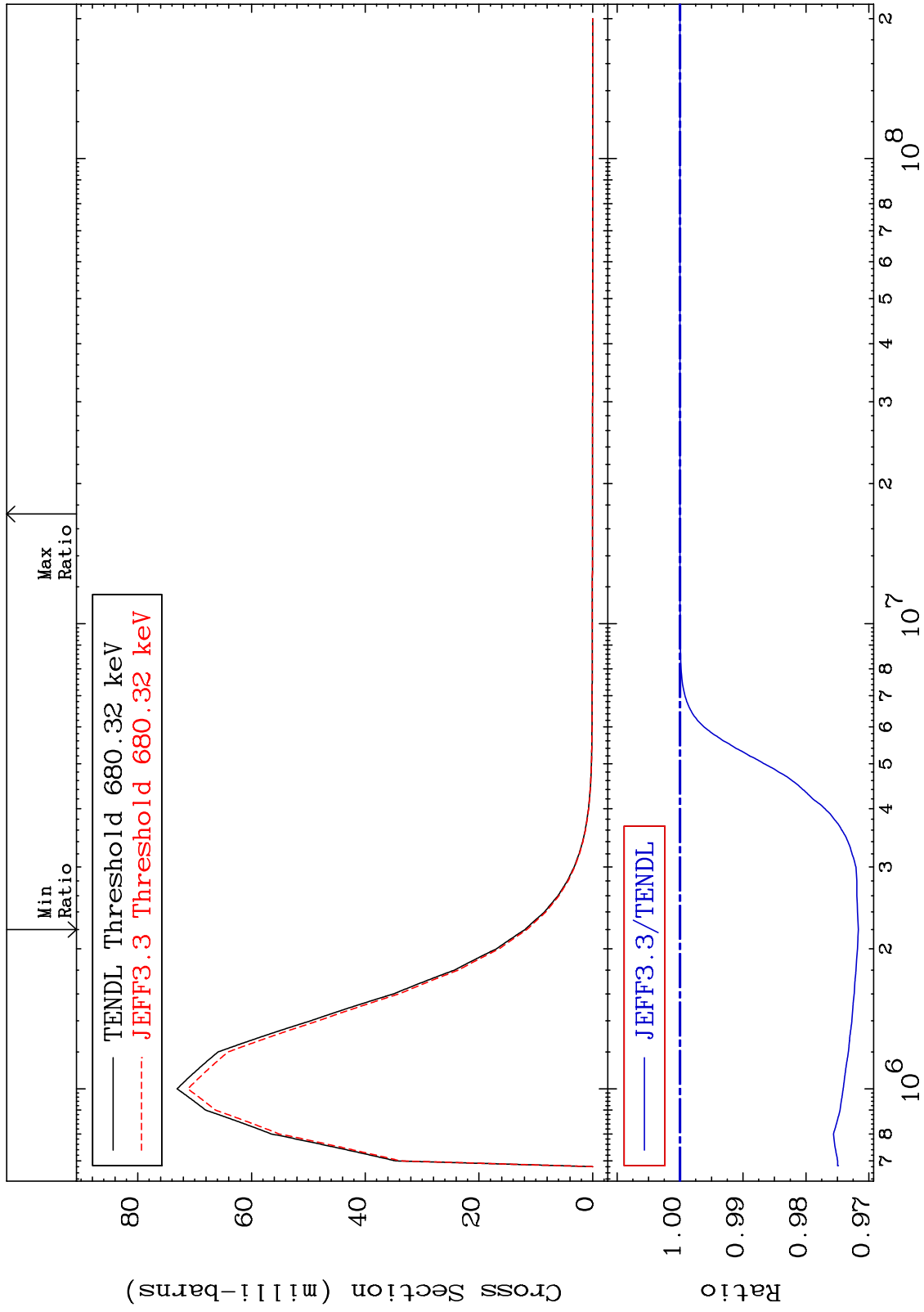
MAT 7322 MT= 65 (n,n') Level Cross Section -3.788 To 0.000 % <sup>73</sup>Ta-179



MAT 7322

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

<sup>73</sup>Ta-179  
-2.833 To 0.000 %



35

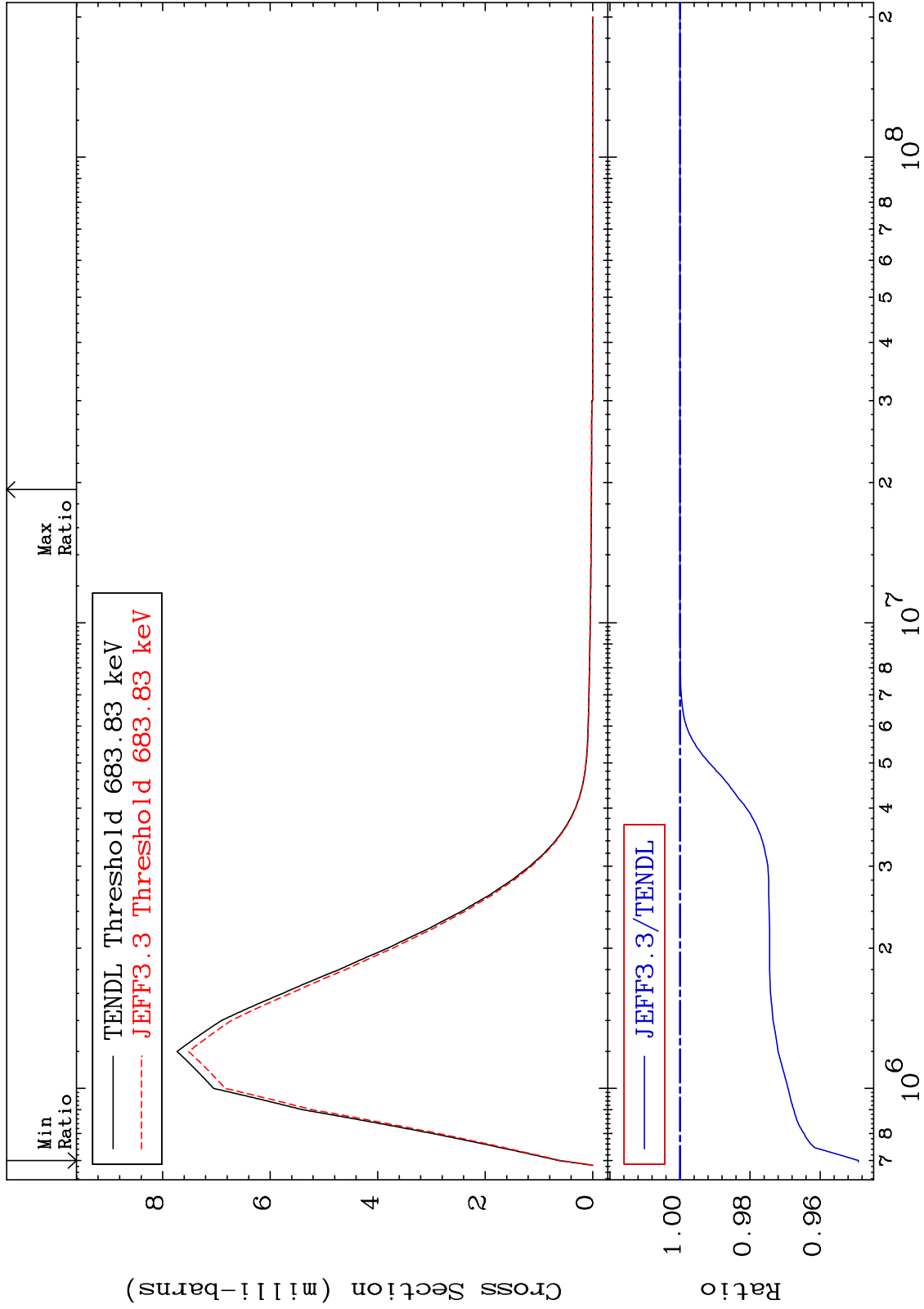
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

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

<sup>73</sup>Ta-179  
-5.093 To 0.000 %



36

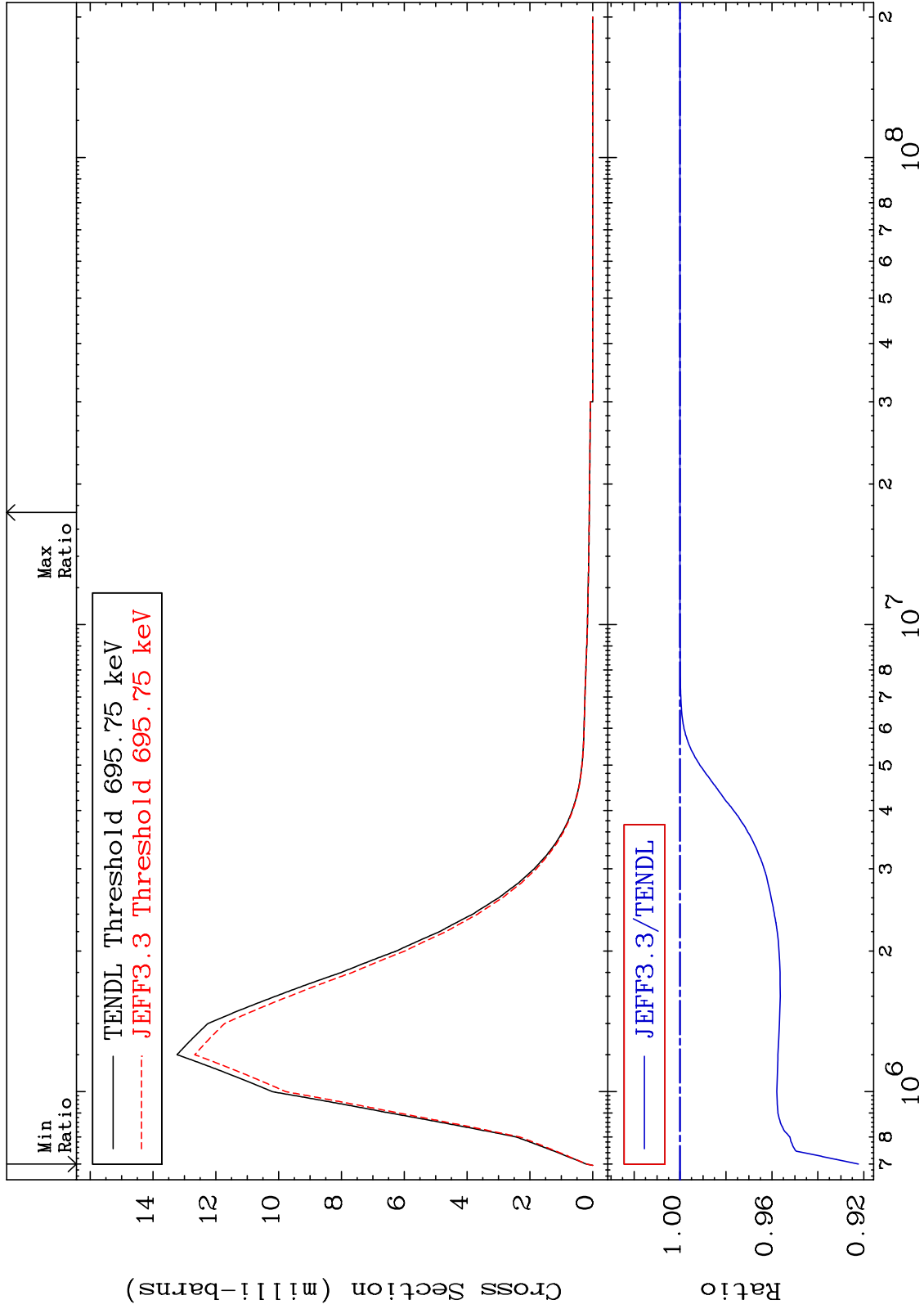
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

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

<sup>73</sup>Ta-179  
-7.764 To 0.000 %



37

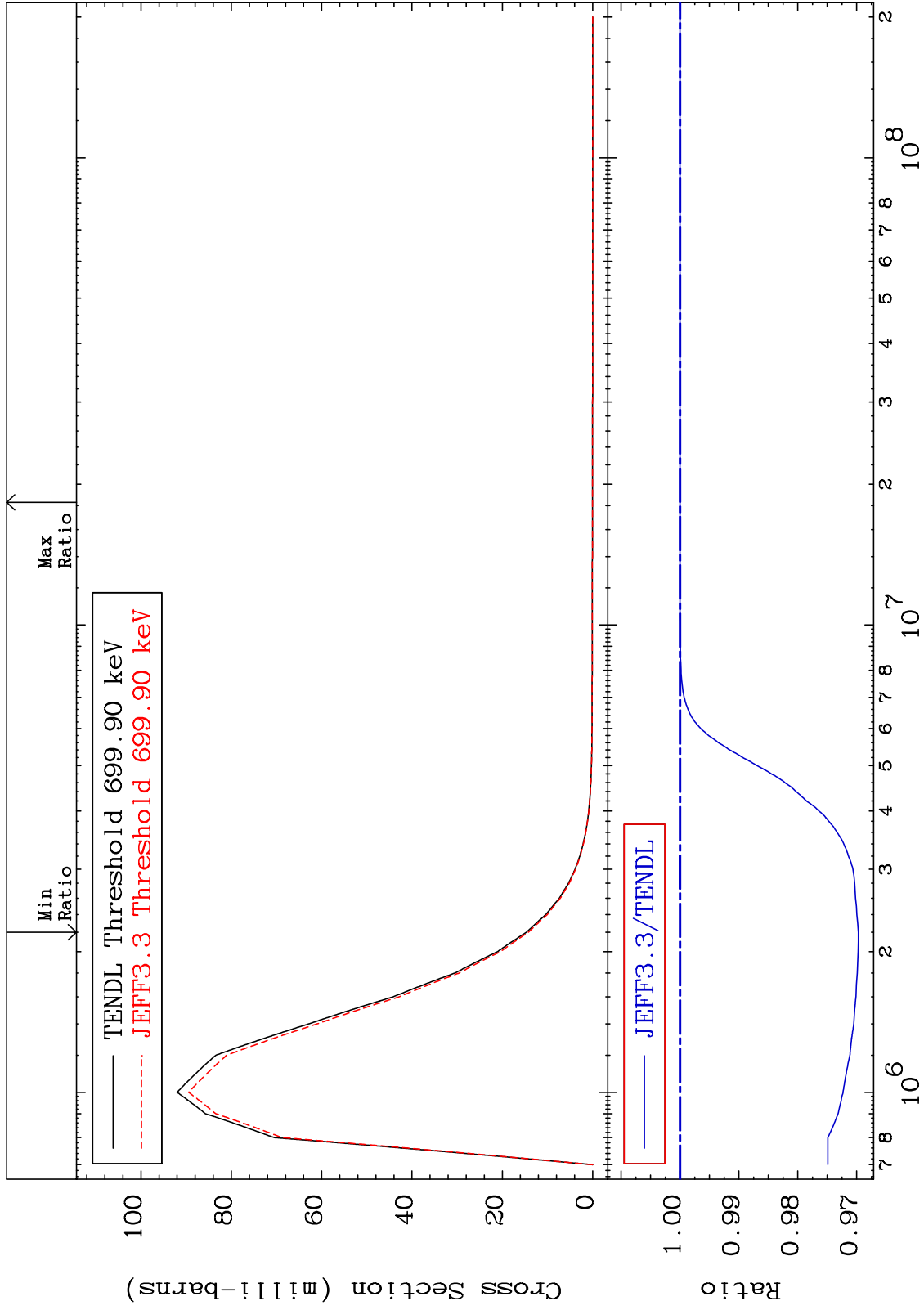
Incident Energy (eV)

<sup>73</sup>Ta-179

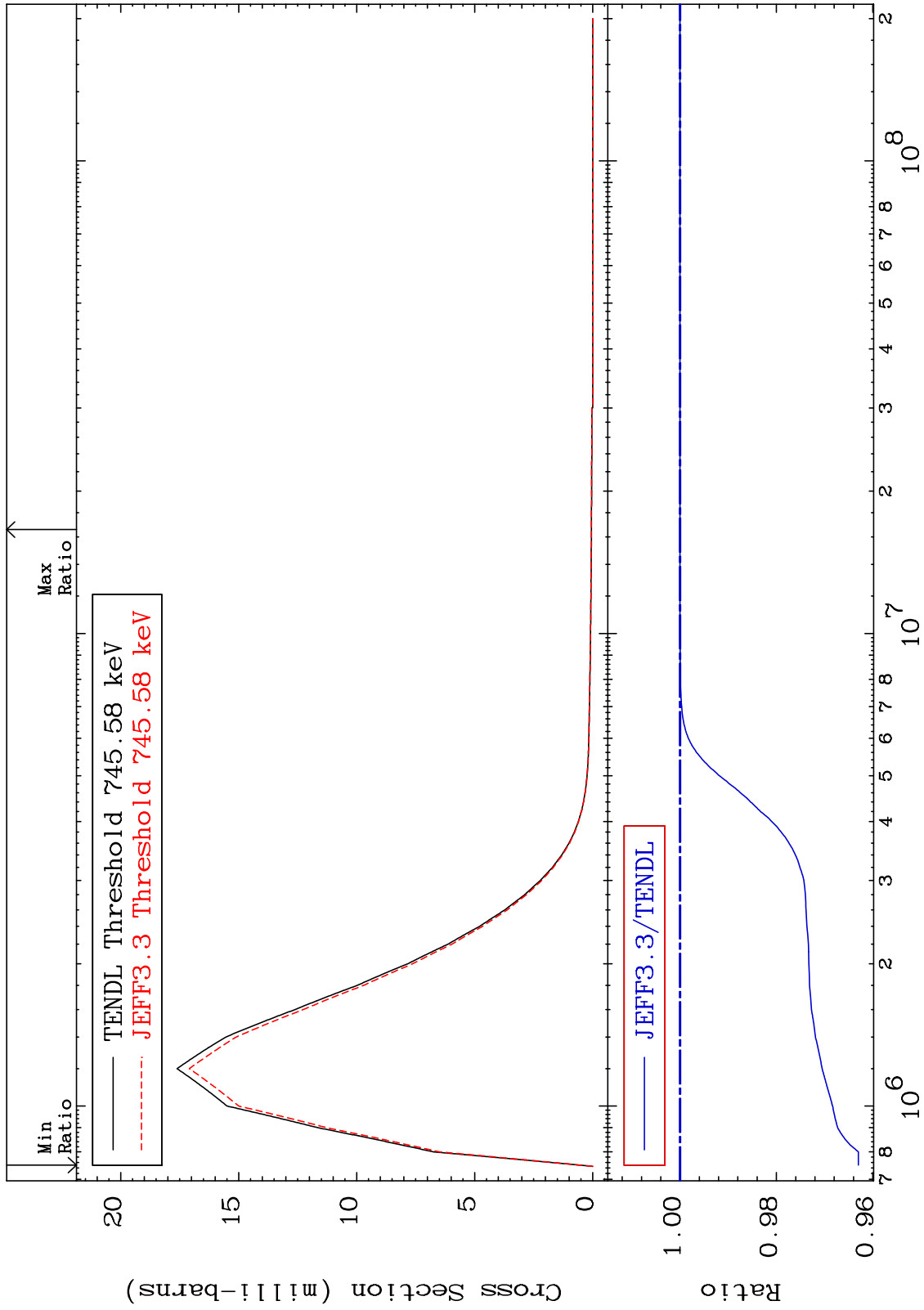
MAT 7322

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

<sup>73</sup>Ta-179  
-3.029 To 0.000 %



MAT 7322 MT= 70 (n, n') Level Cross Section -3.702 To 0.000 % <sup>73</sup>Ta-179

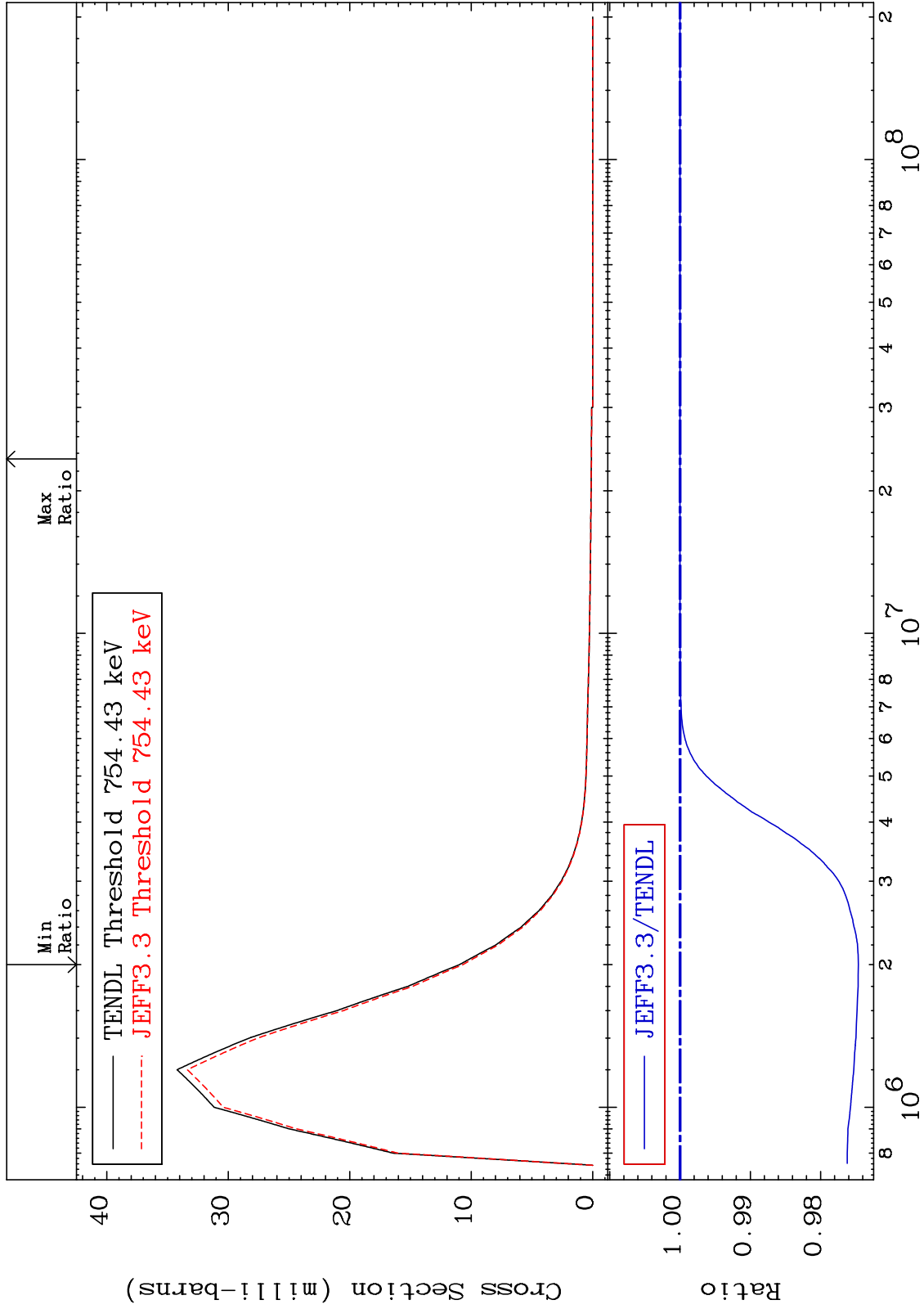




MAT 7322

MT= 71 (n,n') Level  
Cross Section

<sup>73</sup>Ta-179  
-2.538 To 0.000 %



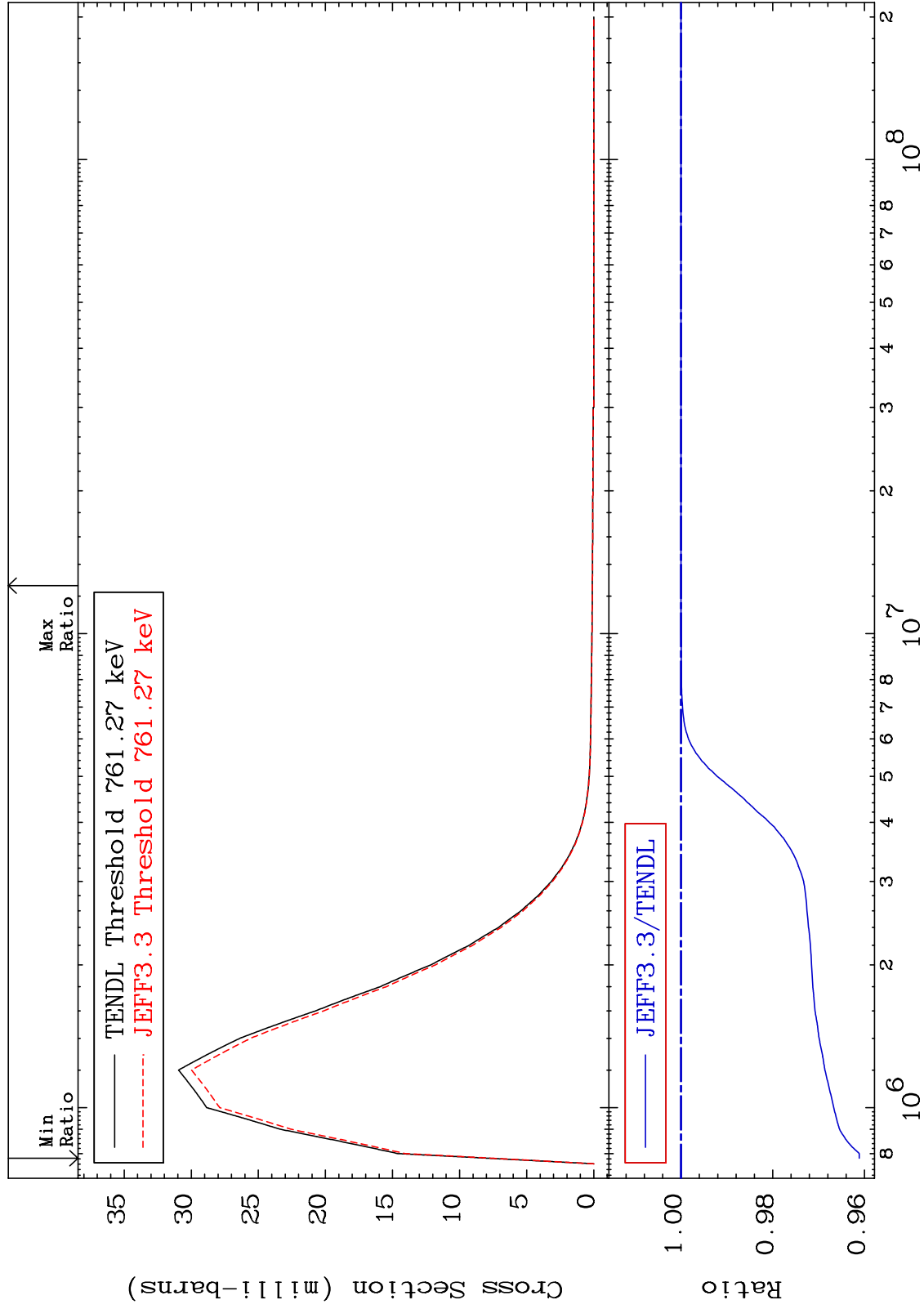
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

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

<sup>73</sup>Ta-179  
-3.887 To 0.000 %



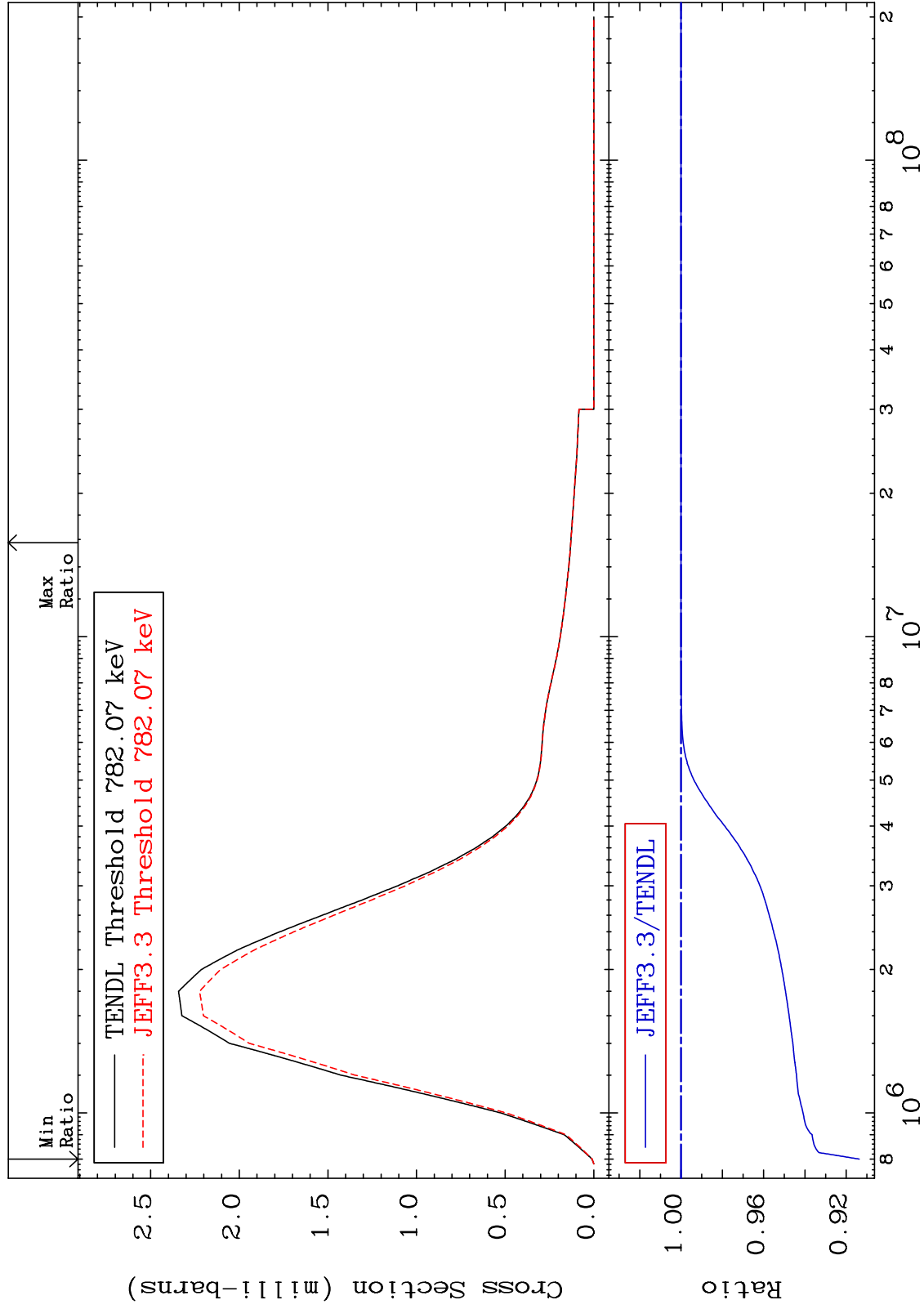
41

<sup>73</sup>Ta-179

MAT 7322

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

<sup>73</sup>Ta-179  
-8.631 To 0.000 %

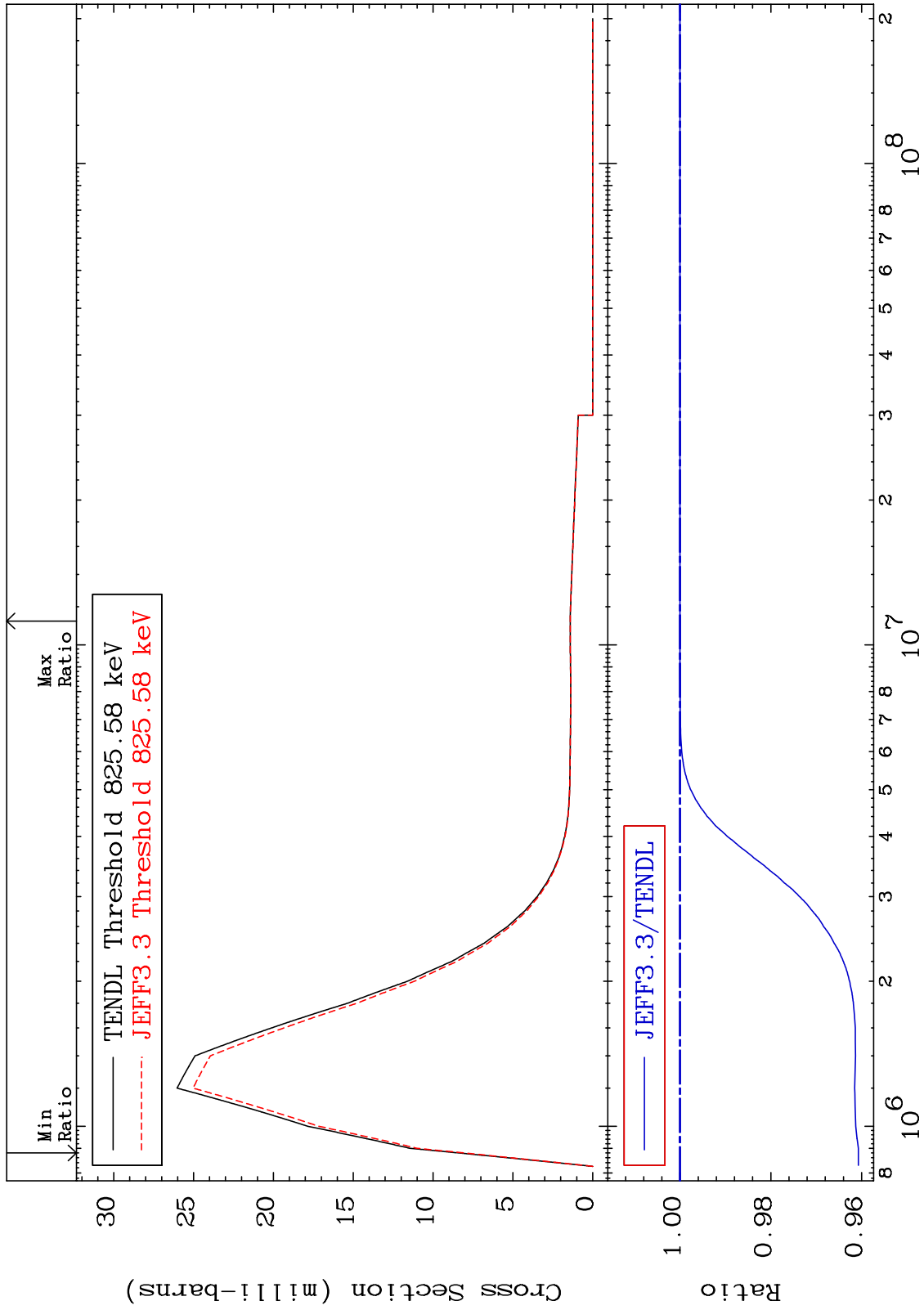


42

Incident Energy (eV)

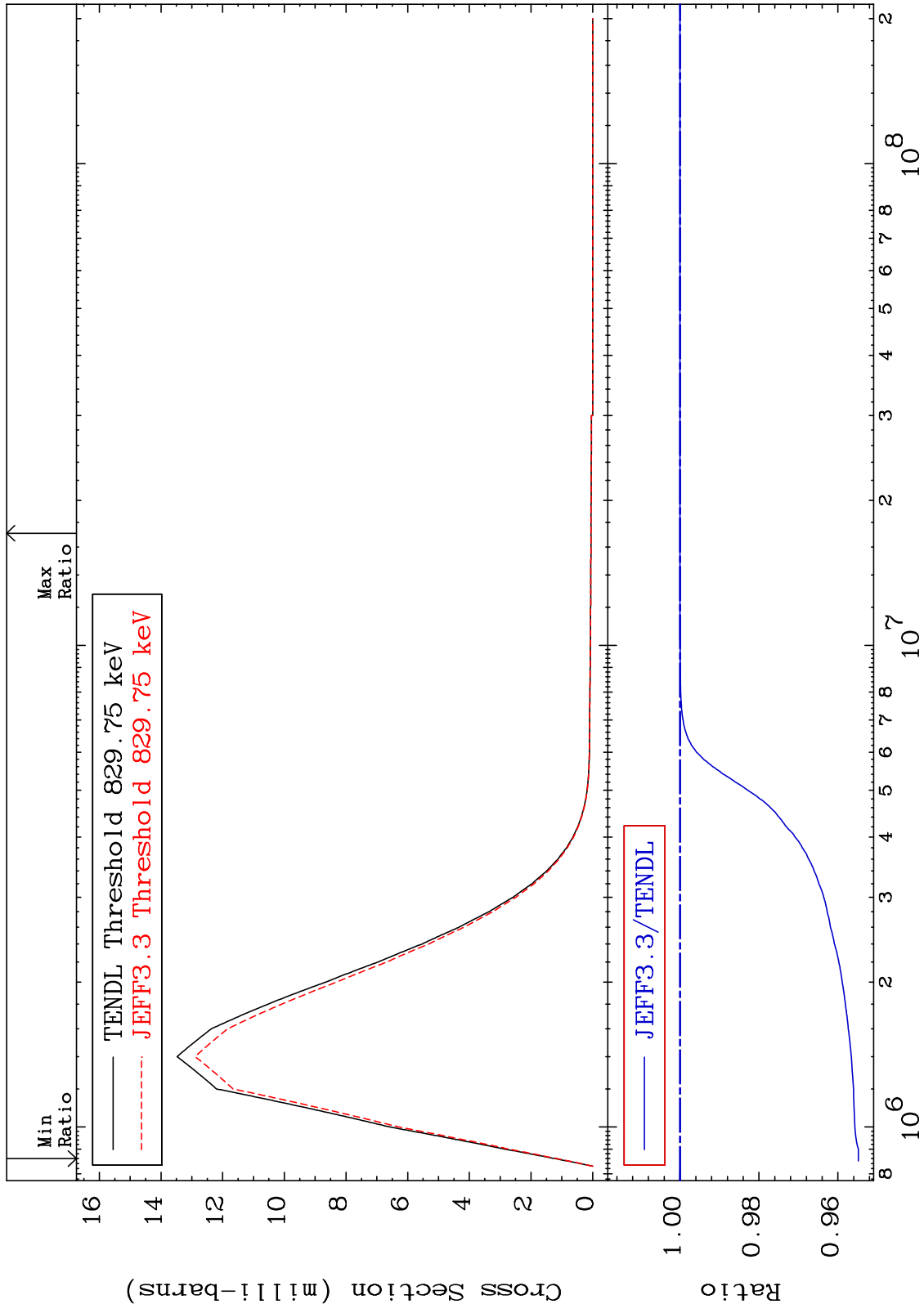
<sup>73</sup>Ta-179

MAT 7322 MT= 74 (n,n') Level Cross Section -3.929 To 0.000 % <sup>73</sup>Ta-179



43 <sup>73</sup>Ta-179

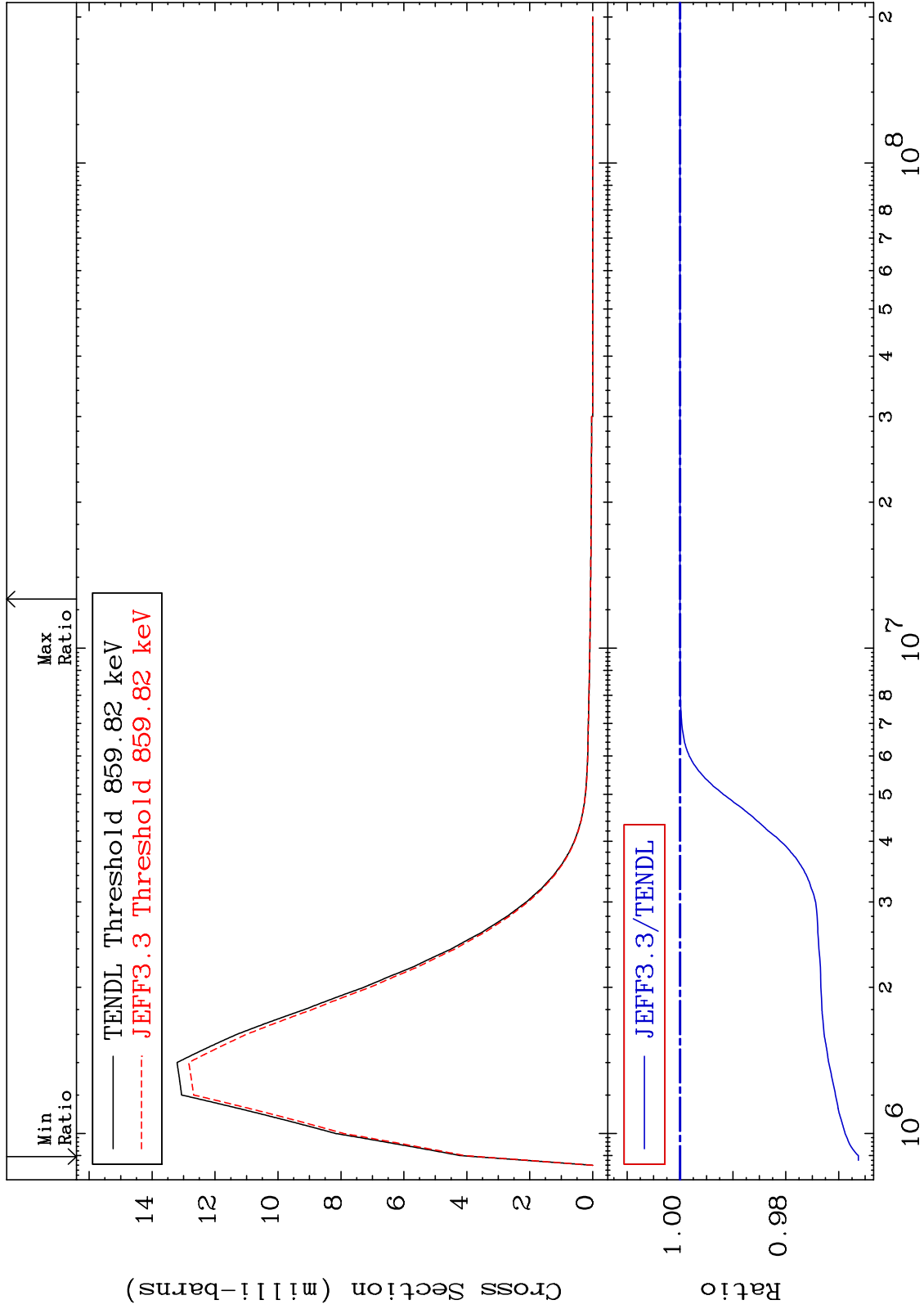
MAT 7322 MT= 75 (n, n') Level Cross Section -4.518 To 0.000 % <sup>73</sup>Ta-179



MAT 7322

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

<sup>73</sup>Ta-179  
-3.372 To 0.000 %



45

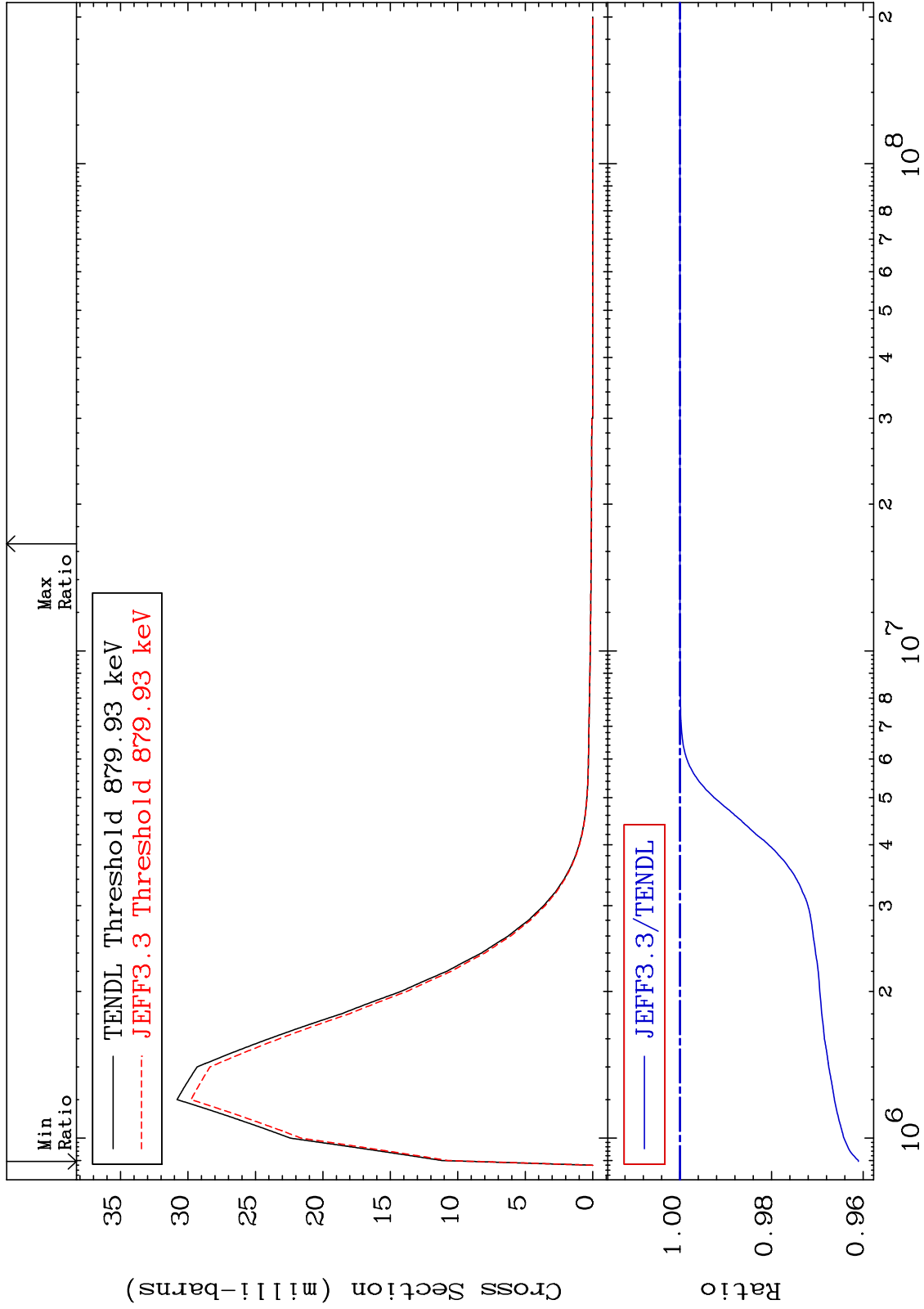
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

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

<sup>73</sup>Ta-179  
-3.897 To 0.000 %

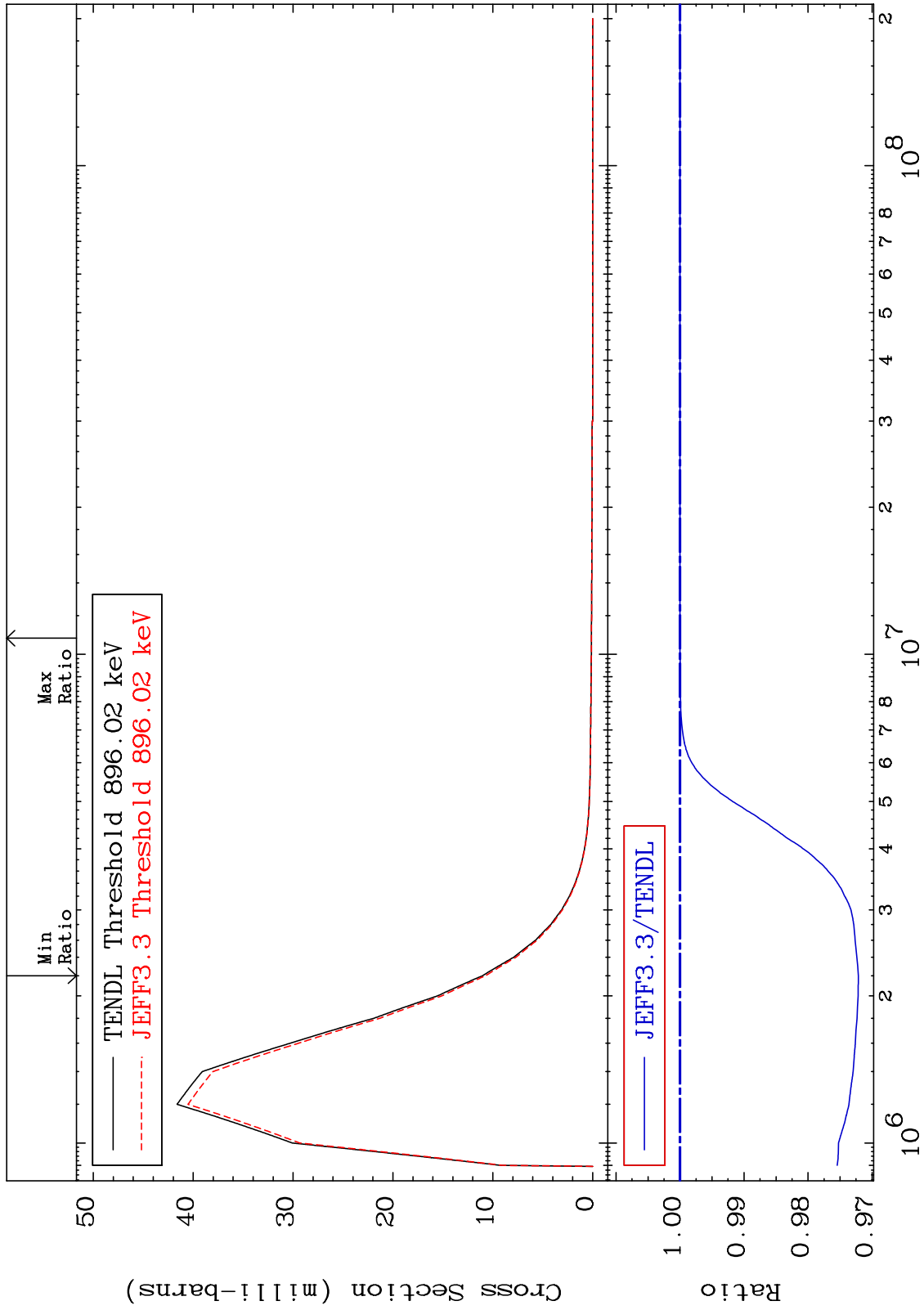


46

Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322 MT= 78 (n,n') Level Cross Section -2.787 To 0.000 % <sup>73</sup>Ta-179

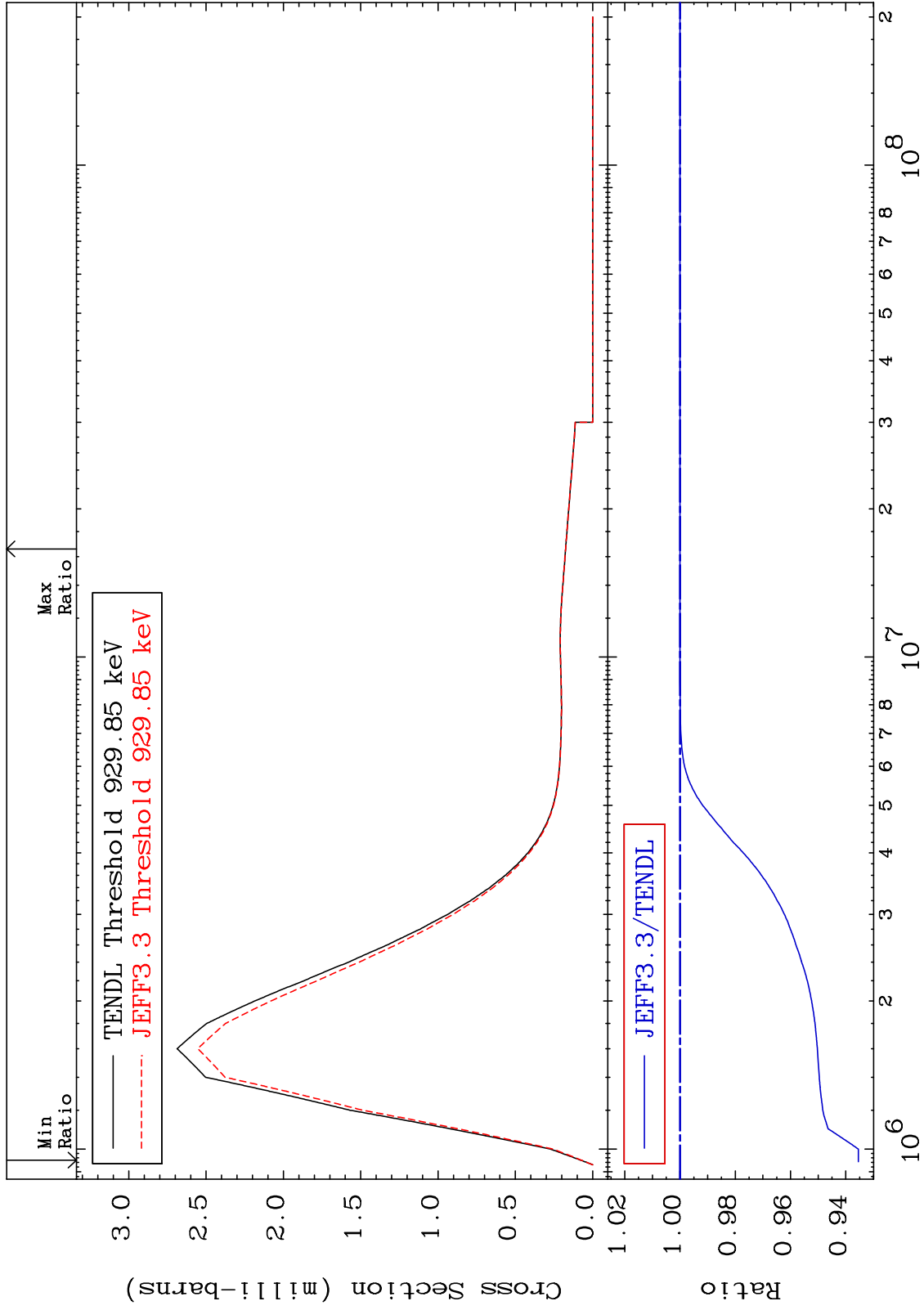




MAT 7322

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

<sup>73</sup>Ta-179  
-6.456 To 0.000 %



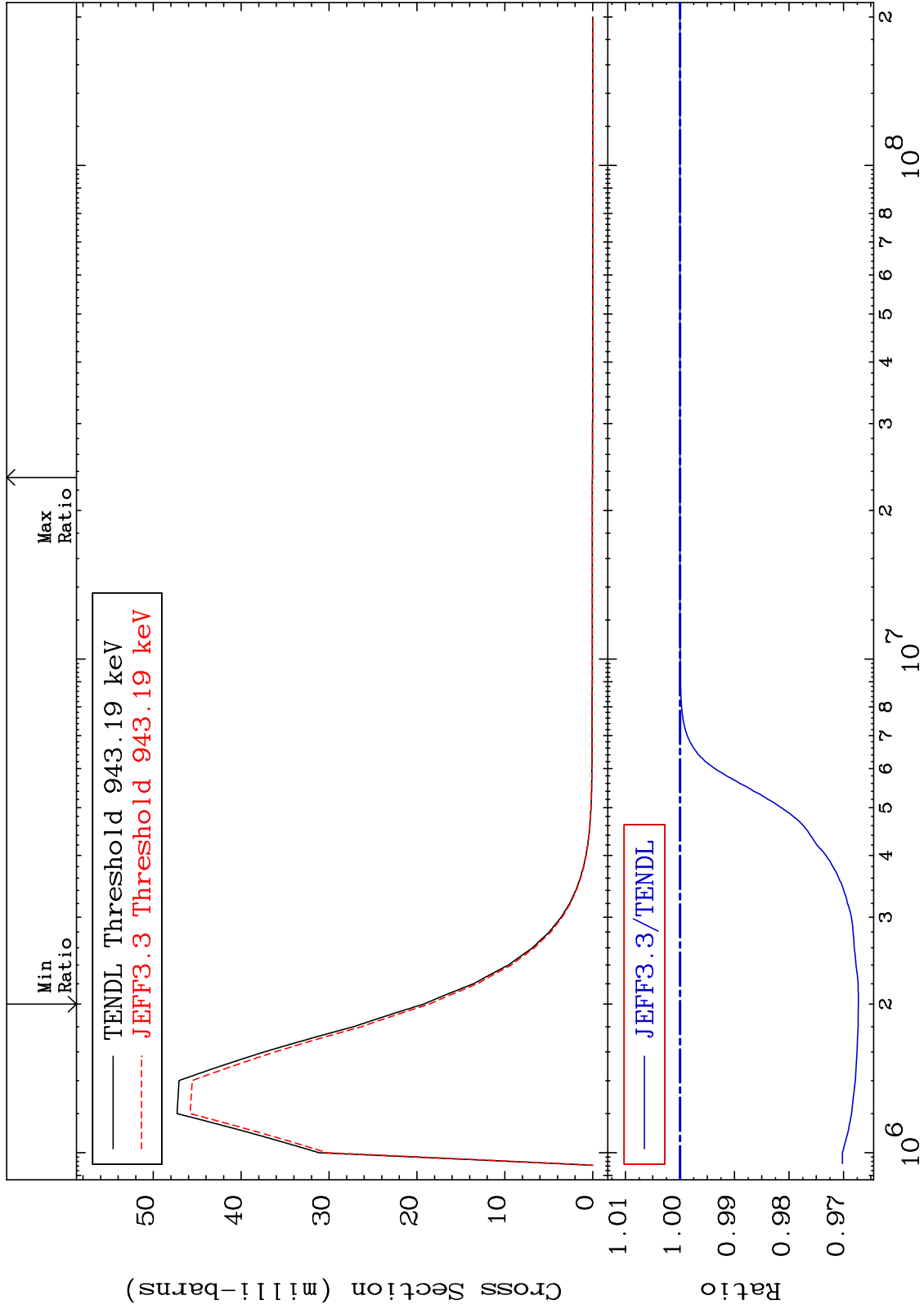
48

<sup>73</sup>Ta-179

MAT 7322

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

<sup>73</sup>Ta-179  
-3.271 To 0.000 %



Incident Energy (eV)

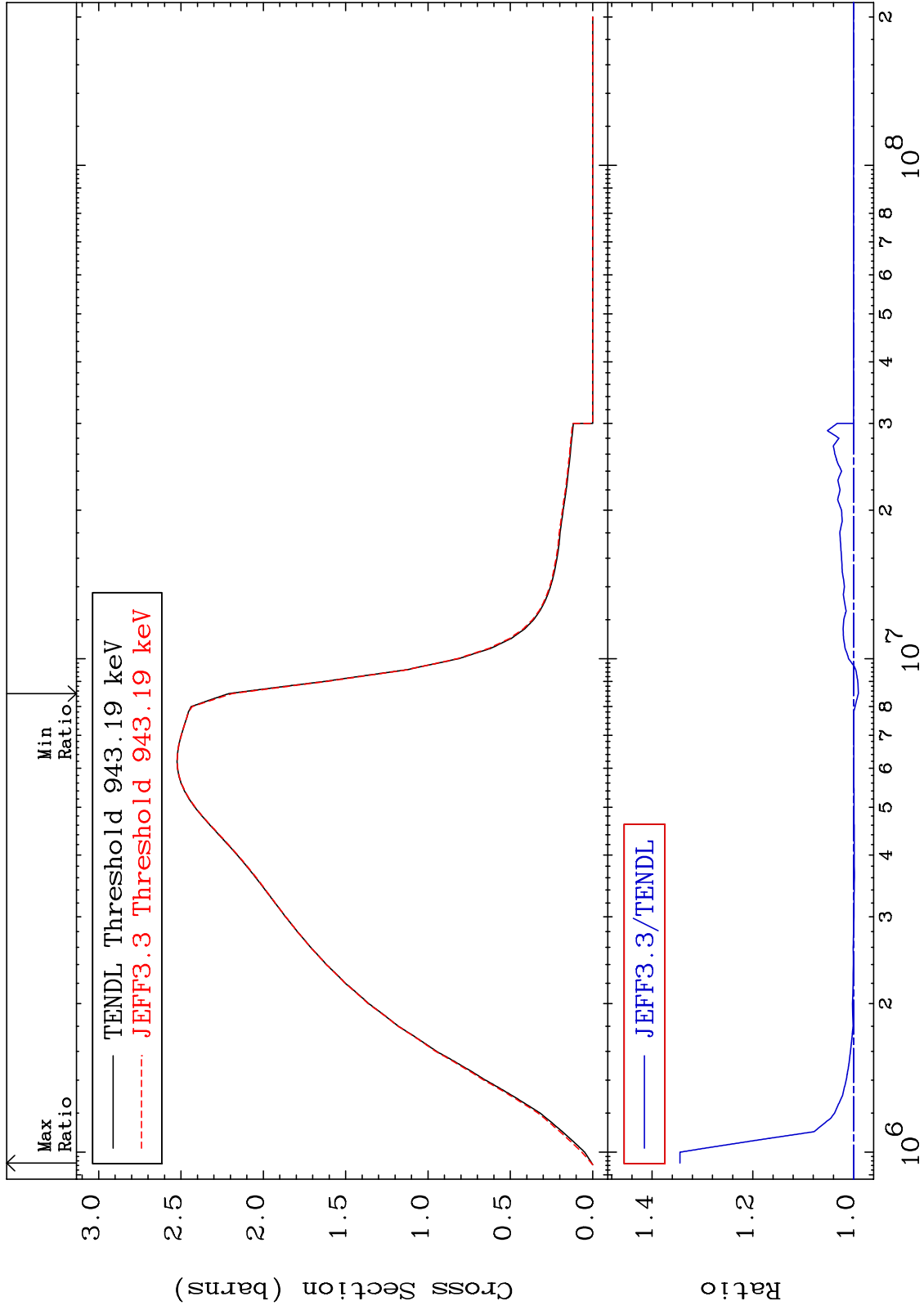
<sup>73</sup>Ta-179

49

MAT 7322

(n, n') Continuum  
Cross Section

<sup>73</sup>Ta-179  
-0.957 To 34.45 %



Incident Energy (eV)

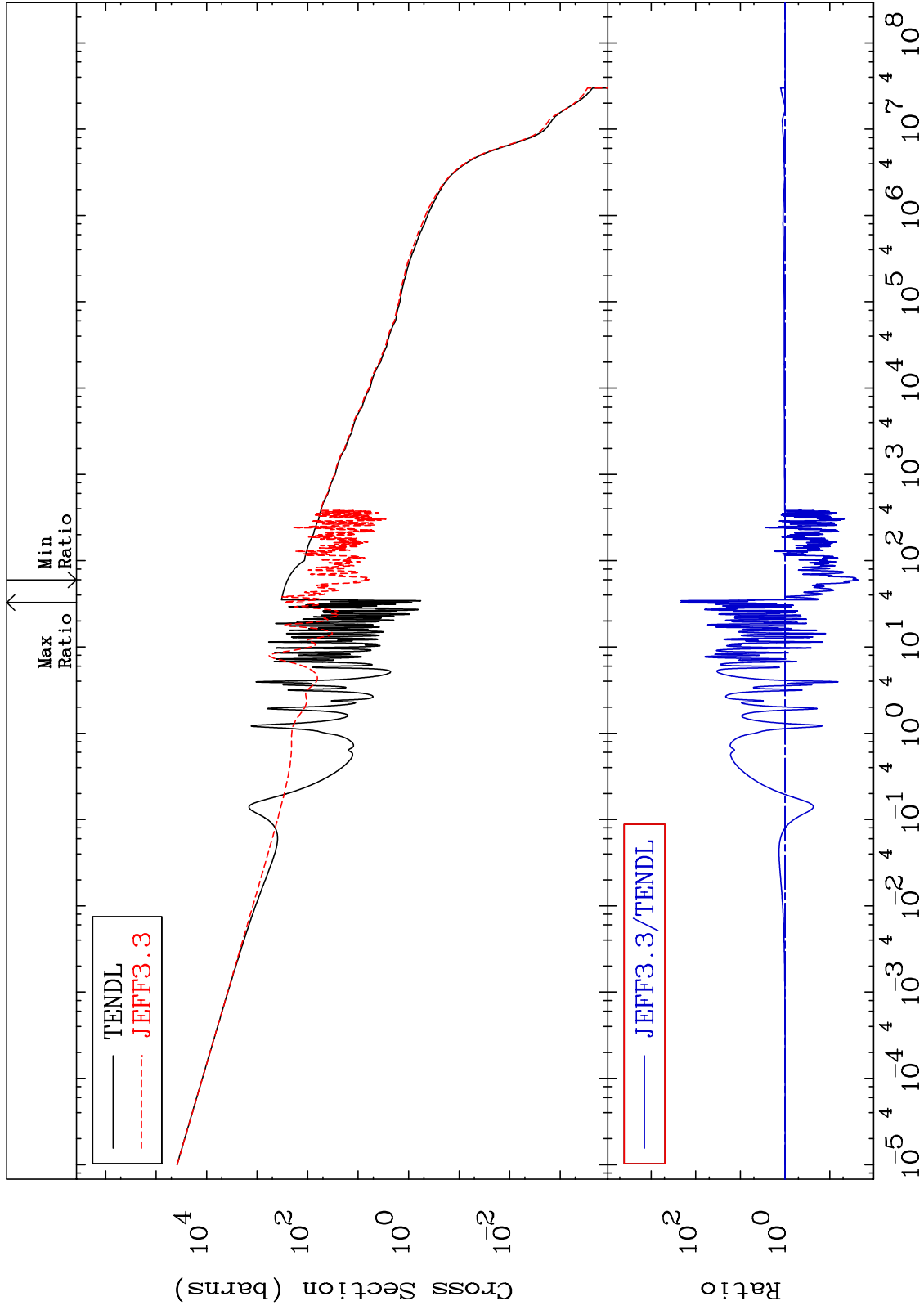
<sup>73</sup>Ta-179

50

MAT 7322

(n,  $\gamma$ )  
Cross Section

<sup>73</sup>Ta-179  
-97.73 To 9999. %



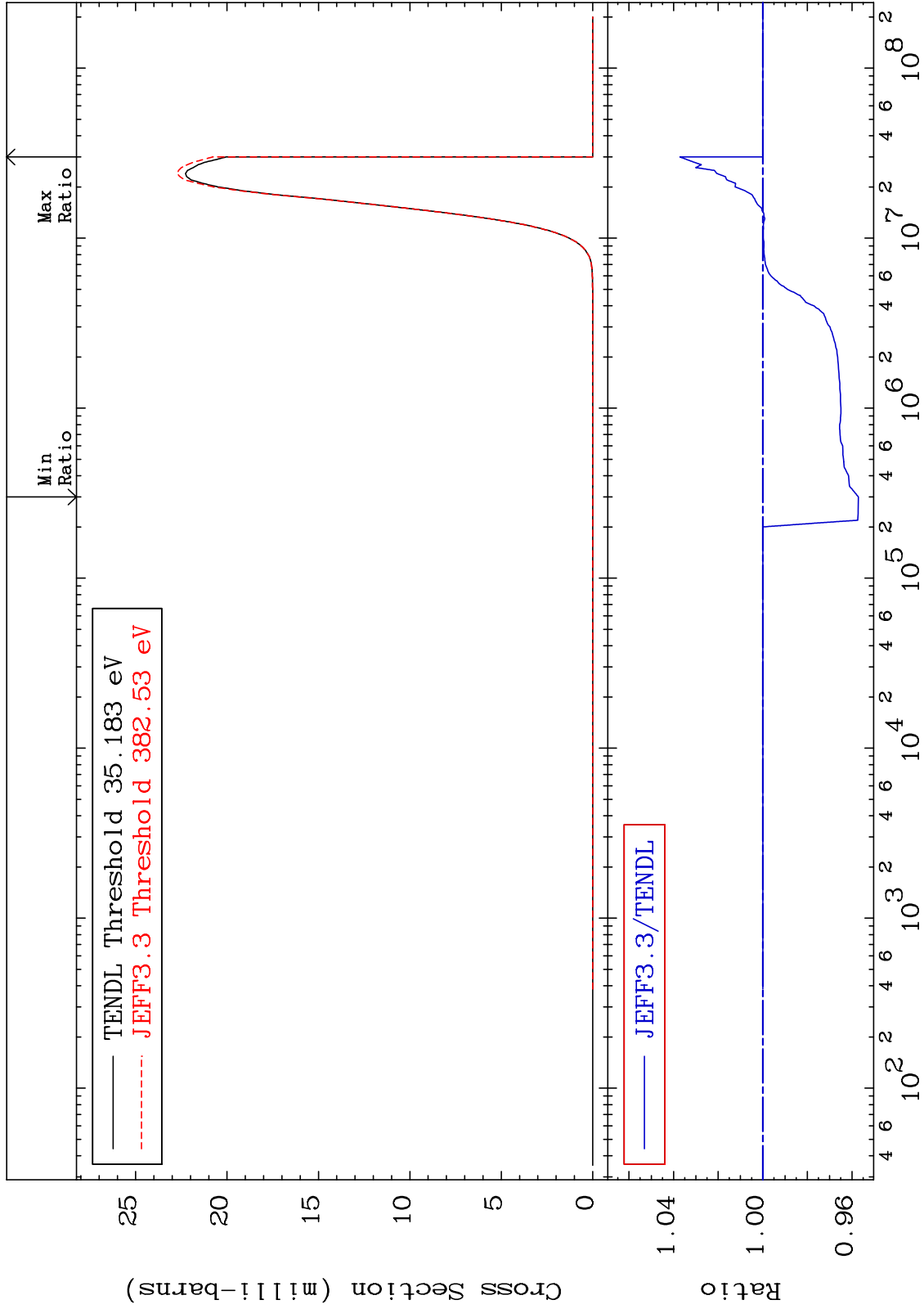
MAT 7322

(n,p)

<sup>73</sup>Ta-179

Cross Section

-4.290 To 3.711 %



52

Incident Energy (eV)

<sup>73</sup>Ta-179

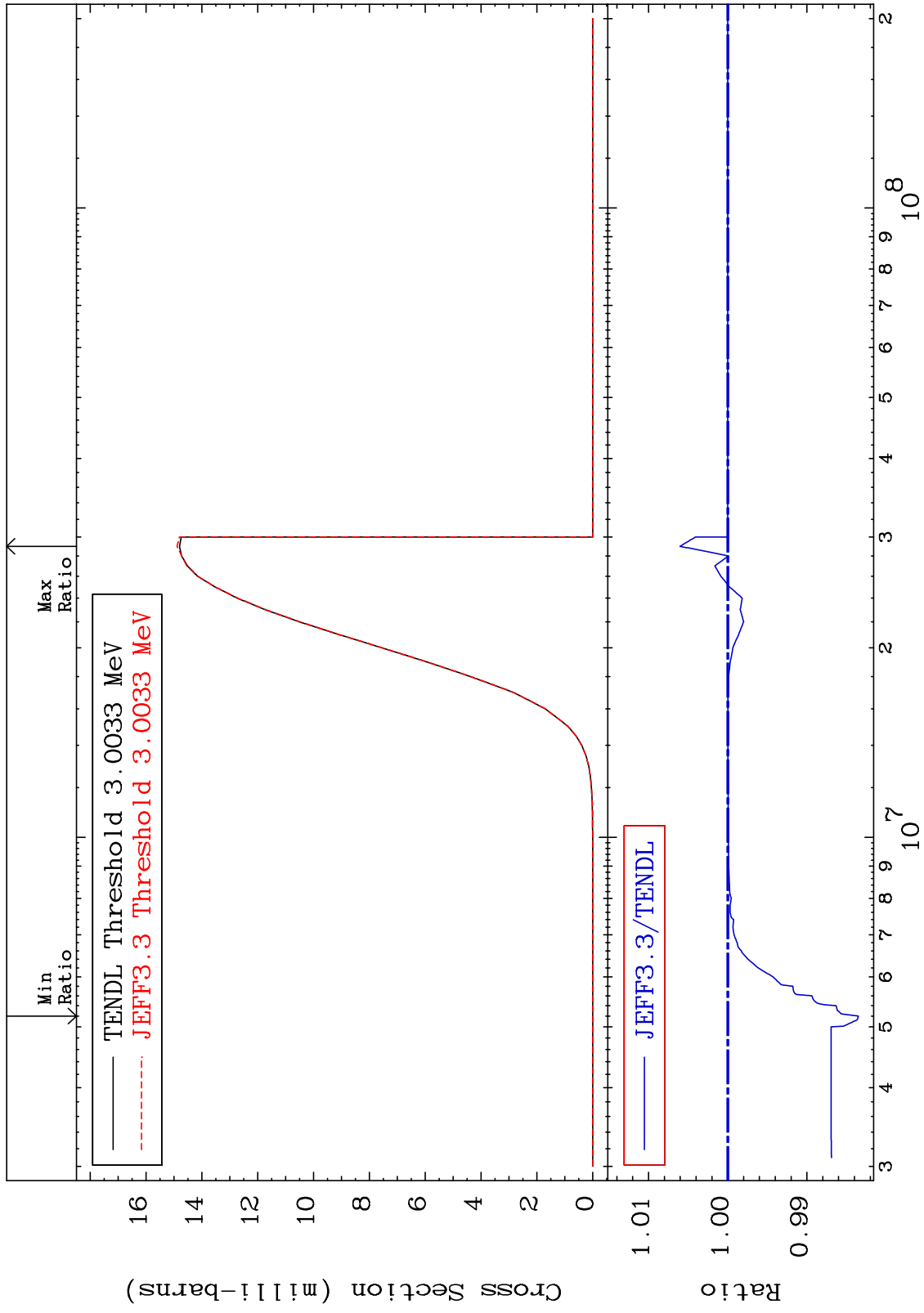
MAT 7322

(n, d)

<sup>73</sup>Ta-179

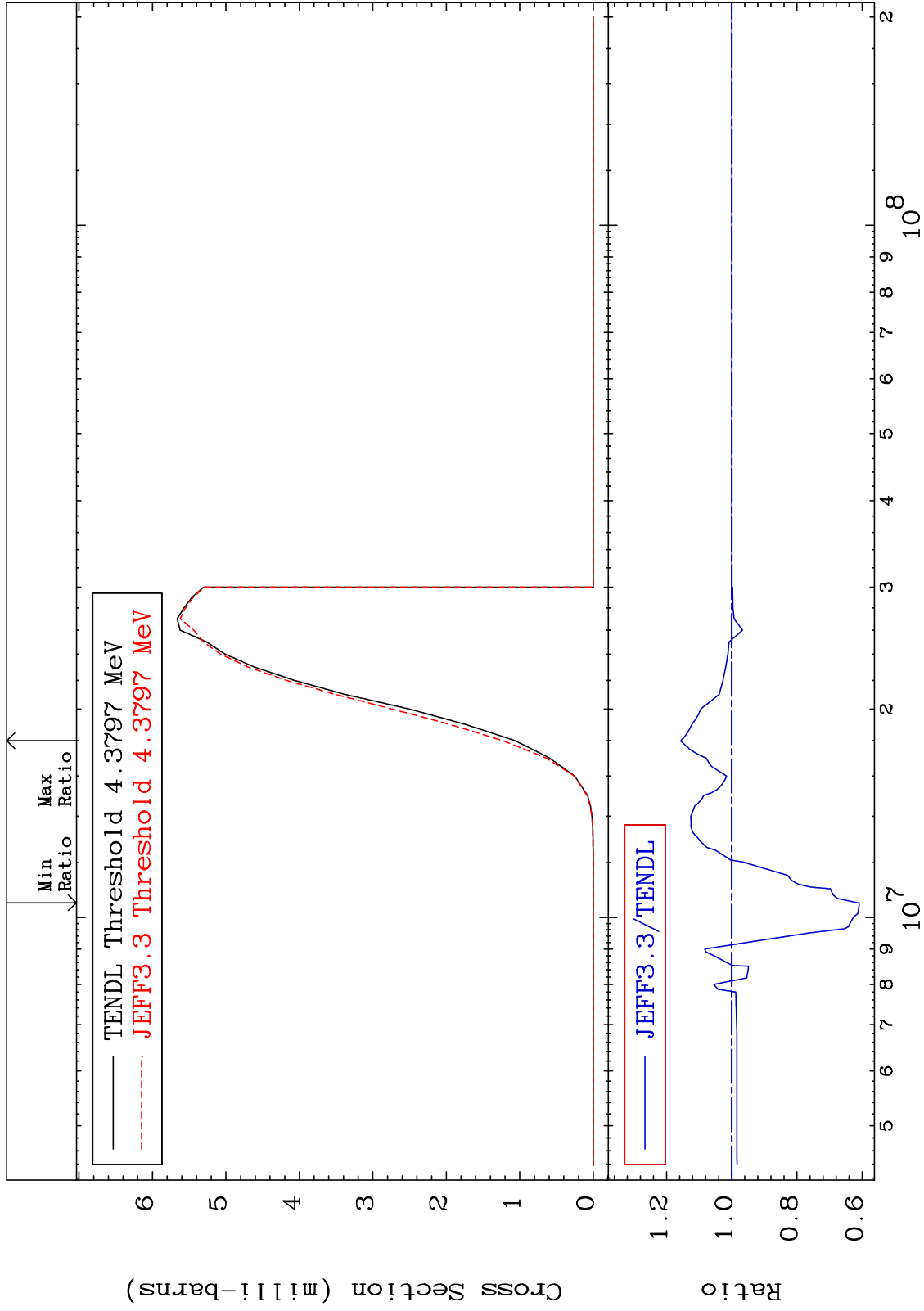
Cross Section

-1.650 To 0.603 %



MAT 7322

(n, t) Cross Section  
73-Ta-179  
-39.07 To 15.68 %



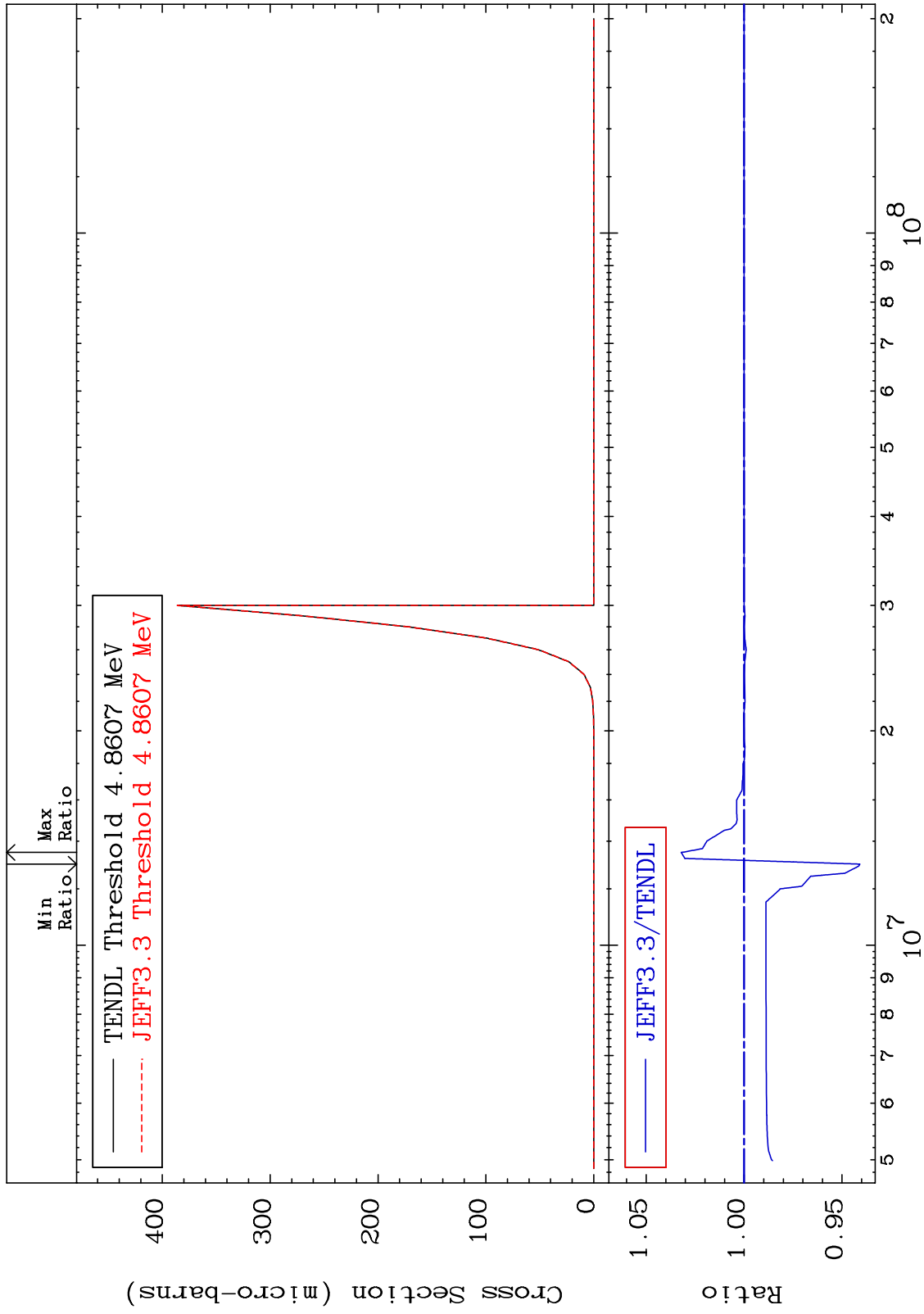
MAT 7322

(n, He-3)

<sup>73</sup>Ta-179

Cross Section

-5.912 To 3.213 %



55

Incident Energy (eV)

<sup>73</sup>Ta-179



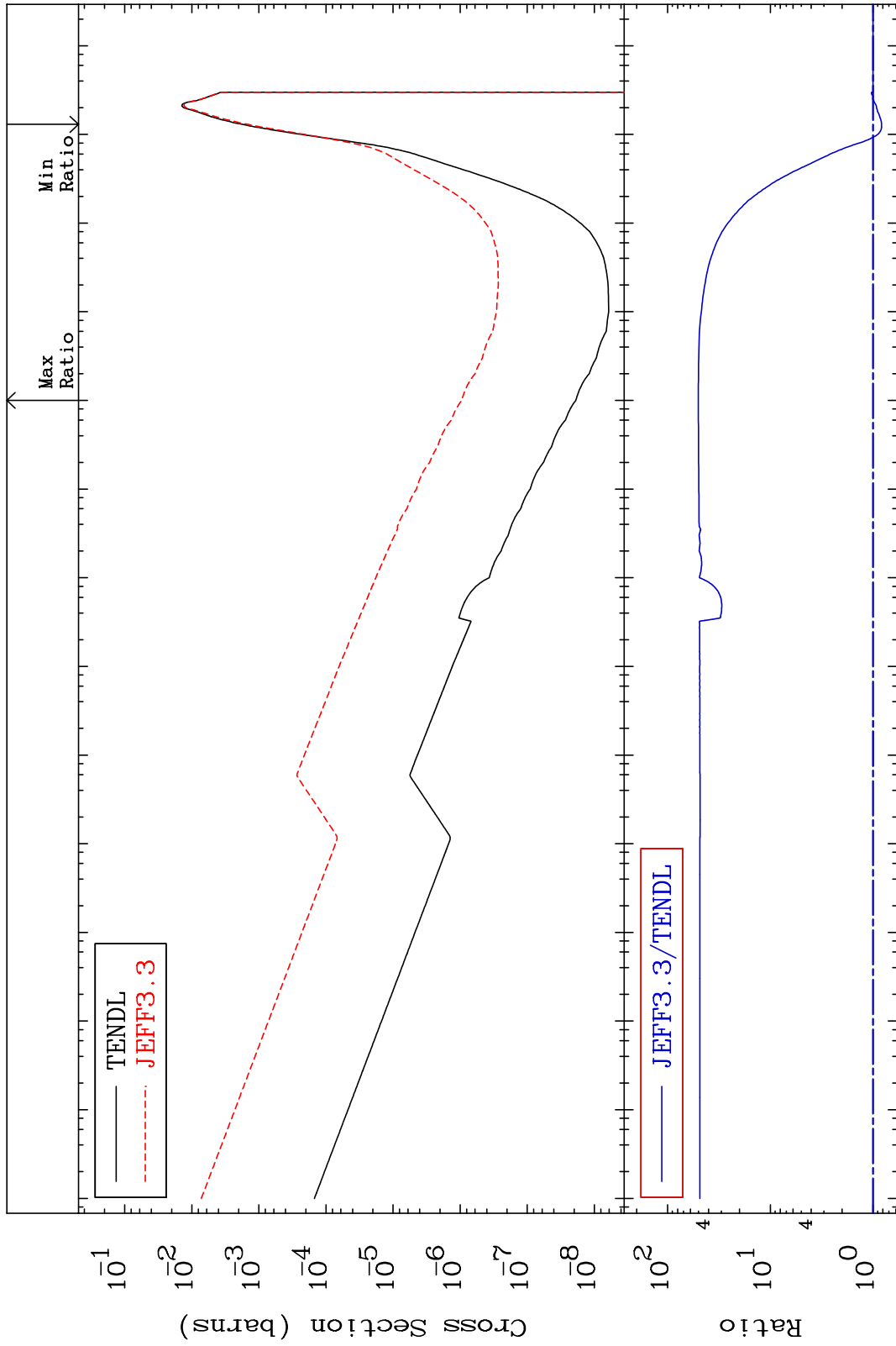
MAT 7322

(n,  $\alpha$ )

<sup>73</sup>Ta-179

Cross Section

-17.45 To 4924. %



Incident Energy (eV)

56

<sup>73</sup>Ta-179

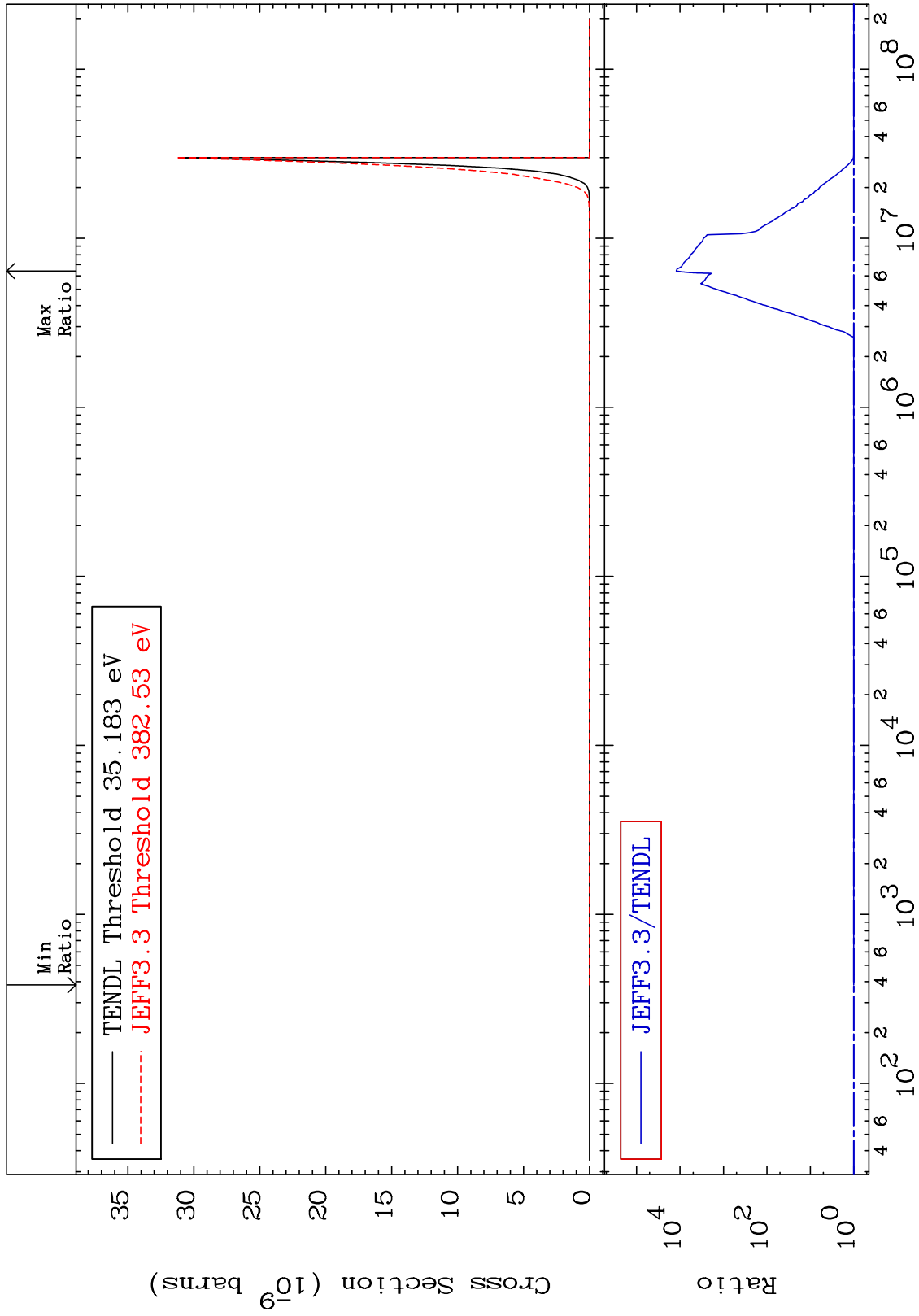
MAT 7322

(n, 2α)

<sup>73</sup>Ta-179

Cross Section

0.000 To 9999. %



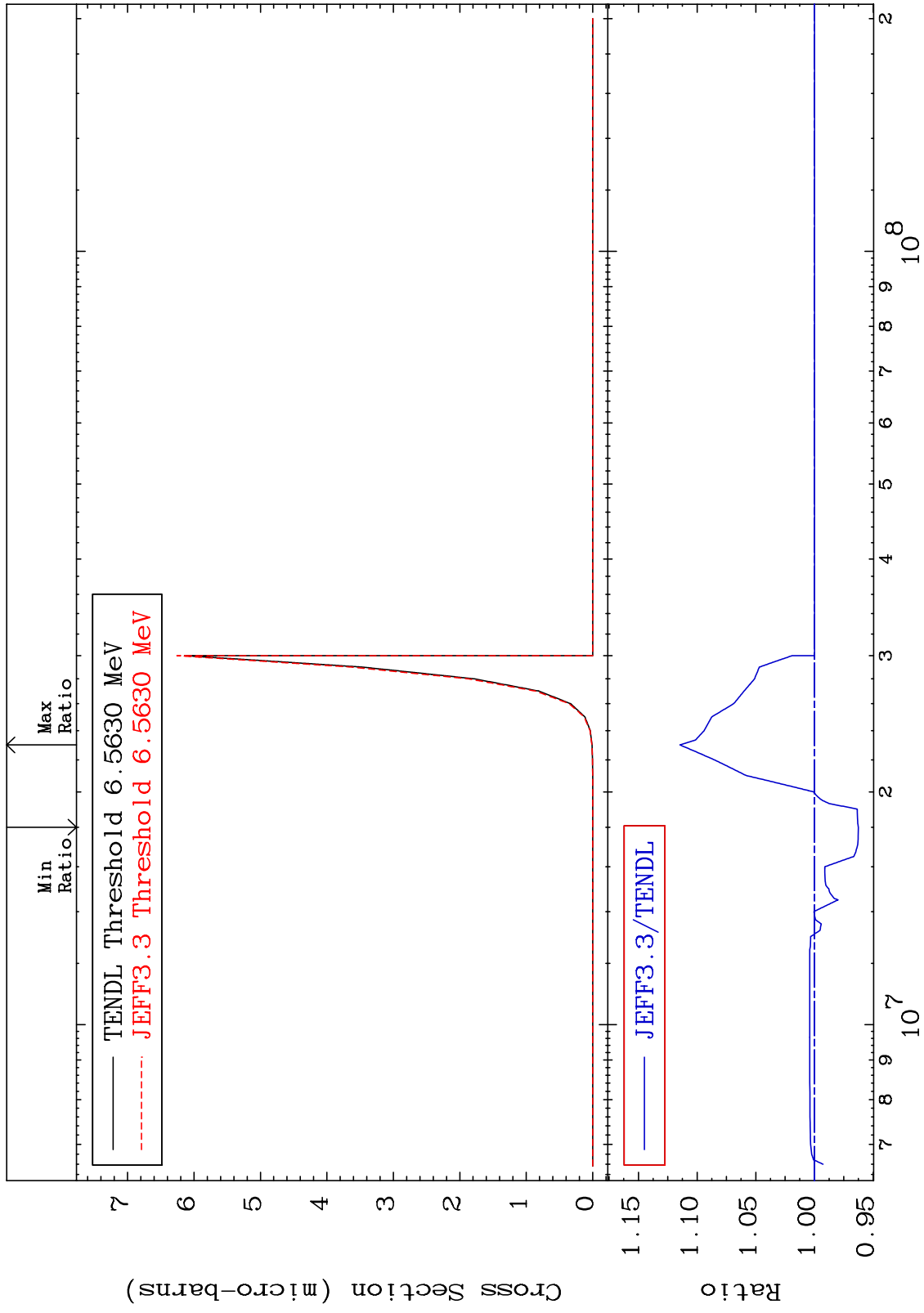
MAT 7322

(n,2p)

<sup>73</sup>Ta-179

-3.745 To 11.46 %

Cross Section



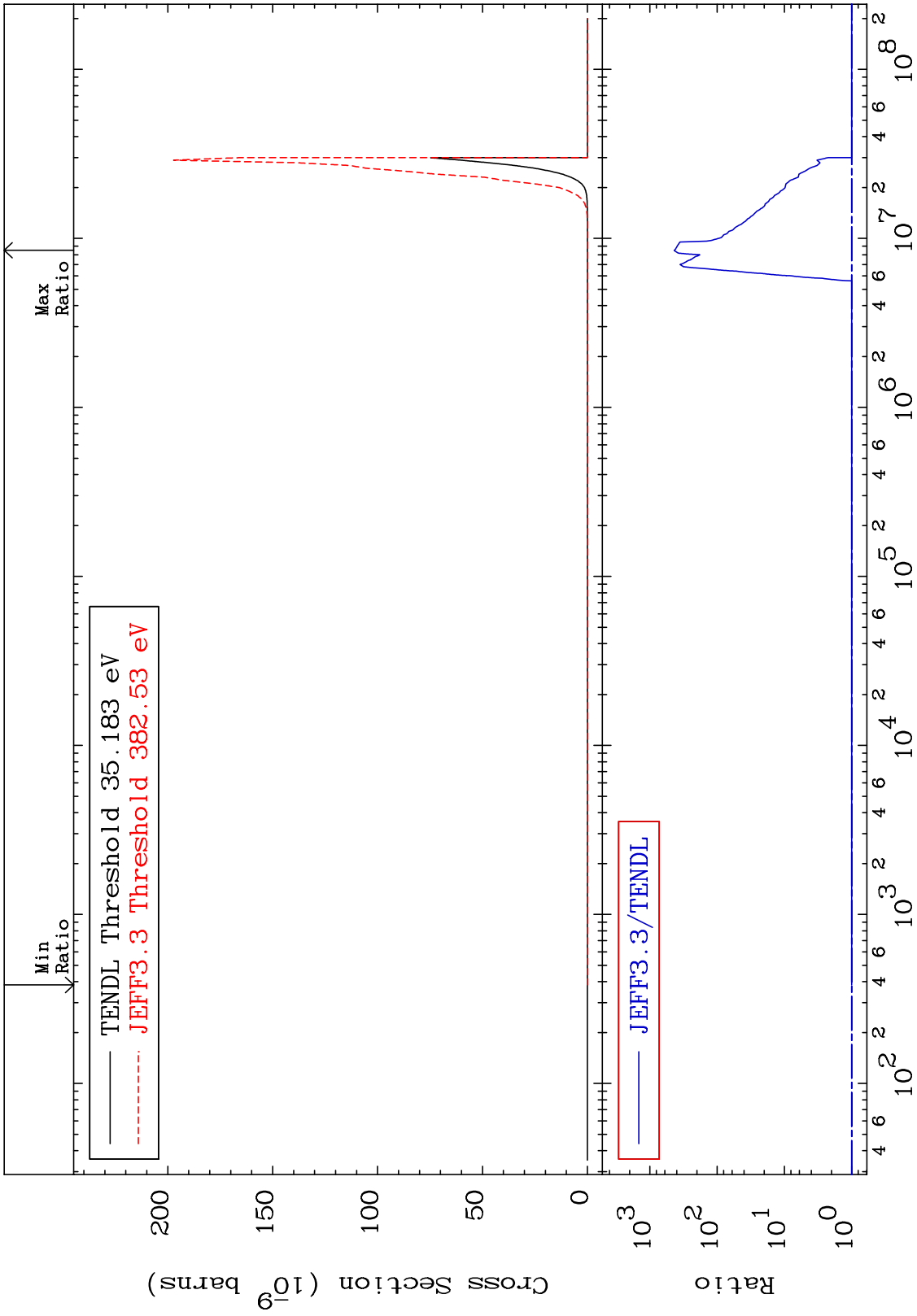
MAT 7322

(n,p)  $\alpha$

<sup>73</sup>Ta-179

Cross Section

0.000 To 9999. %



MAT 7322

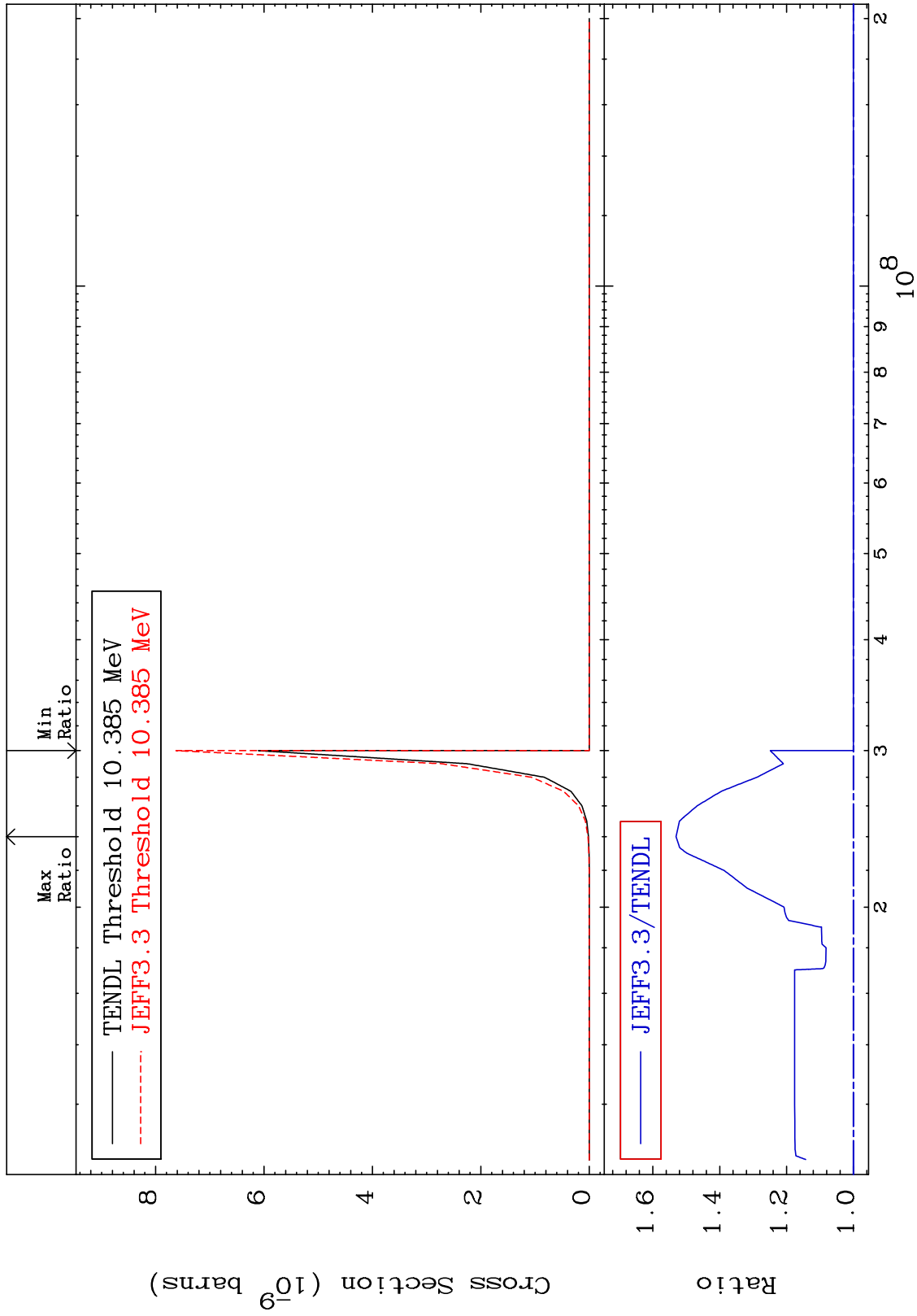
(n,p) d

<sup>73</sup>Ta-179

Cross Section

0.000

To 53.05 %



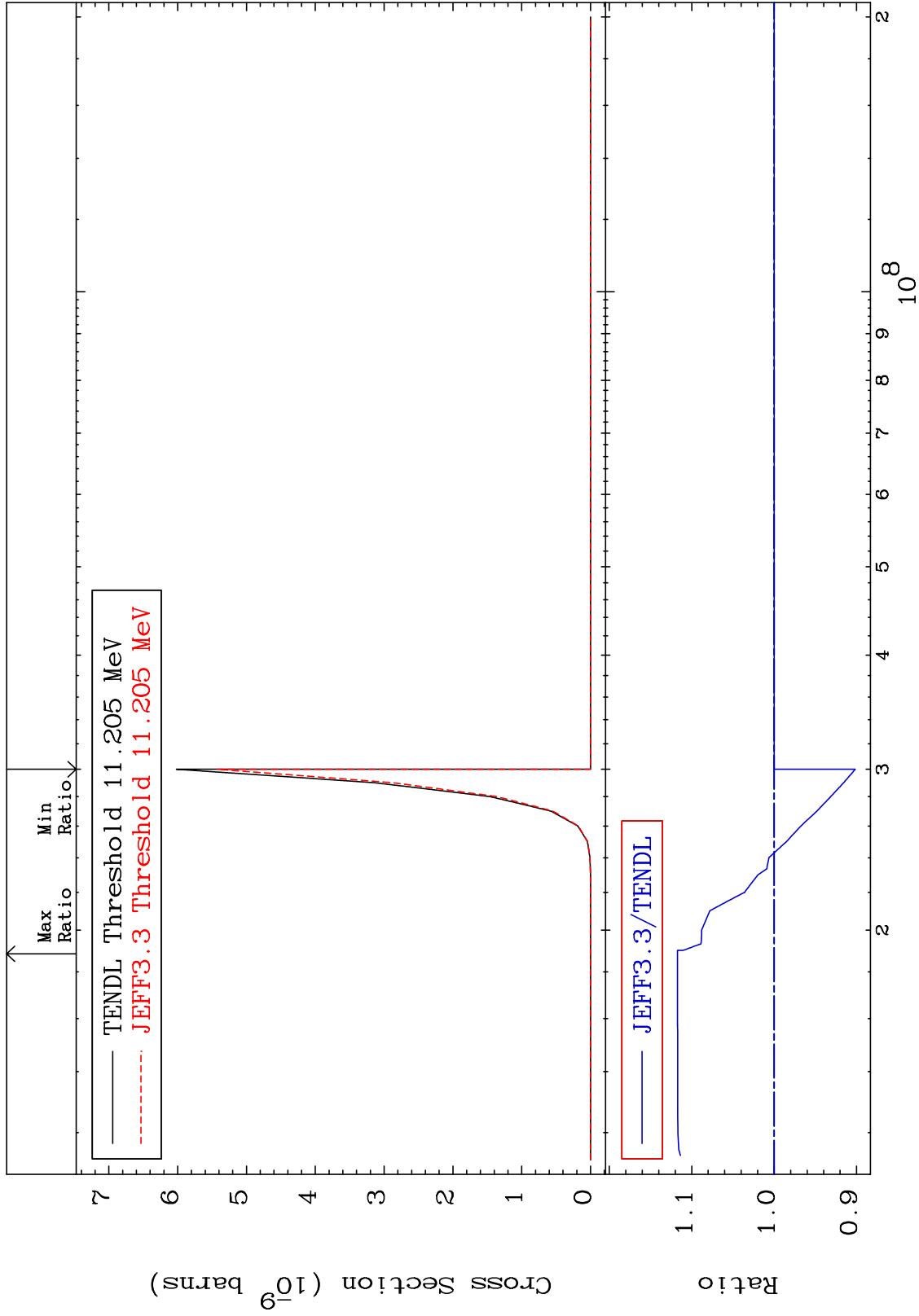
MAT 7322

(n,p) t

<sup>73</sup>Ta-179

Cross Section

-9.841 To 11.72 %



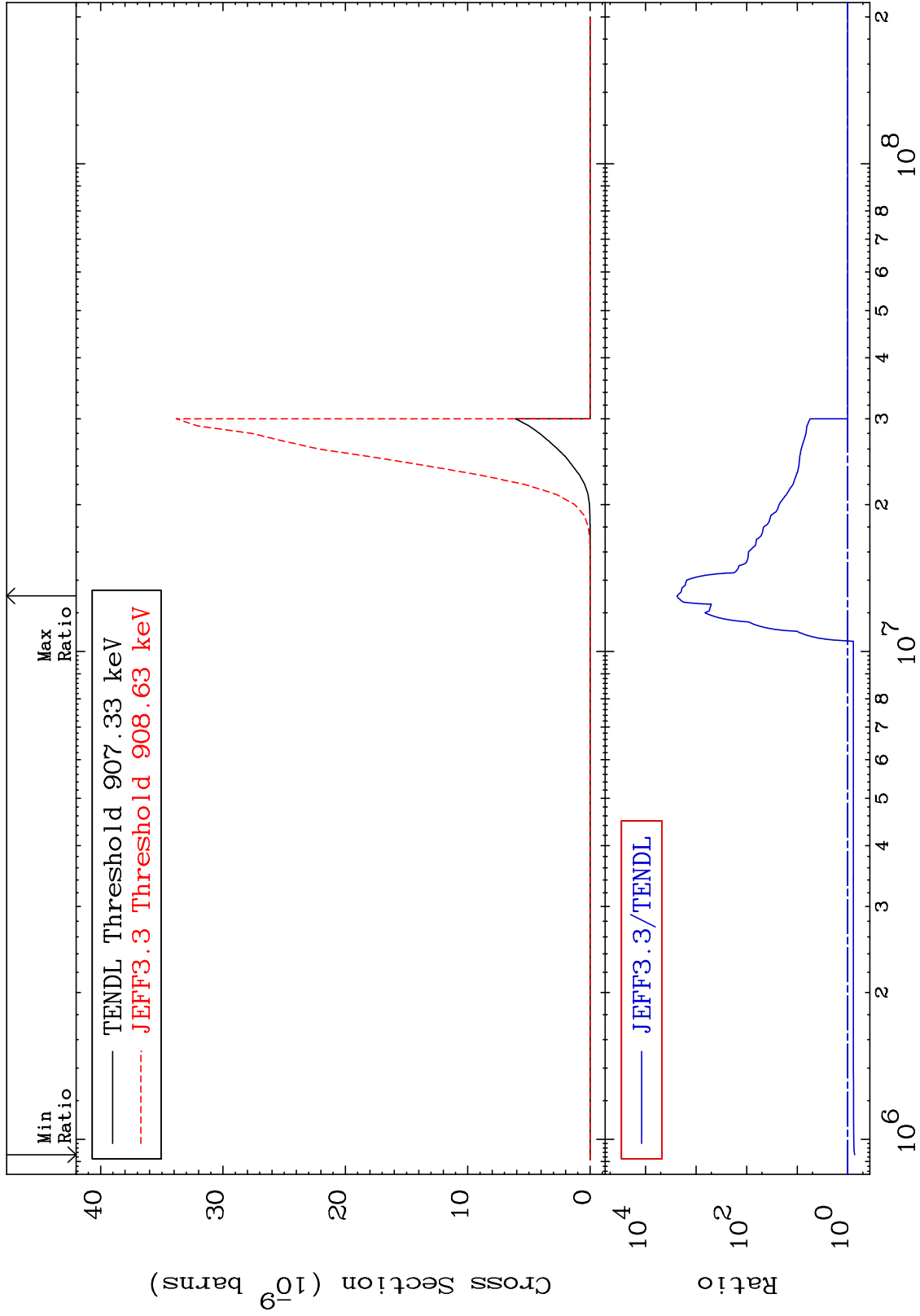
MAT 7322

(n,d)  $\alpha$

<sup>73</sup>Ta-179

-27.04 To 9999. %

Cross Section



62

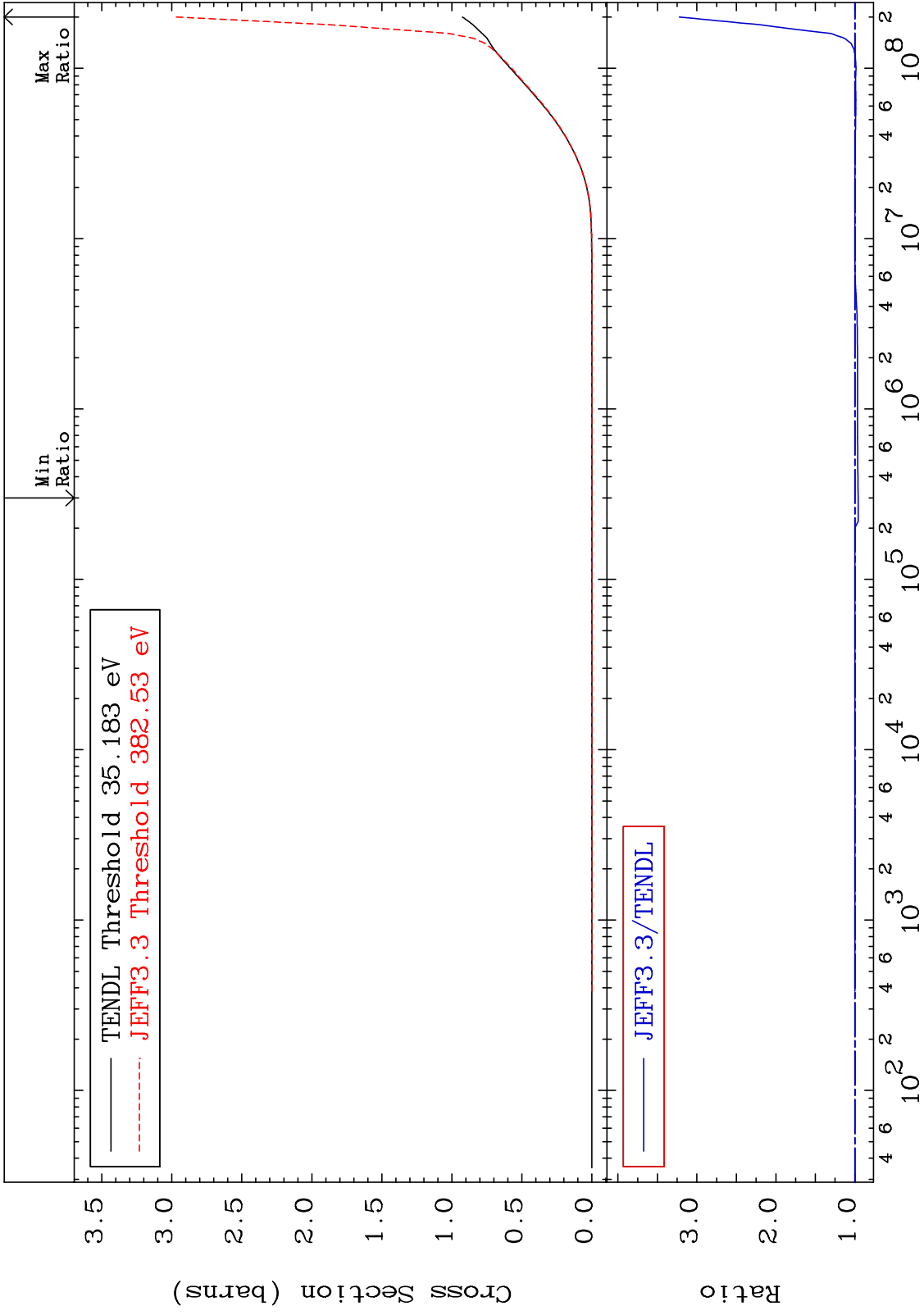
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

Hydrogen Production  
Cross Section

$^{73}\text{Ta-179}$   
-4.283 To 222.2 %



63

Incident Energy (eV)

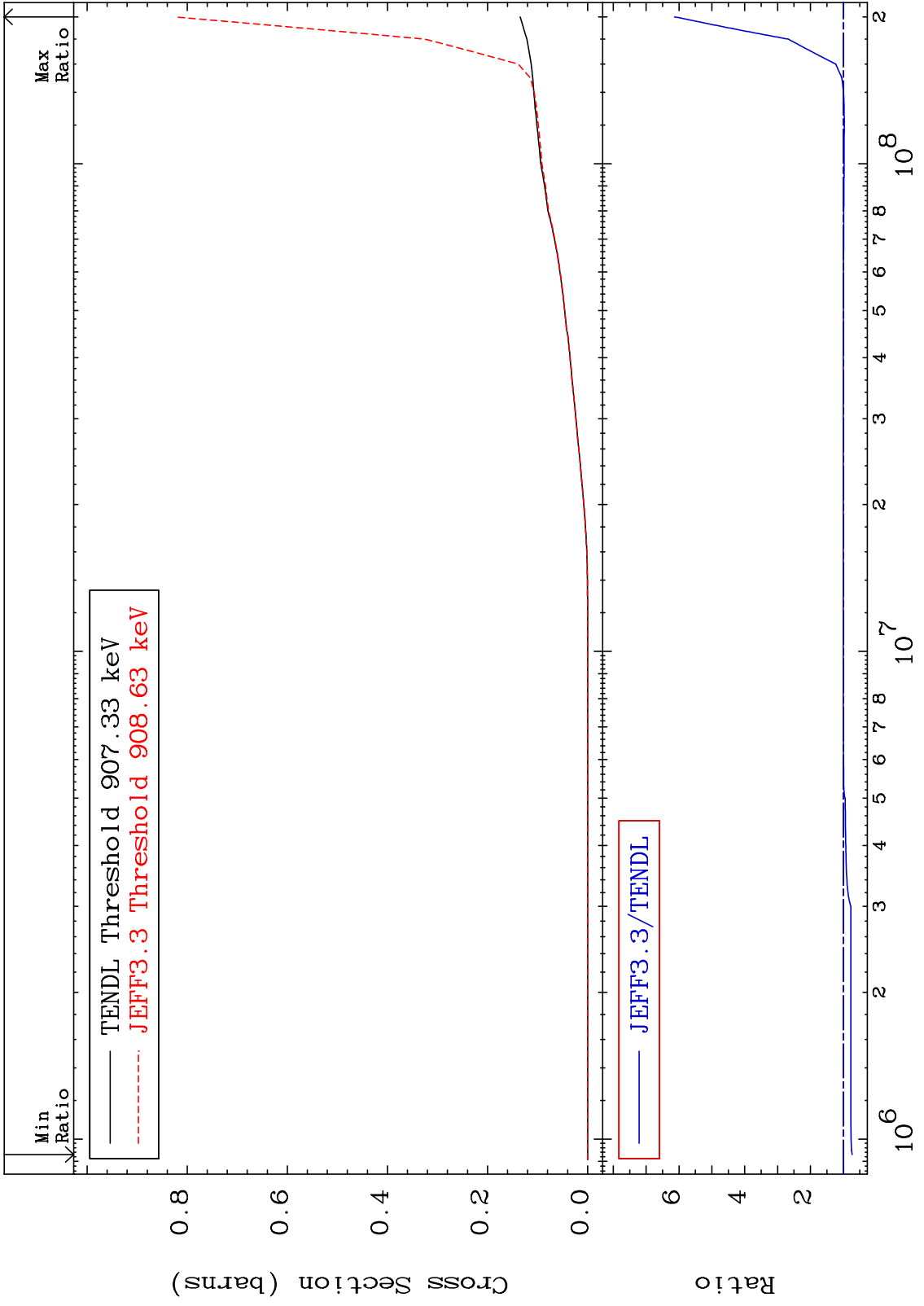
$^{73}\text{Ta-179}$



MAT 7322

Deuterium Production  
Cross Section

$^{73}\text{Ta-179}$   
-27.04 To 513.5 %



64

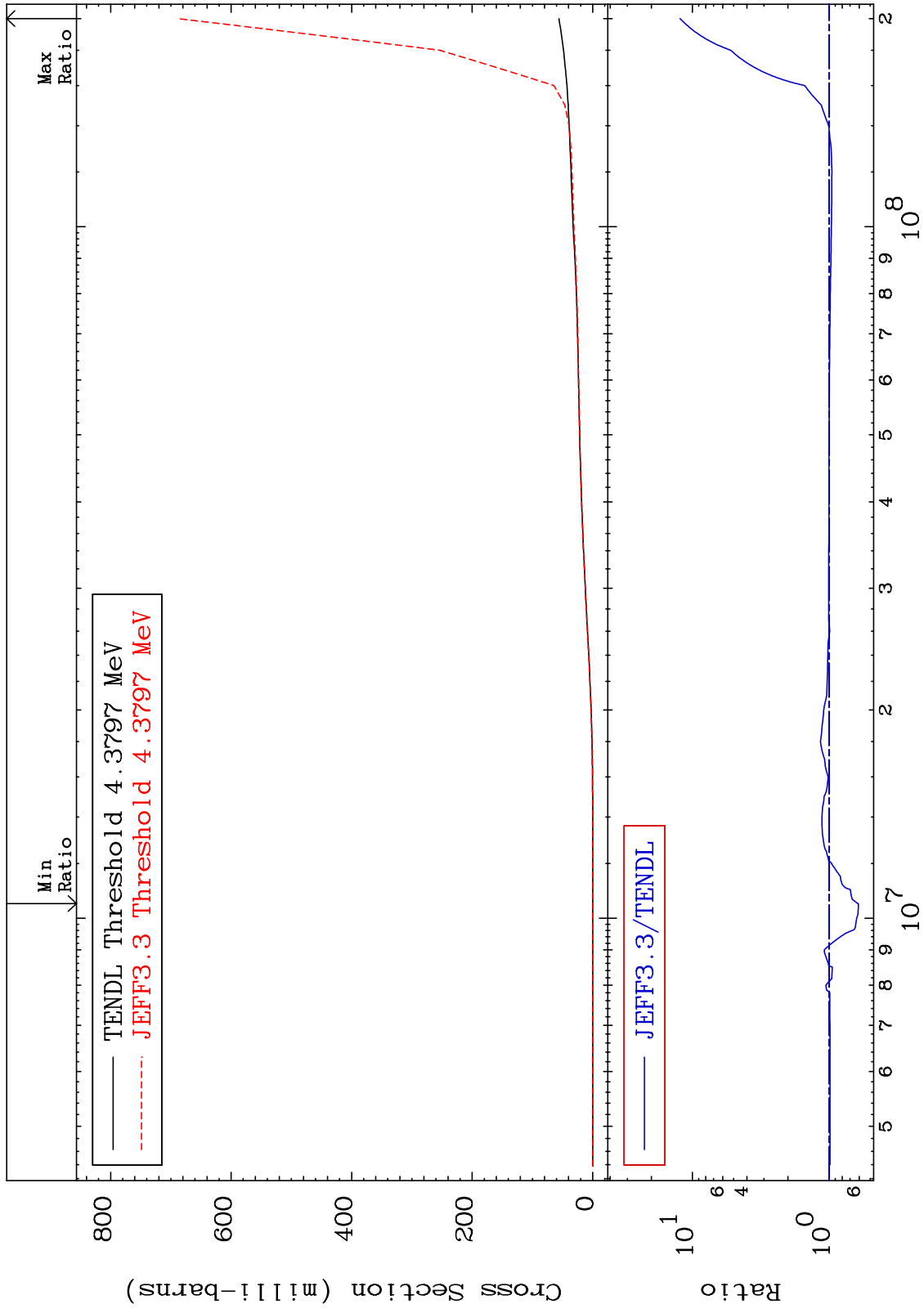
Incident Energy (eV)

$^{73}\text{Ta-179}$

MAT 7322

Tritium Production  
Cross Section

$^{73}\text{Ta-179}$   
-39.07 To 1134. %



65

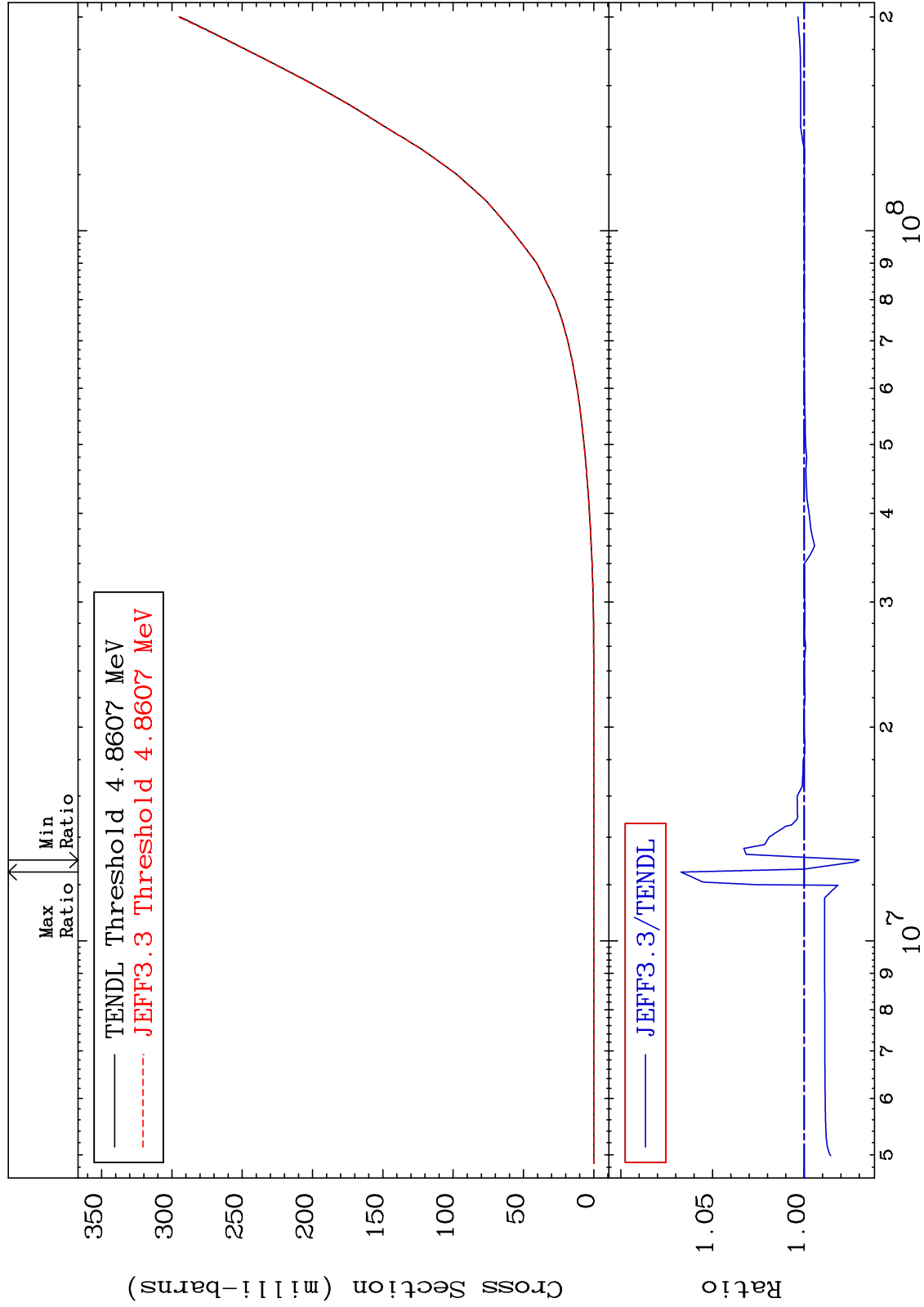
Incident Energy (eV)

$^{73}\text{Ta-179}$

MAT 7322

He-3 Production  
Cross Section

<sup>73</sup>Ta-179  
-3.004 To 6.715 %



66

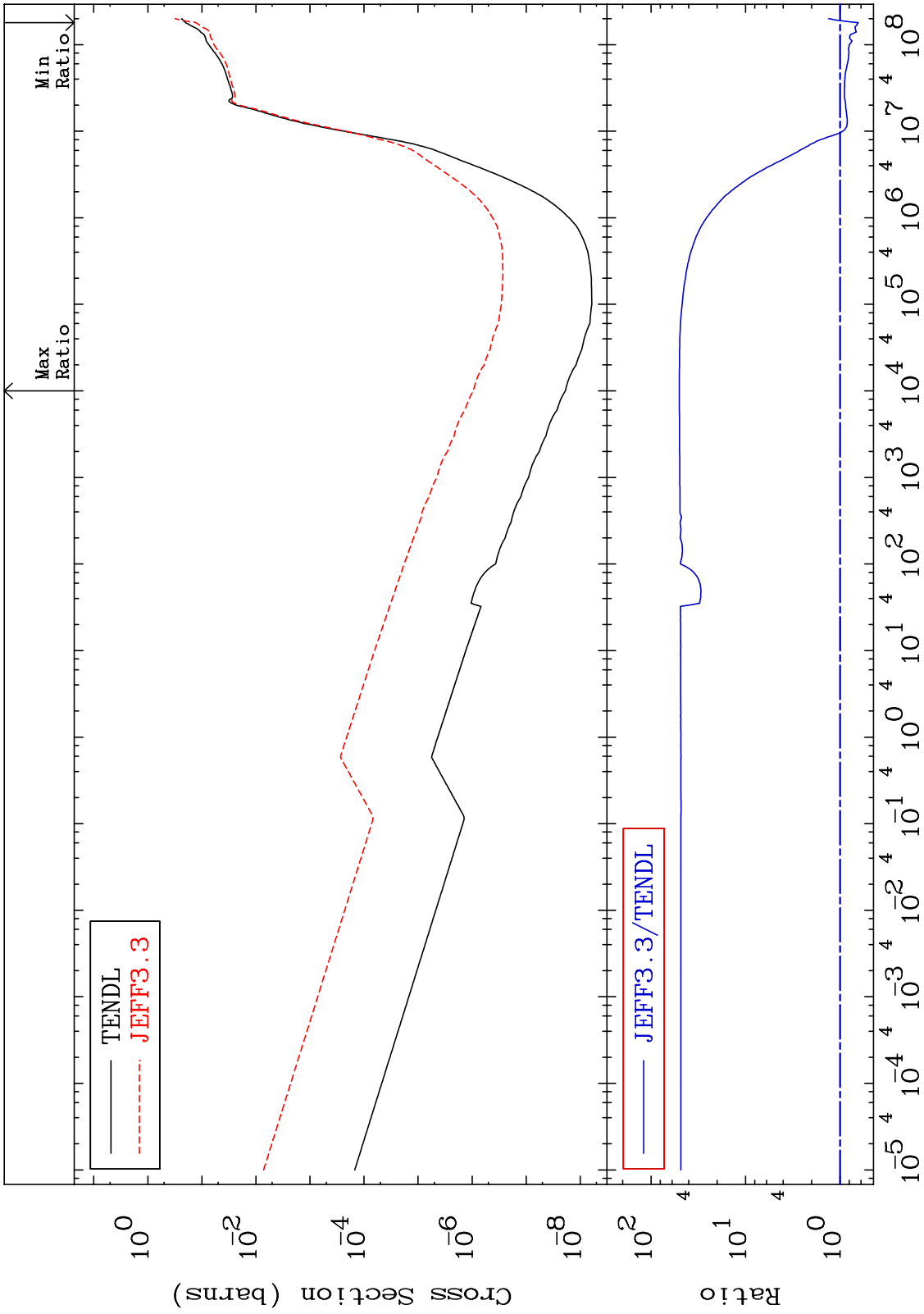
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

He-4 Production  
Cross Section

73-Ta-179  
-35.74 To 4924. %



67

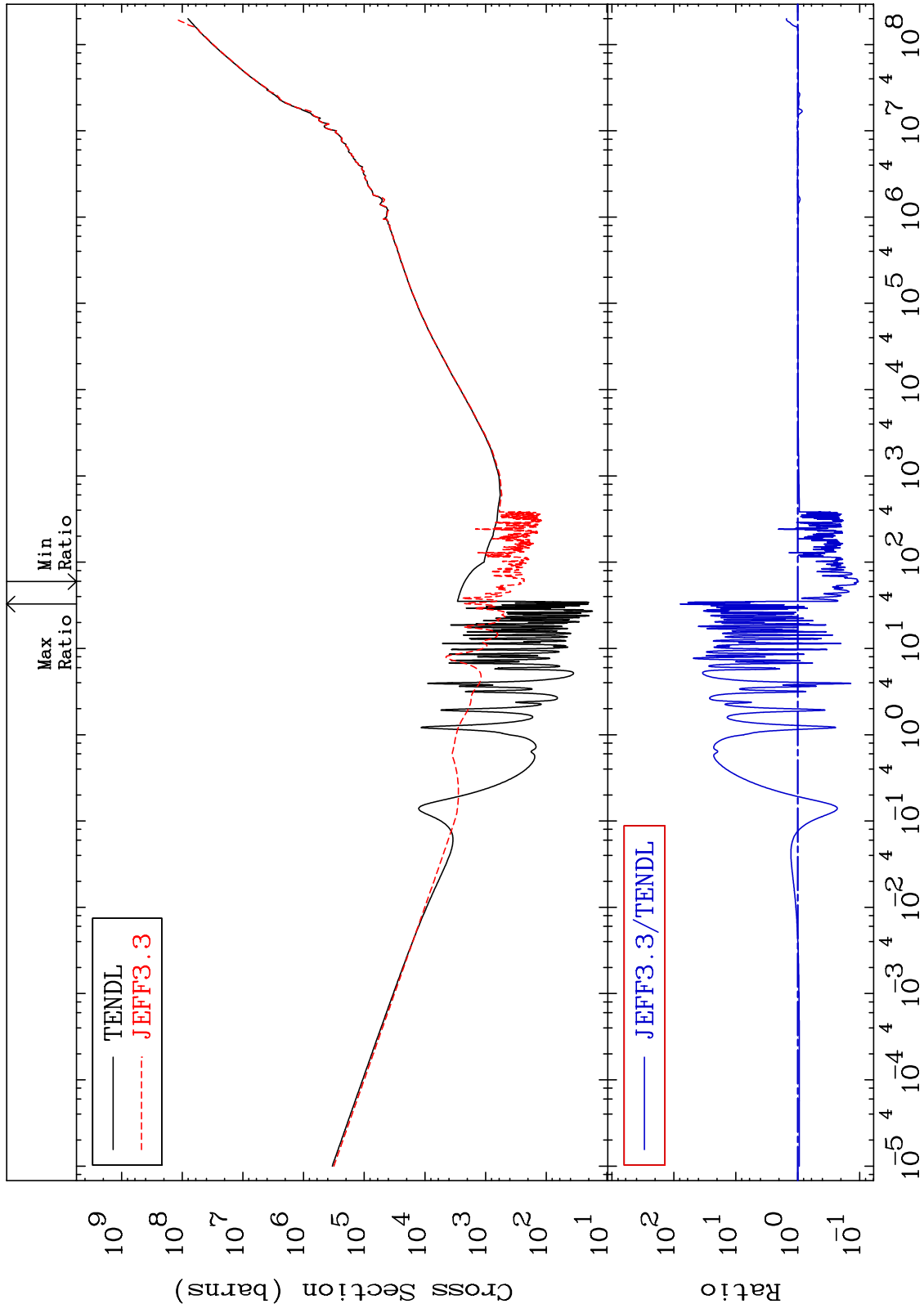
Incident Energy (eV)

73-Ta-179

MAT 7322

Kerma total (eV-barns)  
Cross Section

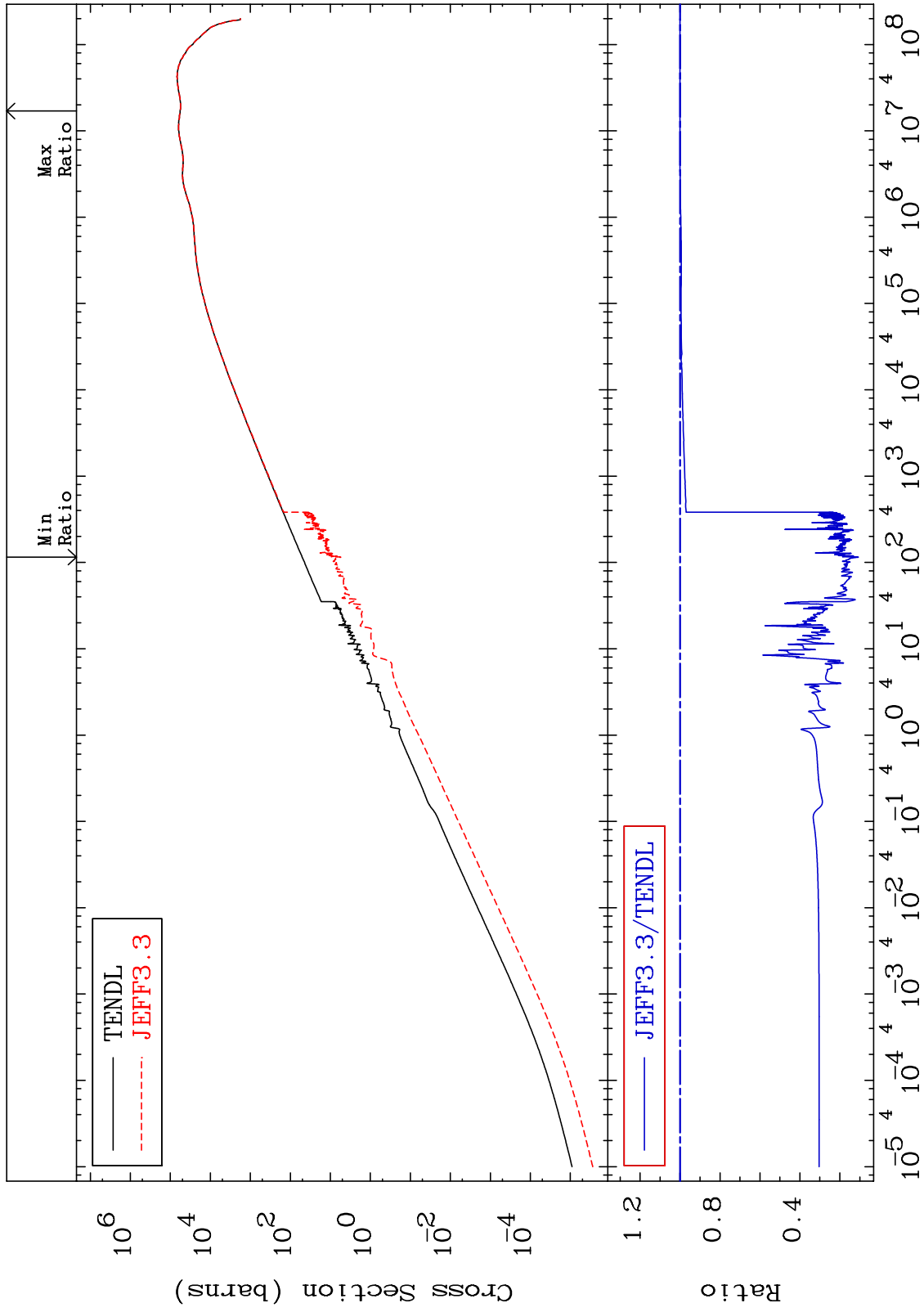
<sup>73</sup>Ta-179  
-89.53 To 7845. %



MAT 7322

Kerma elastic  
Cross Section

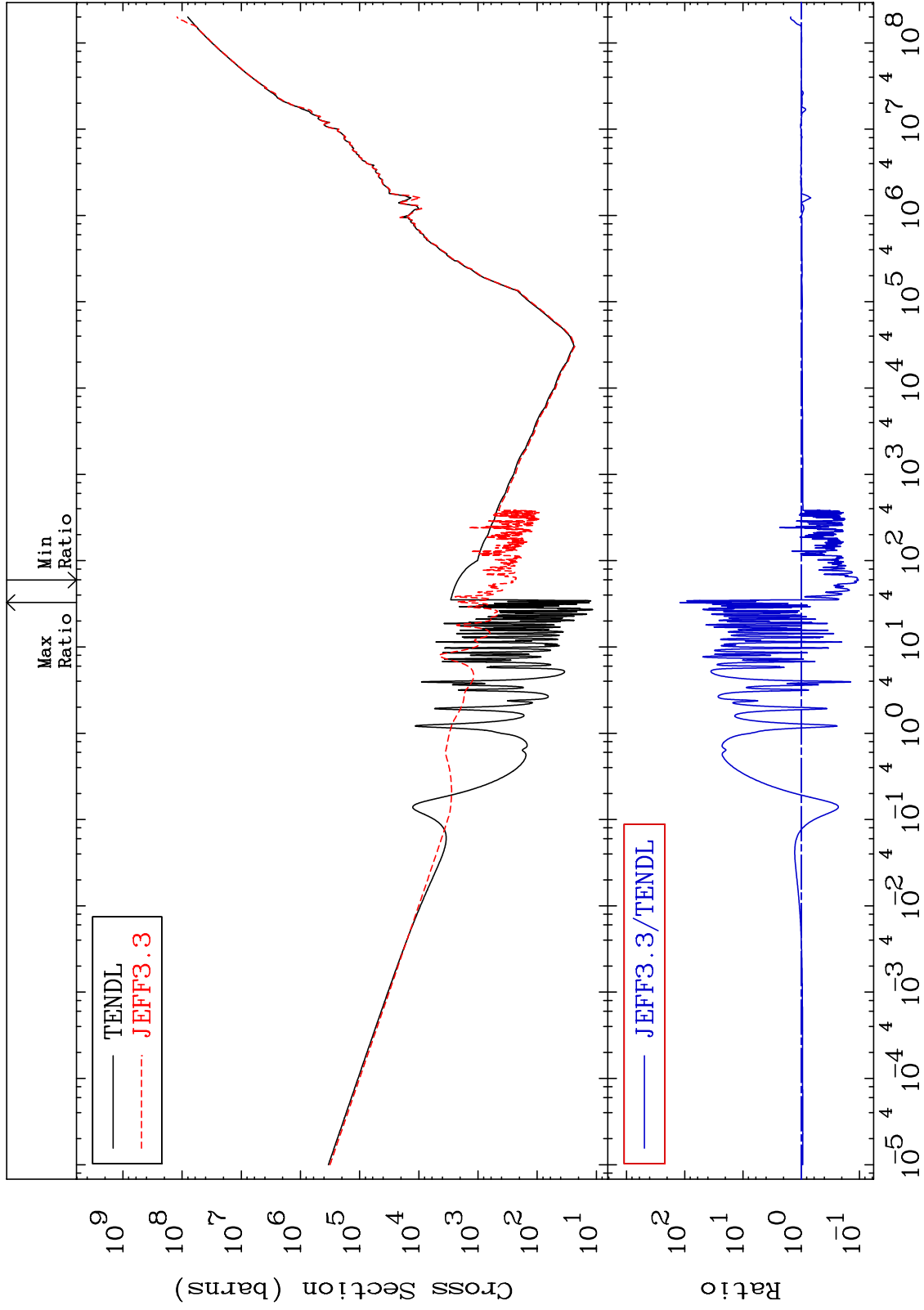
<sup>73</sup>Ta-179  
-89.30 To 0.011 %



MAT 7322

Kerma non-elastic (all but mt2)  
Cross Section

<sup>73</sup>Ta-179  
-89.62 To 9999. %



70

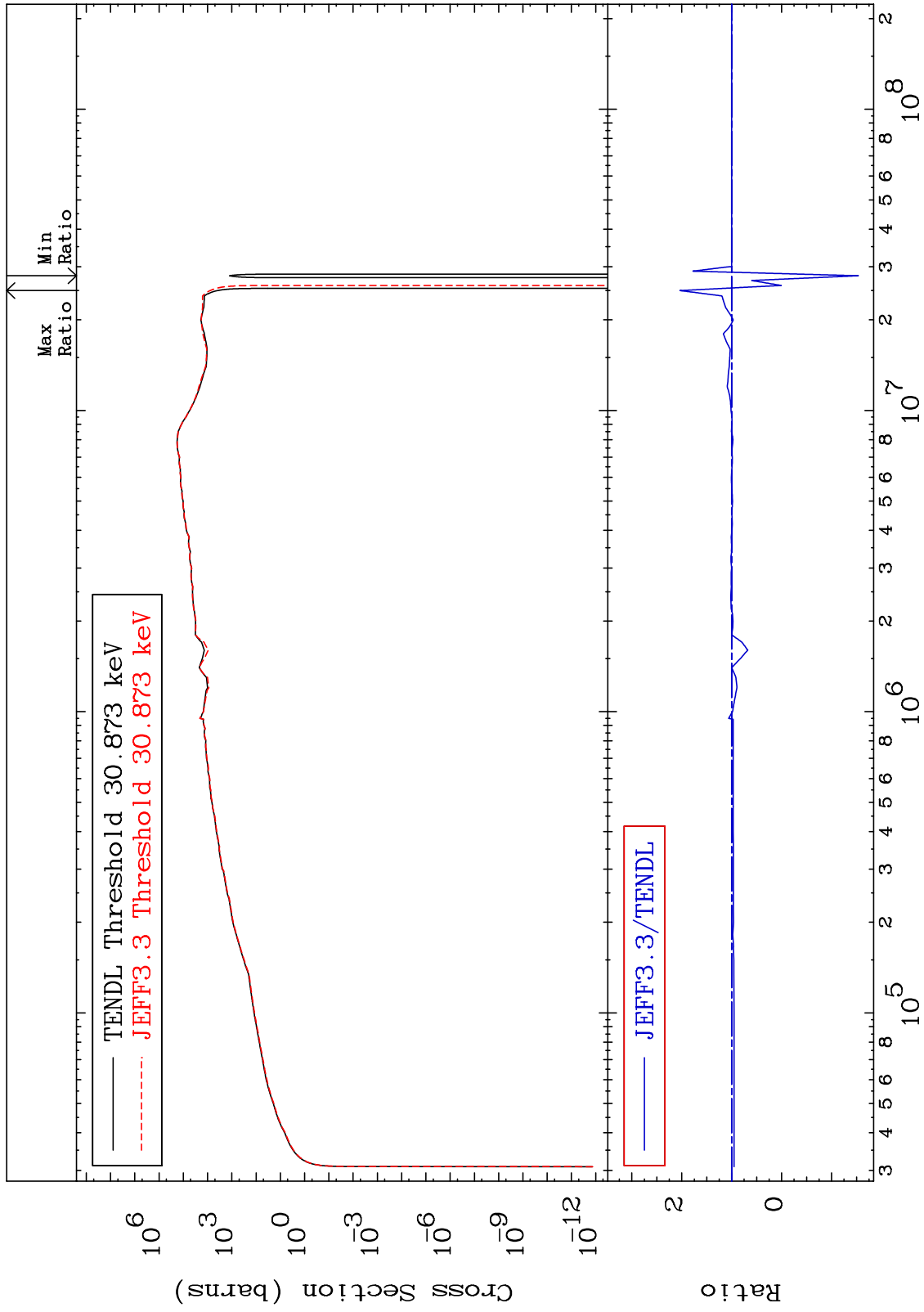
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

Kerma inelastic (mt51-91)  
Cross Section

<sup>73</sup>Ta-179  
-253.8 To 103.5 %



71

Incident Energy (eV)

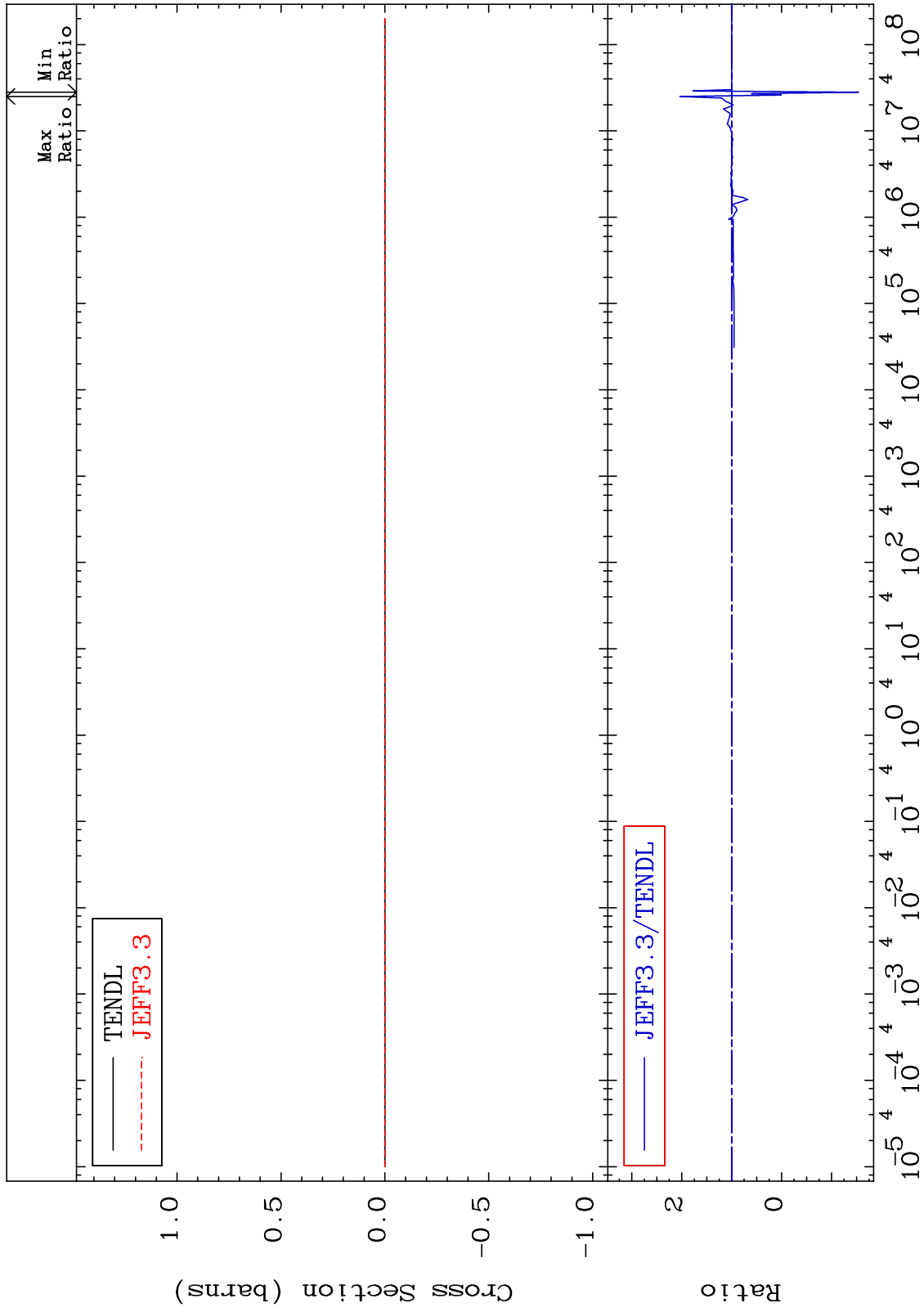
<sup>73</sup>Ta-179



MAT 7322

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

73-Ta-179  
-253.8 To 103.5 %



72

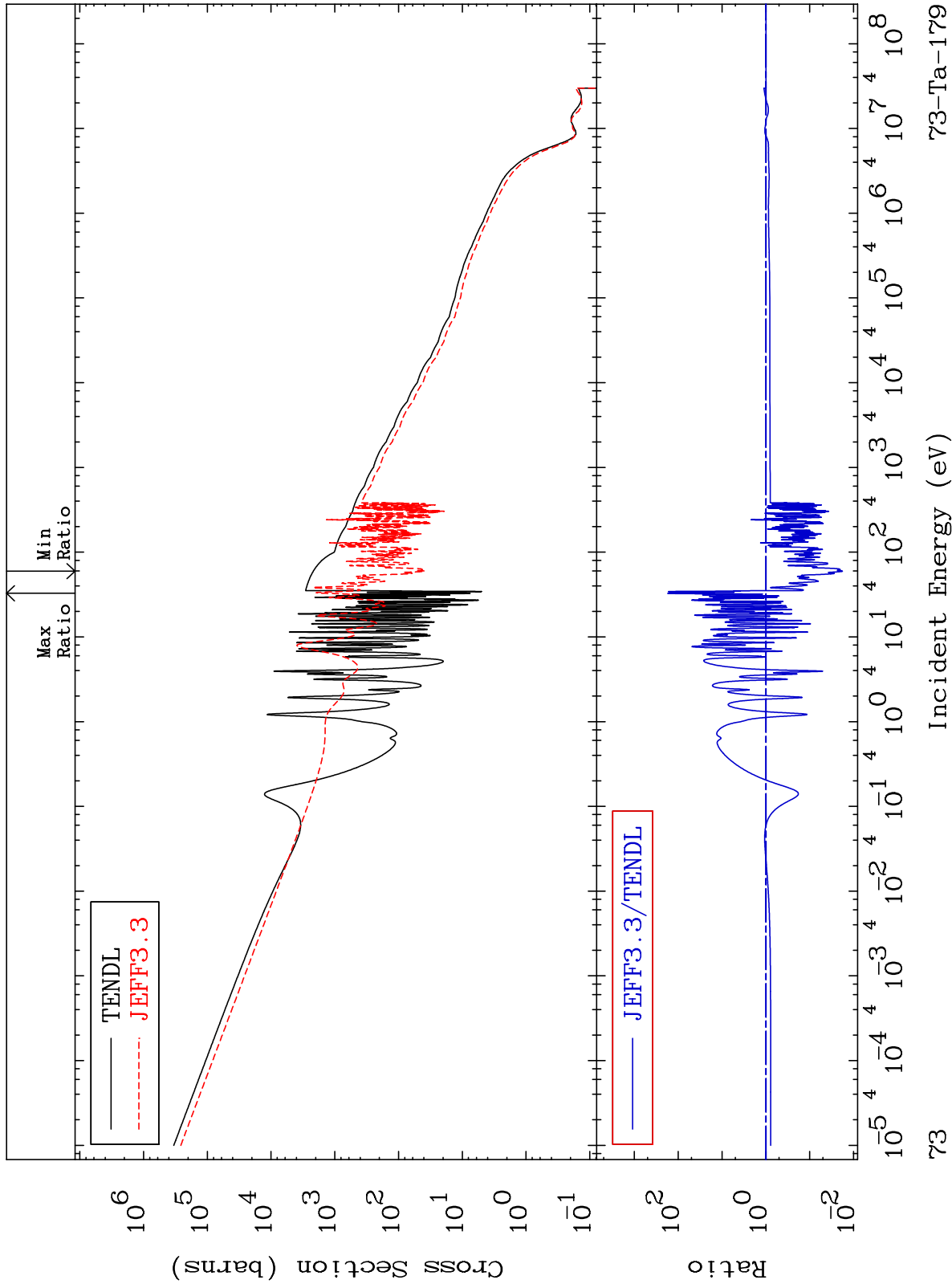
Incident Energy (eV)

73-Ta-179

MAT 7322

Kerma capture (mt102)  
Cross Section

<sup>73</sup>Ta-179  
-98.23 To 9999. %



<sup>73</sup>Ta-179

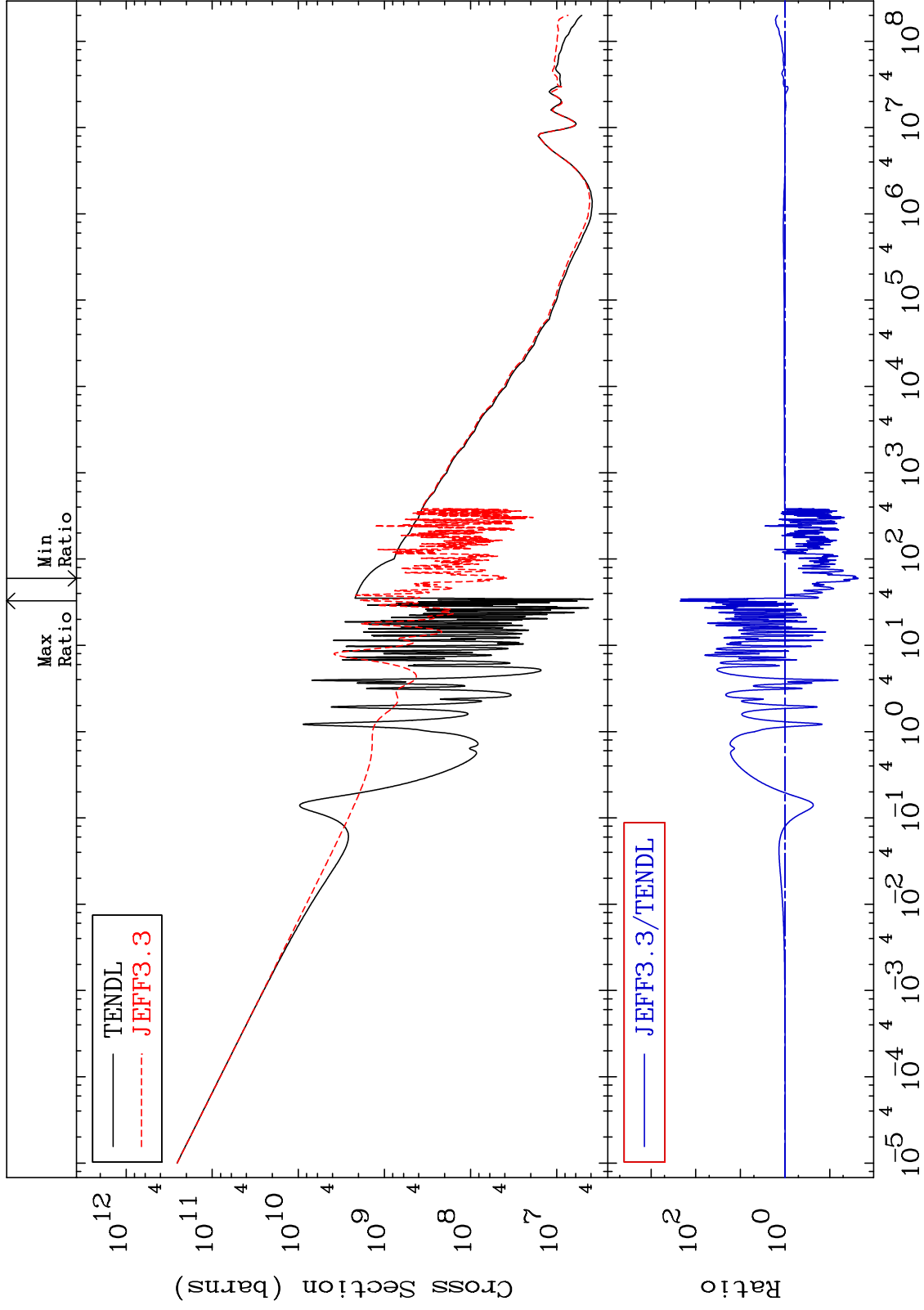
Incident Energy (eV)

73

MAT 7322

Total photon (eV-barns)  
Cross Section

<sup>73</sup>Ta-179  
-97.73 To 9999. %



74

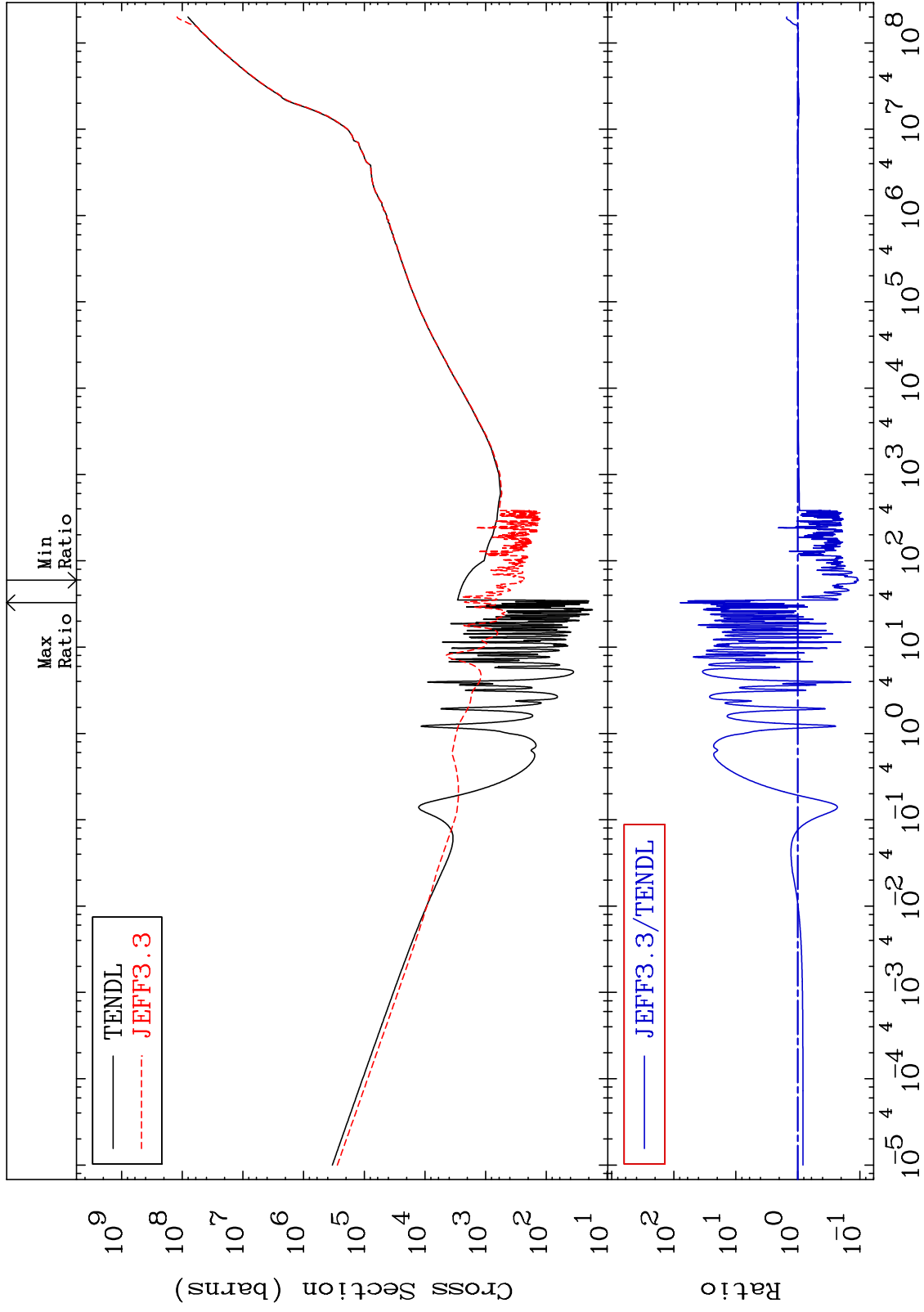
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

Total kinematic kerma (high limit)  
Cross Section

<sup>73</sup>Ta-179  
-89.46 To 7838. %



75

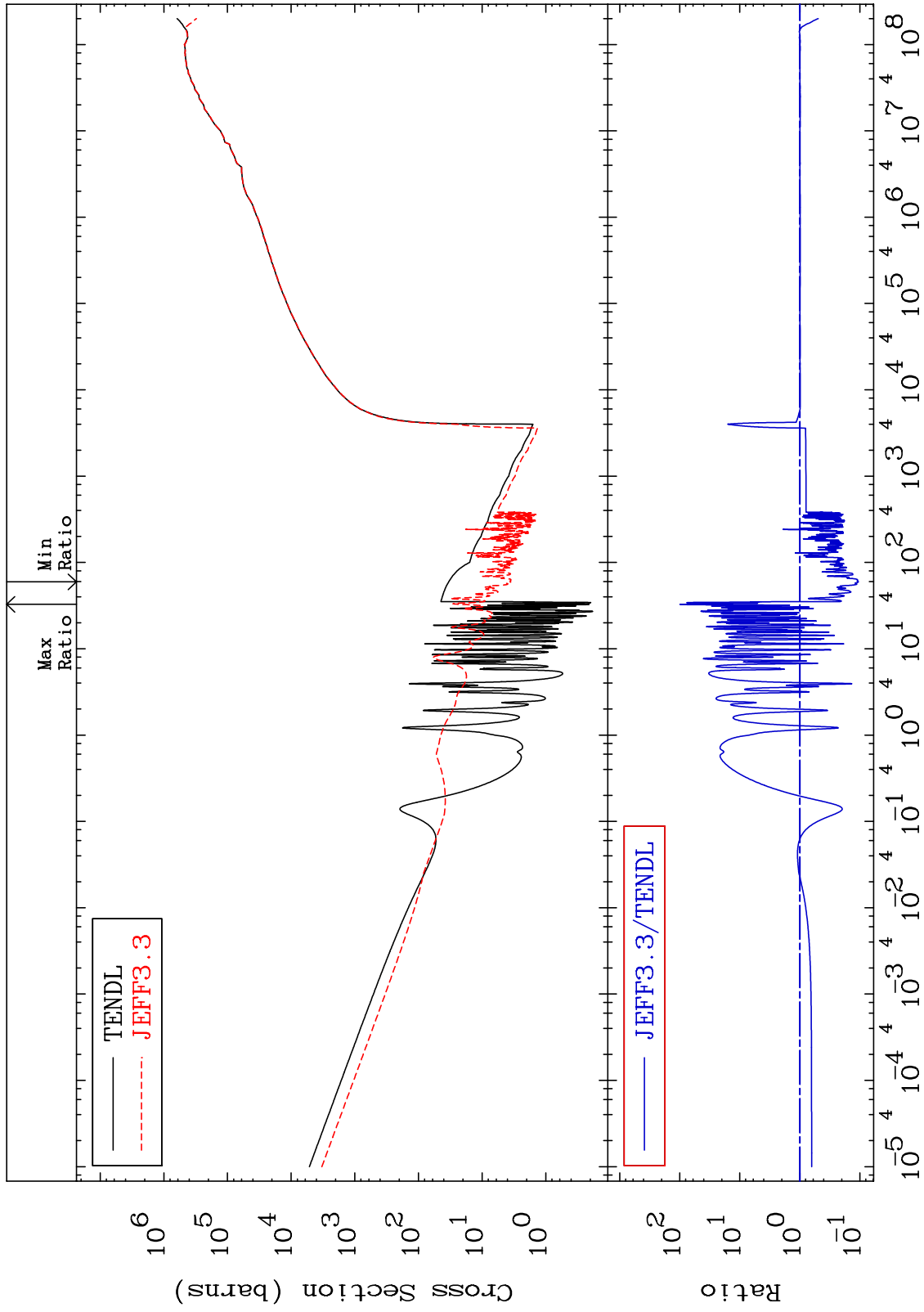
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

Dpa total (eV-barns)  
Cross Section

$^{73}\text{Ta-179}$   
-89.41 To 9808. %



76

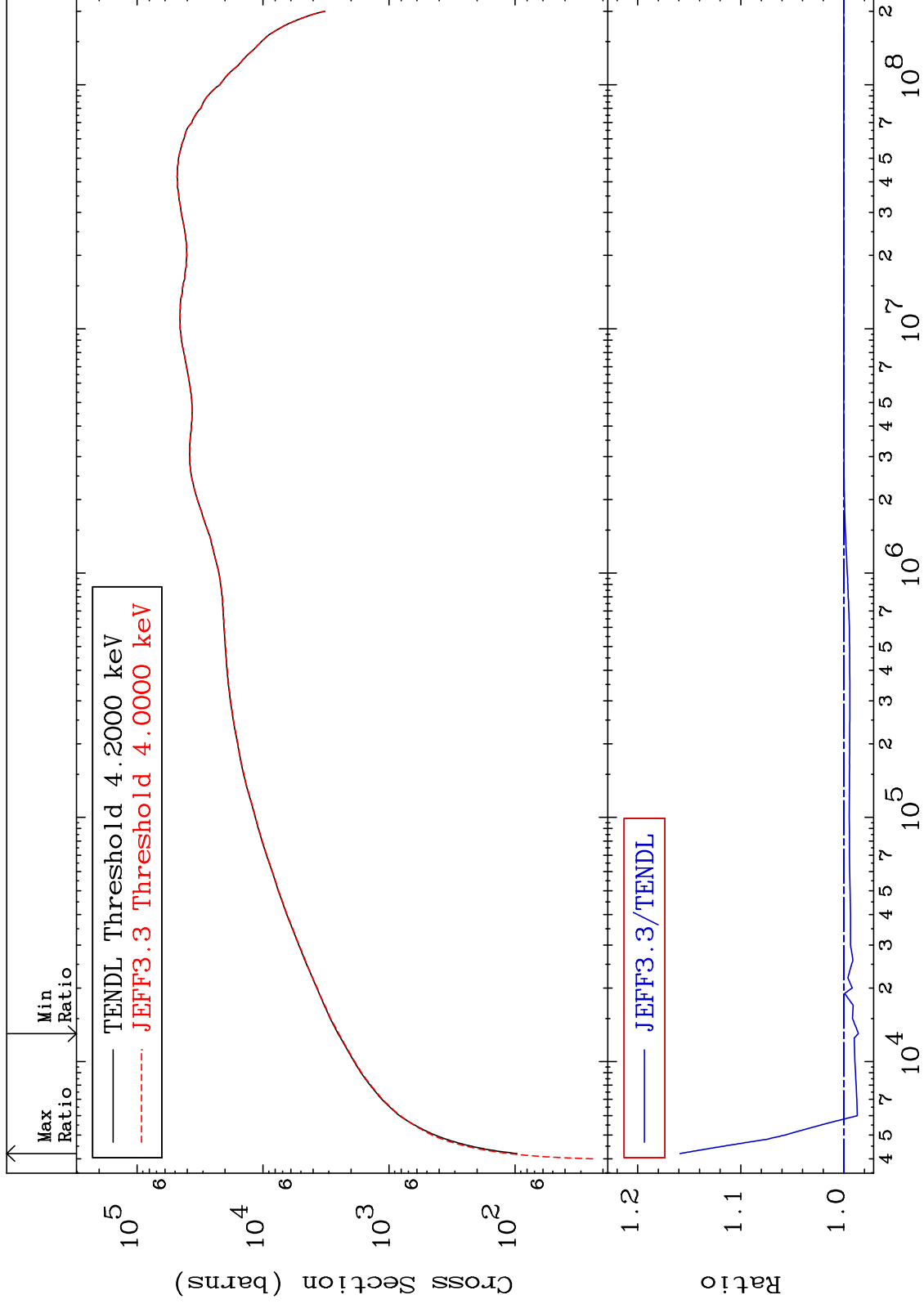
Incident Energy (eV)

$^{73}\text{Ta-179}$

MAT 7322

Dpa elastic (mt2)  
Cross Section

<sup>73</sup>Ta-179  
-1.420 To 15.89 %



77

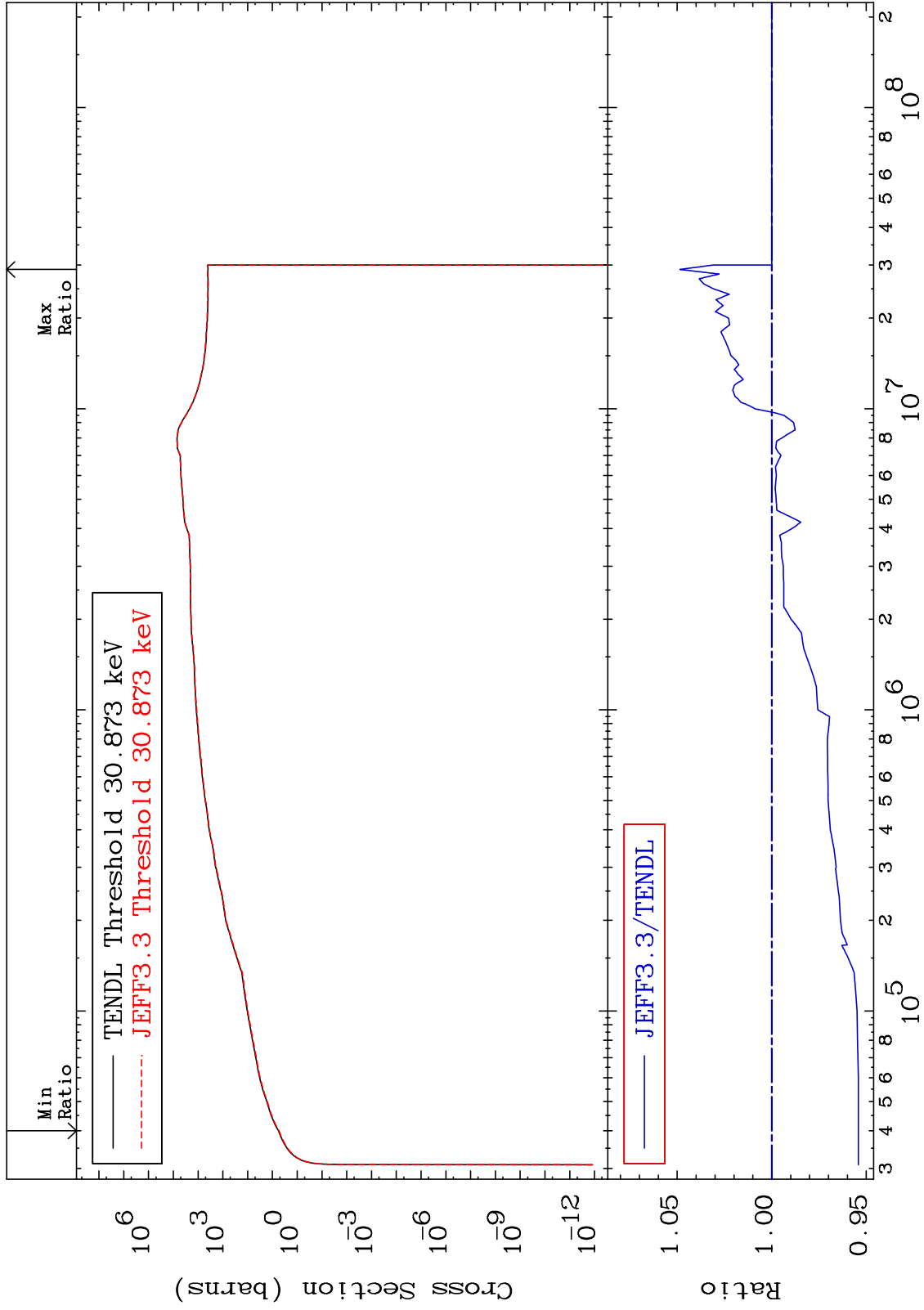
Incident Energy (eV)

<sup>73</sup>Ta-179

MAT 7322

Dpa inelastic (mt51-91)  
Cross Section

<sup>73</sup>Ta-179  
-4.582 To 4.852 %



78

<sup>73</sup>Ta-179

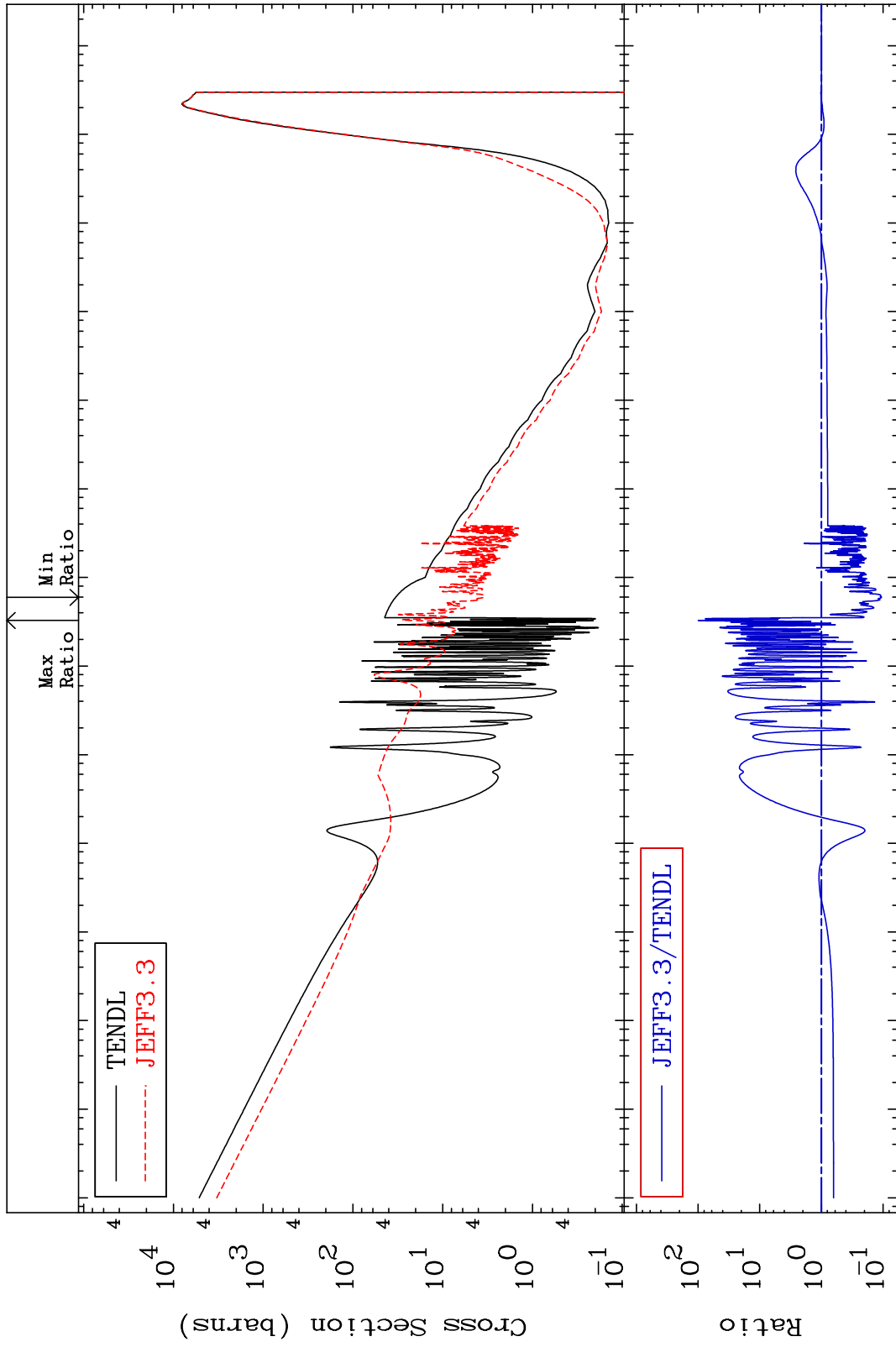
MAT 7322

Dpa disappearance (mt102 -120)

<sup>73</sup>Ta-179

-89.41 To 9808. %

Cross Section



Incident Energy (eV)

79

<sup>73</sup>Ta-179

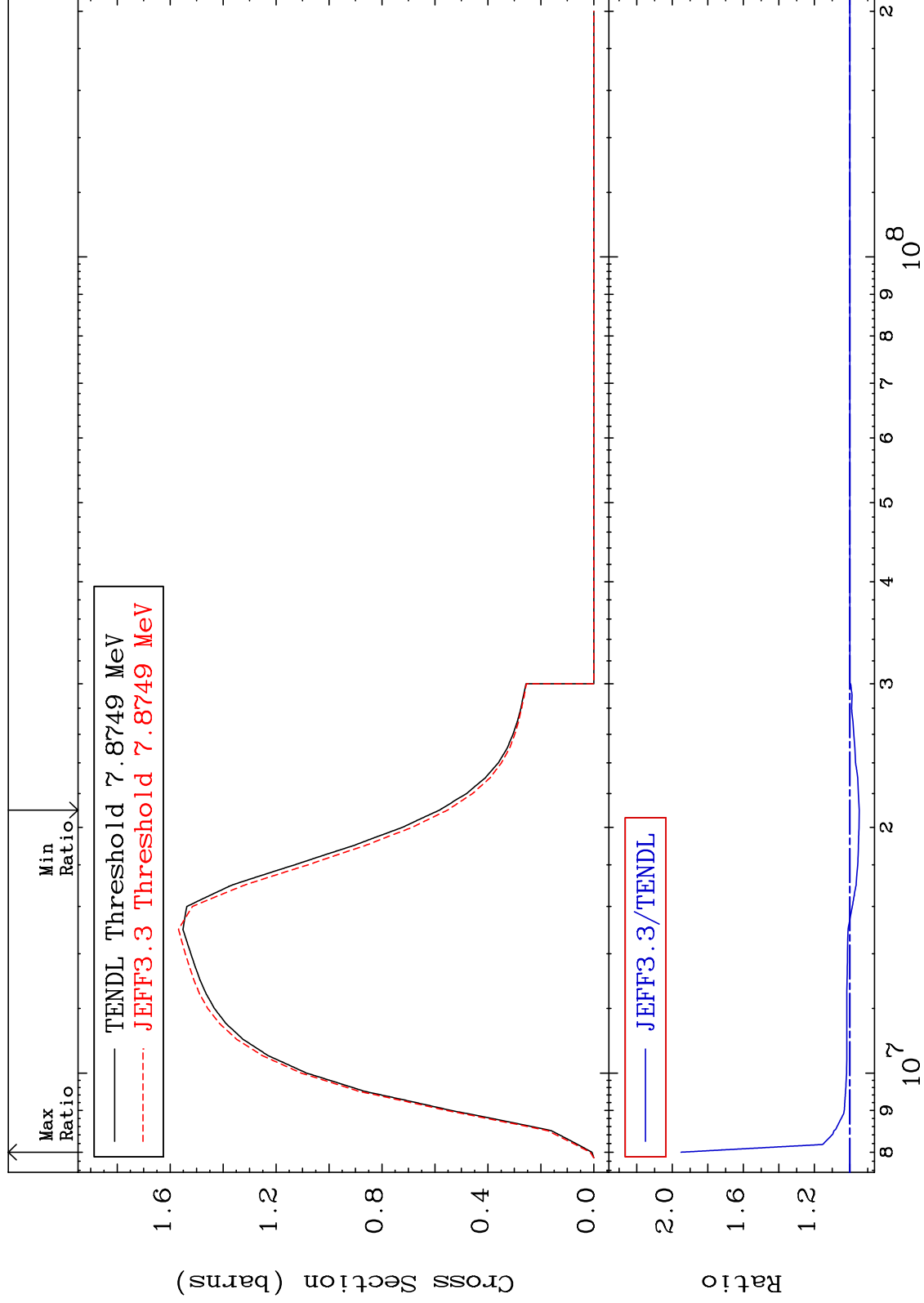


MAT 7322

(n,2n):<sup>73</sup>Ta-178g

<sup>73</sup>Ta-179

Radionuclide Production Cross Section -5.286 To 95.09 %



80

Incident Energy (eV)

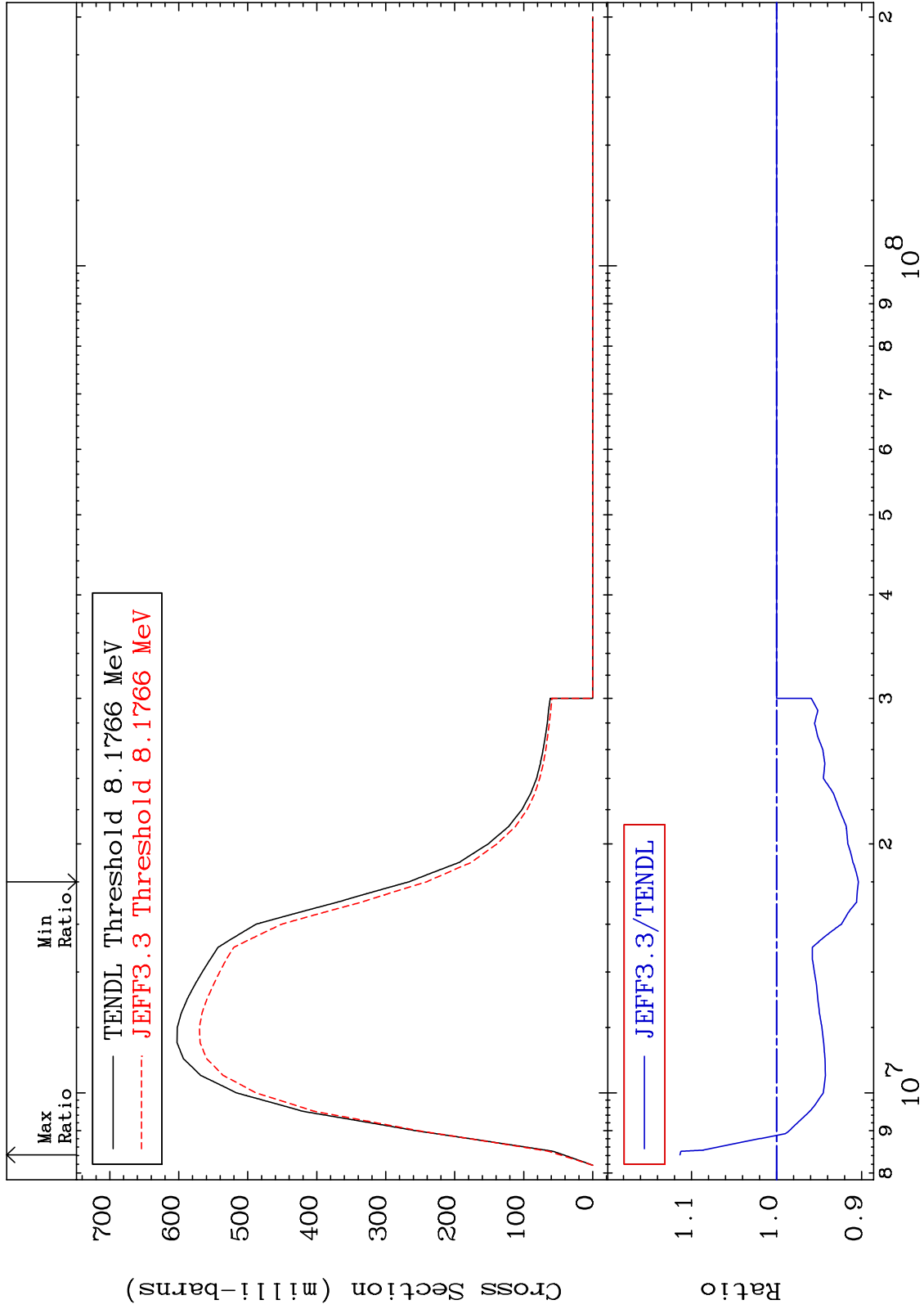
<sup>73</sup>Ta-179

MAT 7322

(n,2n): 73-Ta-178m1

73-Ta-179

Radionuclide Production Cross Section -9.618 To 11.35 %



81

Incident Energy (eV)

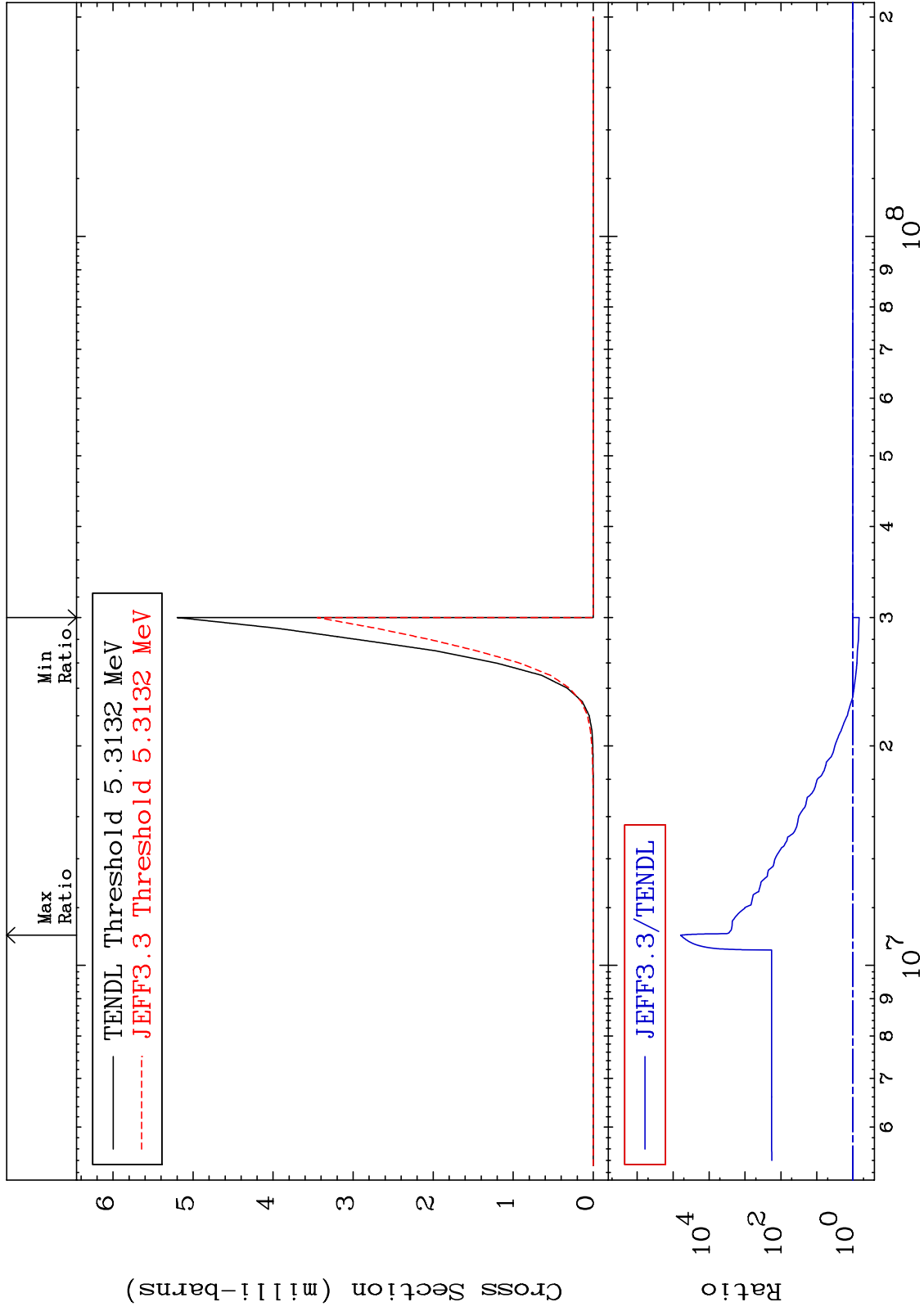
73-Ta-179

MAT 7322

(n,2n)  $\alpha$ :71-Lu-174g

<sup>73</sup>Ta-179

Radionuclide Production Cross Section -33.66 To 9999. %

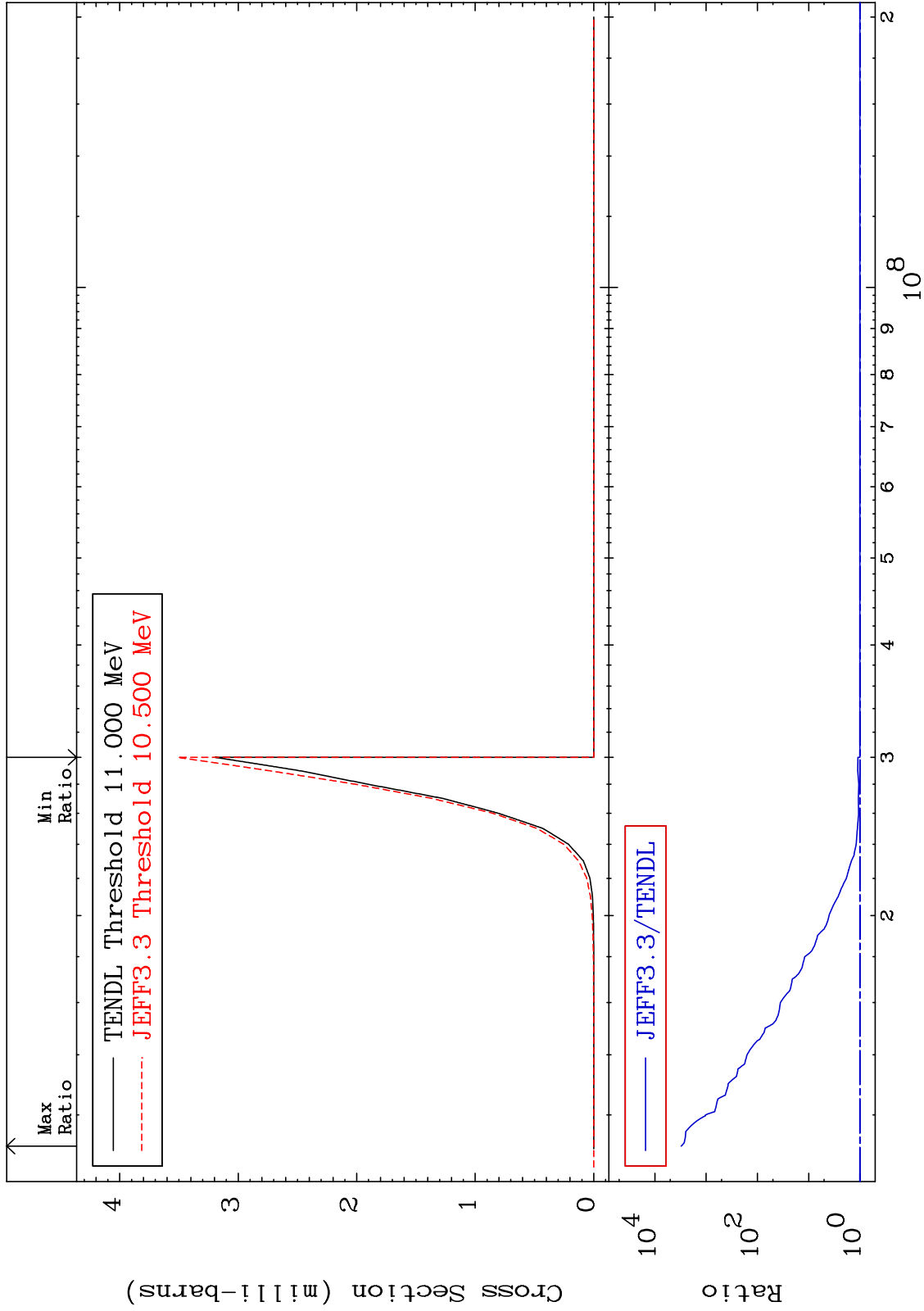


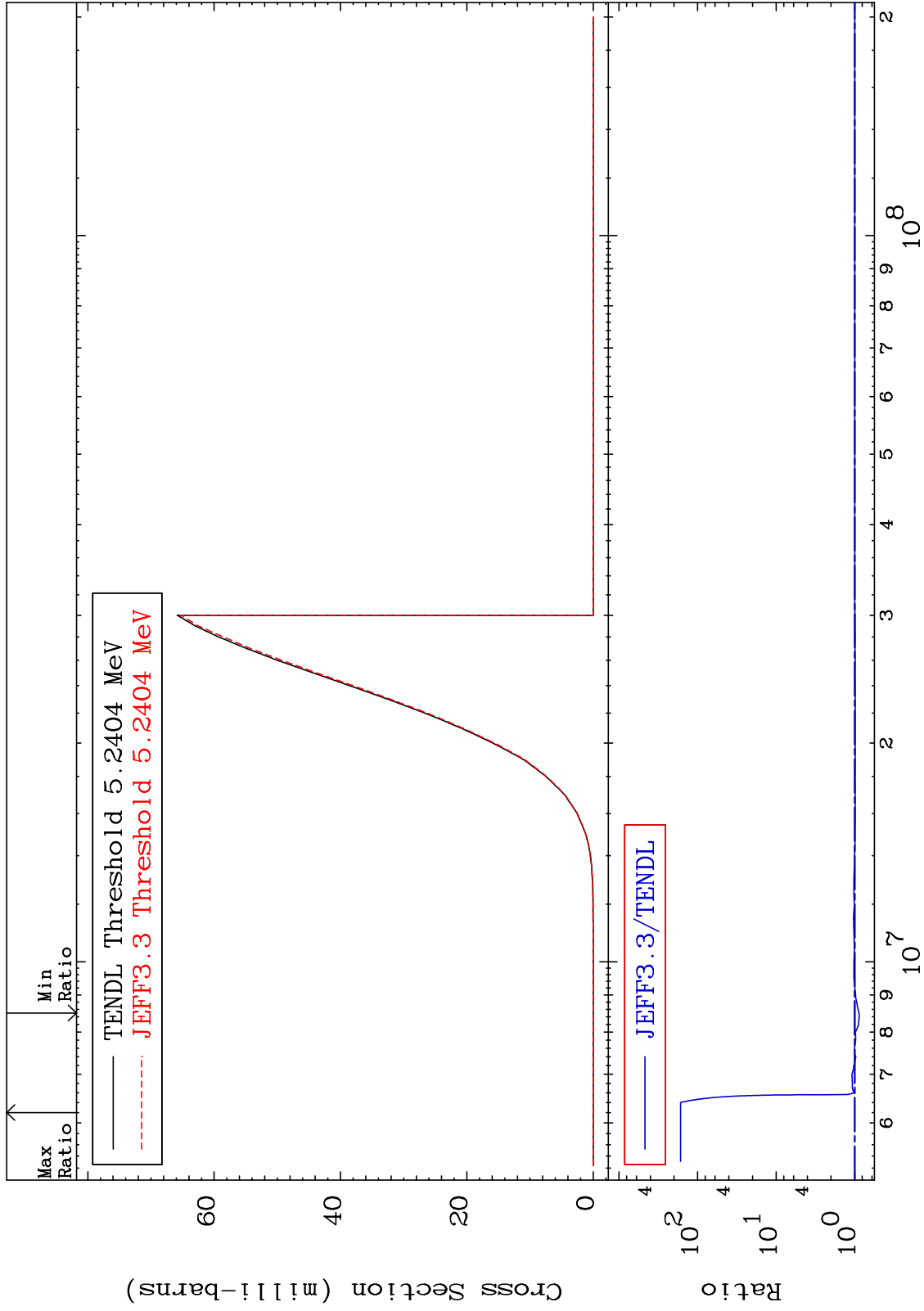
MAT 7322

(n, 2n)  $\alpha$ : 71-Lu-174m3

<sup>73</sup>Ta-179

Radionuclide Production Cross Section 0.000 To 9999. %



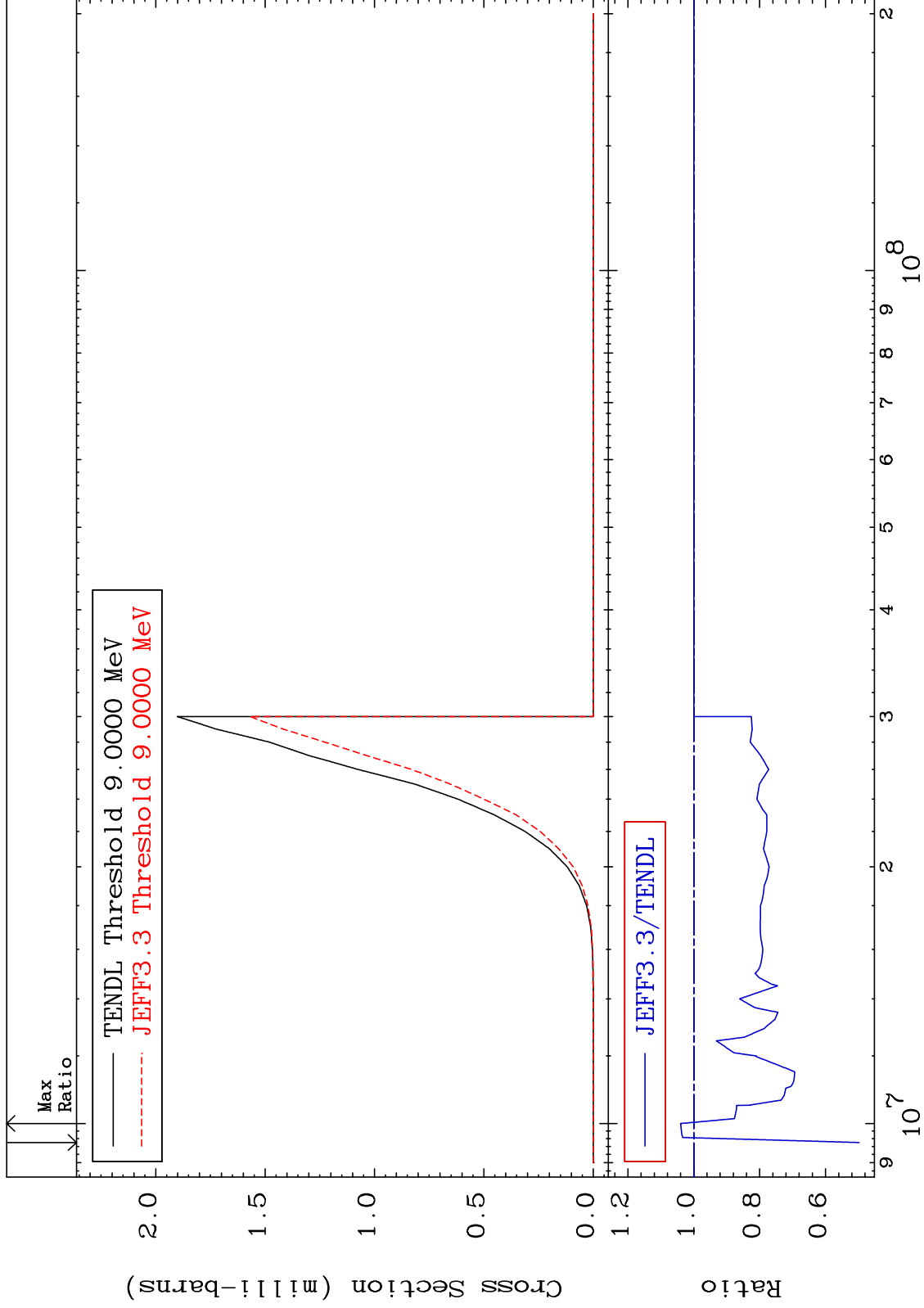


MAT 7322

(n, n') p:72-Hf-178m5

73-Ta-179

Radionuclide Production Cross Section -50.21 To 4.001 %



85

Incident Energy (eV)

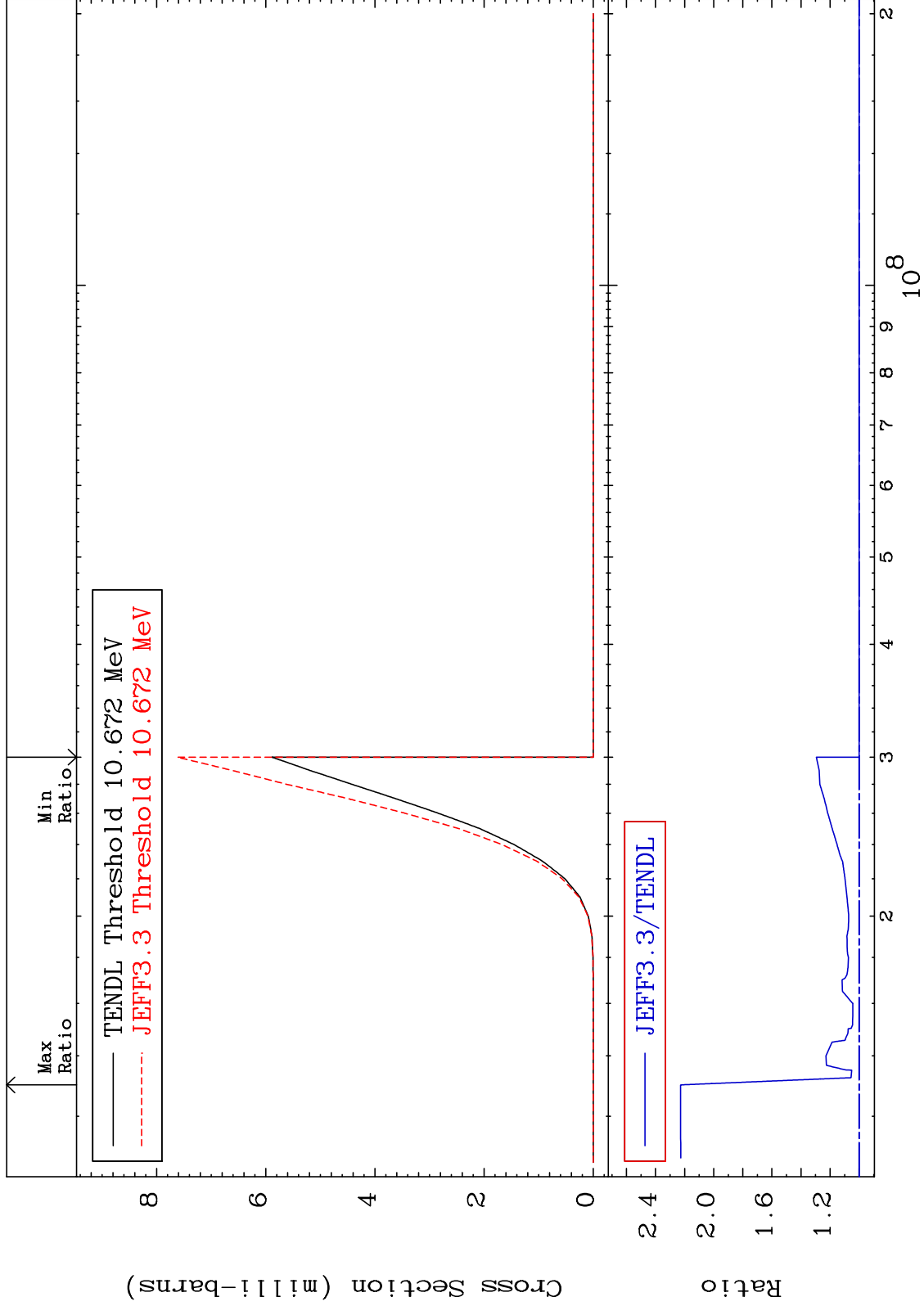
73-Ta-179

MAT 7322

(n, n') d:72-Hf-177g

<sup>73</sup>Ta-179

Radionuclide Production Cross Section 0.000 To 122.8 %

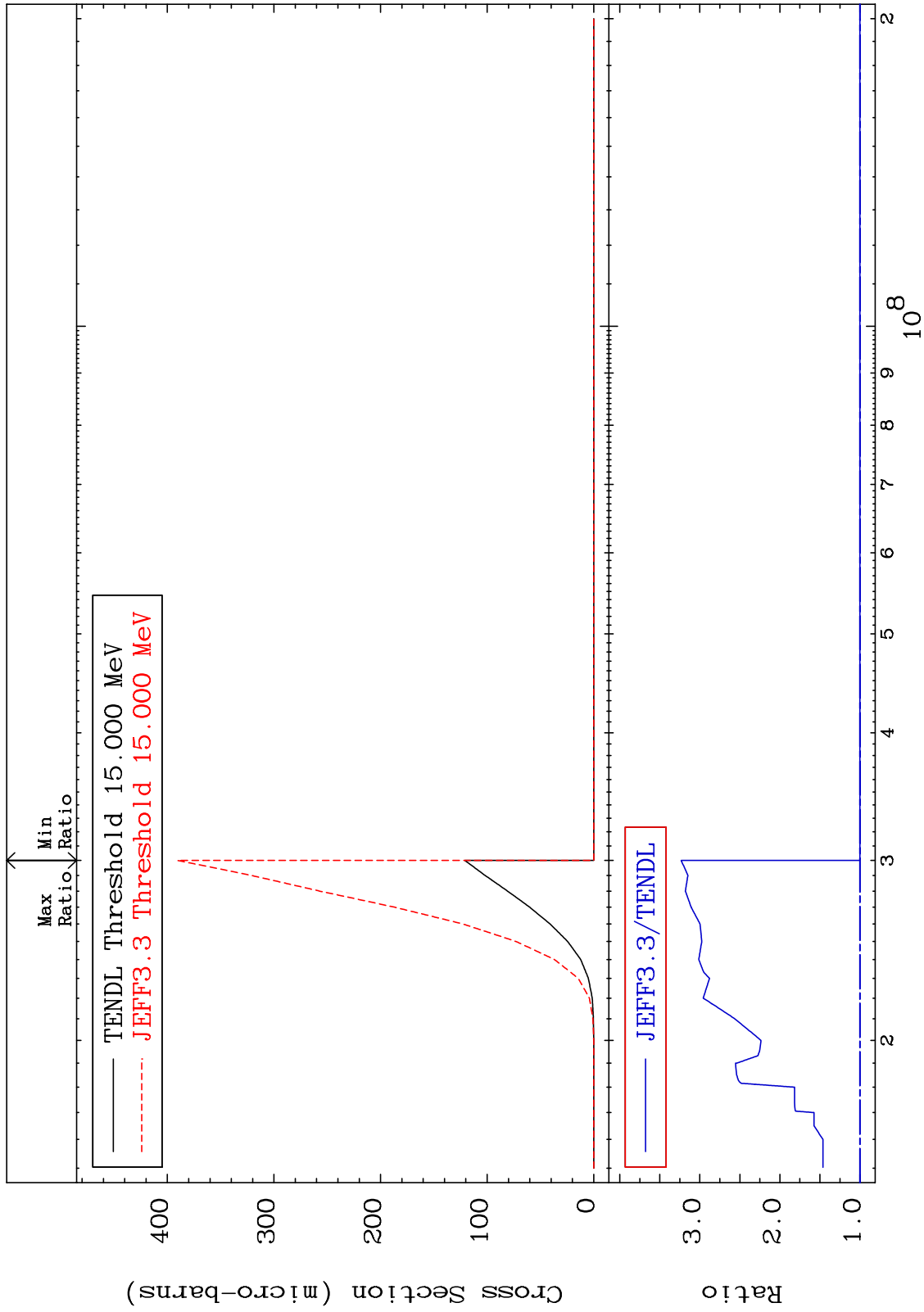


MAT 7322

(n, n') d:72-Hf-177m5

73-Ta-179

Radionuclide Production Cross Section 0.000 To 223.2 %



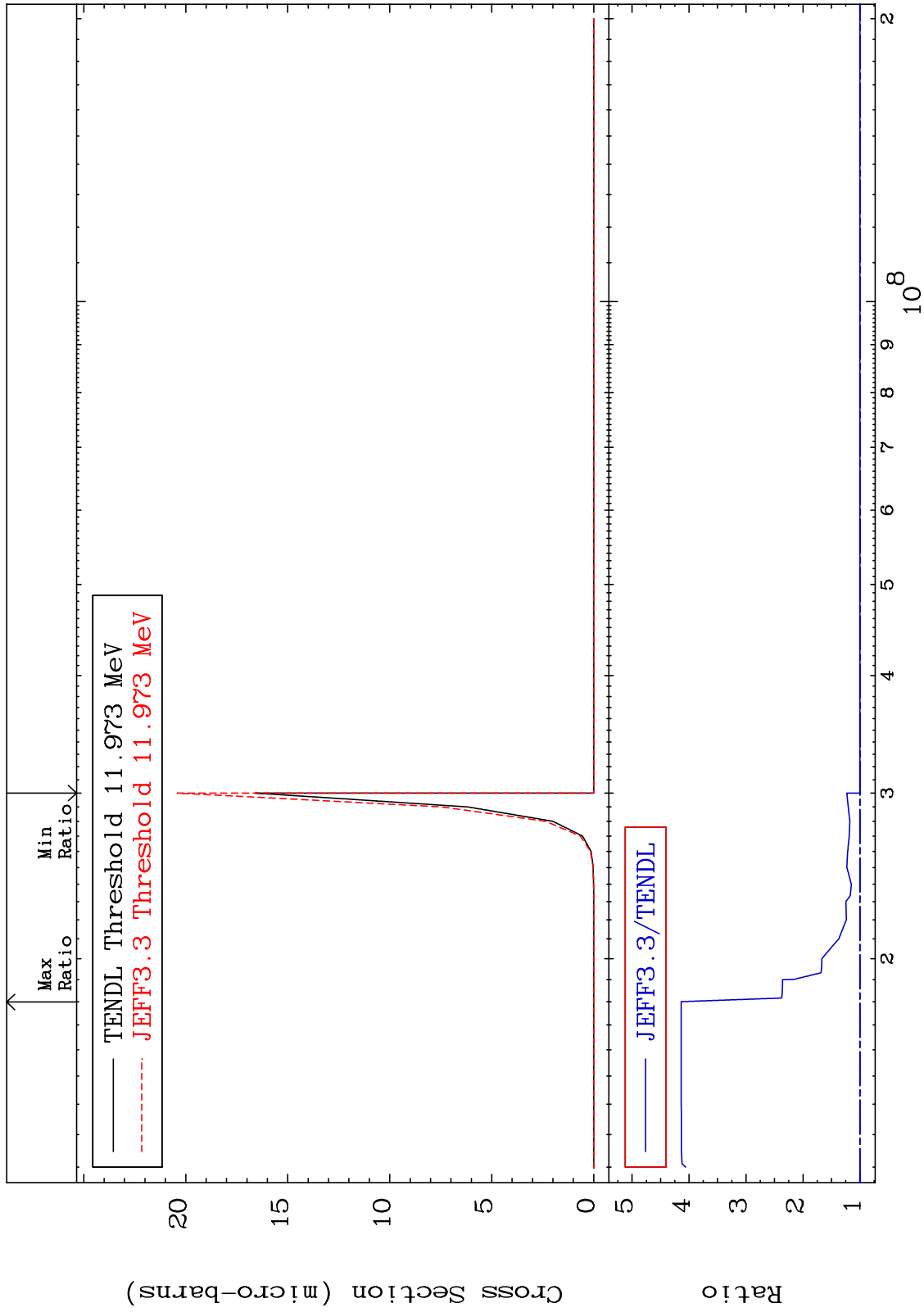


MAT 7322

(n, n') He-3:71-Lu-176g

<sup>73</sup>Ta-179

Radionuclide Production Cross Section 0.000 To 313.7 %

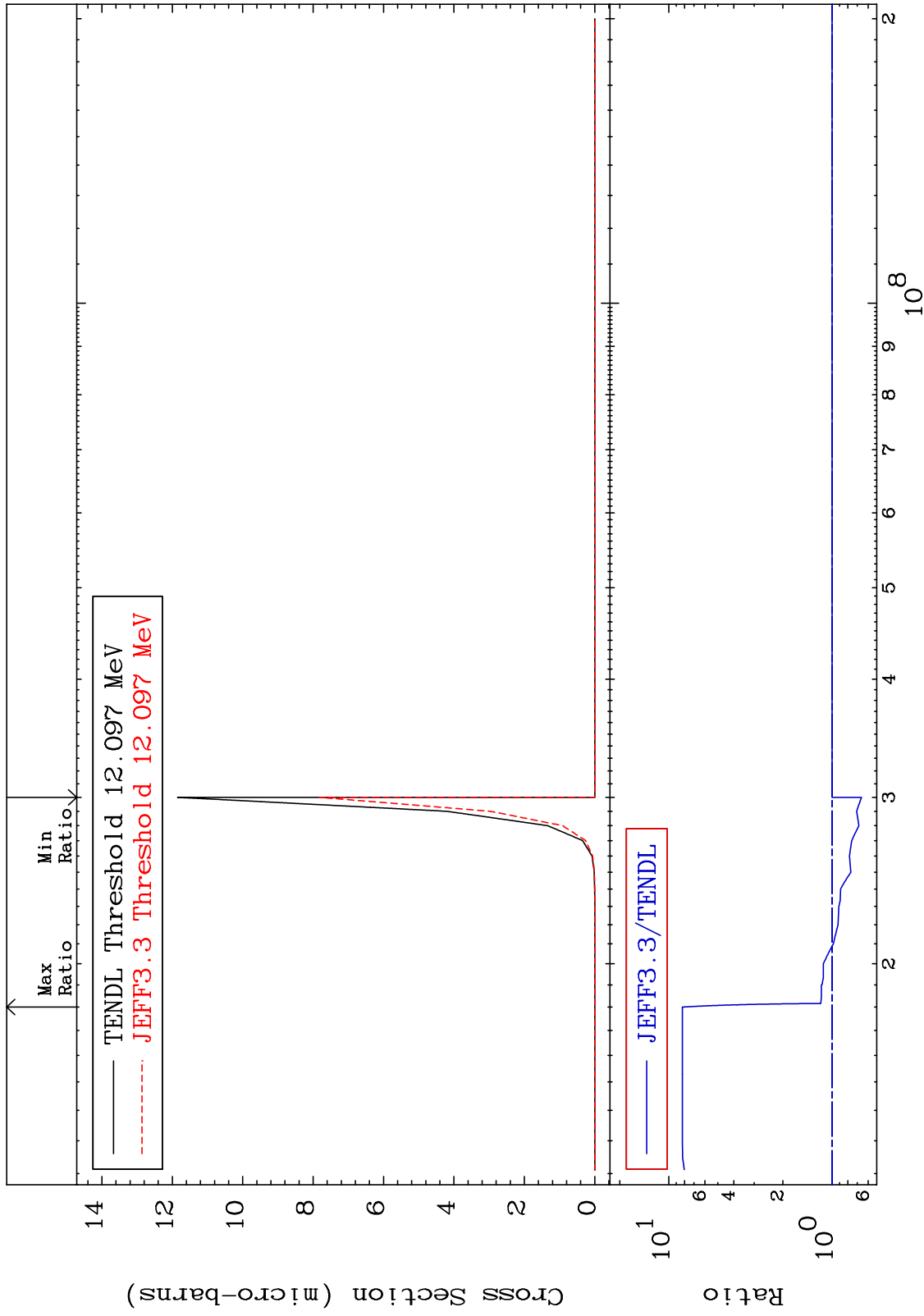


MAT 7322

(n, n') He-3:71-Lu-176m1

73-Ta-179

Radionuclide Production Cross Section -34.00 To 724.9 %

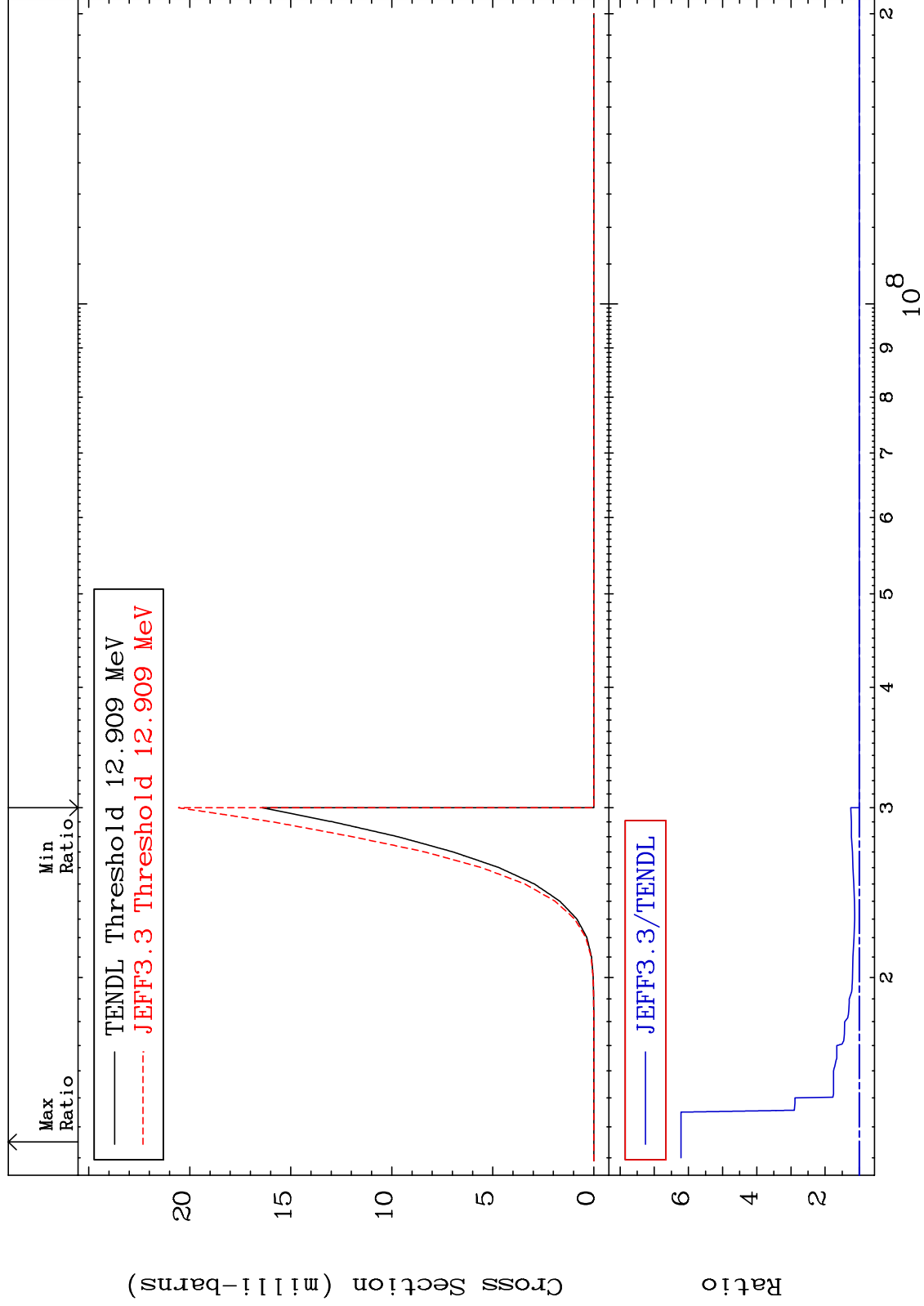


MAT 7322

(n,2n) p:72-Hf-177g

73-Ta-179

Radionuclide Production Cross Section 0.000 To 521.6 %

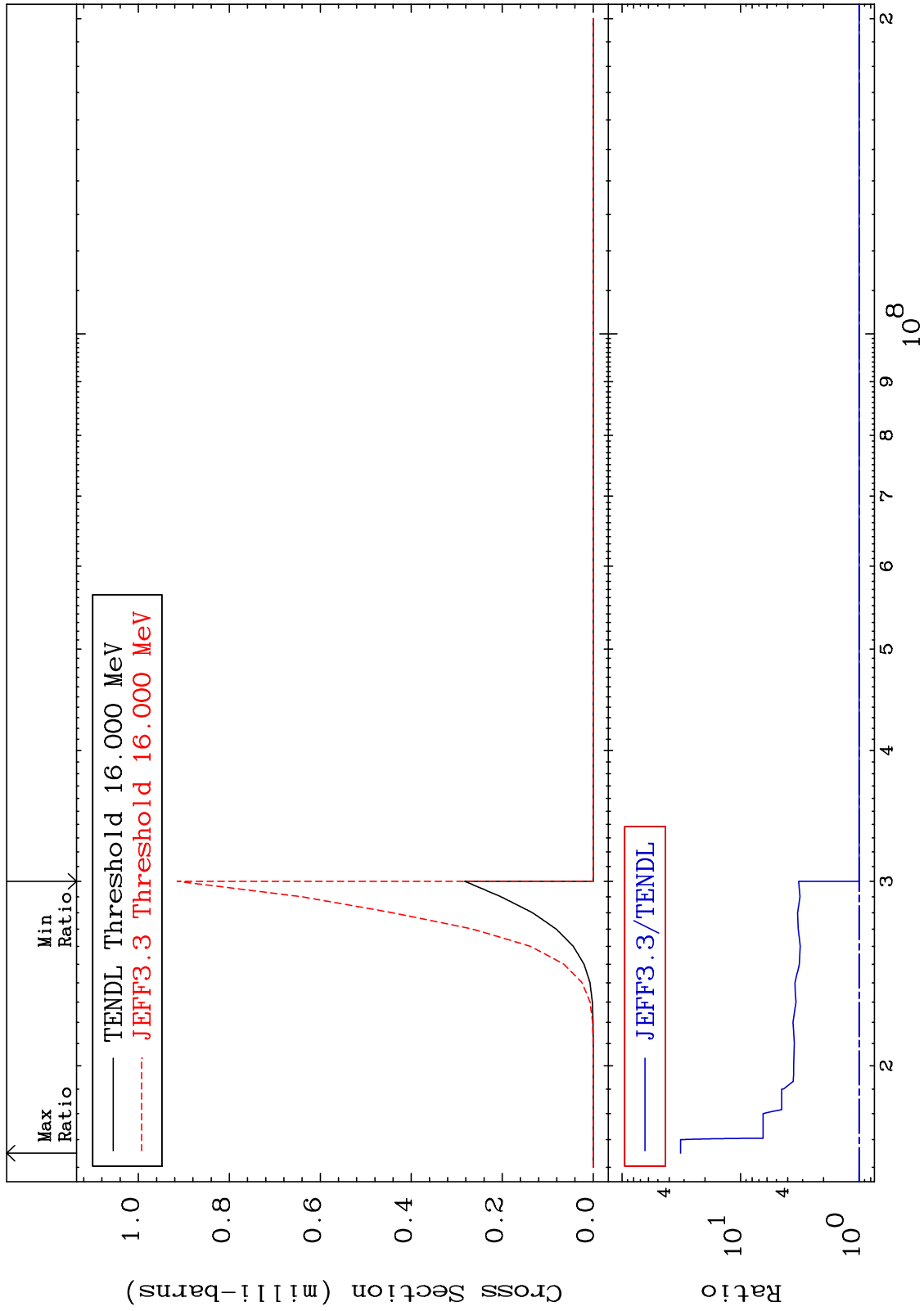


MAT 7322

(n,2n) p:72-Hf-177m5

73-Ta-179

Radionuclide Production Cross Section 0.000 To 3109. %

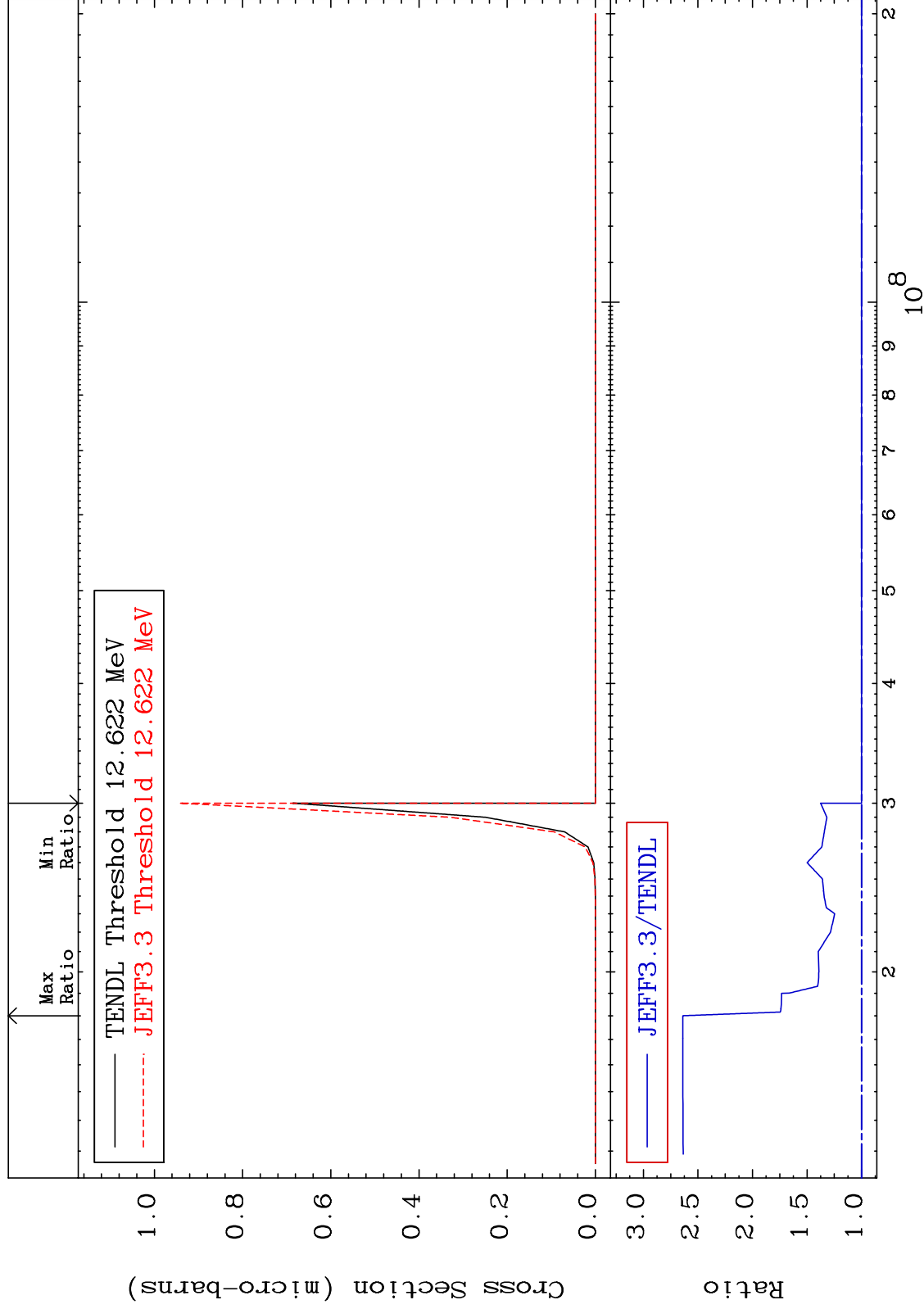


MAT 7322

(n,2n) p:71-Lu-177g

<sup>73</sup>Ta-179

Radionuclide Production Cross Section 0.000 To 163.9 %

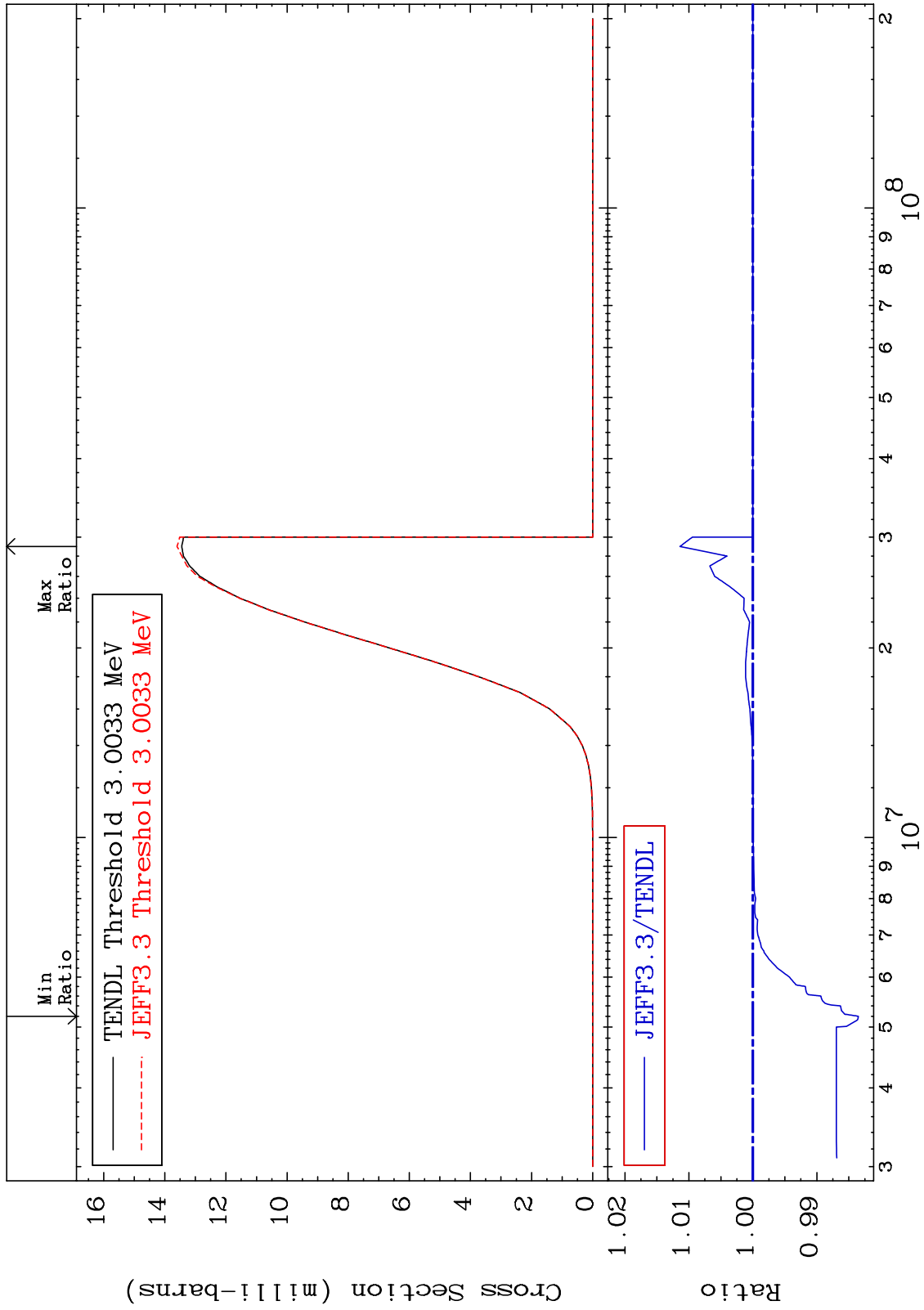


MAT 7322

(n,d):72-Hf-178g

73-Ta-179

Radionuclide Production Cross Section -1.650 To 1.139 %



93

Incident Energy (eV)

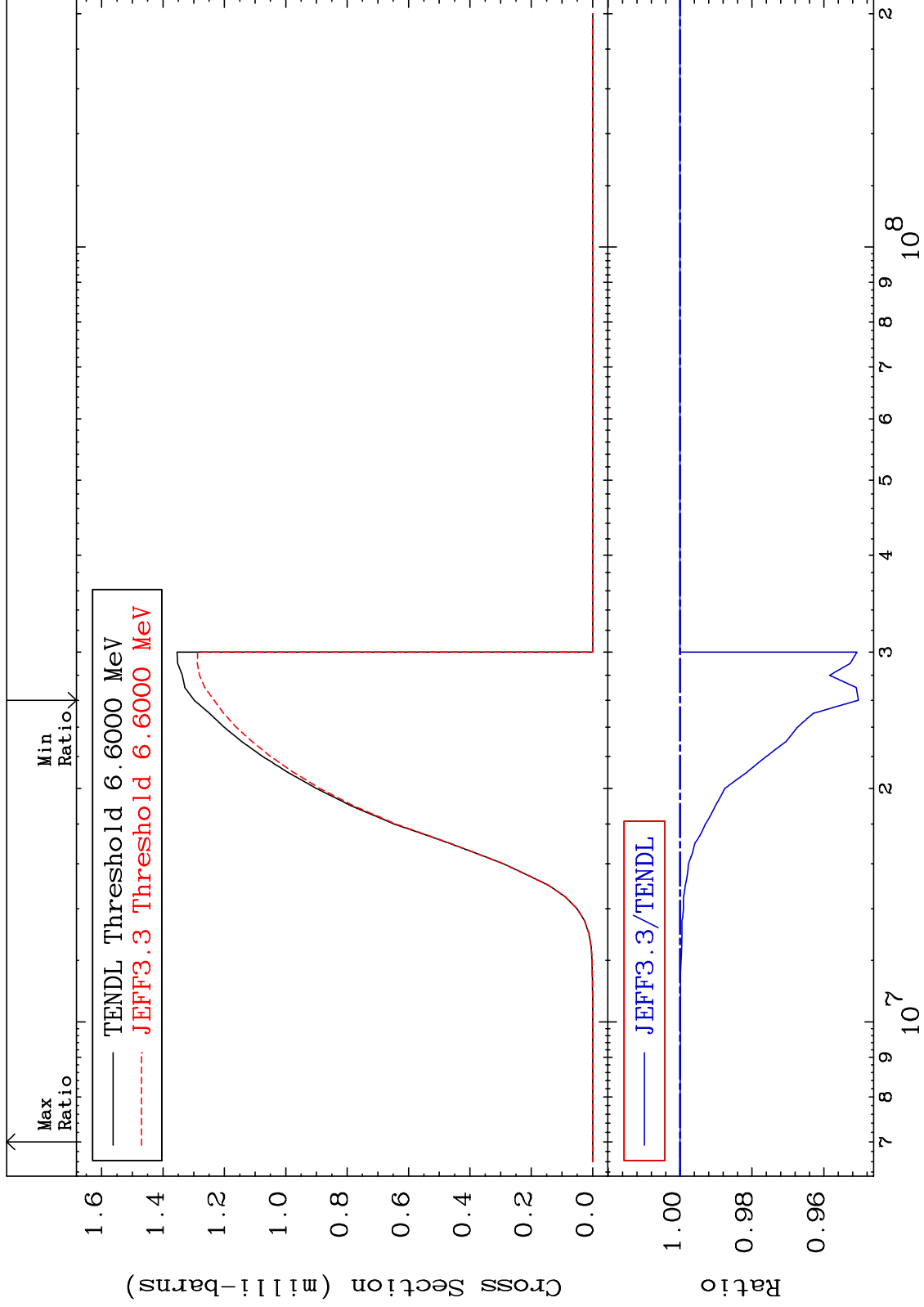
73-Ta-179

MAT 7322

(n,d):72-Hf-178m5

73-Ta-179

Radionuclide Production Cross Section -4.961 To 0.000 %

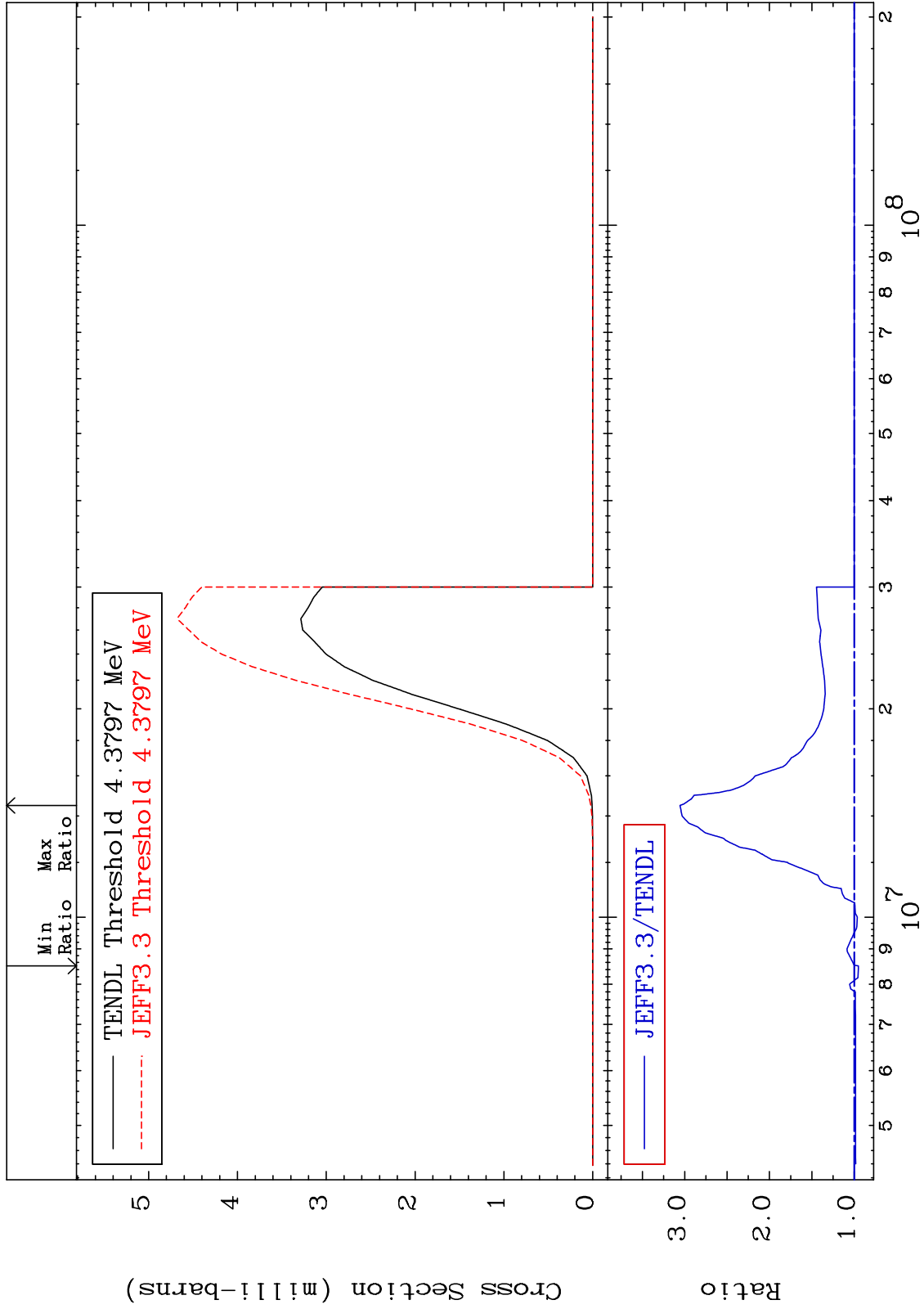


MAT 7322

(n, t): 72-Hf-177g

73-Ta-179

Radionuclide Production Cross Section -4.928 To 205.5 %



95

Incident Energy (eV)

73-Ta-179

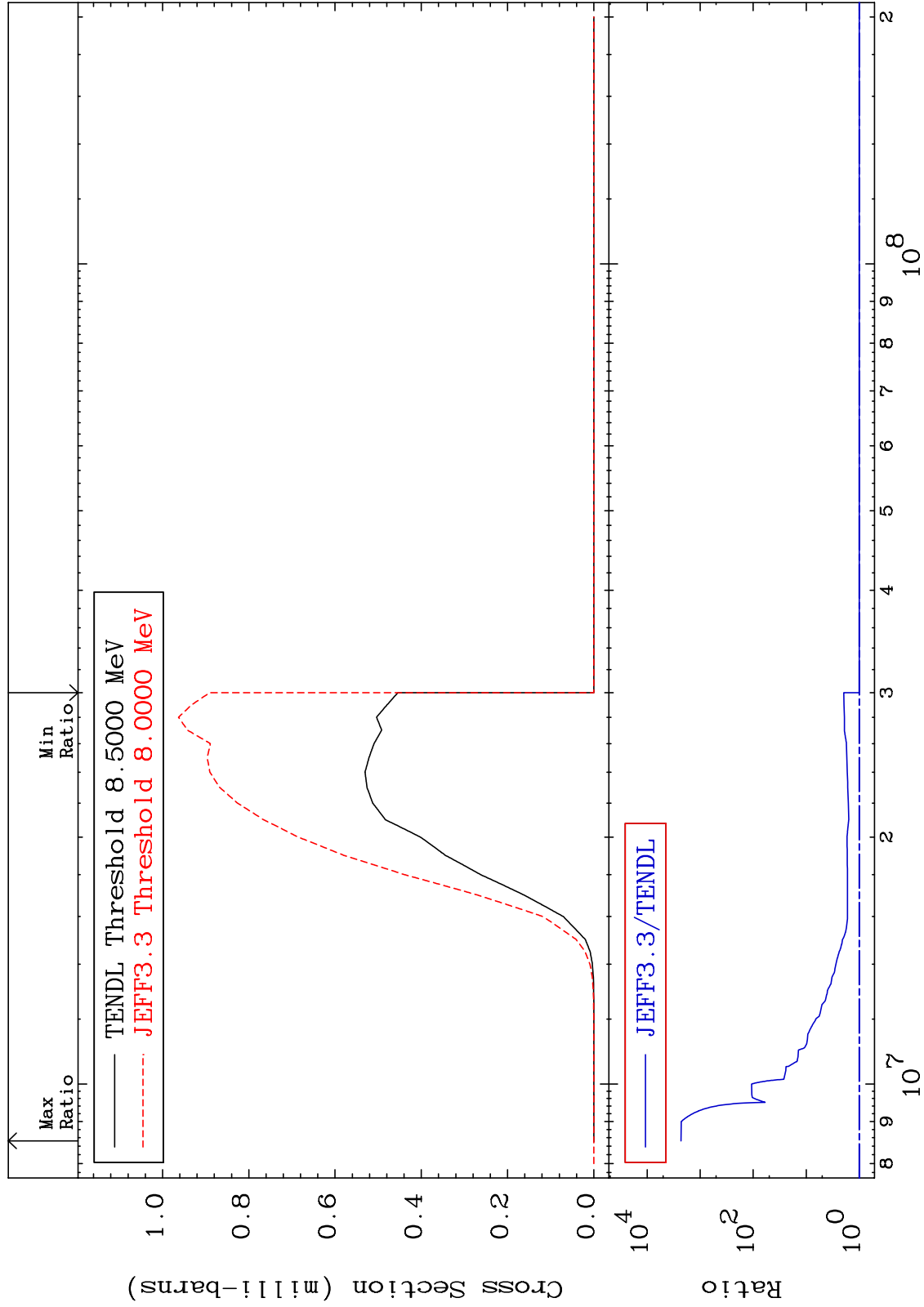


MAT 7322

(n, t): 72-Hf-177m5

73-Ta-179

Radionuclide Production Cross Section 0.000 To 9999. %



96

Incident Energy (eV)

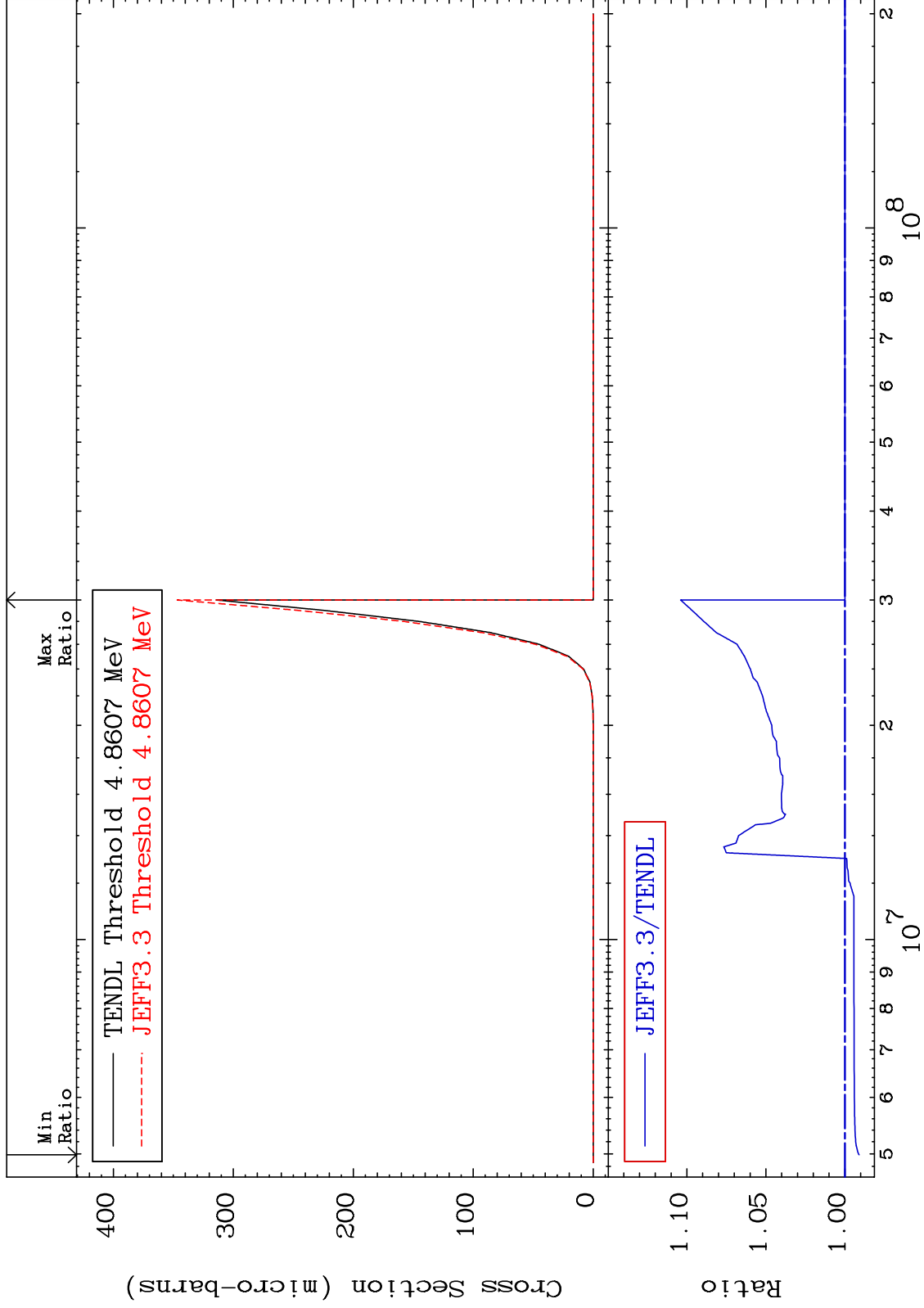
73-Ta-179

MAT 7322

(n, He-3): 71-Lu-177g

73-Ta-179

Radionuclide Production Cross Section -0.903 To 10.40 %



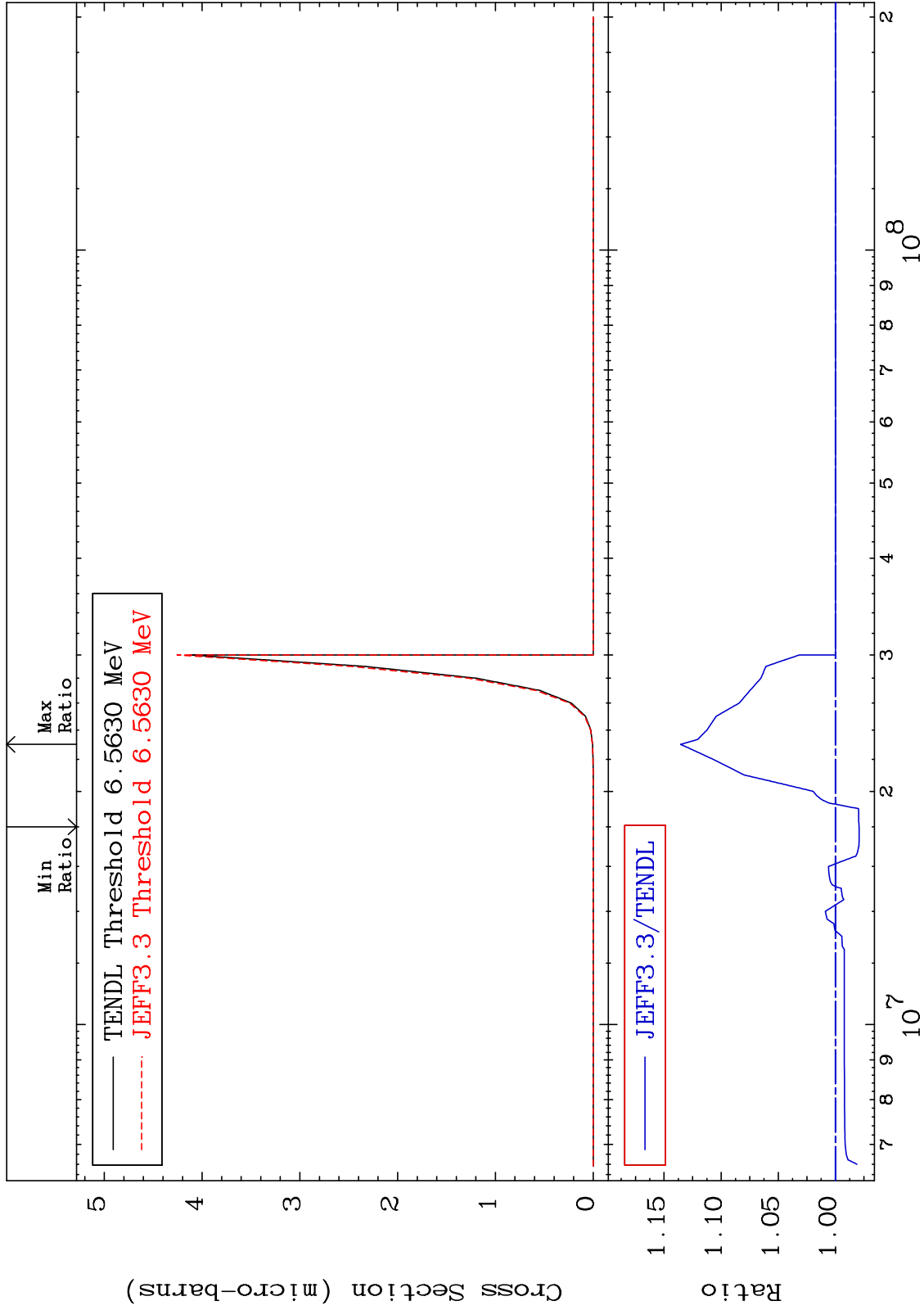
97

Incident Energy (eV)

73-Ta-179

MAT 7322

(n,2p):71-Lu-178g 73-Ta-179  
Radionuclide Production Cross Section -2.077 To 13.55 %



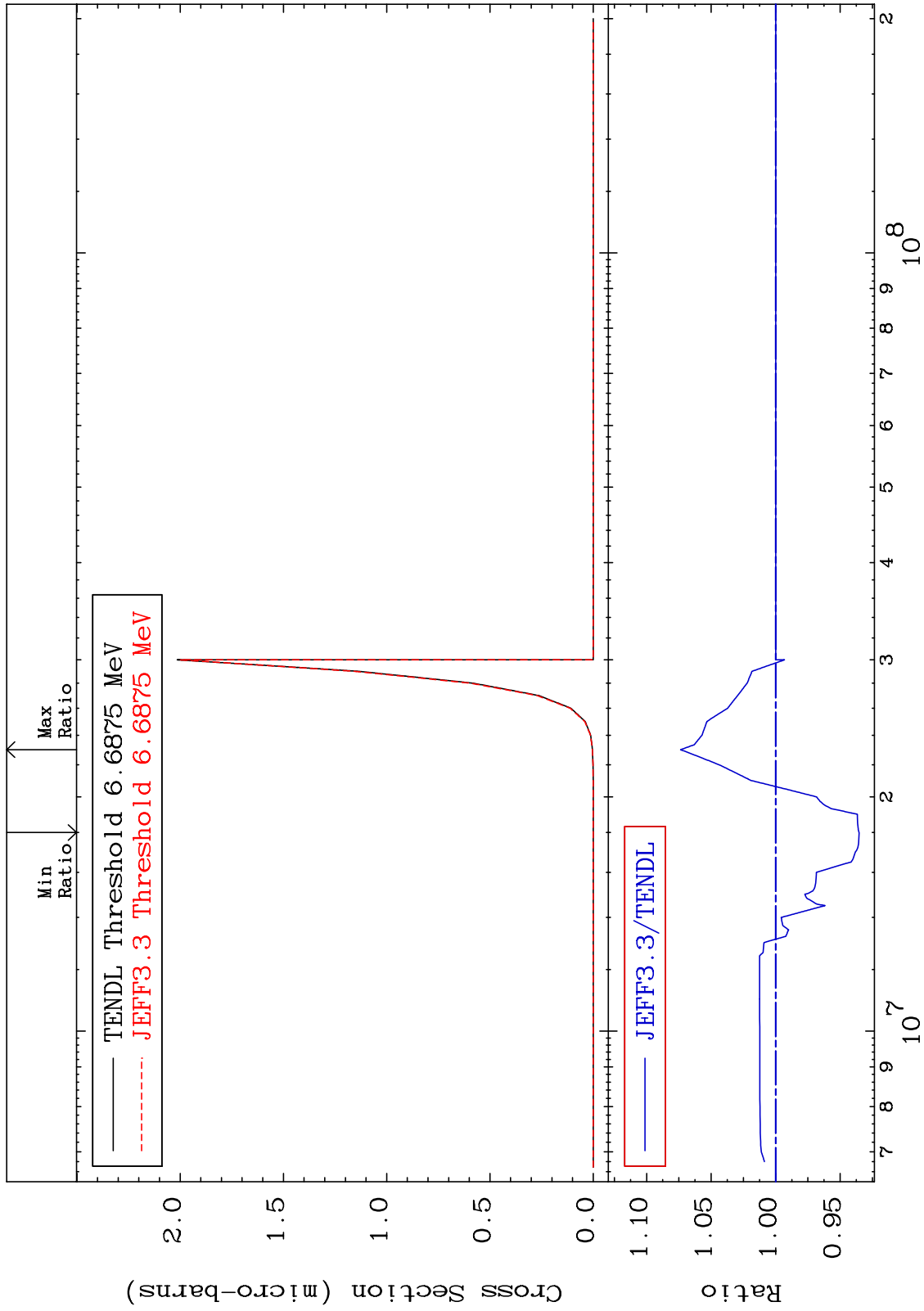
MAT 7322

(n,2p): 71-Lu-178m3

73-Ta-179

Radionuclide Production Cross Section

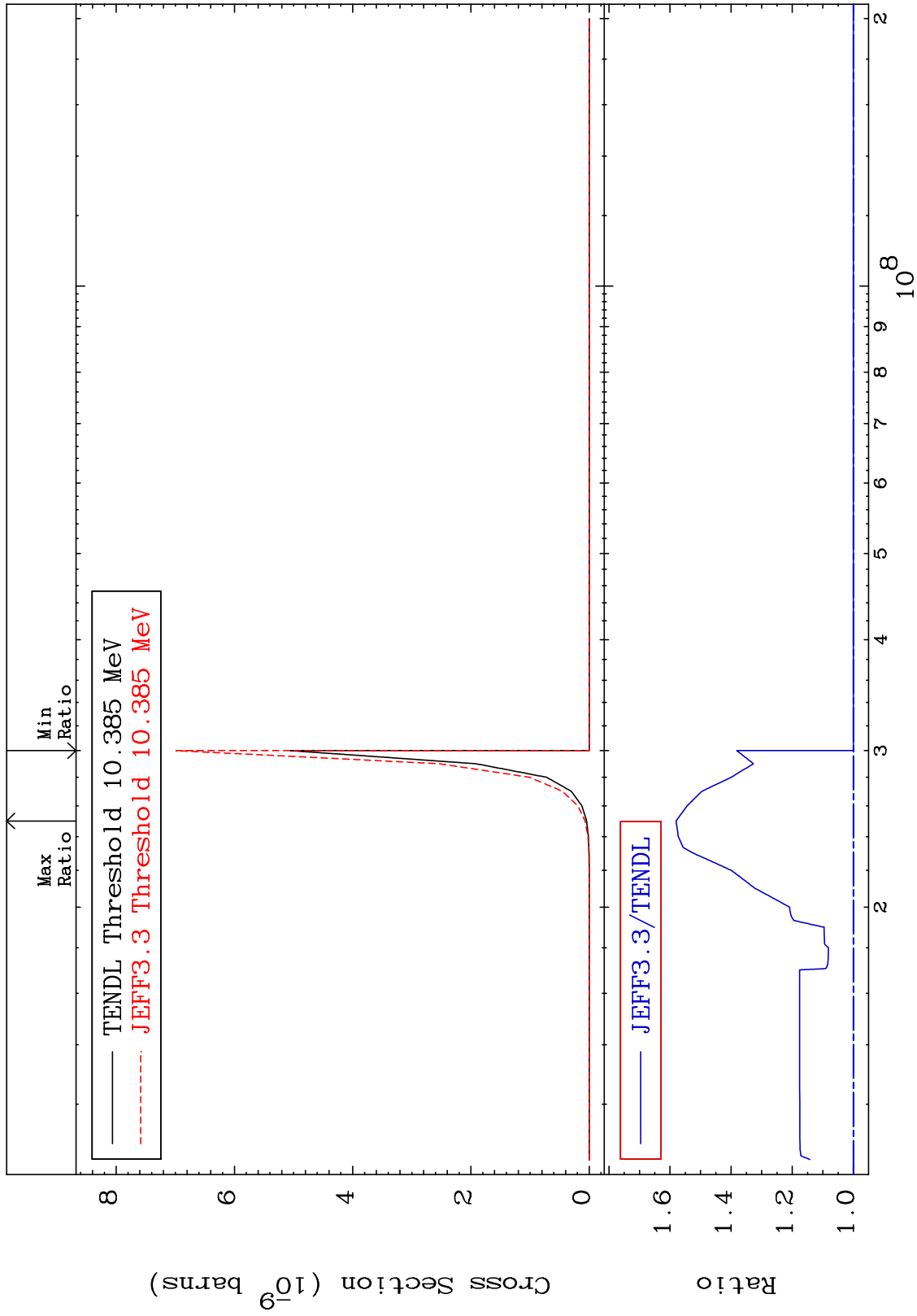
-6.471 To 7.366 %



MAT 7322

(n, p) d:71-Lu-177g  
Radionuclide Production Cross Section 0.000 To 58.03 %

73-Ta-179



100

Incident Energy (eV)

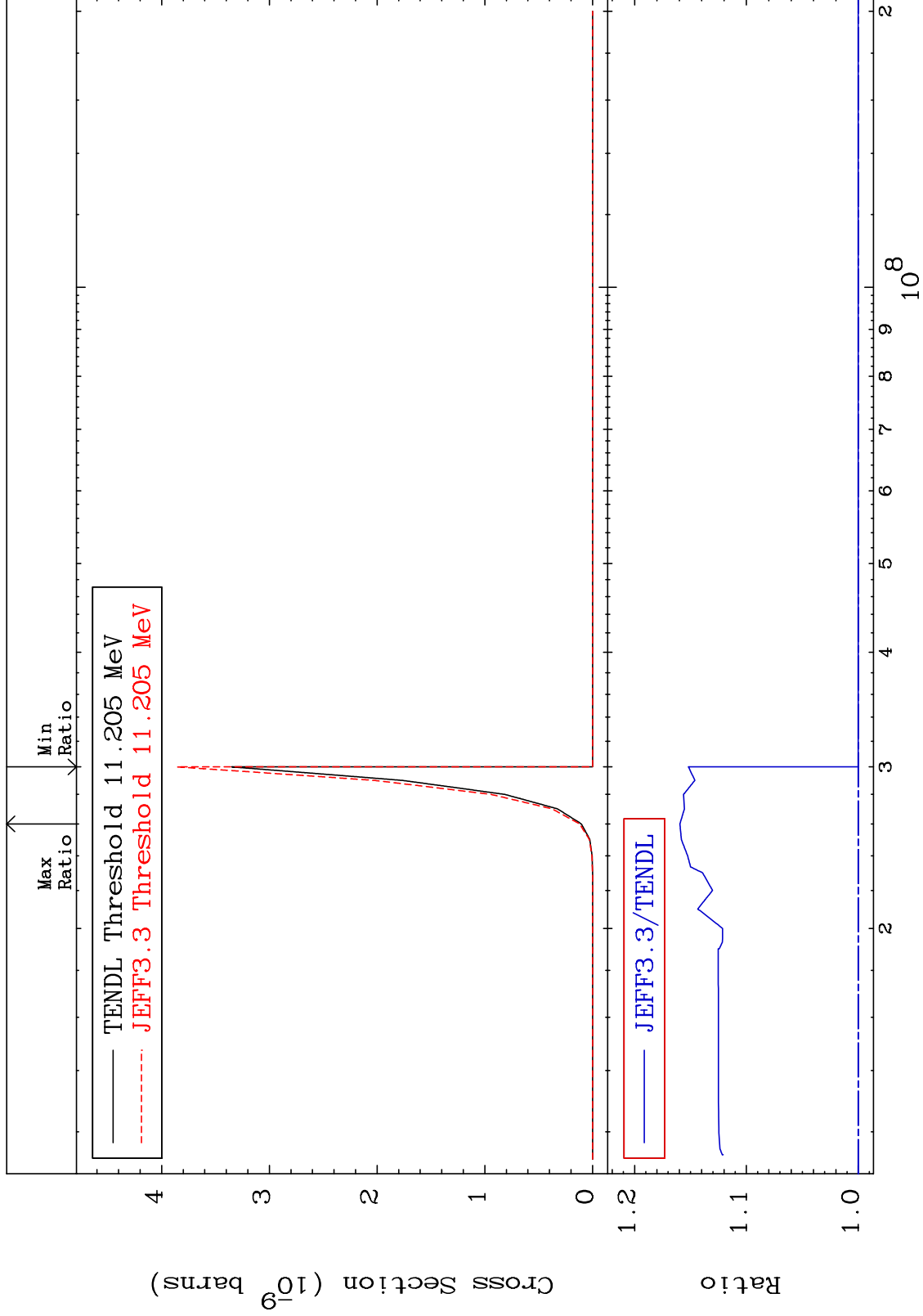
73-Ta-179

MAT 7322

(n, p) t: 71-Lu-176g

<sup>73</sup>Ta-179

Radionuclide Production Cross Section 0.000 To 15.95 %



MAT 7322

(n,p) t:71-Lu-176m1

73-Ta-179

Radionuclide Production Cross Section -41.24 To 9.201 %

