

Program Complot  
(Version 2018-1)

by

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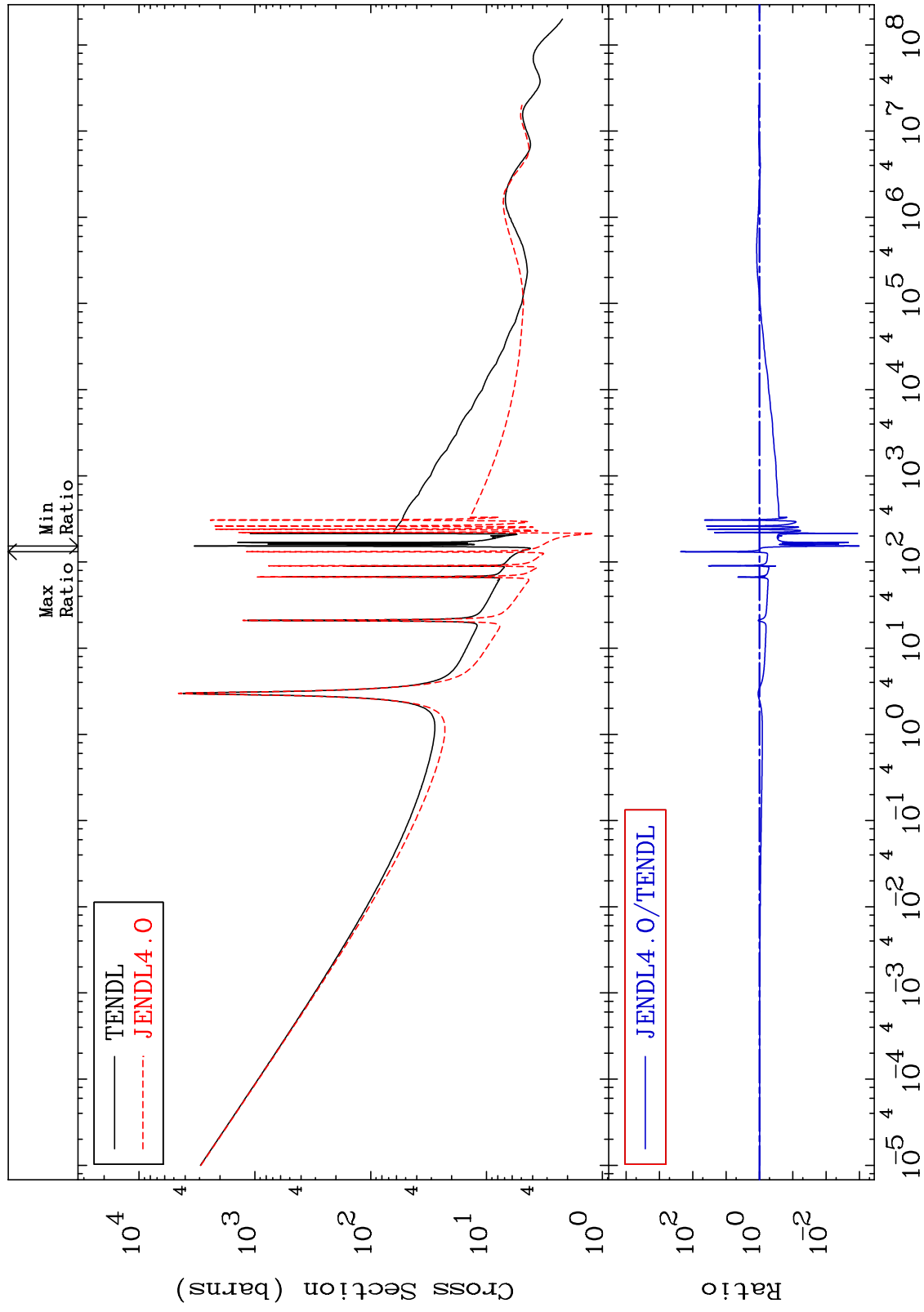
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 5725

Total  
Cross Section

57-La-138  
-99.90 To 9999. %



57-La-138

Incident Energy (eV)

1

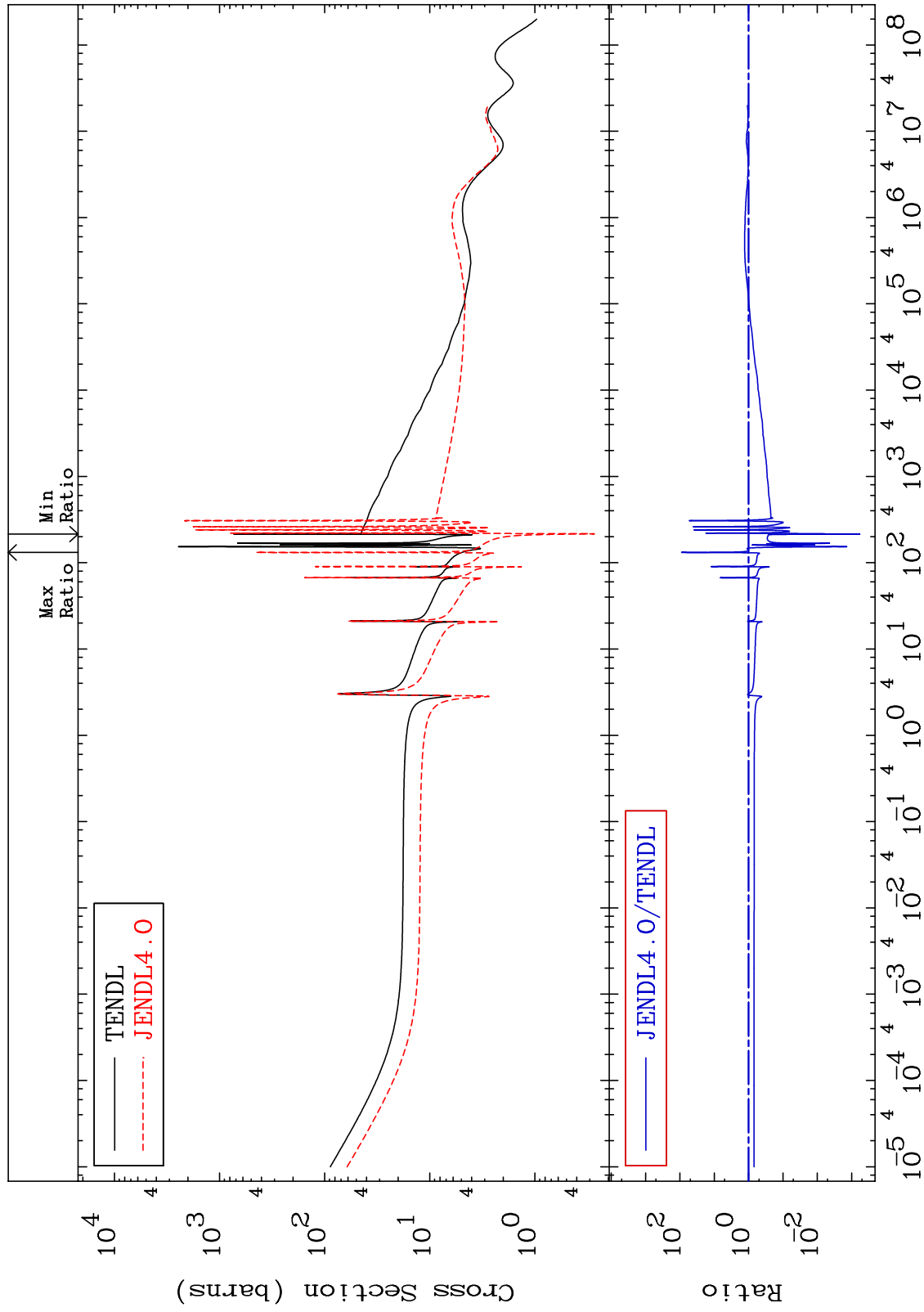
MAT 5725

Elastic

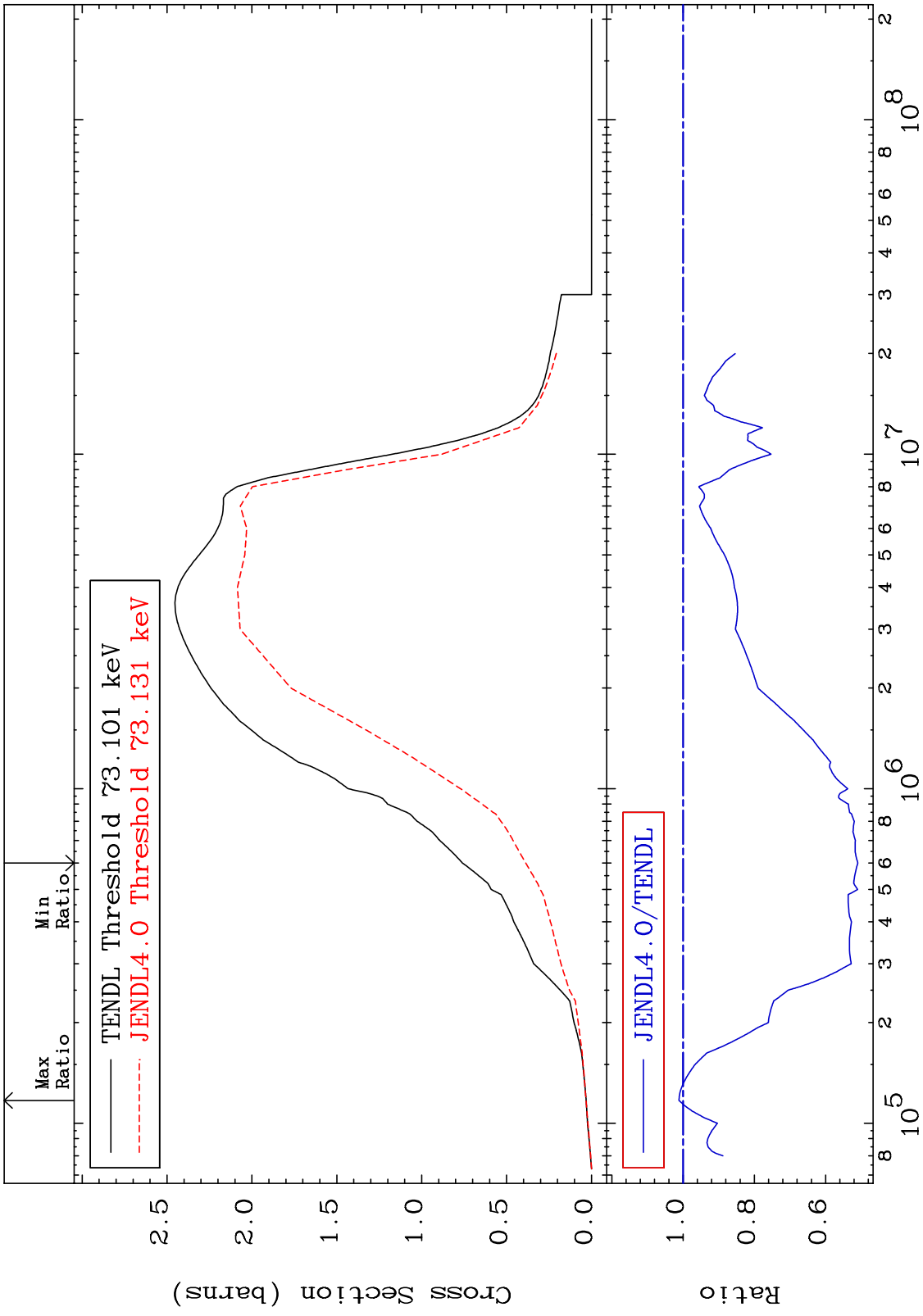
Cross Section

57-La-138

-99.94 To 8926. %

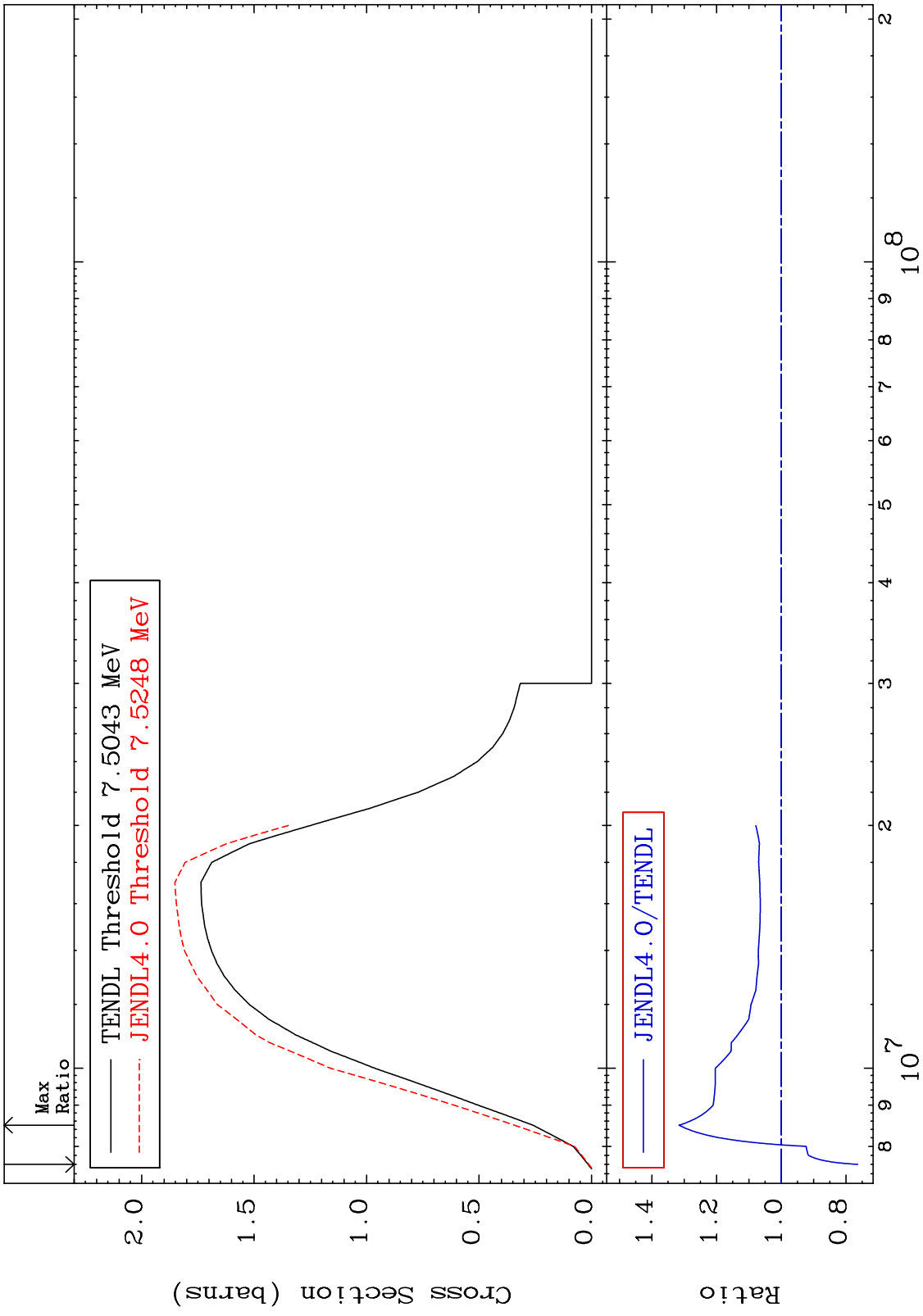


MAT 5725 Inelastic Cross Section 57-La-138 -49.05 To 1.131 %

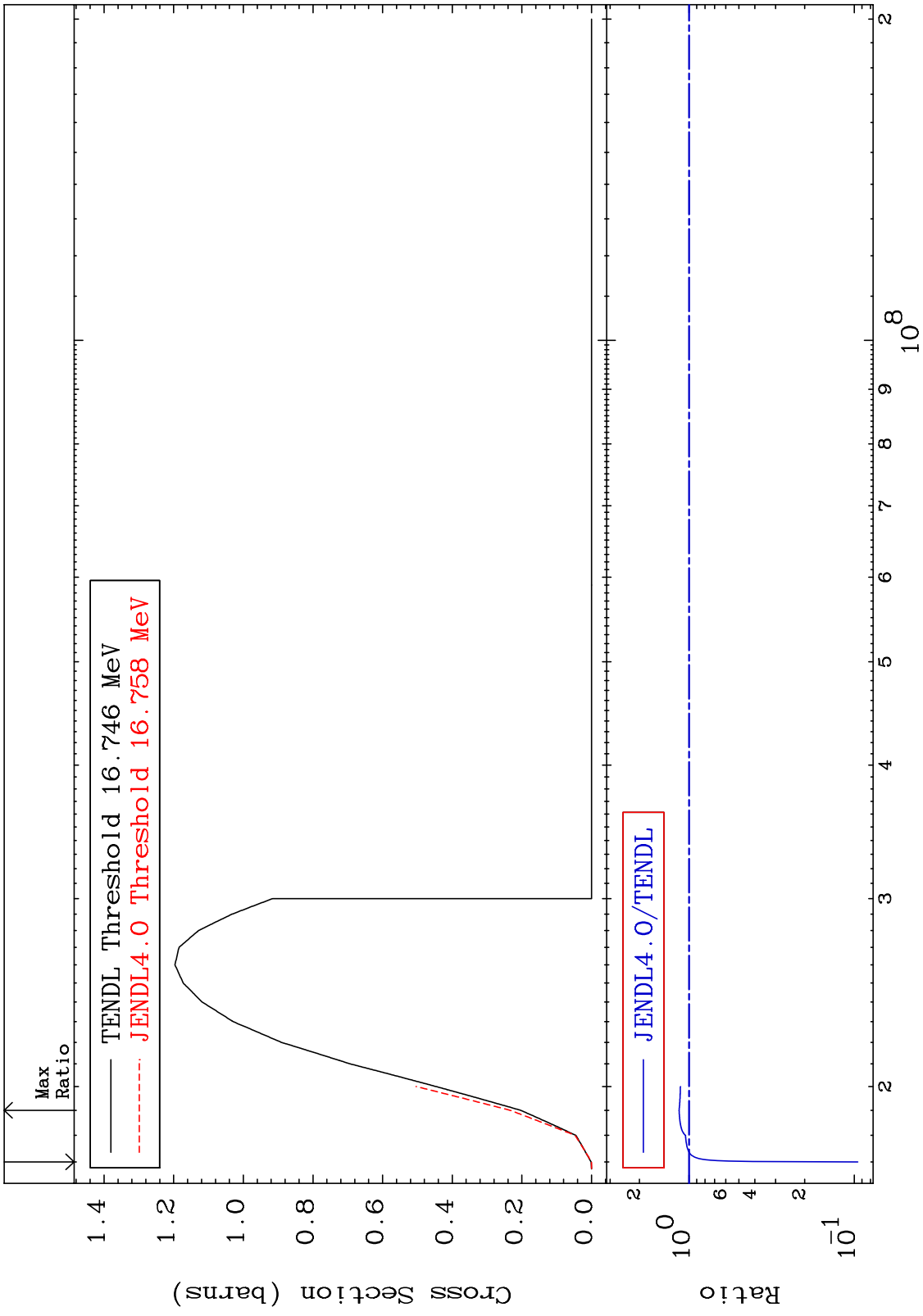


3 57-La-138

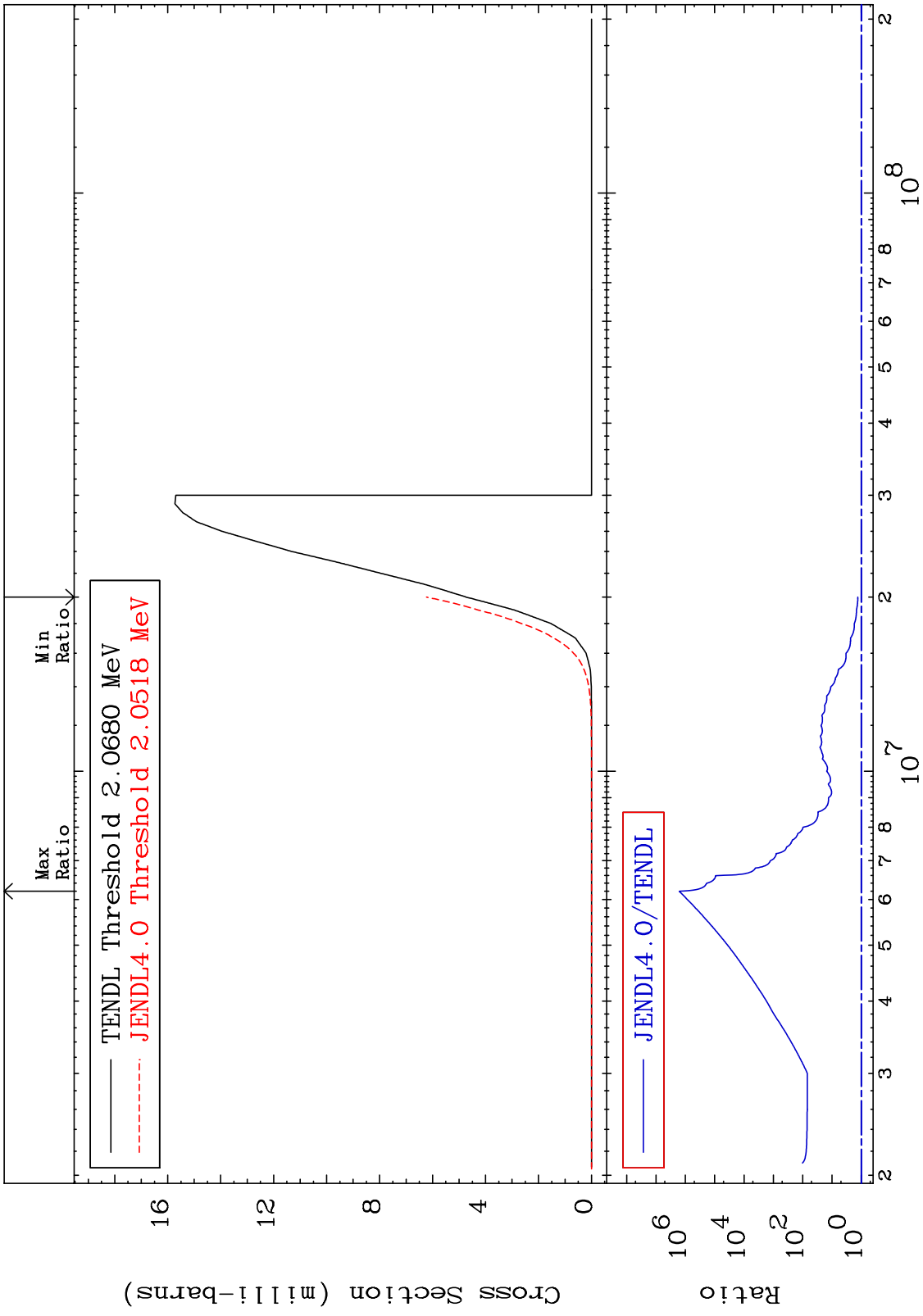
MAT 5725 (n,2n) Cross Section 57-La-138 -23.69 To 31.61 %



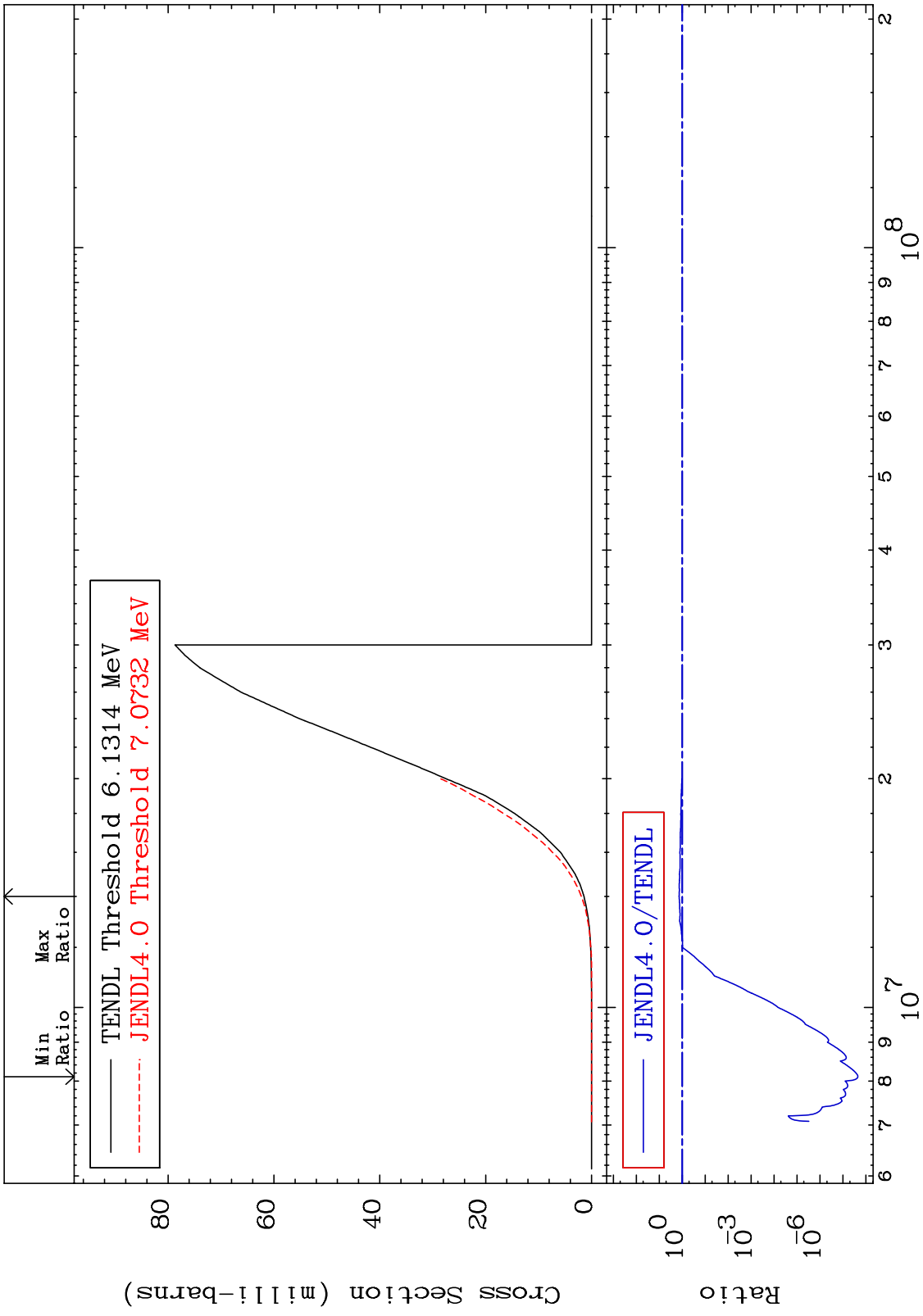
MAT 5725 (n,3n) Cross Section 57-La-138 -90.47 To 14.98 %



MAT 5725  $(n, n') \alpha$  57-La-138  
 Cross Section 31.78 To 9999. %



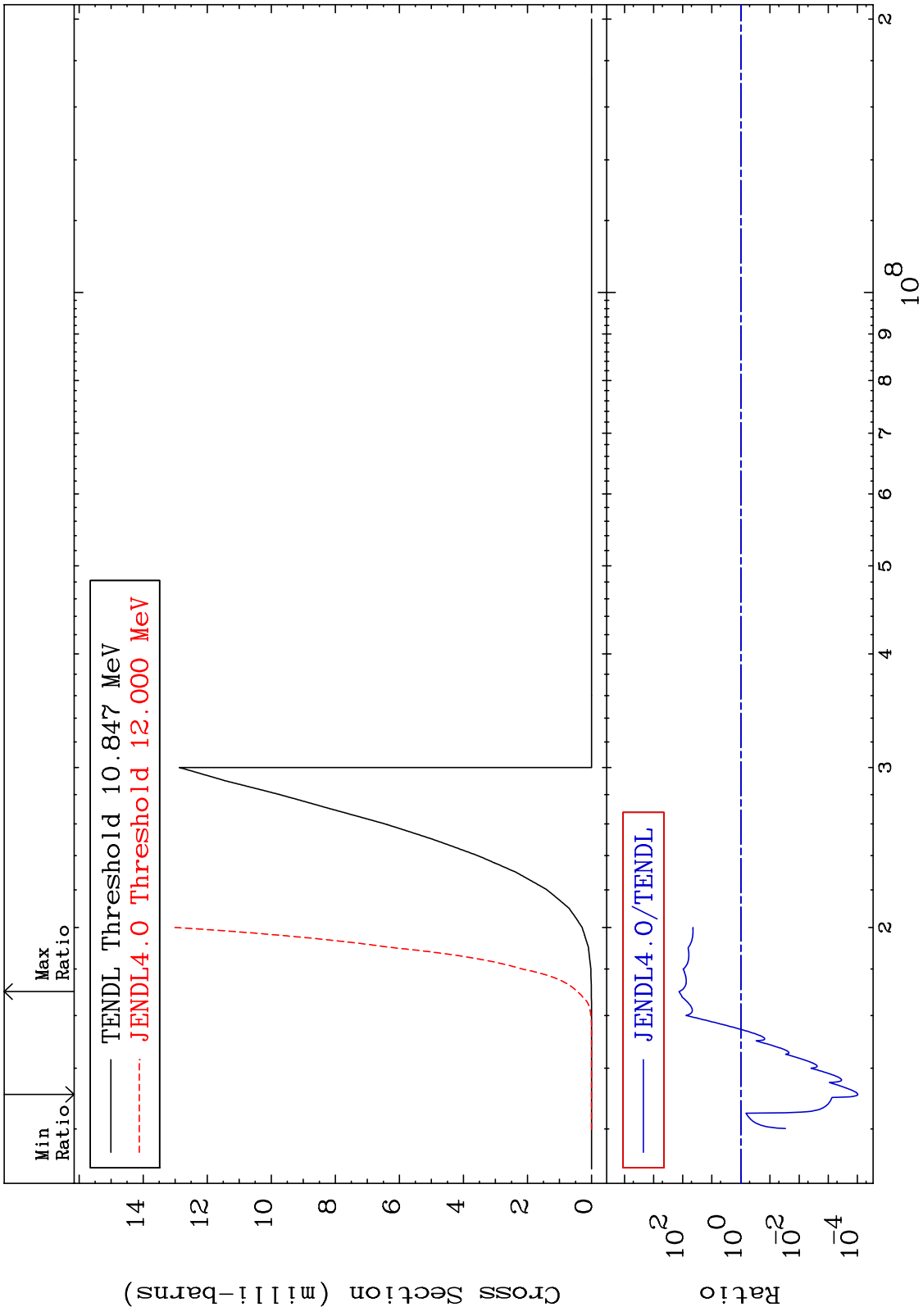
MAT 5725 57-La-138  
(n, n') p  
Cross Section  
-100.0 To 37.07 %

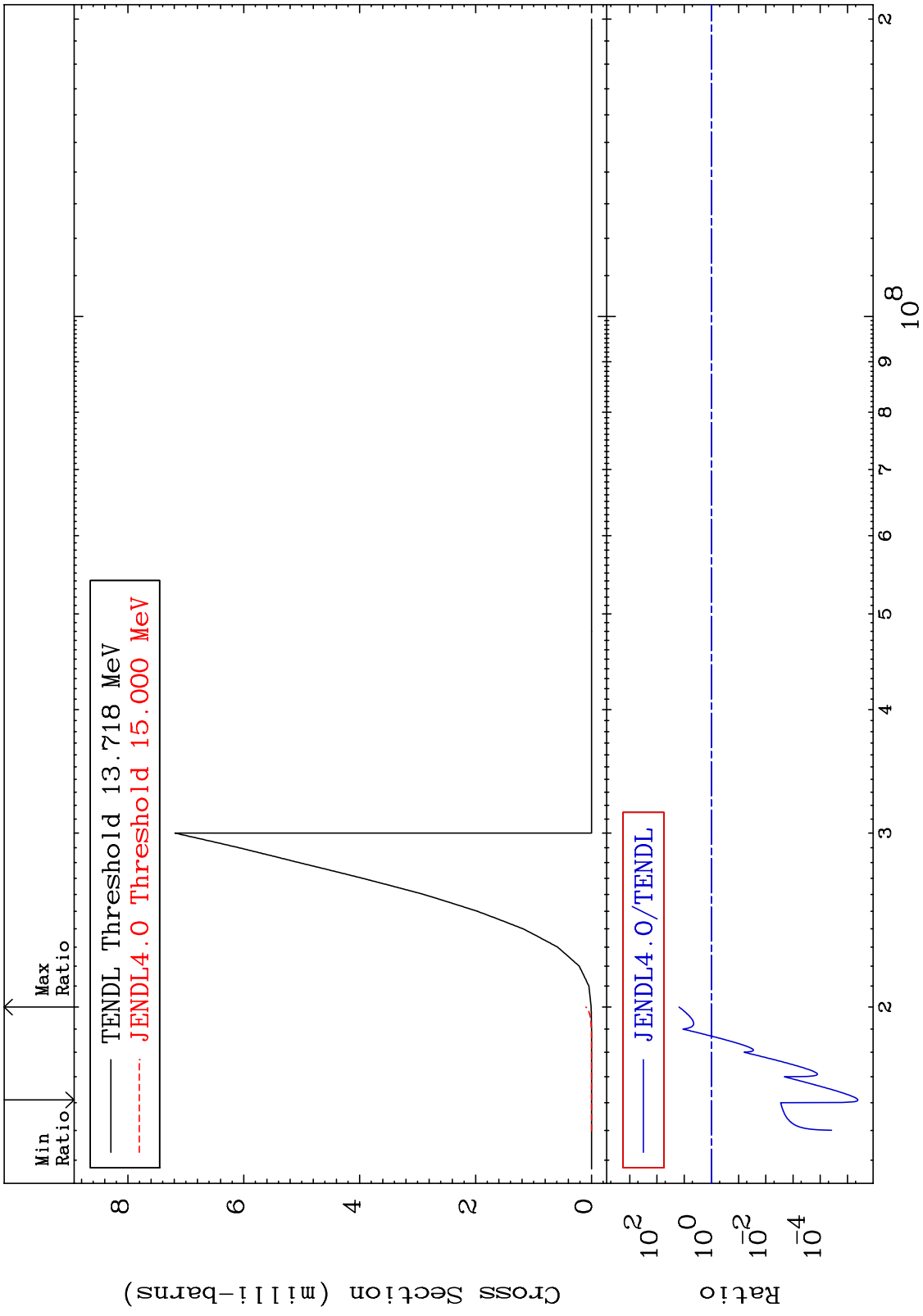


7 57-La-138

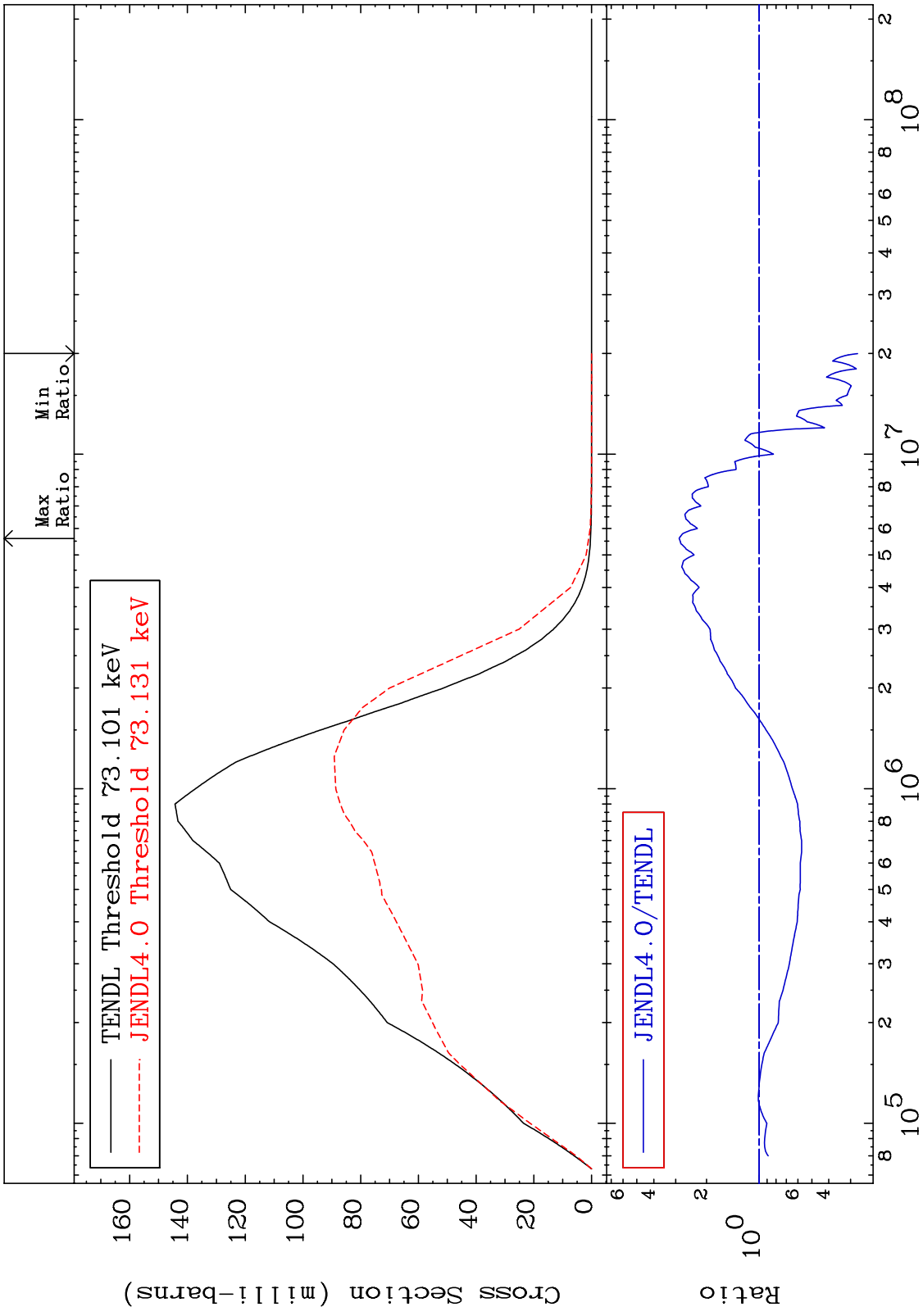


MAT 5725 (n,n') d 57-La-138  
 Cross Section -99.99 To 9999. %



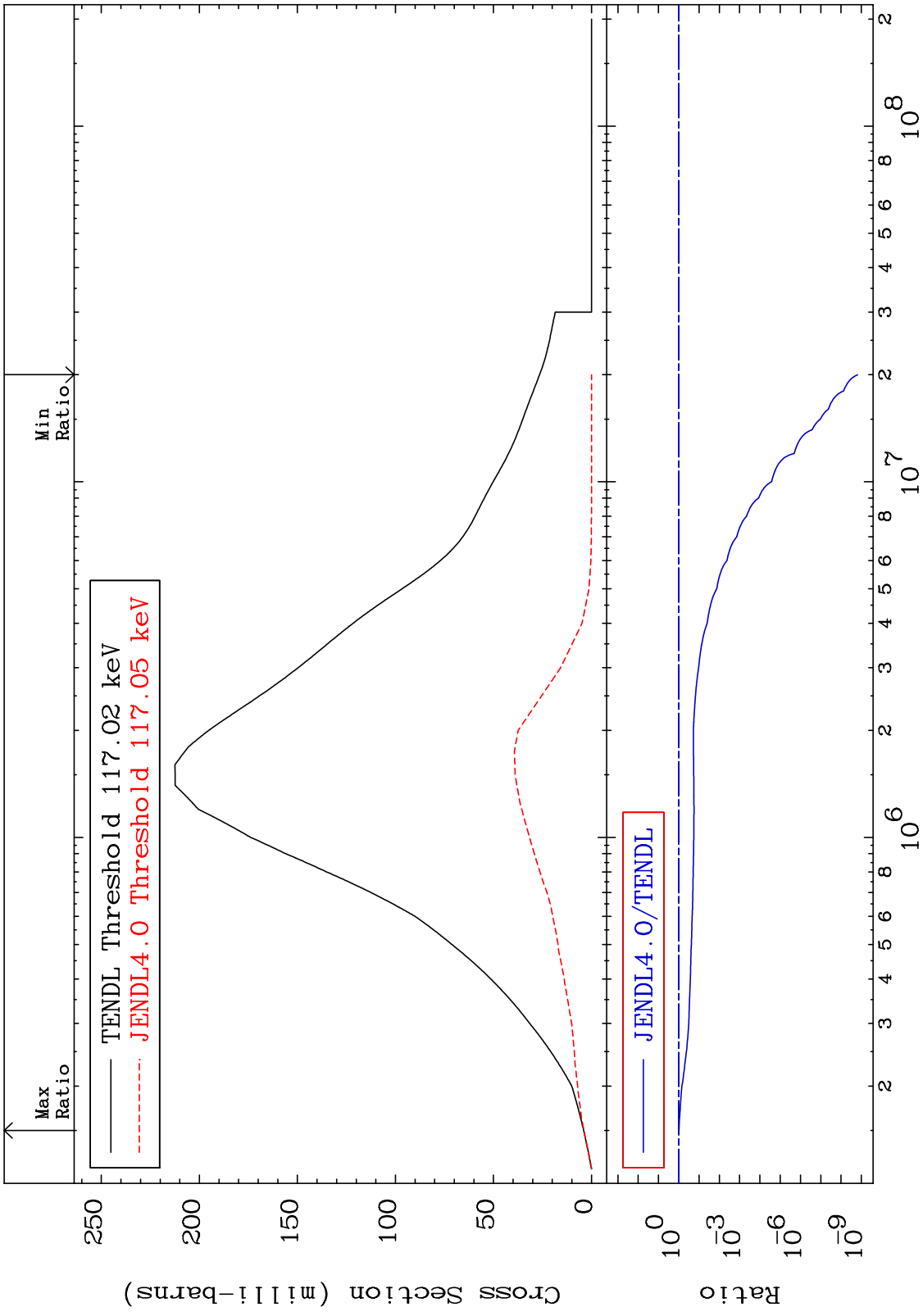


MAT 5725 MT= 51 (n,n') Level Cross Section 57-La-138 -72.71 To 186.8 %



57-La-138

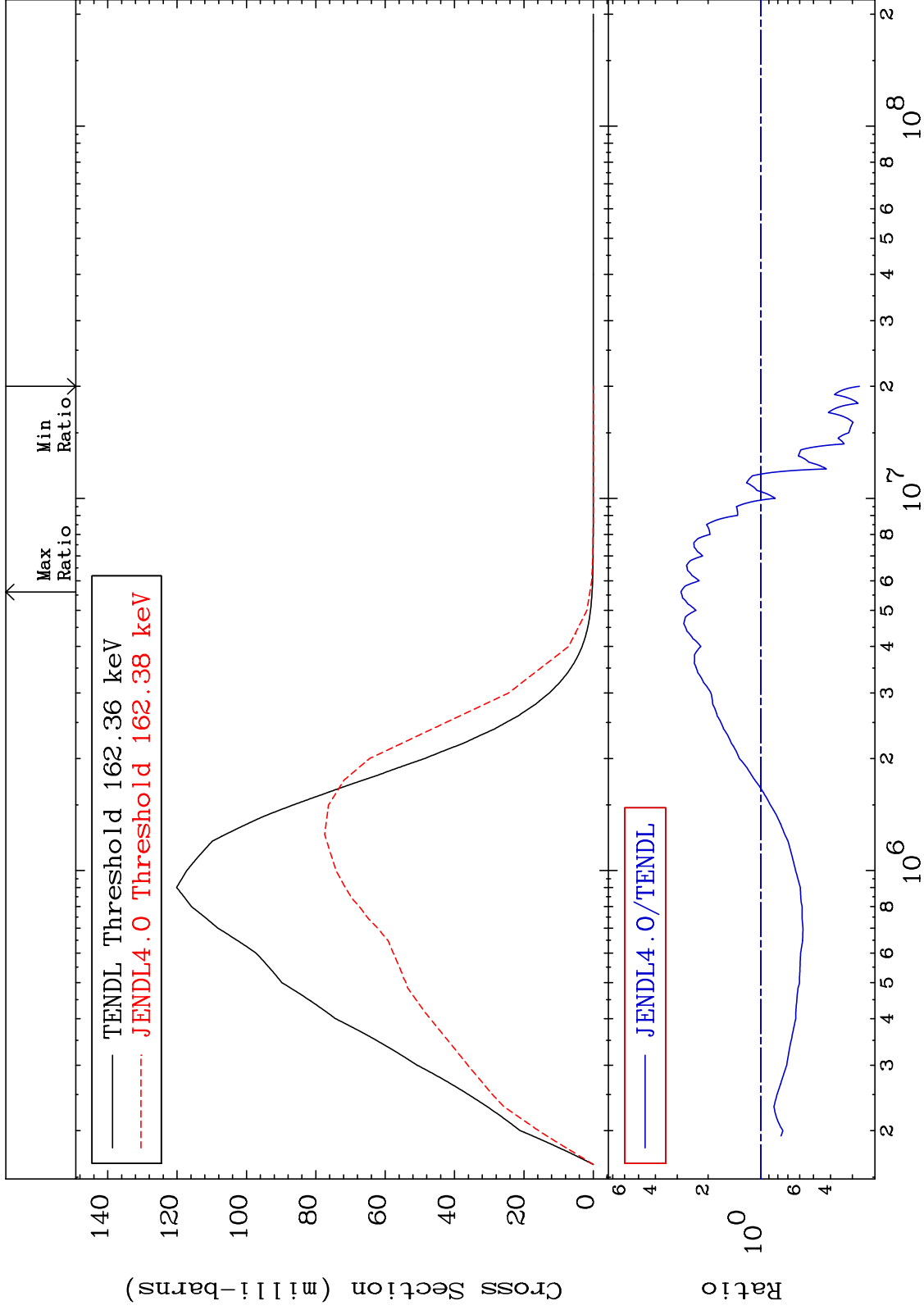
MAT 5725 MT= 52 (n,n') Level Cross Section 57-La-138 -100.0 To -3.040%



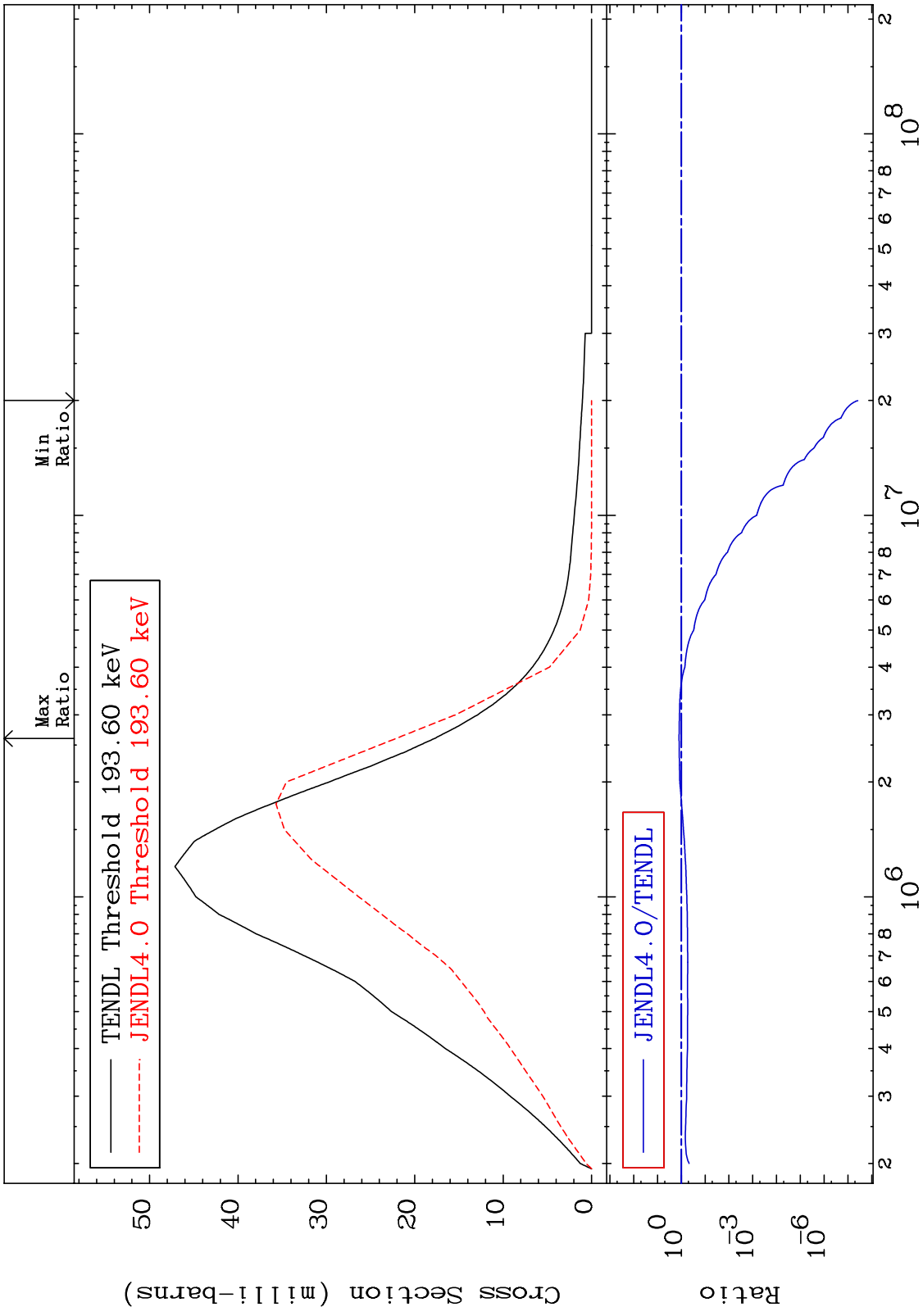
MAT 5725

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

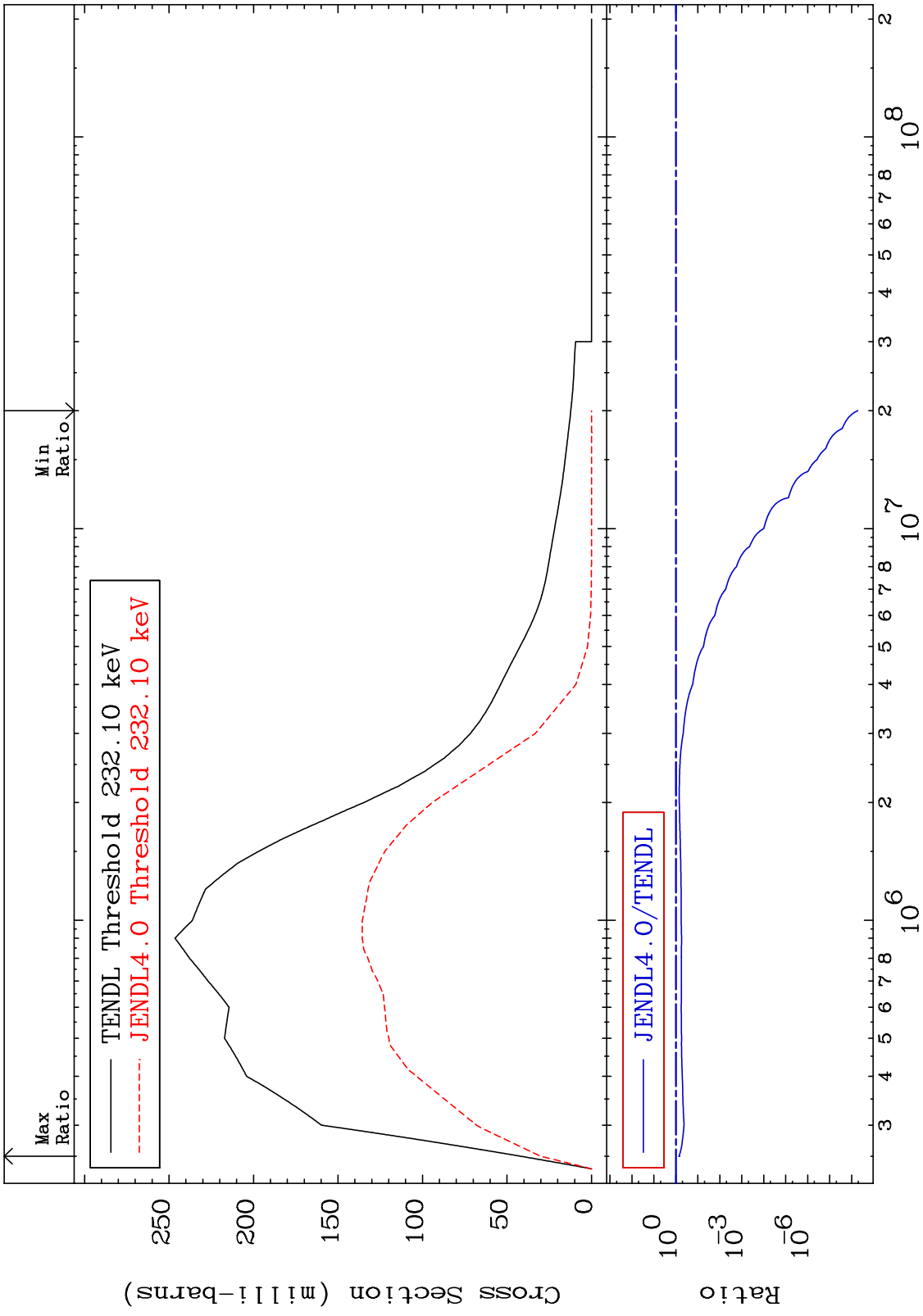
57-La-138  
-72.73 To 186.4 %



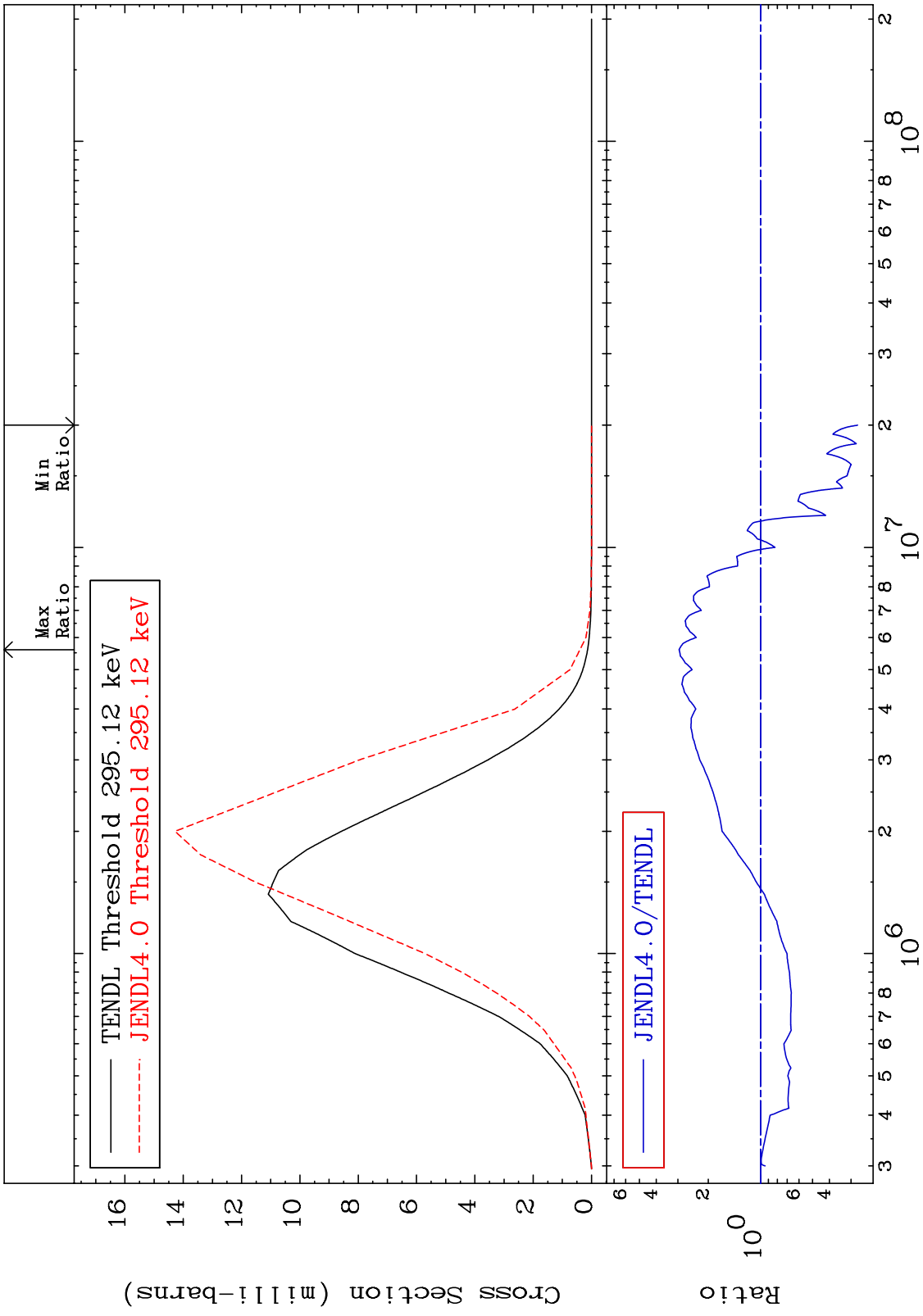
MAT 5725 MT= 54 (n,n') Level Cross Section 57-La-138 -100.0 To 24.65 %



MAT 5725 MT= 55 (n,n') Level Cross Section 57-La-138 -100.0 To -28.31%



MAT 5725 MT= 56 (n,n') Level Cross Section 57-La-138 -72.60 To 195.1 %

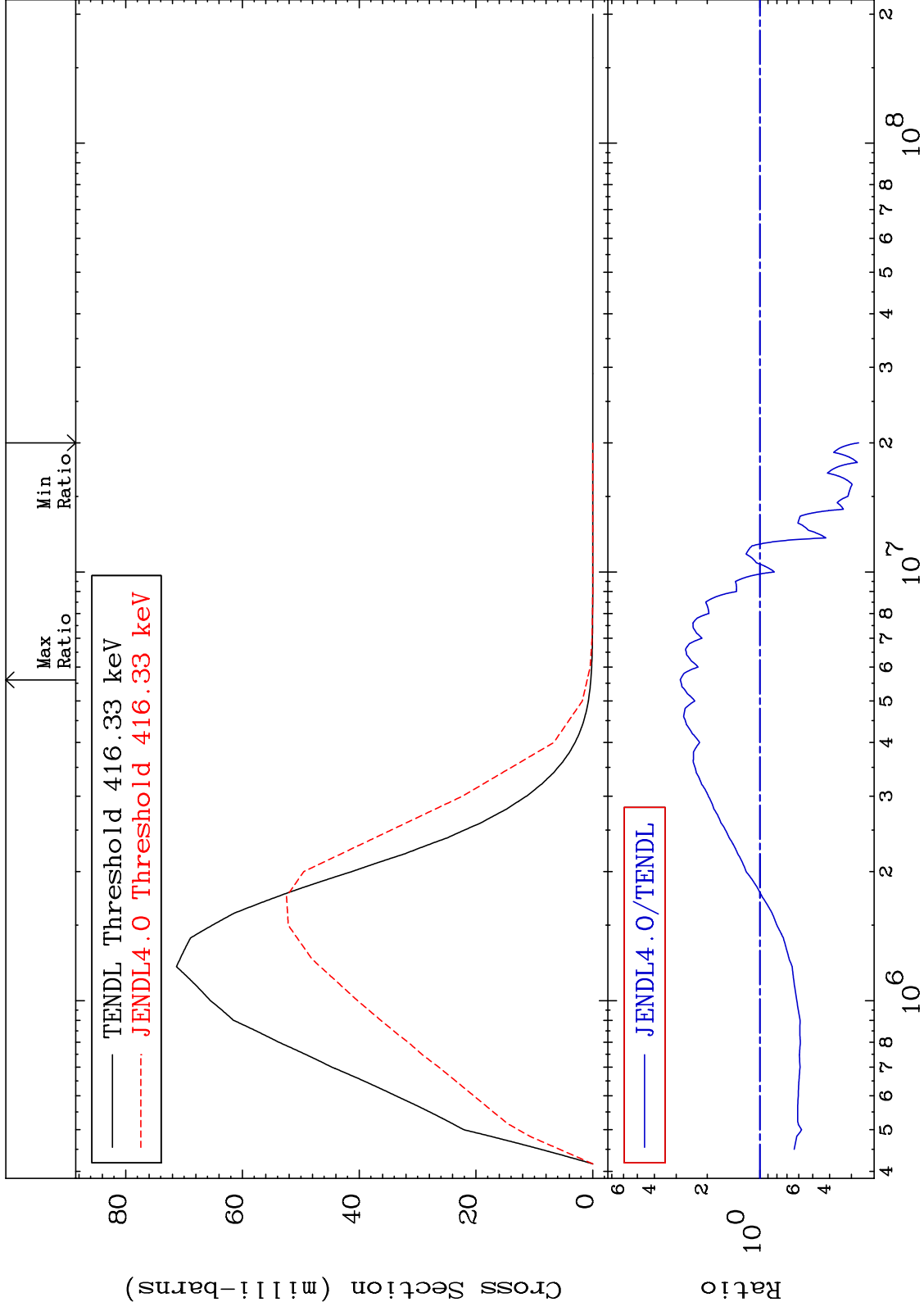




MAT 5725

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

57-La-138  
-72.77 To 184.9 %

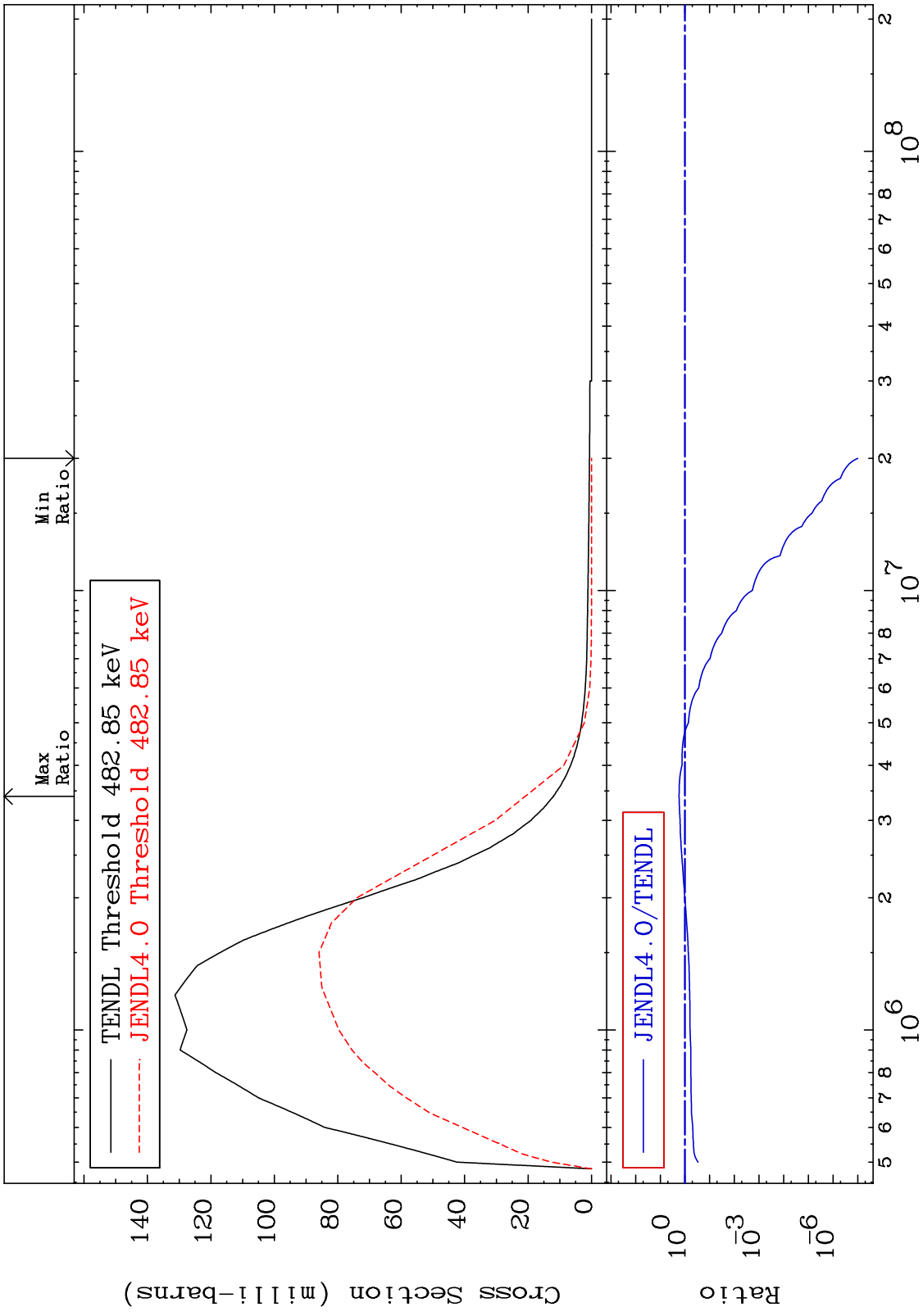


16

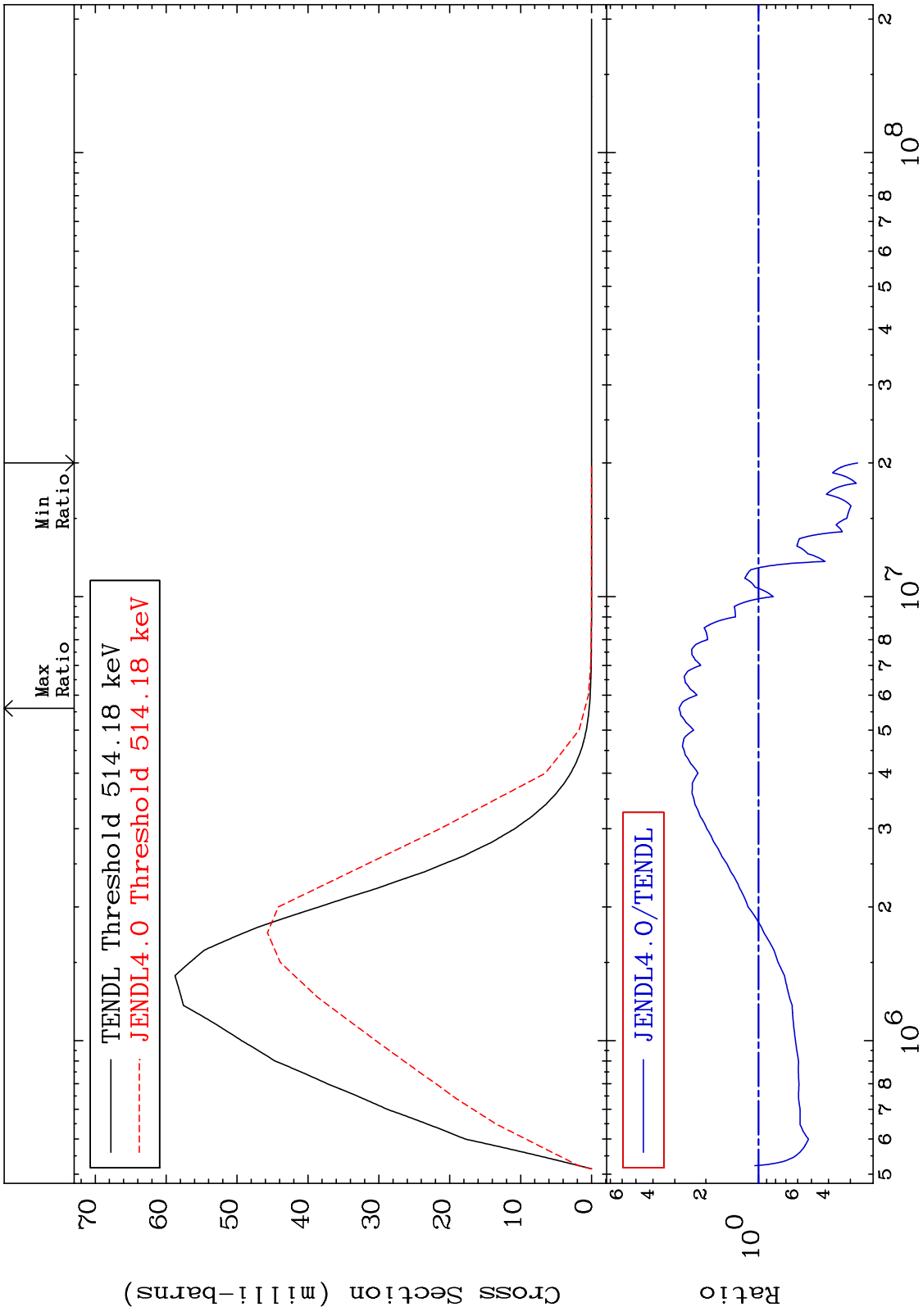
Incident Energy (eV)

57-La-138

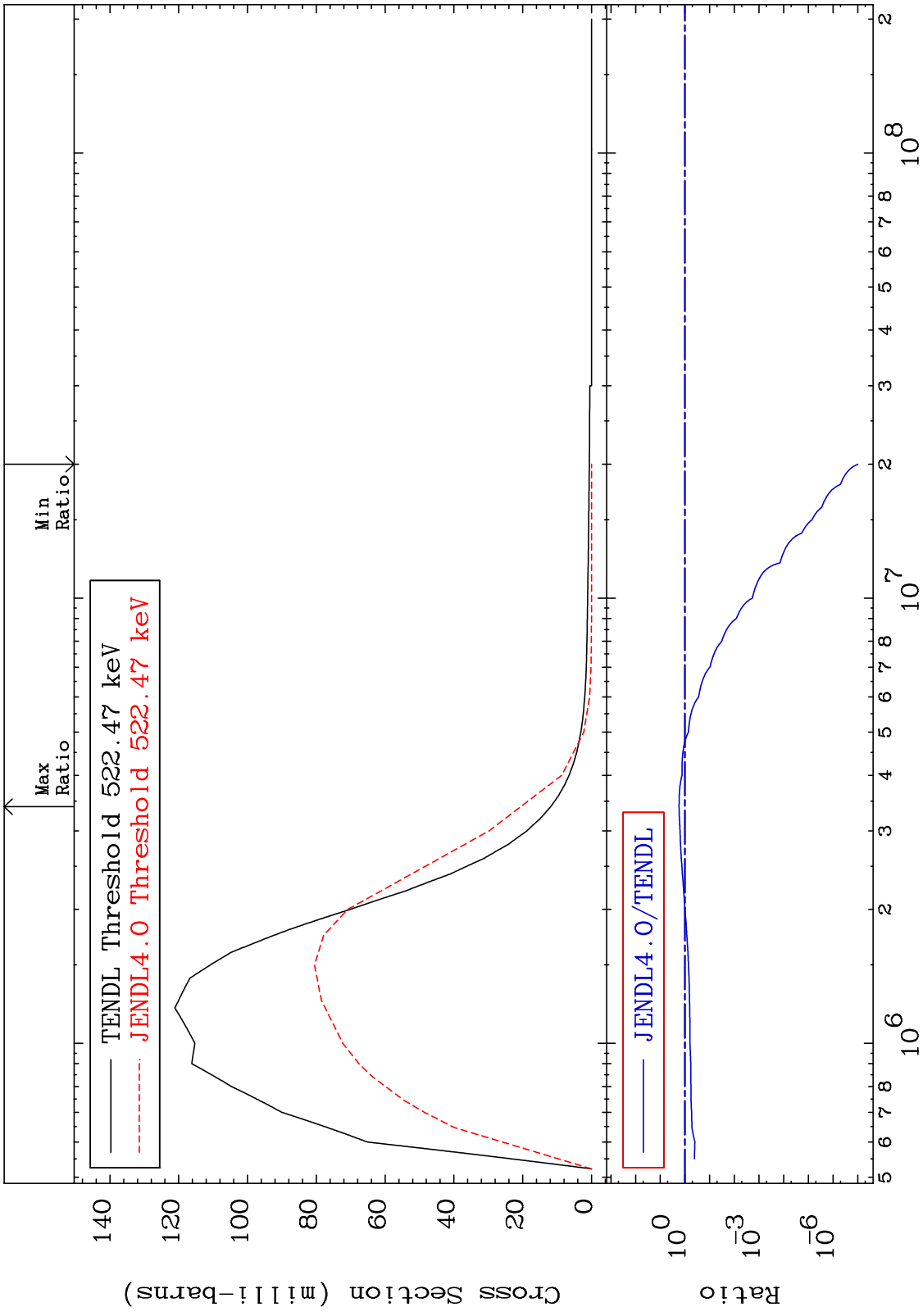
MAT 5725 MT= 58 (n,n') Level Cross Section 57-La-138 -100.0 To 73.94 %



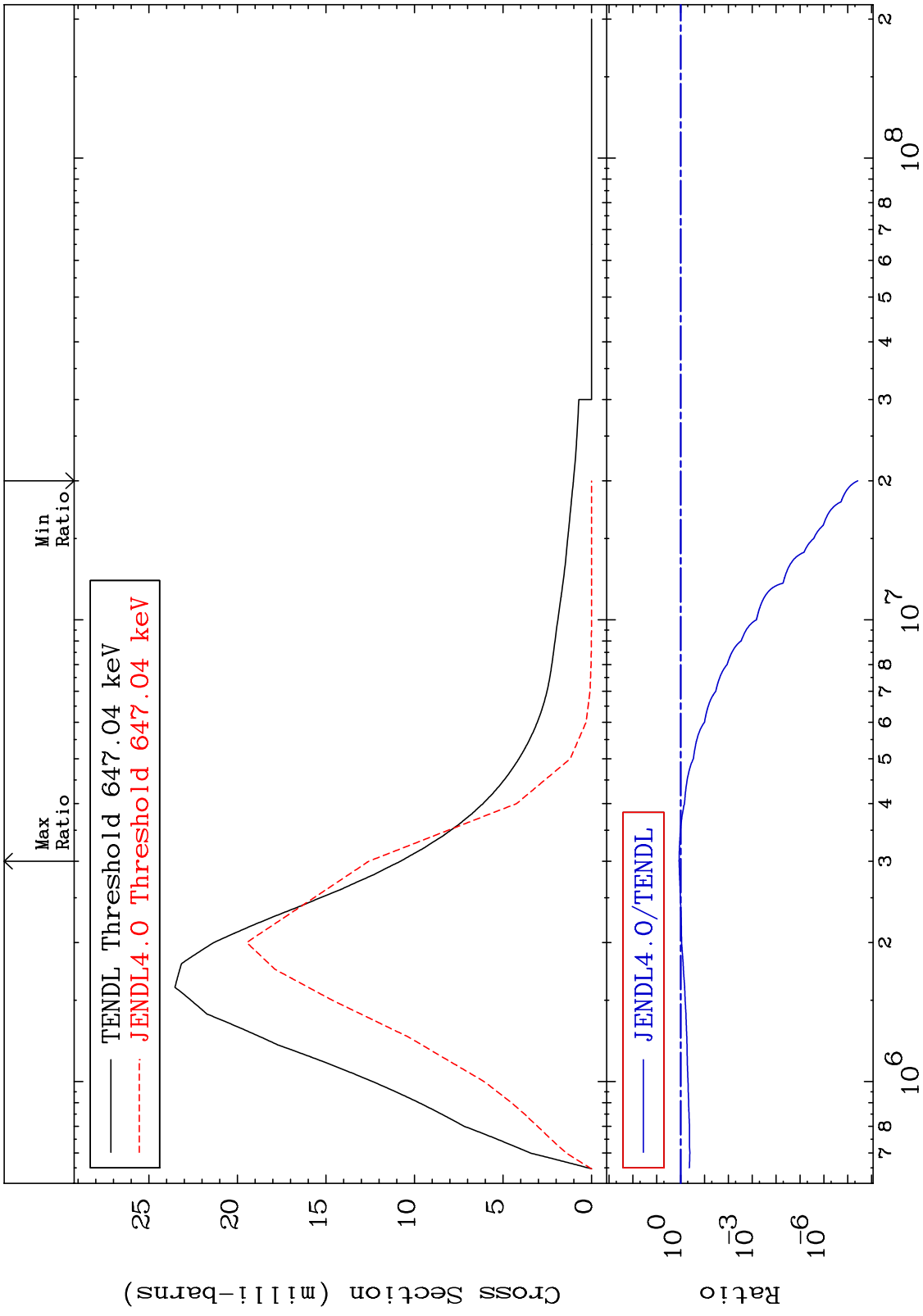
MAT 5725 MT= 59 (n,n') Level Cross Section 57-La-138 -72.79 To 184.1 %



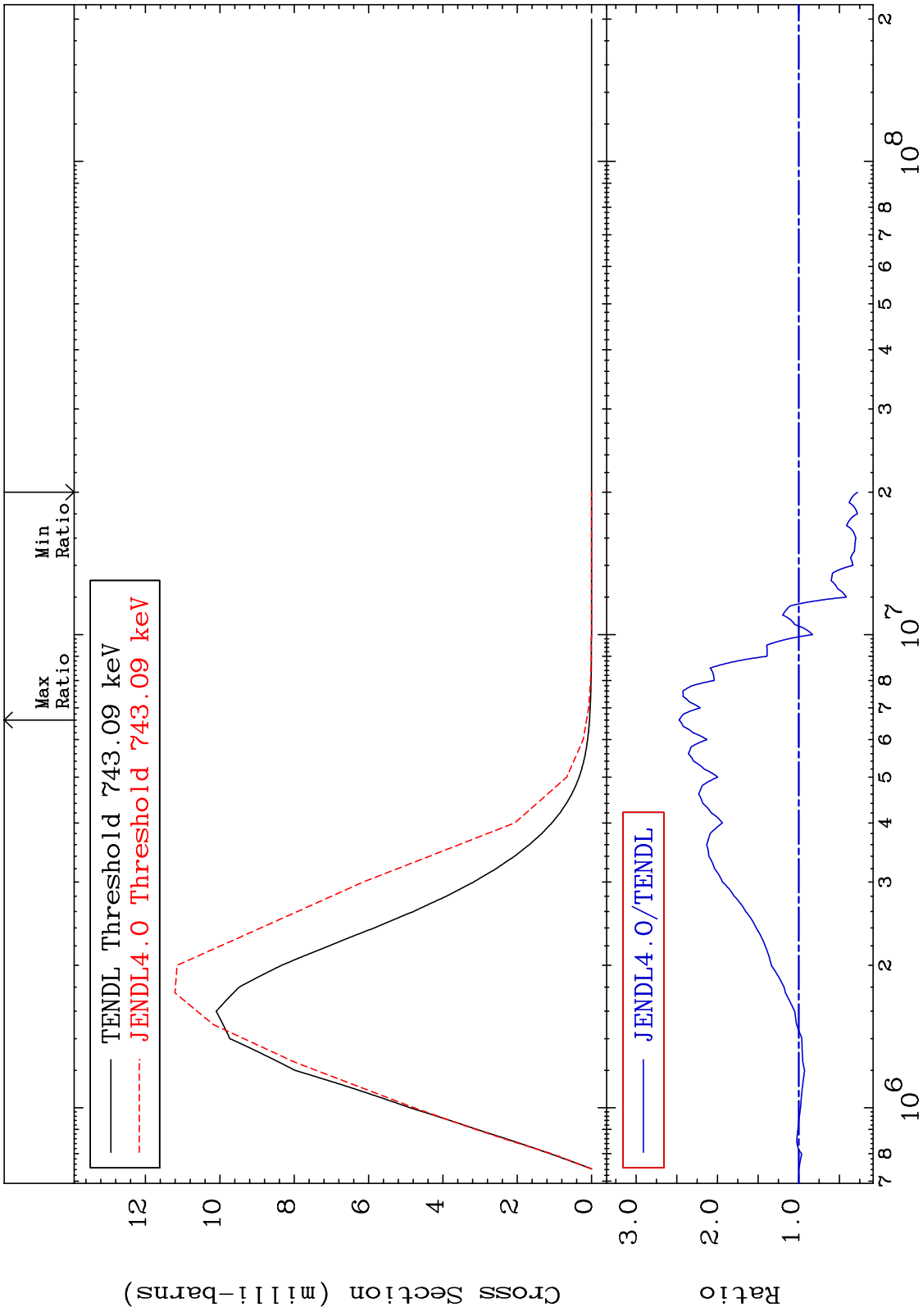
MAT 5725 MT= 60 (n,n') Level Cross Section 57-La-138 -100.0 To 73.54 %



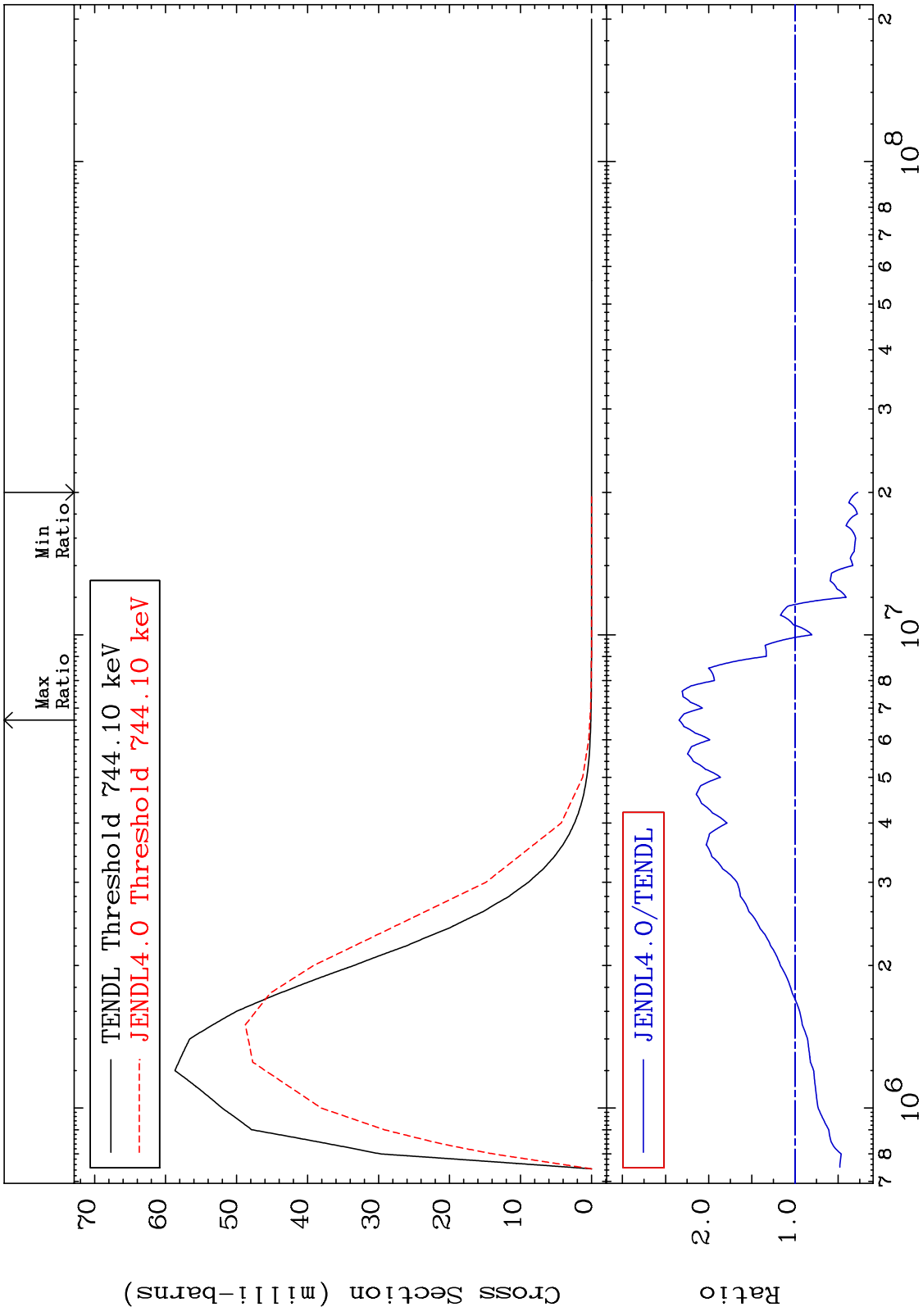
MAT 5725 MT= 61 (n,n') Level Cross Section 57-La-138 -100.0 To 16.64 %



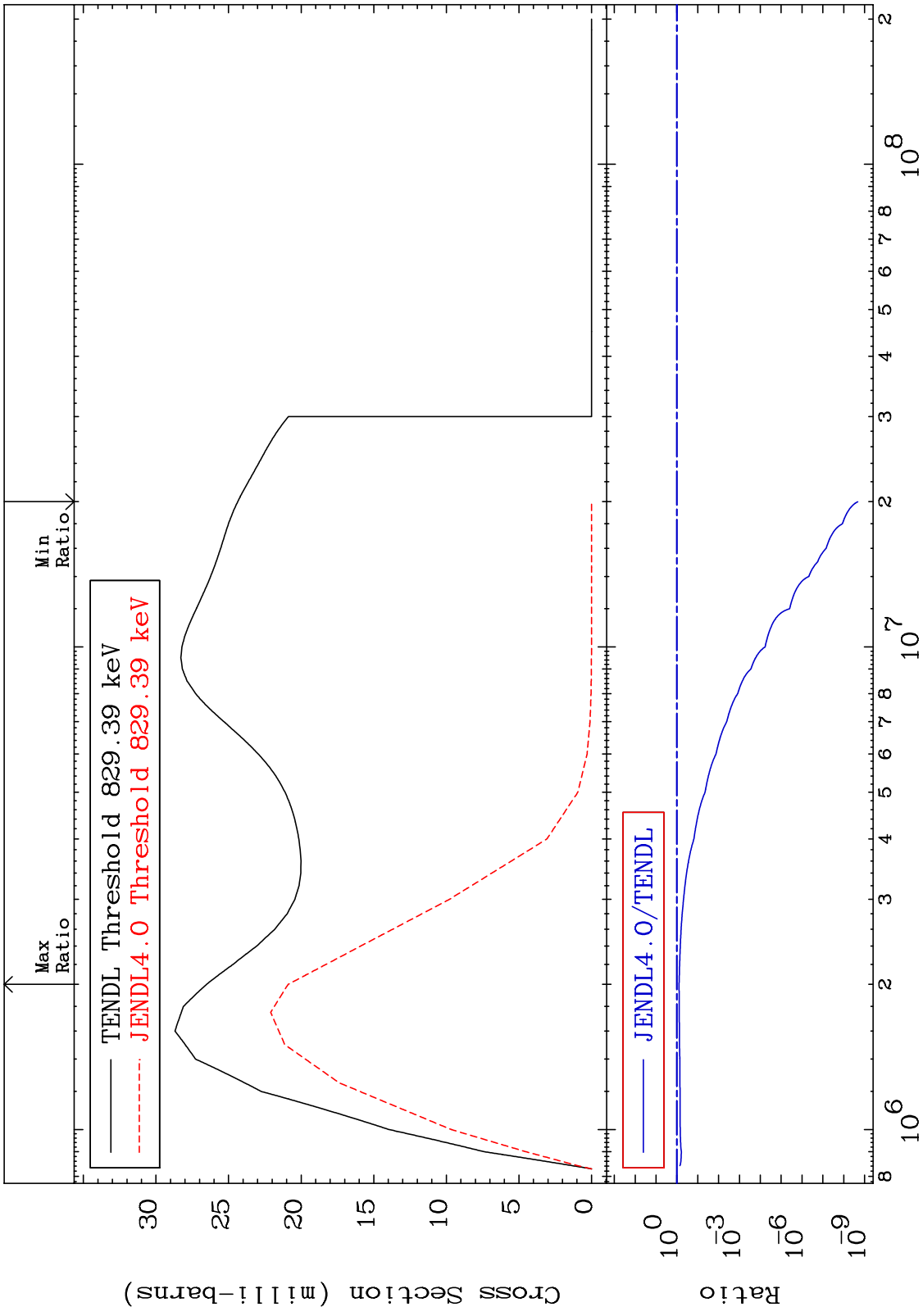
MAT 5725 MT= 62 (n,n') Level Cross Section 57-La-138 -72.68 To 147.2 %



MAT 5725 MT= 63 (n,n') Level Cross Section 57-La-138 -72.89 To 134.4 %

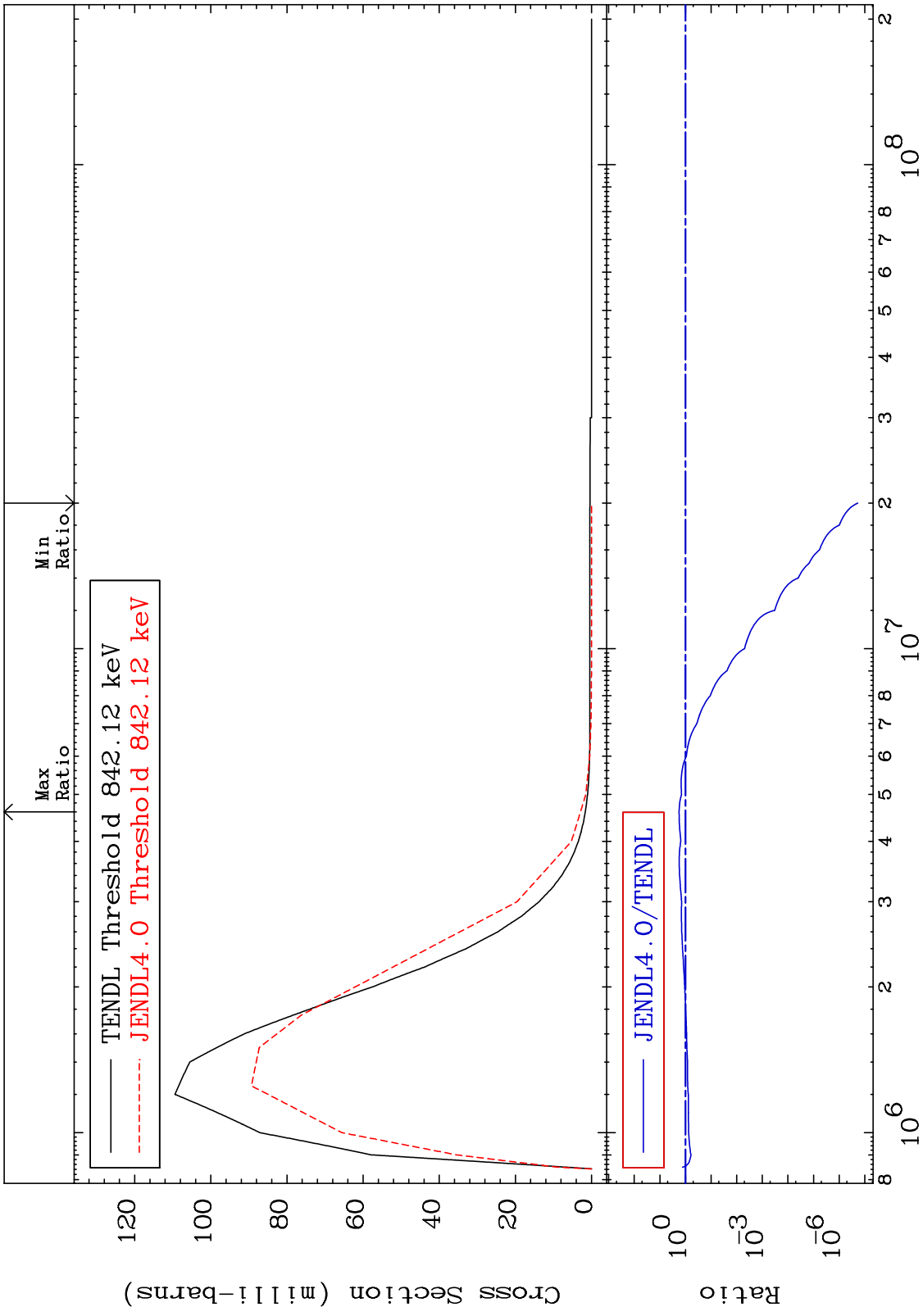


MAT 5725 MT= 64 (n,n') Level Cross Section 57-La-138 -100.0 To -21.20%

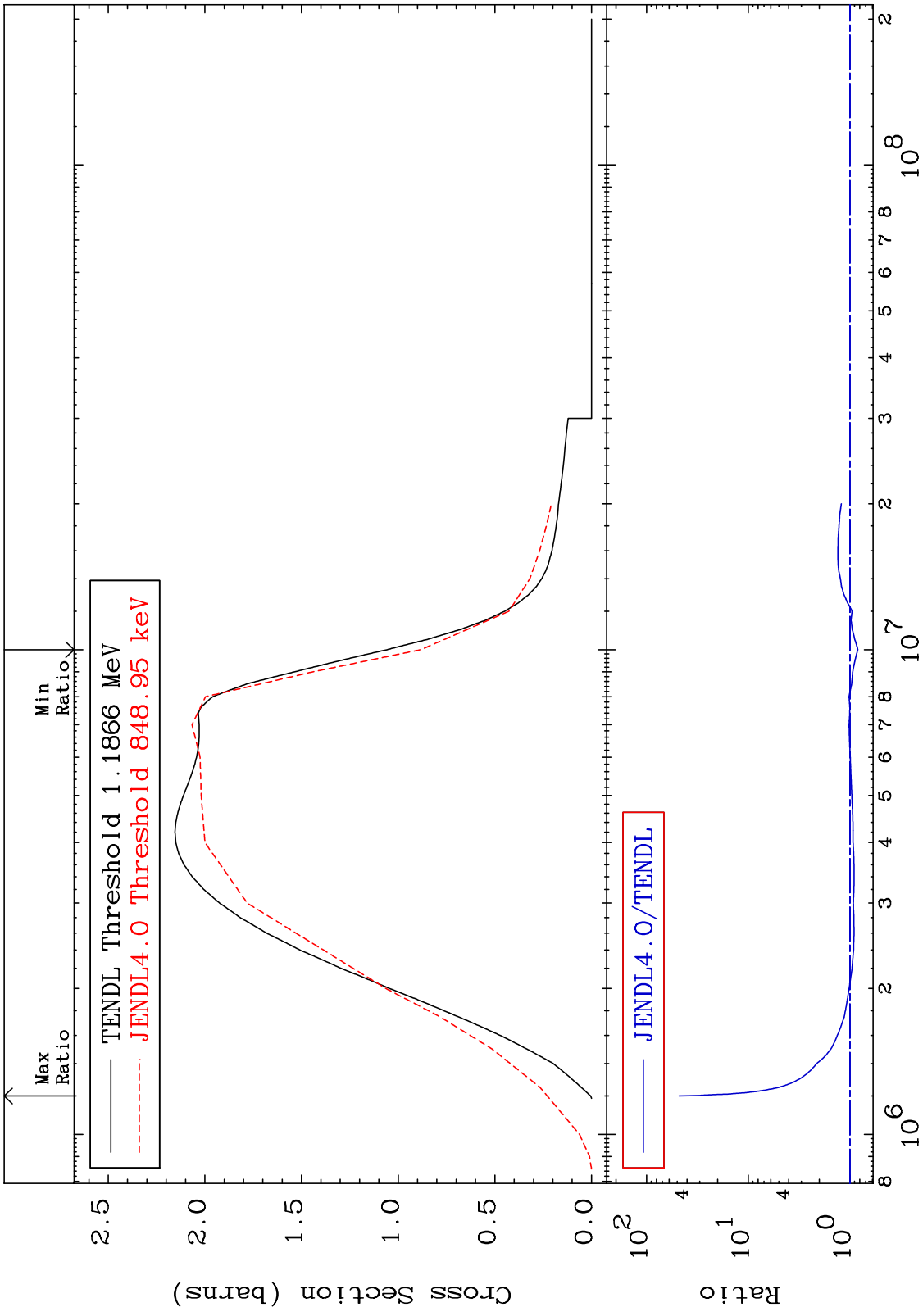




MAT 5725 MT= 65 (n,n') Level Cross Section 57-La-138 -100.0 To 78.39 %



MAT 5725 (n,n') Continuum Cross Section 57-La-138 -16.51 To 4692. %



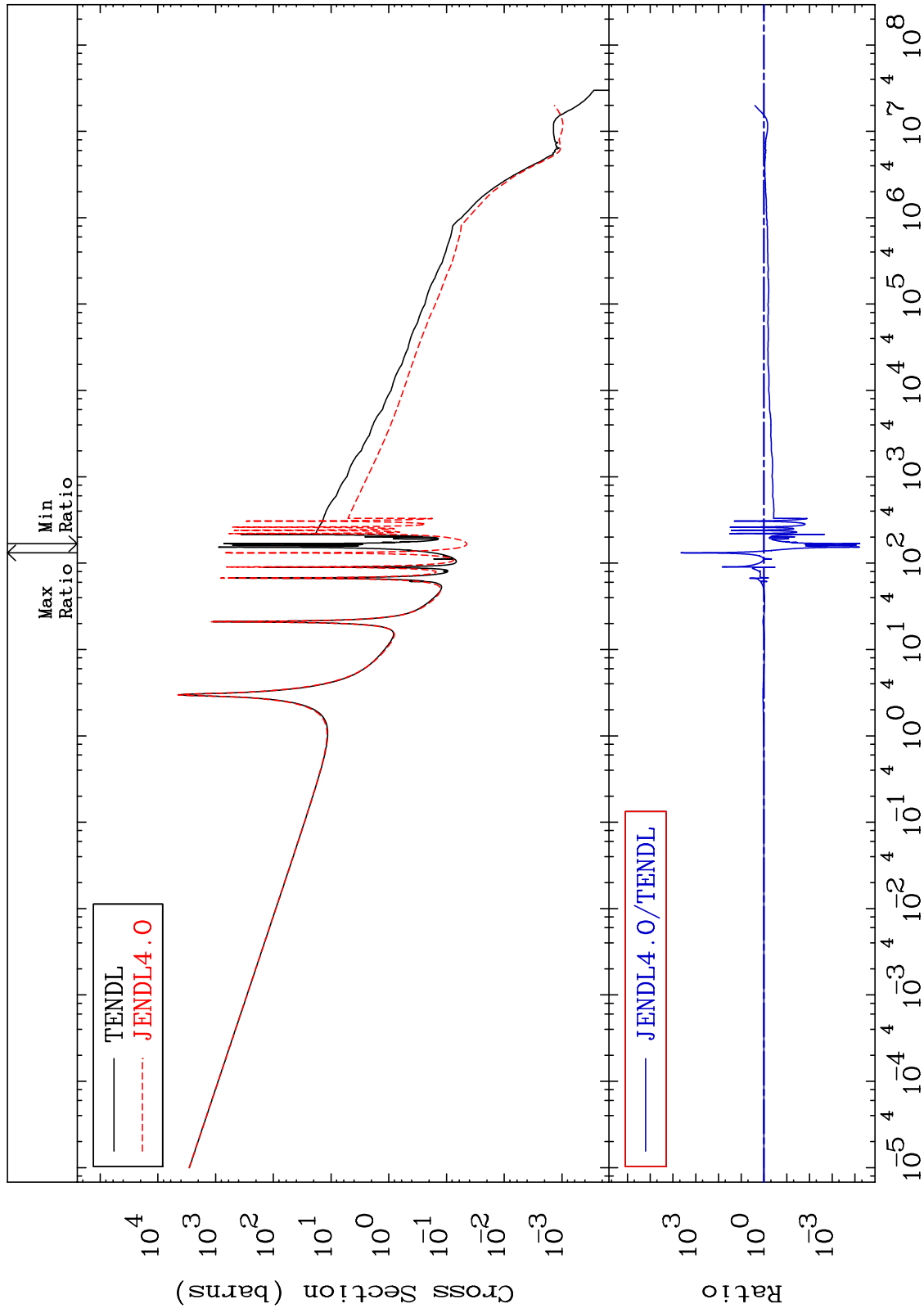
MAT 5725

(n,  $\gamma$ )

57-La-138

-99.99 To 9999. %

Cross Section



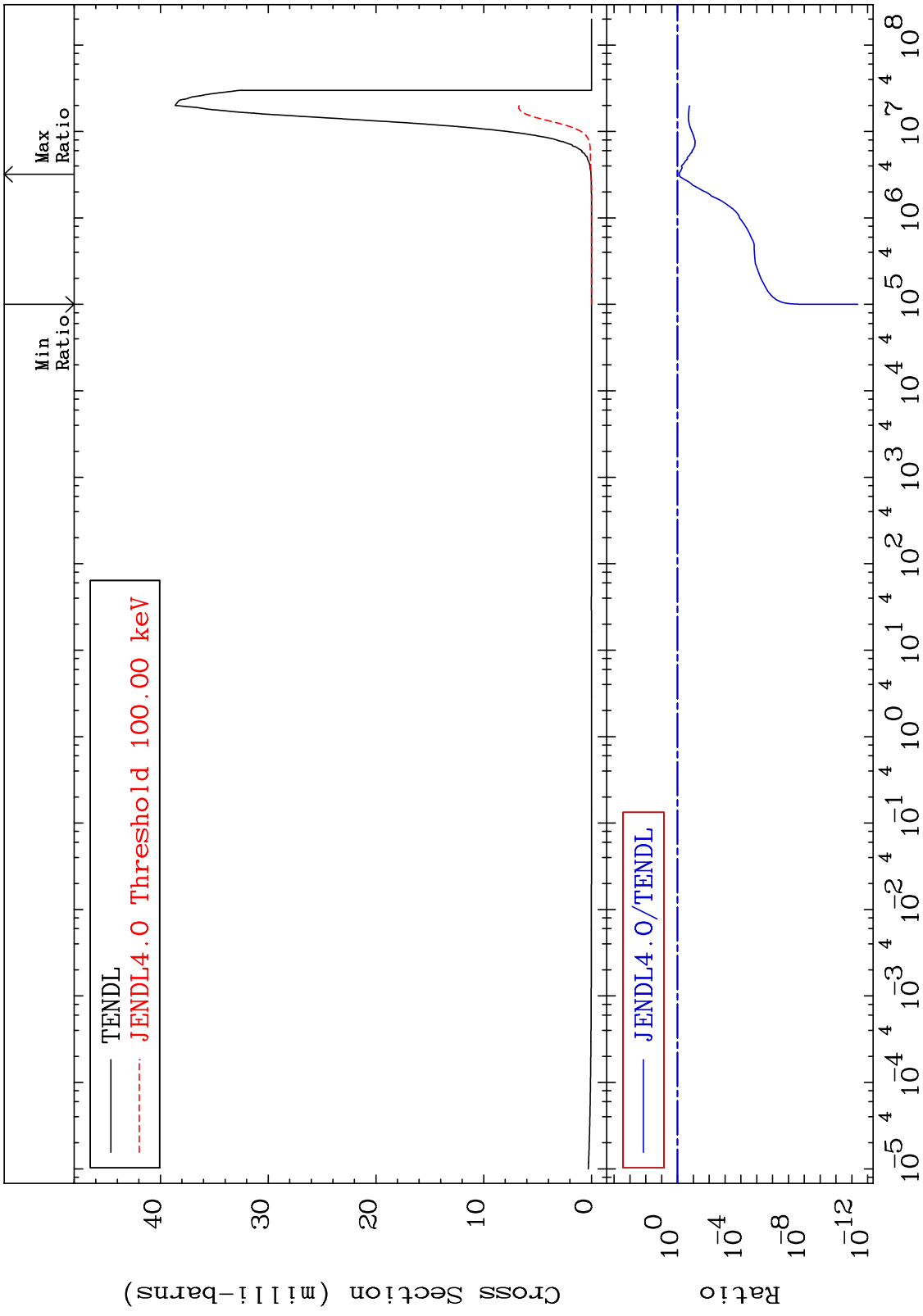
MAT 5725

(n,p)

57-La-138

Cross Section

-100.0 To -20.44%



MAT 5725

(n,d)

57-La-138

-100.0 To 107.9 %

Cross Section

Min Ratio

Max Ratio

— TENDL Threshold 3.8906 MeV  
- - - JENDL4.0 Threshold 5.0000 MeV

Cross Section (milli-barns)

35  
30  
25  
20  
15  
10  
5  
0

— JENDL4.0/TENDL

Ratio

$10^0$   
 $10^{-2}$   
 $10^{-4}$

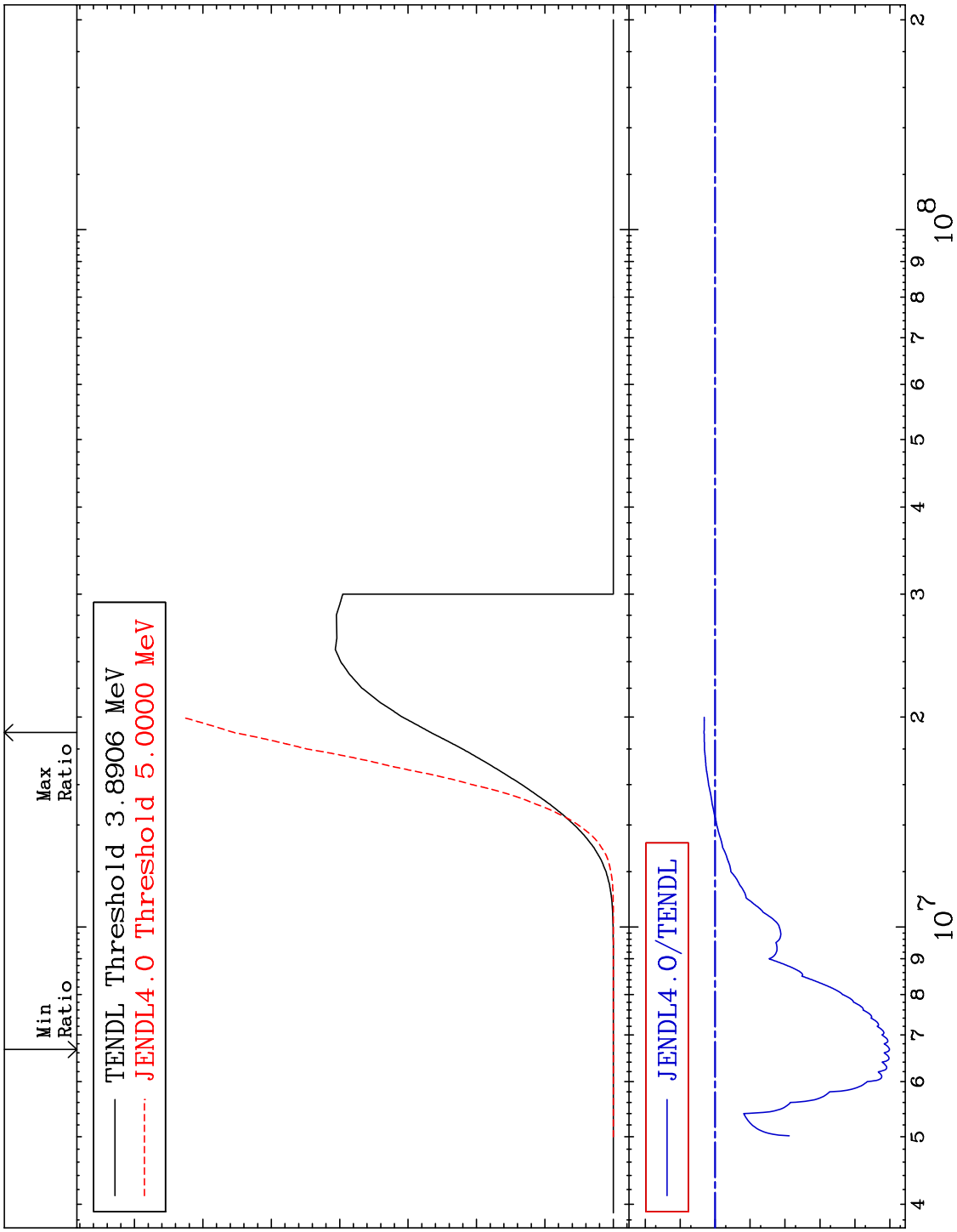
$10^7$

$10^8$

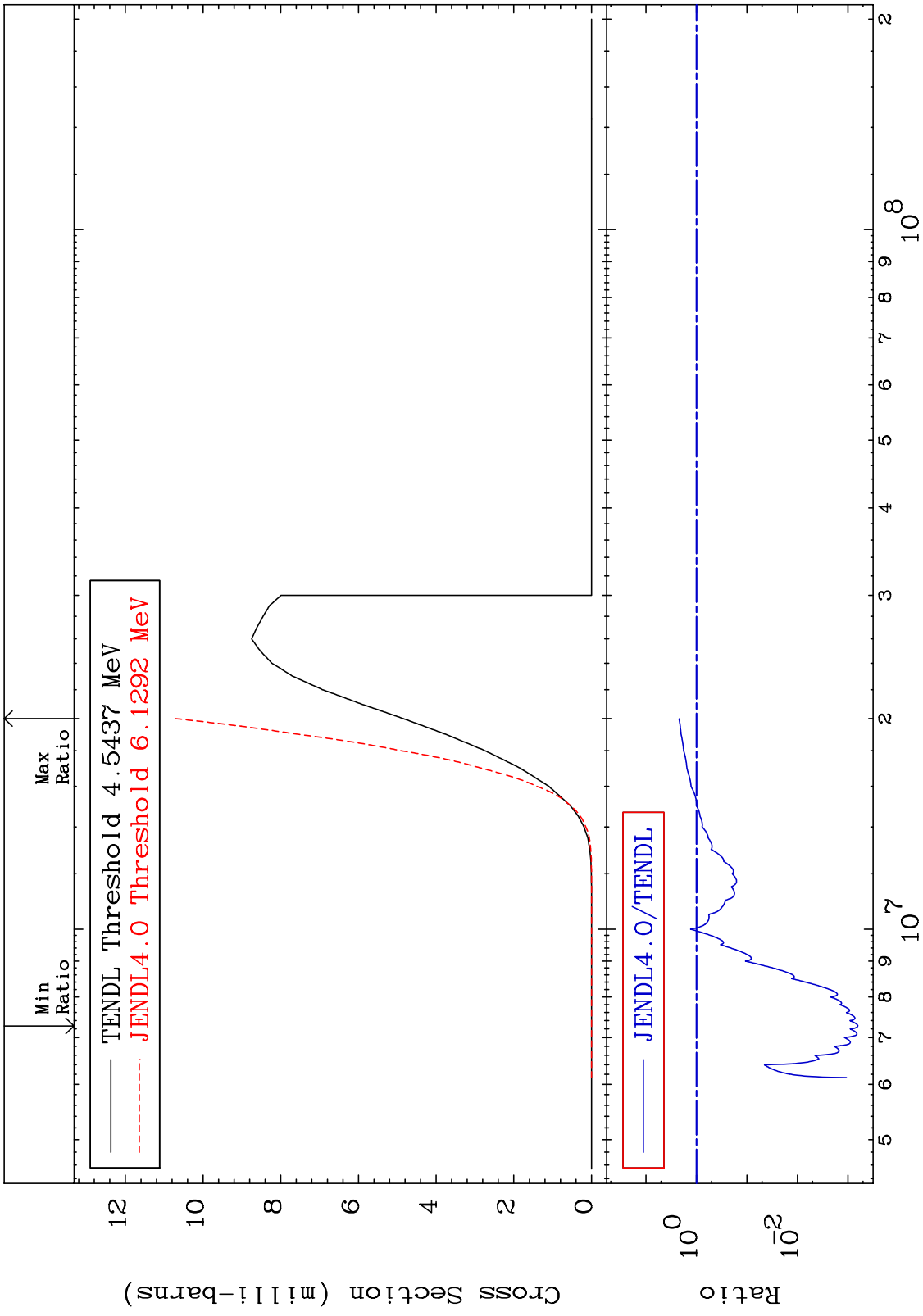
28

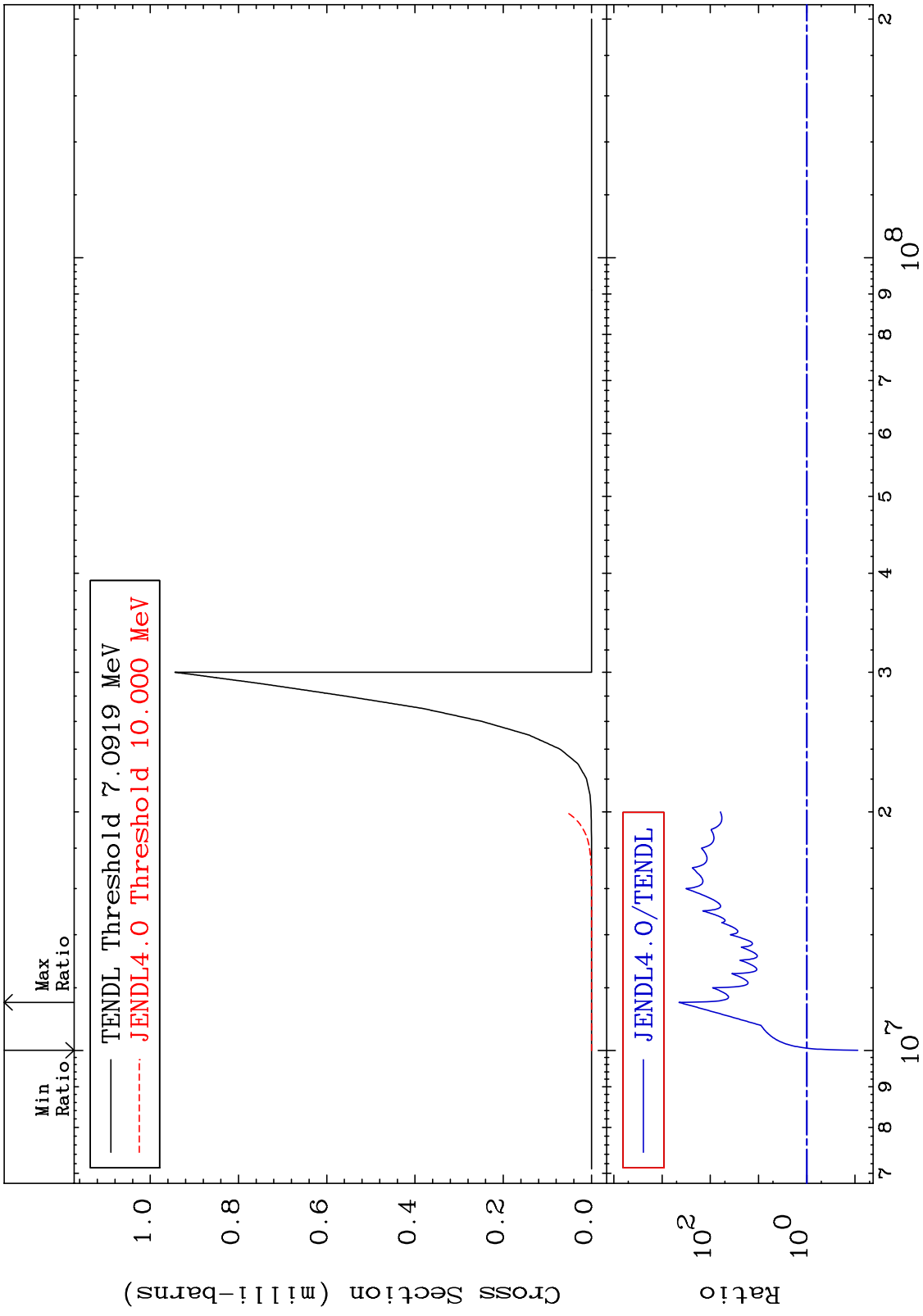
Incident Energy (eV)

57-La-138



MAT 5725 57-La-138  
-99.94 To 121.1 %





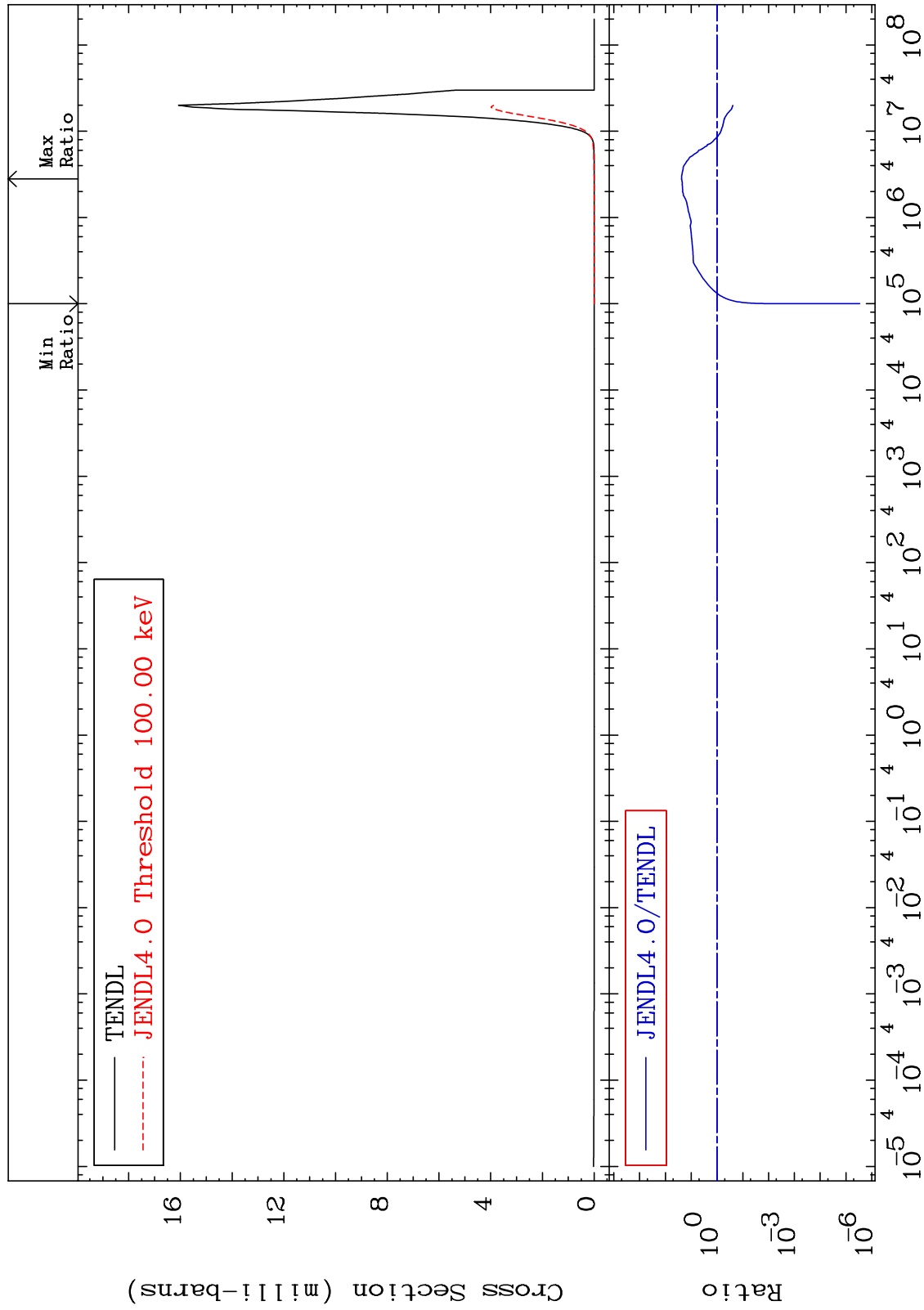
MAT 5725

(n,  $\alpha$ )

57-La-138

Cross Section

-100.0 To 2285. %

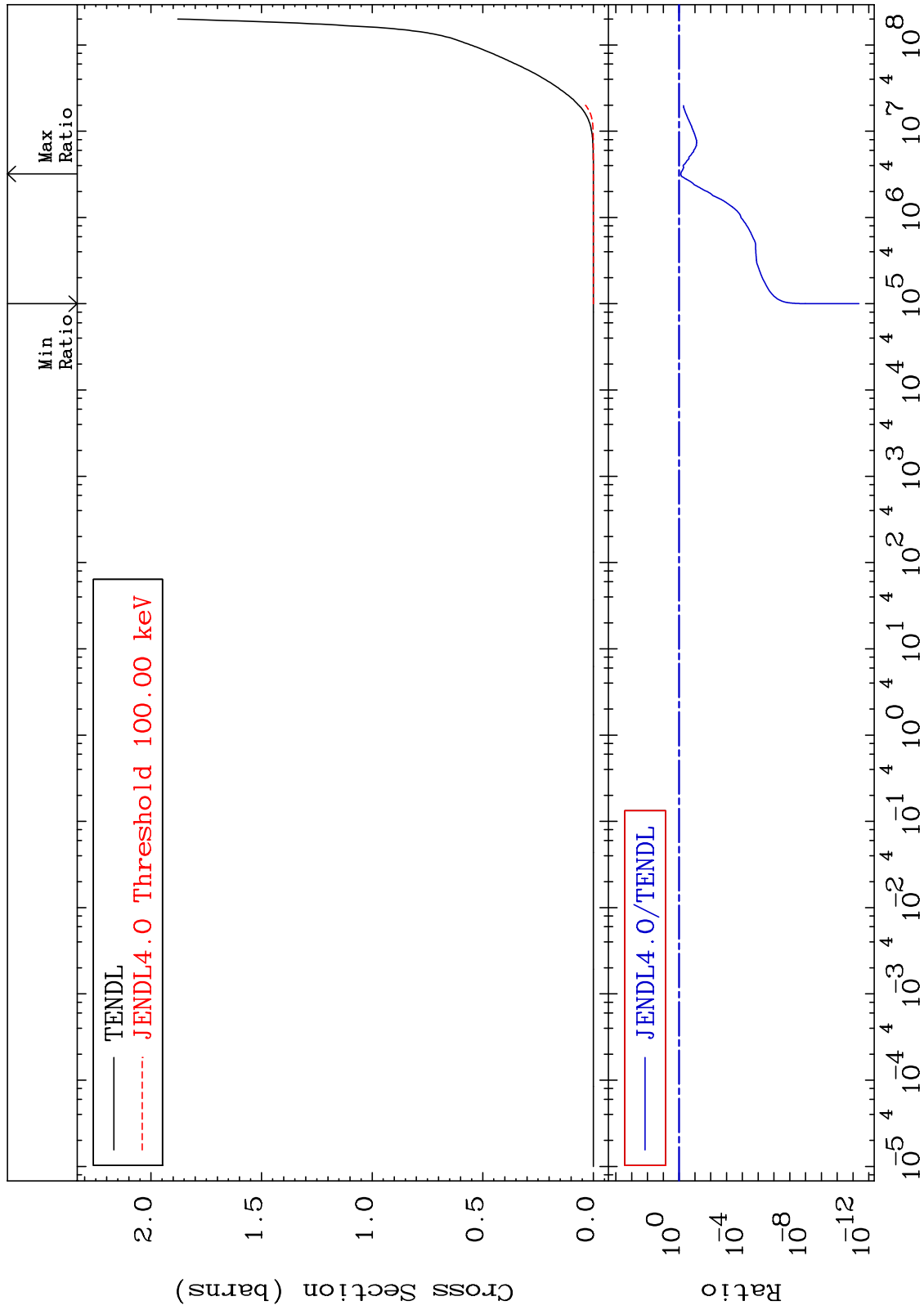




MAT 5725

### Hydrogen Production Cross Section

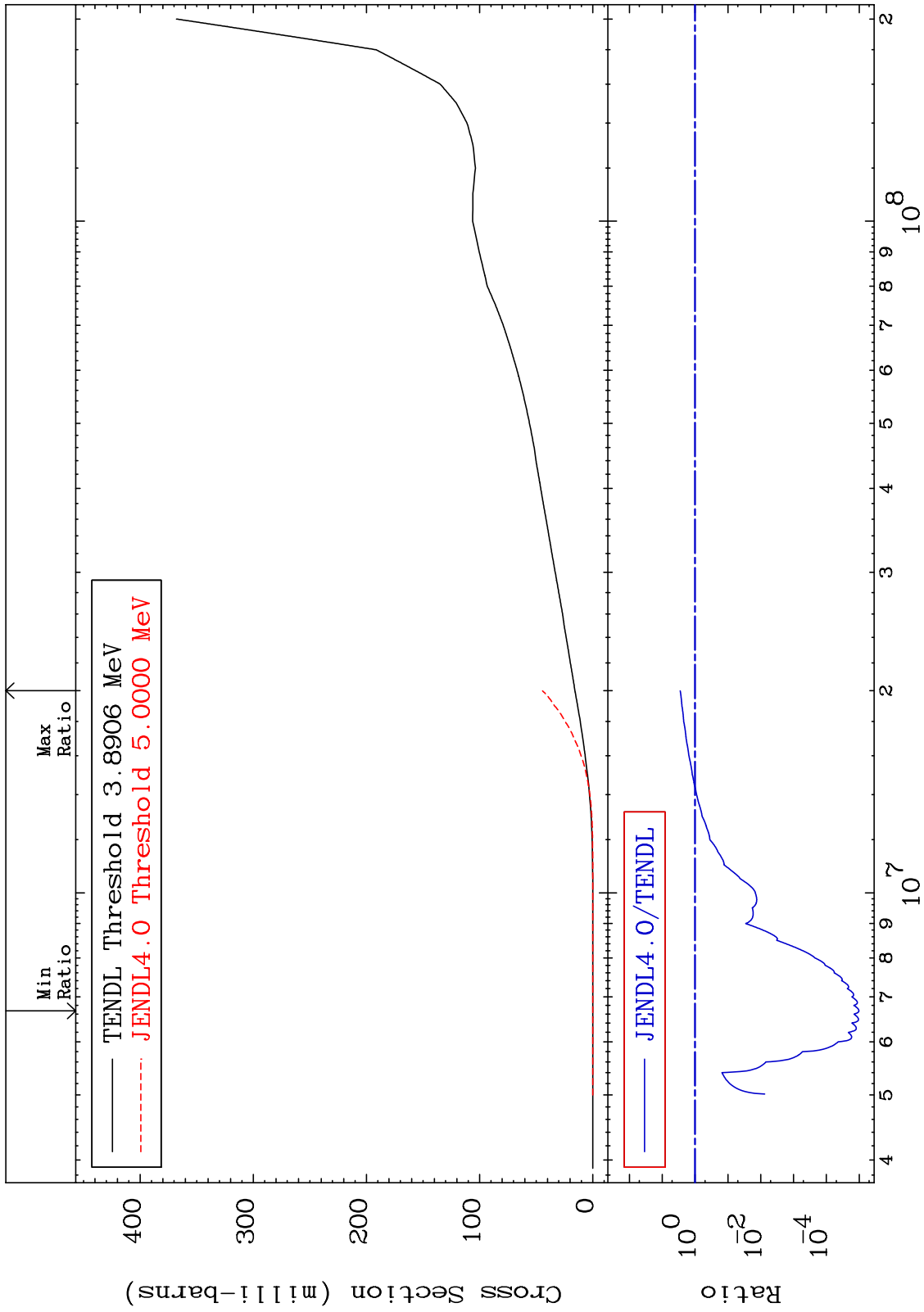
57-La-138  
-100.0 To -20.44%



MAT 5725

Deuterium Production  
Cross Section

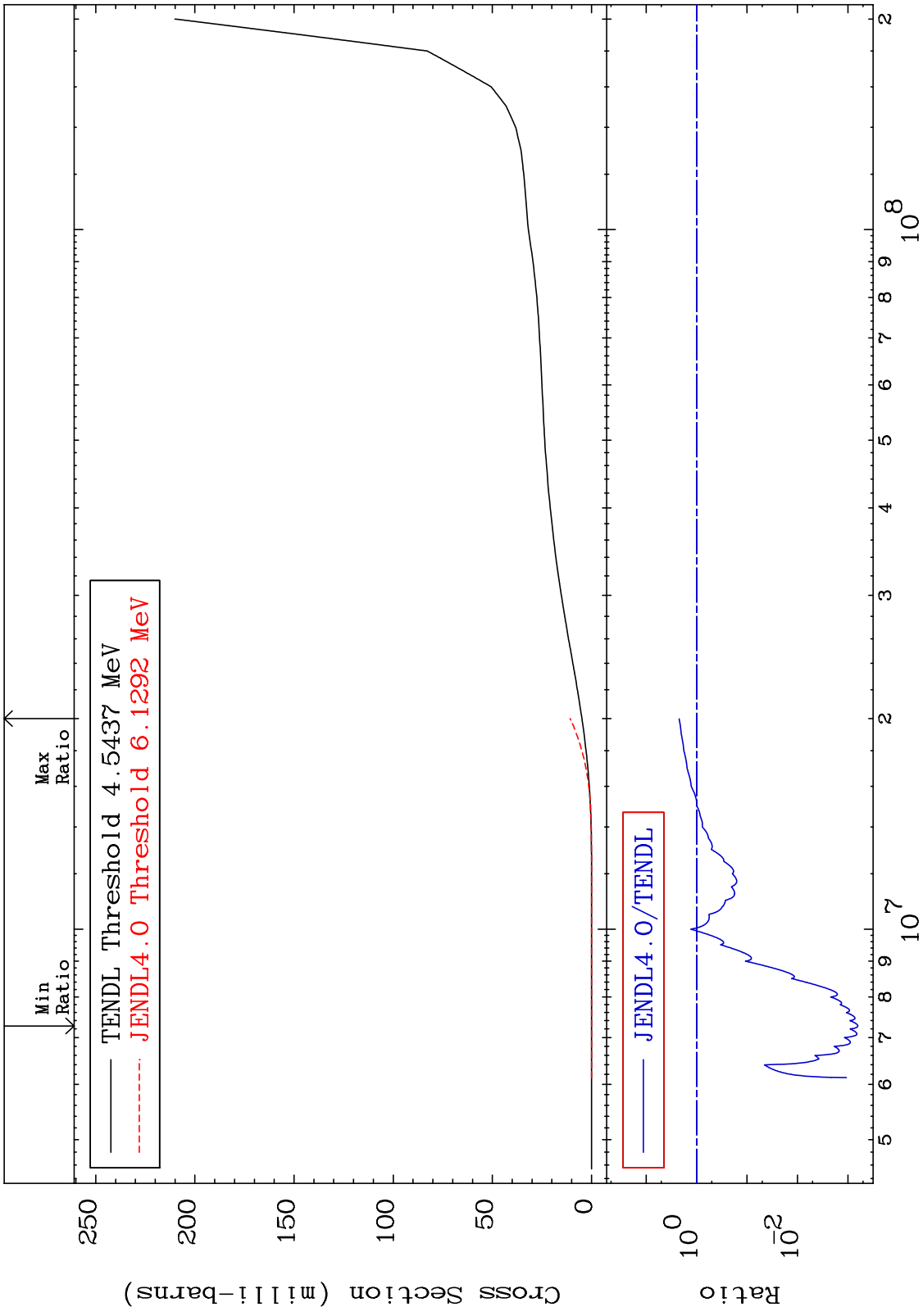
57-La-138  
-100.0 To 183.7 %



33

Incident Energy (eV)

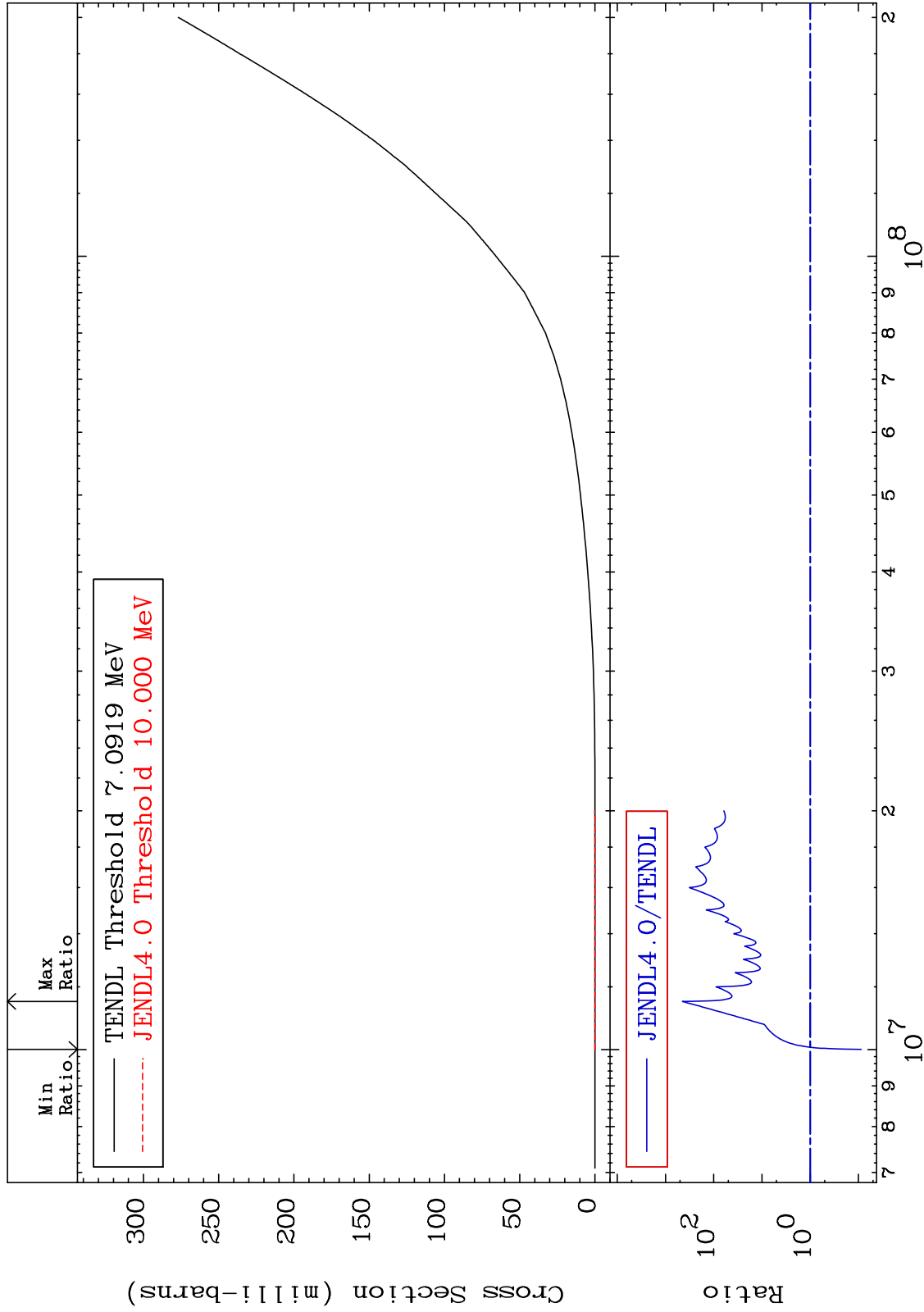
57-La-138



MAT 5725

He-3 Production  
Cross Section

57-La-138  
-91.27 To 9999. %



35

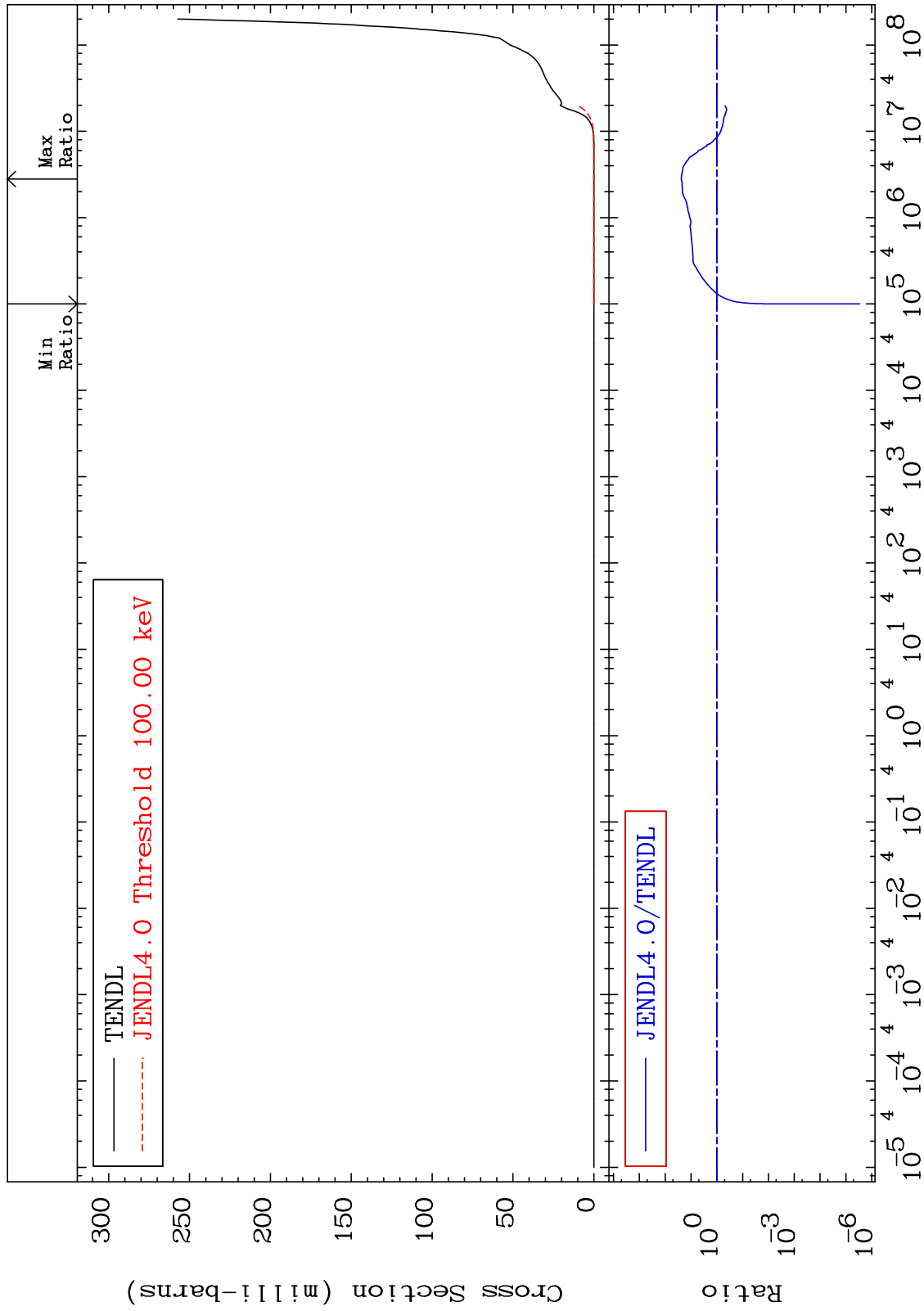
Incident Energy (eV)

57-La-138

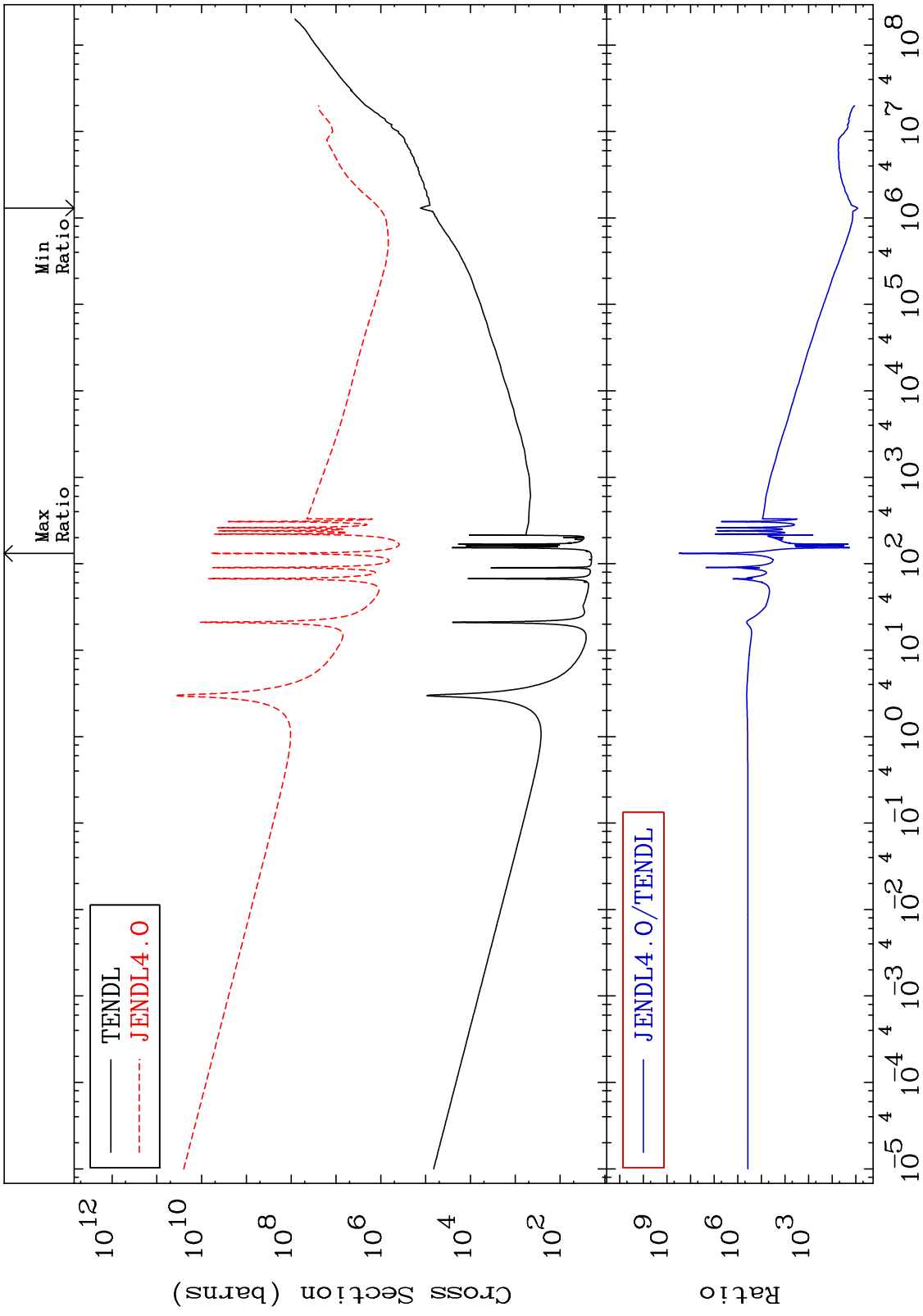
MAT 5725

He-4 Production  
Cross Section

57-La-138  
-100.0 To 2285. %



MAT 5725      Kerma total (eV-barns)      57-La-138      727.0 To 9999. %  
 Cross Section

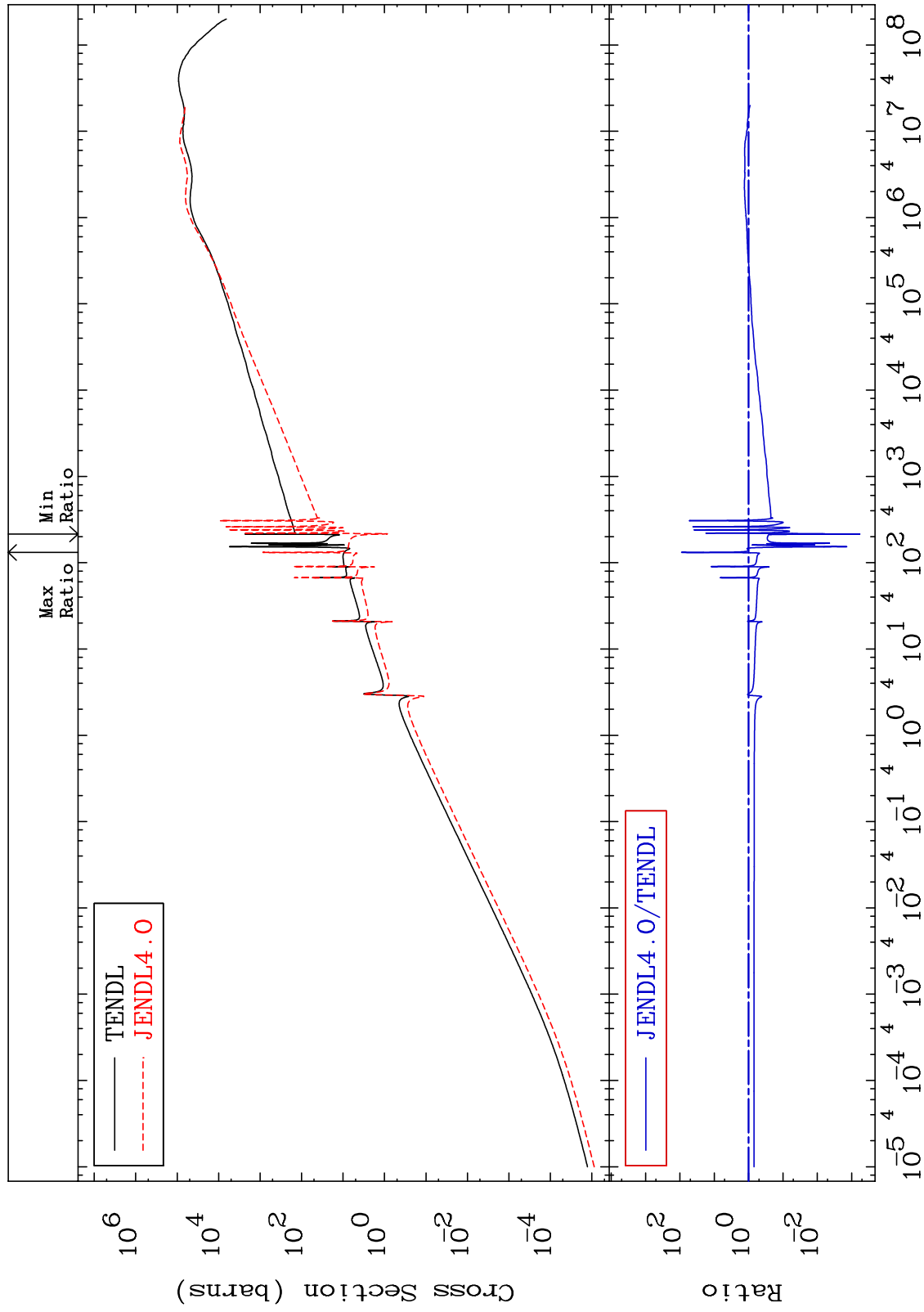


37      Incident Energy (eV)      57-La-138

MAT 5725

Kerma elastic  
Cross Section

57-La-138  
-99.94 To 8925. %

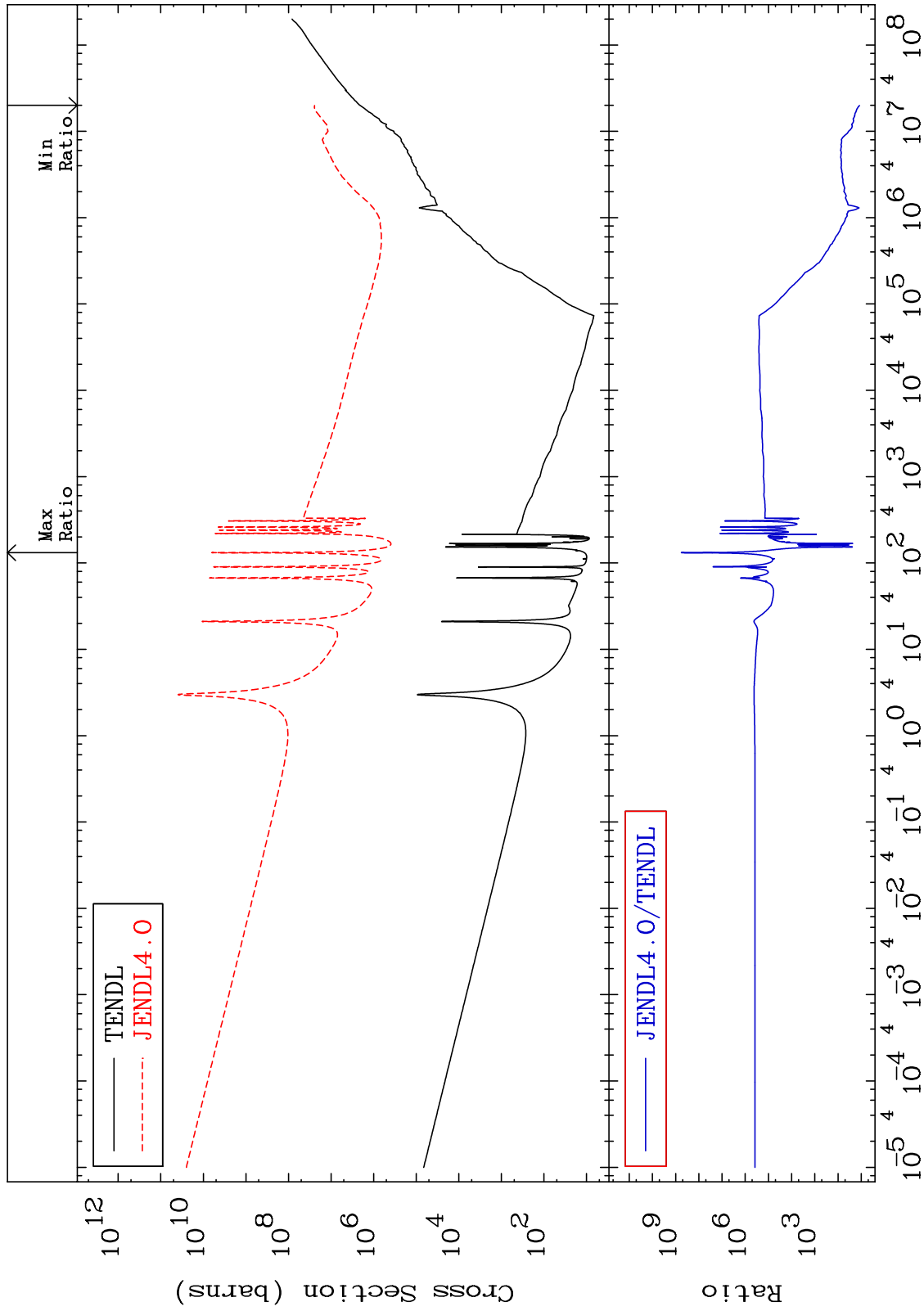


MAT 5725

Kerma non-elastic (all but mt2)

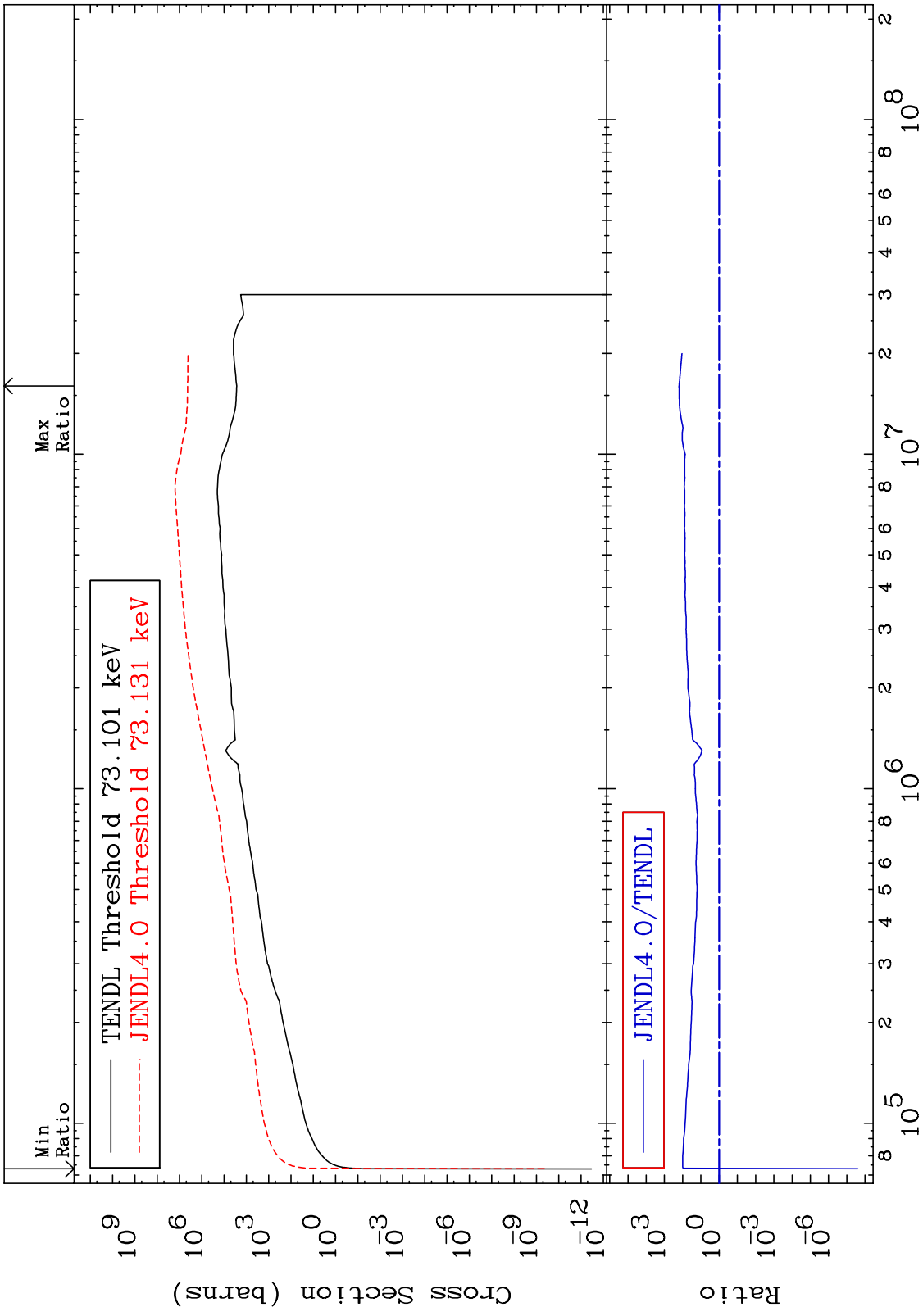
57-La-138

1054. To 9999. %

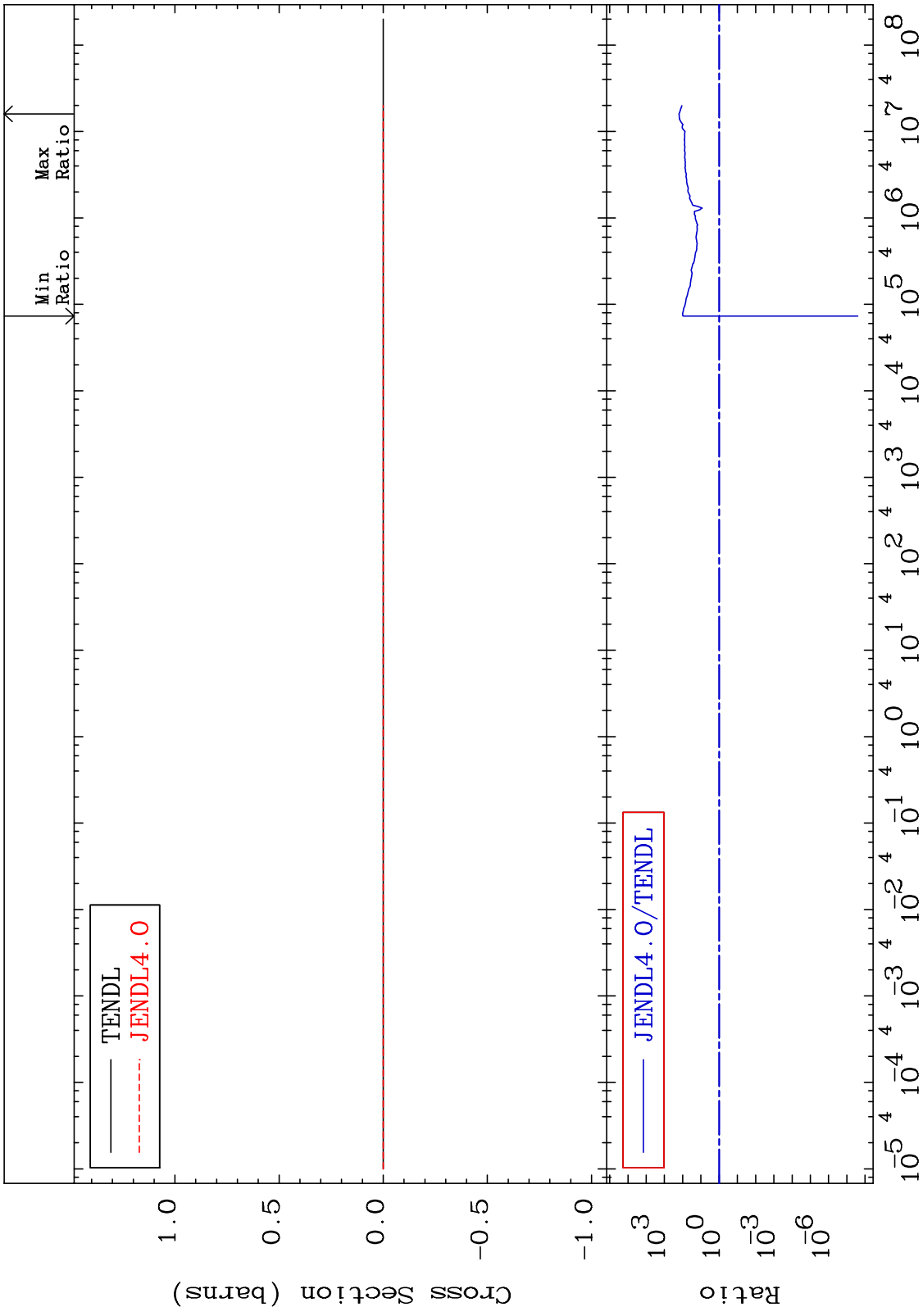




MAT 5725      Kerma inelastic (mt51-91)      57-La-138  
 -100.0 To 9999. %



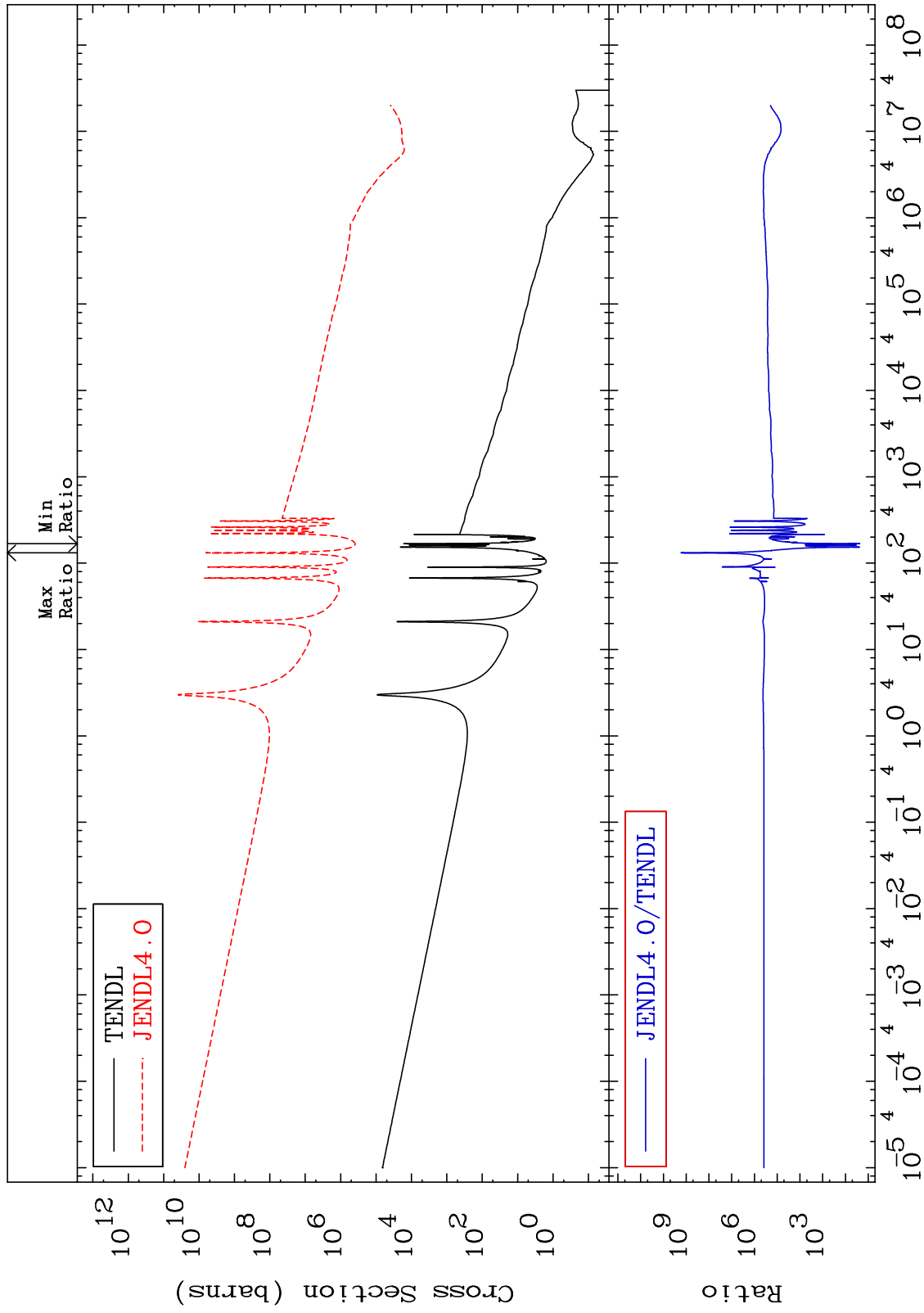
MAT 5725 Kerma fission (mt18 or mt19-20-21-38) 57-La-138  
 Cross Section -100.0 To 9999. %



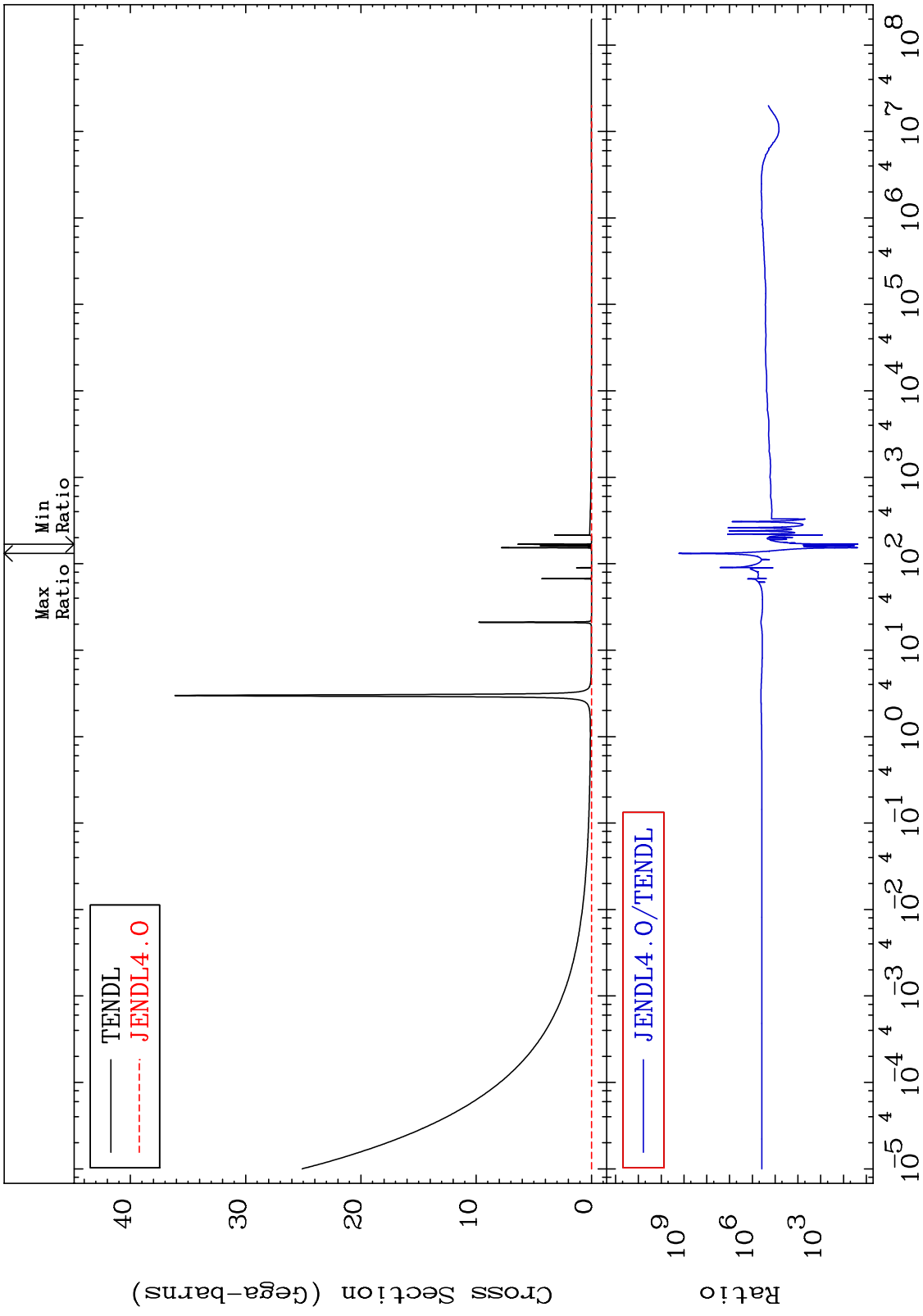
MAT 5725

Kerma capture (mt102)  
Cross Section

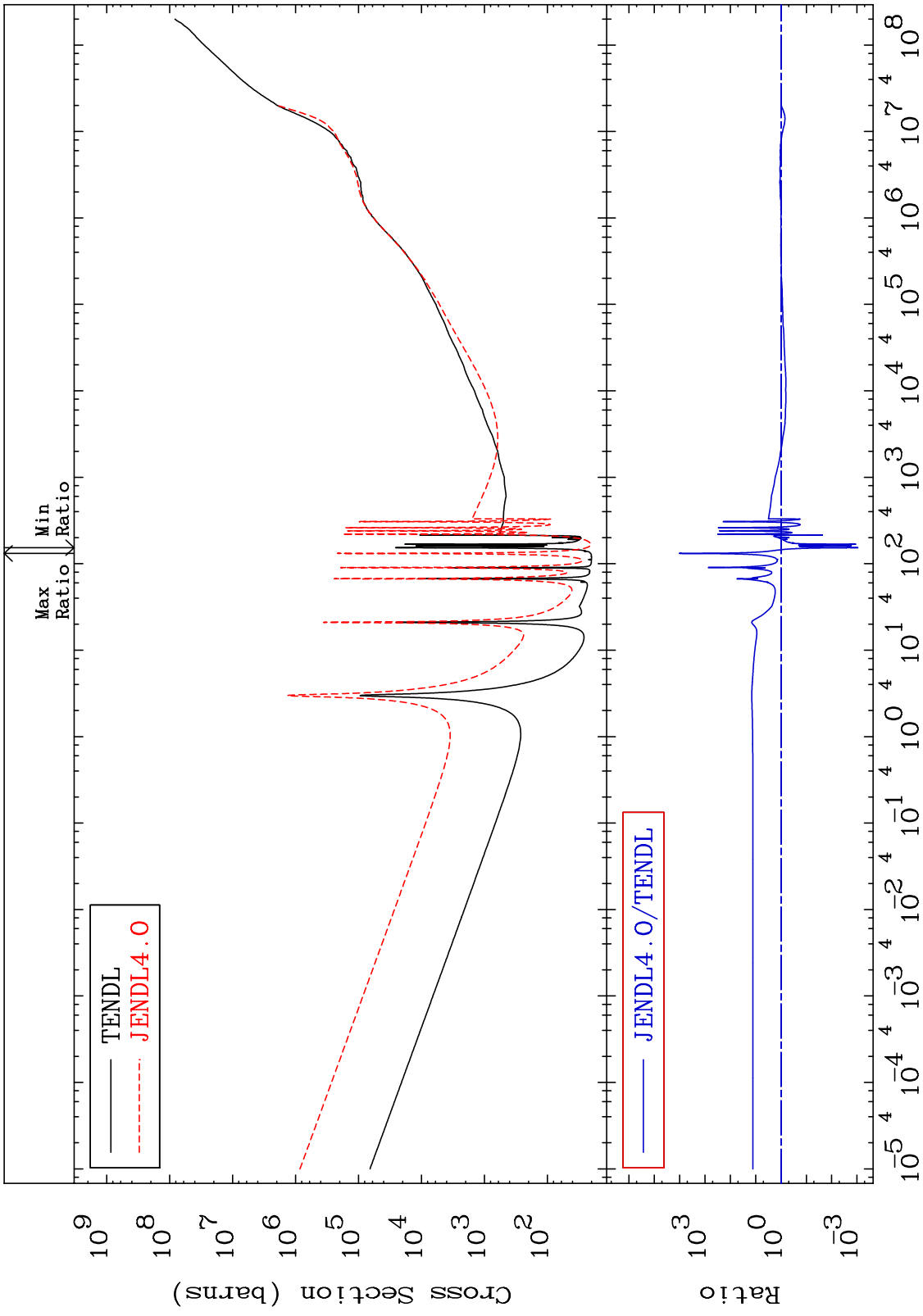
57-La-138  
2251. To 9999. %



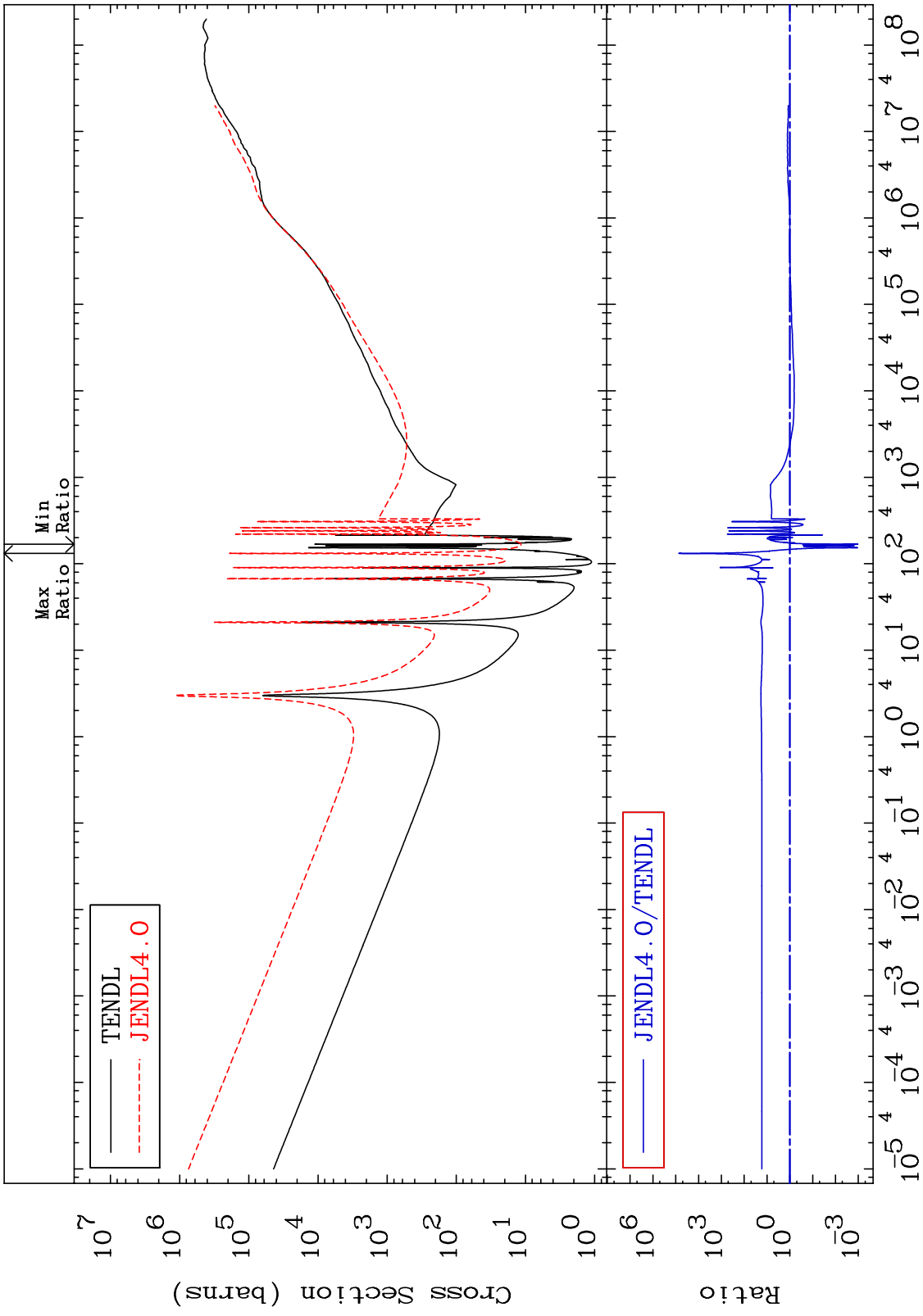
MAT 5725 Total photon (eV-barns) 57-La-138  
Cross Section 2251. To 9999. %



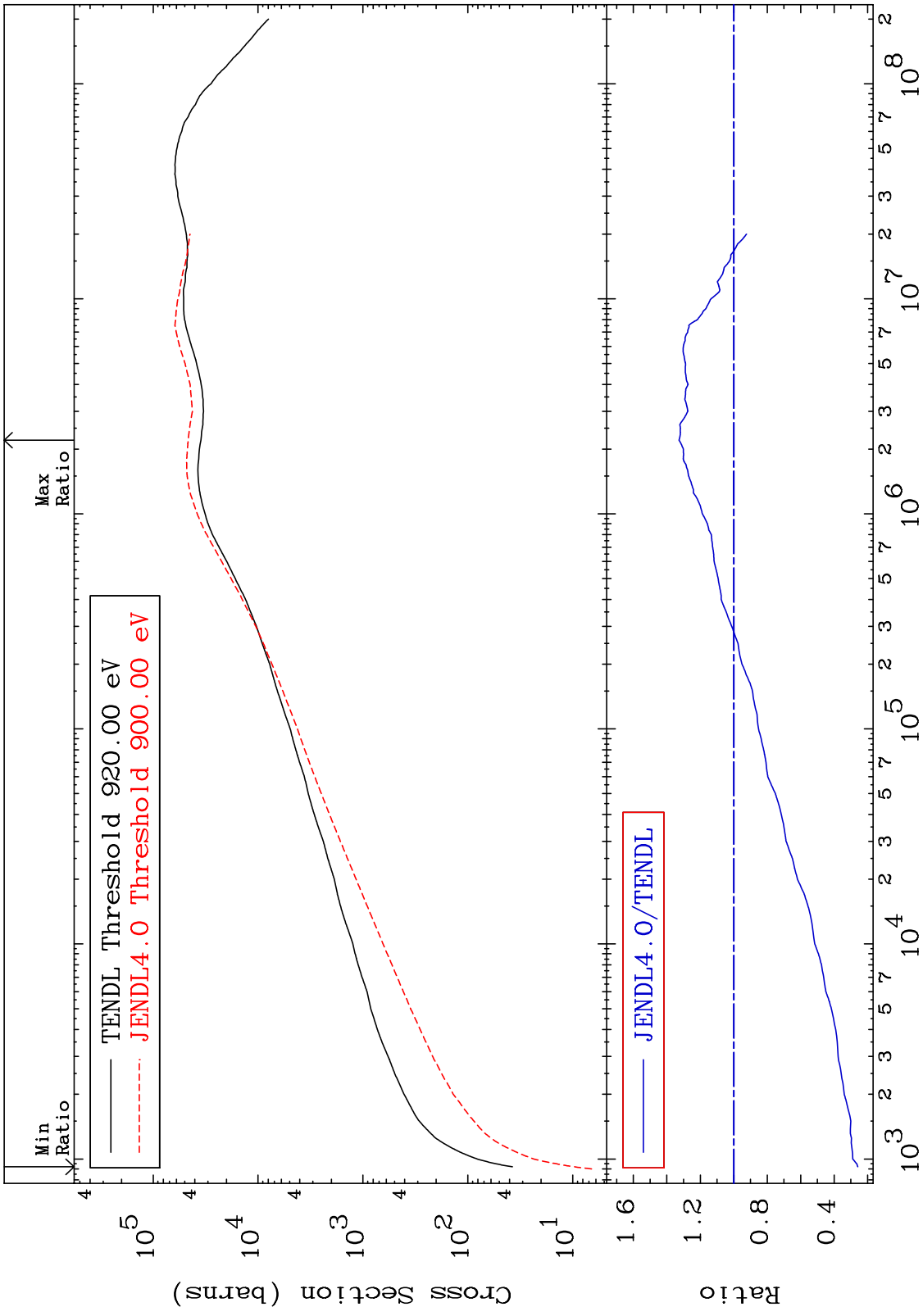
MAT 5725      Total kinematic kerma (high limit)      57-La-138  
 -99.91 To 9999. %  
 Cross Section



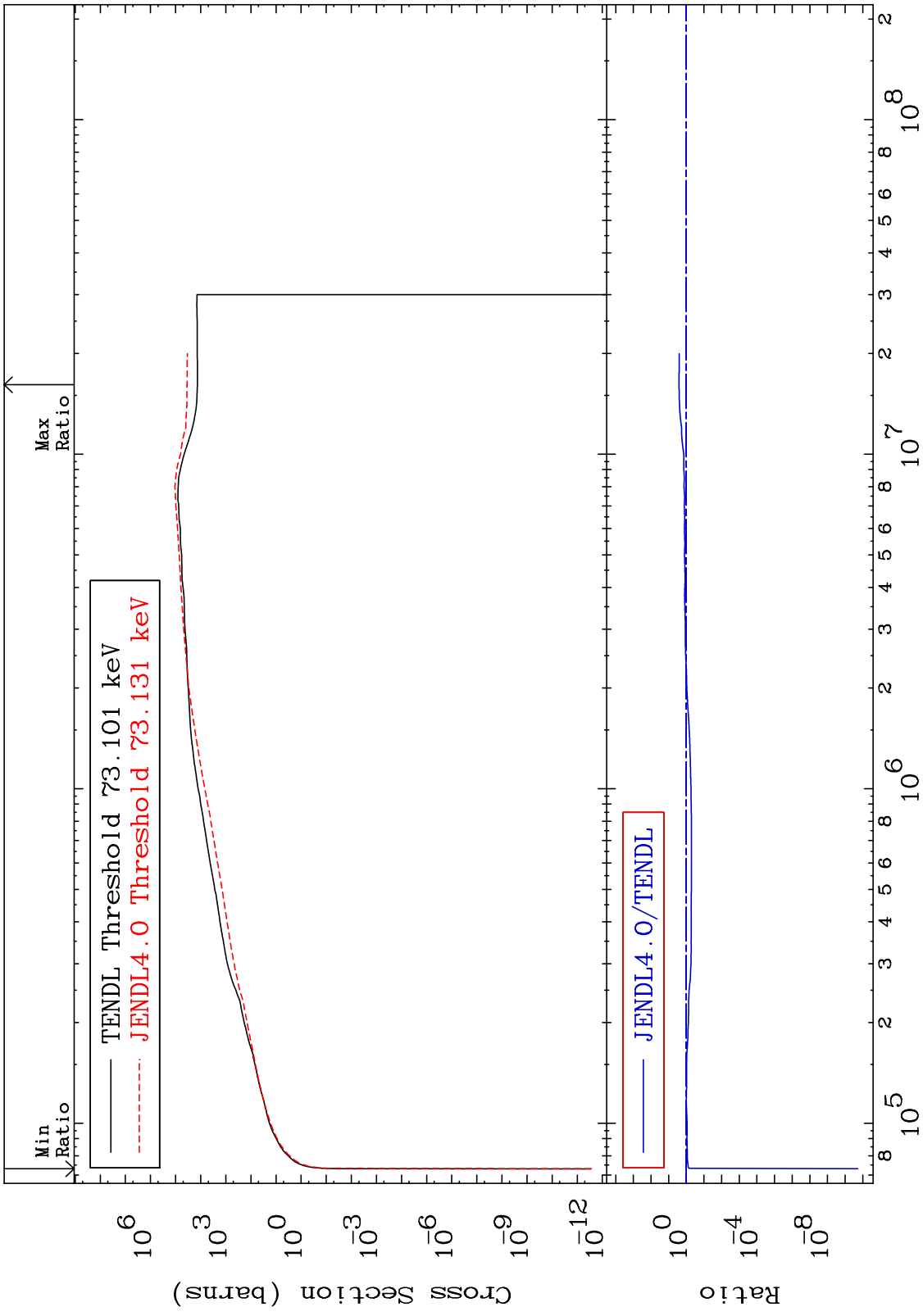
MAT 5725      Dpa total (eV-barns)      57-La-138  
 Cross Section      -99.90 To 9999. %



MAT 5725      Dpa elastic (mt2)      57-La-138  
Cross Section      -74.15 To 32.70 %



MAT 5725 Dpa inelastic (mt51-91) 57-La-138  
 Cross Section -100.0 To 157.5 %





MAT 5725

Dpa disappearance (mt102 -120)  
Cross Section

57-La-138  
-99.90 To 9999. %

