

Program Complot  
(Version 2021-1)

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)

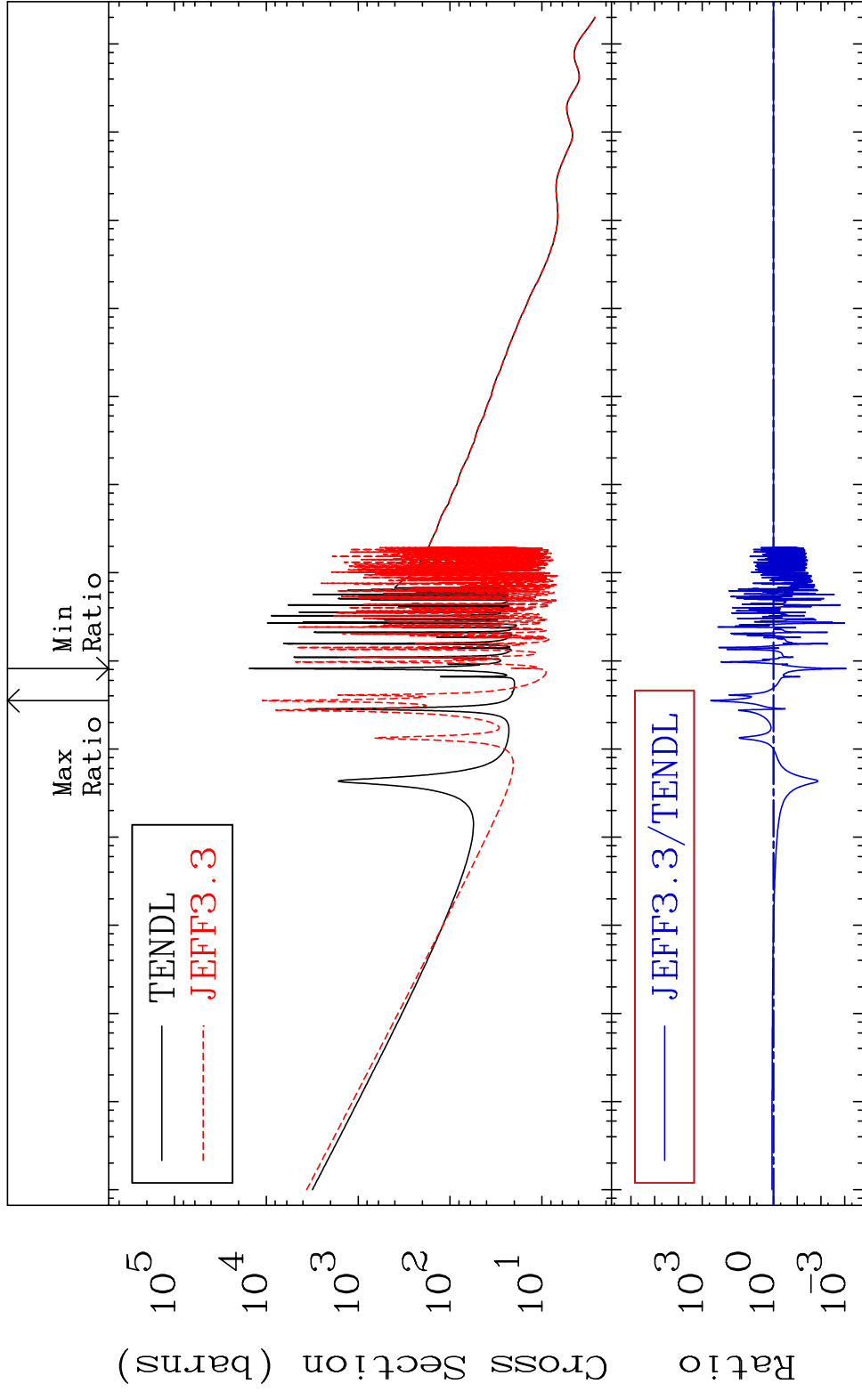
Press Mouse Button to Start

MAT 7122

71-Lu-174

Total

Cross Section -99.91 To 9999. %



10<sup>5</sup> 10<sup>4</sup> 10<sup>3</sup> 10<sup>2</sup> 10<sup>1</sup> 10<sup>0</sup> 10<sup>-1</sup> 10<sup>-2</sup> 10<sup>-3</sup> 10<sup>-4</sup> 10<sup>-5</sup>

10<sup>8</sup> 10<sup>7</sup> 10<sup>6</sup> 10<sup>5</sup> 10<sup>4</sup> 10<sup>3</sup> 10<sup>2</sup> 10<sup>1</sup> 10<sup>0</sup> 10<sup>-1</sup> 10<sup>-2</sup> 10<sup>-3</sup> 10<sup>-4</sup> 10<sup>-5</sup>

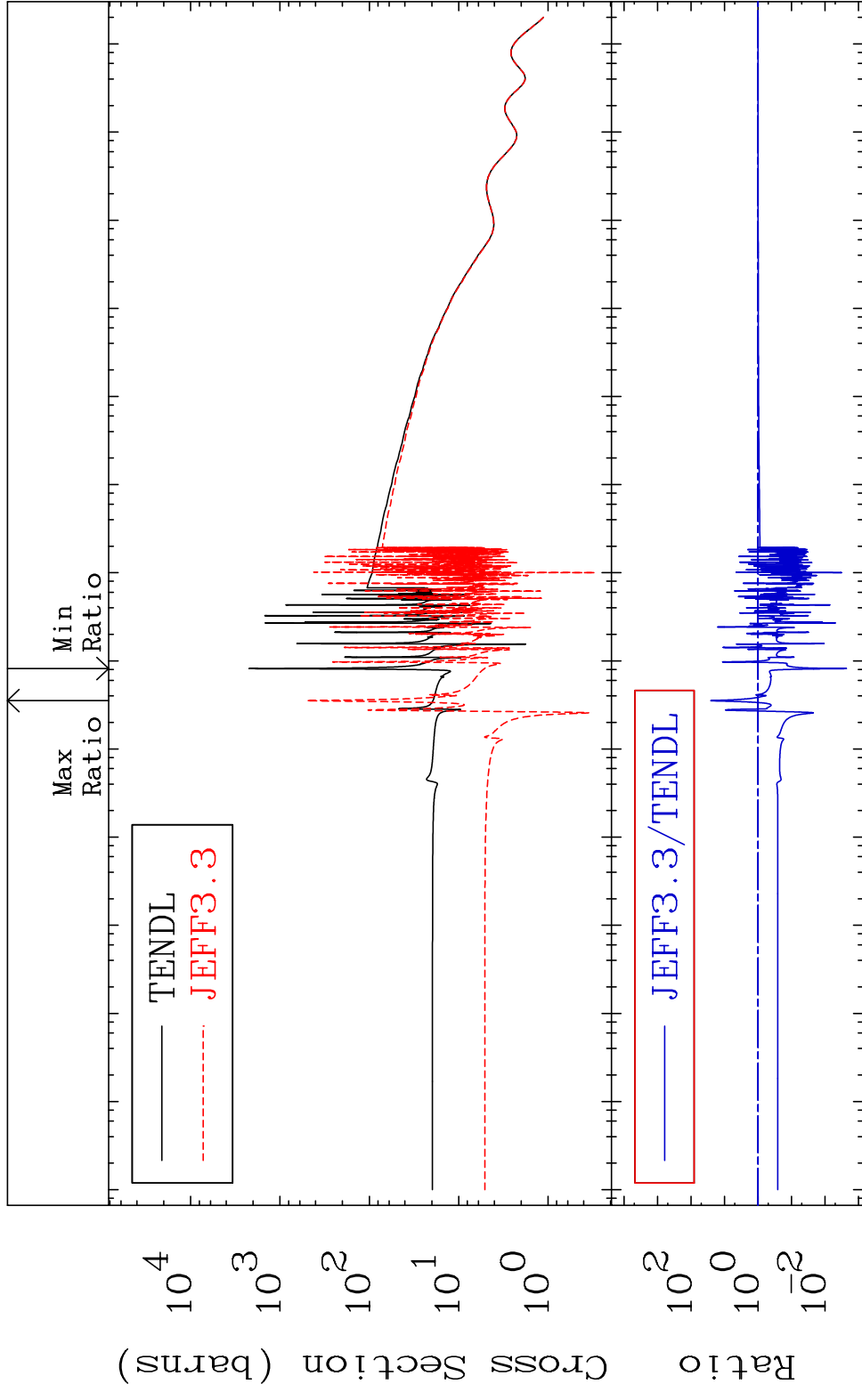
1 Incident Energy (eV) 71-Lu-174

MAT 7122

Elastic

71-Lu-174

Cross Section -99.77 To 2492. %



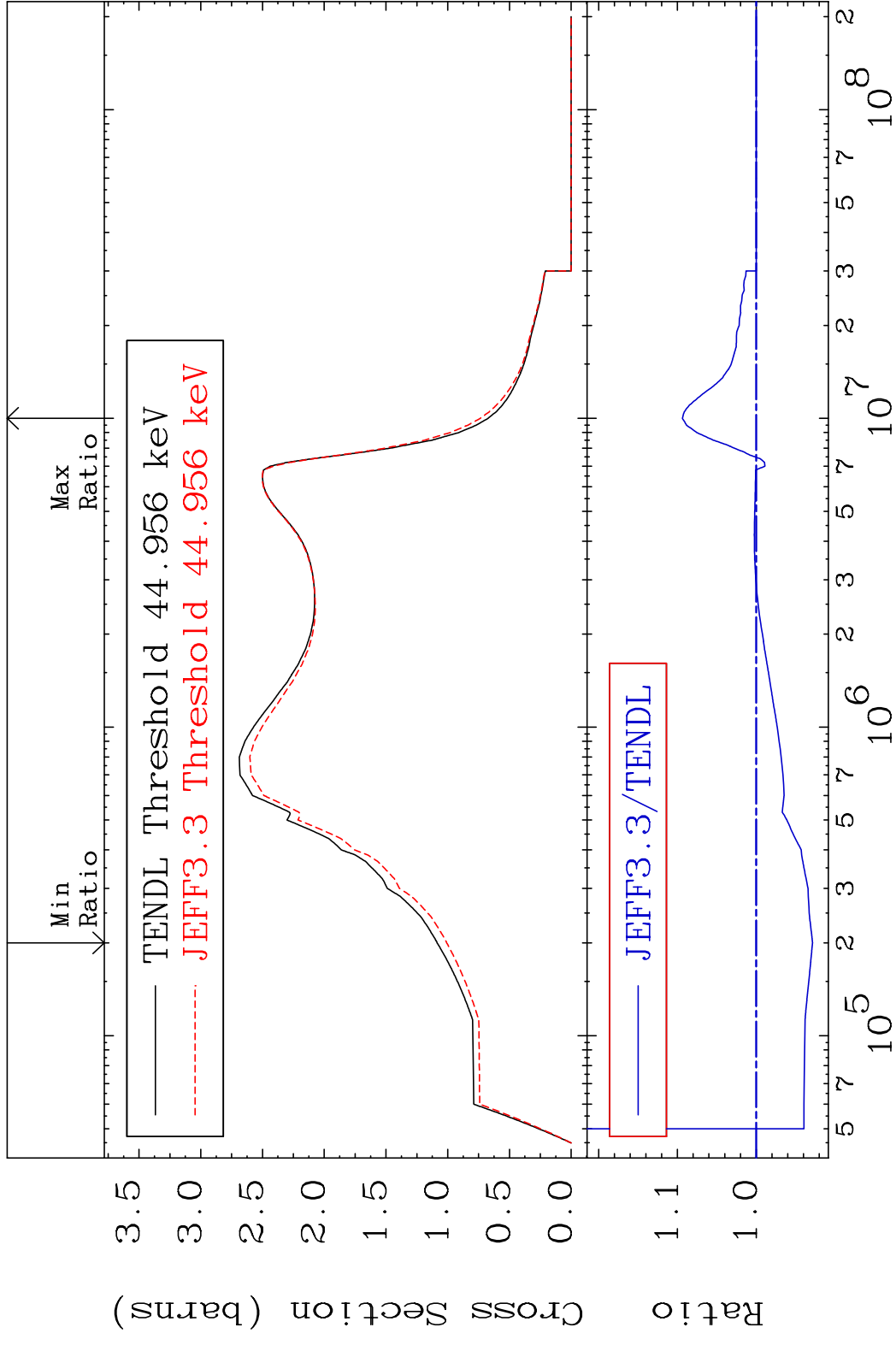
MAT 7122

Inelastic

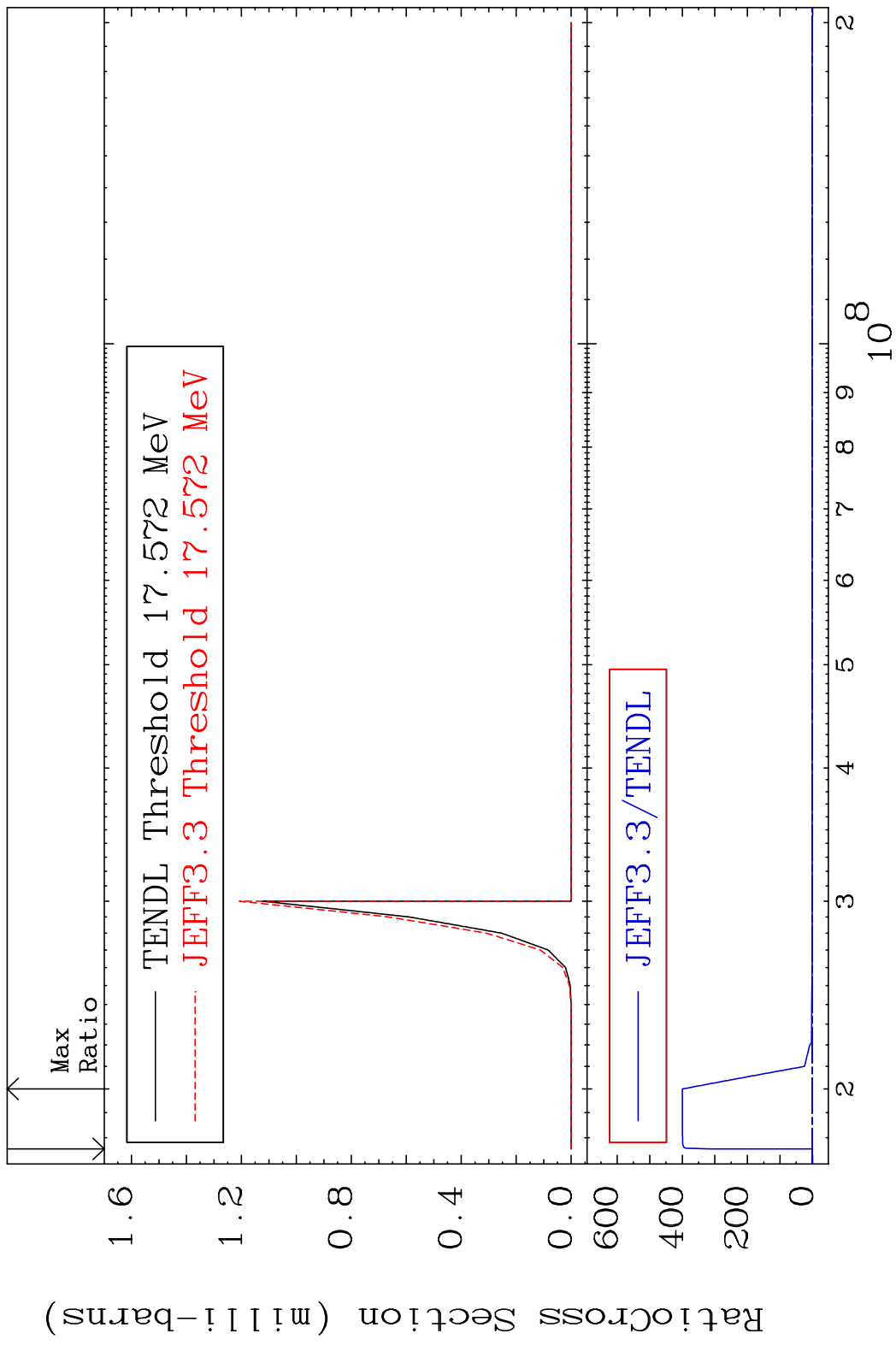
71-Lu-174

Cross Section

-7.161 To 9.380 %



MAT 7122 (n,2n) d 71-Lu-174  
 Cross Section -100.0 To 9999. %

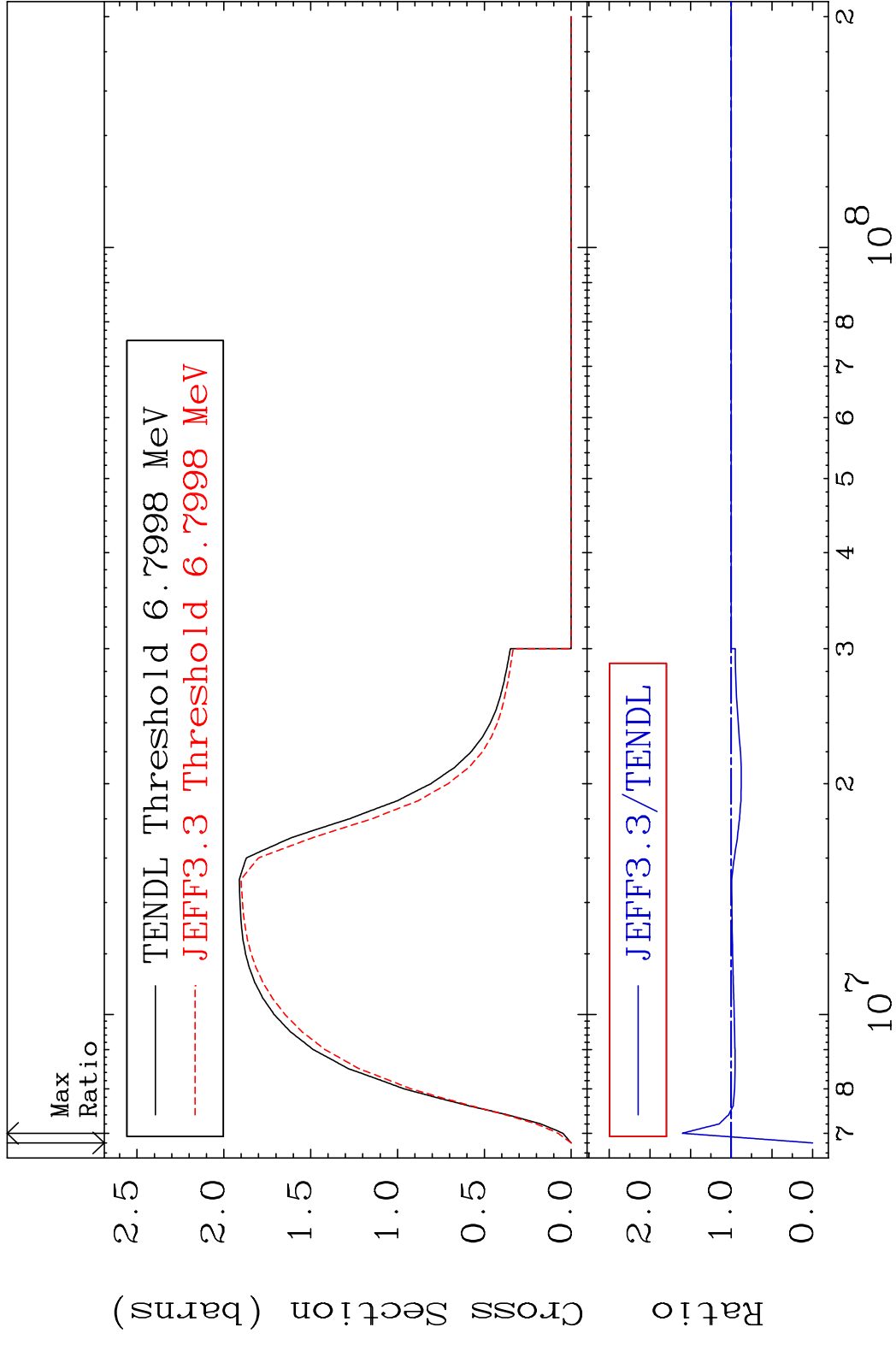


MAT 7122

(n,2n)

71-Lu-174

Cross Section -100.0 To 60.14 %



5

Incident Energy (eV)

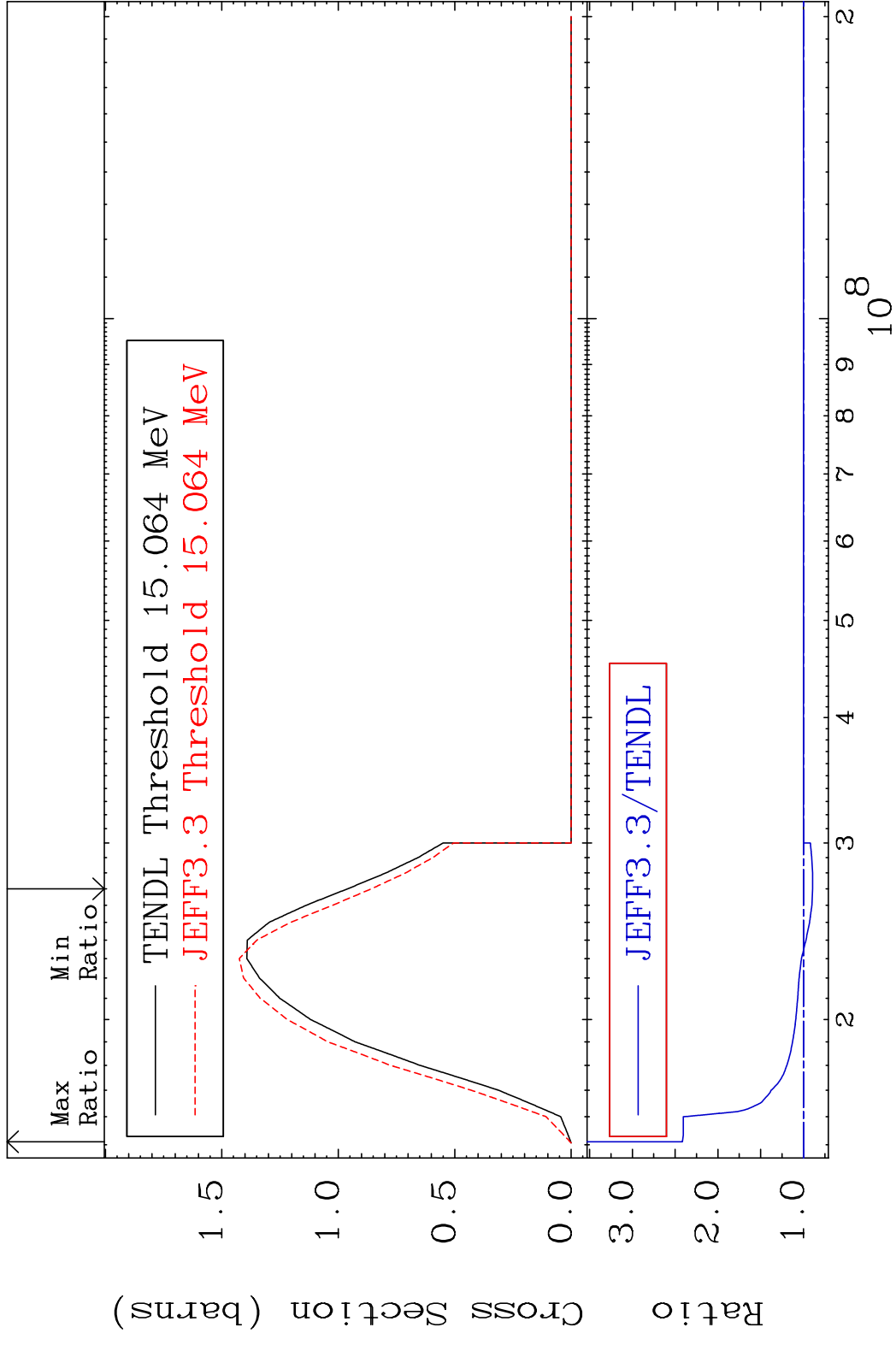
71-Lu-174

MAT 7122

(n,3n)

71-Lu-174

Cross Section -10.67 To 141.6 %

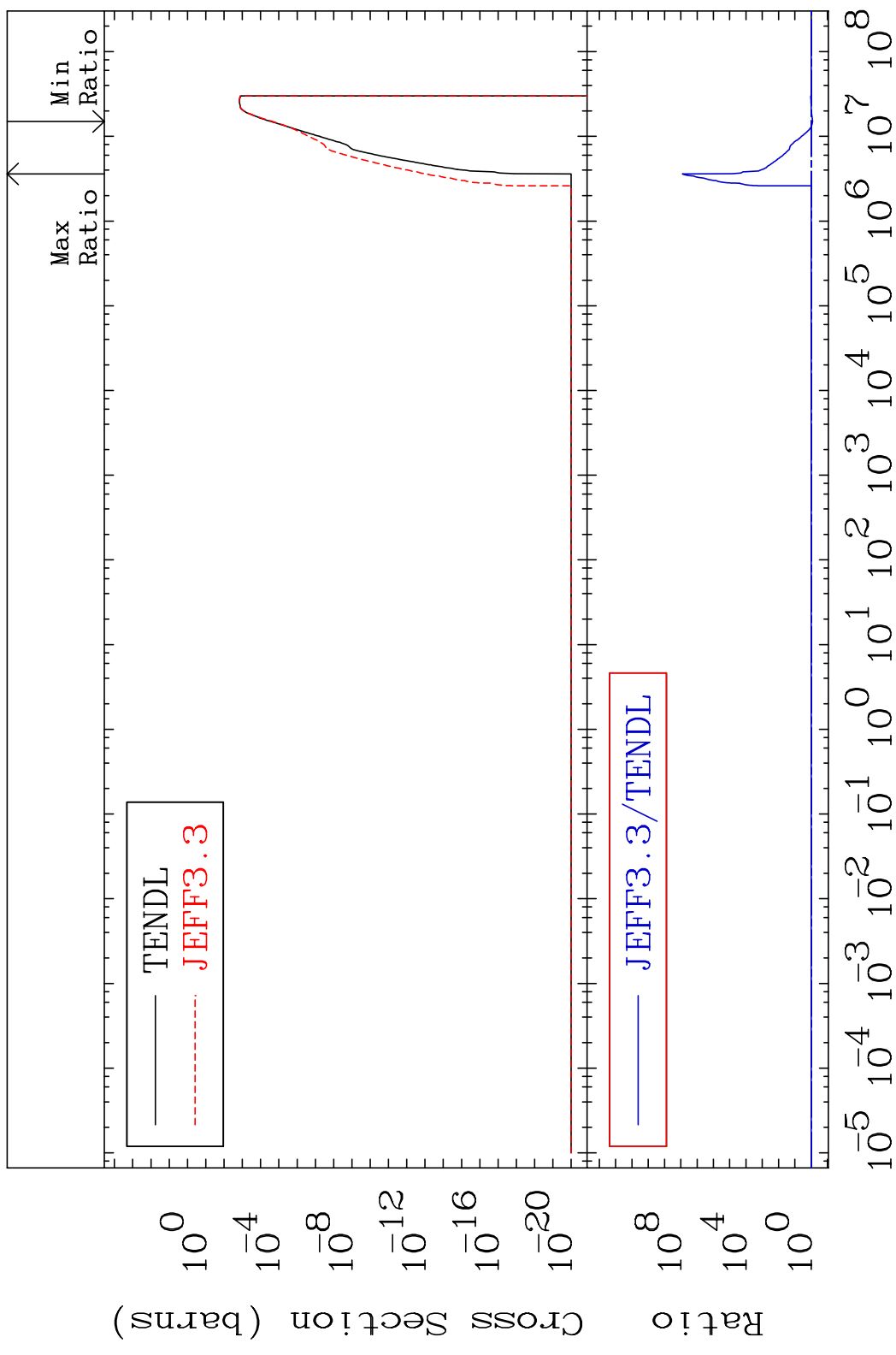


MAT 7122

(n, n')  $\alpha$

71-Lu-174

Cross Section -18.20 To 9999. %

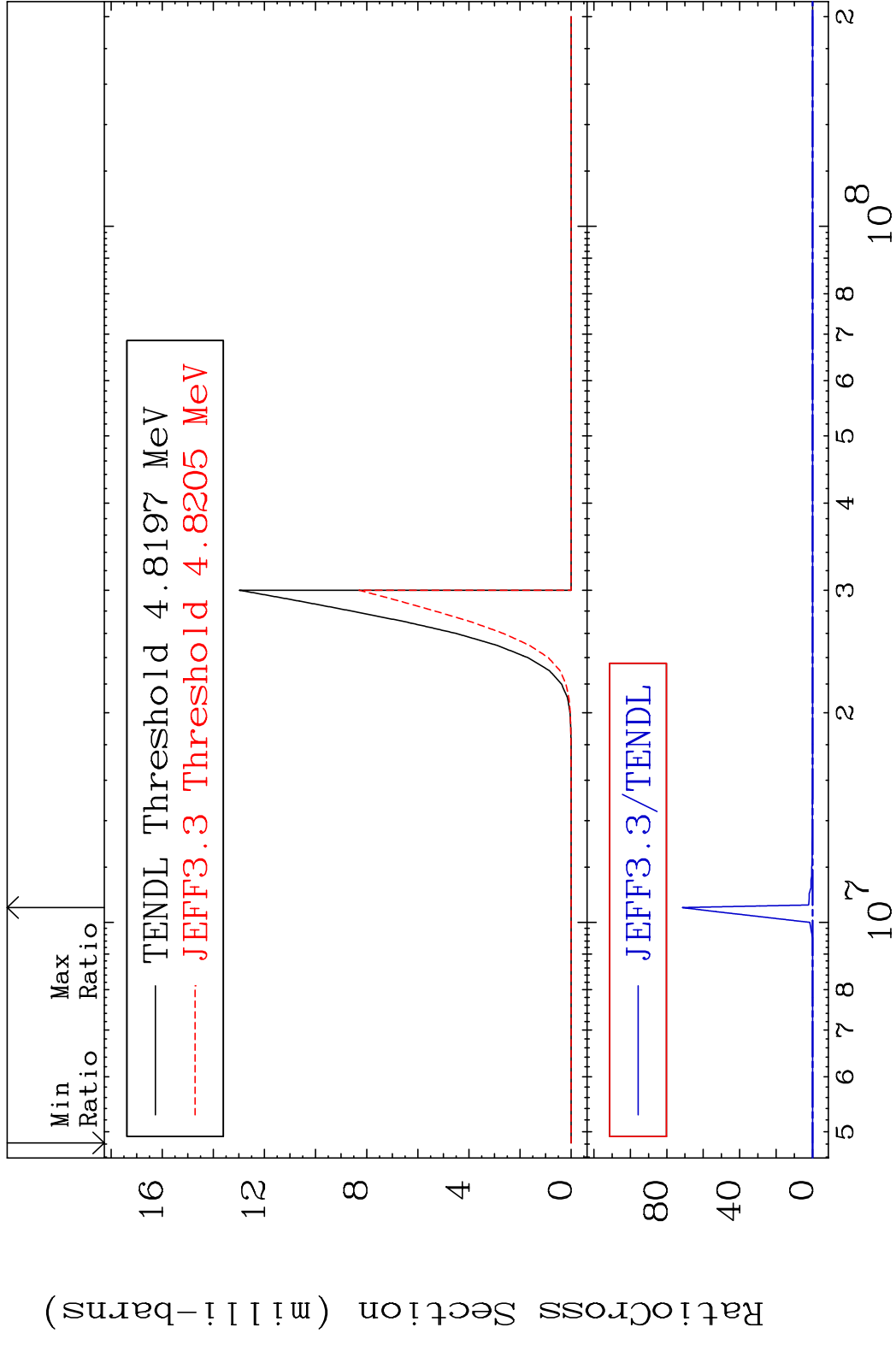




MAT 7122

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

Cross Section -100.0 To 9999. %



8

Incident Energy (eV)

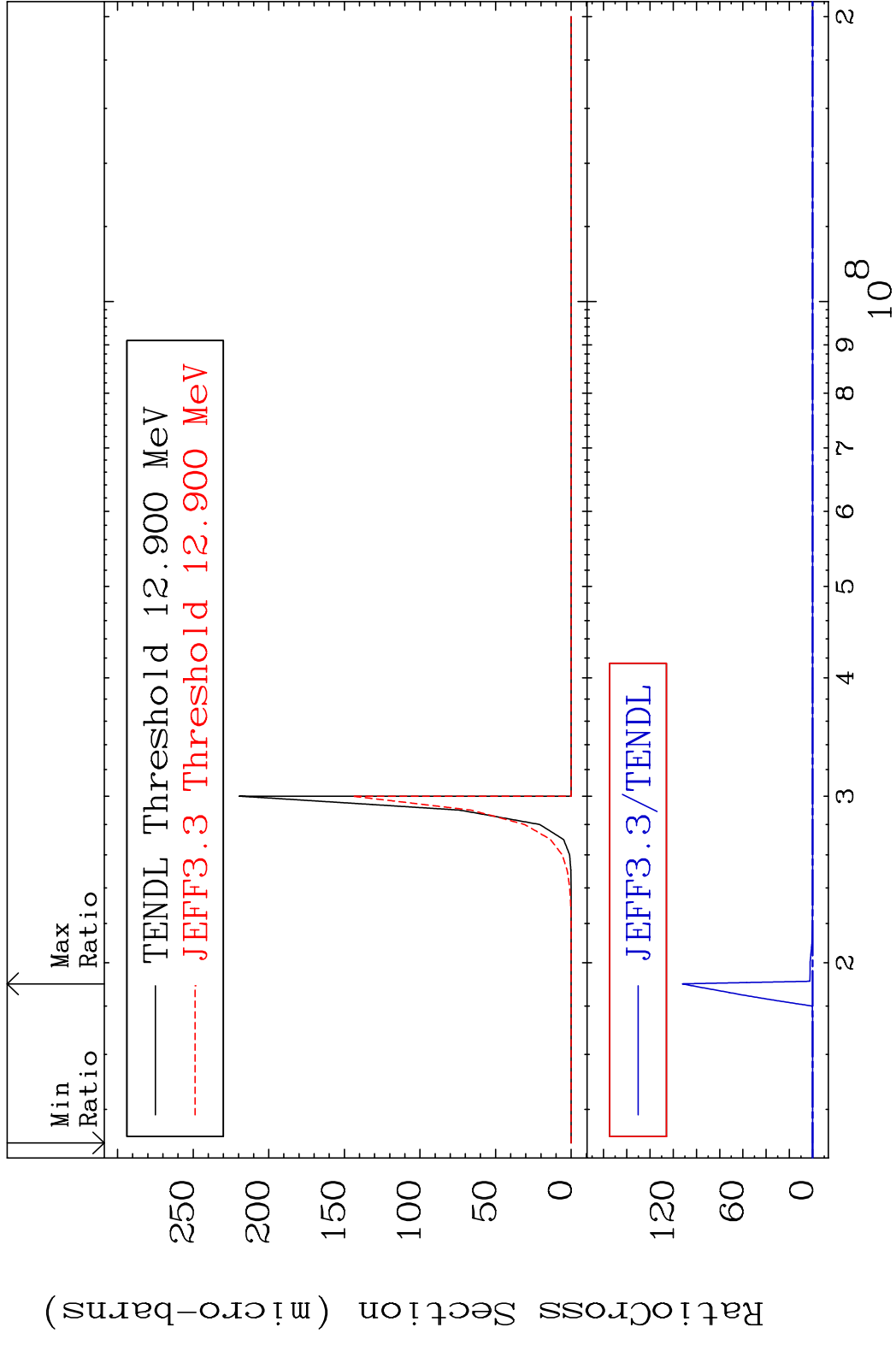
71-Lu-174

MAT 7122

(n,3n)  $\alpha$

71-Lu-174

Cross Section -100.0 To 9999. %

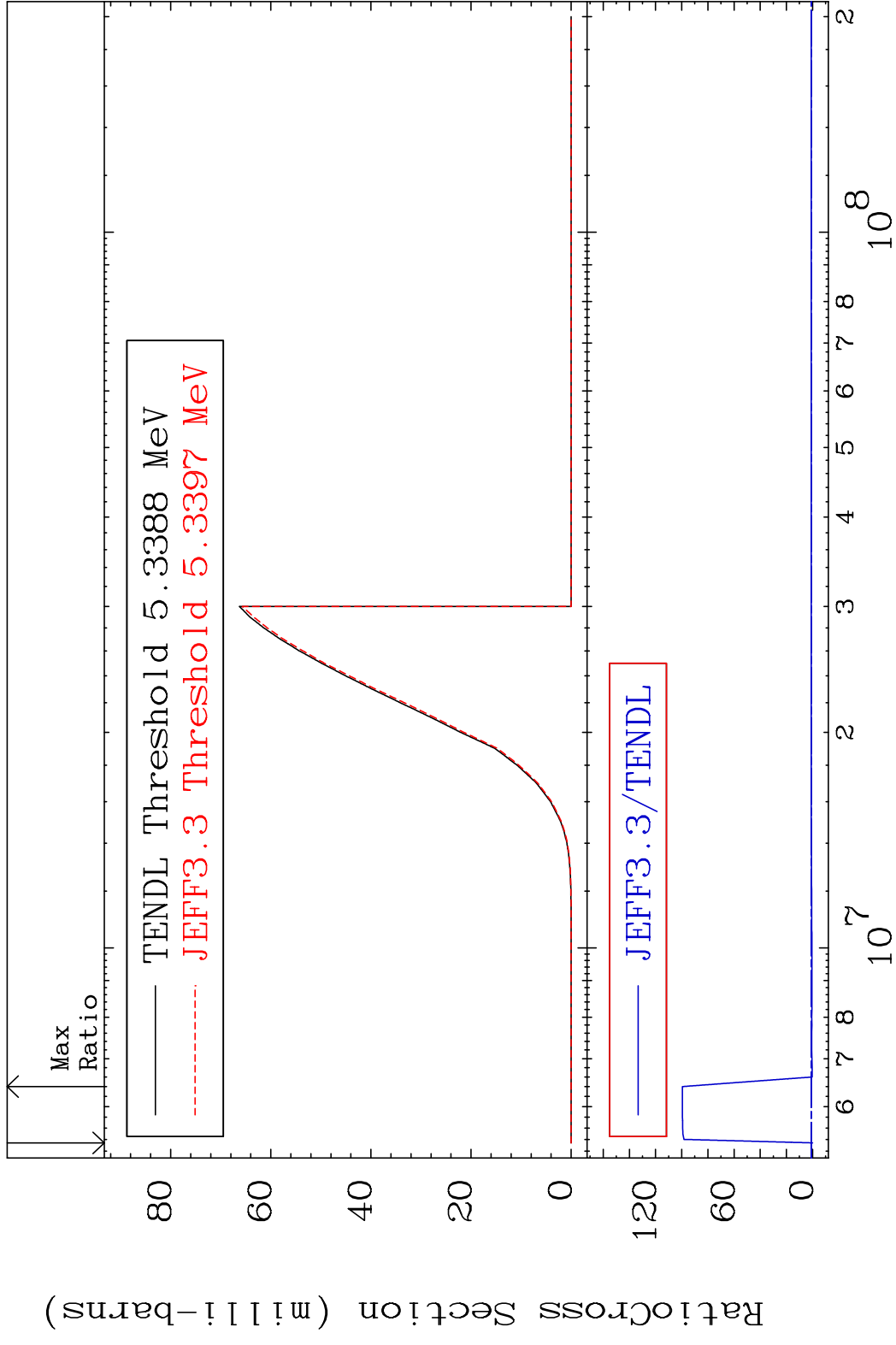


MAT 7122

(n, n') p

71-Lu-174

Cross Section -100.0 To 9852. %



71-Lu-174

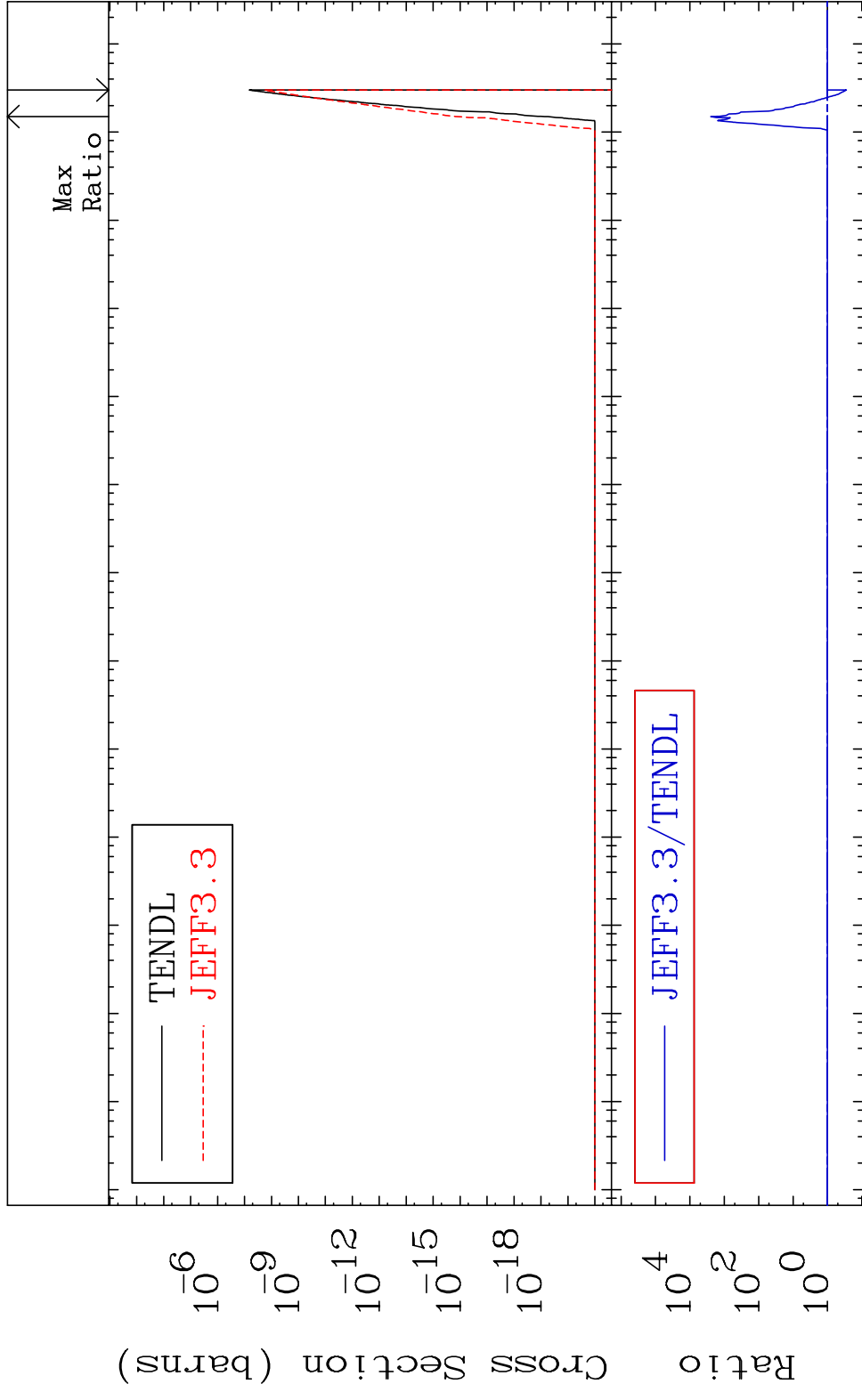
MAT 7122

(n, n') 2α

71-Lu-174

Cross Section

-71.66 To 9999. %

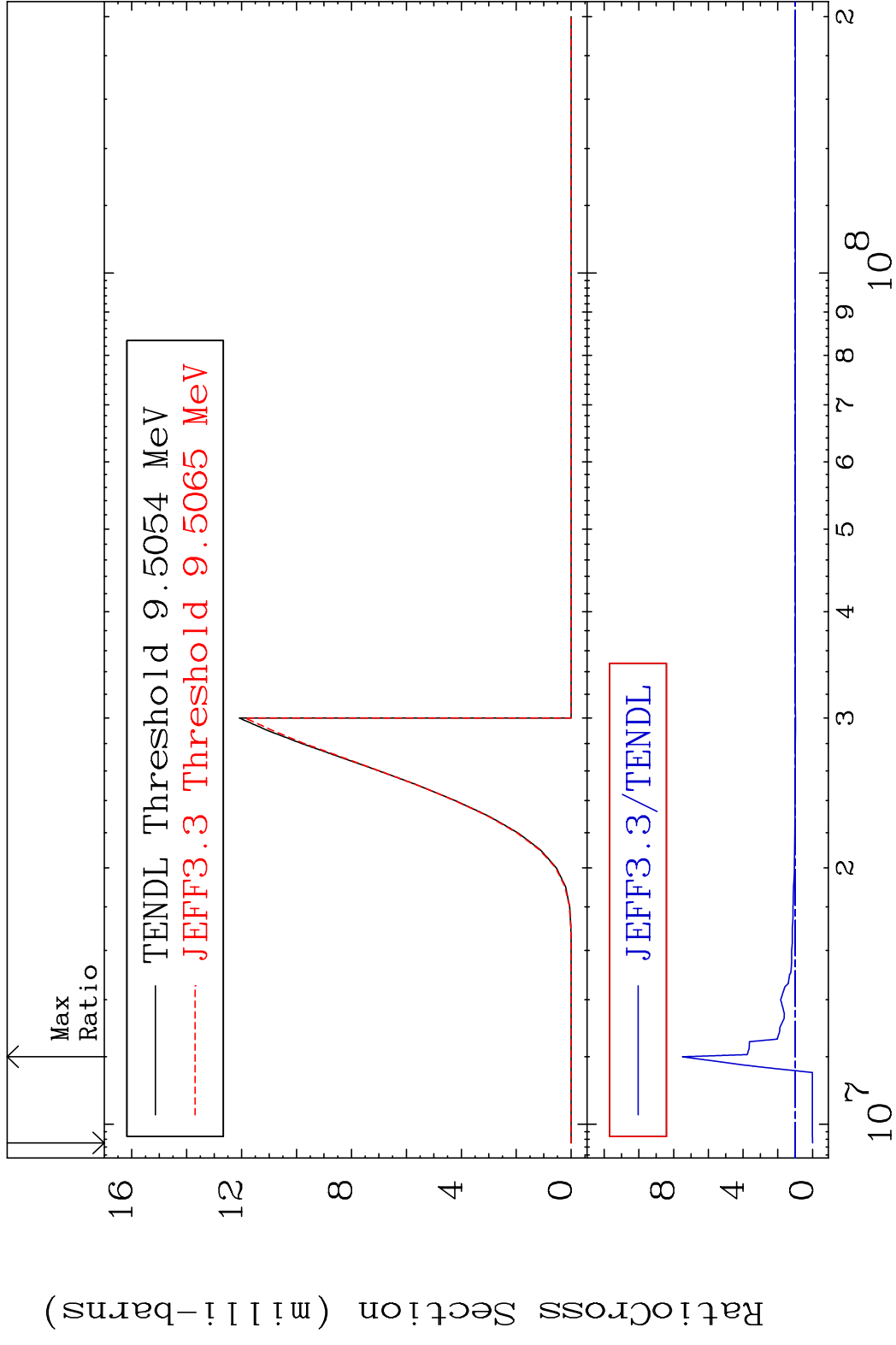


MAT 7122

(n, n') d

71-Lu-174

Cross Section -100.0 To 649.8 %



12

Incident Energy (eV)

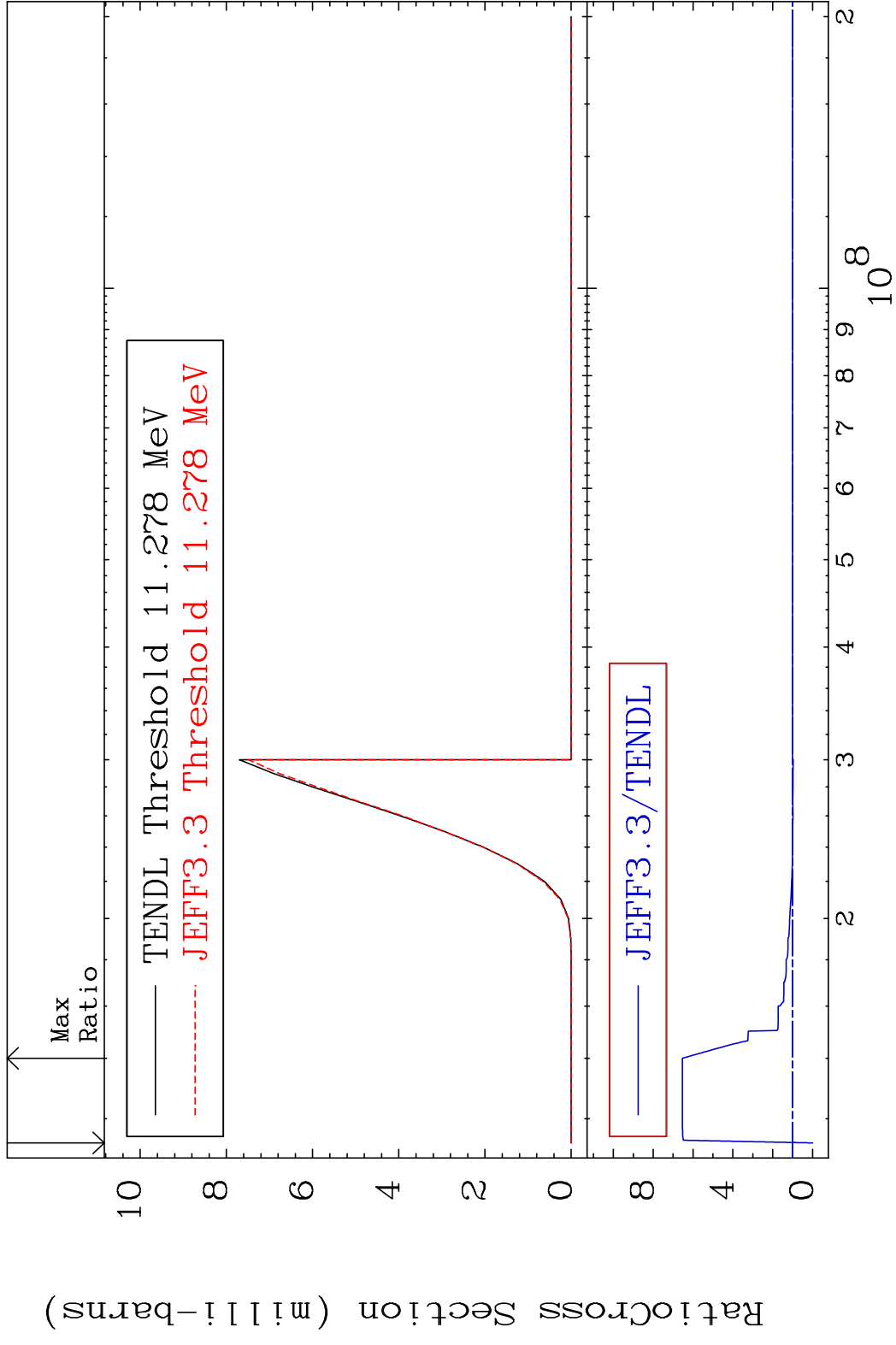
71-Lu-174

MAT 7122

(n, n') t

71-Lu-174

Cross Section -100.0 To 553.7 %

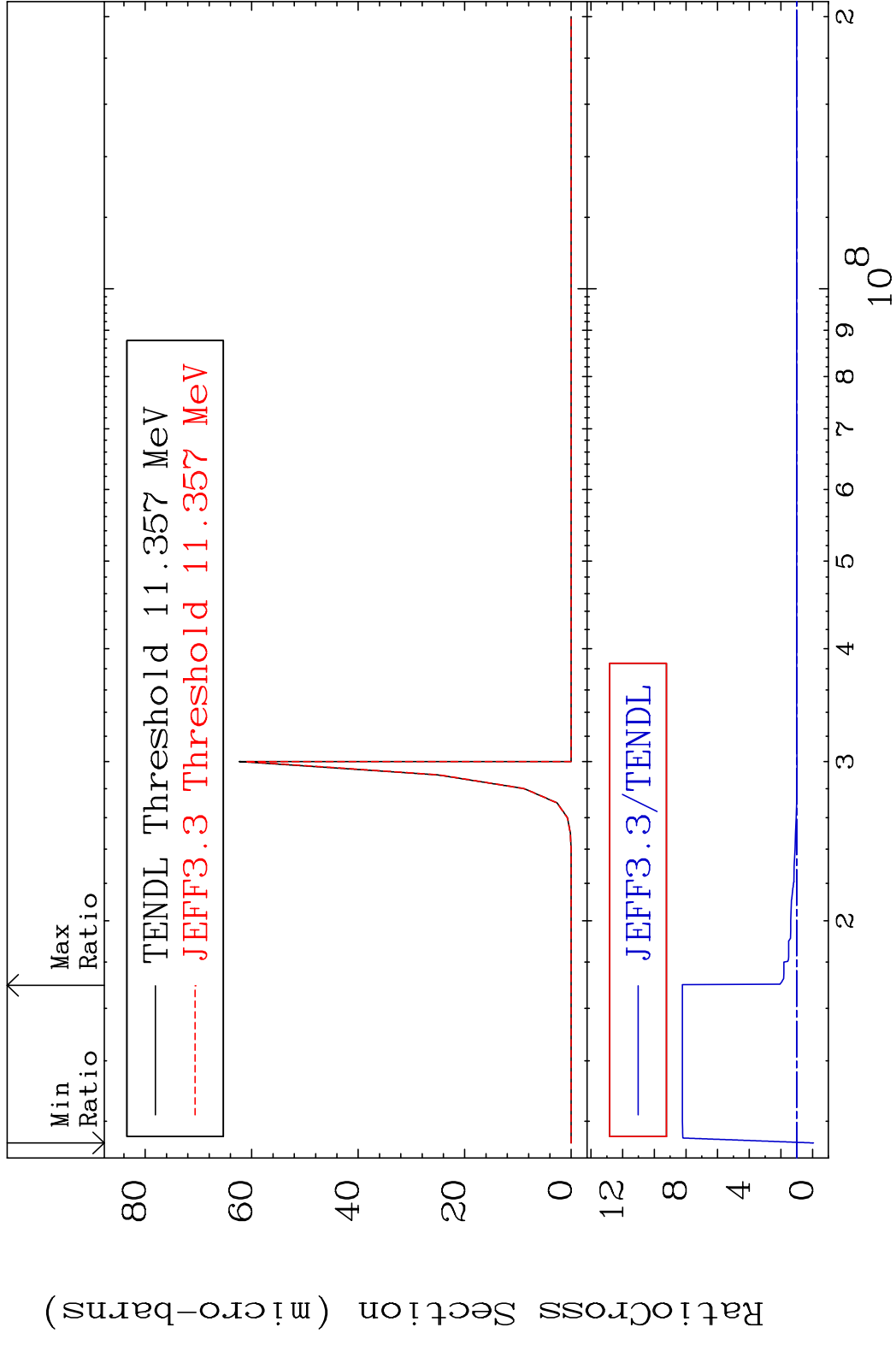


MAT 7122

(n,n') He-3

71-Lu-174

Cross Section -100.0 To 722.7 %

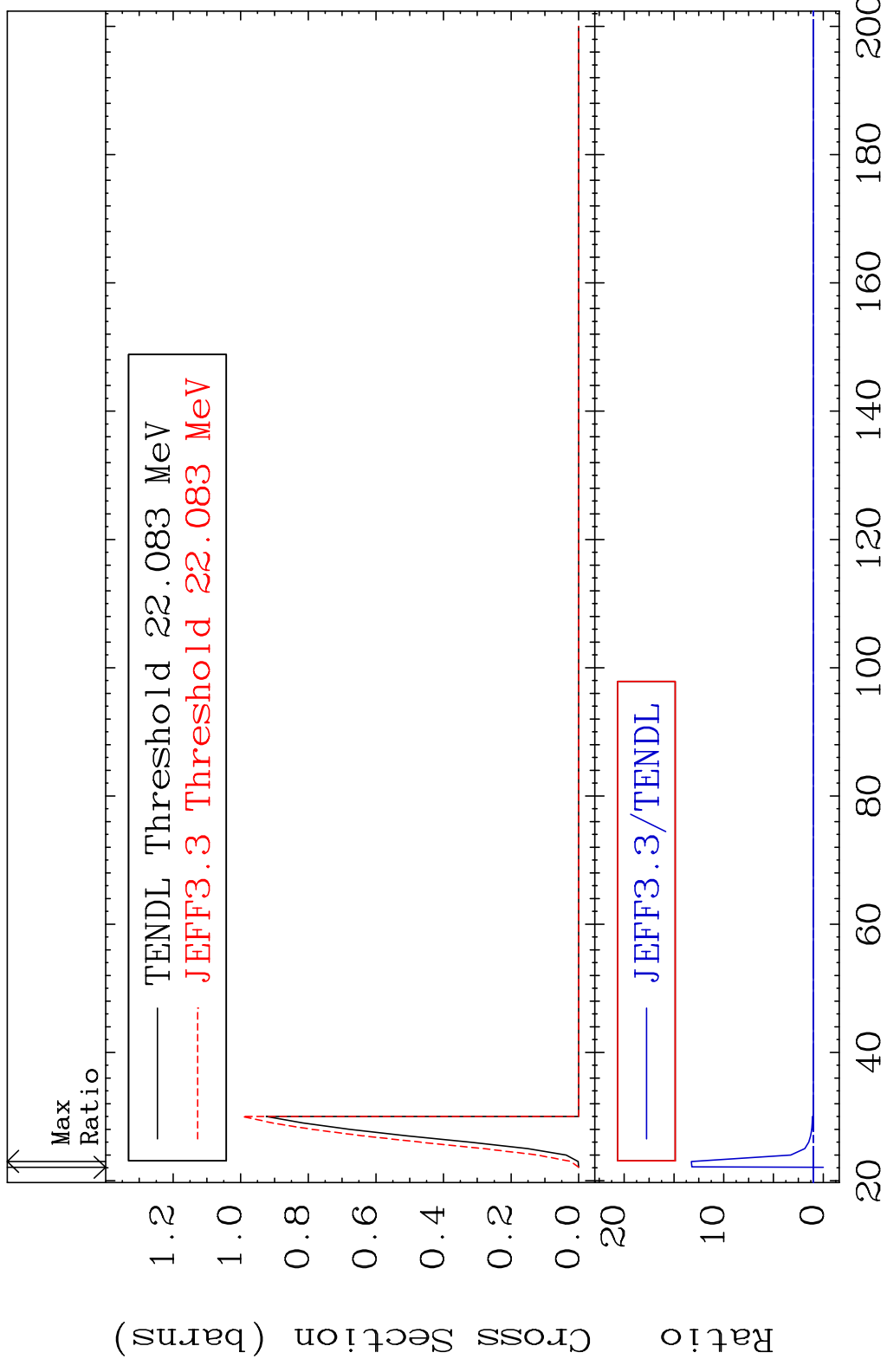


MAT 7122

(n,4n)

71-Lu-174

Cross Section -100.0 To 1225. %



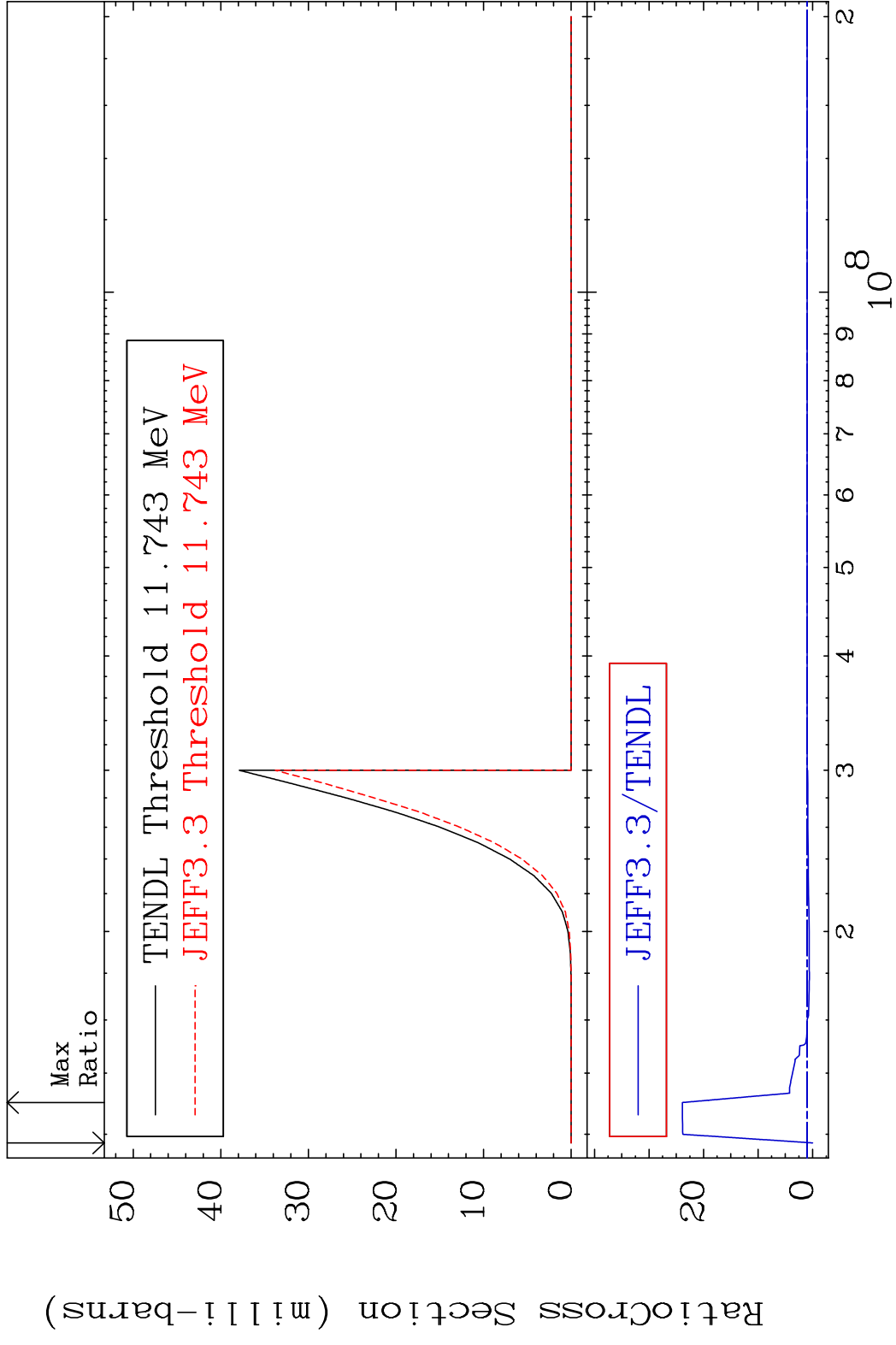


MAT 7122

(n,2n) p

71-Lu-174

Cross Section -100.0 To 2288. %

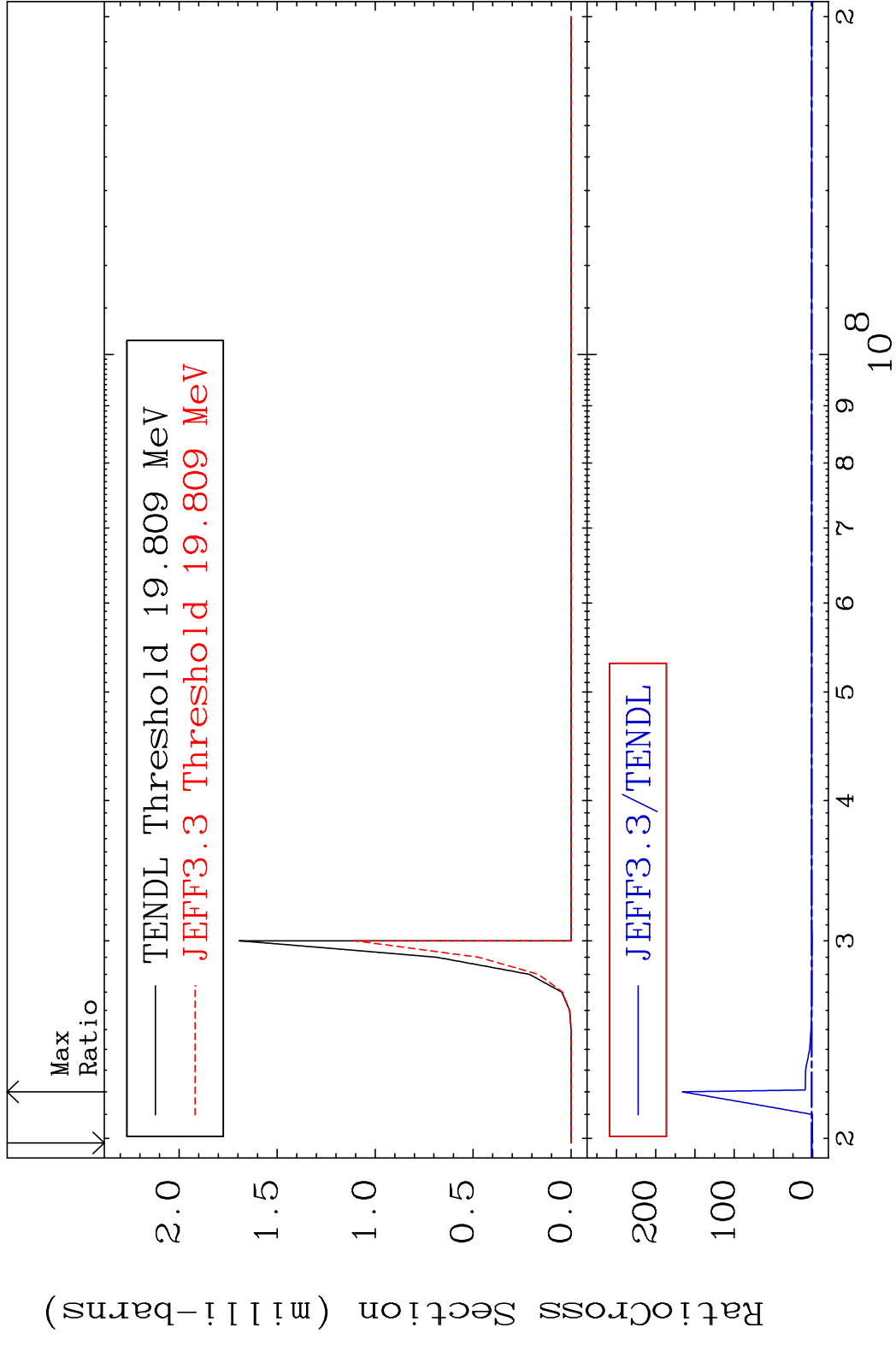


MAT 7122

(n,3n) p

71-Lu-174

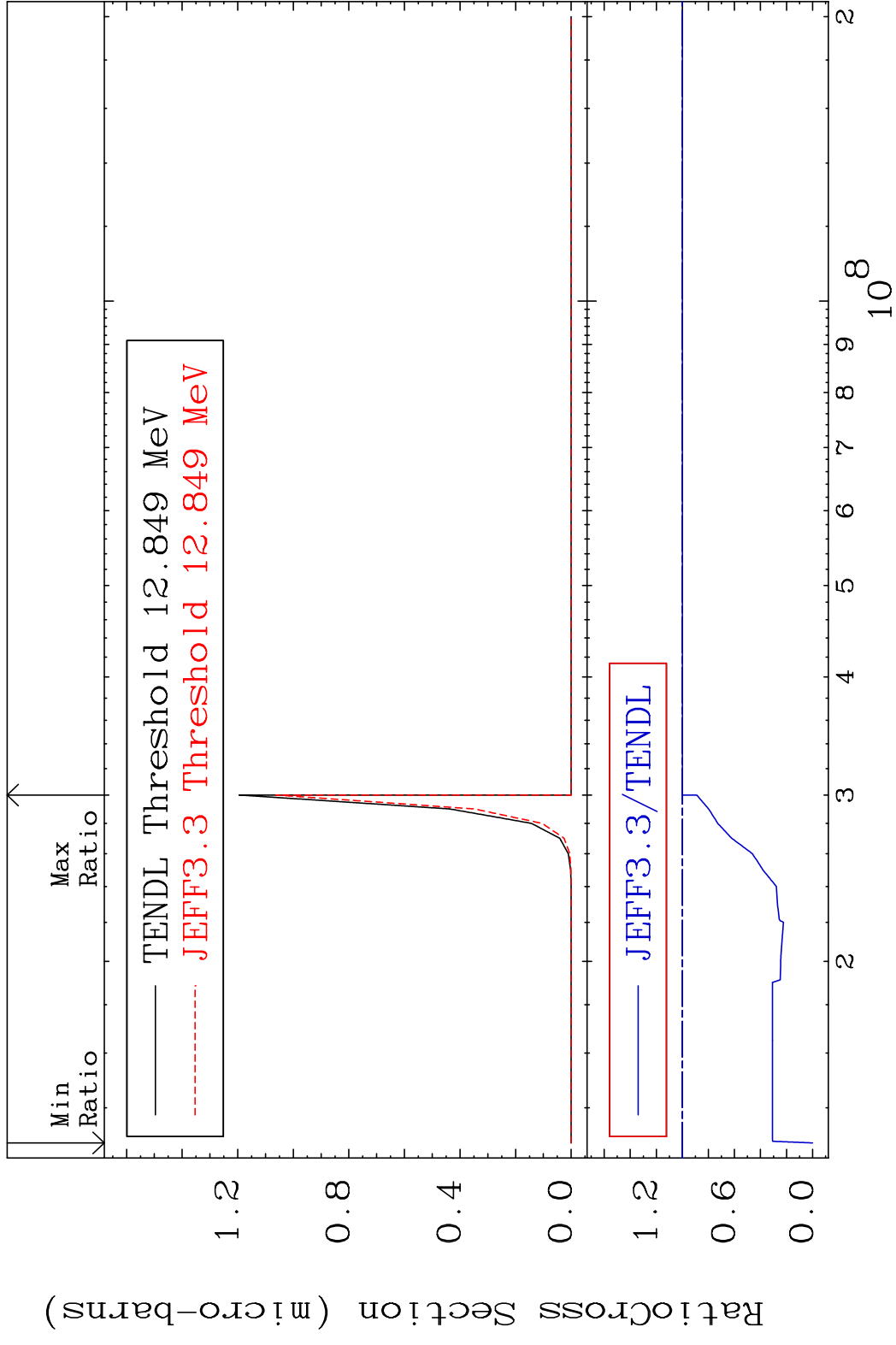
Cross Section -100.0 To 9999. %



MAT 7122

(n,2n) p 71-Lu-174

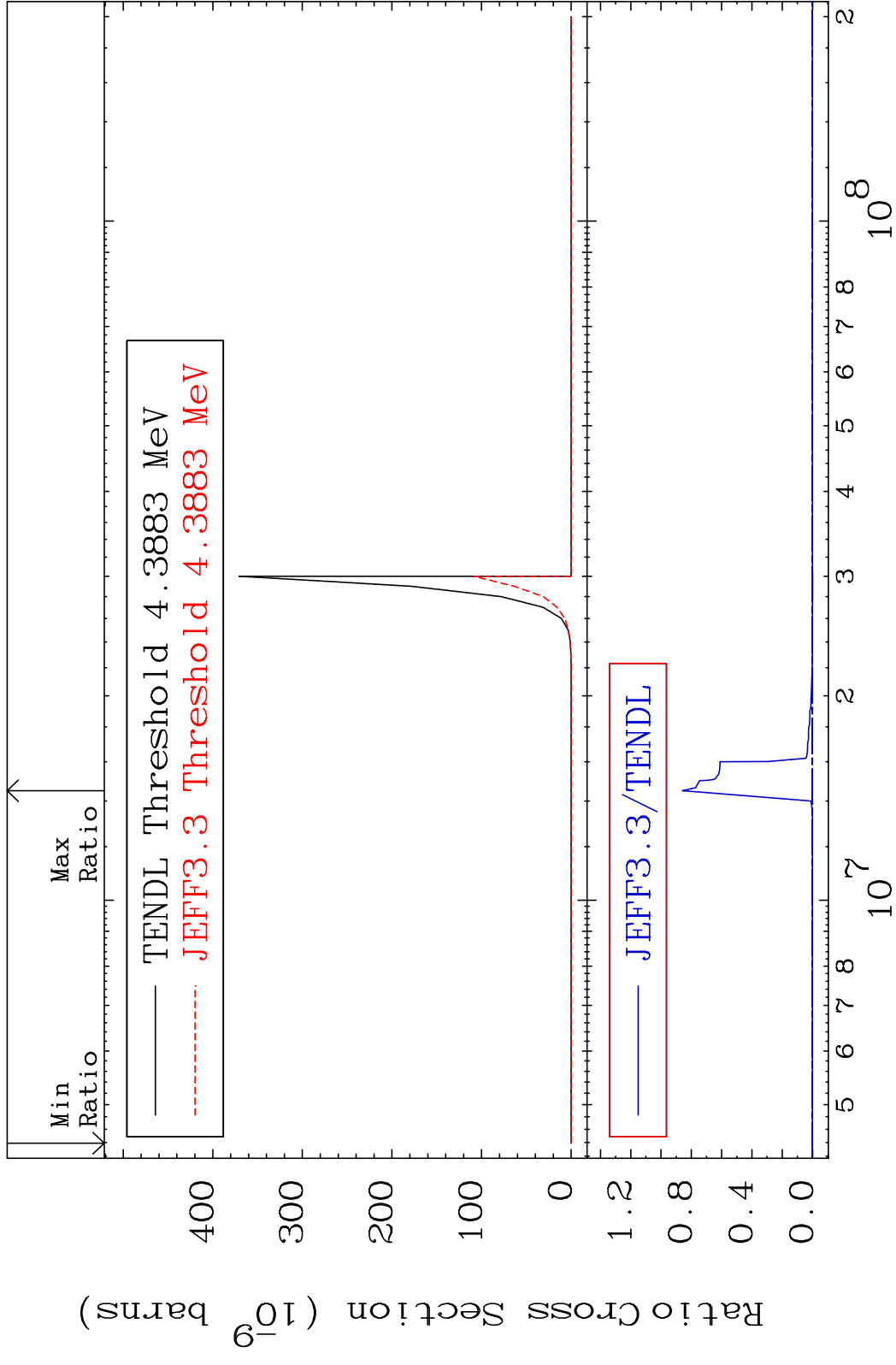
Cross Section -100.0 To 0.000 %



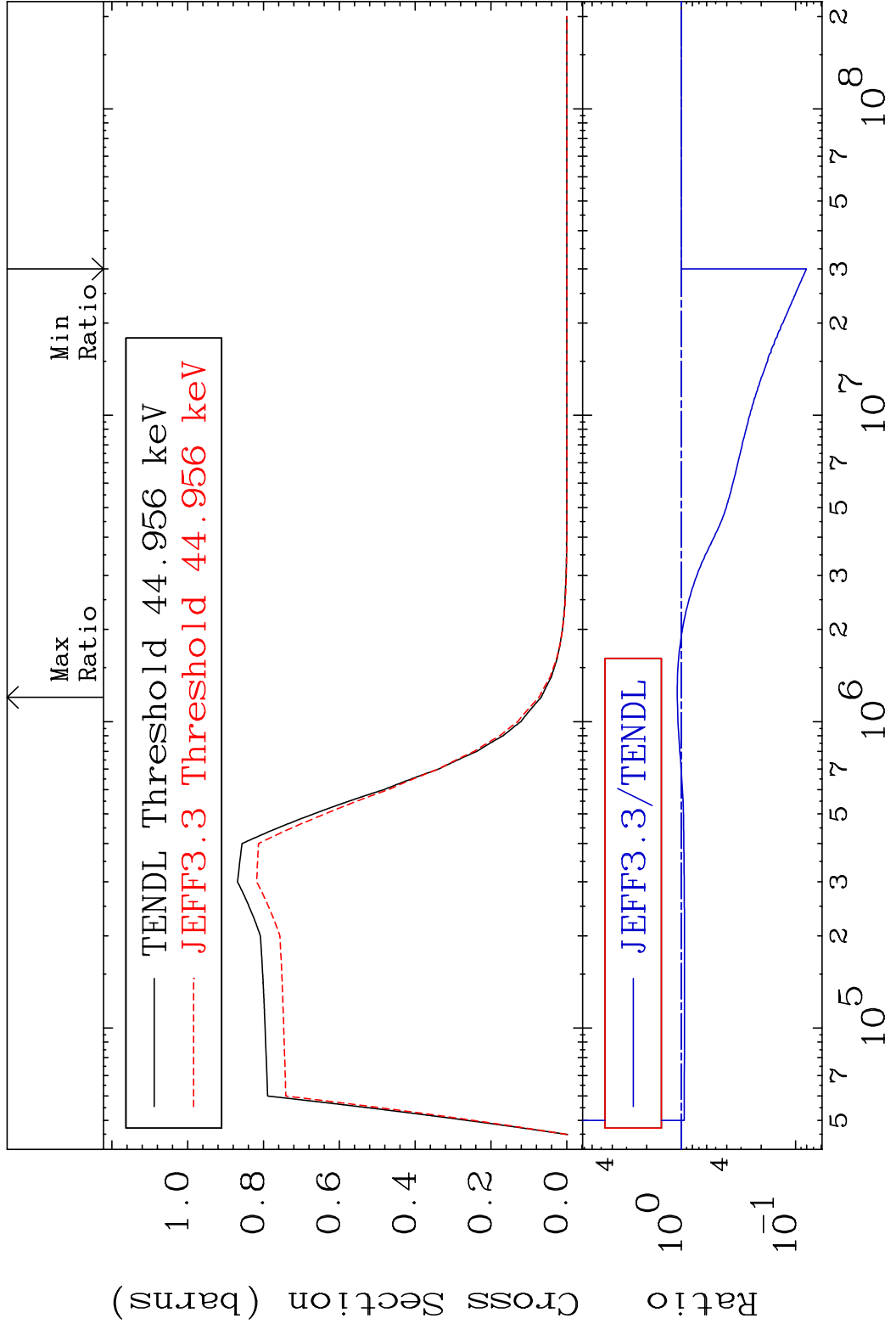
MAT 7122

(n,n') p  $\alpha$  71-Lu-174

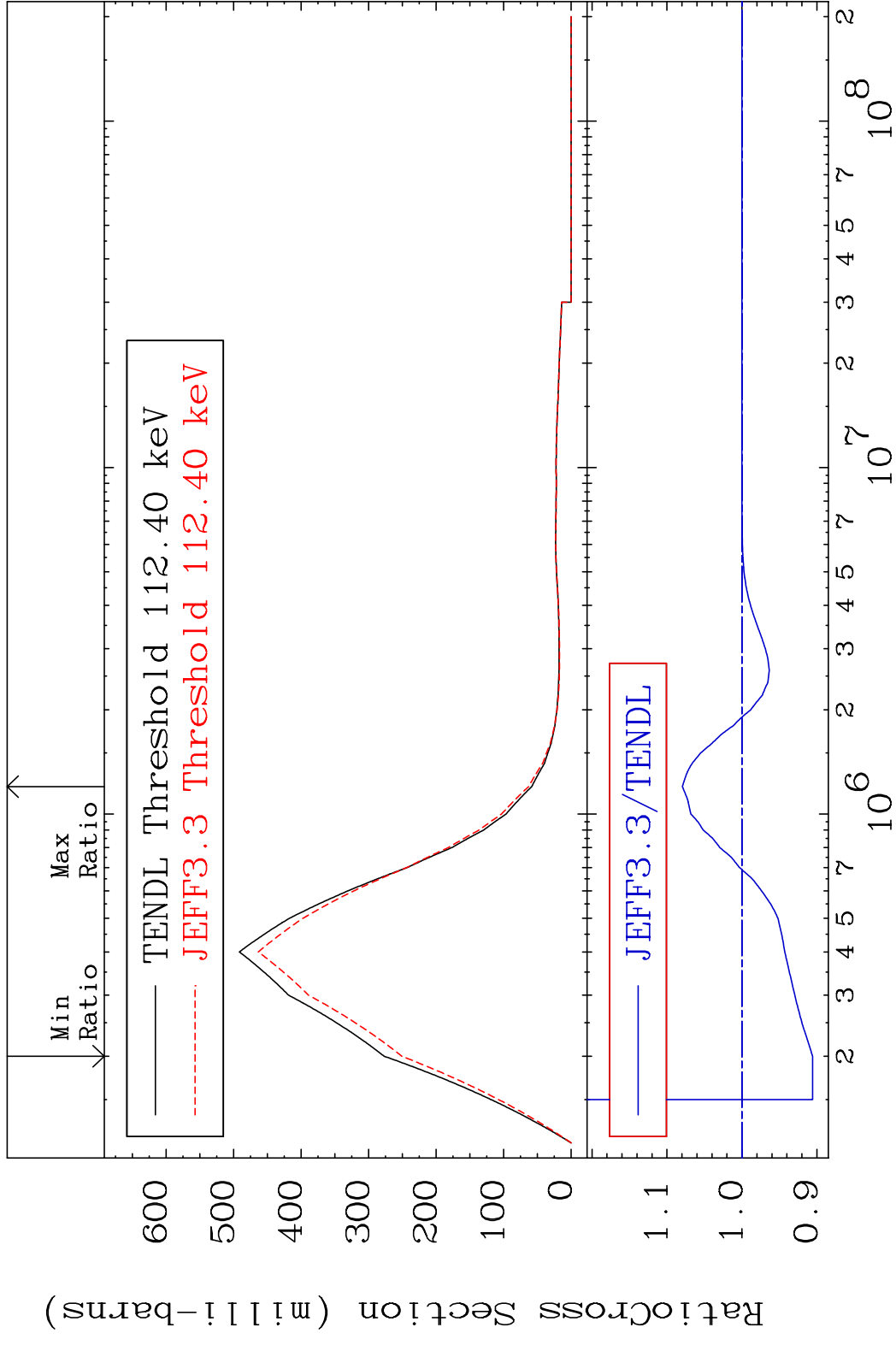
Cross Section -100.0 To 9999. %



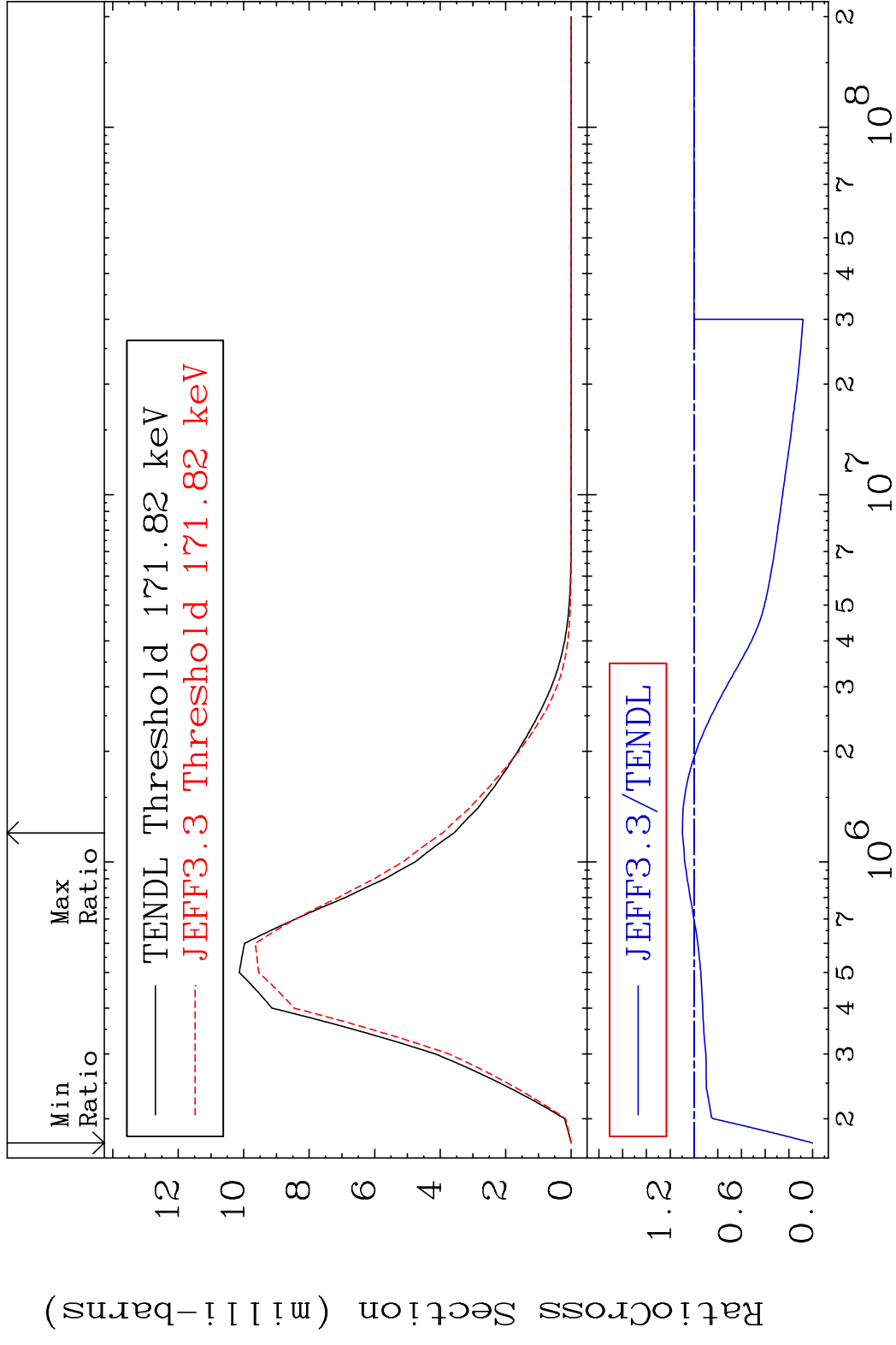
MAT 7122 MT= 51 (n,n') Level 71-Lu-174  
 Cross Section -91.94 To 8.433 %



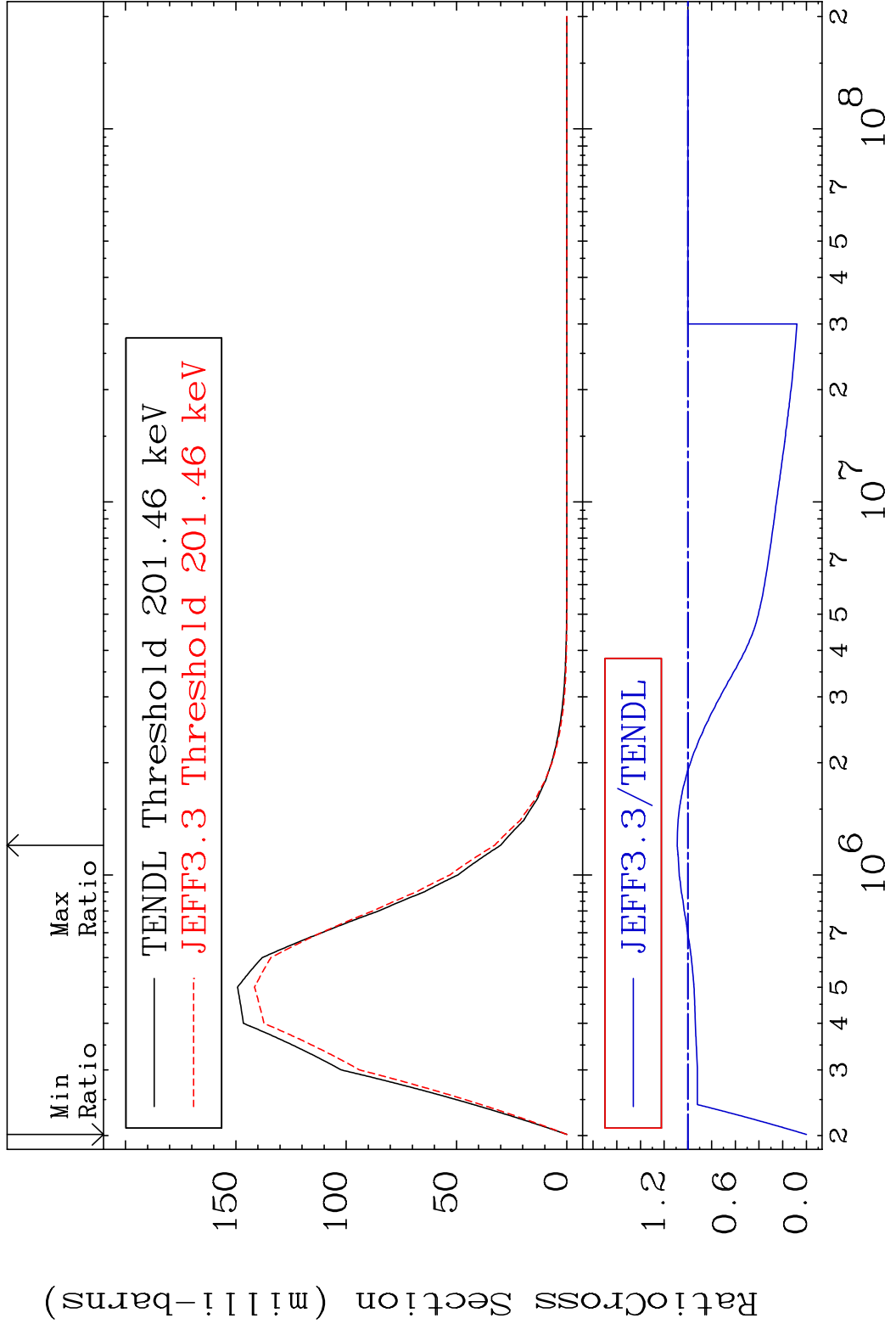
MAT 7122 MT= 52 (n, n') Level 71-Lu-174  
 Cross Section -9.417 To 7.948 %



MAT 7122 MT= 53 (n, n') Level 71-Lu-174  
 Cross Section -100.0 To 9.752 %



MAT 7122 MT= 54 (n,n') Level 71-Lu-174  
 Cross Section -100.0 To 9.018 %



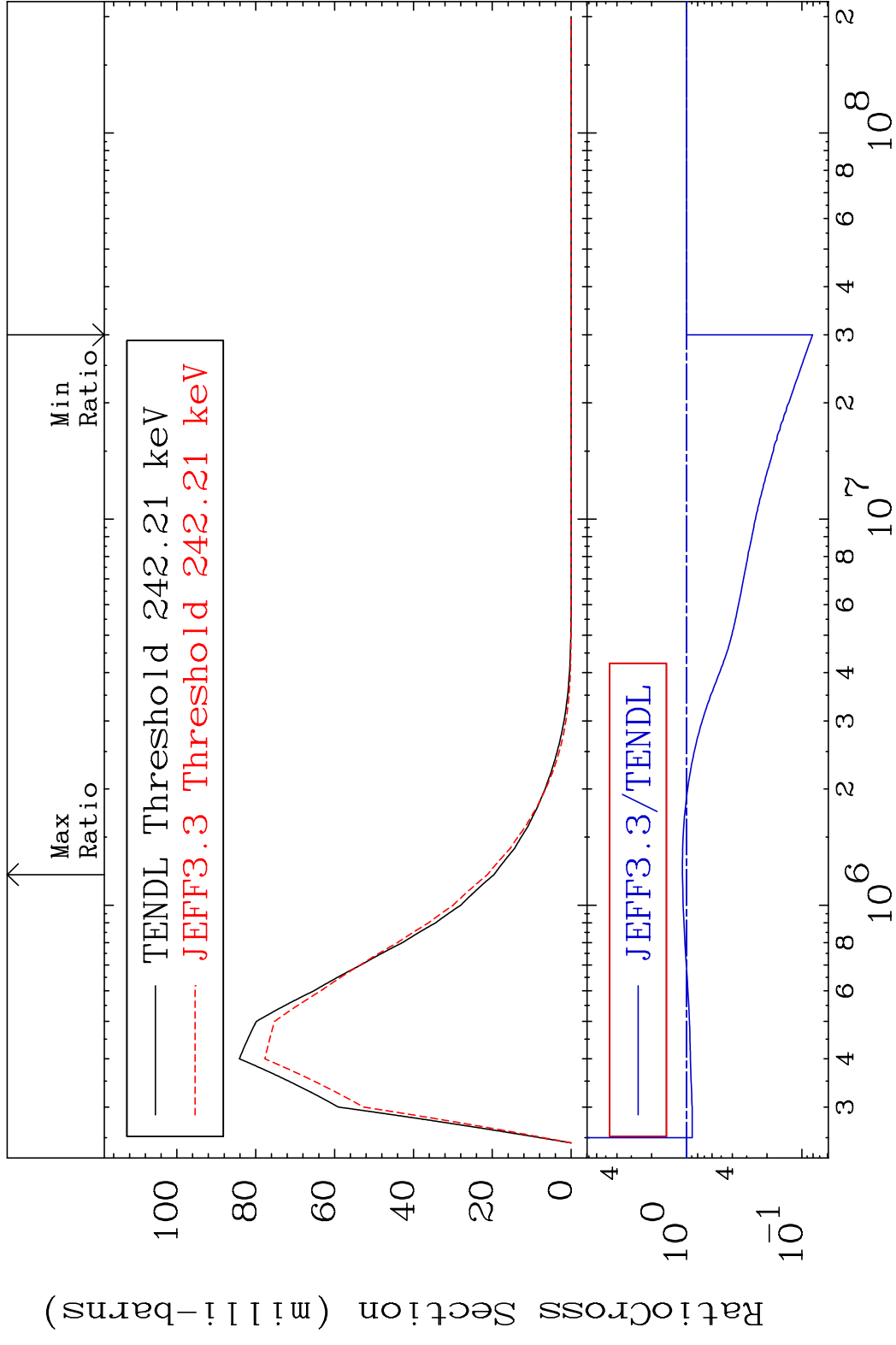


MAT 7122

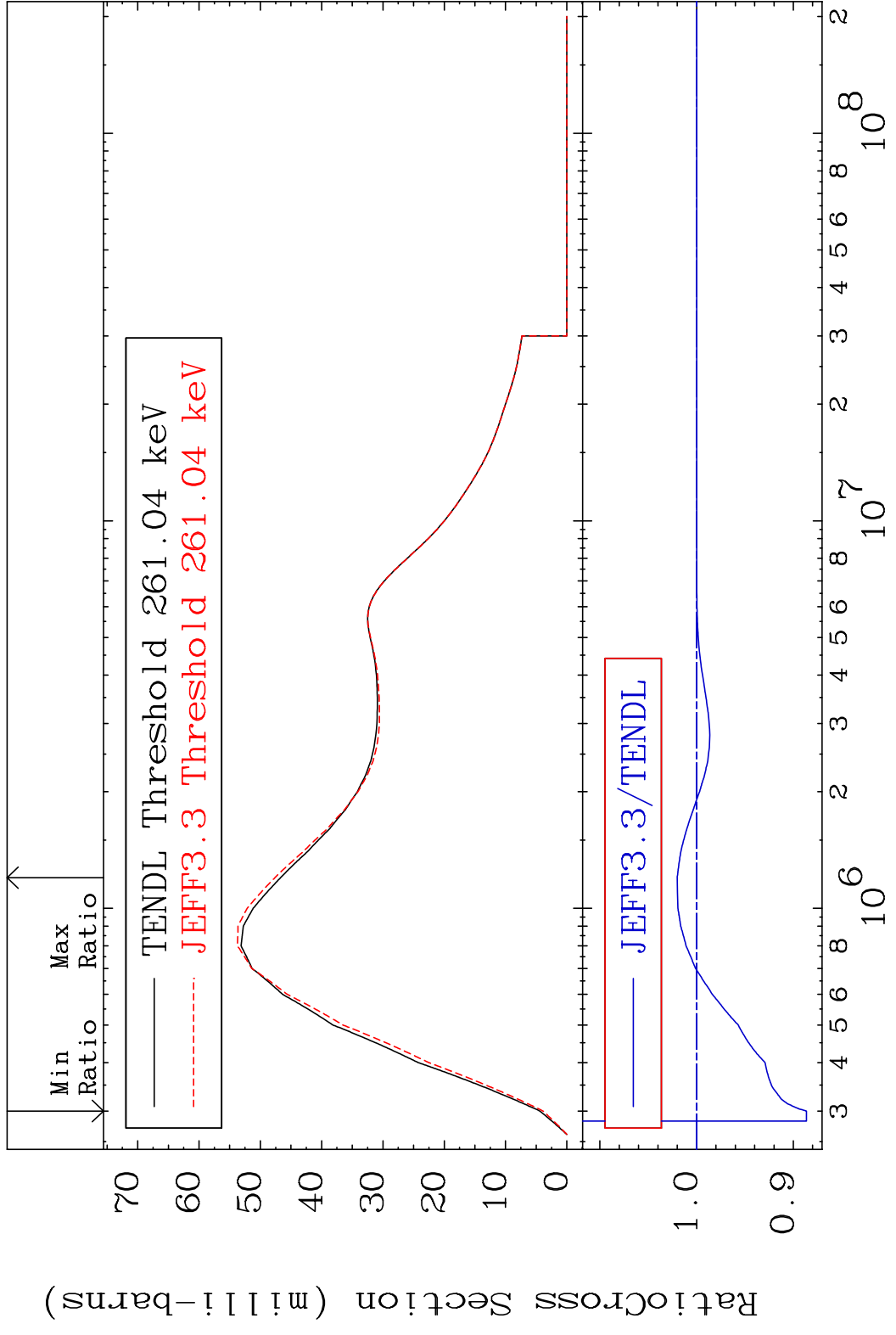
MT= 55 (n,n') Level

71-Lu-174

Cross Section -91.94 To 8.472 %



MAT 7122 MT= 56 (n,n') Level 71-Lu-174  
 Cross Section -11.35 To 2.009 %

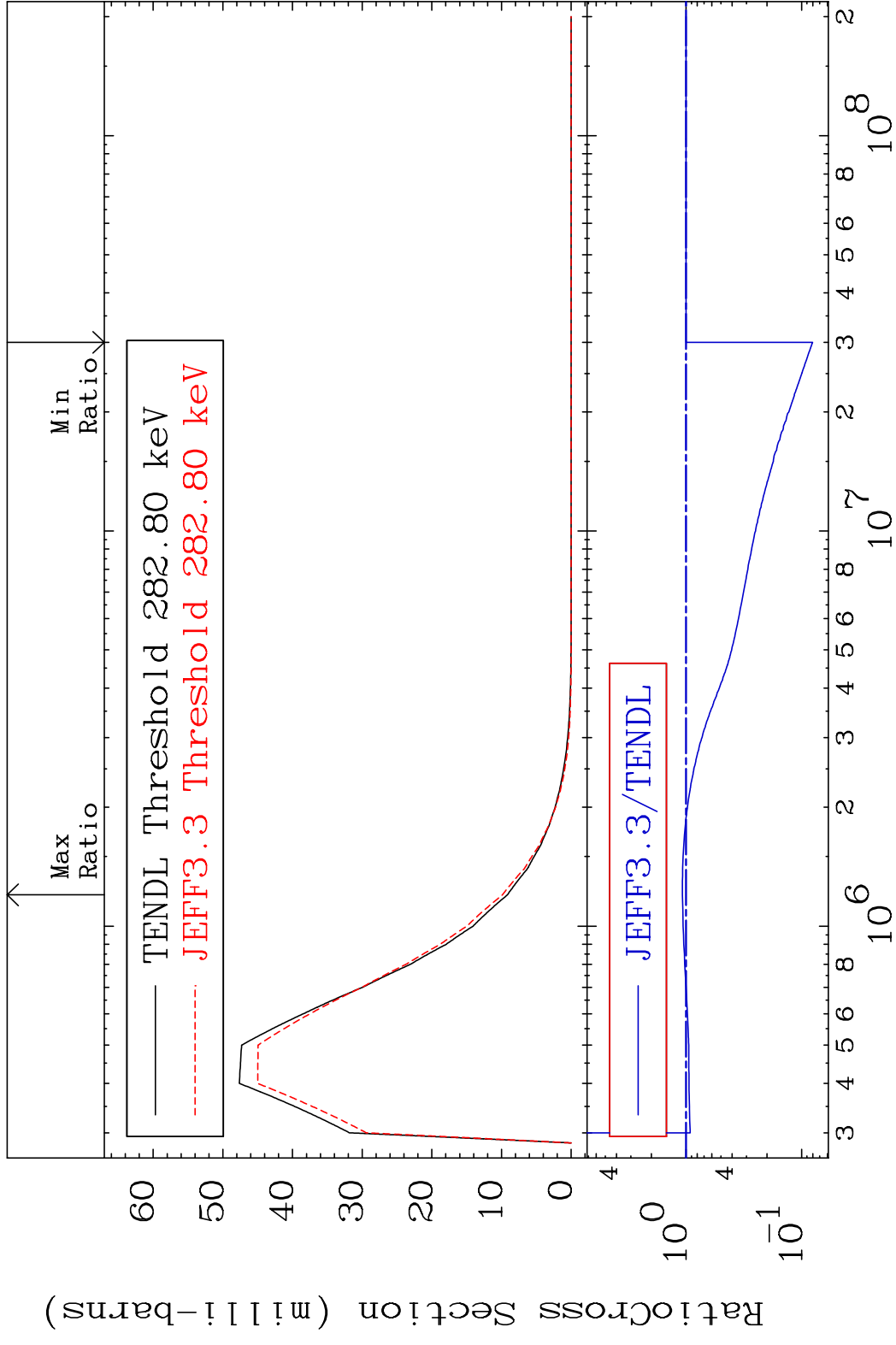


MAT 7122

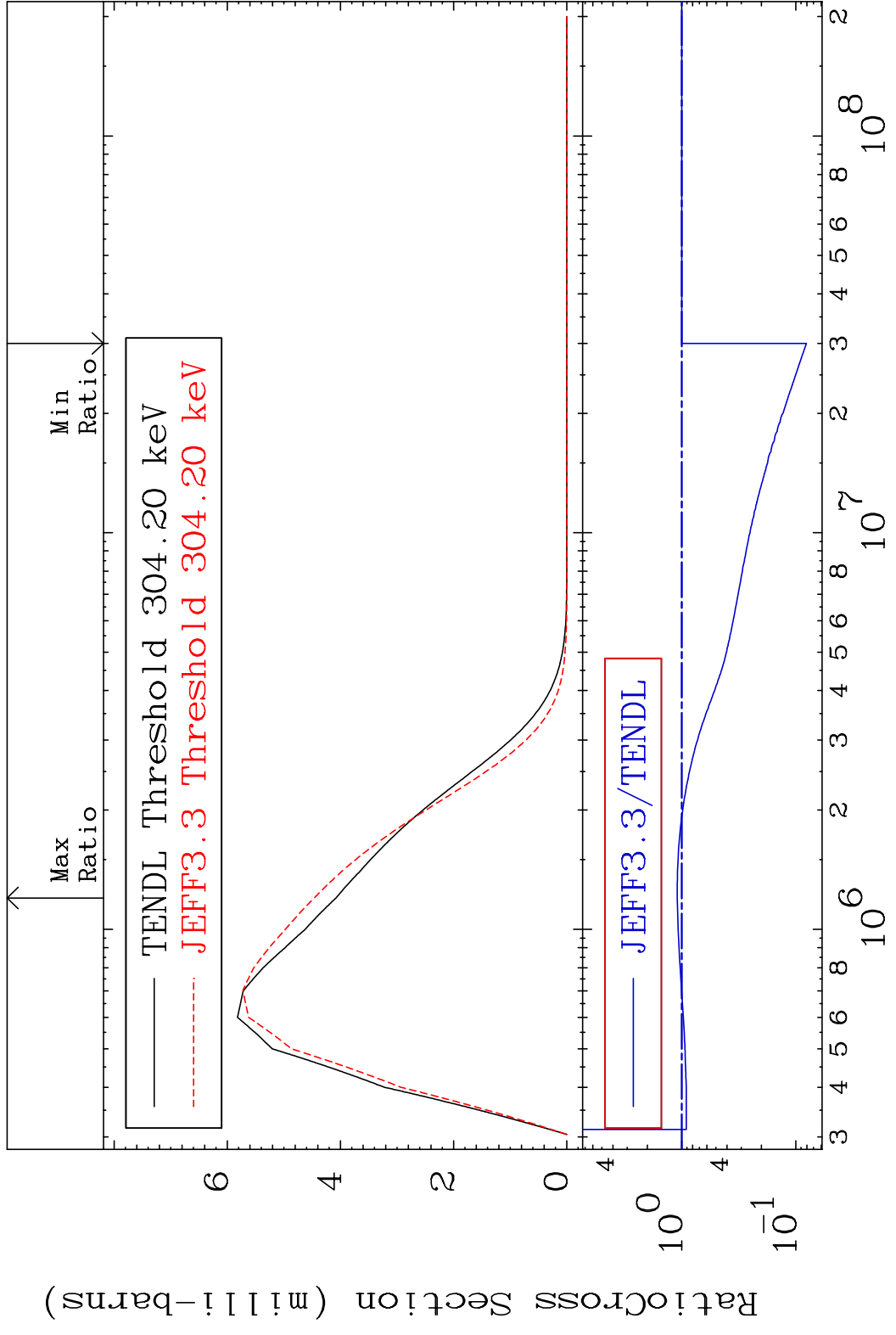
MT= 57 (n, n') Level

71-Lu-174

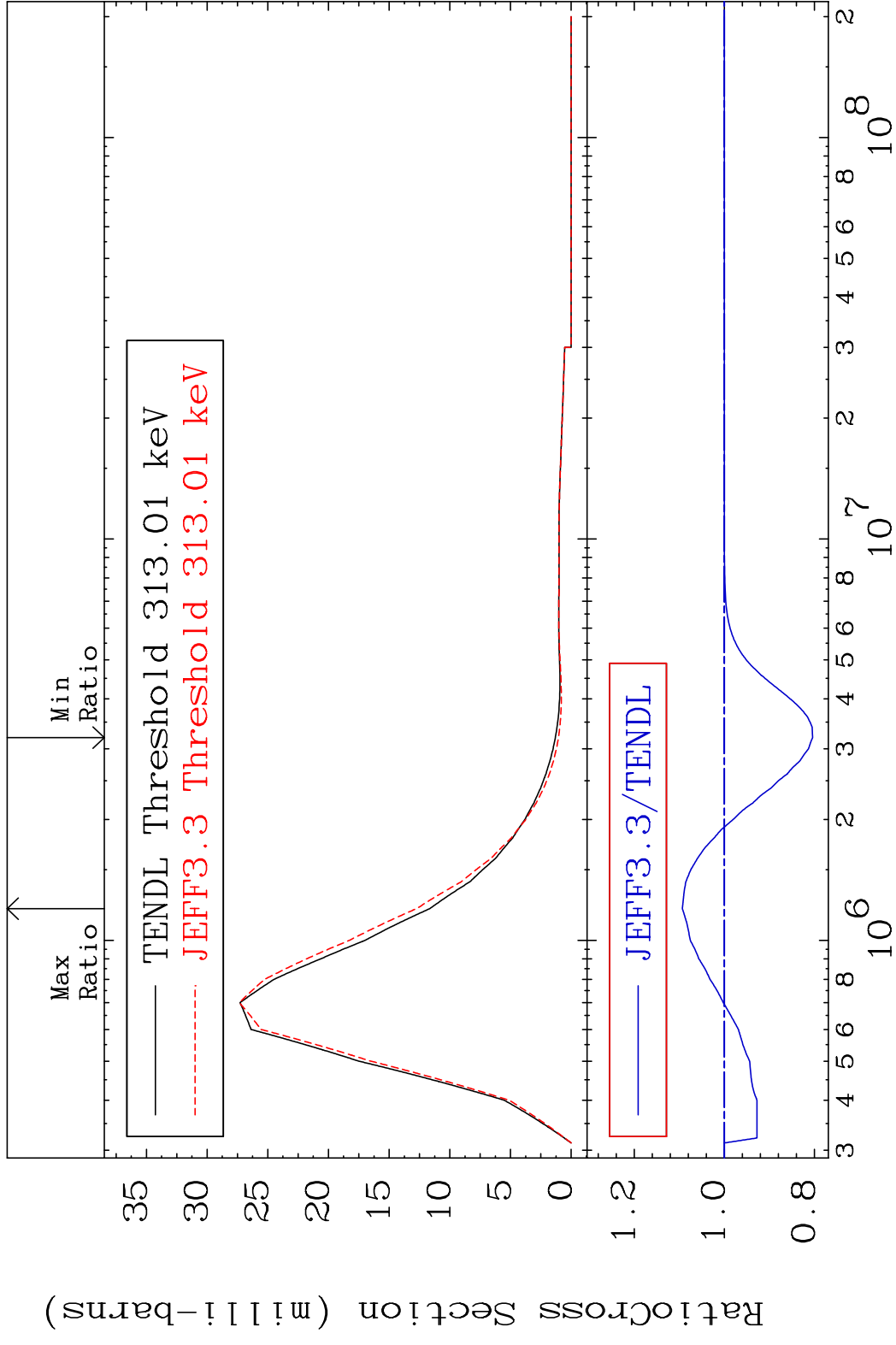
Cross Section -91.94 To 7.778 %



MAT 7122 MT= 58 (n,n') Level 71-Lu-174  
 Cross Section -91.93 To 9.426 %



MAT 7122 MT= 59 (n, n') Level 71-Lu-174  
 Cross Section -19.58 To 9.314 %

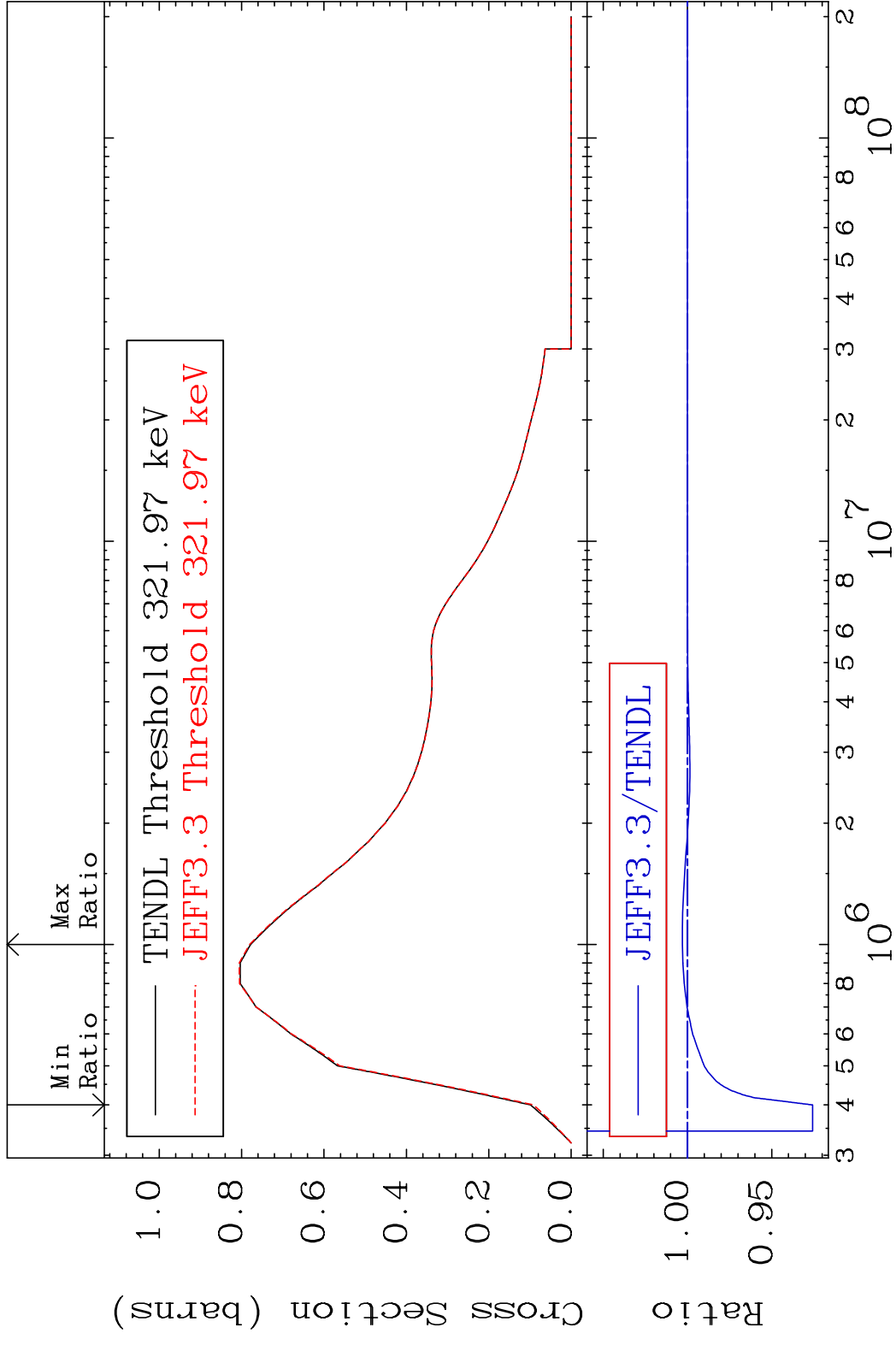


MAT 7122

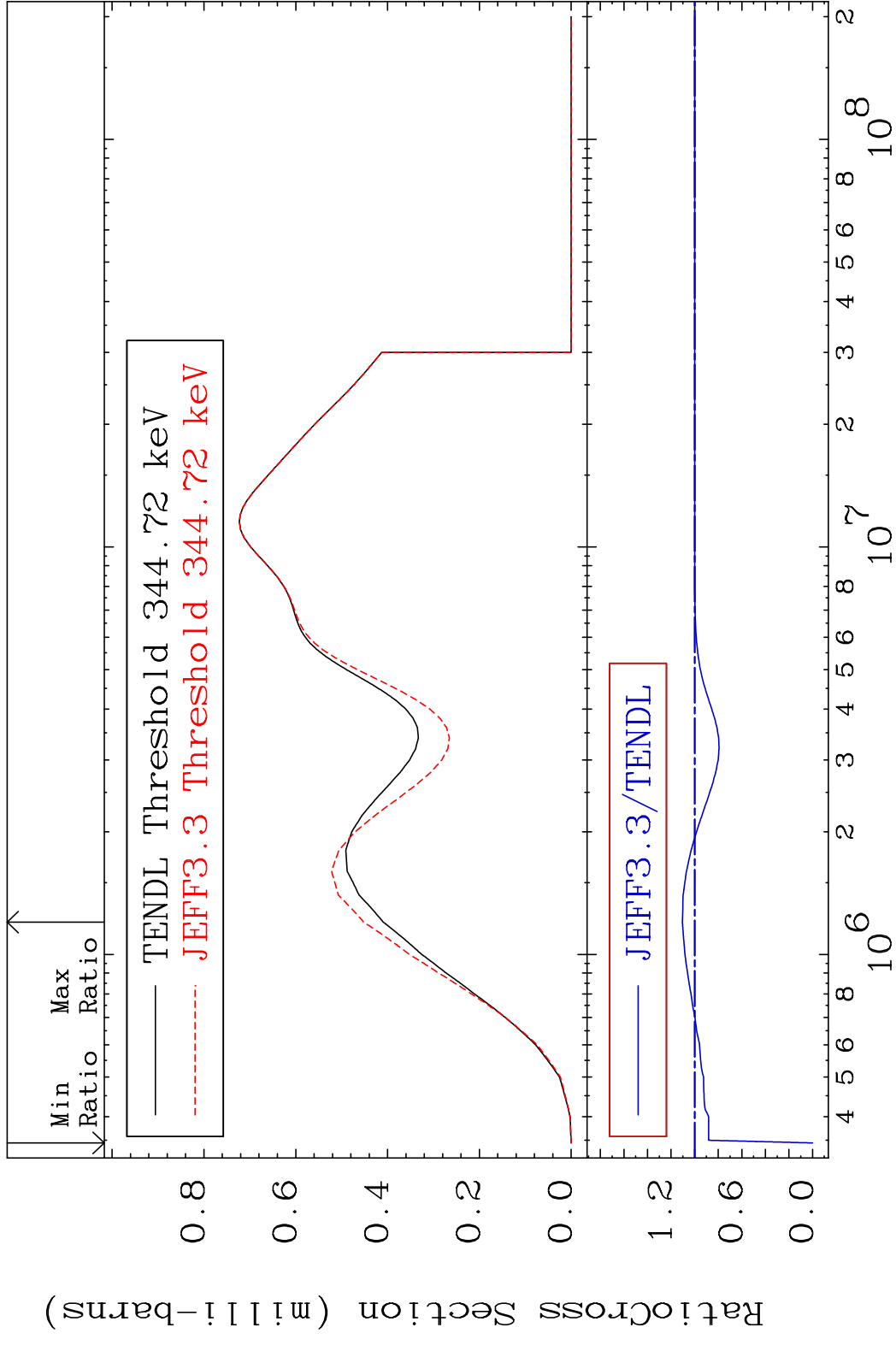
MT= 60 (n, n') Level

71-Lu-174

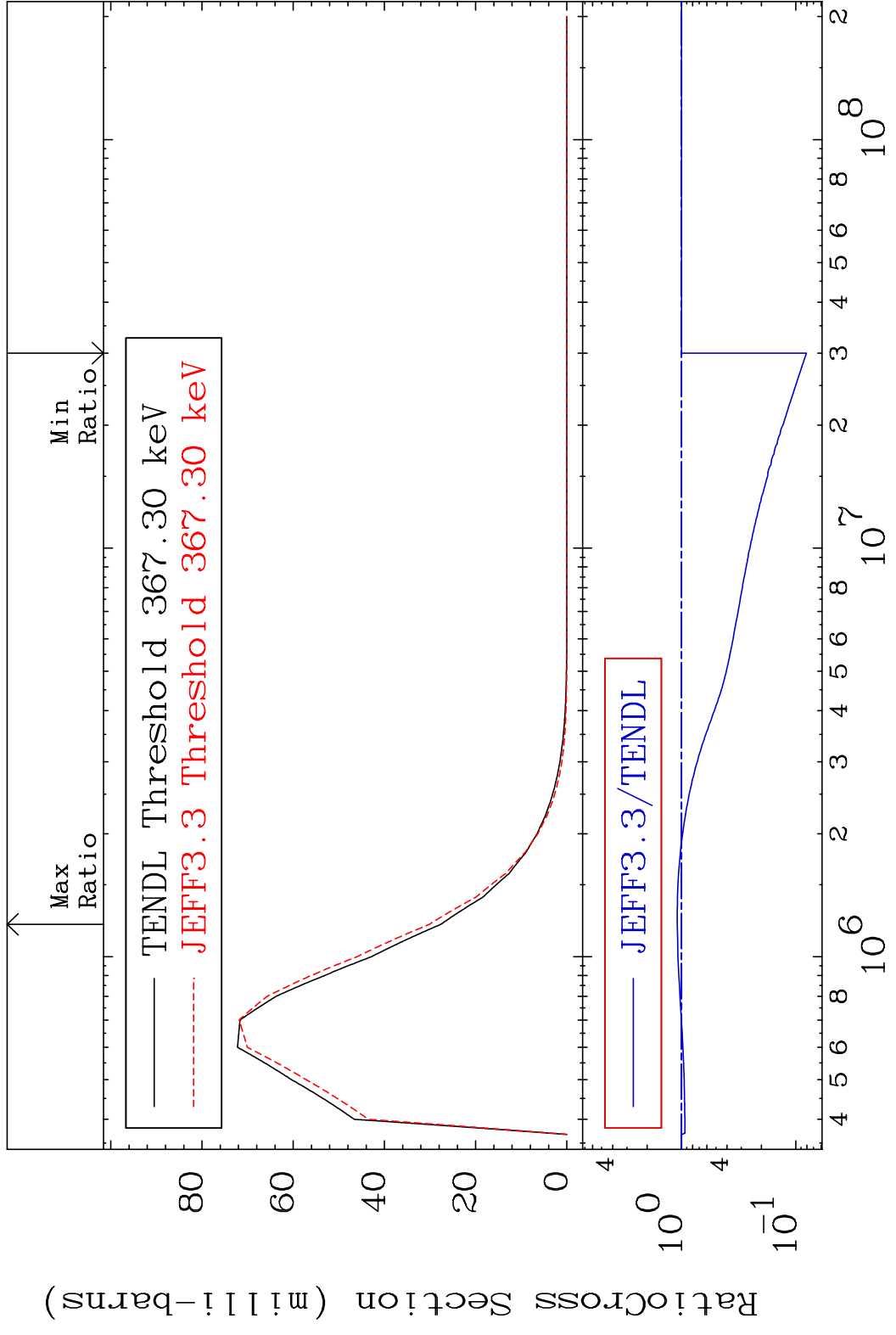
Cross Section -7.427 To 0.304 %



MAT 7122 MT= 61 (n, n') Level 71-Lu-174  
 Cross Section -100.0 To 10.43 %

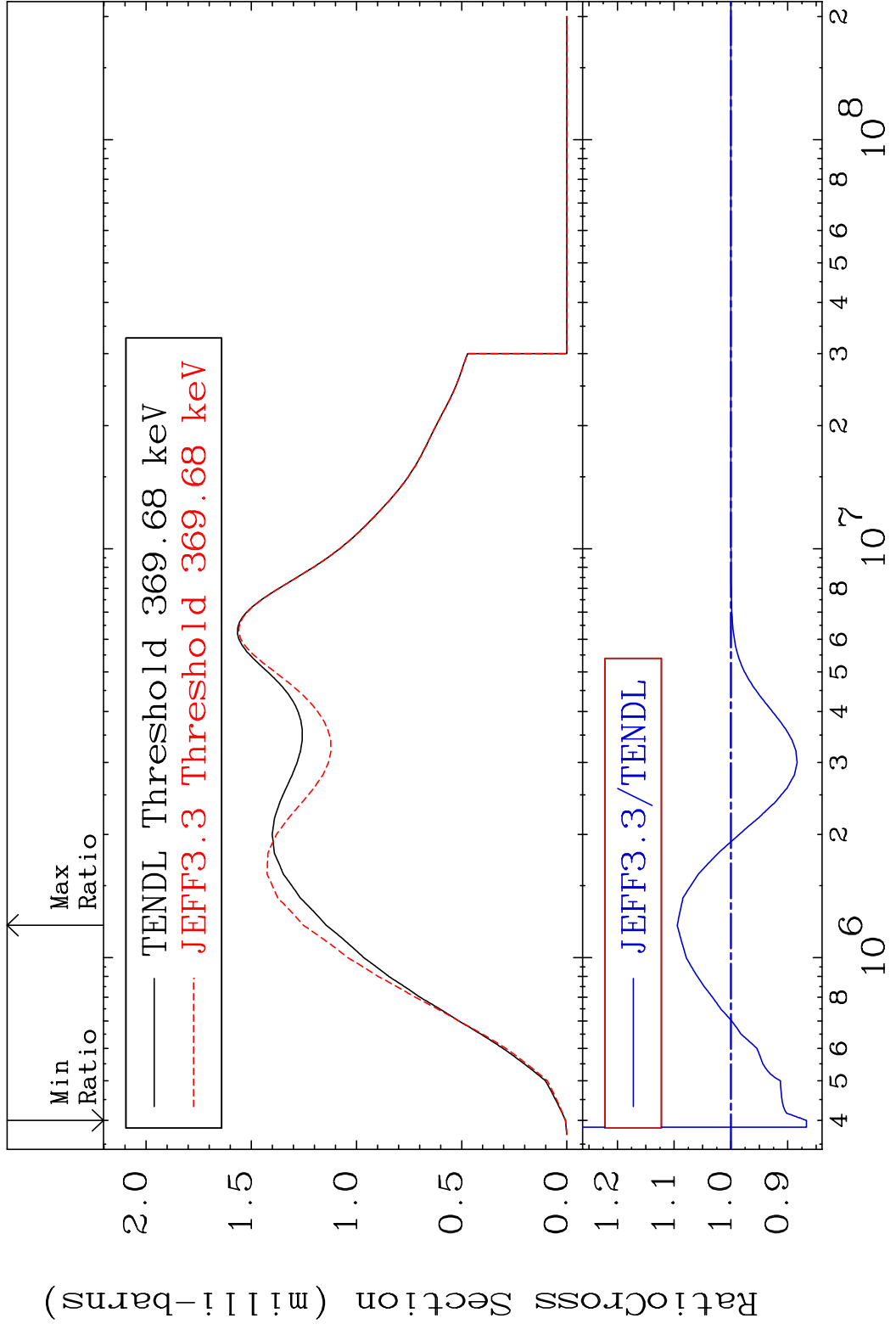


MAT 7122 MT= 62 (n, n') Level 71-Lu-174  
 Cross Section -91.93 To 9.043 %

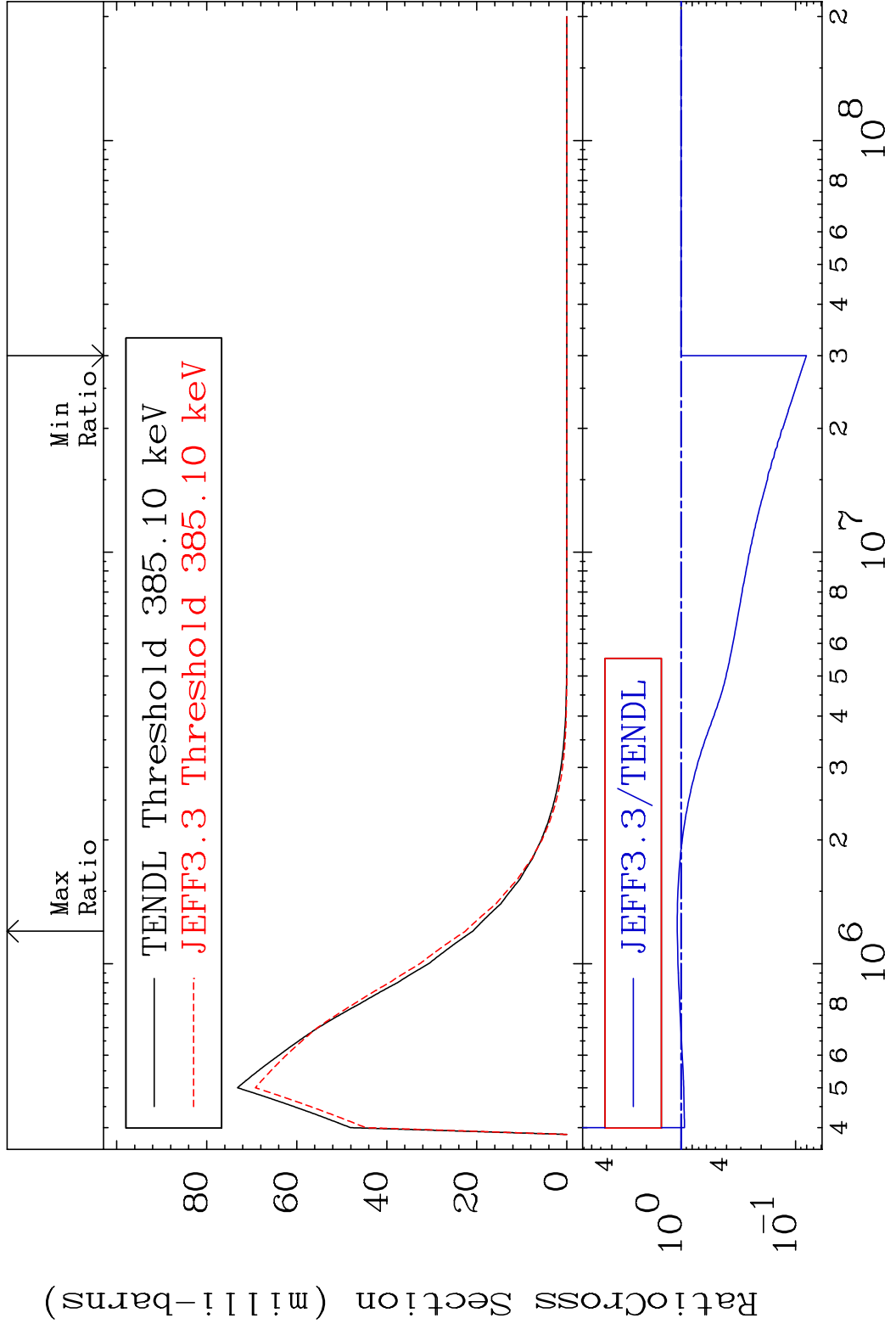




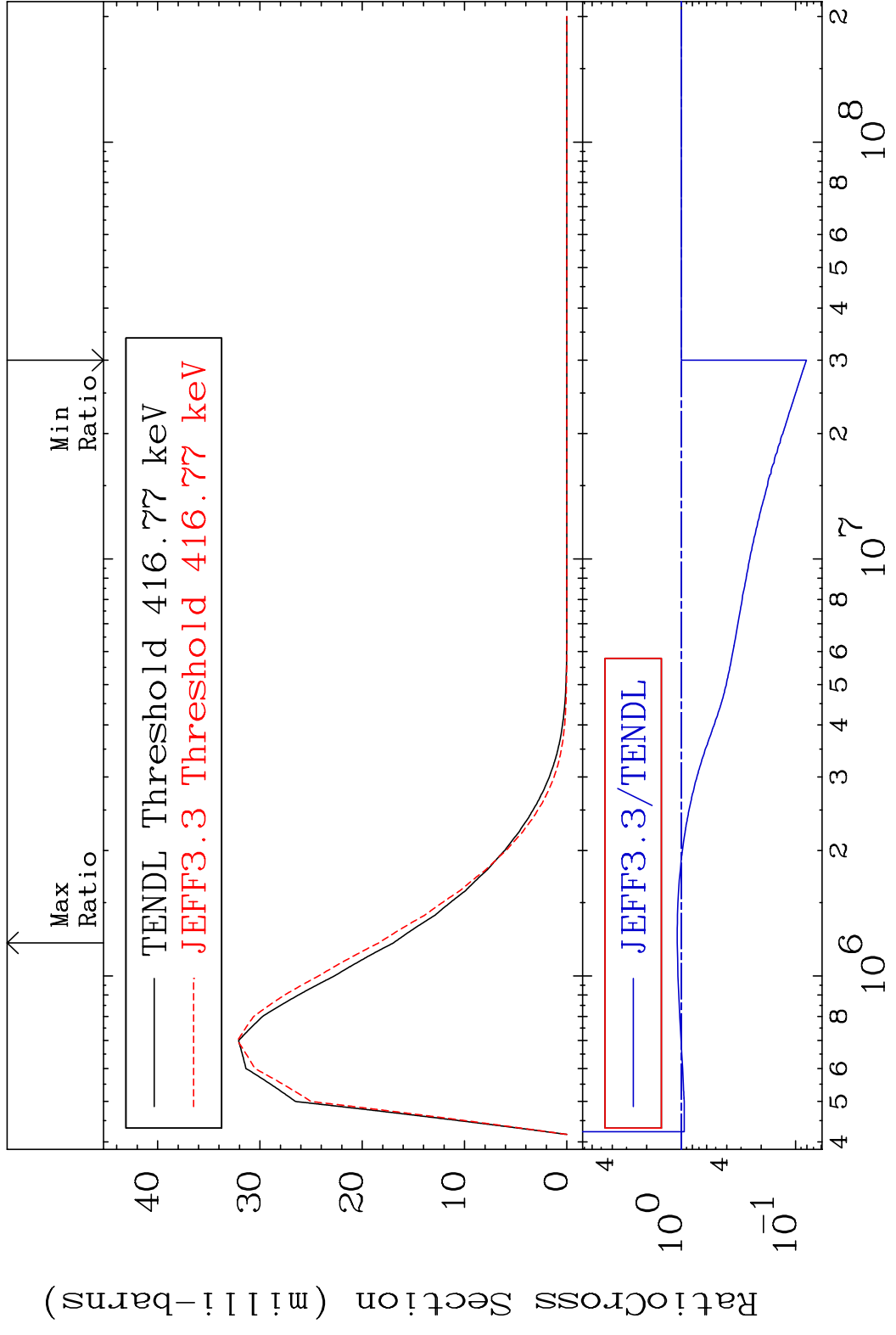
MAT 7122 MT= 63 (n, n') Level 71-Lu-174  
 Cross Section -13.29 To 9.467 %



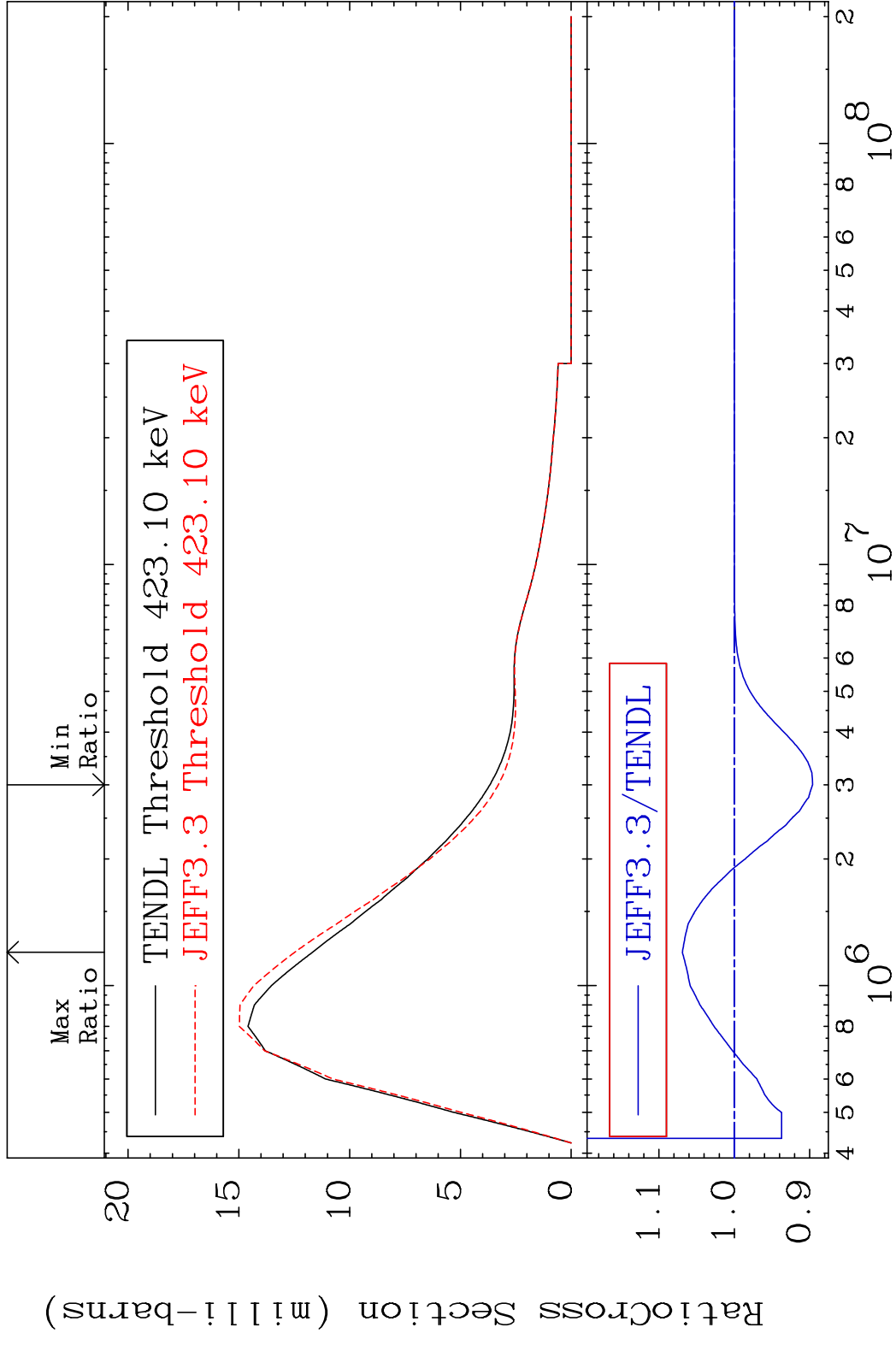
MAT 7122 MT= 64 (n, n') Level 71-Lu-174  
 Cross Section -91.94 To 7.874 %



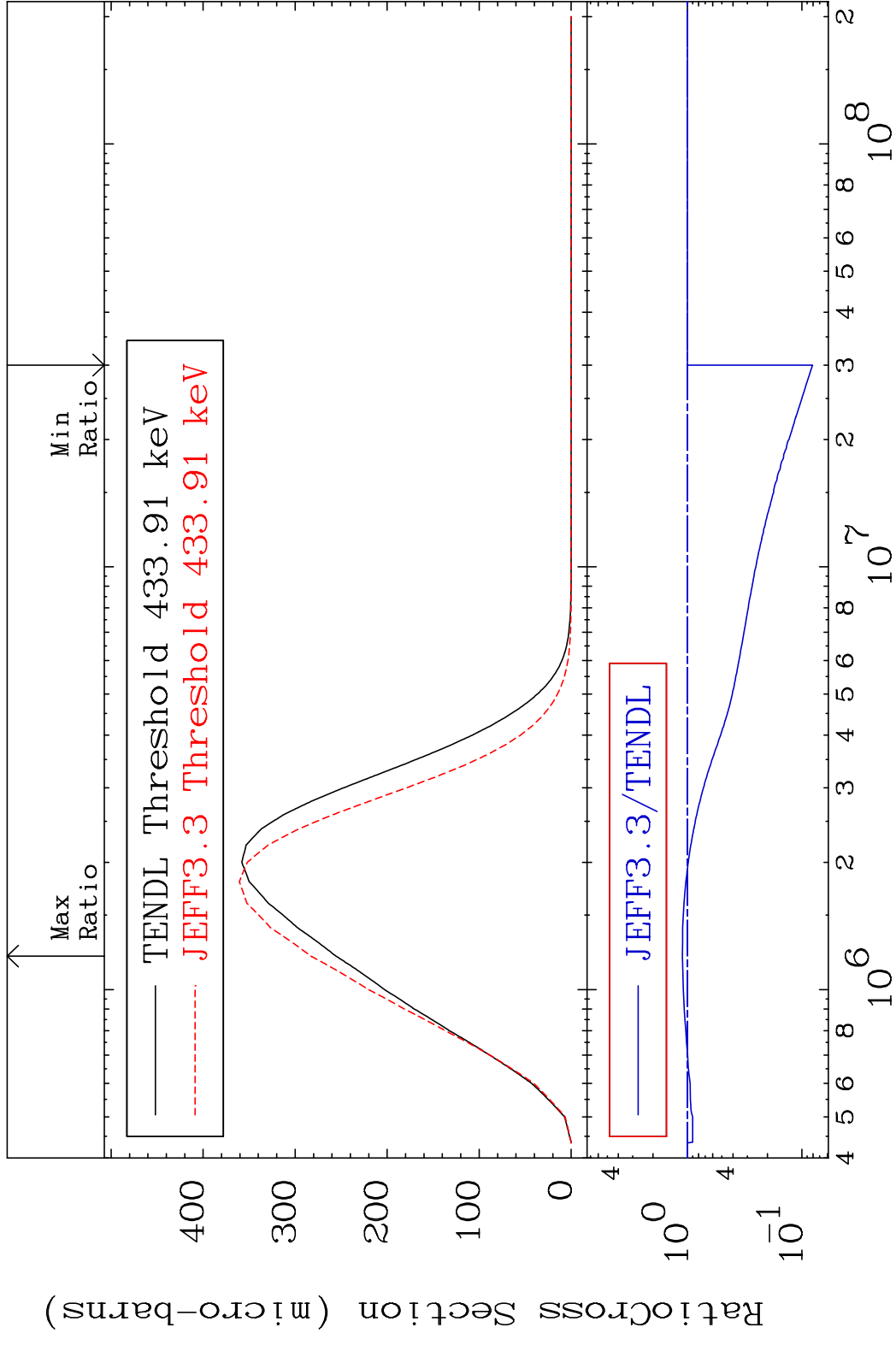
MAT 7122 MT= 65 (n,n') Level 71-Lu-174  
 Cross Section -91.94 To 8.462 %



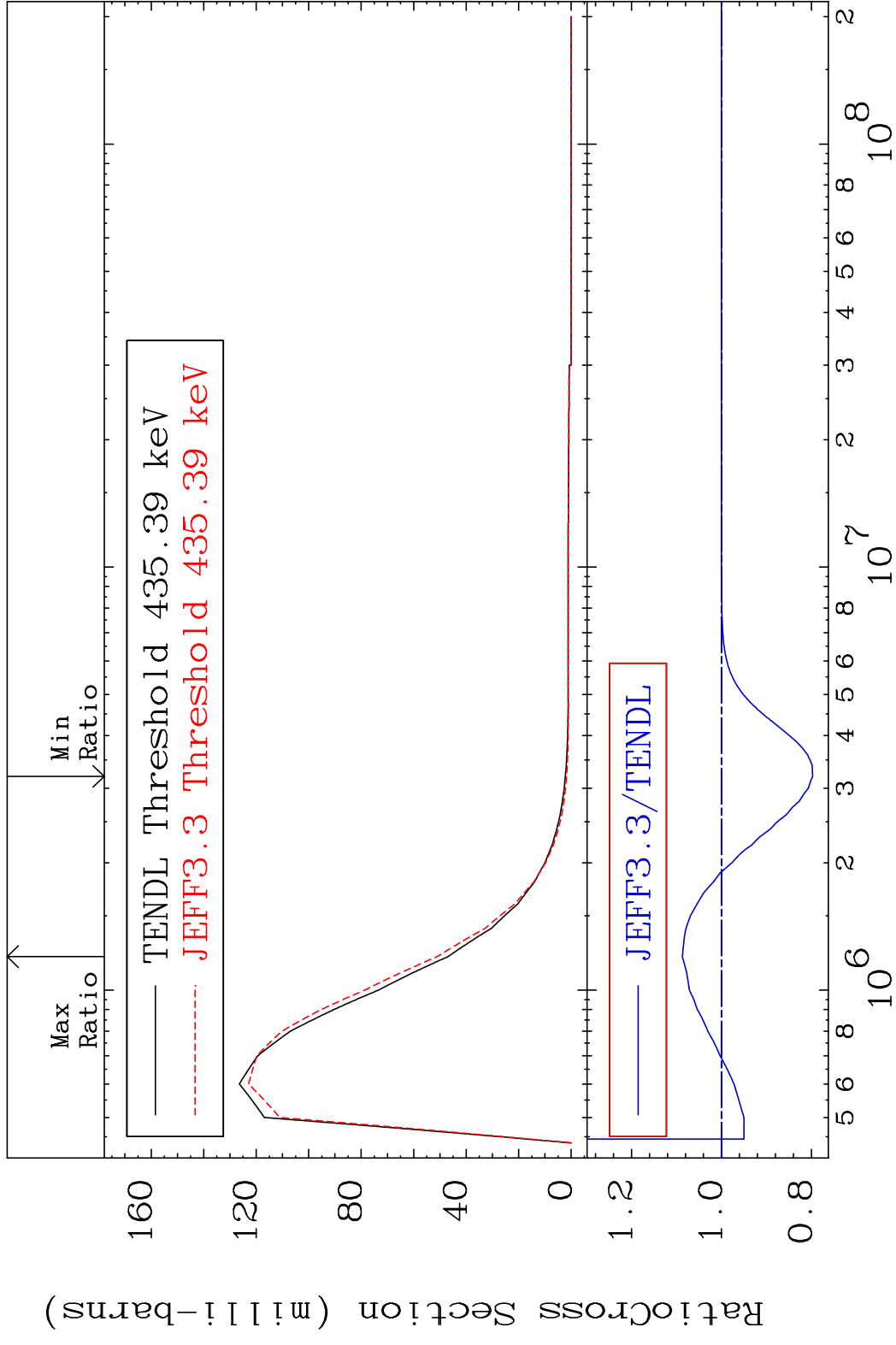
MAT 7122 MT= 66 (n, n') Level 71-Lu-174  
 Cross Section -10.39 To 6.895 %



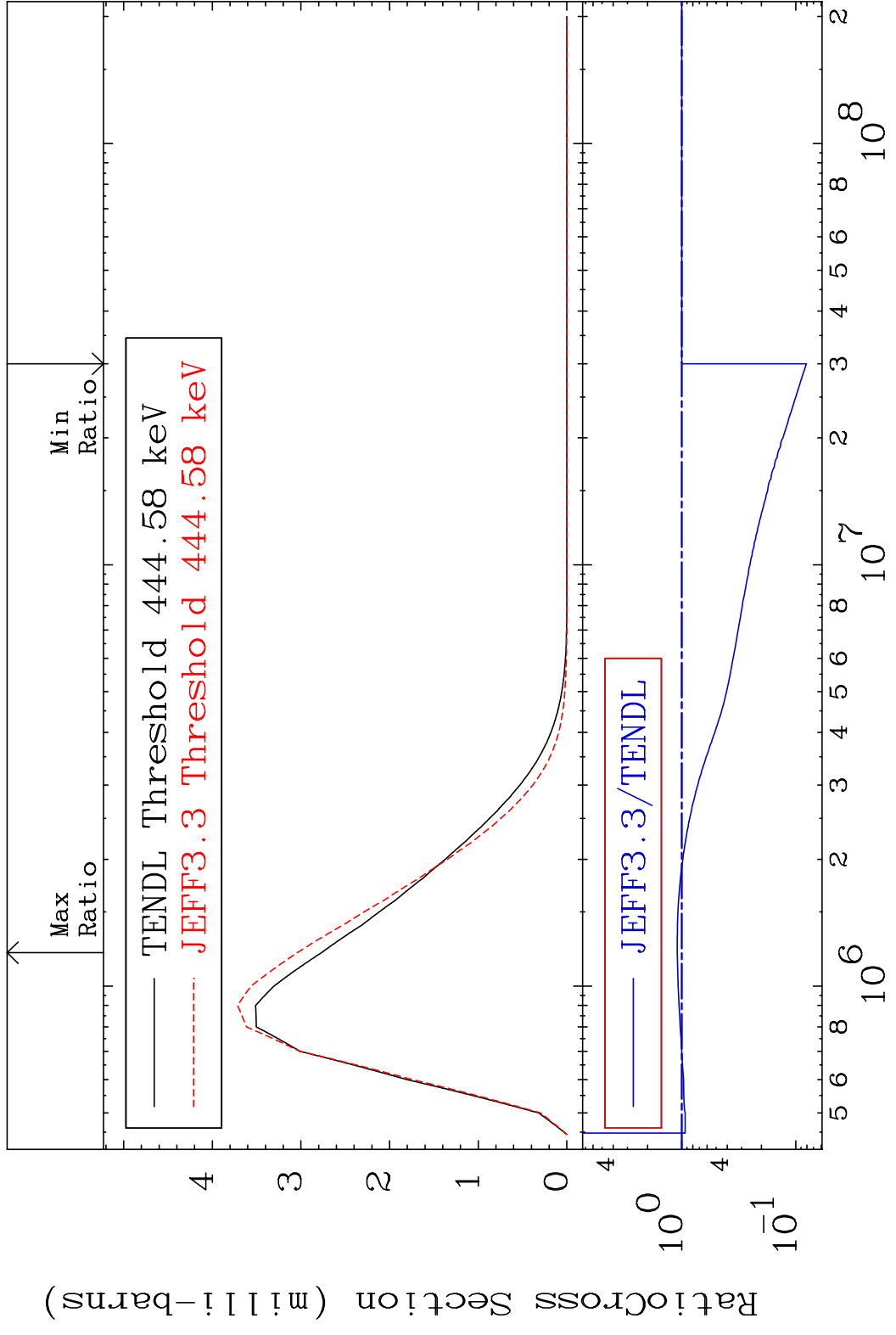
MAT 7122 MT= 67 (n, n') Level 71-Lu-174  
 Cross Section -91.92 To 10.64 %



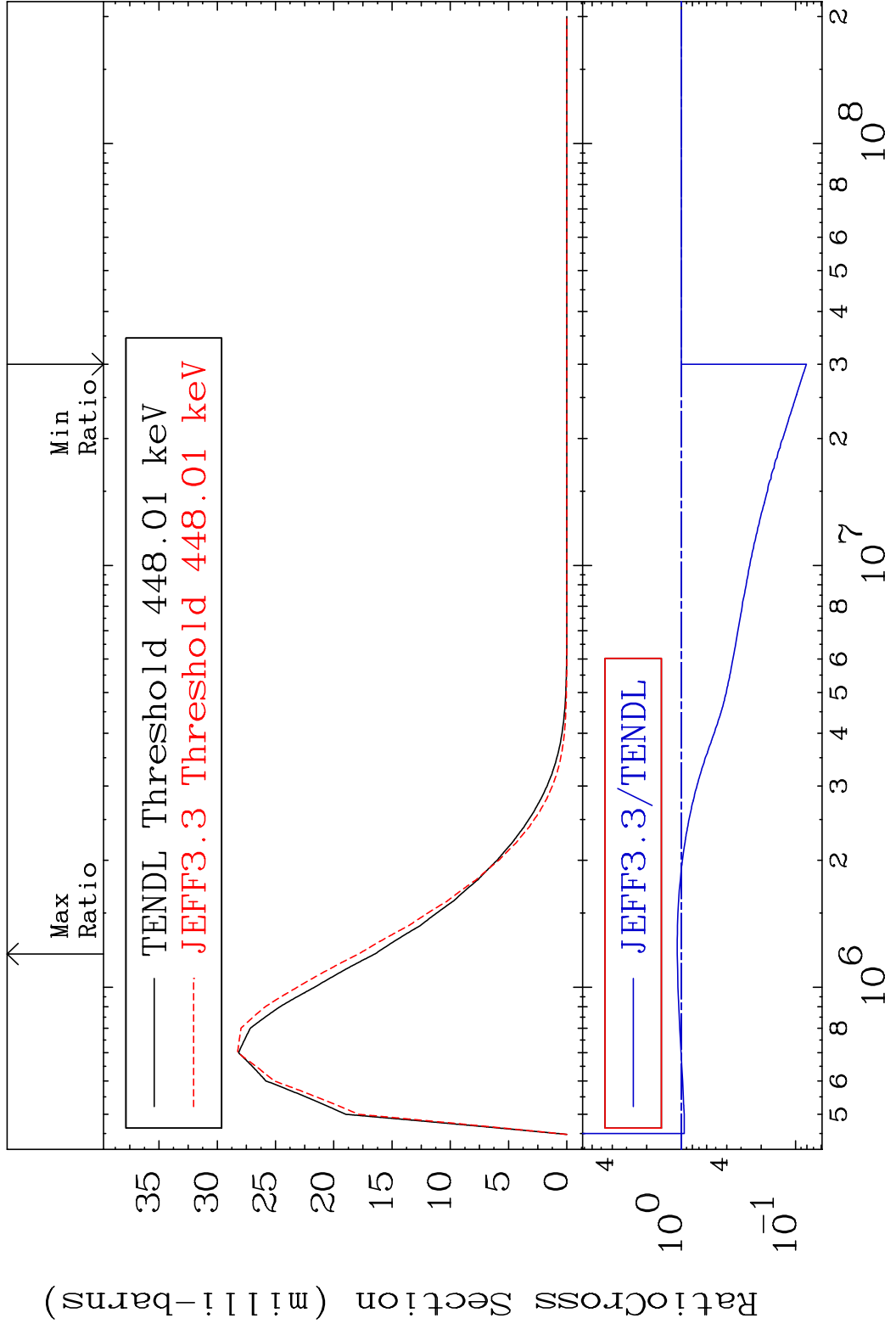
MAT 7122 MT= 68 (n, n') Level 71-Lu-174  
 Cross Section -20.25 To 8.695 %



MAT 7122 MT= 69 (n, n') Level 71-Lu-174  
 Cross Section -91.93 To 9.833 %

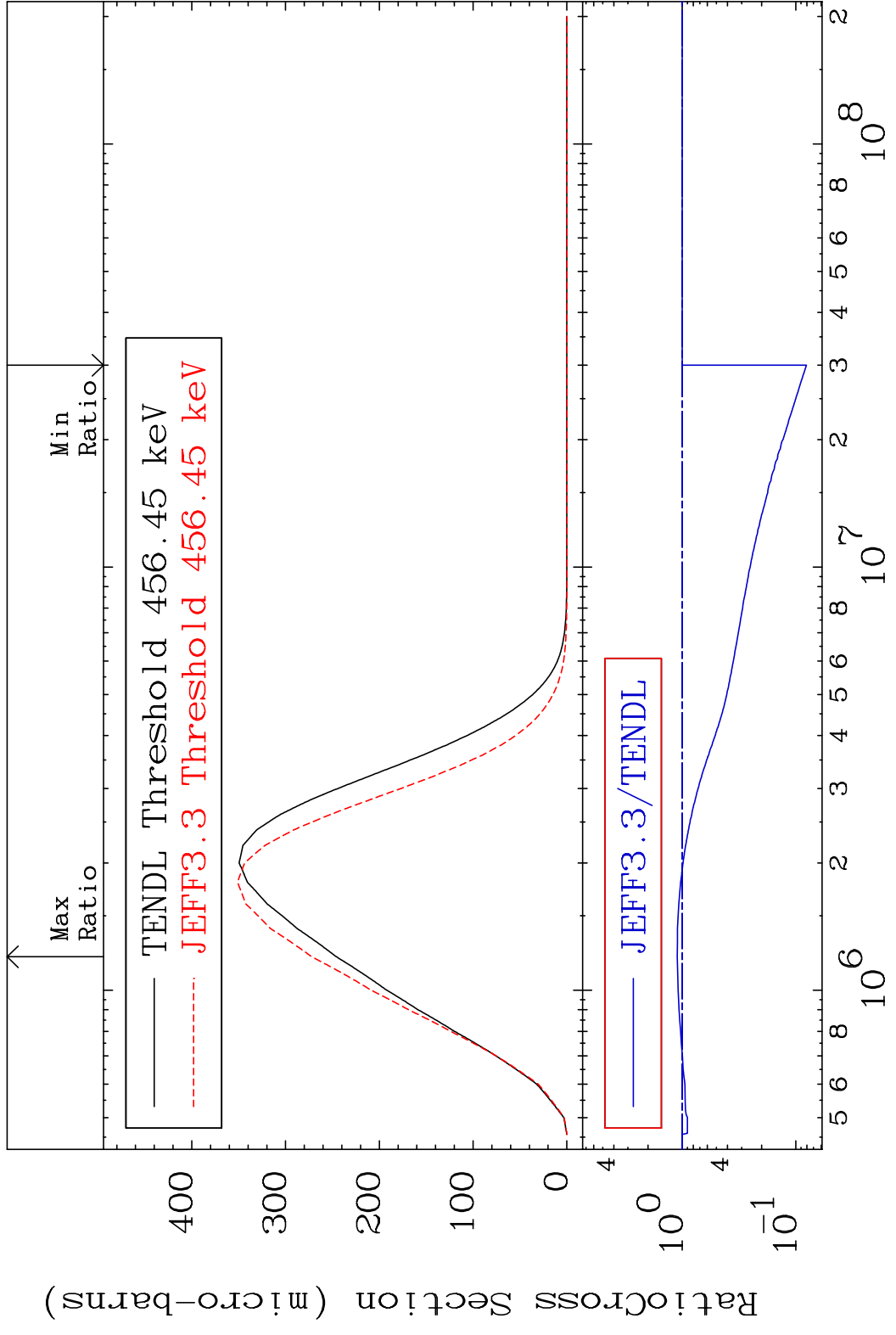


MAT 7122 MT= 70 (n,n') Level 71-Lu-174  
 Cross Section -91.94 To 8.460 %



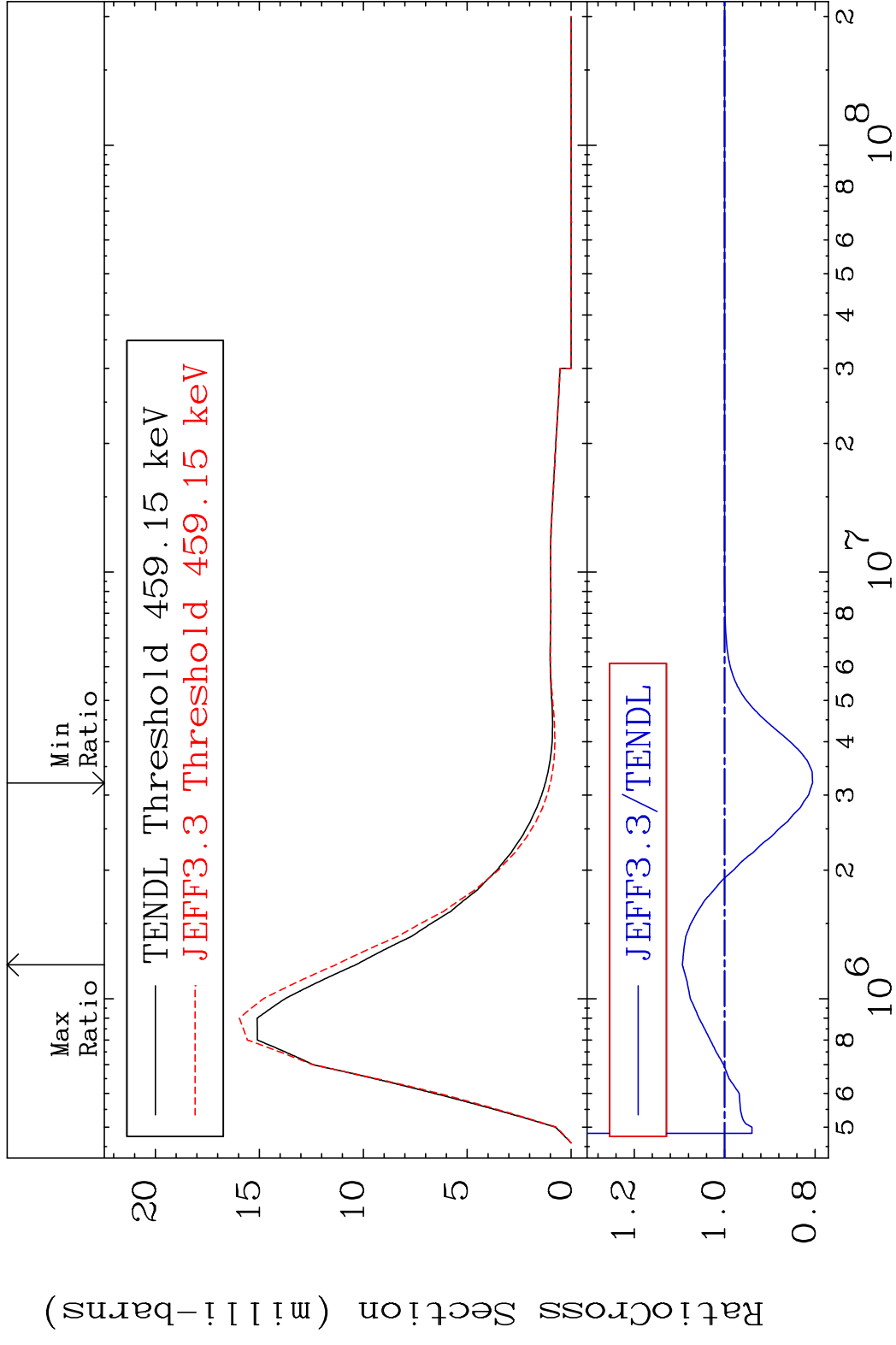


MAT 7122 MT= 71 (n, n') Level 71-Lu-174  
 Cross Section -91.92 To 10.66 %

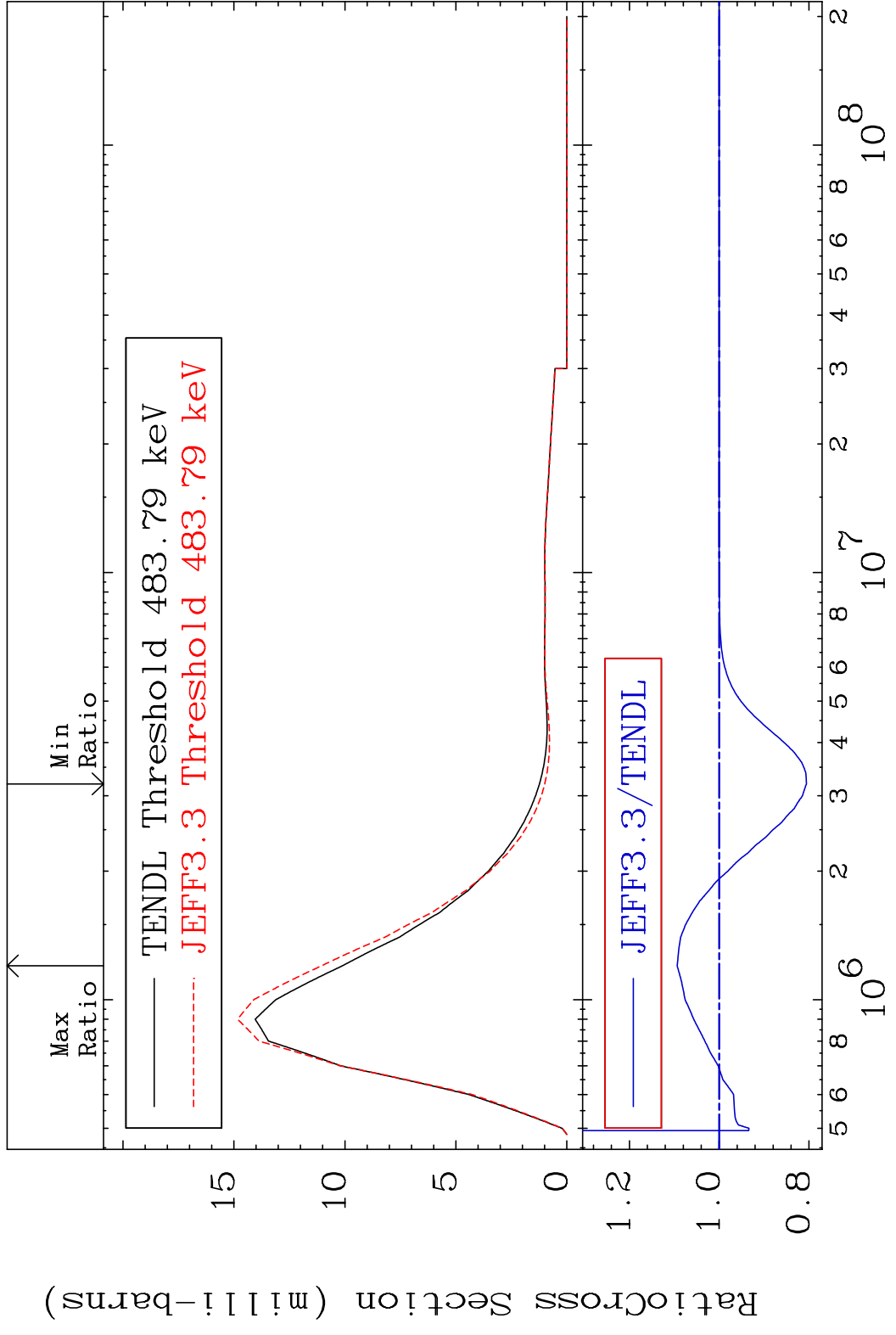


40 71-Lu-174

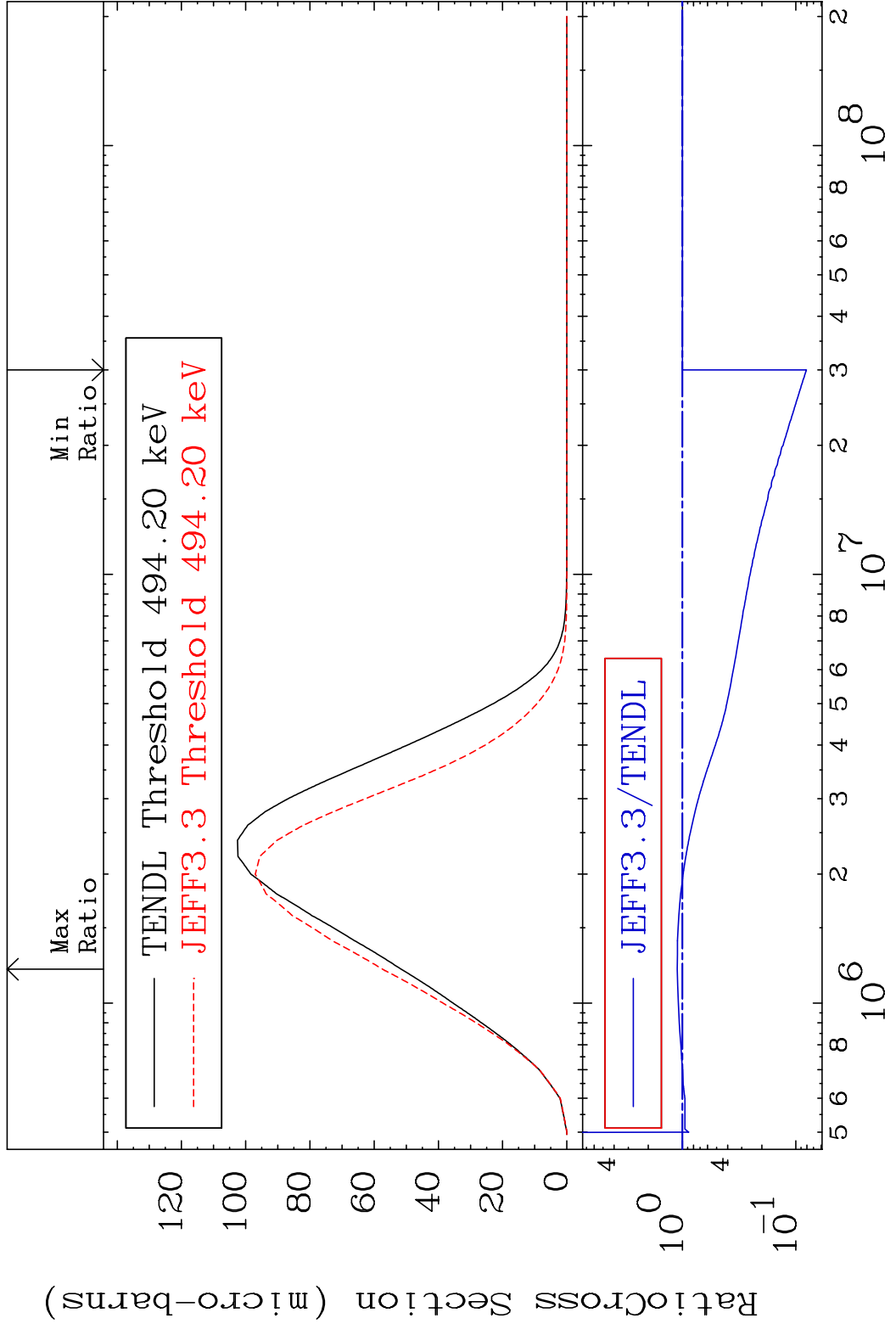
MAT 7122 MT= 72 (n, n') Level 71-Lu-174  
 Cross Section -19.45 To 9.345 %



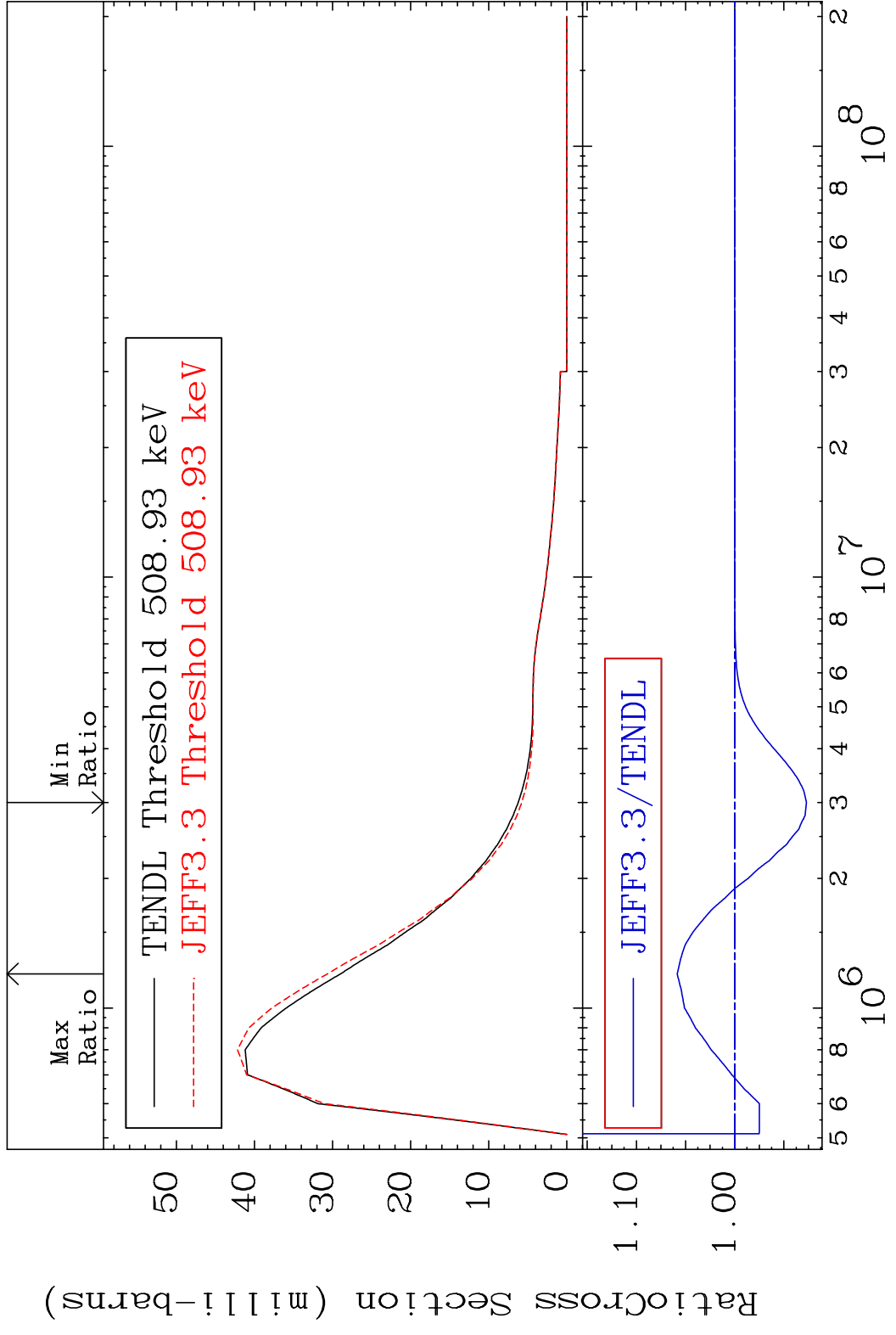
MAT 7122 MT= 73 (n, n') Level 71-Lu-174  
 Cross Section -19.42 To 9.351 %



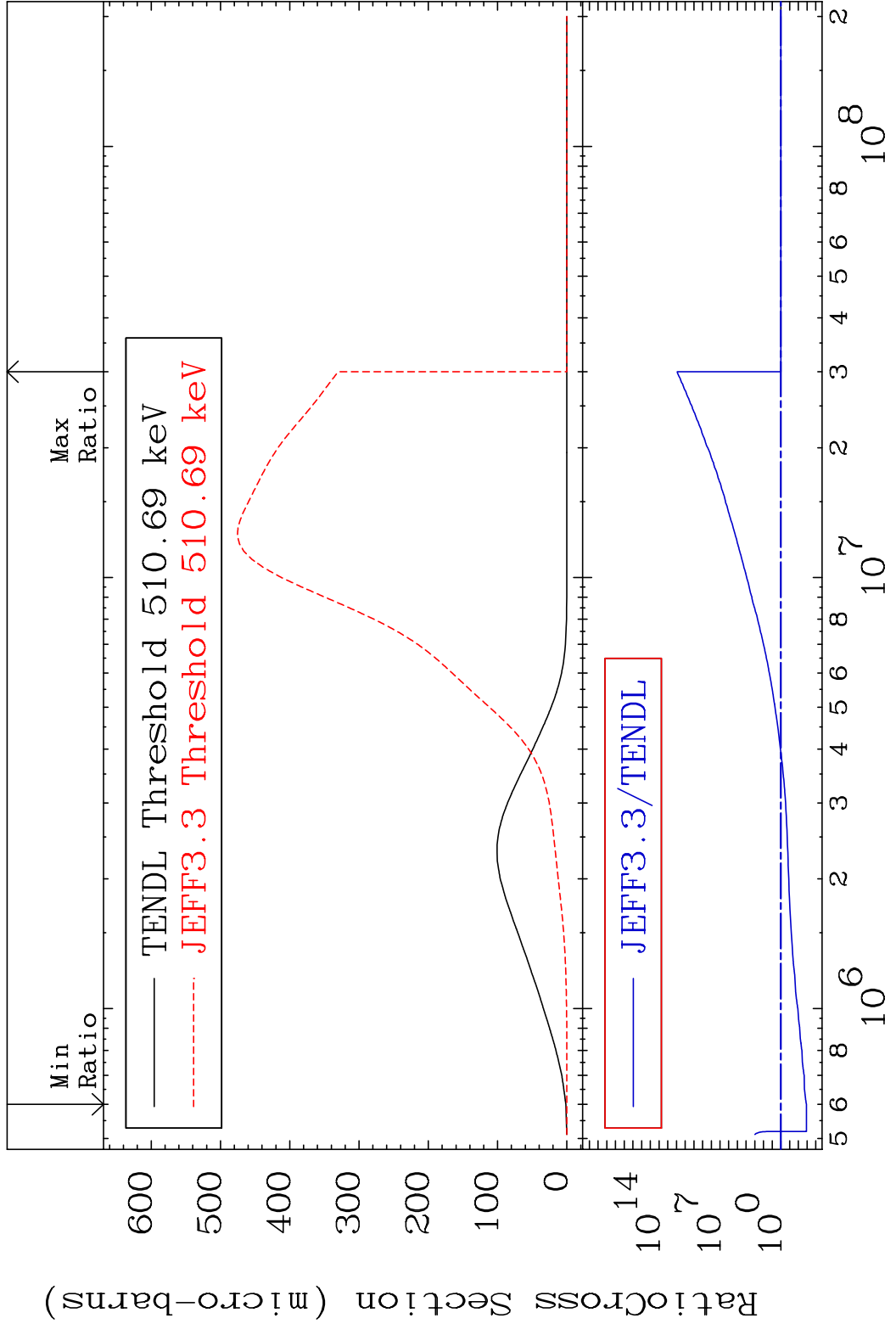
MAT 7122 MT= 74 (n, n') Level 71-Lu-174  
 Cross Section -91.91 To 11.22 %



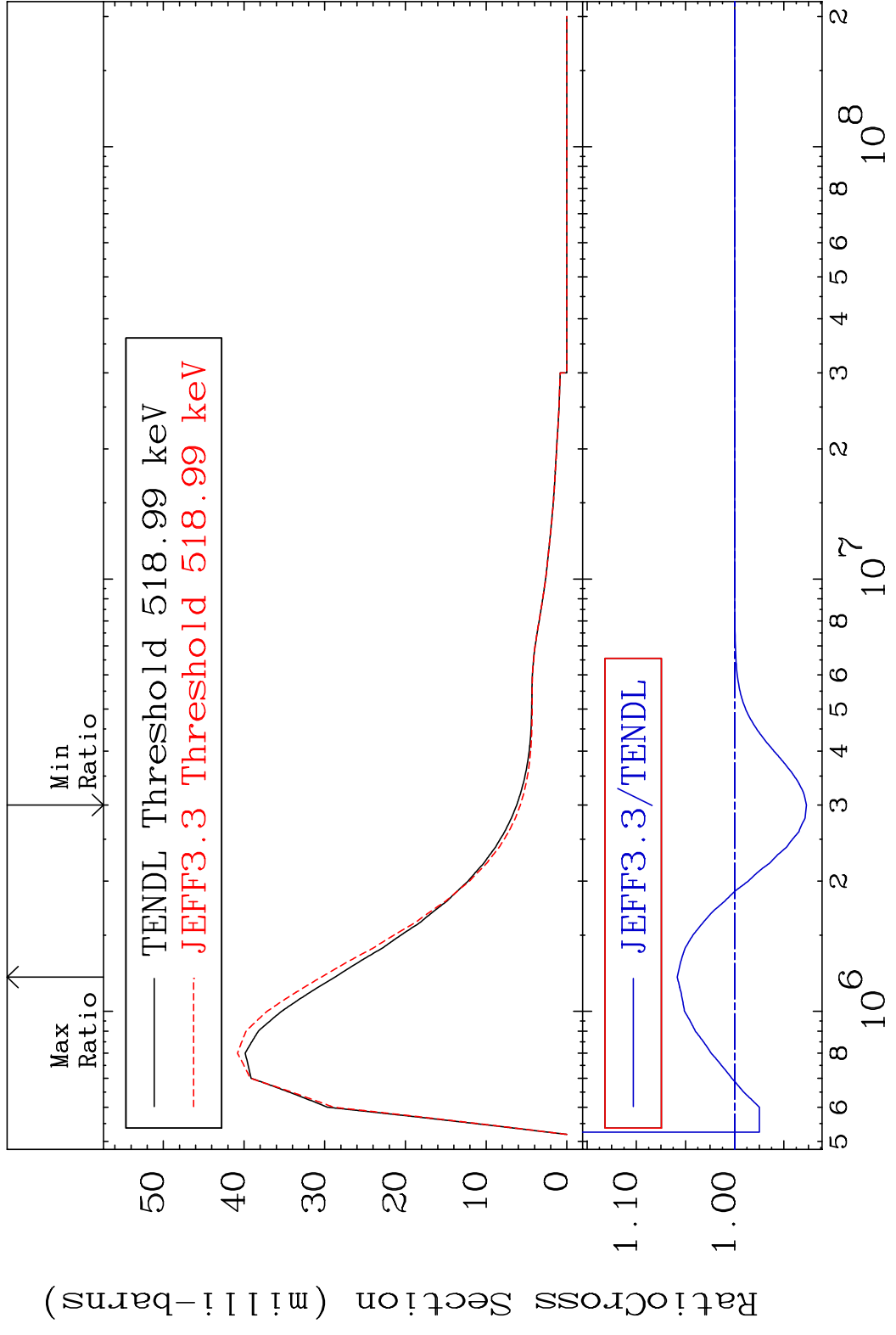
MAT 7122 MT= 75 (n, n') Level 71-Lu-174  
 Cross Section -7.291 To 5.851 %



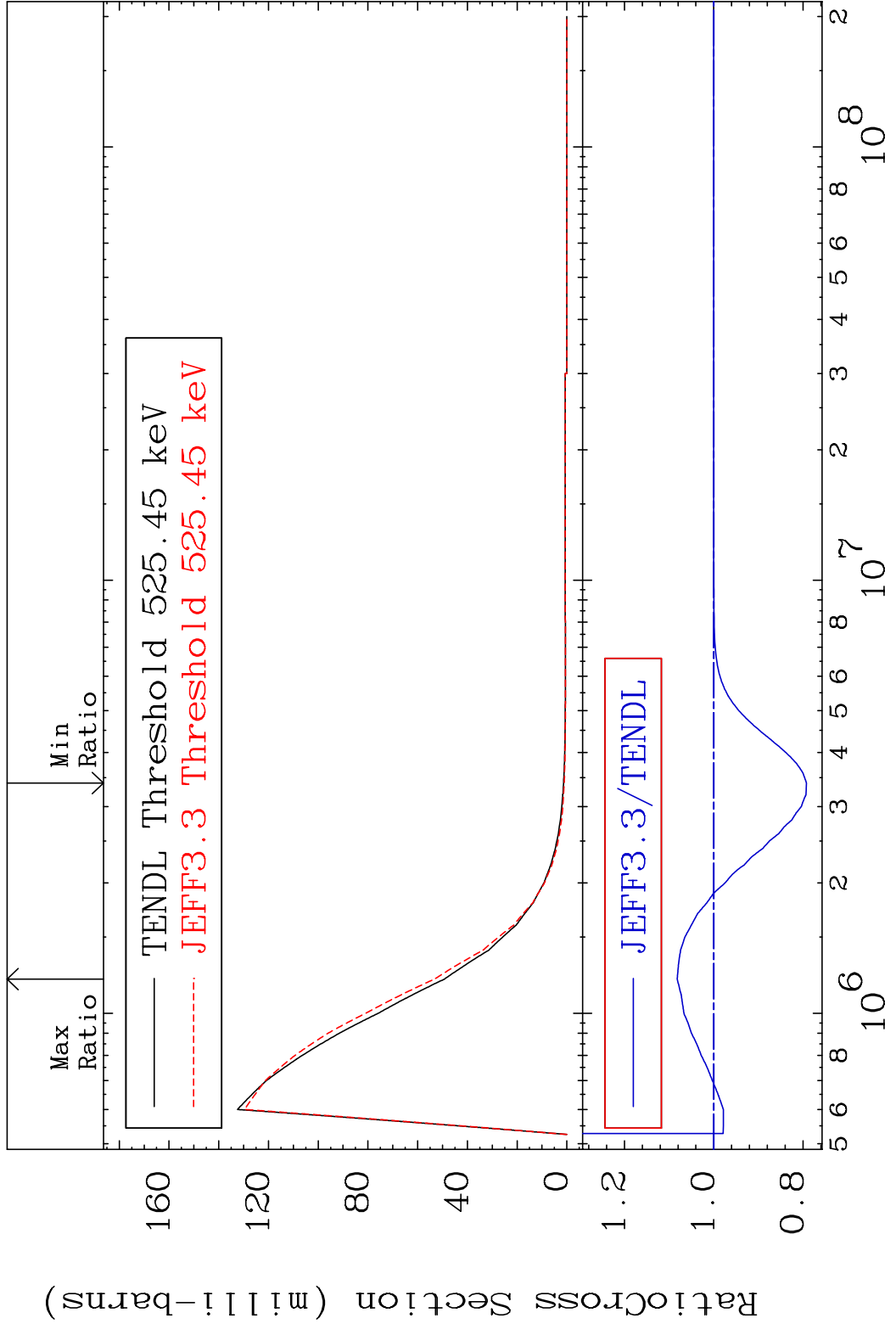
MAT 7122 MT= 76 (n, n') Level 71-Lu-174  
 Cross Section -99.88 To 9999. %



MAT 7122 MT= 77 (n, n') Level 71-Lu-174  
 Cross Section -7.287 To 5.845 %

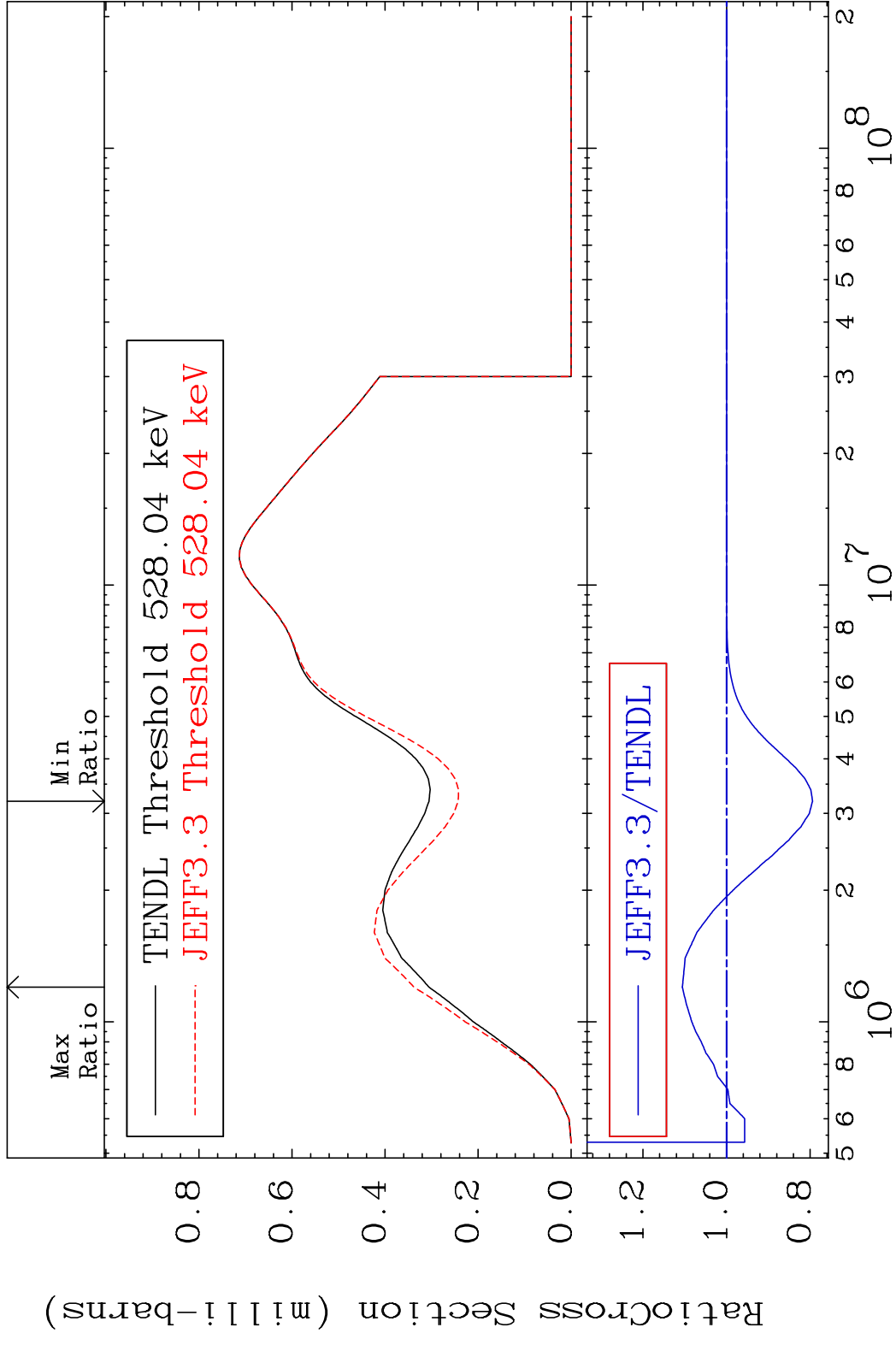


MAT 7122 MT= 78 (n, n') Level 71-Lu-174  
 Cross Section -20.77 To 8.192 %

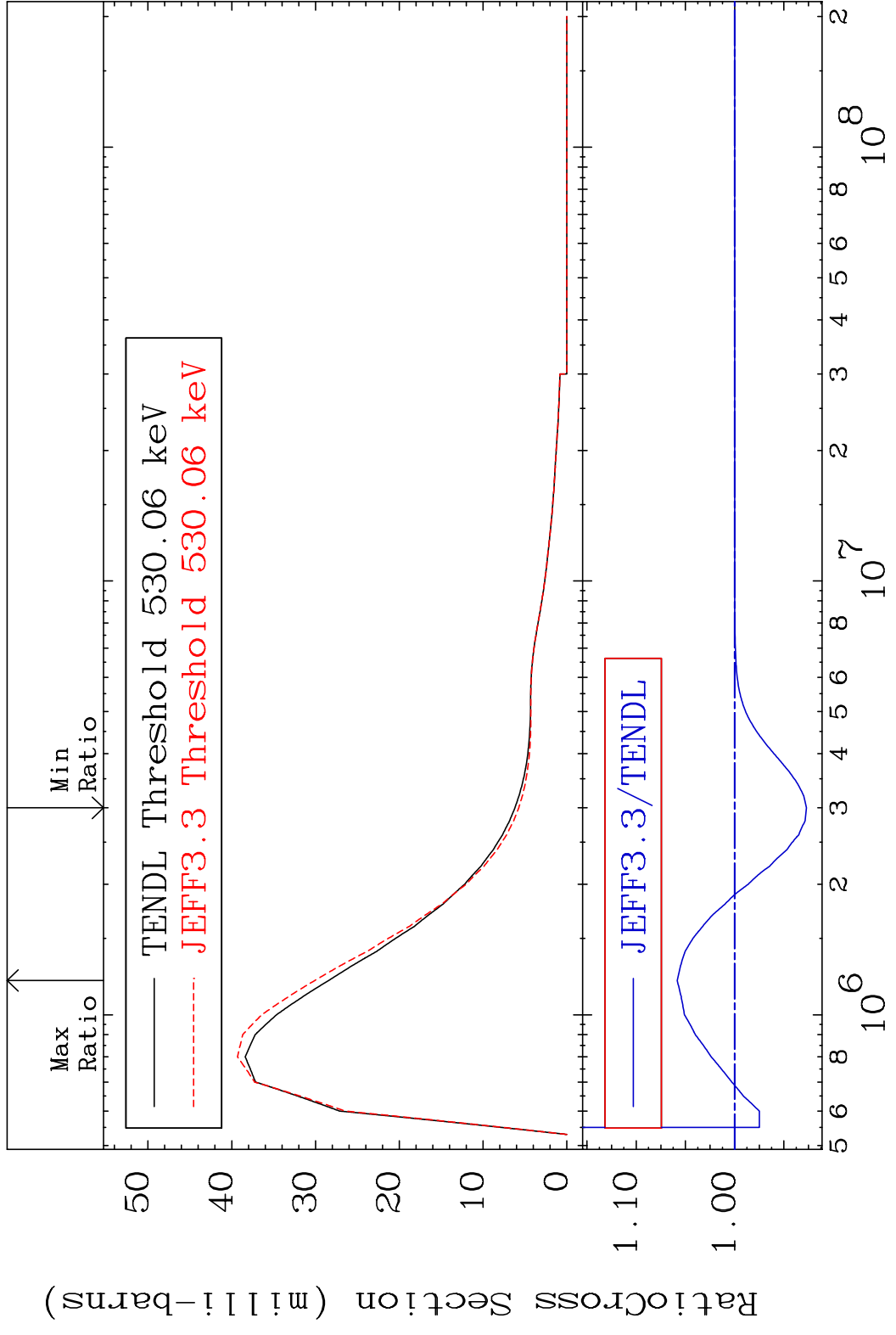




MAT 7122 MT= 79 (n, n') Level 71-Lu-174  
 Cross Section -20.58 To 10.57 %



MAT 7122 MT= 80 (n, n') Level 71-Lu-174  
 Cross Section -7.282 To 5.838 %

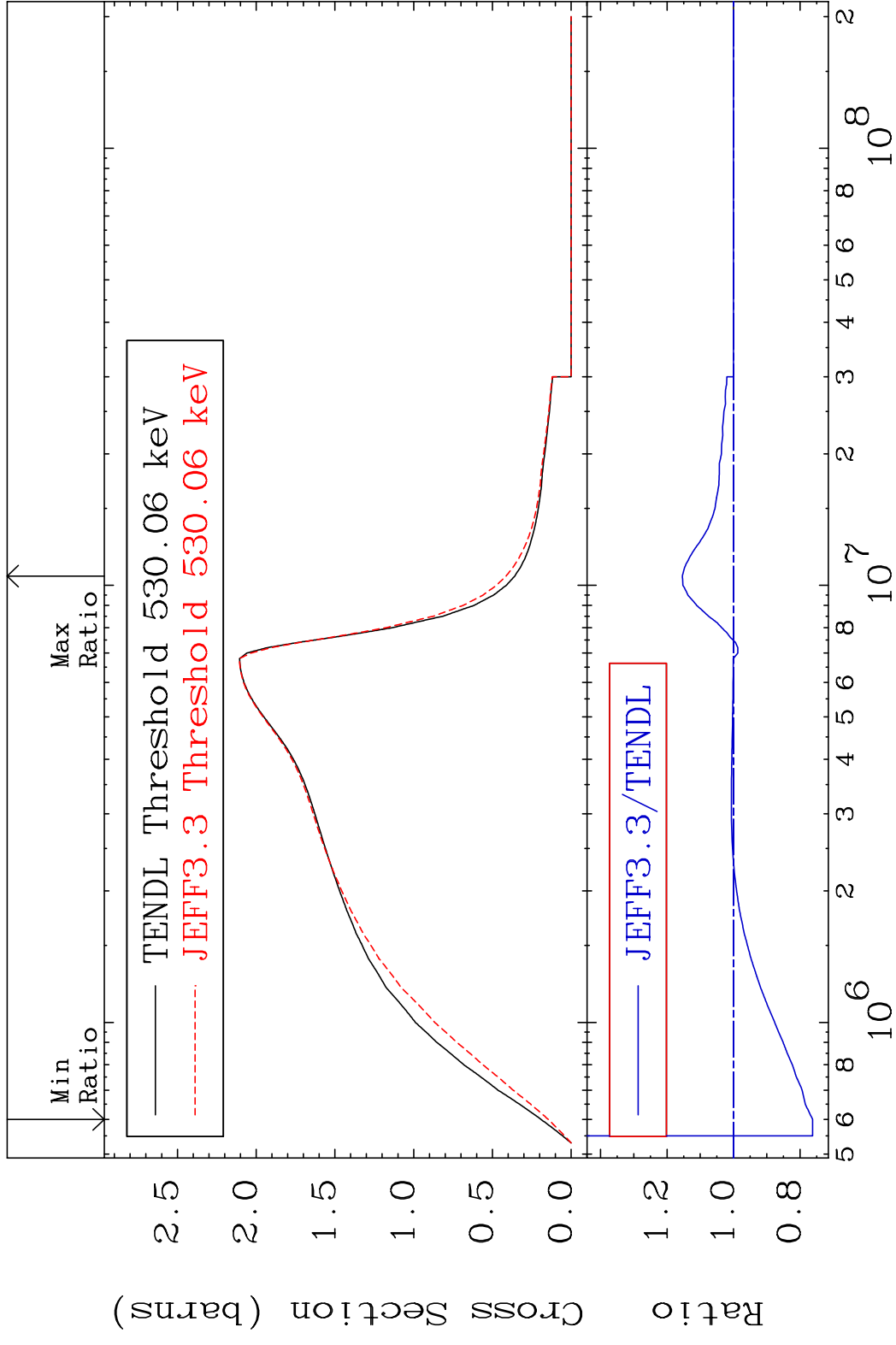


MAT 7122

(n,n') Continuum

71-Lu-174

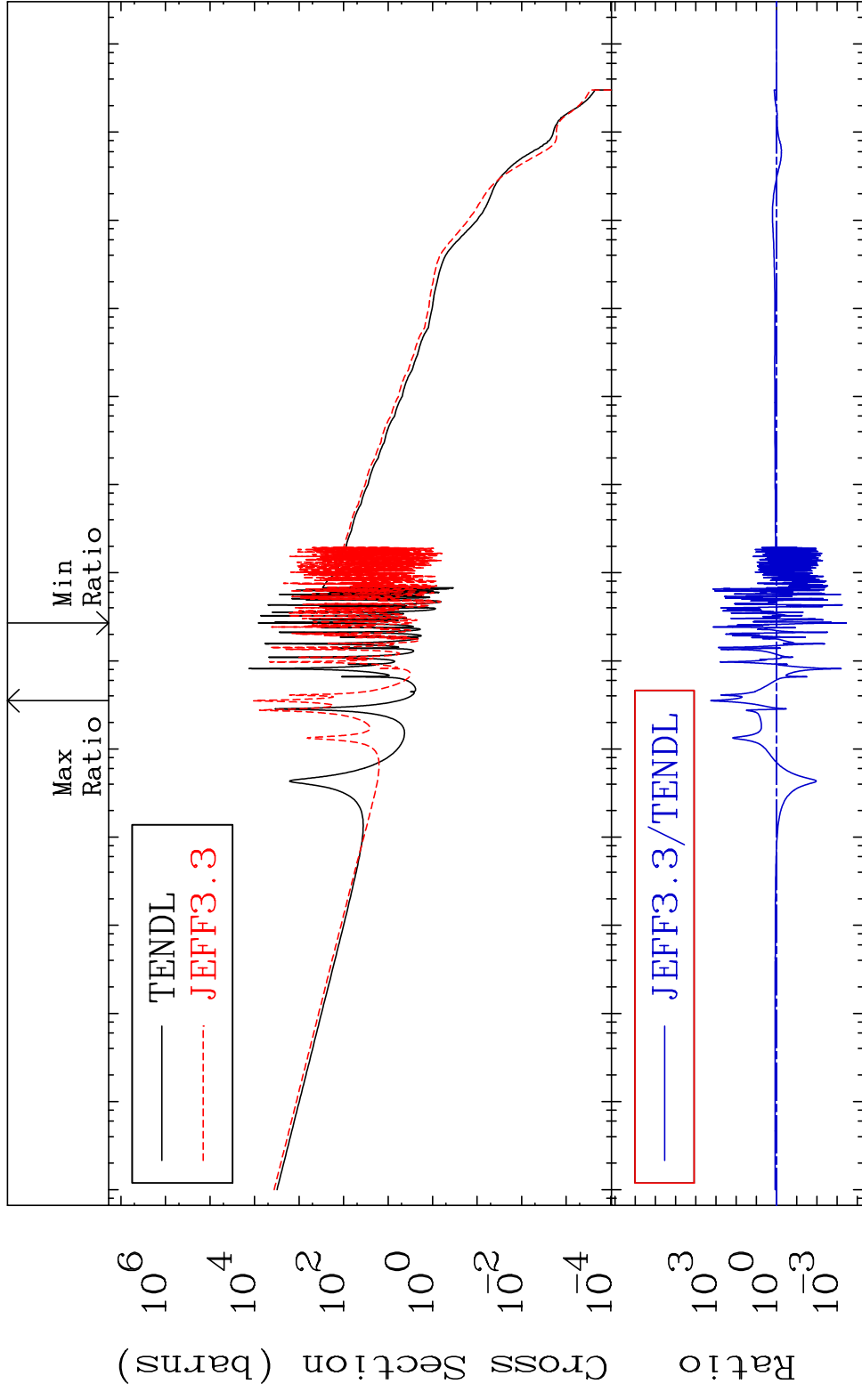
Cross Section -23.77 To 15.39 %



MAT 7122

(n,  $\gamma$ )  
Cross Section -99.97 To 9999. %

71-Lu-174



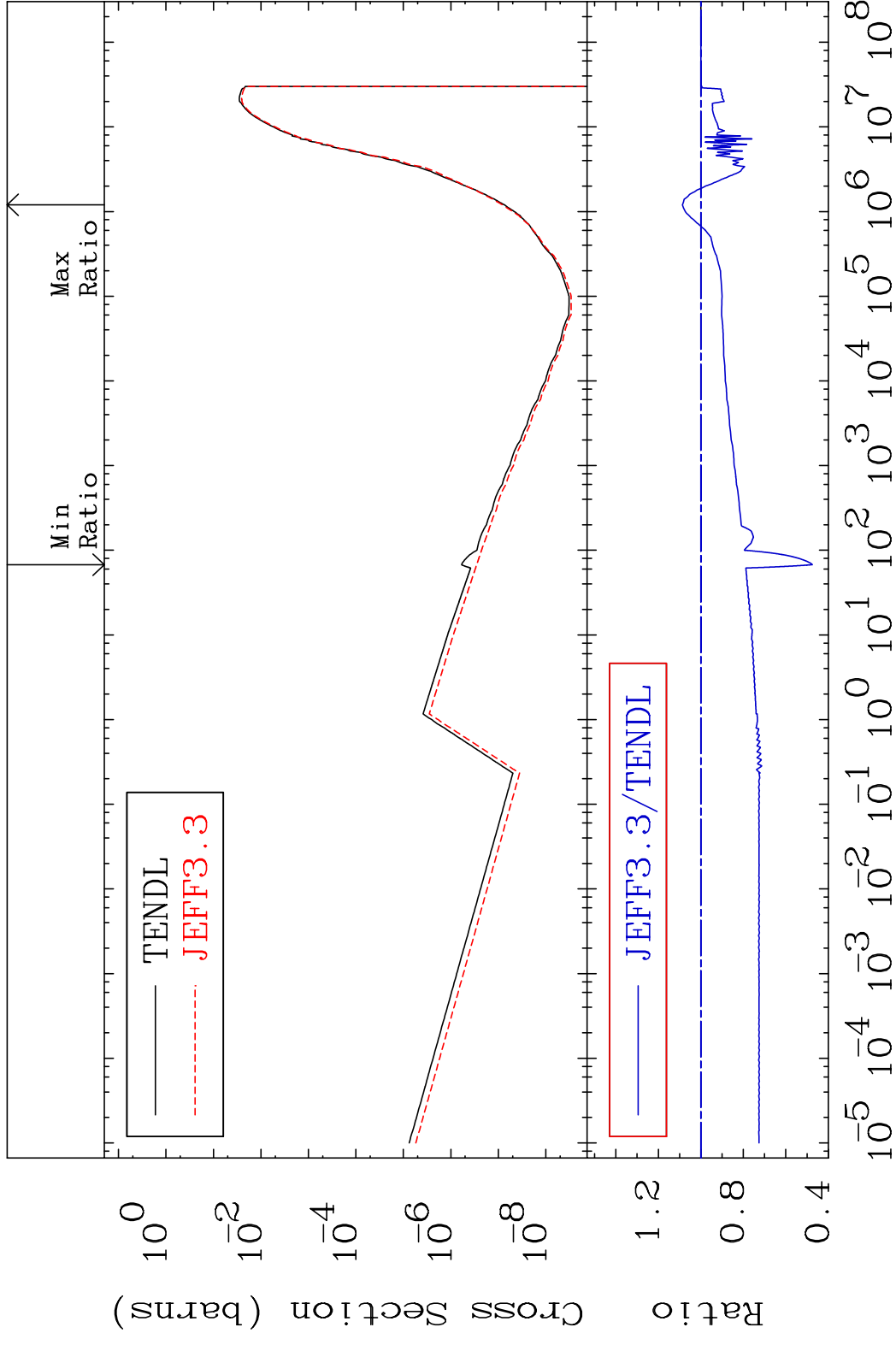
MAT 7122

(n, p)

71-Lu-174

Cross Section

-52.59 To 8.704 %

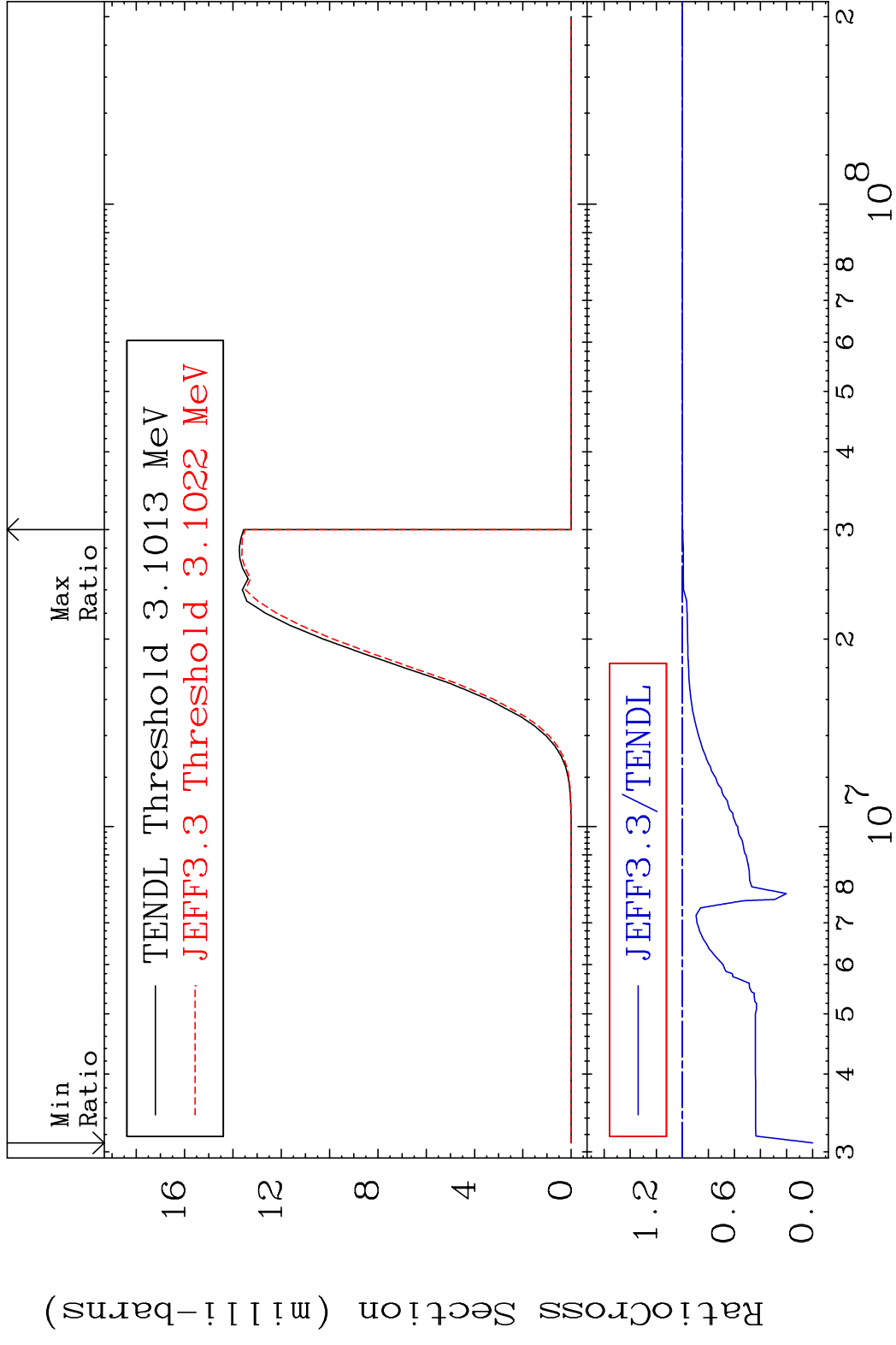


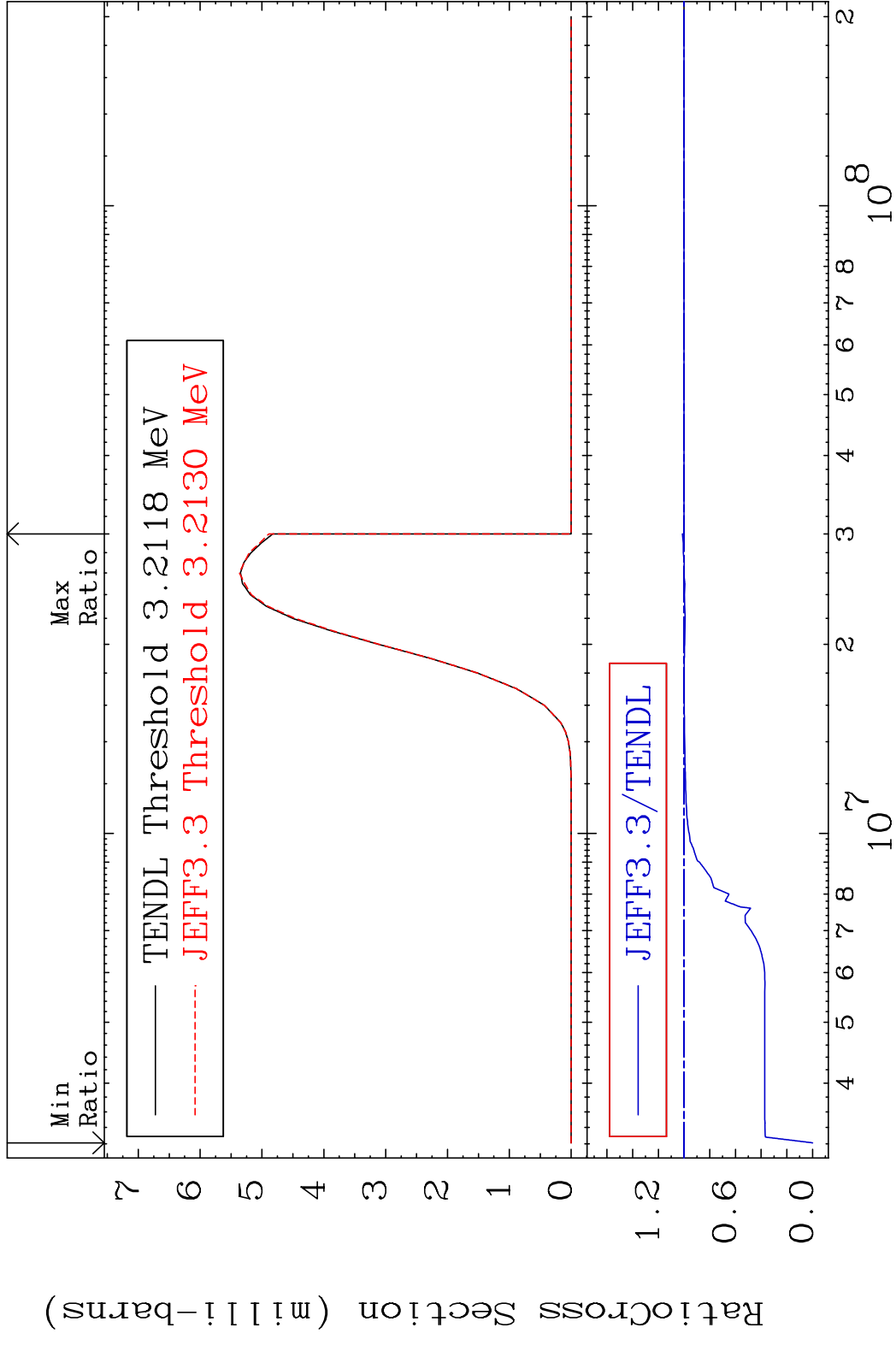
MAT 7122

71-Lu-174

(n,d)

Cross Section -100.0 To 0.000 %



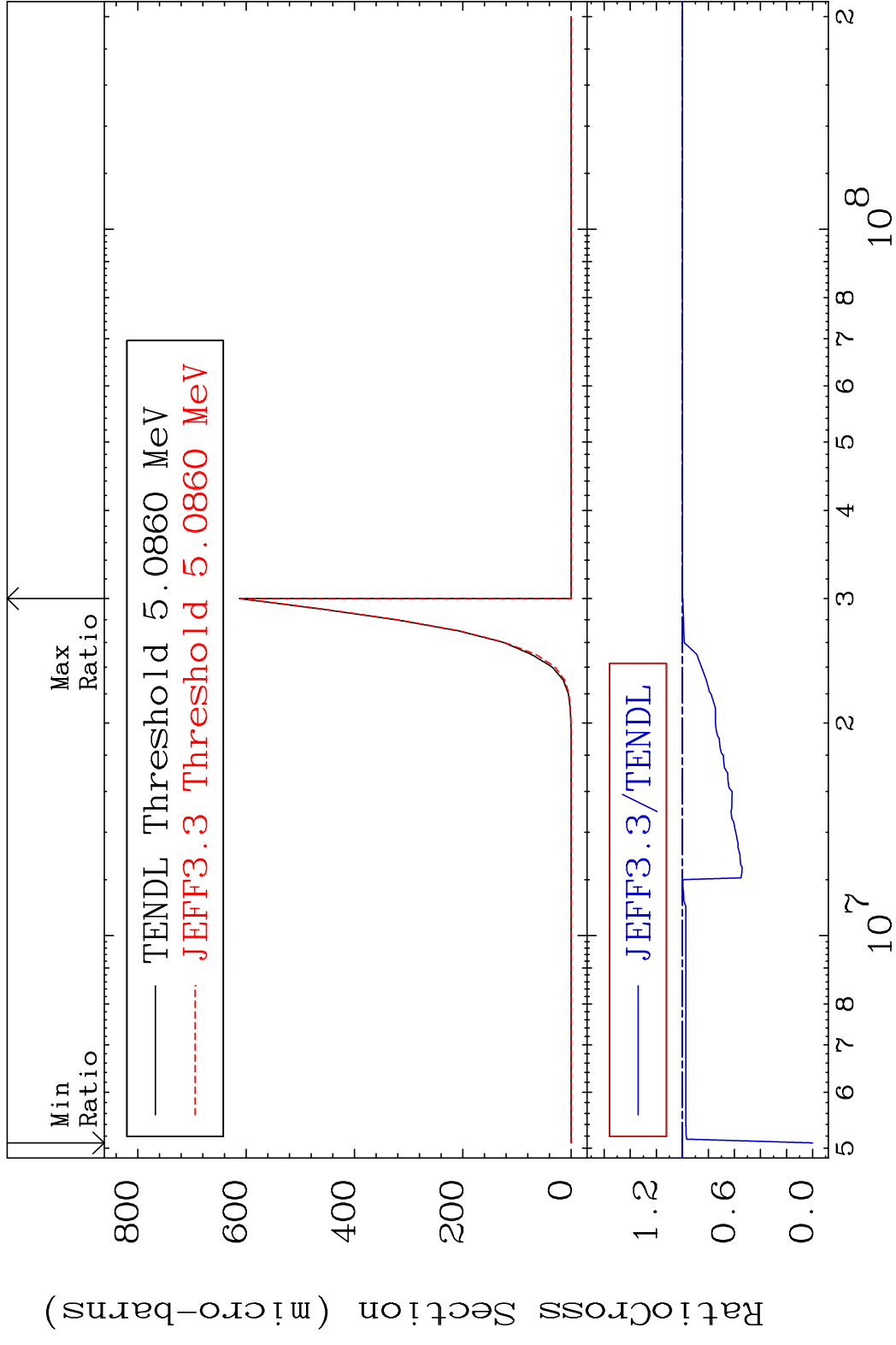


MAT 7122

(n, He-3)

71-Lu-174

Cross Section -100.0 To 0.000 %



55

Incident Energy (eV)

71-Lu-174

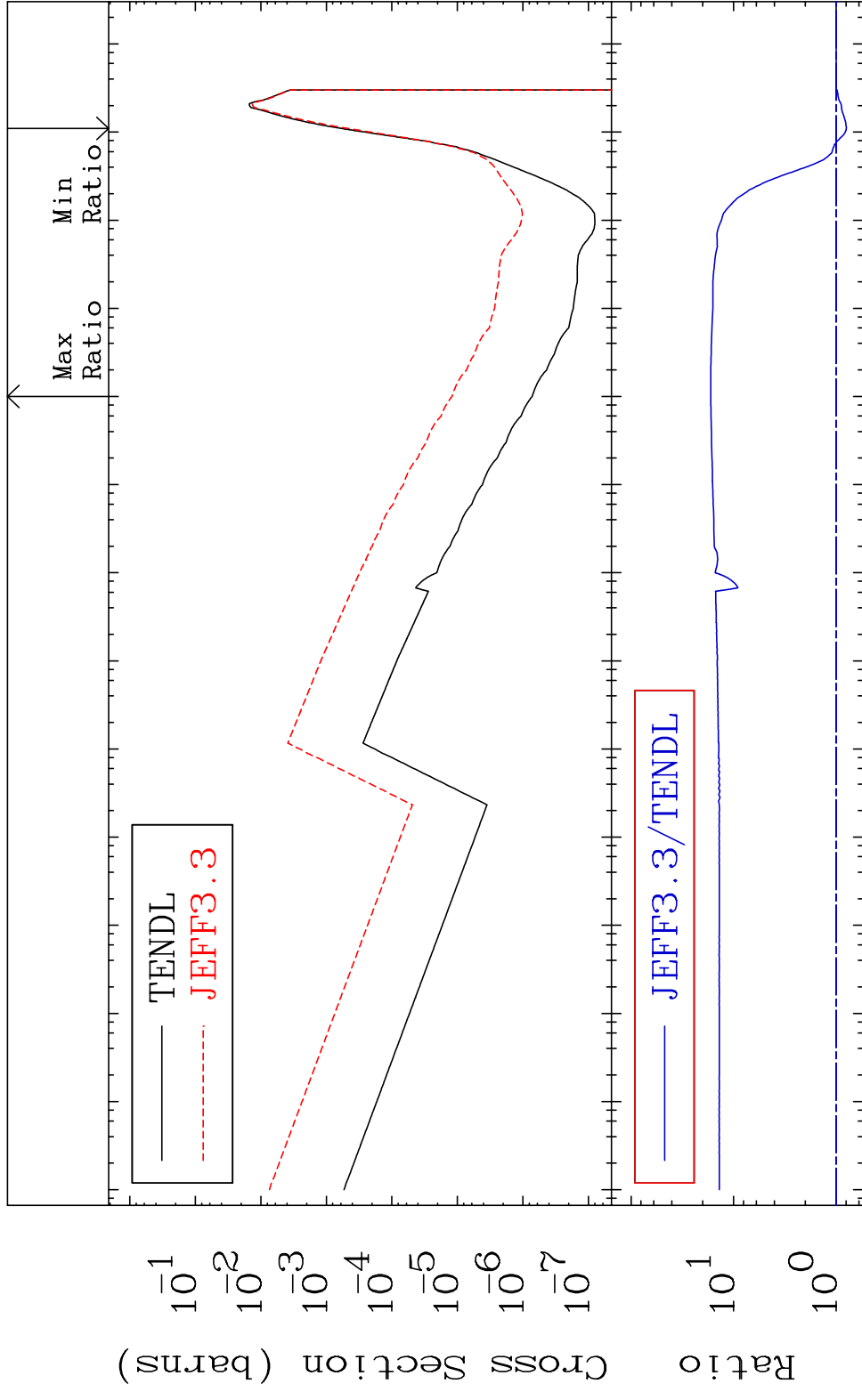


MAT 7122

71-Lu-174

(n,  $\alpha$ )

Cross Section -20.33 To 1573. %

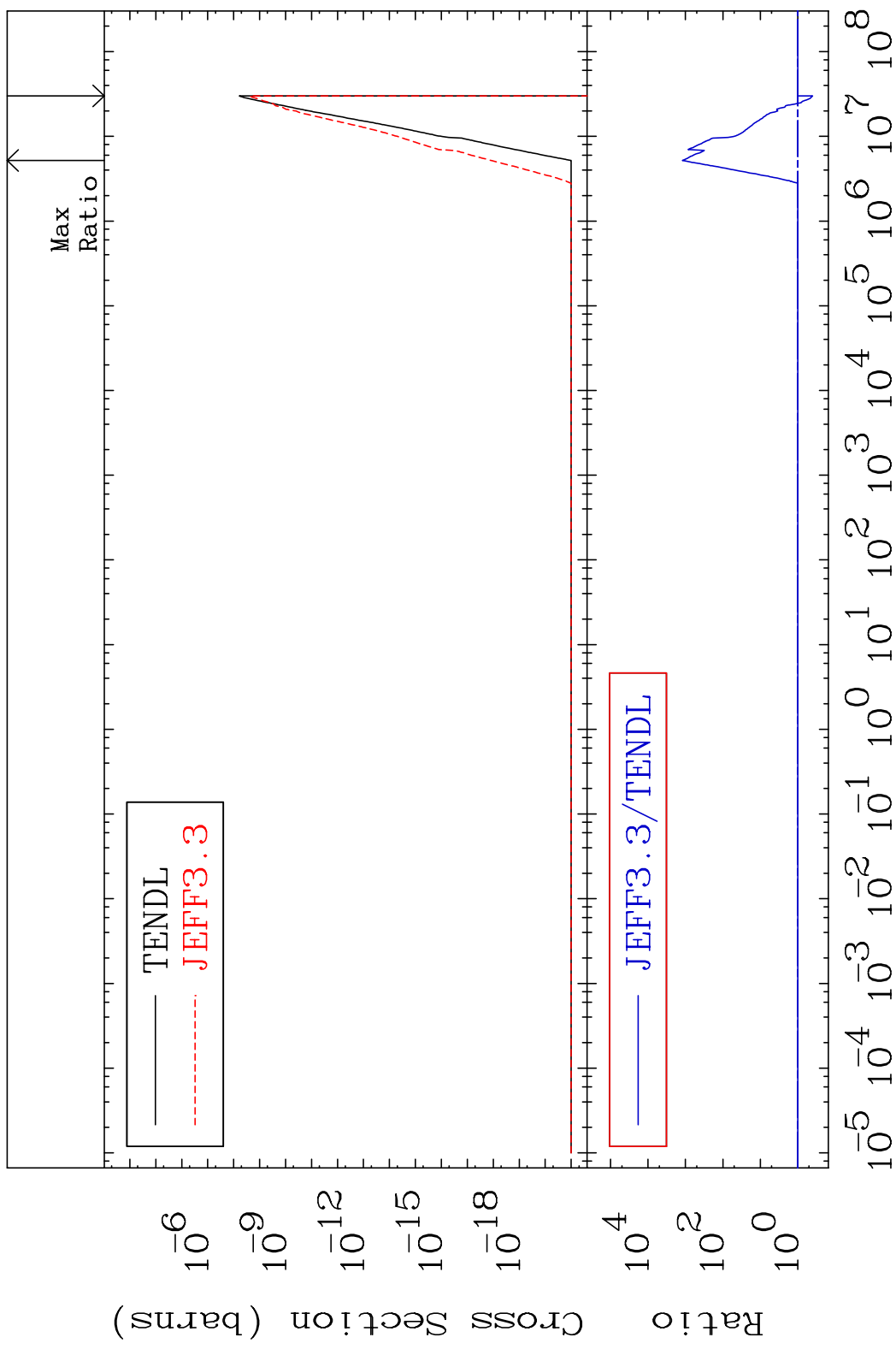


MAT 7122

(n,2α)

71-Lu-174

Cross Section -59.87 To 9999. %

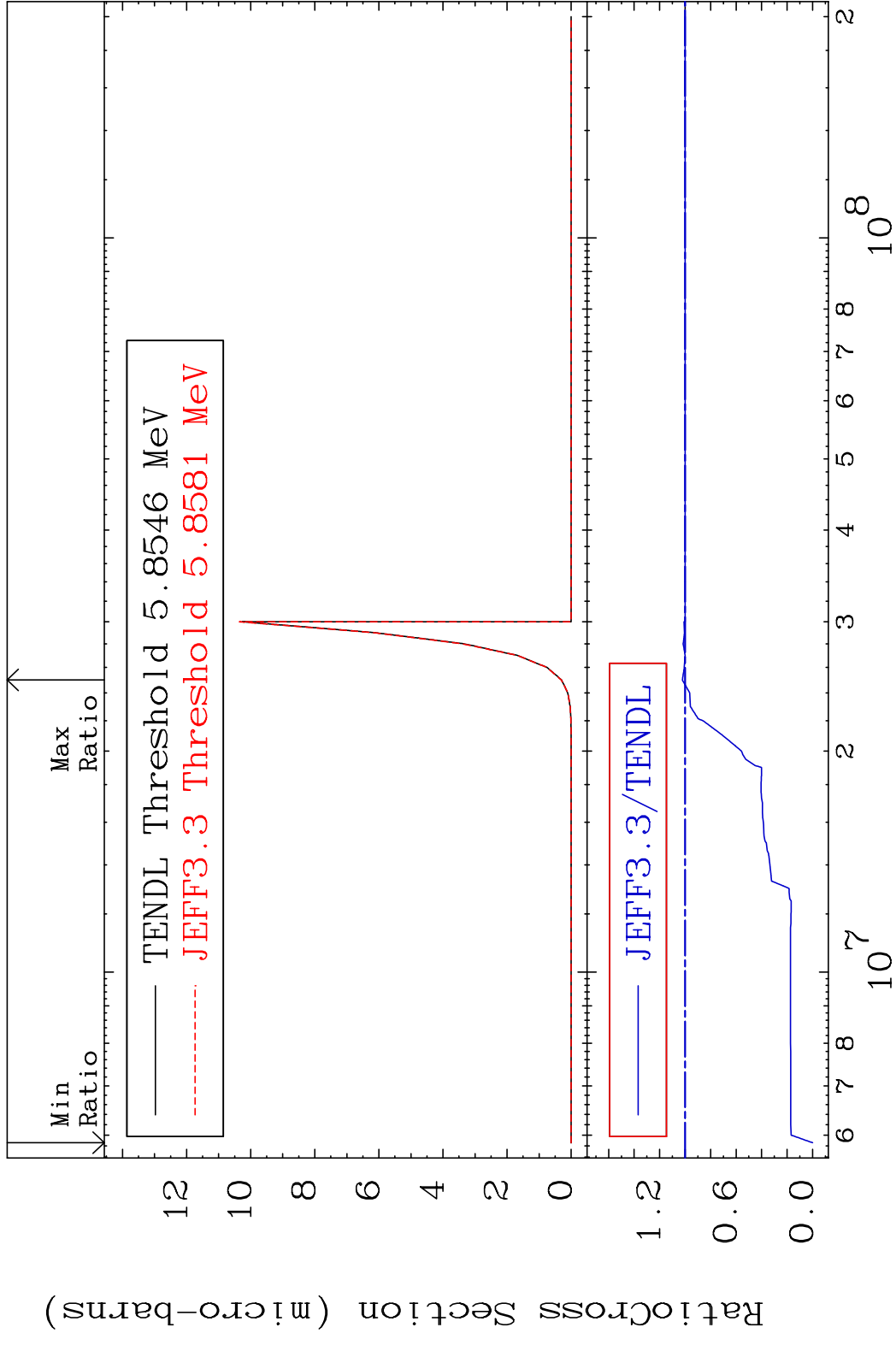


MAT 7122

(n,2p)

71-Lu-174

Cross Section -100.0 To 2.174 %

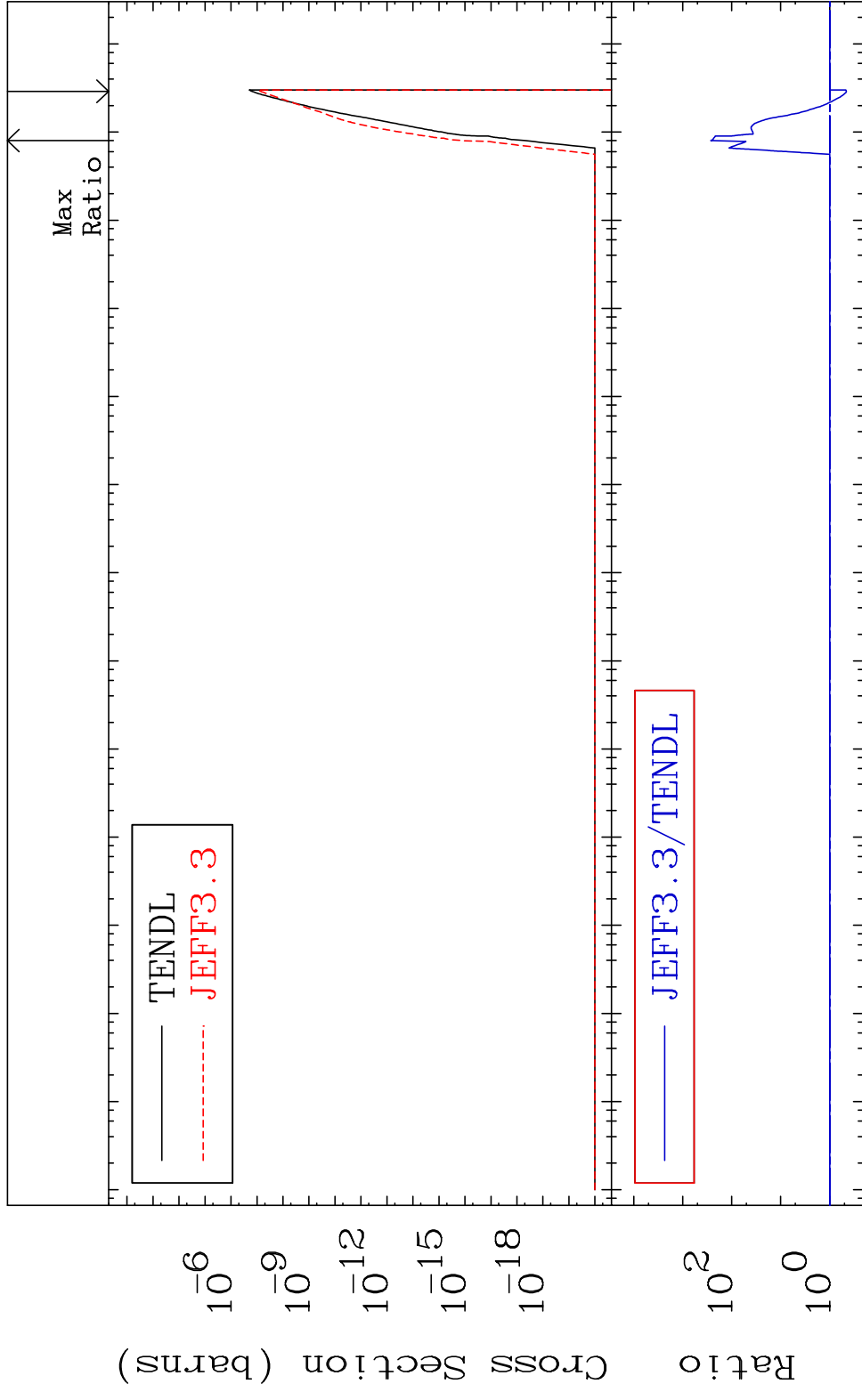


MAT 7122

(n,p)  $\alpha$

71-Lu-174

Cross Section -54.33 To 9999. %



59

Incident Energy (eV)

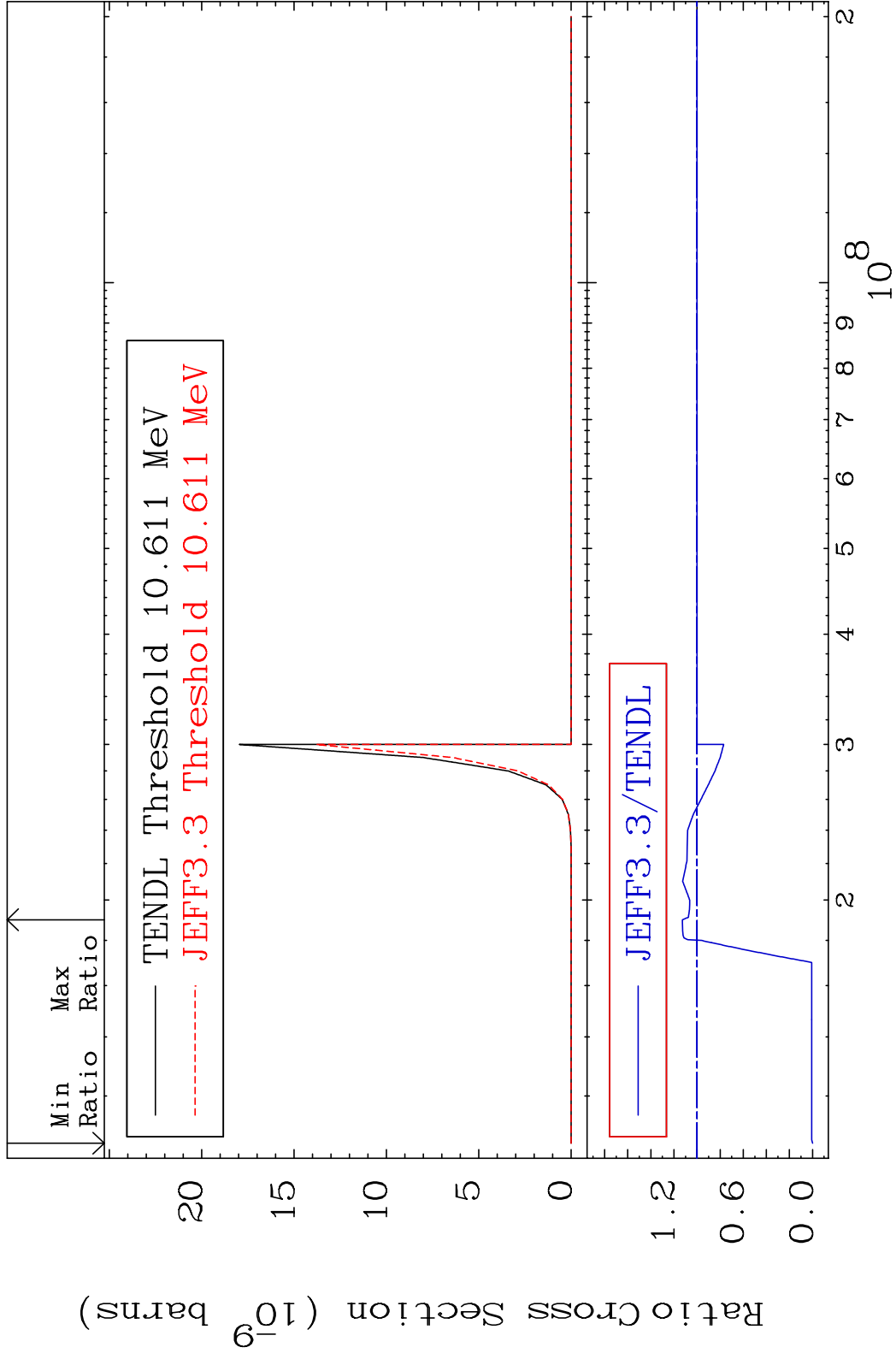
71-Lu-174

MAT 7122

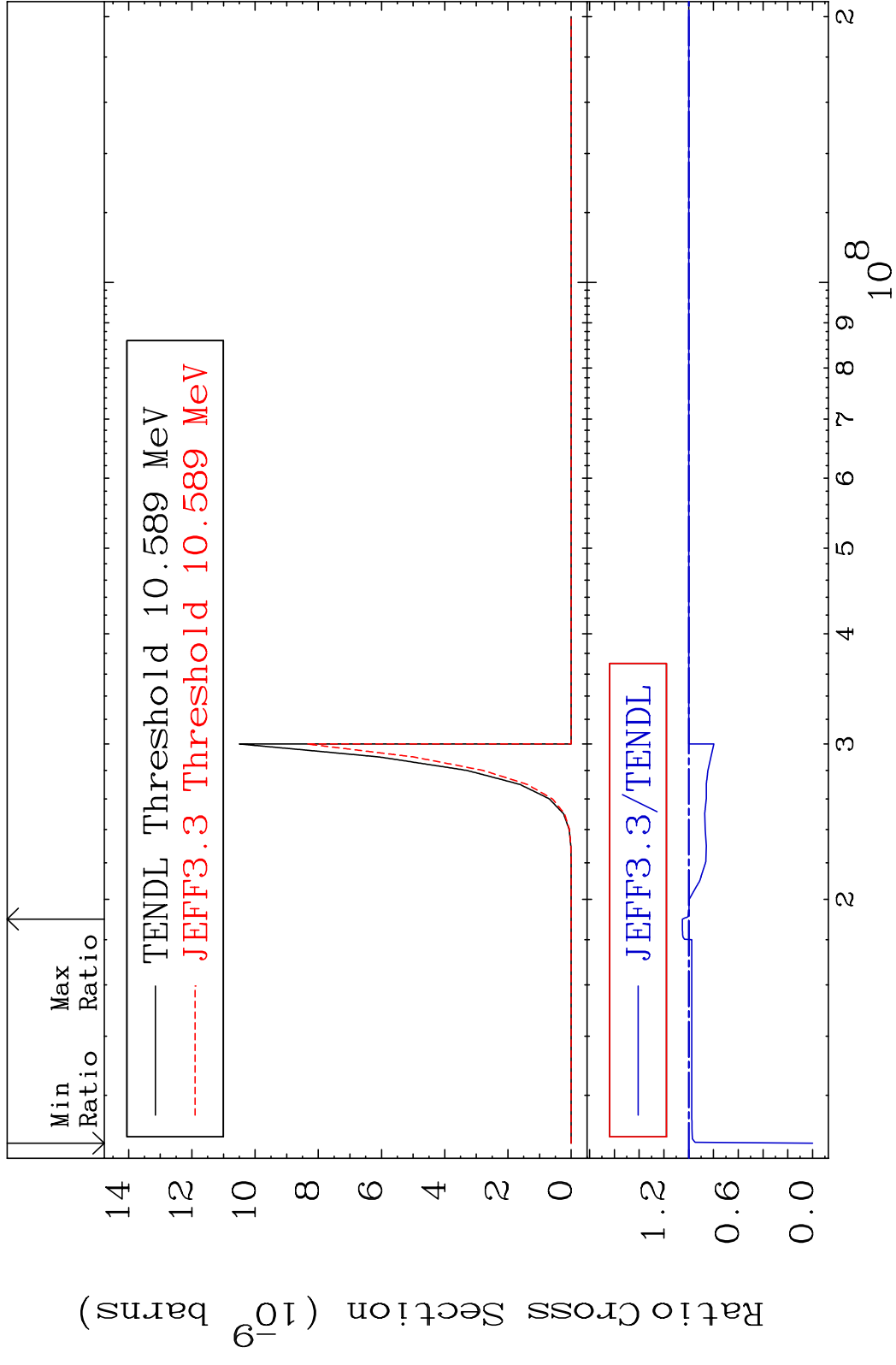
(n,p) d

71-Lu-174

Cross Section -100.0 To 12.73 %



MAT 7122 (n,p) t 71-Lu-174  
 Cross Section -100.0 To 5.122 %

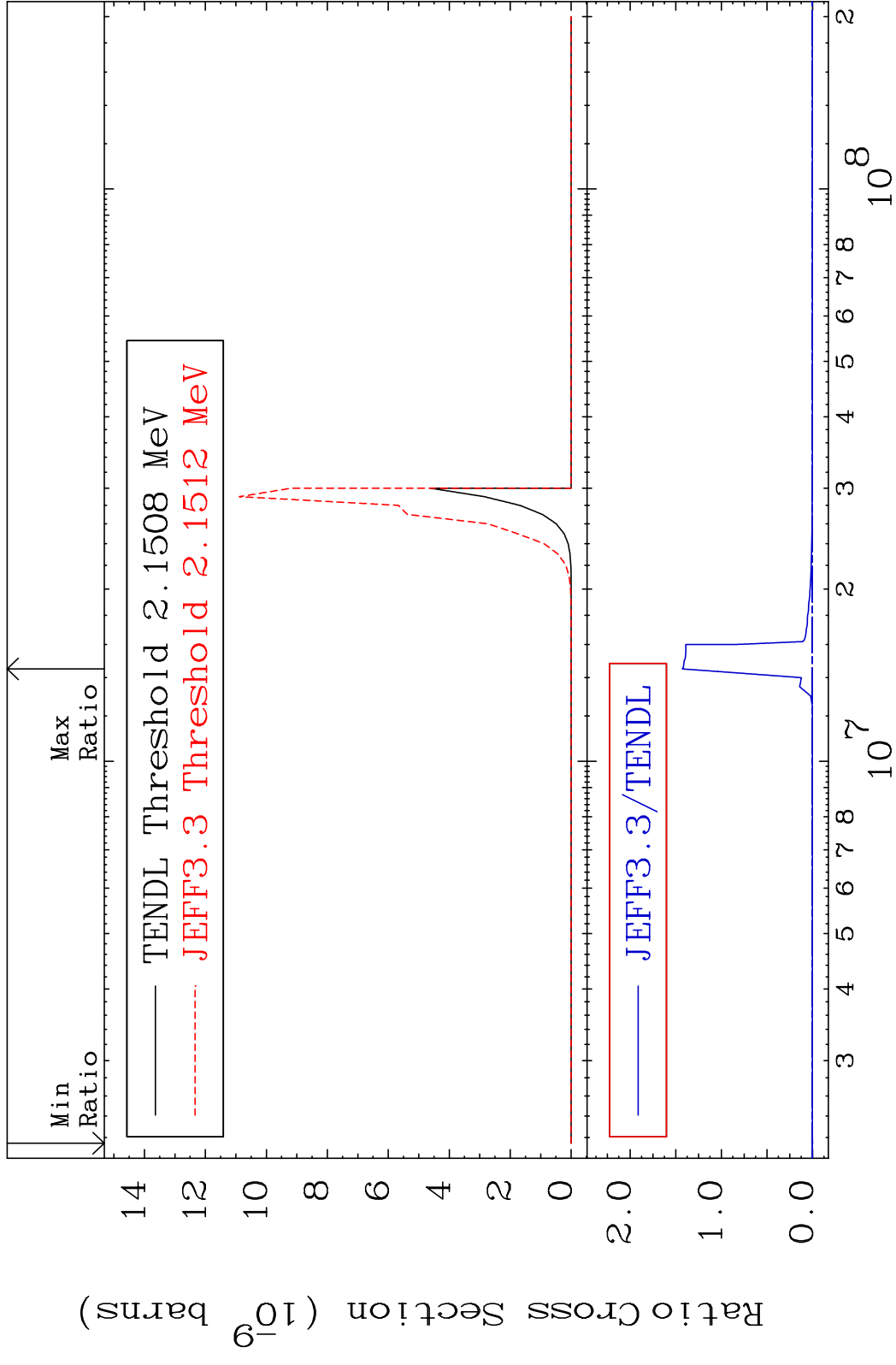


MAT 7122

(n,d)  $\alpha$

71-Lu-174

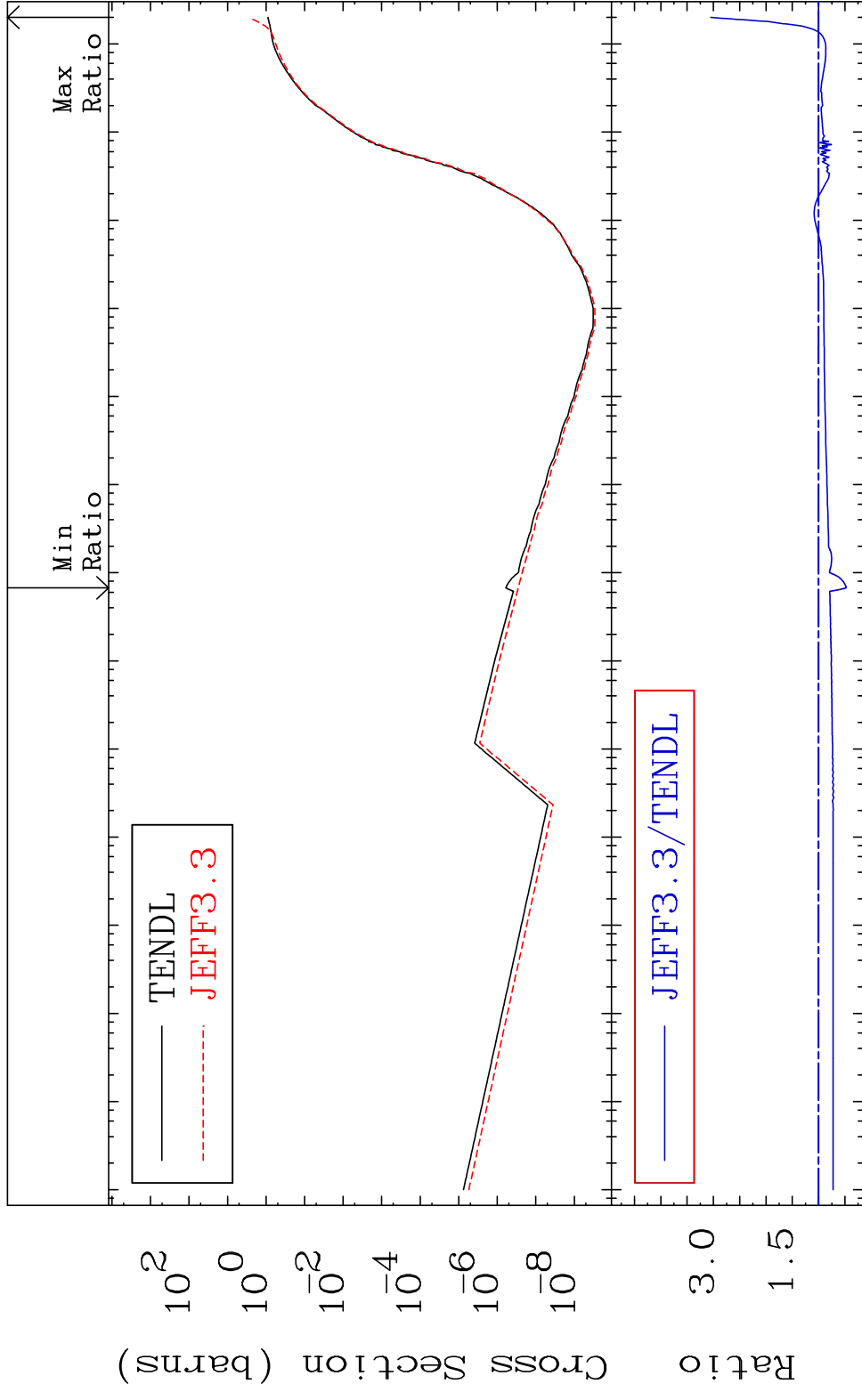
Cross Section -100.0 To 9999. %



MAT 7122

Hydrogen Production  
Cross Section -52.59 To 205.1 %

71-Lu-174



63

Incident Energy (eV)

71-Lu-174

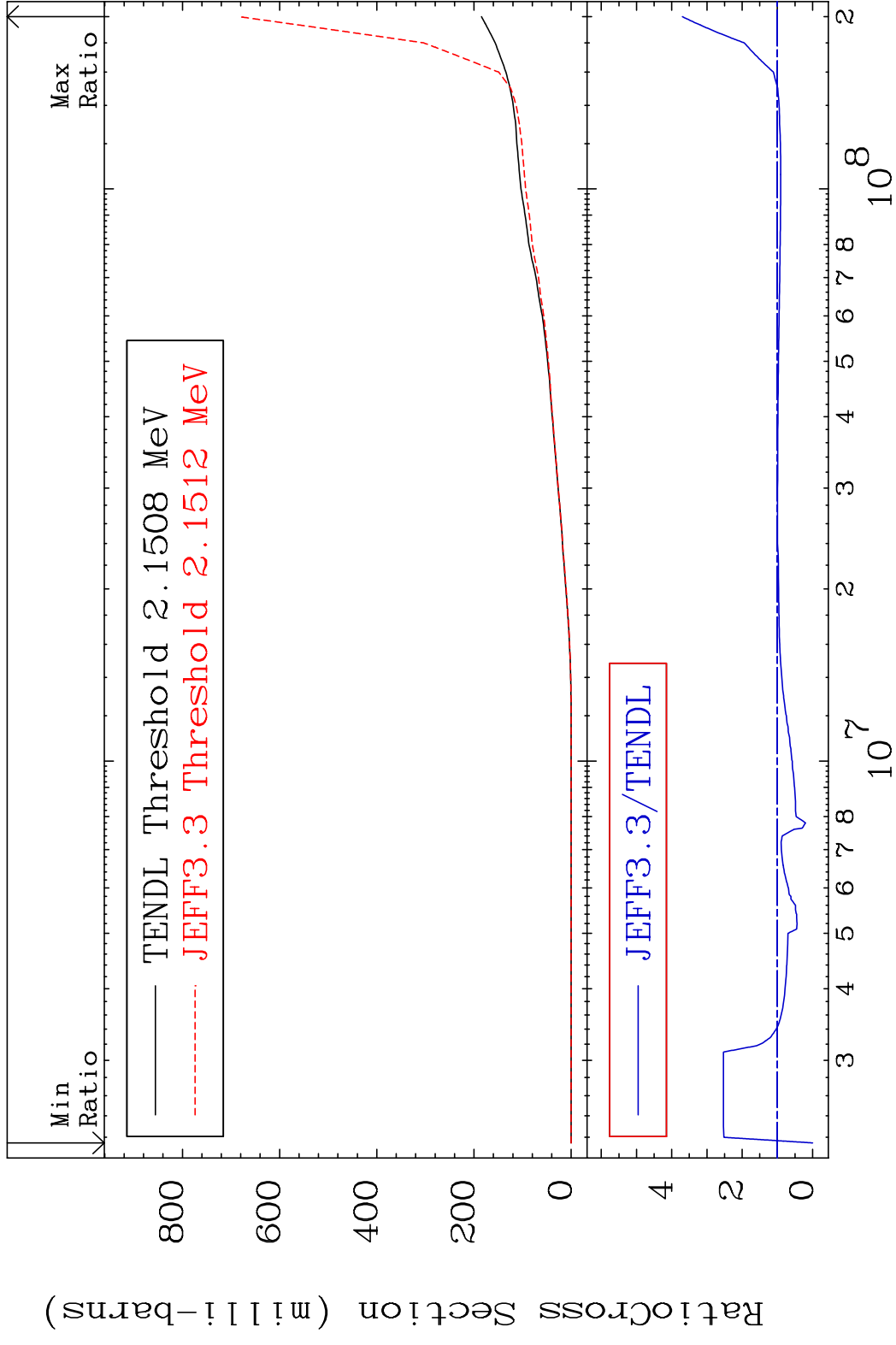


MAT 7122

Deuterium Production

71-Lu-174

Cross Section -100.0 To 269.8 %

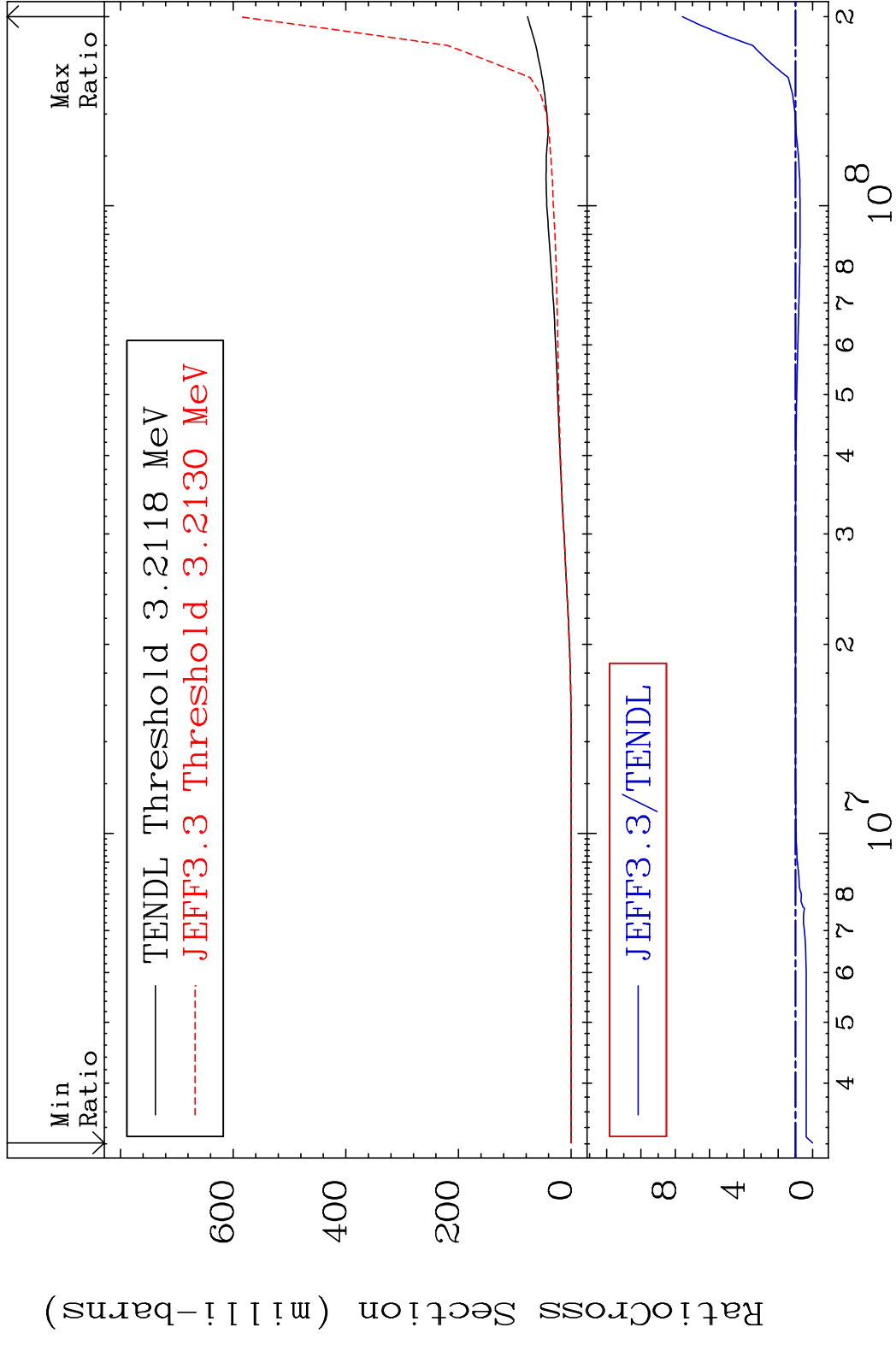


MAT 7122

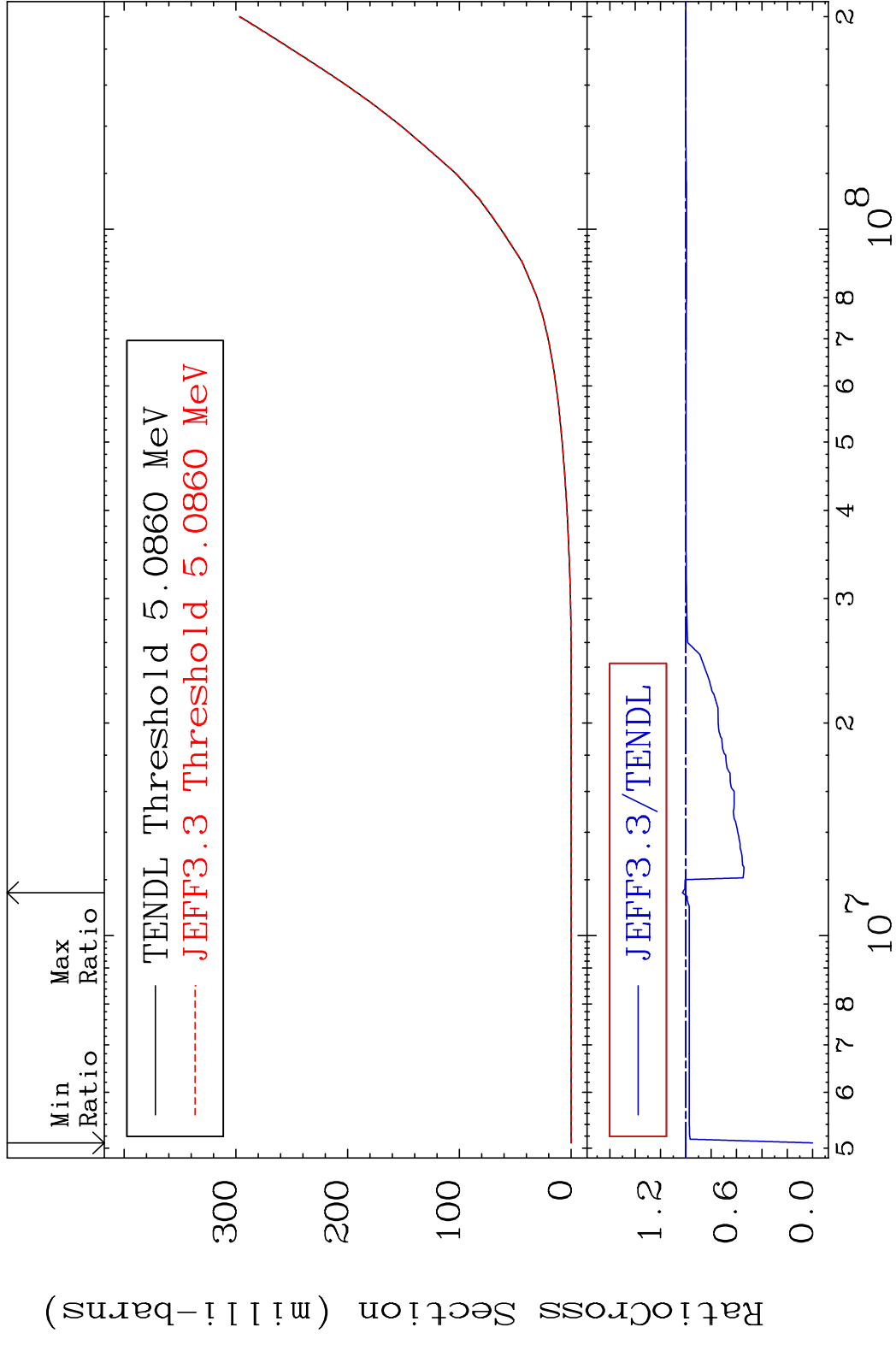
Tritium Production

71-Lu-174

Cross Section -100.0 To 658.9 %



Cross Section -100.0 To 2.768 %

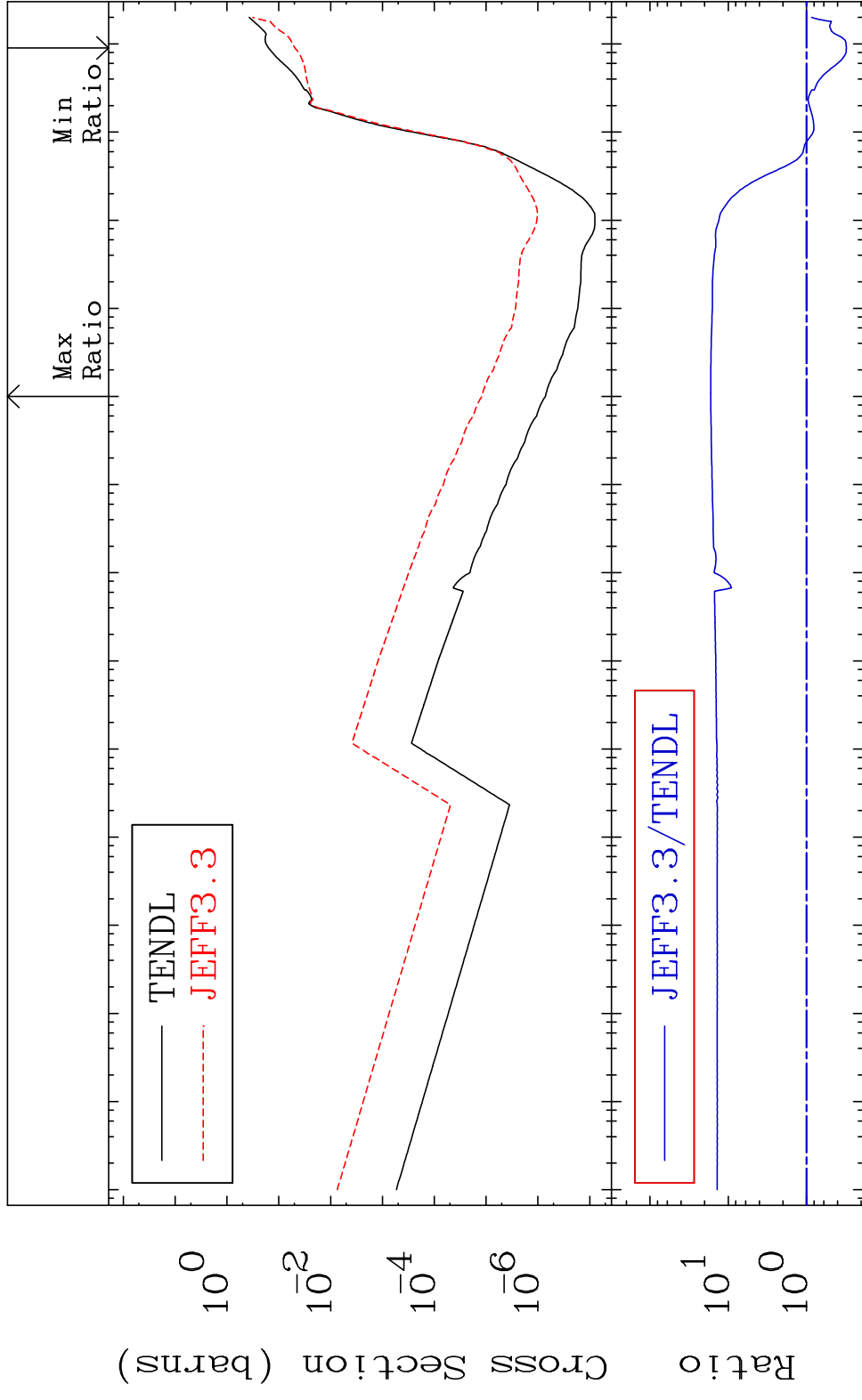


MAT 7122

He-4 Production

71-Lu-174

Cross Section -69.05 To 1573. %



Ratio

10<sup>1</sup>

10<sup>0</sup>

10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

67

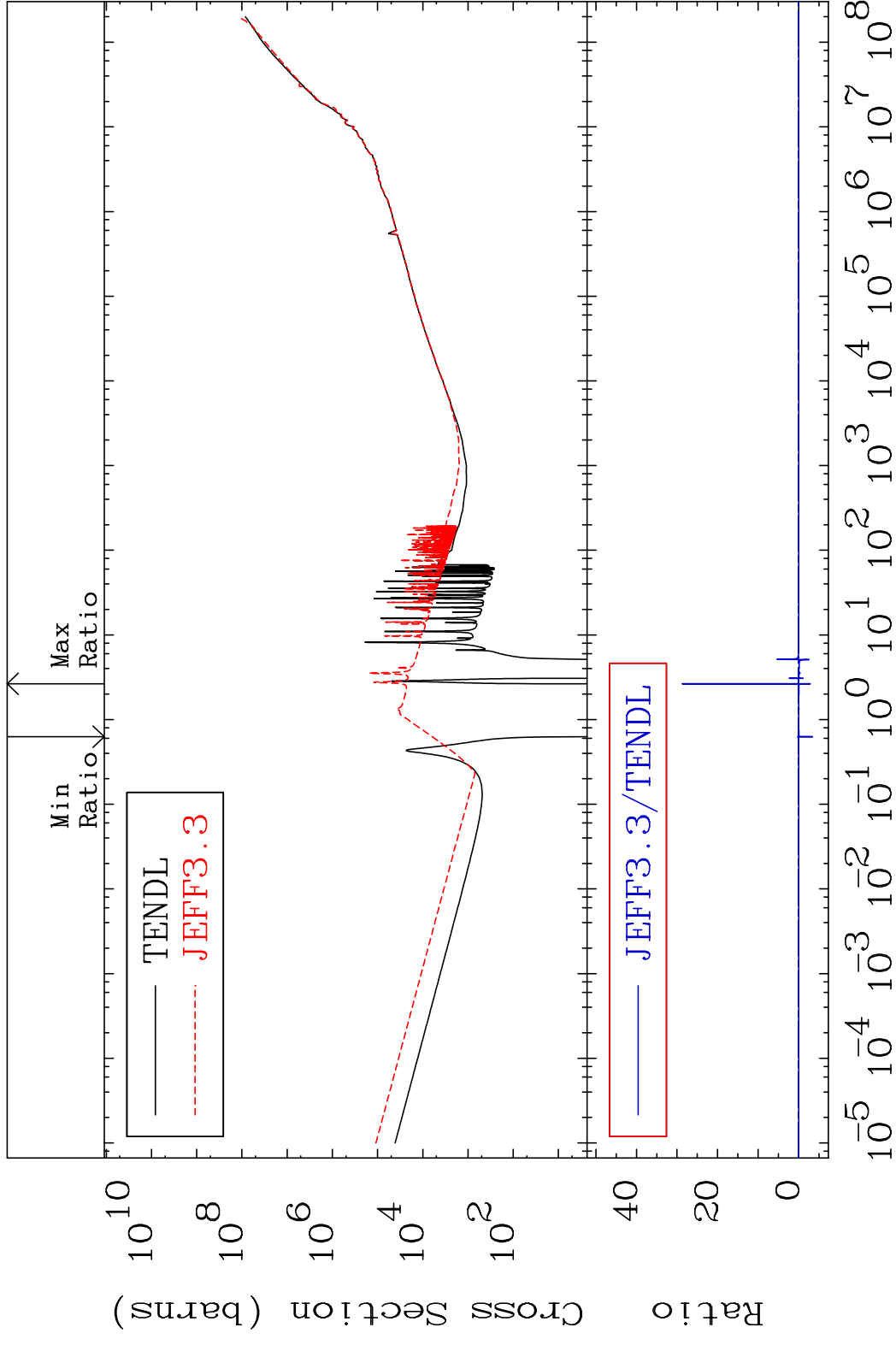
Incident Energy (eV)

71-Lu-174

MAT 7122

Kerma total (eV-barns) 71-Lu-174

Cross Section -9999. To 9999. %



68

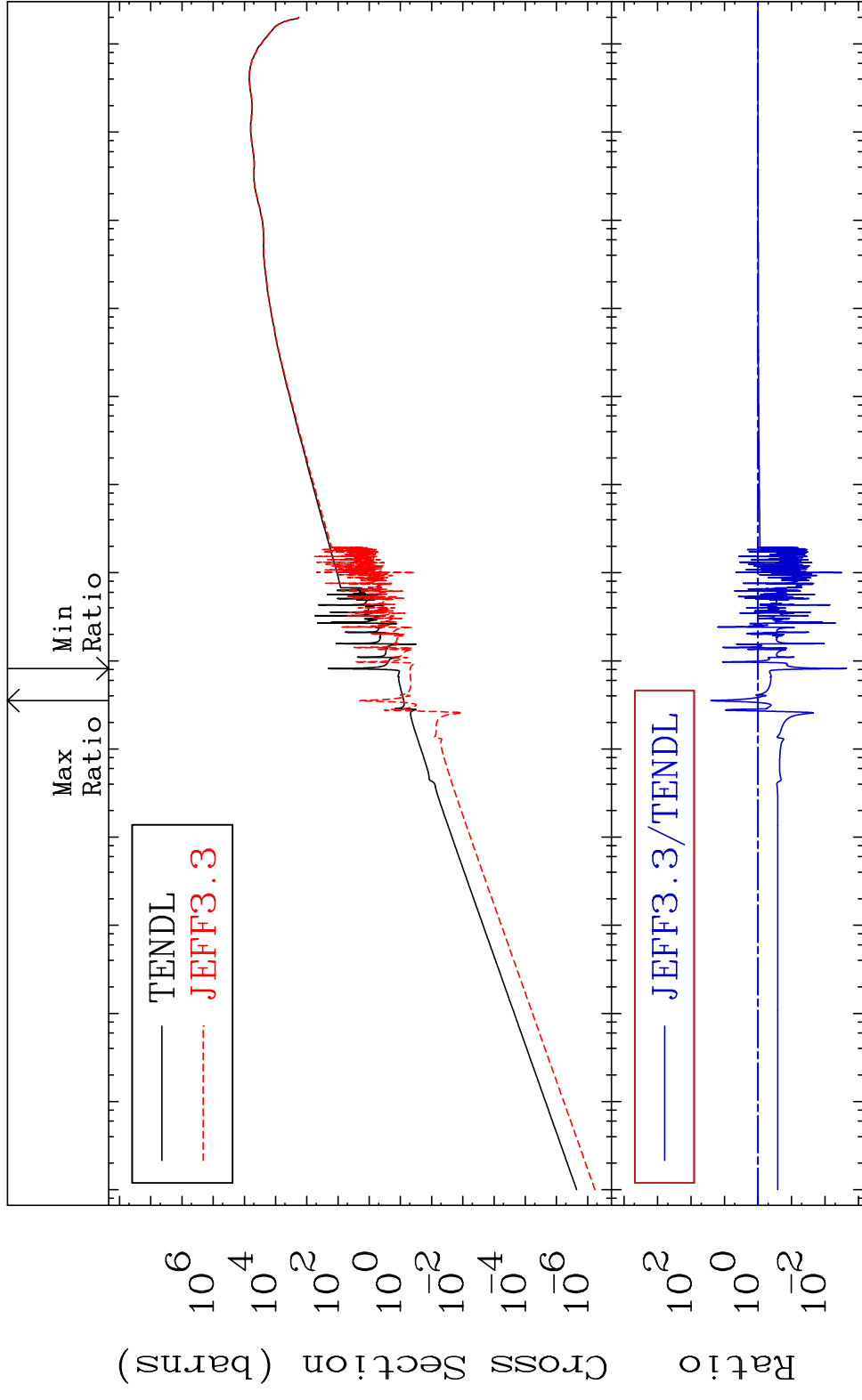
Incident Energy (eV)

71-Lu-174

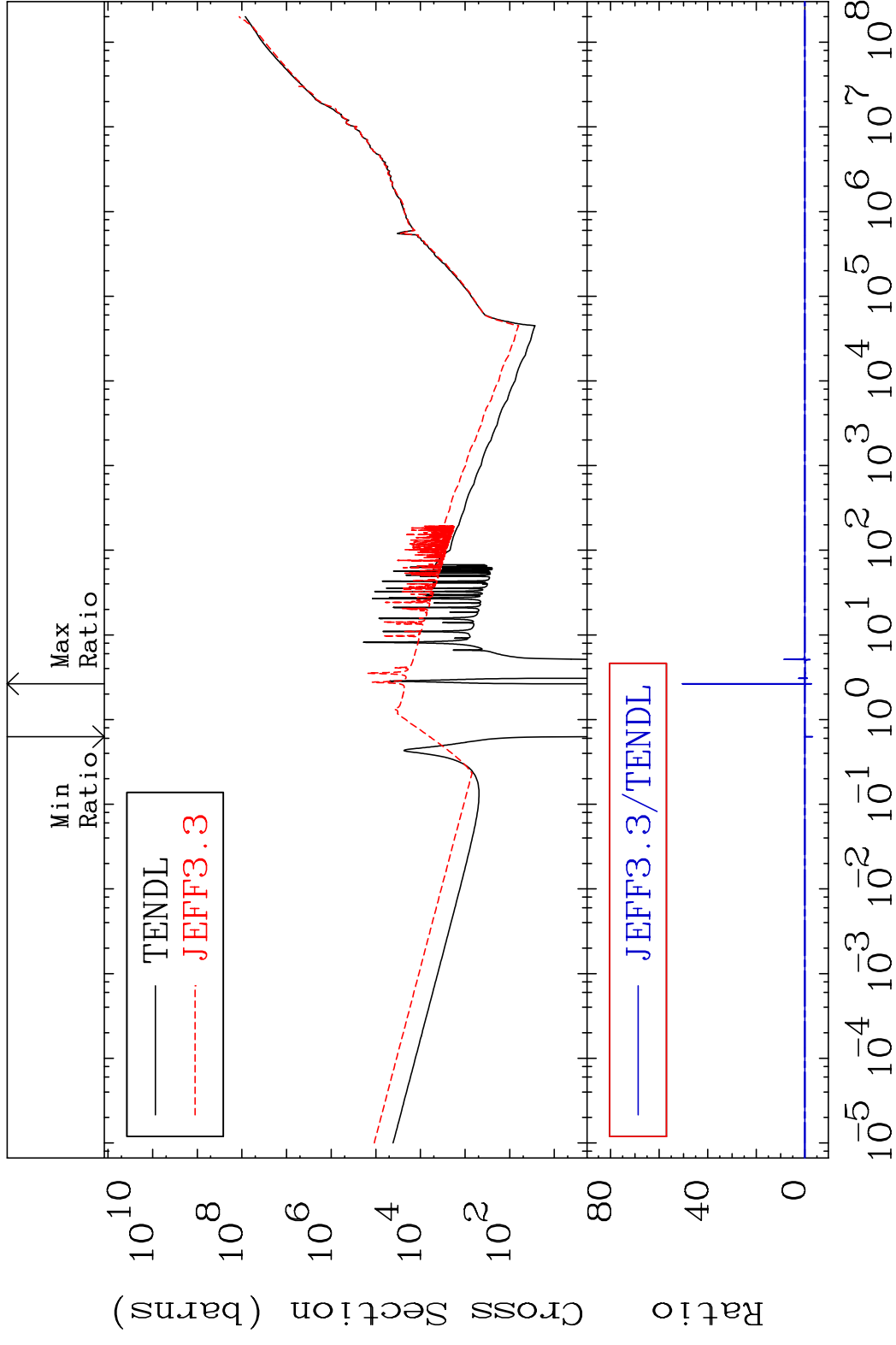
MAT 7122

Kerma elastic  
Cross Section -99.777 To 2491. %

71-Lu-174

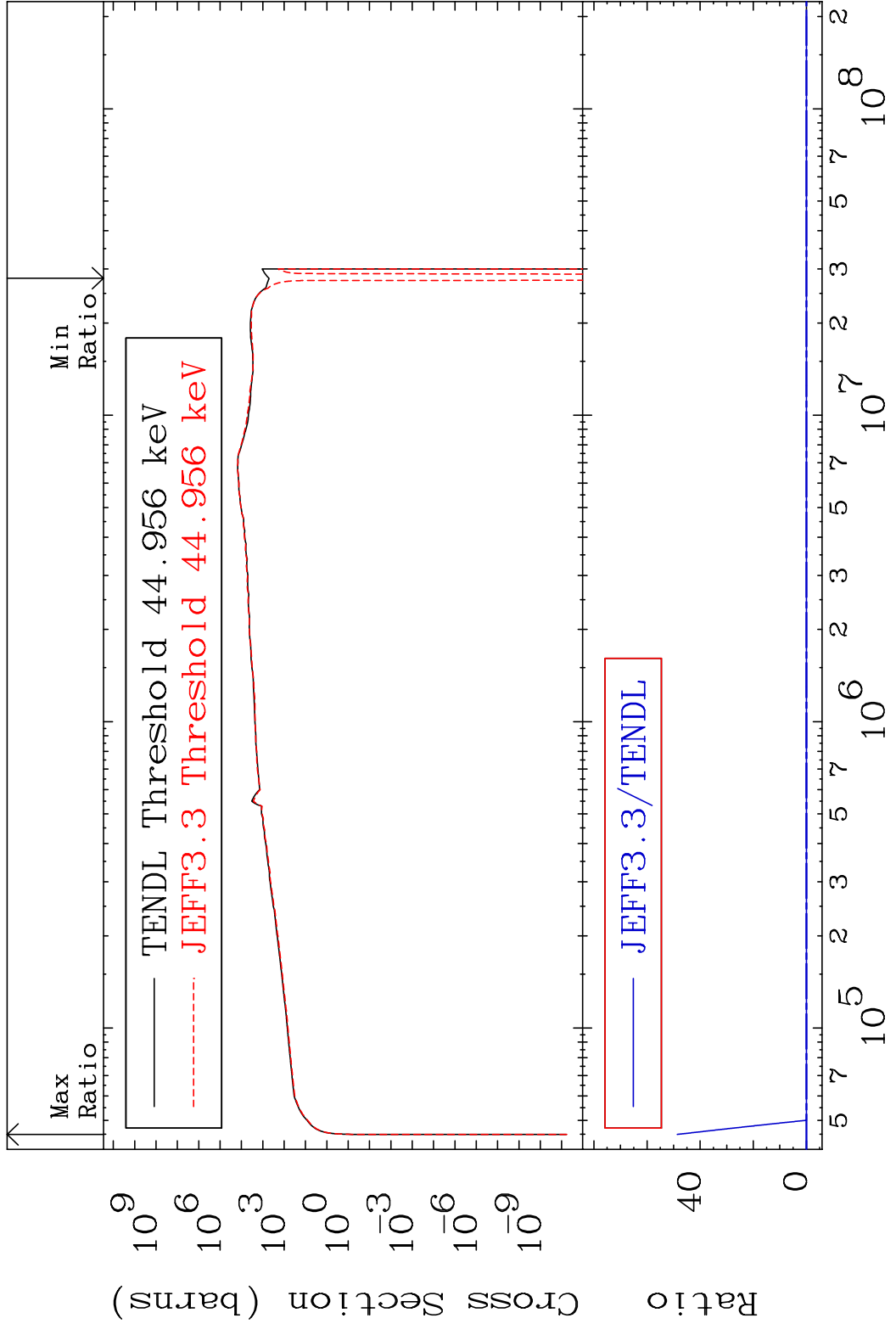


MAT 7122 Kerma non-elastic (all but mt2) 71-Lu-174  
 Cross Section -9999. To 9999. %



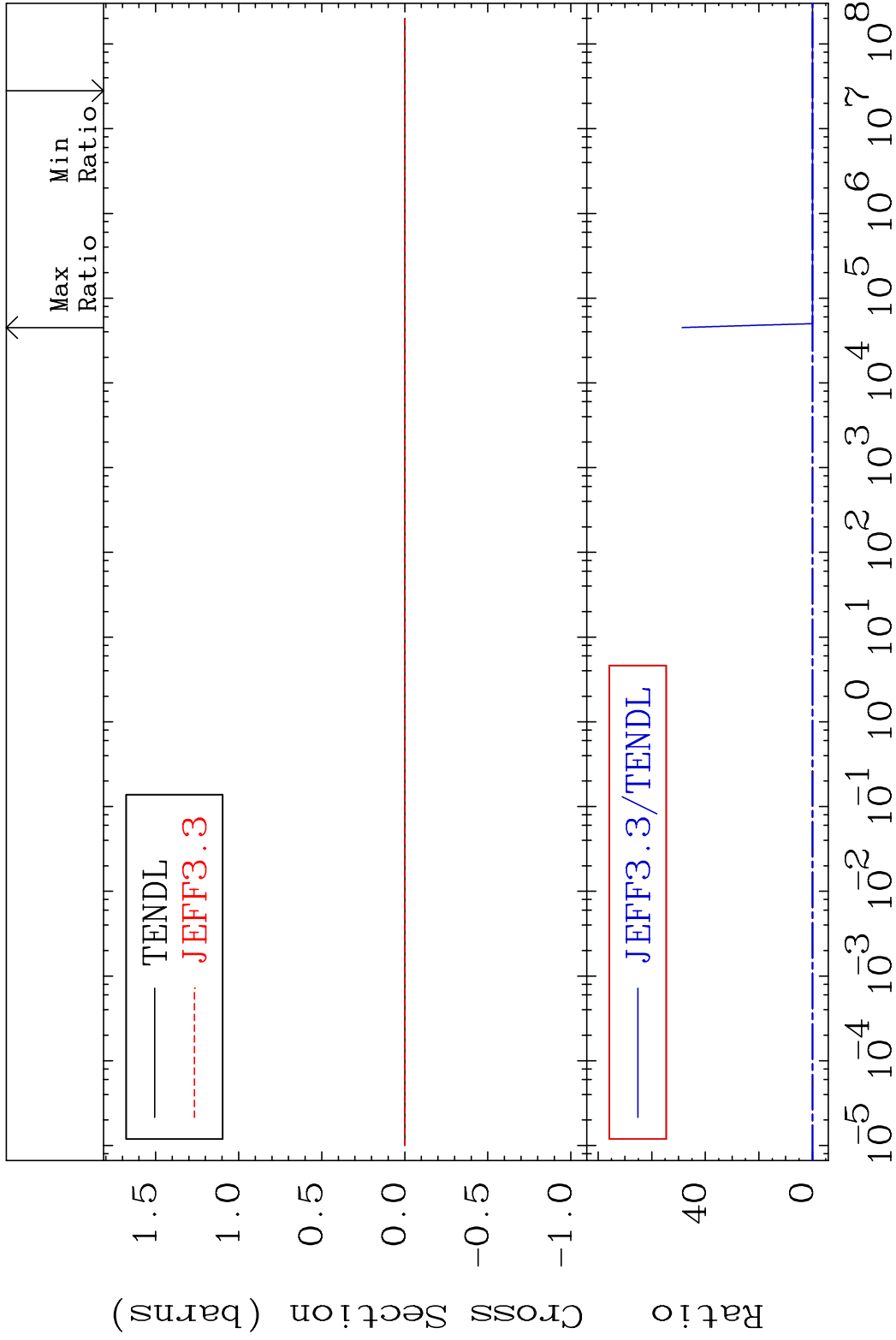
70 Incident Energy (eV) 71-Lu-174

MAT 7122 Kerma inelastic (mt51-91) 71-Lu-174  
 Cross Section -131.4 To 9999. %



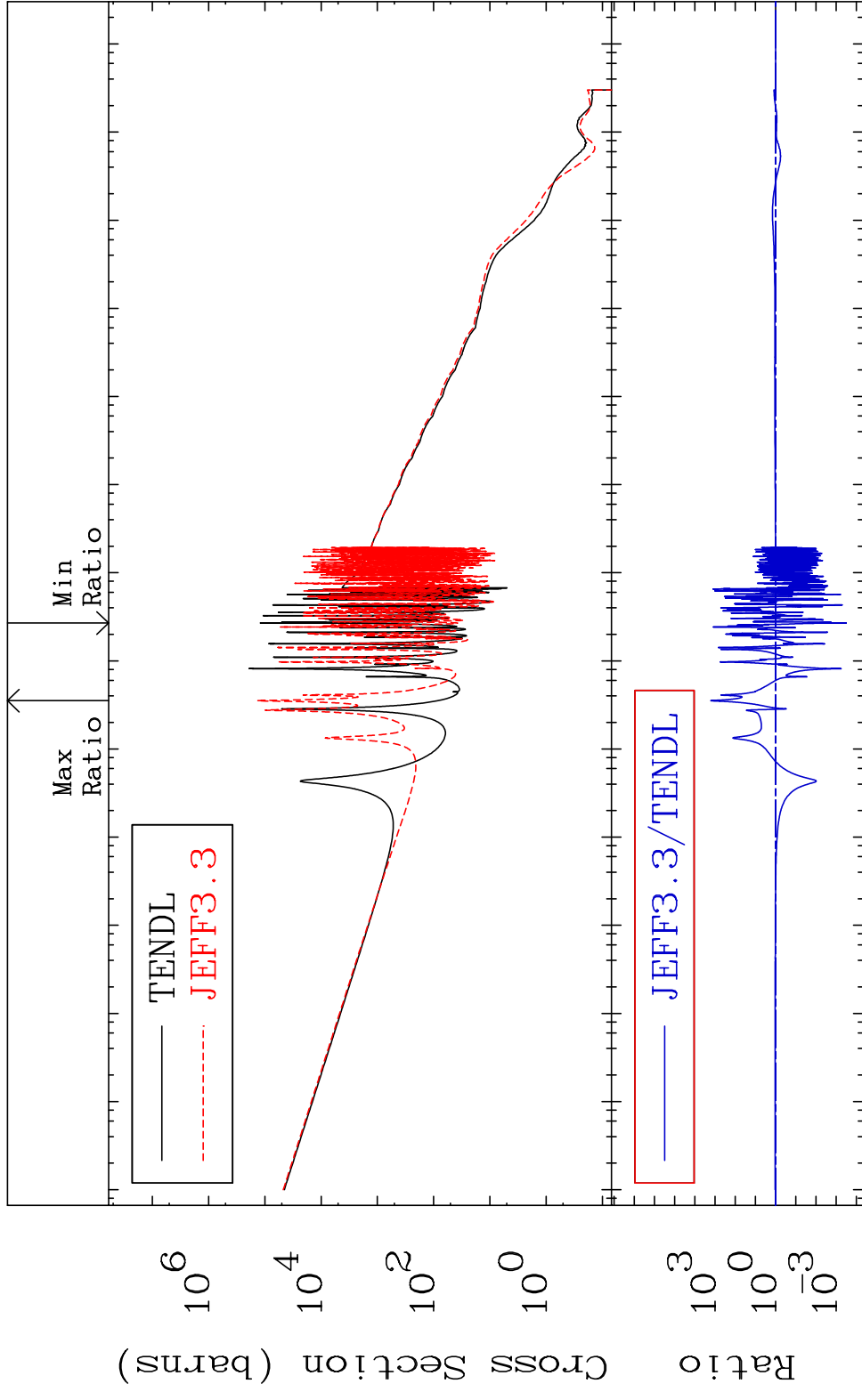


MAT 7122 Kerma fission (mt18 or mt19-20-21-38) 71-Lu-174  
 Cross Section -131.4 To 9999. %



MAT 7122

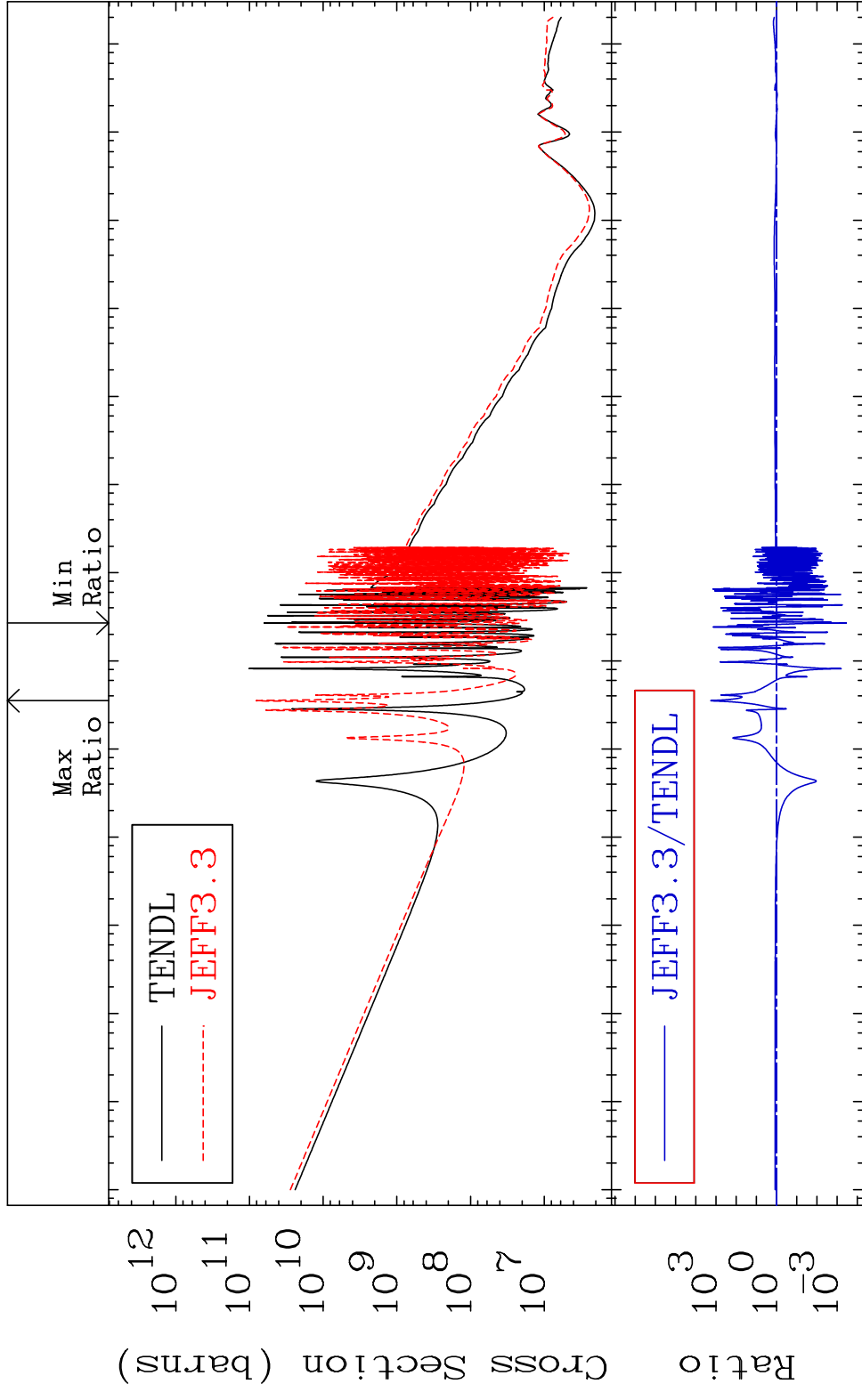
Kerma capture (mt102) 71-Lu-174  
Cross Section -99.97 To 9999. %



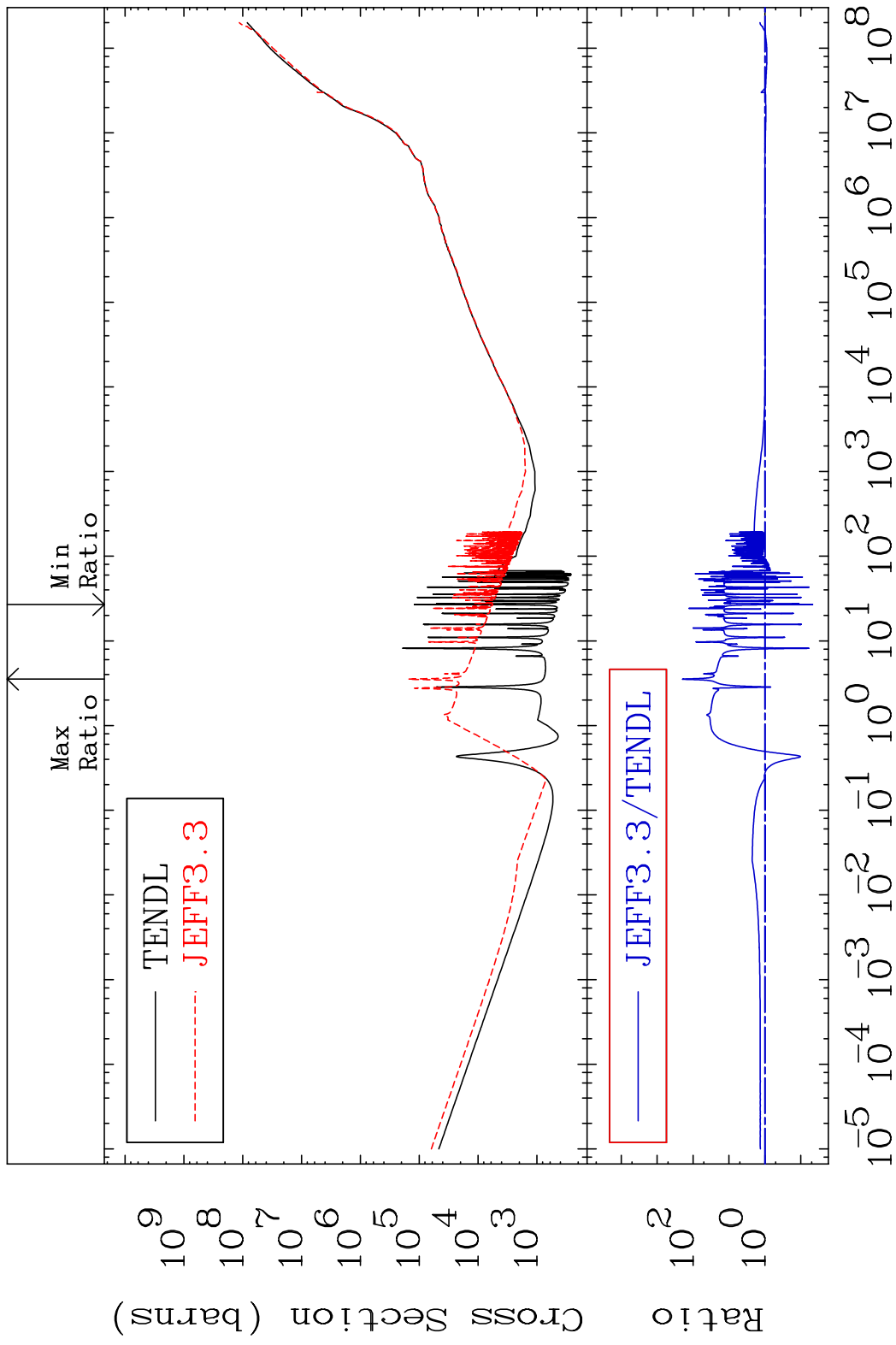
73

Incident Energy (eV) 71-Lu-174

MAT 7122 Total photon (eV-barns) 71-Lu-174  
 Cross Section -99.97 To 9999. %



MAT 7122 Total kinematic kerma (high limit) 71-Lu-174  
 Cross Section -95.29 To 9999. %

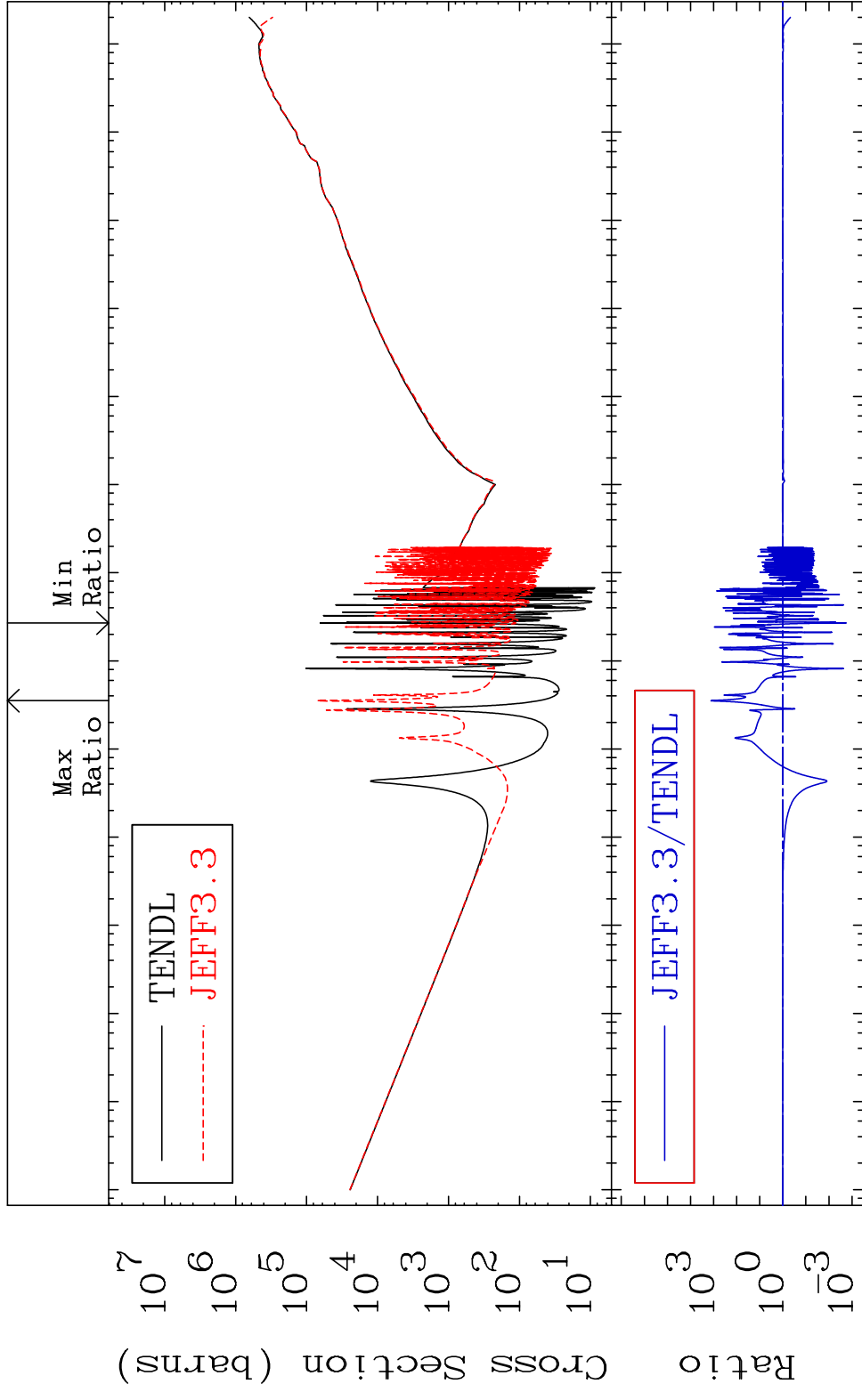


MAT 7122

Dpa total (eV-barns)

71-Lu-174

Cross Section -99.82 To 9999. %



76

Incident Energy (eV)

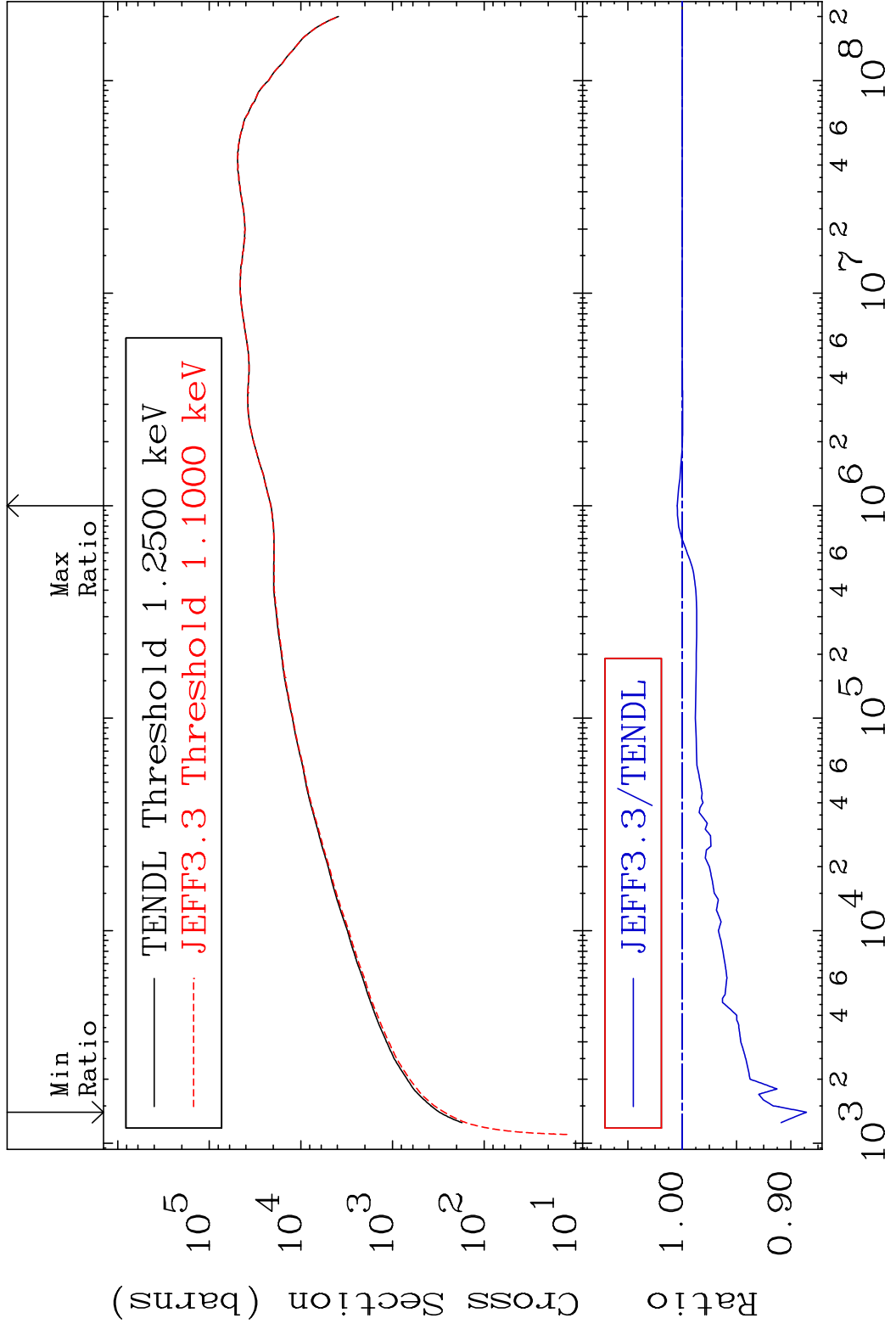
71-Lu-174

MAT 7122

Dpa elastic (mt2)

71-Lu-174

Cross Section -11.44 To 0.461 %

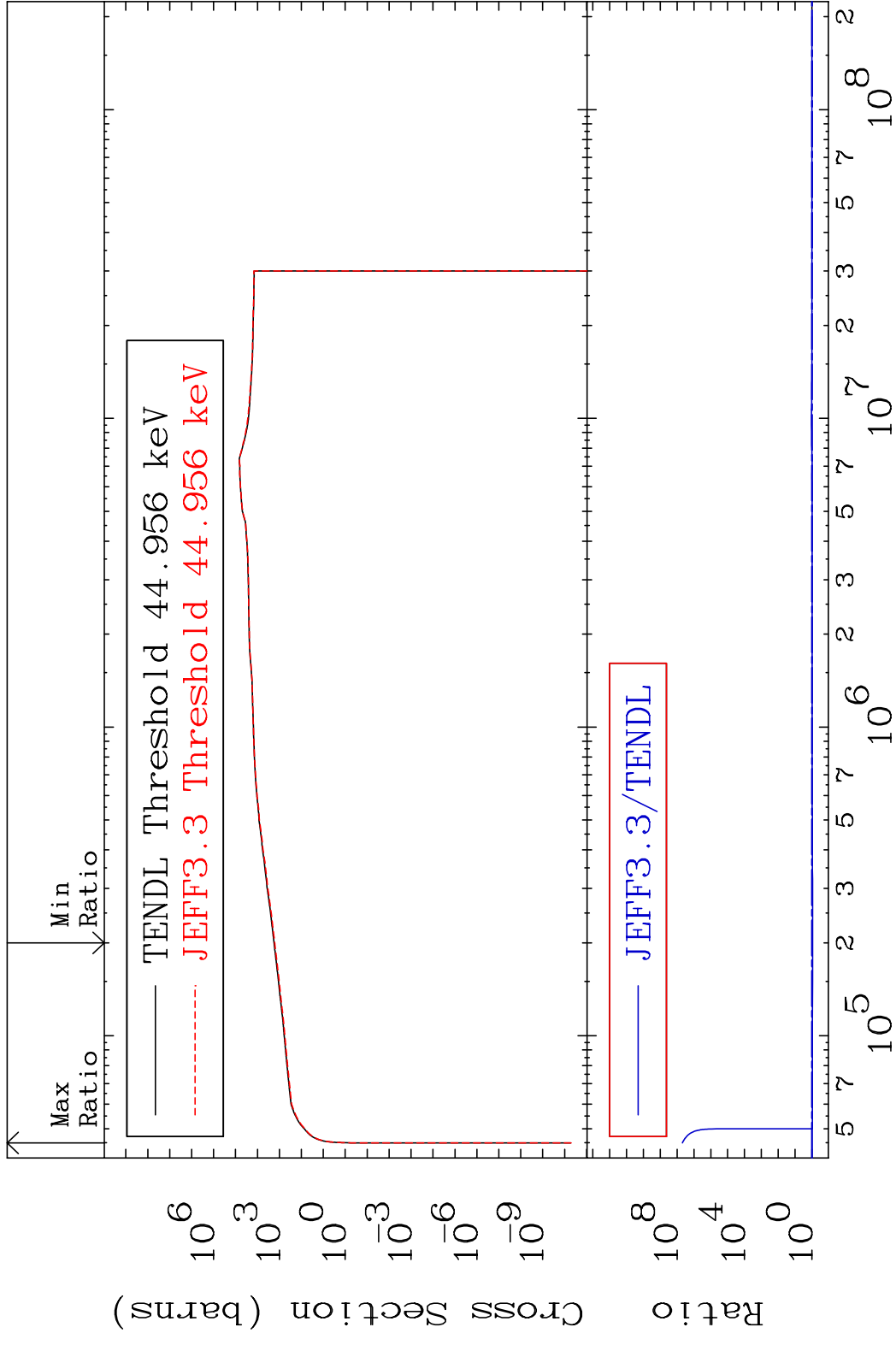


77

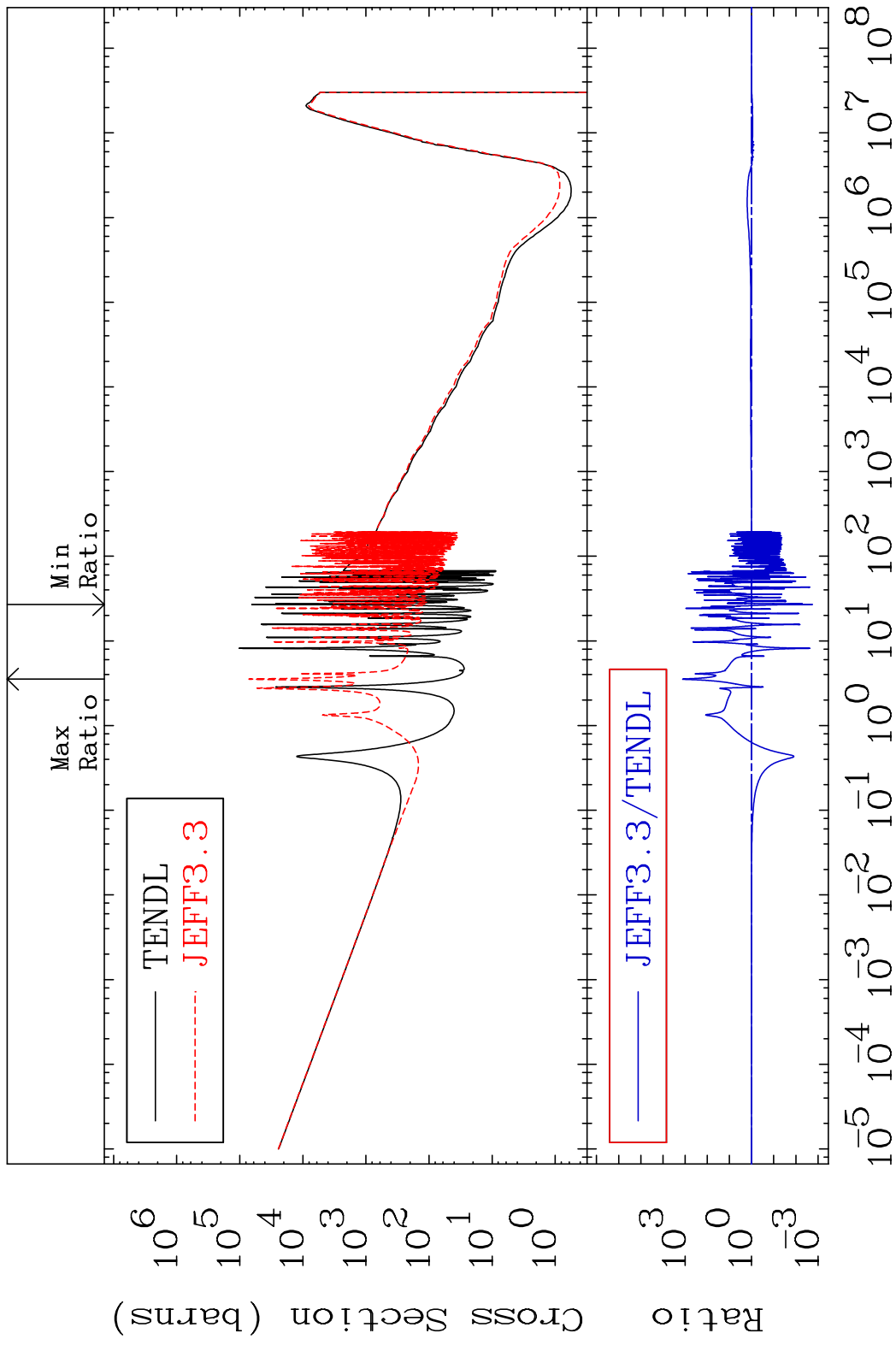
Incident Energy (eV)

71-Lu-174

MAT 7122 Dpa inelastic (mt51-91) 71-Lu-174  
 Cross Section -7.049 To 9999. %



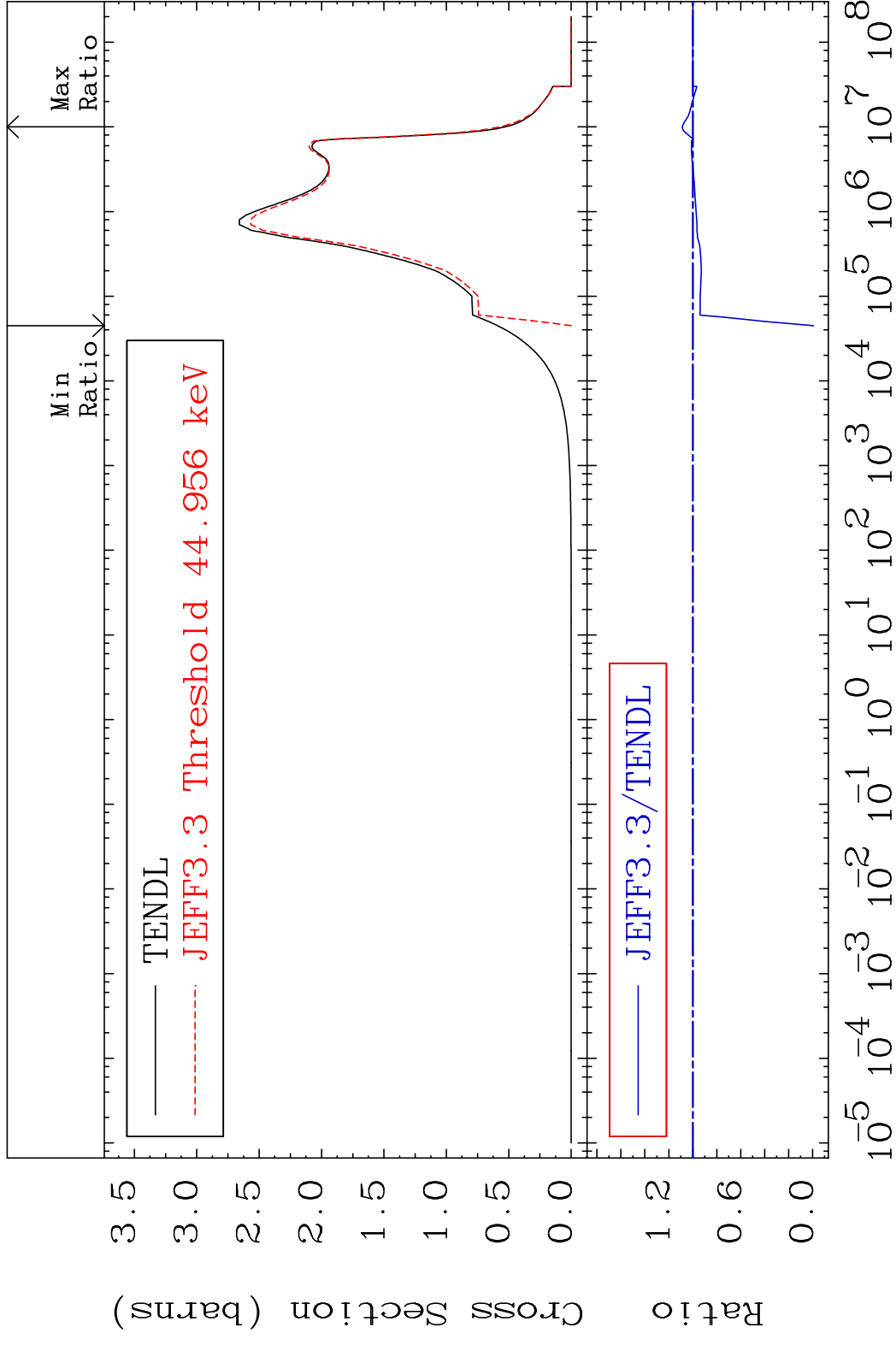
MAT 7122 Dpa disappearance (mt102 -120) 71-Lu-174  
 Cross Section -99.82 To 9999. %



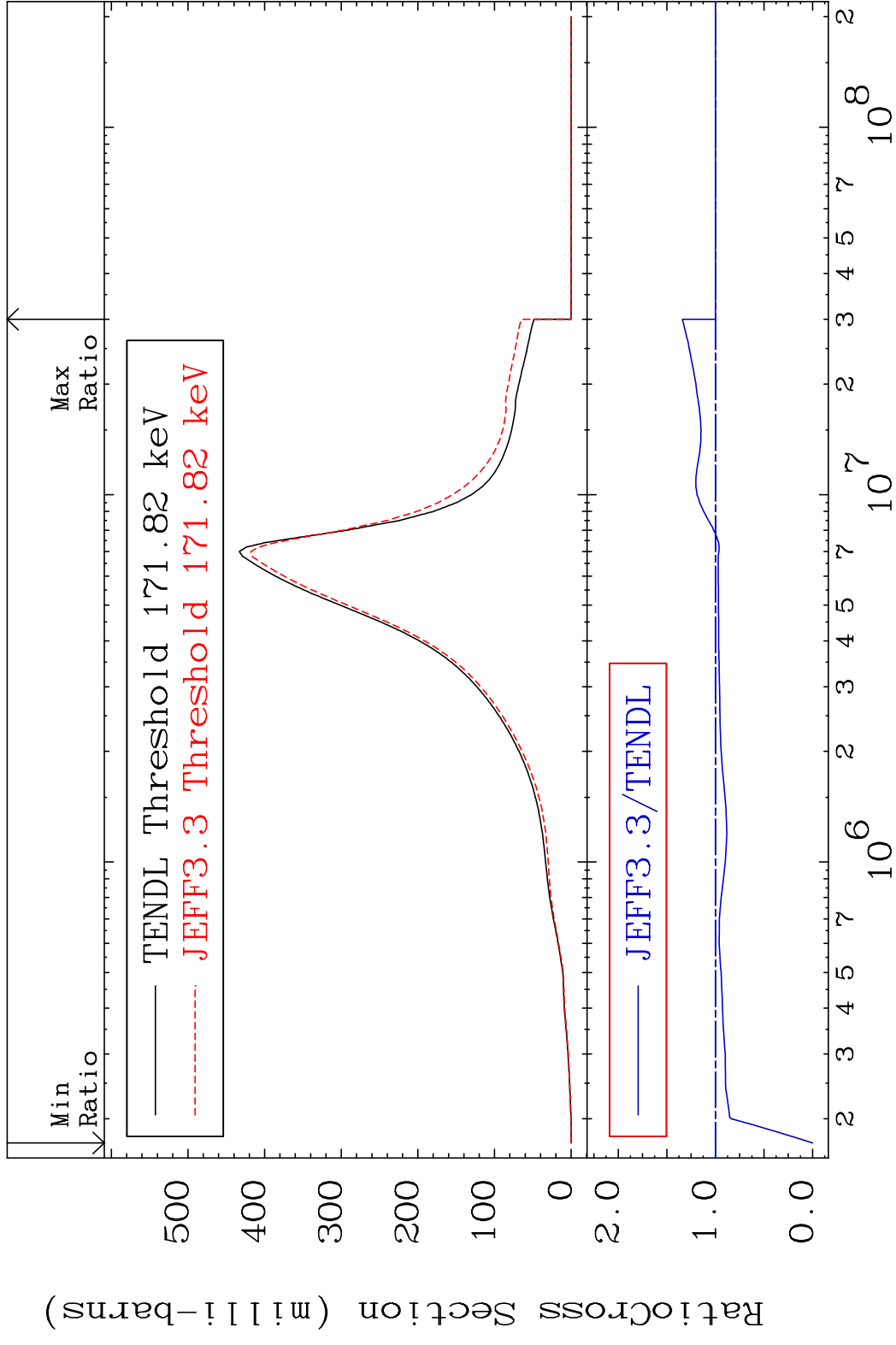
79 Incident Energy (eV) 71-Lu-174

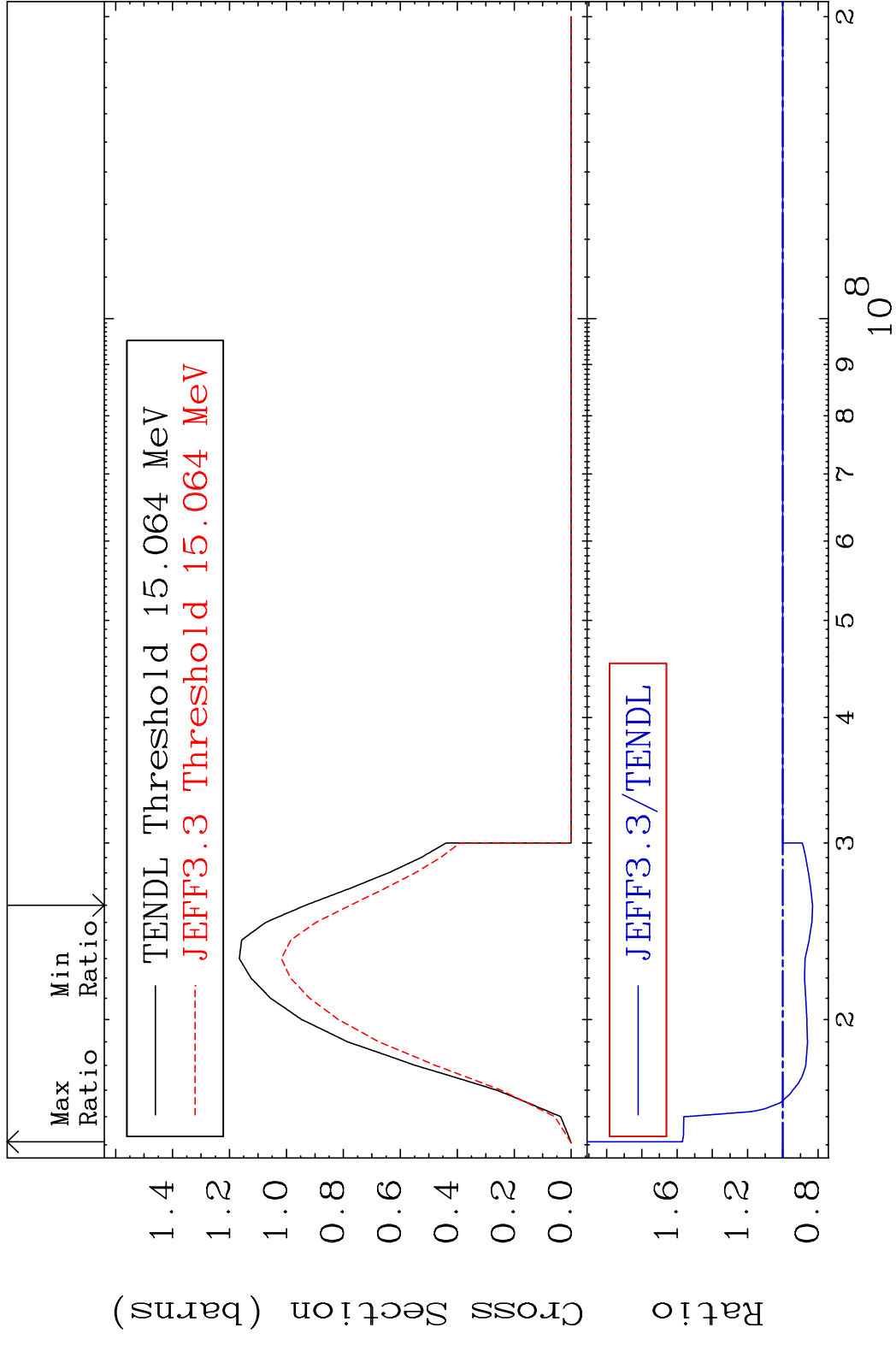


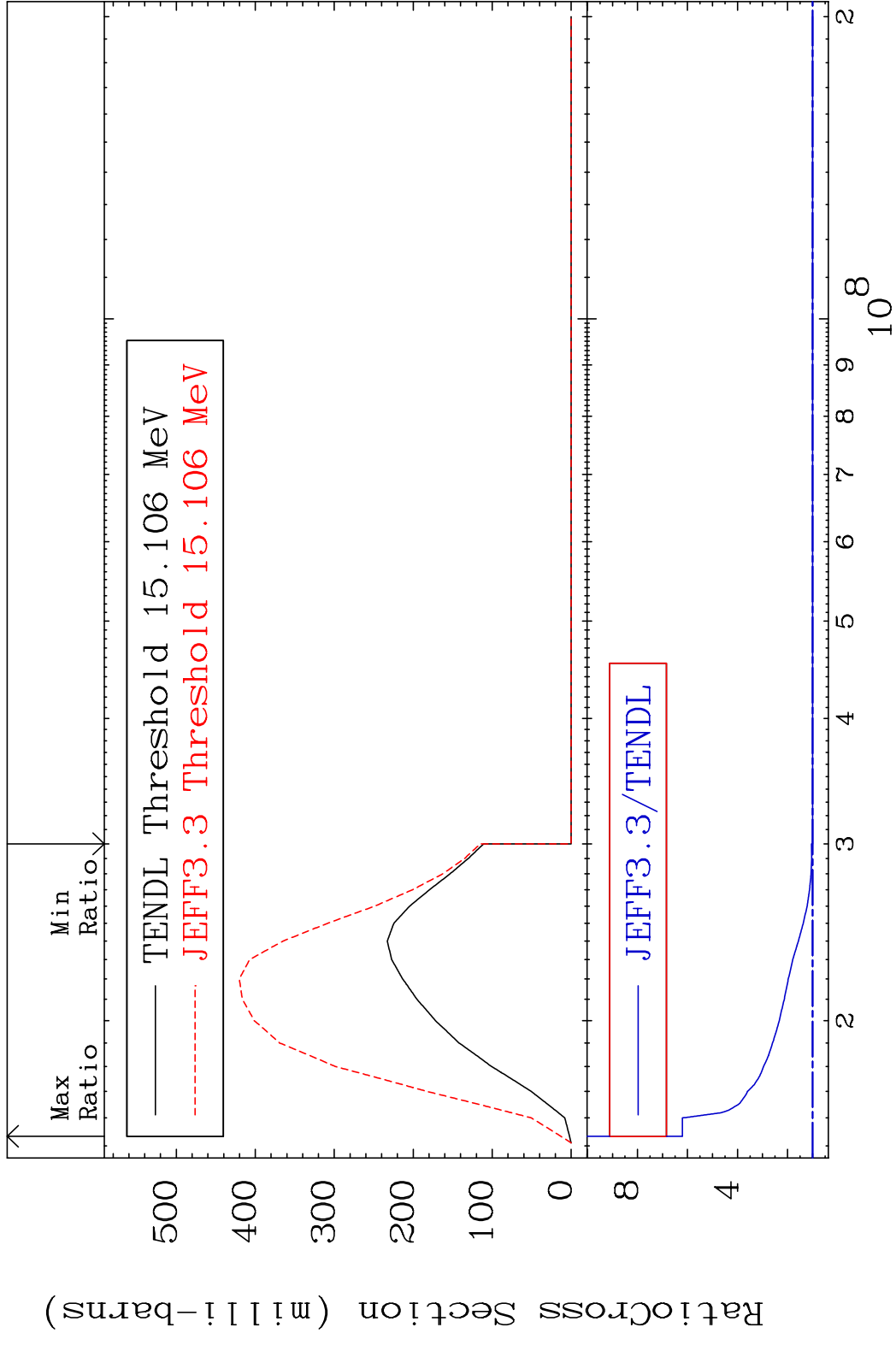
MAT 7122 Inelastic:71-Lu-174g 71-Lu-174  
 Radionuclide Production Cross Section 180.01 dth 8.708 %



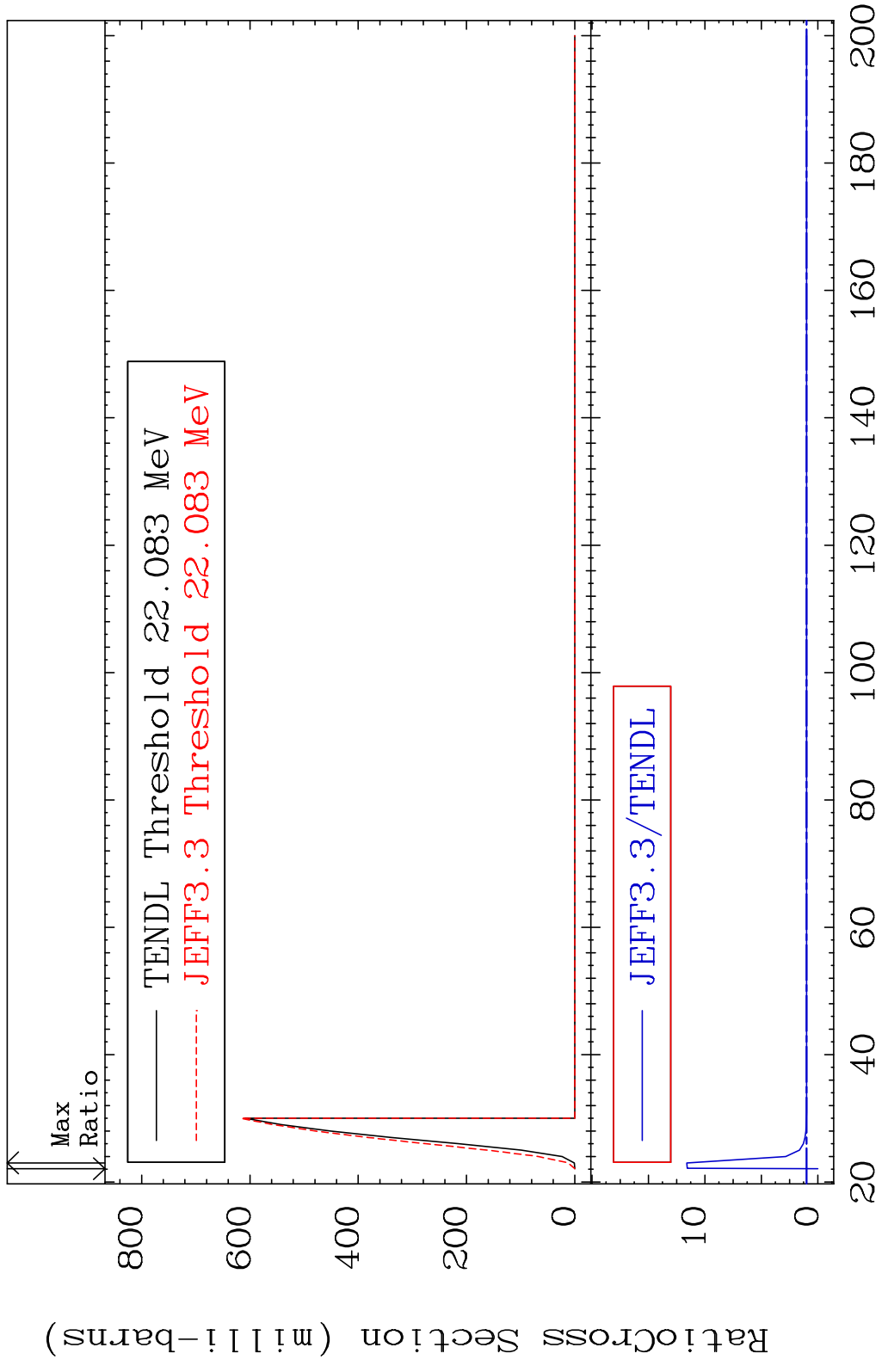
80 Incident Energy (eV) 71-Lu-174







MAT 7122 (n,4n):71-Lu-171g 71-Lu-174  
 Radionuclide Production Cross Section 1061. %



MAT 7122 (n, 4n):71-Lu-171m1 71-Lu-174  
 Radionuclide Production Cross Section 1800.0 dth 1479. %

