

Program Complot  
(Version 2021-1)

by

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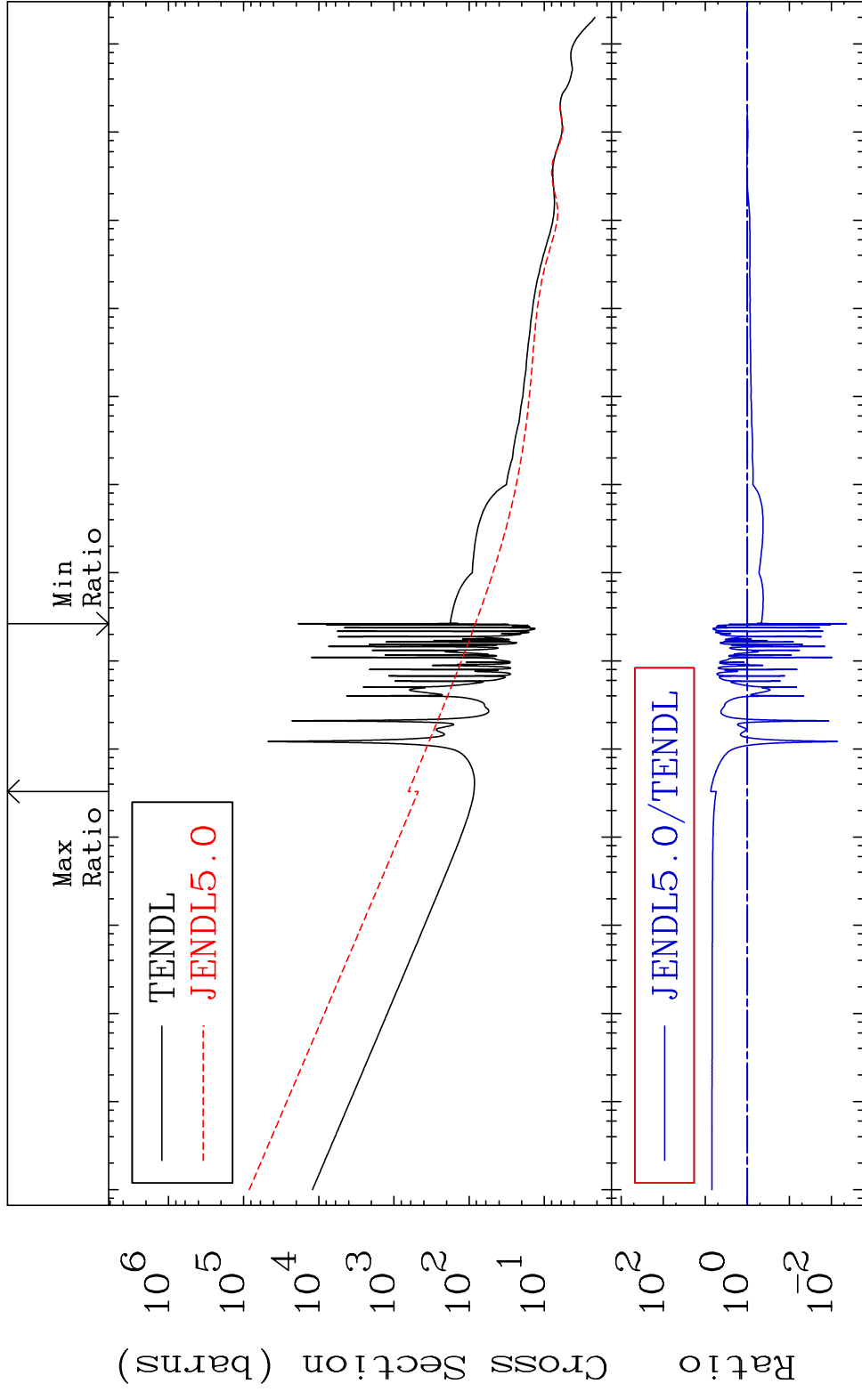
E.Mail:redcullen1@comcast.net  
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 9037

Total  
Cross Section    -99.56 To 643.5 %

90-Th-231



Ratio  
Cross Section (barns)

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>-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>

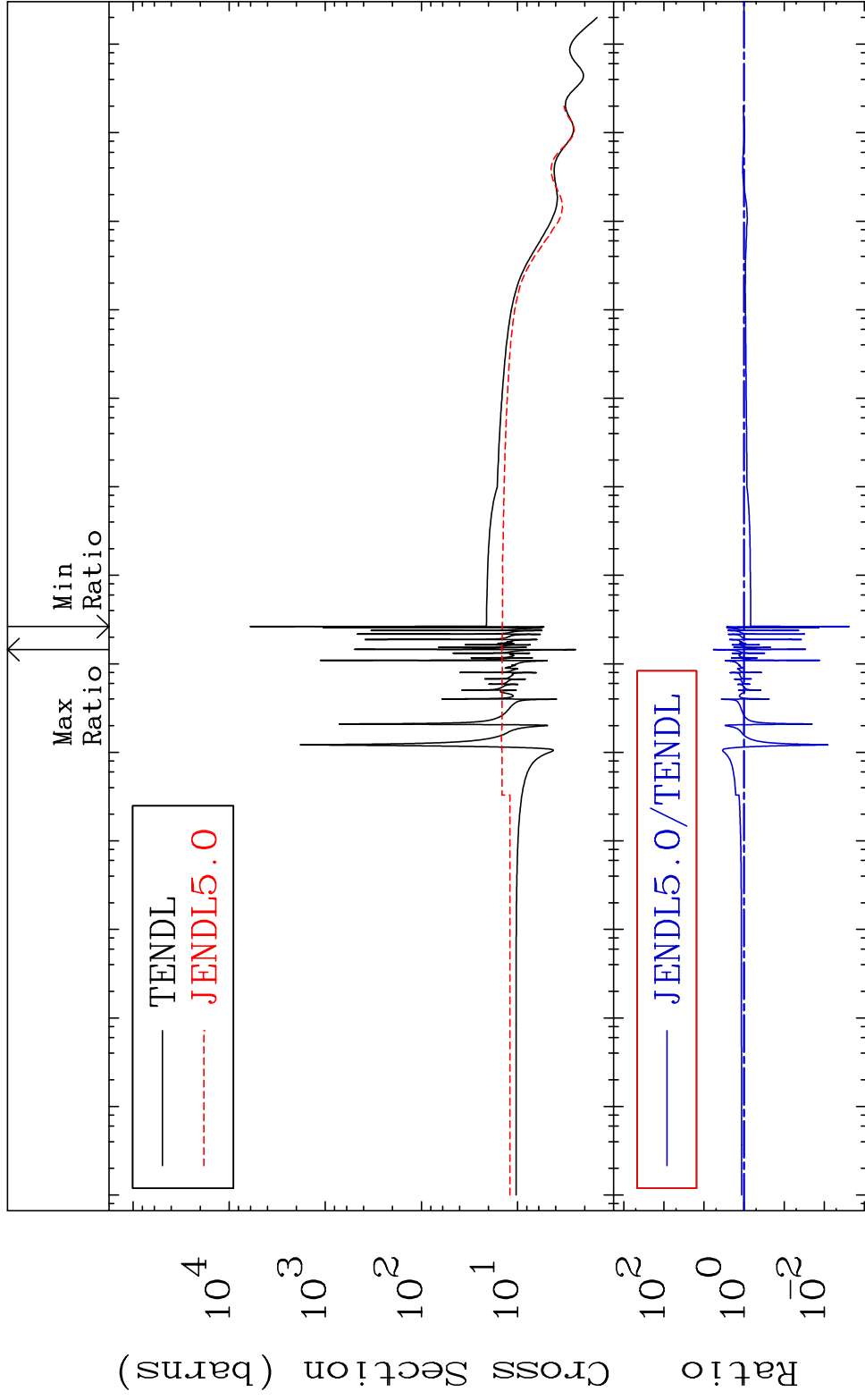
1                      Incident Energy (eV)                      90-Th-231

MAT 9037

Elastic

90-Th-231

Cross Section -99.76 To 488.3 %



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>

2

Incident Energy (eV)

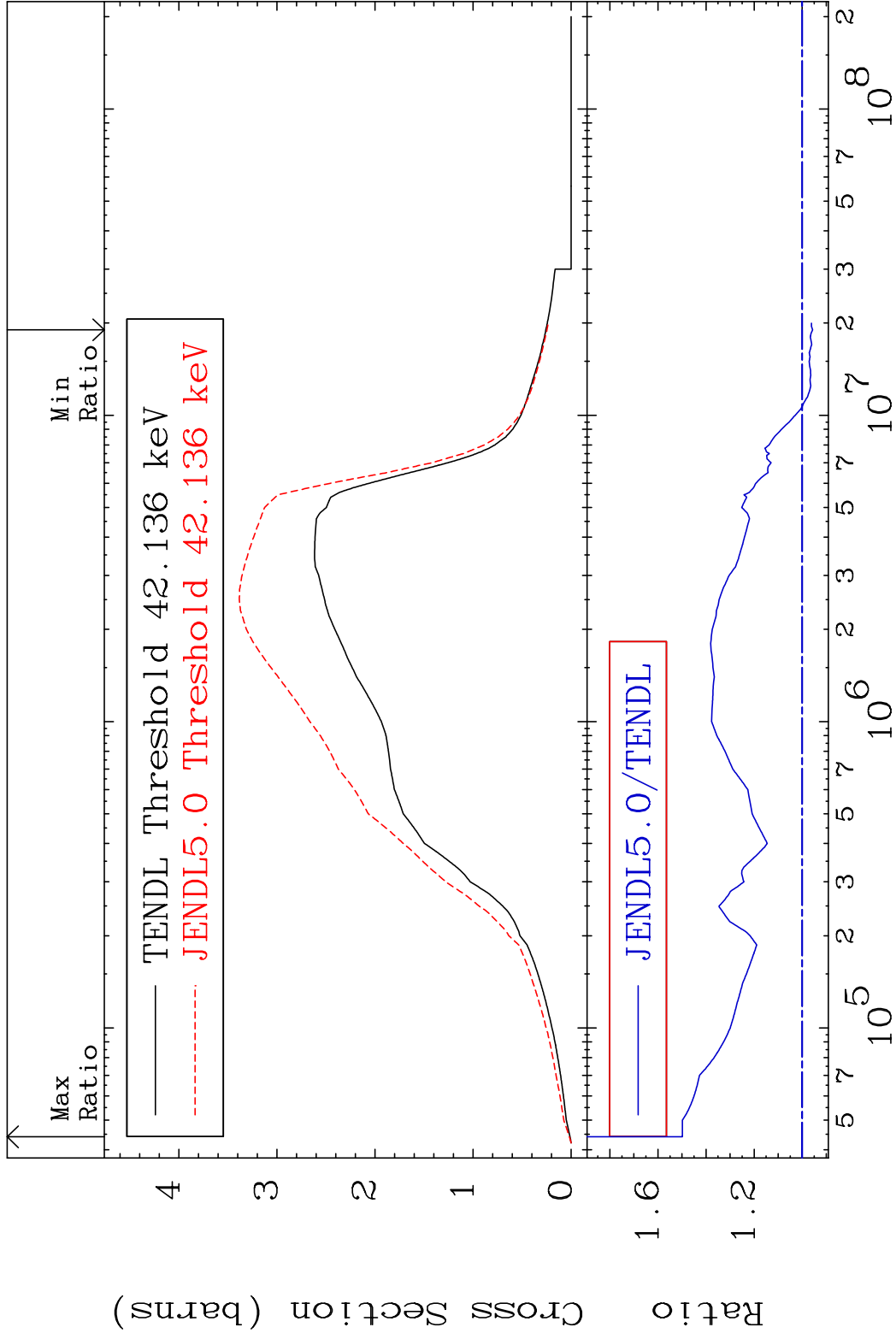
90-Th-231

MAT 9037

Inelastic

90-Th-231

Cross Section -4.305 To 49.86 %



3

Incident Energy (eV)

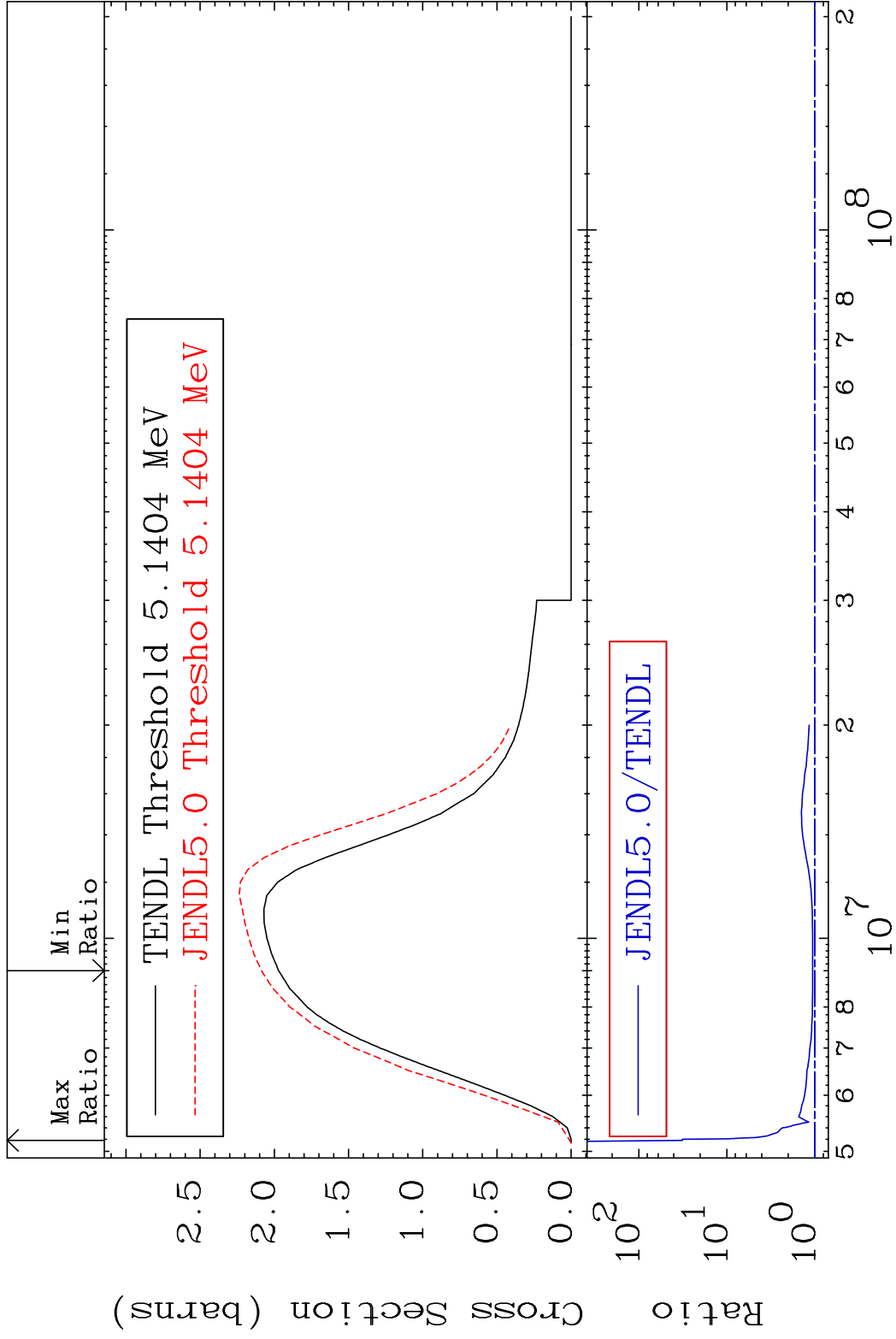
90-Th-231

MAT 9037

(n,2n)

90-Th-231

Cross Section 5.905 To 3095. %



4

Incident Energy (eV)

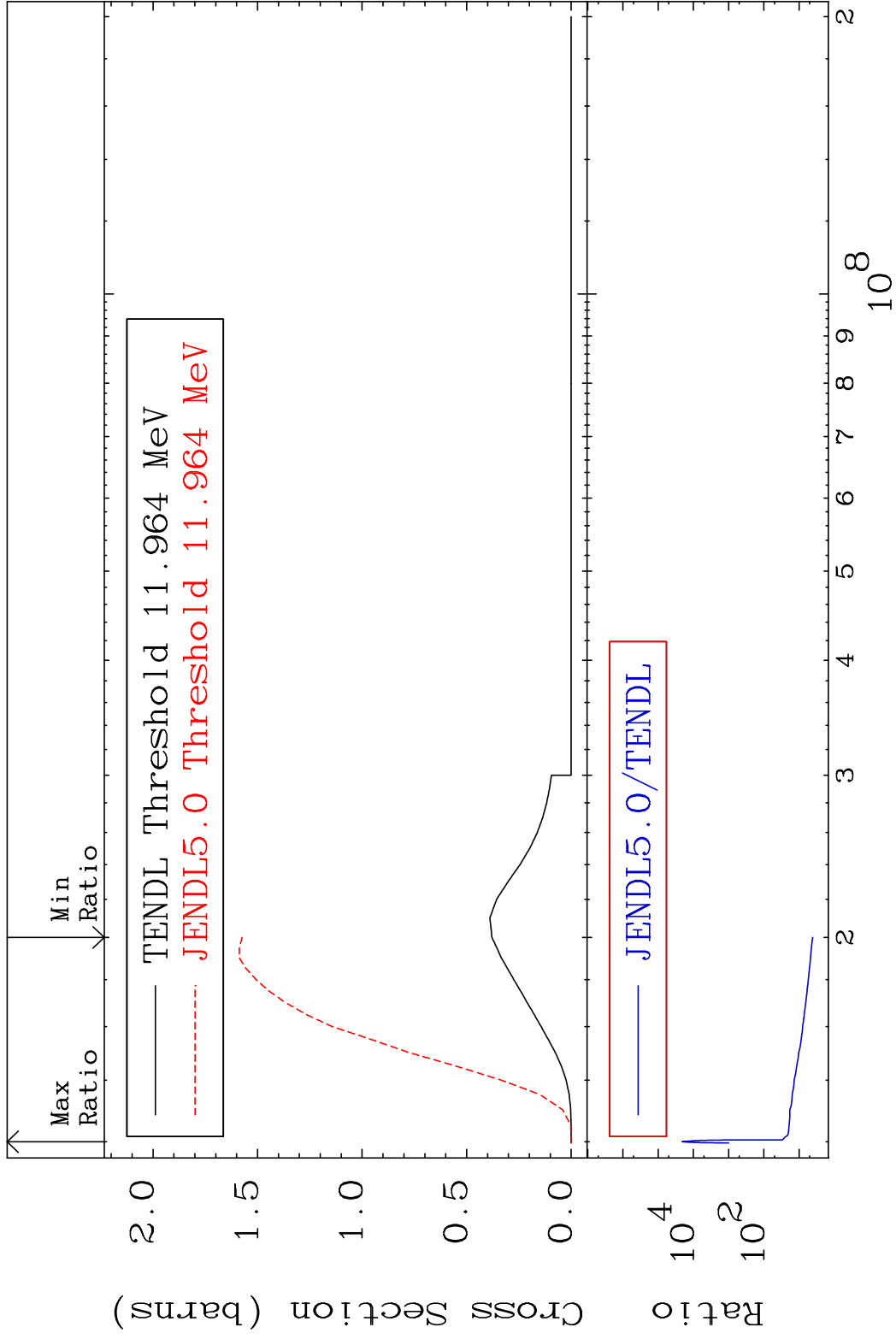
90-Th-231

MAT 9037

(n,3n)

90-Th-231

Cross Section 315.4 To 9999. %



5

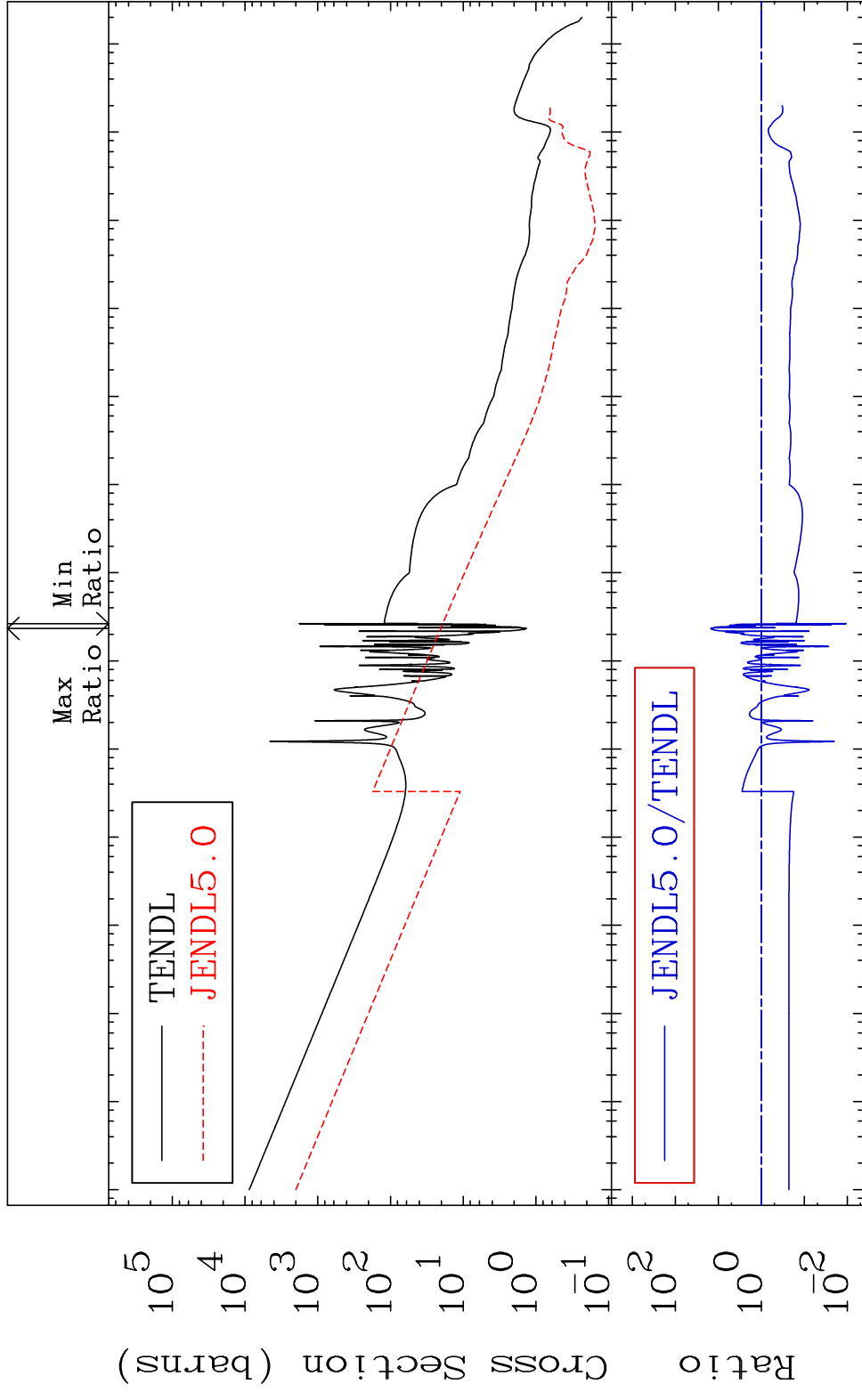
Incident Energy (eV)

90-Th-231

MAT 9037

Fission  
Cross Section -98.94 To 1406. %

90-Th-231

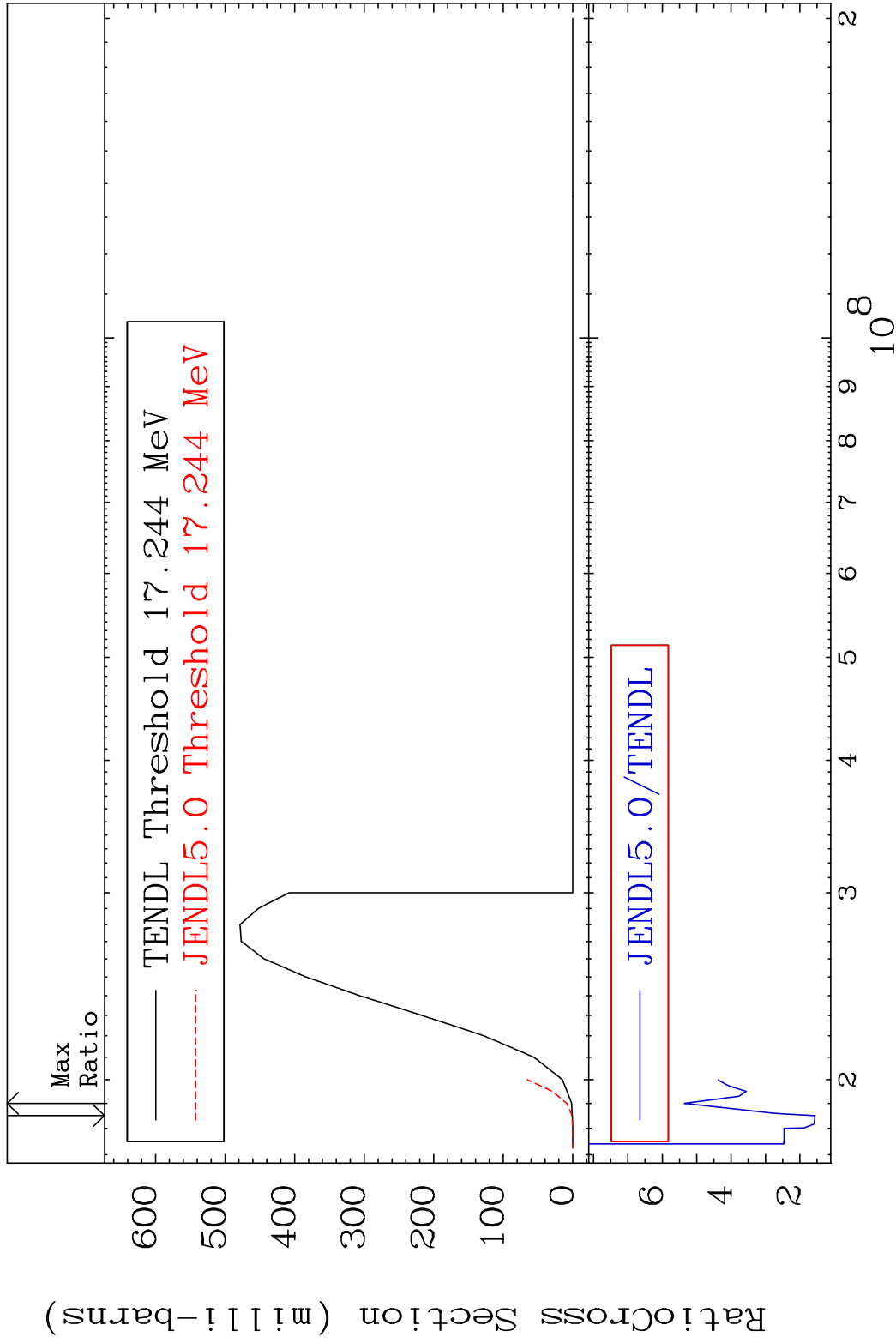


MAT 9037

(n,4n)

90-Th-231

Cross Section 56.29 To 436.0 %



7

Incident Energy (eV)

90-Th-231



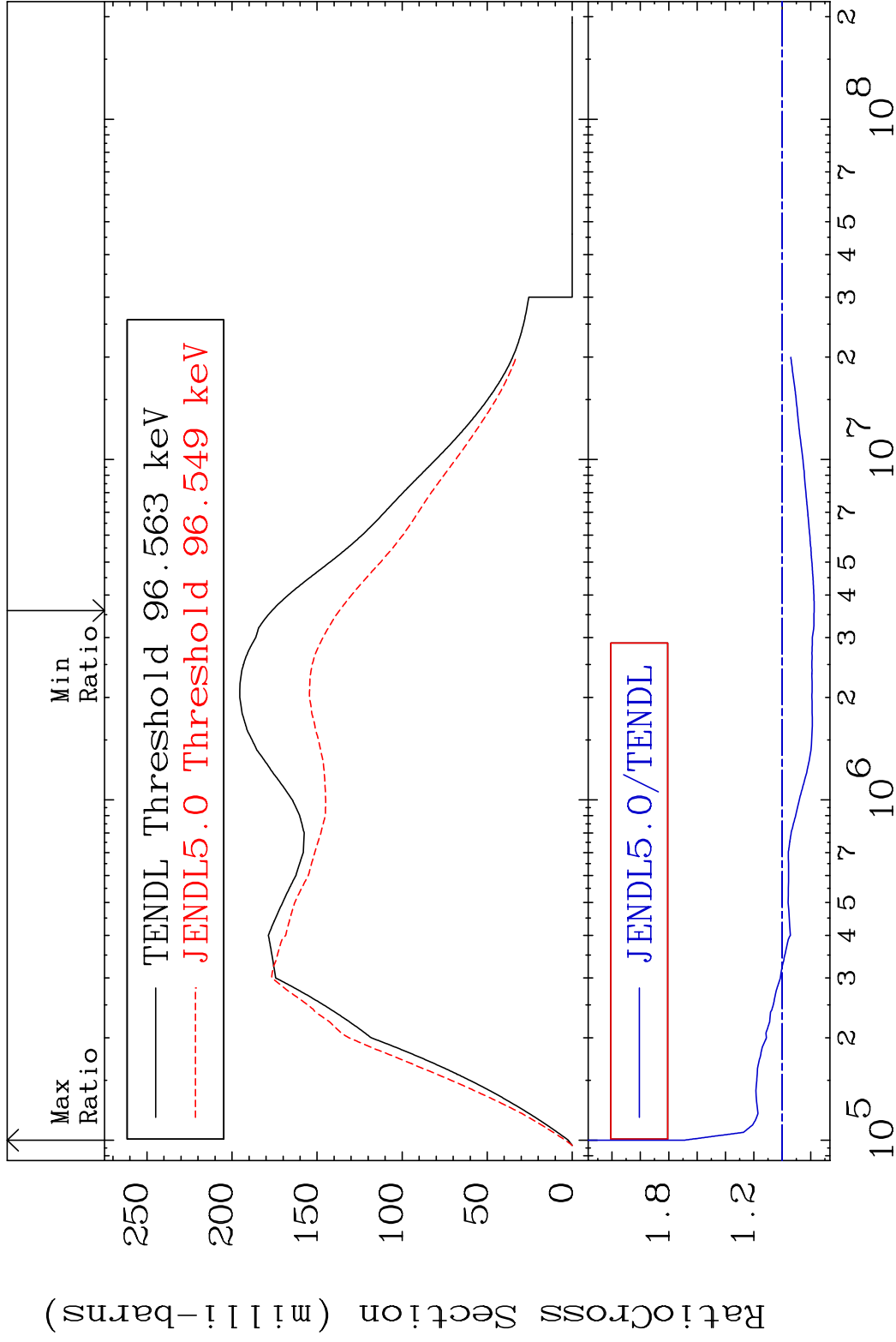


MAT 9037

MT= 52 (n, n') Level

90-Th-231

Cross Section -22.45 To 69.48 %

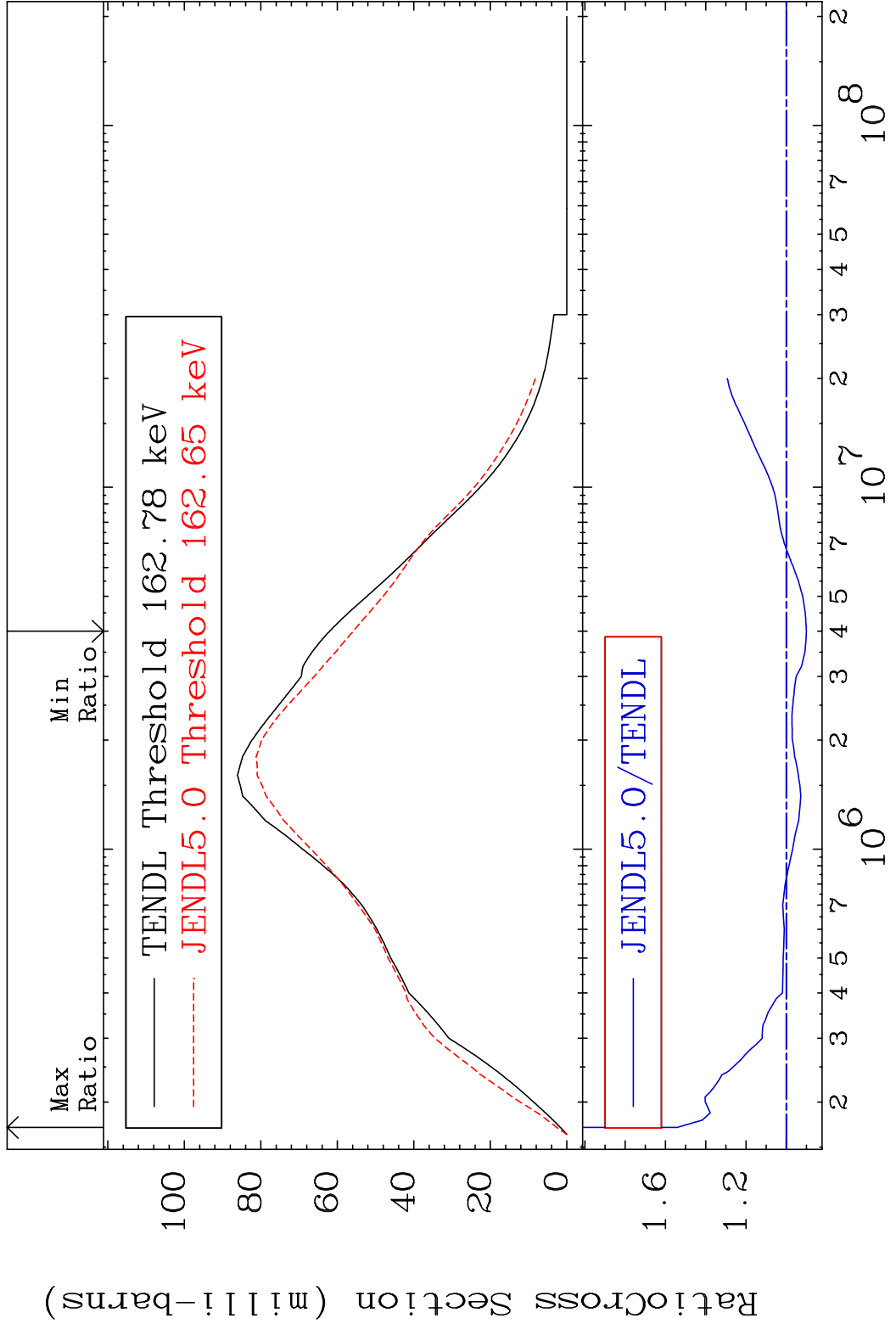


9

Incident Energy (eV)

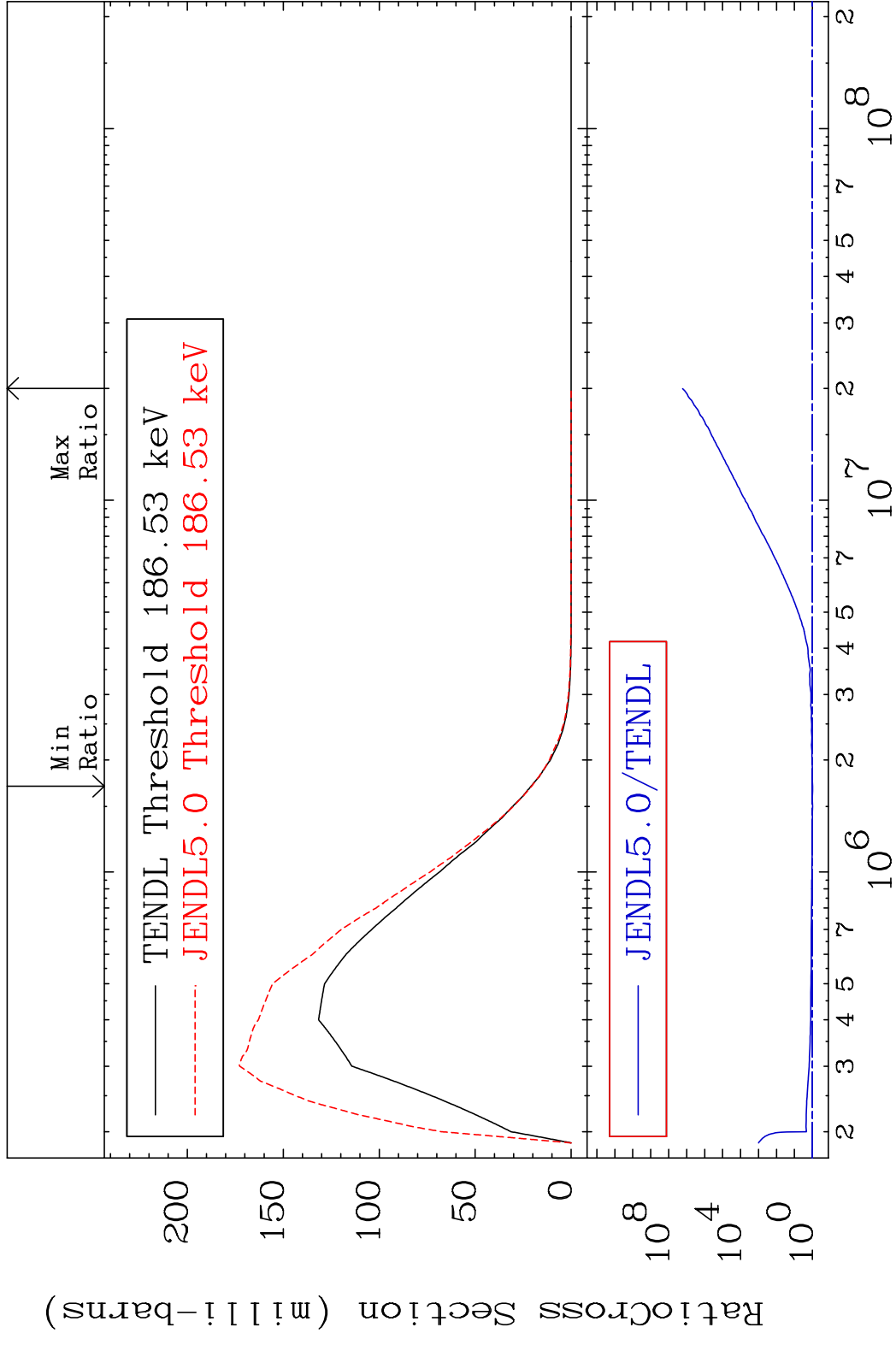
90-Th-231

MAT 9037 MT= 53 (n, n') Level 90-Th-231  
 Cross Section -9.991 To 54.16 %

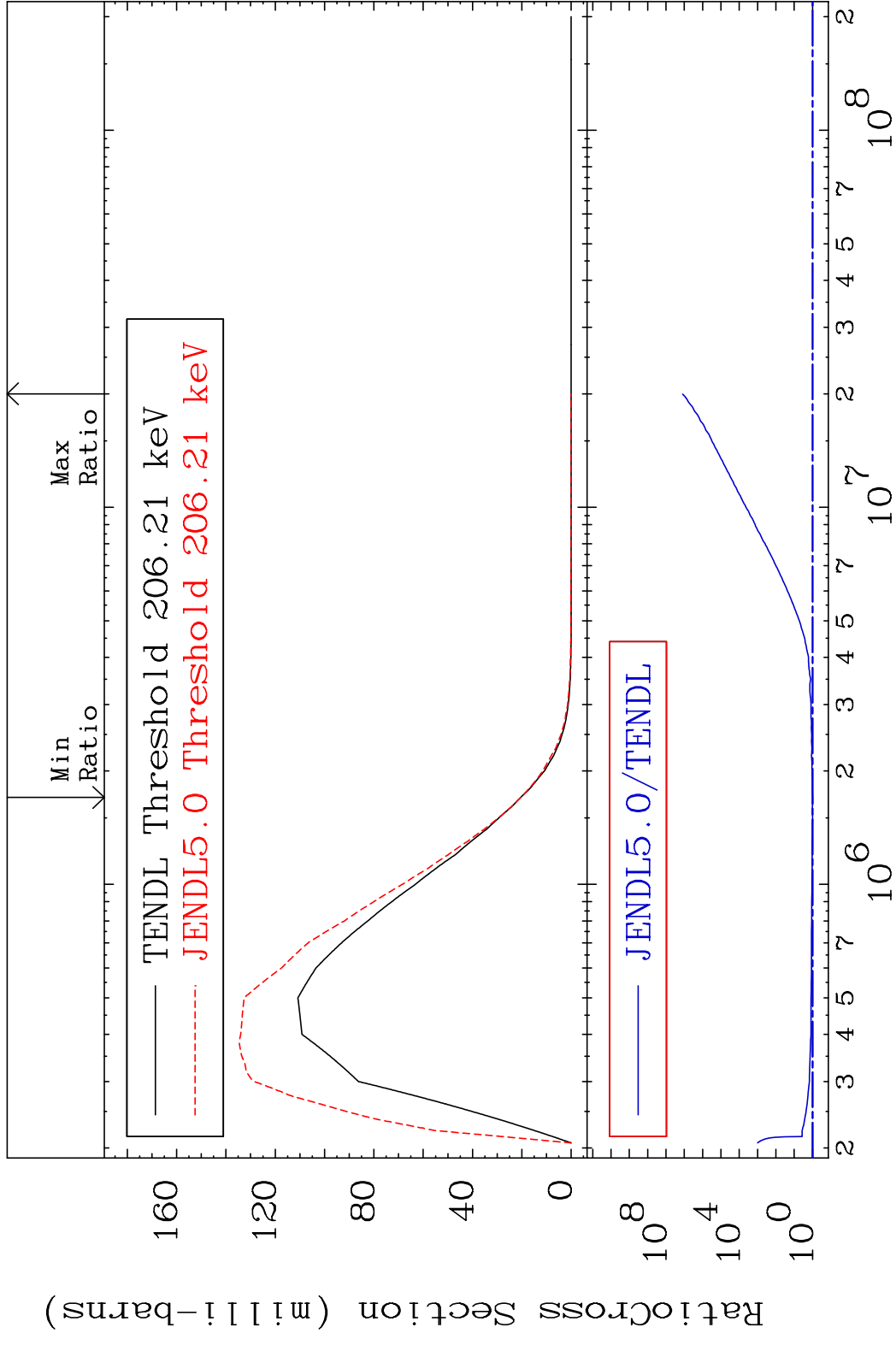


10 Incident Energy (eV) 90-Th-231

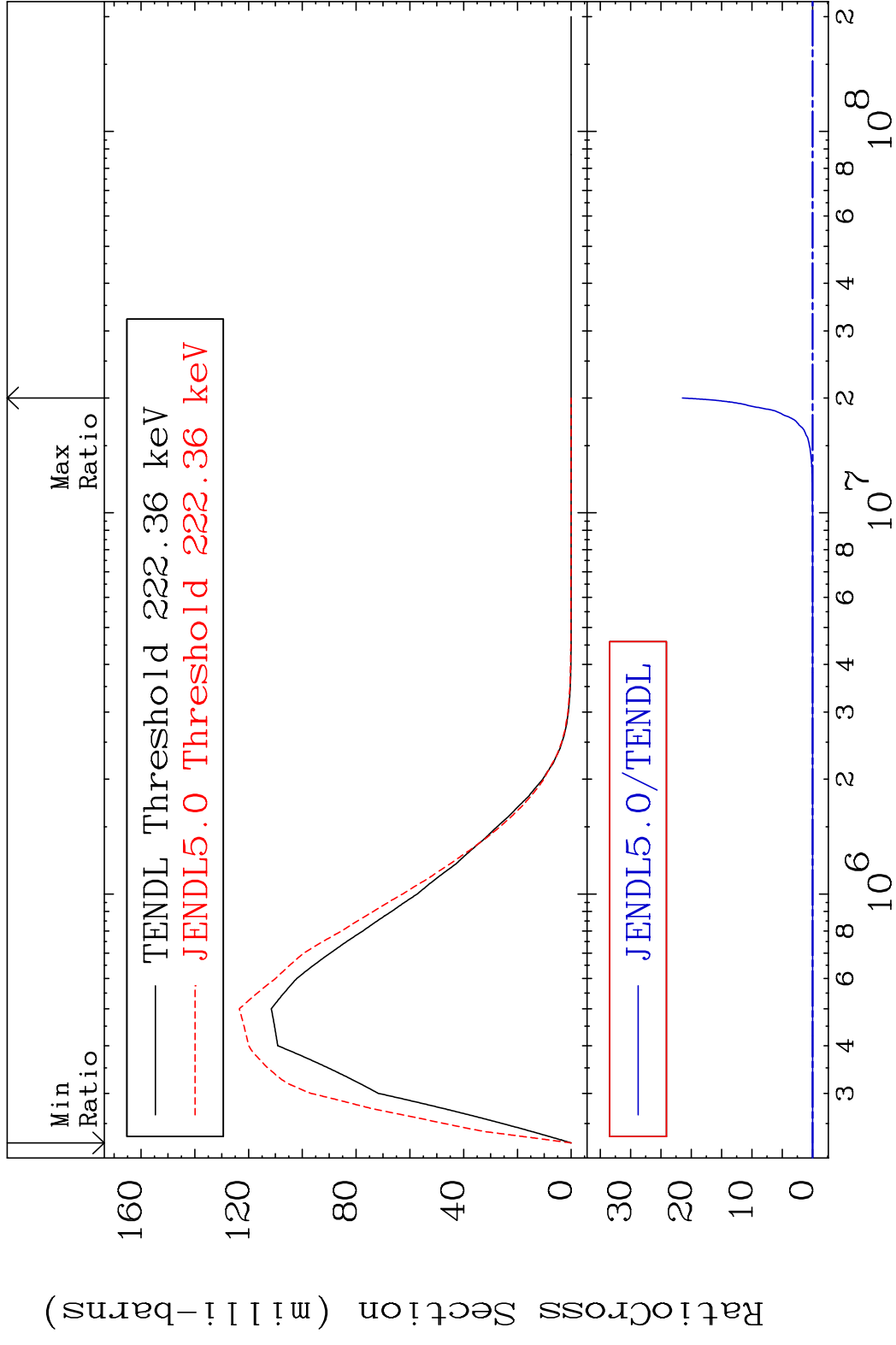
MAT 9037 MT= 54 (n,n') Level 90-Th-231  
 Cross Section -1.635 To 9999. %



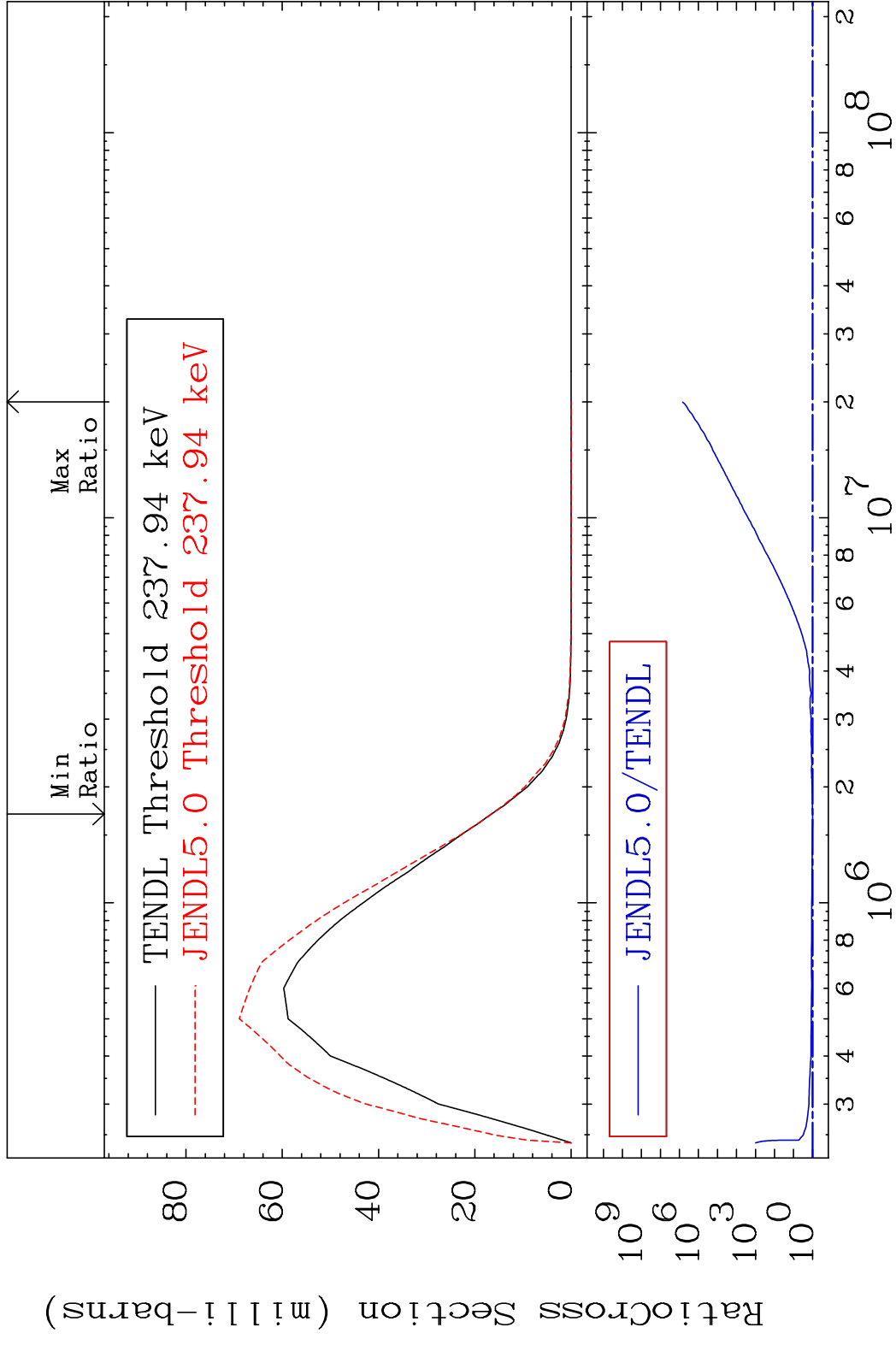
MAT 9037 MT= 55 (n,n') Level 90-Th-231  
 Cross Section -0.367 To 9999. %



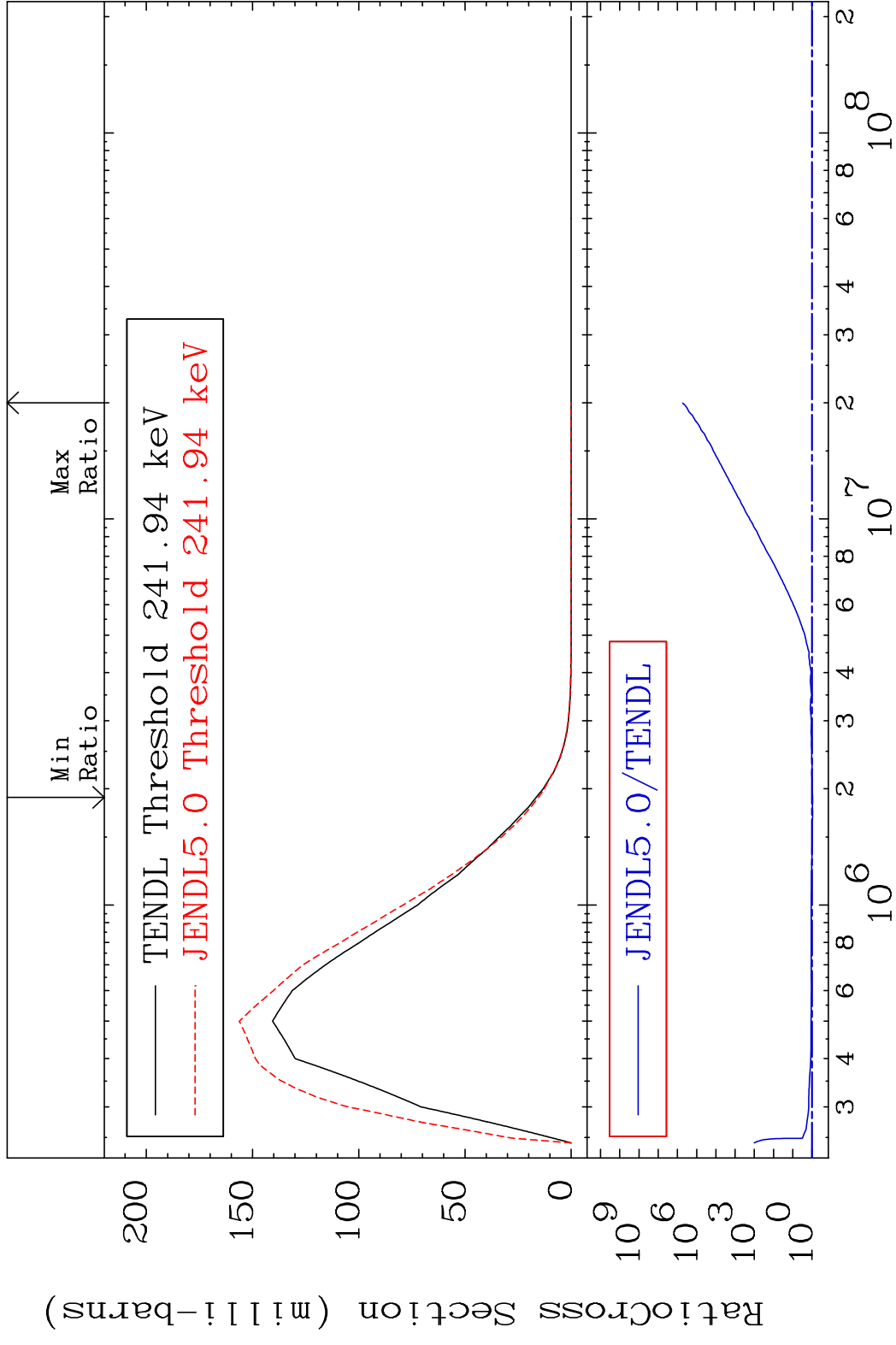
MAT 9037 MT= 56 (n,n') Level 90-Th-231  
 Cross Section -100.0 To 9999. %



MAT 9037 MT= 57 (n, n') Level 90-Th-231  
 Cross Section -0.363 To 9999. %

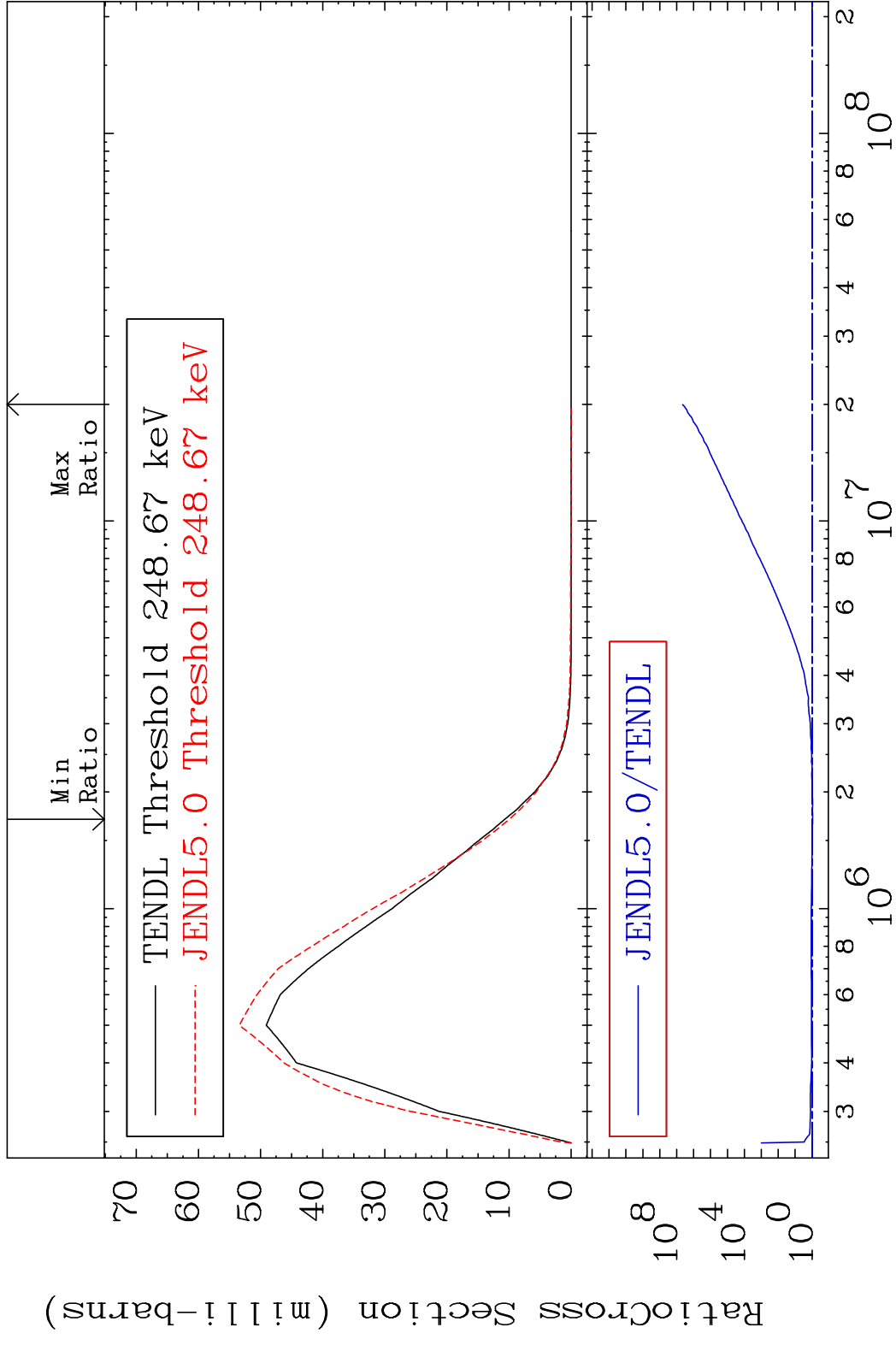


MAT 9037 MT= 58 (n, n') Level 90-Th-231  
 Cross Section -6.632 To 9999. %

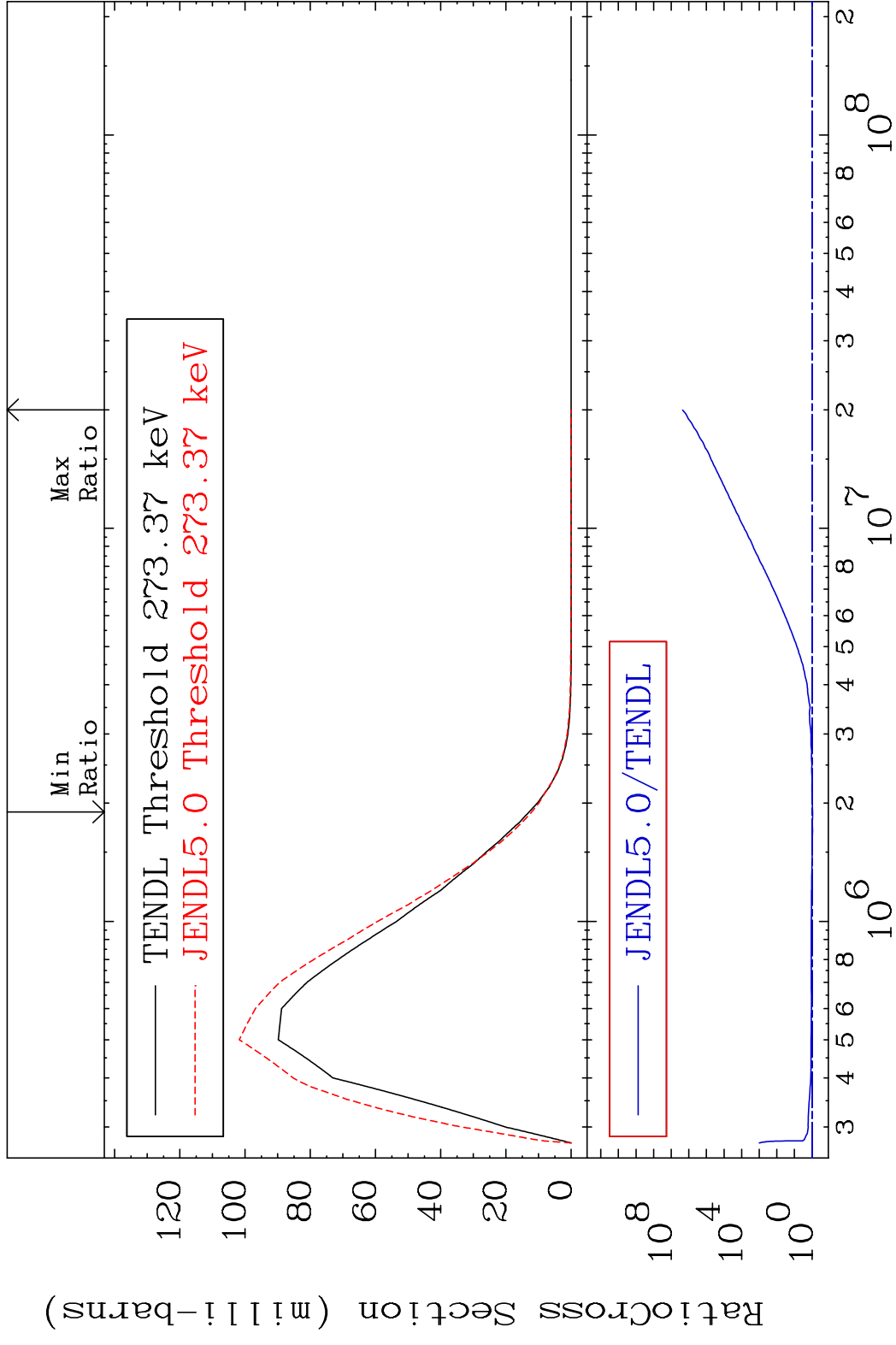




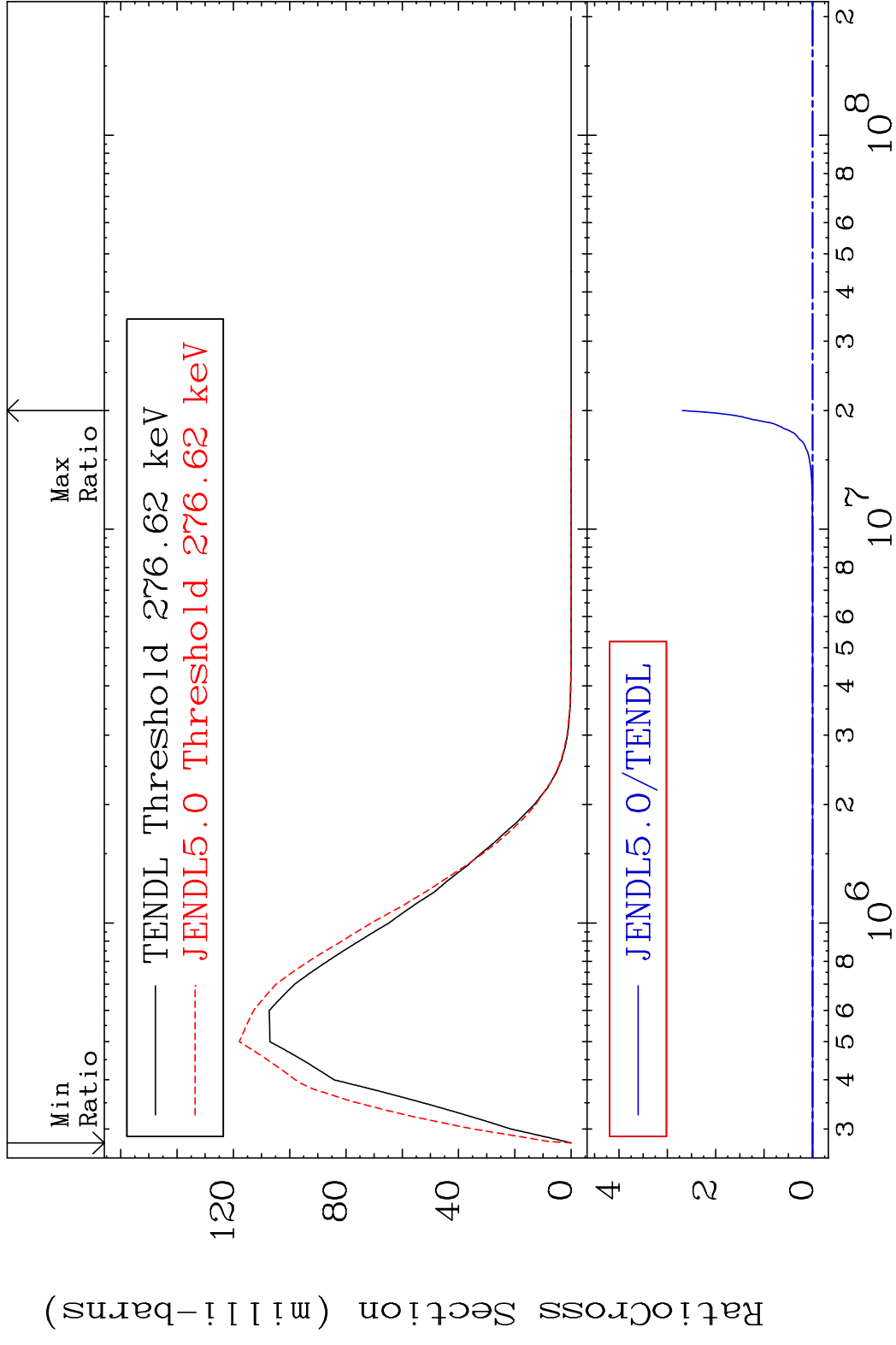
MAT 9037 MT= 59 (n, n') Level 90-Th-231  
 Cross Section -6.799 To 9999. %



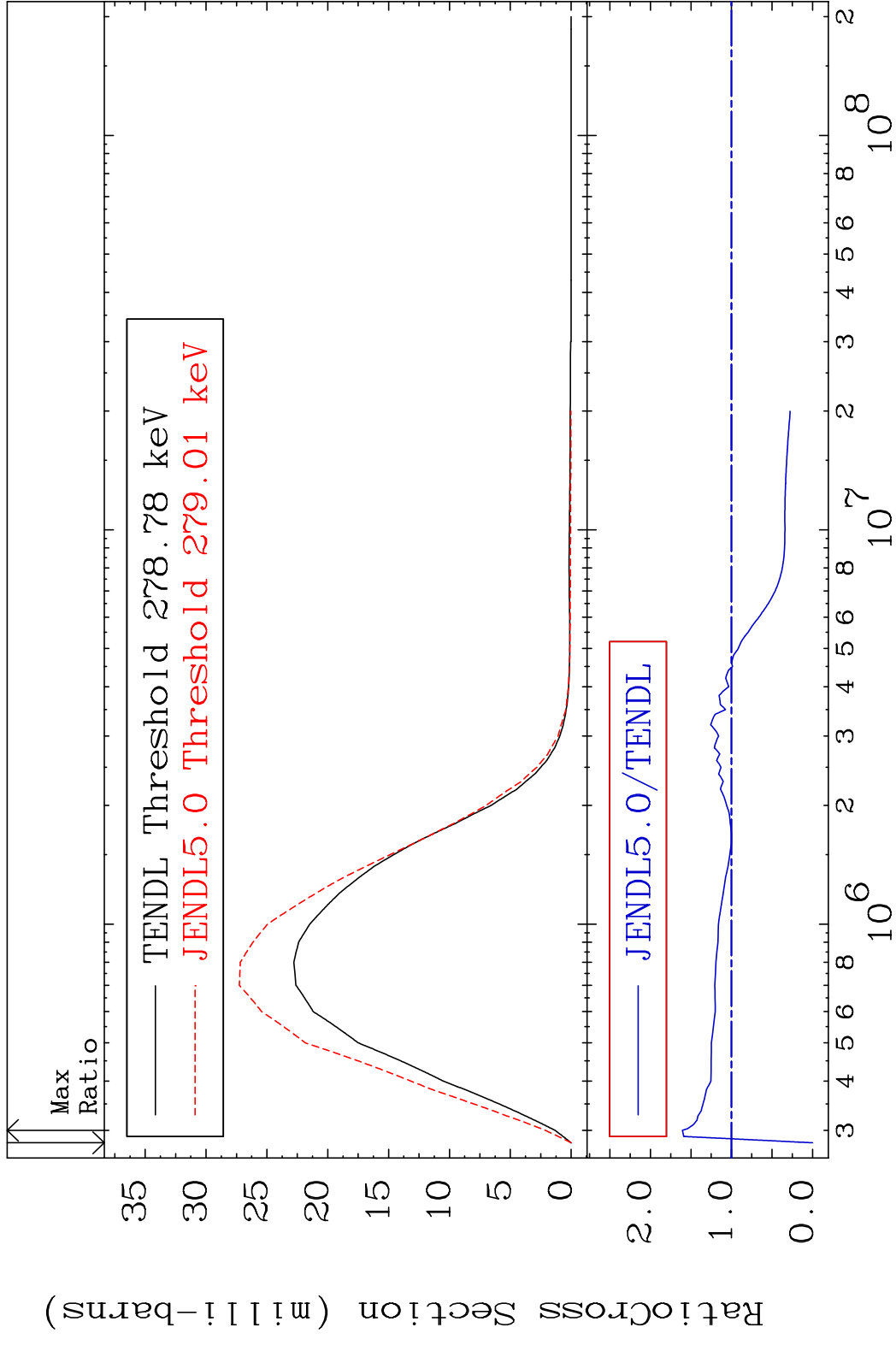
MAT 9037 MT= 60 (n, n') Level 90-Th-231  
 Cross Section -6.224 To 9999. %



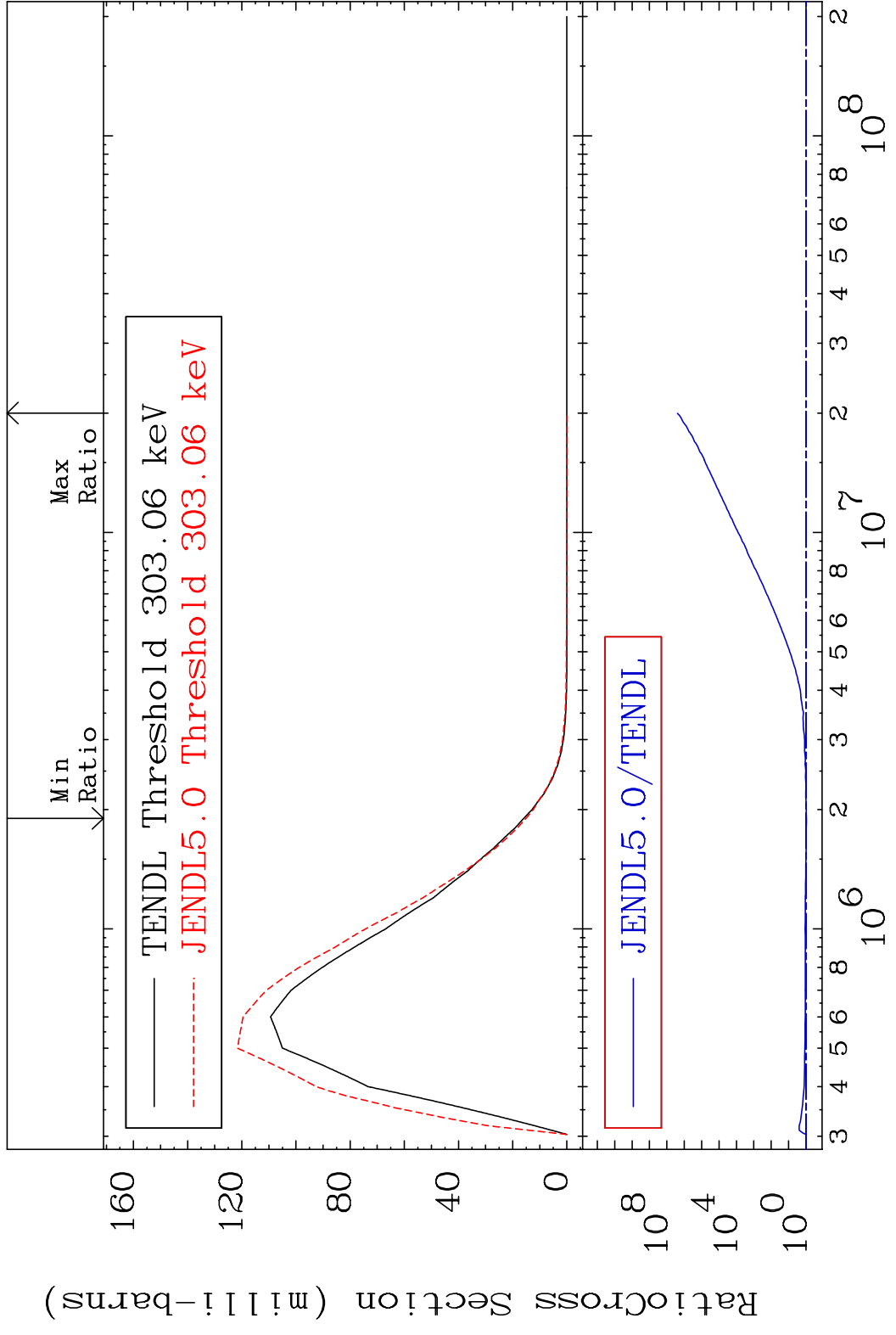
MAT 9037 MT= 61 (n, n') Level 90-Th-231  
 Cross Section -100.0 To 9999. %



MAT 9037 MT= 62 (n,n') Level 90-Th-231  
 Cross Section -100.0 To 60.63 %

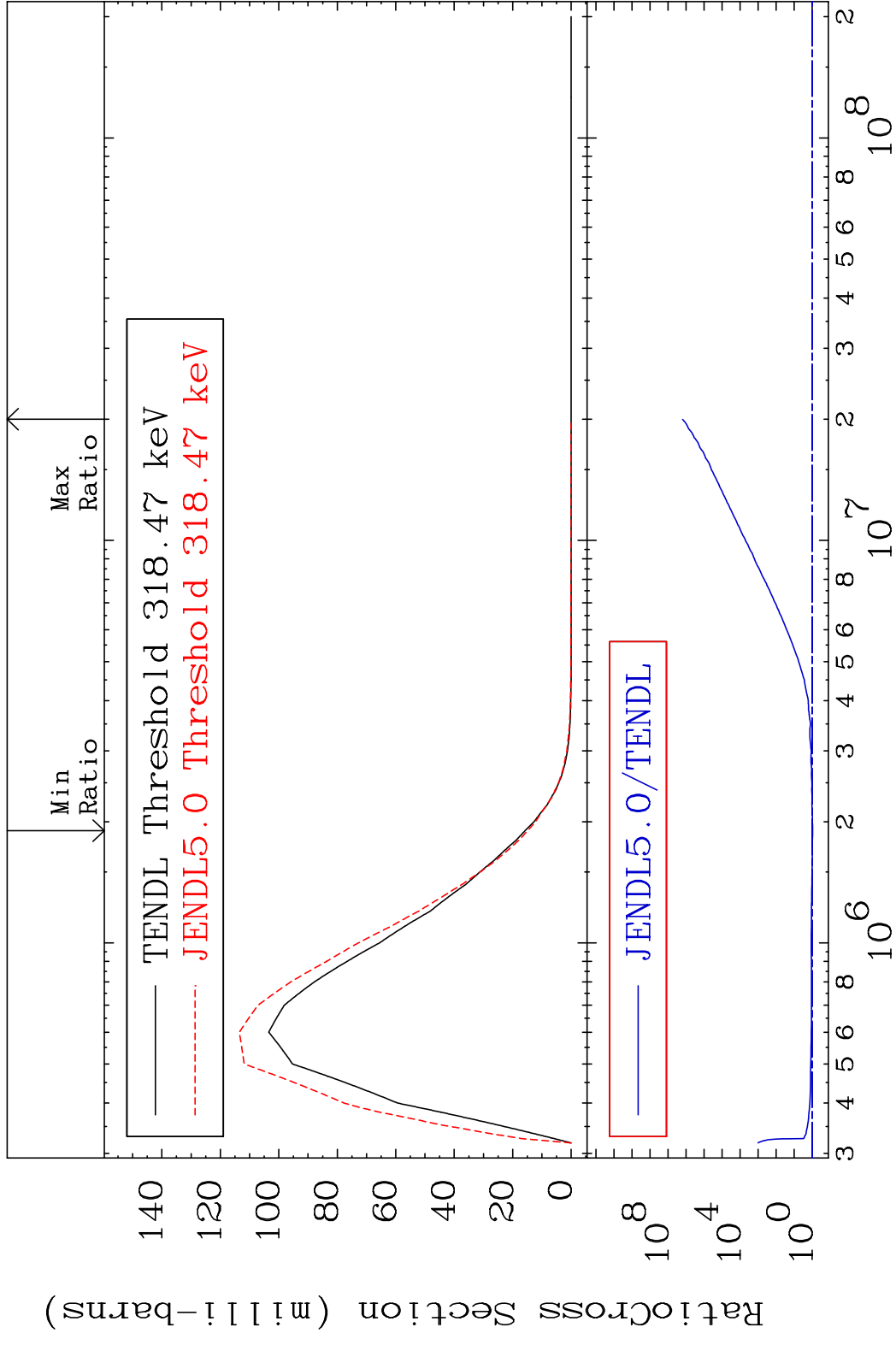


MAT 9037 MT= 63 (n, n') Level 90-Th-231  
 Cross Section -5.406 To 9999. %

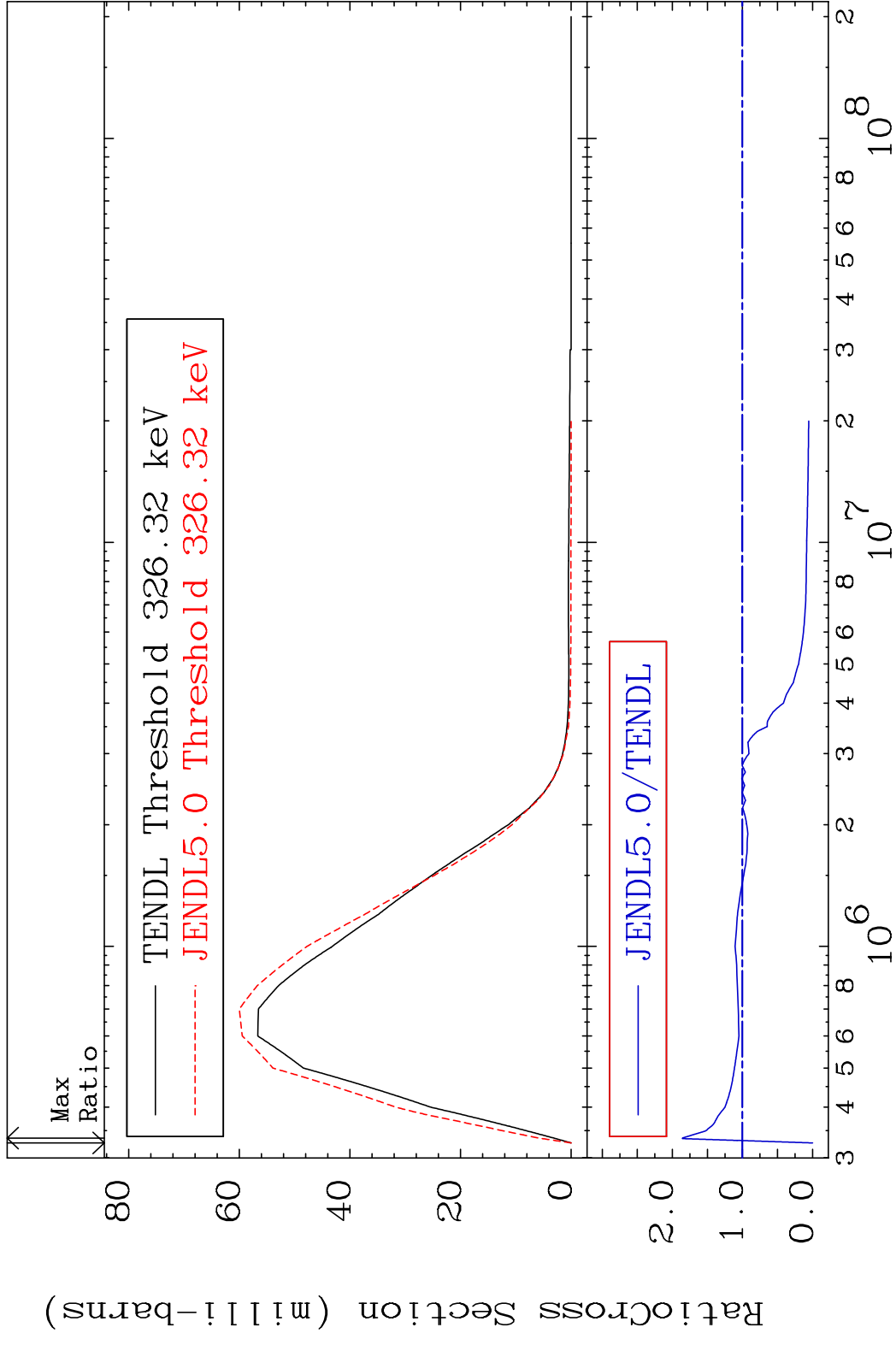


20 Incident Energy (eV) 90-Th-231

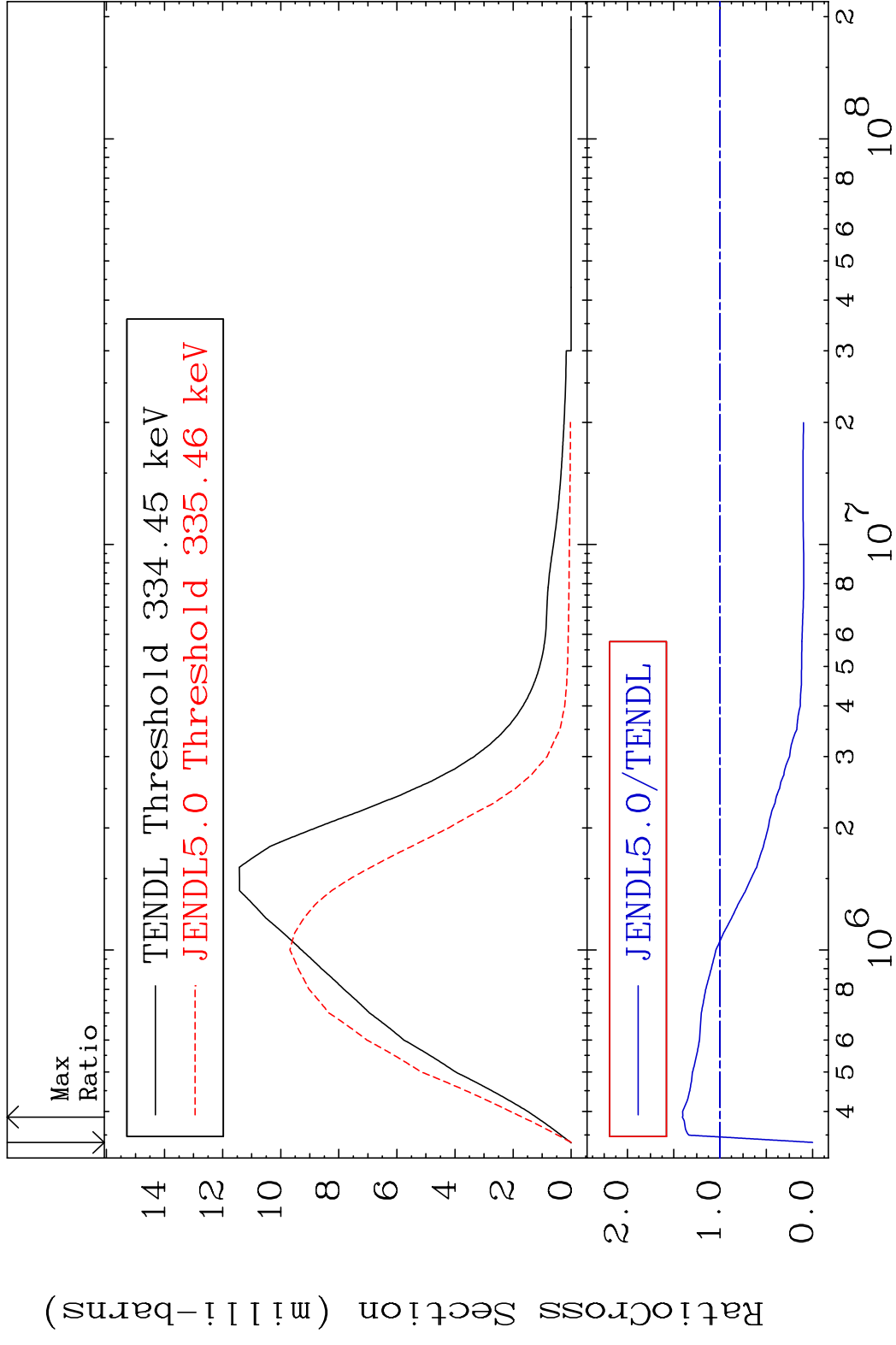
MAT 9037 MT= 64 (n, n') Level 90-Th-231  
 Cross Section -5.974 To 9999. %



MAT 9037 MT= 65 (n,n') Level 90-Th-231  
 Cross Section -100.0 To 85.76 %



MAT 9037 MT= 66 (n,n') Level 90-Th-231  
 Cross Section -100.0 To 40.60 %



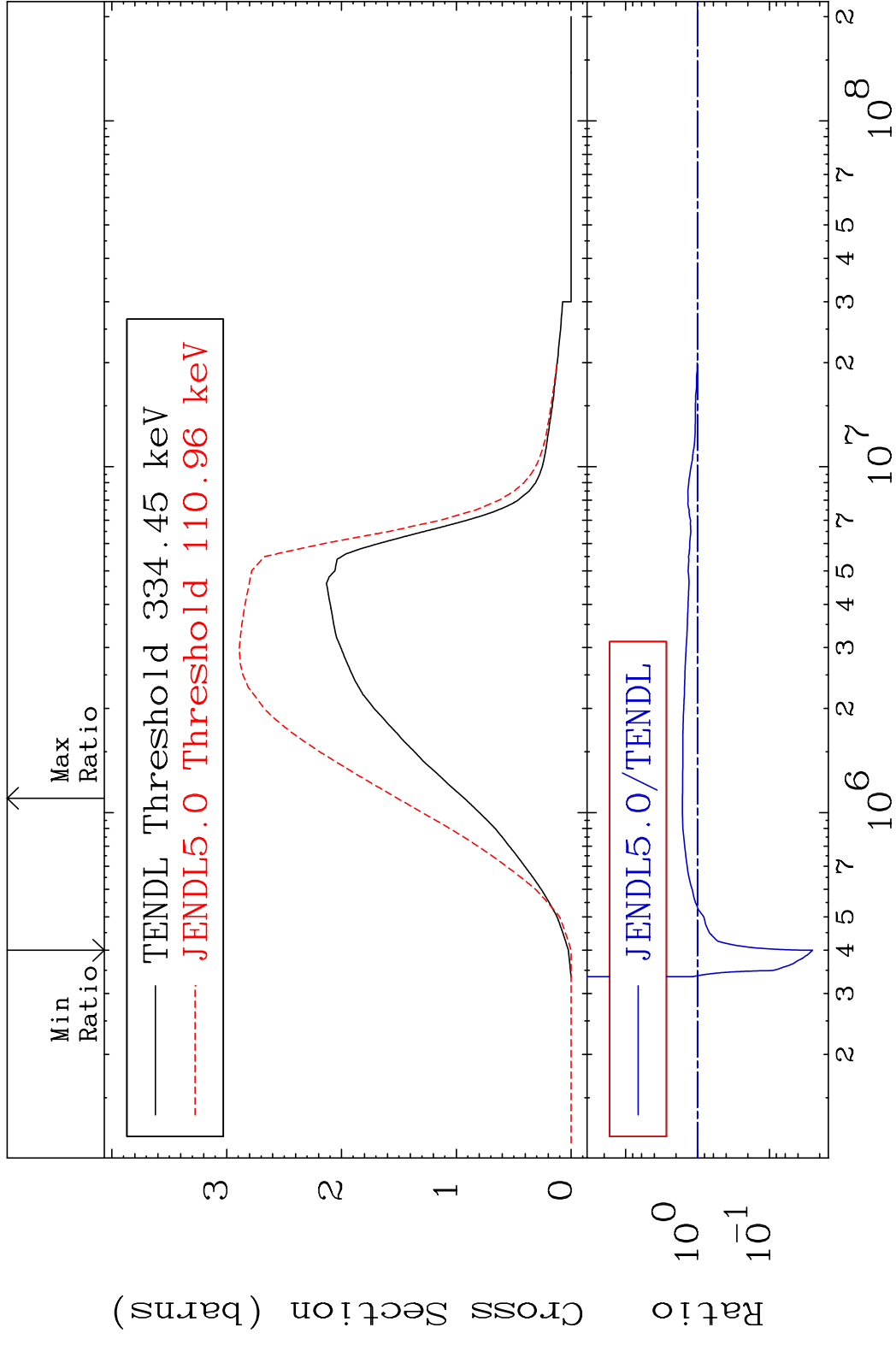


MAT 9037

(n, n') Continuum

90-Th-231

Cross Section -97.49 To 62.69 %

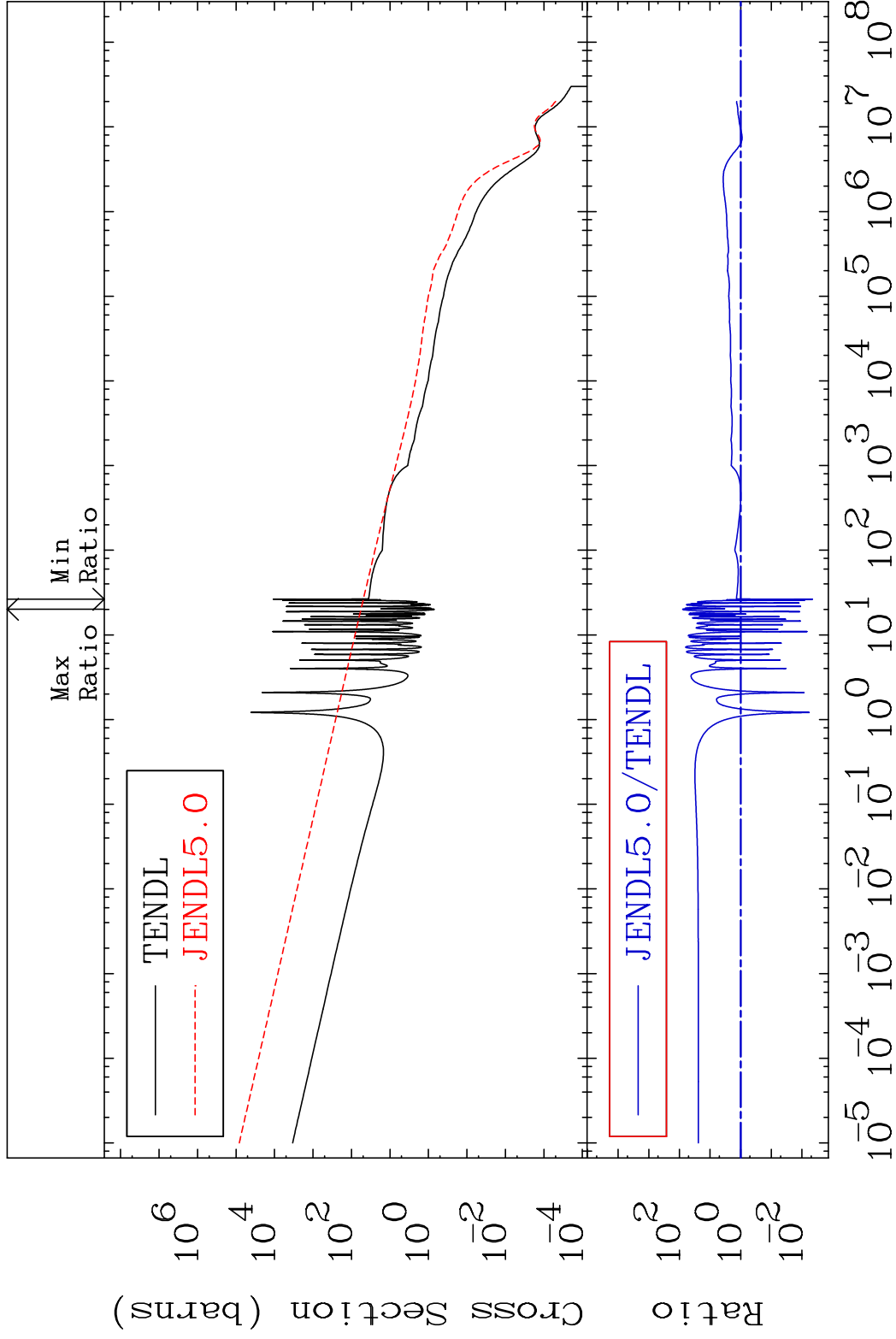


MAT 9037

(n,  $\gamma$ )

90-Th-231

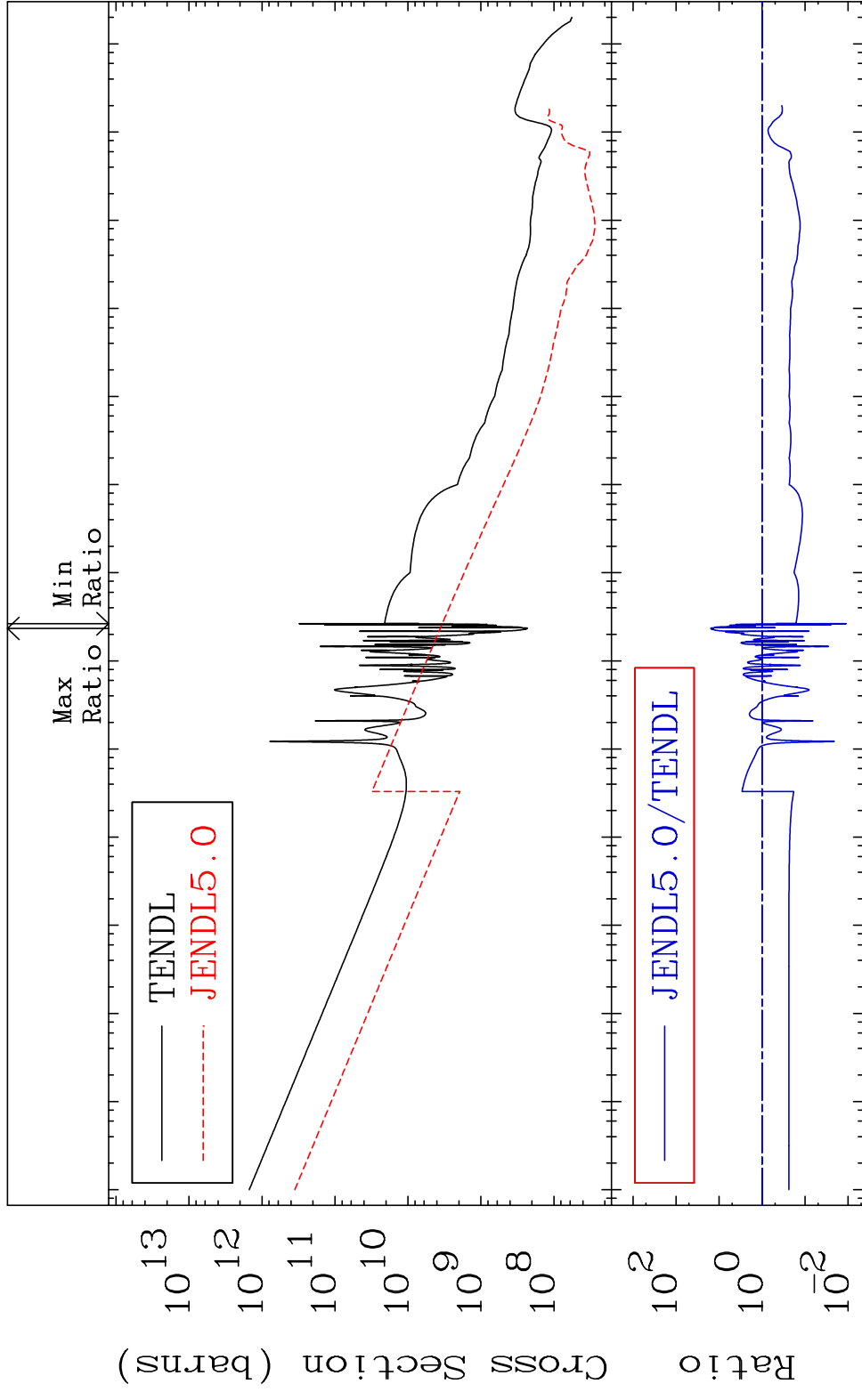
Cross Section -99.55 To 7931. %



25

90-Th-231

MAT 9037 Kerma total (eV-barns) 90-Th-231  
 Cross Section -98.90 To 1464. %

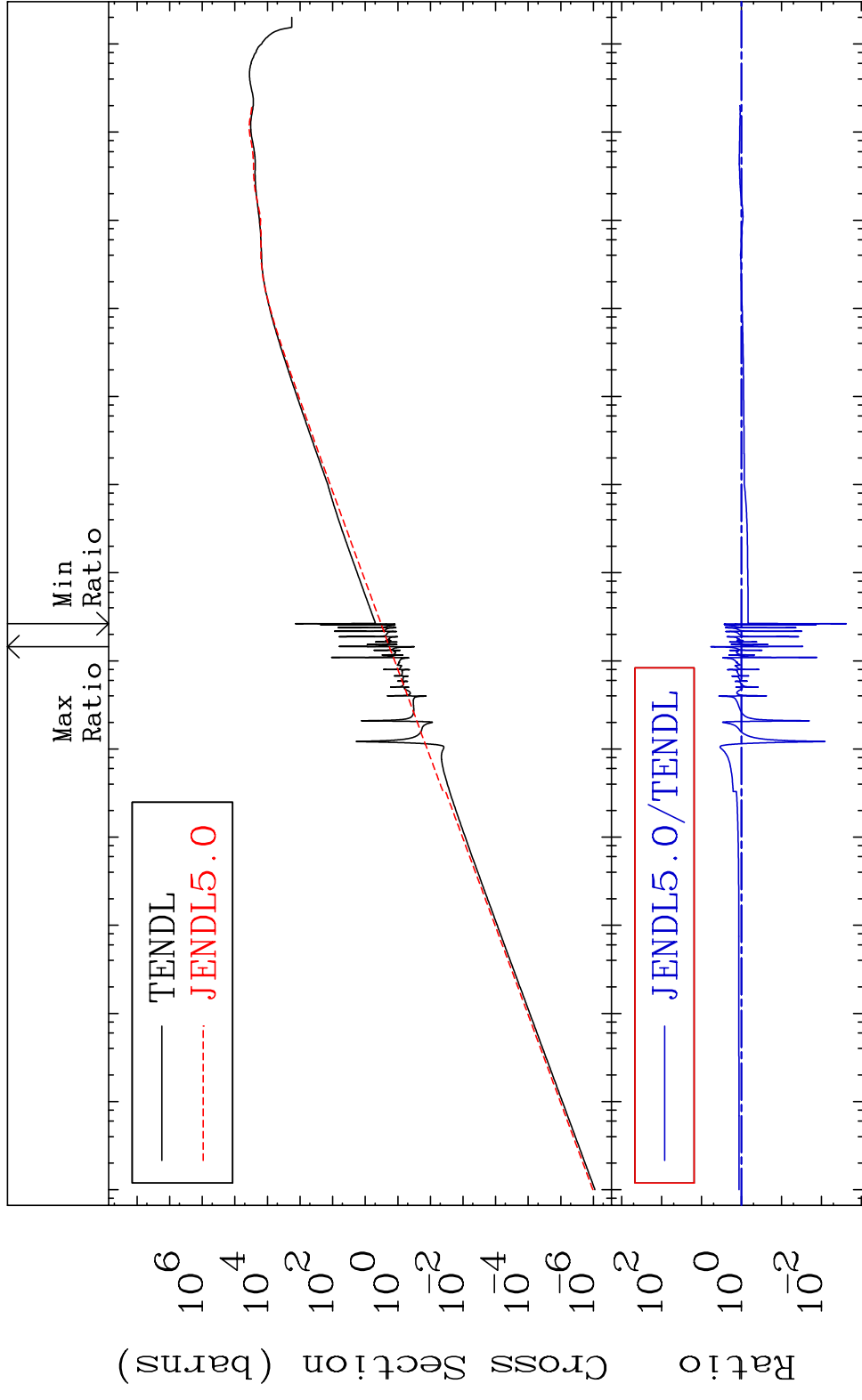


MAT 9037

Kerma elastic

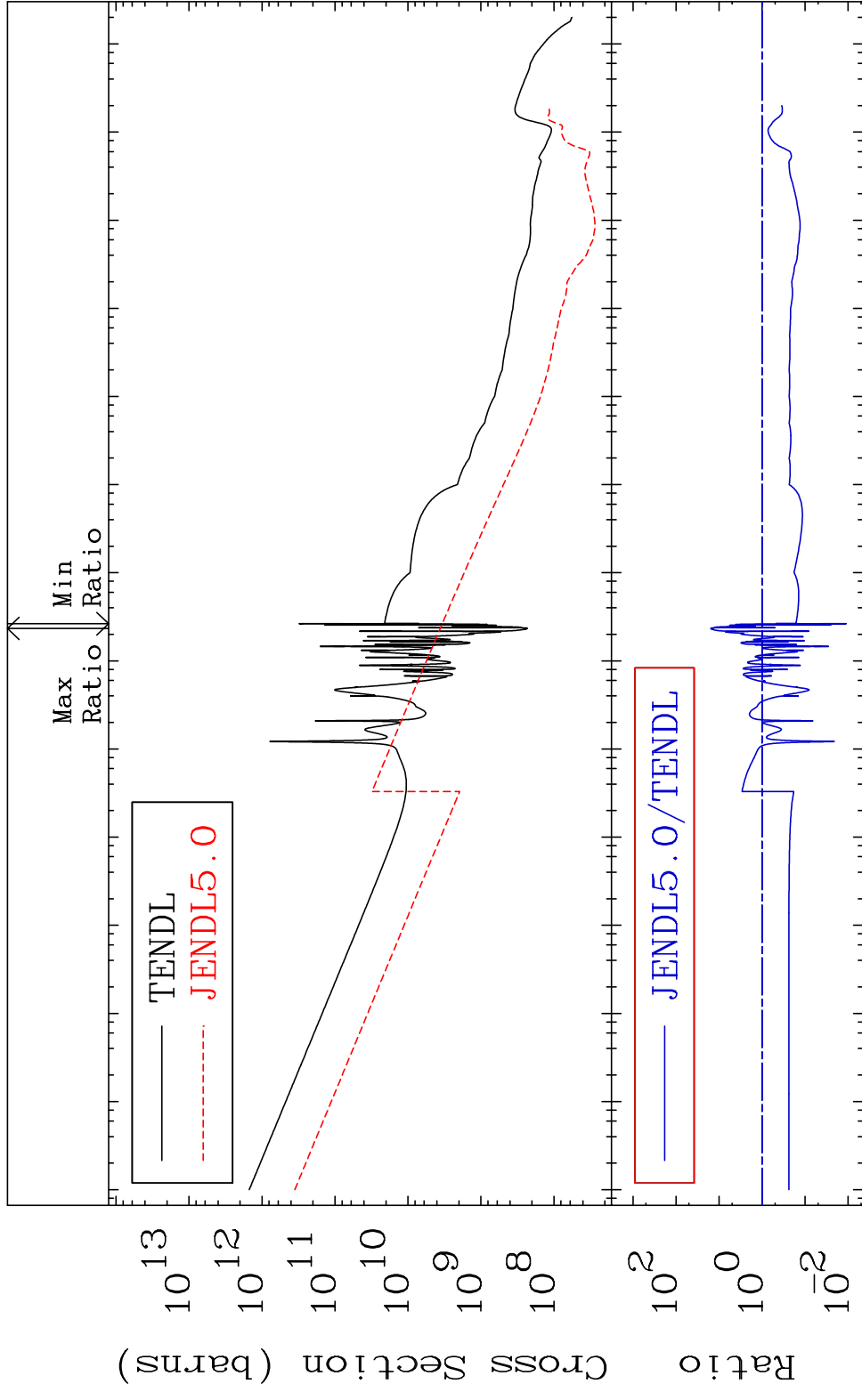
90-Th-231

Cross Section -99.76 To 488.3 %

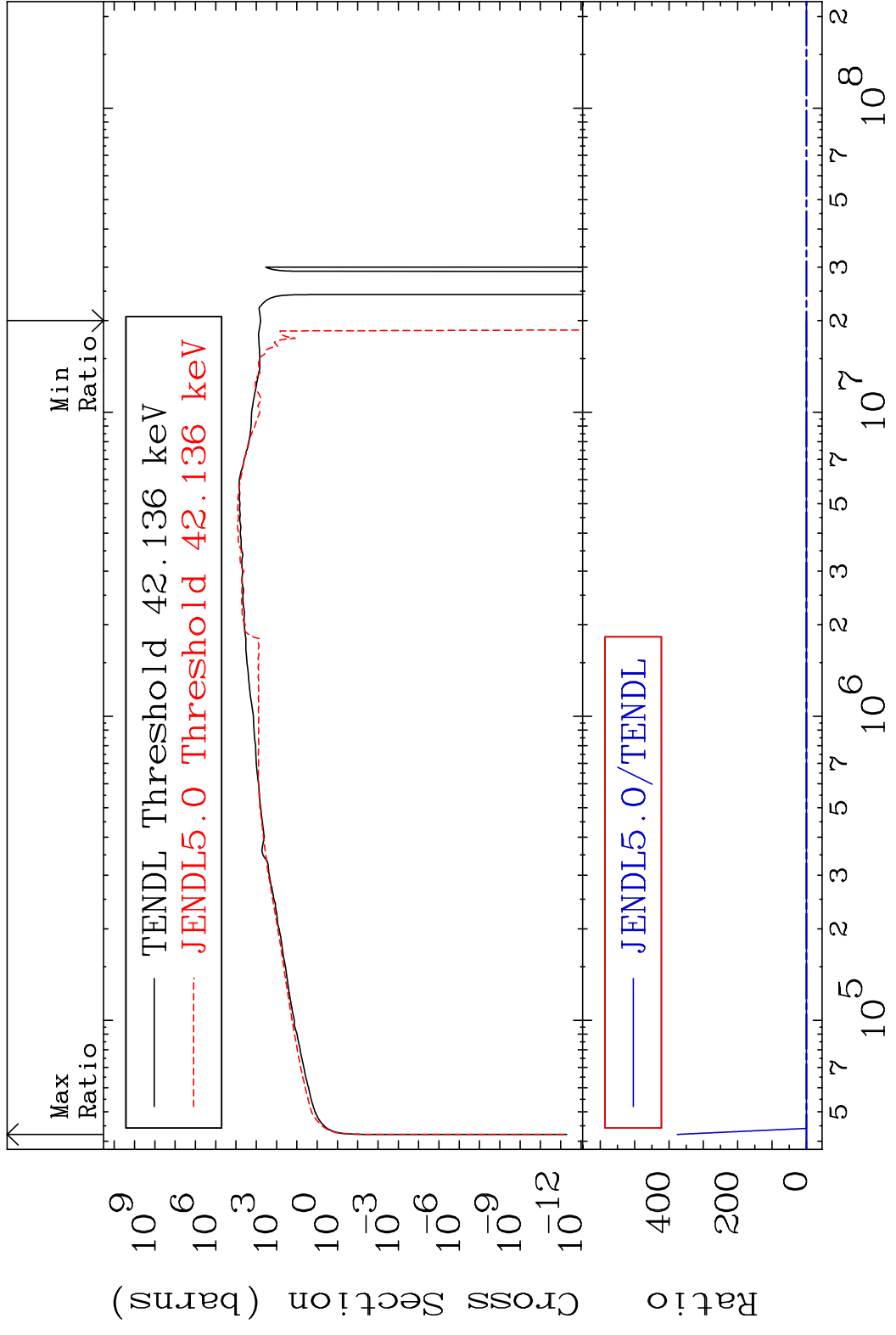


10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

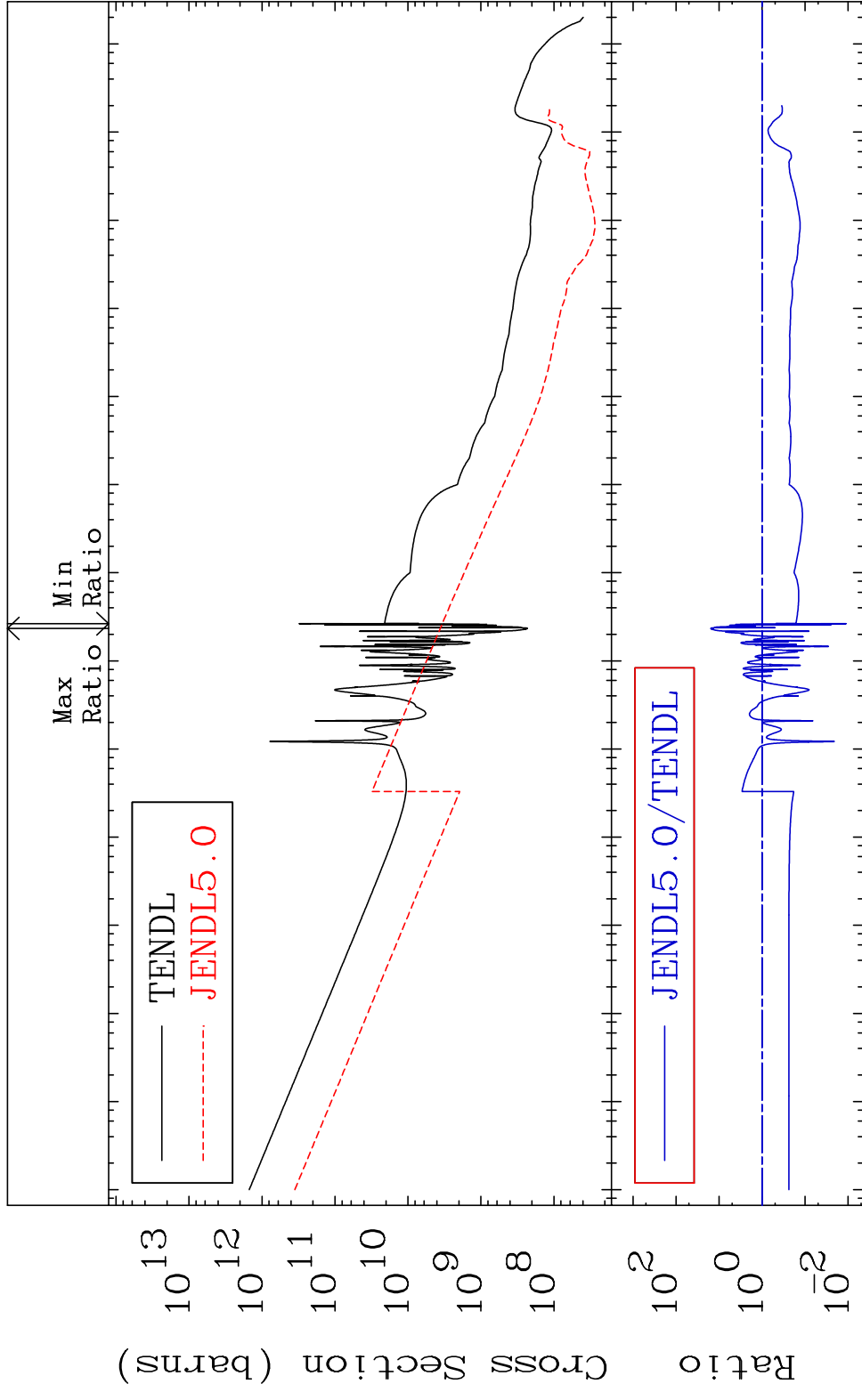
MAT 9037 Kerma non-elastic (all but mt2) 90-Th-231  
 Cross Section -98.90 To 1464. %



MAT 9037 Kerma inelastic (mt51-91) 90-Th-231  
 Cross Section -141.2 To 9999. %

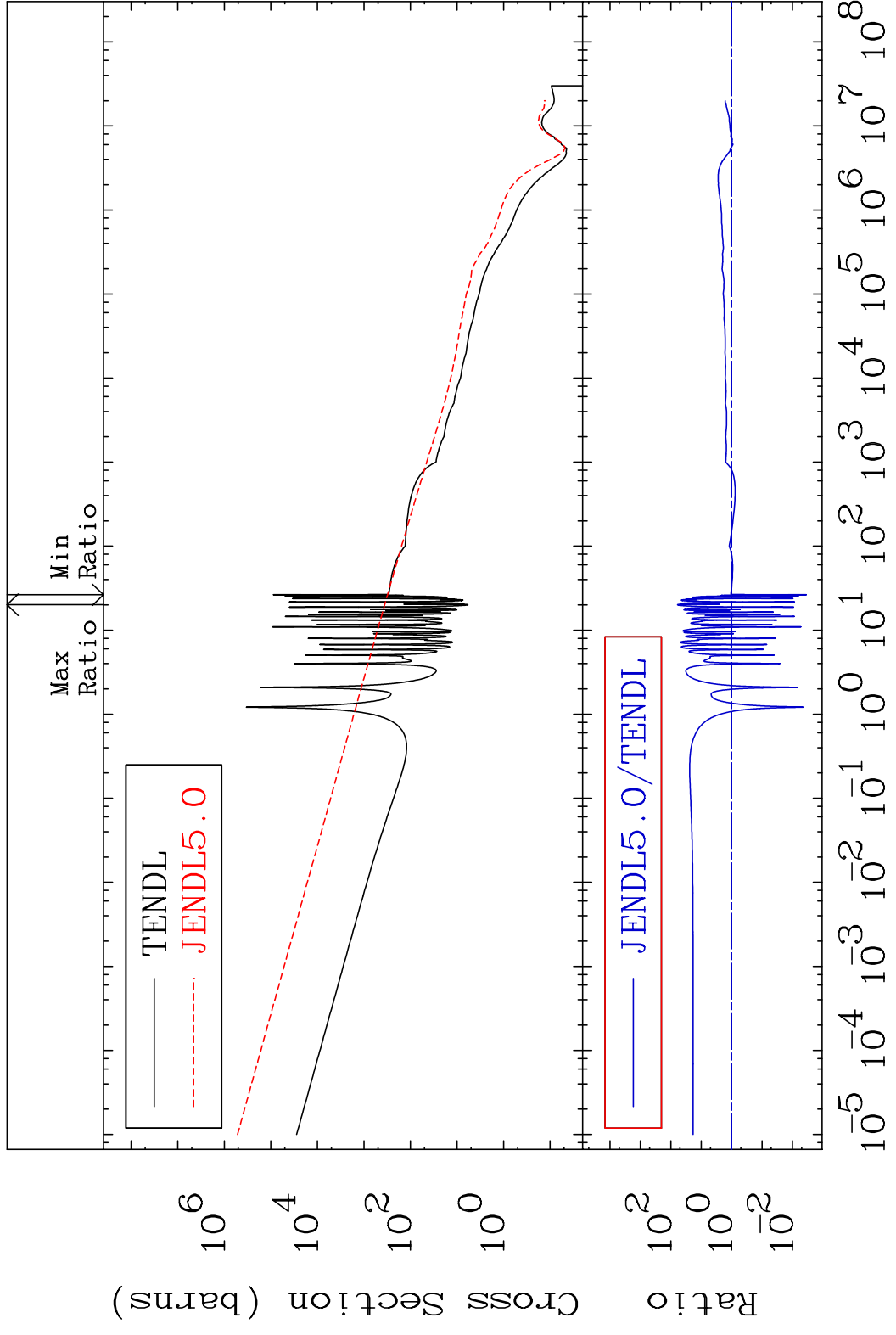


MAT 9037 Kerma fission (mt18 or mt19-20-21-38) 90-Th-231  
 Cross Section -98.90 To 1464. %



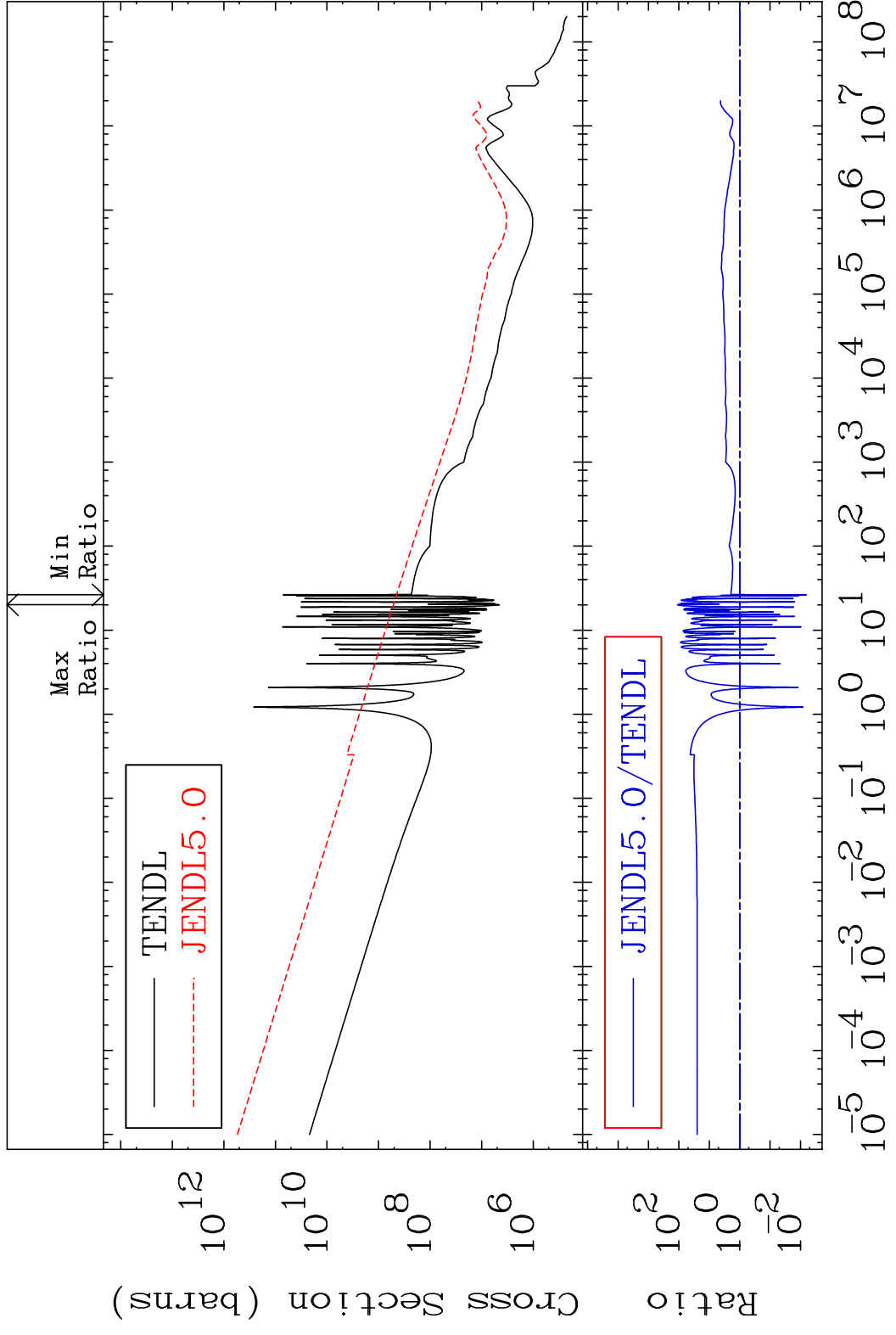
MAT 9037

Kerma capture (mt102) 90-Th-231  
Cross Section -99.65 To 6080. %

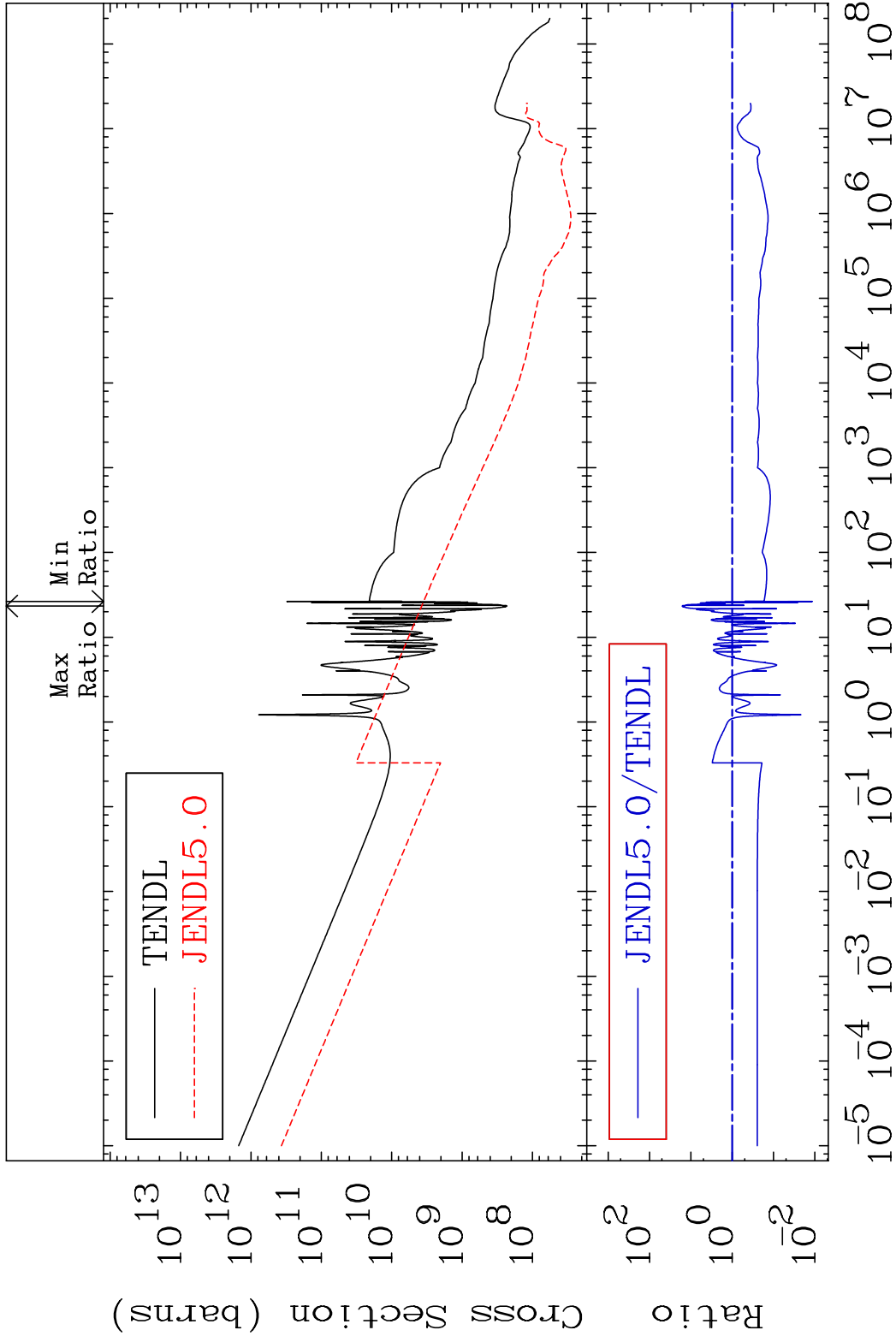




MAT 9037 Total photon (eV-barns) 90-Th-231  
 Cross Section -99.36 To 9999. %



MAT 9037 Total kinematic kerma (high limit) 90-Th-231  
 Cross Section -98.86 To 1524. %

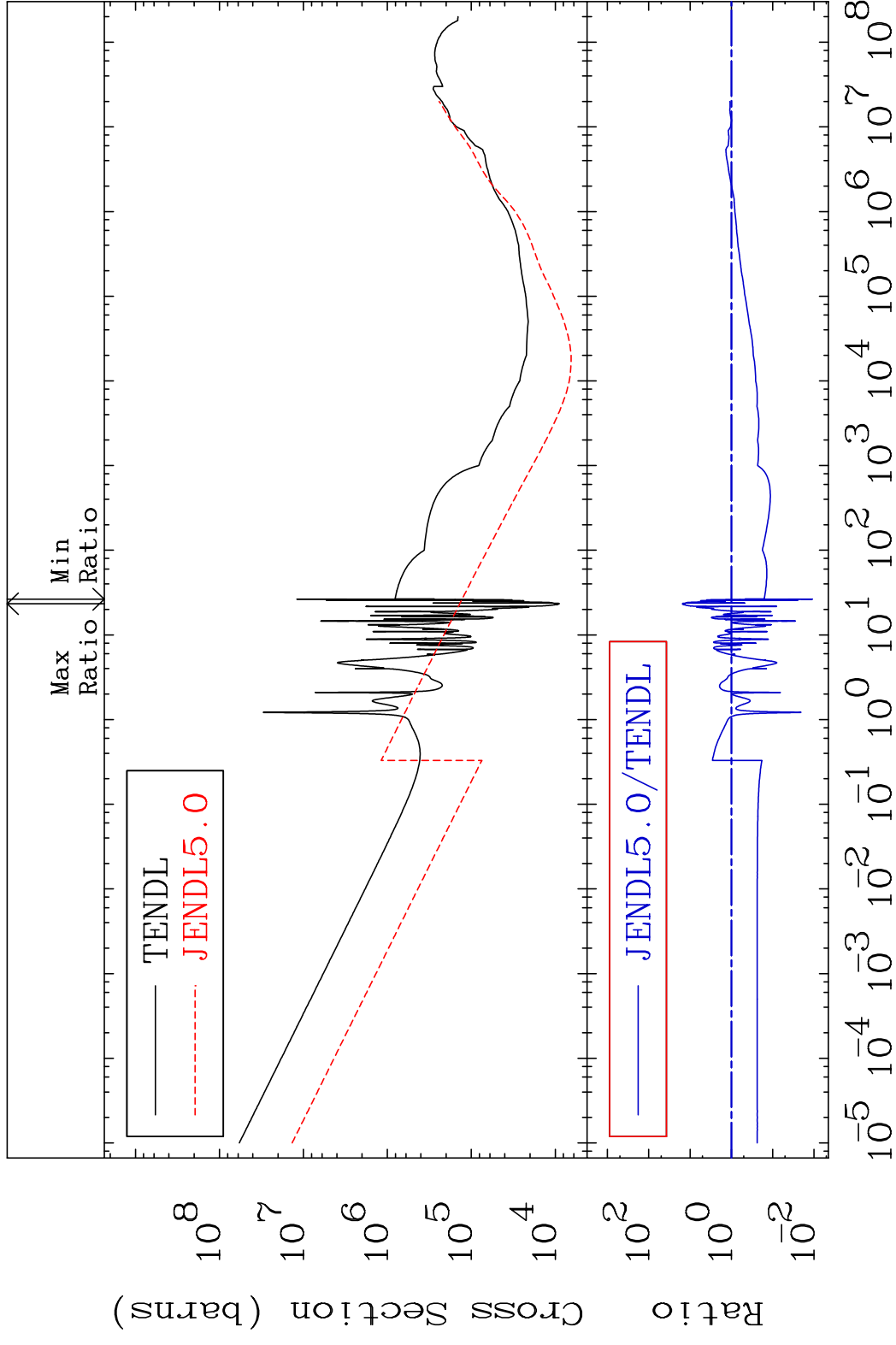


MAT 9037

Dpa total (eV-barns)

90-Th-231

Cross Section -98.92 To 1434. %

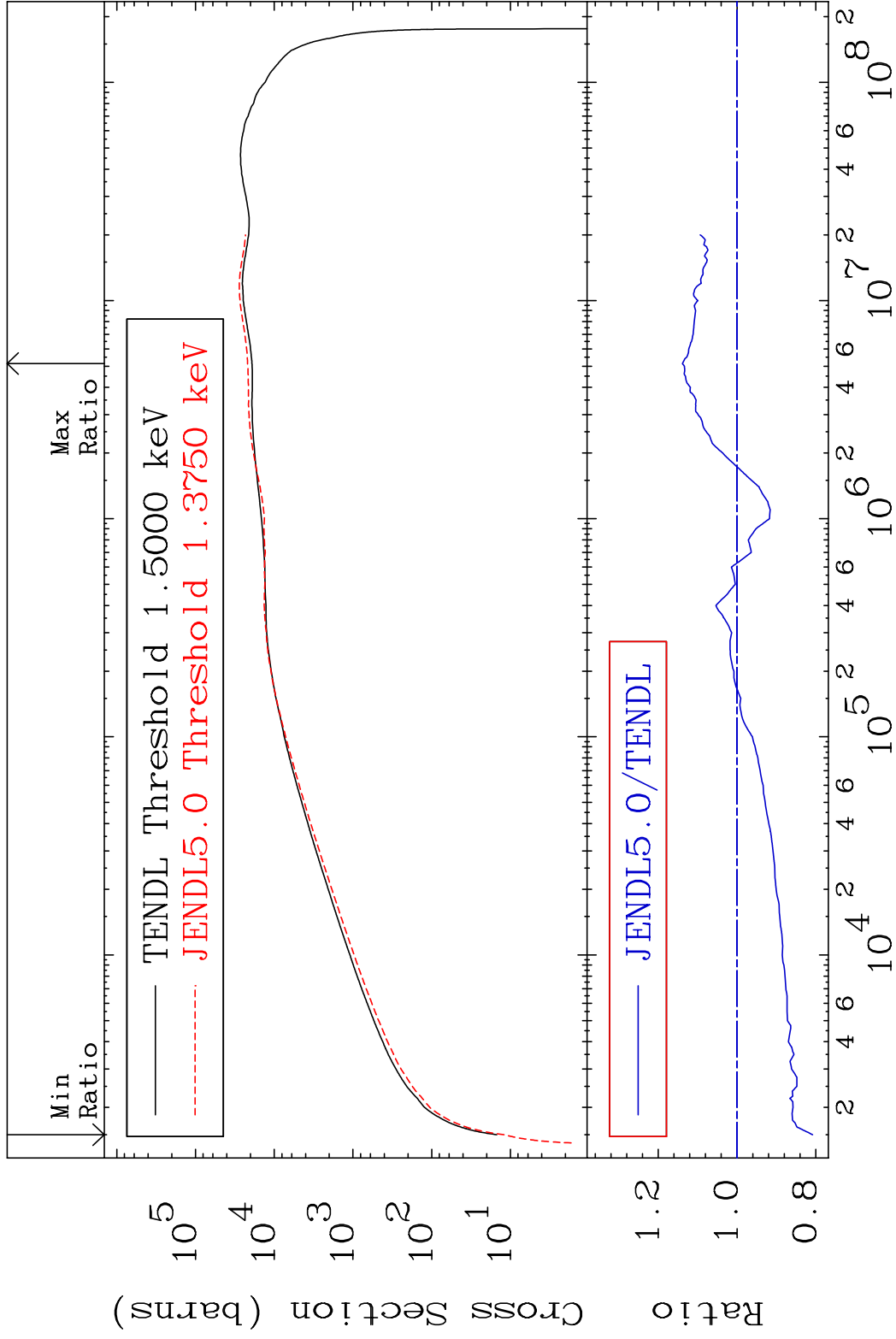


MAT 9037

Dpa elastic (mt2)

90-Th-231

Cross Section -19.20 To 13.89 %

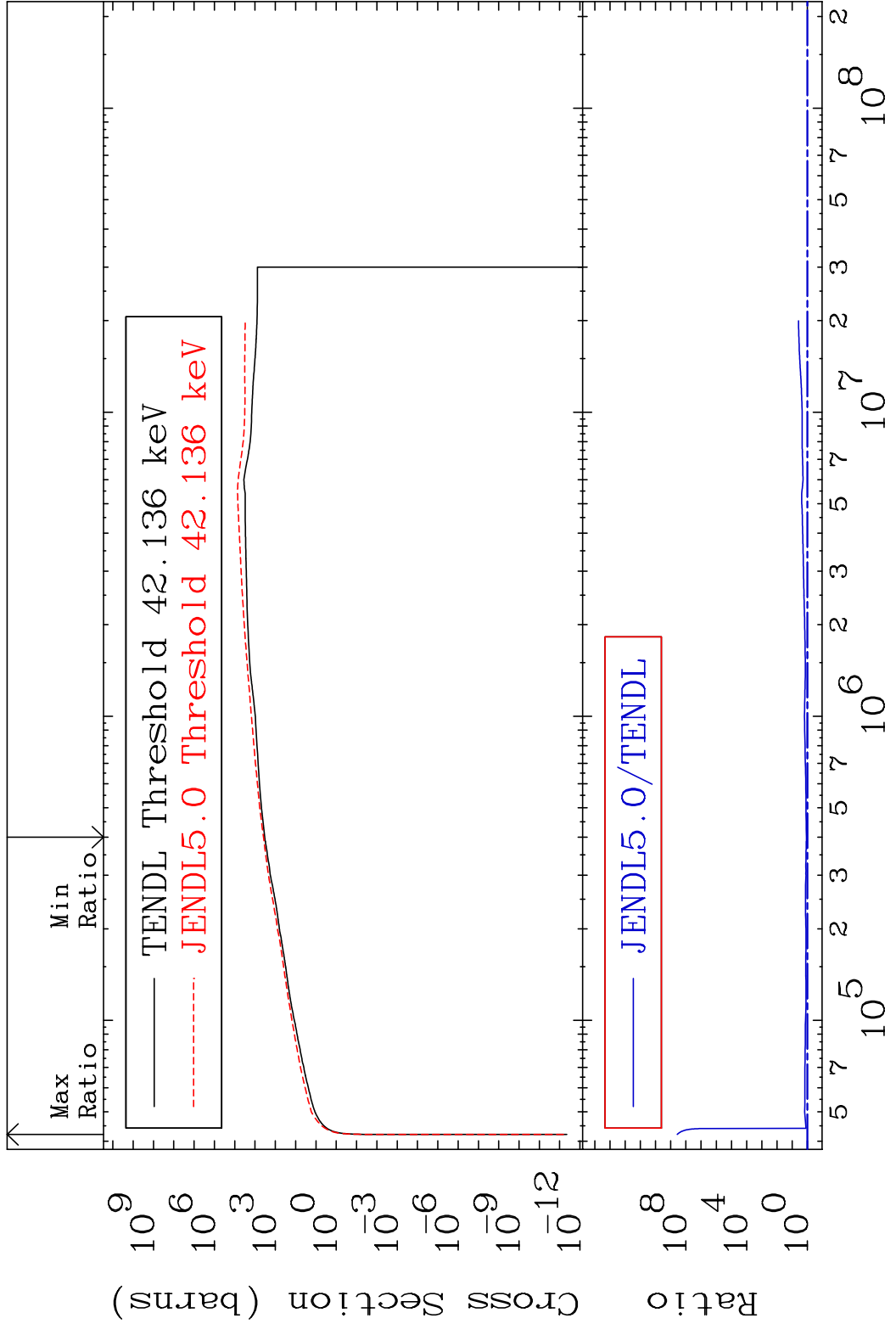


35

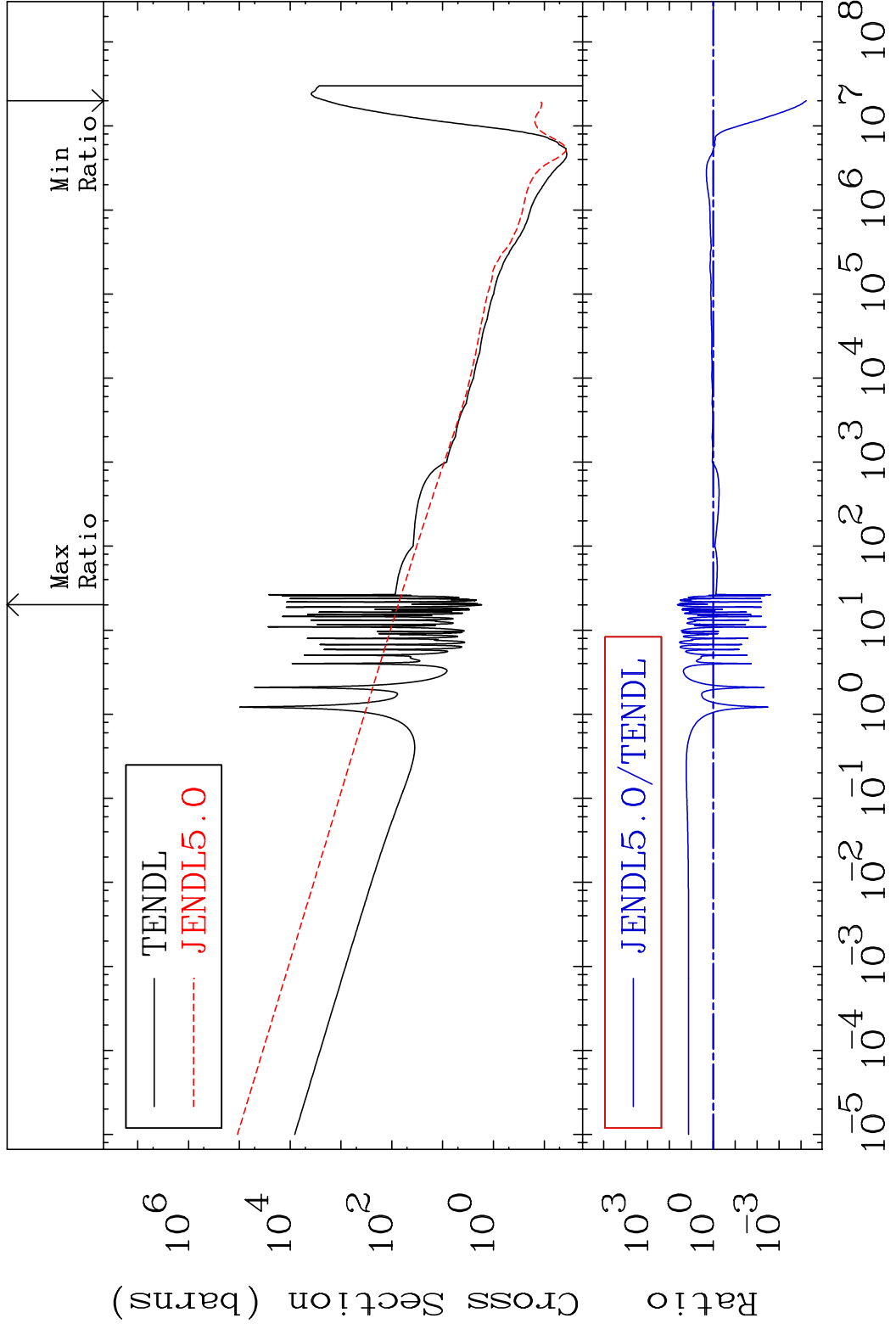
Incident Energy (eV)

90-Th-231

MAT 9037 Dpa inelastic (mt51-91) 90-Th-231  
 Cross Section 14.91 To 9999. %



MAT 9037 Dpa disappearance (mt102 -120) 90-Th-231  
 Cross Section -99.99 To 4323. %

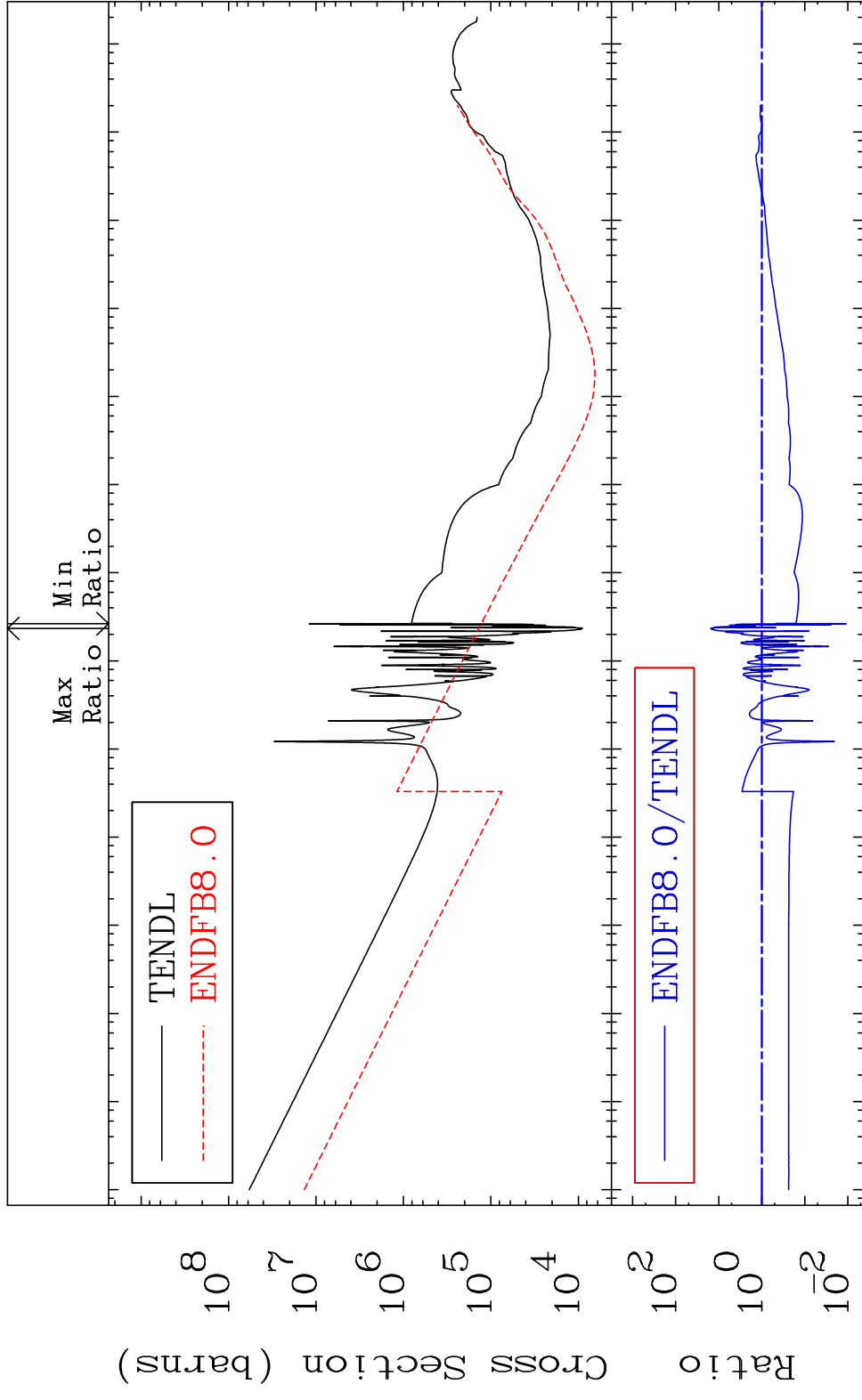


MAT 9037

Dpa total (eV-barns)

90-Th-231

Cross Section -98.92 To 1434. %



Ratio

10<sup>8</sup>

10<sup>7</sup>

10<sup>6</sup>

10<sup>5</sup>

10<sup>4</sup>

10<sup>2</sup>

10<sup>0</sup>

10<sup>-2</sup>

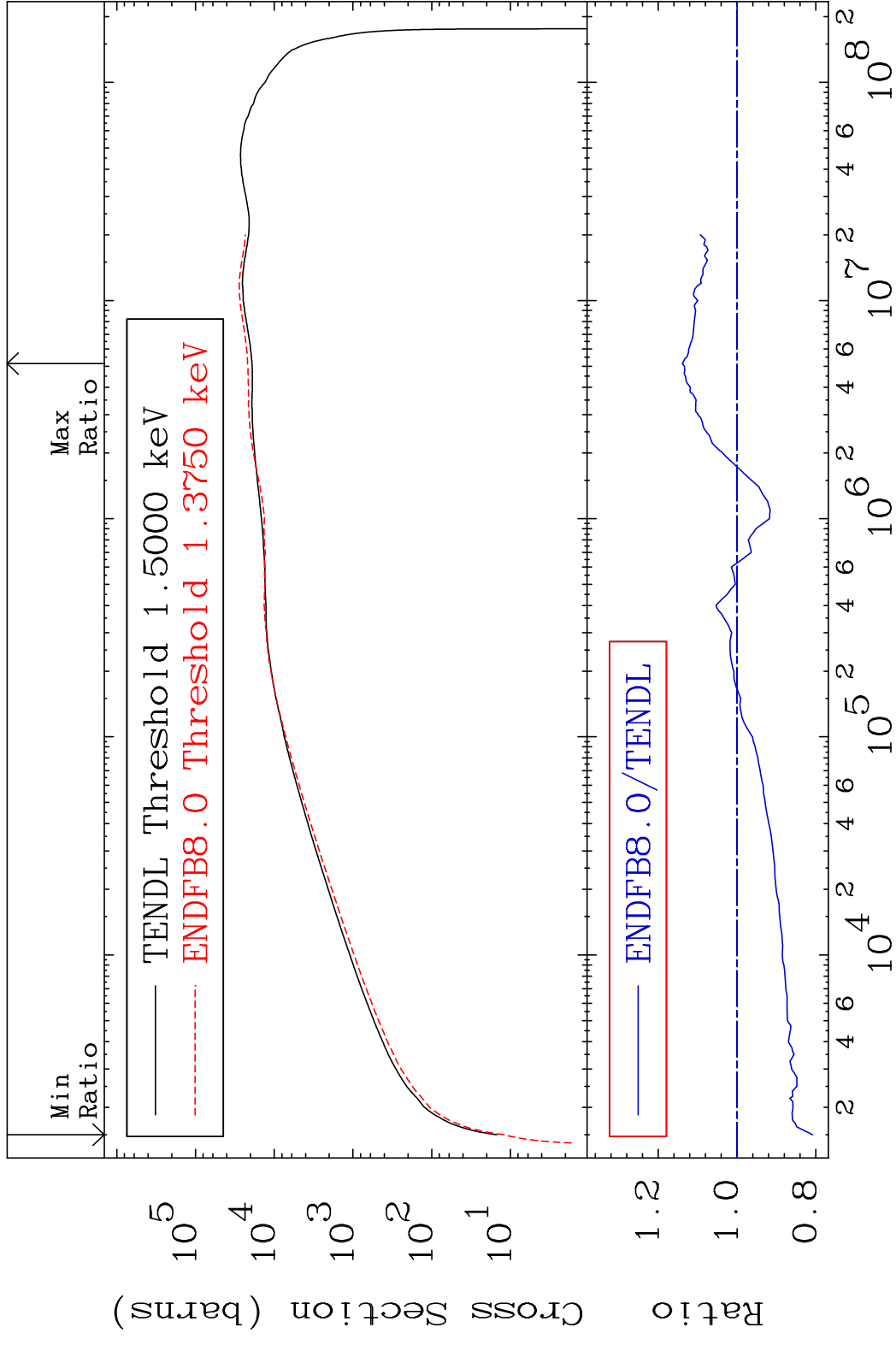
10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

MAT 9037

Dpa elastic (mt2)

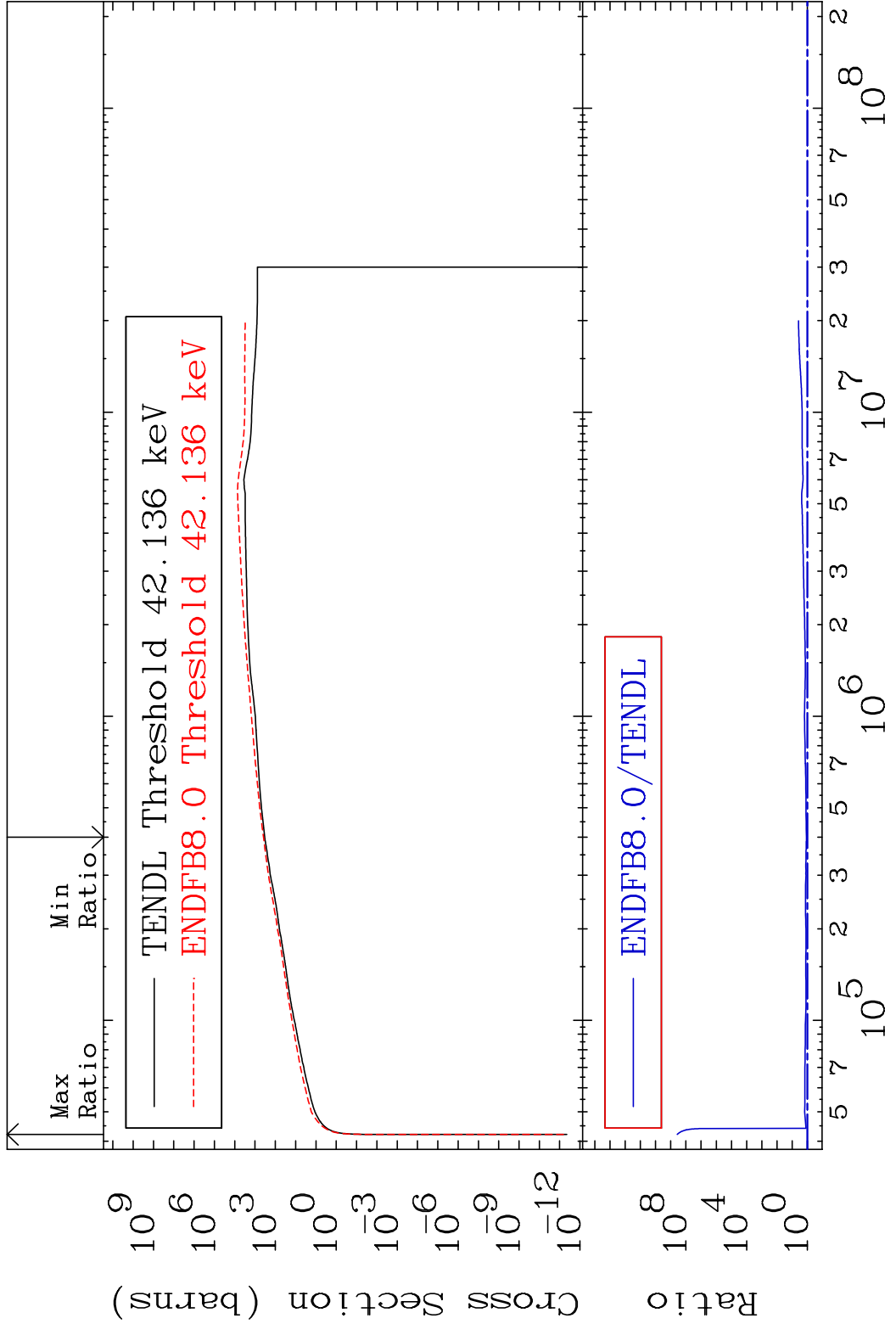
90-Th-231

Cross Section -19.20 To 13.89 %





MAT 9037 Dpa inelastic (mt51-91) 90-Th-231  
 Cross Section 14.91 To 9999. %



MAT 9037 Dpa disappearance (mt102 -120) 90-Th-231  
 Cross Section -99.99 To 4323. %

