

Program Complot
(Version 2018-1)

by

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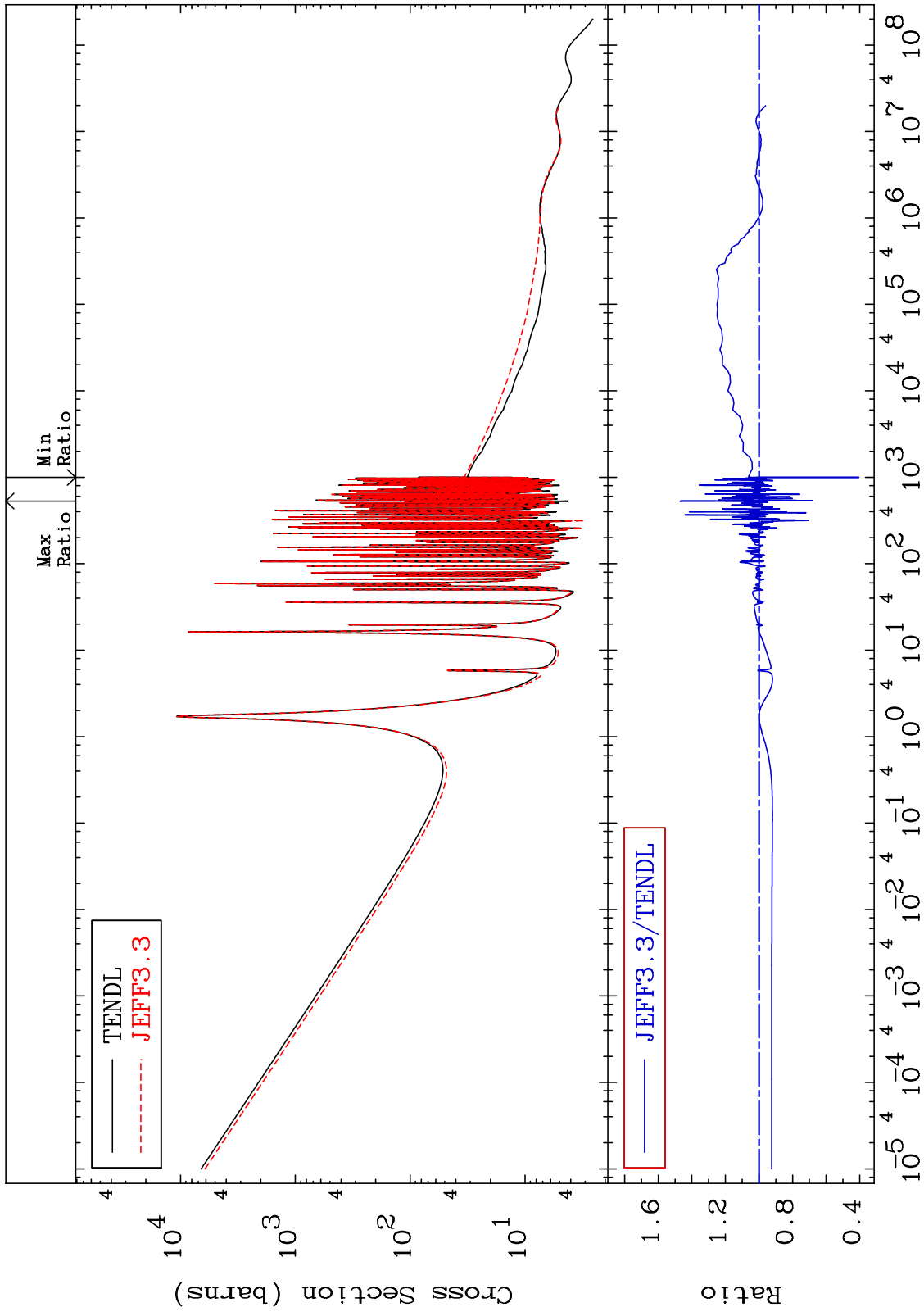
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6646

Total
Cross Section

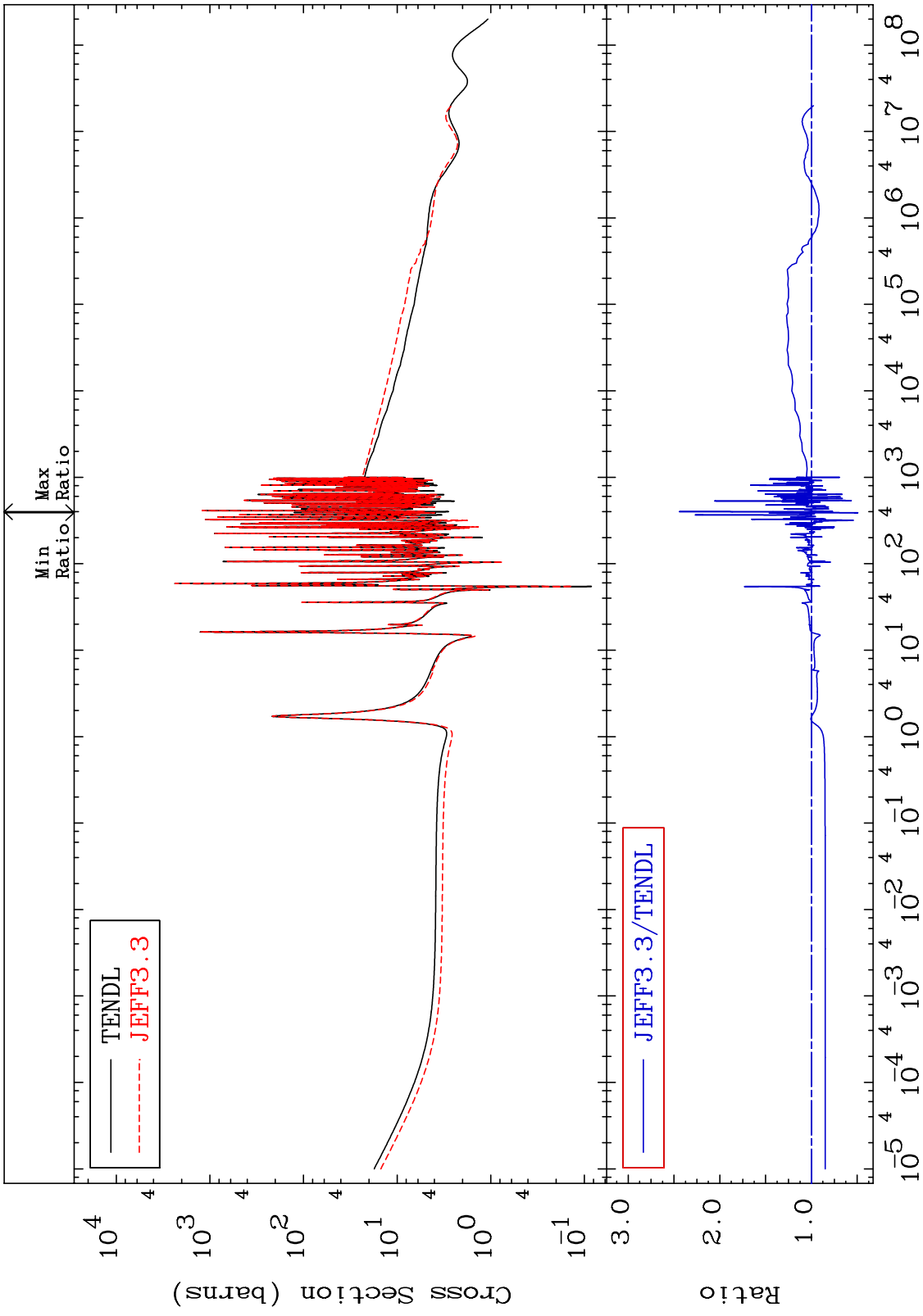
66-Dy-163
-59.52 To 46.91 %



Incident Energy (eV)

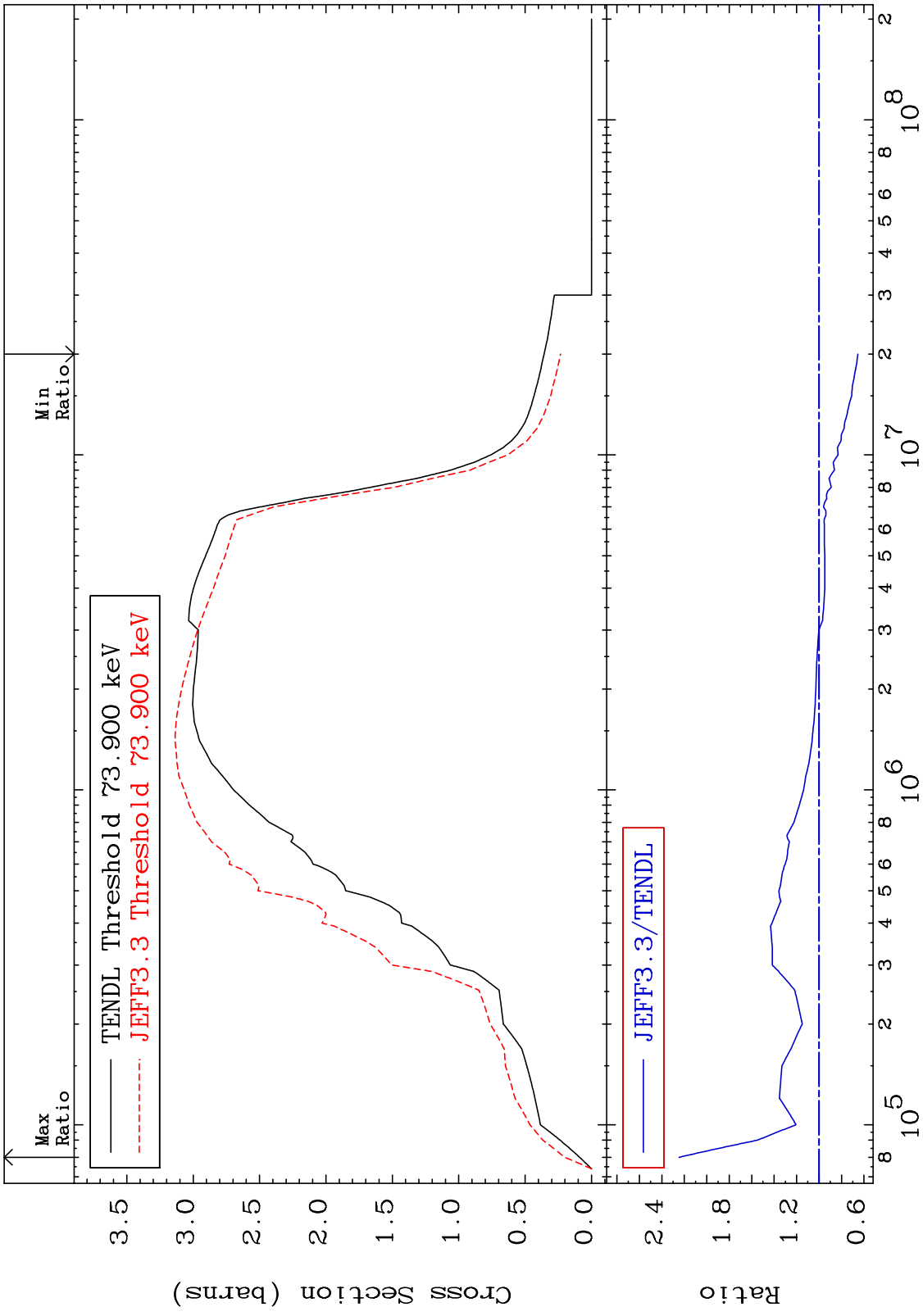
66-Dy-163

MAT 6646 Elastic Cross Section 66-Dy-163
-50.65 To 144.5 %



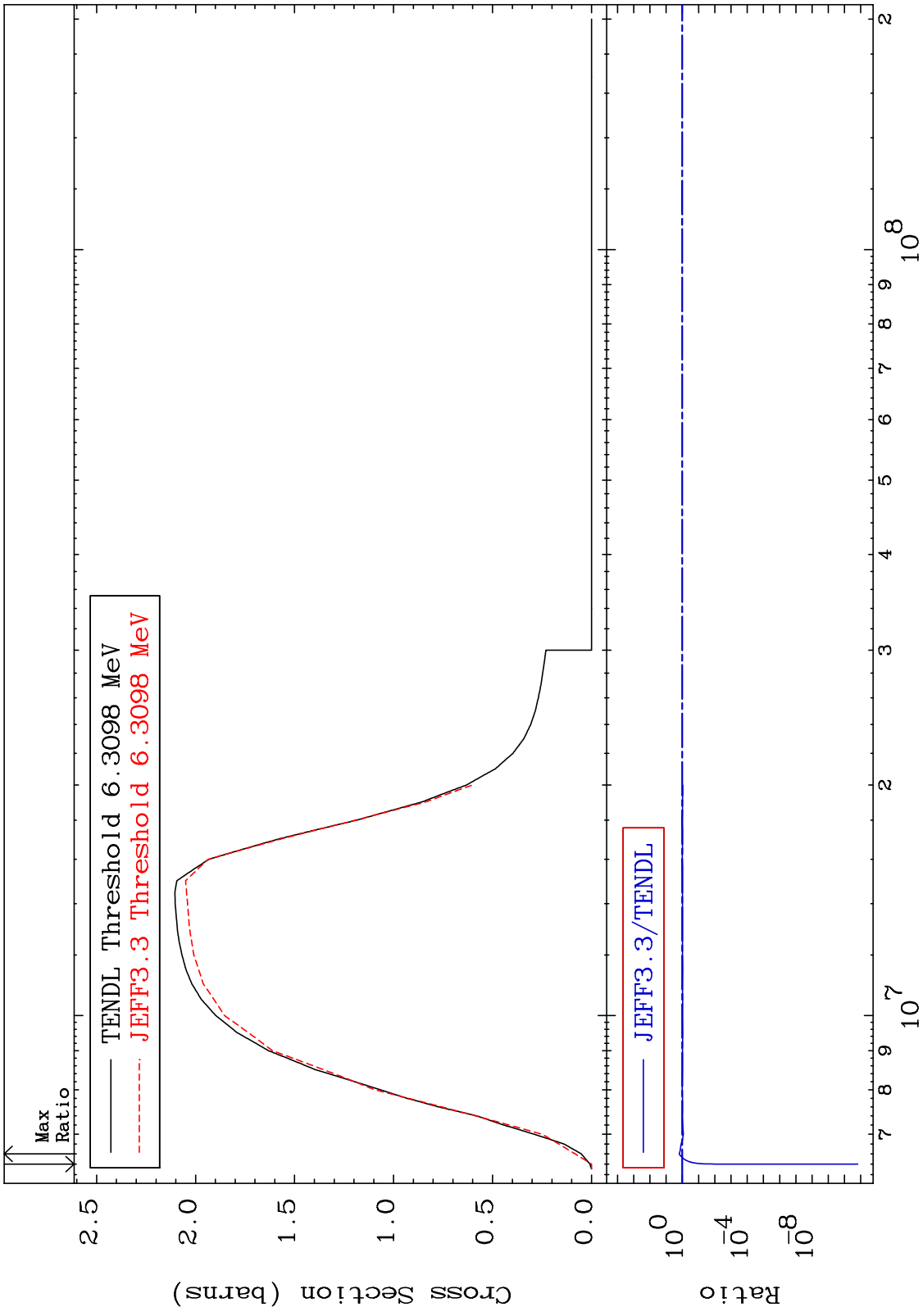
2 Incident Energy (eV) 66-Dy-163

MAT 6646 Inelastic Cross Section 66-Dy-163 -34.55 To 124.7 %



3 66-Dy-163

MAT 6646 (n,2n) 66-Dy-163
 Cross Section -100.0 To 60.10 %



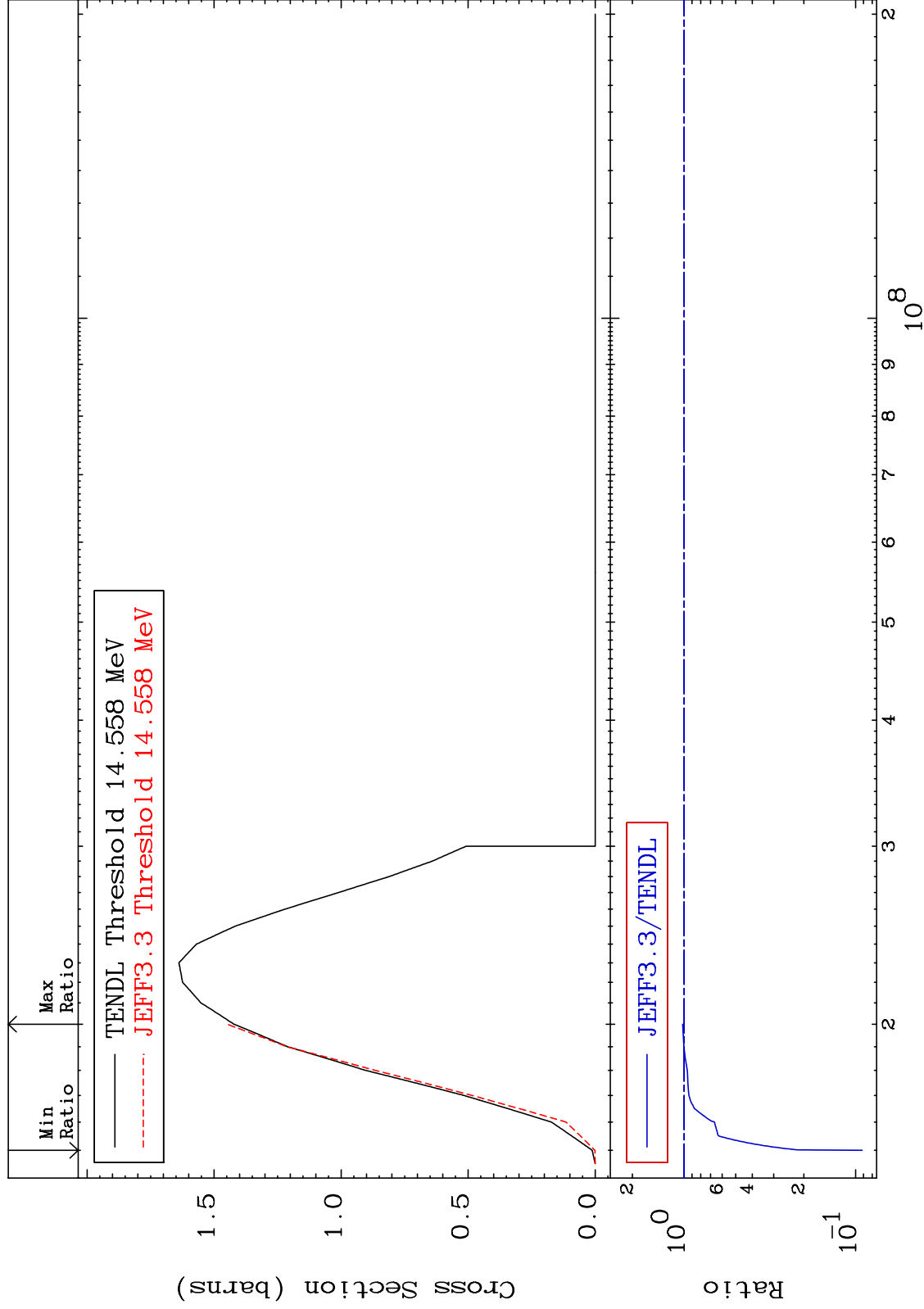
MAT 6646

(n,3n)

66-Dy-163

Cross Section

-90.75 To 1.895 %



5

Incident Energy (eV)

66-Dy-163

MAT 6646

(n, n') α

66-Dy-163

-43.39 To 233.0 %

Cross Section

Max Ratio

Min Ratio

TENDL Threshold 246.16 keV
JEFF3.3 Threshold 7.0000 MeV

Cross Section (milli-barns)

14

12

10

8

6

4

2

0

4.0

3.0

2.0

1.0

JEFF3.3/TENDL

3

4

5

6

7

8

10⁶

2

3

4

5

6

7

8

10⁷

2

3

4

5

6

7

8

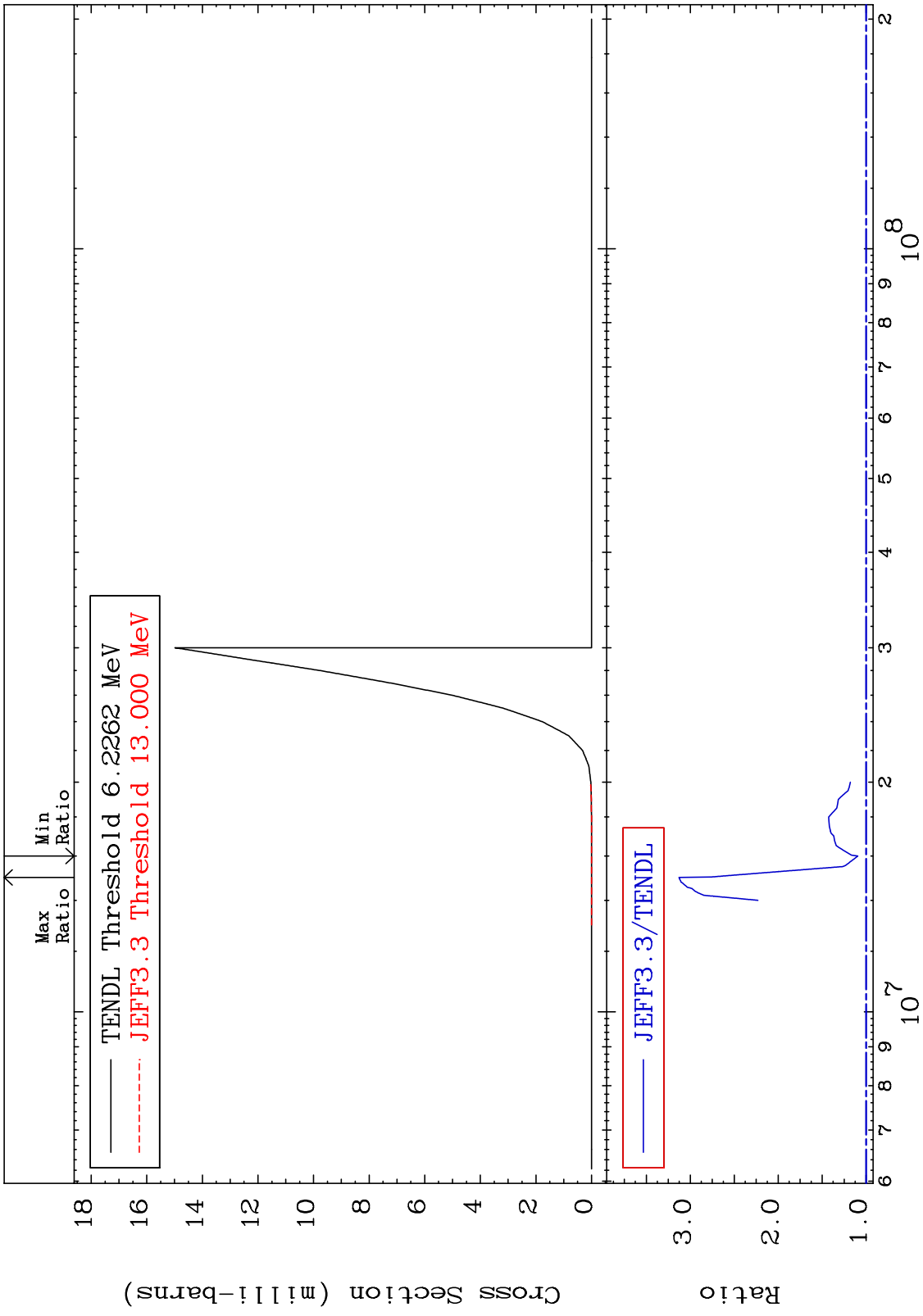
10⁸

6

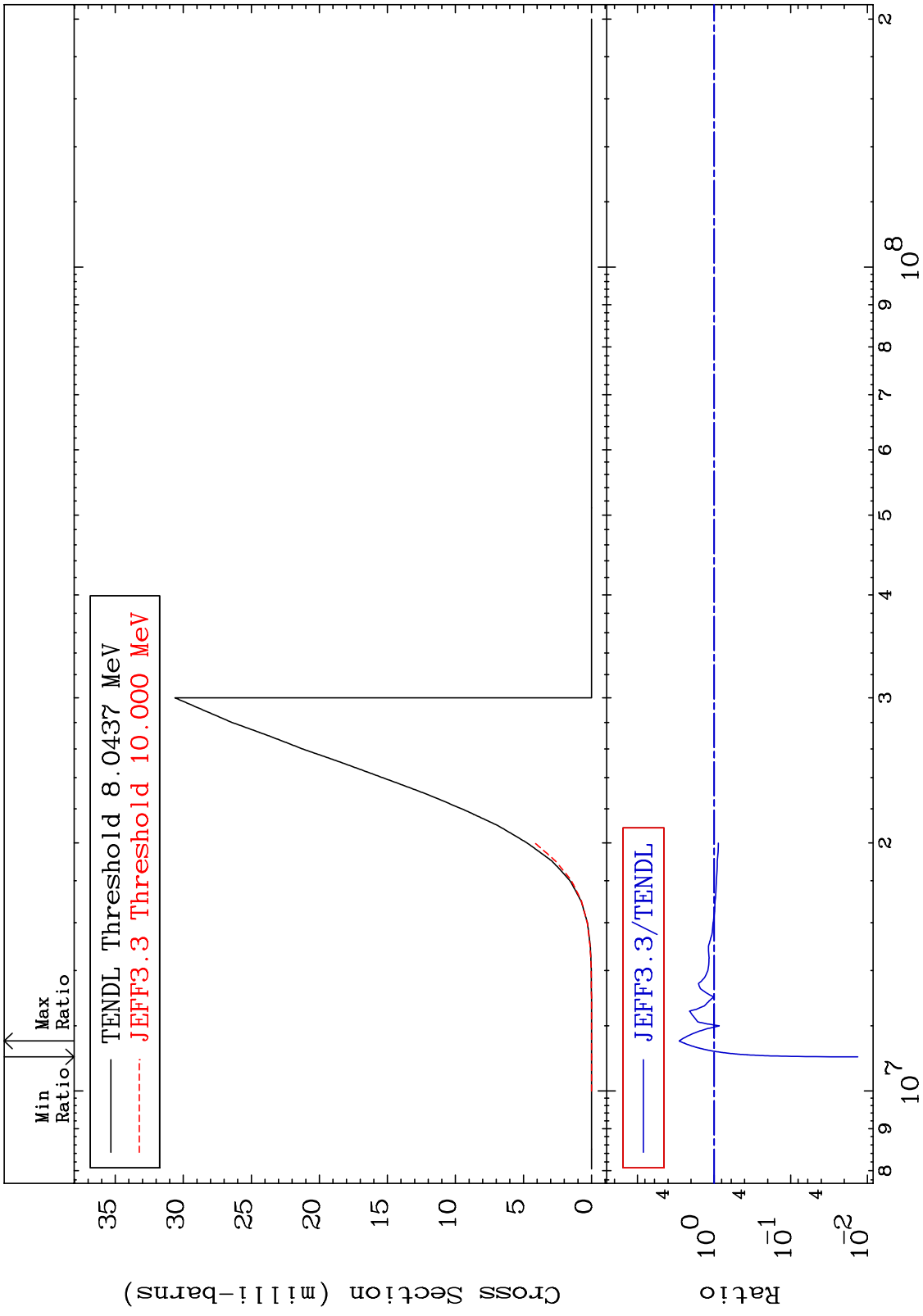
Incident Energy (eV)

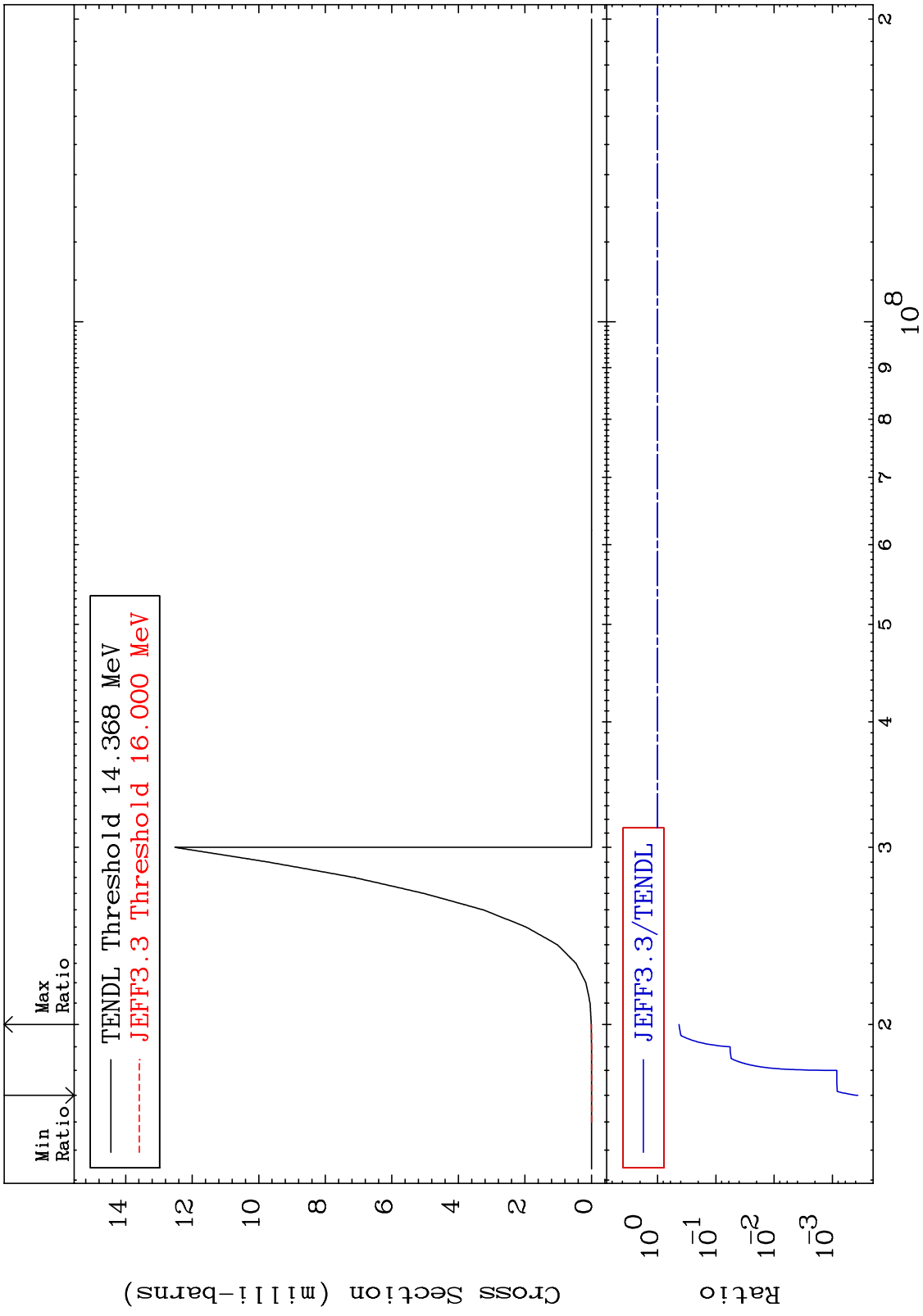
66-Dy-163

MAT 6646 $(n, 2n) \alpha$ 66-Dy-163
 Cross Section 9.437 To 212.8 %

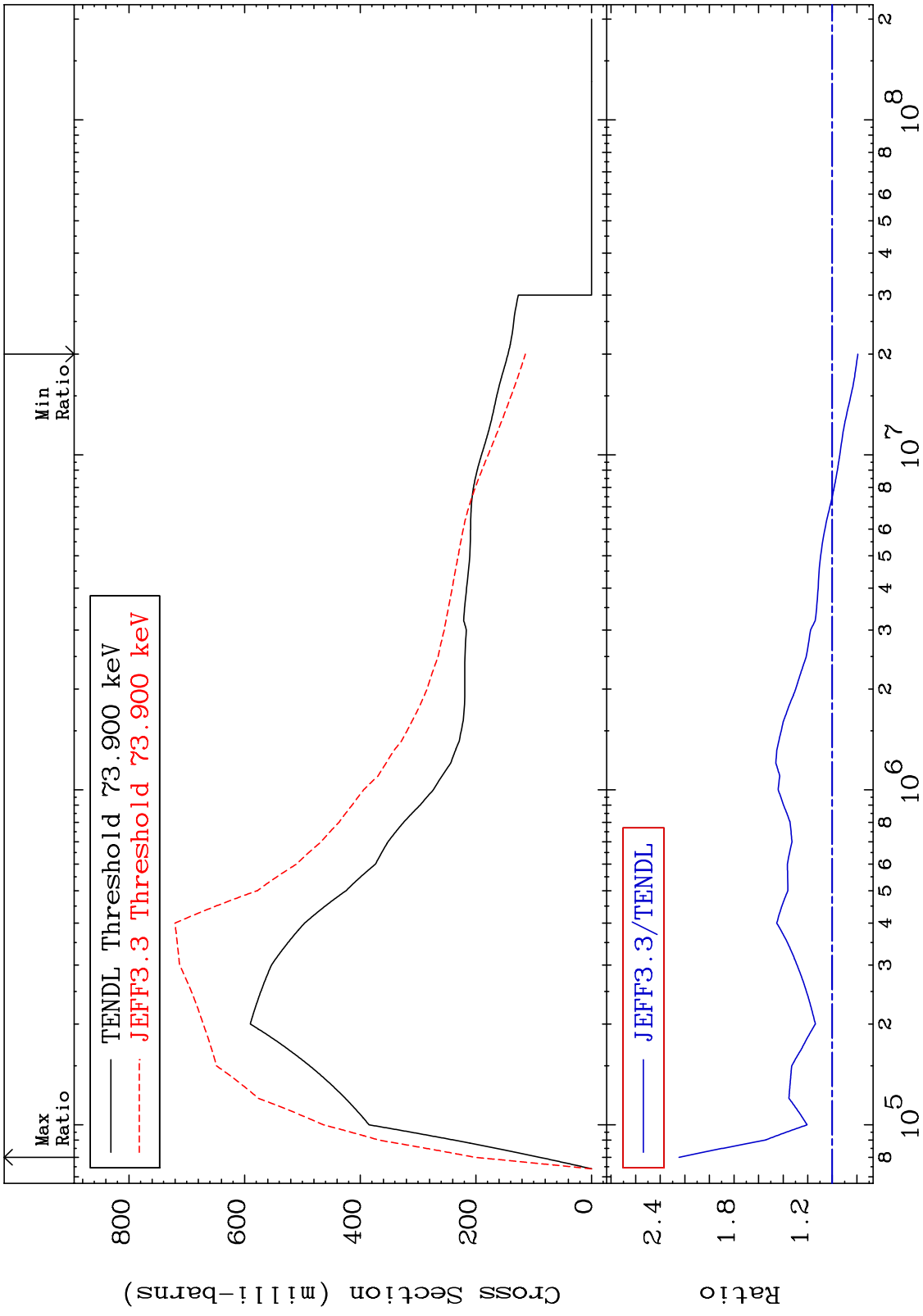


7 66-Dy-163

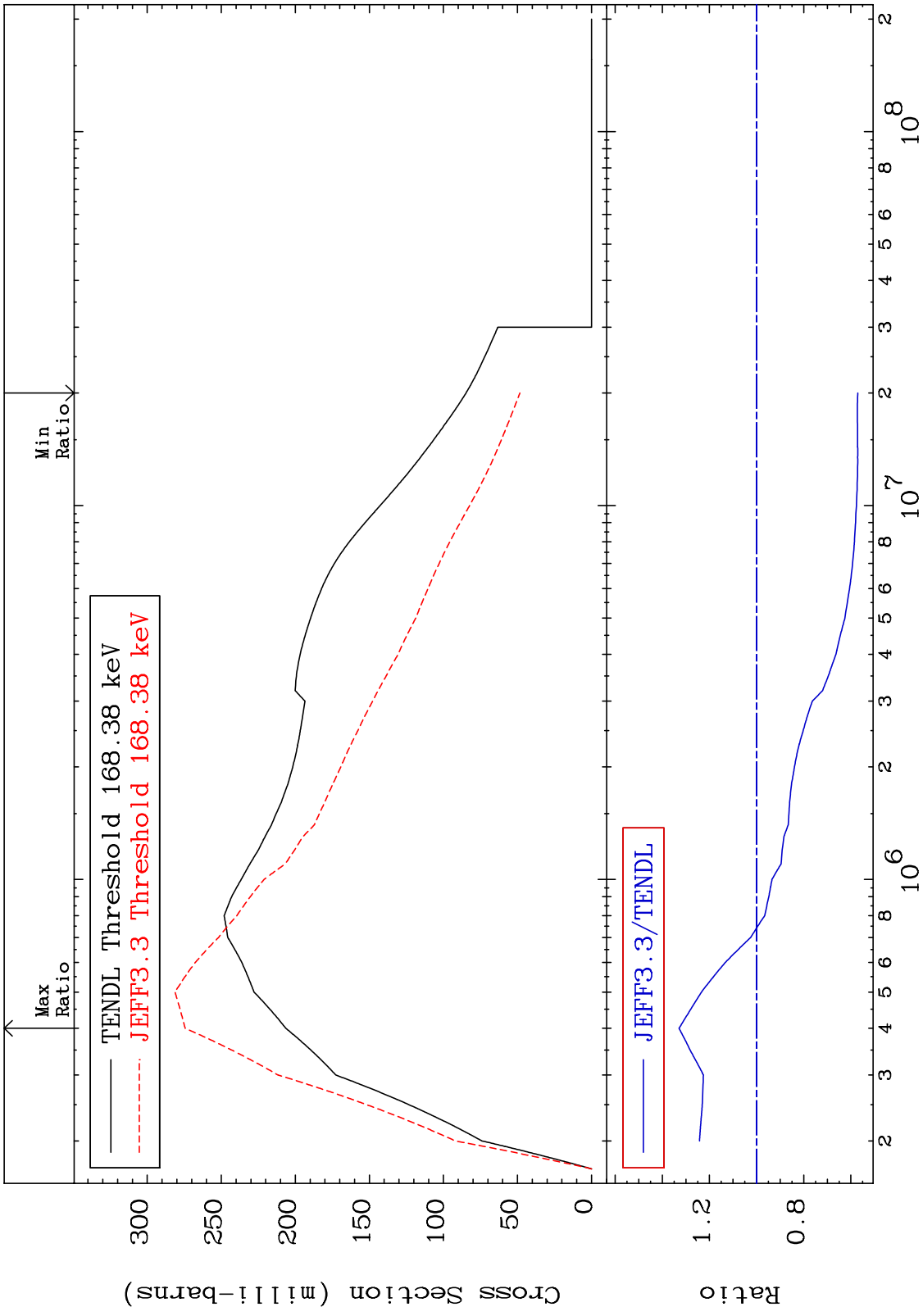




MAT 6646 MT= 51 (n,n') Level 66-Dy-163
Cross Section -20.77 To 124.7 %



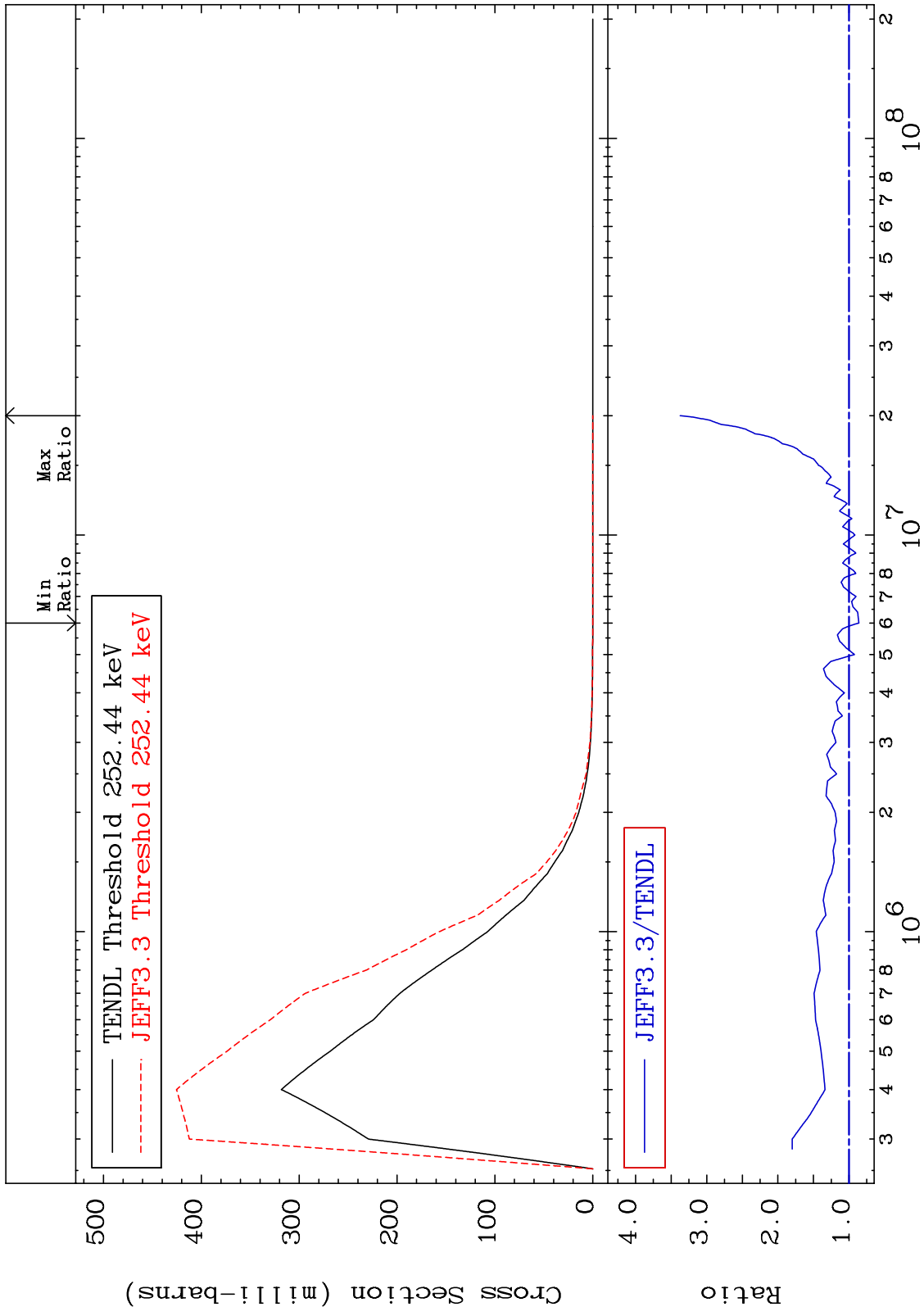
MAT 6646 MT= 52 (n,n') Level 66-Dy-163
 Cross Section -42.95 To 32.91 %



MAT 6646

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

66-Dy-163
-13.90 To 237.3 %

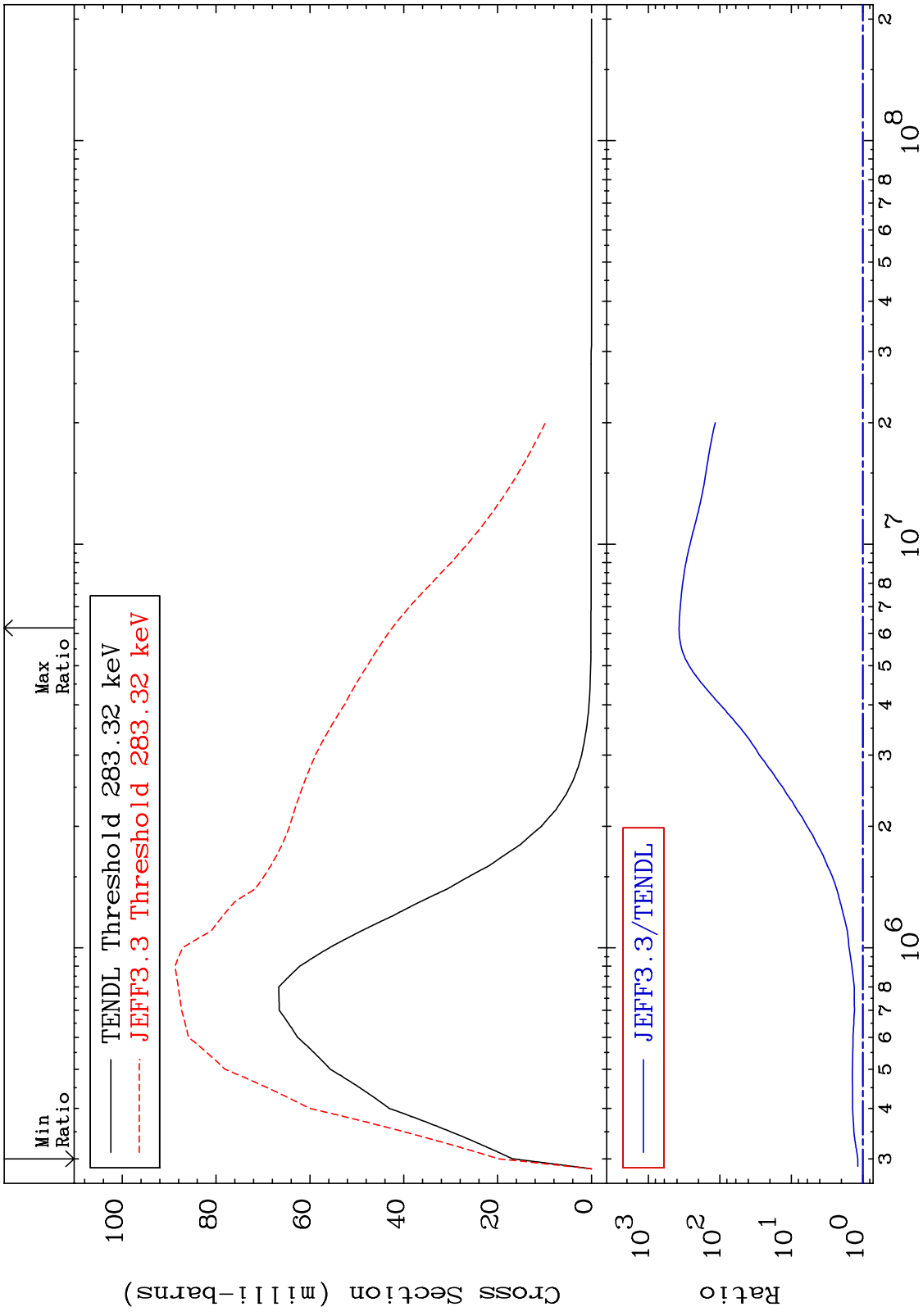


12

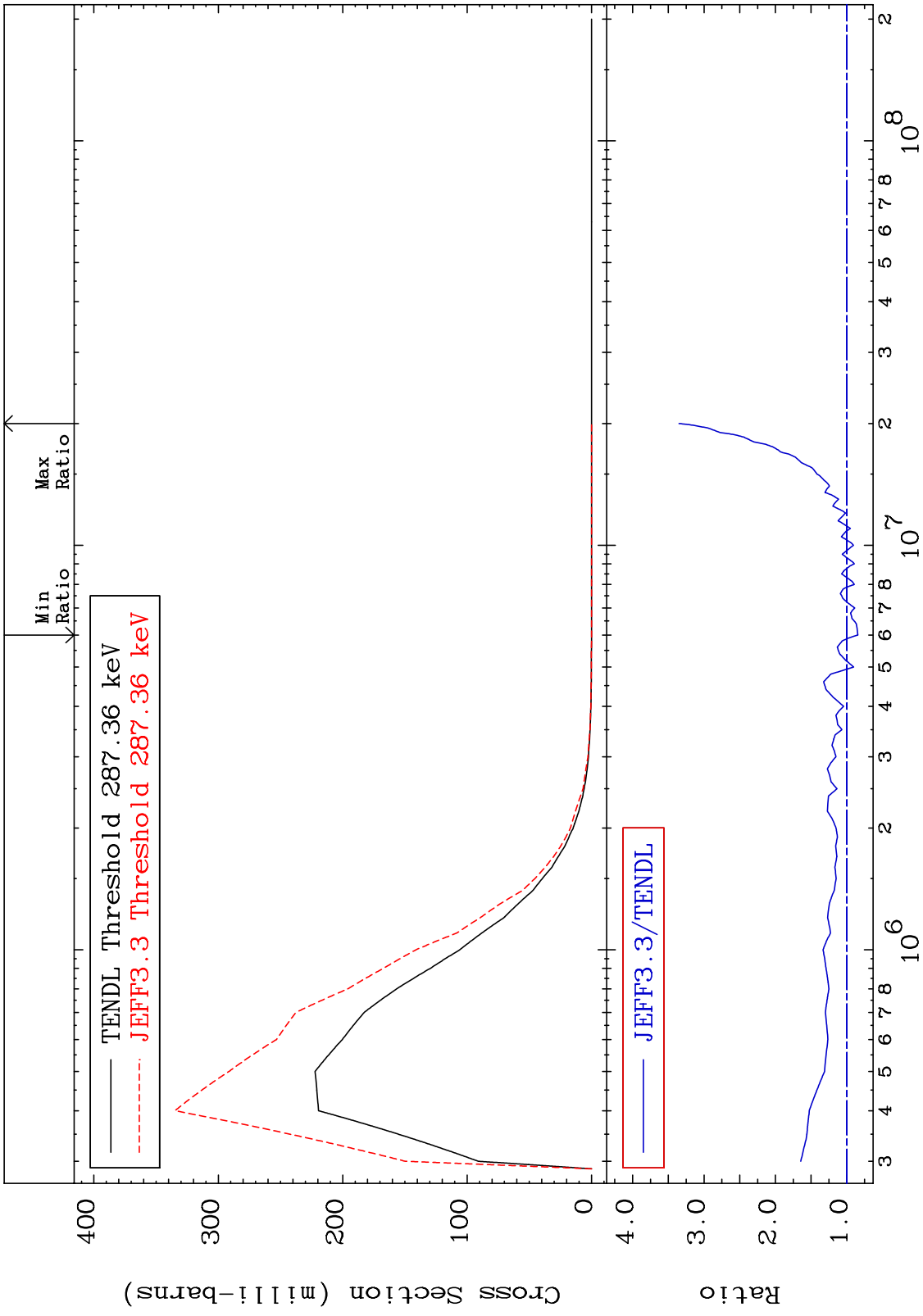
Incident Energy (eV)

66-Dy-163

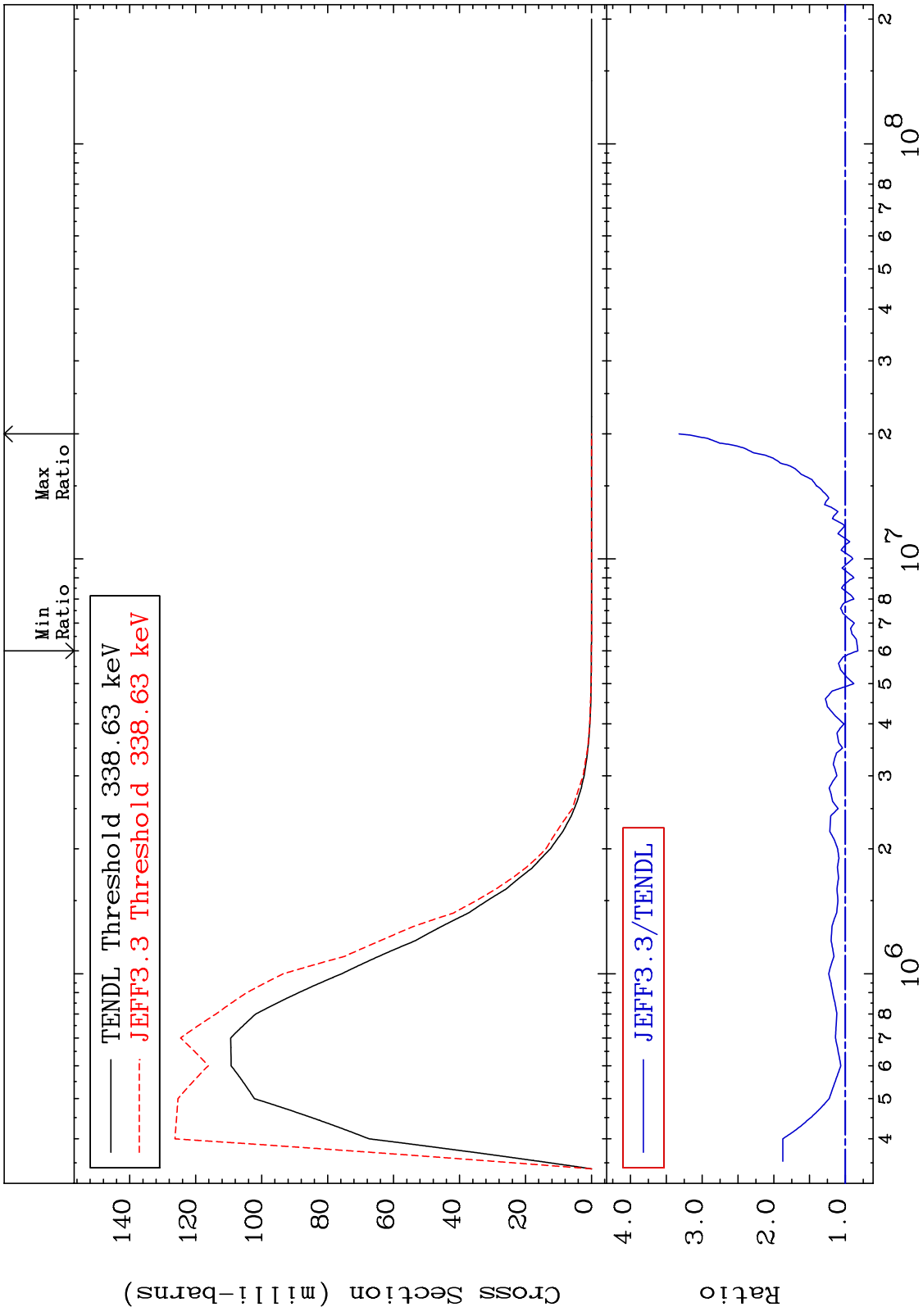
MAT 6646 MT= 54 (n,n') Level 66-Dy-163
 Cross Section 17.60 To 9999. %



MAT 6646 MT= 55 (n,n') Level Cross Section 66-Dy-163
 -15.46 To 235.0 %



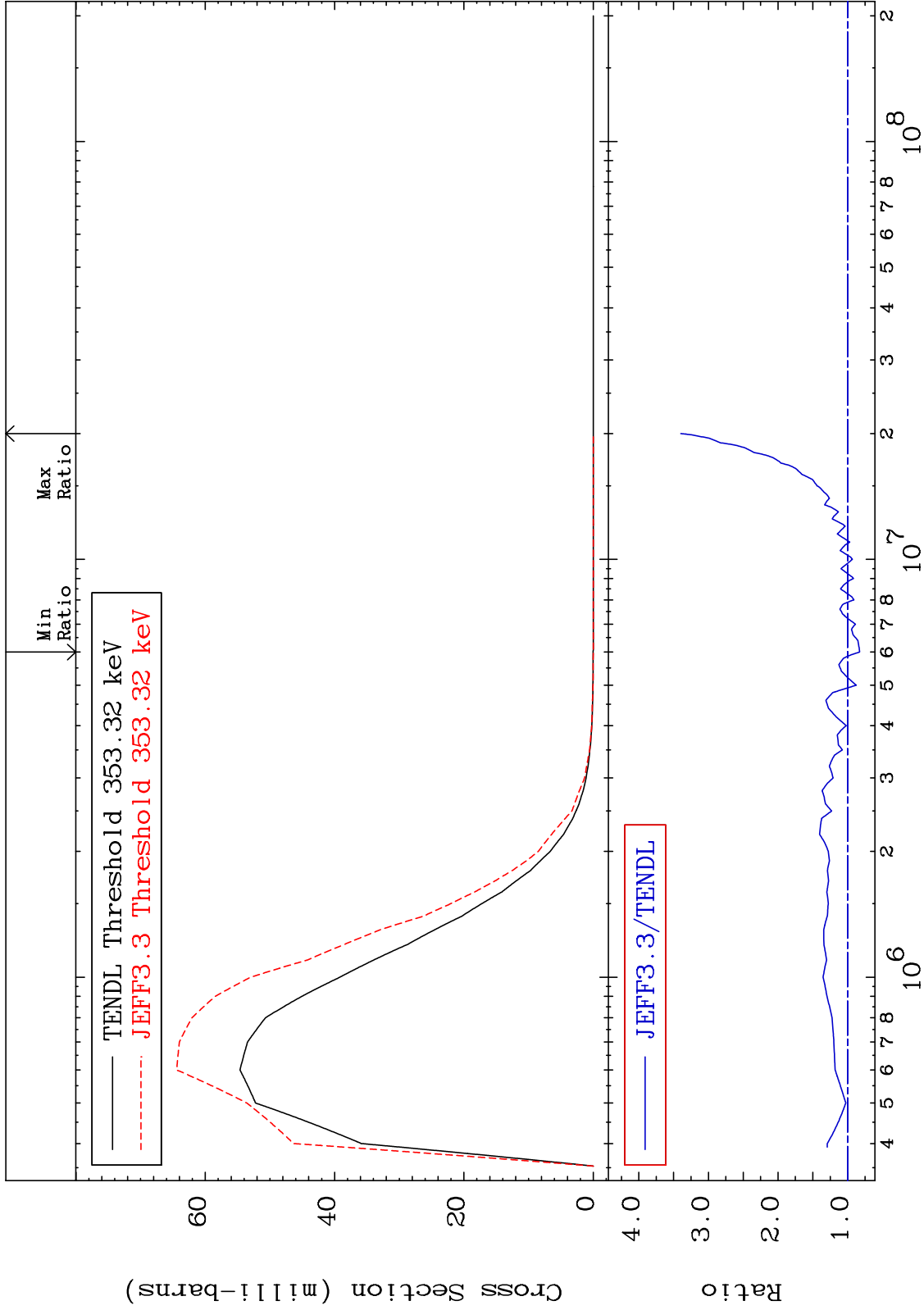
MAT 6646 MT= 56 (n,n') Level Cross Section -17.39 To 232.3 % 66-Dy-163



MAT 6646

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

66-Dy-163
-17.32 To 239.7 %

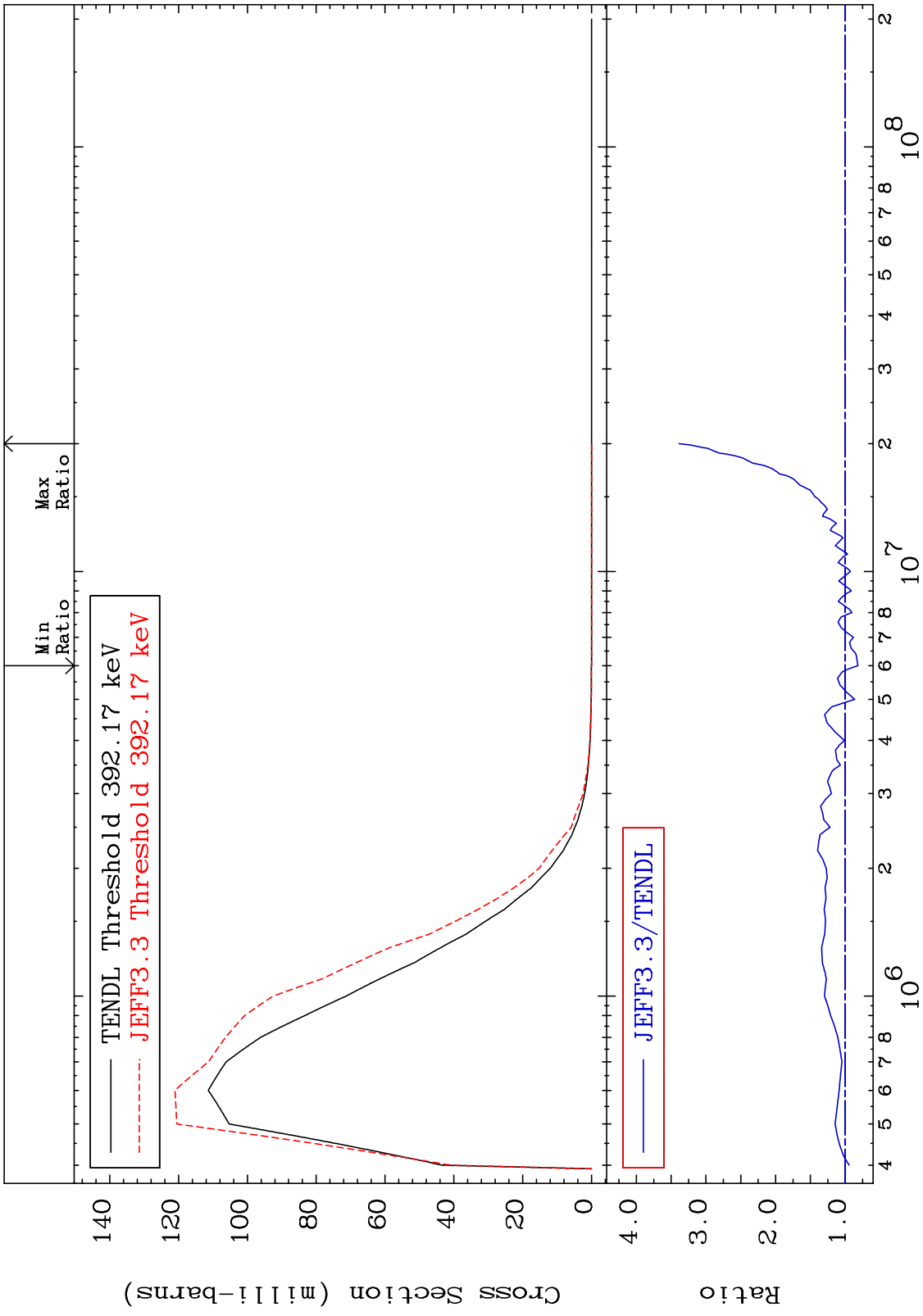


16

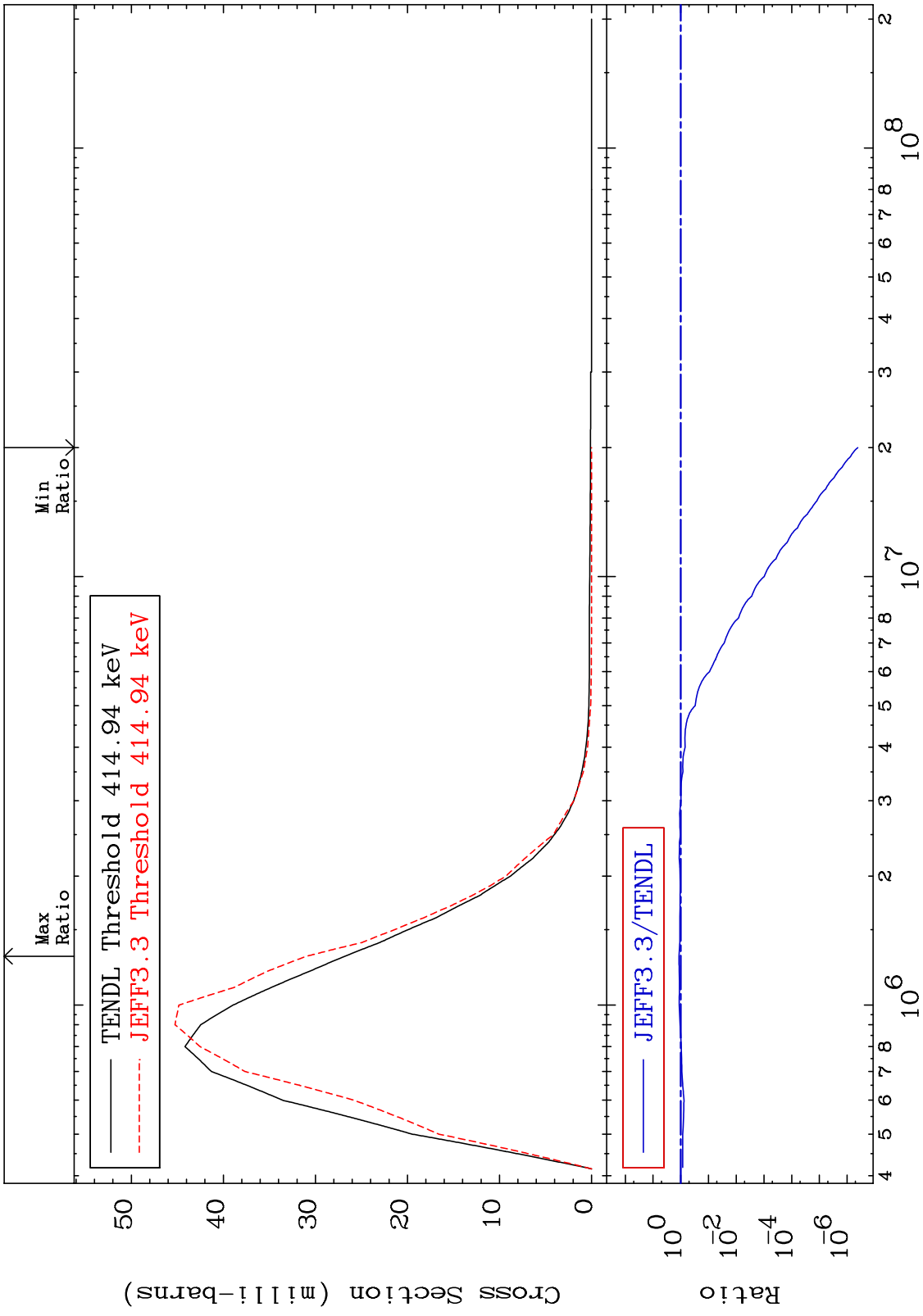
Incident Energy (eV)

66-Dy-163

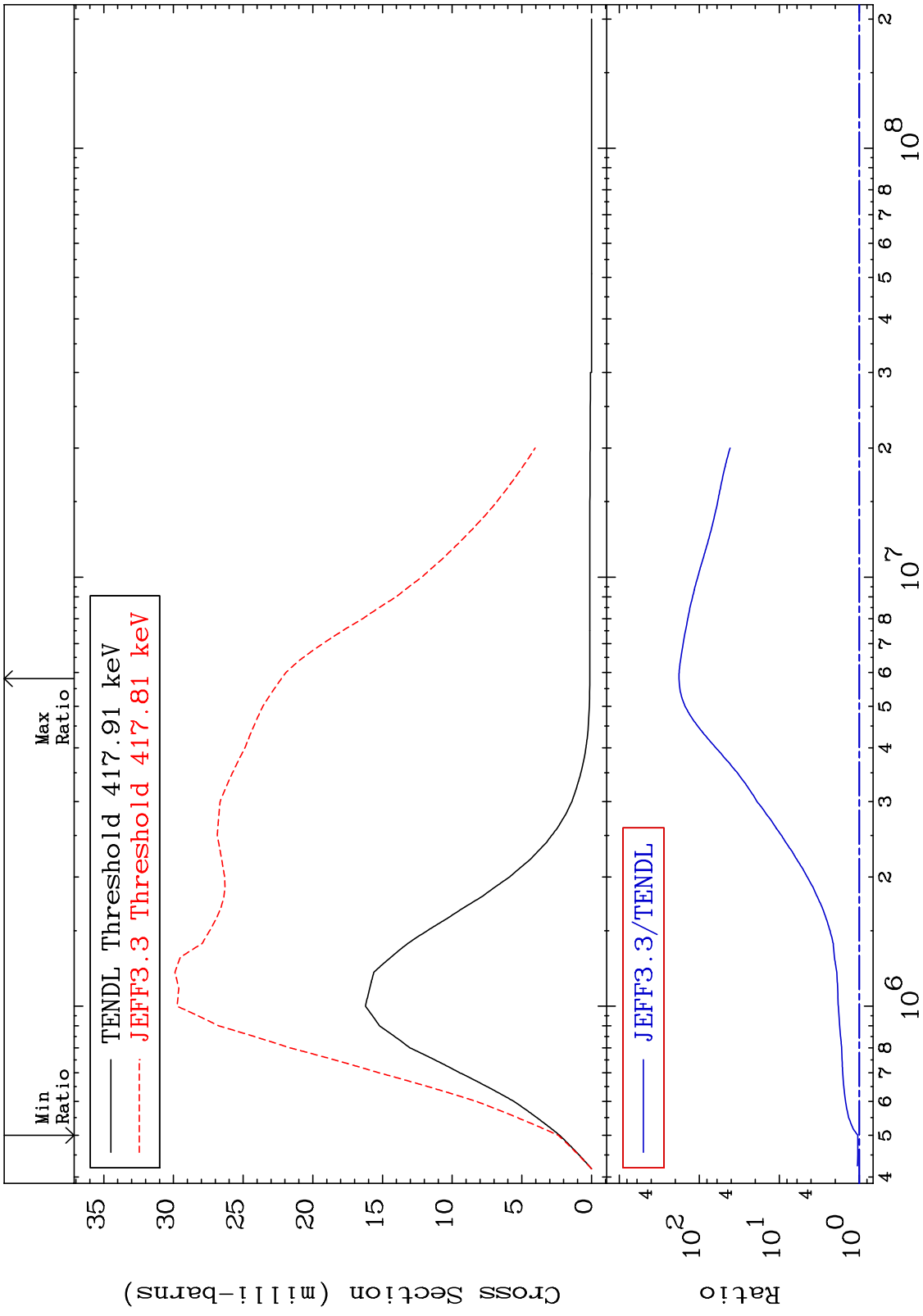
MAT 6646 MT= 58 (n,n') Level Cross Section -18.15 To 238.7 % 66-Dy-163



MAT 6646 MT= 59 (n,n') Level Cross Section 66-Dy-163
 -100.0 To 15.59 %



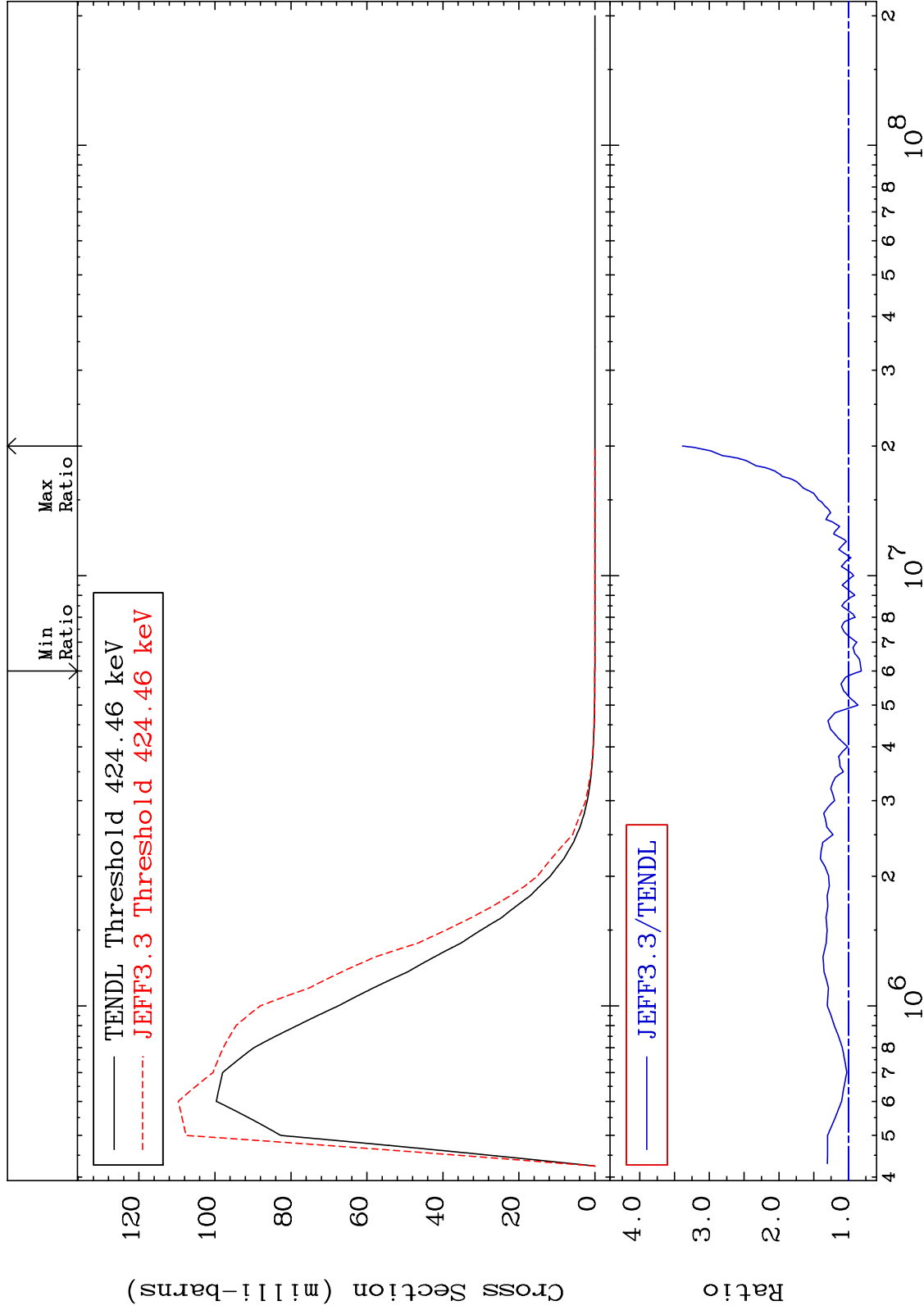
MAT 6646 MT= 60 (n,n') Level Cross Section 66-Dy-163
 4.236 To 9999. %



MAT 6646

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

66-Dy-163
-18.32 To 238.6 %

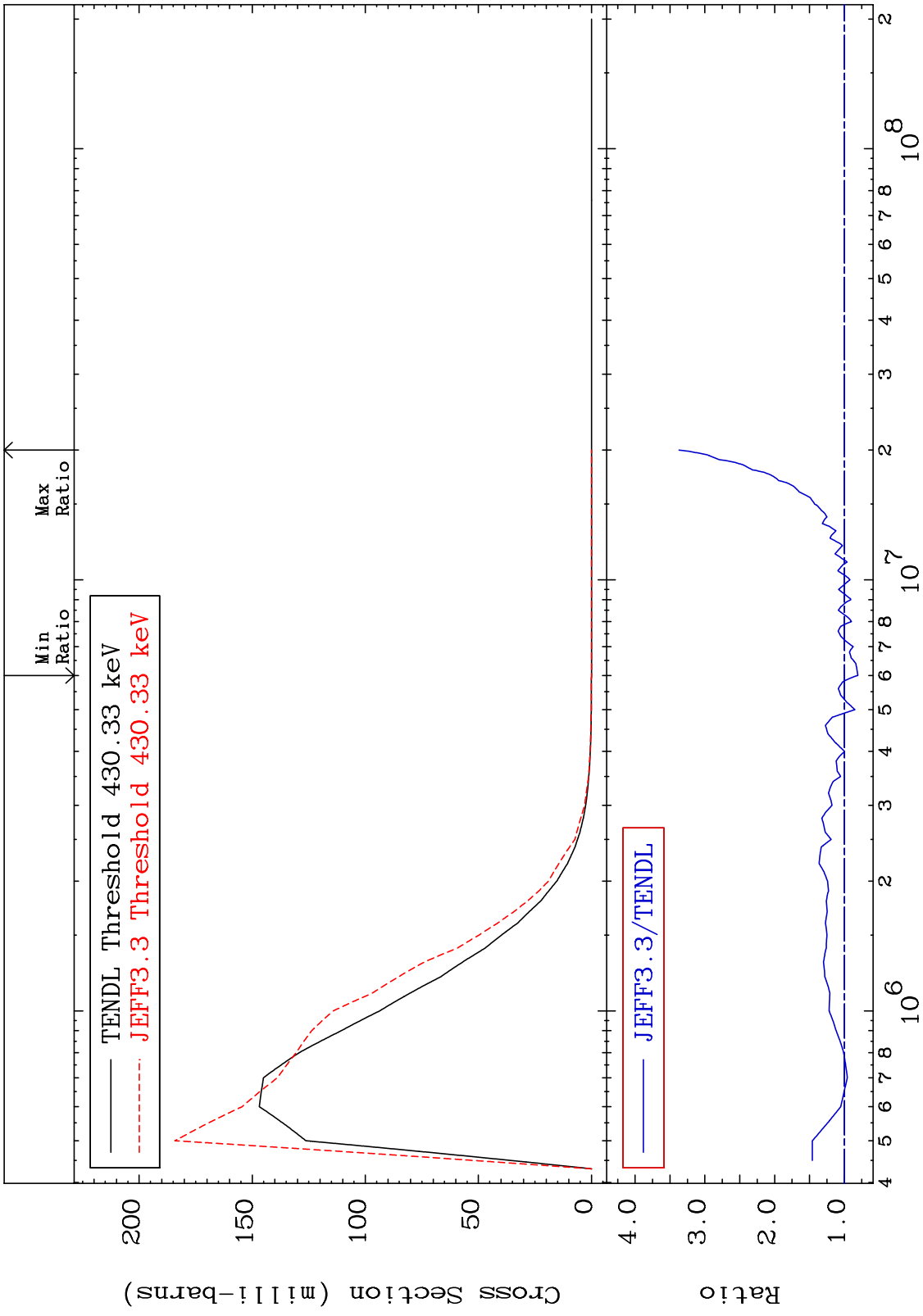


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Incident Energy (eV)

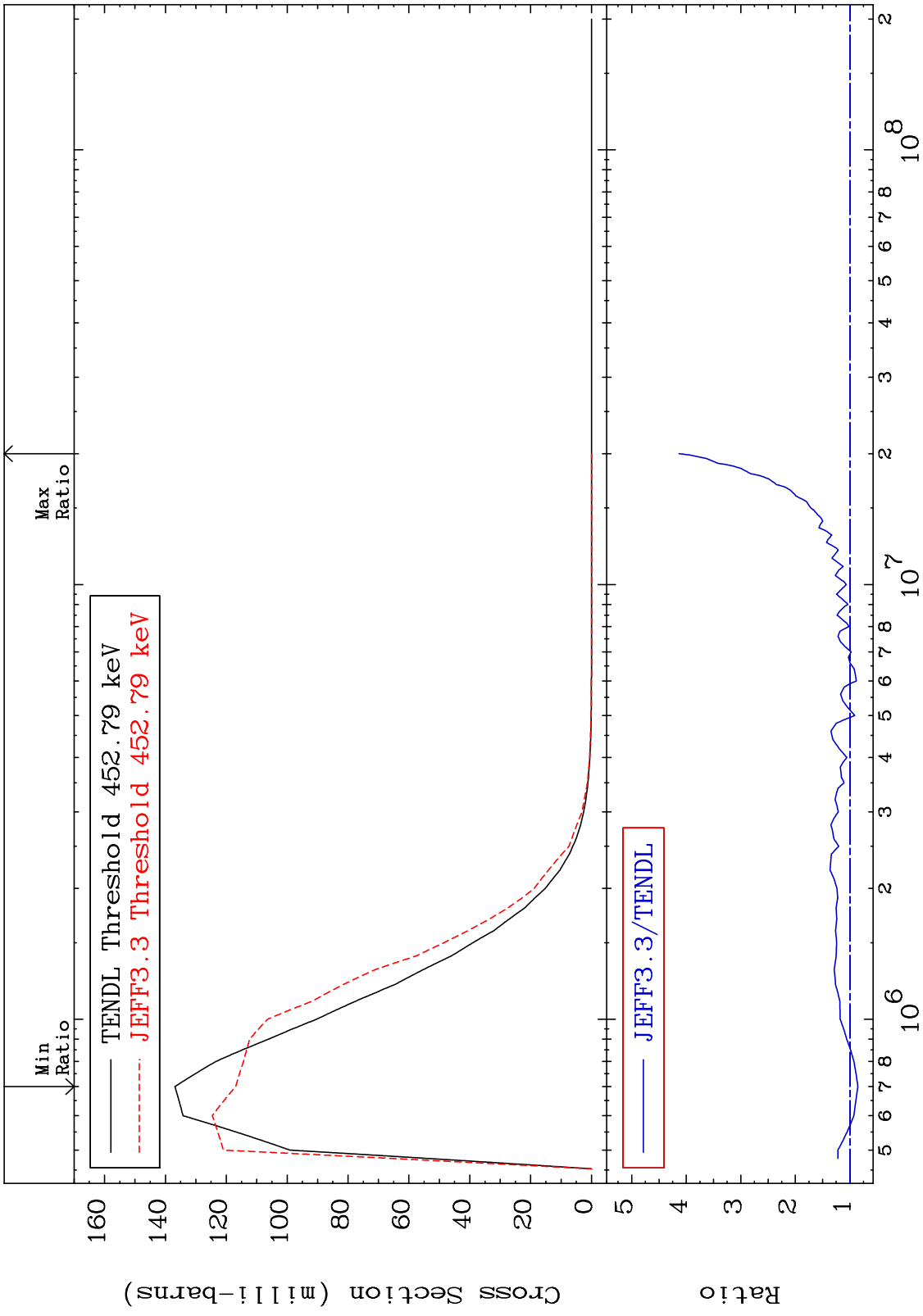
66-Dy-163

MAT 6646 MT= 62 (n,n') Level Cross Section 66-Dy-163
 -19.30 To 237.0 %

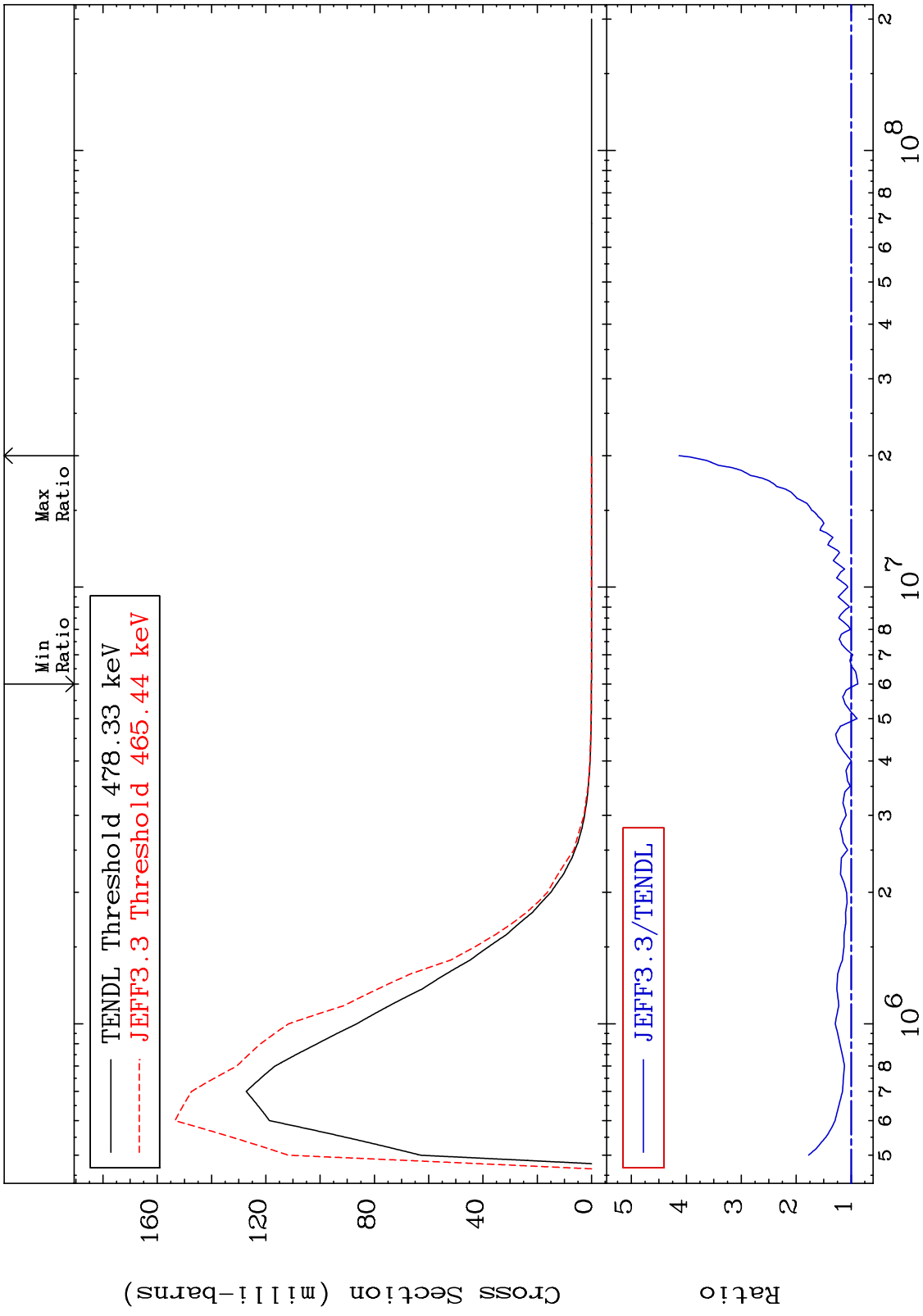


21 66-Dy-163

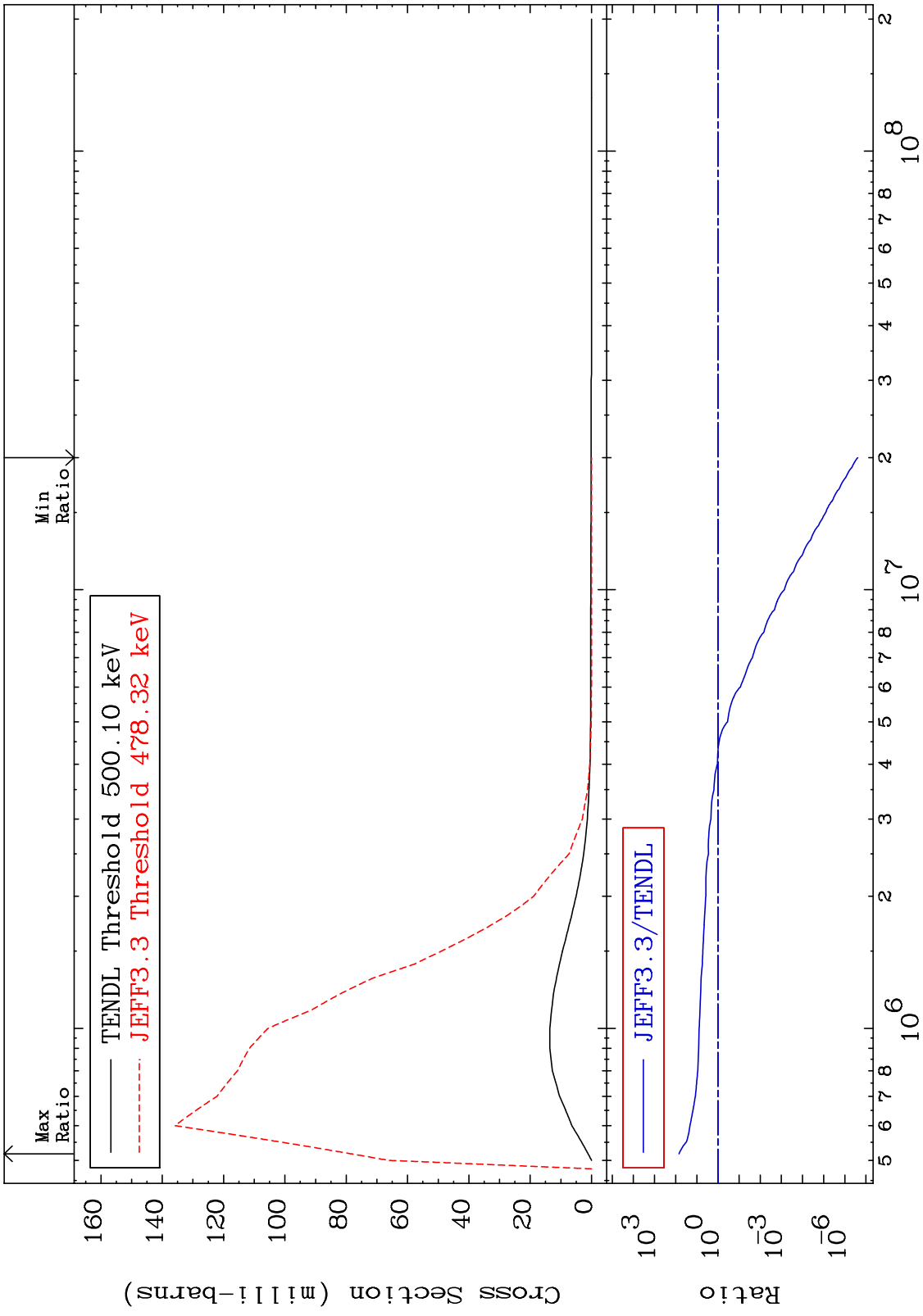
MAT 6646 MT= 63 (n,n') Level Cross Section 66-Dy-163
 -14.57 To 313.2 %



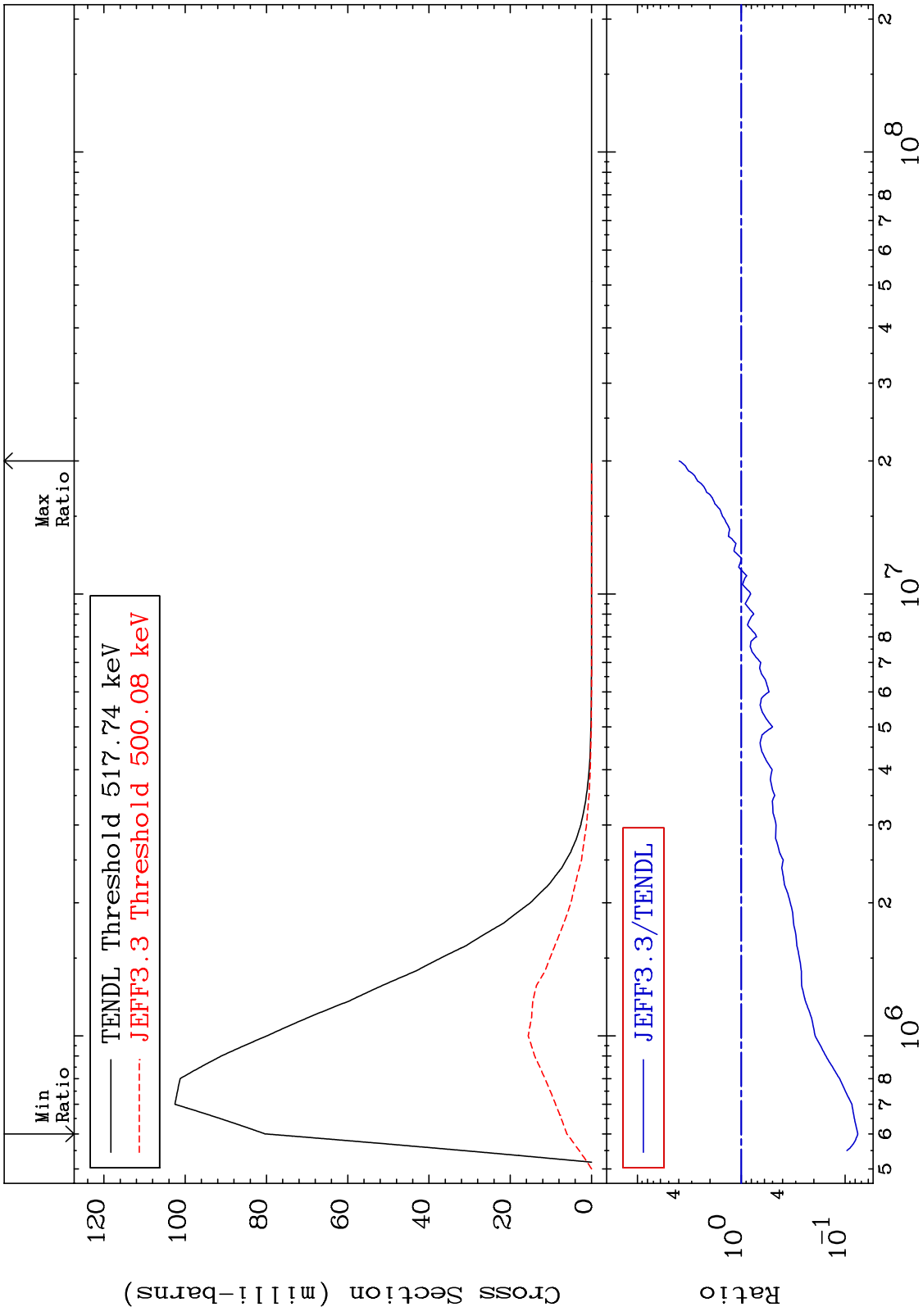
MAT 6646 MT= 64 (n,n') Level Cross Section 66-Dy-163
 -12.16 To 313.3 %



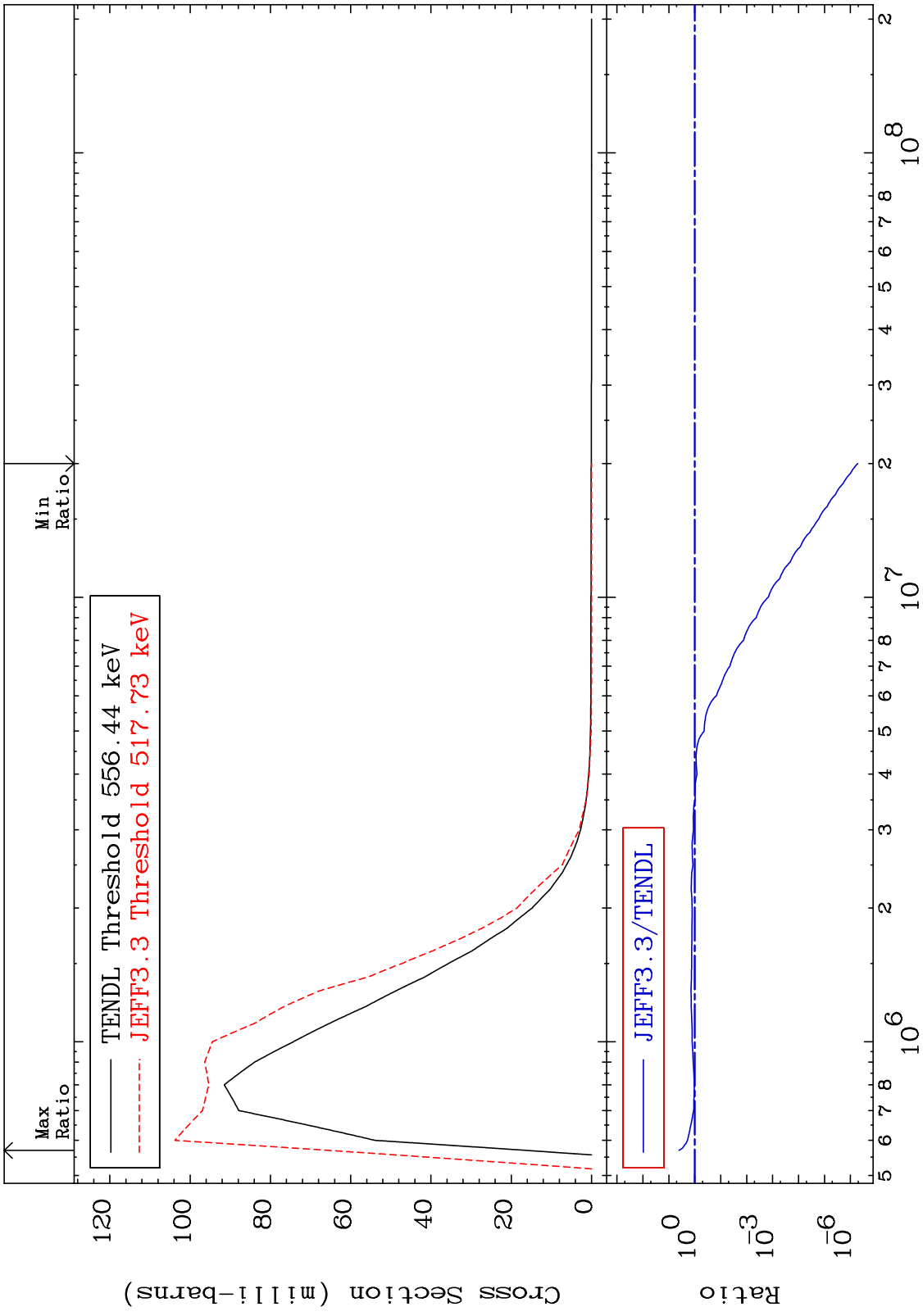
MAT 6646 MT= 65 (n,n') Level Cross Section 66-Dy-163
 -100.0 To 6830. %



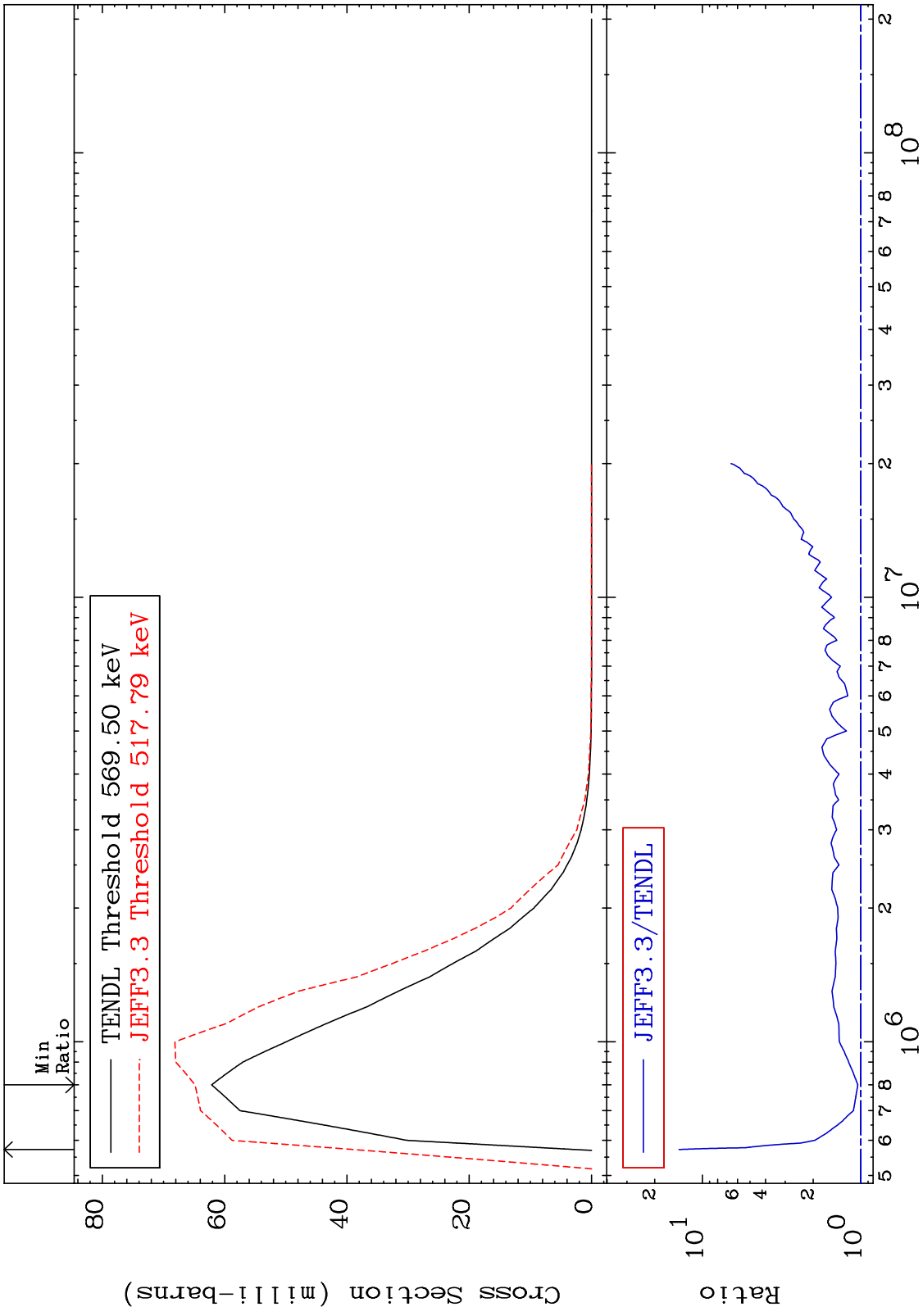
MAT 6646 MT= 66 (n,n') Level Cross Section 66-Dy-163
 -92.44 To 297.2 %



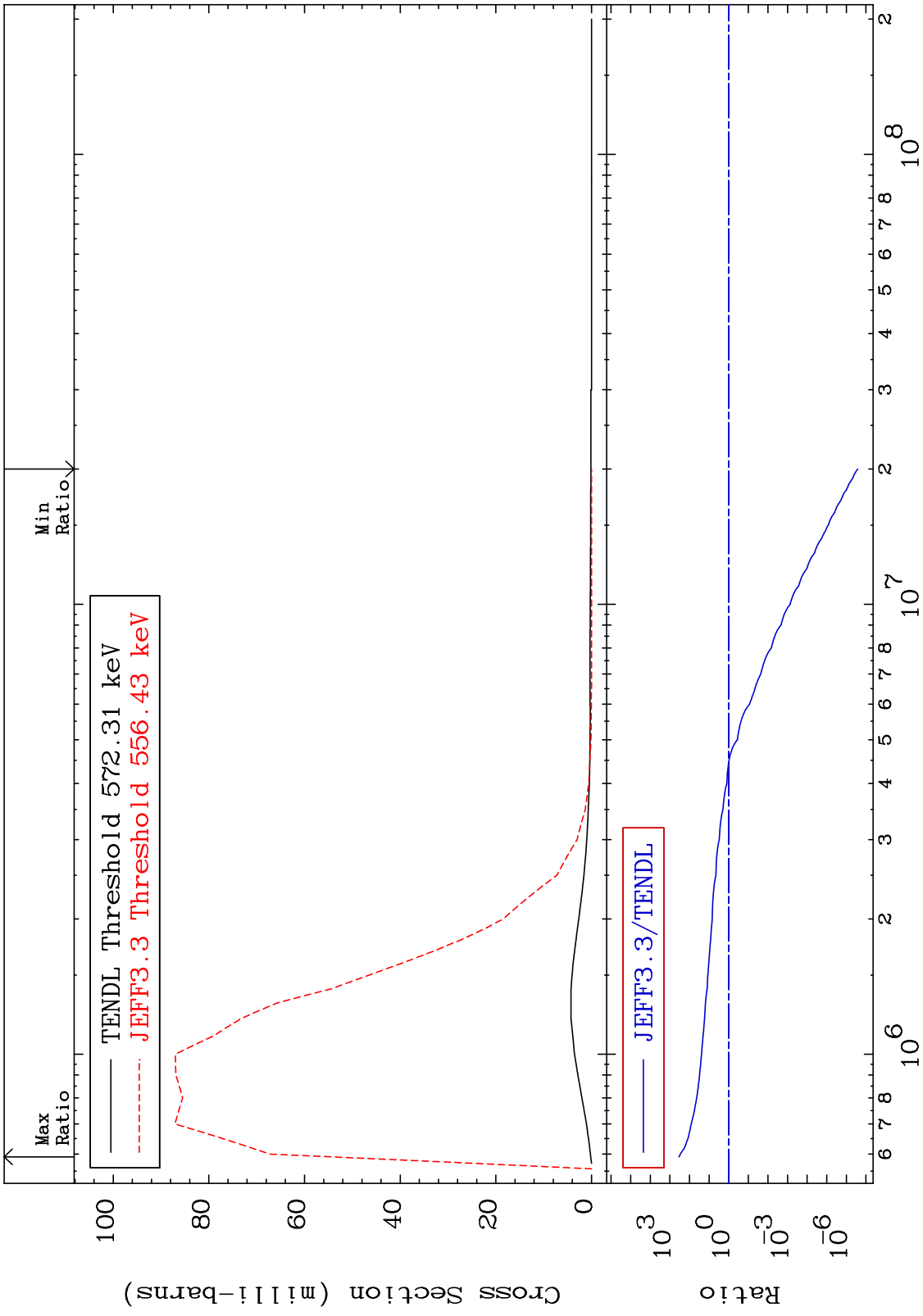
MAT 6646 MT= 67 (n,n') Level Cross Section 66-Dy-163
 -100.0 To 303.9 %



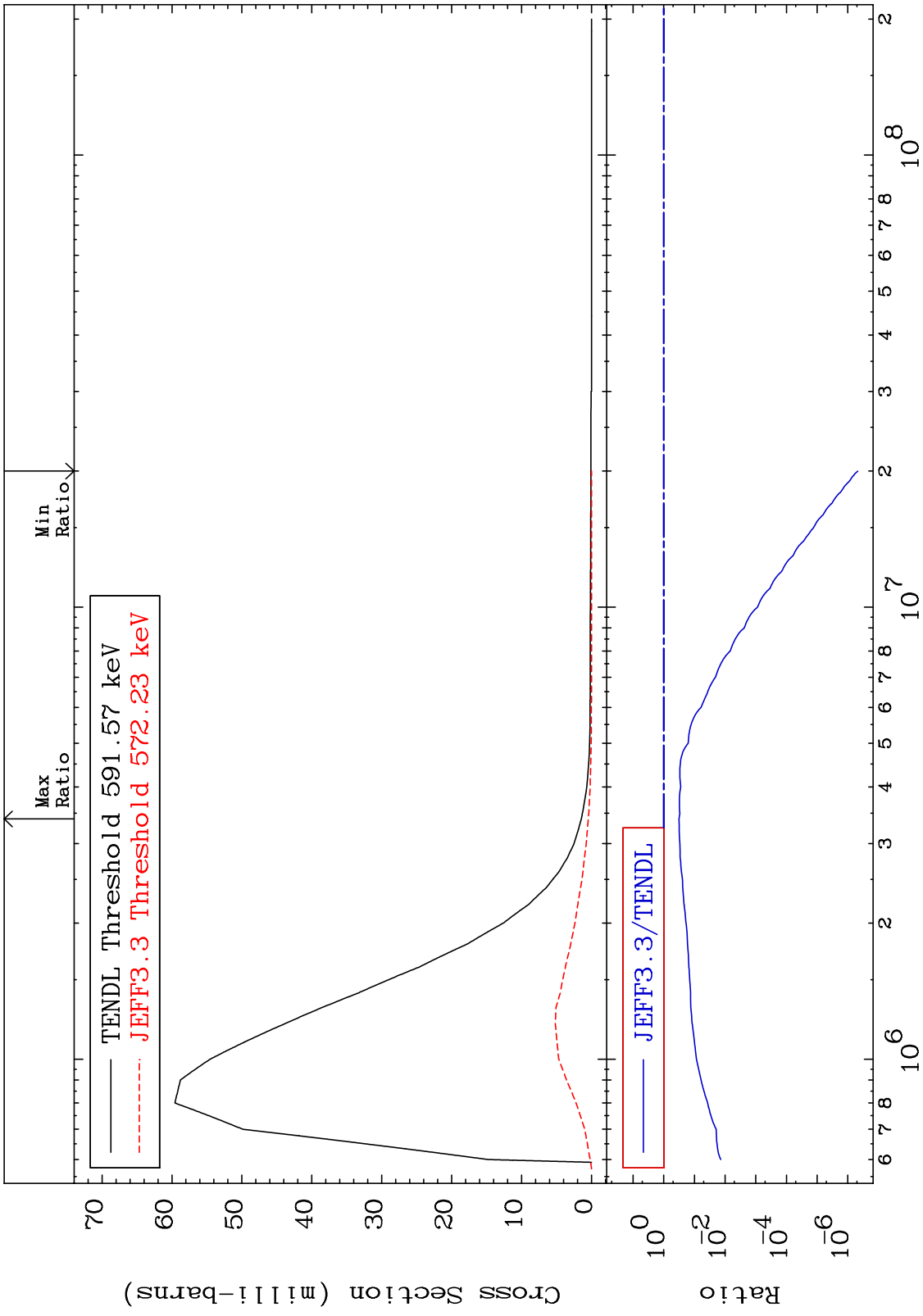
MAT 6646 MT= 68 (n,n') Level Cross Section 66-Dy-163 4.355 To 1305. %



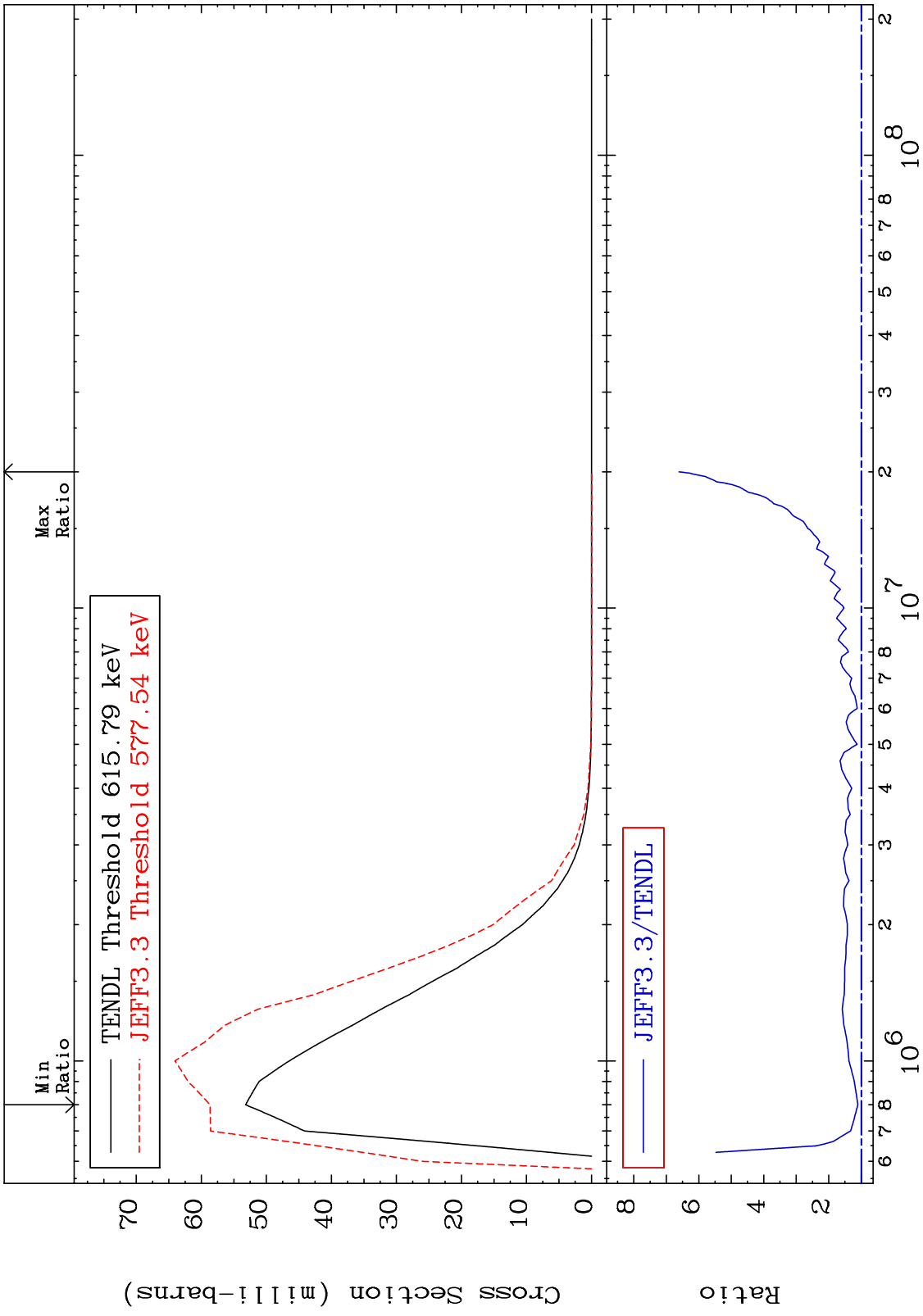
MAT 6646 MT= 69 (n,n') Level Cross Section 66-Dy-163
 -100.0 To 9999. %



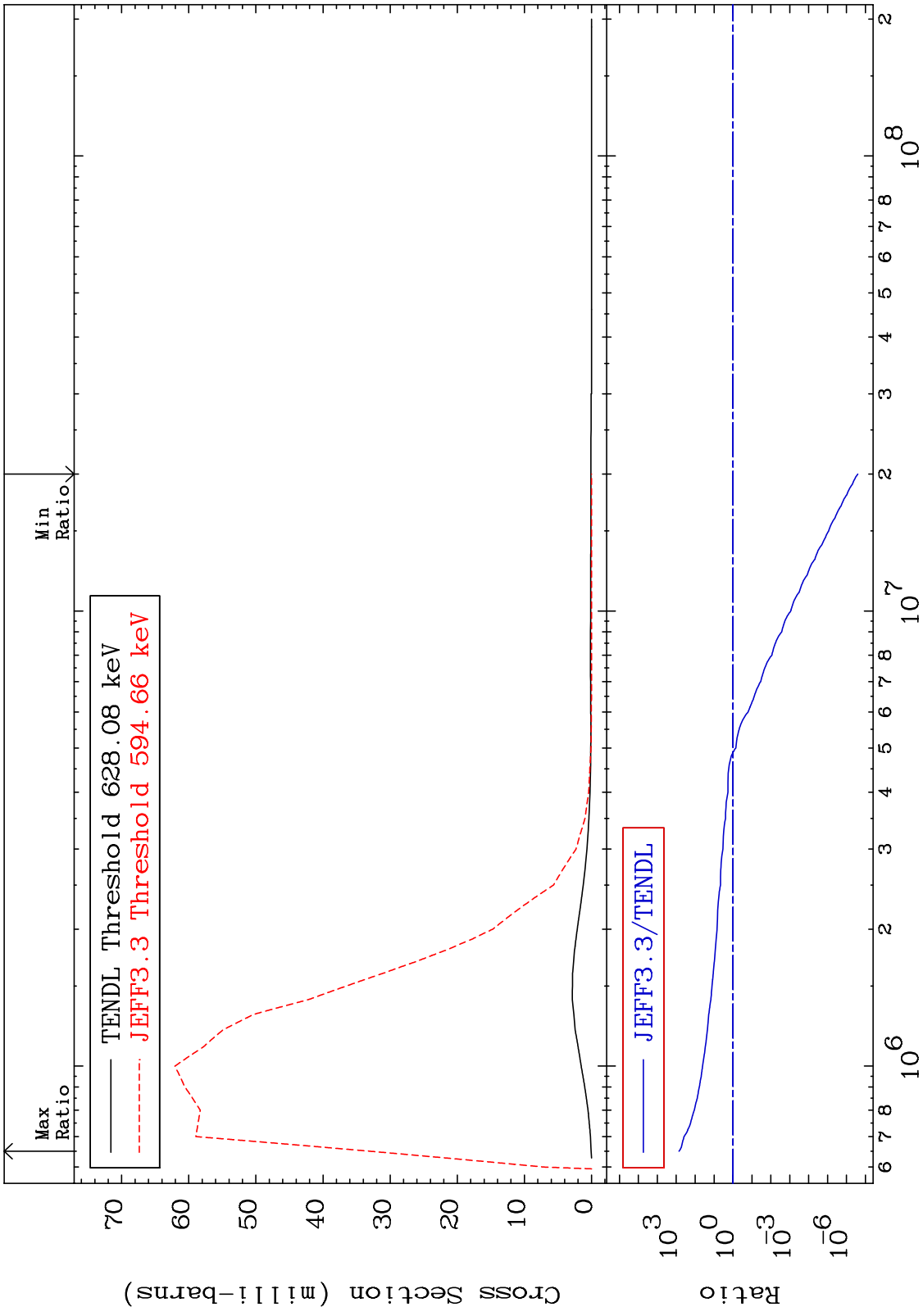
MAT 6646 MT= 70 (n,n') Level Cross Section 66-Dy-163
 -100.0 To -68.26%



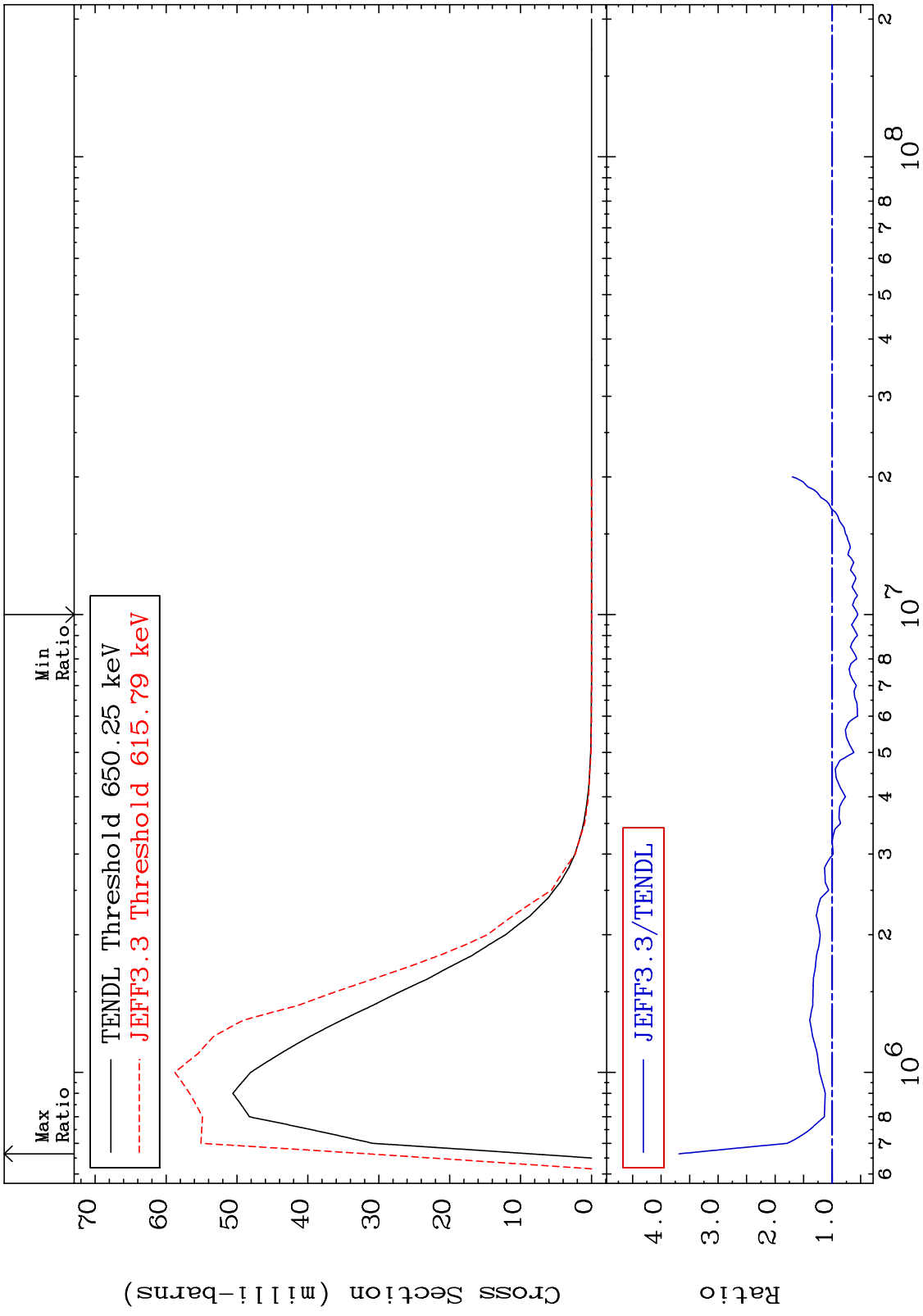
MAT 6646 MT= 71 (n,n') Level Cross Section 66-Dy-163
 10.30 To 560.8 %



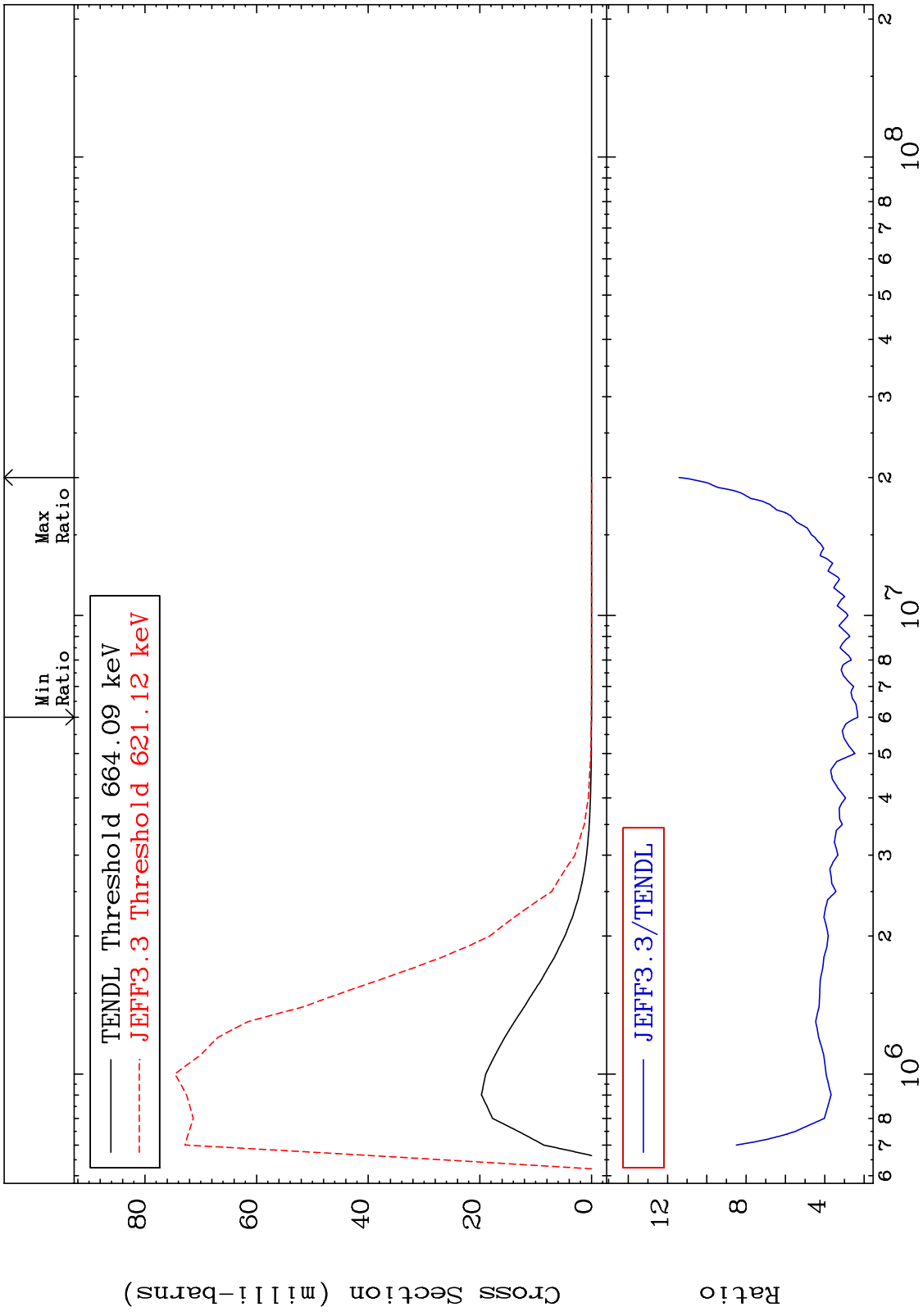
MAT 6646 MT= 72 (n,n') Level Cross Section 66-Dy-163
 -100.0 To 9999. %



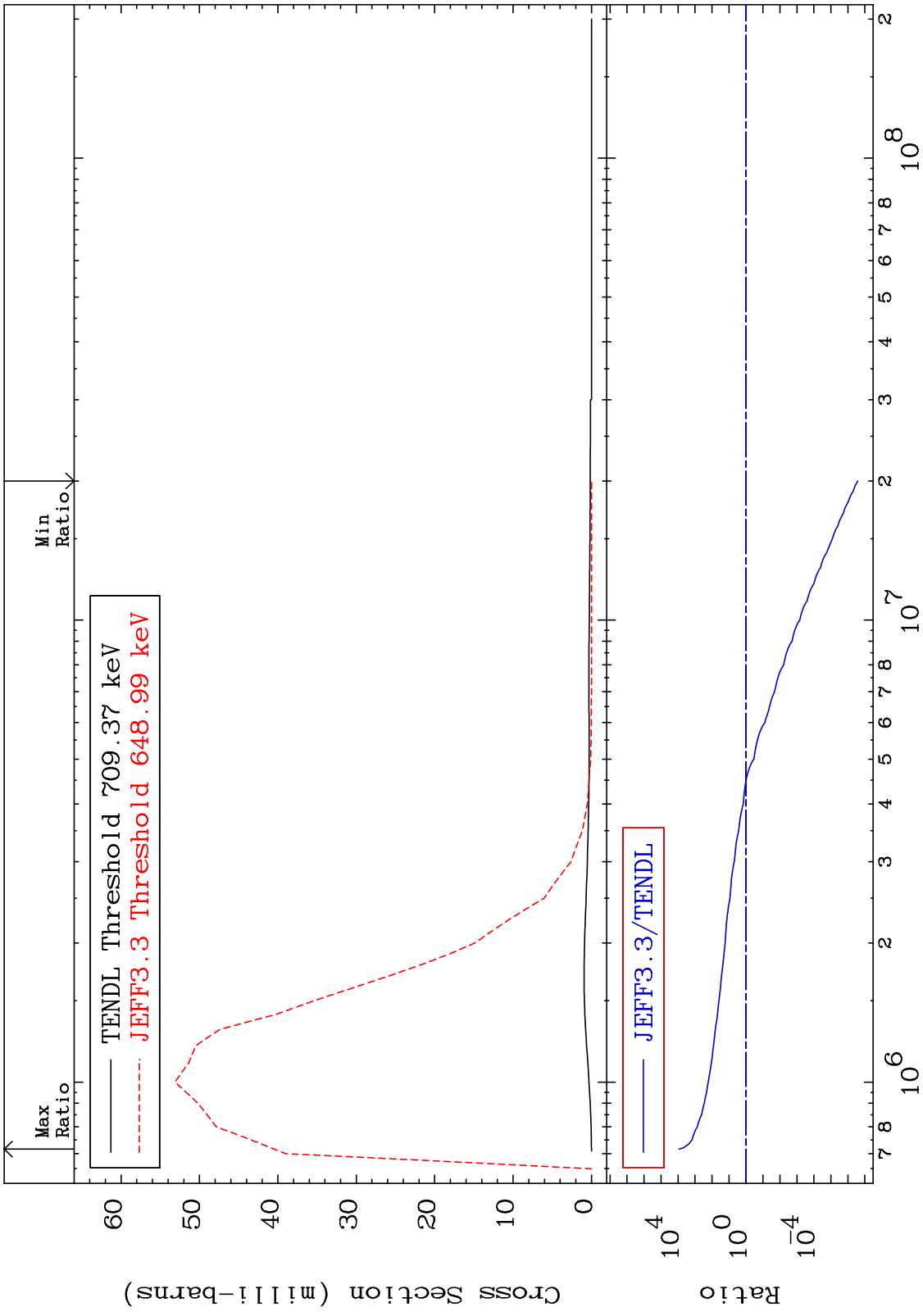
MAT 6646 MT= 73 (n,n') Level 66-Dy-163
 Cross Section -45.00 To 268.5 %



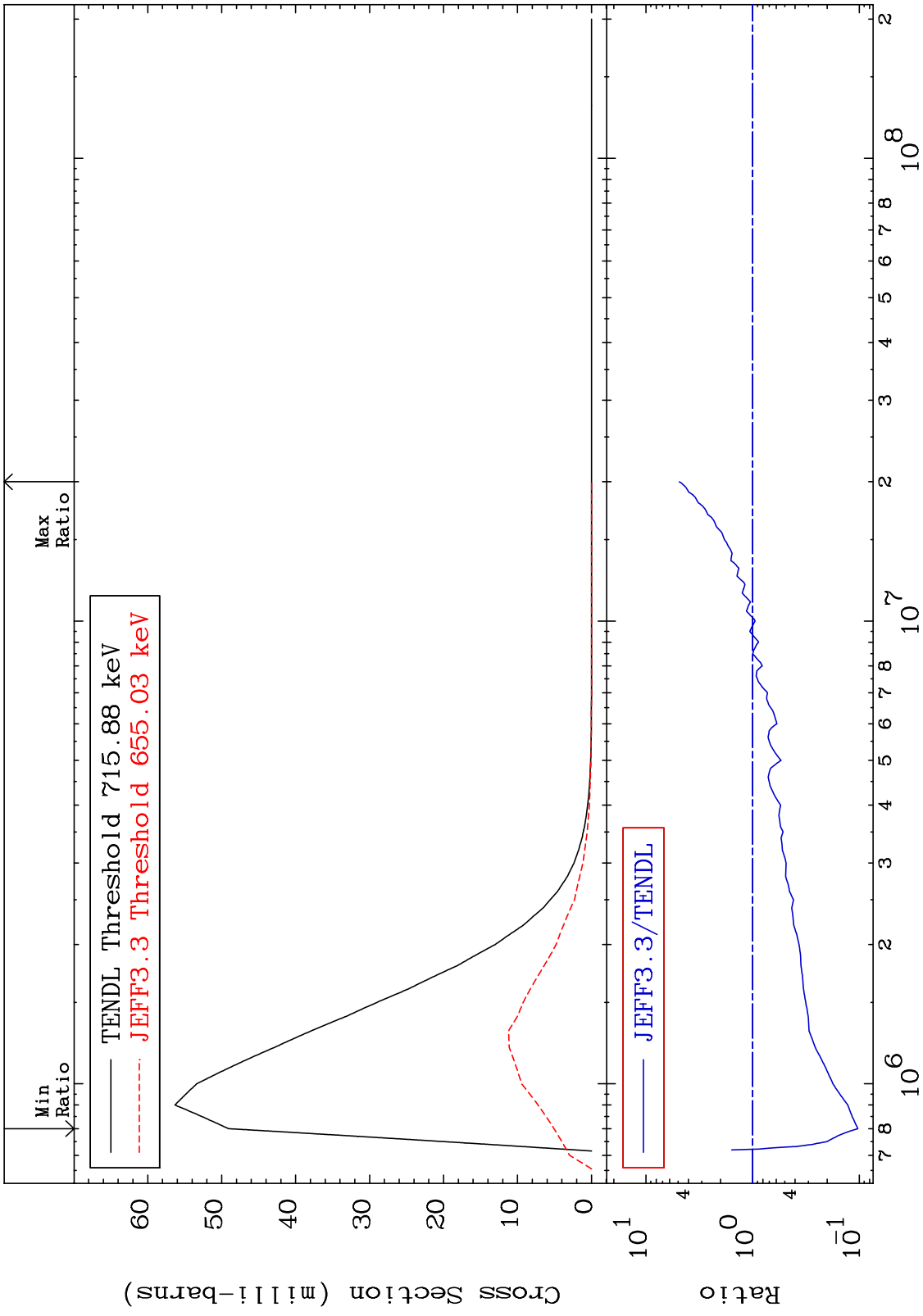
MAT 6646 MT= 74 (n,n') Level Cross Section 66-Dy-163
 131.6 To 1041. %

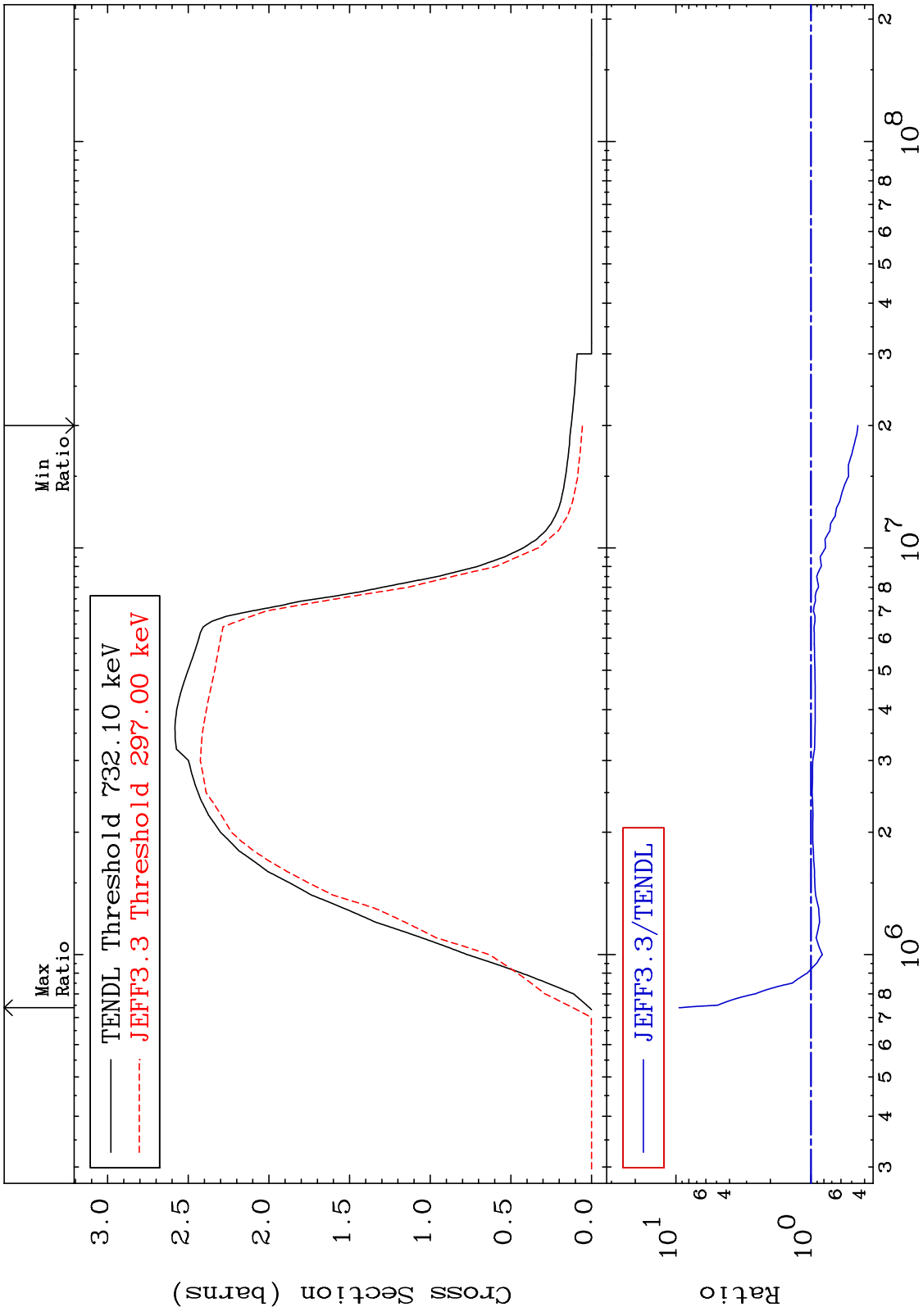


MAT 6646 MT= 75 (n,n') Level 66-Dy-163
 Cross Section -100.0 To 9999. %



MAT 6646 MT= 76 (n,n') Level 66-Dy-163
 Cross Section -89.67 To 390.0 %



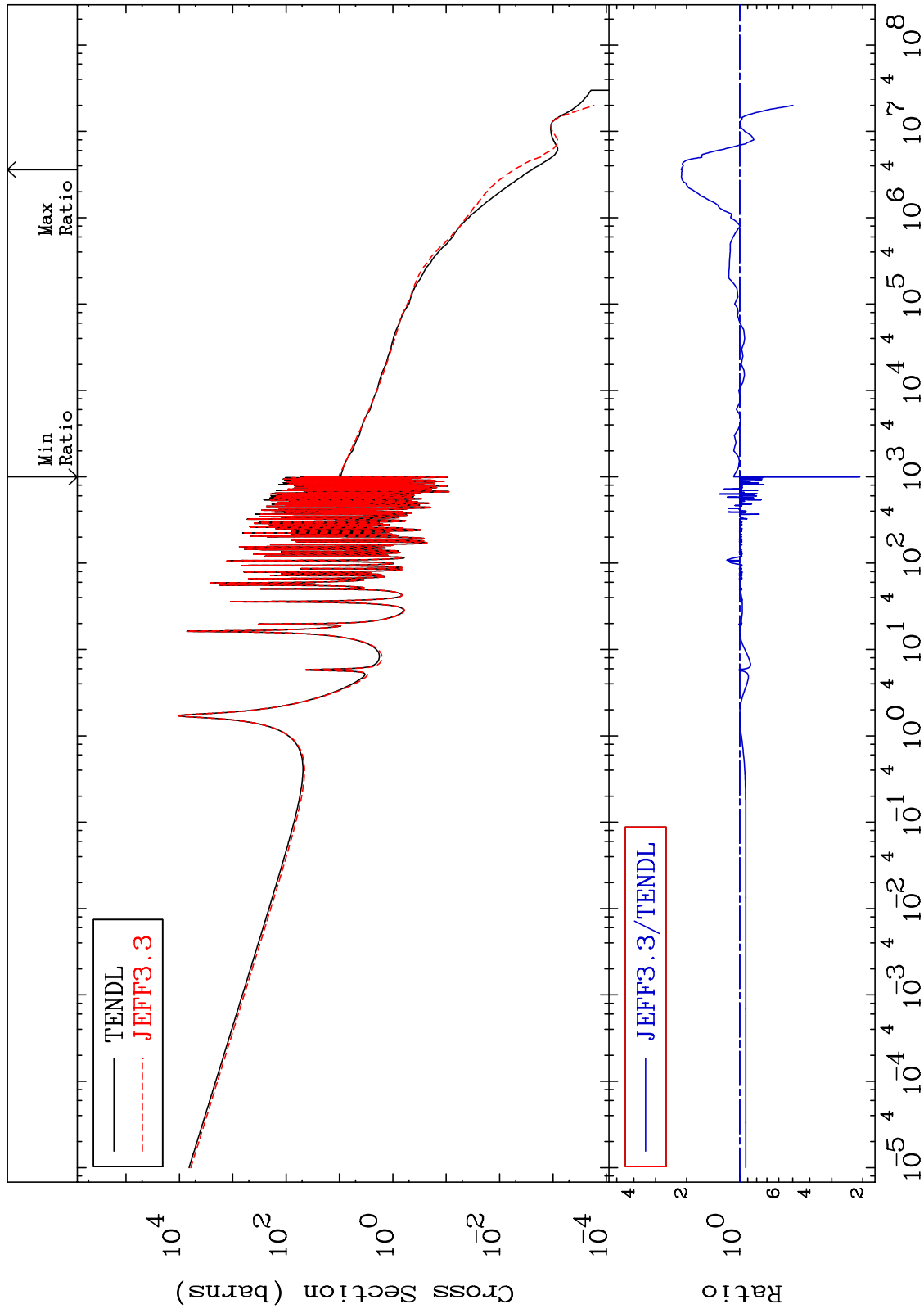


MAT 6646

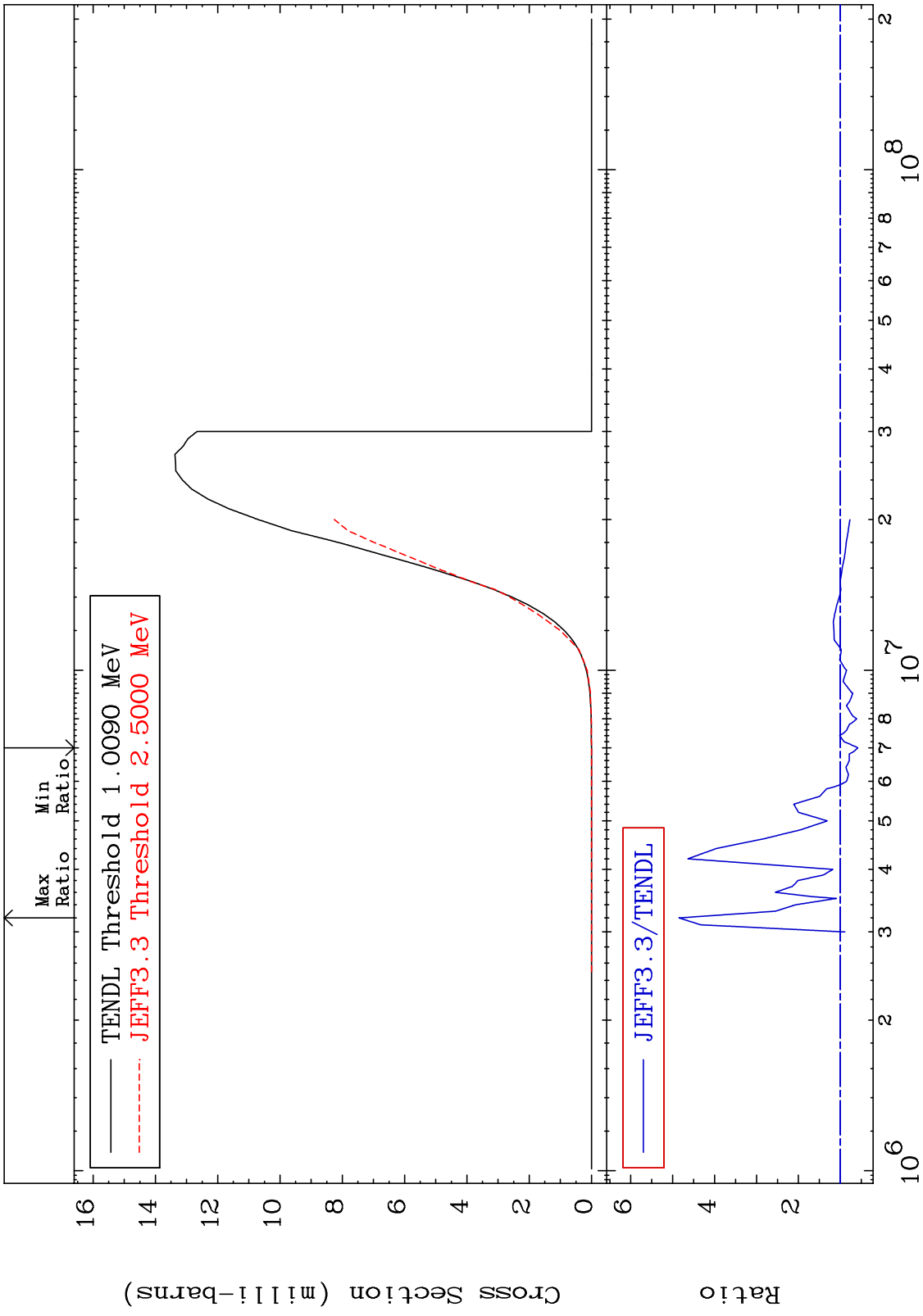
(n, γ)

66-Dy-163

-79.21 To 114.9 %



MAT 6646 (n,p) Cross Section 66-Dy-163
 -41.77 To 384.8 %



38 Incident Energy (eV) 66-Dy-163

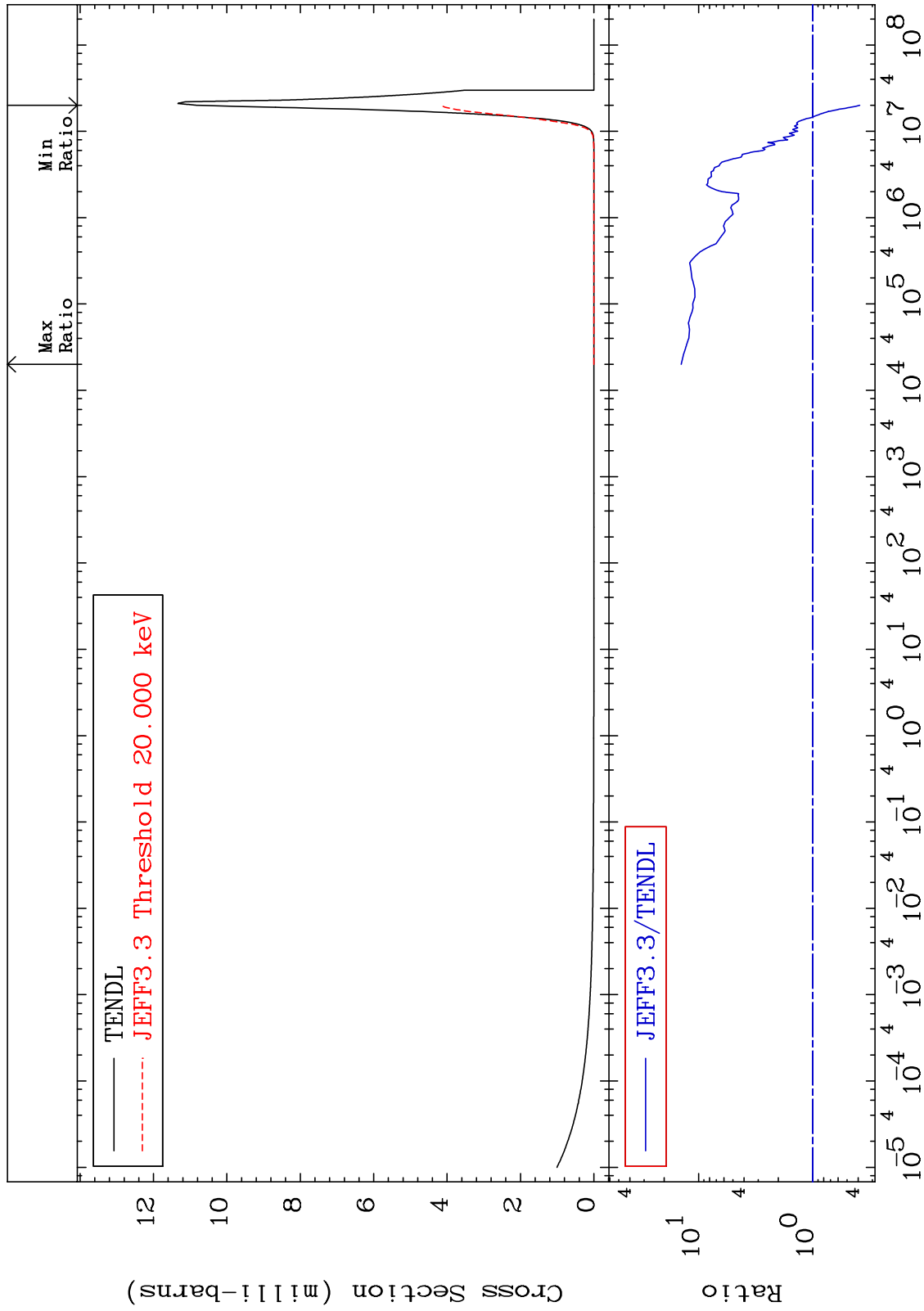
MAT 6646

(n, α)

66-Dy-163

Cross Section

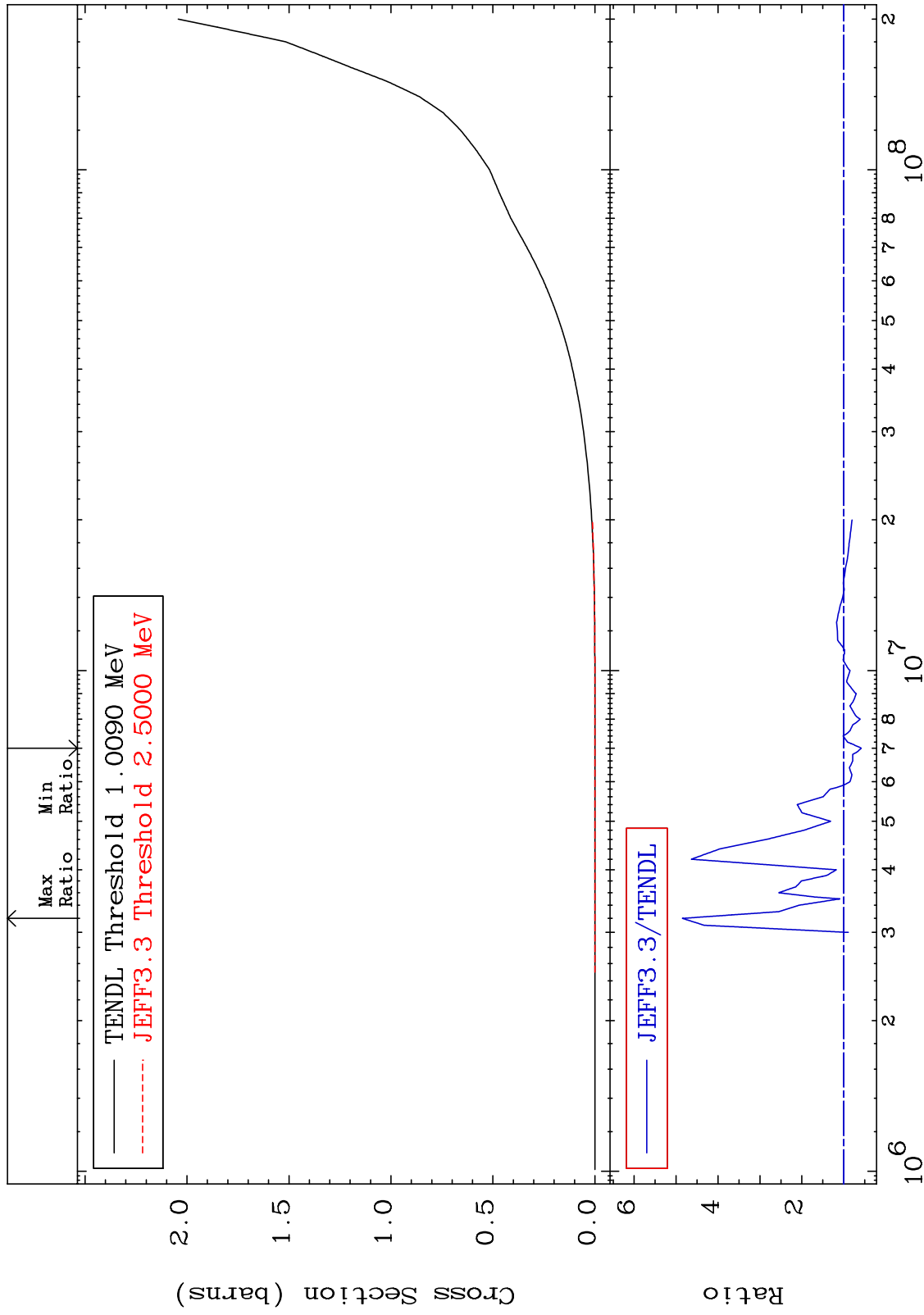
-61.29 To 1318. %



MAT 6646

Hydrogen Production
Cross Section

66-Dy-163
-41.77 To 384.8 %



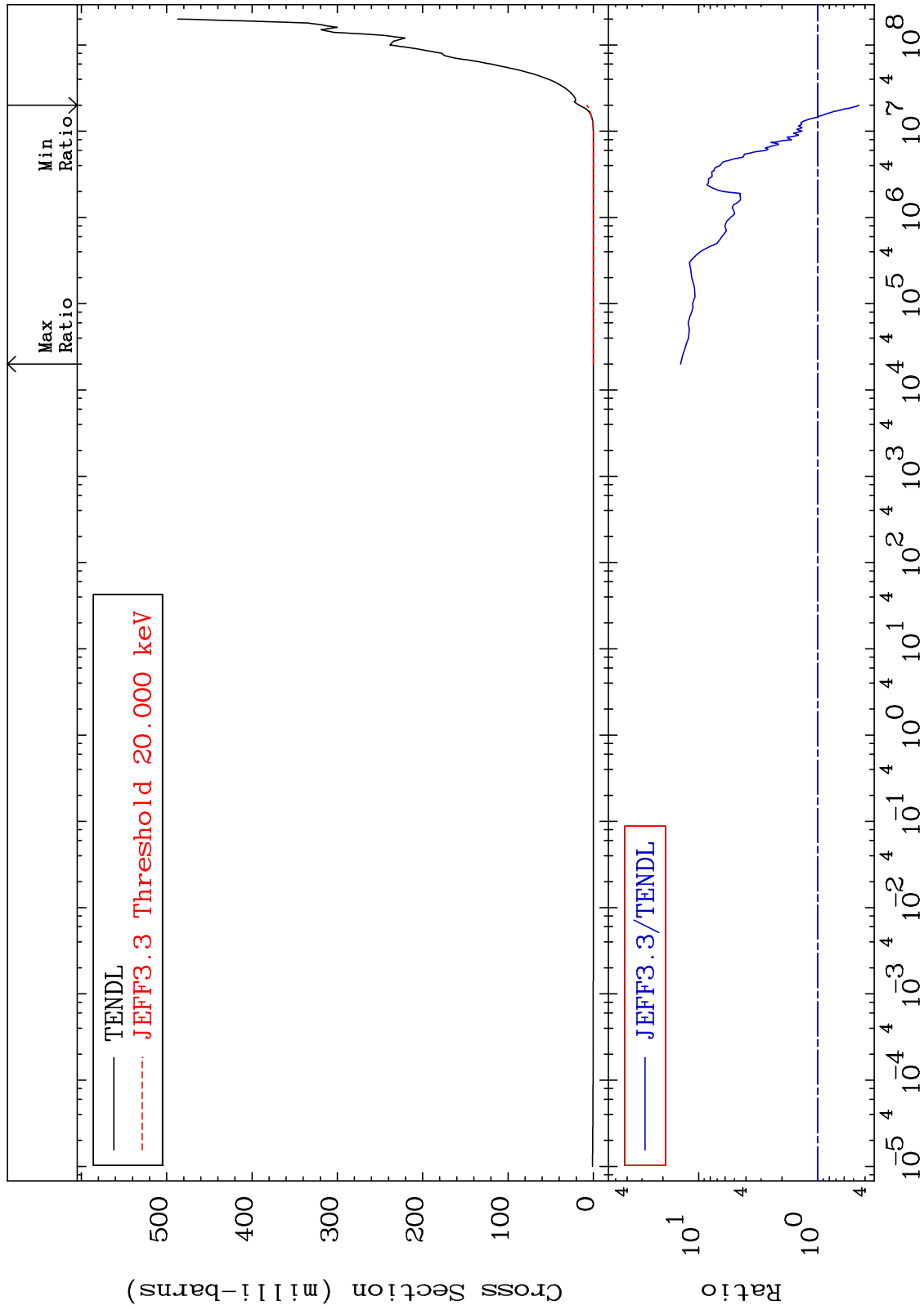
Incident Energy (eV)

66-Dy-163

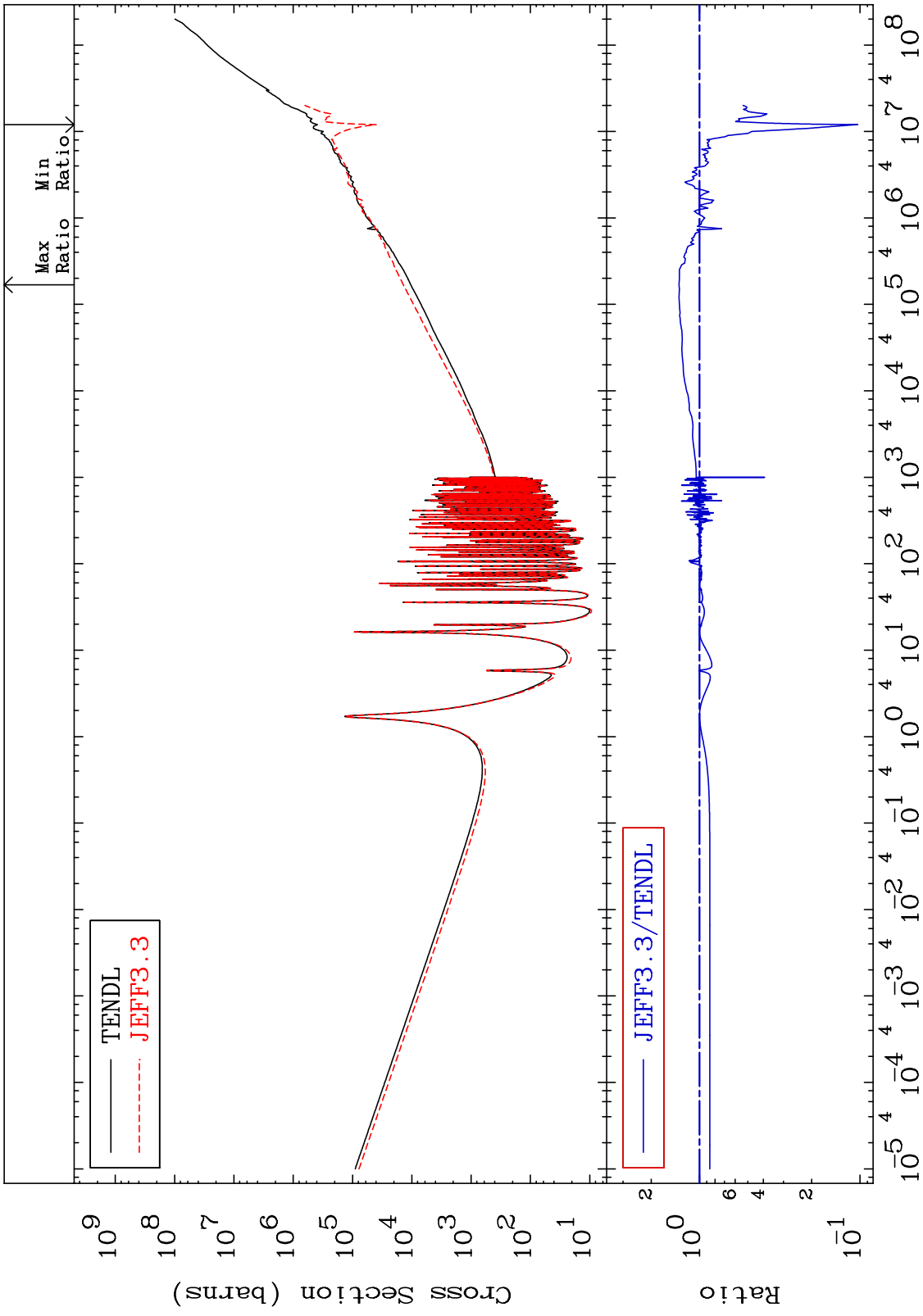
MAT 6646

He-4 Production
Cross Section

66-Dy-163
-55.00 To 1318. %



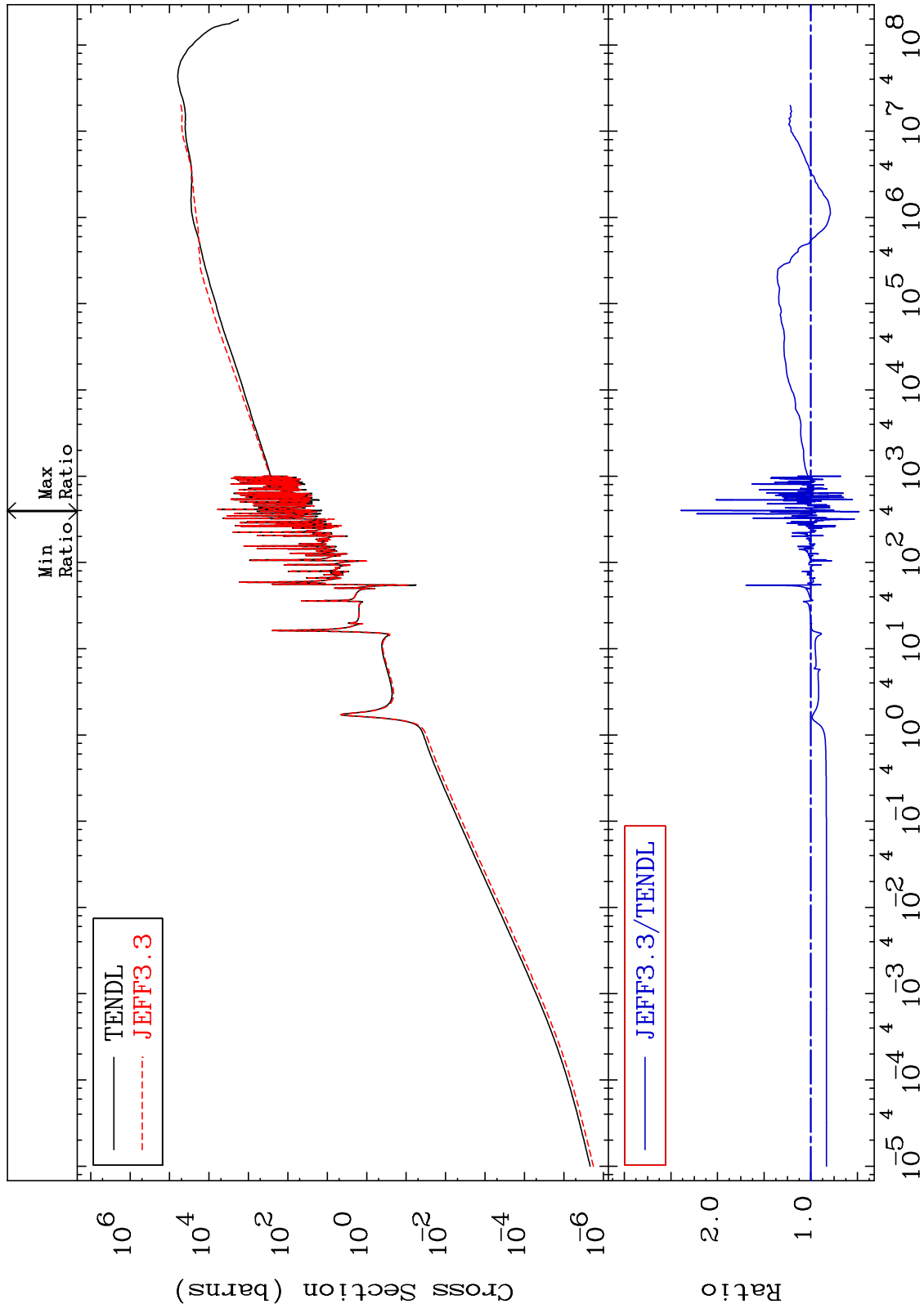
MAT 6646 Kerma total (eV-barns)
 Cross Section 66-Dy-163
 -89.69 To 34.11 %



MAT 6646

Kerma elastic
Cross Section

66-Dy-163
-51.65 To 139.5 %



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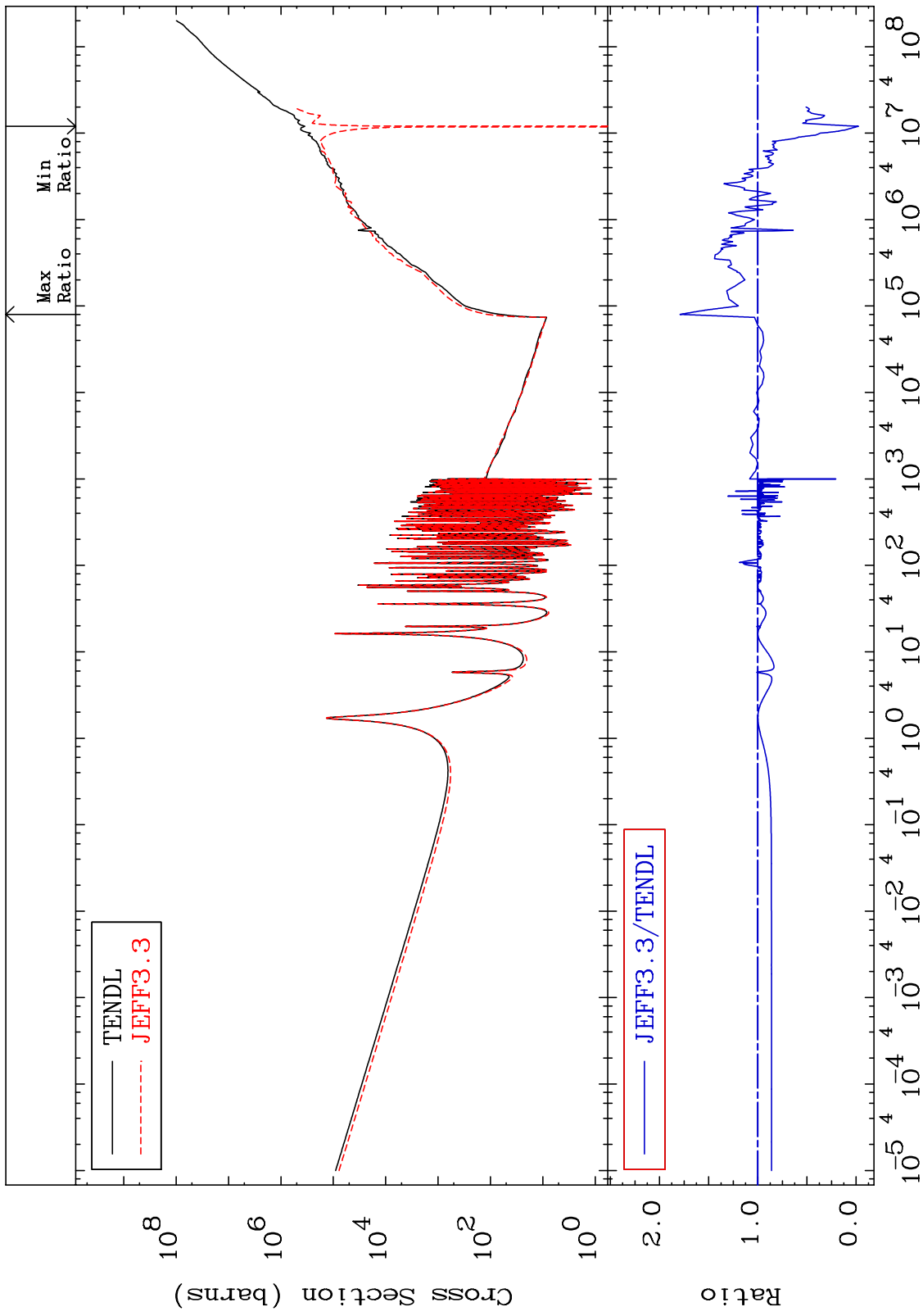
Incident Energy (eV)

66-Dy-163

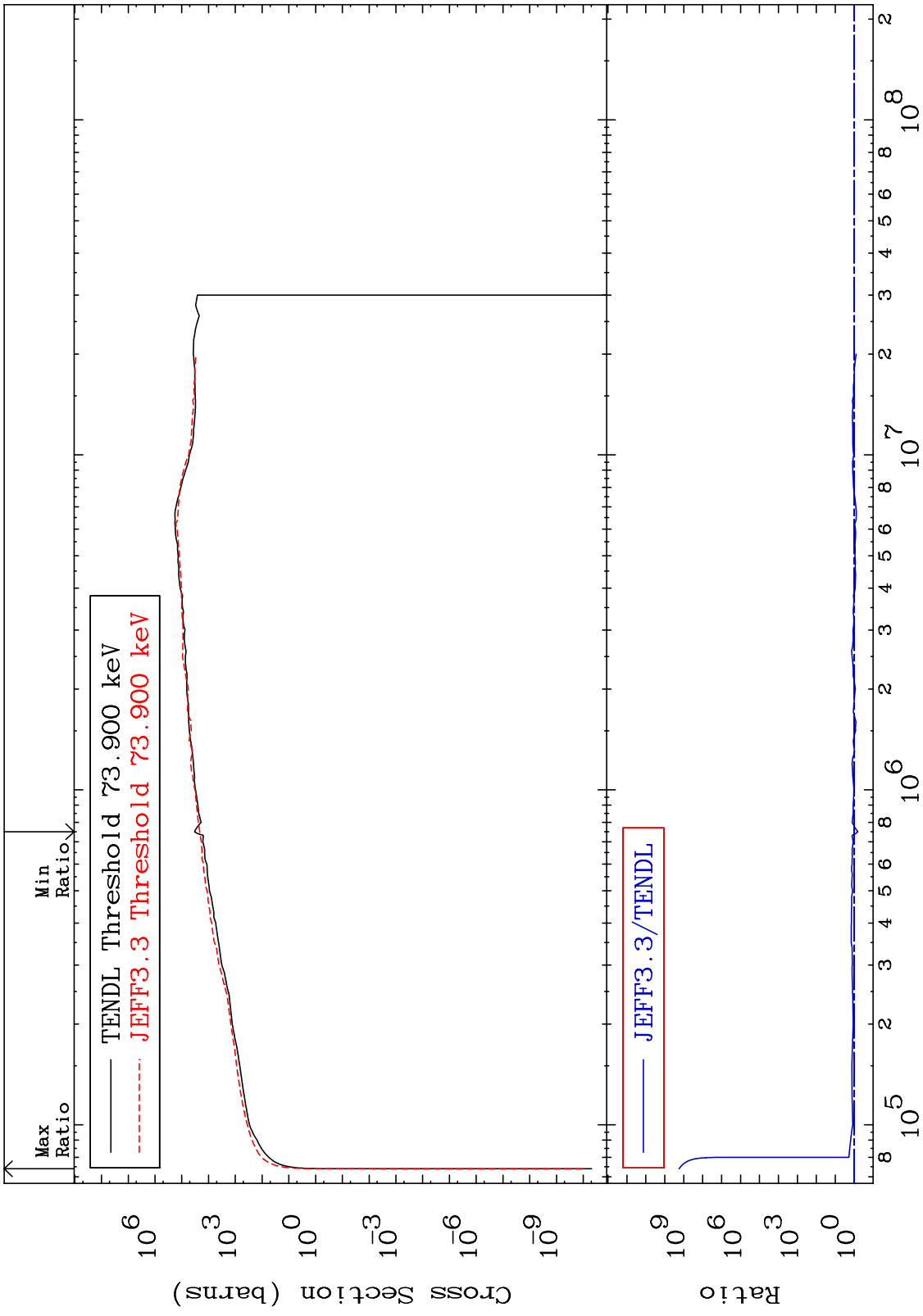
MAT 6646

Kerma non-elastic (all but mt2)
Cross Section

66-Dy-163
-102.7 To 79.10 %



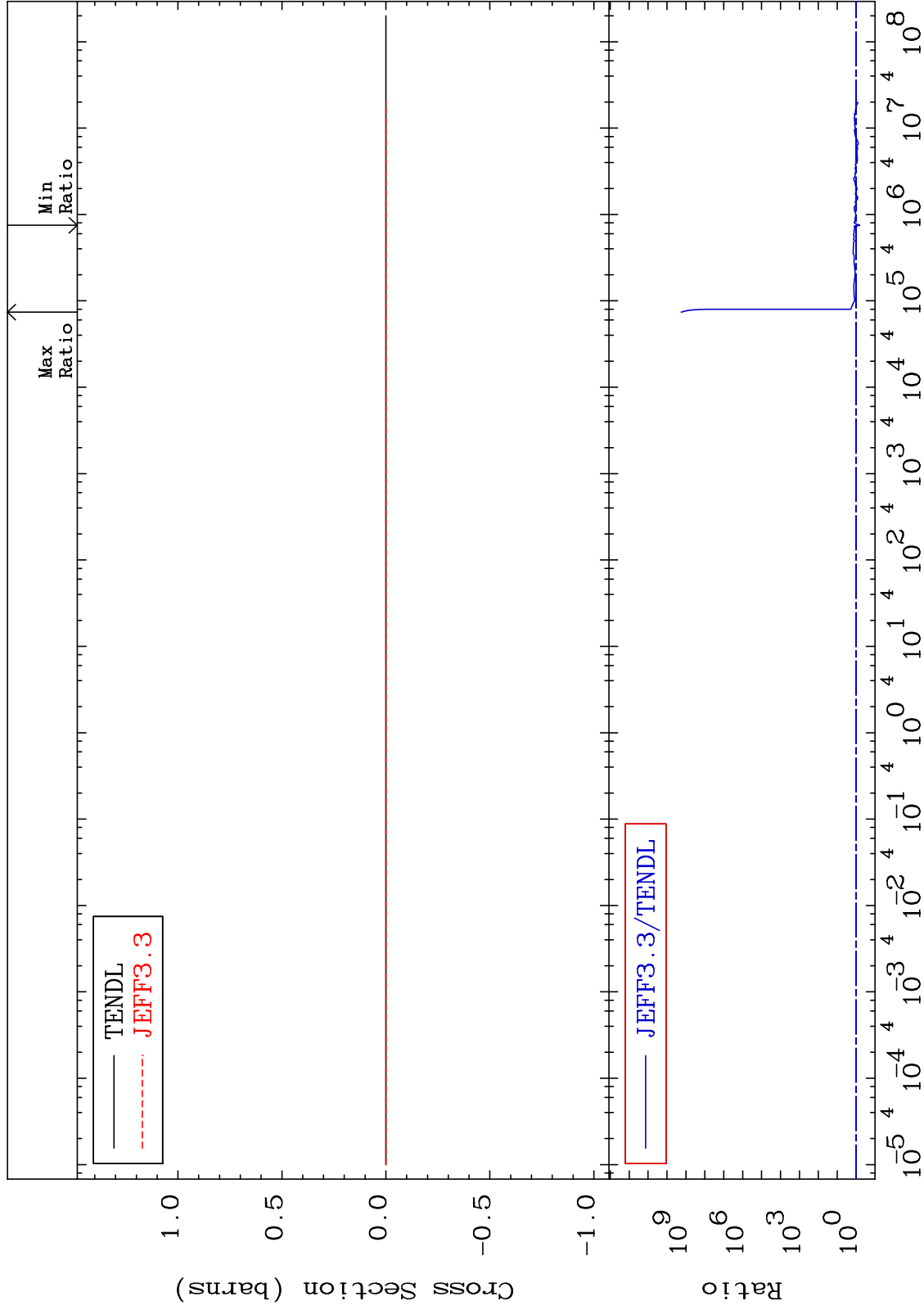
MAT 6646 Kerma inelastic (mt51-91) 66-Dy-163
-35.87 To 9999. % Cross Section



MAT 6646

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

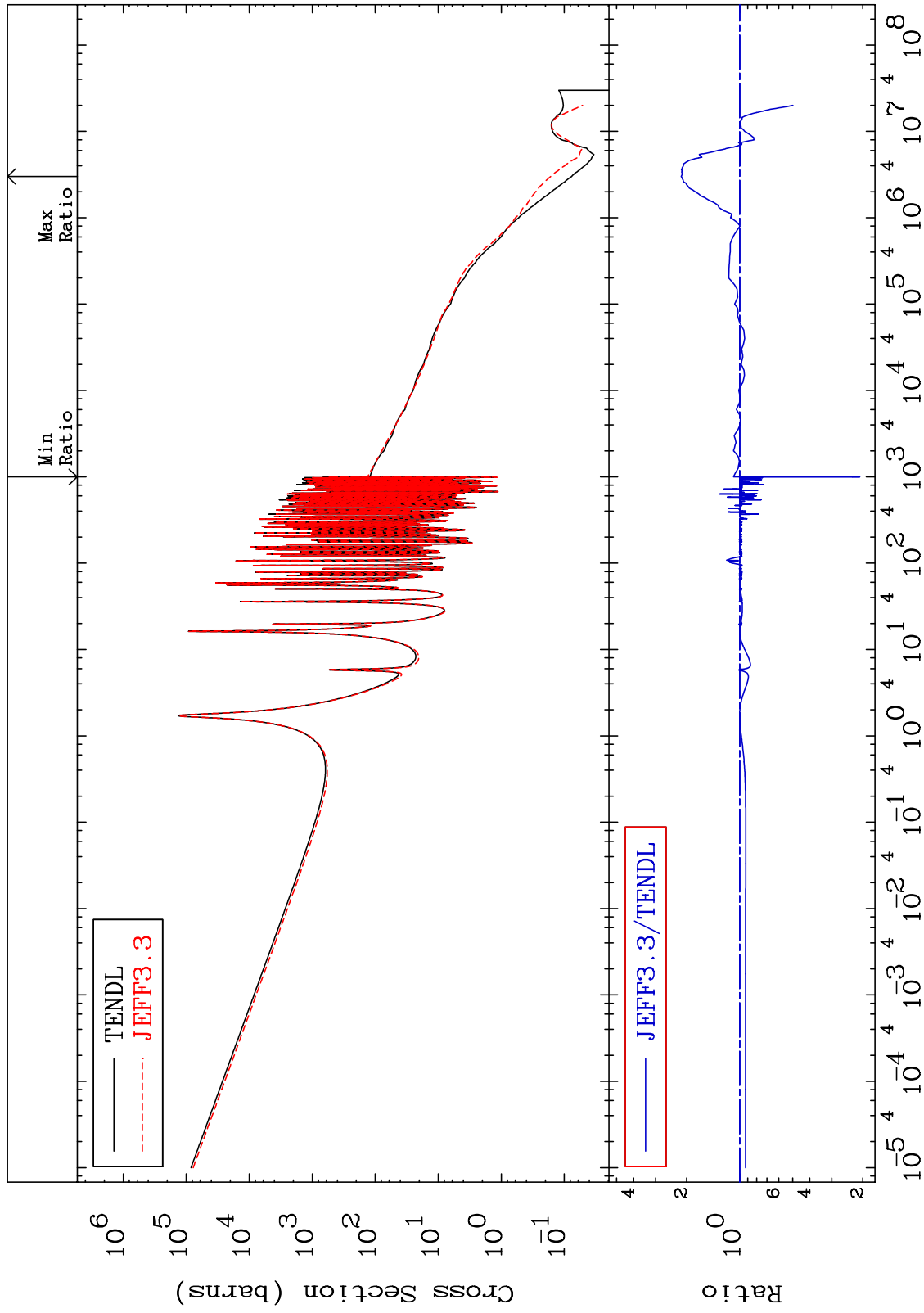
66-Dy-163
-35.87 To 9999. %



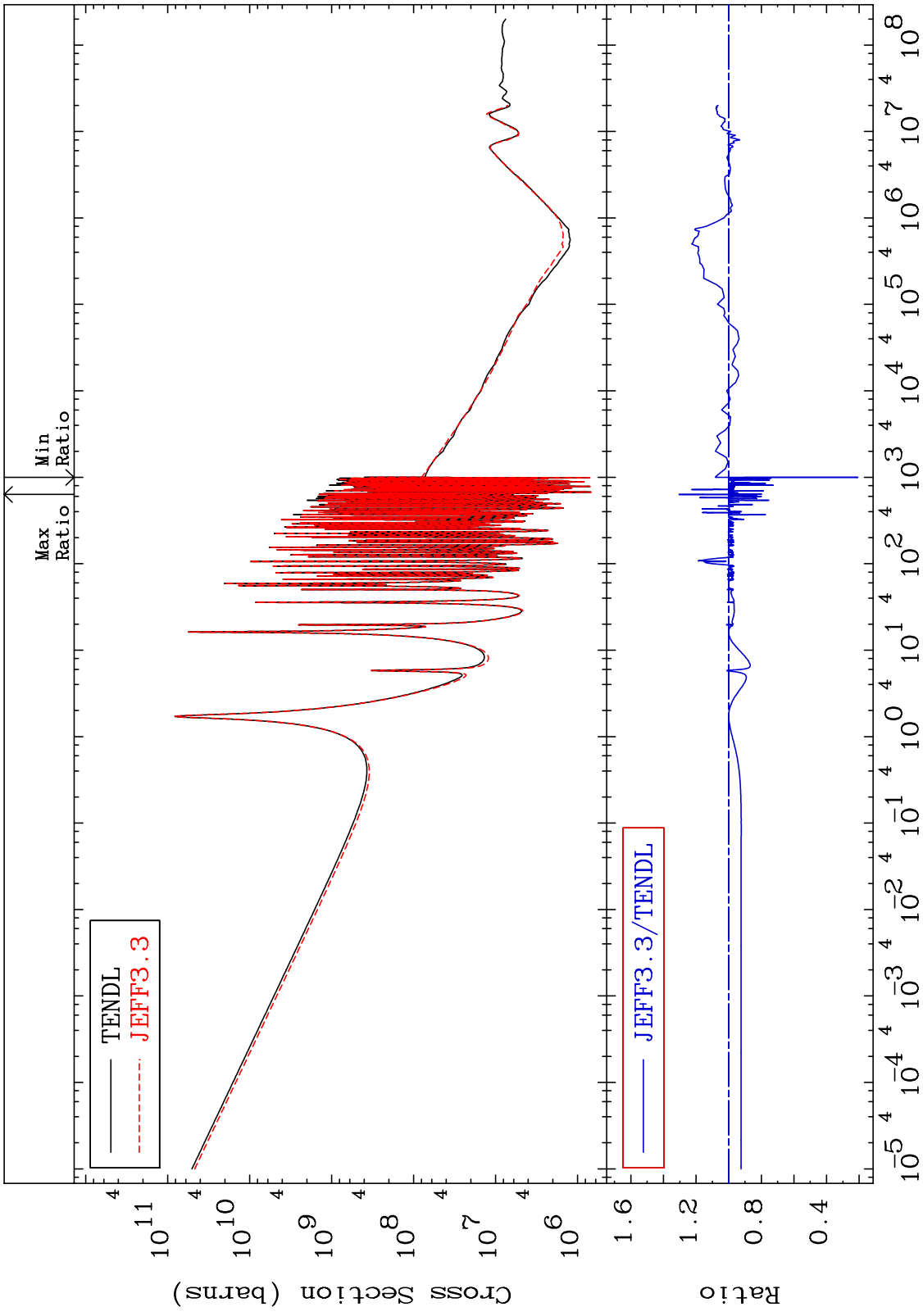
MAT 6646

Kerma capture (mt102)
Cross Section

66-Dy-163
-79.20 To 114.6 %

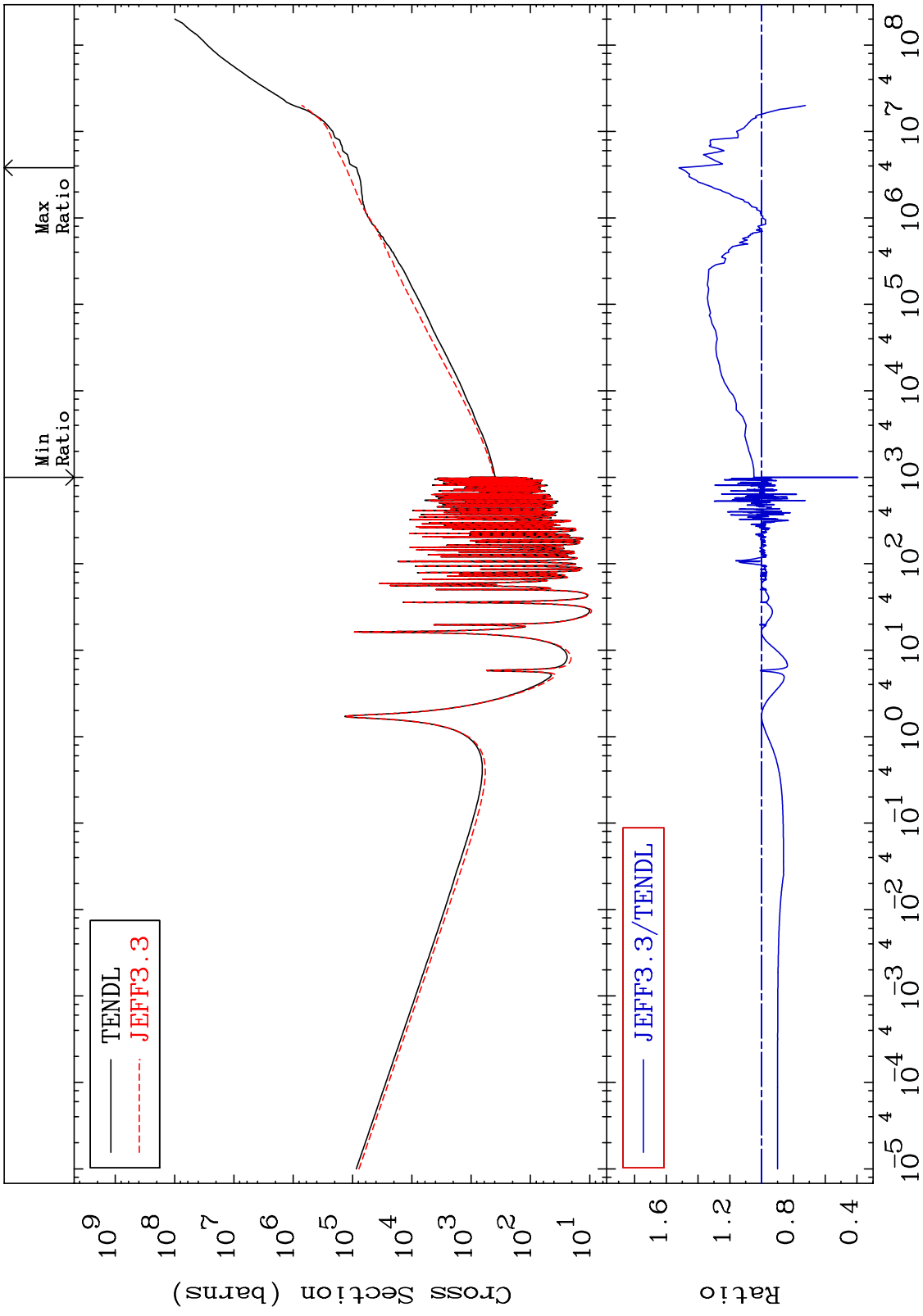


MAT 6646 Total photon (eV-barns) Cross Section 66-Dy-163 -79.21 To 30.44 %

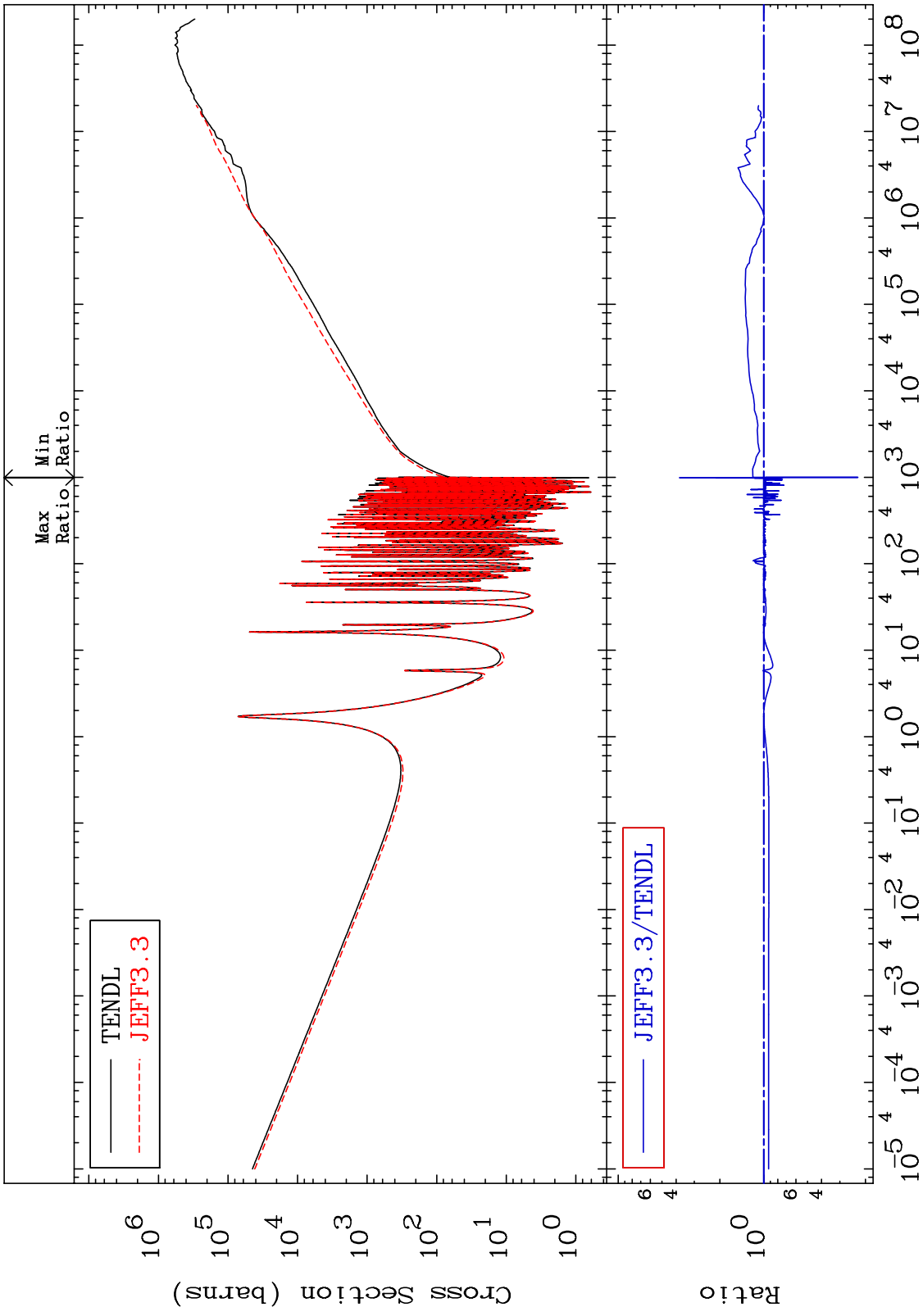


48 66-Dy-163

MAT 6646 Total kinematic kerma (high limit) Cross Section 66-Dy-163 -60.59 To 51.98 %



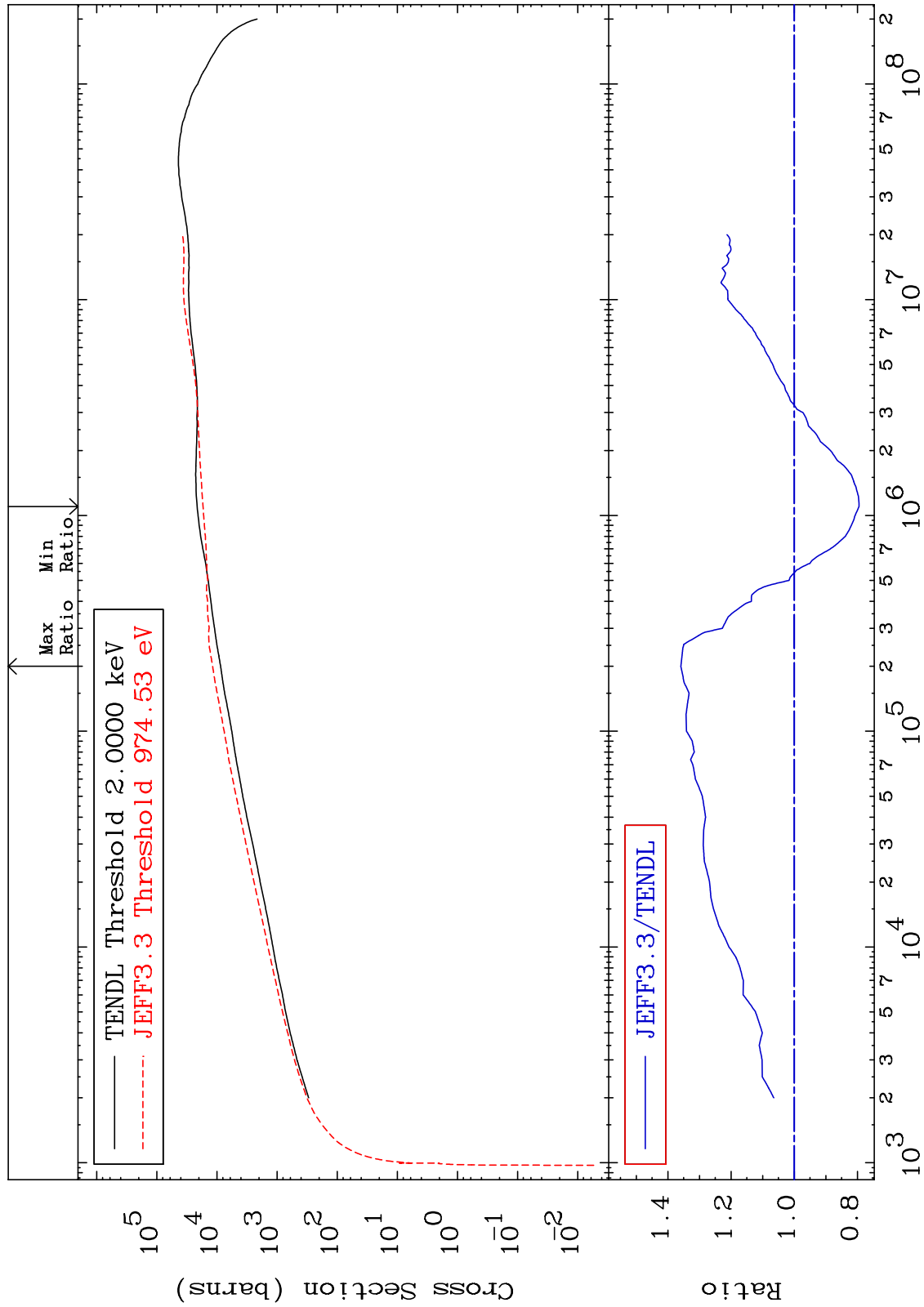
MAT 6646 Dpa total (eV-barns) 66-Dy-163
 Cross Section -77.45 To 281.6 %



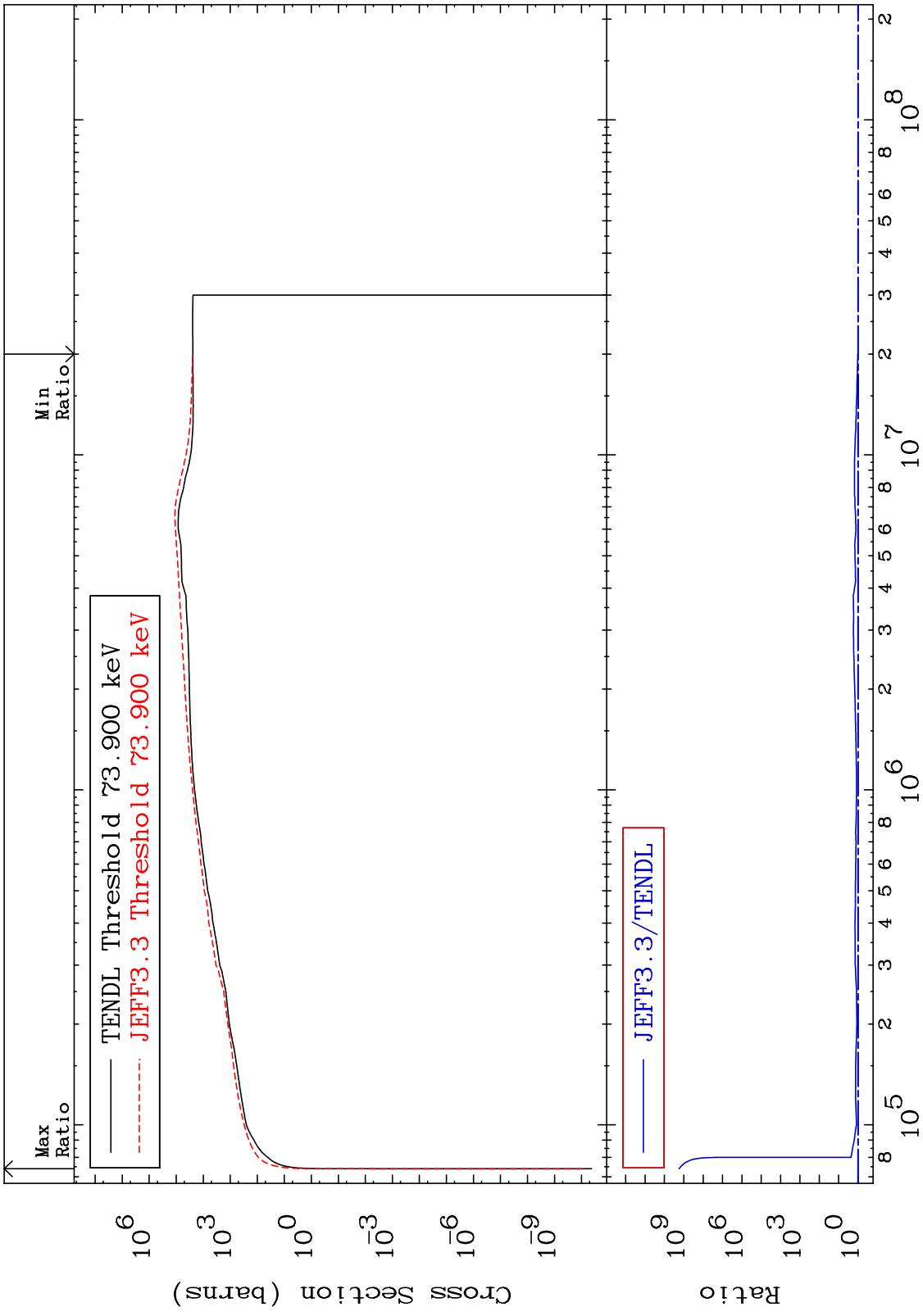
MAT 6646

Dpa elastic (mt2)
Cross Section

66-Dy-163
-20.50 To 35.89 %



MAT 6646 Dpa inelastic (mt51-91) 66-Dy-163
 Cross Section 0.987 To 9999. %



MAT 6646

Dpa disappearance (mt102 -120)
Cross Section

66-Dy-163
-79.20 To 206.0 %

