

Program Complot
(Version 2018-1)

by

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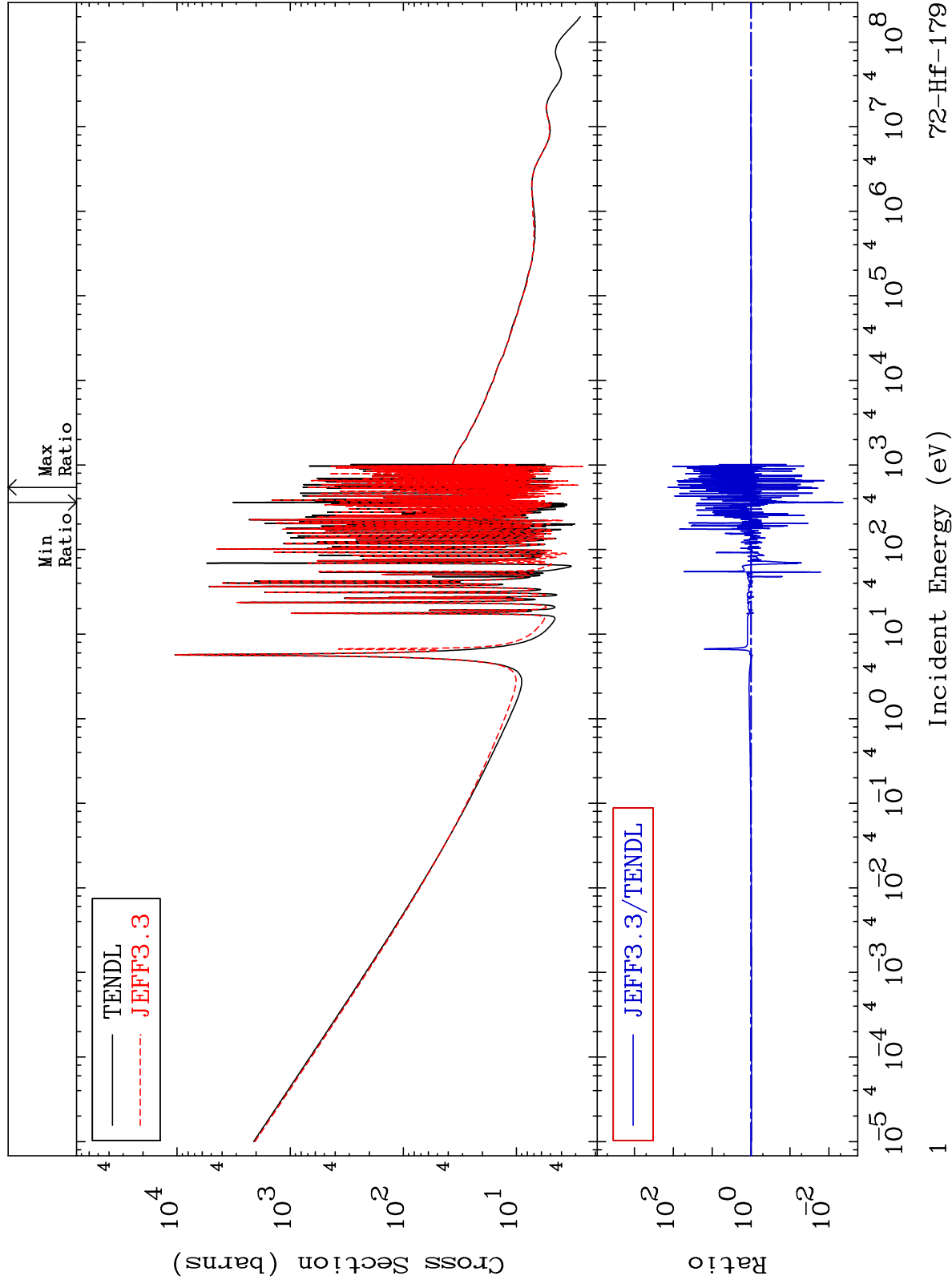
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 7240

Total
Cross Section

72-Hf-179
-99.56 To 9999. %



72-Hf-179

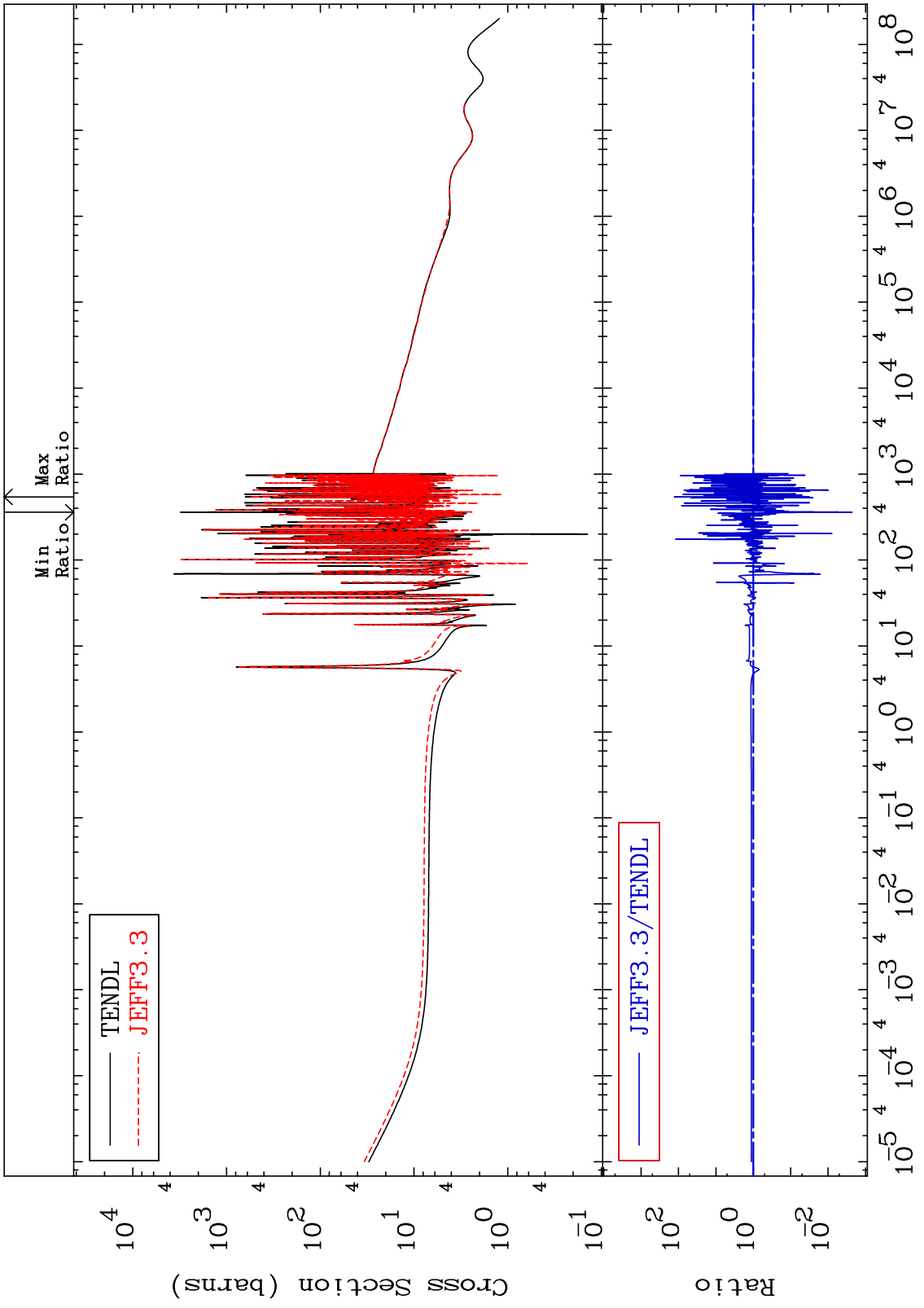
MAT 7240

Elastic

72-Hf-179

Cross Section

-99.77 To 9999. %



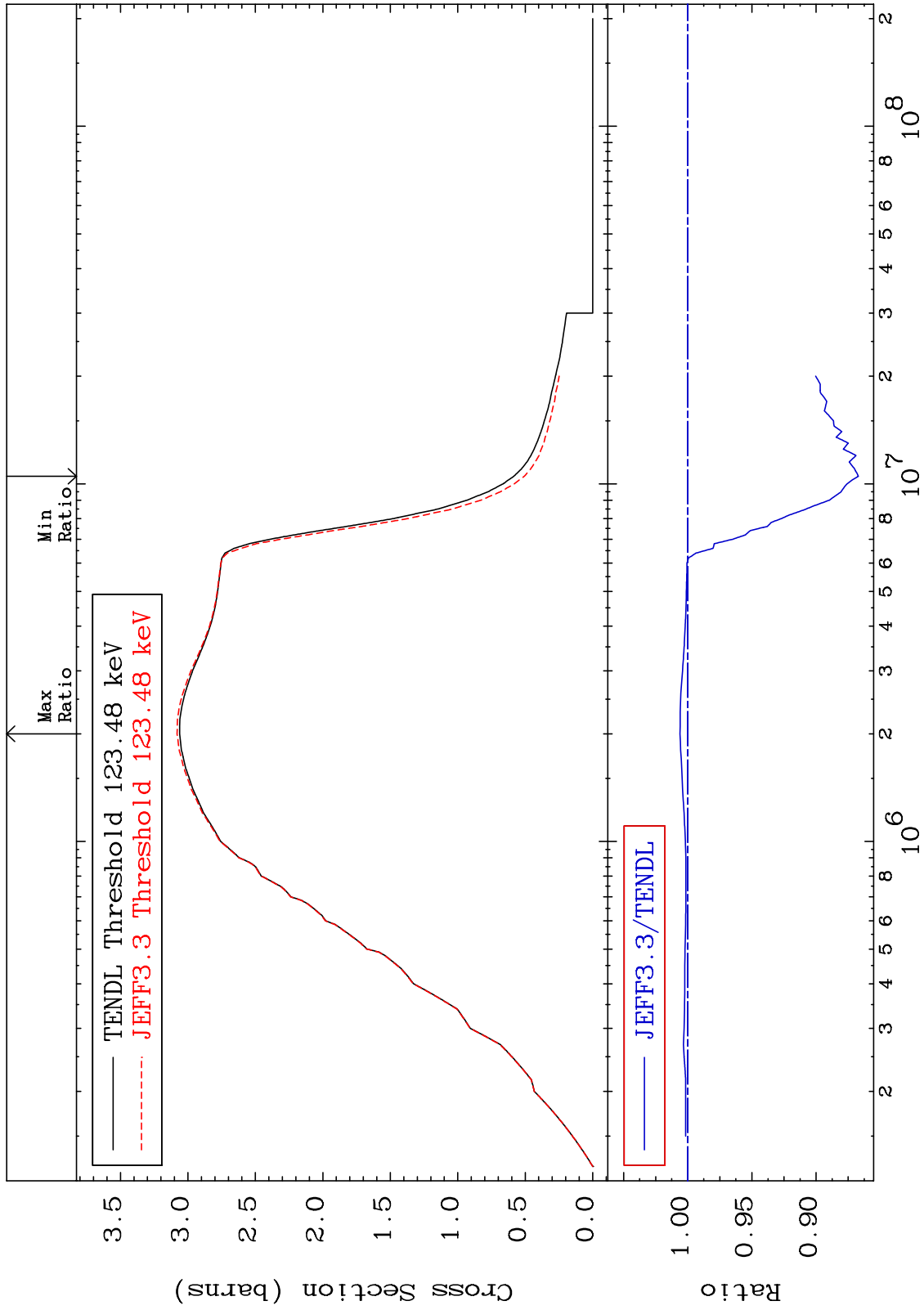
MAT 7240

Inelastic

⁷²Hf-179

Cross Section

-13.30 To 0.603 %



Incident Energy (eV)

⁷²Hf-179

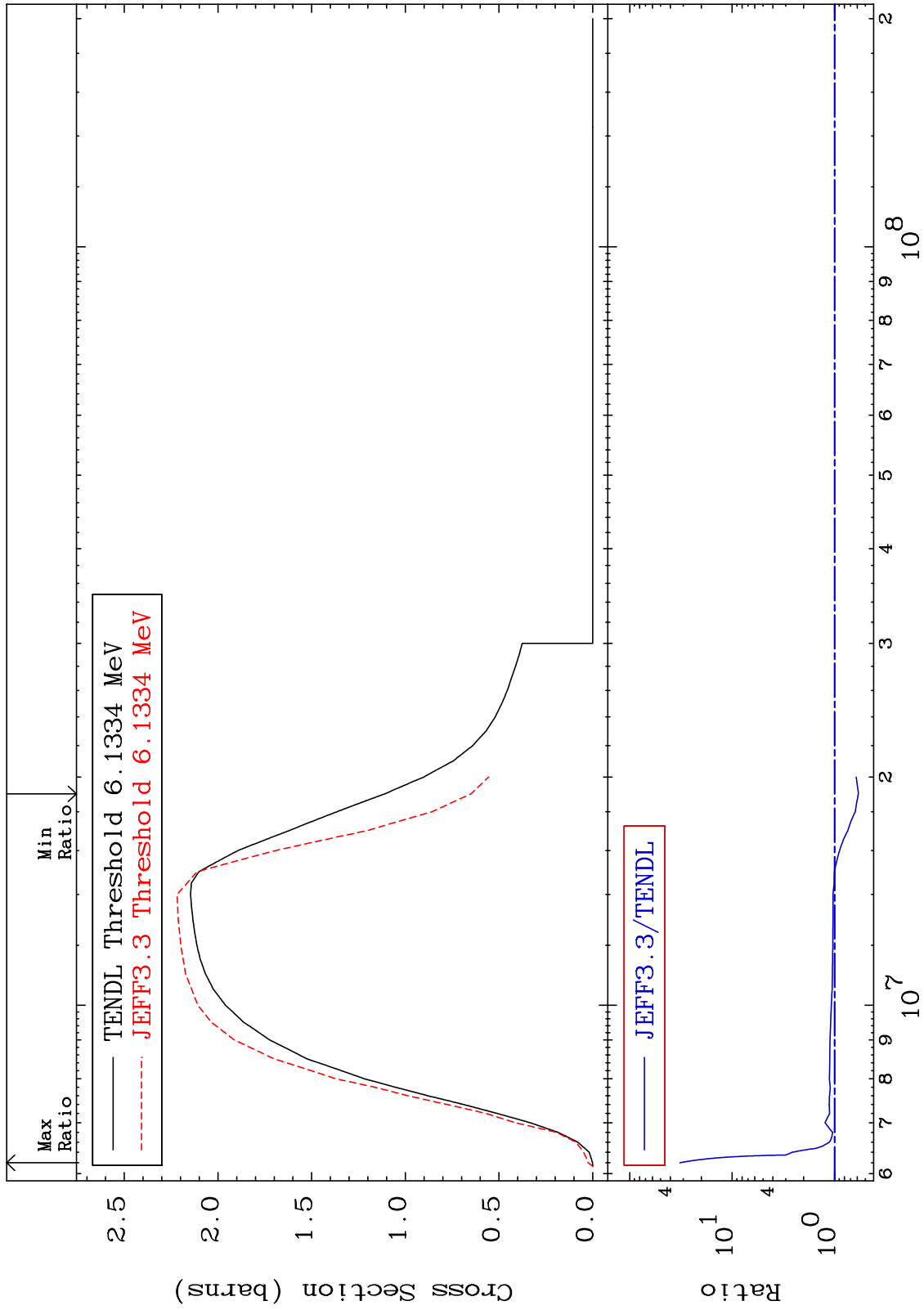
MAT 7240

(n,2n)

72-Hf-179

Cross Section

-41.50 To 3127. %



72-Hf-179

Incident Energy (eV)

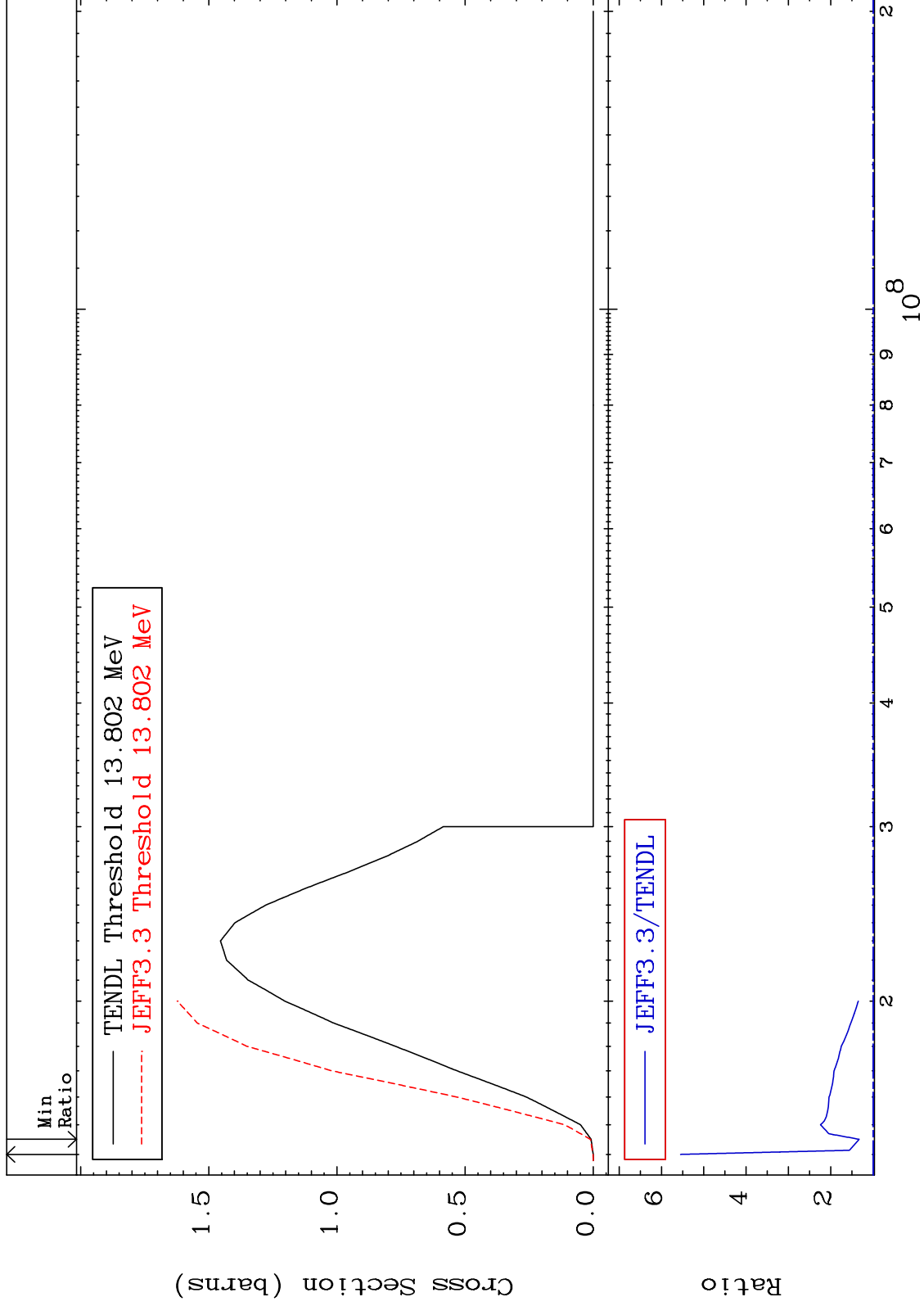
MAT 7240

(n, 3n)

72-Hf-179

Cross Section

32.74 To 454.8 %



5

Incident Energy (eV)

72-Hf-179

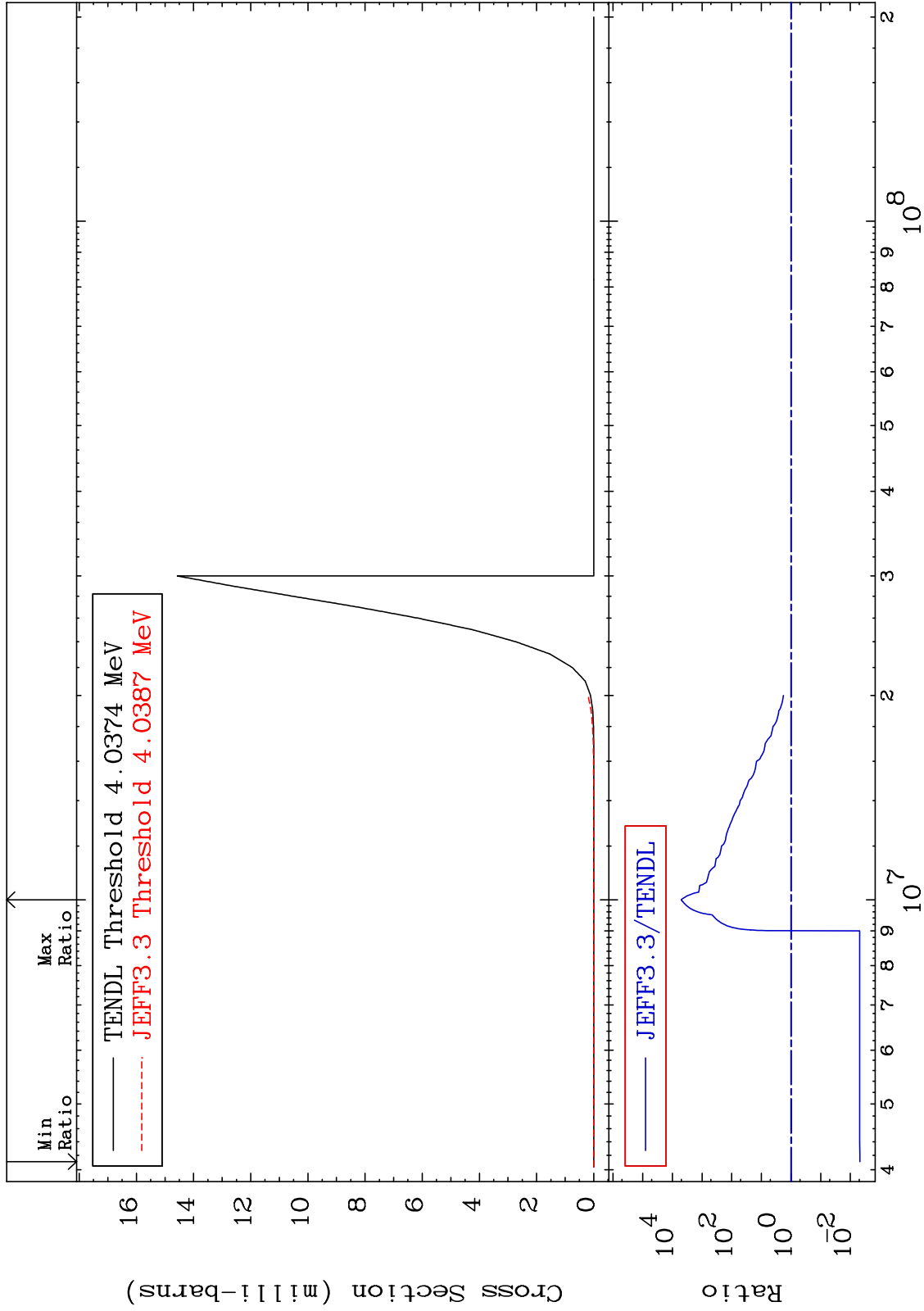
MAT 7240

(n,2n) α

72-Hf-179

Cross Section

-99.52 To 9999. %



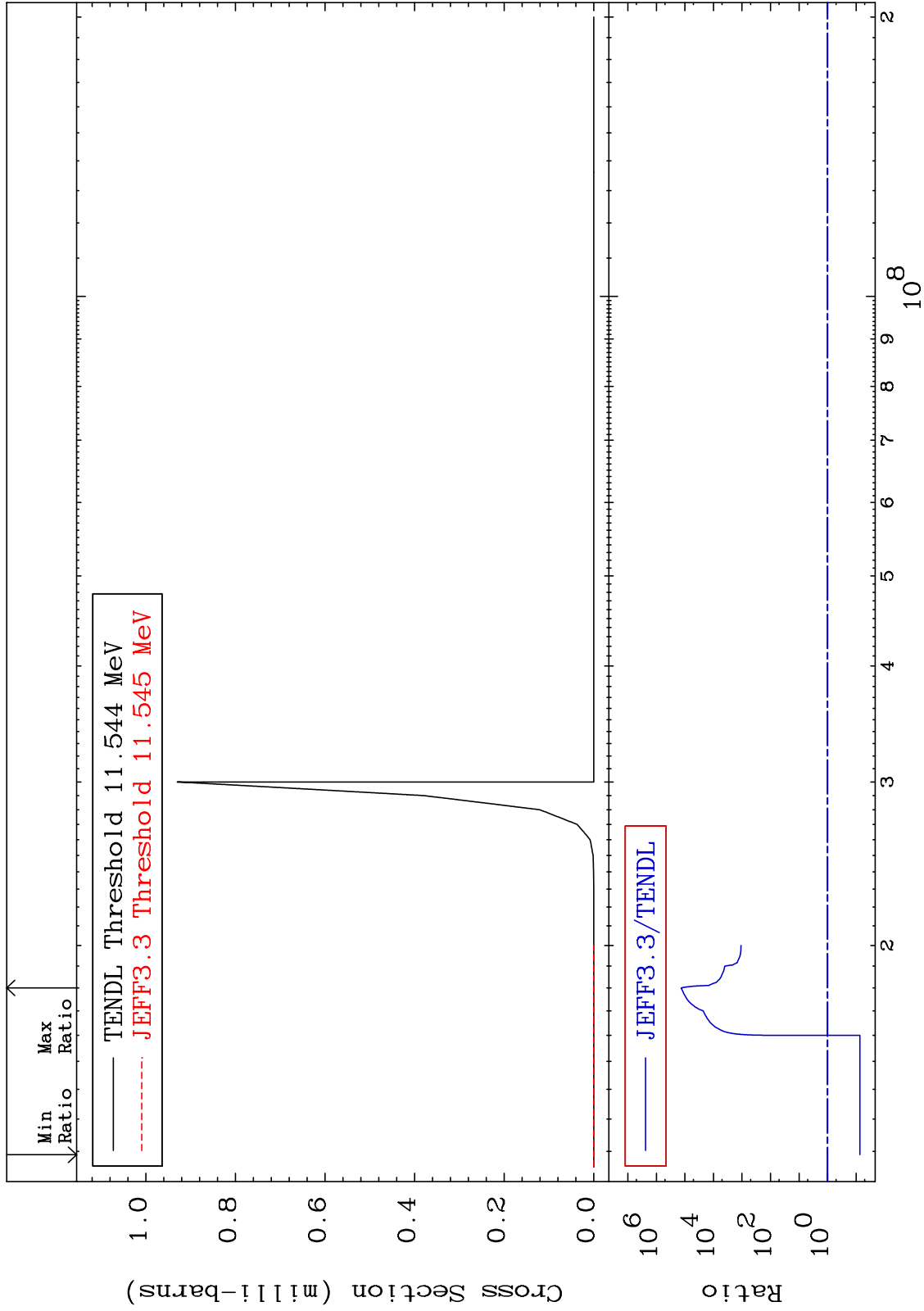
MAT 7240

(n,3n) α

72-Hf-179

Cross Section

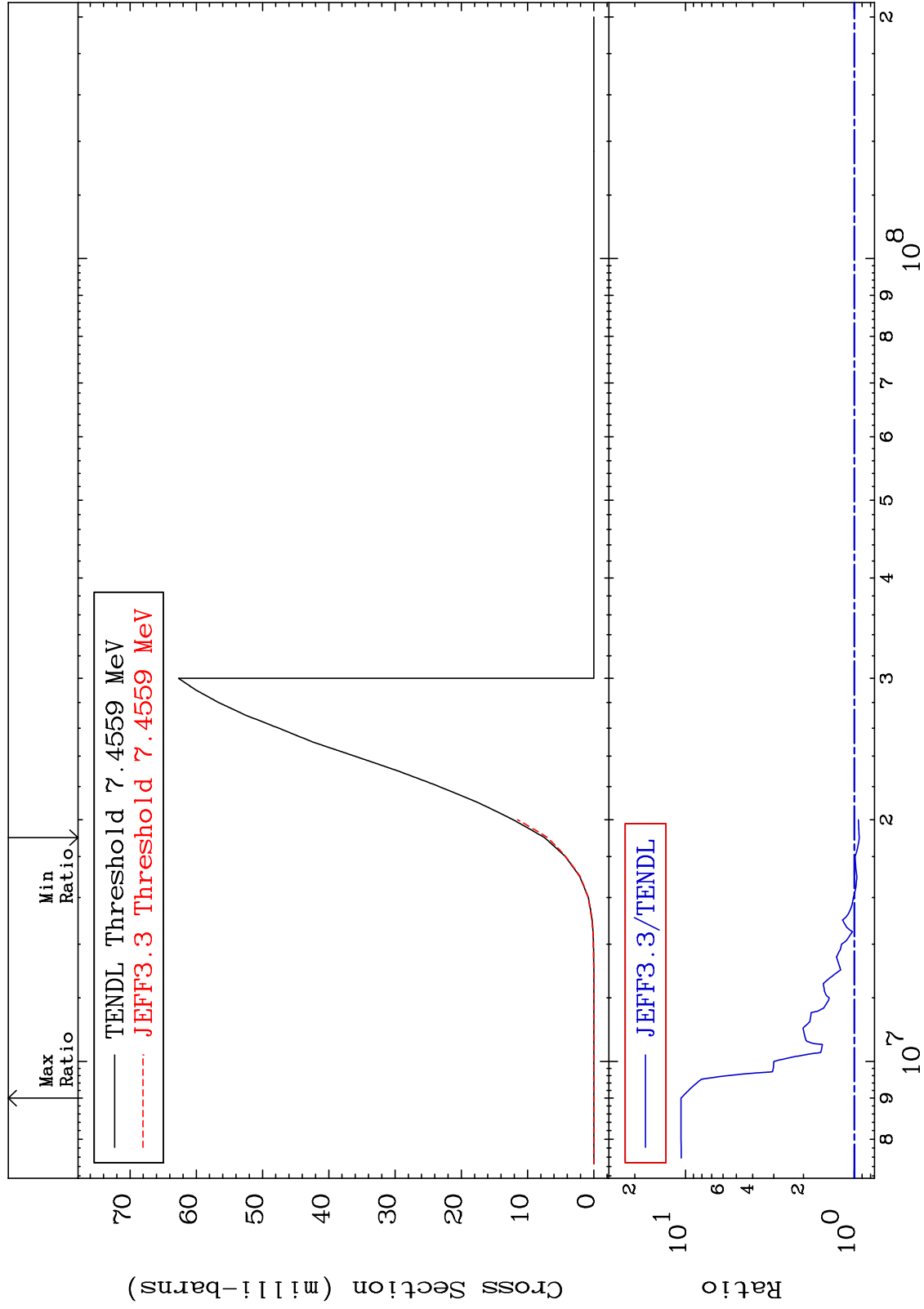
-92.66 To 9999. %



MAT 7240

(n,n') p
Cross Section

72-Hf-179
-6.542 To 964.9 %



9

Incident Energy (eV)

72-Hf-179

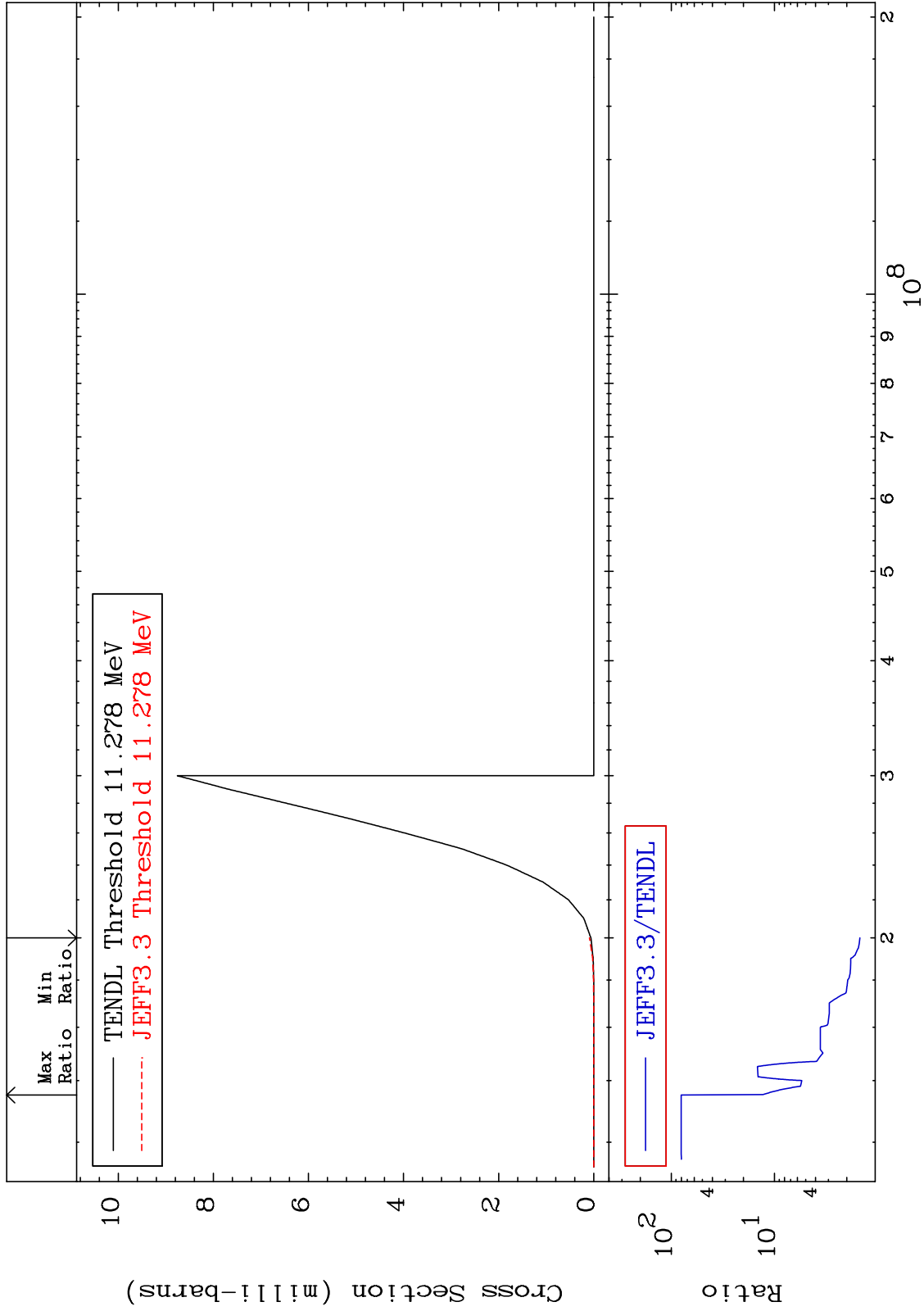
MAT 7240

(n,n') d

72-Hf-179

Cross Section

48.92 To 7911. %



10

Incident Energy (eV)

72-Hf-179

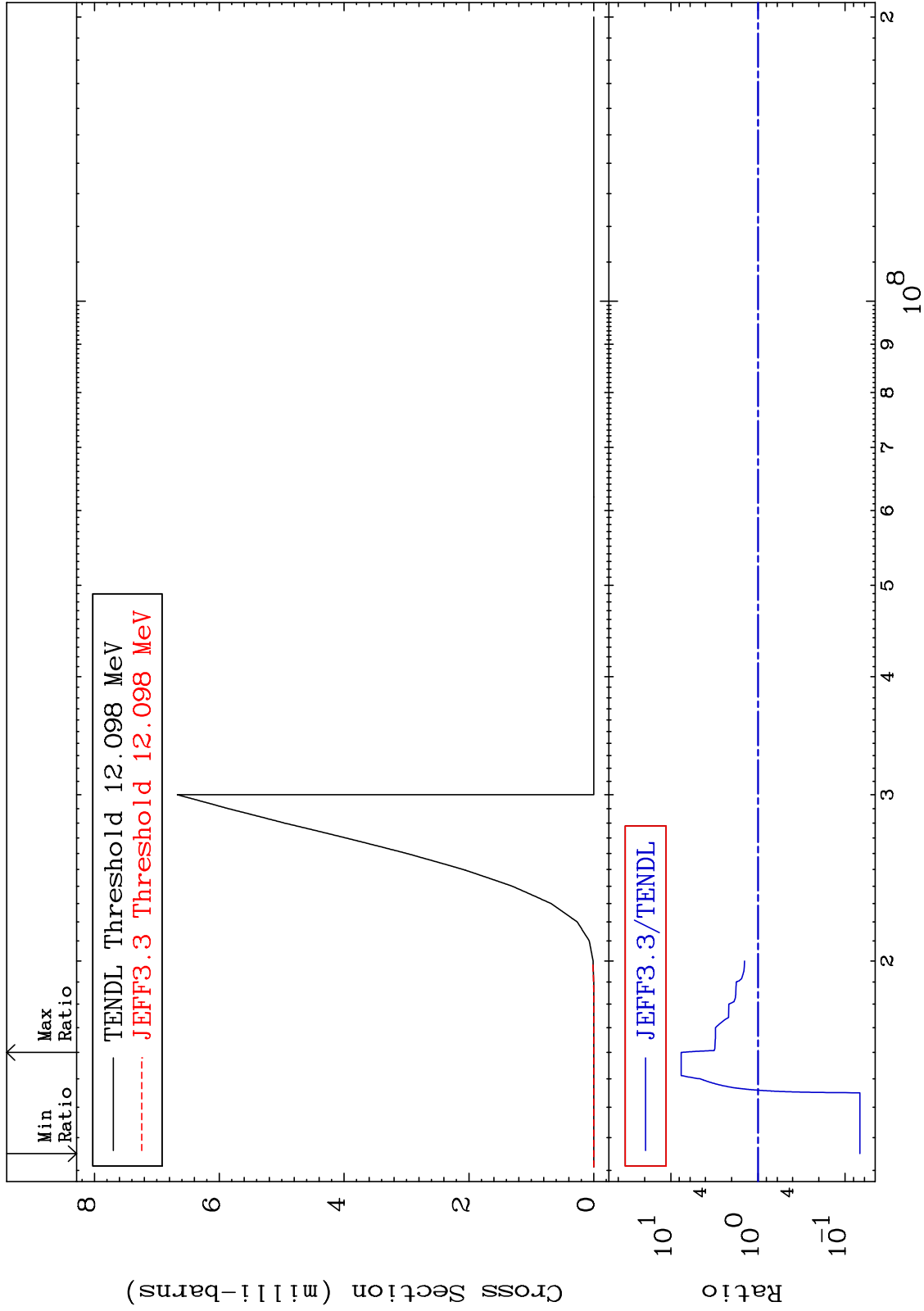
MAT 7240

(n, n') t

72-Hf-179

Cross Section

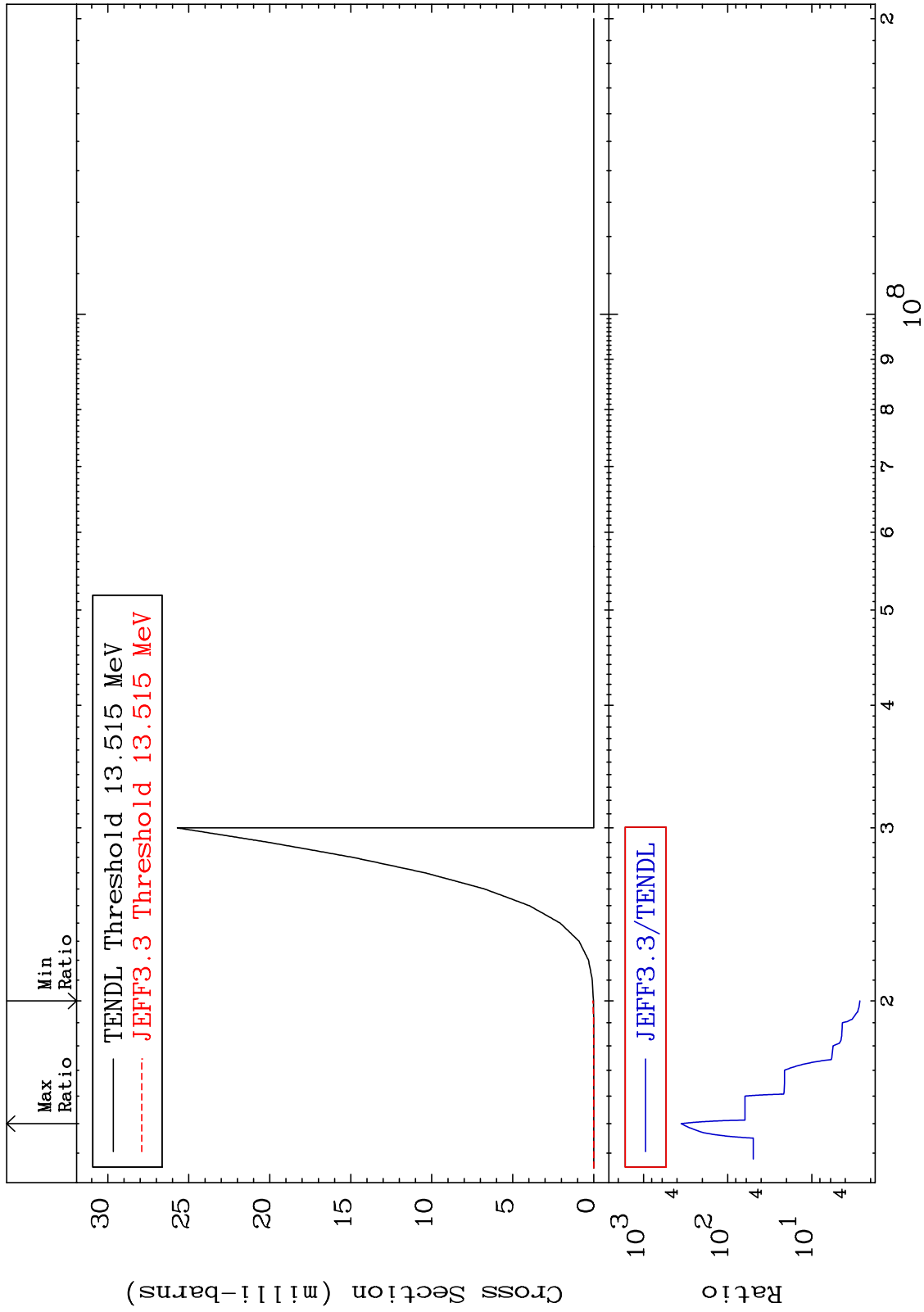
-93.24 To 659.3 %

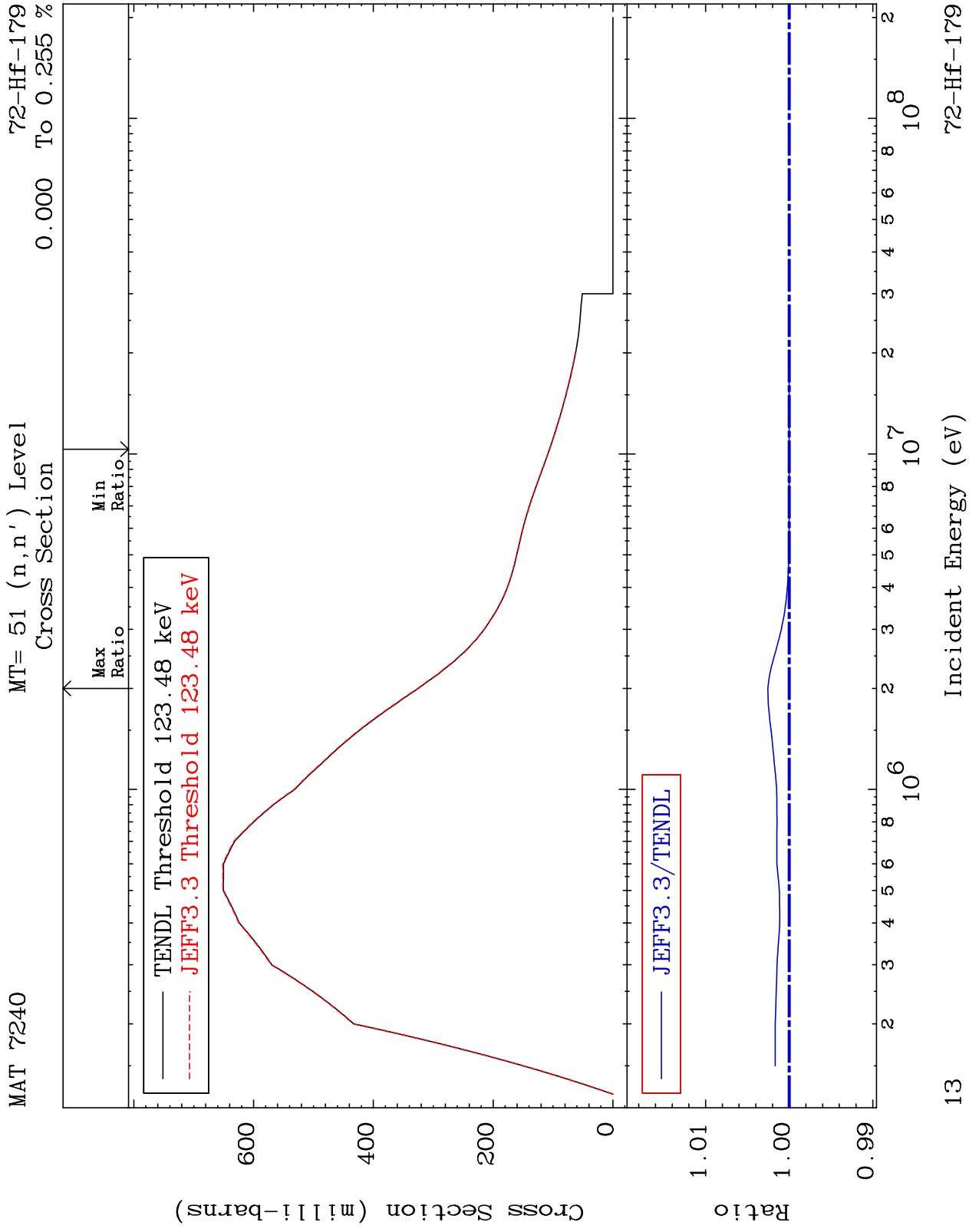


MAT 7240

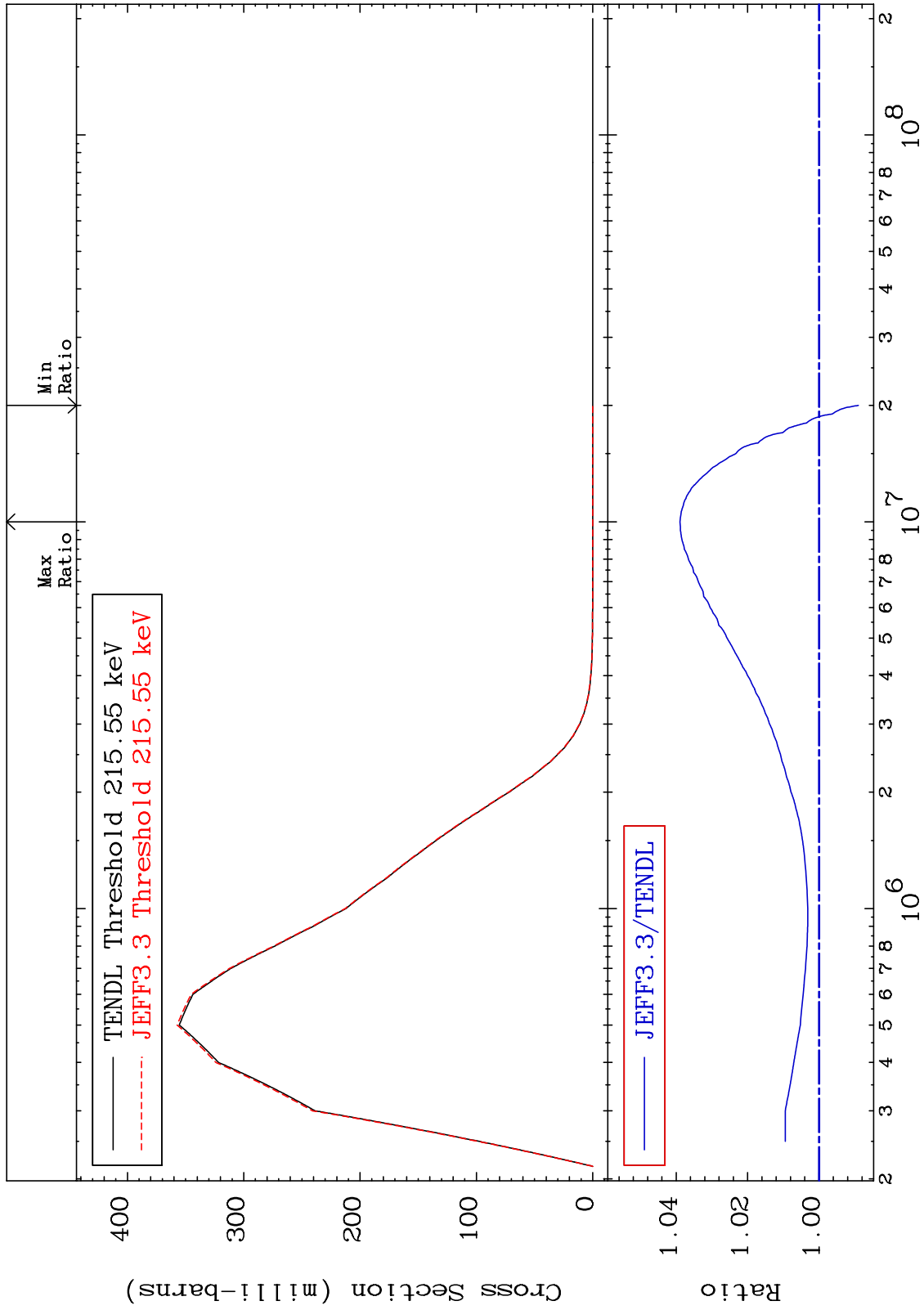
(n,2n) p
Cross Section

72-Hf-179
168.2 To 9999. %





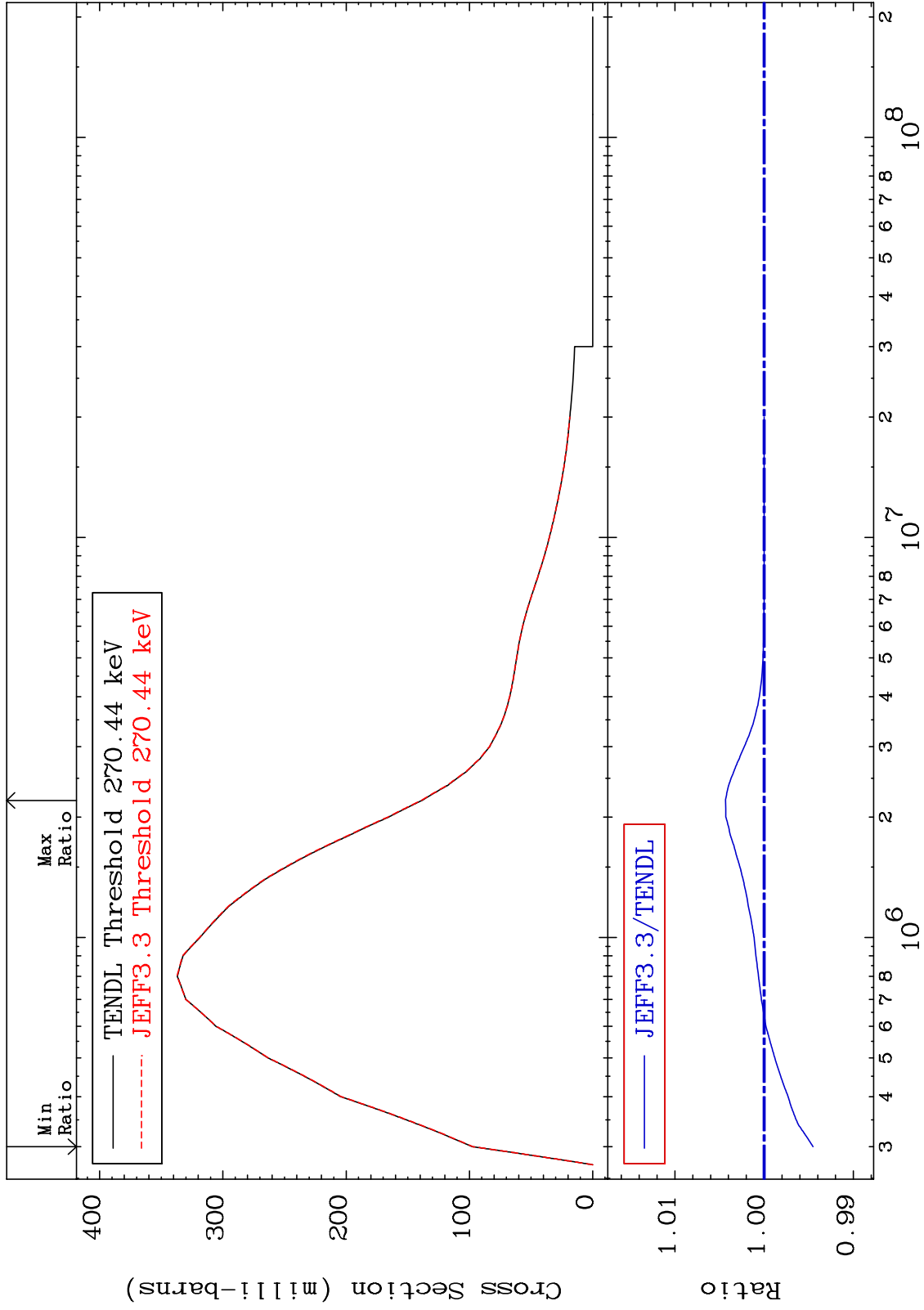
MAT 7240 MT= 52 (n,n') Level Cross Section 72-Hf-179
-1.101 To 3.893 %



MAT 7240

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

72-Hf-179
-0.547 To 0.434 %



15

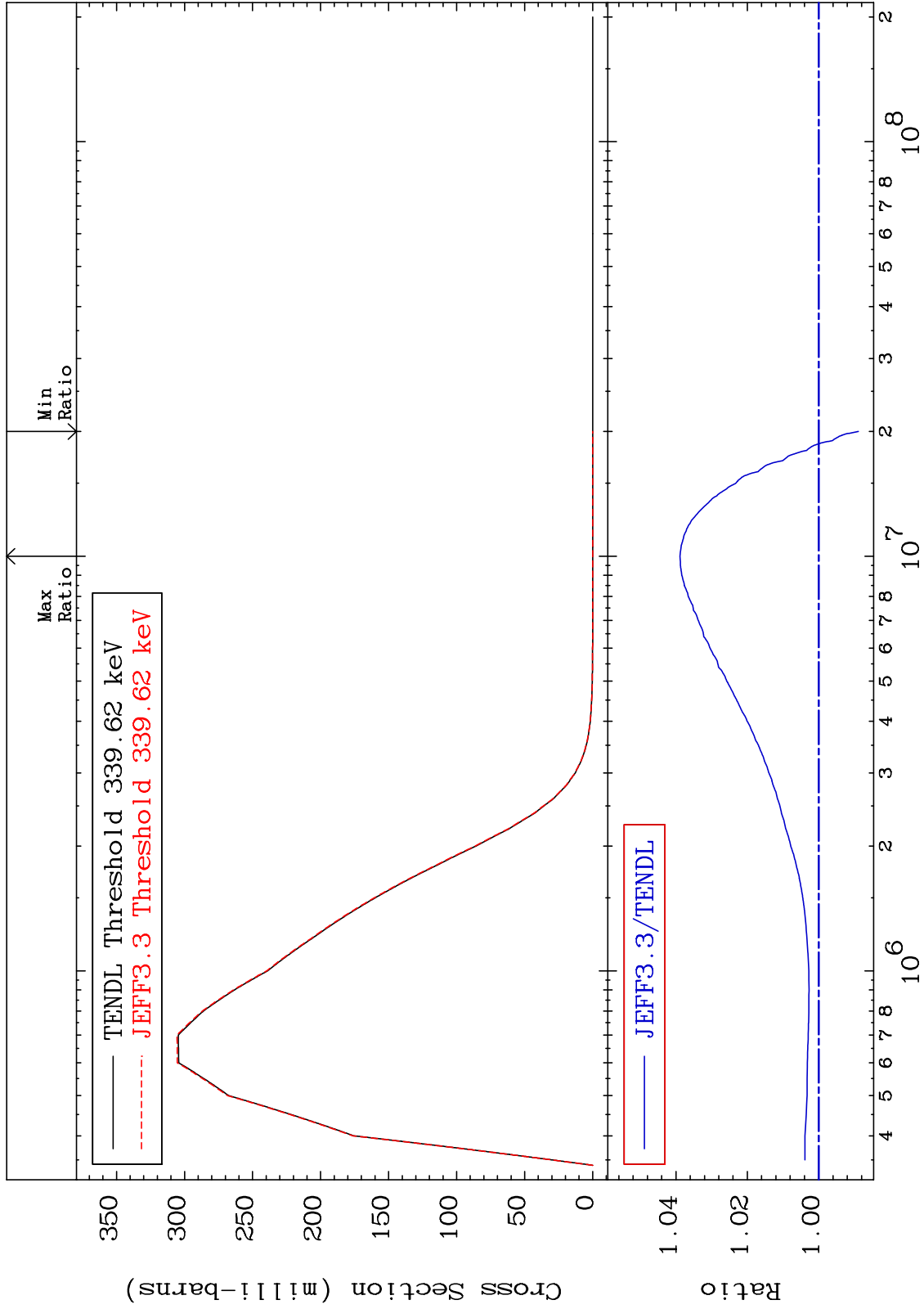
Incident Energy (eV)

72-Hf-179

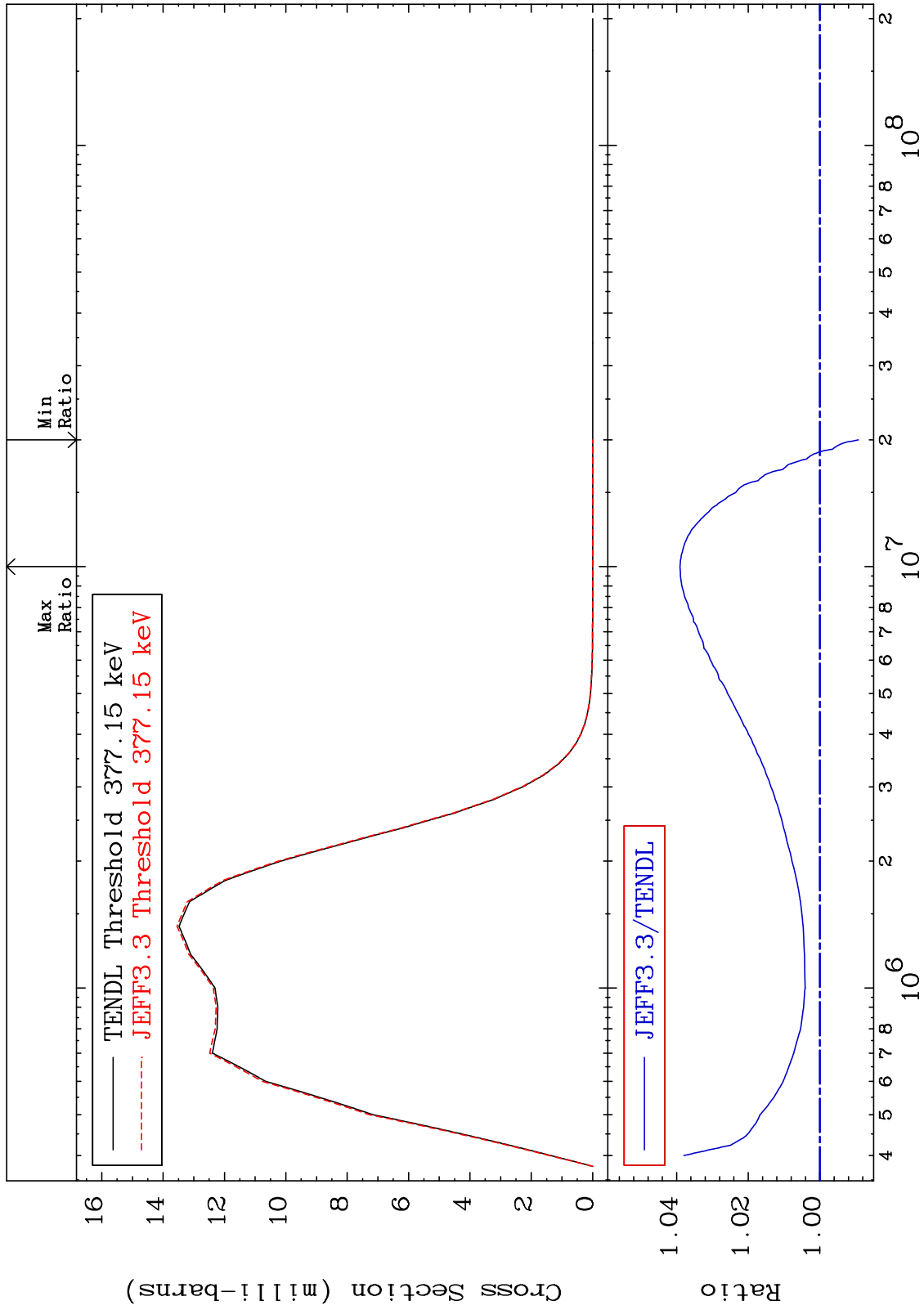
MAT 7240

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

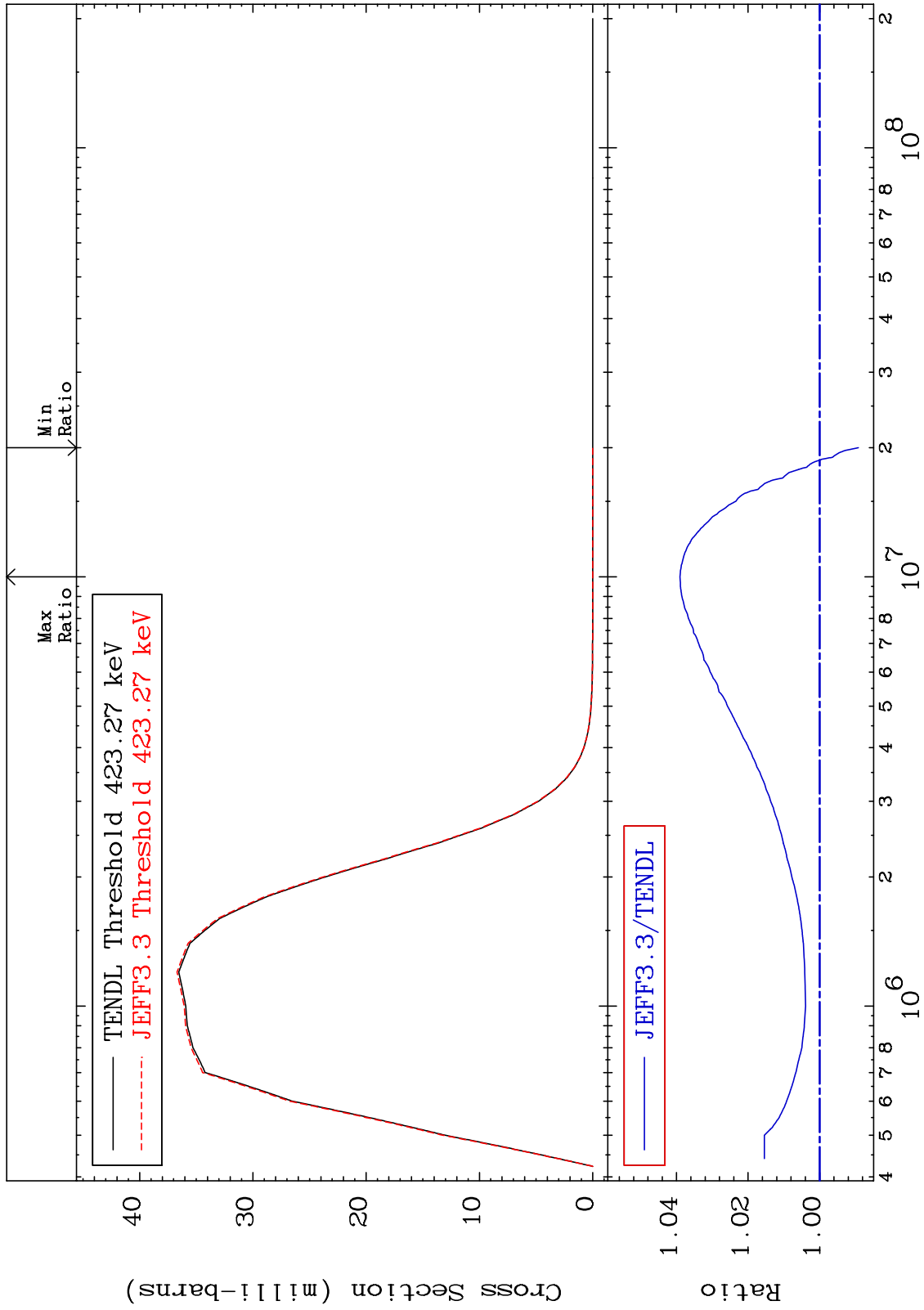
72-Hf-179
-1.113 To 3.886 %



MAT 7240 MT= 55 (n,n') Level Cross Section -1.079 To 3.906 % 72-Hf-179



MAT 7240 MT= 56 (n,n') Level Cross Section 72-Hf-179
 -1.083 To 3.903 %

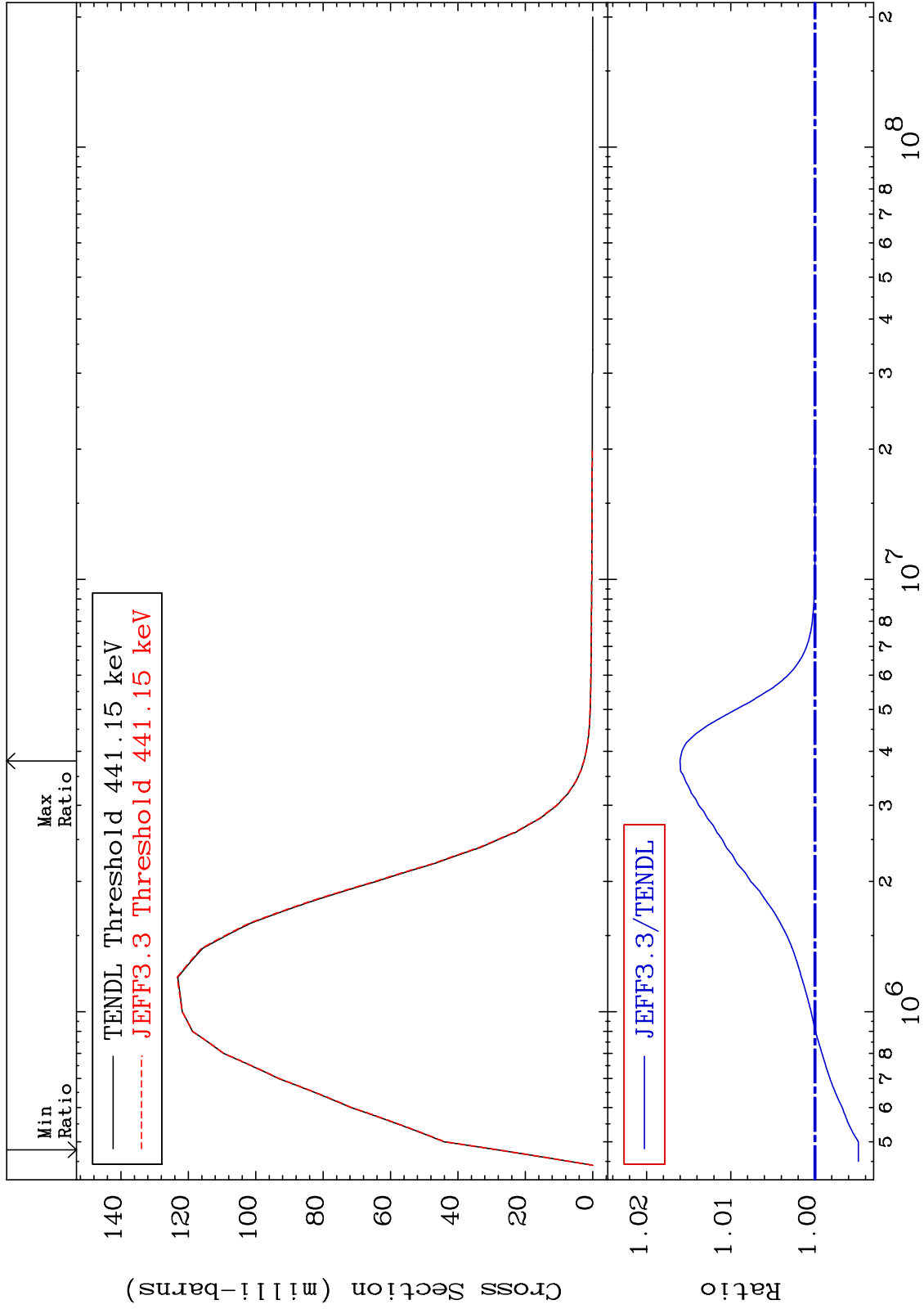


18 Incident Energy (eV) 72-Hf-179

MAT 7240

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

72-Hf-179
-0.516 To 1.602 %

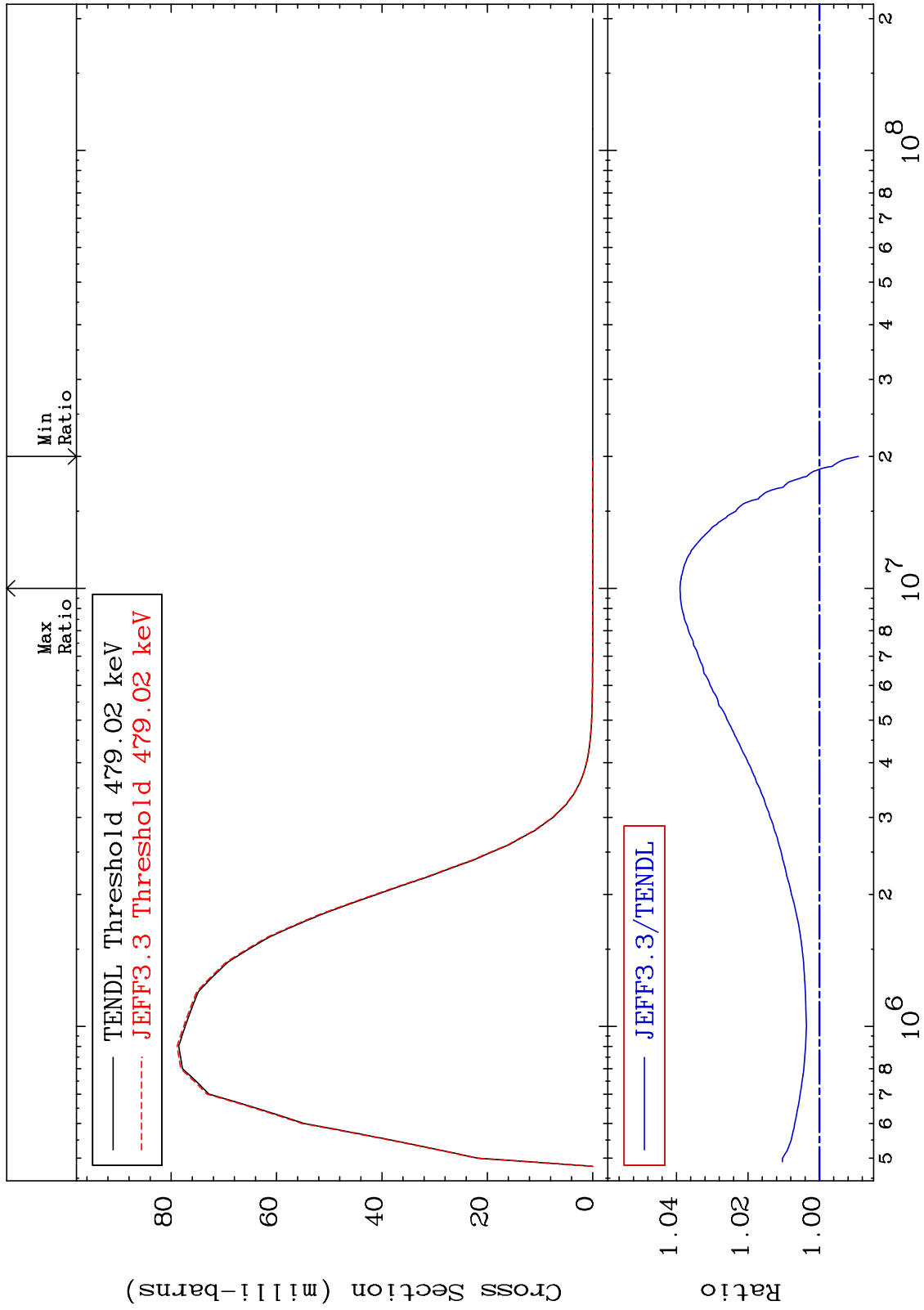


19

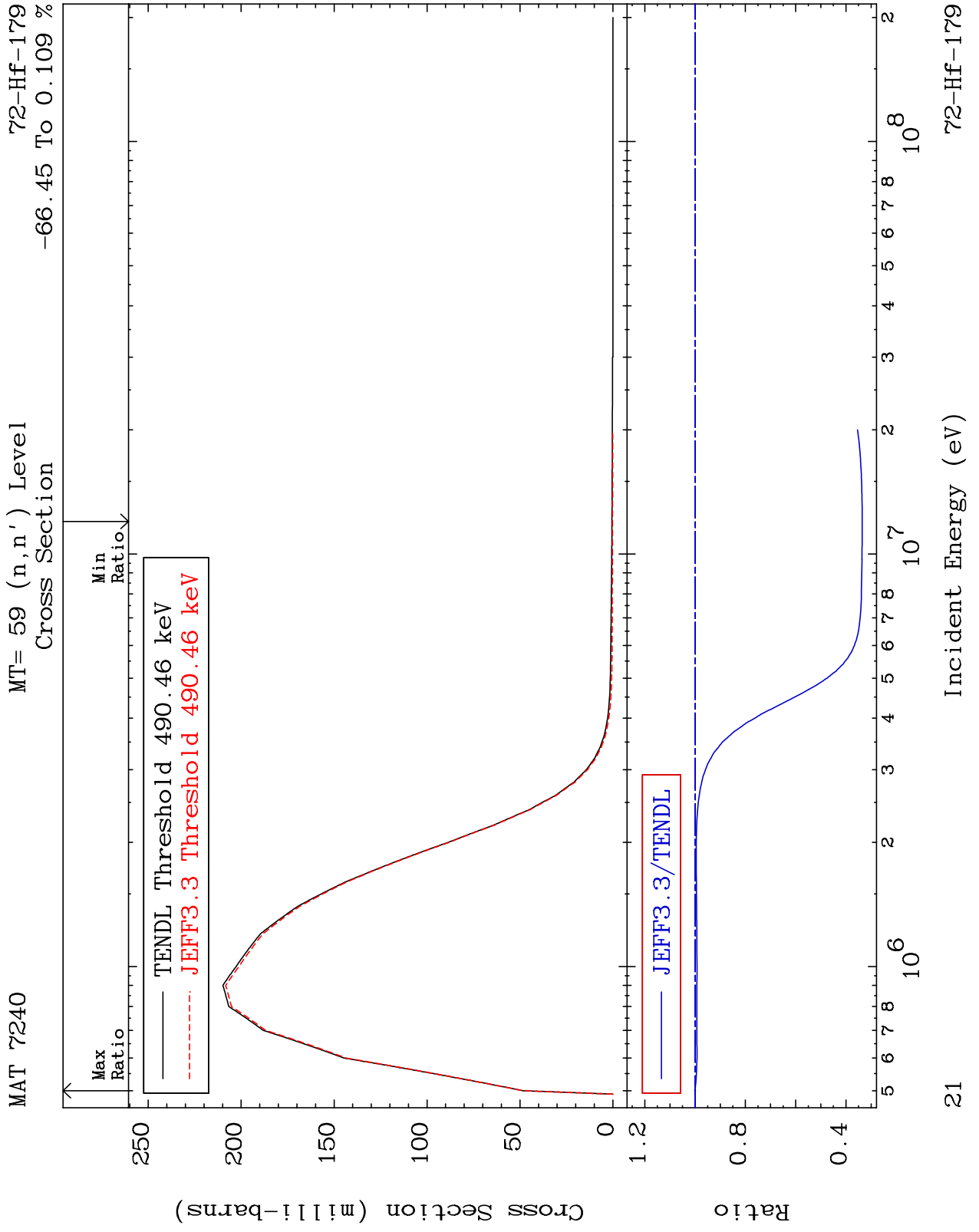
Incident Energy (eV)

72-Hf-179

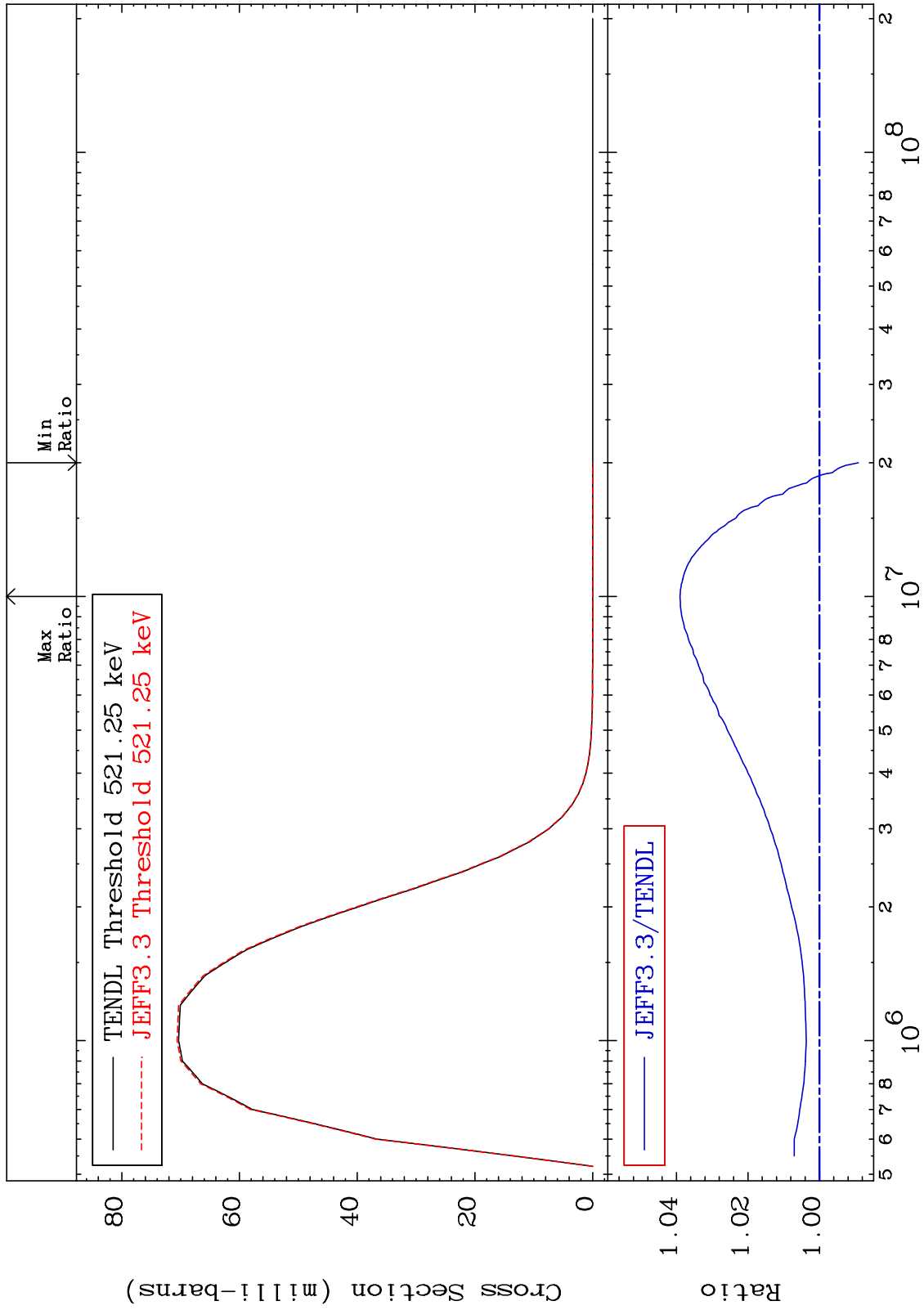
MAT 7240 MT= 58 (n,n') Level 72-Hf-179
 Cross Section -1.090 To 3.899 %



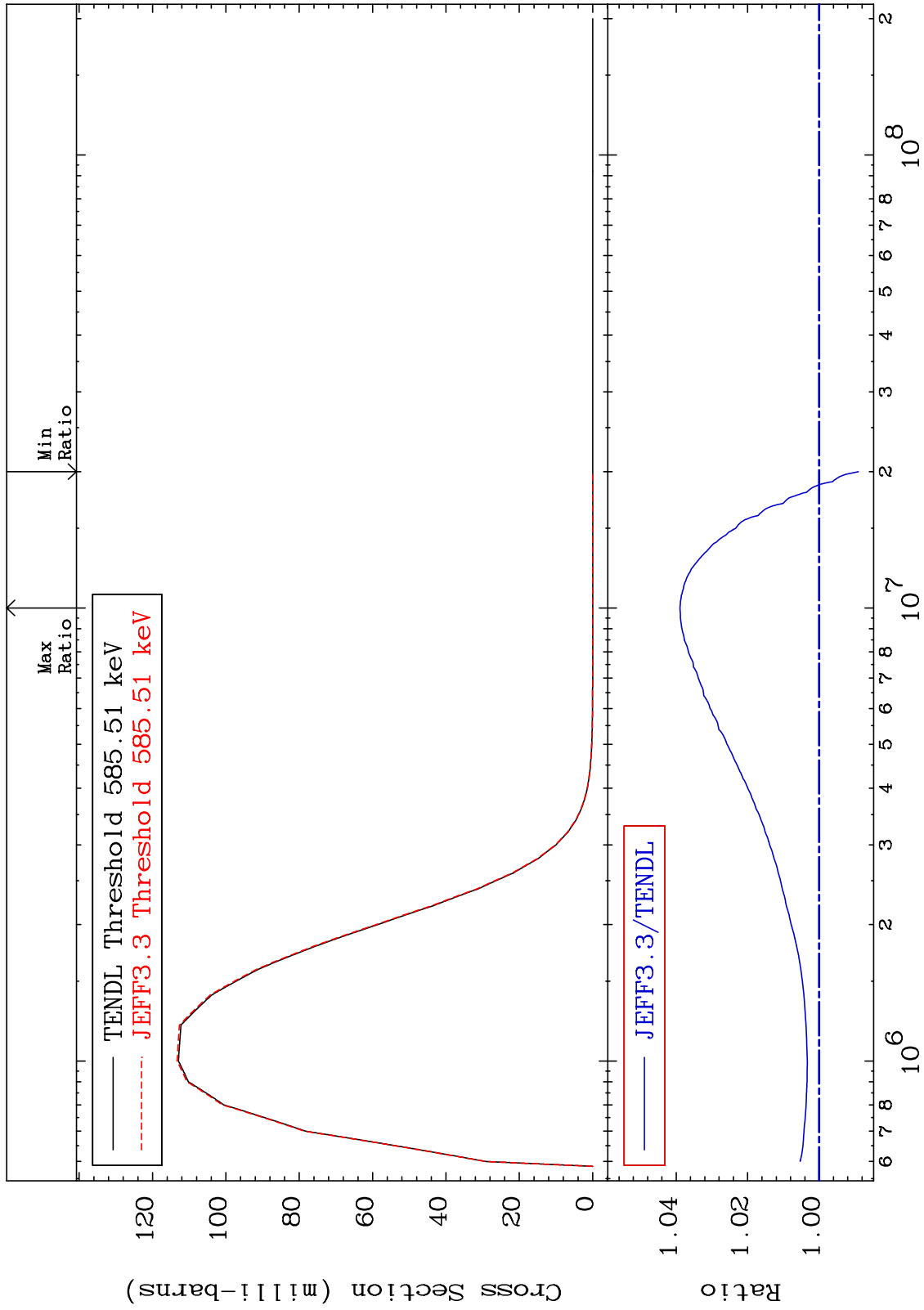
20 Incident Energy (eV) 72-Hf-179

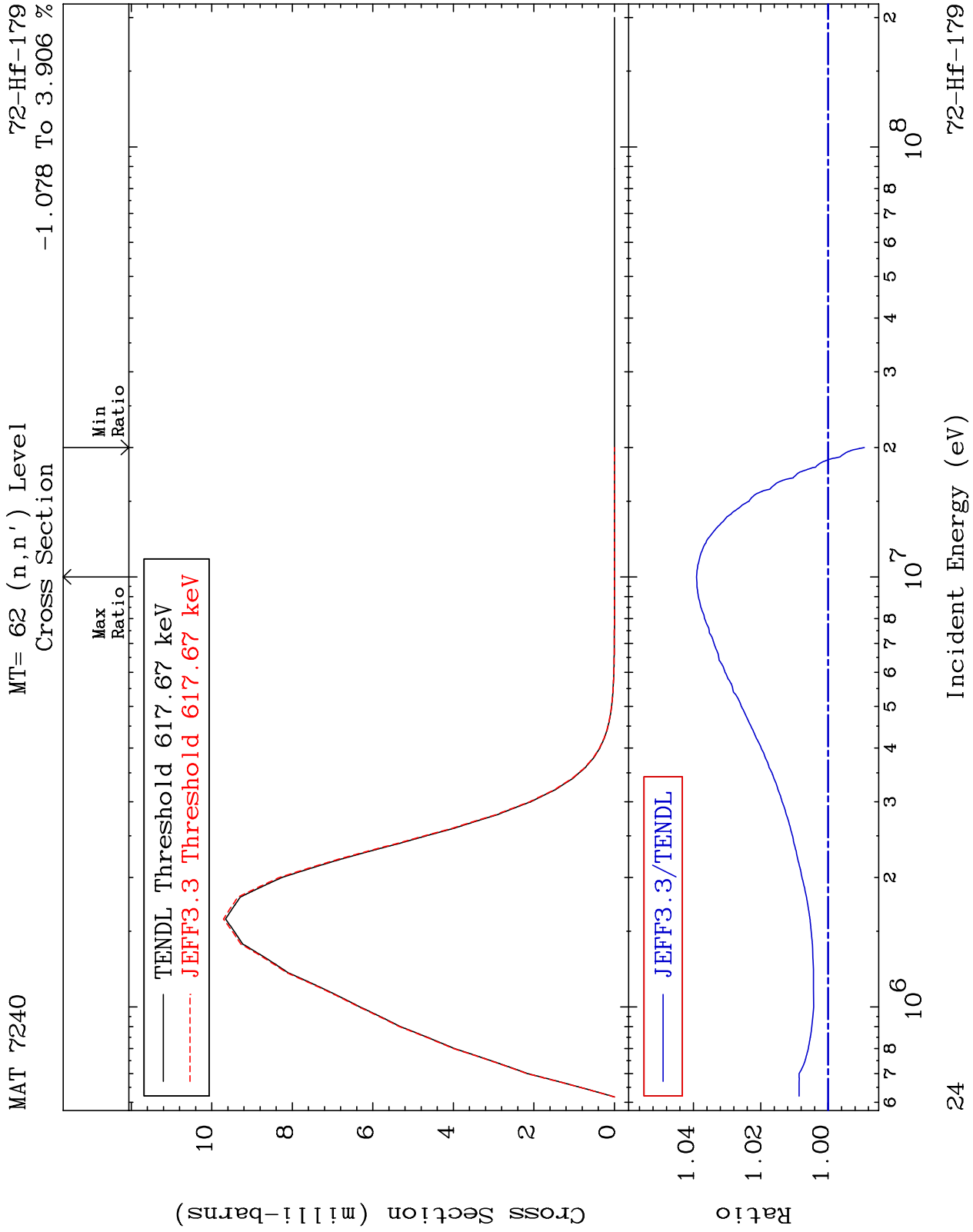


MAT 7240 MT= 60 (n,n') Level Cross Section -1.090 To 3.899 % 72-Hf-179

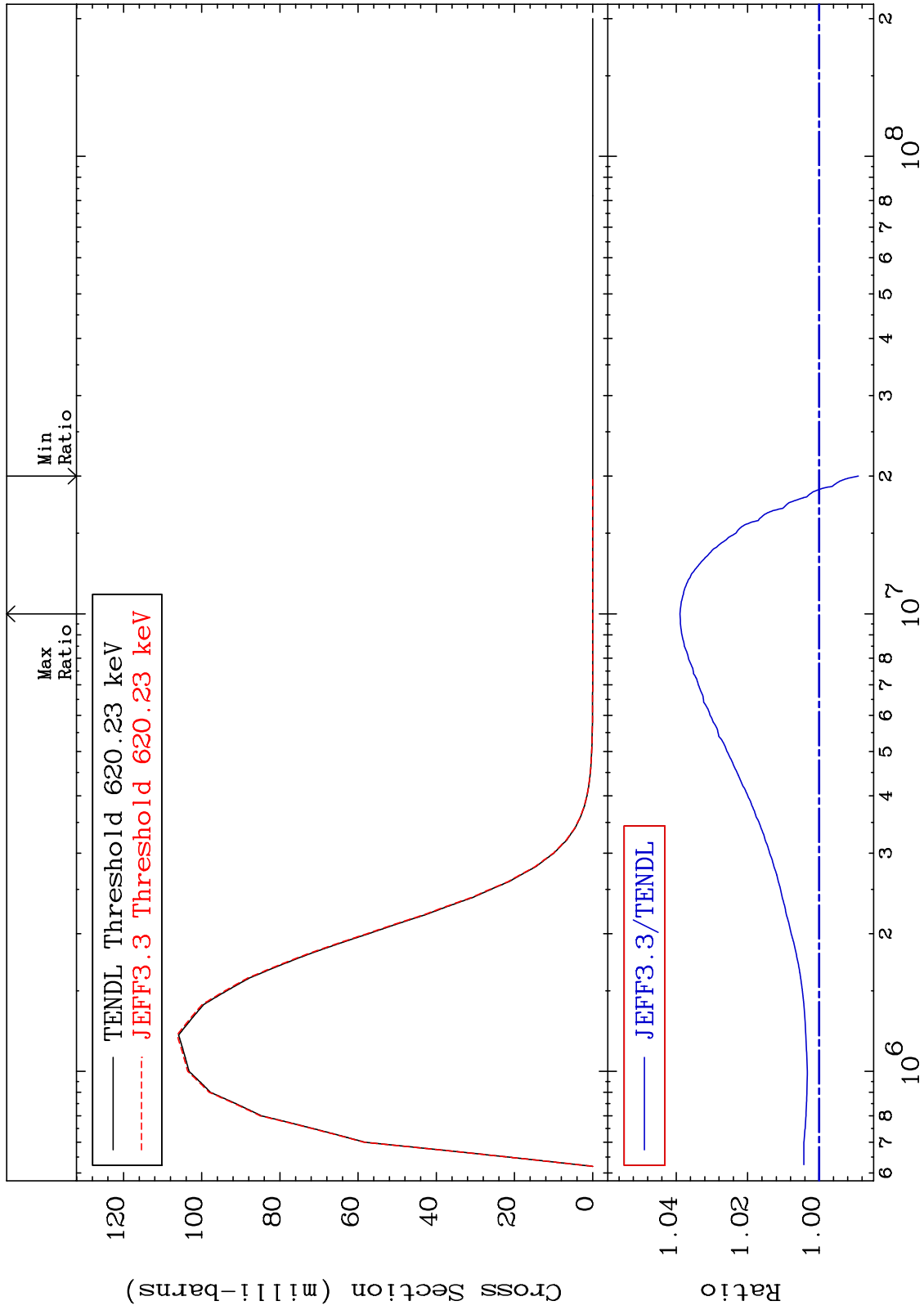


MAT 7240 MT= 61 (n,n') Level Cross Section -1.100 To 3.894 % 72-Hf-179





MAT 7240 MT= 63 (n,n') Level Cross Section 72-Hf-179
 -1.099 To 3.893 %

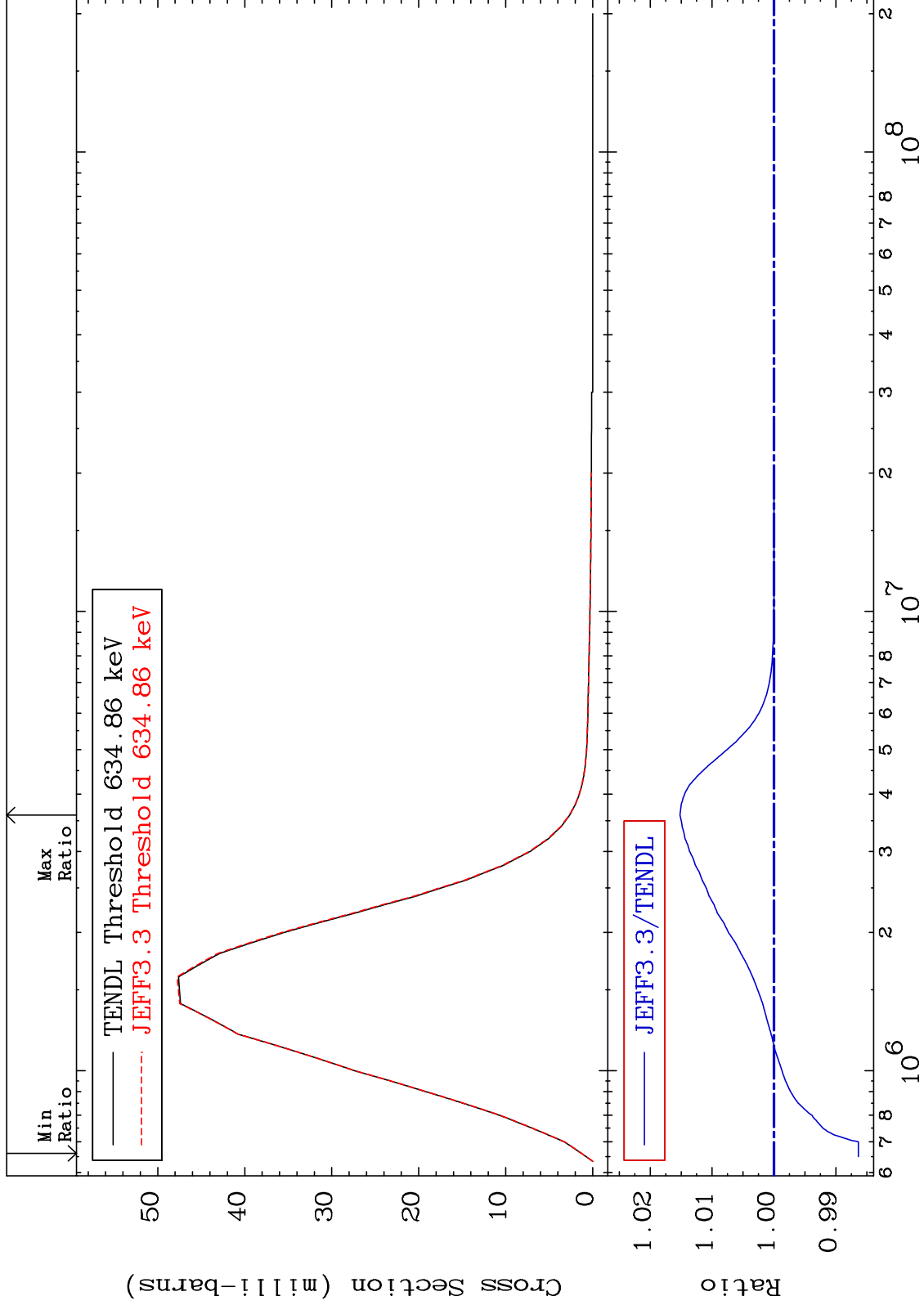


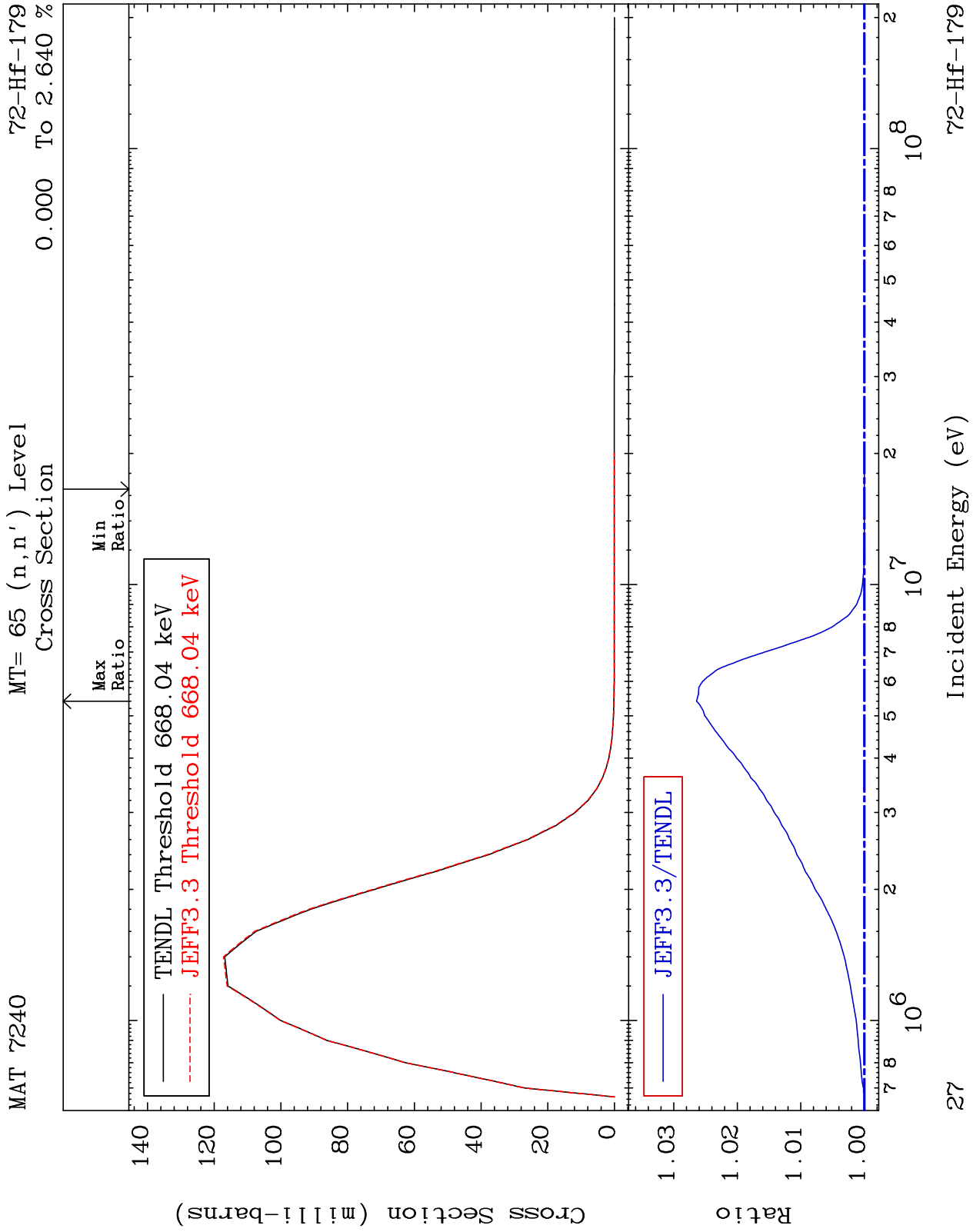
25 Incident Energy (eV) 72-Hf-179

MAT 7240

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

72-Hf-179
-1.364 To 1.518 %

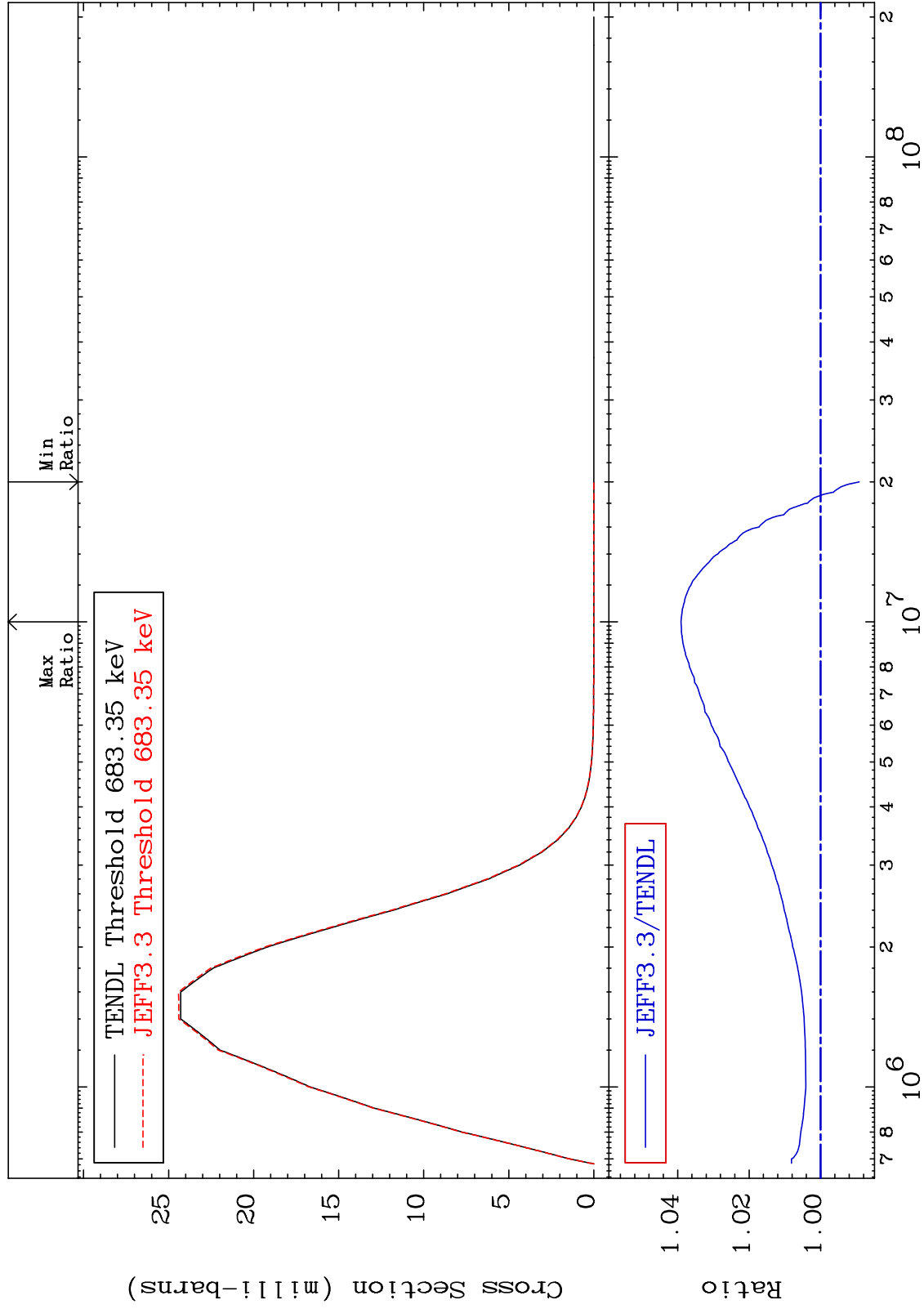




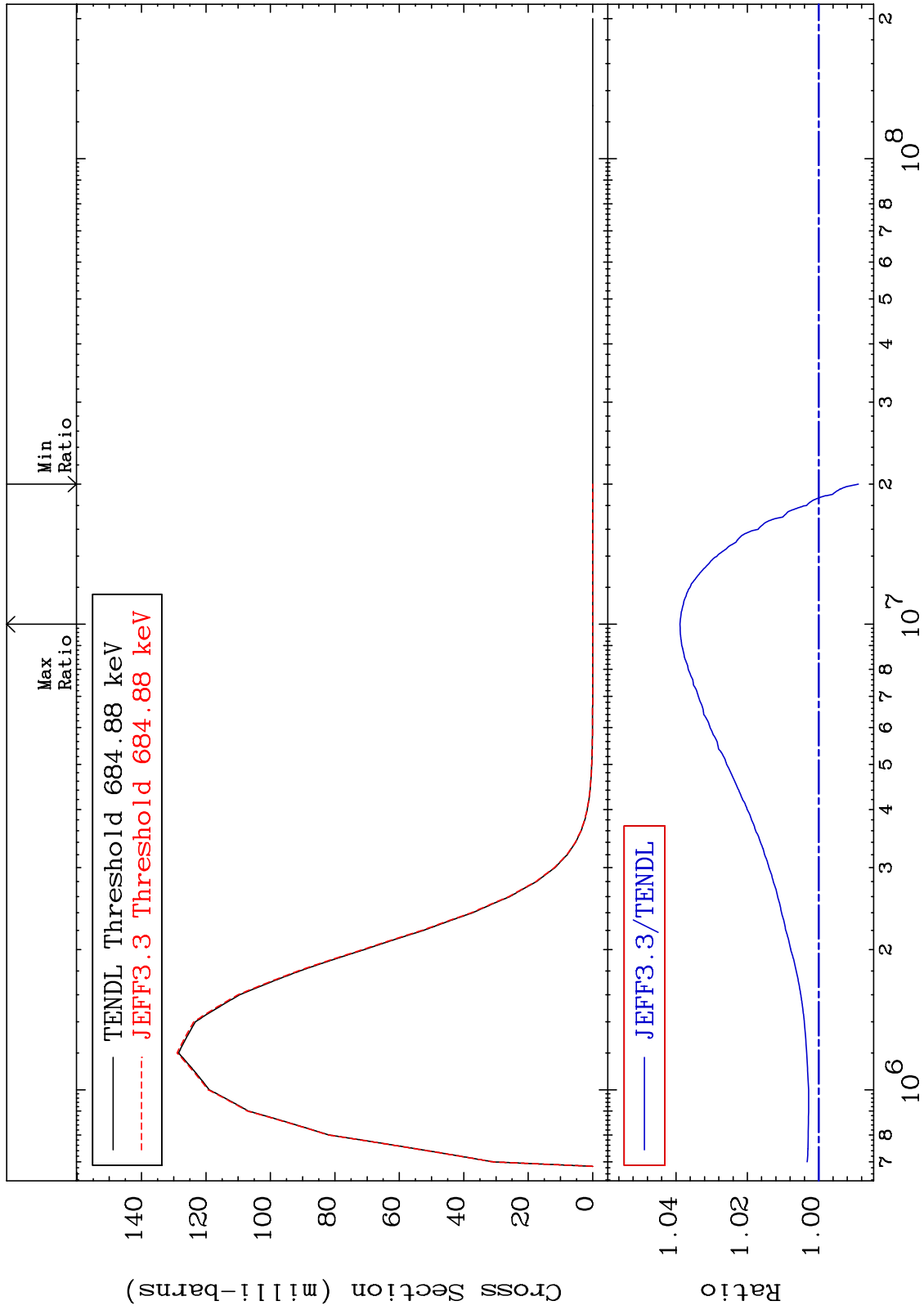
MAT 7240

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

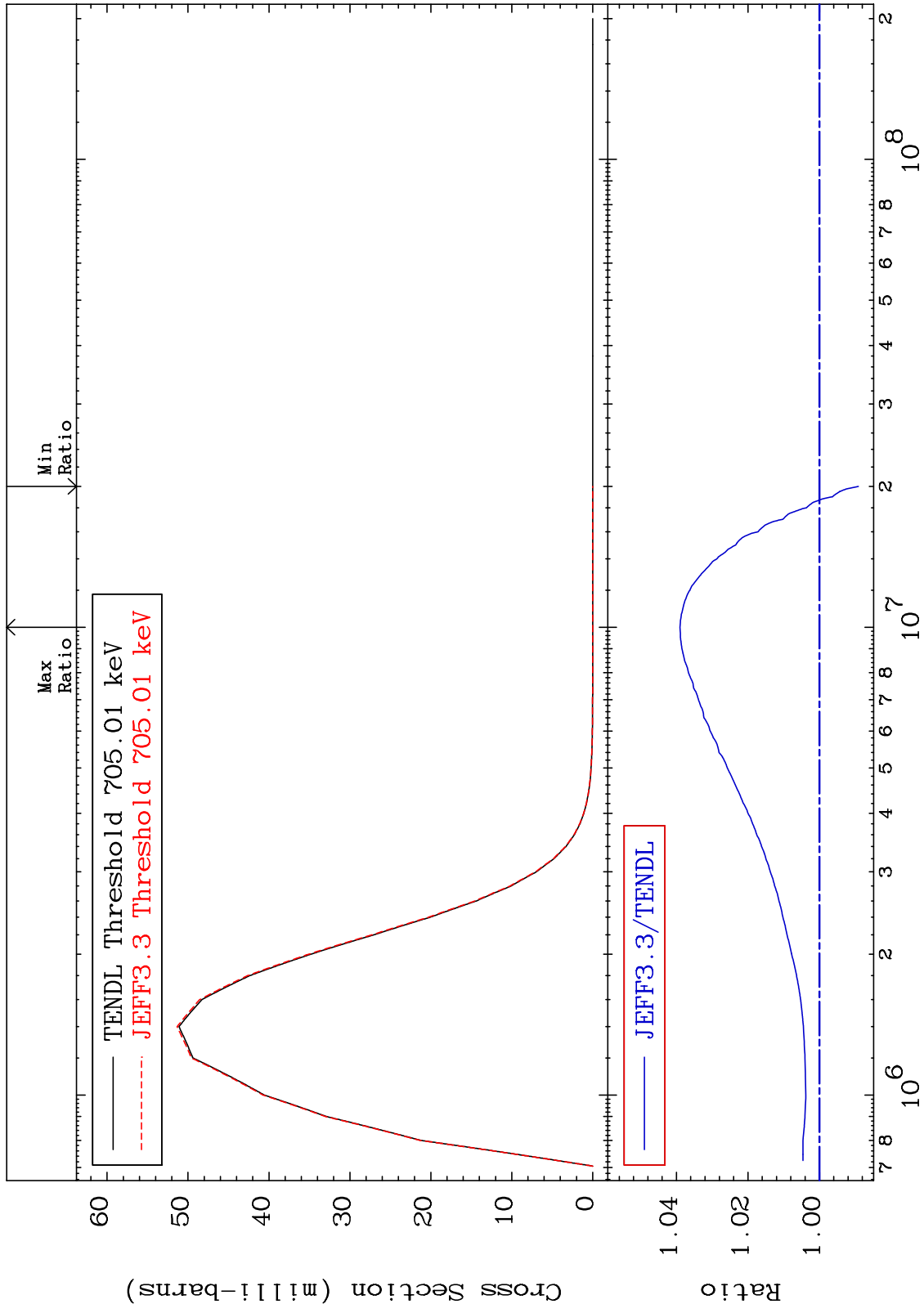
72-Hf-179
-1.082 To 3.905 %



MAT 7240 MT= 67 (n,n') Level Cross Section 72-Hf-179
 -1.112 To 3.886 %

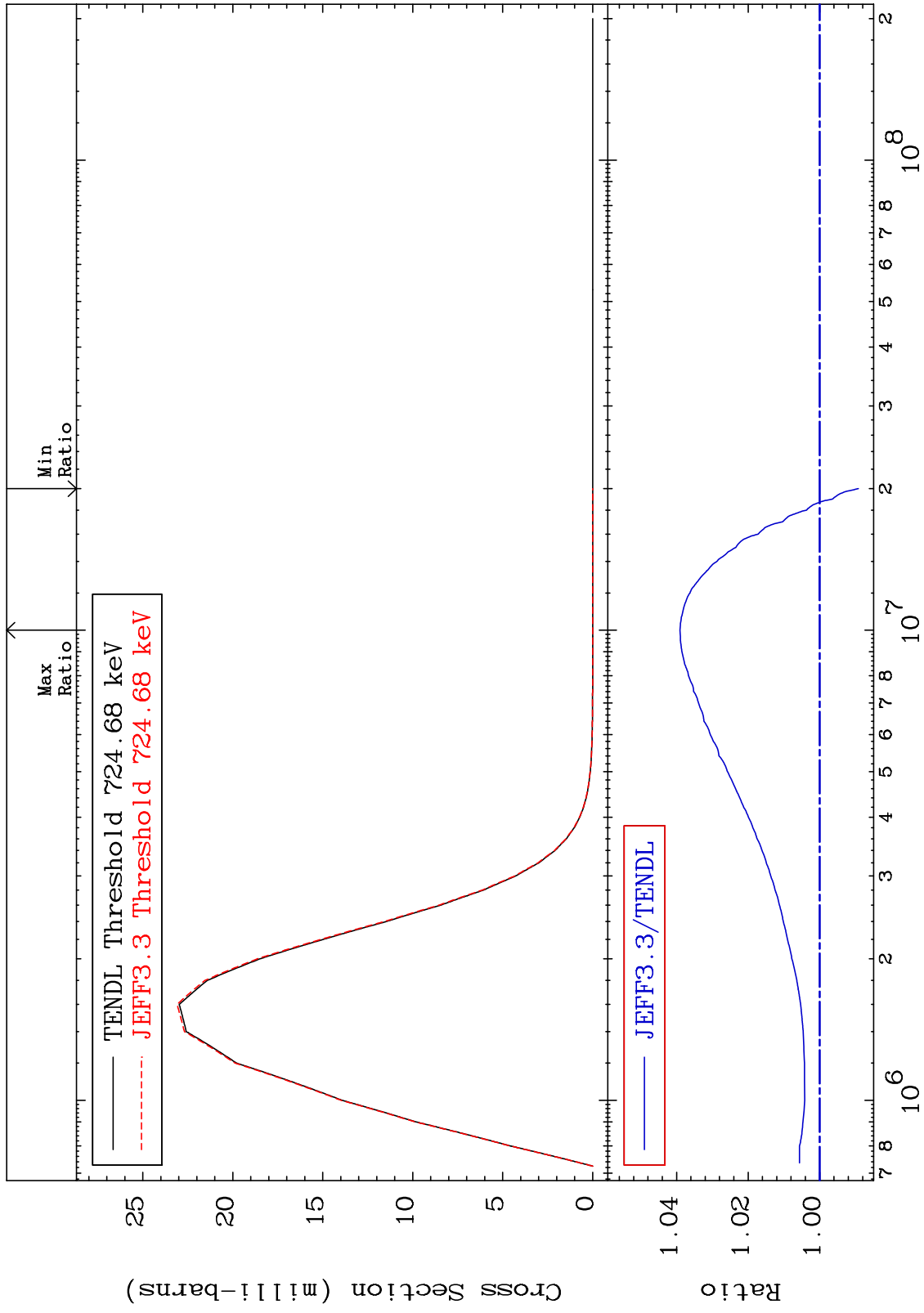


MAT 7240 MT= 68 (n,n') Level Cross Section -1.089 To 3.899 % 72-Hf-179

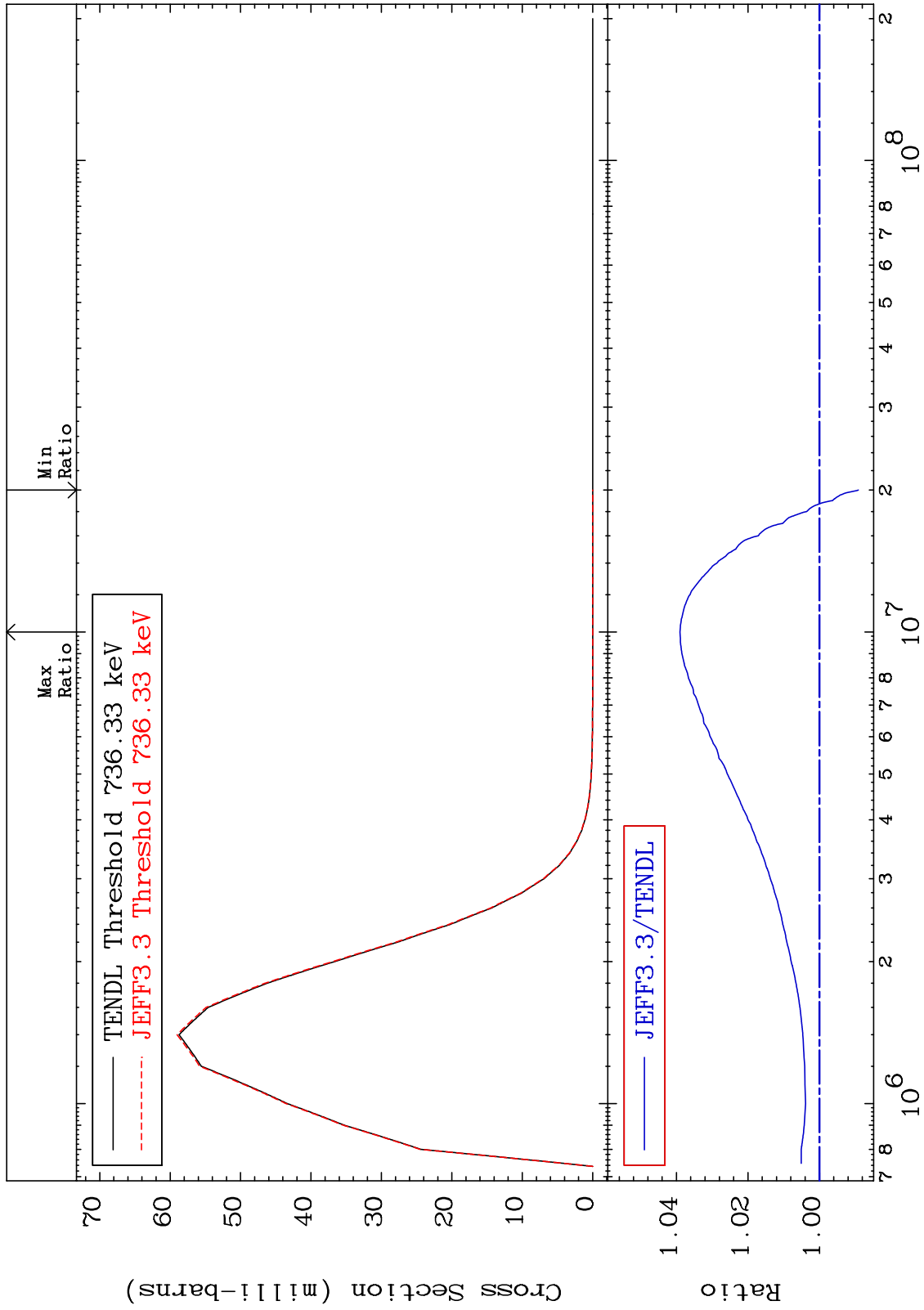


30 72-Hf-179

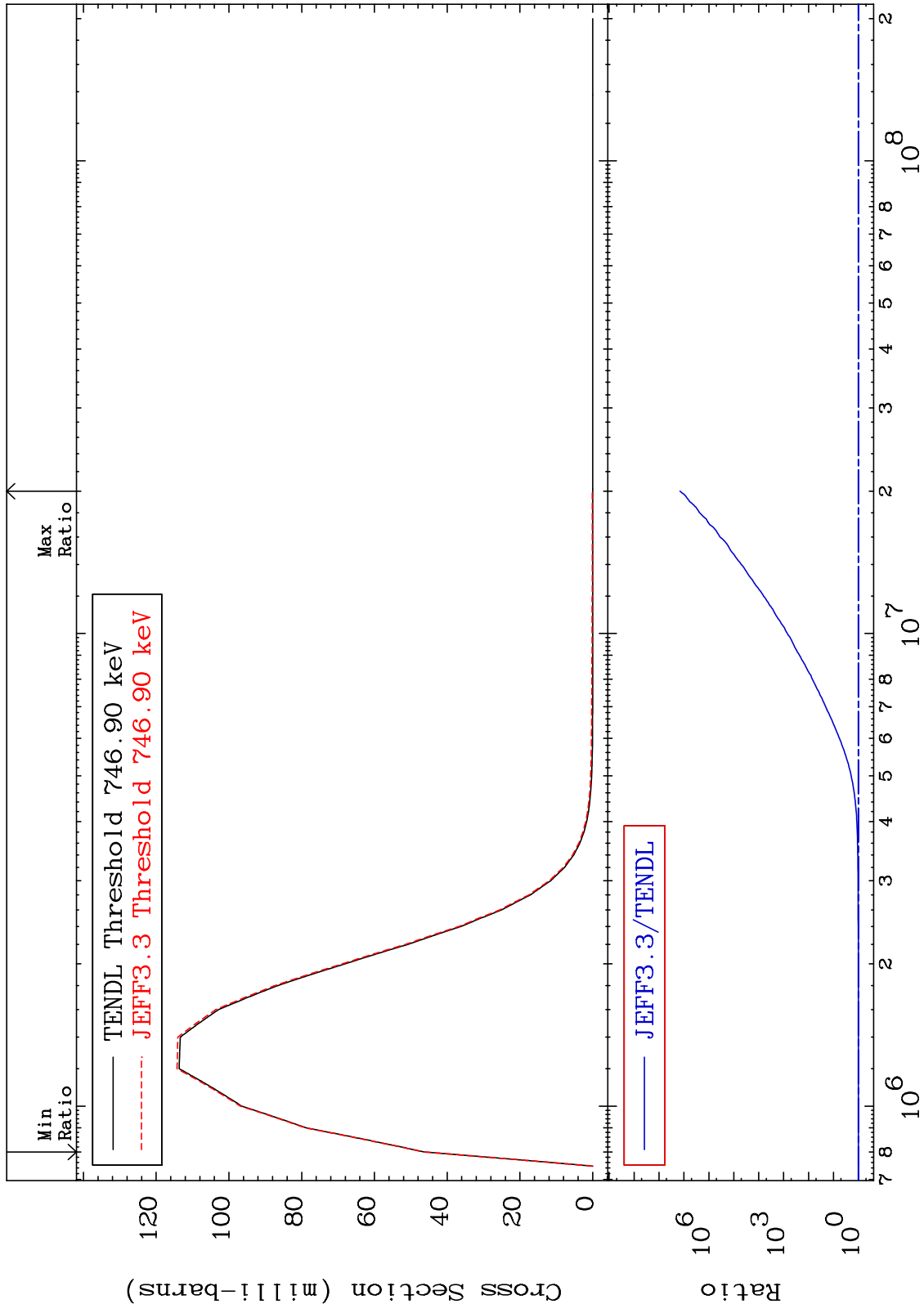
MAT 7240 MT= 69 (n,n') Level 72-Hf-179
 Cross Section -1.082 To 3.904 %



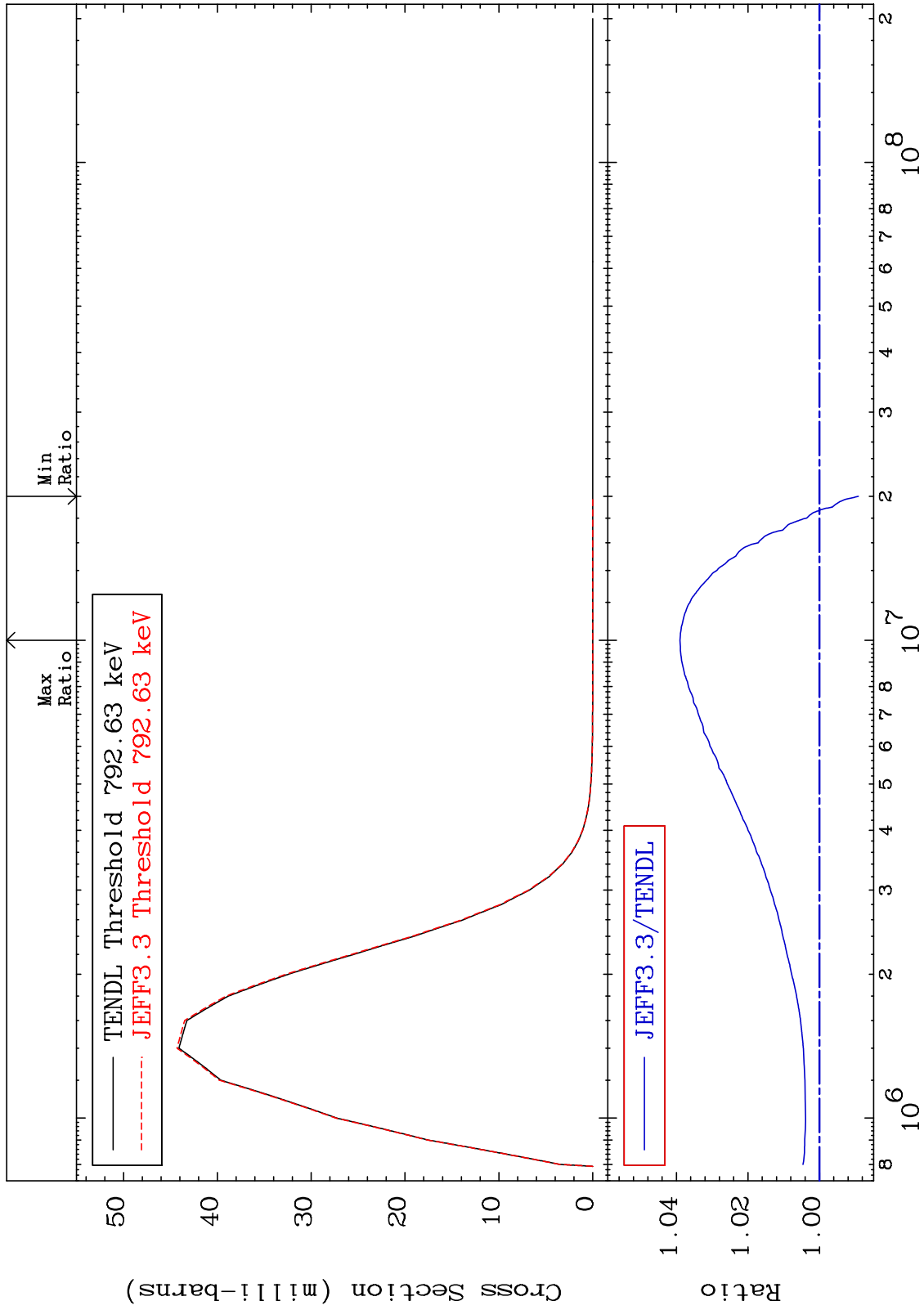
MAT 7240 MT= 70 (n,n') Level Cross Section 72-Hf-179
 -1.089 To 3.900 %



MAT 7240 MT= 71 (n,n') Level Cross Section 72-Hf-179
 0.299 To 9999. %



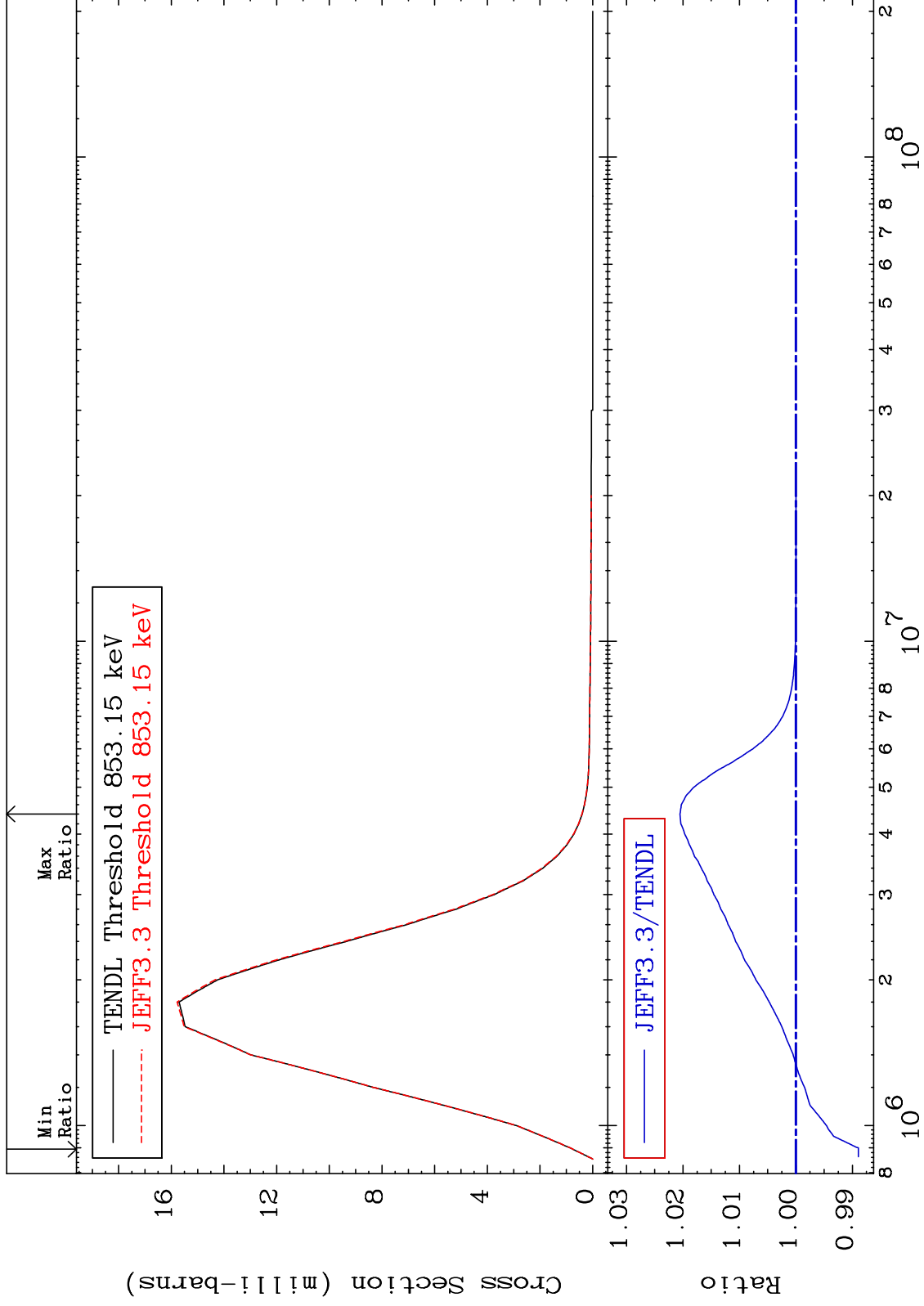
MAT 7240 MT= 72 (n,n') Level 72-Hf-179
 Cross Section -1.089 To 3.899 %



MAT 7240

MT= 74 (n,n') Level
Cross Section

72-Hf-179
-1.106 To 2.052 %

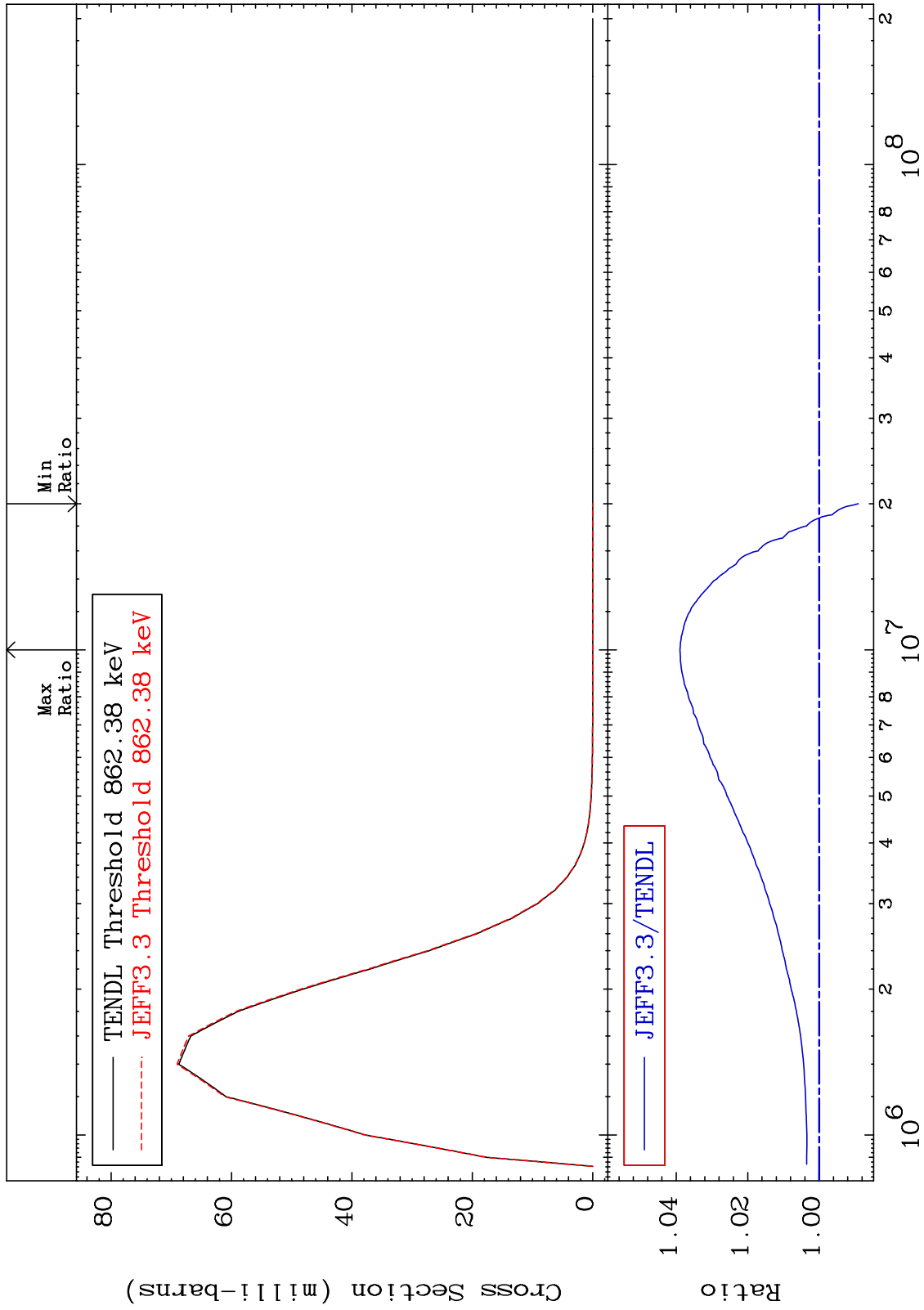


36

Incident Energy (eV)

72-Hf-179

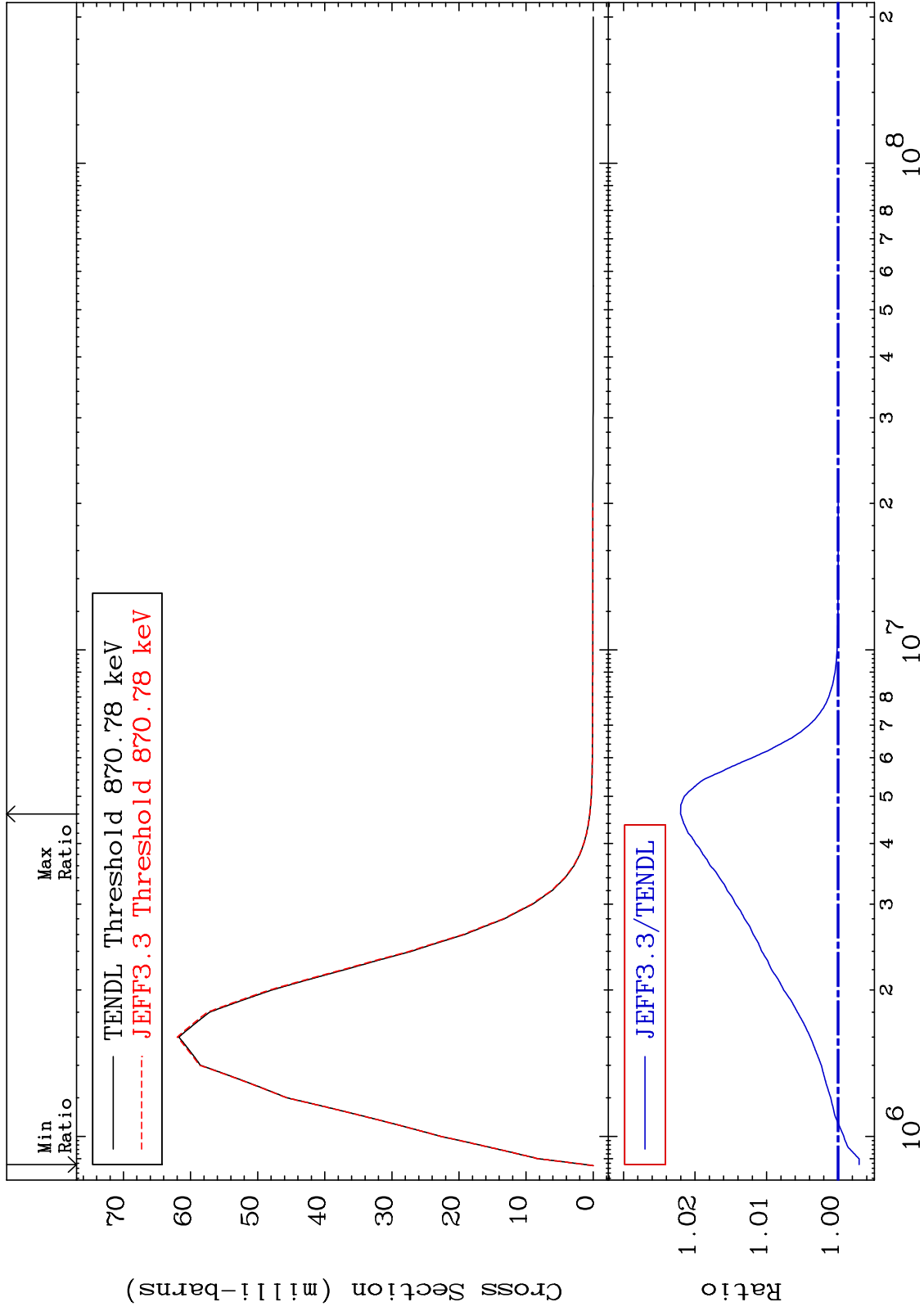
MAT 7240 MT= 75 (n,n') Level Cross Section -1.099 To 3.894 % 72-Hf-179



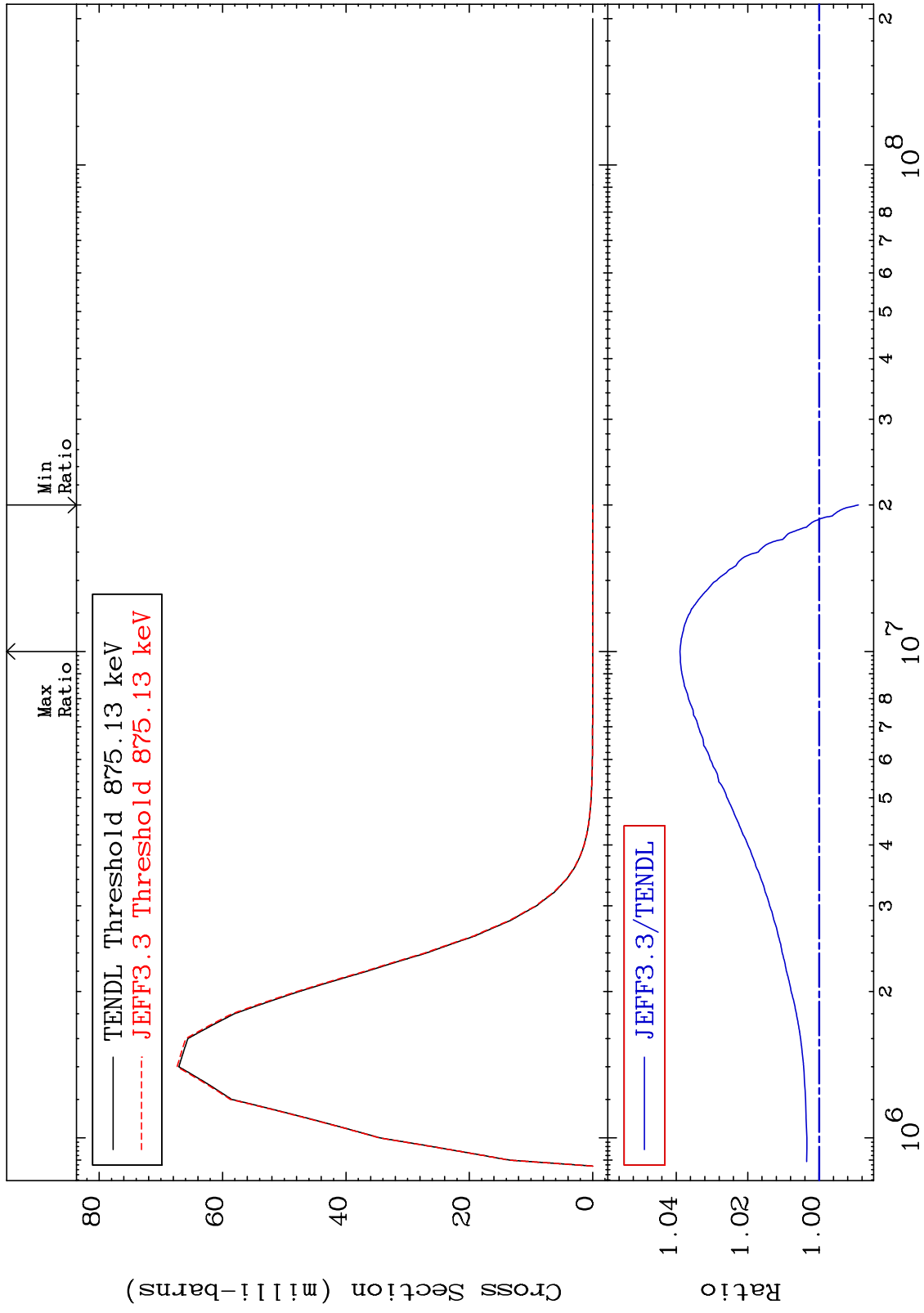
MAT 7240

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

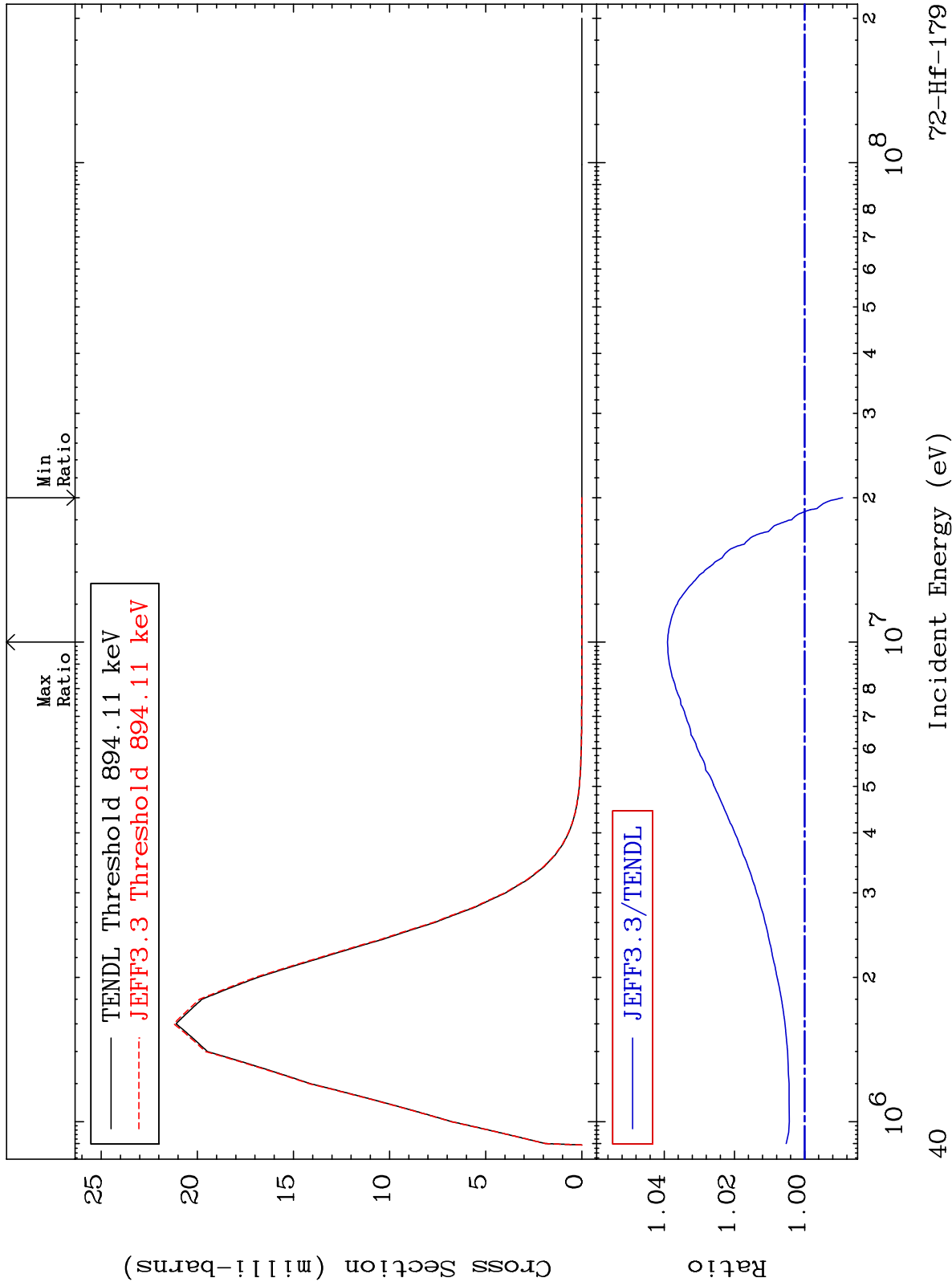
72-Hf-179
-0.295 To 2.202 %



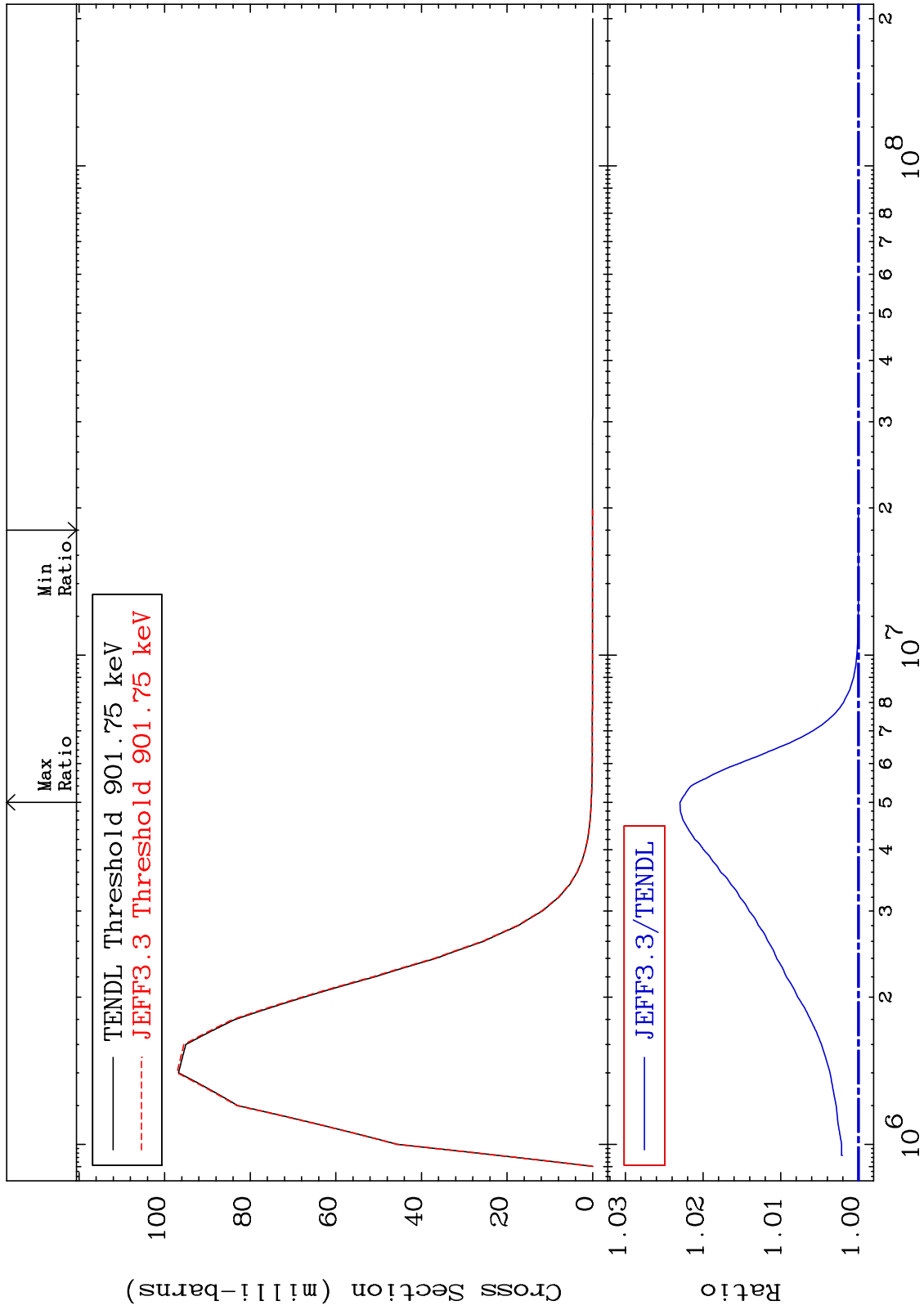
MAT 7240 MT= 77 (n,n') Level 72-Hf-179
Cross Section -1.099 To 3.894 %



MAT 7240 MT= 78 (n,n') Level 72-Hf-179
Cross Section -1.081 To 3.904 %

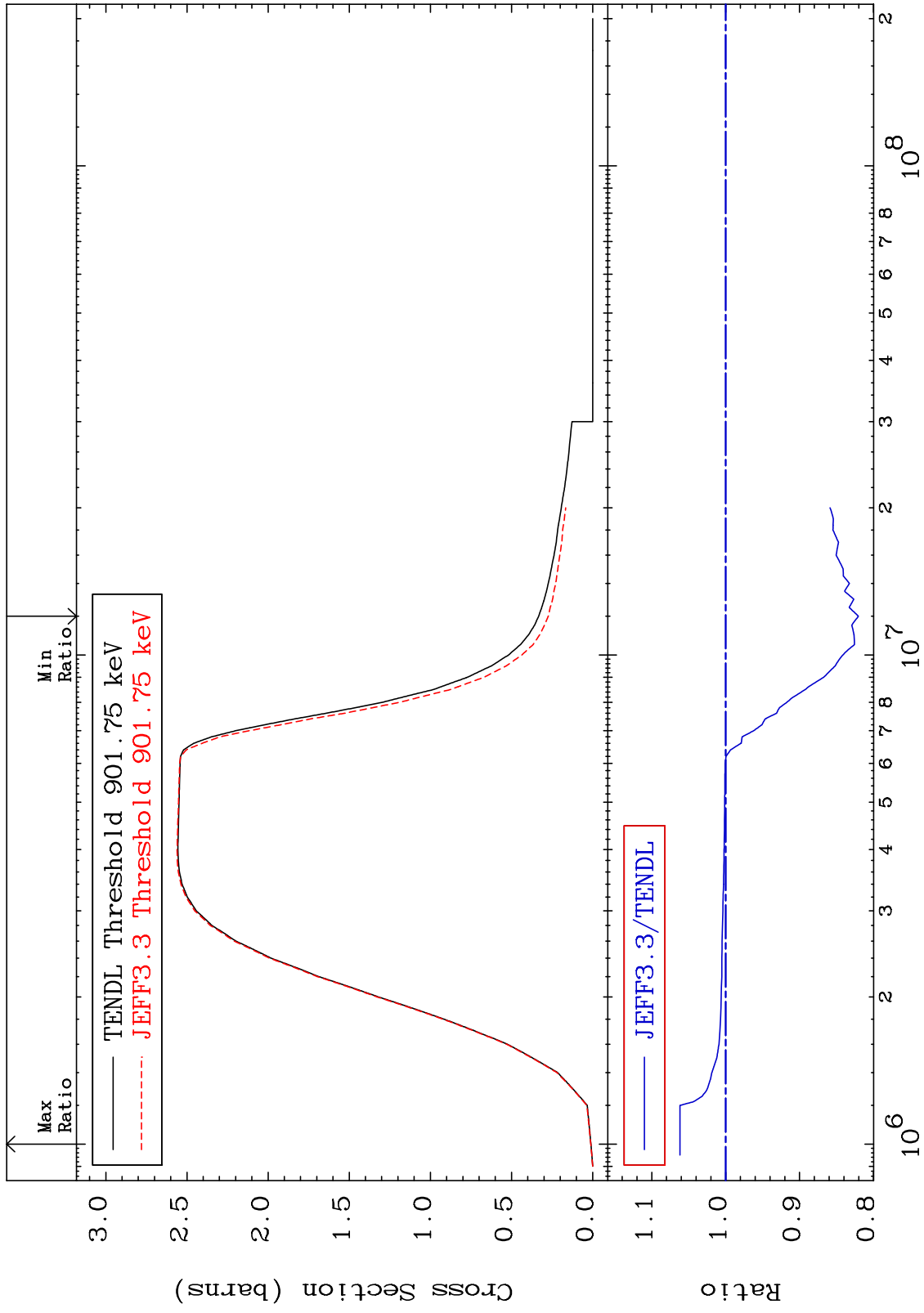


MAT 7240 MT= 79 (n, n') Level Cross Section 72-Hf-179
 0.000 To 2.297 %



41 Incident Energy (eV) 72-Hf-179

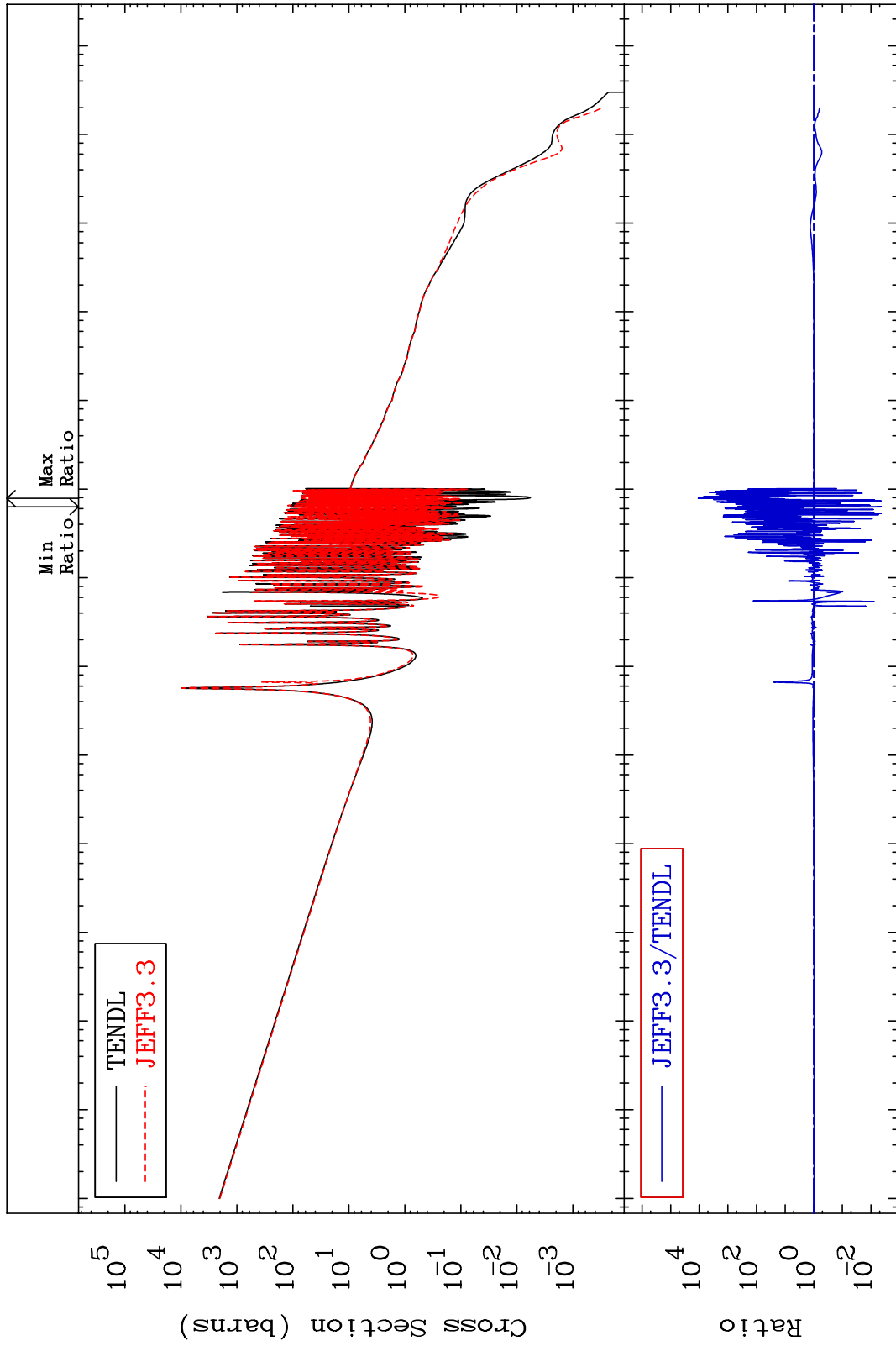
MAT 7240 (n, n') Continuum Cross Section 72-Hf-179 -17.96 To 6.173 %



MAT 7240

(n, γ)
Cross Section

72-Hf-179
-99.57 To 9999. %



72-Hf-179

Incident Energy (eV)

43

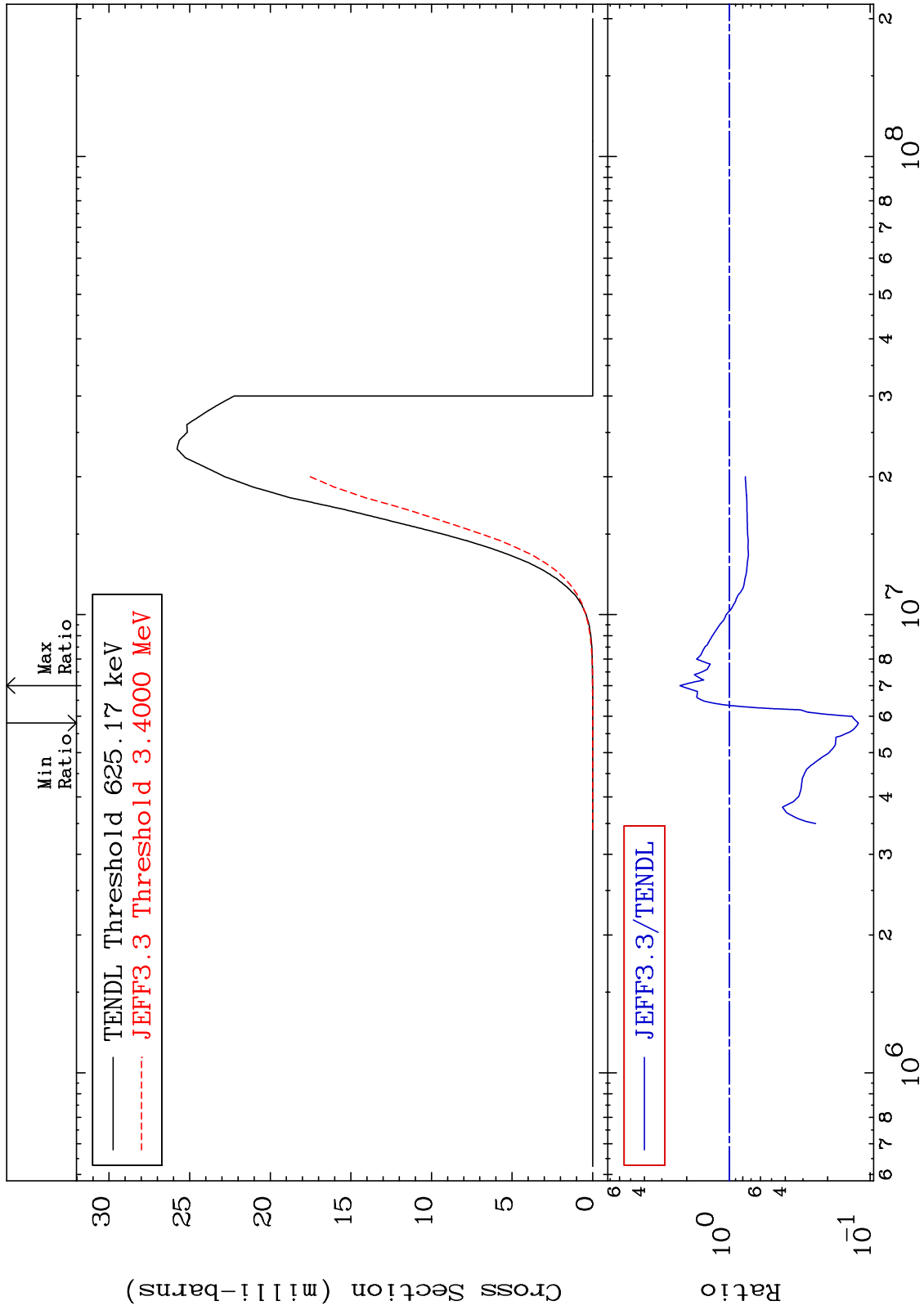
MAT 7240

(n, p)

⁷²Hf-179

Cross Section

-87.89 To 123.3 %



44

Incident Energy (eV)

⁷²Hf-179

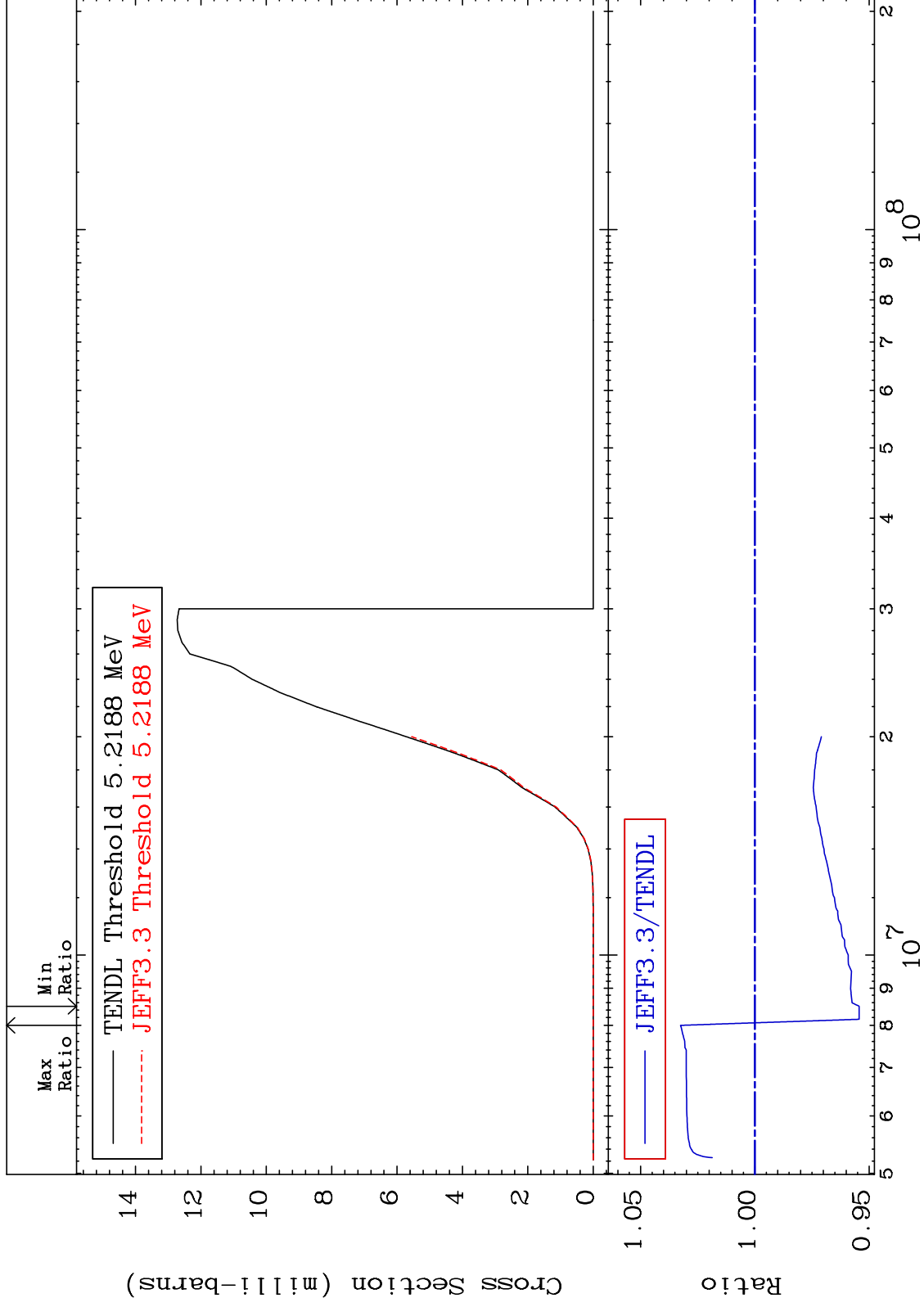
MAT 7240

(n, d)

72-Hf-179

Cross Section

-4.566 To 3.252 %

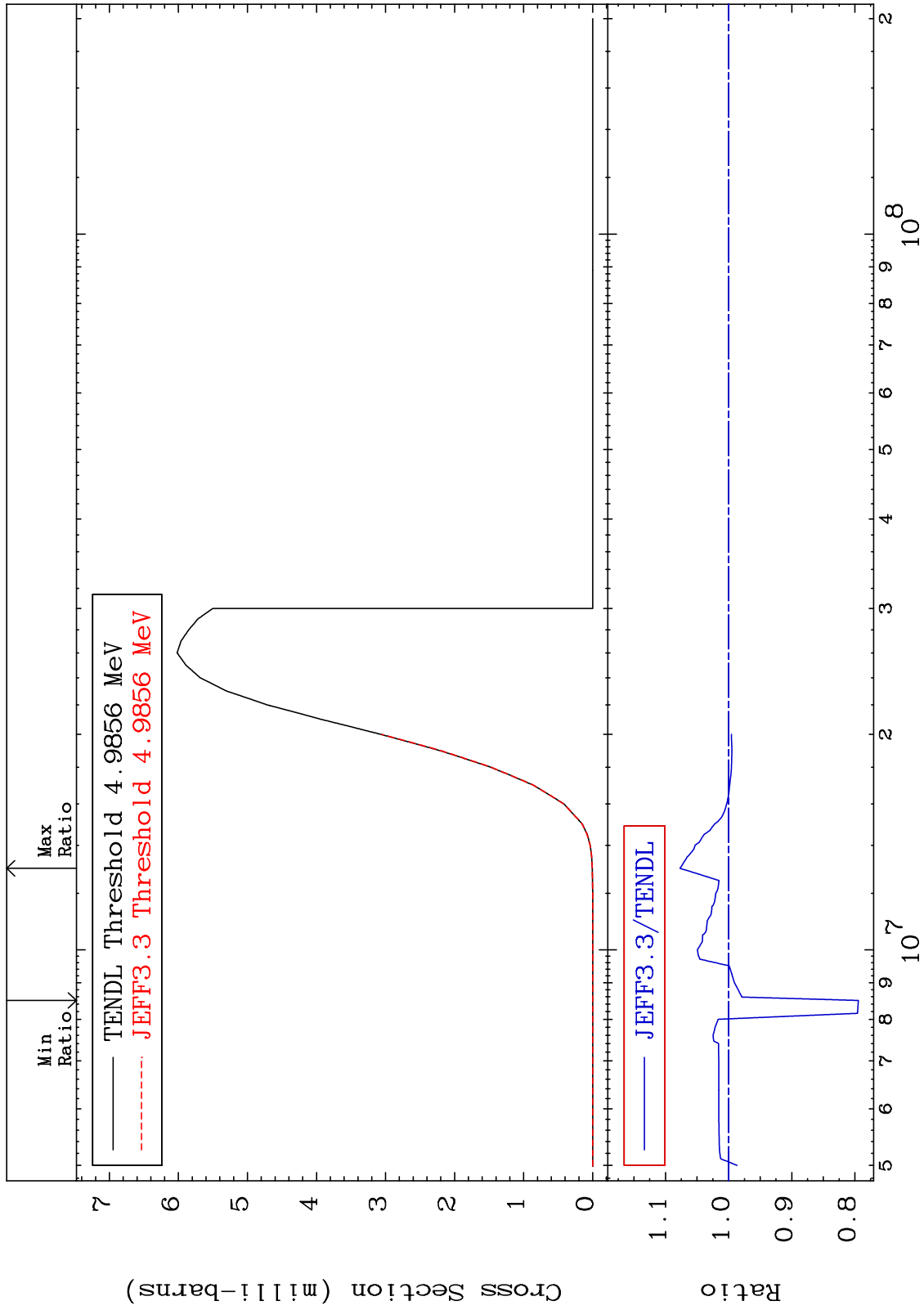


45

Incident Energy (eV)

72-Hf-179

MAT 7240 (n, t) Cross Section 72-Hf-179 -20.56 To 7.698 %



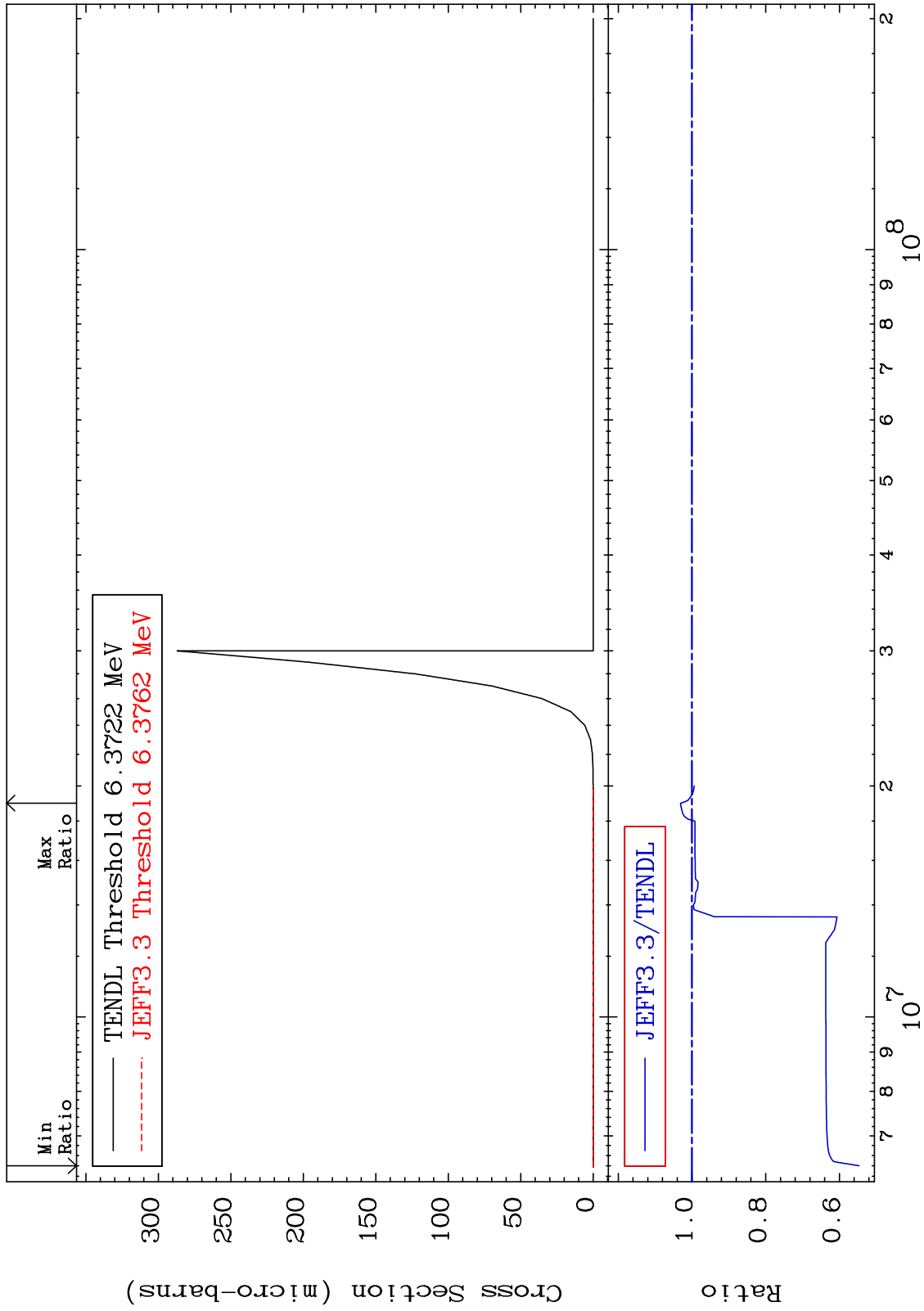
MAT 7240

(n, He-3)

72-Hf-179

Cross Section

-45.36 To 3.076 %



47

Incident Energy (eV)

72-Hf-179

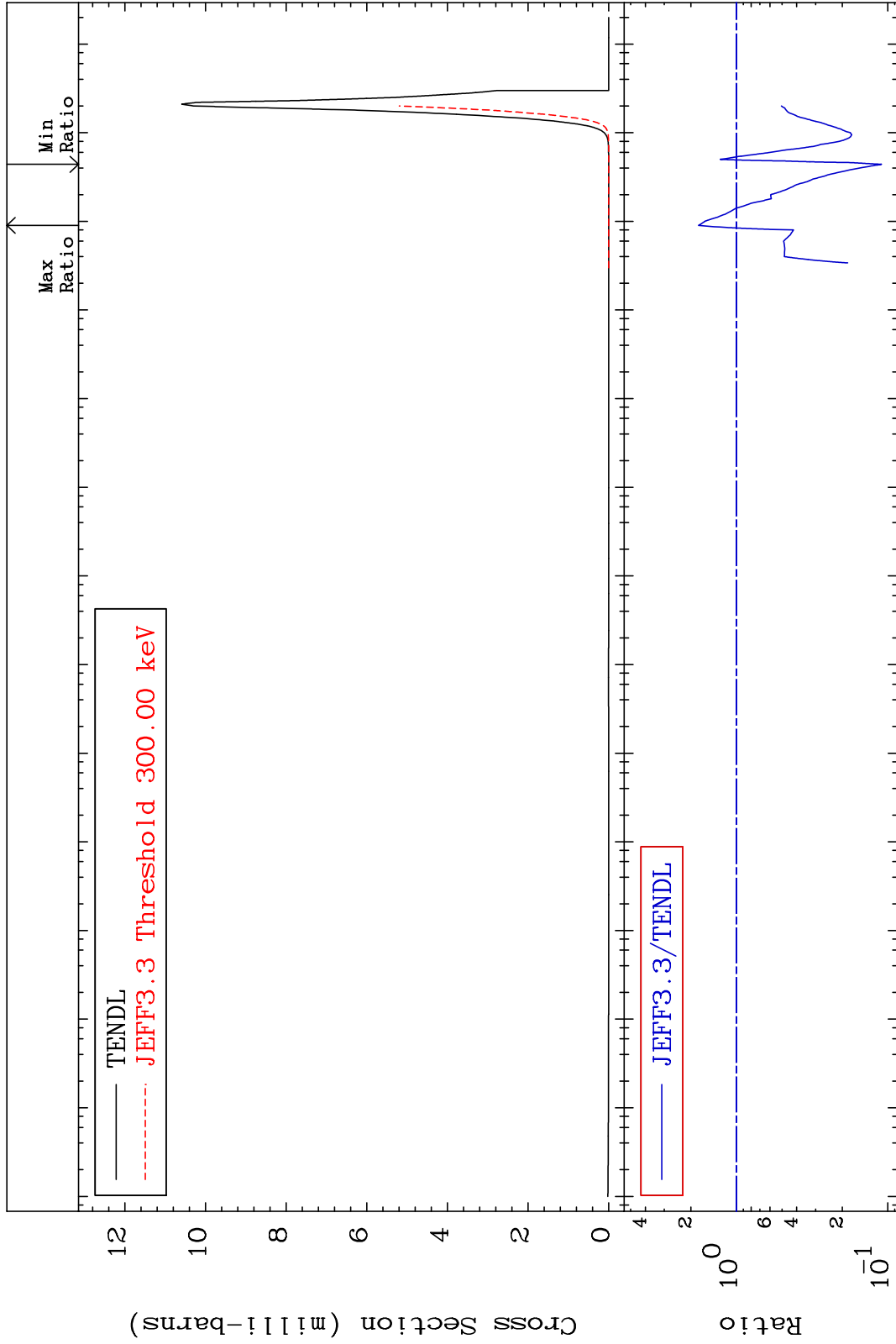
MAT 7240

(n, α)

72-Hf-179

Cross Section

-89.01 To 78.58 %



48

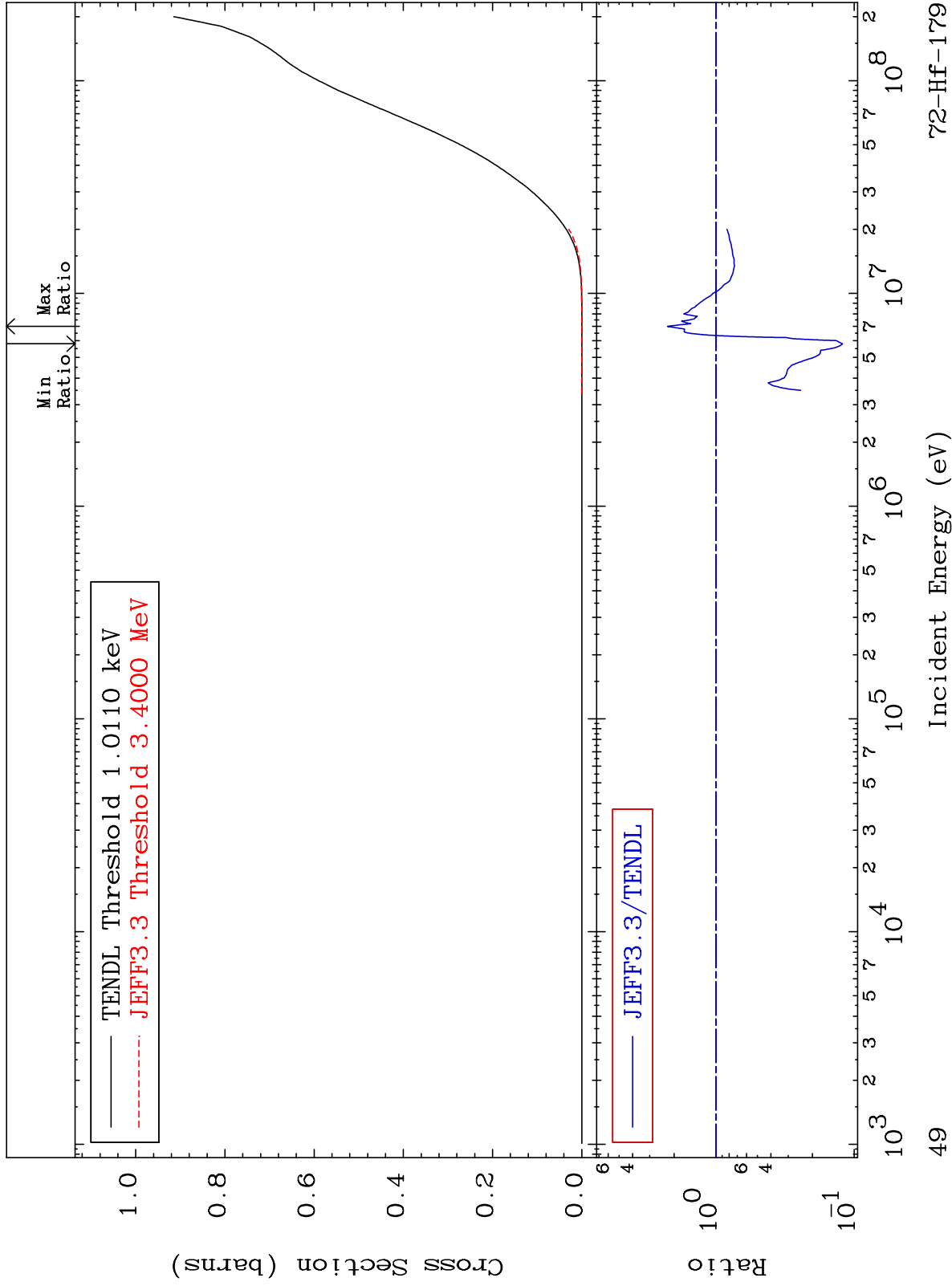
Incident Energy (eV)

72-Hf-179

MAT 7240

Hydrogen Production
Cross Section

72-Hf-179
-87.89 To 123.3 %



49

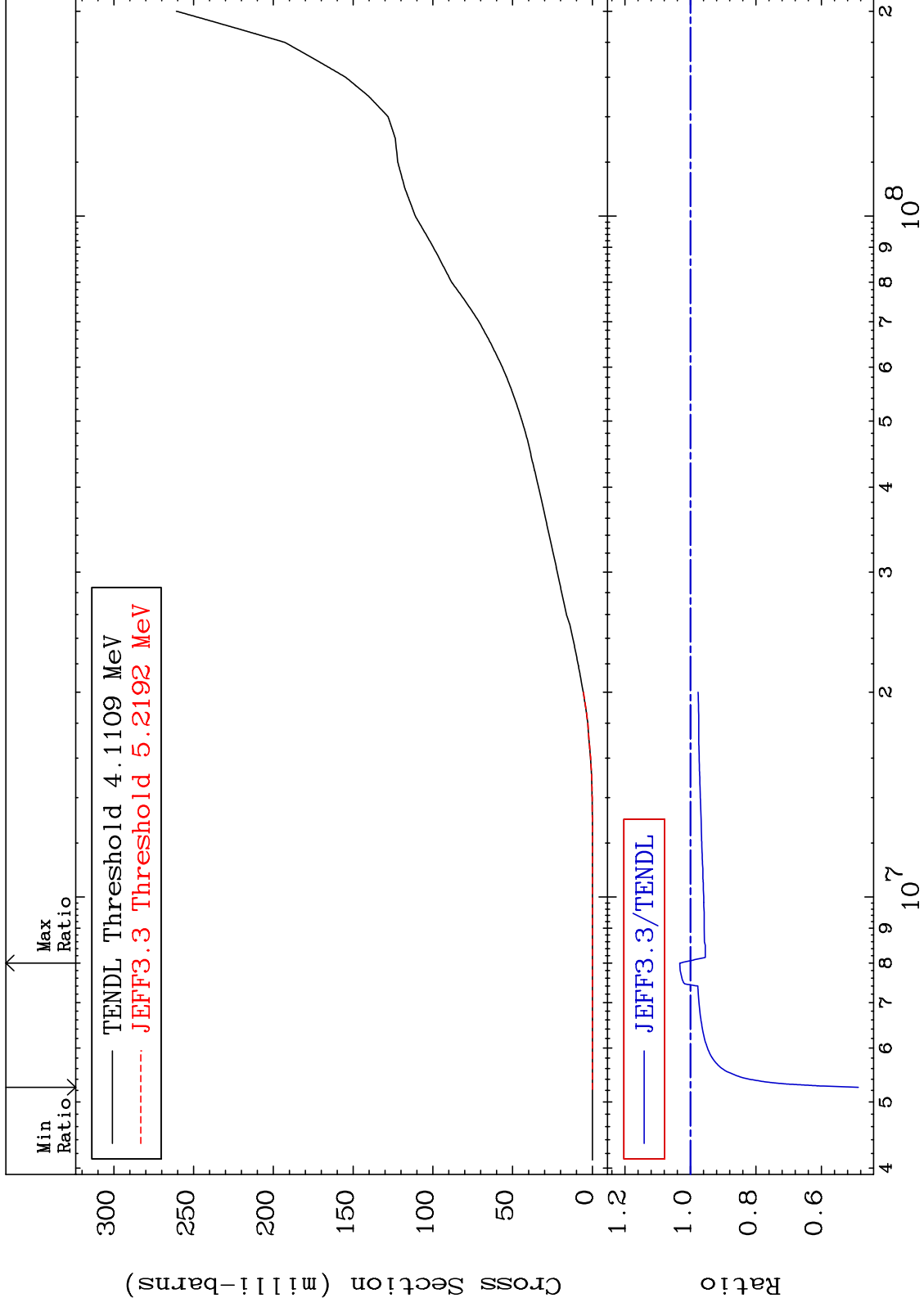
Incident Energy (eV)

72-Hf-179

MAT 7240

Deuterium Production
Cross Section

72-Hf-179
-51.27 To 3.242 %



50

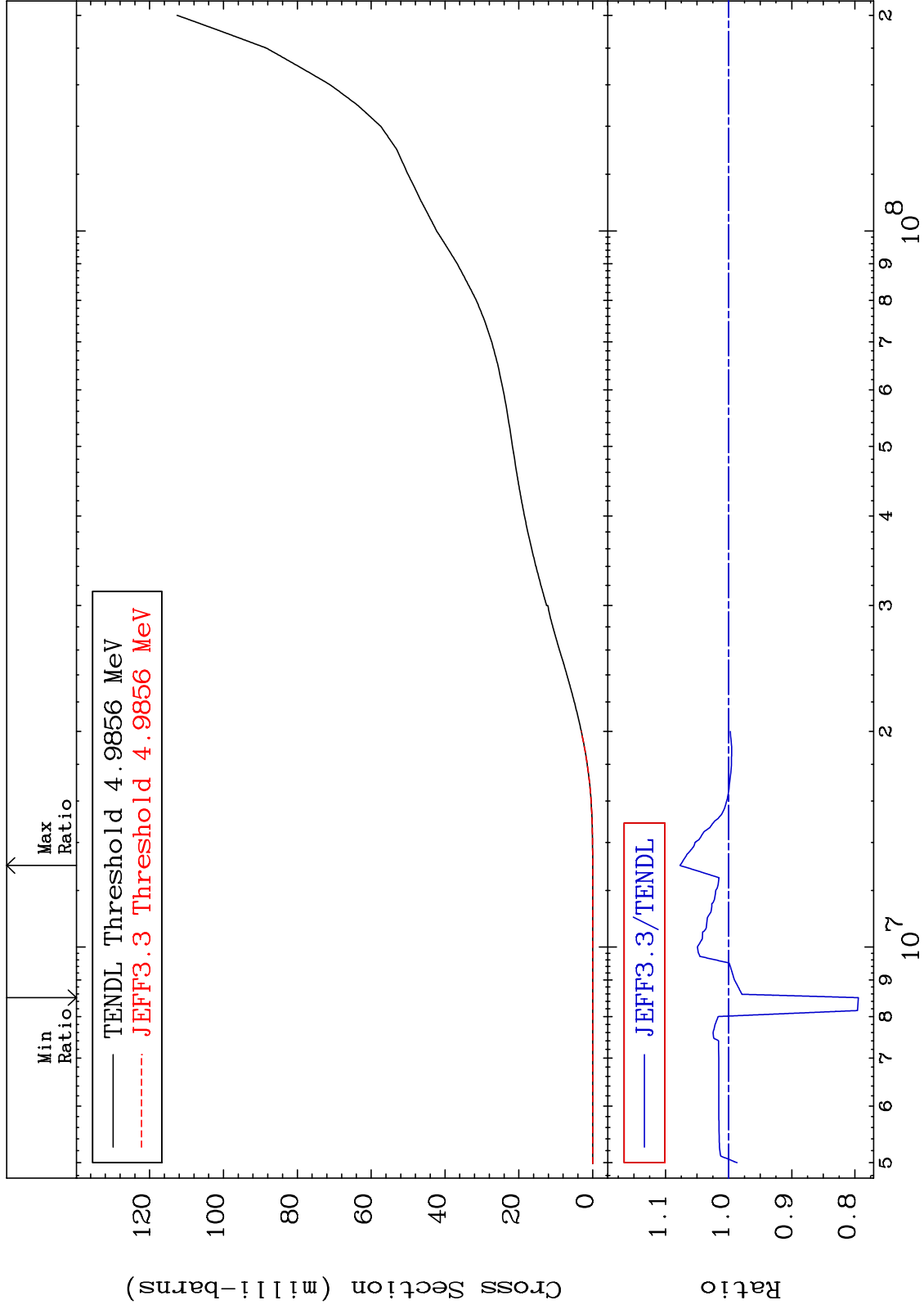
Incident Energy (eV)

72-Hf-179

MAT 7240

Tritium Production
Cross Section

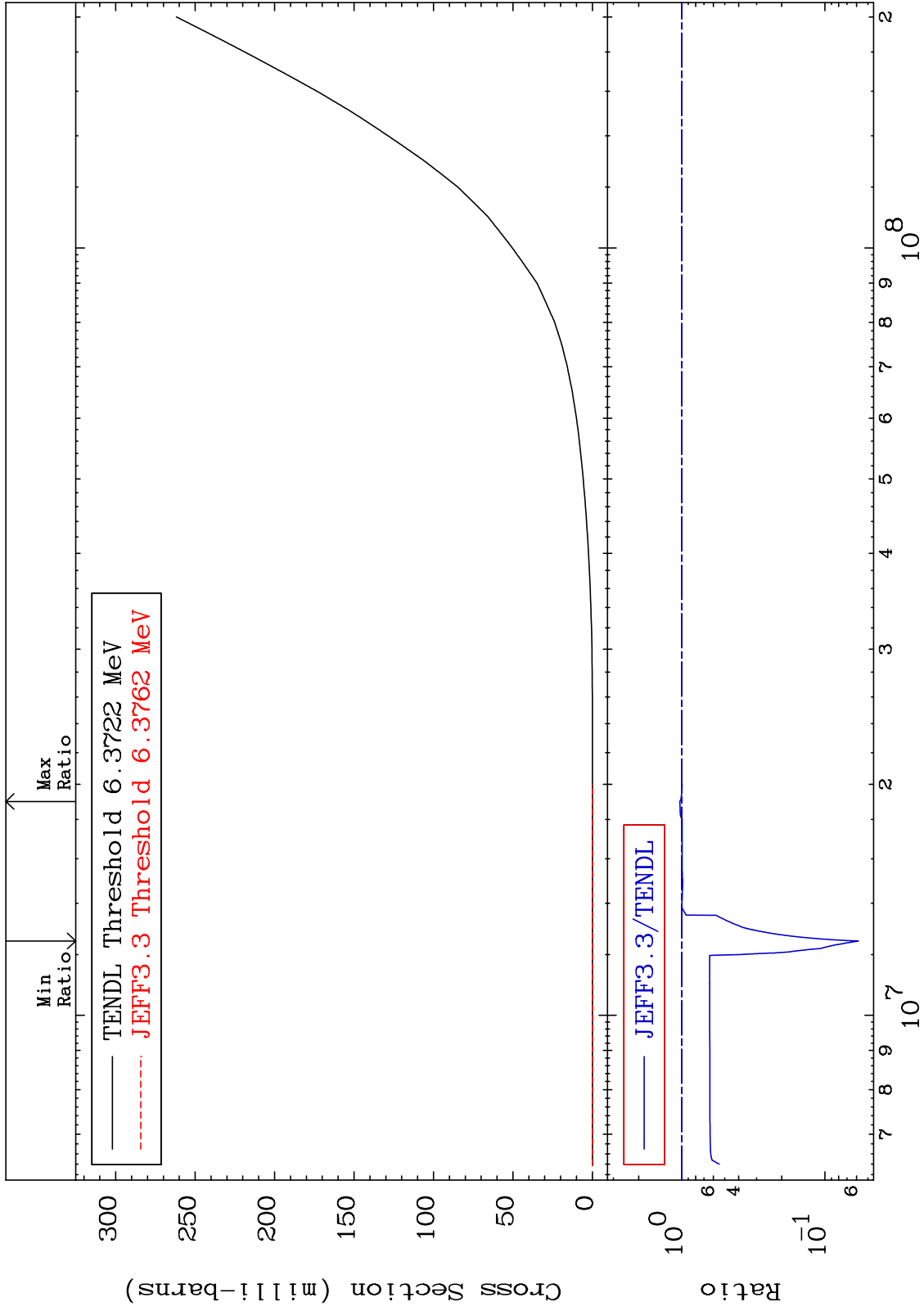
72-Hf-179
-20.56 To 7.698 %



MAT 7240

He-3 Production
Cross Section

⁷²Hf-179
-94.16 To 3.076 %



52

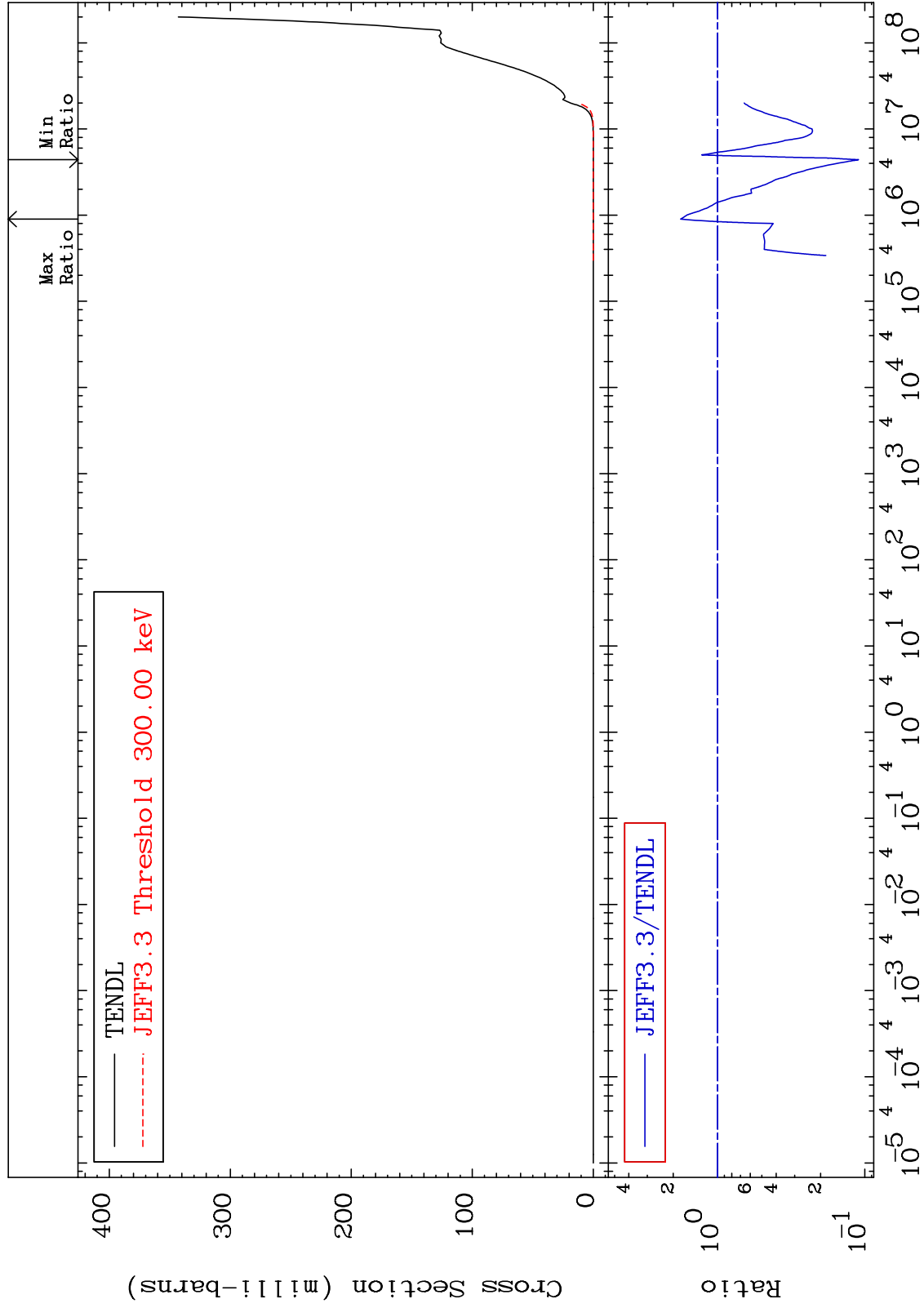
Incident Energy (eV)

⁷²Hf-179

MAT 7240

He-4 Production
Cross Section

72-Hf-179
-88.95 To 78.58 %



53

Incident Energy (eV)

72-Hf-179

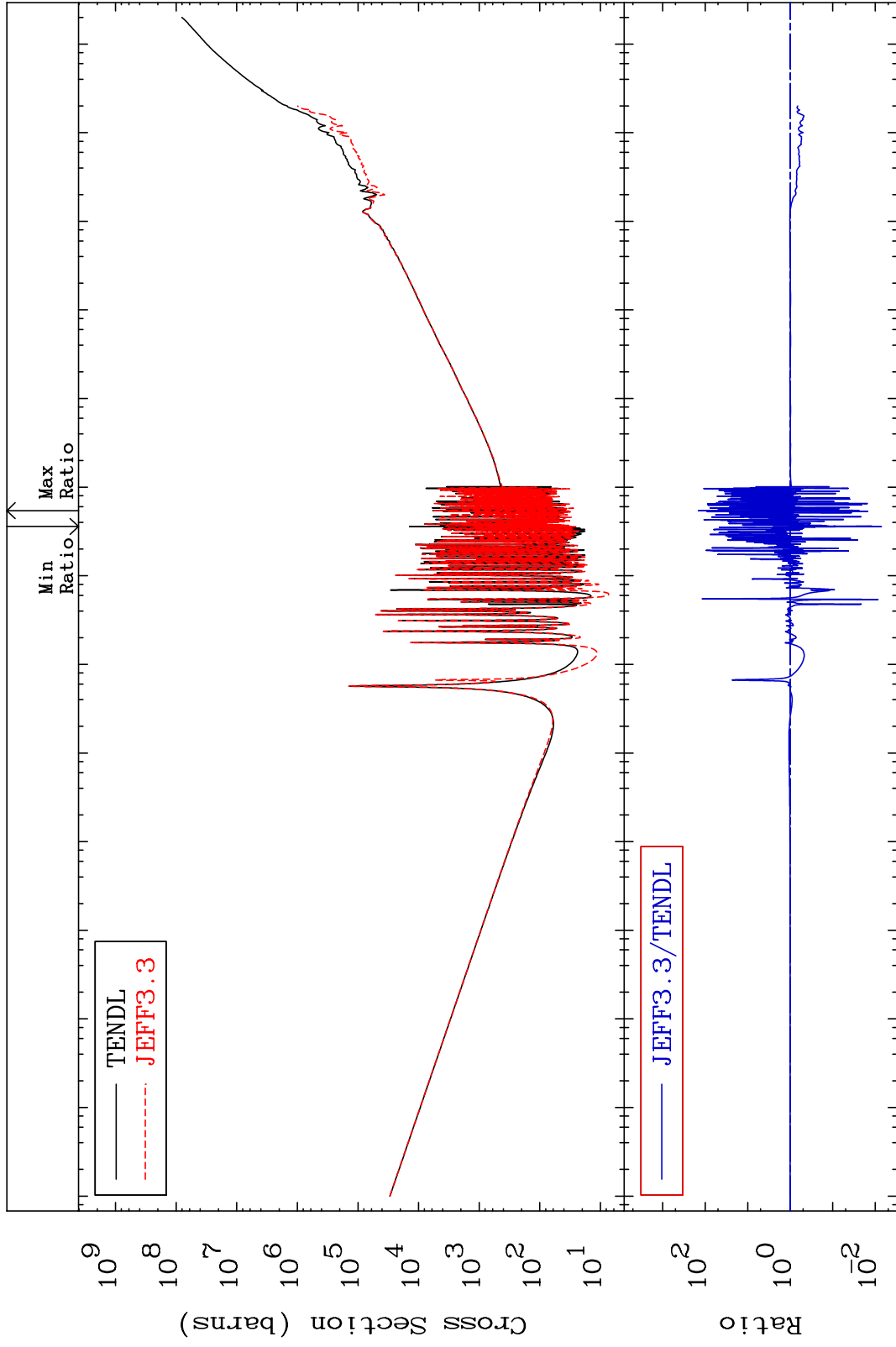
MAT 7240

Kerma total (eV-barns)

72-Hf-179

-99.29 To 9999. %

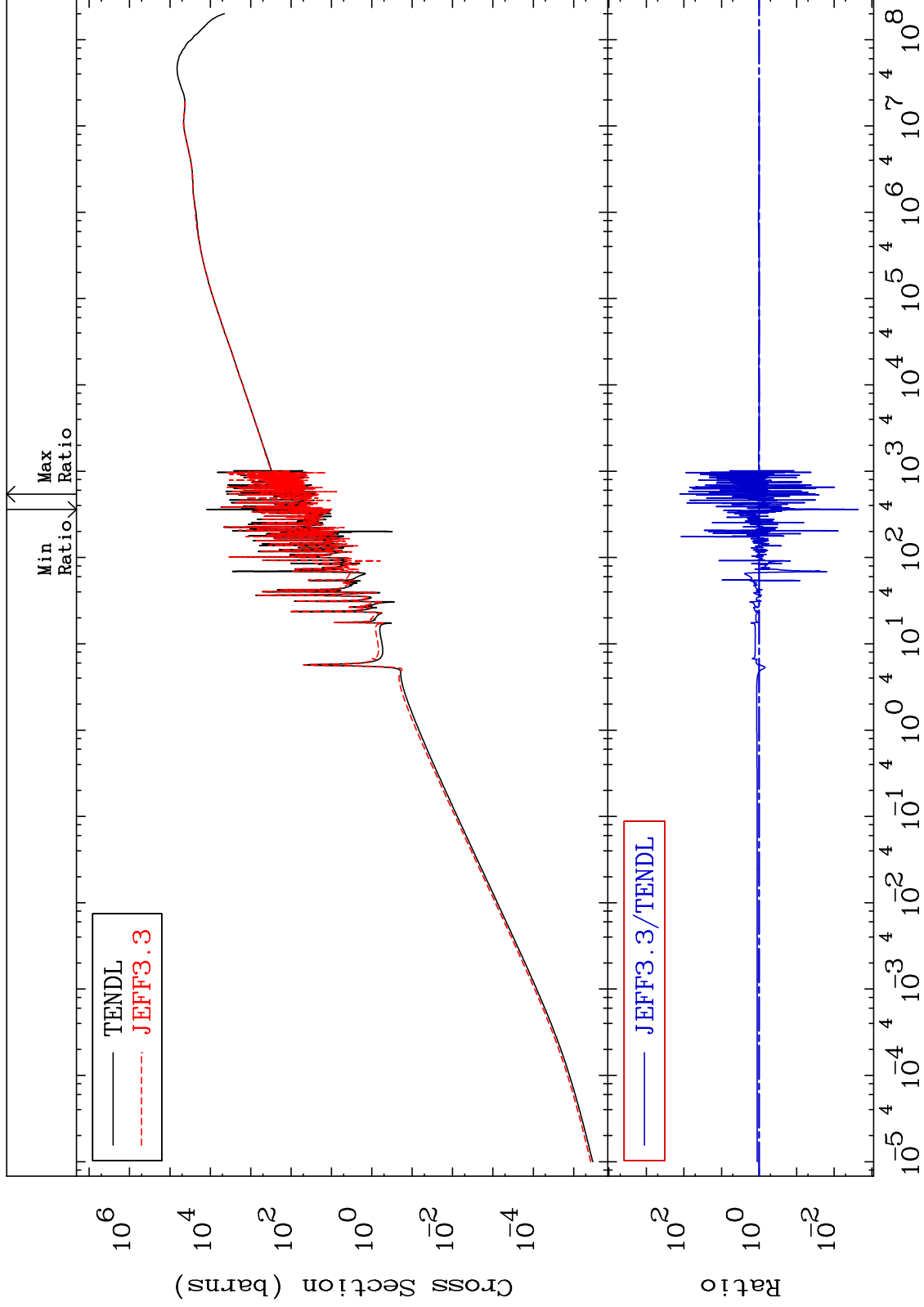
Cross Section



MAT 7240

Kerma elastic
Cross Section

72-Hf-179
-99.77 To 9999. %



55

Incident Energy (eV)

72-Hf-179

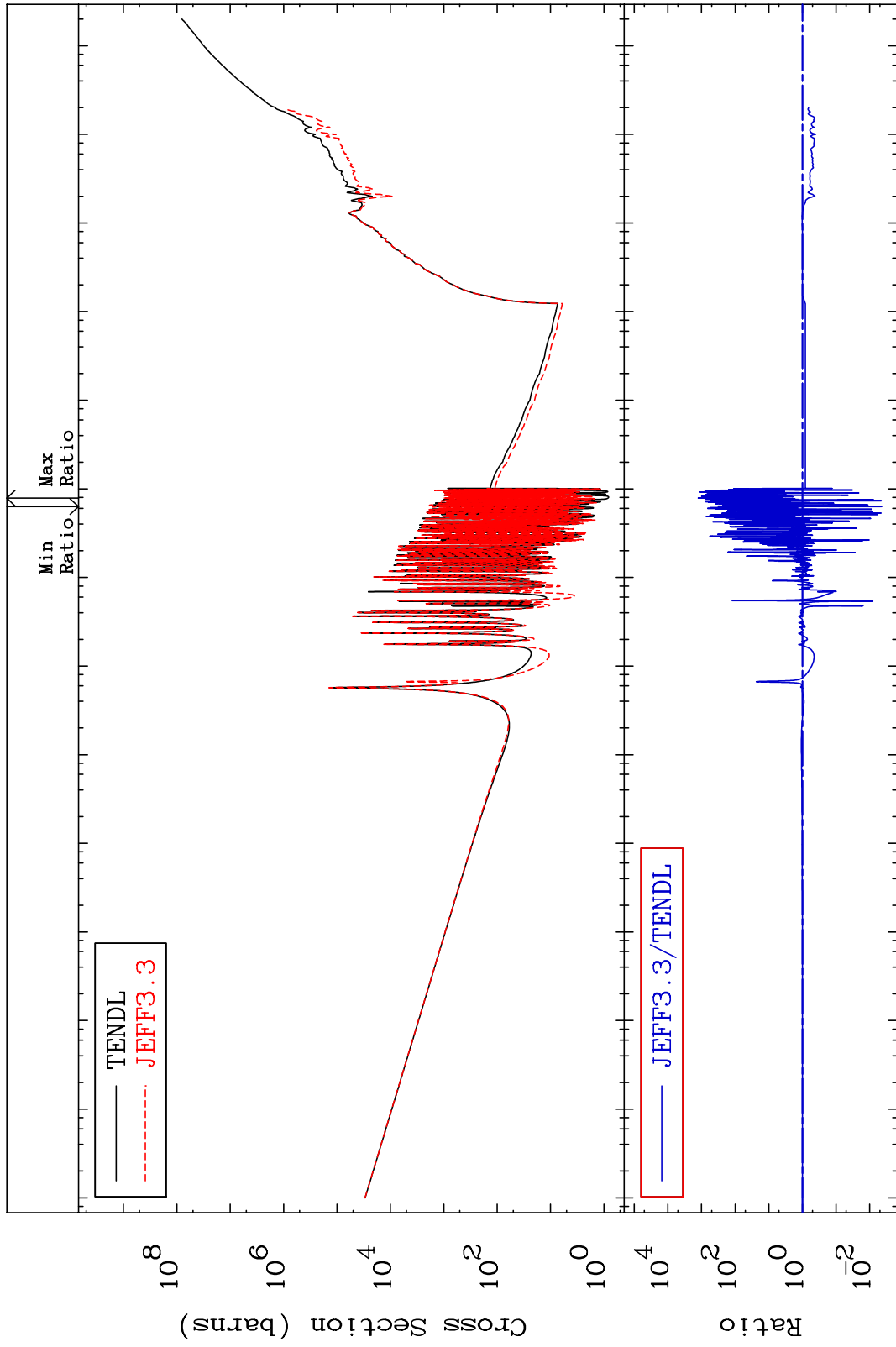
MAT 7240

Kerma non-elastic (all but mt2)

72-Hf-179

-99.56 To 9999. %

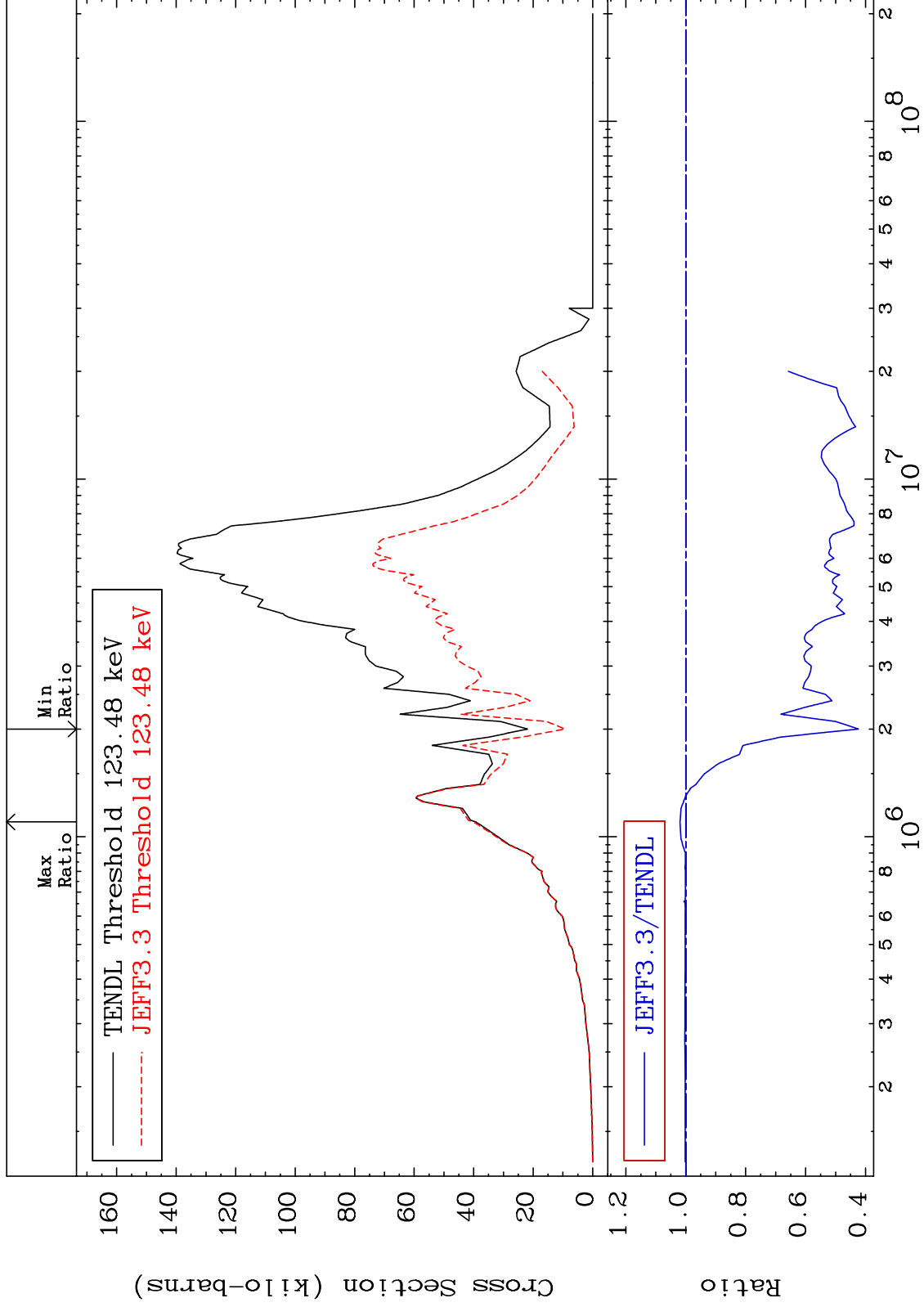
Cross Section



MAT 7240

Kerma inelastic (mt51-91)
Cross Section

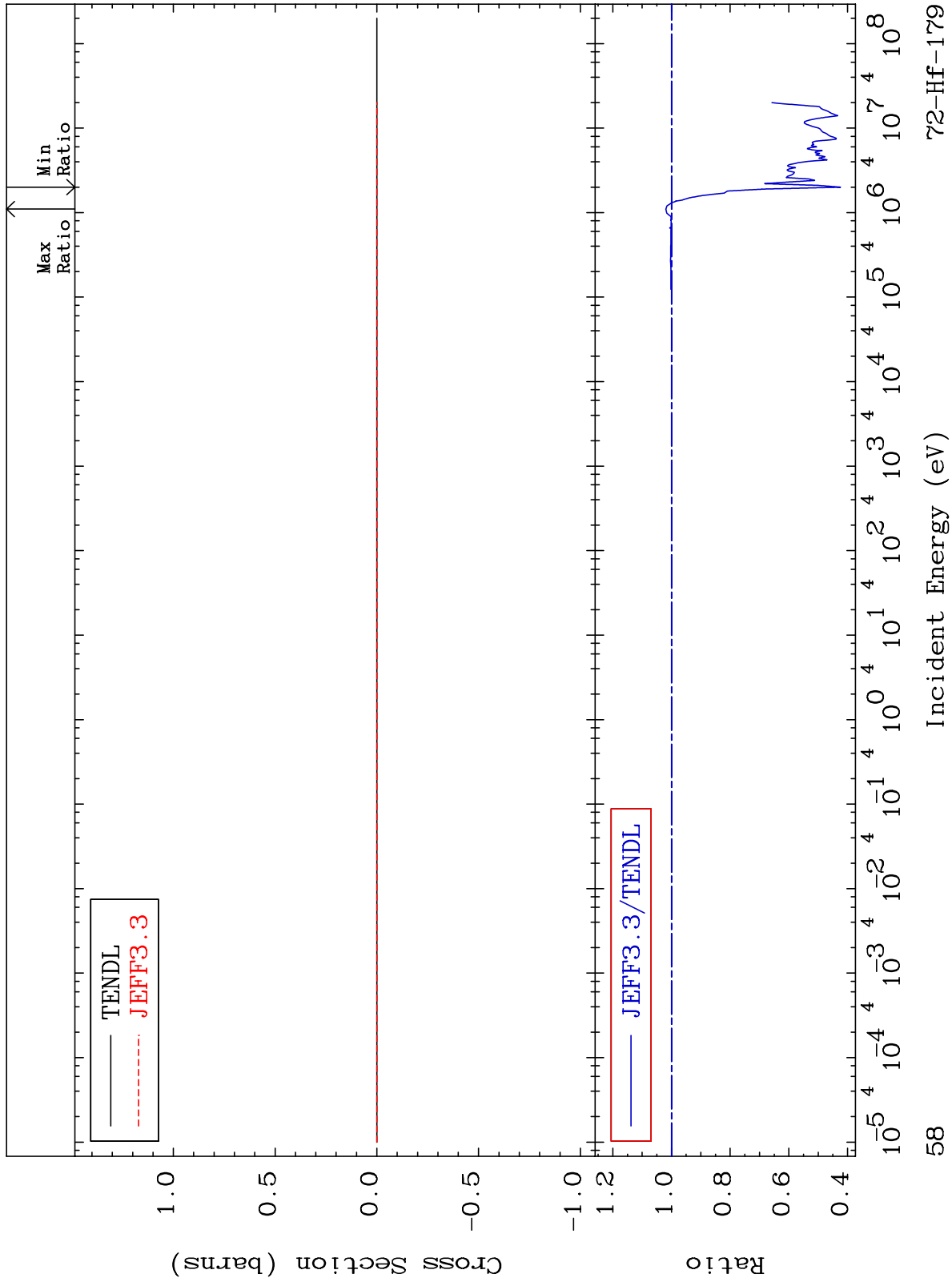
72-Hf-179
-57.61 To 1.922 %



MAT 7240

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

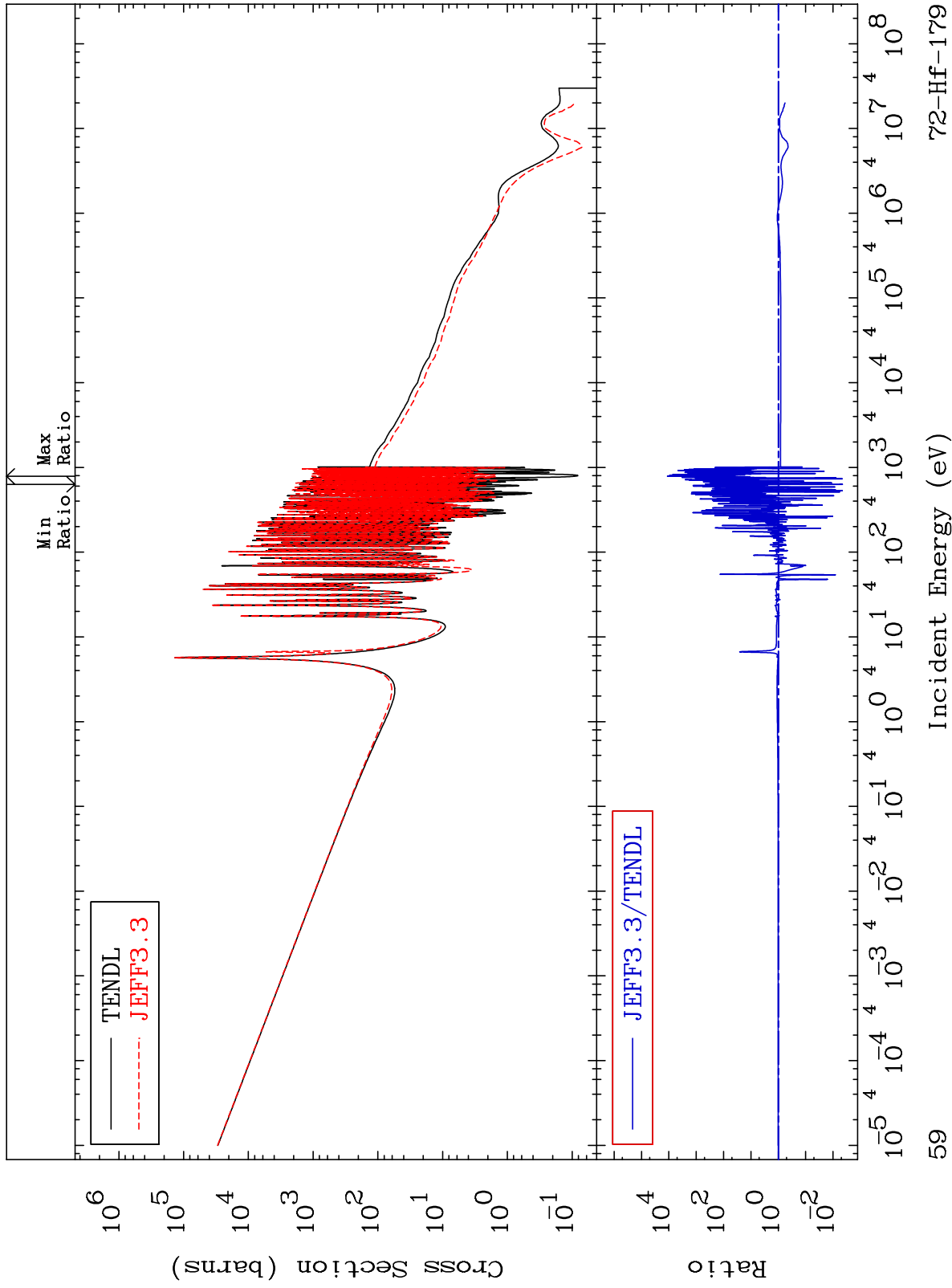
72-Hf-179
-57.61 To 1.922 %



MAT 7240

Kerma capture (mt102)
Cross Section

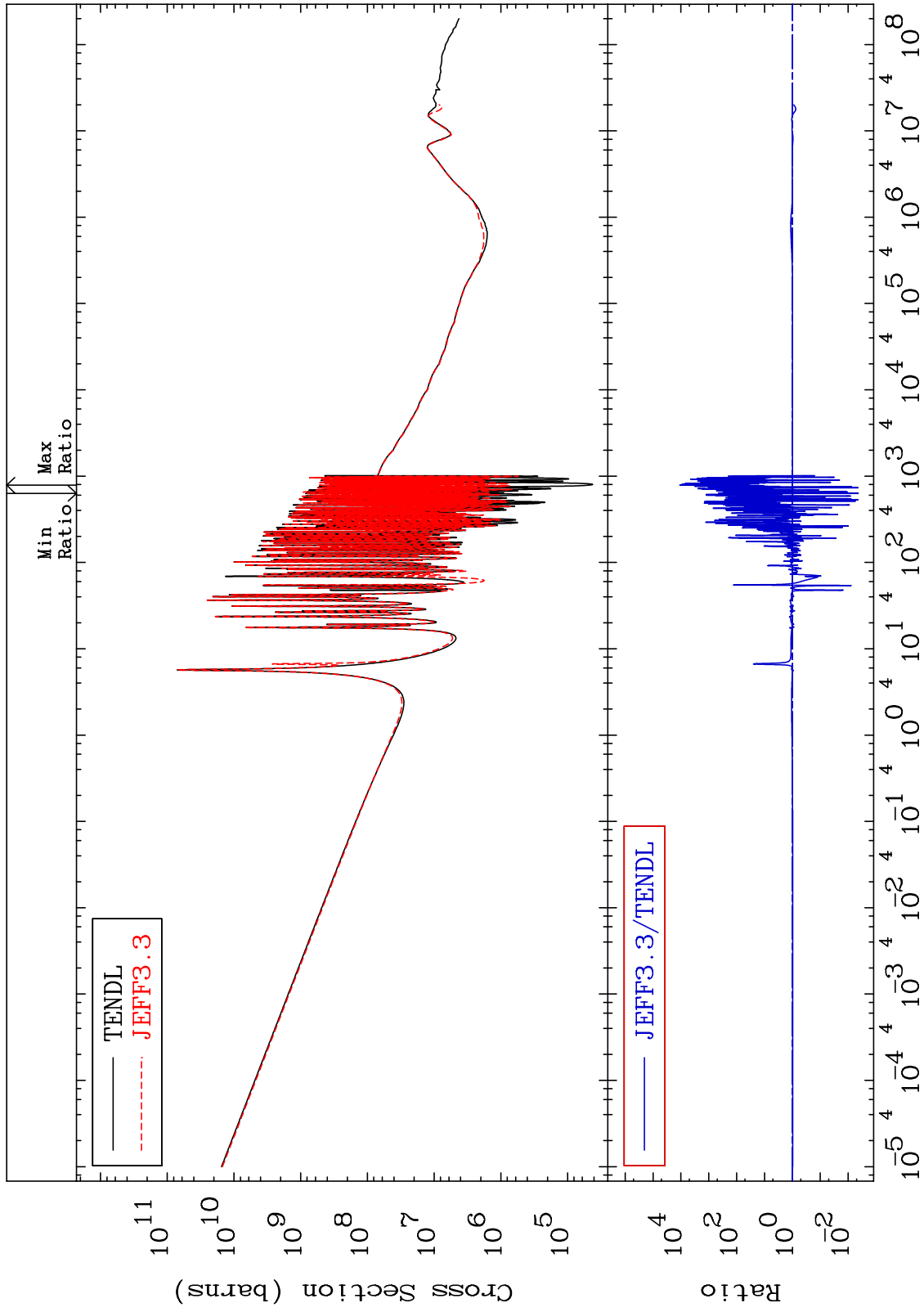
72-Hf-179
-99.56 To 9999. %



MAT 7240

Total photon (eV-barns)
Cross Section

72-Hf-179
-99.57 To 9999. %



60

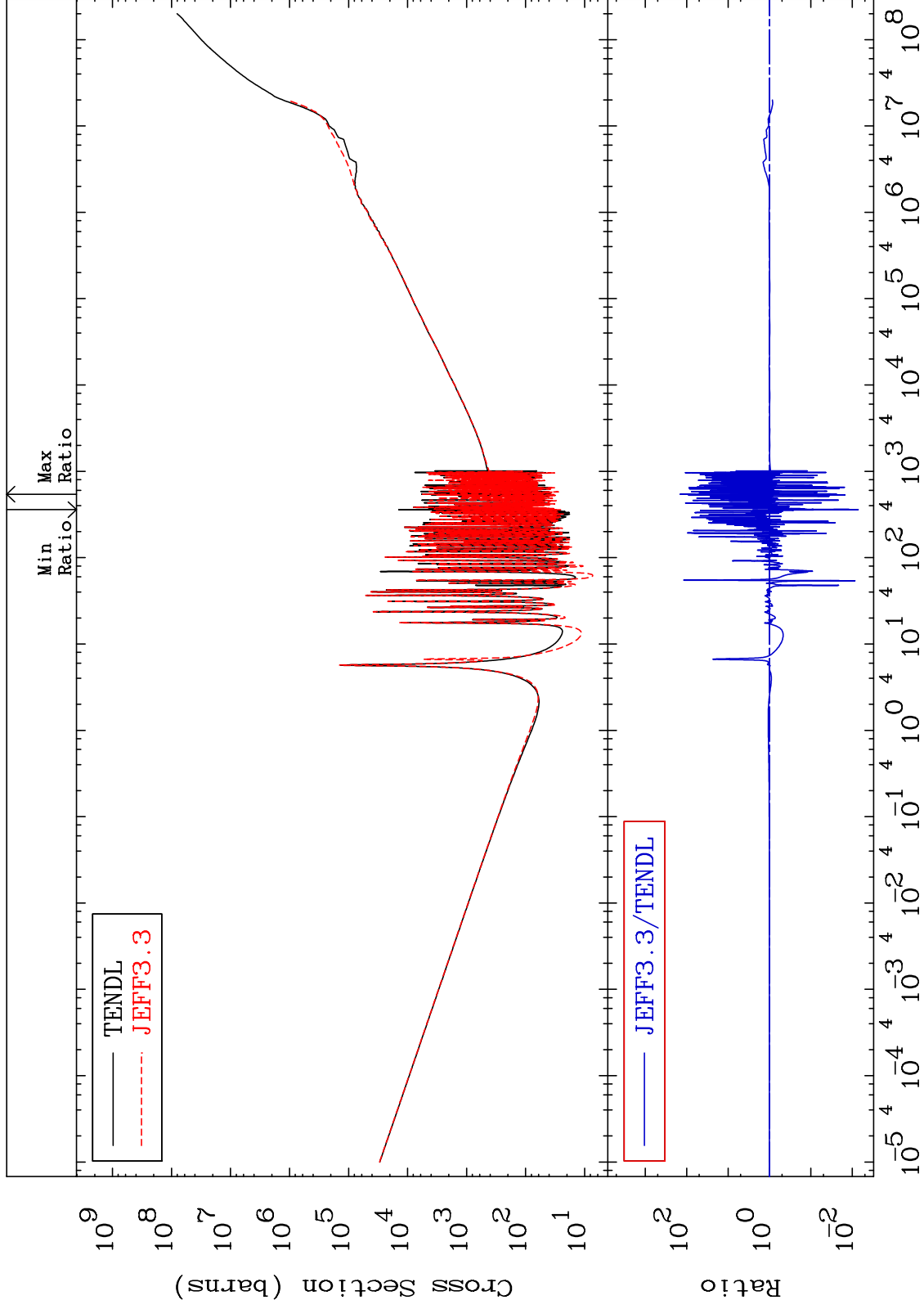
Incident Energy (eV)

72-Hf-179

MAT 7240

Total kinematic kerma (high limit)
Cross Section

72-Hf-179
-99.29 To 9999. %



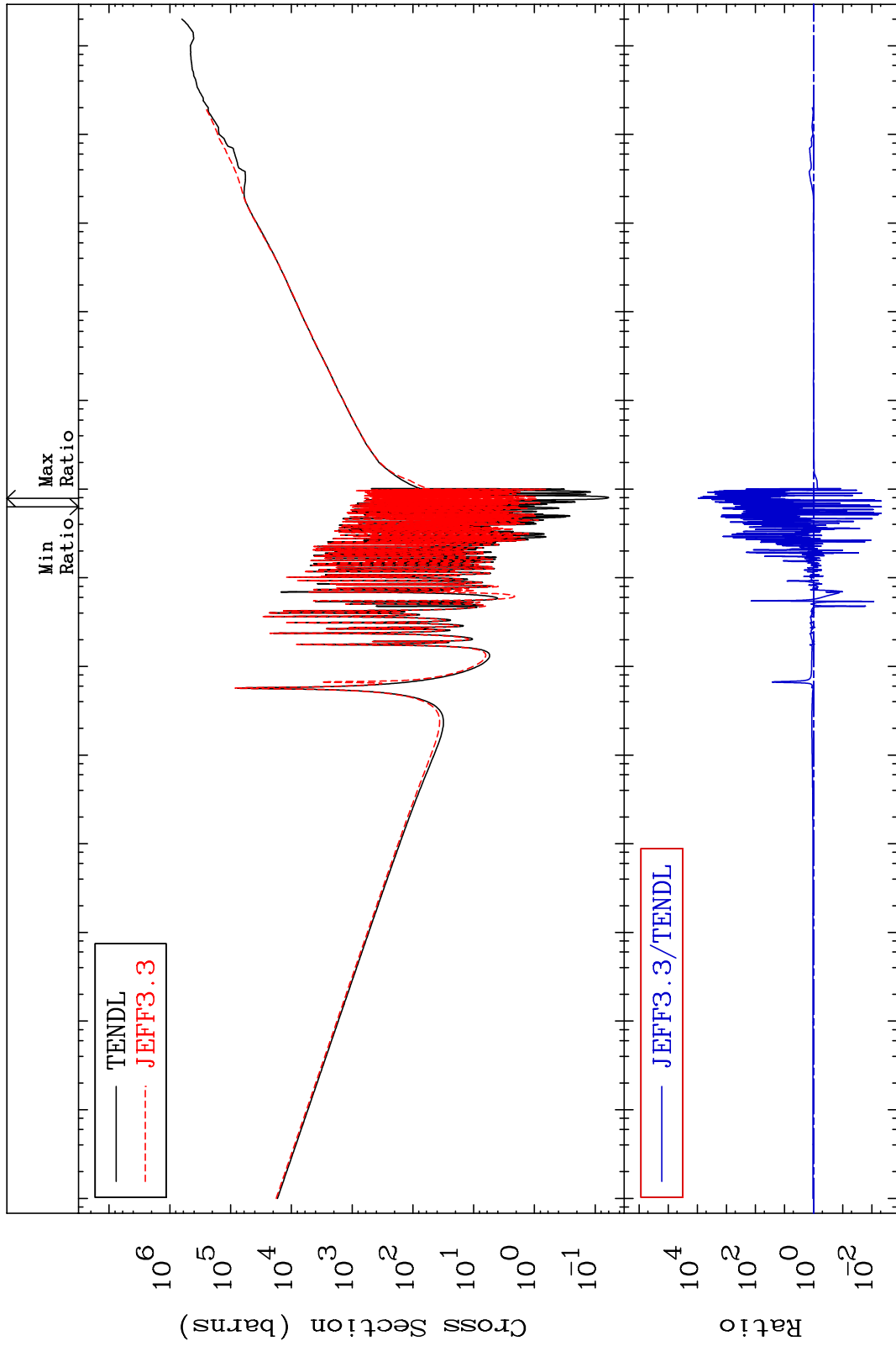
MAT 7240

Dpa total (eV-barns)

72-Hf-179

-99.54 To 9999. %

Cross Section



62

Incident Energy (eV)

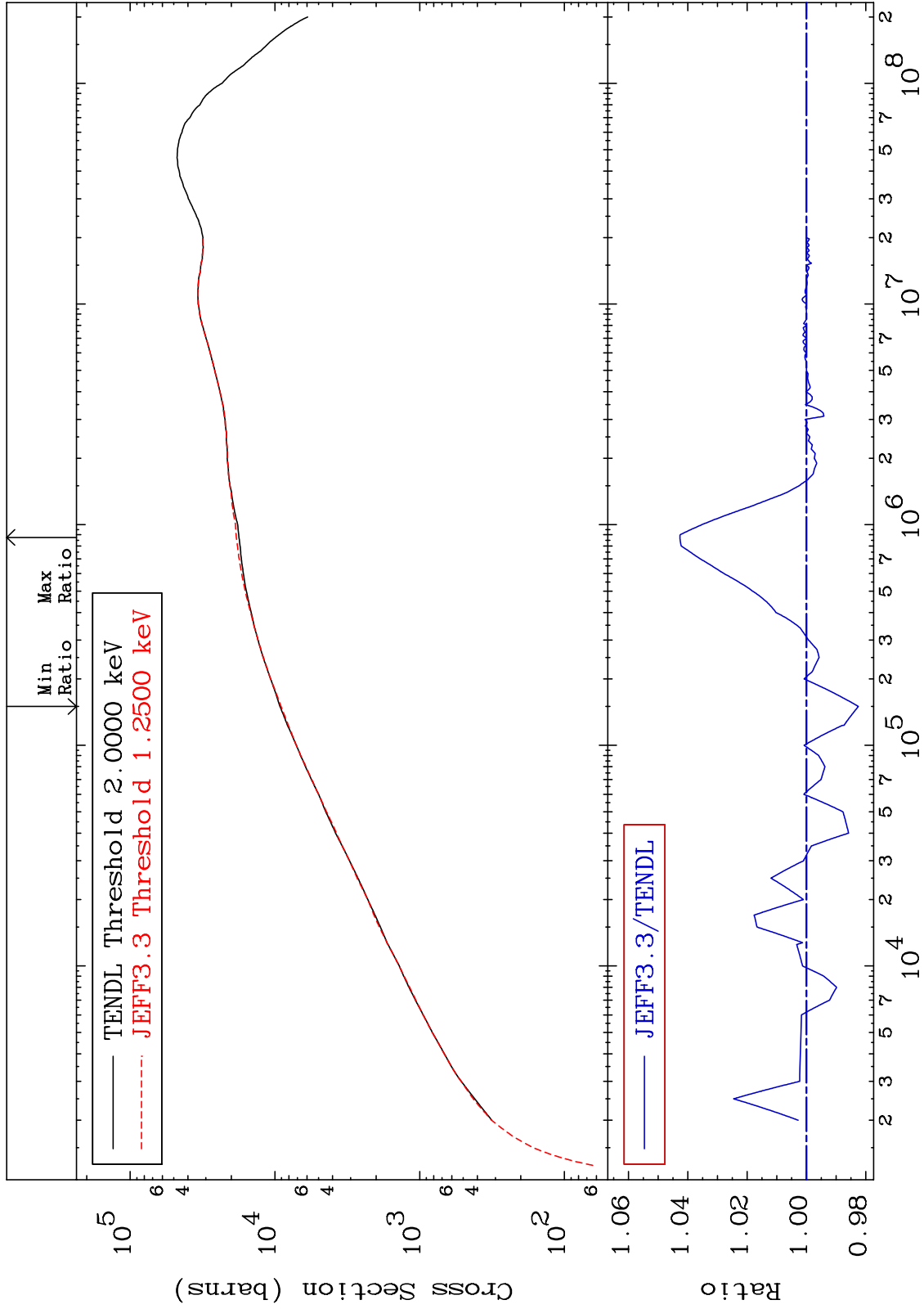
72-Hf-179

MAT 7240

Dpa elastic (mt2)
Cross Section

72-Hf-179

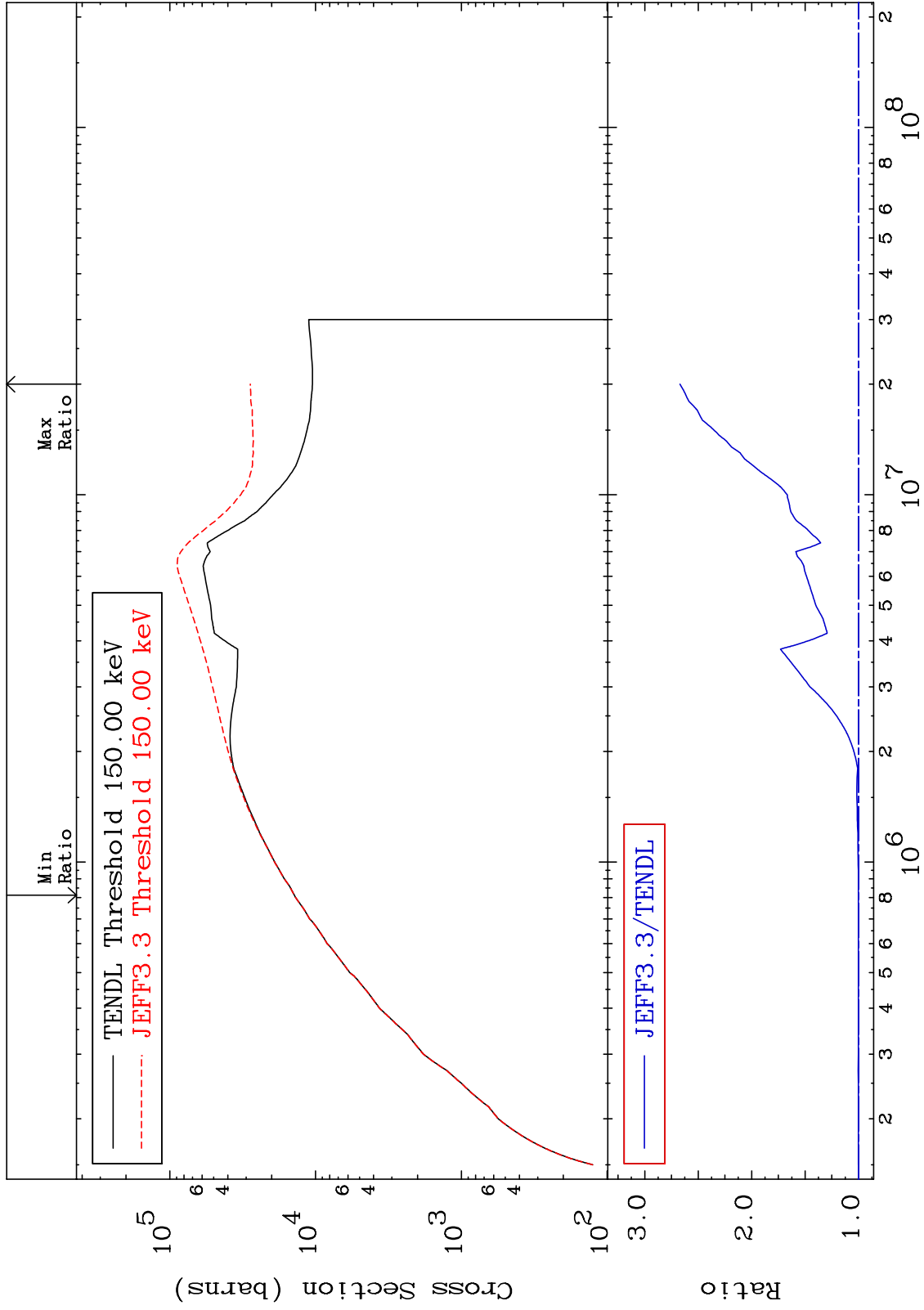
-1.753 To 4.262 %



MAT 7240

Dpa inelastic (mt51-91)
Cross Section

72-Hf-179
0.149 To 167.0 %



64

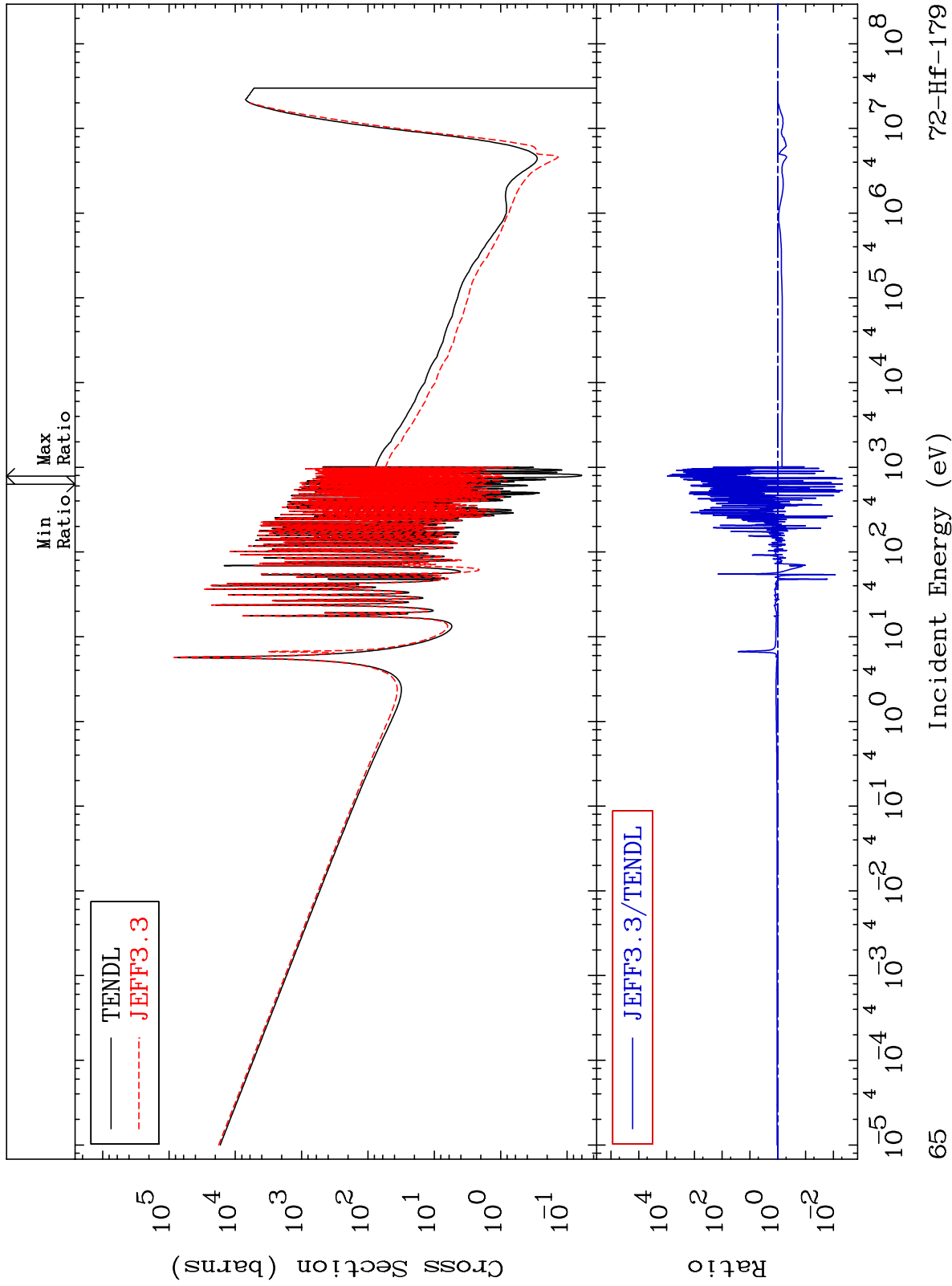
Incident Energy (eV)

72-Hf-179

MAT 7240

Dpa disappearance (mt102 -120)
Cross Section

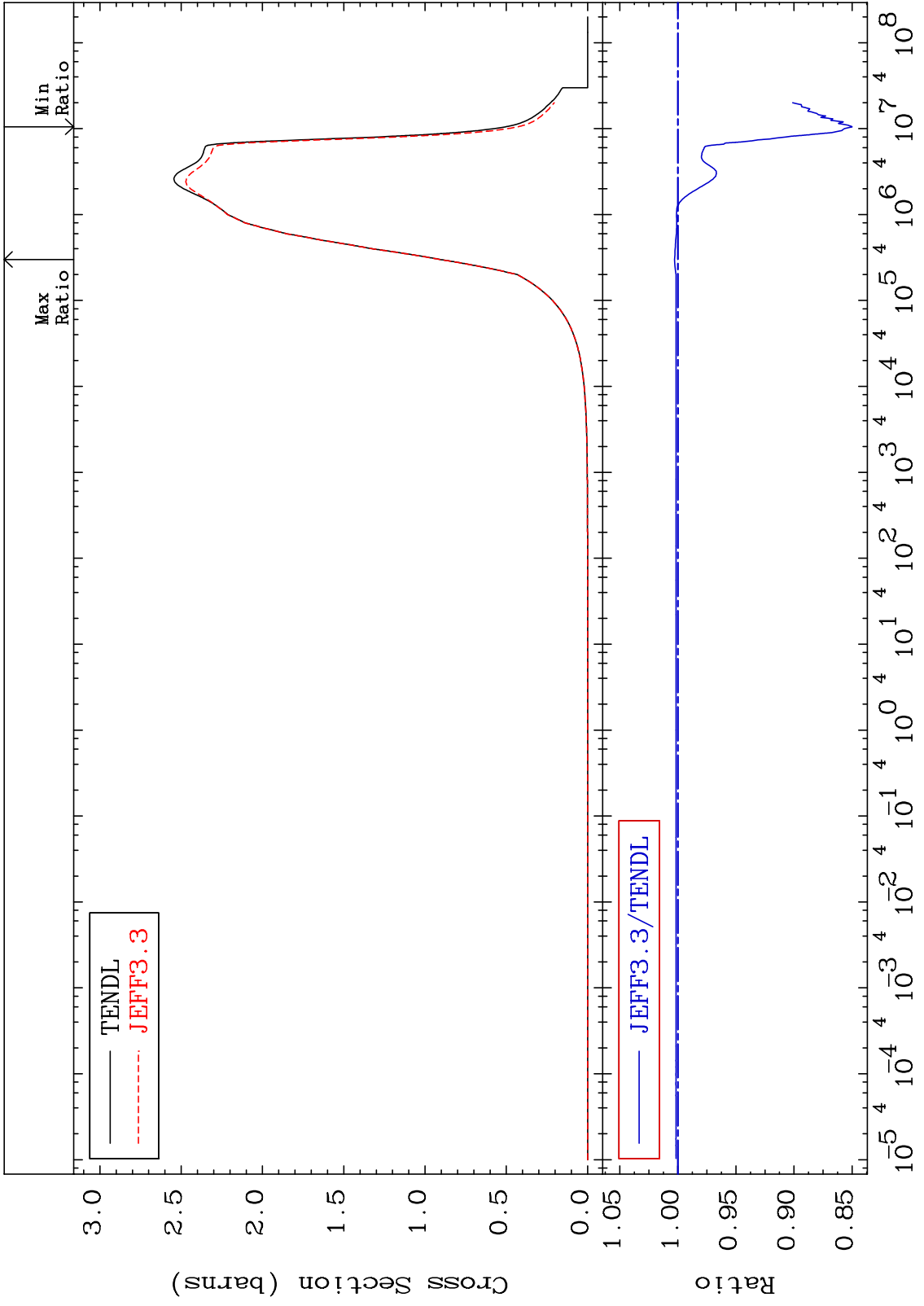
72-Hf-179
-99.54 To 9999. %



MAT 7240

Inelastic: 72-Hf-179
Radionuclide Production Cross Section -15.01 To 0.283 %

72-Hf-179



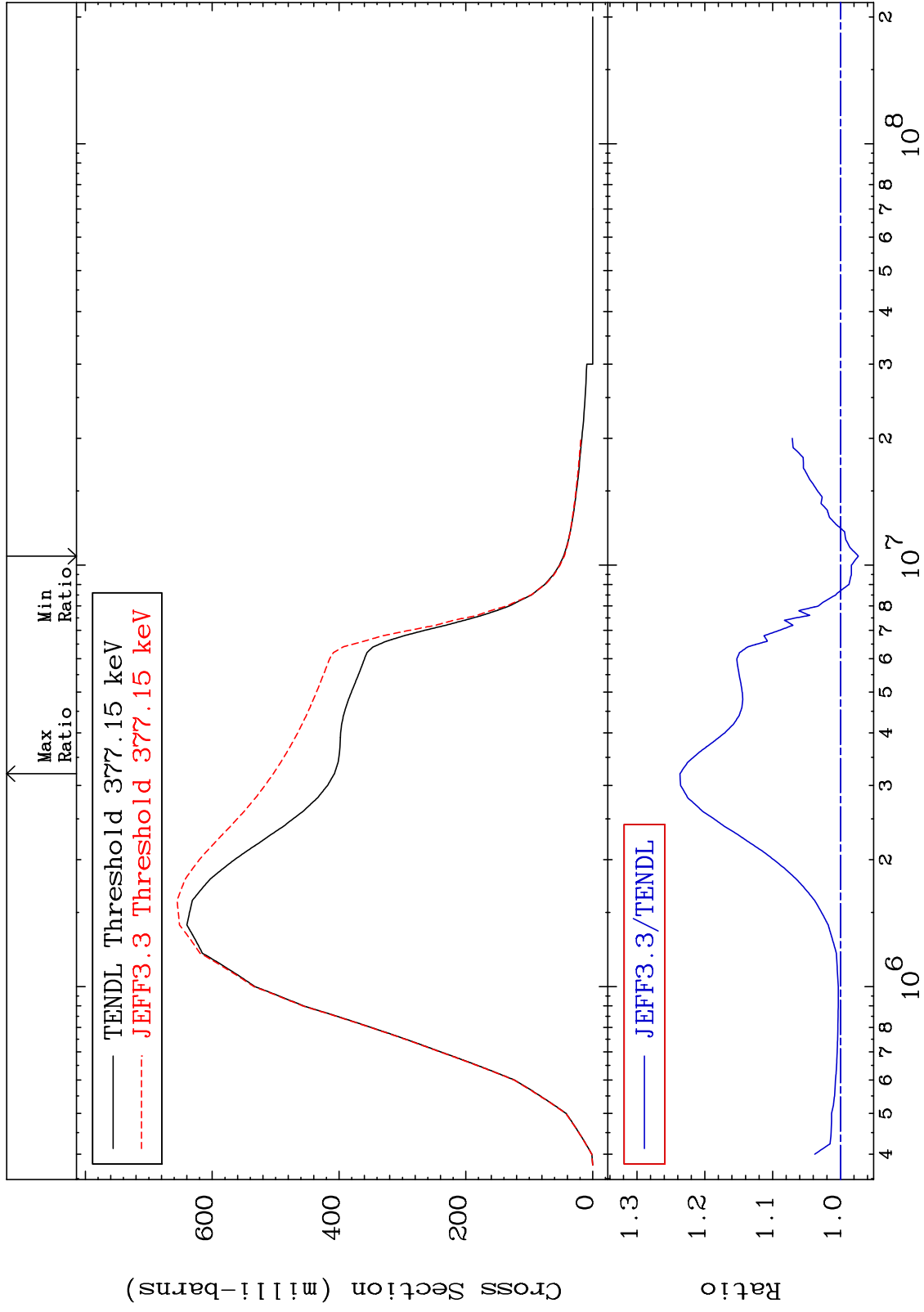
MAT 7240

Inelastic: 72-Hf-179m5

72-Hf-179

Radionuclide Production Cross Section

-2.650 To 23.66 %



67

Incident Energy (eV)

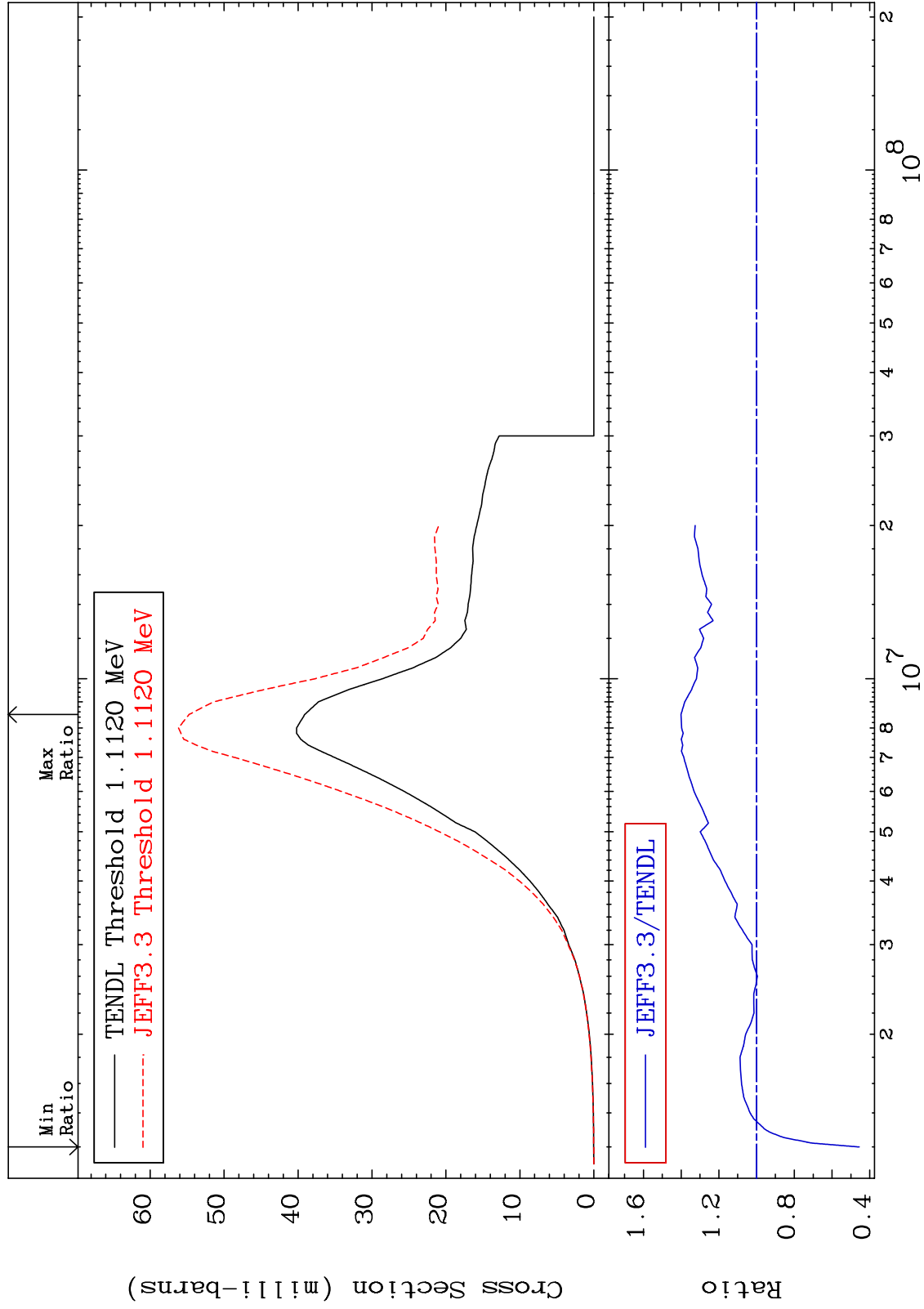
72-Hf-179

MAT 7240

Inelastic: 72-Hf-179m30

72-Hf-179

Radionuclide Production Cross Section -54.46 To 40.04 %

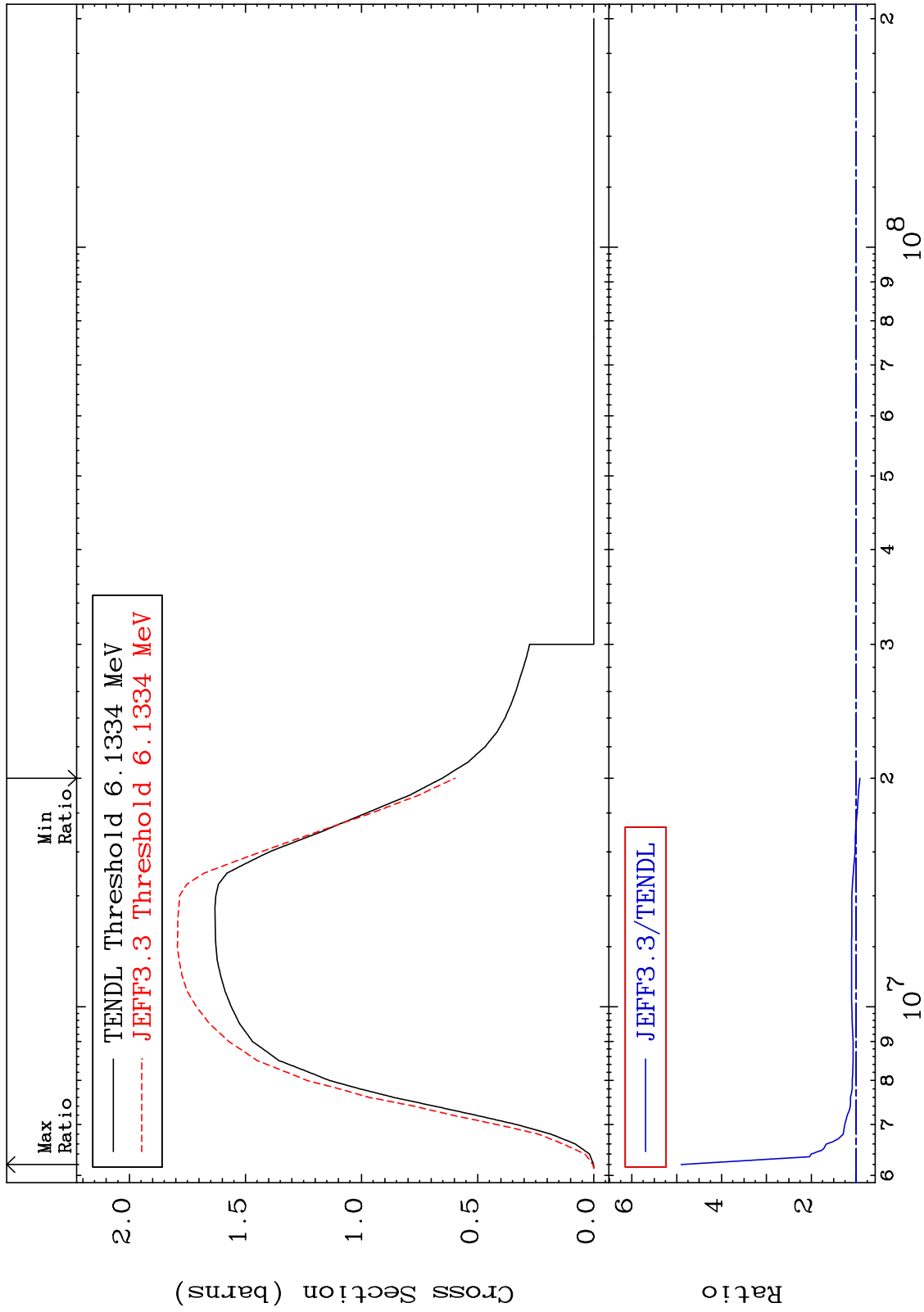


MAT 7240

(n,2n):72-Hf-178g

72-Hf-179

Radionuclide Production Cross Section -8.453 To 389.9 %



69

Incident Energy (eV)

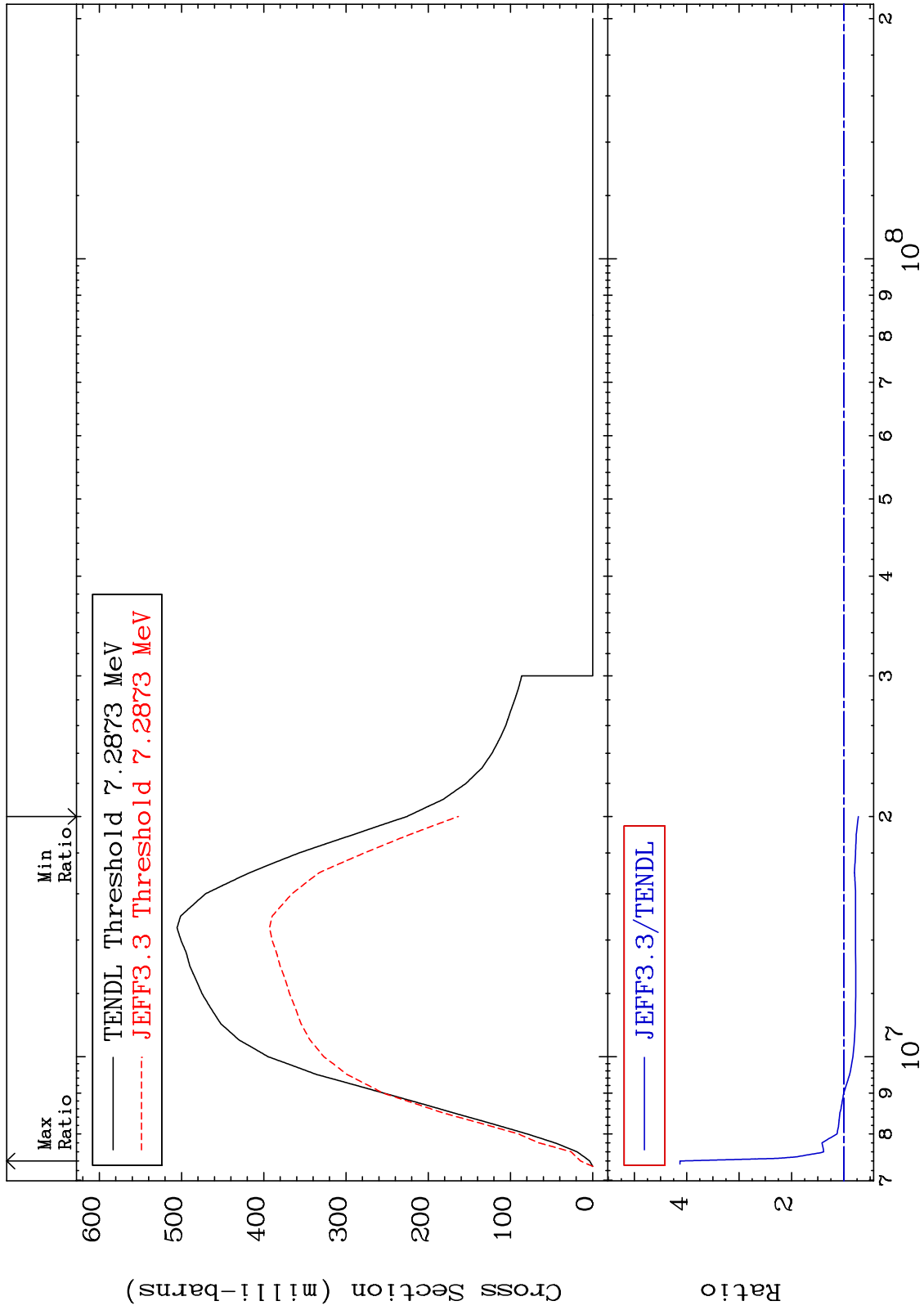
72-Hf-179

MAT 7240

(n,2n): 72-Hf-178m5

72-Hf-179

Radionuclide Production Cross Section -27.66 To 312.8 %



70

Incident Energy (eV)

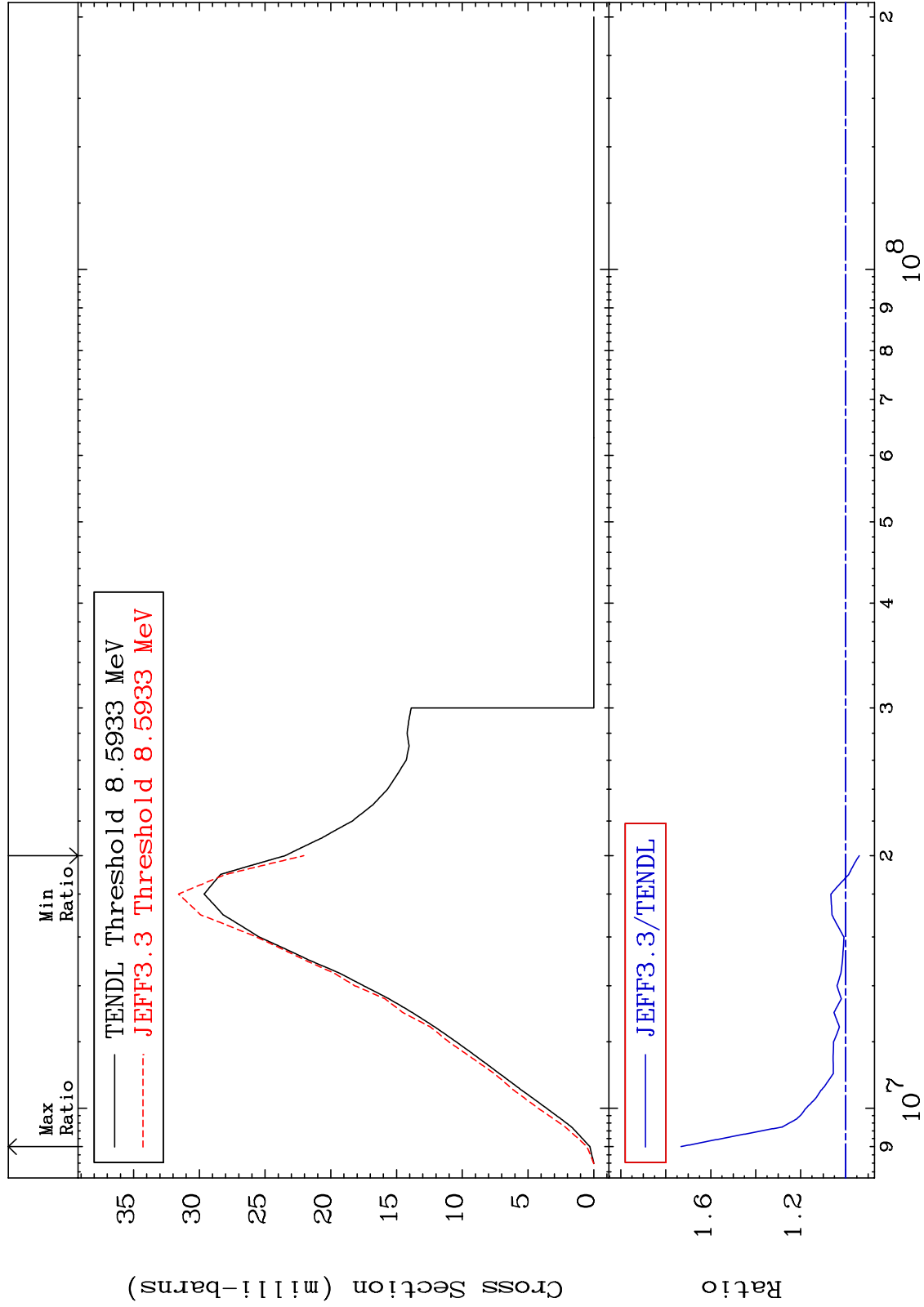
72-Hf-179

MAT 7240

(n,2n) : 72-Hf-178m10

72-Hf-179

Radionuclide Production Cross Section -6.058 To 73.21 %



71

Incident Energy (eV)

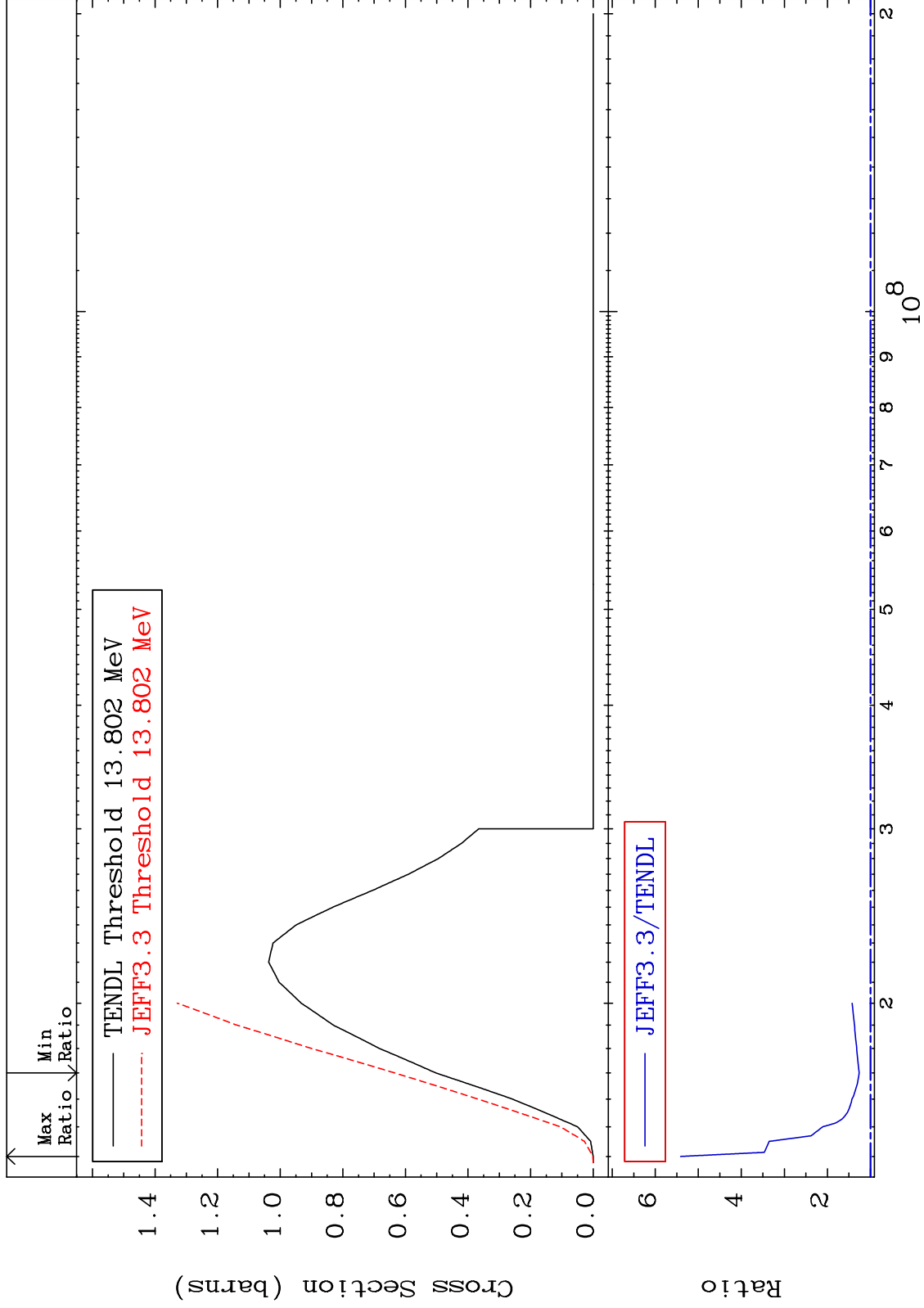
72-Hf-179

MAT 7240

(n,3n):72-Hf-177g

72-Hf-179

Radionuclide Production Cross Section 26.12 To 441.1 %



72

Incident Energy (eV)

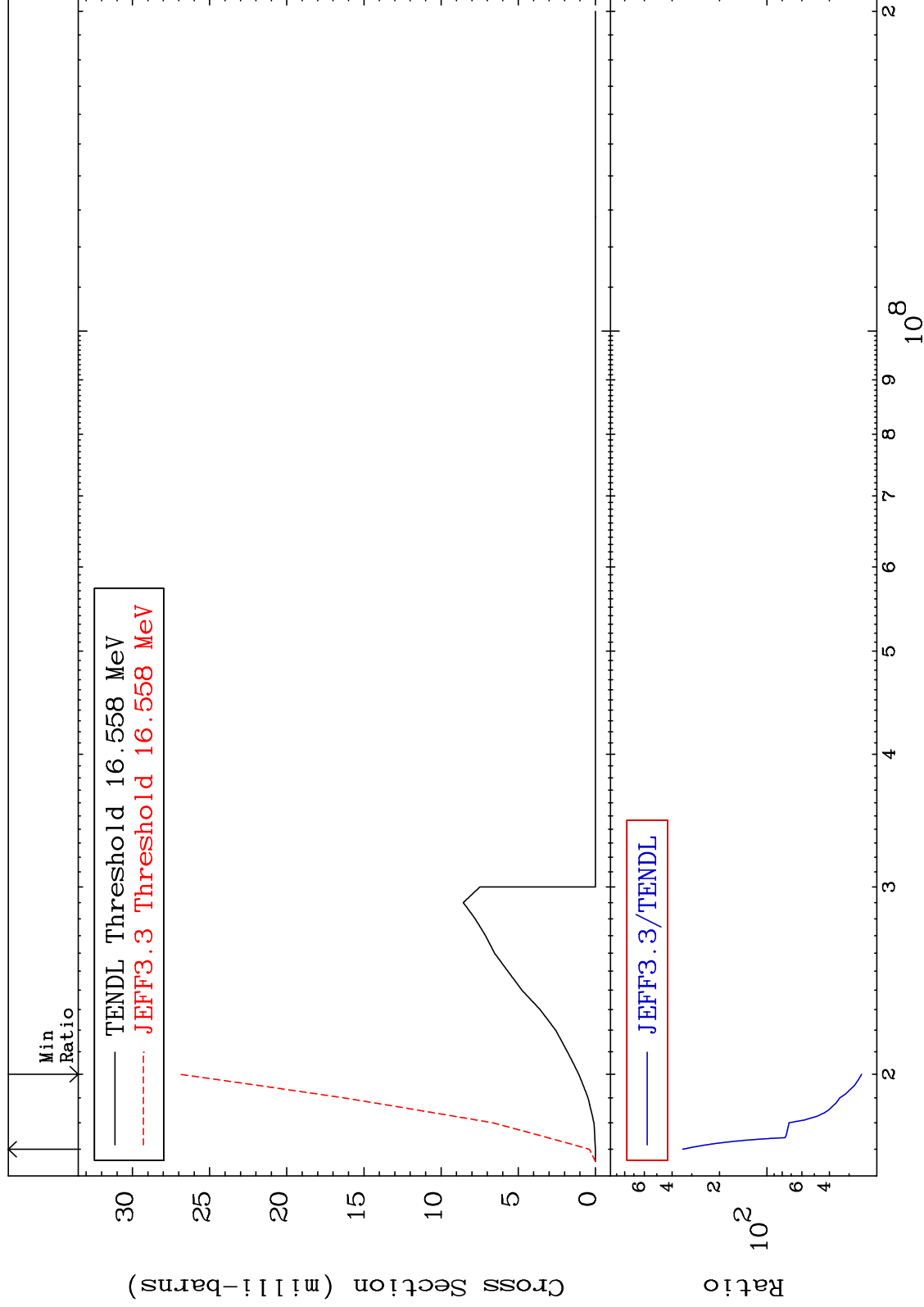
72-Hf-179

MAT 7240

(n,3n):72-Hf-177m10

72-Hf-179

Radionuclide Production Cross Section 2401. To 9999. %



73

Incident Energy (eV)

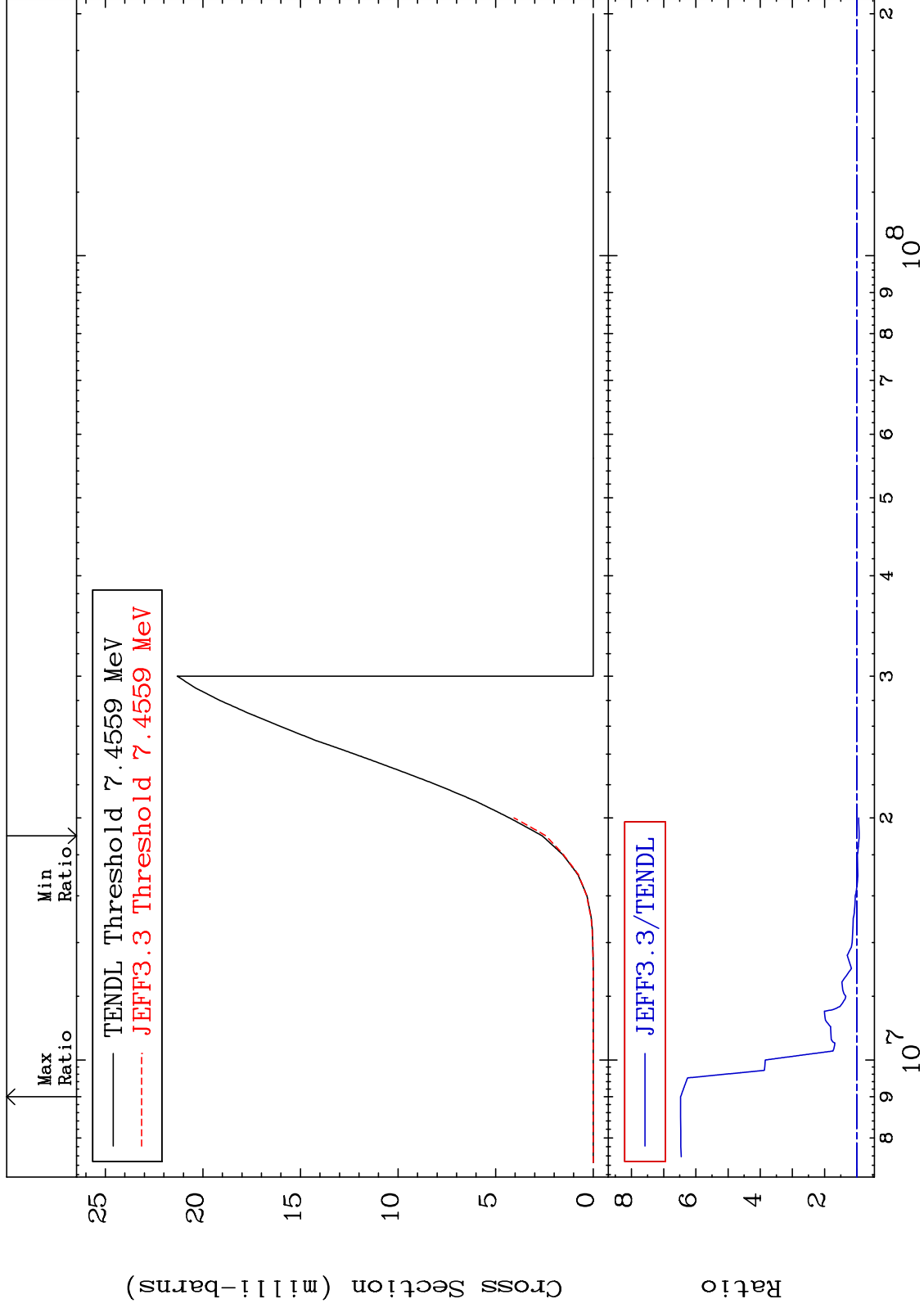
72-Hf-179

MAT 7240

(n, n') p:71-Lu-178g

72-Hf-179

Radionuclide Production Cross Section -7.346 To 547.3 %



74

Incident Energy (eV)

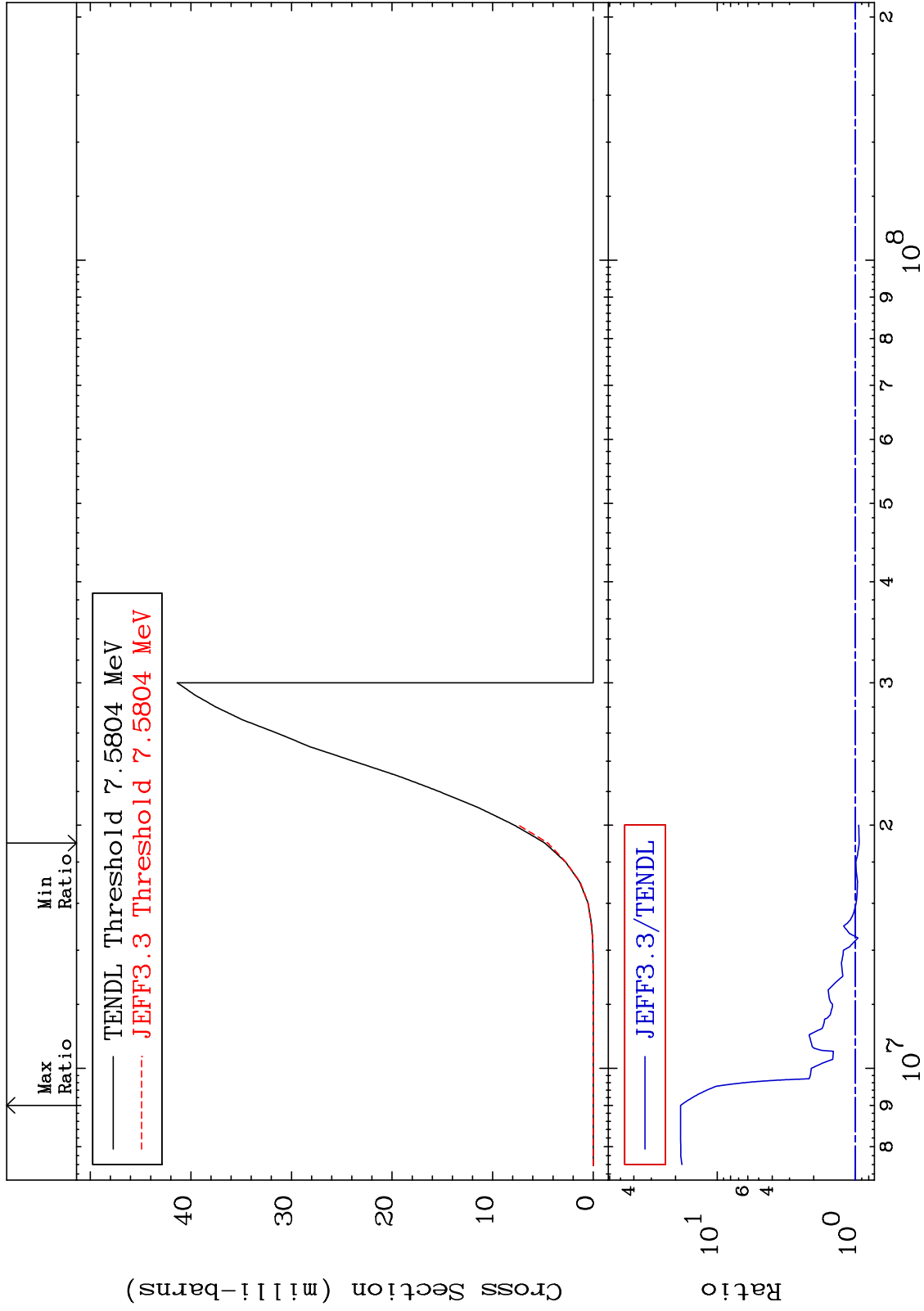
72-Hf-179

MAT 7240

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

72-Hf-179

Radionuclide Production Cross Section -6.104 To 1738. %



75

Incident Energy (eV)

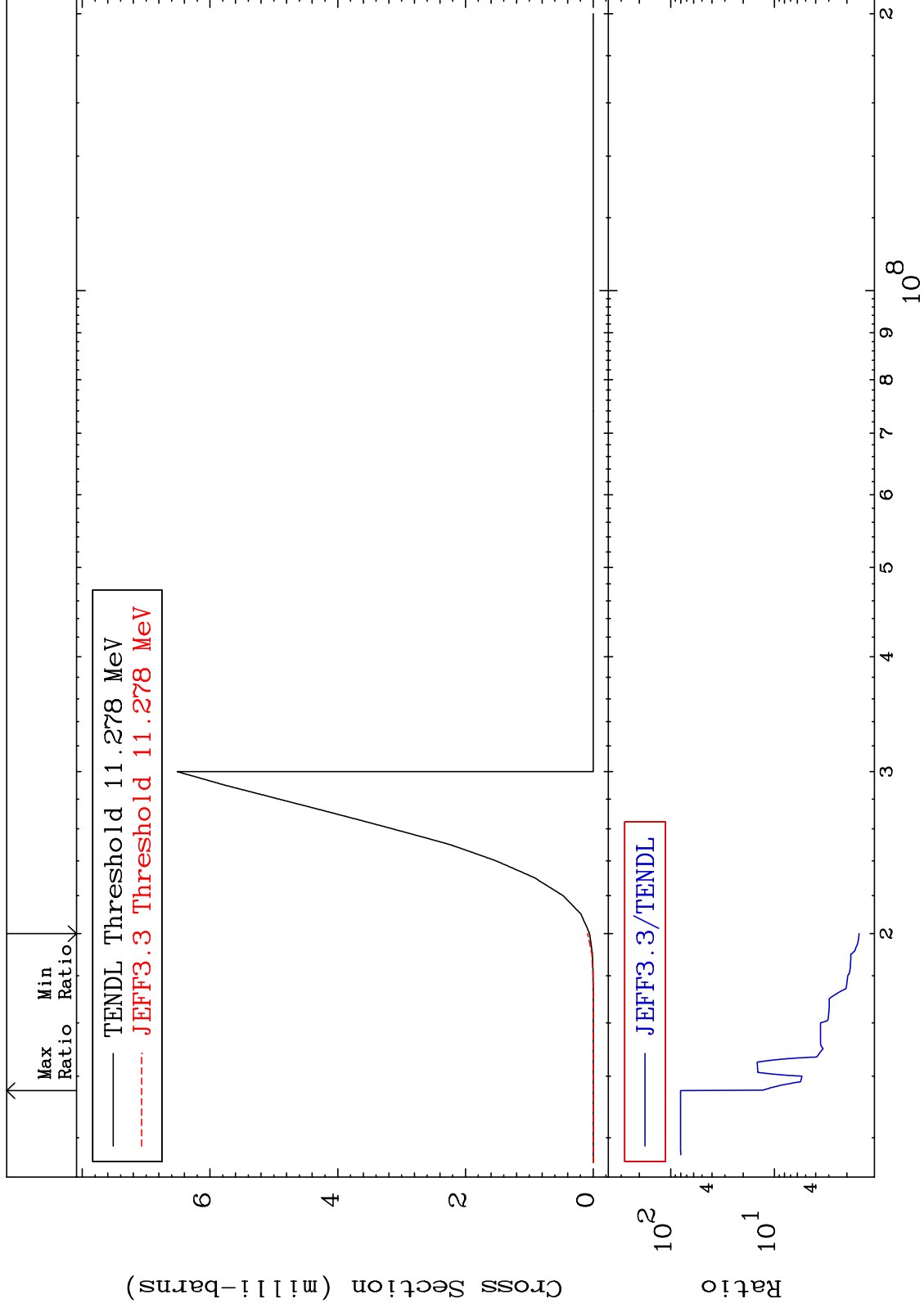
72-Hf-179

MAT 7240

(n, n') d:71-Lu-177g

72-Hf-179

Radionuclide Production Cross Section 52.51 To 7911. %



76

Incident Energy (eV)

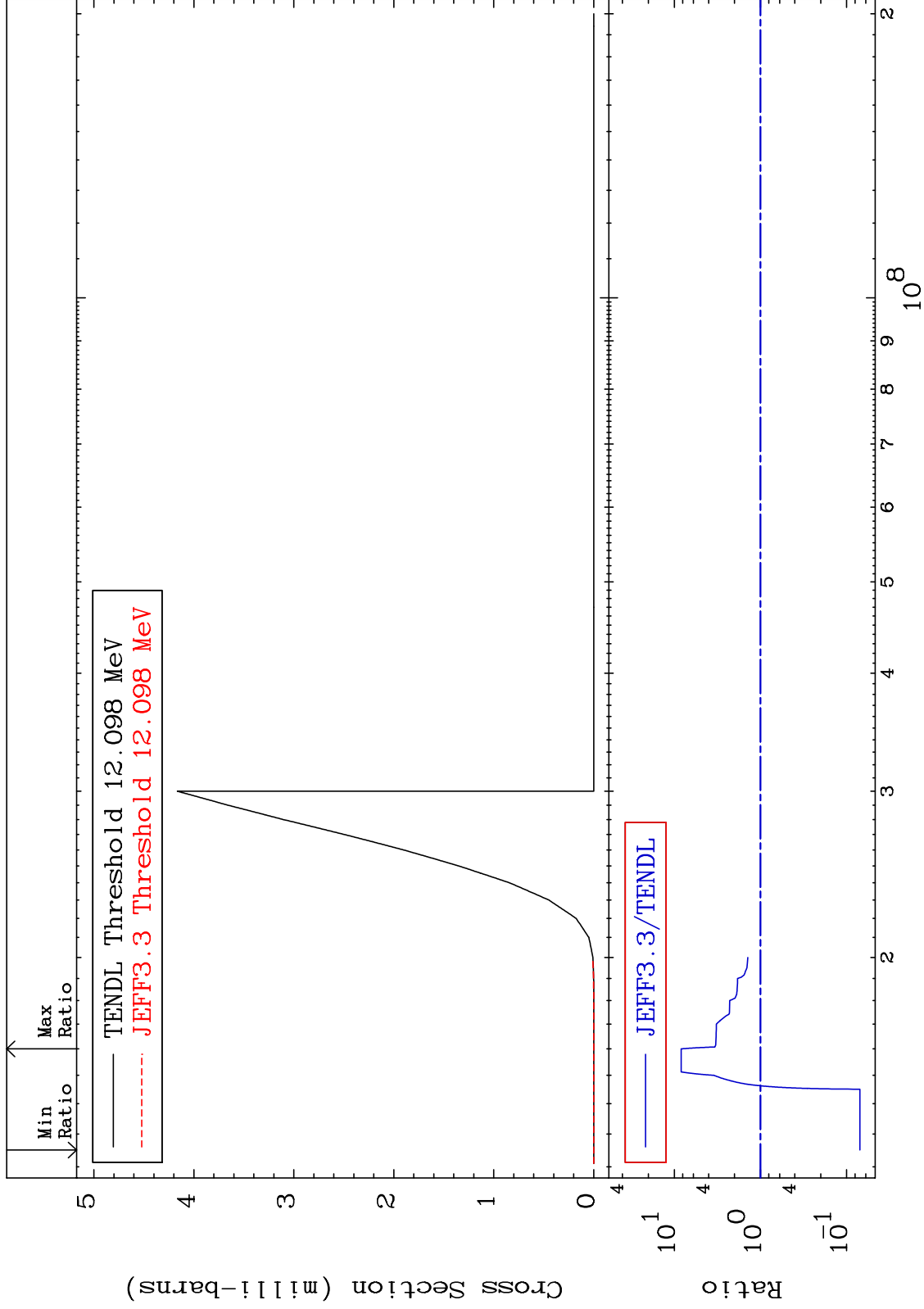
72-Hf-179

MAT 7240

(n, n') t:71-Lu-176g

72-Hf-179

Radionuclide Production Cross Section -92.99 To 732.2 %



77

Incident Energy (eV)

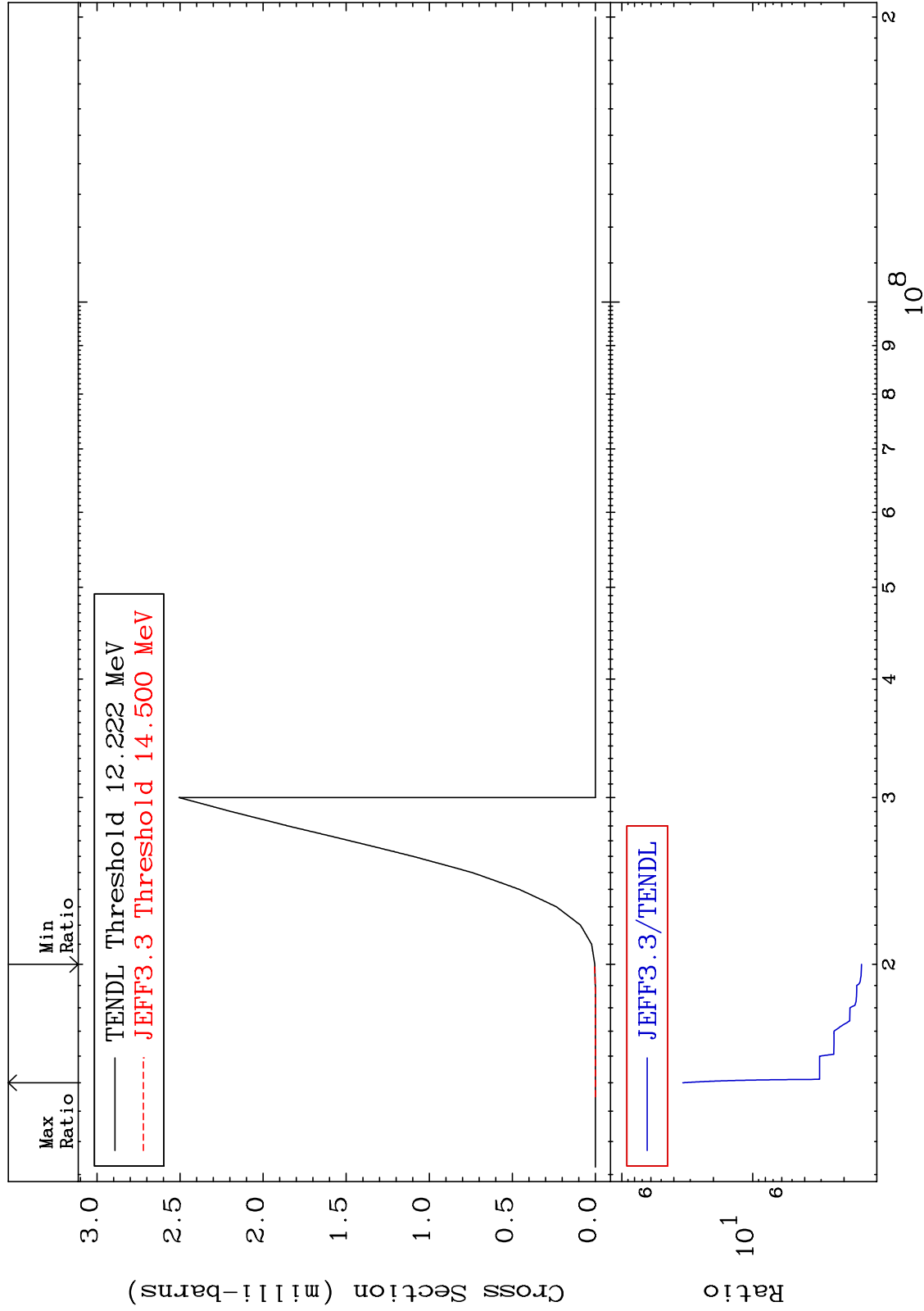
72-Hf-179

MAT 7240

(n, n') t:71-Lu-176m1

72-Hf-179

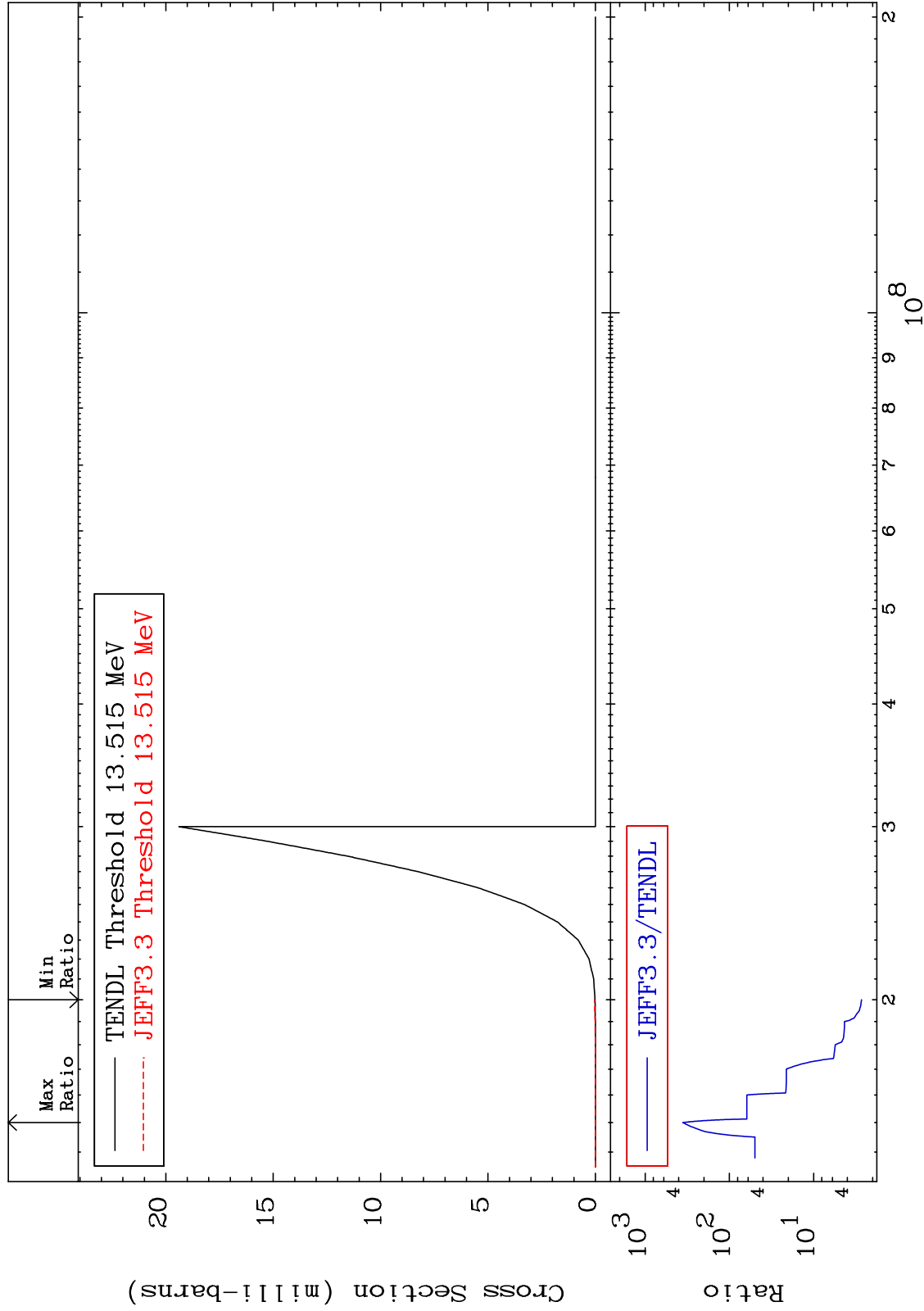
Radionuclide Production Cross Section 47.11 To 3319. %



78

Incident Energy (eV)

72-Hf-179

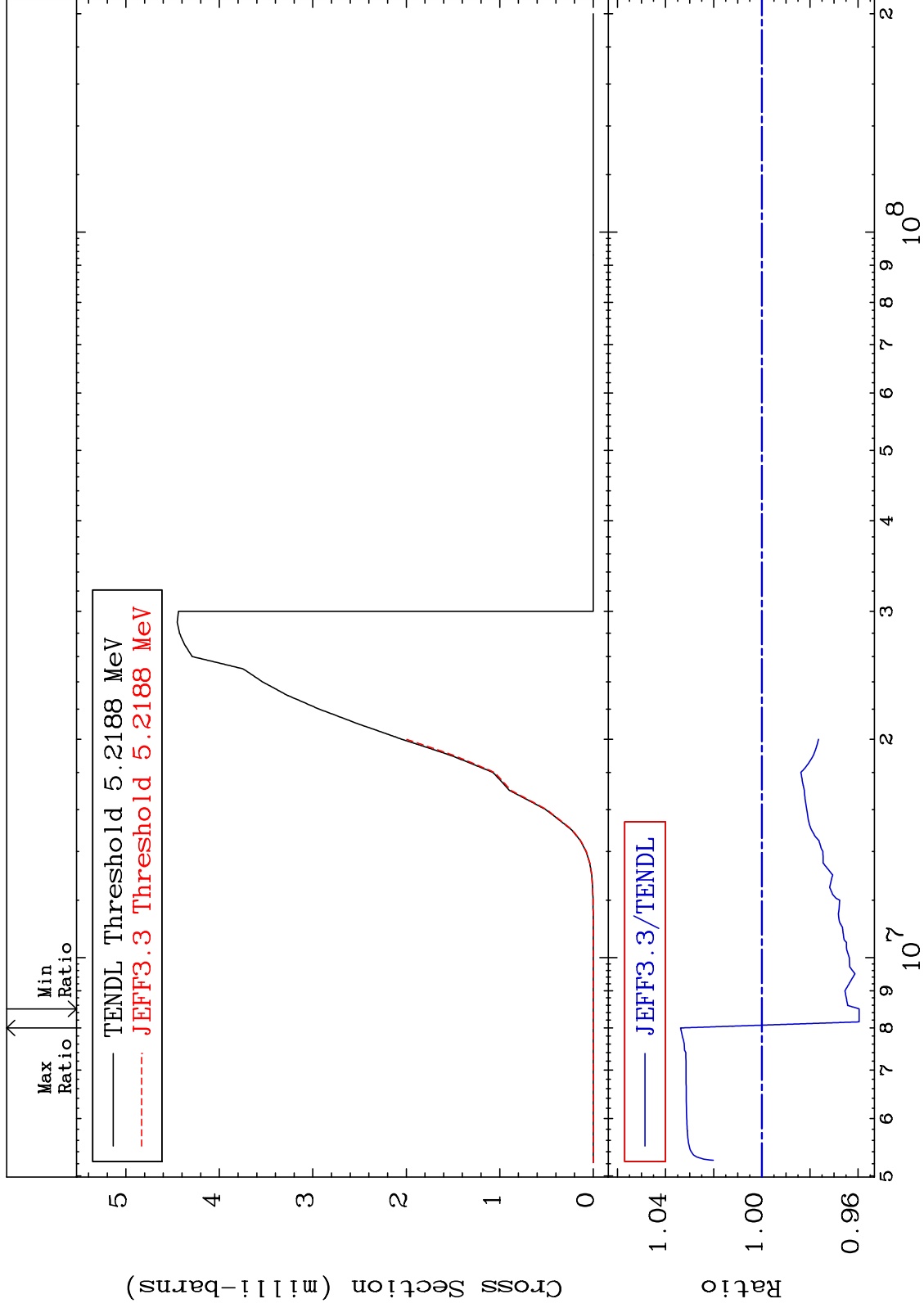


MAT 7240

(n, d): 71-Lu-178g

72-Hf-179

Radionuclide Production Cross Section -4.043 To 3.375 %



80

Incident Energy (eV)

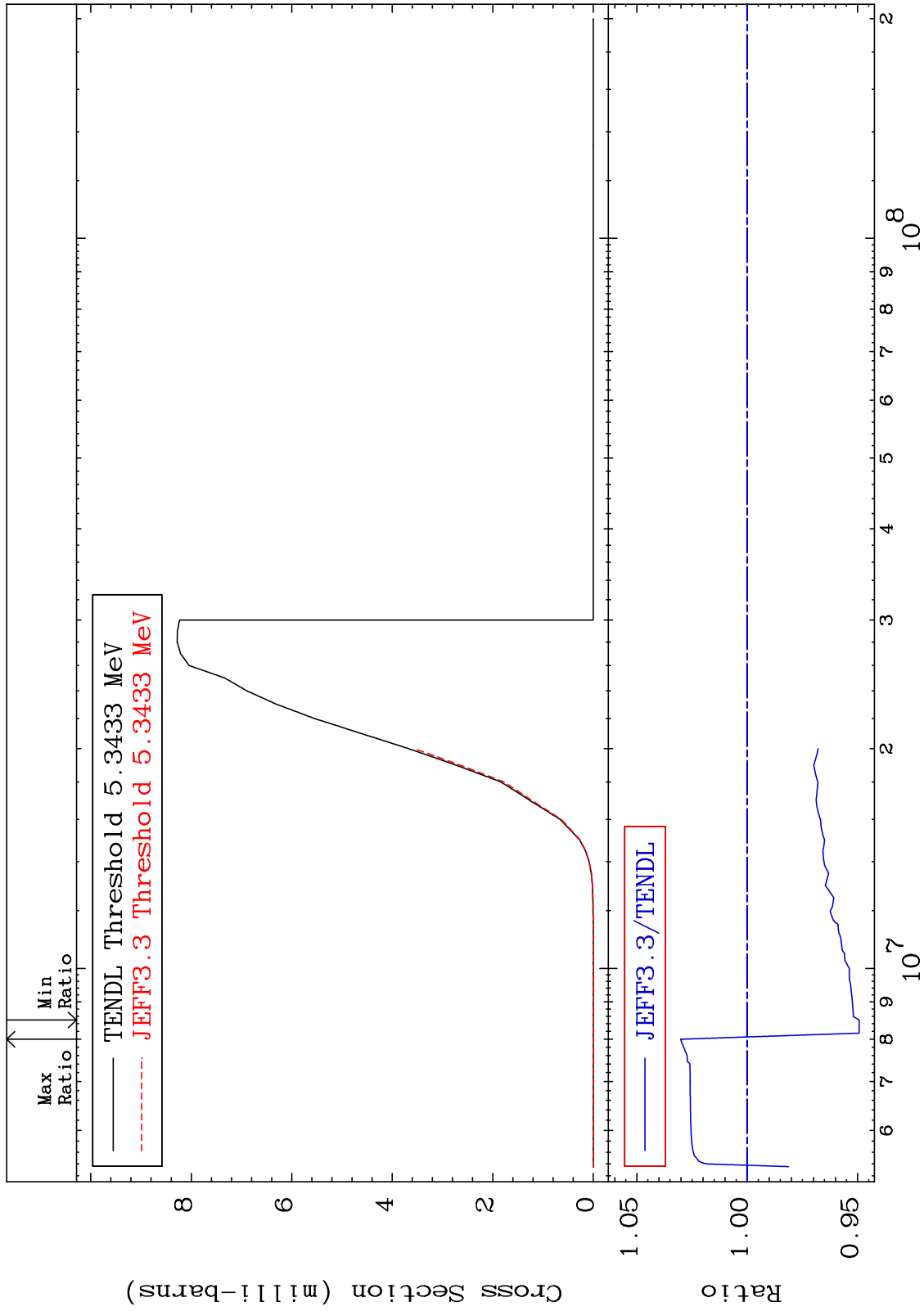
72-Hf-179

MAT 7240

(n, d): 71-Lu-178m3

72-Hf-179

Radionuclide Production Cross Section -5.072 To 3.017 %

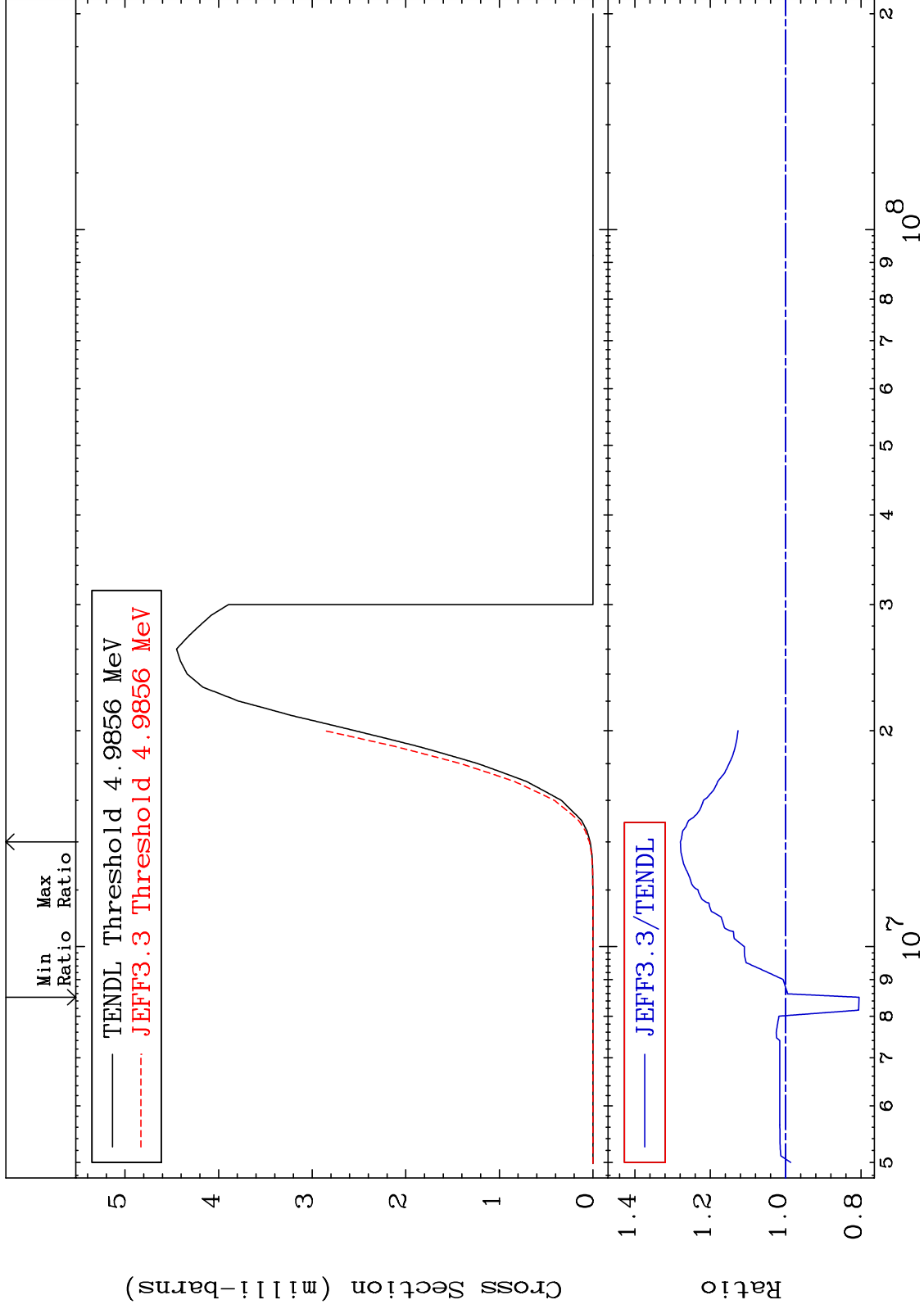


MAT 7240

(n, t): 71-Lu-177g

72-Hf-179

Radionuclide Production Cross Section -19.48 To 27.90 %



82

Incident Energy (eV)

72-Hf-179

MAT 7240

(n, He-3):70-Yb-177g

72-Hf-179

Radionuclide Production Cross Section 0.275 To 7.777 %

