

Program Complot
(Version 2018-1)

by

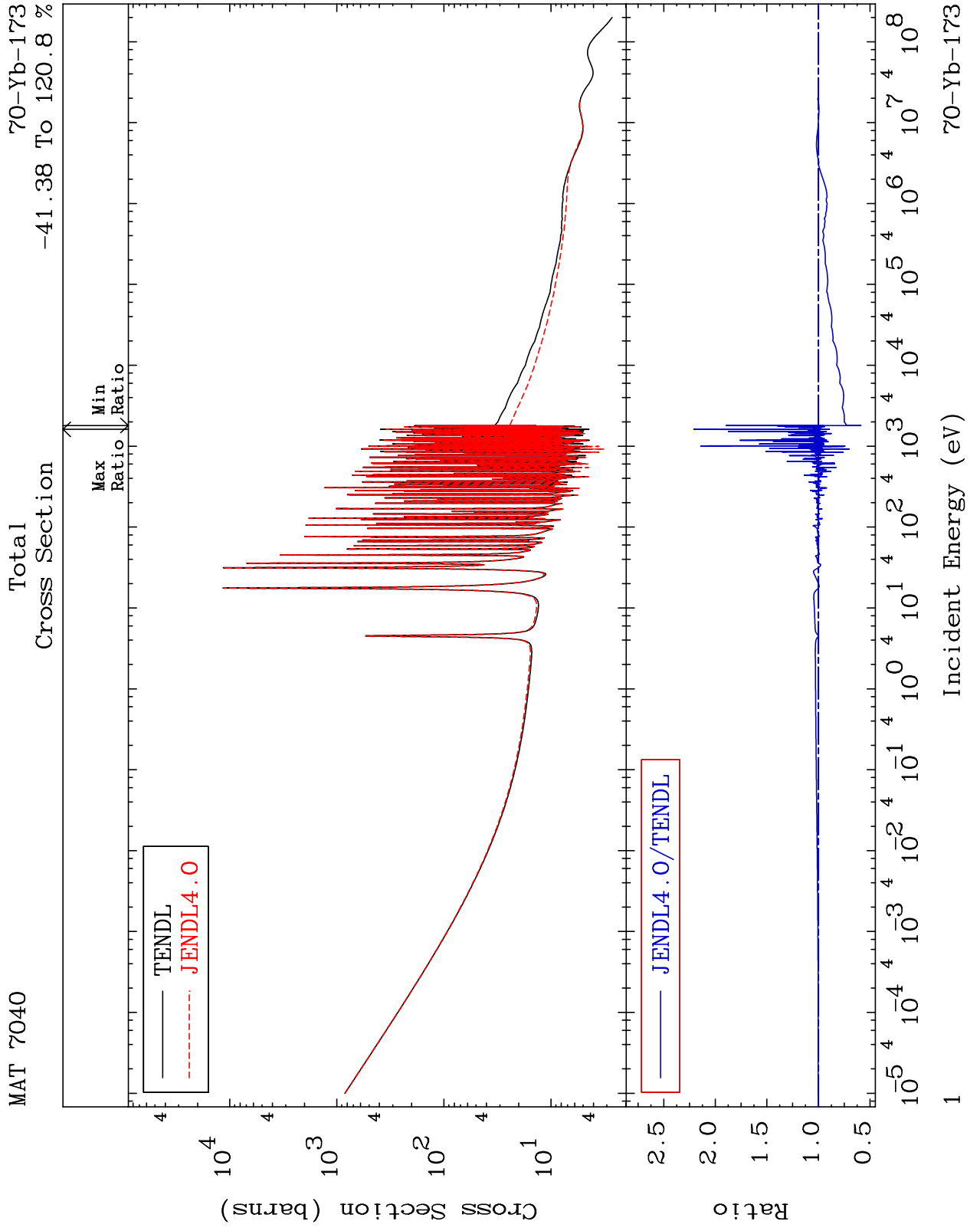
Dermott E. Cullen
(Present Contact Information)

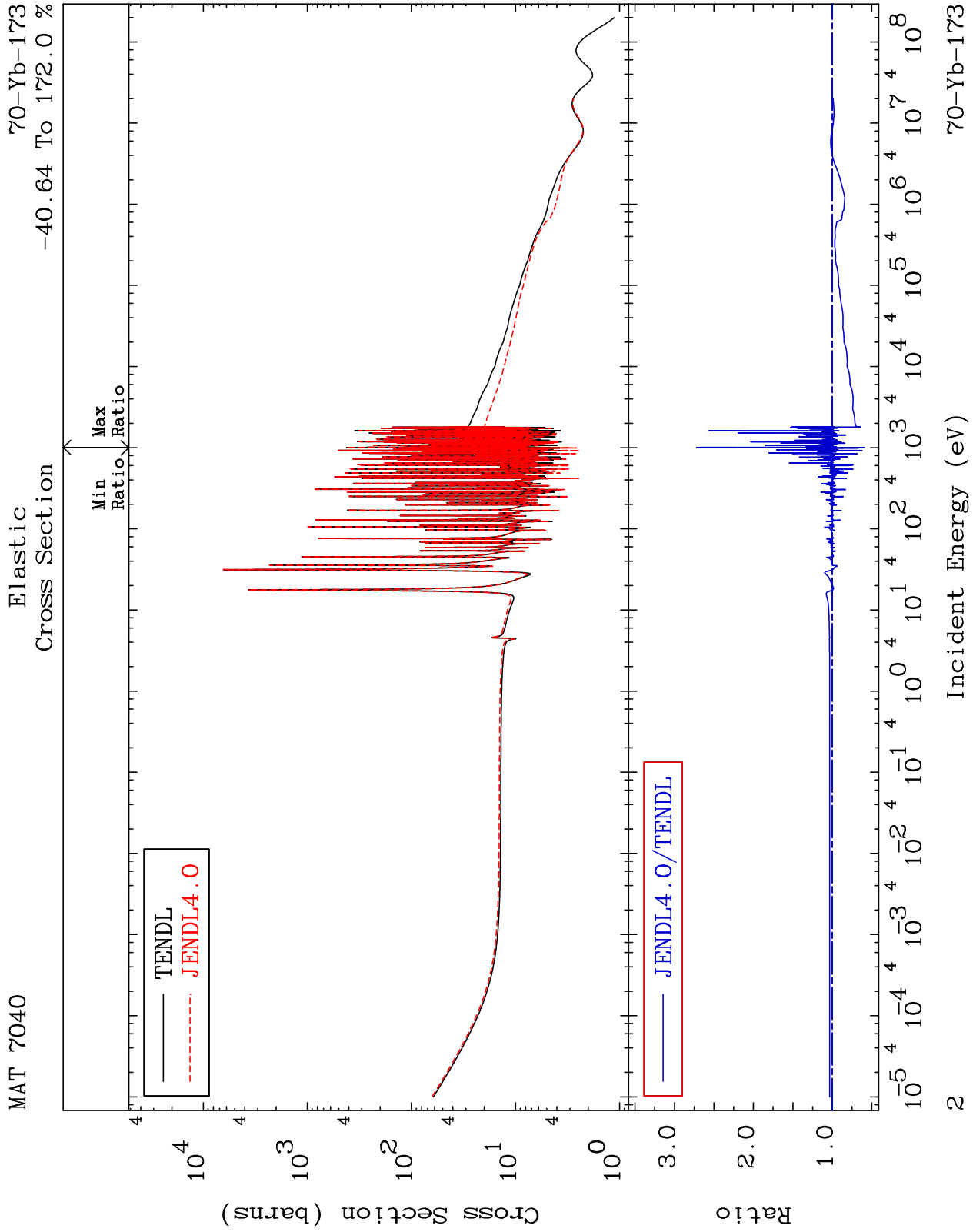
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Press Mouse Button to Start

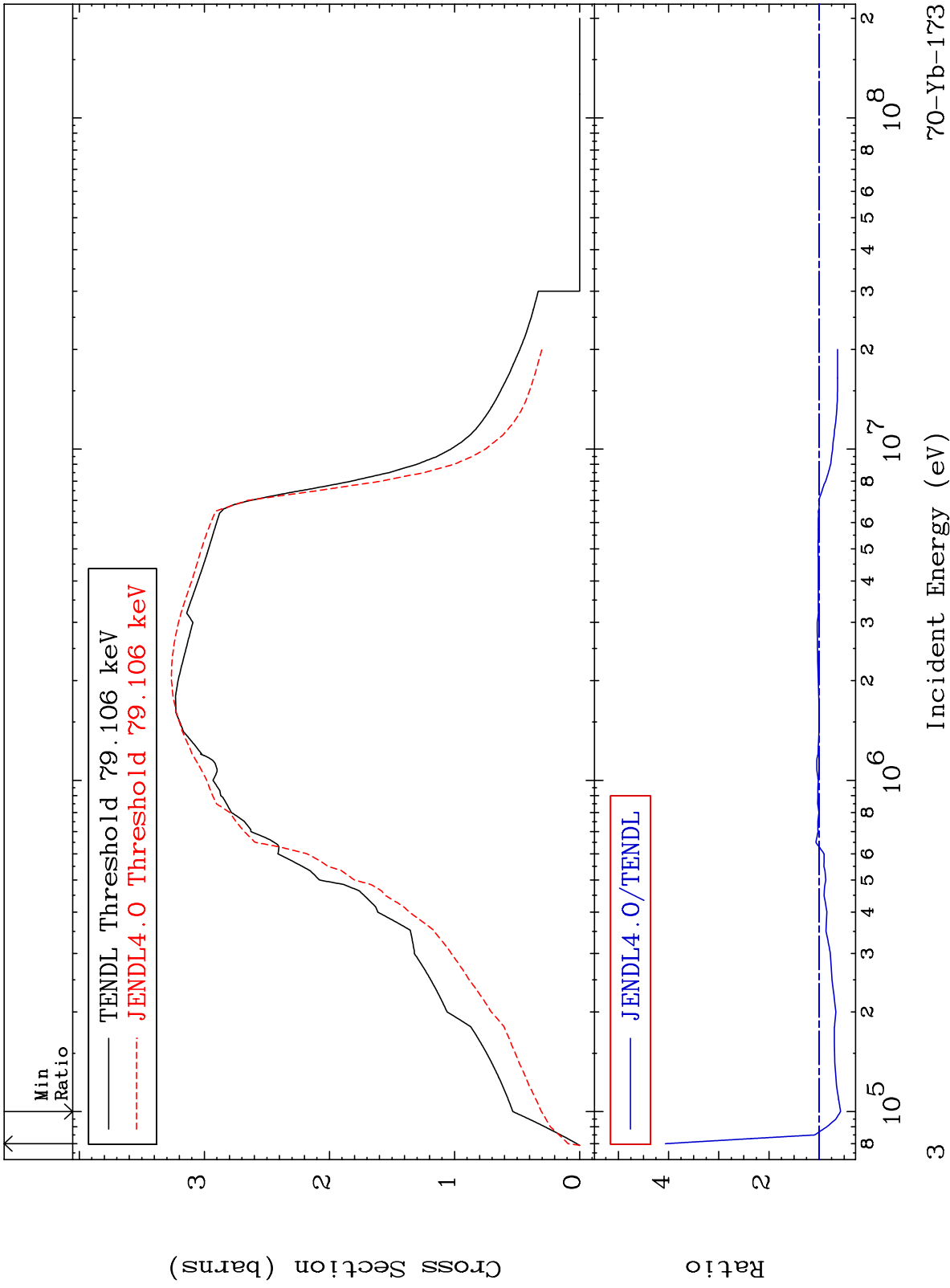




MAT 7040

Inelastic
Cross Section

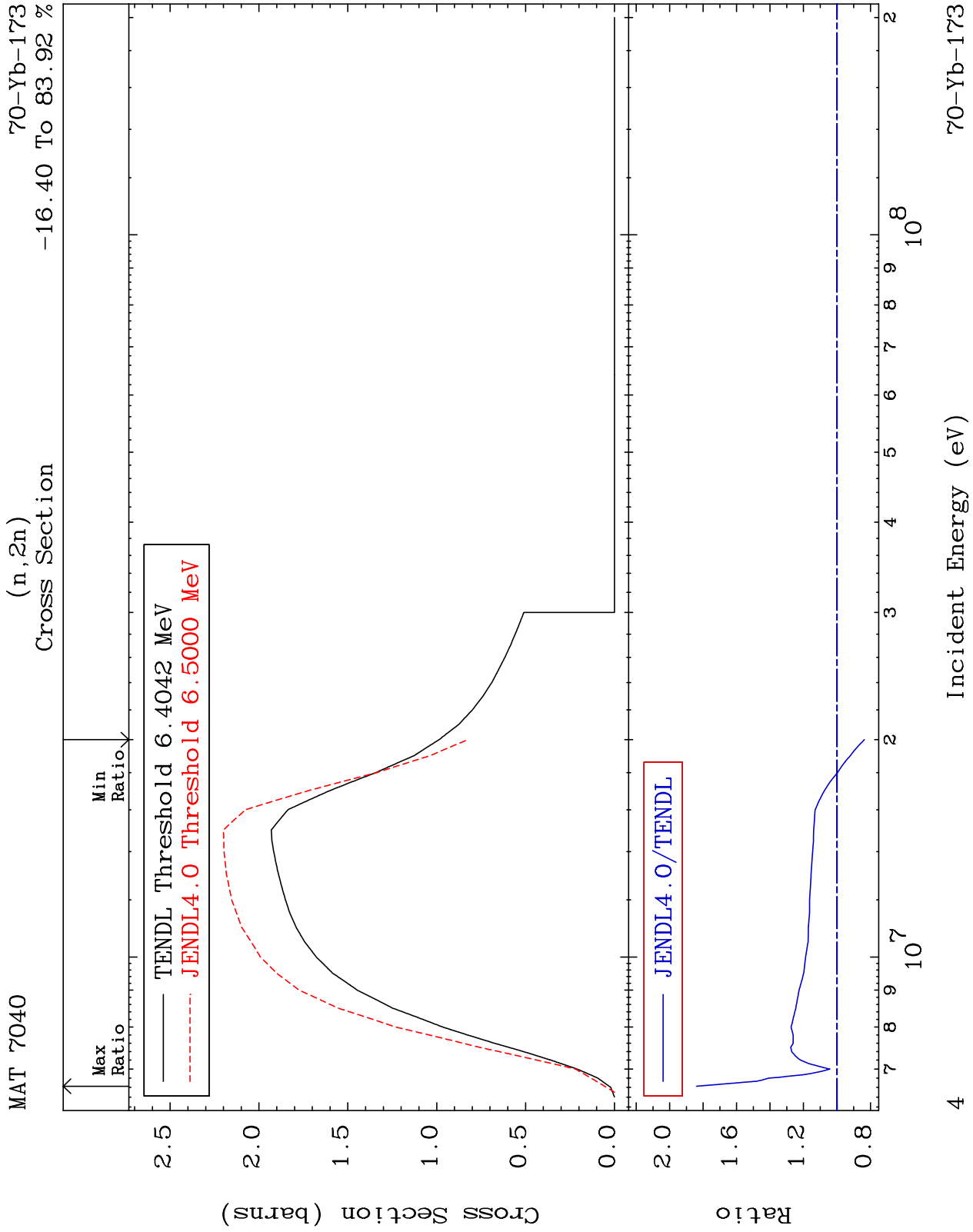
70-Yb-173
-42.83 To 306.2 %



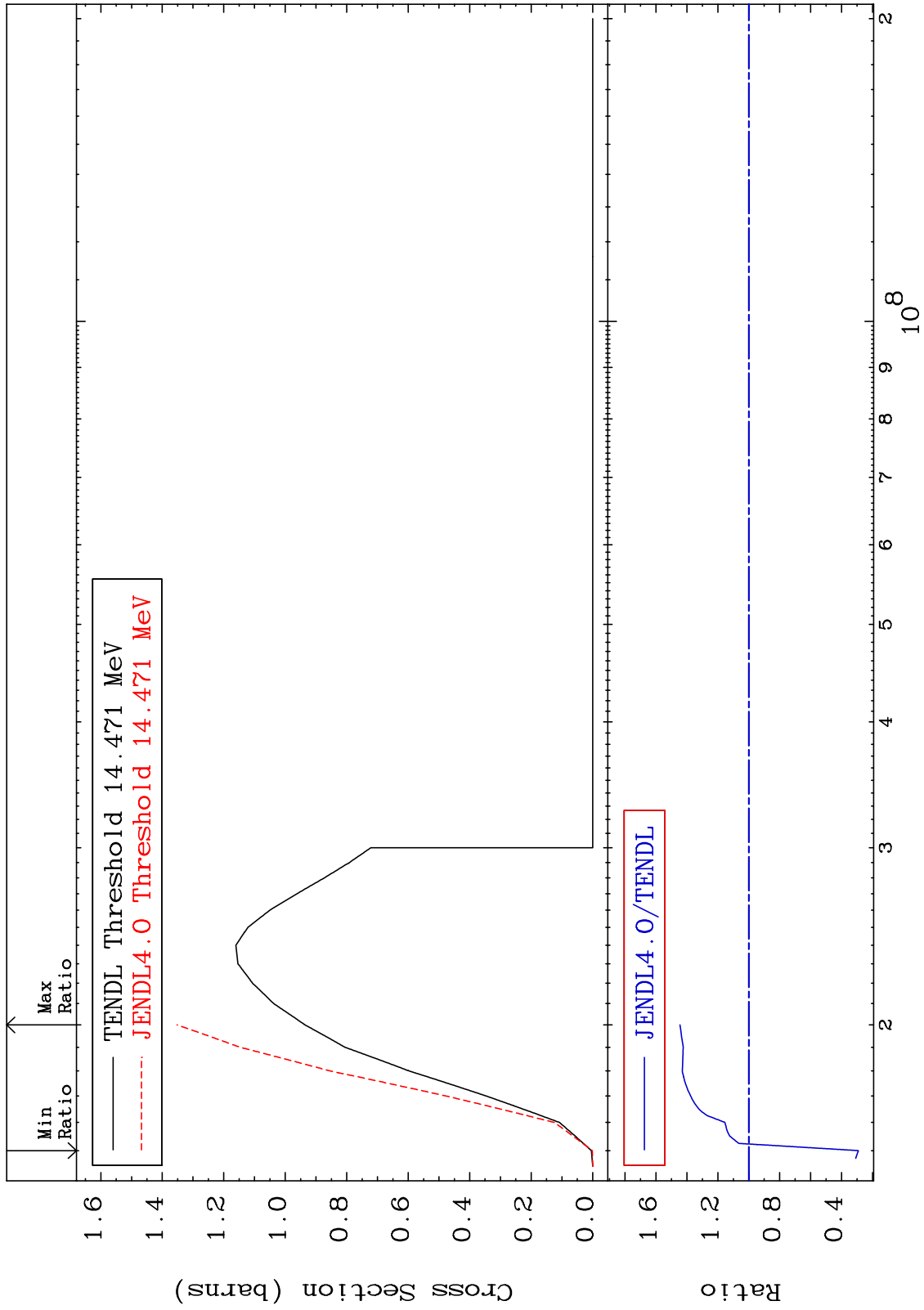
70-Yb-173

Incident Energy (eV)

3



MAT 7040 (n,3n) Cross Section 70-Yb-173 -70.88 To 44.45 %



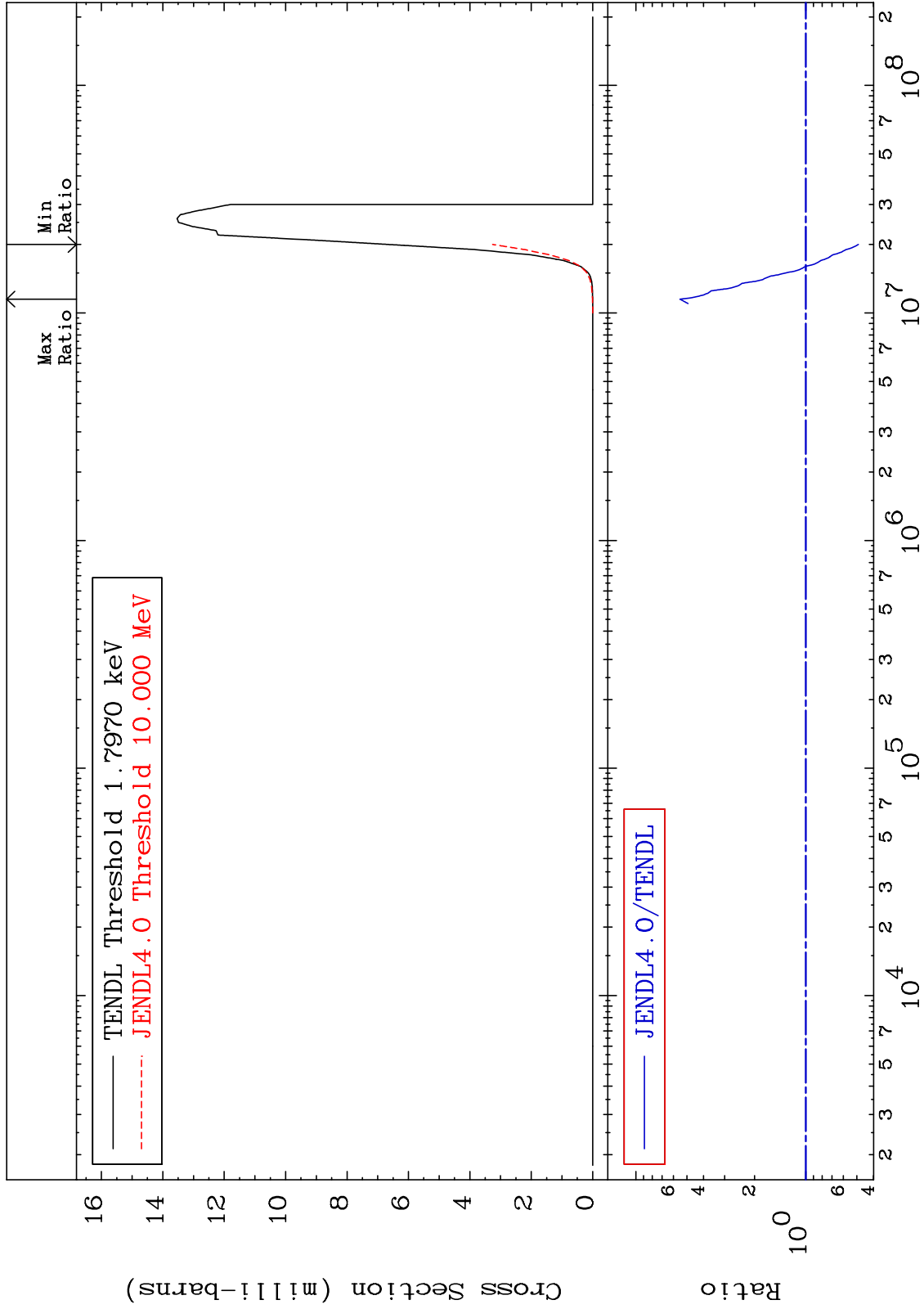
MAT 7040

(n, n') α

Cross Section

70-Yb-173

-51.04 To 449.2 %



6

Incident Energy (eV)

70-Yb-173

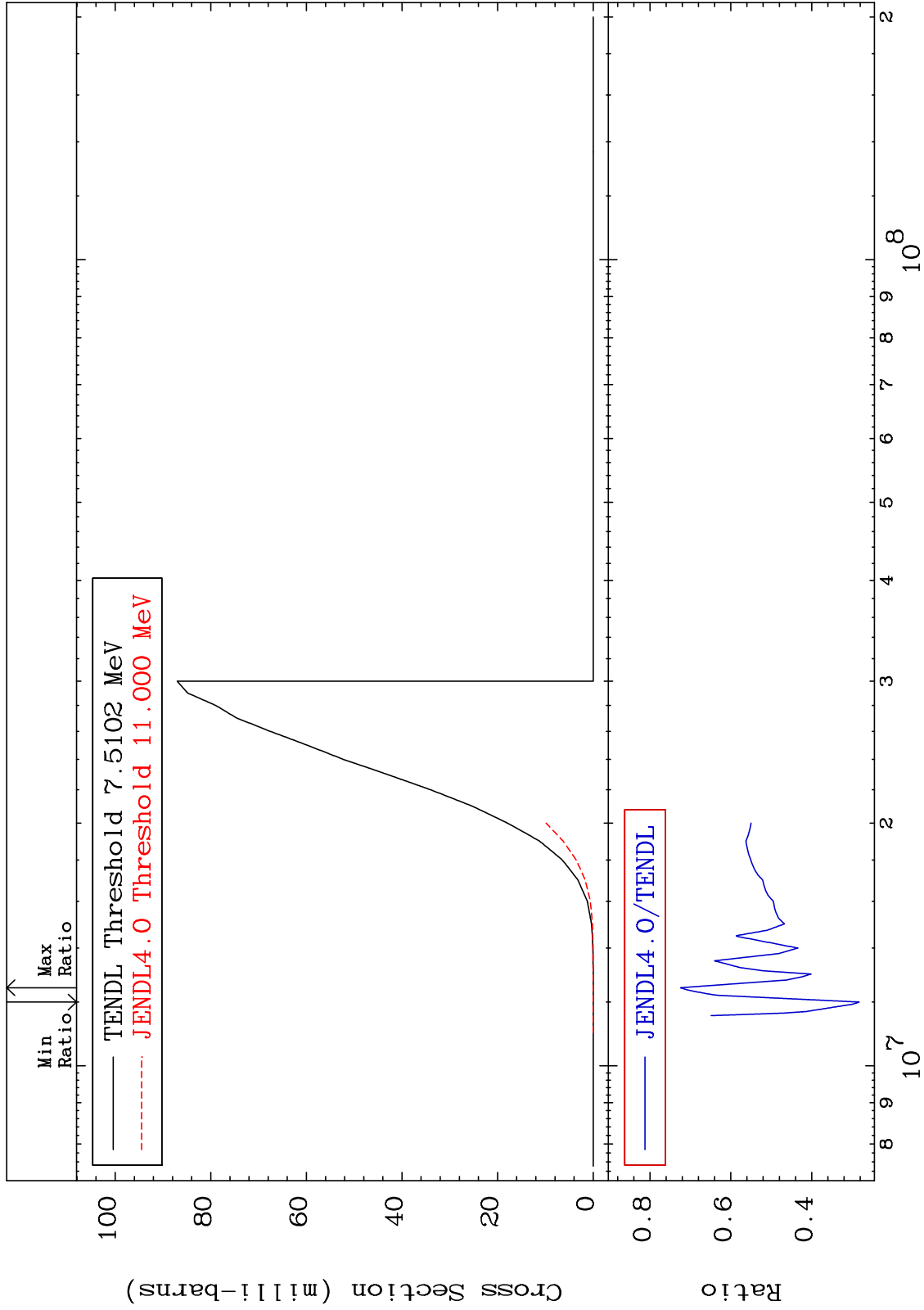
MAT 7040

(n,n') p

70-Yb-173

Cross Section

-71.75 To -27.57%

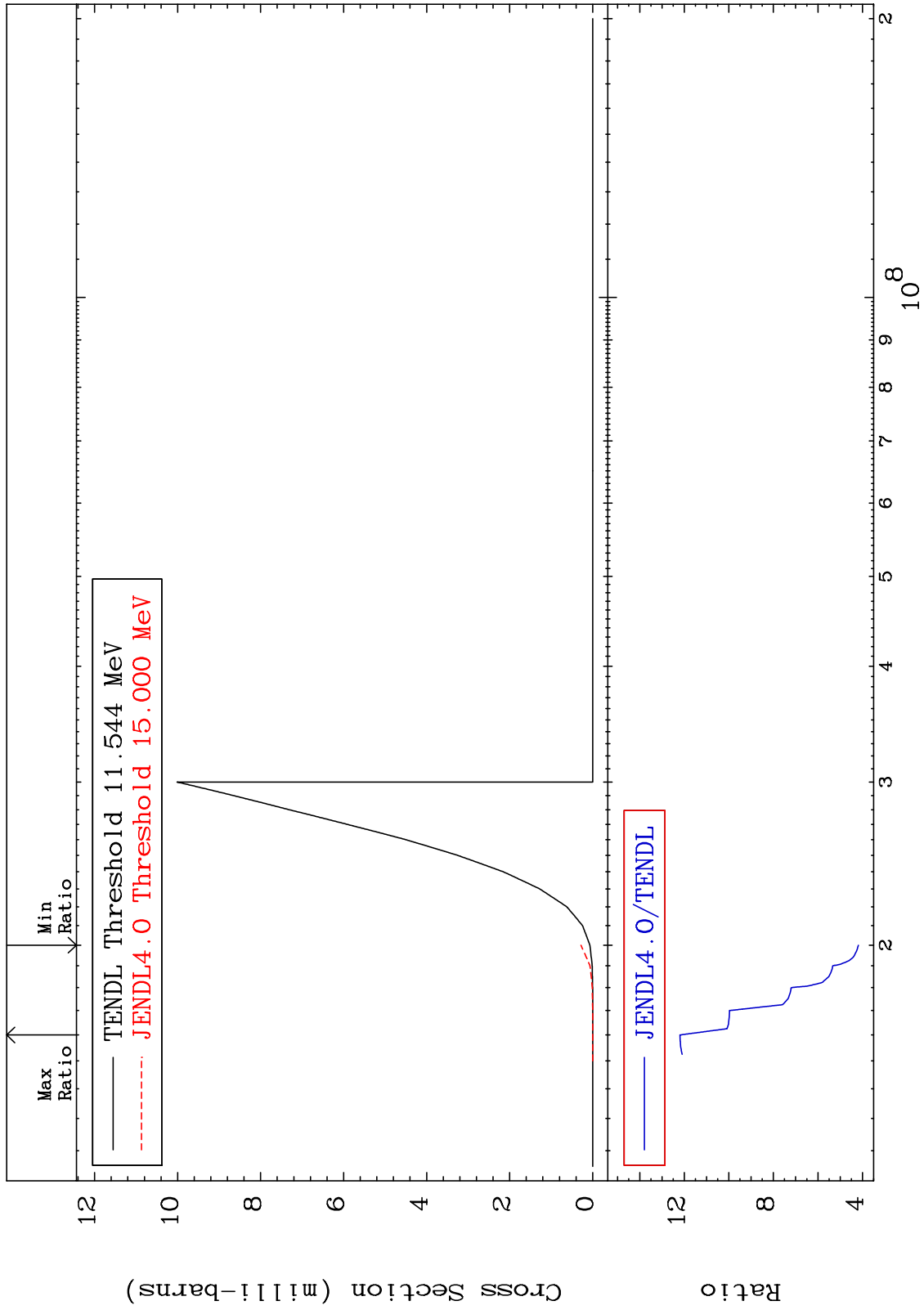


7

Incident Energy (eV)

70-Yb-173

MAT 7040 (n,n') d 70-Yb-173
 Cross Section 318.2 To 1119. %

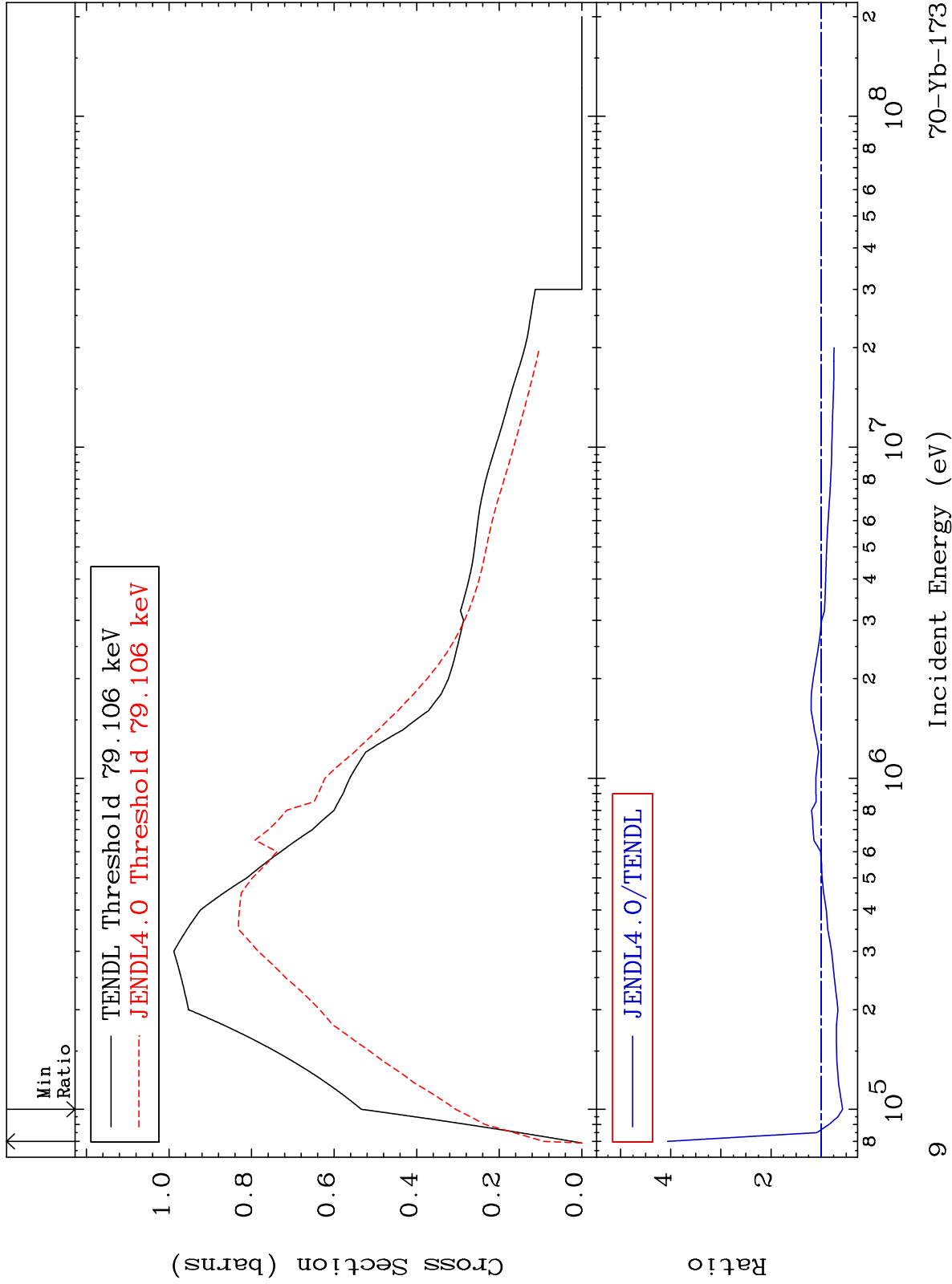


8 Incident Energy (eV) 70-Yb-173

MAT 7040

MT= 51 (n,n') Level
Cross Section

70-Yb-173
-42.83 To 306.2 %



70-Yb-173

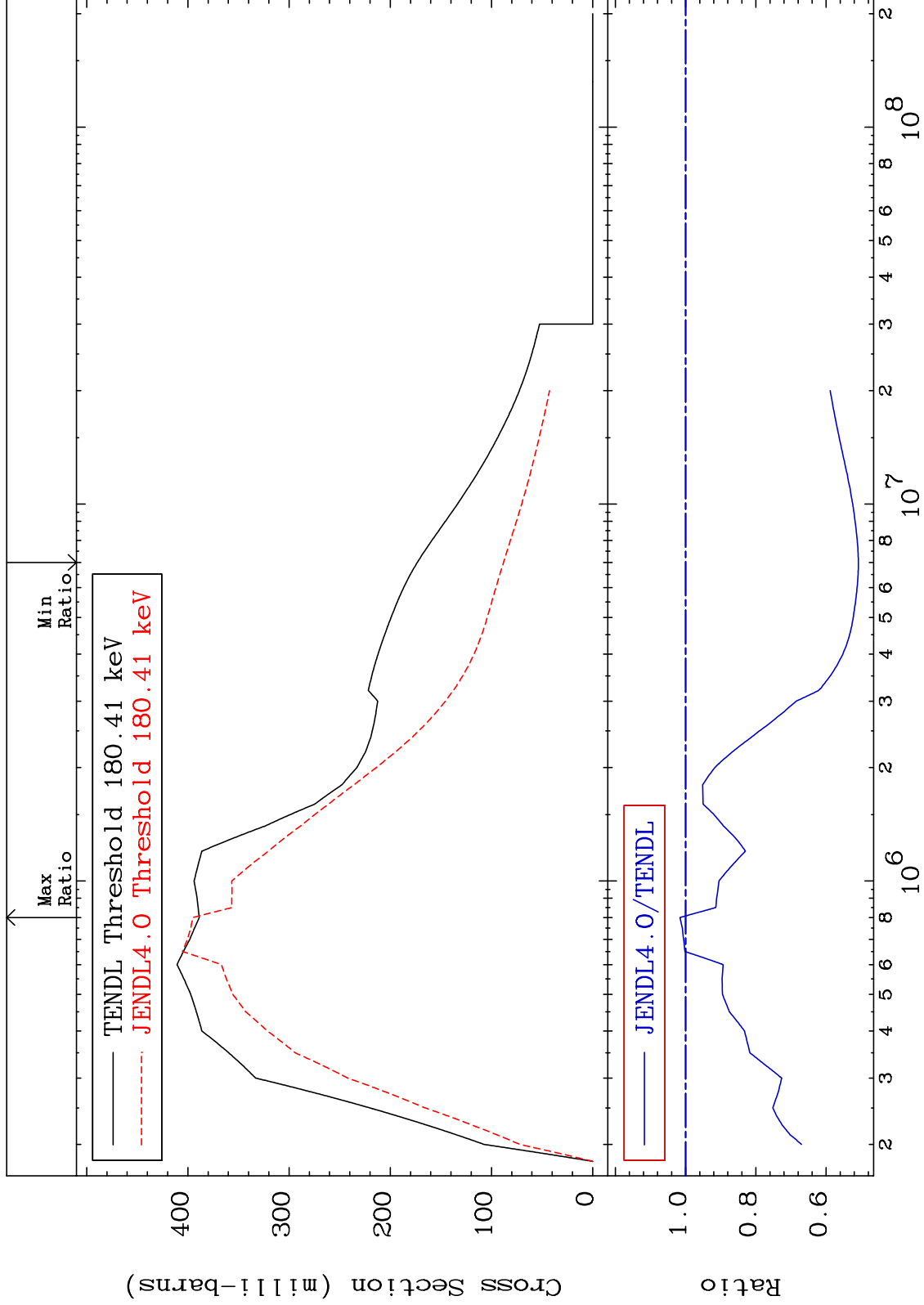
Incident Energy (eV)

9

MAT 7040

MT= 52 (n,n') Level
Cross Section

70-Yb-173
-49.18 To 1.603 %

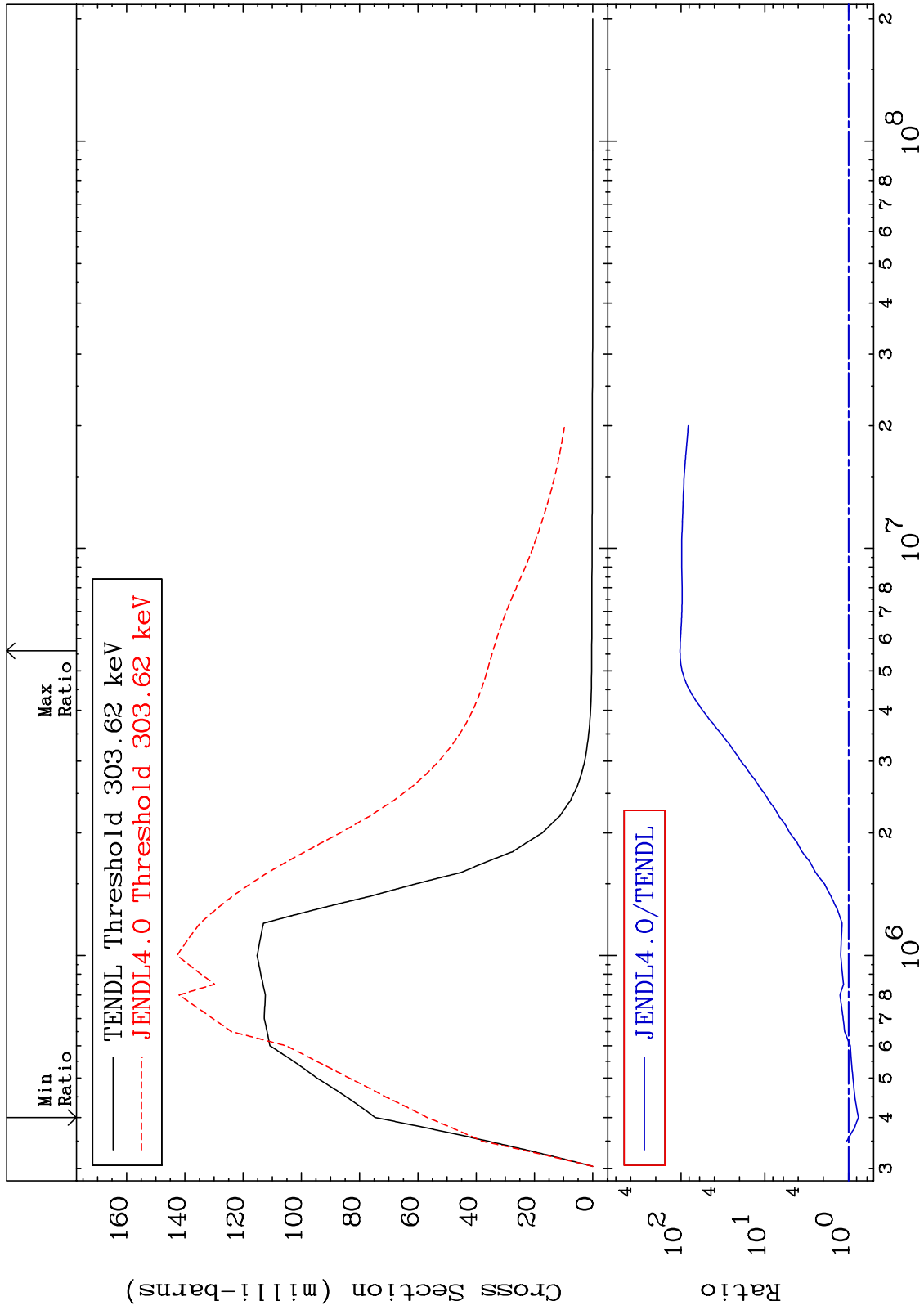


10

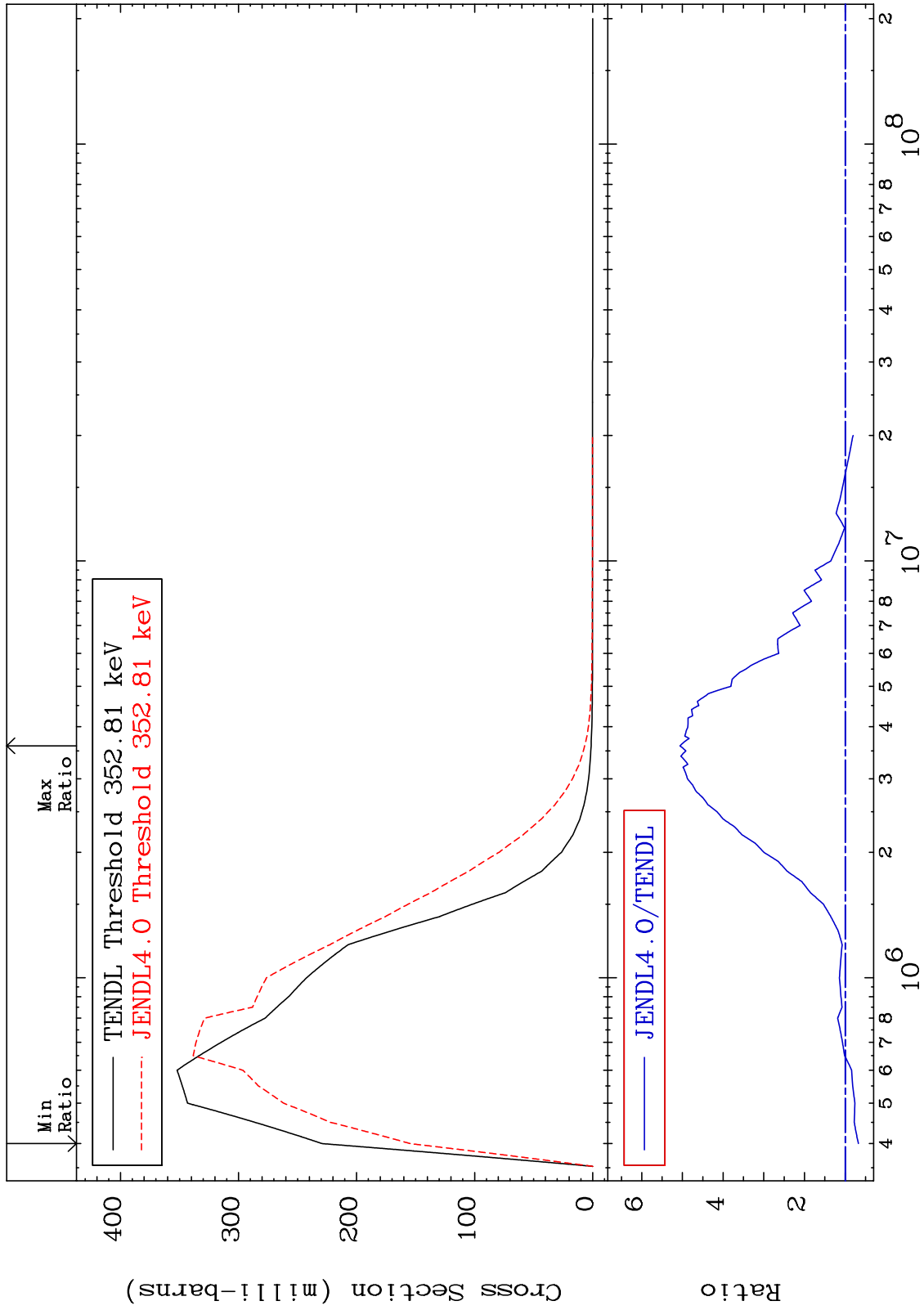
Incident Energy (eV)

70-Yb-173

MAT 7040 MT= 53 (n,n') Level 70-Yb-173
 Cross Section -23.93 To 9999. %

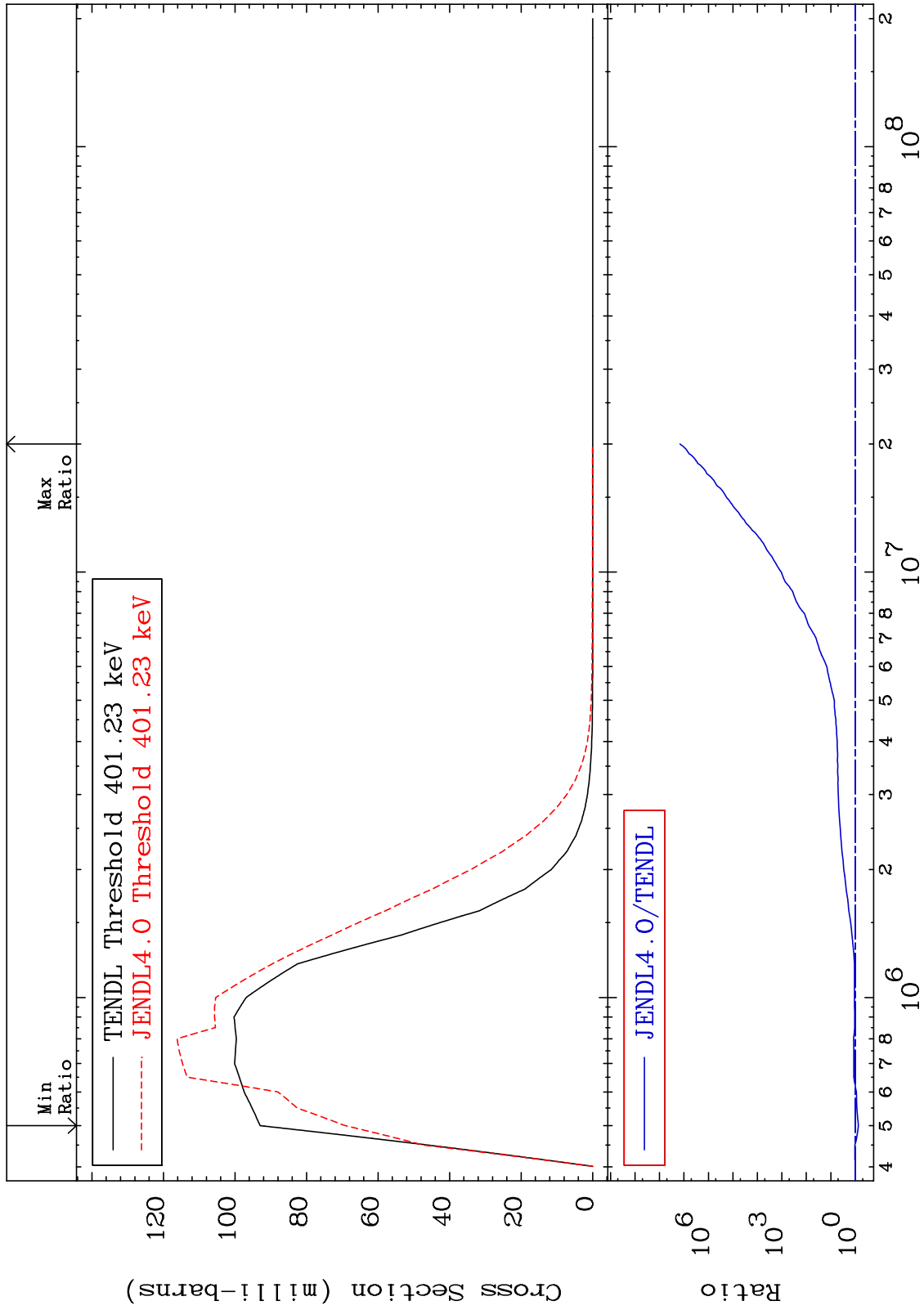


MAT 7040 MT= 54 (n,n') Level Cross Section -32.53 To 406.0 % 70-Yb-173

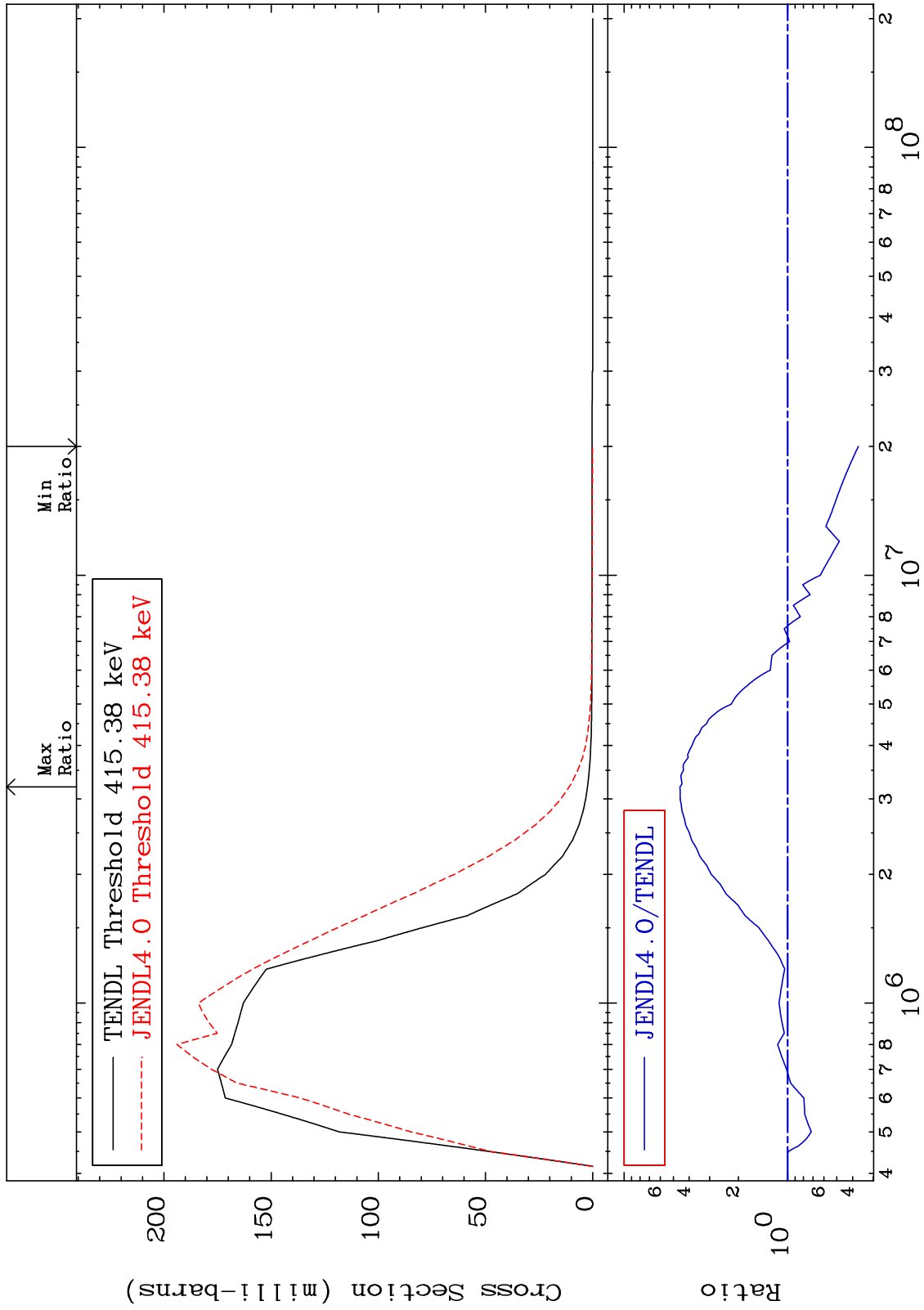


12 Incident Energy (eV) 70-Yb-173

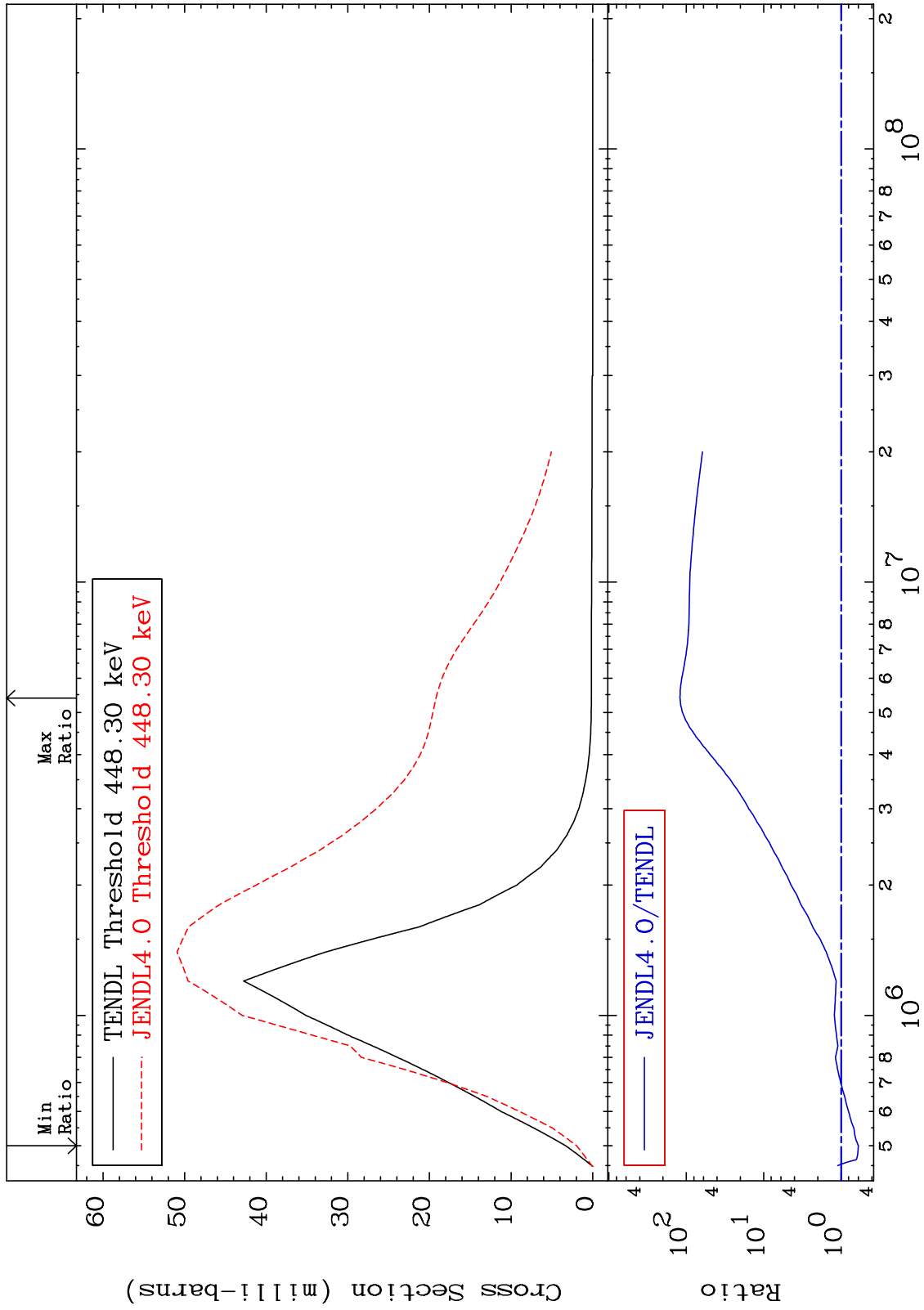
MAT 7040 MT= 55 (n,n') Level Cross Section 70-Yb-173
 -25.59 To 9999. %



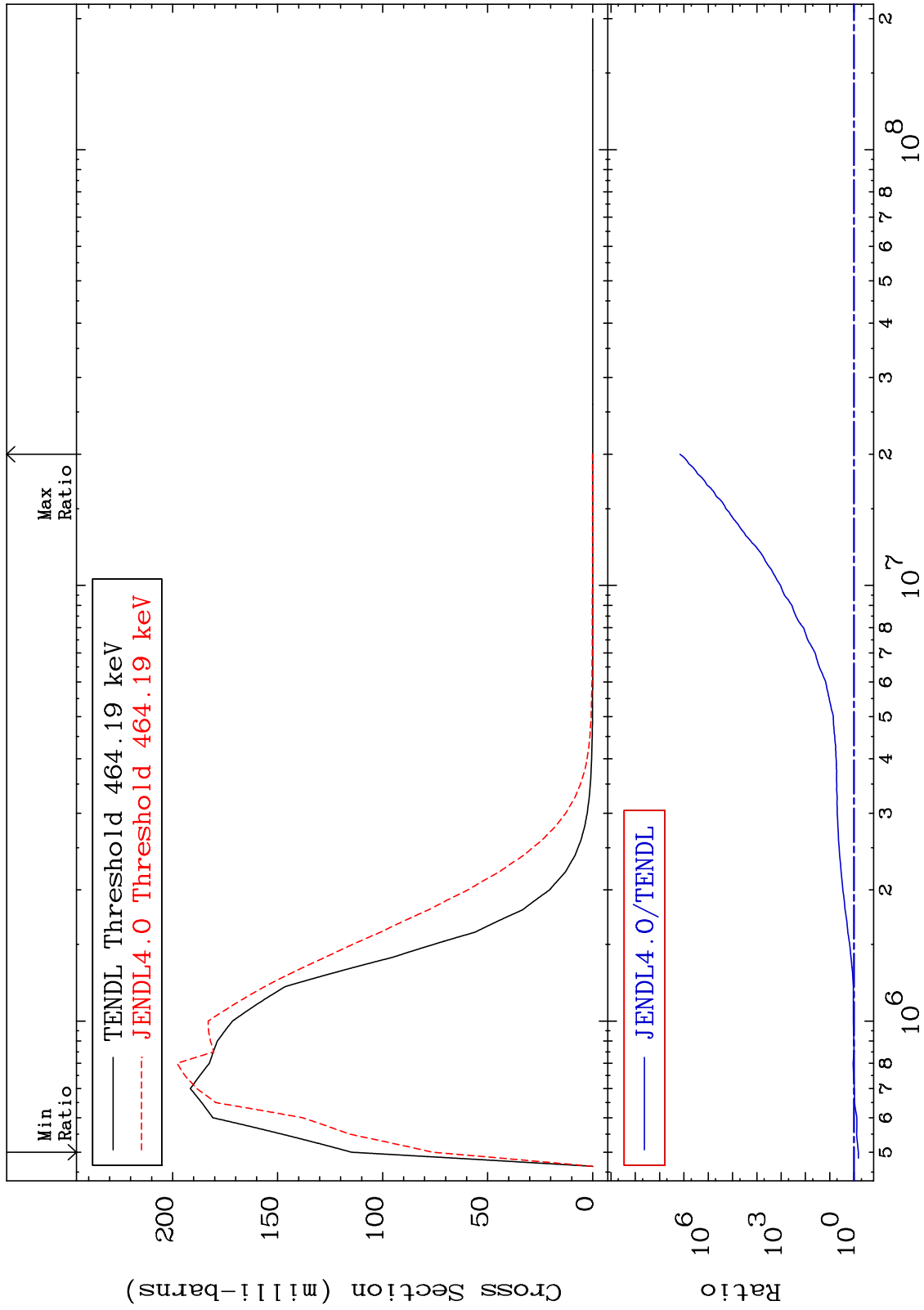
MAT 7040 MT= 56 (n,n') Level Cross Section 70-Yb-173
 -63.08 To 355.0 %



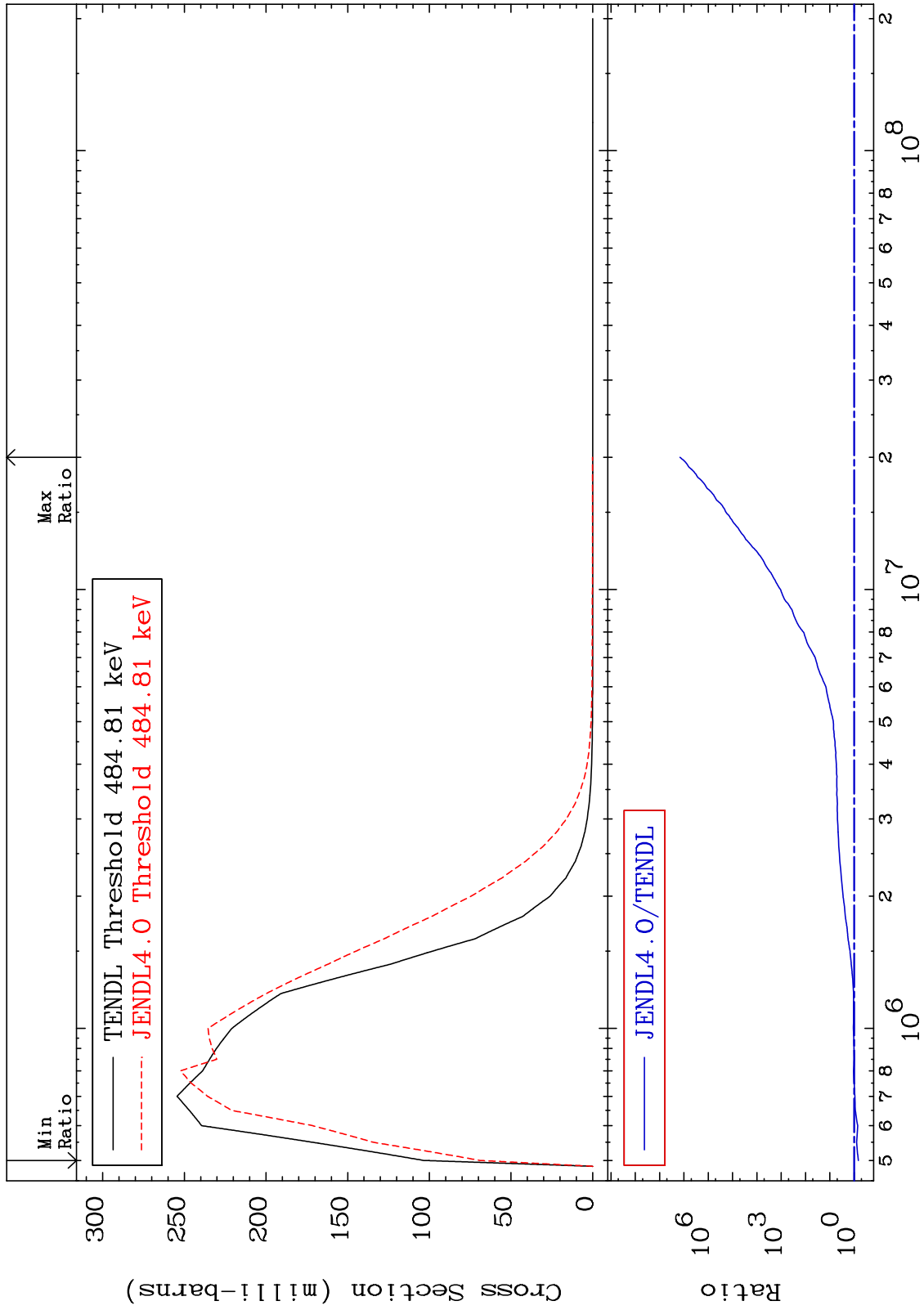
MAT 7040 MT= 57 (n,n') Level Cross Section -40.25 To 9999. % 70-Yb-173



MAT 7040 MT= 58 (n,n') Level Cross Section 70-Yb-173
 -33.66 To 9999. %



MAT 7040 MT= 59 (n,n') Level Cross Section 70-Yb-173
 -33.45 To 9999. %



Min Ratio

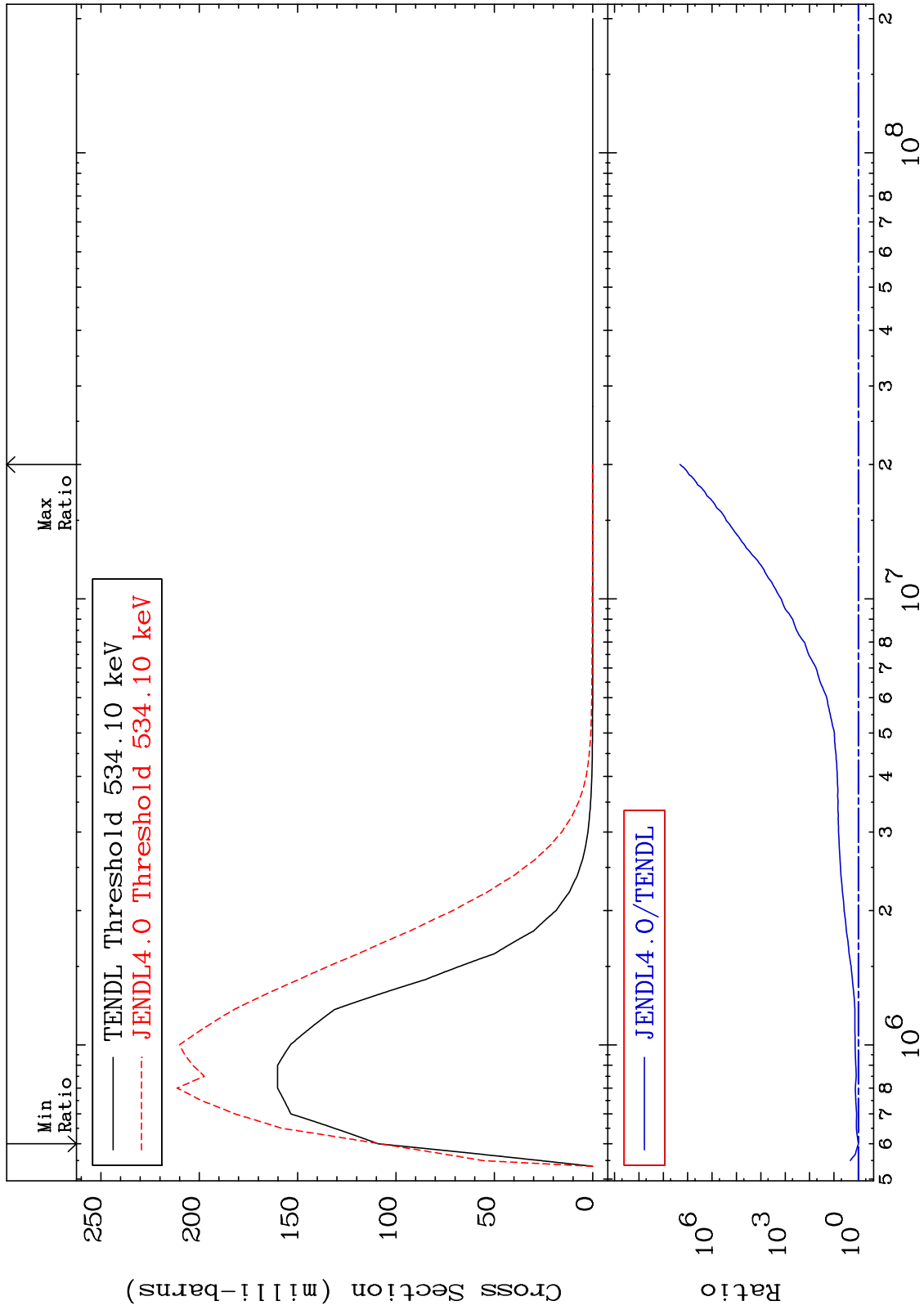
Max Ratio

TENDL Threshold 484.81 keV

JENDL4.0 Threshold 484.81 keV

JENDL4.0/TENDL

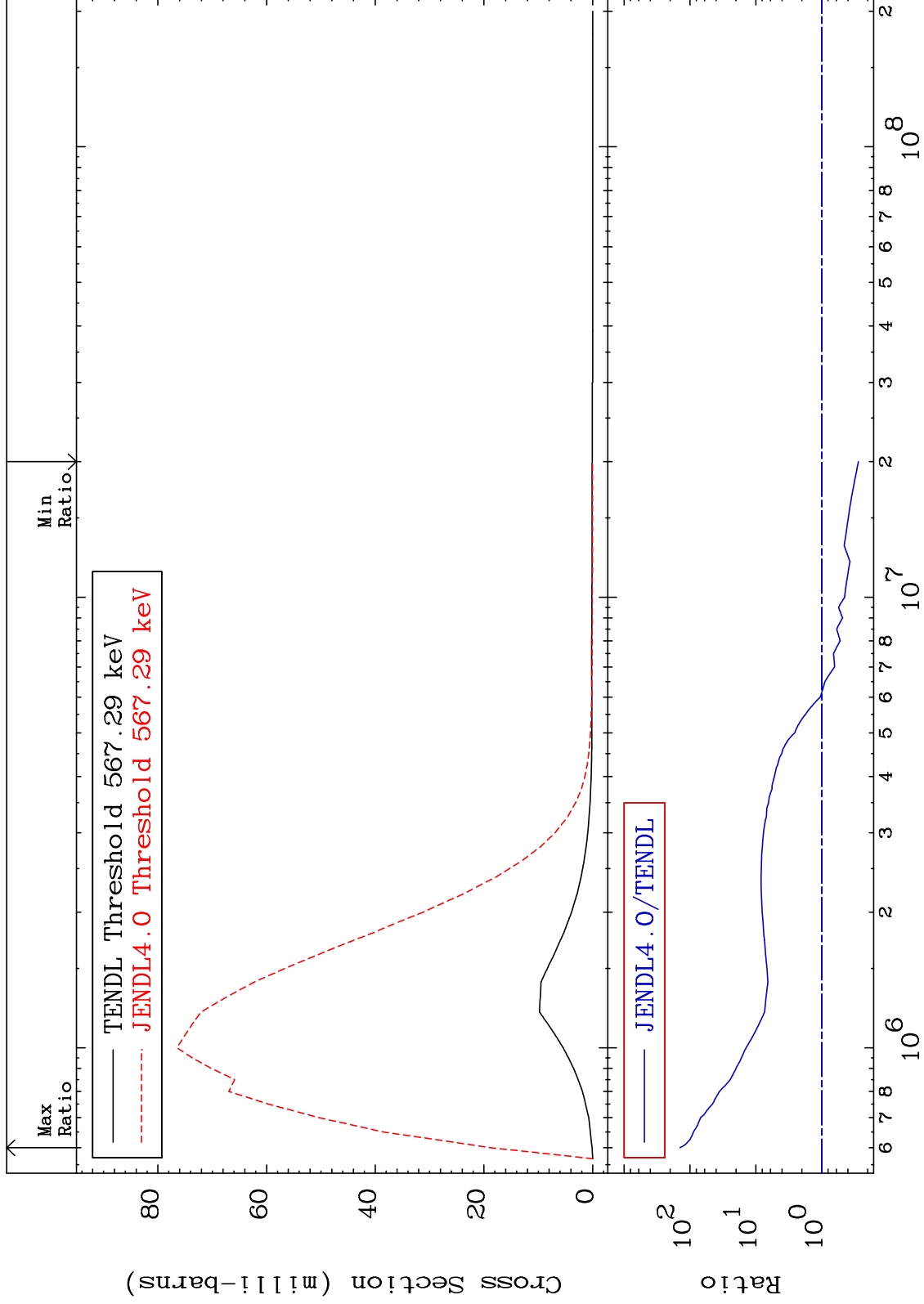
MAT 7040 MT= 60 (n,n') Level Cross Section -0.701 To 9999. % 70-Yb-173



MAT 7040

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

70-Yb-173
-72.33 To 9999. %

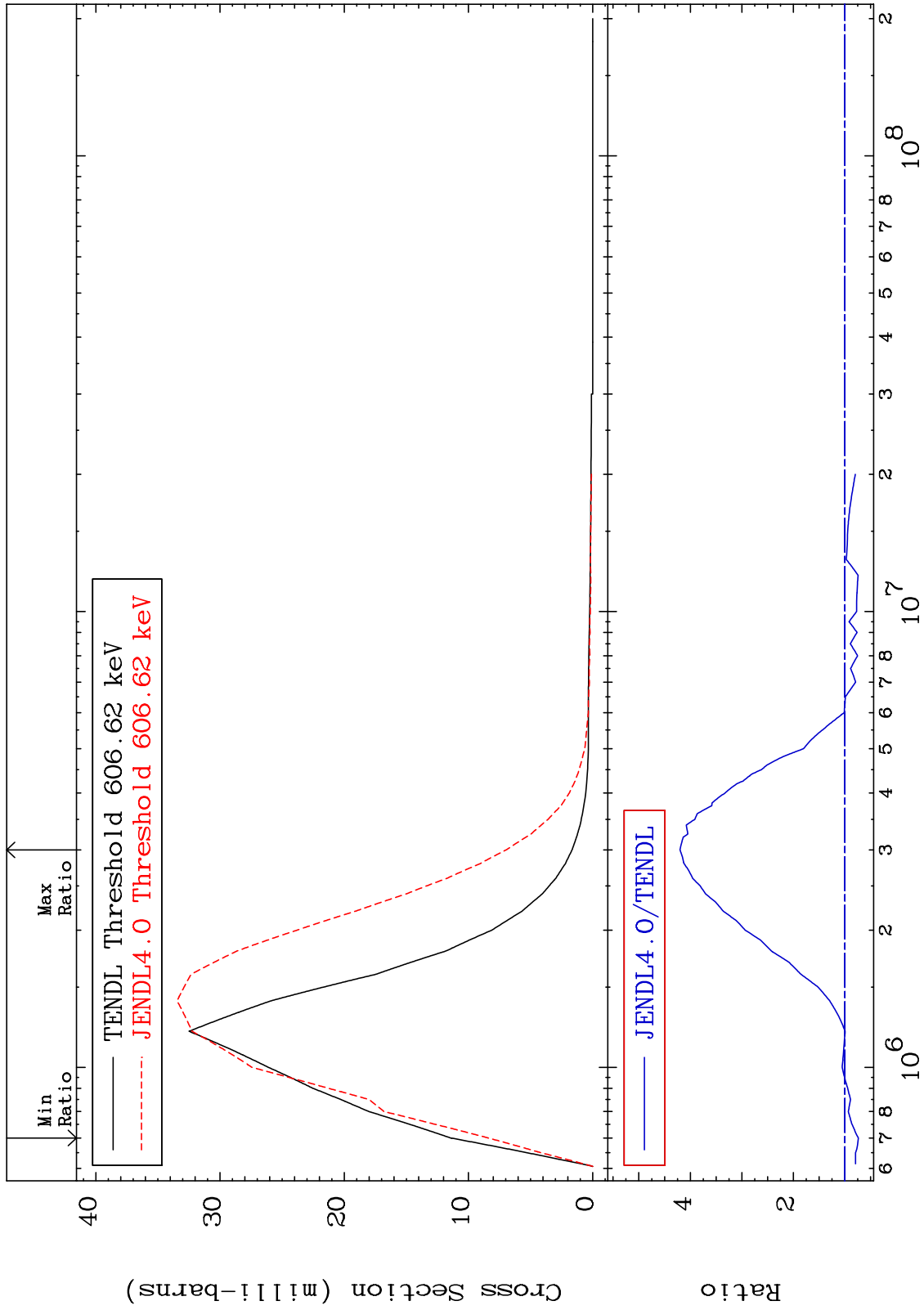


19

Incident Energy (eV)

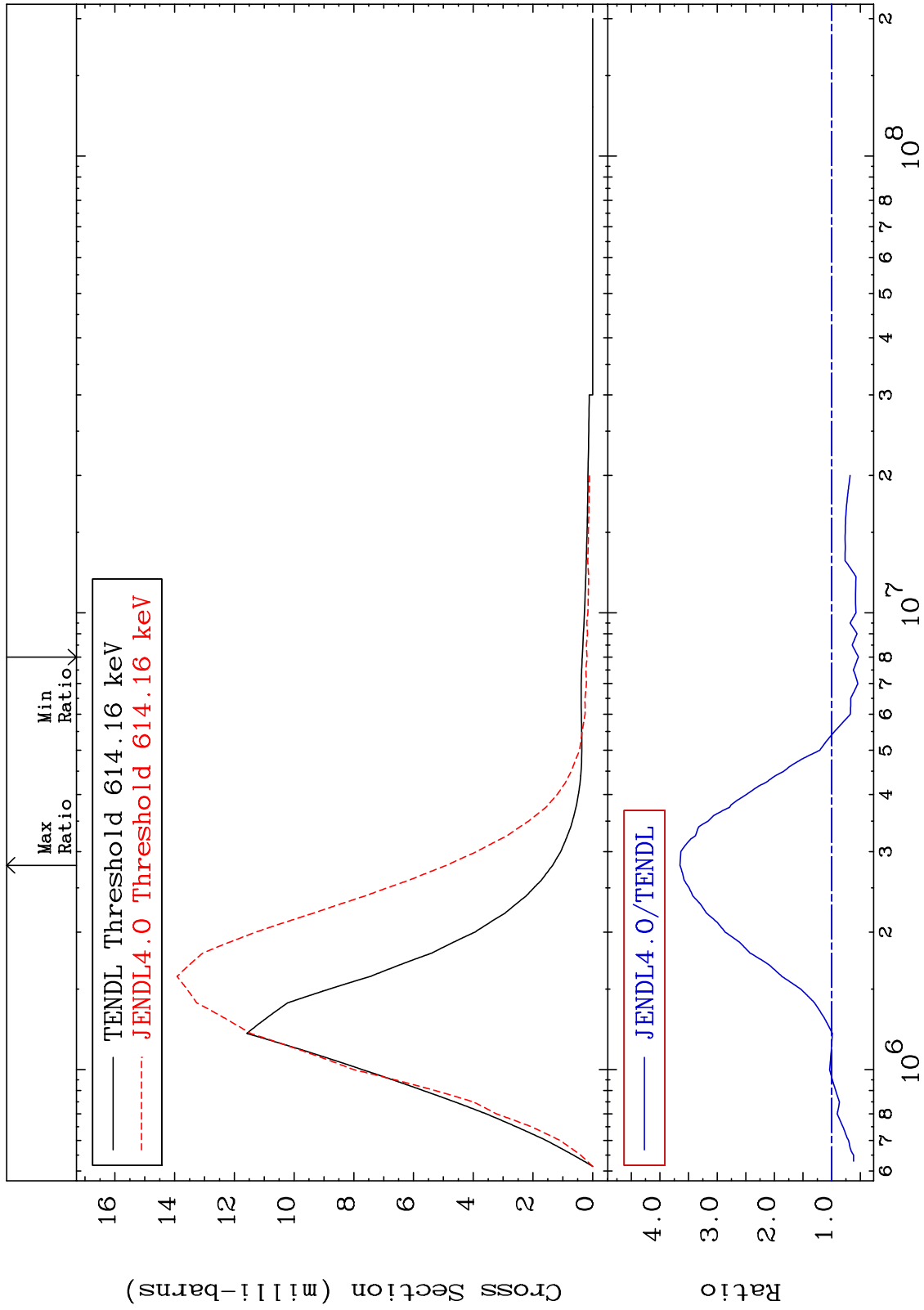
70-Yb-173

MAT 7040 MT= 62 (n,n') Level Cross Section -26.49 To 320.0 % 70-Yb-173

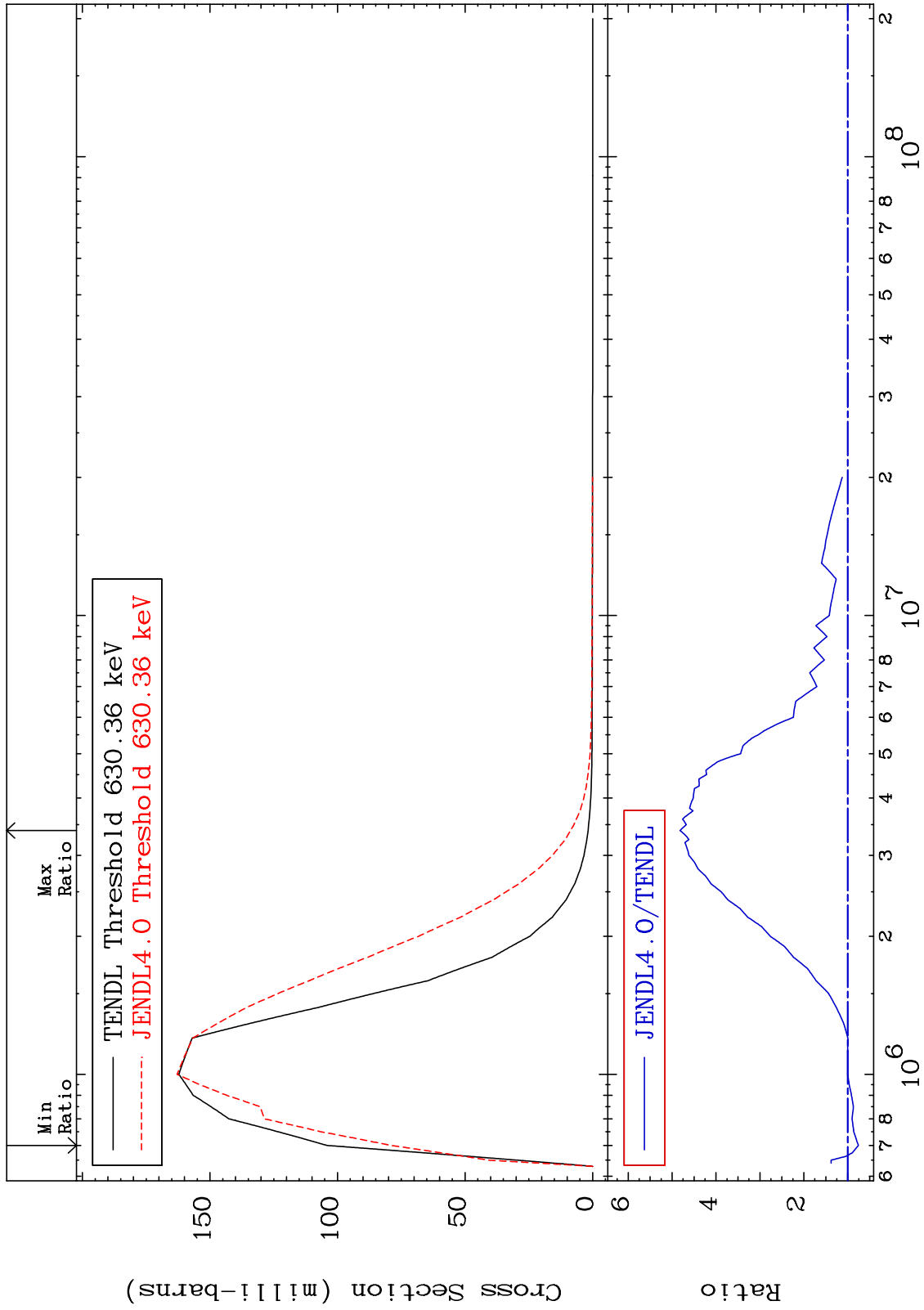


20 7 8 10⁶ 2 3 4 5 6 7 8 10⁸ 70-Yb-173

MAT 7040 MT= 63 (n,n') Level 70-Yb-173
 Cross Section -46.68 To 264.8 %

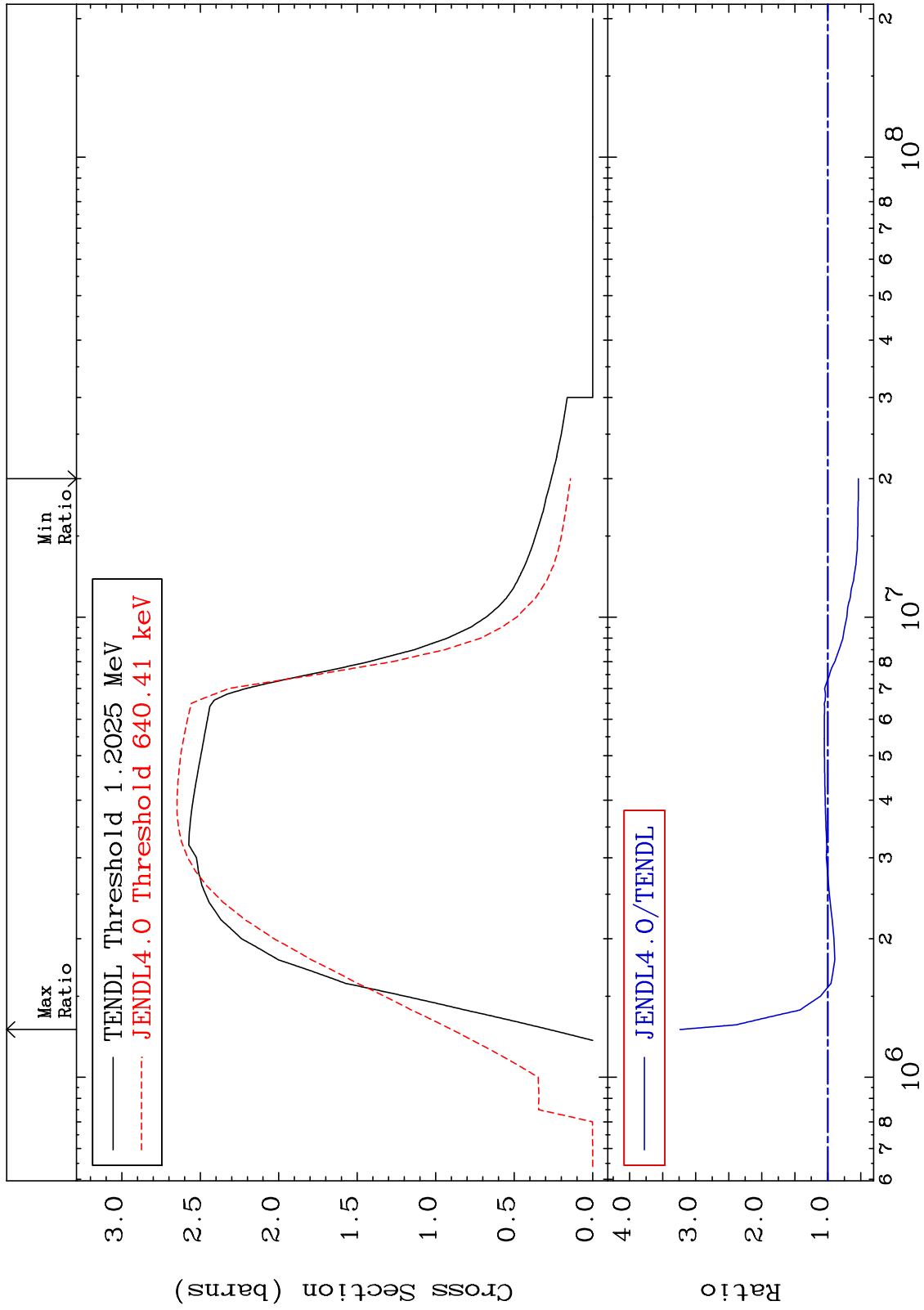


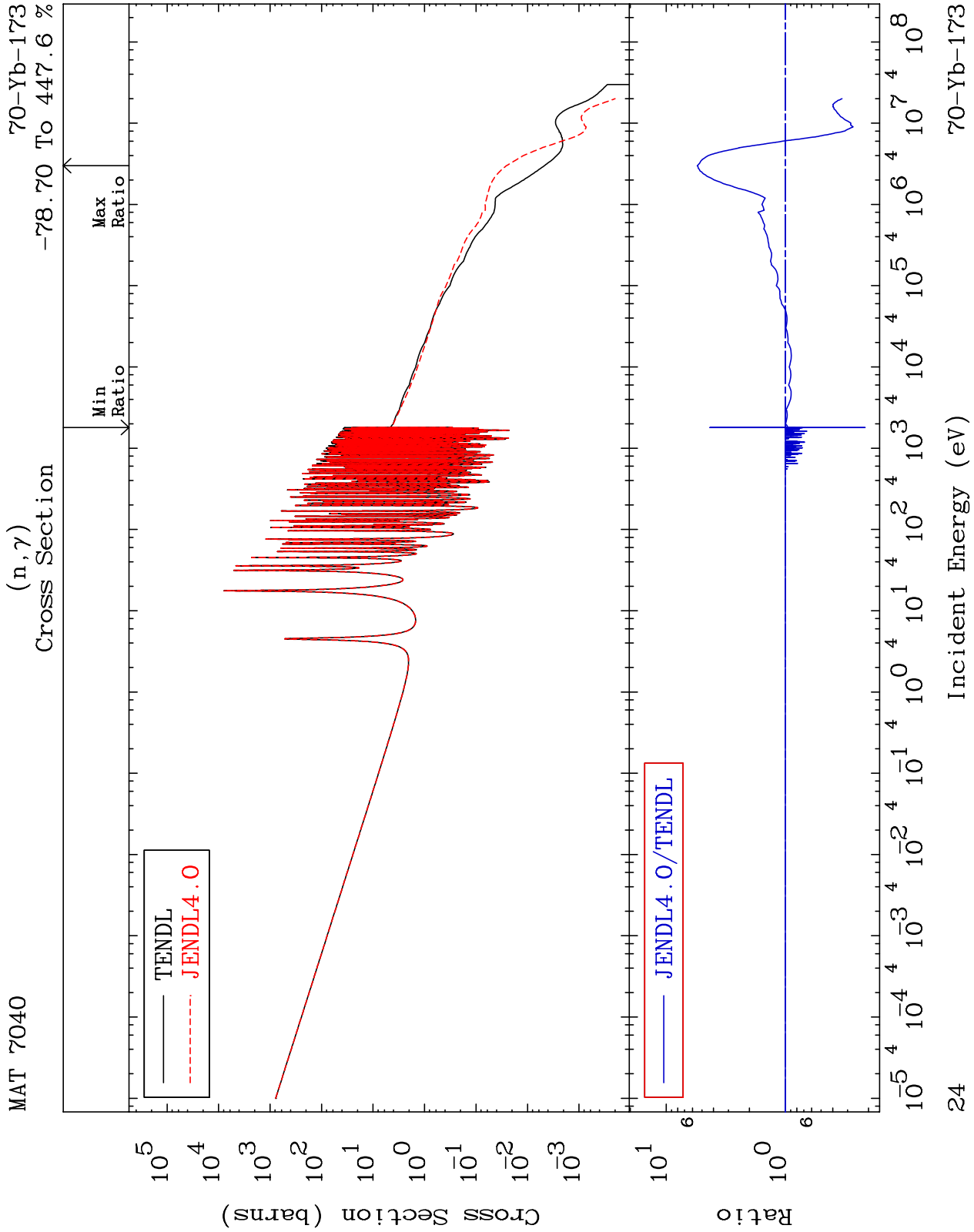
MAT 7040 MT= 64 (n,n') Level Cross Section -24.21 To 381.9 % 70-Yb-173



22 Incident Energy (eV) 70-Yb-173

MAT 7040 (n,n') Continuum Cross Section -46.30 To 223.7 % 70-Yb-173





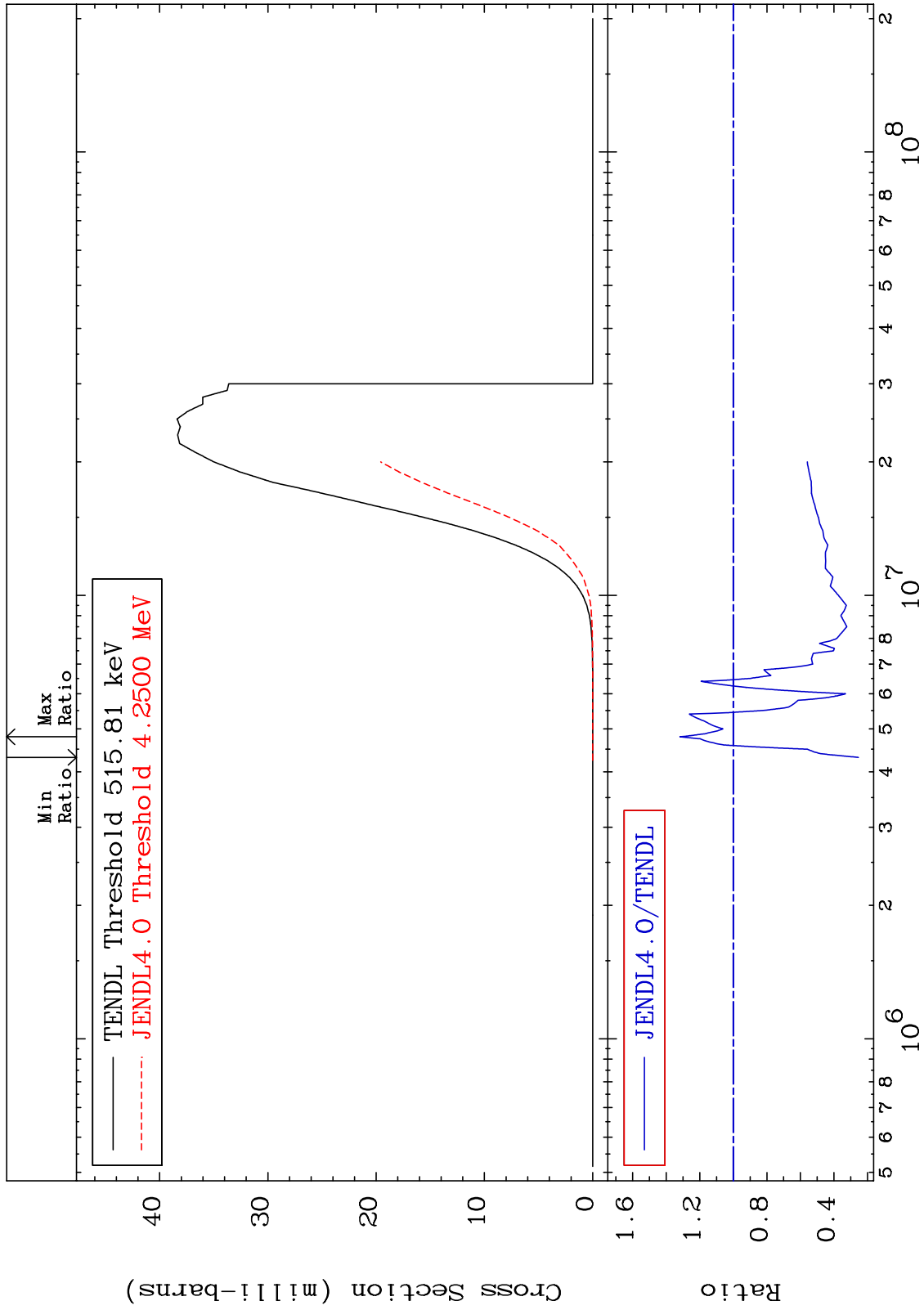
MAT 7040

(n, p)

70-Yb-173

Cross Section

-74.52 To 31.73 %



25

70-Yb-173

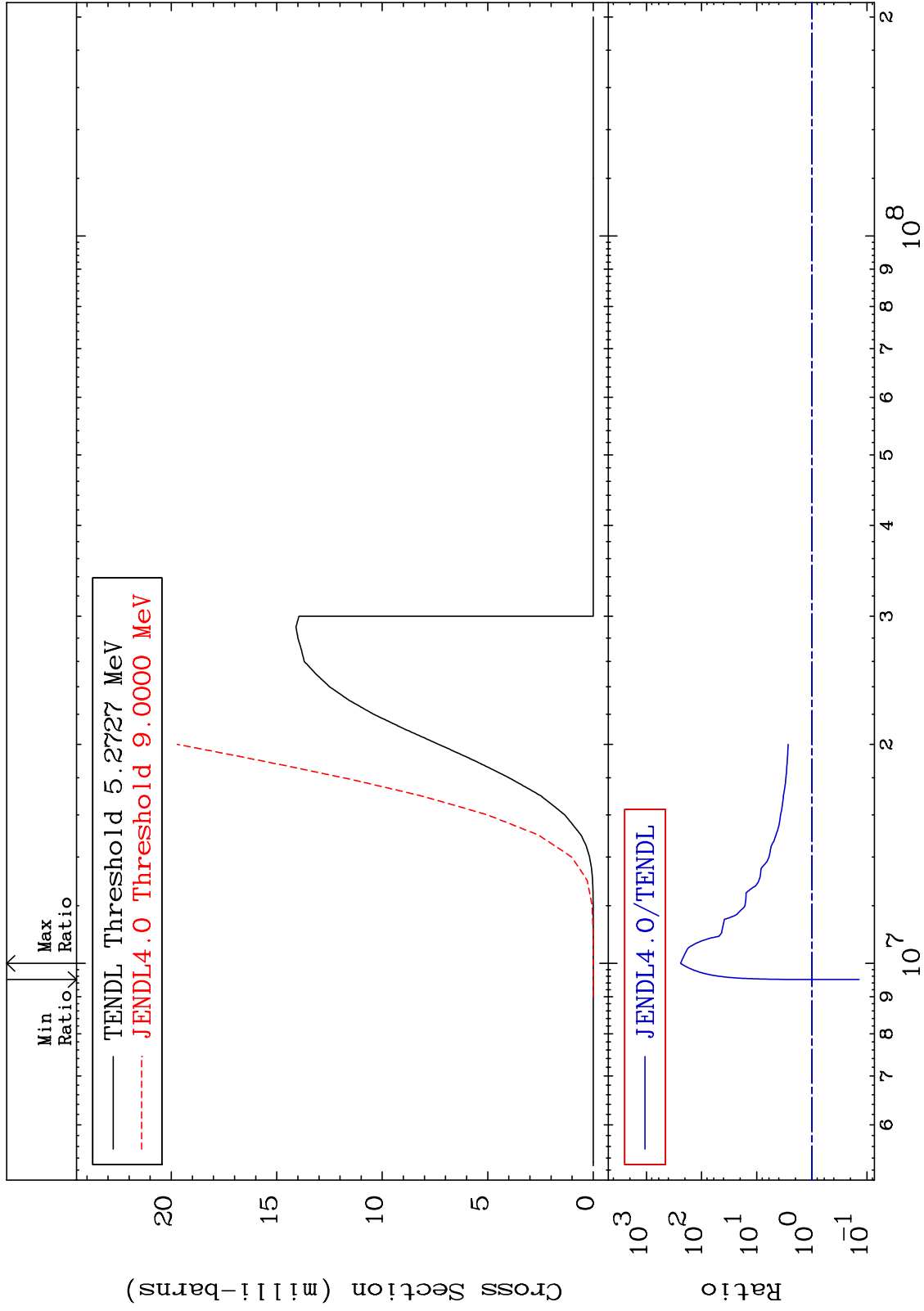
MAT 7040

(n, d)

70-Yb-173

Cross Section

-86.08 To 9999. %



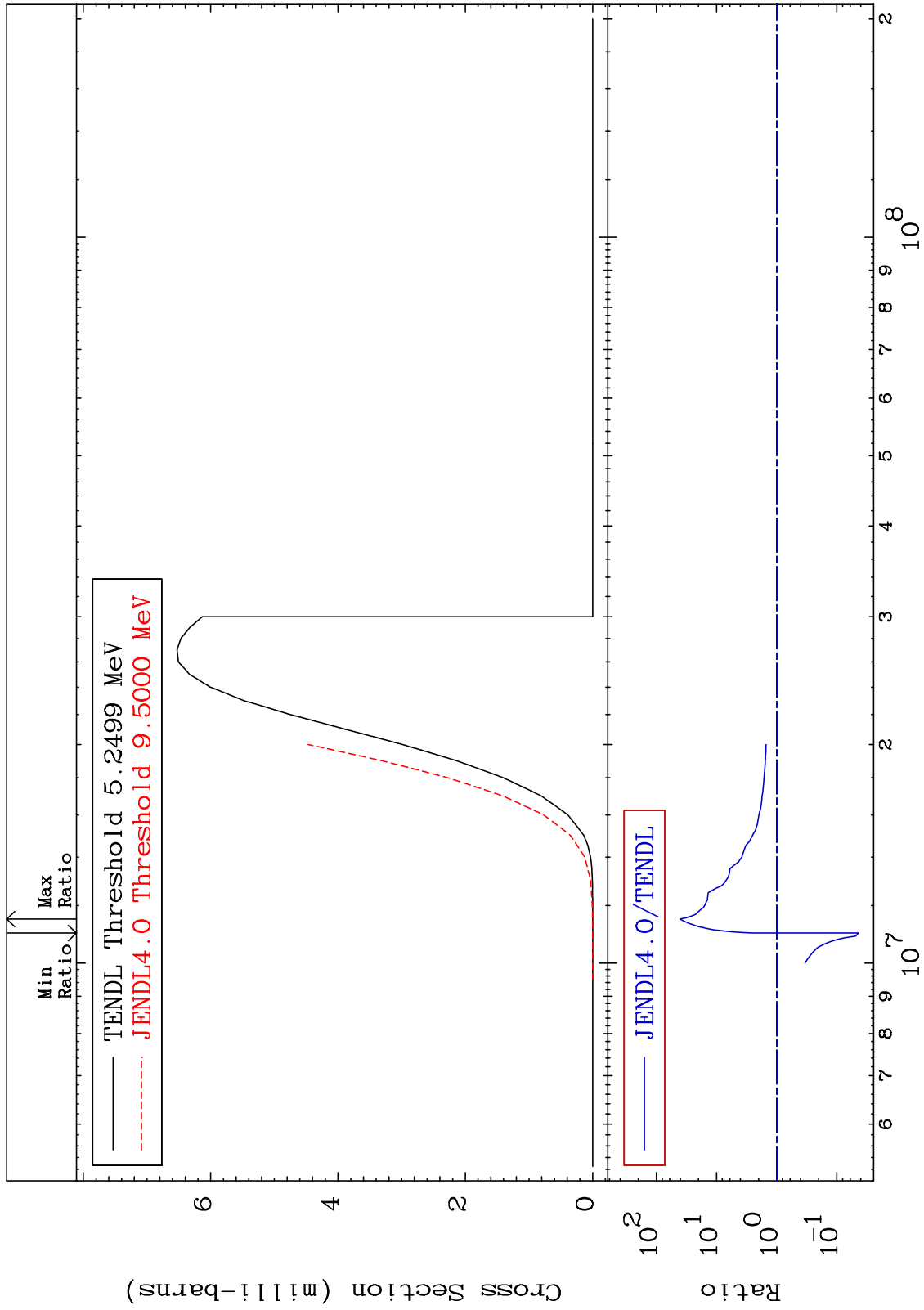
MAT 7040

(n, t)

70-Yb-173

Cross Section

-95.62 To 3947. %



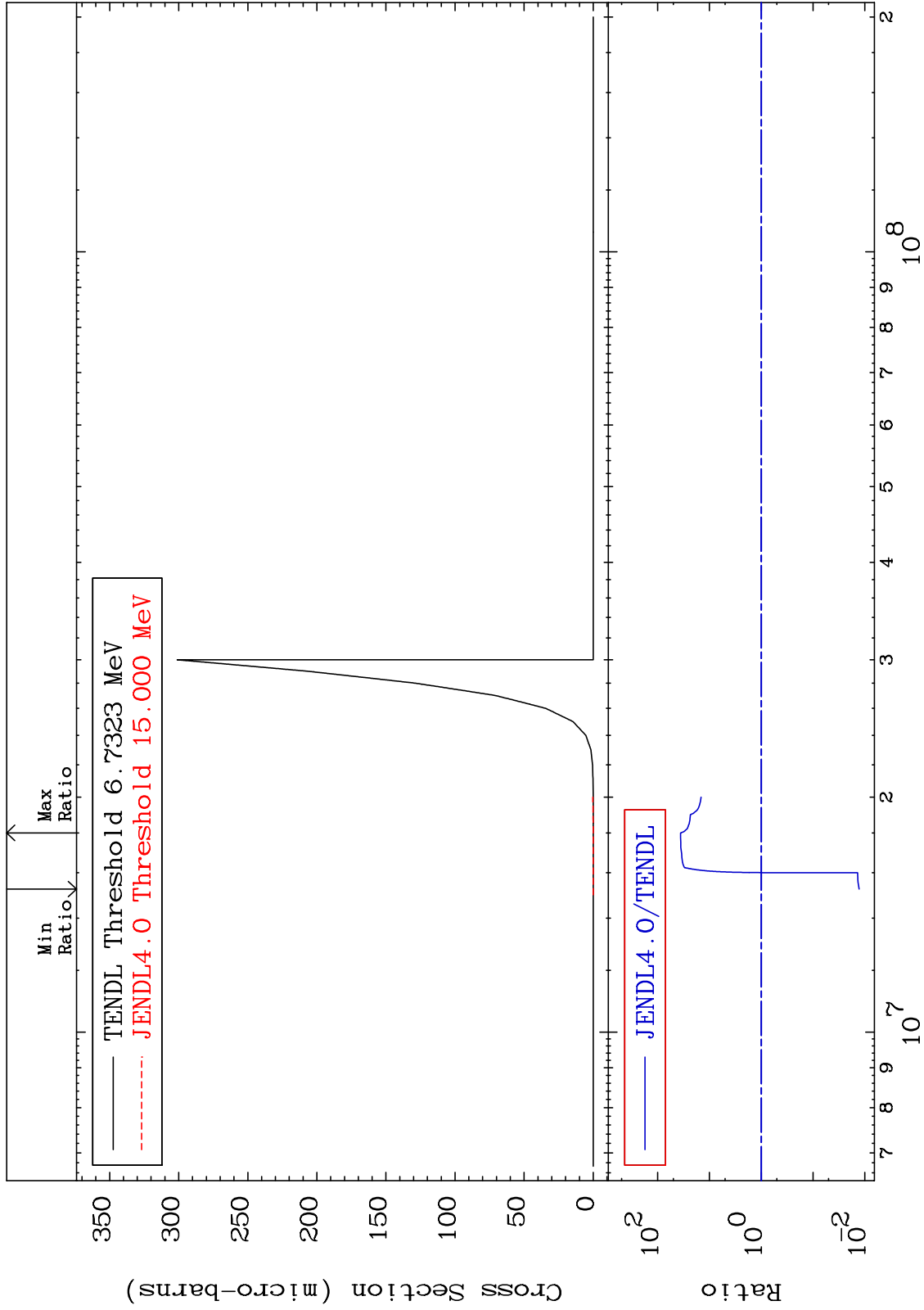
MAT 7040

(n, He-3)

70-Yb-173

Cross Section

-98.72 To 3508. %



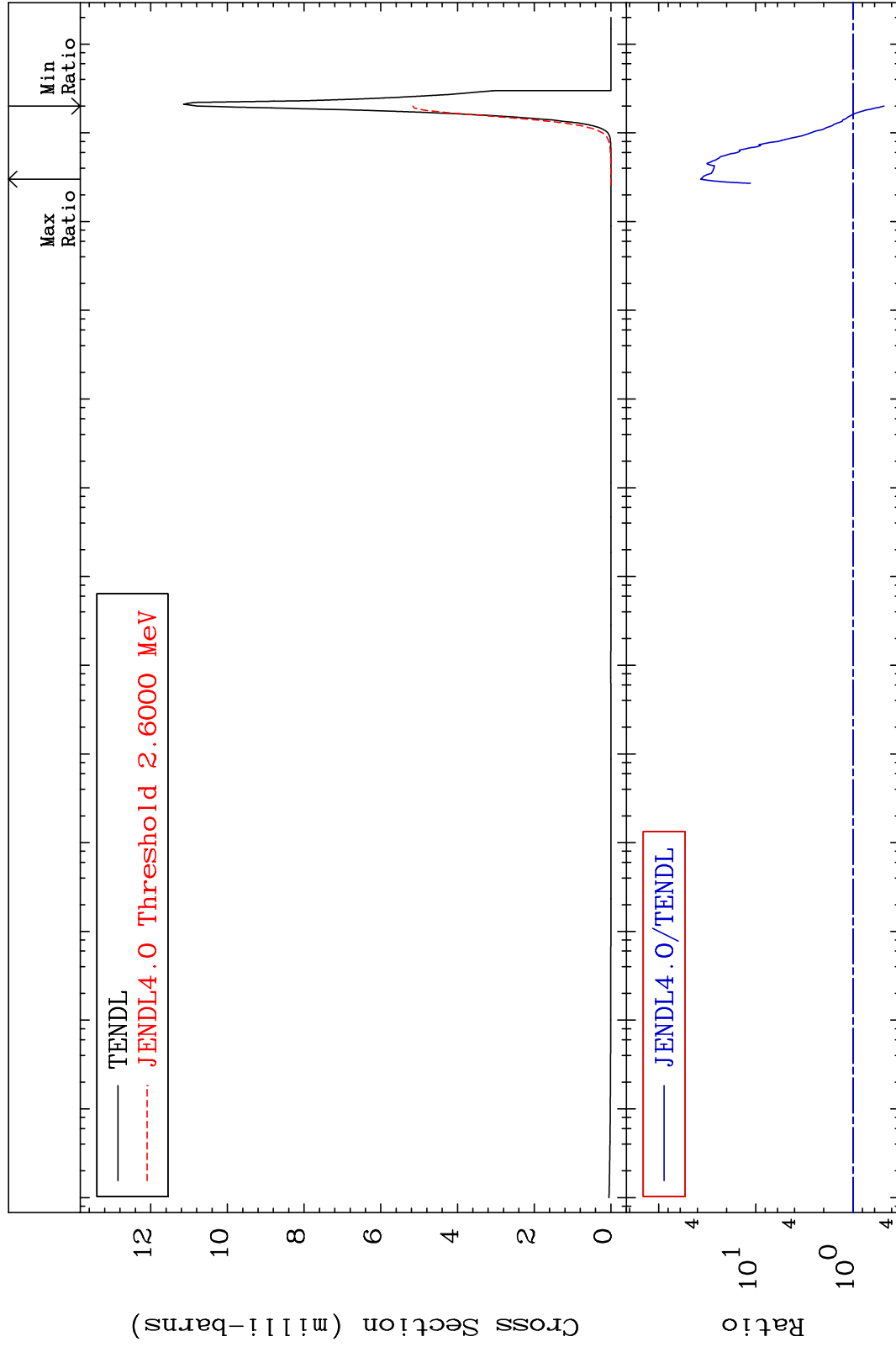
MAT 7040

(n, α)

70-Yb-173

Cross Section

-52.10 To 3598. %



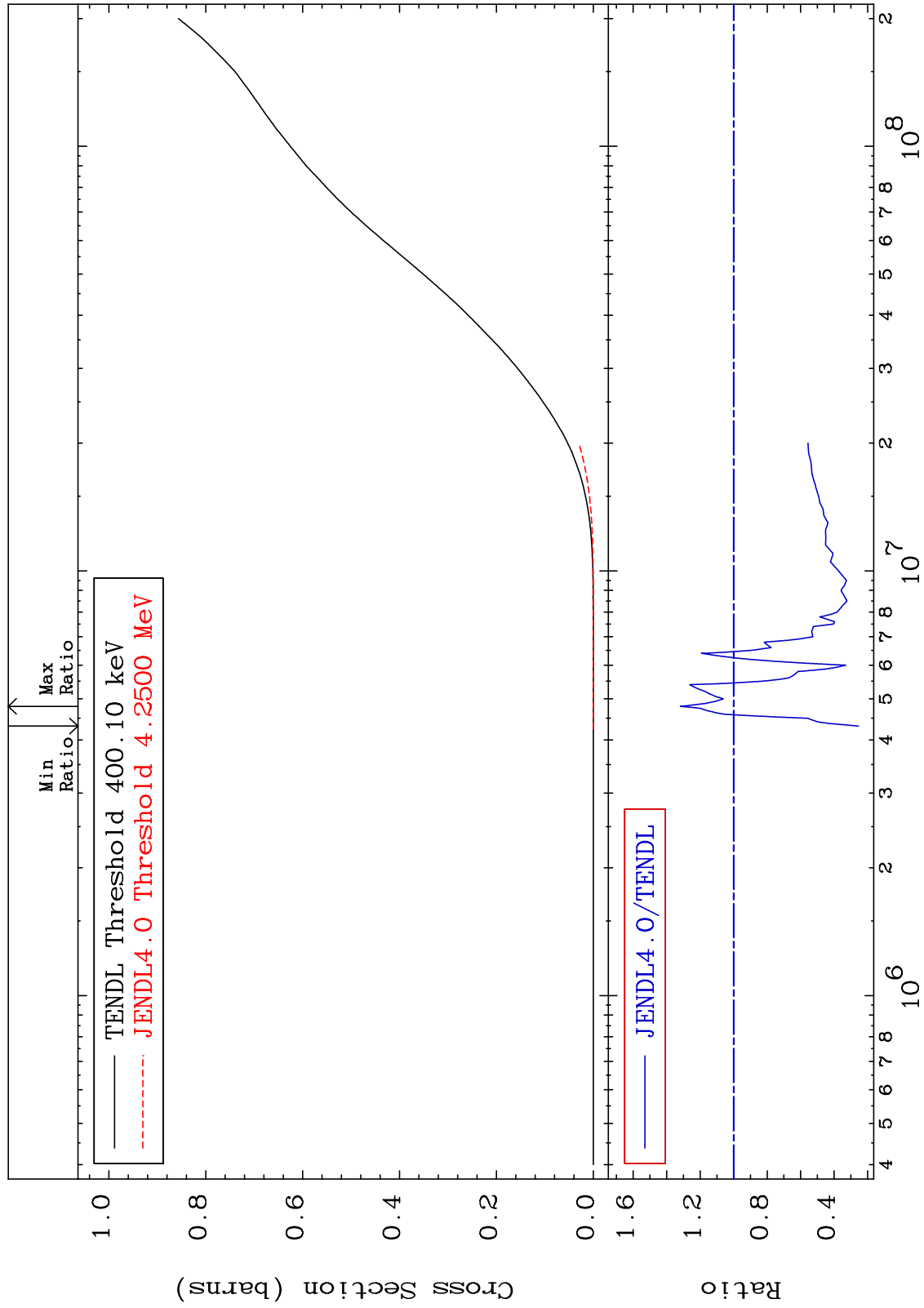
Incident Energy (eV)

70-Yb-173

MAT 7040

Hydrogen Production
Cross Section

70-Yb-173
-74.52 To 31.73 %



30

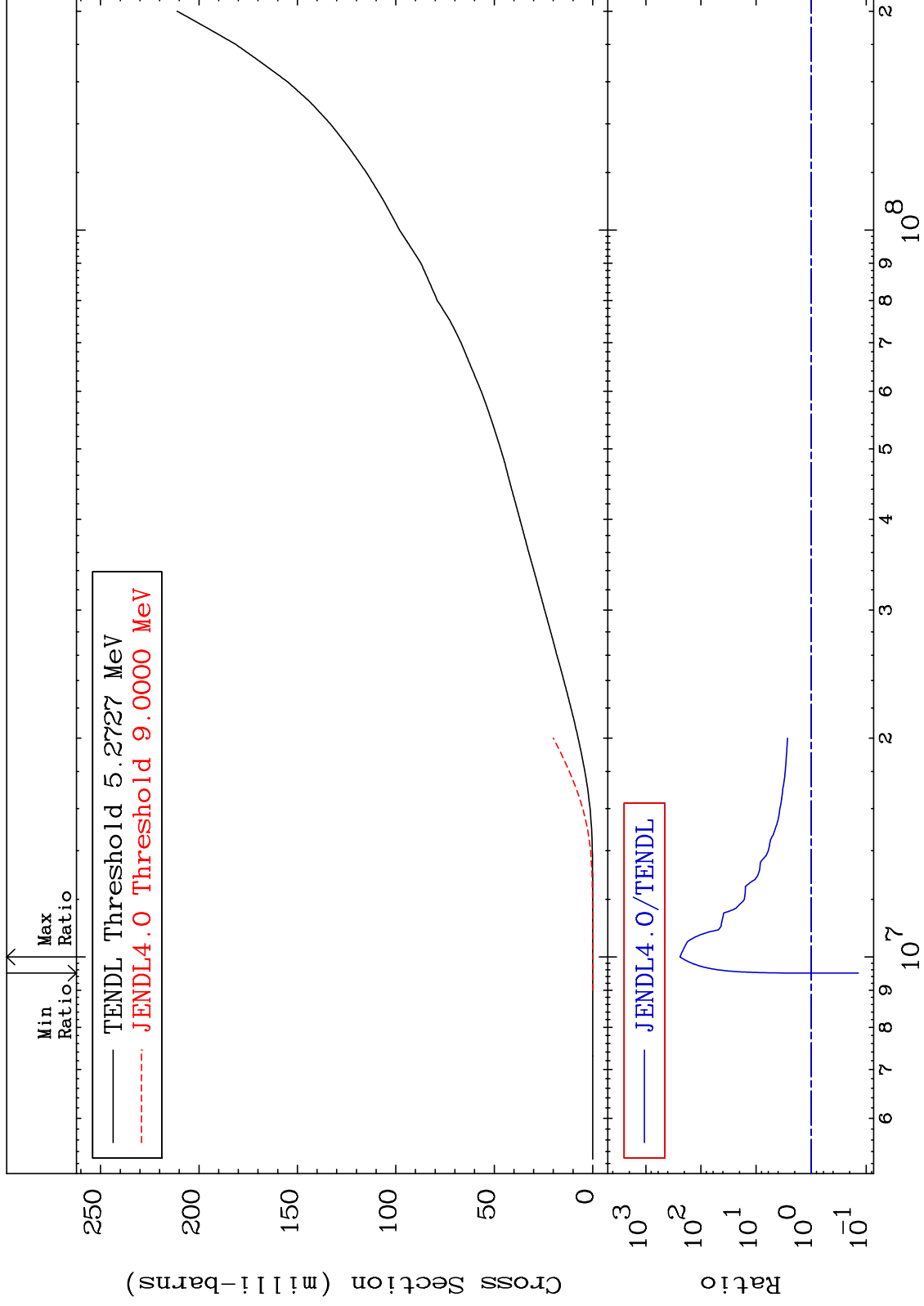
Incident Energy (eV)

70-Yb-173

MAT 7040

Deuterium Production
Cross Section

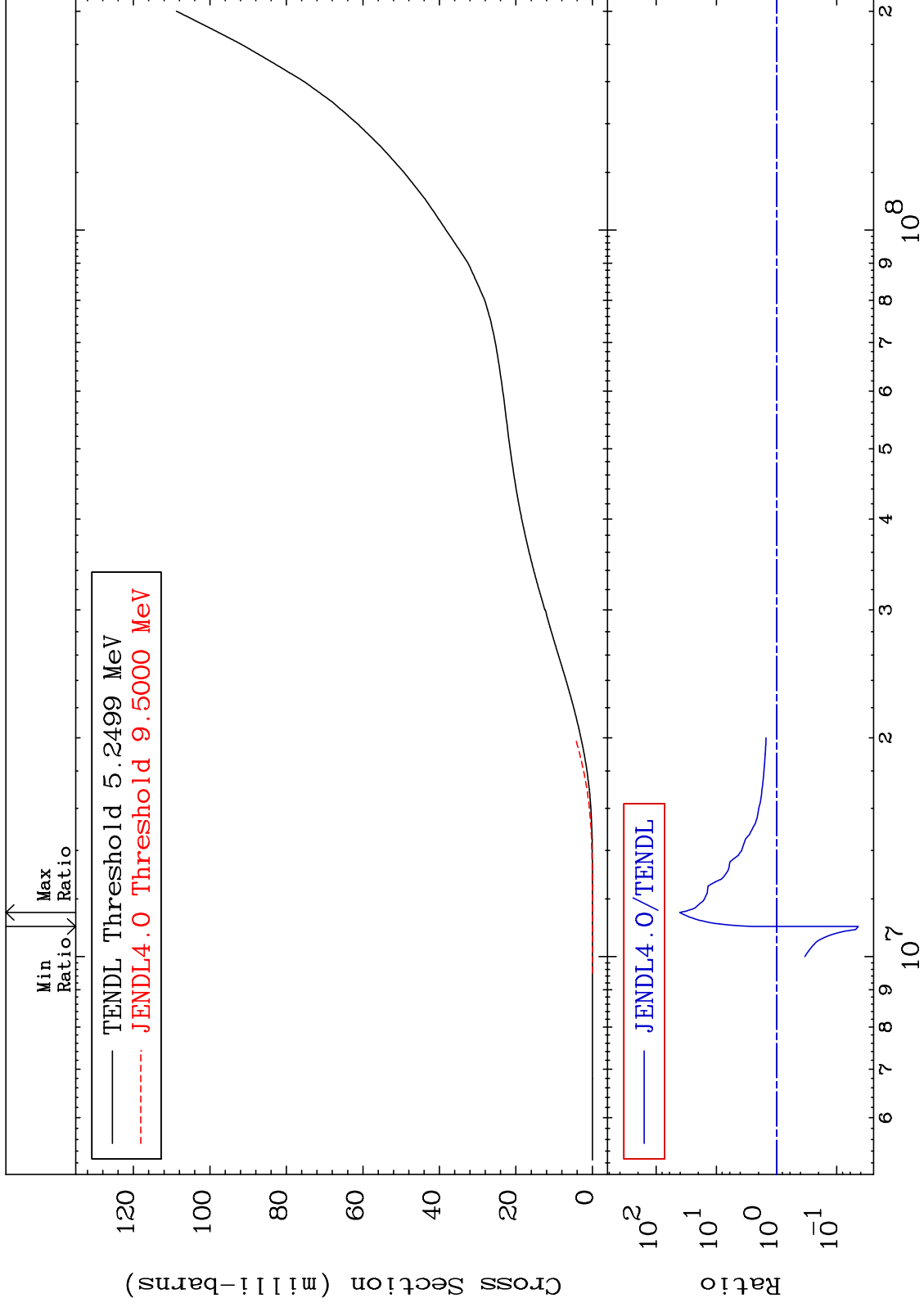
70-Yb-173
-86.08 To 9999. %



MAT 7040

Tritium Production
Cross Section

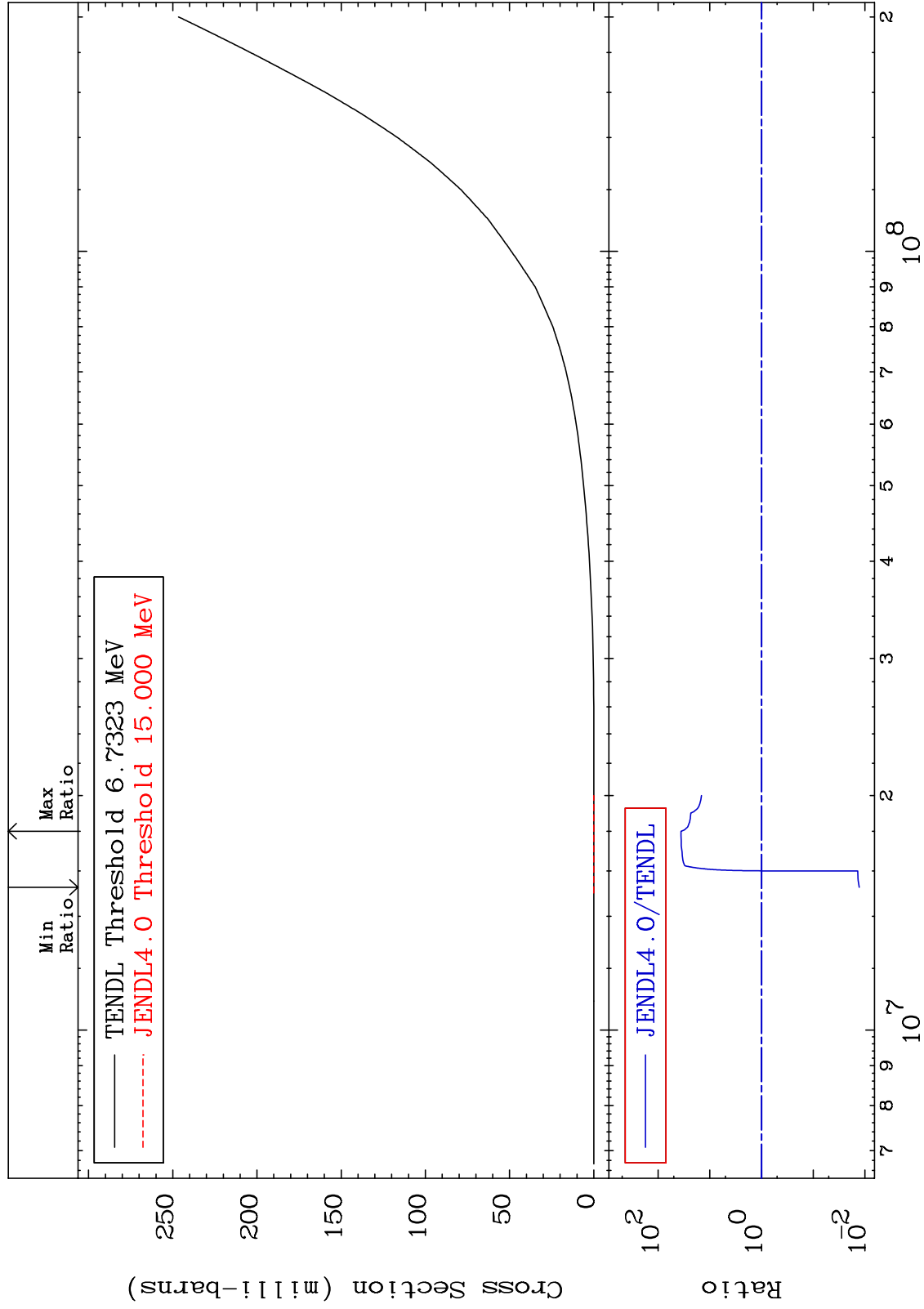
70-Yb-173
-95.62 To 3947. %



MAT 7040

He-3 Production
Cross Section

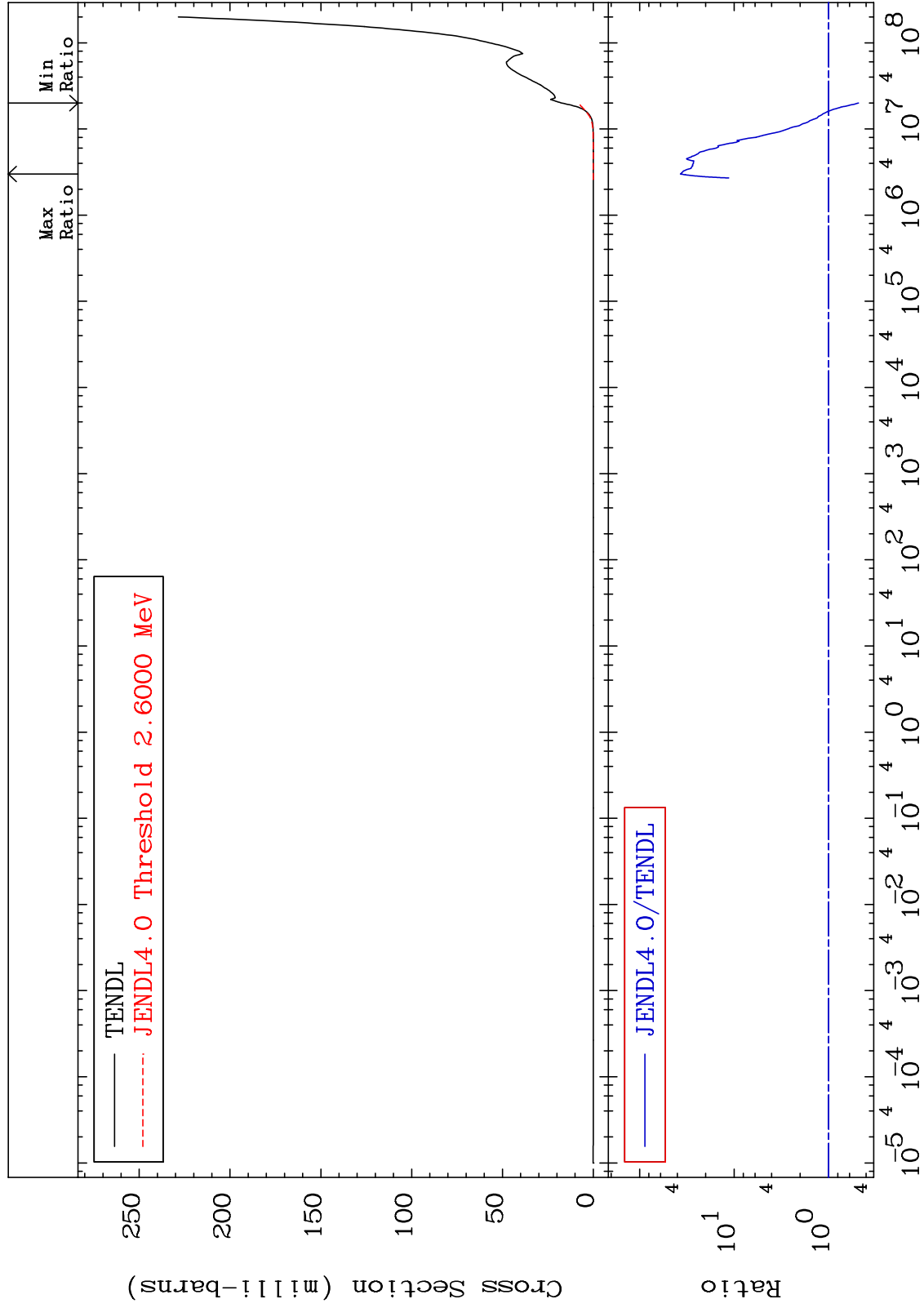
70-Yb-173
-98.72 To 3508. %



MAT 7040

He-4 Production
Cross Section

70-Yb-173
-51.78 To 3598. %



34

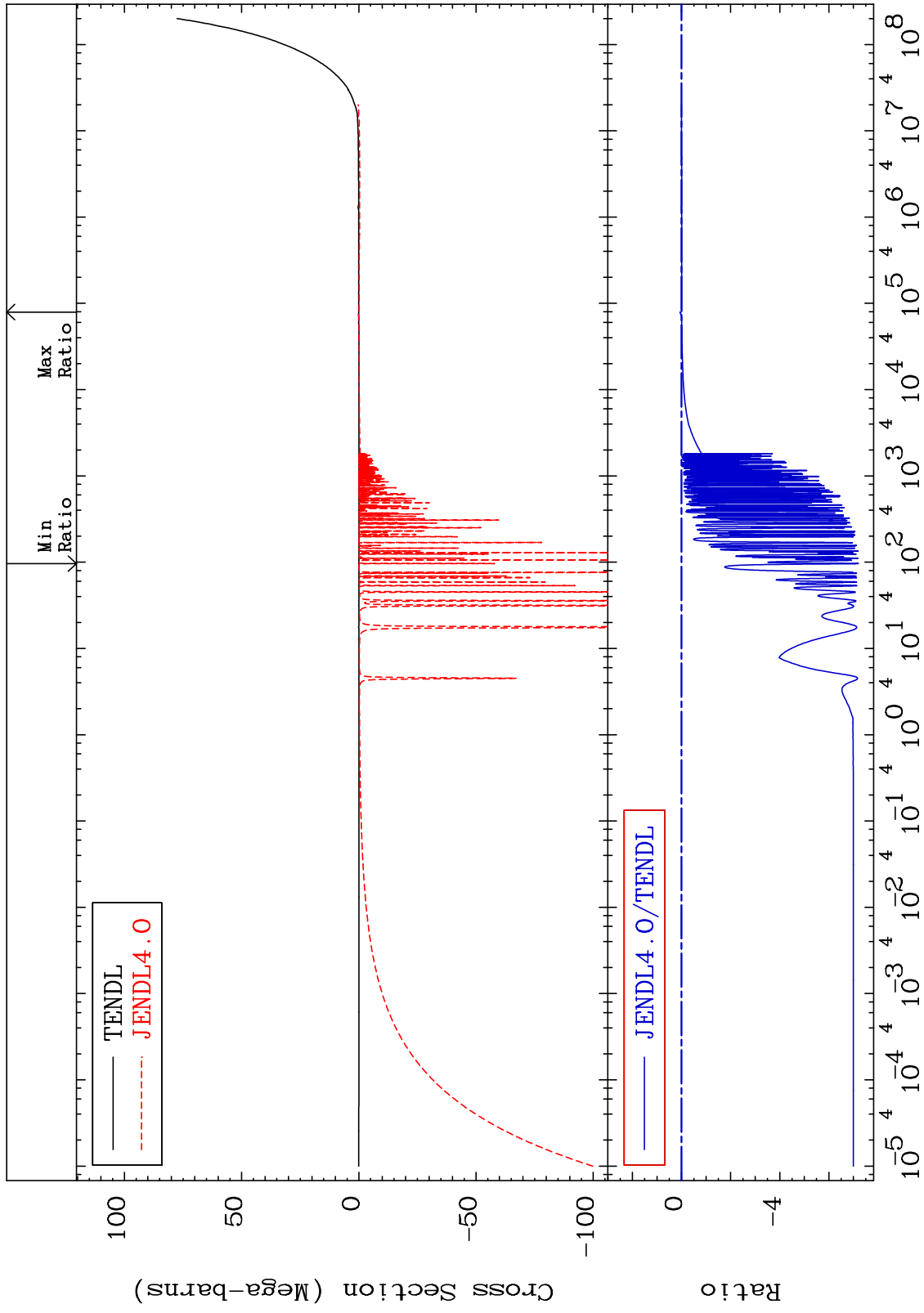
Incident Energy (eV)

70-Yb-173

MAT 7040

Kerma total (eV-barns)
Cross Section

70-Yb-173
-9999. To 6077. %



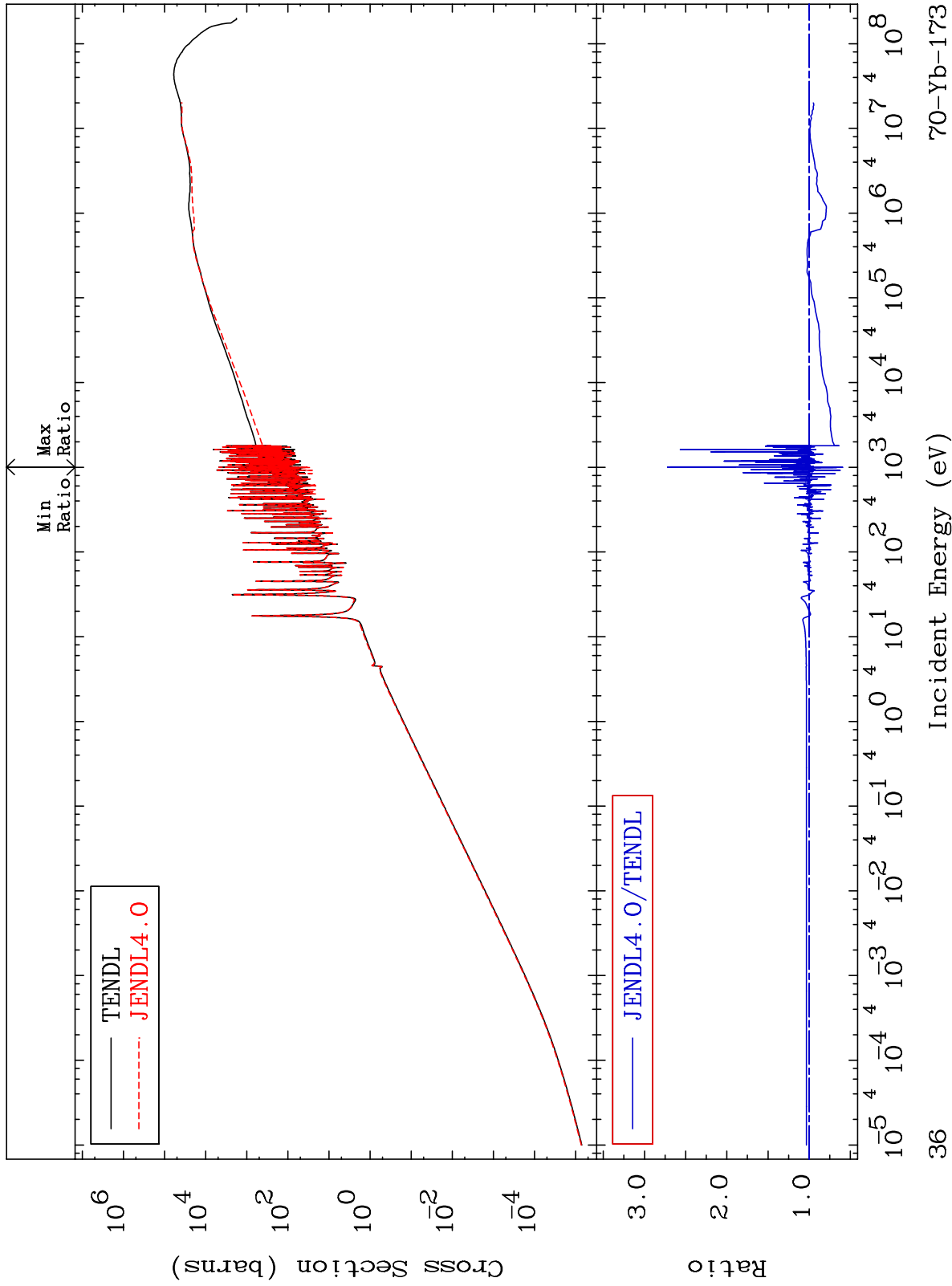
35

70-Yb-173

MAT 7040

Kerma elastic
Cross Section

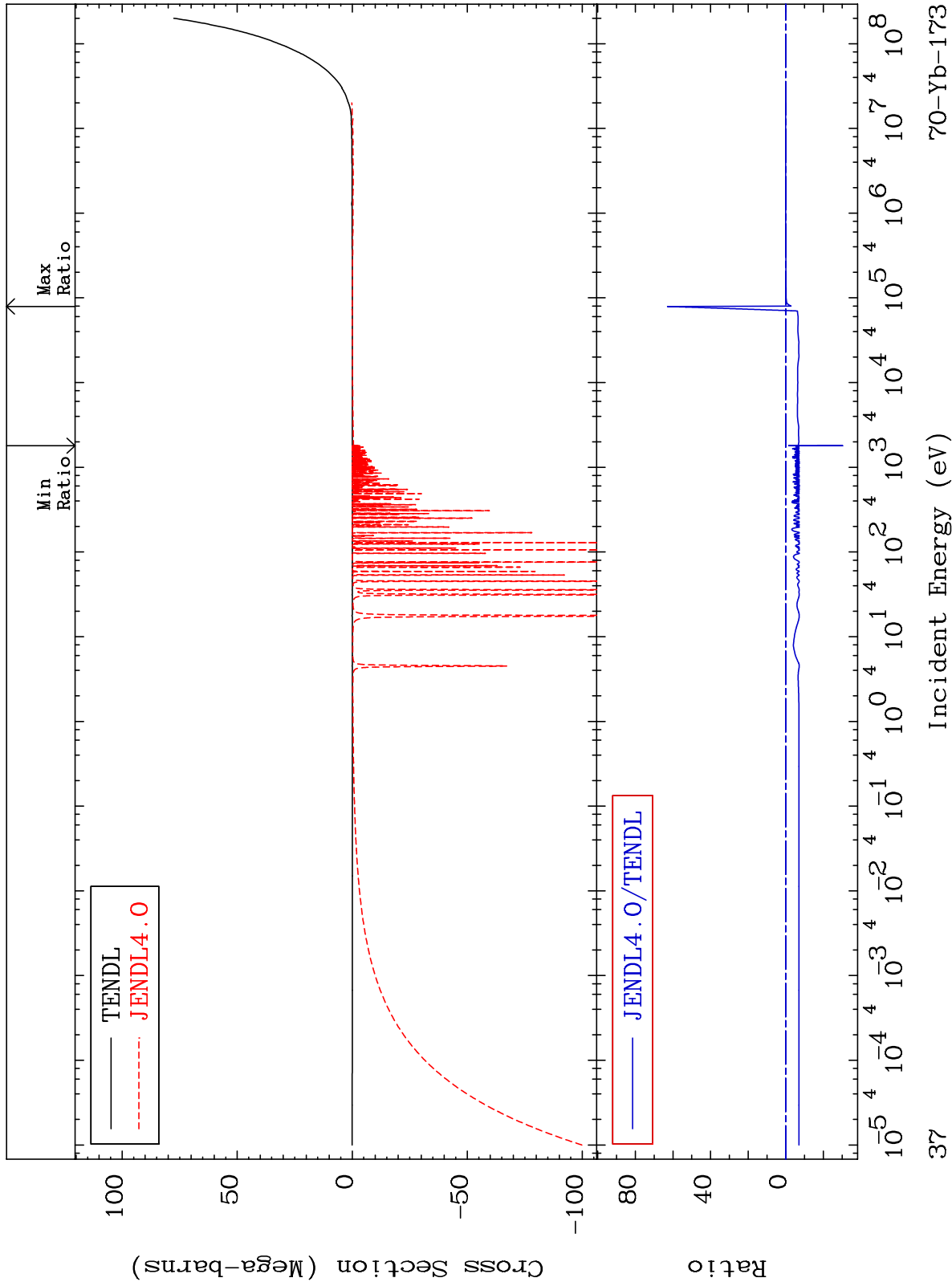
70-Yb-173
-40.64 To 172.0 %



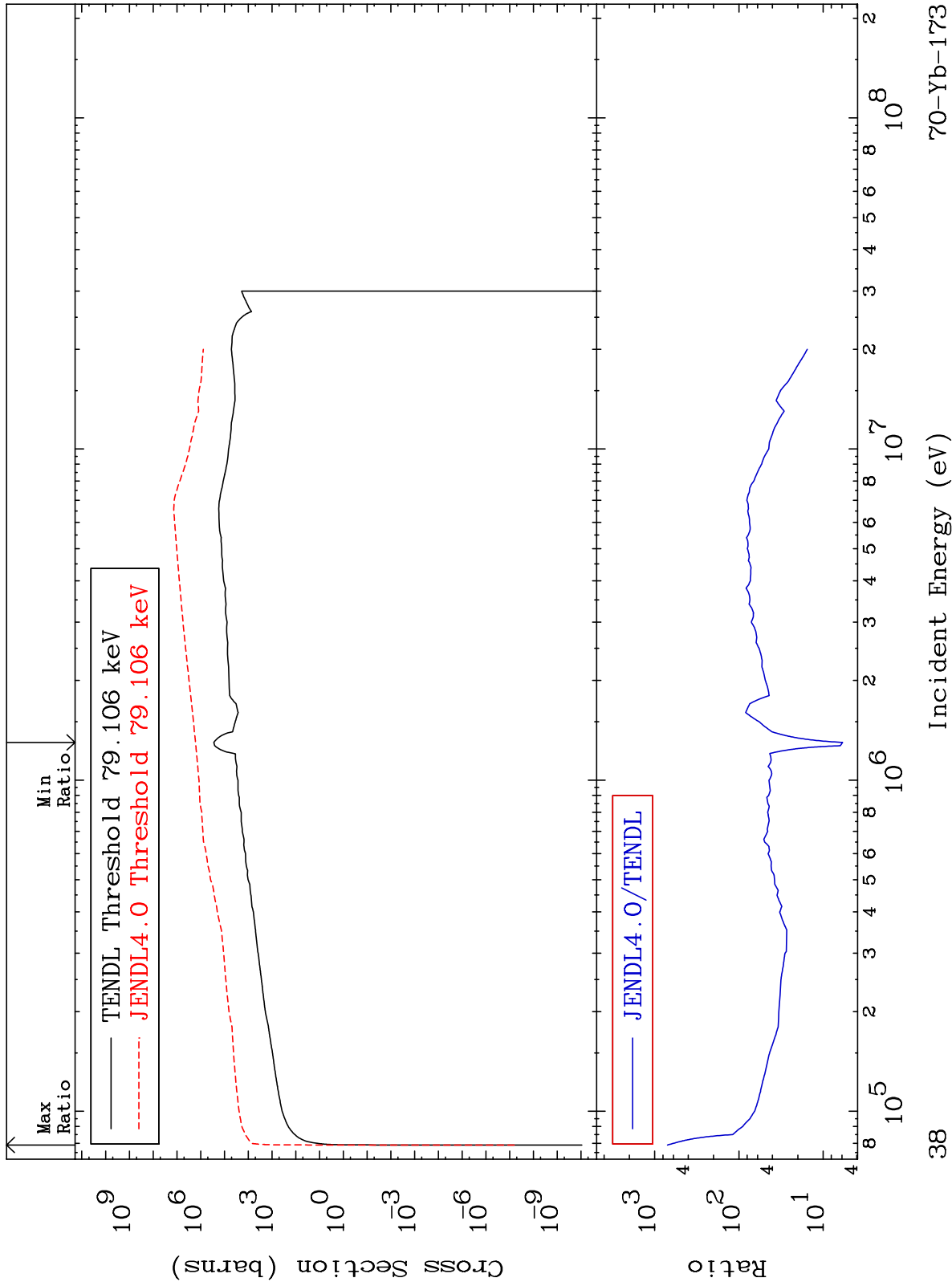
MAT 7040

Kerma non-elastic (all but mt2)
Cross Section

70-Yb-173
-9999. To 9999. %



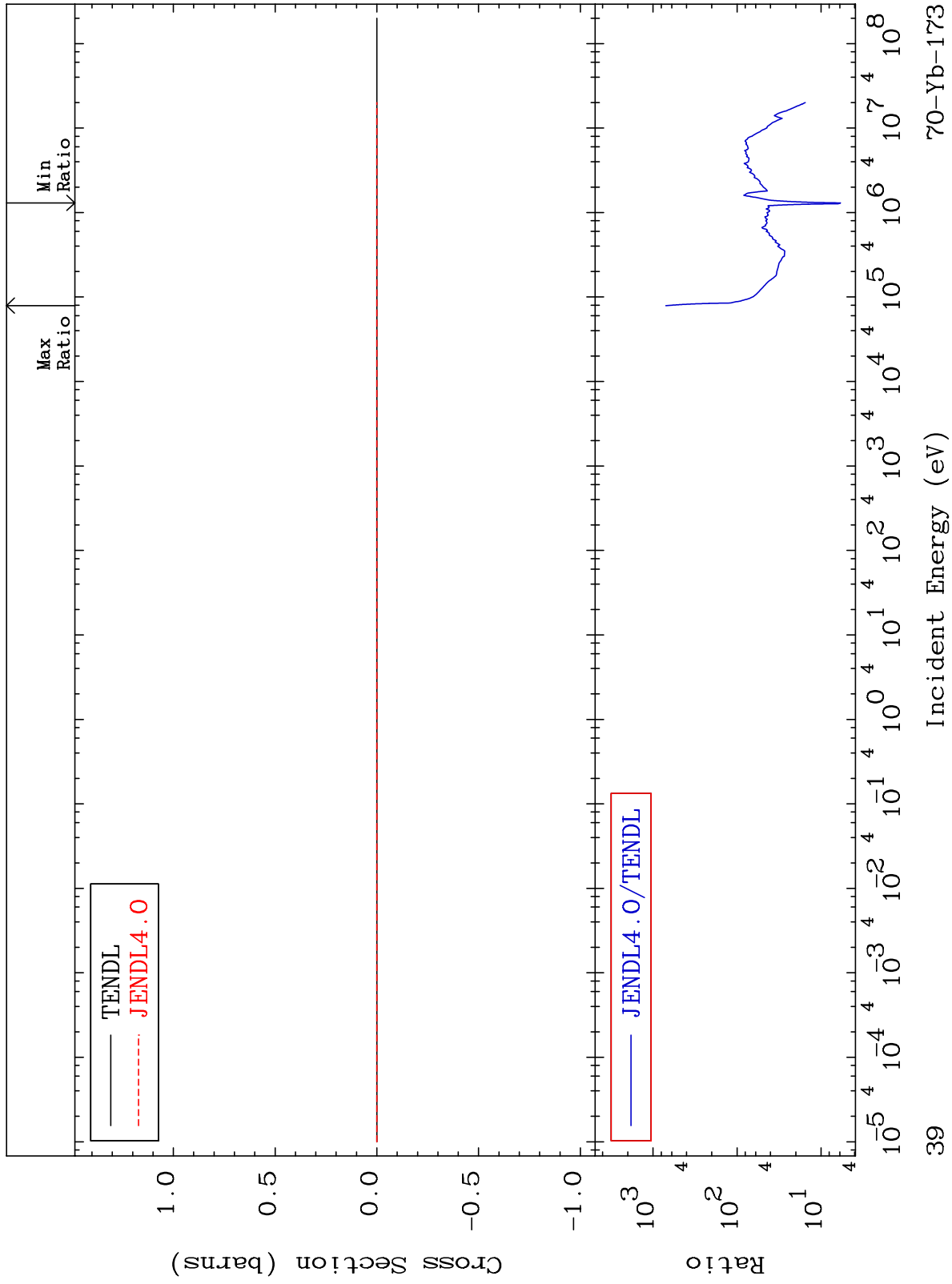
MAT 7040 Kerma inelastic (mt51-91) 70-Yb-173
 Cross Section 487.1 To 9999. %



MAT 7040

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

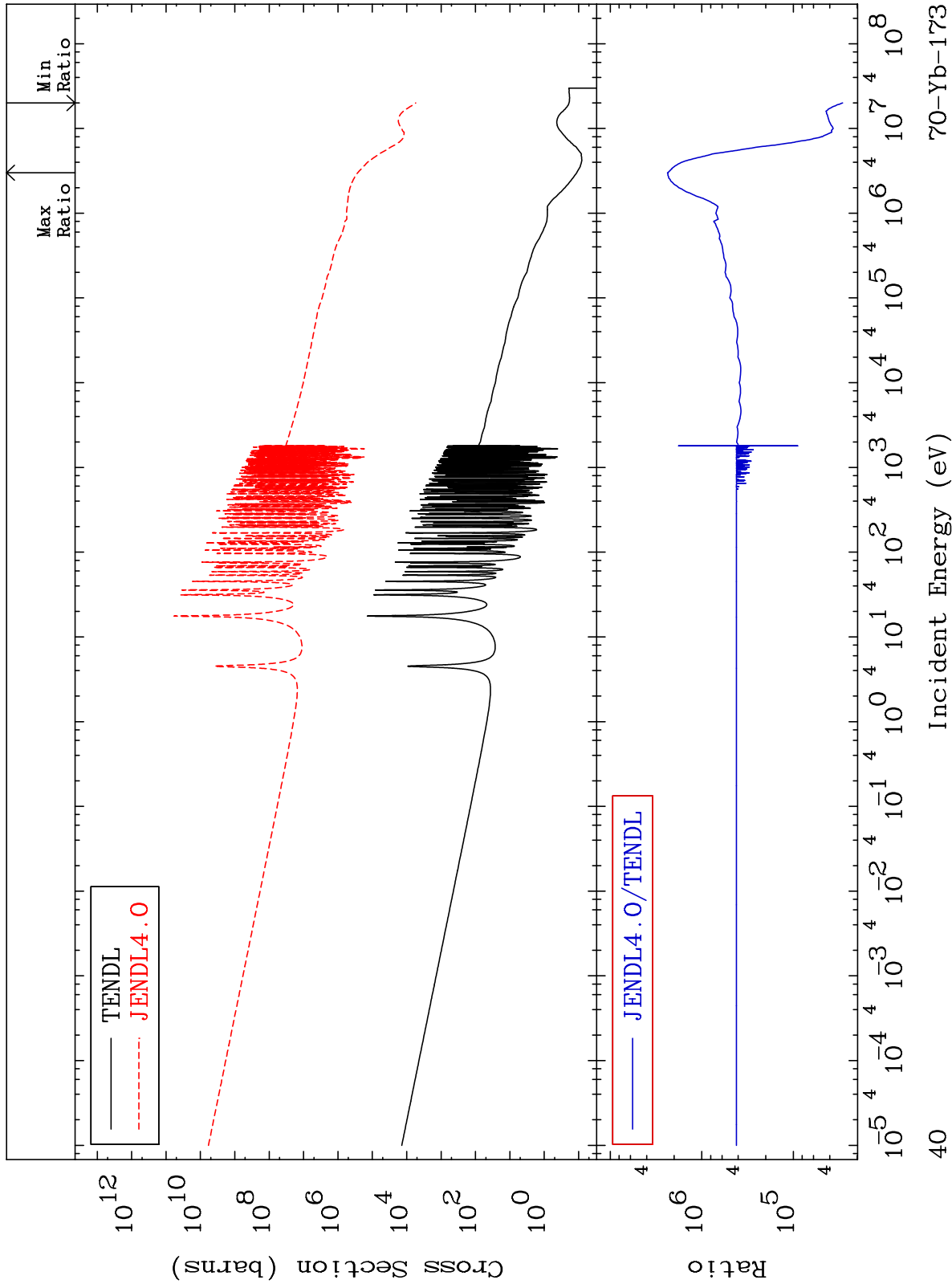
70-Yb-173
487.1 To 9999. %



MAT 7040

Kerma capture (mt102)
Cross Section

70-Yb-173
To 9999. %

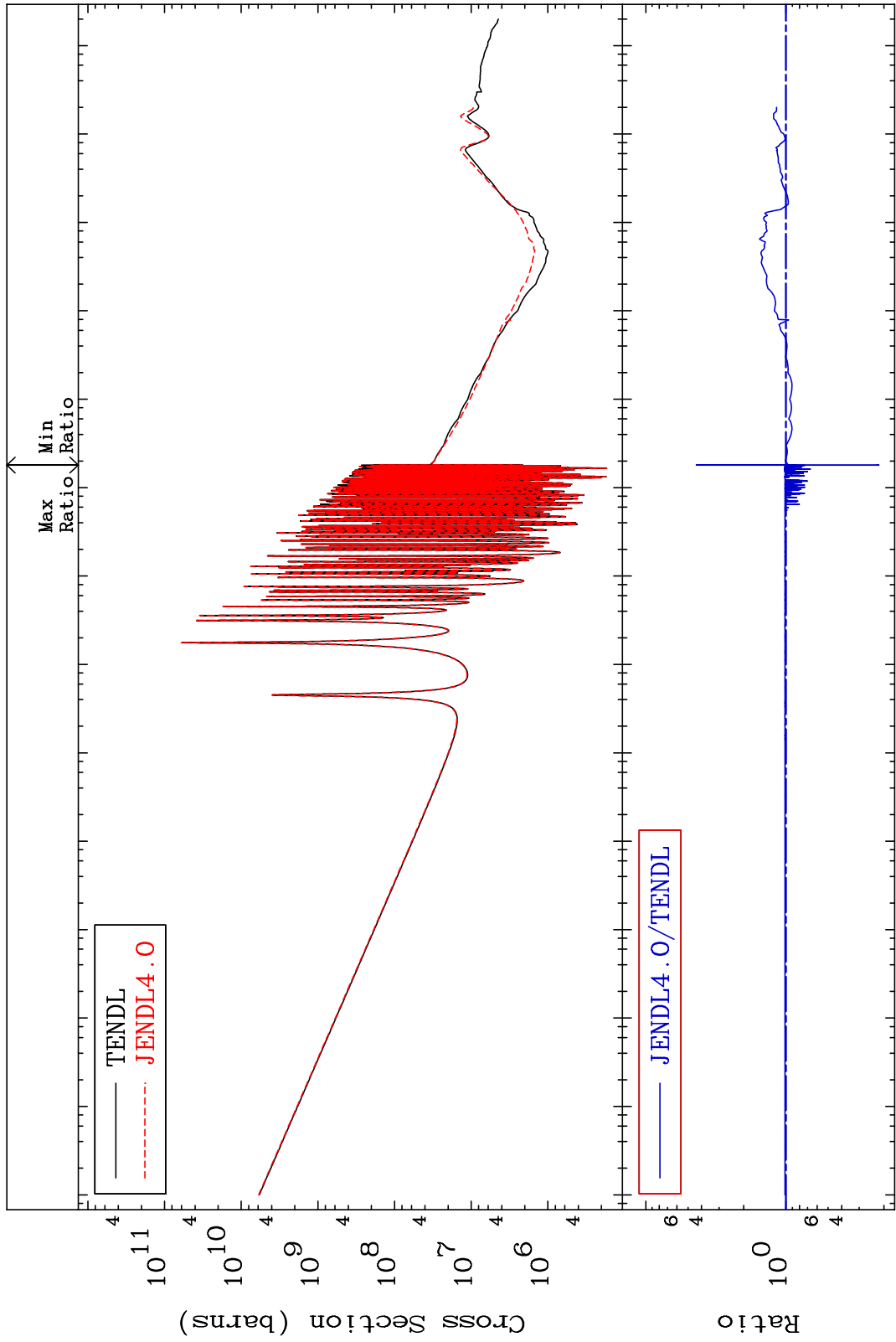


70-Yb-173

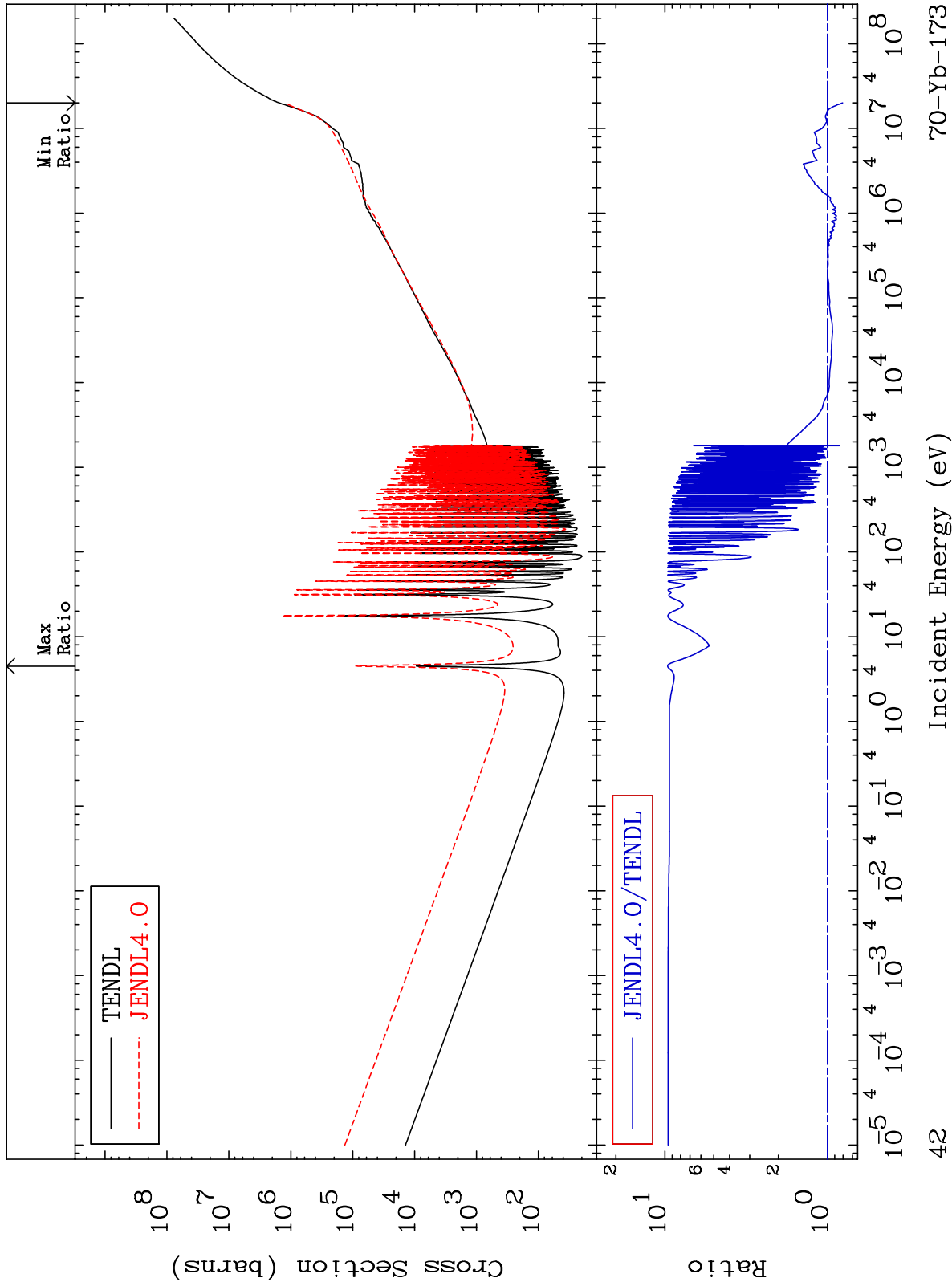
Incident Energy (eV)

40

MAT 7040 Total photon (eV-barns) 70-Yb-173
Cross Section -78.33 To 335.2 %



MAT 7040 Total kinematic kerma (high limit) 70-Yb-173
Cross Section -19.52 To 861.9 %



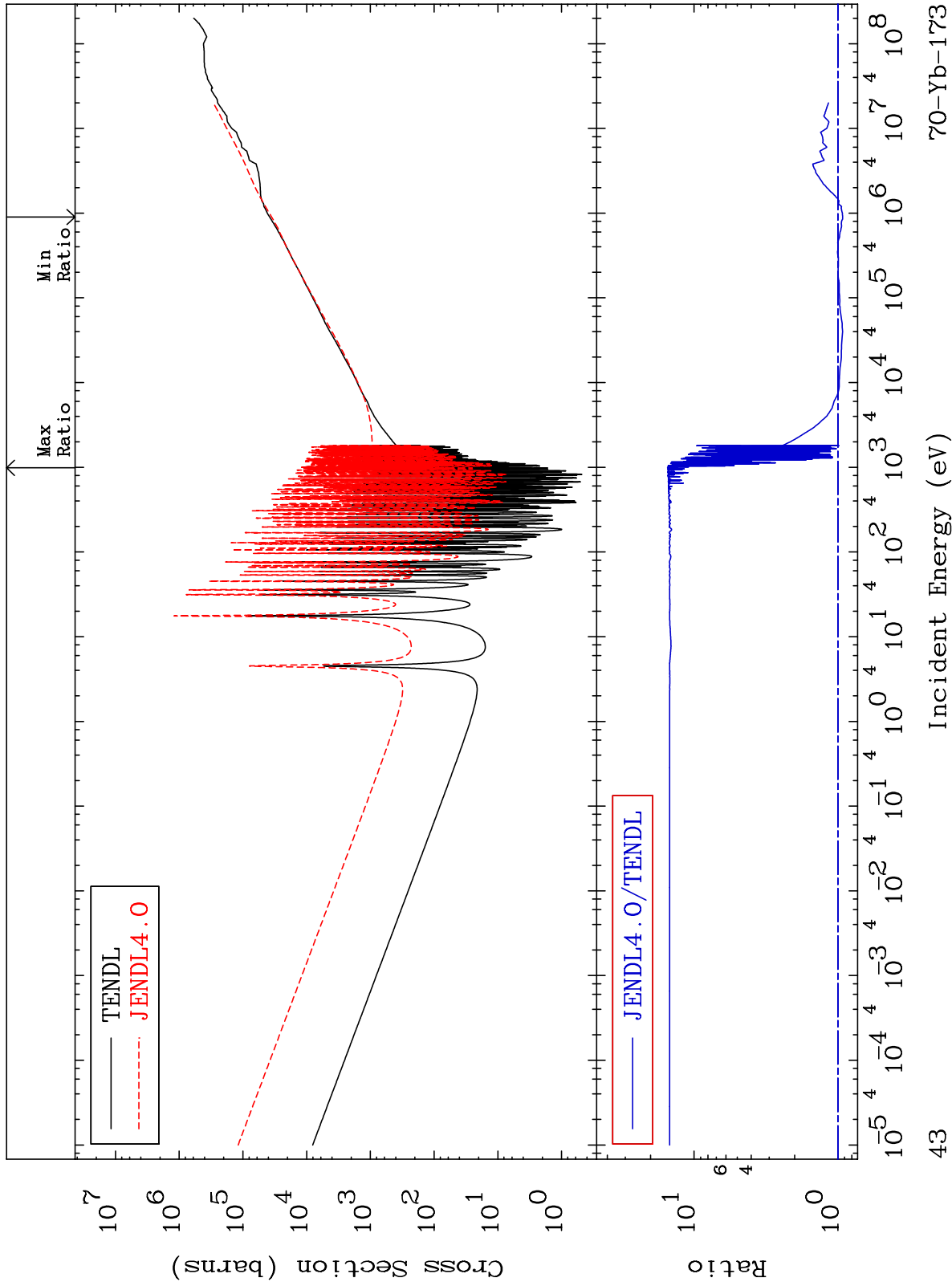
70-Yb-173

Incident Energy (eV)

MAT 7040

Dpa total (eV-barns)
Cross Section

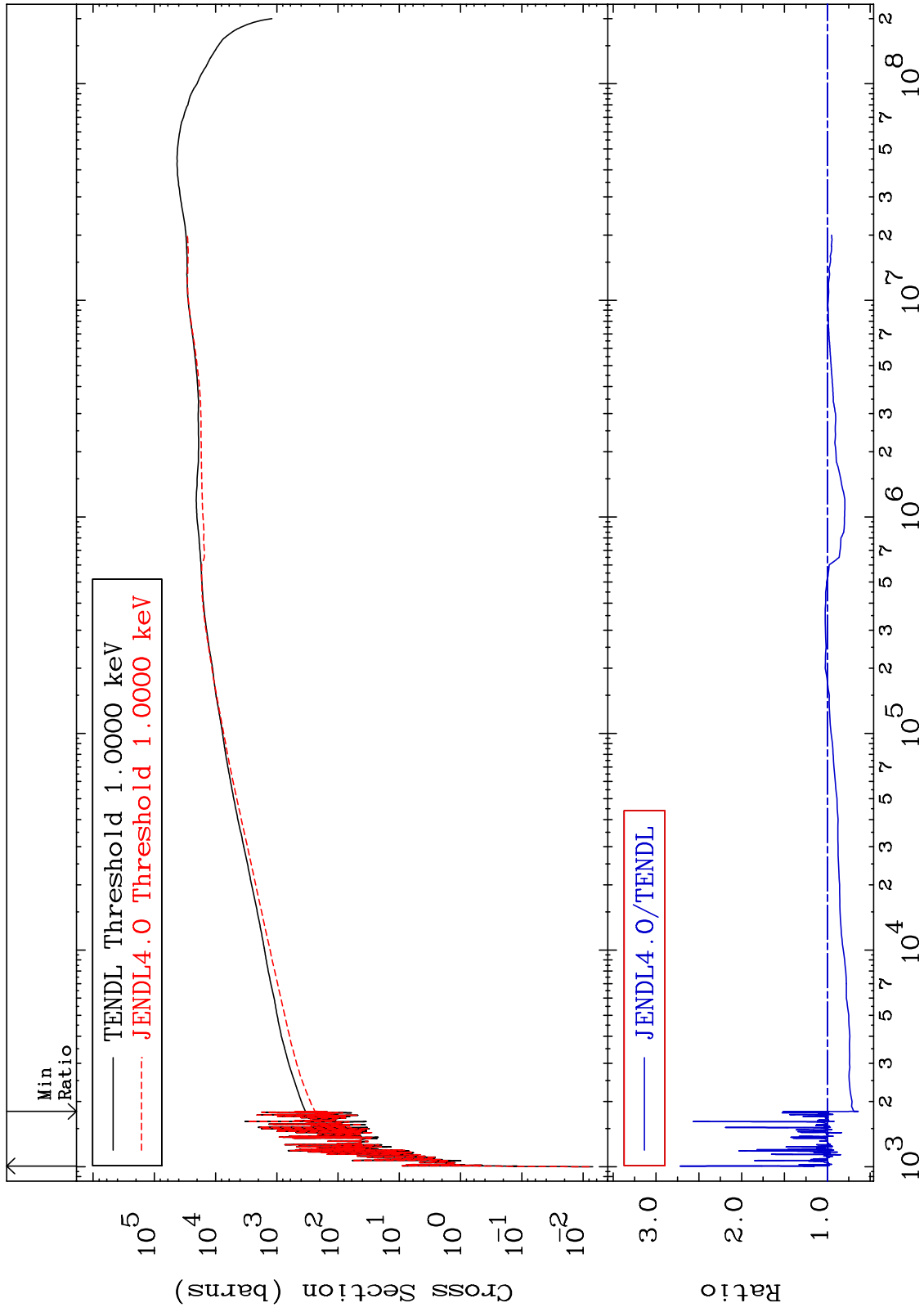
70-Yb-173
-7.223 To 1427. %



MAT 7040

Dpa elastic (mt2)
Cross Section

70-Yb-173
-36.25 To 172.0 %



44

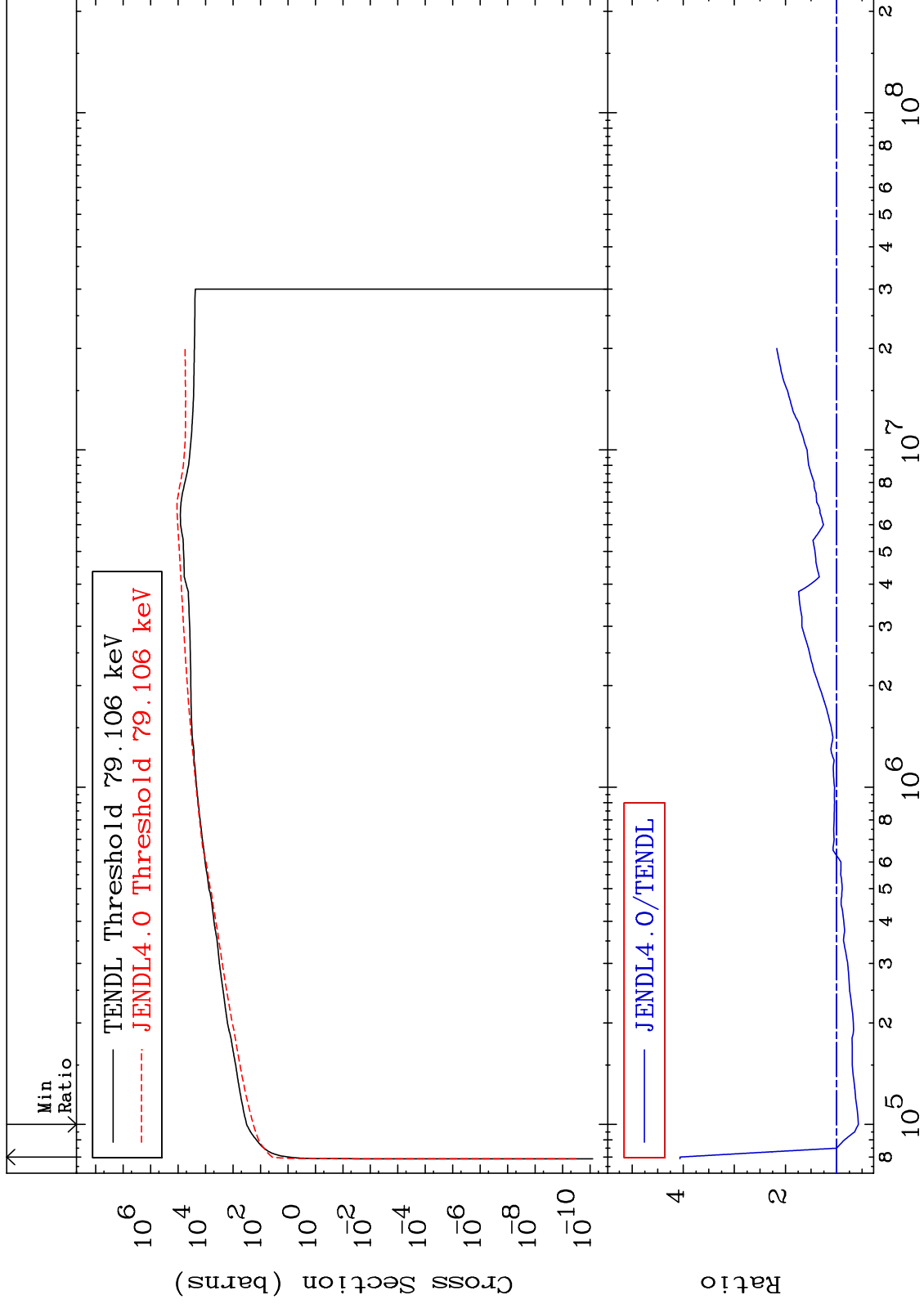
Incident Energy (eV)

70-Yb-173

MAT 7040

Dpa inelastic (mt51-91)
Cross Section

70-Yb-173
-42.65 To 306.3 %



45

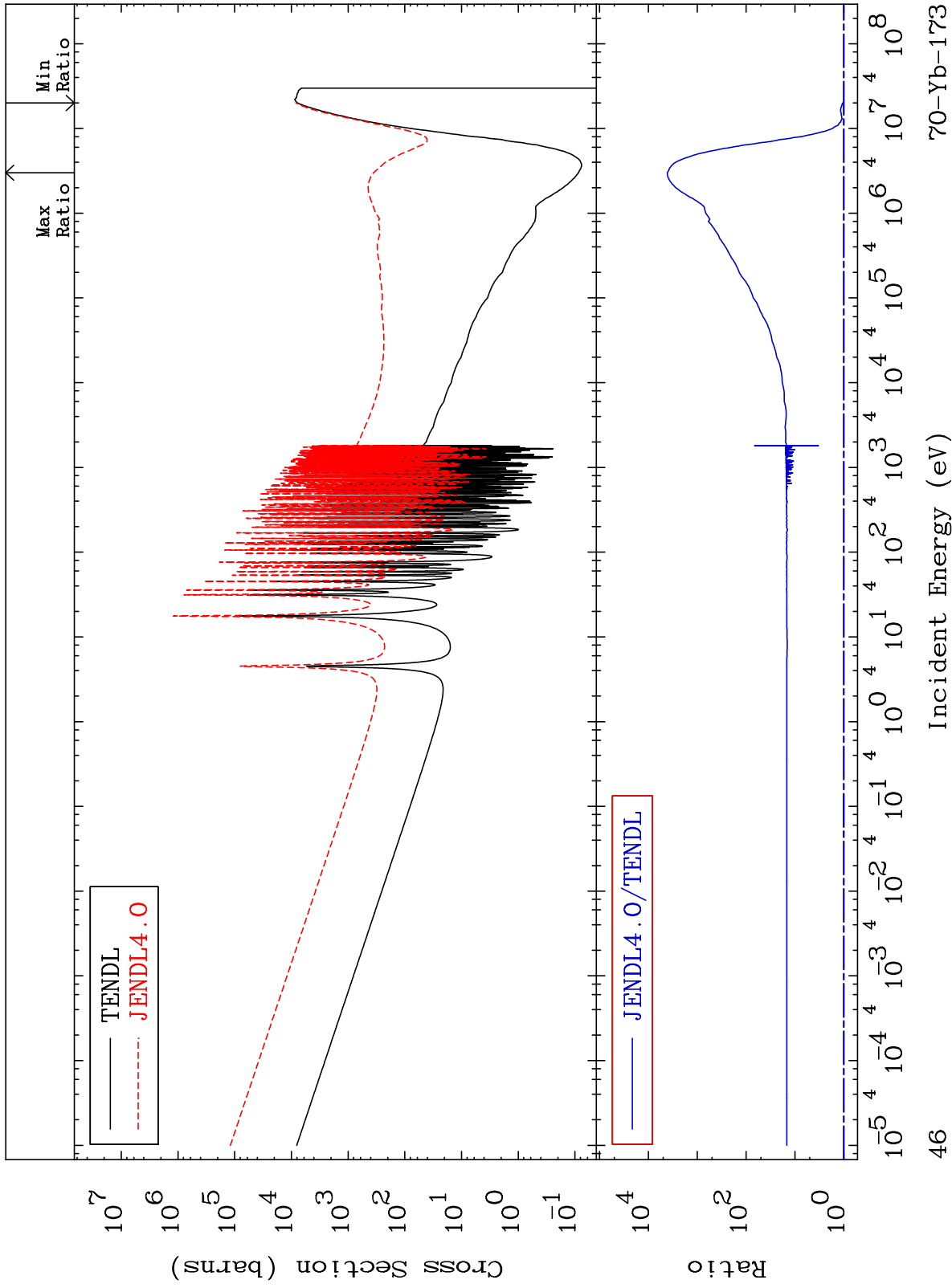
Incident Energy (eV)

70-Yb-173

MAT 7040

Dpa disappearance (mt102 -120)
Cross Section

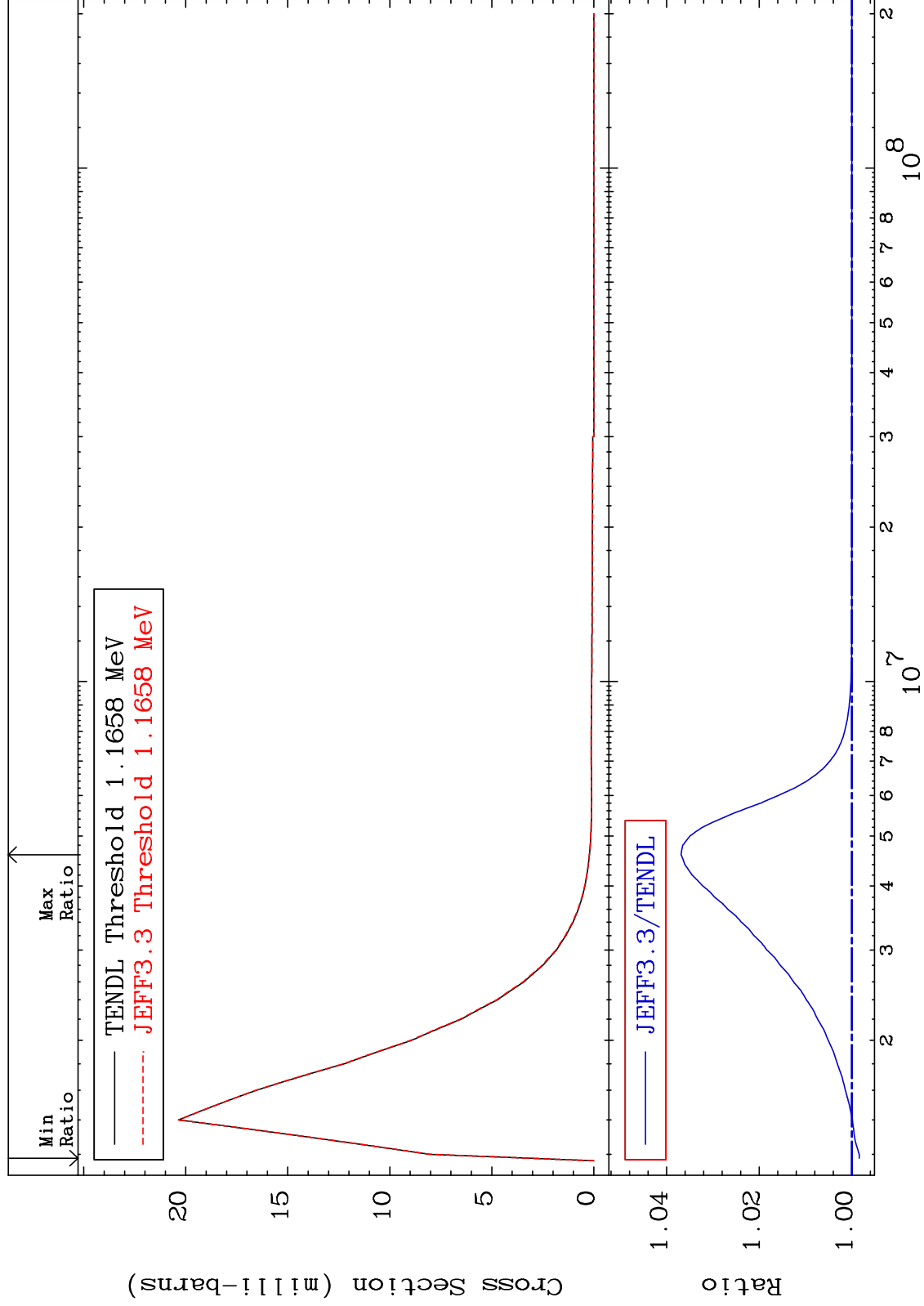
70-Yb-173
6.182 To 9999. %



MAT 7040

MT= 78 (n,n') Level
Cross Section

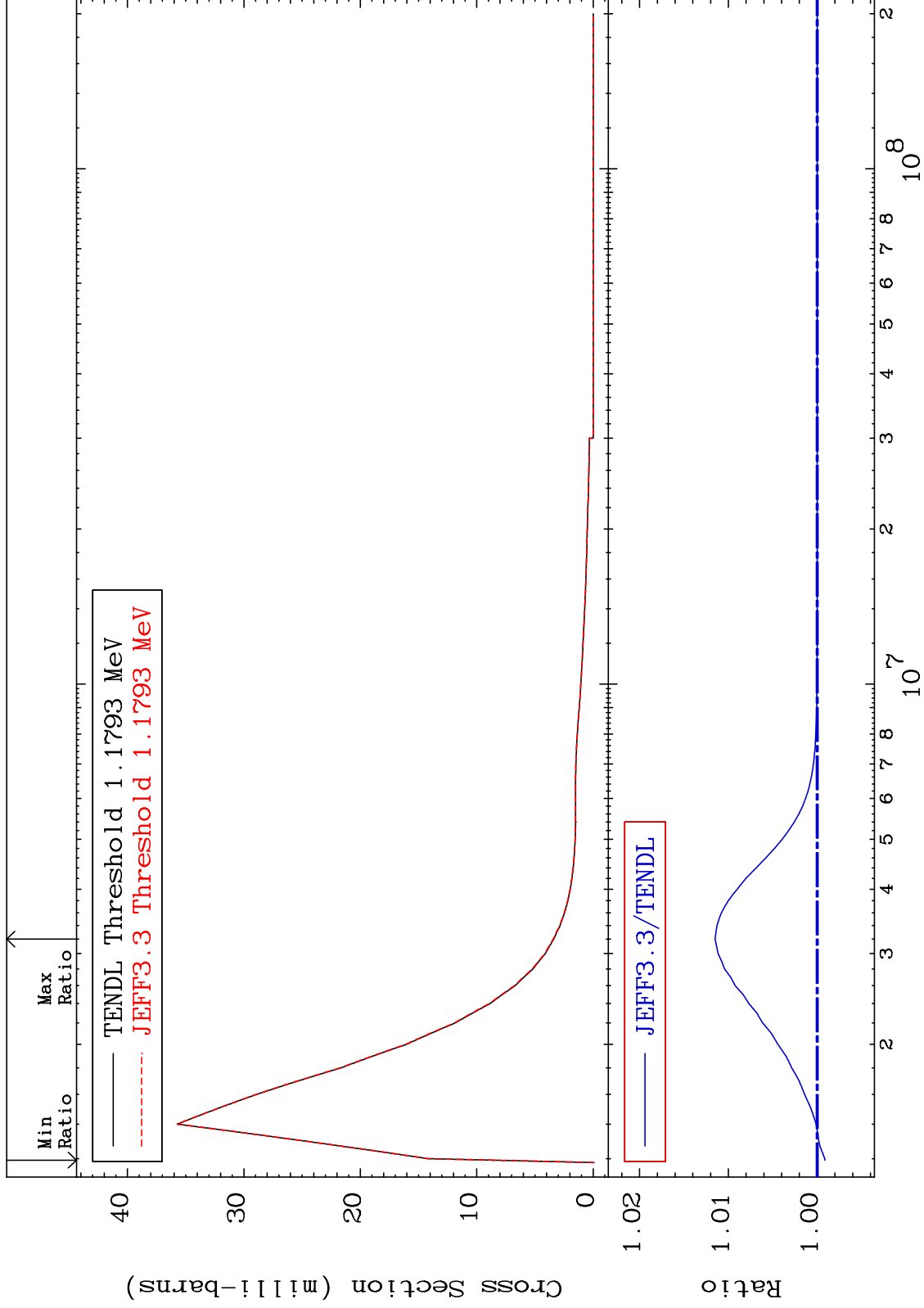
70-Yb-173
-0.160 To 3.689 %

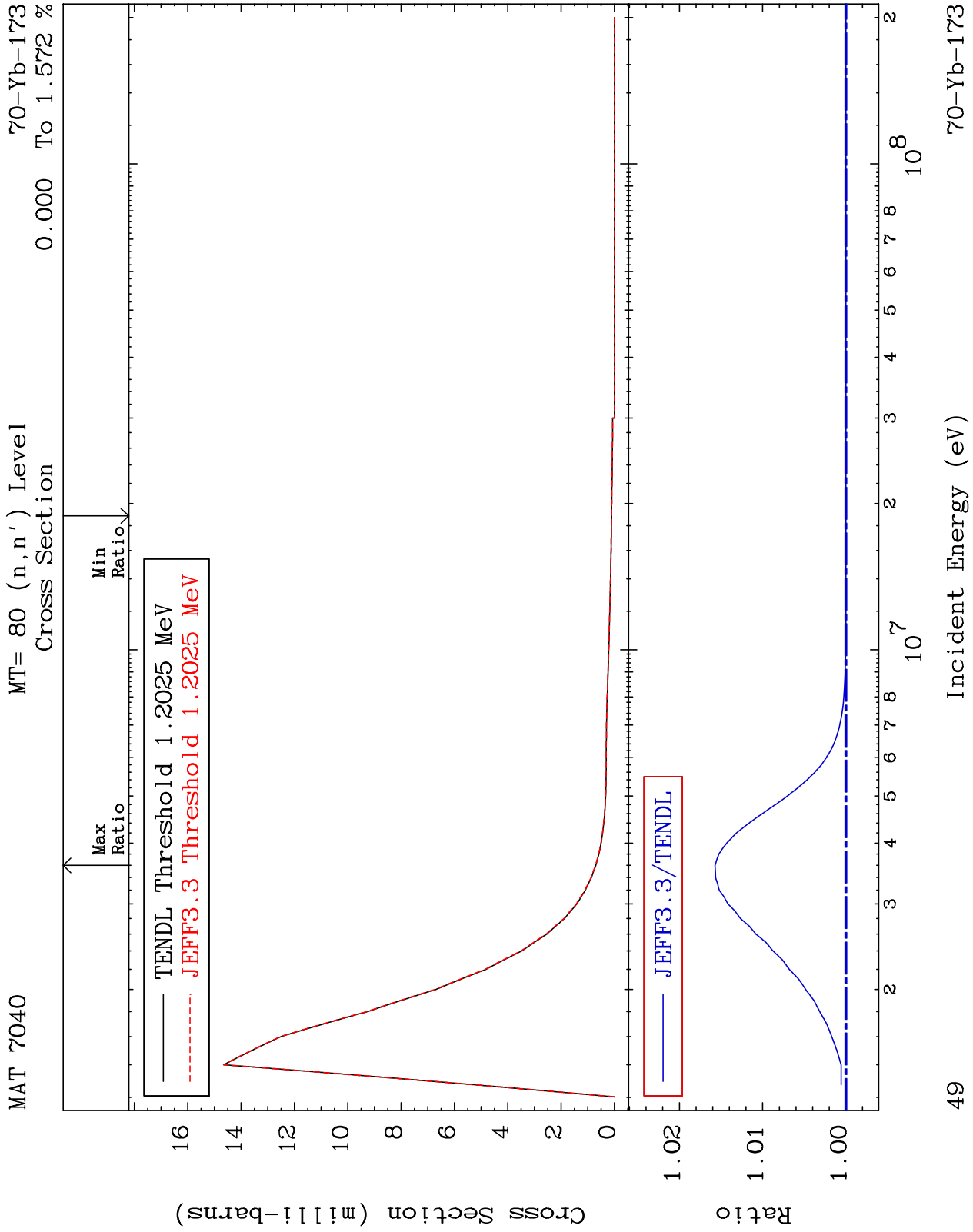


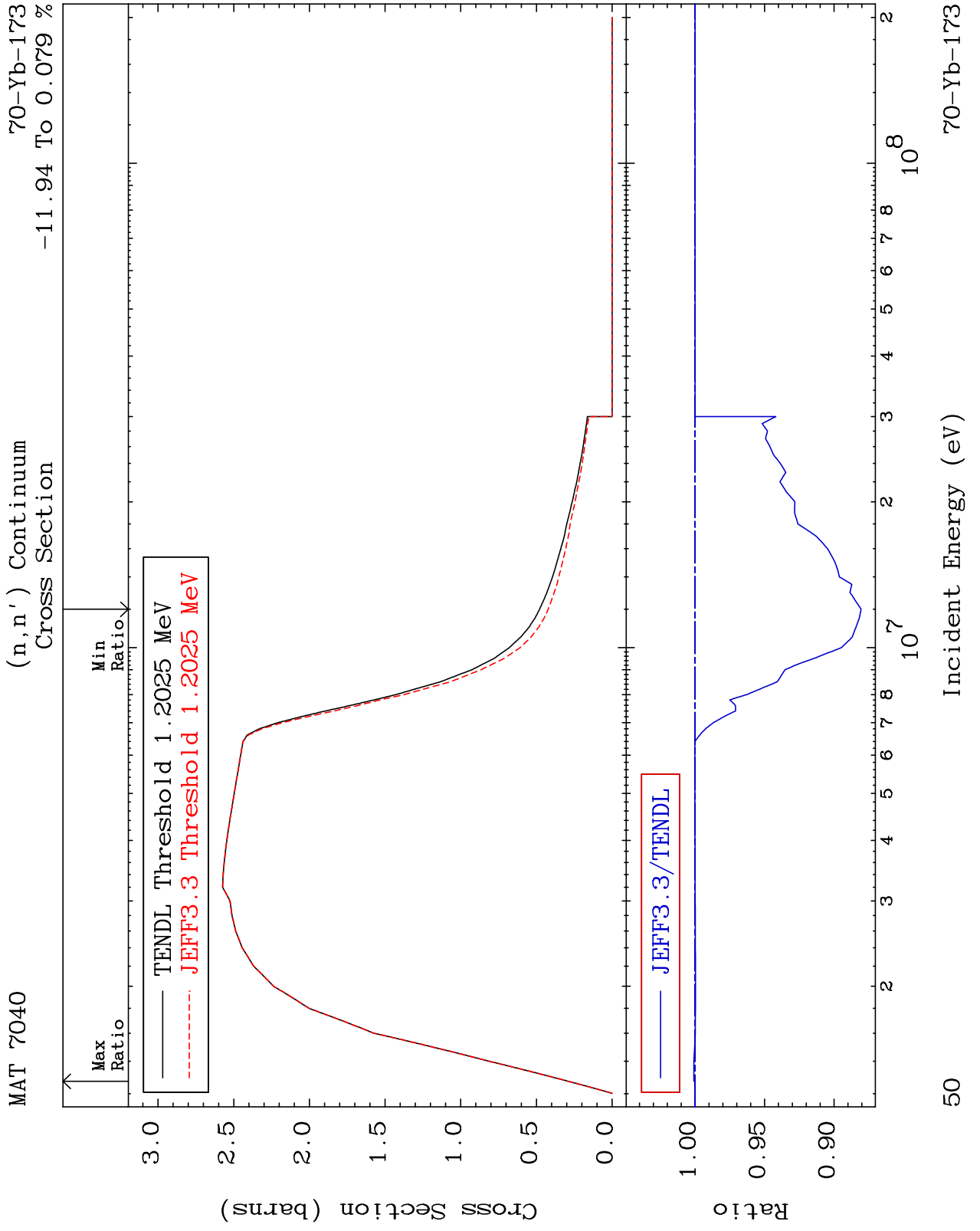
MAT 7040

MT= 79 (n,n') Level
Cross Section

70-Yb-173
-0.086 To 1.151 %



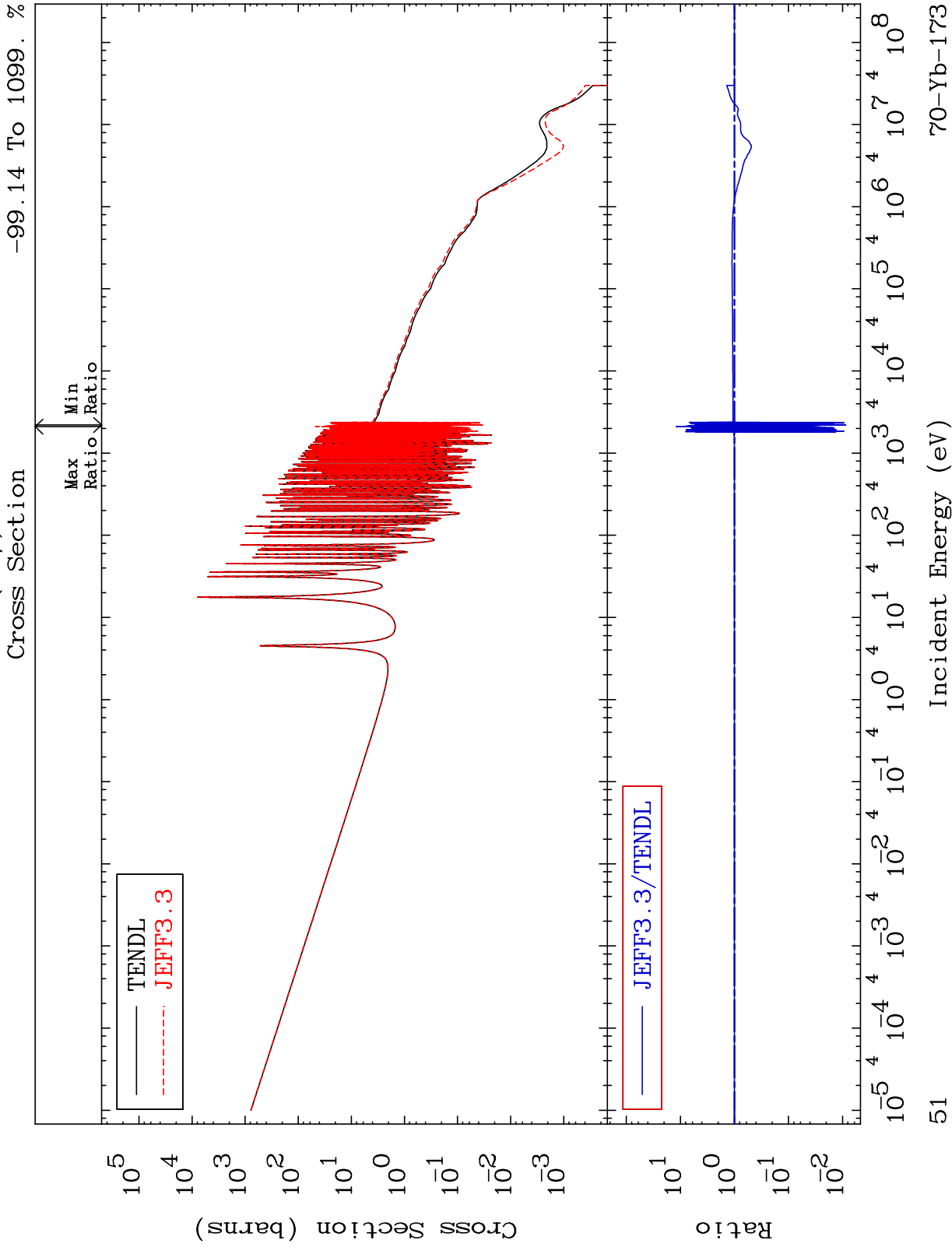


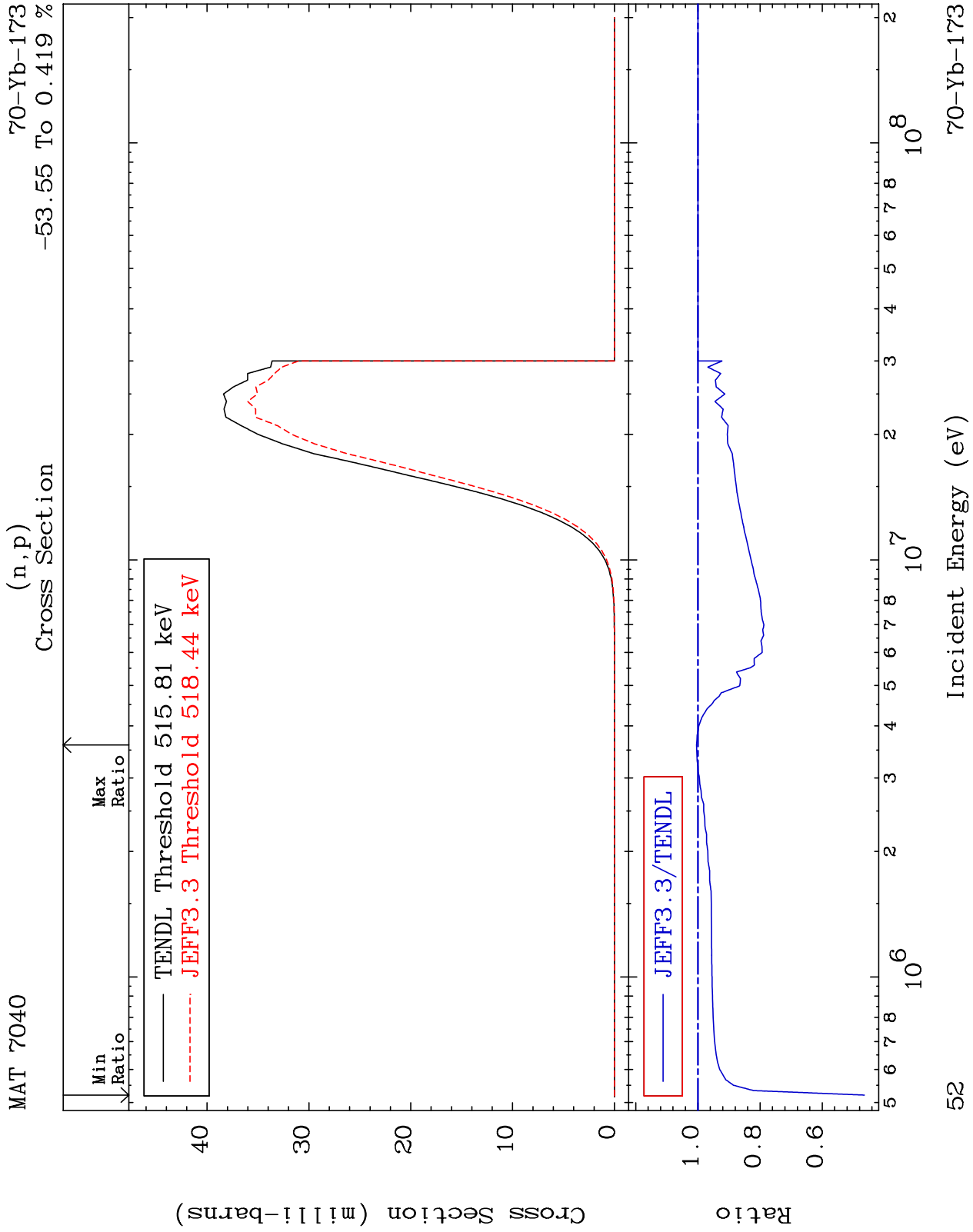


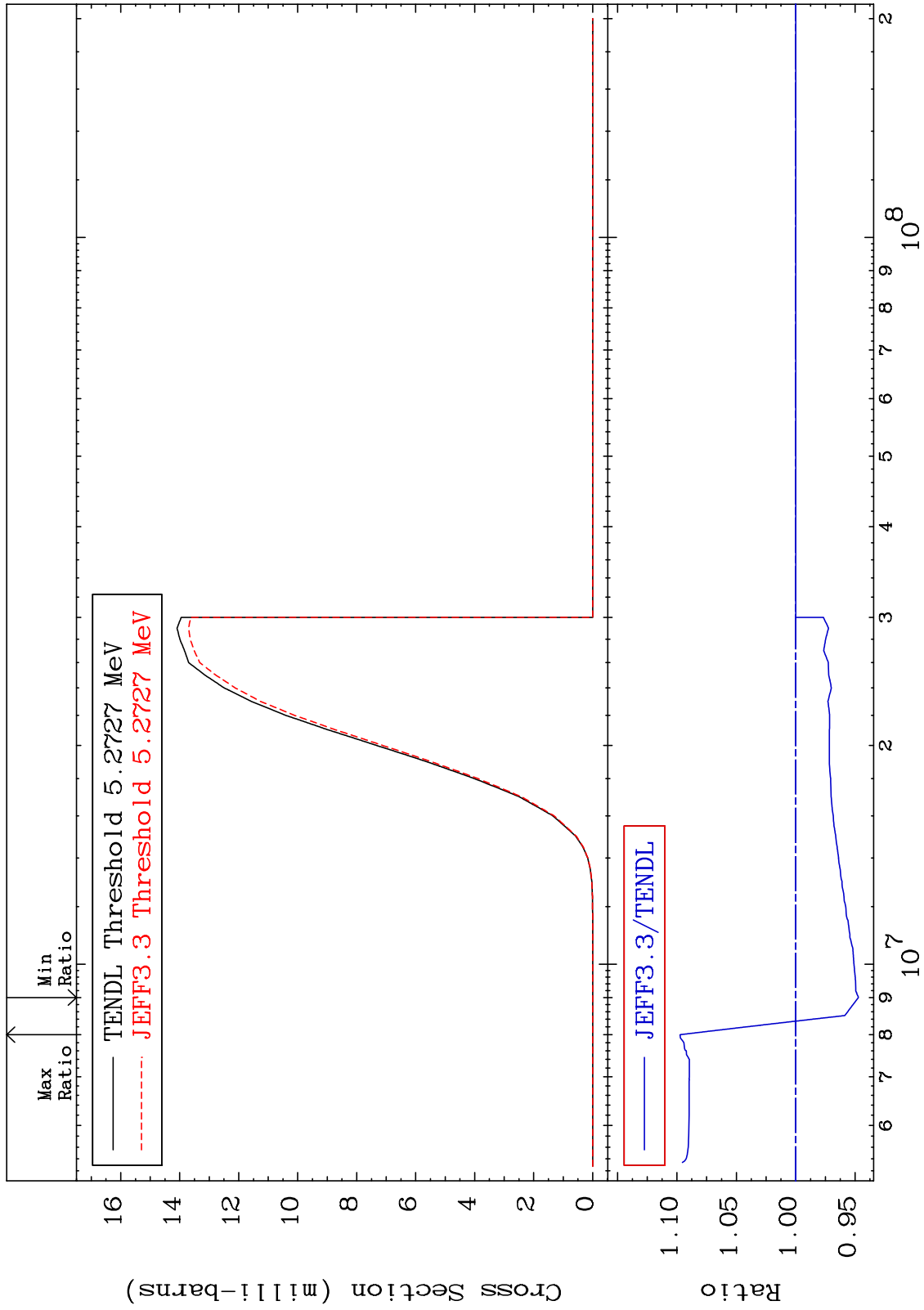
MAT 7040

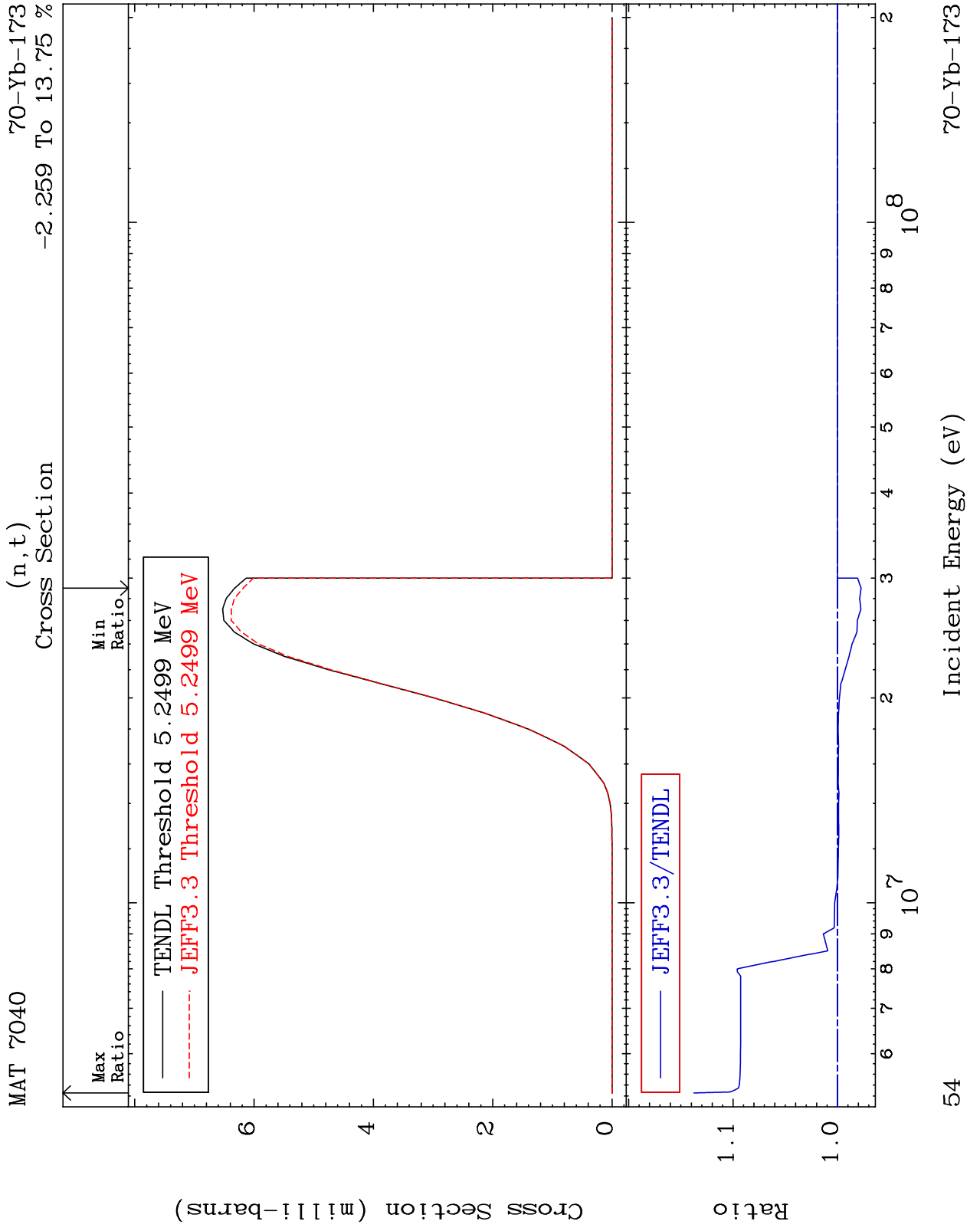
(n, γ)

70-Yb-173
-99.14 To 1099. %









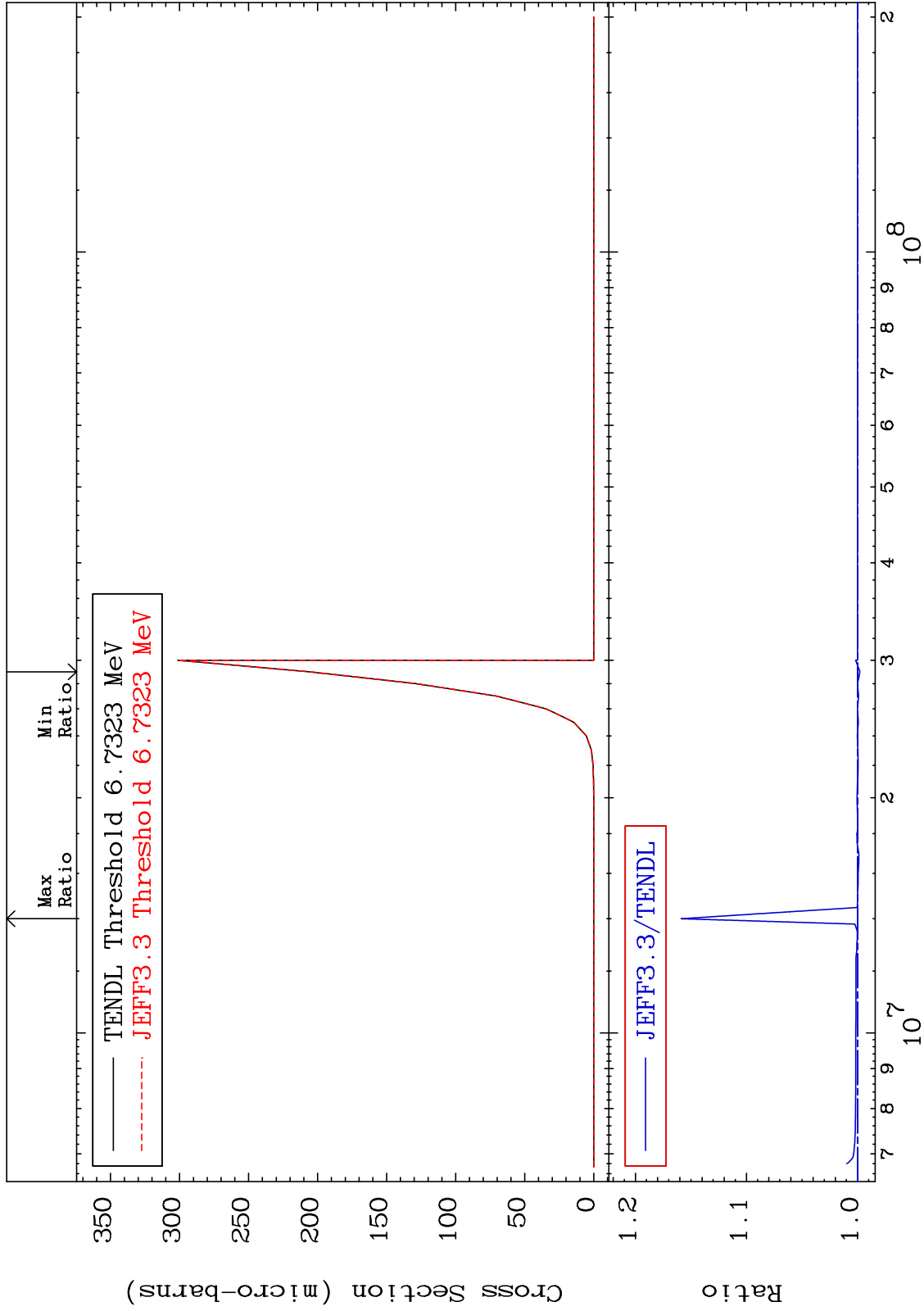
MAT 7040

(n, He-3)

70-Yb-173

Cross Section

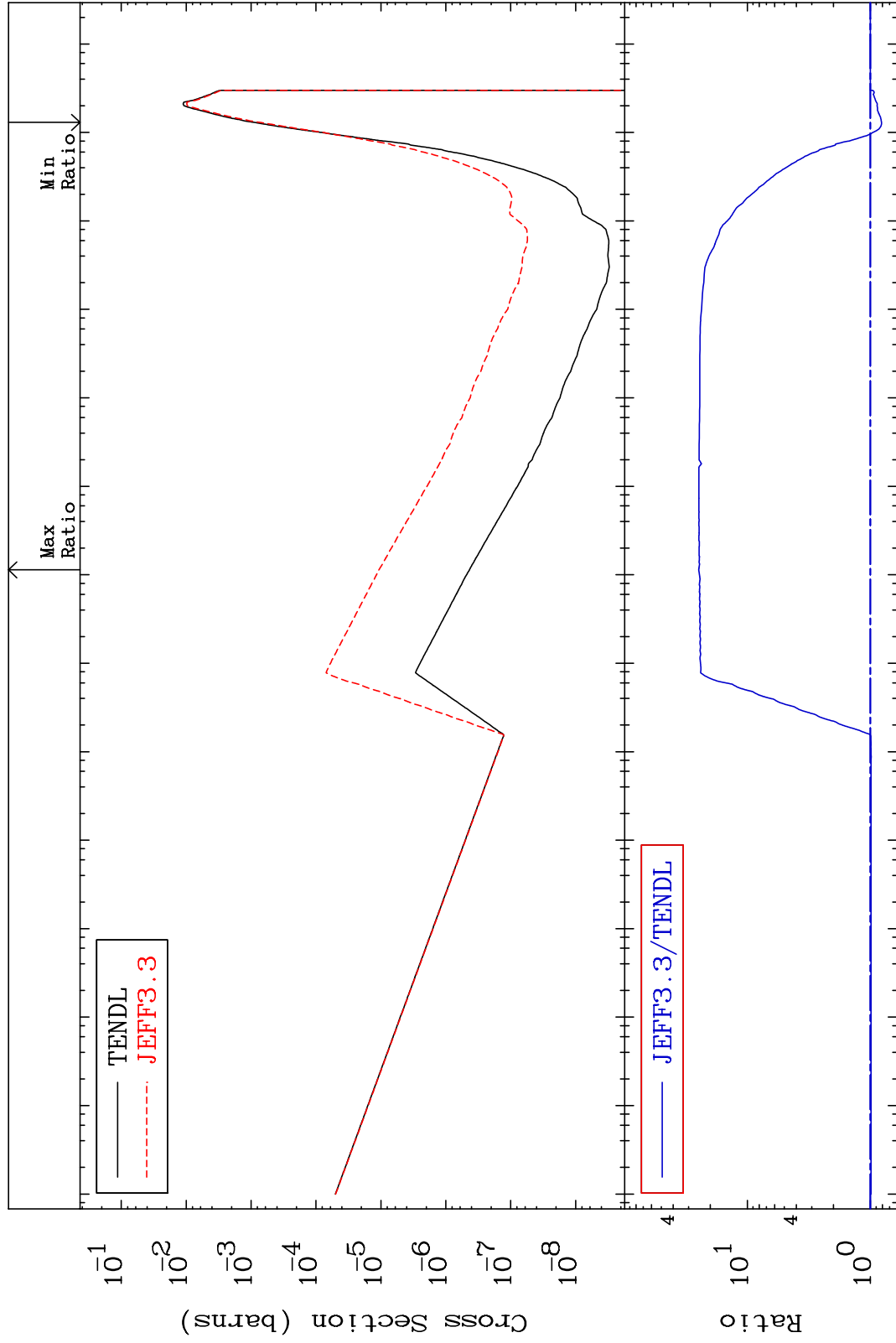
-0.217 To 15.88 %



MAT 7040

(n, α)
Cross Section

70-Yb-173
-18.77 To 2379. %



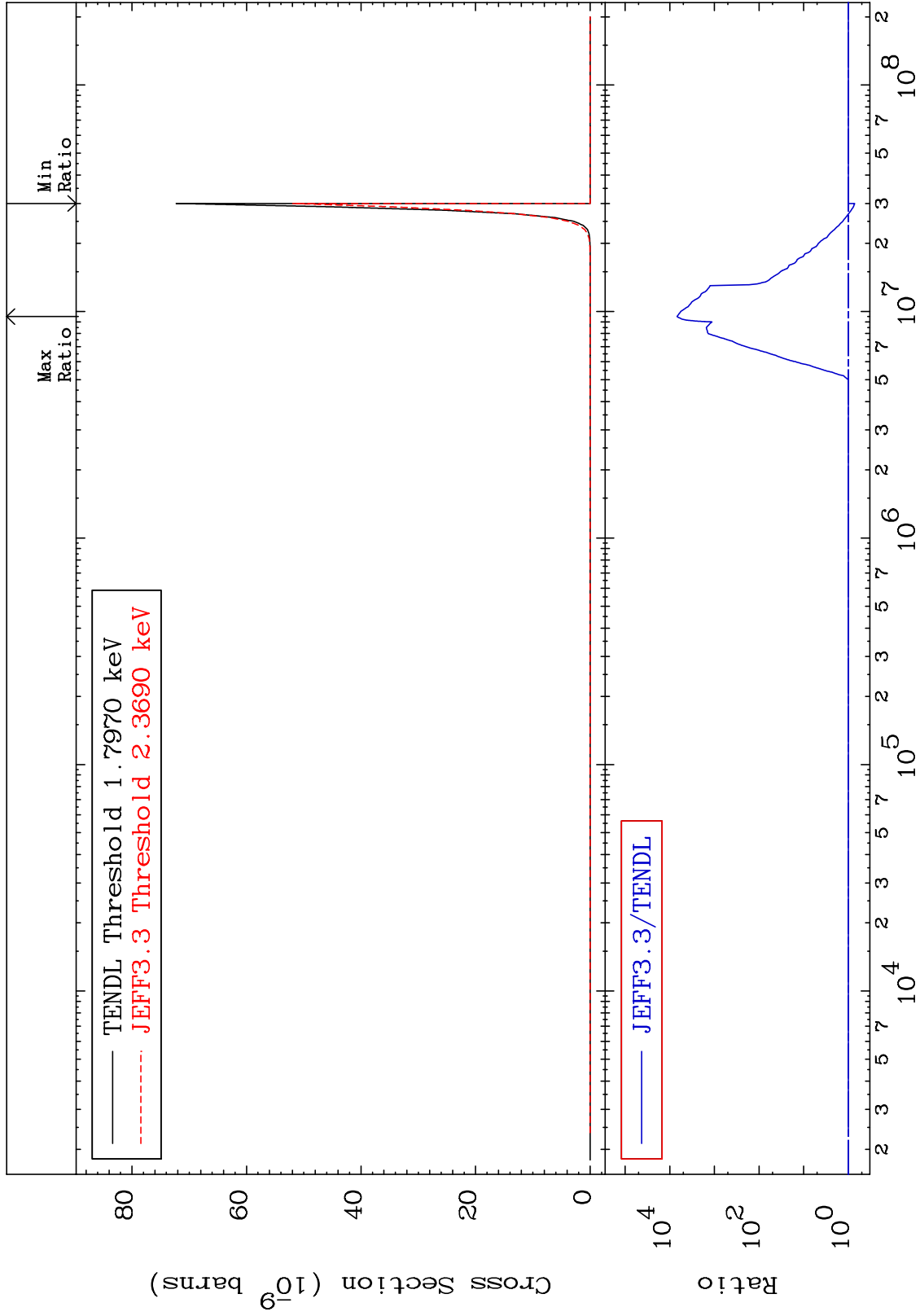
MAT 7040

(n, 2α)

70-Yb-173

Cross Section

-28.14 To 9999. %



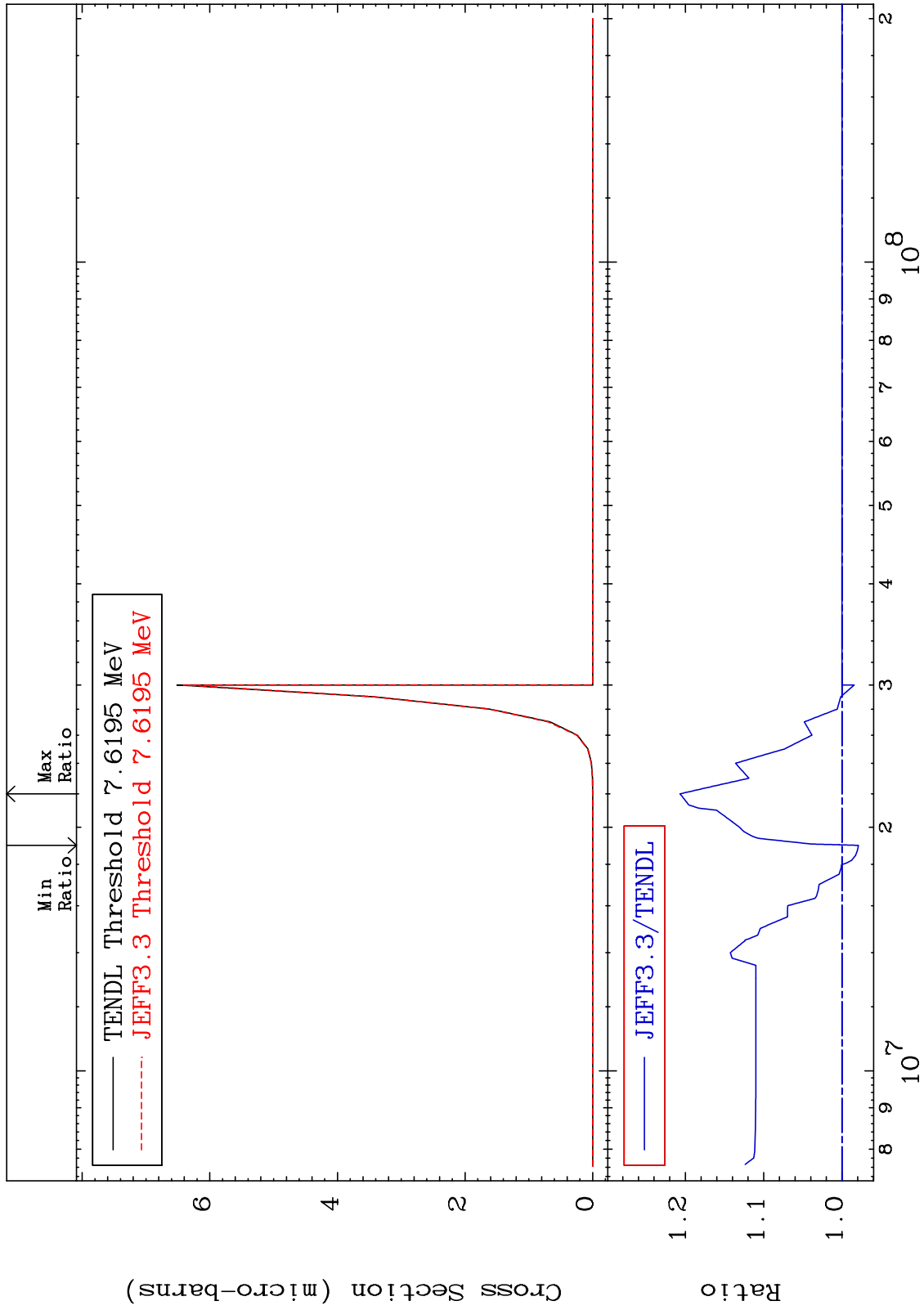
MAT 7040

(n,2p)

70-Yb-173

Cross Section

-2.091 To 20.69 %



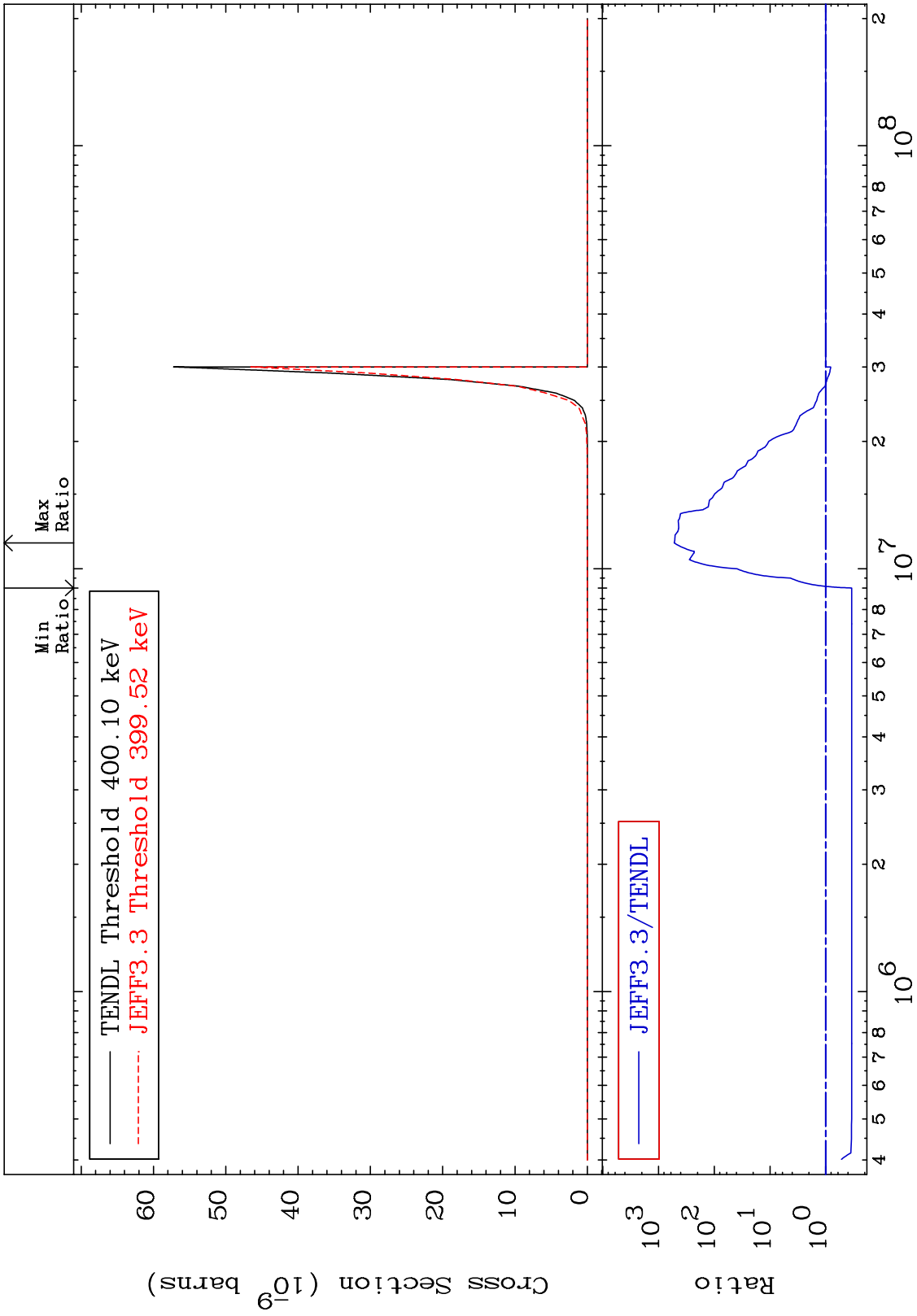
MAT 7040

(n,p) α

70-Yb-173

Cross Section

-65.83 To 9999. %



59

70-Yb-173

70-Yb-173

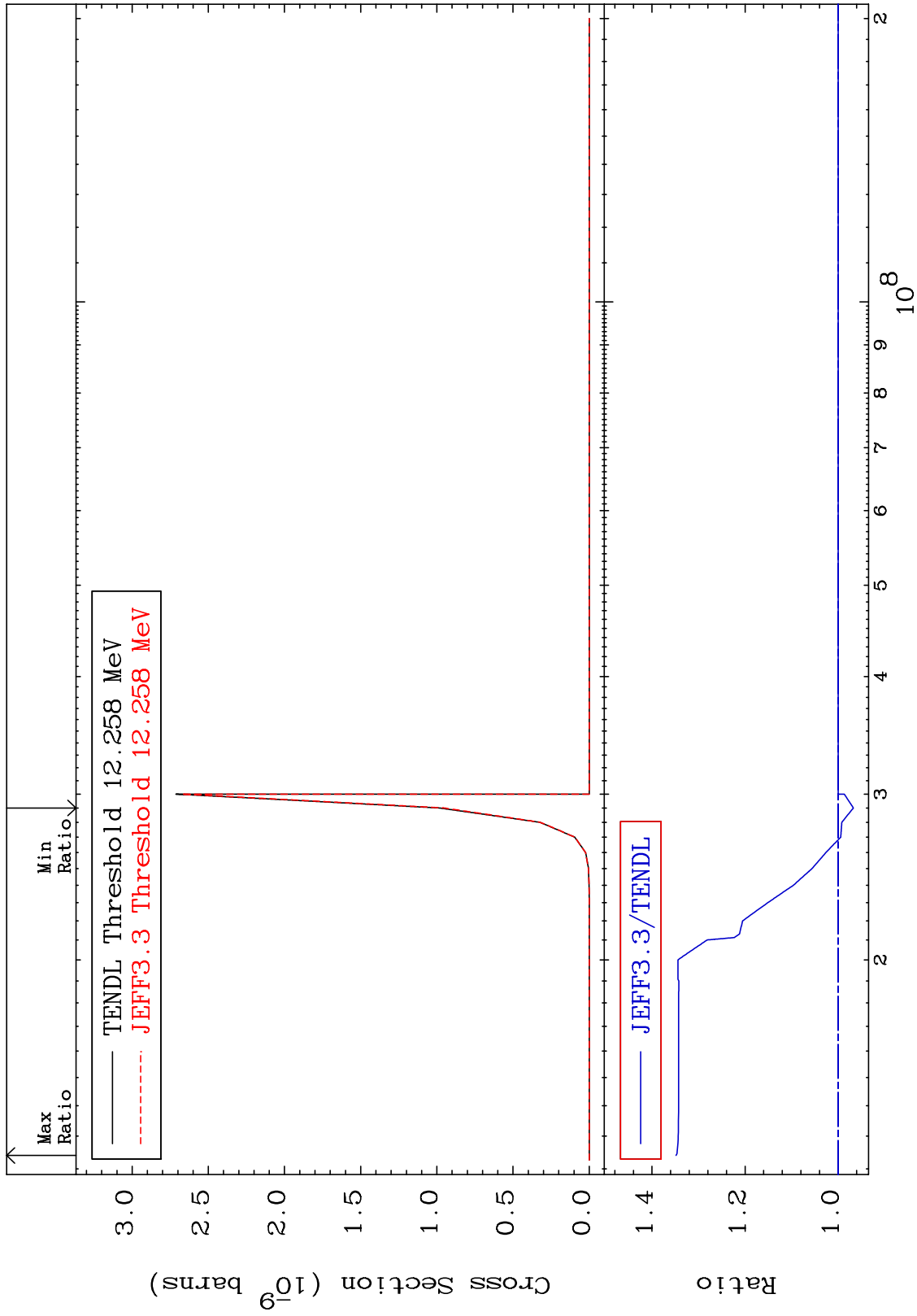
MAT 7040

(n,p) d

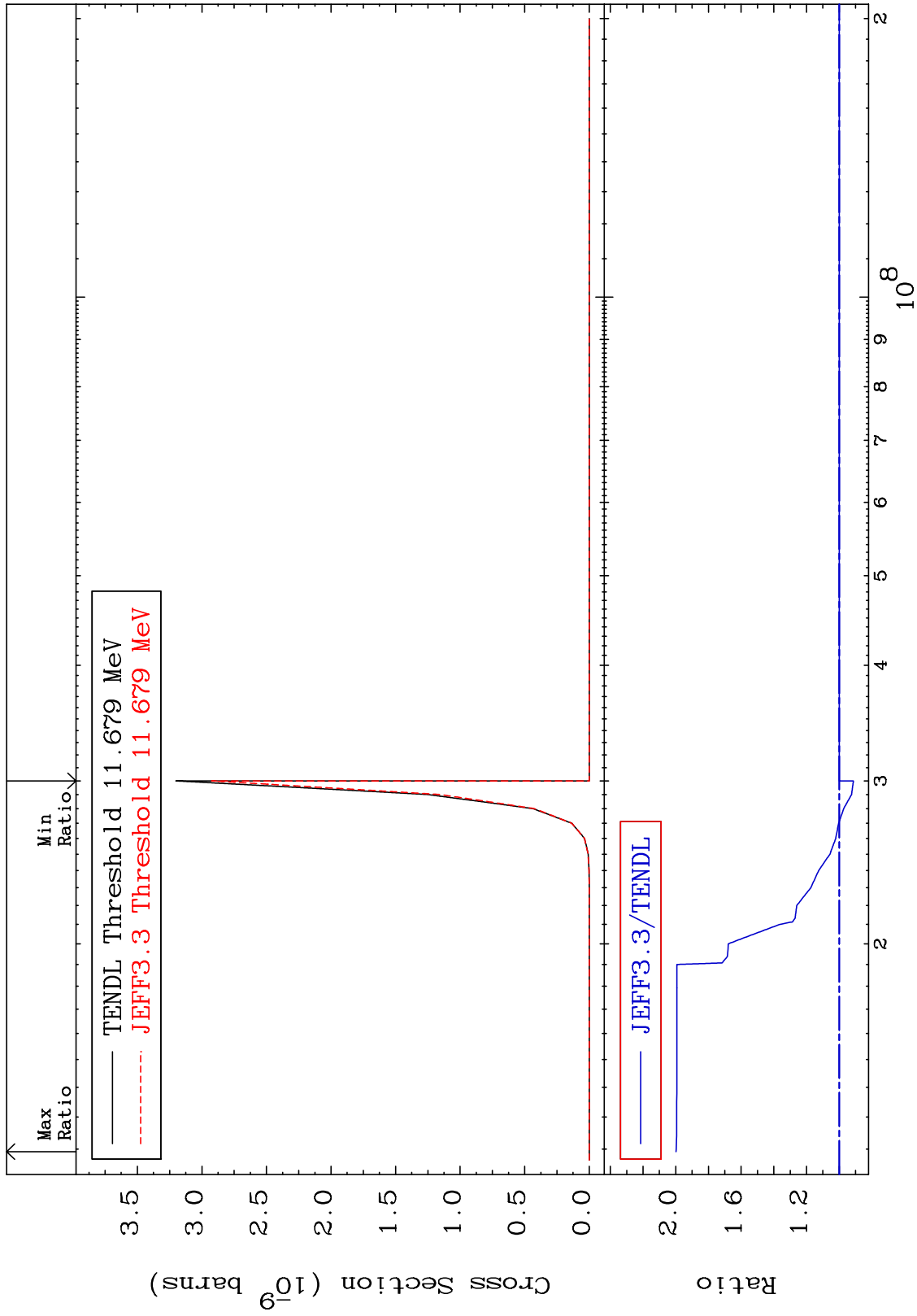
70-Yb-173

Cross Section

-3.288 To 34.83 %



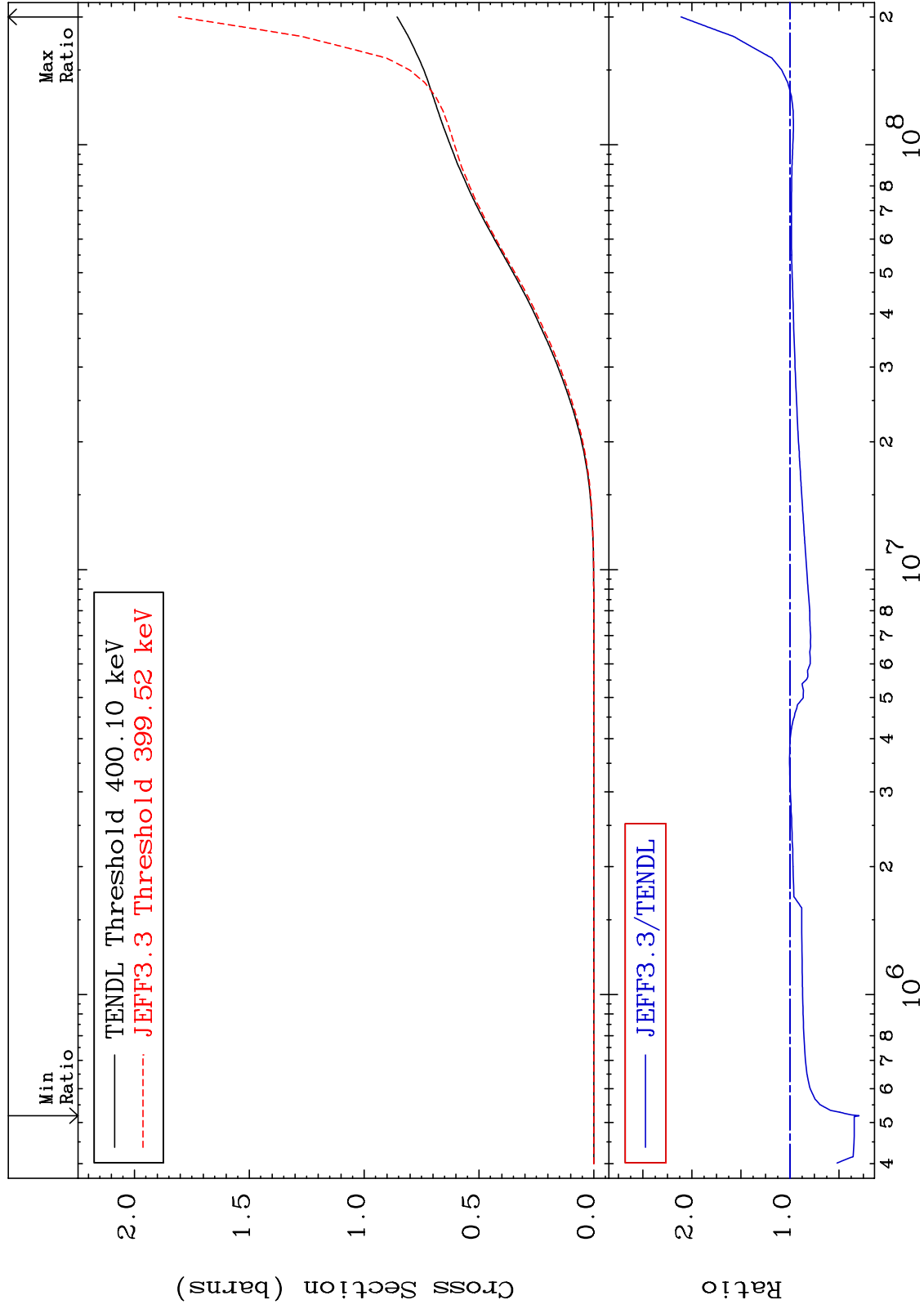
MAT 7040 (n,p) t 70-Yb-173
 Cross Section -8.665 To 99.81 %



MAT 7040

Hydrogen Production
Cross Section

70-Yb-173
-70.75 To 111.1 %



62

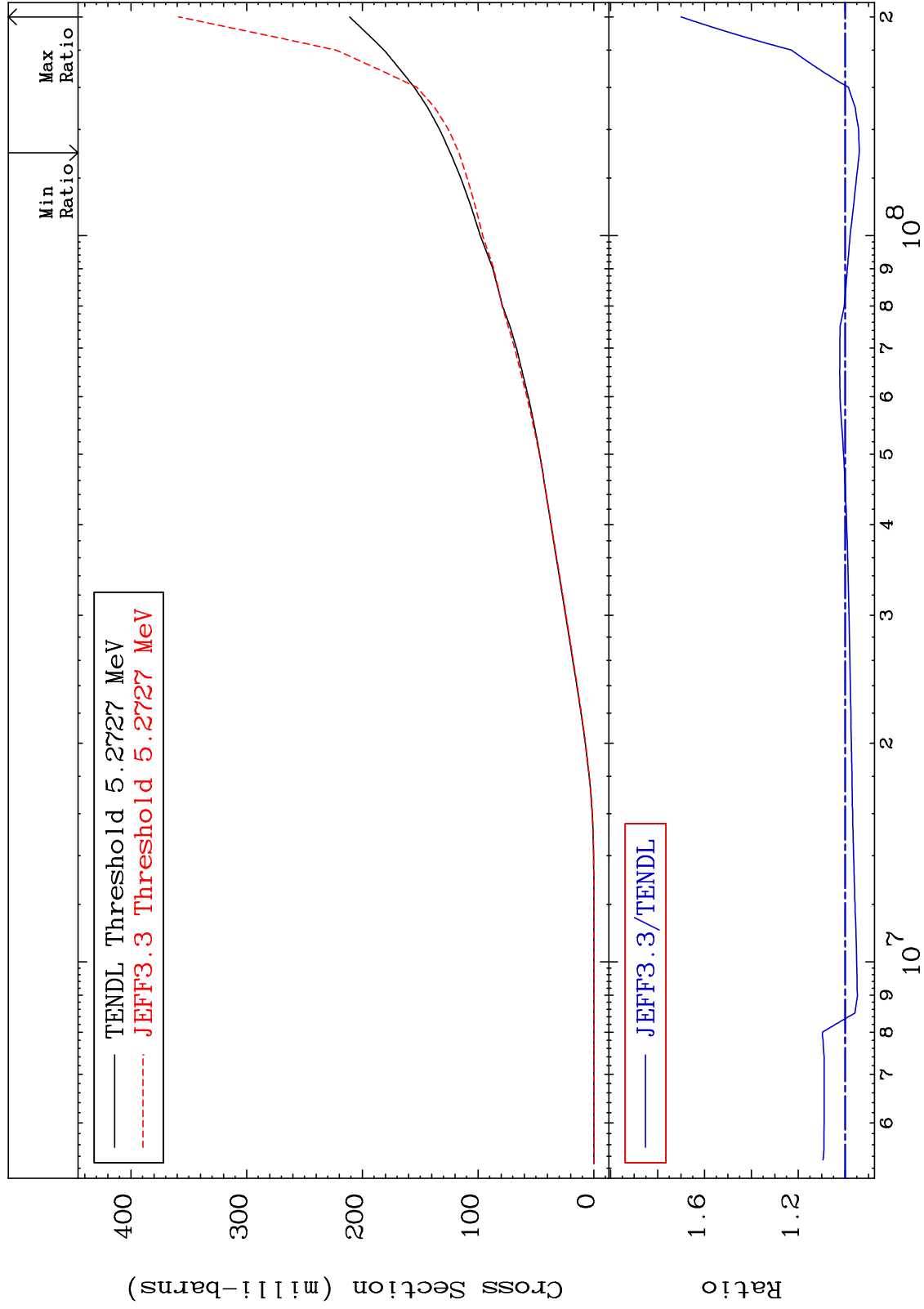
Incident Energy (eV)

70-Yb-173

MAT 7040

Deuterium Production
Cross Section

70-Yb-173
-6.016 To 70.00 %



63

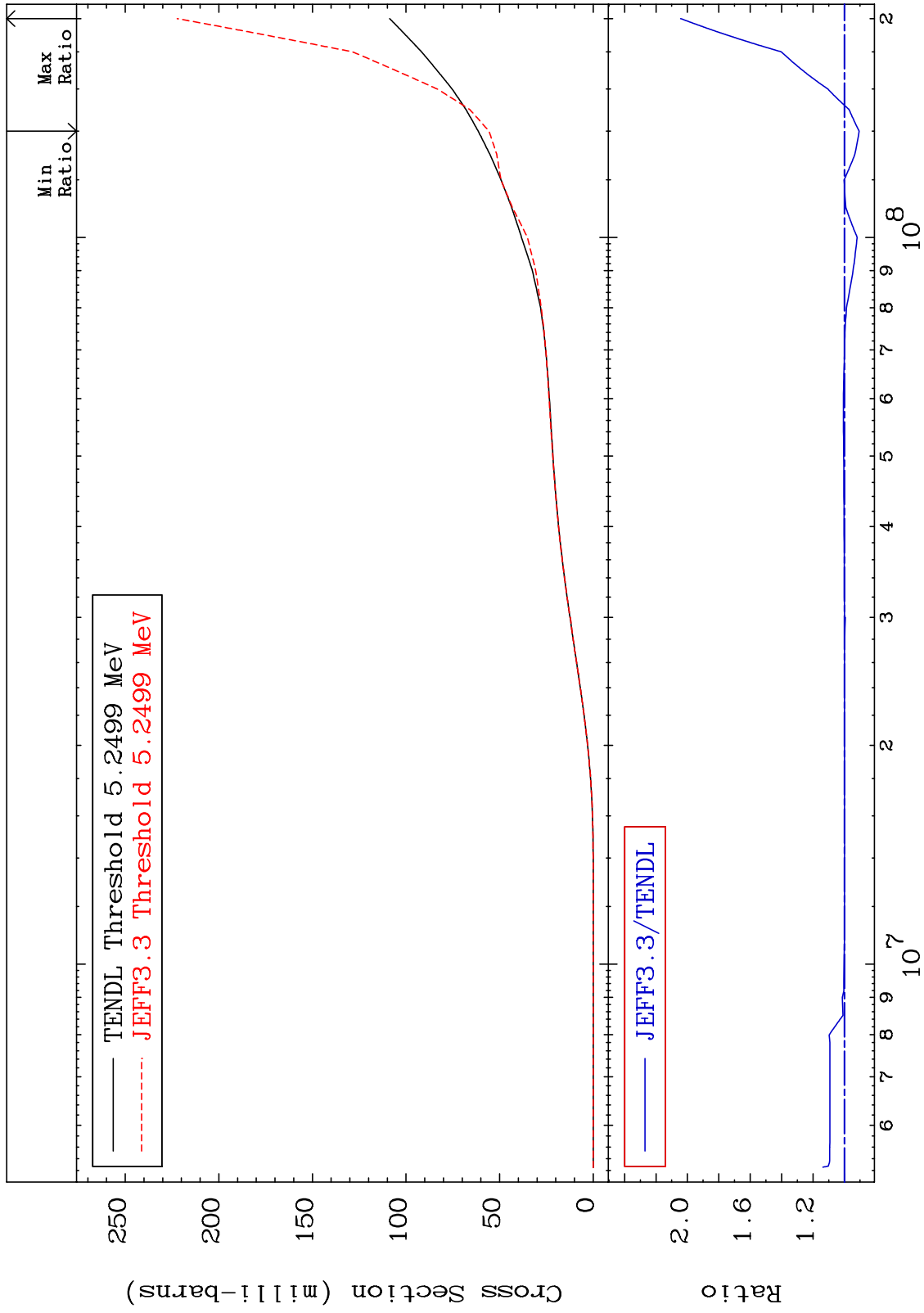
Incident Energy (eV)

70-Yb-173

MAT 7040

Tritium Production
Cross Section

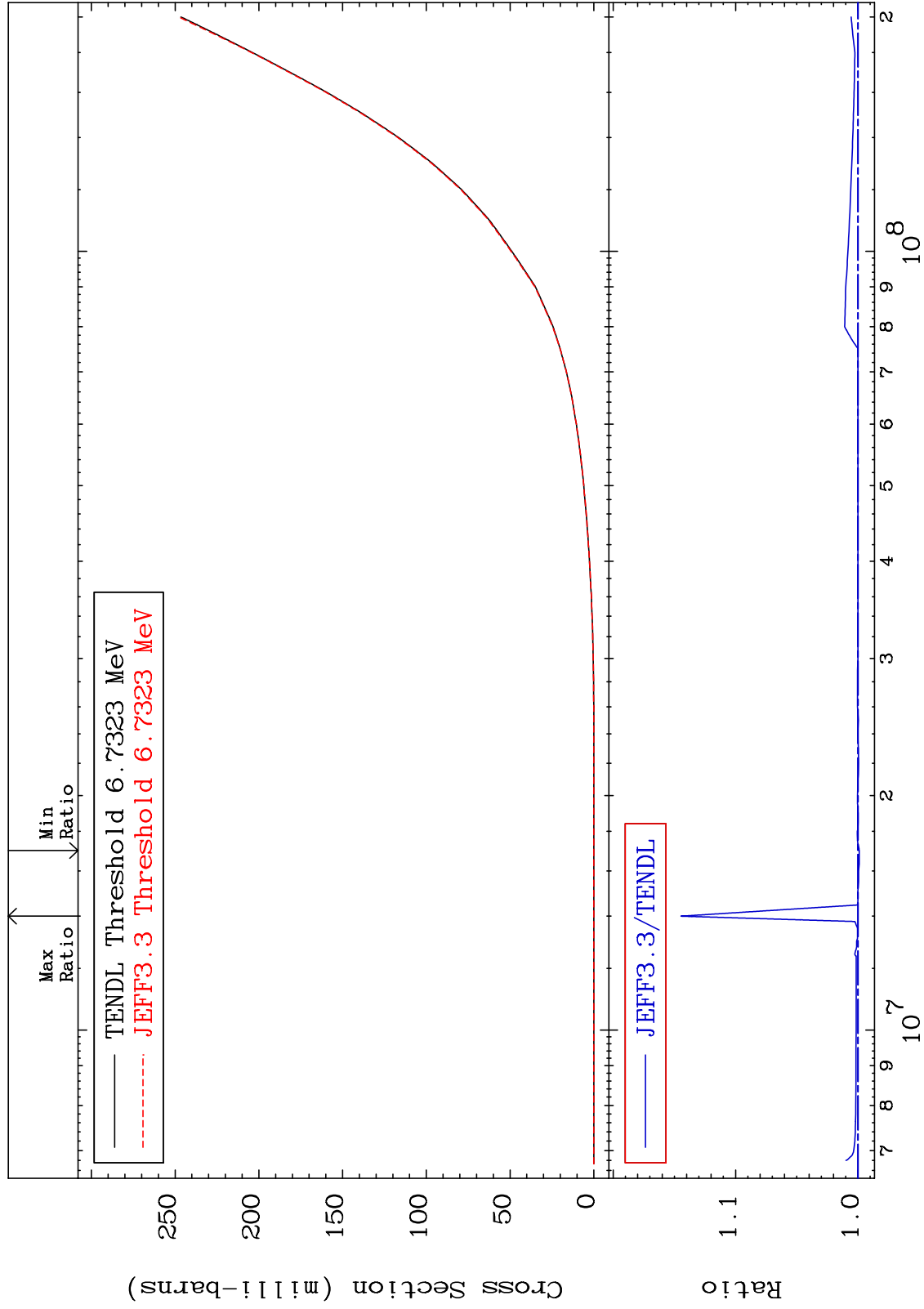
70-Yb-173
-9.410 To 104.3 %



MAT 7040

He-3 Production
Cross Section

70-Yb-173
-0.107 To 14.46 %



65

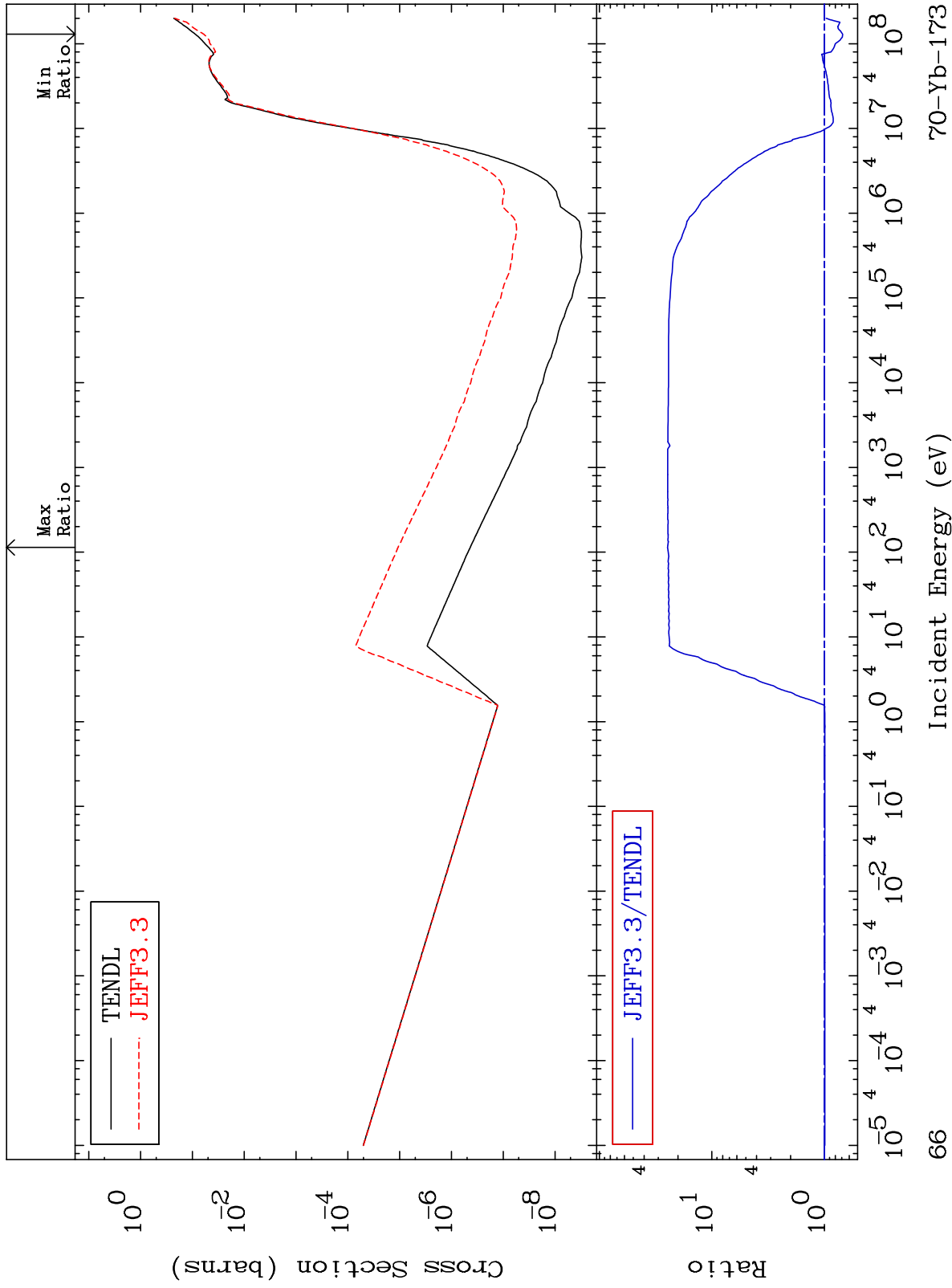
Incident Energy (eV)

70-Yb-173

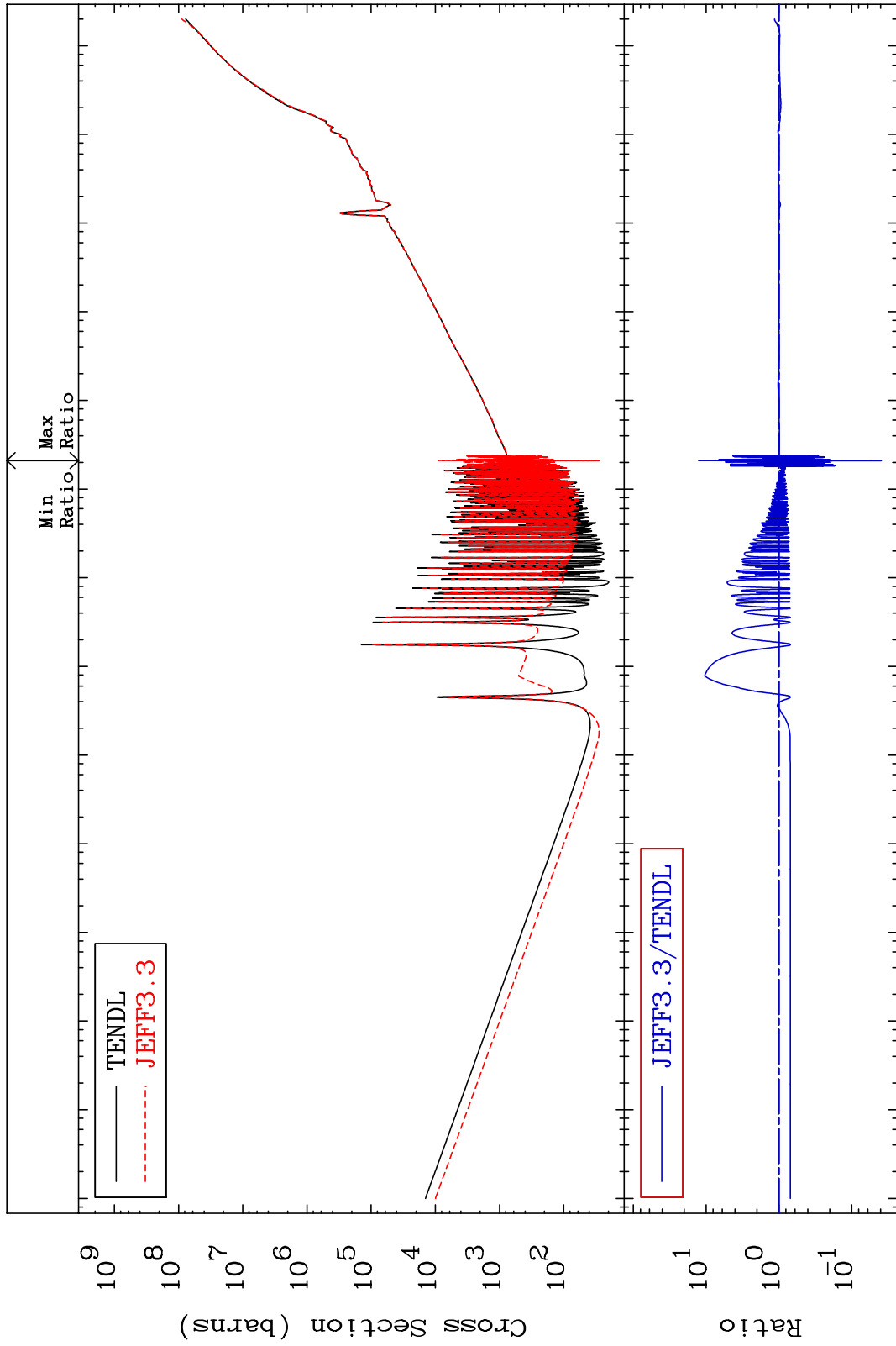
MAT 7040

He-4 Production
Cross Section

70-Yb-173
-31.26 To 2379. %



MAT 7040 Kerma total (eV-barns) 70-Yb-173
Cross Section -96.12 To 1179. %

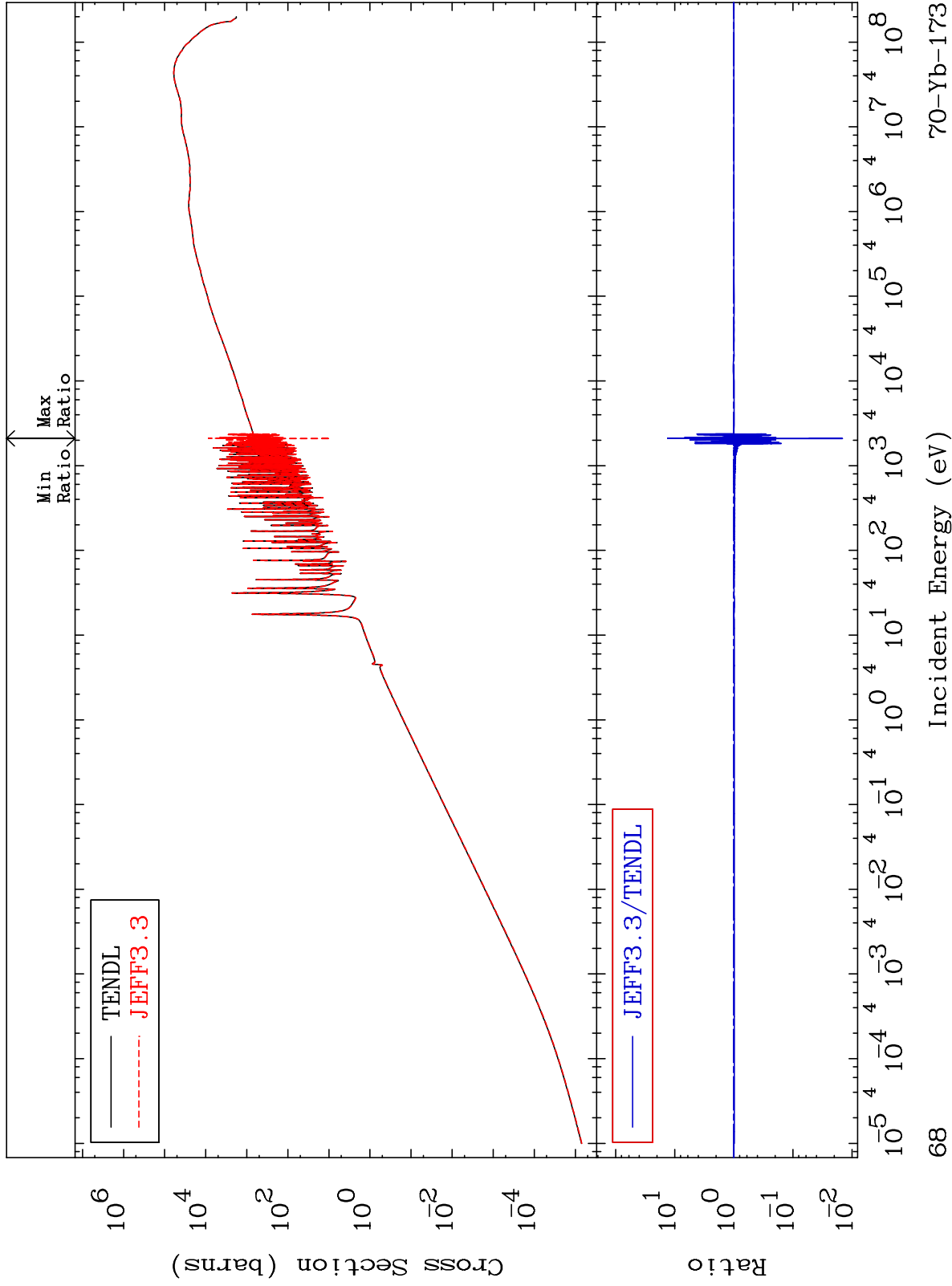


67 Incident Energy (eV) 70-Yb-173

MAT 7040

Kerma elastic
Cross Section

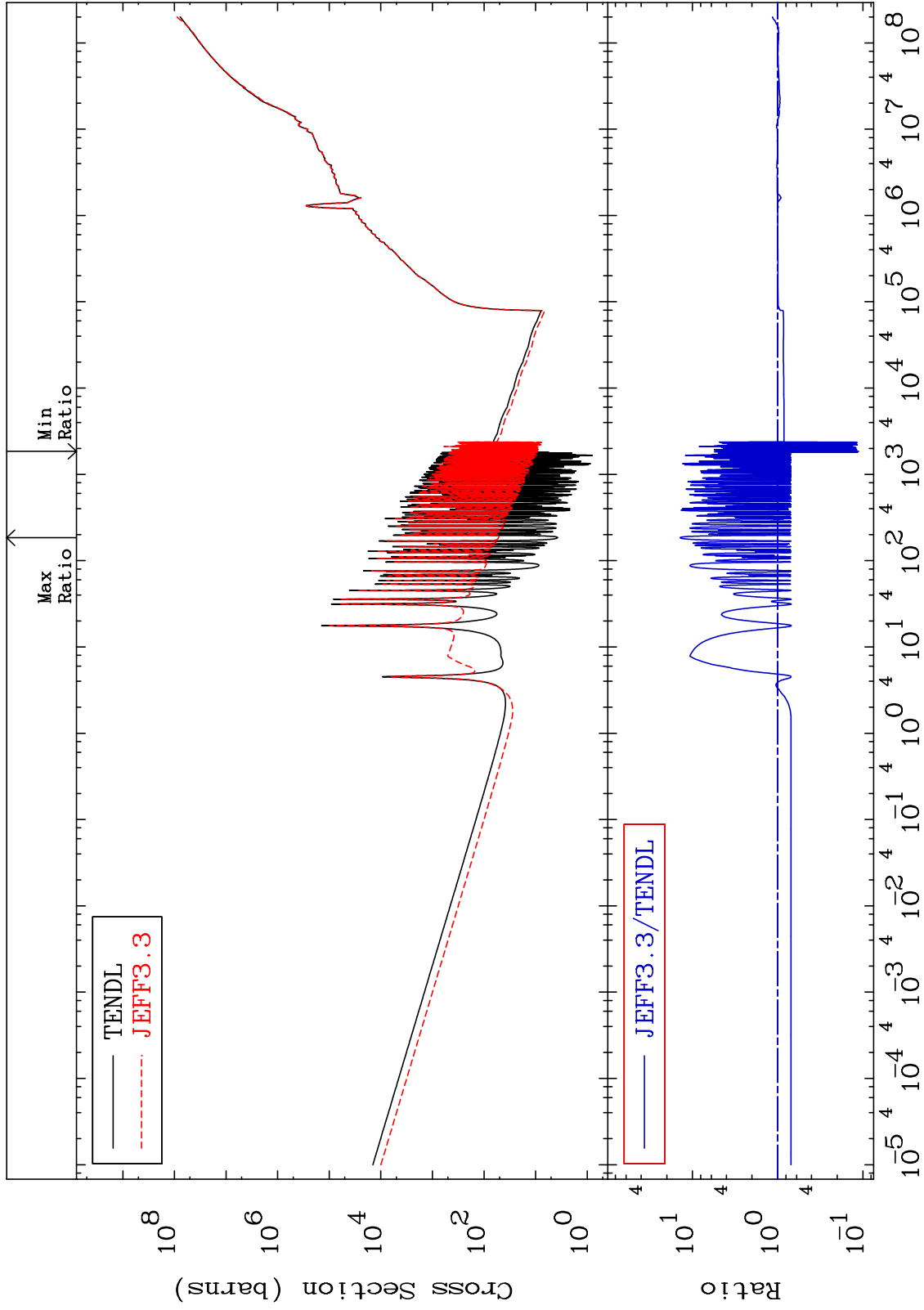
70-Yb-173
-98.56 To 1228. %



MAT 7040

Kerma non-elastic (all but mt2)
Cross Section

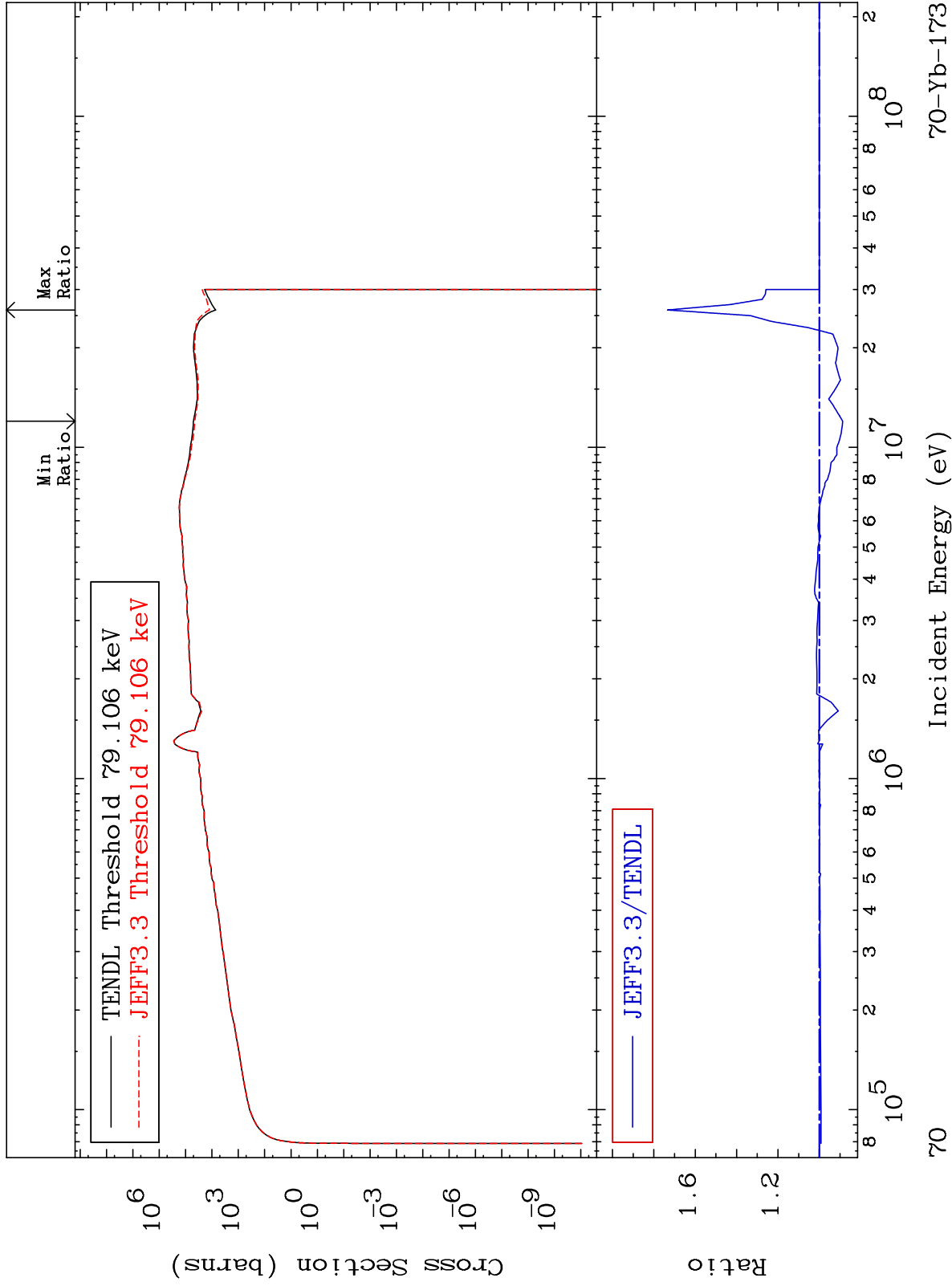
70-Yb-173
-88.72 To 1299. %



MAT 7040

Kerma inelastic (mt51-91)
Cross Section

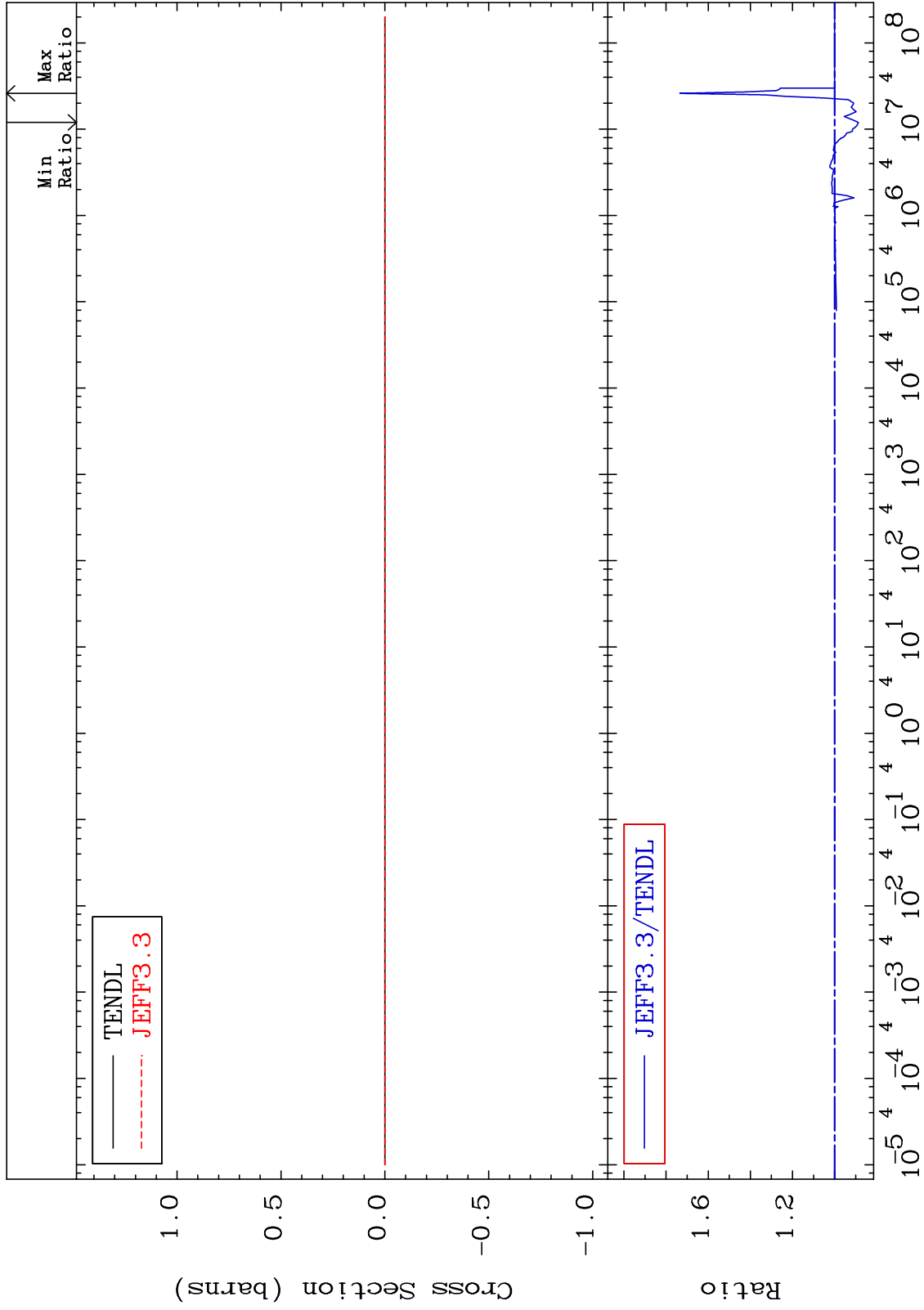
70-Yb-173
-11.30 To 73.38 %



MAT 7040

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

70-Yb-173
-11.30 To 73.38 %



71

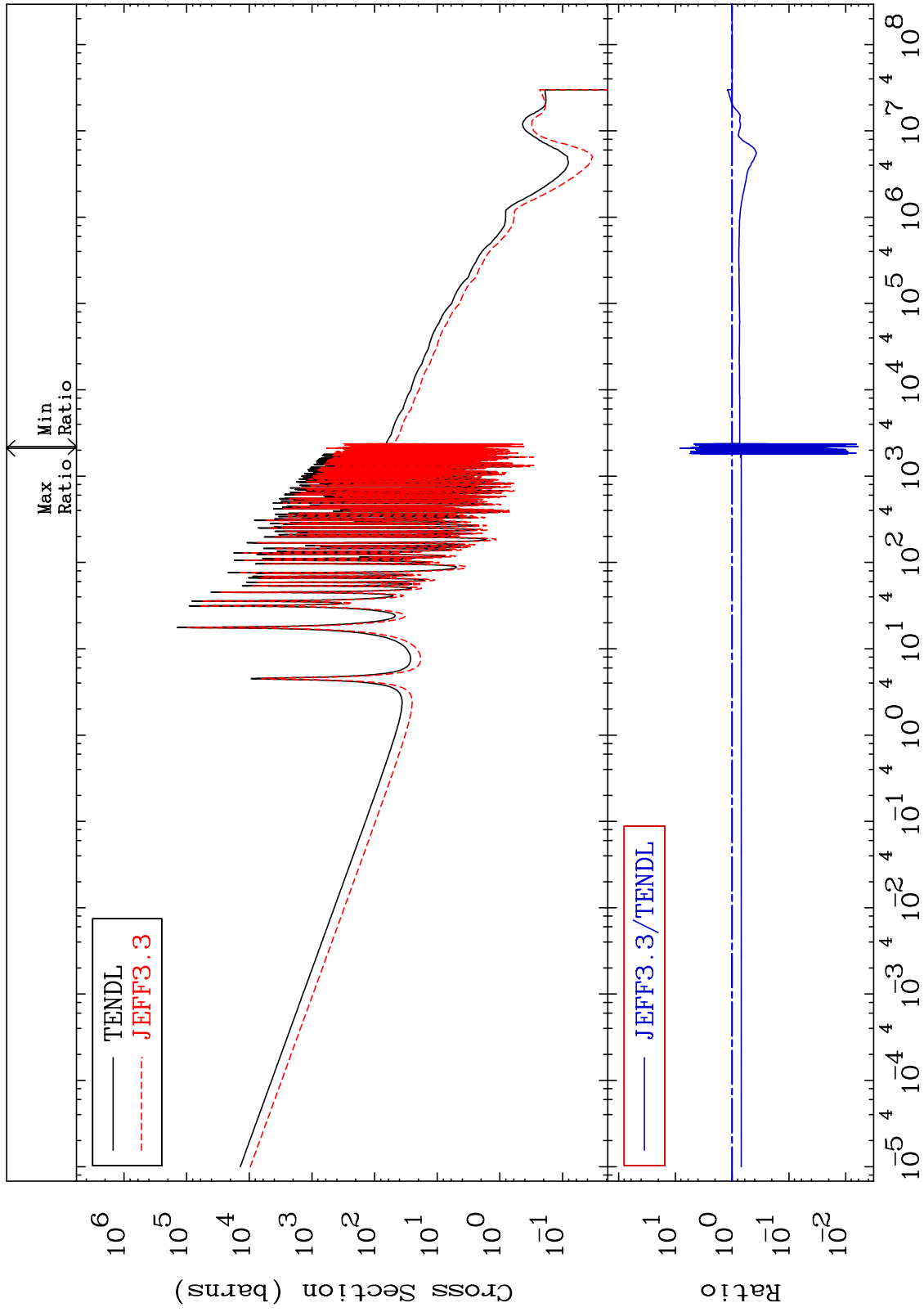
Incident Energy (eV)

70-Yb-173

MAT 7040

Kerma capture (mt102)
Cross Section

70-Yb-173
-99.40 To 728.0 %



72

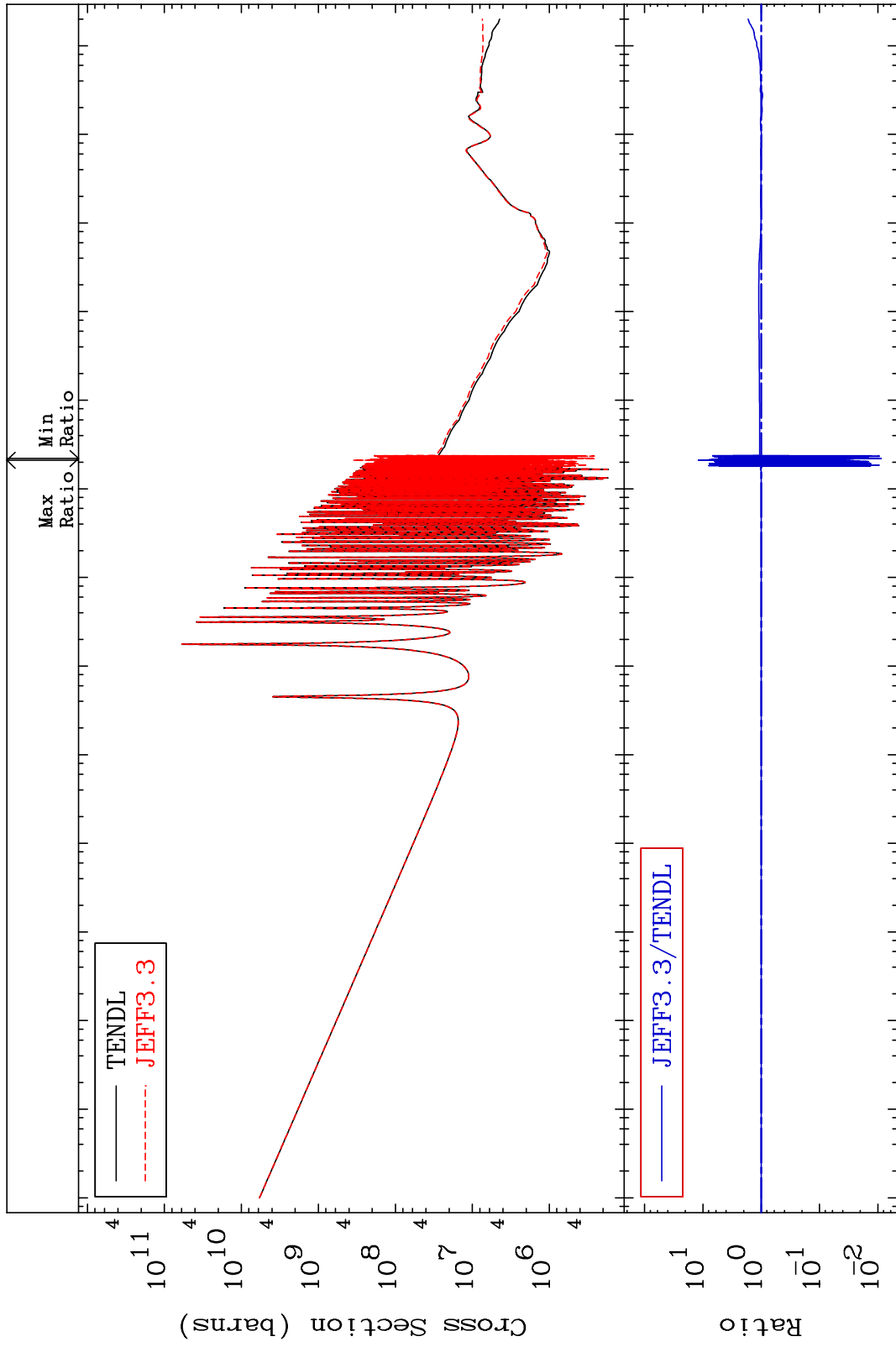
Incident Energy (eV)

70-Yb-173

MAT 7040

Total photon (eV-barns)
Cross Section

70-Yb-173
-99.14 To 1099. %

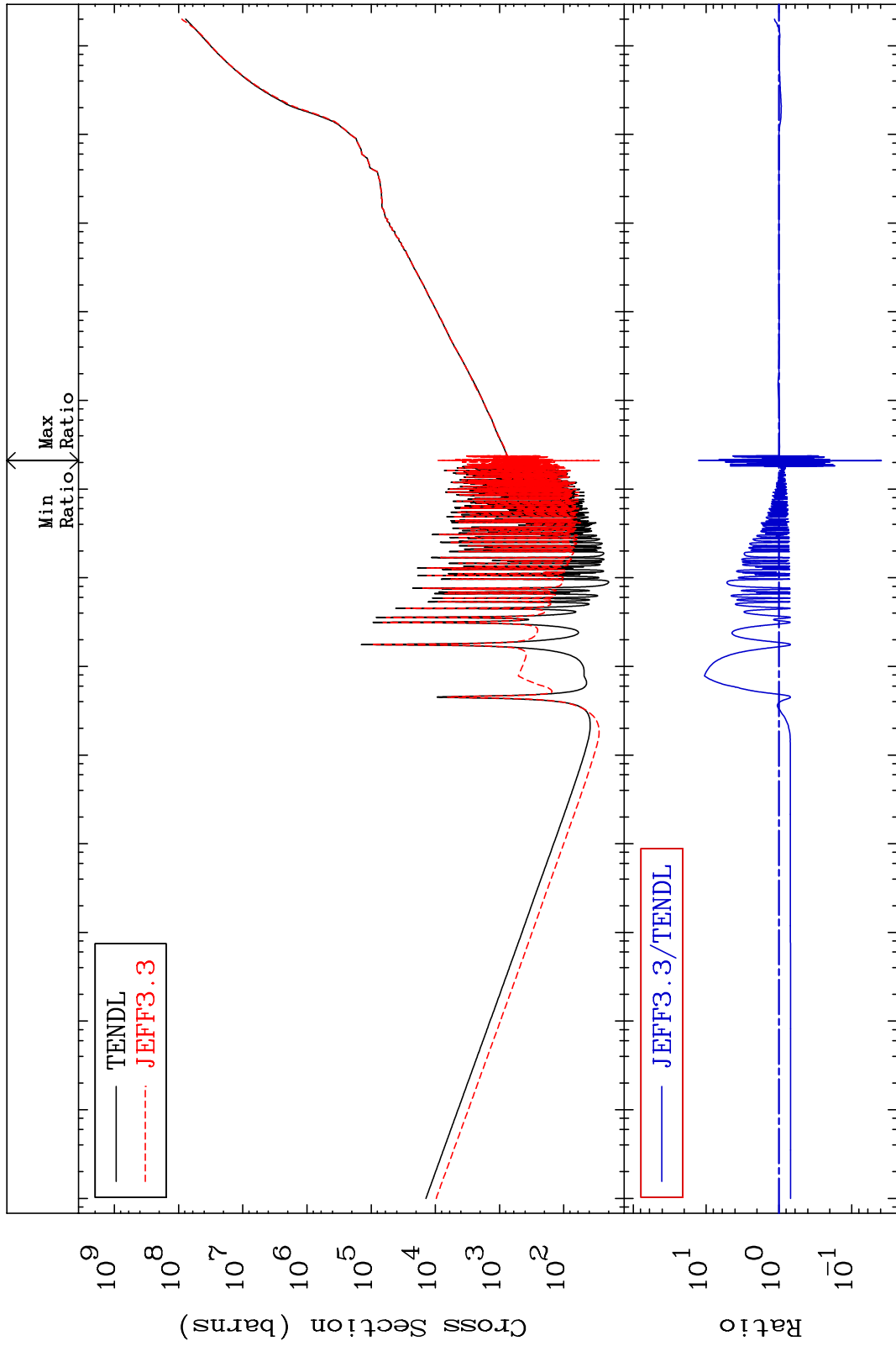


73

Incident Energy (eV)

70-Yb-173

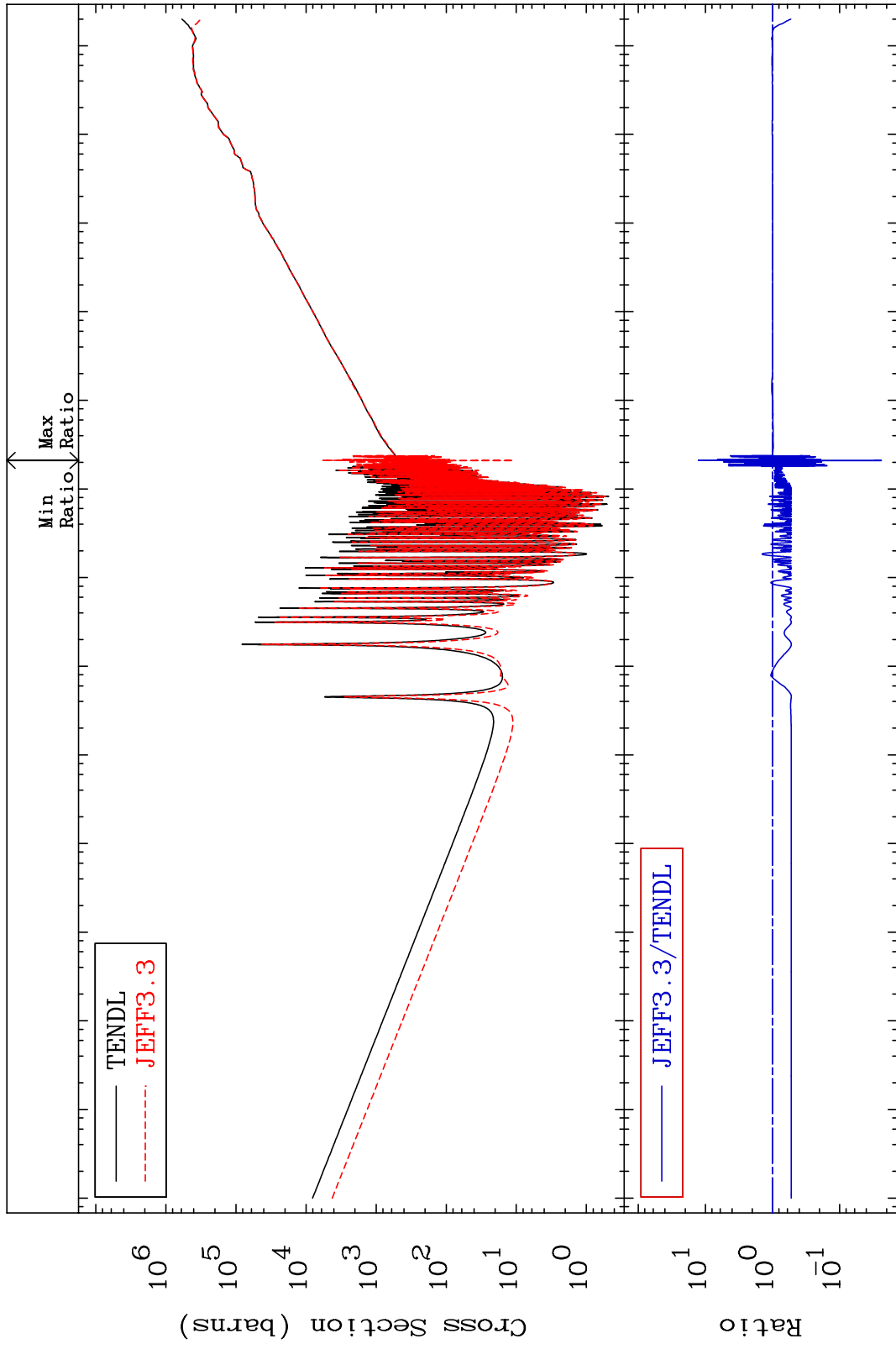
MAT 7040 Total kinematic kerma (high limit) 70-Yb-173
 Cross Section -96.11 To 1179. %



MAT 7040

Dpa total (eV-barns)
Cross Section

70-Yb-173
-97.63 To 1174. %



75

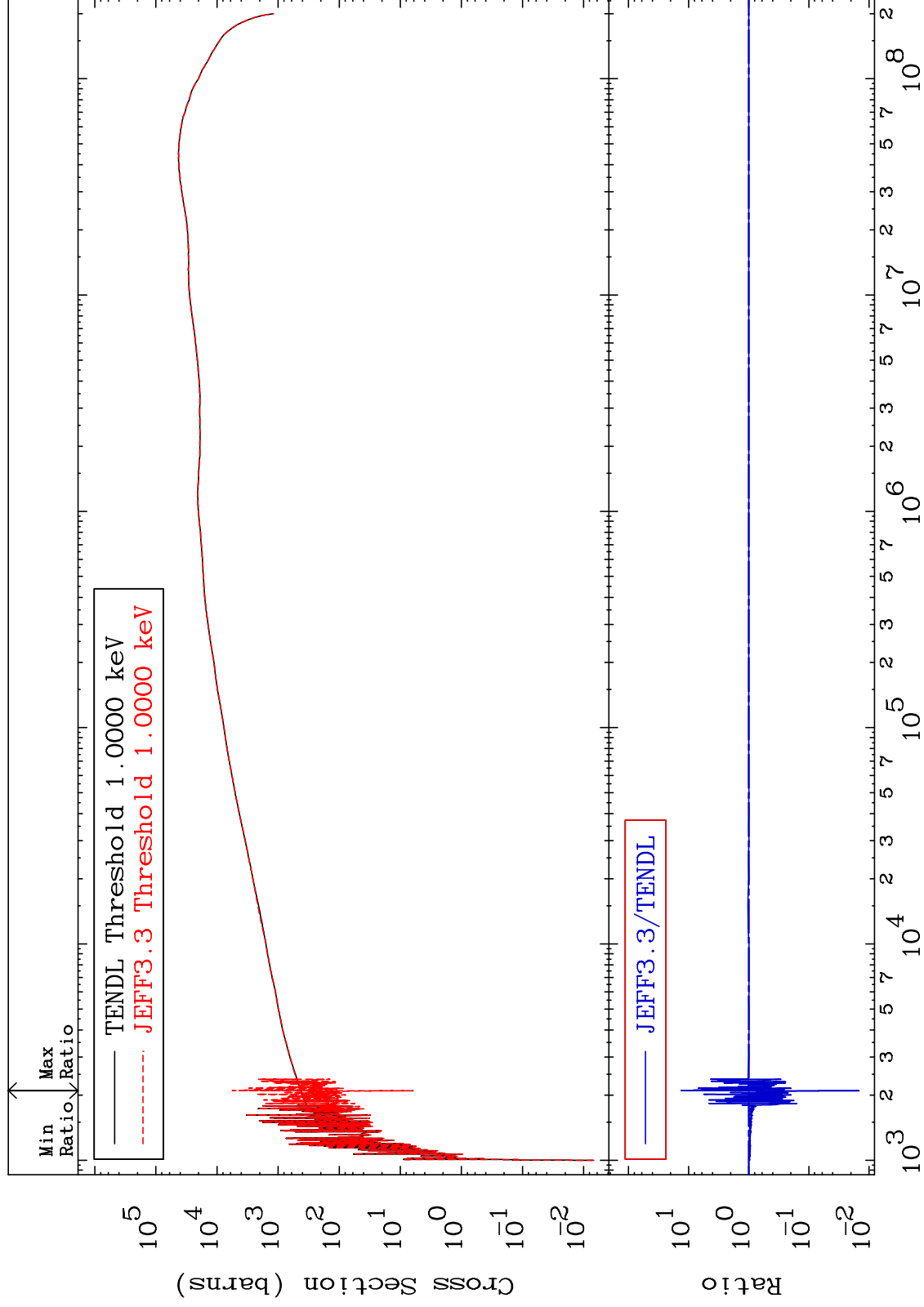
Incident Energy (eV)

70-Yb-173

MAT 7040

Dpa elastic (mt2)
Cross Section

70-Yb-173
-98.55 To 1236. %



76

Incident Energy (eV)

70-Yb-173

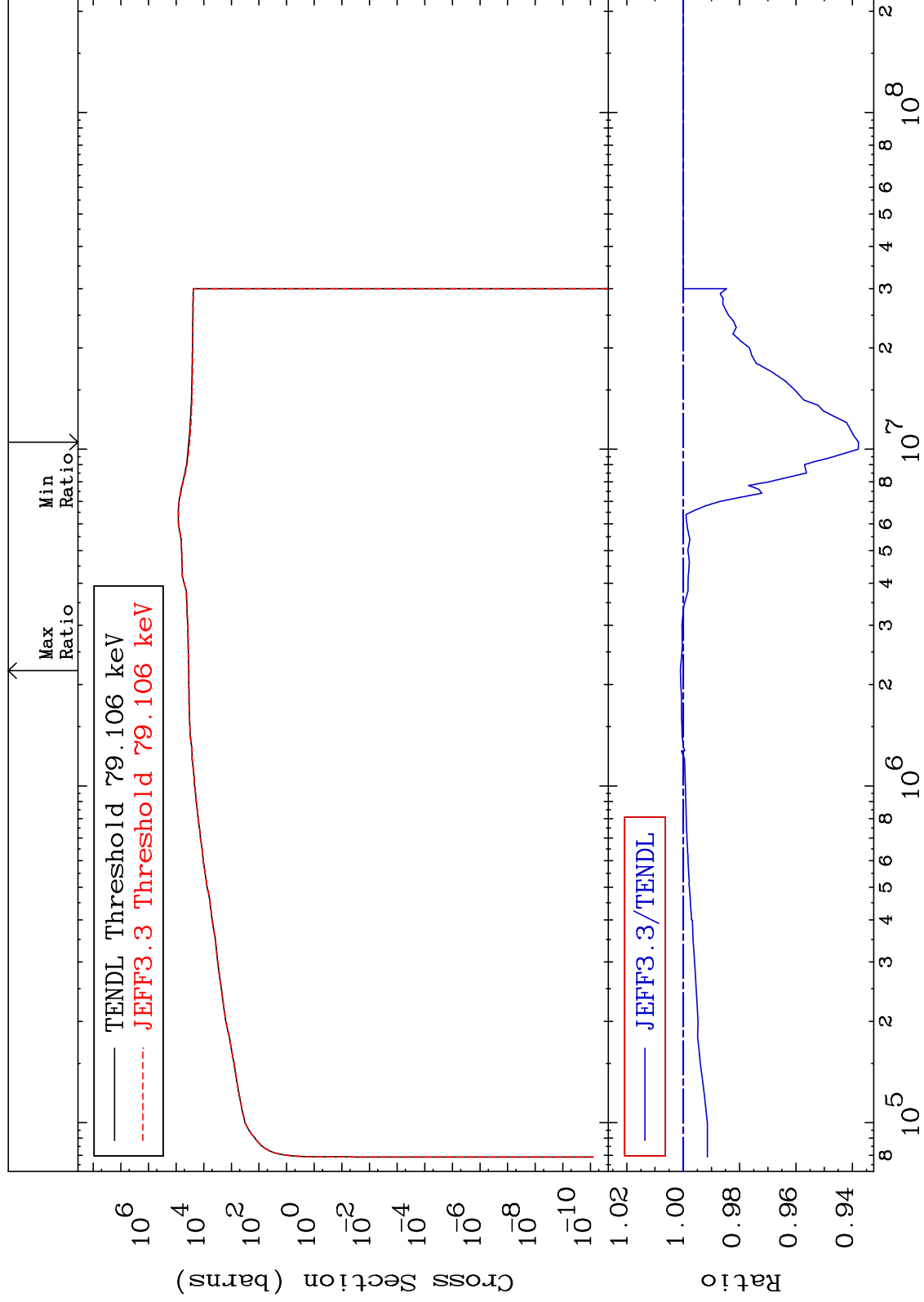
MAT 7040

Dpa inelastic (mt51-91)

70-Yb-173

-6.216 To 0.098 %

Cross Section

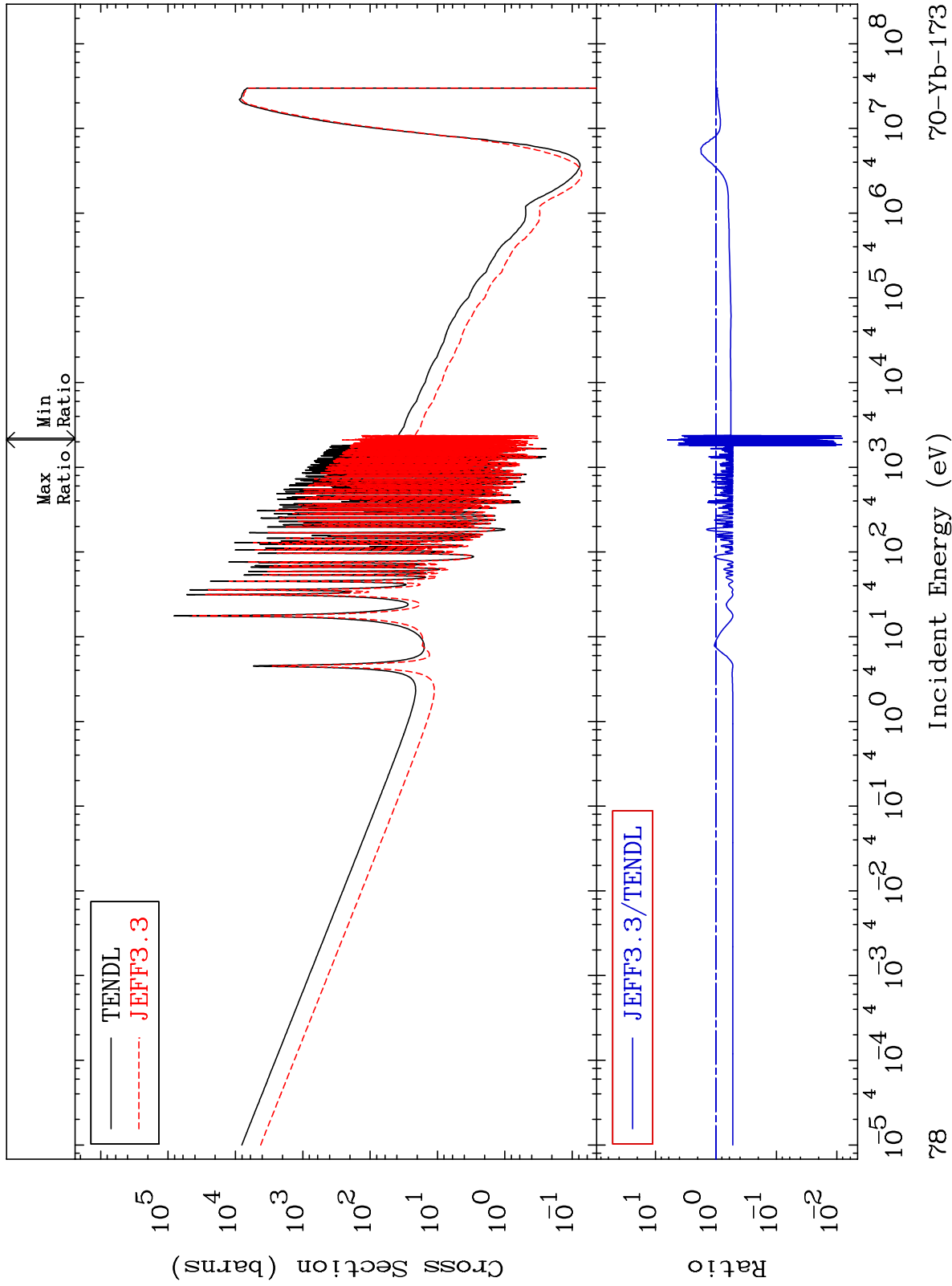


77

Incident Energy (eV)

70-Yb-173

MAT 7040 Dpa disappearance (mt102 -120) 70-Yb-173
Cross Section -99.20 To 530.8 %



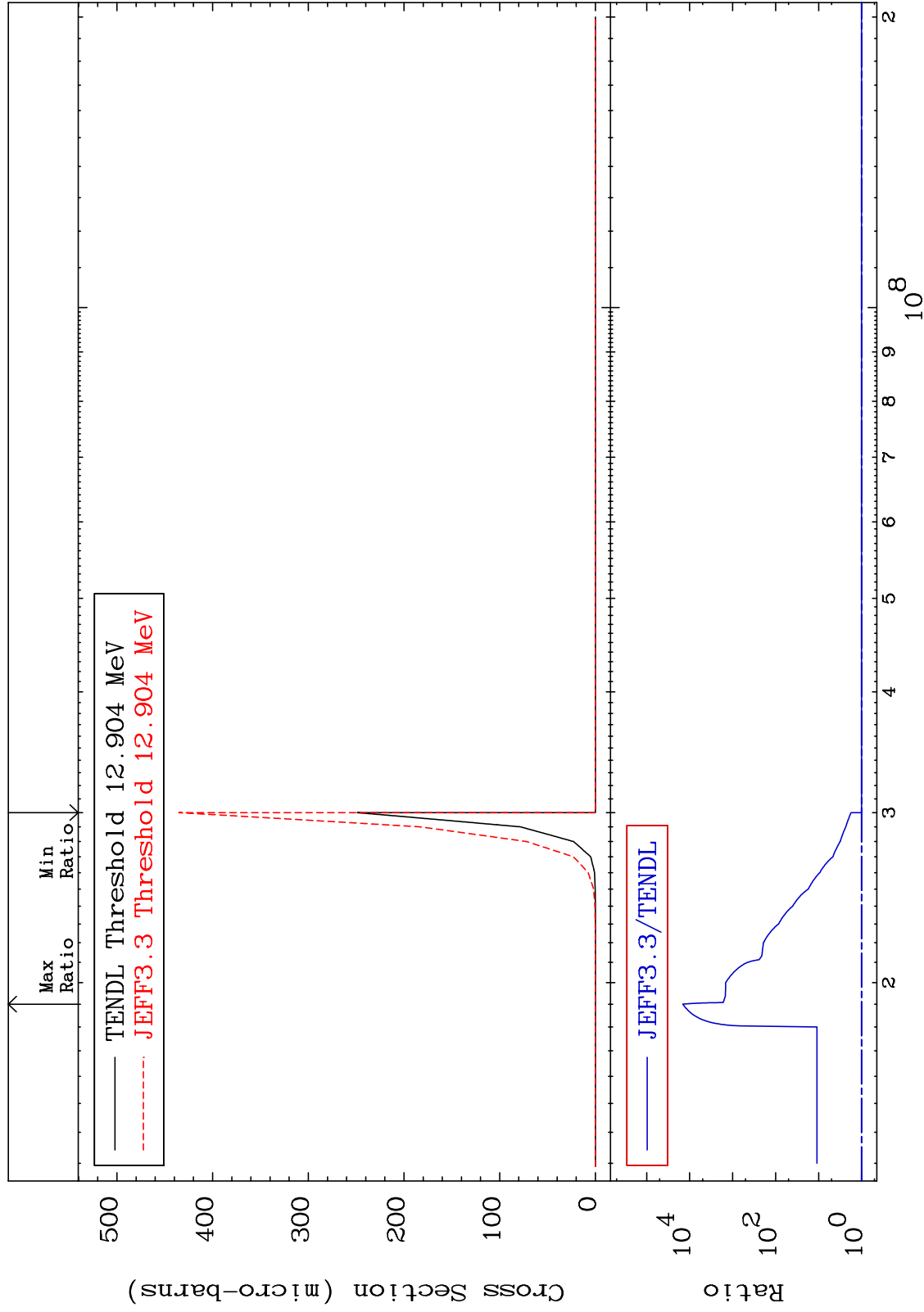
78 Incident Energy (eV) 70-Yb-173

MAT 7040

(n,3n) α :68-Er-167g

70-Yb-173

Radionuclide Production Cross Section 0.000 To 9999. %



79

Incident Energy (eV)

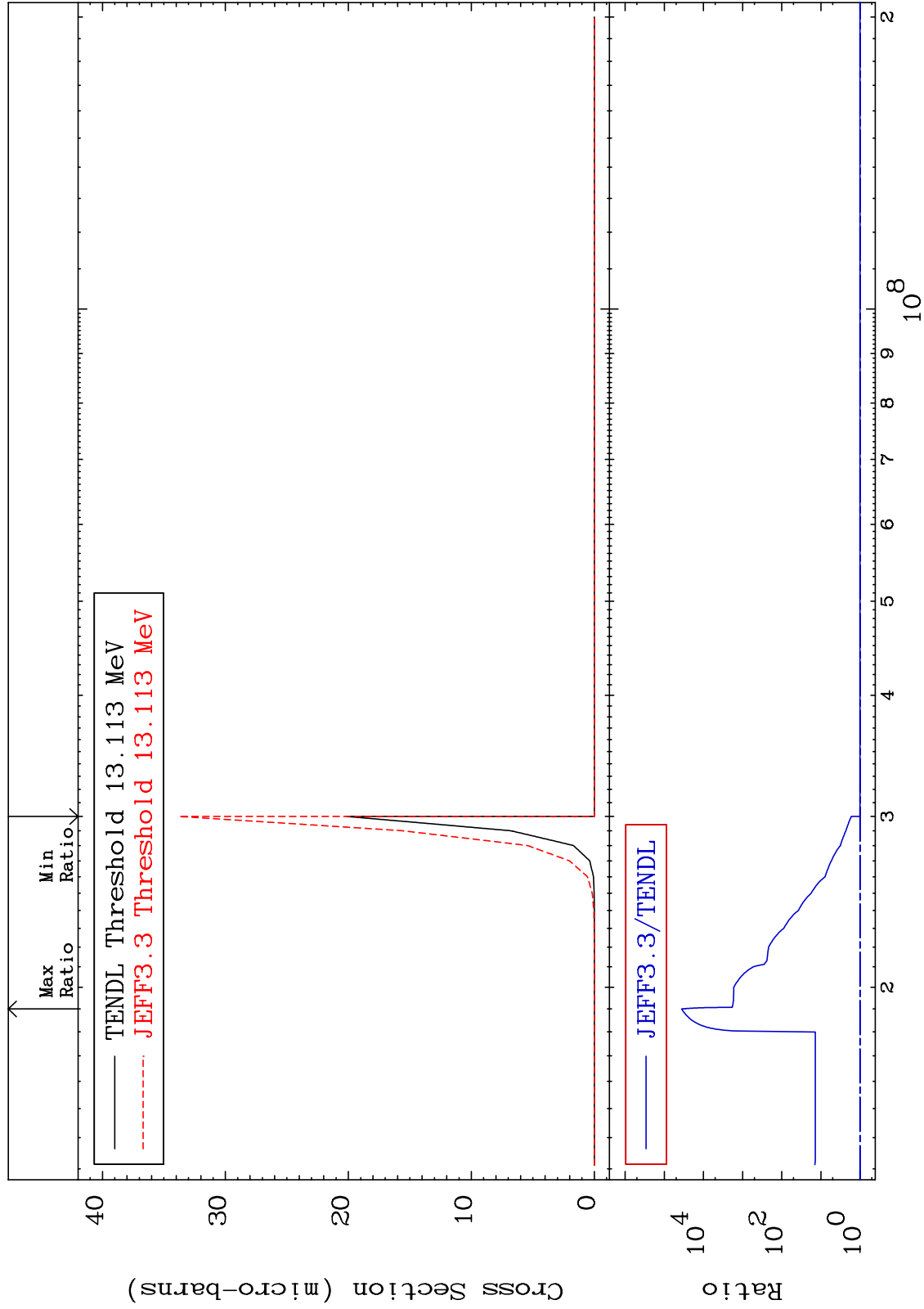
70-Yb-173

MAT 7040

(n,3n) α : 68-Er-167m3

70-Yb-173

Radionuclide Production Cross Section 0.000 To 9999. %

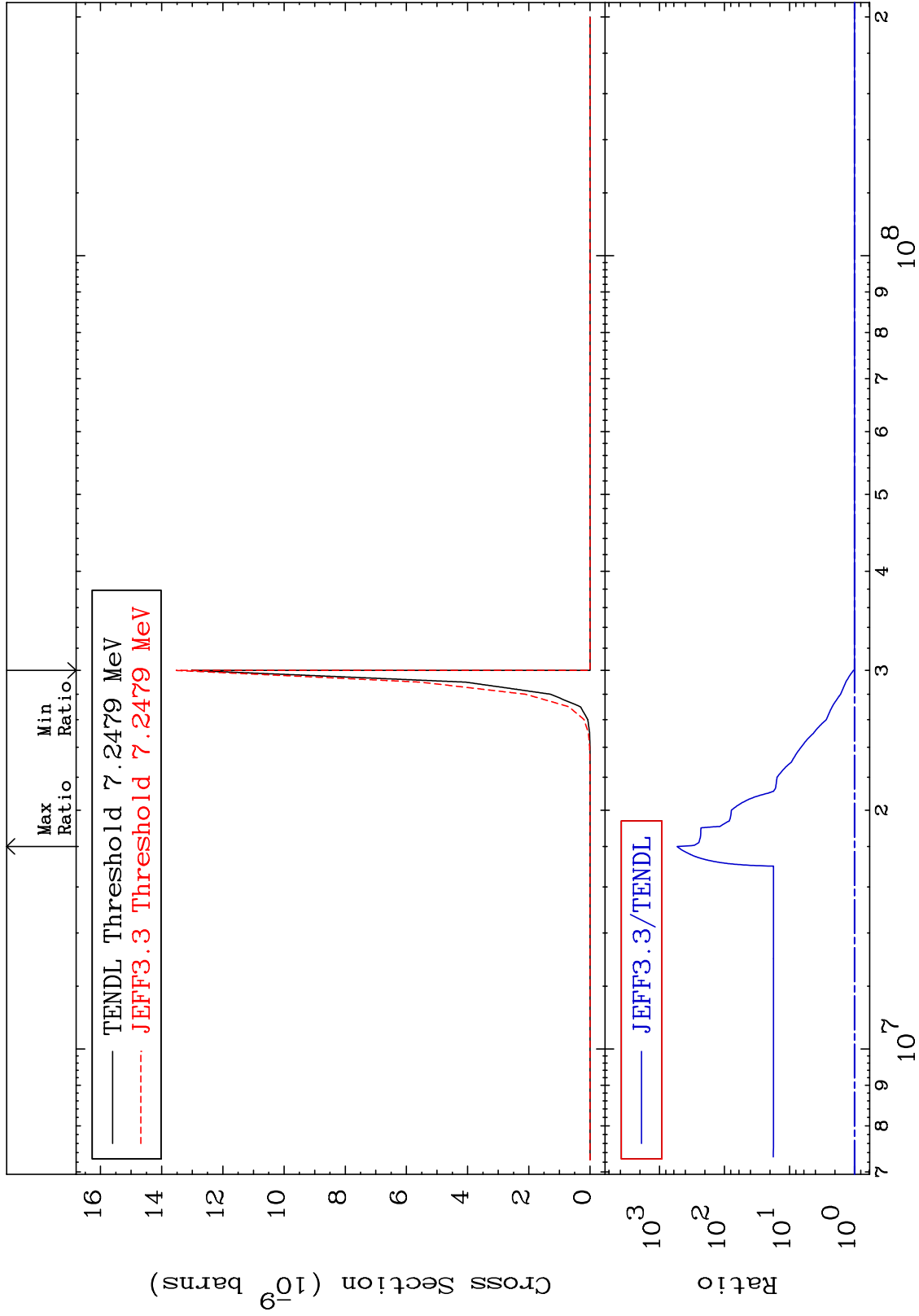


MAT 7040

(n, n') p α : 67-Ho-168g

70-Yb-173

Radionuclide Production Cross Section 0.000 To 9999. %



81

Incident Energy (eV)

70-Yb-173

MAT 7040

(n, n') p α : 67-Ho-168m1

70-Yb-173

Radionuclide Production Cross Section 0.000 To 9999. %

