

Program Complot
(Version 2018-1)

by

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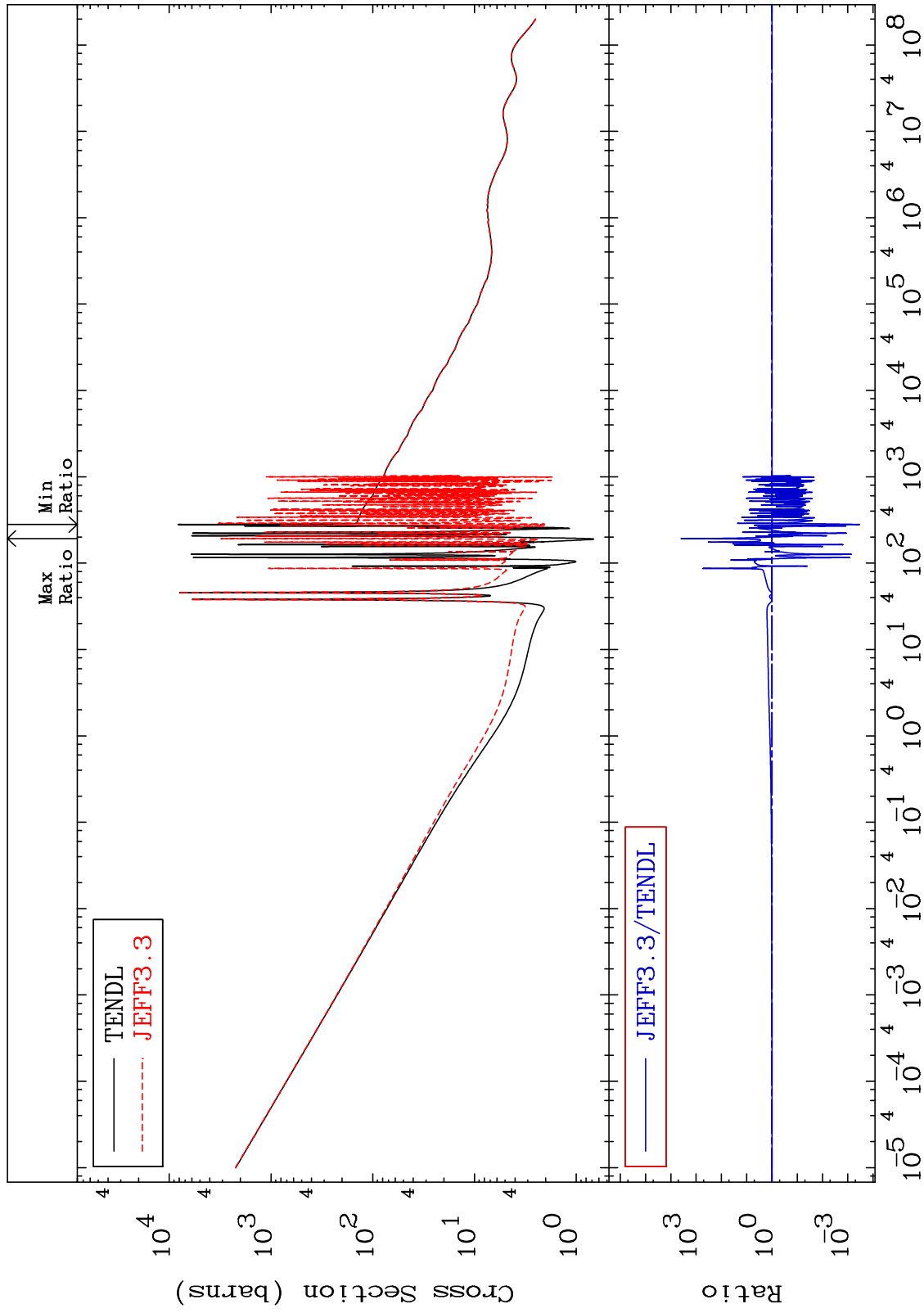
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6631

Total
Cross Section

66-Dy-158
-99.97 To 9999. %



1

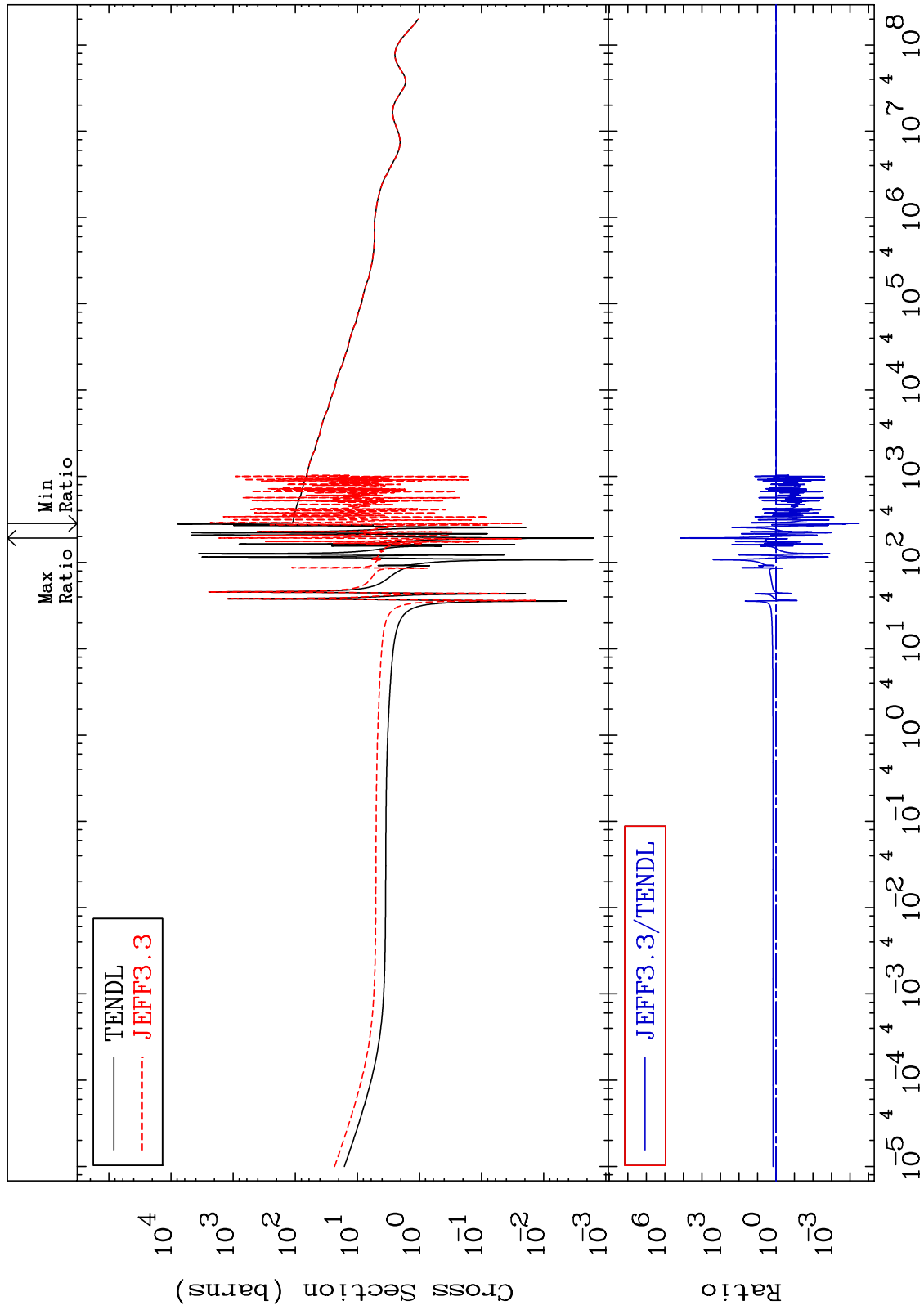
Incident Energy (eV)

66-Dy-158

MAT 6631

Elastic
Cross Section

66-Dy-158
-100.0 To 9999. %

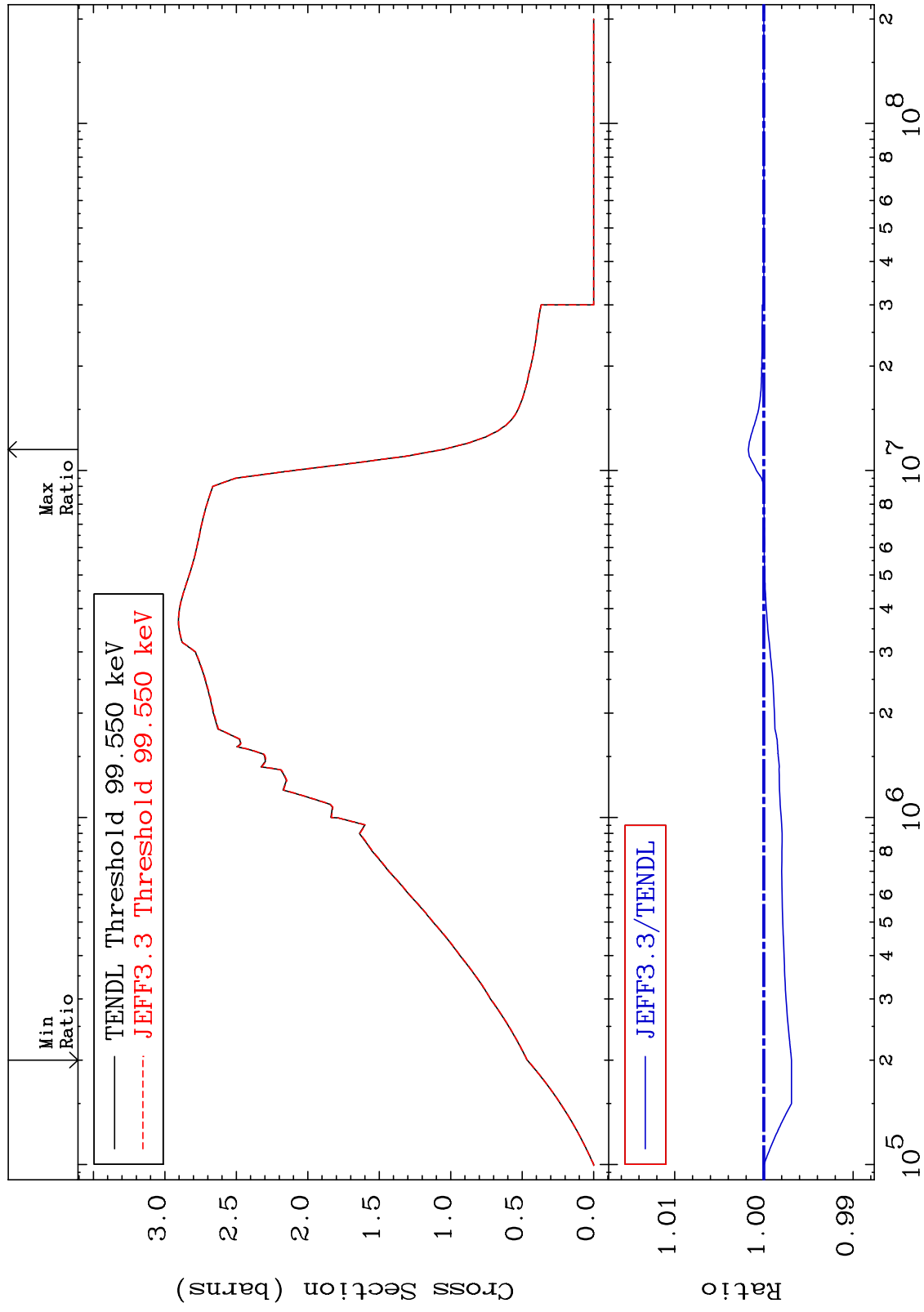


2

Incident Energy (eV)

66-Dy-158

MAT 6631 Inelastic Cross Section 66-Dy-158 -0.310 To 0.174 %



3 Incident Energy (eV) 66-Dy-158

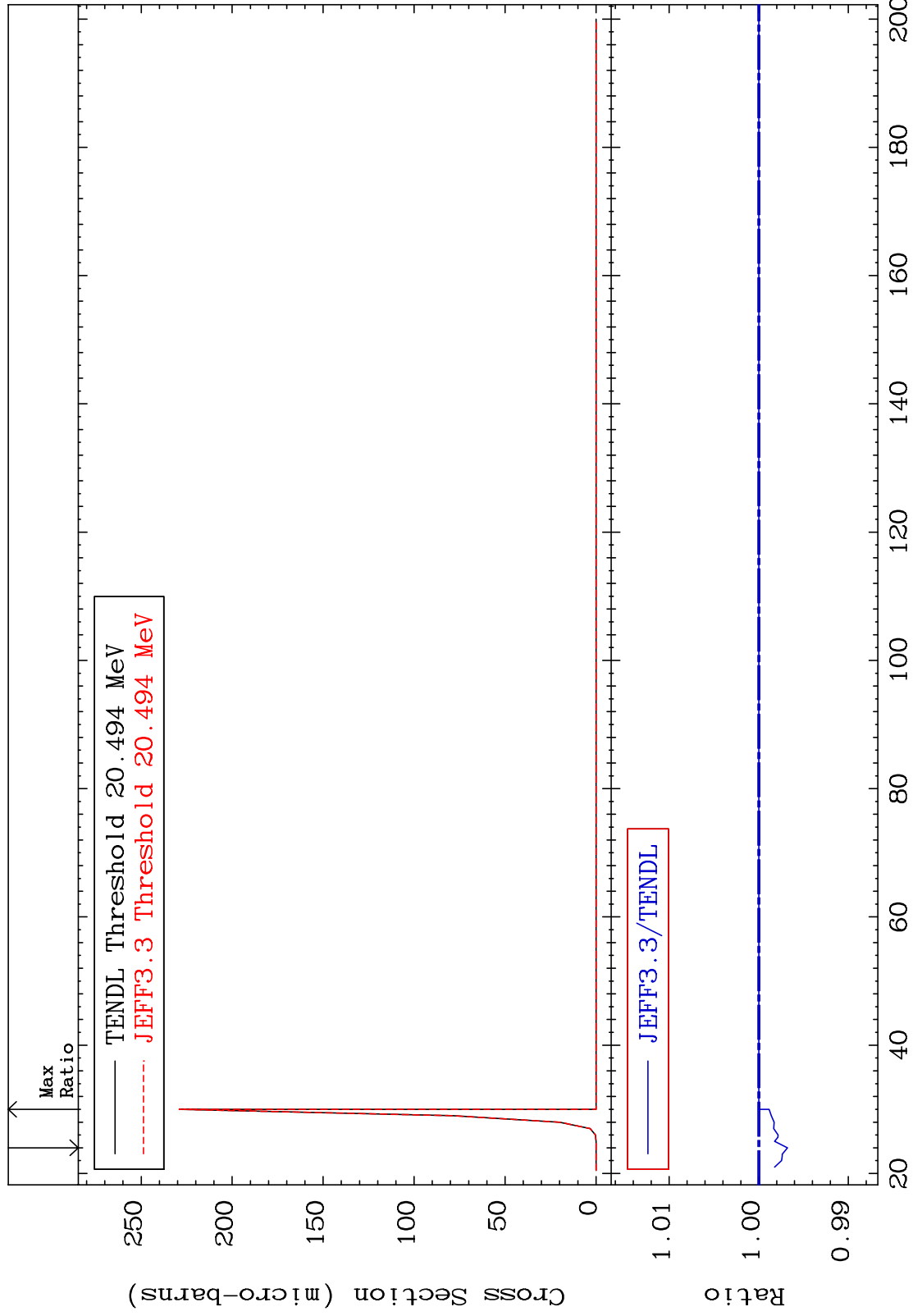
MAT 6631

(n,2n) d

66-Dy-158

Cross Section

-0.320 To 0.000 %



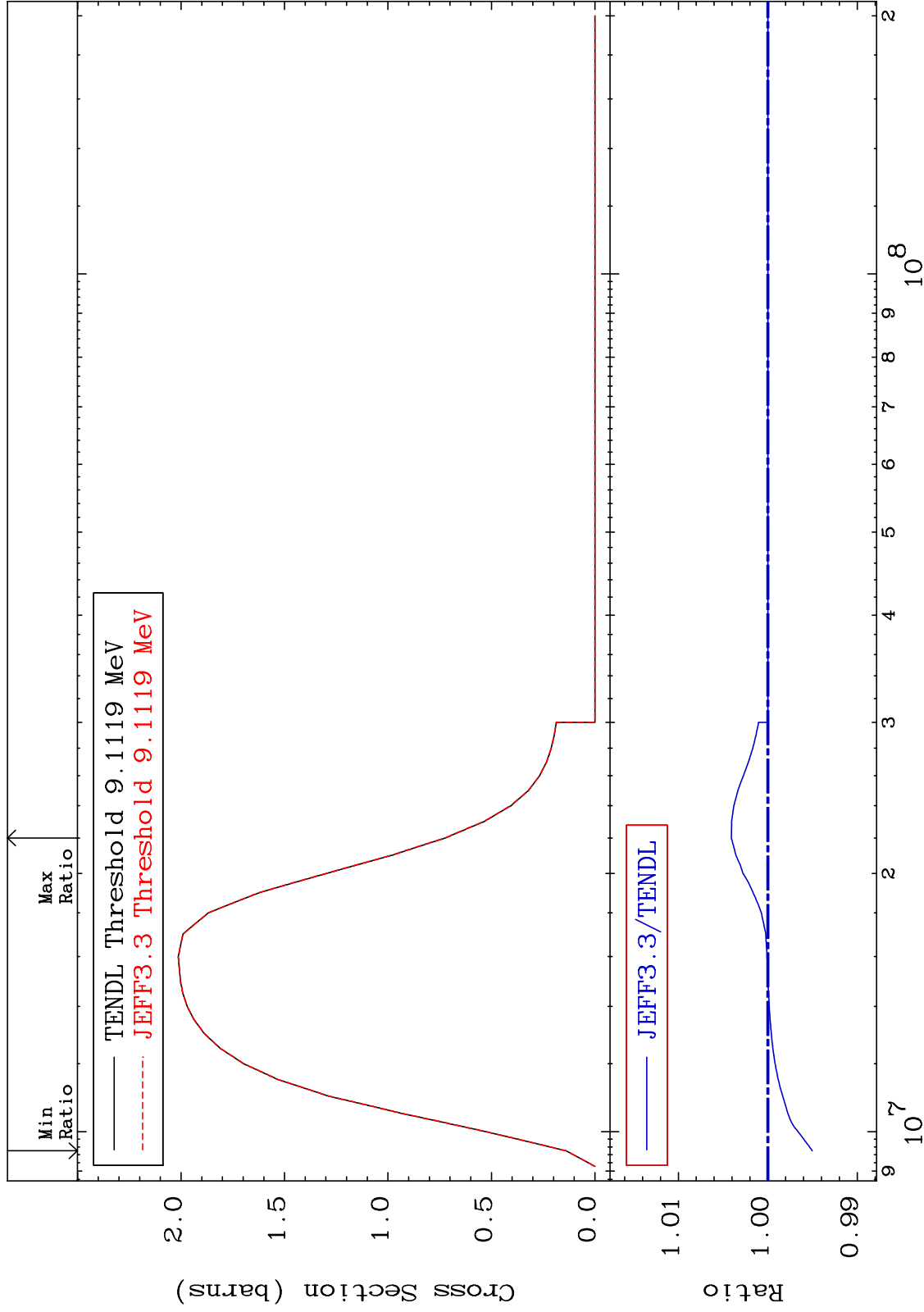
MAT 6631

(n,2n)

66-Dy-158

-0.498 To 0.407 %

Cross Section



Incident Energy (eV)

66-Dy-158

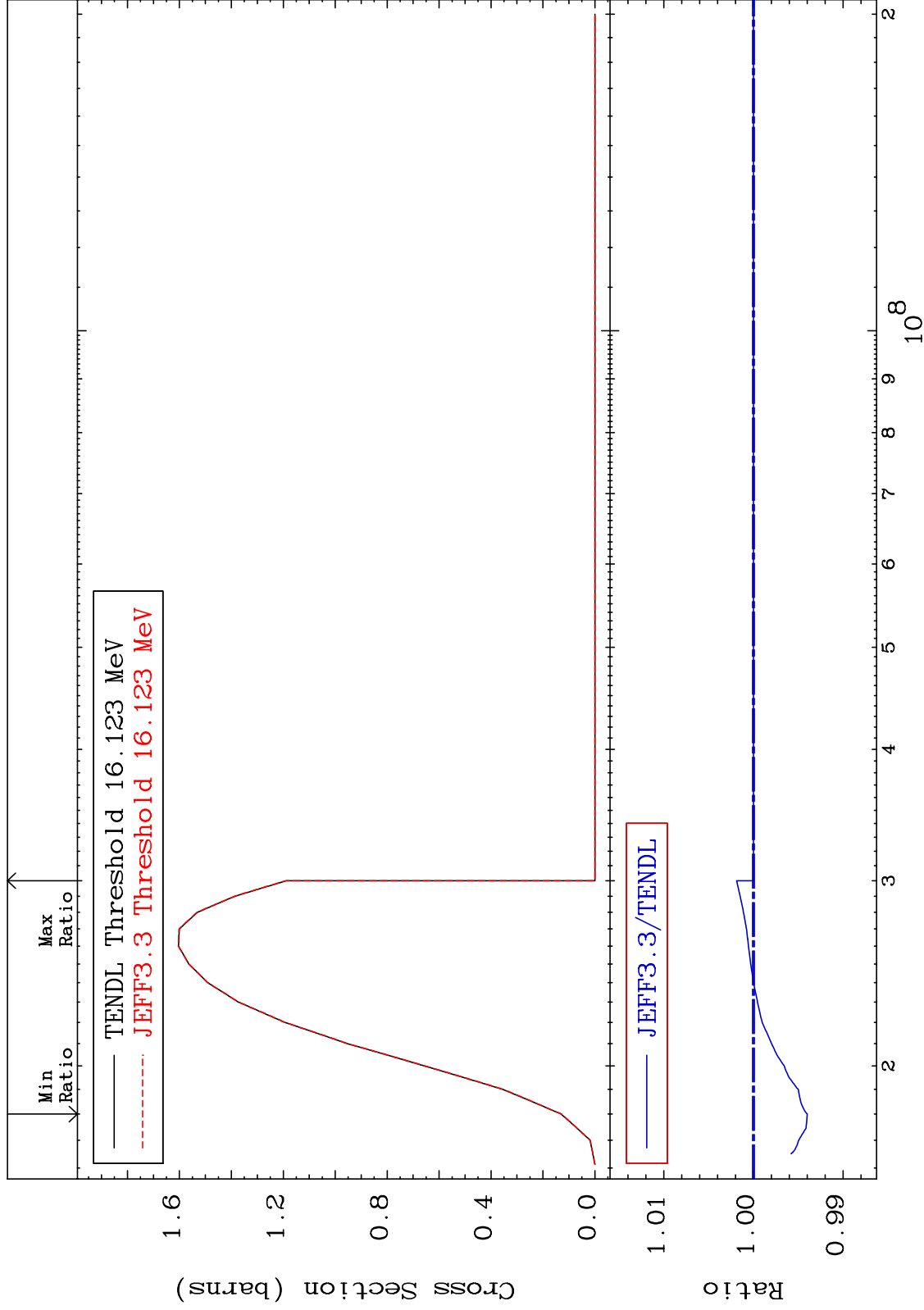
MAT 6631

(n,3n)

66-Dy-158

Cross Section

-0.599 To 0.188 %



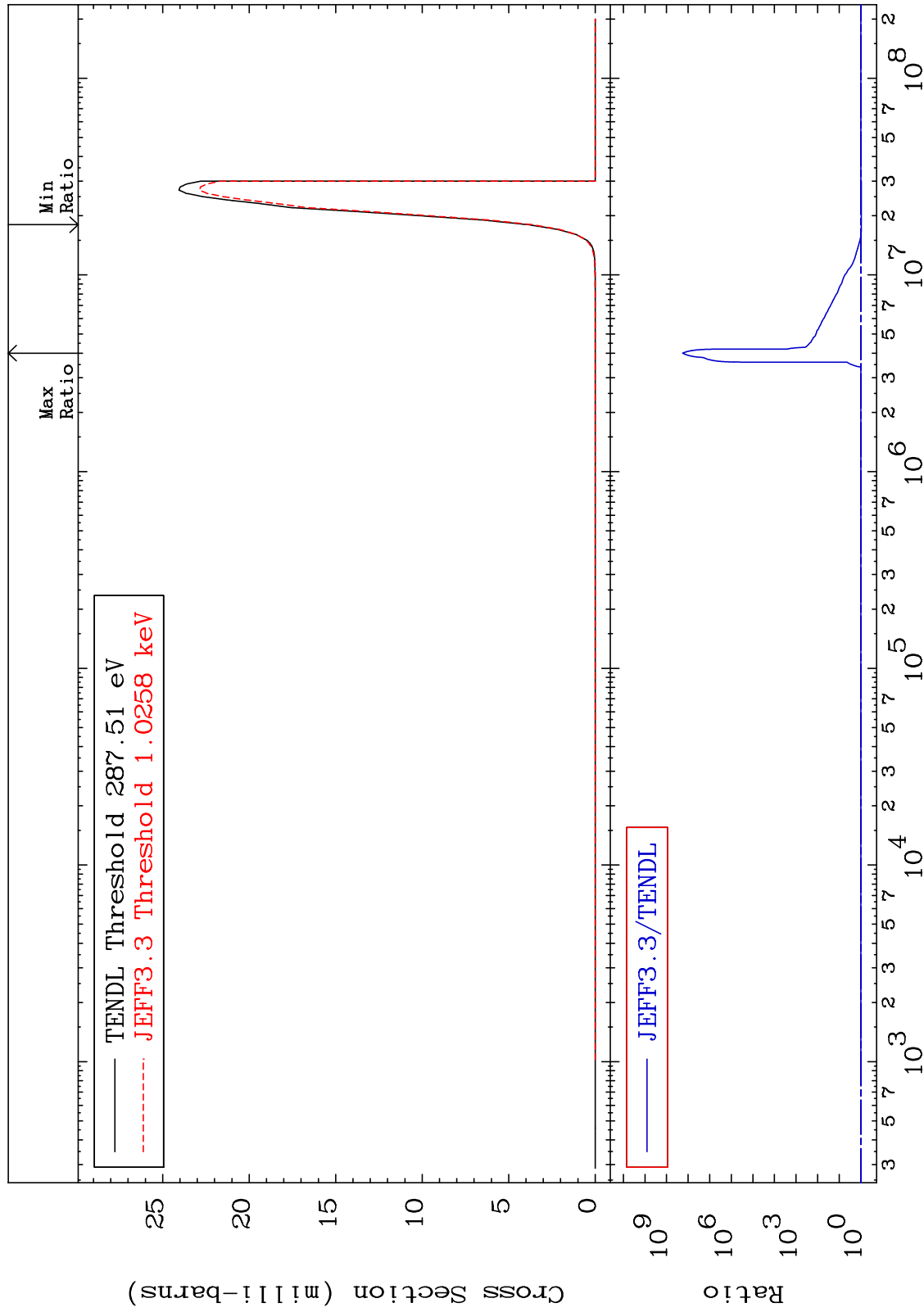
MAT 6631

(n, n') α

66-Dy-158

Cross Section

-5.698 To 9999. %



7

Incident Energy (eV)

66-Dy-158

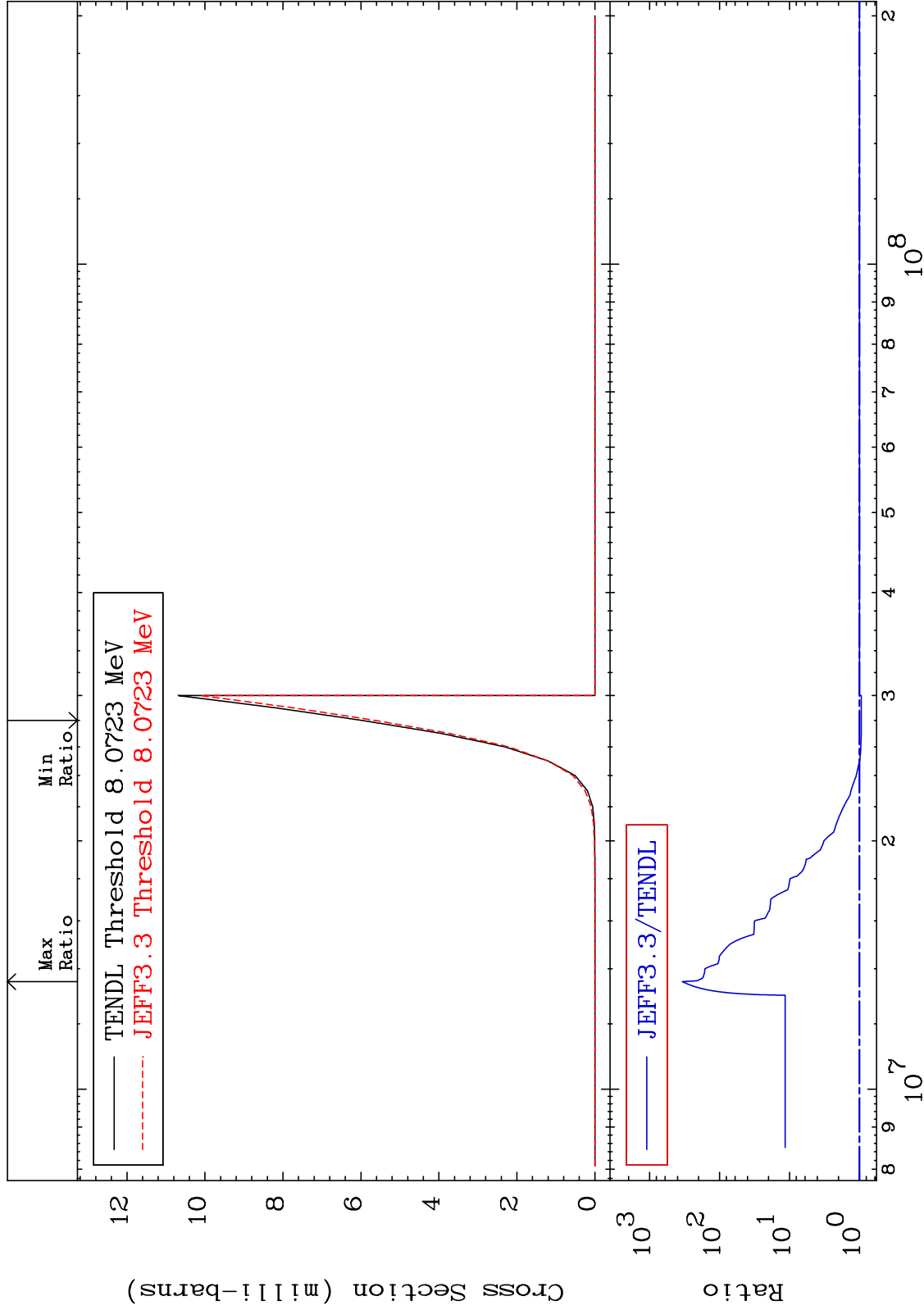
MAT 6631

(n,2n) α

66-Dy-158

Cross Section

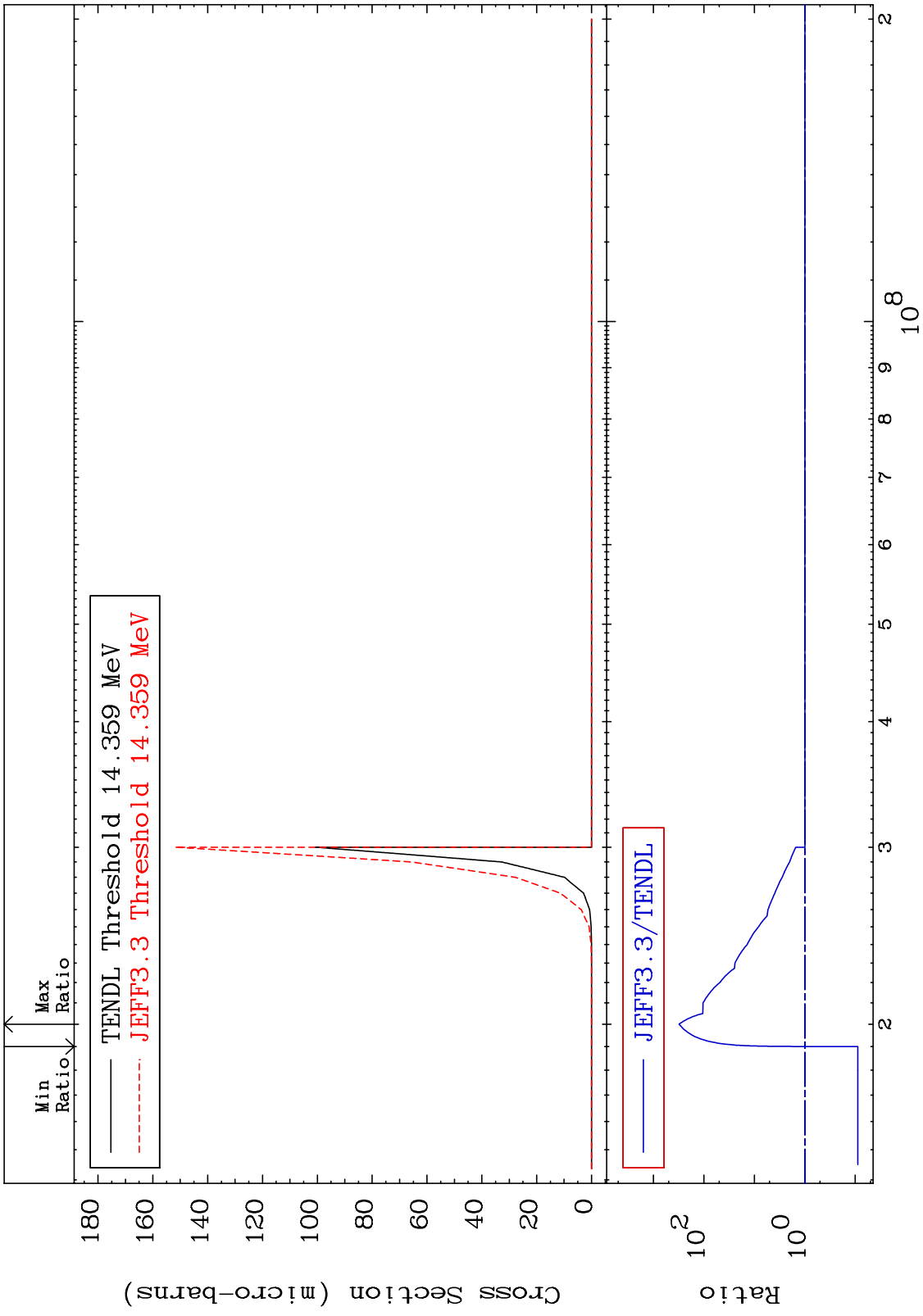
-5.672 To 9999. %



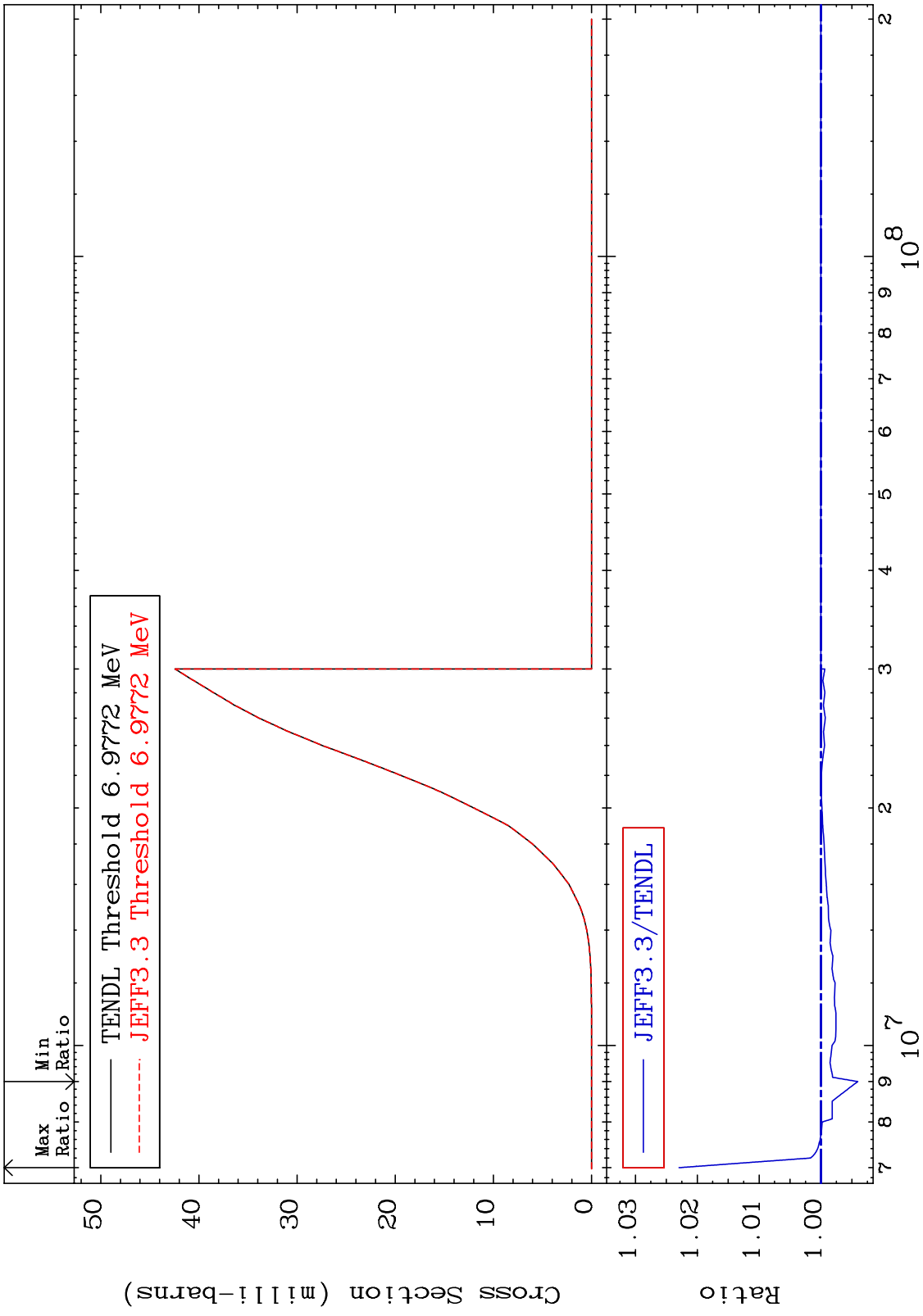
8

Incident Energy (eV)

66-Dy-158

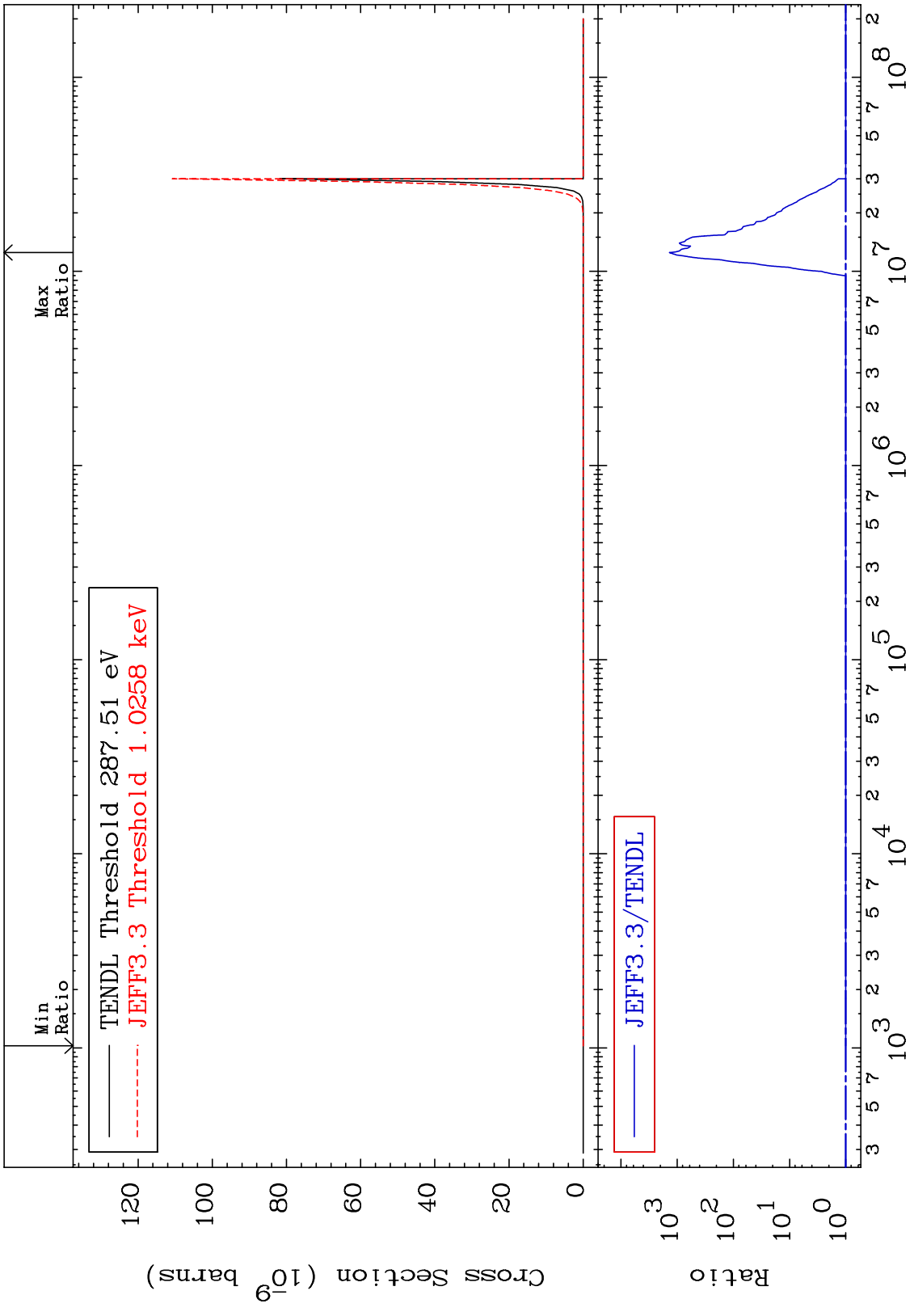


MAT 6631 (n,n') p 66-Dy-158
 Cross Section -0.596 To 2.294 %

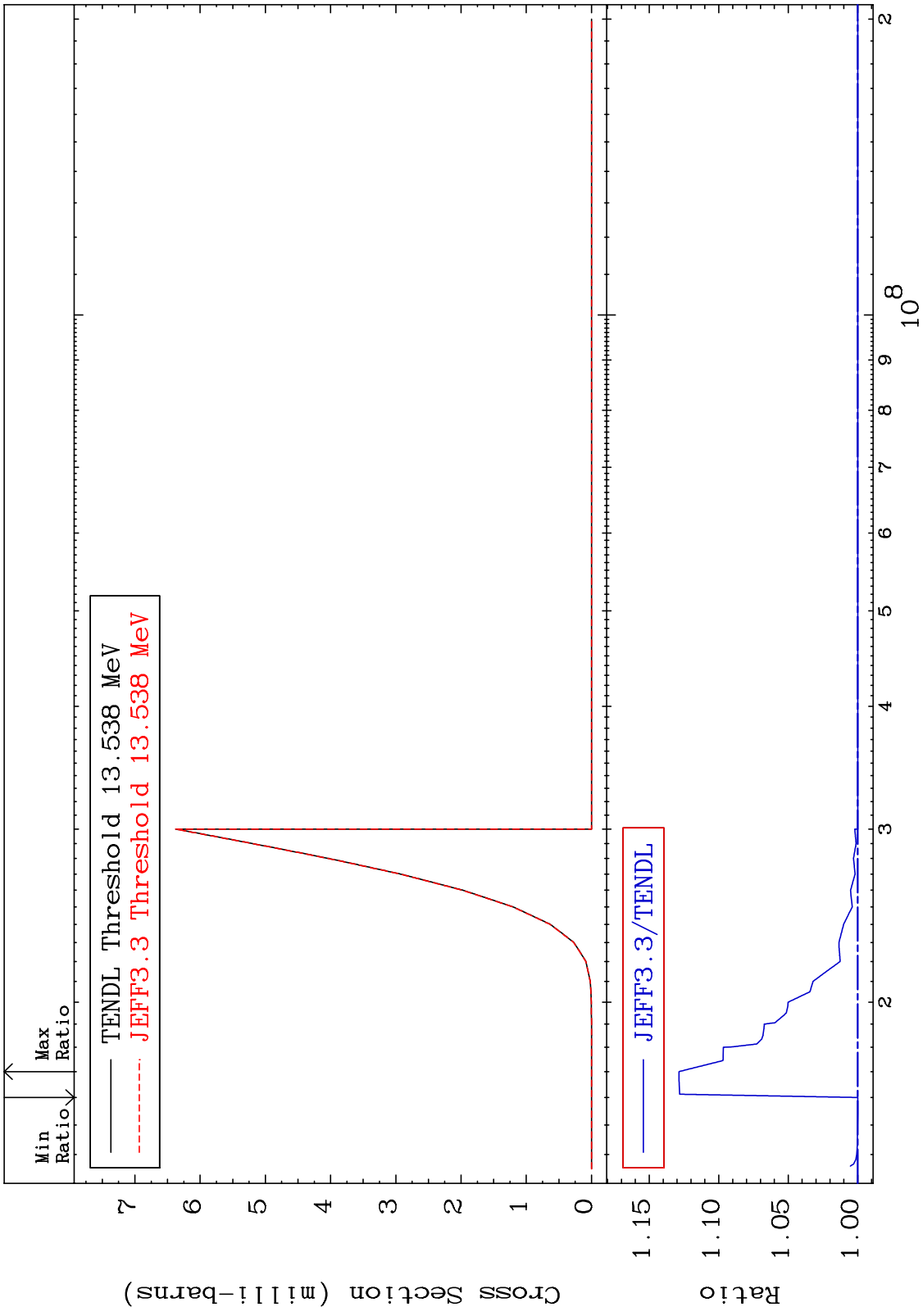


10 66-Dy-158

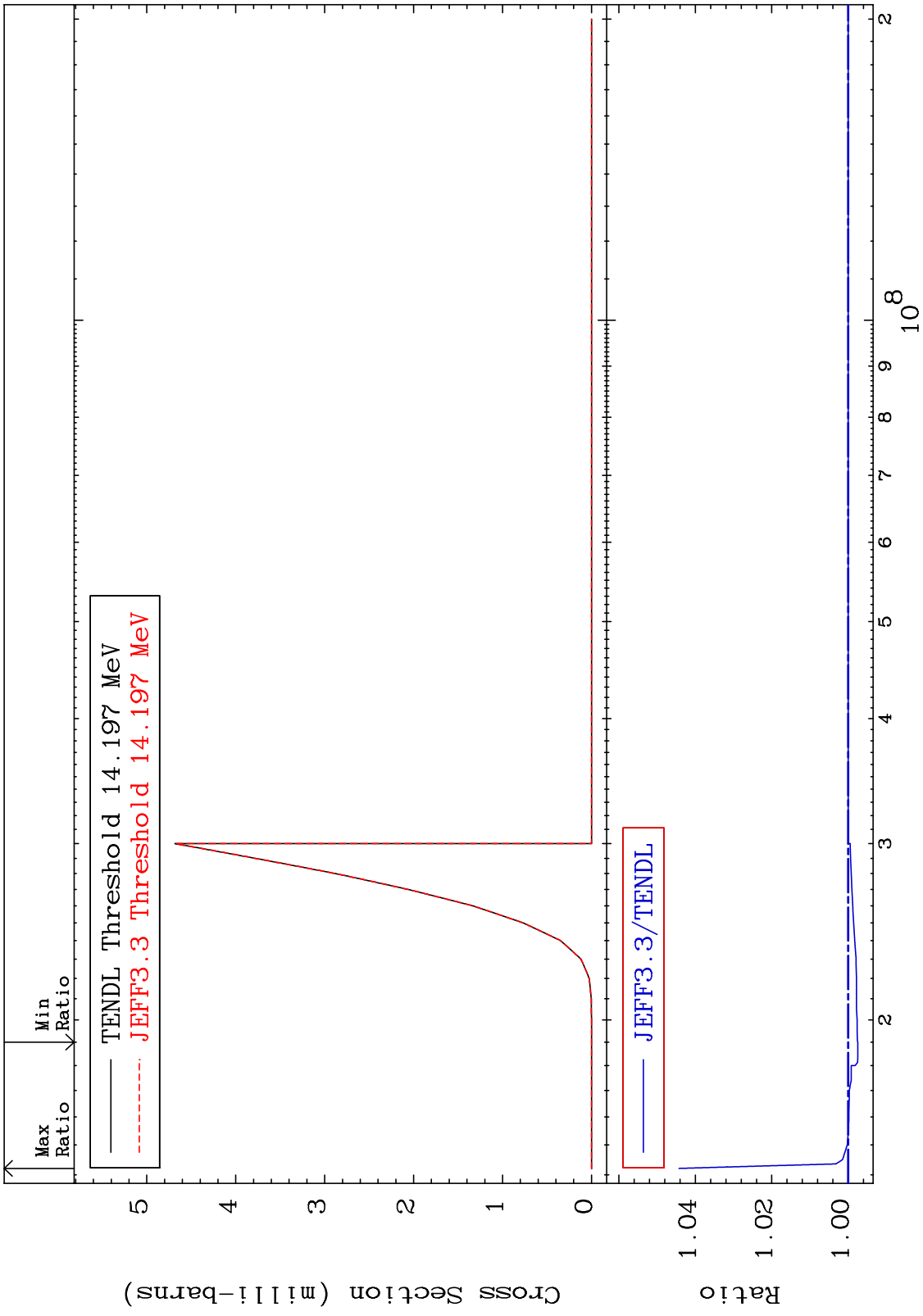
MAT 6631 (n,n') 2α Cross Section 66-Dy-158 To 9999. %



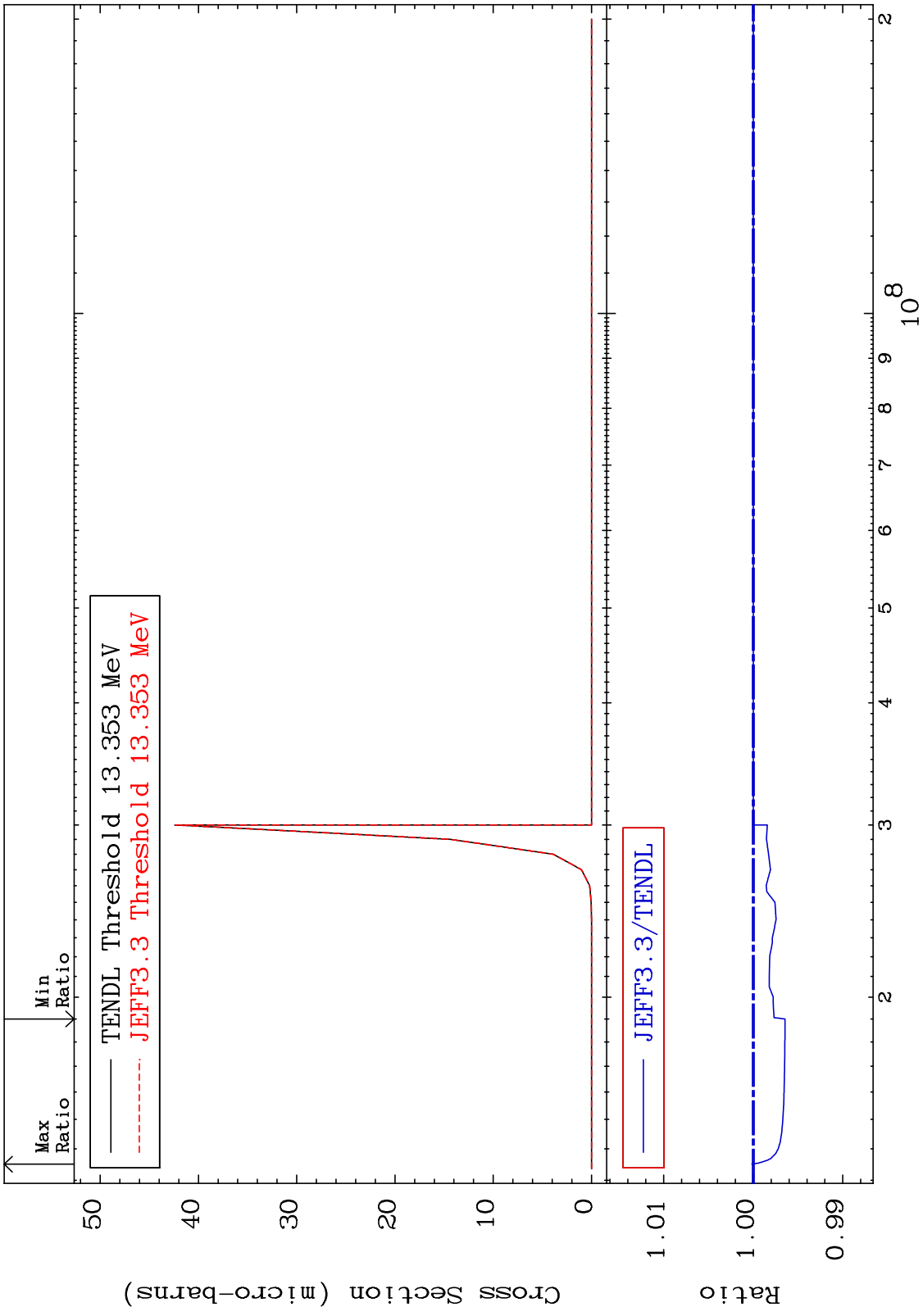
MAT 6631 (n, n') d 66-Dy-158
 Cross Section -0.007 To 12.86 %



MAT 6631 (n, n') t 66-Dy-158
 Cross Section -0.253 To 4.427 %



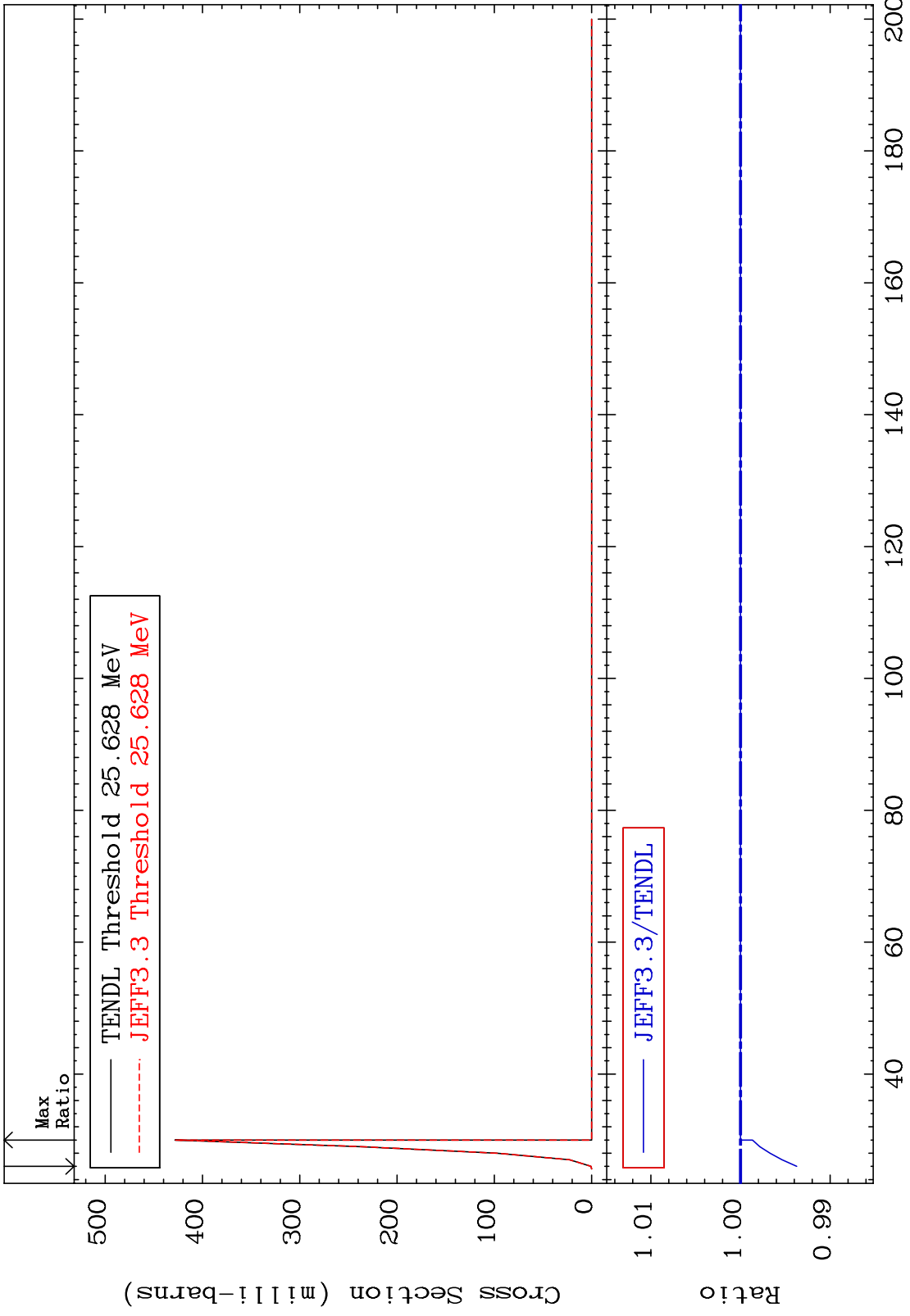
MAT 6631 (n, n') He-3 66-Dy-158
Cross Section -0.355 To 0.016 %



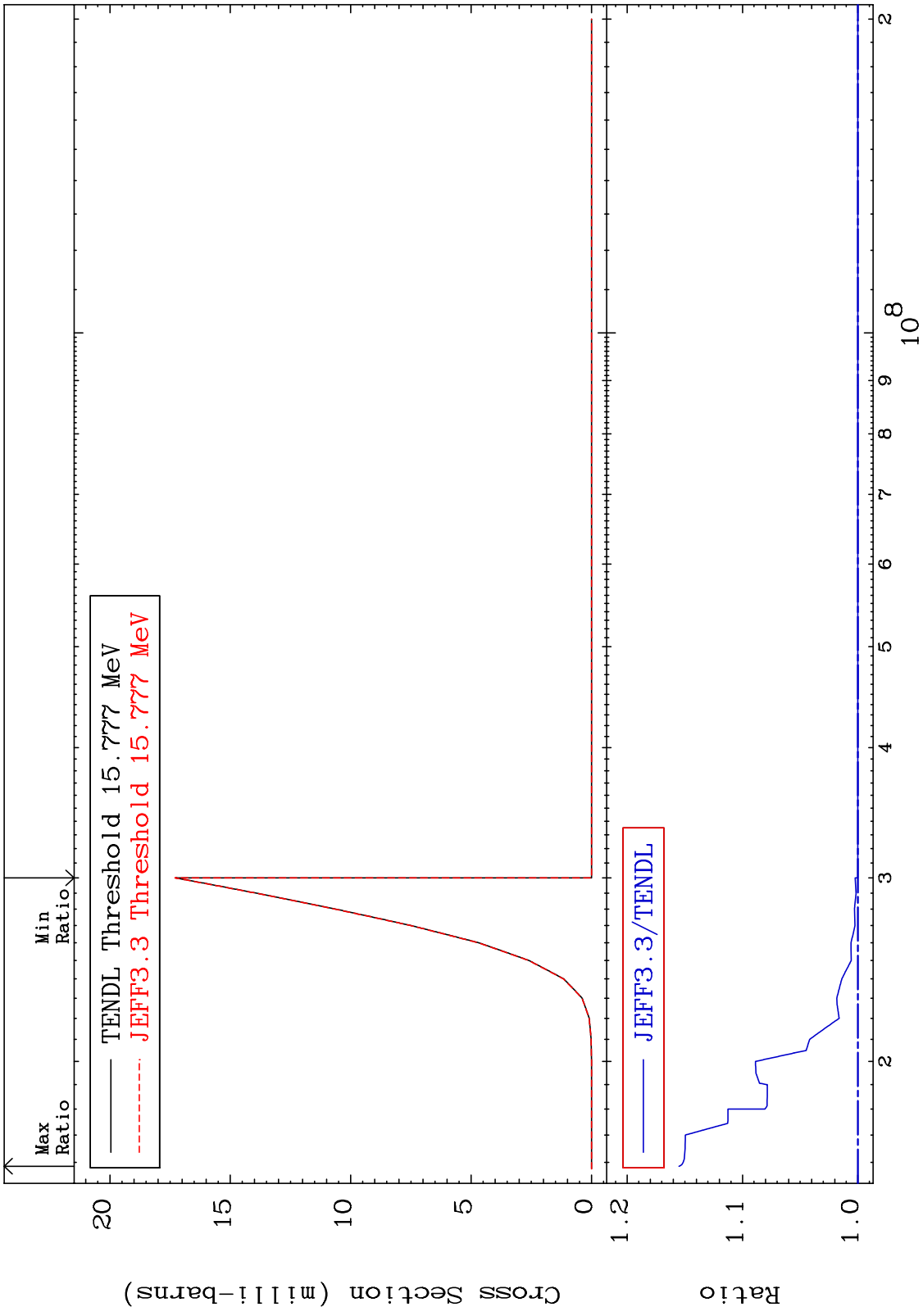
66-Dy-158

Incident Energy (eV)

MAT 6631 (n,4n) Cross Section 66-Dy-158 -0.626 To 0.000 %



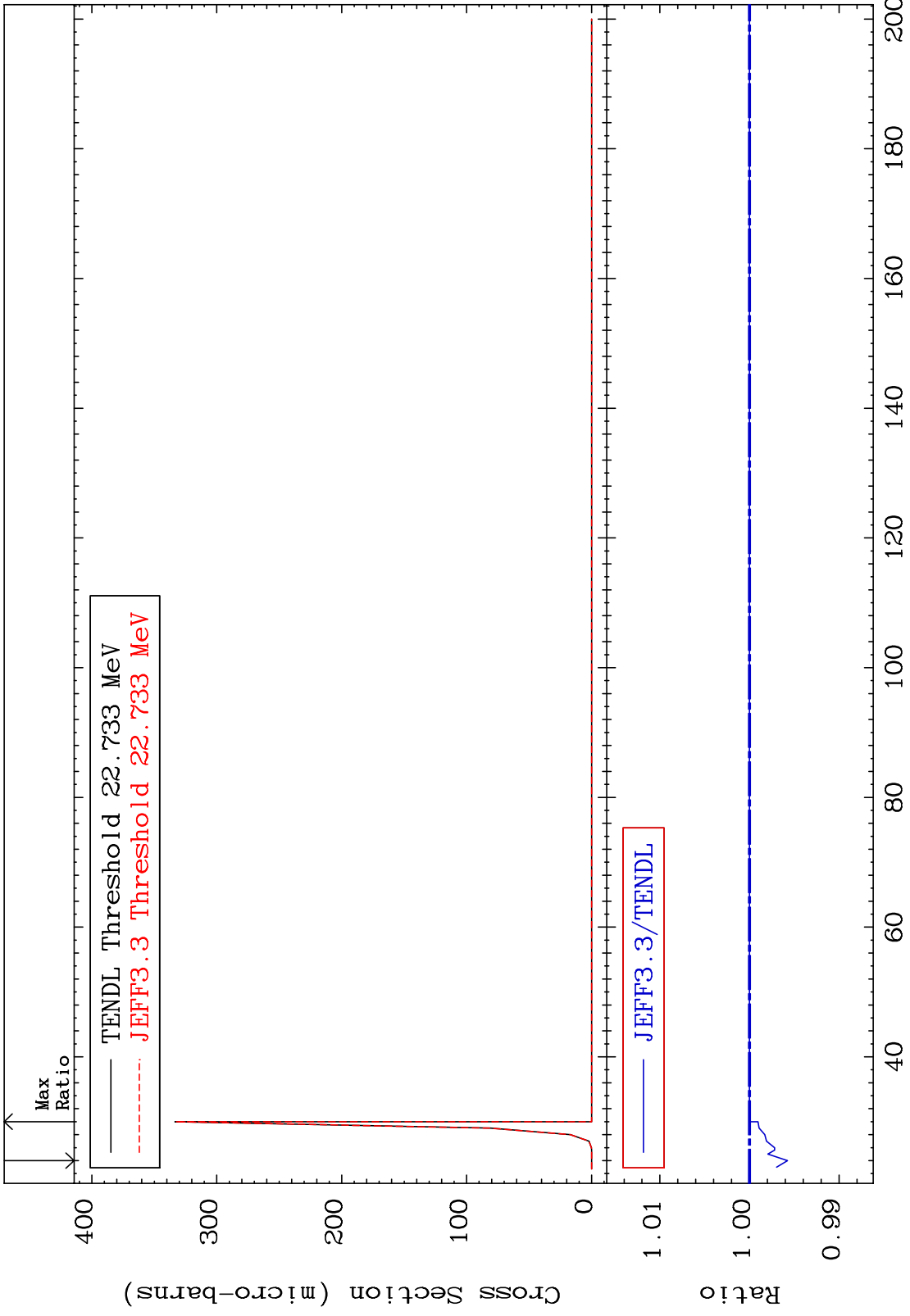
MAT 6631 (n,2n) p 66-Dy-158
Cross Section 0.000 To 15.51 %



66-Dy-158

Incident Energy (eV)

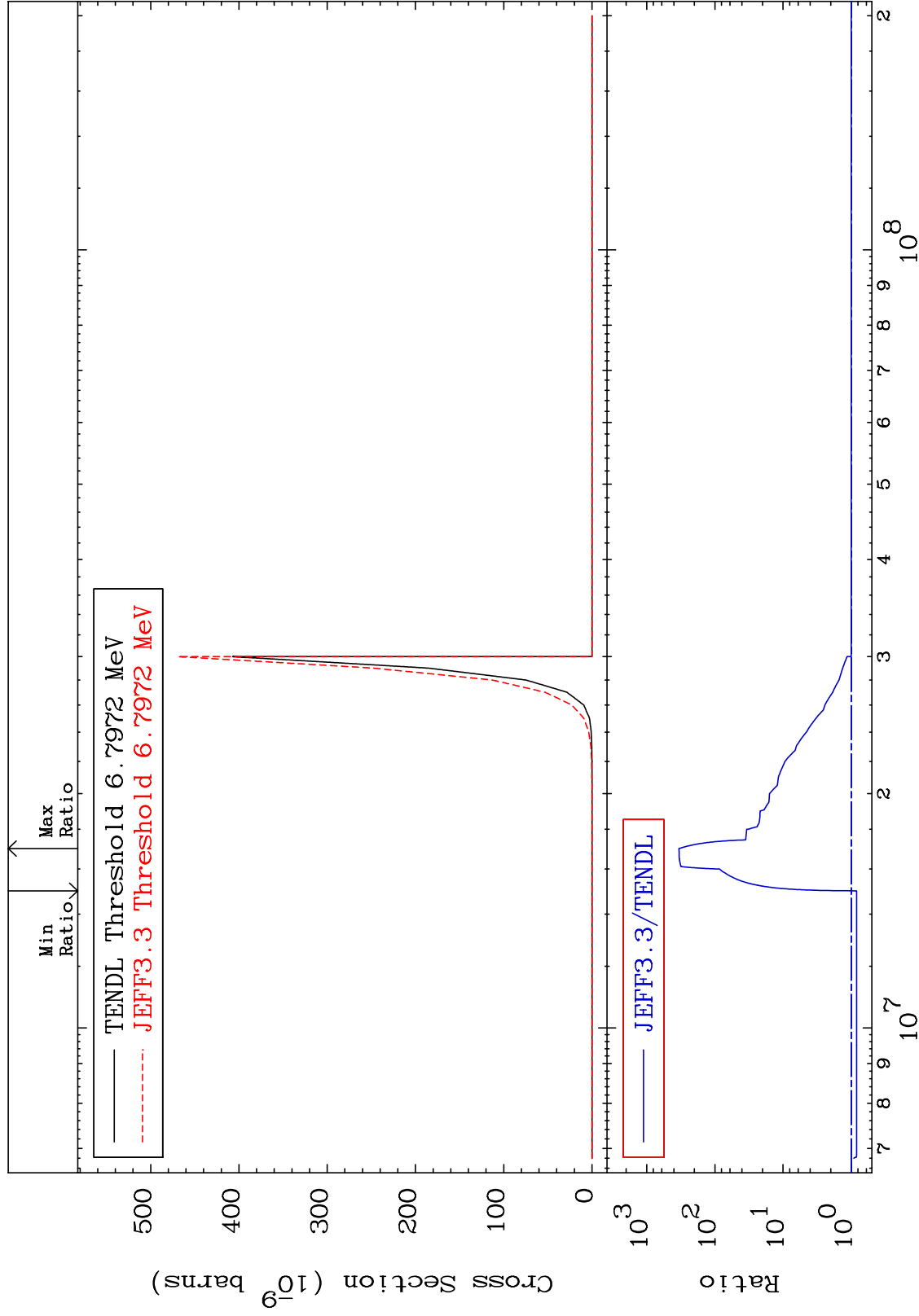
MAT 6631 (n,3n) p 66-Dy-158
Cross Section -0.424 To 0.000 %



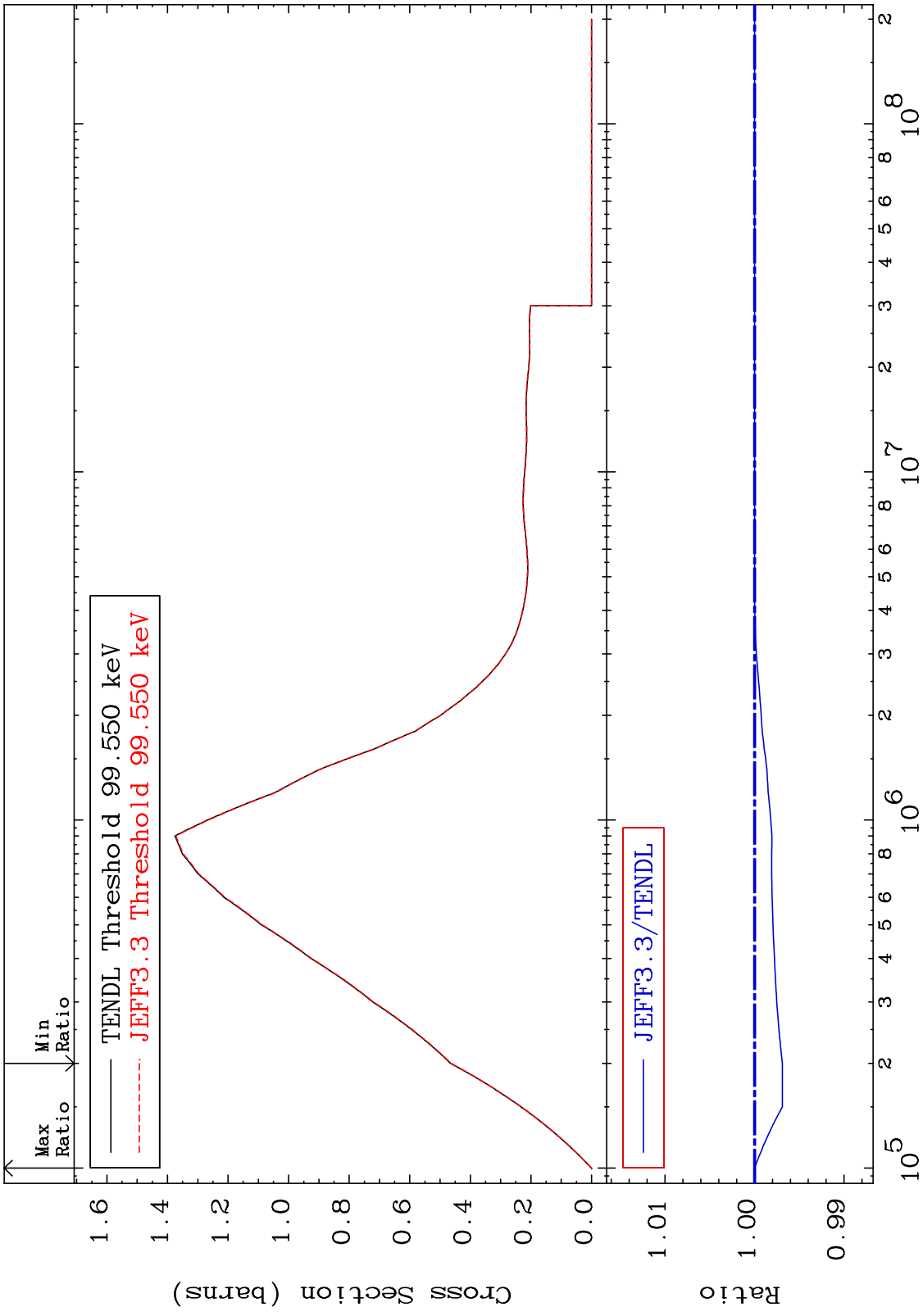
MAT 6631

(n,n') p α
Cross Section

66-Dy-158
-16.72 To 9999. %

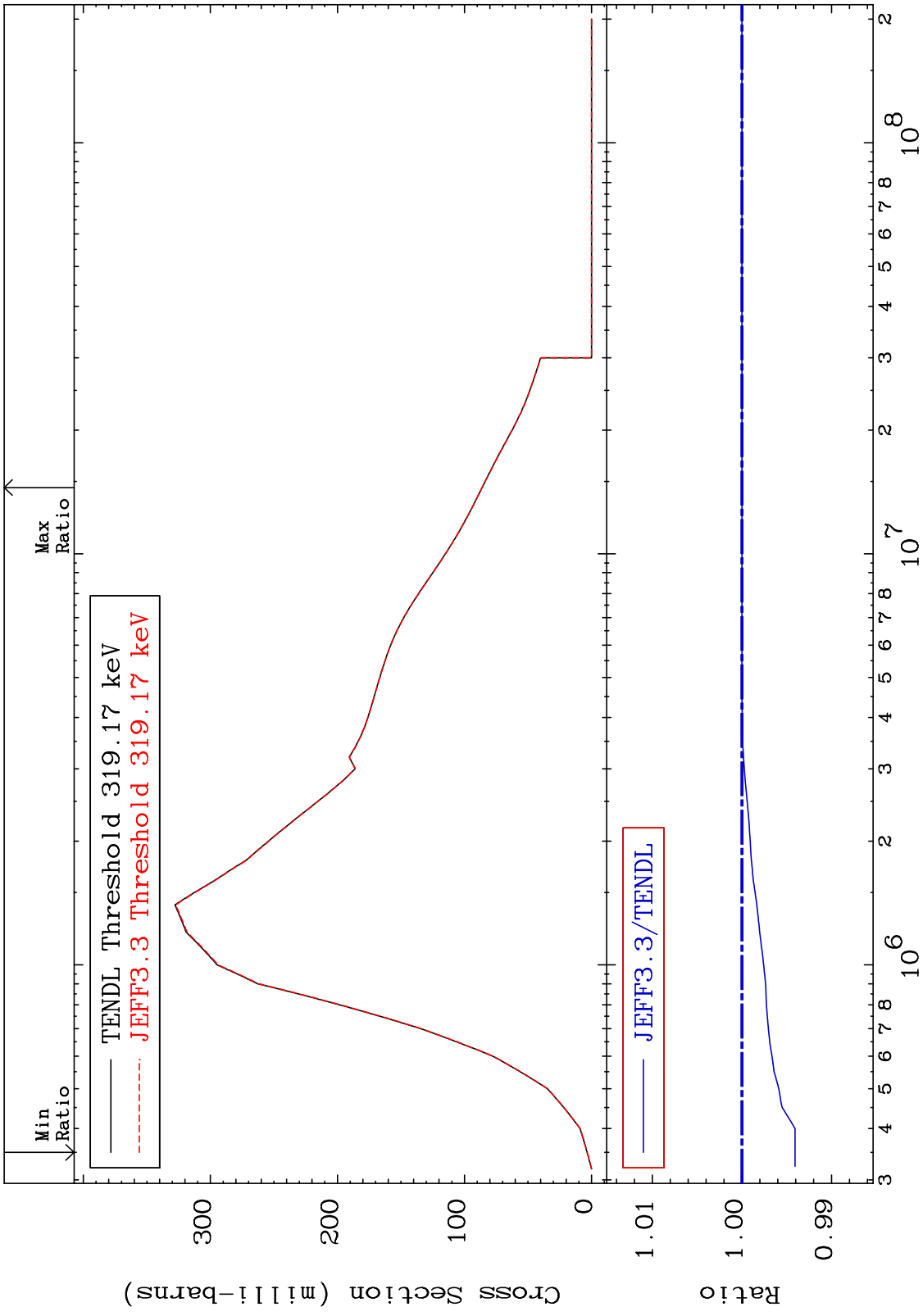


MAT 6631 MT= 51 (n,n') Level Cross Section 66-Dy-158 -0.310 To 0.000 %

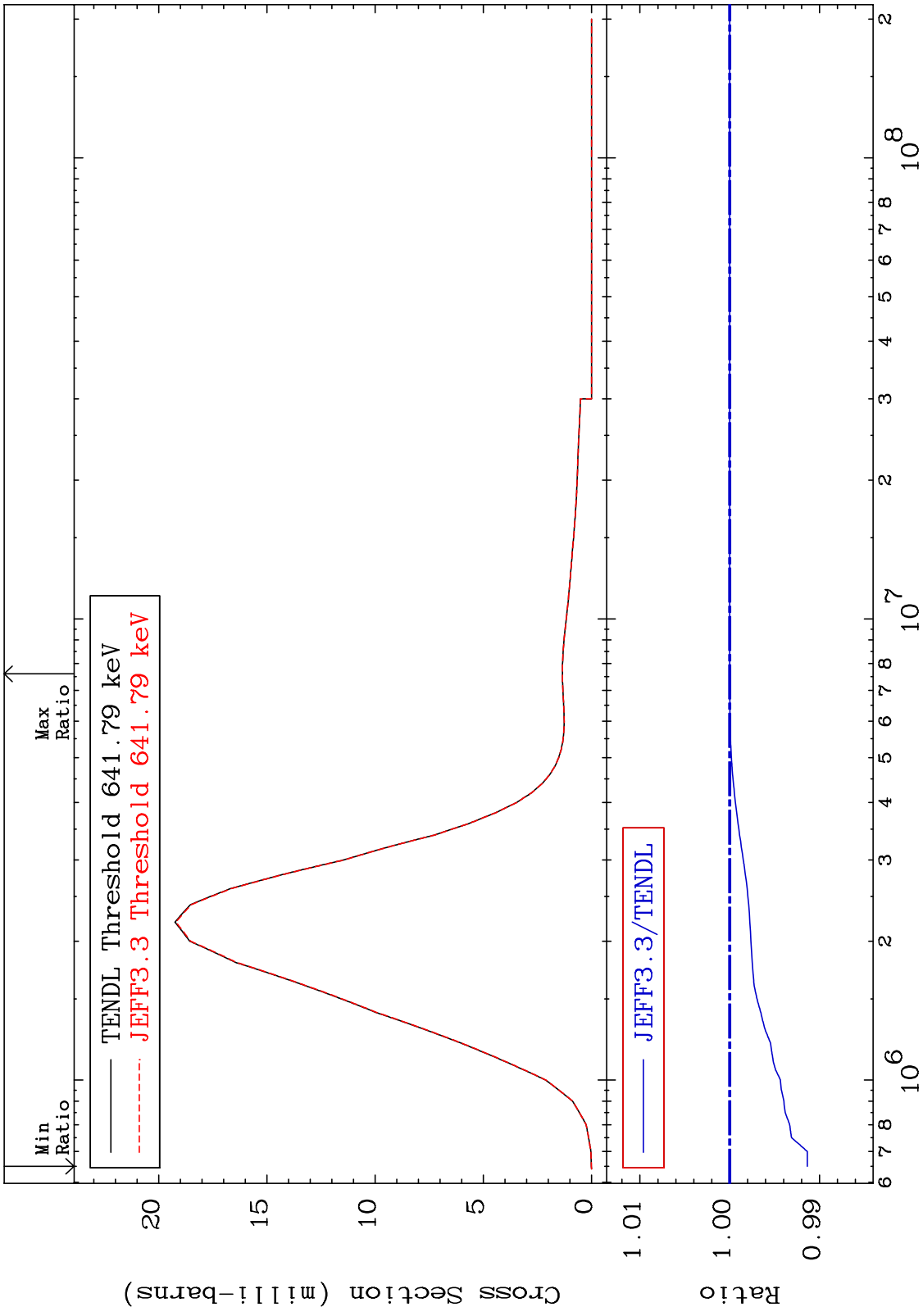


20 Incident Energy (eV) 66-Dy-158

MAT 6631 MT= 52 (n,n') Level Cross Section 66-Dy-158 -0.592 To 0.000 %



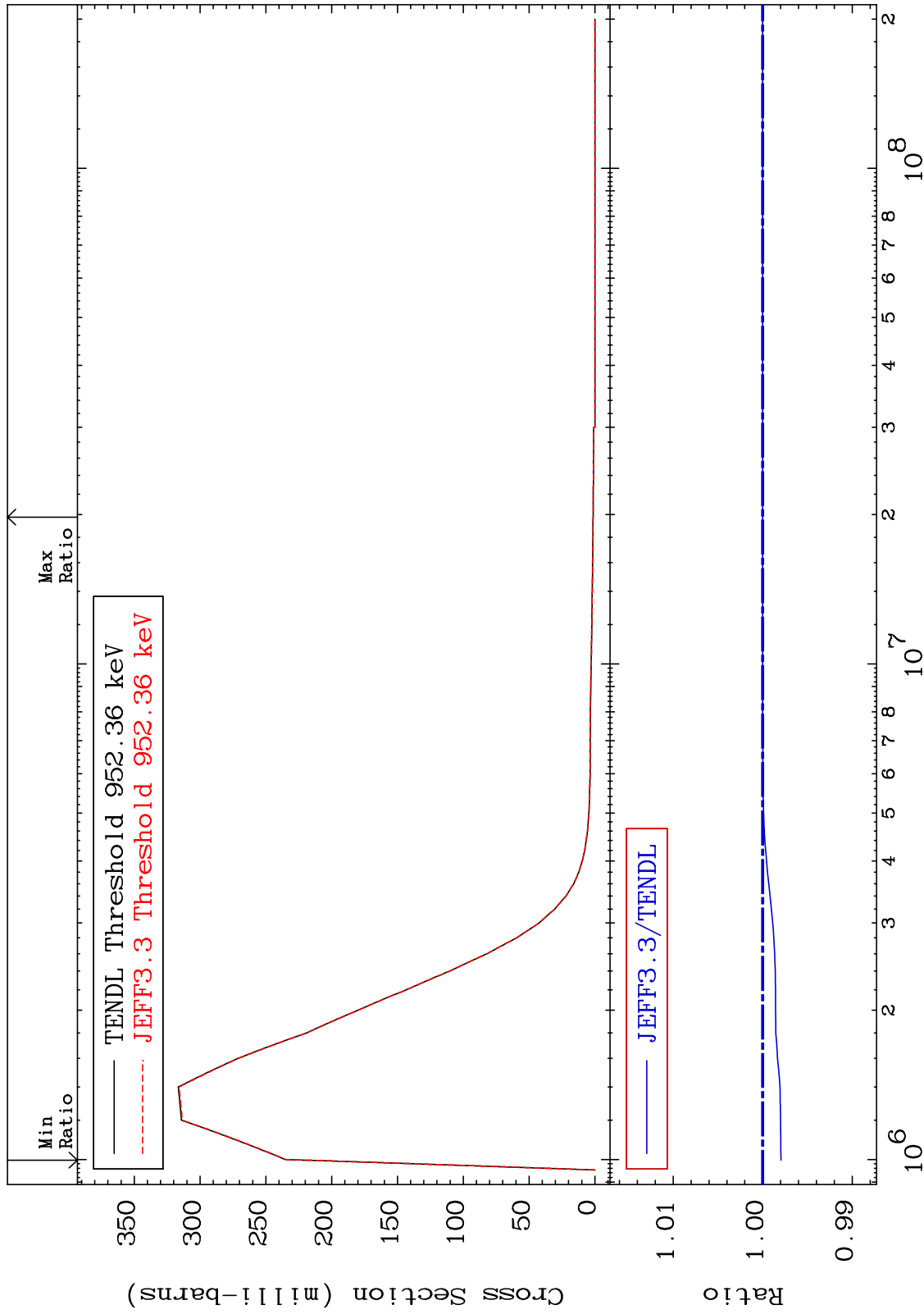
MAT 6631 MT= 53 (n,n') Level Cross Section 66-Dy-158
 -0.863 To 0.000 %



MAT 6631

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

66-Dy-158
-0.205 To 0.000 %

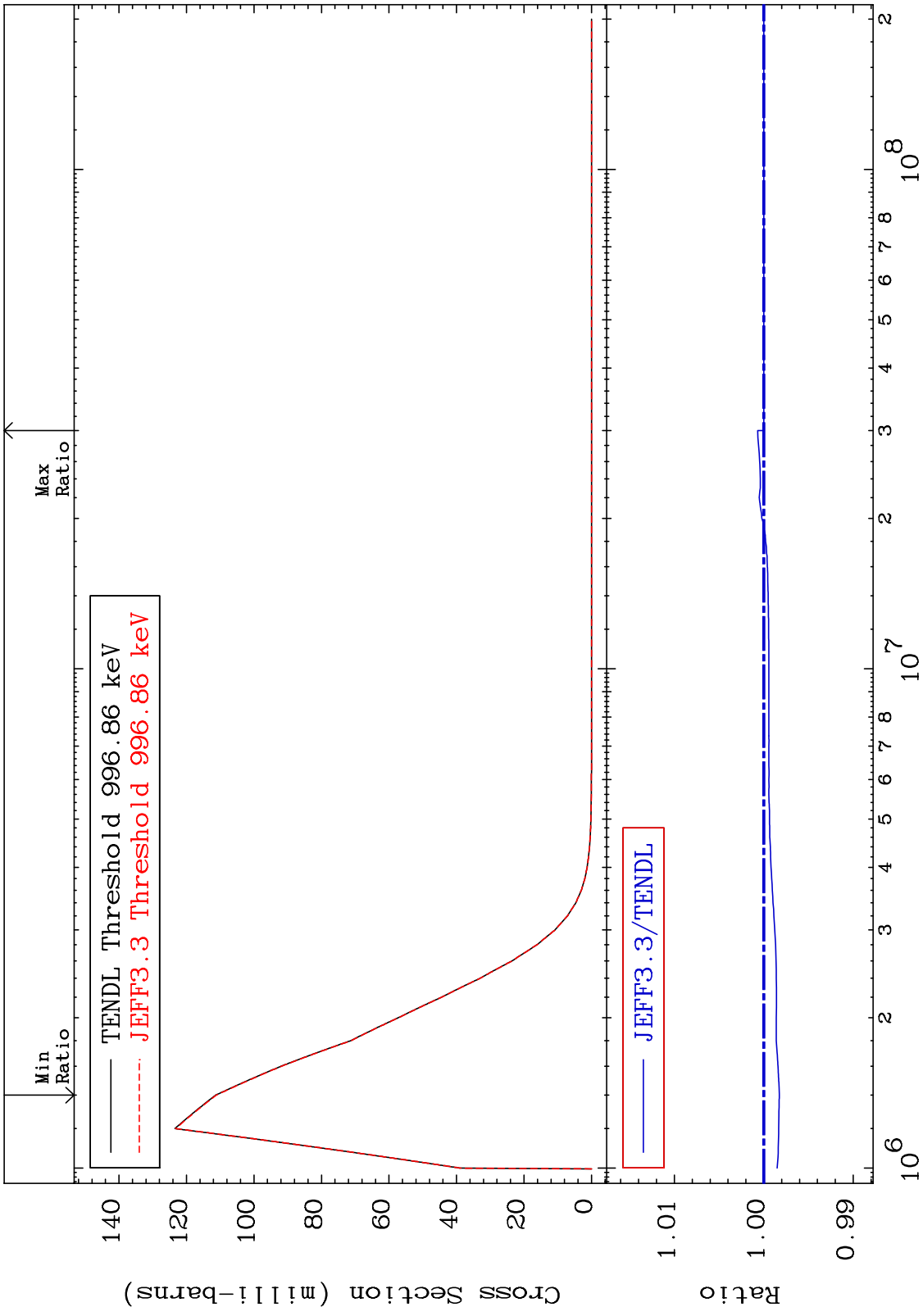


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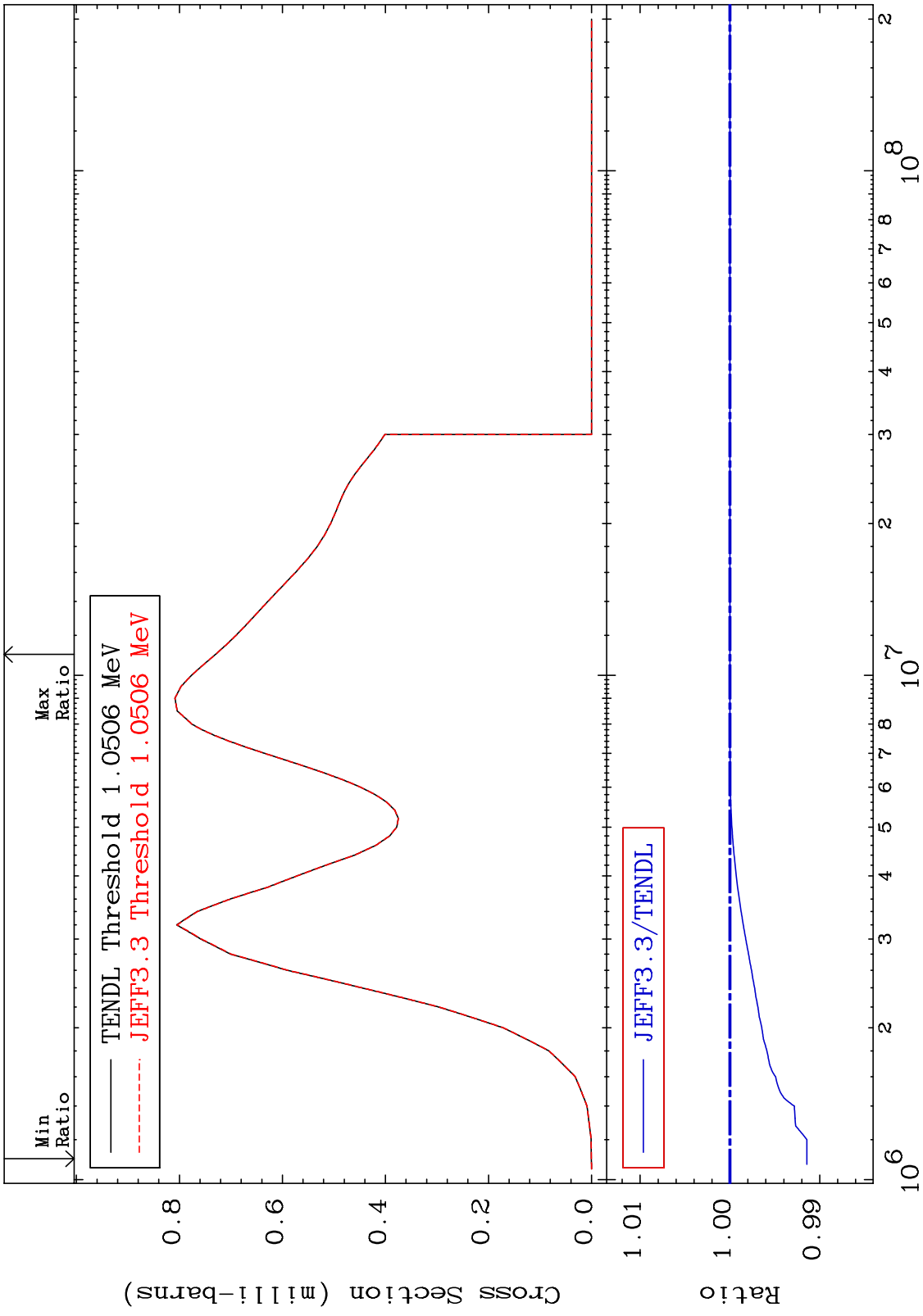
Incident Energy (eV)

66-Dy-158

MAT 6631 MT= 55 (n,n') Level Cross Section 66-Dy-158
 -0.173 To 0.069 %

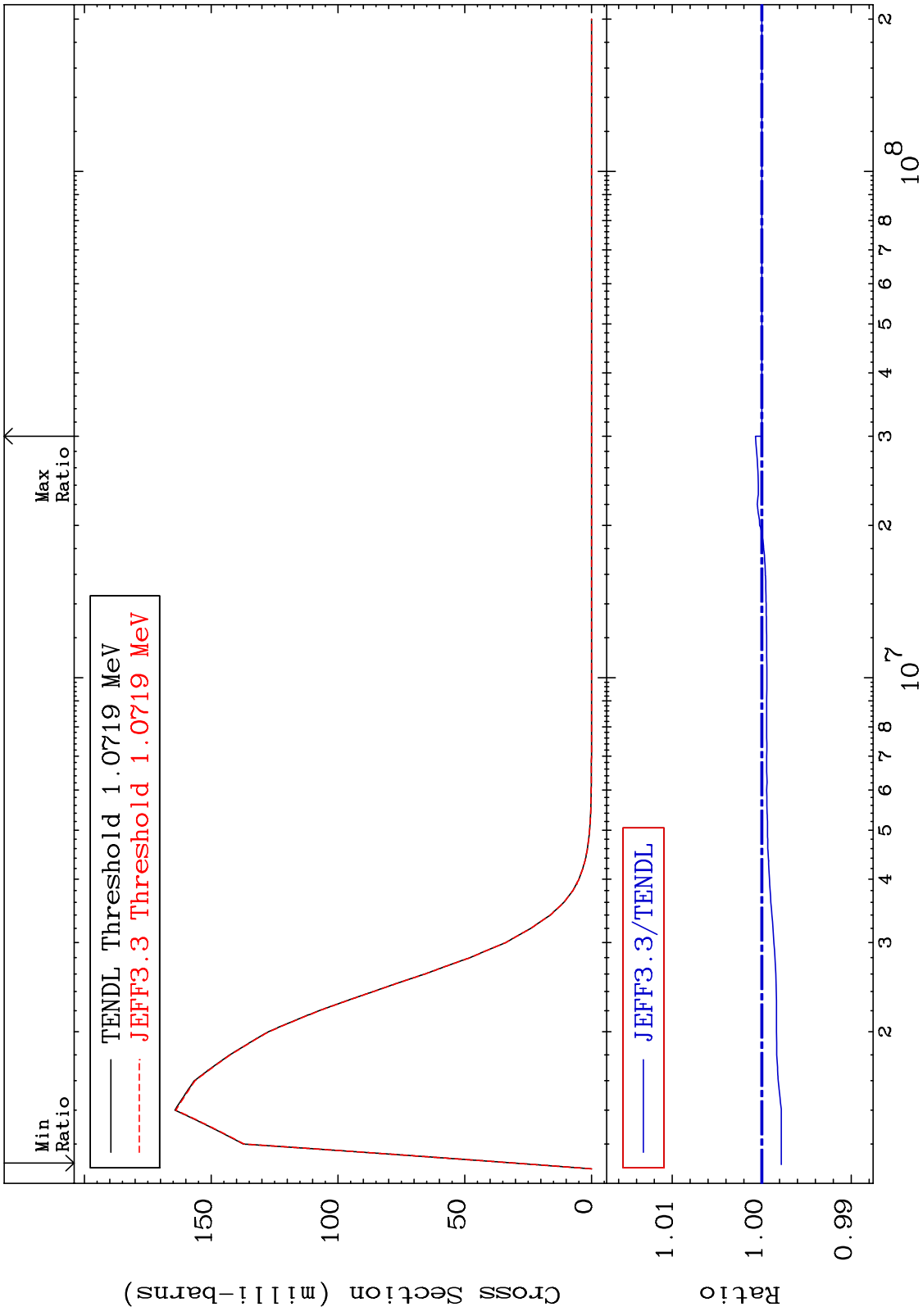


MAT 6631 MT= 56 (n,n') Level Cross Section 66-Dy-158 -0.857 To 0.000 %

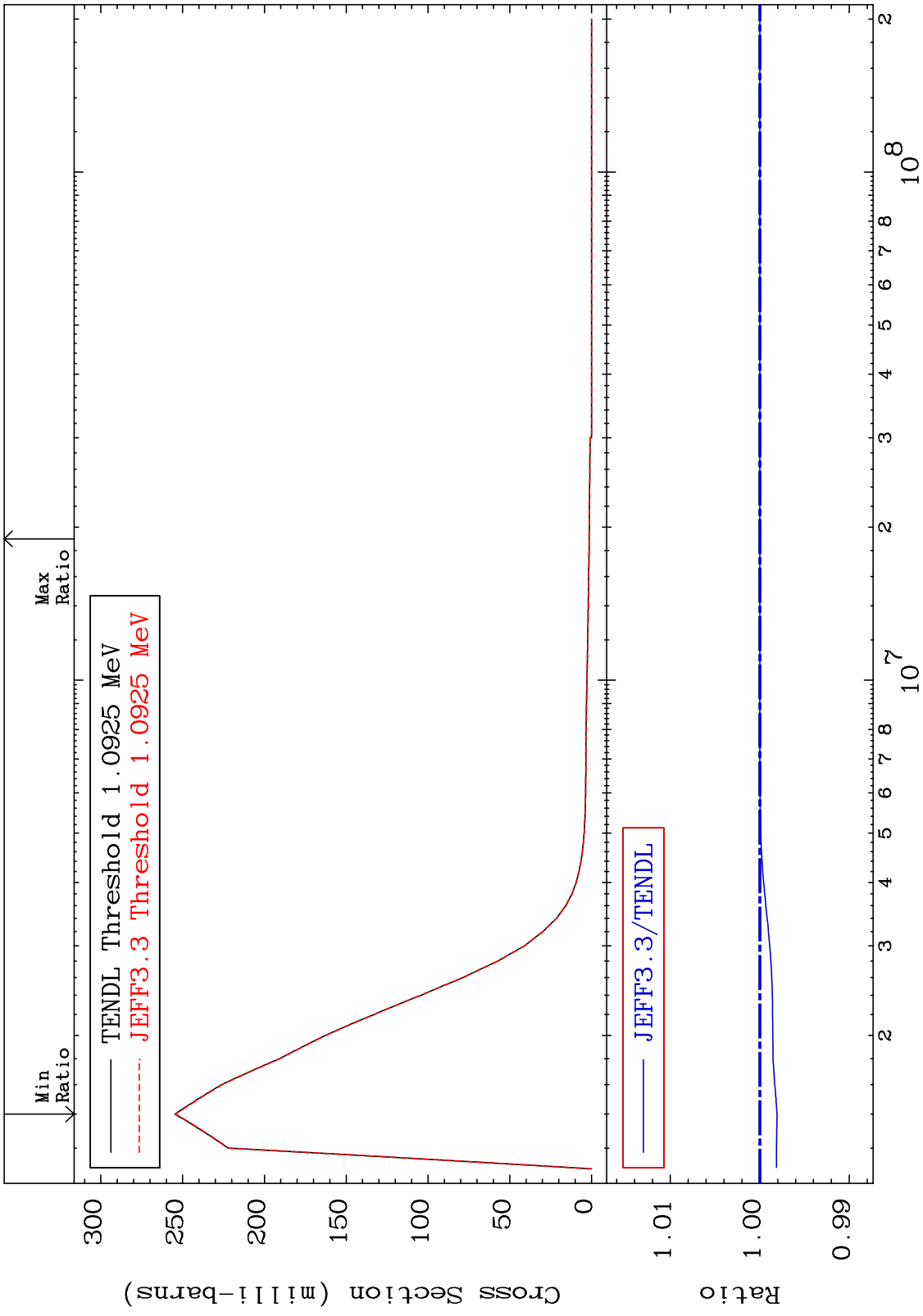


25 Incident Energy (eV) 66-Dy-158

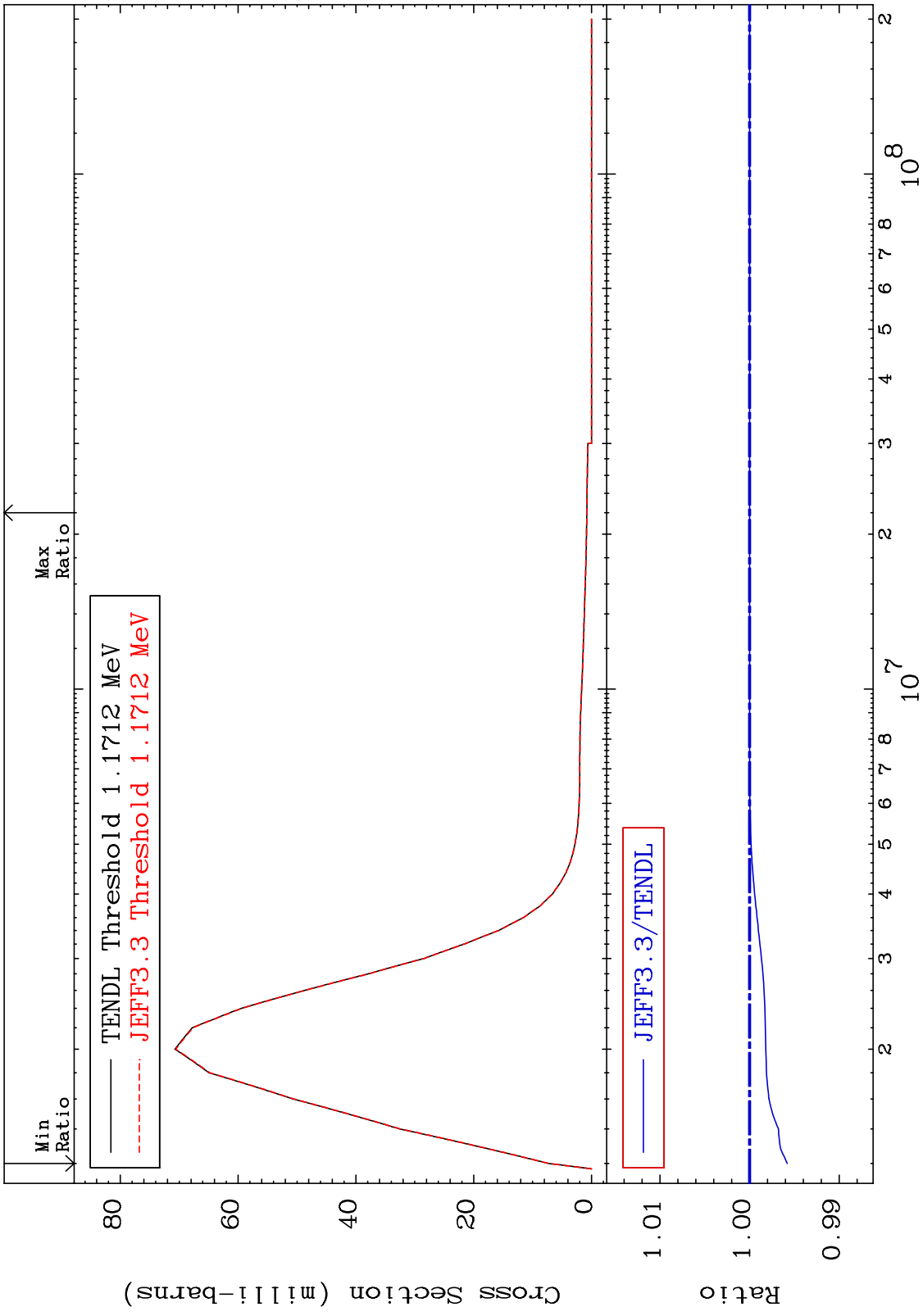
MAT 6631 MT= 57 (n,n') Level Cross Section 66-Dy-158 -0.219 To 0.069 %



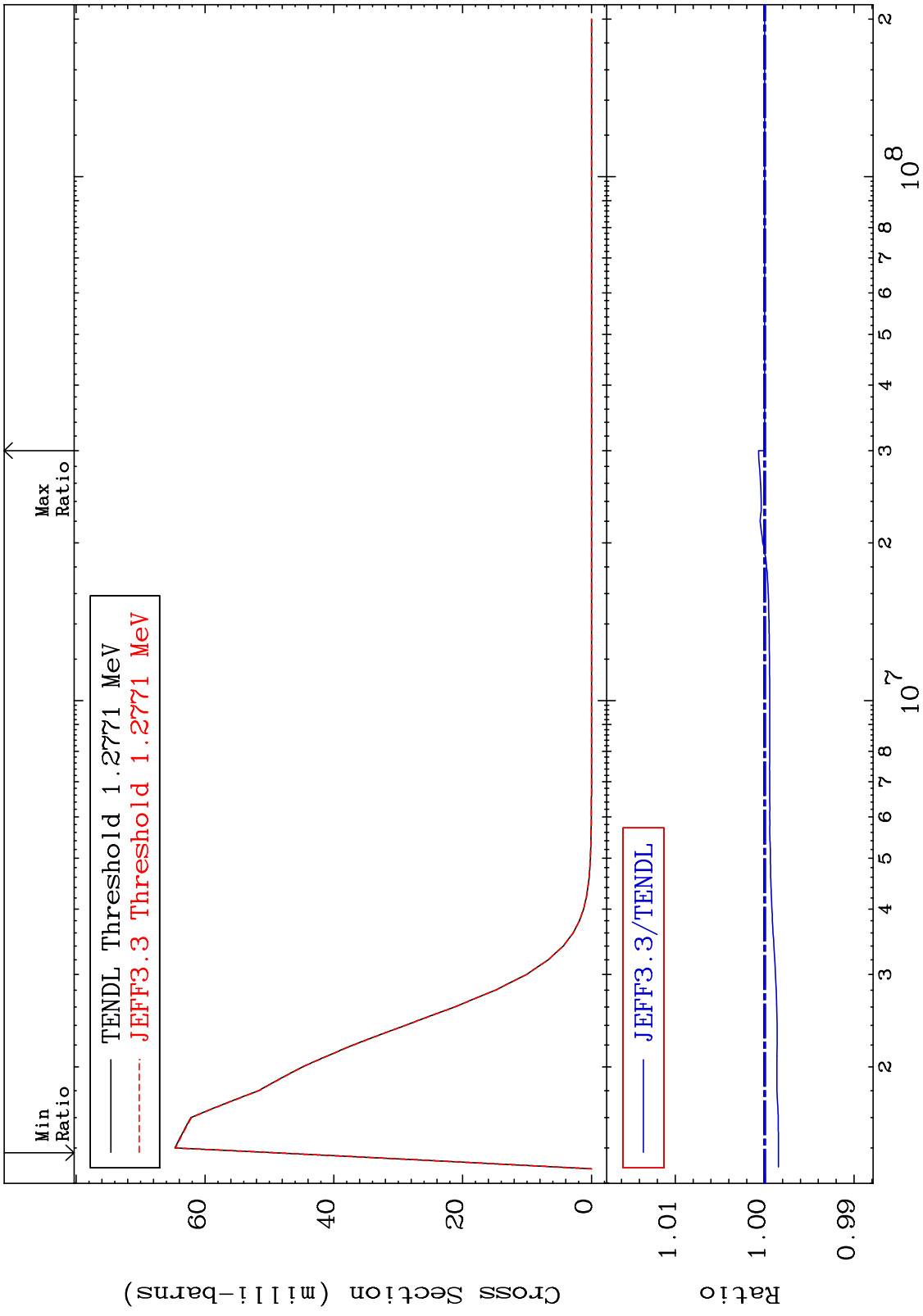
MAT 6631 MT= 58 (n, n') Level Cross Section 66-Dy-158
 -0.193 To 0.000 %



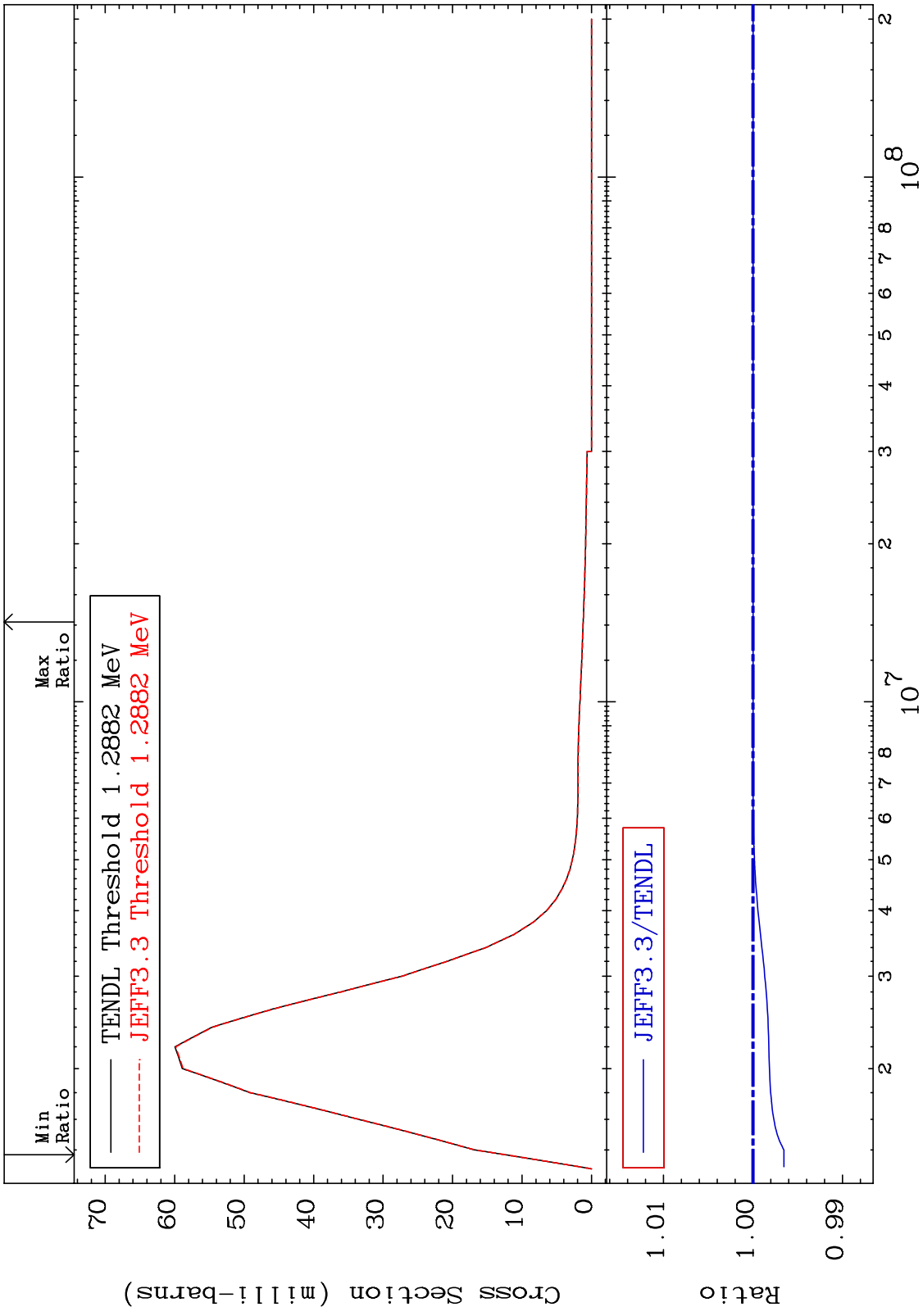
MAT 6631 MT= 59 (n, n') Level Cross Section 66-Dy-158
 -0.421 To 0.000 %



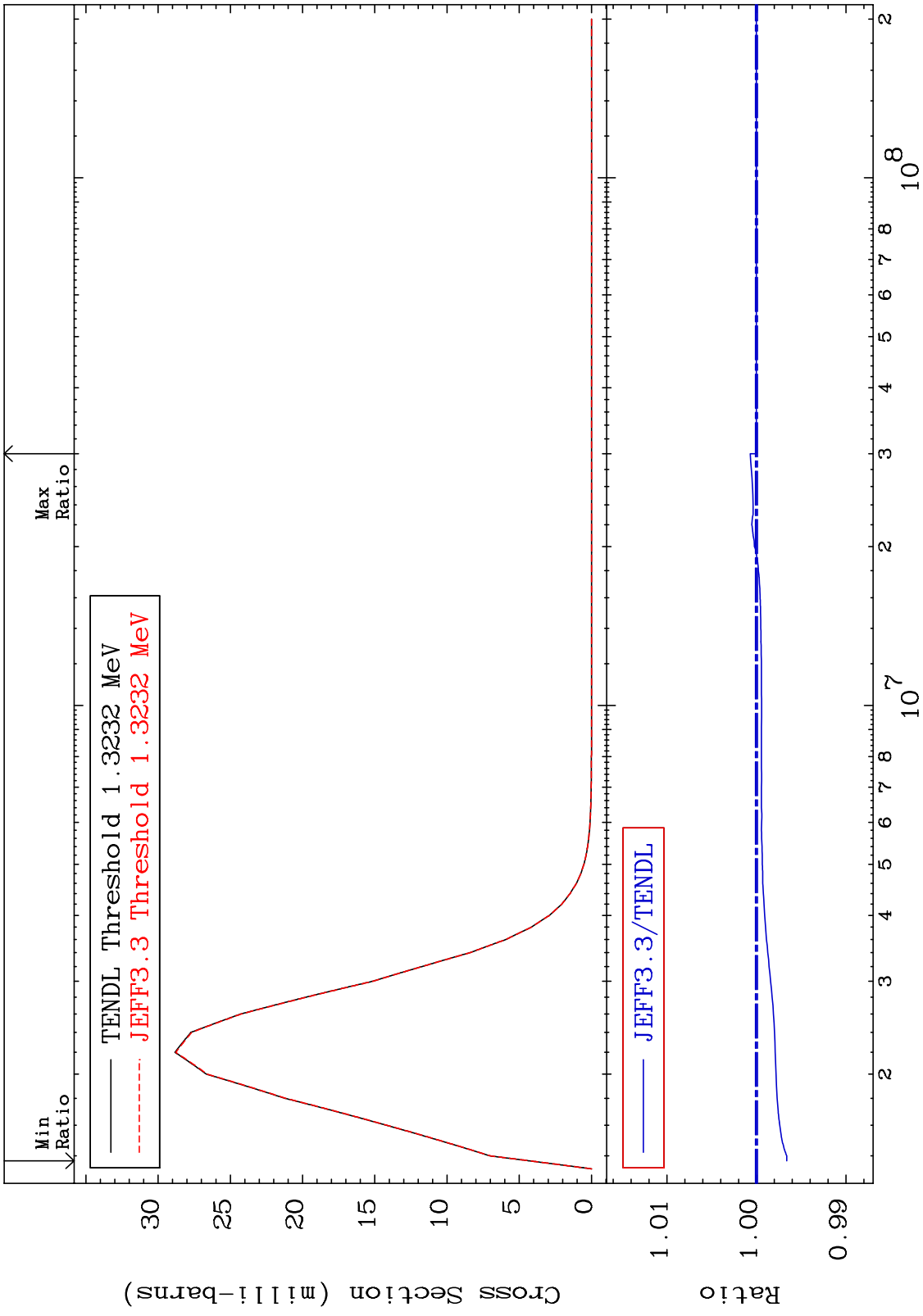
MAT 6631 MT= 60 (n,n') Level Cross Section 66-Dy-158 -0.154 To 0.069 %



MAT 6631 MT= 61 (n,n') Level Cross Section 66-Dy-158 -0.345 To 0.000 %



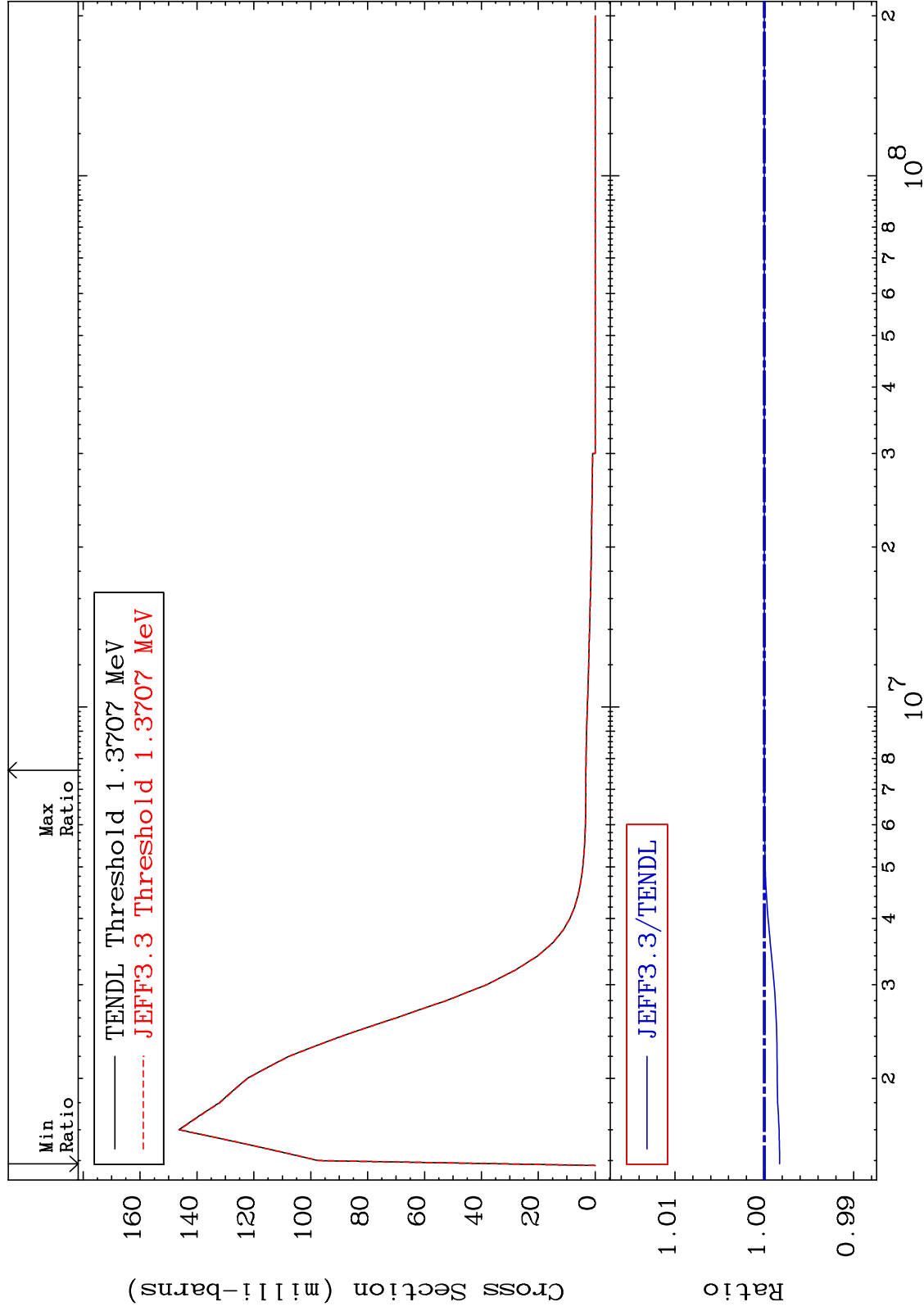
MAT 6631 MT= 62 (n,n') Level Cross Section 66-Dy-158 -0.337 To 0.070 %



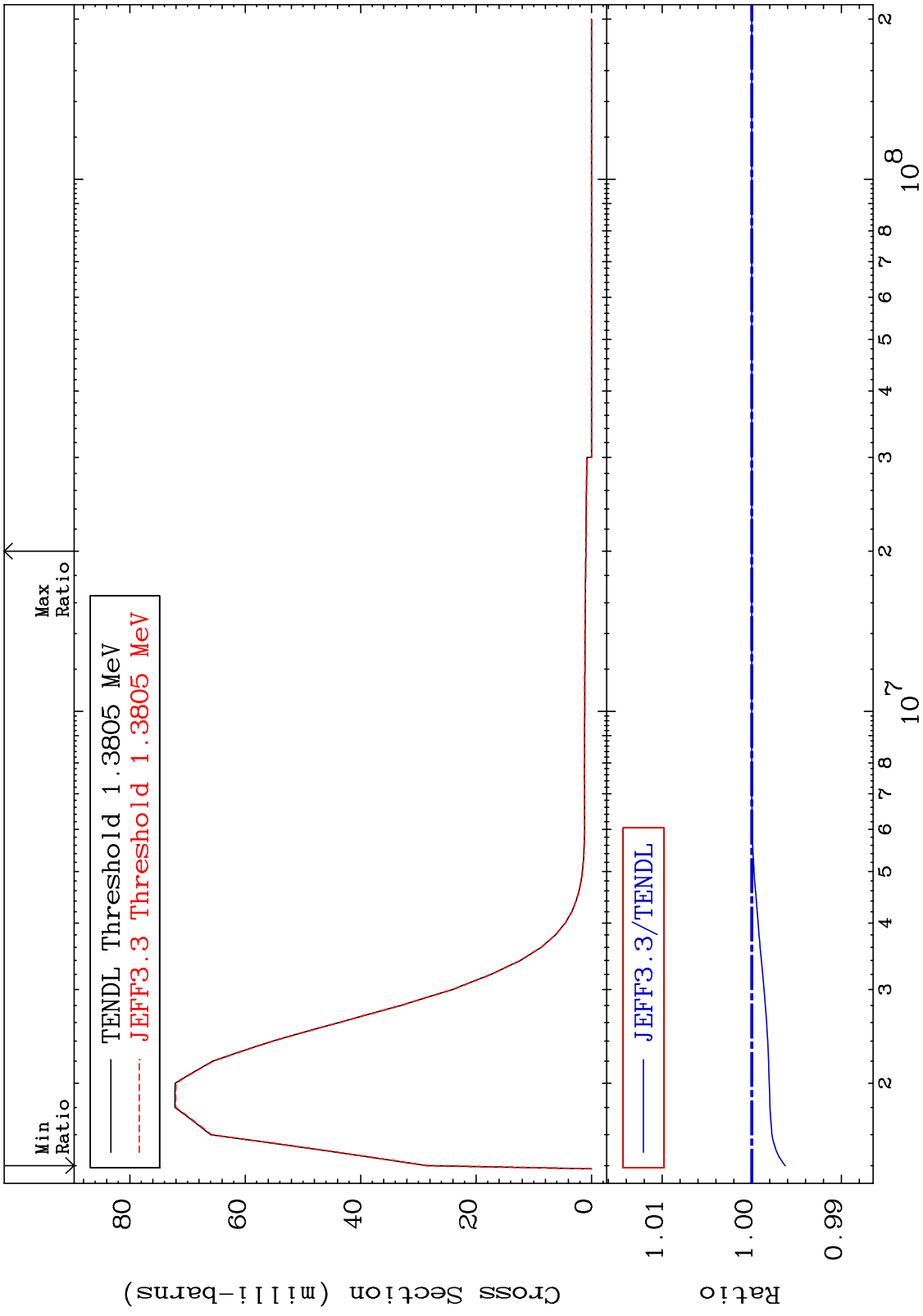
MAT 6631

MT= 63 (n,n') Level
Cross Section

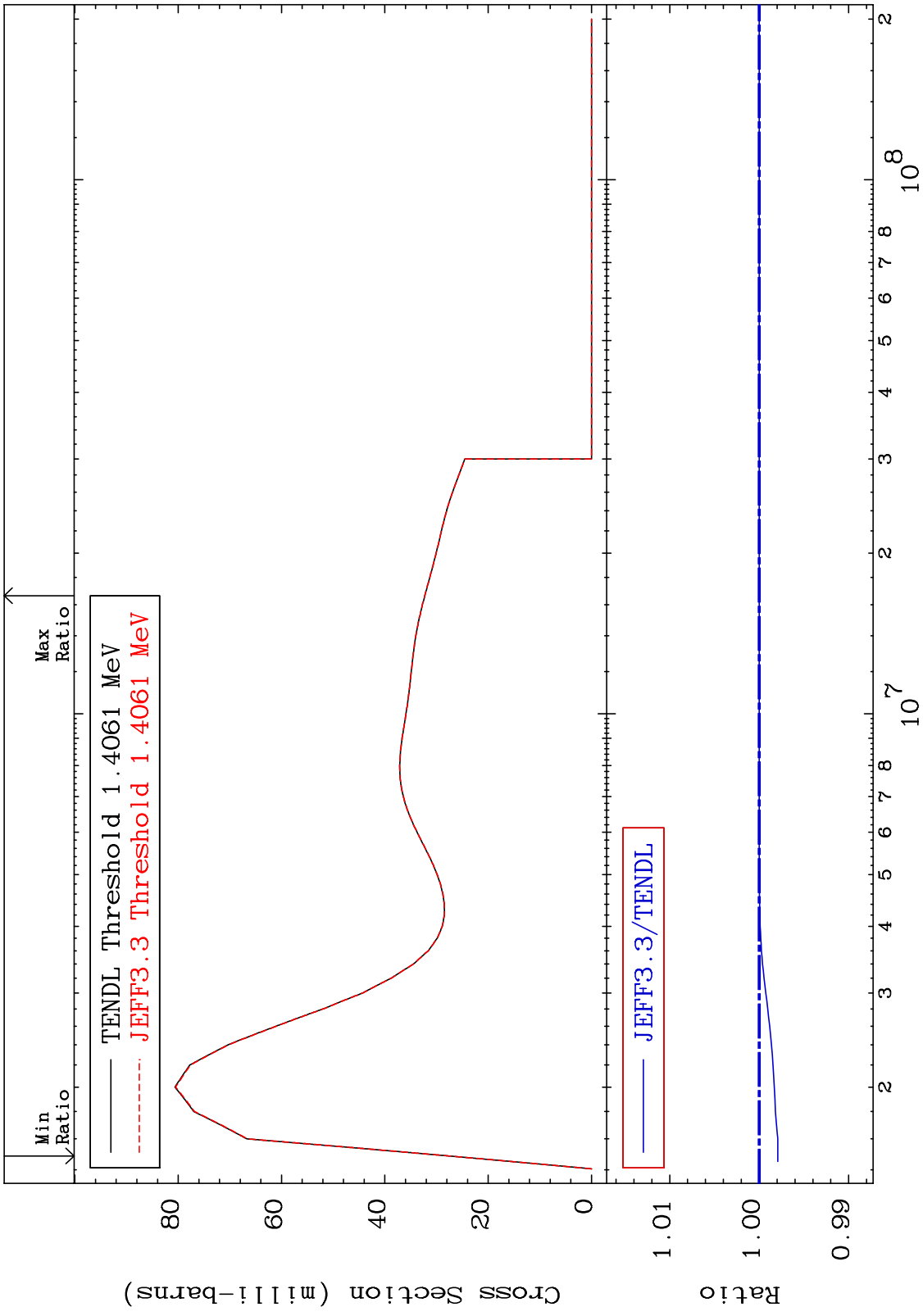
66-Dy-158
-0.172 To 0.000 %



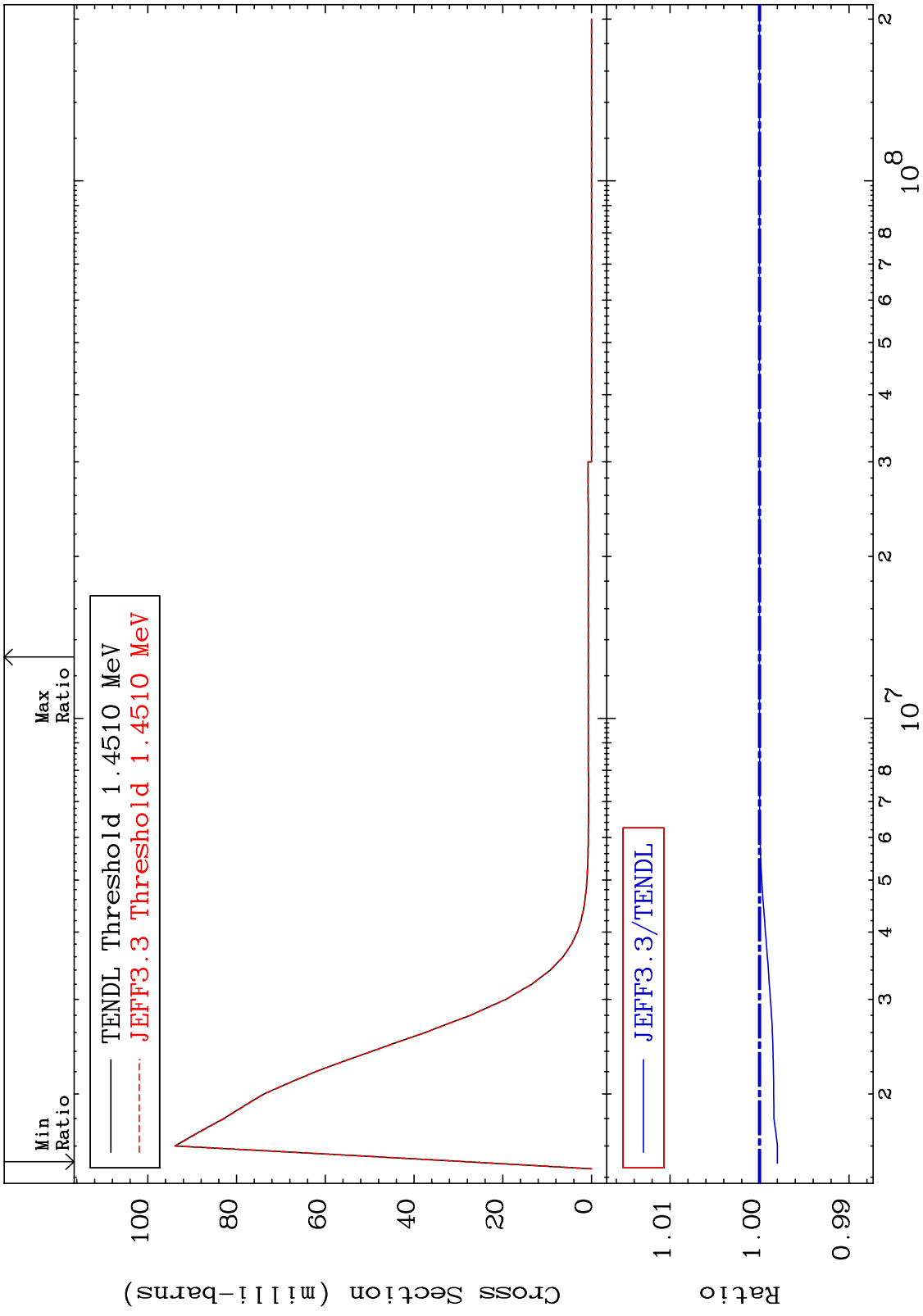
MAT 6631 MT= 64 (n,n') Level 66-Dy-158
 Cross Section -0.372 To 0.000 %



MAT 6631 MT= 65 (n,n') Level Cross Section 66-Dy-158 -0.207 To 0.000 %



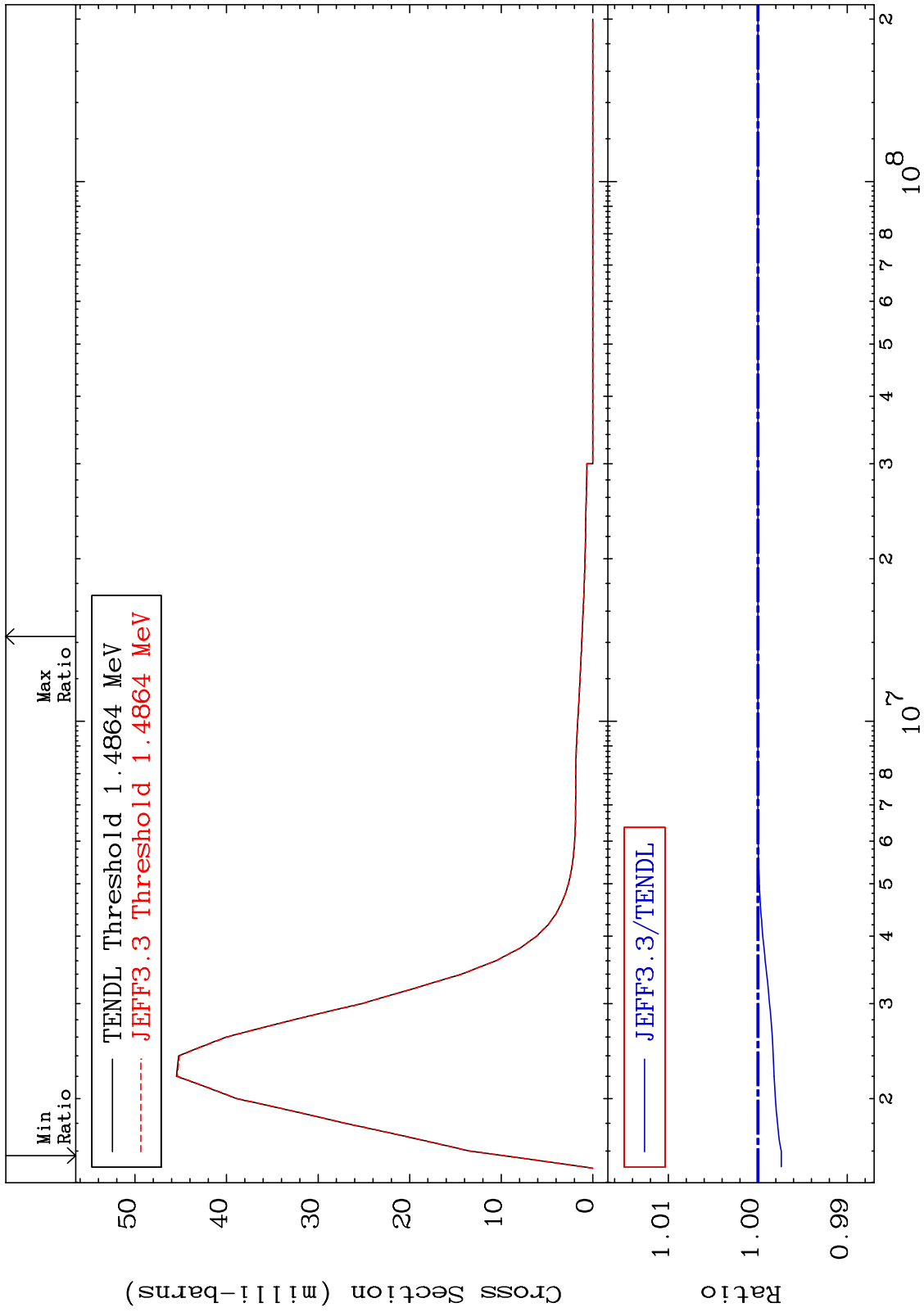
MAT 6631 MT= 66 (n,n') Level Cross Section 66-Dy-158
 -0.200 To 0.000 %



MAT 6631

MT= 67 (n,n') Level
Cross Section

66-Dy-158
-0.262 To 0.000 %

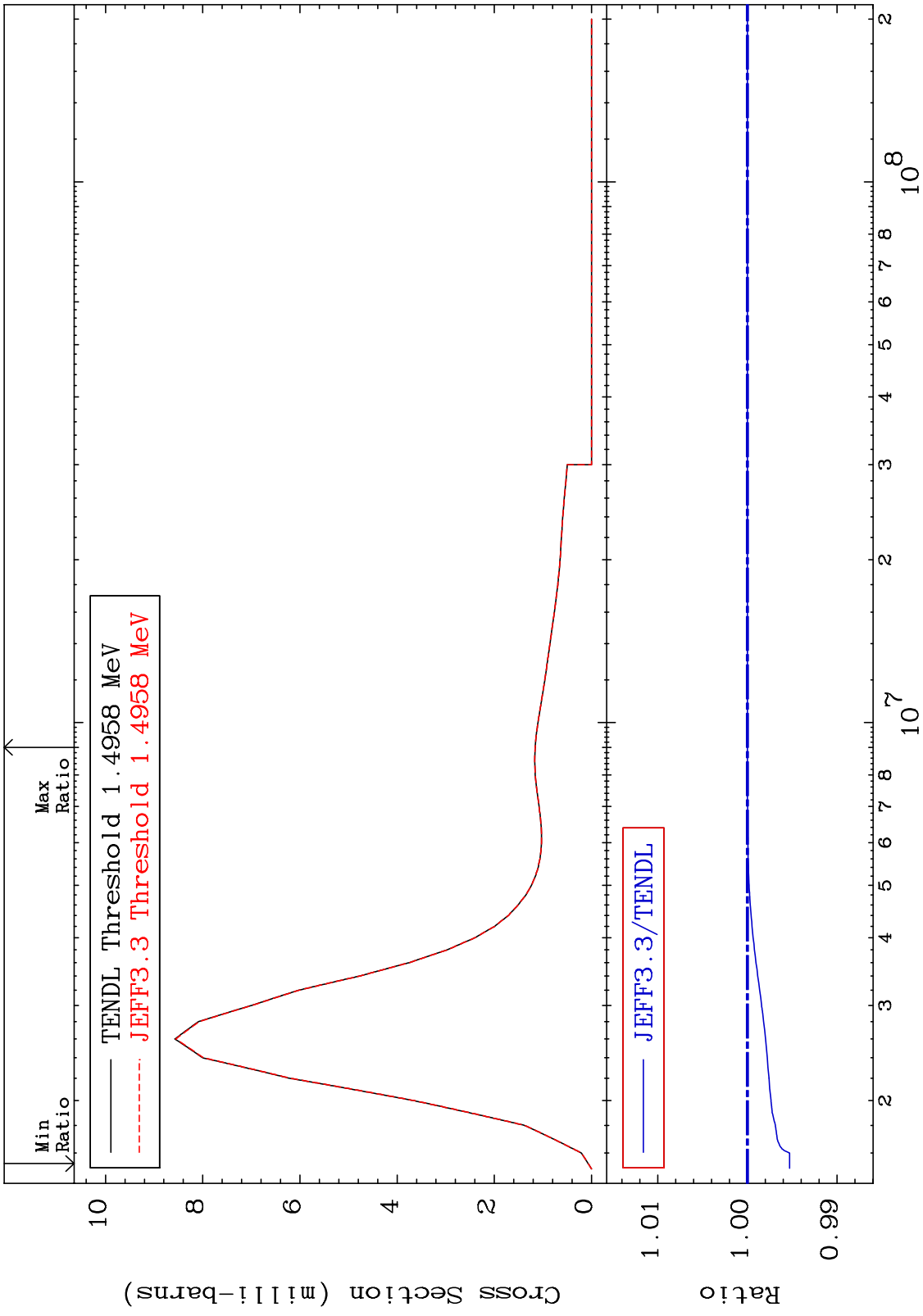


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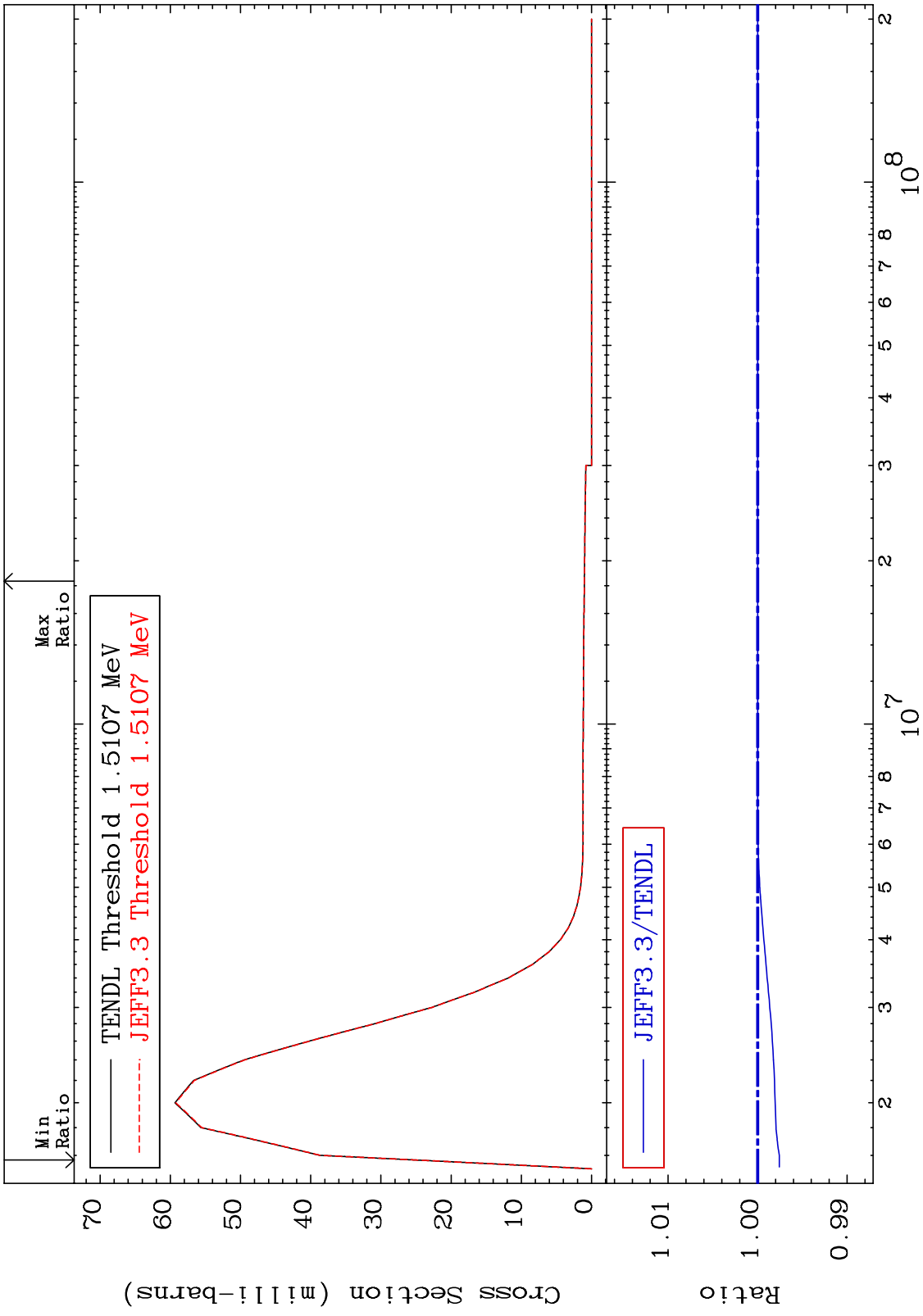
Incident Energy (eV)

66-Dy-158

MAT 6631 MT= 68 (n,n') Level Cross Section 66-Dy-158 -0.469 To 0.000 %



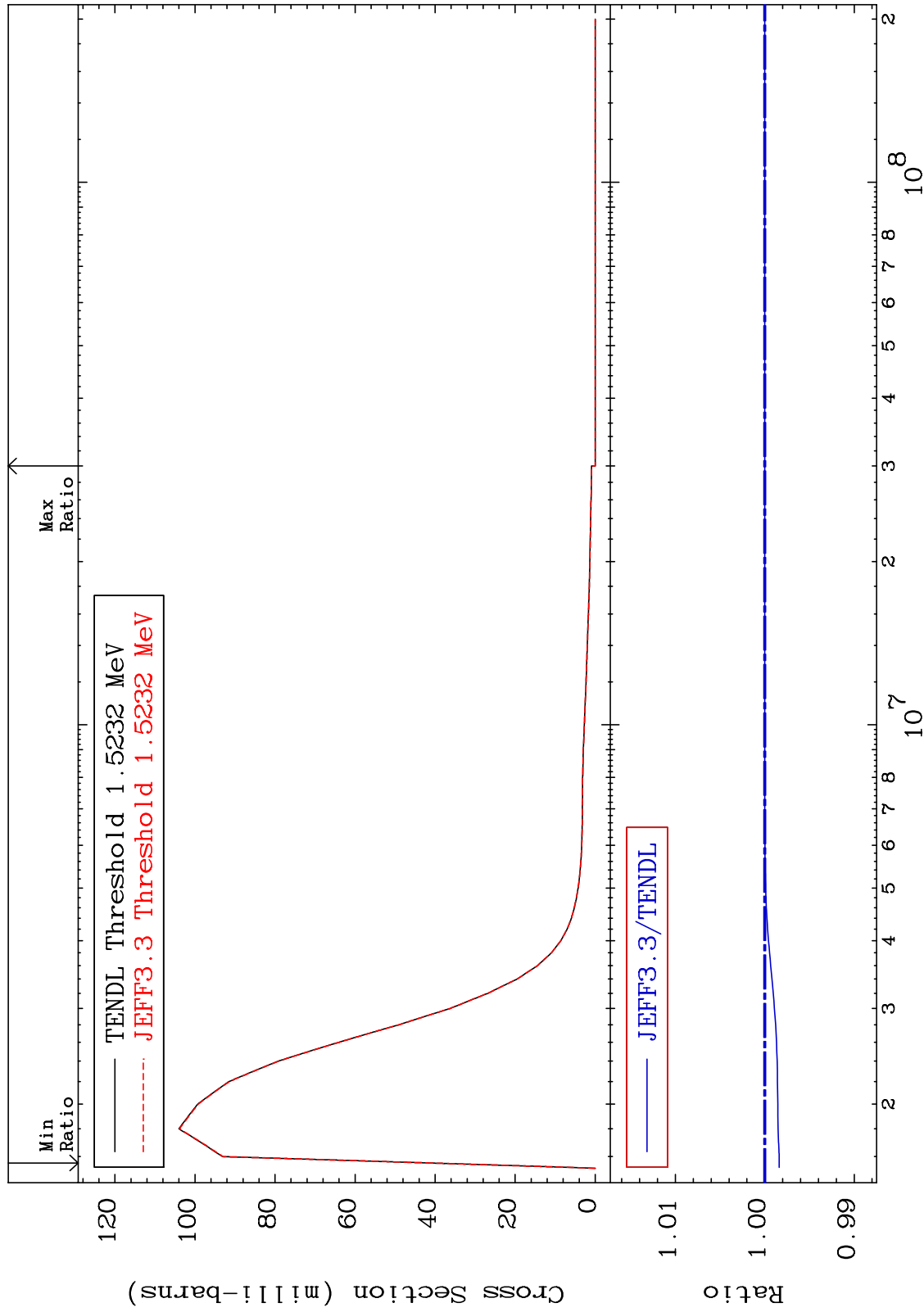
MAT 6631 MT= 69 (n,n') Level Cross Section 66-Dy-158
 -0.242 To 0.000 %



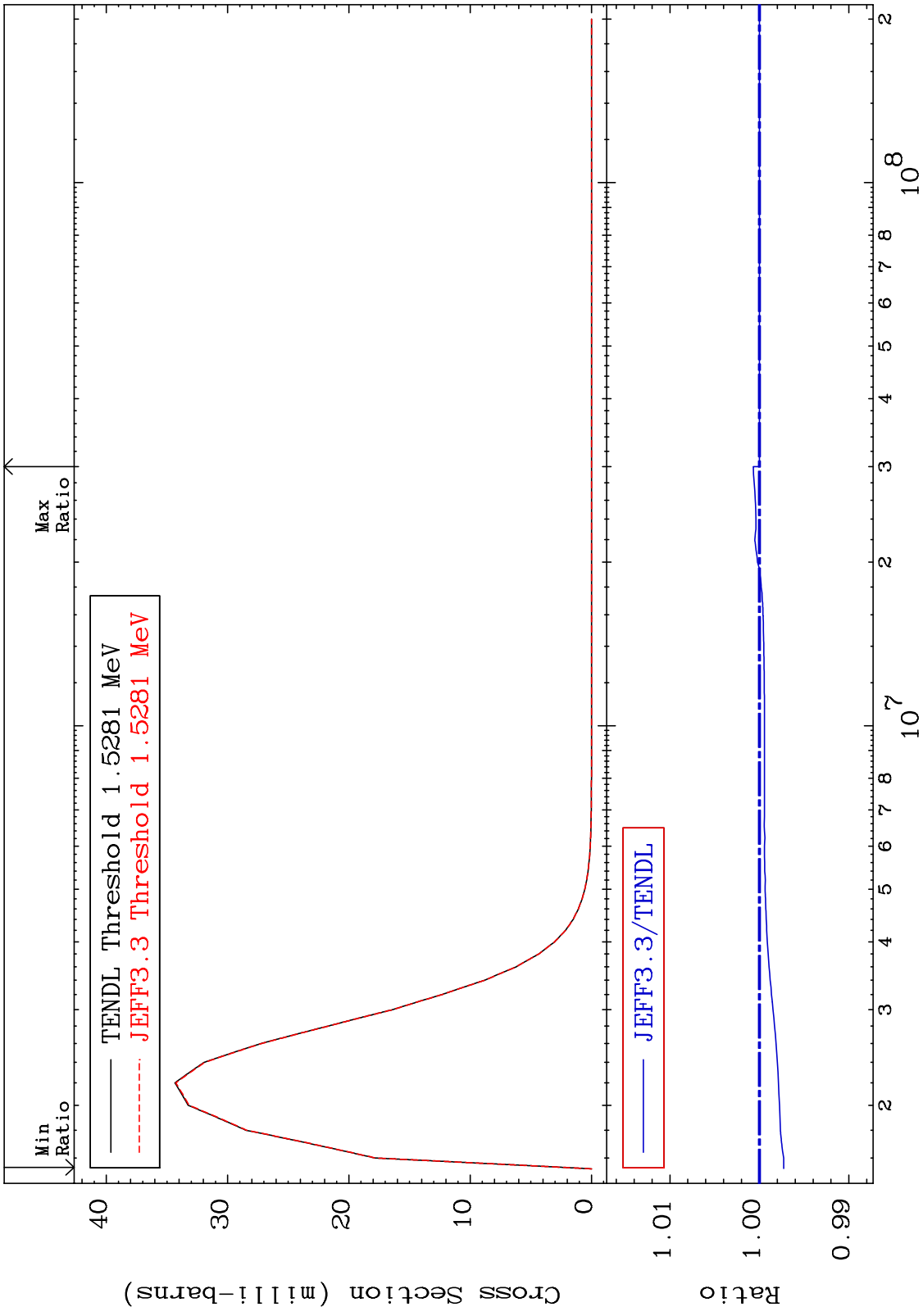
MAT 6631

MT= 70 (n,n') Level
Cross Section

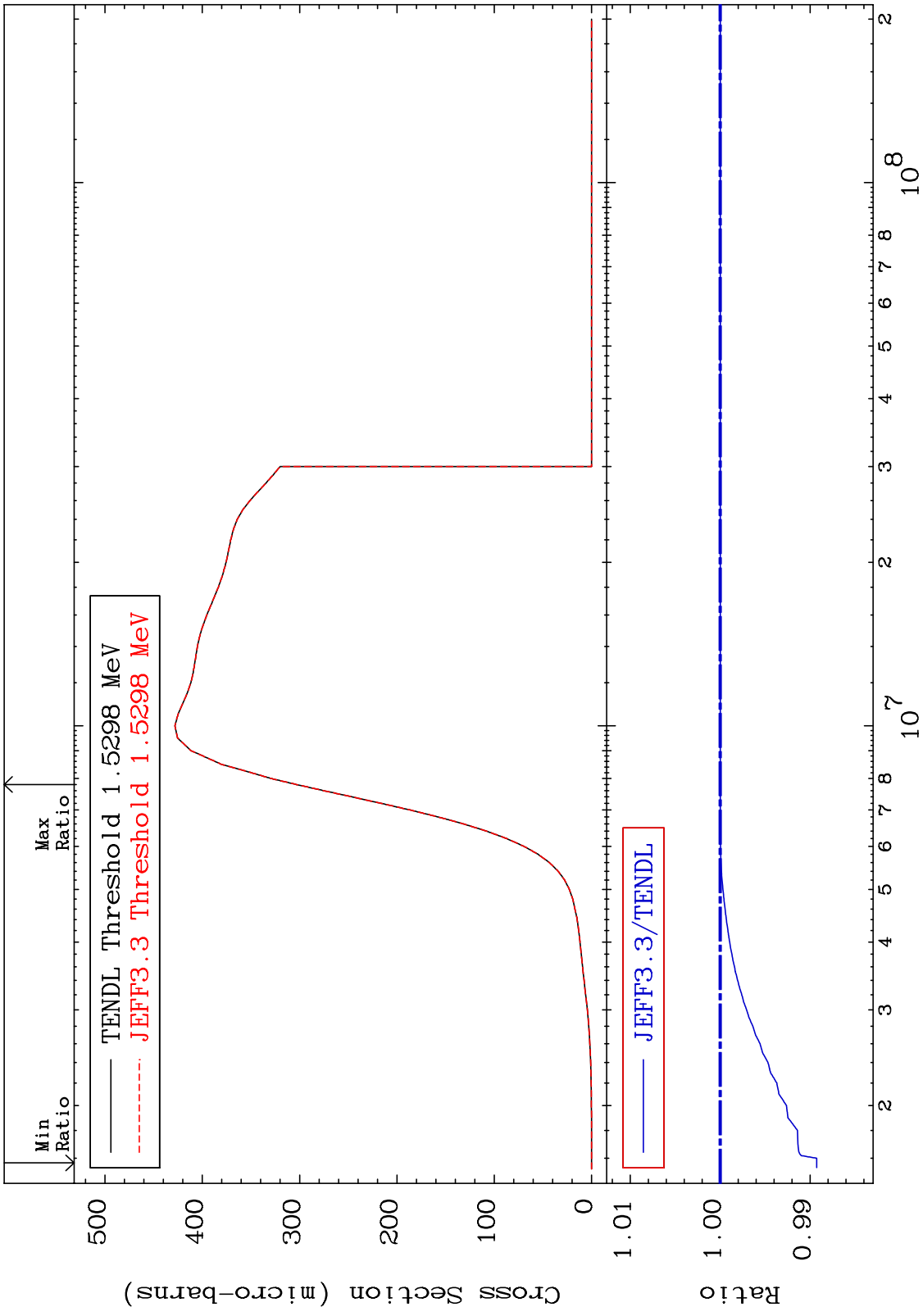
66-Dy-158
-0.162 To 0.000 %



MAT 6631 MT= 71 (n,n') Level Cross Section 66-Dy-158
-0.271 To 0.069 %



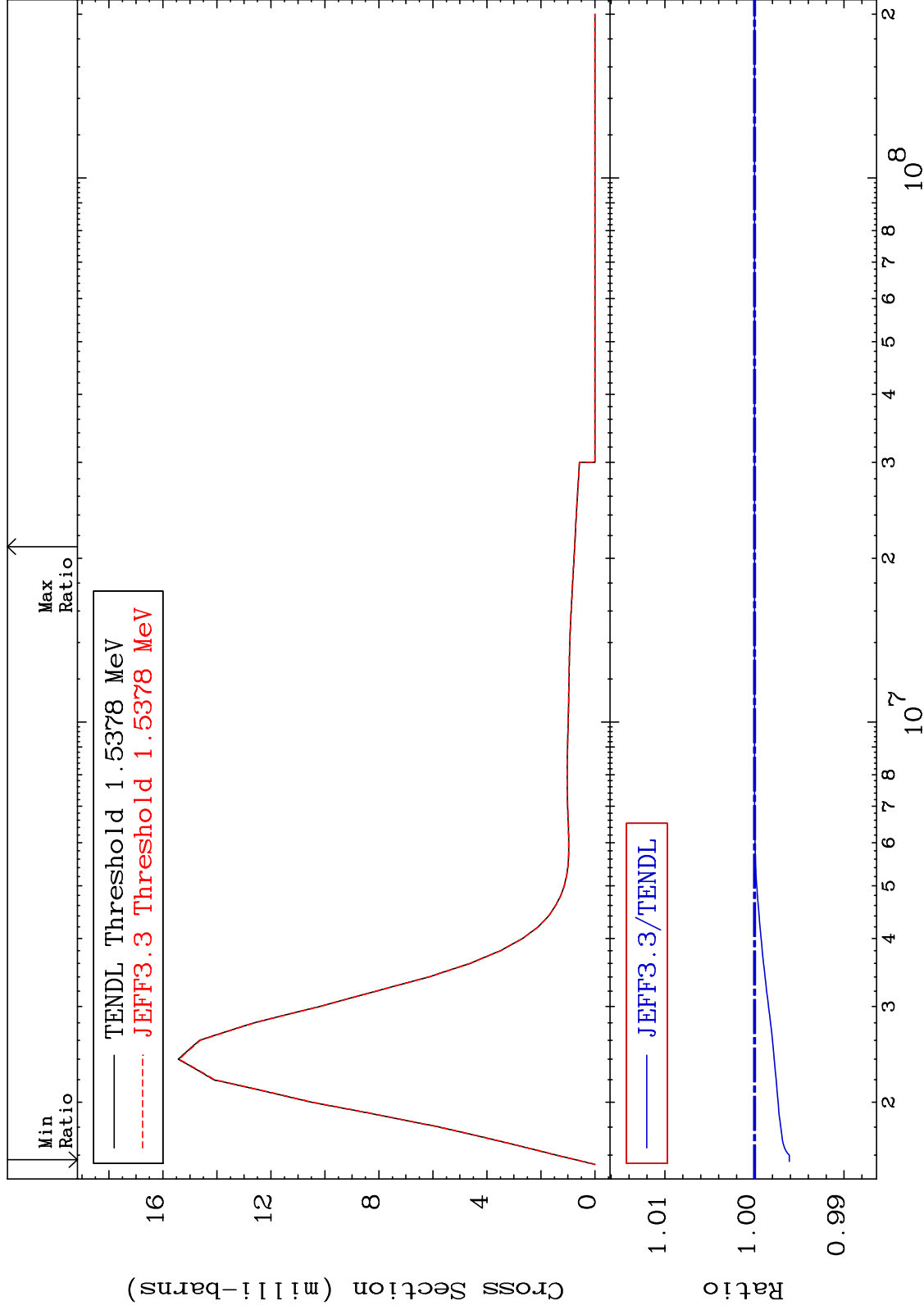
MAT 6631 MT= 72 (n,n') Level Cross Section 66-Dy-158
 -1.074 To 0.000 %



MAT 6631

MT= 73 (n,n') Level
Cross Section

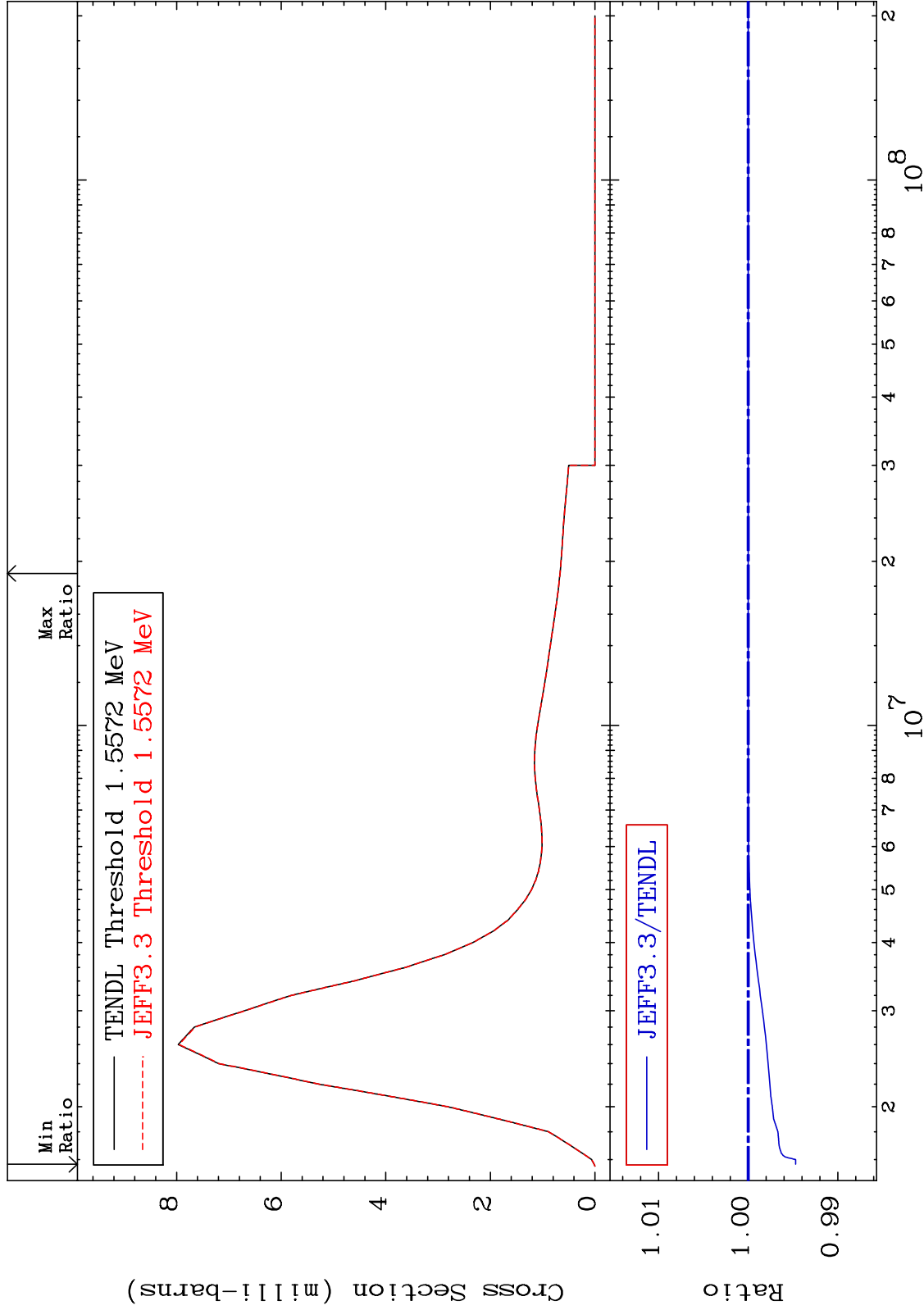
66-Dy-158
-0.388 To 0.000 %



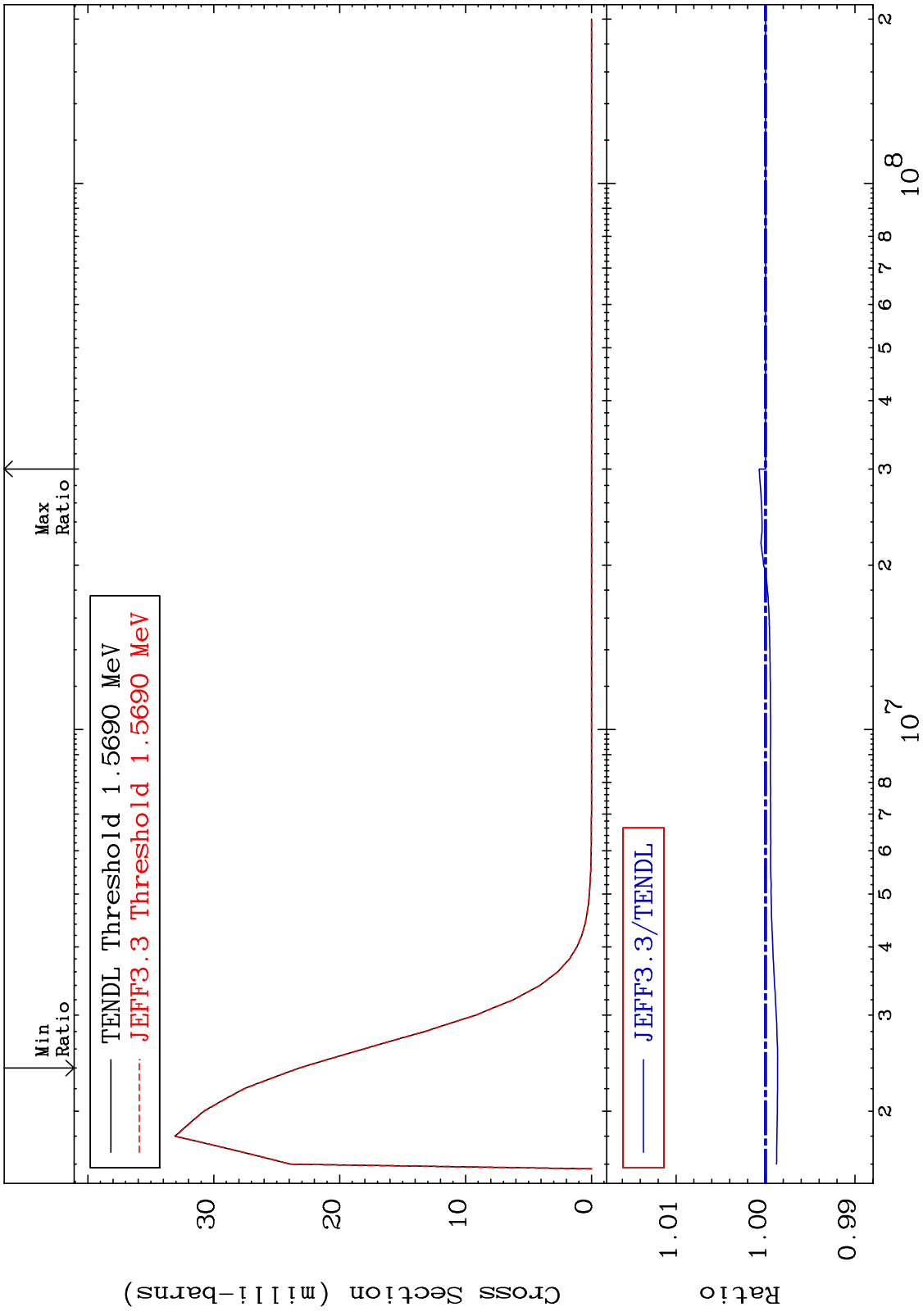
MAT 6631

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

66-Dy-158
-0.528 To 0.000 %



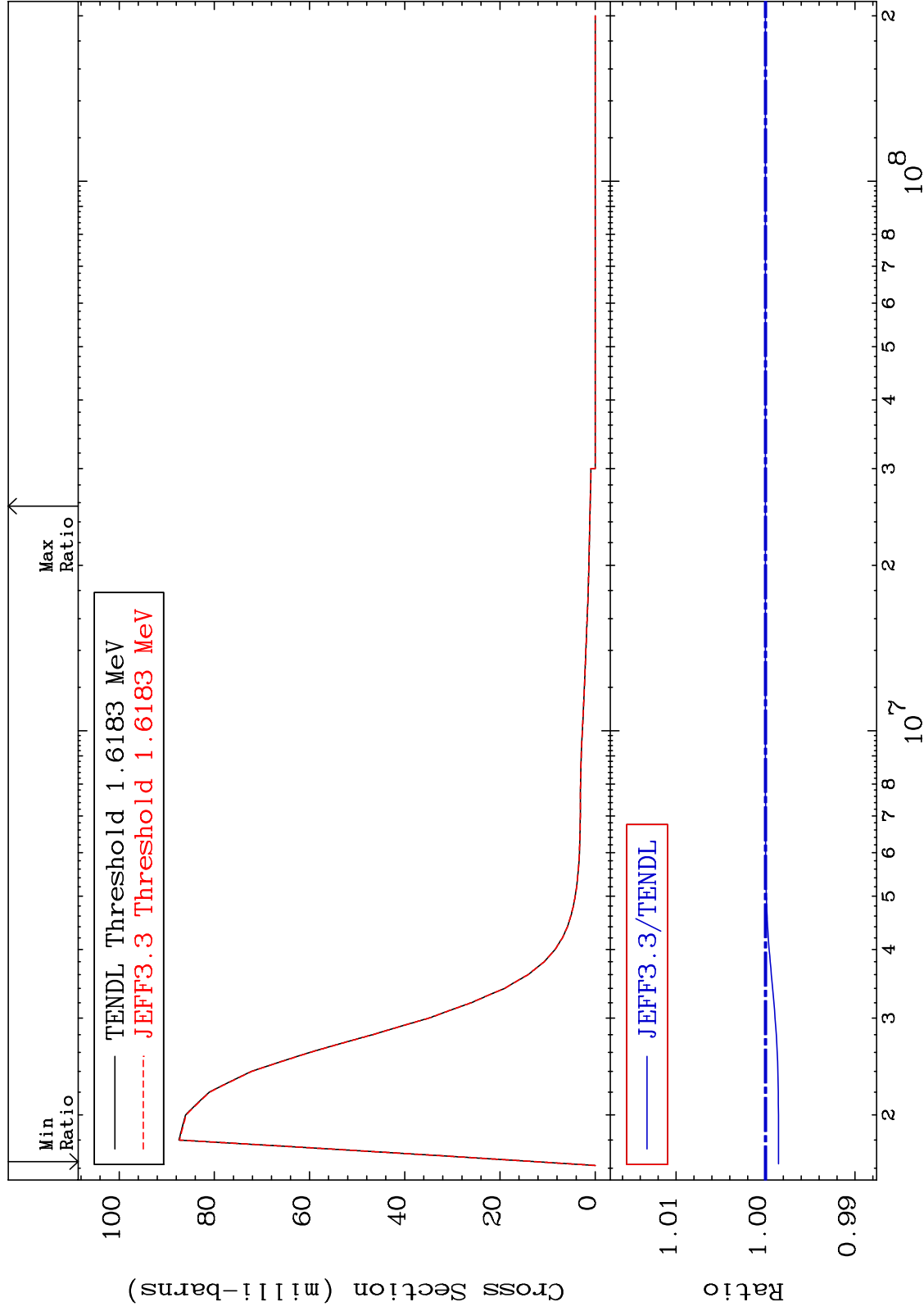
MAT 6631 MT= 75 (n,n') Level Cross Section 66-Dy-158
 -0.136 To 0.070 %



MAT 6631

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

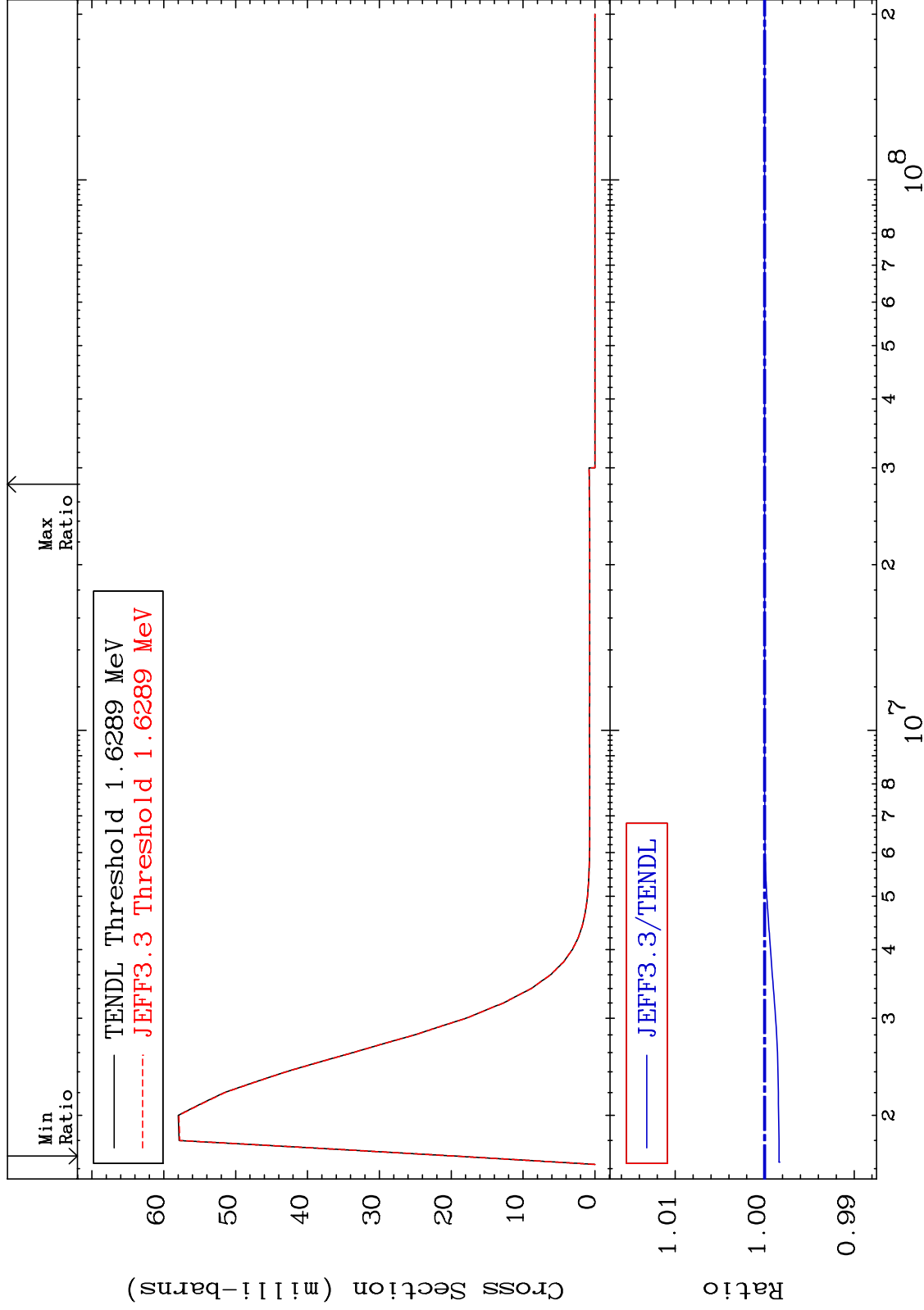
66-Dy-158
-0.146 To 0.000 %



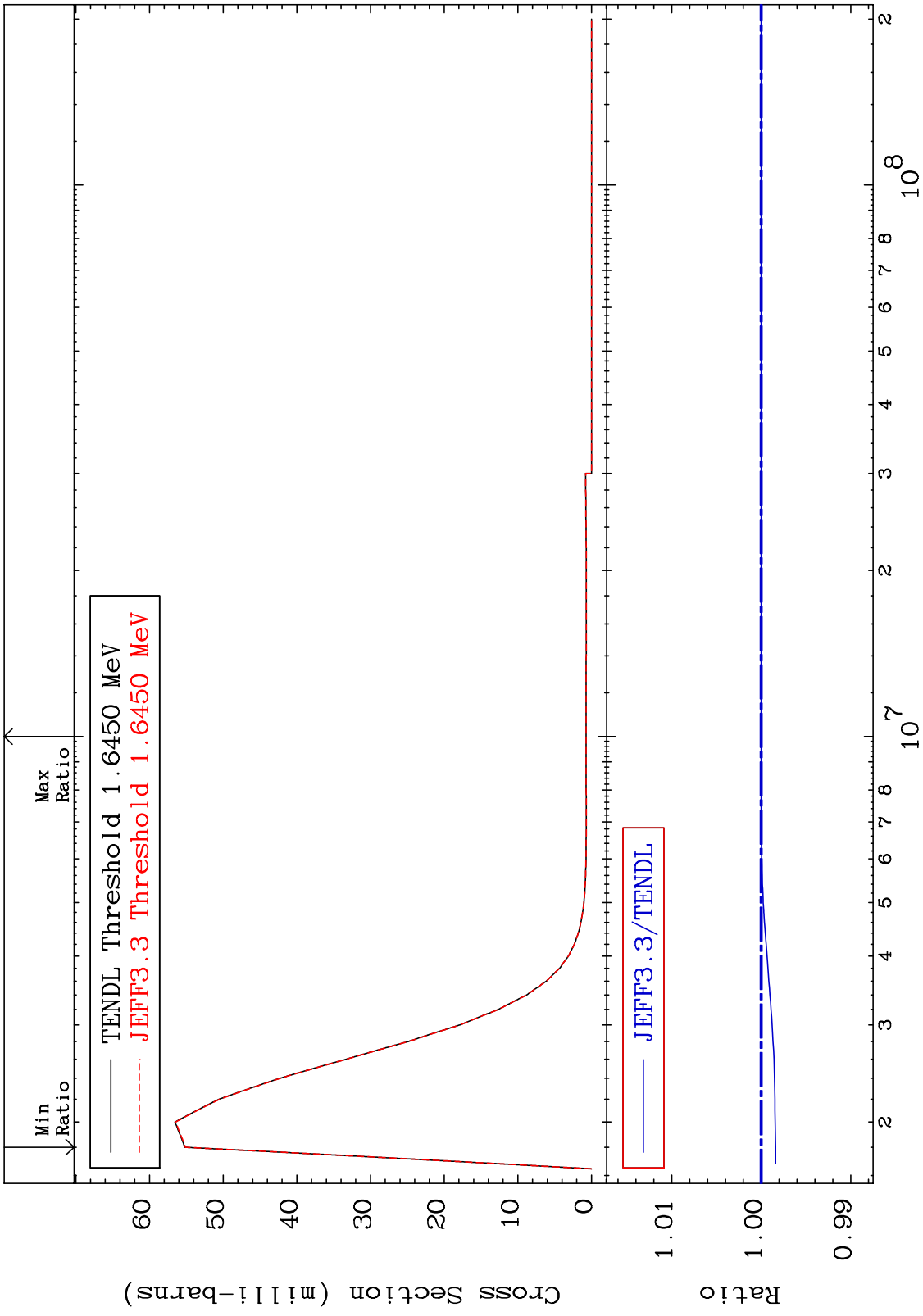
MAT 6631

MT= 77 (n,n') Level
Cross Section

66-Dy-158
-0.161 To 0.000 %



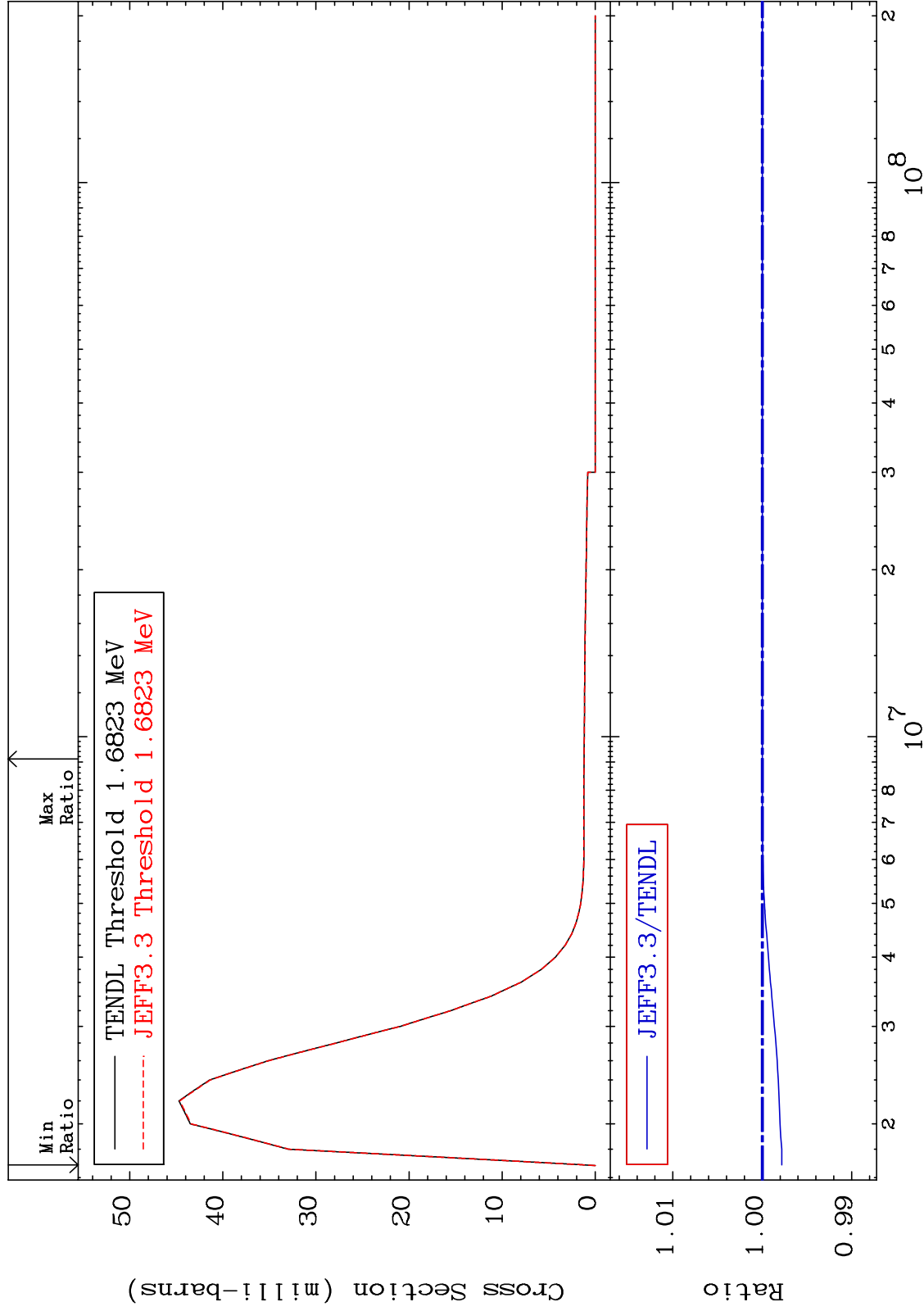
MAT 6631 MT= 78 (n,n') Level Cross Section 66-Dy-158
 -0.162 To 0.000 %



MAT 6631

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

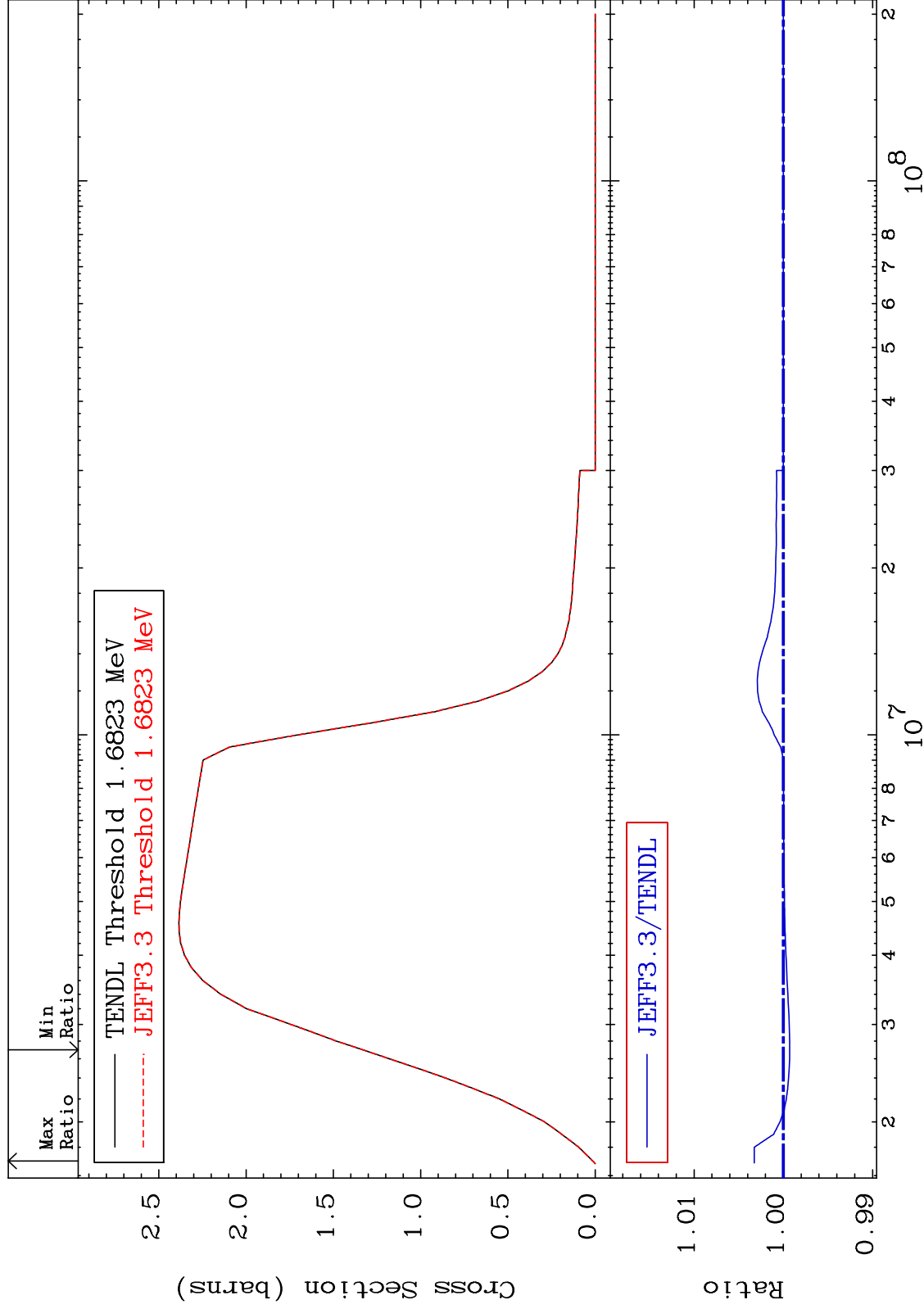
66-Dy-158
-0.218 To 0.000 %



MAT 6631

(n,n') Continuum
Cross Section

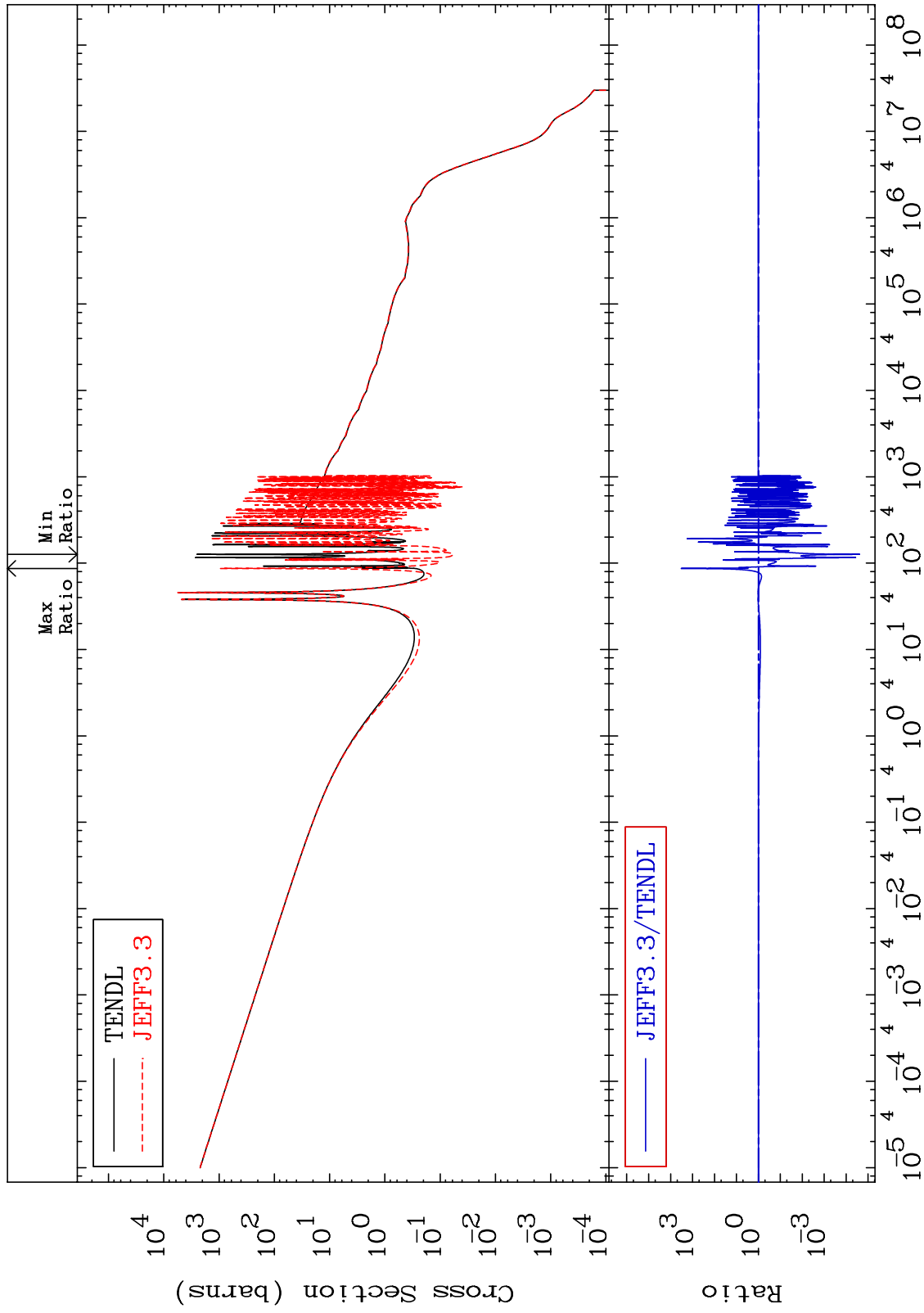
66-Dy-158
-0.071 To 0.325 %



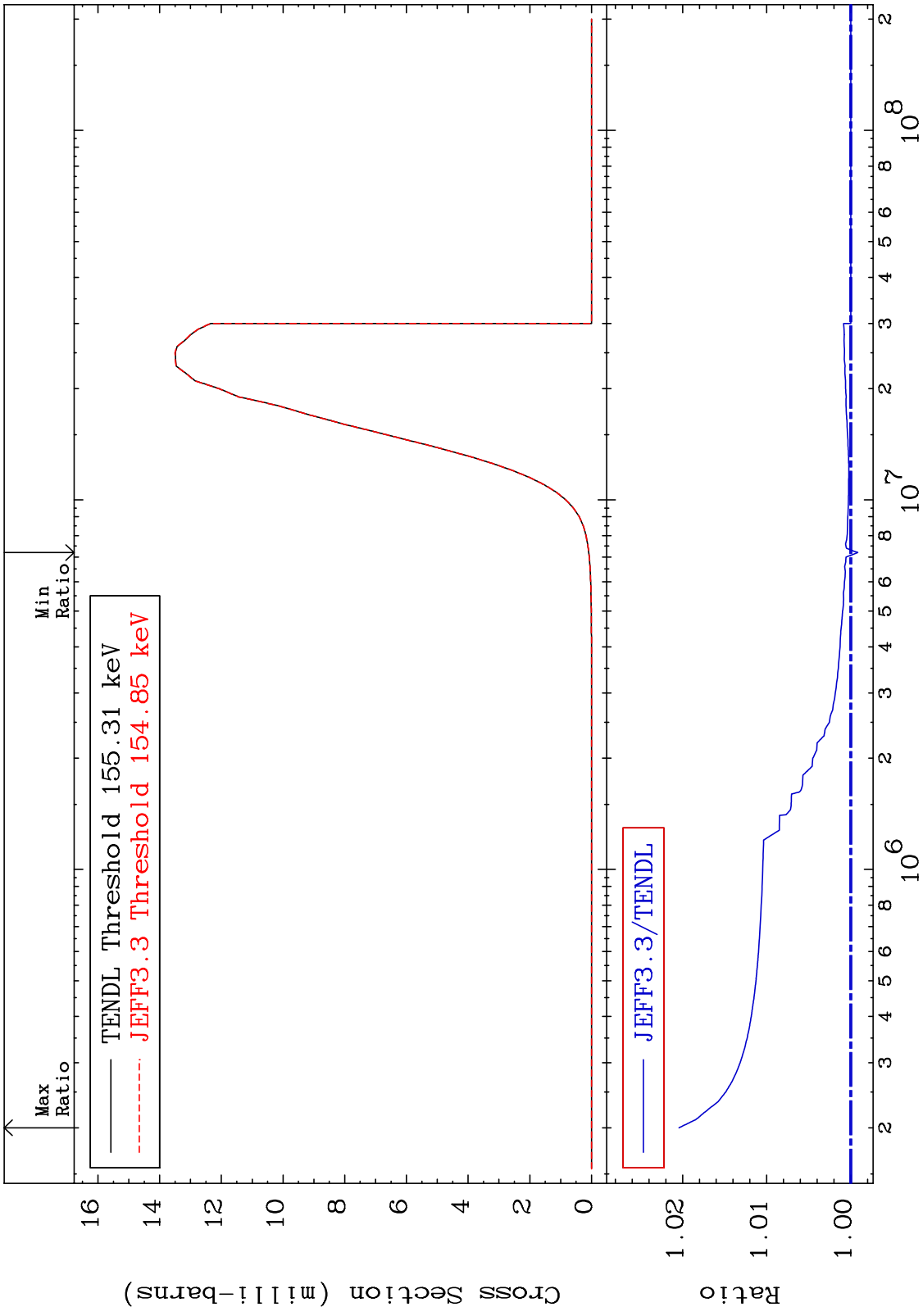
MAT 6631

(n, γ)
Cross Section

66-Dy-158
-100.0 To 9999. %



MAT 6631 (n,p) Cross Section 66-Dy-158
 -0.084 To 2.042 %



MAT 6631

(n,d)

66-Dy-158

-0.065 To 75.25 %

Cross Section

Max Ratio

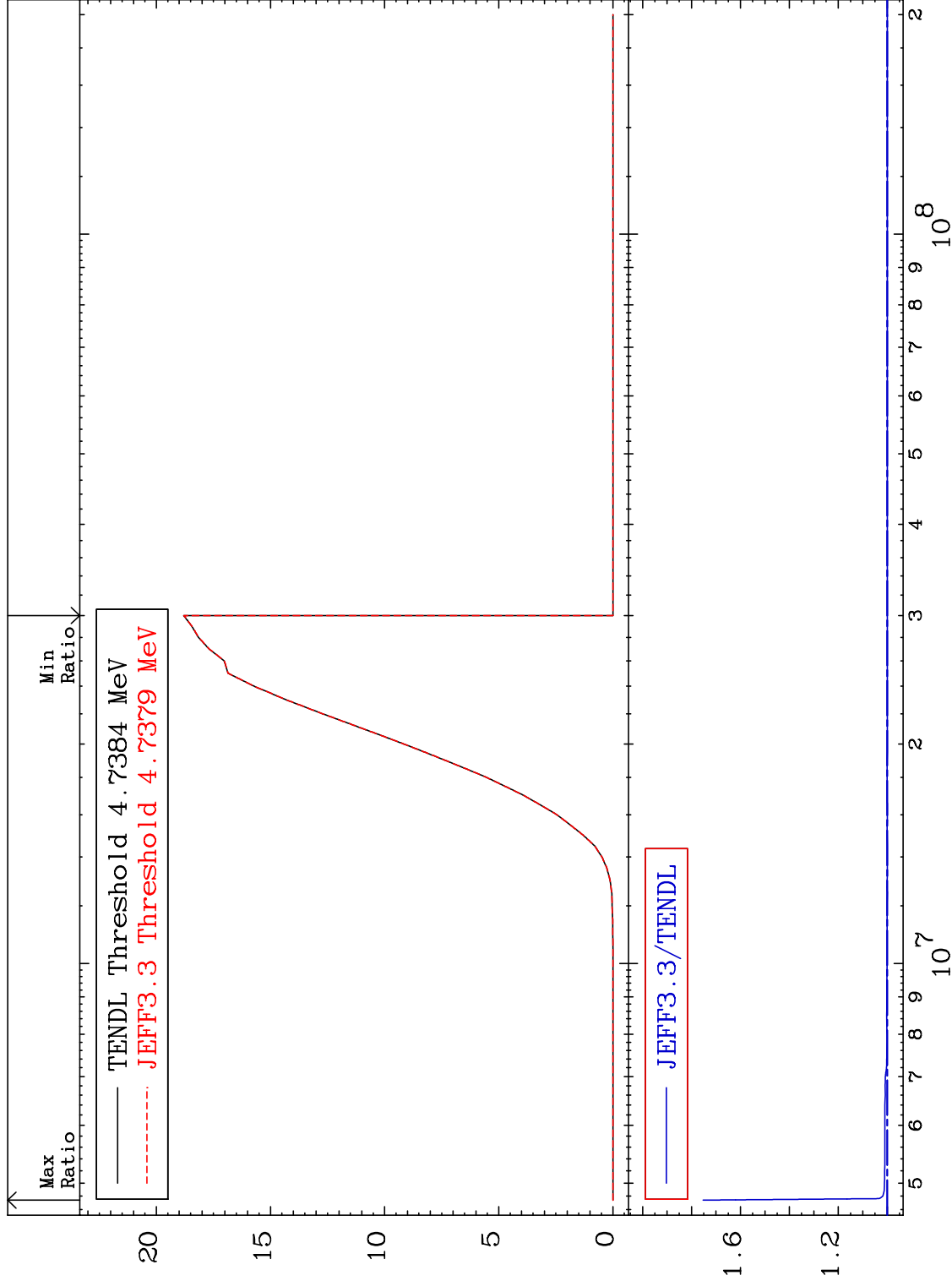
Min Ratio

— TENDL Threshold 4.7384 MeV
- - - JEFF3.3 Threshold 4.7379 MeV

— JEFF3.3/TENDL

Cross Section (milli-barns)

Ratio



52

Incident Energy (eV)

66-Dy-158

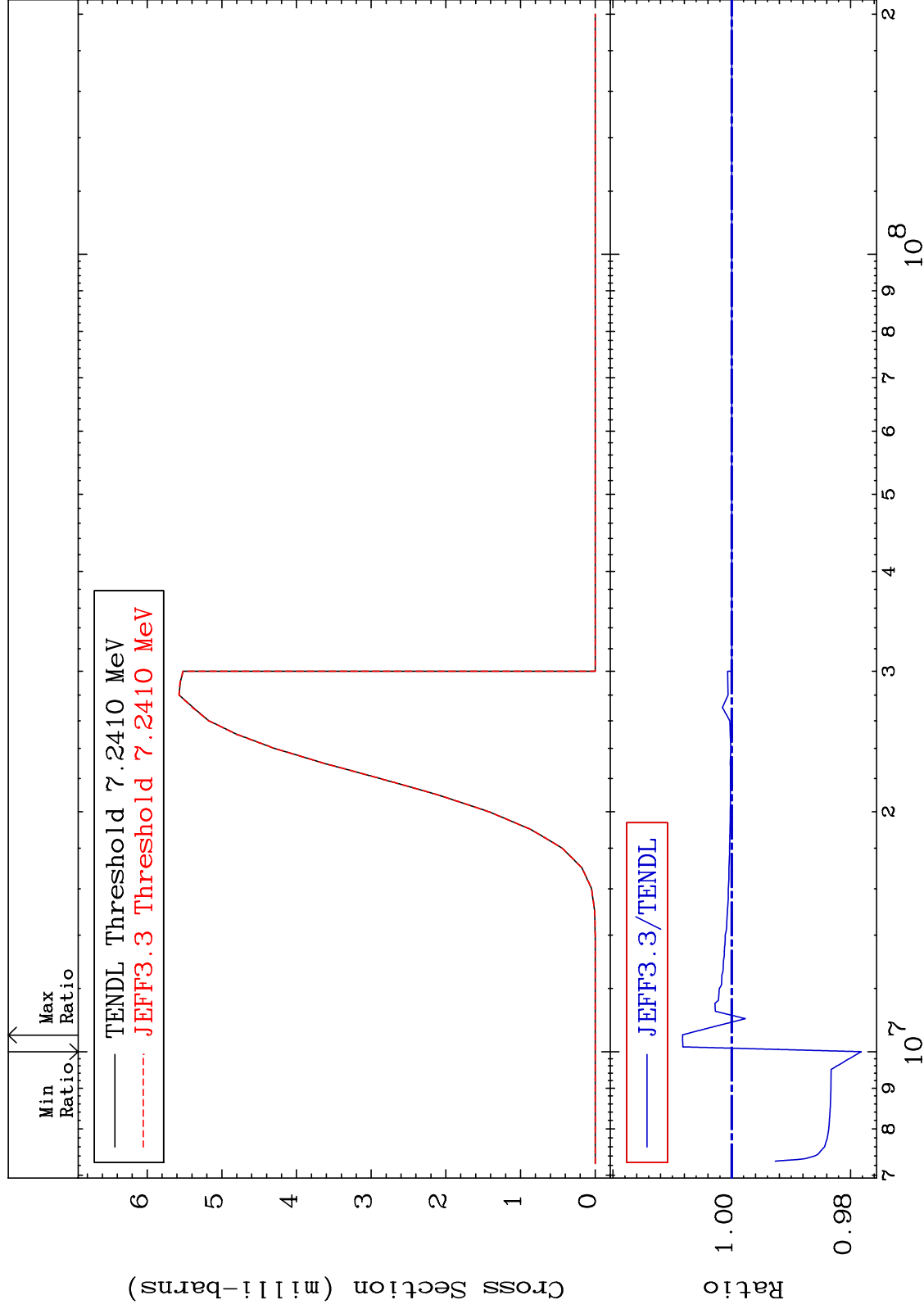
MAT 6631

(n, t)

66-Dy-158

Cross Section

-2.182 To 0.827 %

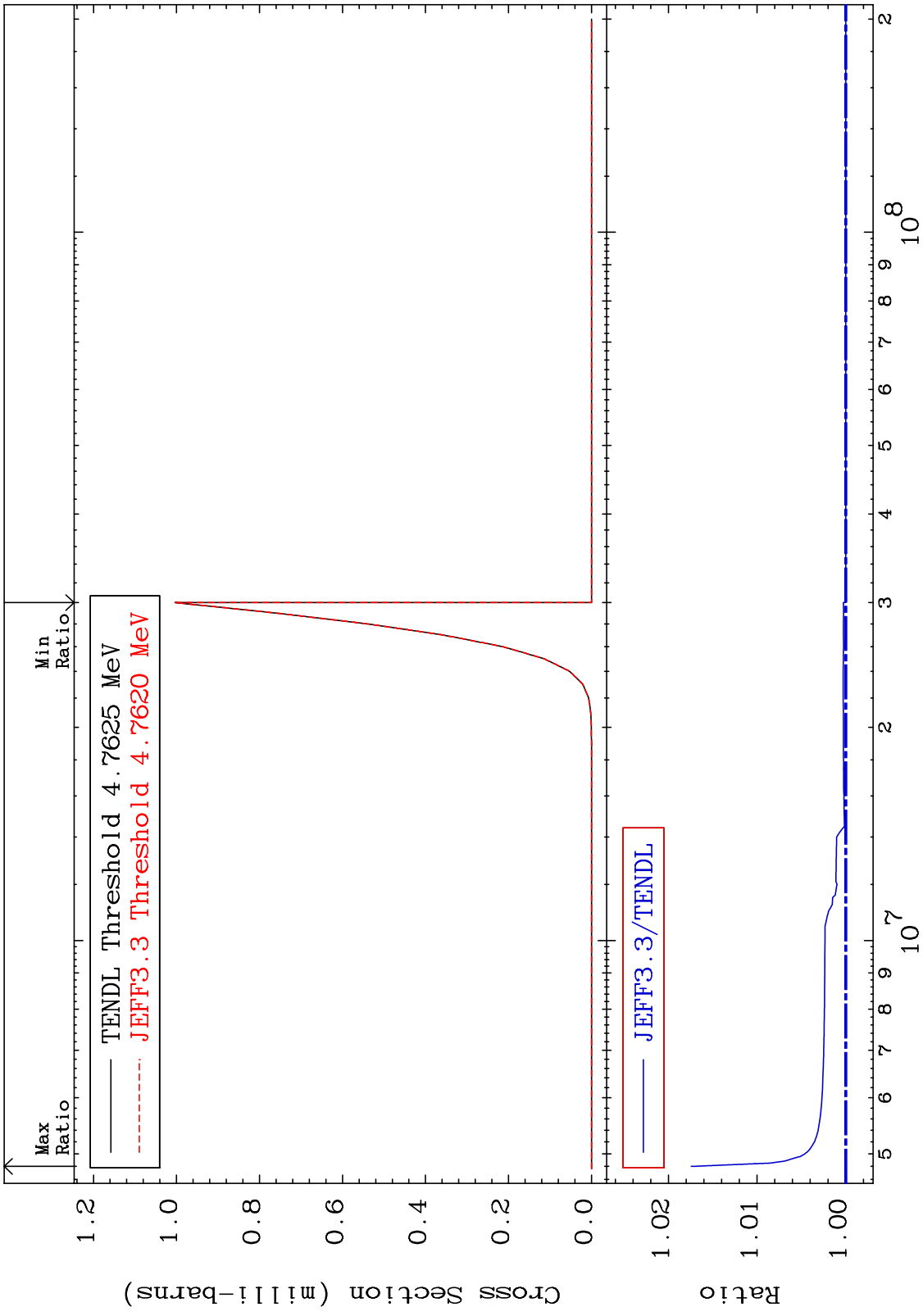


53

Incident Energy (eV)

66-Dy-158

MAT 6631 (n, He-3) Cross Section 66-Dy-158 To 1.743 %

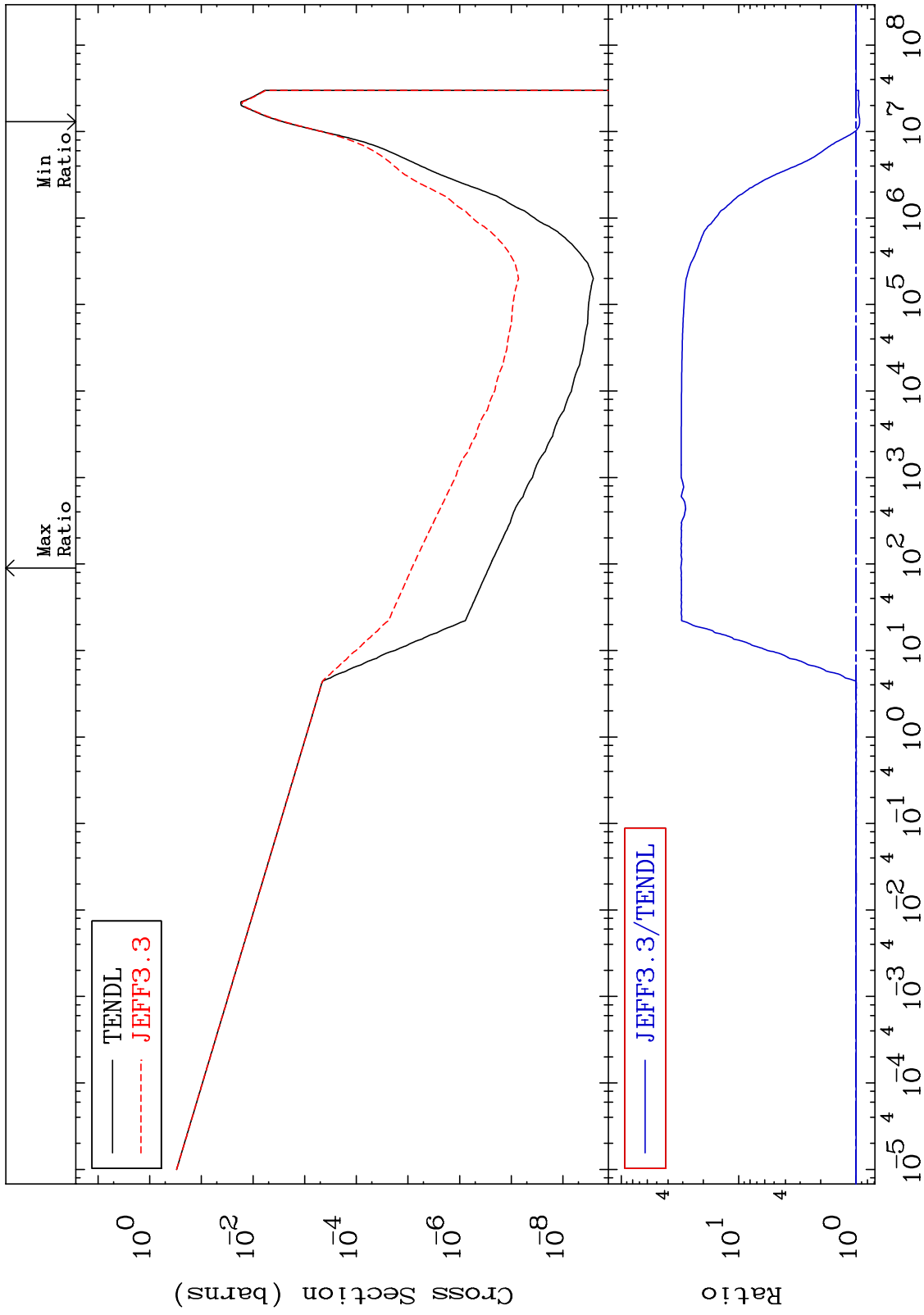


MAT 6631

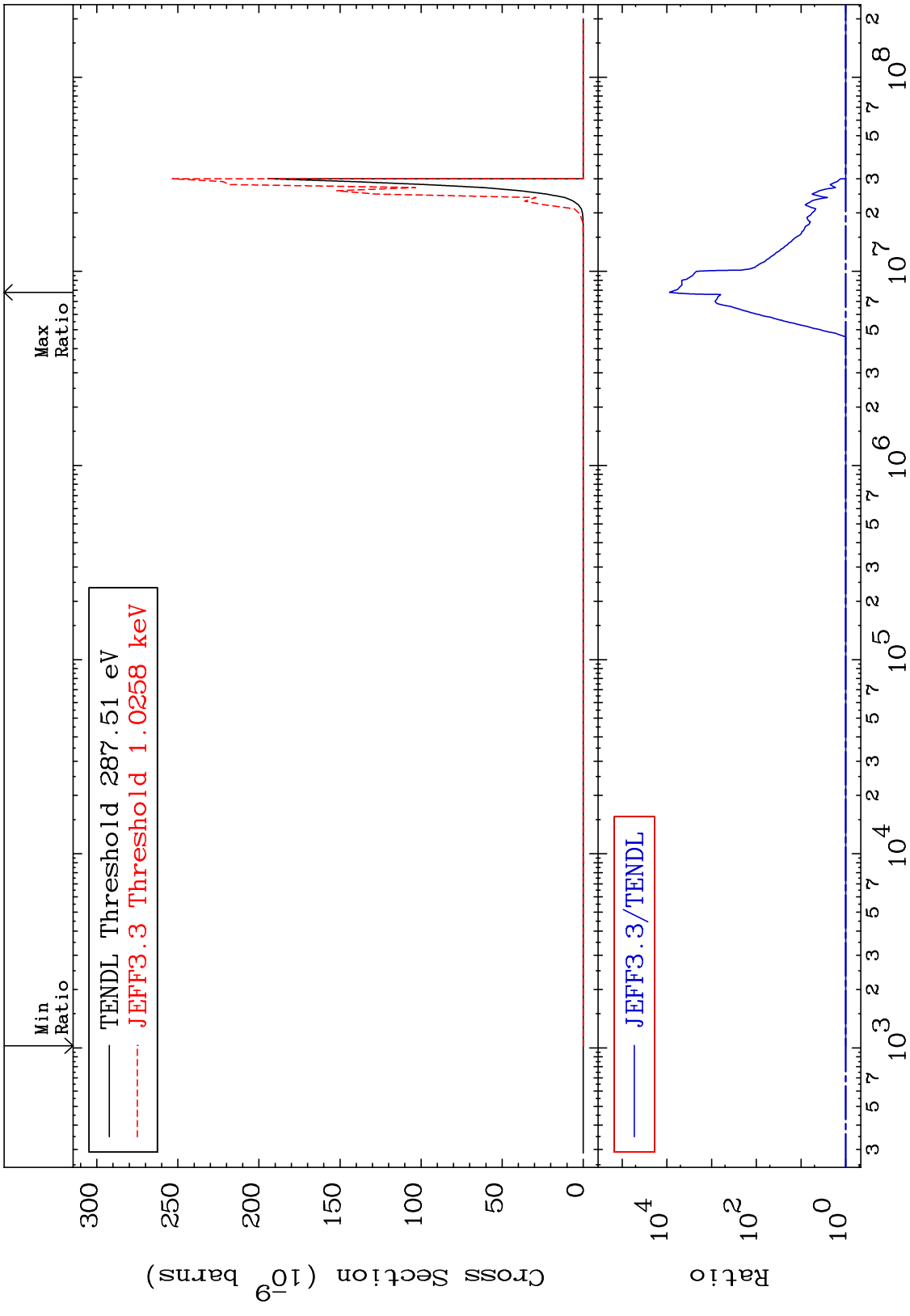
(n, α)

66-Dy-158

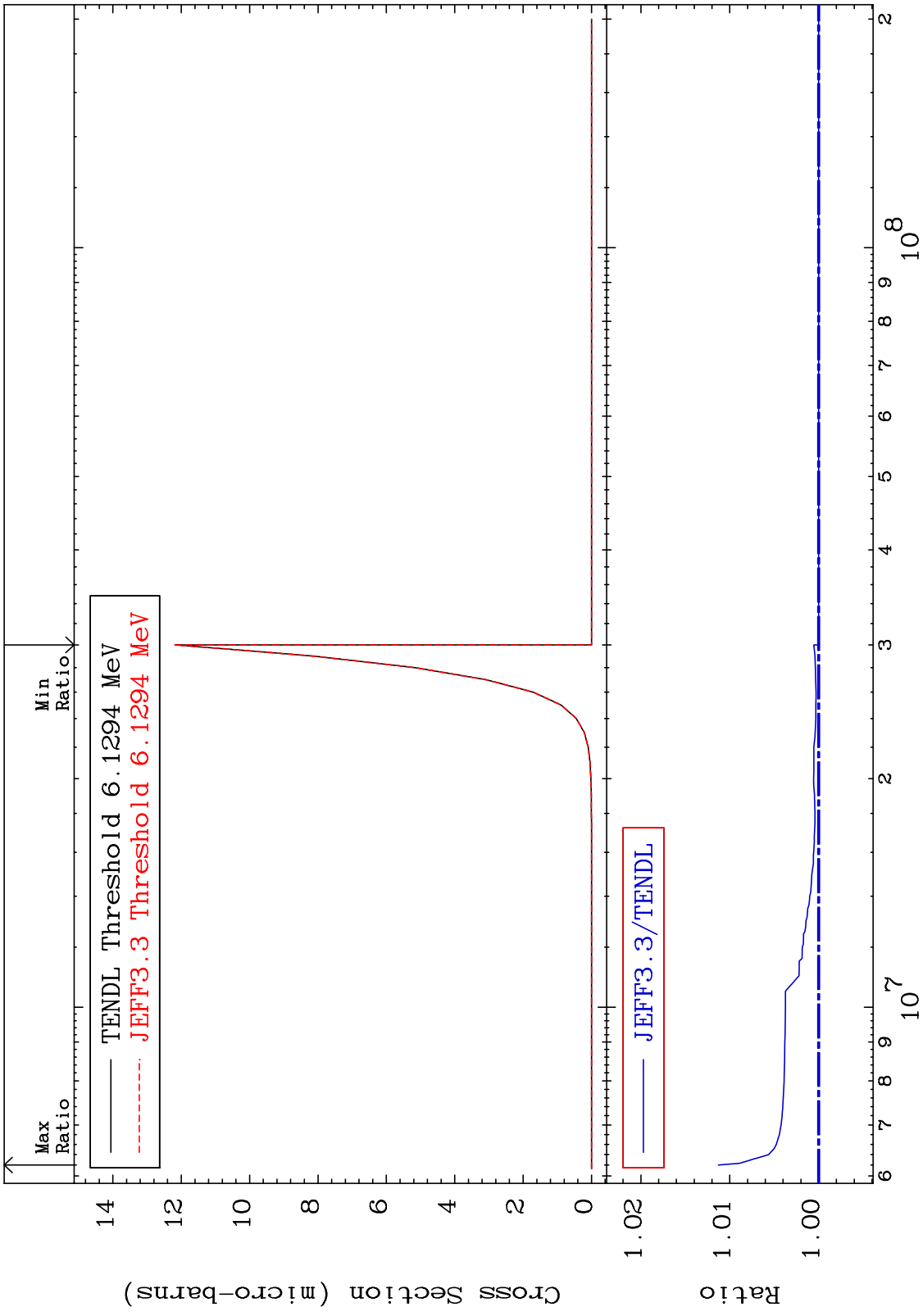
-6.726 To 3011. %



MAT 6631 $(n, 2\alpha)$ Cross Section 66-Dy-158 To 9999. %



MAT 6631 (n,2p) Cross Section 66-Dy-158 To 1.130 %



MAT 6631

(n, p) α

66-Dy-158

-20.44 To 9999. %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 313.78 keV
JEFF3.3 Threshold 313.52 keV

Cross Section (micro-barns)

1.0
0.8
0.6
0.4
0.2
0.0

JEFF3.3/TENDL

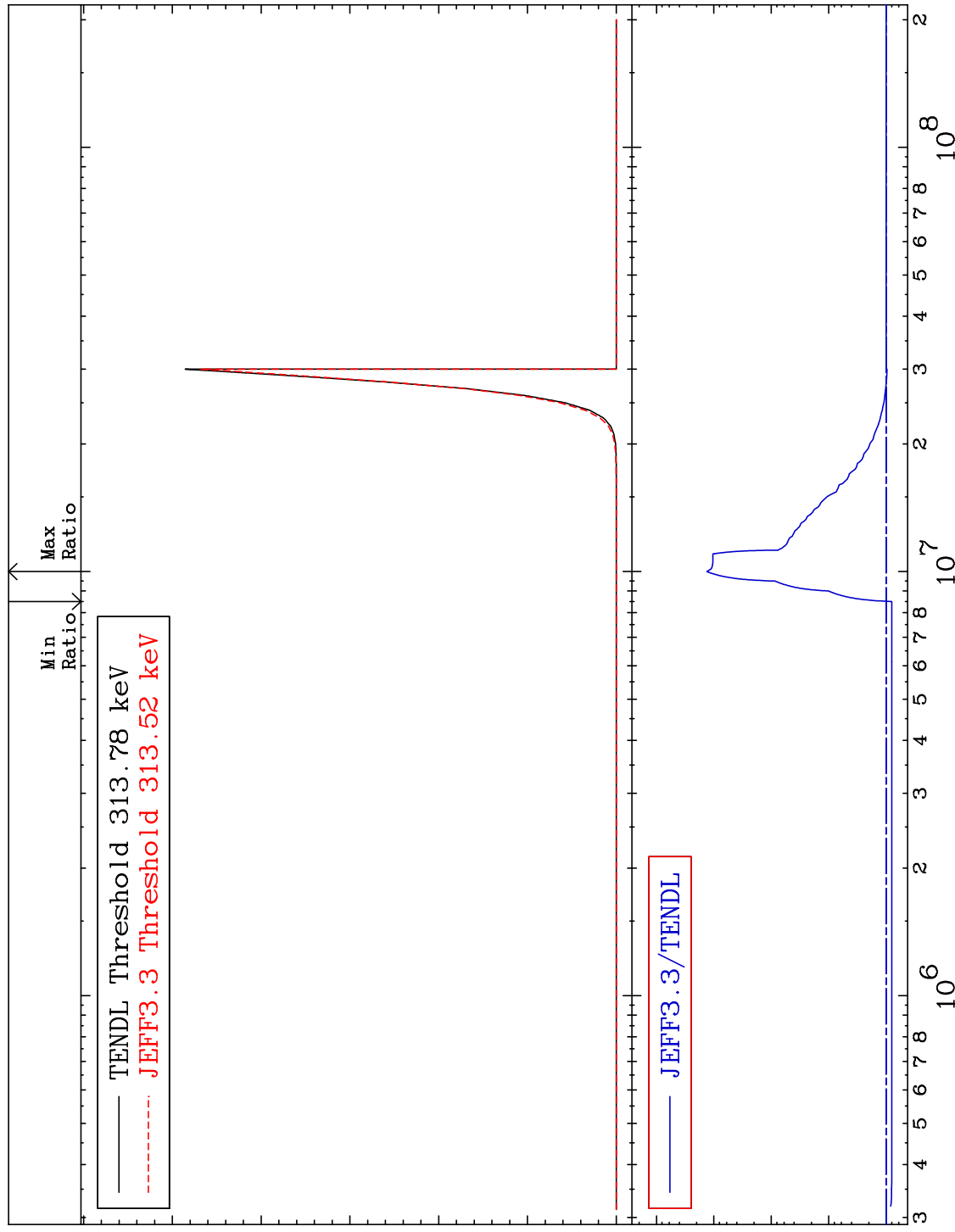
Ratio

10^3
 10^2
 10^1
 10^0

58

Incident Energy (eV)

66-Dy-158



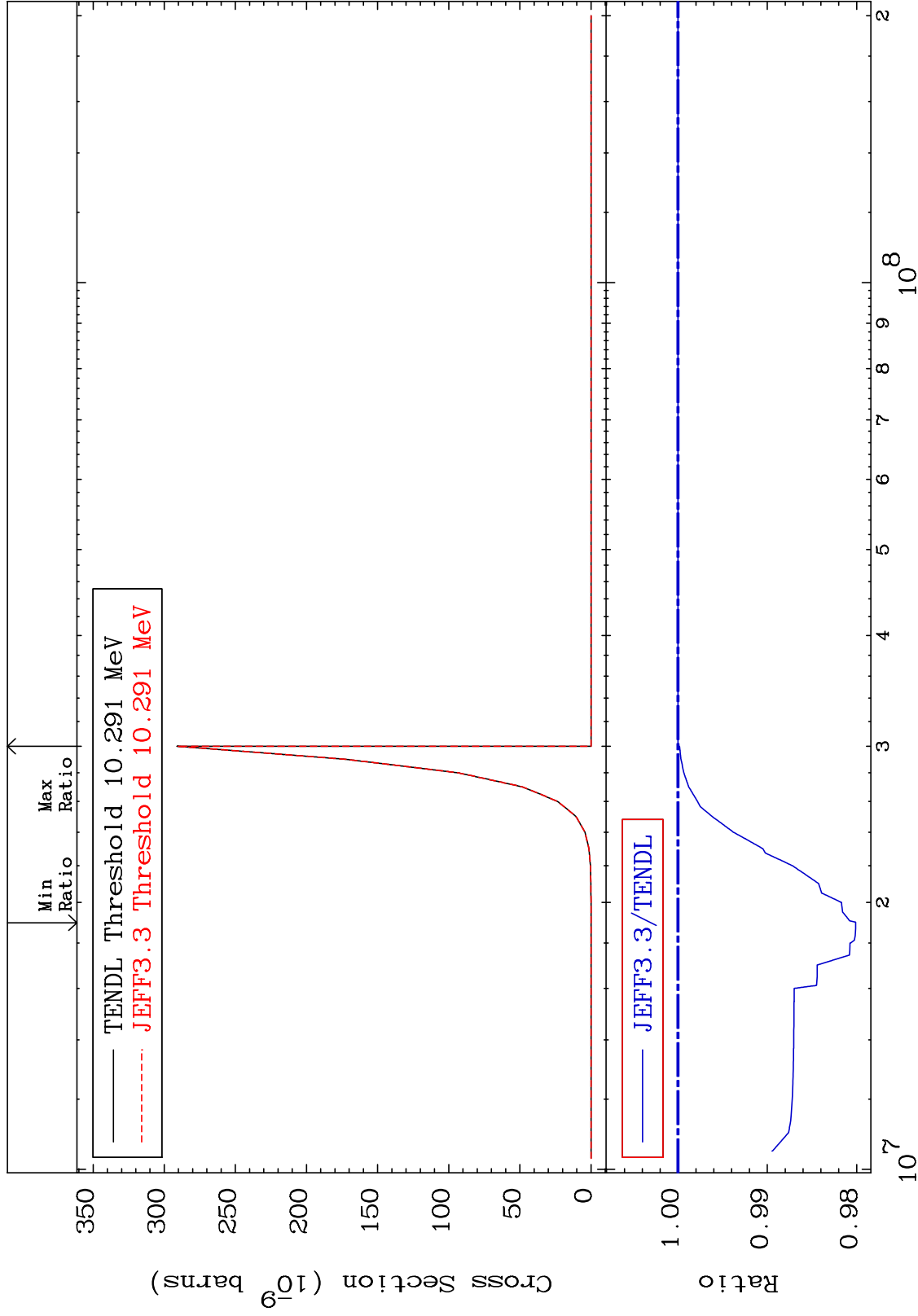
MAT 6631

(n,p) d

66-Dy-158

Cross Section

-1.989 To 0.000 %

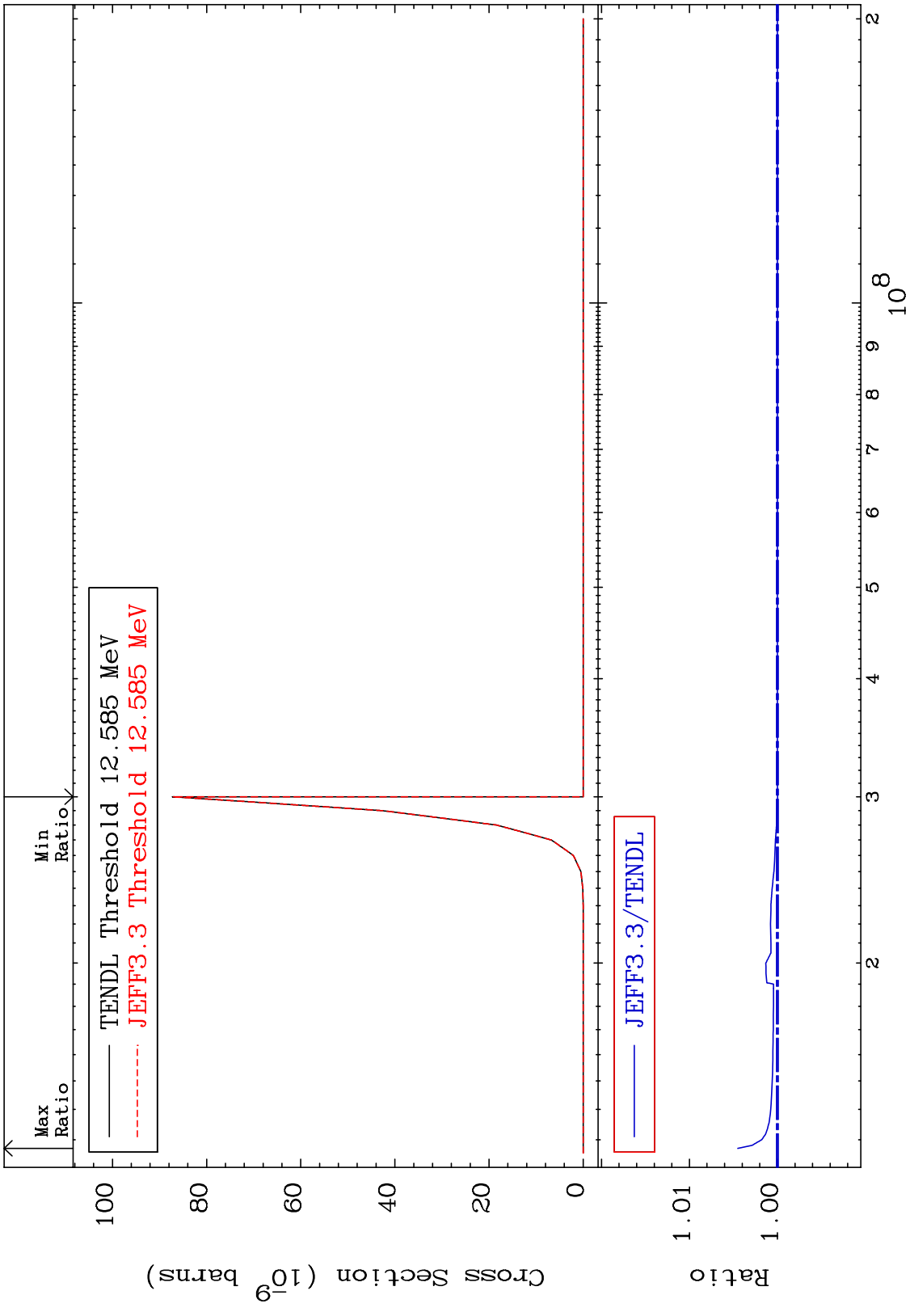


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Incident Energy (eV)

66-Dy-158

MAT 6631 (n,p) t 66-Dy-158
 Cross Section -0.002 To 0.451 %



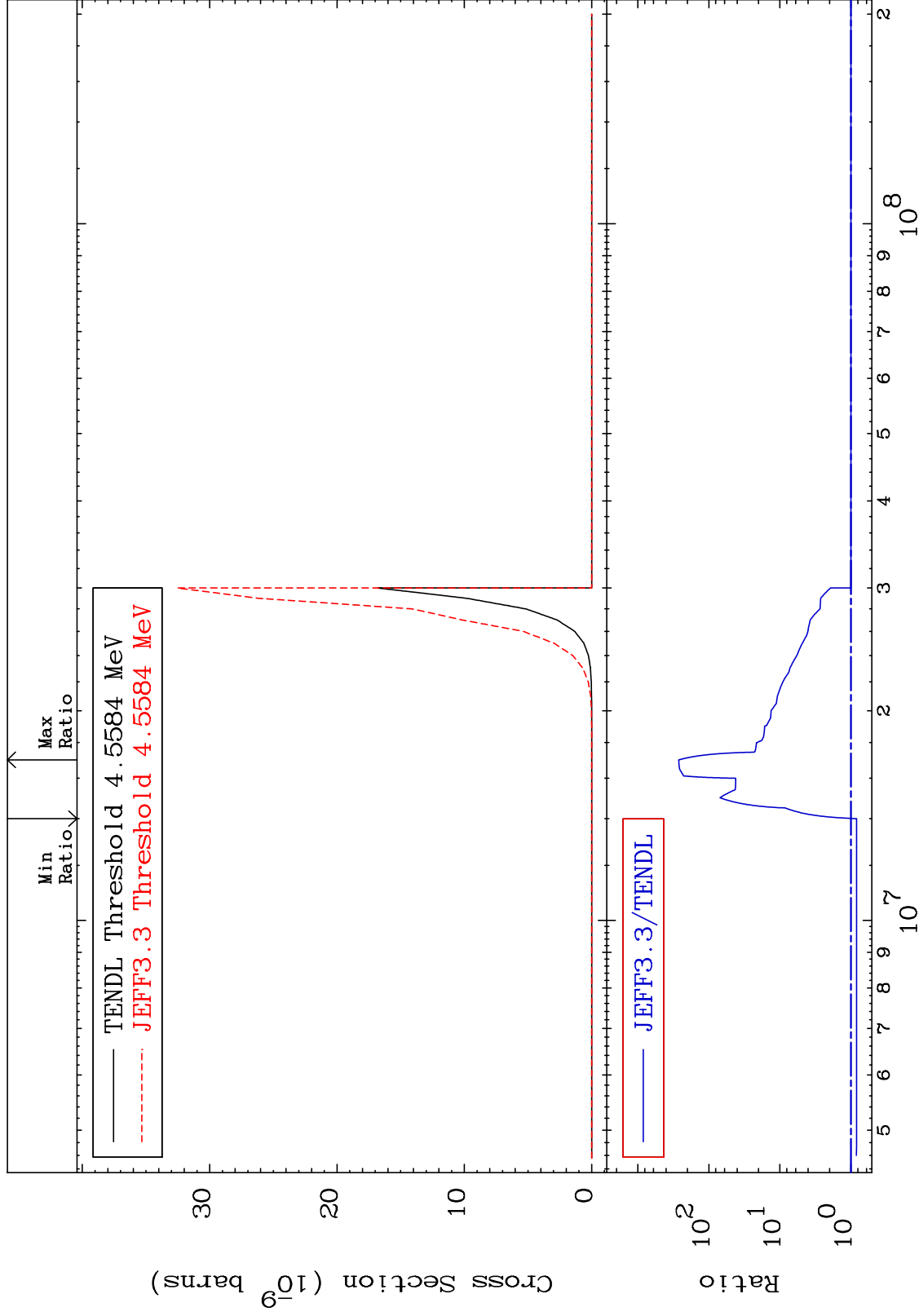
MAT 6631

(n,d) α

66-Dy-158

-16.88 To 9999. %

Cross Section

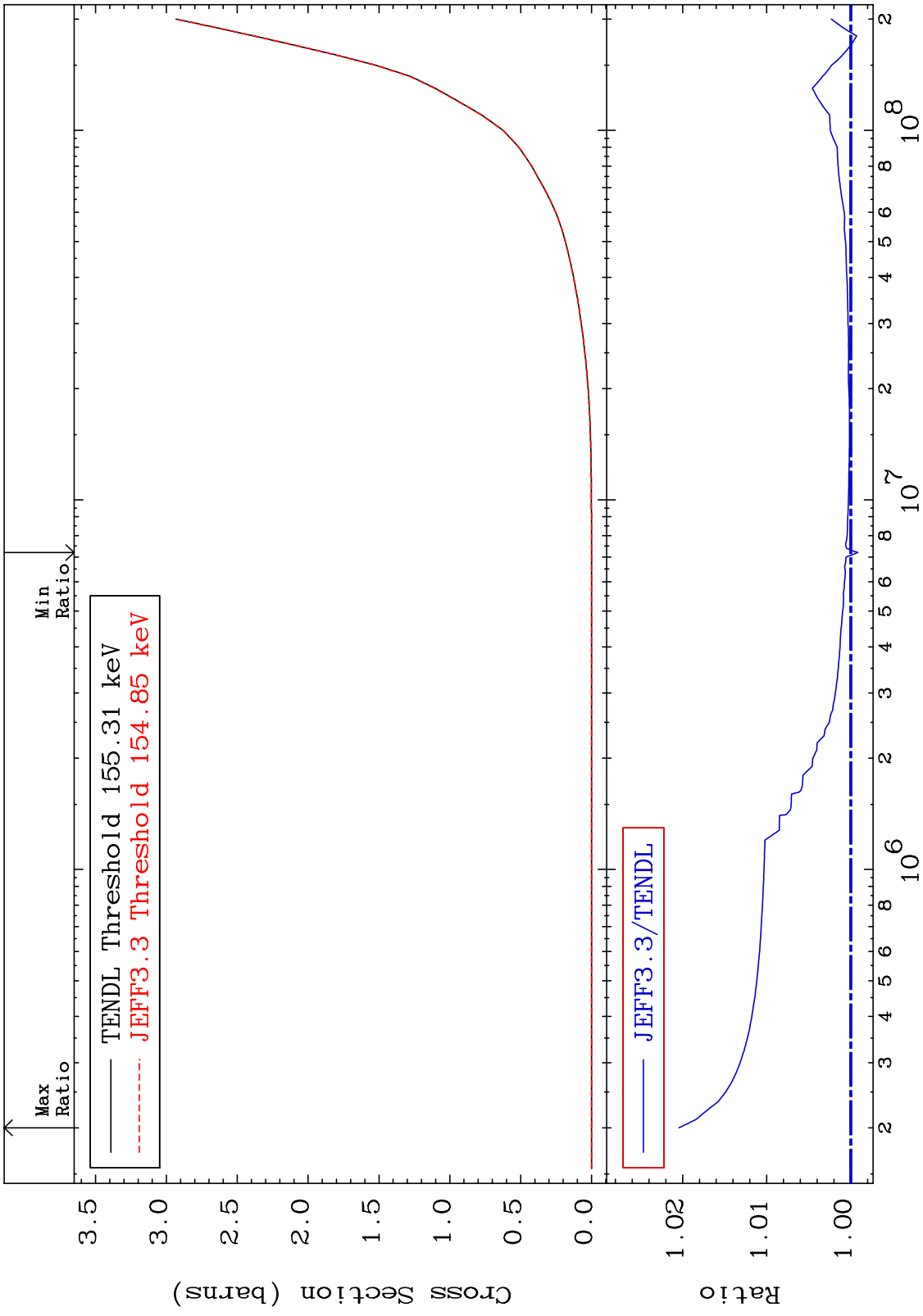


61

Incident Energy (eV)

66-Dy-158

MAT 6631 Hydrogen Production Cross Section 66-Dy-158
 -0.084 To 2.042 %

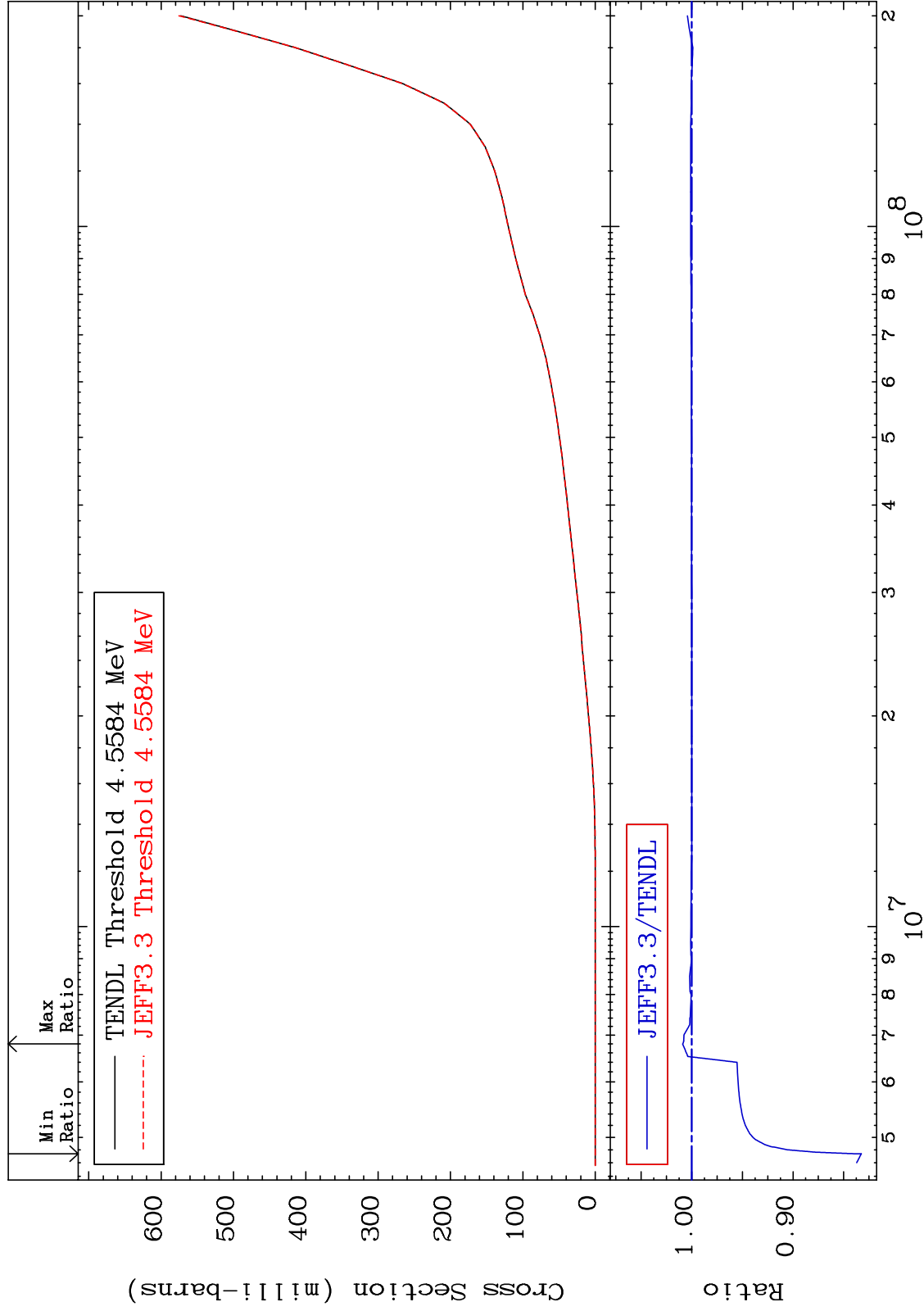


62 66-Dy-158

MAT 6631

Deuterium Production
Cross Section

66-Dy-158
-16.74 To 0.893 %



63

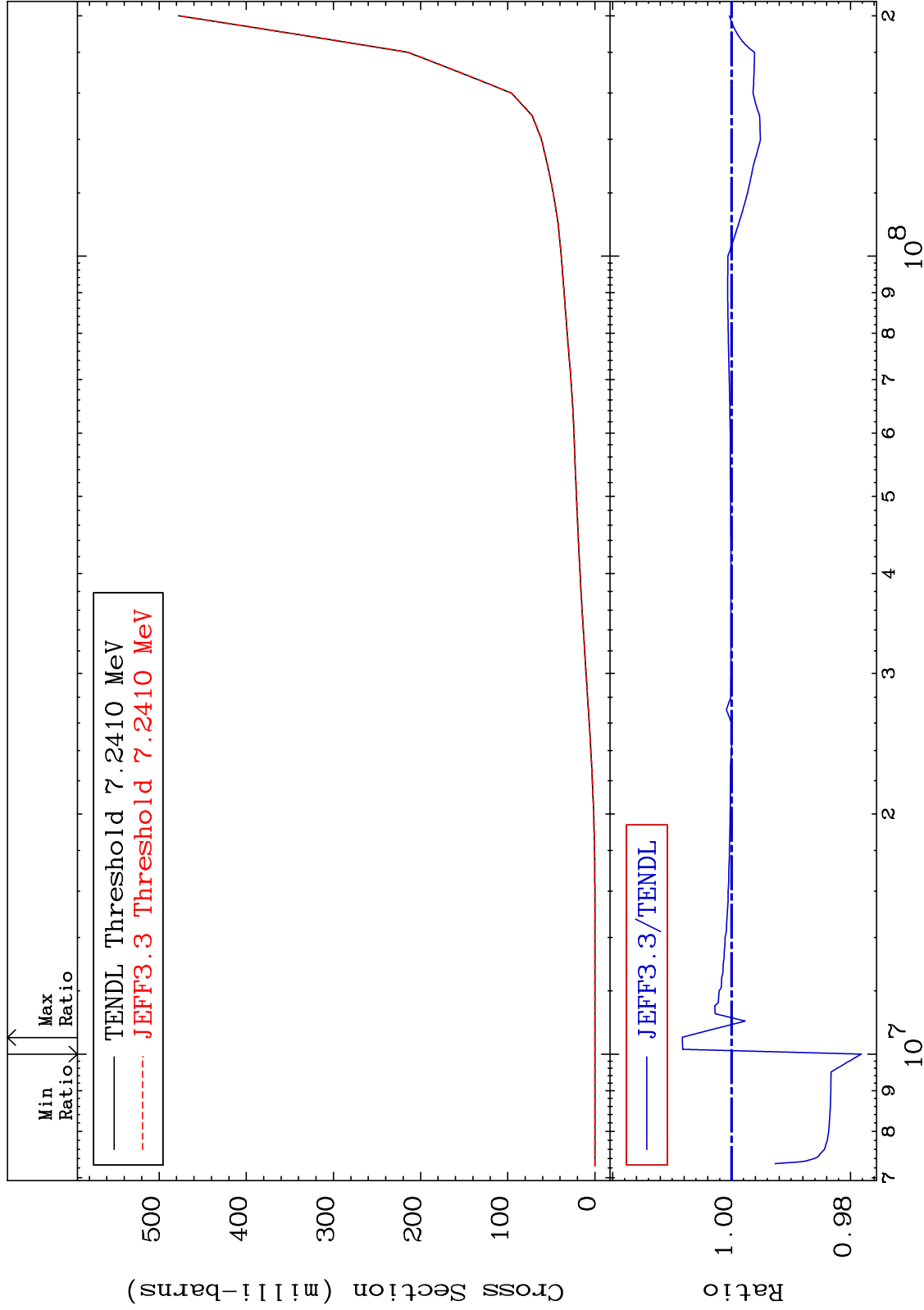
Incident Energy (eV)

66-Dy-158

MAT 6631

Tritium Production
Cross Section

66-Dy-158
-2.182 To 0.827 %



64

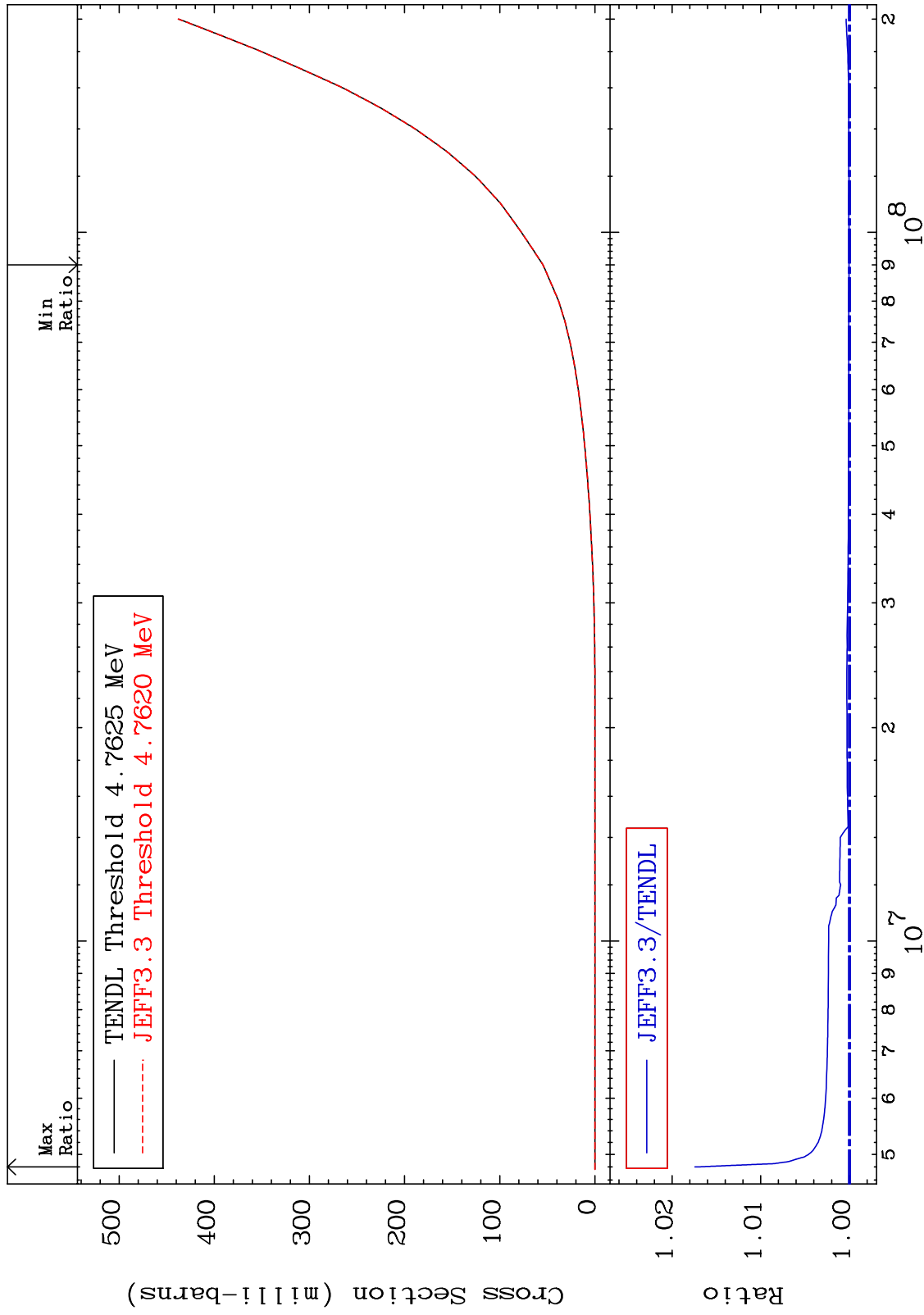
Incident Energy (eV)

66-Dy-158

MAT 6631

He-3 Production
Cross Section

66-Dy-158
To 1.743 %



65

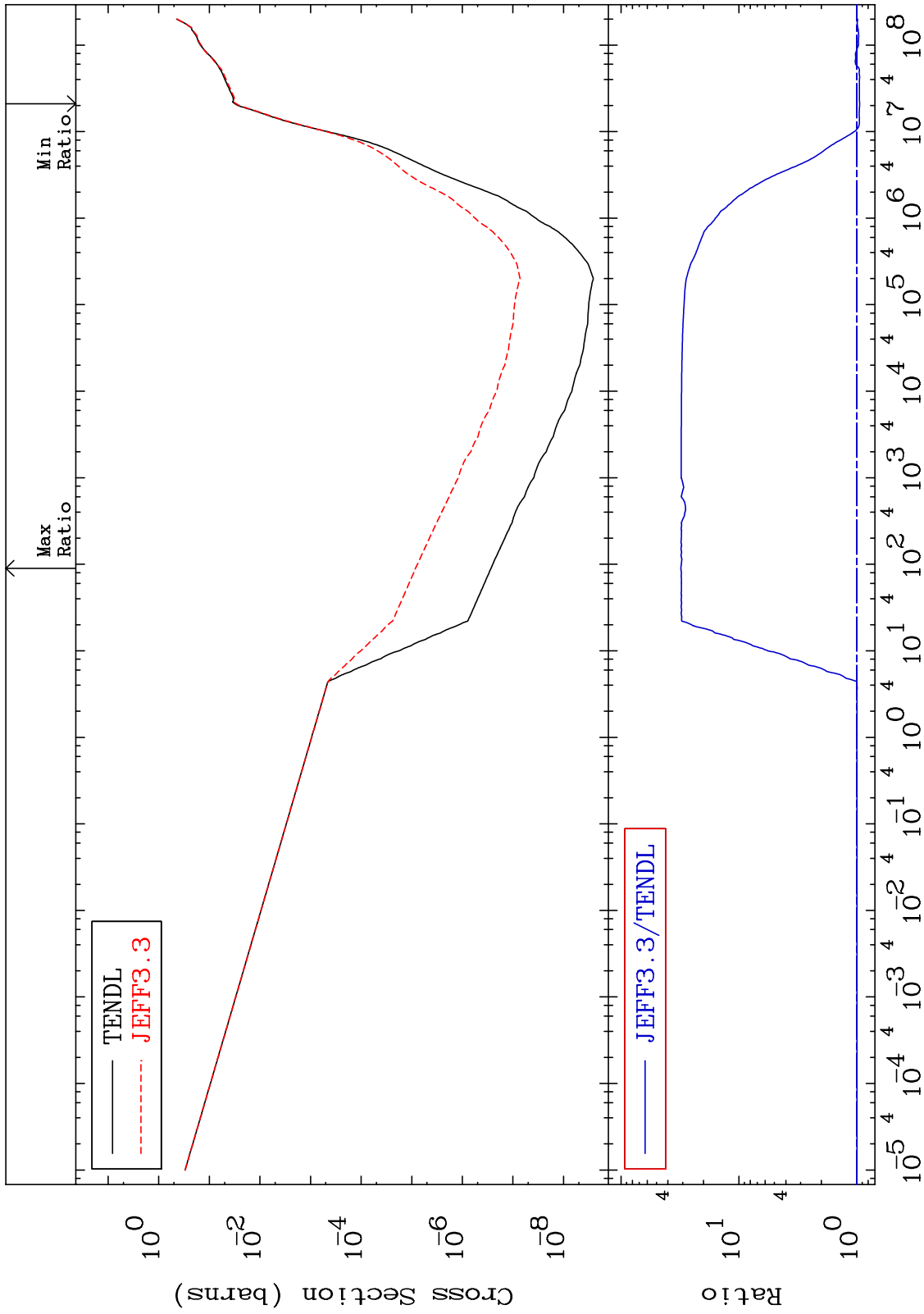
Incident Energy (eV)

66-Dy-158

MAT 6631

He-4 Production
Cross Section

66-Dy-158
-5.427 To 3011. %

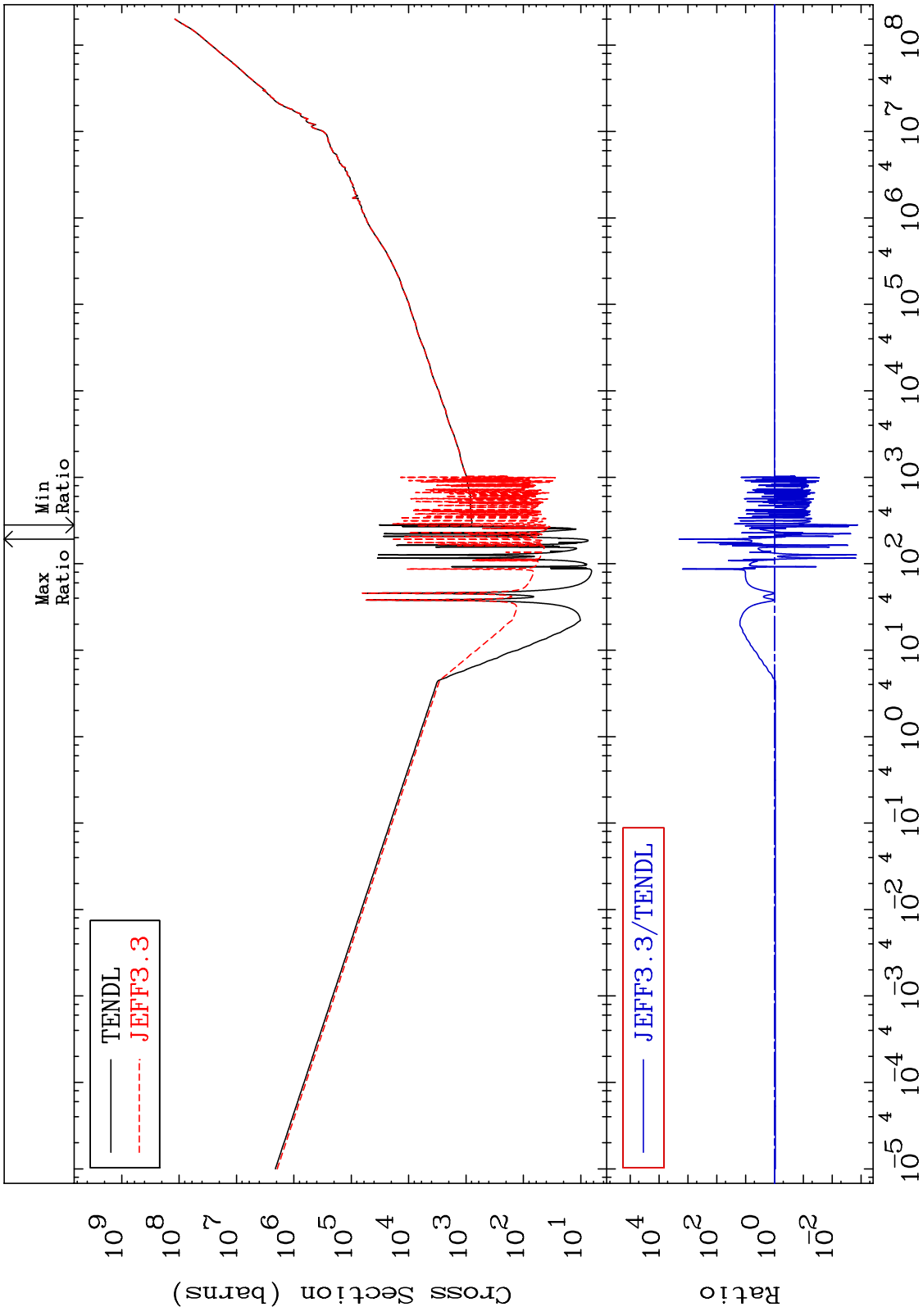


66

Incident Energy (eV)

66-Dy-158

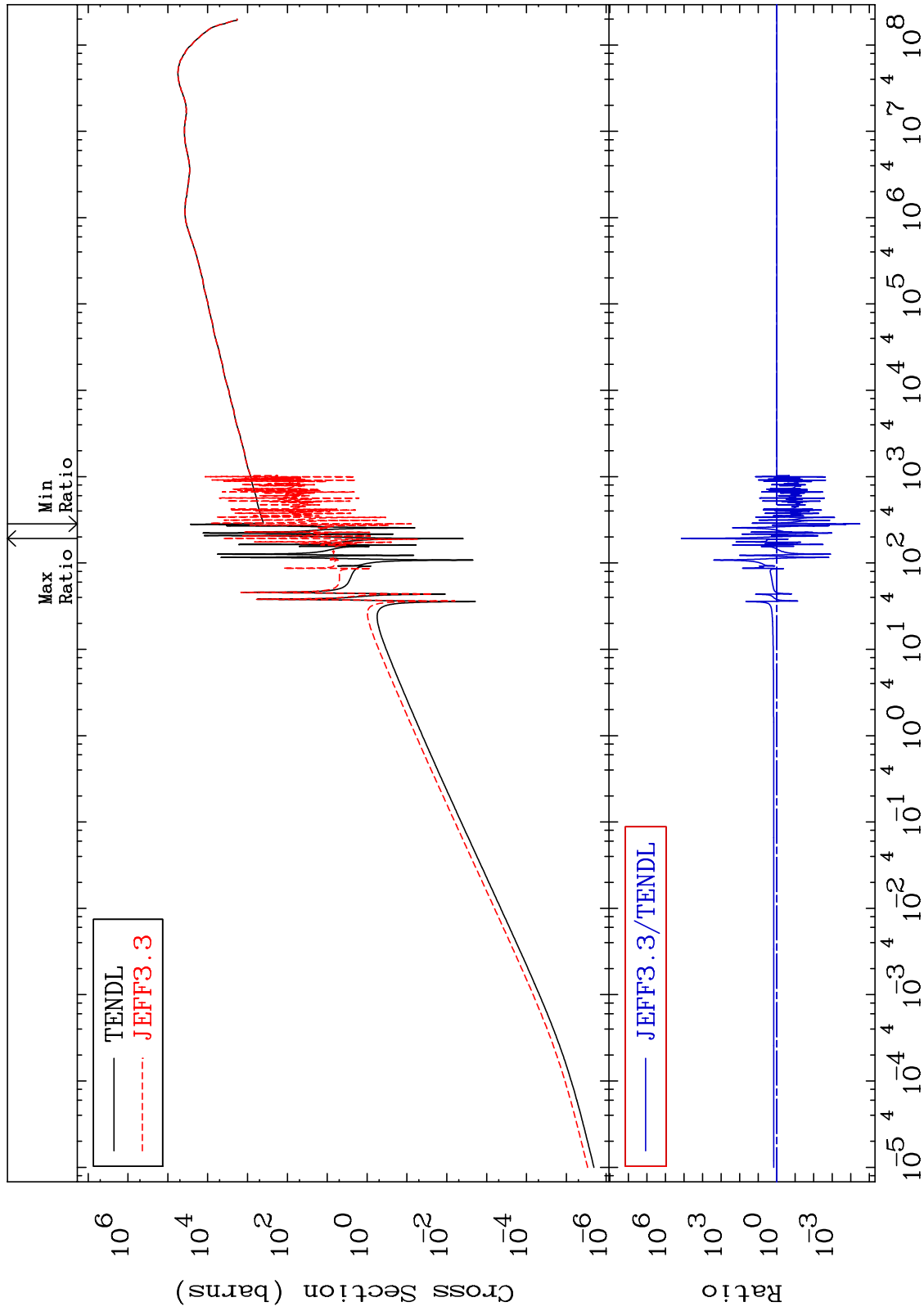
MAT 6631 Kerma total (eV-barns) 66-Dy-158
Cross Section -99.87 To 9999. %



MAT 6631

Kerma elastic
Cross Section

66-Dy-158
-100.0 To 9999. %



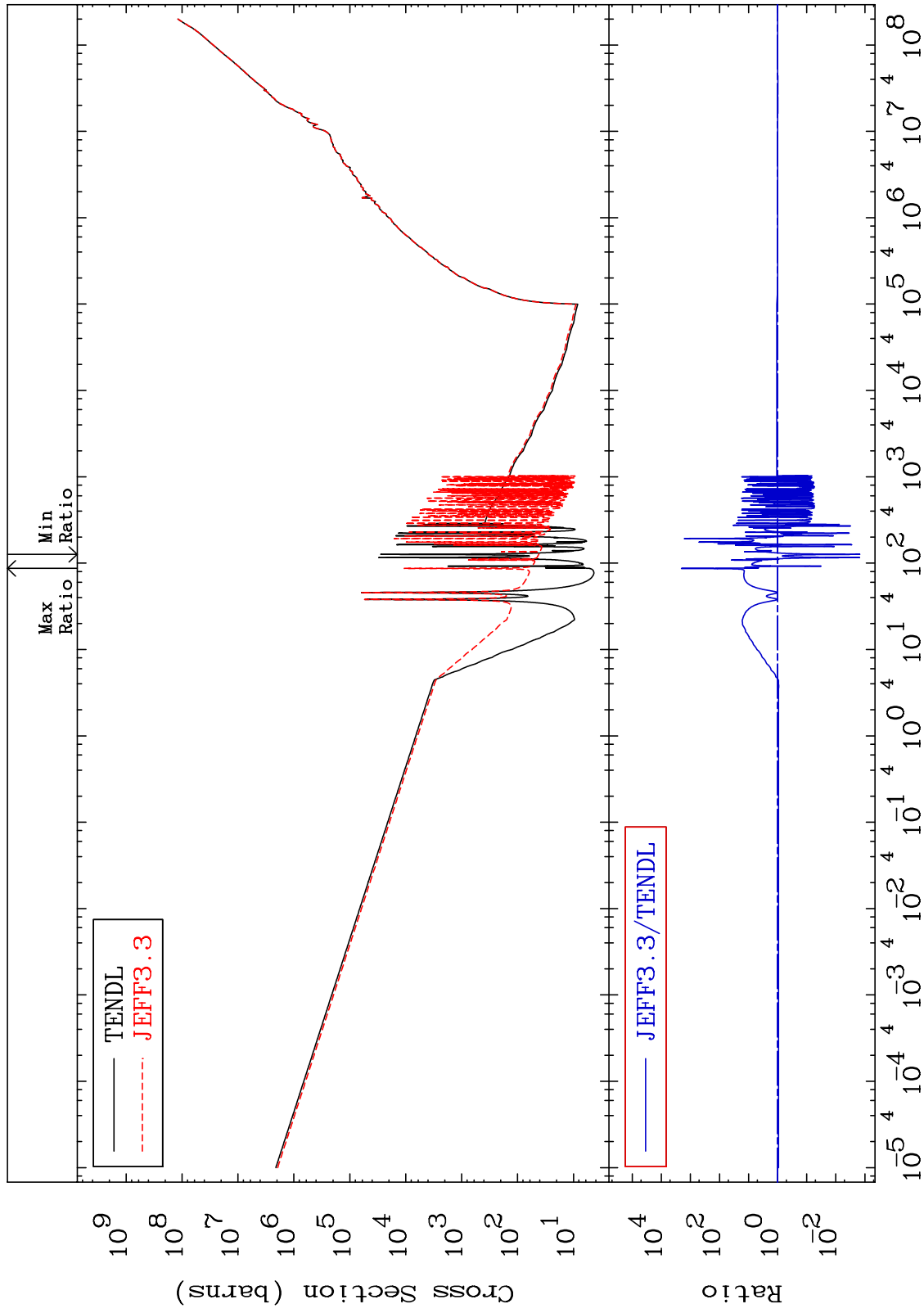
MAT 6631

Kerma non-elastic (all but mt2)

66-Dy-158

-99.85 To 9999. %

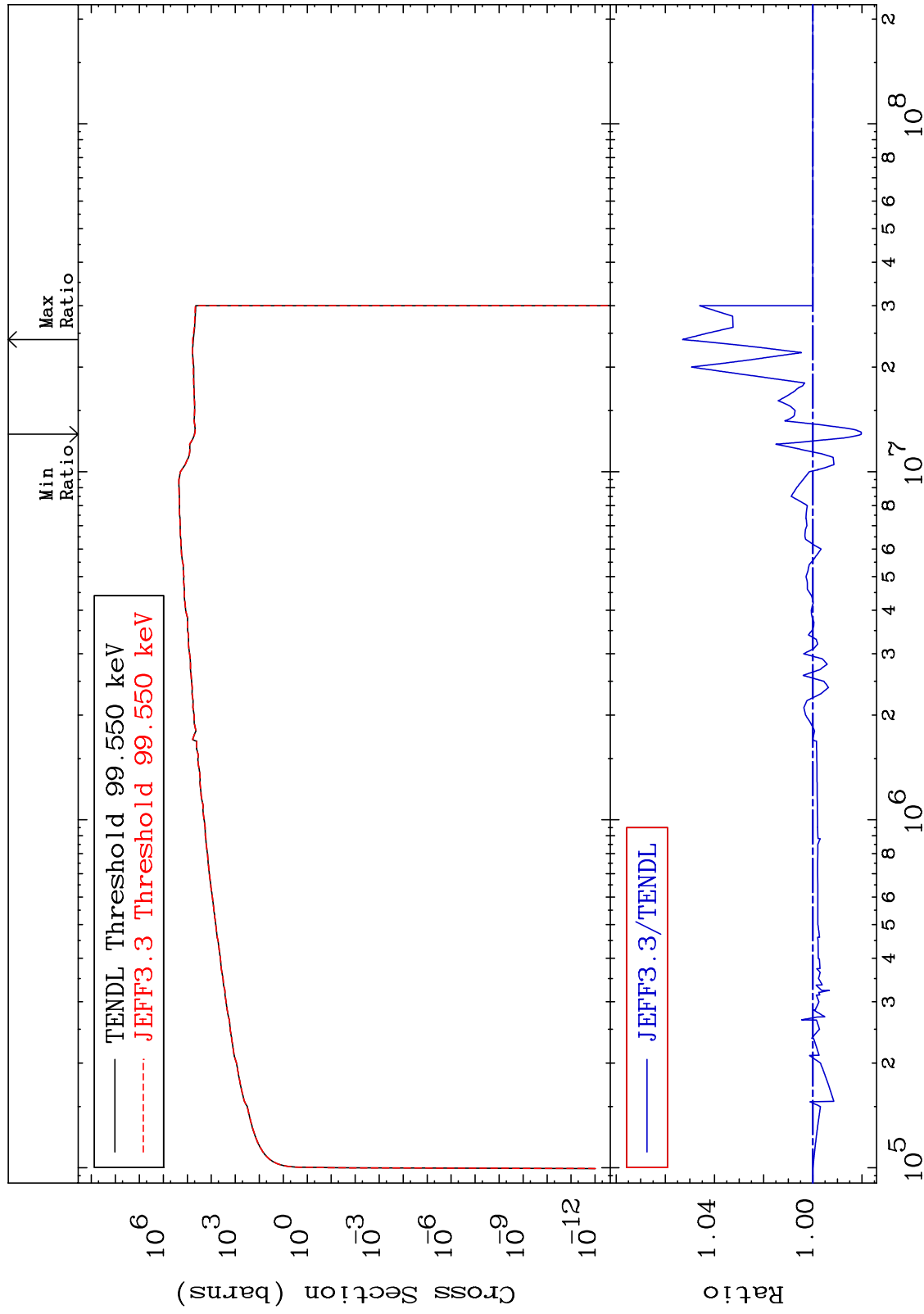
Cross Section



MAT 6631

Kerma inelastic (mt51-91)
Cross Section

66-Dy-158
-1.973 To 5.295 %



70

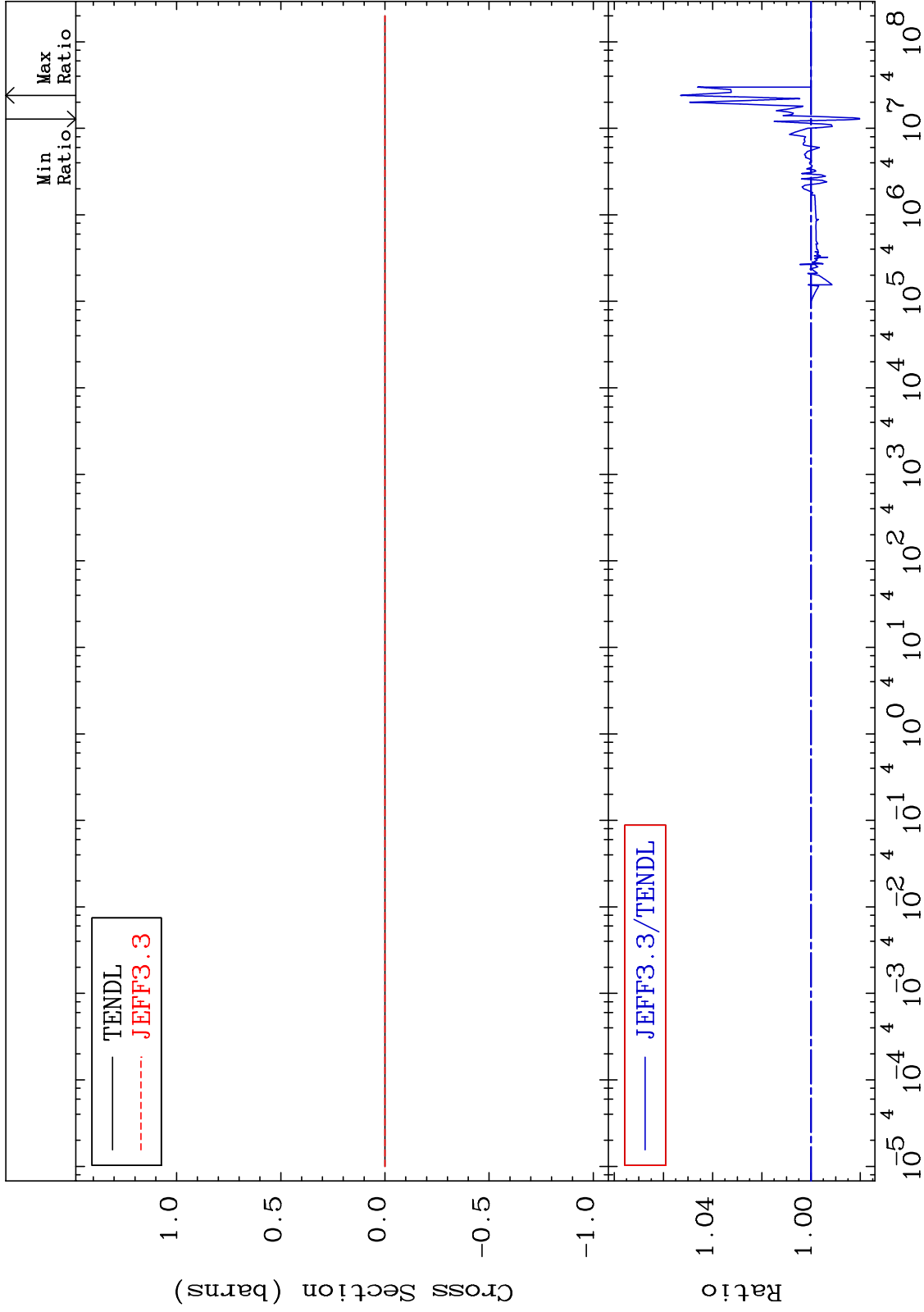
Incident Energy (eV)

66-Dy-158

MAT 6631

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

66-Dy-158
-1.973 To 5.295 %

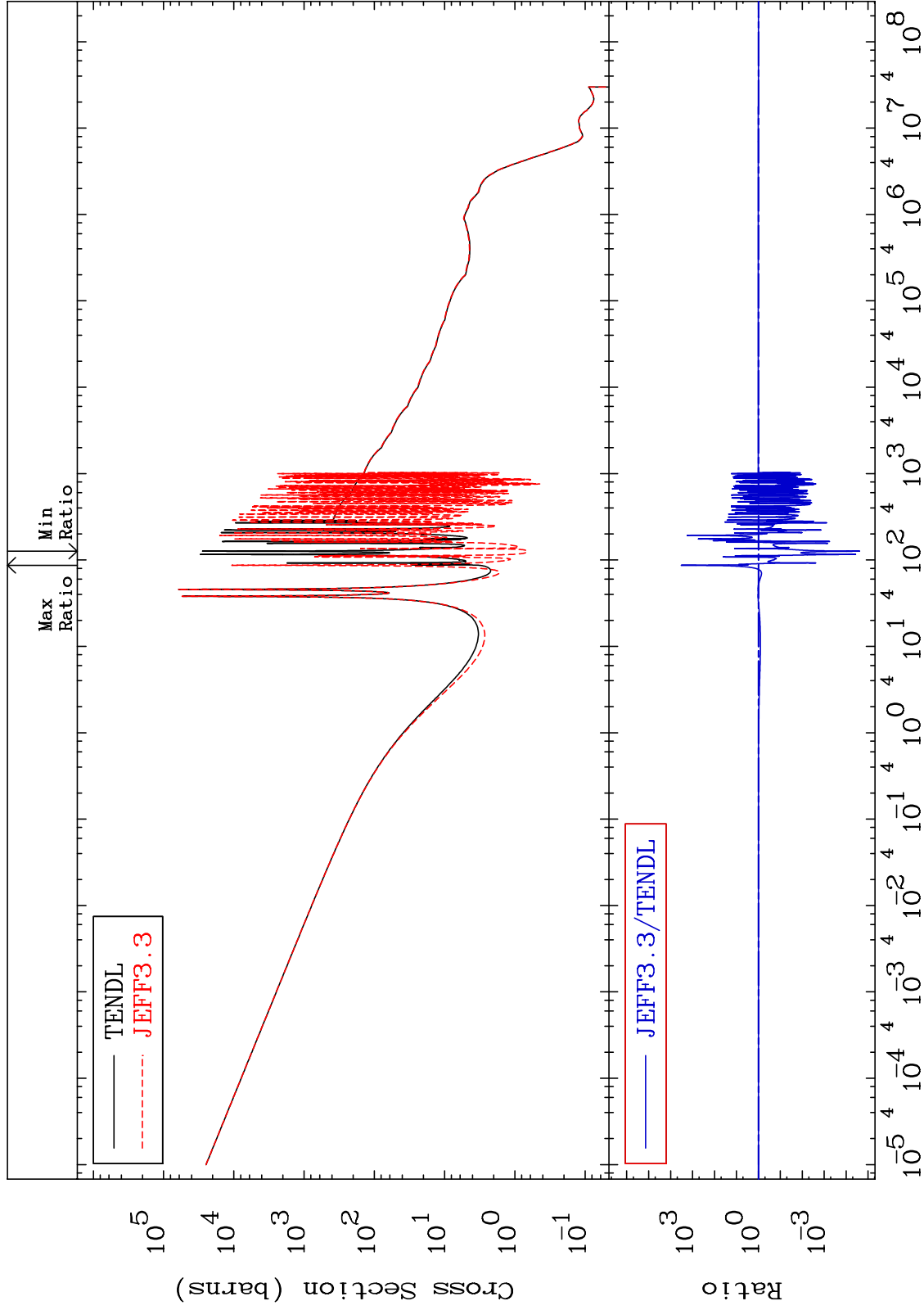


MAT 6631

Kerma capture (mt102)

66-Dy-158

-100.0 To 9999. %



72

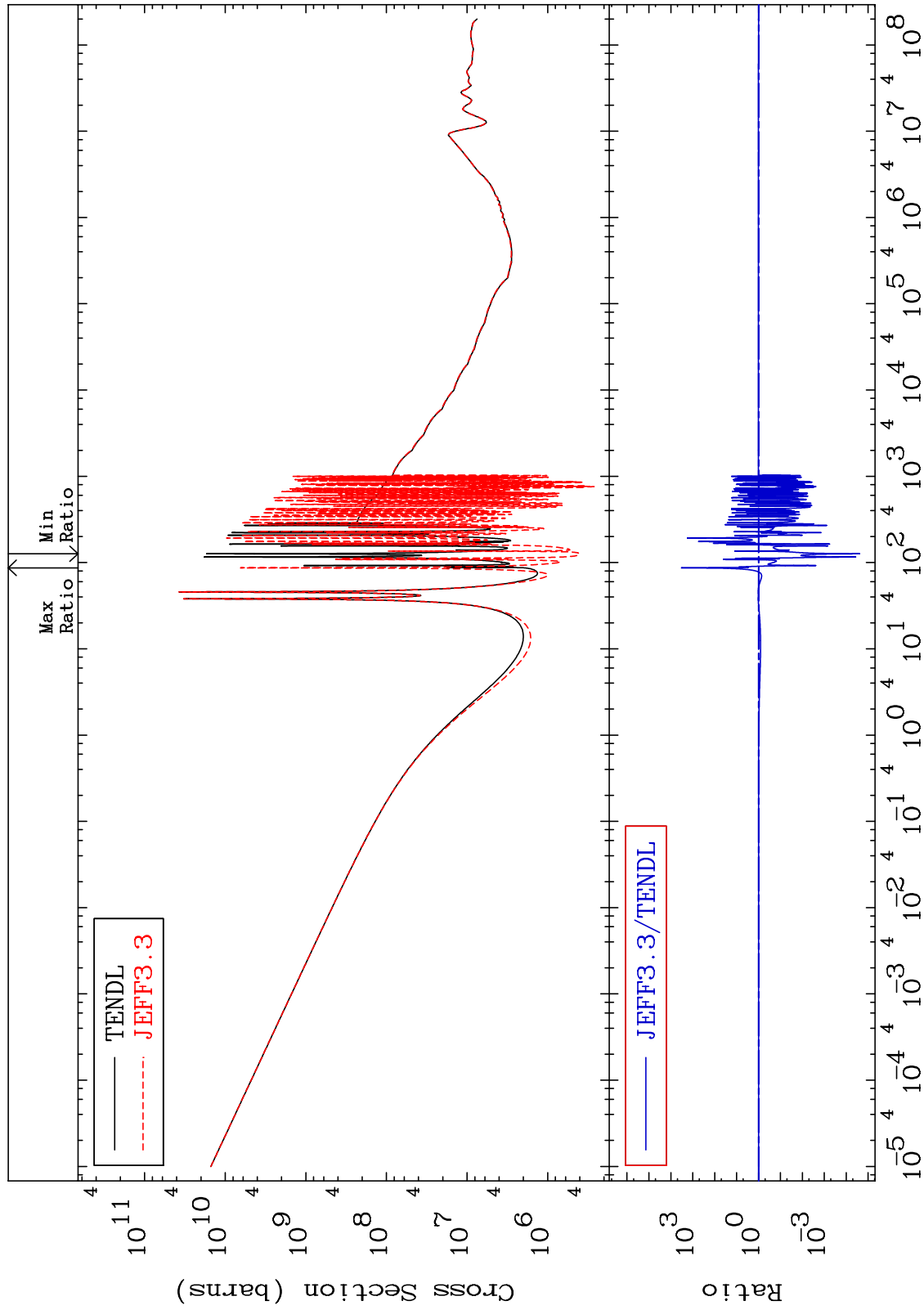
Incident Energy (eV)

66-Dy-158

MAT 6631

Total photon (eV-barns)
Cross Section

66-Dy-158
-100.0 To 9999. %

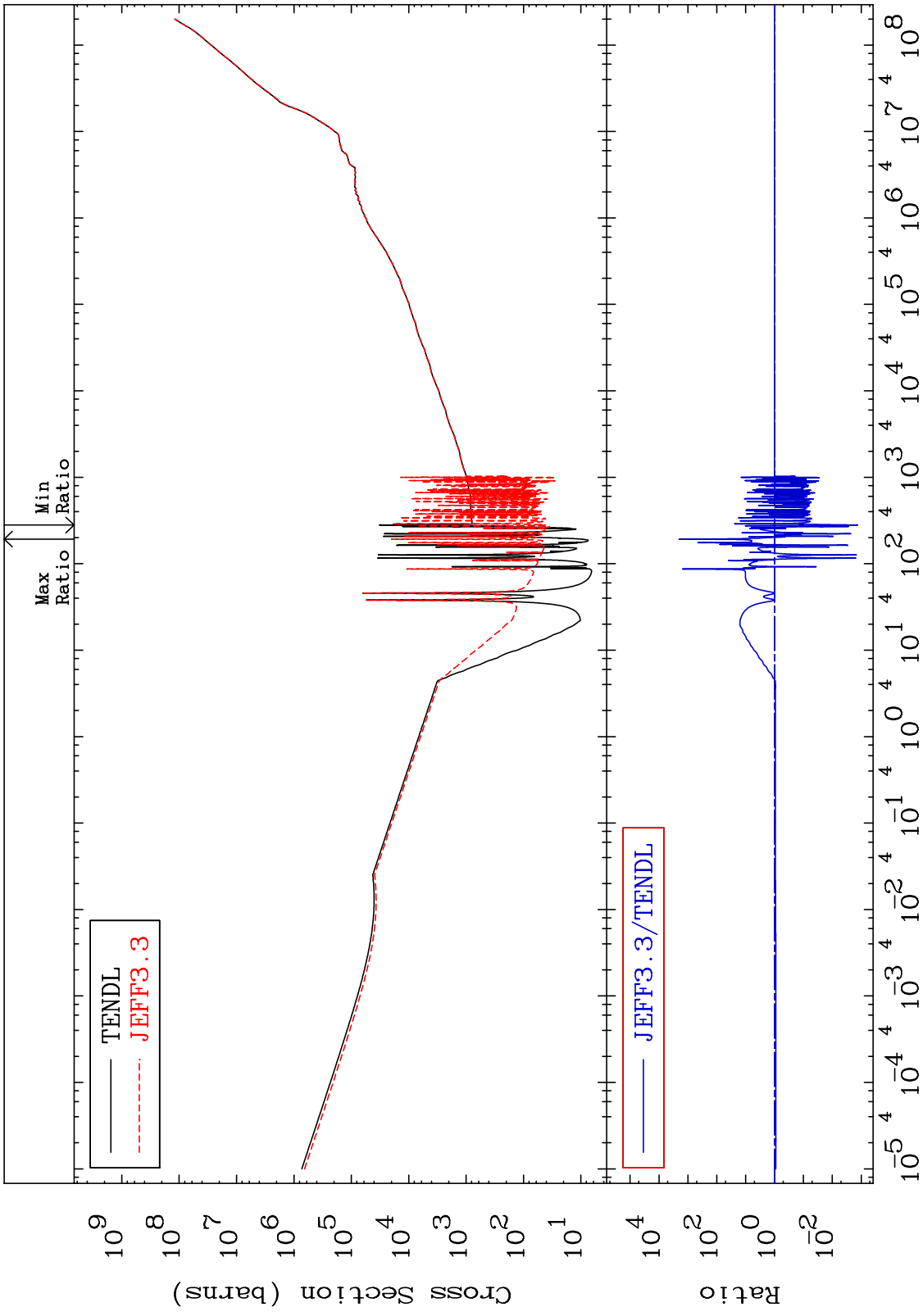


73

Incident Energy (eV)

66-Dy-158

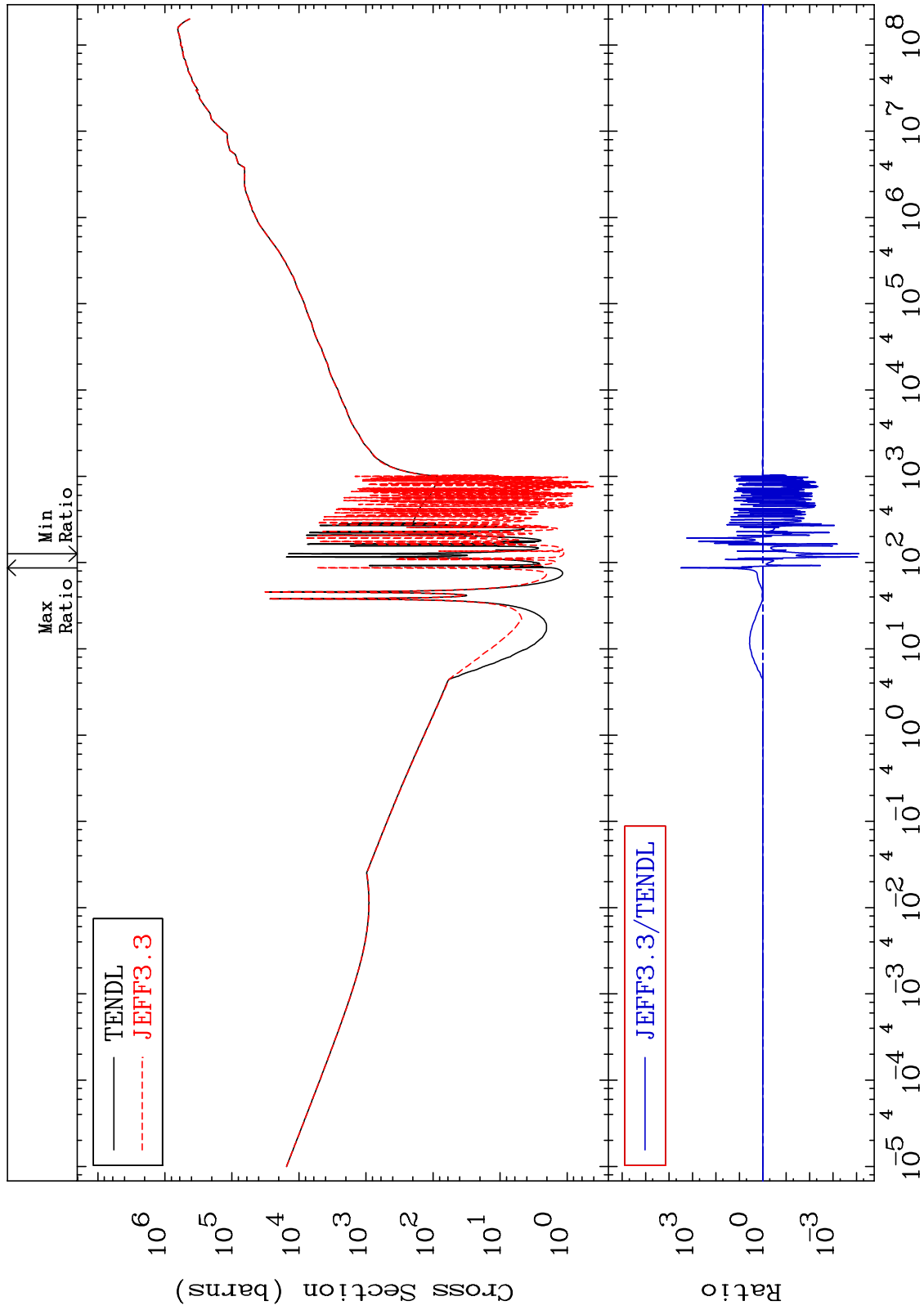
MAT 6631 Total kinematic kerma (high limit) 66-Dy-158
 Cross Section -99.87 To 9999. %



MAT 6631

Dpa total (eV-barns)
Cross Section

66-Dy-158
-99.99 To 9999. %



75

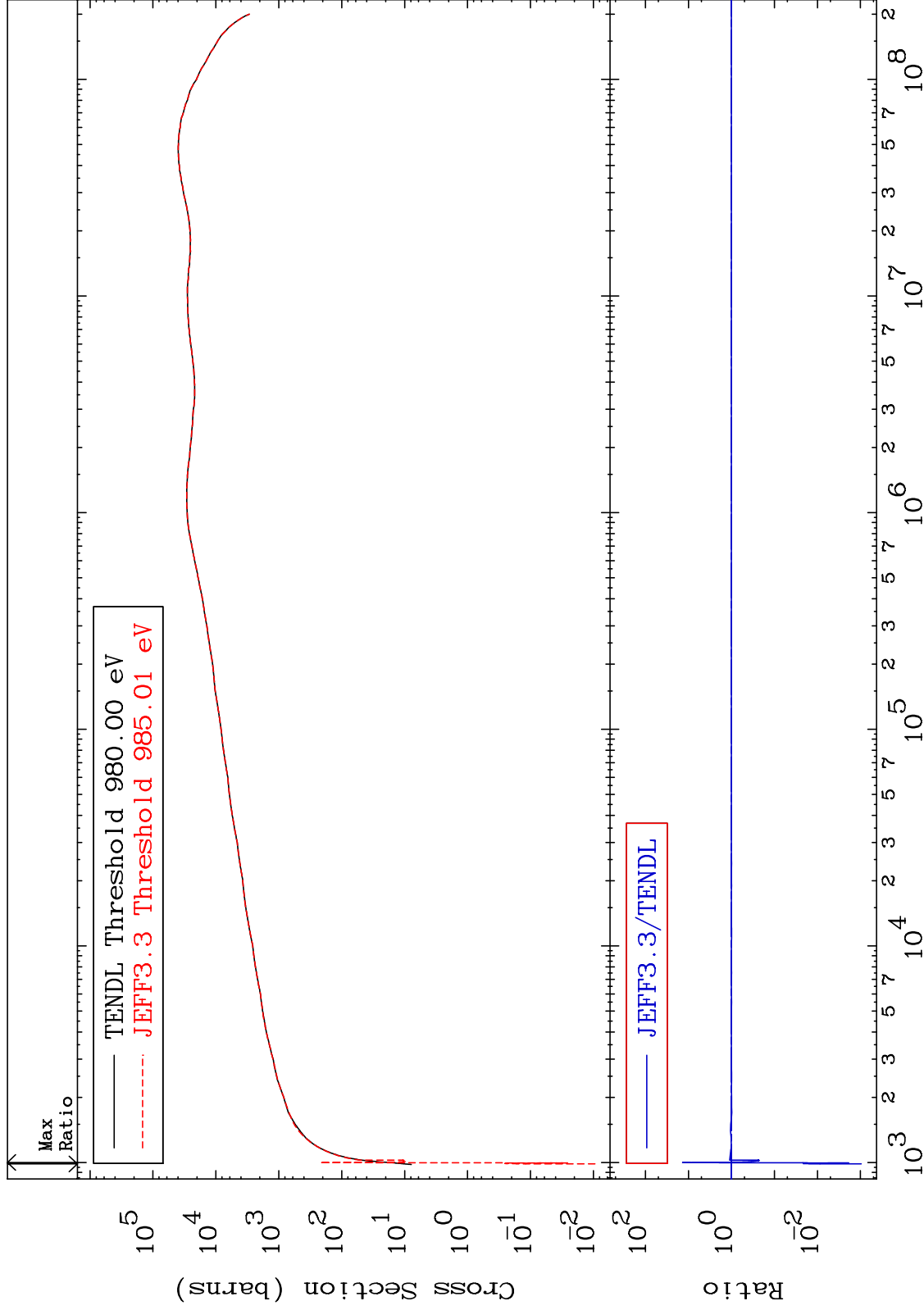
Incident Energy (eV)

66-Dy-158

MAT 6631

Dpa elastic (mt2)
Cross Section

66-Dy-158
-99.90 To 1278. %



76

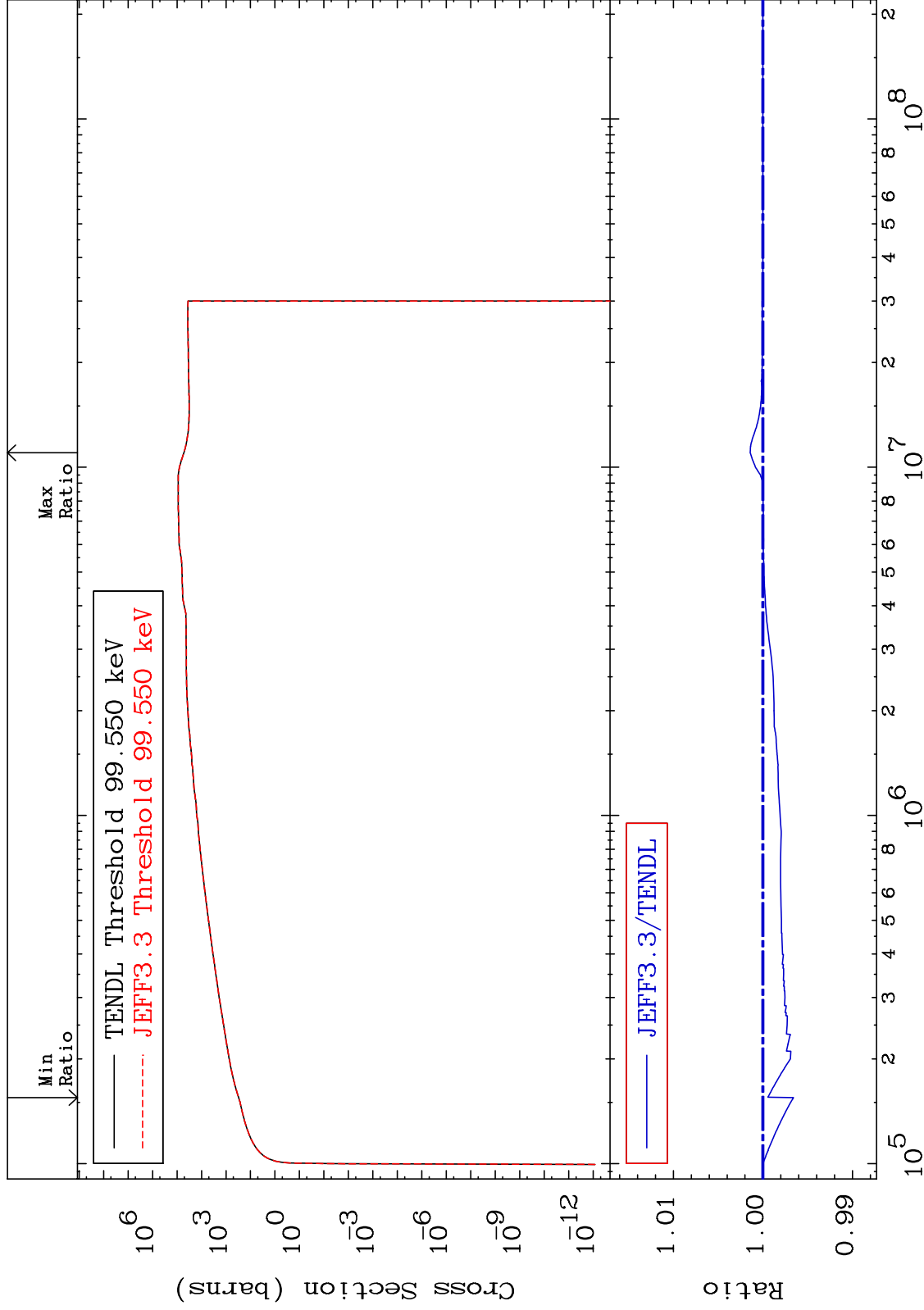
Incident Energy (eV)

66-Dy-158

MAT 6631

Dpa inelastic (mt51-91)
Cross Section

66-Dy-158
-0.342 To 0.142 %



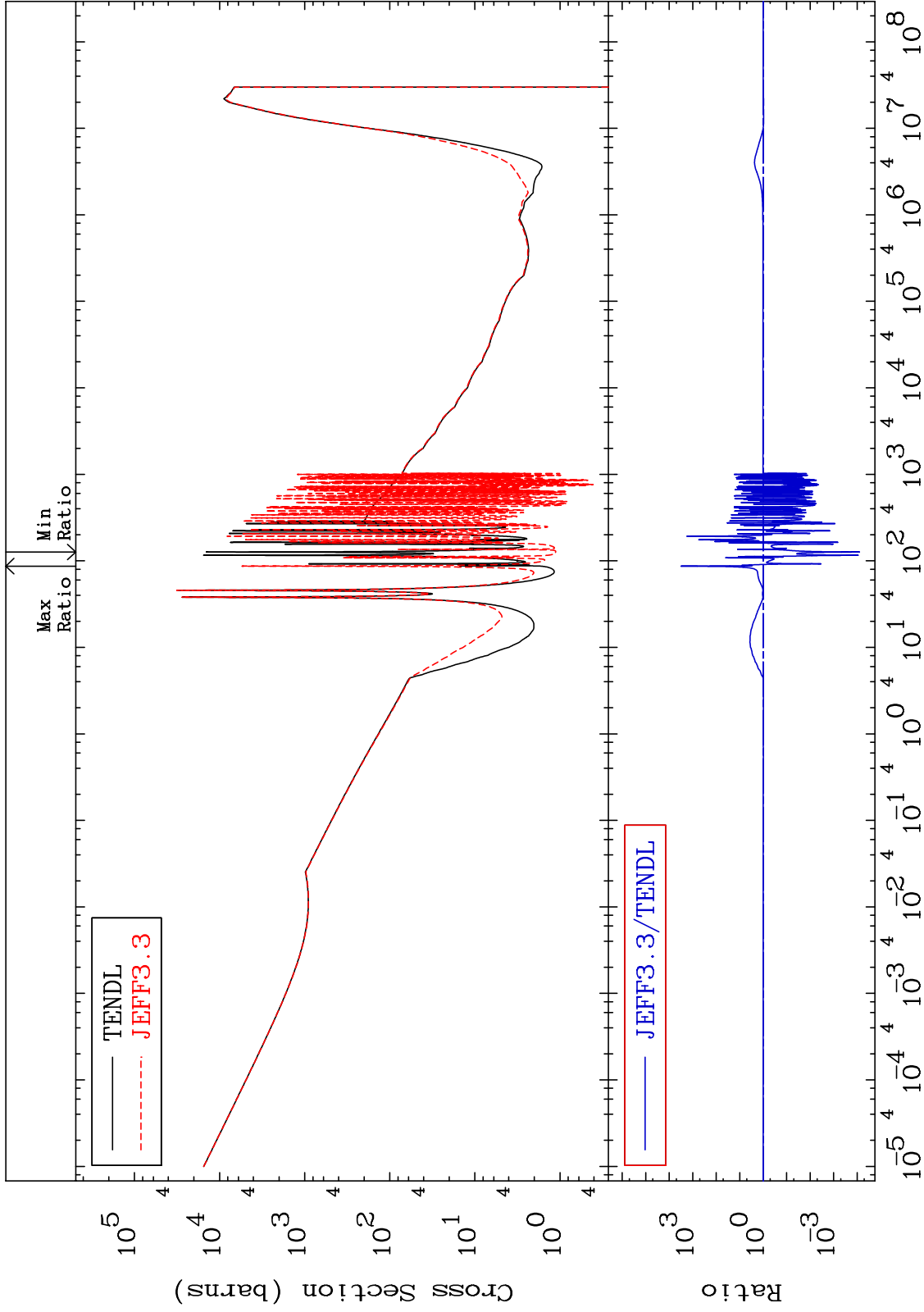
77

66-Dy-158

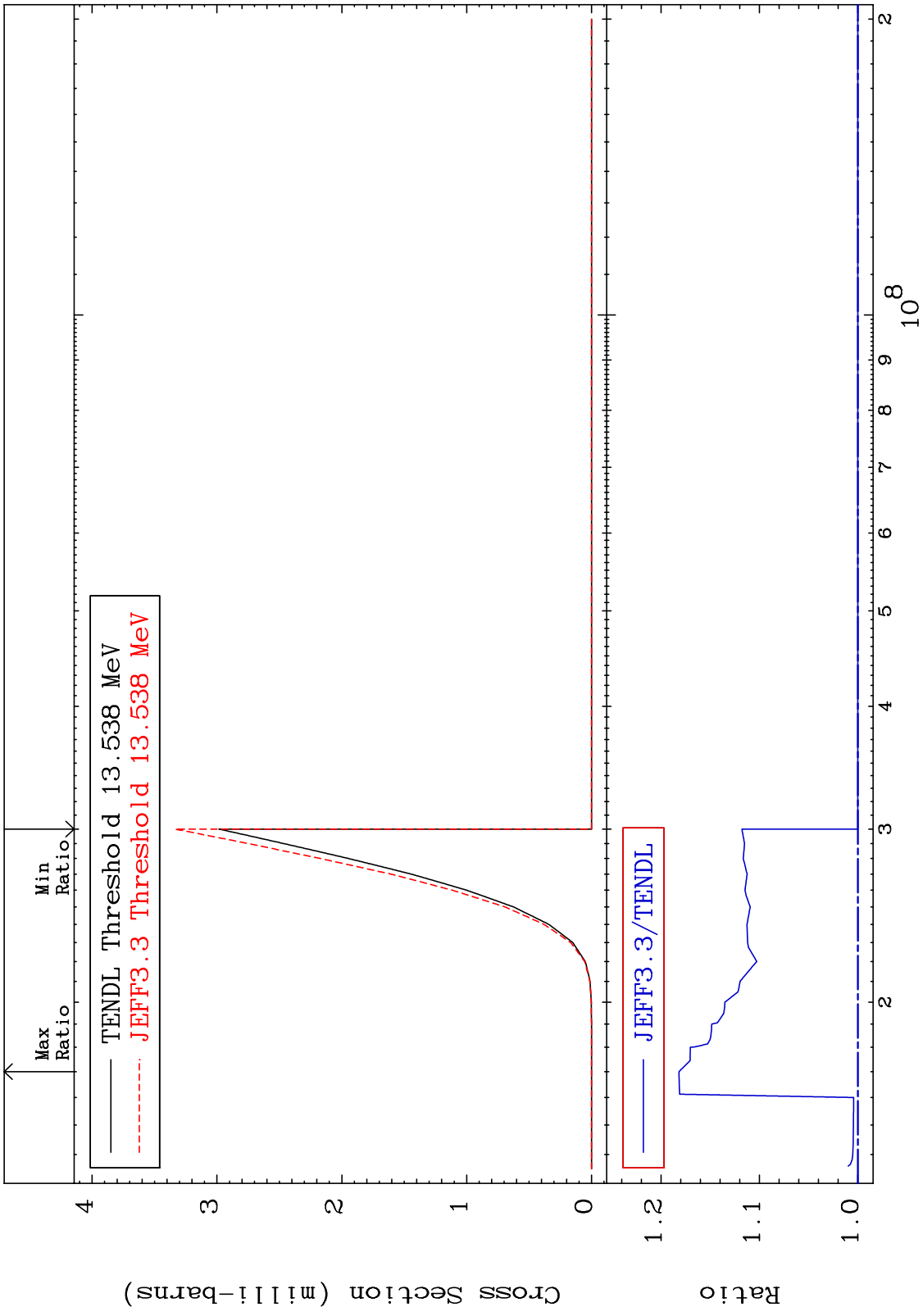
MAT 6631

Dpa disappearance (mt102 -120)
Cross Section

66-Dy-158
-99.99 To 9999. %



MAT 6631 (n, n') d:65-Tb-156g 66-Dy-158
 Radionuclide Production Cross Section 0.000 To 18.18 %

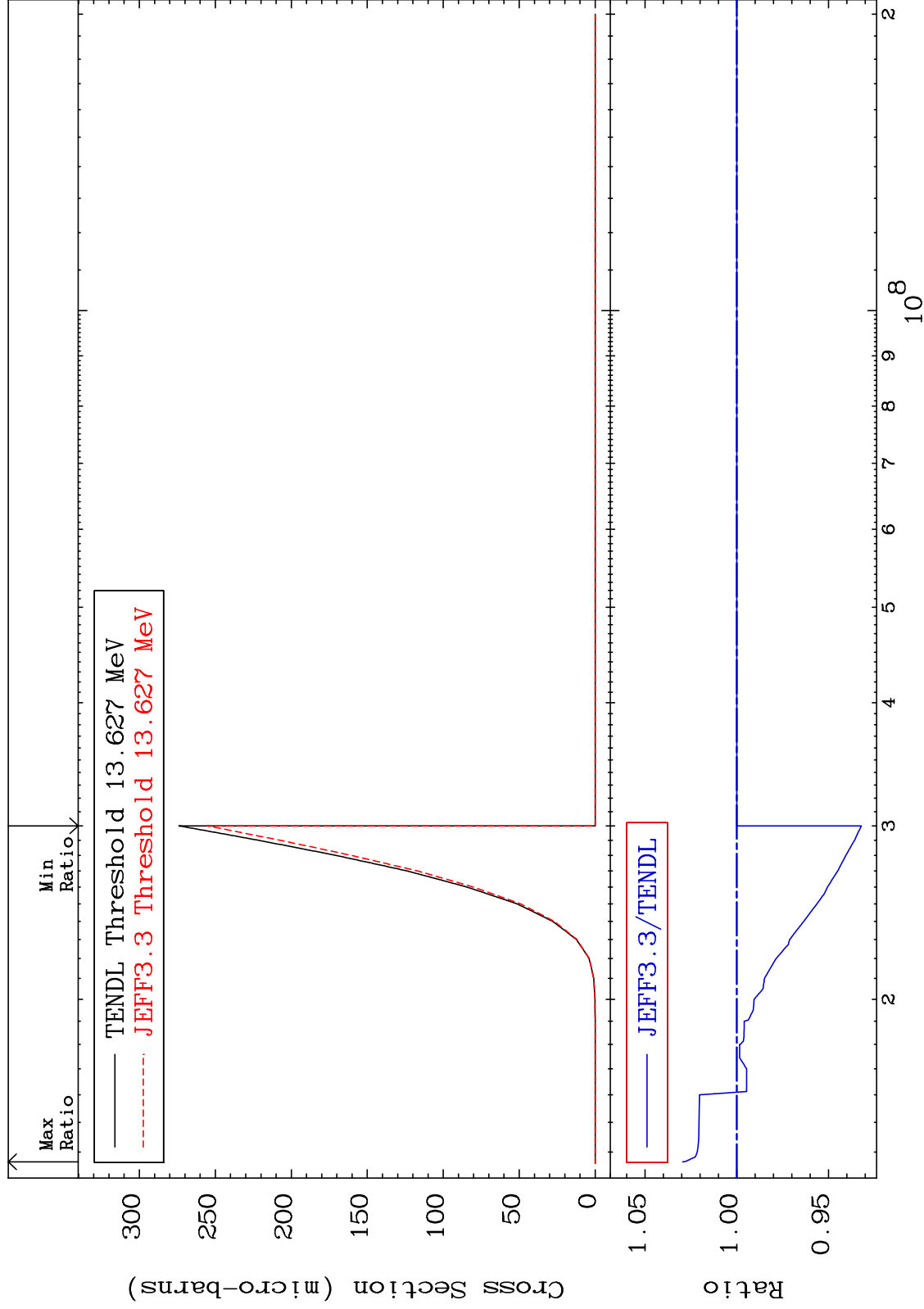


MAT 6631

(n, n') d: 65-Tb-156m3

66-Dy-158

Radionuclide Production Cross Section -6.792 To 2.950 %

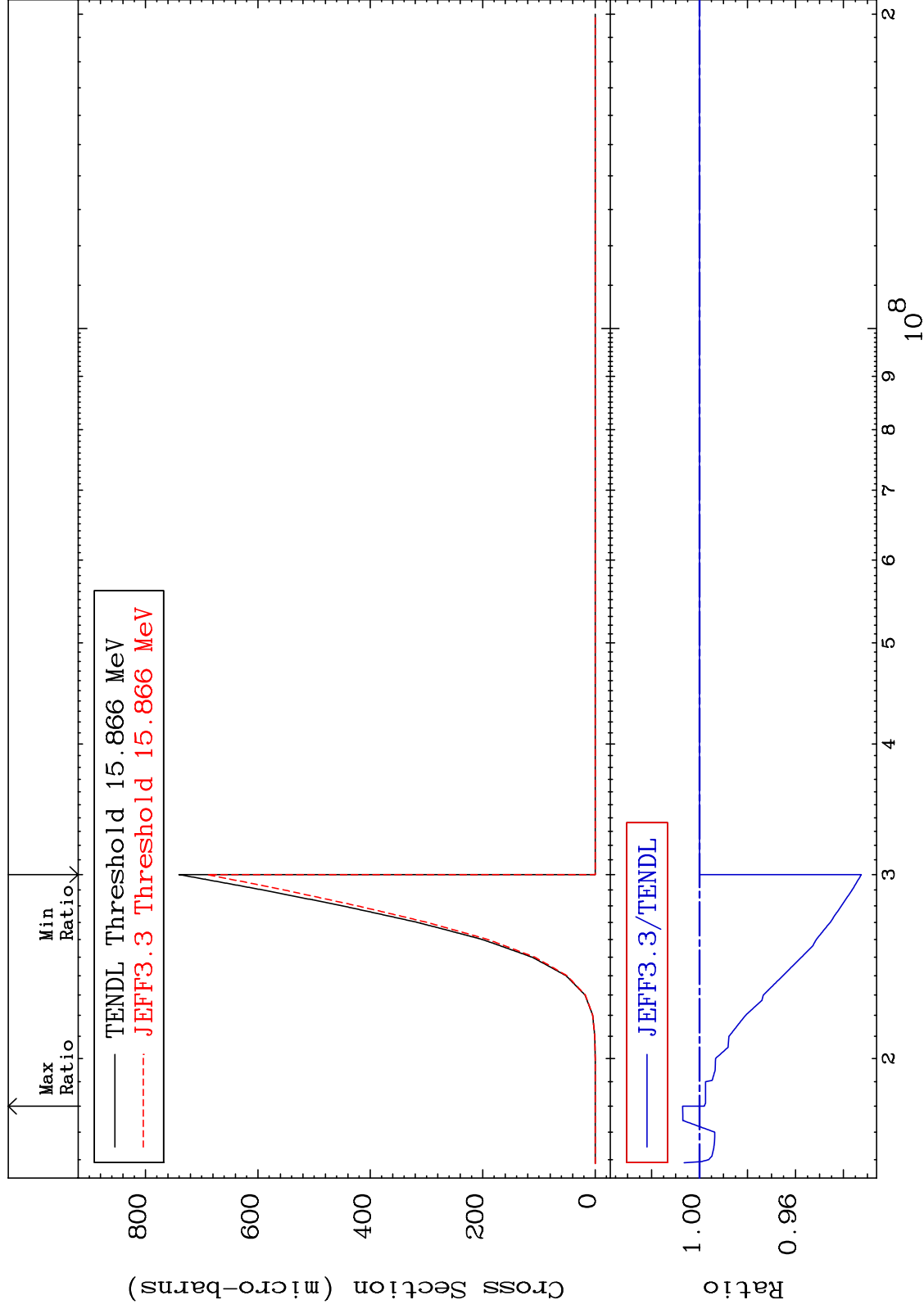


MAT 6631

(n,2n) p:65-Tb-156m3

66-Dy-158

Radionuclide Production Cross Section -6.744 To 0.702 %

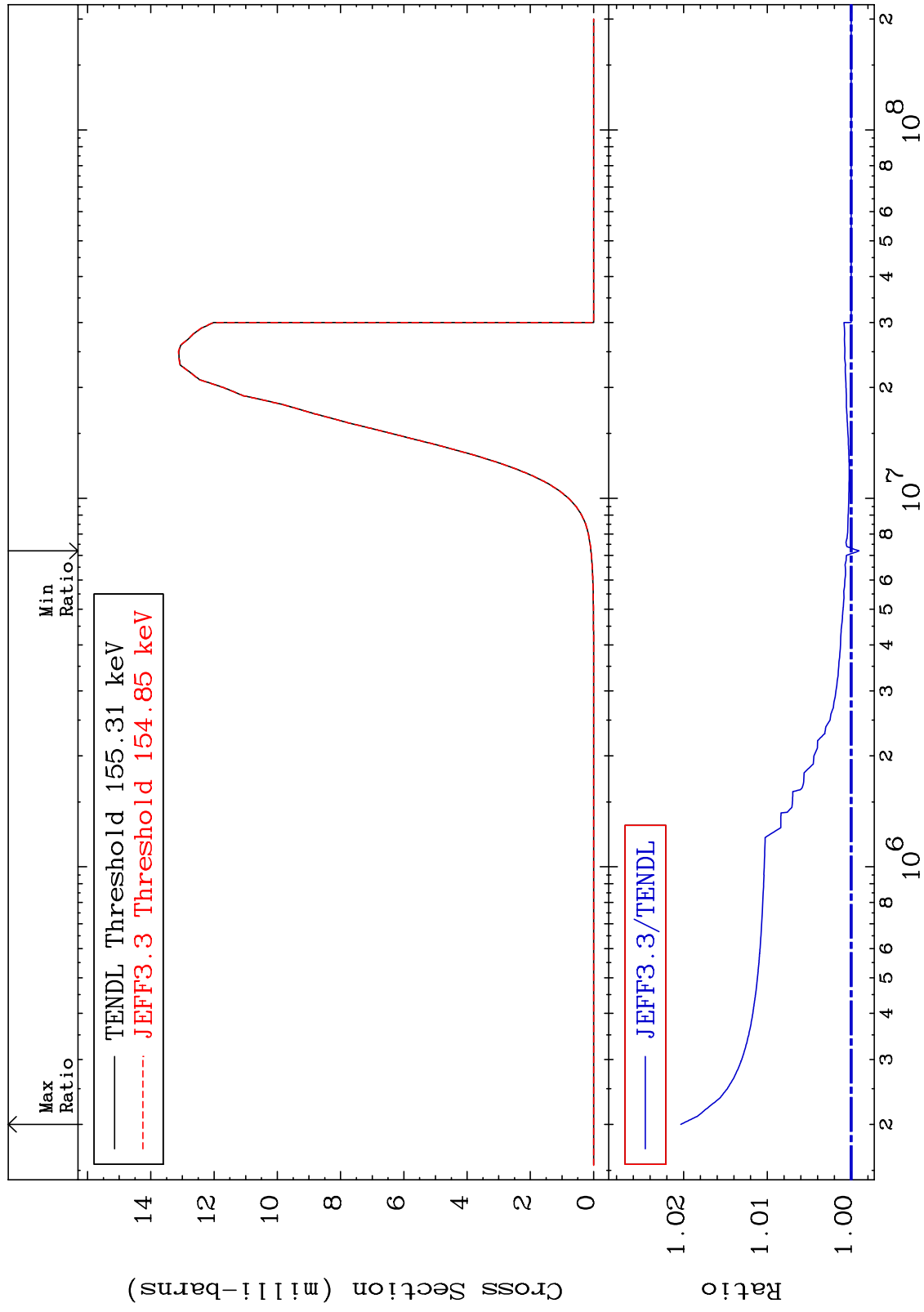


82

Incident Energy (eV)

66-Dy-158

MAT 6631 (n,p): 65-Tb-158g 66-Dy-158
Radionuclide Production Cross Section -0.095 To 2.032 %

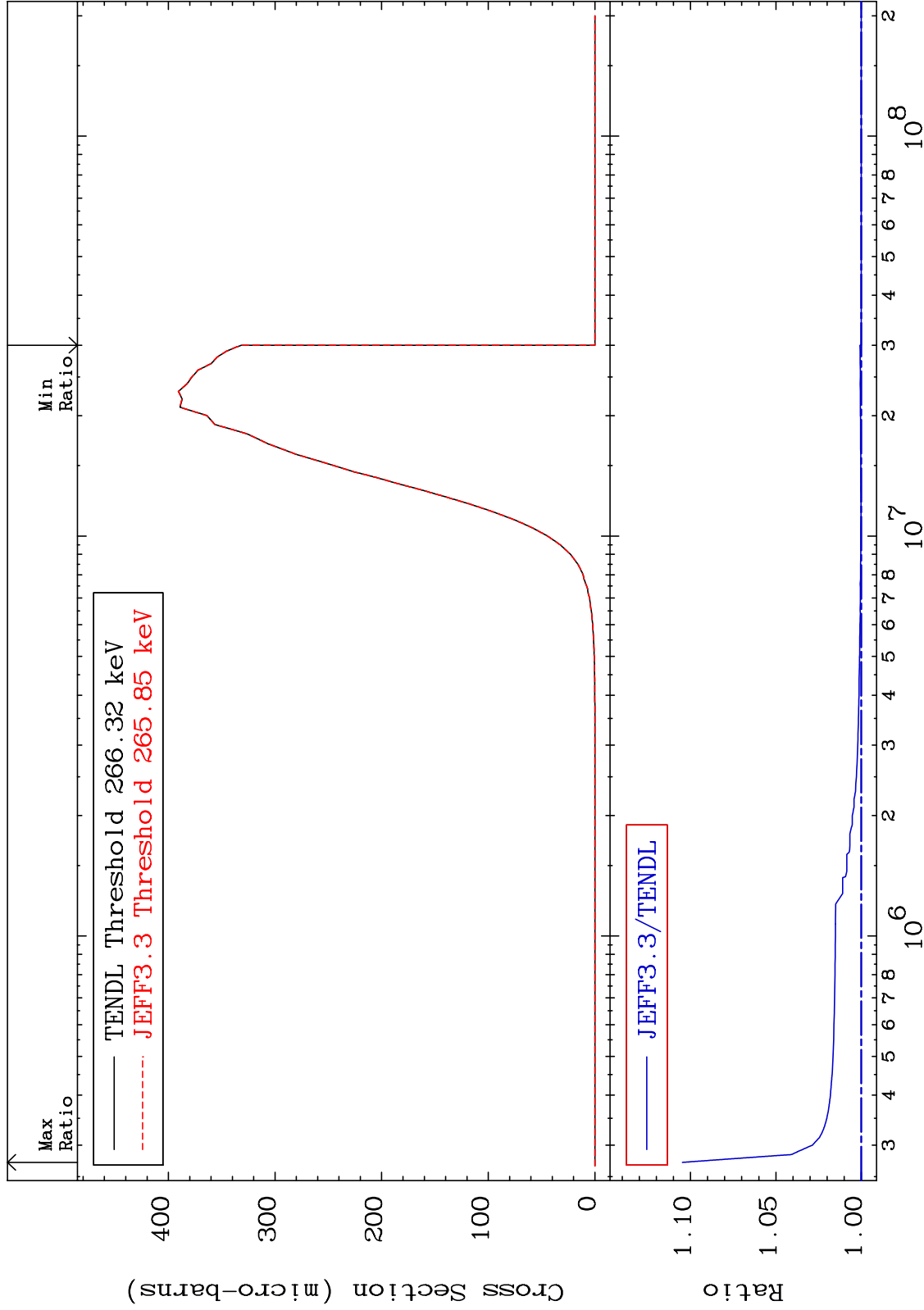


MAT 6631

(n, p) : 65-Tb-158m3

66-Dy-158

Radionuclide Production Cross Section 0.000 To 10.47 %

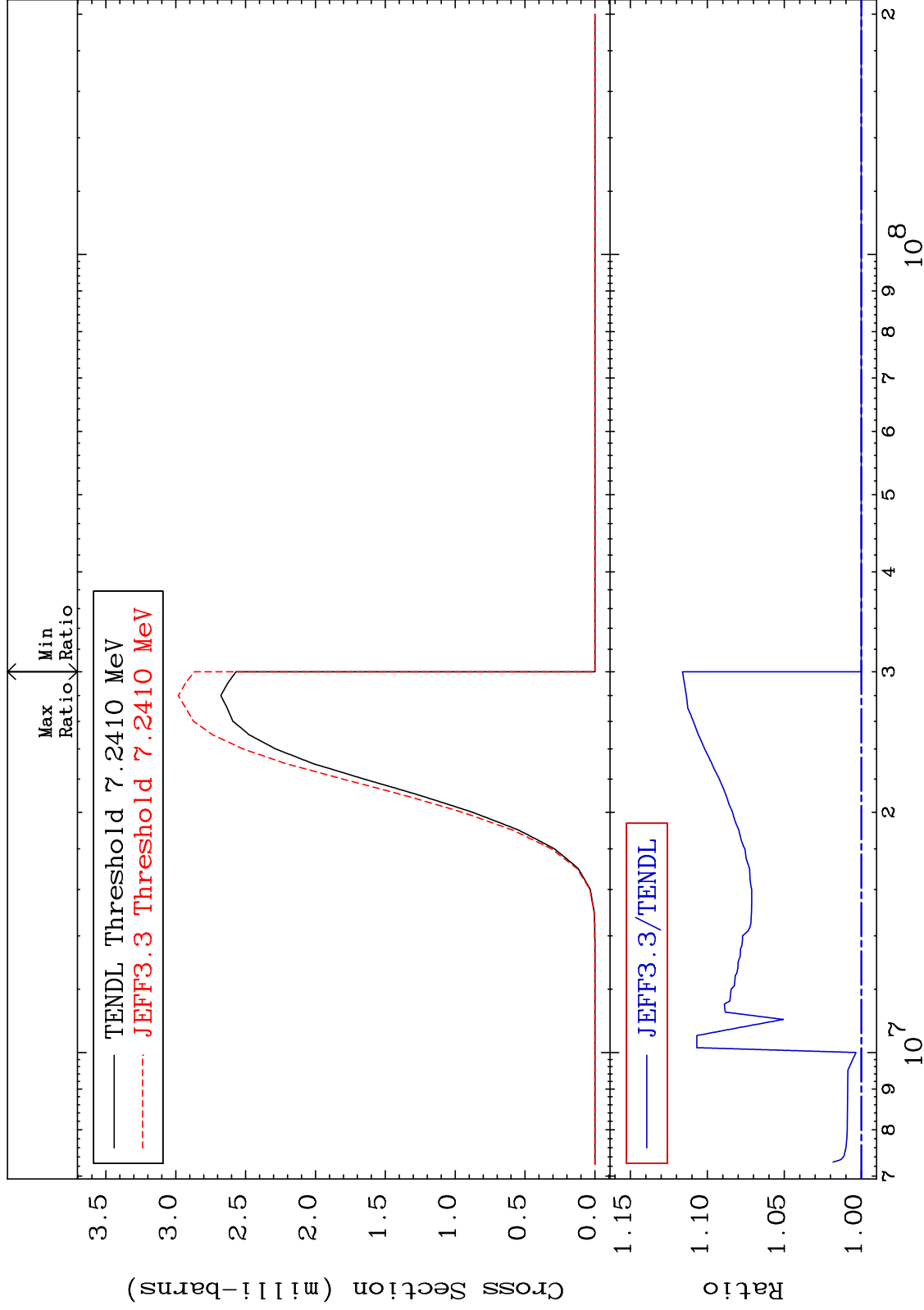


MAT 6631

(n, t) : 65-Tb-156g

66-Dy-158

Radionuclide Production Cross Section 0.000 To 11.62 %



85

Incident Energy (eV)

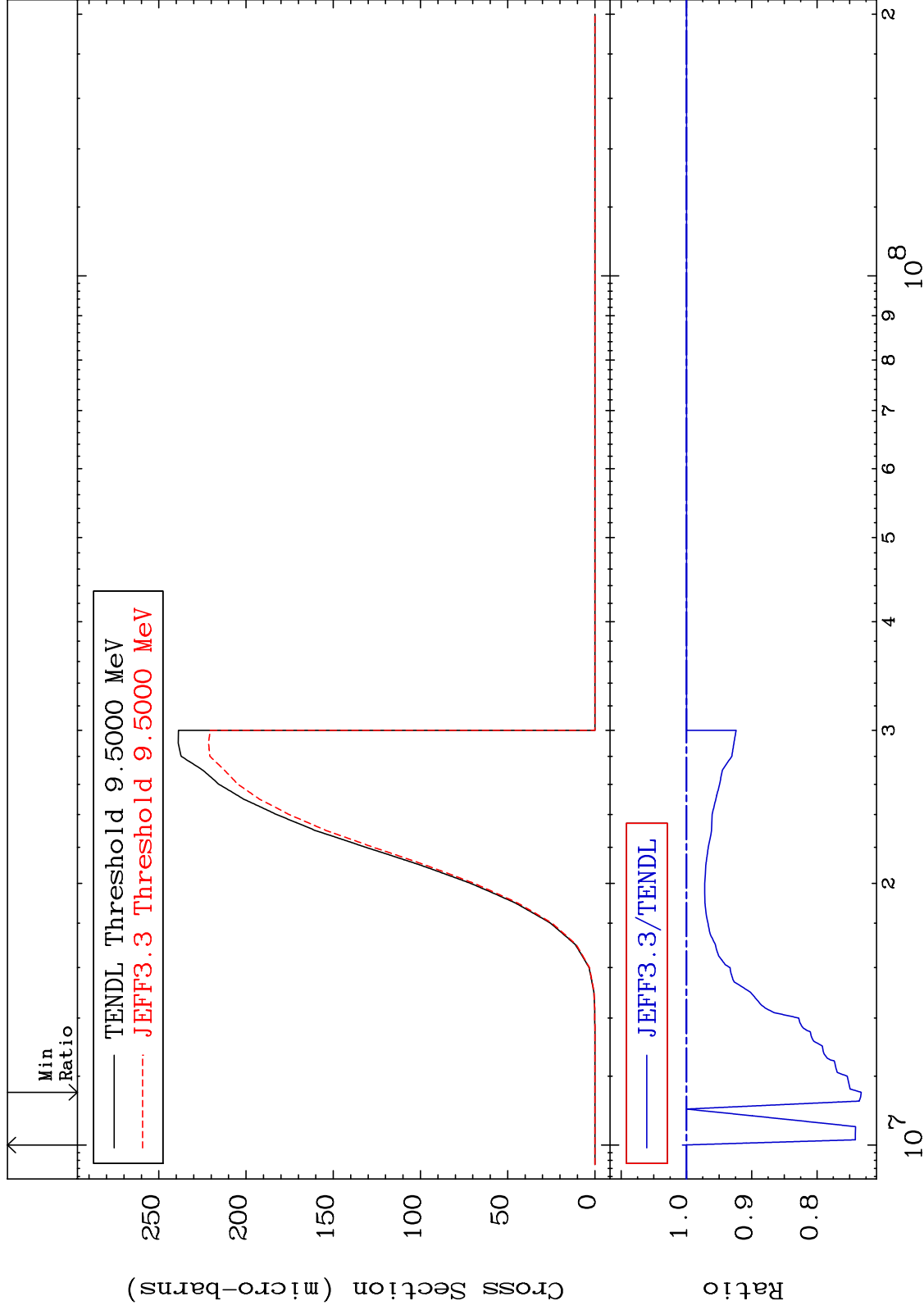
66-Dy-158

MAT 6631

(n, t) : 65-Tb-156m3

66-Dy-158

Radionuclide Production Cross Section -26.78 To 0.616 %



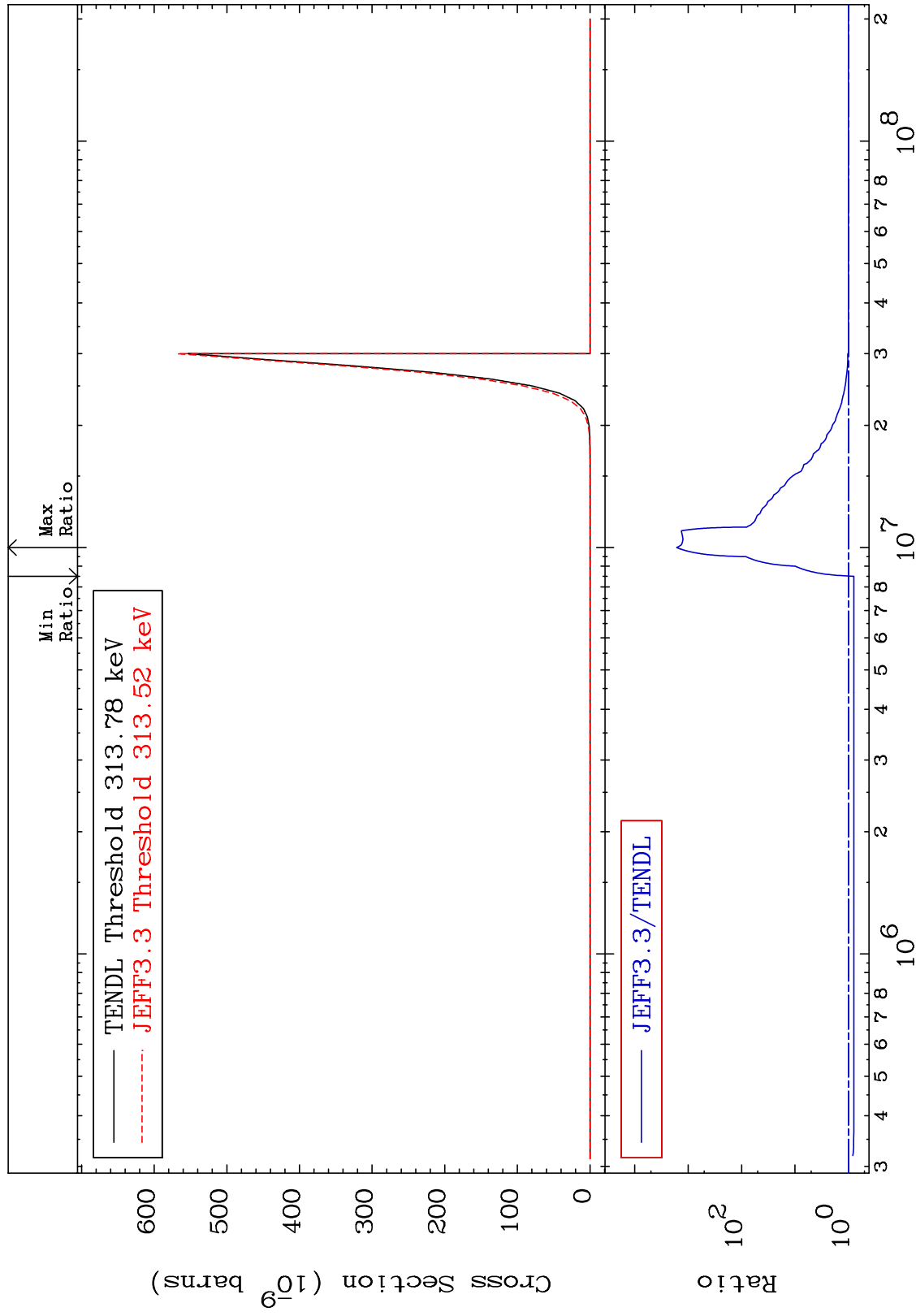
86

Incident Energy (eV)

66-Dy-158

MAT 6631

(n,p) α : 63-Eu-154g 66-Dy-158
Radionuclide Production Cross Section -20.95 To 9999. %



87

Incident Energy (eV)

66-Dy-158