

Program Complot
(Version 2018-1)

by

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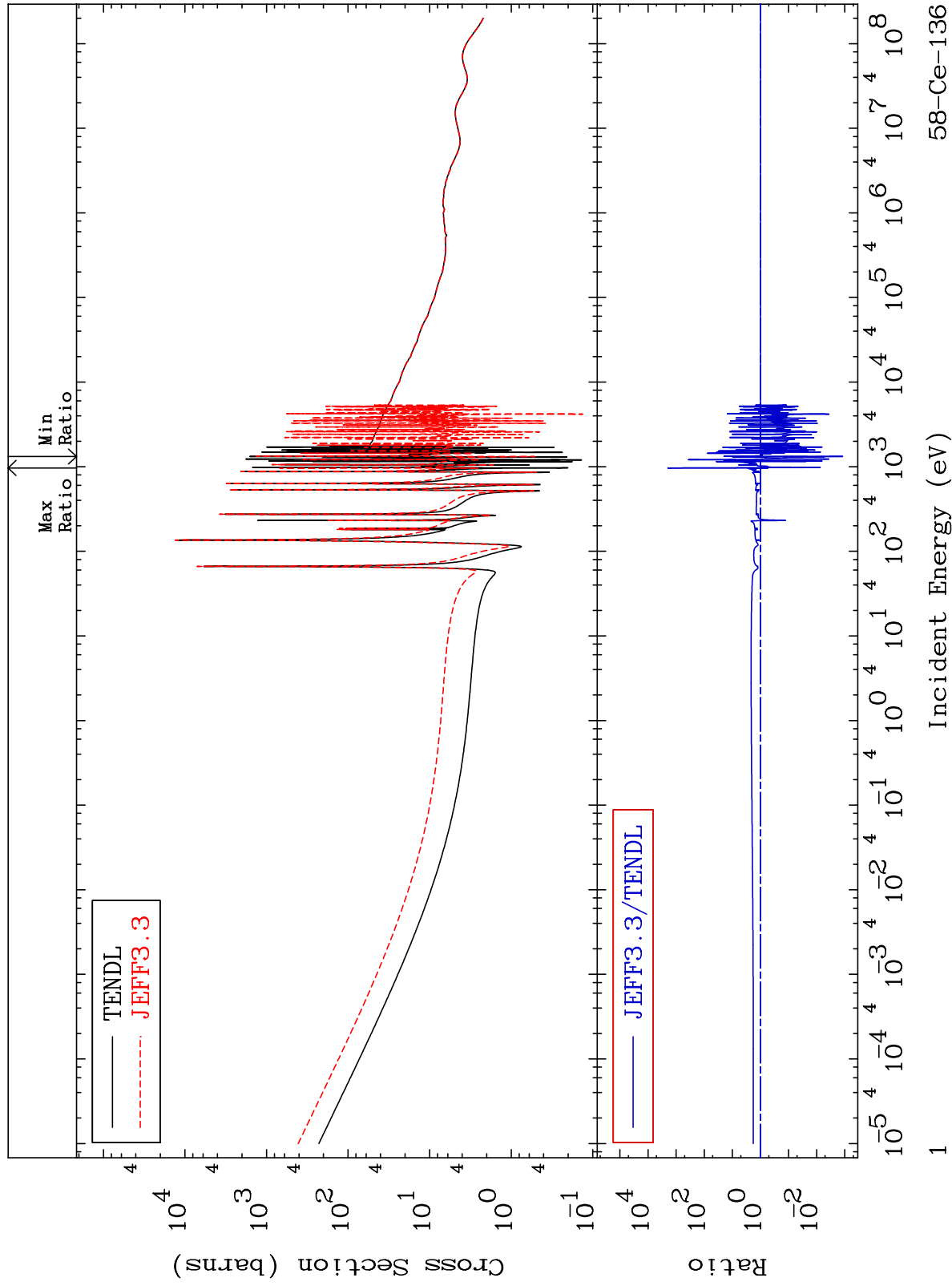
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 5825

Total
Cross Section

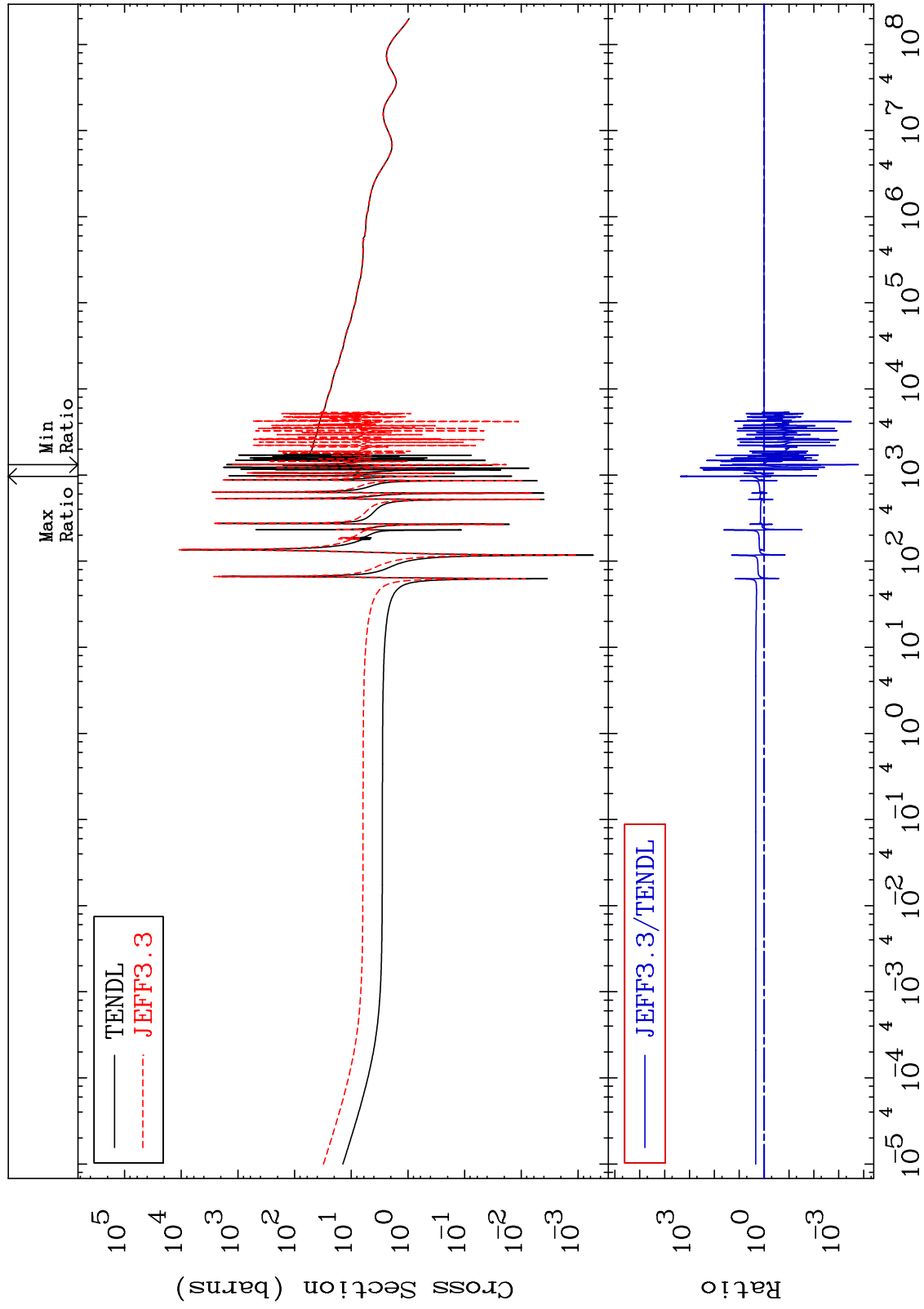
58-Ce-136
-99.88 To 9999. %



MAT 5825

Elastic
Cross Section

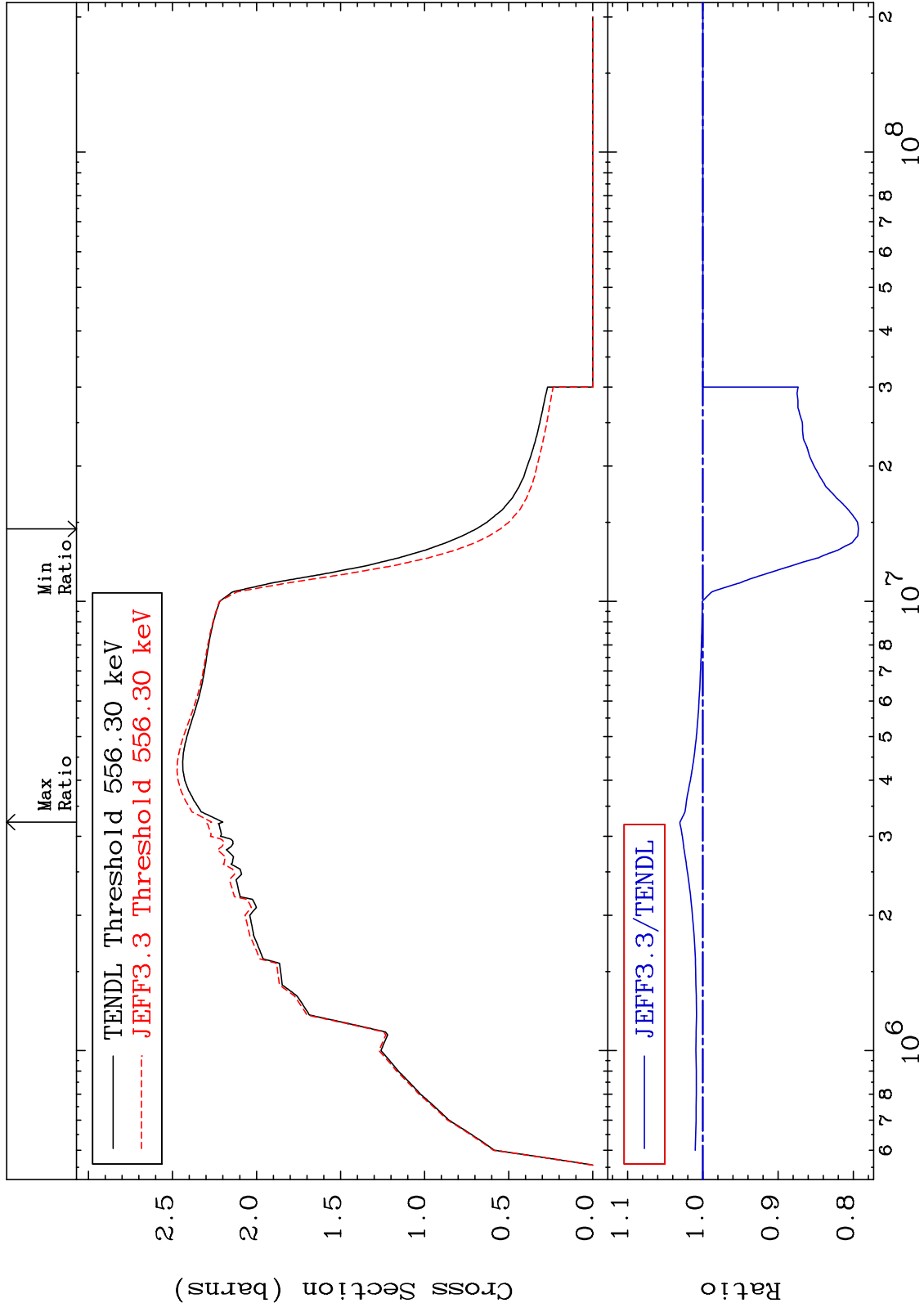
58-Ce-136
-99.98 To 9999. %



MAT 5825

Inelastic
Cross Section

58-Ce-136
-20.67 To 3.028 %



3

Incident Energy (eV)

58-Ce-136

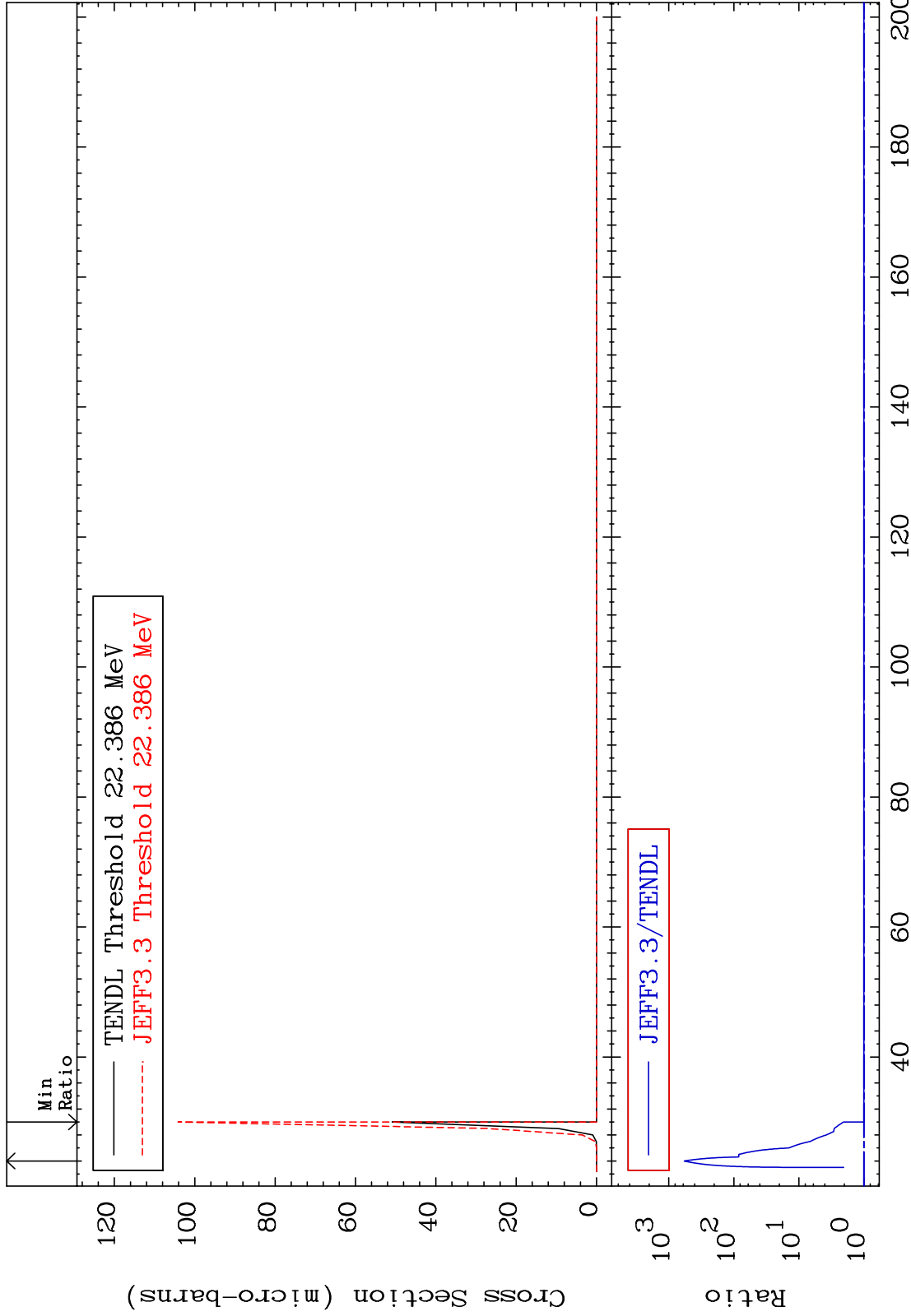
MAT 5825

(n,2n) d

58-Ce-136

Cross Section

0.000 To 9999. %



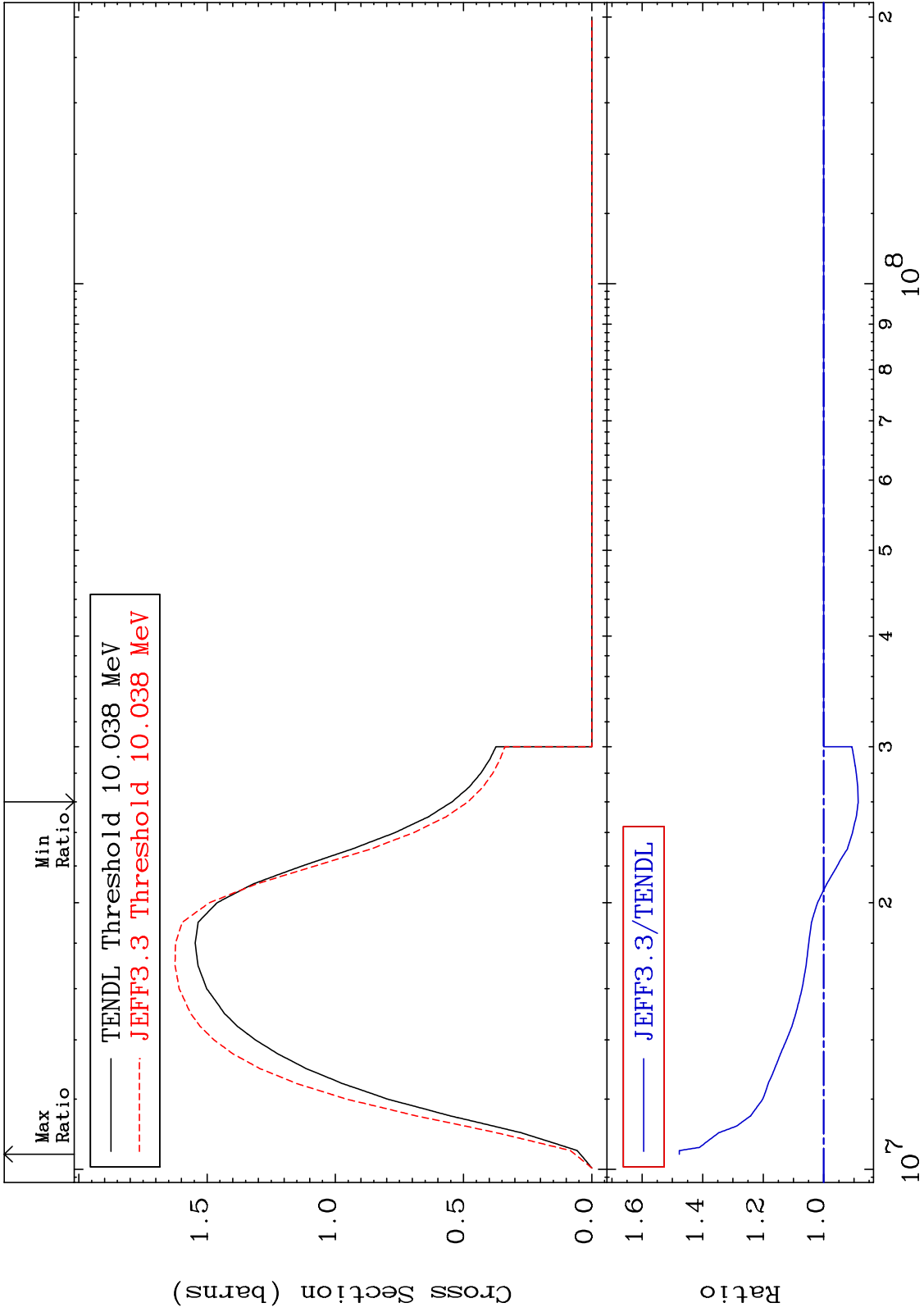
MAT 5825

(n,2n)

58-Ce-136

Cross Section

-11.41 To 47.69 %



58-Ce-136

Incident Energy (eV)

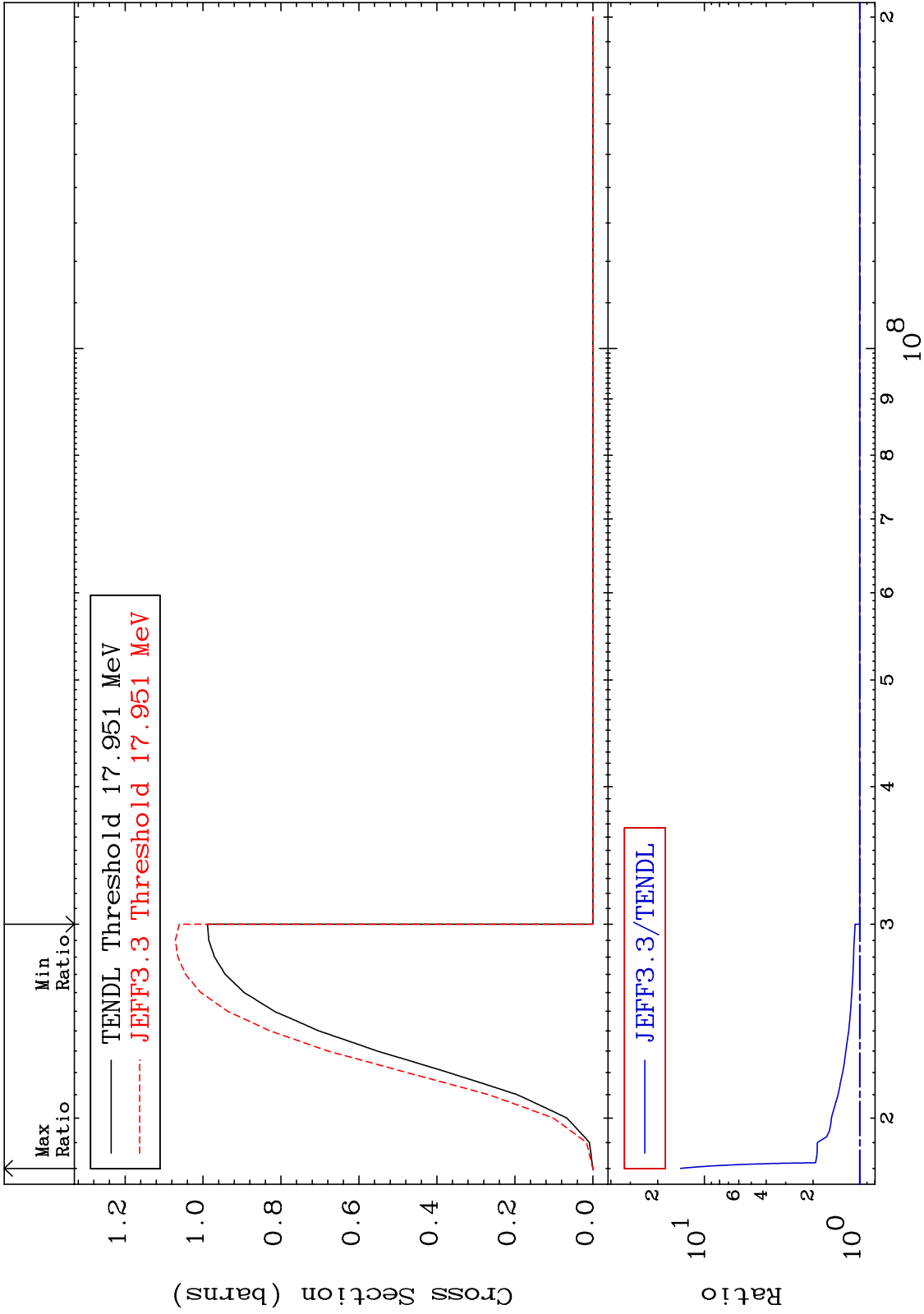
MAT 5825

(n, 3n)

58-Ce-136

Cross Section

0.000 To 1323. %



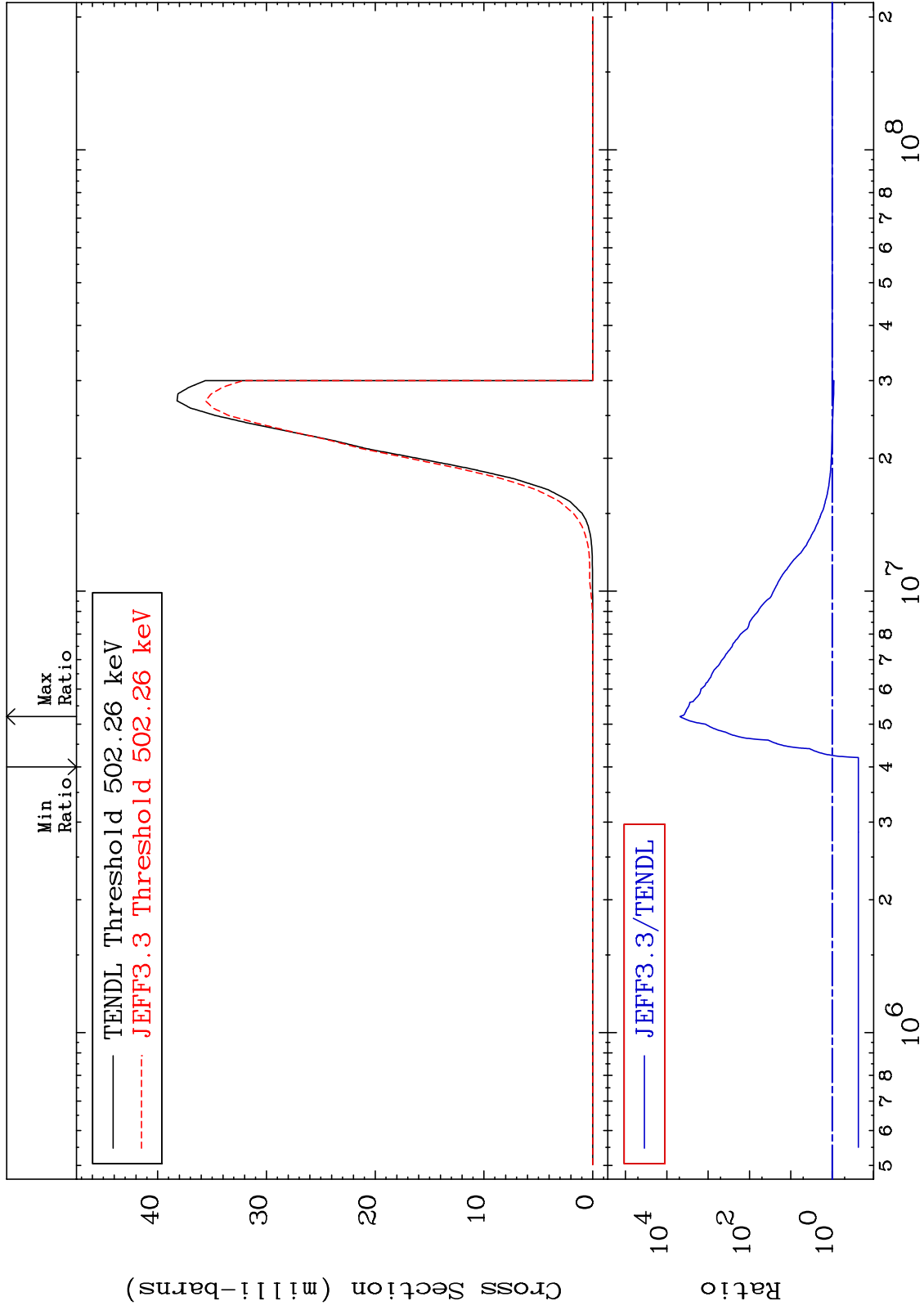
MAT 5825

(n, n') α

58-Ce-136

-76.91 To 9999. %

Cross Section



MAT 5825

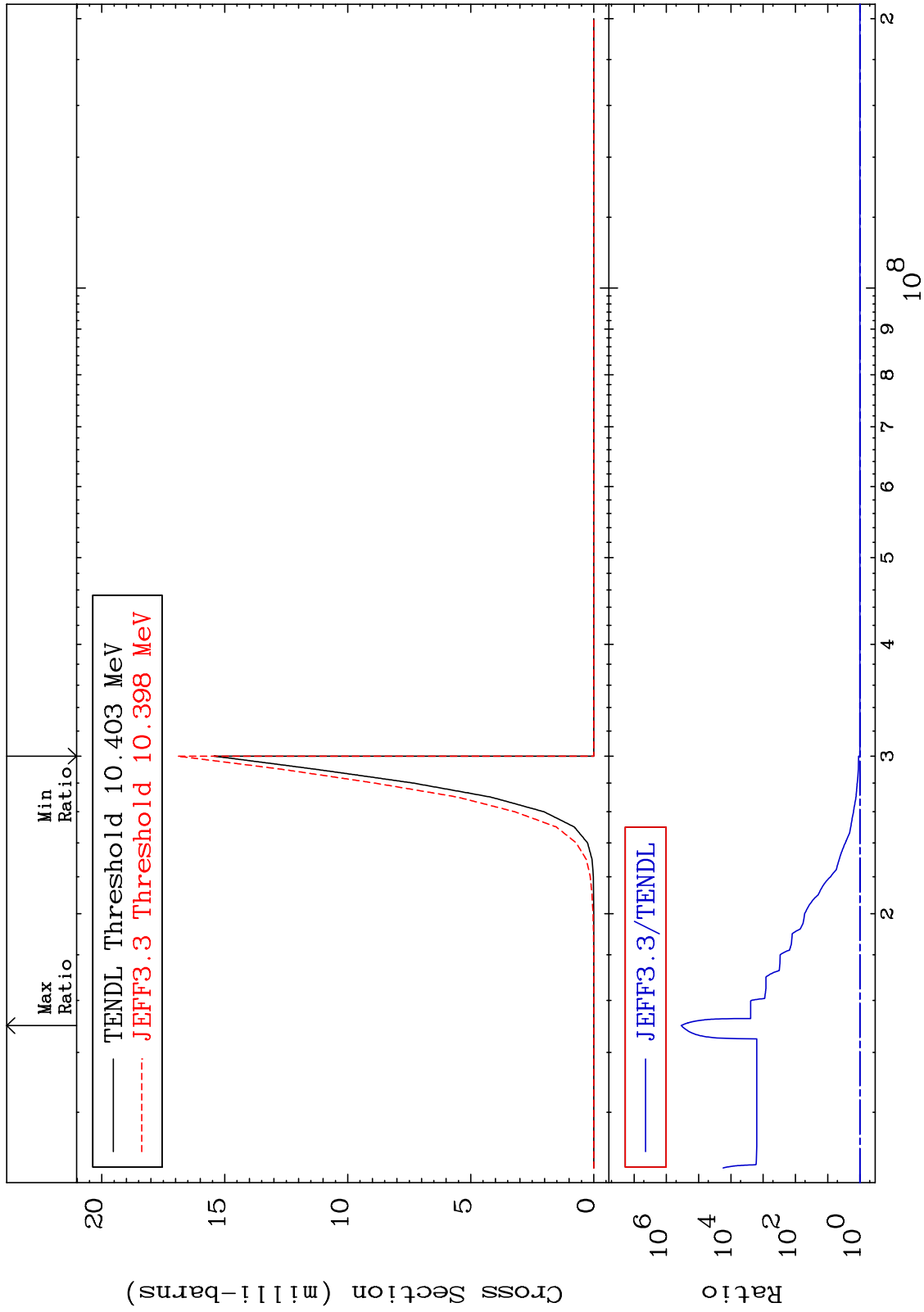
(n,2n) α

58-Ce-136

Cross Section

0.000

To 9999. %



MAT 5825

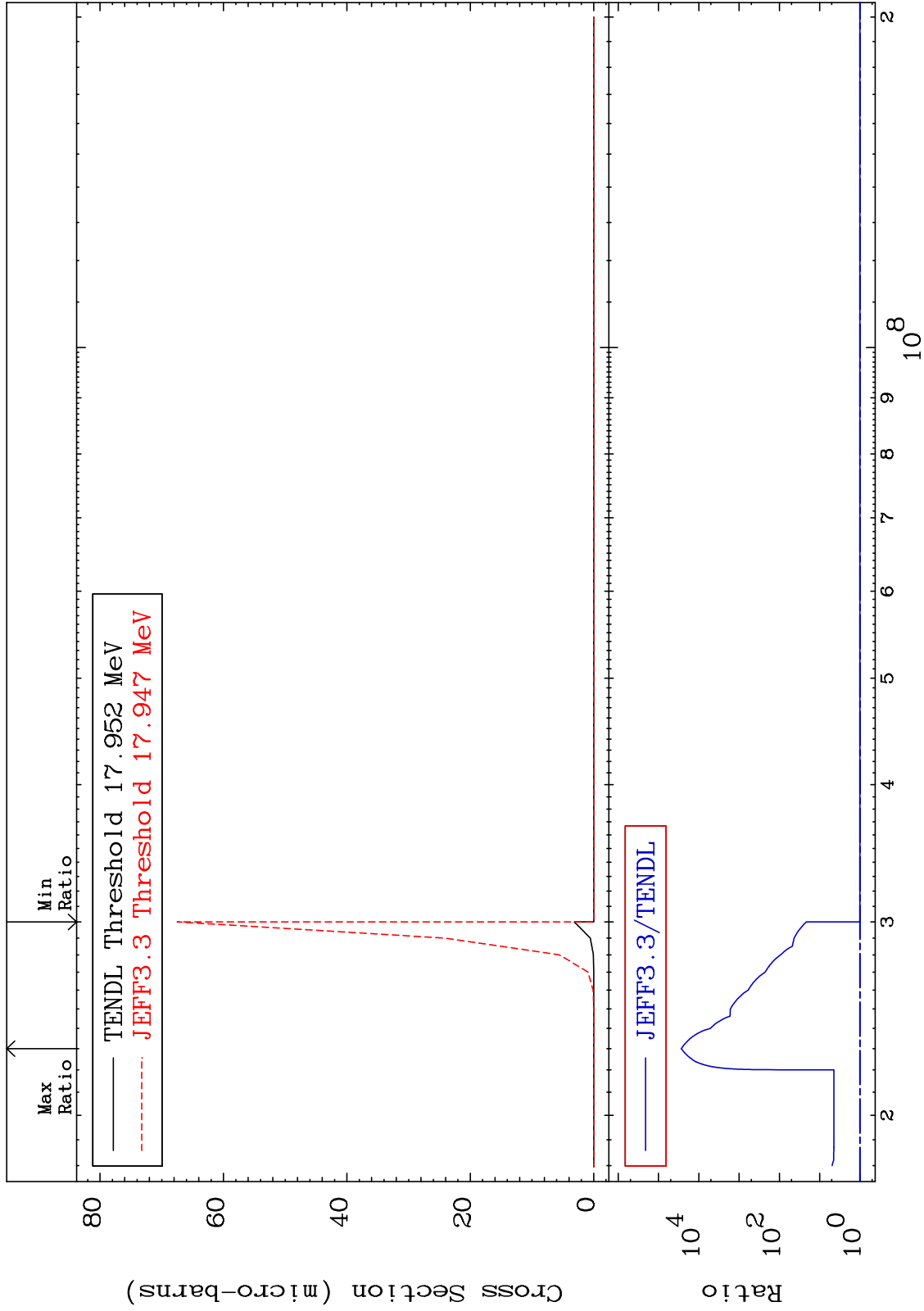
(n, 3n) α

58-Ce-136

Cross Section

0.000

To 9999. %



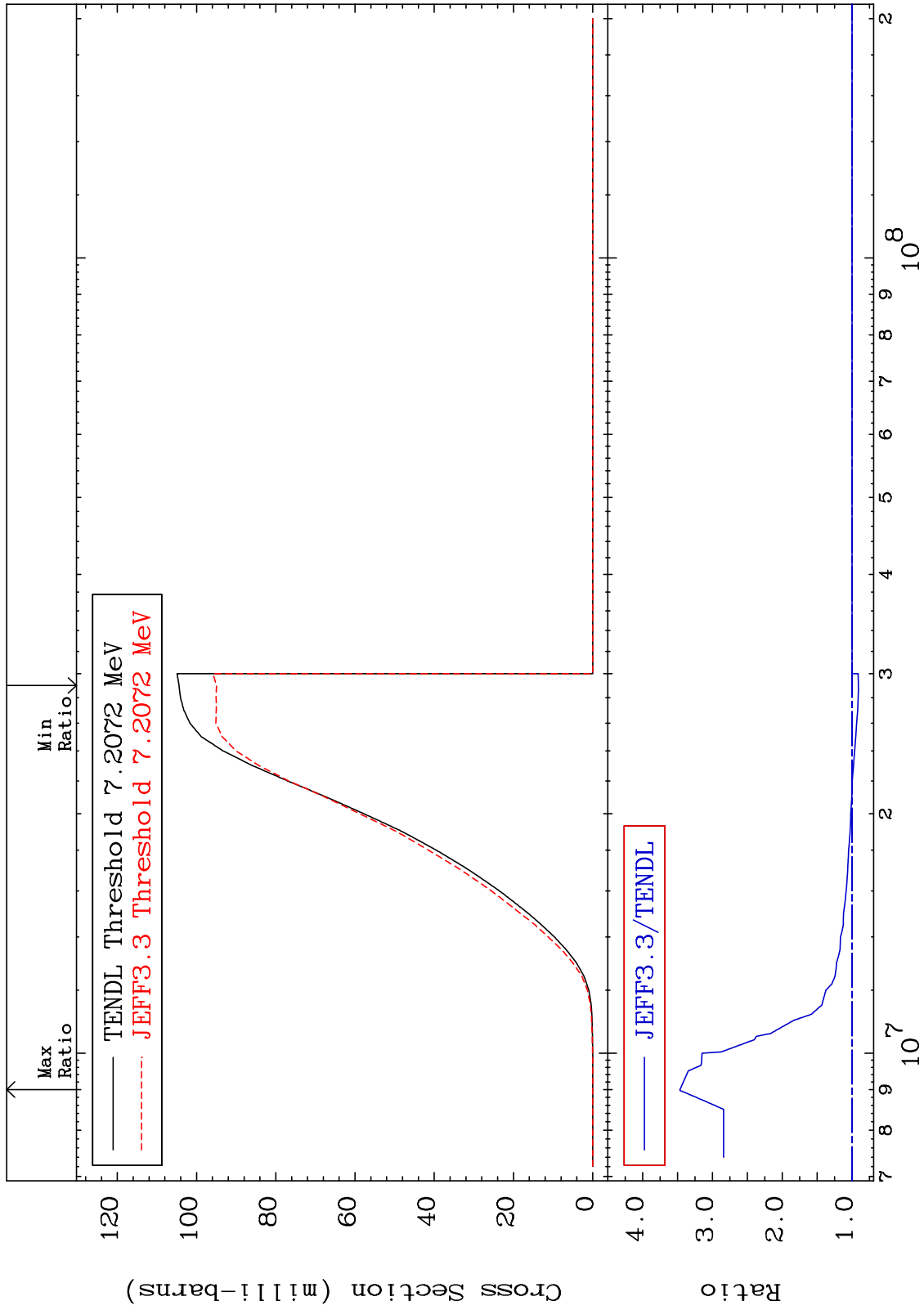
MAT 5825

(n,n') p

58-Ce-136

Cross Section

-9.028 To 246.5 %



58-Ce-136

Incident Energy (eV)

10

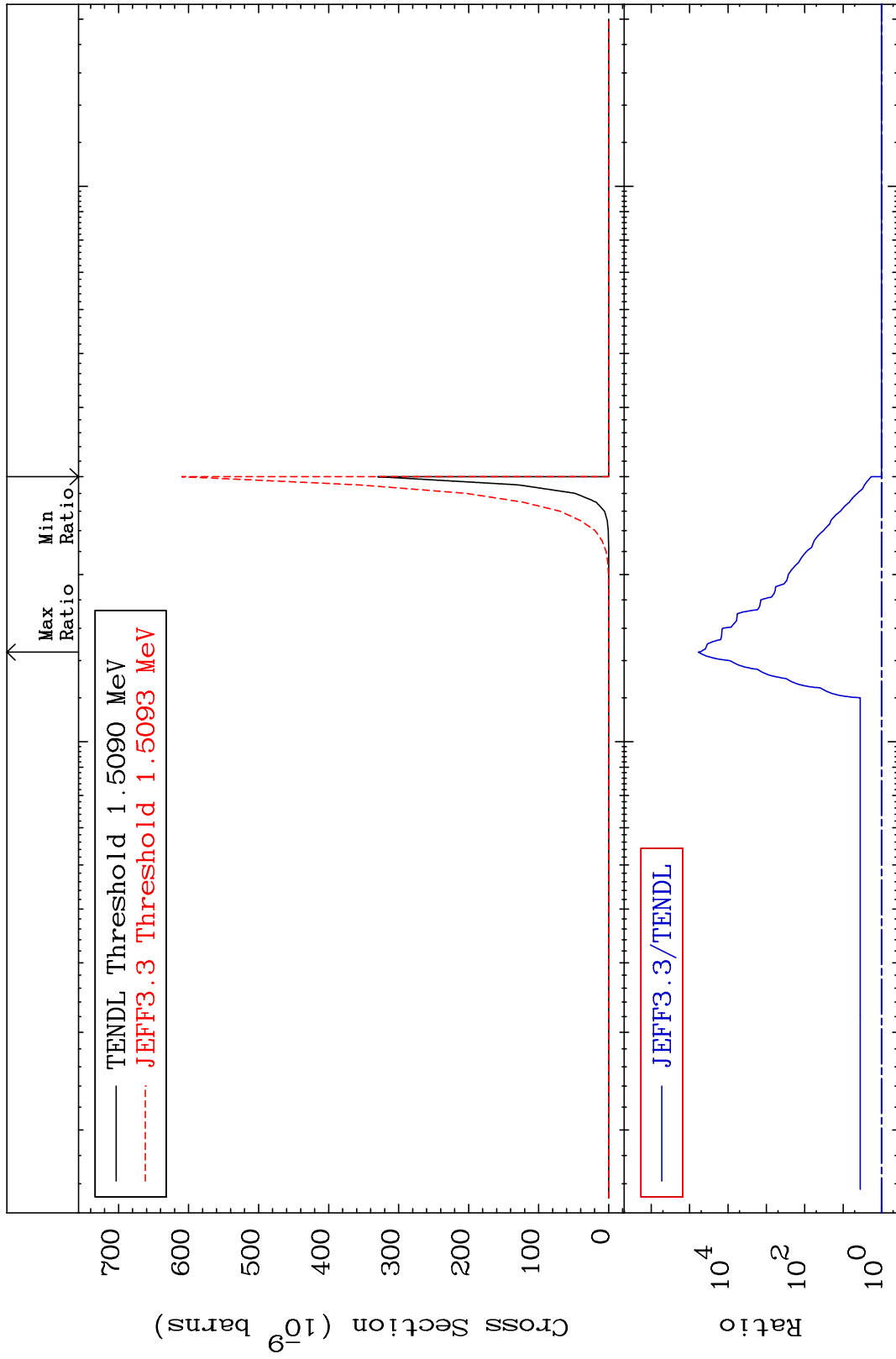
MAT 5825

(n, n') 2α

58-Ce-136

Cross Section

0.000 To 9999. %



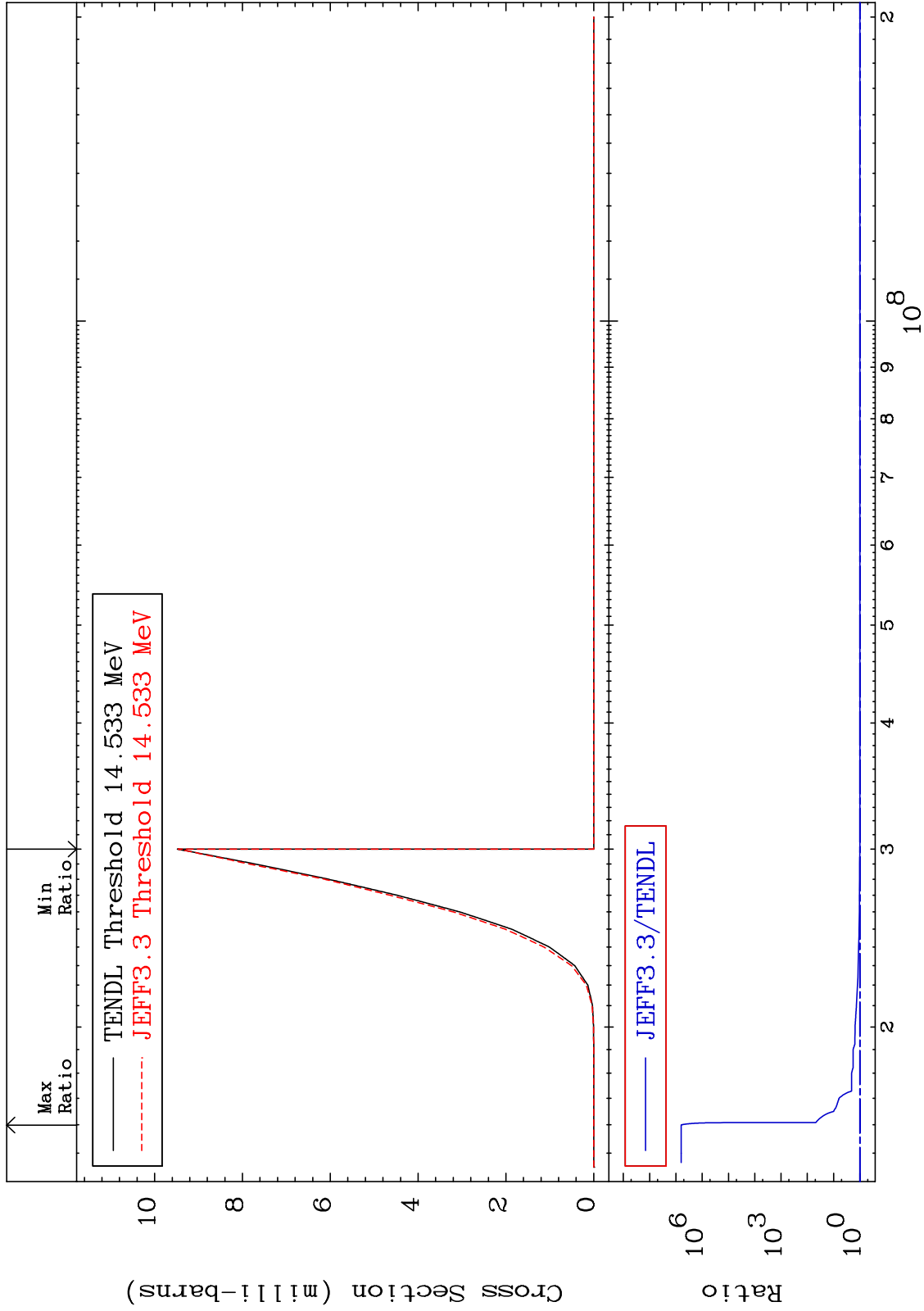
MAT 5825

(n, n') d

58-Ce-136

Cross Section

-0.202 To 9999. %



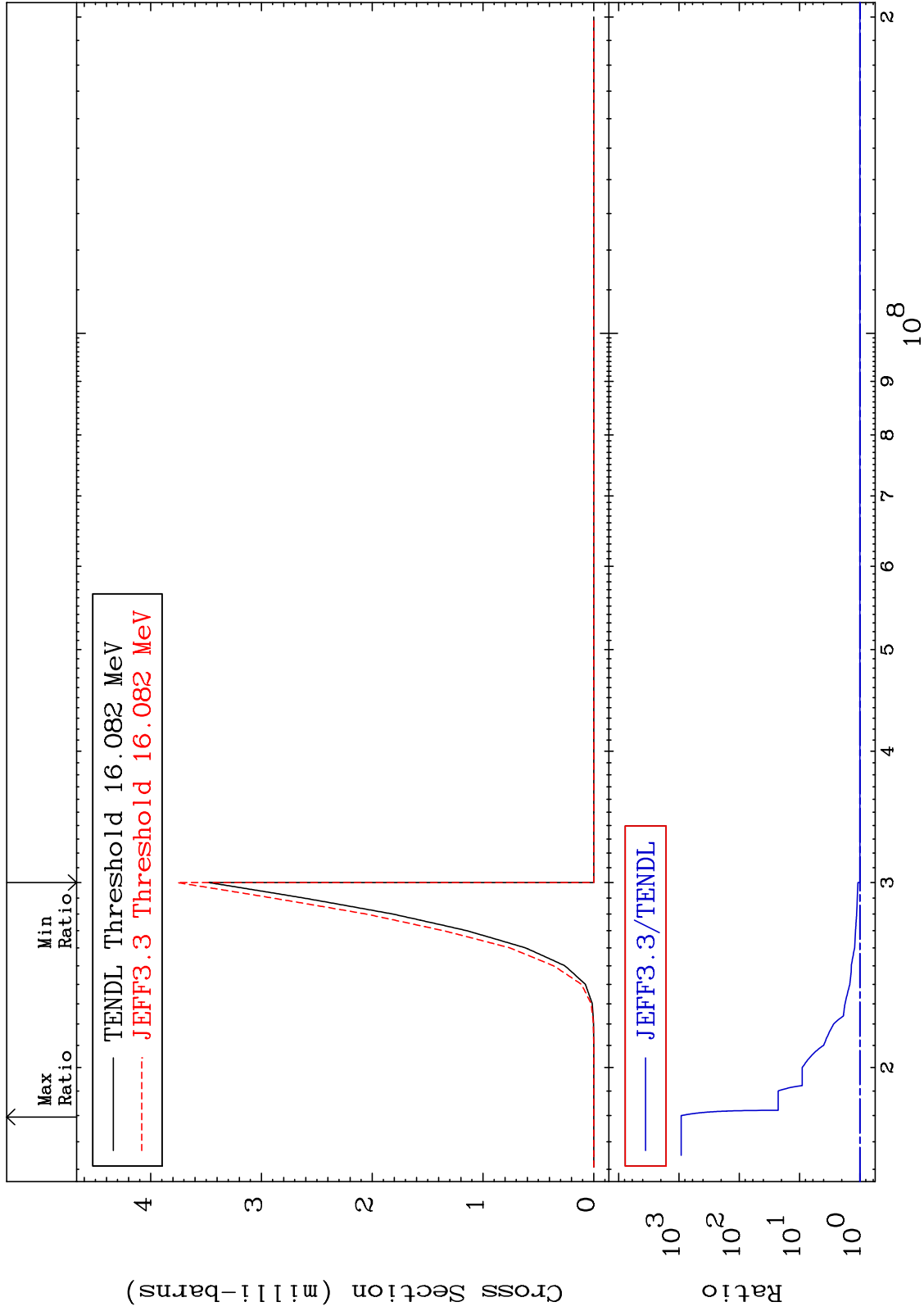
MAT 5825

(n,n') t

58-Ce-136

Cross Section

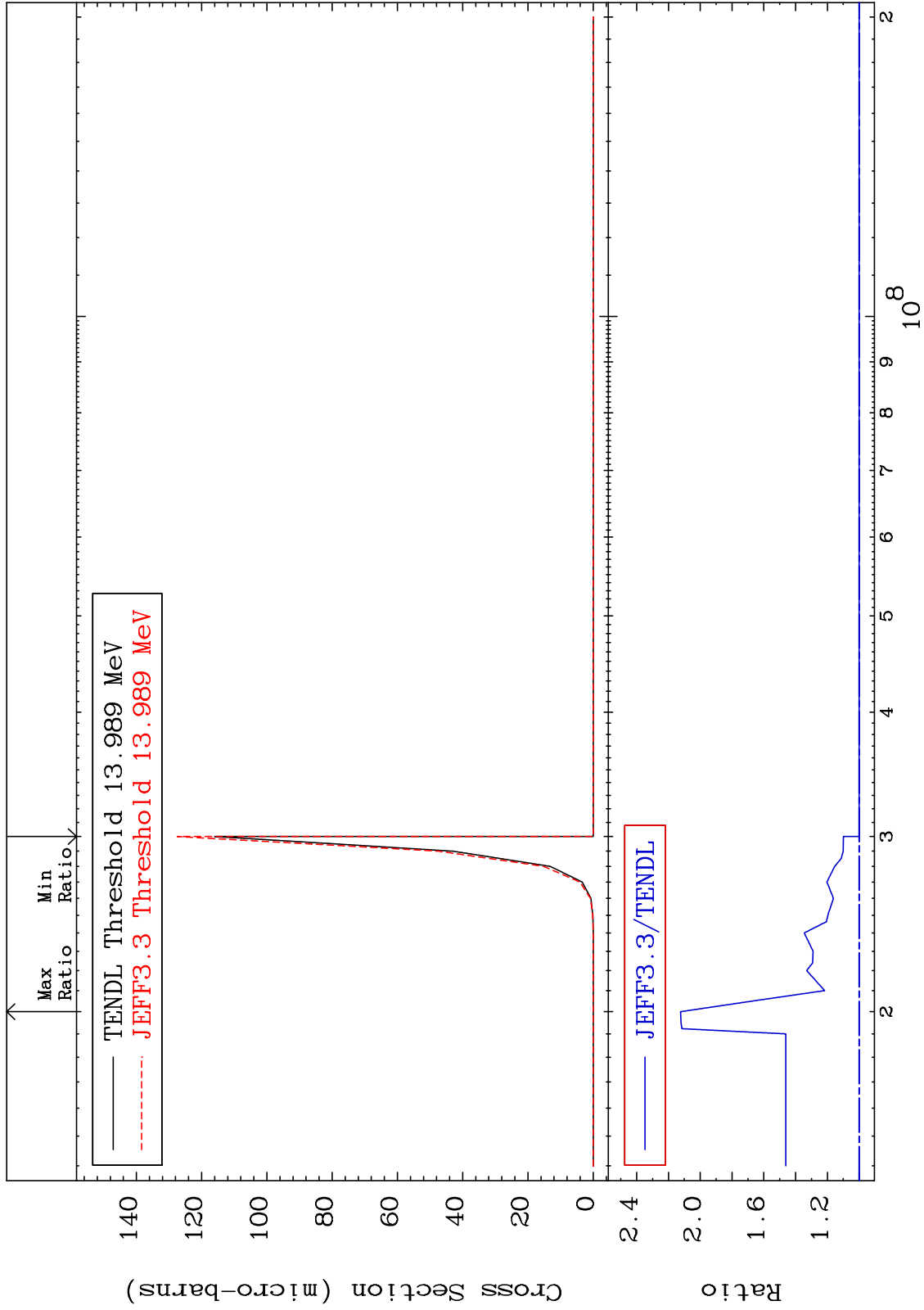
0.000 To 9999. %



MAT 5825

(n, n') He-3
Cross Section

58-Ce-136
0.000 To 112.3 %



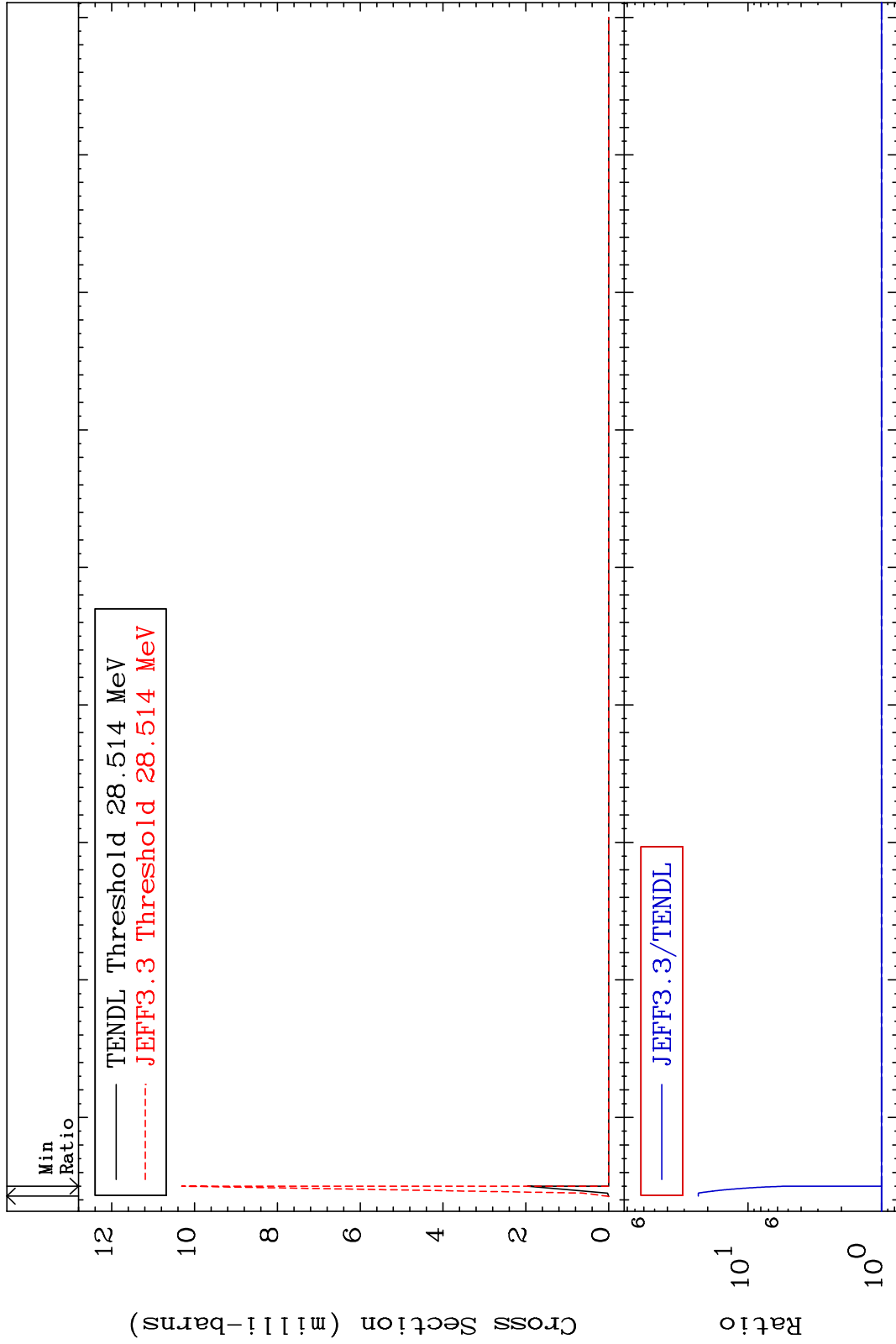
MAT 5825

(n, 4n)

58-Ce-136

Cross Section

0.000 To 2249. %



15

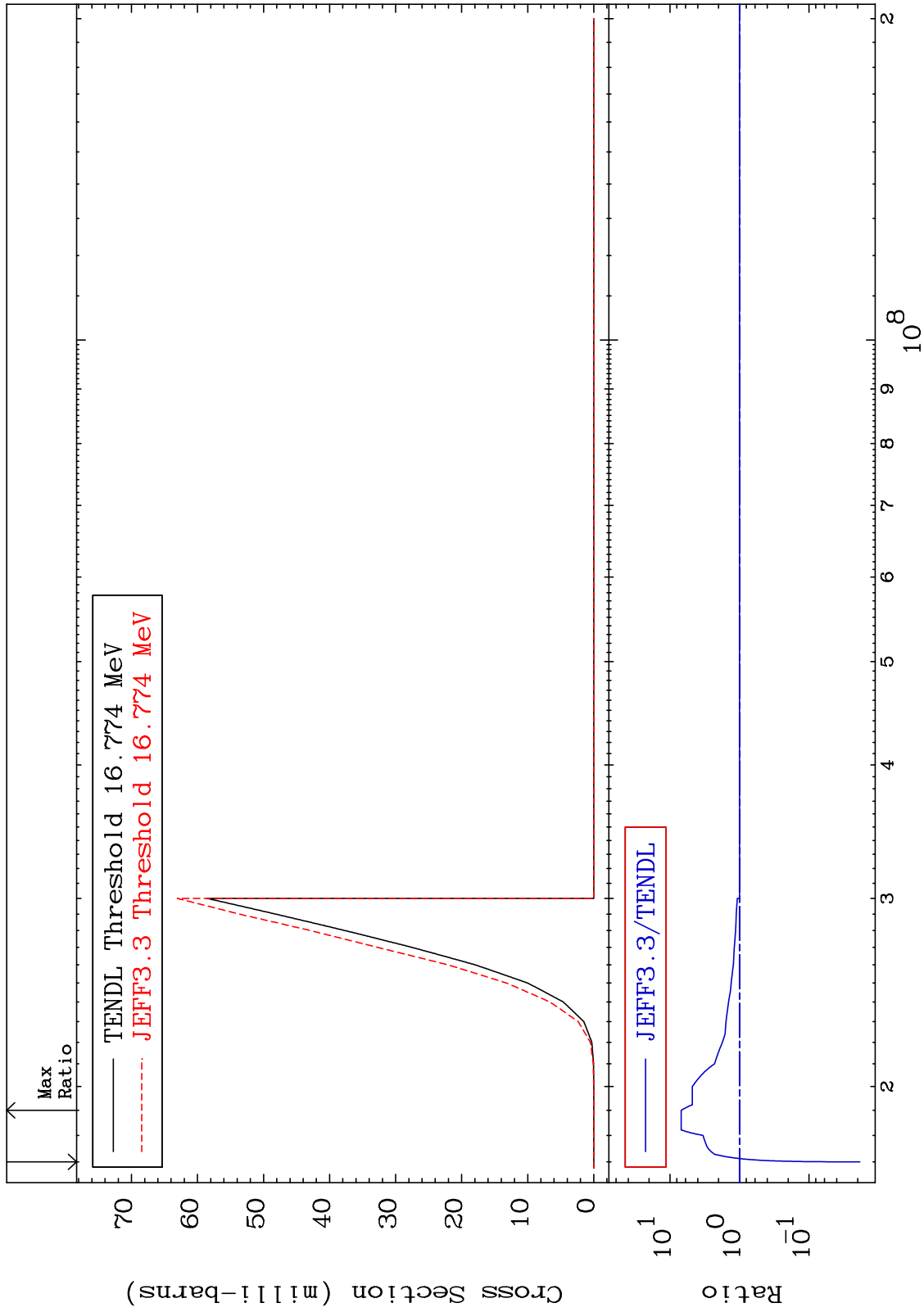
Incident Energy (MeV)

58-Ce-136

MAT 5825

(n,2n) p
Cross Section

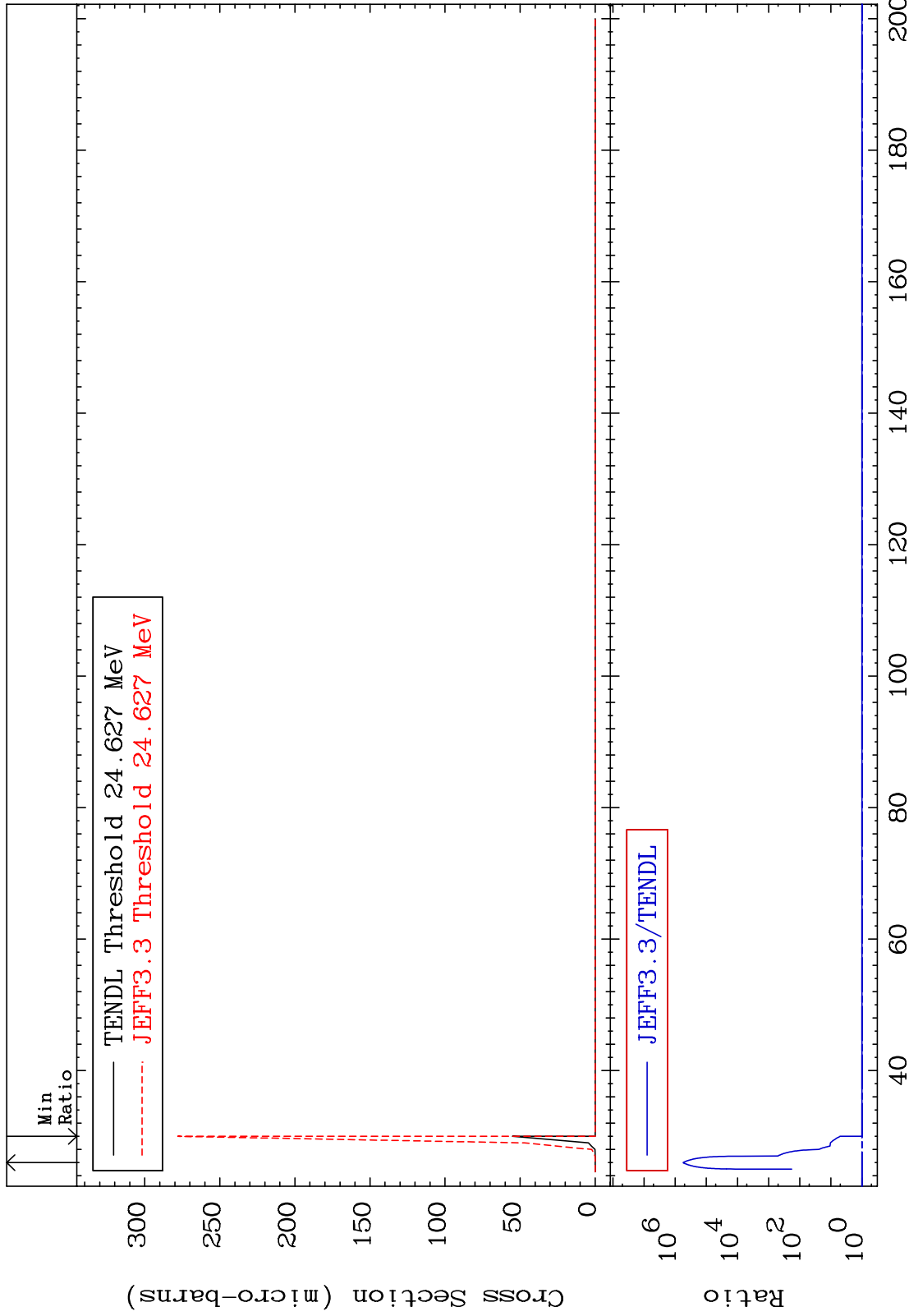
58-Ce-136
-98.15 To 590.5 %



MAT 5825

(n,3n) p
Cross Section

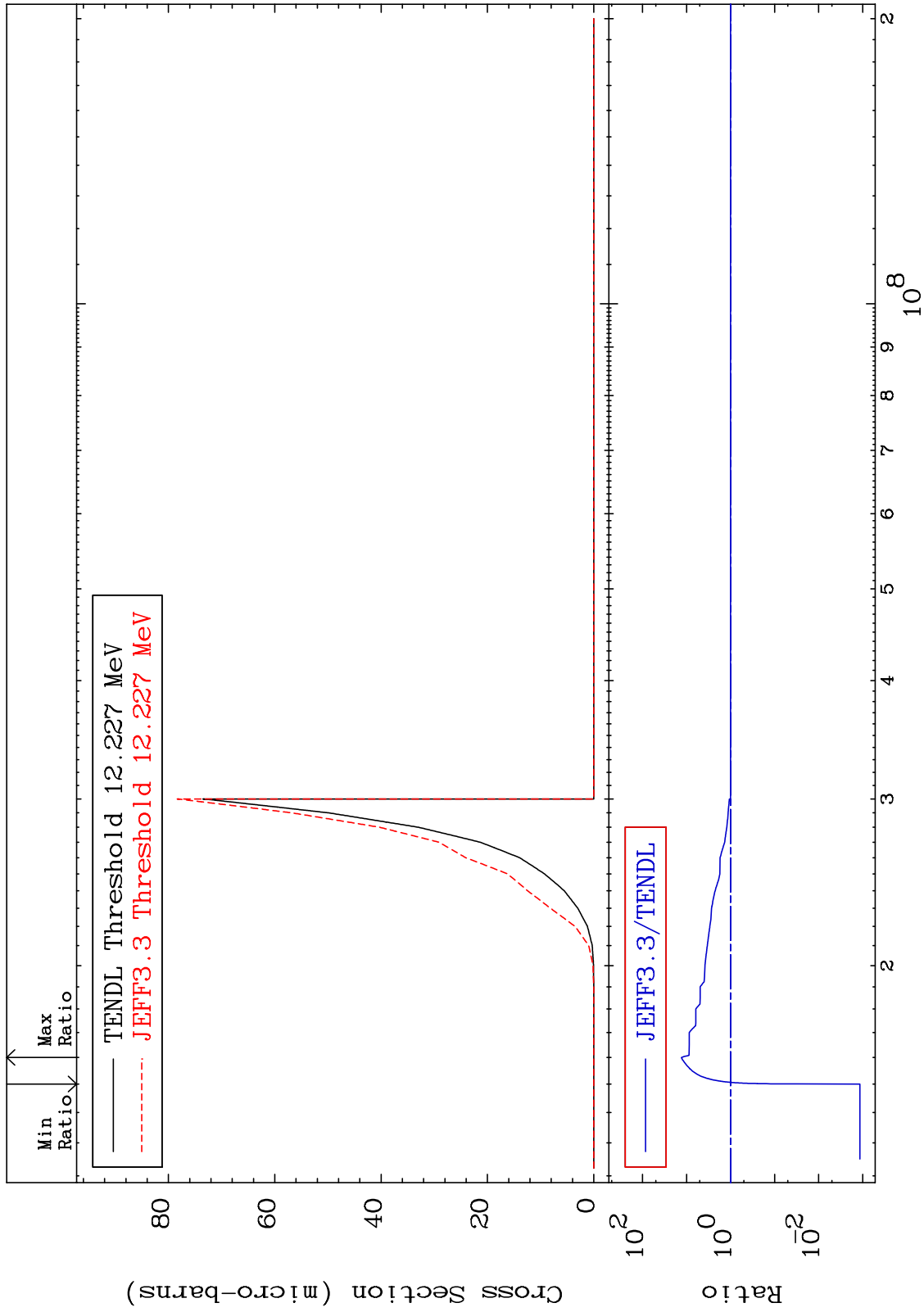
58-Ce-136
0.000 To 9999. %



MAT 5825

(n,2n) p
Cross Section

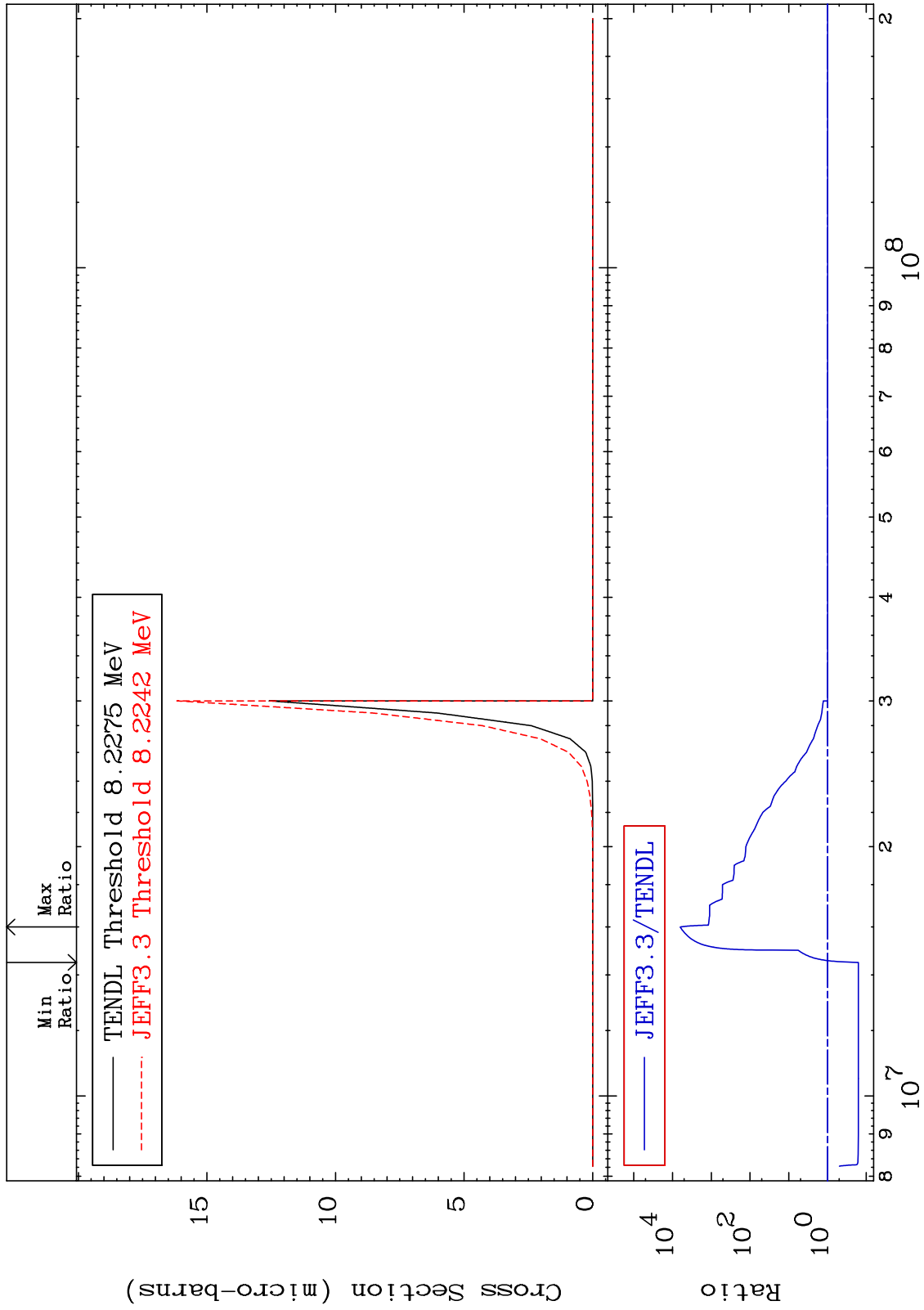
58-Ce-136
-99.88 To 1222. %



MAT 5825

(n,n') p α
Cross Section

58-Ce-136
-84.01 To 9999. %



19

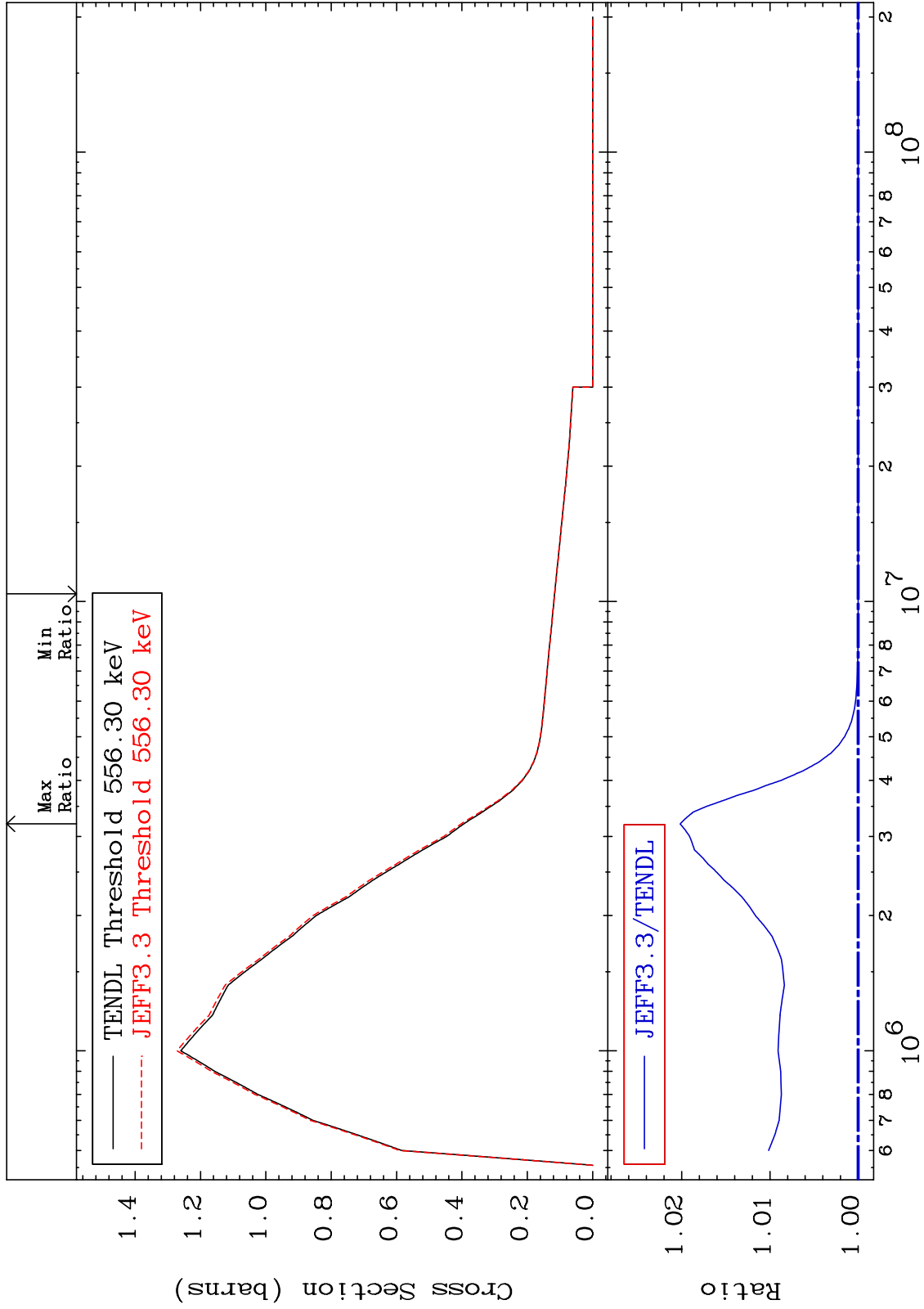
Incident Energy (eV)

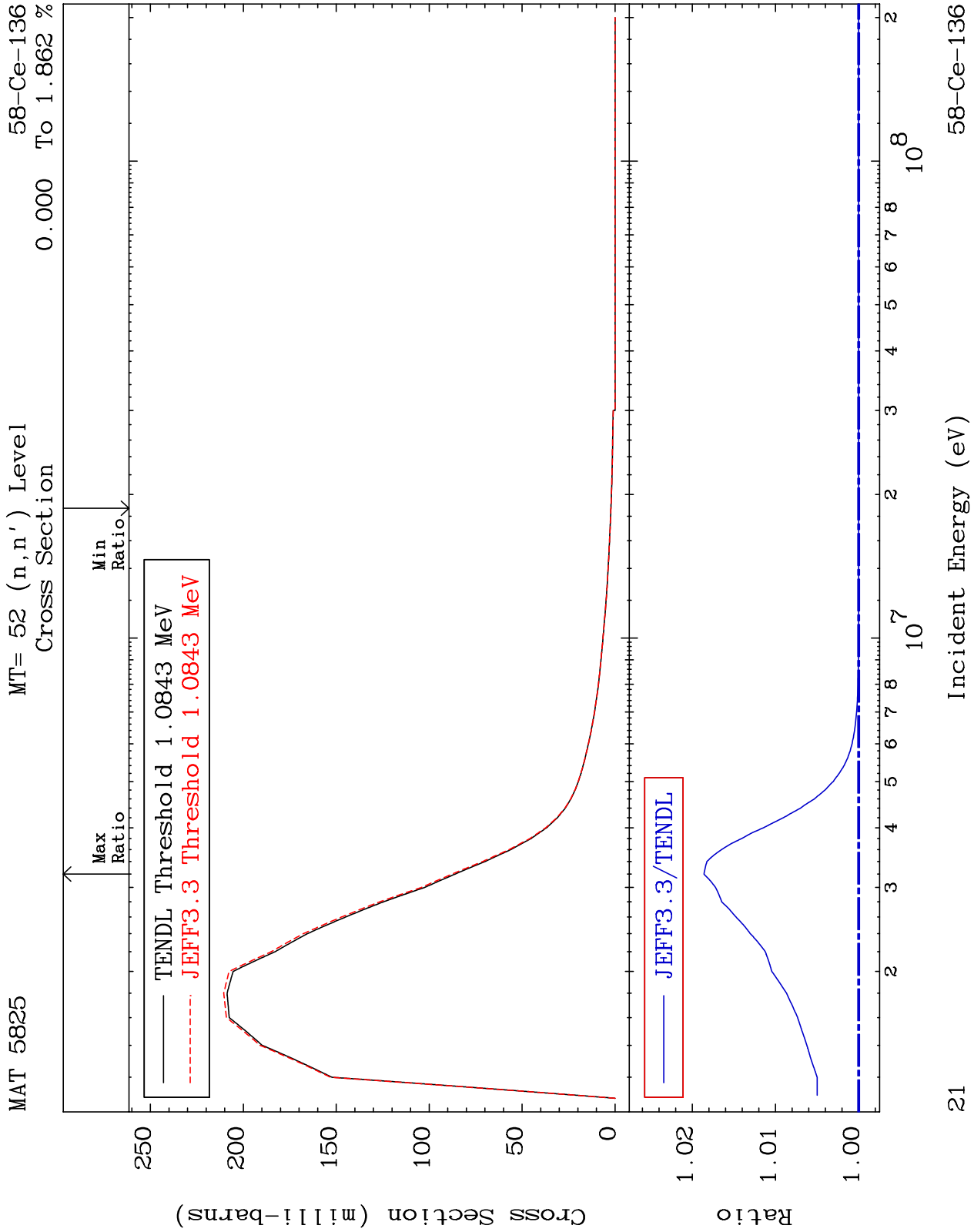
58-Ce-136

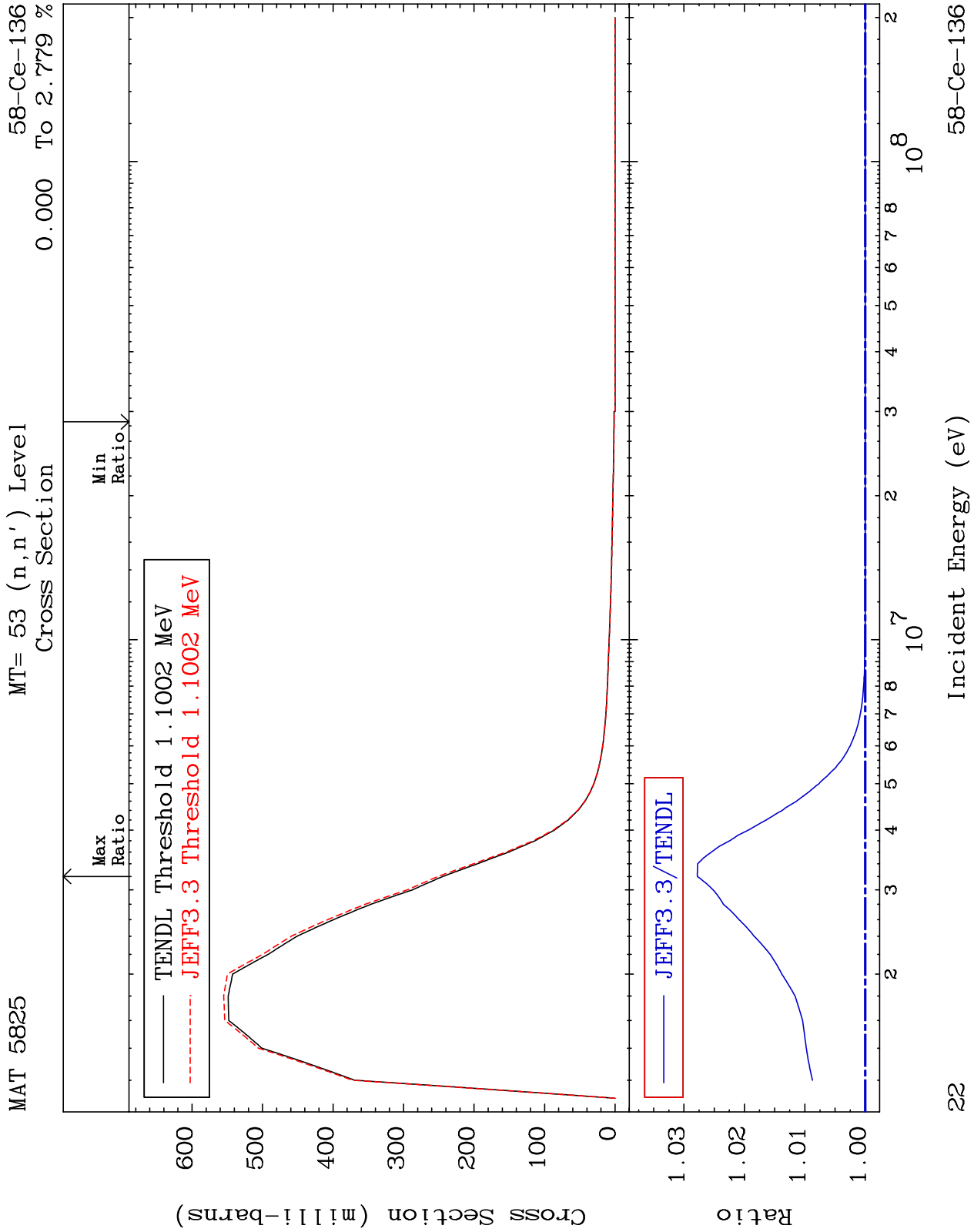
MAT 5825

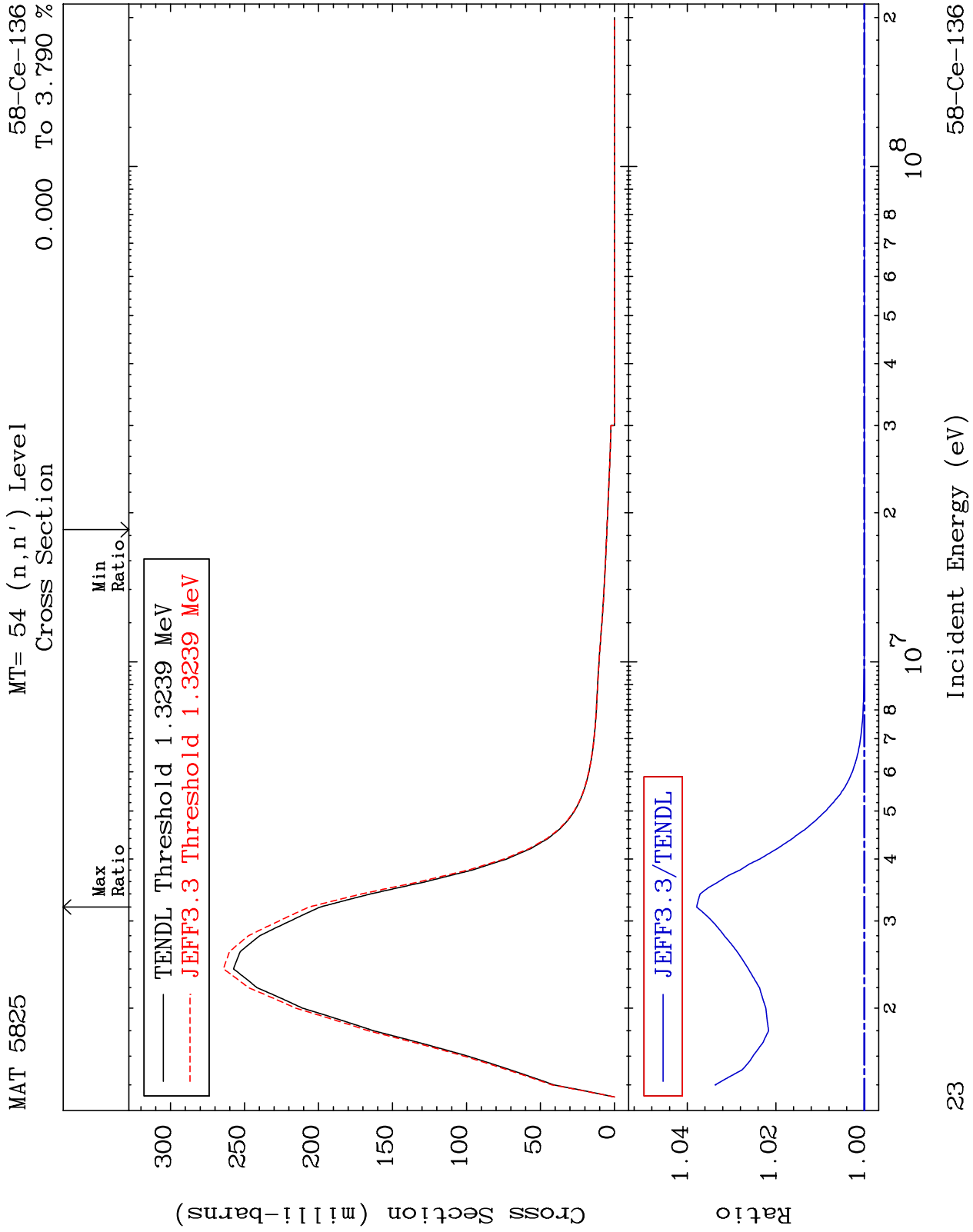
MT= 51 (n, n') Level
Cross Section

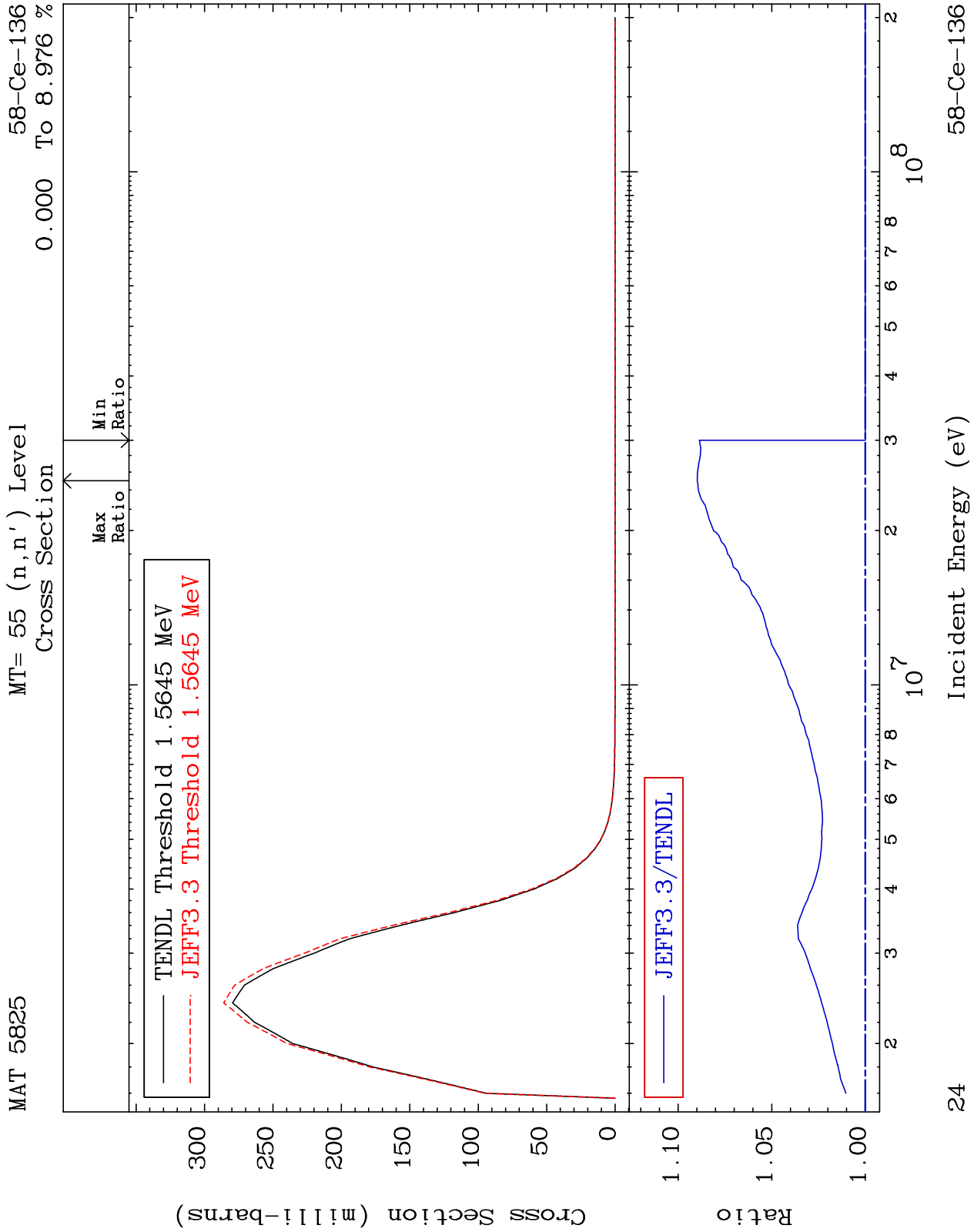
58-Ce-136
0.000 To 2.016 %







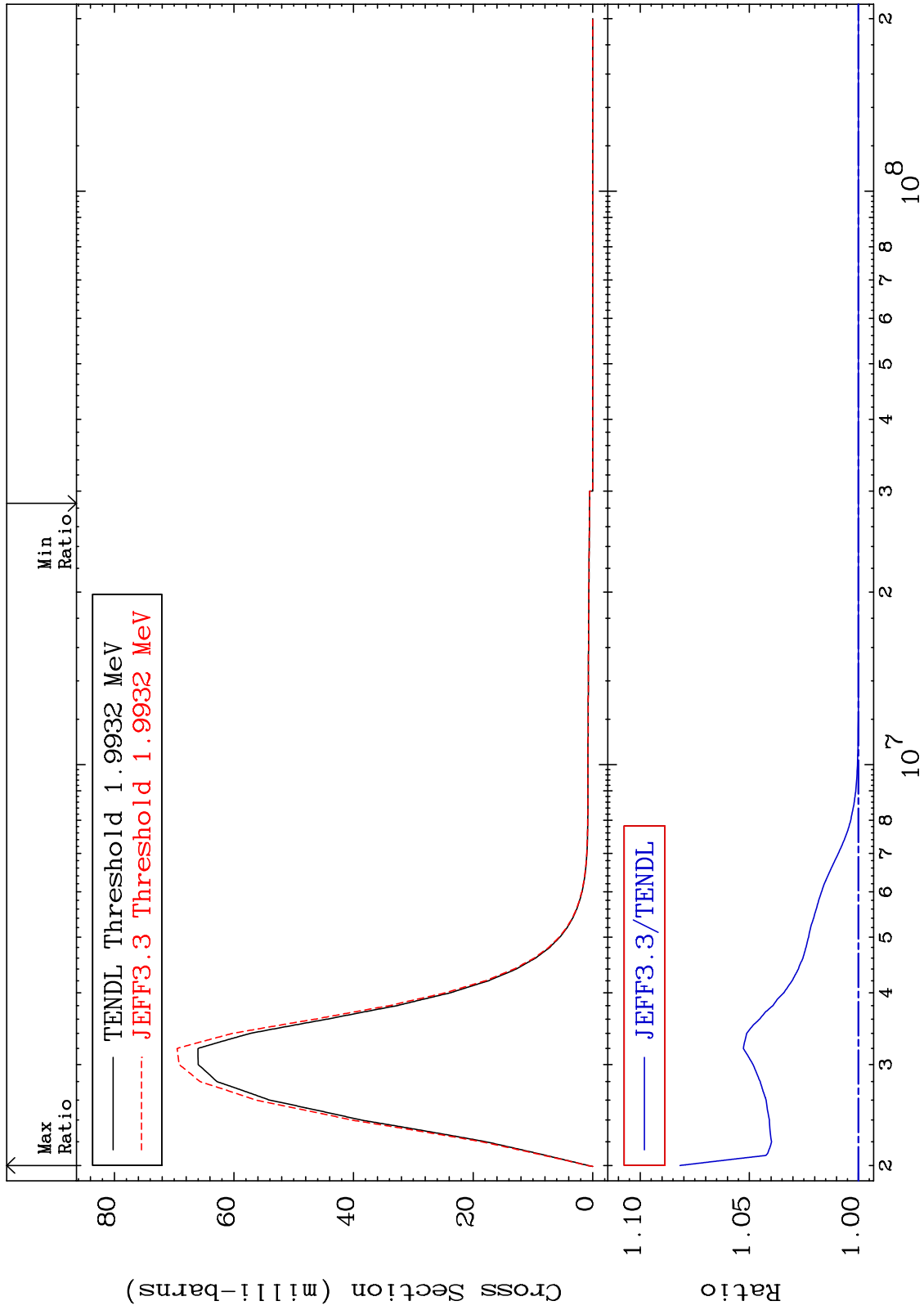




MAT 5825

MT= 56 (n,n') Level
Cross Section

58-Ce-136
To 8.176 %

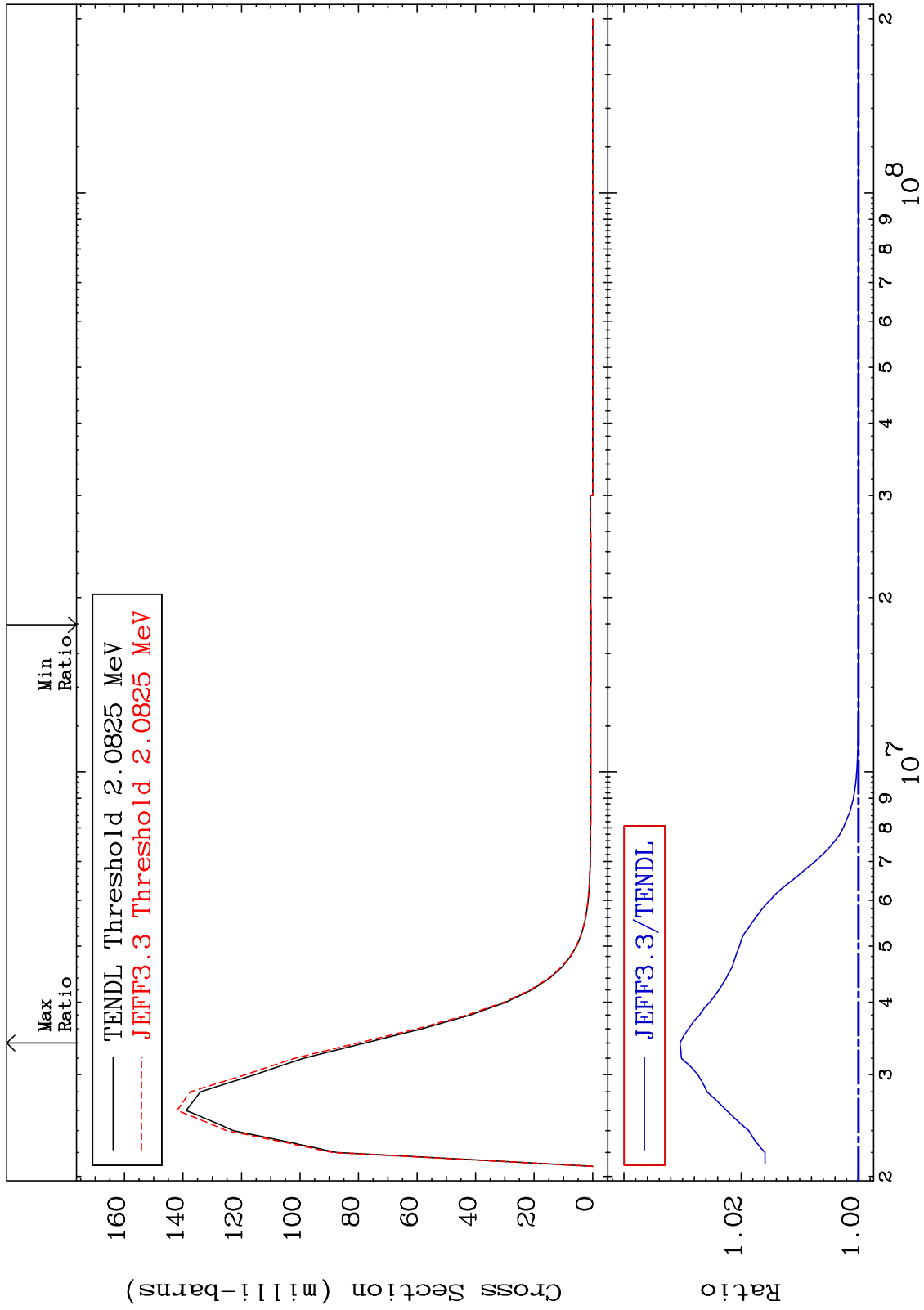


25

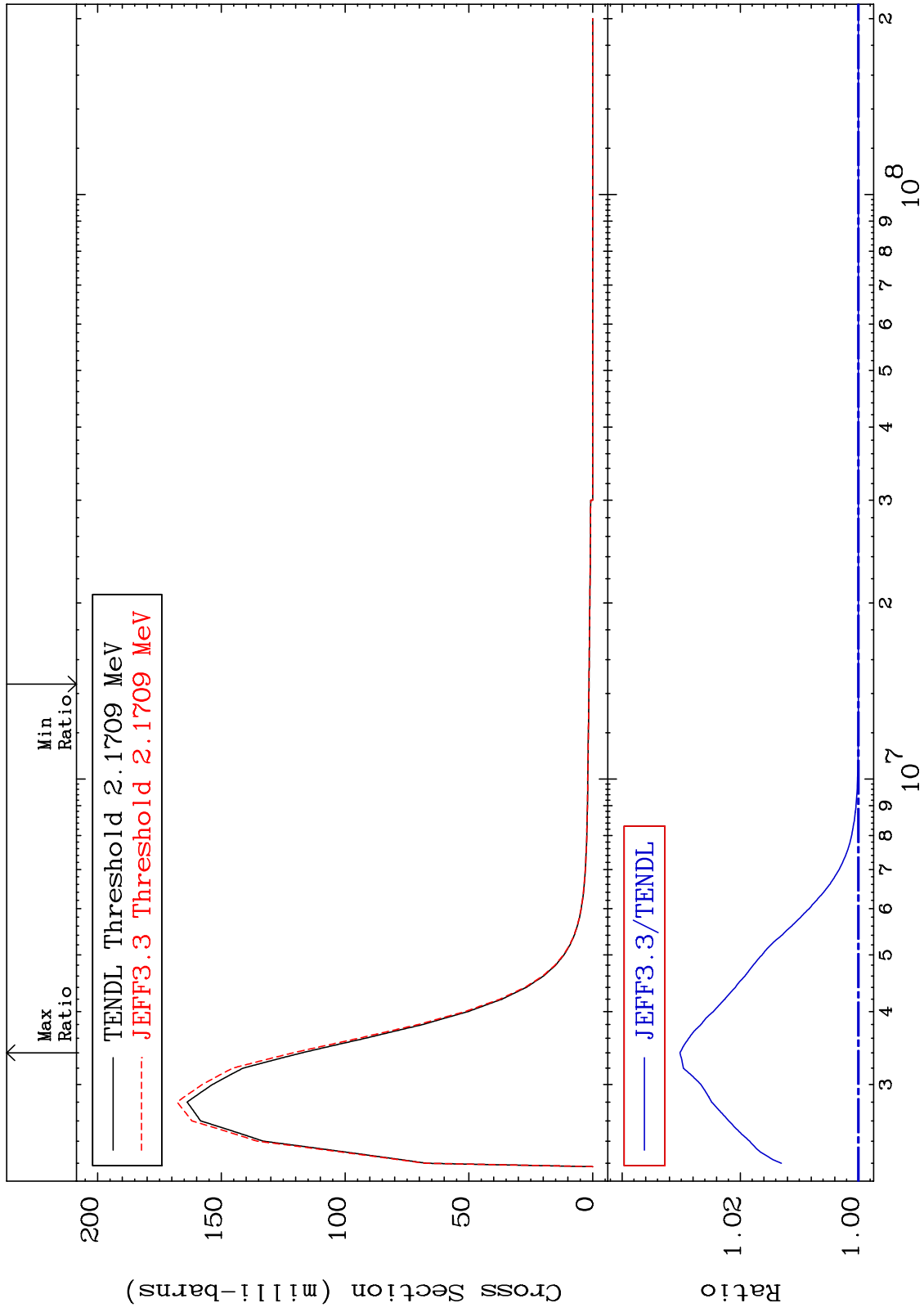
Incident Energy (eV)

58-Ce-136

MAT 5825 MT= 57 (n, n') Level Cross Section 58-Ce-136 To 3.043 %



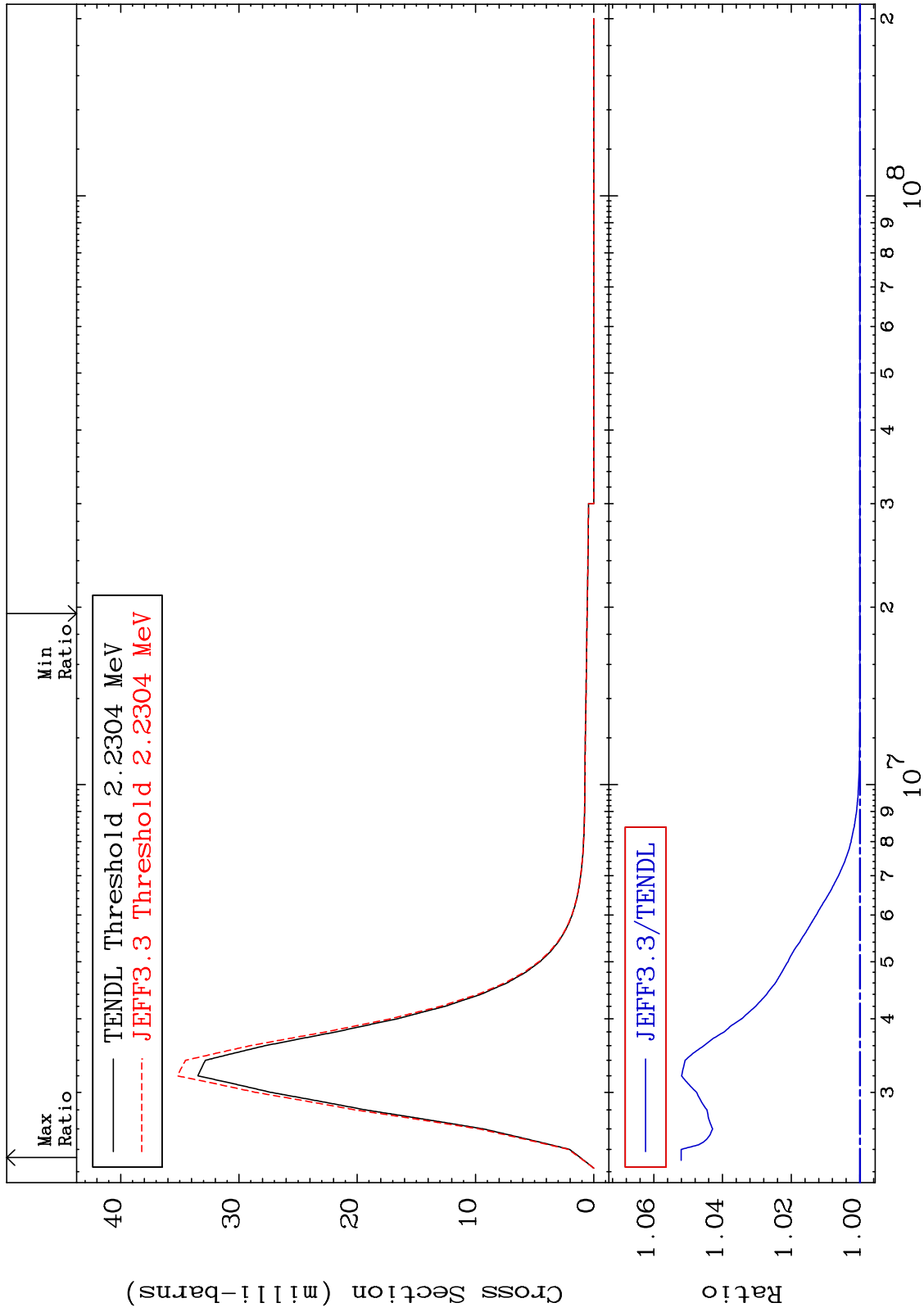
MAT 5825 MT= 58 (n, n') Level Cross Section 58-Ce-136 To 3.020 %



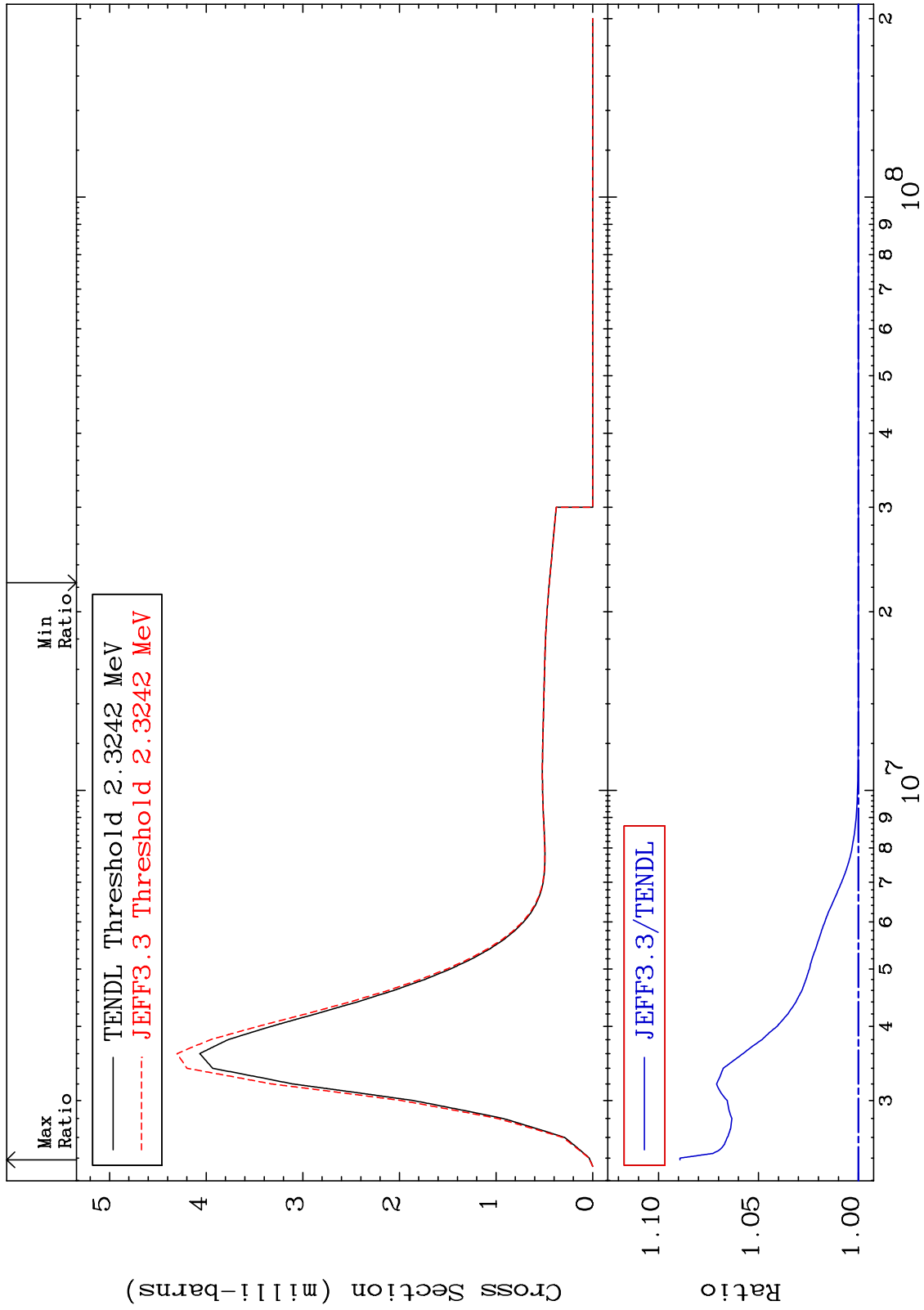
MAT 5825

MT= 59 (n, n') Level
Cross Section

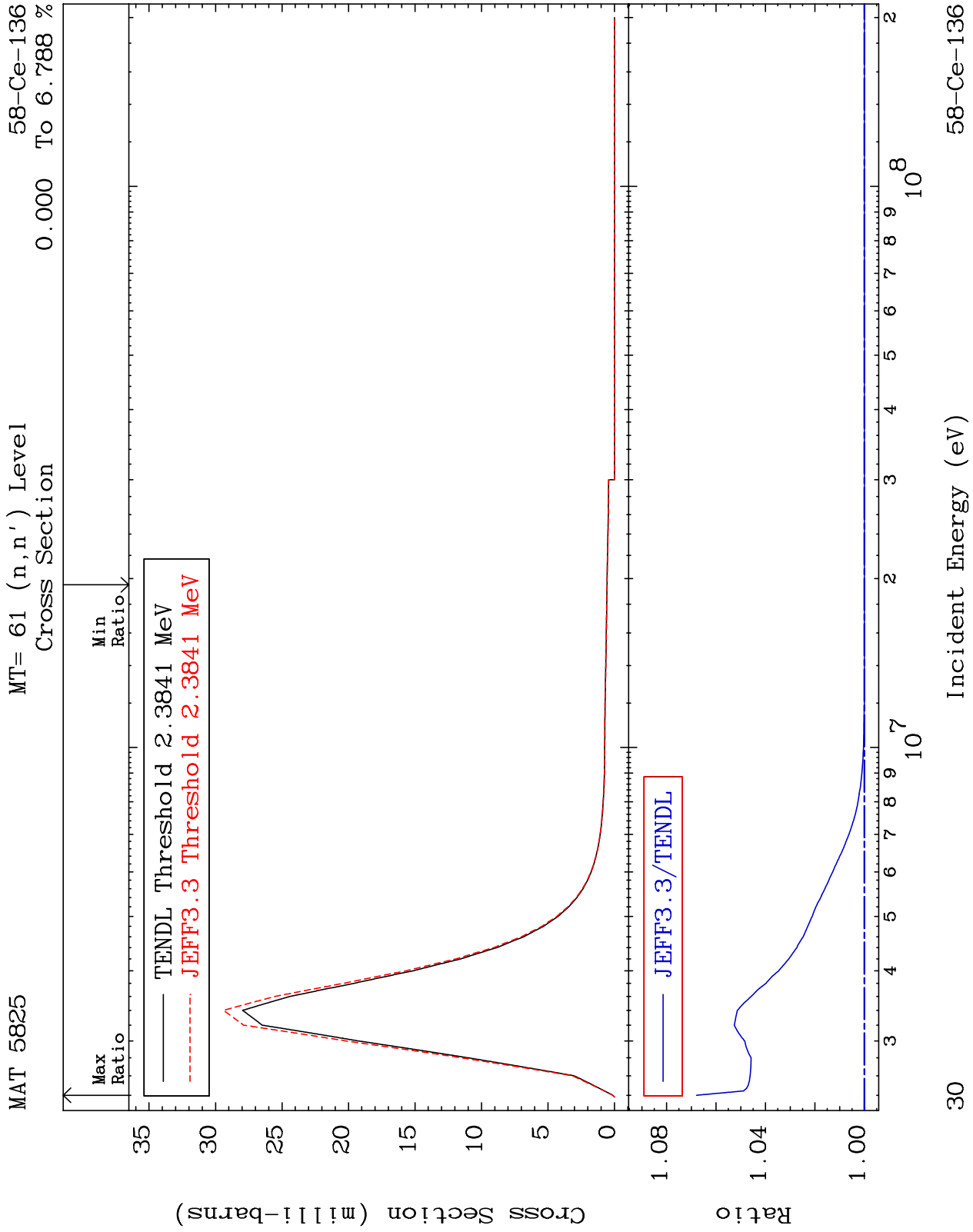
58-Ce-136
To 5.202 %



MAT 5825 MT= 60 (n,n') Level Cross Section 58-Ce-136 To 8.923 %



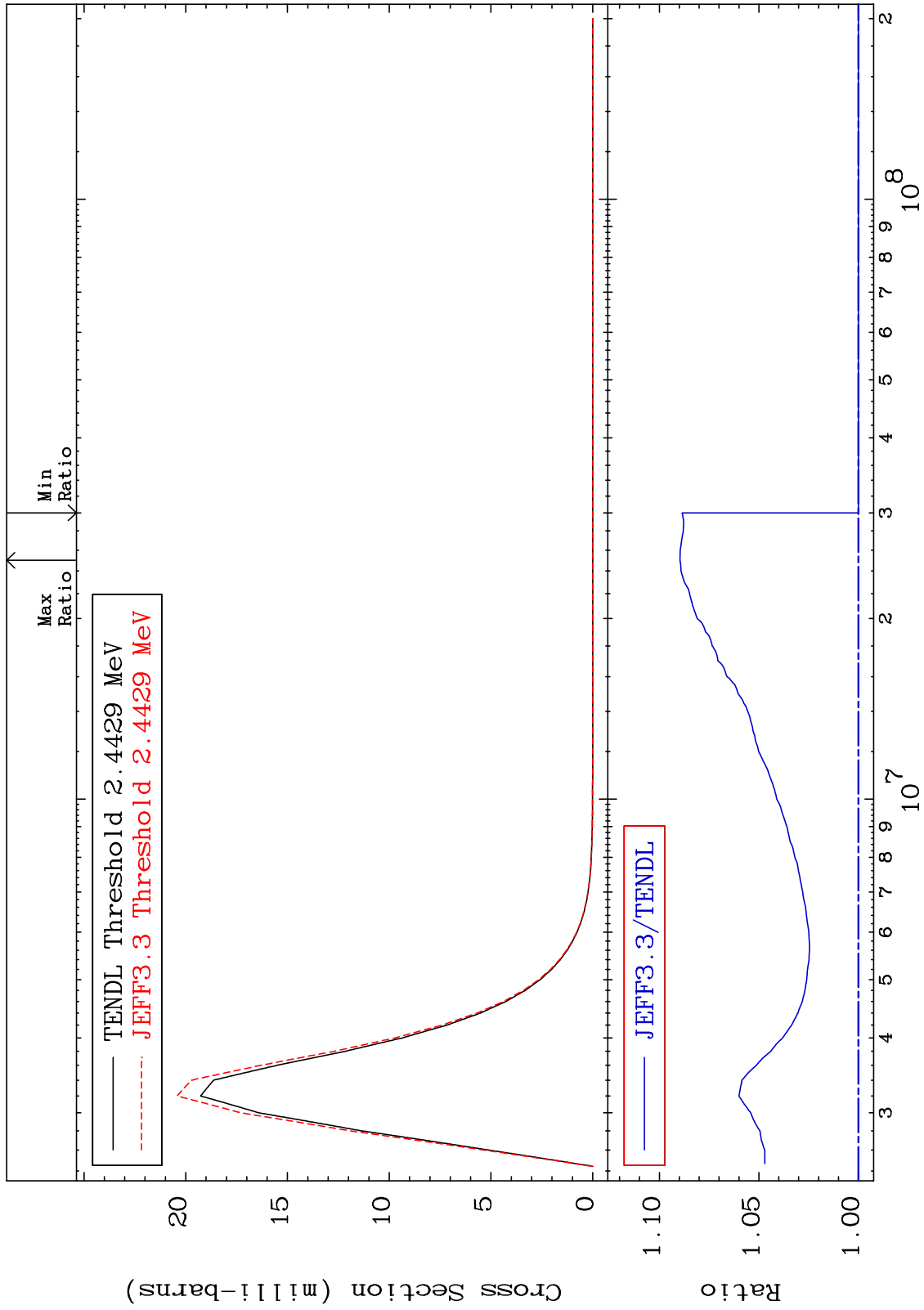
Incident Energy (eV) 58-Ce-136

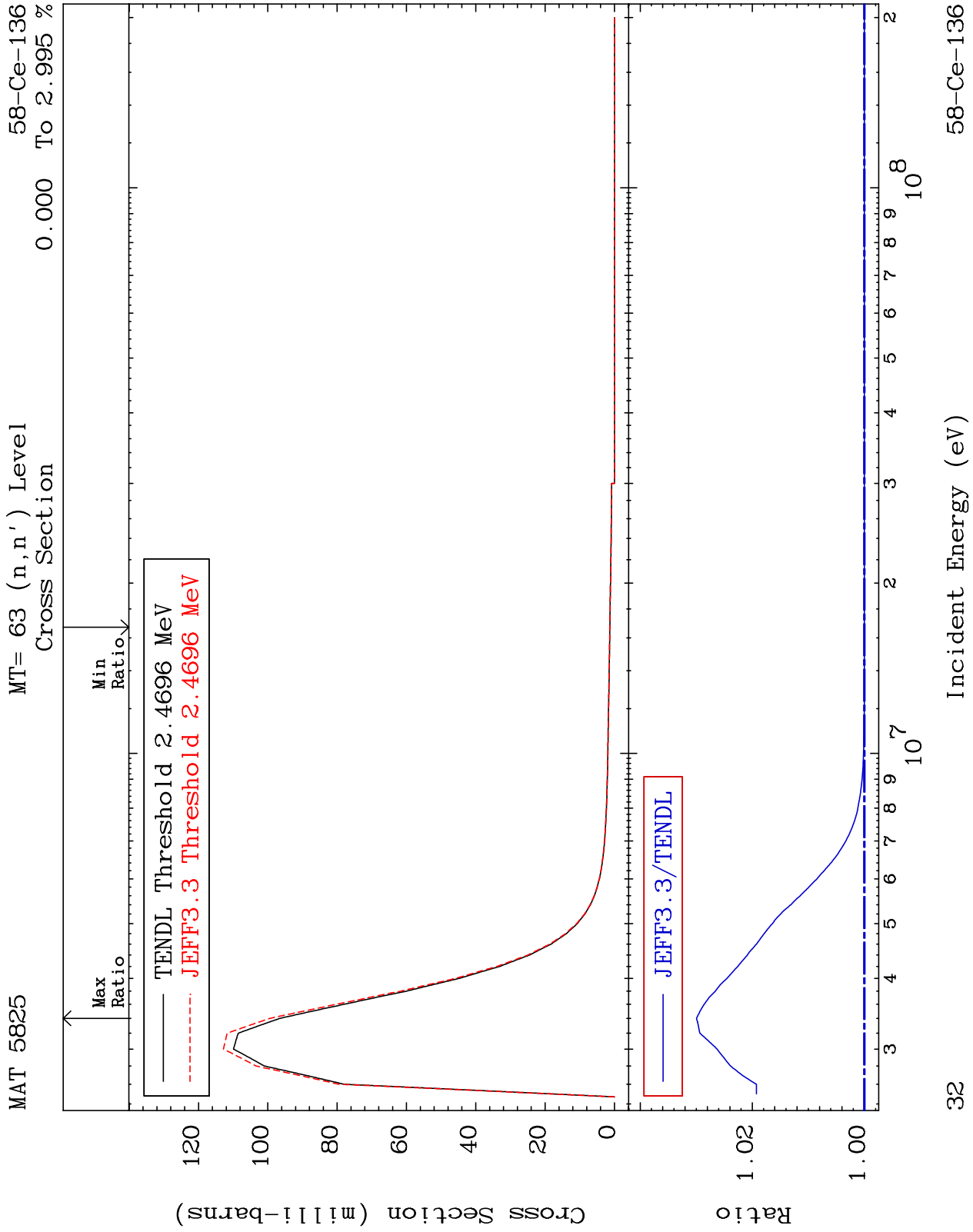


MAT 5825

MT= 62 (n, n') Level
Cross Section

58-Ce-136
To 8.963 %

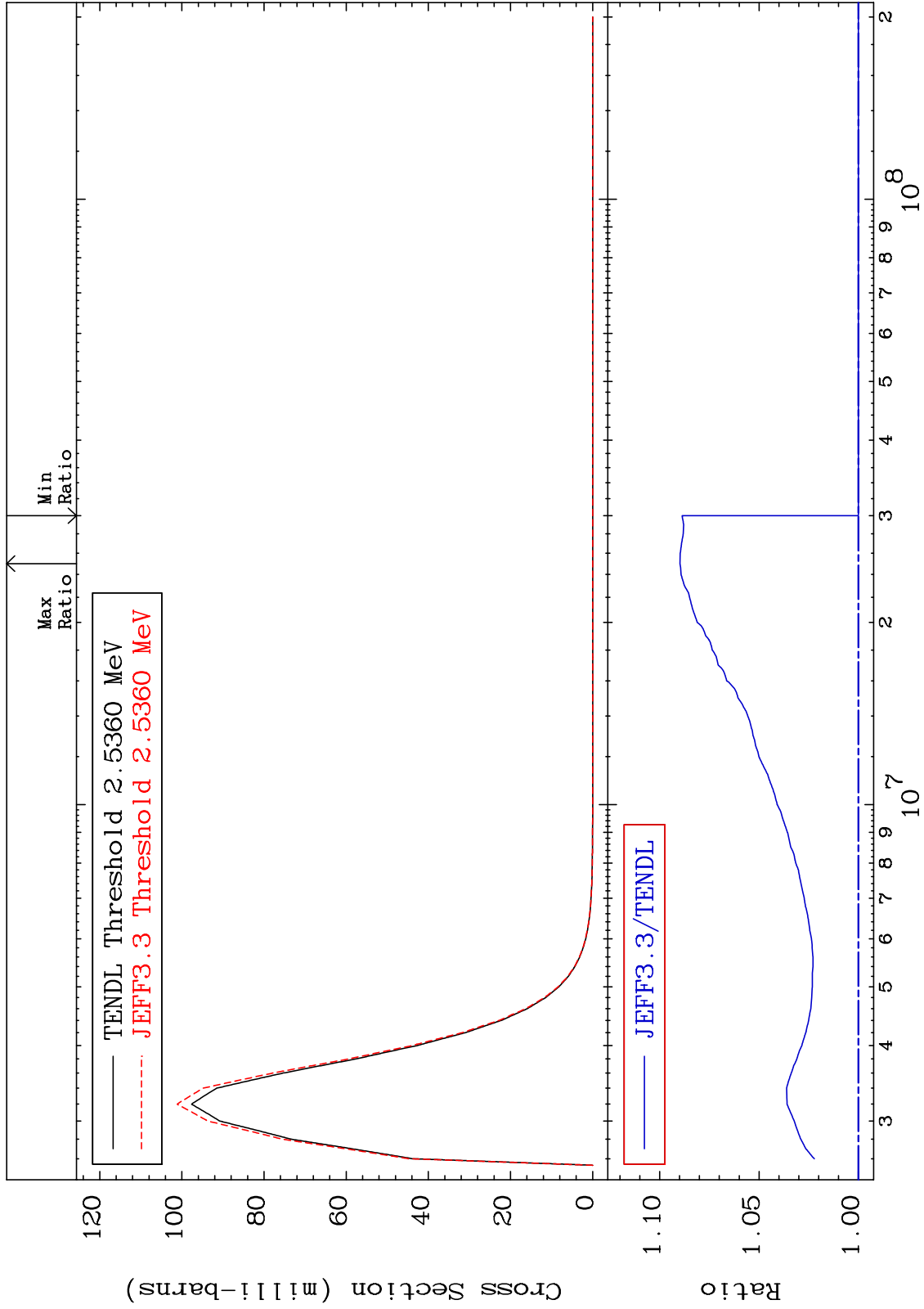




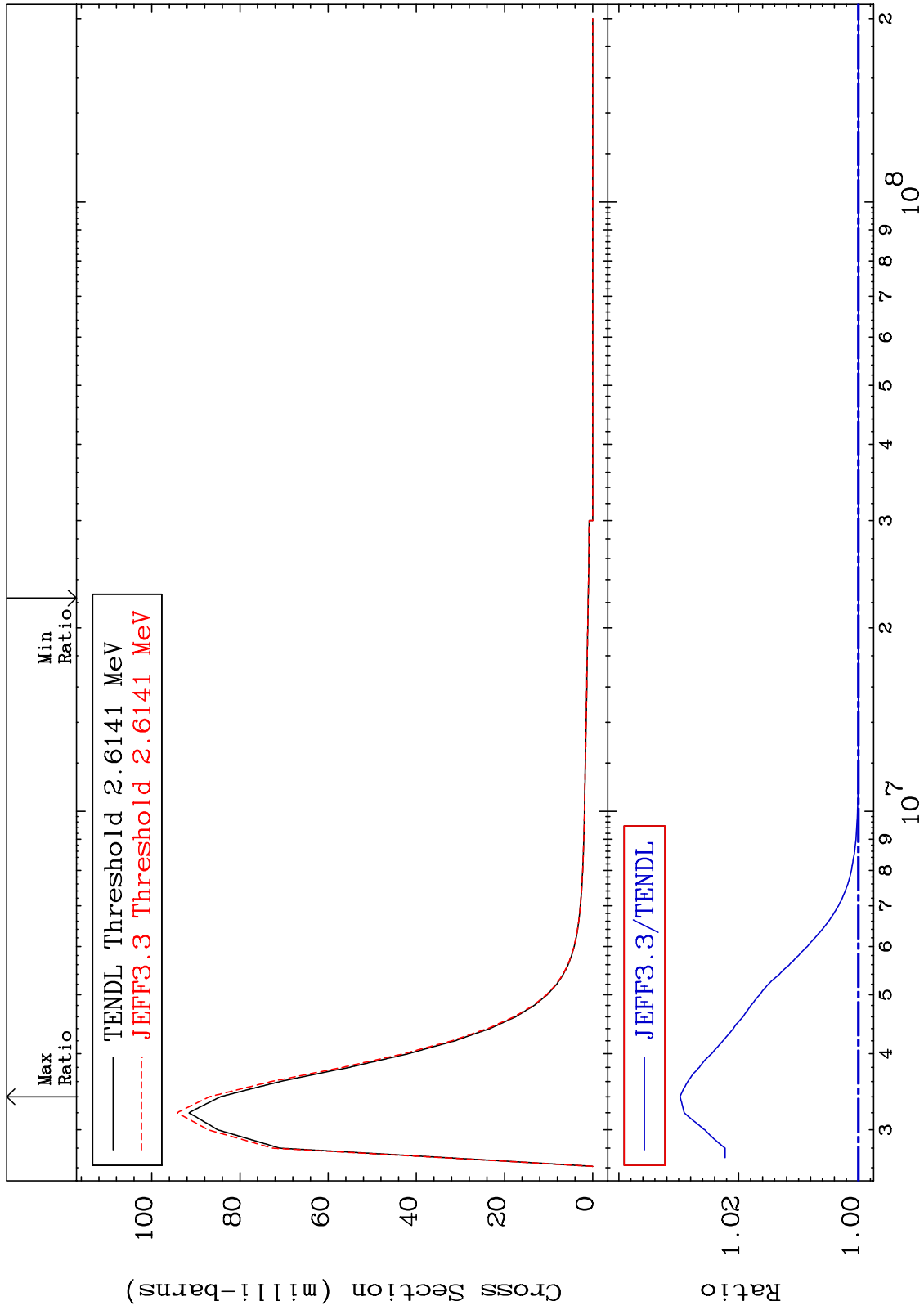
MAT 5825

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

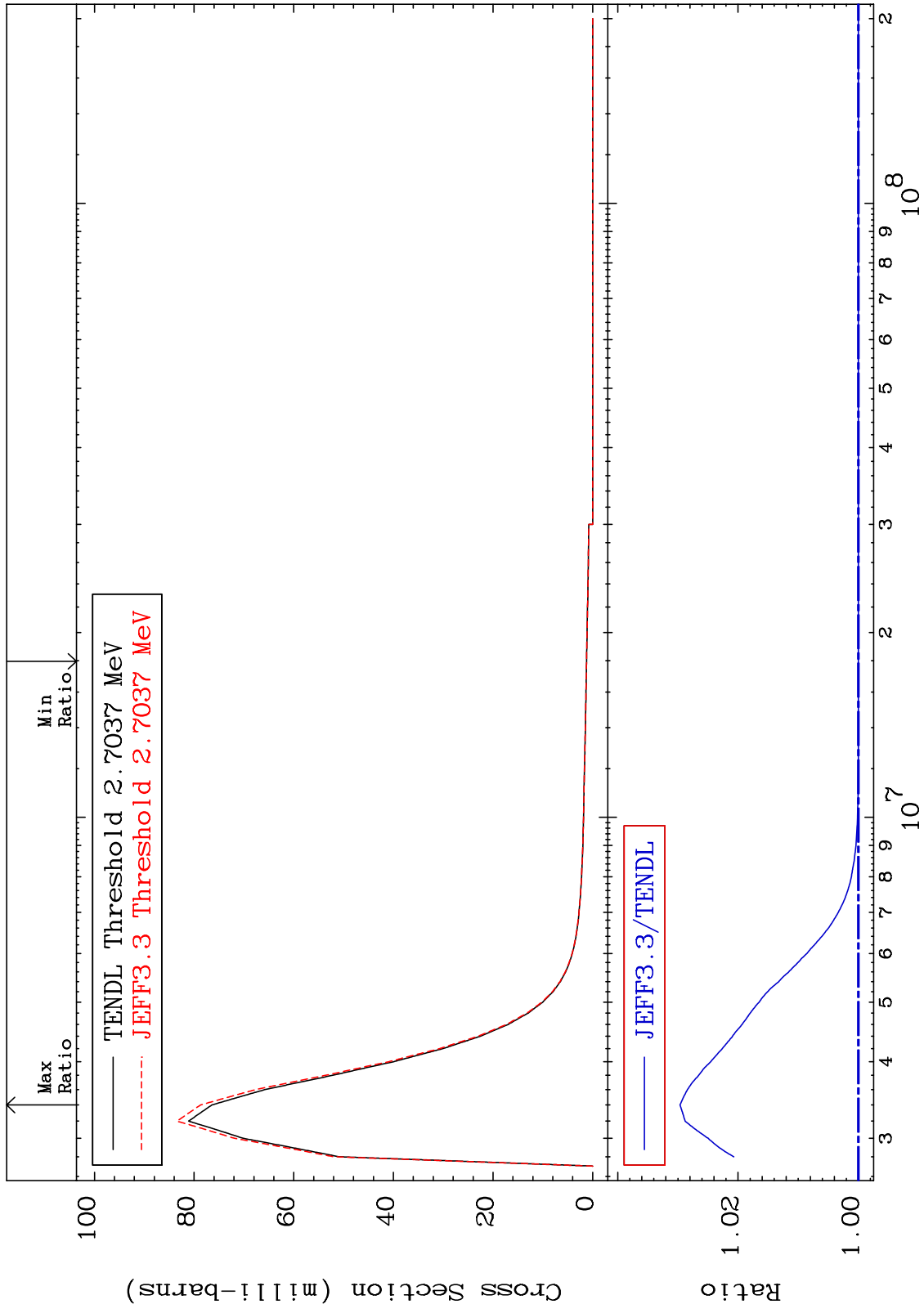
58-Ce-136
To 8.977 %



MAT 5825 MT= 65 (n,n') Level Cross Section 58-Ce-136 To 2.979 %



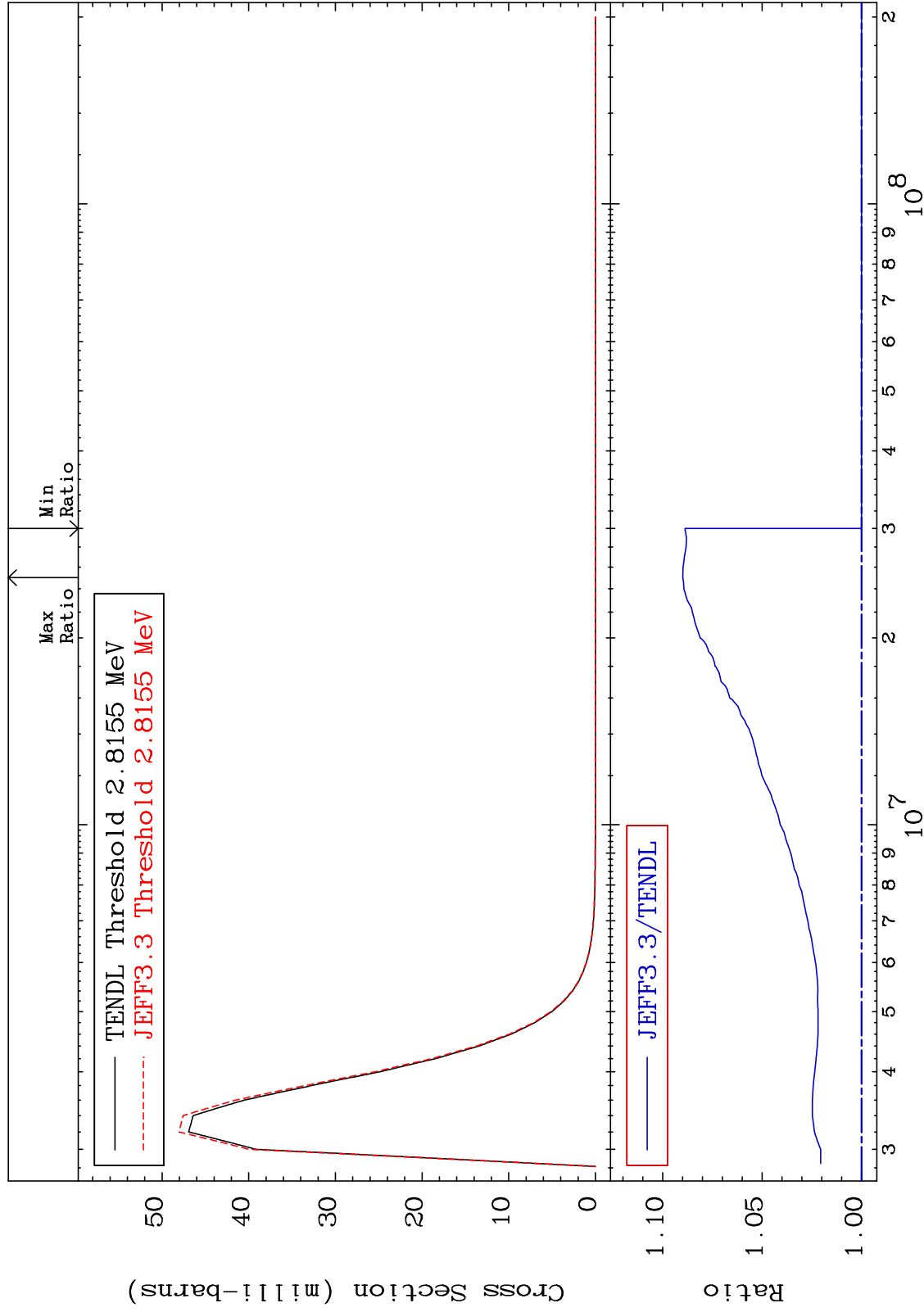
MAT 5825 MT= 66 (n,n') Level Cross Section 58-Ce-136 To 2.965 %



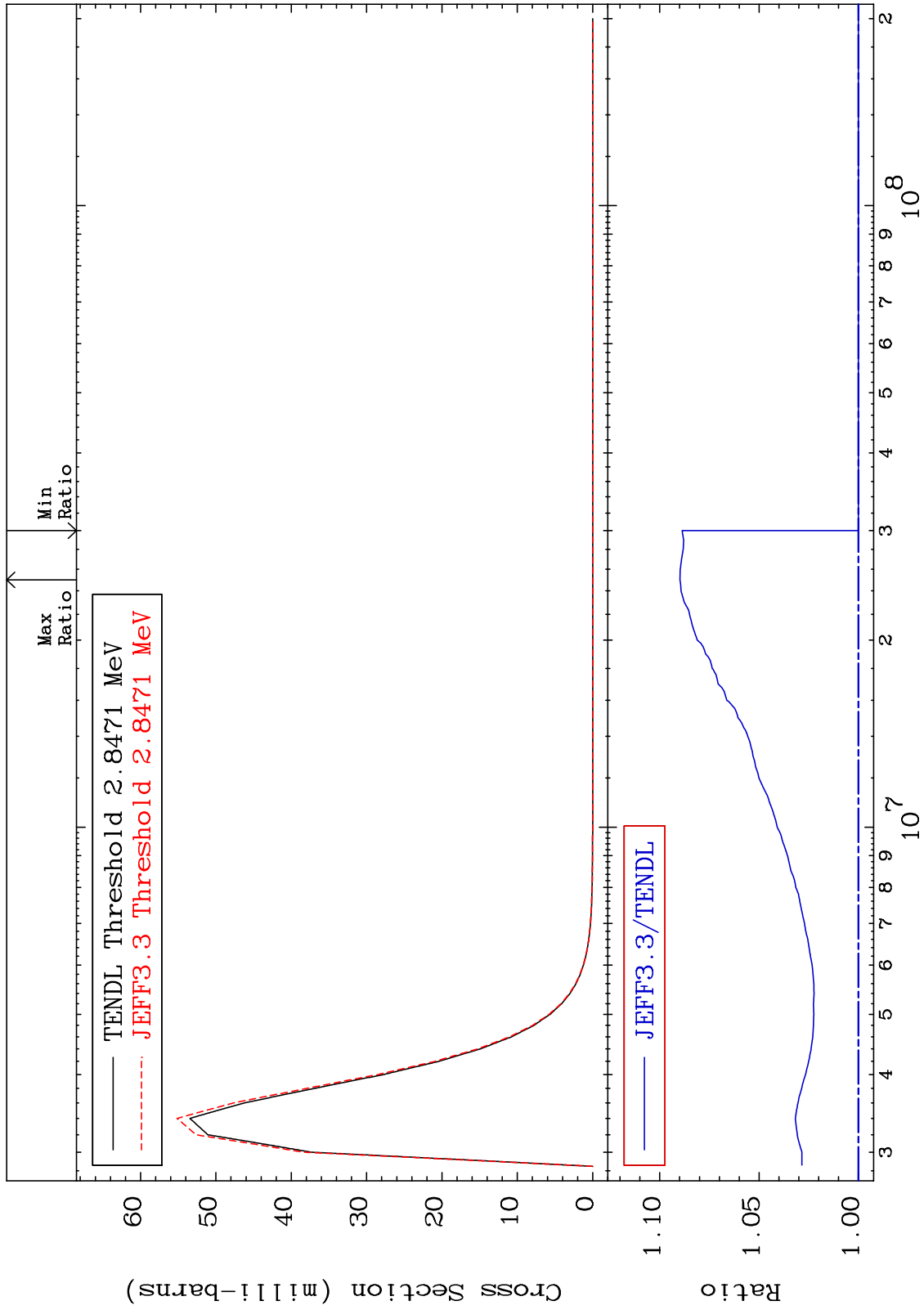
MAT 5825

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

58-Ce-136
To 8.983 %



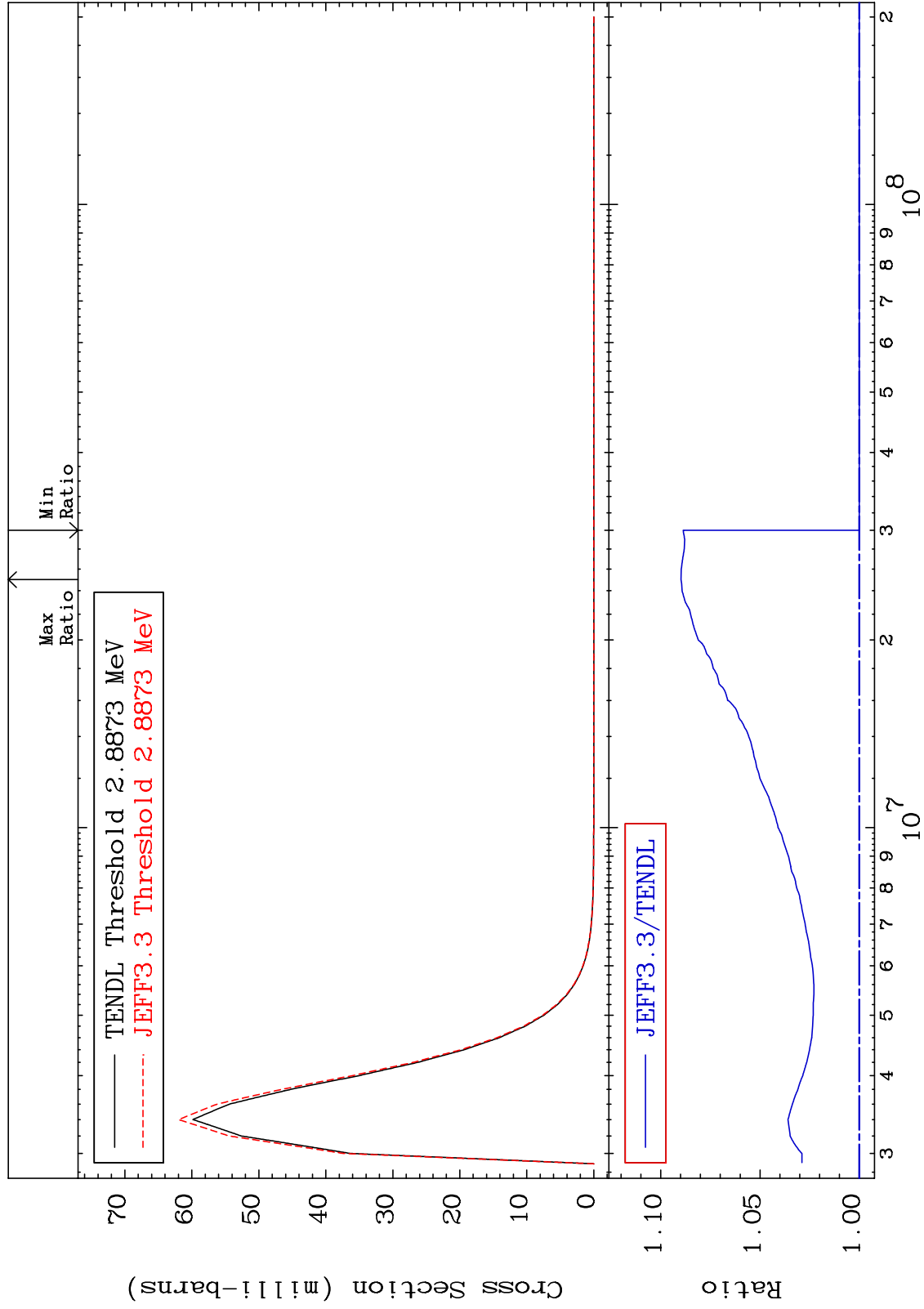
MAT 5825 MT= 68 (n, n') Level Cross Section 58-Ce-136 To 8.980 %



MAT 5825

MT= 69 (n, n') Level
Cross Section

58-Ce-136
To 8.977 %



38

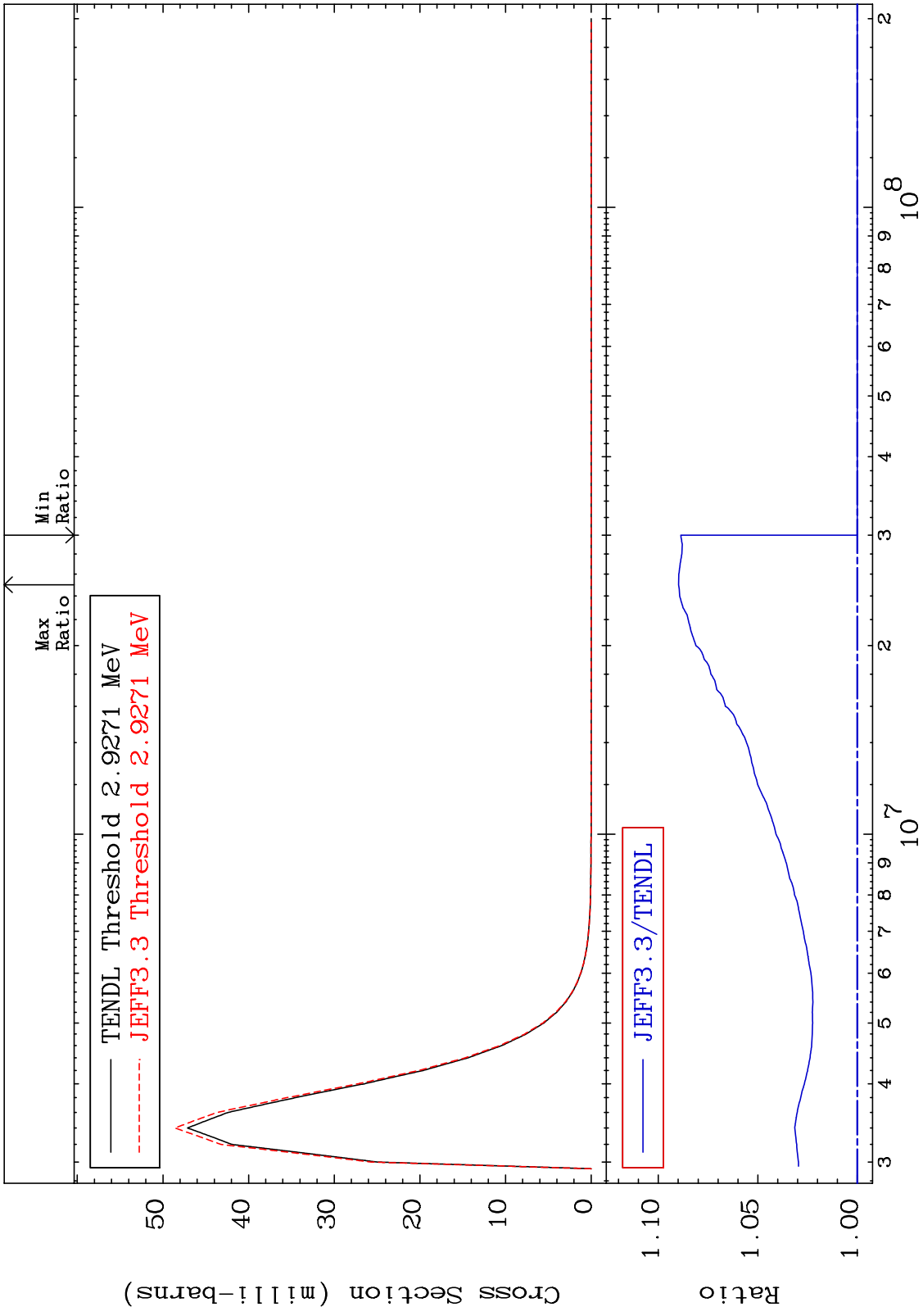
Incident Energy (eV)

58-Ce-136

MAT 5825

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

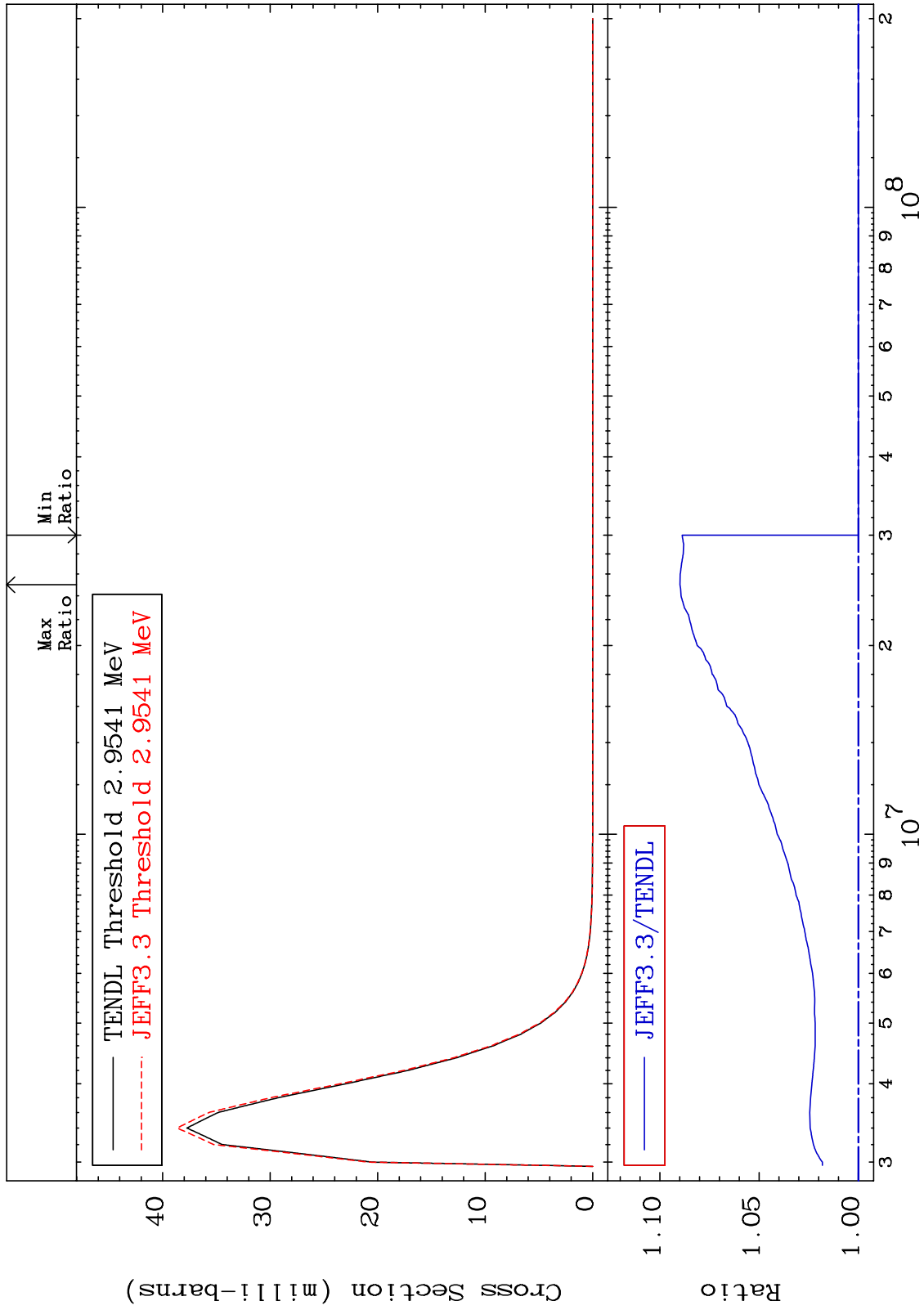
58-Ce-136
0.000 To 8.980 %



MAT 5825

MT= 71 (n, n') Level
Cross Section

58-Ce-136
To 8.983 %

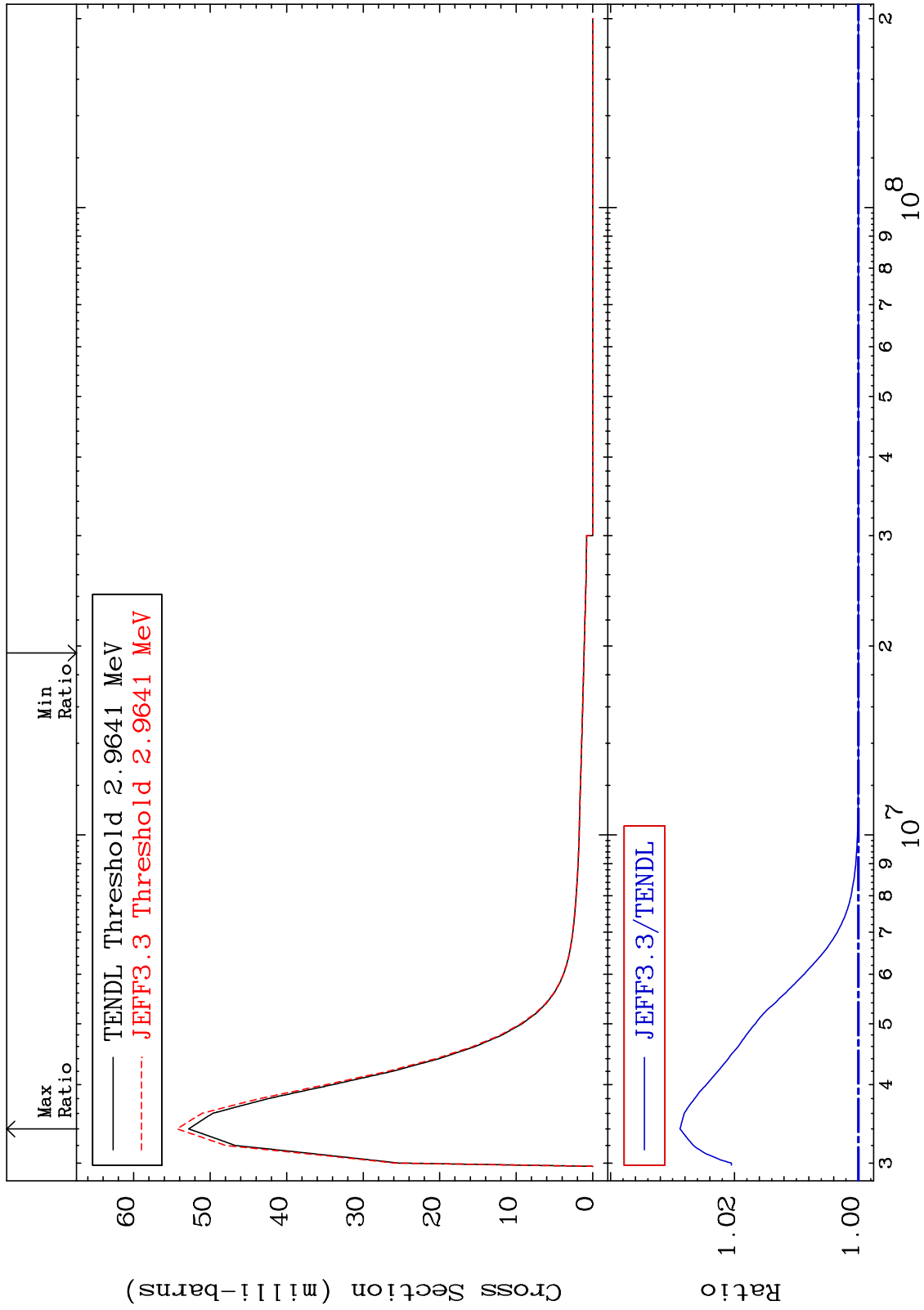


40

Incident Energy (eV)

58-Ce-136

MAT 5825 MT= 72 (n,n') Level Cross Section 58-Ce-136 To 2.881 %

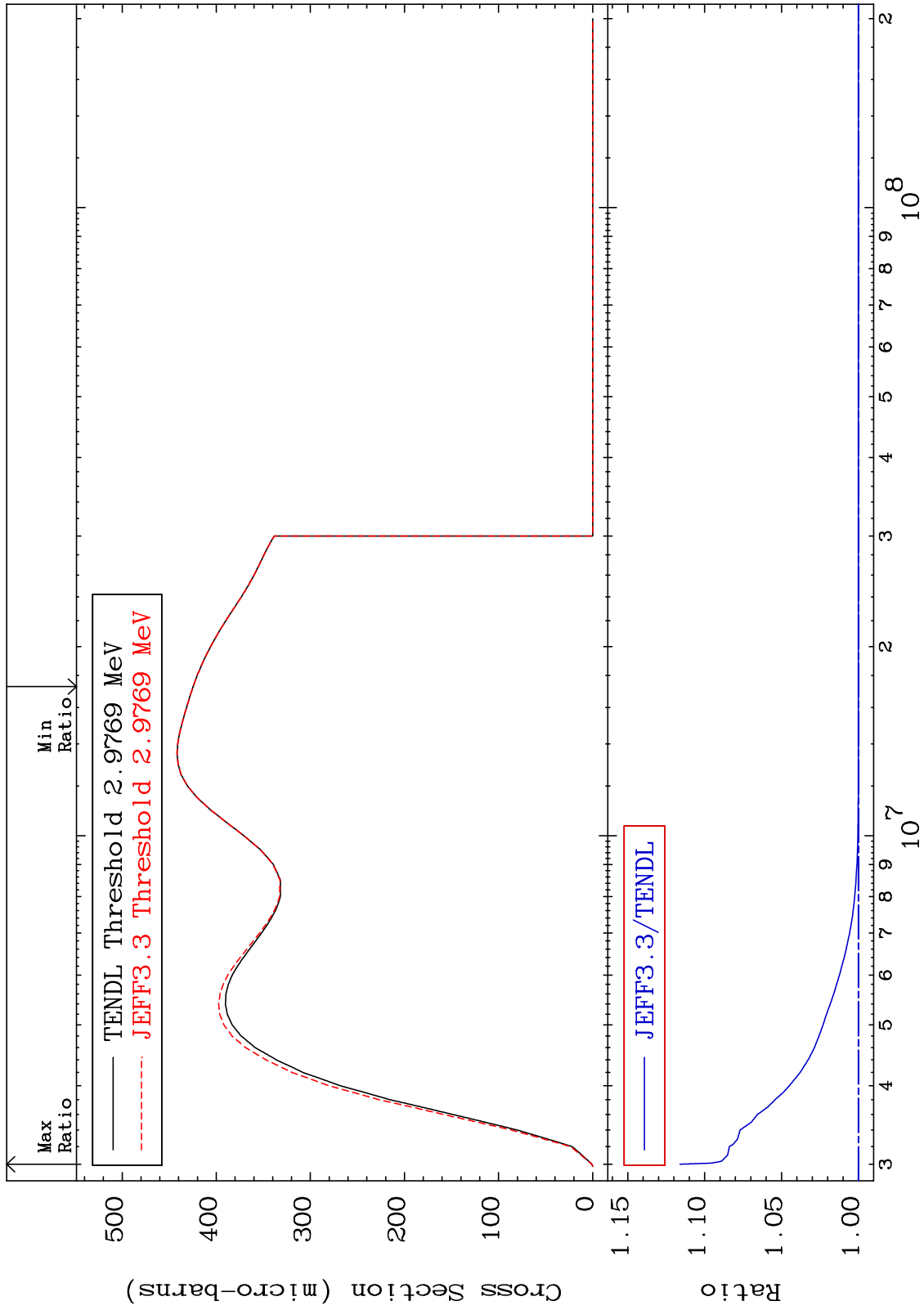


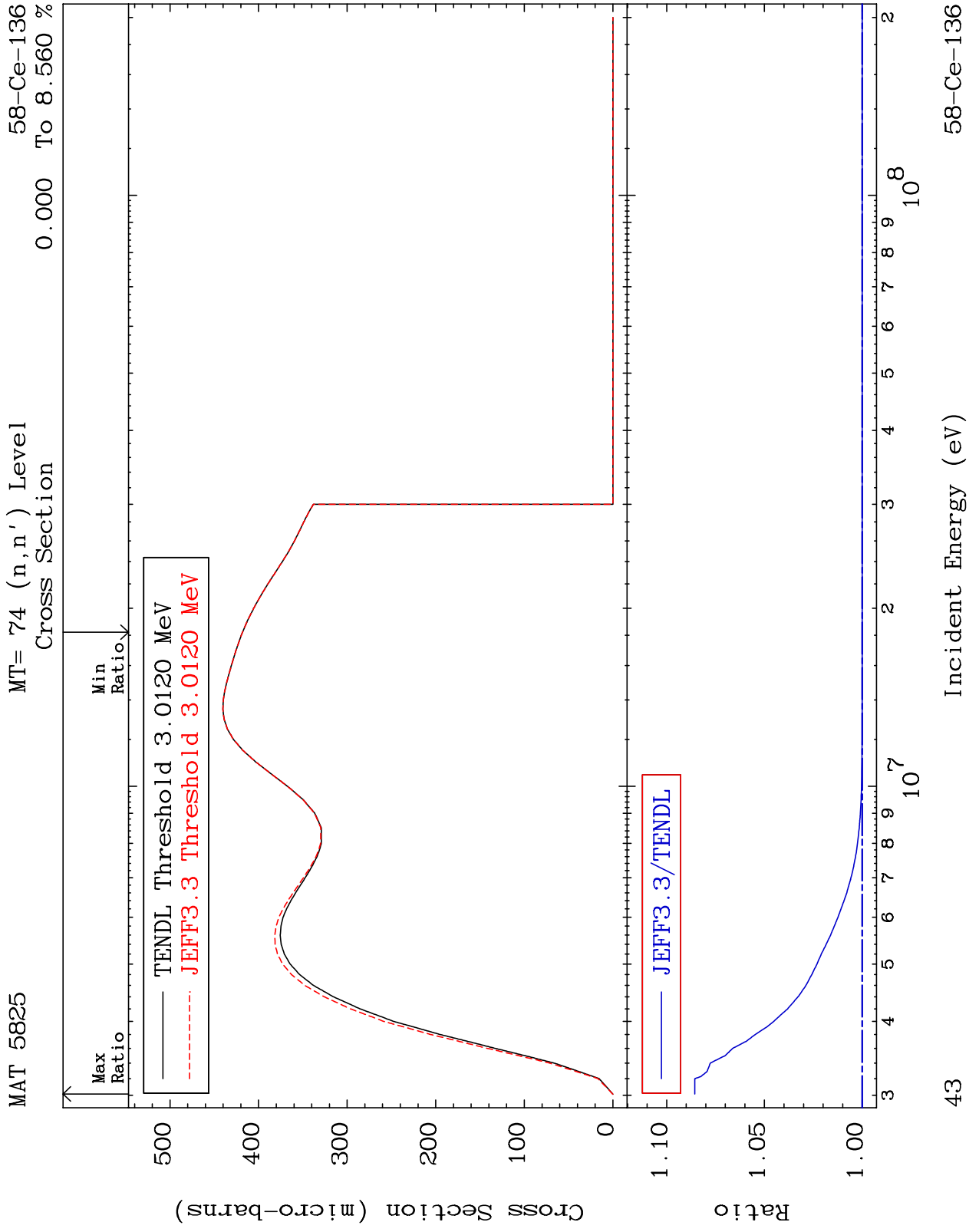
41 58-Ce-136

MAT 5825

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

58-Ce-136
To 11.60 %

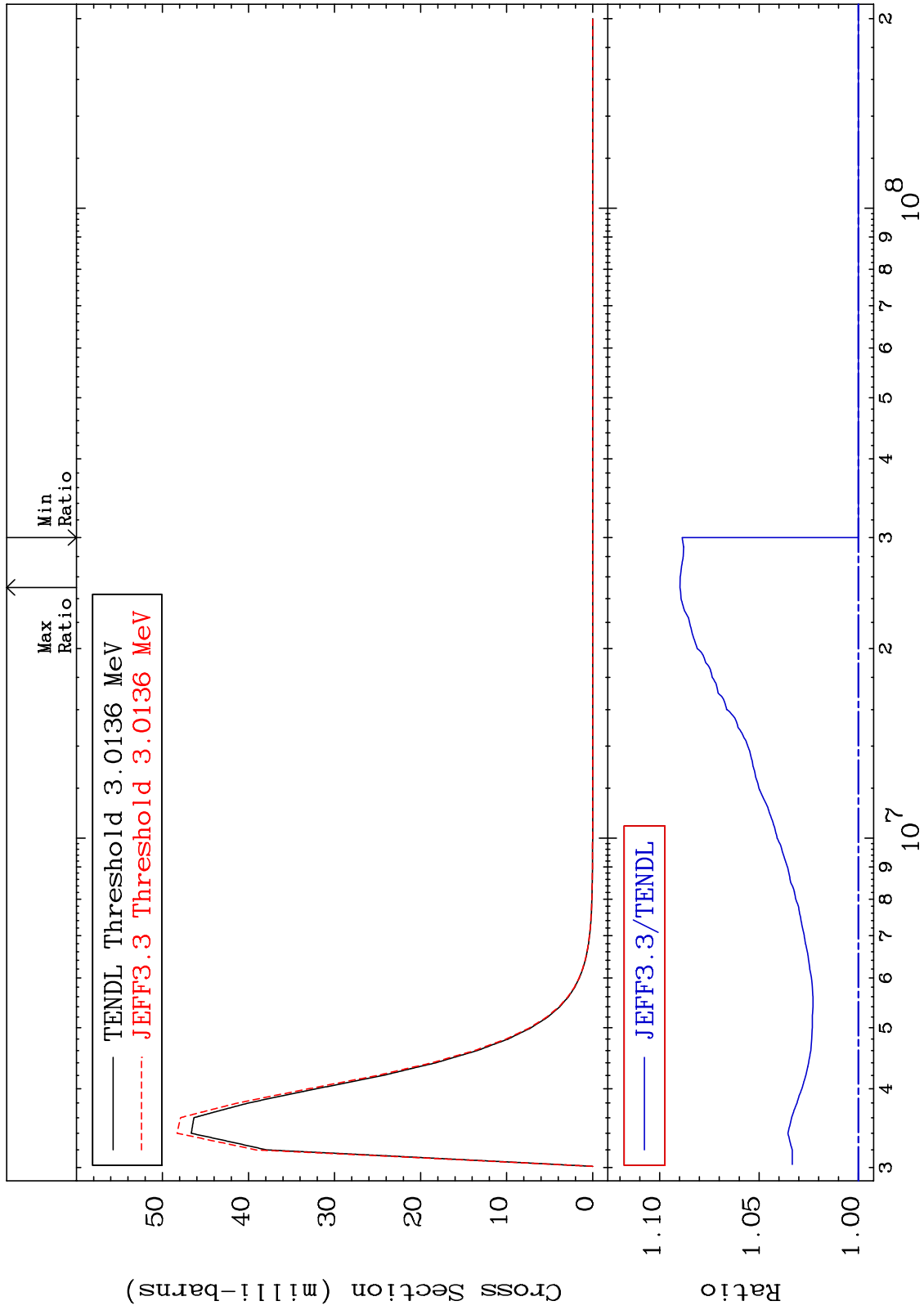




MAT 5825

MT= 75 (n, n') Level
Cross Section

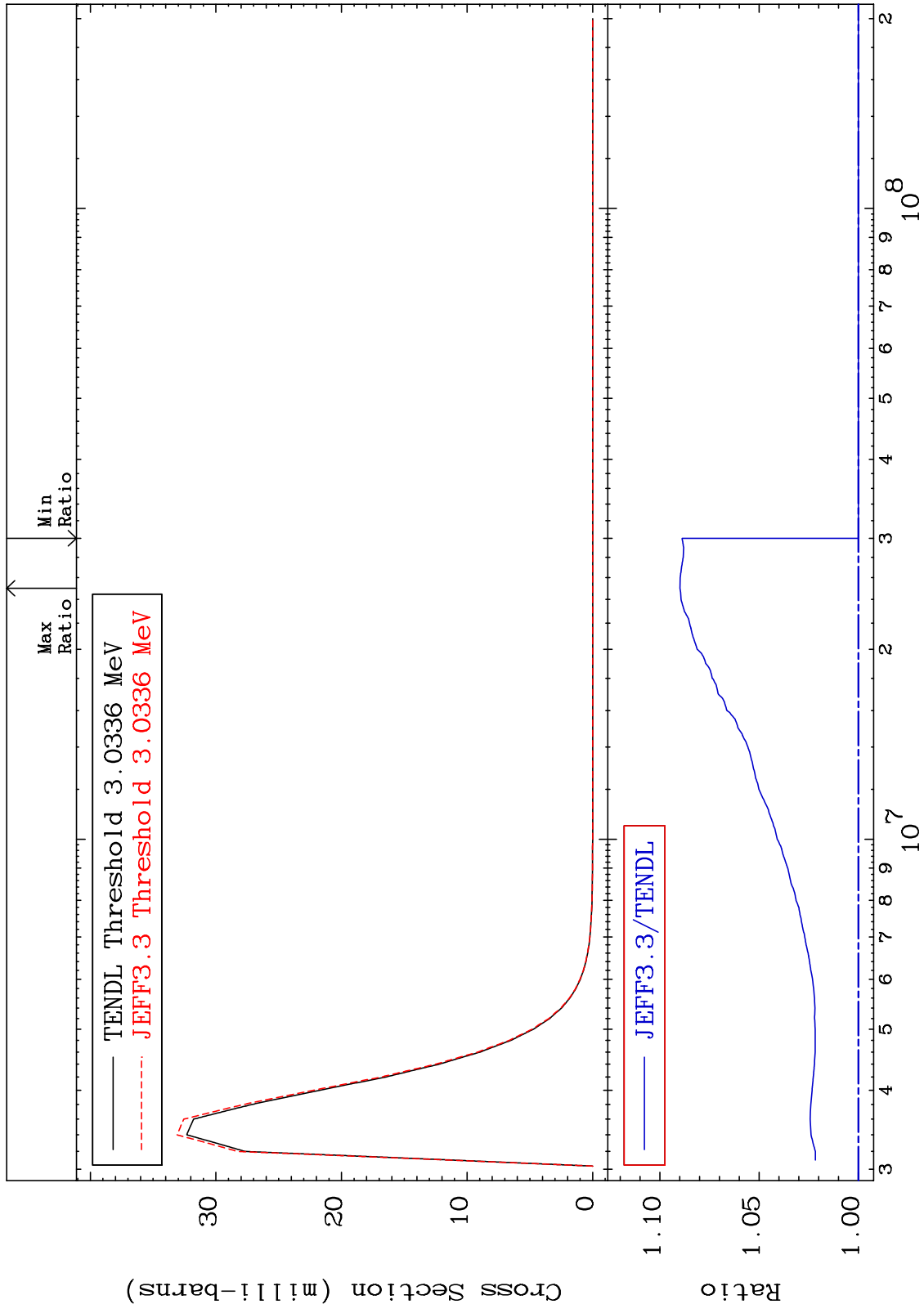
58-Ce-136
To 8.977 %



MAT 5825

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

58-Ce-136
To 8.983 %



45

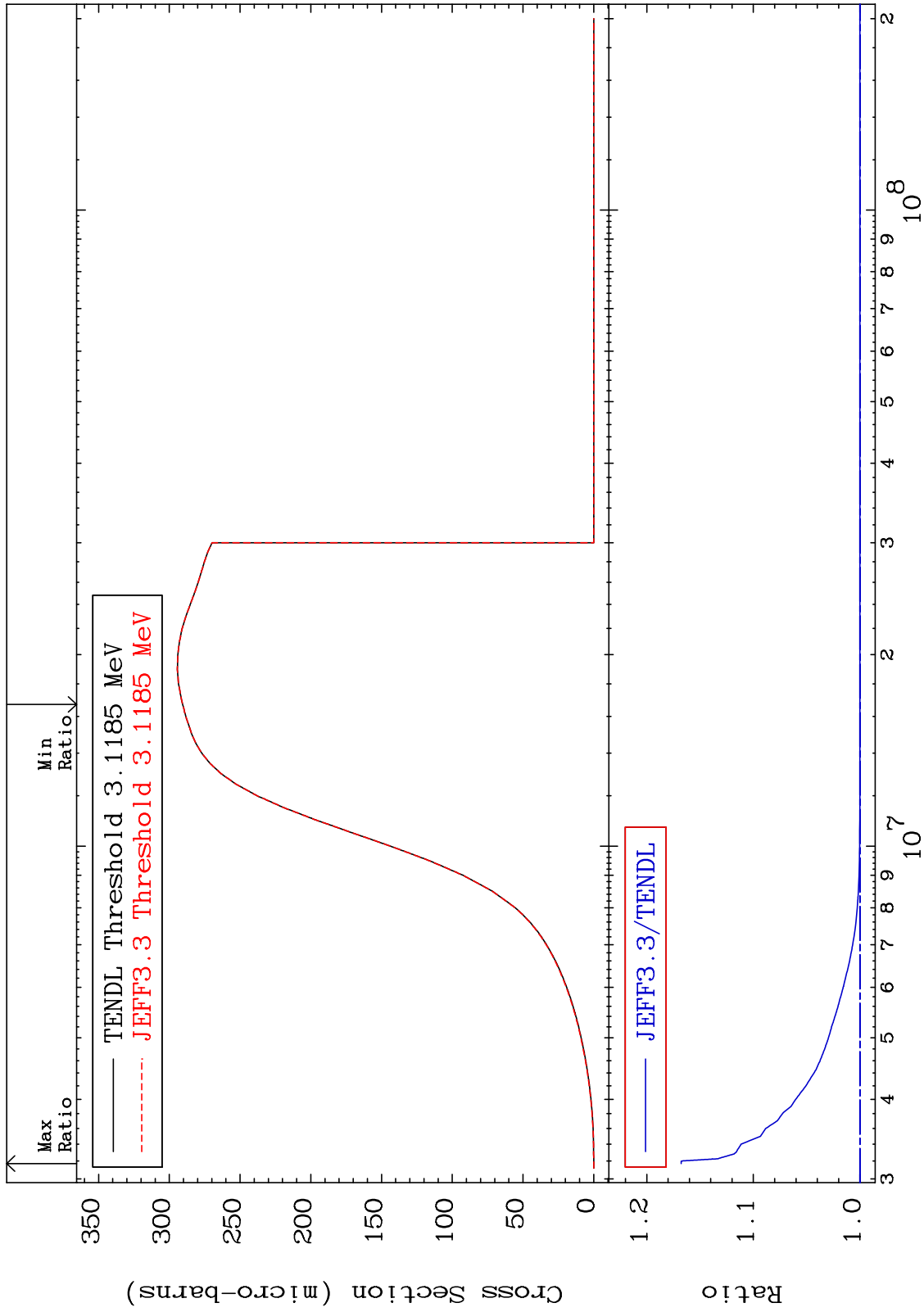
Incident Energy (eV)

58-Ce-136

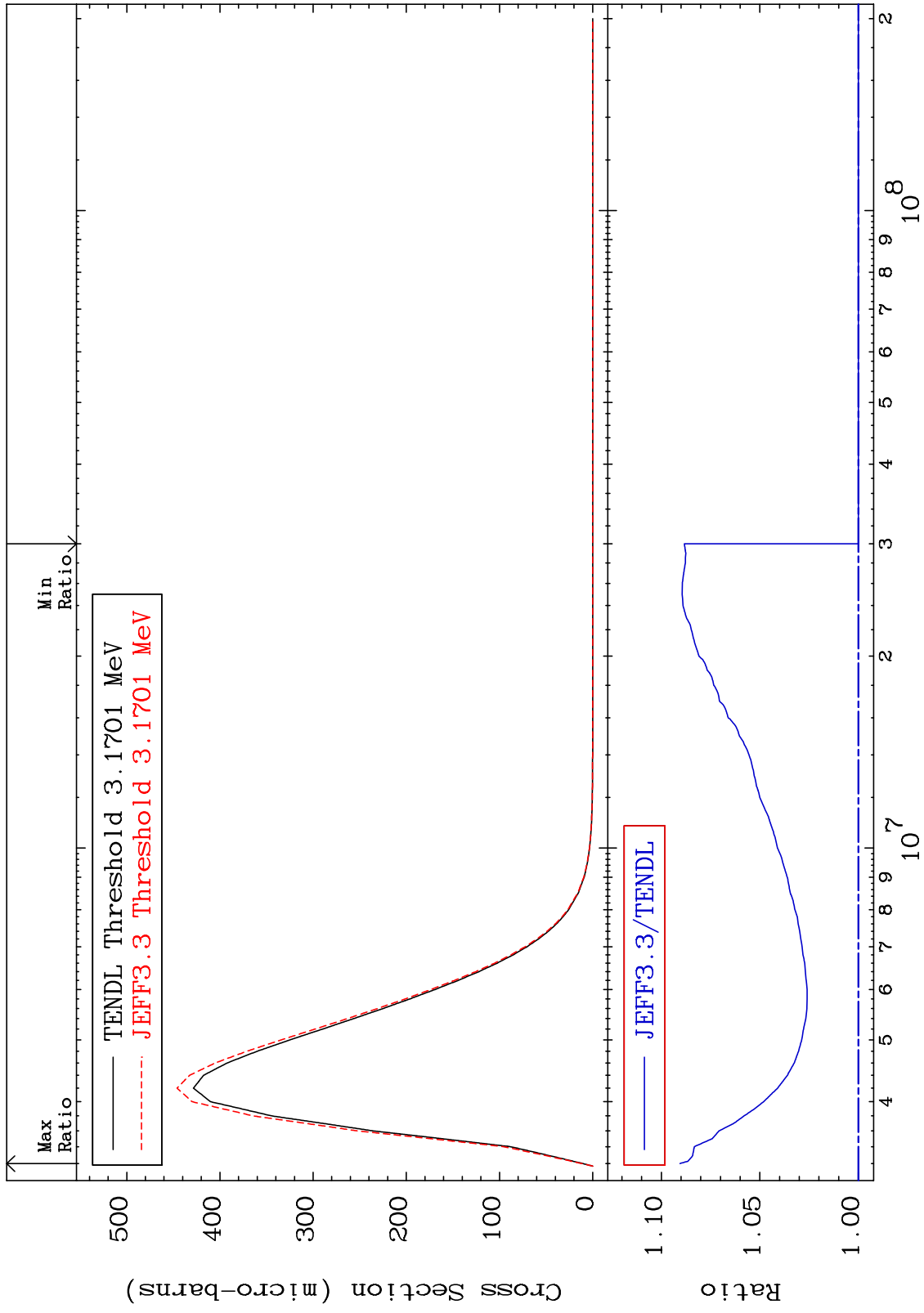
MAT 5825

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

58-Ce-136
To 16.77 %



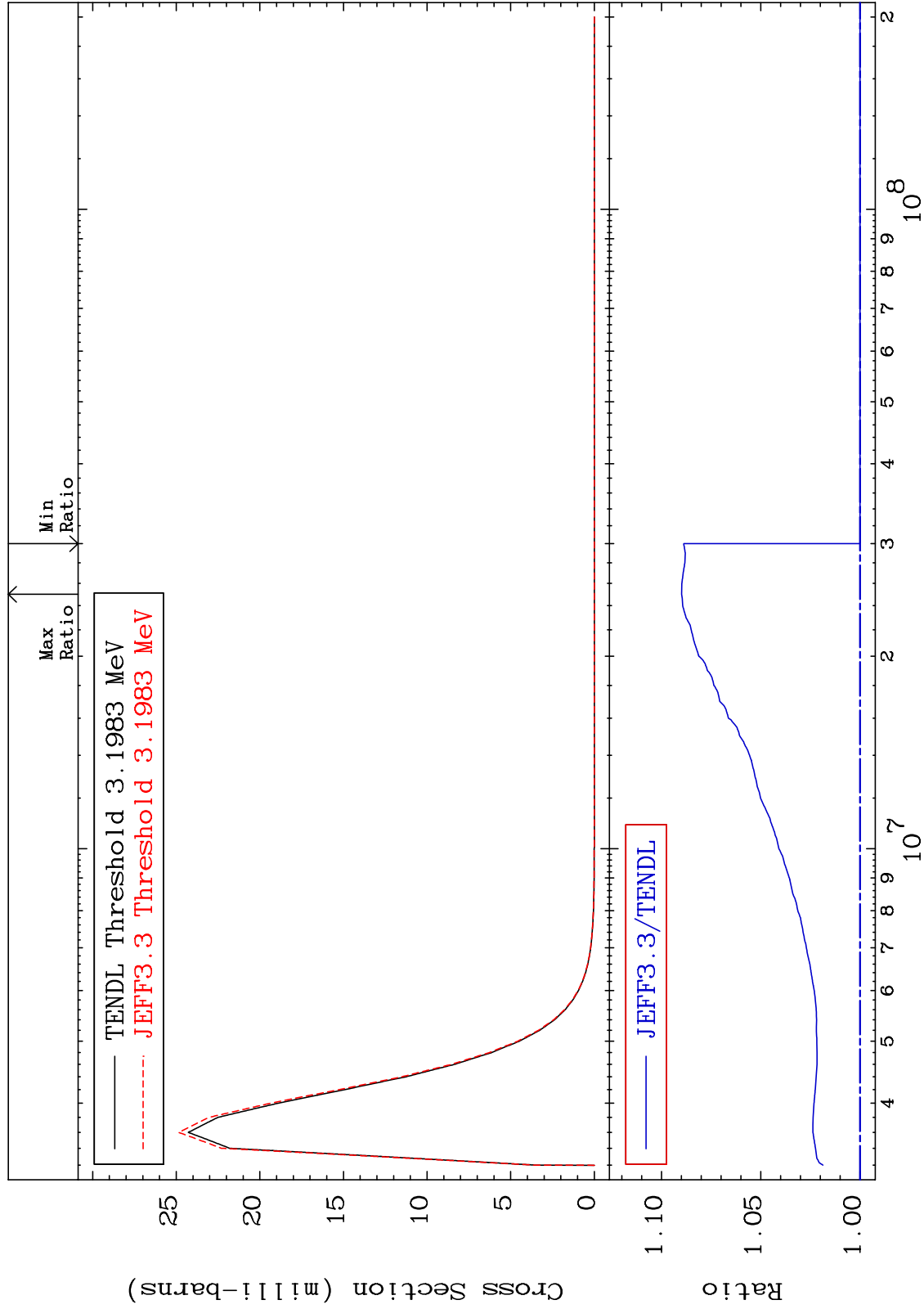
MAT 5825 MT= 78 (n, n') Level Cross Section 58-Ce-136 To 9.052 %
 0.000



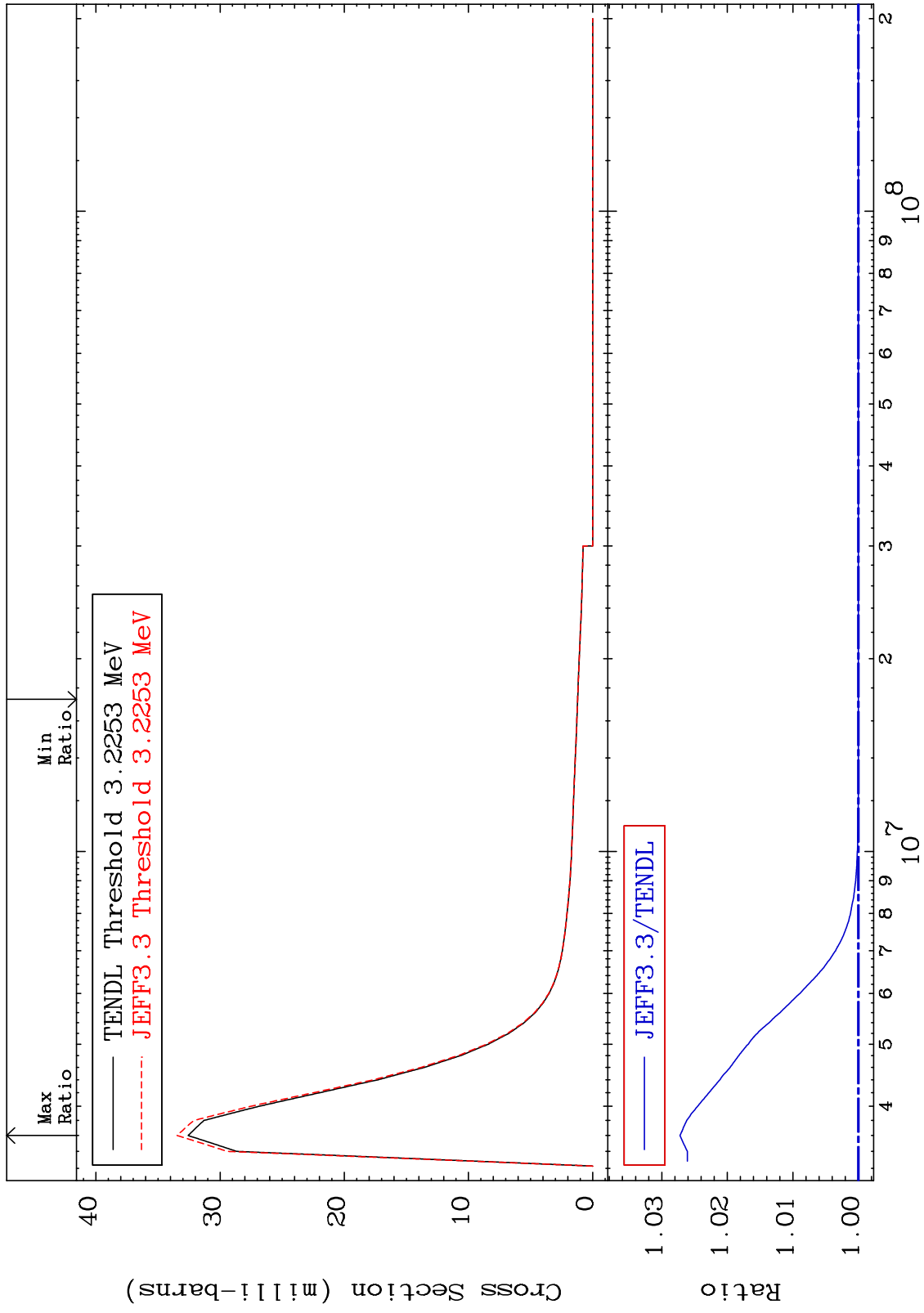
MAT 5825

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

58-Ce-136
0.000 To 8.984 %



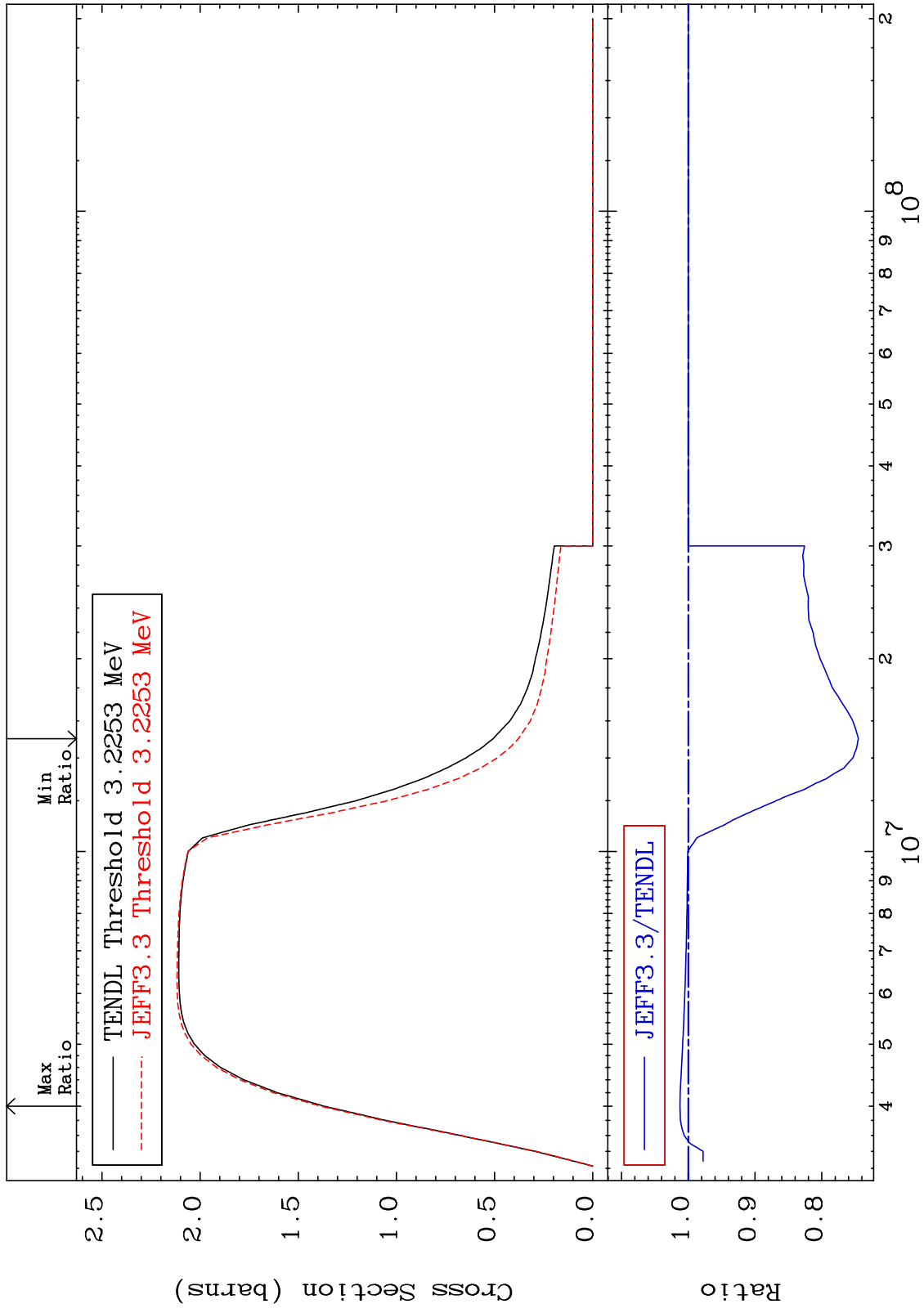
MAT 5825 MT= 80 (n, n') Level Cross Section 58-Ce-136 To 2.722 %



MAT 5825

(n, n') Continuum
Cross Section

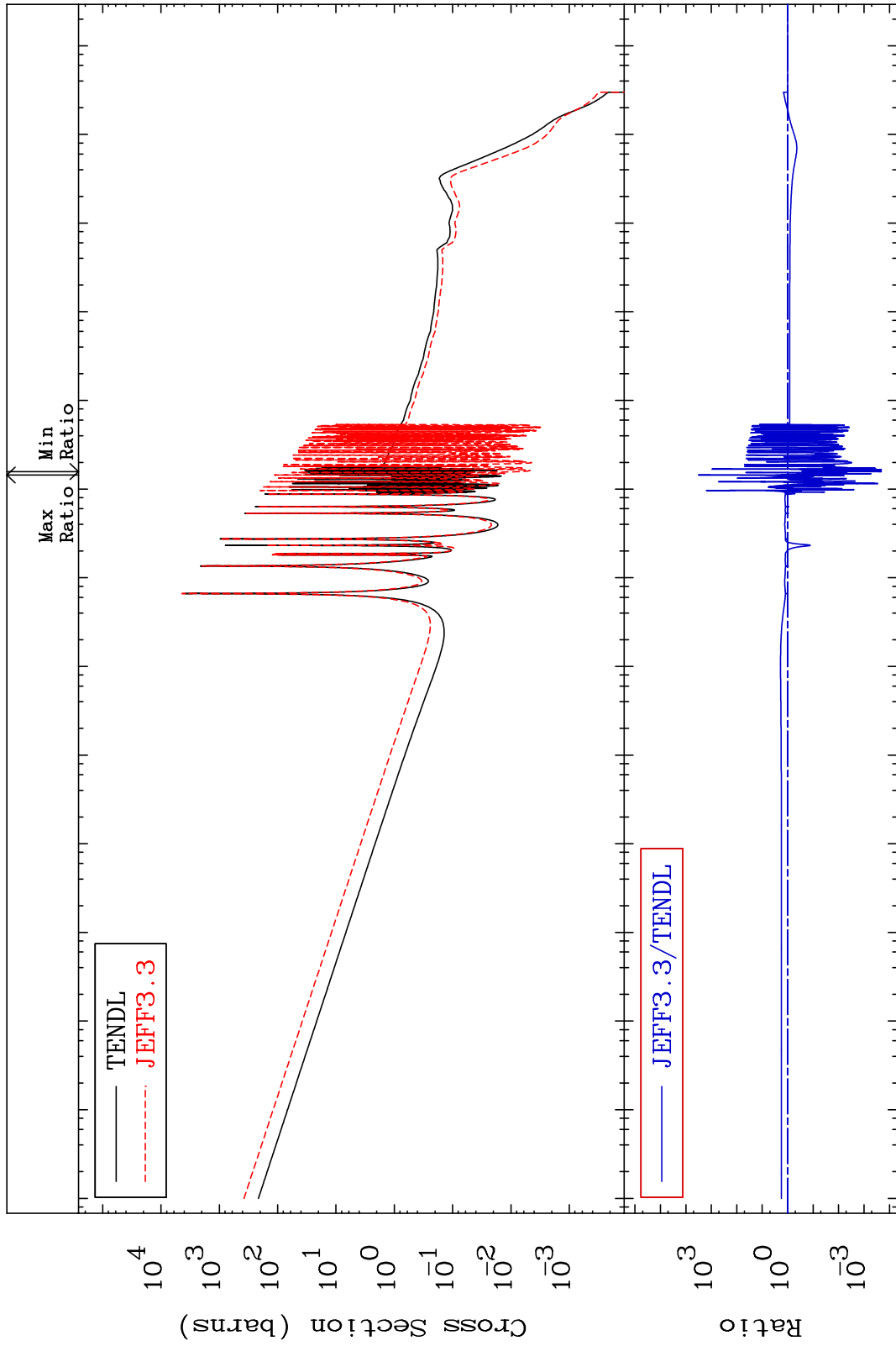
58-Ce-136
-25.48 To 1.234 %



MAT 5825

(n, γ)
Cross Section

58-Ce-136
-99.98 To 9999. %



51

Incident Energy (eV)

58-Ce-136

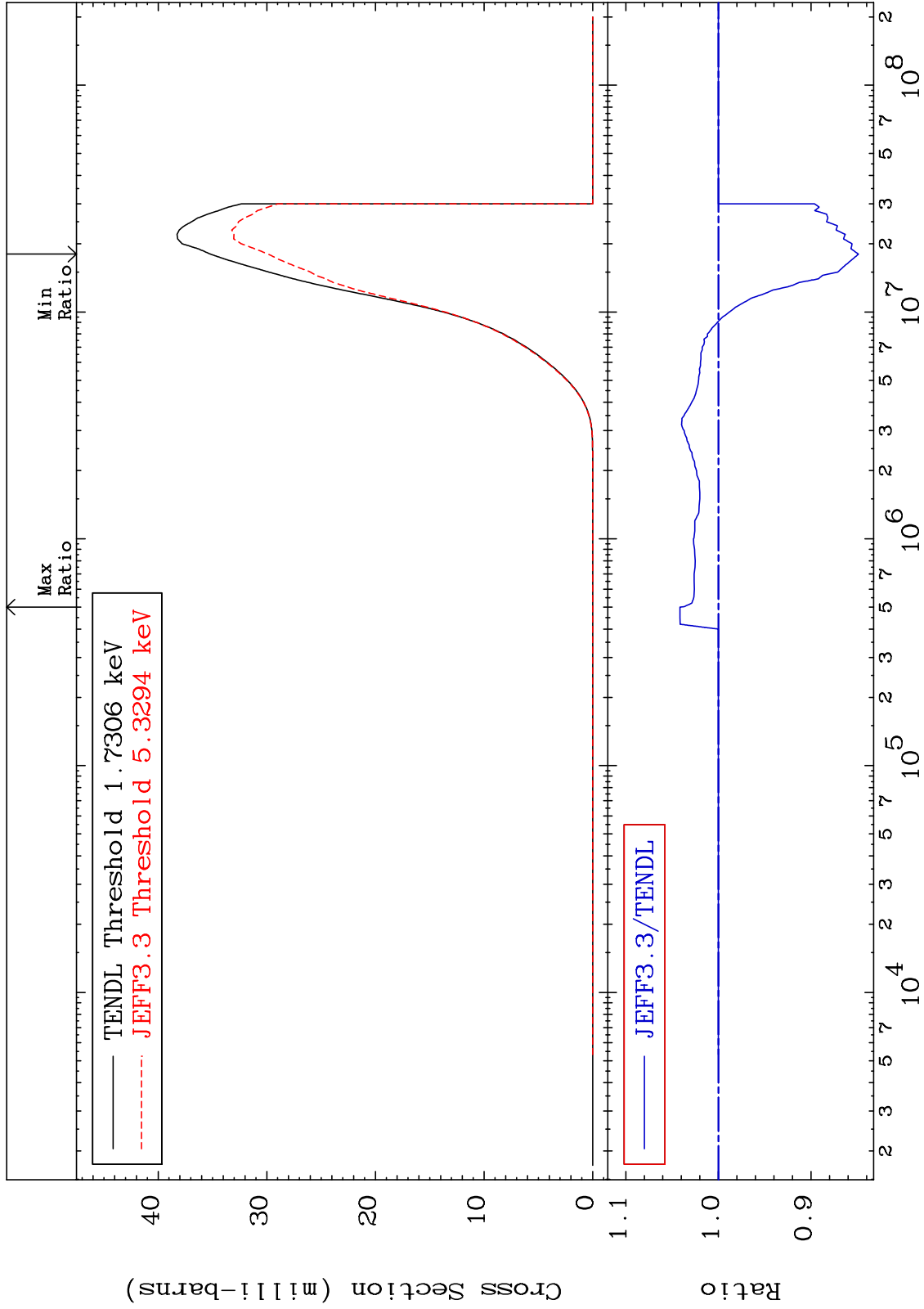
MAT 5825

58-Ce-136

(n, p)

Cross Section

-15.11 To 4.144 %



52

Incident Energy (eV)

58-Ce-136

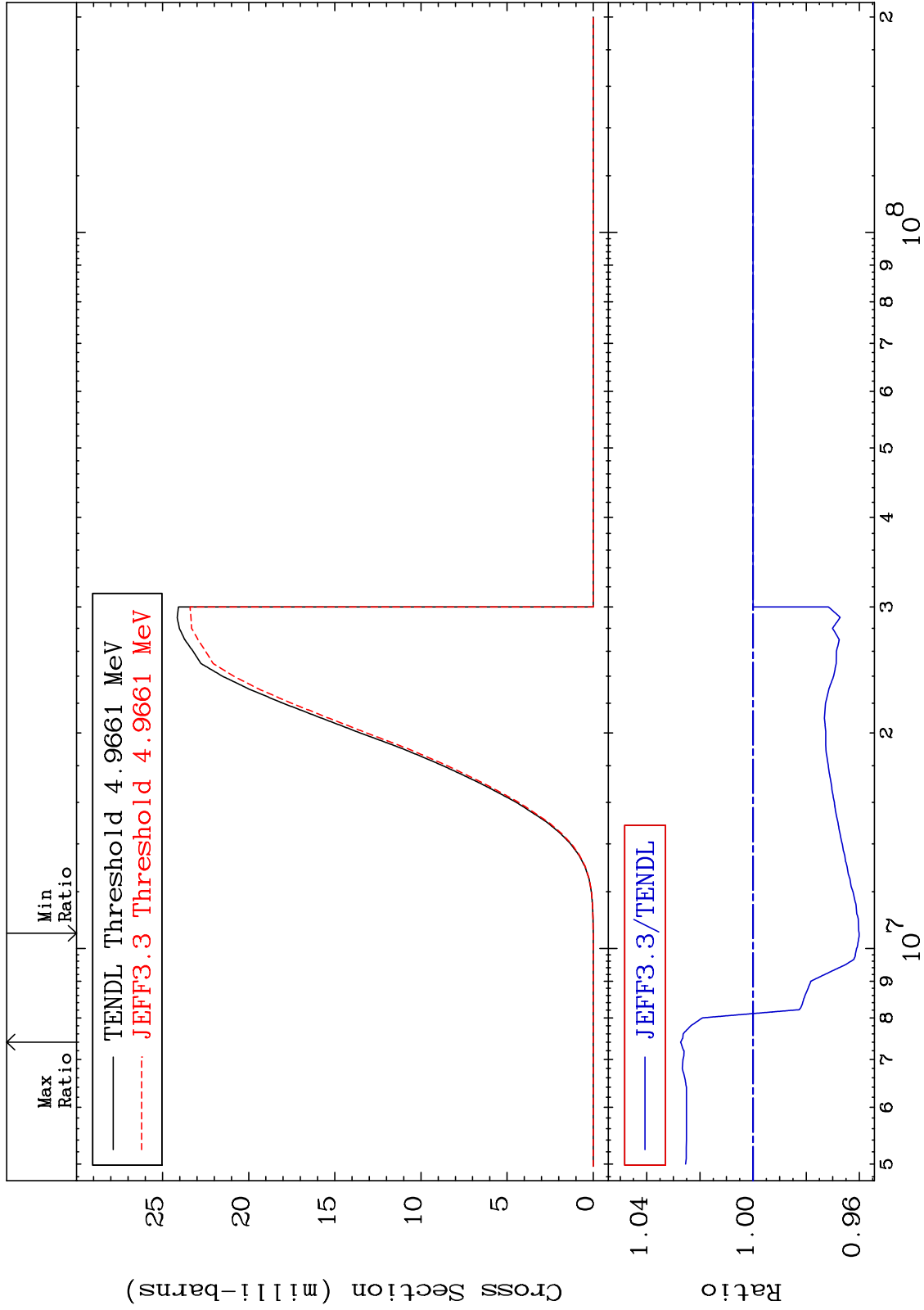
MAT 5825

(n, d)

58-Ce-136

Cross Section

-3.993 To 2.726 %



53

Incident Energy (eV)

58-Ce-136

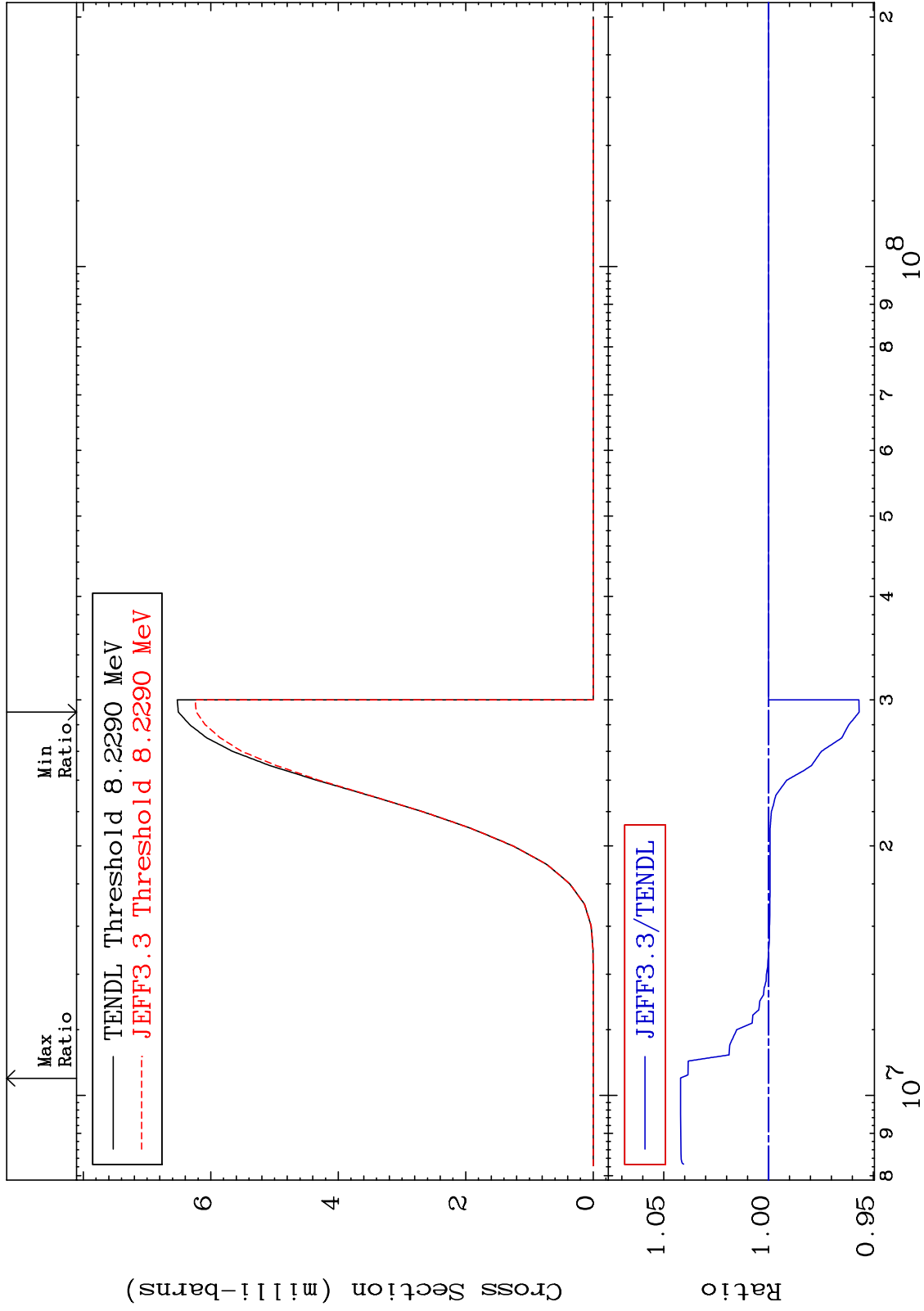
MAT 5825

(n, t)

58-Ce-136

Cross Section

-4.325 To 4.194 %



54

Incident Energy (eV)

58-Ce-136

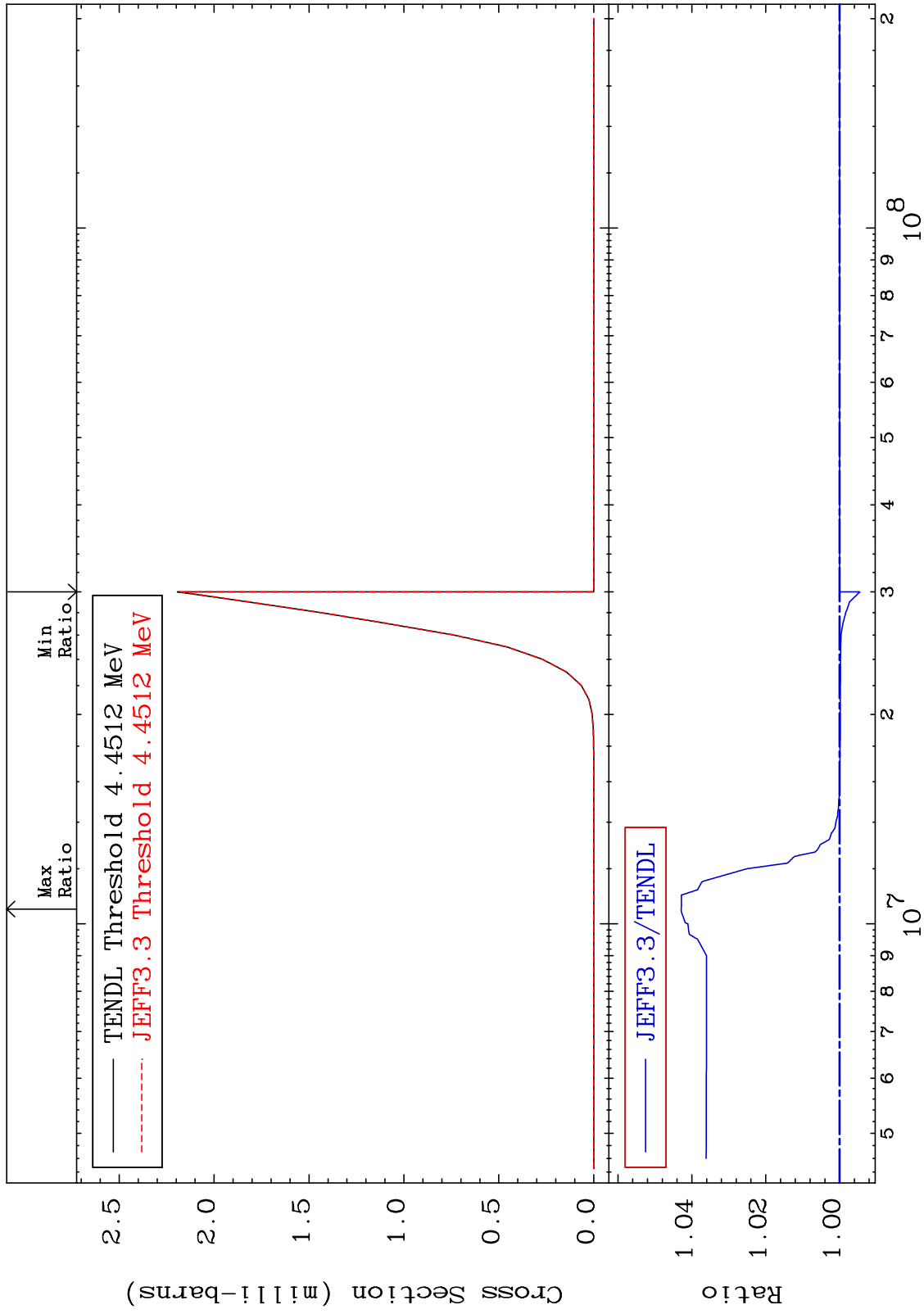
MAT 5825

(n, He-3)

58-Ce-136

Cross Section

-0.550 To 4.287 %



55

Incident Energy (eV)

58-Ce-136

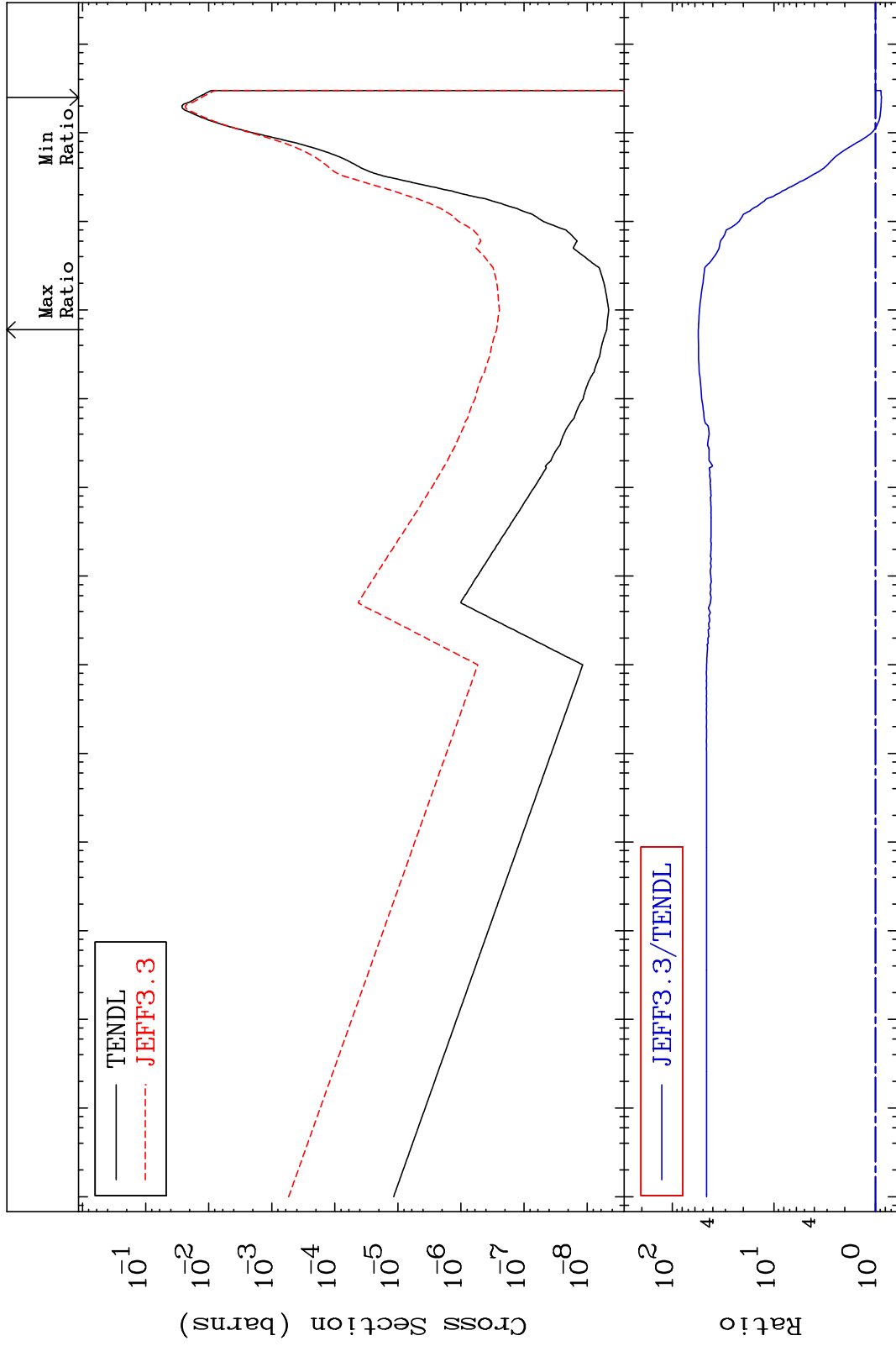
MAT 5825

(n, α)

58-Ce-136

Cross Section

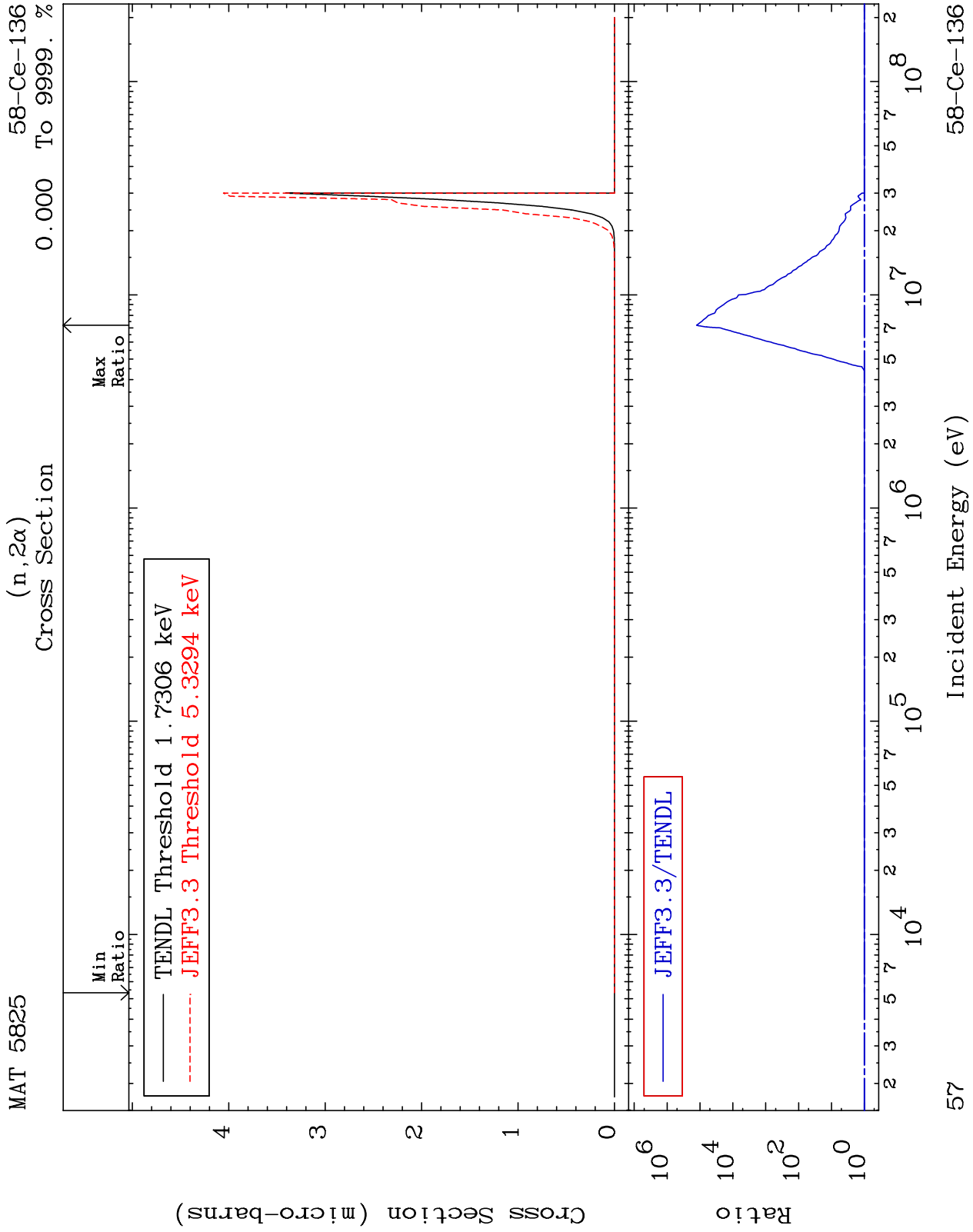
-12.97 To 5449. %

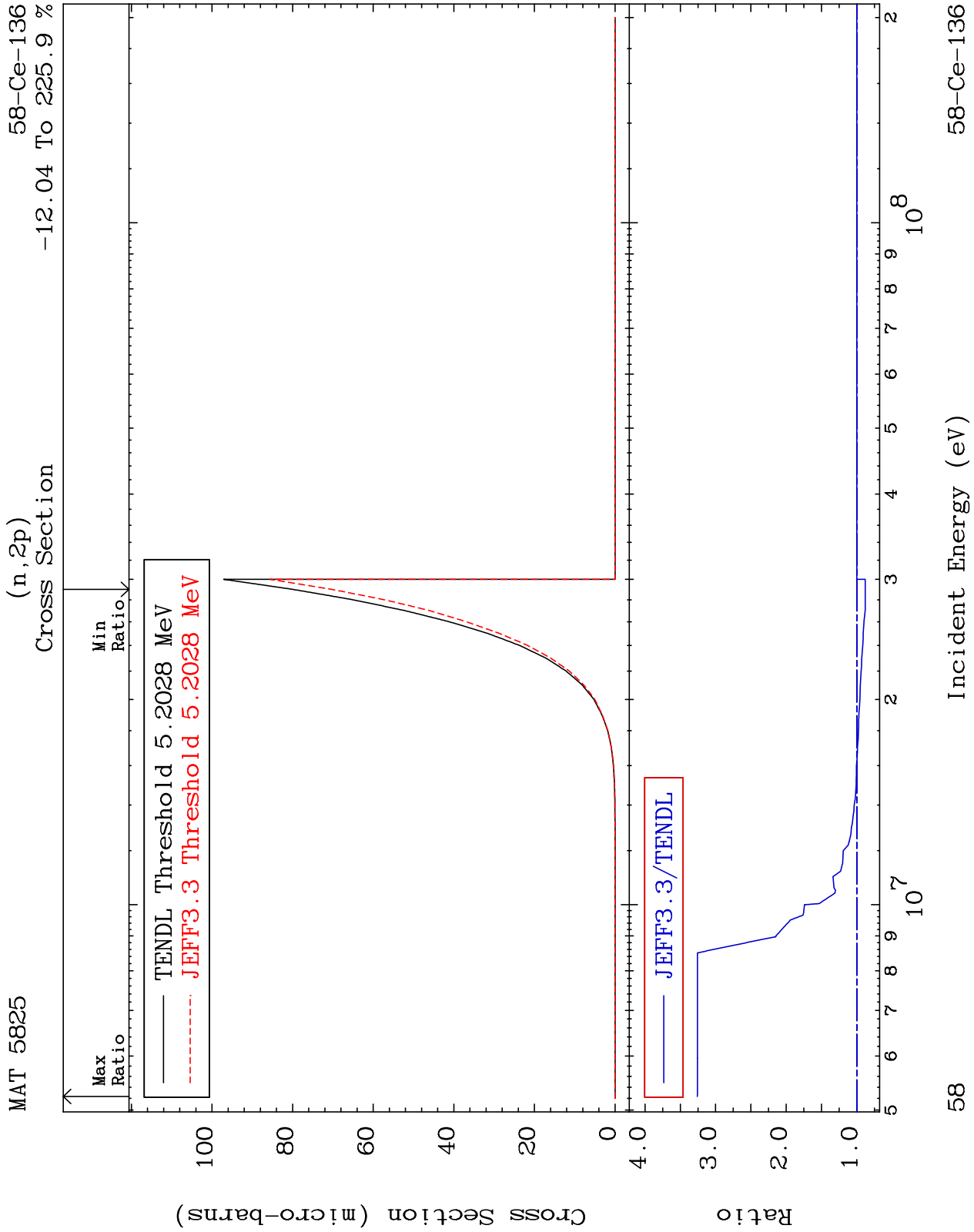


Incident Energy (eV)

56

58-Ce-136





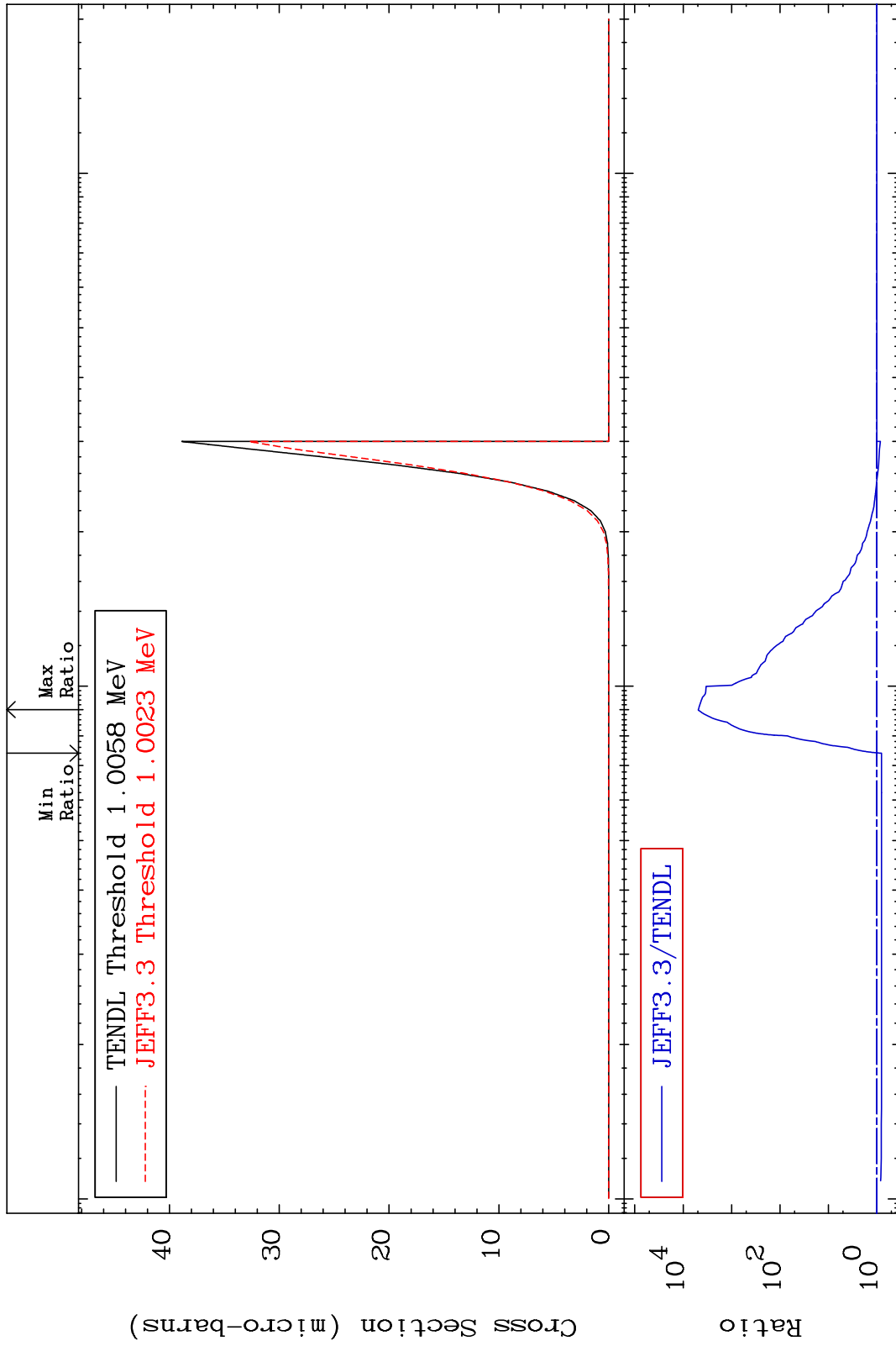
MAT 5825

(n,p) α

58-Ce-136

-20.22 To 9999. %

Cross Section



Min Ratio

Max Ratio

TENDL Threshold 1.0058 MeV
JEFF3.3 Threshold 1.0023 MeV

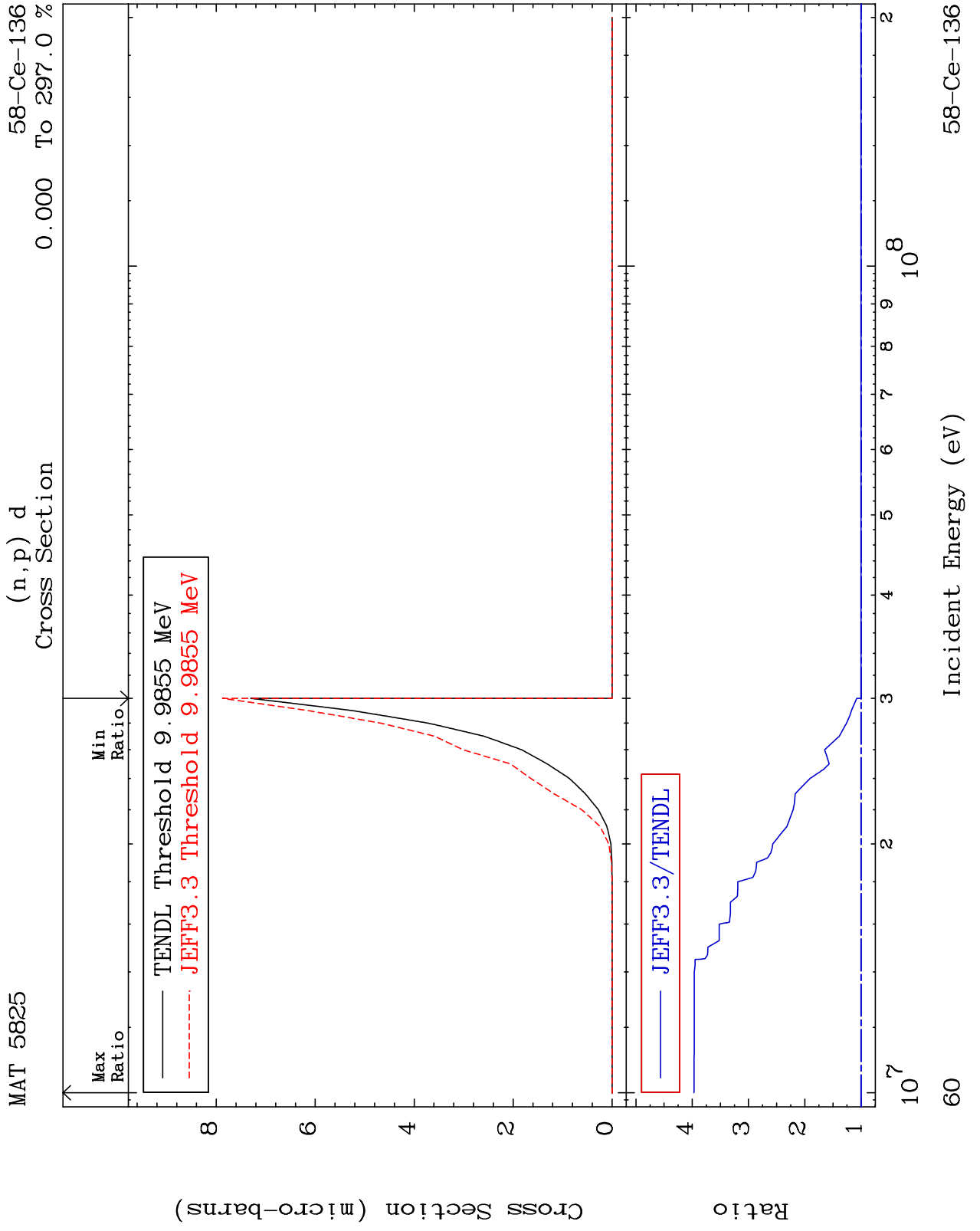
JEFF3.3/TENDL

10⁶ 10⁷ 10⁸

Incident Energy (eV)

58-Ce-136

59



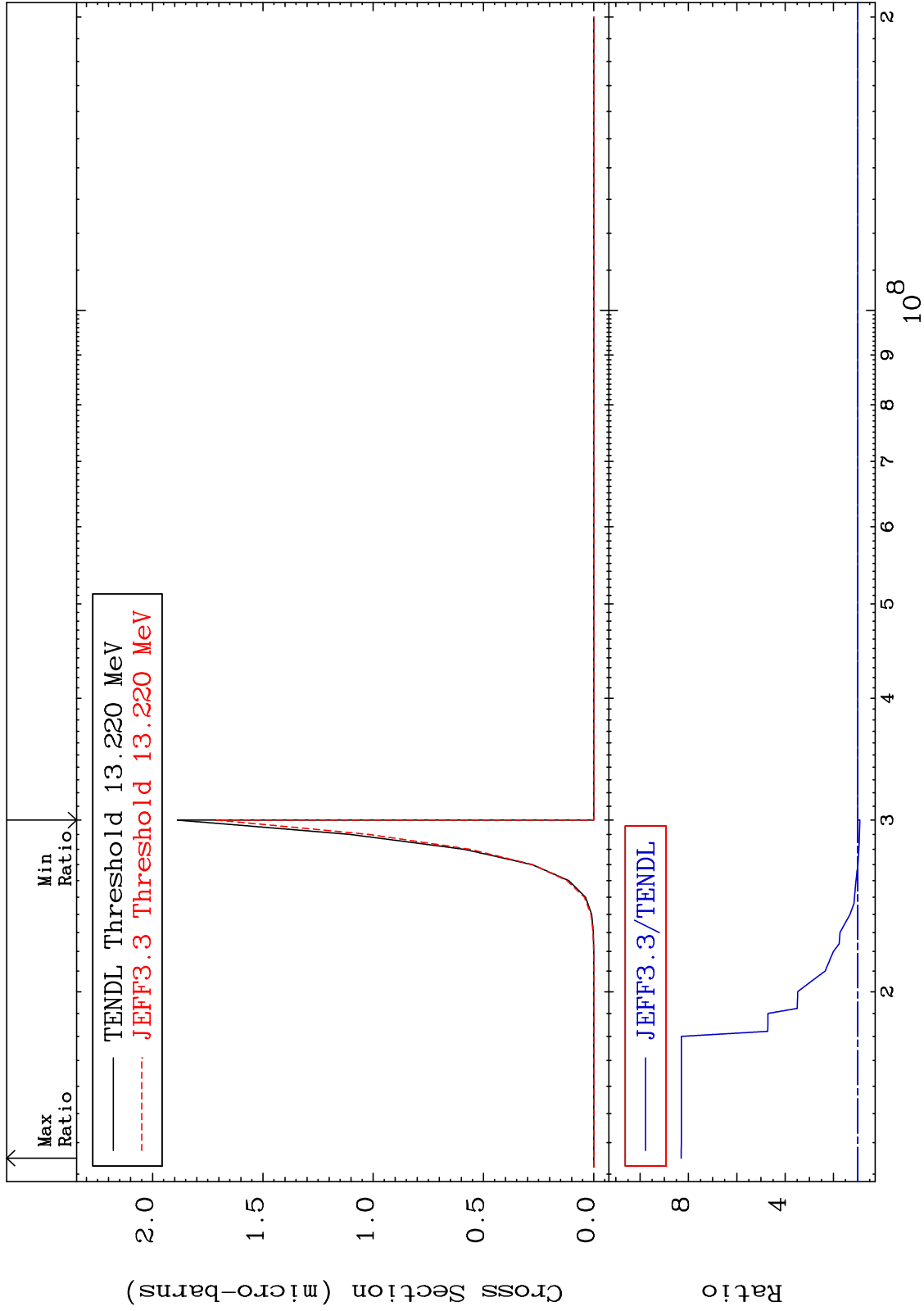
MAT 5825

(n,p) t

58-Ce-136

Cross Section

-9.441 To 729.9 %



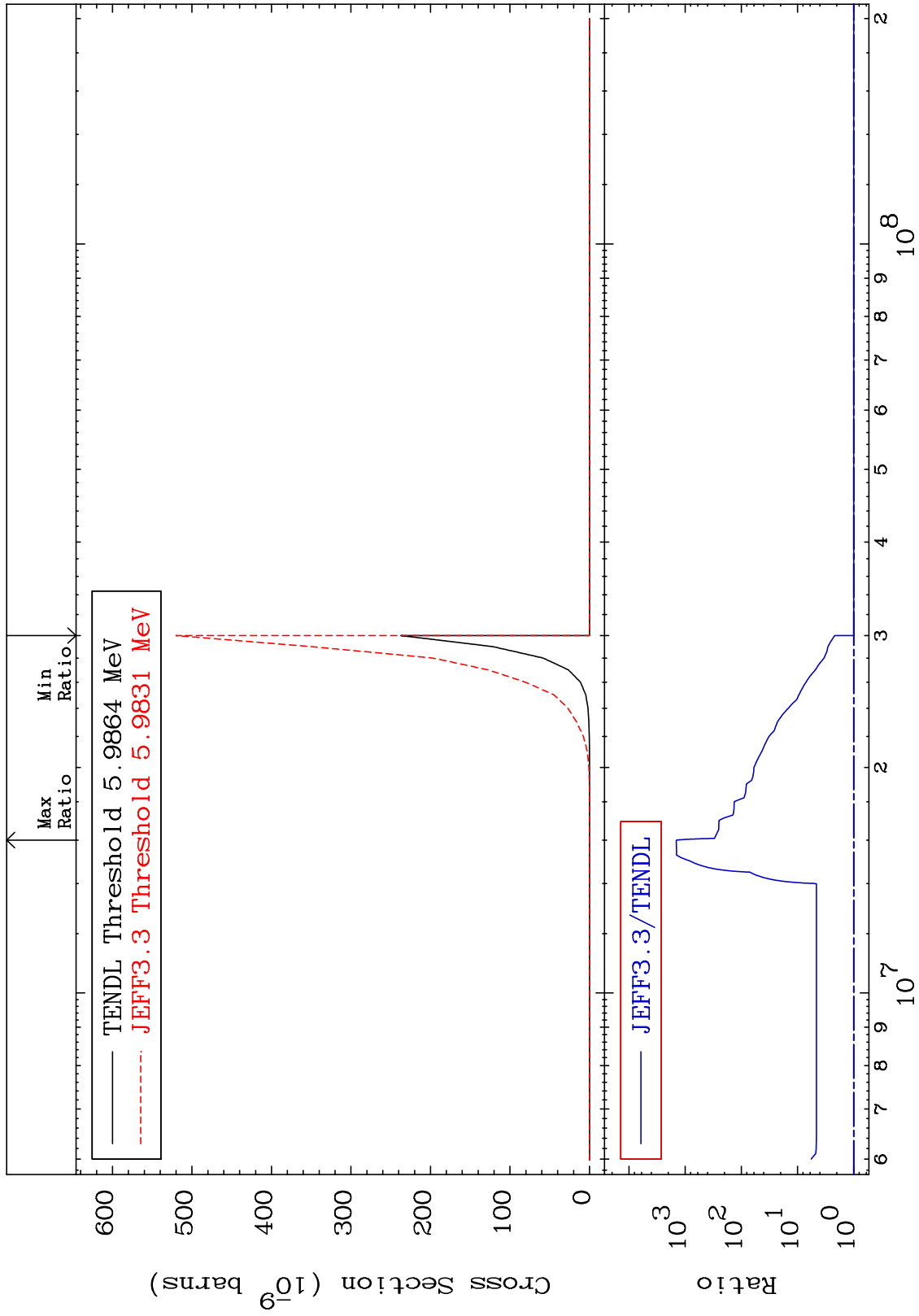
MAT 5825

(n,d) α

58-Ce-136

0.000 To 9999. %

Cross Section



62

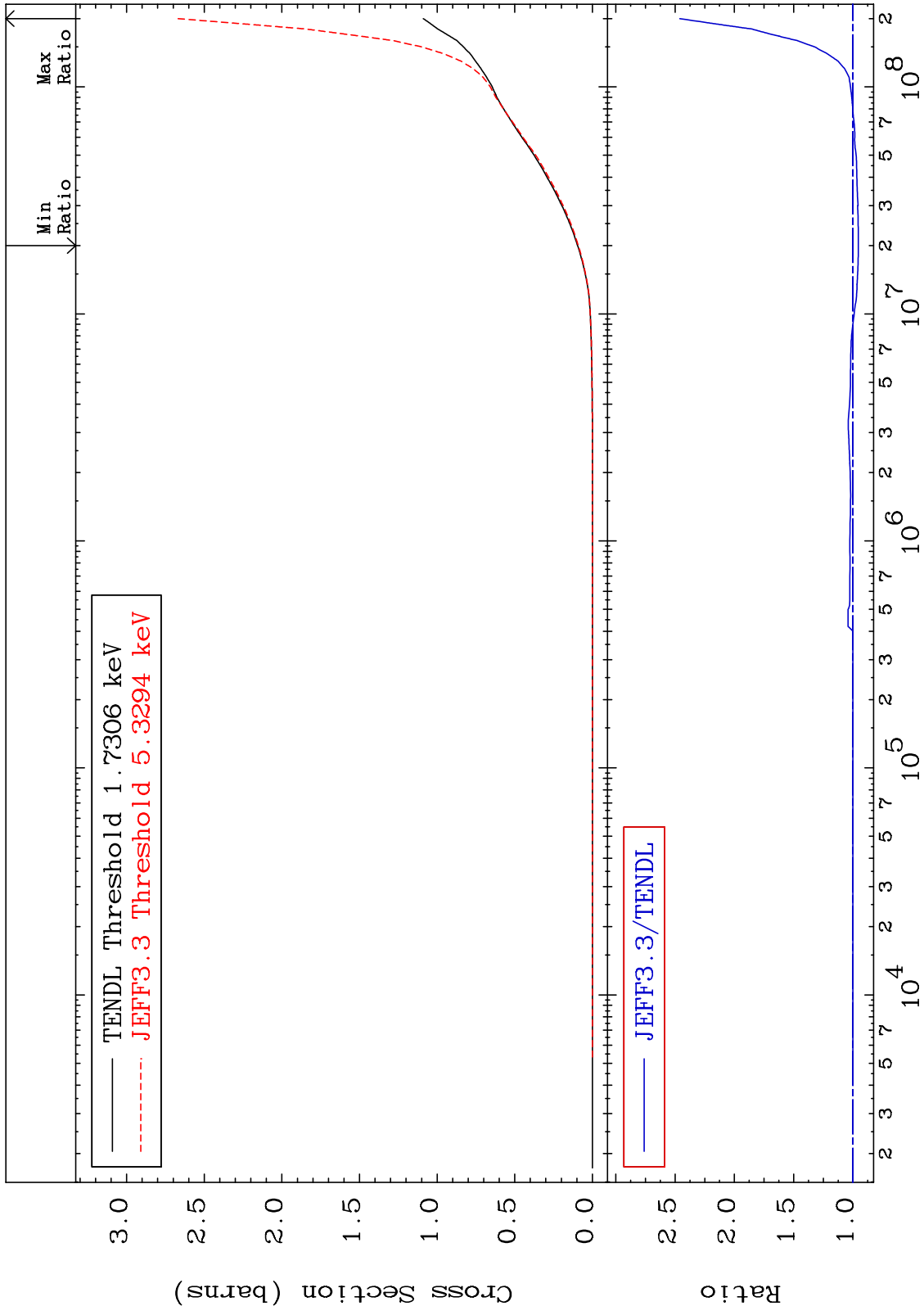
Incident Energy (eV)

58-Ce-136

MAT 5825

Hydrogen Production
Cross Section

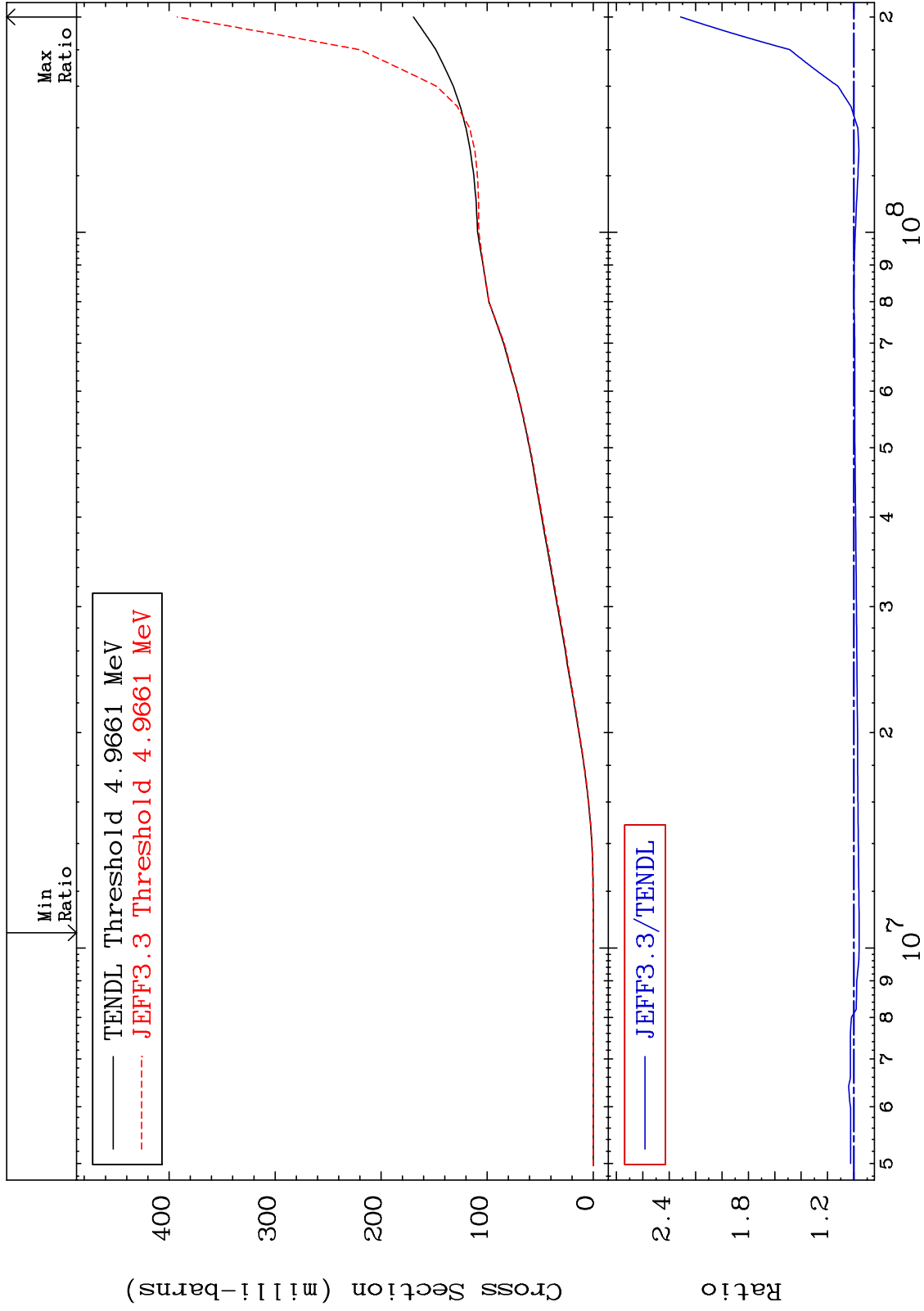
58-Ce-136
-4.565 To 146.0 %



MAT 5825

Deuterium Production
Cross Section

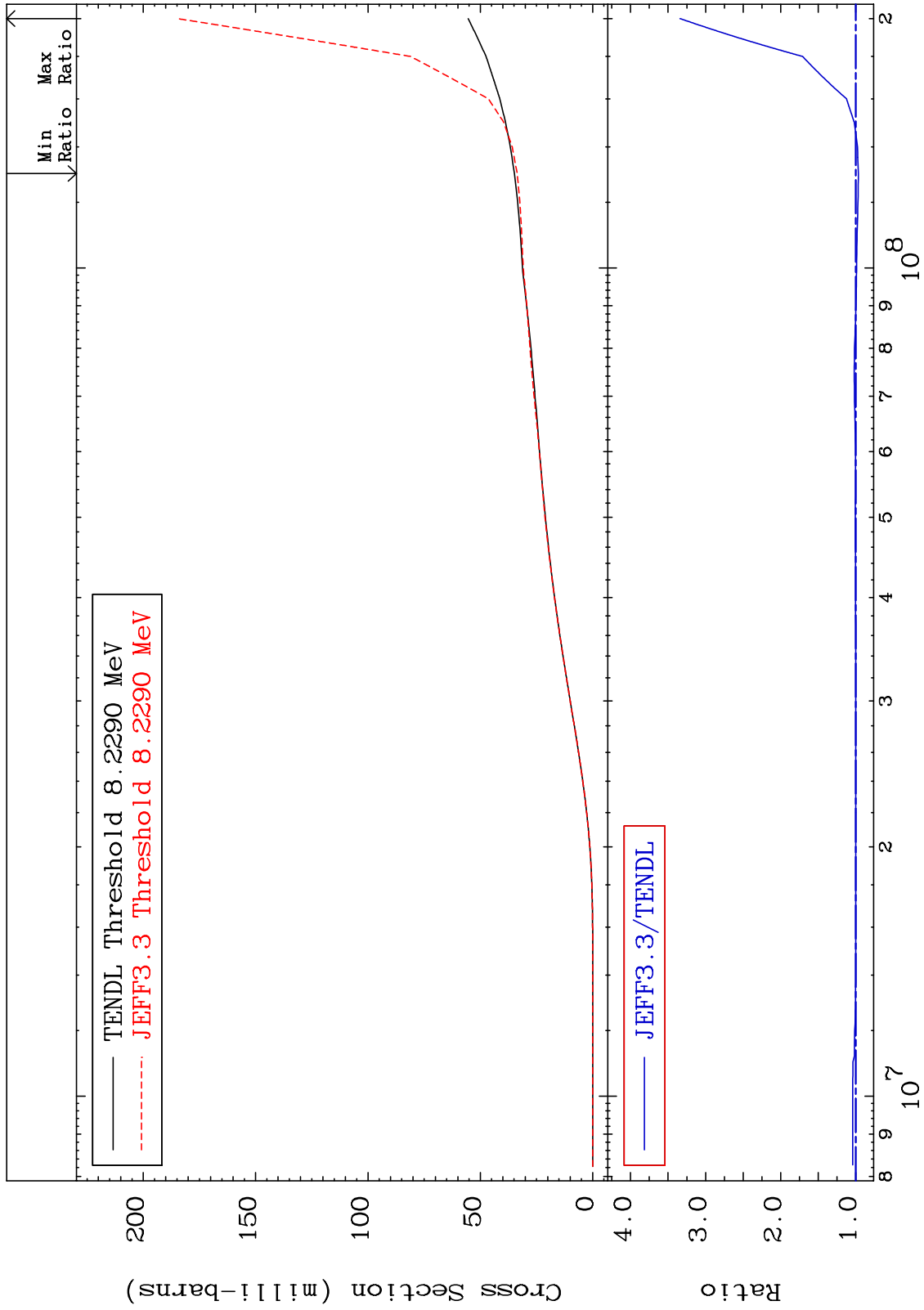
58-Ce-136
-3.993 To 131.4 %



MAT 5825

Tritium Production
Cross Section

58-Ce-136
-3.520 To 234.1 %



65

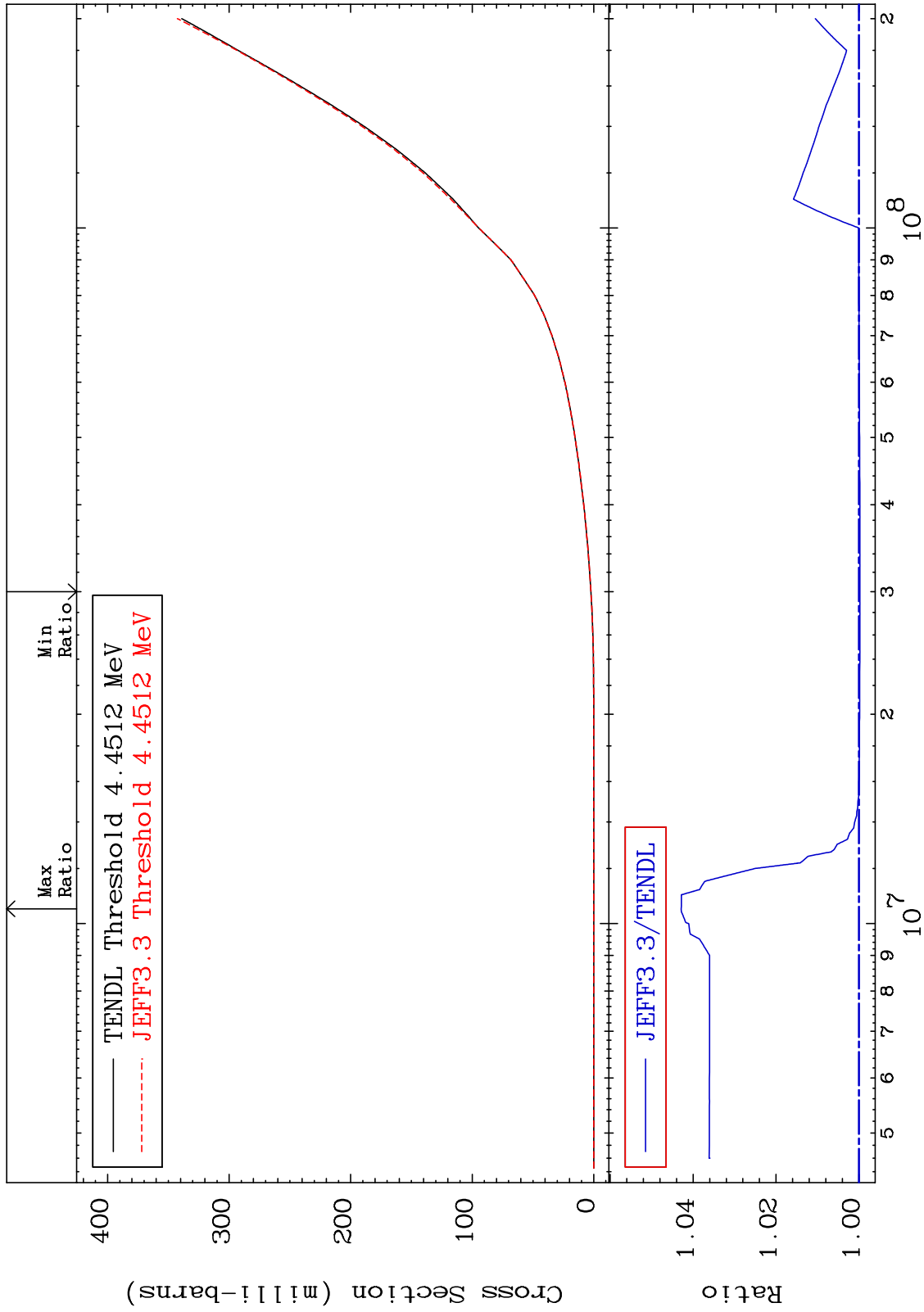
Incident Energy (eV)

58-Ce-136

MAT 5825

He-3 Production
Cross Section

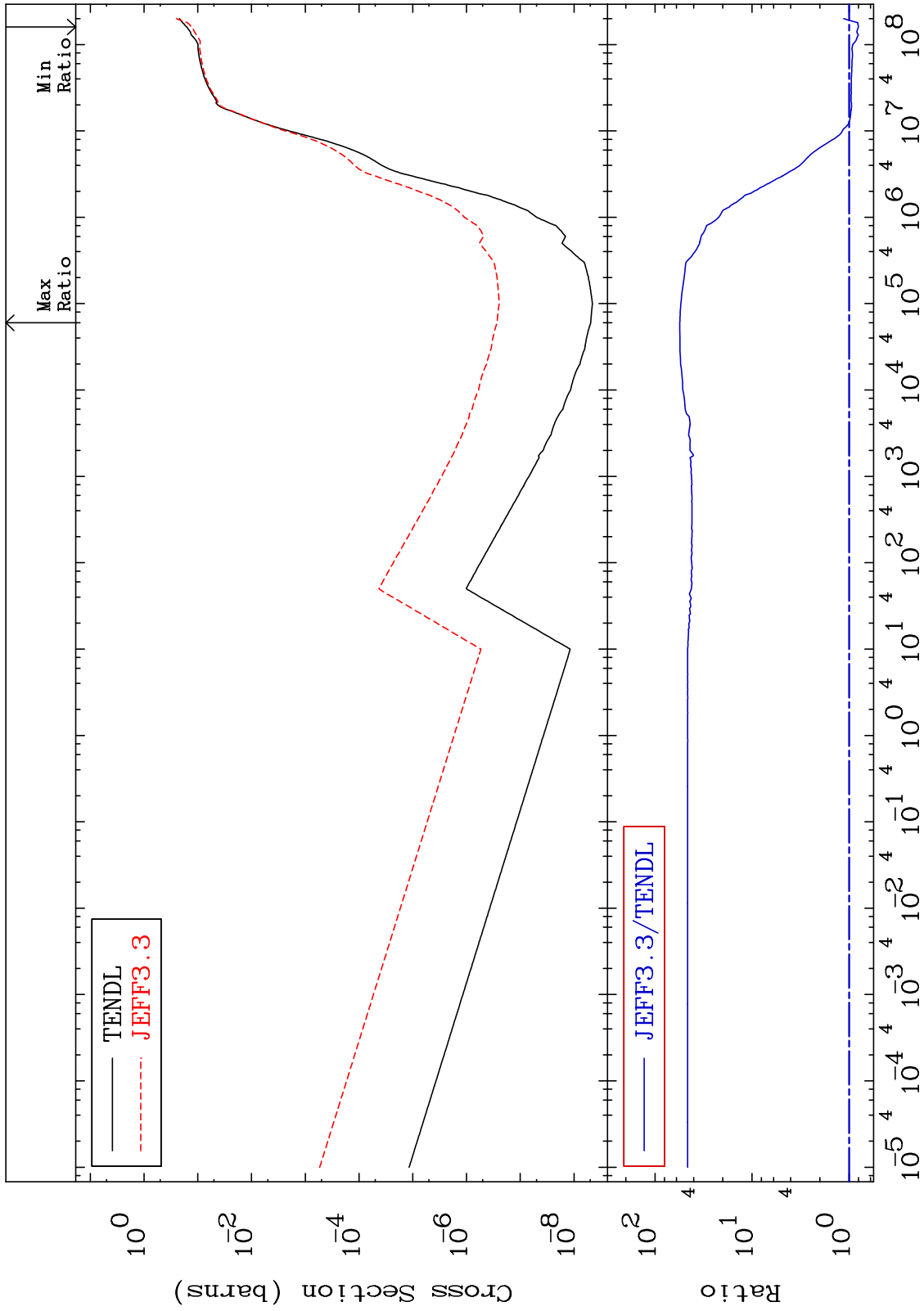
58-Ce-136
-0.025 To 4.287 %



MAT 5825

He-4 Production
Cross Section

58-Ce-136
-19.76 To 5449. %



67

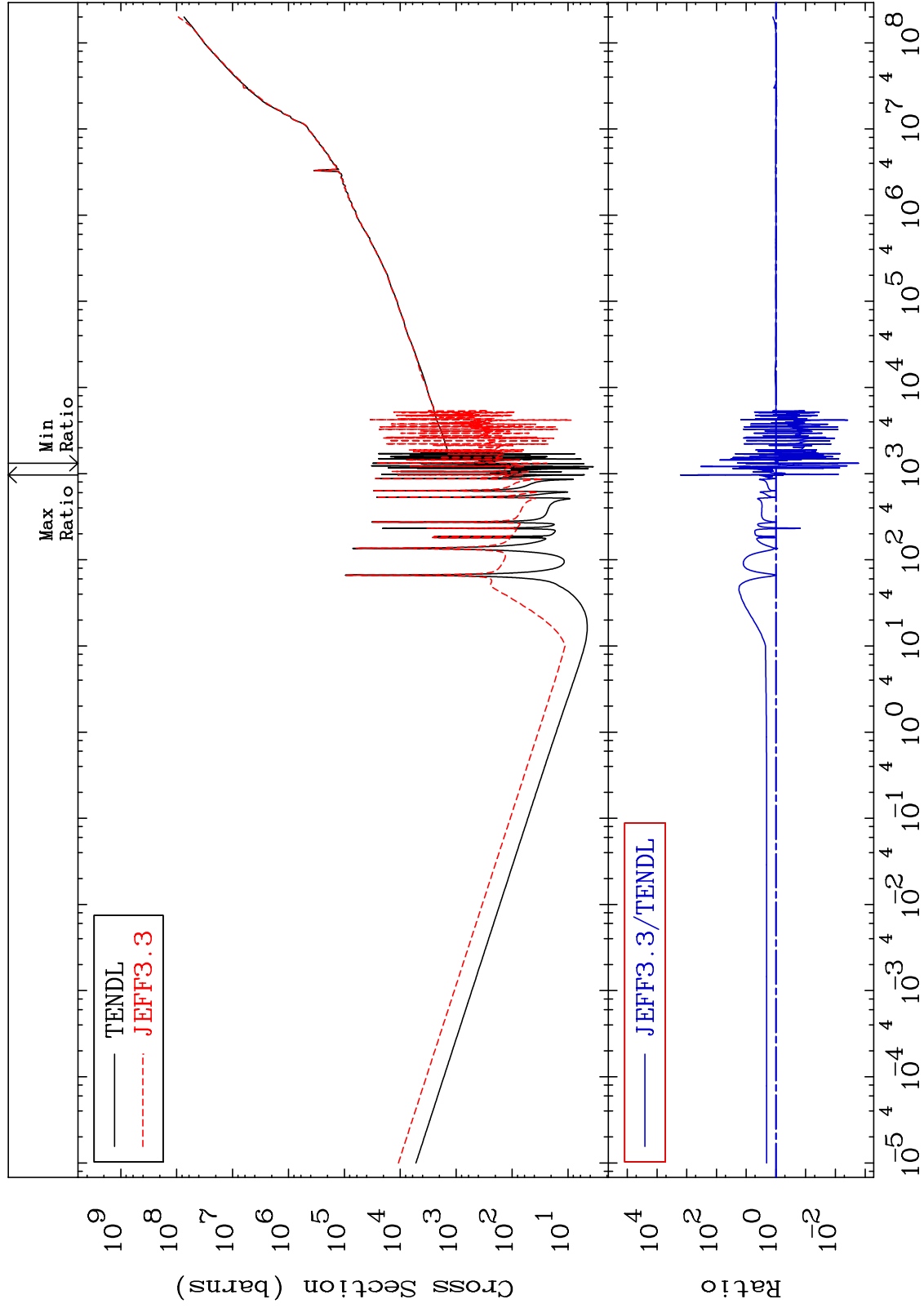
Incident Energy (eV)

58-Ce-136

MAT 5825

Kerma total (eV-barns)
Cross Section

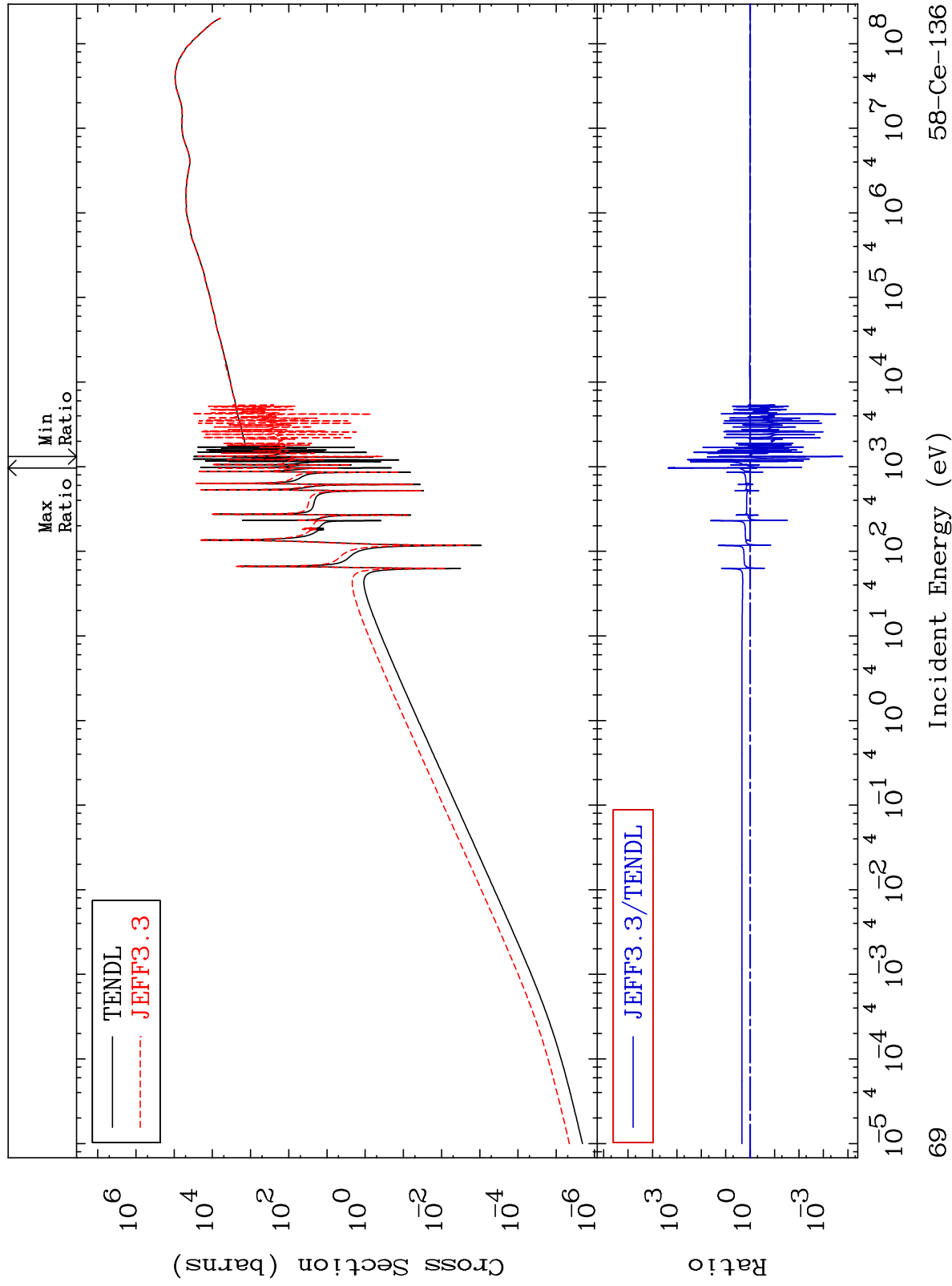
58-Ce-136
-99.83 To 9999. %



MAT 5825

Kerma elastic
Cross Section

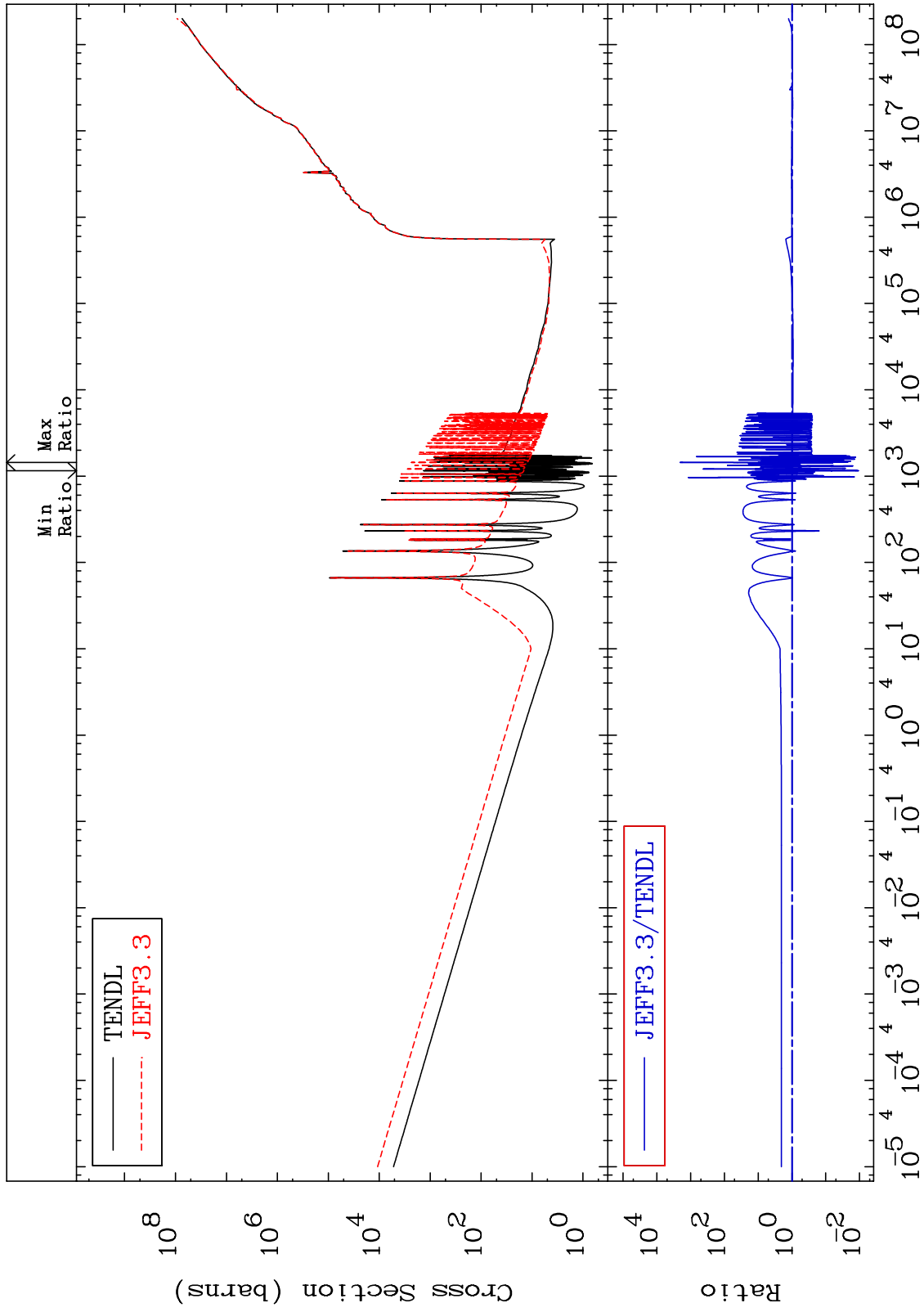
58-Ce-136
-99.98 To 9999. %



MAT 5825

Kerma non-elastic (all but mt2)
Cross Section

58-Ce-136
-98.92 To 9999. %



70

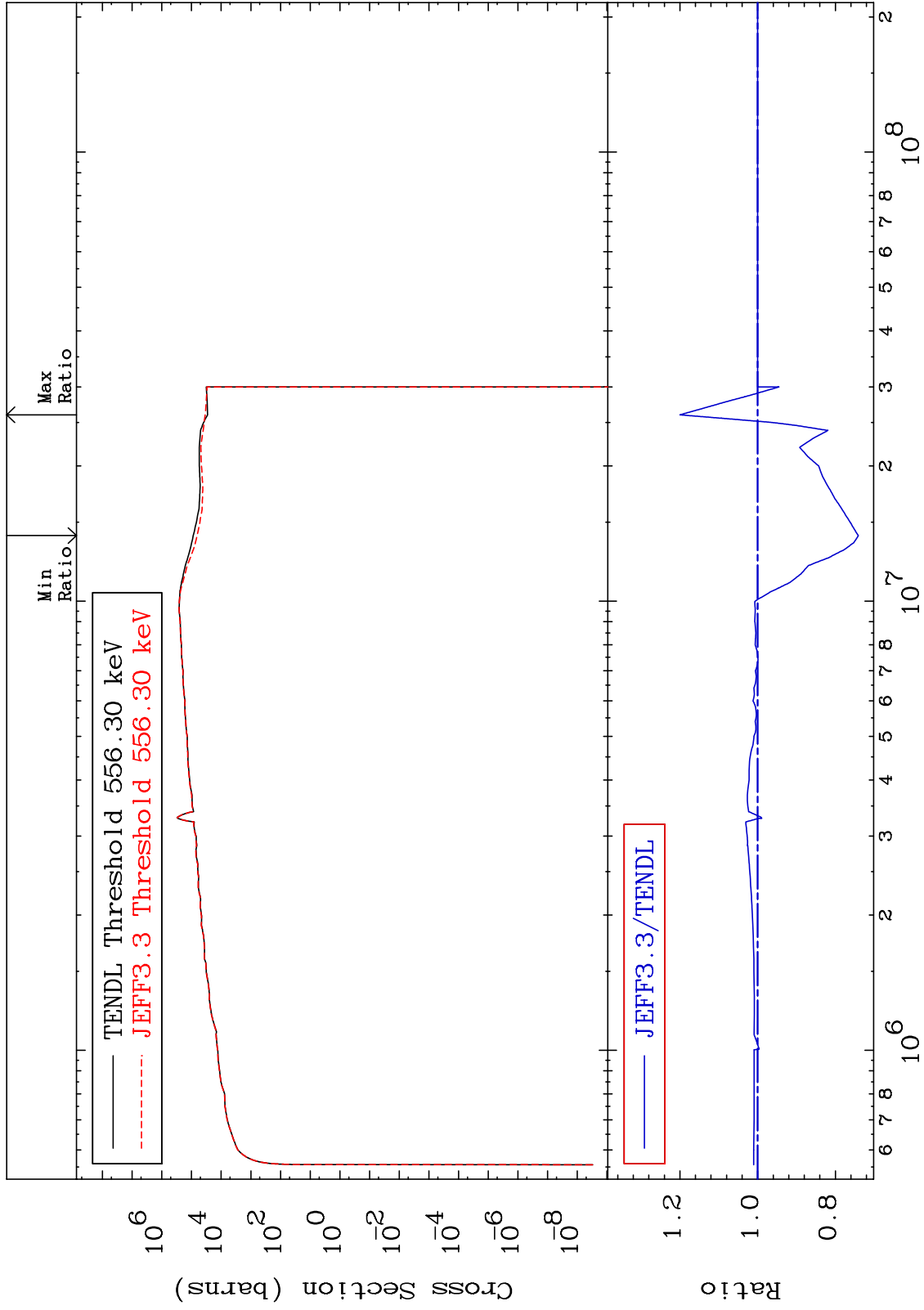
Incident Energy (eV)

58-Ce-136

MAT 5825

Kerma inelastic (mt51-91)
Cross Section

58-Ce-136
-25.93 To 19.98 %



71

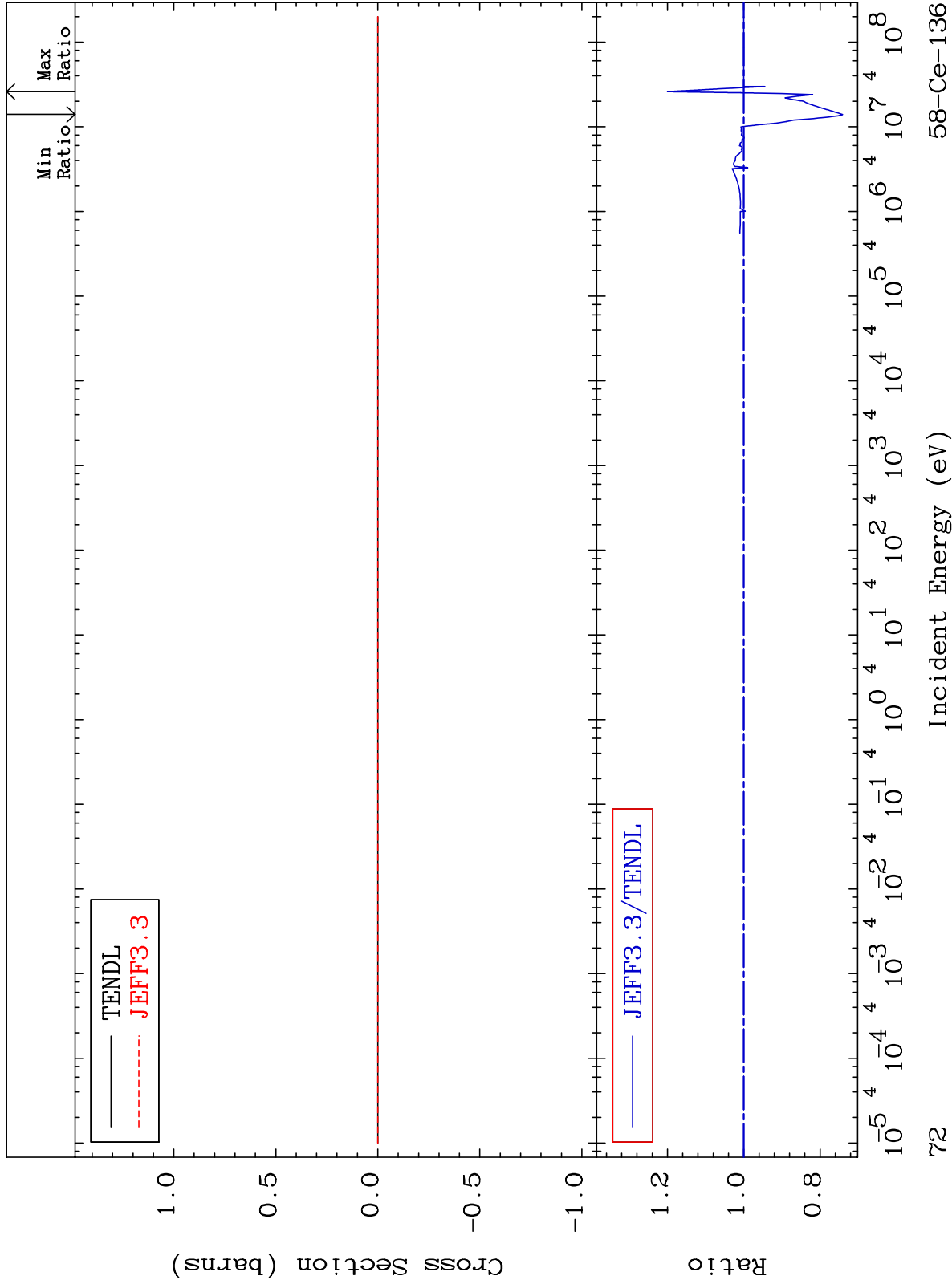
Incident Energy (eV)

58-Ce-136

MAT 5825

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

58-Ce-136
-25.93 To 19.98 %



72

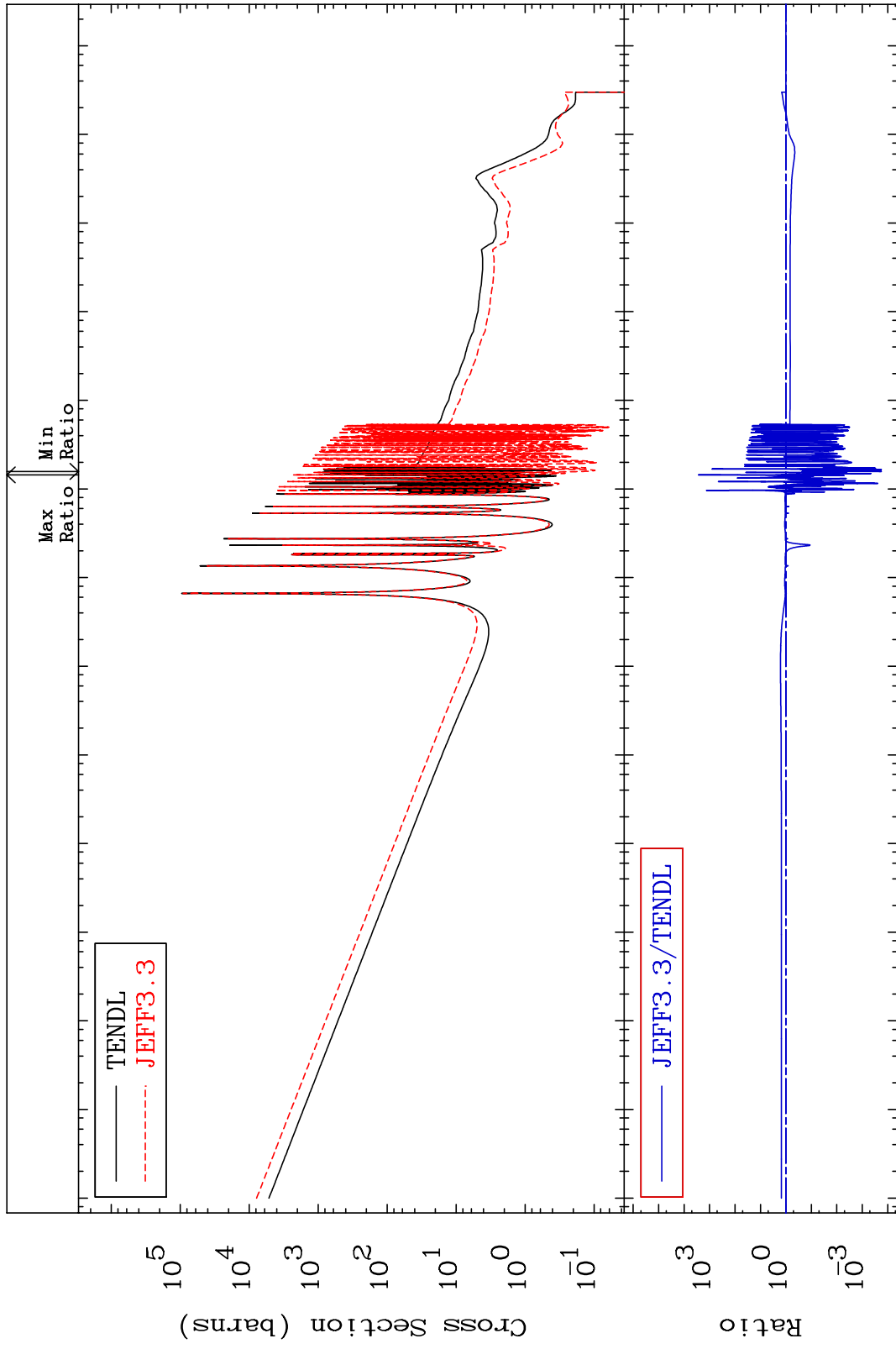
Incident Energy (eV)

58-Ce-136

MAT 5825

Kerma capture (mt102)
Cross Section

58-Ce-136
-99.98 To 9999. %



73

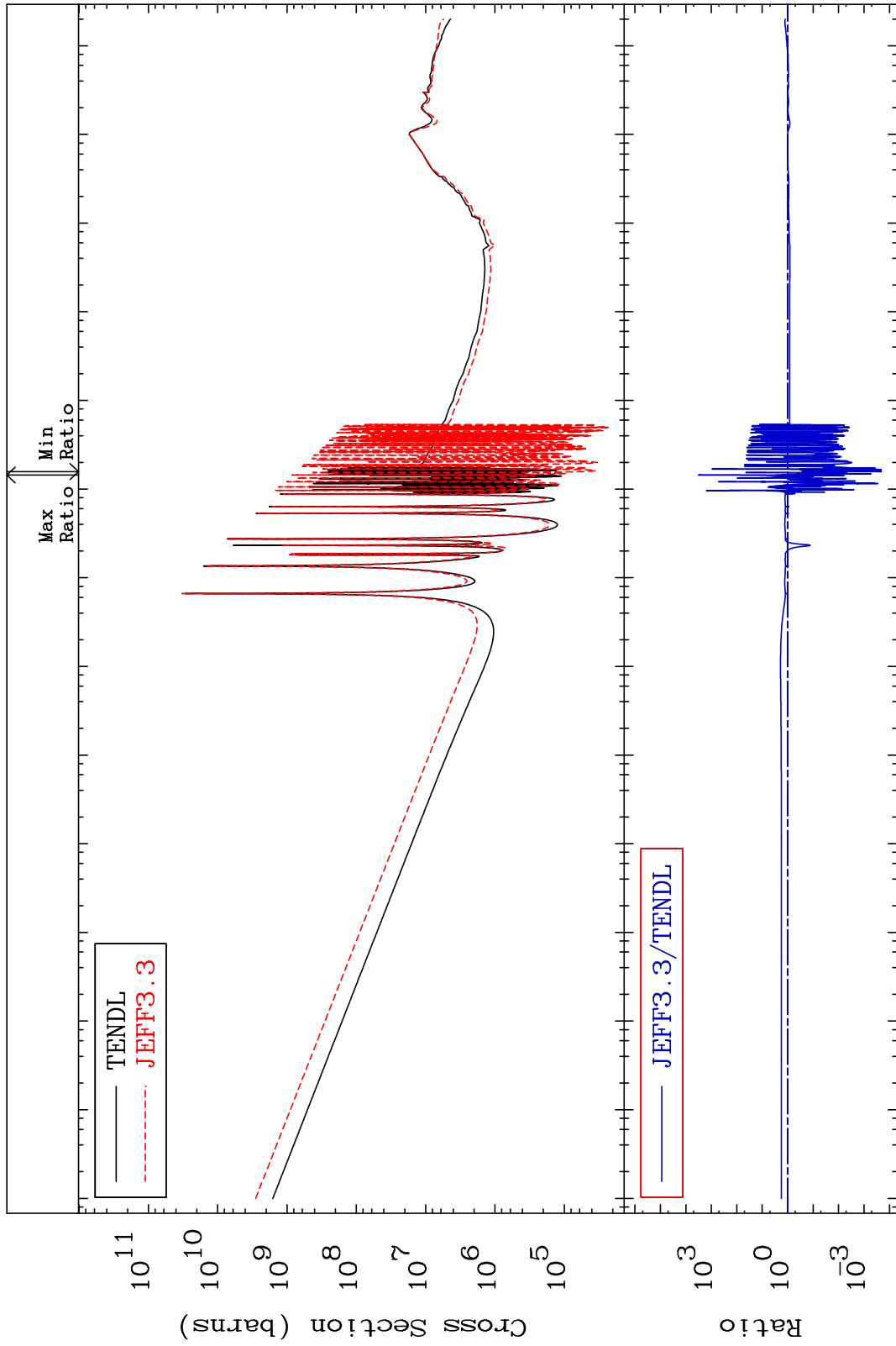
Incident Energy (eV)

58-Ce-136

MAT 5825

Total photon (eV-barns)
Cross Section

58-Ce-136
-99.98 To 9999. %



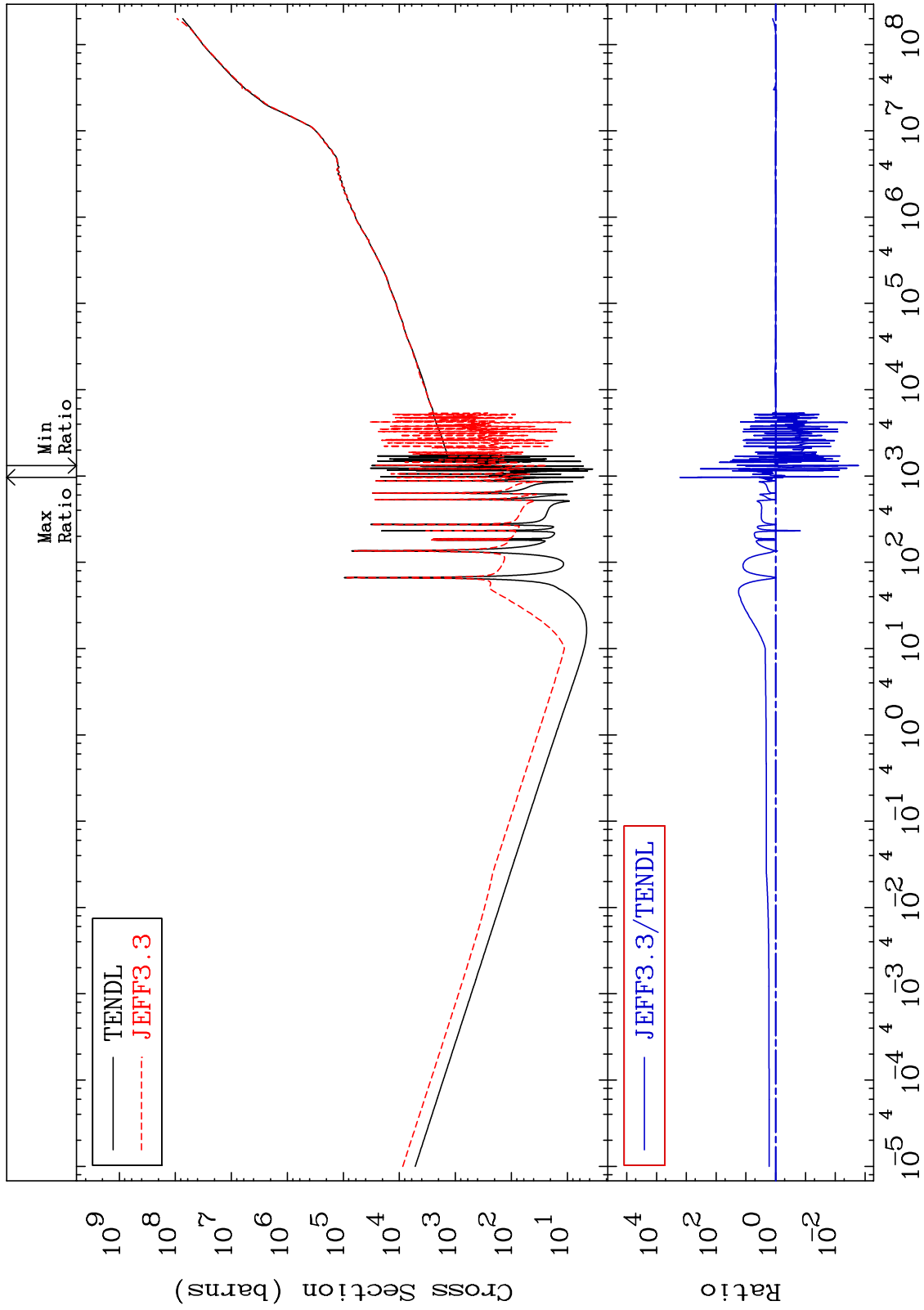
— TENDL
- - - JEFF3.3

— JEFF3.3/TENDL

MAT 5825

Total kinematic kerma (high limit)
Cross Section

58-Ce-136
-99.83 To 9999. %



75

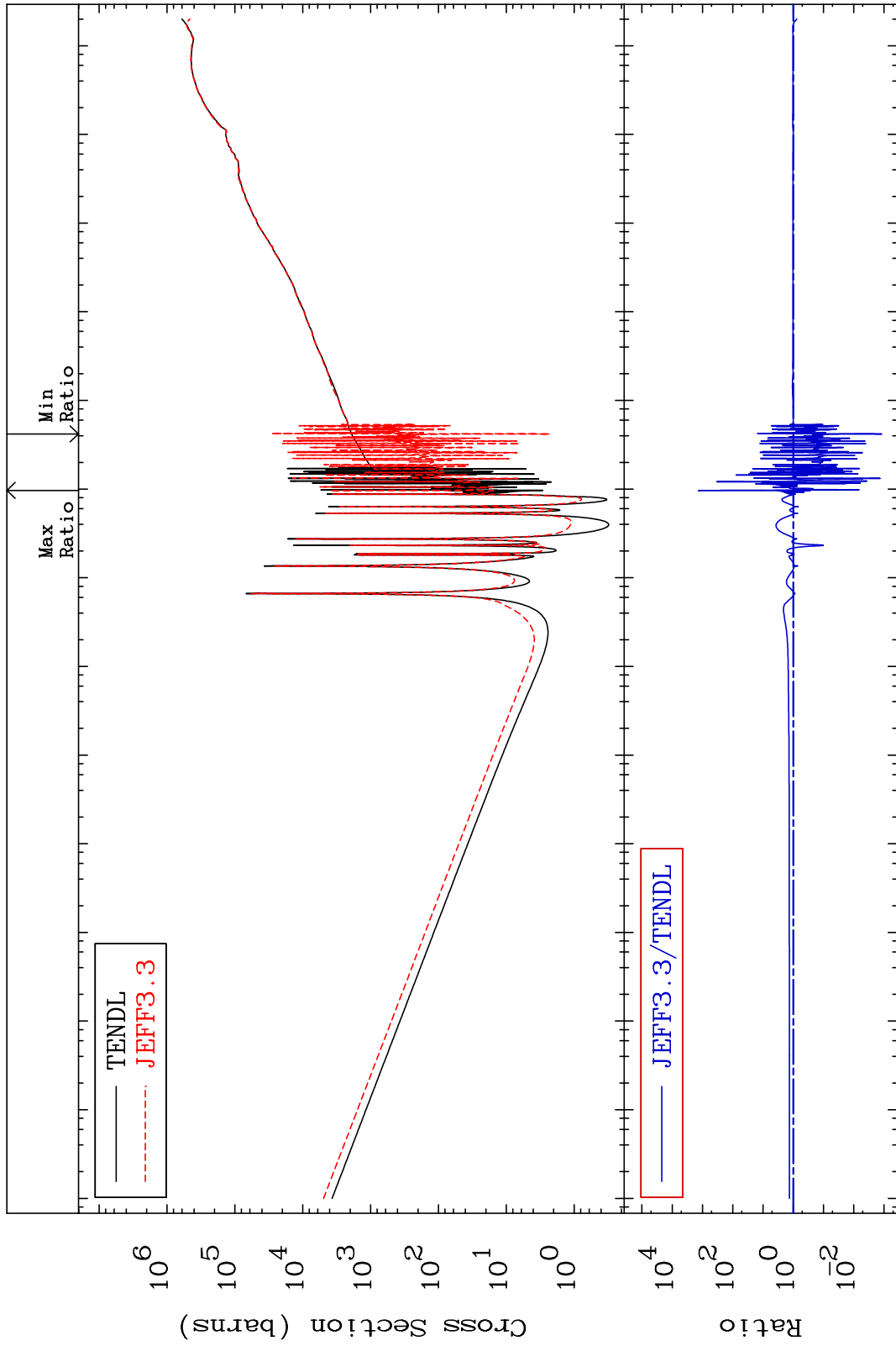
Incident Energy (eV)

58-Ce-136

MAT 5825

Dpa total (eV-barns)
Cross Section

58-Ce-136
-99.88 To 9999. %



76

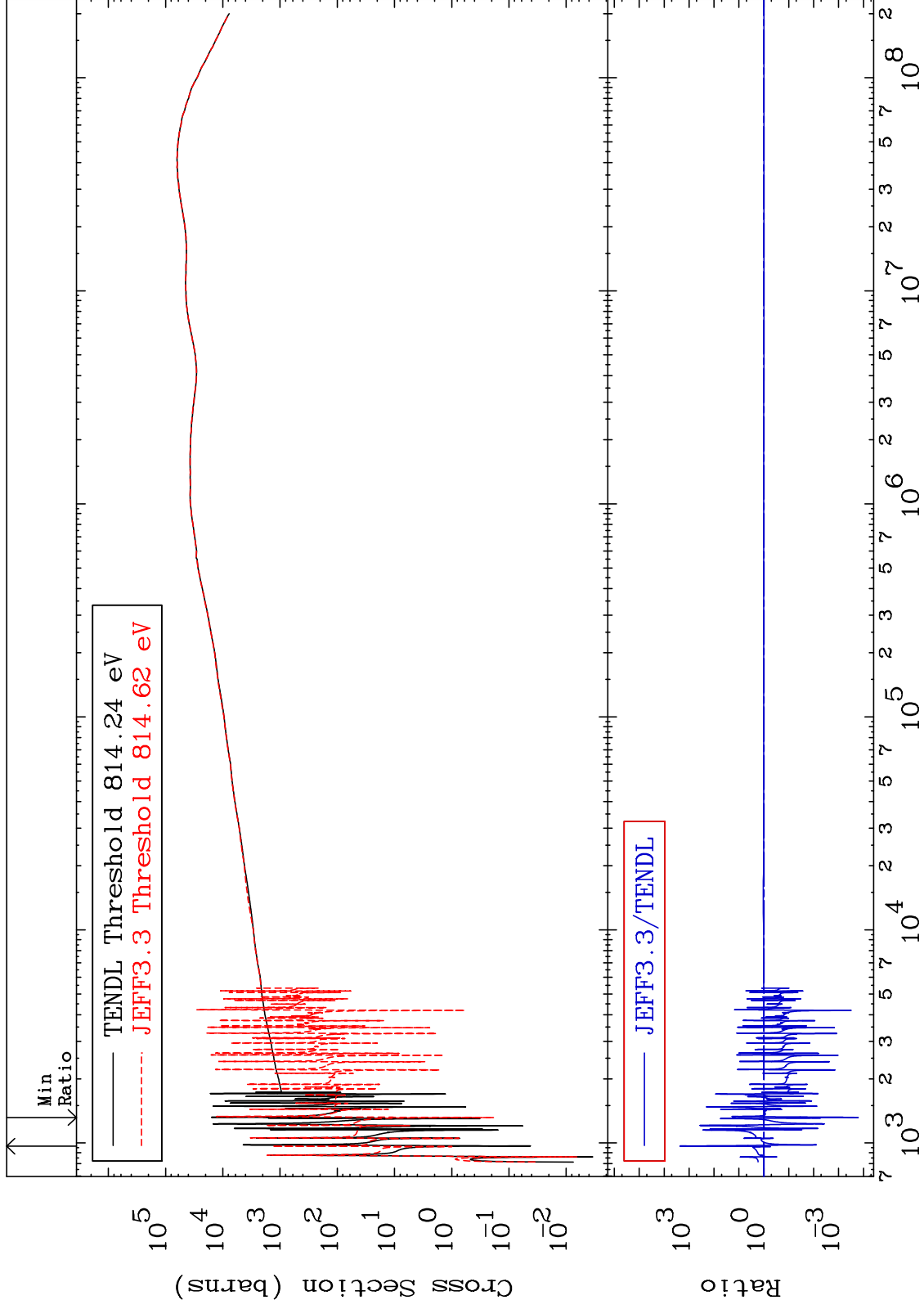
Incident Energy (eV)

58-Ce-136

MAT 5825

Dpa elastic (mt2)
Cross Section

58-Ce-136
-99.98 To 9999. %



77

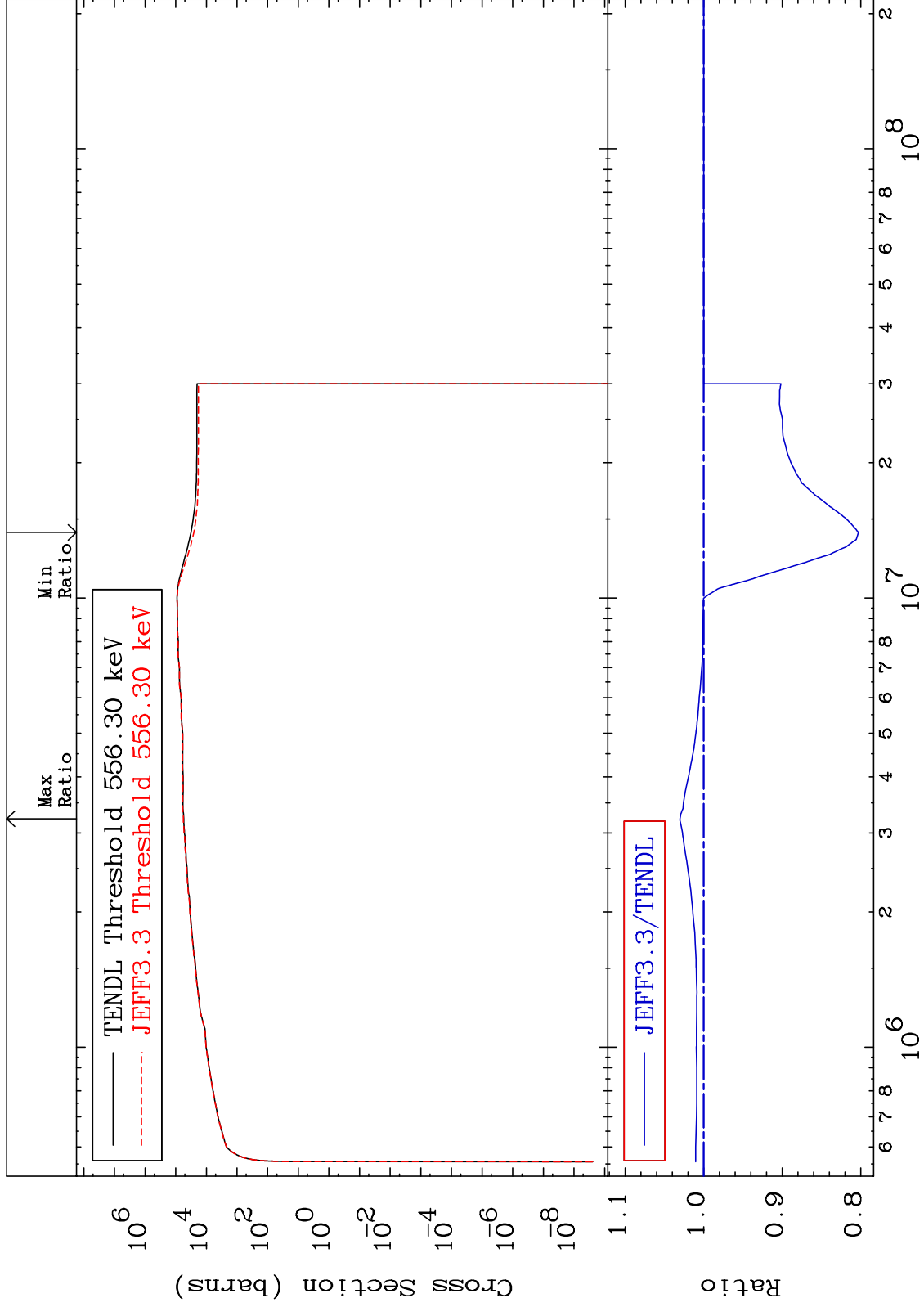
58-Ce-136

58-Ce-136

MAT 5825

Dpa inelastic (mt51-91)
Cross Section

58-Ce-136
-19.69 To 3.012 %



78

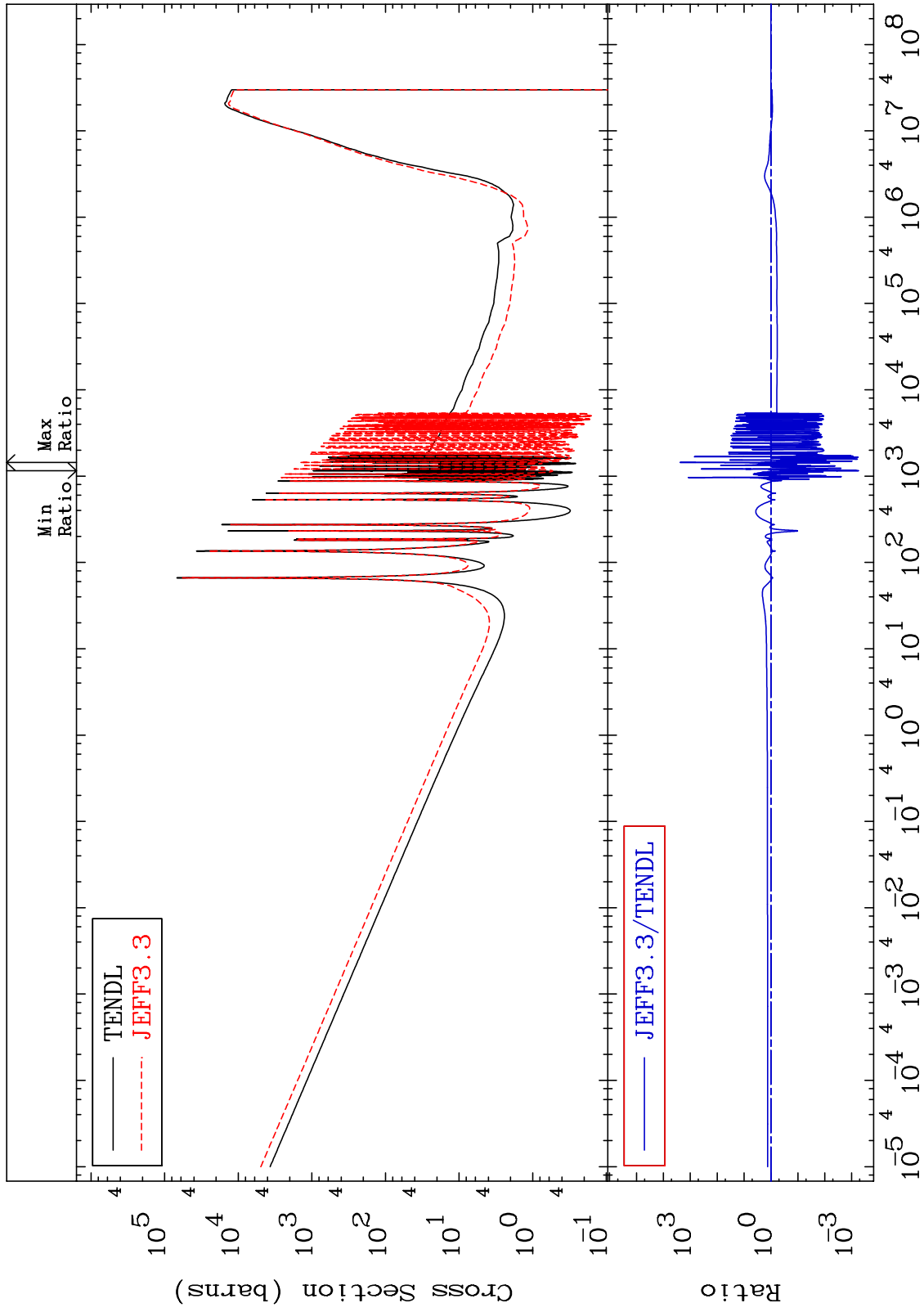
Incident Energy (eV)

58-Ce-136

MAT 5825

Dpa disappearance (mt102 -120)
Cross Section

58-Ce-136
-99.94 To 9999. %



79

Incident Energy (eV)

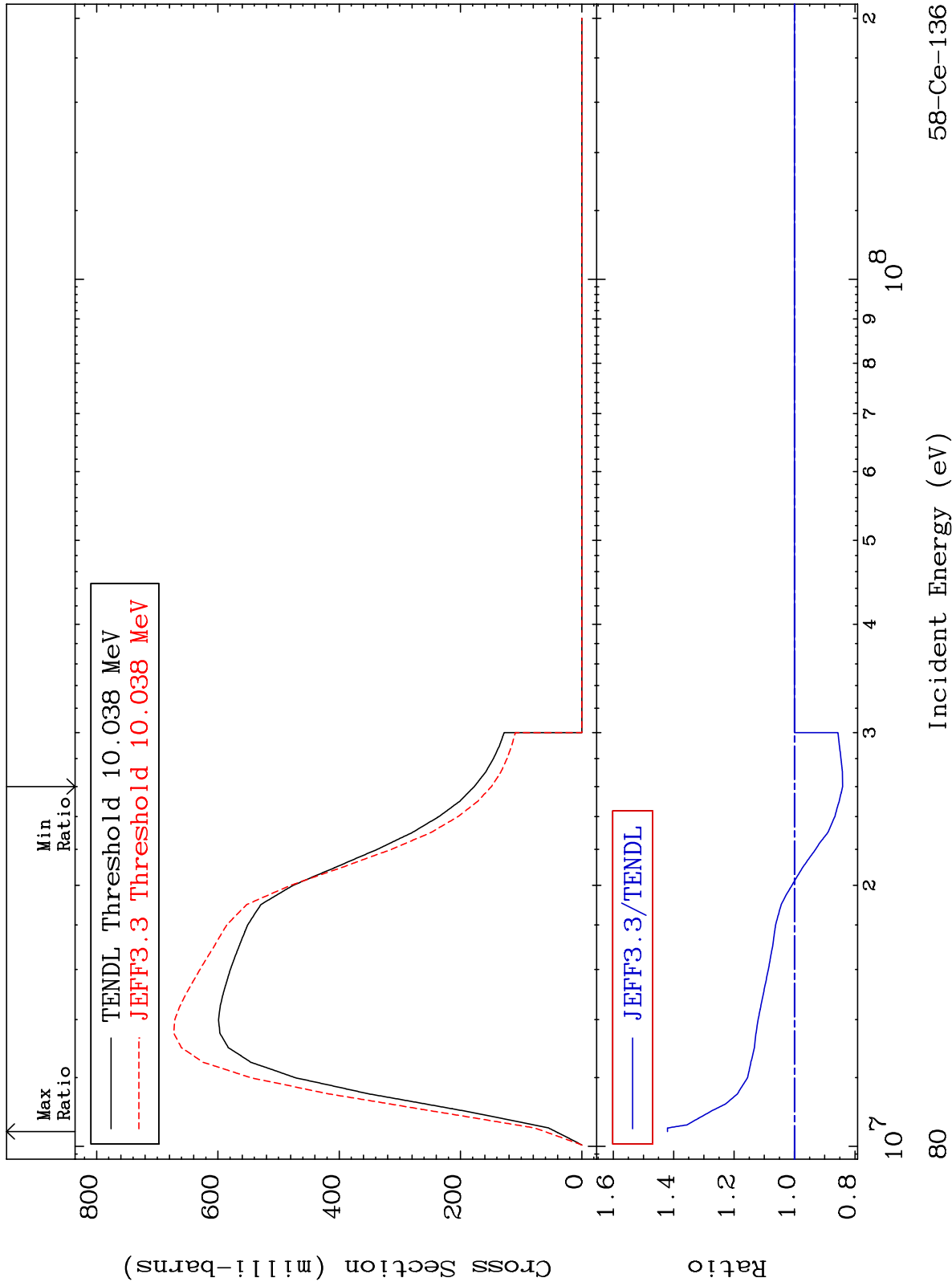
58-Ce-136

MAT 5825

(n,2n):58-Ce-135g

58-Ce-136

Radionuclide Production Cross Section -15.93 To 42.03 %

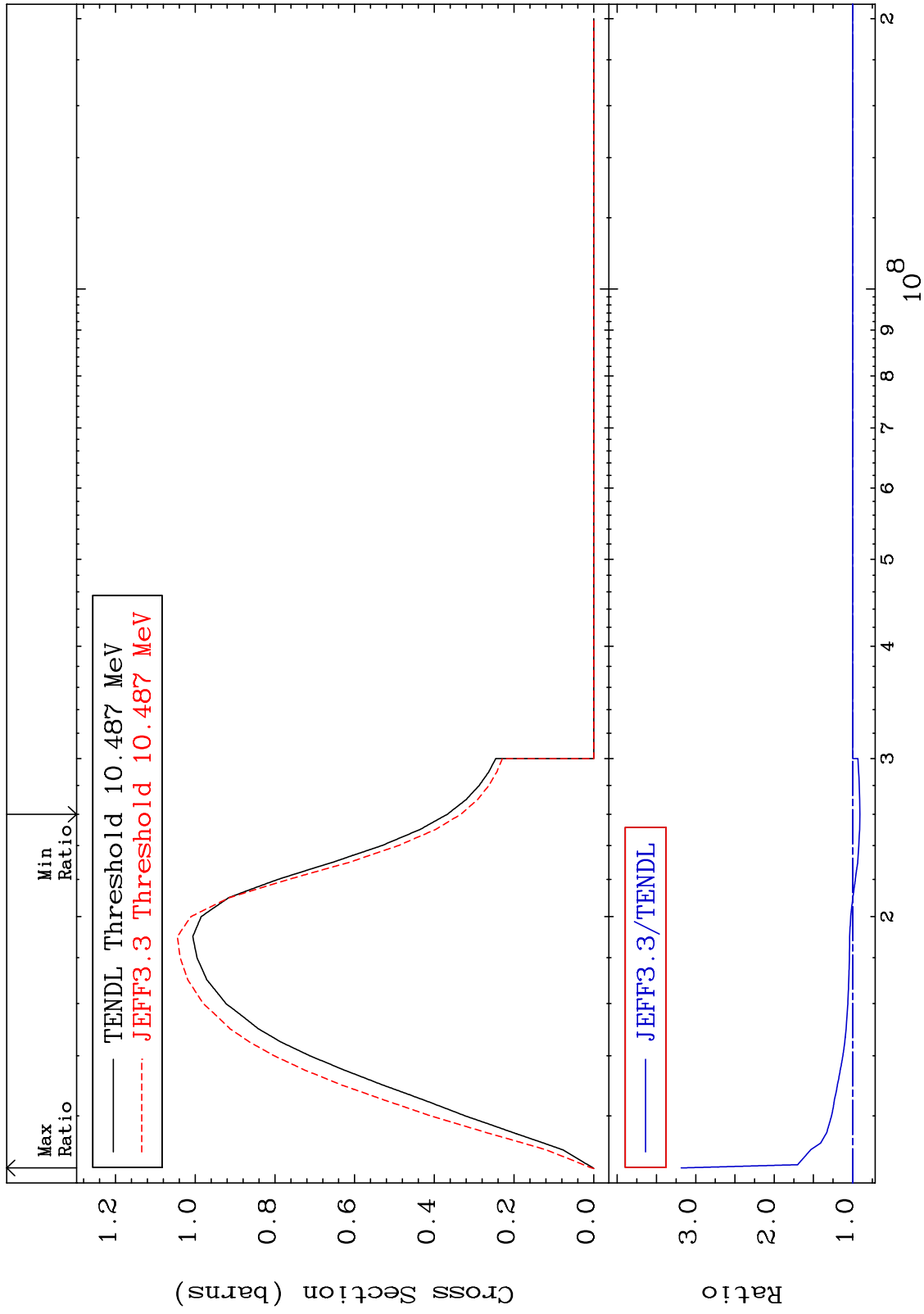


MAT 5825

(n,2n):58-Ce-135m4

58-Ce-136

Radionuclide Production Cross Section -9.225 To 218.5 %

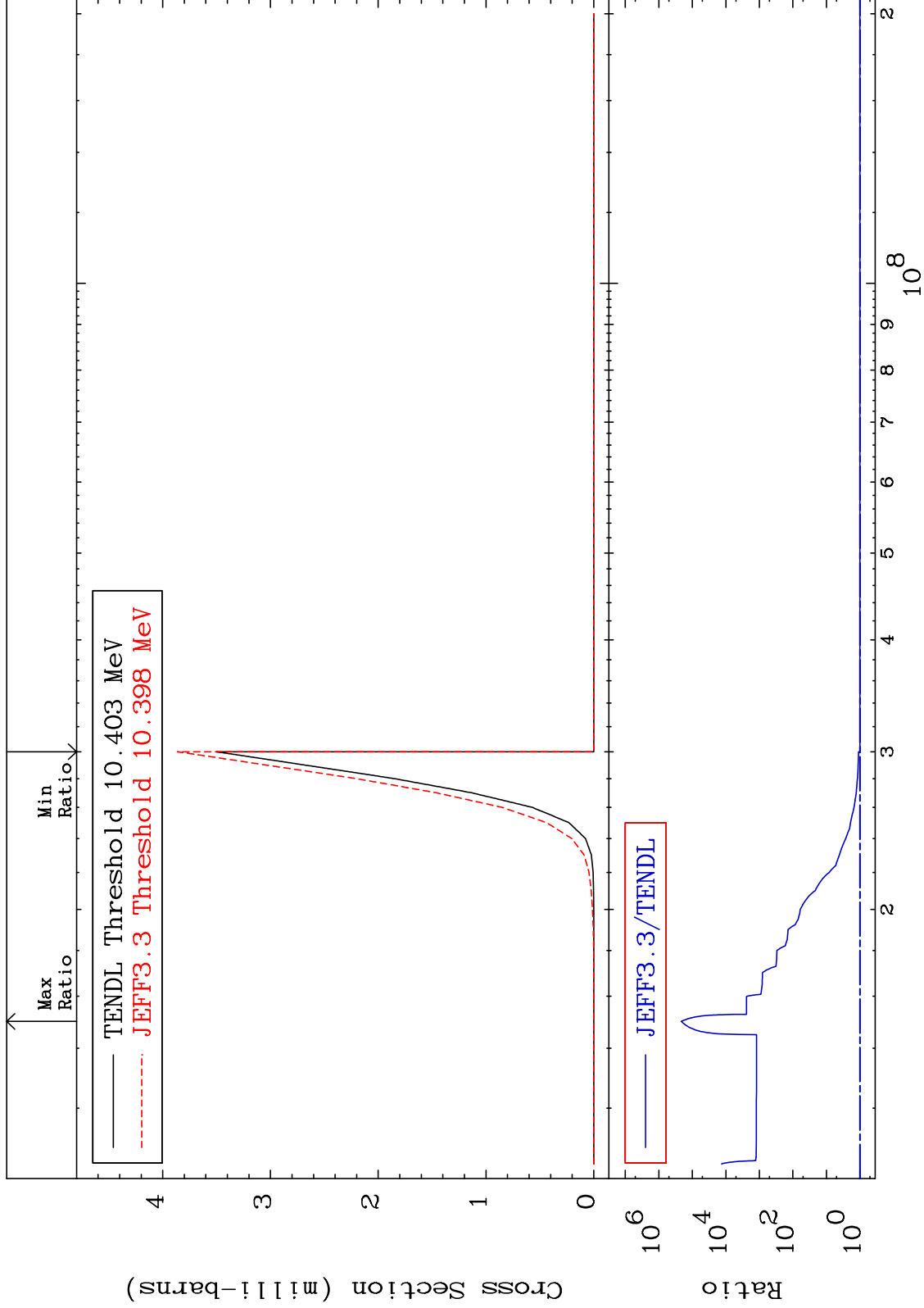


MAT 5825

(n,2n) α :56-Ba-131g

58-Ce-136

Radionuclide Production Cross Section 0.000 To 9999. %

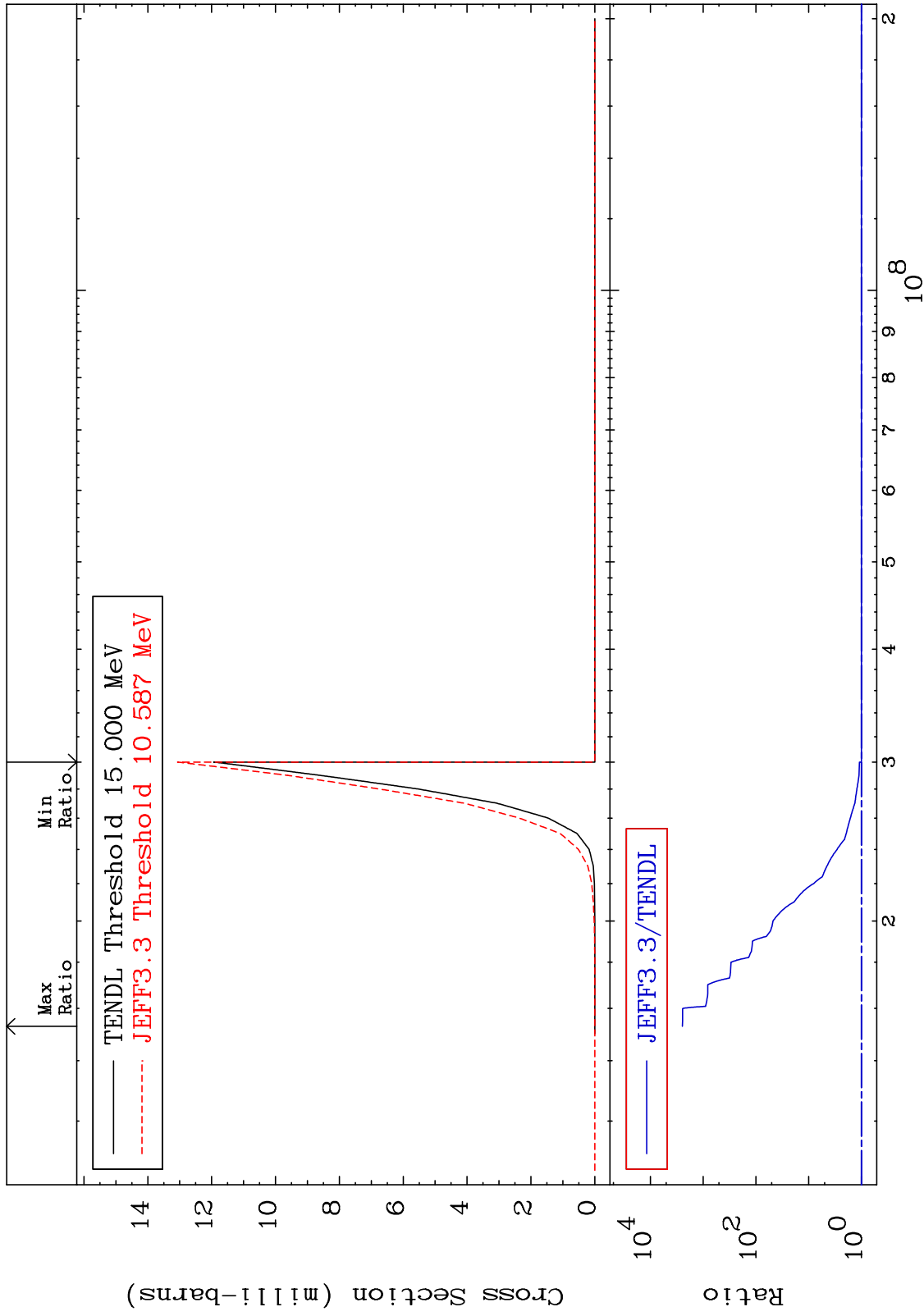


MAT 5825

(n,2n) α :56-Ba-131m2

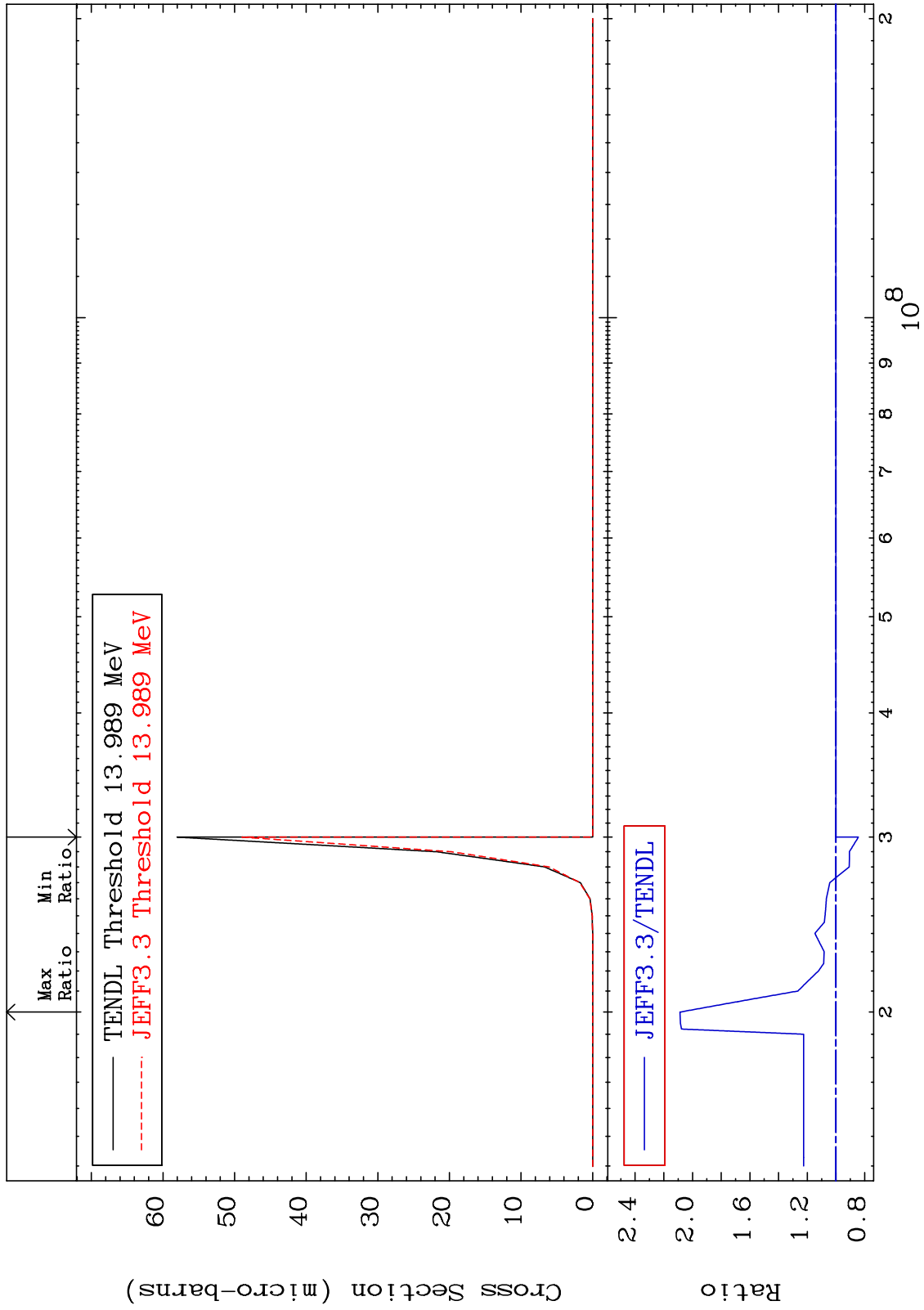
58-Ce-136

Radionuclide Production Cross Section 0.000 To 9999. %



MAT 5825

(n, n') He-3:56-Ba-133g 58-Ce-136
Radionuclide Production Cross Section -15.64 To 108.7 %

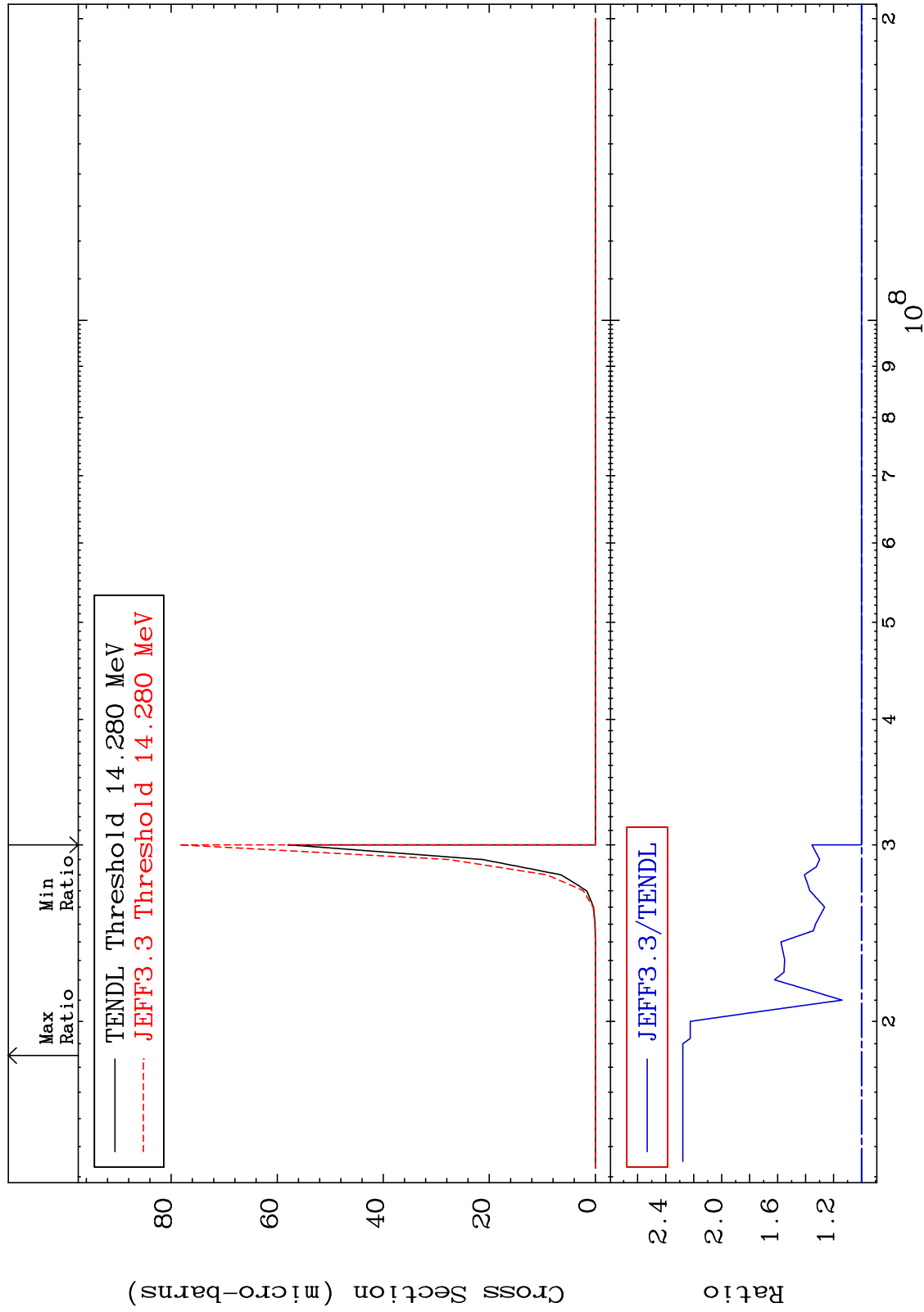


MAT 5825

(n, n') He-3:56-Ba-133m2

58-Ce-136

Radionuclide Production Cross Section 0.000 To 127.7 %

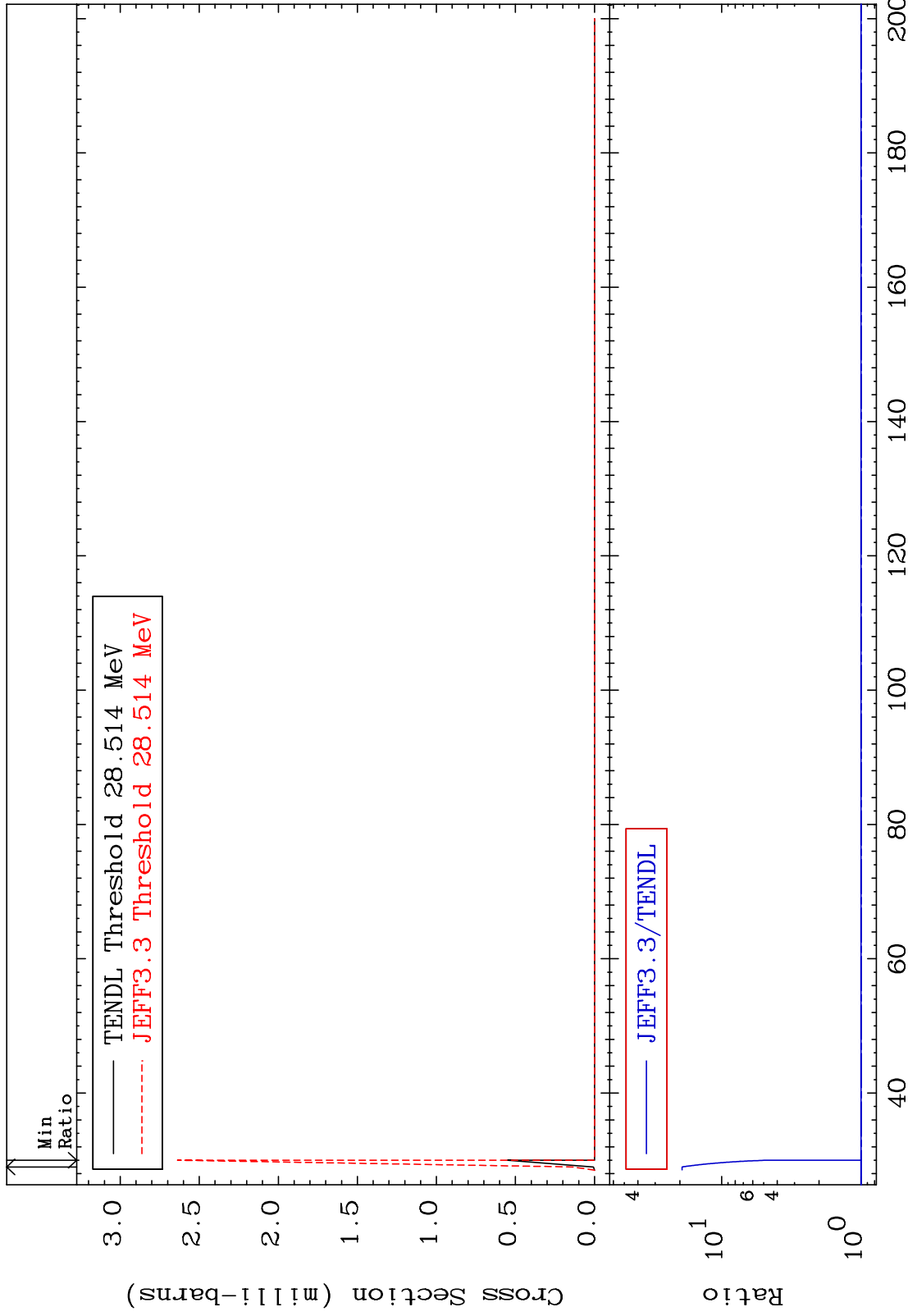


MAT 5825

(n,4n):58-Ce-133g

58-Ce-136

Radionuclide Production Cross Section 0.000 To 1824. %

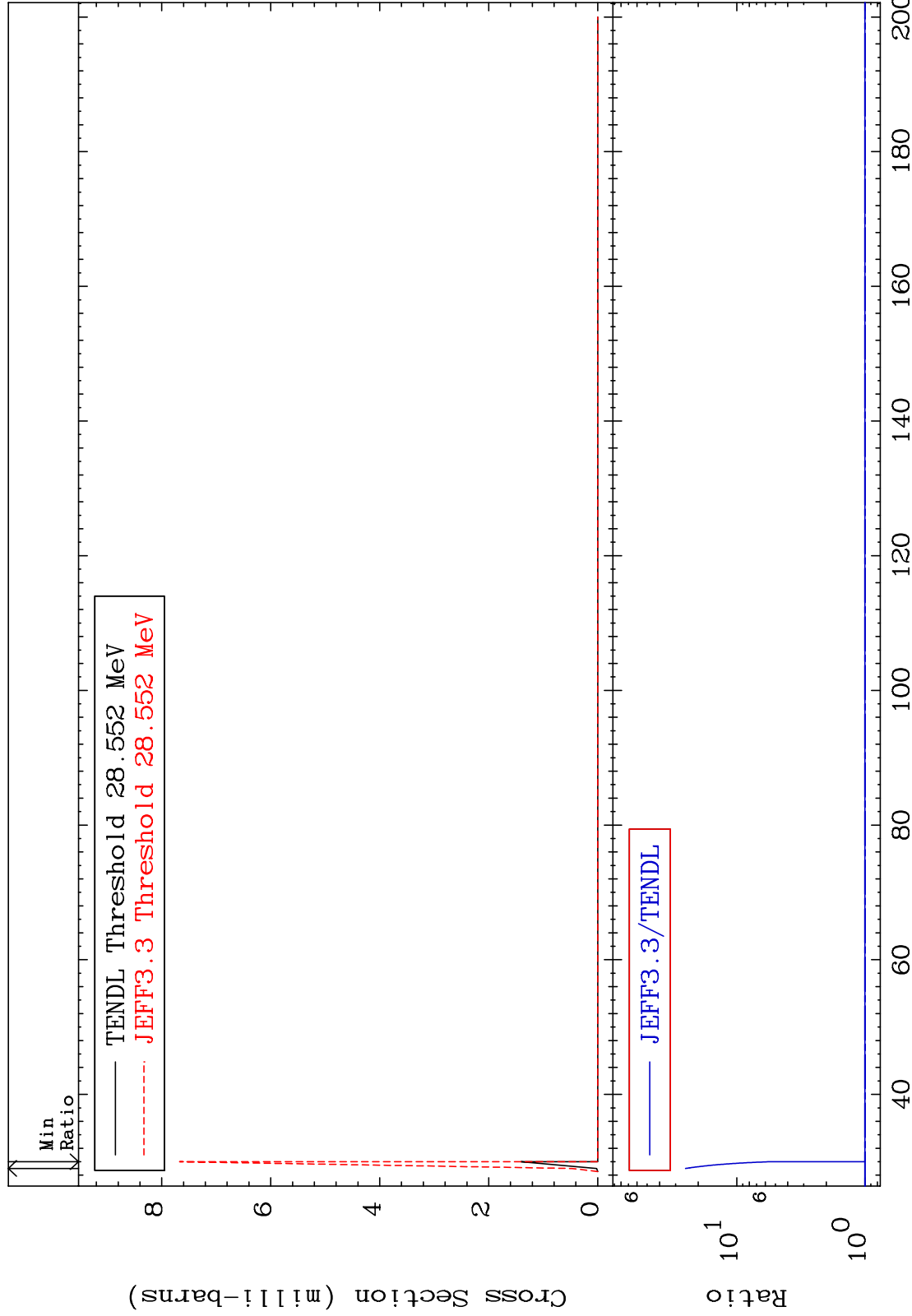


MAT 5825

(n, 4n): 58-Ce-133m1

58-Ce-136

Radionuclide Production Cross Section 0.000 To 2410. %

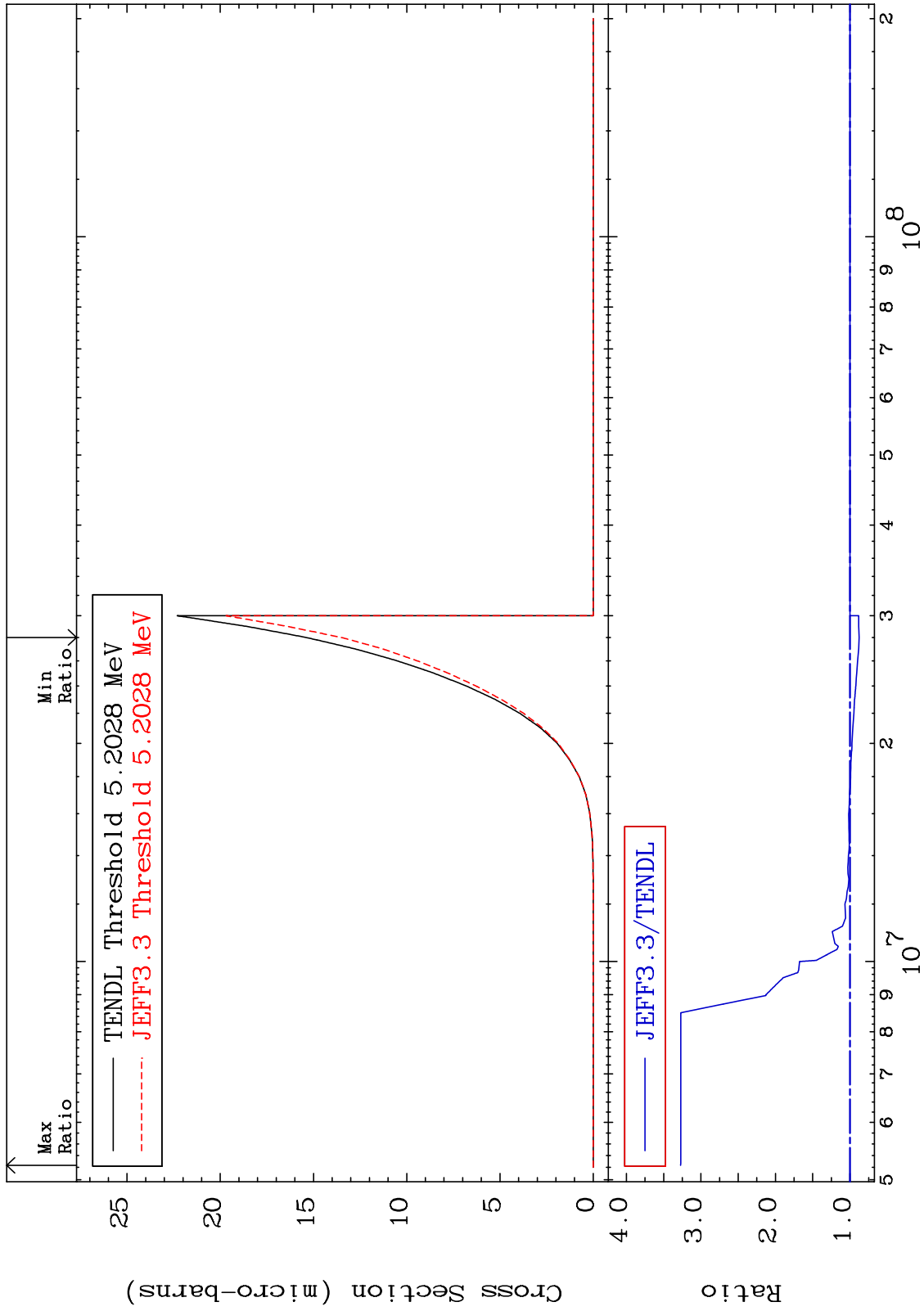


MAT 5825

(n,2p) : 56-Ba-135g

58-Ce-136

Radionuclide Production Cross Section -12.31 To 227.2 %



88

Incident Energy (eV)

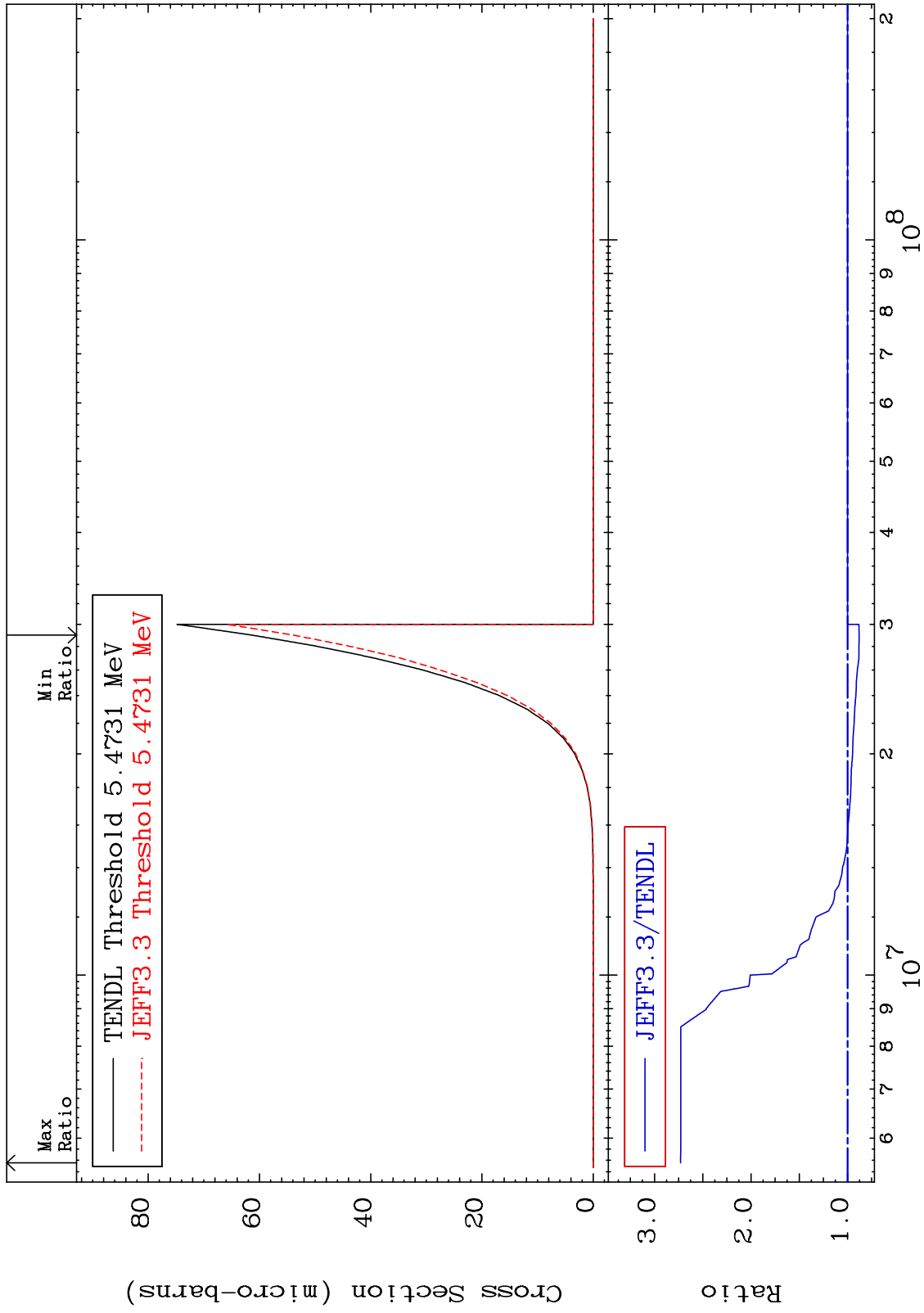
58-Ce-136

MAT 5825

(n,2p):56-Ba-135m2

58-Ce-136

Radionuclide Production Cross Section -12.14 To 172.9 %



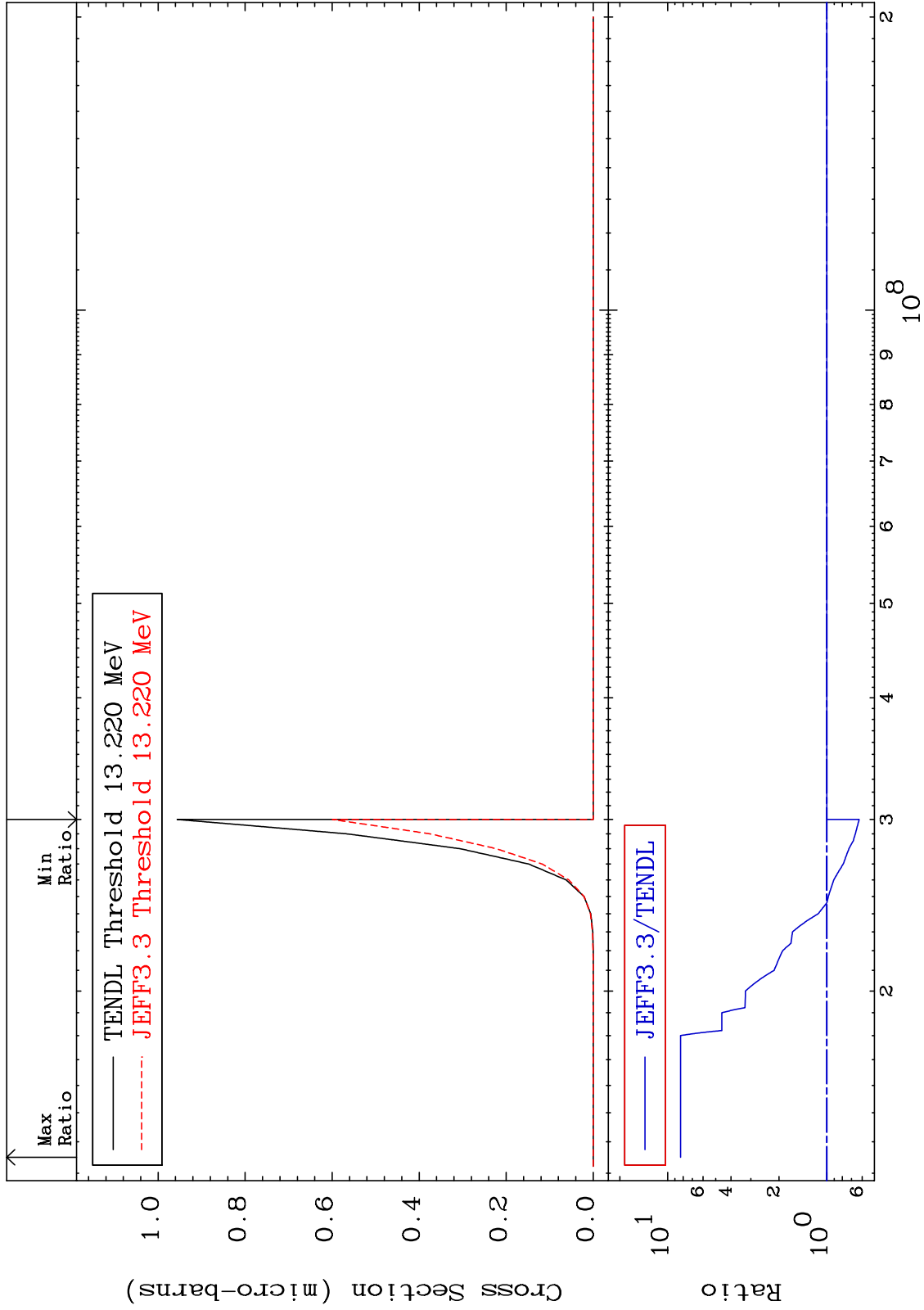
MAT 5825

(n, p) t:56-Ba-133g

58-Ce-136

Radionuclide Production Cross Section

-37.28 To 729.5 %



MAT 5825

(n, p) t:56-Ba-133m2

58-Ce-136

Radionuclide Production Cross Section 0.000 To 757.2 %

