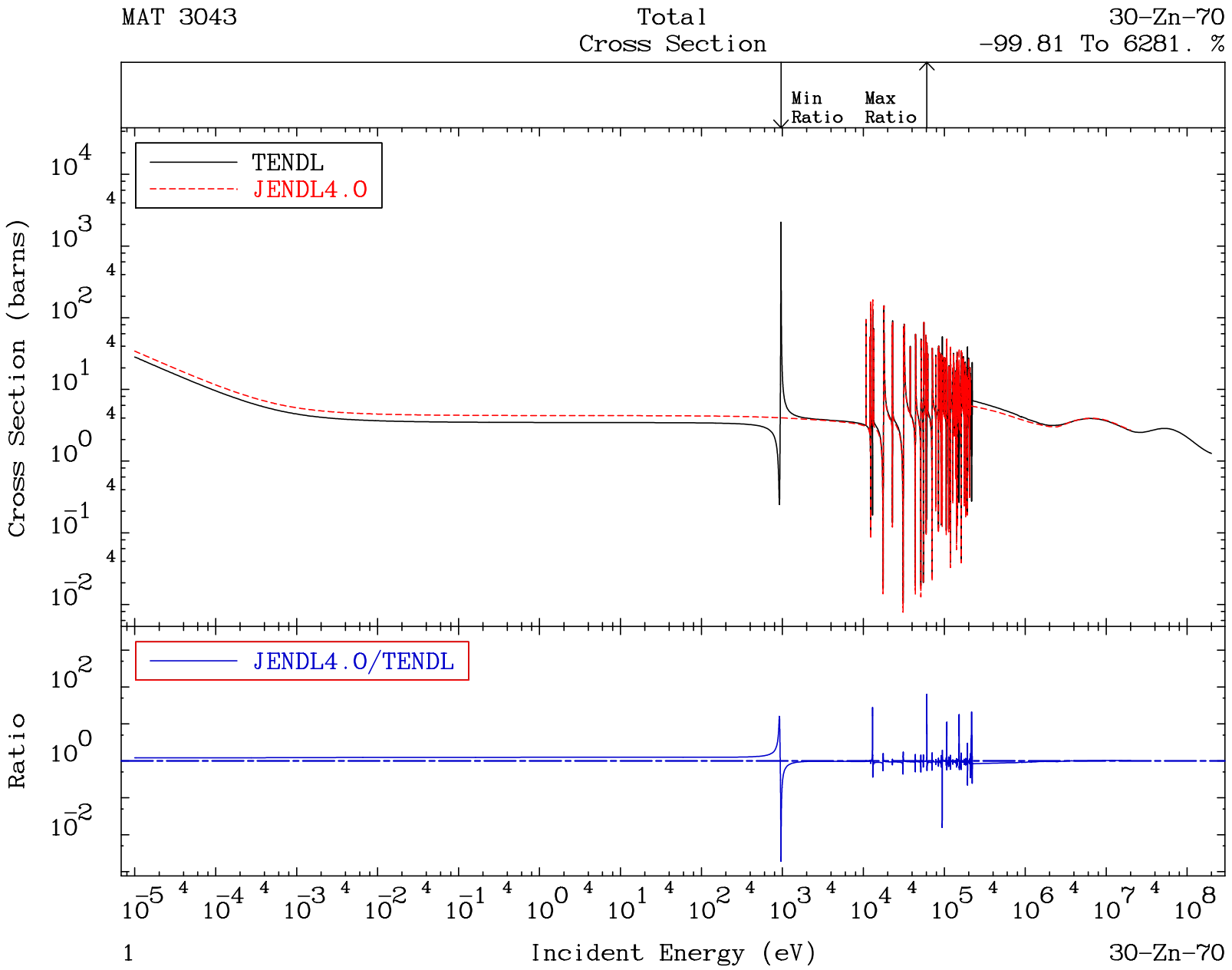
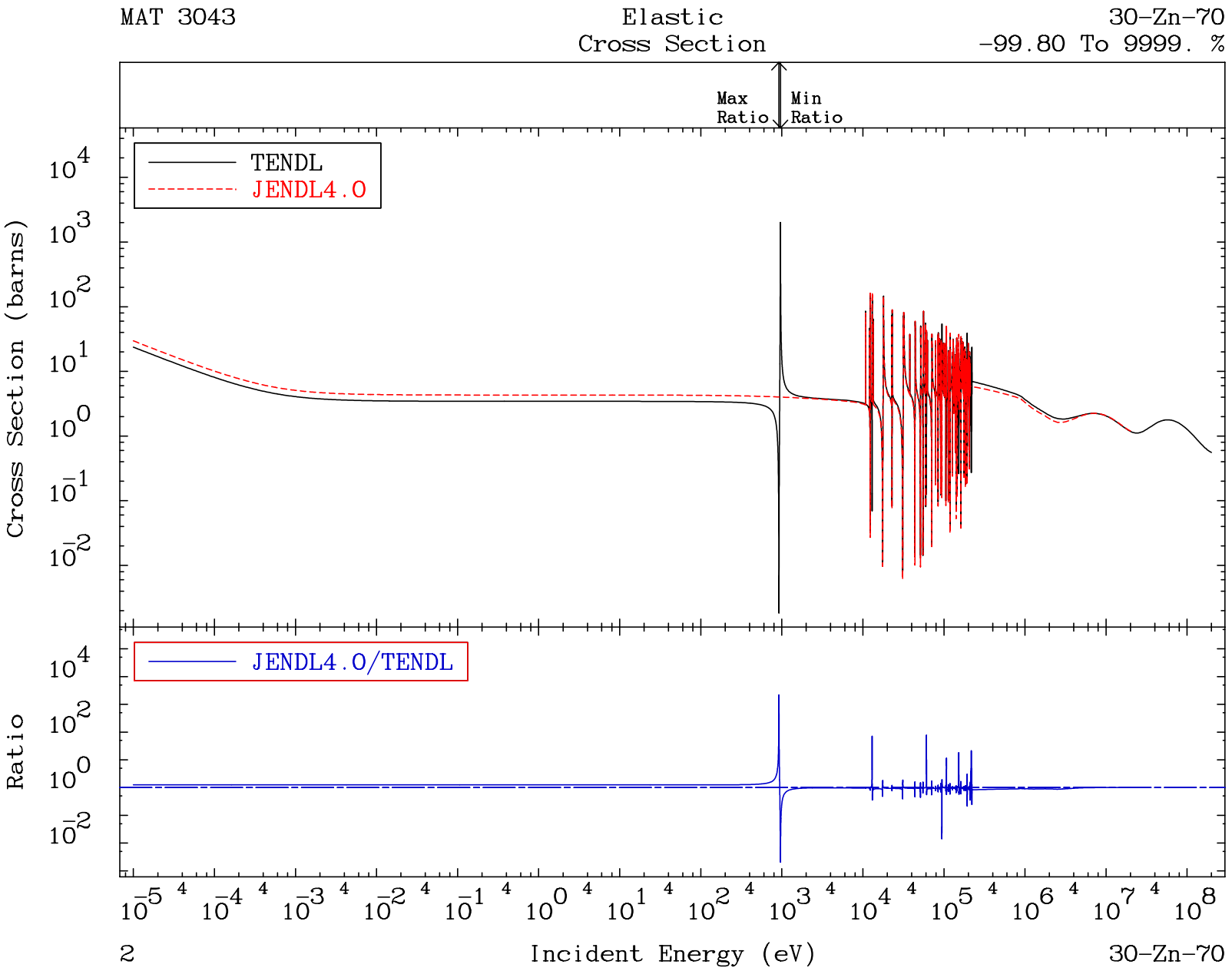
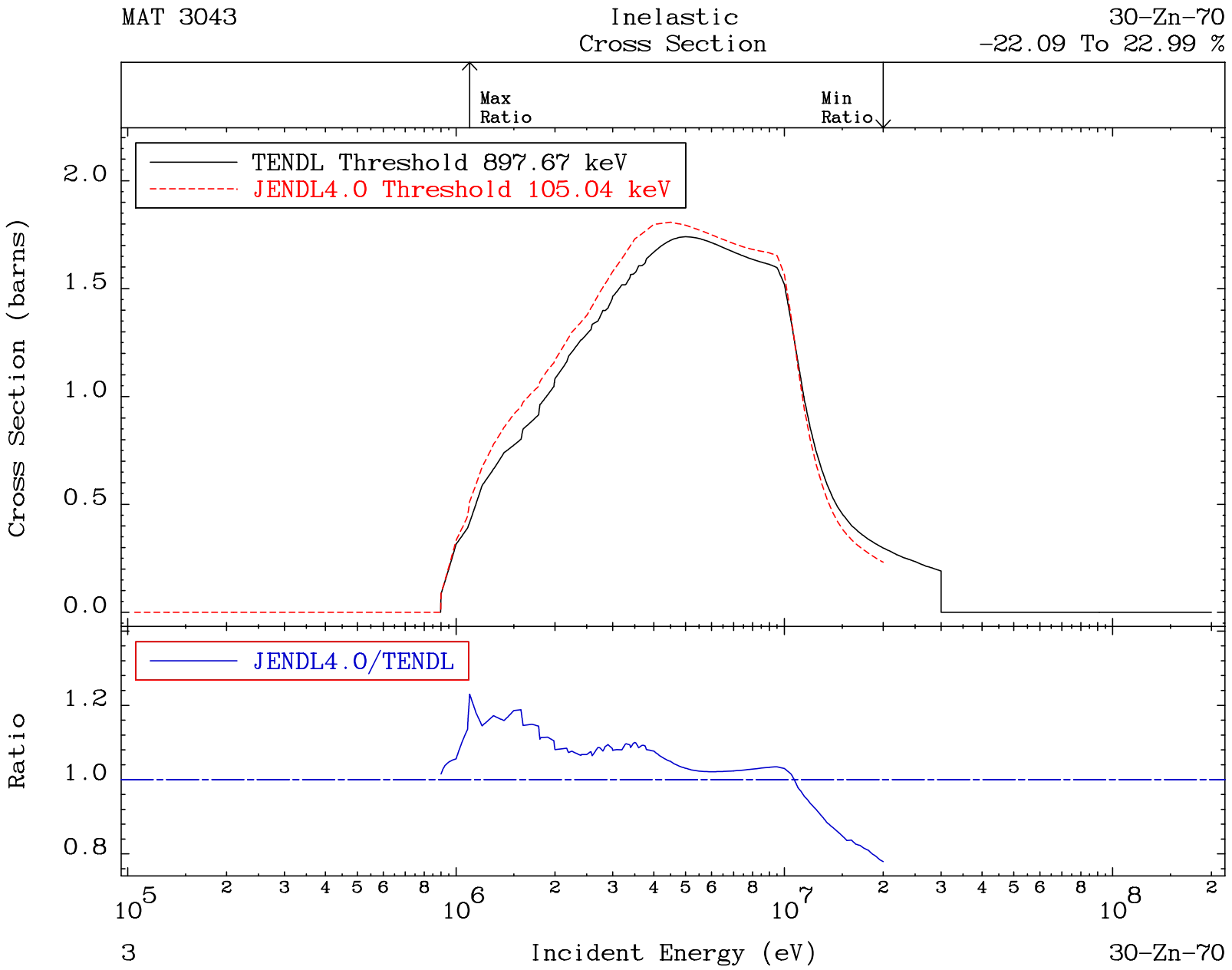
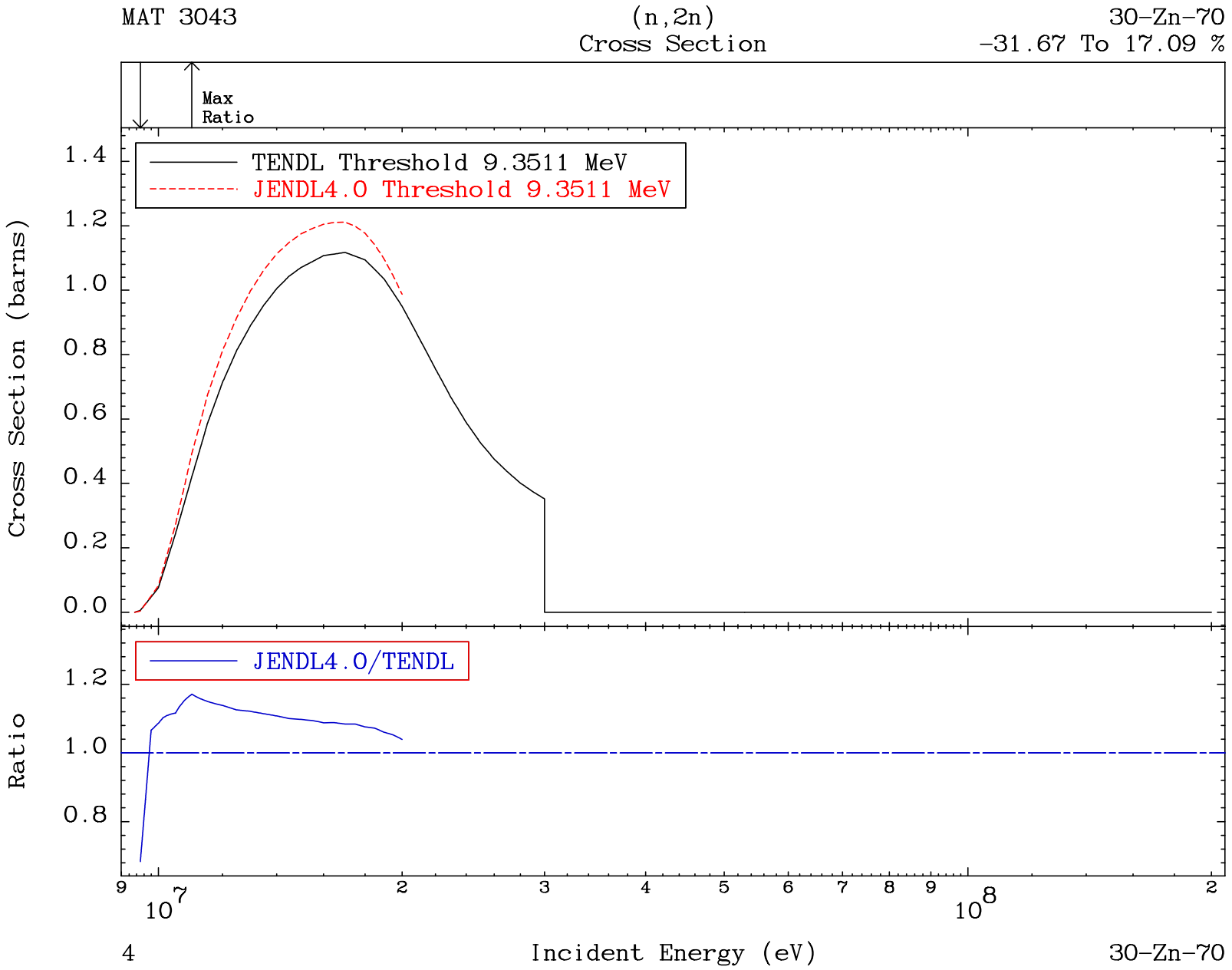
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

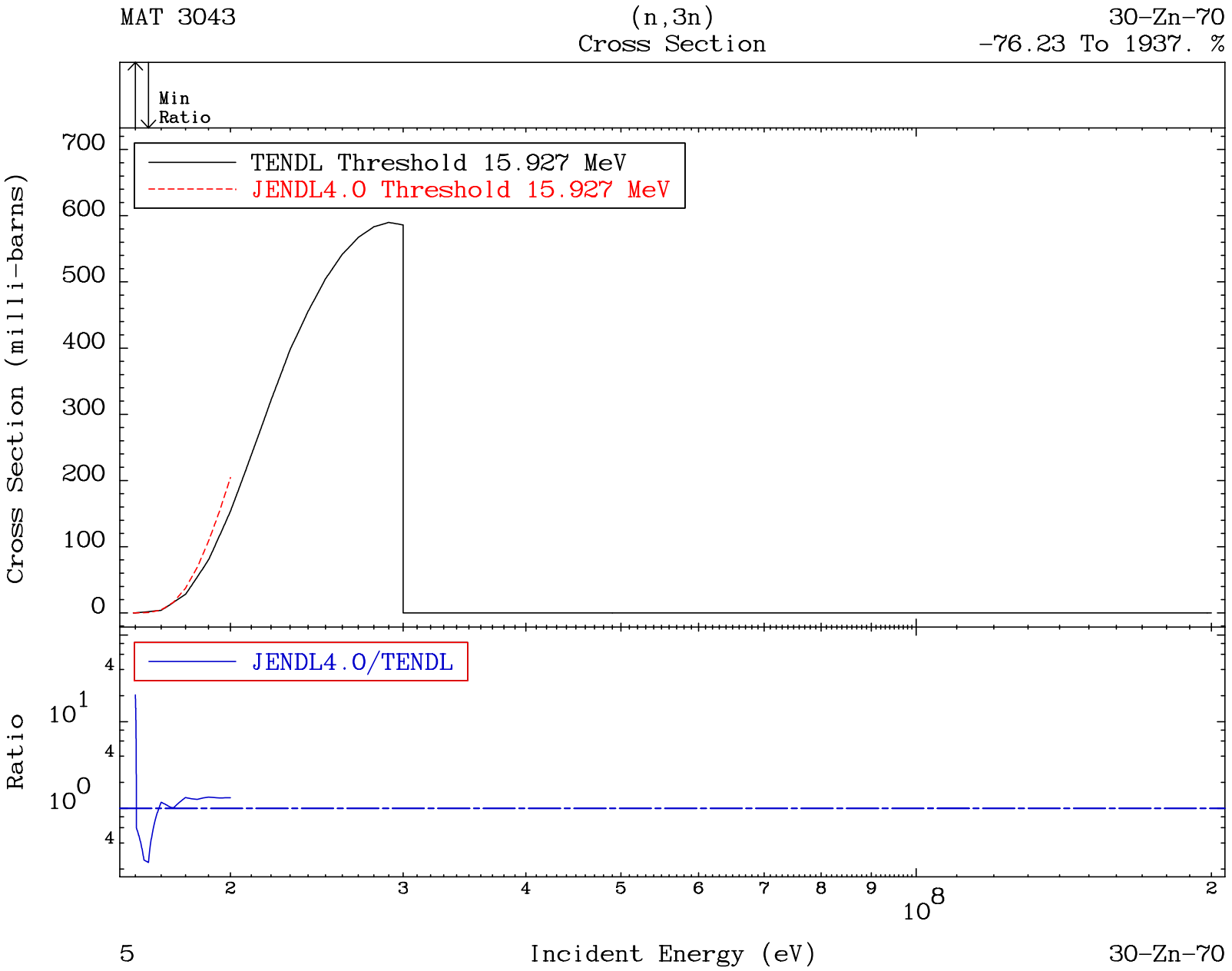
Press Mouse Button to Start

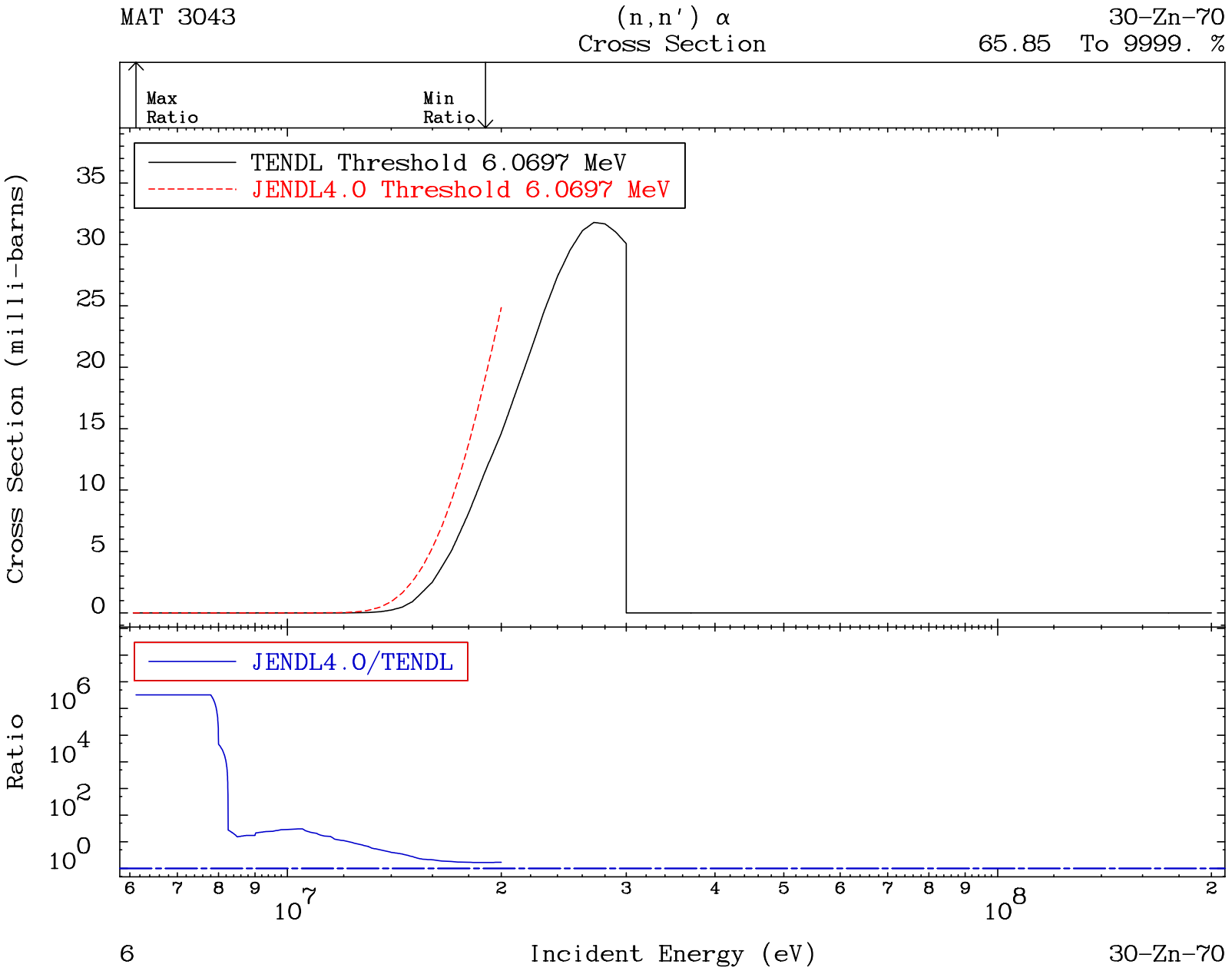

MAT 3043
Total
Cross Section
30-Zn-70
-99.81 To 6281. %
Min
Ratio
Max
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
30-Zn-70

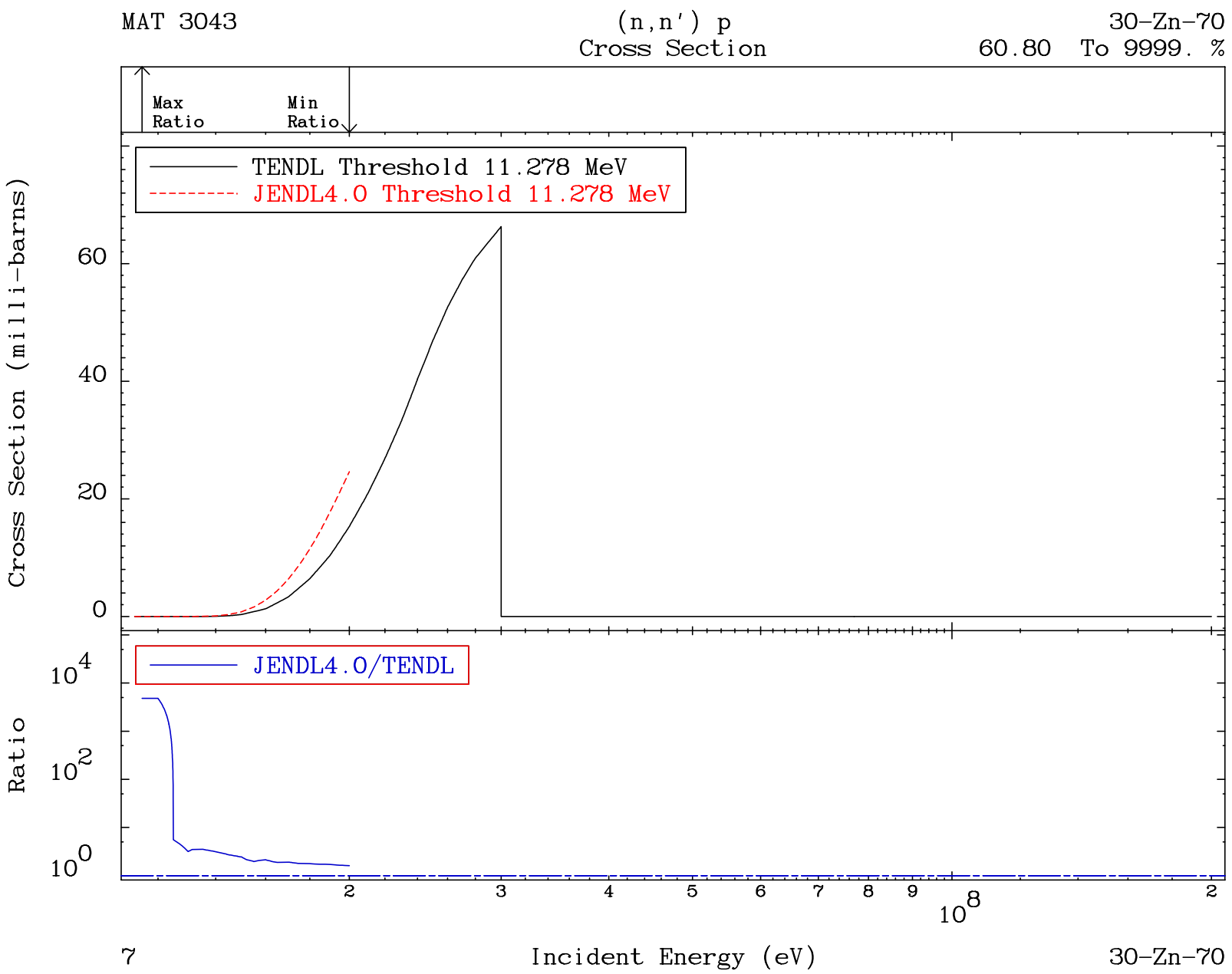

MAT 3043
Elastic
Cross Section
30-Zn-70
-99.80 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
30-Zn-70

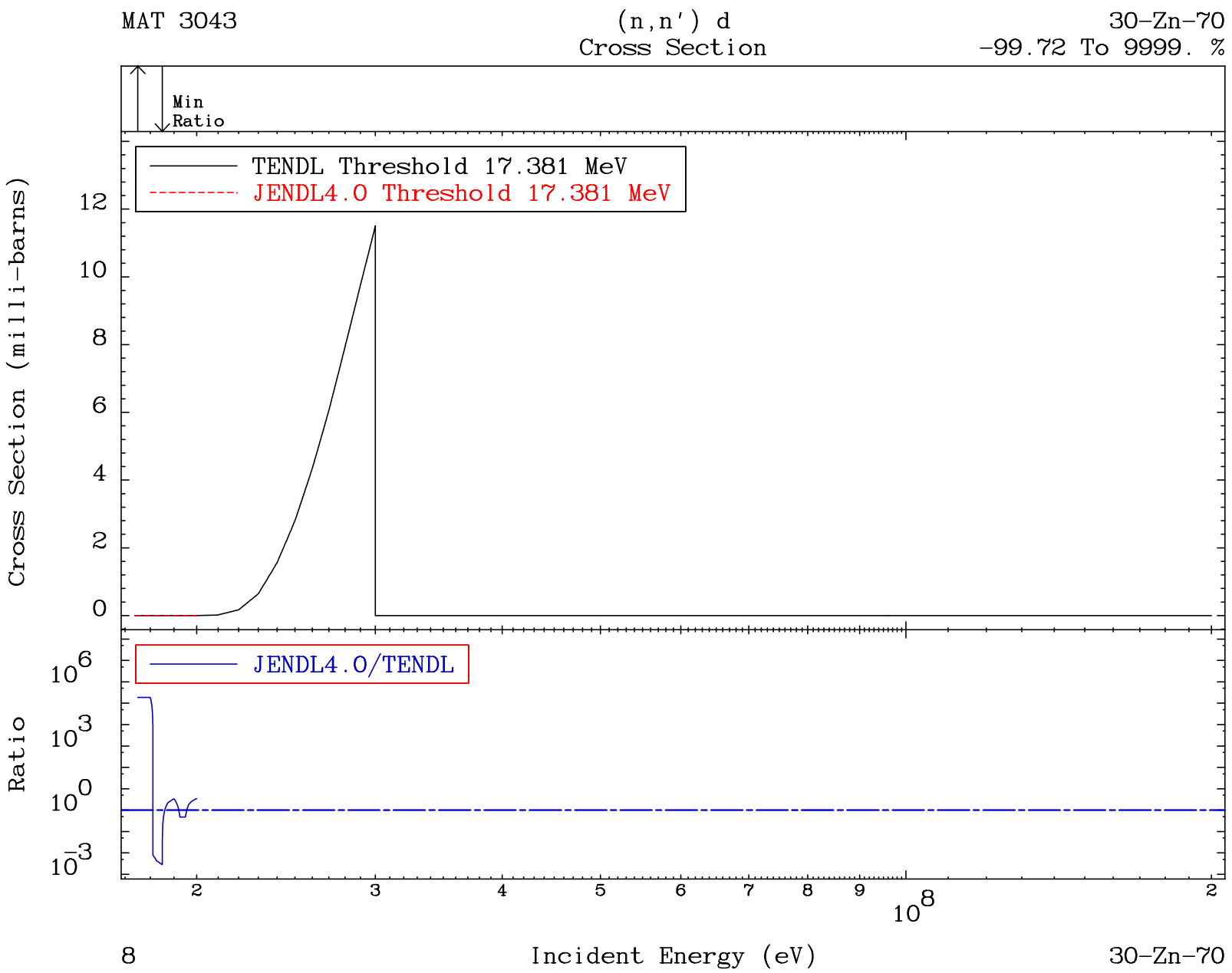

MAT 3043
Inelastic
Cross Section
30-Zn-70
-22.09 To 22.99 %
Max
Ratio
Min
Ratio
TENDL Threshold 897.67 keV
JENDL4.0 Threshold 105.04 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
1.2
1.0
0.8
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
30-Zn-70

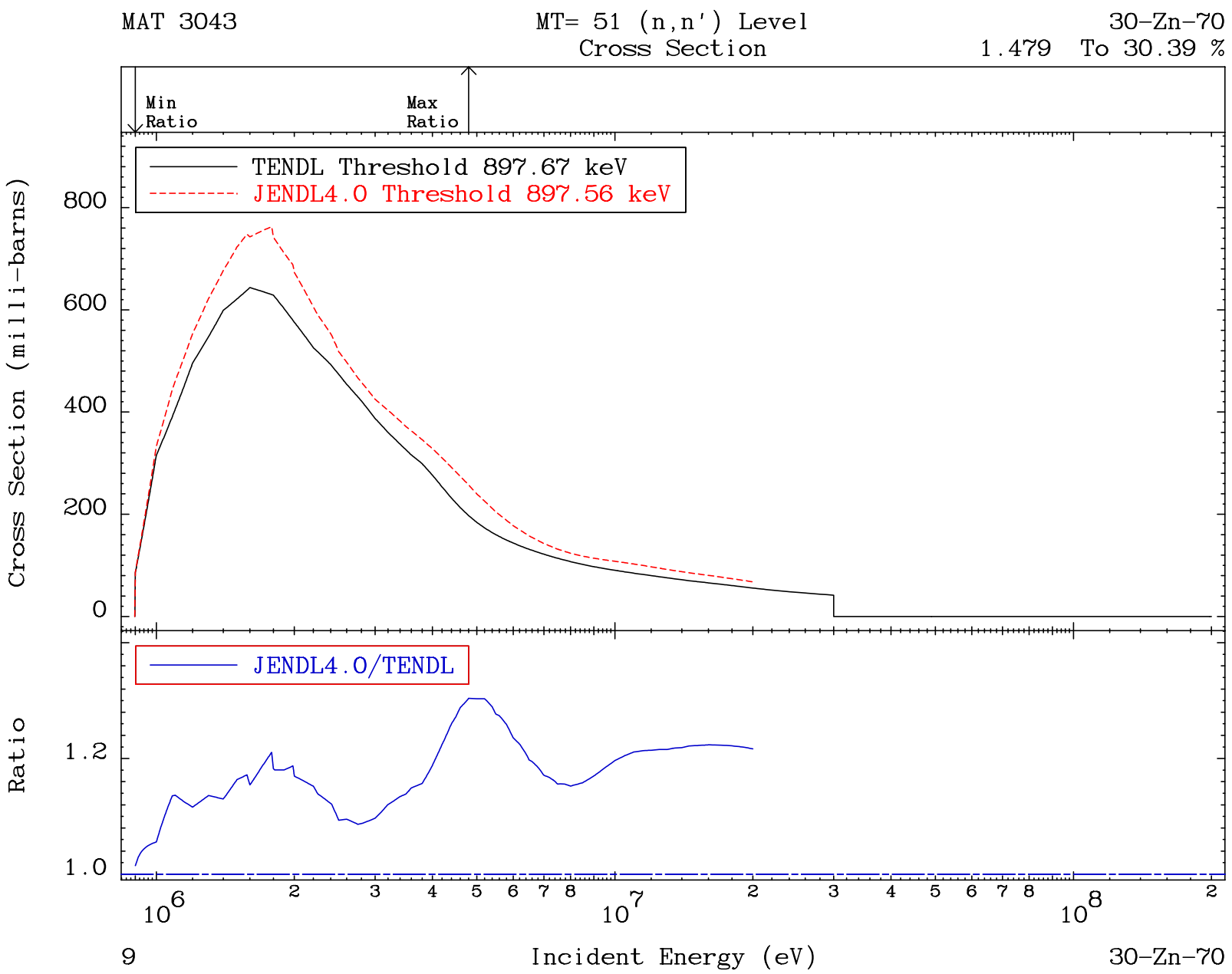

MAT 3043
(n,2n)
Cross Section
30-Zn-70
-31.67 To 17.09 %
Max
Ratio
TENDL Threshold 9.3511 MeV
JENDL4.0 Threshold 9.3511 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
30-Zn-70

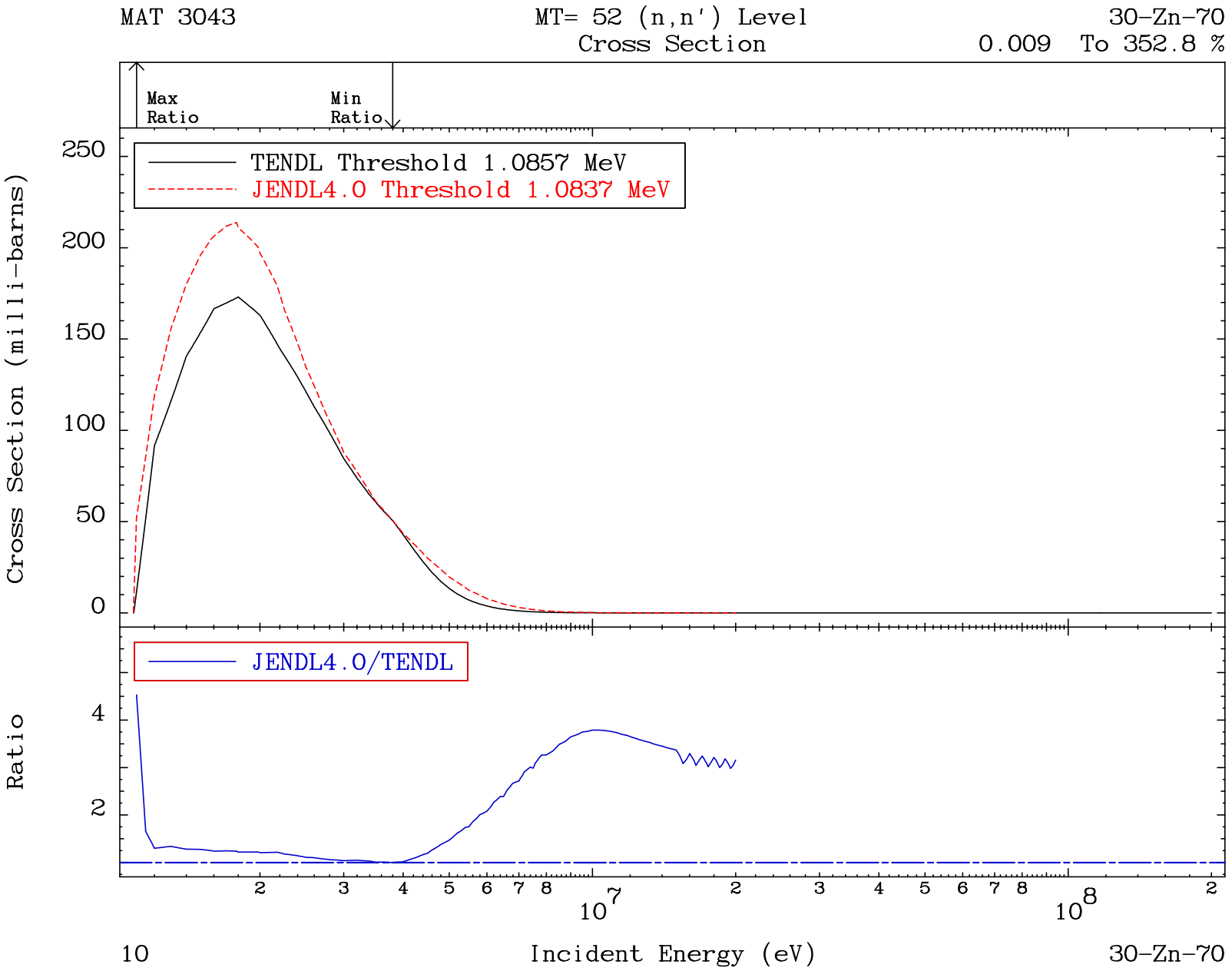

MAT 3043
(n,3n)
Cross Section
30-Zn-70
-76.23 To 1937. %
Min
Ratio
TENDL Threshold 15.927 MeV
JENDL4.0 Threshold 15.927 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
30-Zn-70

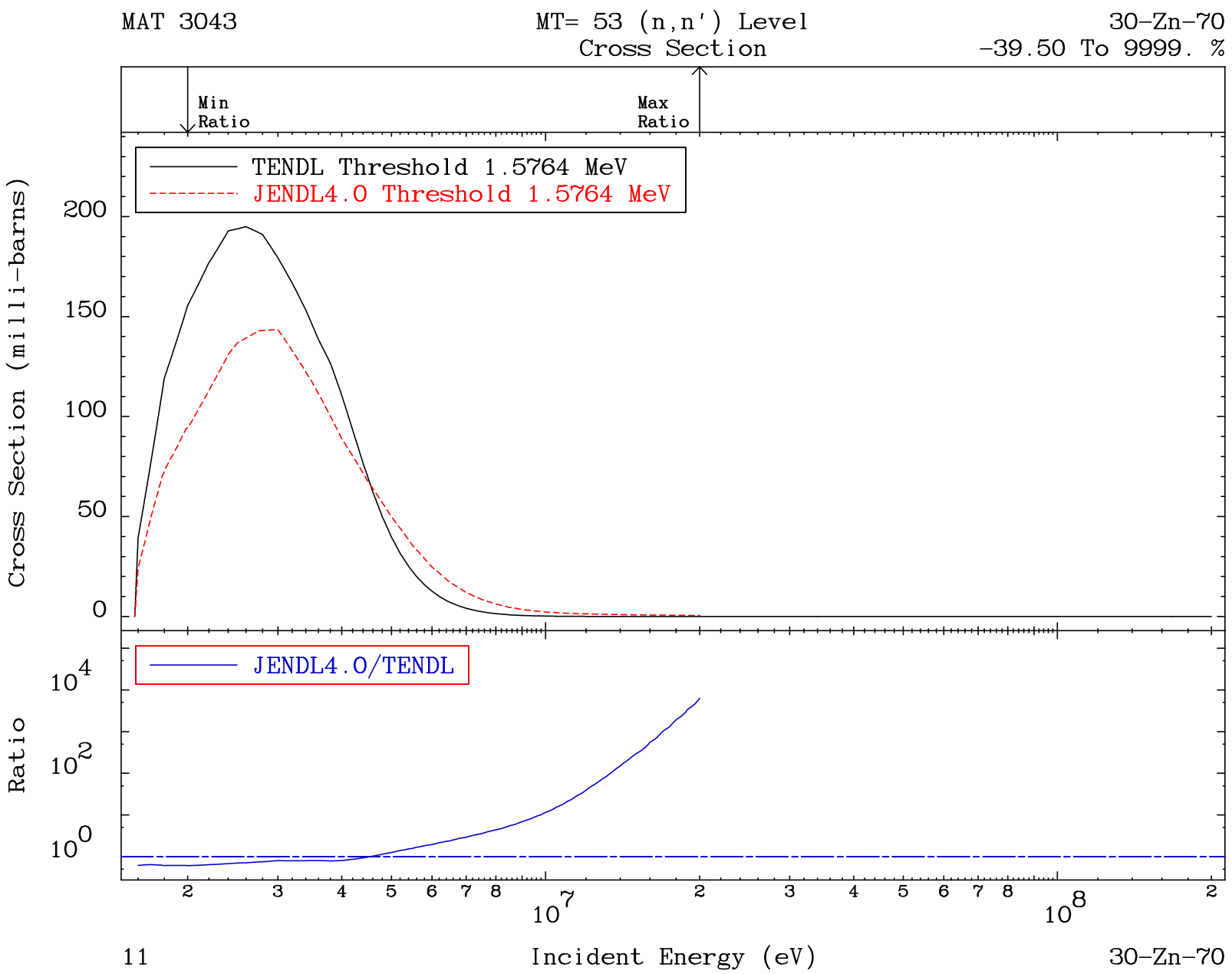

MAT 3043
(n,n') α
Cross Section
30-Zn-70
65.85 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.0697 MeV
JENDL4.0 Threshold 6.0697 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^6
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
30-Zn-70

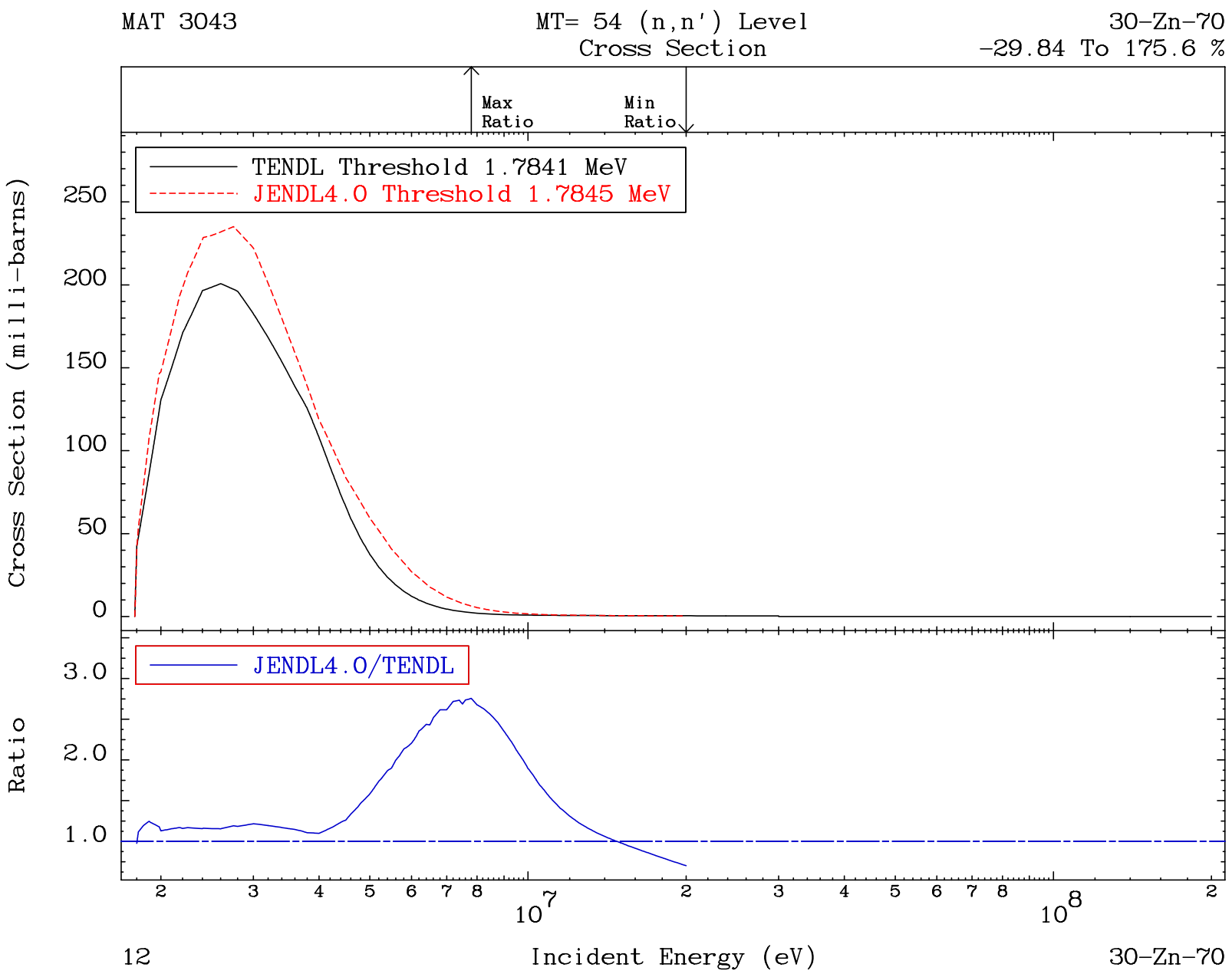

MAT 3043
(n,n') p
Cross Section
30-Zn-70
60.80 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.278 MeV
JENDL4.0 Threshold 11.278 MeV
Cross Section (milli-barns)
60
40
20
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
30-Zn-70

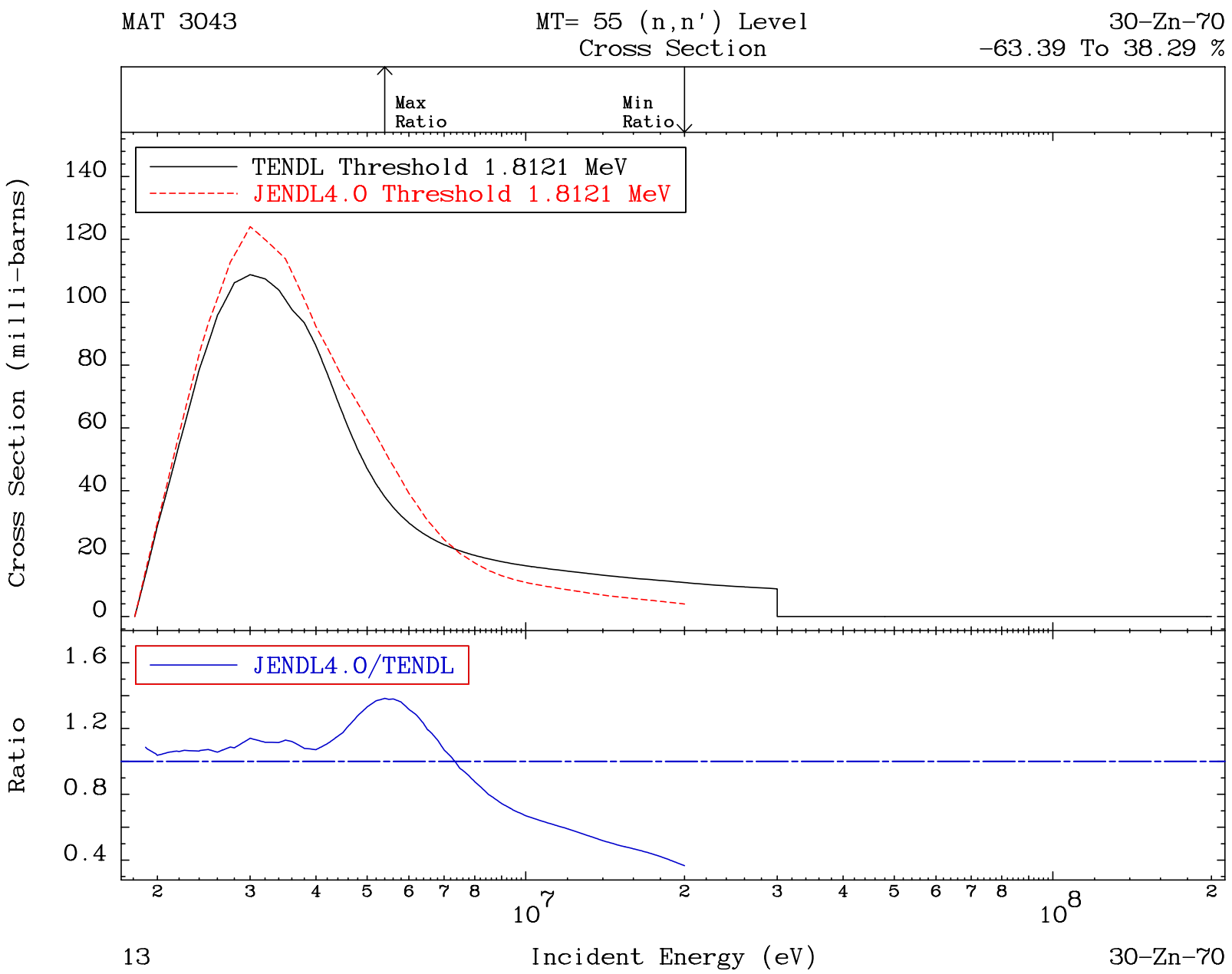

MAT 3043
(n,n') d
Cross Section
30-Zn-70
-99.72 To 9999. %
Min
Ratio
TENDL Threshold 17.381 MeV
JENDL4.0 Threshold 17.381 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JENDL4.0/TENDL
Ratio
10^6
10^3
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
30-Zn-70

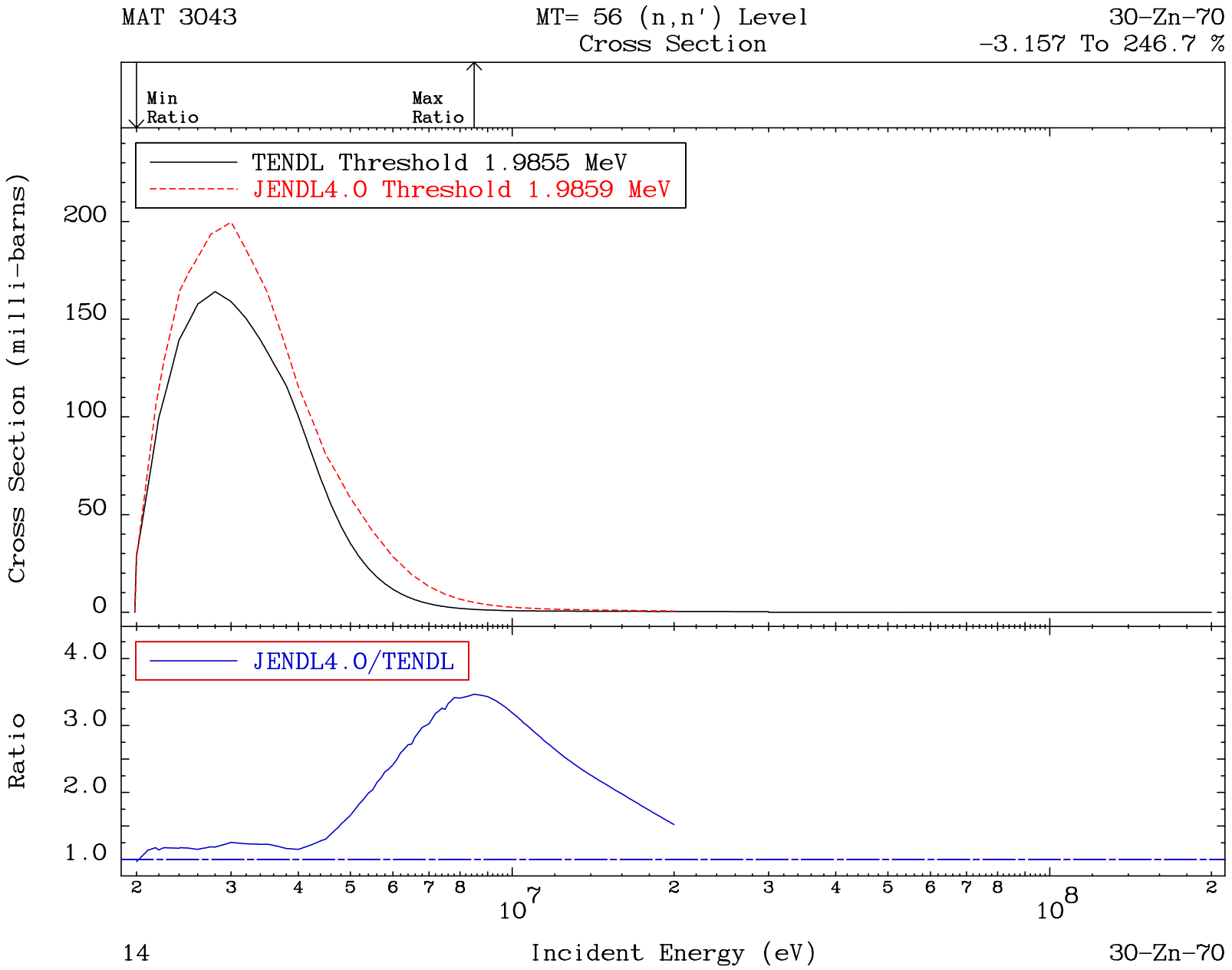

MAT 3043
MT= 51 (n,n') Level
Cross Section
30-Zn-70
1.479 To 30.39 %
Min Ratio
Max Ratio
TENDL Threshold 897.67 keV
JENDL4.0 Threshold 897.56 keV
Cross Section (milli-barns)
800
600
400
200
0
JENDL4.0/TENDL
Ratio
1.2
1.0
10^6
10^7
10^8
Incident Energy (eV)
9
30-Zn-70

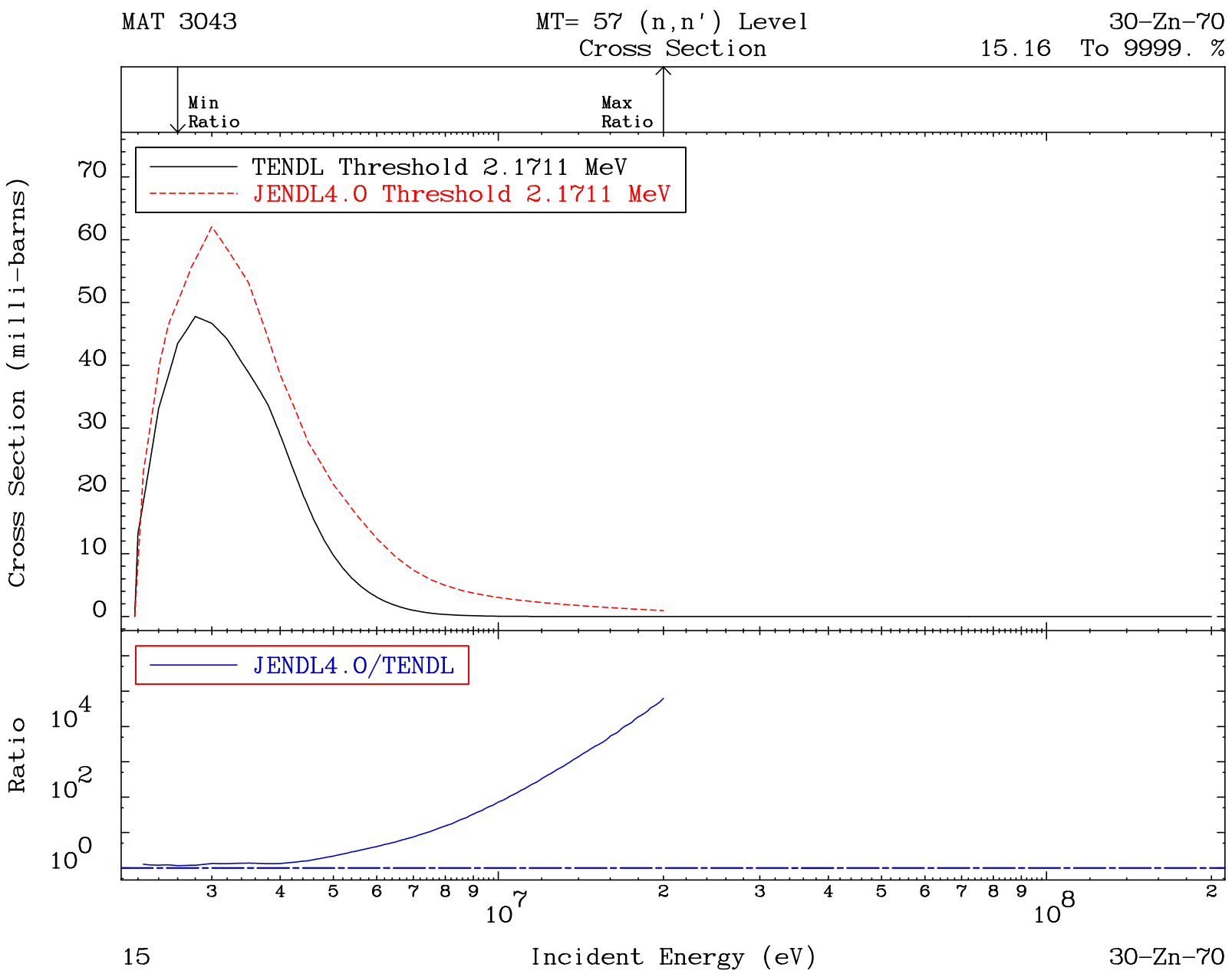

MAT 3043
MT= 52 (n,n') Level
Cross Section
30-Zn-70
0.009 To 352.8 %
Max Ratio
Min Ratio
TENDL Threshold 1.0857 MeV
JENDL4.0 Threshold 1.0837 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
4
2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
30-Zn-70

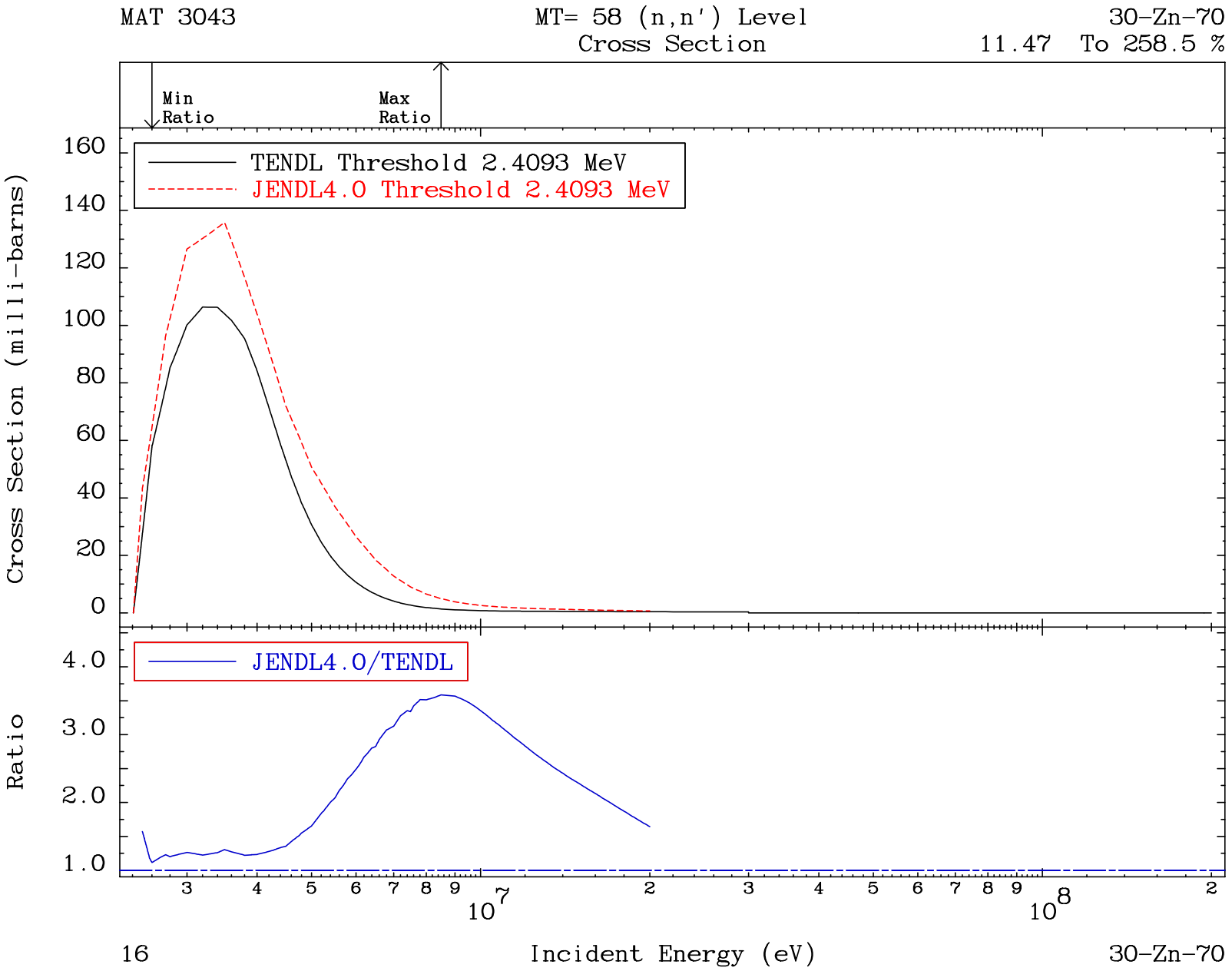

MAT 3043
MT= 53 (n,n') Level
Cross Section
30-Zn-70
-39.50 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5764 MeV
JENDL4.0 Threshold 1.5764 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
30-Zn-70

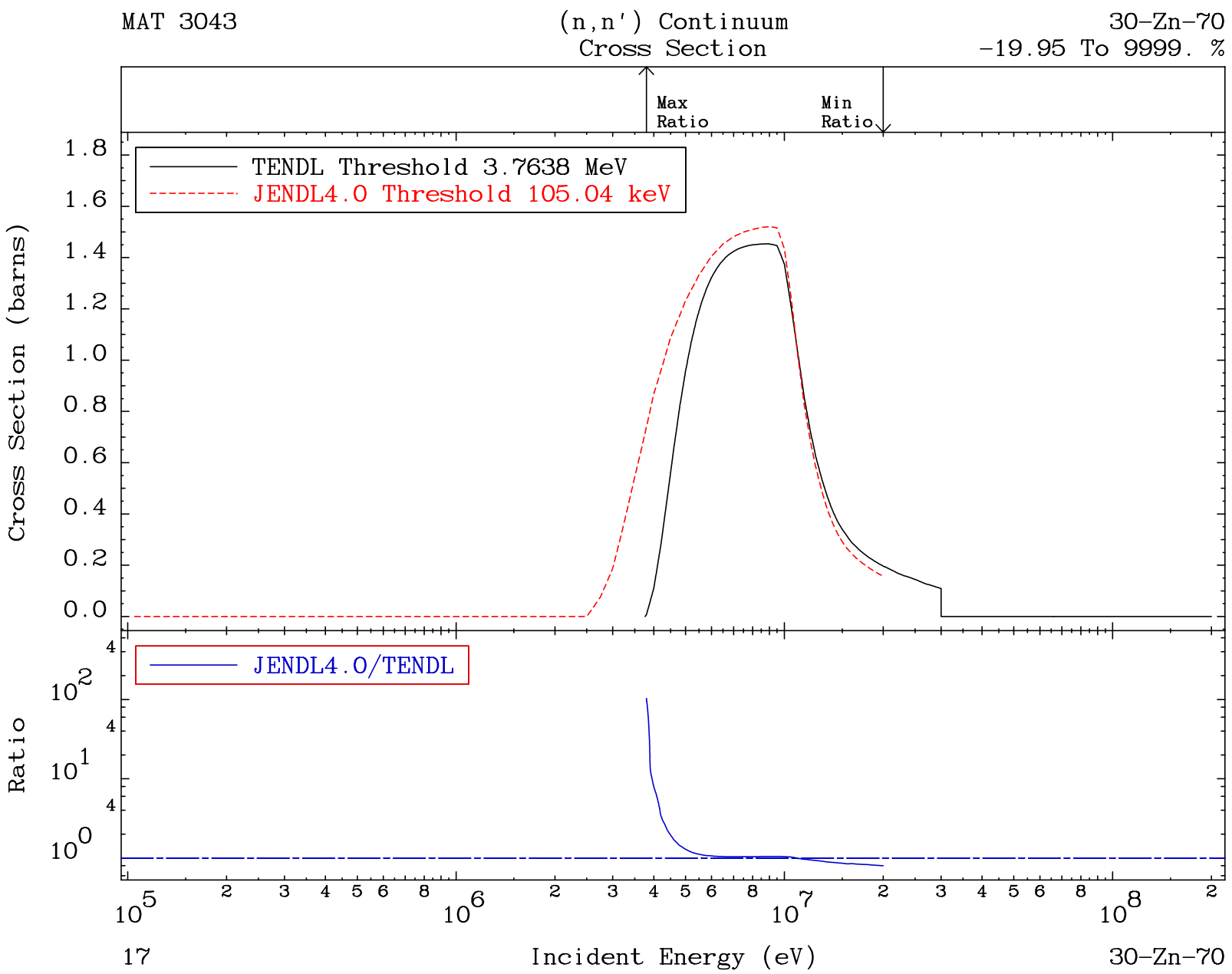

MAT 3043
MT= 54 (n,n') Level
Cross Section
30-Zn-70
-29.84 To 175.6 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.7841 MeV
JENDL4.0 Threshold 1.7845 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
30-Zn-70

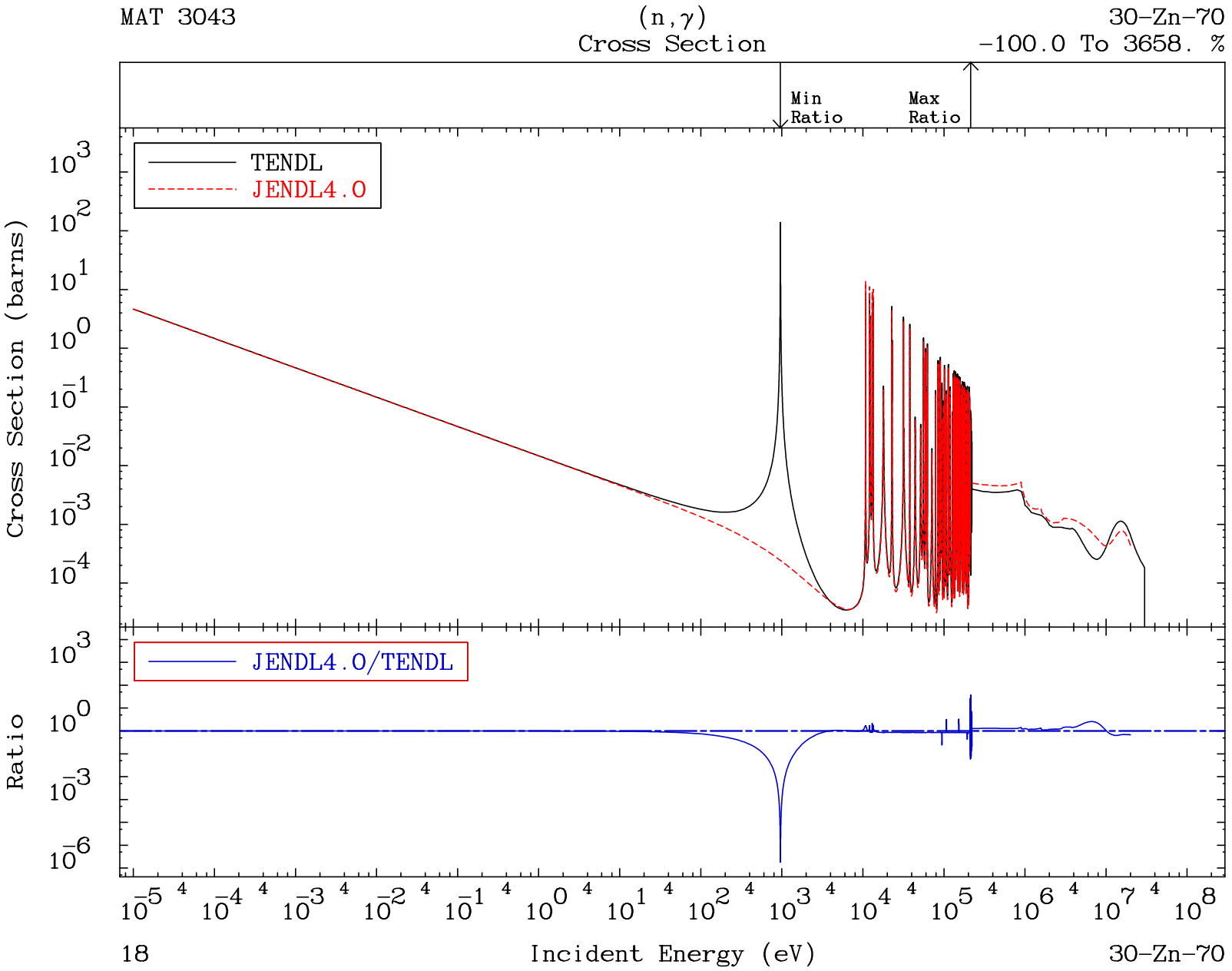

MAT 3043
MT= 55 (n,n') Level
Cross Section
30-Zn-70
-63.39 To 38.29 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.8121 MeV
JENDL4.0 Threshold 1.8121 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
30-Zn-70

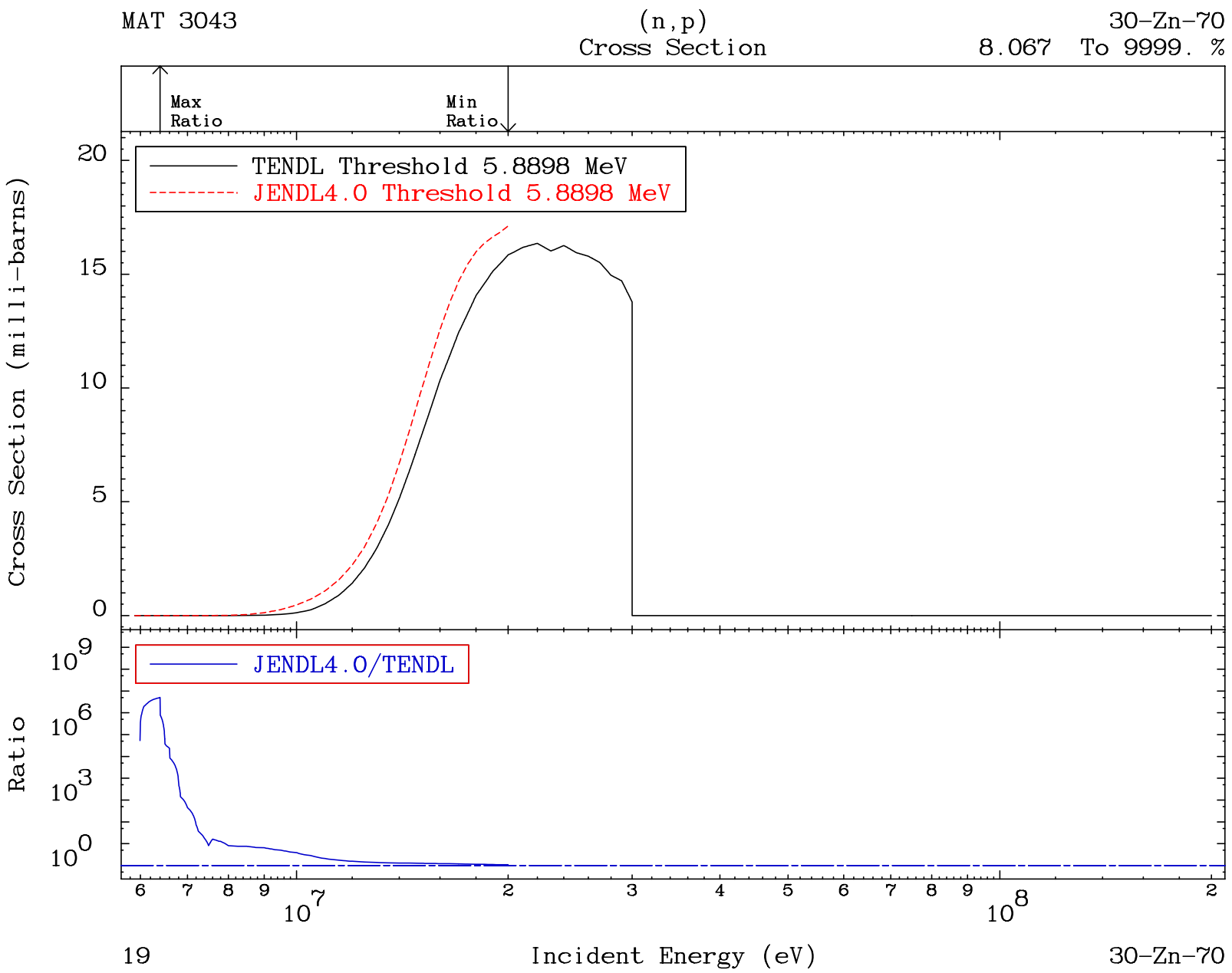

MAT 3043
MT= 56 (n,n') Level
Cross Section
30-Zn-70
-3.157 To 246.7 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.9855 MeV
JENDL4.0 Threshold 1.9859 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
30-Zn-70

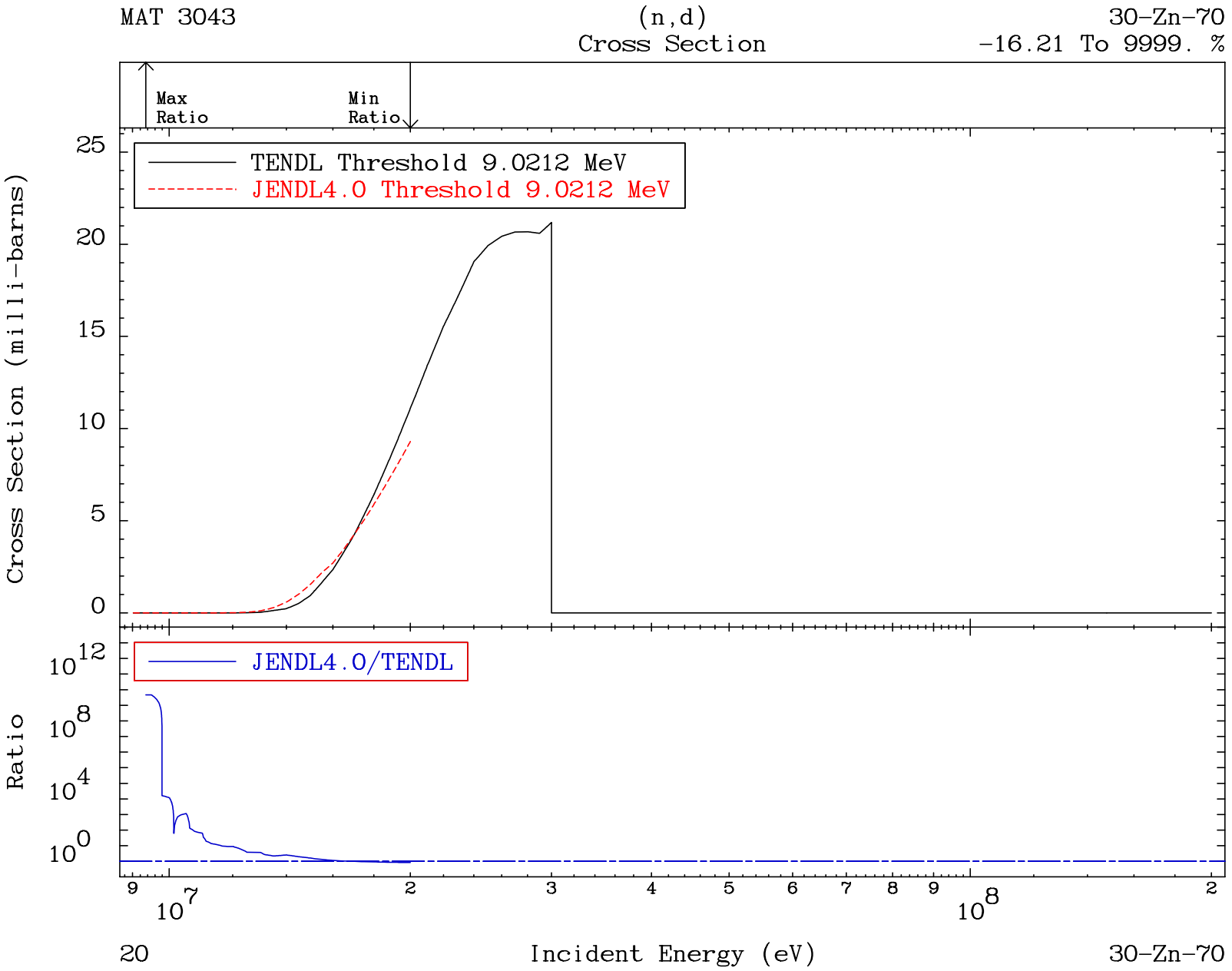

MAT 3043
MT= 57 (n,n') Level
Cross Section
30-Zn-70
15.16 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.1711 MeV
JENDL4.0 Threshold 2.1711 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
15
30-Zn-70

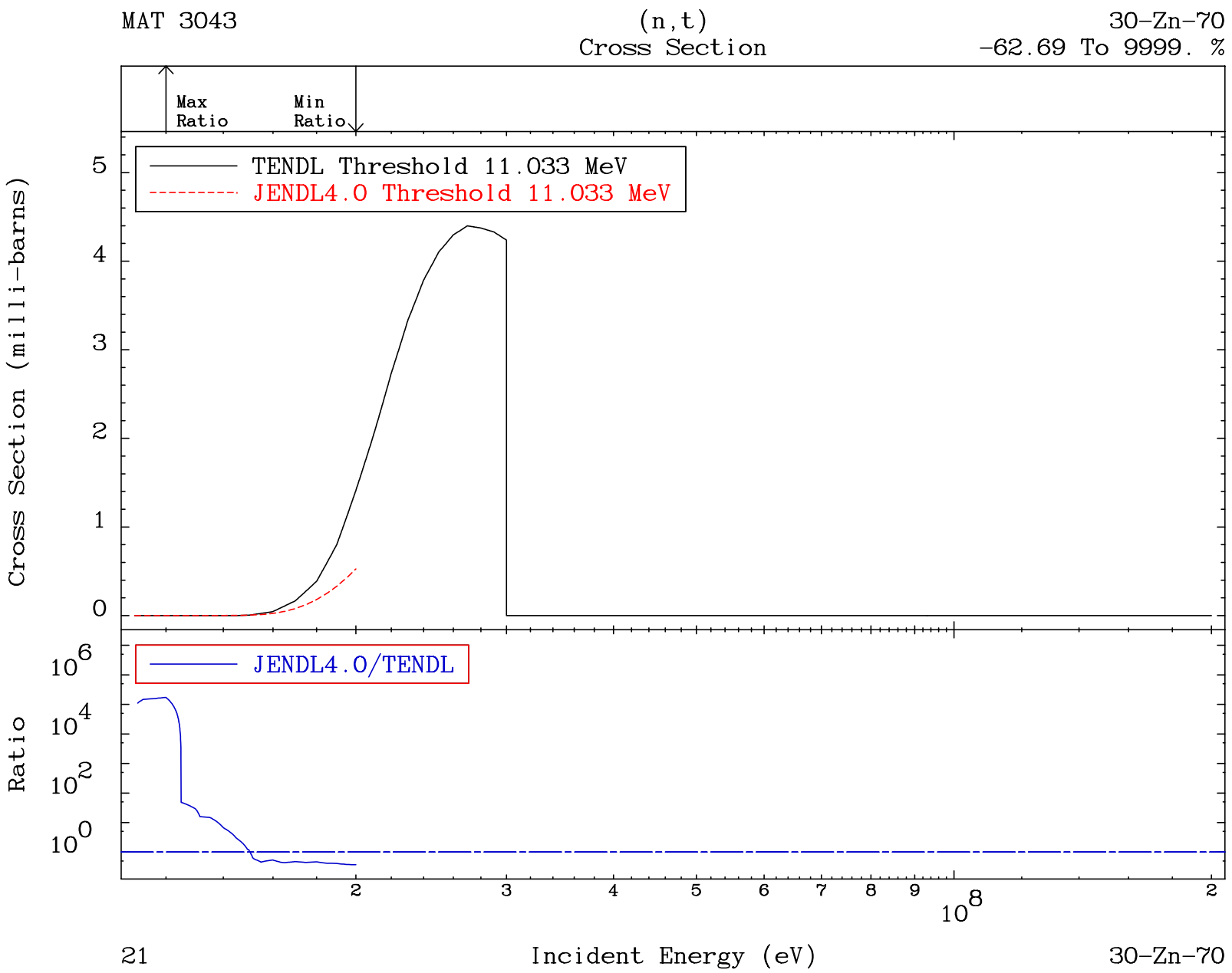

MAT 3043
MT= 58 (n,n') Level
Cross Section
30-Zn-70
11.47 To 258.5 %
Min Ratio
Max Ratio
TENDL Threshold 2.4093 MeV
JENDL4.0 Threshold 2.4093 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
4.0
3.0
2.0
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
30-Zn-70

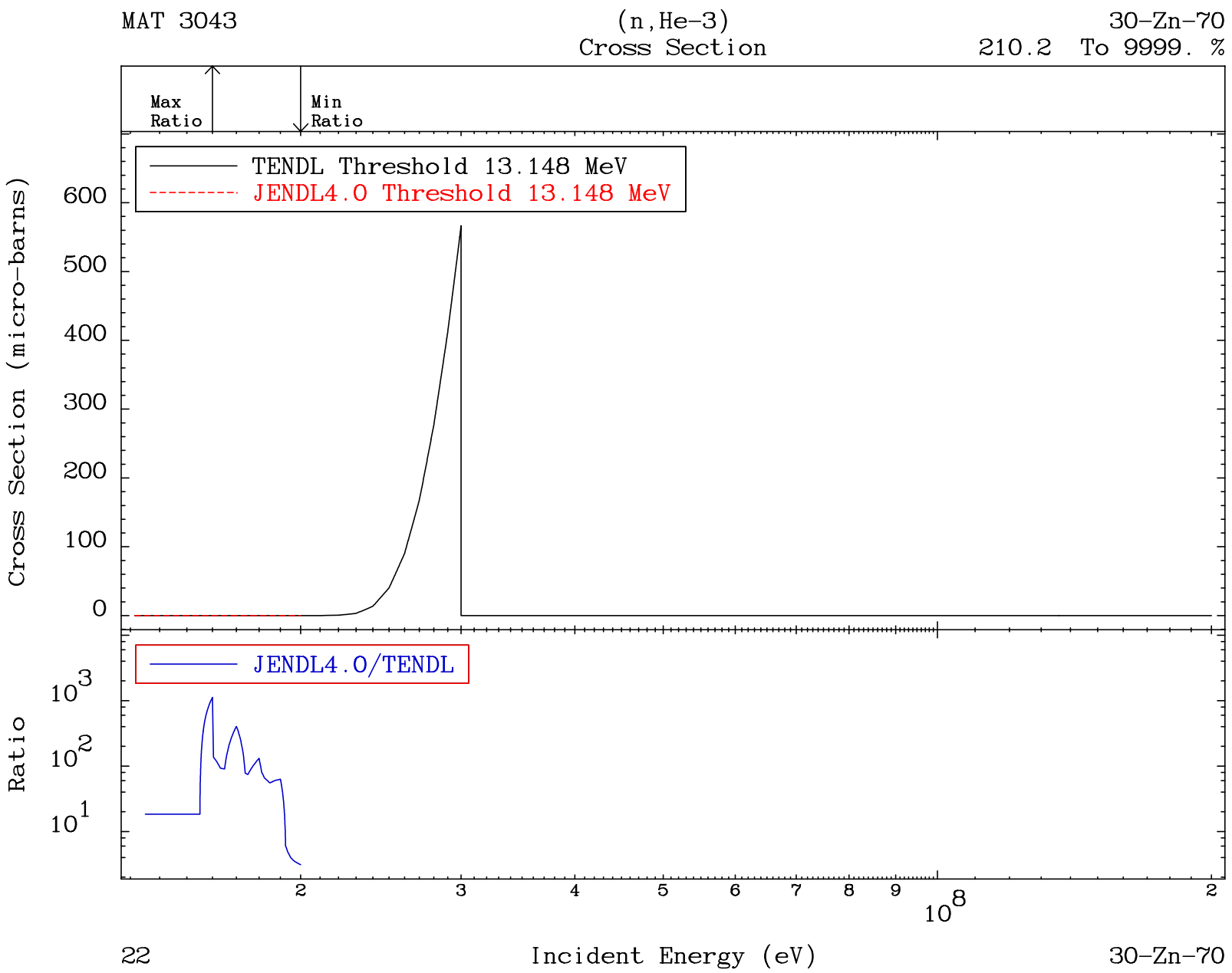

MAT 3043
(n,n') Continuum
Cross Section
30-Zn-70
-19.95 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 3.7638 MeV
JENDL4.0 Threshold 105.04 keV
Cross Section (barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
10^5
10^6
10^7
10^8
Incident Energy (eV)
17
30-Zn-70

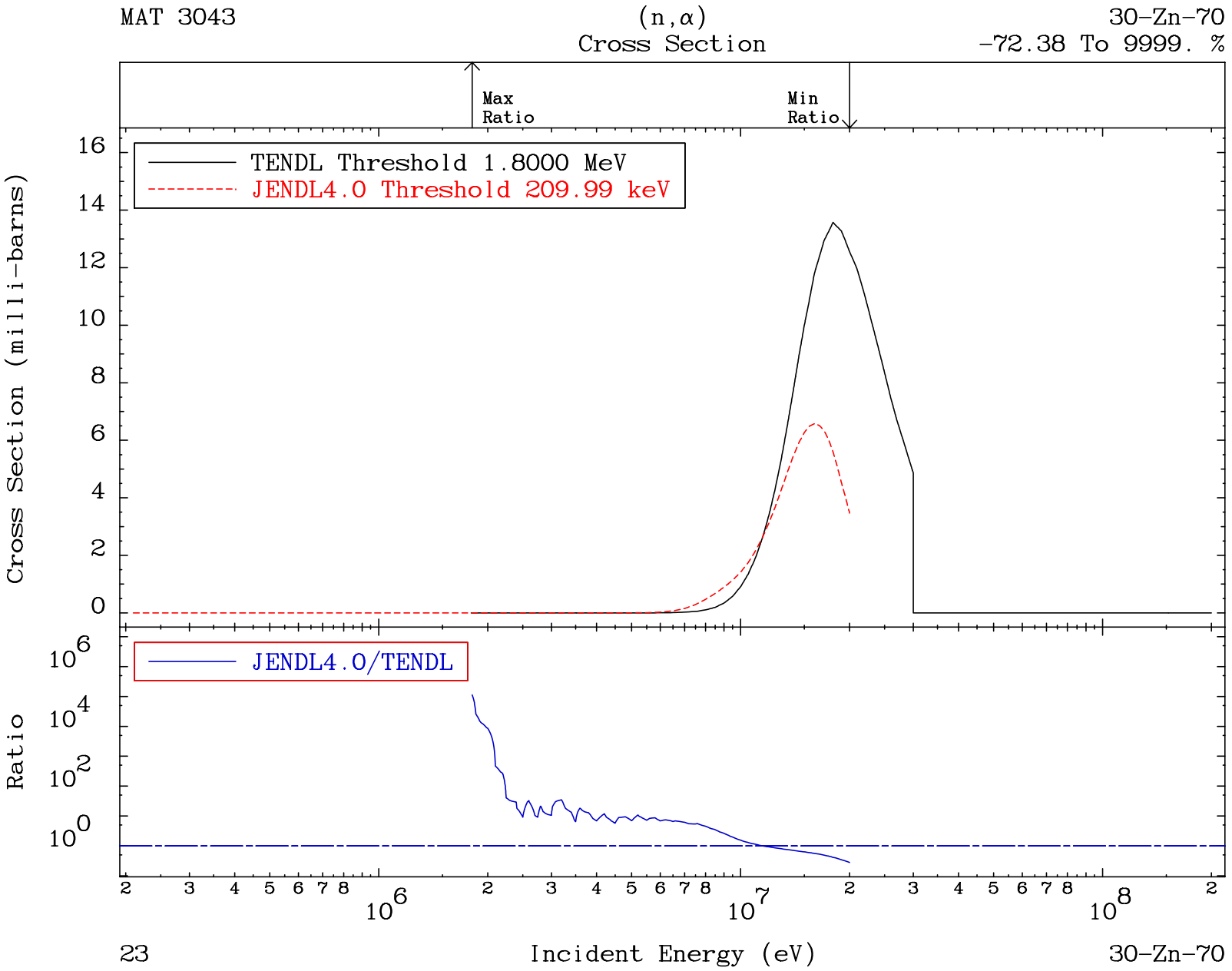

MAT 3043
(n,γ)
Cross Section
30-Zn-70
-100.0 To 3658. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
18
30-Zn-70

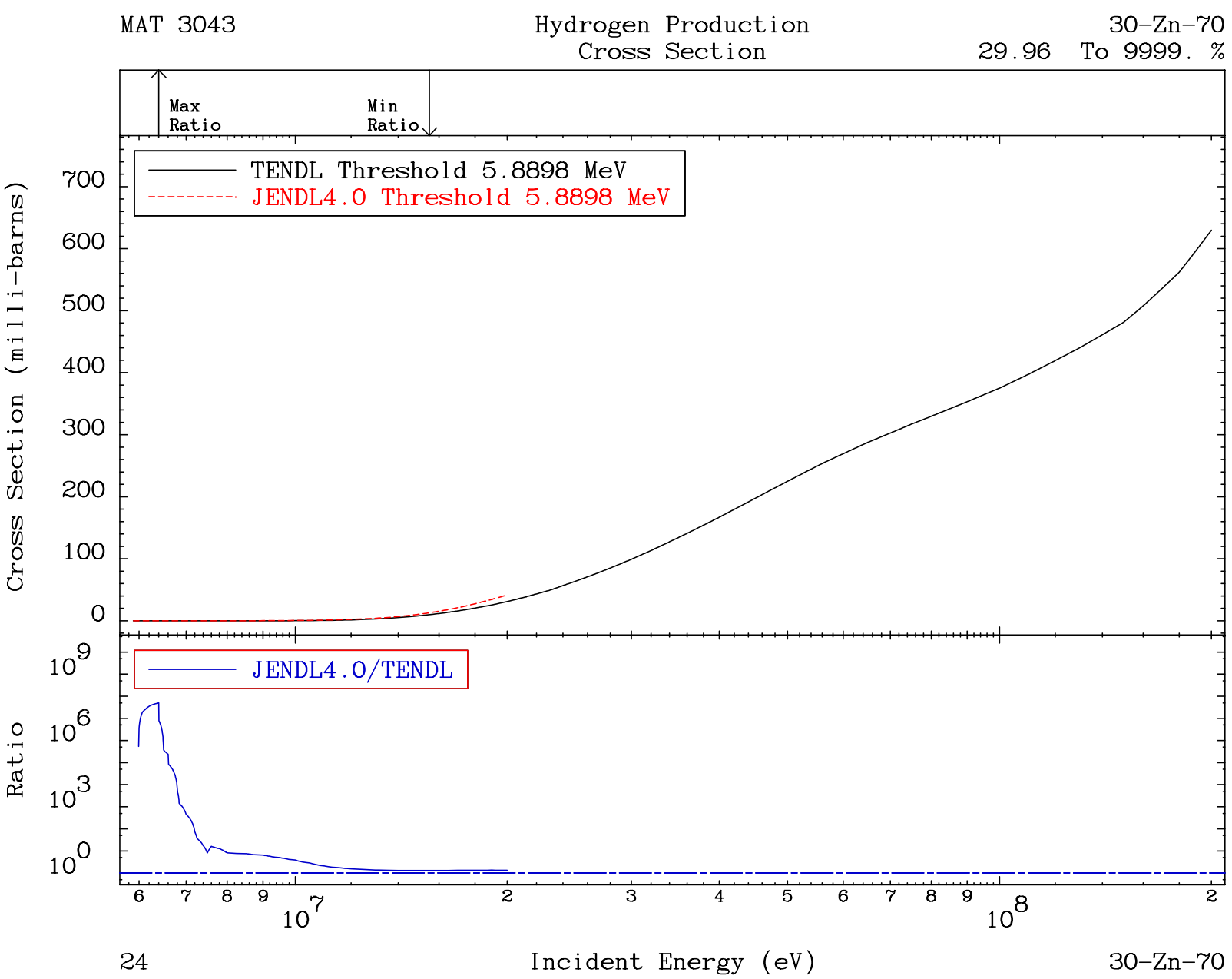

MAT 3043
(n,p)
Cross Section
30-Zn-70
8.067 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.8898 MeV
JENDL4.0 Threshold 5.8898 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^9
10^6
10^3
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
30-Zn-70

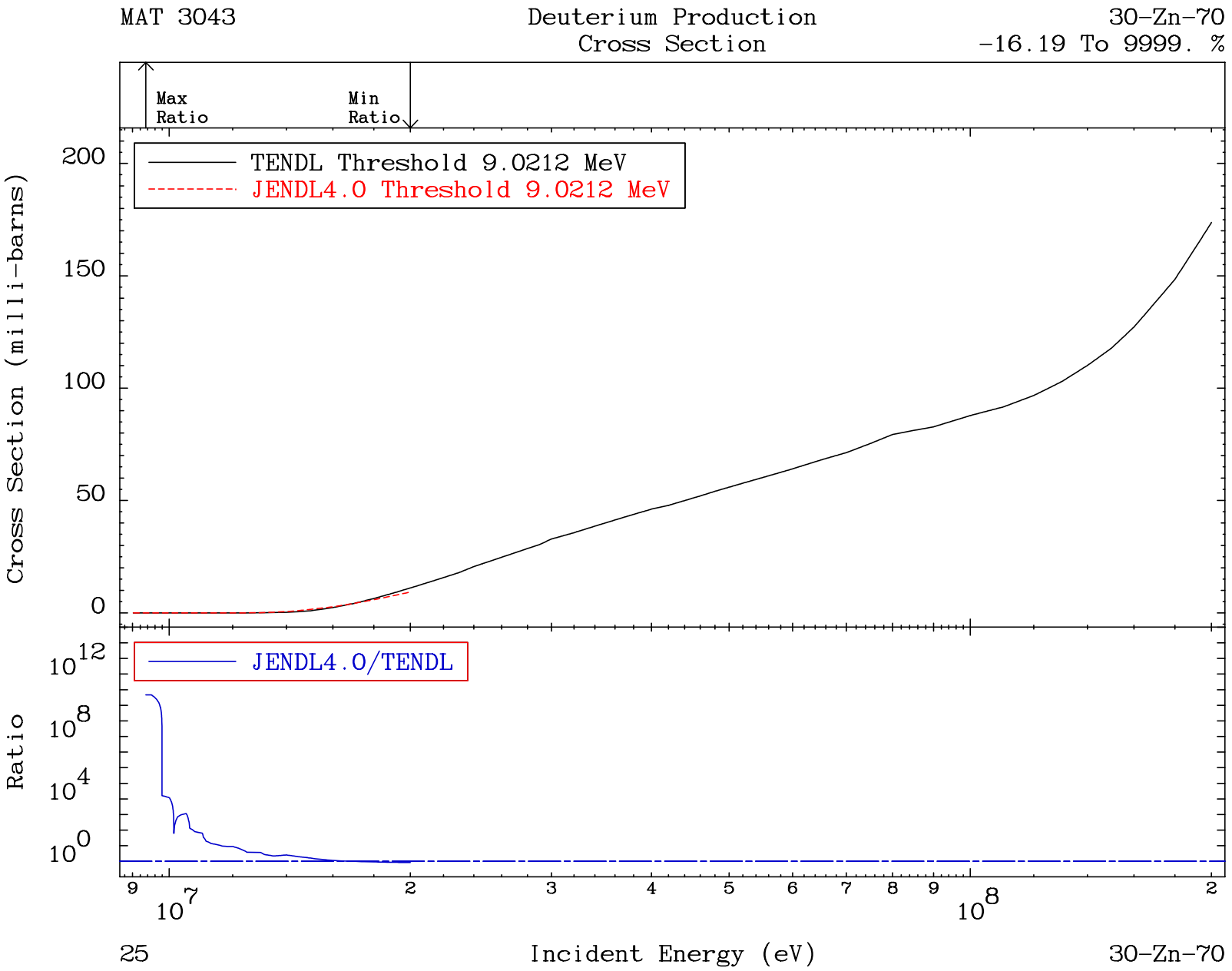

MAT 3043
(n,d)
Cross Section
30-Zn-70
-16.21 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.0212 MeV
JENDL4.0 Threshold 9.0212 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^12
10^8
10^4
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
30-Zn-70

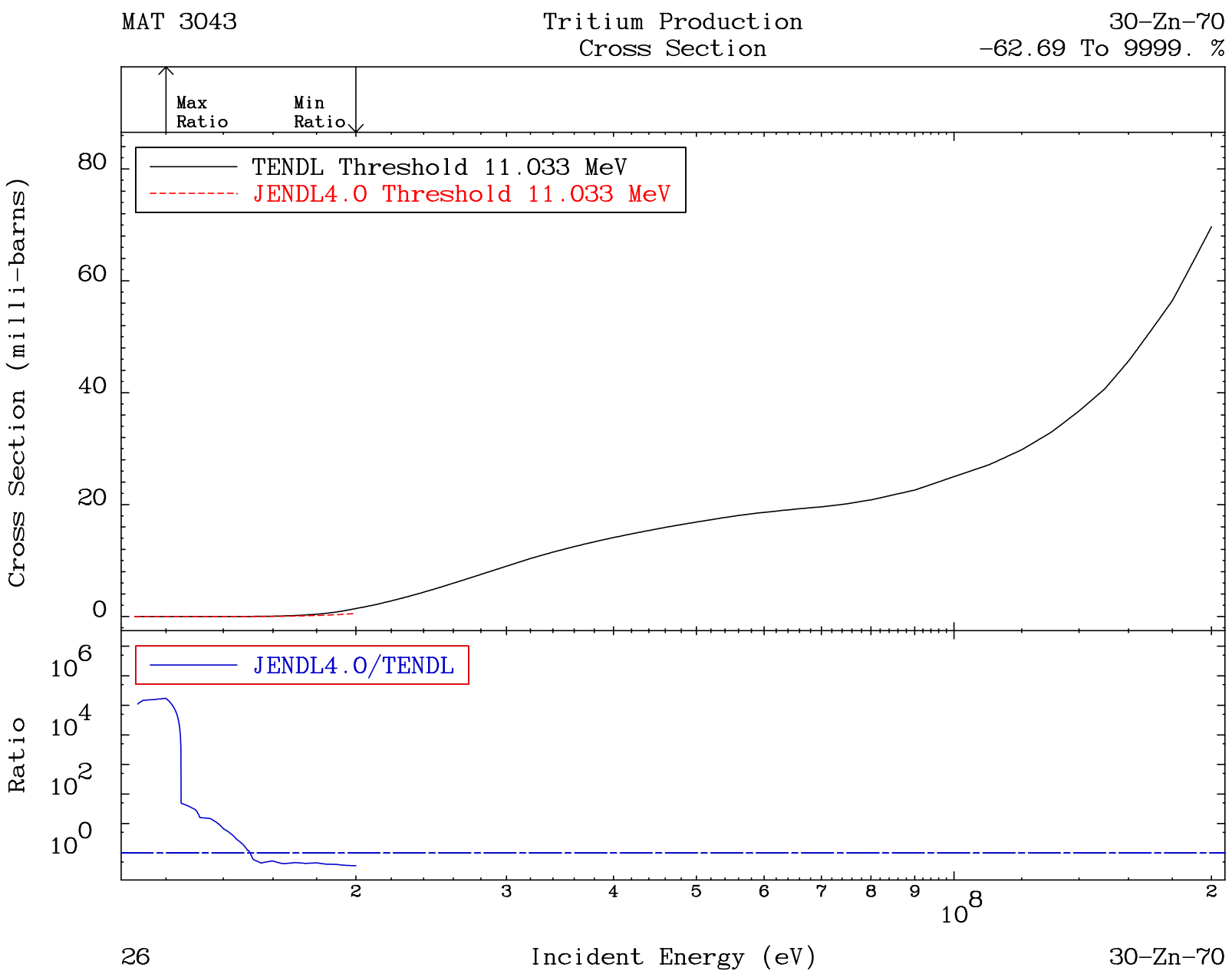

MAT 3043
(n,t)
Cross Section
30-Zn-70
-62.69 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.033 MeV
JENDL4.0 Threshold 11.033 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
21
30-Zn-70

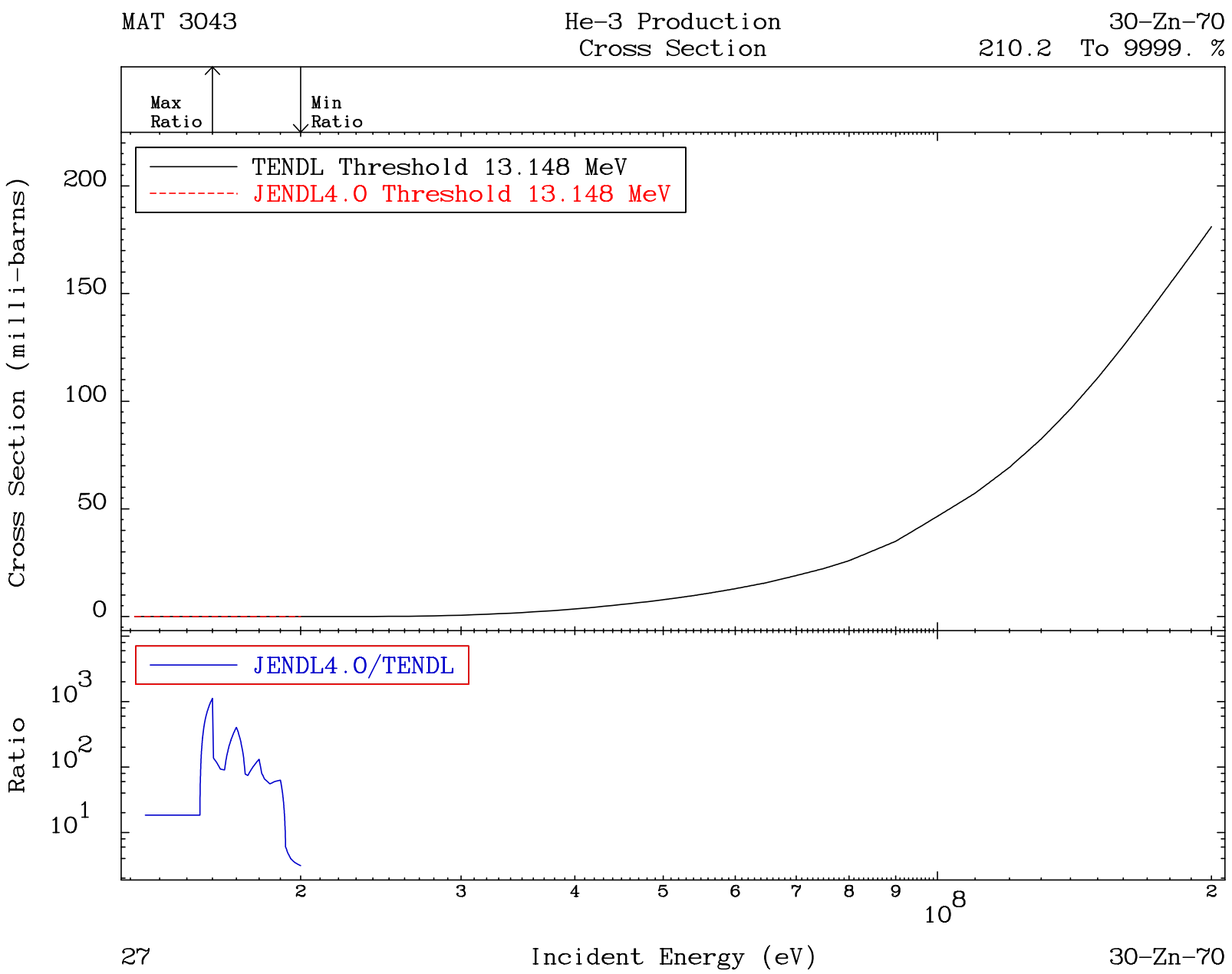

MAT 3043
(n,He-3)
Cross Section
30-Zn-70
210.2 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.148 MeV
JENDL4.0 Threshold 13.148 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^3
10^2
10^1
2
3
4
5
6
7
8
9
10^8
2
22
Incident Energy (eV)
30-Zn-70

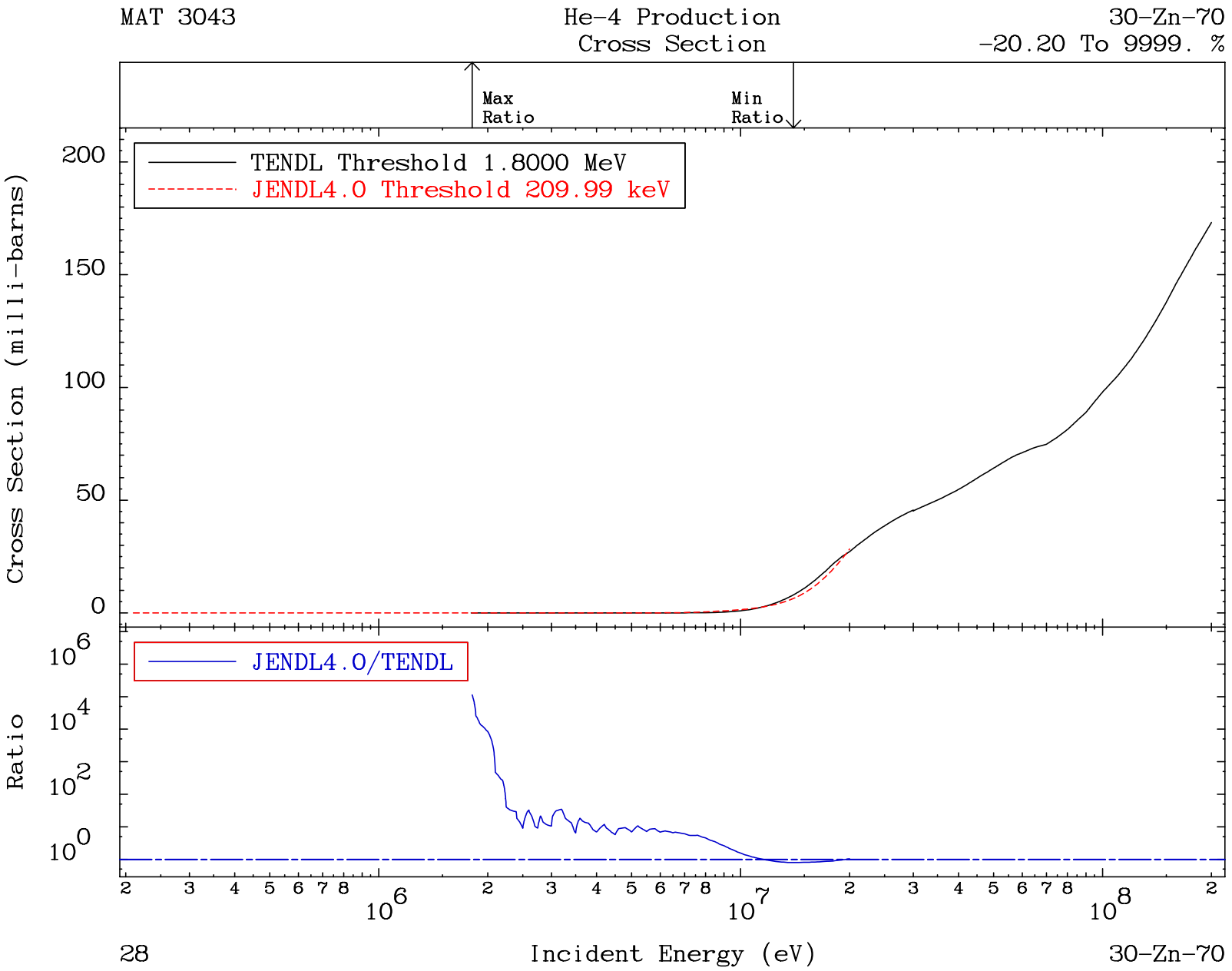

MAT 3043
(n,α)
Cross Section
30-Zn-70
-72.38 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8000 MeV
JENDL4.0 Threshold 209.99 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
23
30-Zn-70

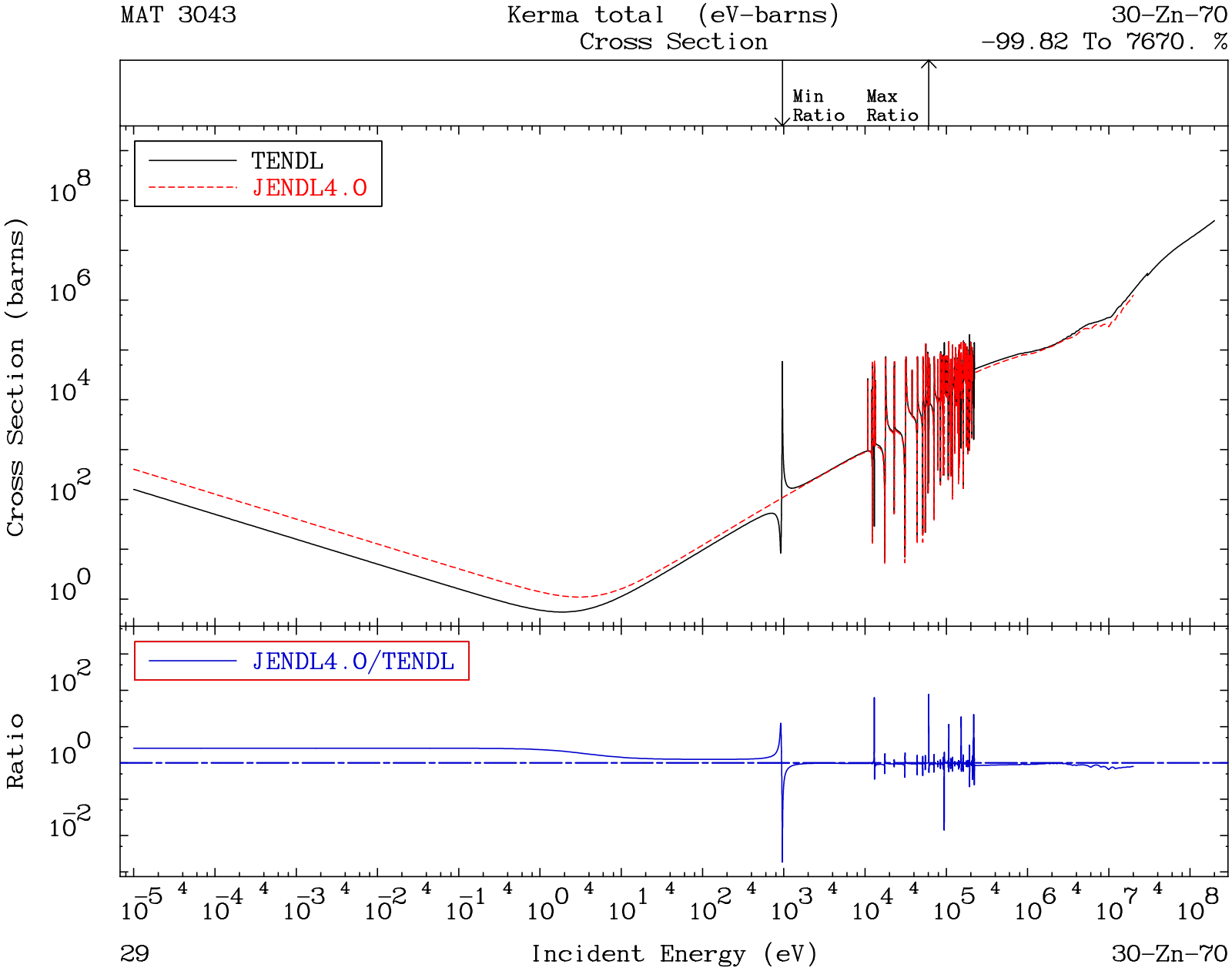

MAT 3043
Hydrogen Production
Cross Section
30-Zn-70
29.96 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.8898 MeV
JENDL4.0 Threshold 5.8898 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^9
10^6
10^3
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
30-Zn-70

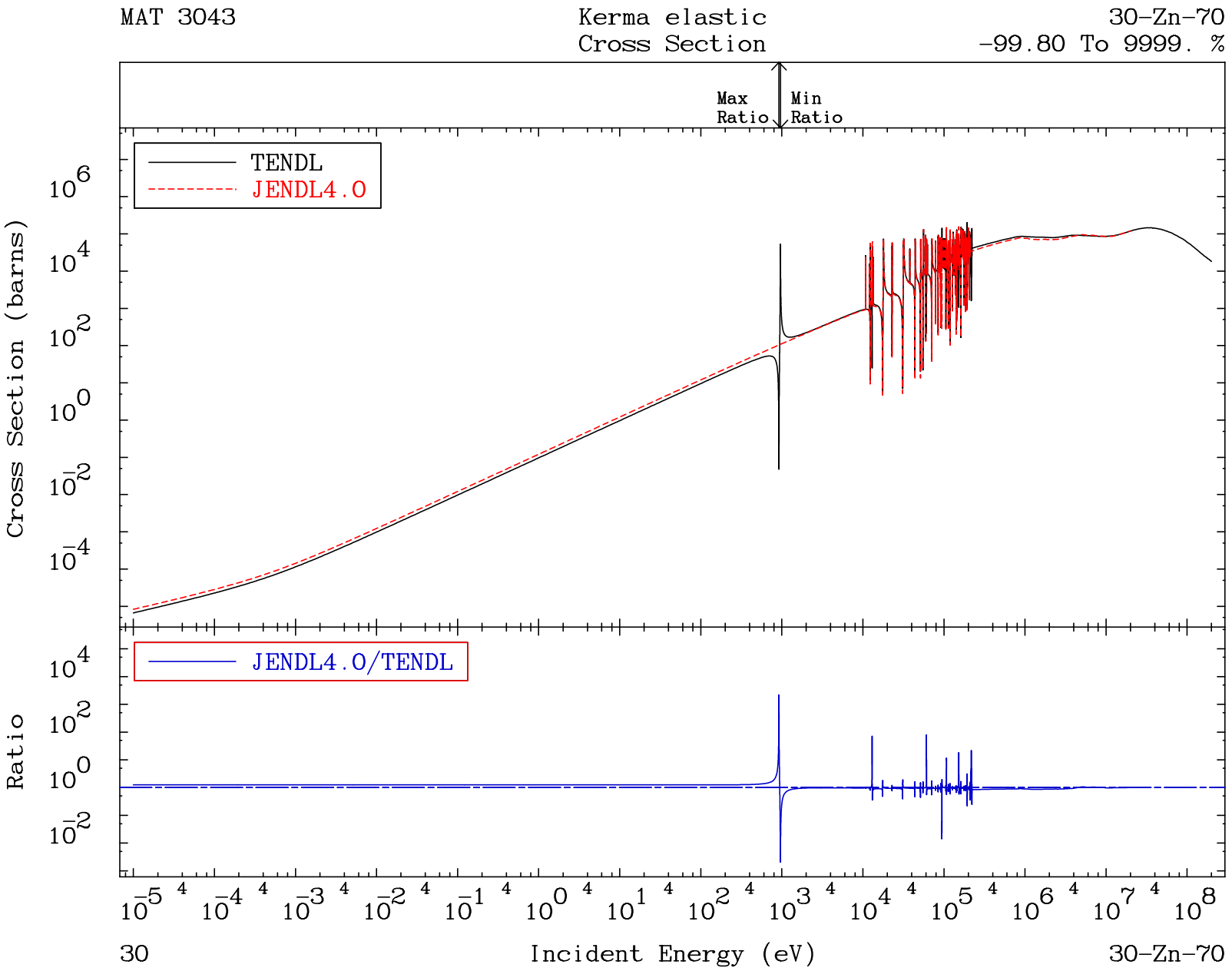

MAT 3043
Deuterium Production
Cross Section
30-Zn-70
-16.19 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.0212 MeV
JENDL4.0 Threshold 9.0212 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^12
10^8
10^4
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
30-Zn-70

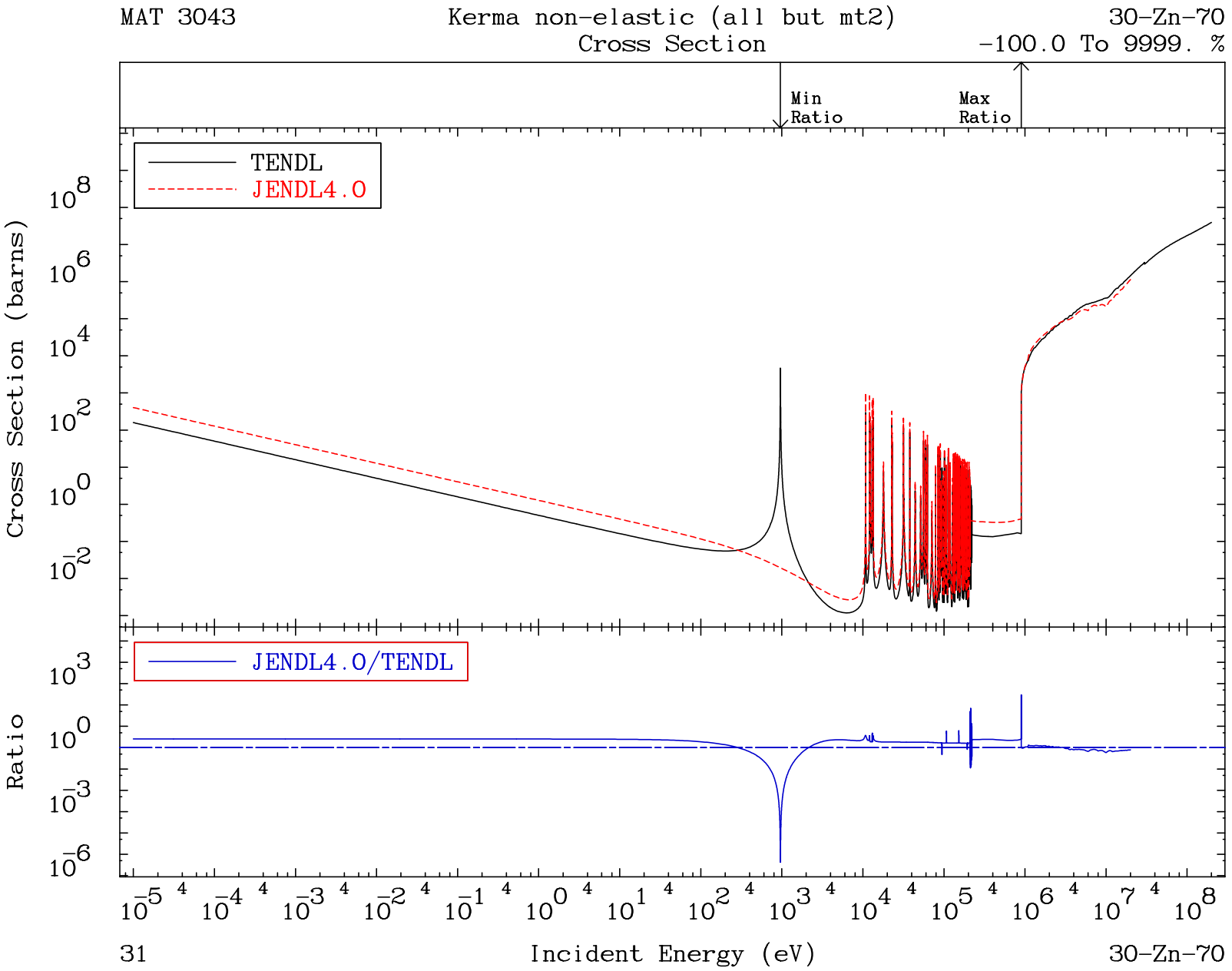

MAT 3043
Tritium Production
Cross Section
30-Zn-70
-62.69 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.033 MeV
JENDL4.0 Threshold 11.033 MeV
Cross Section (milli-barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^6
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
30-Zn-70

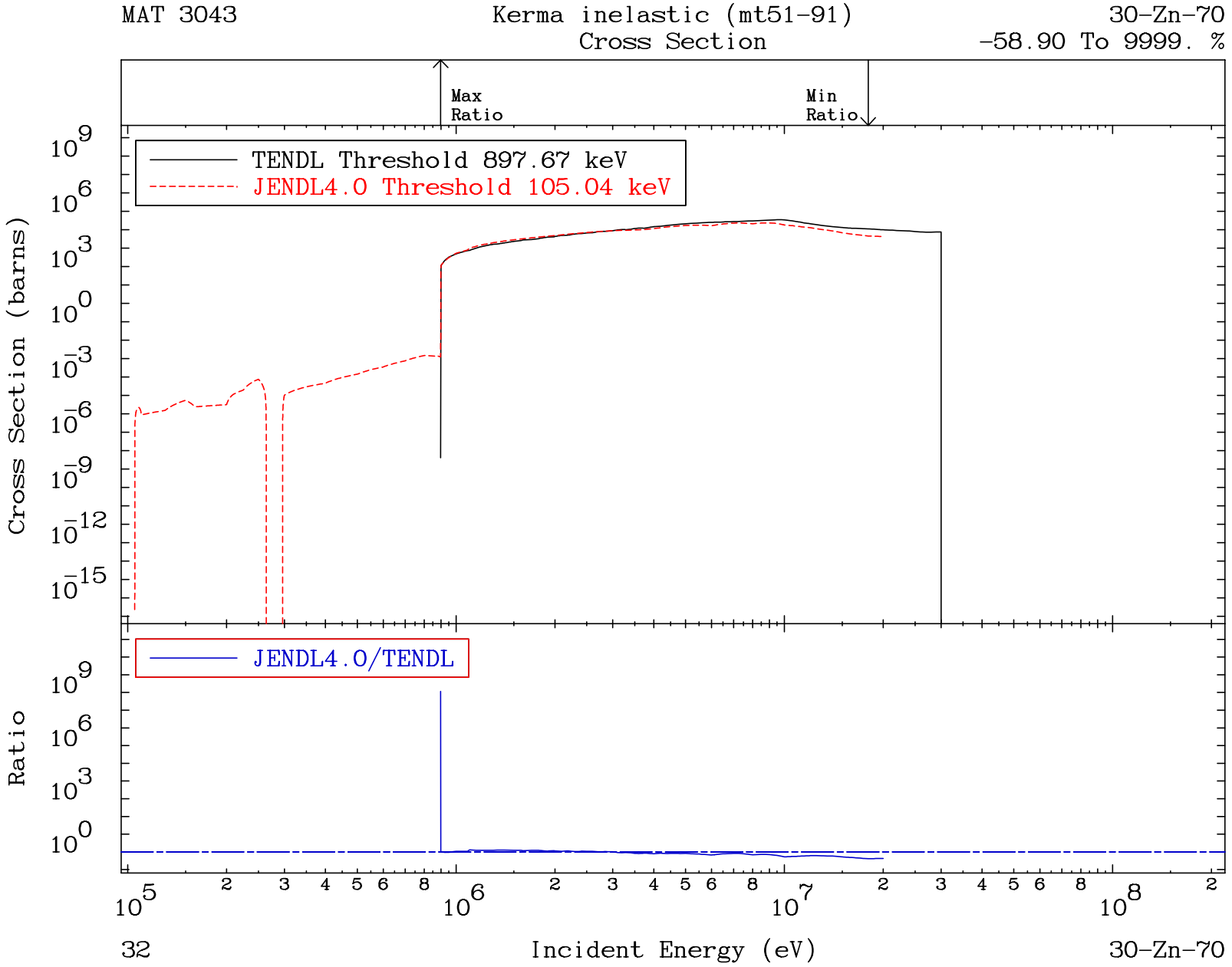

MAT 3043
He-3 Production
Cross Section
30-Zn-70
210.2 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.148 MeV
JENDL4.0 Threshold 13.148 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^3
10^2
10^1
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
30-Zn-70

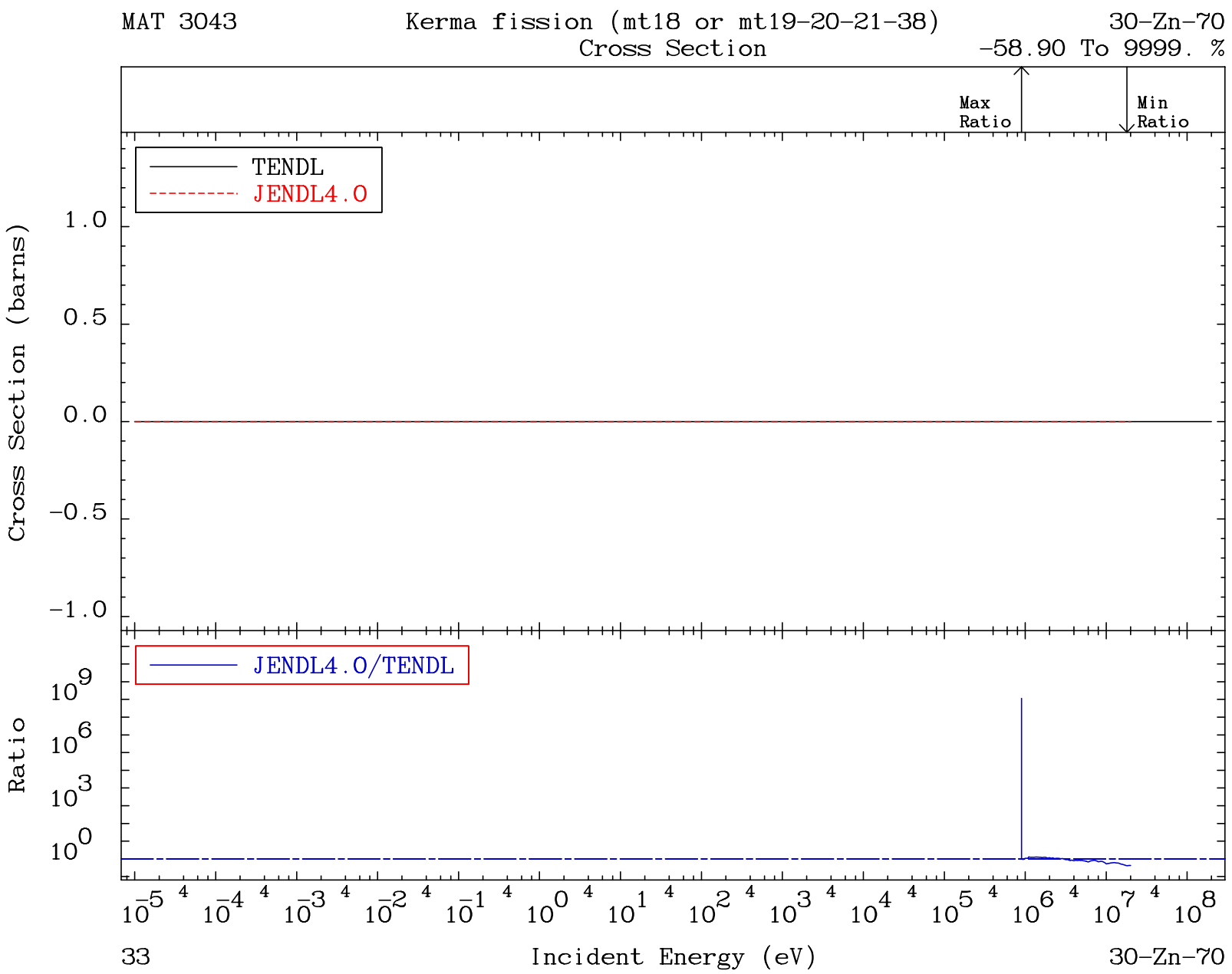

MAT 3043
He-4 Production
Cross Section
30-Zn-70
-20.20 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.8000 MeV
JENDL4.0 Threshold 209.99 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
30-Zn-70

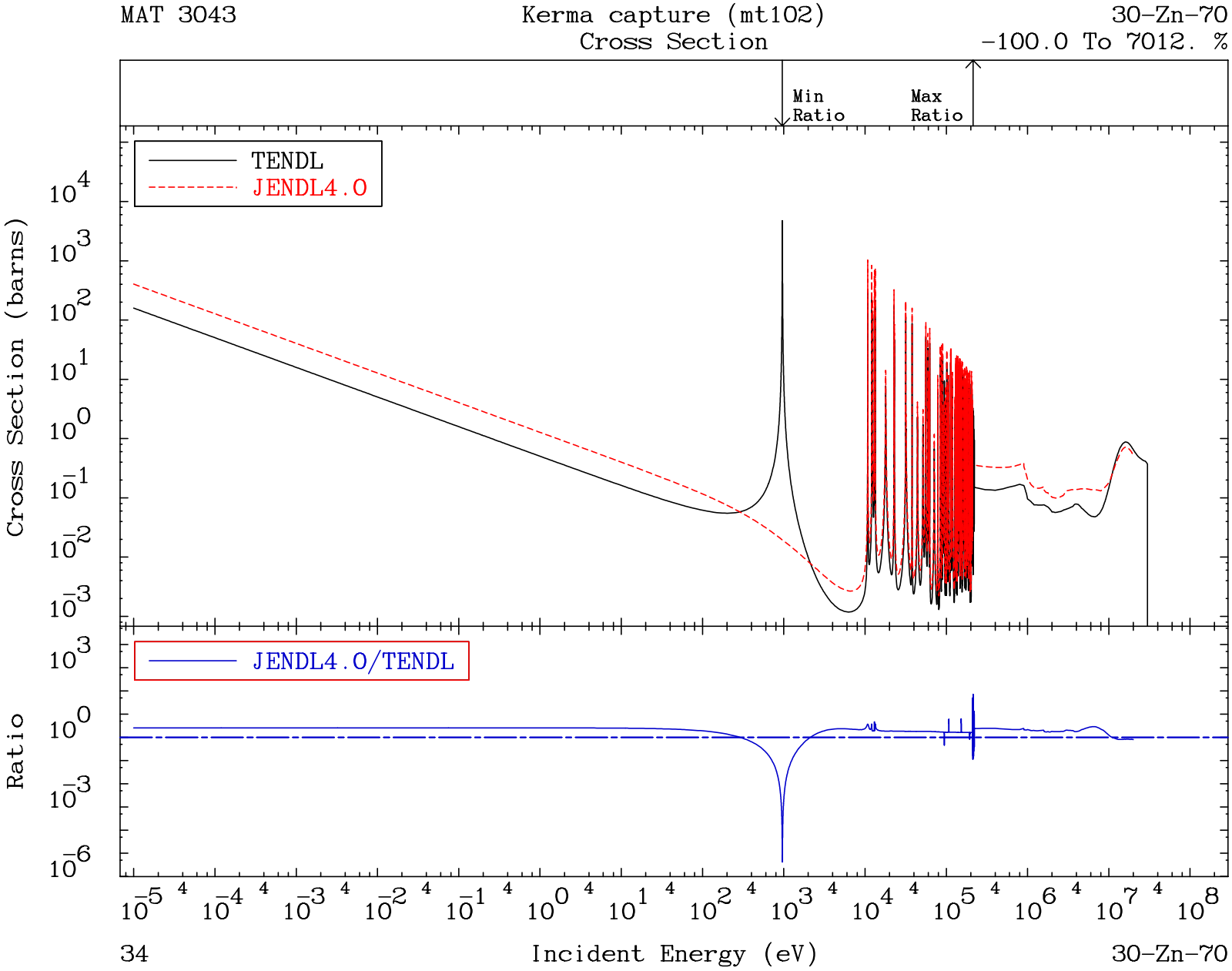

MAT 3043
Kerma total (eV-barns)
Cross Section
30-Zn-70
-99.82 To 7670. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
29
30-Zn-70

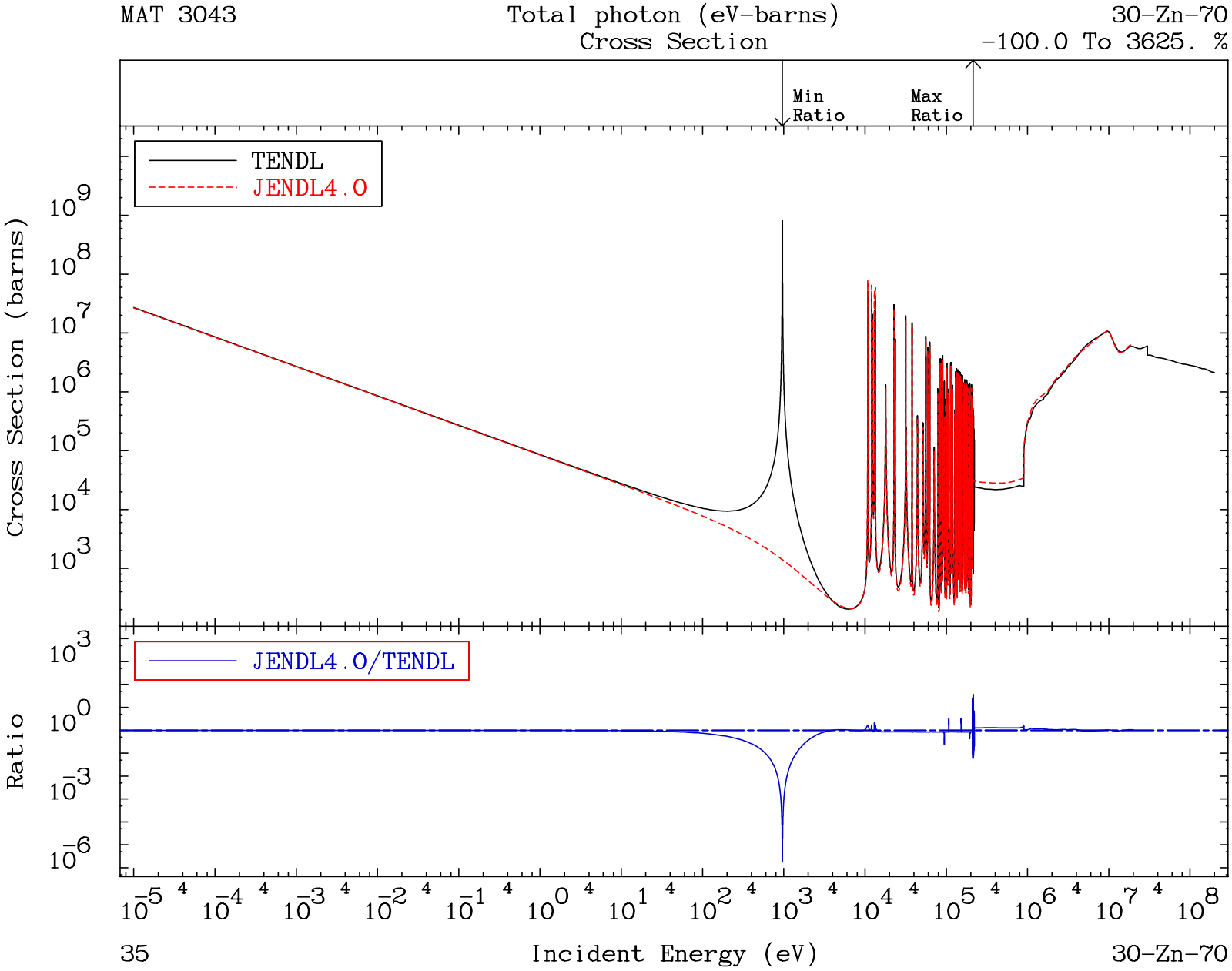

MAT 3043
Kerma elastic
Cross Section
30-Zn-70
-99.80 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
30
30-Zn-70

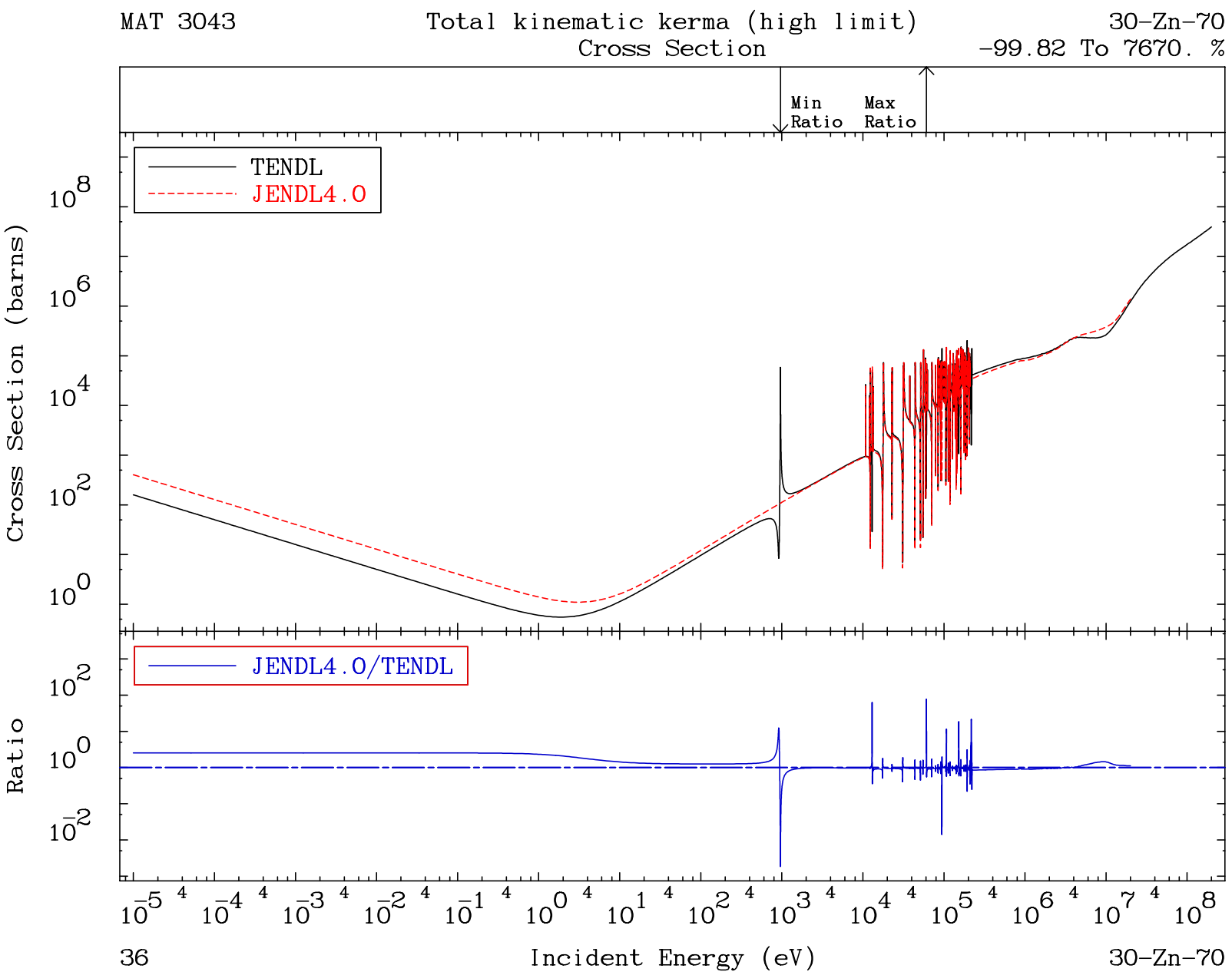

MAT 3043
Kerma non-elastic (all but mt2)
Cross Section
30-Zn-70
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
31
30-Zn-70

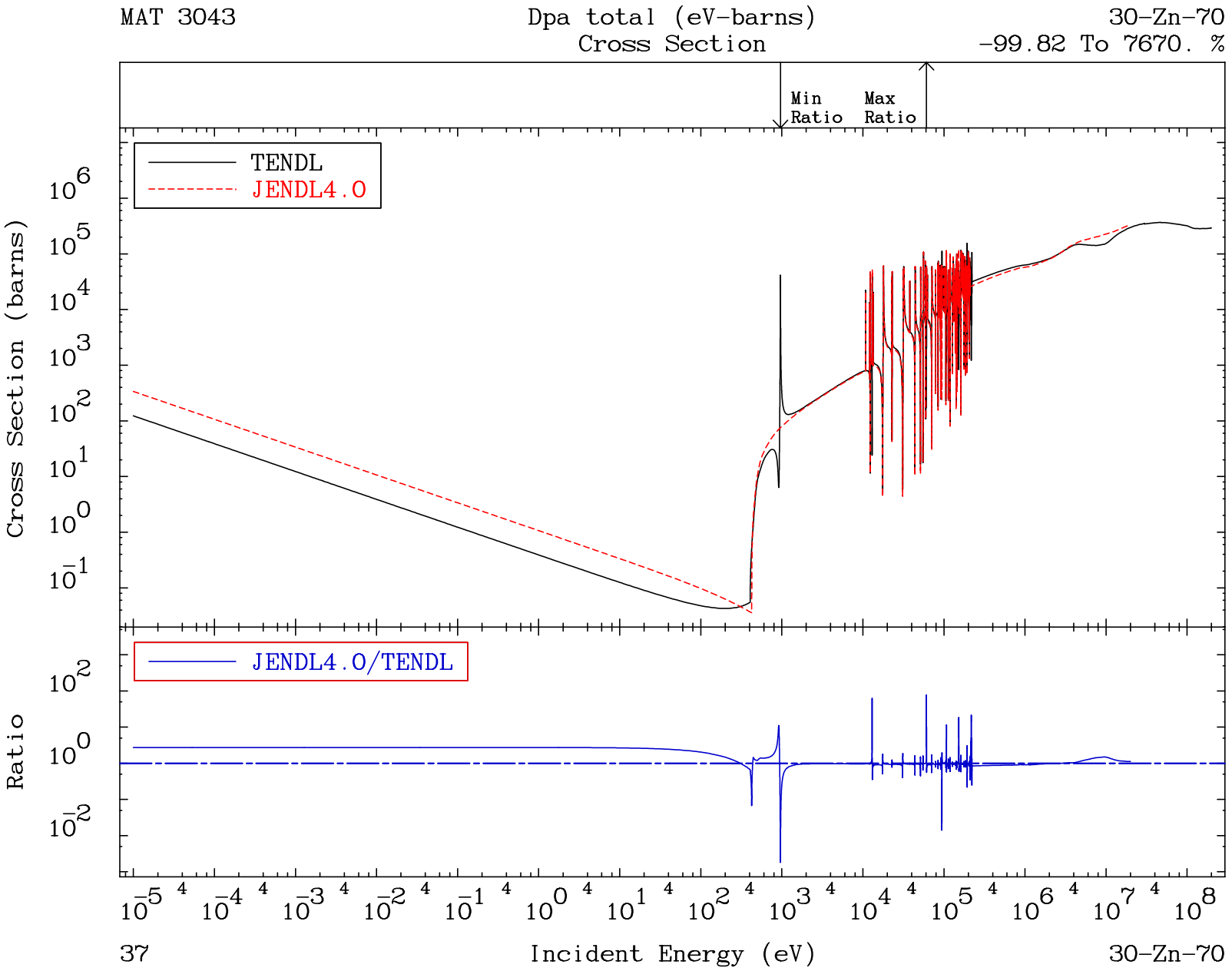

MAT 3043
Kerma inelastic (mt51-91)
Cross Section
30-Zn-70
-58.90 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 897.67 keV
JENDL4.0 Threshold 105.04 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
32
30-Zn-70

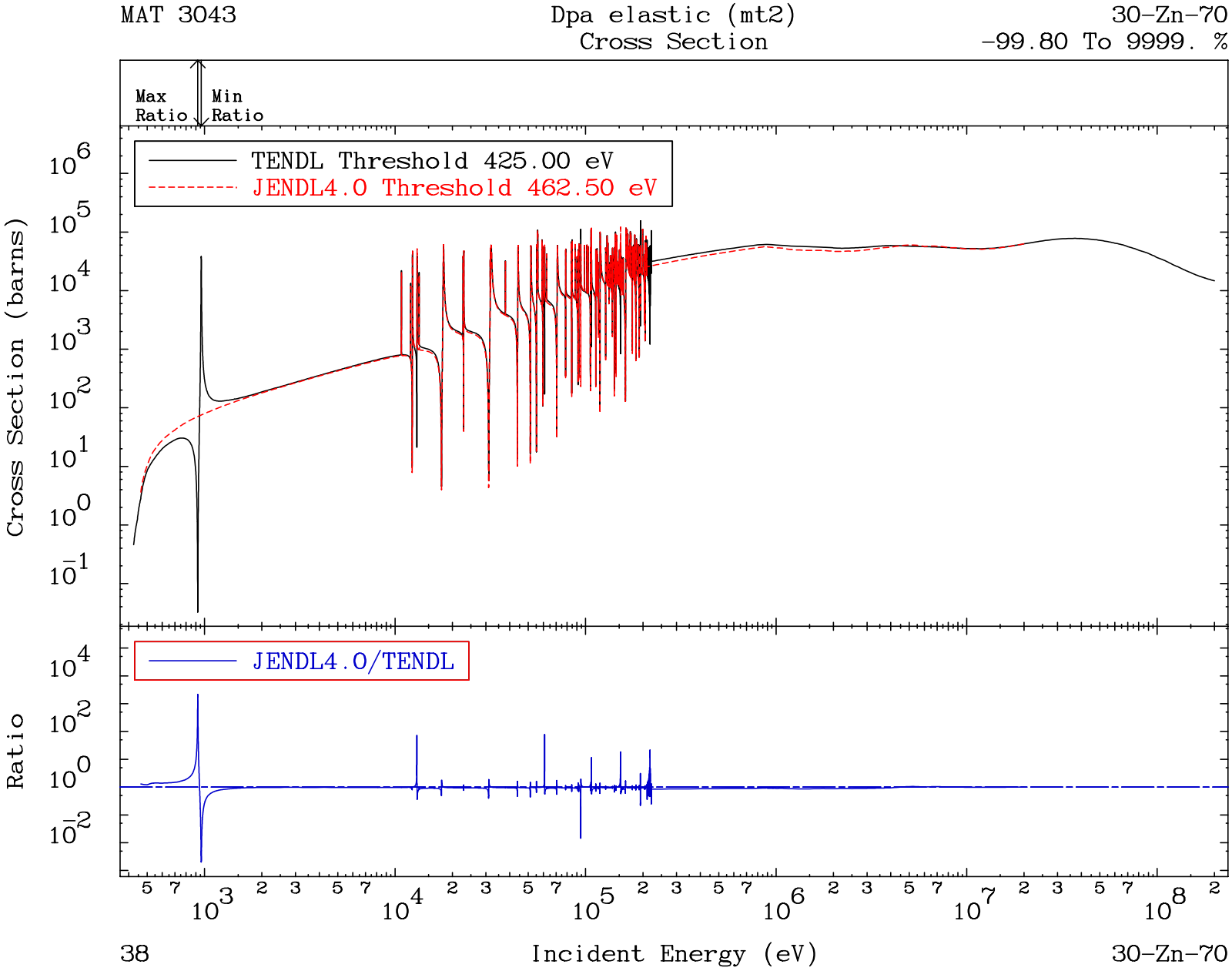

MAT 3043
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
30-Zn-70
-58.90 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^9
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
30-Zn-70

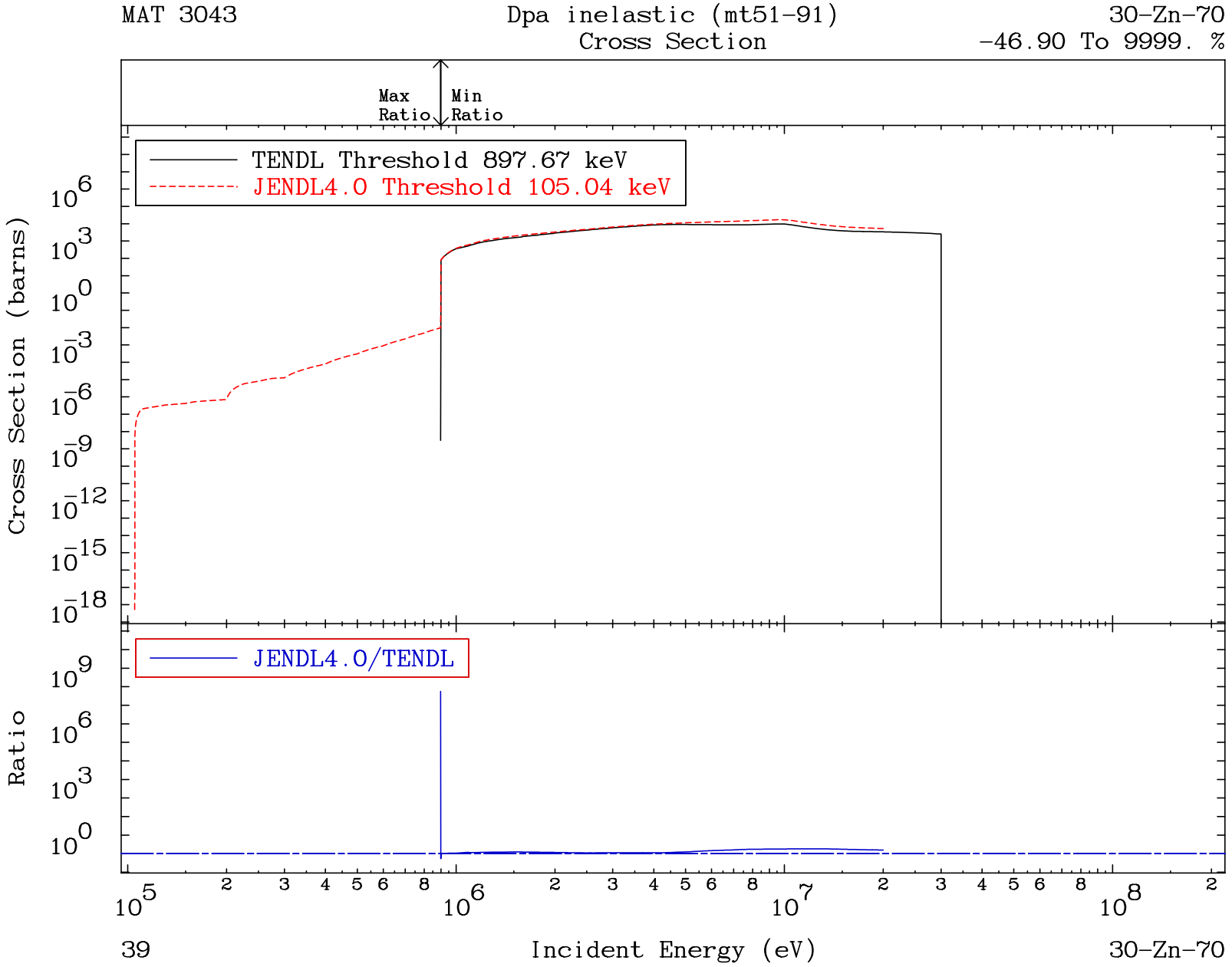

MAT 3043
Kerma capture (mt102)
Cross Section
30-Zn-70
-100.0 To 7012. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
34
30-Zn-70

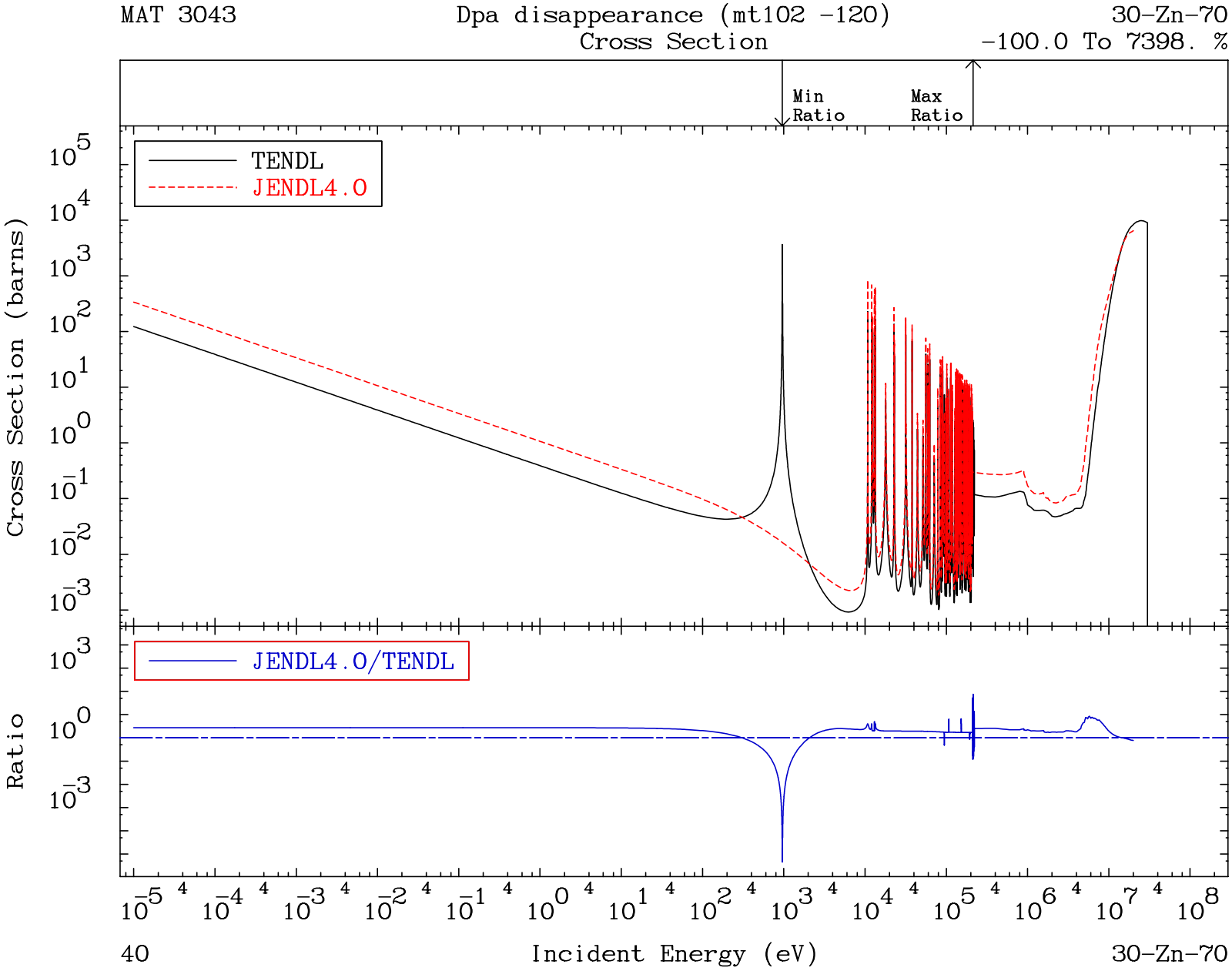

MAT 3043
Total photon (eV-barns)
Cross Section
30-Zn-70
-100.0 To 3625. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
35
30-Zn-70

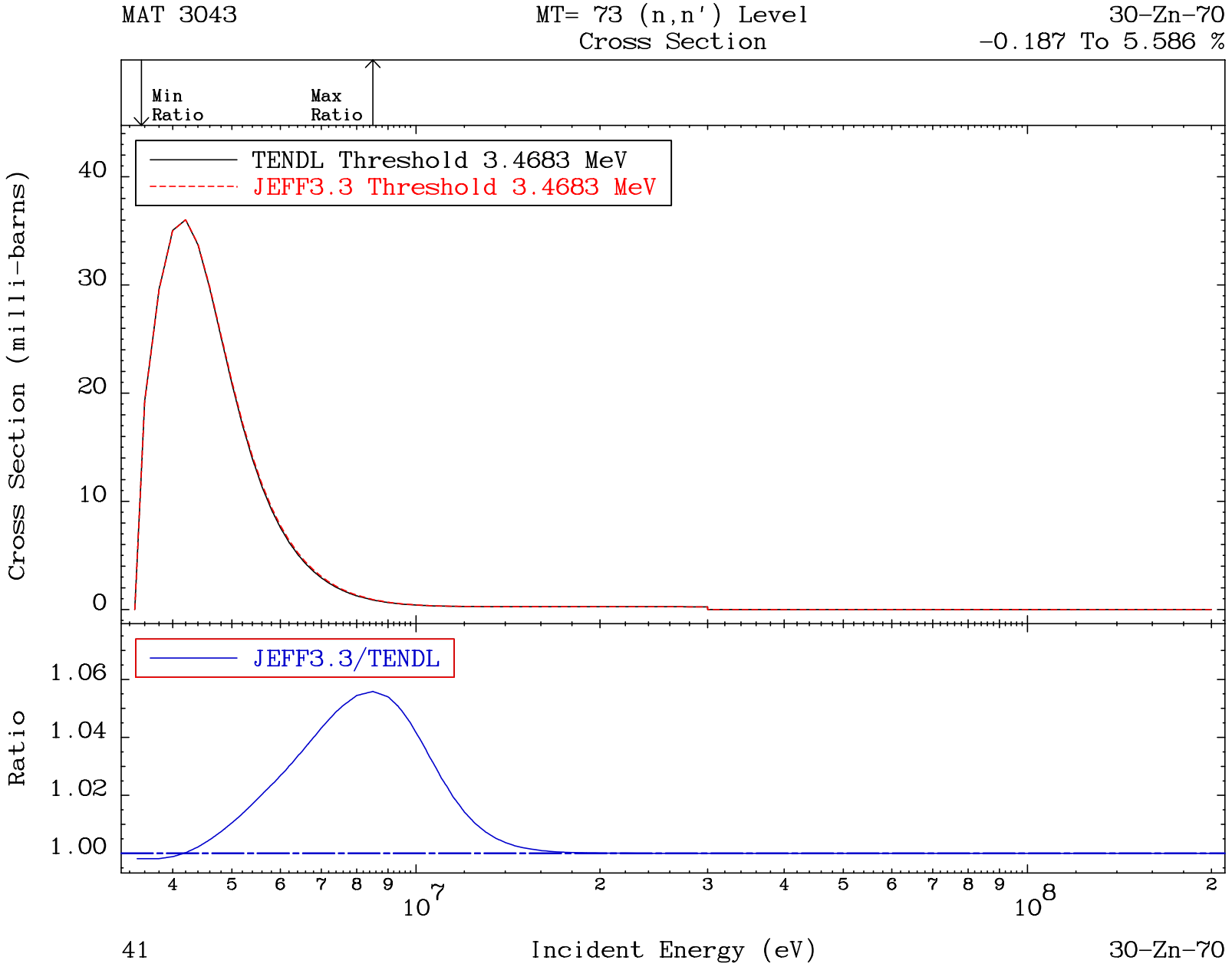

MAT 3043
Total kinematic kerma (high limit)
Cross Section
30-Zn-70
-99.82 To 7670. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
36
30-Zn-70

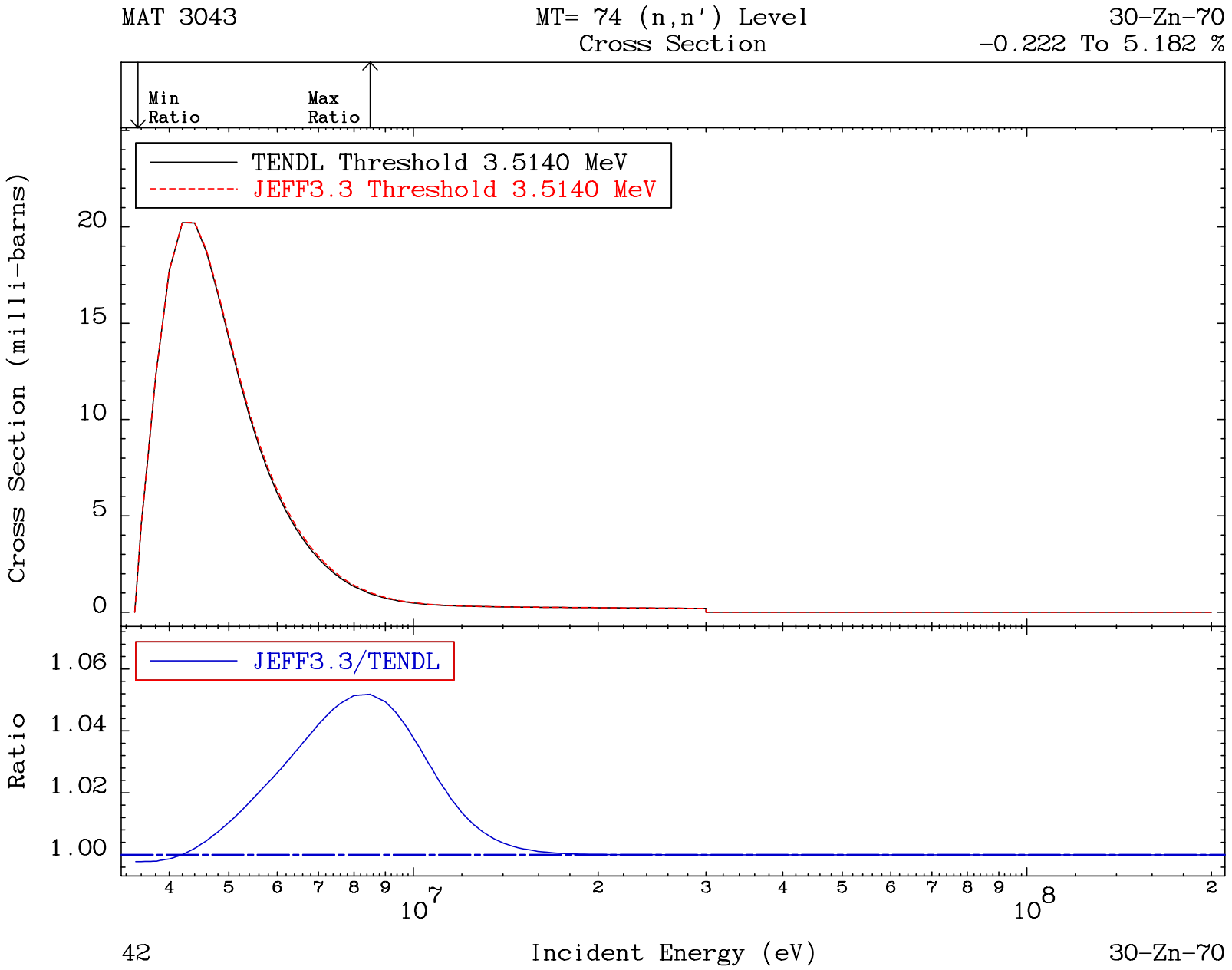

MAT 3043
Dpa total (eV-barns)
Cross Section
30-Zn-70
-99.82 To 7670. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
37
30-Zn-70

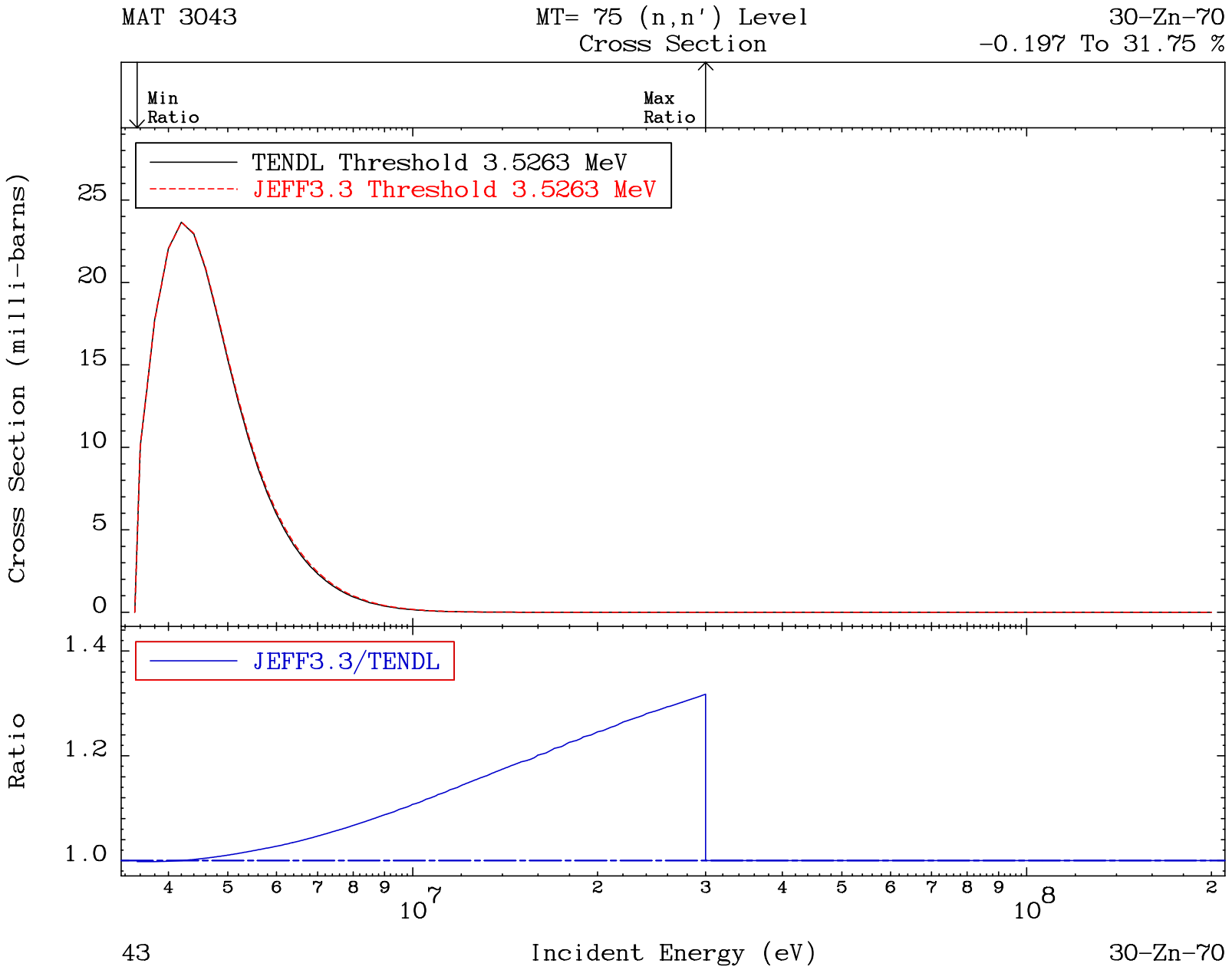

MAT 3043
Dpa elastic (mt2)
Cross Section
30-Zn-70
-99.80 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 425.00 eV
JENDL4.0 Threshold 462.50 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
38
30-Zn-70

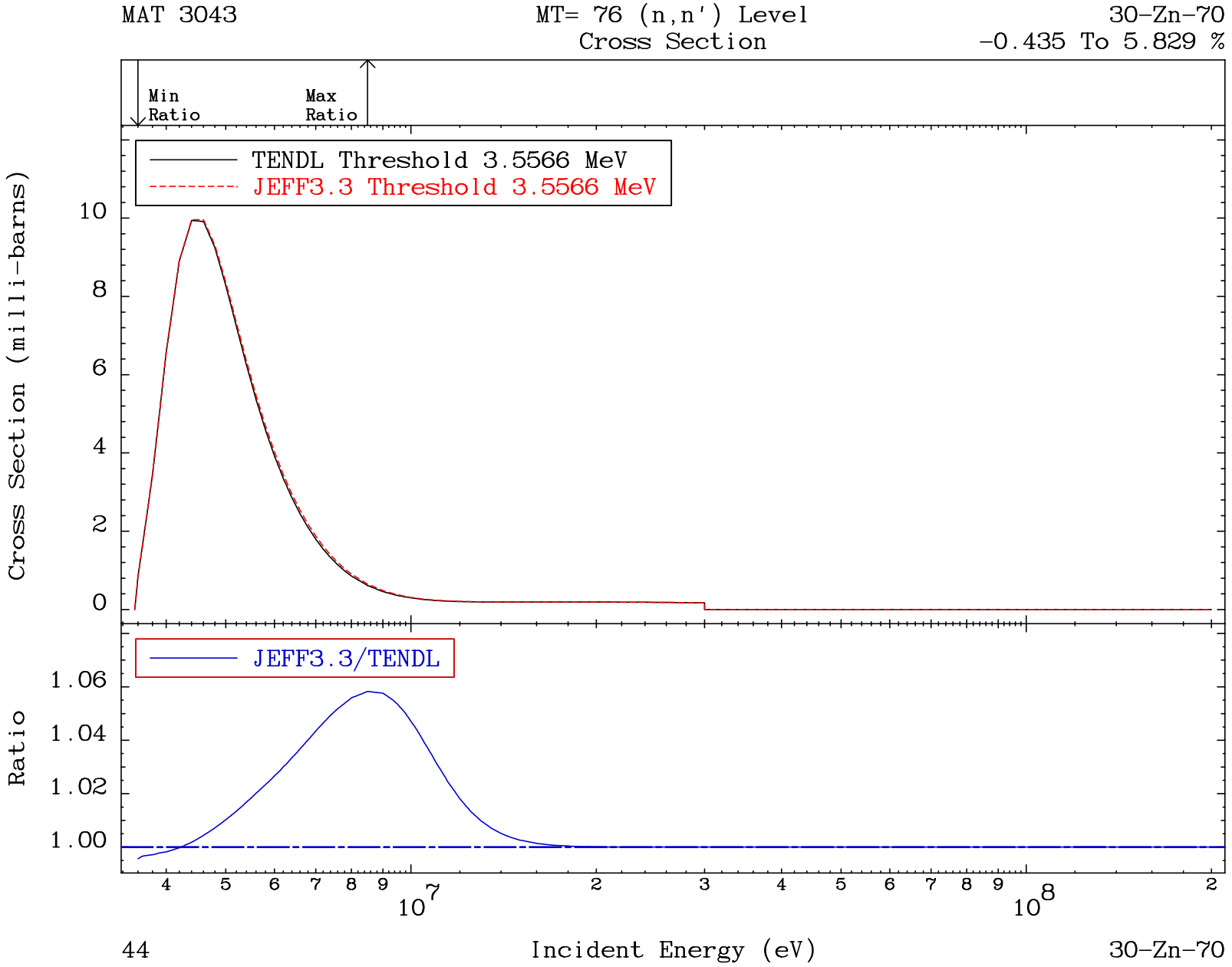

MAT 3043
Dpa inelastic (mt51-91)
Cross Section
30-Zn-70
-46.90 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 897.67 keV
JENDL4.0 Threshold 105.04 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
39
30-Zn-70

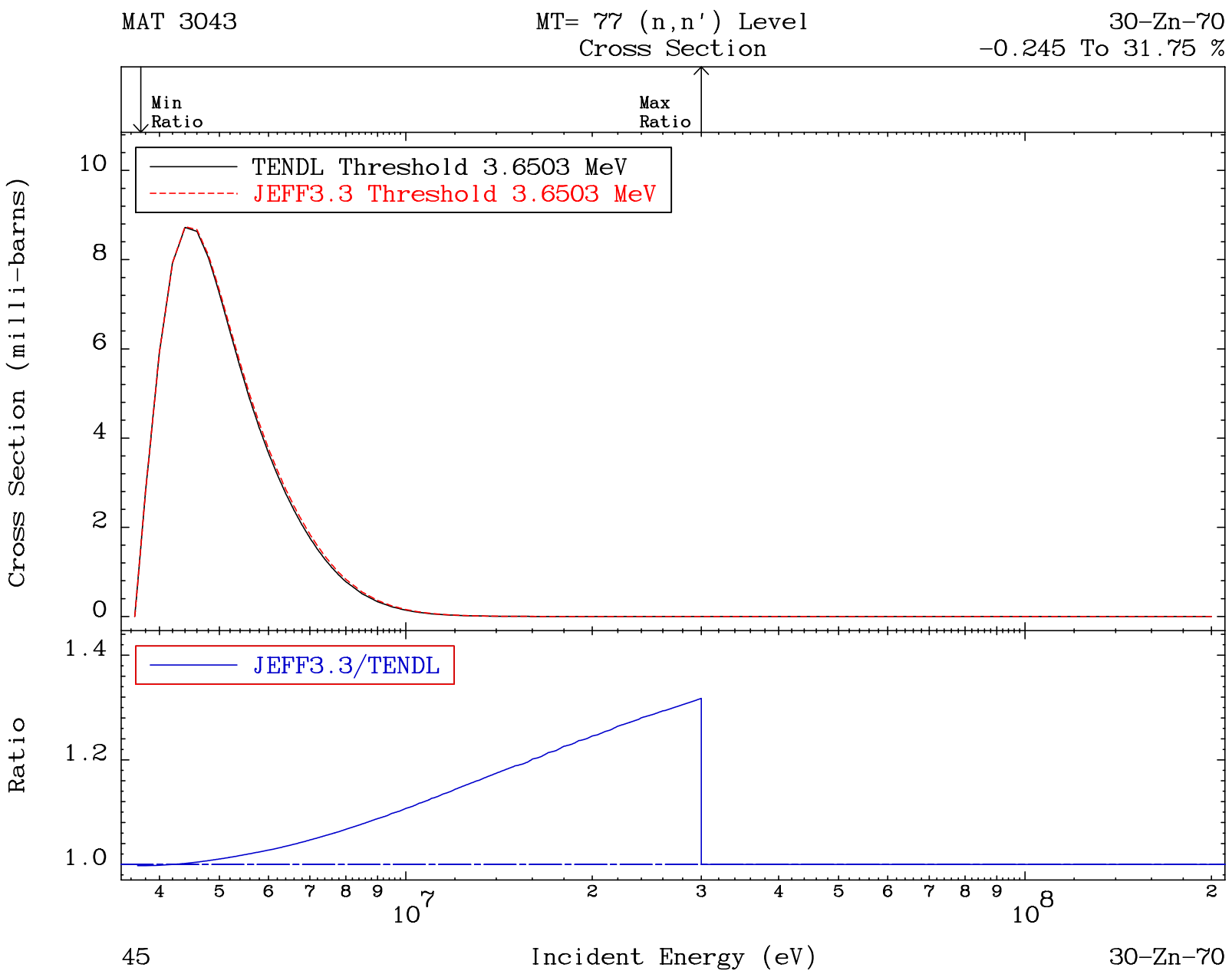

MAT 3043
Dpa disappearance (mt102 -120)
Cross Section
30-Zn-70
-100.0 To 7398. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
40
30-Zn-70

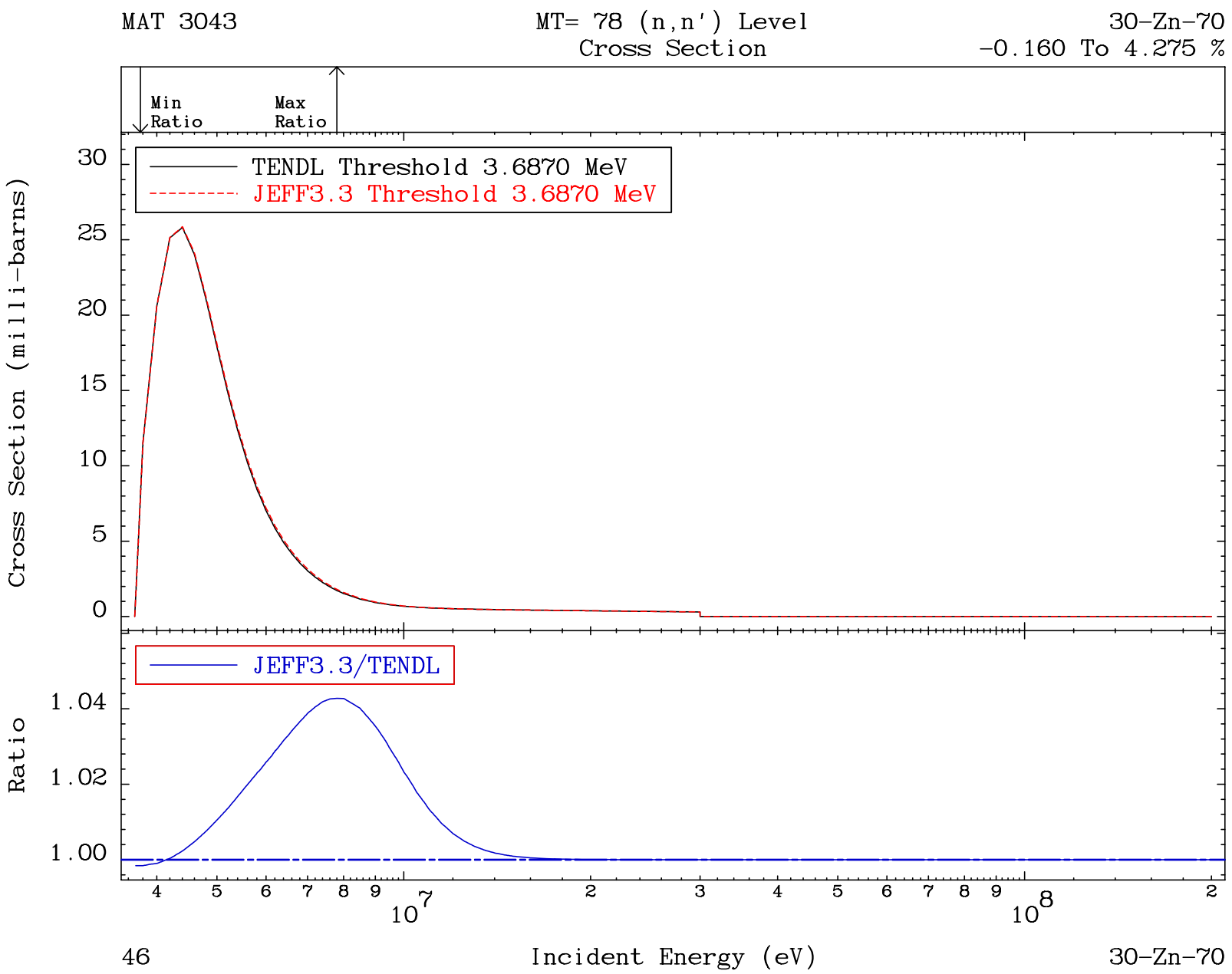

MAT 3043
MT= 73 (n,n') Level
Cross Section
30-Zn-70
-0.187 To 5.586 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.4683 MeV
JEFF3.3 Threshold 3.4683 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
41
Incident Energy (eV)
30-Zn-70

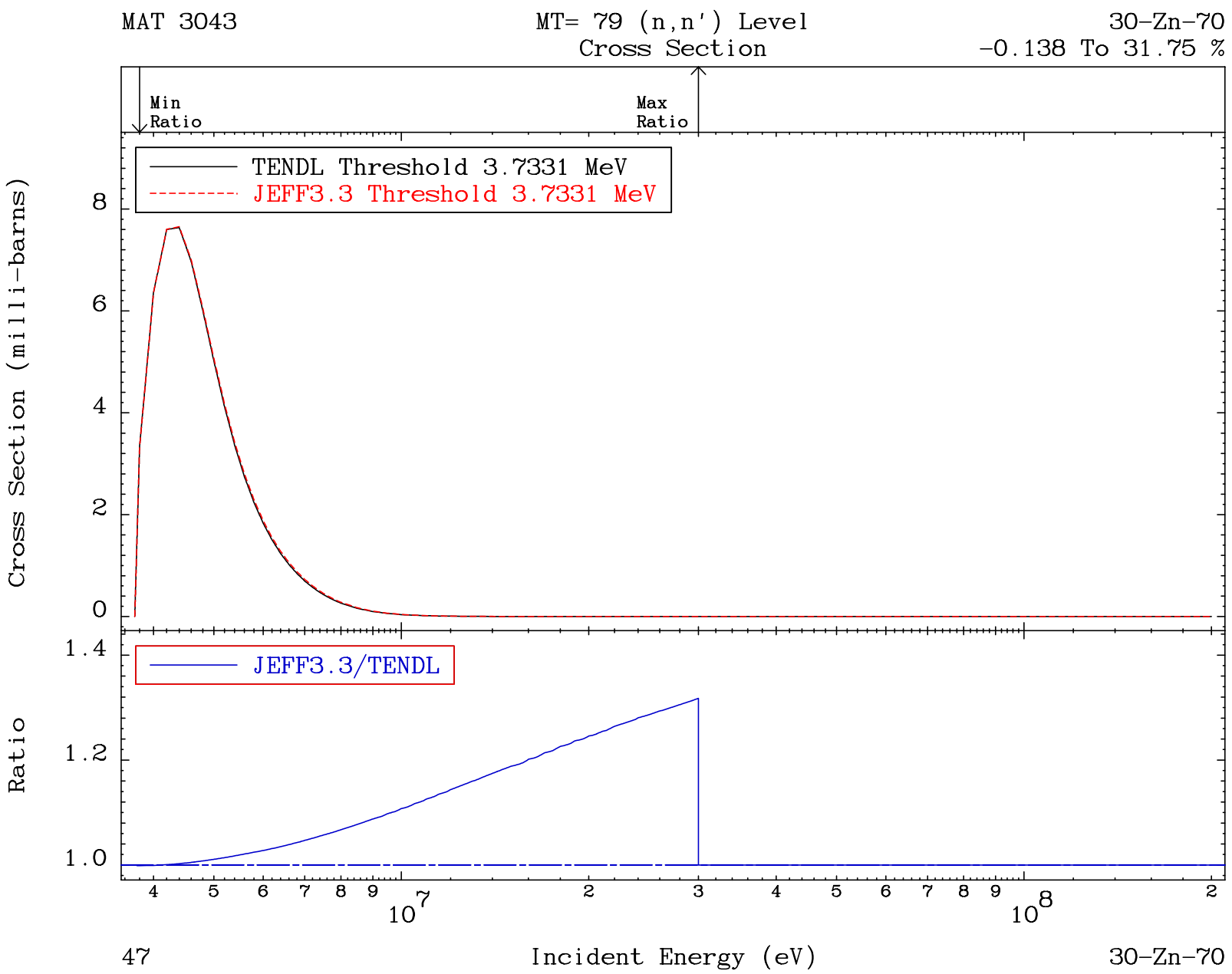

MAT 3043
MT= 74 (n,n') Level
Cross Section
30-Zn-70
-0.222 To 5.182 %
Min Ratio
Max Ratio
TENDL Threshold 3.5140 MeV
JEFF3.3 Threshold 3.5140 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
30-Zn-70

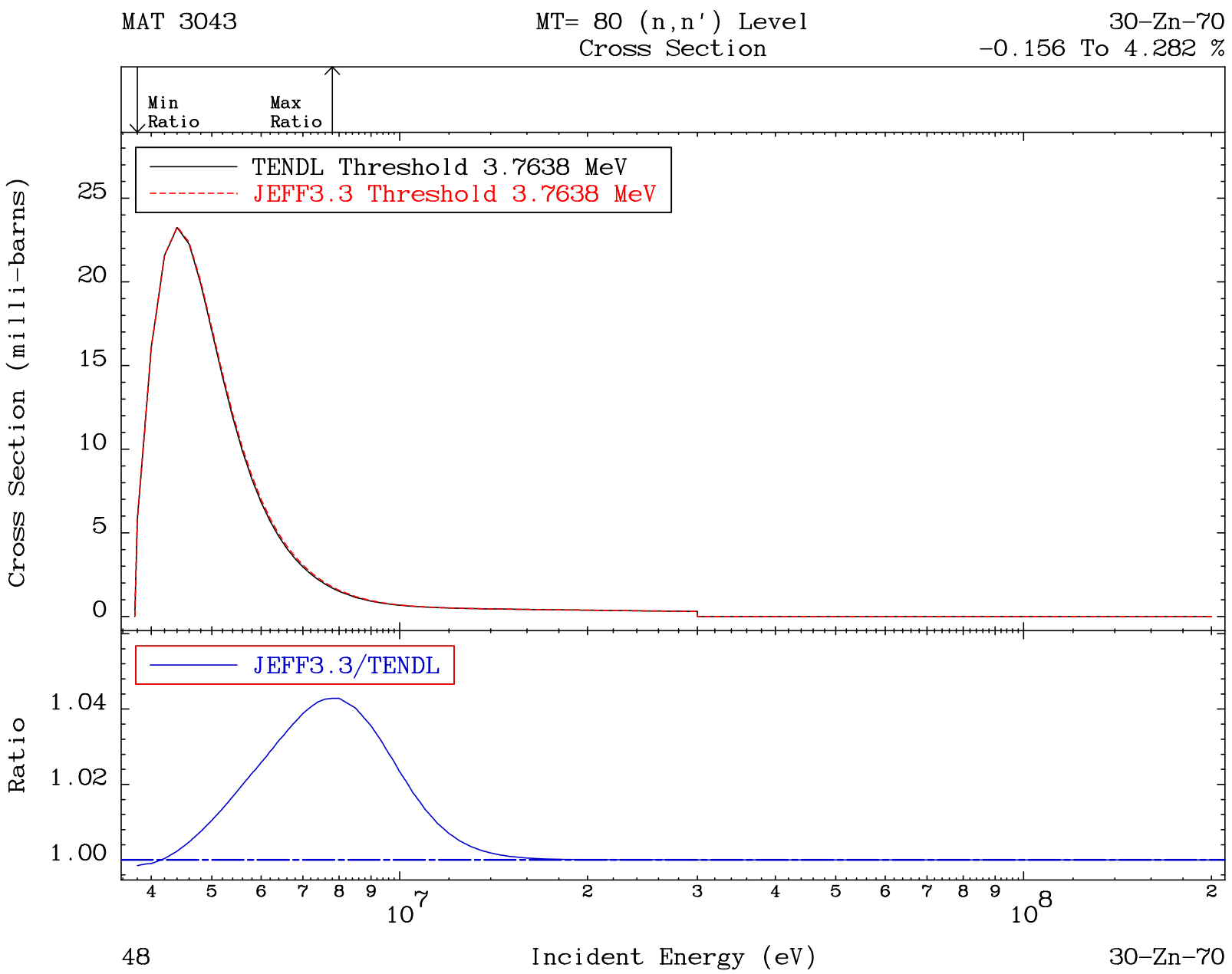

MAT 3043
MT= 75 (n,n') Level
Cross Section
30-Zn-70
-0.197 To 31.75 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.5263 MeV
JEFF3.3 Threshold 3.5263 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
30-Zn-70

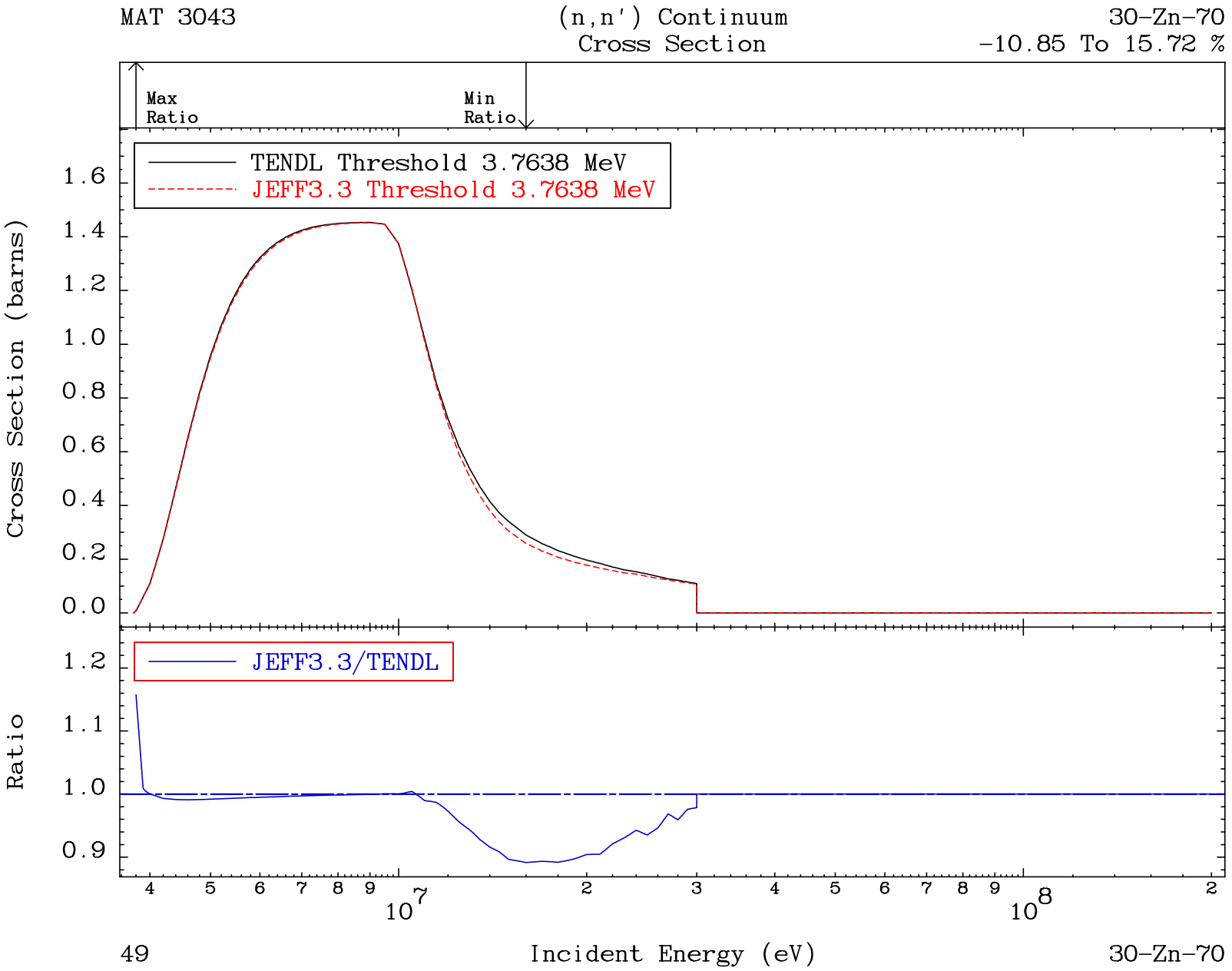

MAT 3043
MT= 76 (n,n') Level
Cross Section
30-Zn-70
-0.435 To 5.829 %
Min Ratio
Max Ratio
TENDL Threshold 3.5566 MeV
JEFF3.3 Threshold 3.5566 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
1.06
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
44
30-Zn-70

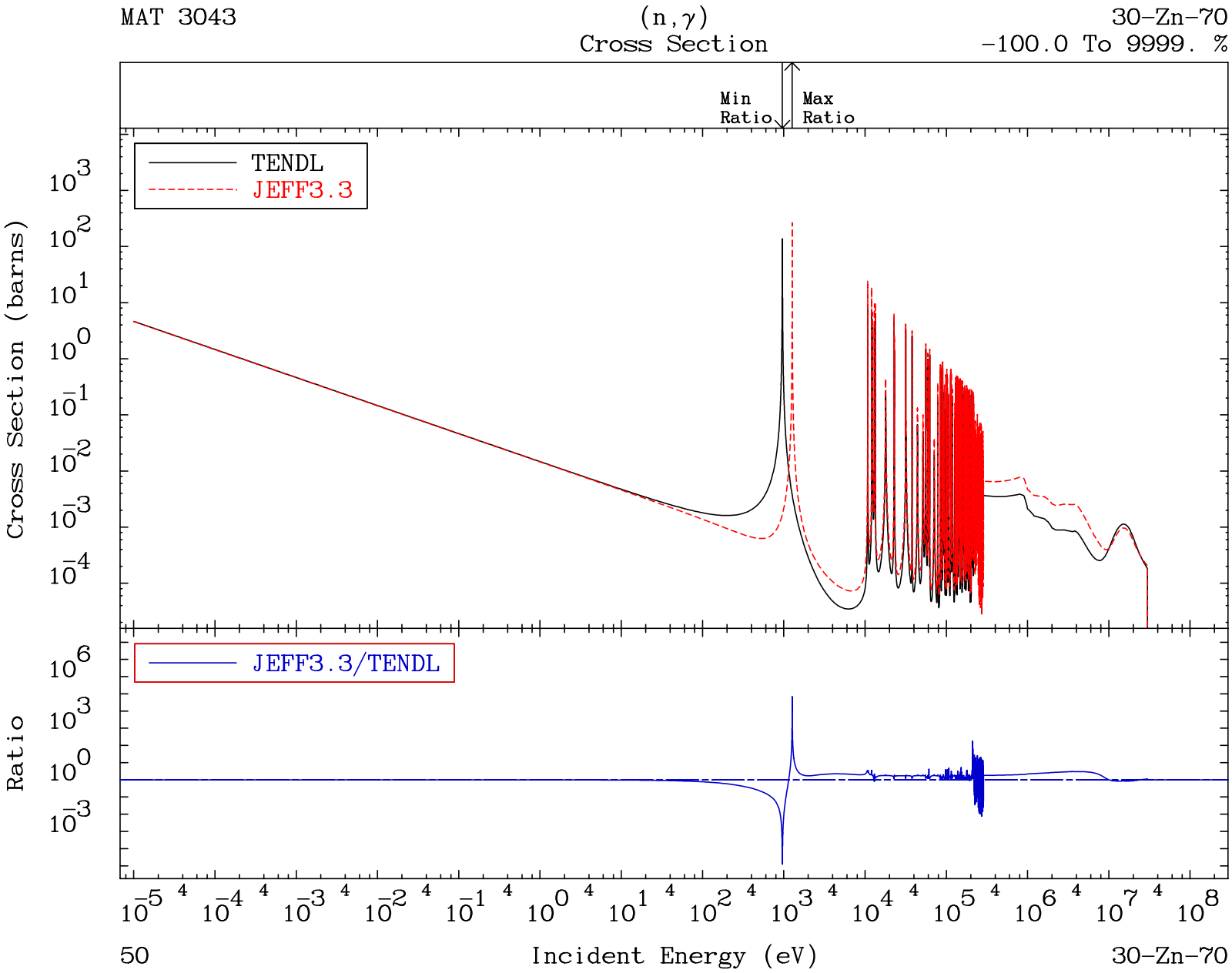

MAT 3043
MT= 77 (n,n') Level
Cross Section
30-Zn-70
-0.245 To 31.75 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.6503 MeV
JEFF3.3 Threshold 3.6503 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
30-Zn-70

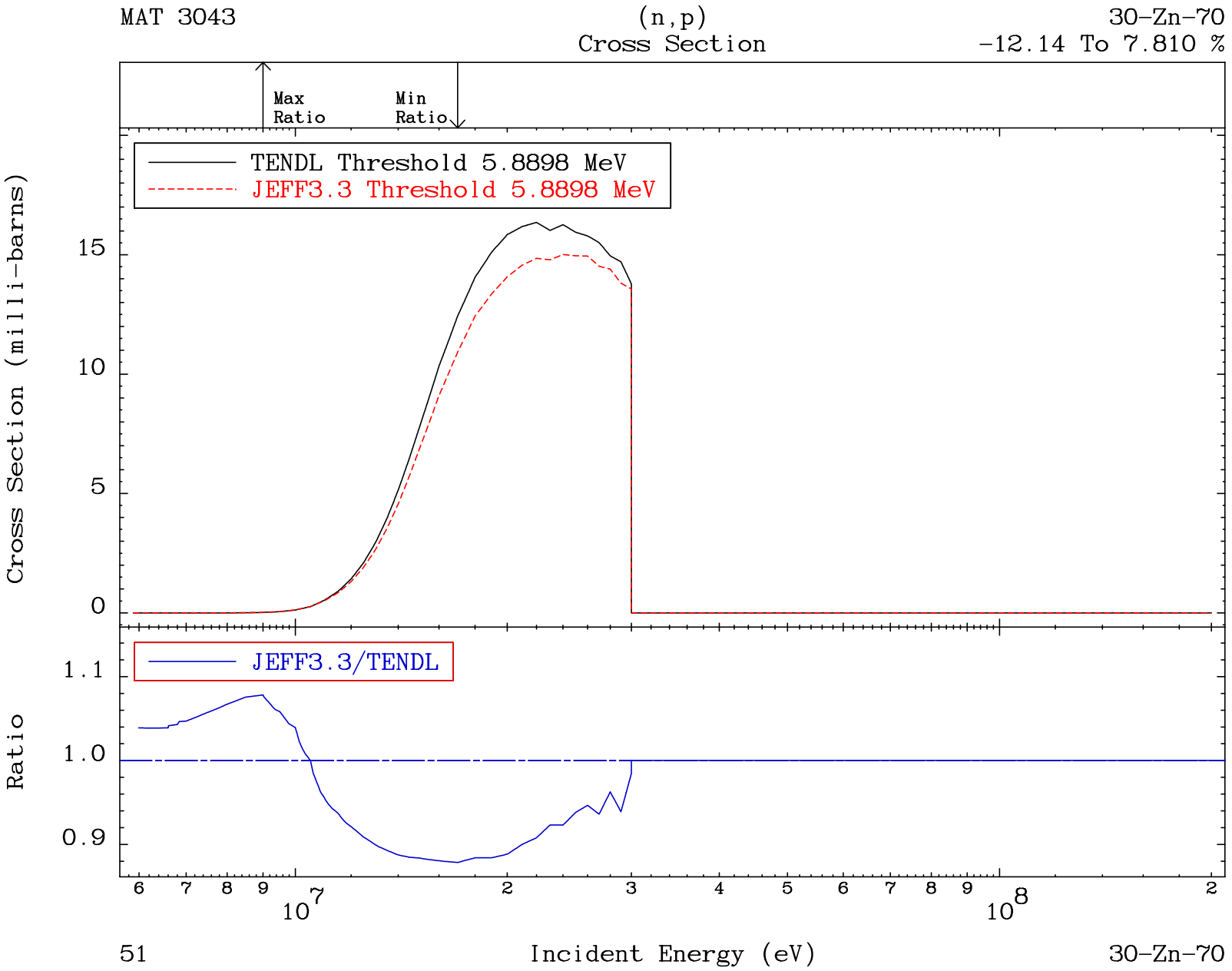

MAT 3043
MT= 78 (n,n') Level
Cross Section
30-Zn-70
-0.160 To 4.275 %
Min Ratio
Max Ratio
TENDL Threshold 3.6870 MeV
JEFF3.3 Threshold 3.6870 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
30-Zn-70

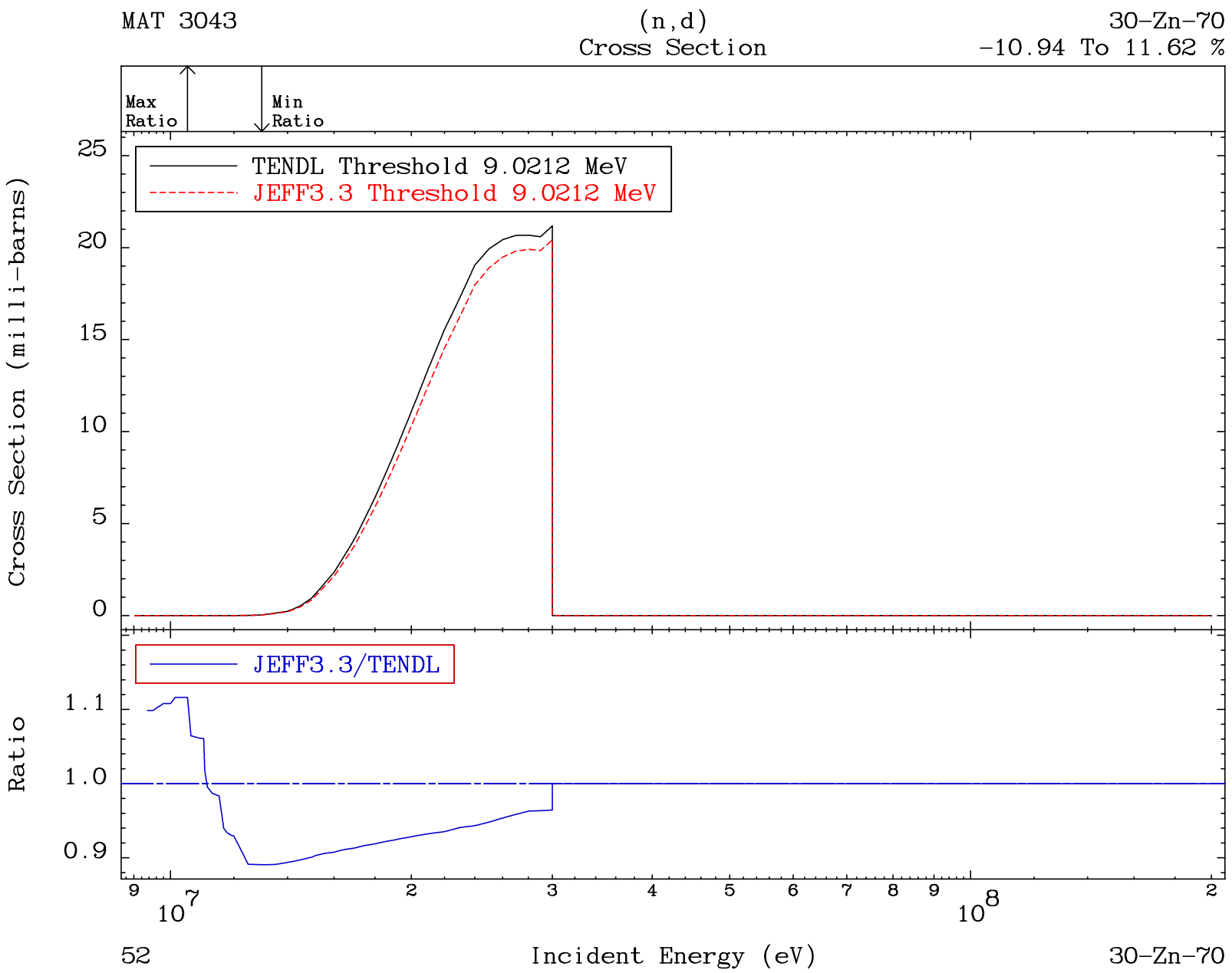

MAT 3043
MT= 79 (n,n') Level
Cross Section
30-Zn-70
-0.138 To 31.75 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.7331 MeV
JEFF3.3 Threshold 3.7331 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
1.0
1.2
1.4
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
47
Incident Energy (eV)
30-Zn-70

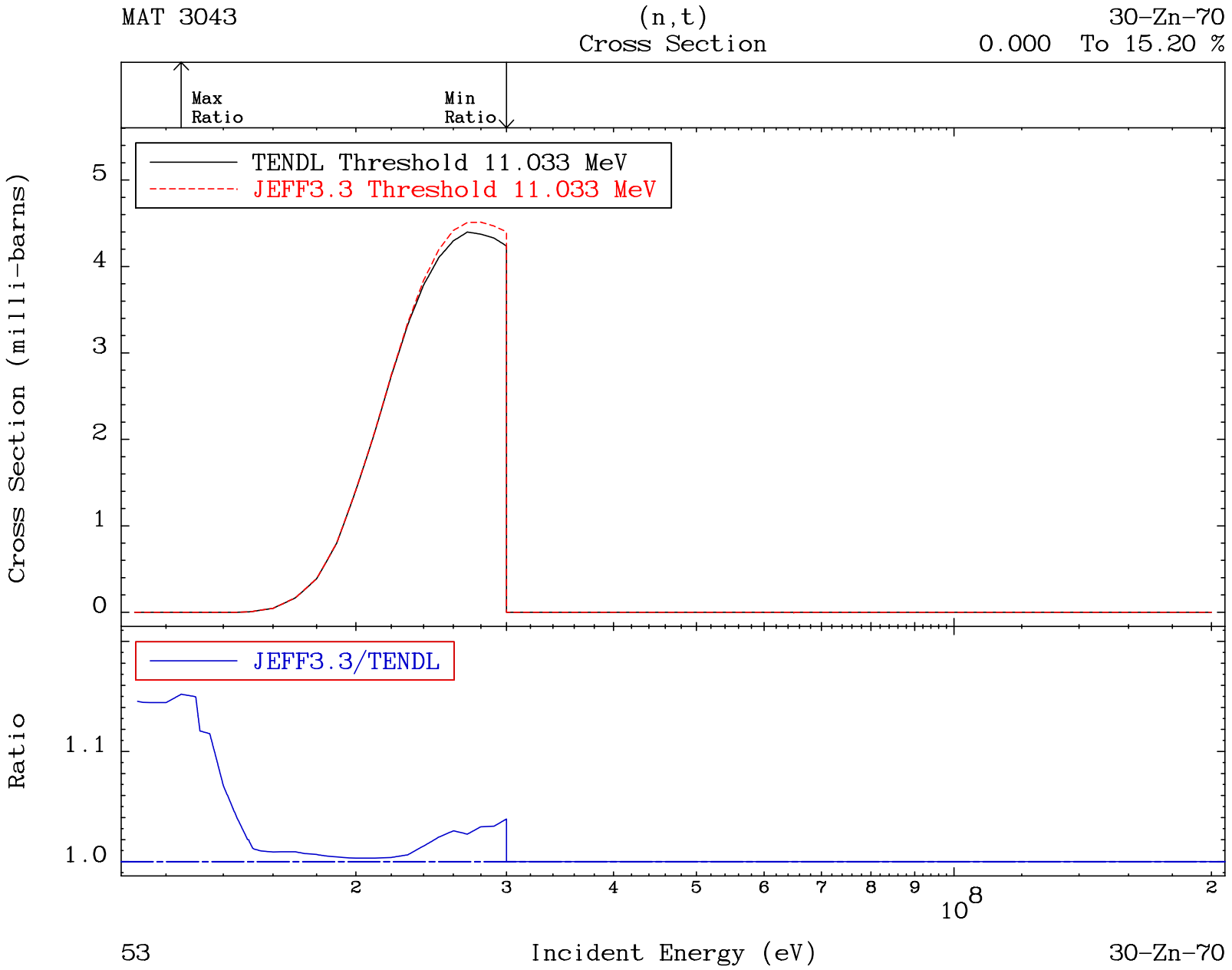

MAT 3043
MT= 80 (n,n') Level
Cross Section
30-Zn-70
-0.156 To 4.282 %
Min Ratio
Max Ratio
TENDL Threshold 3.7638 MeV
JEFF3.3 Threshold 3.7638 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
30-Zn-70

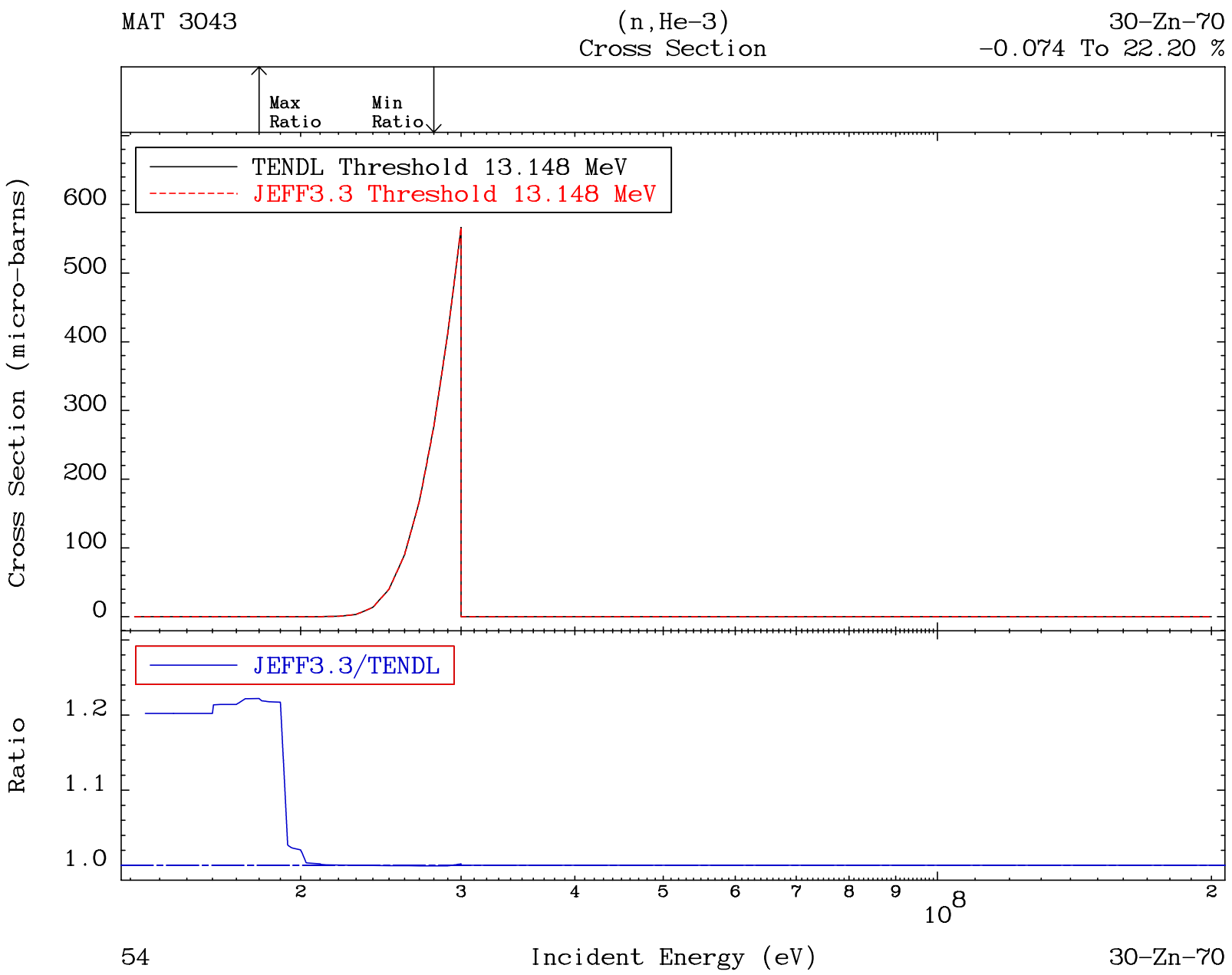

MAT 3043
(n,n') Continuum
Cross Section
30-Zn-70
-10.85 To 15.72 %
Max
Ratio
Min
Ratio
TENDL Threshold 3.7638 MeV
JEFF3.3 Threshold 3.7638 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
0.9
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
30-Zn-70

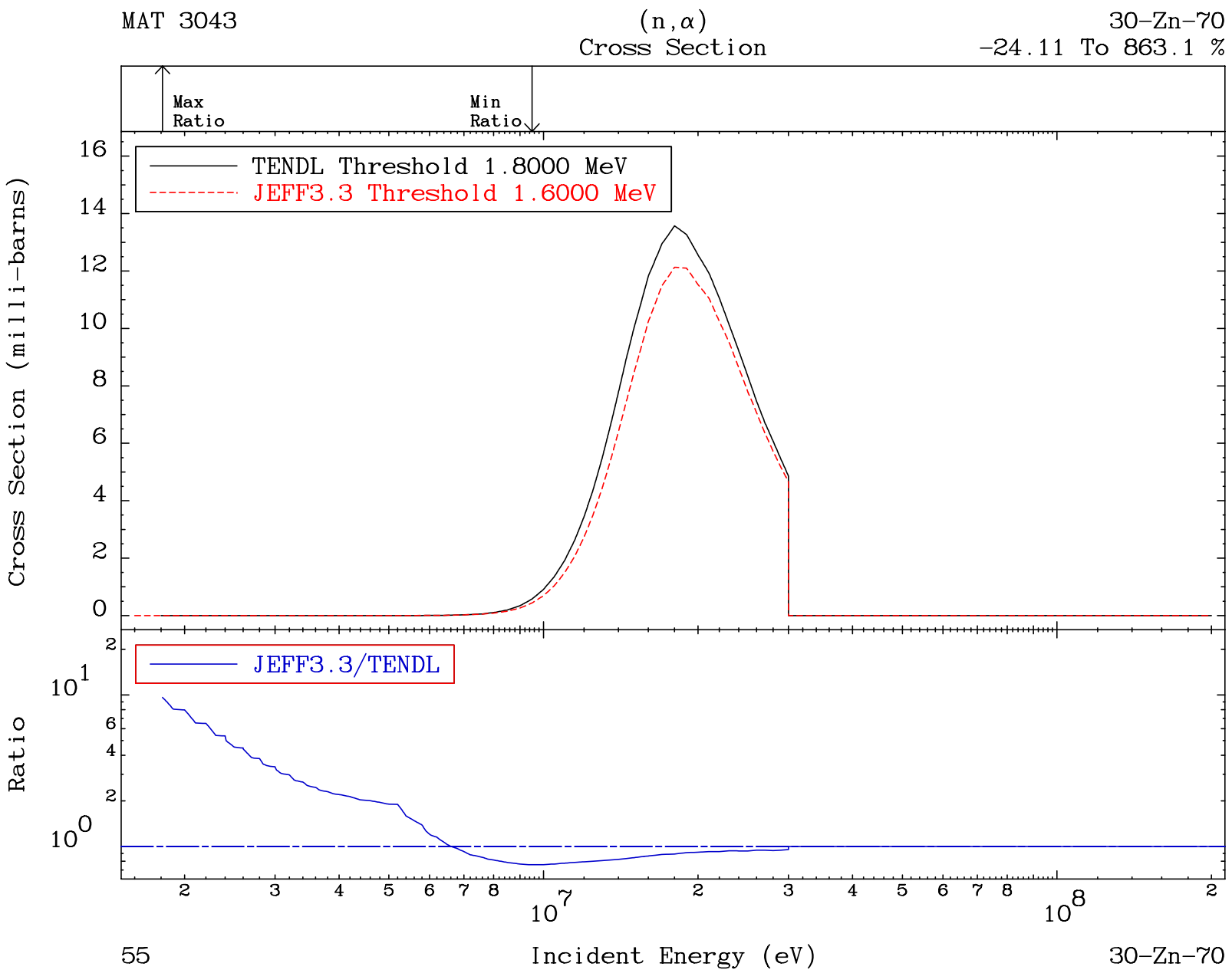

MAT 3043
(n,γ)
Cross Section
30-Zn-70
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
50
30-Zn-70

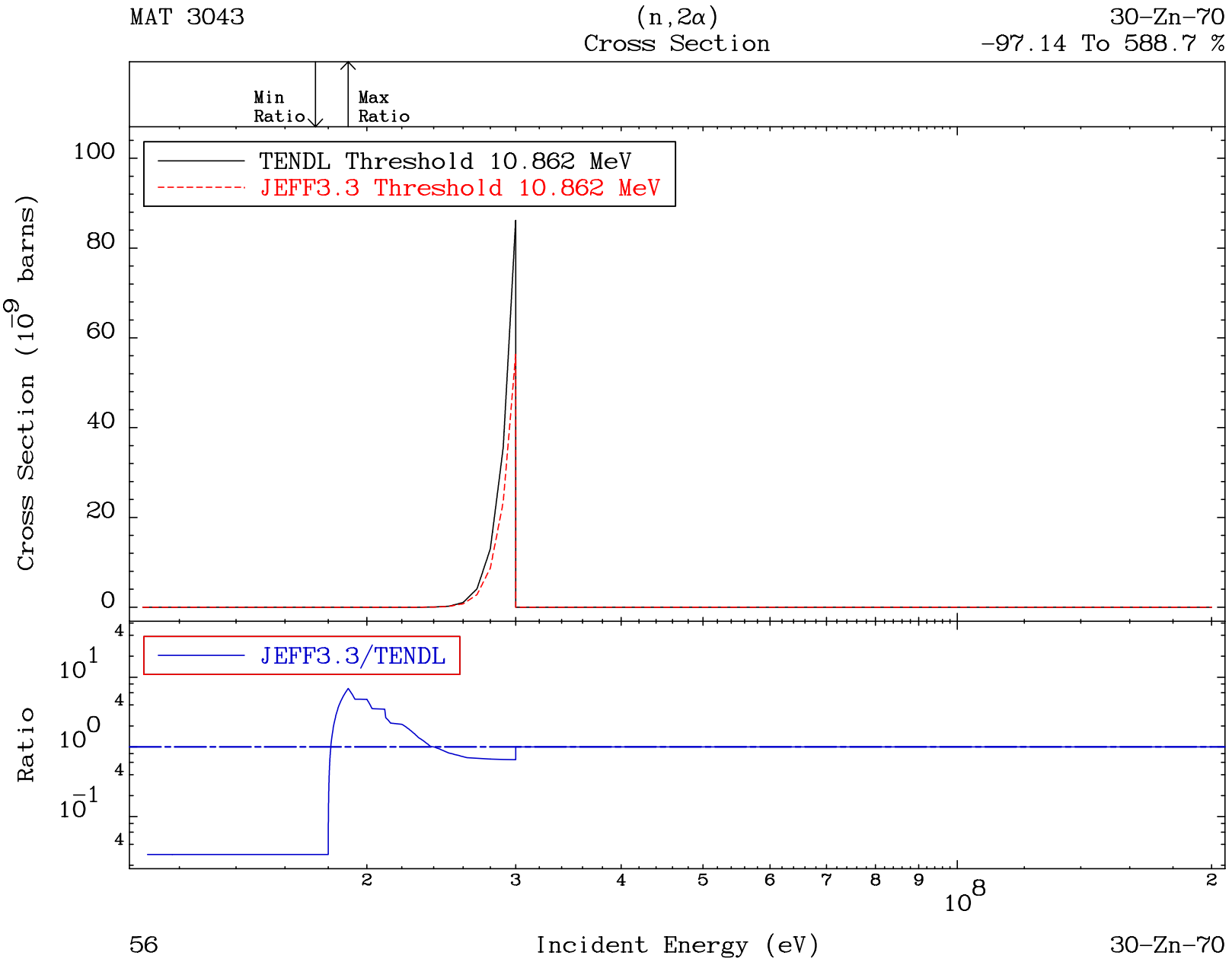

MAT 3043
(n,p)
Cross Section
30-Zn-70
-12.14 To 7.810 %
Max Ratio
Min Ratio
TENDL Threshold 5.8898 MeV
JEFF3.3 Threshold 5.8898 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
30-Zn-70

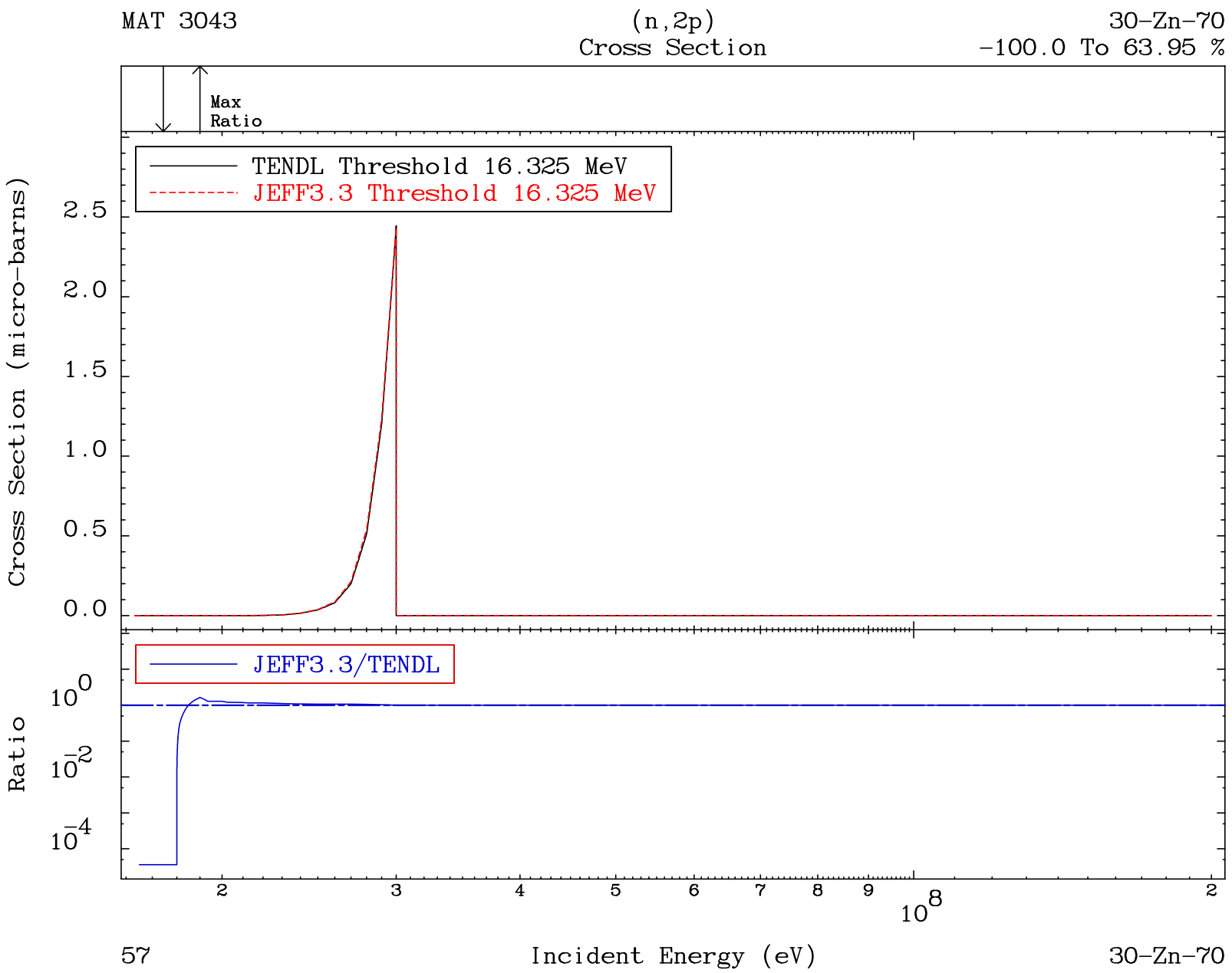

MAT 3043
(n,d)
Cross Section
30-Zn-70
-10.94 To 11.62 %
Max Ratio
Min Ratio
TENDL Threshold 9.0212 MeV
JEFF3.3 Threshold 9.0212 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
9
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
30-Zn-70

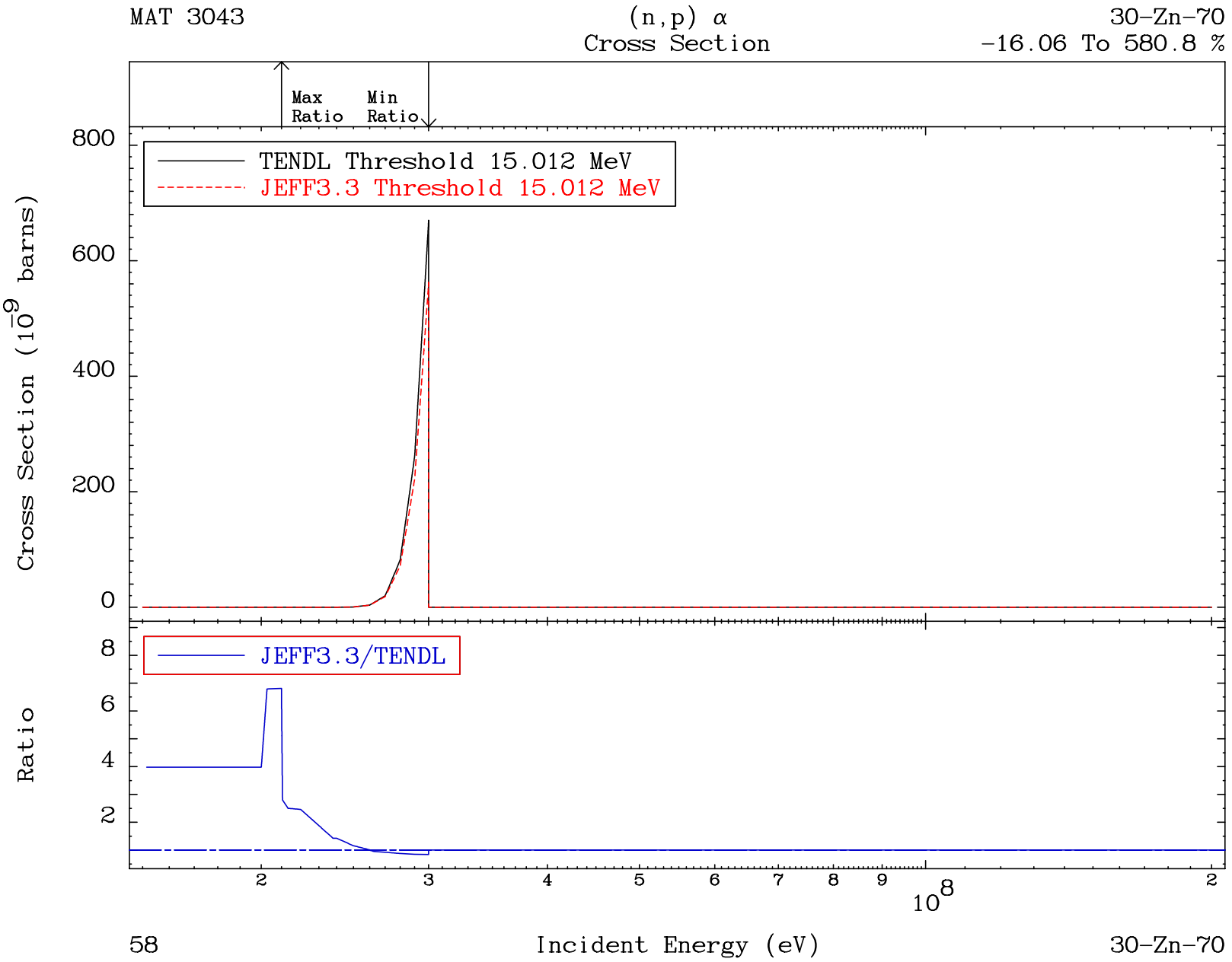

MAT 3043
(n,t)
Cross Section
30-Zn-70
0.000 To 15.20 %
Max Ratio
Min Ratio
TENDL Threshold 11.033 MeV
JEFF3.3 Threshold 11.033 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
53
30-Zn-70

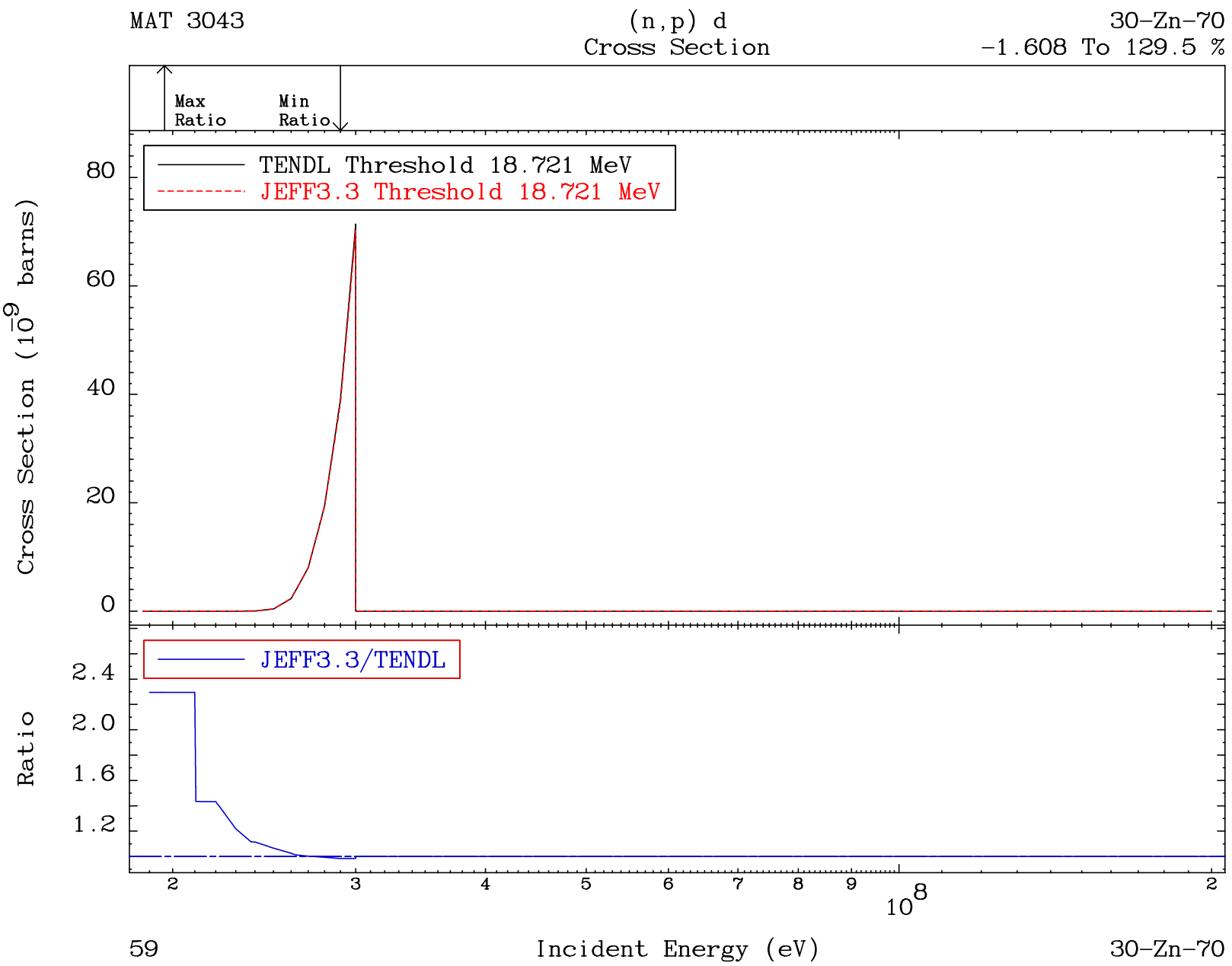

MAT 3043
(n,He-3)
Cross Section
30-Zn-70
-0.074 To 22.20 %
Max Ratio
Min Ratio
TENDL Threshold 13.148 MeV
JEFF3.3 Threshold 13.148 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
30-Zn-70

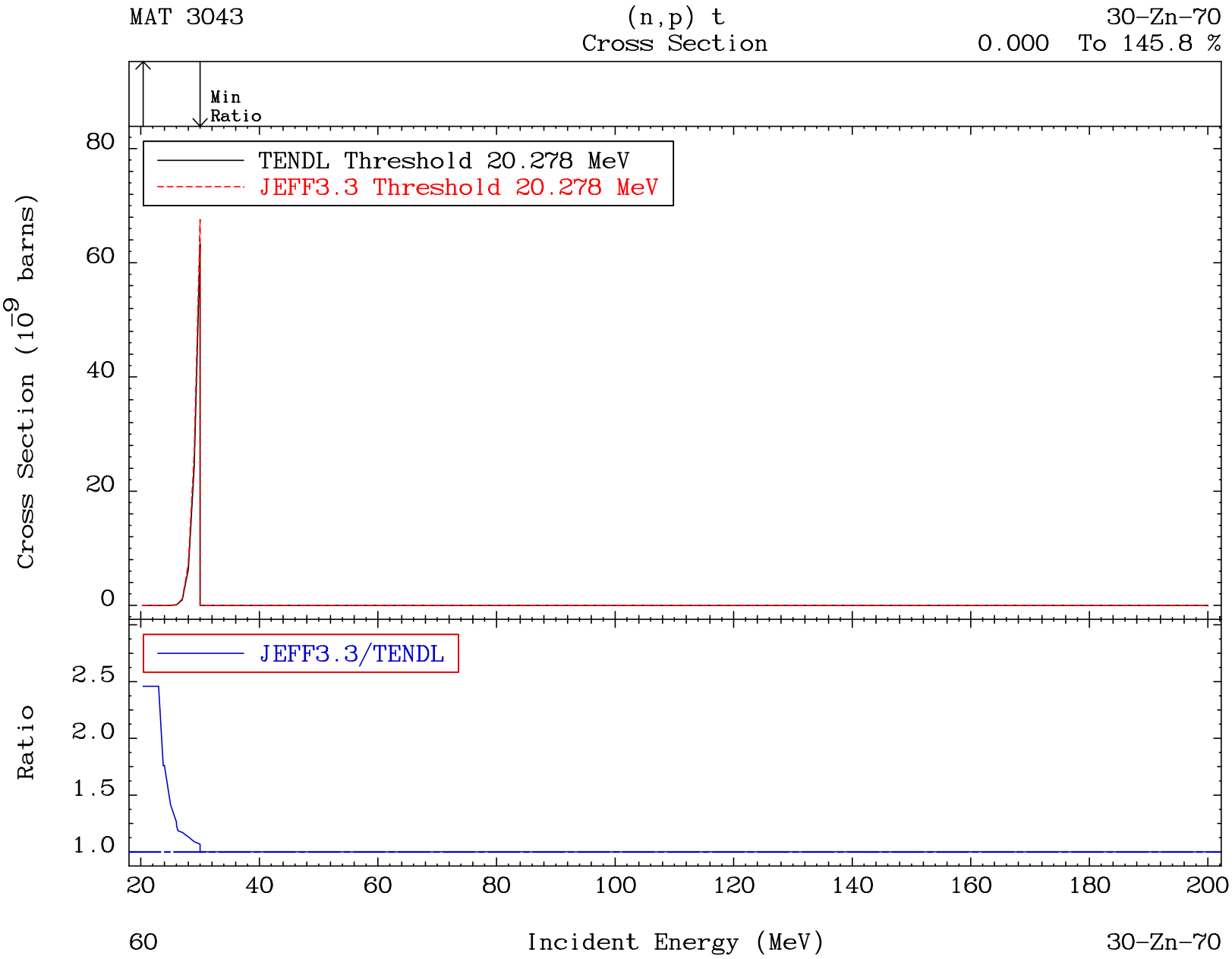

MAT 3043
(n,α)
Cross Section
30-Zn-70
-24.11 To 863.1 %
Max Ratio
Min Ratio
TENDL Threshold 1.8000 MeV
JEFF3.3 Threshold 1.6000 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
30-Zn-70

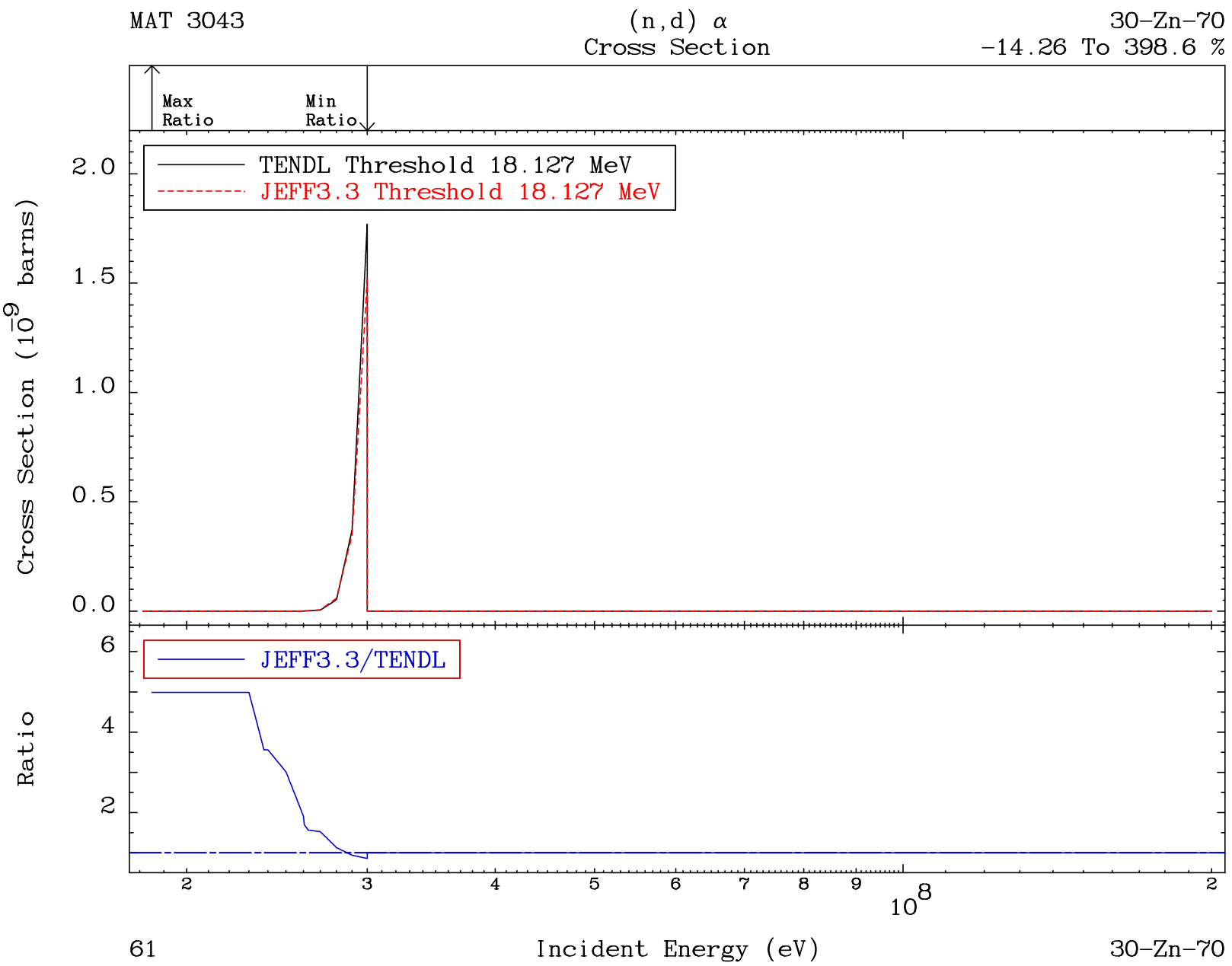

MAT 3043
(n,2α)
Cross Section
30-Zn-70
-97.14 To 588.7 %
Min Ratio
Max Ratio
TENDL Threshold 10.862 MeV
JEFF3.3 Threshold 10.862 MeV
Cross Section (10^-9 barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
30-Zn-70

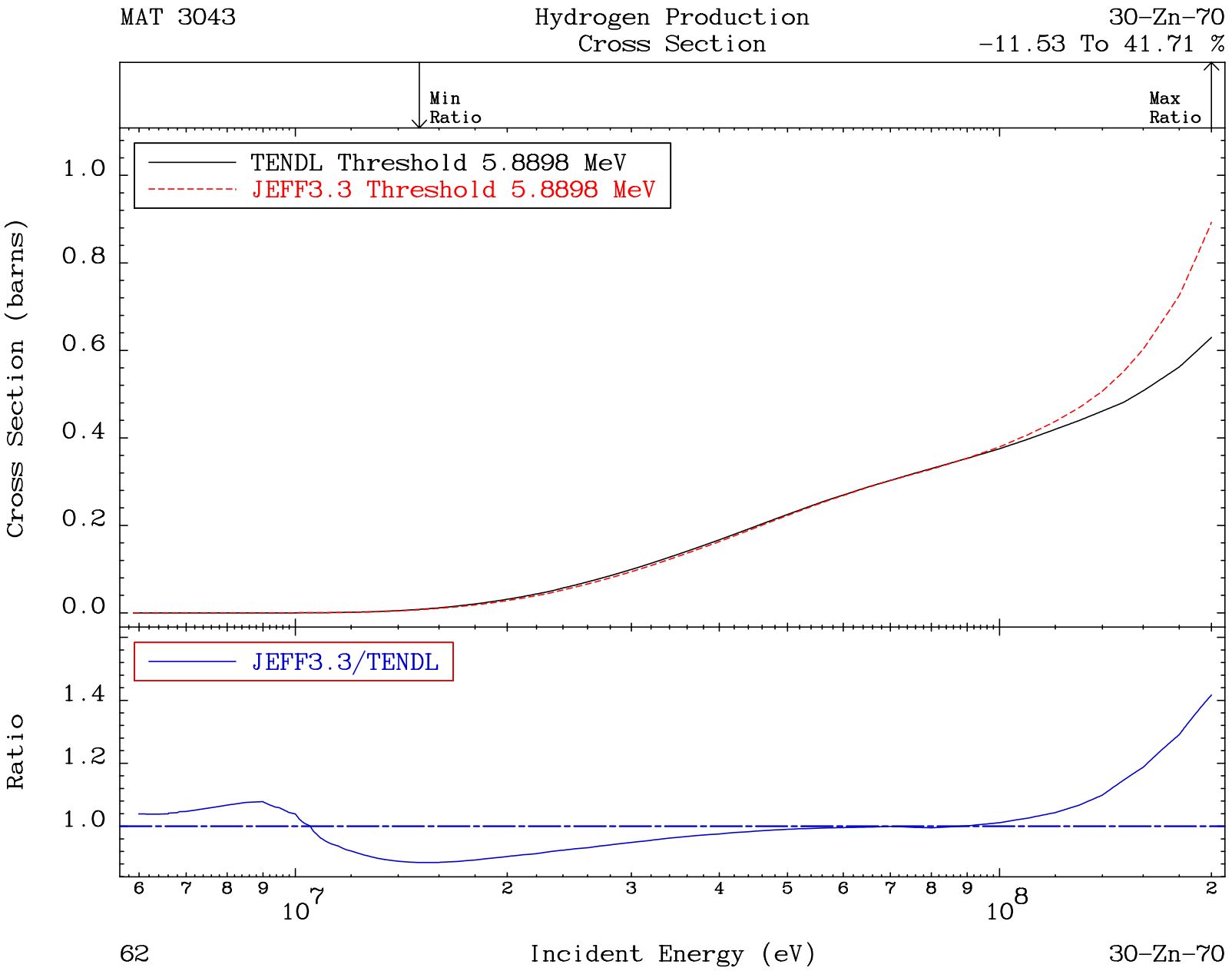

MAT 3043
(n,2p)
Cross Section
30-Zn-70
-100.0 To 63.95 %
Max
Ratio
TENDL Threshold 16.325 MeV
JEFF3.3 Threshold 16.325 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^0
10^-2
10^-4
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
30-Zn-70

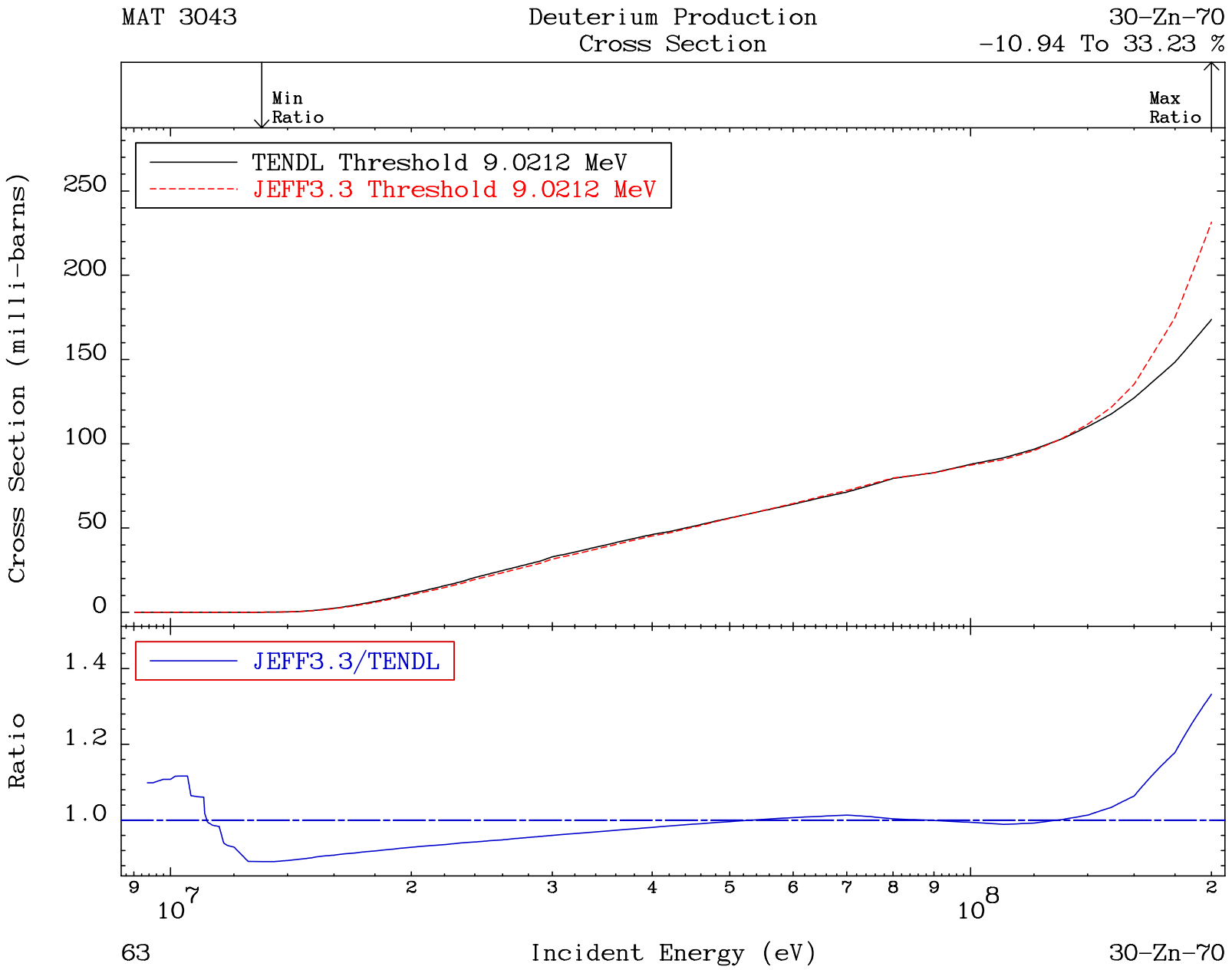

MAT 3043
(n,p) α
Cross Section
30-Zn-70
-16.06 To 580.8 %
Max Ratio
Min Ratio
TENDL Threshold 15.012 MeV
JEFF3.3 Threshold 15.012 MeV
Cross Section (10^{-9} barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
8
6
4
2
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
30-Zn-70

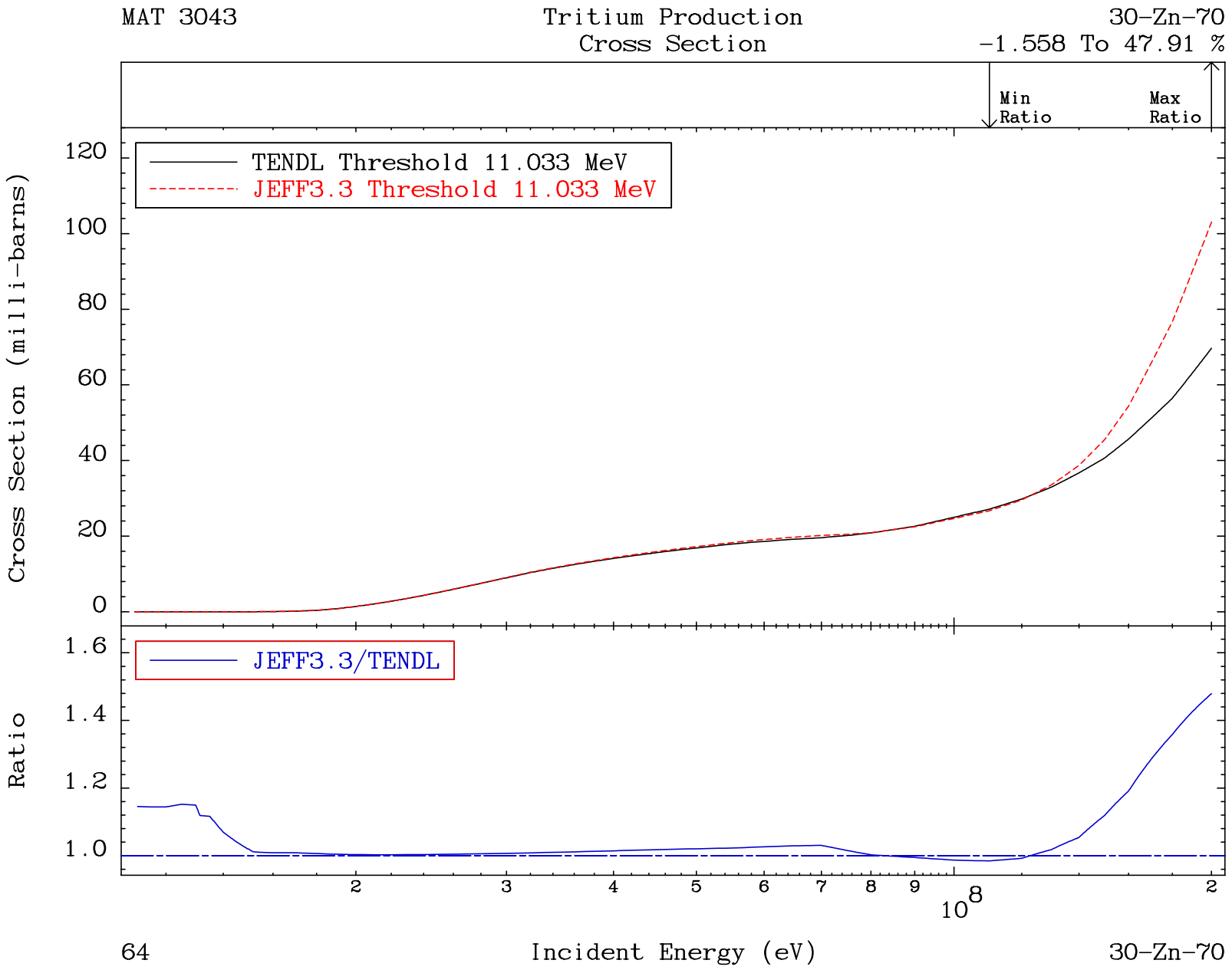

MAT 3043
(n,p) d
Cross Section
30-Zn-70
-1.608 To 129.5 %
Max Ratio
Min Ratio
TENDL Threshold 18.721 MeV
JEFF3.3 Threshold 18.721 MeV
Cross Section (10^-9 barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
30-Zn-70

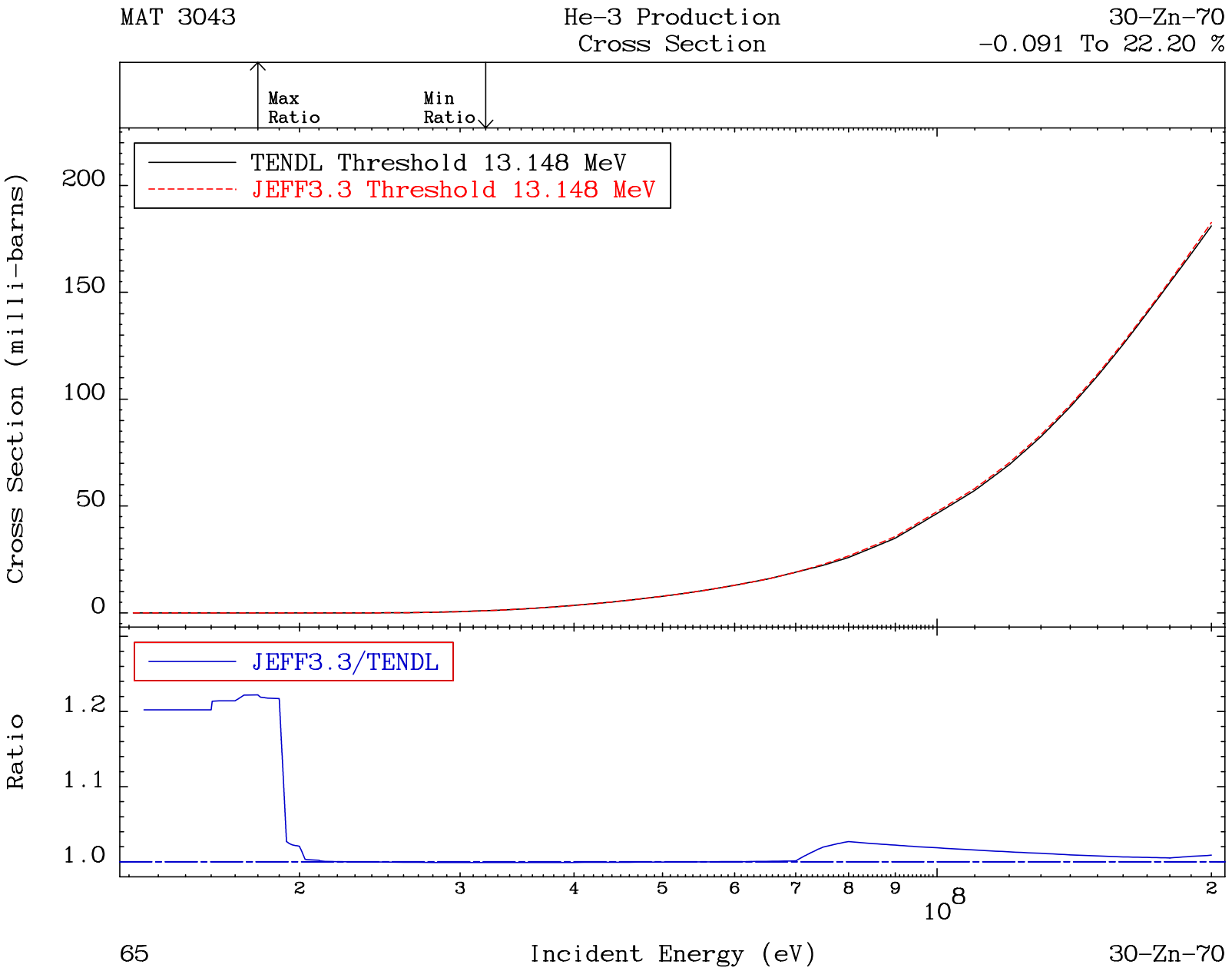

MAT 3043
(n,p) t
Cross Section
30-Zn-70
0.000 To 145.8 %
Min
Ratio
TENDL Threshold 20.278 MeV
JEFF3.3 Threshold 20.278 MeV
Cross Section (10^-9 barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.5
2.0
1.5
1.0
20
40
60
80
100
120
140
160
180
200
60
Incident Energy (MeV)
30-Zn-70

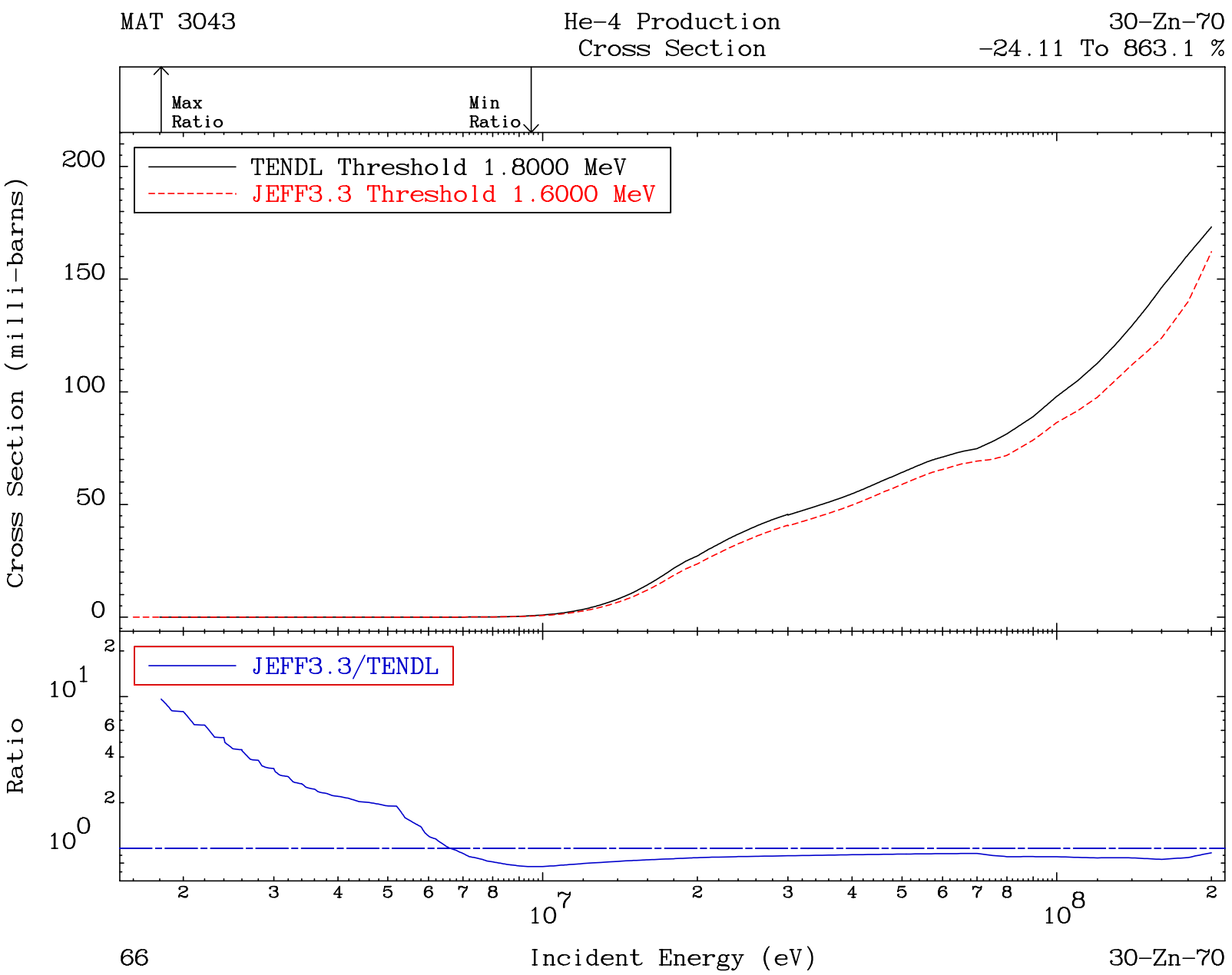

MAT 3043
(n,d) α
Cross Section
30-Zn-70
-14.26 To 398.6 %
Max Ratio
Min Ratio
TENDL Threshold 18.127 MeV
JEFF3.3 Threshold 18.127 MeV
Cross Section (10^-9 barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
30-Zn-70

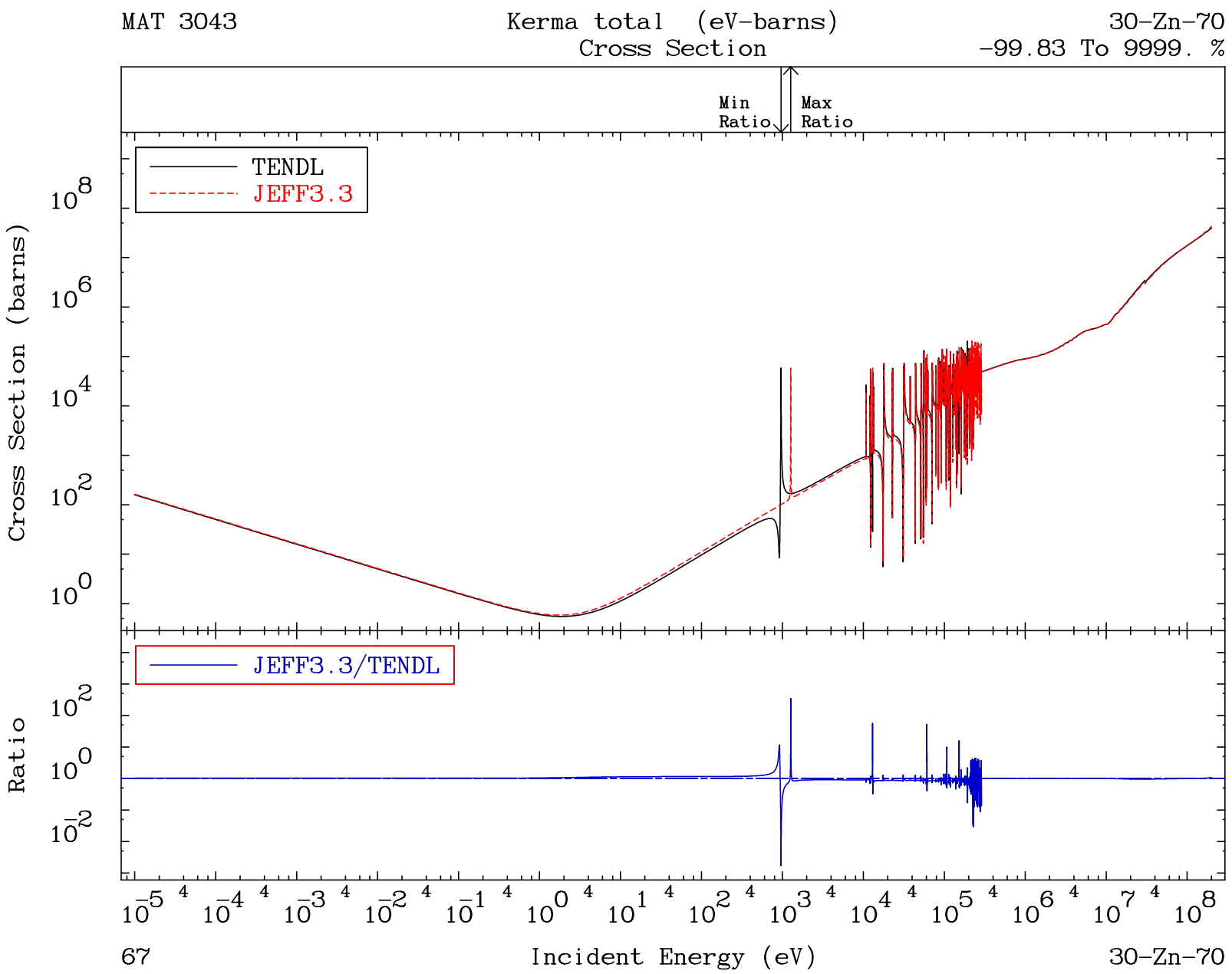

MAT 3043
Hydrogen Production
Cross Section
30-Zn-70
-11.53 To 41.71 %
Min Ratio
Max Ratio
TENDL Threshold 5.8898 MeV
JEFF3.3 Threshold 5.8898 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
30-Zn-70

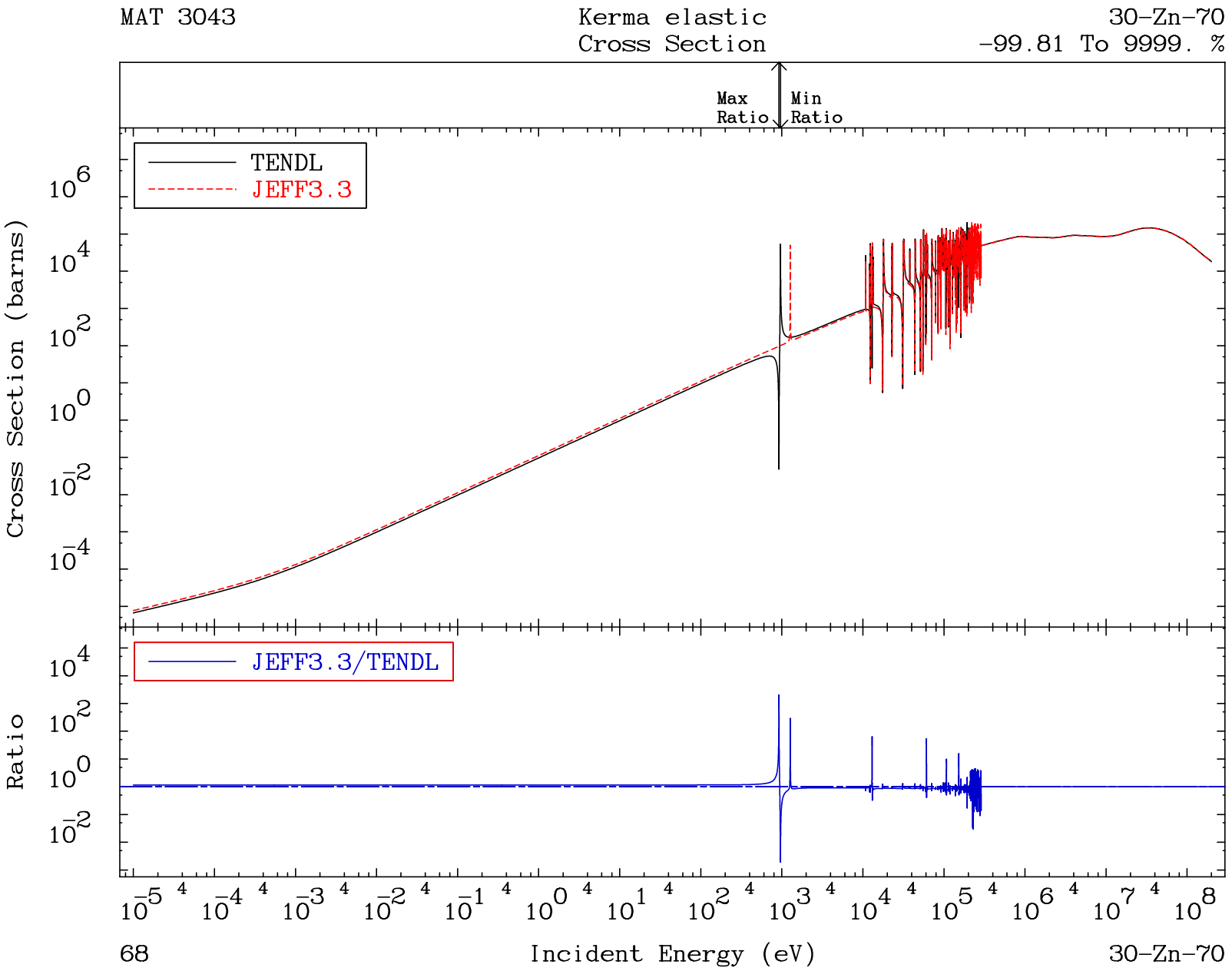

MAT 3043
Deuterium Production
Cross Section
30-Zn-70
-10.94 To 33.23 %
Min Ratio
Max Ratio
TENDL Threshold 9.0212 MeV
JEFF3.3 Threshold 9.0212 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
30-Zn-70

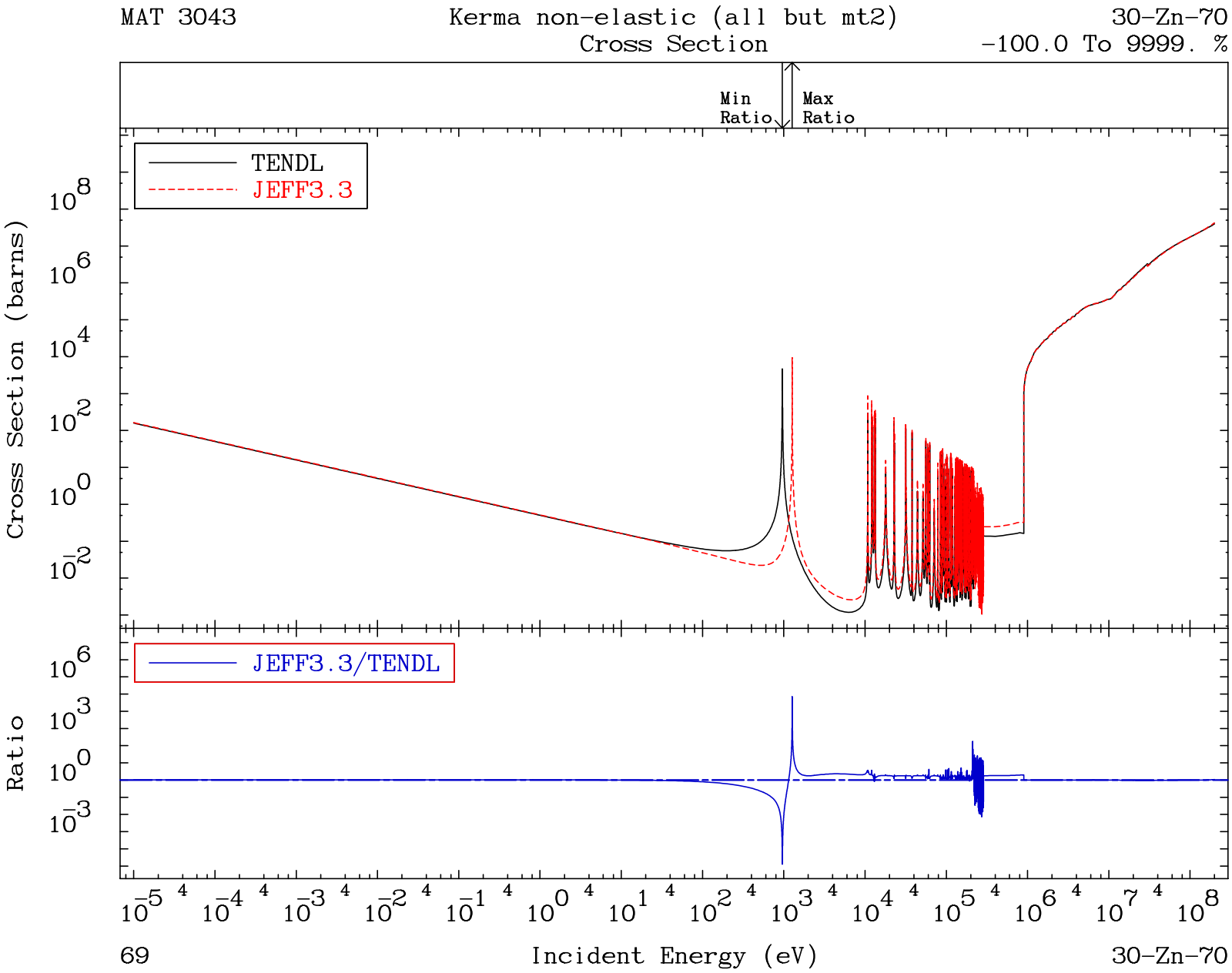

MAT 3043
Tritium Production
Cross Section
30-Zn-70
-1.558 To 47.91 %
Min Ratio
Max Ratio
TENDL Threshold 11.033 MeV
JEFF3.3 Threshold 11.033 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
30-Zn-70

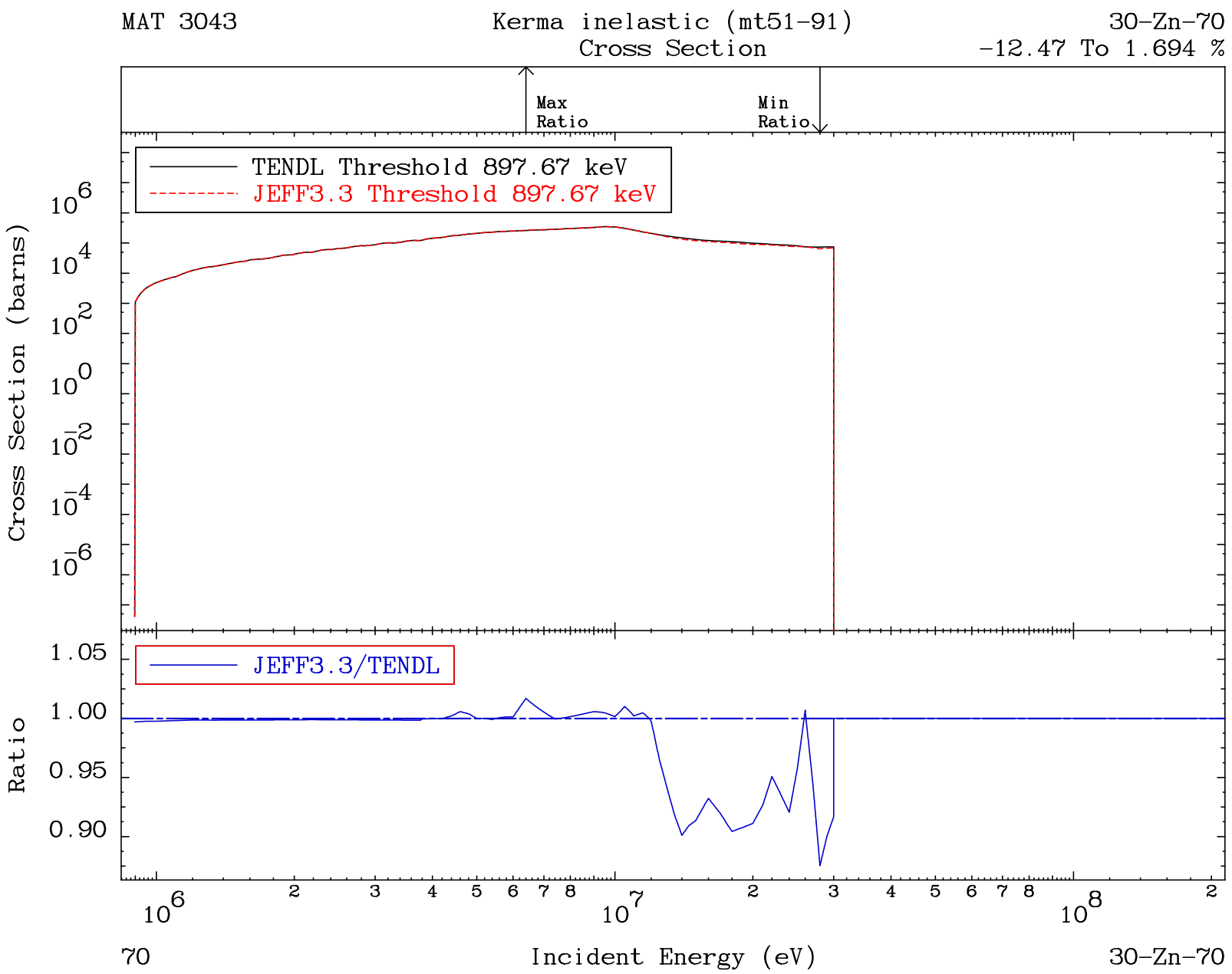

MAT 3043
He-3 Production
Cross Section
30-Zn-70
-0.091 To 22.20 %
Max Ratio
Min Ratio
TENDL Threshold 13.148 MeV
JEFF3.3 Threshold 13.148 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
30-Zn-70

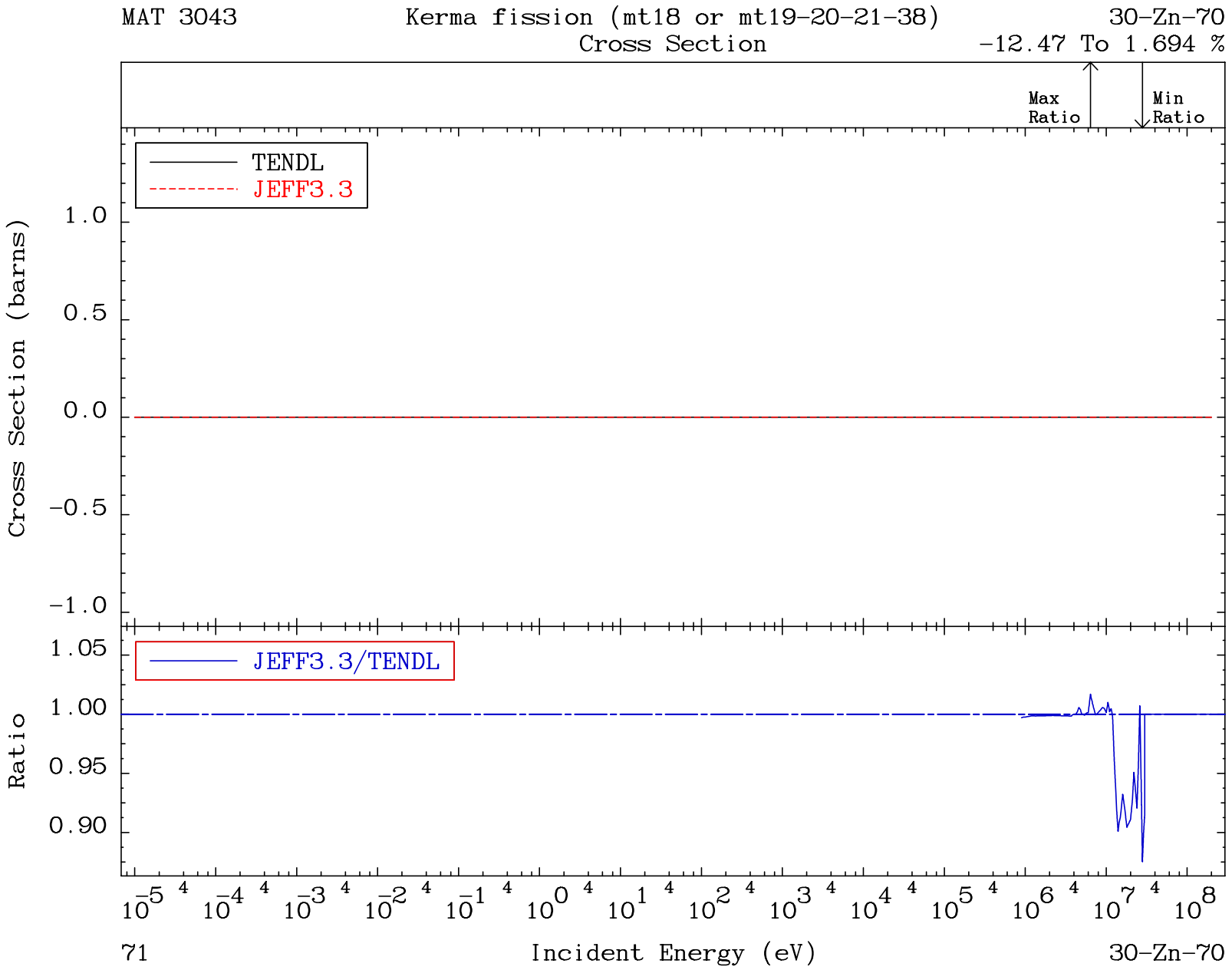

MAT 3043
He-4 Production
Cross Section
30-Zn-70
-24.11 To 863.1 %
Max Ratio
Min Ratio
TENDL Threshold 1.8000 MeV
JEFF3.3 Threshold 1.6000 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^1
10^0
2
6
4
2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
66
Incident Energy (eV)
30-Zn-70

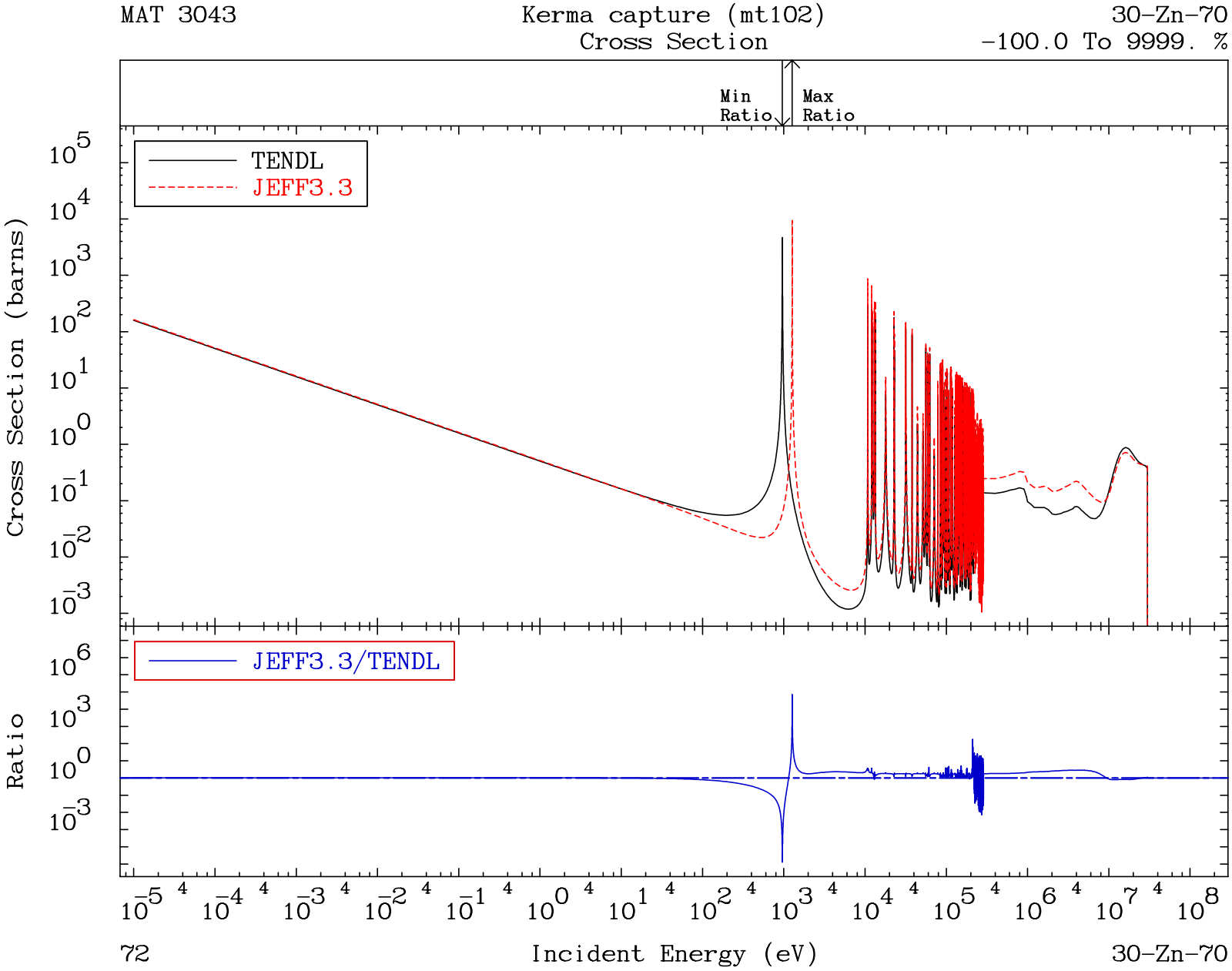

MAT 3043
Kerma total (eV-barns)
Cross Section
30-Zn-70
-99.83 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
30-Zn-70

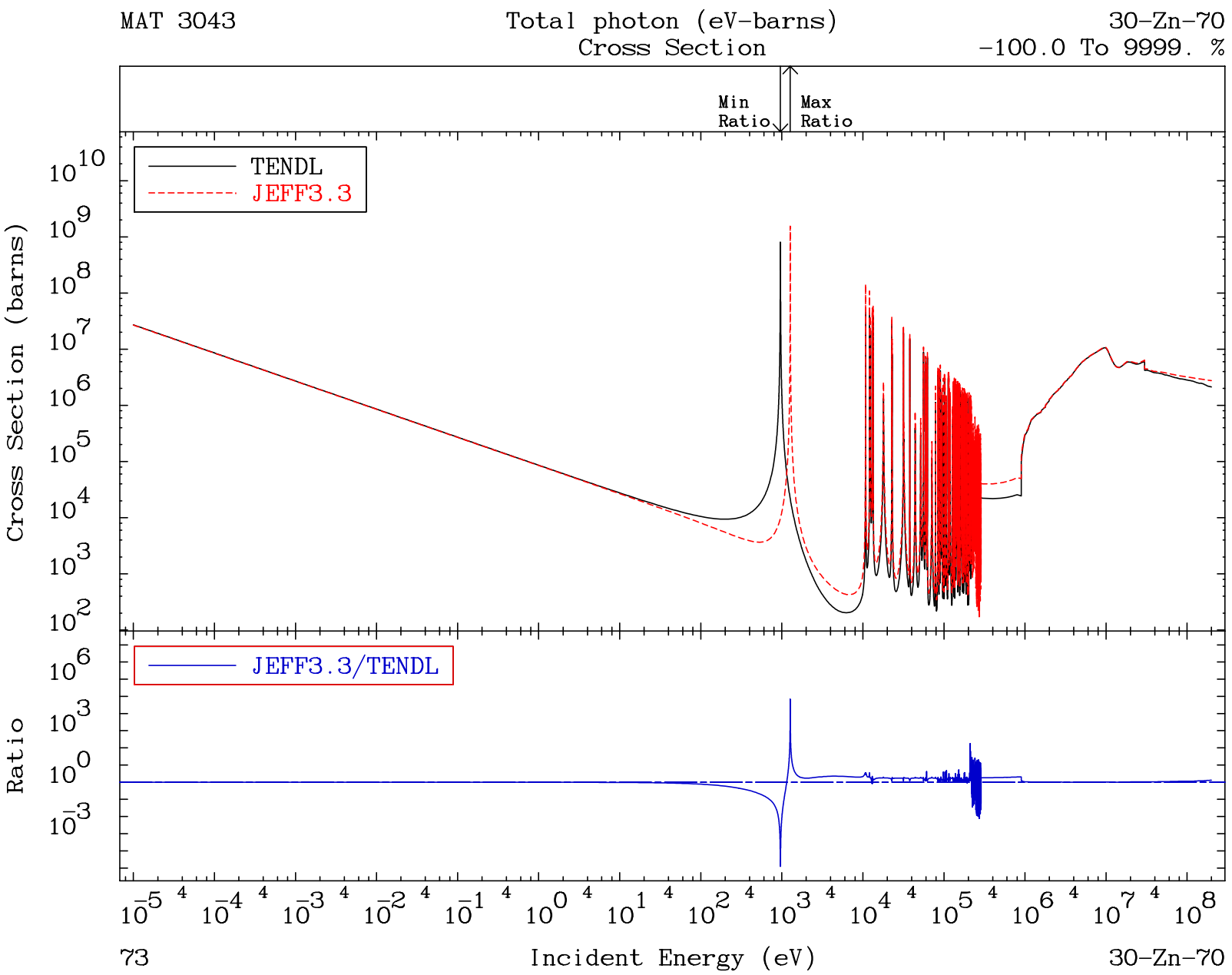

MAT 3043
Kerma elastic
Cross Section
30-Zn-70
-99.81 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
30-Zn-70

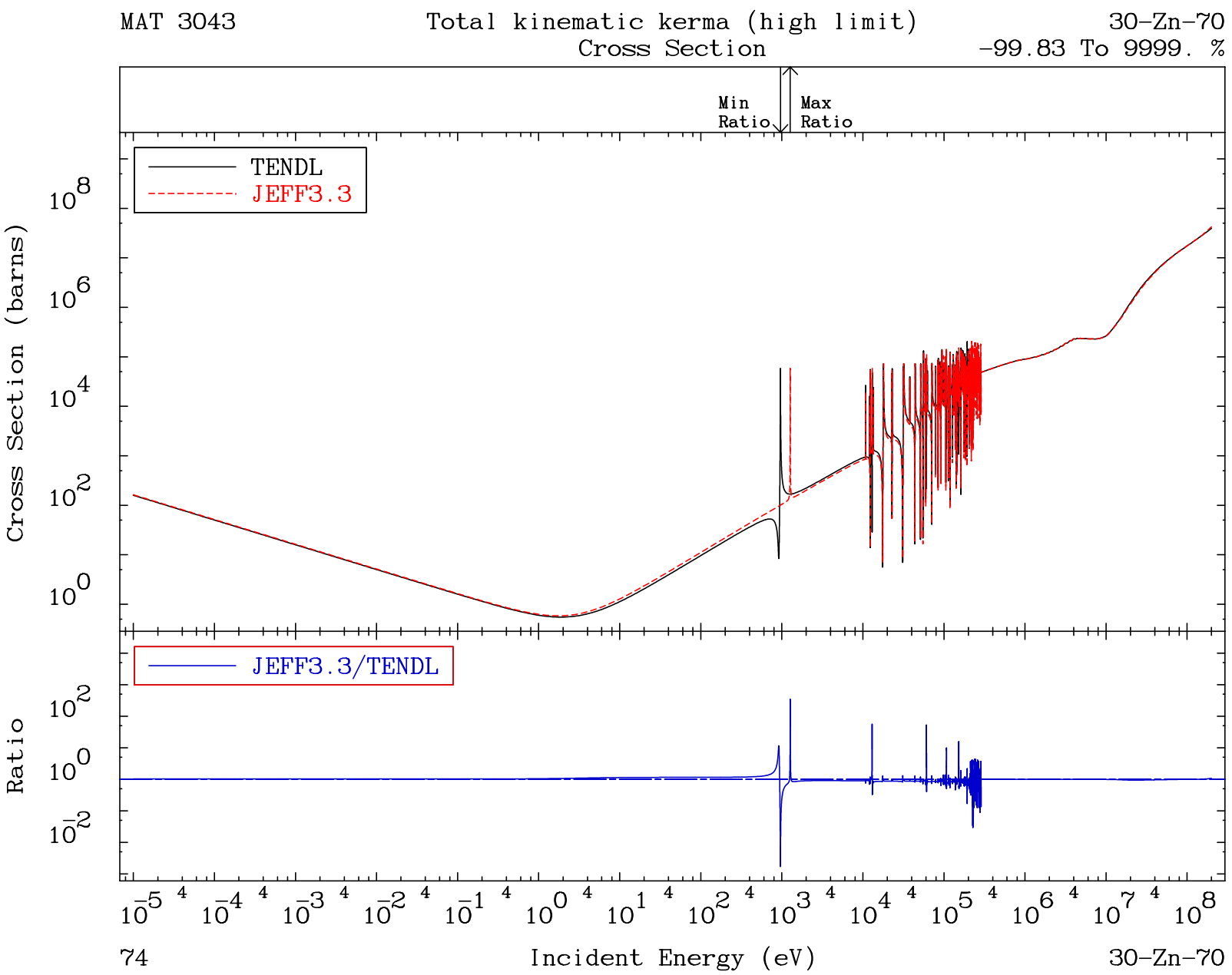

MAT 3043
Kerma non-elastic (all but mt2)
Cross Section
30-Zn-70
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
30-Zn-70

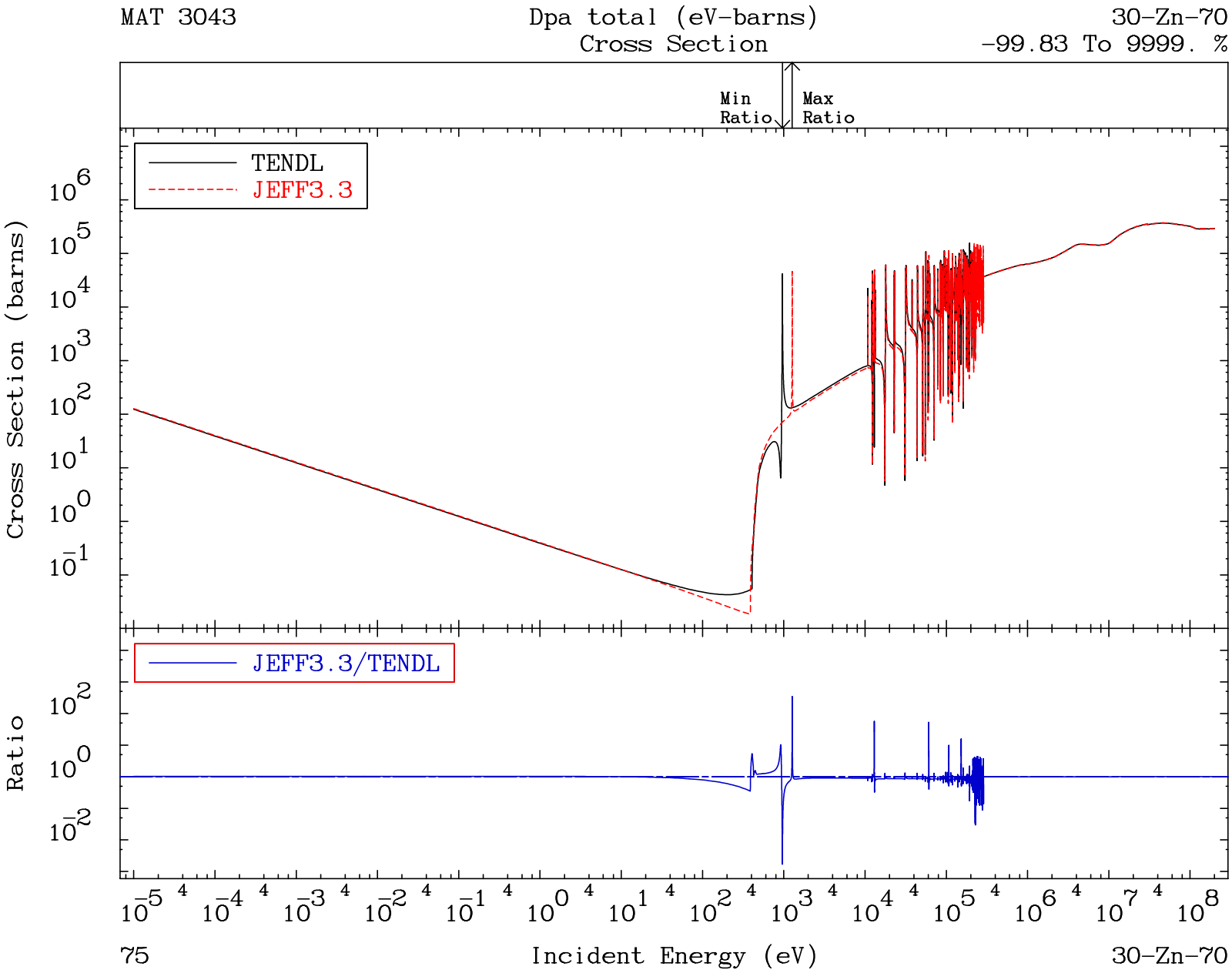

MAT 3043
Kerma inelastic (mt51-91)
Cross Section
30-Zn-70
-12.47 To 1.694 %
Max Ratio
Min Ratio
TENDL Threshold 897.67 keV
JEFF3.3 Threshold 897.67 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
30-Zn-70

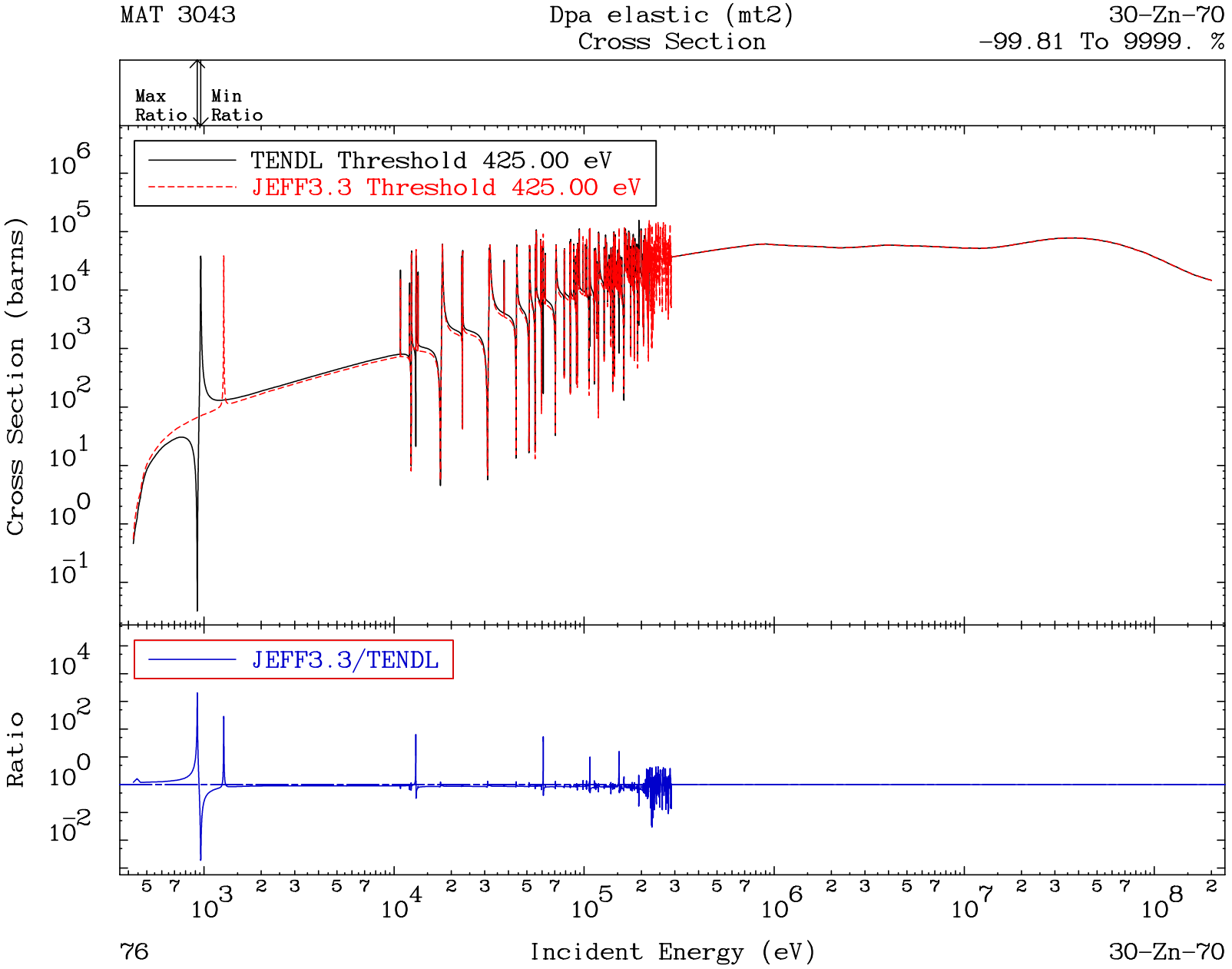

MAT 3043
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
30-Zn-70
-12.47 To 1.694 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
71
Incident Energy (eV)
30-Zn-70

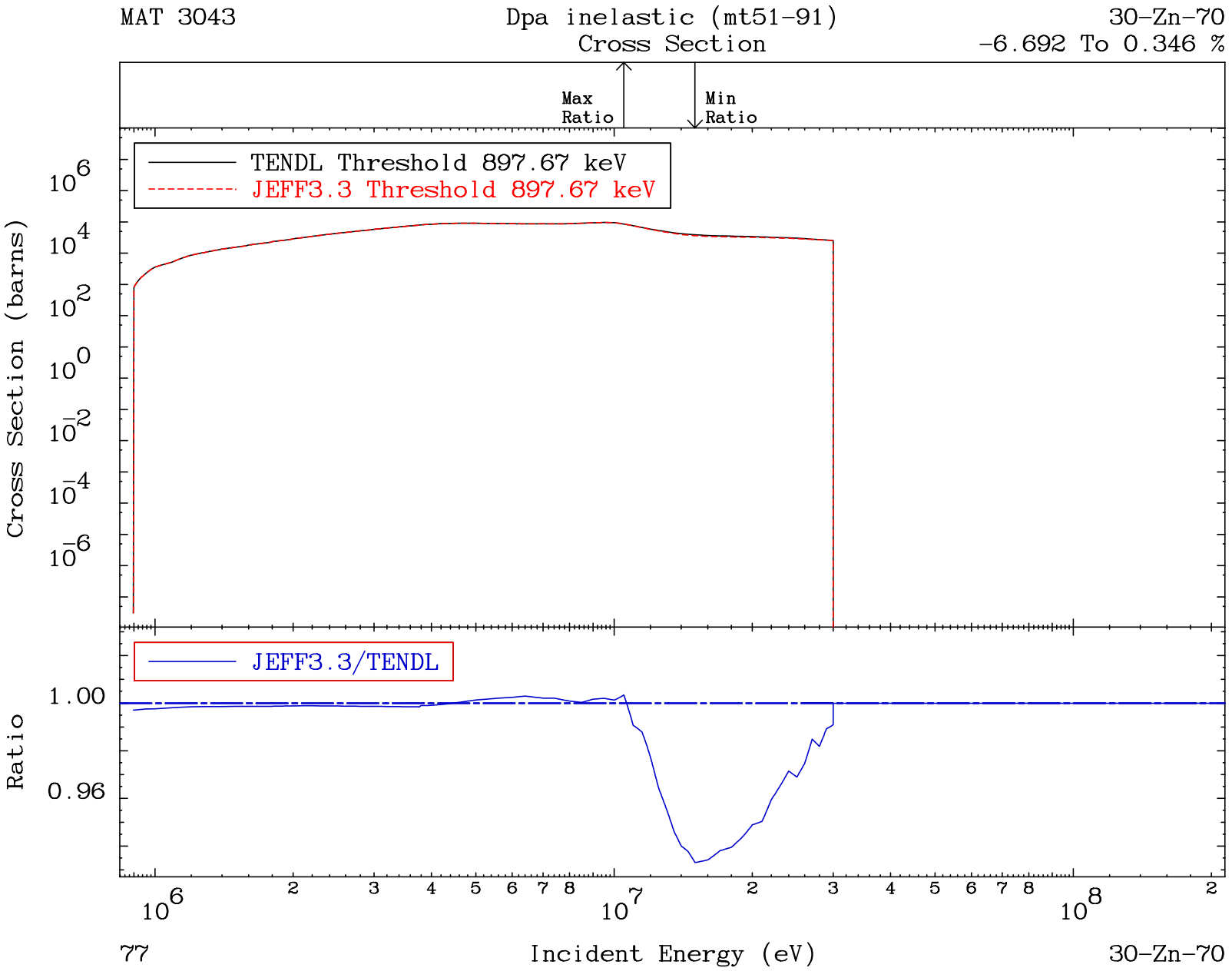

MAT 3043
Kerma capture (mt102)
Cross Section
30-Zn-70
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
30-Zn-70

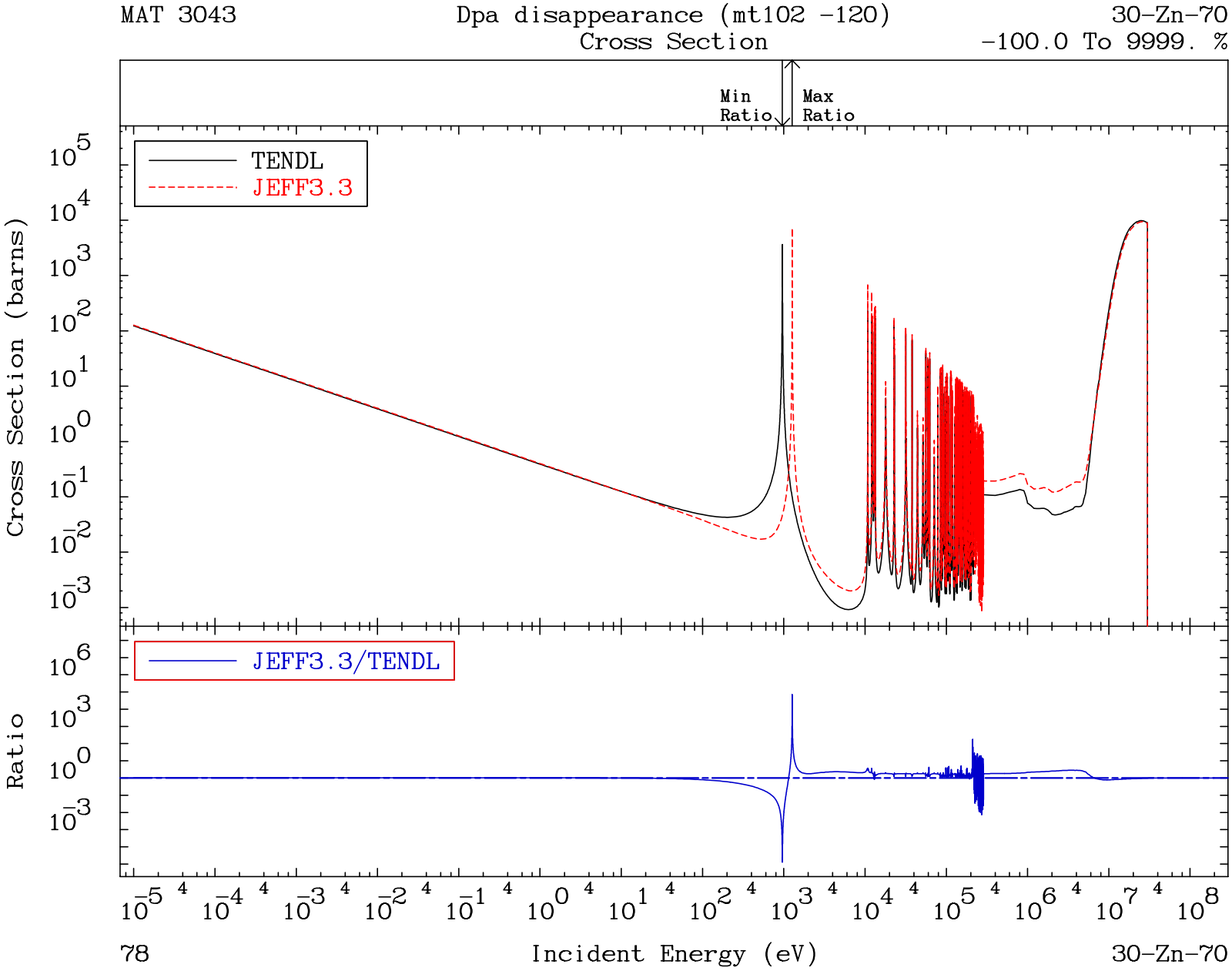

MAT 3043
Total photon (eV-barns)
Cross Section
30-Zn-70
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
30-Zn-70

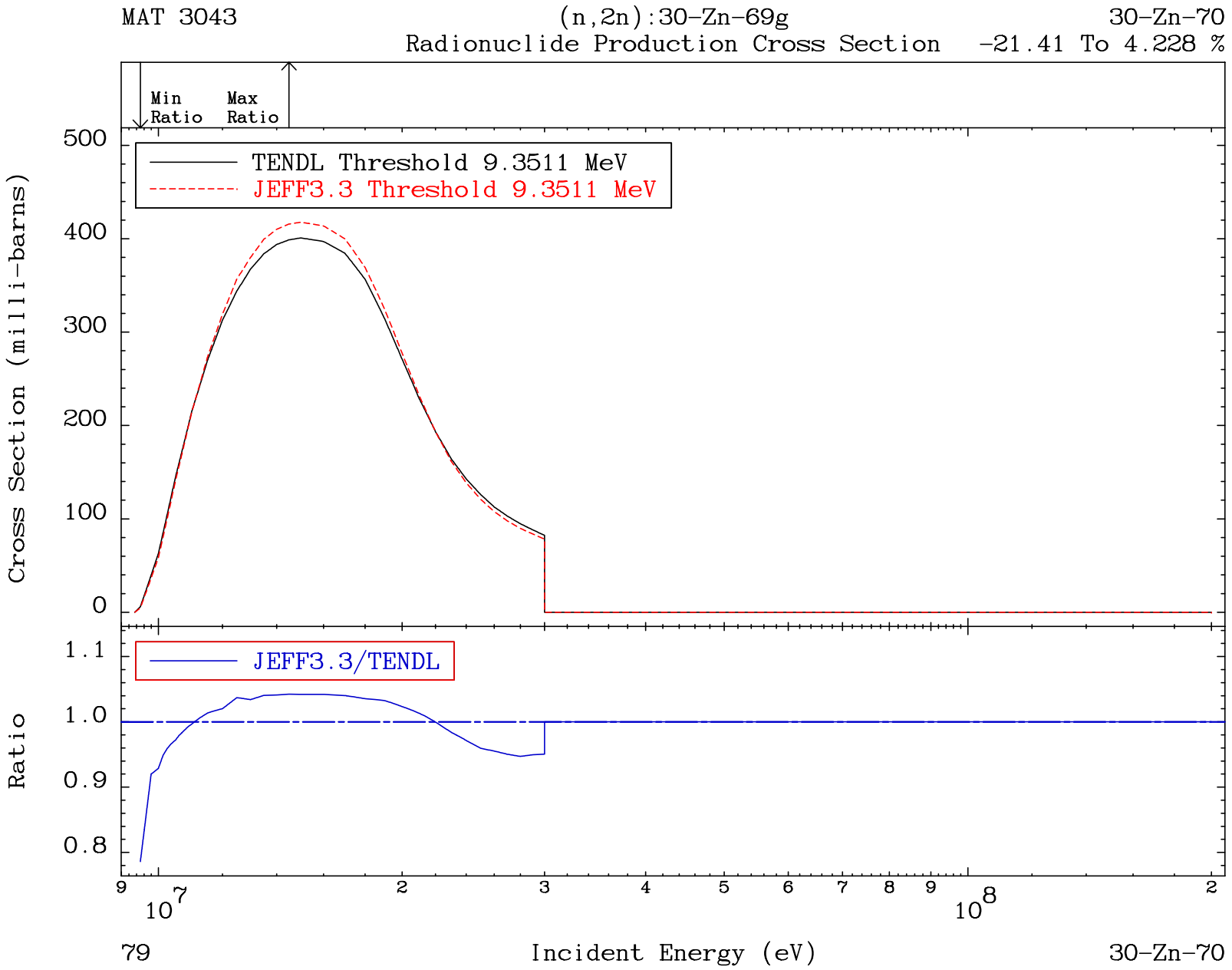

MAT 3043
Total kinematic kerma (high limit)
Cross Section
30-Zn-70
-99.83 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
30-Zn-70

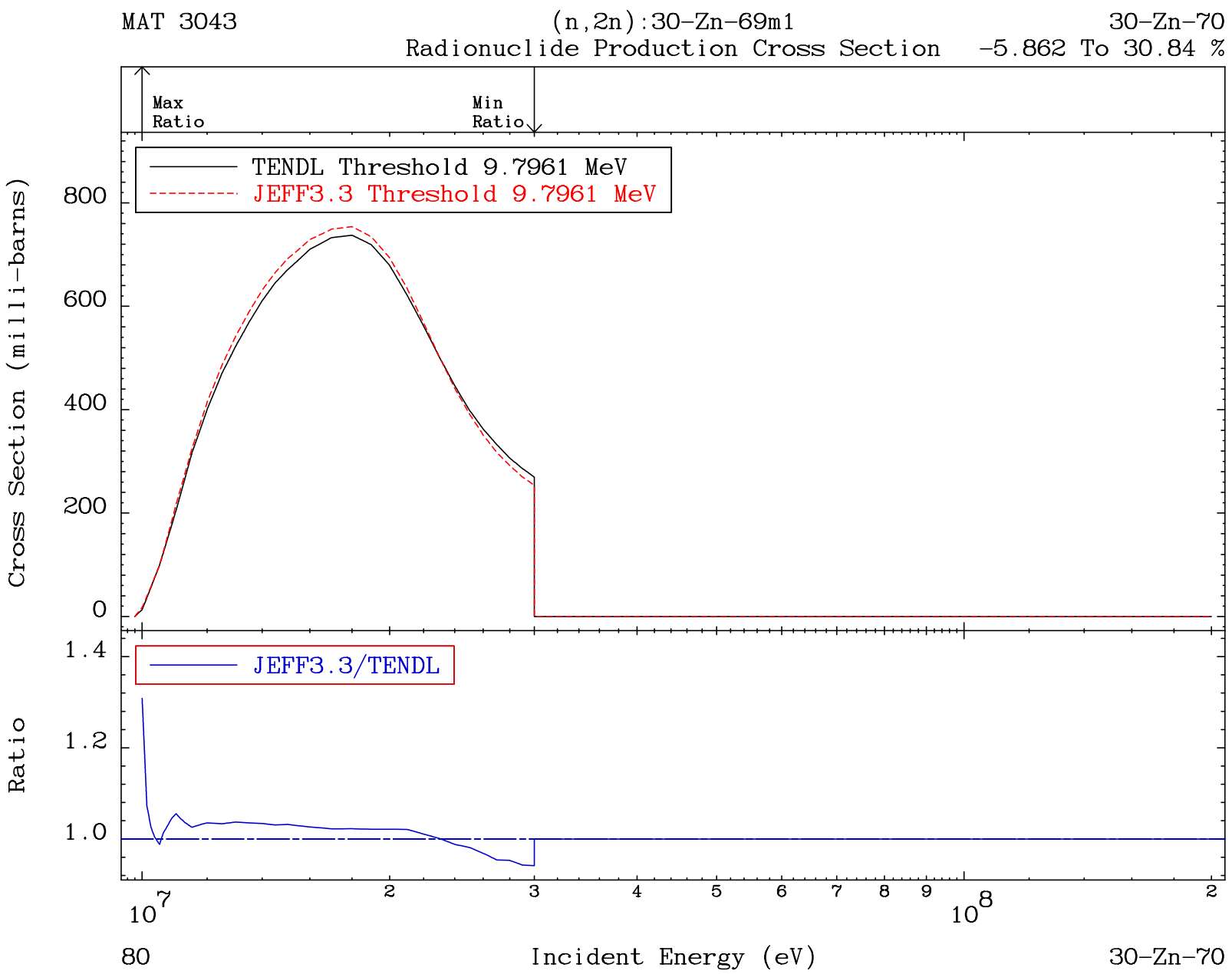

MAT 3043
Dpa total (eV-barns)
Cross Section
30-Zn-70
-99.83 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
30-Zn-70

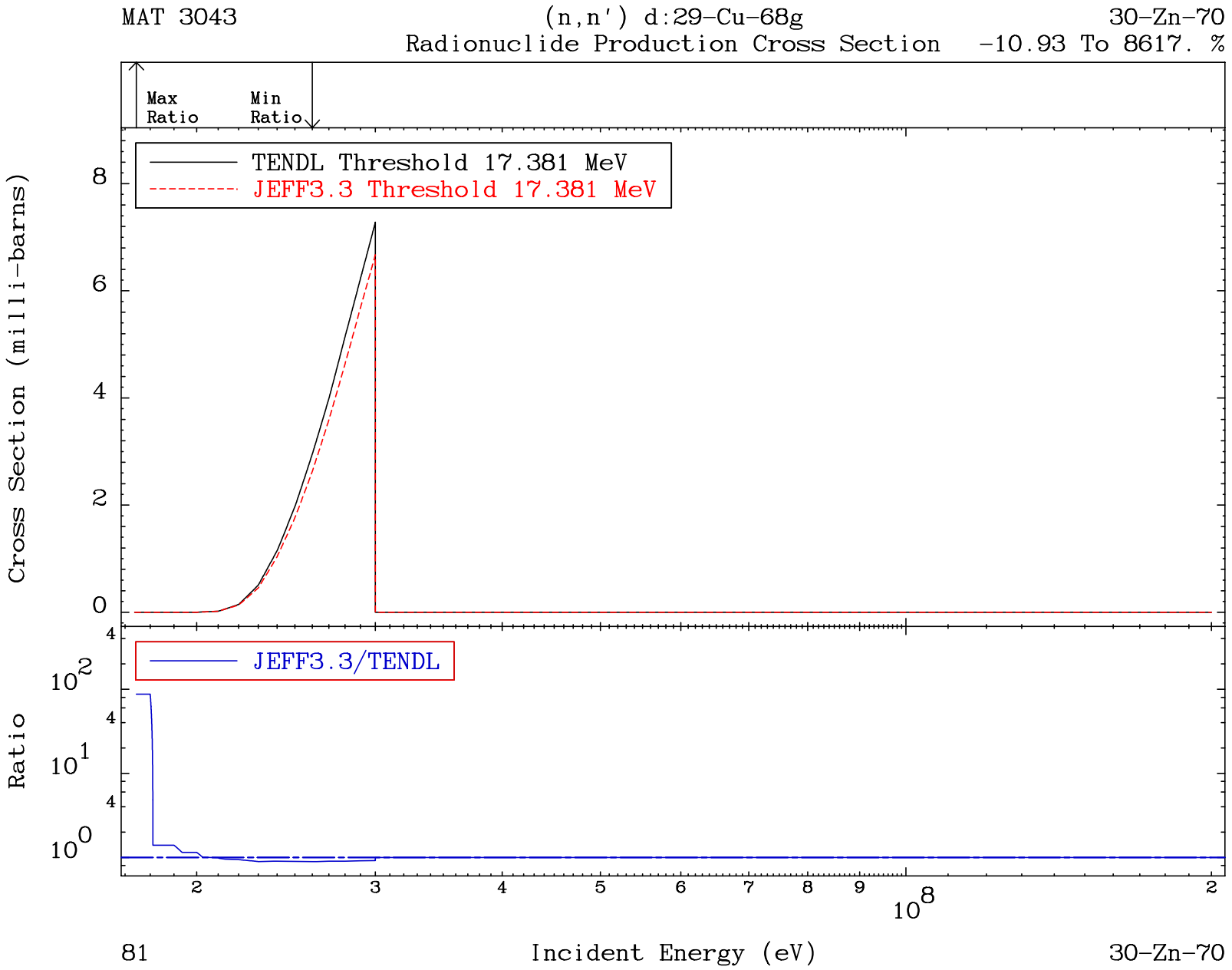

MAT 3043
Dpa elastic (mt2)
Cross Section
30-Zn-70
-99.81 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 425.00 eV
JEFF3.3 Threshold 425.00 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
30-Zn-70

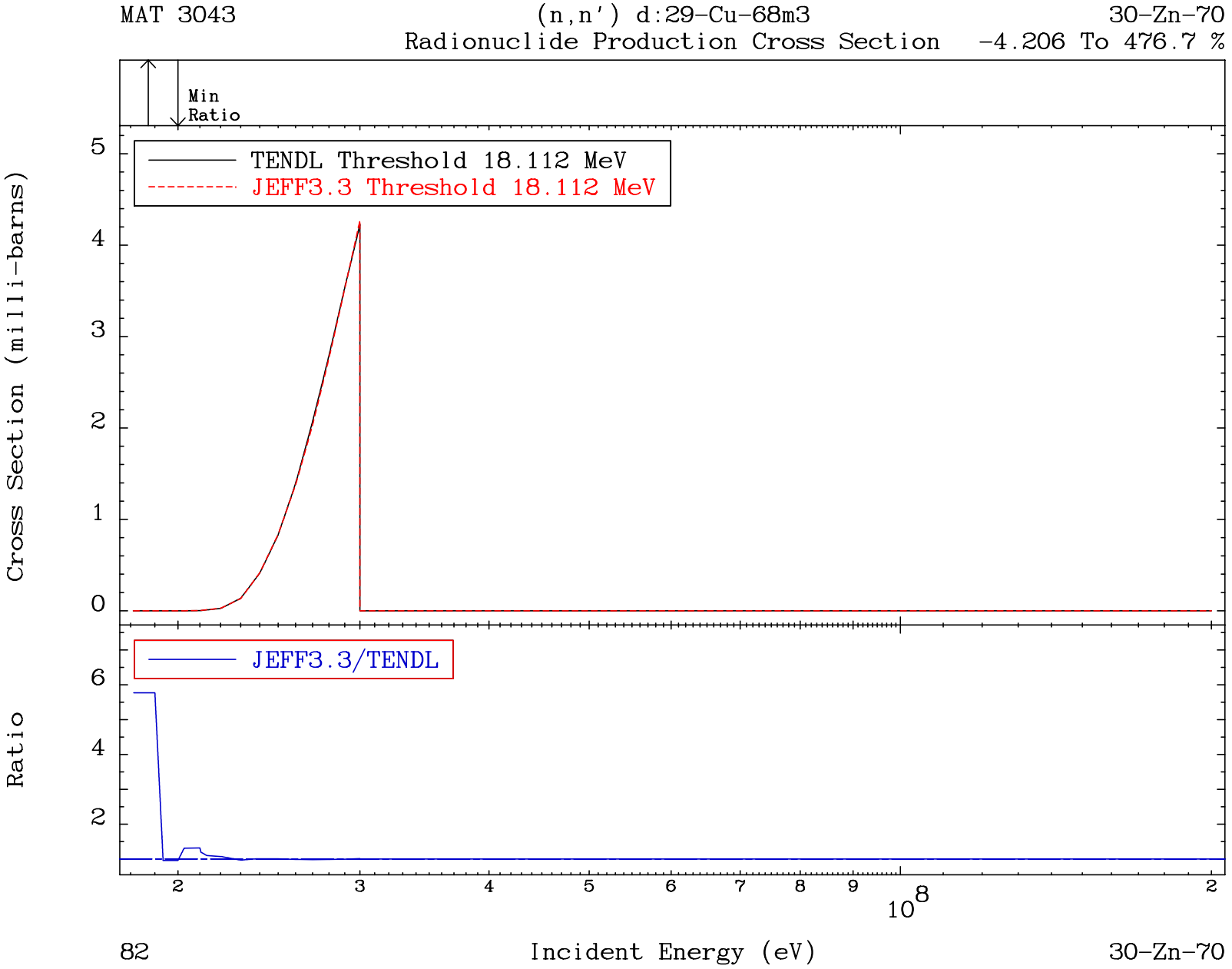

MAT 3043
Dpa inelastic (mt51-91)
Cross Section
30-Zn-70
-6.692 To 0.346 %
Max Ratio
Min Ratio
TENDL Threshold 897.67 keV
JEFF3.3 Threshold 897.67 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
30-Zn-70

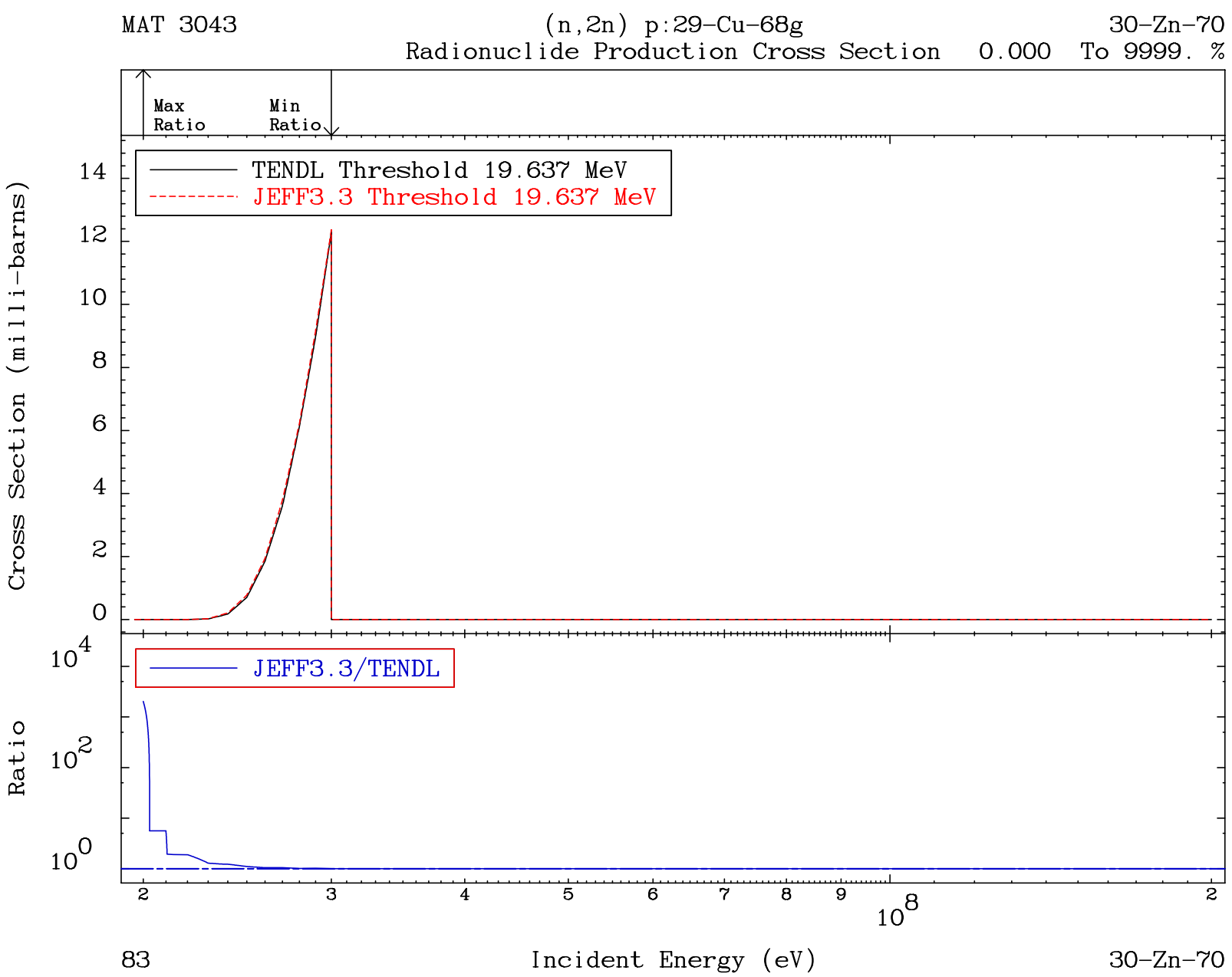

MAT 3043
Dpa disappearance (mt102 -120)
Cross Section
30-Zn-70
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
30-Zn-70

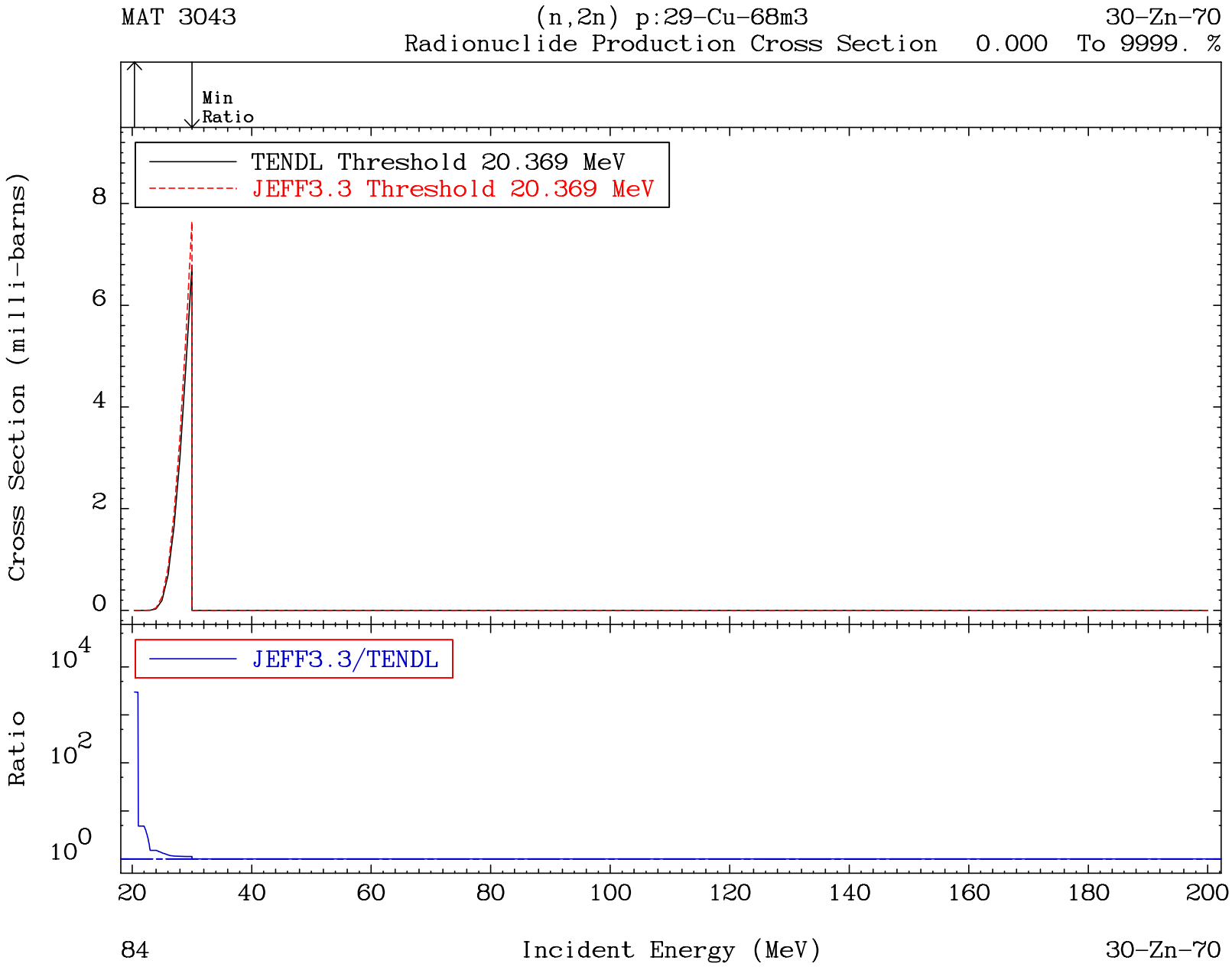

MAT 3043
(n,2n):30-Zn-69g
30-Zn-70
Radionuclide Production Cross Section
-21.41 To 4.228 %
Min Ratio
Max Ratio
TENDL Threshold 9.3511 MeV
JEFF3.3 Threshold 9.3511 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
9
2
3
4
5
6
7
8
9
2
10^7
10^8
79
Incident Energy (eV)
30-Zn-70

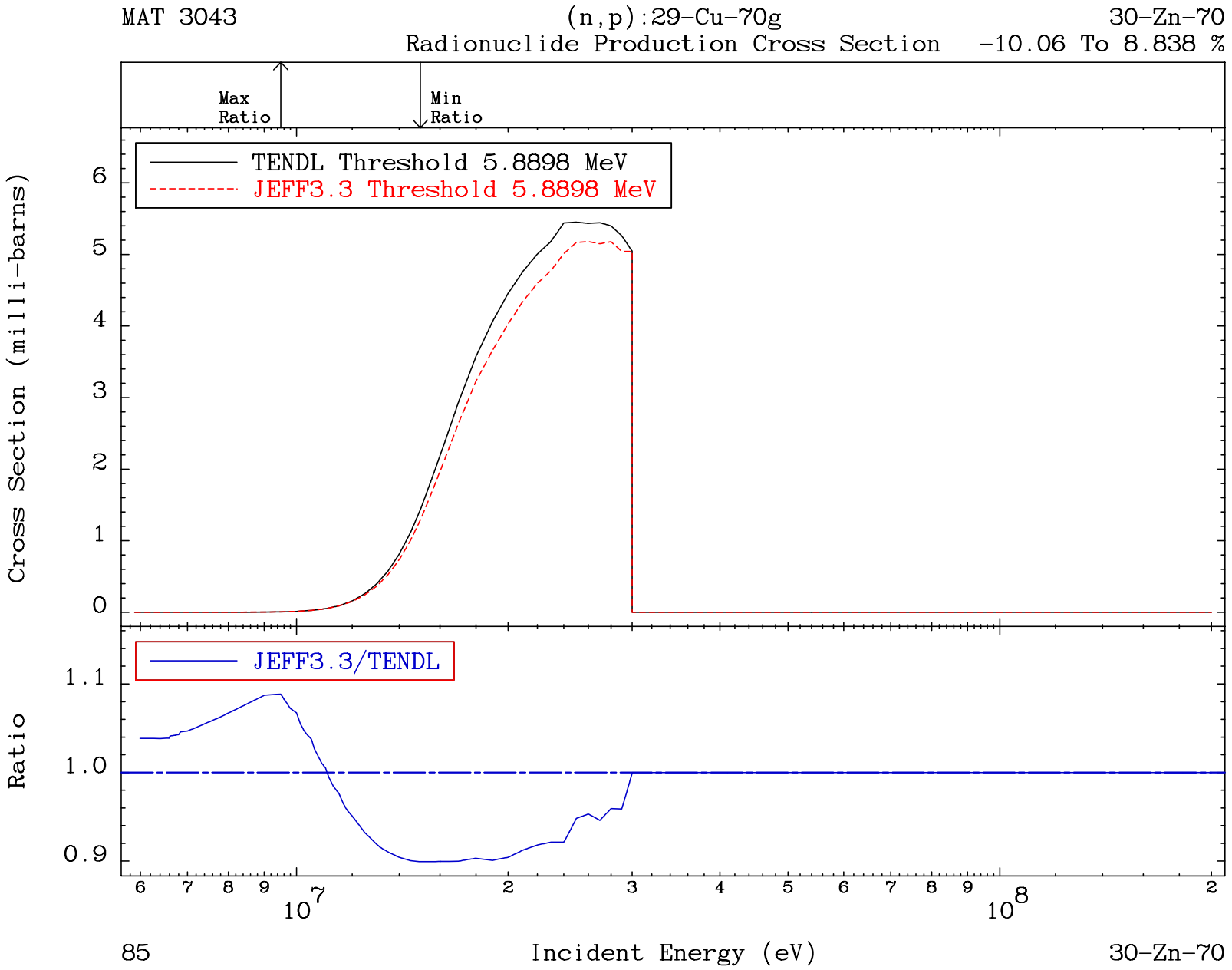

MAT 3043
(n,2n):30-Zn-69m1
30-Zn-70
Radionuclide Production Cross Section
-5.862 To 30.84 %
Max Ratio
Min Ratio
TENDL Threshold 9.7961 MeV
JEFF3.3 Threshold 9.7961 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
30-Zn-70

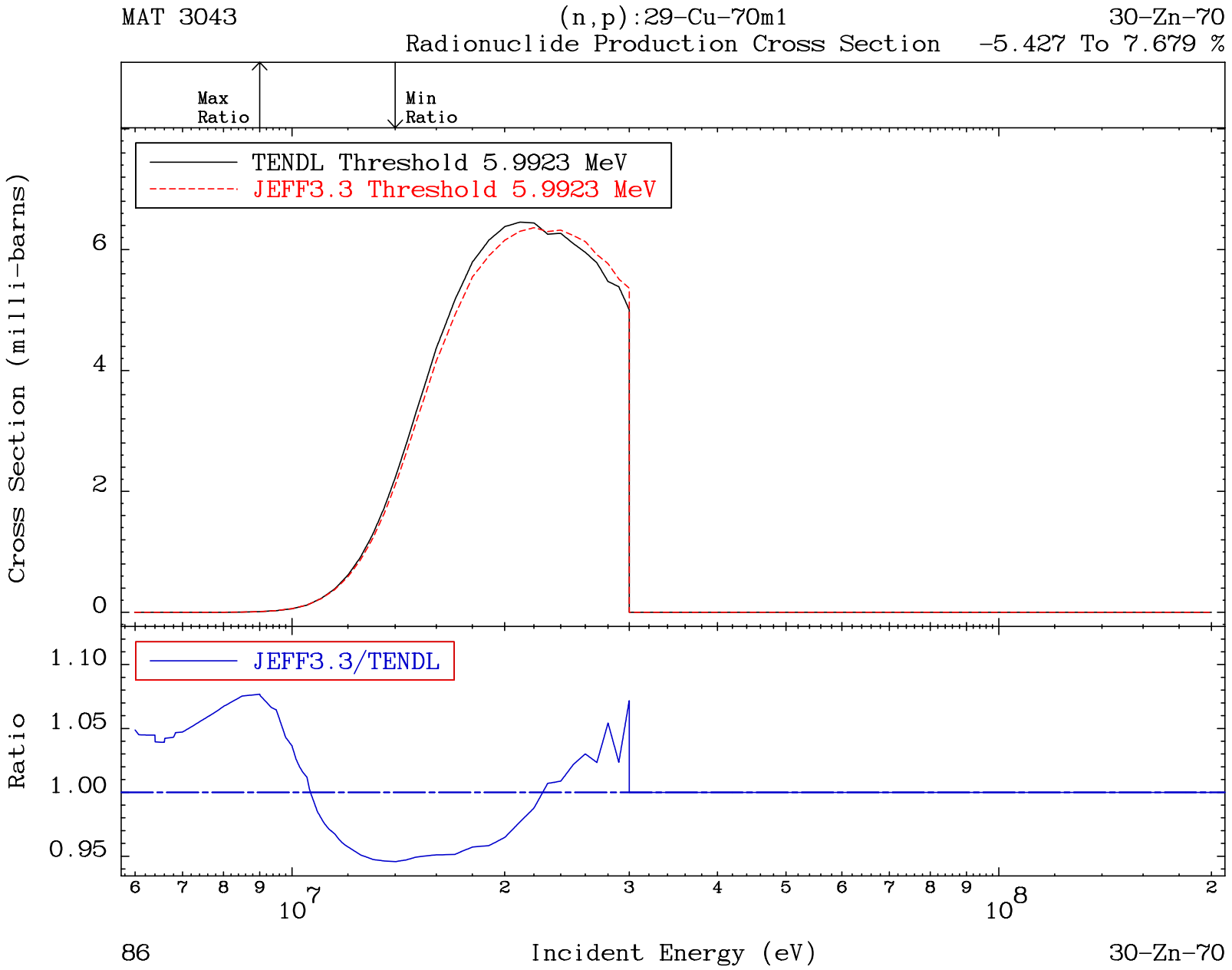

MAT 3043
(n,n') d:29-Cu-68g
30-Zn-70
Radionuclide Production Cross Section -10.93 To 8617. %
Max Ratio
Min Ratio
TENDL Threshold 17.381 MeV
JEFF3.3 Threshold 17.381 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
81
30-Zn-70

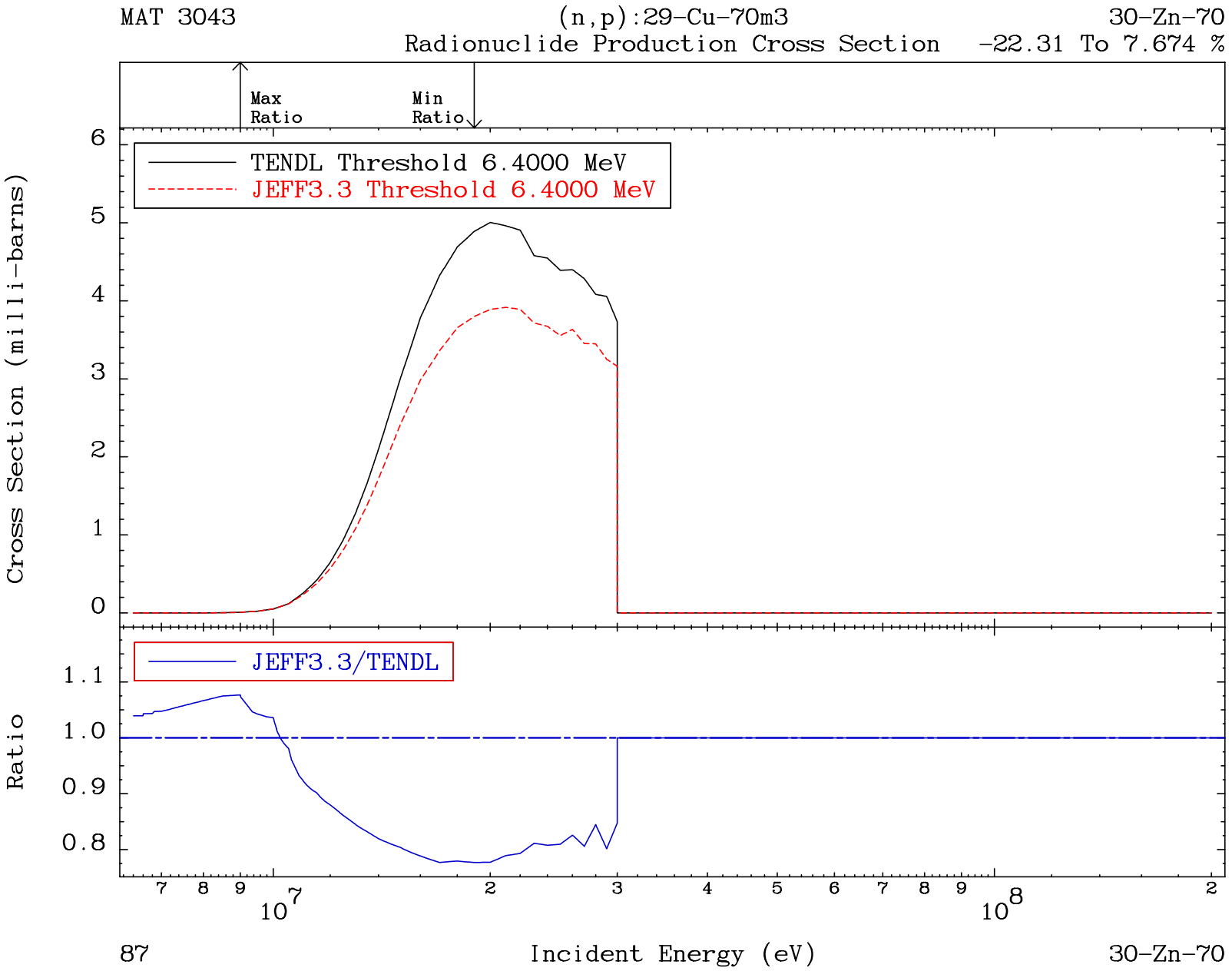

MAT 3043
(n,n') d:29-Cu-68m3
30-Zn-70
Radionuclide Production Cross Section
-4.206 To 476.7 %
Min
Ratio
TENDL Threshold 18.112 MeV
JEFF3.3 Threshold 18.112 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
82
30-Zn-70

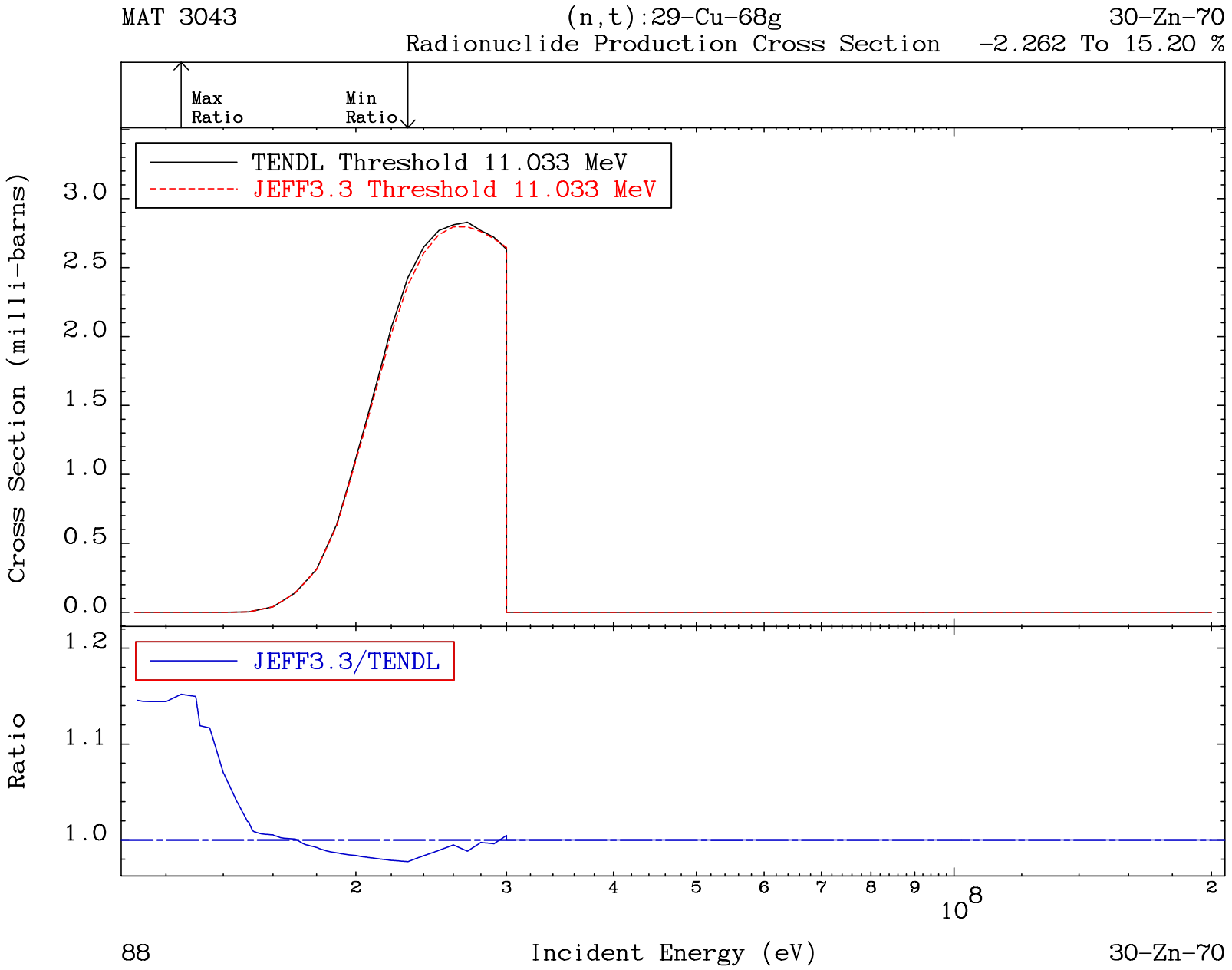

MAT 3043
(n,2n) p:29-Cu-68g
30-Zn-70
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.637 MeV
JEFF3.3 Threshold 19.637 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
30-Zn-70

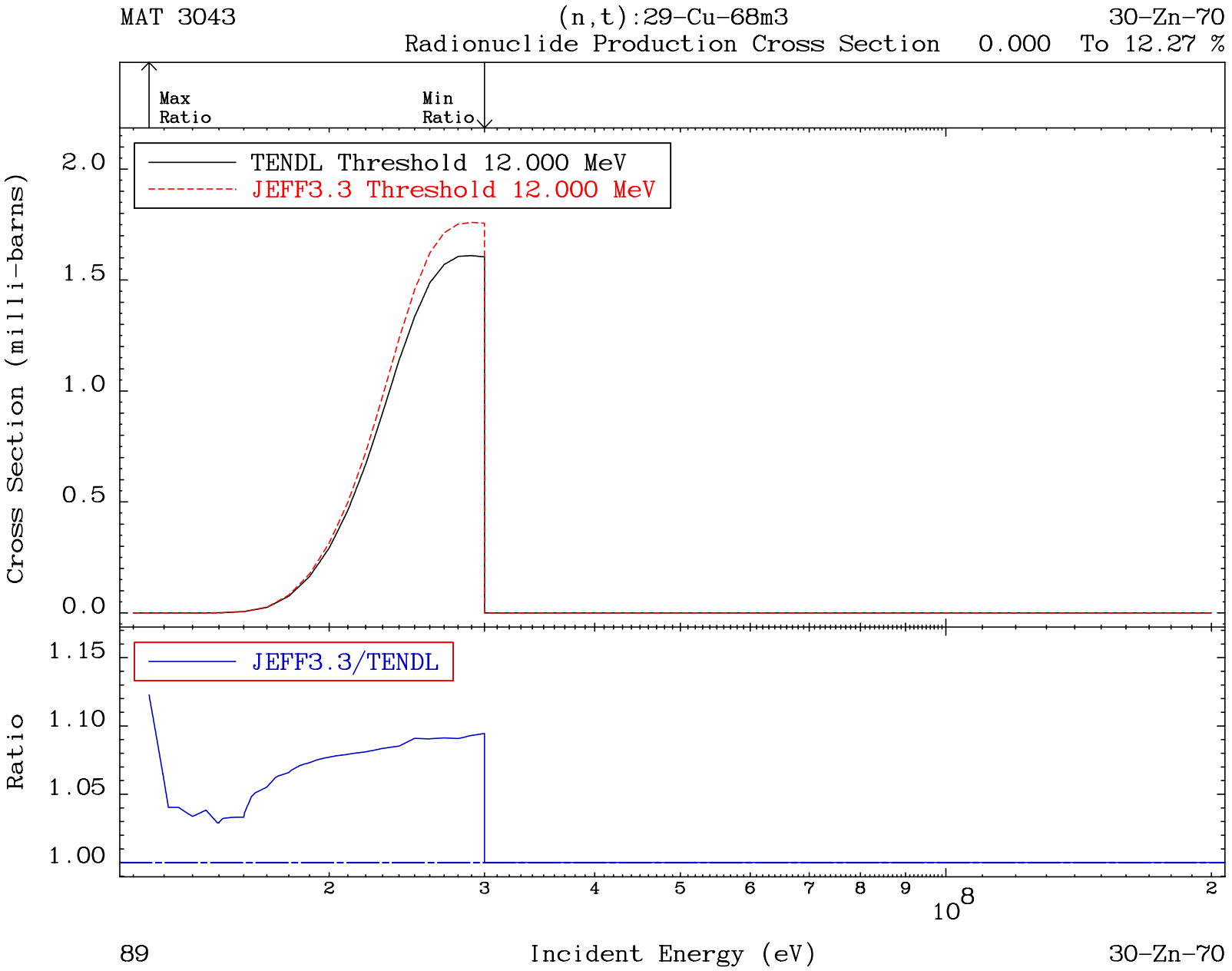

MAT 3043
(n,2n) p:29-Cu-68m3
30-Zn-70
Radionuclide Production Cross Section 0.000 To 9999. %
Min
Ratio
TENDL Threshold 20.369 MeV
JEFF3.3 Threshold 20.369 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
10^0
10^2
10^4
20
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
30-Zn-70


MAT 3043
(n,p):29-Cu-70g
30-Zn-70
Radionuclide Production Cross Section
-10.06 To 8.838 %
Max Ratio
Min Ratio
TENDL Threshold 5.8898 MeV
JEFF3.3 Threshold 5.8898 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
0.9
1.0
1.1
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
85
Incident Energy (eV)
30-Zn-70


MAT 3043
(n,p):29-Cu-70m1
30-Zn-70
Radionuclide Production Cross Section
-5.427 To 7.679 %
Max Ratio
Min Ratio
TENDL Threshold 5.9923 MeV
JEFF3.3 Threshold 5.9923 MeV
Cross Section (milli-barns)
0
2
4
6
JEFF3.3/TENDL
Ratio
0.95
1.00
1.05
1.10
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
86
Incident Energy (eV)
30-Zn-70


MAT 3043
(n,p):29-Cu-70m3
30-Zn-70
Radionuclide Production Cross Section
-22.31 To 7.674 %
Max Ratio
Min Ratio
TENDL Threshold 6.4000 MeV
JEFF3.3 Threshold 6.4000 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
87
30-Zn-70


MAT 3043
(n,t):29-Cu-68g
30-Zn-70
Radionuclide Production Cross Section
-2.262 To 15.20 %
Max Ratio
Min Ratio
TENDL Threshold 11.033 MeV
JEFF3.3 Threshold 11.033 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
30-Zn-70


MAT 3043
(n,t):29-Cu-68m3
30-Zn-70
Radionuclide Production Cross Section 0.000 To 12.27 %
Max Ratio
Min Ratio
TENDL Threshold 12.000 MeV
JEFF3.3 Threshold 12.000 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
30-Zn-70