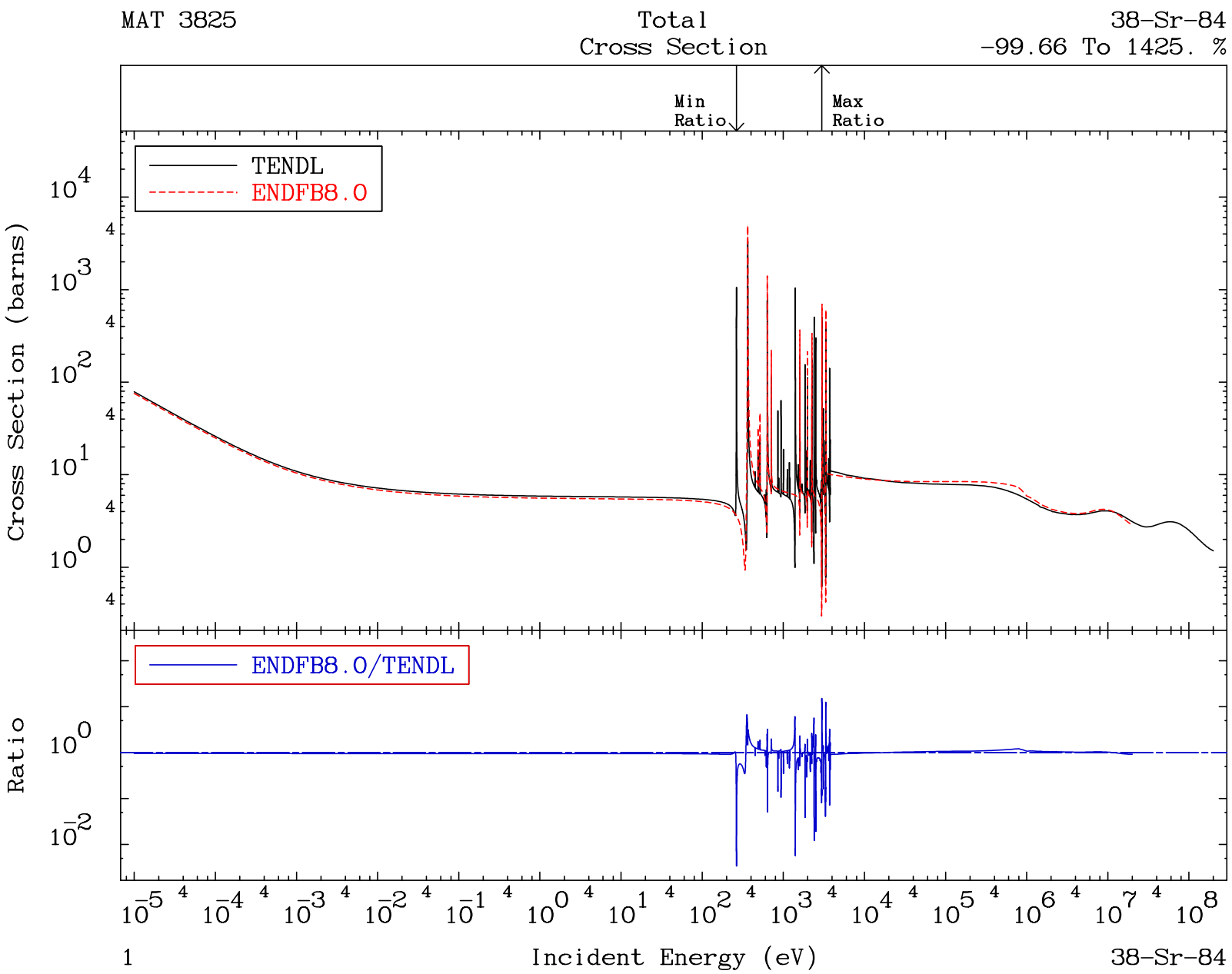
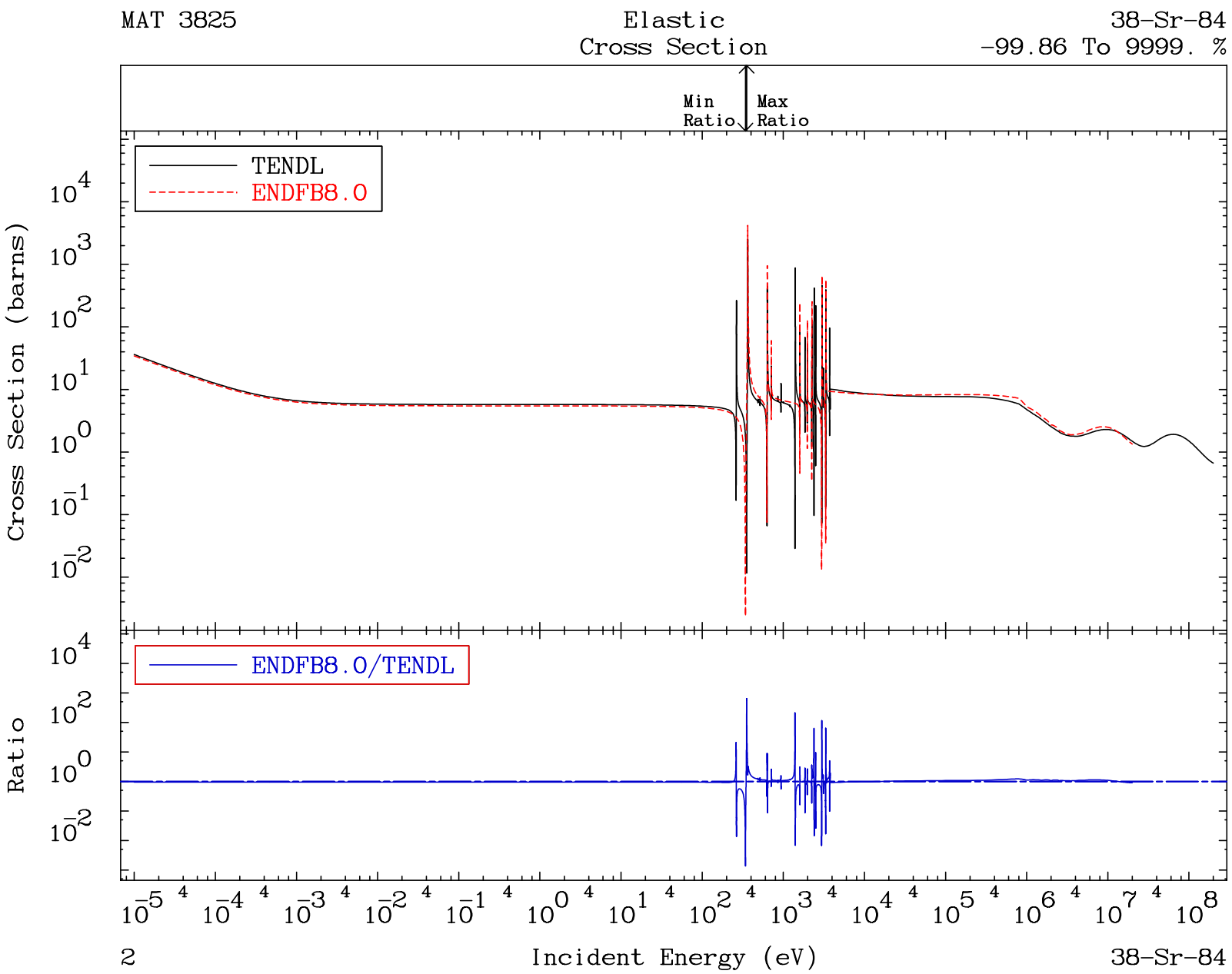
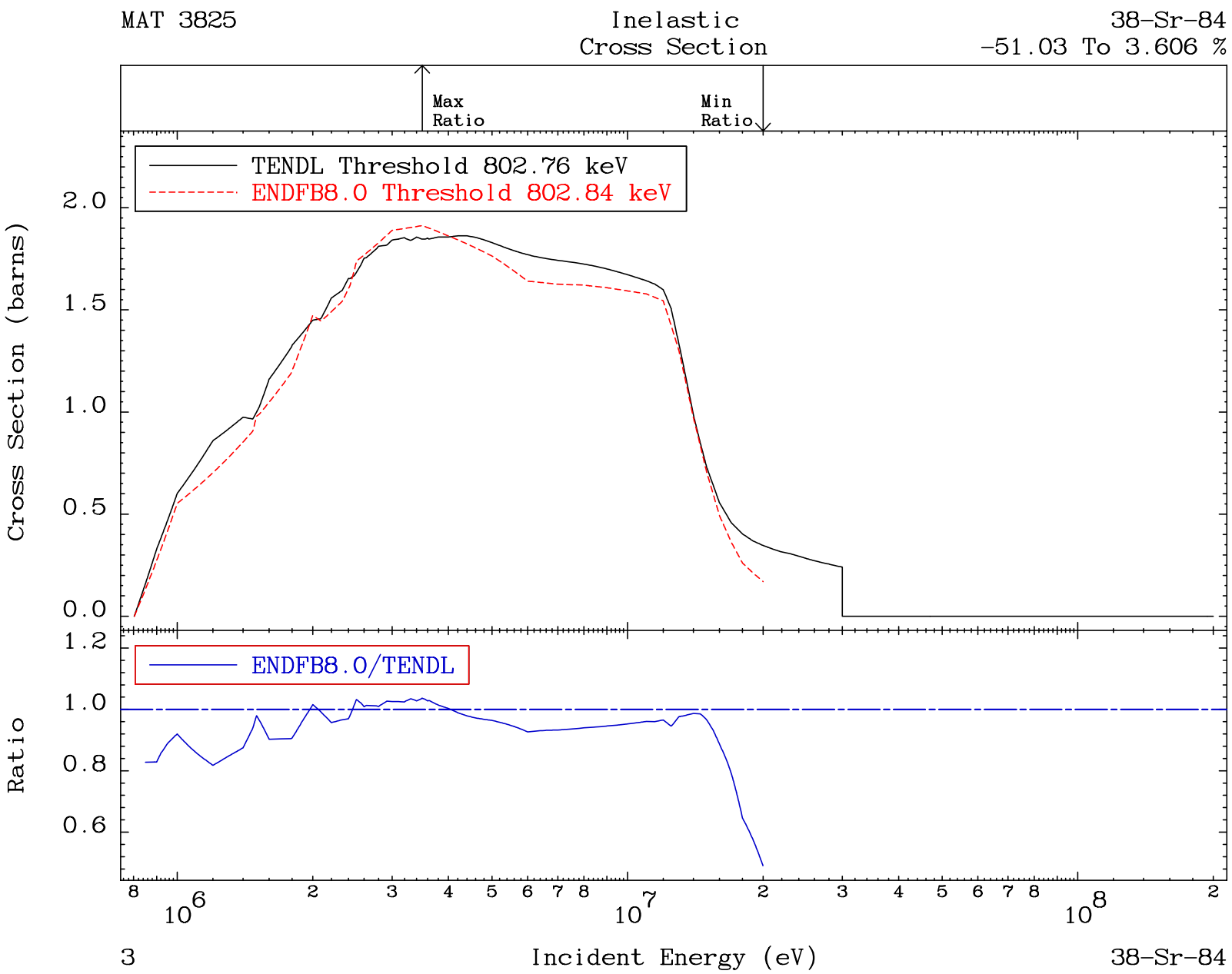
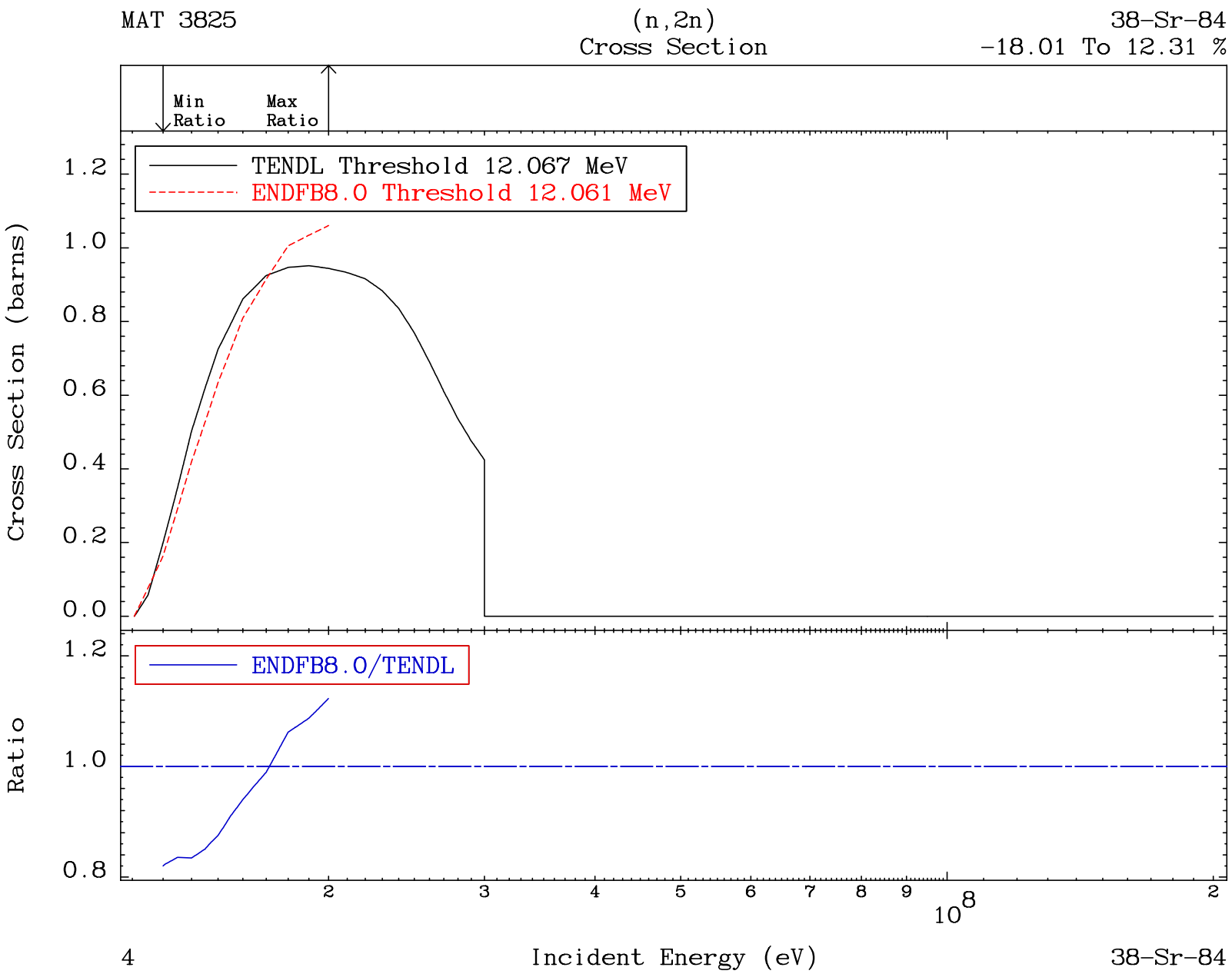
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

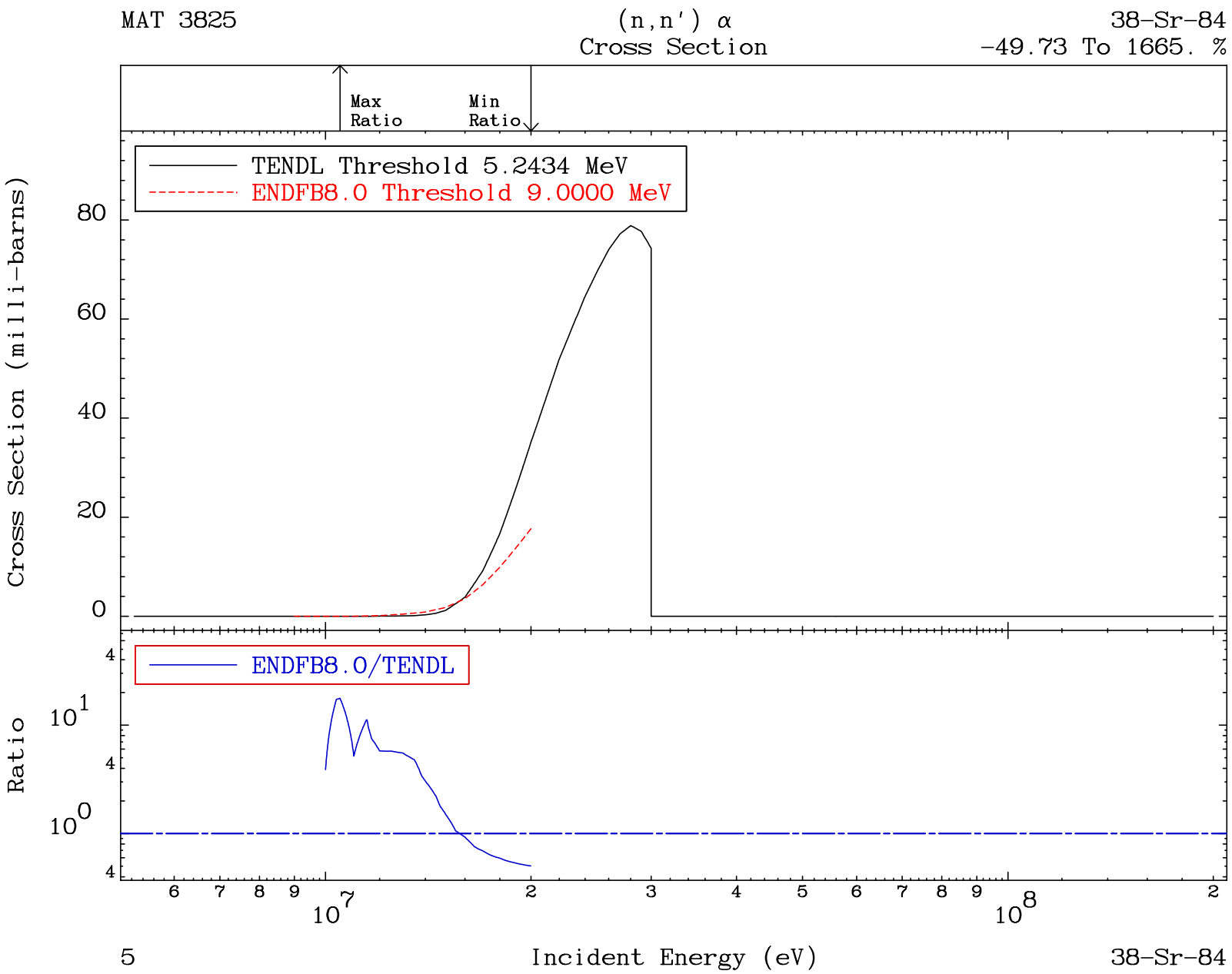
Press Mouse Button to Start

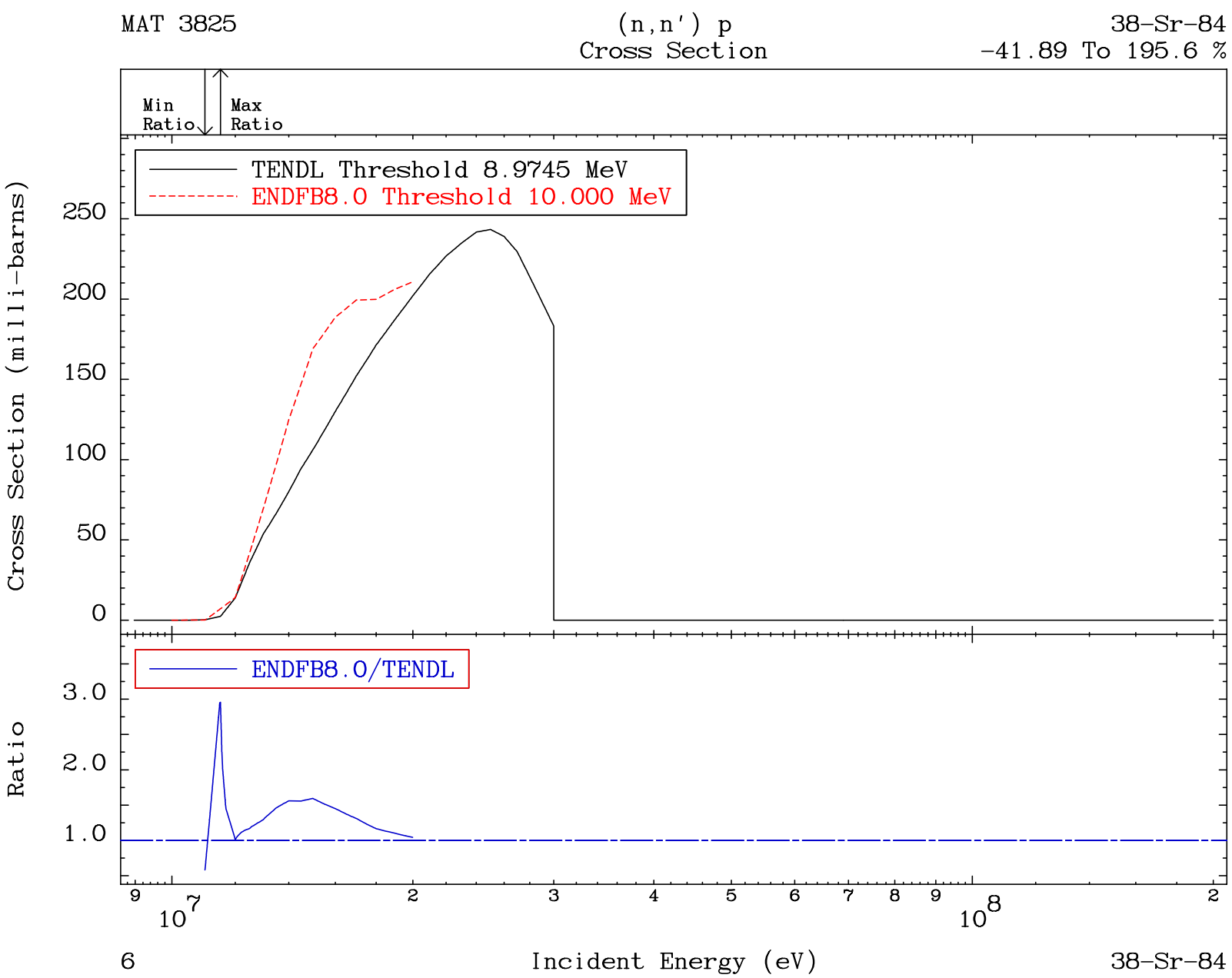

MAT 3825
Total
Cross Section
38-Sr-84
-99.66 To 1425. %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
1
38-Sr-84

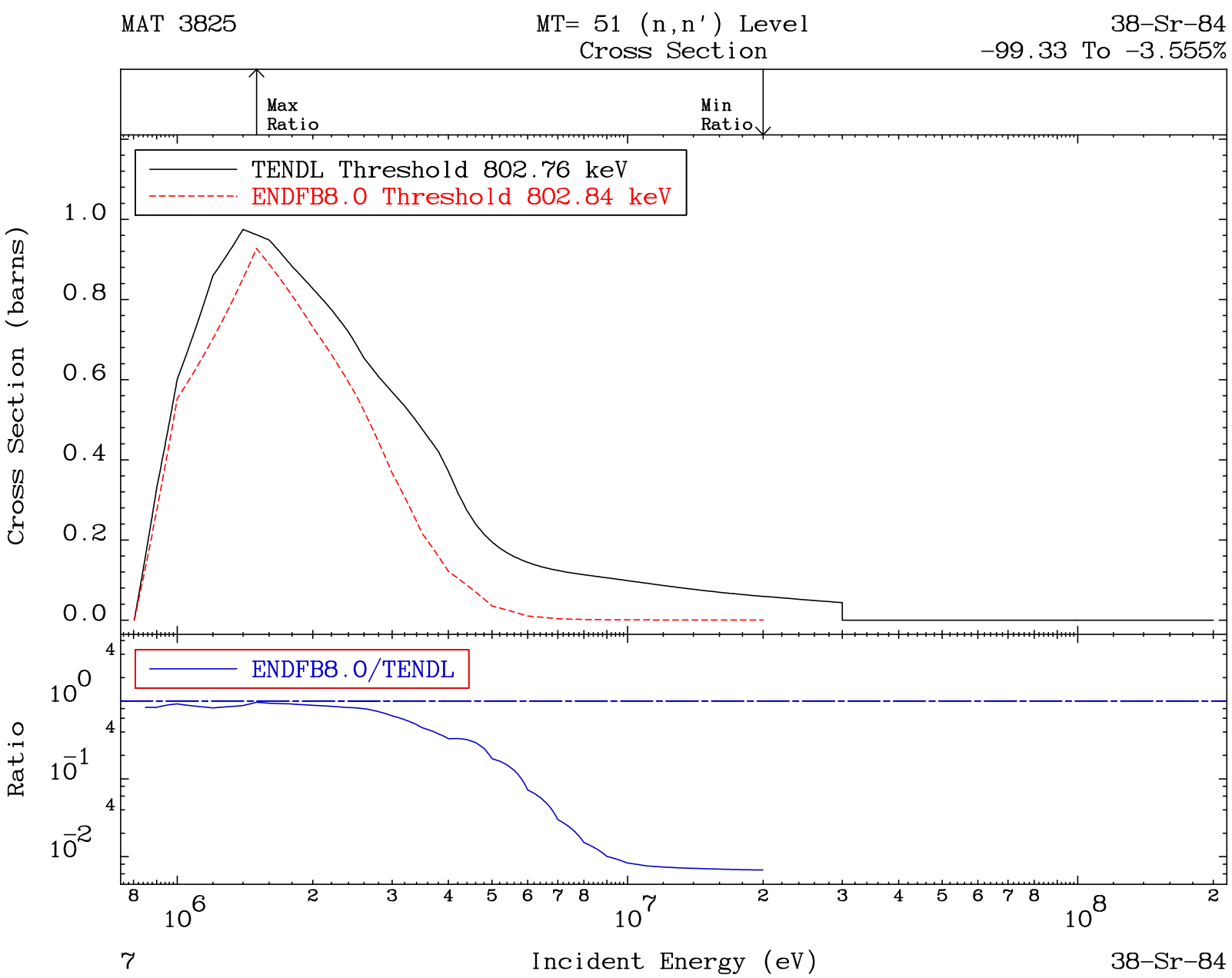

MAT 3825
Elastic
Cross Section
38-Sr-84
-99.86 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
2
38-Sr-84

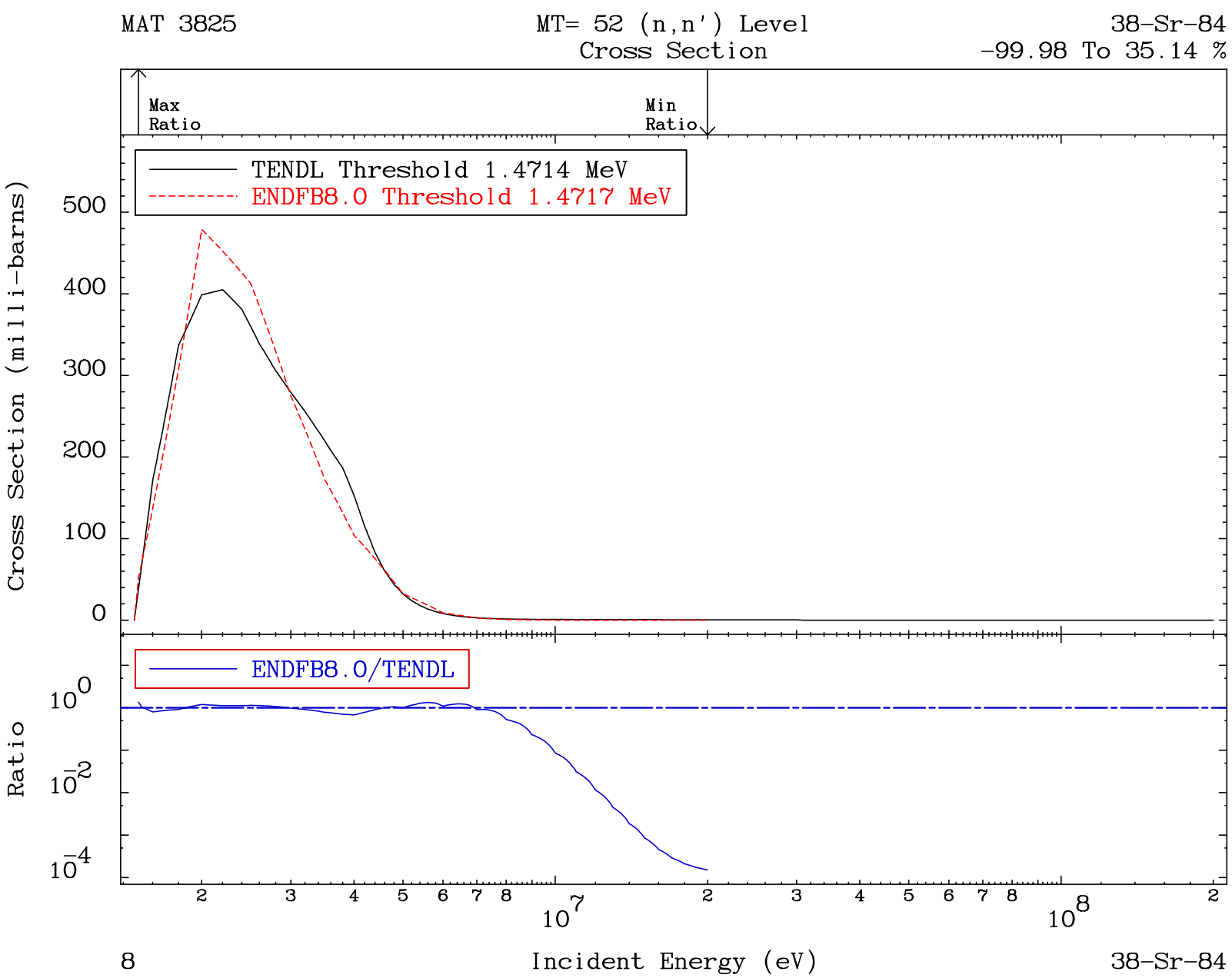

MAT 3825
Inelastic
Cross Section
38-Sr-84
-51.03 To 3.606 %
Max
Ratio
Min
Ratio
TENDL Threshold 802.76 keV
ENDFB8.0 Threshold 802.84 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
1.2
1.0
0.8
0.6
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
38-Sr-84

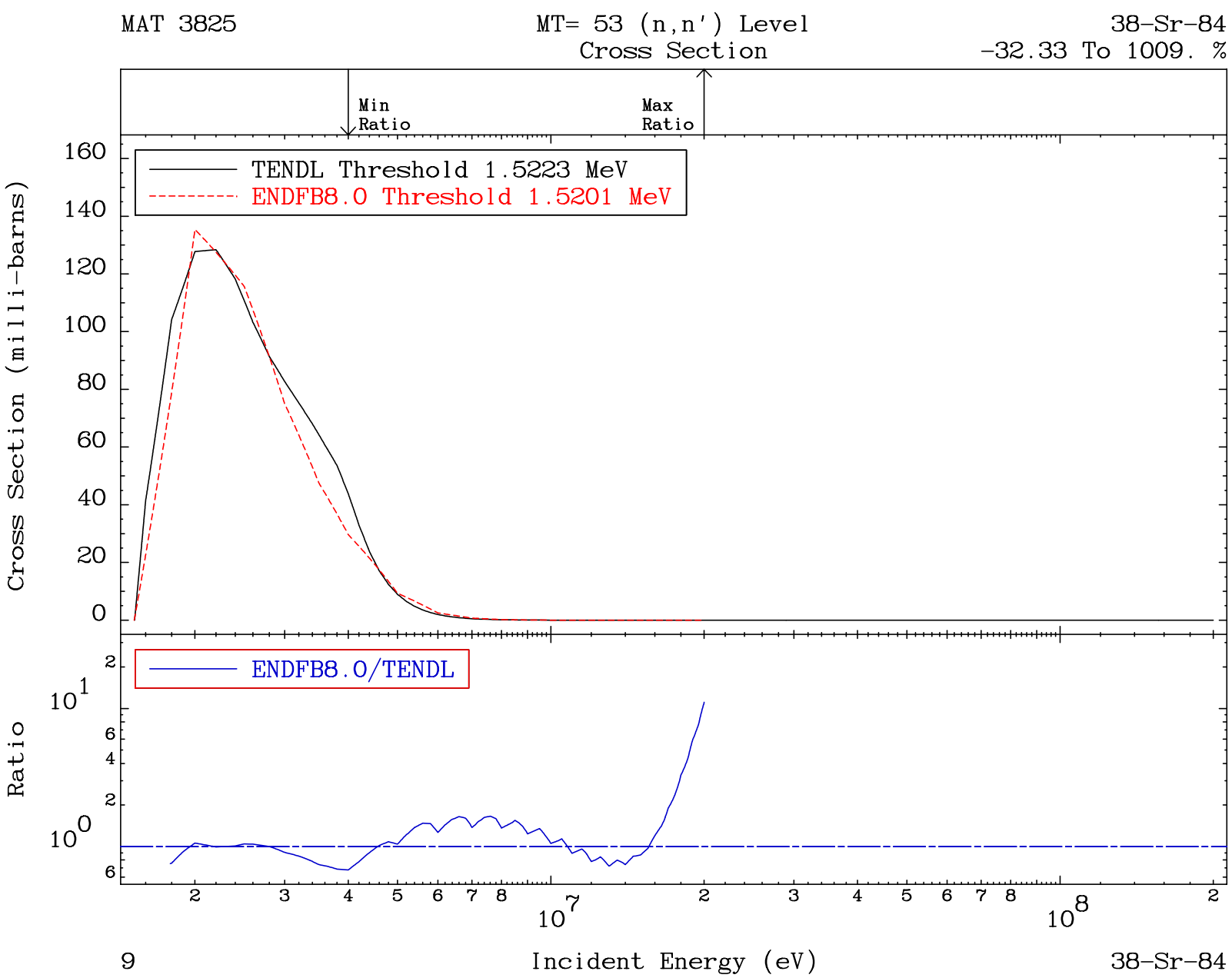

MAT 3825
(n,2n)
Cross Section
38-Sr-84
-18.01 To 12.31 %
Min Ratio
Max Ratio
TENDL Threshold 12.067 MeV
ENDFB8.0 Threshold 12.061 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
38-Sr-84

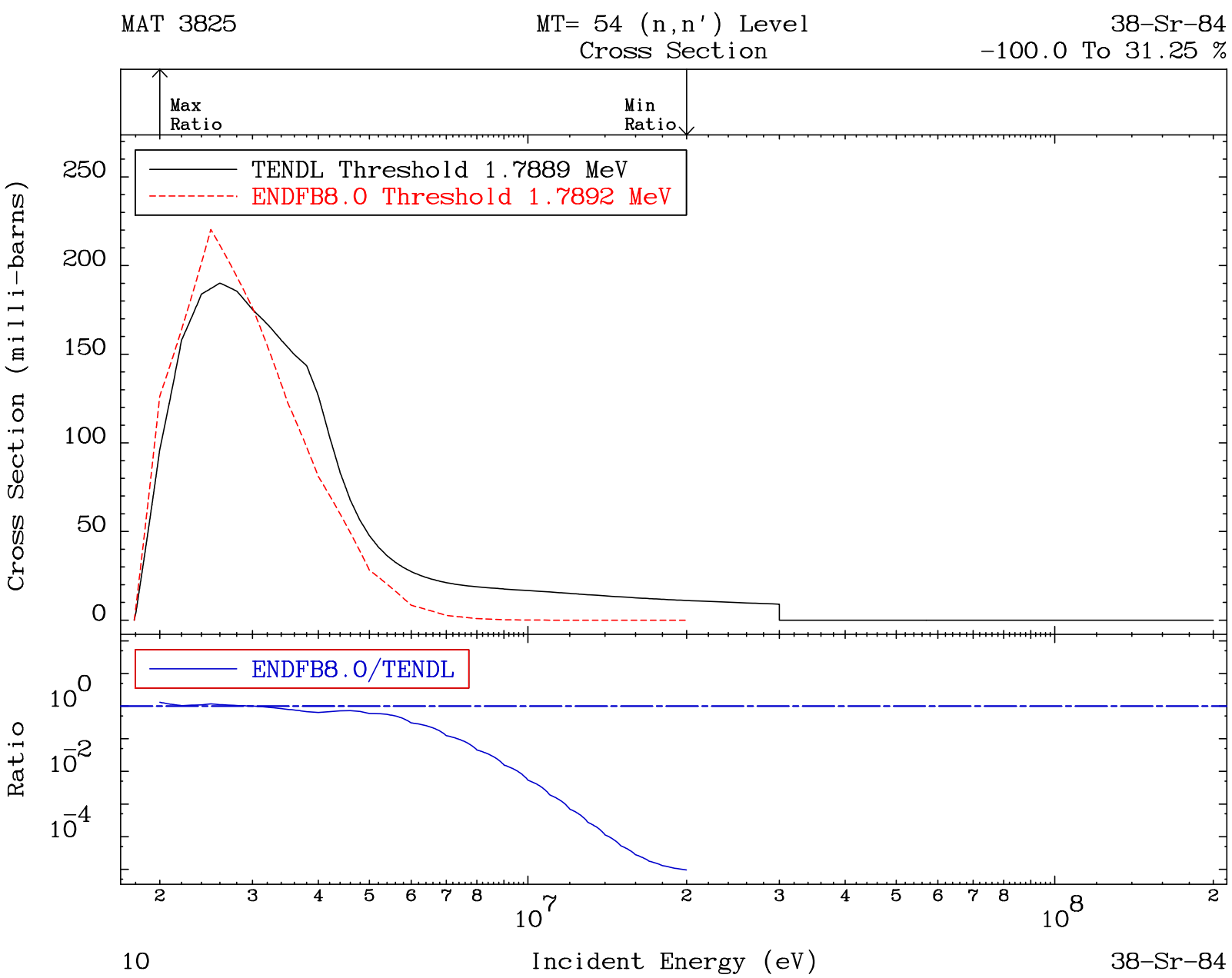

MAT 3825
(n,n') α
Cross Section
38-Sr-84
-49.73 To 1665. %
Max Ratio
Min Ratio
TENDL Threshold 5.2434 MeV
ENDFB8.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^1
10^0
4
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
5
Incident Energy (eV)
38-Sr-84

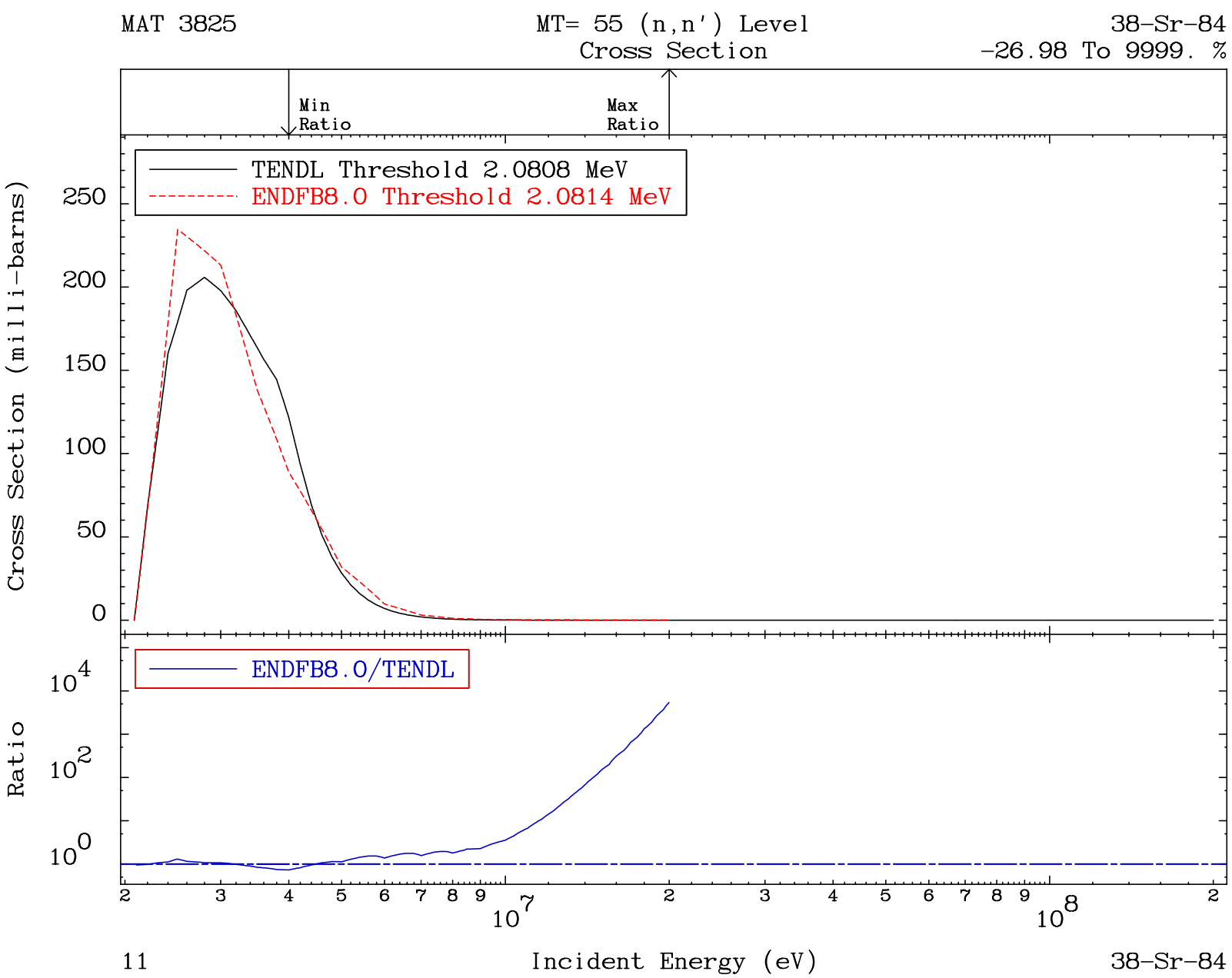

MAT 3825
(n,n') p
Cross Section
38-Sr-84
-41.89 To 195.6 %
Min Ratio
Max Ratio
TENDL Threshold 8.9745 MeV
ENDFB8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
38-Sr-84

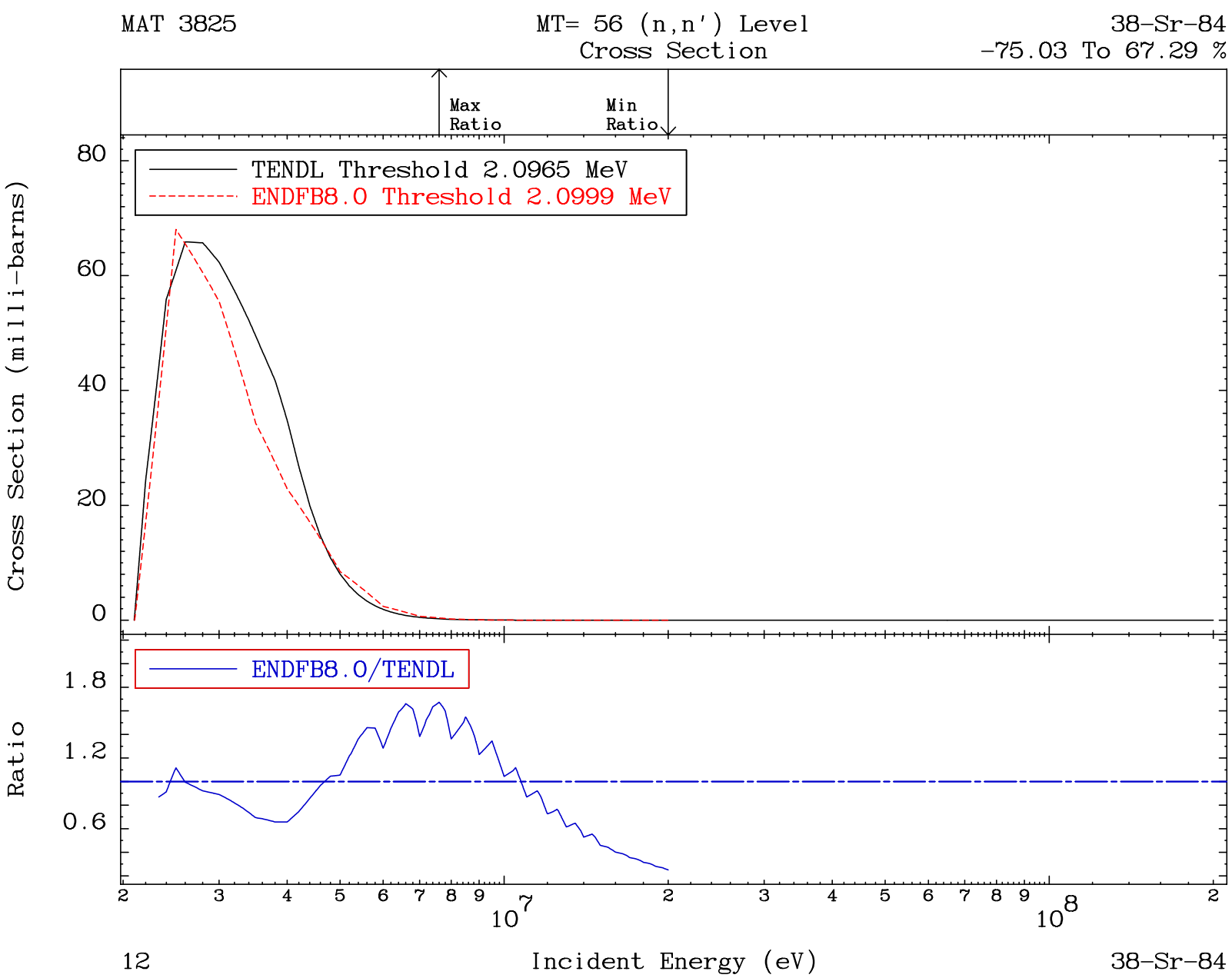

MAT 3825
MT= 51 (n,n') Level
Cross Section
38-Sr-84
-99.33 To -3.555%
Max
Ratio
Min
Ratio
TENDL Threshold 802.76 keV
ENDFB8.0 Threshold 802.84 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
7
38-Sr-84

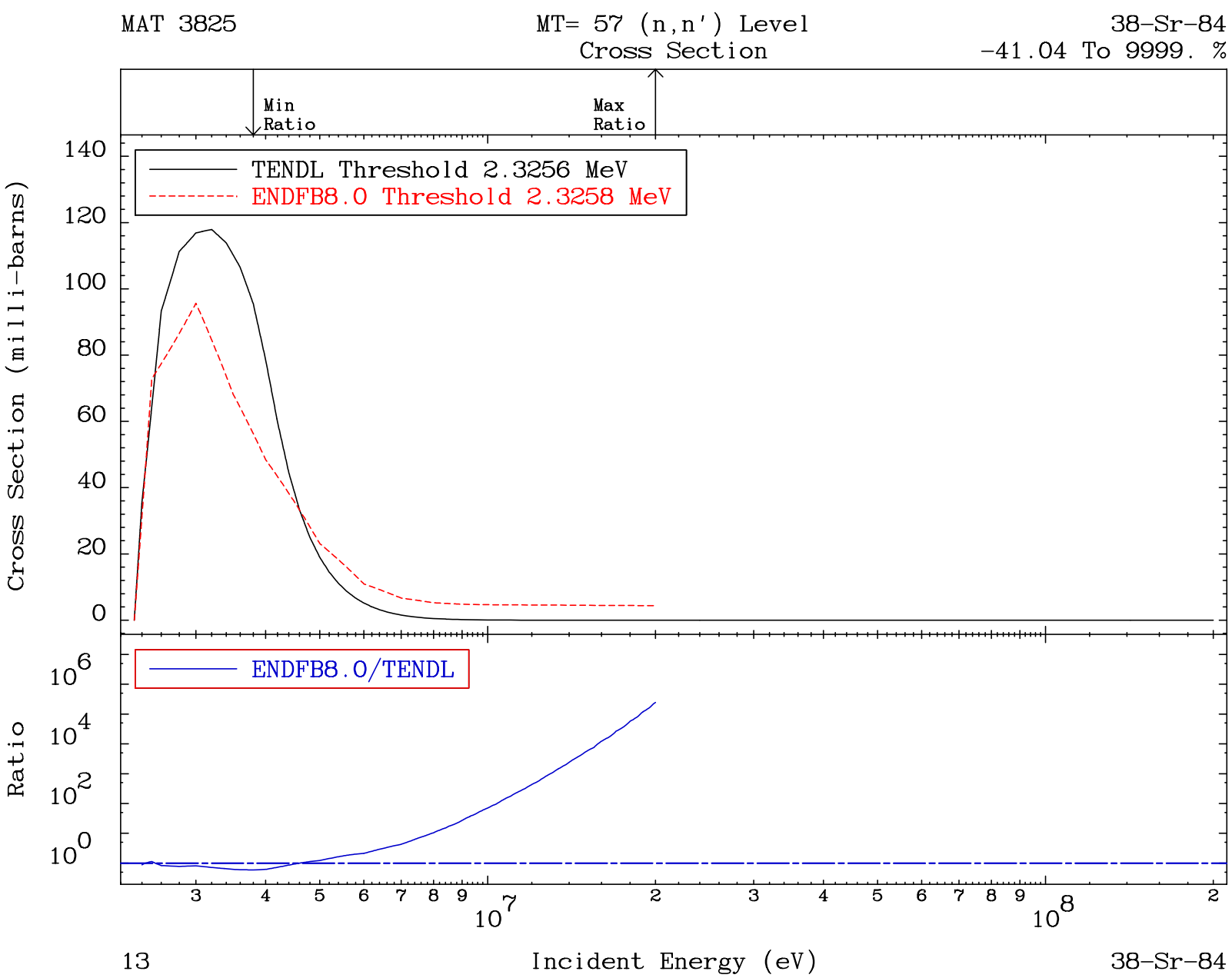

MAT 3825
MT= 52 (n,n') Level
Cross Section
38-Sr-84
-99.98 To 35.14 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4714 MeV
ENDFB8.0 Threshold 1.4717 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
ENDFB8.0/TENDL
Ratio
10^0
10^-2
10^-4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
8
Incident Energy (eV)
38-Sr-84

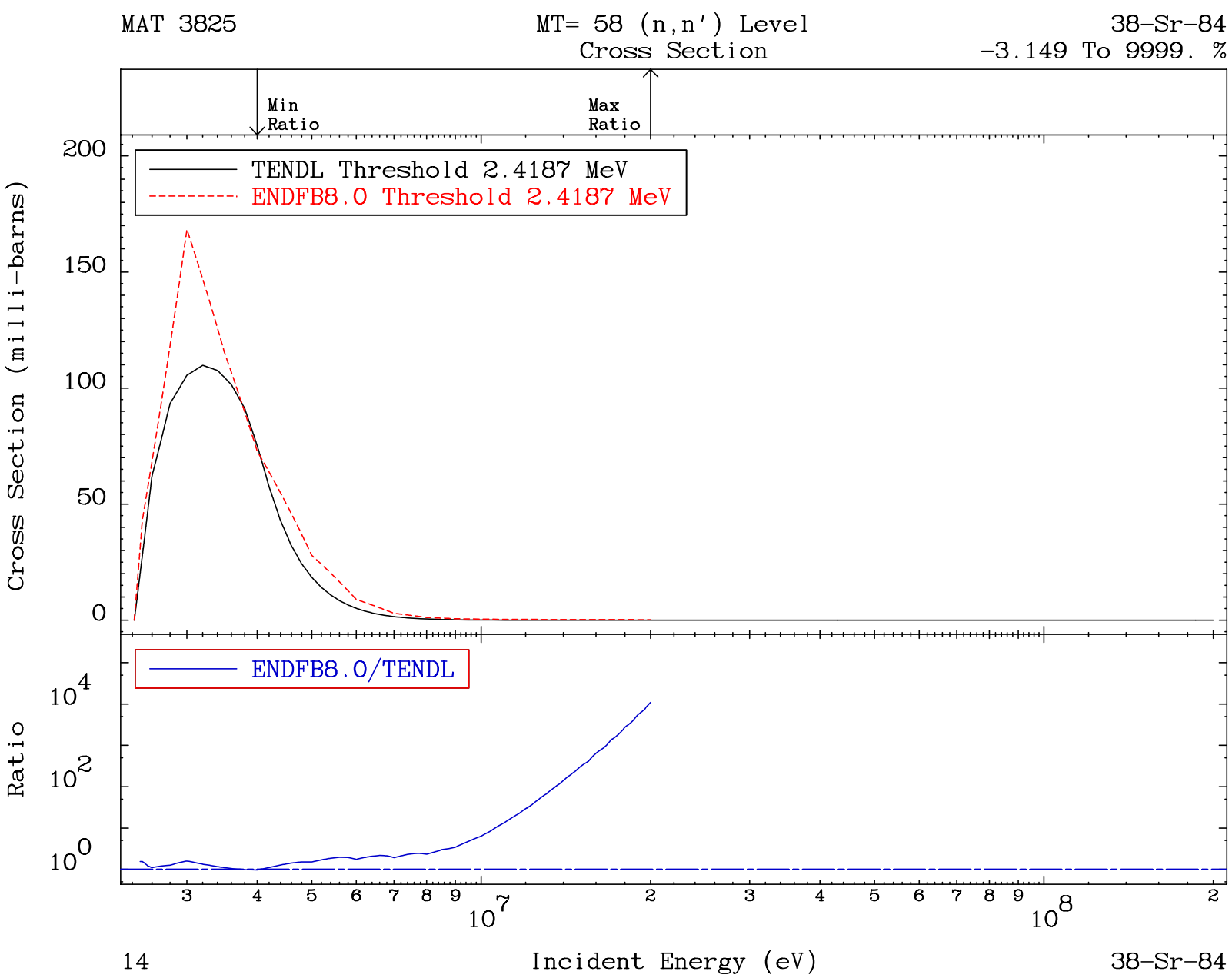

MAT 3825
MT= 53 (n,n') Level
Cross Section
38-Sr-84
-32.33 To 1009. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5223 MeV
ENDFB8.0 Threshold 1.5201 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^1
10^0
2
6
4
2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
38-Sr-84

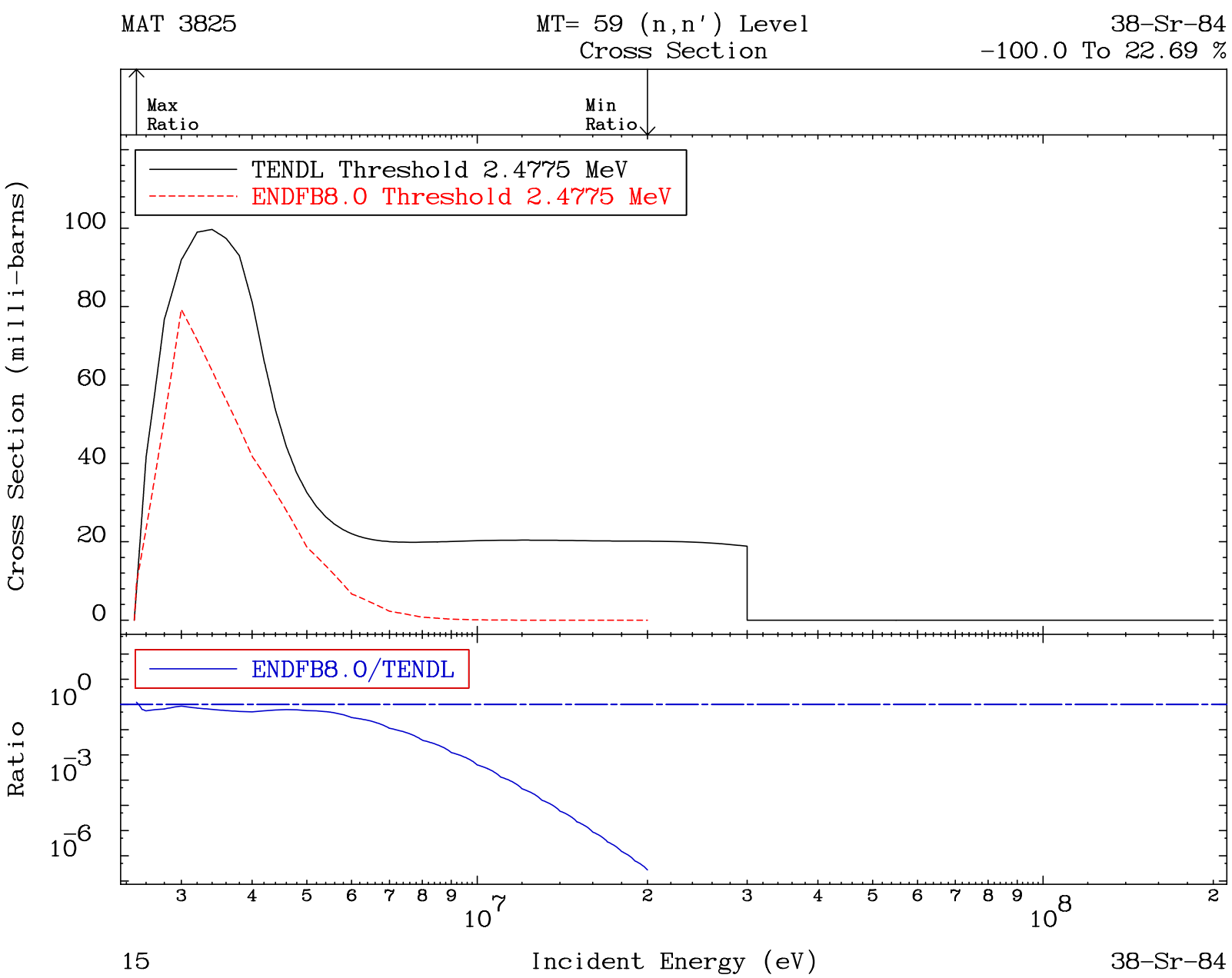

MAT 3825
MT= 54 (n,n') Level
Cross Section
38-Sr-84
-100.0 To 31.25 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.7889 MeV
ENDFB8.0 Threshold 1.7892 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^0
10^-2
10^-4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
10
Incident Energy (eV)
38-Sr-84

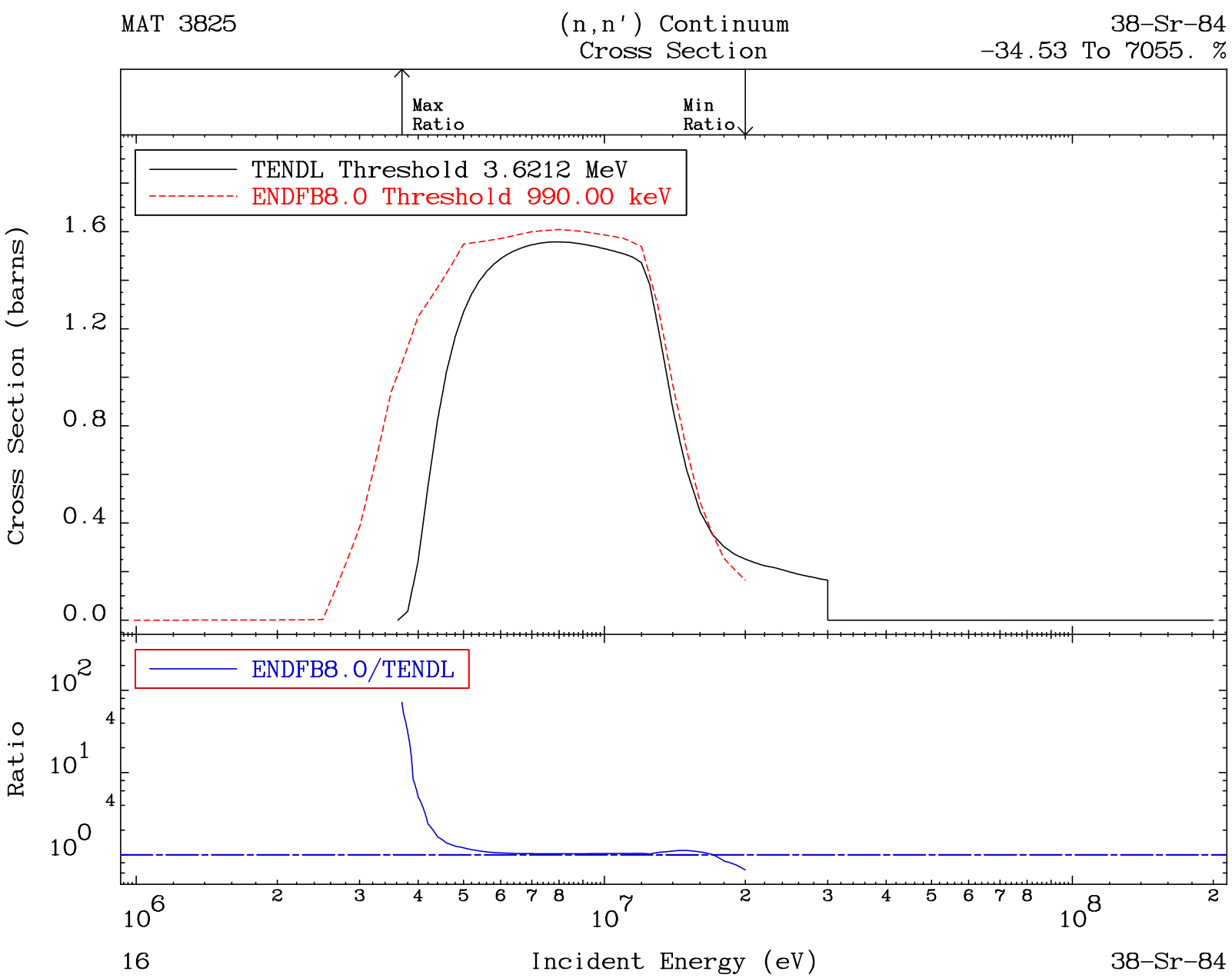

MAT 3825
MT= 55 (n,n') Level
Cross Section
38-Sr-84
-26.98 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 2.0808 MeV
ENDFB8.0 Threshold 2.0814 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
38-Sr-84

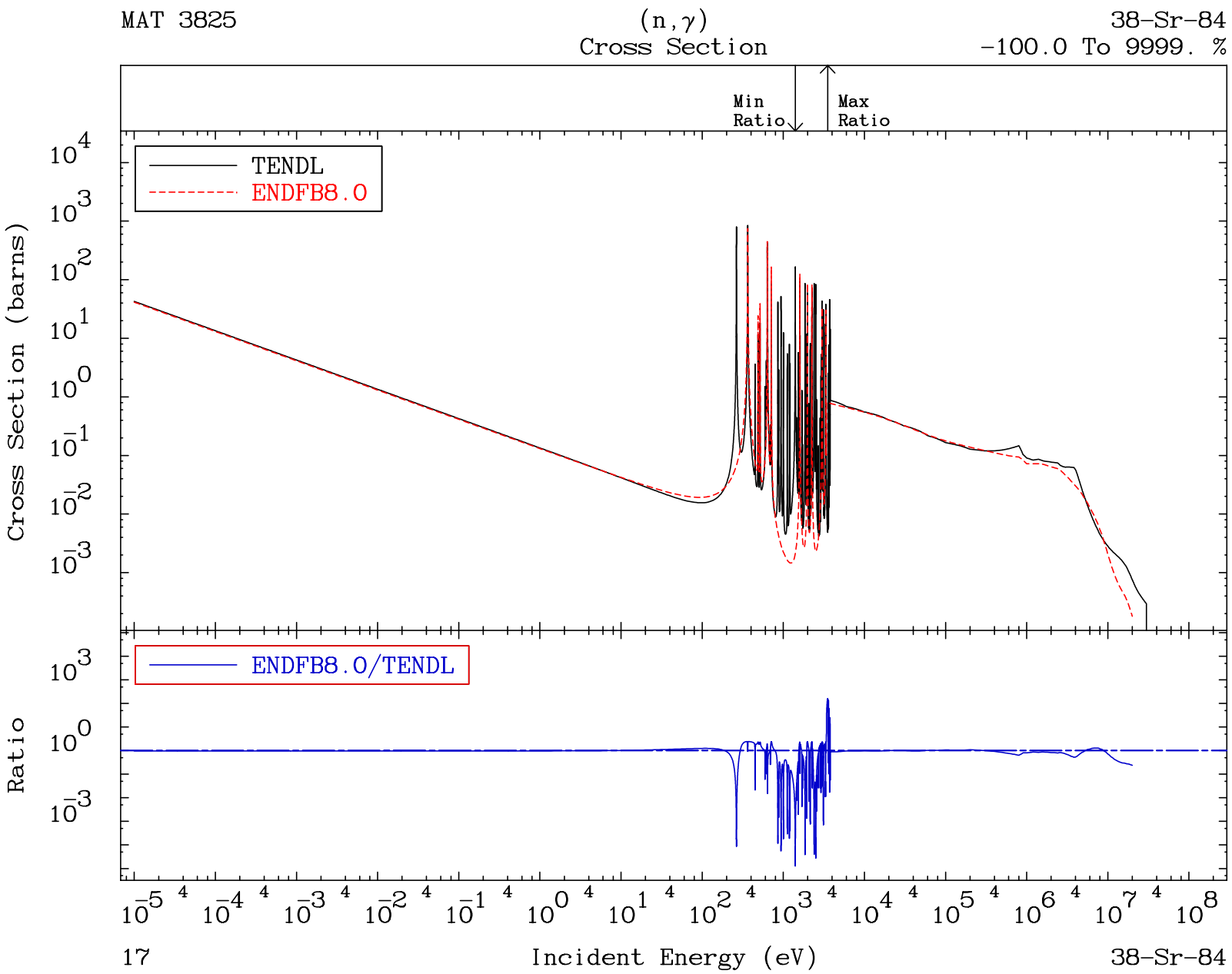

MAT 3825
MT= 56 (n,n') Level
Cross Section
38-Sr-84
-75.03 To 67.29 %
Max Ratio
Min Ratio
TENDL Threshold 2.0965 MeV
ENDFB8.0 Threshold 2.0999 MeV
Cross Section (milli-barns)
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
1.8
1.2
0.6
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
38-Sr-84

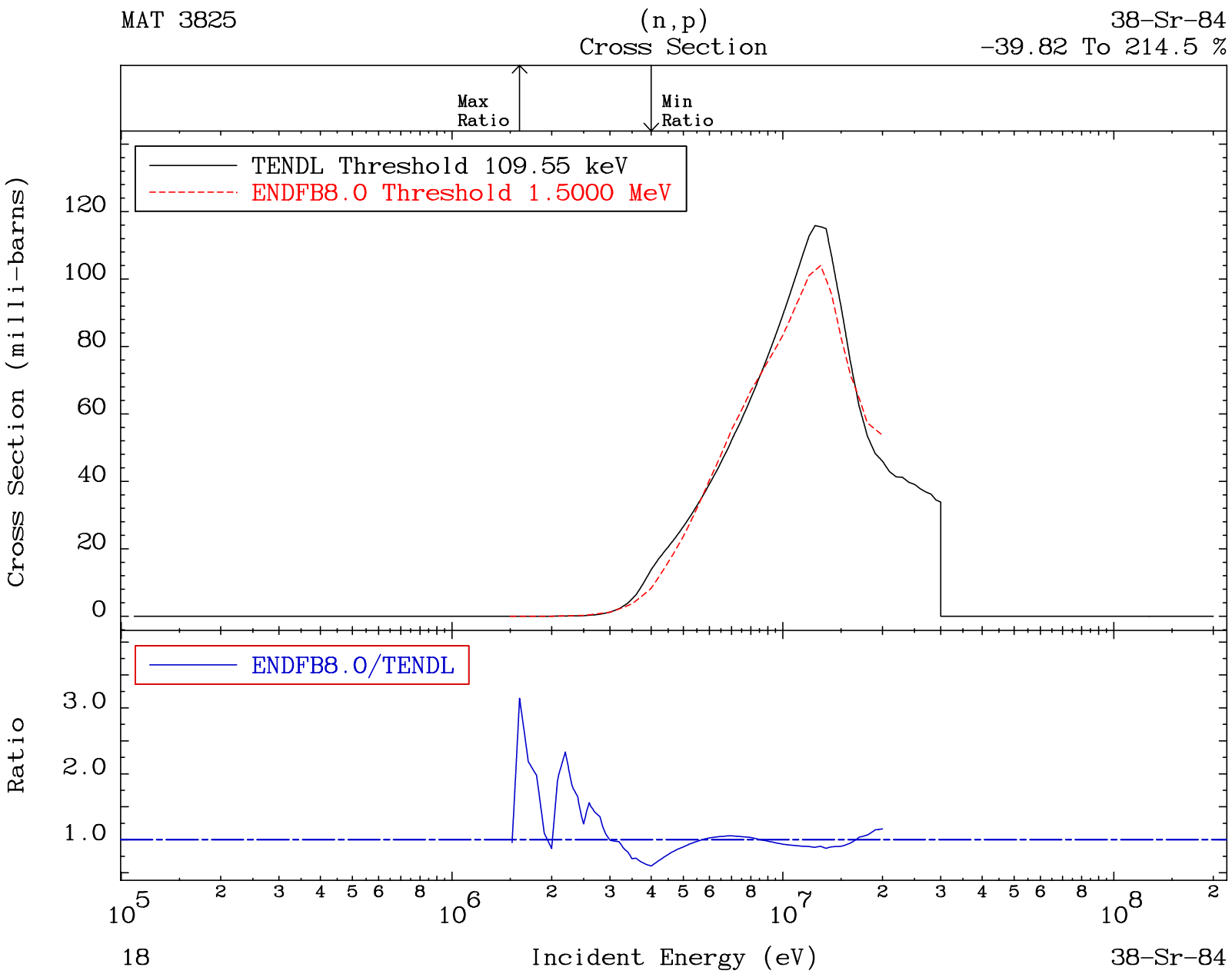

MAT 3825
MT= 57 (n,n') Level
Cross Section
38-Sr-84
-41.04 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 2.3256 MeV
ENDFB8.0 Threshold 2.3258 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
13
Incident Energy (eV)
38-Sr-84

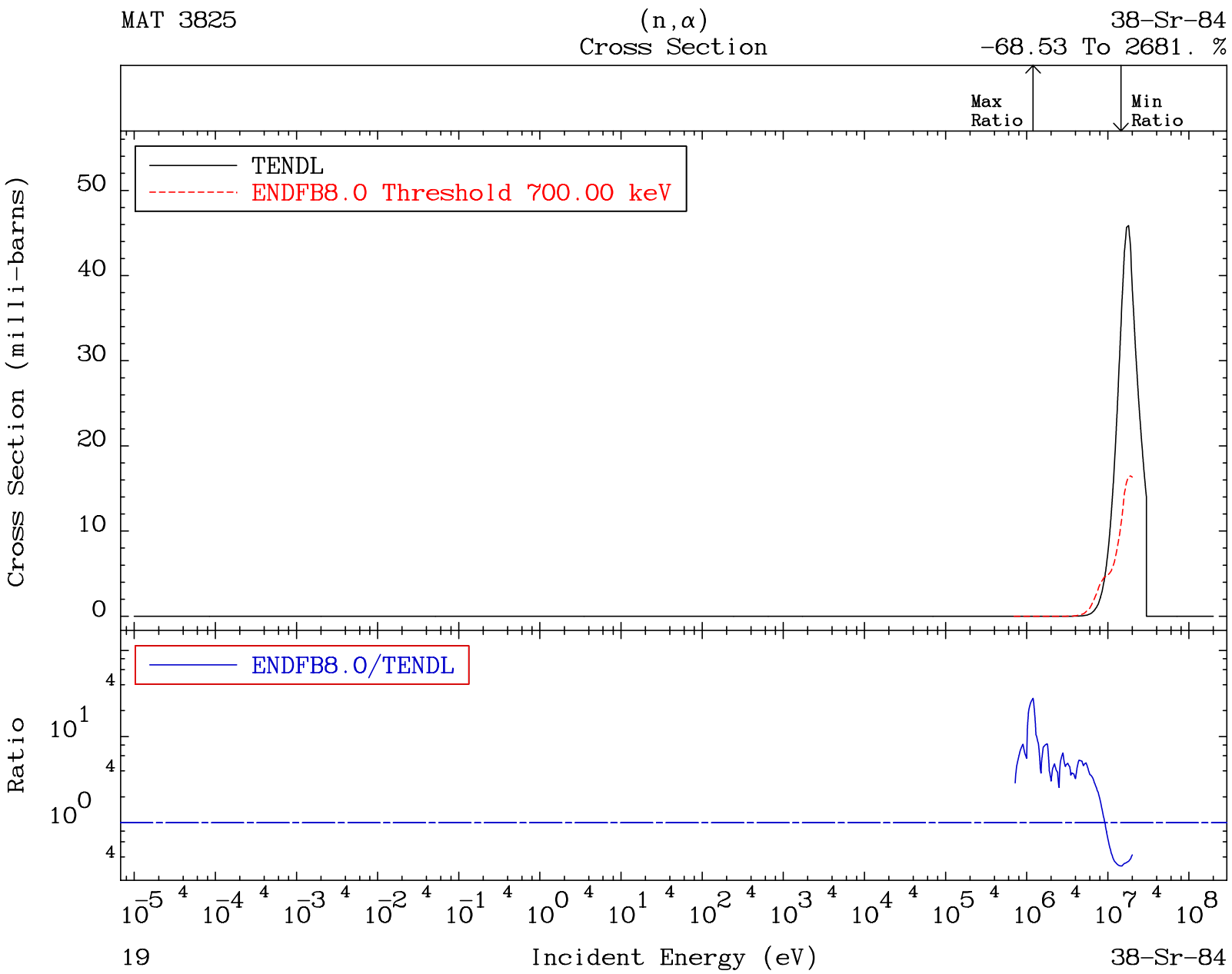

MAT 3825
MT= 58 (n,n') Level
Cross Section
38-Sr-84
-3.149 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 2.4187 MeV
ENDFB8.0 Threshold 2.4187 MeV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
14
Incident Energy (eV)
38-Sr-84

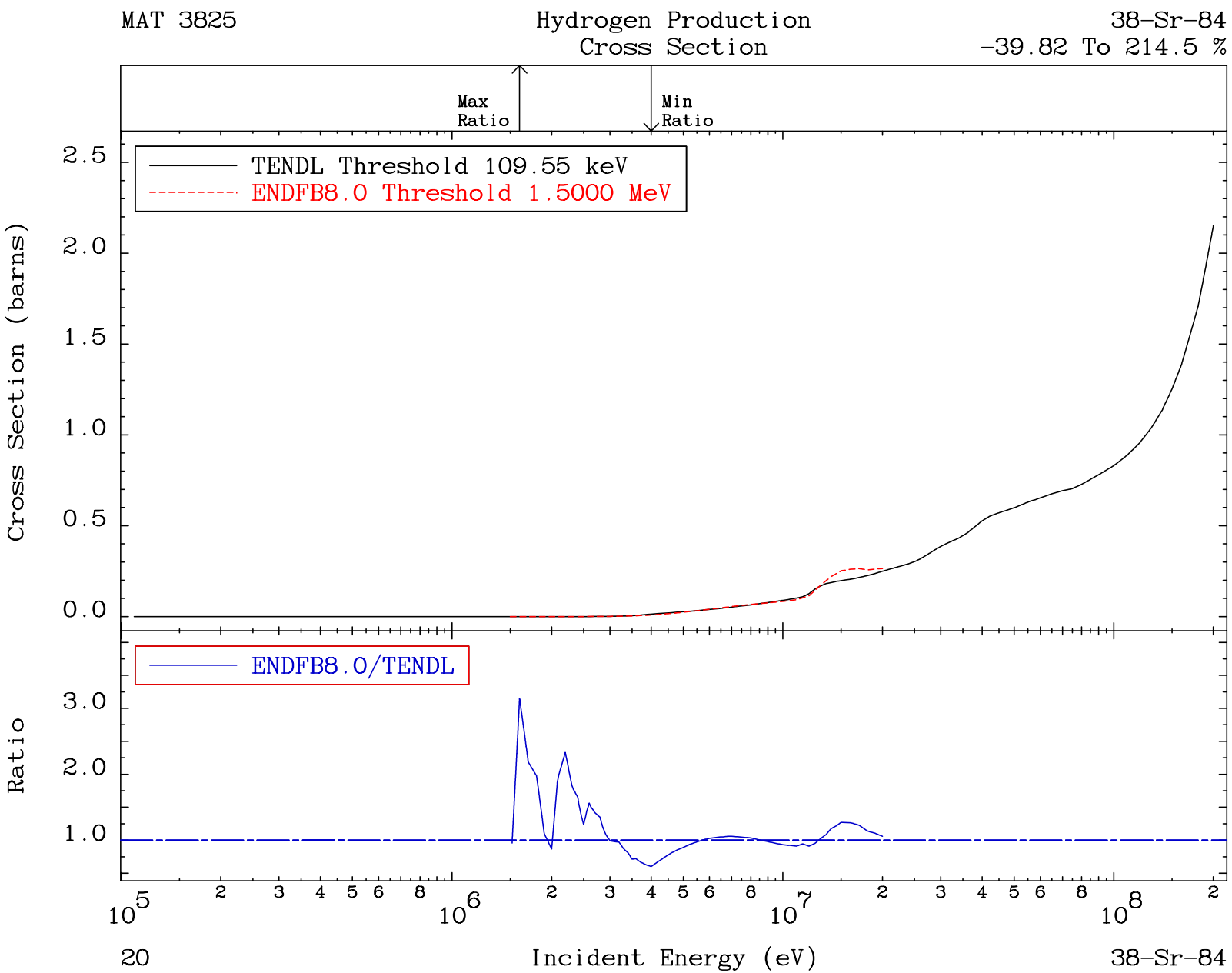

MAT 3825
MT= 59 (n,n') Level
Cross Section
38-Sr-84
-100.0 To 22.69 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.4775 MeV
ENDFB8.0 Threshold 2.4775 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
15
Incident Energy (eV)
38-Sr-84

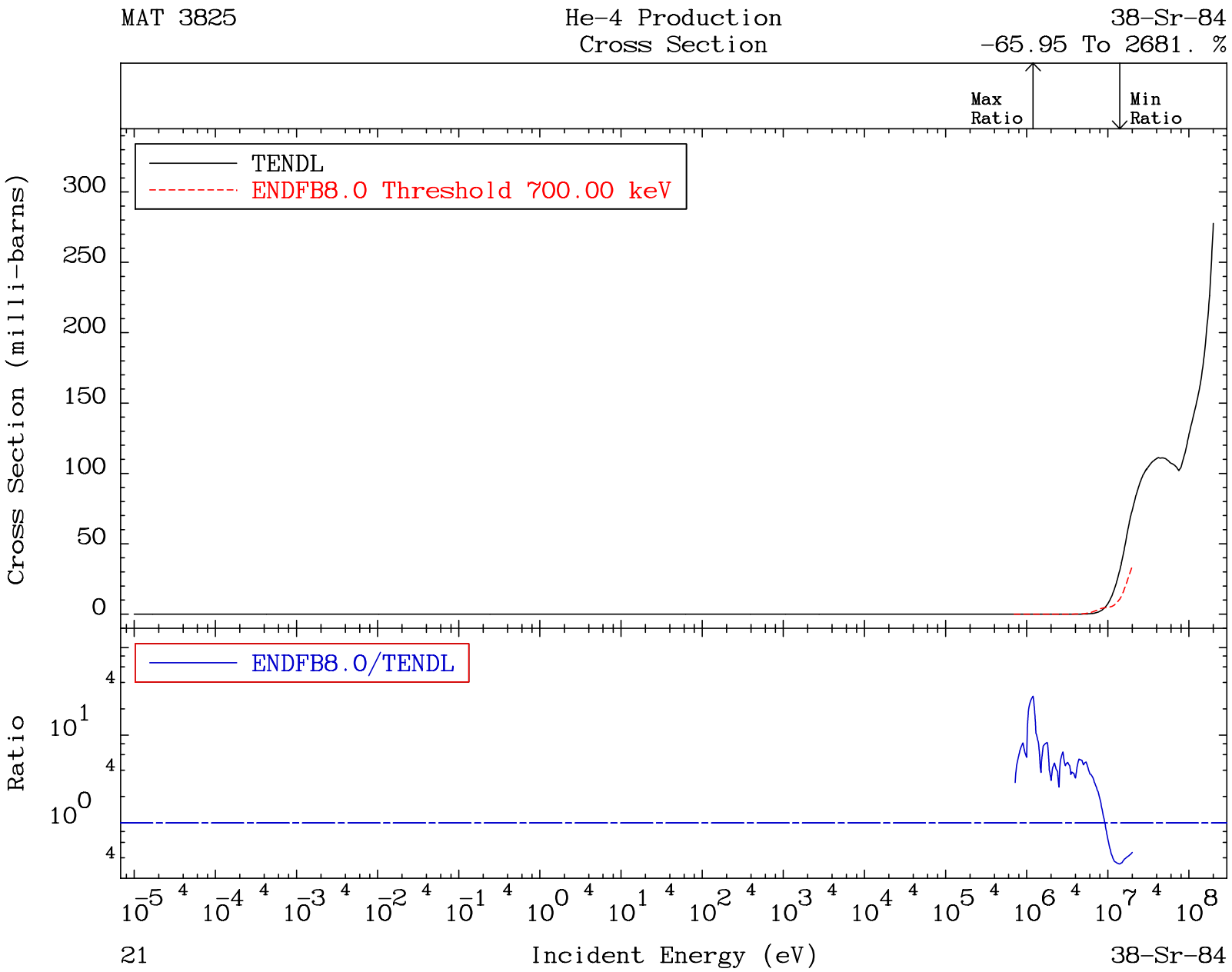

MAT 3825
(n,n') Continuum
Cross Section
38-Sr-84
-34.53 To 7055. %
Max
Ratio
Min
Ratio
TENDL Threshold 3.6212 MeV
ENDFB8.0 Threshold 990.00 keV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
ENDFB8.0/TENDL
Ratio
10^2
10^1
10^0
10^6
10^7
10^8
Incident Energy (eV)
16
38-Sr-84

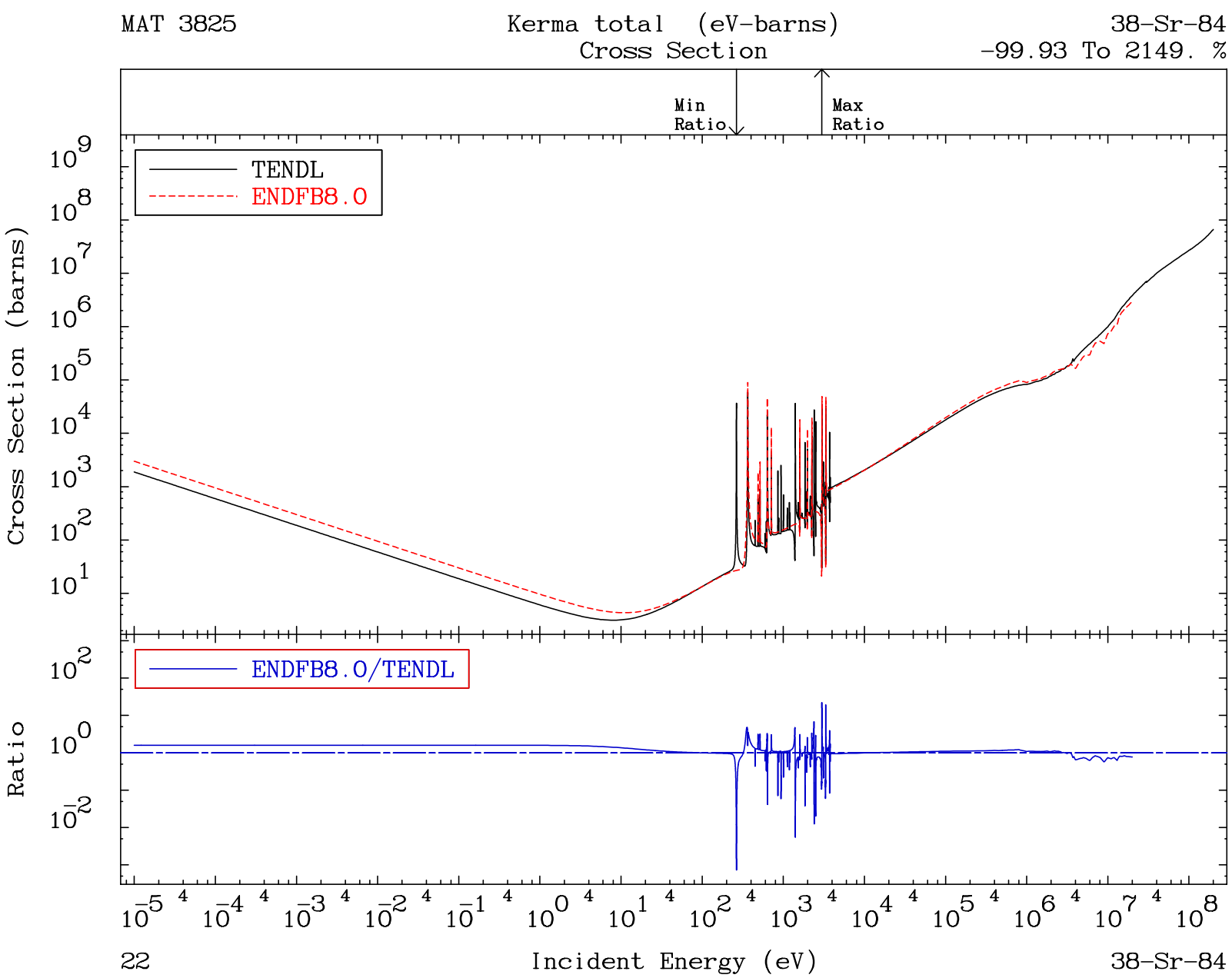

MAT 3825
(n,γ)
Cross Section
38-Sr-84
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
17
38-Sr-84

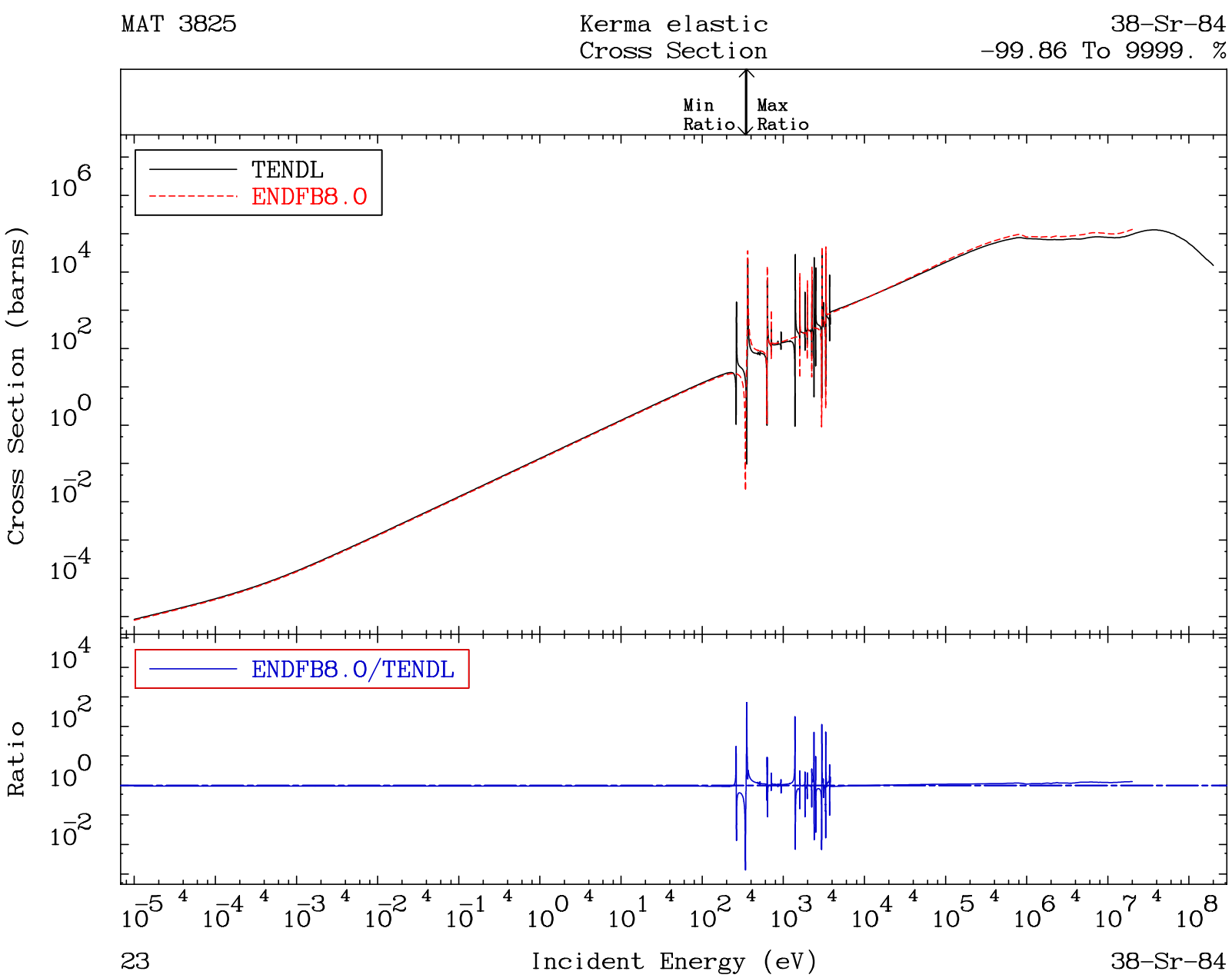

MAT 3825
(n,p)
Cross Section
38-Sr-84
-39.82 To 214.5 %
Max Ratio
Min Ratio
TENDL Threshold 109.55 keV
ENDFB8.0 Threshold 1.5000 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
3.0
2.0
1.0
10^5
10^6
10^7
10^8
18
Incident Energy (eV)
38-Sr-84

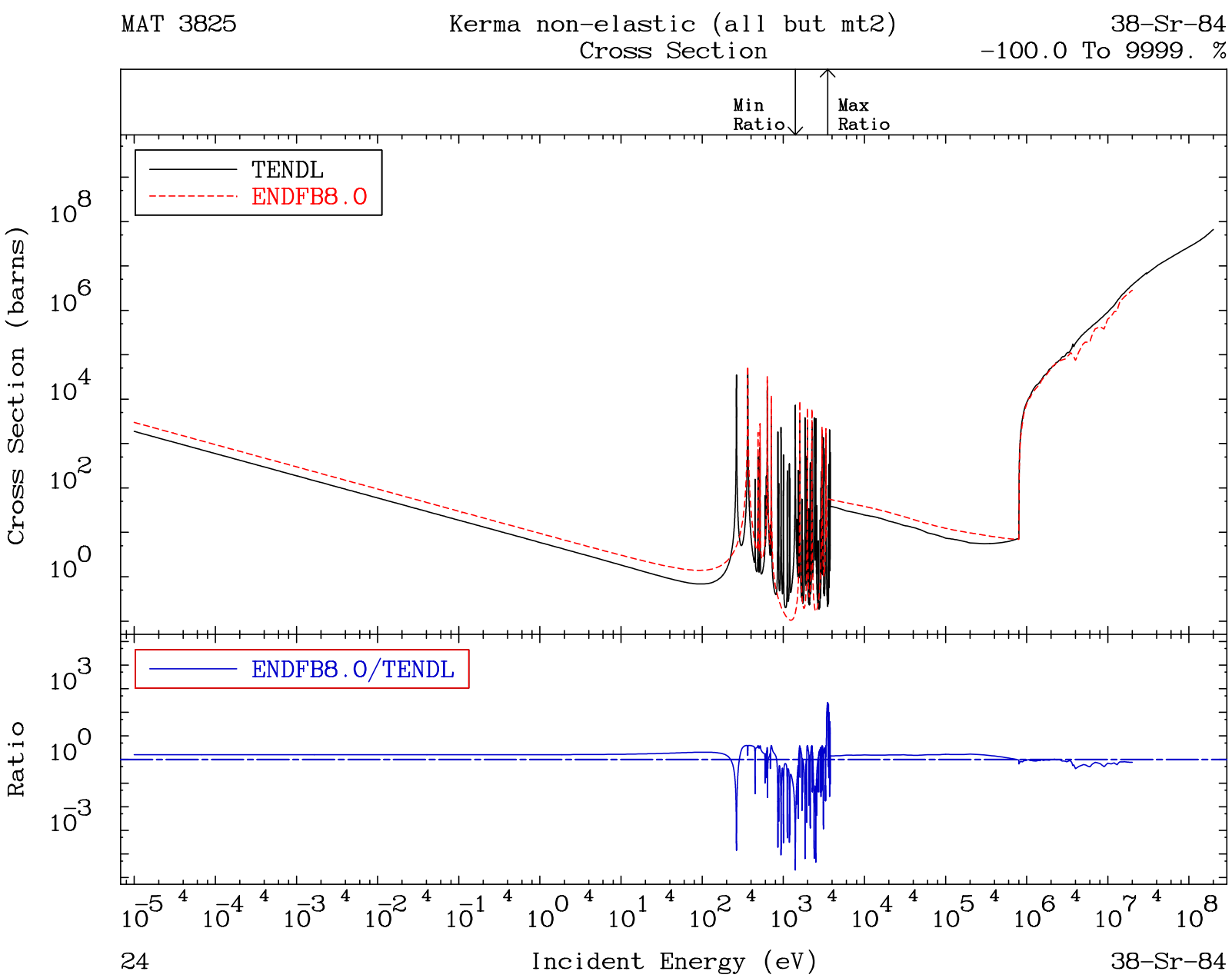

MAT 3825
(n,α)
Cross Section
38-Sr-84
-68.53 To 2681. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0 Threshold 700.00 keV
Cross Section (milli-barns)
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^1
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
19
Incident Energy (eV)
38-Sr-84

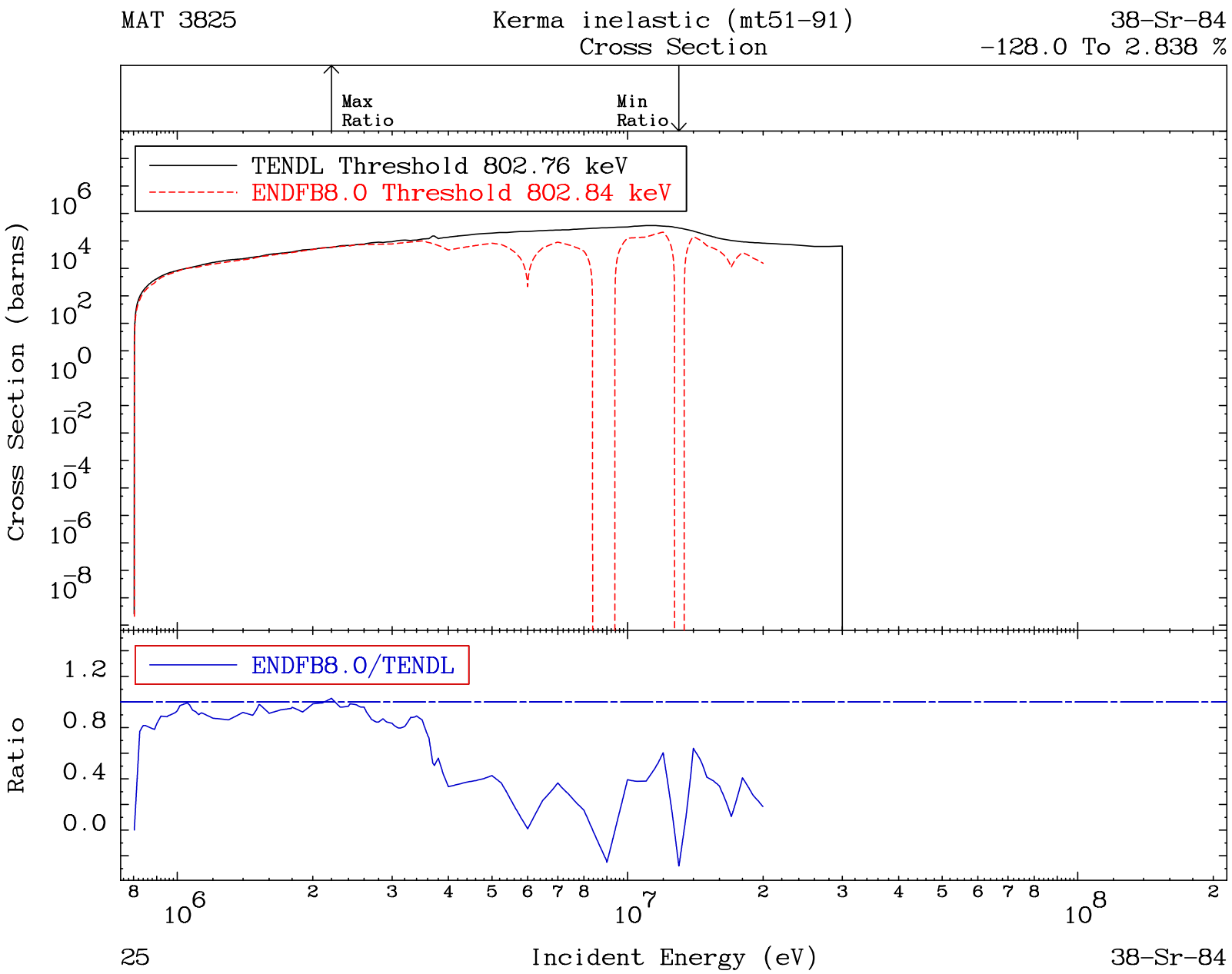

MAT 3825
Hydrogen Production
Cross Section
38-Sr-84
-39.82 To 214.5 %
Max Ratio
Min Ratio
TENDL Threshold 109.55 keV
ENDFB8.0 Threshold 1.5000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
3.0
2.0
1.0
10^5
10^6
10^7
10^8
Incident Energy (eV)
20
38-Sr-84

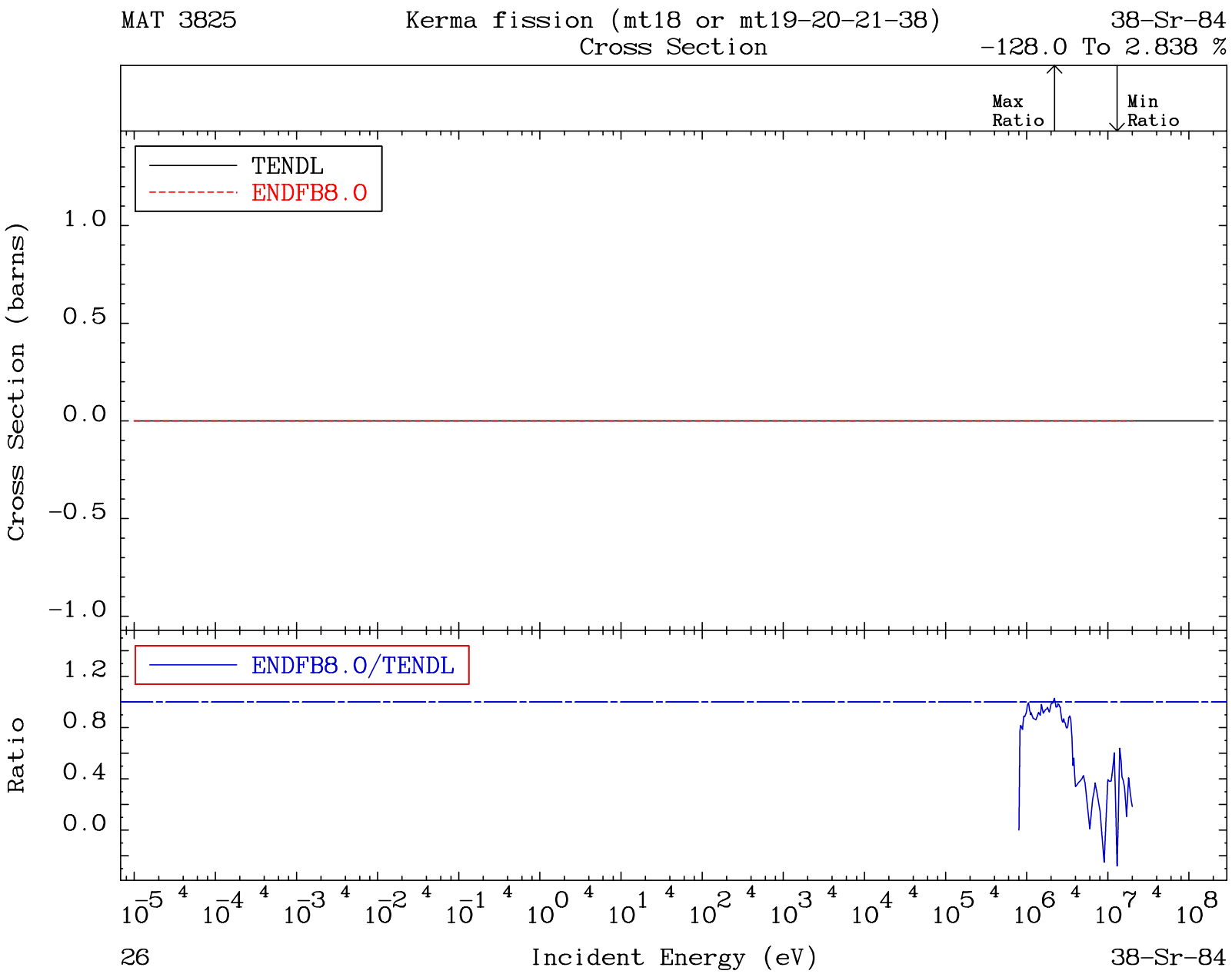

MAT 3825
He-4 Production
Cross Section
38-Sr-84
-65.95 To 2681. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0 Threshold 700.00 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^{1}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
21
Incident Energy (eV)
38-Sr-84

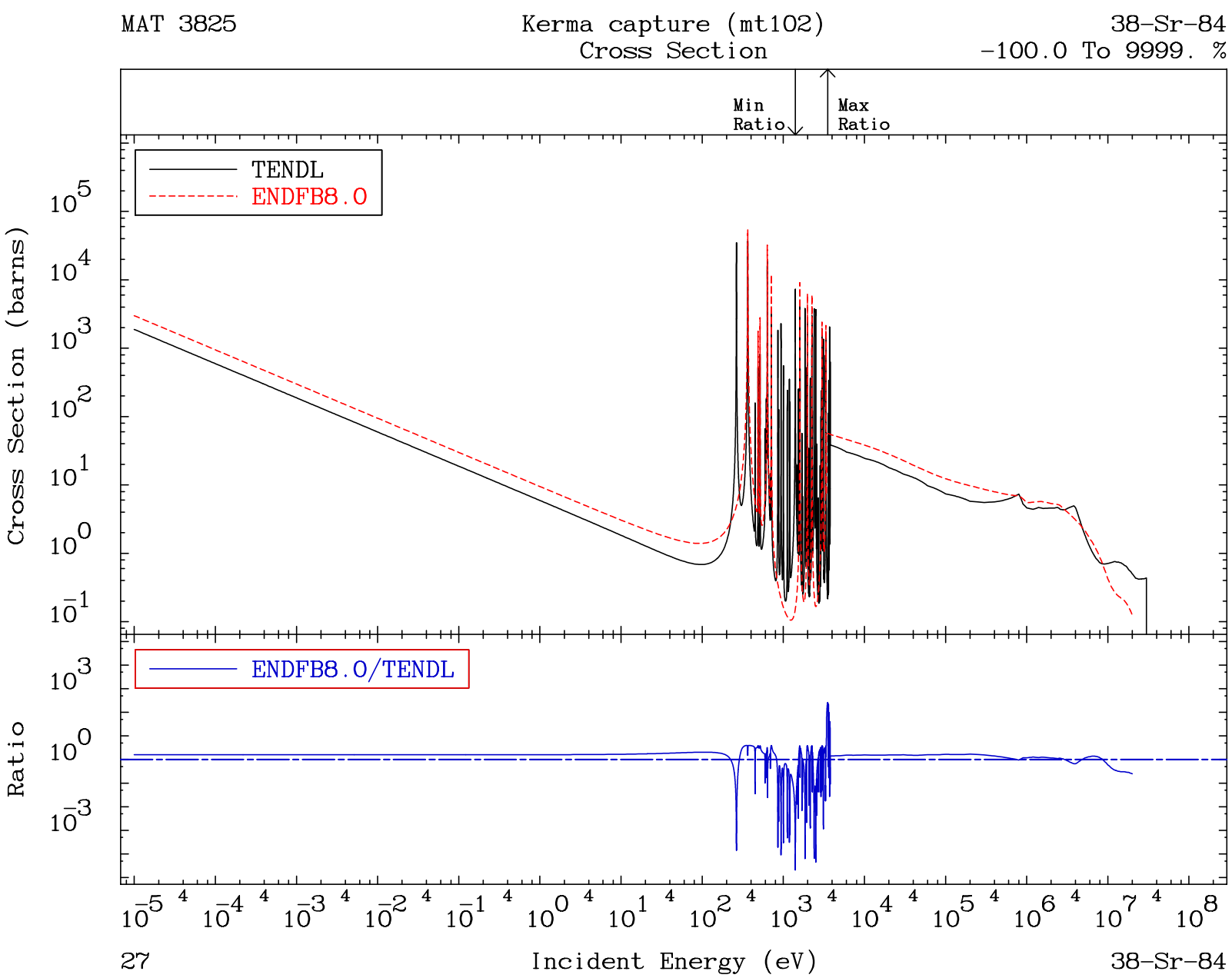

MAT 3825
Kerma total (eV-barns)
Cross Section
38-Sr-84
-99.93 To 2149. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
22
38-Sr-84

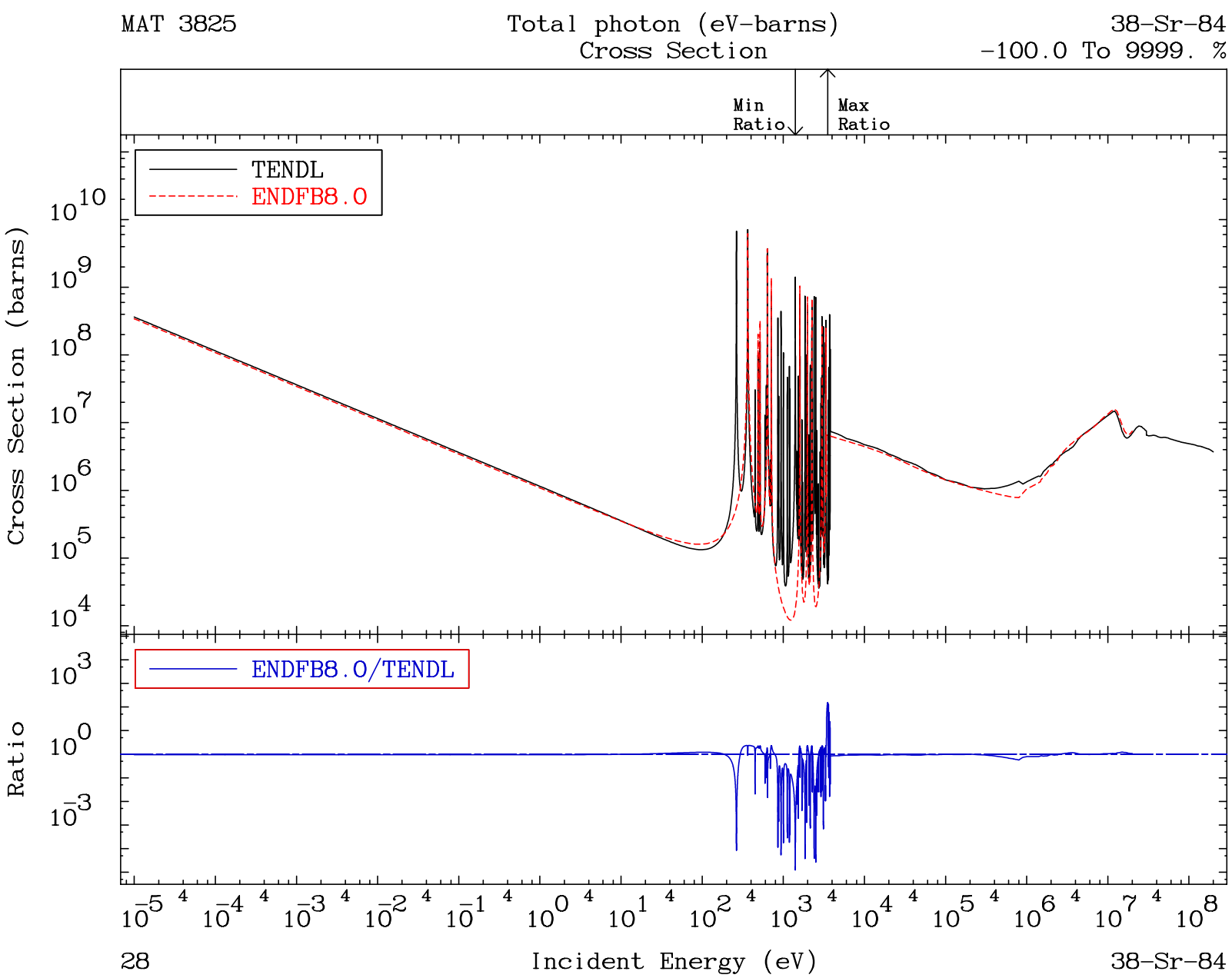

MAT 3825
Kerma elastic
Cross Section
38-Sr-84
-99.86 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
23
38-Sr-84

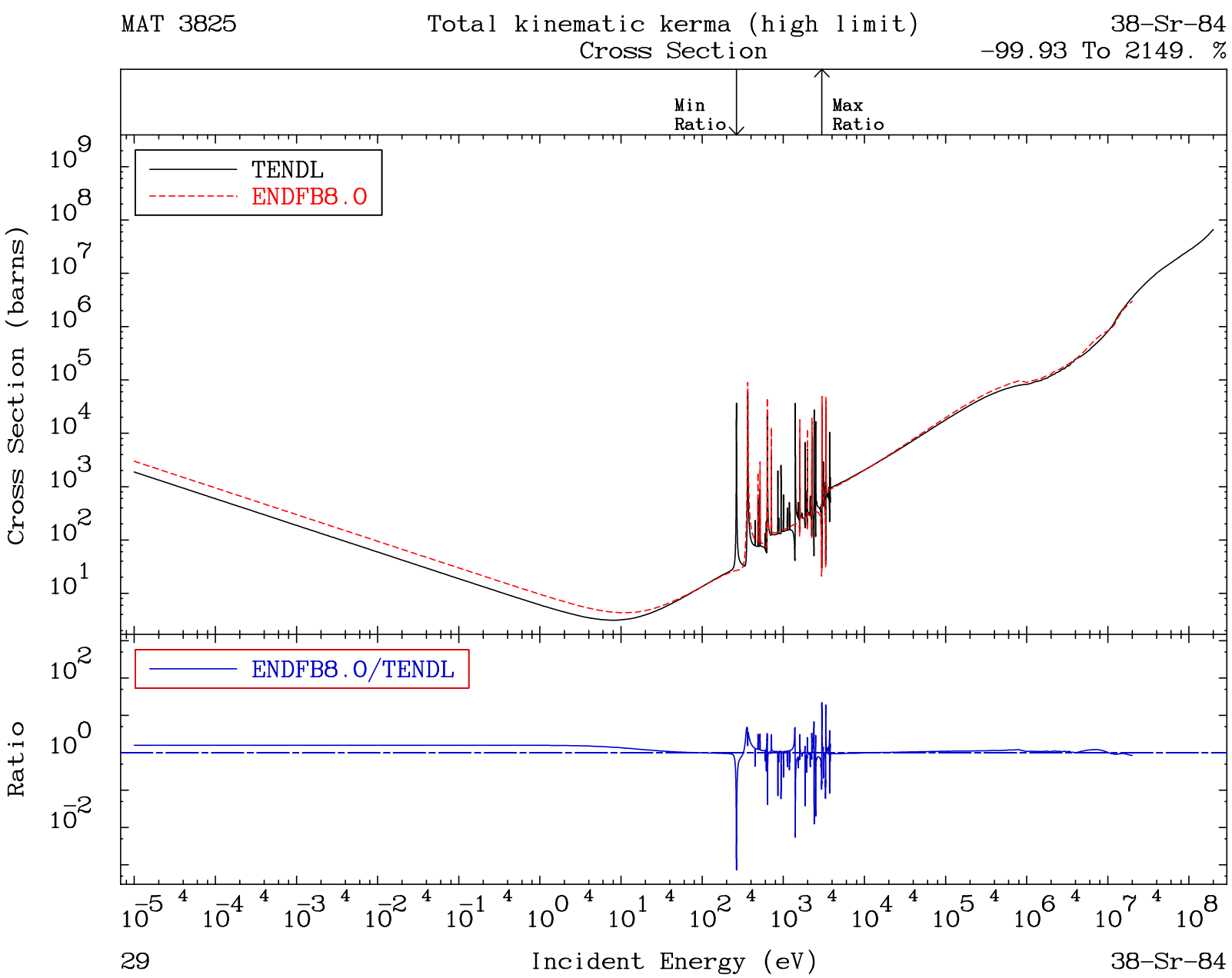

MAT 3825
Kerma non-elastic (all but mt2)
Cross Section
38-Sr-84
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
24
38-Sr-84

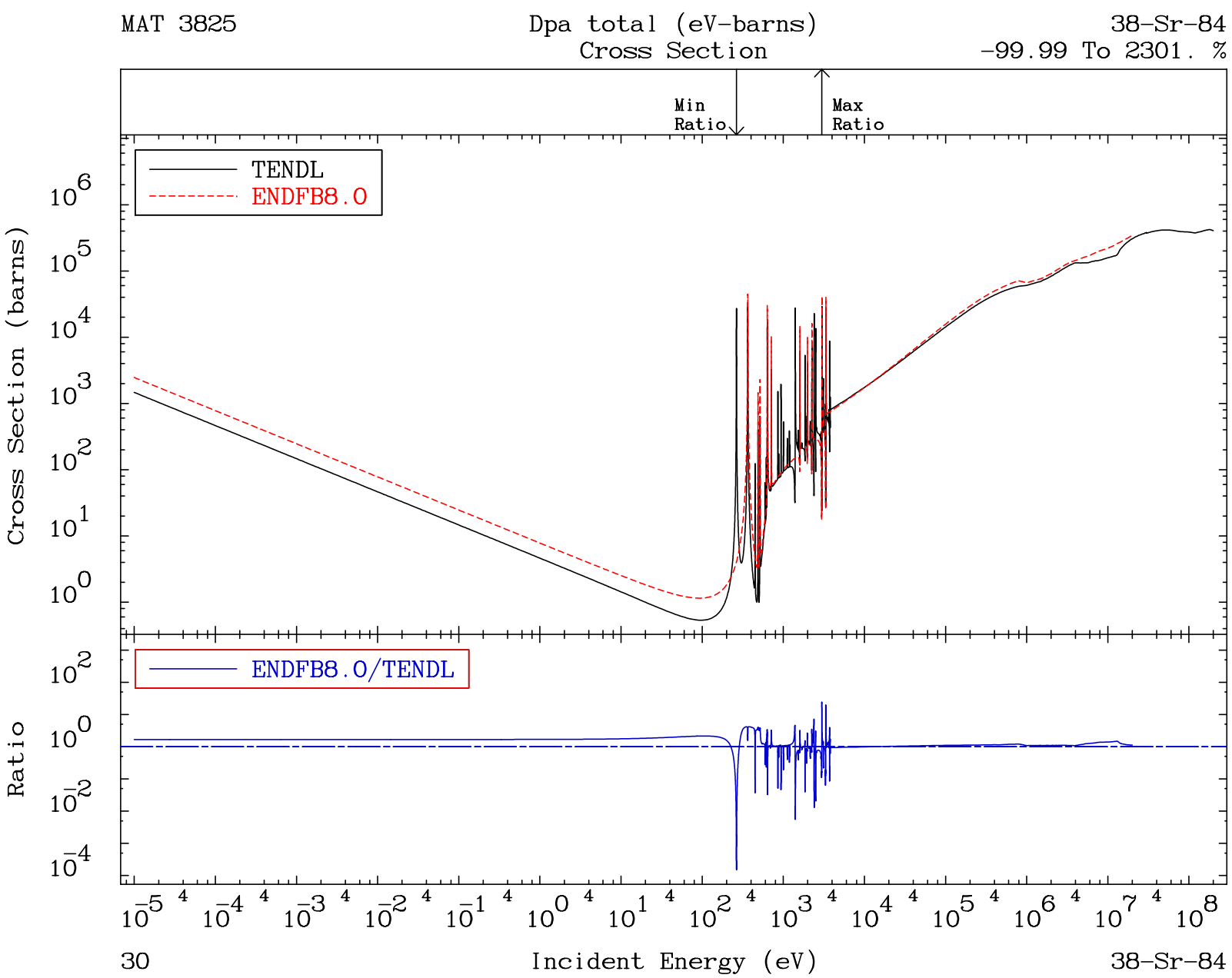

MAT 3825
Kerma inelastic (mt51-91)
Cross Section
38-Sr-84
-128.0 To 2.838 %
Max Ratio
Min Ratio
TENDL Threshold 802.76 keV
ENDFB8.0 Threshold 802.84 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
25
38-Sr-84

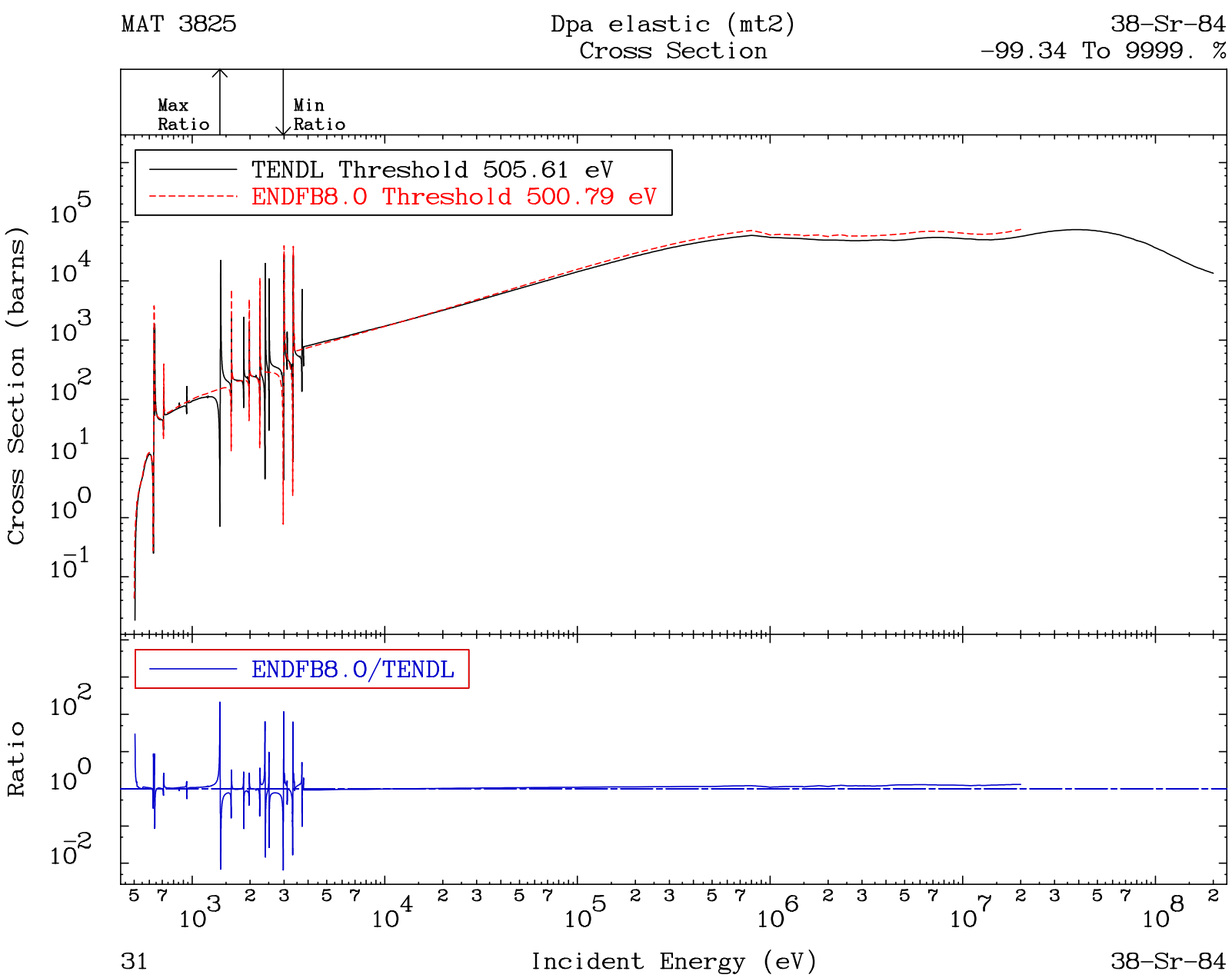

MAT 3825
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
38-Sr-84
-128.0 To 2.838 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
ENDFB8.0/TENDL
Ratio
1.2
0.8
0.4
0.0
10-5 10-4 10-3 10-2 10-1 100 101 102 103 104 105 106 107 108
26
Incident Energy (eV)
38-Sr-84

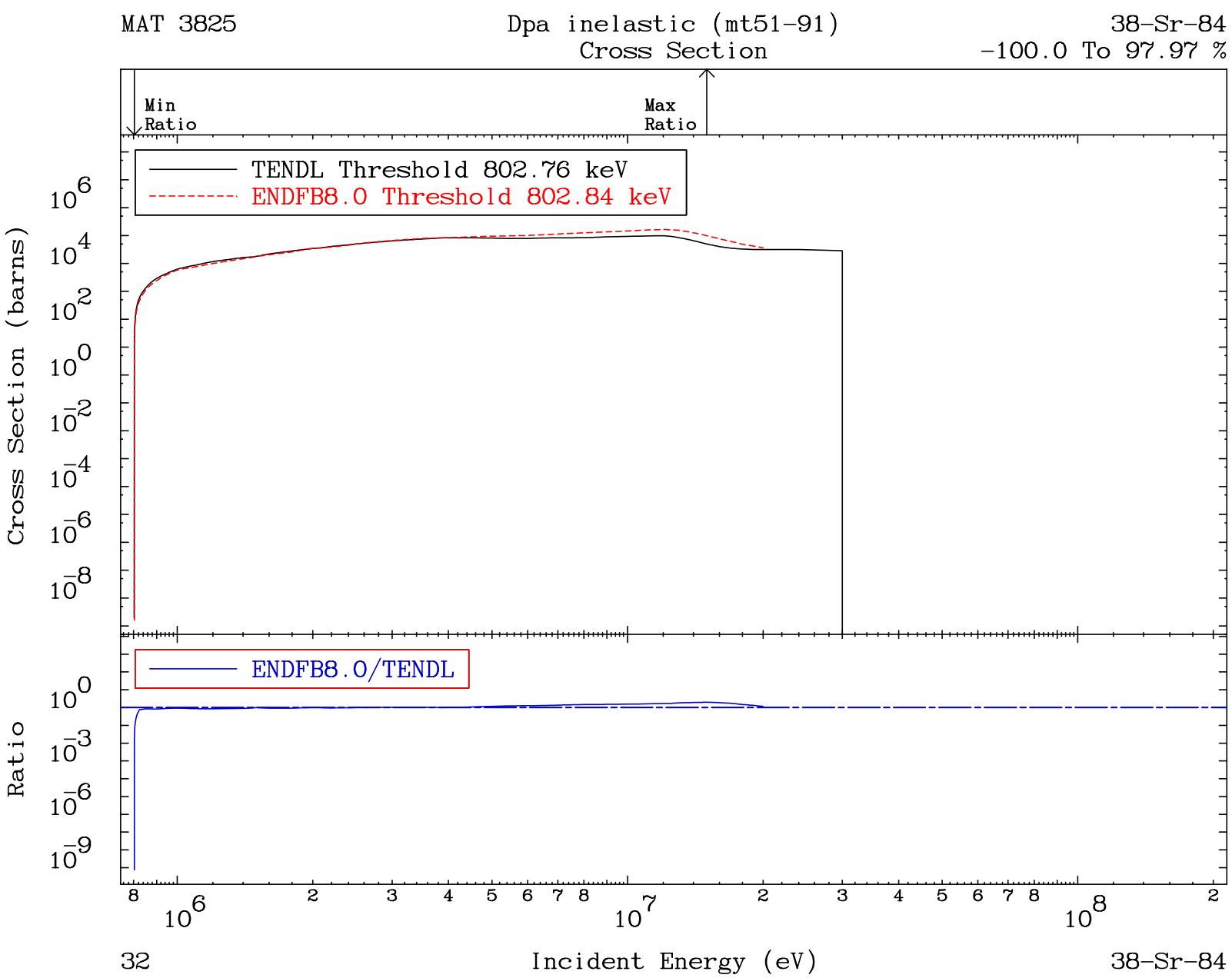

MAT 3825
Kerma capture (mt102)
Cross Section
38-Sr-84
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
27
38-Sr-84

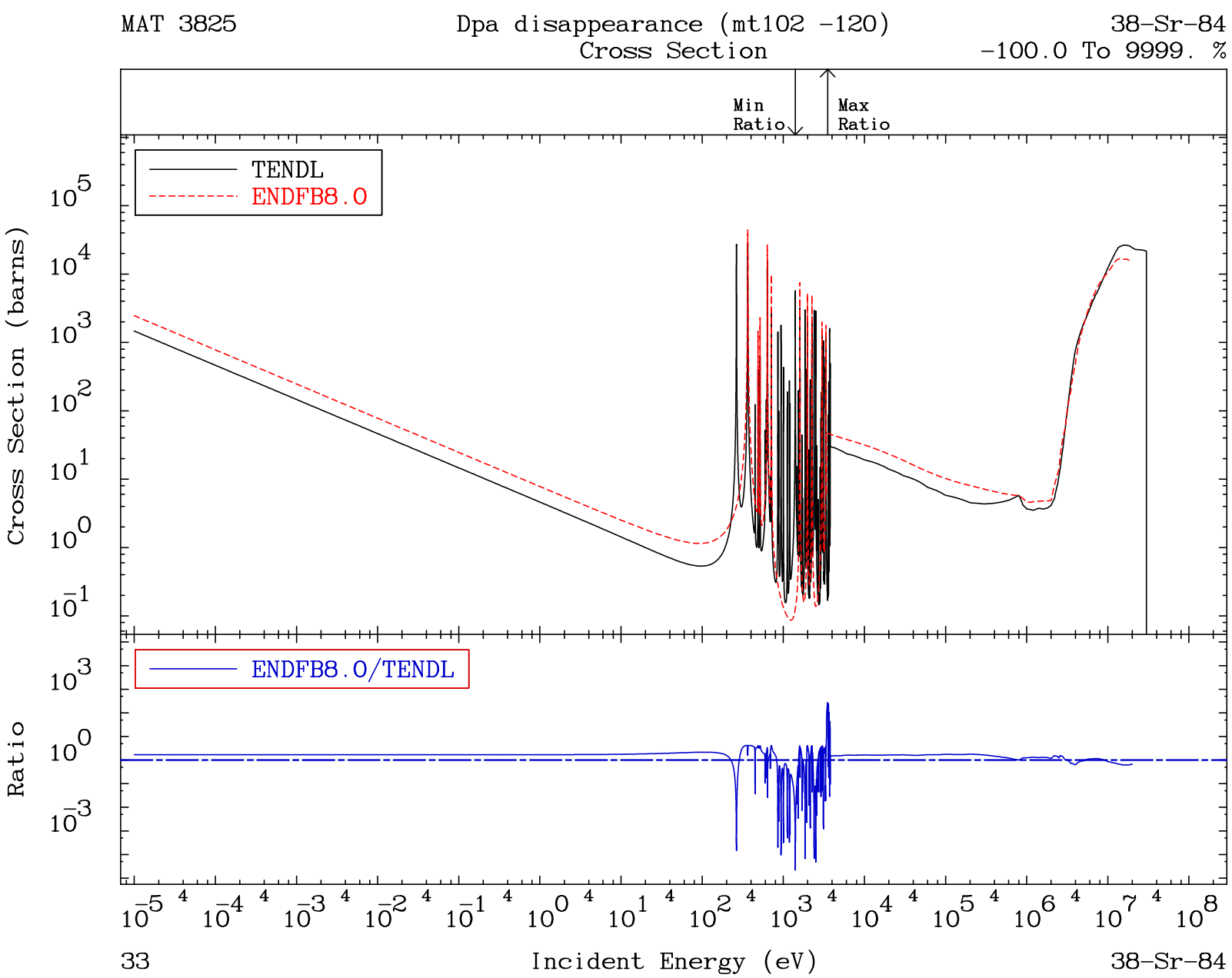

MAT 3825
Total photon (eV-barns)
Cross Section
38-Sr-84
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
28
38-Sr-84


MAT 3825
Total kinematic kerma (high limit)
Cross Section
38-Sr-84
-99.93 To 2149. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
29
38-Sr-84


MAT 3825
Dpa total (eV-barns)
Cross Section
38-Sr-84
-99.99 To 2301. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
30
38-Sr-84


MAT 3825
Dpa elastic (mt2)
Cross Section
38-Sr-84
-99.34 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 505.61 eV
ENDFB8.0 Threshold 500.79 eV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
31
38-Sr-84


MAT 3825
Dpa inelastic (mt51-91)
Cross Section
38-Sr-84
-100.0 To 97.97 %
Min Ratio
Max Ratio
TENDL Threshold 802.76 keV
ENDFB8.0 Threshold 802.84 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
32
38-Sr-84


MAT 3825
Dpa disappearance (mt102 -120)
Cross Section
38-Sr-84
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
33
38-Sr-84