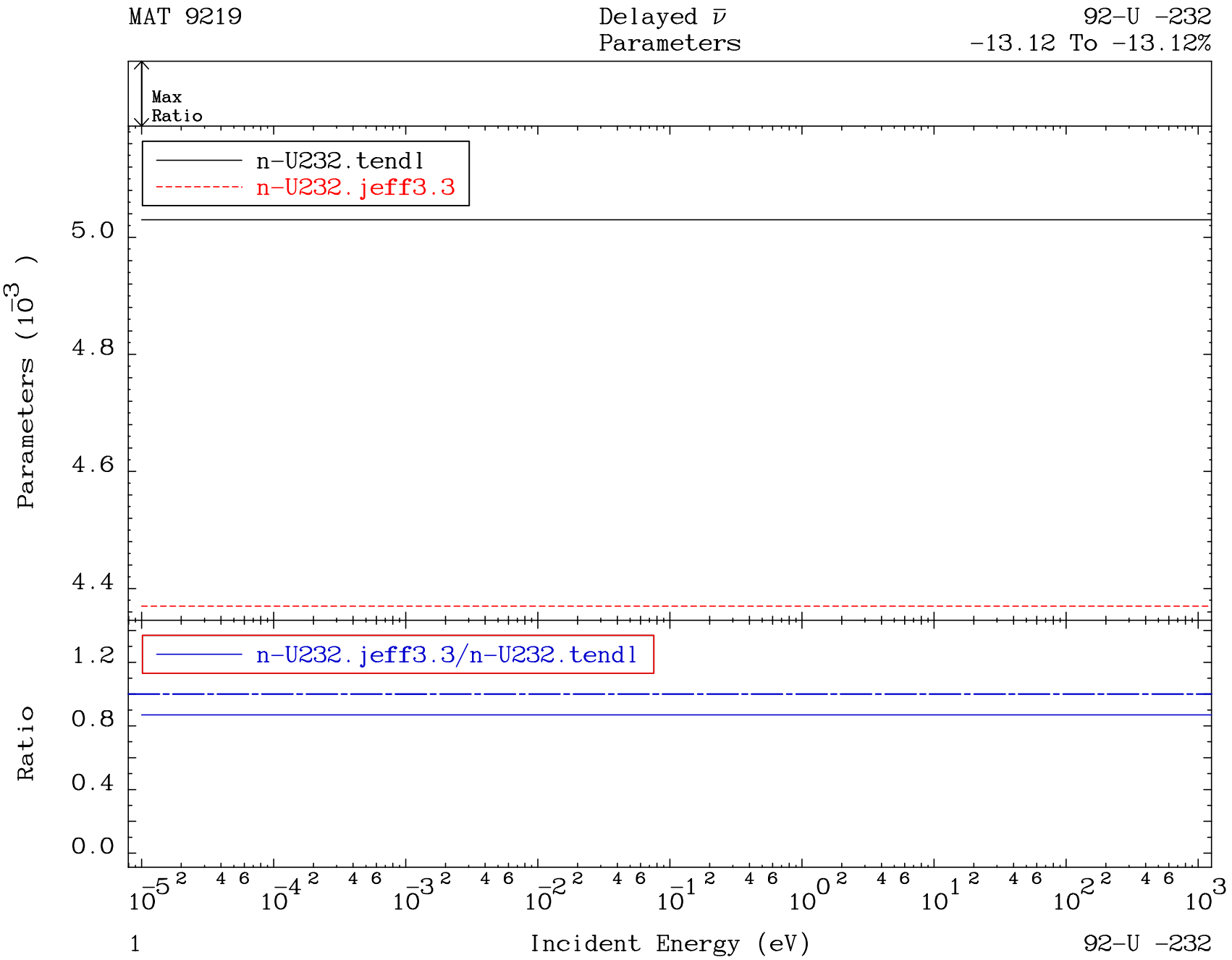
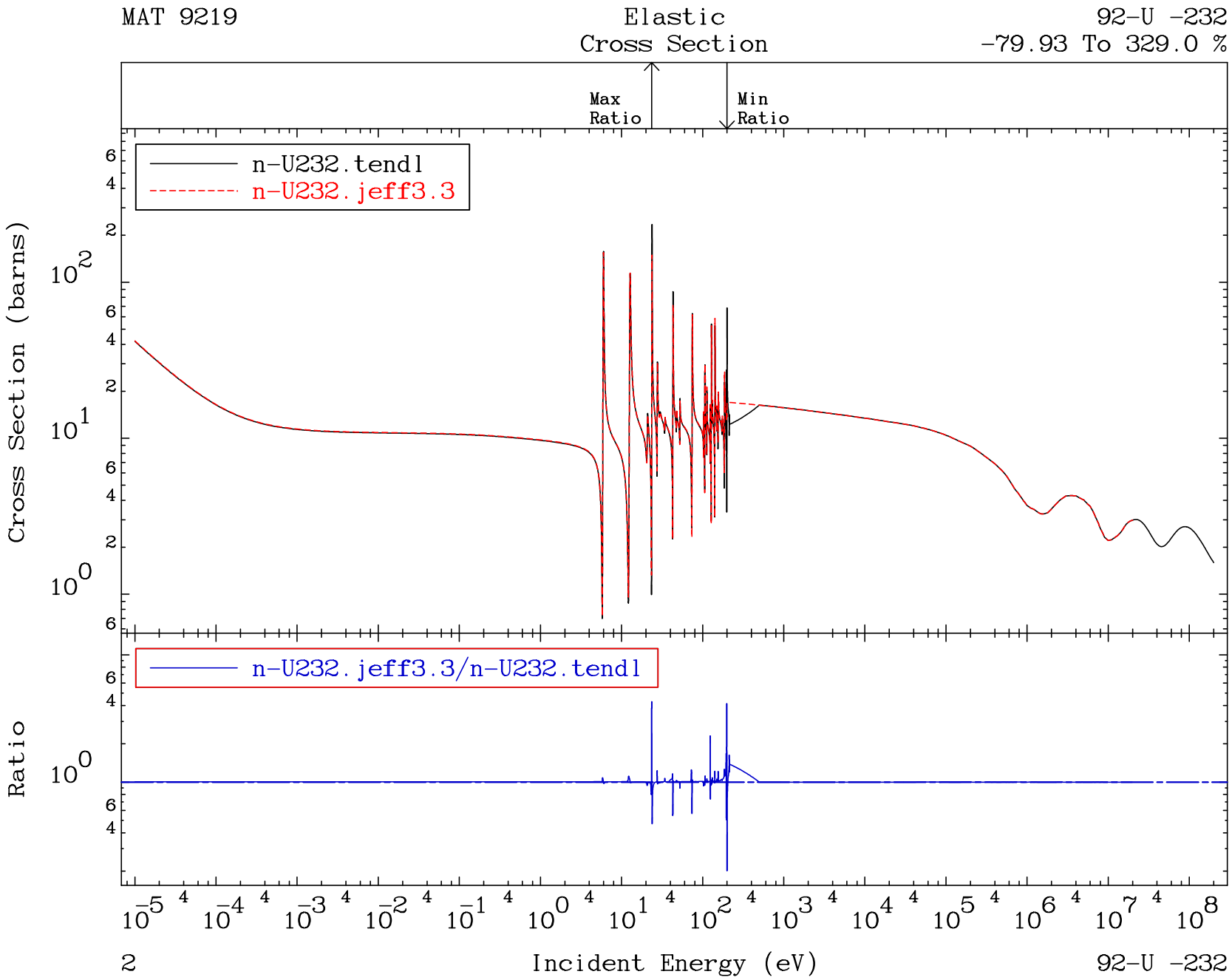
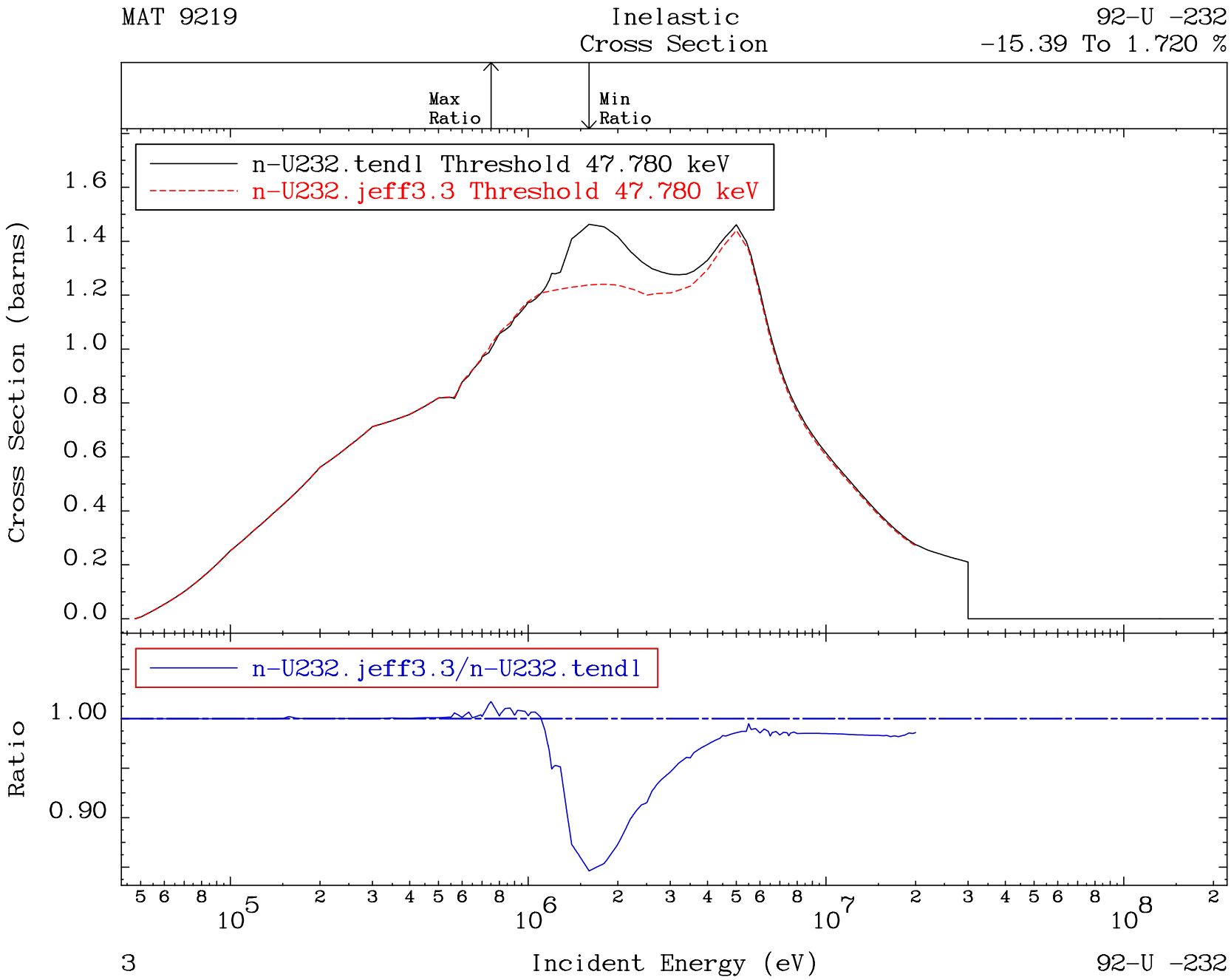
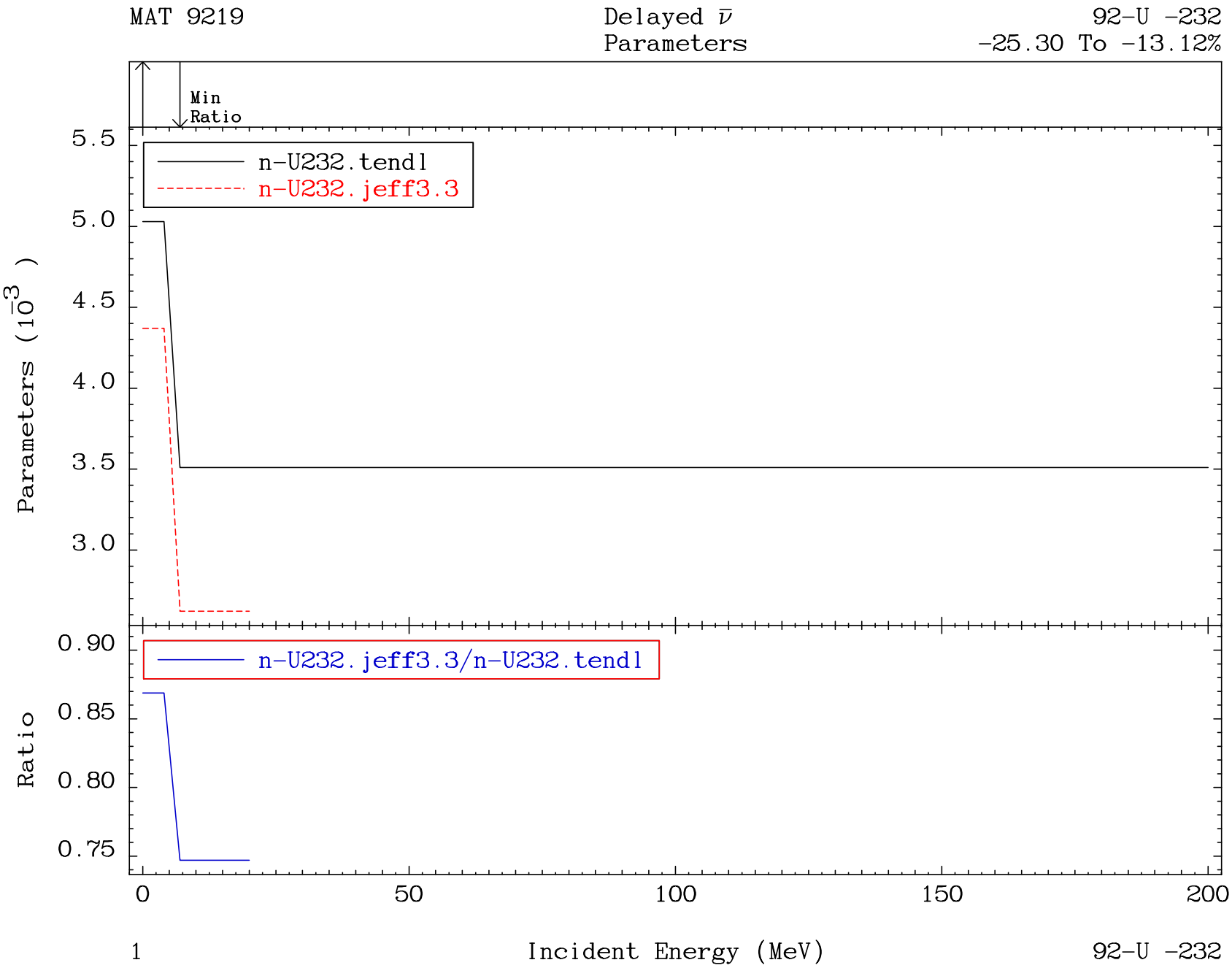
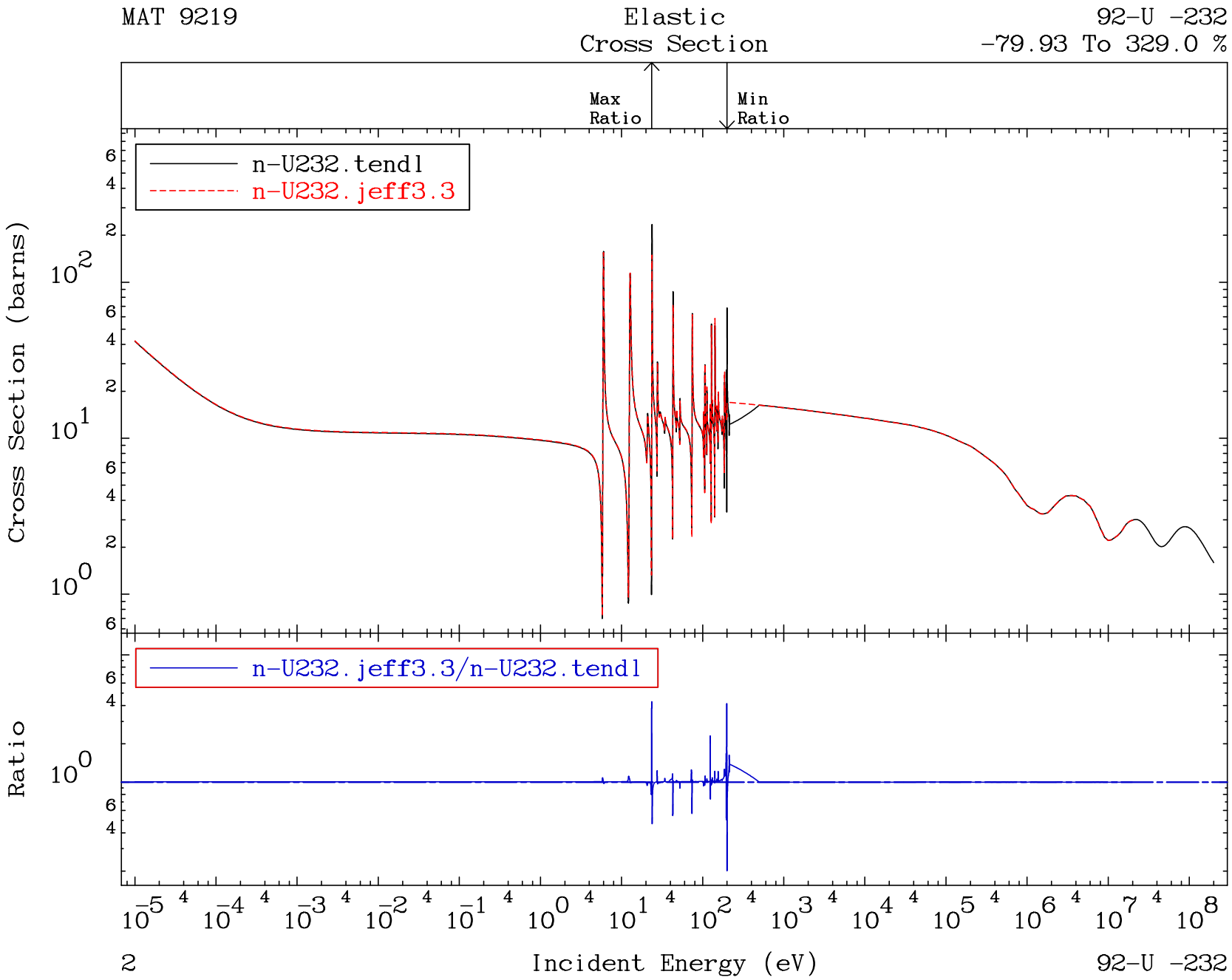
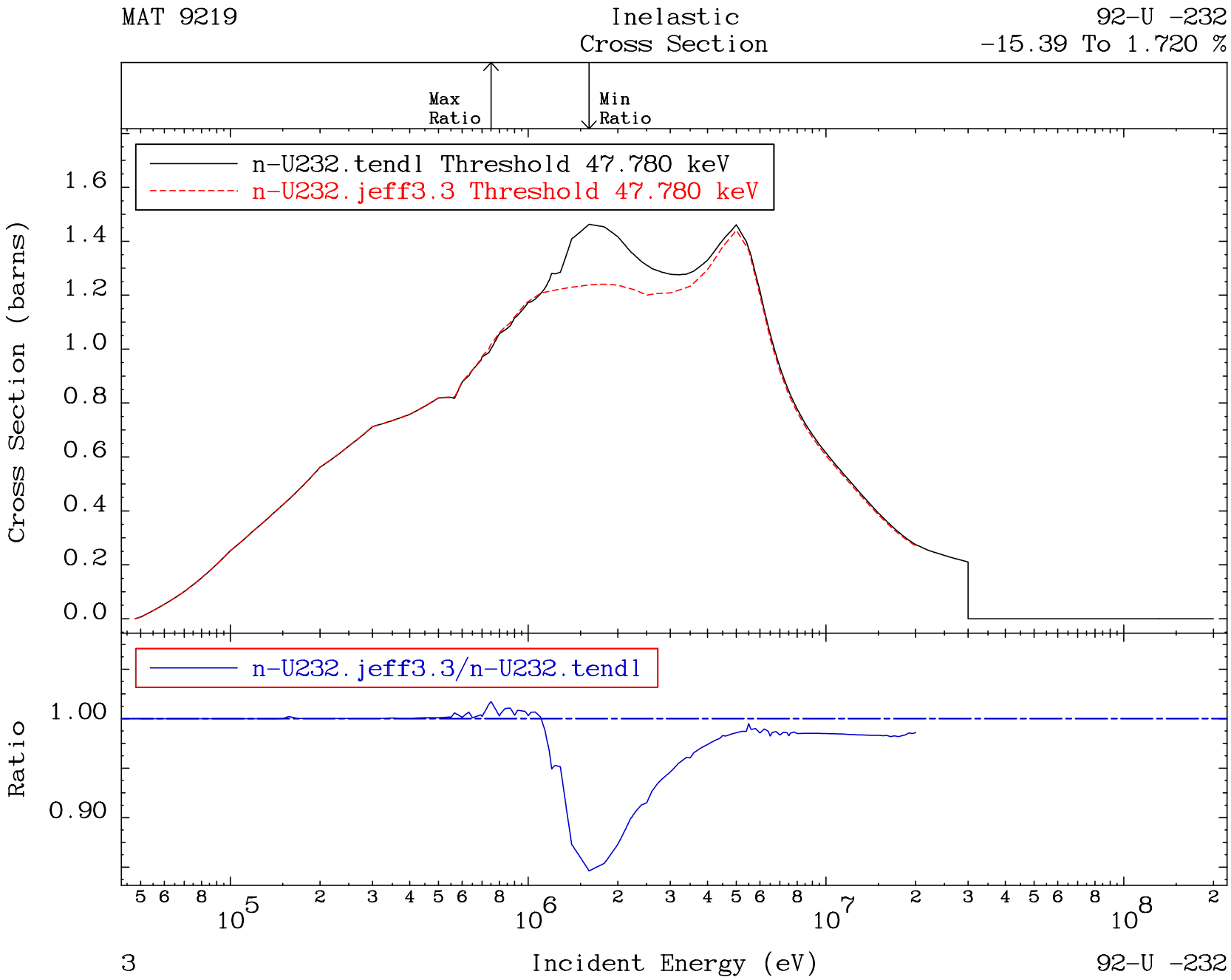

MAT 9219
Delayed $\bar{\nu}$
Parameters
92-U -232
-13.12 To -13.12%
Max
Ratio
n-U232.tendl
n-U232.jeff3.3
n-U232.jeff3.3/n-U232.tendl
Parameters (10^{-3})
Ratio
5.0
4.8
4.6
4.4
1.2
0.8
0.4
0.0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3}
Incident Energy (eV)
1
92-U -232

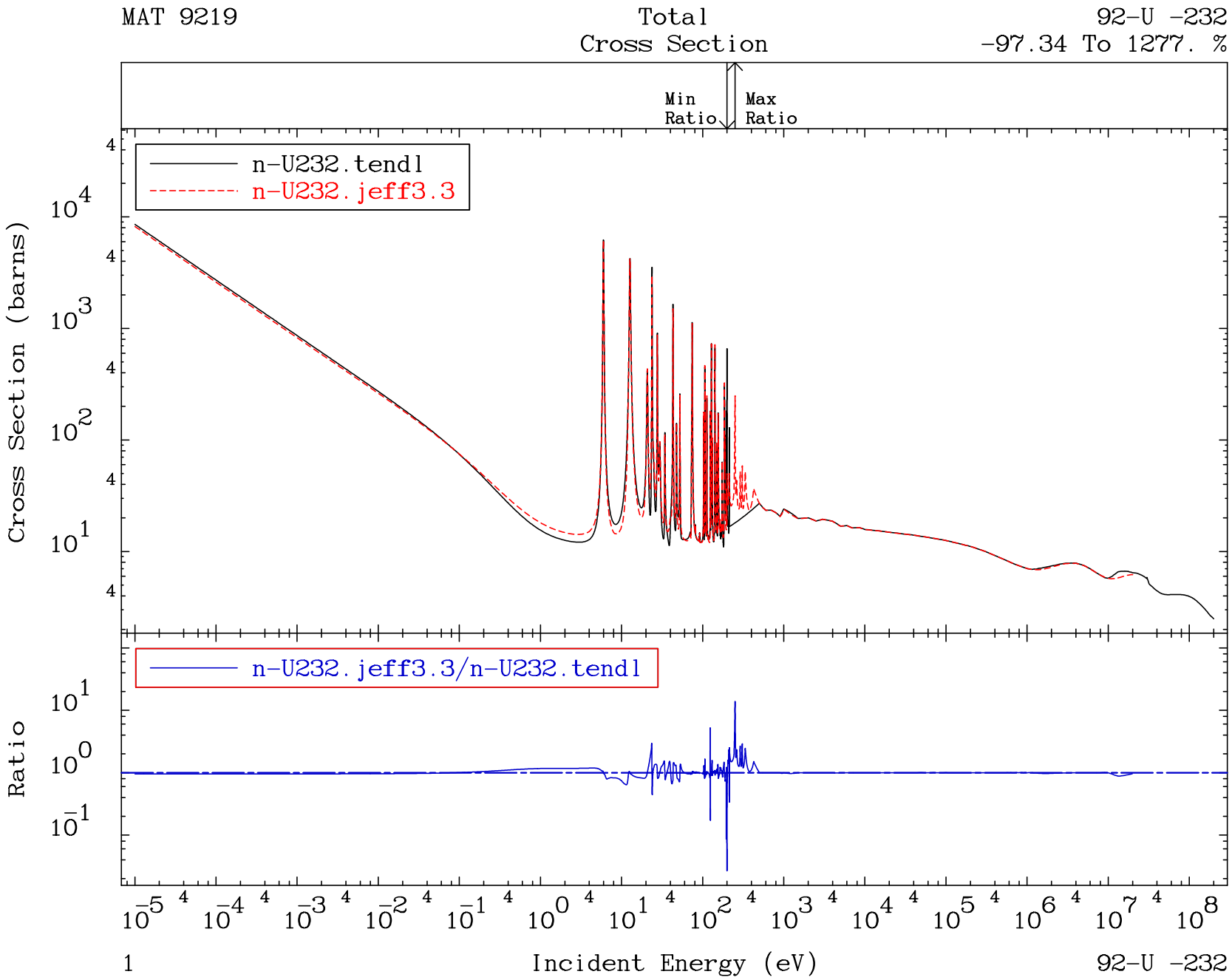

MAT 9219
Elastic
Cross Section
92-U -232
-79.93 To 329.0 %
Max
Ratio
Min
Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
2
92-U -232

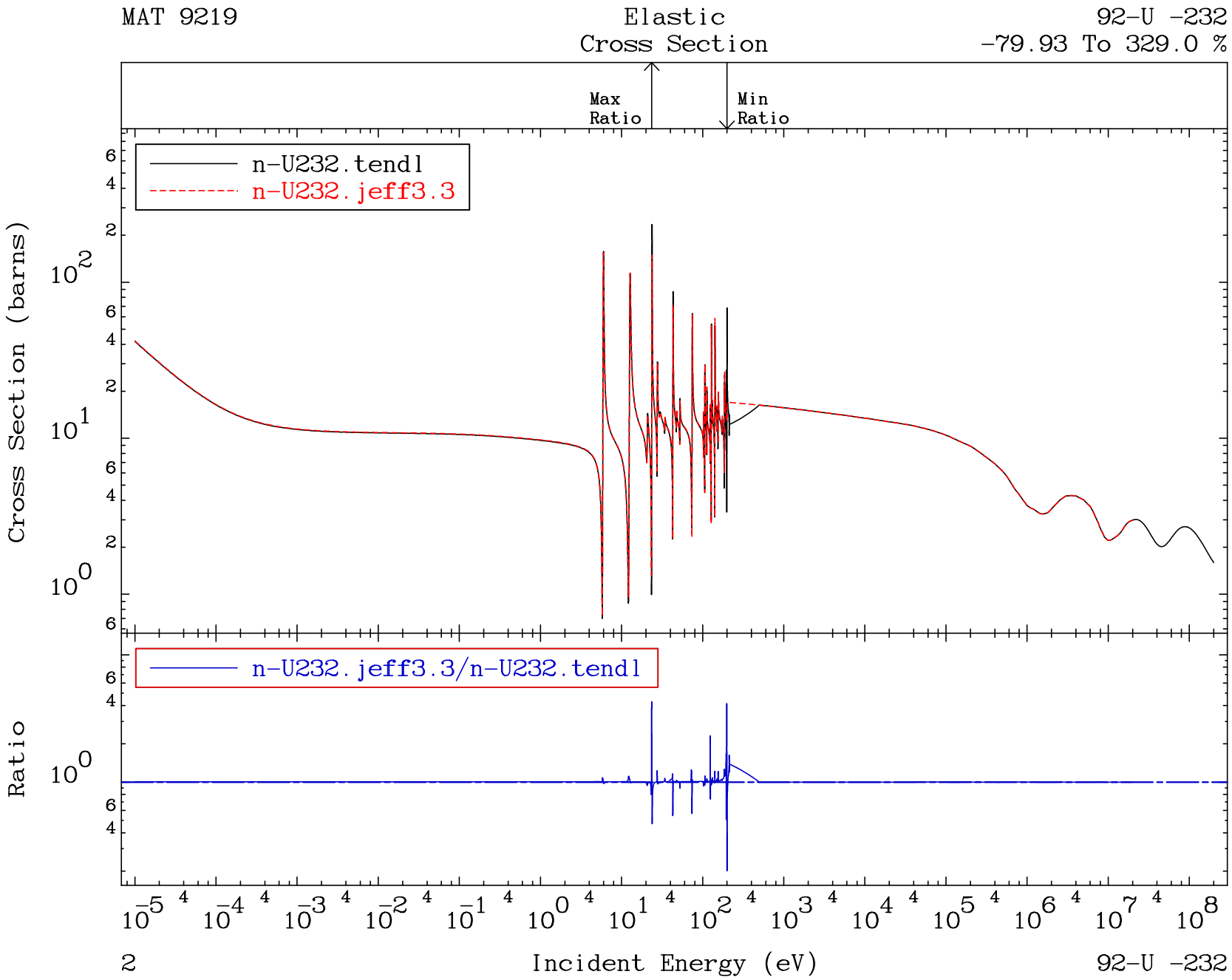

MAT 9219
Inelastic
Cross Section
92-U -232
-15.39 To 1.720 %
Max
Ratio
Min
Ratio
n-U232.tendl Threshold 47.780 keV
n-U232.jeff3.3 Threshold 47.780 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.00
0.90
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
92-U -232

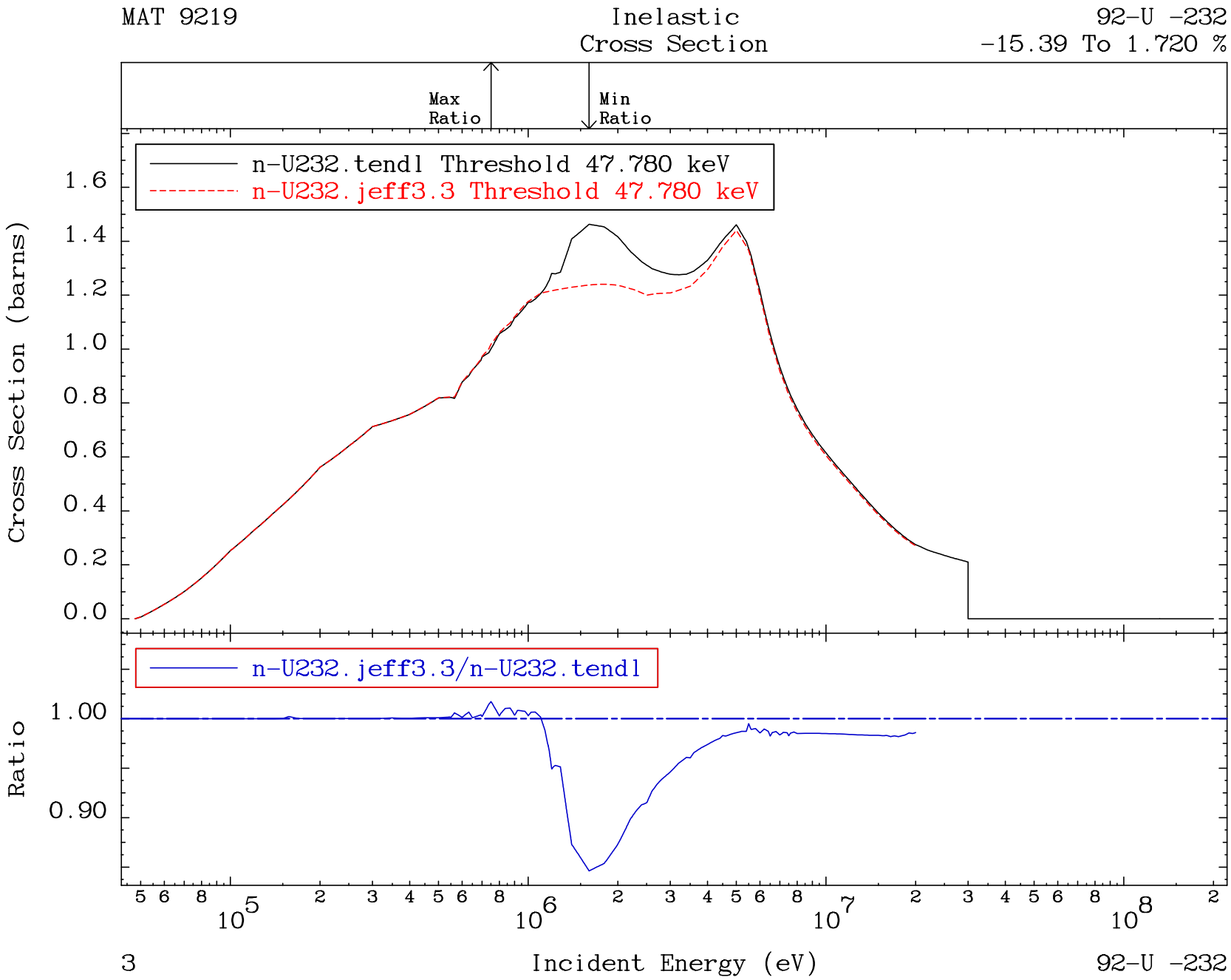

MAT 9219
Delayed $\bar{\nu}$
Parameters
92-U -232
-25.30 To -13.12%
Min
Ratio
n-U232.tendl
n-U232.jeff3.3
Parameters (10^{-3})
5.5
5.0
4.5
4.0
3.5
3.0
n-U232.jeff3.3/n-U232.tendl
Ratio
0.90
0.85
0.80
0.75
0
50
100
150
200
1
Incident Energy (MeV)
92-U -232

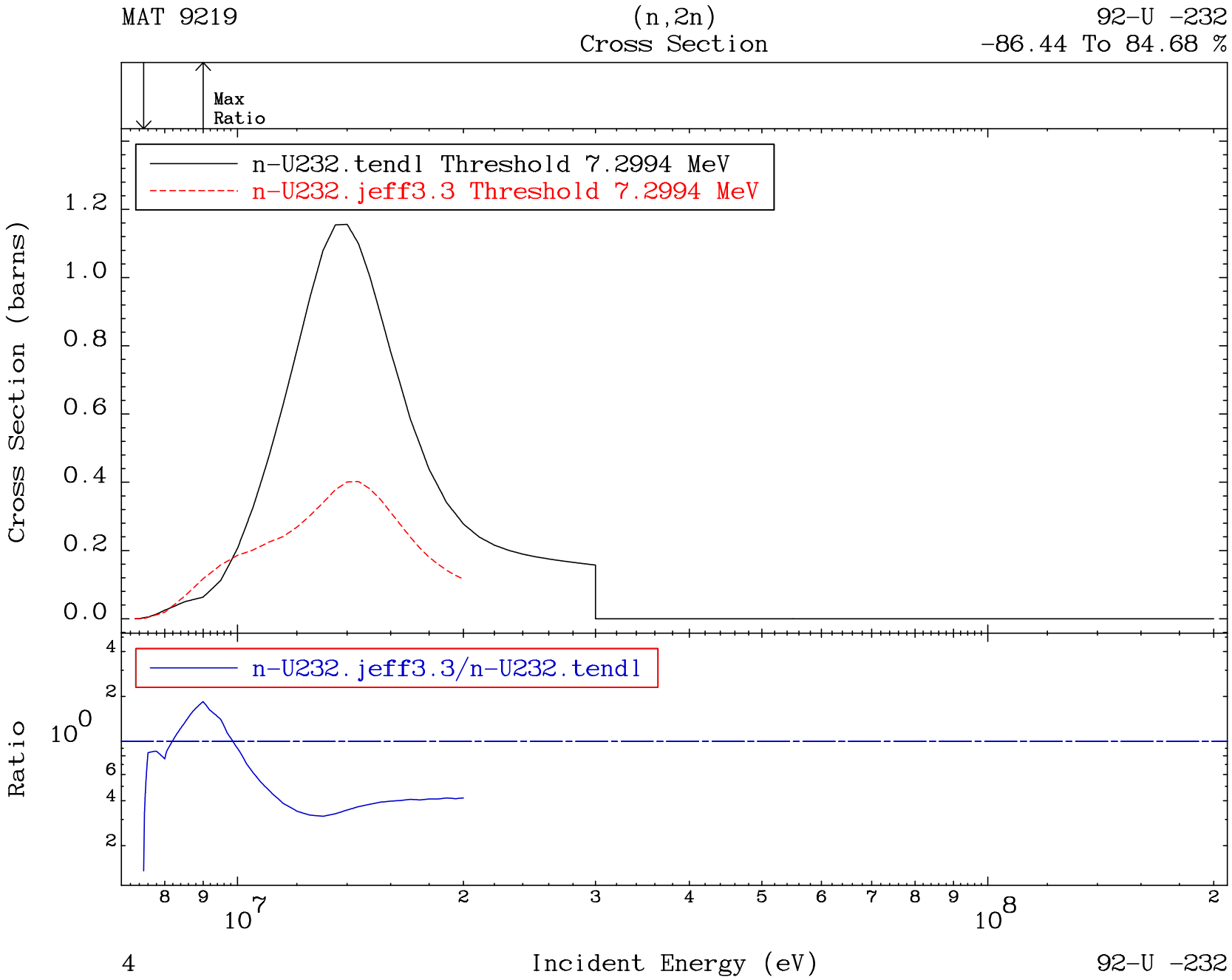

MAT 9219
Elastic
Cross Section
92-U -232
-79.93 To 329.0 %
Max
Ratio
Min
Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
2
92-U -232

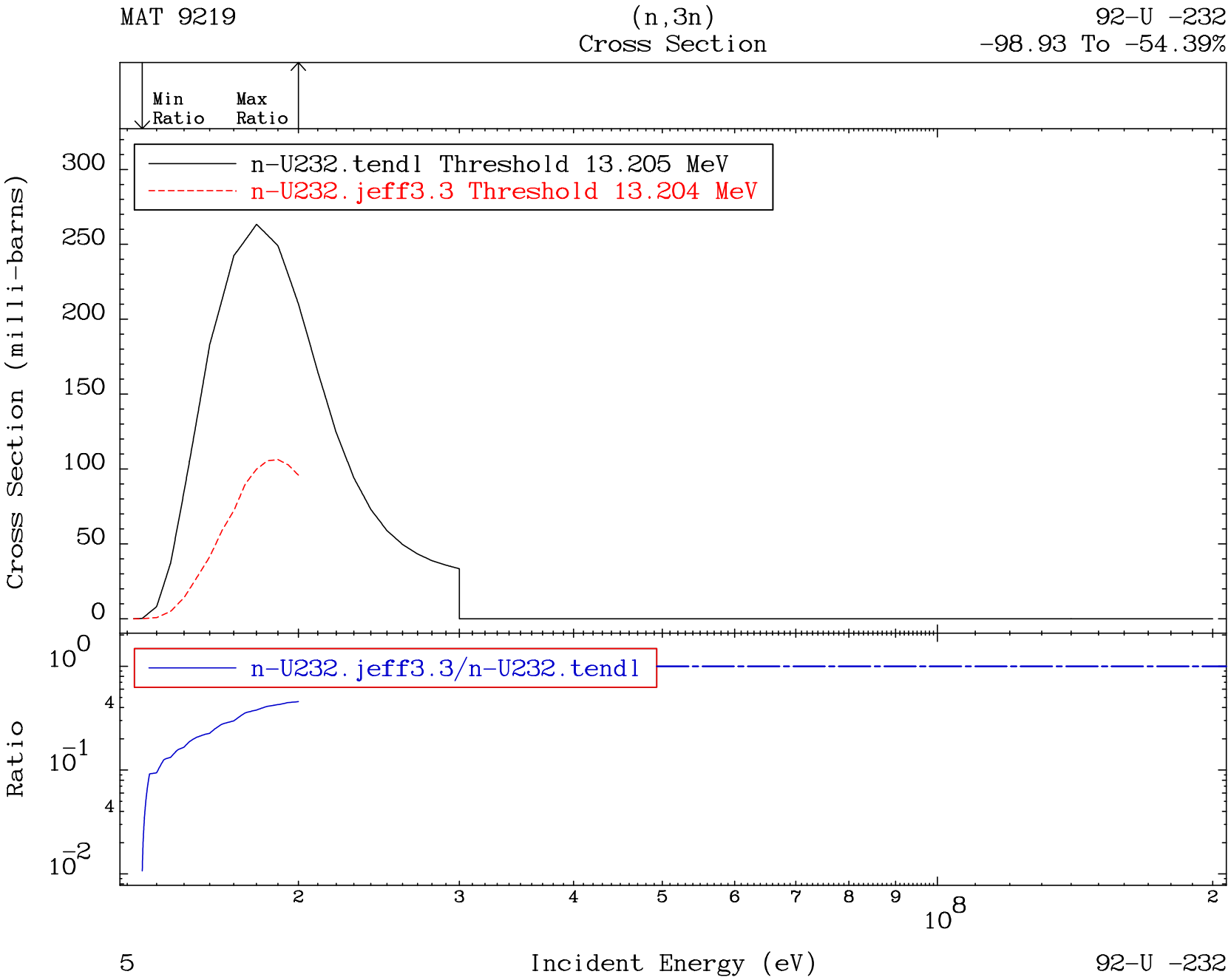

MAT 9219
Inelastic
Cross Section
92-U -232
-15.39 To 1.720 %
Max
Ratio
Min
Ratio
n-U232.tendl Threshold 47.780 keV
n-U232.jeff3.3 Threshold 47.780 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.00
0.90
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
92-U -232

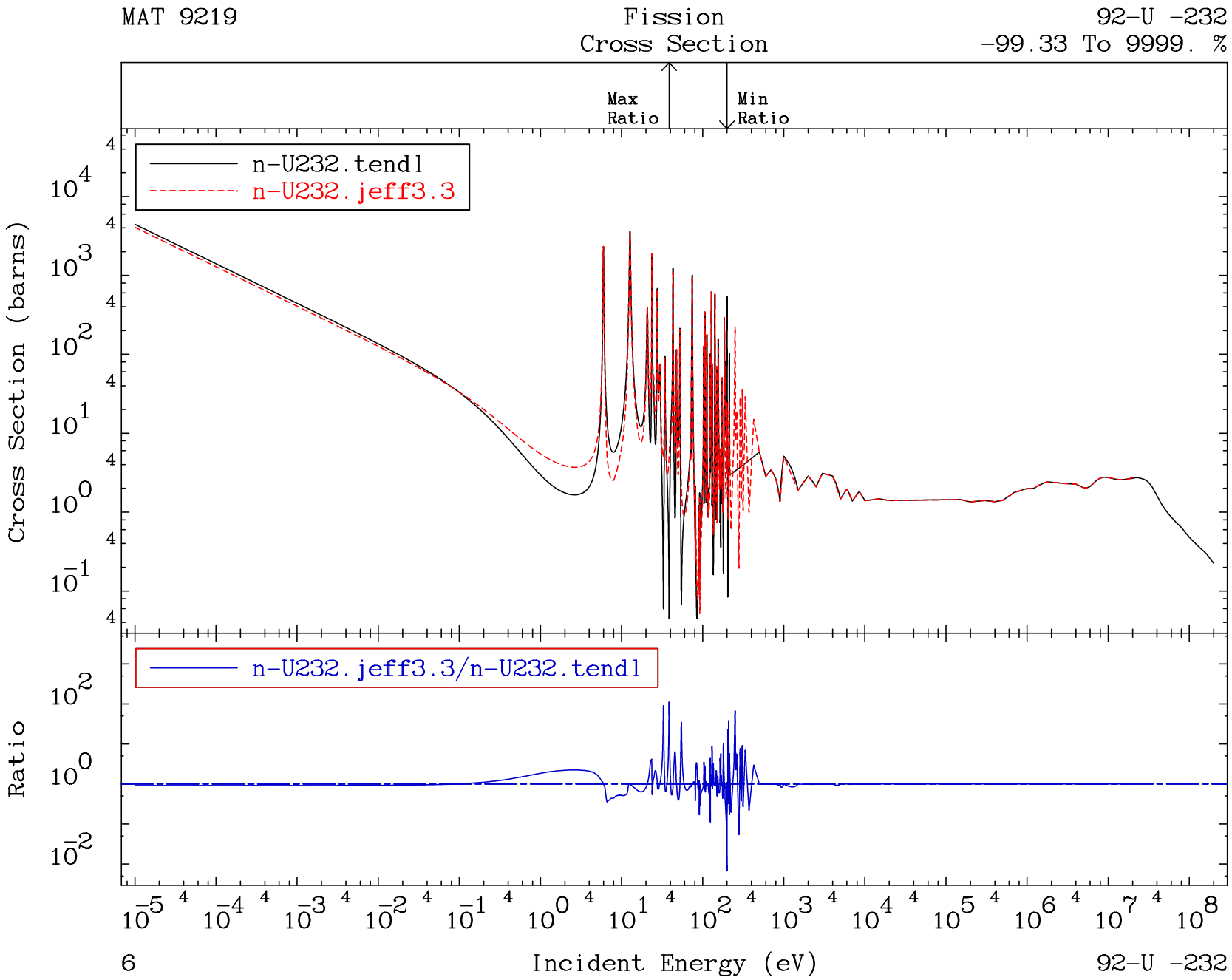

MAT 9219
Total
Cross Section
92-U -232
-97.34 To 1277. %
Min
Ratio
Max
Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
1
92-U -232

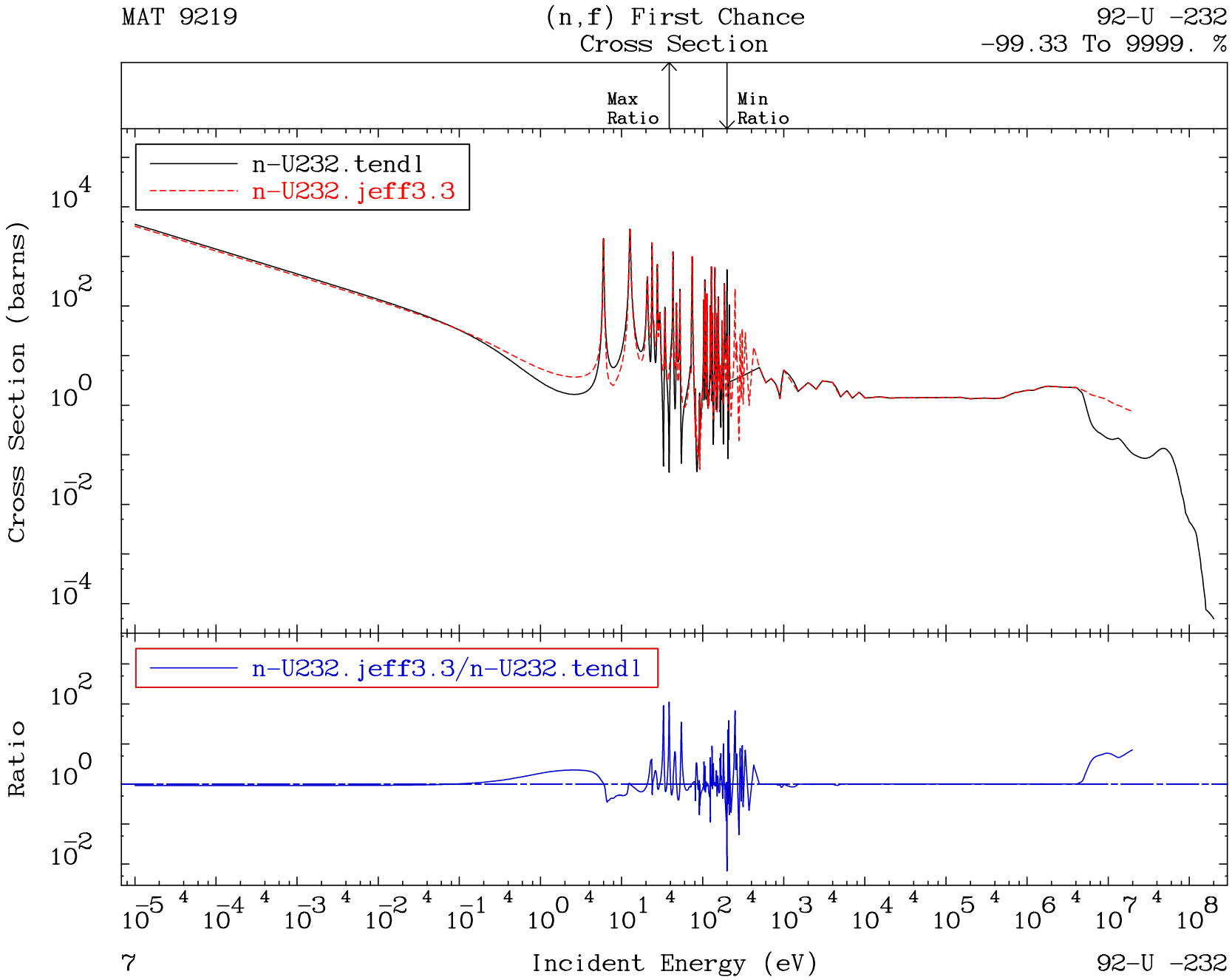

MAT 9219
Elastic
Cross Section
92-U -232
-79.93 To 329.0 %
Max
Ratio
Min
Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
2
92-U -232

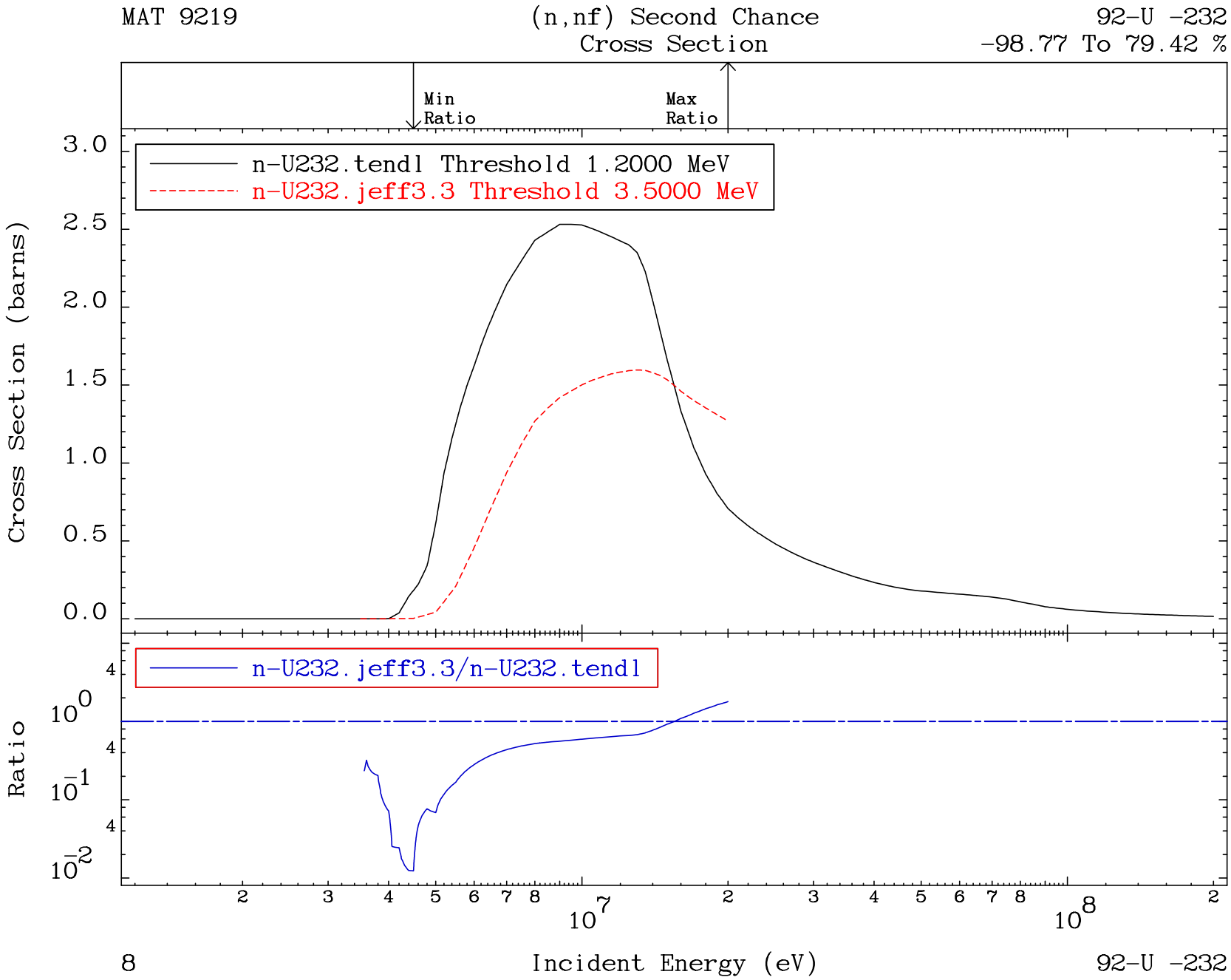

MAT 9219
Inelastic
Cross Section
92-U -232
-15.39 To 1.720 %
Max
Ratio
Min
Ratio
n-U232.tendl Threshold 47.780 keV
n-U232.jeff3.3 Threshold 47.780 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.00
0.90
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
92-U -232

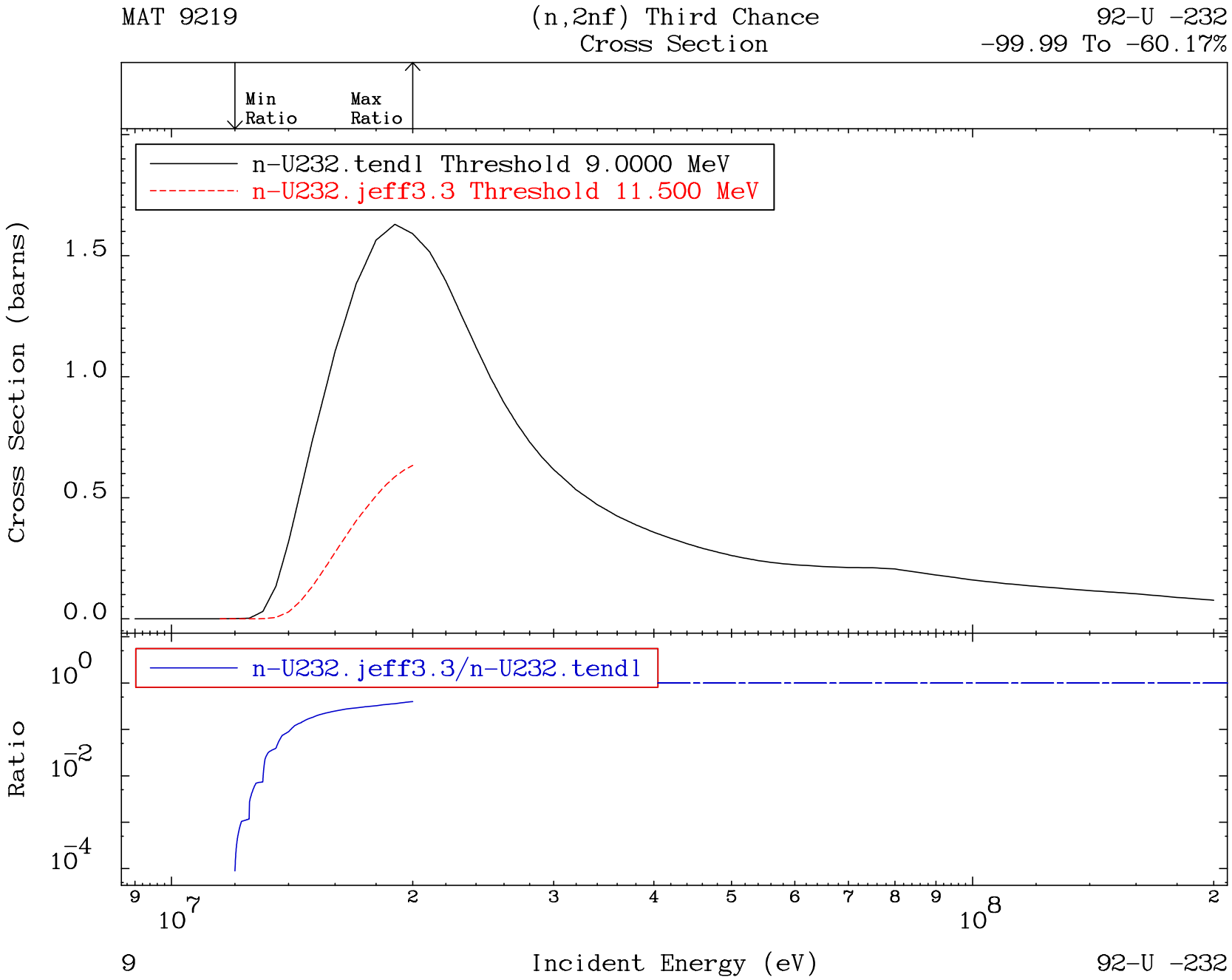

MAT 9219
(n,2n)
Cross Section
92-U -232
-86.44 To 84.68 %
Max
Ratio
n-U232.tendl Threshold 7.2994 MeV
n-U232.jeff3.3 Threshold 7.2994 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
4
2
10^0
6
4
2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
92-U -232

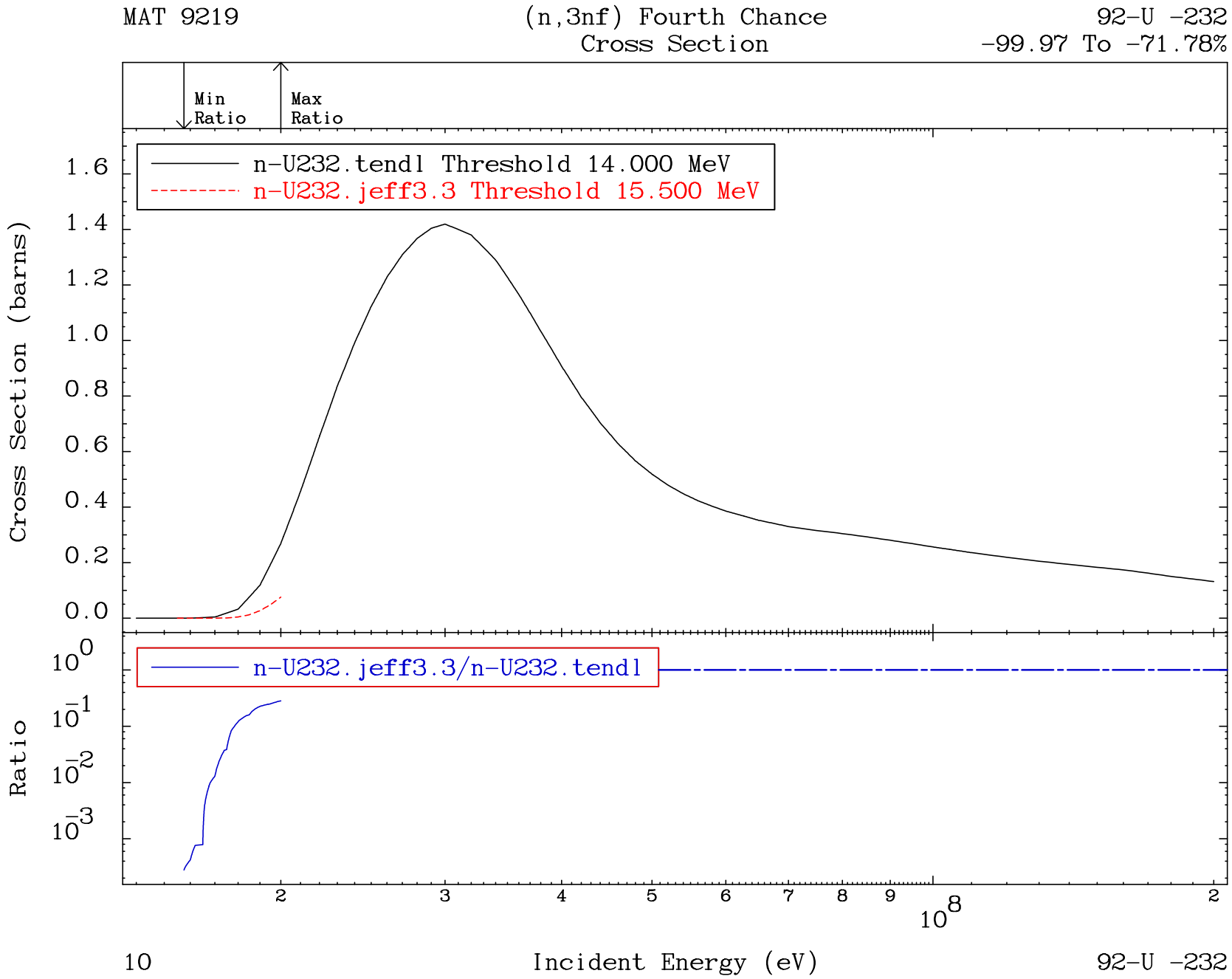

MAT 9219
(n,3n)
Cross Section
92-U -232
-98.93 To -54.39%
Min Ratio
Max Ratio
n-U232.tendl Threshold 13.205 MeV
n-U232.jeff3.3 Threshold 13.204 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
92-U -232

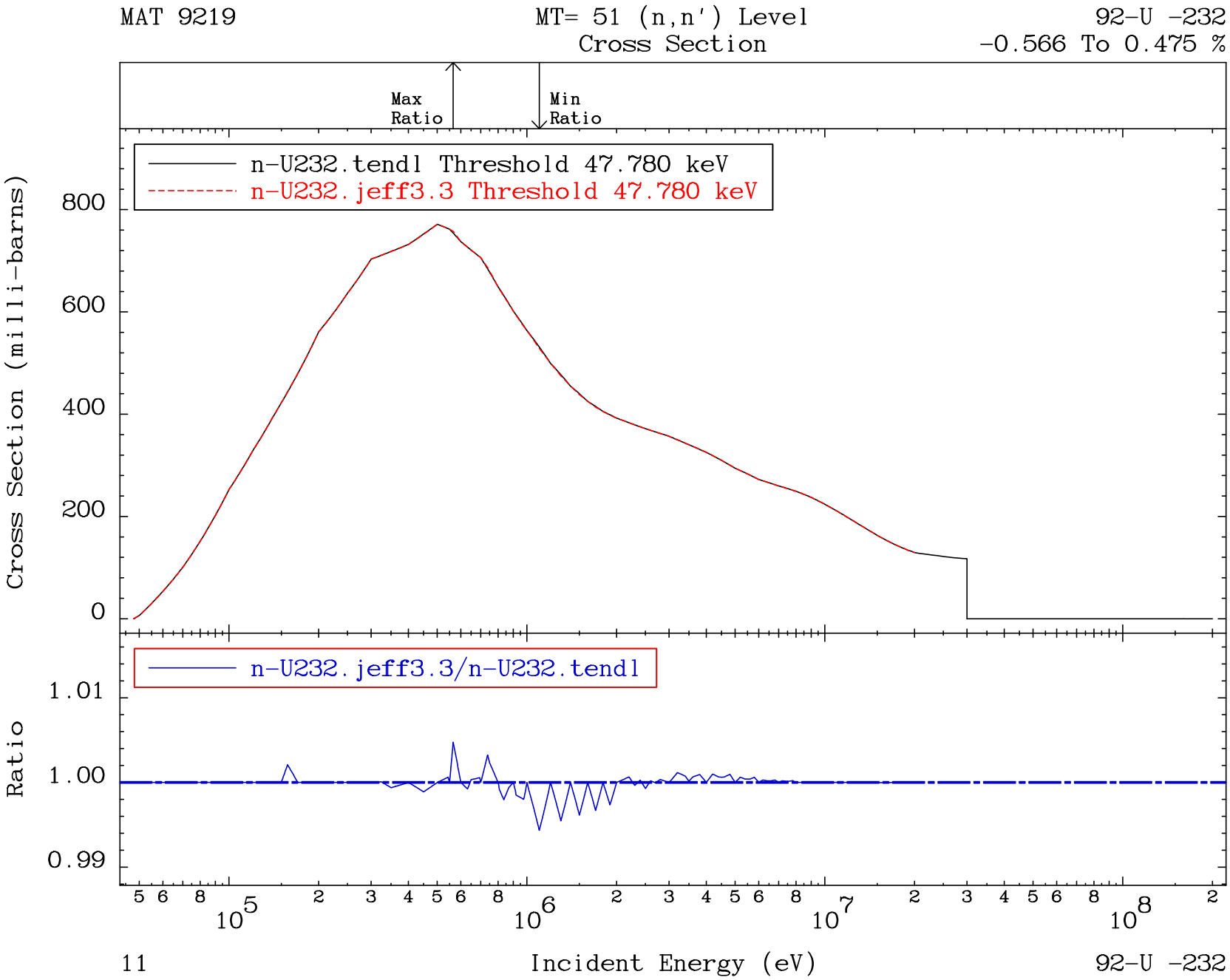

MAT 9219
Fission
Cross Section
92-U -232
-99.33 To 9999. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
6
92-U -232

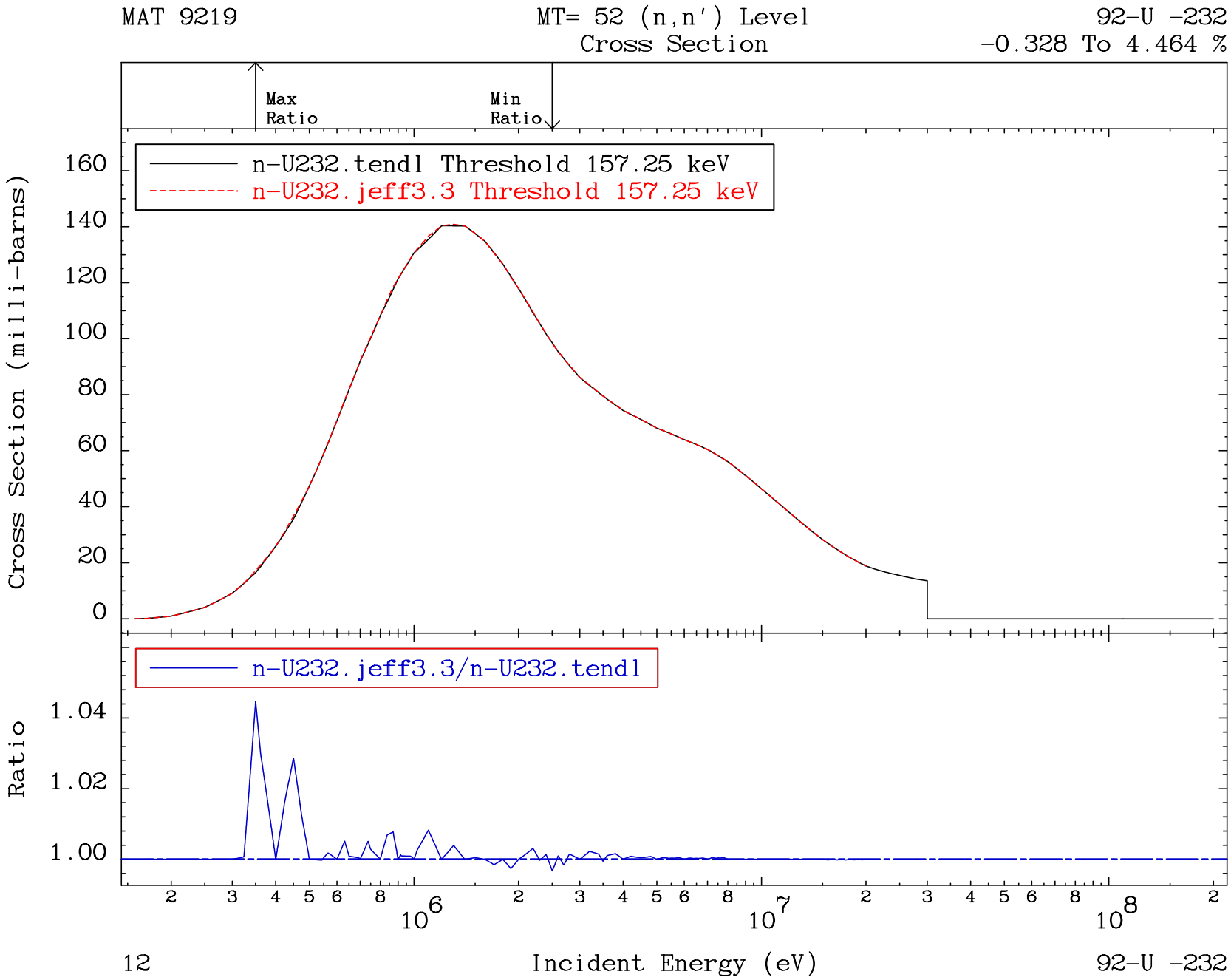

MAT 9219
(n,f) First Chance
Cross Section
92-U -232
-99.33 To 9999. %
Max
Ratio
Min
Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
7
92-U -232

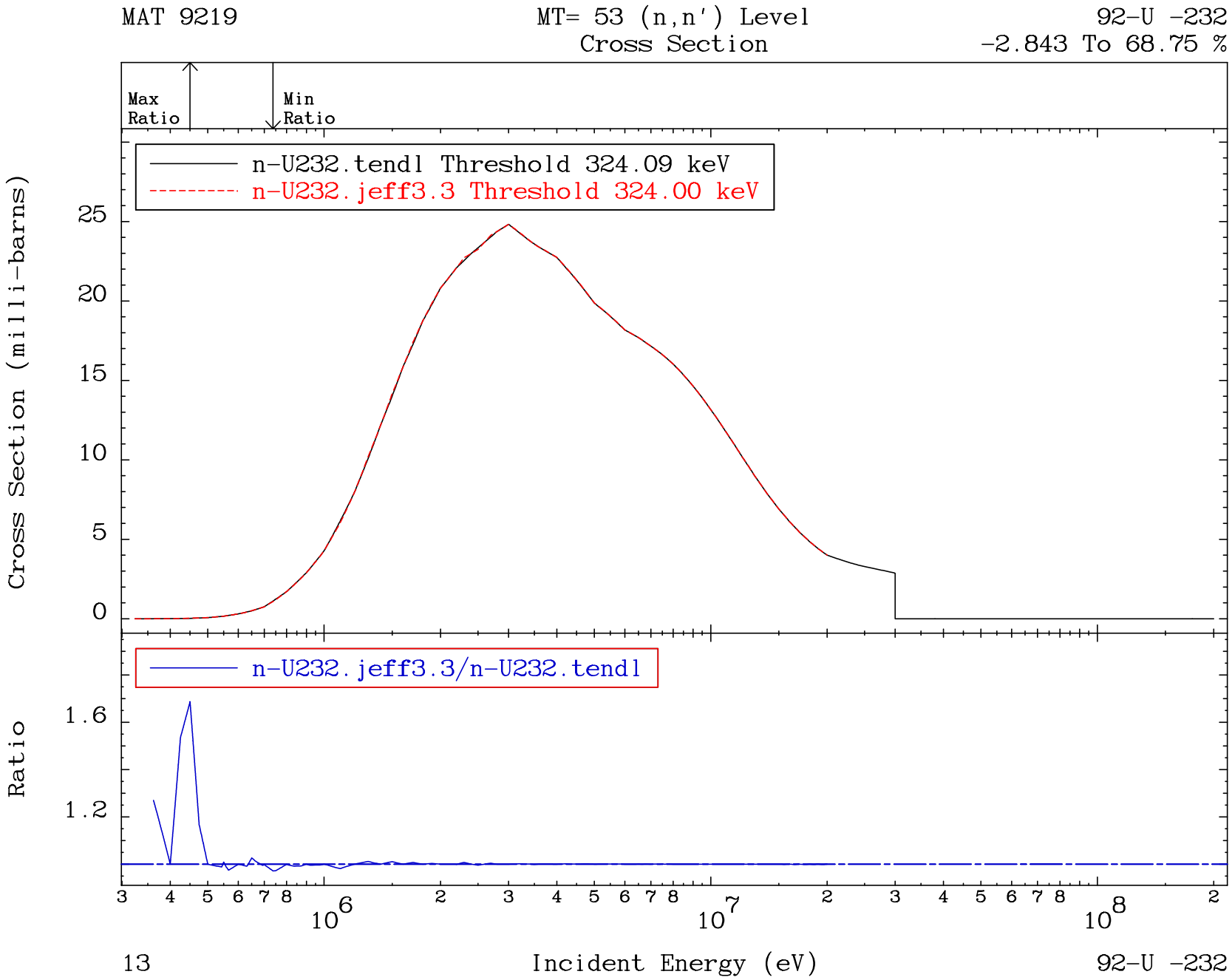

MAT 9219
(n,nf) Second Chance
Cross Section
92-U -232
-98.77 To 79.42 %
Min
Ratio
Max
Ratio
n-U232.tendl Threshold 1.2000 MeV
n-U232.jeff3.3 Threshold 3.5000 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^0
10^-1
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
92-U -232

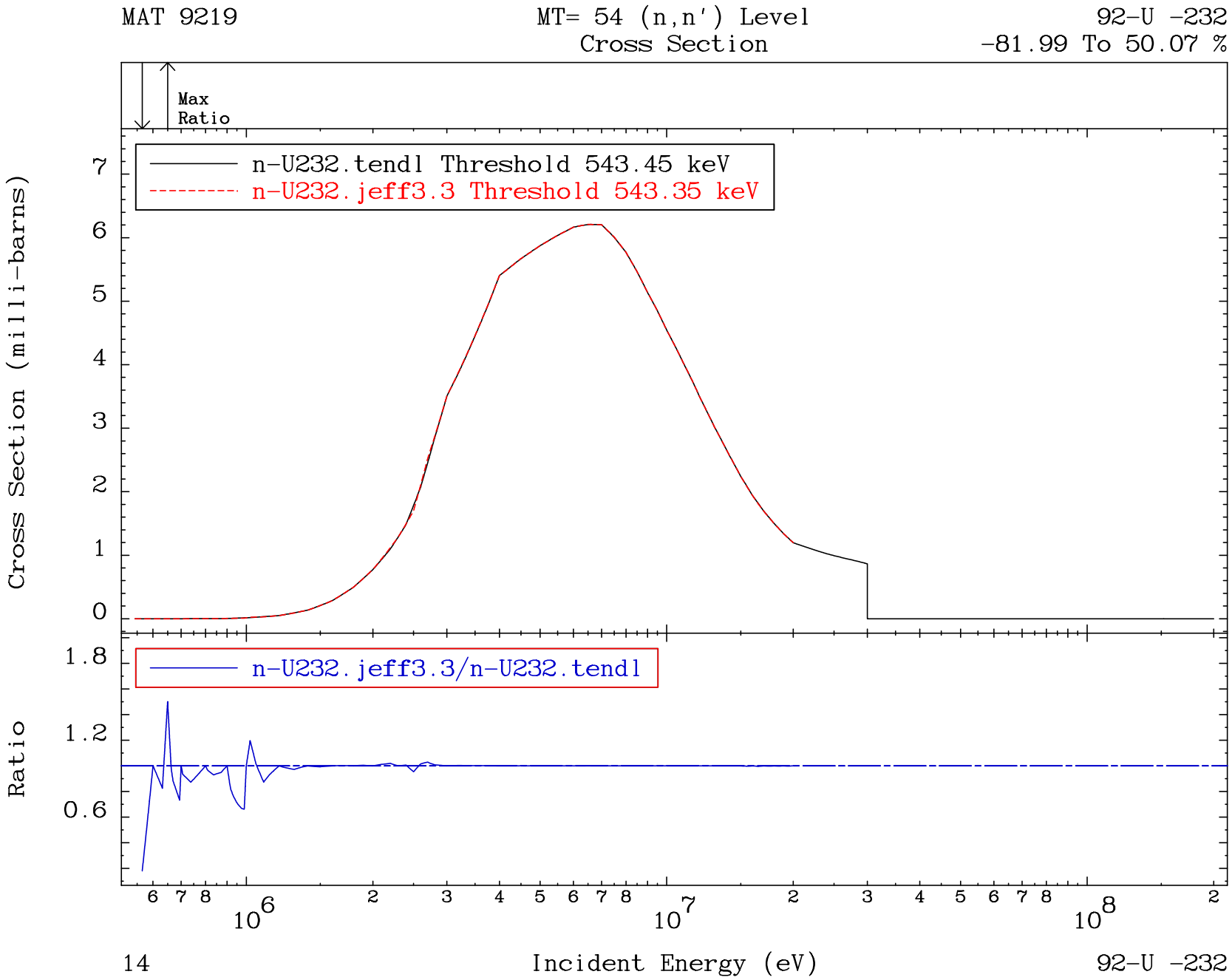

MAT 9219
(n,2nf) Third Chance
Cross Section
92-U -232
-99.99 To -60.17%
Min
Ratio
Max
Ratio
n-U232.tendl Threshold 9.0000 MeV
n-U232.jeff3.3 Threshold 11.500 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^0
10^-2
10^-4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
92-U -232

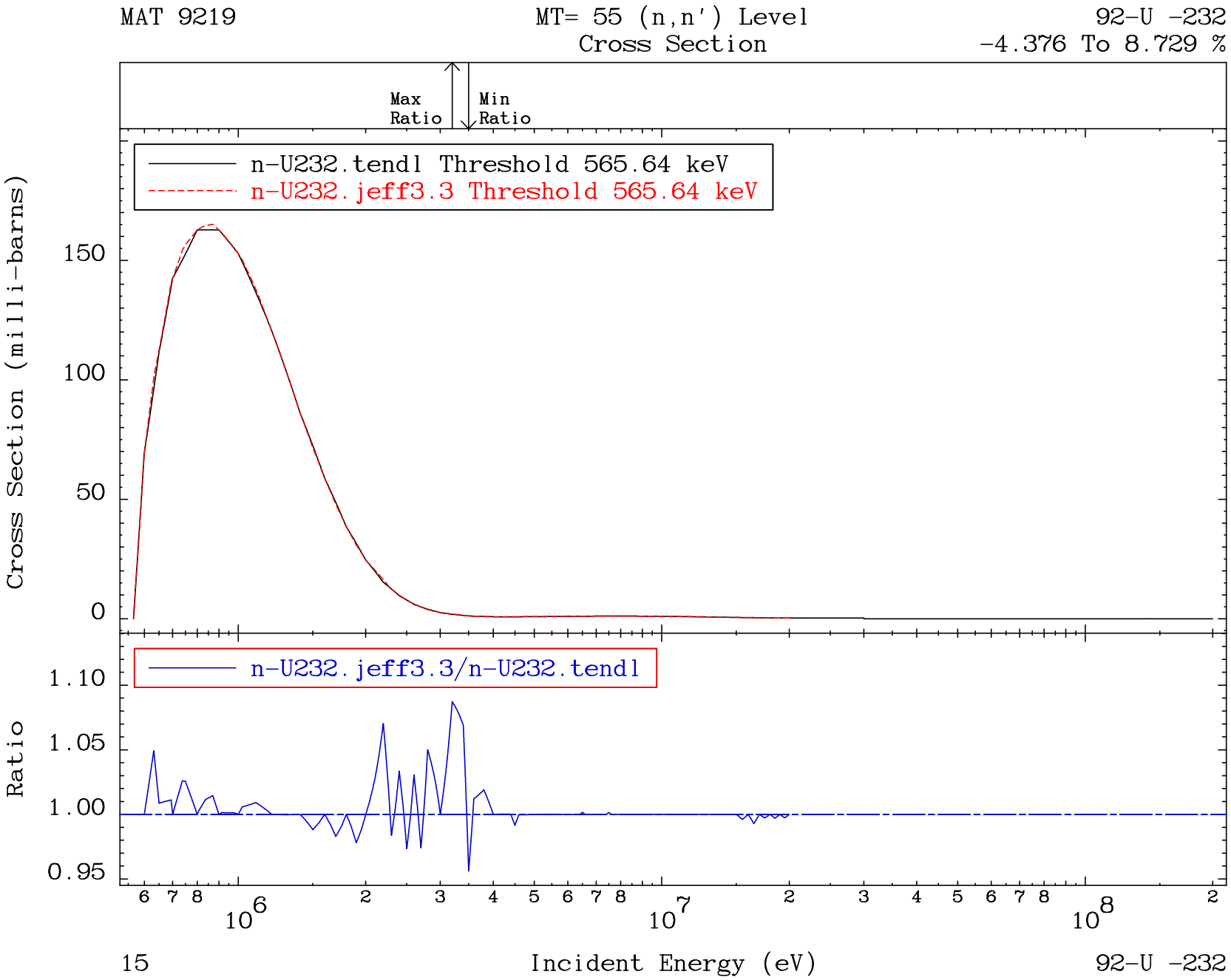

MAT 9219
(n,3nf) Fourth Chance
Cross Section
92-U -232
-99.97 To -71.78%
Min
Ratio
Max
Ratio
n-U232.tendl Threshold 14.000 MeV
n-U232.jeff3.3 Threshold 15.500 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^0
10^-1
10^-2
10^-3
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
92-U -232

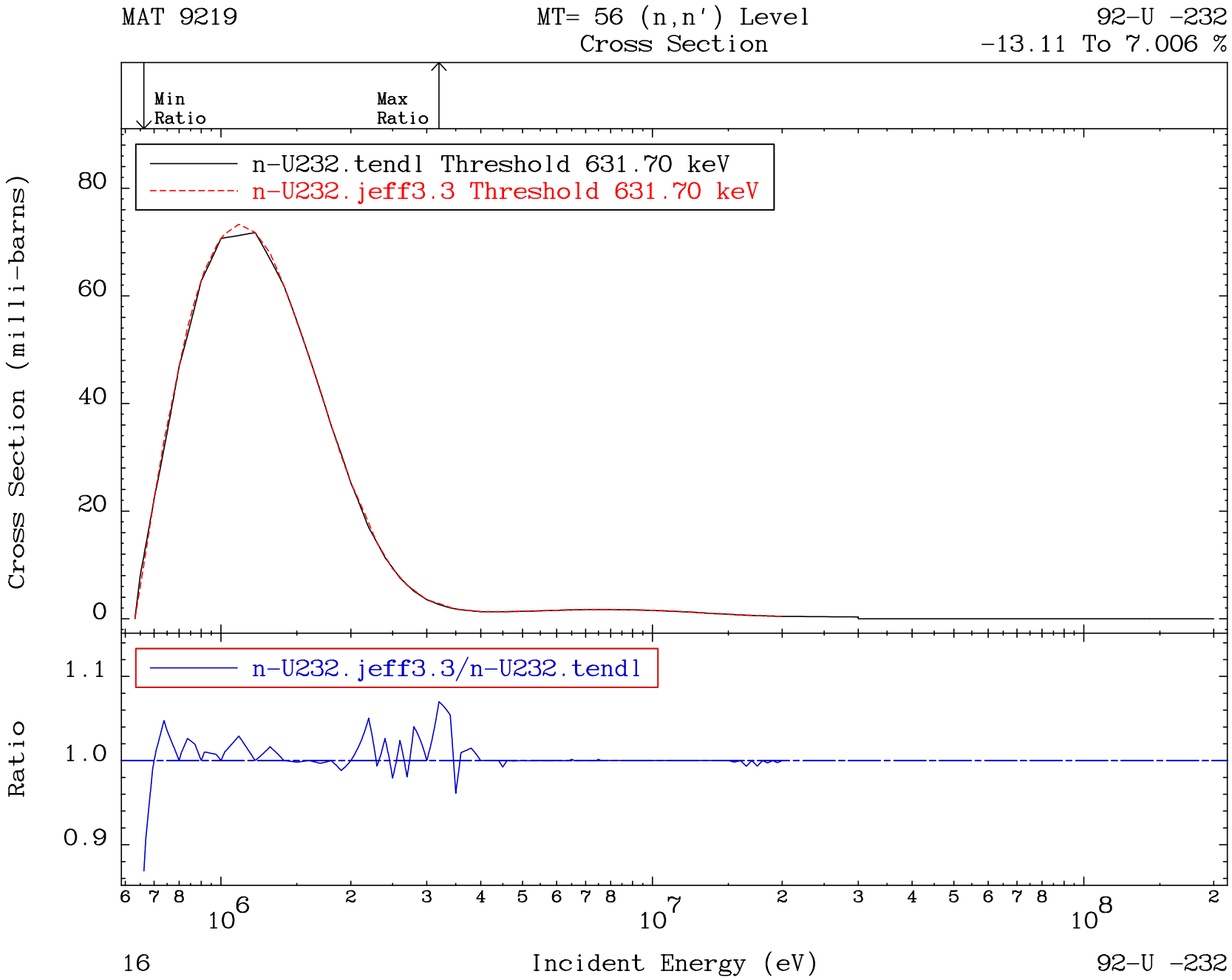

MAT 9219
MT= 51 (n,n') Level
Cross Section
92-U -232
-0.566 To 0.475 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 47.780 keV
n-U232.jeff3.3 Threshold 47.780 keV
Cross Section (milli-barns)
800
600
400
200
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.01
1.00
0.99
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
92-U -232

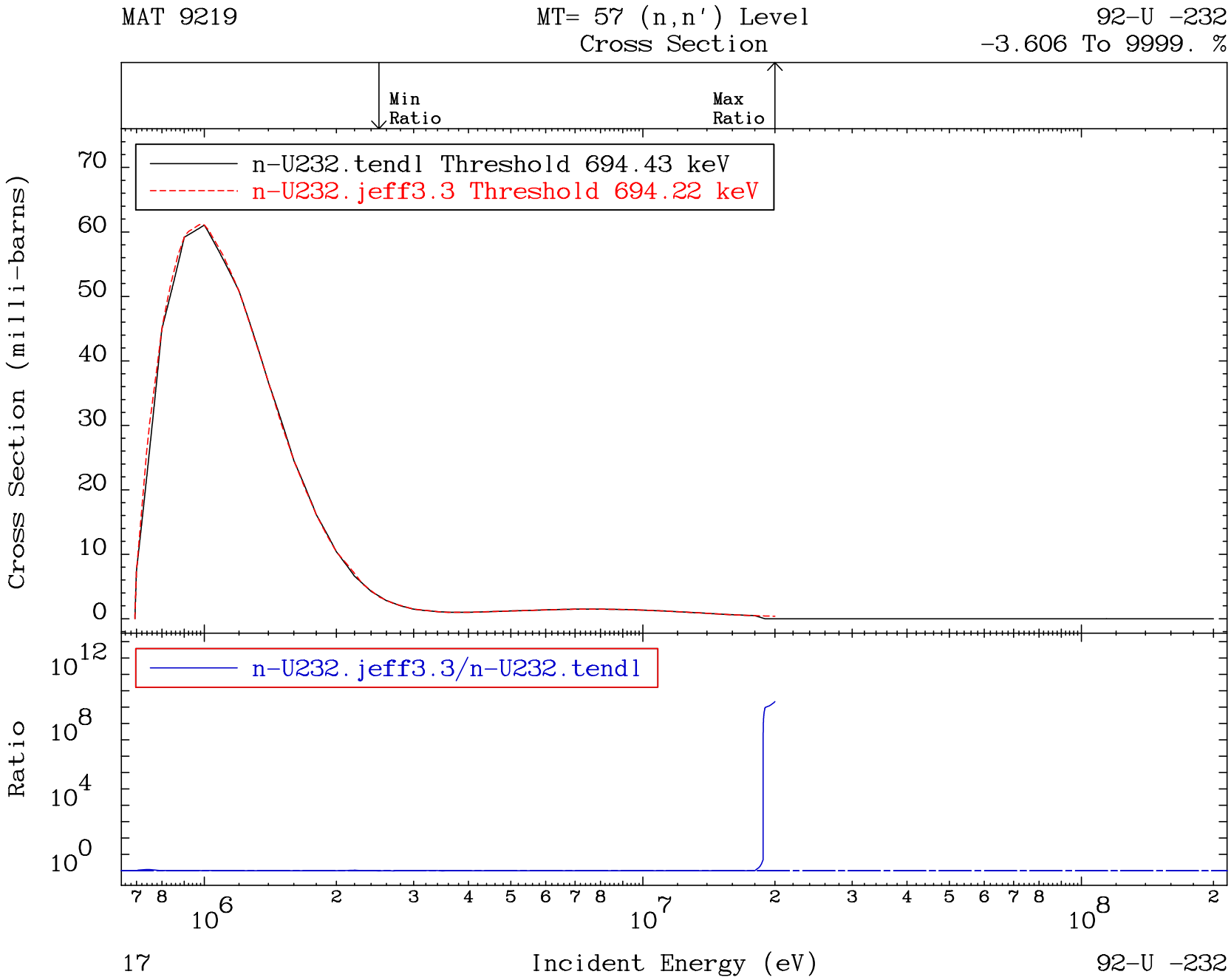

MAT 9219
MT= 52 (n,n') Level
Cross Section
92-U -232
-0.328 To 4.464 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 157.25 keV
n-U232.jeff3.3 Threshold 157.25 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
92-U -232

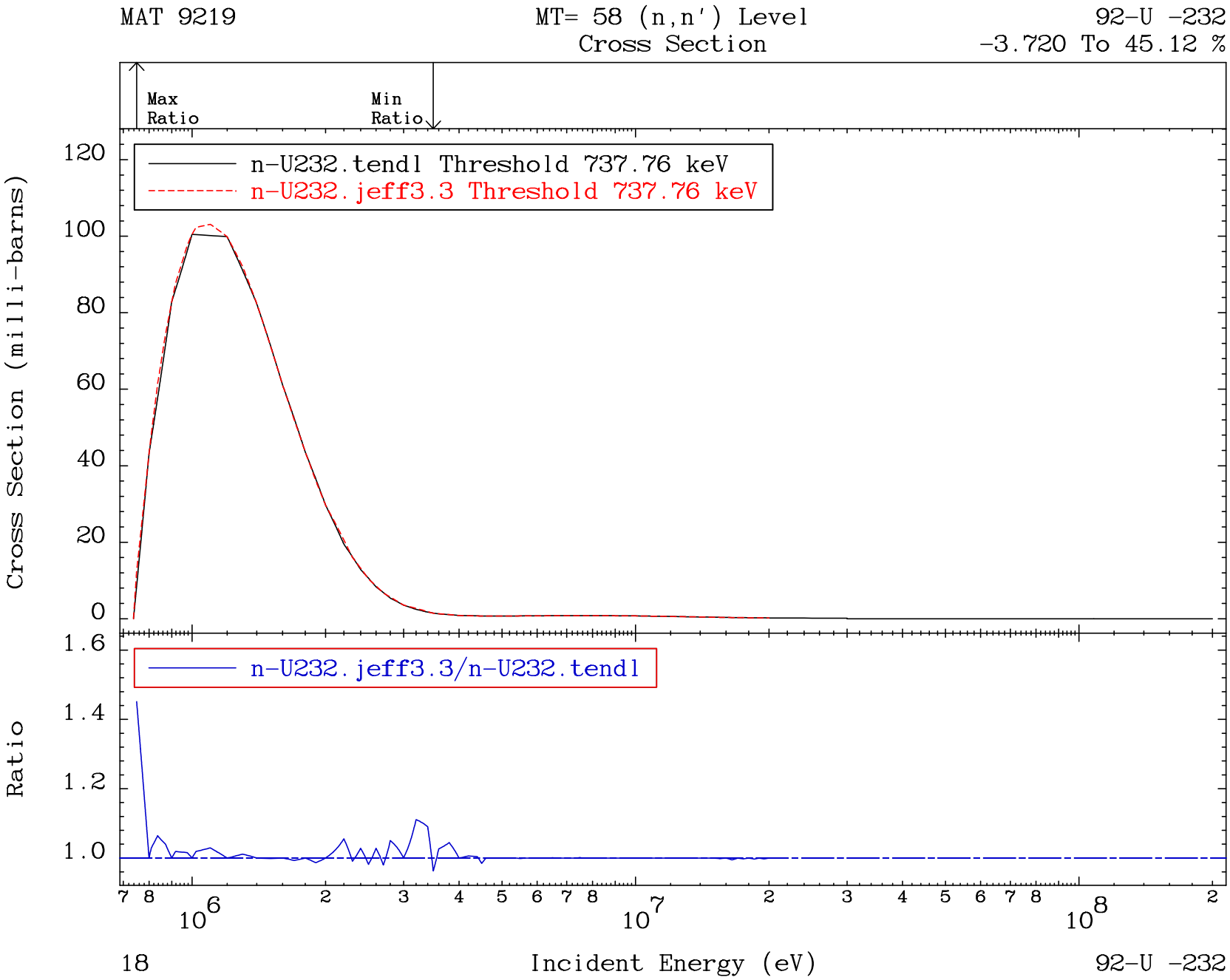

MAT 9219
MT= 53 (n,n') Level
Cross Section
92-U -232
-2.843 To 68.75 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 324.09 keV
n-U232.jeff3.3 Threshold 324.00 keV
Cross Section (milli-barns)
0
5
10
15
20
25
n-U232.jeff3.3/n-U232.tendl
Ratio
1.2
1.6
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
92-U -232

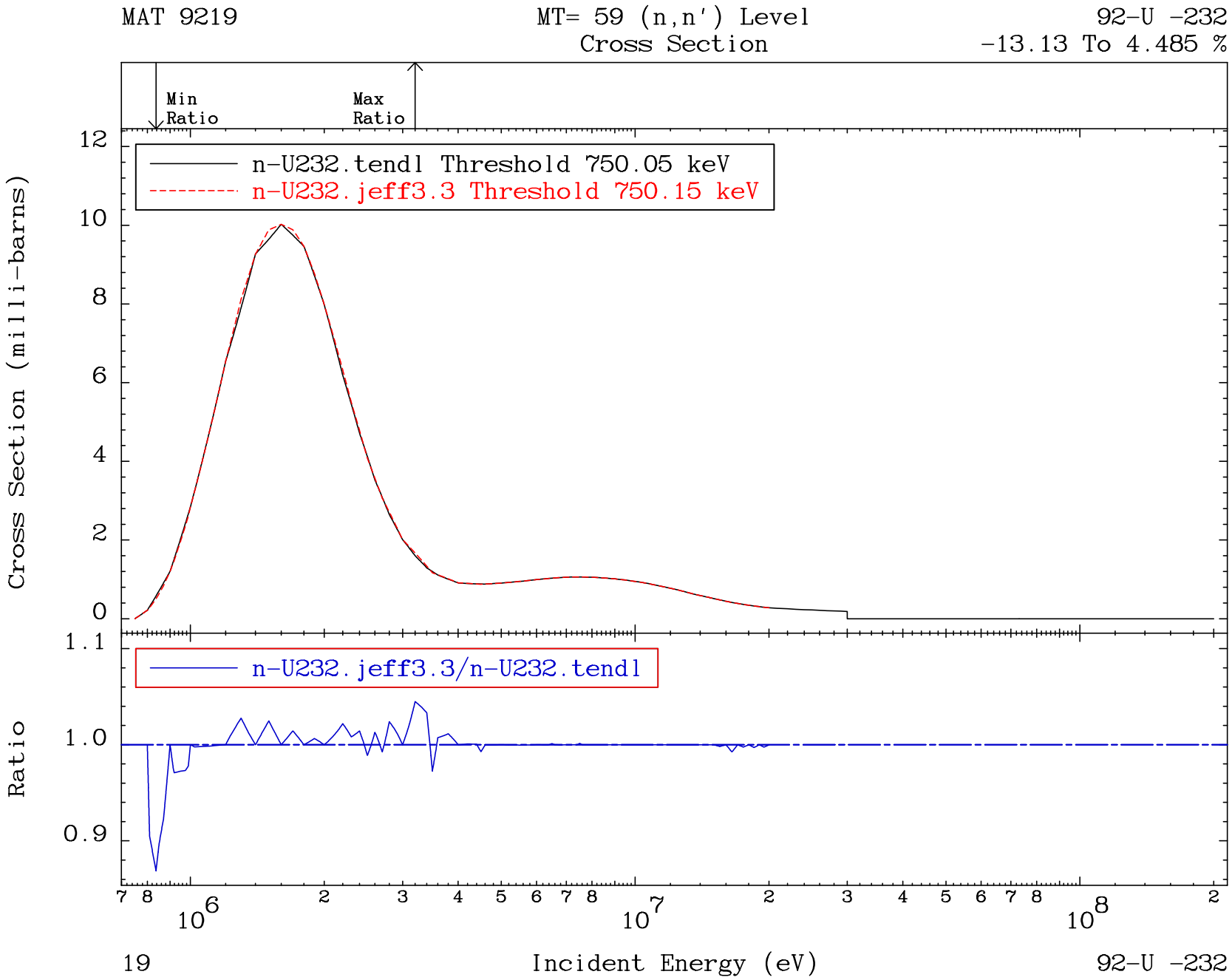

MAT 9219
MT= 54 (n,n') Level
Cross Section
92-U -232
-81.99 To 50.07 %
Max
Ratio
n-U232.tendl Threshold 543.45 keV
n-U232.jeff3.3 Threshold 543.35 keV
Cross Section (milli-barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
14
92-U -232

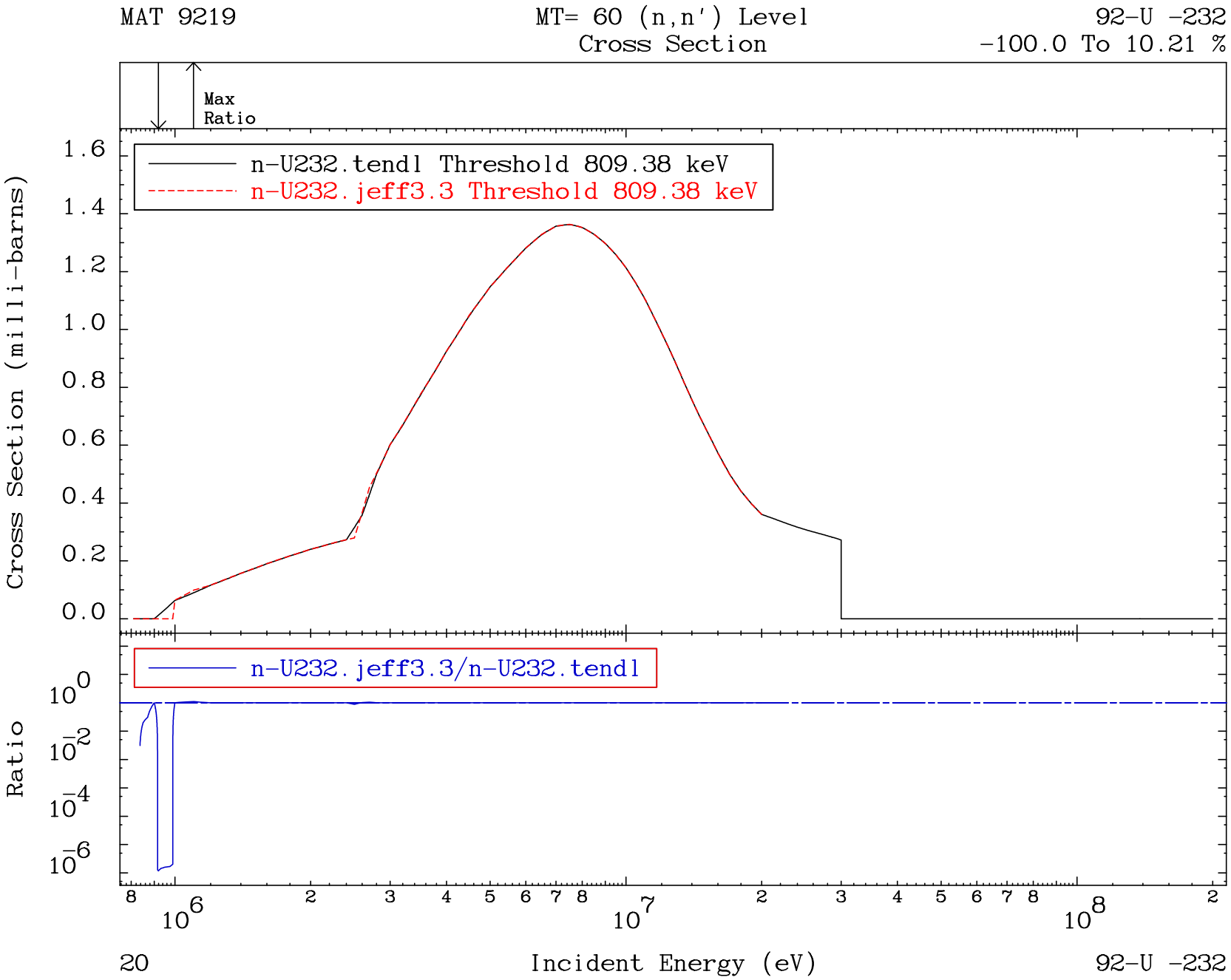

MAT 9219
MT= 55 (n,n') Level
Cross Section
92-U -232
-4.376 To 8.729 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 565.64 keV
n-U232.jeff3.3 Threshold 565.64 keV
Cross Section (milli-barns)
150
100
50
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.10
1.05
1.00
0.95
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
92-U -232

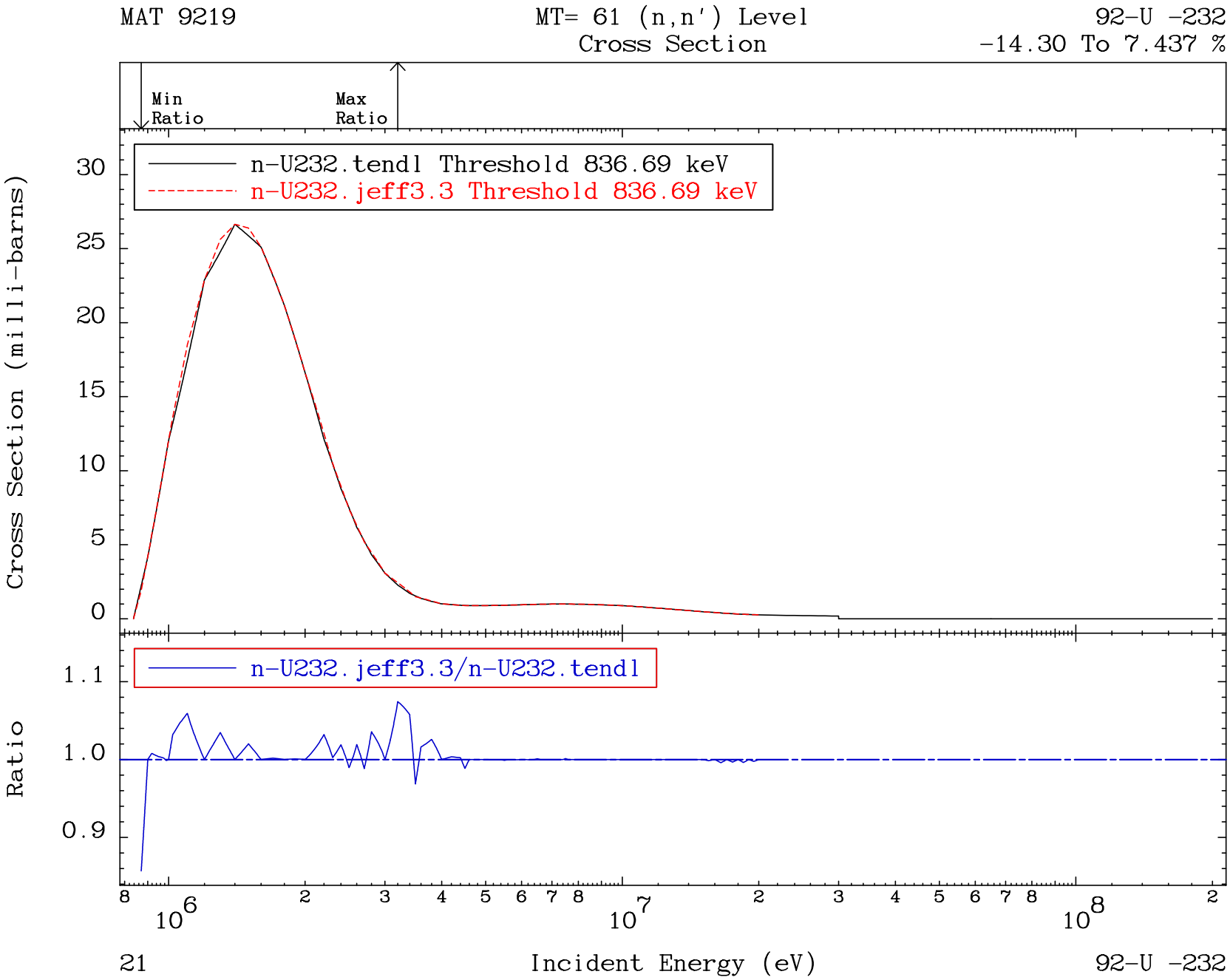

MAT 9219
MT= 56 (n,n') Level
Cross Section
92-U -232
-13.11 To 7.006 %
Min Ratio
Max Ratio
n-U232.tendl Threshold 631.70 keV
n-U232.jeff3.3 Threshold 631.70 keV
Cross Section (milli-barns)
80
60
40
20
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.1
1.0
0.9
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
92-U -232

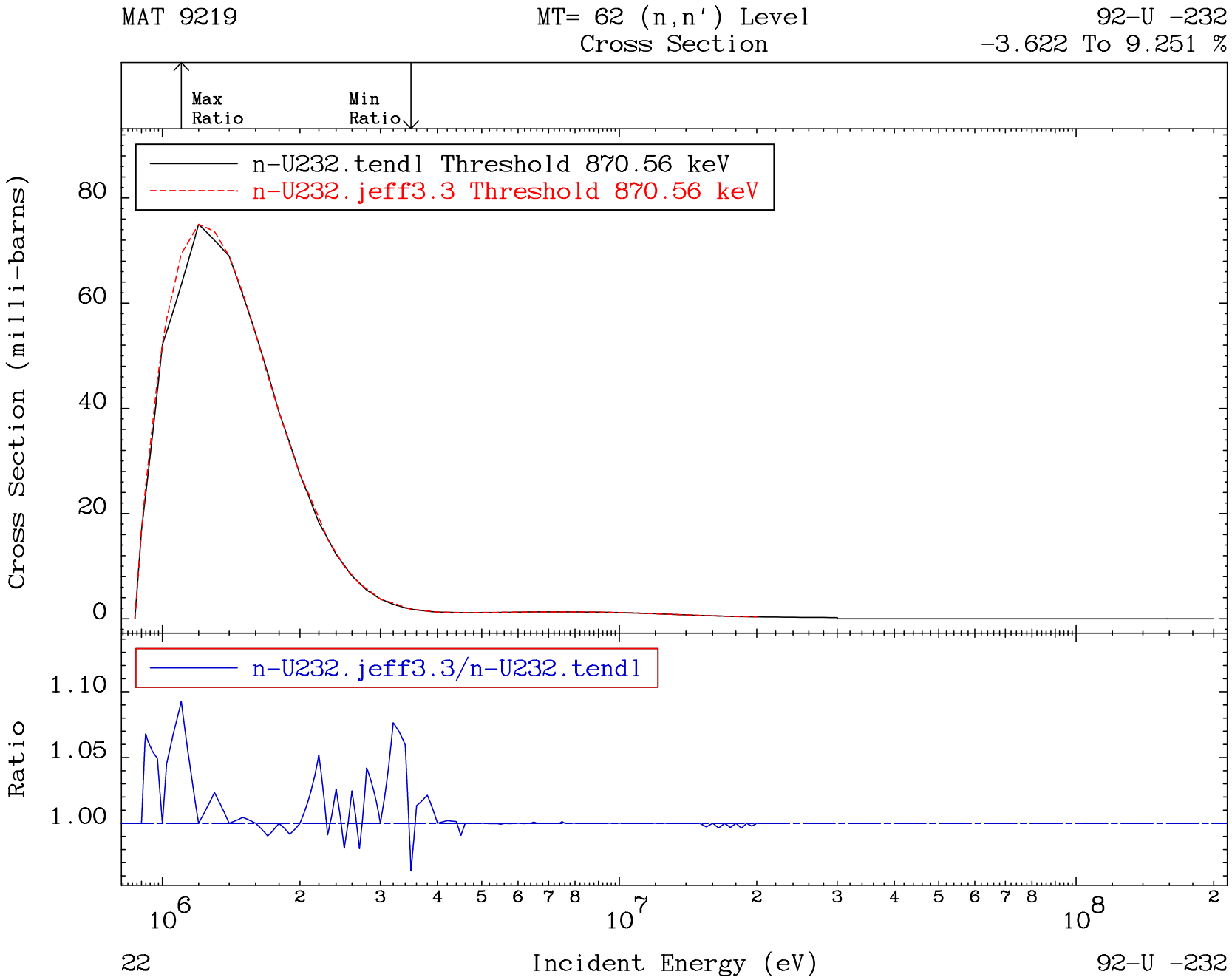

MAT 9219
MT= 57 (n,n') Level
Cross Section
92-U -232
-3.606 To 9999. %
Min
Ratio
Max
Ratio
n-U232.tendl Threshold 694.43 keV
n-U232.jeff3.3 Threshold 694.22 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^12
10^8
10^4
10^0
7 8
10^6
2
3
4
5
6
7 8
10^7
2
3
4
5
6
7 8
10^8
2
17
Incident Energy (eV)
92-U -232

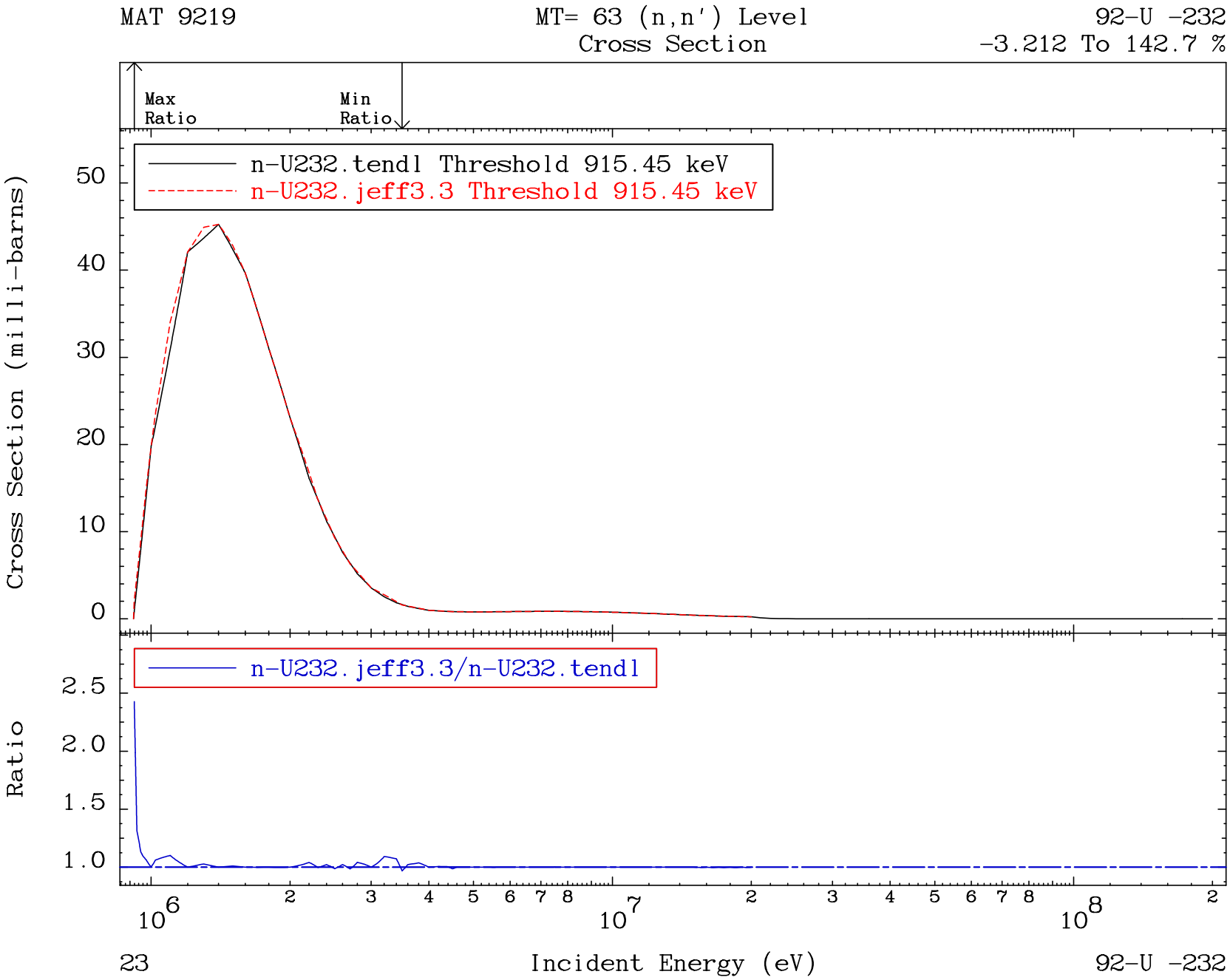

MAT 9219
MT= 58 (n,n') Level
Cross Section
92-U -232
-3.720 To 45.12 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 737.76 keV
n-U232.jeff3.3 Threshold 737.76 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.6
1.4
1.2
1.0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
92-U -232

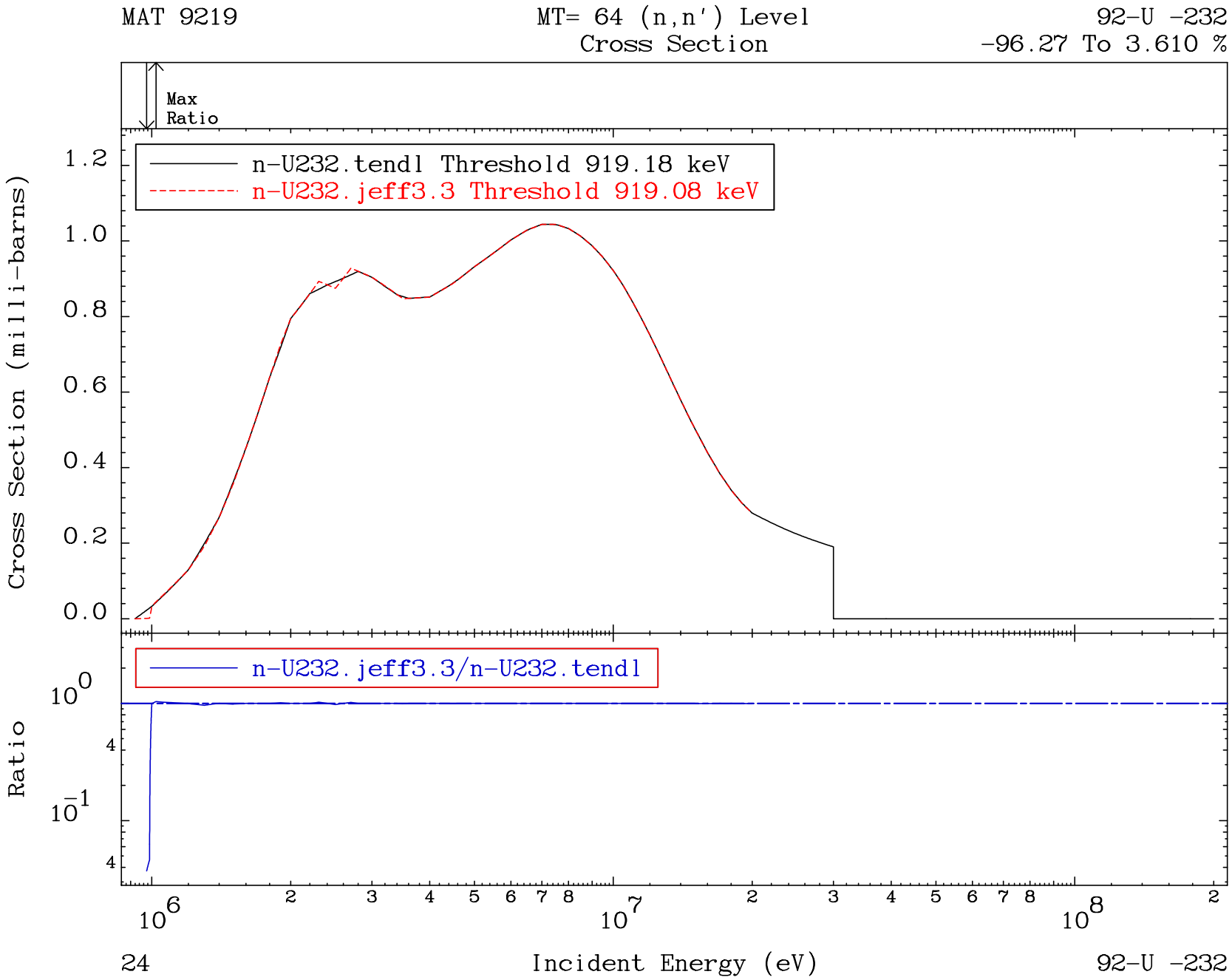

MAT 9219
MT= 59 (n,n') Level
Cross Section
92-U -232
-13.13 To 4.485 %
Min Ratio
Max Ratio
n-U232.tendl Threshold 750.05 keV
n-U232.jeff3.3 Threshold 750.15 keV
Cross Section (milli-barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
19
92-U -232

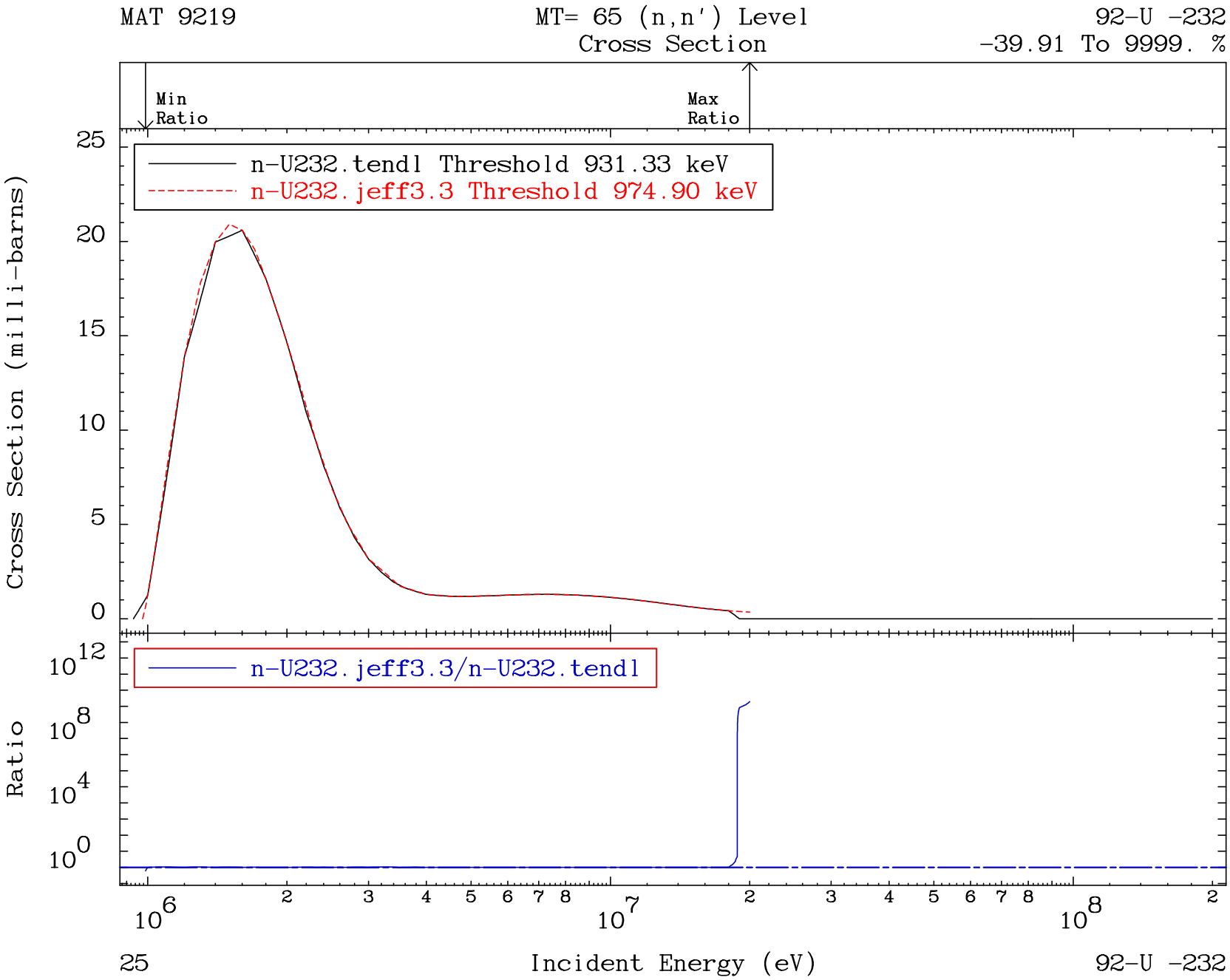

MAT 9219
MT= 60 (n,n') Level
Cross Section
92-U -232
-100.0 To 10.21 %
Max
Ratio
n-U232.tendl Threshold 809.38 keV
n-U232.jeff3.3 Threshold 809.38 keV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^0
10^-2
10^-4
10^-6
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
92-U -232

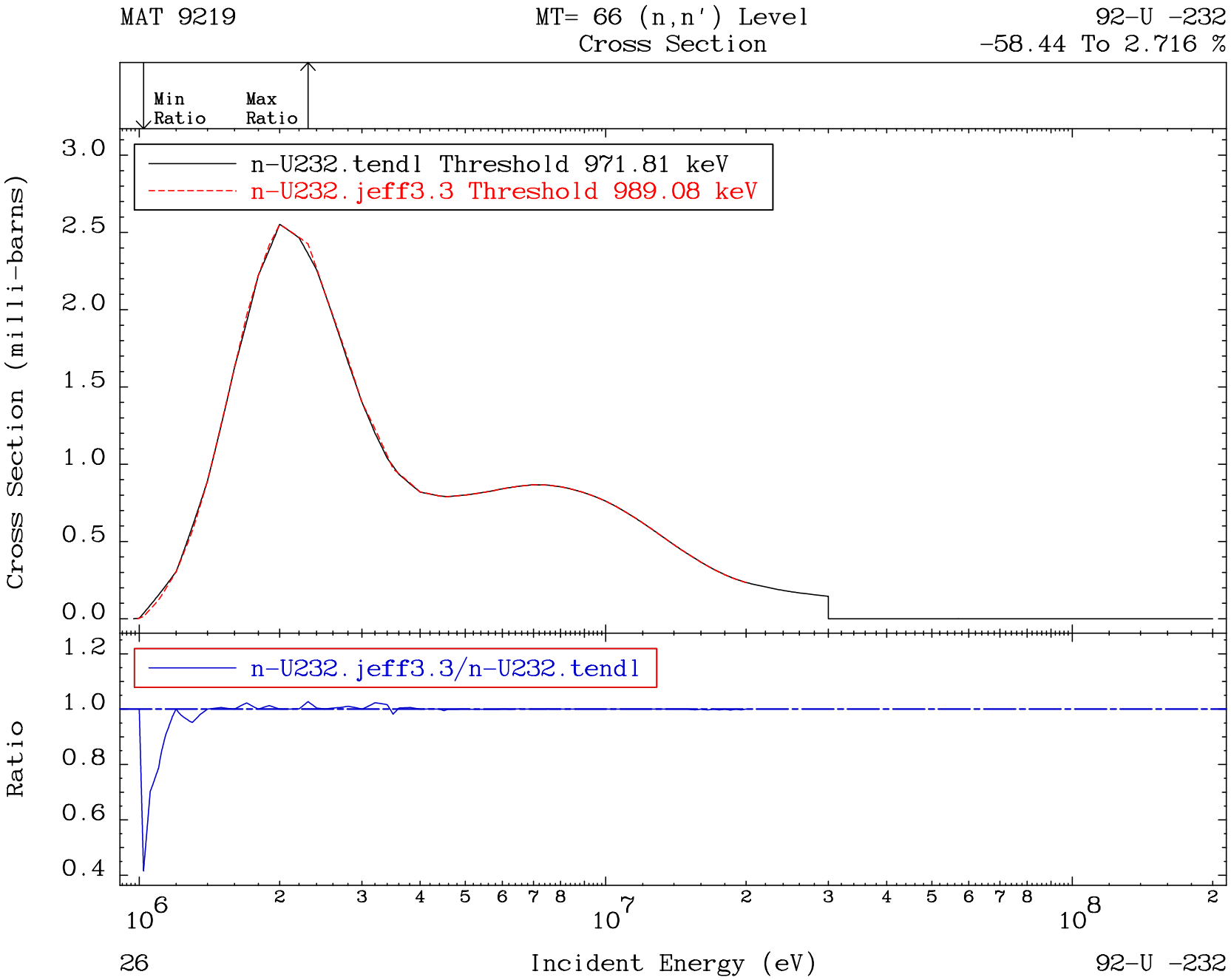

MAT 9219
MT= 61 (n,n') Level
Cross Section
92-U -232
-14.30 To 7.437 %
Min Ratio
Max Ratio
n-U232.tendl Threshold 836.69 keV
n-U232.jeff3.3 Threshold 836.69 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.1
1.0
0.9
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
92-U -232

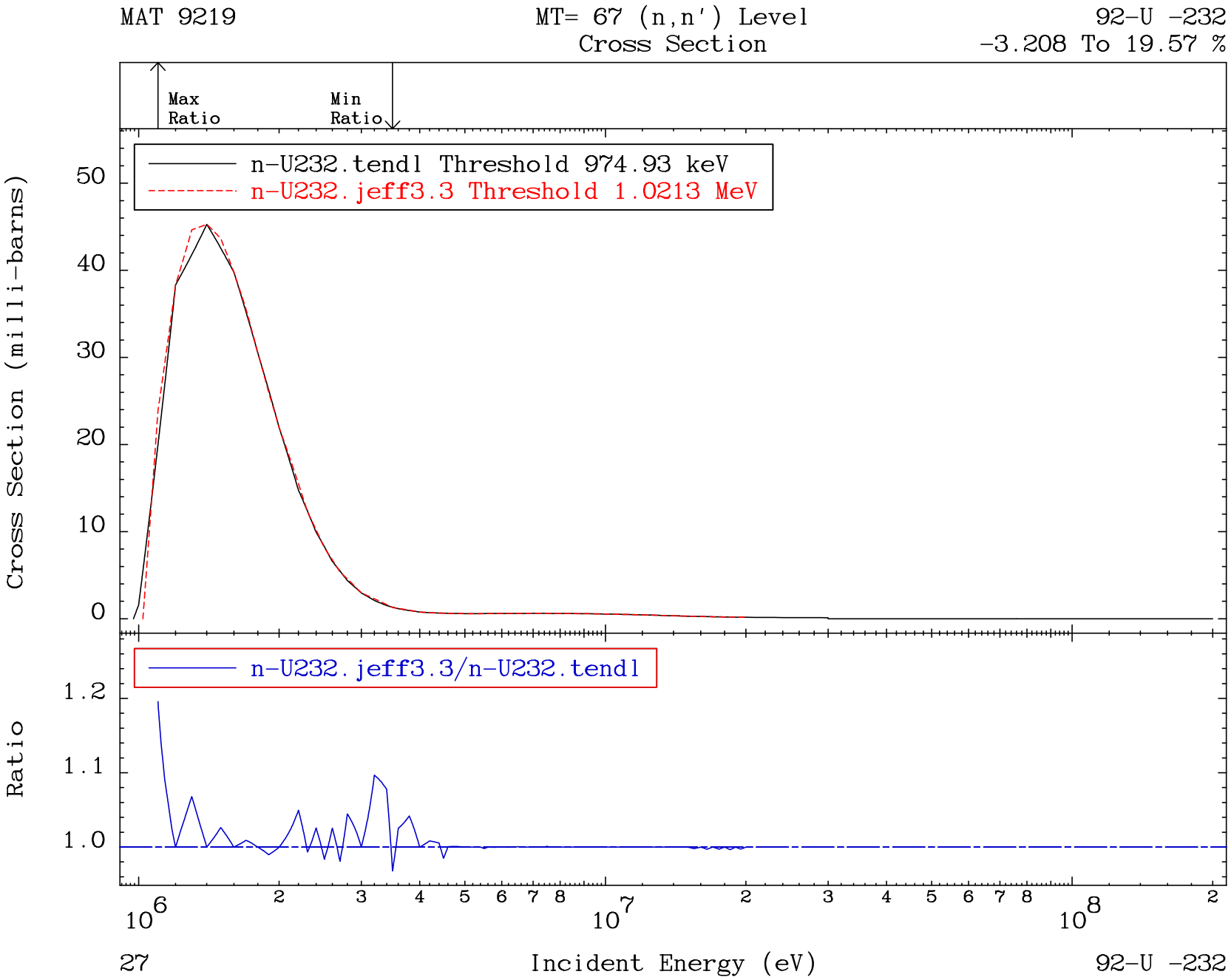

MAT 9219
MT= 62 (n,n') Level
Cross Section
92-U -232
-3.622 To 9.251 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 870.56 keV
n-U232.jeff3.3 Threshold 870.56 keV
Cross Section (milli-barns)
80
60
40
20
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.10
1.05
1.00
10^6
10^7
10^8
22
Incident Energy (eV)
92-U -232

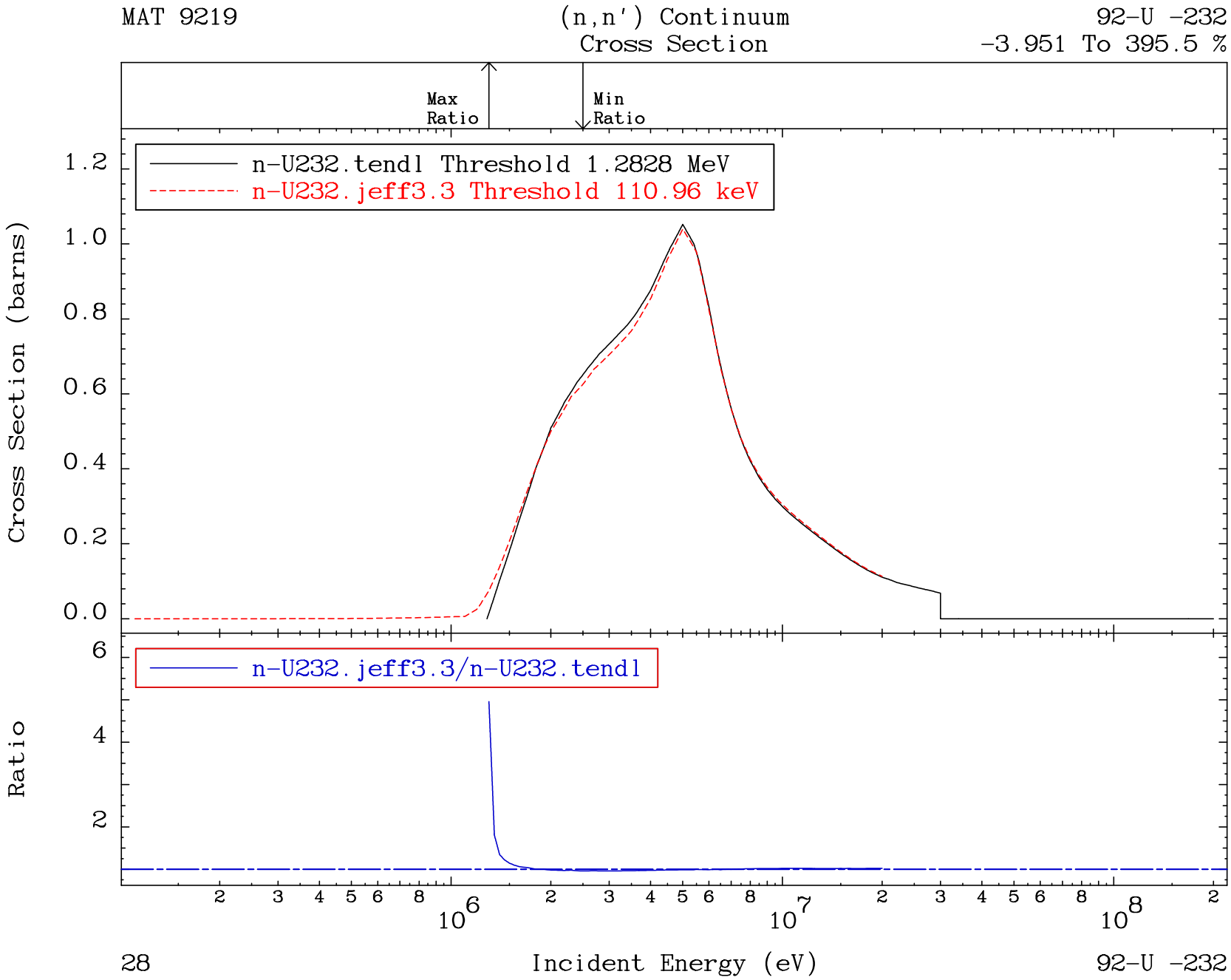

MAT 9219
MT= 63 (n,n') Level
Cross Section
92-U -232
-3.212 To 142.7 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 915.45 keV
n-U232.jeff3.3 Threshold 915.45 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-U232.jeff3.3/n-U232.tendl
Ratio
2.5
2.0
1.5
1.0
10^6
10^7
10^8
23
Incident Energy (eV)
92-U -232

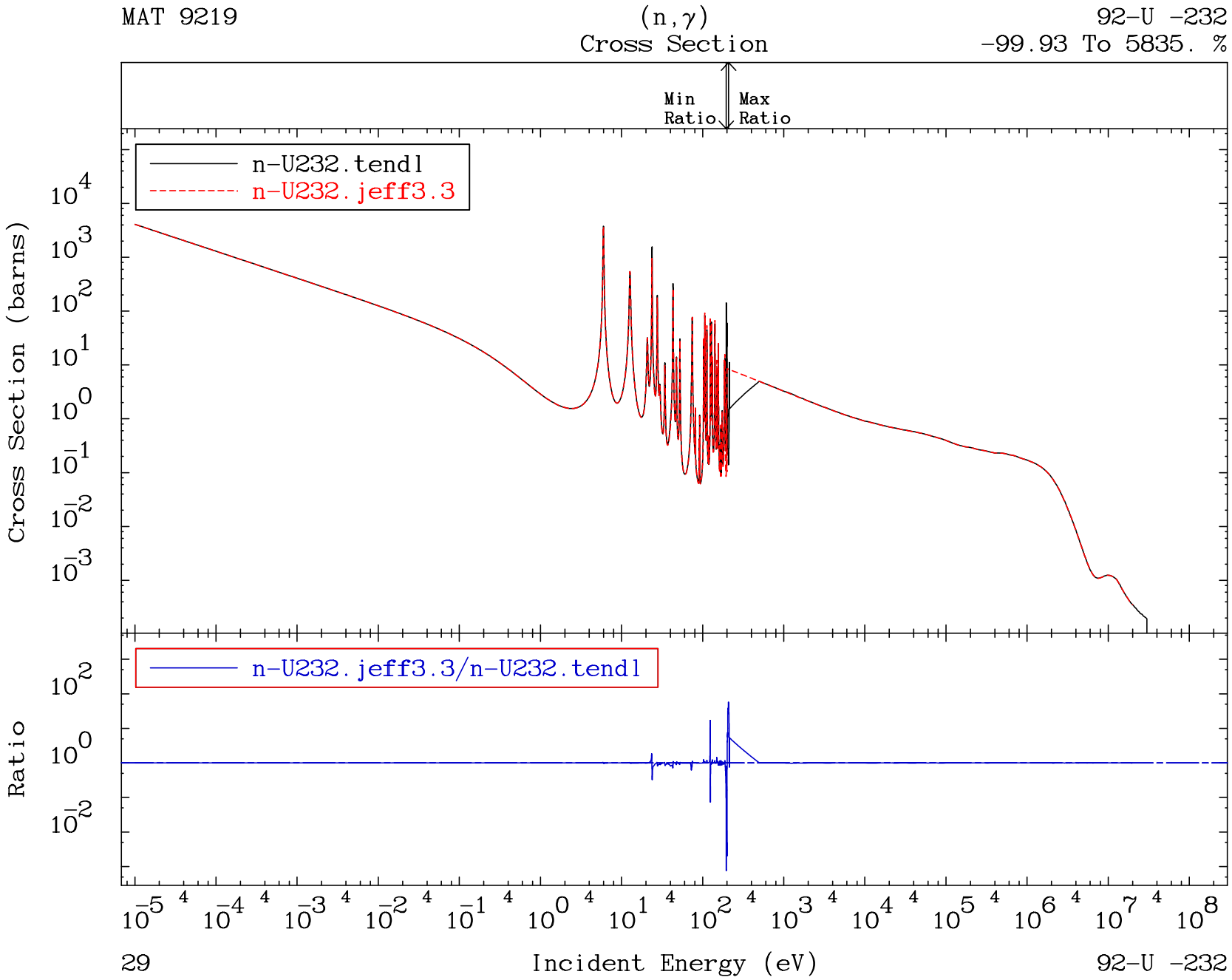

MAT 9219
MT= 64 (n,n') Level
Cross Section
92-U -232
-96.27 To 3.610 %
Max
Ratio
n-U232.tendl Threshold 919.18 keV
n-U232.jeff3.3 Threshold 919.08 keV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^0
10^-1
10^6
10^7
10^8
Incident Energy (eV)
24
92-U -232

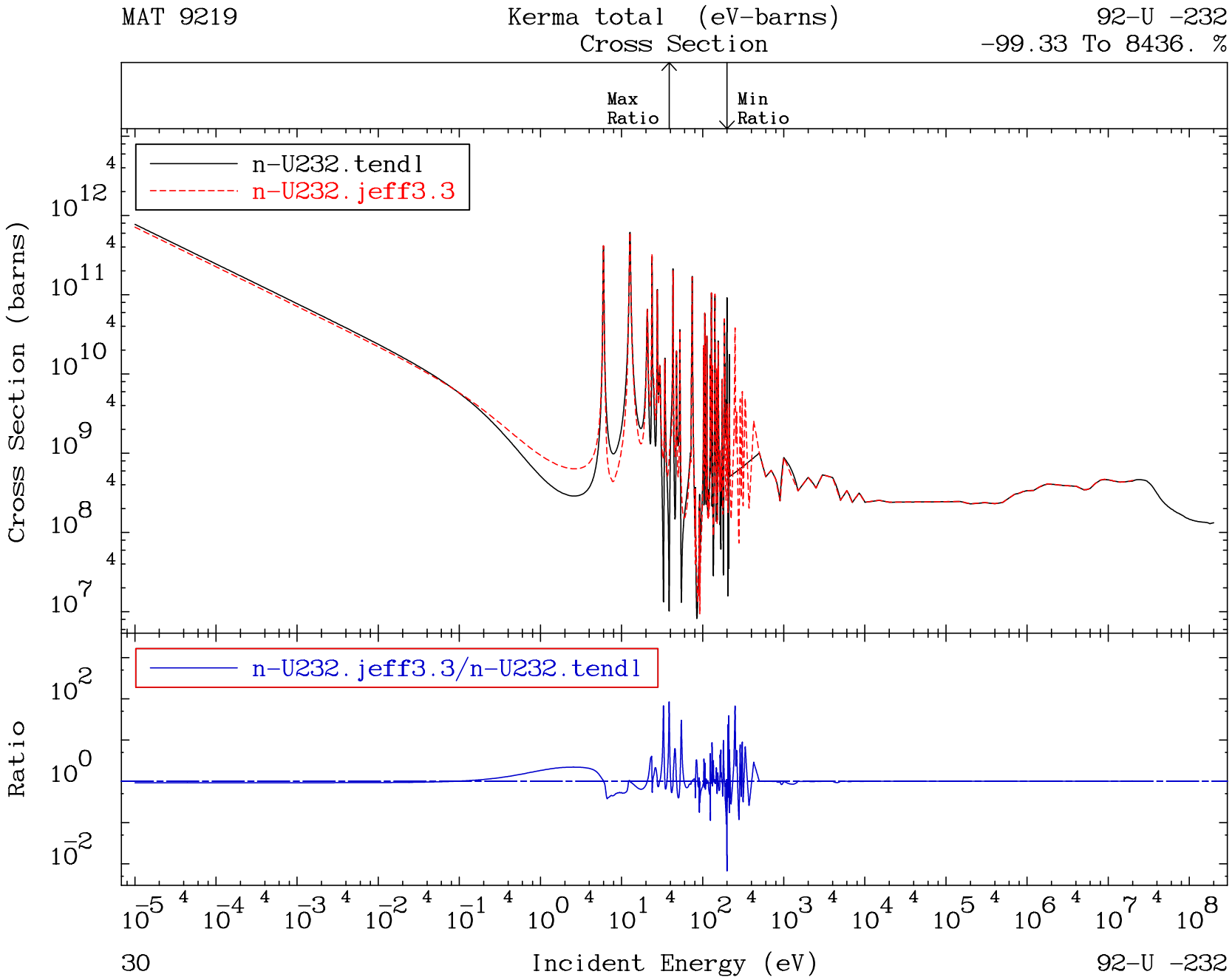

MAT 9219
MT= 65 (n,n') Level
Cross Section
92-U -232
-39.91 To 9999. %
Min
Ratio
Max
Ratio
n-U232.tendl Threshold 931.33 keV
n-U232.jeff3.3 Threshold 974.90 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-U232.jeff3.3/n-U232.tendl
Ratio
10^12
10^8
10^4
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
92-U -232

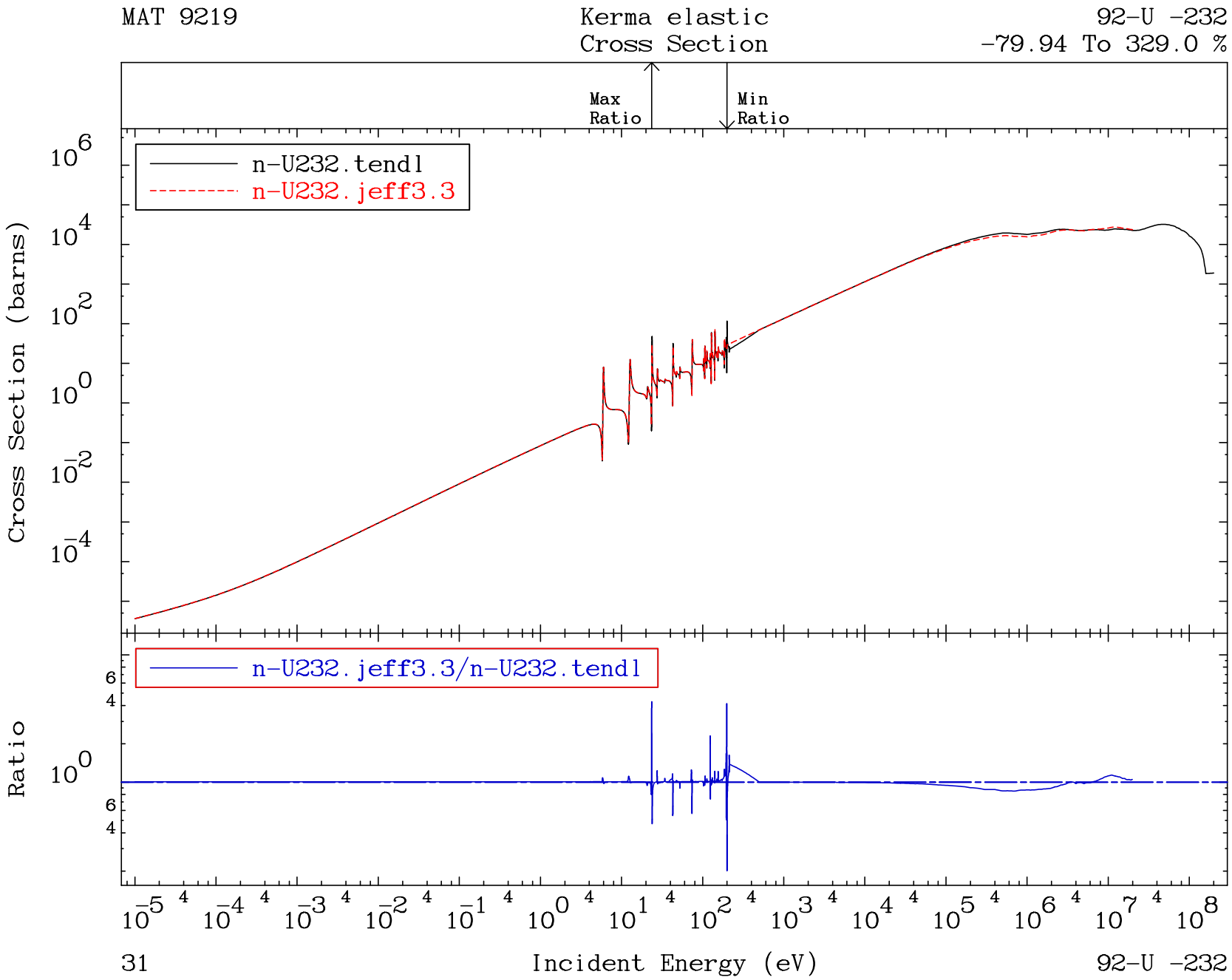

MAT 9219
MT= 66 (n,n') Level
Cross Section
92-U -232
-58.44 To 2.716 %
Min Ratio
Max Ratio
n-U232.tendl Threshold 971.81 keV
n-U232.jeff3.3 Threshold 989.08 keV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.2
1.0
0.8
0.6
0.4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
92-U -232

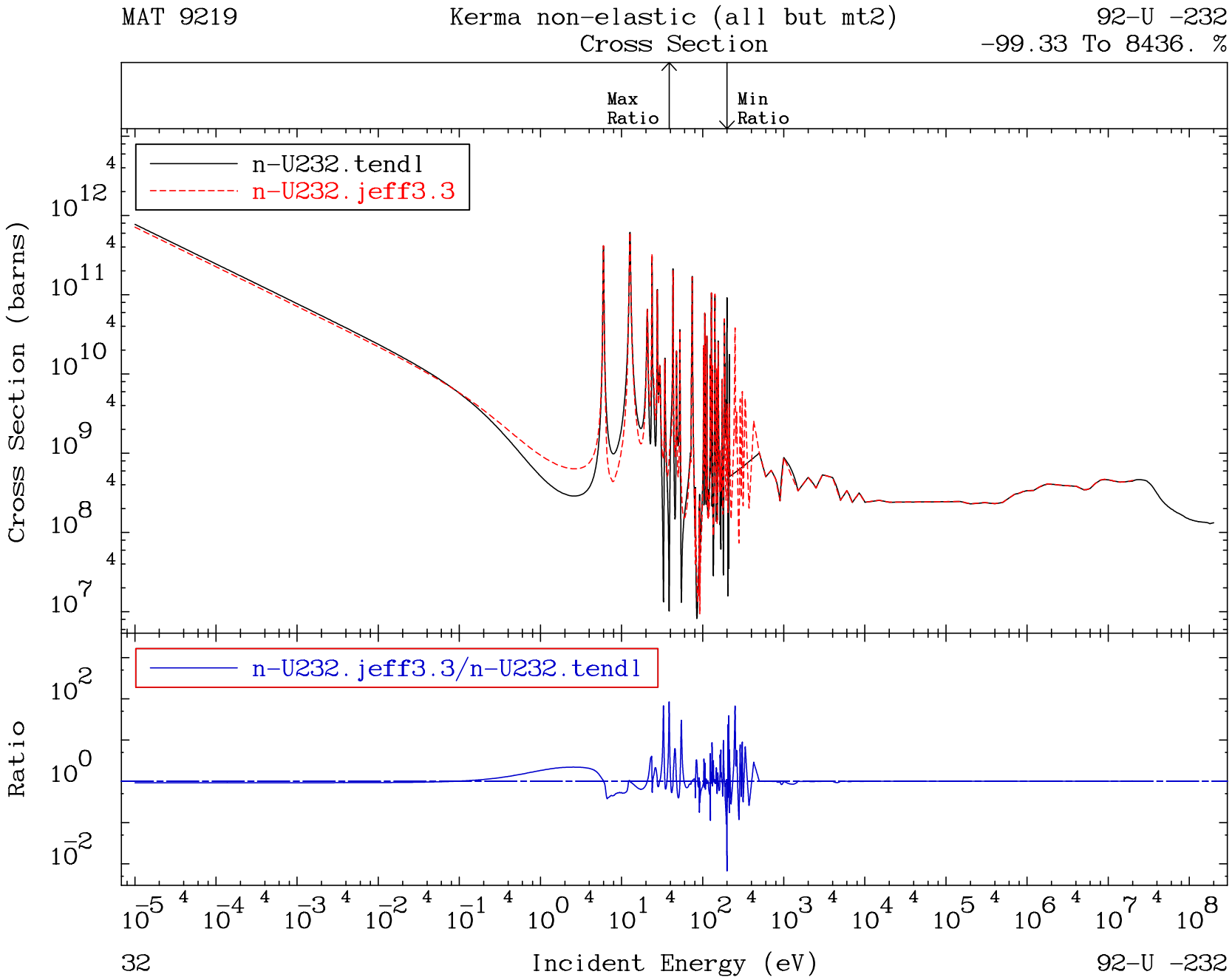

MAT 9219
MT= 67 (n,n') Level
Cross Section
92-U -232
-3.208 To 19.57 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 974.93 keV
n-U232.jeff3.3 Threshold 1.0213 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-U232.jeff3.3/n-U232.tendl
Ratio
1.2
1.1
1.0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
92-U -232

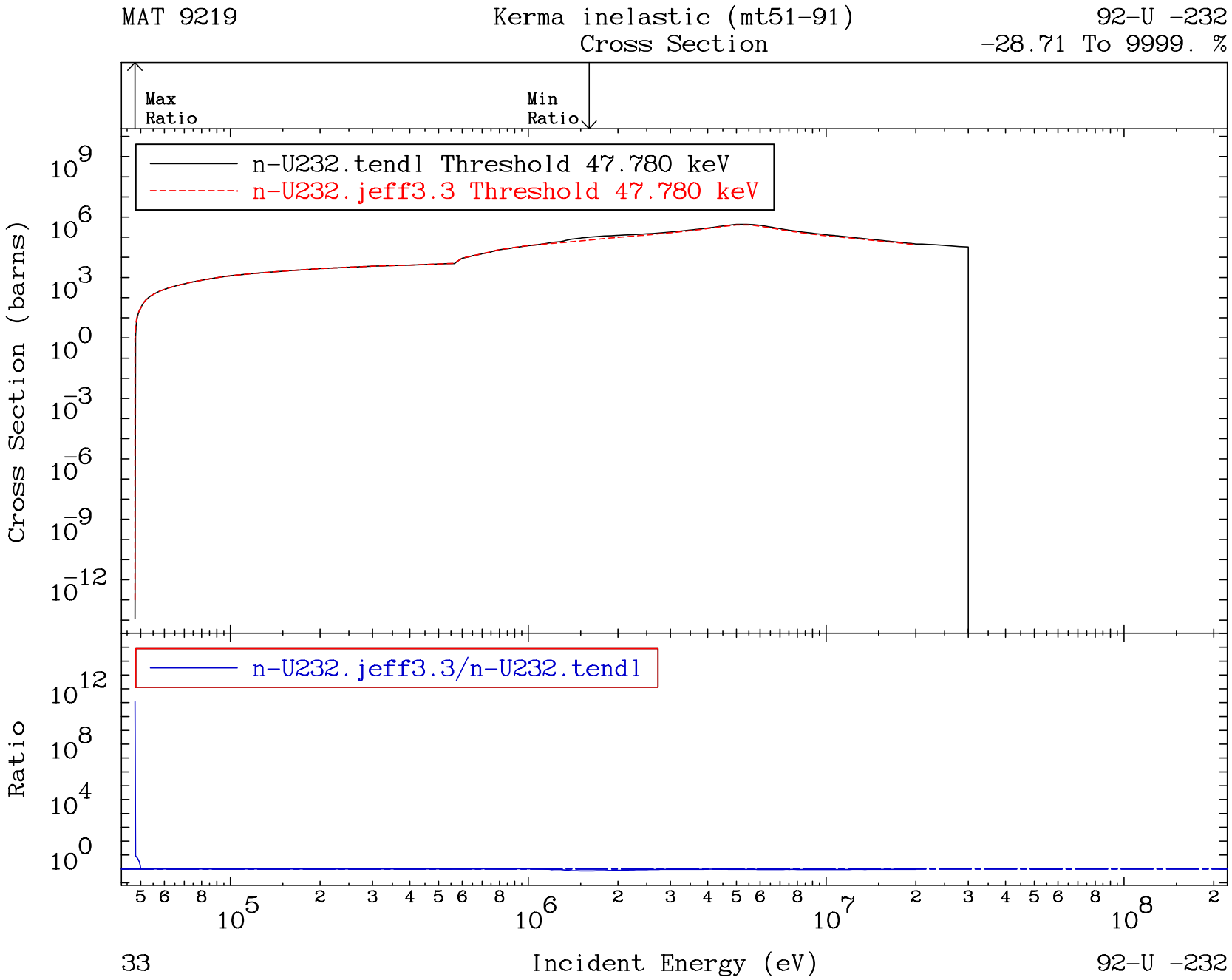

MAT 9219
(n,n') Continuum
Cross Section
92-U -232
-3.951 To 395.5 %
Max Ratio
Min Ratio
n-U232.tendl Threshold 1.2828 MeV
n-U232.jeff3.3 Threshold 110.96 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-U232.jeff3.3/n-U232.tendl
Ratio
6
4
2
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
28
Incident Energy (eV)
92-U -232

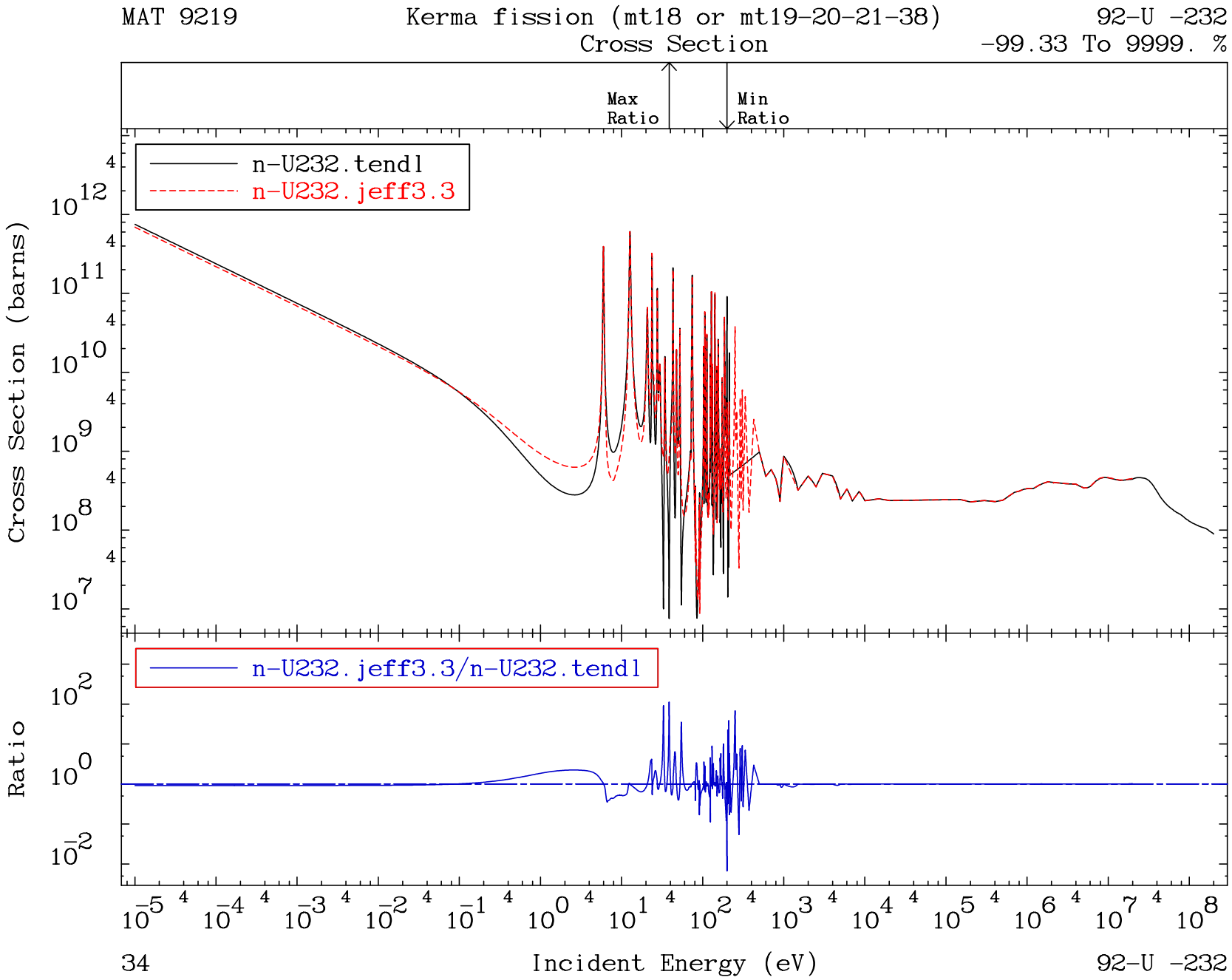

MAT 9219
(n,γ)
Cross Section
92-U -232
-99.93 To 5835. %
Min Ratio
Max Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
29
92-U -232

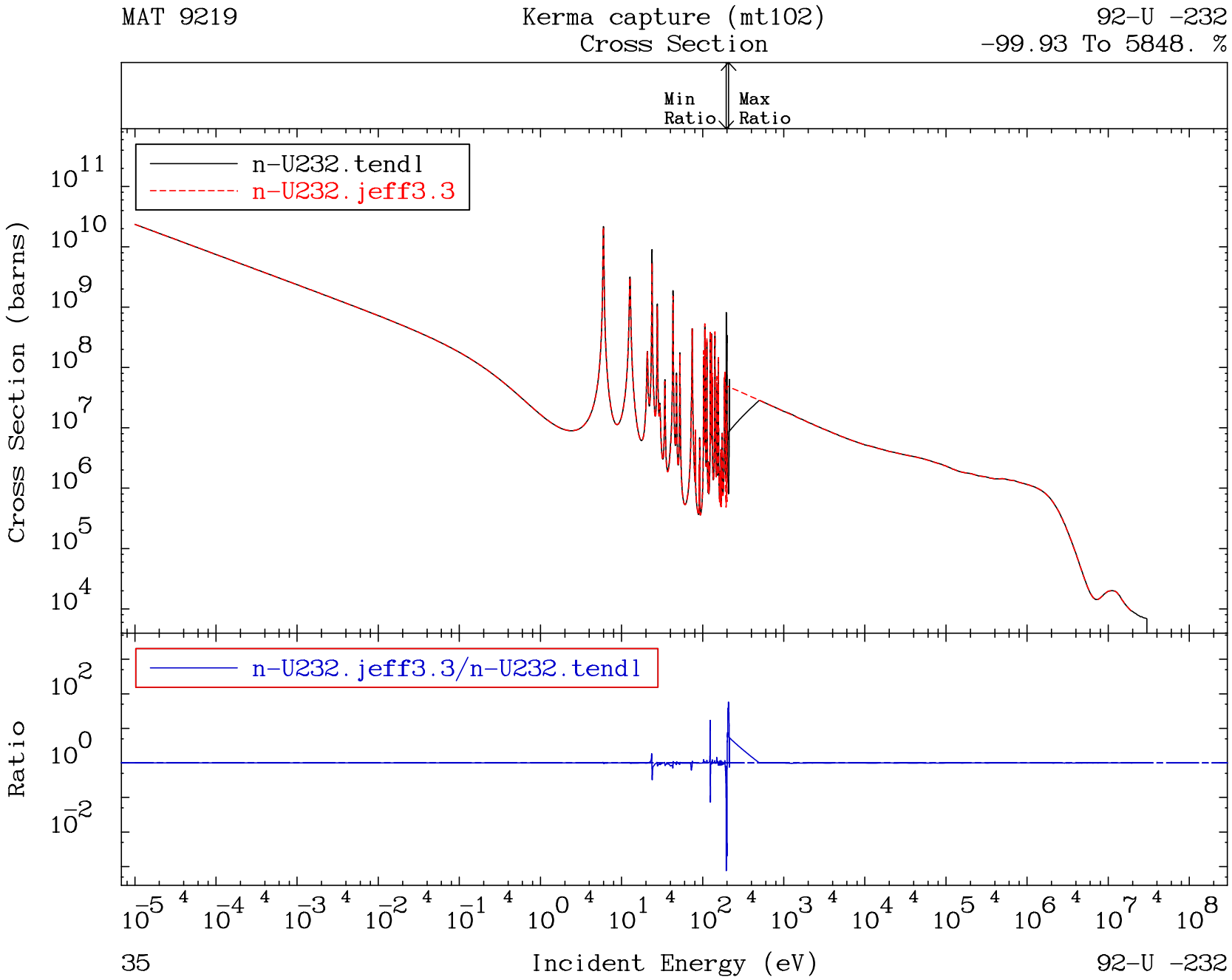

MAT 9219
Kerma total (eV-barns)
Cross Section
92-U -232
-99.33 To 8436. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
30
92-U -232

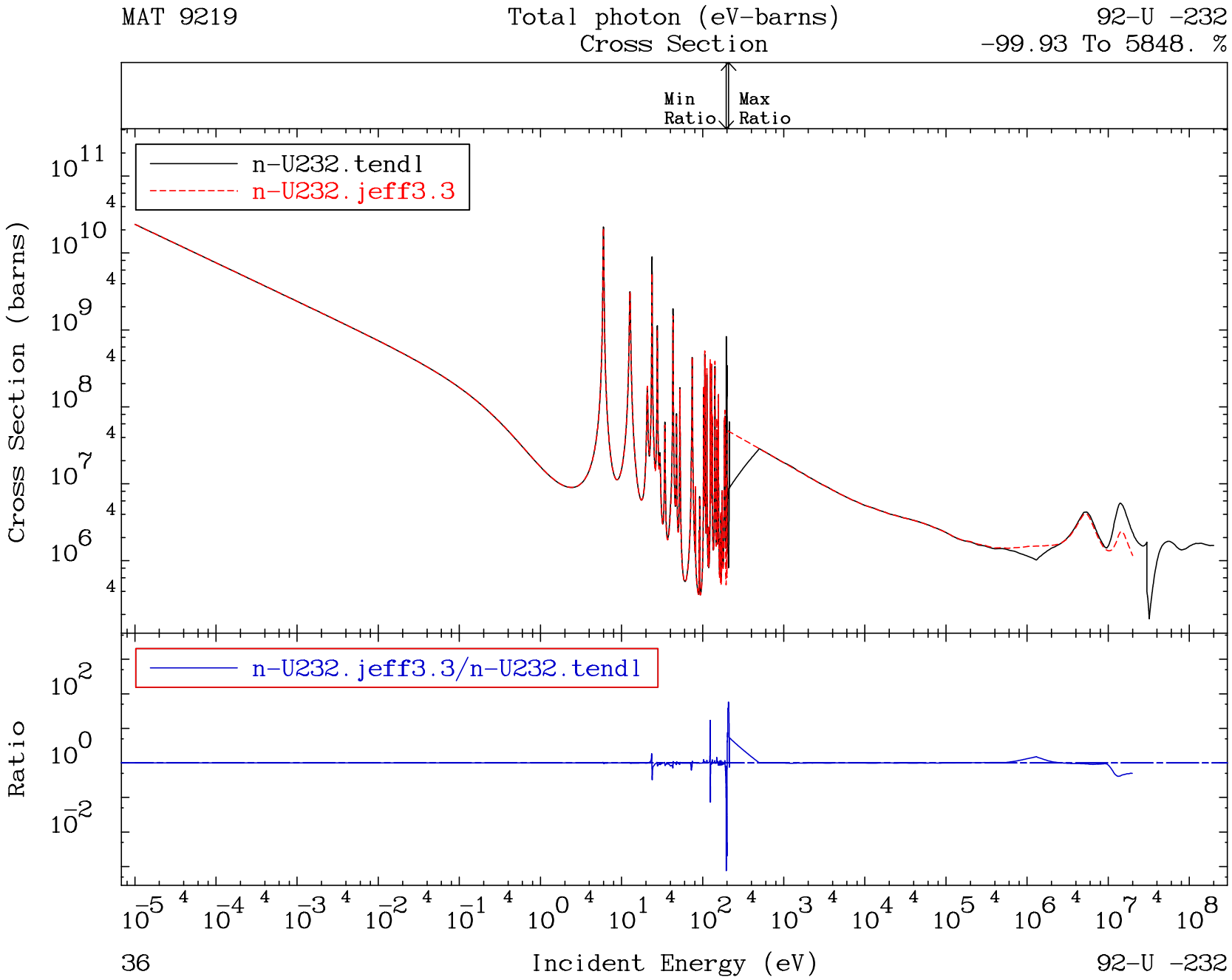

MAT 9219
Kerma elastic
Cross Section
92-U -232
-79.94 To 329.0 %
Max
Ratio
Min
Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
31
92-U -232

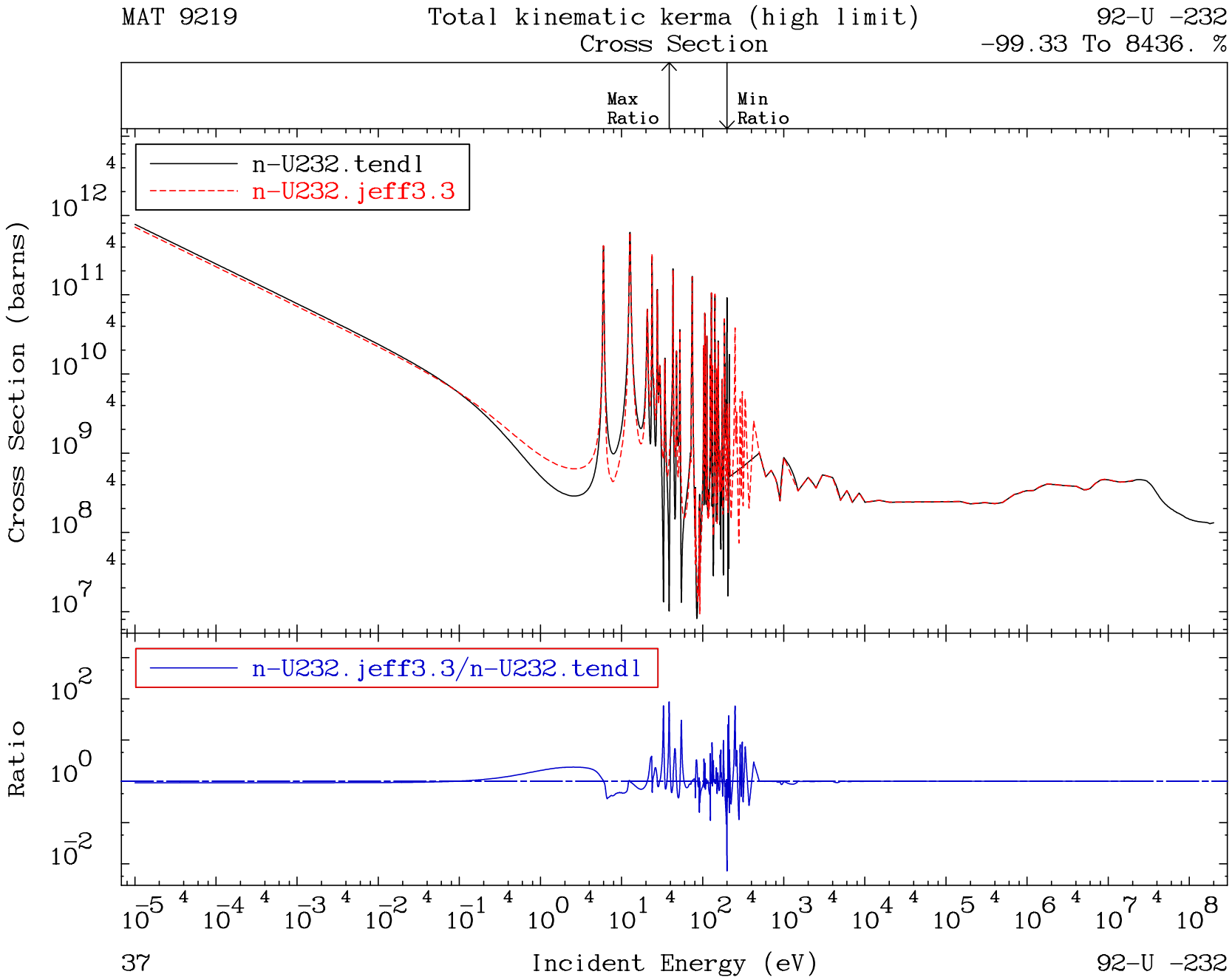

MAT 9219
Kerma non-elastic (all but mt2)
Cross Section
92-U -232
-99.33 To 8436. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
32
92-U -232

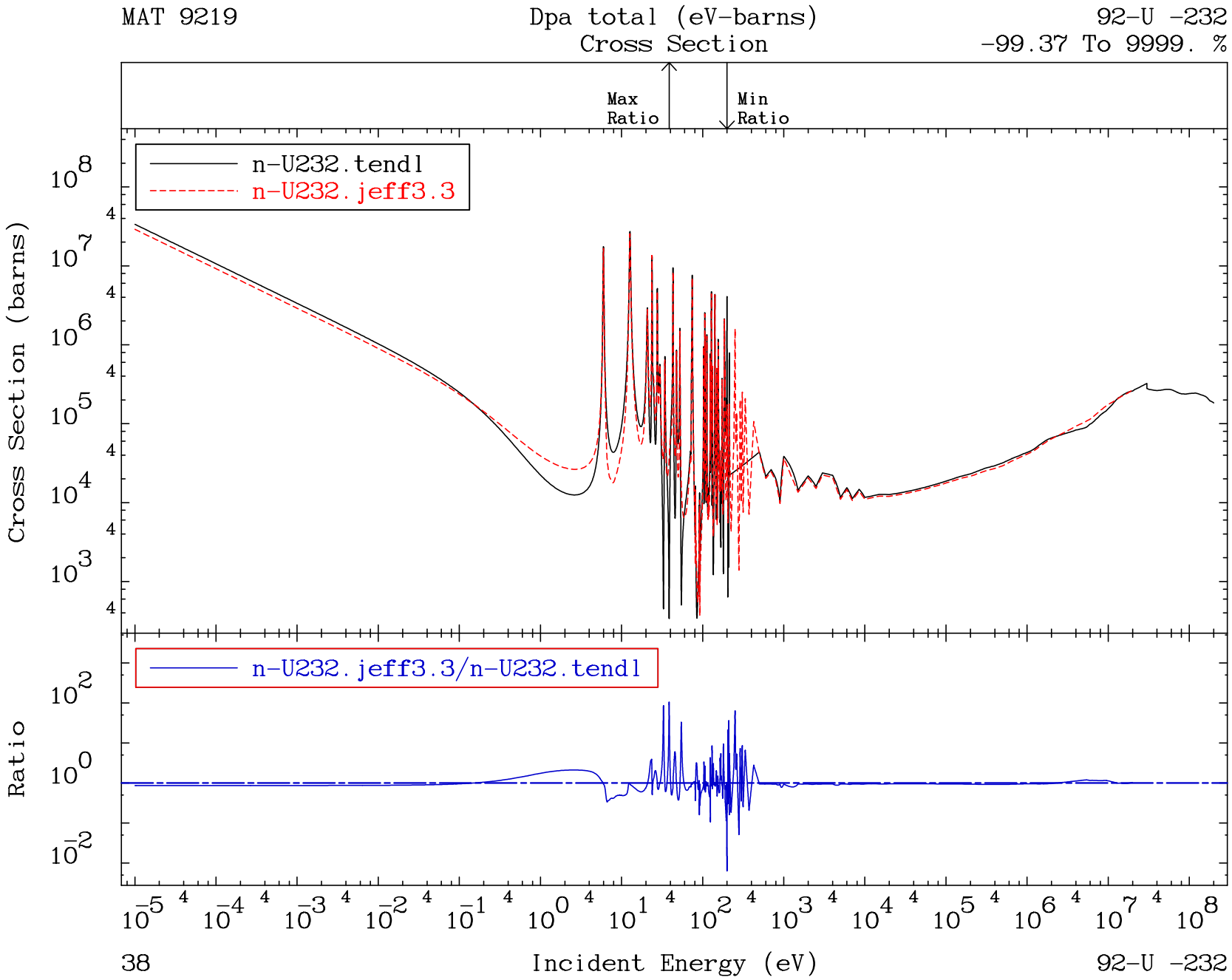

MAT 9219
Kerma inelastic (mt51-91)
Cross Section
92-U -232
-28.71 To 9999. %
Max Ratio
Min Ratio
n-U232.tendl Threshold 47.780 keV
n-U232.jeff3.3 Threshold 47.780 keV
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
33
92-U -232

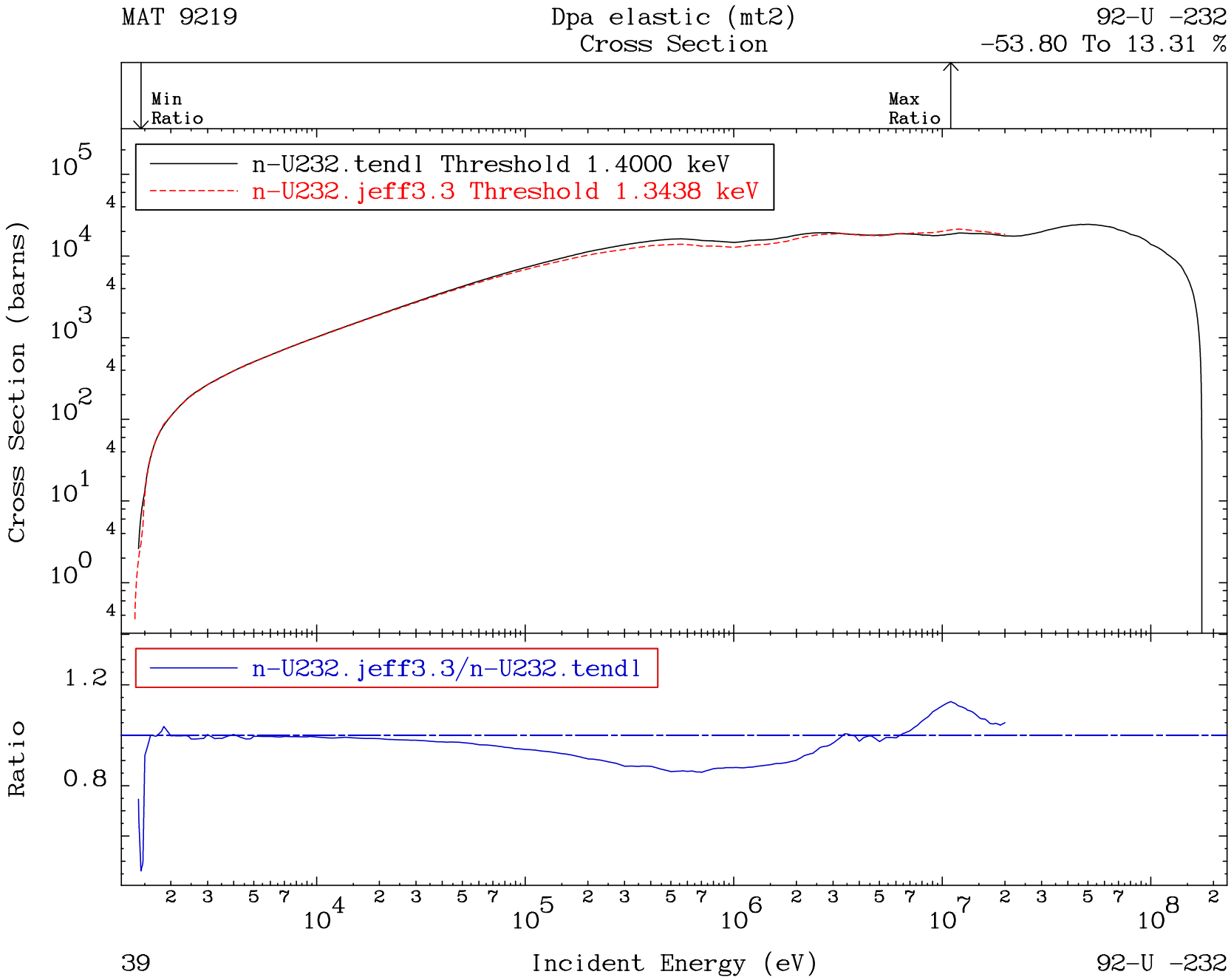

MAT 9219
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
92-U -232
-99.33 To 9999. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
34
Incident Energy (eV)
92-U -232

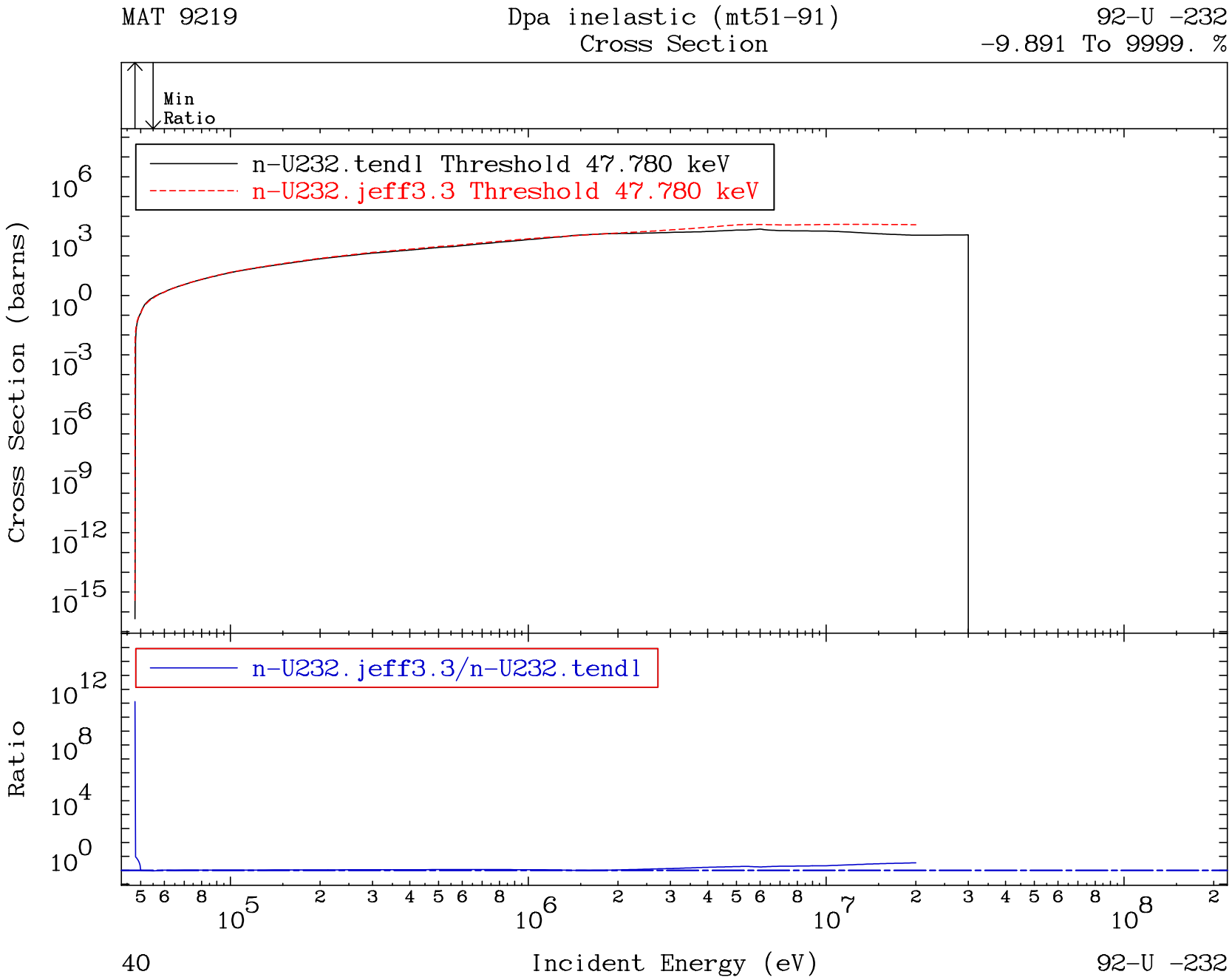

MAT 9219
Kerma capture (mt102)
Cross Section
92-U -232
-99.93 To 5848. %
Min Ratio
Max Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
35
92-U -232

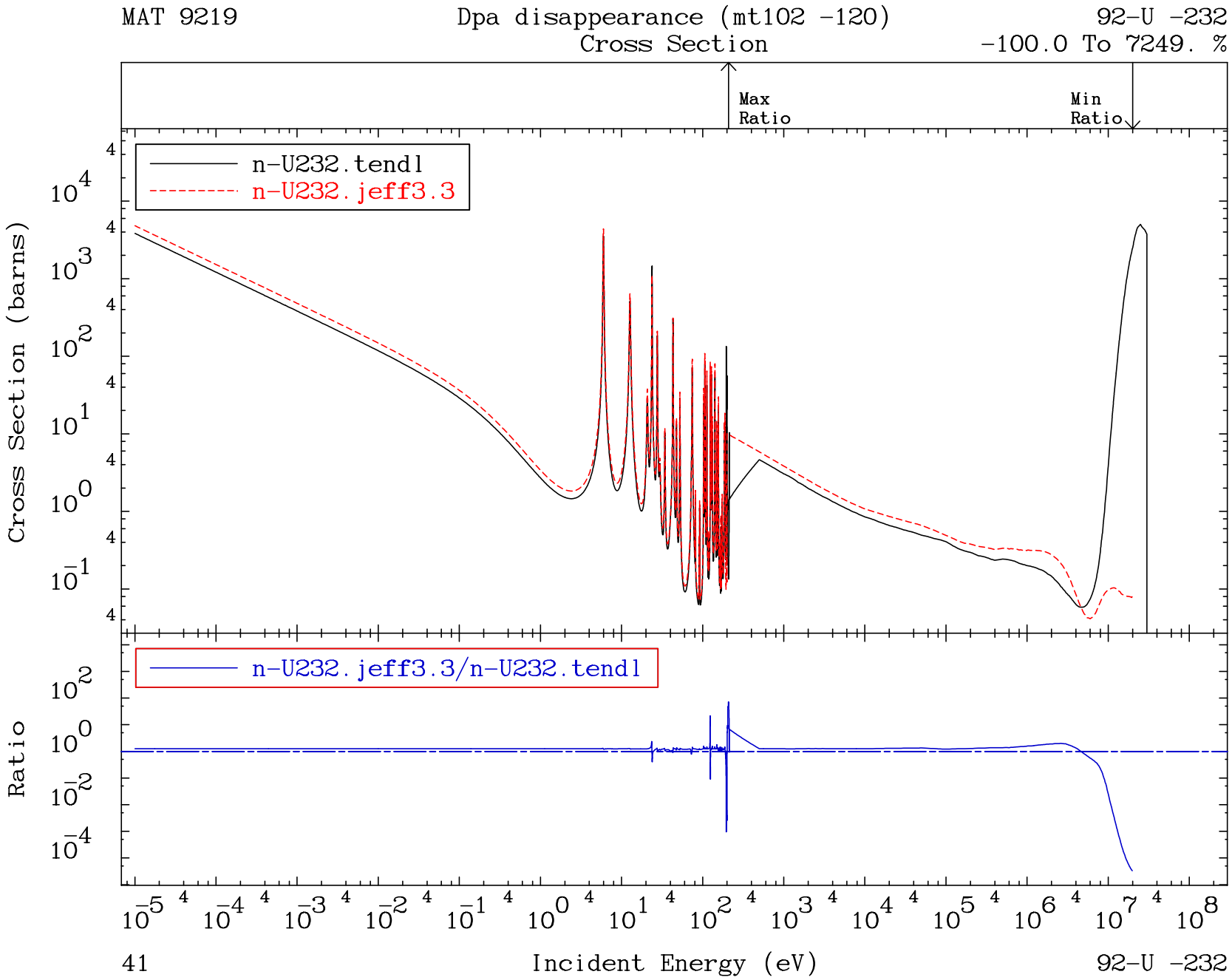

MAT 9219
Total photon (eV-barns)
Cross Section
92-U -232
-99.93 To 5848. %
Min Ratio
Max Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
36
92-U -232


MAT 9219
Total kinematic kerma (high limit)
Cross Section
92-U -232
-99.33 To 8436. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
37
92-U -232


MAT 9219
Dpa total (eV-barns)
Cross Section
92-U -232
-99.37 To 9999. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
38
92-U -232


MAT 9219
Dpa elastic (mt2)
Cross Section
92-U -232
-53.80 To 13.31 %
Min Ratio
Max Ratio
n-U232.tendl Threshold 1.4000 keV
n-U232.jeff3.3 Threshold 1.3438 keV
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
39
92-U -232


MAT 9219
Dpa inelastic (mt51-91)
Cross Section
92-U -232
-9.891 To 9999. %
Min
Ratio
n-U232.tendl Threshold 47.780 keV
n-U232.jeff3.3 Threshold 47.780 keV
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
40
92-U -232


MAT 9219
Dpa disappearance (mt102 -120)
Cross Section
92-U -232
-100.0 To 7249. %
Max Ratio
Min Ratio
n-U232.tendl
n-U232.jeff3.3
Cross Section (barns)
n-U232.jeff3.3/n-U232.tendl
Ratio
Incident Energy (eV)
41
92-U -232