Program Complot
(Version 2021-1)
by
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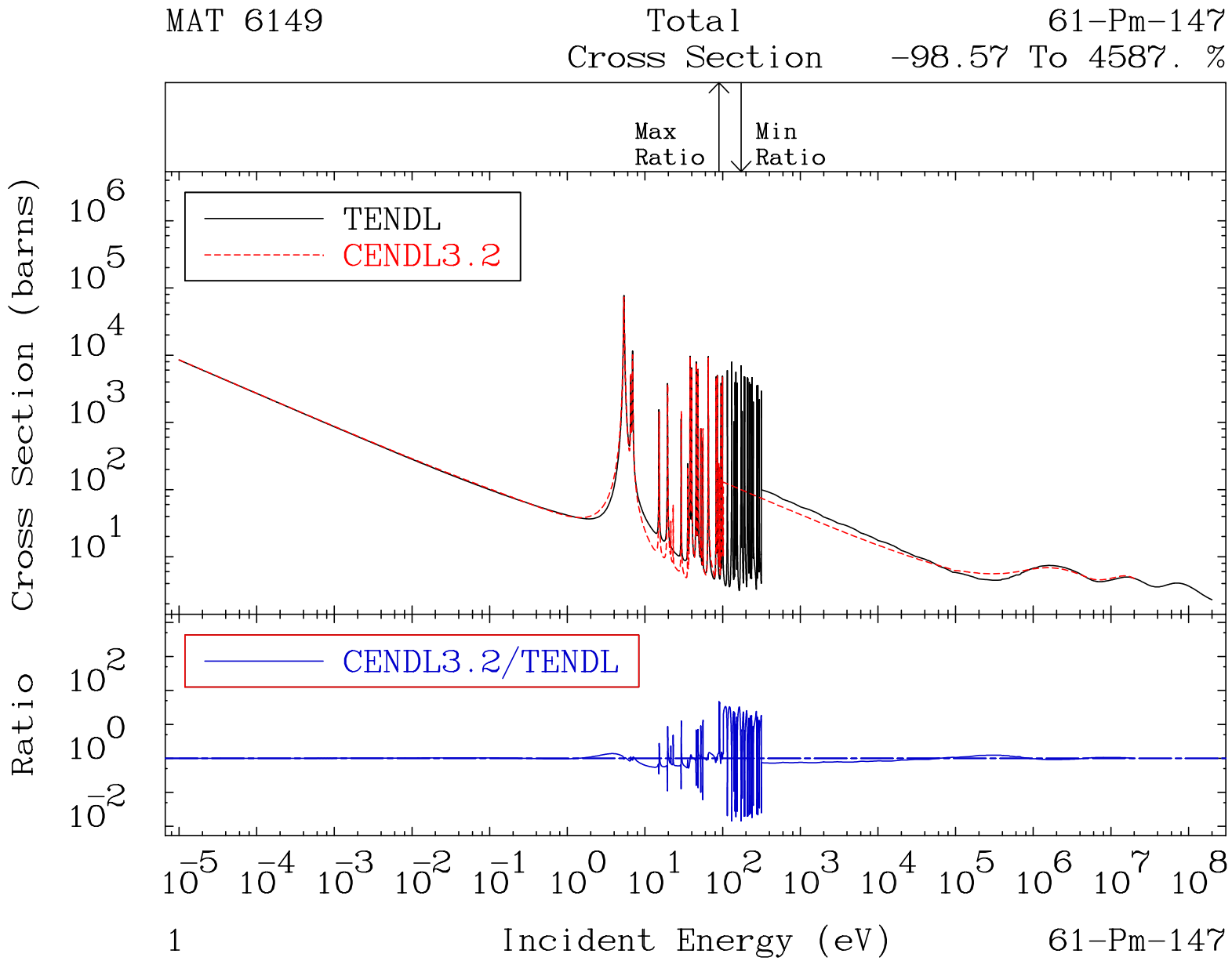
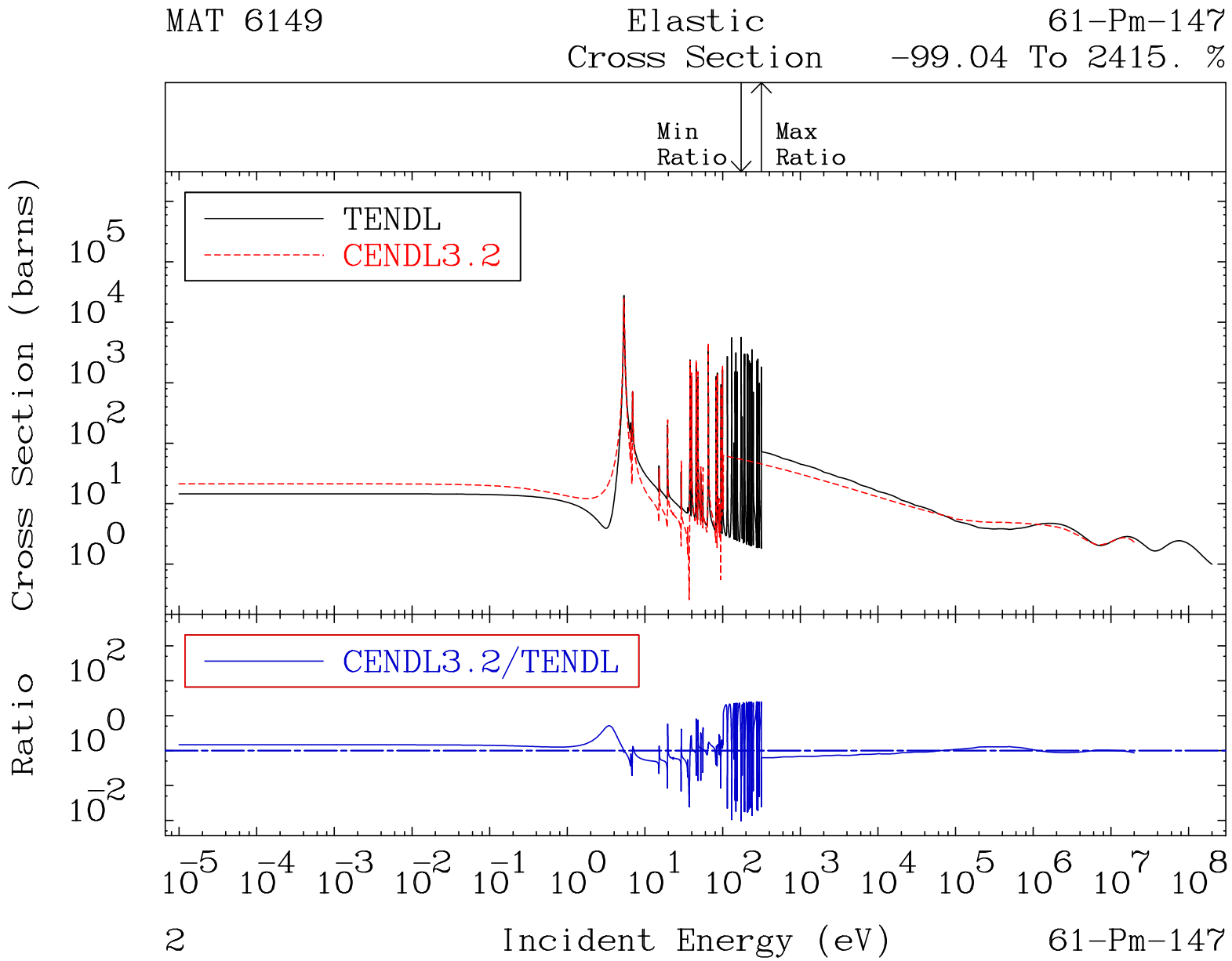
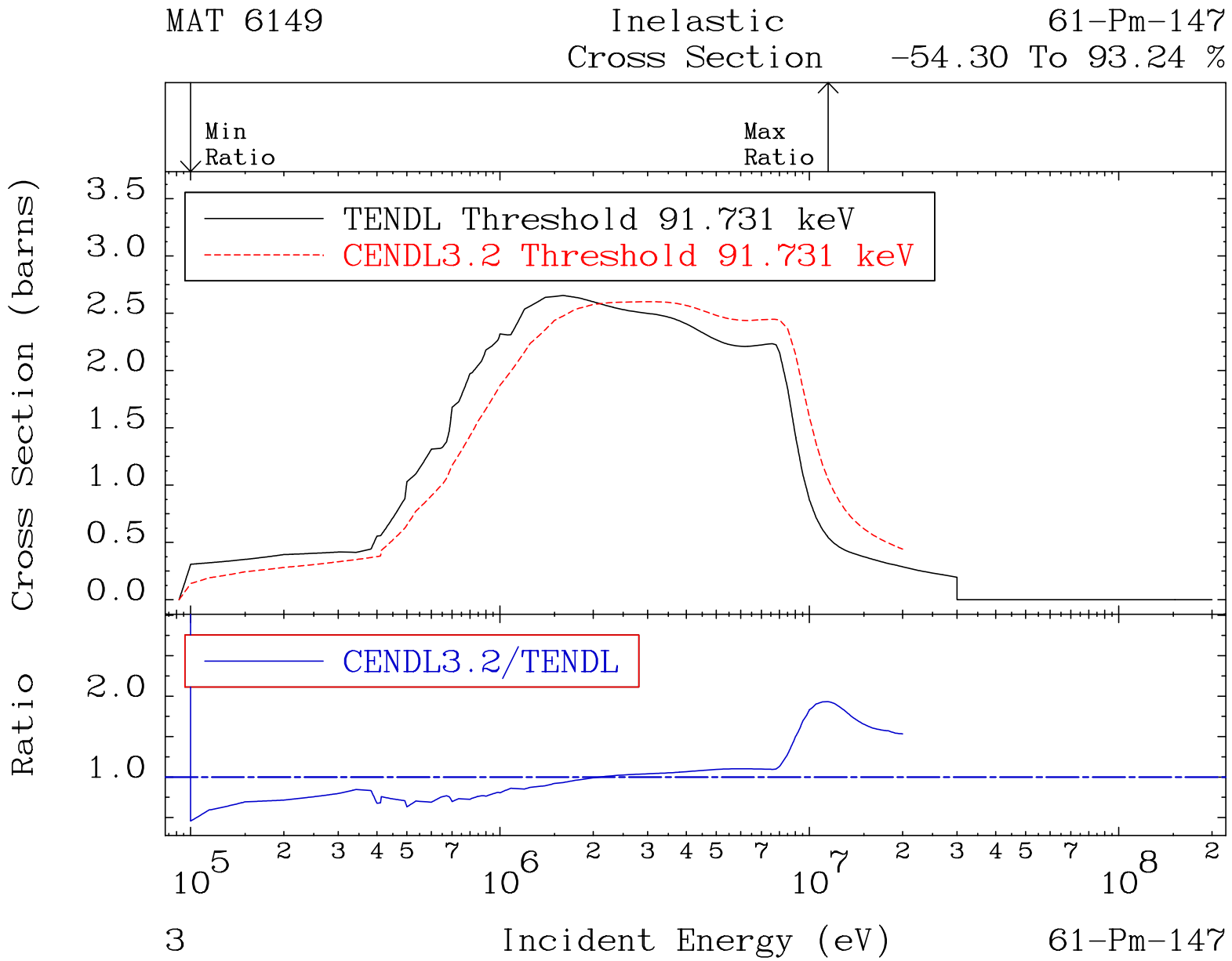
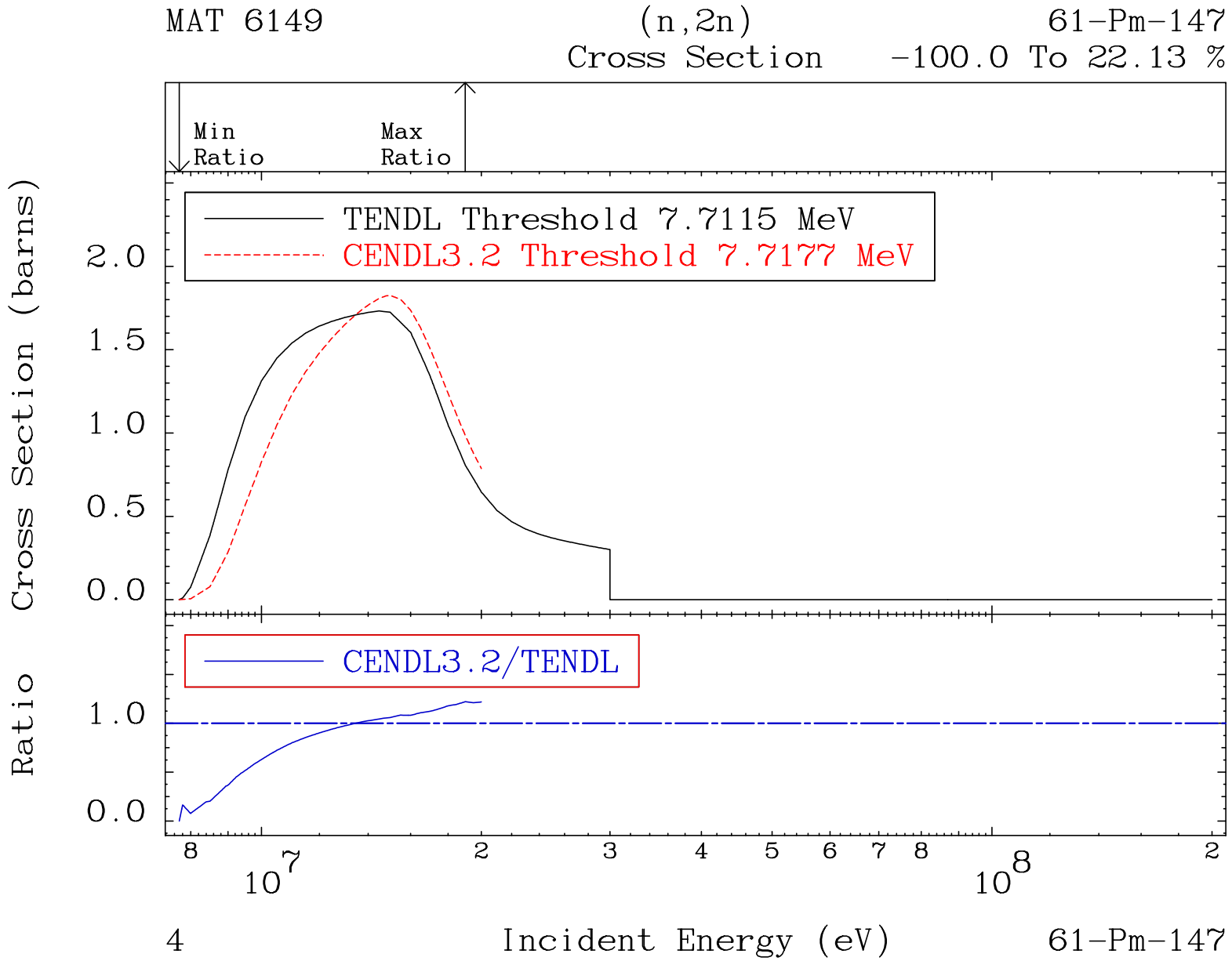
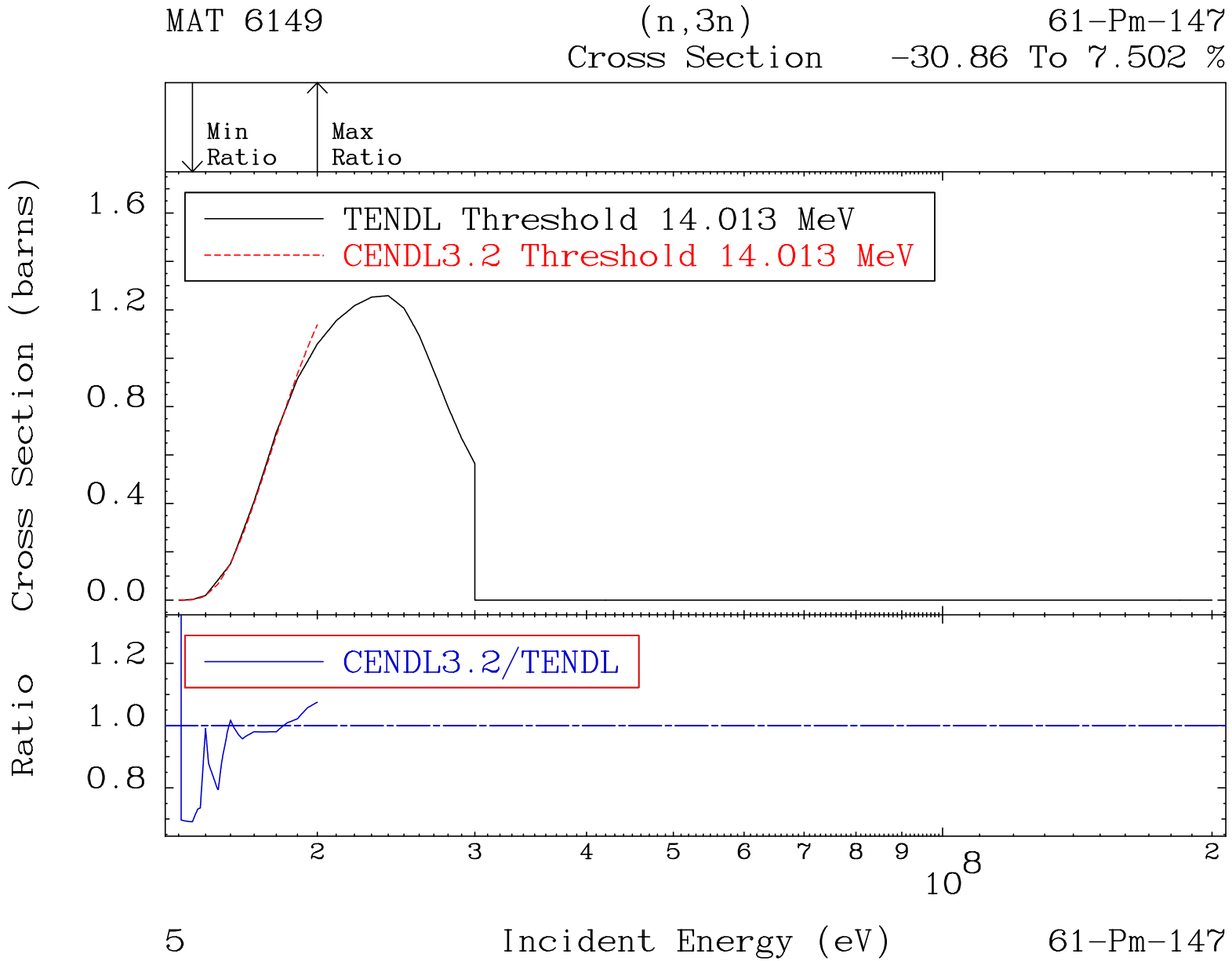
Press Mouse Button to Start

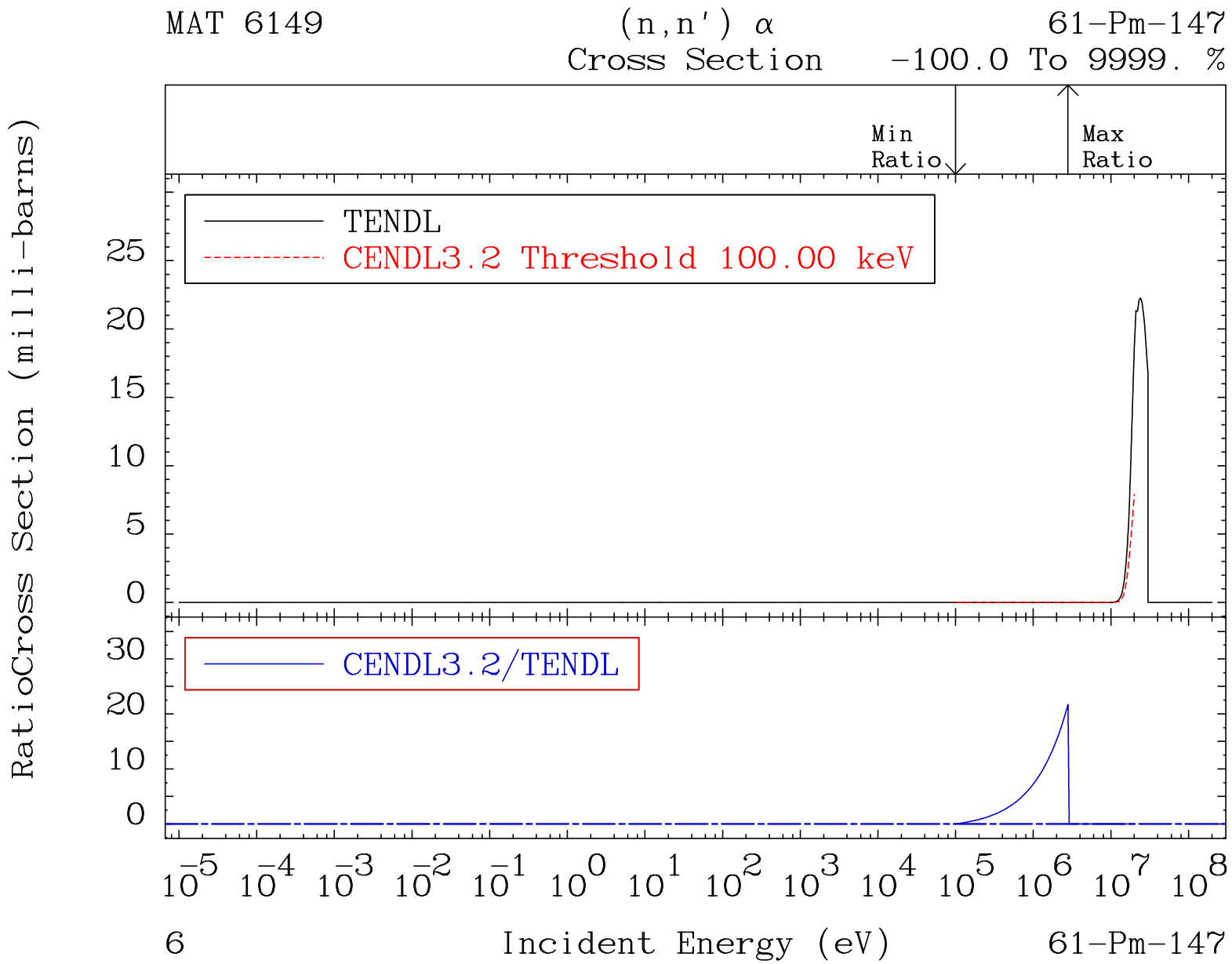

MAT 6149
Total
Cross Section
61-Pm-147
-98.57 To 4587. %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
1
61-Pm-147

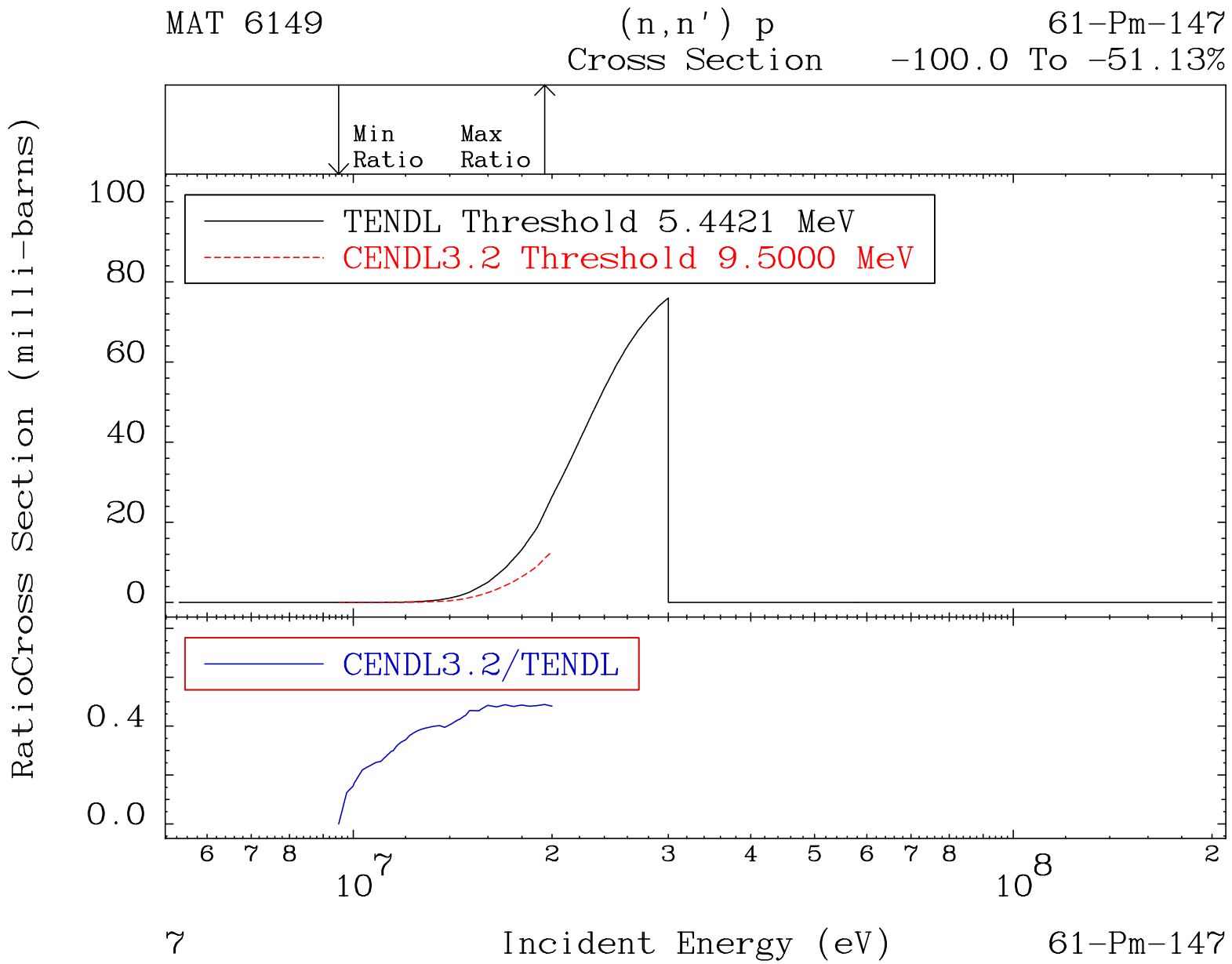

MAT 6149
Elastic
Cross Section
61-Pm-147
-99.04 To 2415. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
2
61-Pm-147

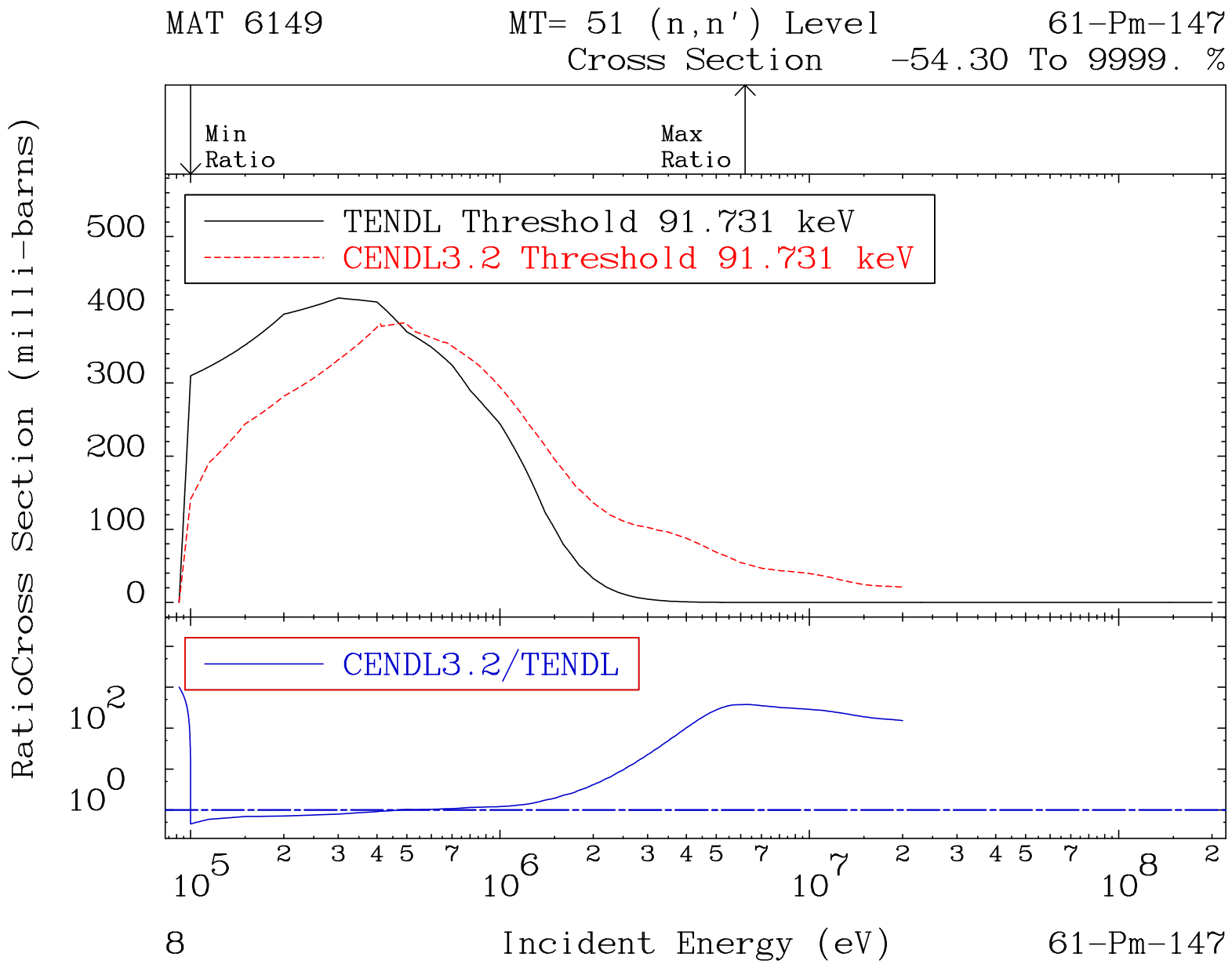

MAT 6149
Inelastic
Cross Section
61-Pm-147
-54.30 To 93.24 %
Min
Ratio
Max
Ratio
TENDL Threshold 91.731 keV
CENDL3.2 Threshold 91.731 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
61-Pm-147

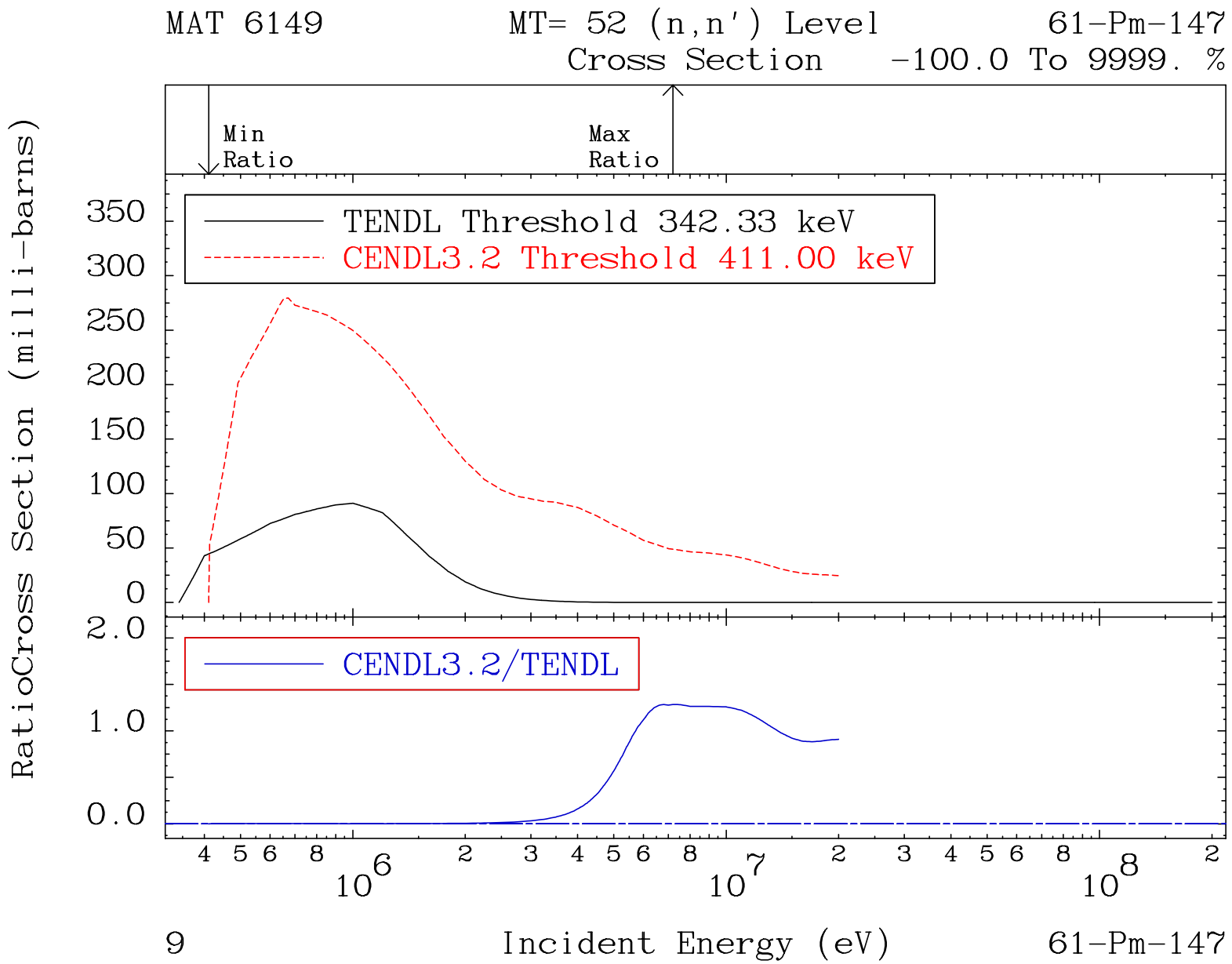

MAT 6149
(n,2n)
Cross Section
61-Pm-147
-100.0 To 22.13 %
Min Ratio
Max Ratio
TENDL Threshold 7.7115 MeV
CENDL3.2 Threshold 7.7177 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
8
2
3
4
5
6
7
8
2
10^7
10^8
4
Incident Energy (eV)
61-Pm-147

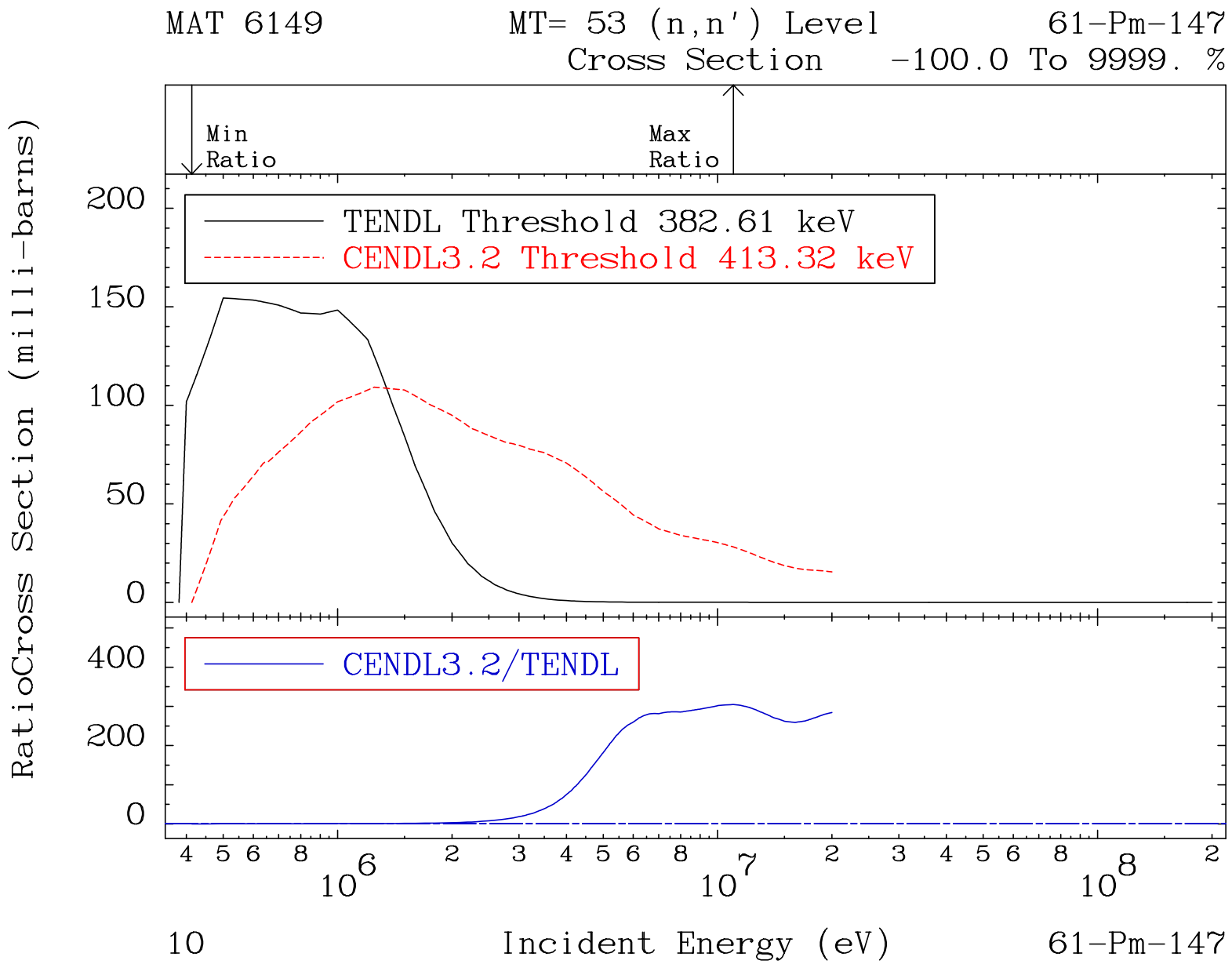

MAT 6149
(n,3n)
Cross Section
61-Pm-147
-30.86 To 7.502 %
Min Ratio
Max Ratio
TENDL Threshold 14.013 MeV
CENDL3.2 Threshold 14.013 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
61-Pm-147

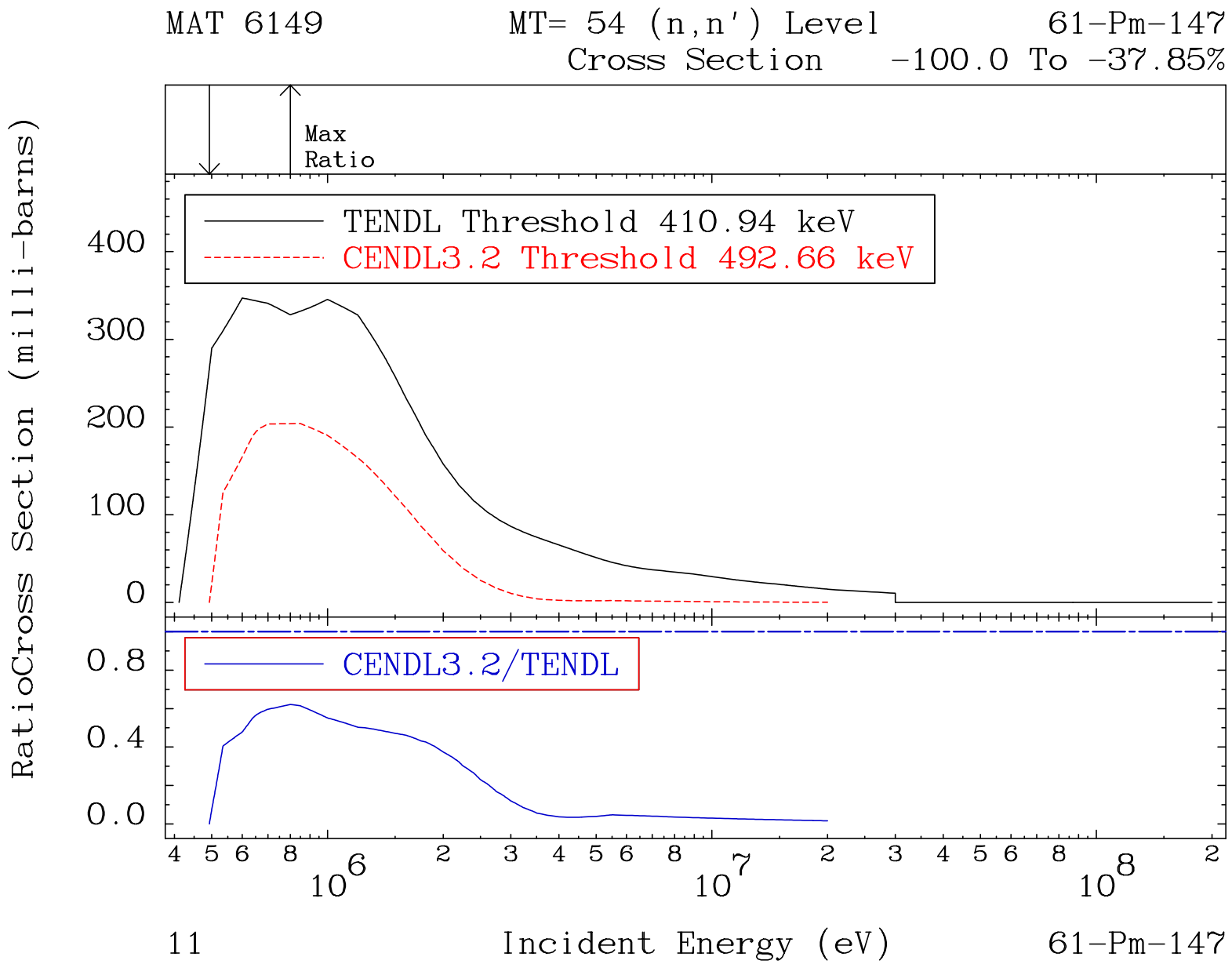

MAT 6149
(n,n') α
Cross Section
61-Pm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 100.00 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
61-Pm-147

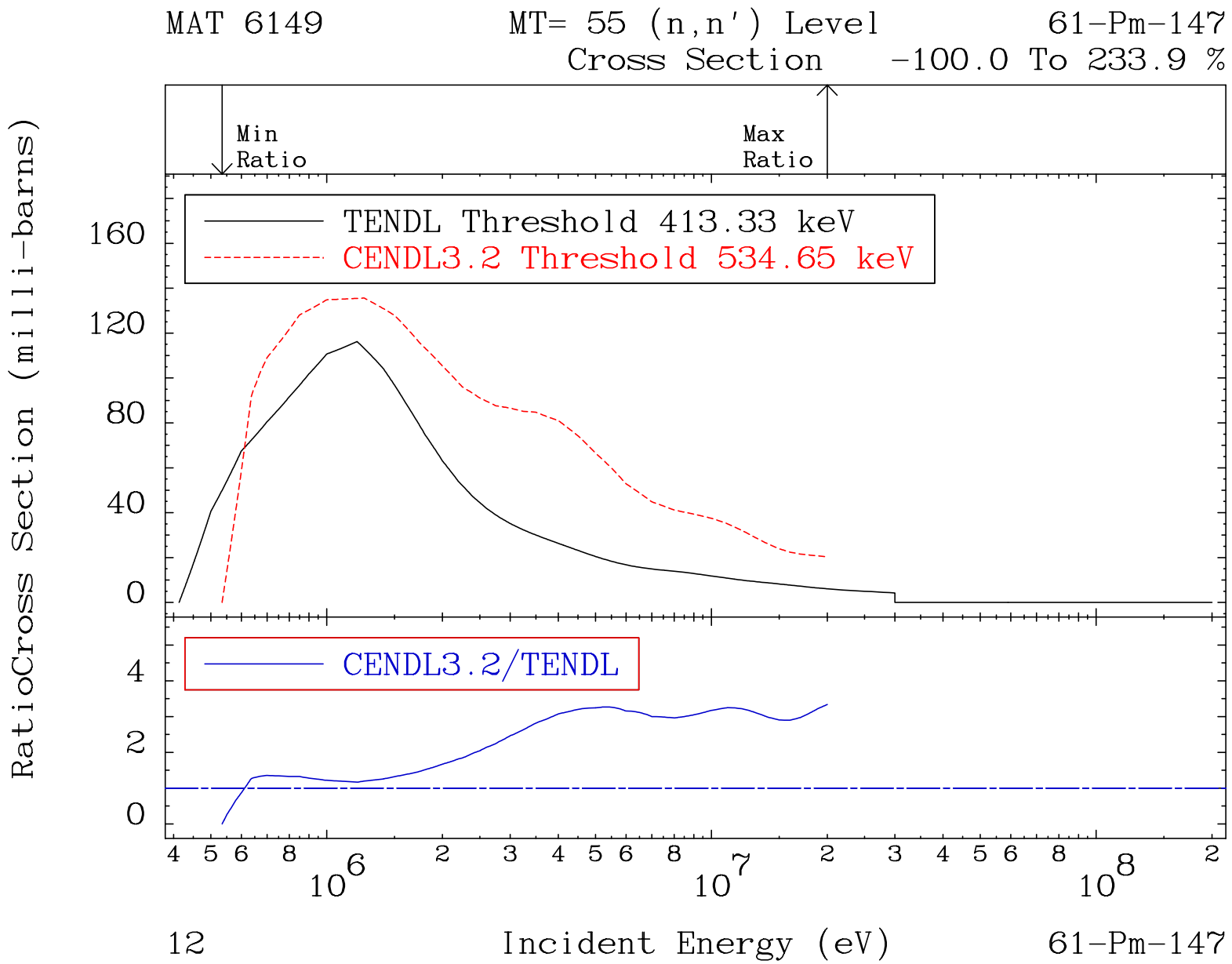

MAT 6149
(n,n') p
Cross Section
61-Pm-147
-100.0 To -51.13%
Min Ratio
Max Ratio
TENDL Threshold 5.4421 MeV
CENDL3.2 Threshold 9.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
0.4
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
61-Pm-147

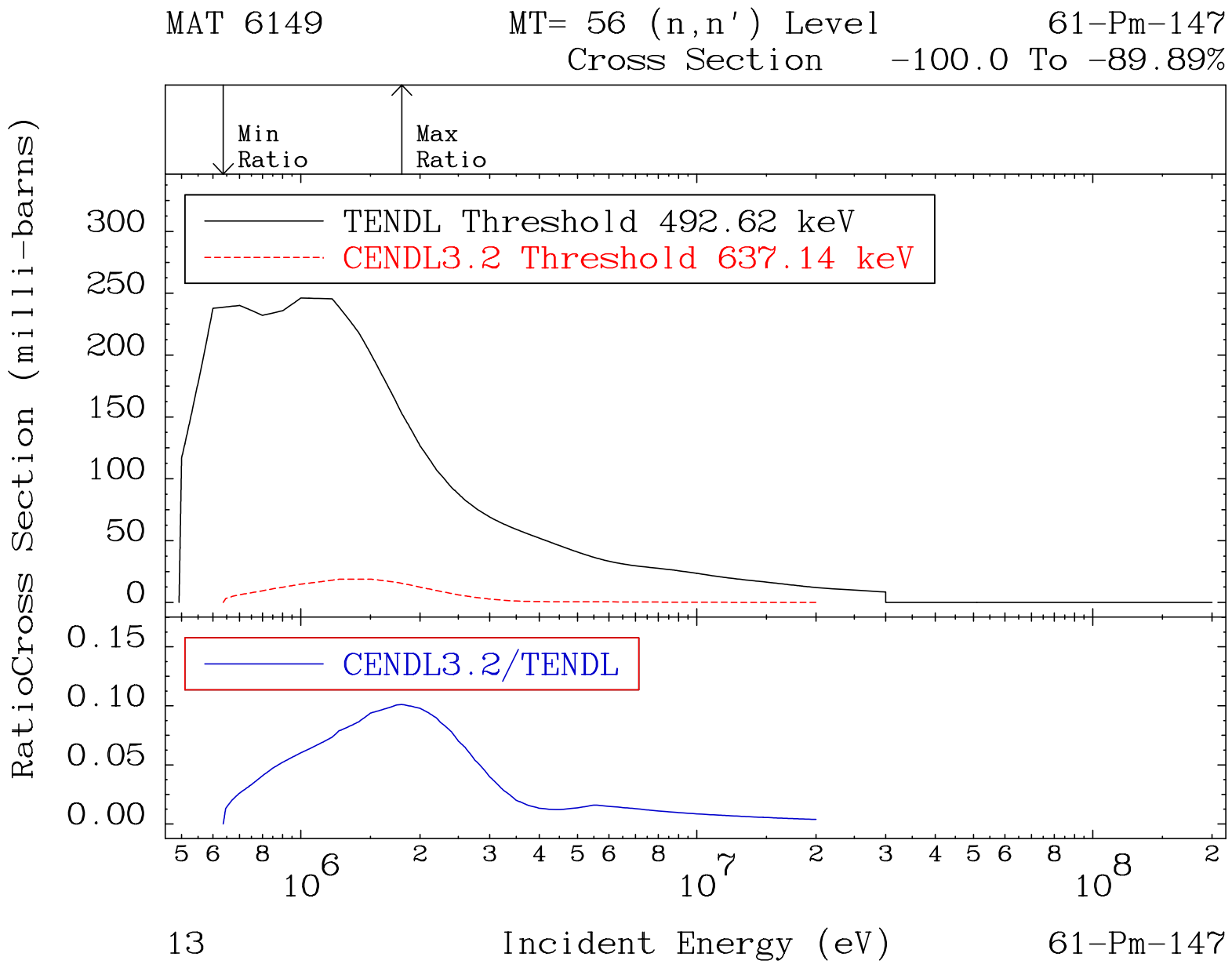

MAT 6149
MT= 51 (n,n') Level
61-Pm-147
Cross Section -54.30 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 91.731 keV
CENDL3.2 Threshold 91.731 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
$10^2$
$10^0$
$10^5$
$10^6$
$10^7$
$10^8$
2 3 4 5 7
Incident Energy (eV)
8
61-Pm-147

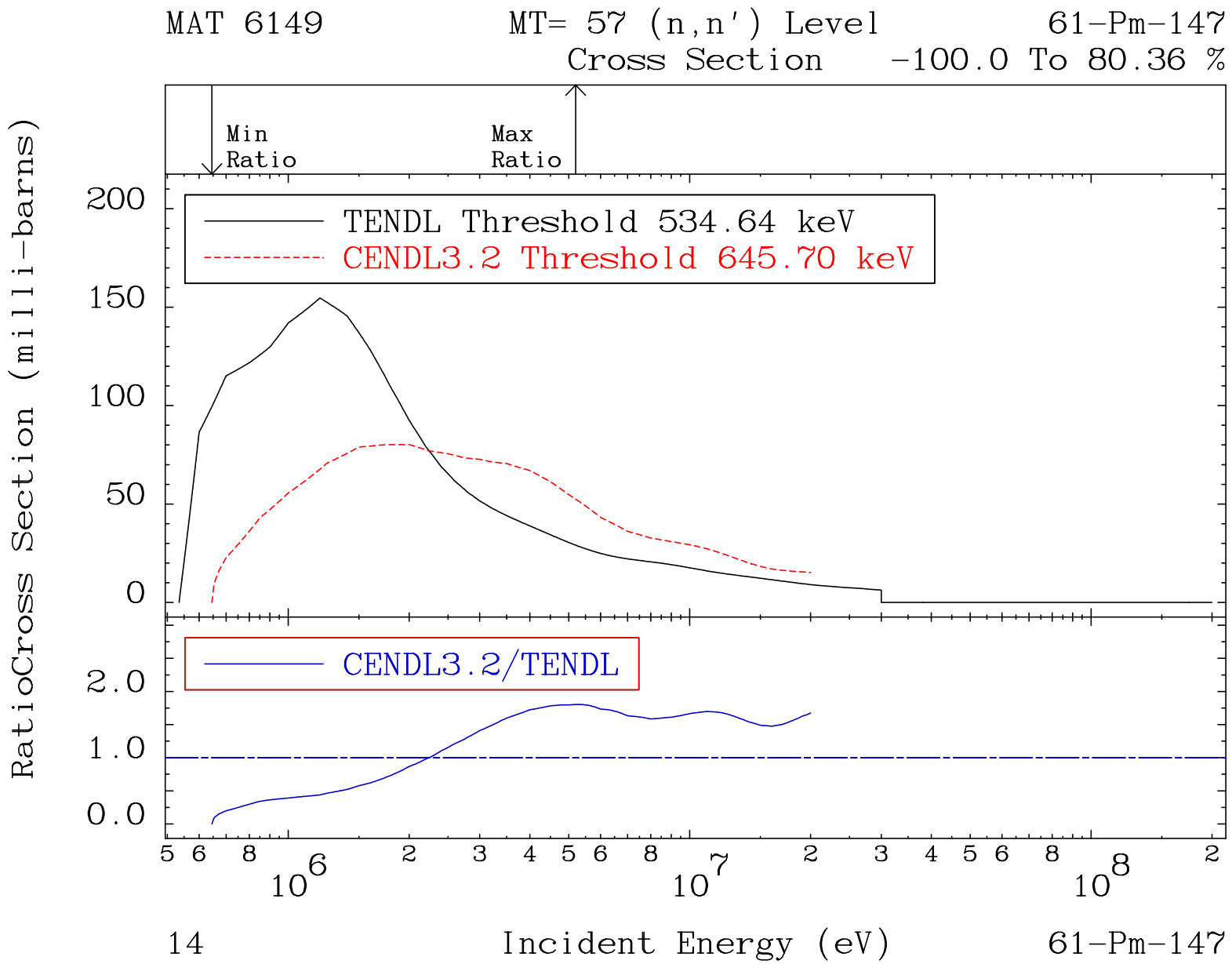

MAT 6149
MT= 52 (n,n') Level
61-Pm-147
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 342.33 keV
CENDL3.2 Threshold 411.00 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2.0
1.0
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
61-Pm-147

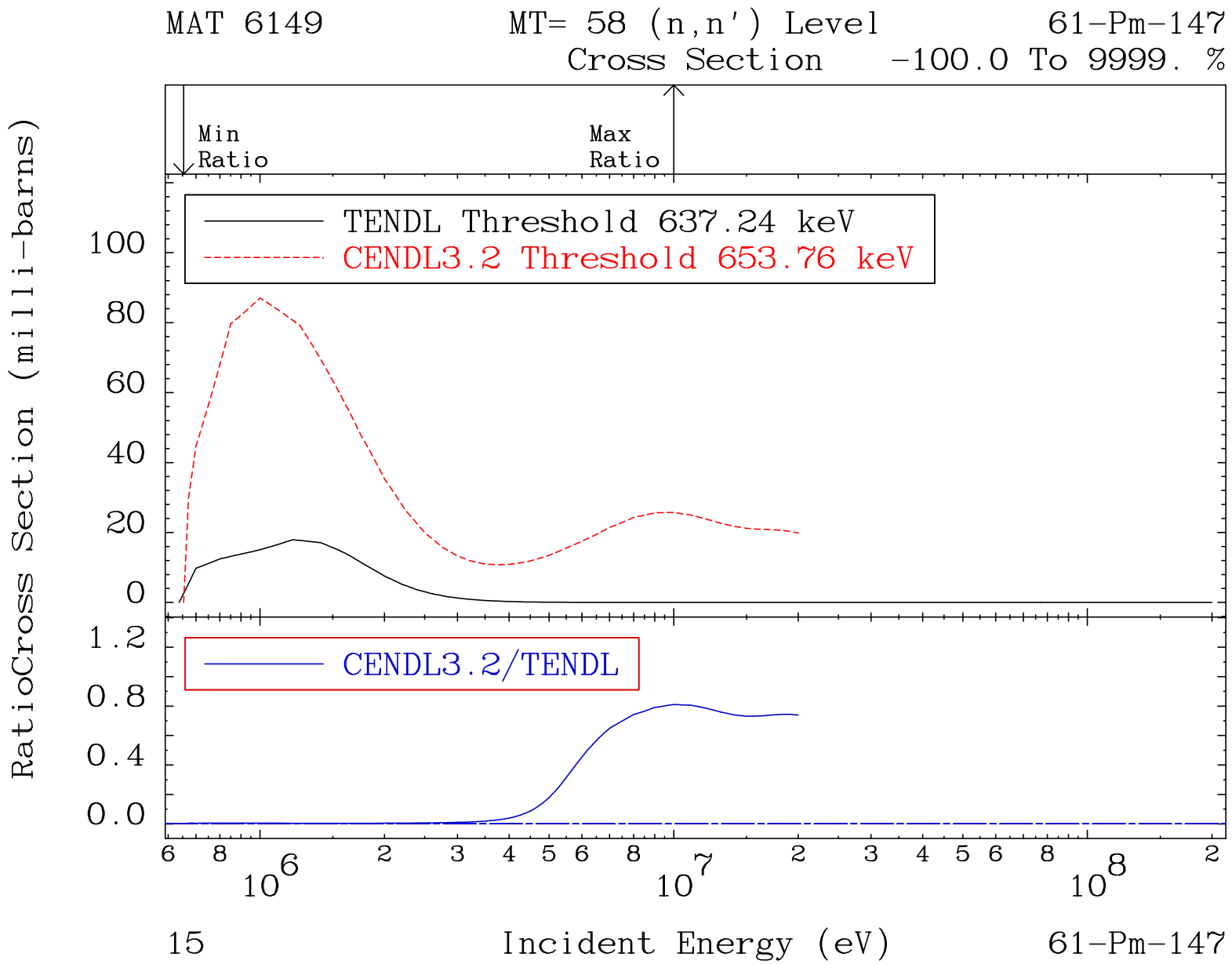

MAT 6149
MT= 53 (n,n') Level
61-Pm-147
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 382.61 keV
CENDL3.2 Threshold 413.32 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
400
200
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
61-Pm-147

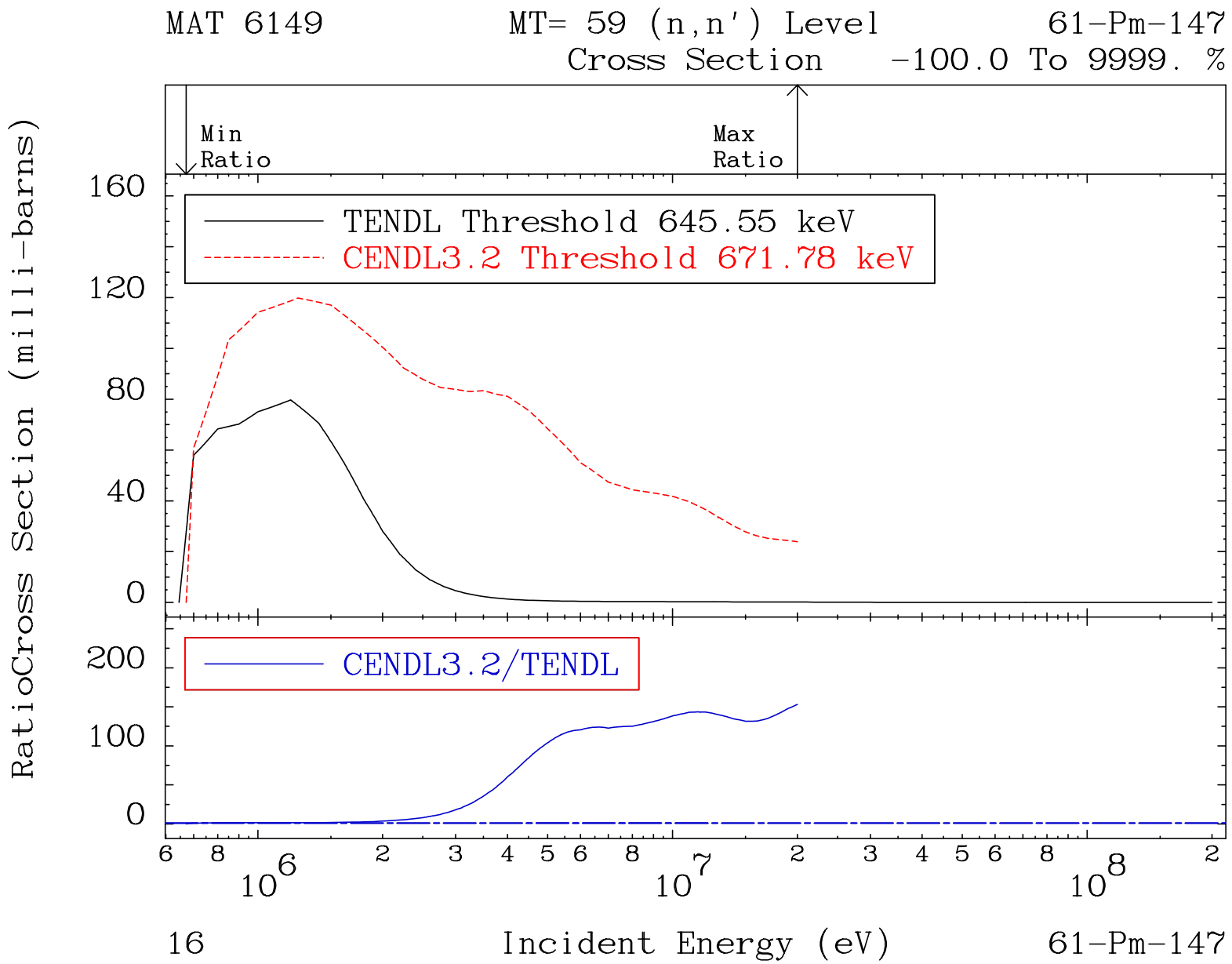

MAT 6149
MT= 54 (n,n') Level
61-Pm-147
Cross Section
-100.0 To -37.85%
Max
Ratio
TENDL Threshold 410.94 keV
CENDL3.2 Threshold 492.66 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
0.8
0.4
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
61-Pm-147

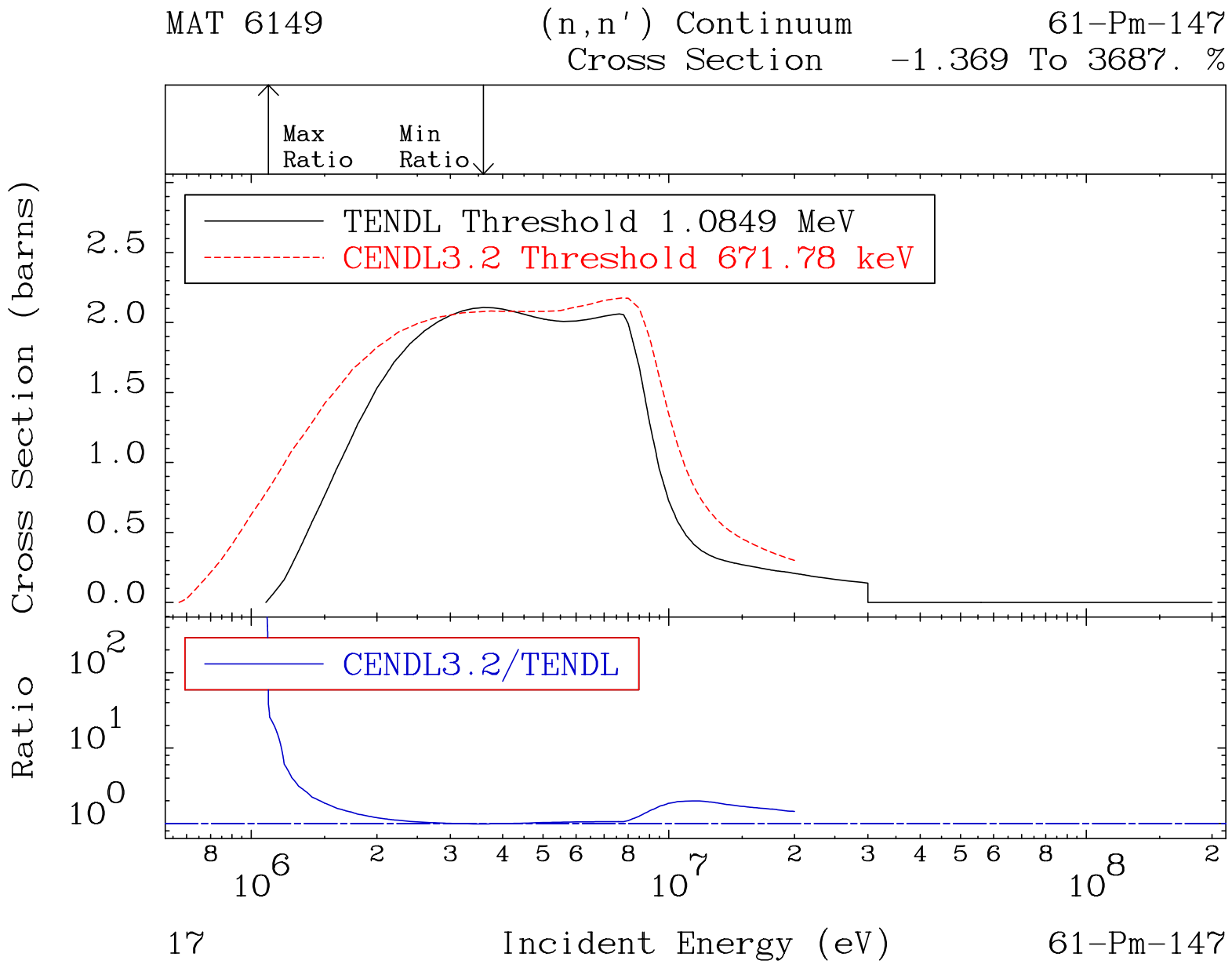

MAT 6149
MT= 55 (n,n') Level
61-Pm-147
Cross Section
-100.0 To 233.9 %
Min Ratio
Max Ratio
TENDL Threshold 413.33 keV
CENDL3.2 Threshold 534.65 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
4
2
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
61-Pm-147

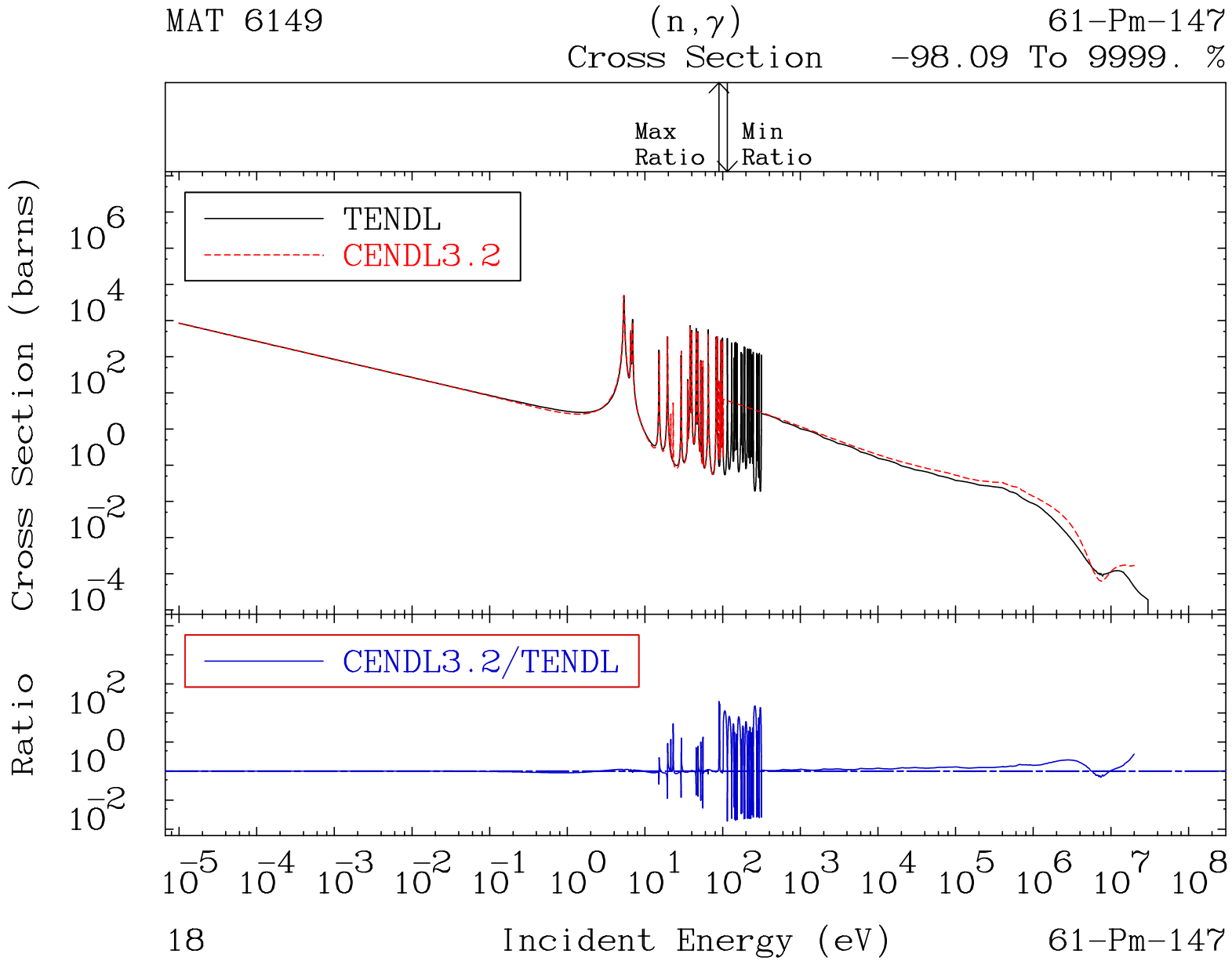

MAT 6149
MT= 56 (n,n') Level
61-Pm-147
Cross Section -100.0 To -89.89%
Min Ratio
Max Ratio
TENDL Threshold 492.62 keV
CENDL3.2 Threshold 637.14 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
0.15
0.10
0.05
0.00
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
61-Pm-147

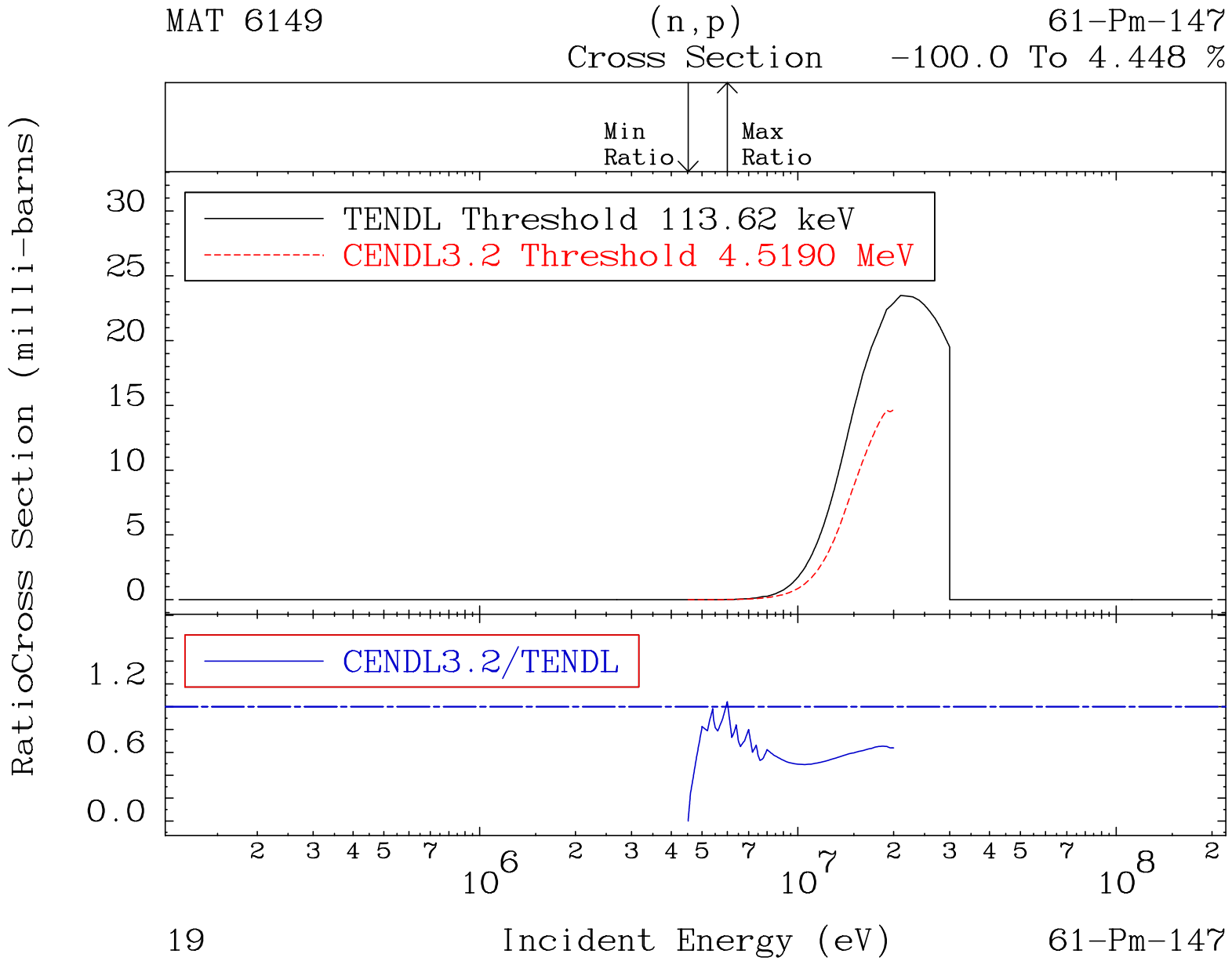

MAT 6149
MT= 57 (n,n') Level
61-Pm-147
Cross Section
-100.0 To 80.36 %
Min Ratio
Max Ratio
TENDL Threshold 534.64 keV
CENDL3.2 Threshold 645.70 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
61-Pm-147

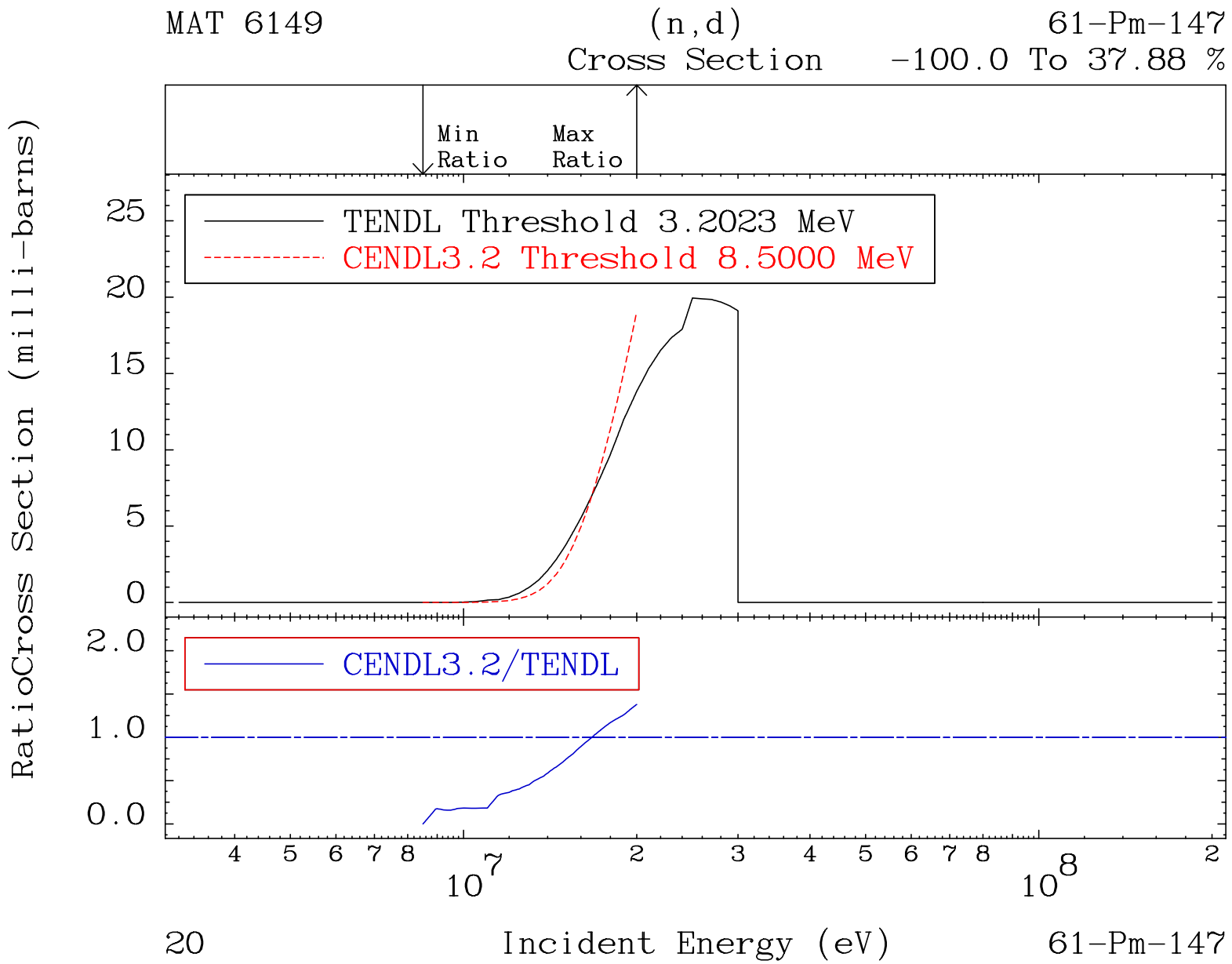

MAT 6149
MT= 58 (n,n') Level
61-Pm-147
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 637.24 keV
CENDL3.2 Threshold 653.76 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.8
0.4
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
61-Pm-147

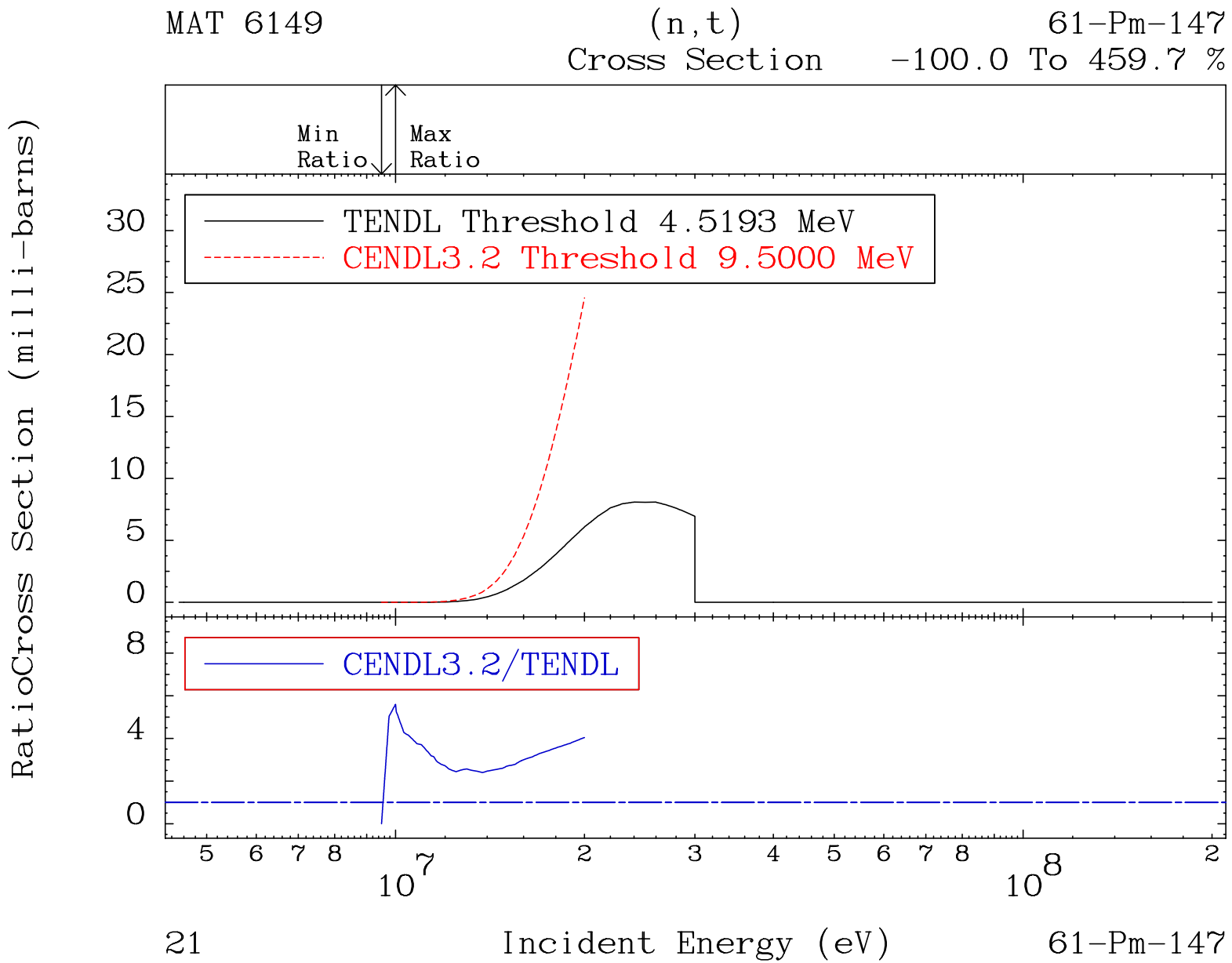

MAT 6149
MT= 59 (n,n') Level
61-Pm-147
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 645.55 keV
CENDL3.2 Threshold 671.78 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
200
100
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
61-Pm-147

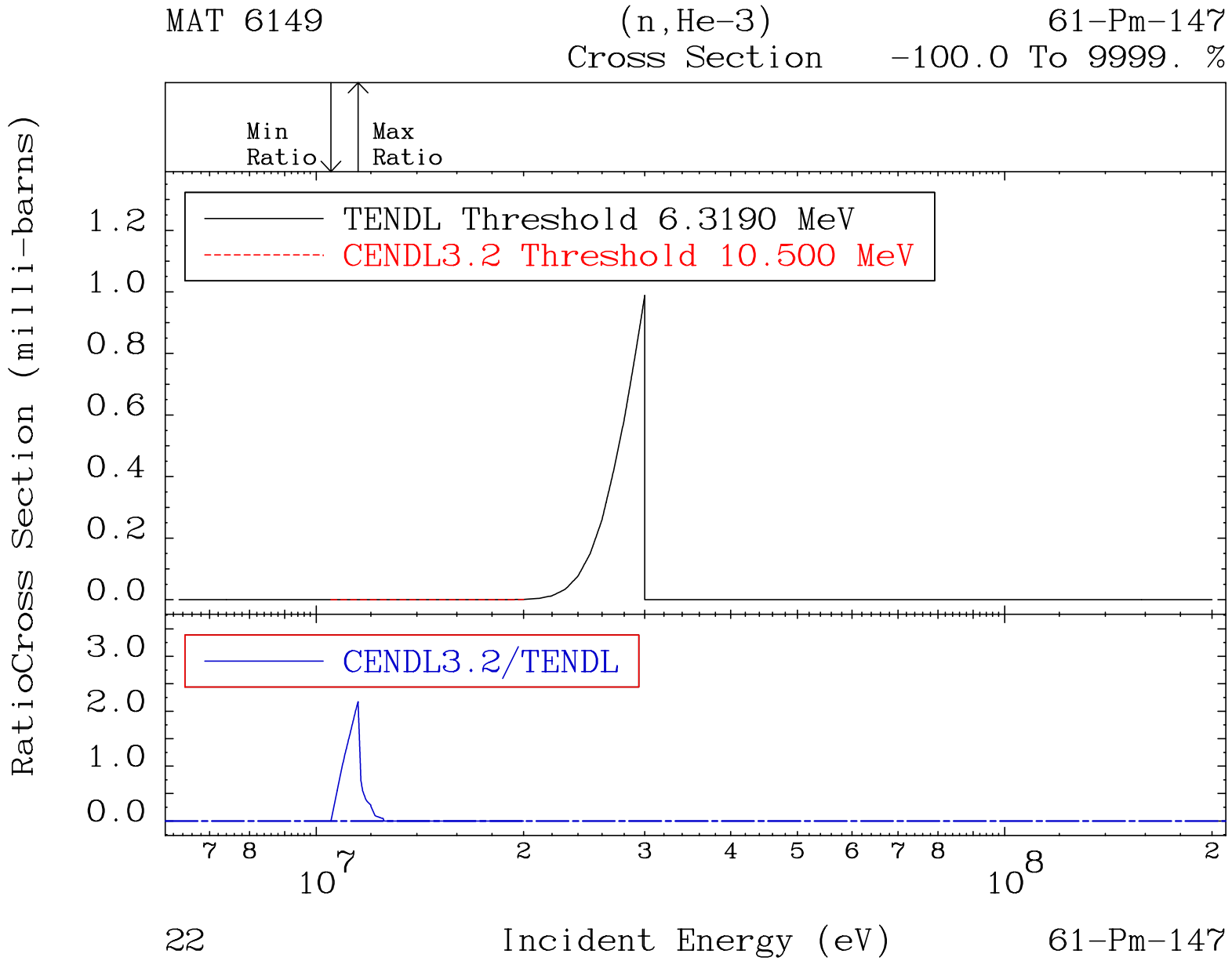

MAT 6149
(n,n') Continuum
Cross Section
61-Pm-147
-1.369 To 3687. %
Max Ratio
Min Ratio
TENDL Threshold 1.0849 MeV
CENDL3.2 Threshold 671.78 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
17
61-Pm-147

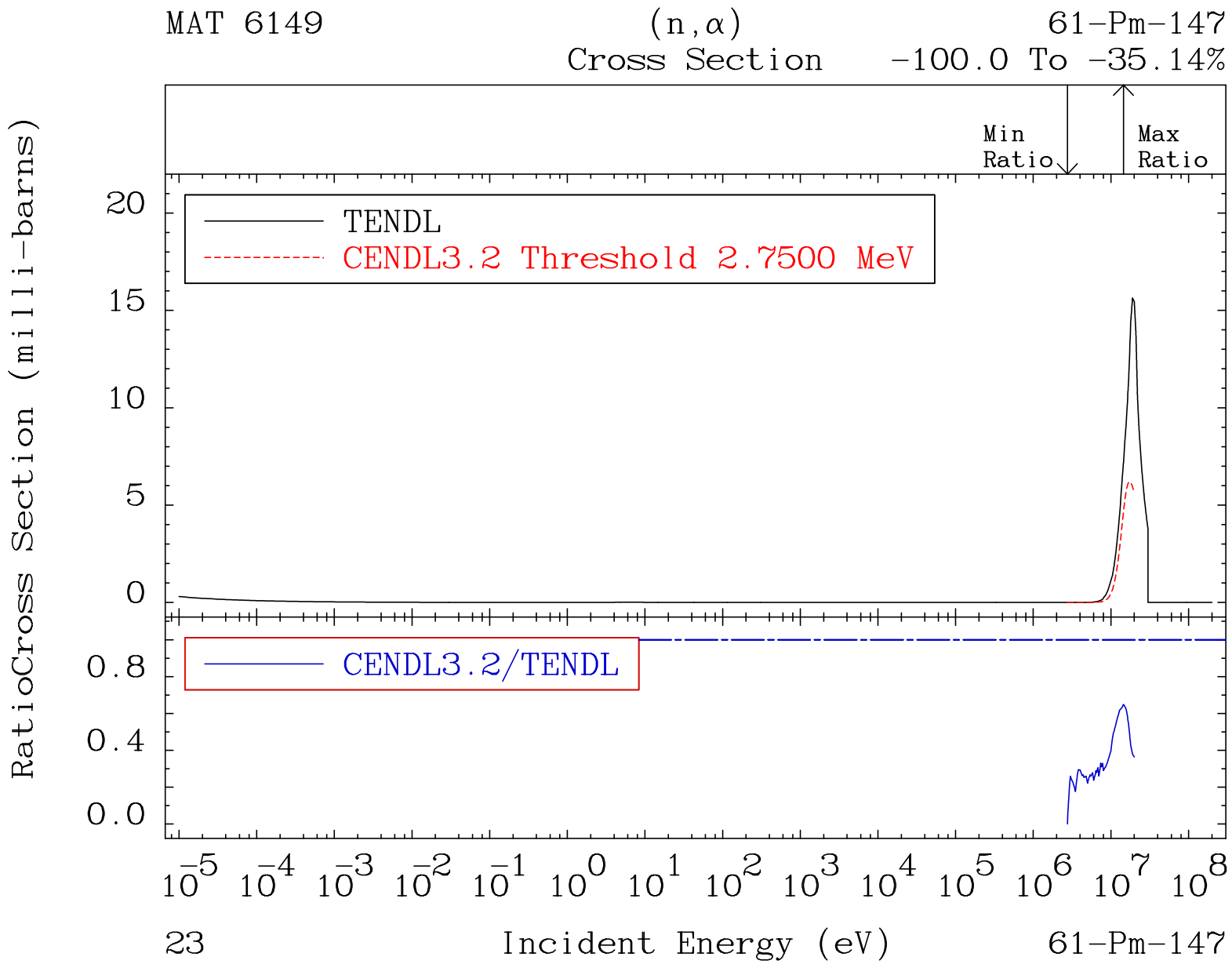

MAT 6149
(n,γ)
Cross Section
61-Pm-147
-98.09 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
18
61-Pm-147

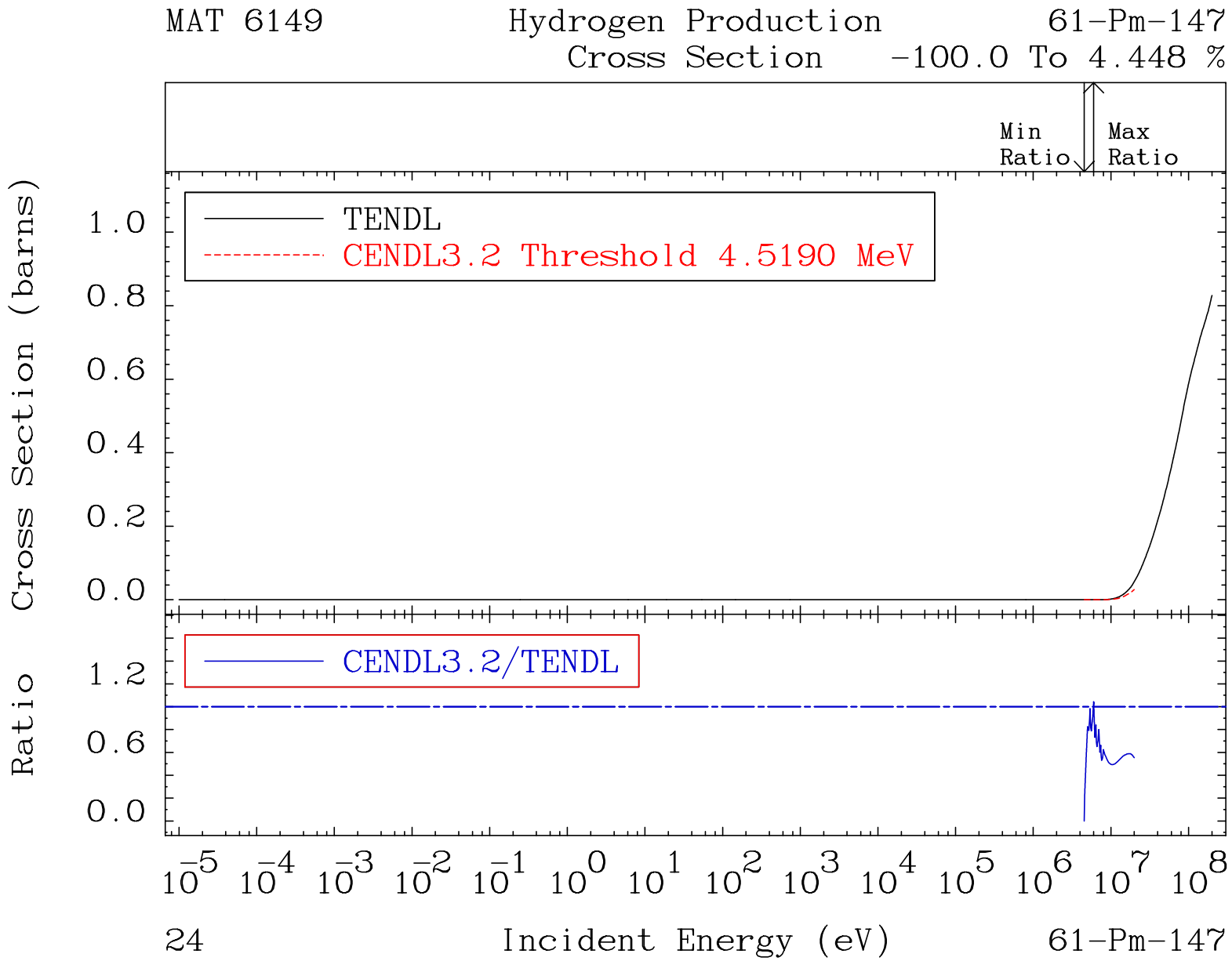

MAT 6149
(n,p)
Cross Section
61-Pm-147
-100.0 To 4.448 %
Min Ratio
Max Ratio
TENDL Threshold 113.62 keV
CENDL3.2 Threshold 4.5190 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
19
Incident Energy (eV)
61-Pm-147

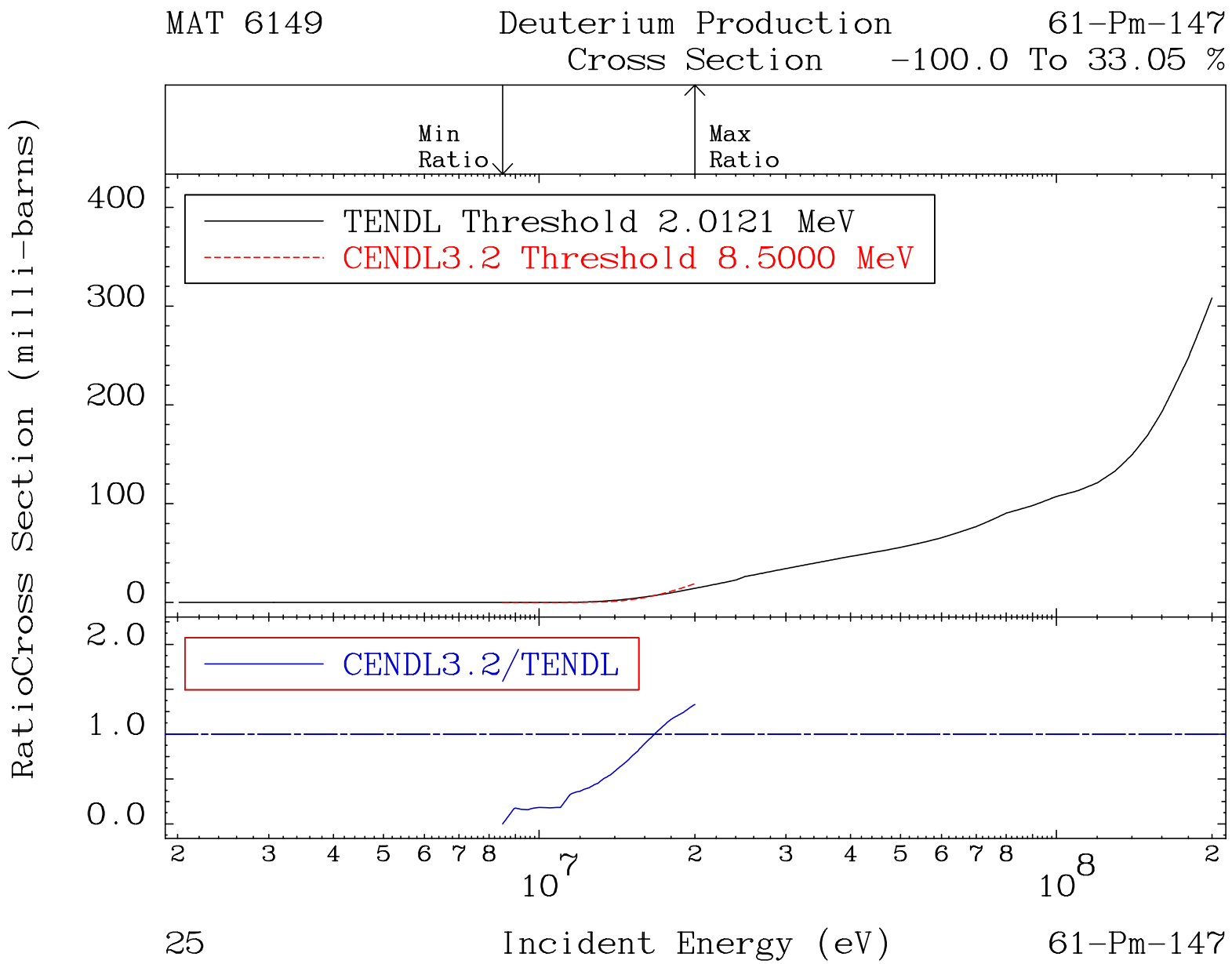

MAT 6149
(n,d)
61-Pm-147
Cross Section
-100.0 To 37.88 %
Min Ratio
Max Ratio
TENDL Threshold 3.2023 MeV
CENDL3.2 Threshold 8.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
61-Pm-147

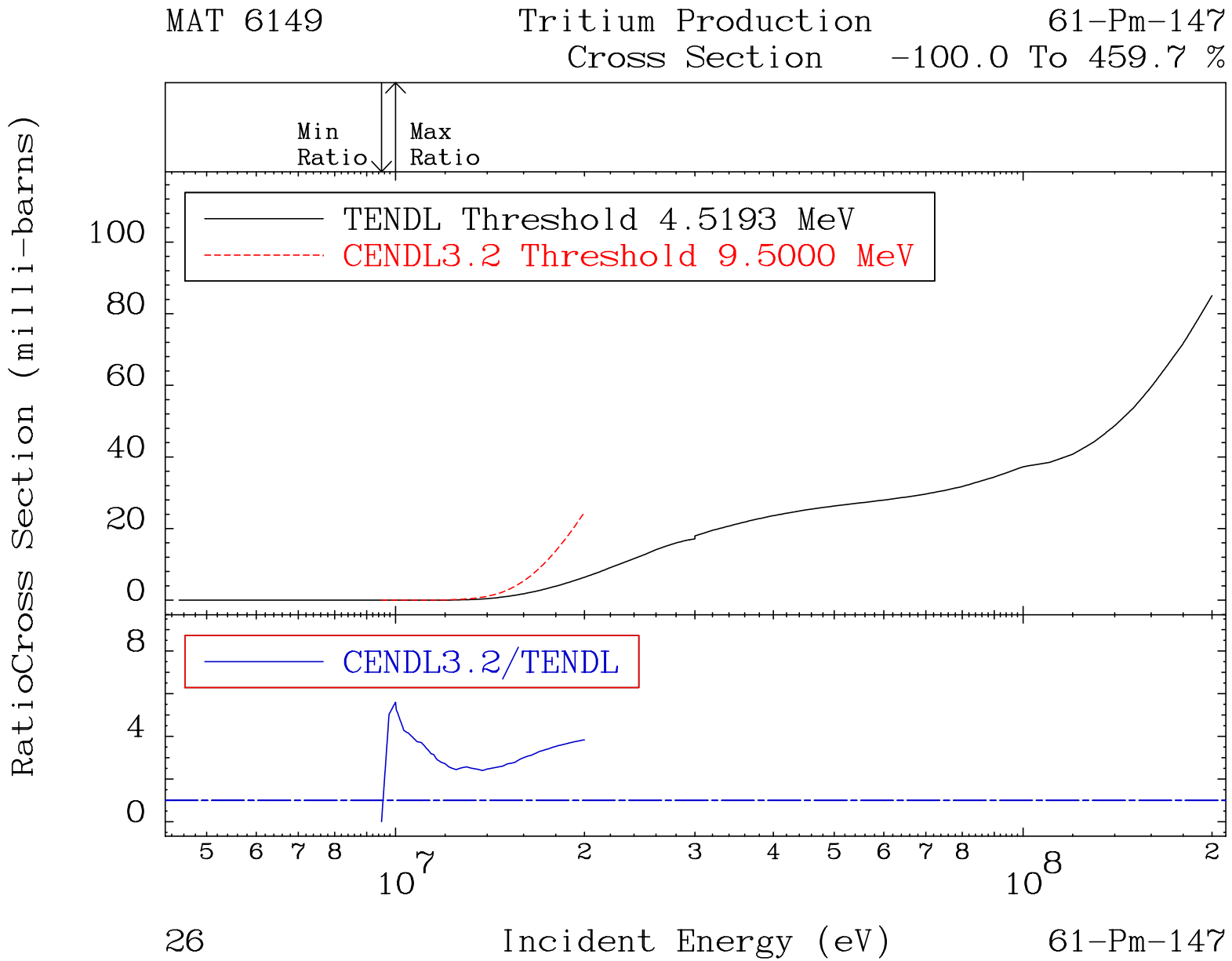

MAT 6149
(n,t)
Cross Section
61-Pm-147
-100.0 To 459.7 %
Min Ratio
Max Ratio
TENDL Threshold 4.5193 MeV
CENDL3.2 Threshold 9.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
61-Pm-147

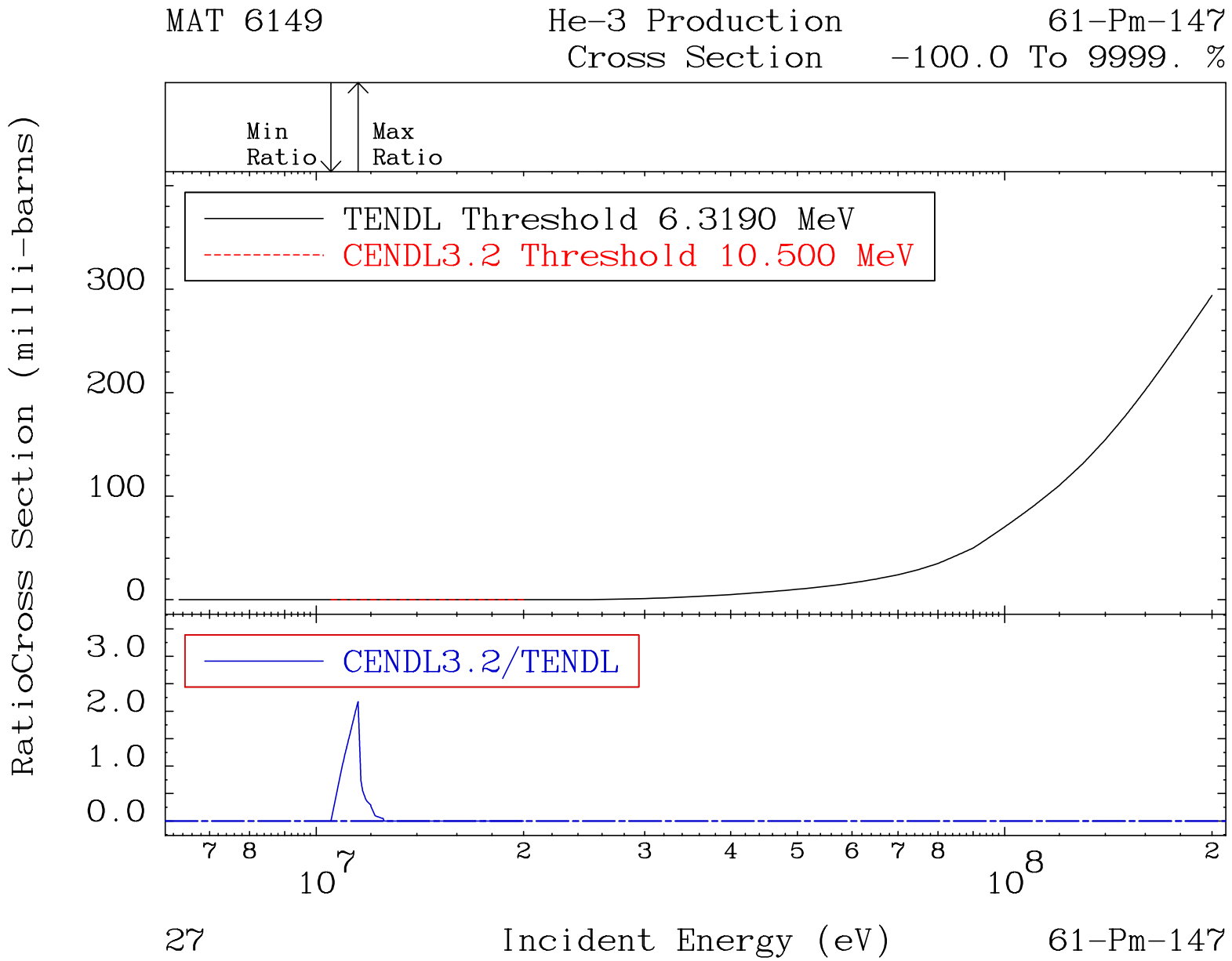

MAT 6149
(n,He-3)
Cross Section
61-Pm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3190 MeV
CENDL3.2 Threshold 10.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
61-Pm-147

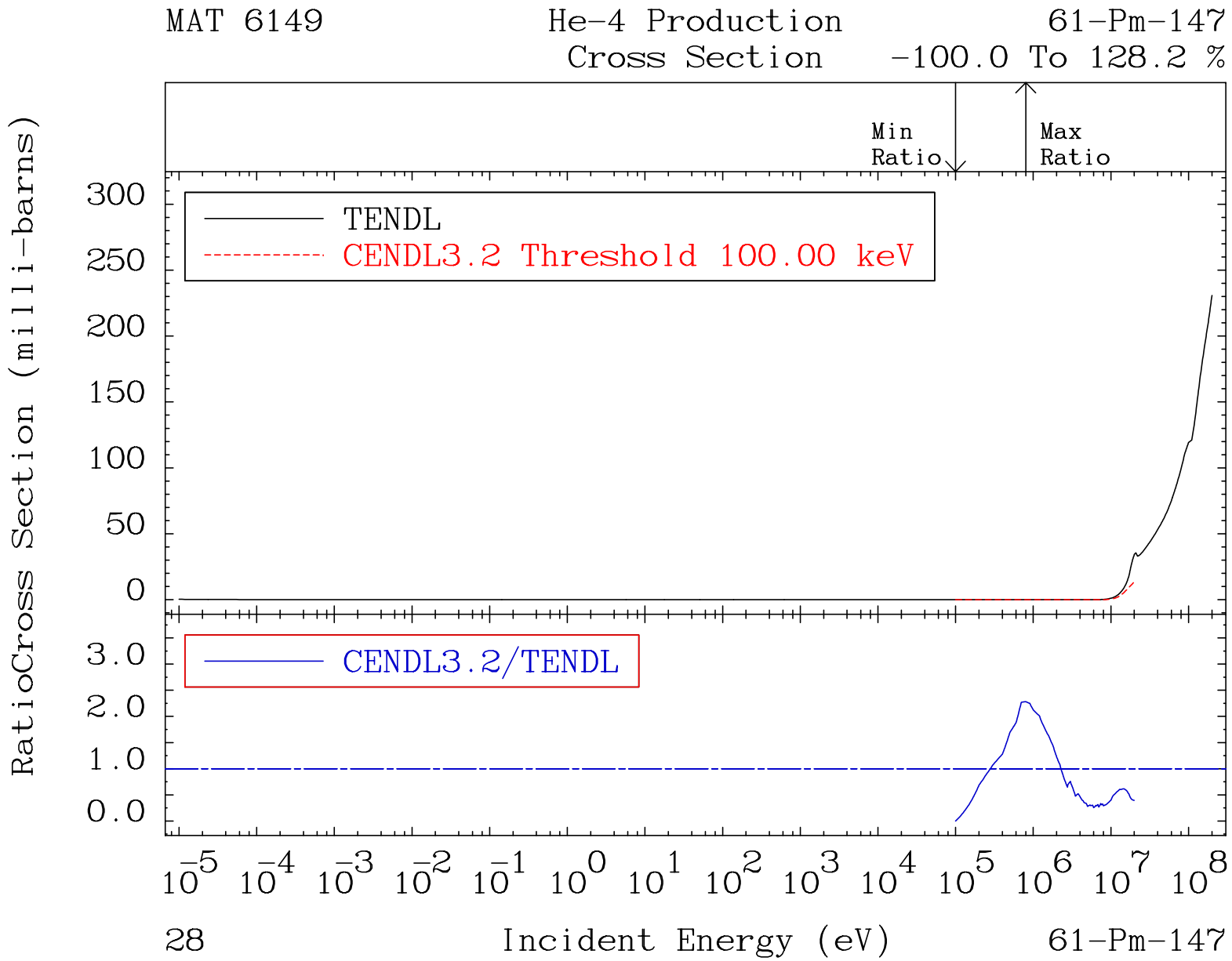

MAT 6149
(n,α)
Cross Section
61-Pm-147
-100.0 To -35.14%
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 2.7500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
23
Incident Energy (eV)
61-Pm-147

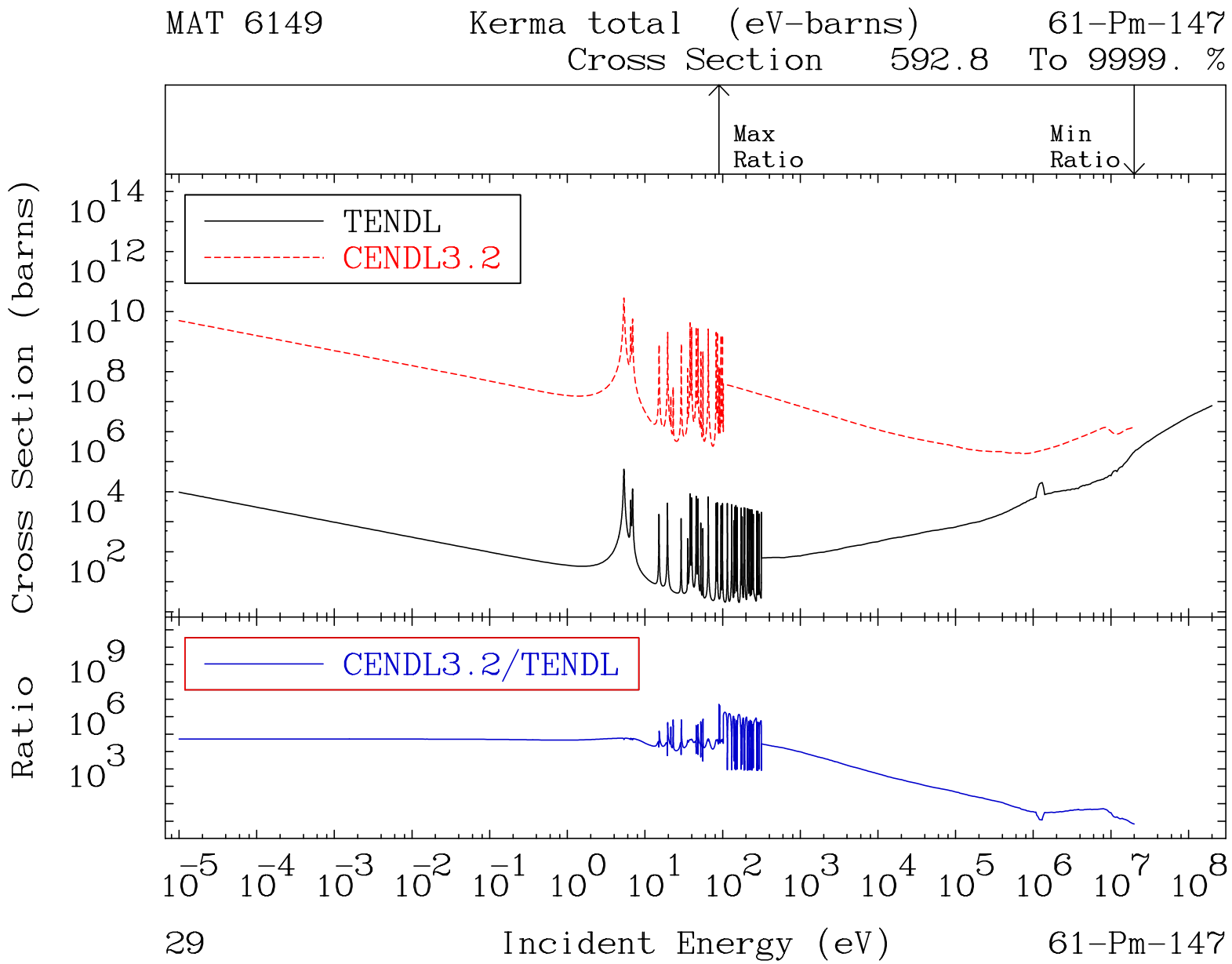

MAT 6149
Hydrogen Production
61-Pm-147
Cross Section -100.0 To 4.448 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 4.5190 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
24
Incident Energy (eV)
61-Pm-147

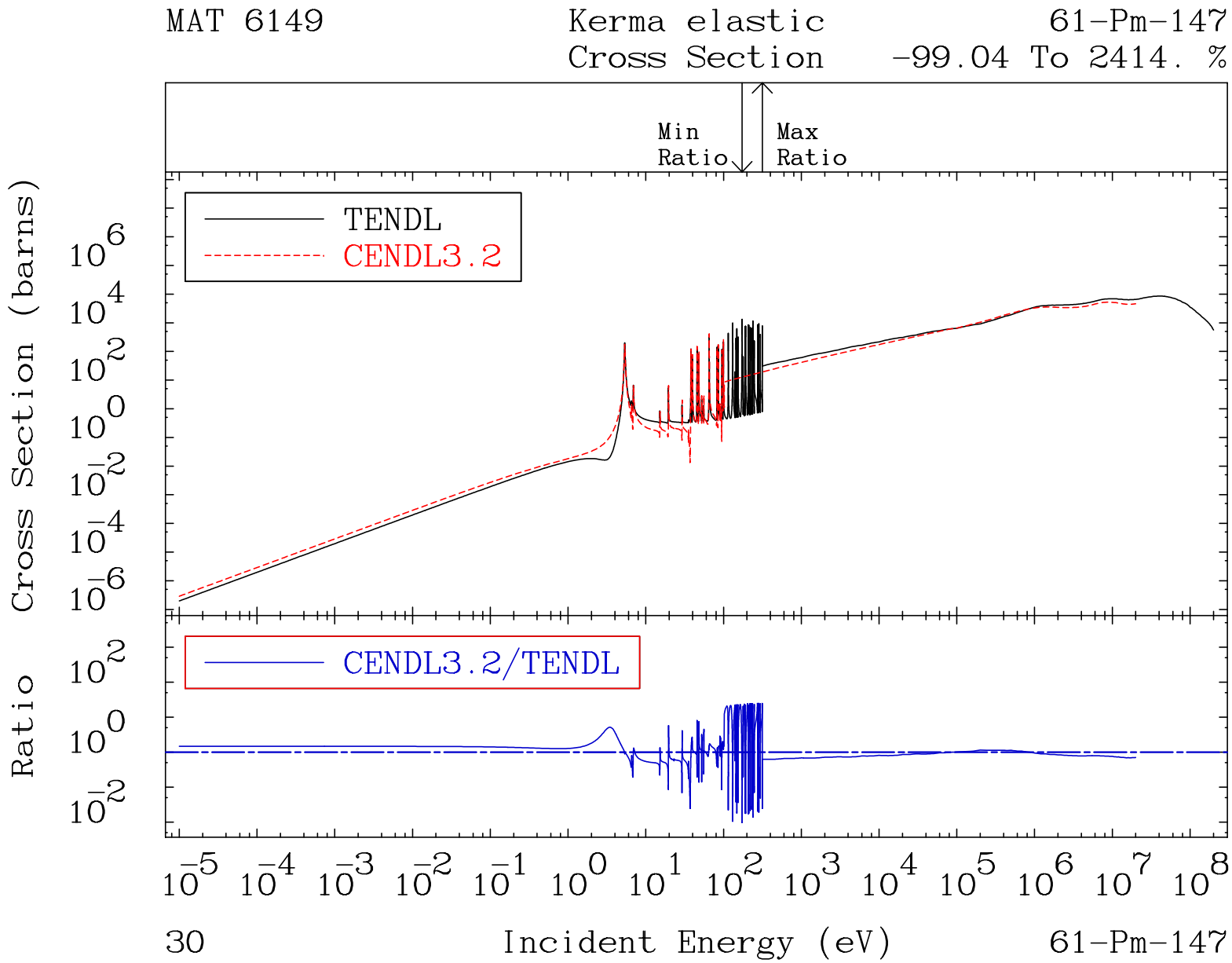

MAT 6149
Deuterium Production
61-Pm-147
Cross Section
-100.0 To 33.05 %
Min Ratio
Max Ratio
TENDL Threshold 2.0121 MeV
CENDL3.2 Threshold 8.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
61-Pm-147

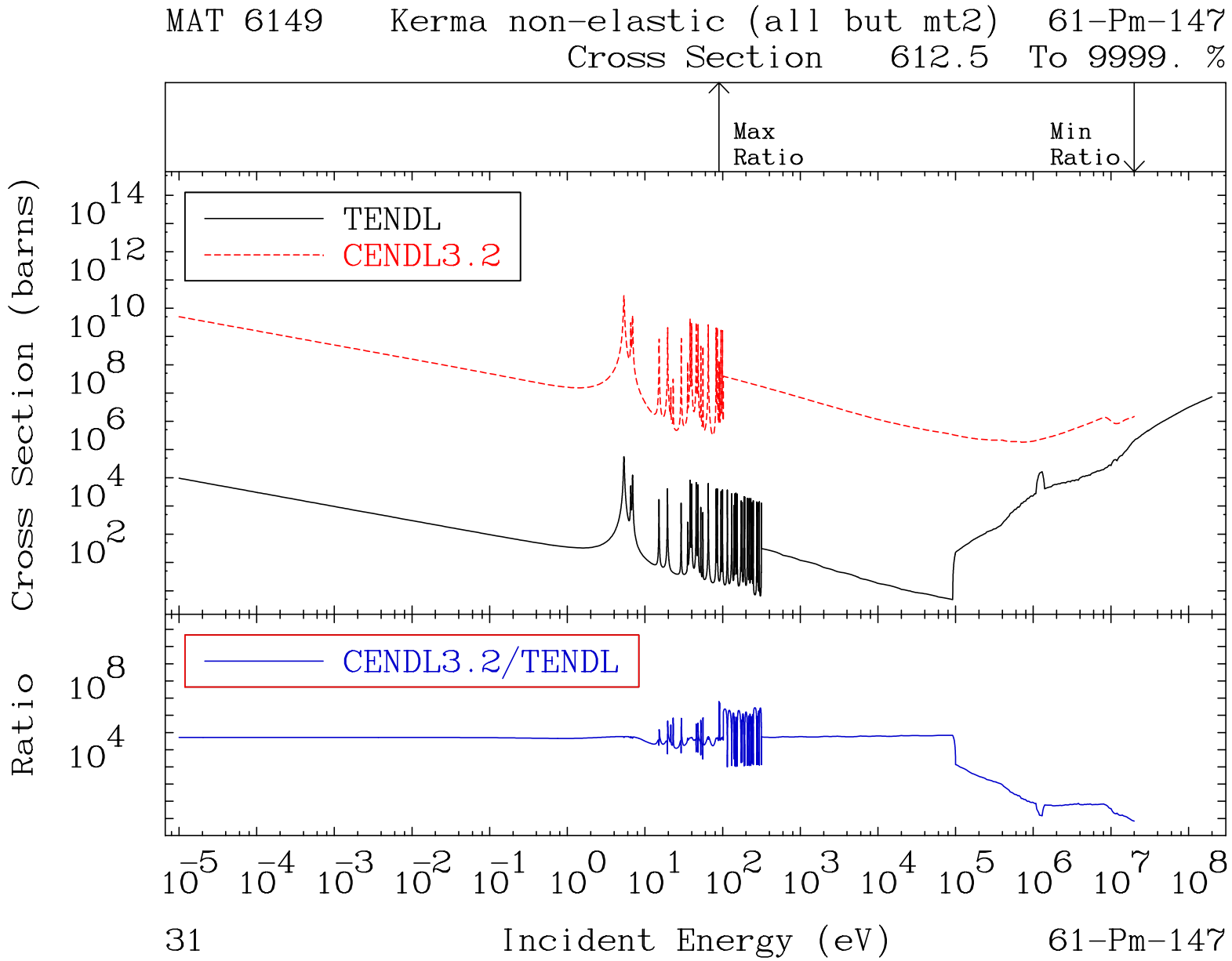

MAT 6149
Tritium Production
61-Pm-147
Cross Section
-100.0 To 459.7 %
Min Ratio
Max Ratio
TENDL Threshold 4.5193 MeV
CENDL3.2 Threshold 9.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
61-Pm-147

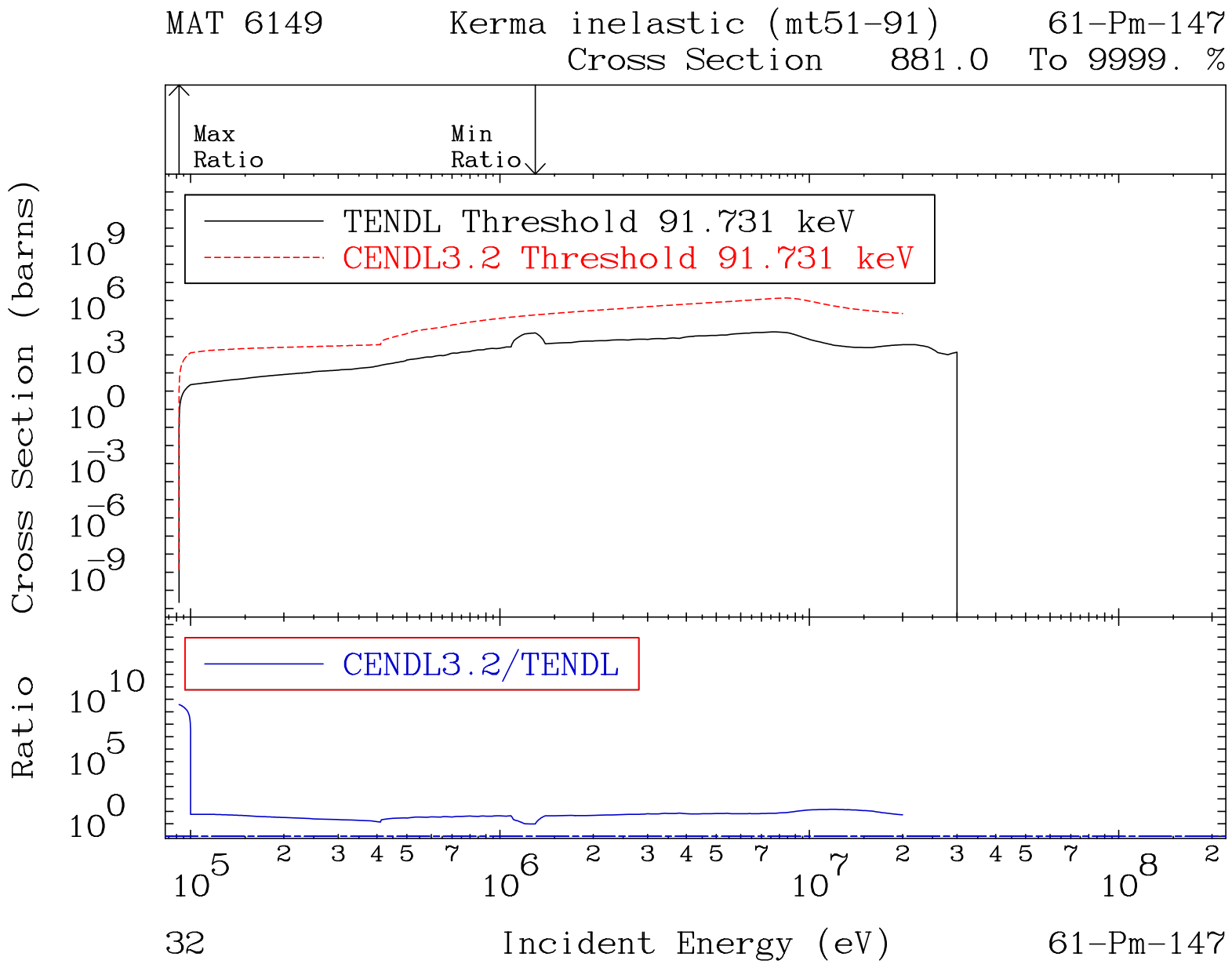

MAT 6149
He-3 Production
61-Pm-147
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3190 MeV
CENDL3.2 Threshold 10.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
200
100
0
3.0
2.0
1.0
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
61-Pm-147

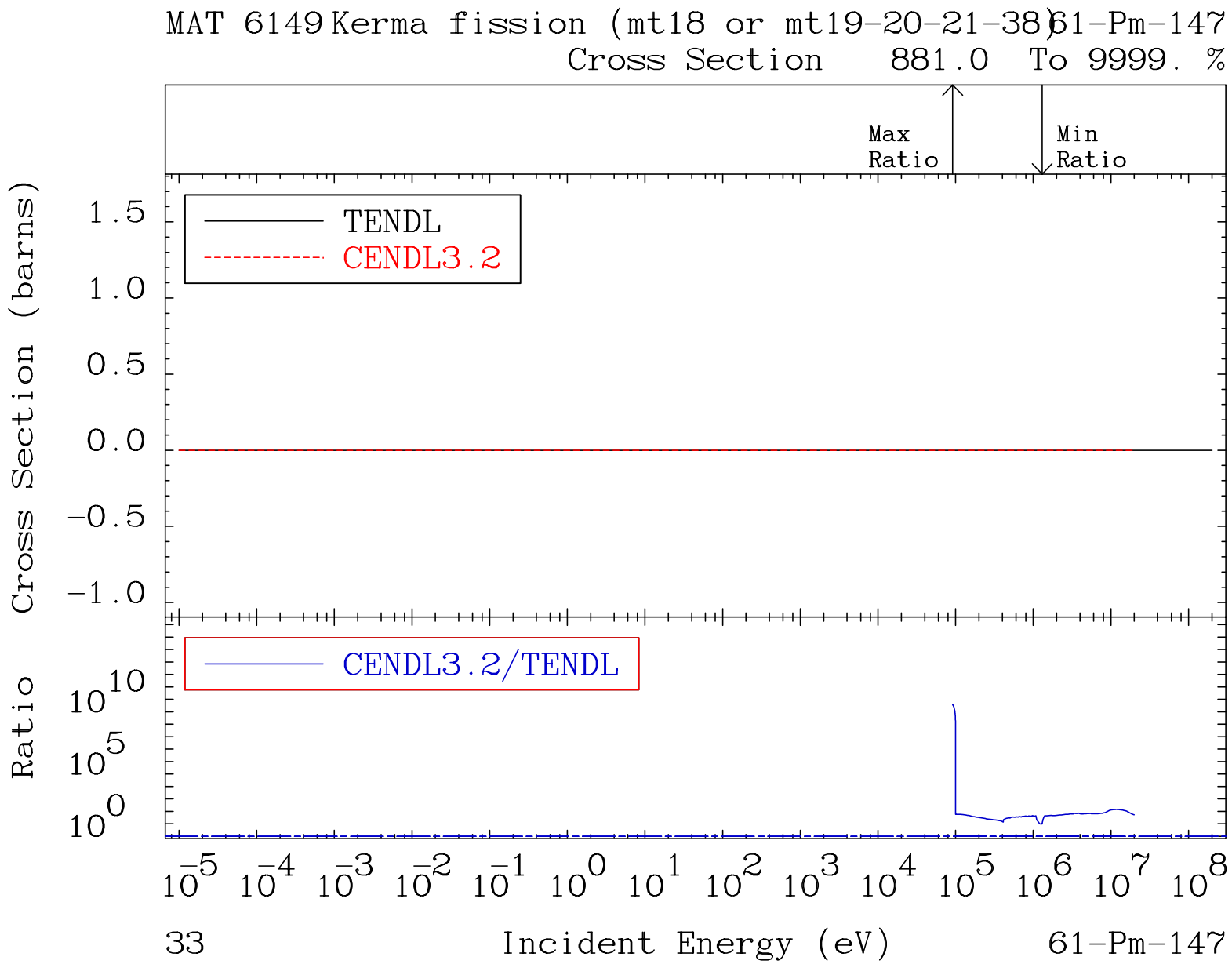

MAT 6149
He-4 Production
Cross Section
61-Pm-147
-100.0 To 128.2 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 100.00 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
3.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
61-Pm-147

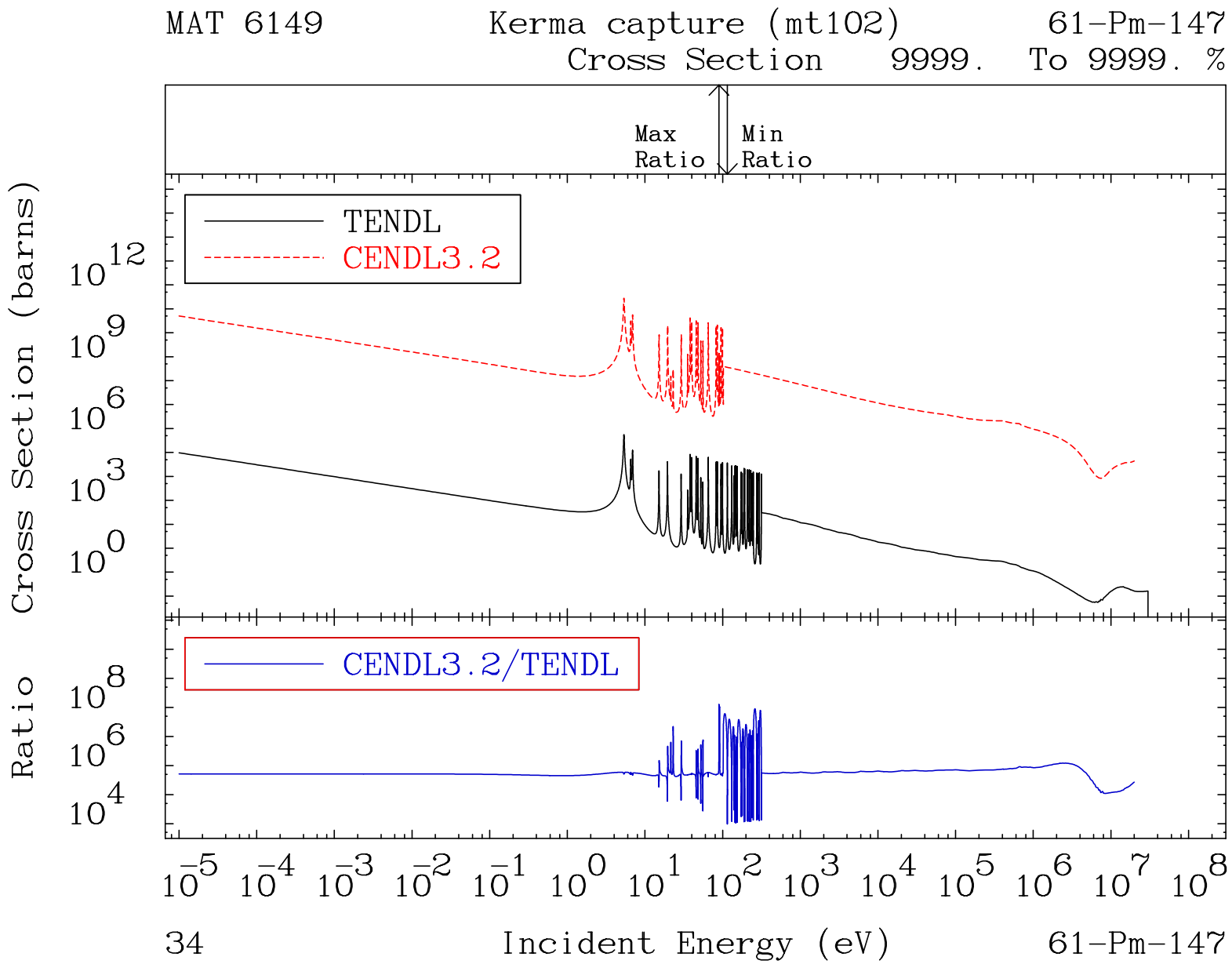

MAT 6149
Kerma total (eV-barns)
61-Pm-147
Cross Section 592.8 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
61-Pm-147

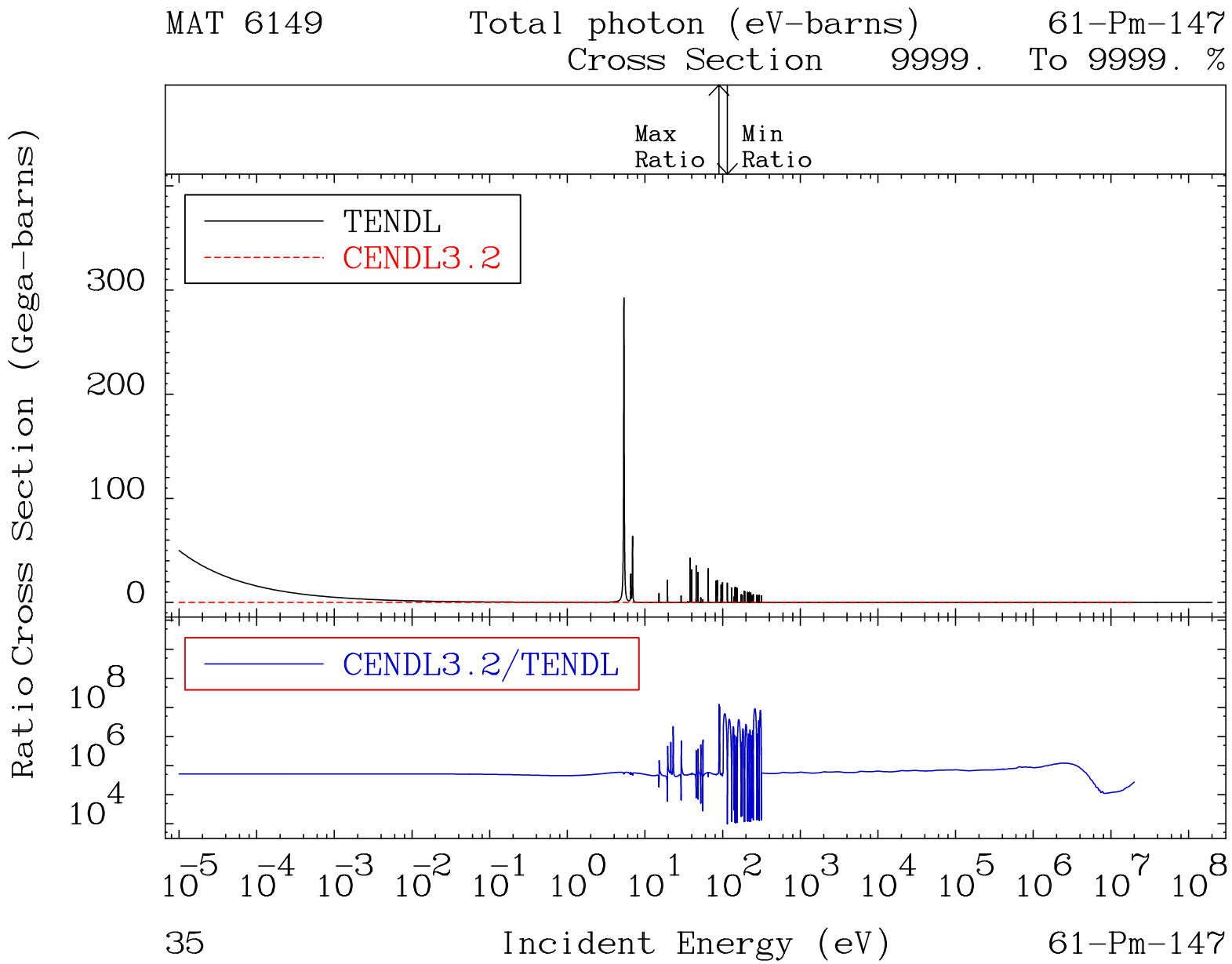

MAT 6149
Kerma elastic
Cross Section
61-Pm-147
-99.04 To 2414. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
61-Pm-147

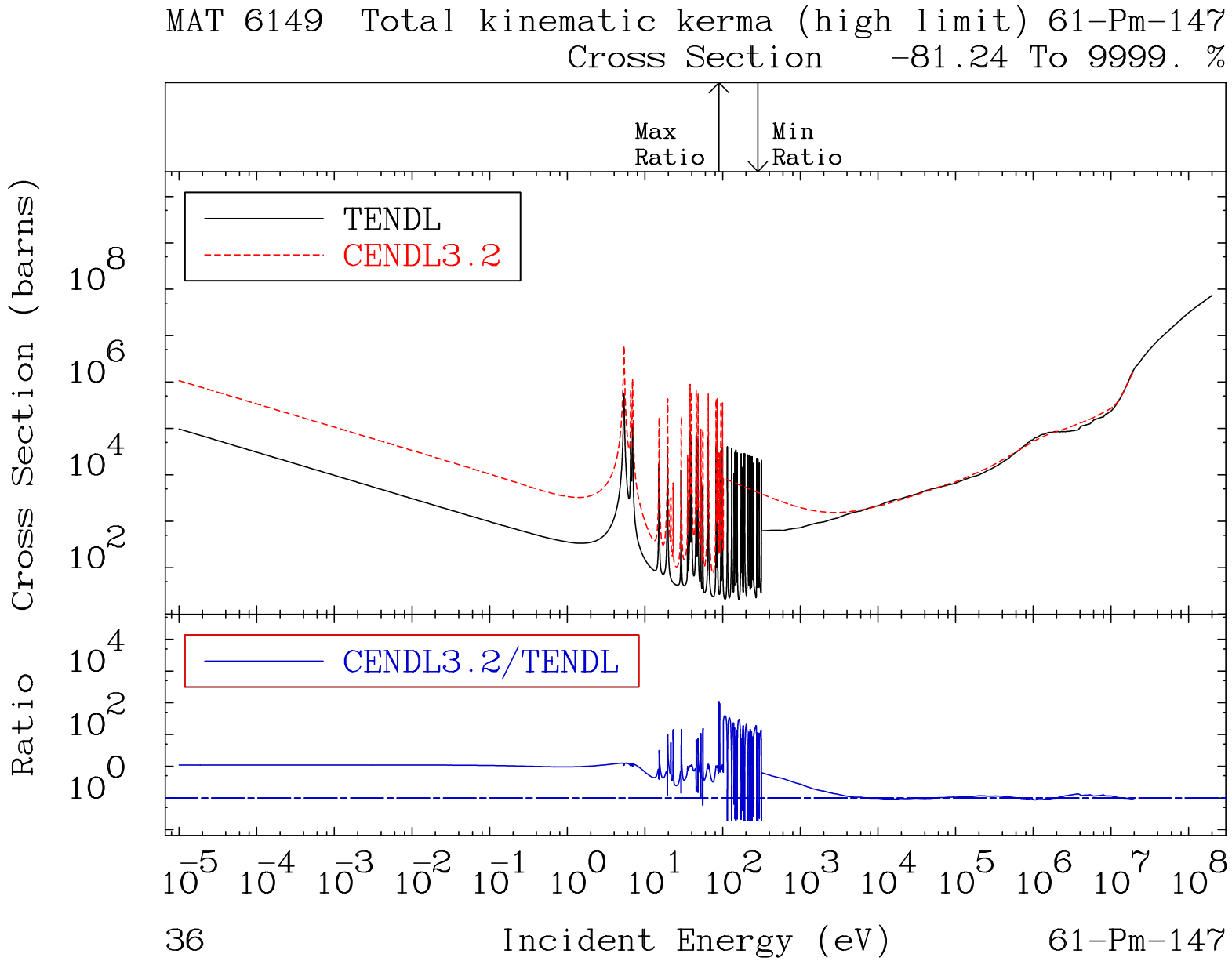

MAT 6149 Kerma non-elastic (all but mt2) 61-Pm-147
Cross Section 612.5 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
61-Pm-147

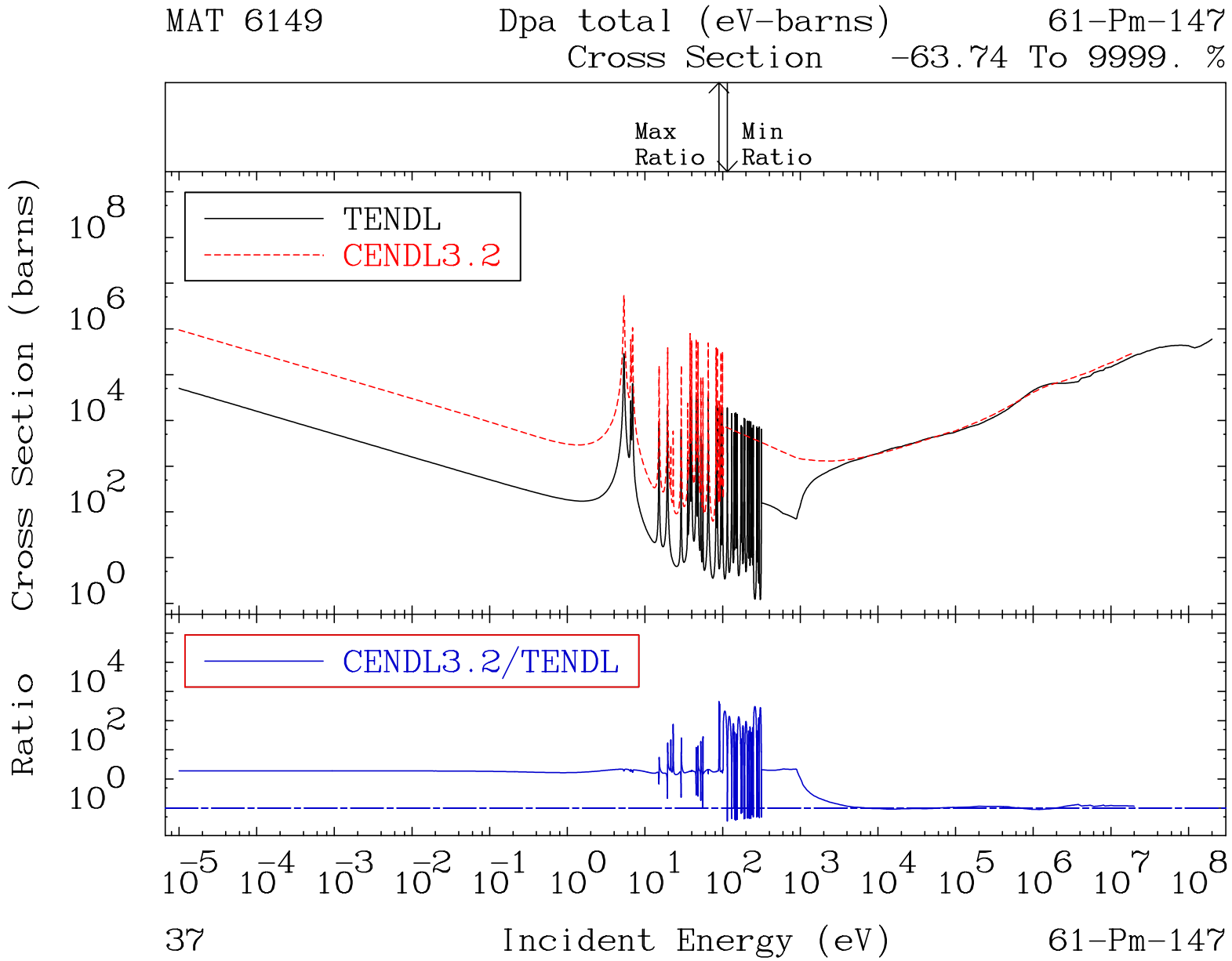

MAT 6149
Kerma inelastic (mt51-91)
61-Pm-147
Cross Section 881.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 91.731 keV
CENDL3.2 Threshold 91.731 keV
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
32
61-Pm-147

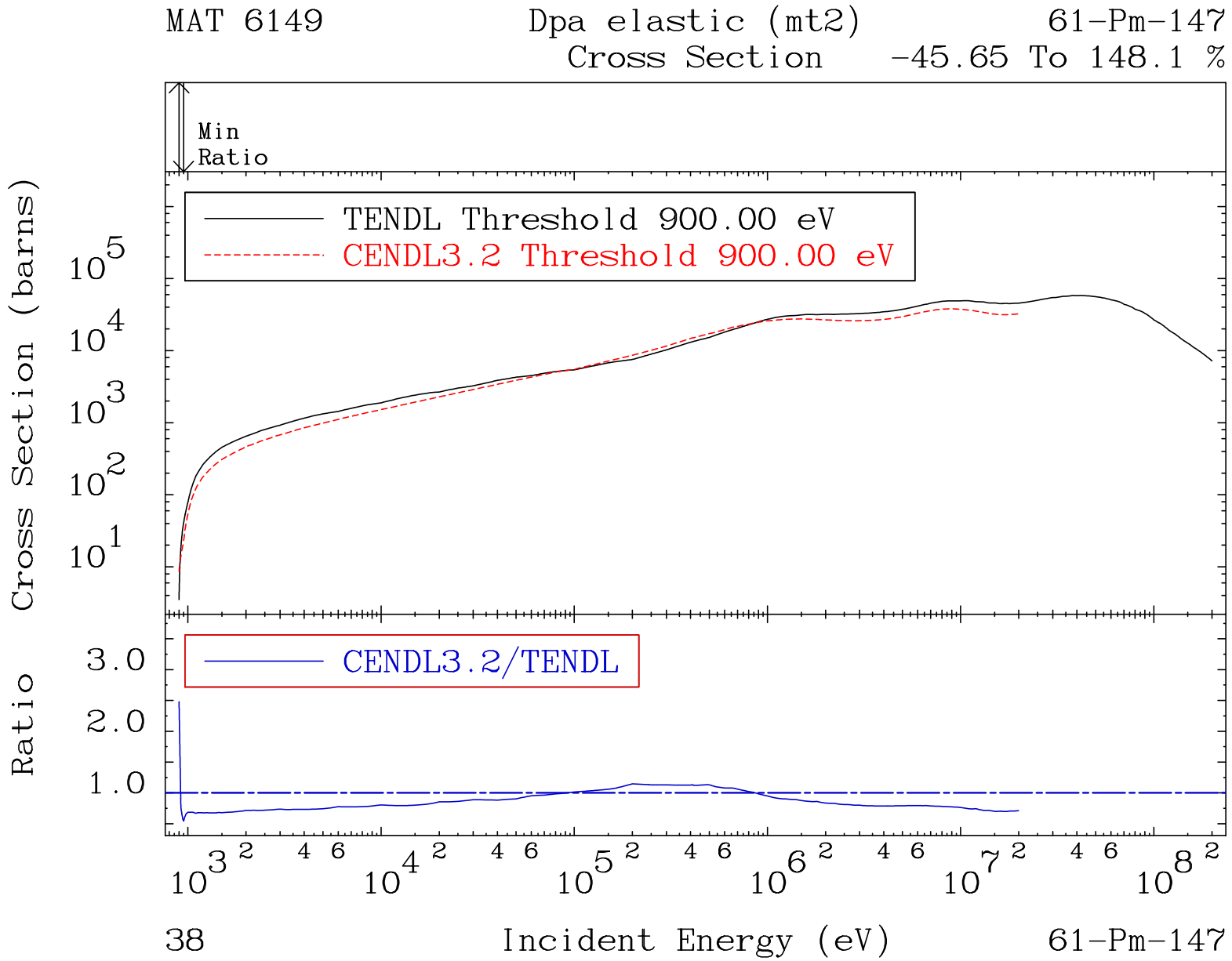

MAT 6149 Kerma fission (mt18 or mt19-20-21-38) 61-Pm-147
Cross Section 881.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
$10^{10}$
$10^{5}$
$10^{0}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
33
Incident Energy (eV)
61-Pm-147

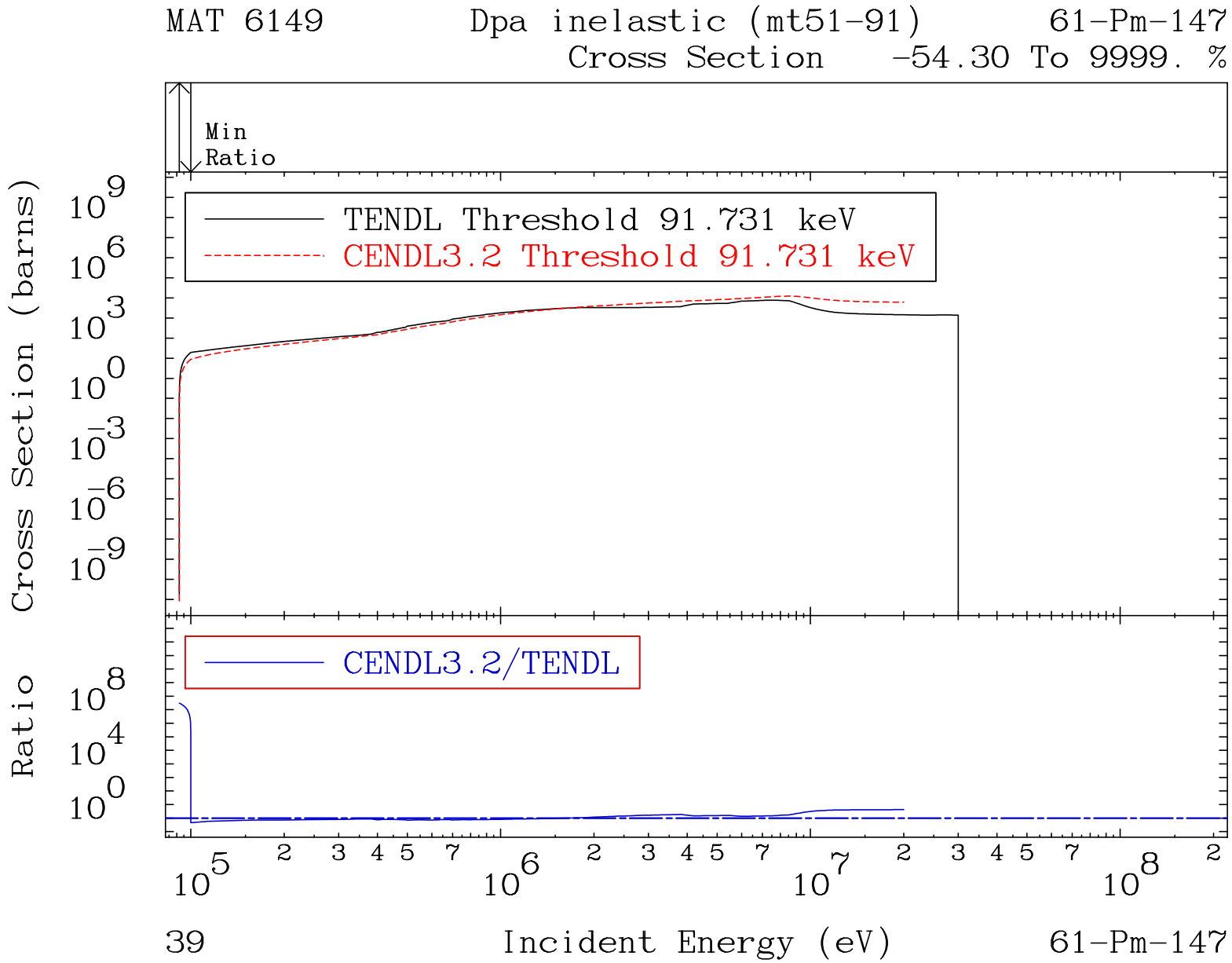

MAT 6149
Kerma capture (mt102)
61-Pm-147
Cross Section 9999. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
$10^{12}$
$10^{9}$
$10^{6}$
$10^{3}$
$10^{0}$
CENDL3.2/TENDL
Ratio
$10^{8}$
$10^{6}$
$10^{4}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
34
Incident Energy (eV)
61-Pm-147

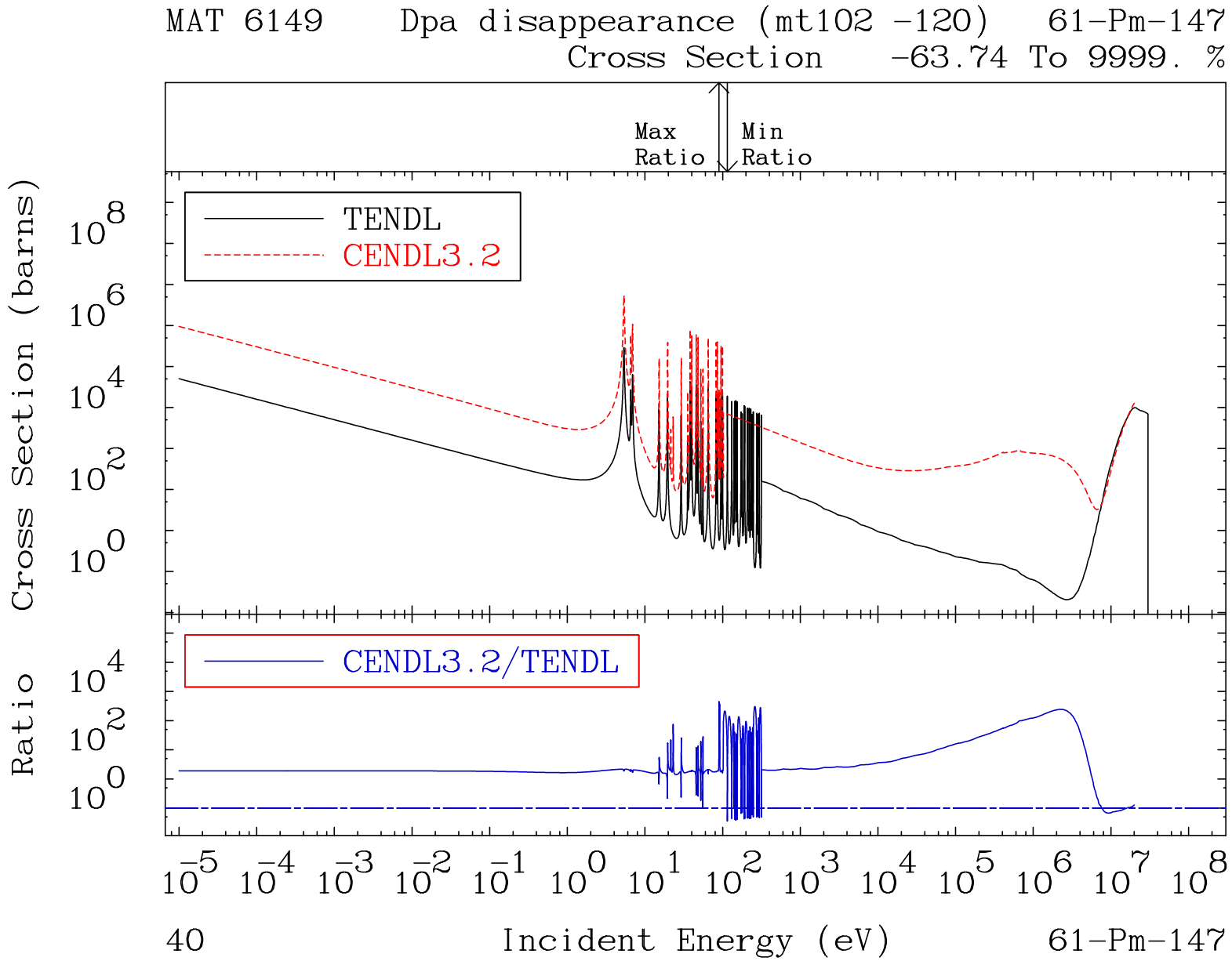

MAT 6149
Total photon (eV-barns)
61-Pm-147
Cross Section 9999. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Ratio Cross Section (Giga-barns)
300
200
100
0
10^8
10^6
10^4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
35
Incident Energy (eV)
61-Pm-147

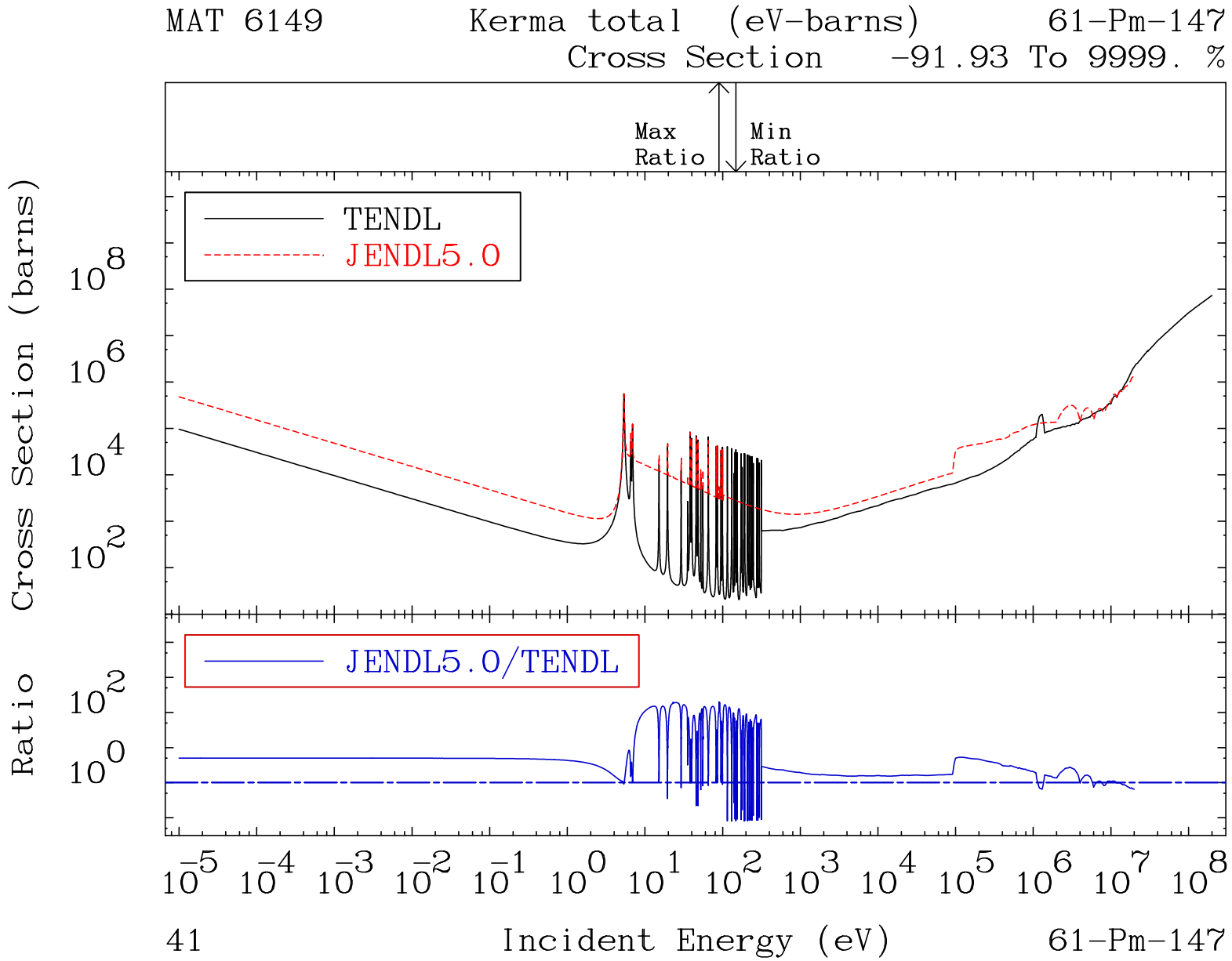

MAT 6149 Total kinematic kerma (high limit) 61-Pm-147
Cross Section -81.24 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
61-Pm-147

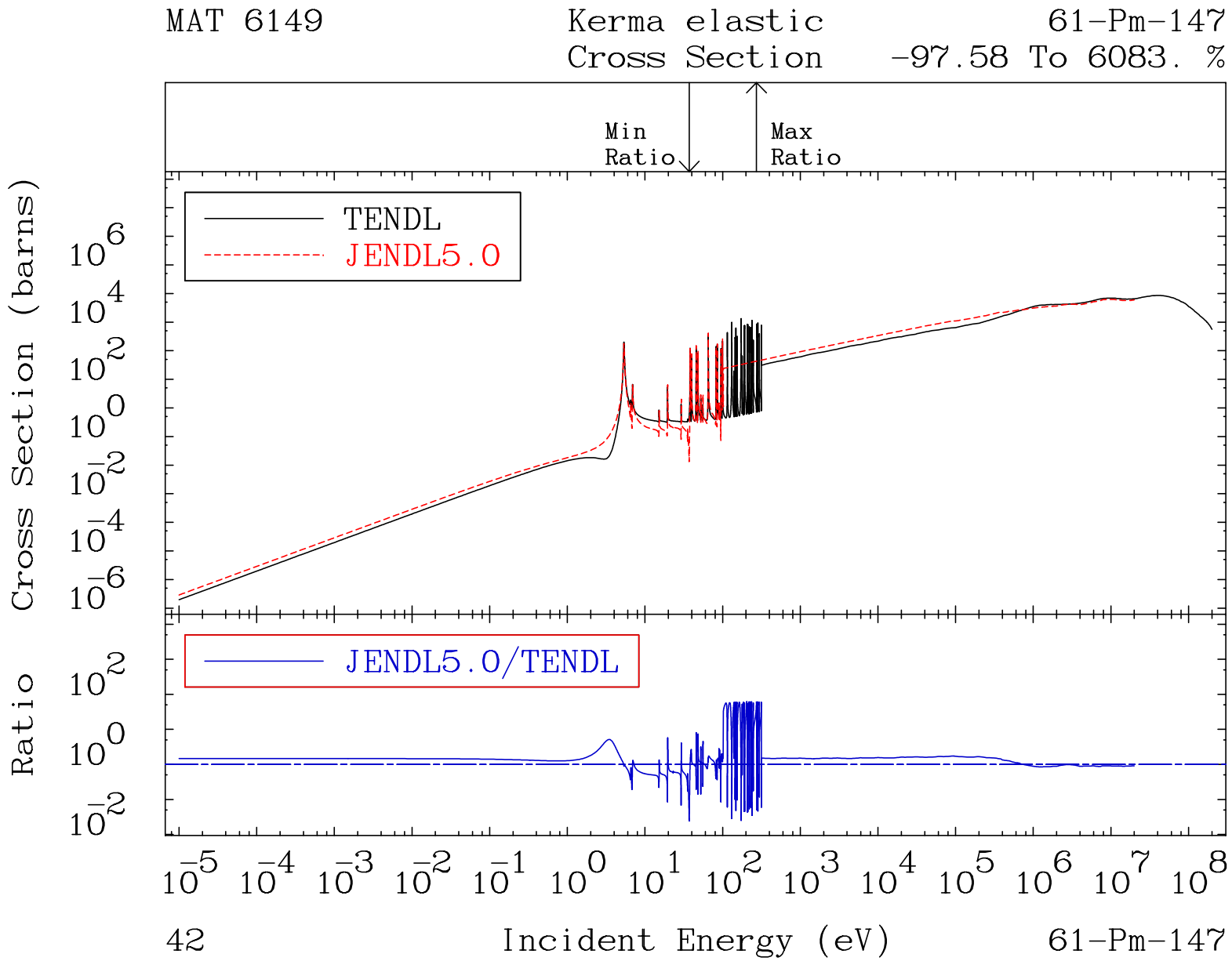

MAT 6149
Dpa total (eV-barns)
61-Pm-147
Cross Section -63.74 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
61-Pm-147

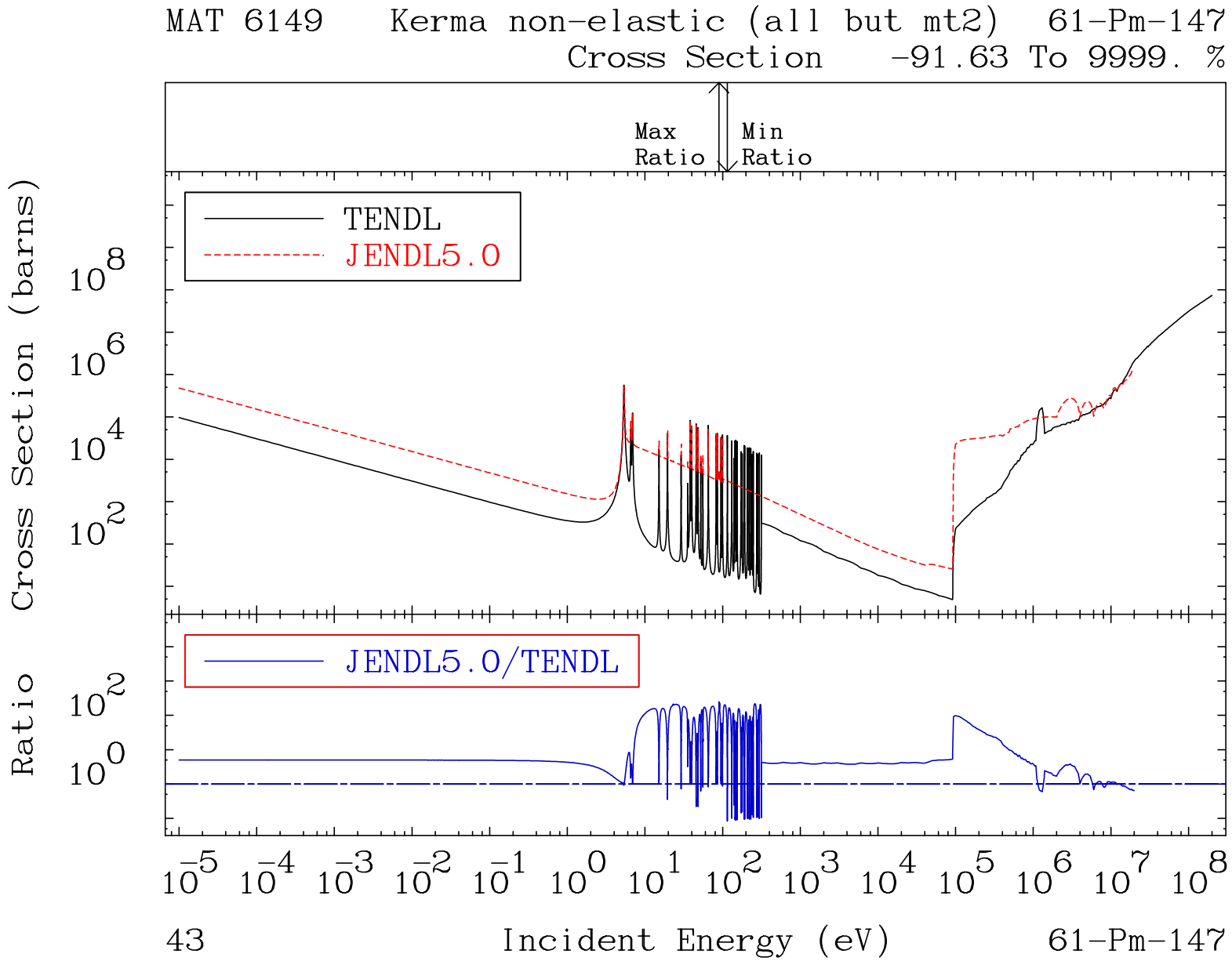

MAT 6149
Dpa elastic (mt2)
Cross Section
61-Pm-147
-45.65 To 148.1 %
Min
Ratio
TENDL Threshold 900.00 eV
CENDL3.2 Threshold 900.00 eV
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
38
61-Pm-147

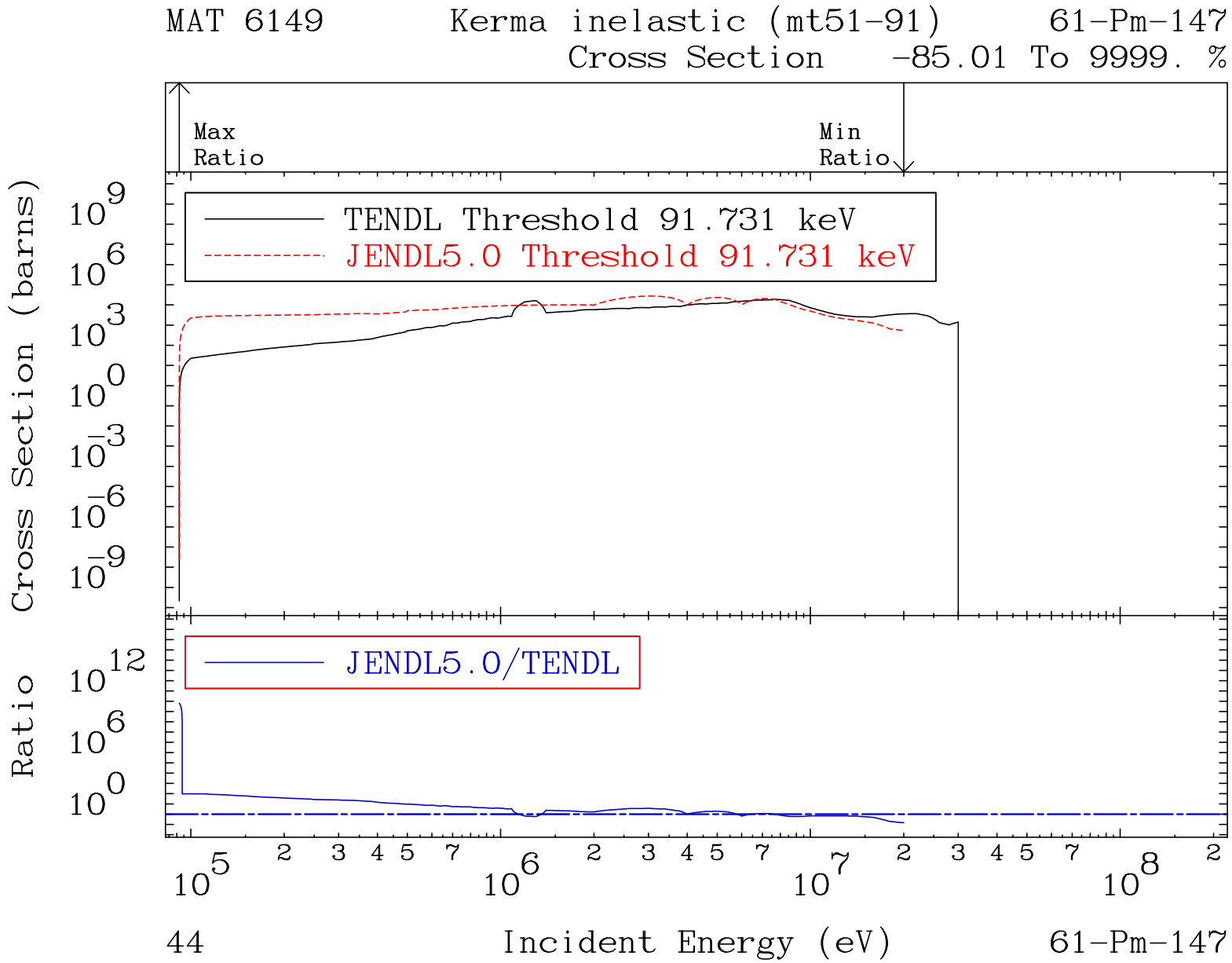

MAT 6149
Dpa inelastic (mt51-91)
61-Pm-147
Cross Section -54.30 To 9999. %
Min
Ratio
TENDL Threshold 91.731 keV
CENDL3.2 Threshold 91.731 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
61-Pm-147

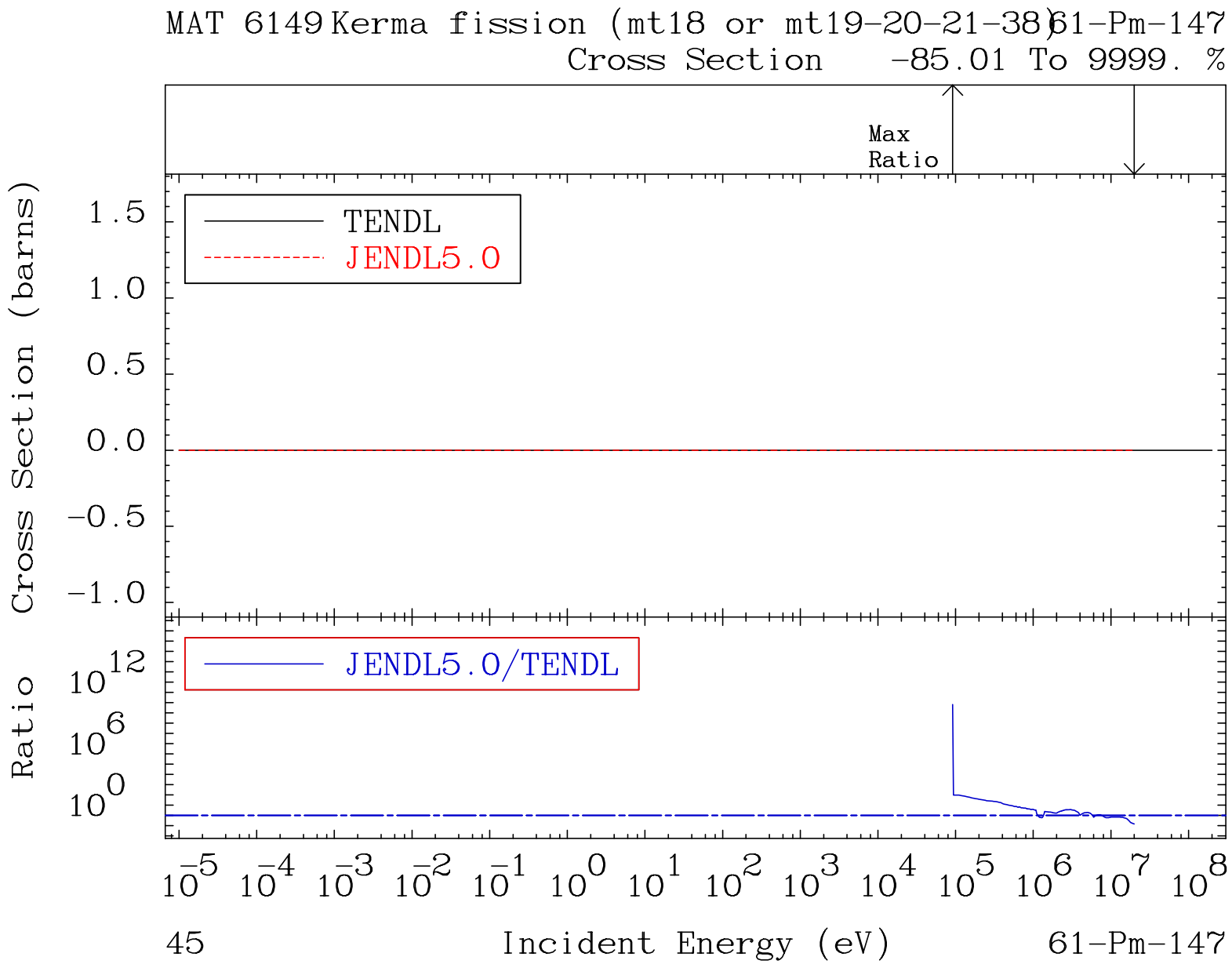

MAT 6149 Dpa disappearance (mt102 -120) 61-Pm-147
Cross Section -63.74 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
40
61-Pm-147

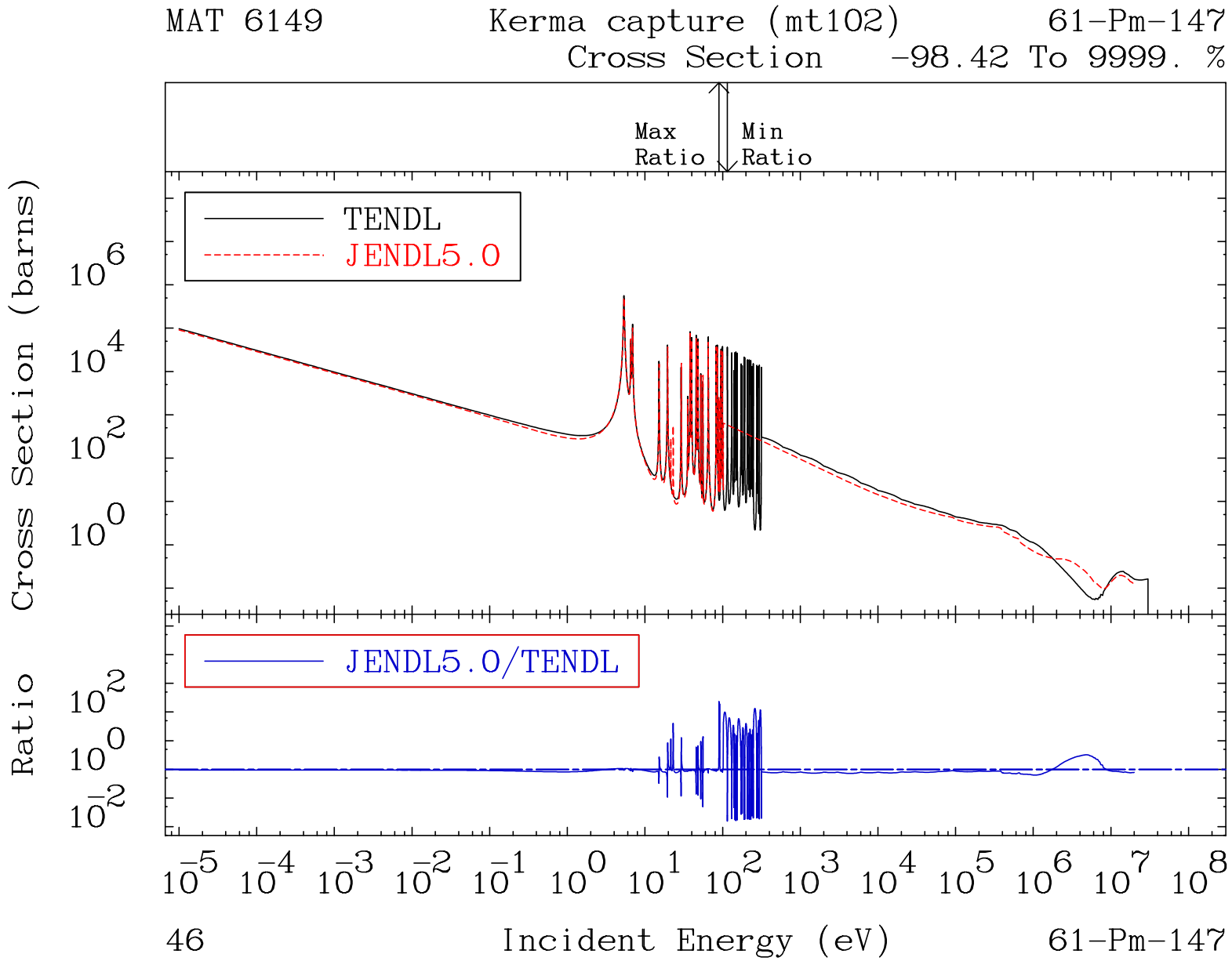

MAT 6149
Kerma total (eV-barns)
61-Pm-147
Cross Section -91.93 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
41
61-Pm-147

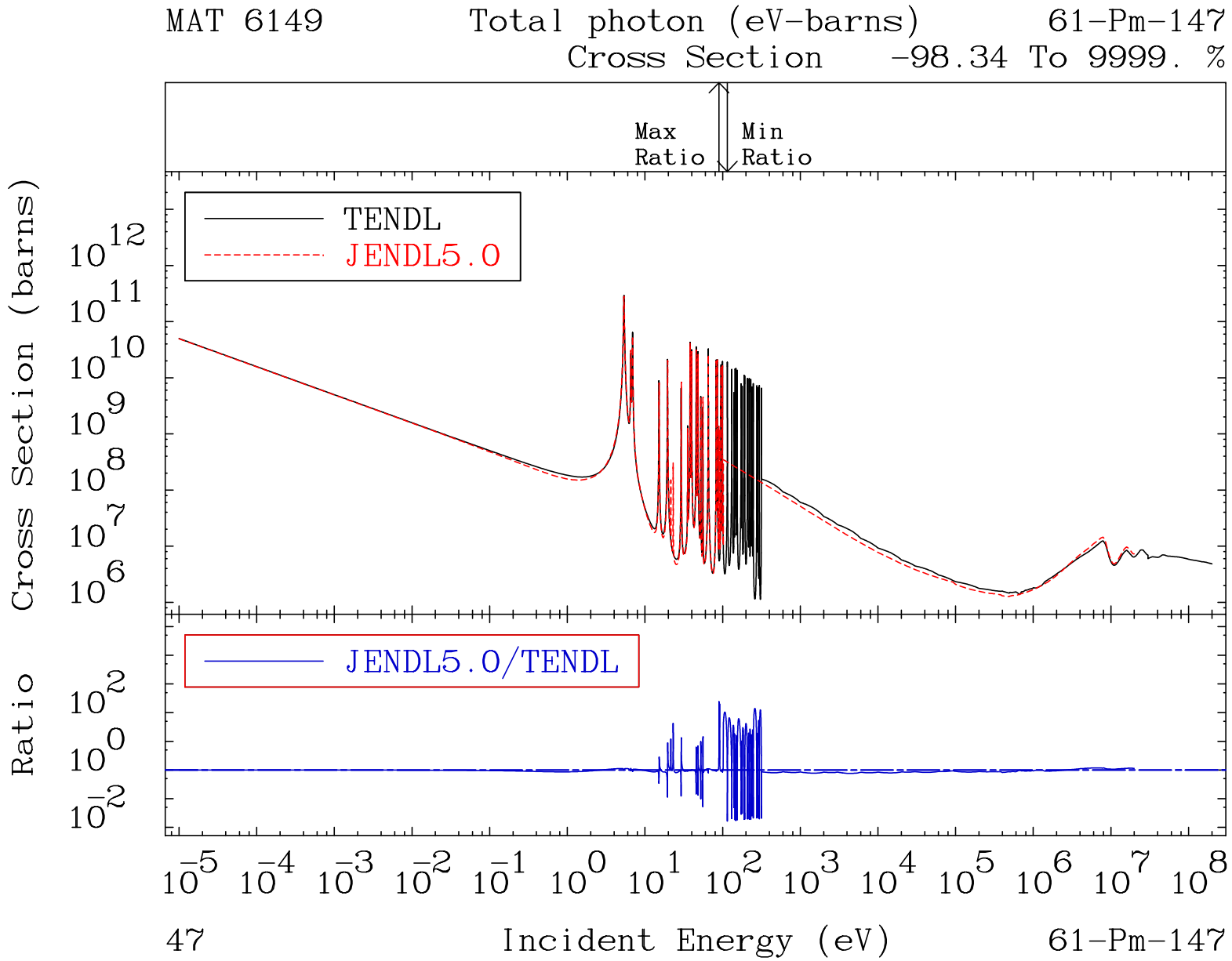

MAT 6149
Kerma elastic
Cross Section
61-Pm-147
-97.58 To 6083. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
61-Pm-147

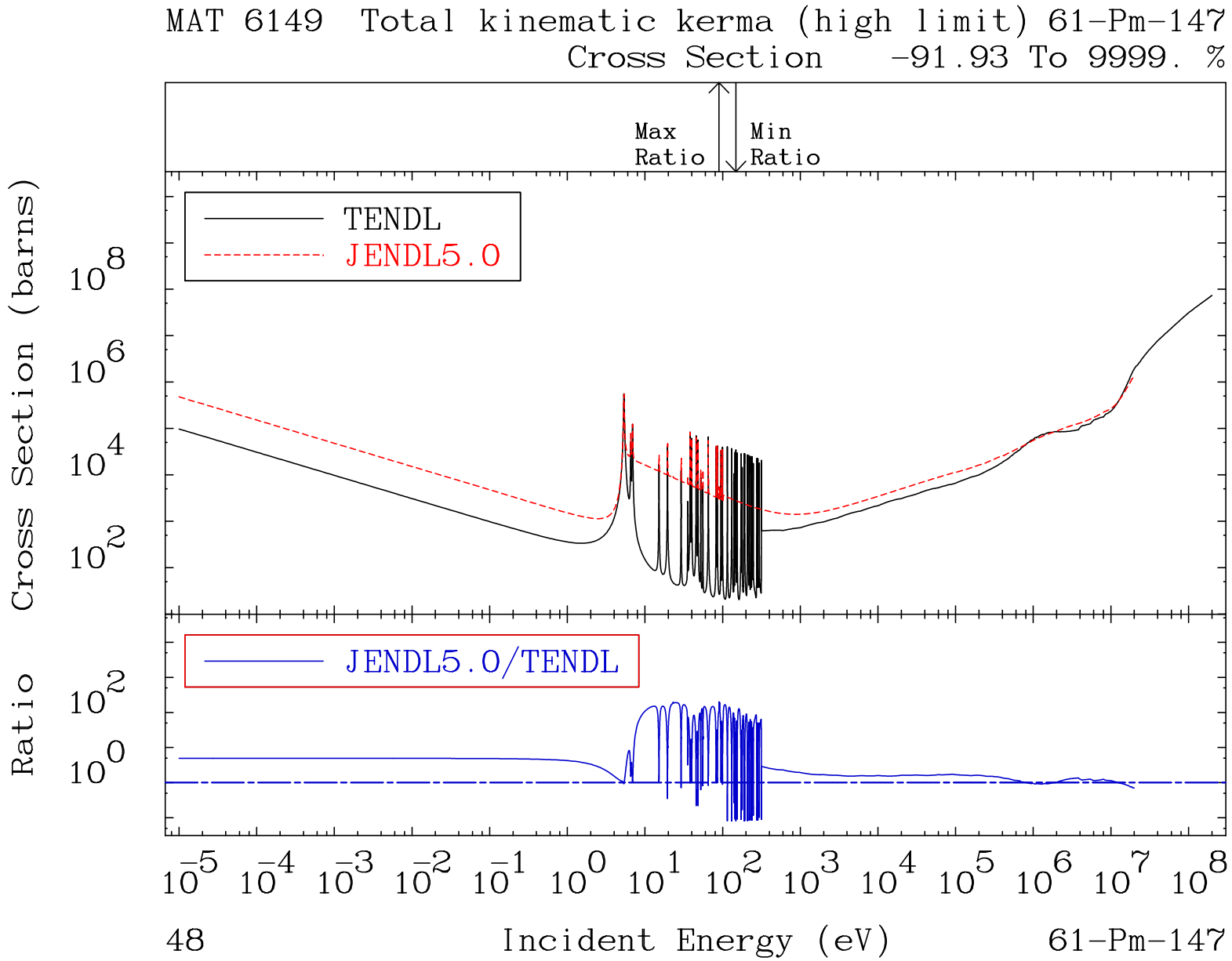

MAT 6149 Kerma non-elastic (all but mt2) 61-Pm-147
Cross Section -91.63 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
43
61-Pm-147

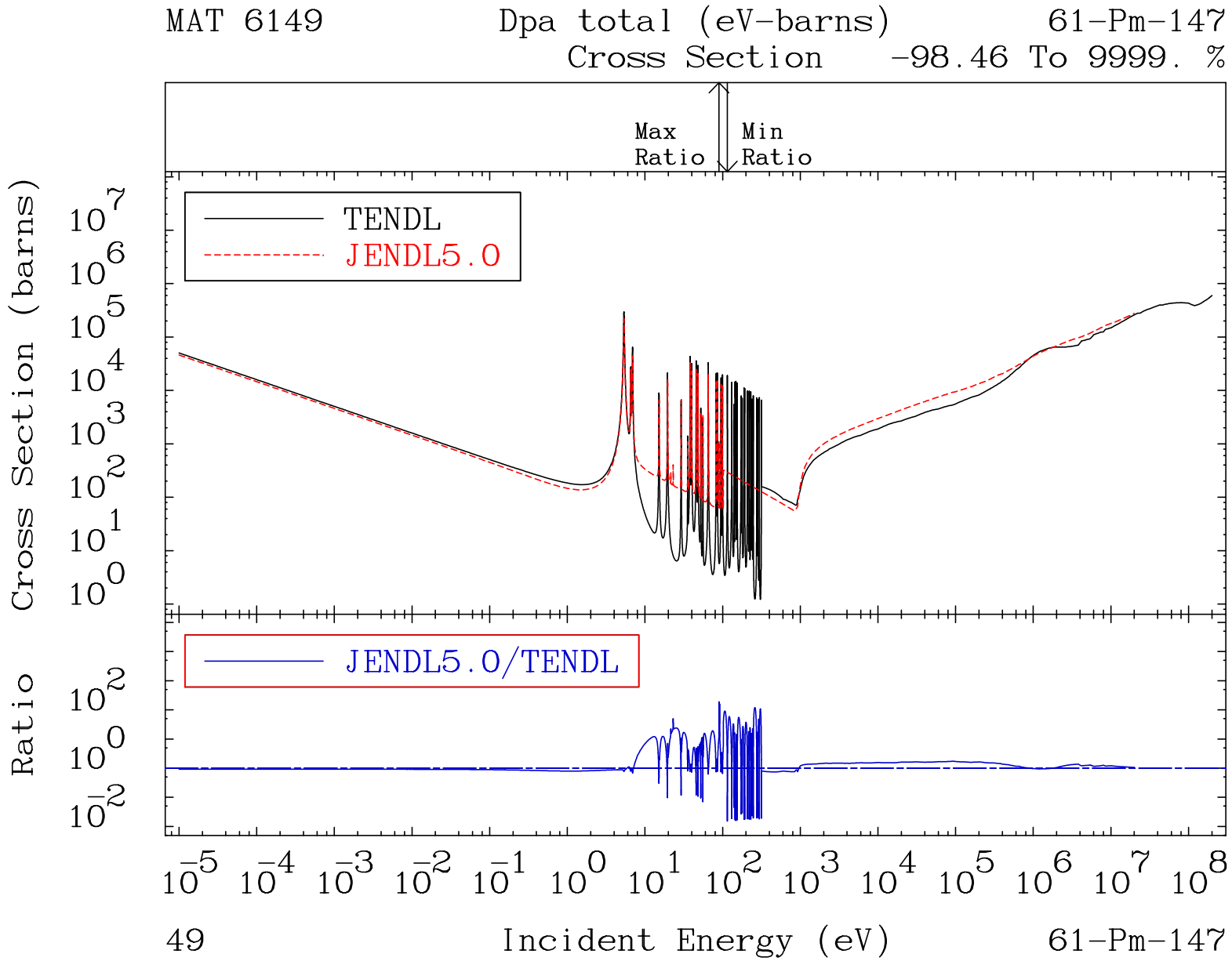

MAT 6149
Kerma inelastic (mt51-91)
61-Pm-147
Cross Section -85.01 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 91.731 keV
JENDL5.0 Threshold 91.731 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
44
61-Pm-147

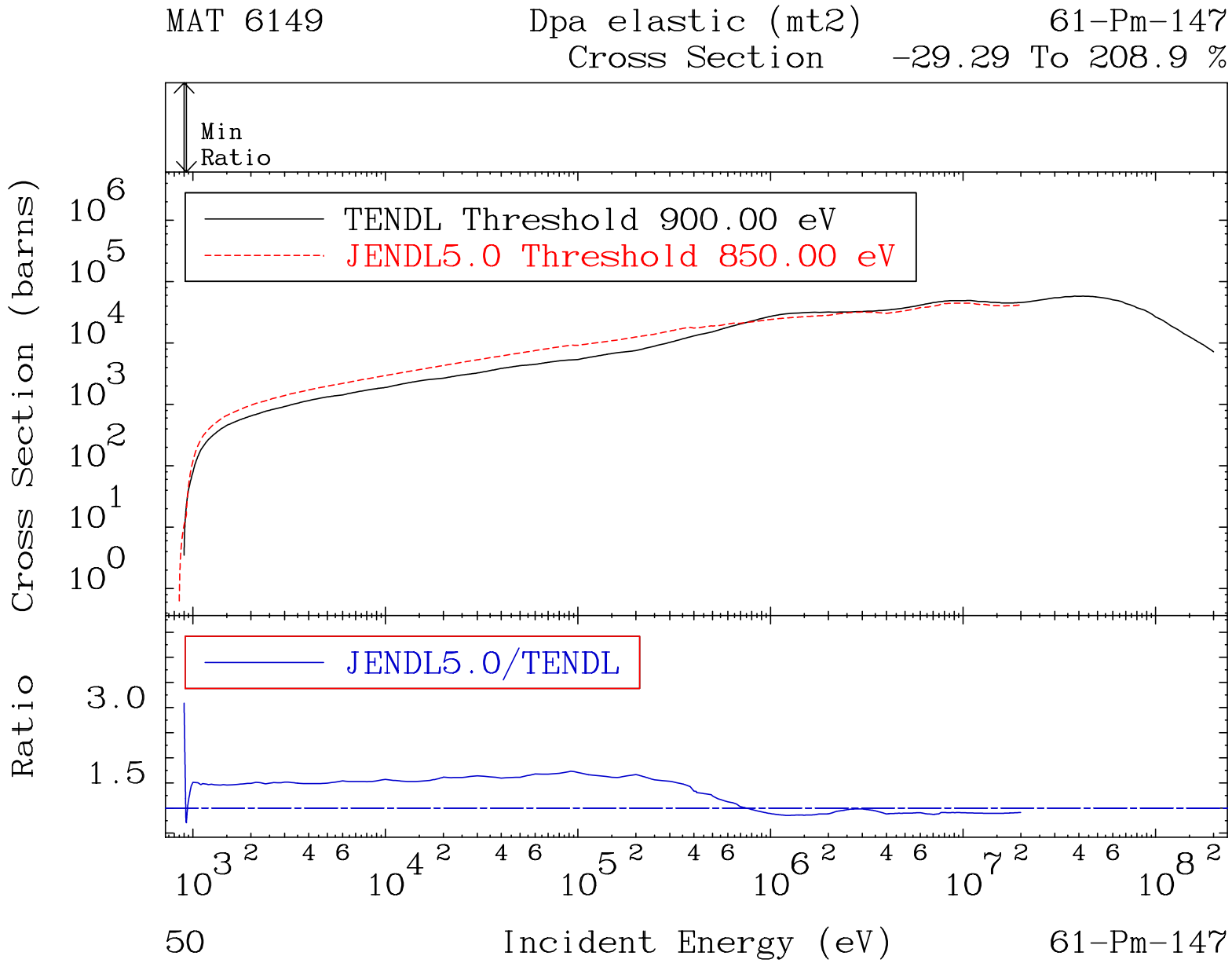

MAT 6149 Kerma fission (mt18 or mt19-20-21-38) 61-Pm-147
Cross Section -85.01 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
$10^{12}$
$10^{6}$
$10^{0}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
45
Incident Energy (eV)
61-Pm-147

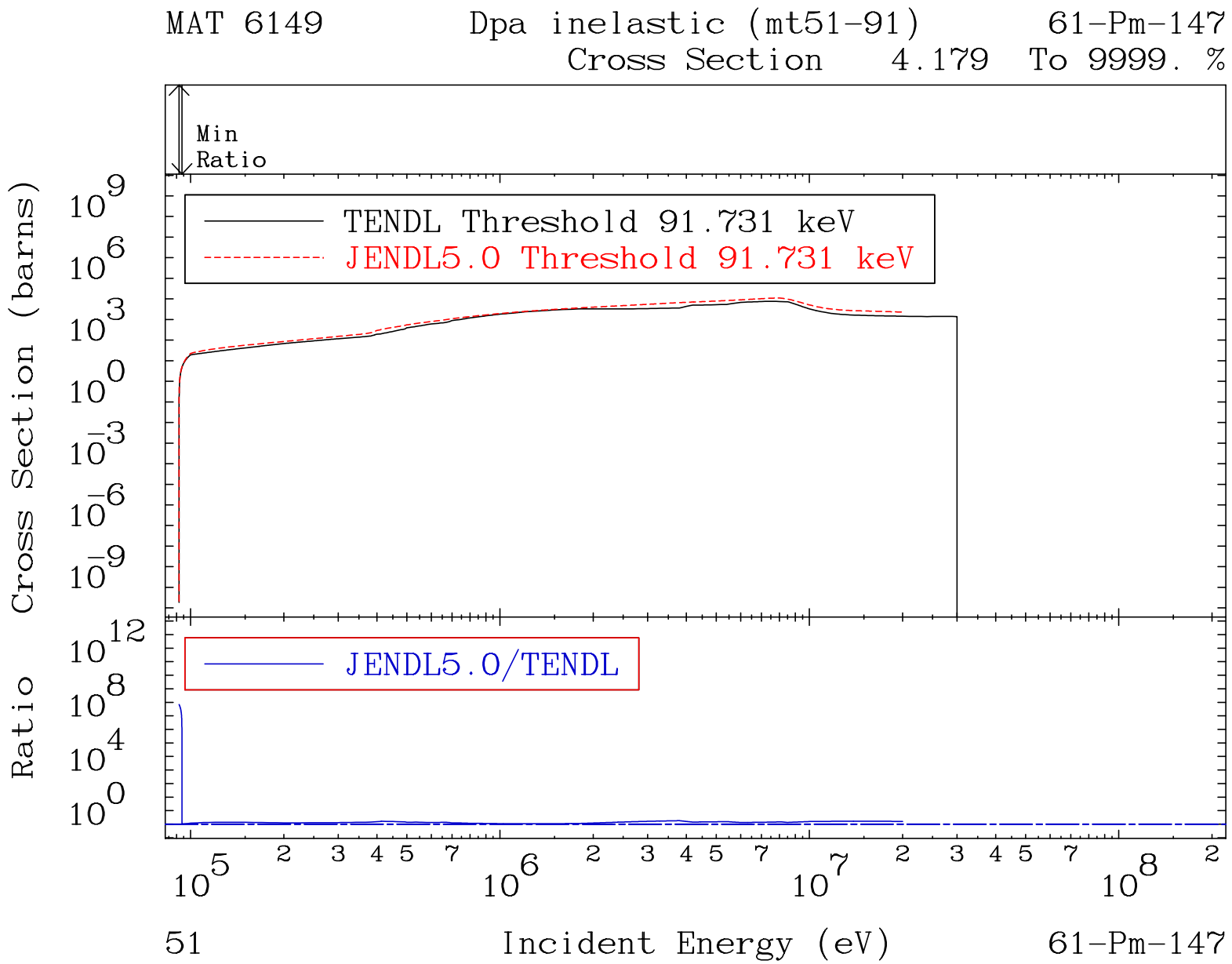

MAT 6149
Kerma capture (mt102)
61-Pm-147
Cross Section -98.42 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
46
61-Pm-147

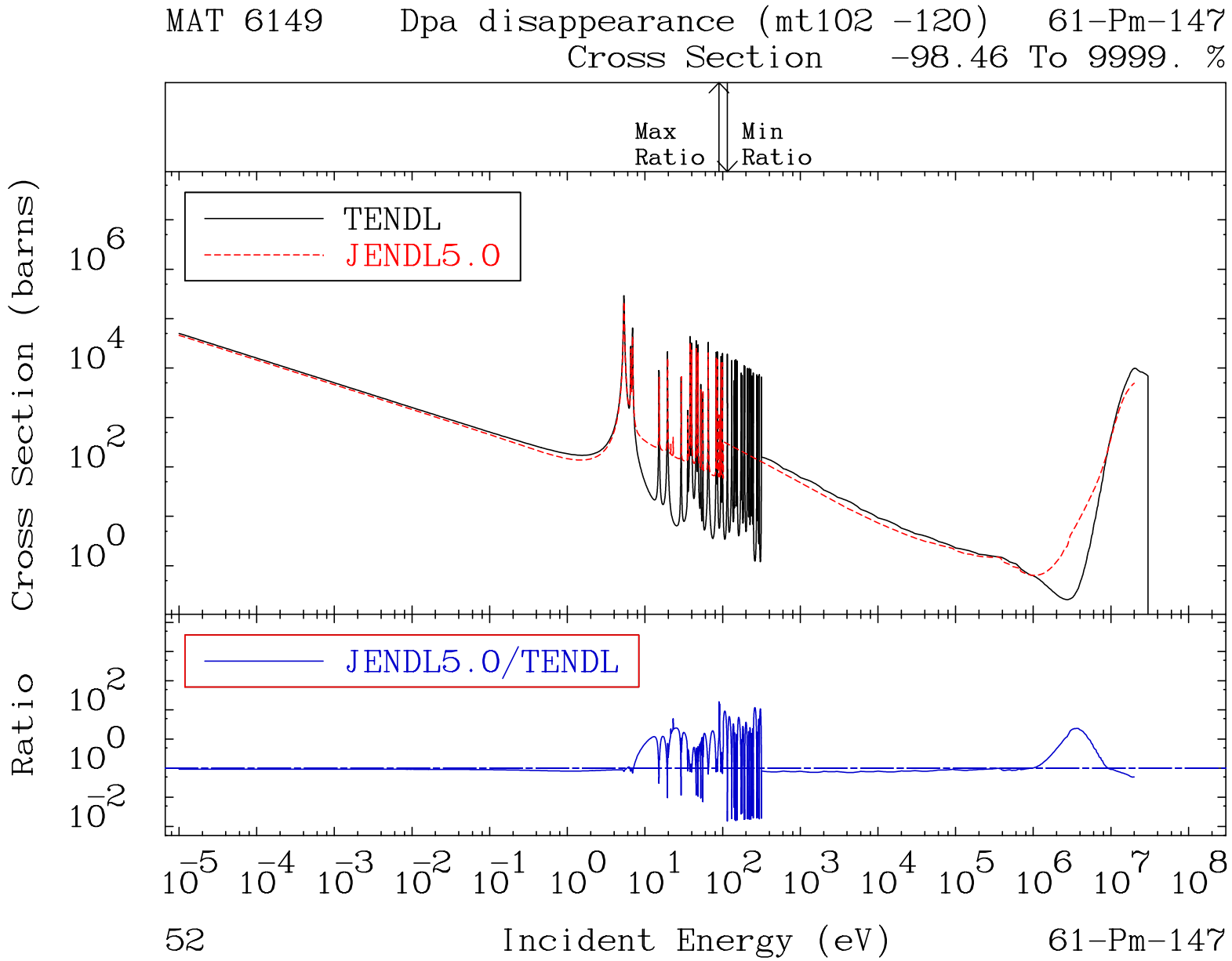

MAT 6149
Total photon (eV-barns)
61-Pm-147
Cross Section -98.34 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
47
61-Pm-147


MAT 6149 Total kinematic kerma (high limit) 61-Pm-147
Cross Section -91.93 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
48
61-Pm-147


MAT 6149
Dpa total (eV-barns)
61-Pm-147
Cross Section
-98.46 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
49
61-Pm-147


MAT 6149
Dpa elastic (mt2)
Cross Section
61-Pm-147
-29.29 To 208.9 %
Min
Ratio
TENDL Threshold 900.00 eV
JENDL5.0 Threshold 850.00 eV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
50
61-Pm-147


MAT 6149
Dpa inelastic (mt51-91)
61-Pm-147
Cross Section 4.179 To 9999. %
Min
Ratio
TENDL Threshold 91.731 keV
JENDL5.0 Threshold 91.731 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
61-Pm-147


MAT 6149 Dpa disappearance (mt102 -120) 61-Pm-147
Cross Section -98.46 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
52
61-Pm-147