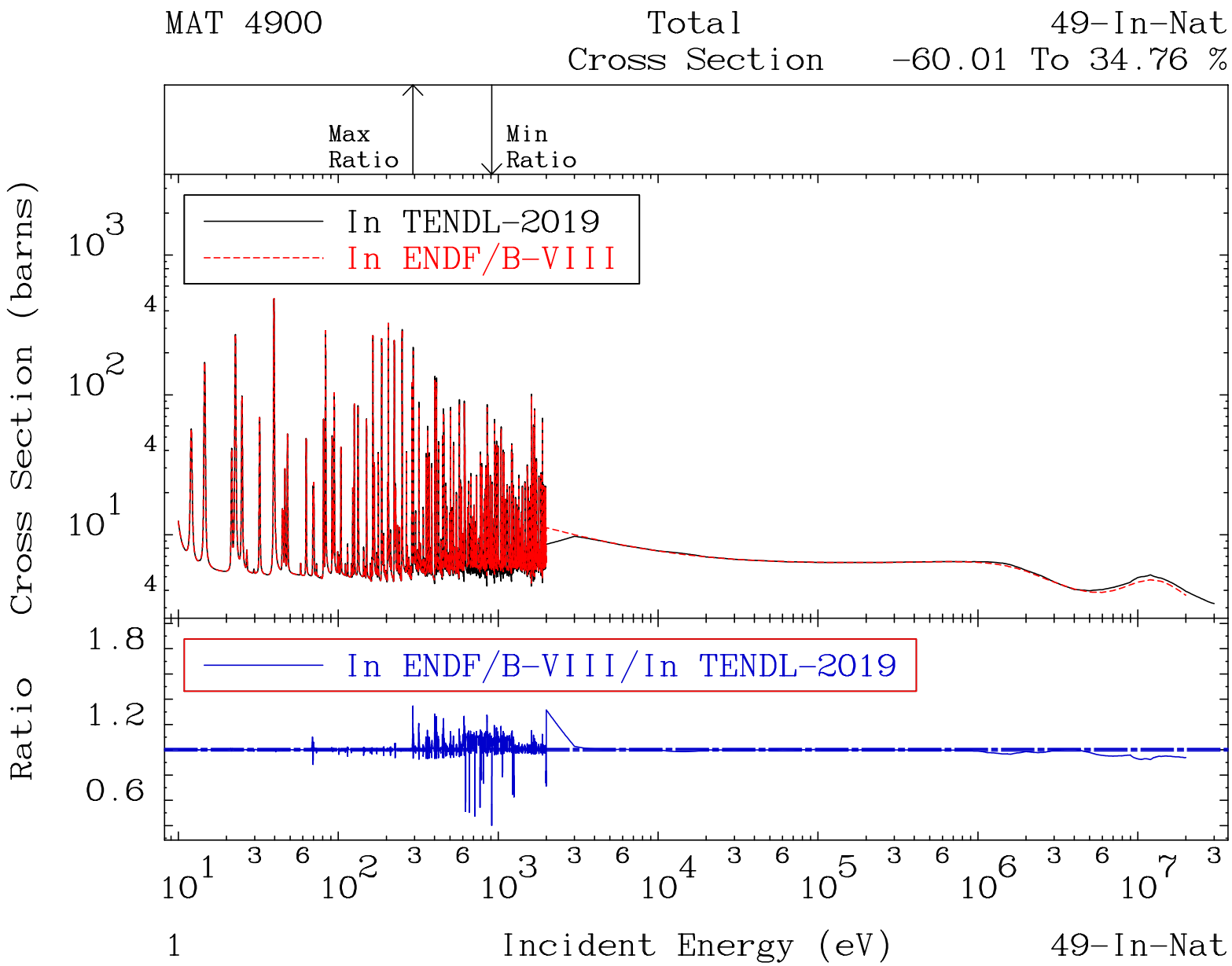
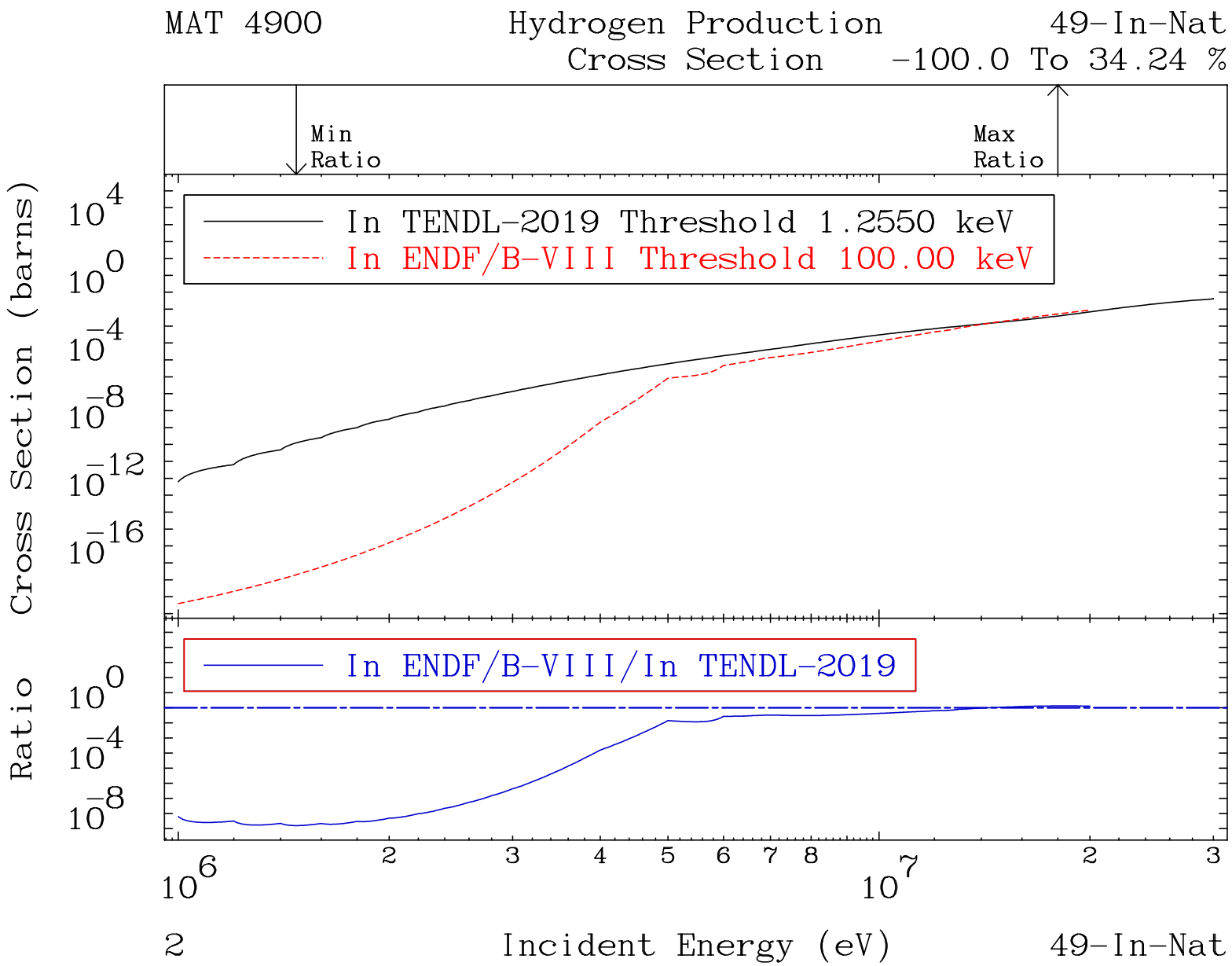
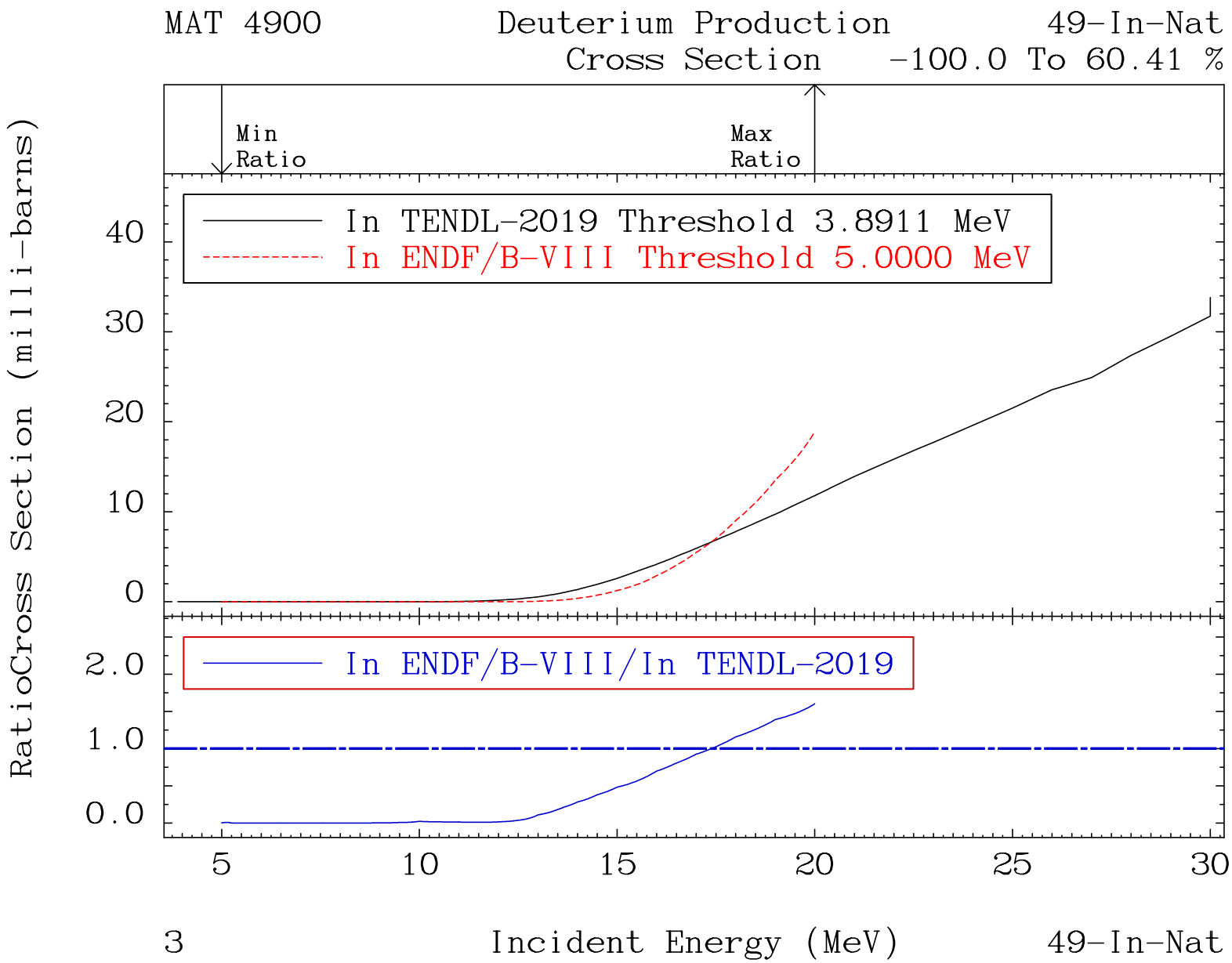
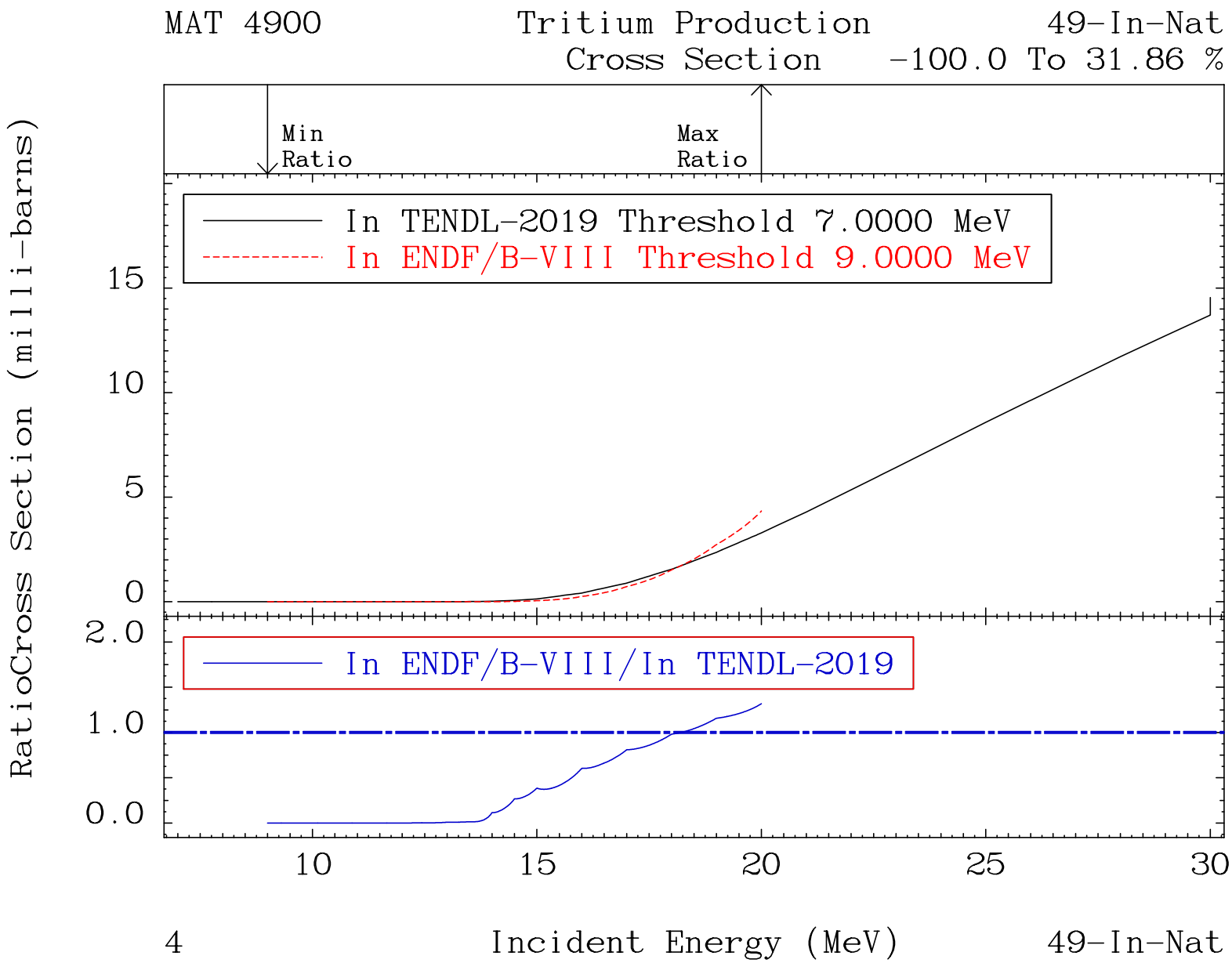
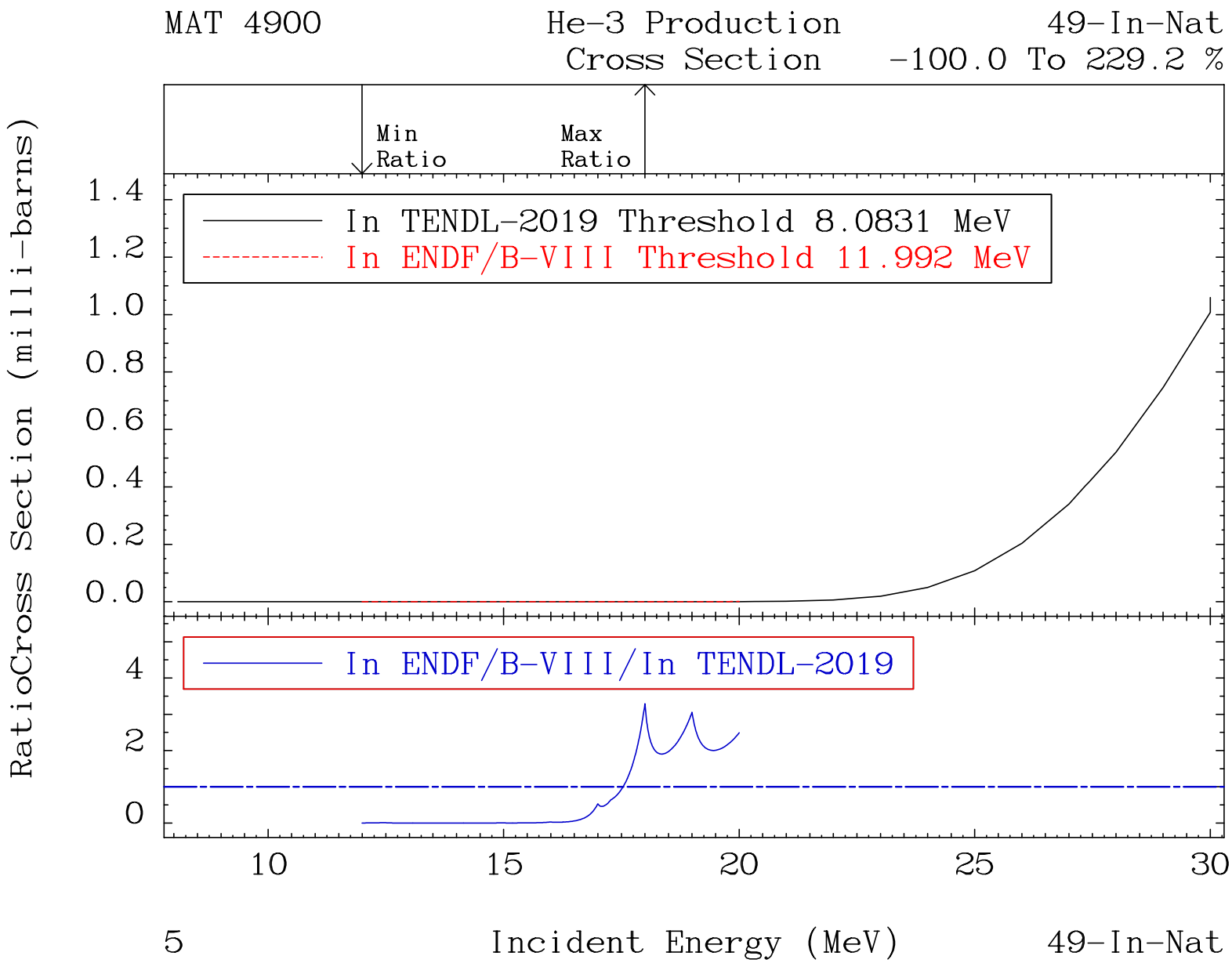
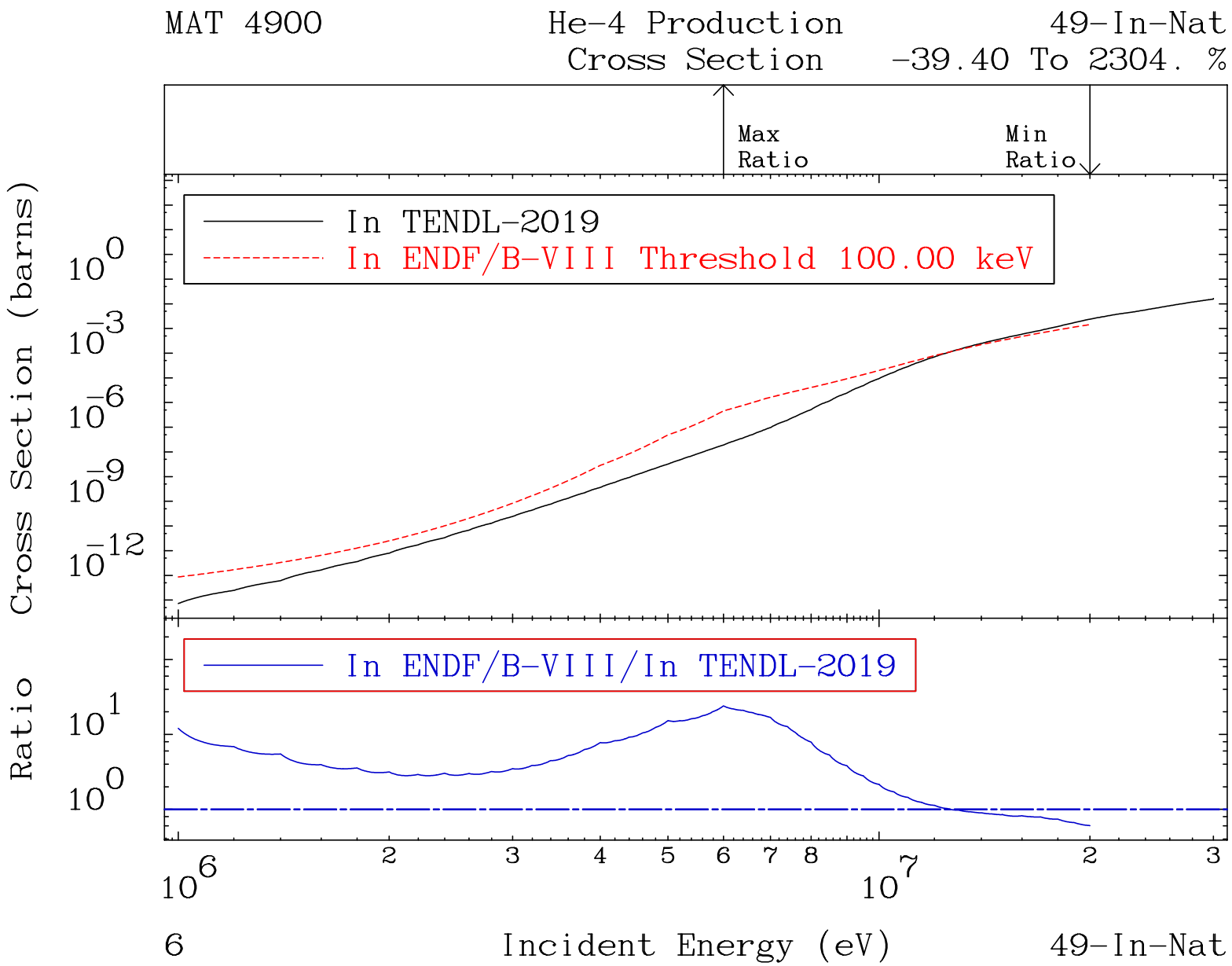

MAT 4900
Total
Cross Section
49-In-Nat
-60.01 To 34.76 %
Max
Ratio
Min
Ratio
In TENDL-2019
In ENDF/B-VIII
Cross Section (barns)
In ENDF/B-VIII/In TENDL-2019
Ratio
Incident Energy (eV)
1
49-In-Nat

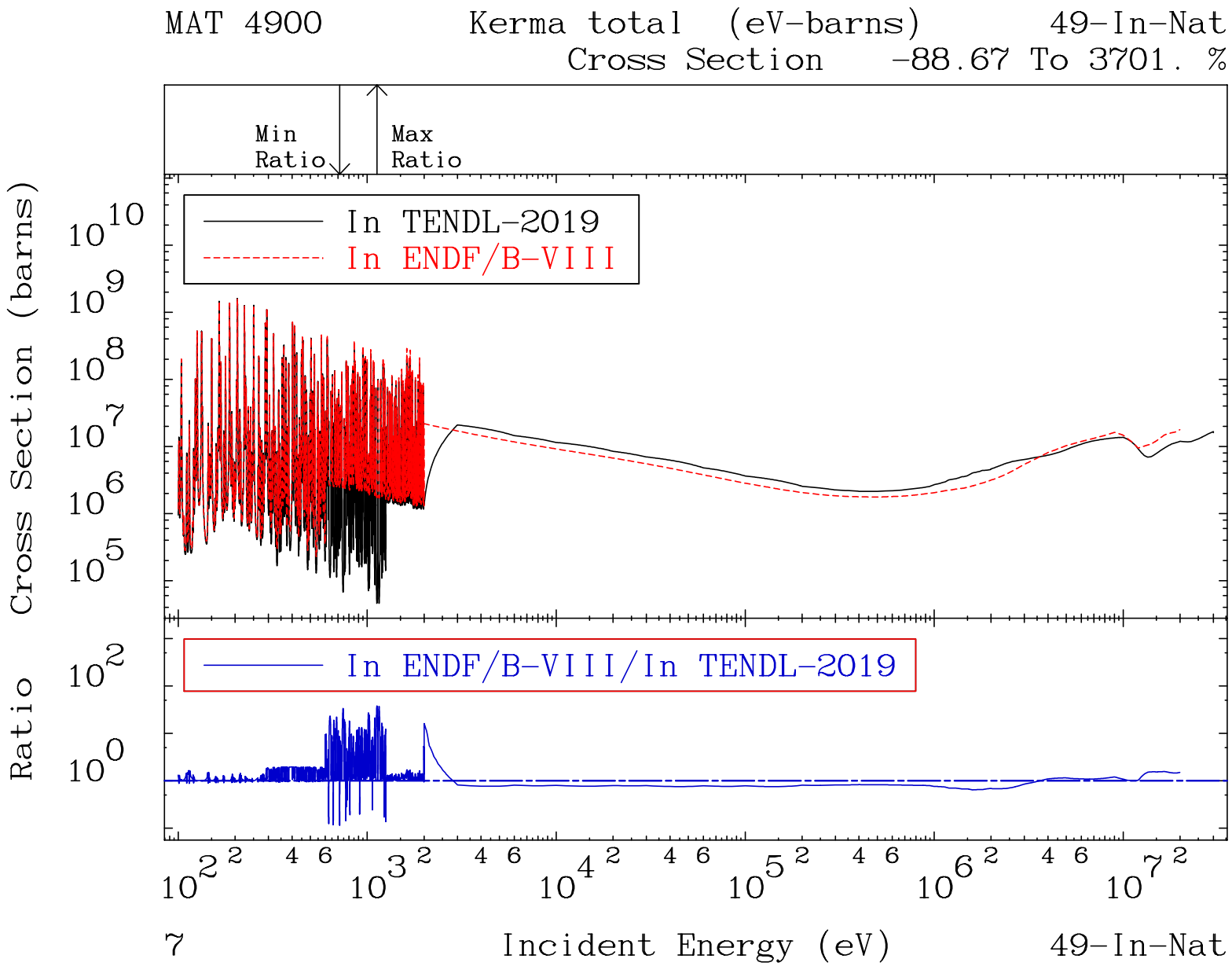

MAT 4900
Hydrogen Production
Cross Section
49-In-Nat
-100.0 To 34.24 %
Min Ratio
Max Ratio
In TENDL-2019 Threshold 1.2550 keV
In ENDF/B-VIII Threshold 100.00 keV
Cross Section (barns)
In ENDF/B-VIII/In TENDL-2019
Ratio
Incident Energy (eV)
49-In-Nat

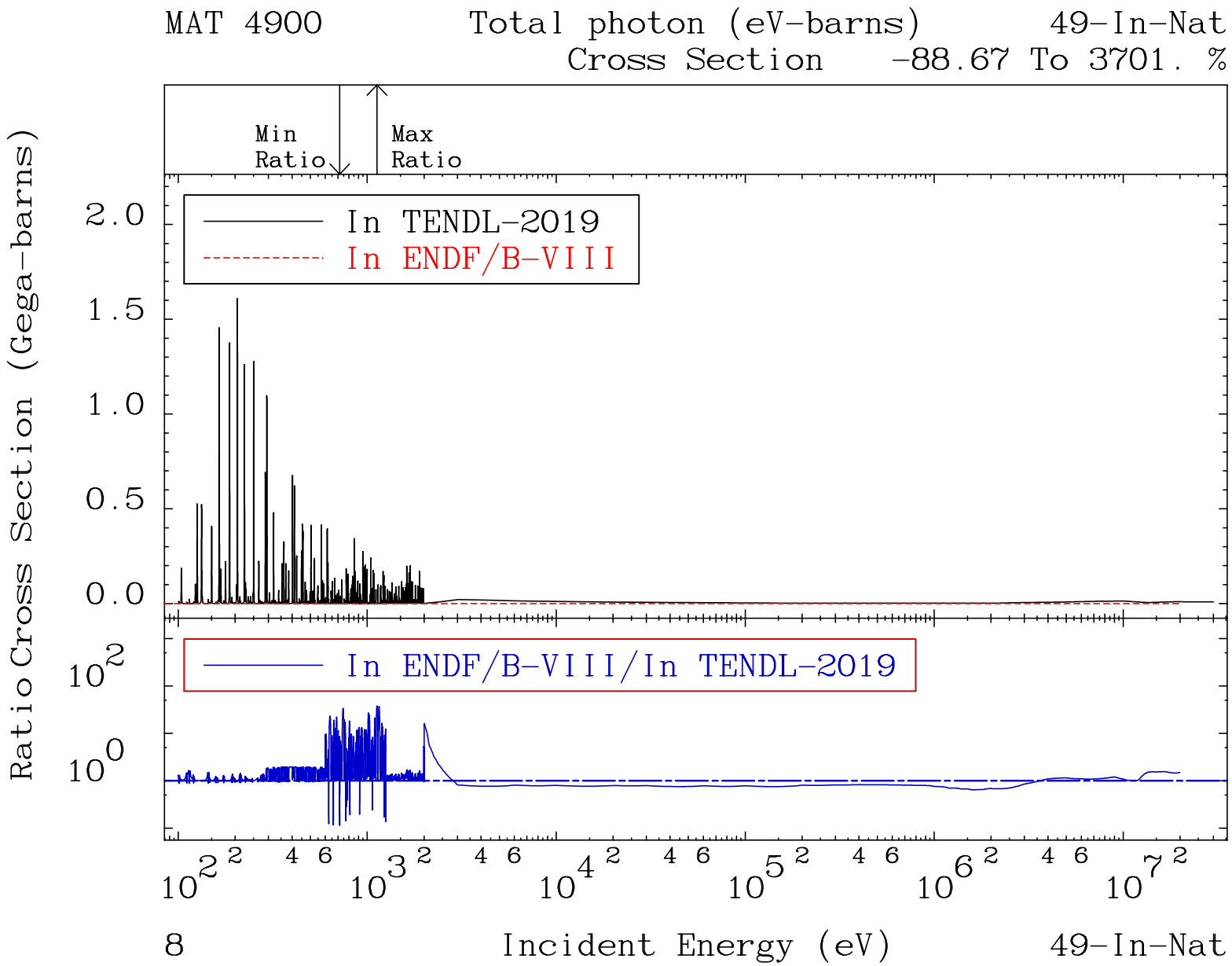

MAT 4900
Deuterium Production
Cross Section
49-In-Nat
-100.0 To 60.41 %
Min Ratio
Max Ratio
In TENDL-2019 Threshold 3.8911 MeV
In ENDF/B-VIII Threshold 5.0000 MeV
In ENDF/B-VIII/In TENDL-2019
RatioCross Section (milli-barns)
Incident Energy (MeV)
3
49-In-Nat

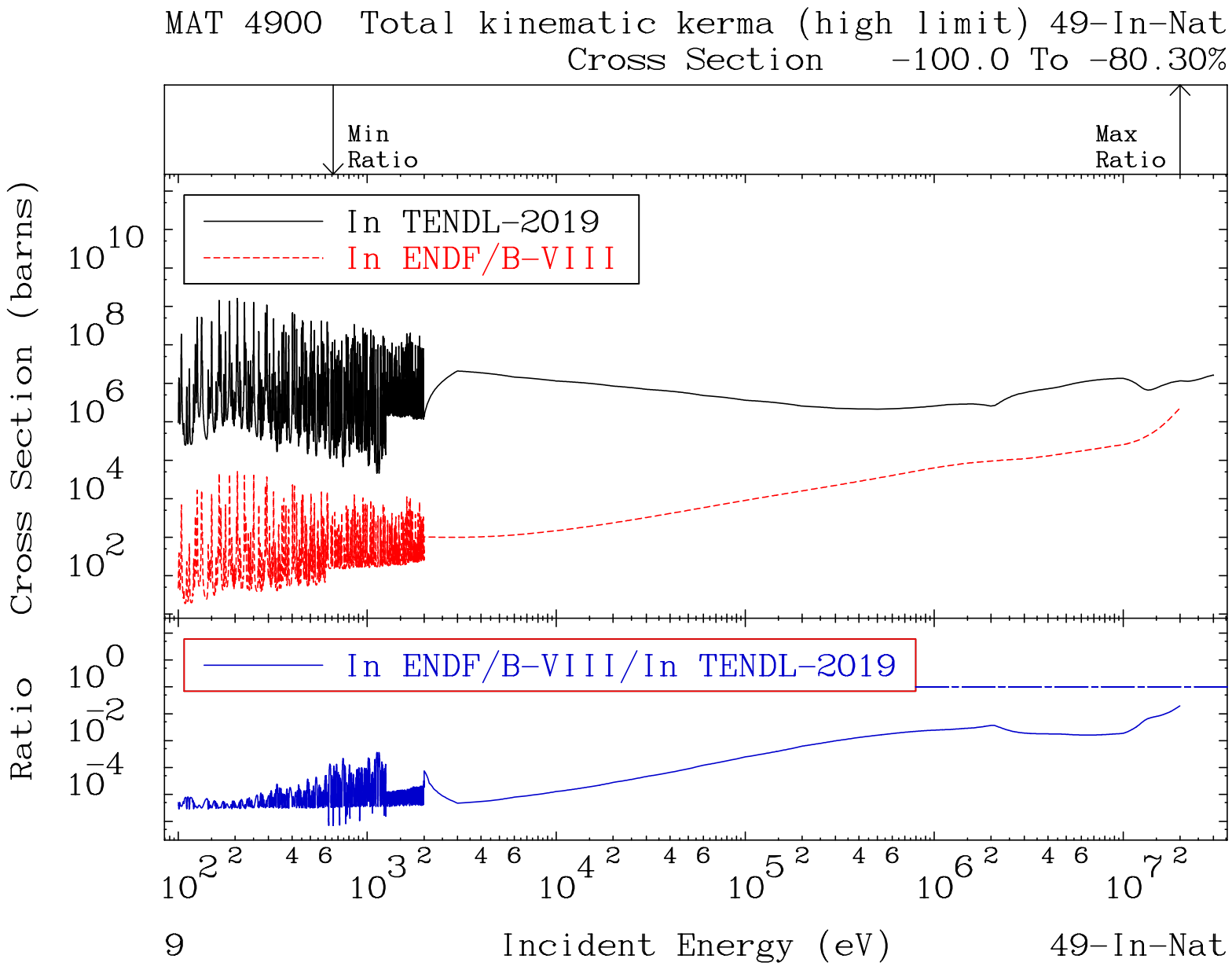

MAT 4900
Tritium Production
Cross Section
49-In-Nat
-100.0 To 31.86 %
Min
Ratio
Max
Ratio
In TENDL-2019 Threshold 7.0000 MeV
In ENDF/B-VIII Threshold 9.0000 MeV
In ENDF/B-VIII/In TENDL-2019
RatioCross Section (milli-barns)
0
5
10
15
0.0
1.0
2.0
10
15
20
25
30
4
Incident Energy (MeV)
49-In-Nat

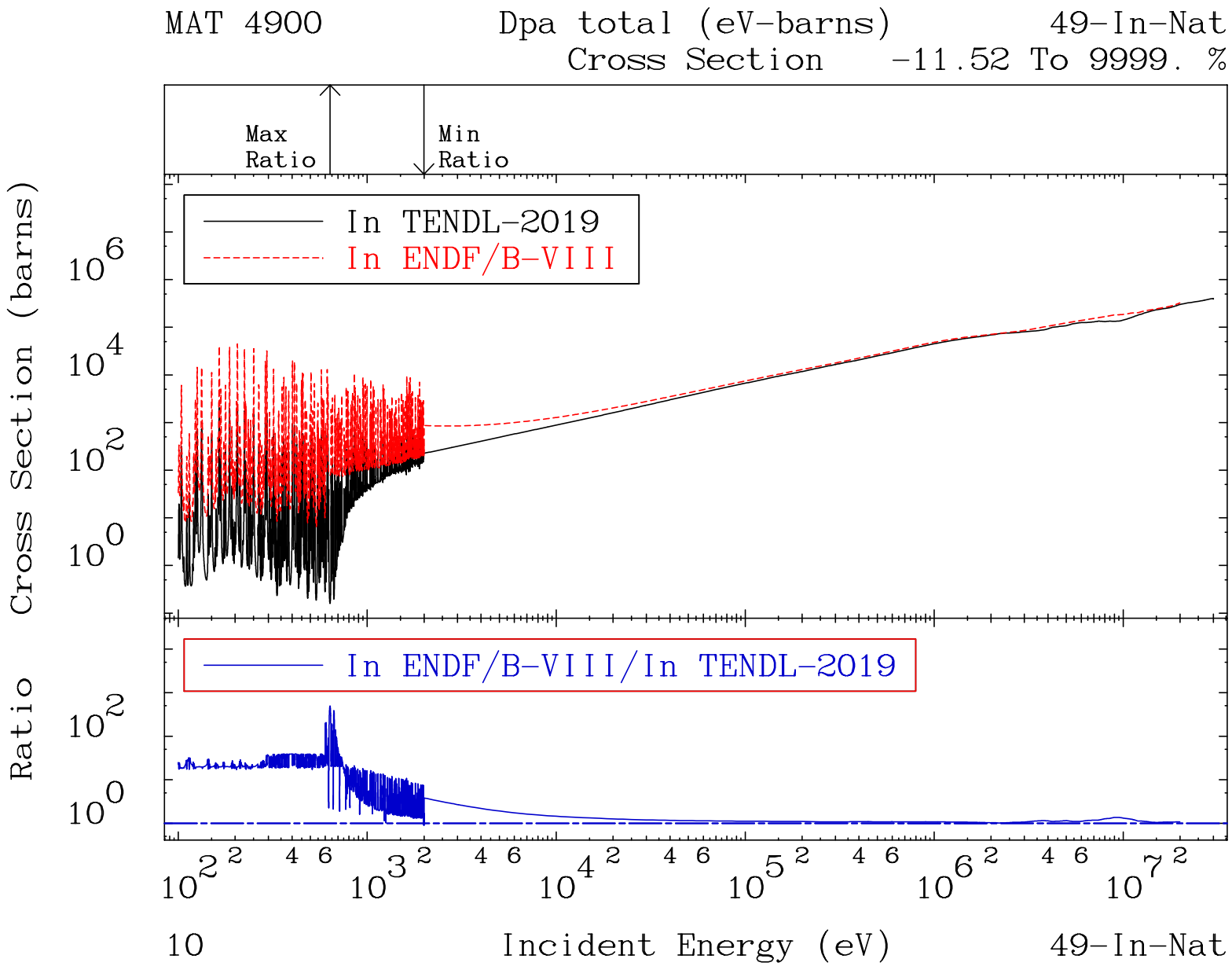

MAT 4900
He-3 Production
Cross Section
49-In-Nat
-100.0 To 229.2 %
Min
Ratio
Max
Ratio
In TENDL-2019 Threshold 8.0831 MeV
In ENDF/B-VIII Threshold 11.992 MeV
In ENDF/B-VIII/In TENDL-2019
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
10
15
20
25
30
5
Incident Energy (MeV)
49-In-Nat

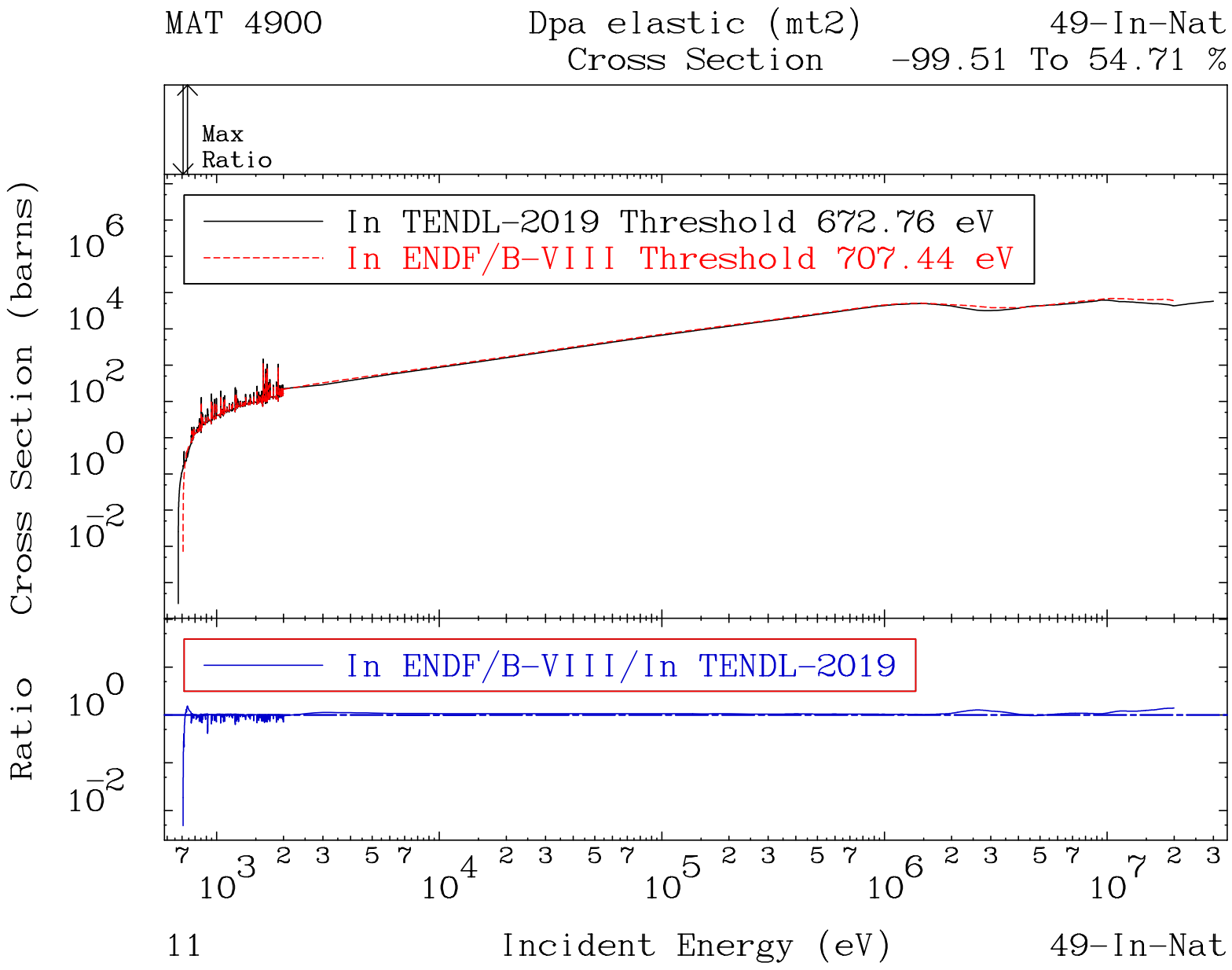

MAT 4900
He-4 Production
Cross Section
49-In-Nat
-39.40 To 2304. %
Max
Ratio
Min
Ratio
In TENDL-2019
In ENDF/B-VIII Threshold 100.00 keV
Cross Section (barns)
$10^{0}$
$10^{-3}$
$10^{-6}$
$10^{-9}$
$10^{-12}$
In ENDF/B-VIII/In TENDL-2019
Ratio
$10^{1}$
$10^{0}$
$10^{6}$
2
3
4
5
6
7
8
$10^{7}$
2
3
Incident Energy (eV)

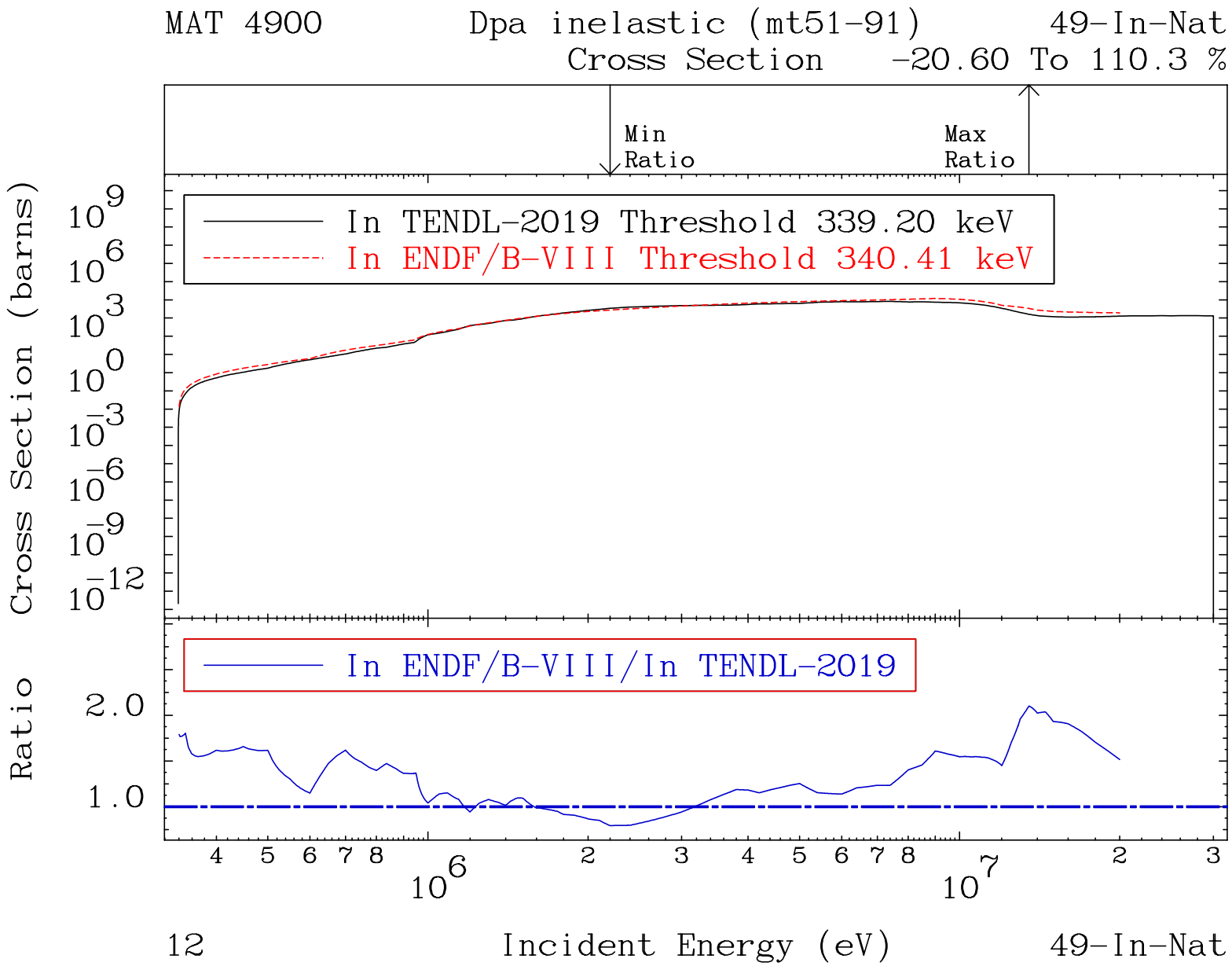

MAT 4900
Kerma total (eV-barns)
49-In-Nat
Cross Section -88.67 To 3701. %
Min Ratio
Max Ratio
In TENDL-2019
In ENDF/B-VIII
In ENDF/B-VIII/In TENDL-2019
Cross Section (barns)
Ratio
Incident Energy (eV)
7
49-In-Nat

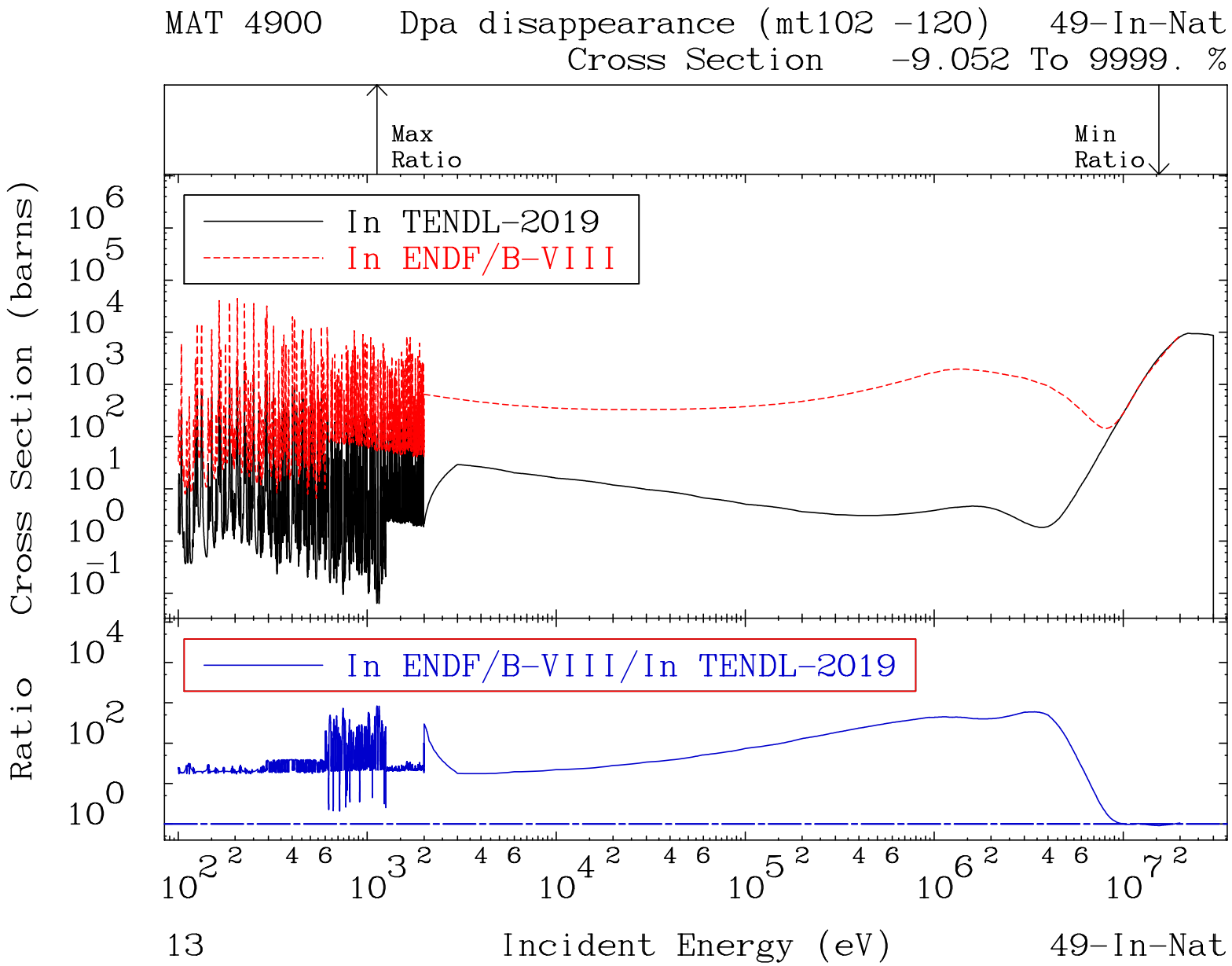

MAT 4900
Total photon (eV-barns)
Cross Section
-88.67 To 3701. %
49-In-Nat
Min Ratio
Max Ratio
In TENDL-2019
In ENDF/B-VIII
In ENDF/B-VIII/In TENDL-2019
Ratio Cross Section (Gega-barns)
2.0
1.5
1.0
0.5
0.0
$10^2$
$10^0$
$10^2$ 2 4 6 $10^3$ 2 4 6 $10^4$ 2 4 6 $10^5$ 2 4 6 $10^6$ 2 4 6 $10^7$ 2
Incident Energy (eV)


MAT 4900 Total kinematic kerma (high limit) 49-In-Nat
Cross Section -100.0 To -80.30%
Min Ratio
Max Ratio
In TENDL-2019
In ENDF/B-VIII
Cross Section (barns)
In ENDF/B-VIII/In TENDL-2019
Ratio
Incident Energy (eV)
9
49-In-Nat


MAT 4900
Dpa total (eV-barns)
49-In-Nat
Cross Section
-11.52 To 9999. %
Max Ratio
Min Ratio
In TENDL-2019
In ENDF/B-VIII
Cross Section (barns)
In ENDF/B-VIII/In TENDL-2019
Ratio
Incident Energy (eV)
10
49-In-Nat


MAT 4900
Dpa elastic (mt2)
Cross Section
49-In-Nat
-99.51 To 54.71 %
Max
Ratio
In TENDL-2019 Threshold 672.76 eV
In ENDF/B-VIII Threshold 707.44 eV
Cross Section (barns)
In ENDF/B-VIII/In TENDL-2019
Ratio
Incident Energy (eV)
11
49-In-Nat


MAT 4900
Dpa inelastic (mt51-91)
Cross Section
49-In-Nat
-20.60 To 110.3 %
Min Ratio
Max Ratio
In TENDL-2019 Threshold 339.20 keV
In ENDF/B-VIII Threshold 340.41 keV
Cross Section (barns)
In ENDF/B-VIII/In TENDL-2019
Ratio
Incident Energy (eV)
12
49-In-Nat


MAT 4900 Dpa disappearance (mt102 -120) 49-In-Nat
Cross Section -9.052 To 9999. %
Max Ratio
Min Ratio
In TENDL-2019
In ENDF/B-VIII
In ENDF/B-VIII/In TENDL-2019
Cross Section (barns)
Ratio
Incident Energy (eV)
13
49-In-Nat