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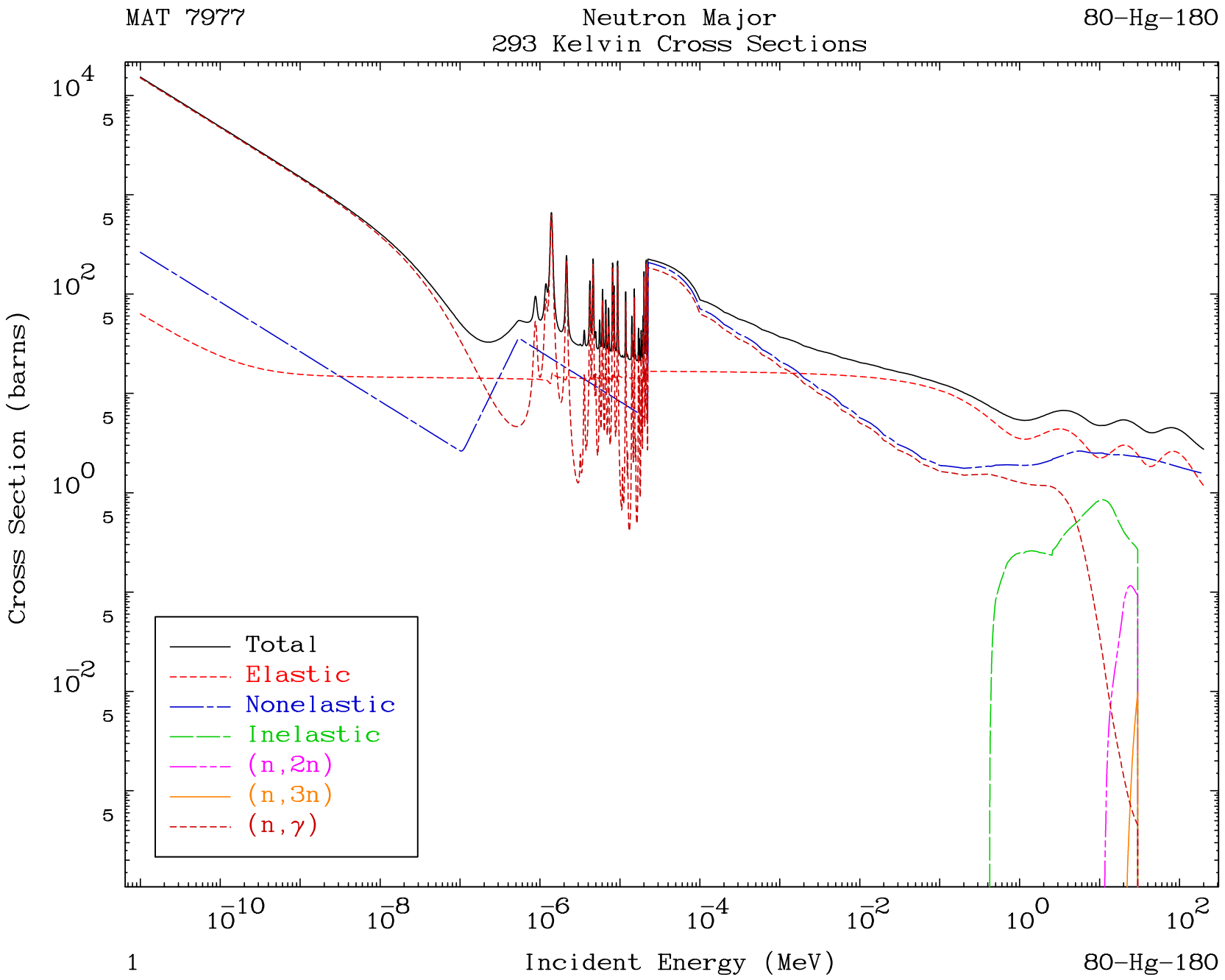
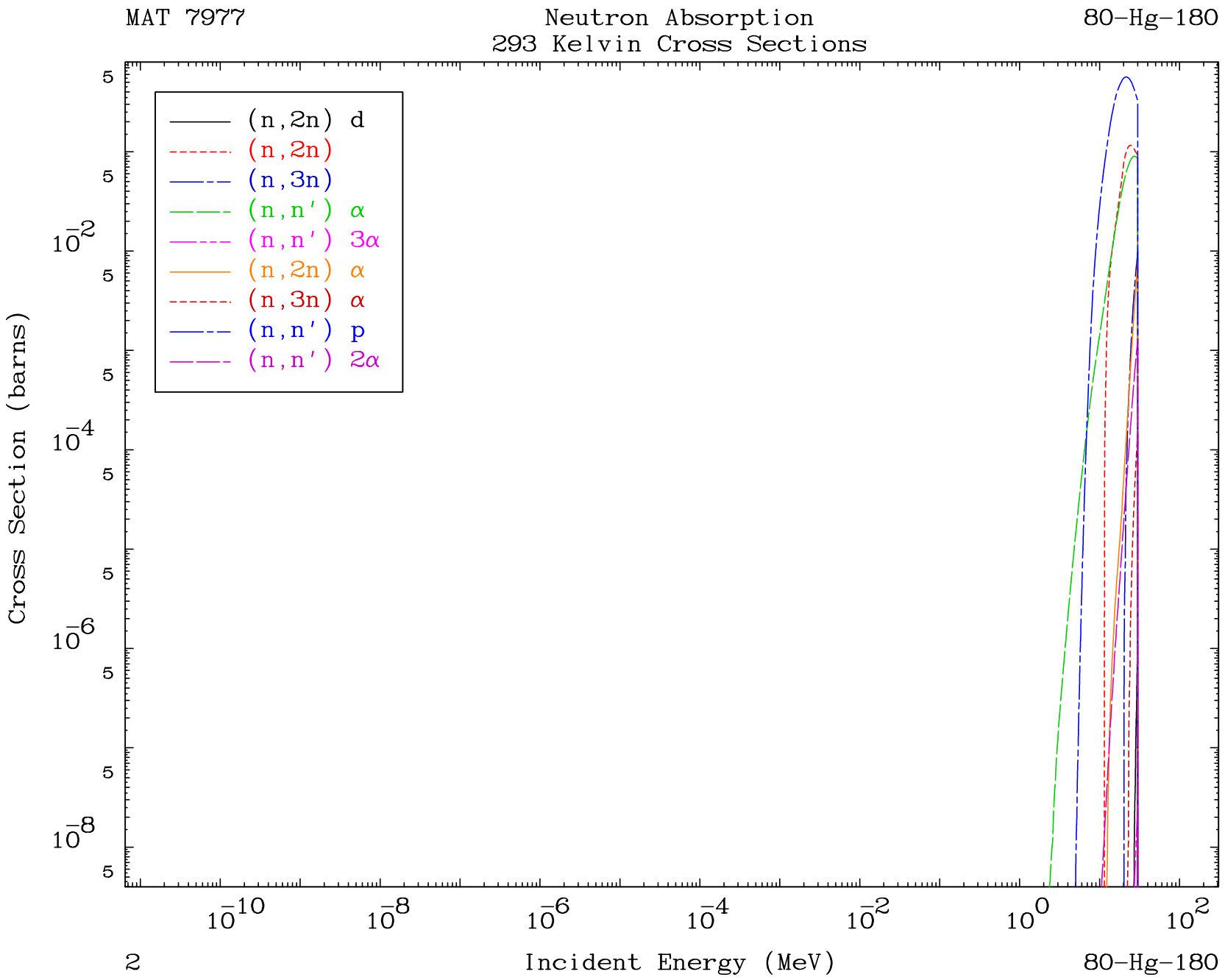
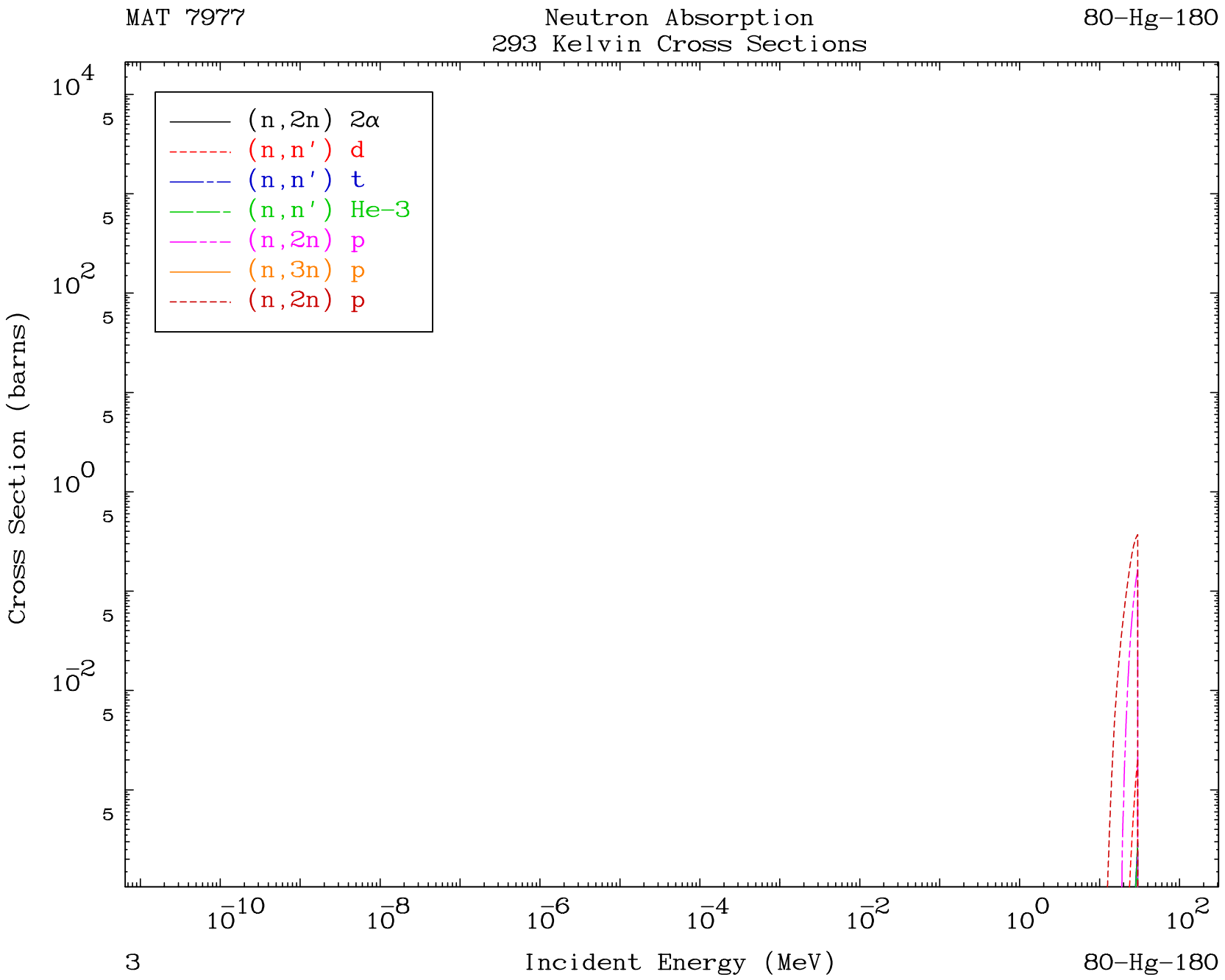
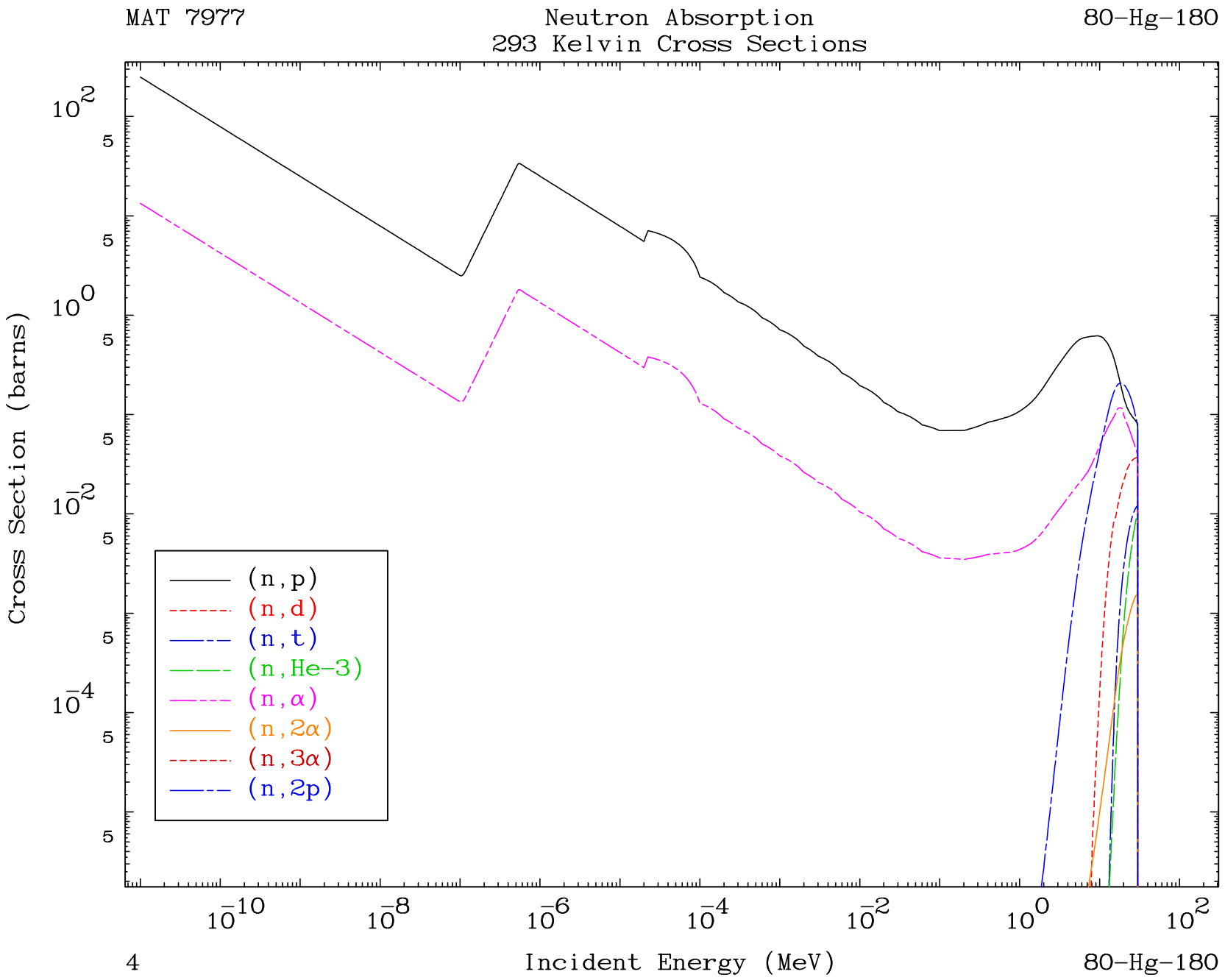
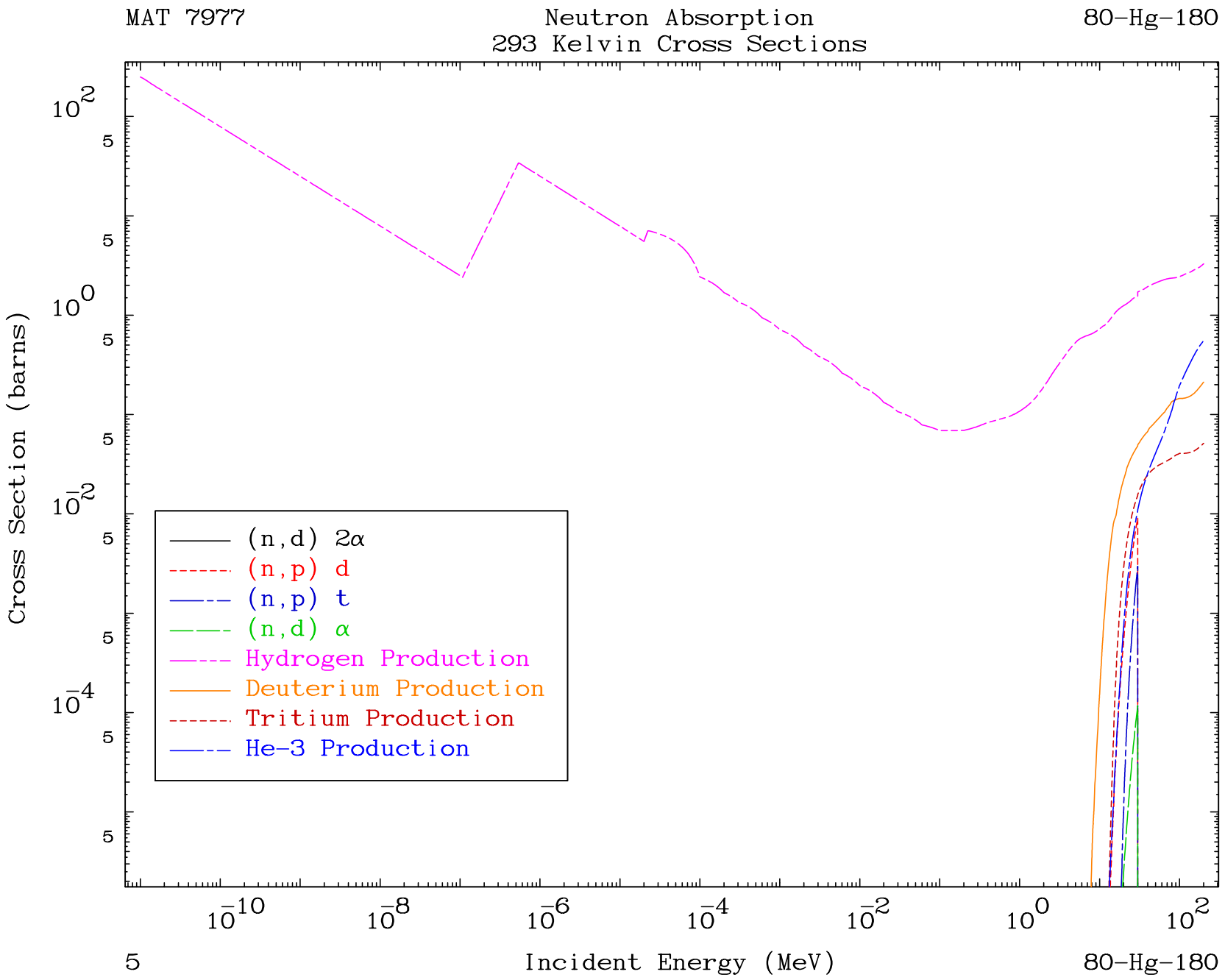
Press Mouse Button to Start

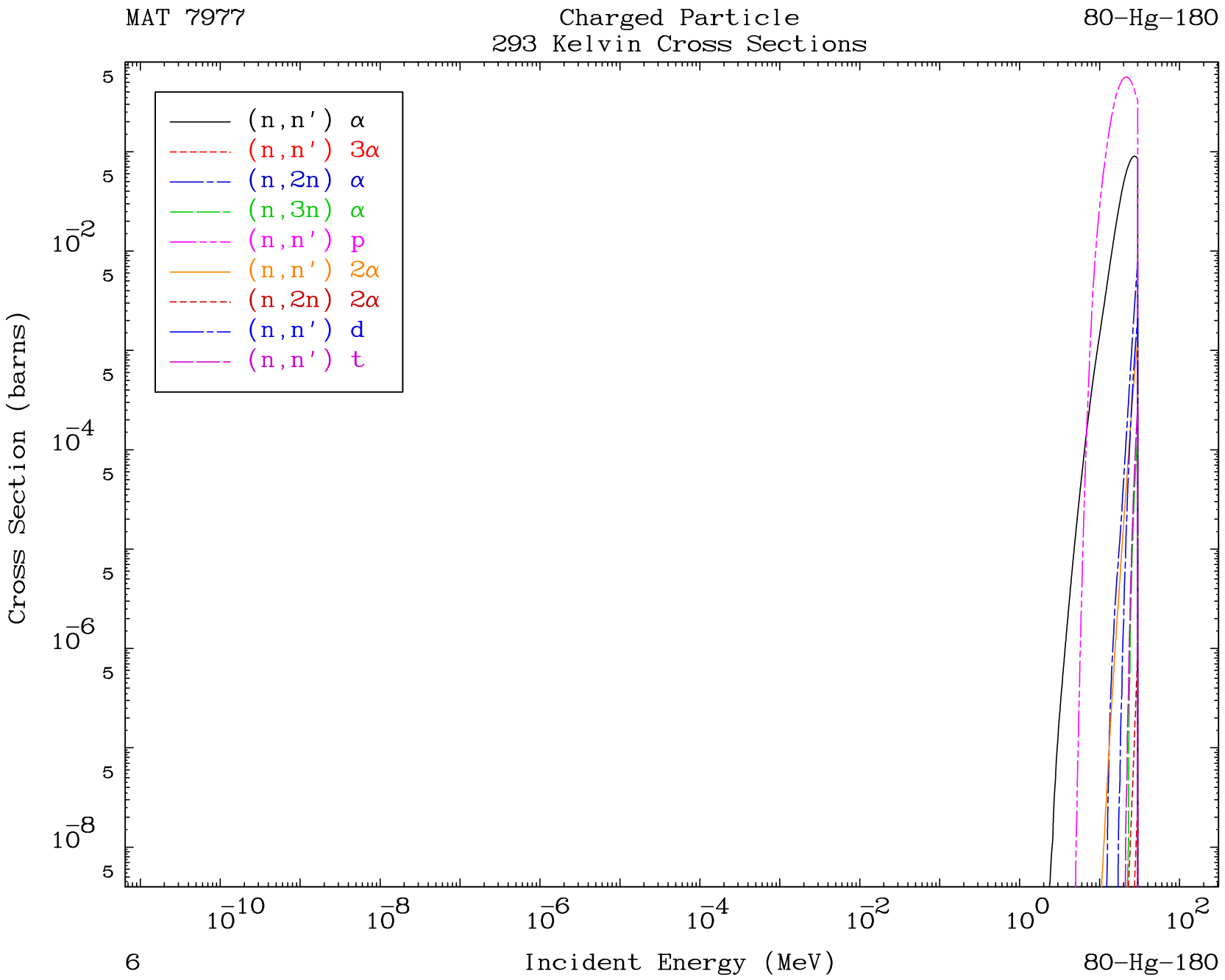

MAT 7977
Neutron Major
293 Kelvin Cross Sections
80-Hg-180
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
80-Hg-180

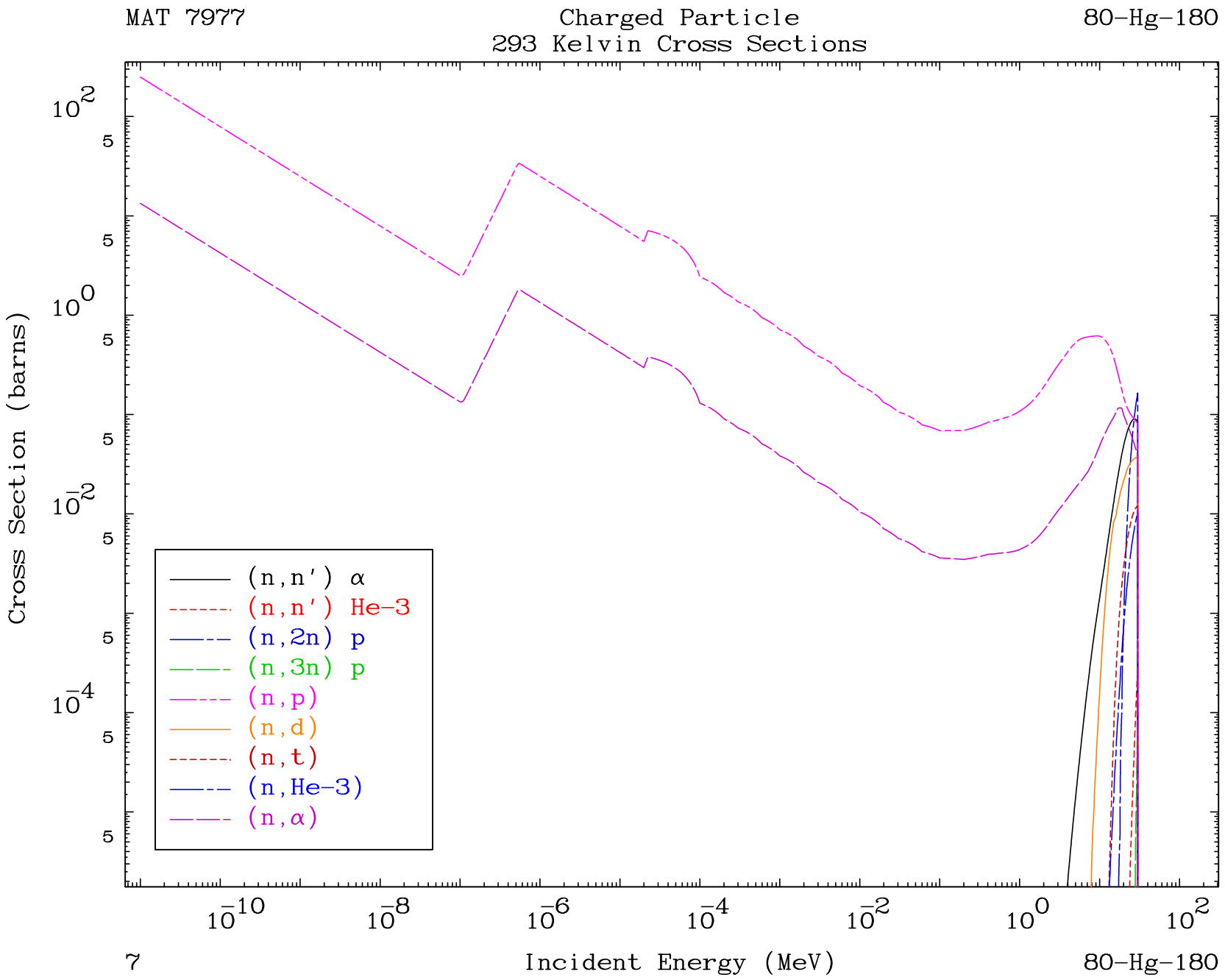

MAT 7977
Neutron Absorption
293 Kelvin Cross Sections
80-Hg-180
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,n') 3α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
80-Hg-180

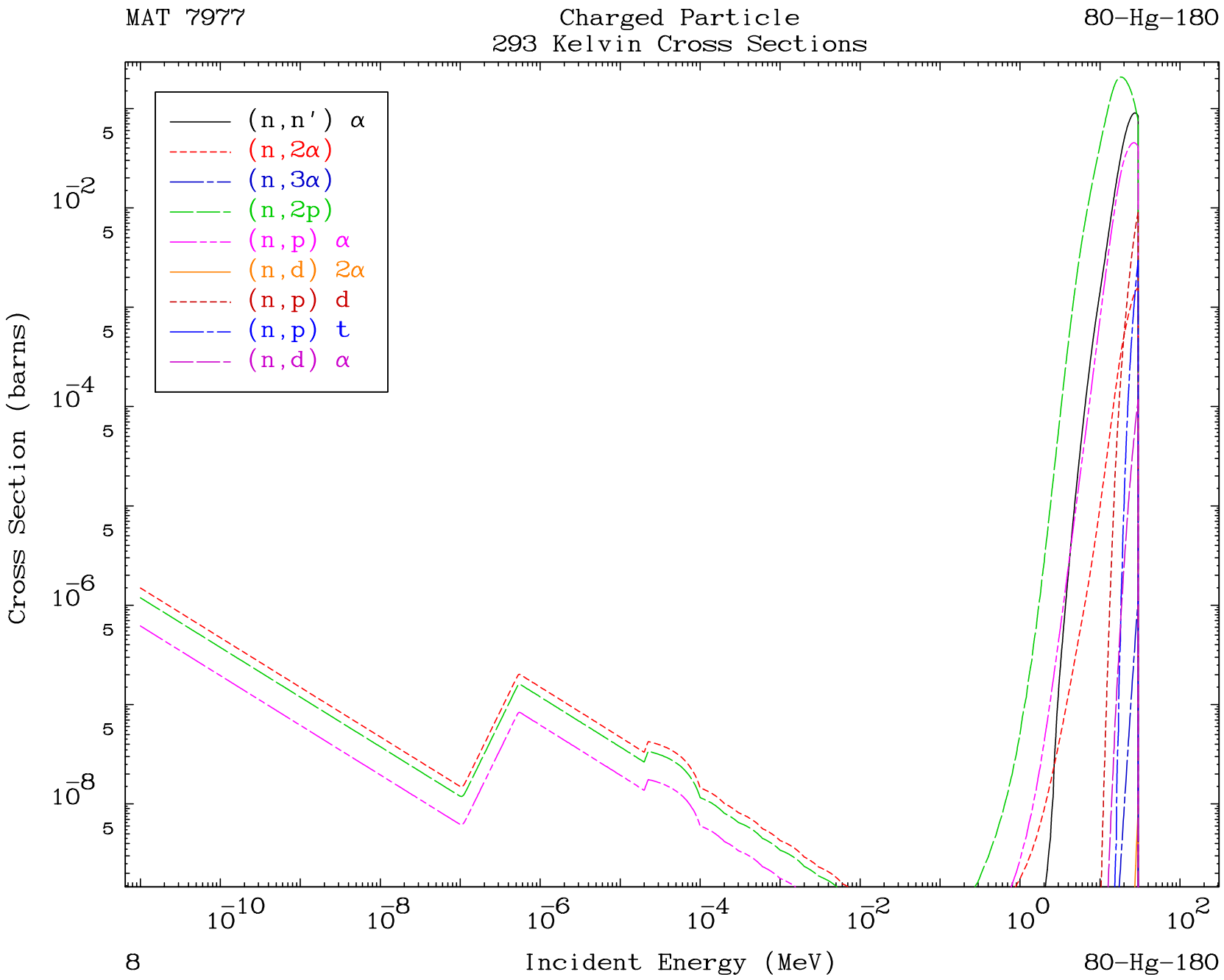

MAT 7977
Neutron Absorption
293 Kelvin Cross Sections
80-Hg-180
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,2n) p
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
3
80-Hg-180

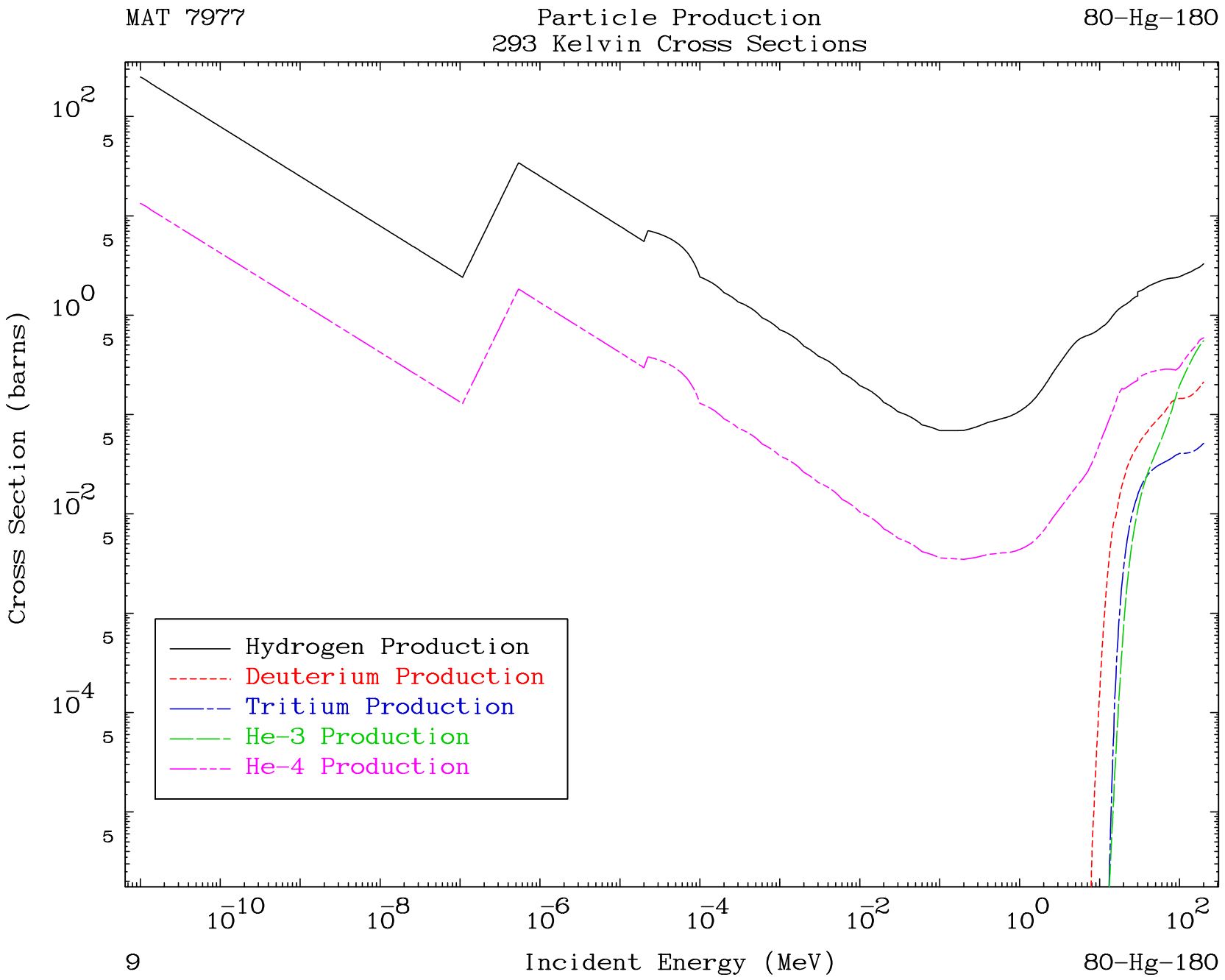

MAT 7977
Neutron Absorption
293 Kelvin Cross Sections
80-Hg-180
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
4
80-Hg-180

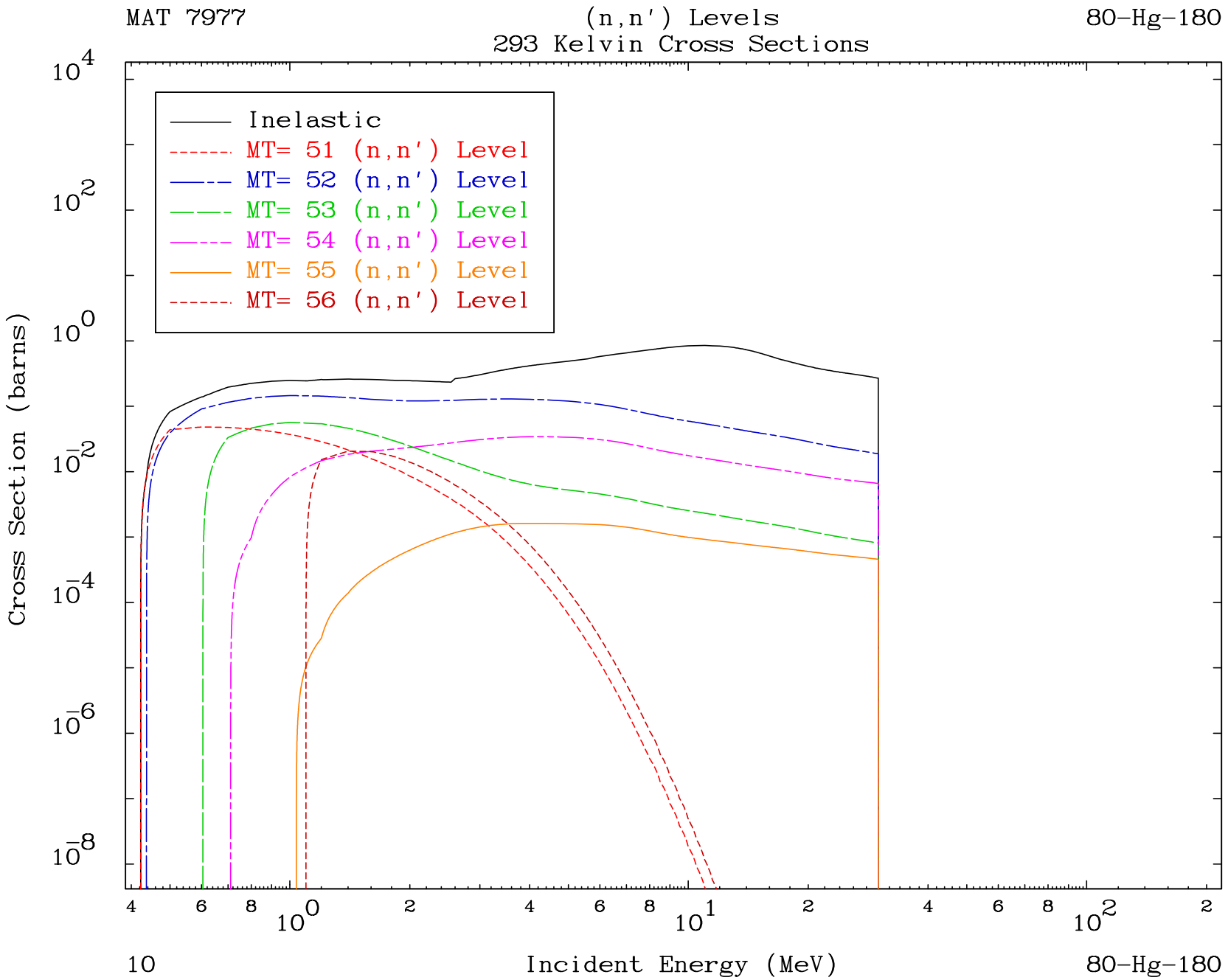

MAT 7977
Neutron Absorption
293 Kelvin Cross Sections
80-Hg-180
Cross Section (barns)
Incident Energy (MeV)
80-Hg-180
5
(n,d) 2α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production

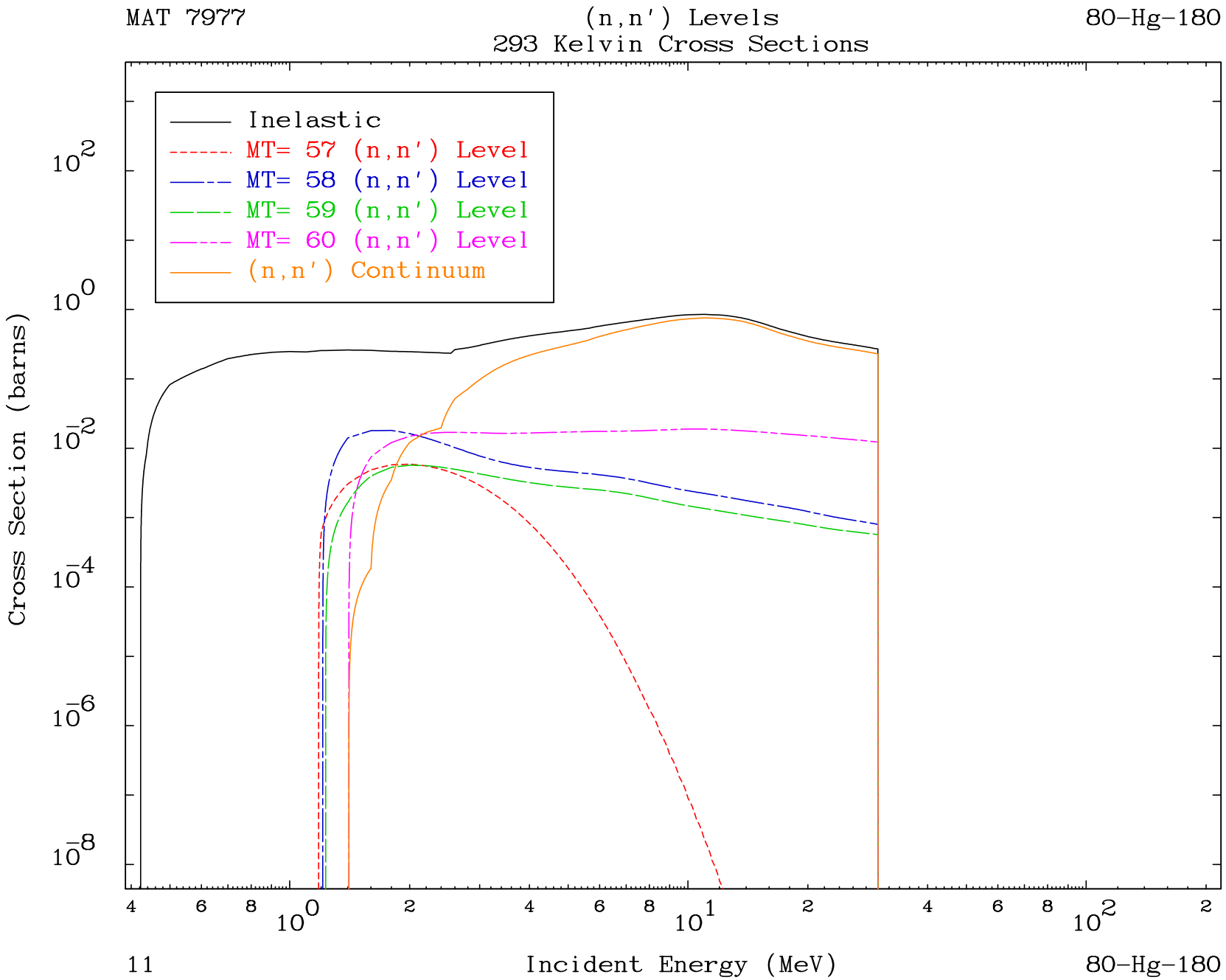

MAT 7977
Charged Particle
293 Kelvin Cross Sections
80-Hg-180
(n,n') α
(n,n') 3α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
6
80-Hg-180

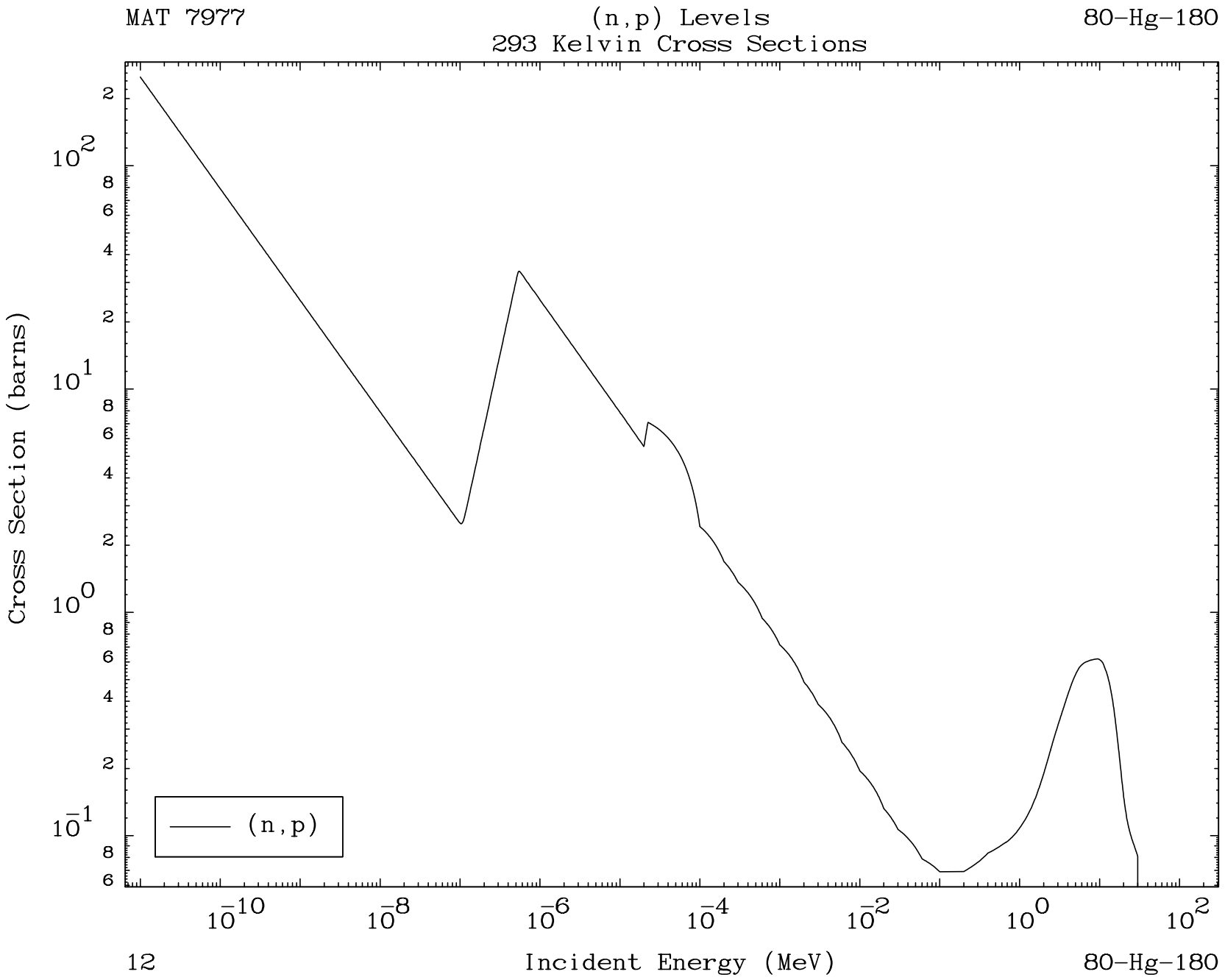

MAT 7977
Charged Particle
293 Kelvin Cross Sections
80-Hg-180
Cross Section (barns)
Incident Energy (MeV)
7
80-Hg-180
(n,n') α
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)

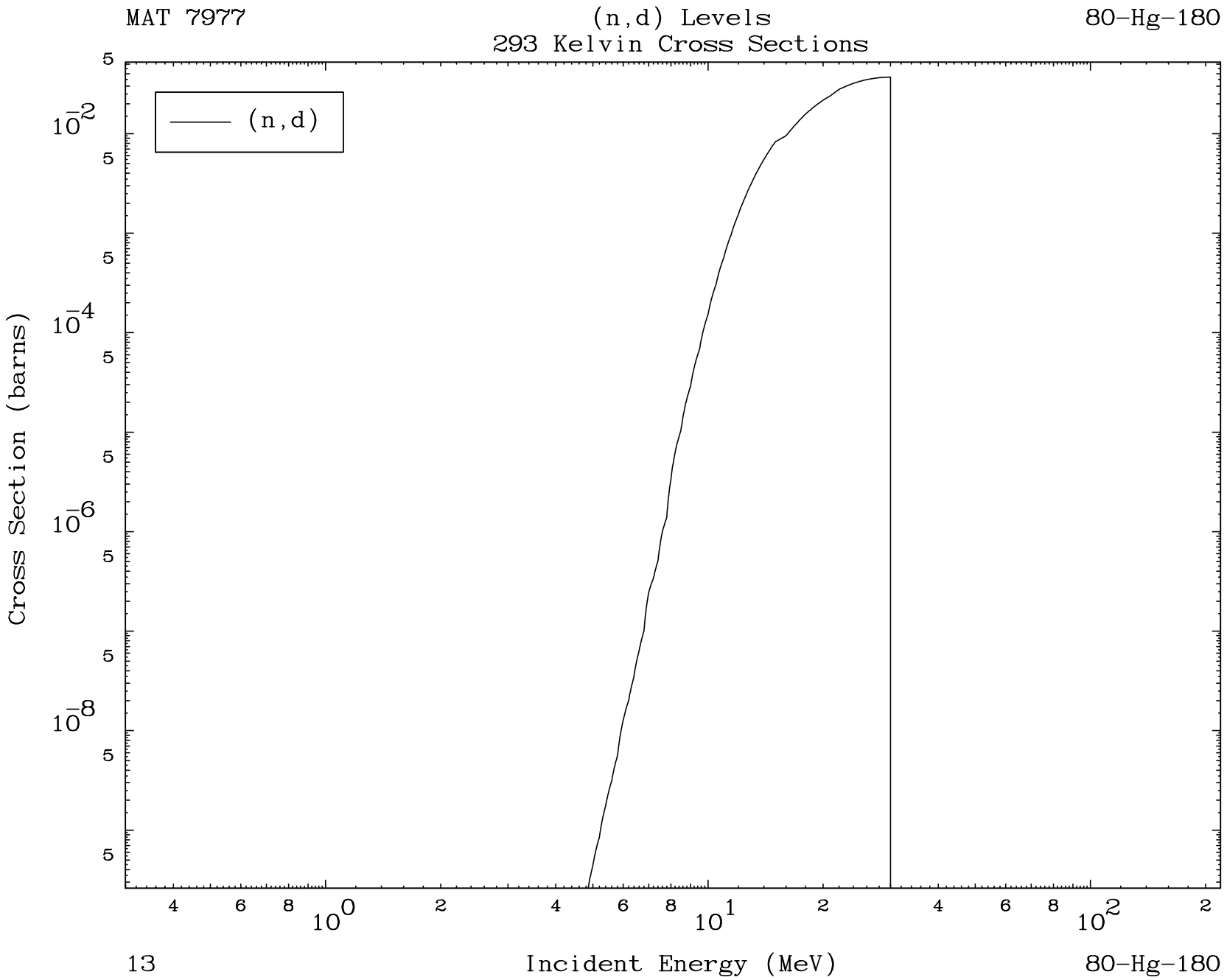

MAT 7977
Charged Particle
293 Kelvin Cross Sections
80-Hg-180
(n,n') α
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α
(n,p) d
(n,p) t
(n,d) α
Cross Section (barns)
Incident Energy (MeV)
8
80-Hg-180

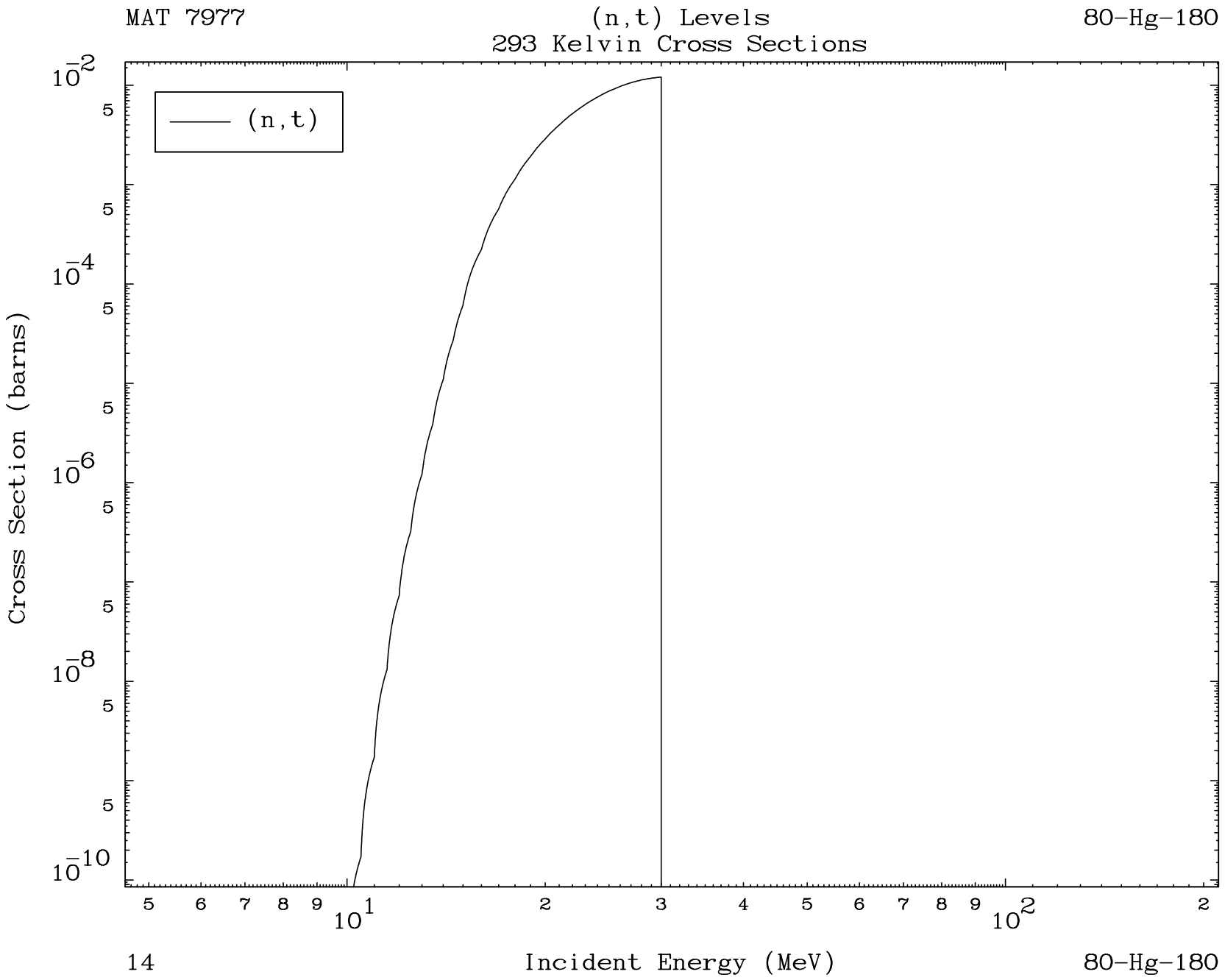

MAT 7977
Particle Production
293 Kelvin Cross Sections
80-Hg-180
Cross Section (barns)
10^2
5
10^0
5
10^-2
5
10^-4
5
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
9
80-Hg-180

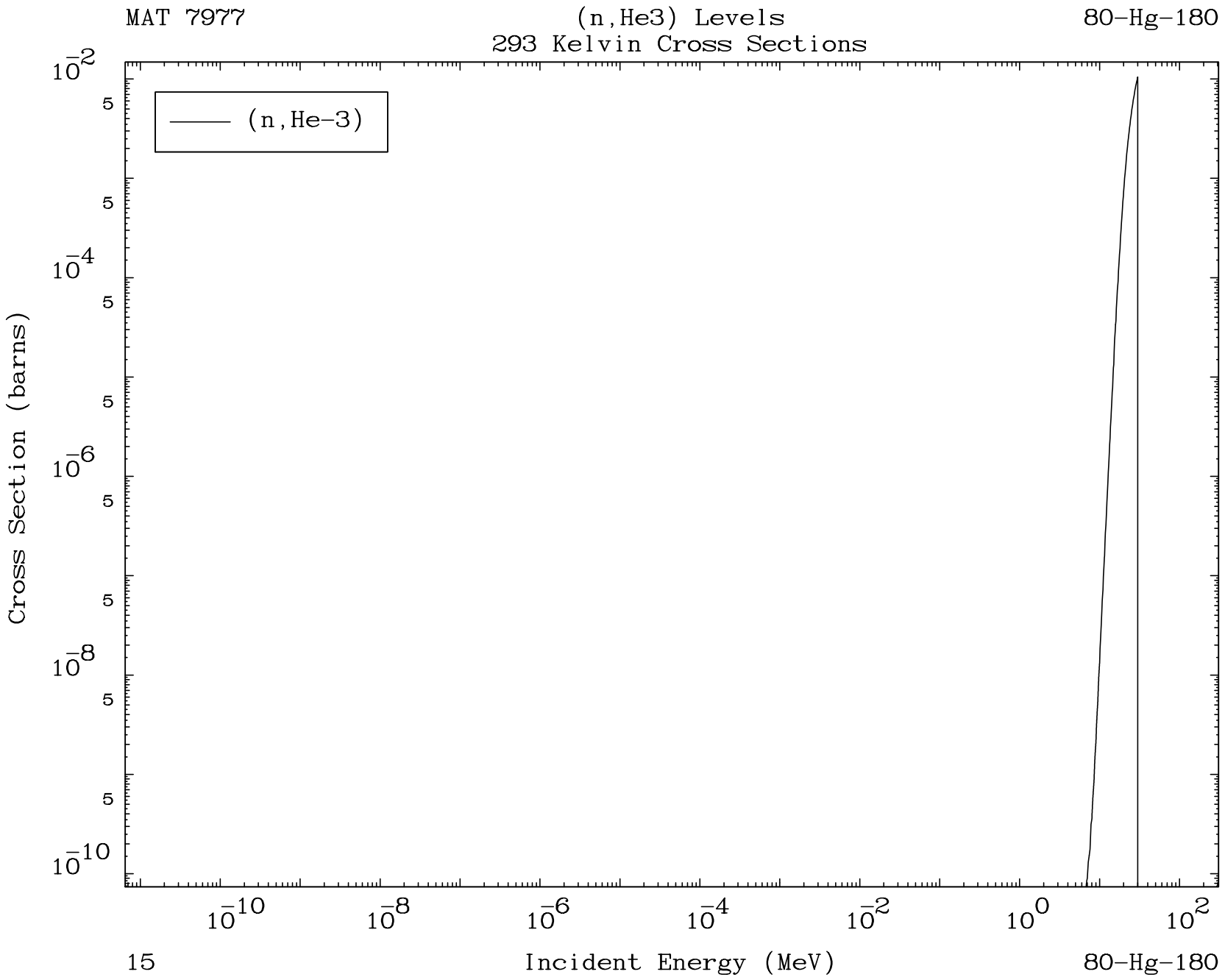

MAT 7977
(n,n') Levels
293 Kelvin Cross Sections
80-Hg-180
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
80-Hg-180

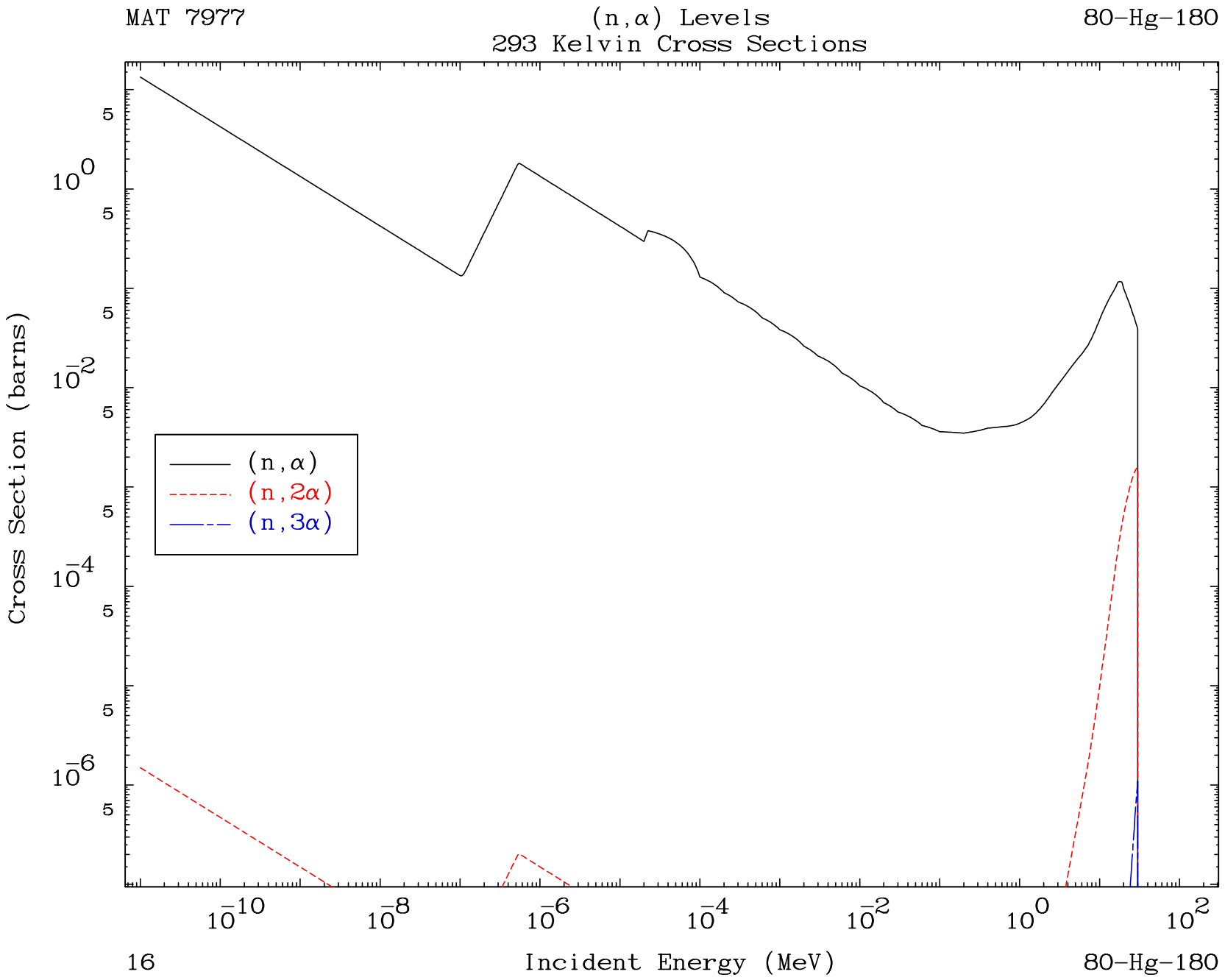

MAT 7977
(n,n') Levels
293 Kelvin Cross Sections
80-Hg-180
Inelastic
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
11
80-Hg-180

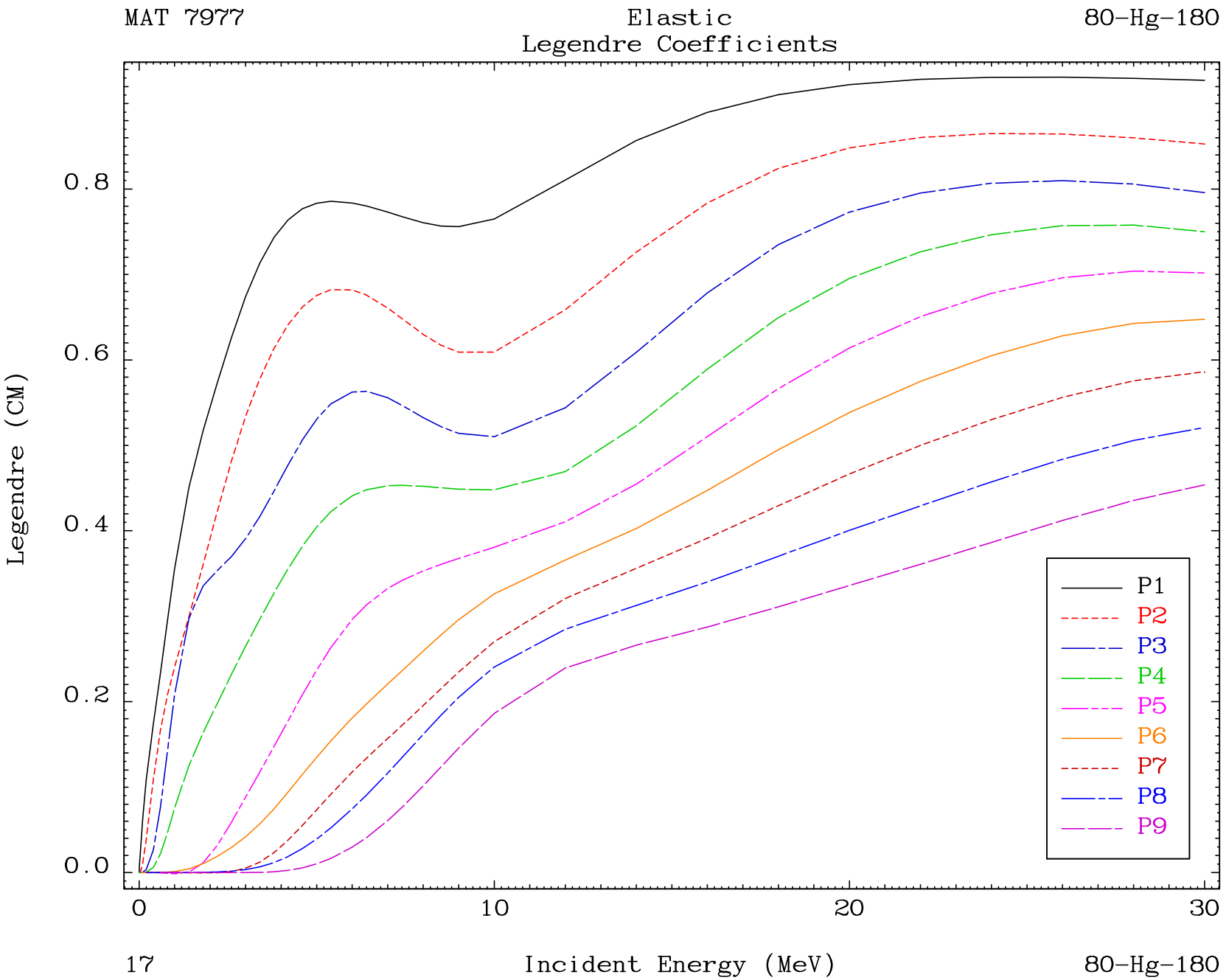

MAT 7977
(n,p) Levels
80-Hg-180
293 Kelvin Cross Sections
Cross Section (barns)
(n,p)
Incident Energy (MeV)
12
80-Hg-180

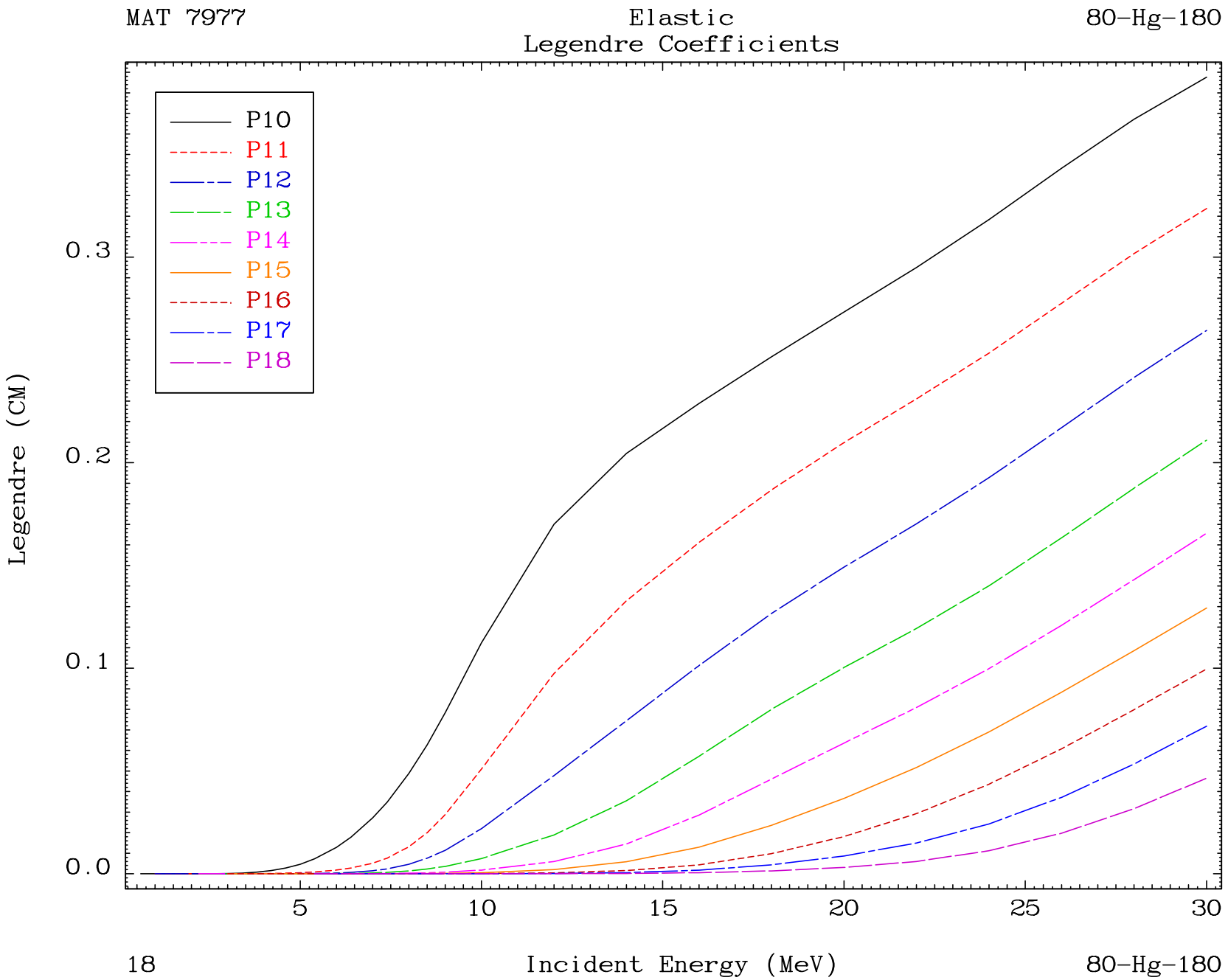

MAT 7977
(n,d) Levels
293 Kelvin Cross Sections
80-Hg-180
(n,d)
Cross Section (barns)
Incident Energy (MeV)
13
80-Hg-180

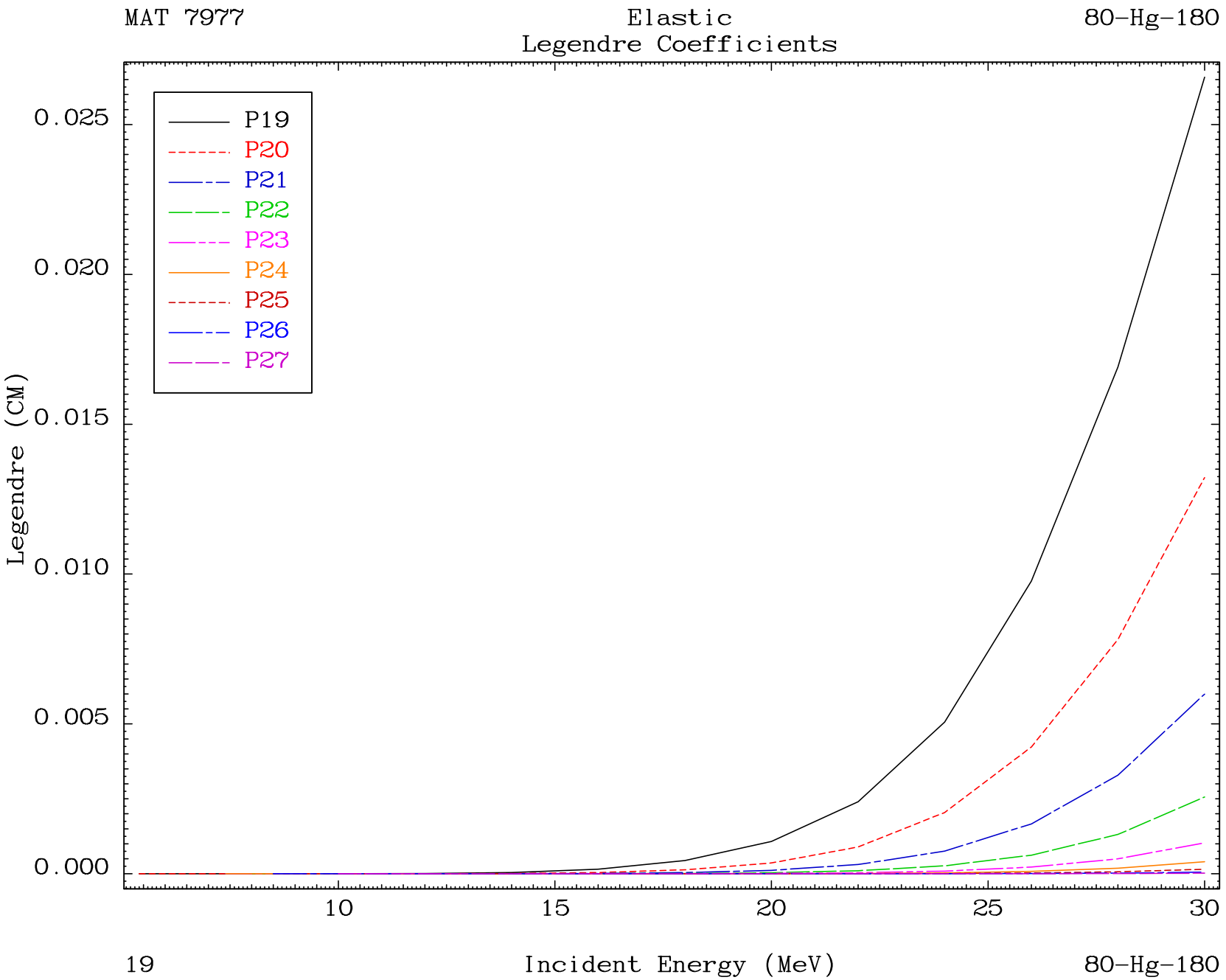

MAT 7977
(n,t) Levels
293 Kelvin Cross Sections
80-Hg-180
(n,t)
Cross Section (barns)
Incident Energy (MeV)
14
80-Hg-180

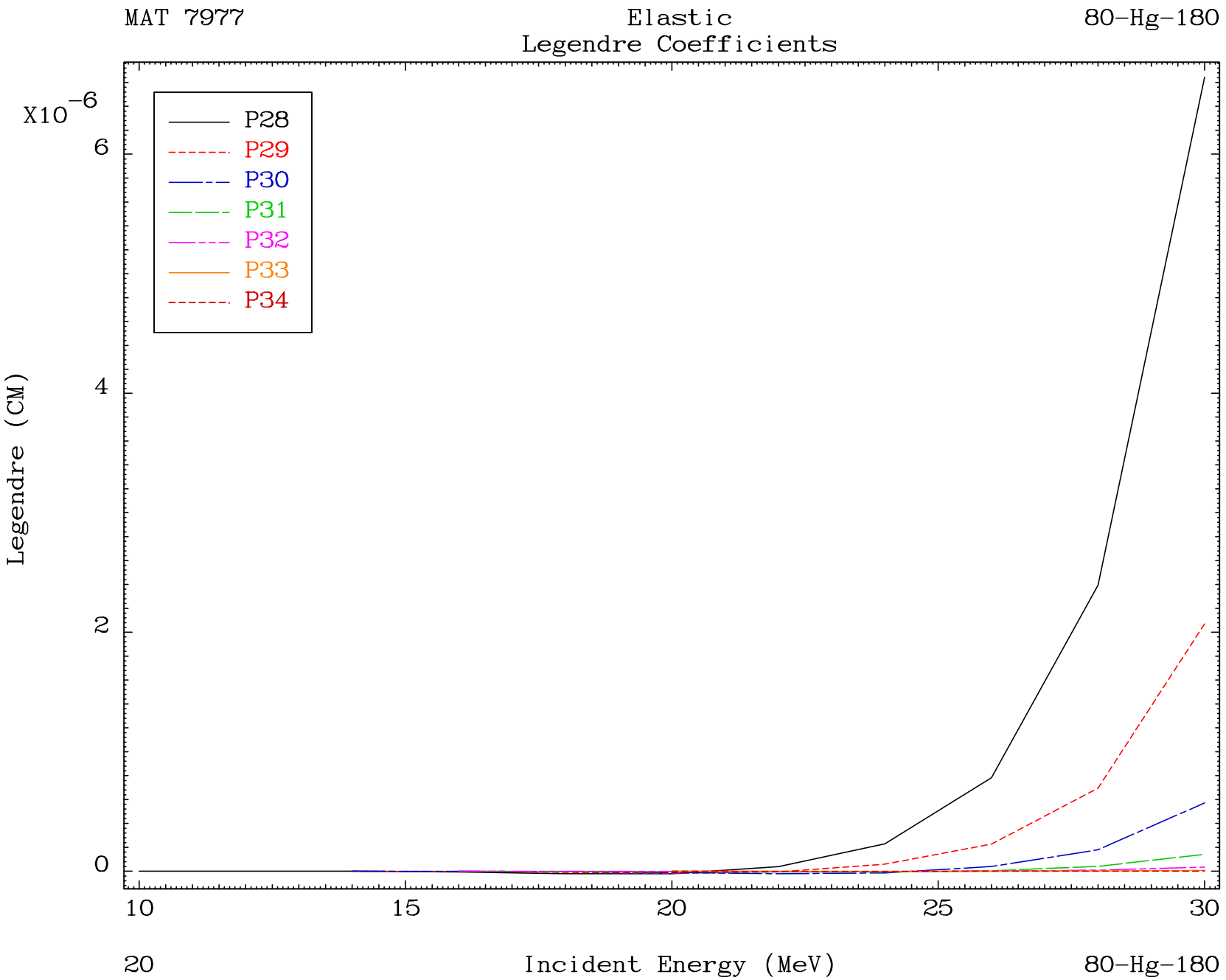

MAT 7977
(n,He3) Levels
293 Kelvin Cross Sections
80-Hg-180
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
15
80-Hg-180

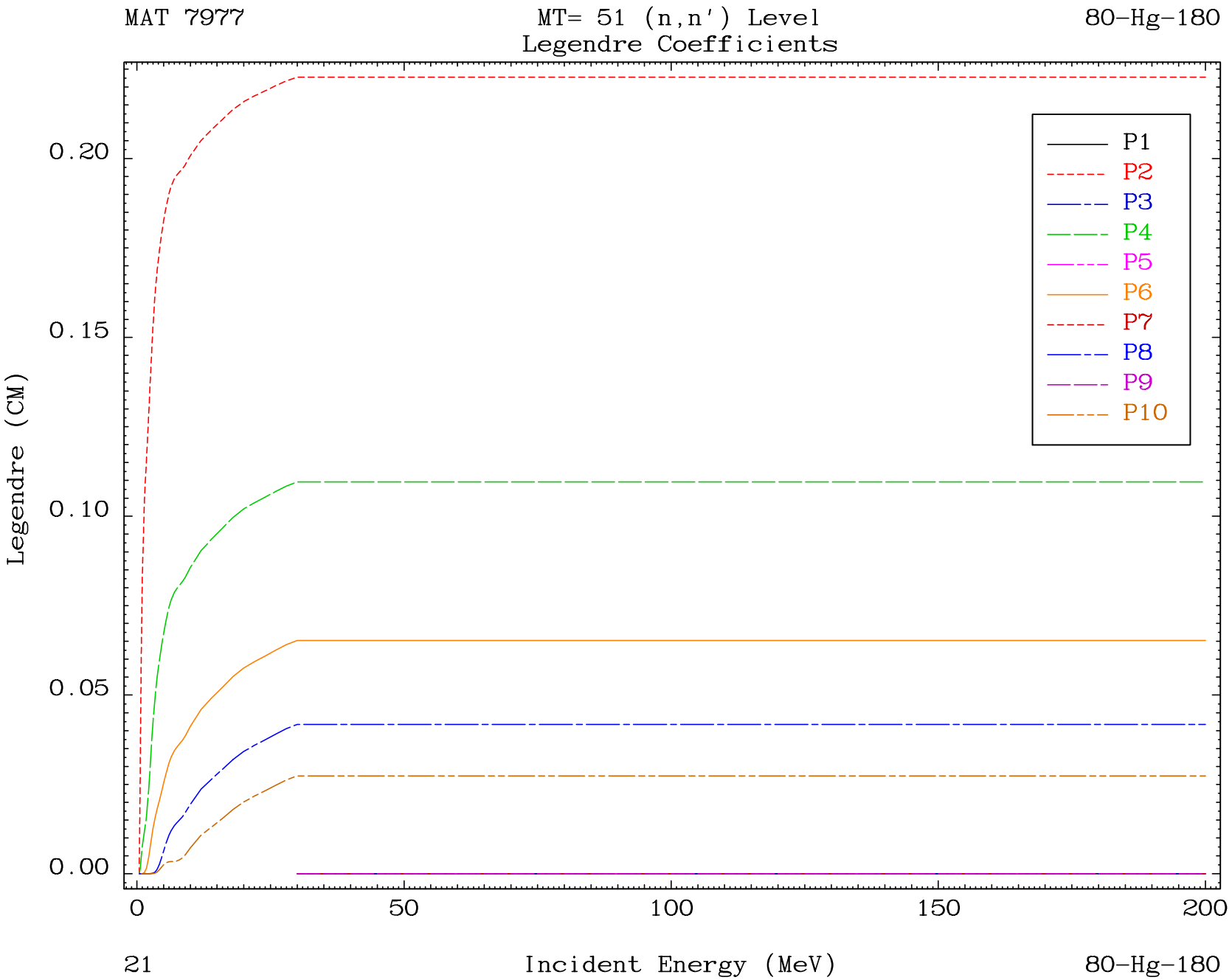

MAT 7977
(n,α) Levels
293 Kelvin Cross Sections
80-Hg-180
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
(n,α)
(n,2α)
(n,3α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
16
80-Hg-180

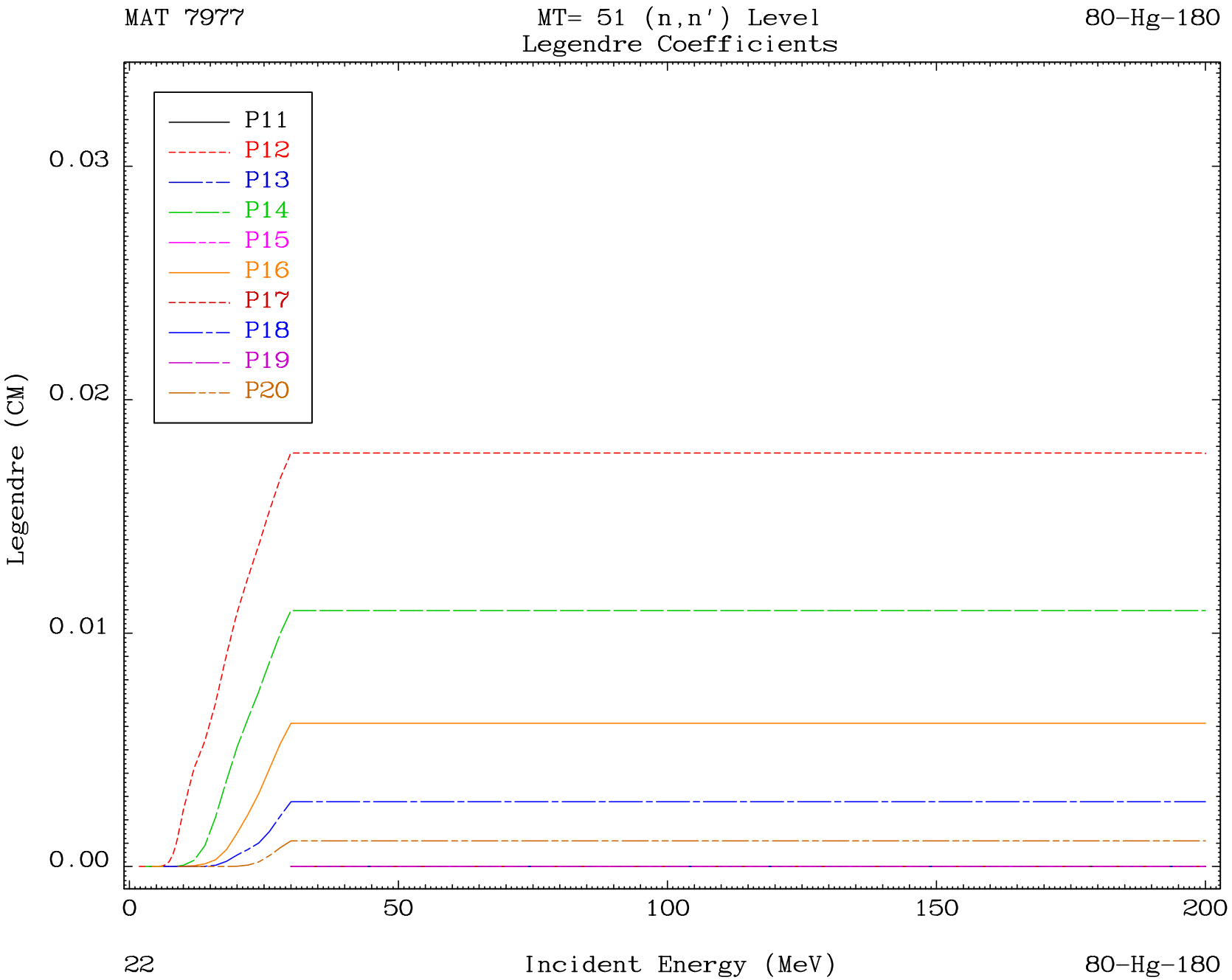

MAT 7977
Elastic
Legendre Coefficients
80-Hg-180
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
17
Incident Energy (MeV)
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9

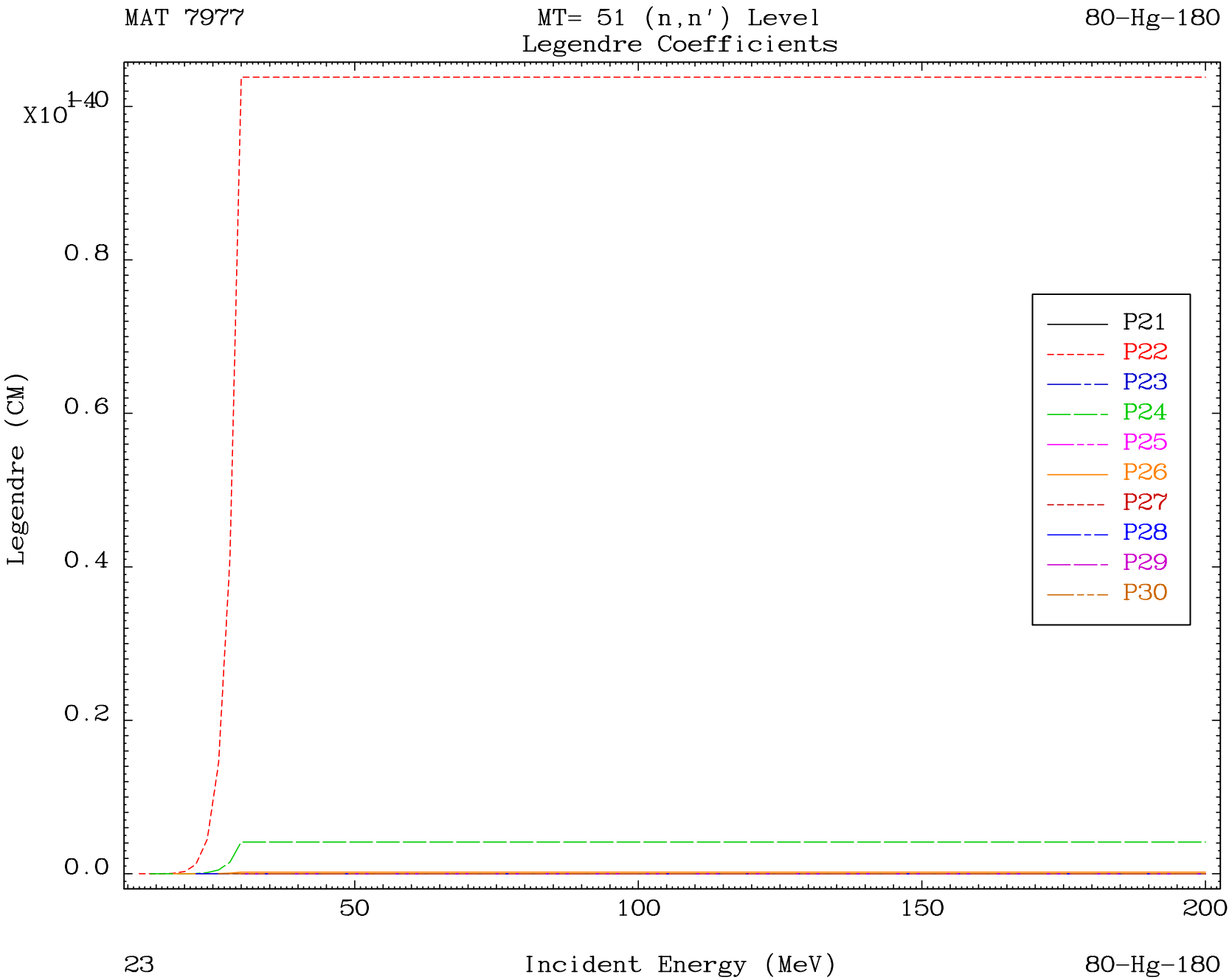

MAT 7977
Elastic
Legendre Coefficients
80-Hg-180
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.0
0.1
0.2
0.3
5
10
15
20
25
30
18
Incident Energy (MeV)
80-Hg-180

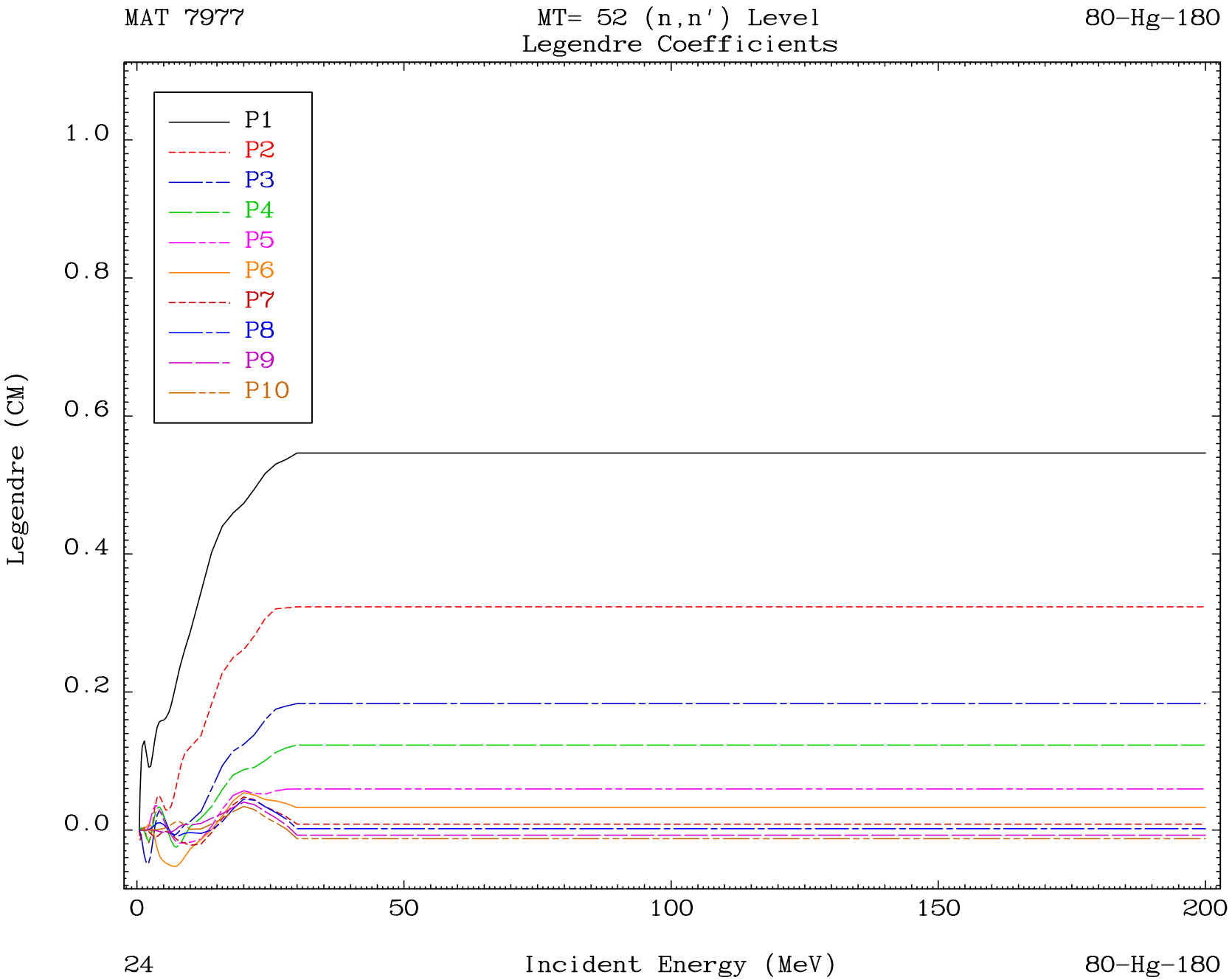

MAT 7977
Elastic
Legendre Coefficients
80-Hg-180
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.025
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
10
15
20
25
30
19
Incident Energy (MeV)
80-Hg-180

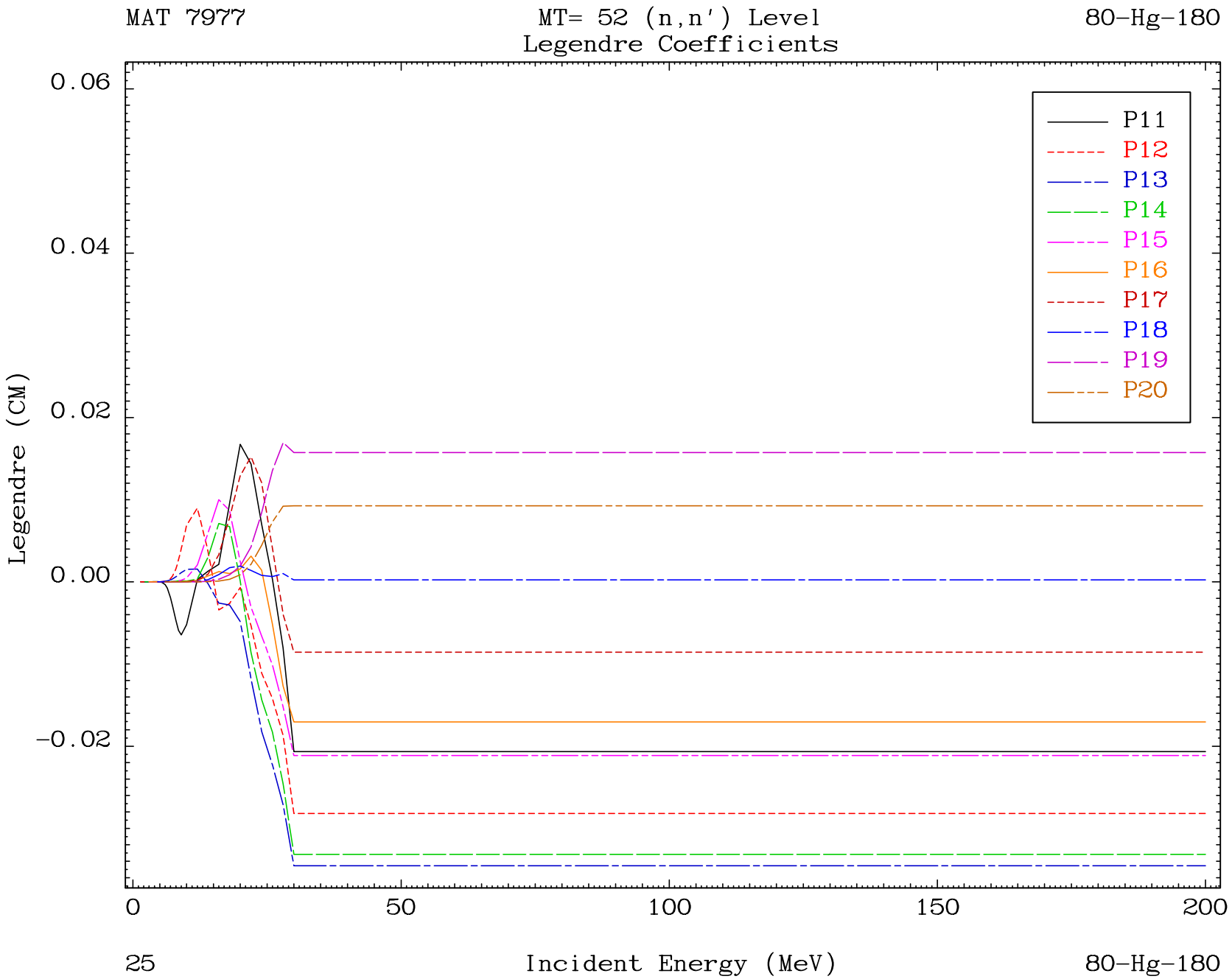

MAT 7977
Elastic
Legendre Coefficients
80-Hg-180
X10 -6
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
10
15
20
25
30
20
Incident Energy (MeV)
80-Hg-180

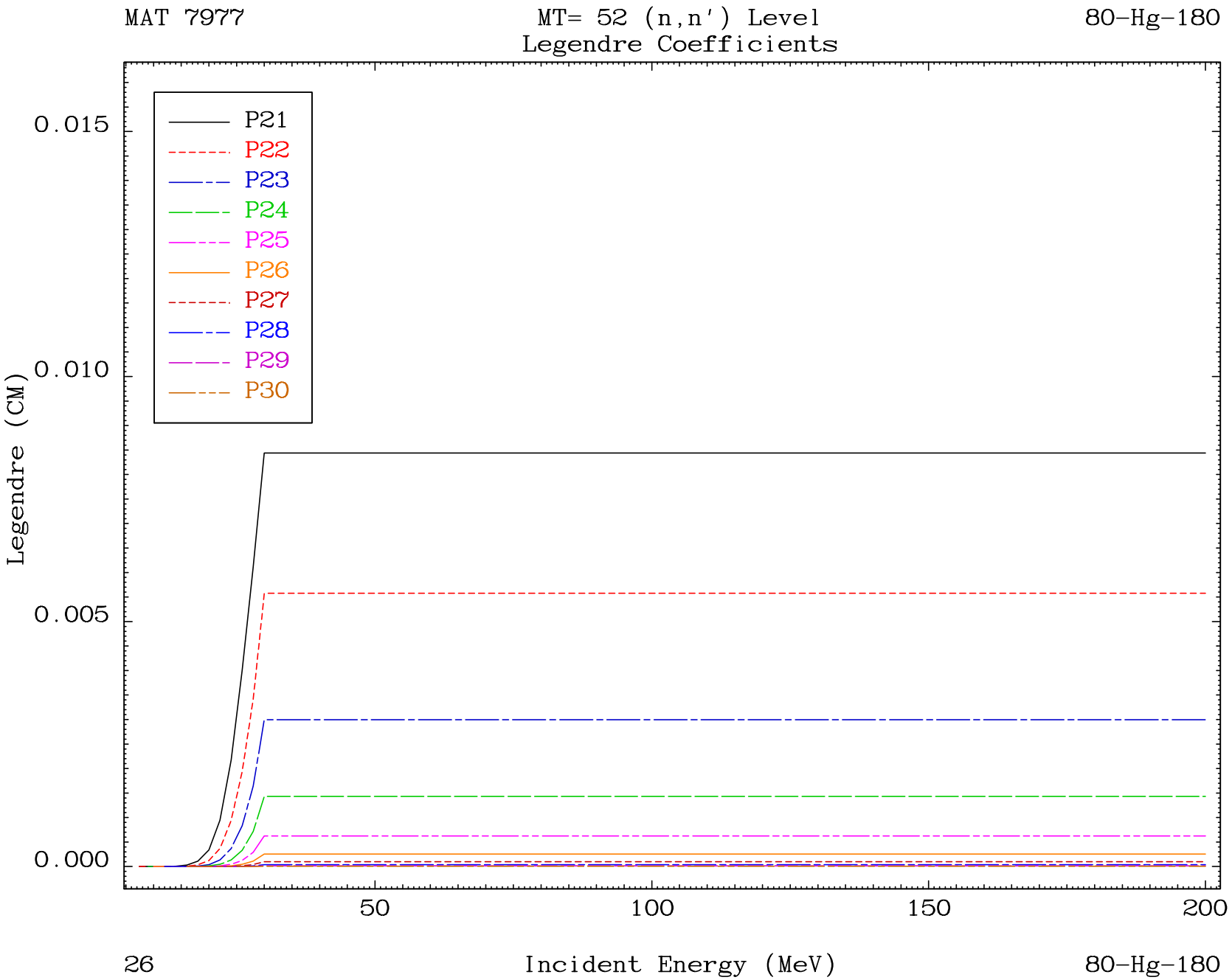

MAT 7977
MT= 51 (n,n') Level
Legendre Coefficients
80-Hg-180
Legendre (CM)
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
Incident Energy (MeV)
21
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

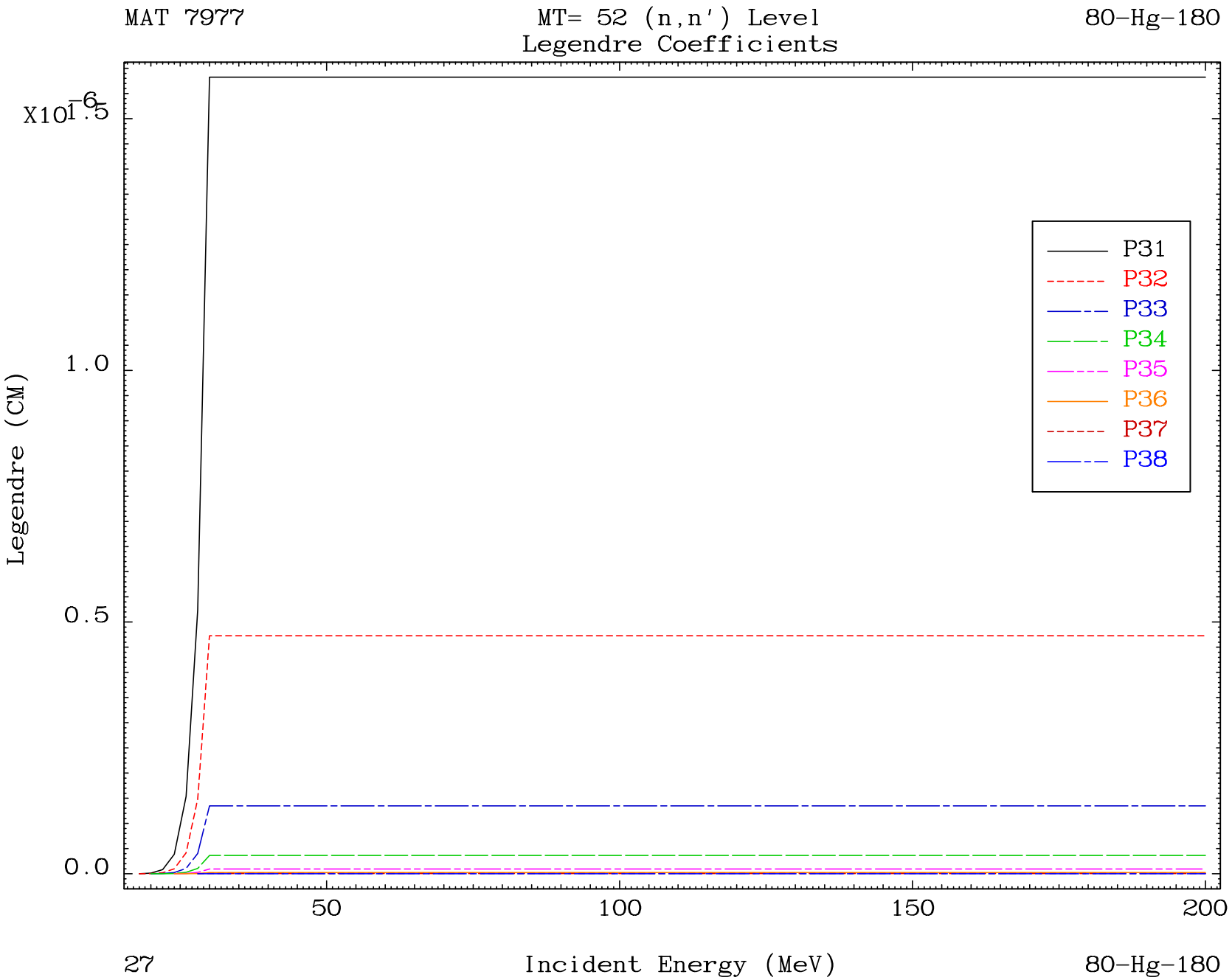

MAT 7977
MT= 51 (n,n') Level
Legendre Coefficients
80-Hg-180
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
22
Incident Energy (MeV)
80-Hg-180

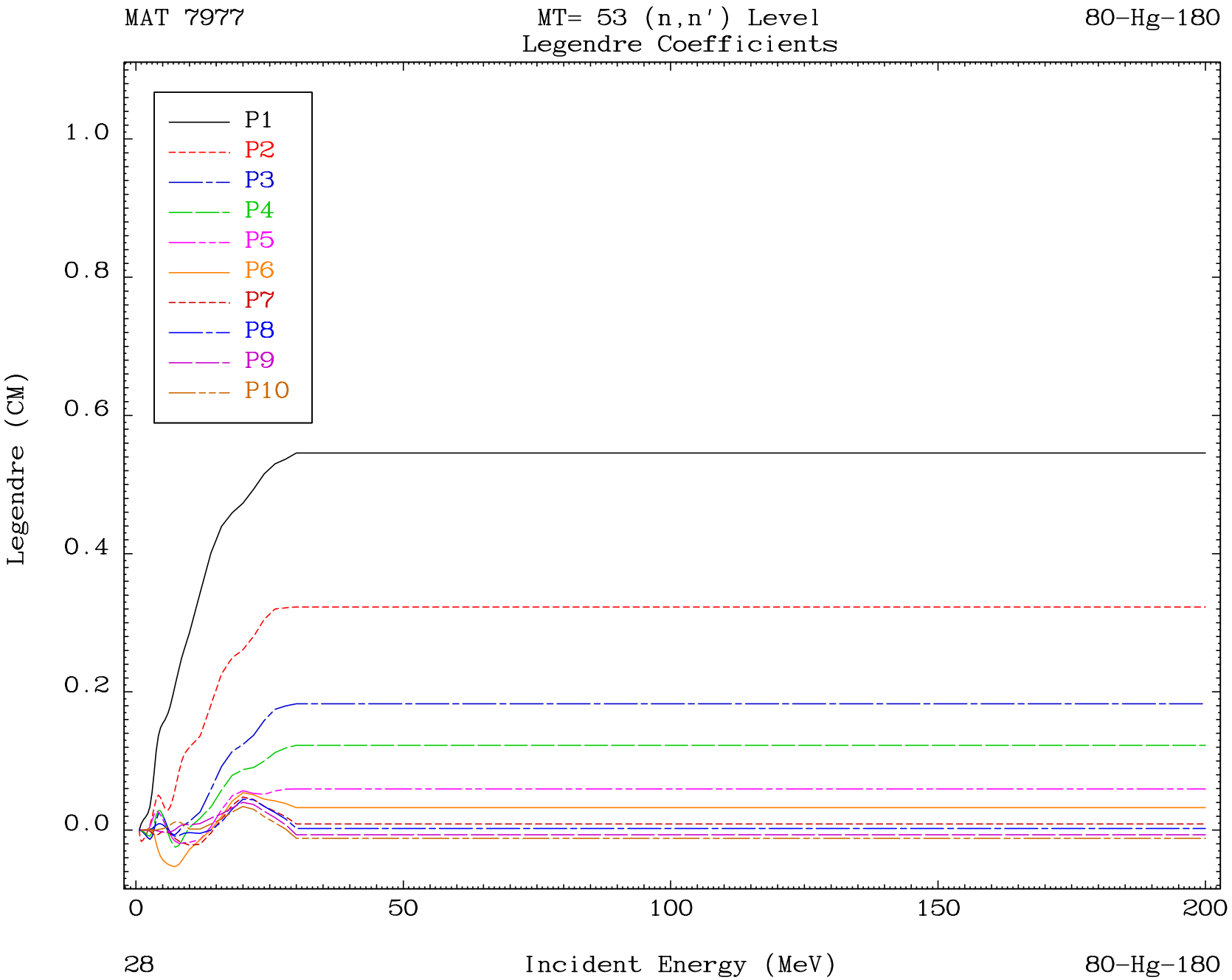

MAT 7977
MT= 51 (n,n') Level
Legendre Coefficients
80-Hg-180
X10+40
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
23
Incident Energy (MeV)
80-Hg-180
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

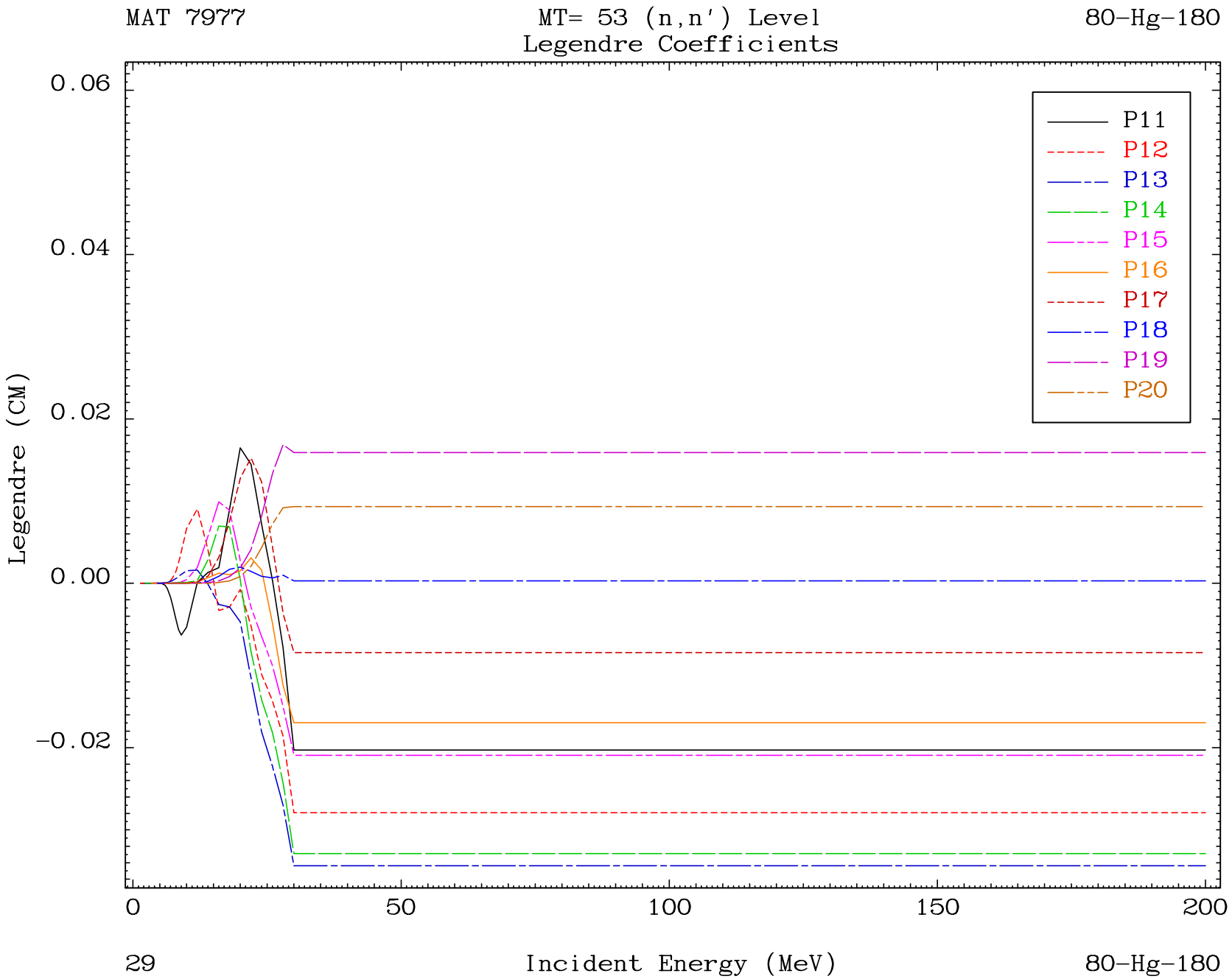

MAT 7977
MT= 52 (n,n') Level
Legendre Coefficients
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
24
Incident Energy (MeV)
80-Hg-180

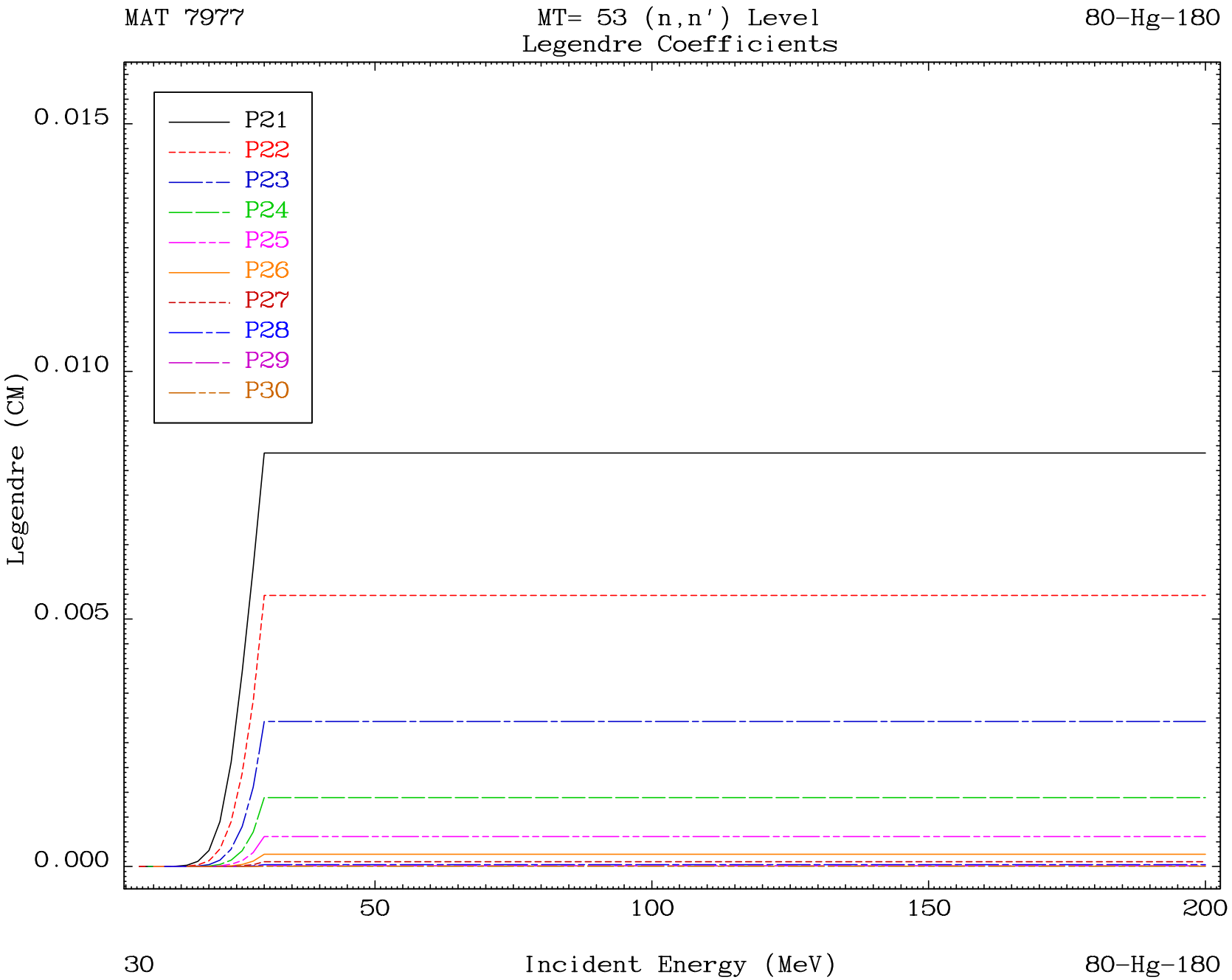

MAT 7977
MT= 52 (n,n') Level
Legendre Coefficients
80-Hg-180
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0
50
100
150
200
25
Incident Energy (MeV)
80-Hg-180

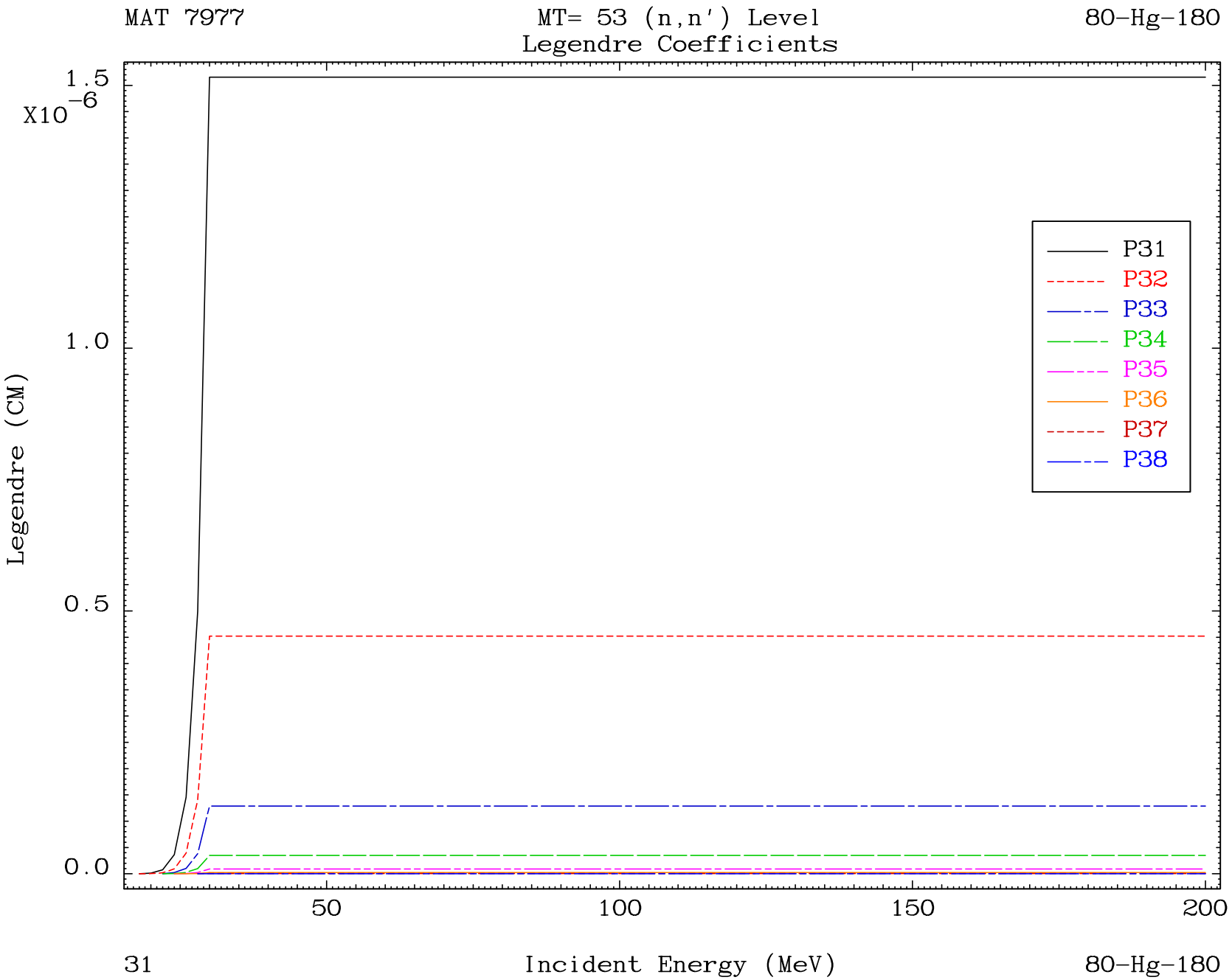

MAT 7977
MT= 52 (n,n') Level
Legendre Coefficients
80-Hg-180
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
26
Incident Energy (MeV)
80-Hg-180

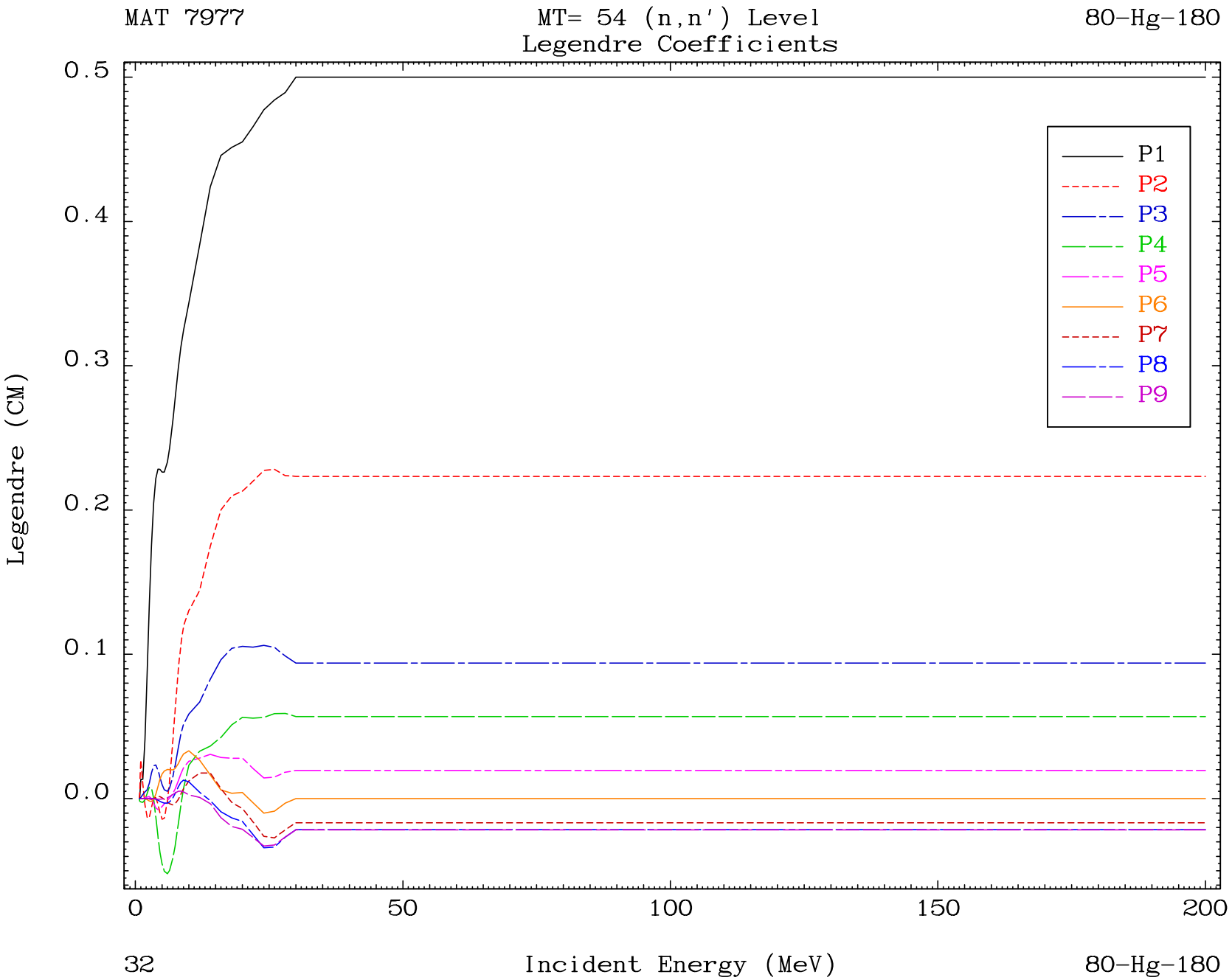

MAT 7977
MT= 52 (n,n') Level
Legendre Coefficients
80-Hg-180
X10-6
1.5
1.0
0.5
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
27
Incident Energy (MeV)
80-Hg-180

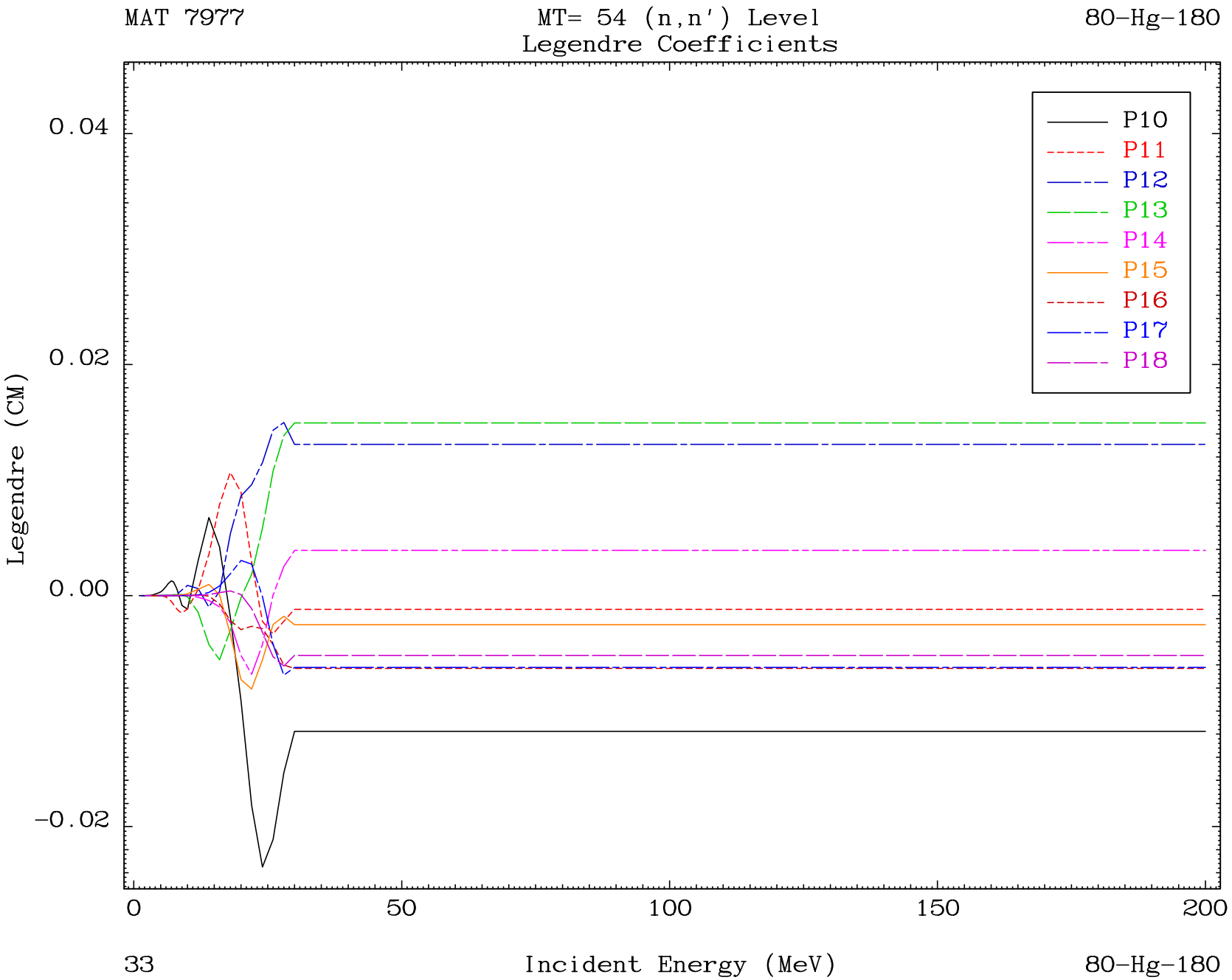

MAT 7977
MT= 53 (n,n') Level
Legendre Coefficients
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
28
Incident Energy (MeV)
80-Hg-180

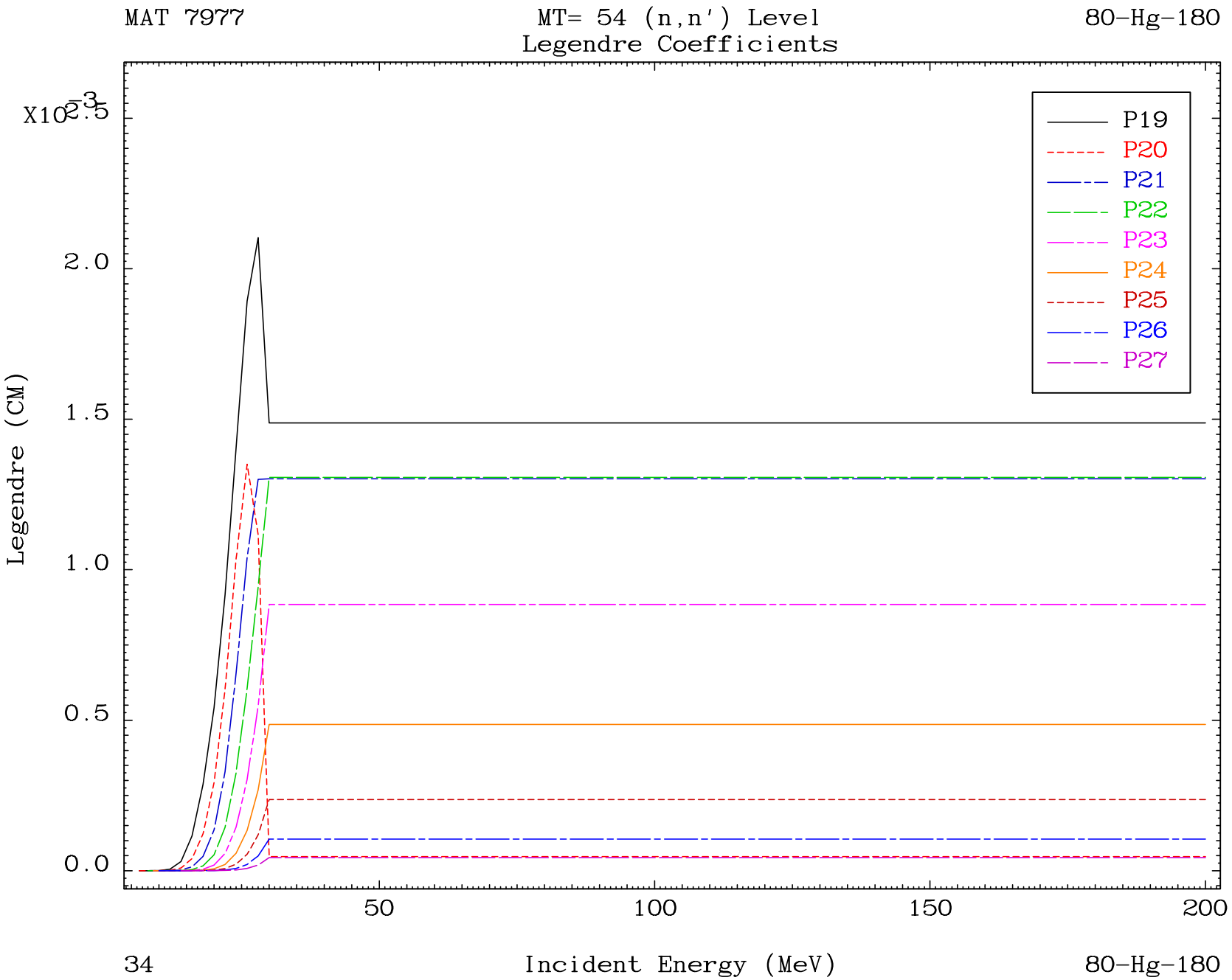

MAT 7977
MT= 53 (n,n') Level
Legendre Coefficients
80-Hg-180
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0
50
100
150
200
29
Incident Energy (MeV)
80-Hg-180

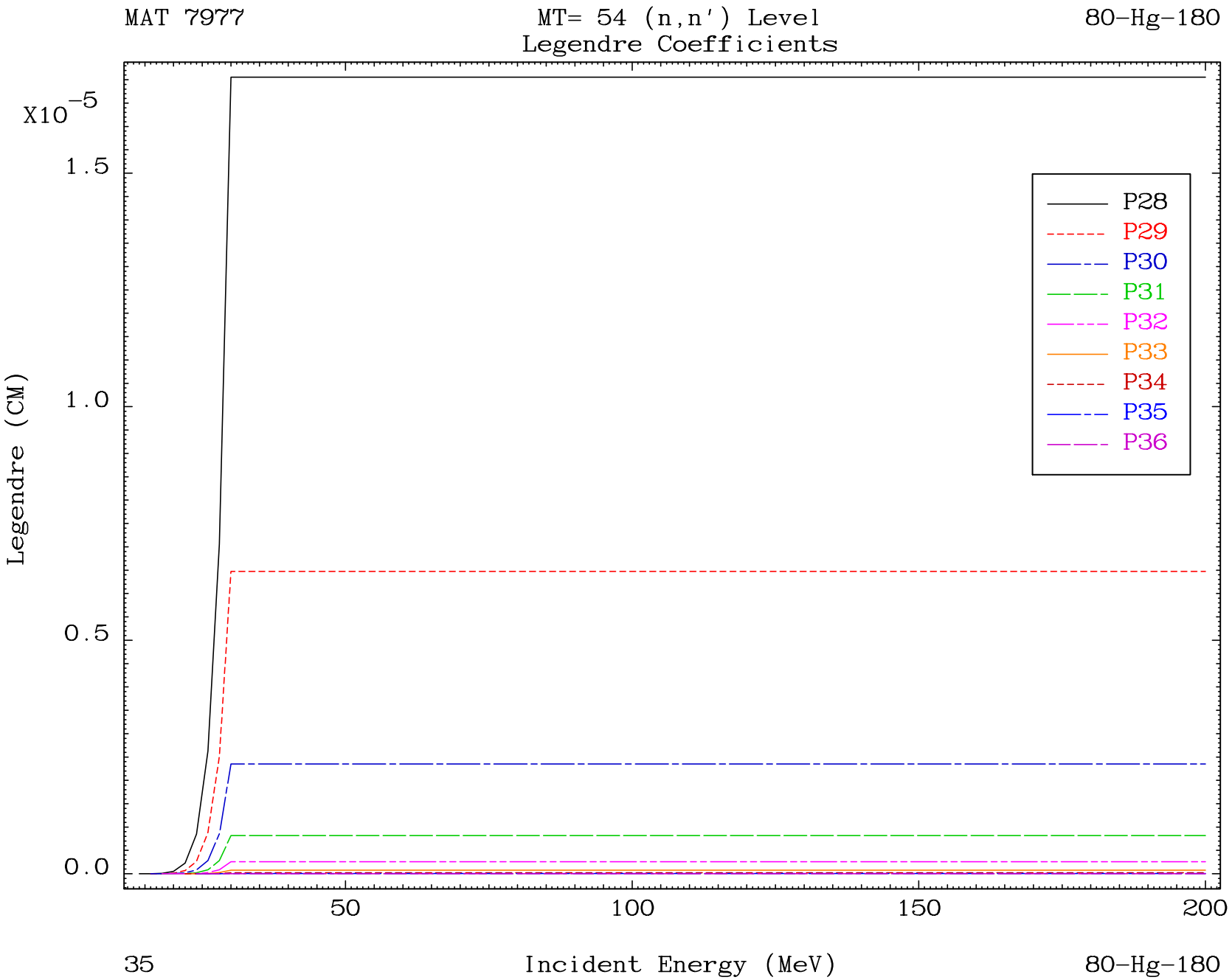

MAT 7977
MT= 53 (n,n') Level
Legendre Coefficients
80-Hg-180
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
30
Incident Energy (MeV)
80-Hg-180

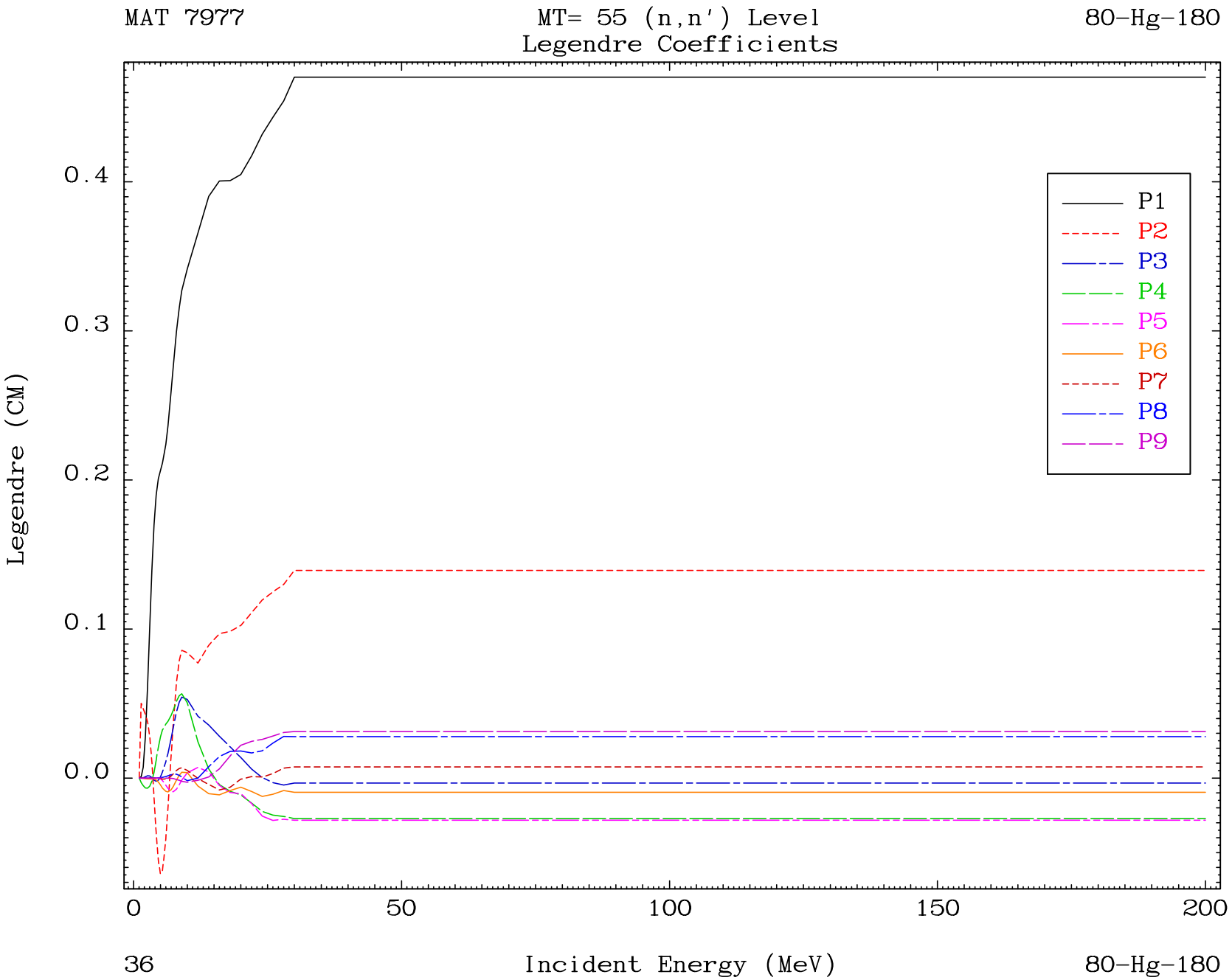

MAT 7977
MT= 53 (n,n') Level
Legendre Coefficients
80-Hg-180
X10 -6
1.5
1.0
0.5
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
31
Incident Energy (MeV)
80-Hg-180

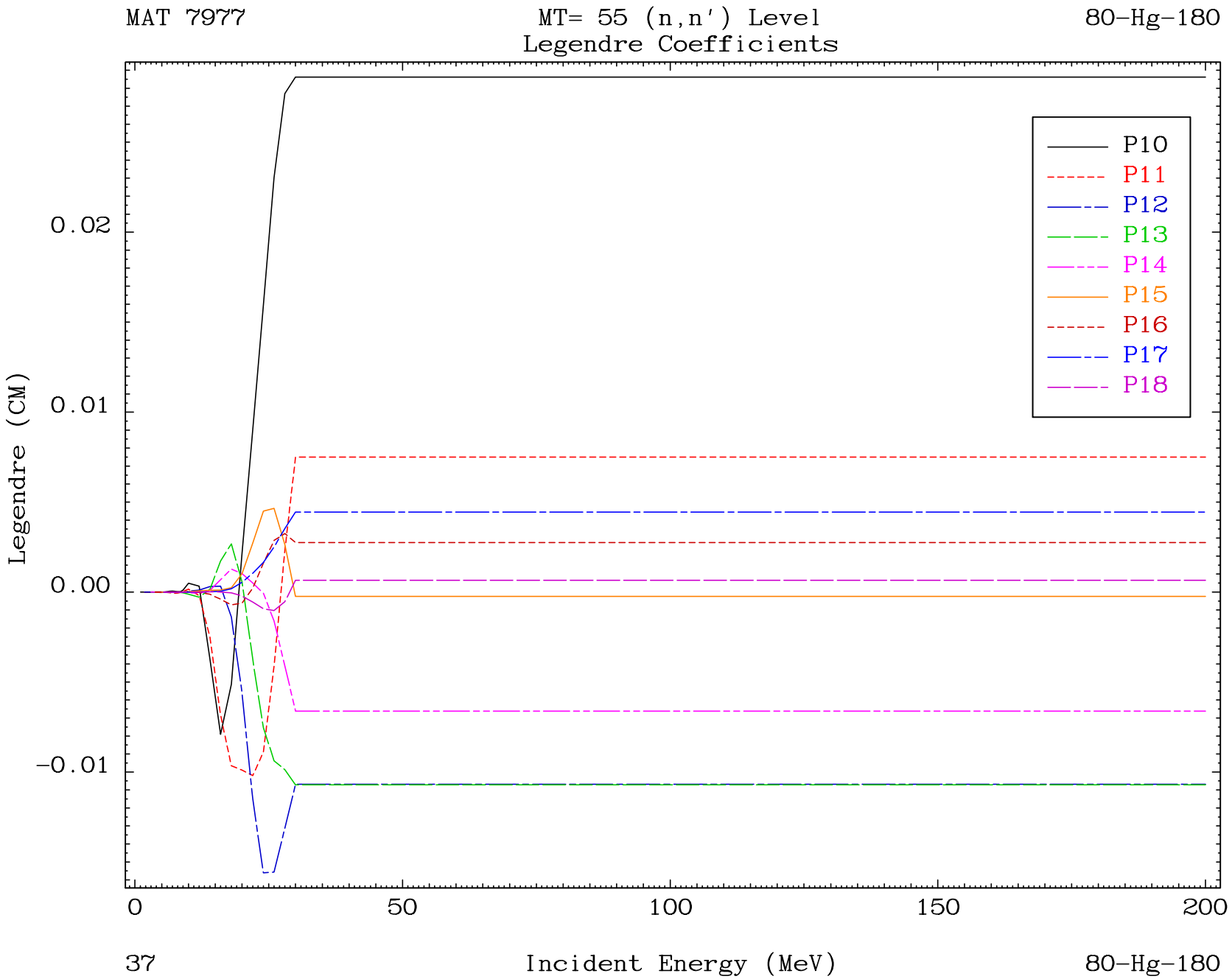

MAT 7977
MT= 54 (n,n') Level
Legendre Coefficients
80-Hg-180
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
32
Incident Energy (MeV)
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9

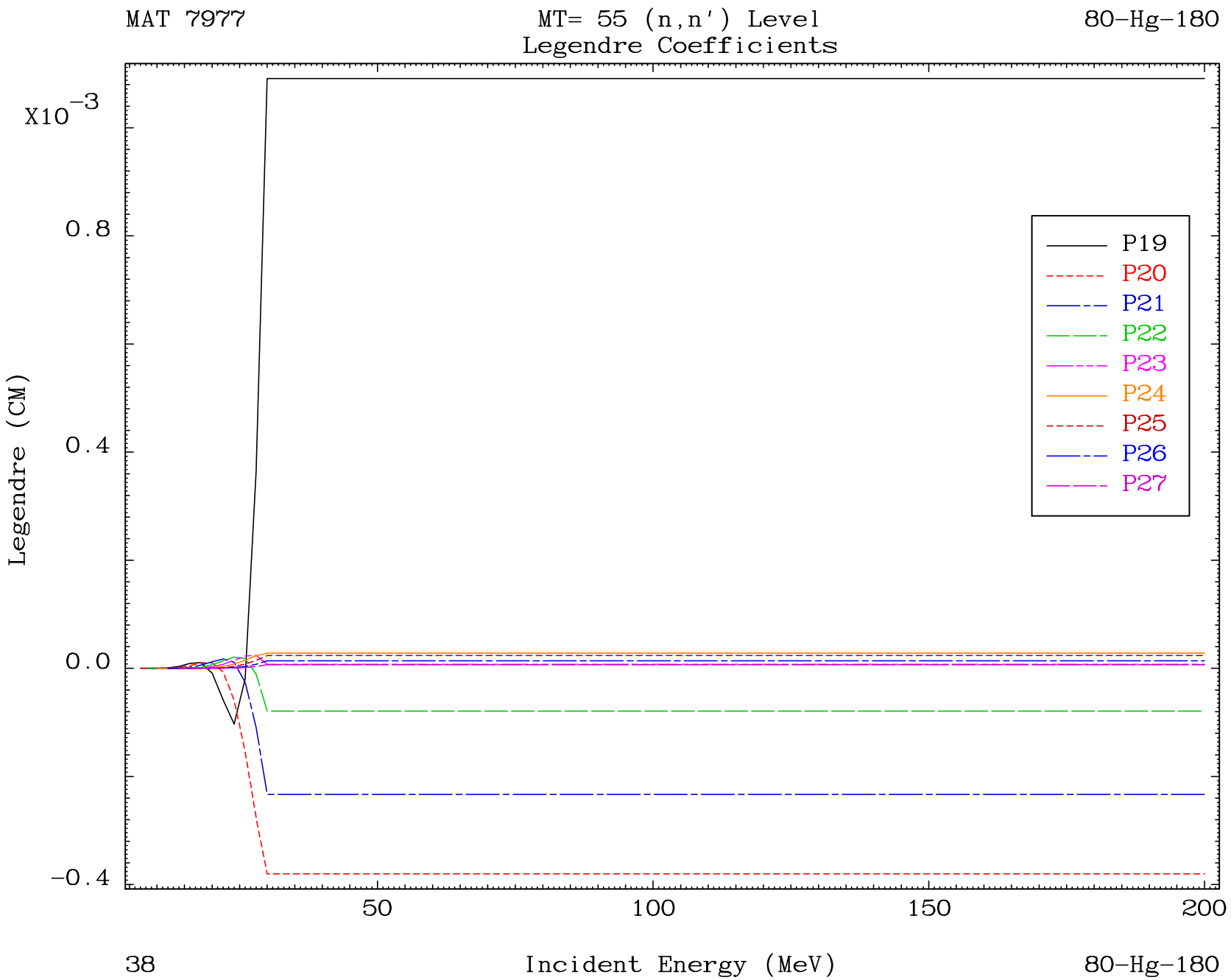

MAT 7977
MT= 54 (n,n') Level
Legendre Coefficients
80-Hg-180
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
33
Incident Energy (MeV)
80-Hg-180

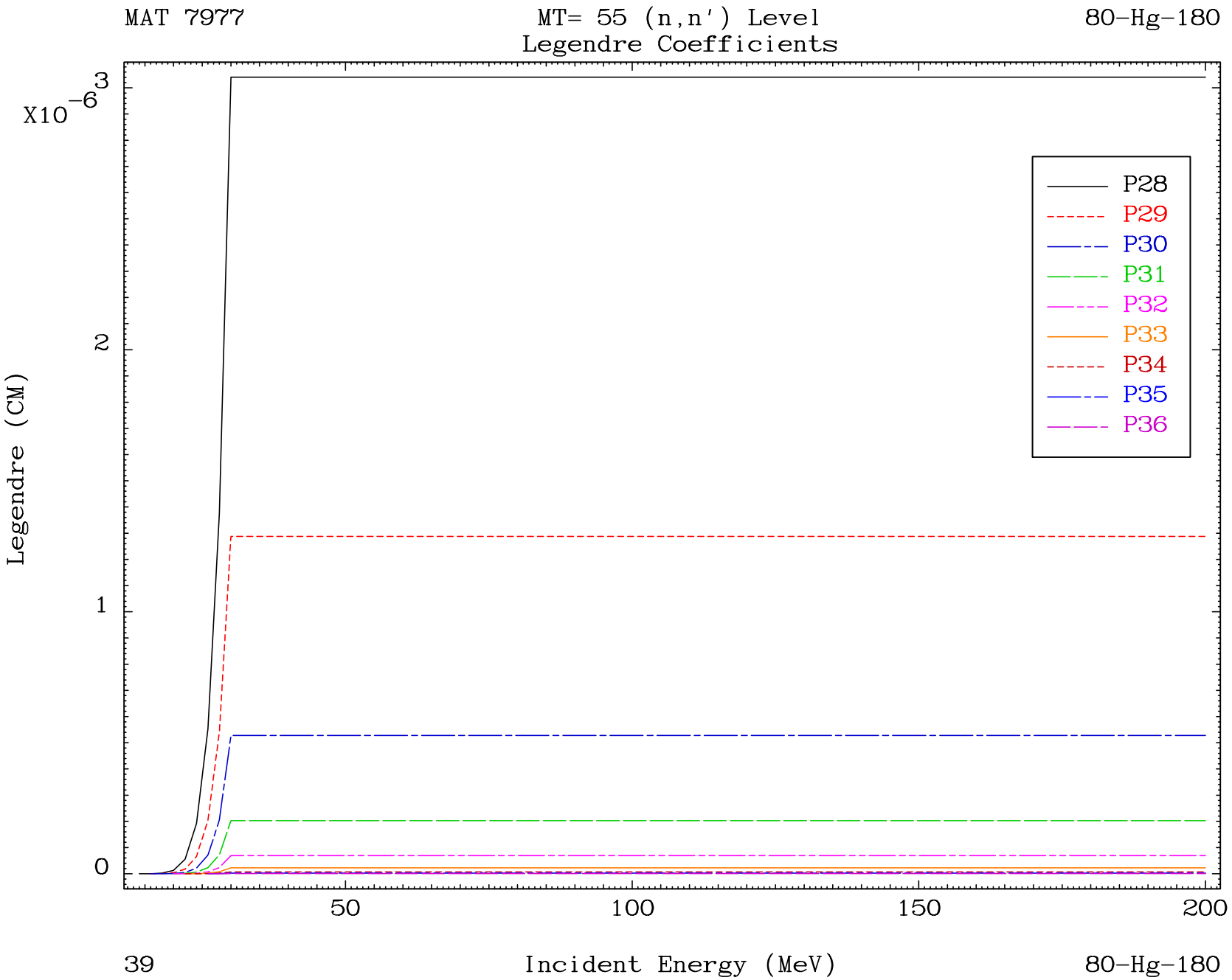

MAT 7977
MT= 54 (n,n') Level
Legendre Coefficients
80-Hg-180
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
34
Incident Energy (MeV)
80-Hg-180

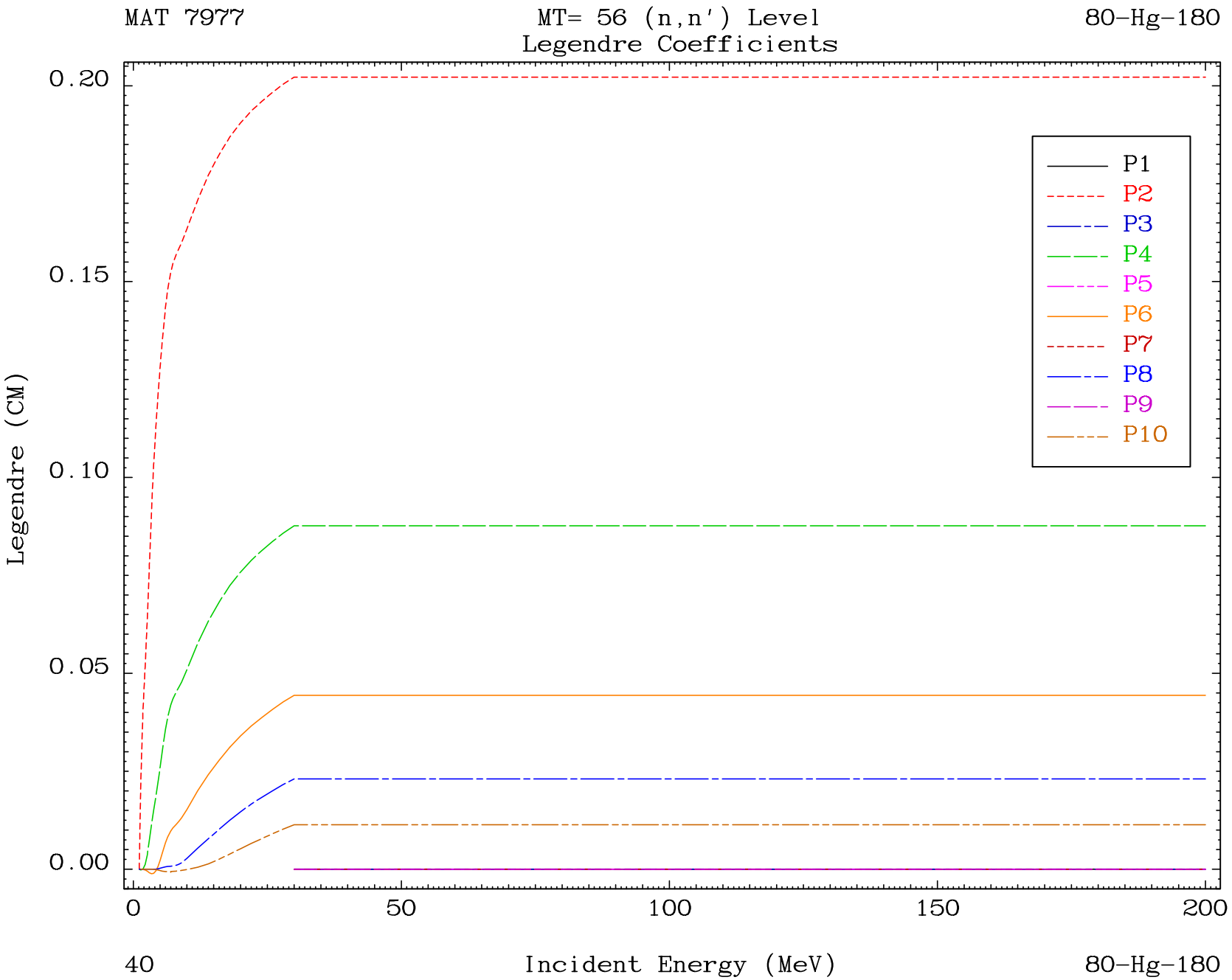

MAT 7977
MT= 54 (n,n') Level
Legendre Coefficients
80-Hg-180
X10^-5
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
35
Incident Energy (MeV)
80-Hg-180

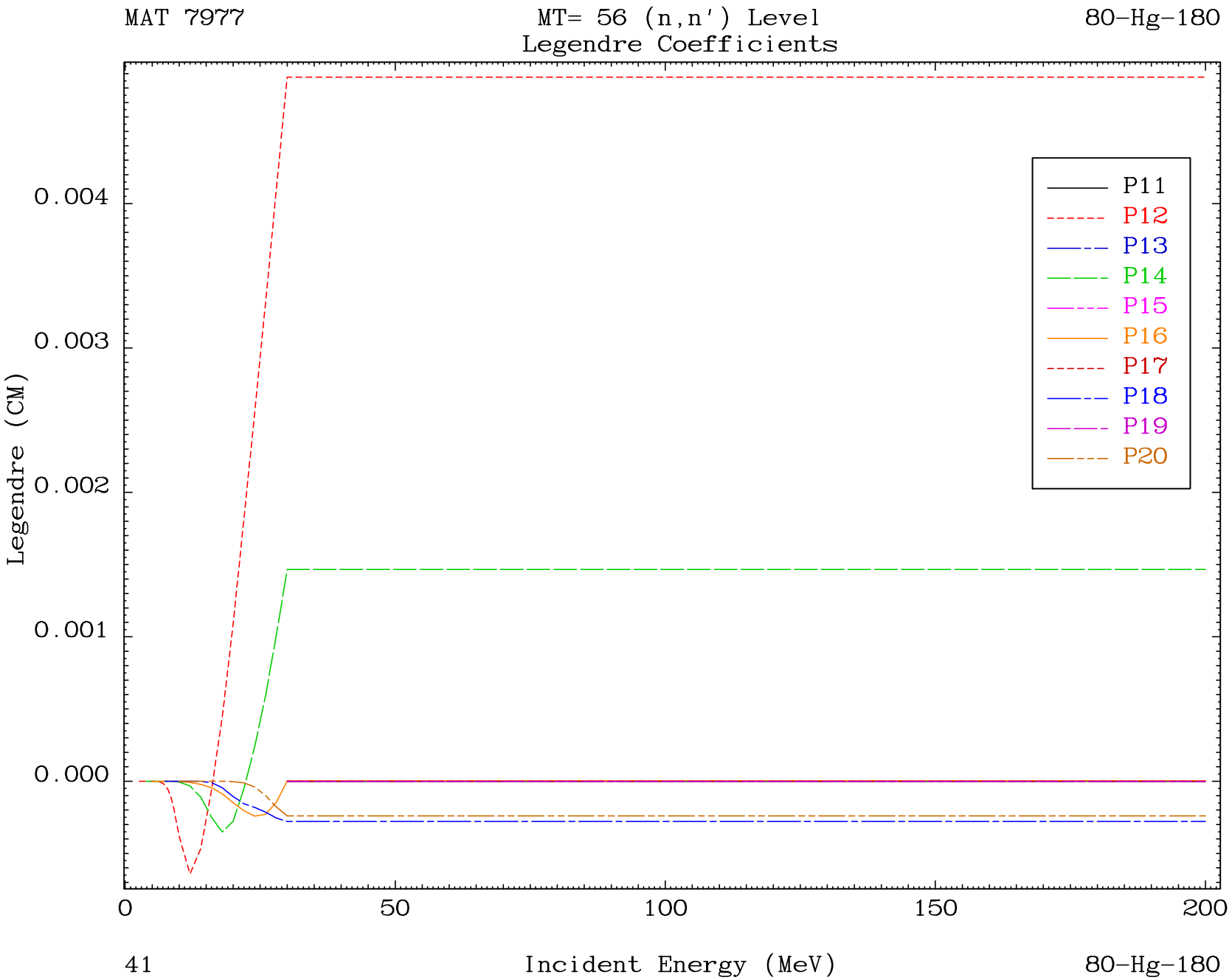

MAT 7977
MT= 55 (n,n') Level
Legendre Coefficients
80-Hg-180
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
36
Incident Energy (MeV)
80-Hg-180

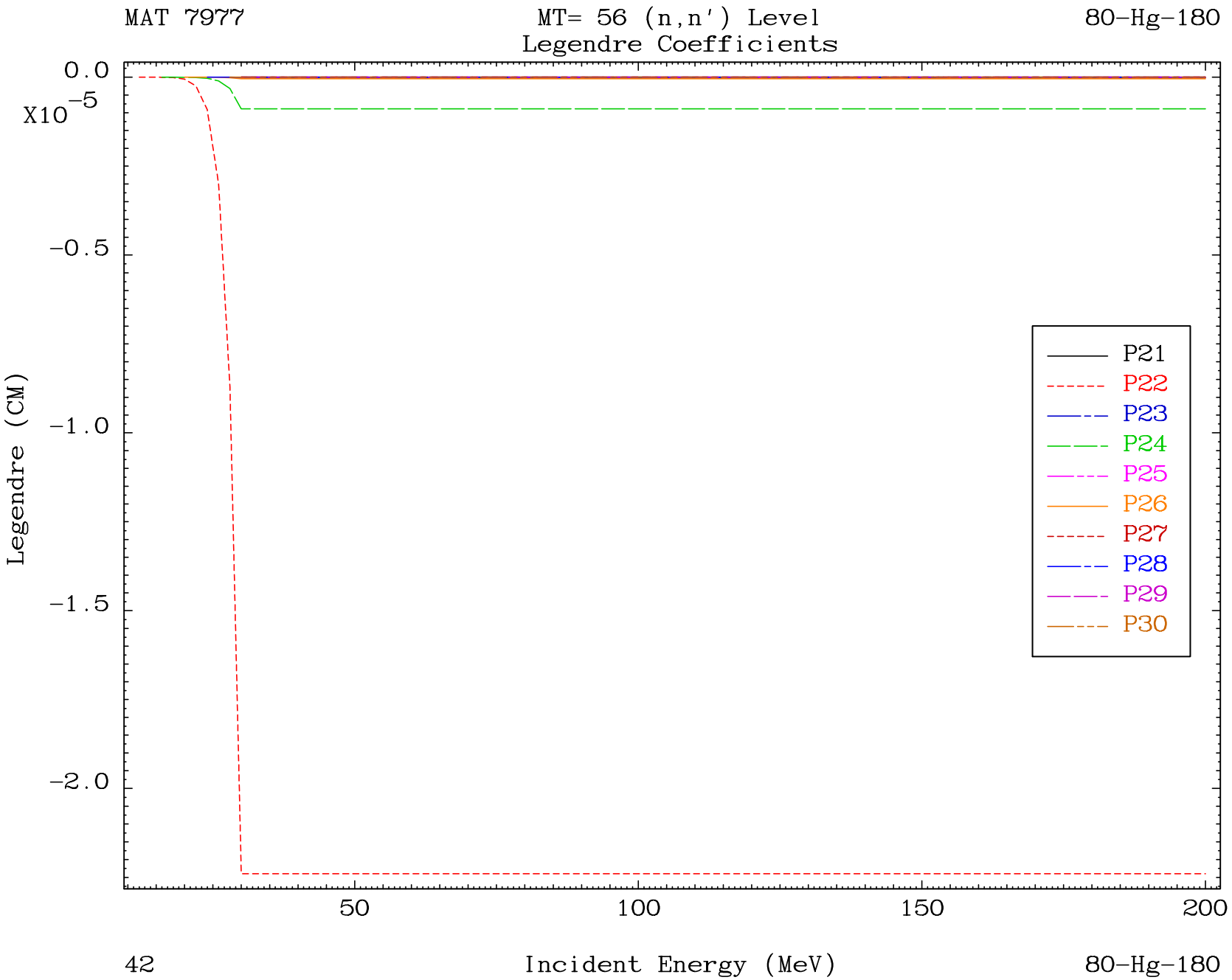

MAT 7977
MT= 55 (n,n') Level
Legendre Coefficients
80-Hg-180
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.02
0.01
0.00
-0.01
Legendre (CM)
0
50
100
150
200
37
Incident Energy (MeV)
80-Hg-180

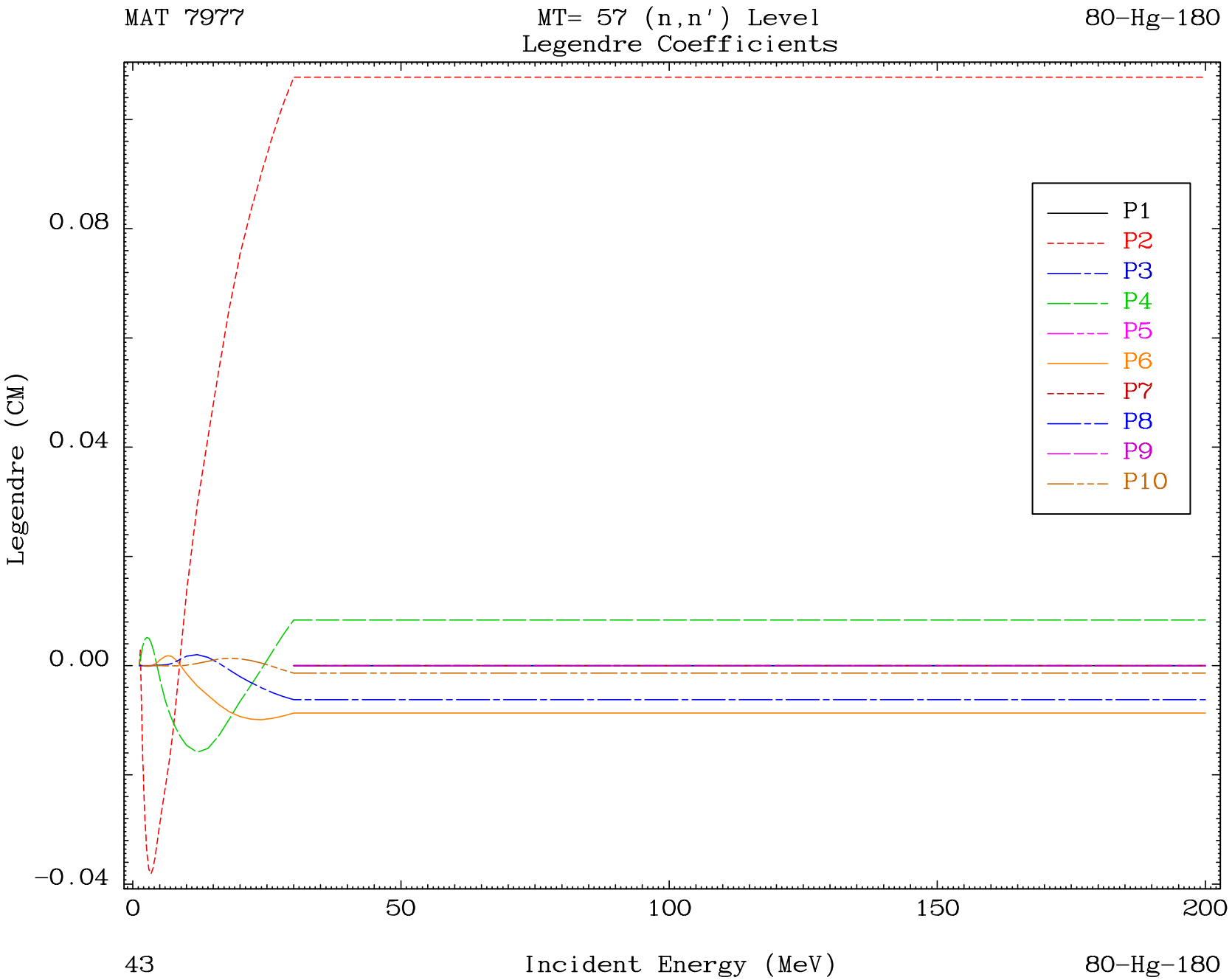

MAT 7977
MT= 55 (n,n') Level
Legendre Coefficients
80-Hg-180
X10^-3
0.8
0.4
0.0
-0.4
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
38
Incident Energy (MeV)
80-Hg-180

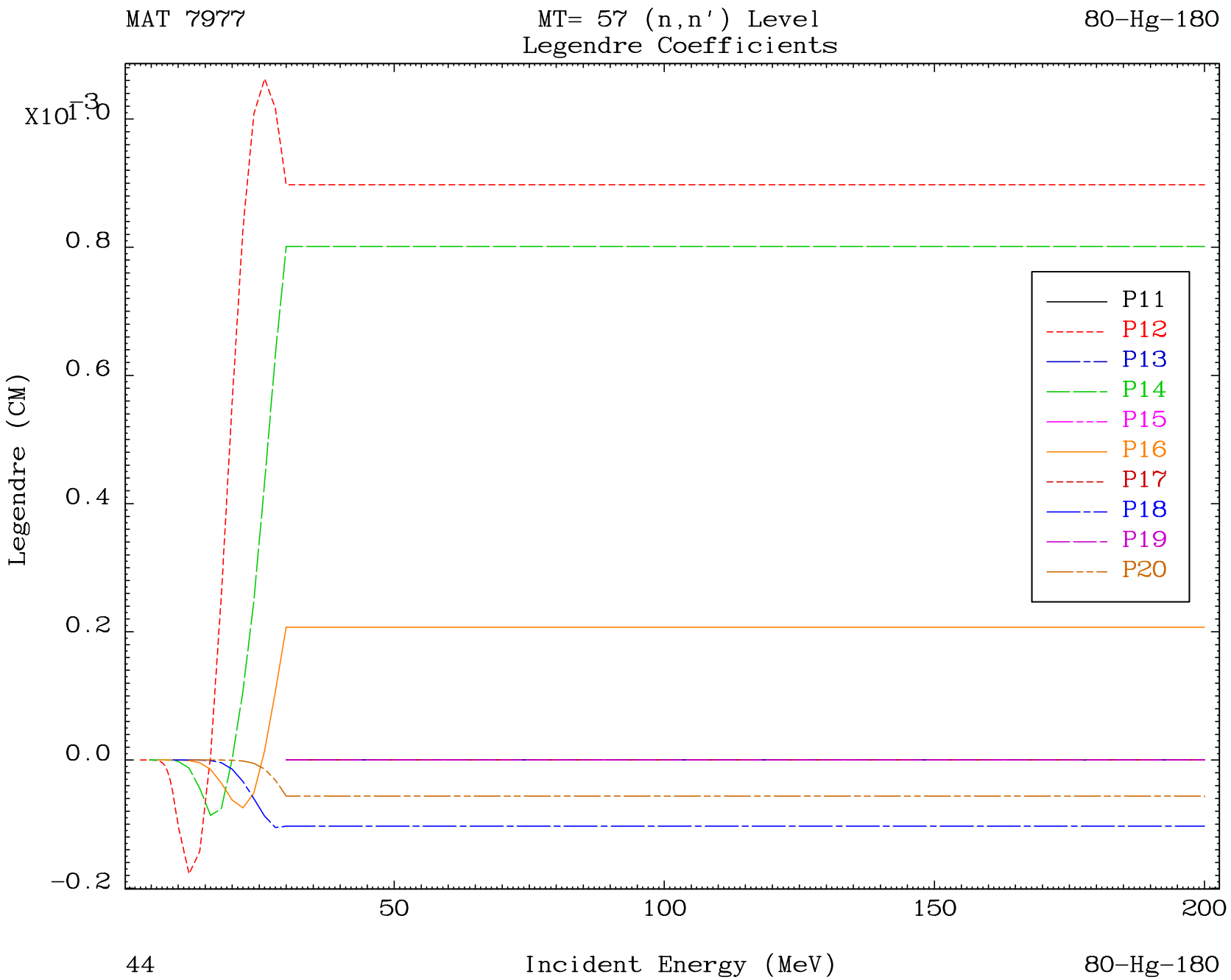

MAT 7977
MT= 55 (n,n') Level
Legendre Coefficients
80-Hg-180
X10 -6
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
39
Incident Energy (MeV)
80-Hg-180

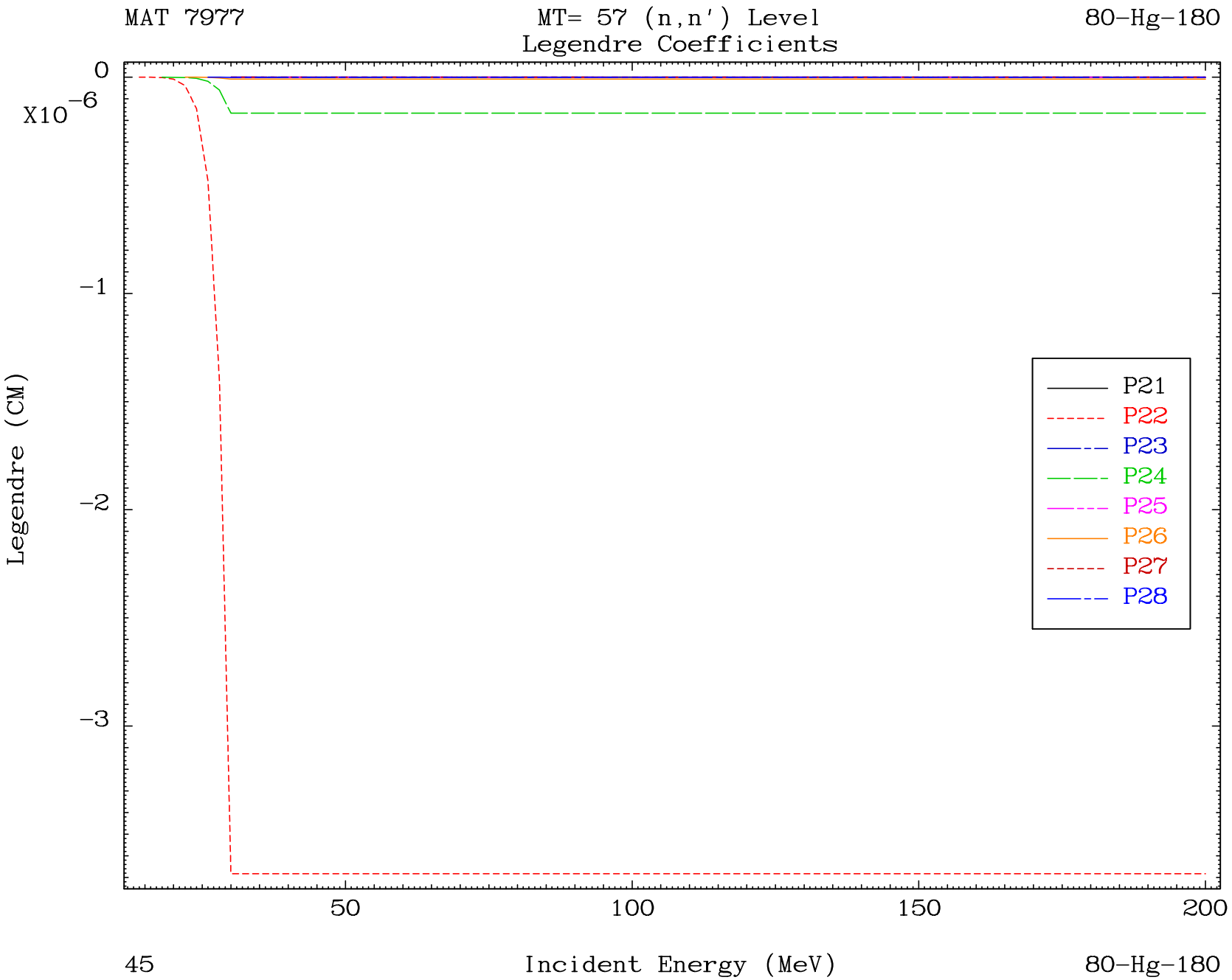

MAT 7977
MT= 56 (n,n') Level
Legendre Coefficients
80-Hg-180
0.20
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
40
Incident Energy (MeV)
80-Hg-180

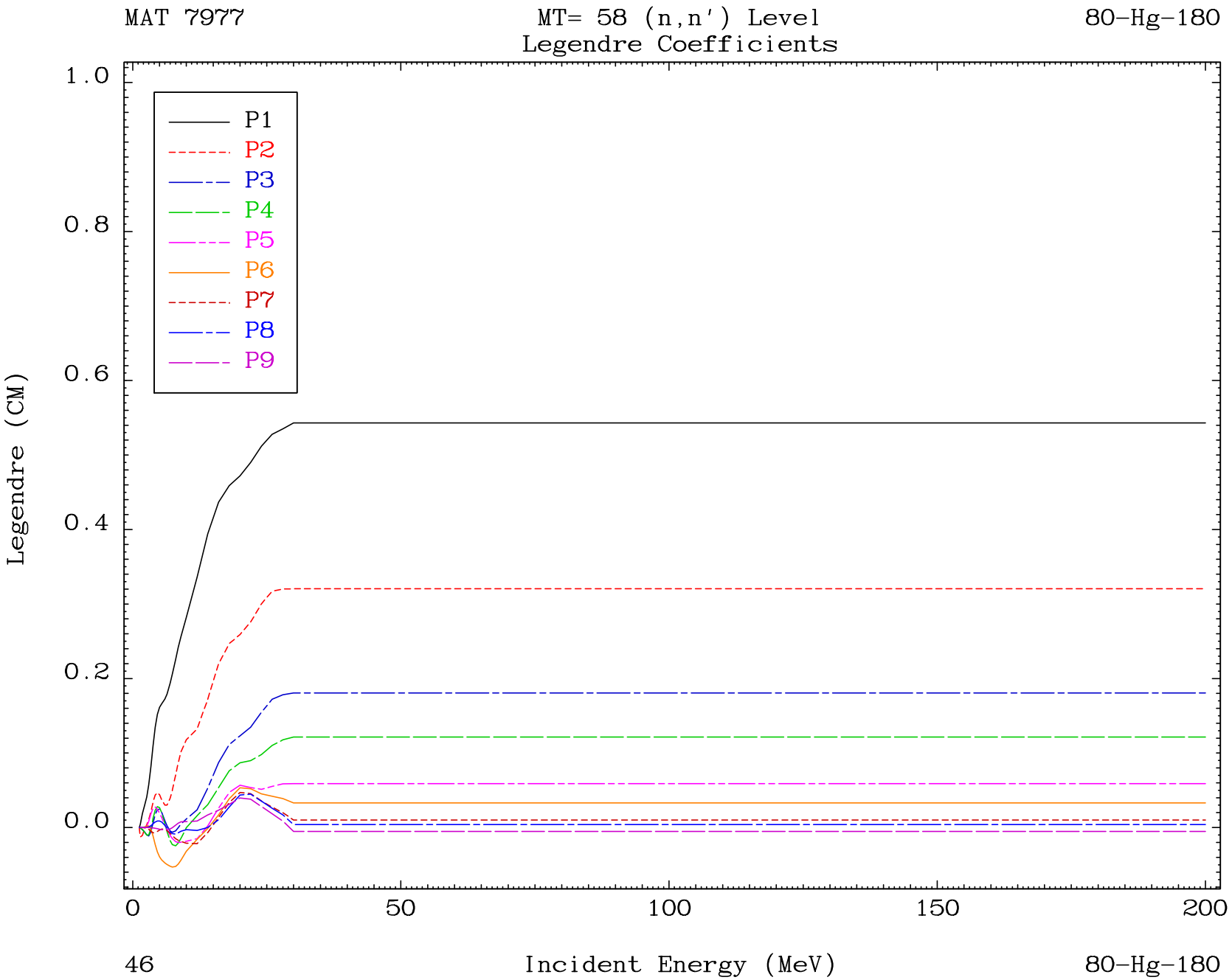

MAT 7977
MT= 56 (n,n') Level
Legendre Coefficients
80-Hg-180
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
41
80-Hg-180
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

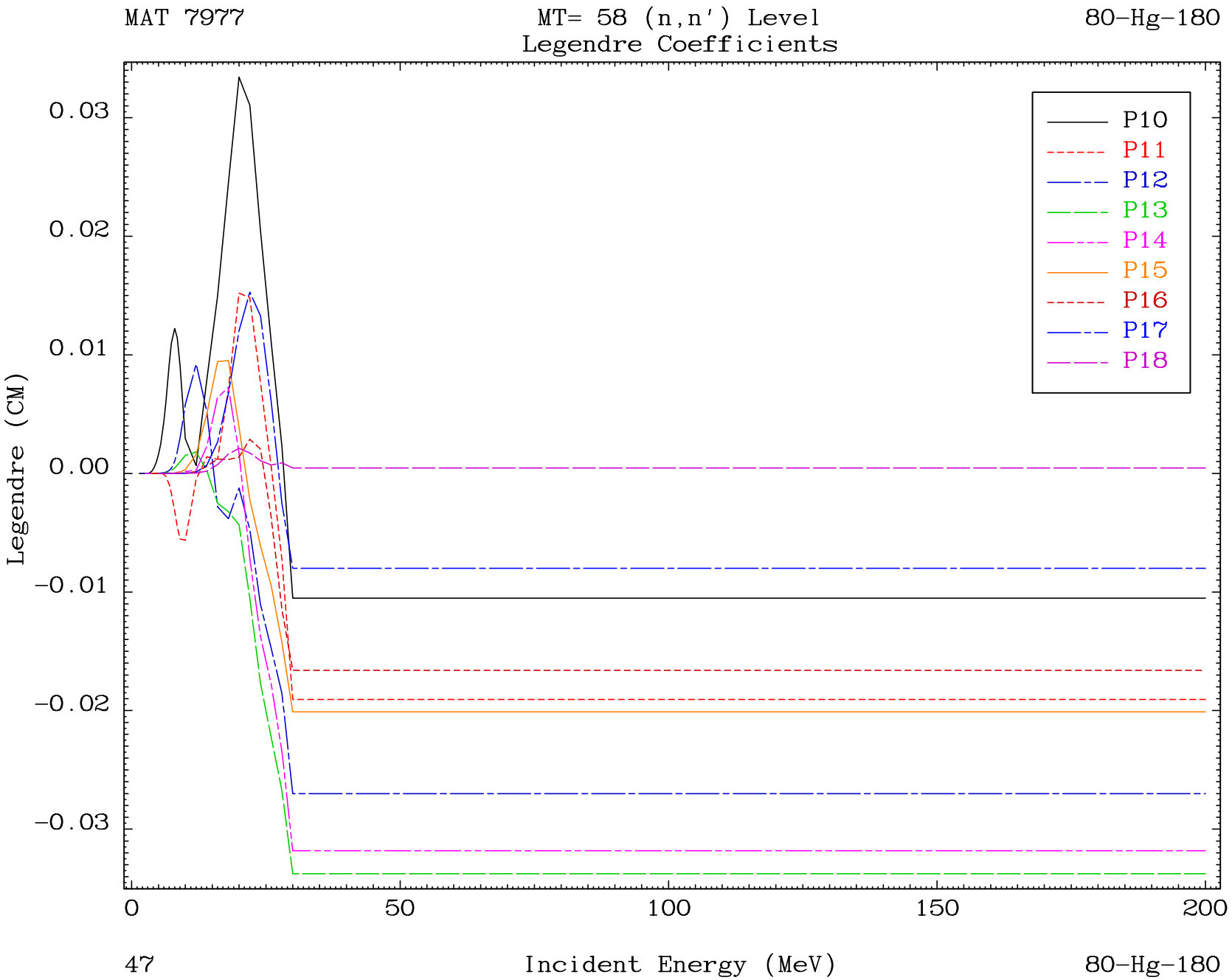

MAT 7977
MT= 56 (n,n') Level
Legendre Coefficients
80-Hg-180
0.0
X10^-5
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
42
Incident Energy (MeV)
80-Hg-180
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

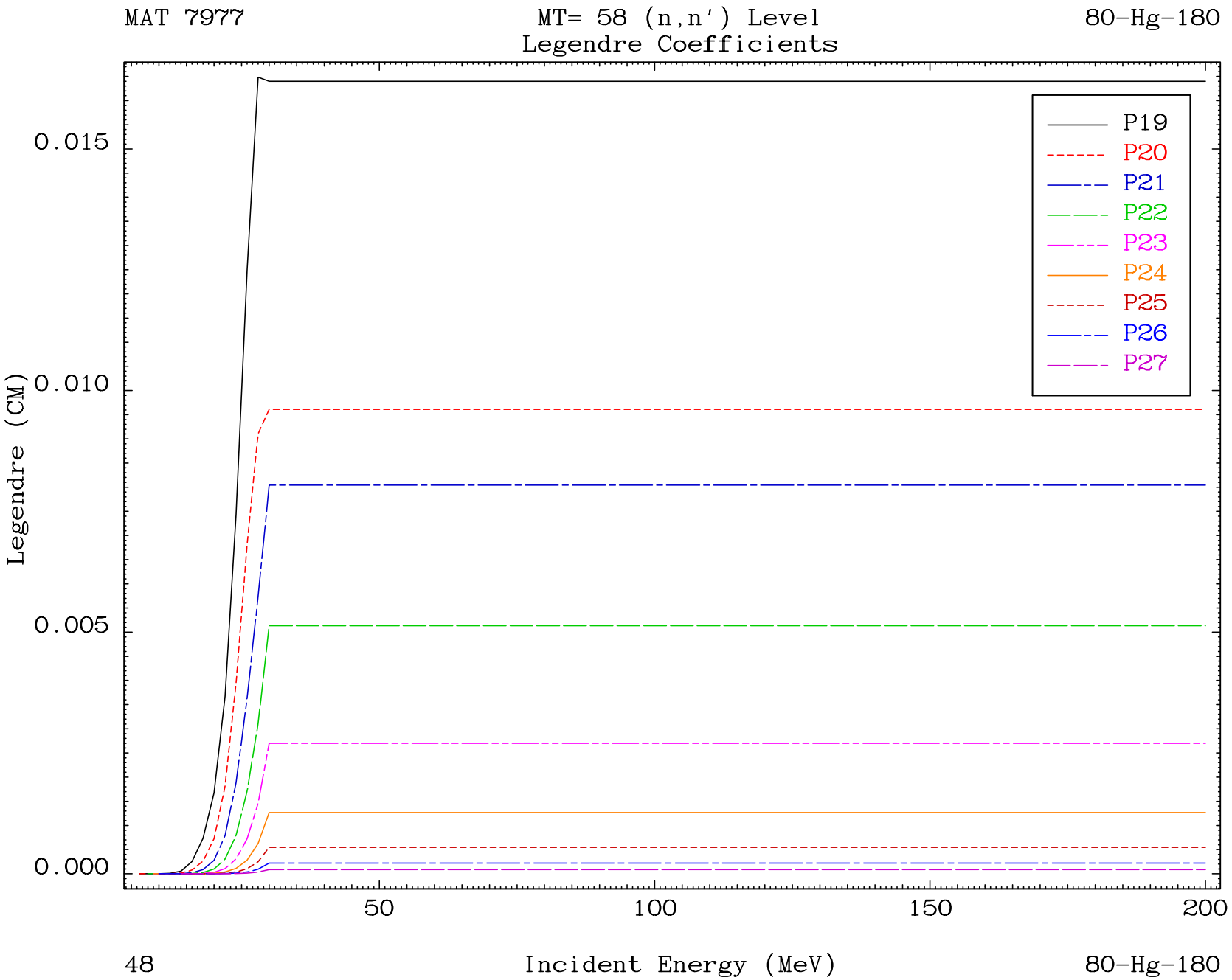

MAT 7977
MT= 57 (n,n') Level
Legendre Coefficients
80-Hg-180
Legendre (CM)
0.08
0.04
0.00
-0.04
0
50
100
150
200
Incident Energy (MeV)
43
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

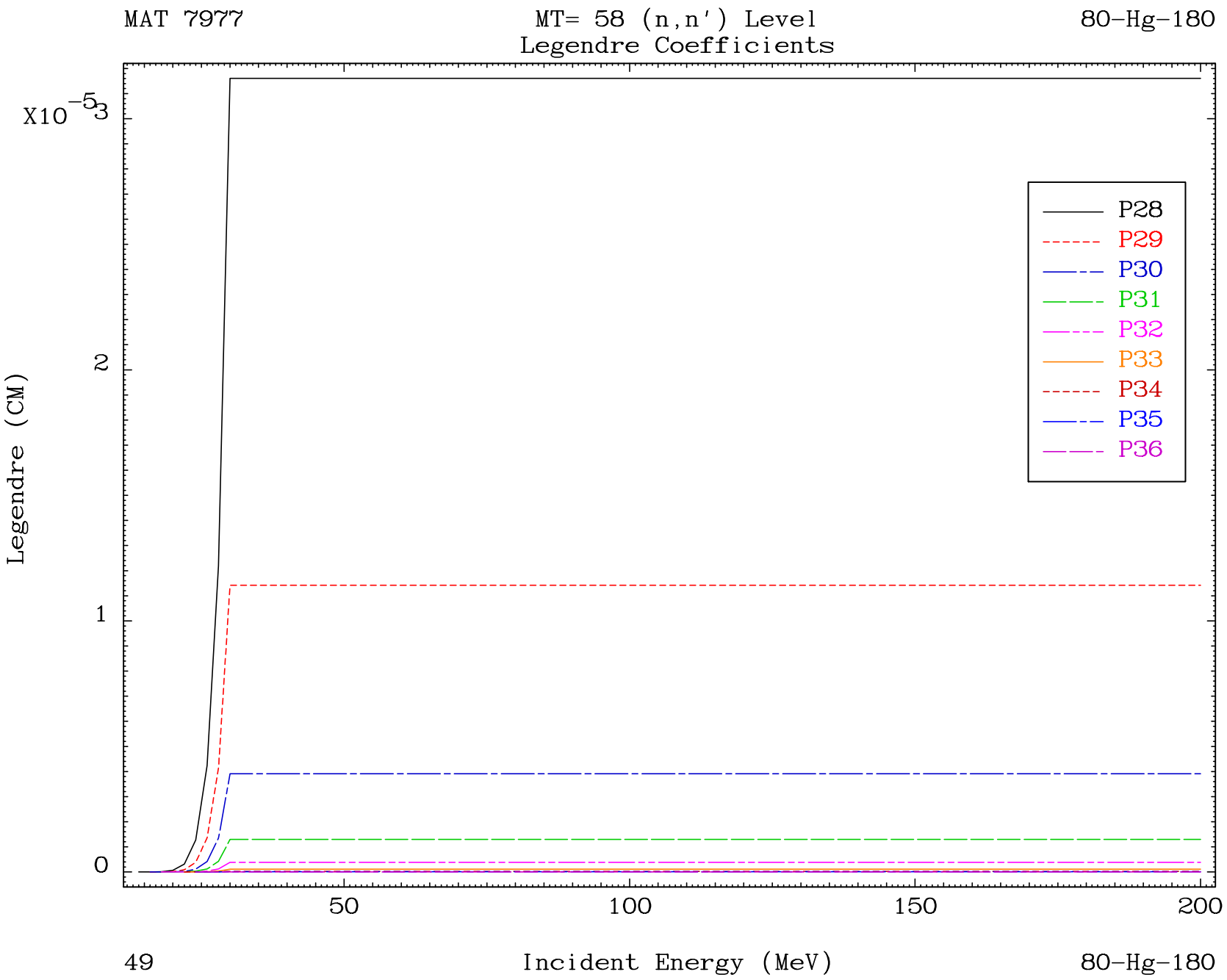

MAT 7977
MT= 57 (n,n') Level
Legendre Coefficients
80-Hg-180
X10-3
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

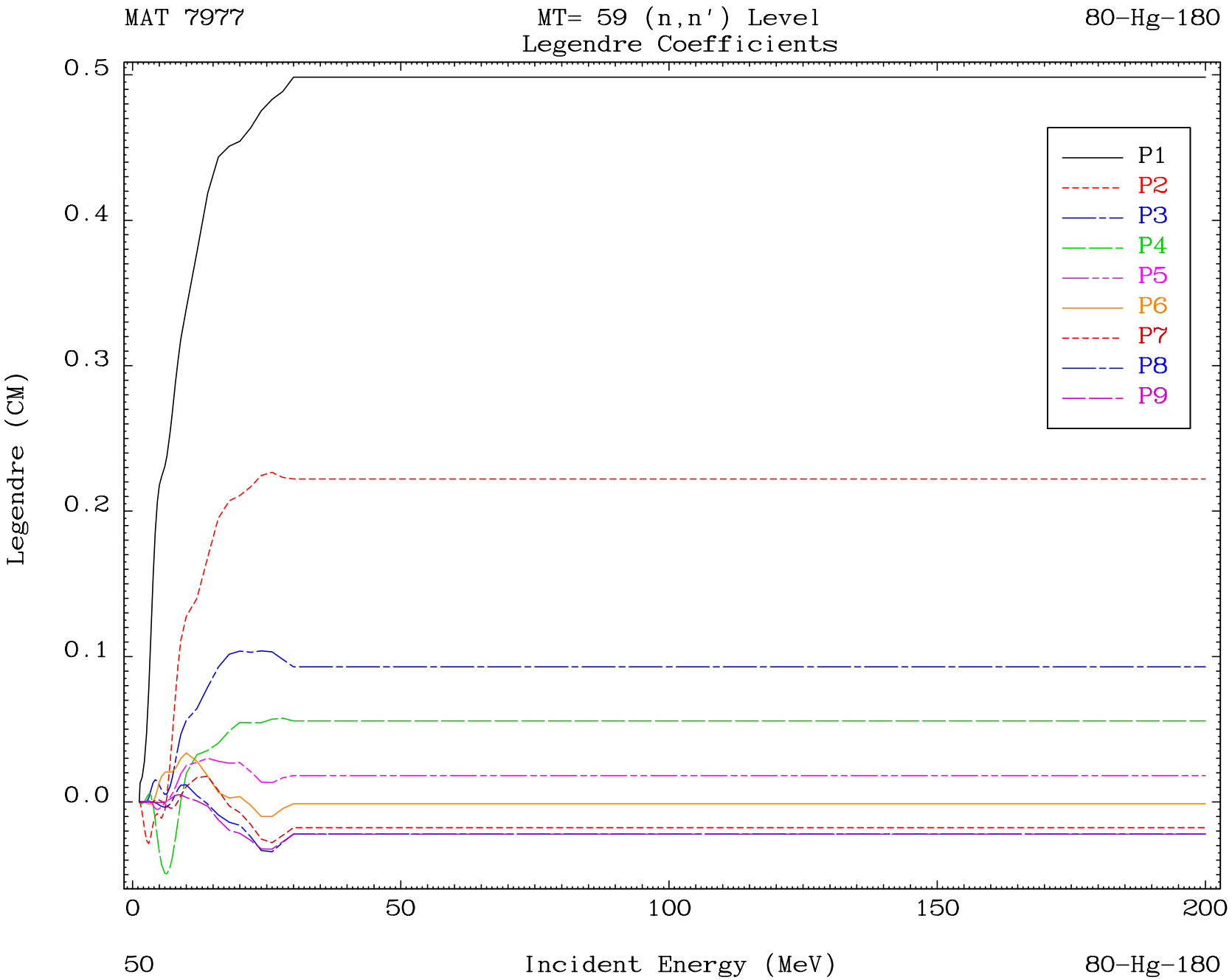

MAT 7977
MT= 57 (n,n') Level
Legendre Coefficients
80-Hg-180
0
X10^-6
-1
-2
-3
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
50
100
150
200
45
Incident Energy (MeV)
80-Hg-180

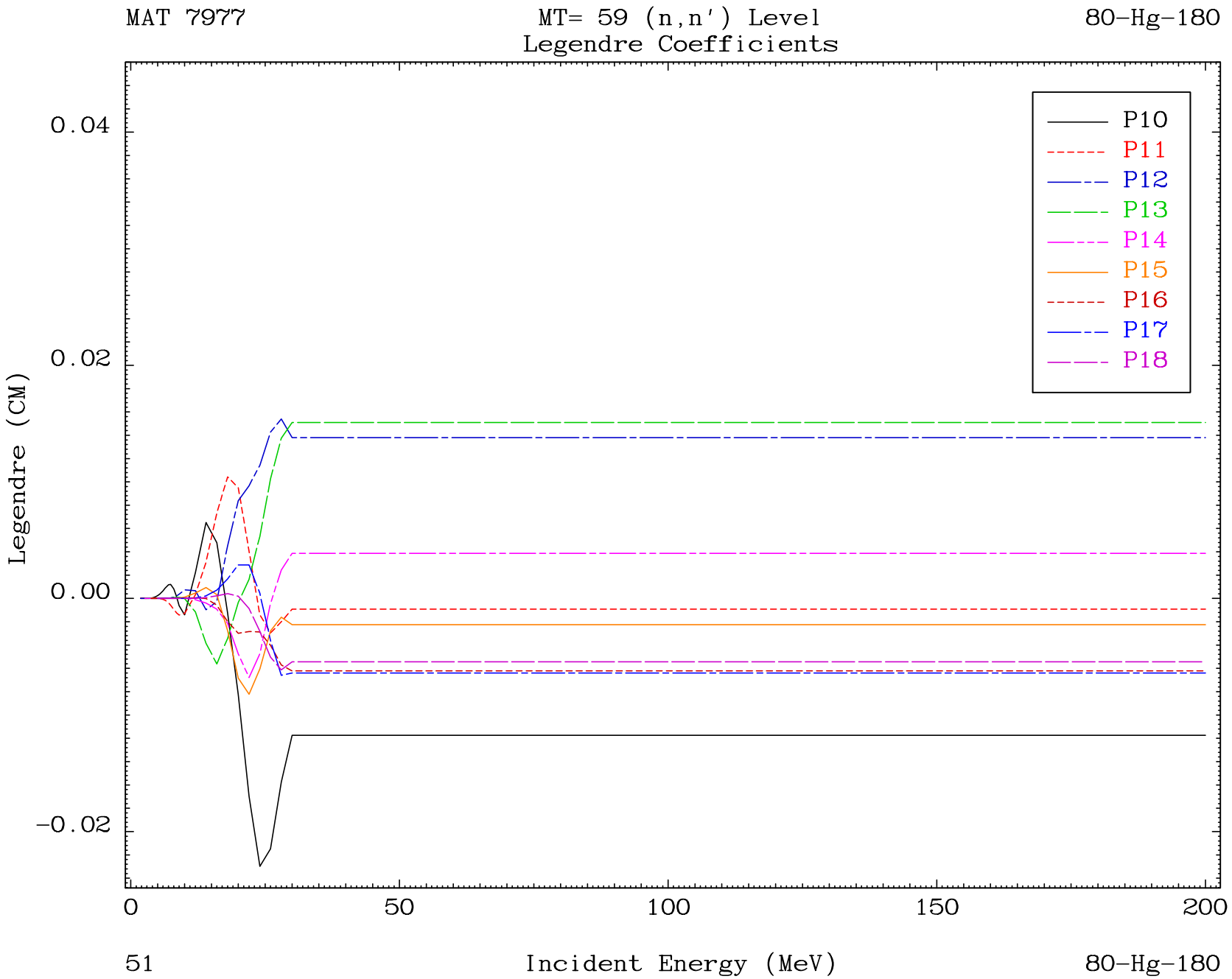

MAT 7977
MT= 58 (n,n') Level
Legendre Coefficients
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
46
Incident Energy (MeV)
80-Hg-180

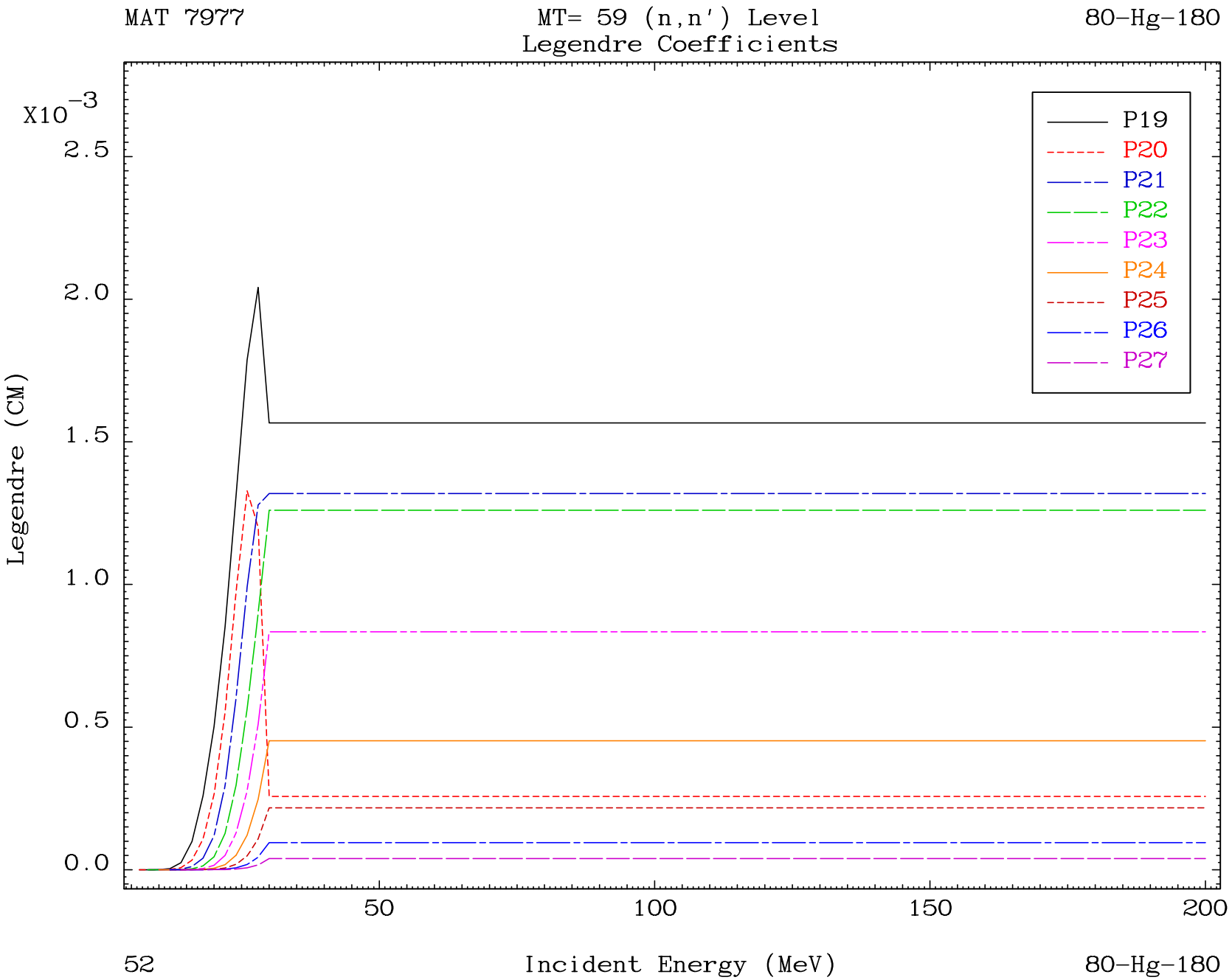

MAT 7977
MT= 58 (n,n') Level
Legendre Coefficients
80-Hg-180
0.03
0.02
0.01
0.00
-0.01
-0.02
-0.03
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
47
Incident Energy (MeV)
80-Hg-180

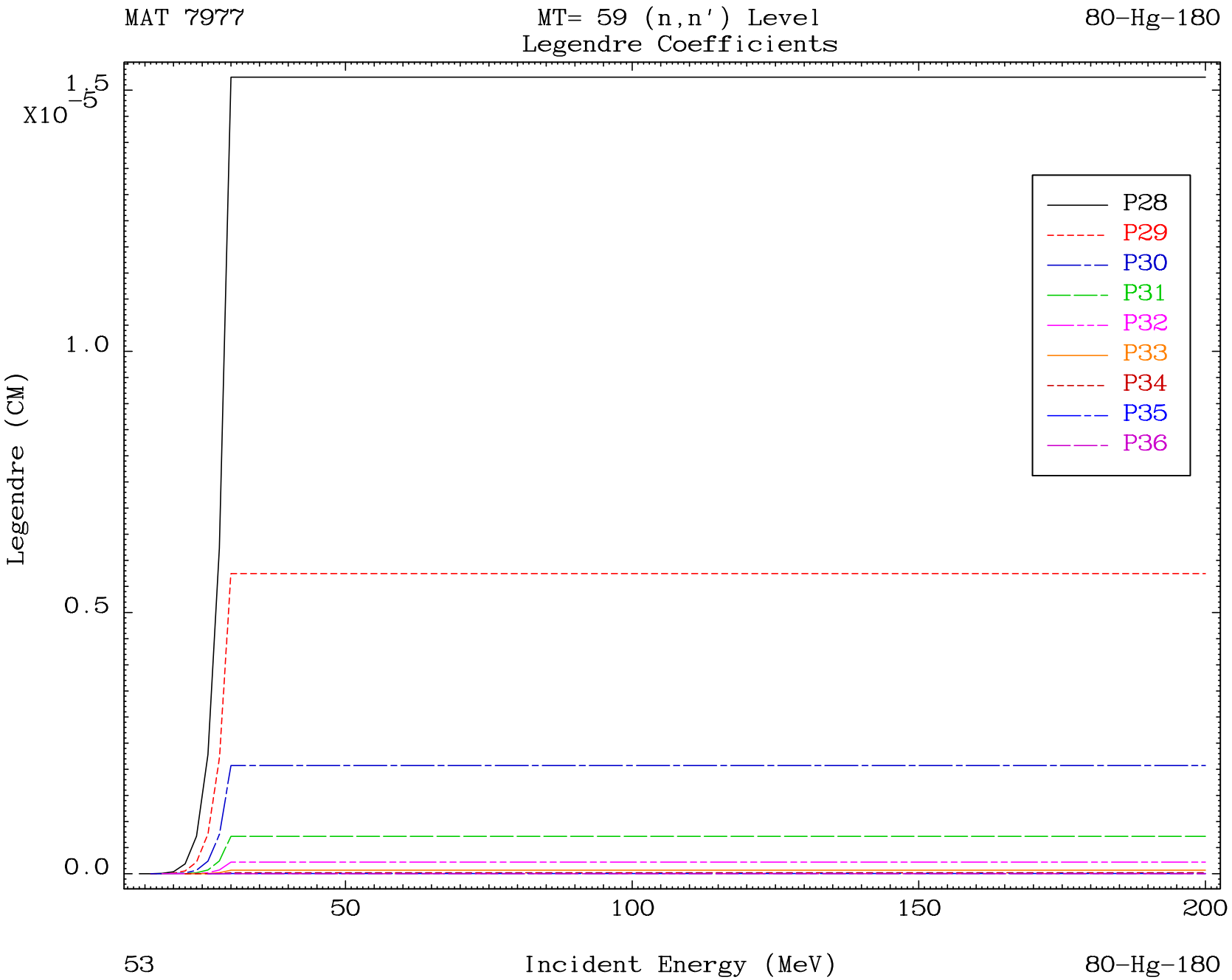

MAT 7977
MT= 58 (n,n') Level
Legendre Coefficients
80-Hg-180
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
48
Incident Energy (MeV)
80-Hg-180

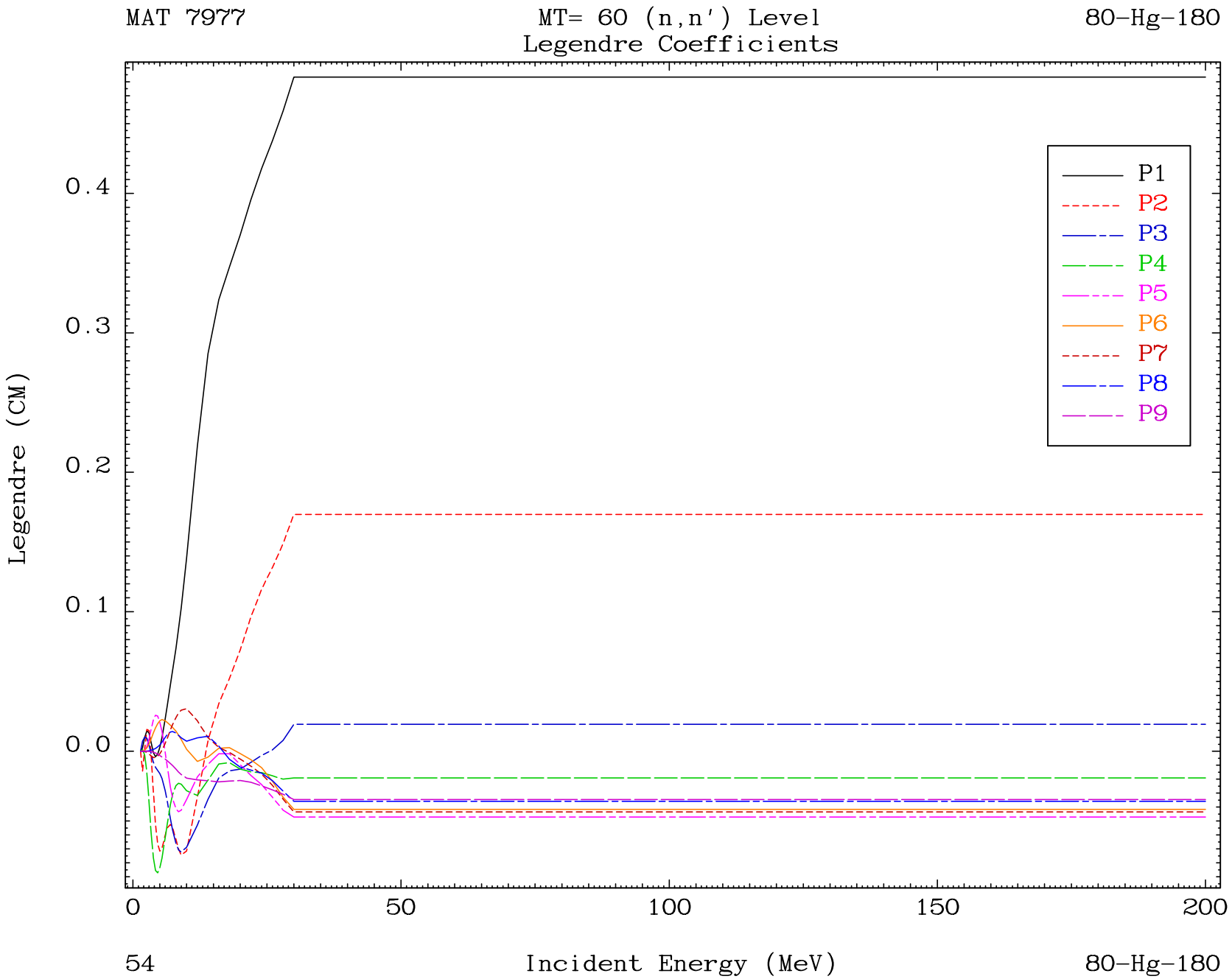

MAT 7977
MT= 58 (n,n') Level
Legendre Coefficients
80-Hg-180
X10 -5
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
49
Incident Energy (MeV)
80-Hg-180

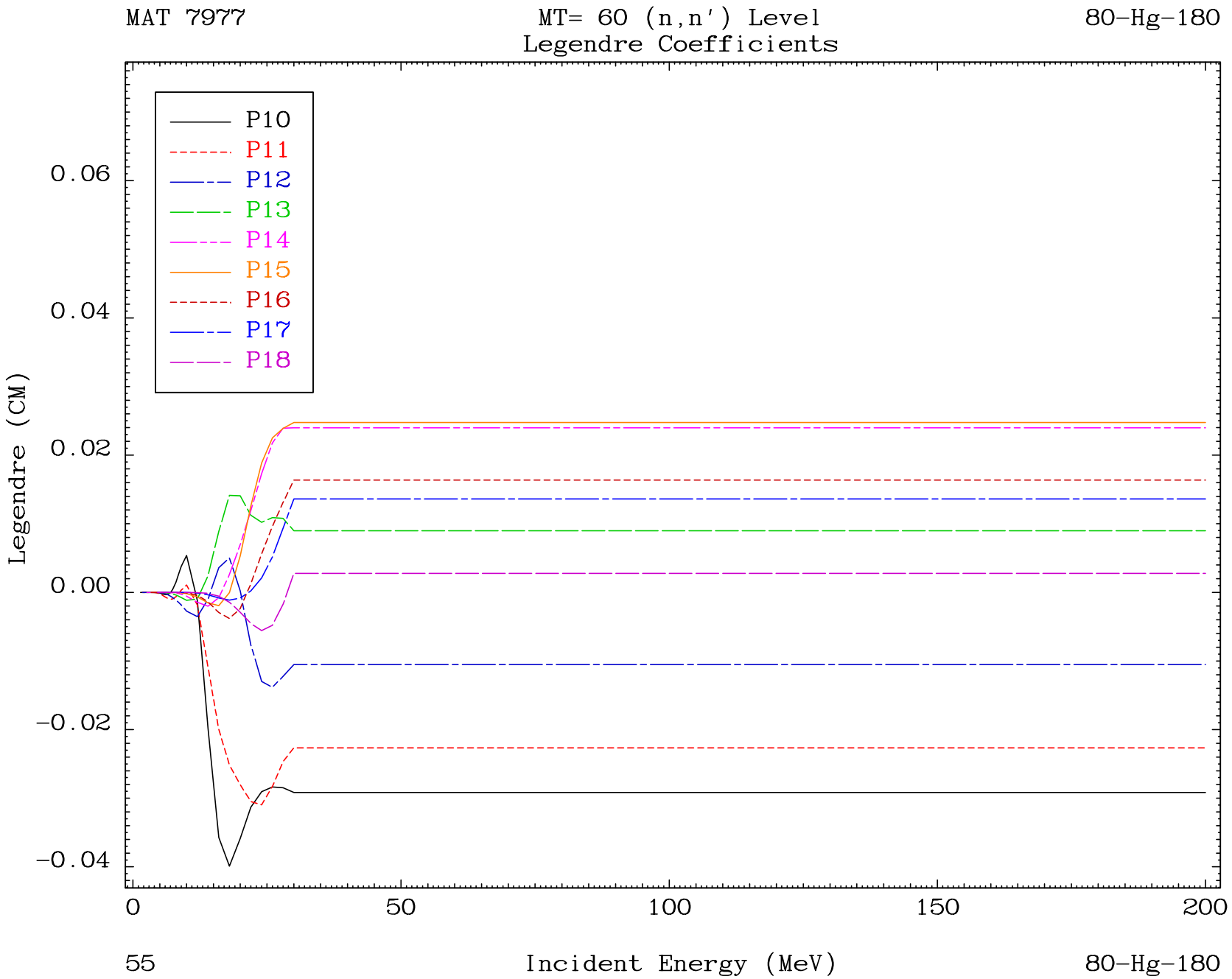

MAT 7977
MT= 59 (n,n') Level
Legendre Coefficients
80-Hg-180
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
50
Incident Energy (MeV)
80-Hg-180

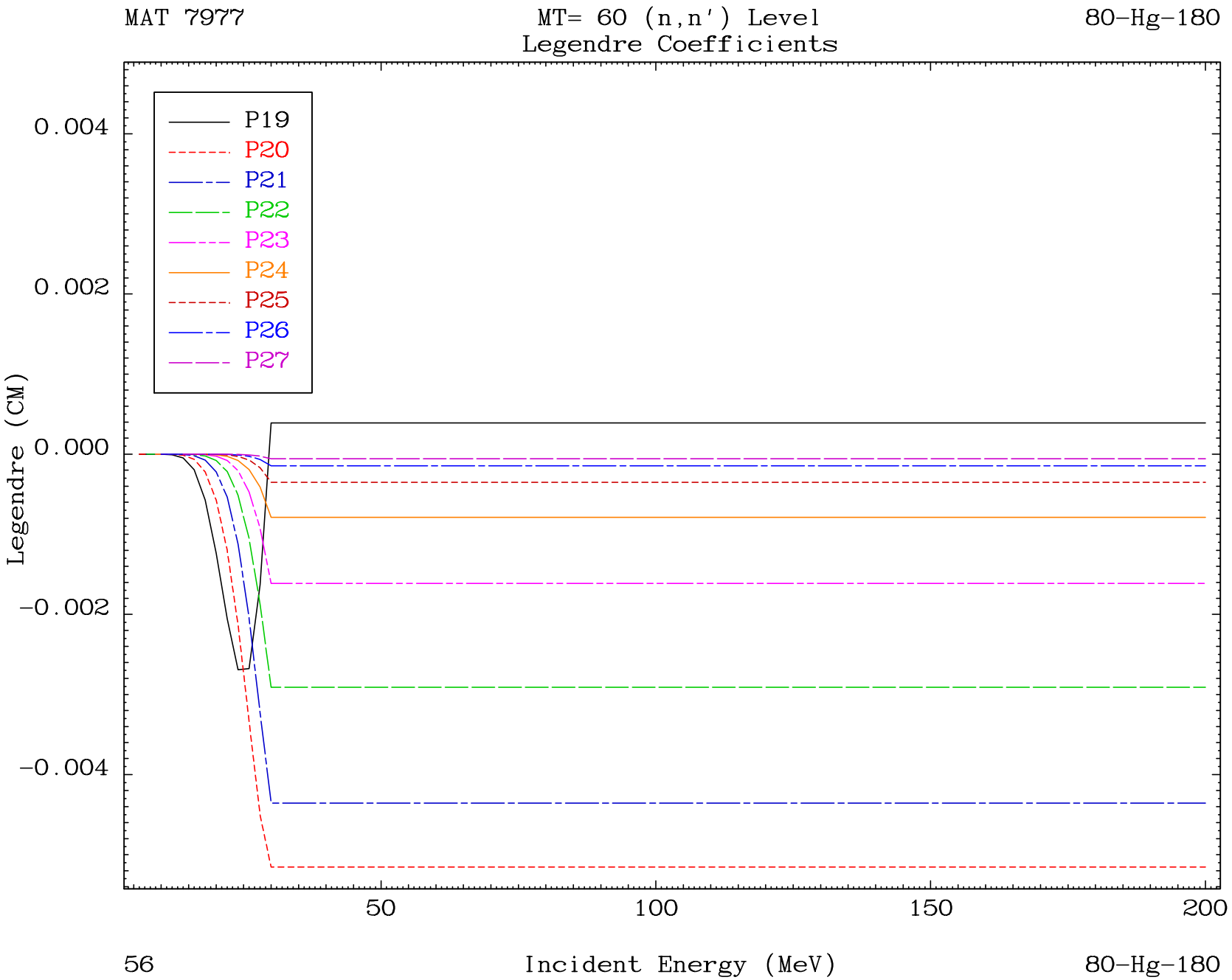

MAT 7977
MT= 59 (n,n') Level
Legendre Coefficients
80-Hg-180
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
51
Incident Energy (MeV)
80-Hg-180

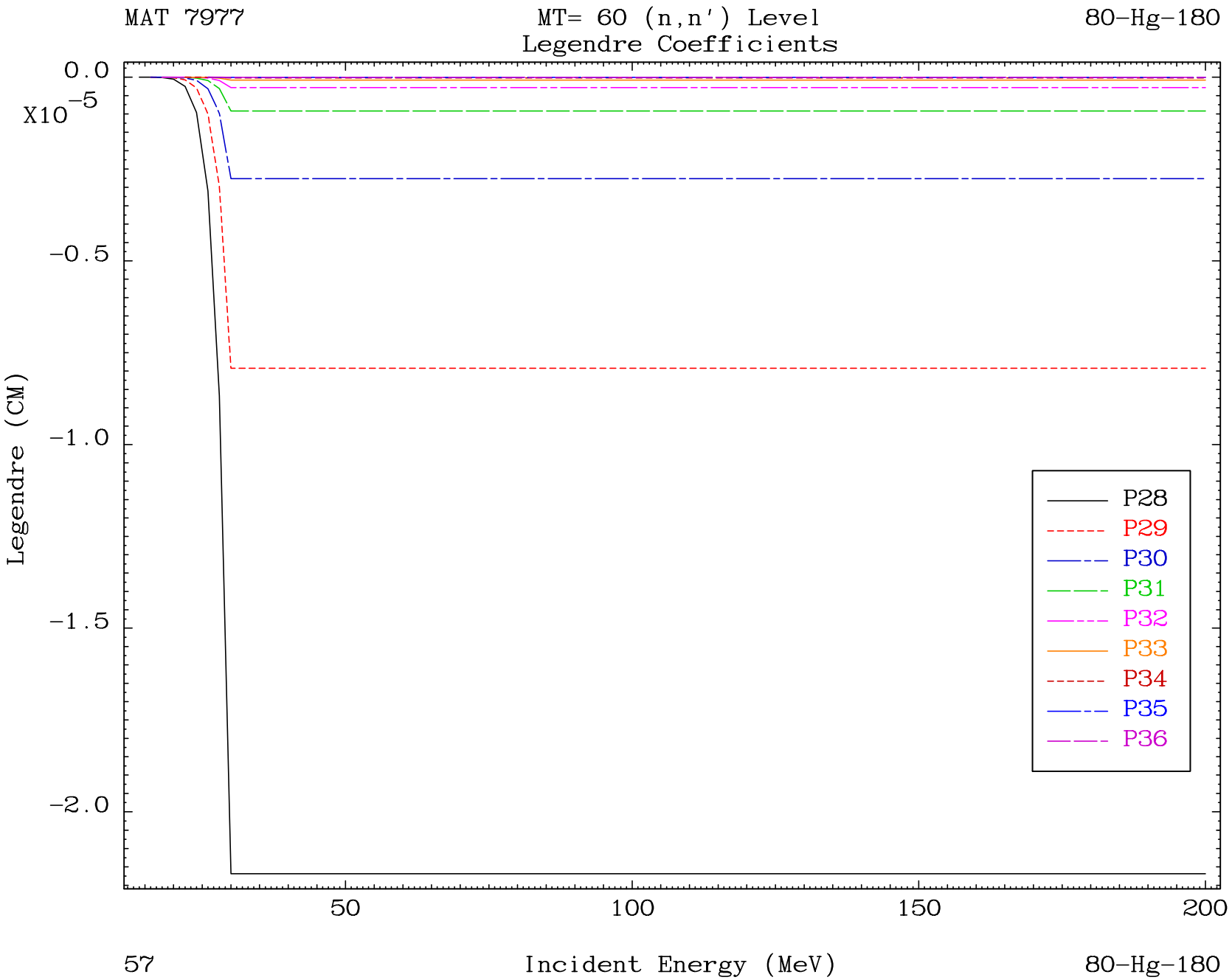

MAT 7977
MT= 59 (n,n') Level
Legendre Coefficients
80-Hg-180
X10^-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
52
Incident Energy (MeV)
80-Hg-180

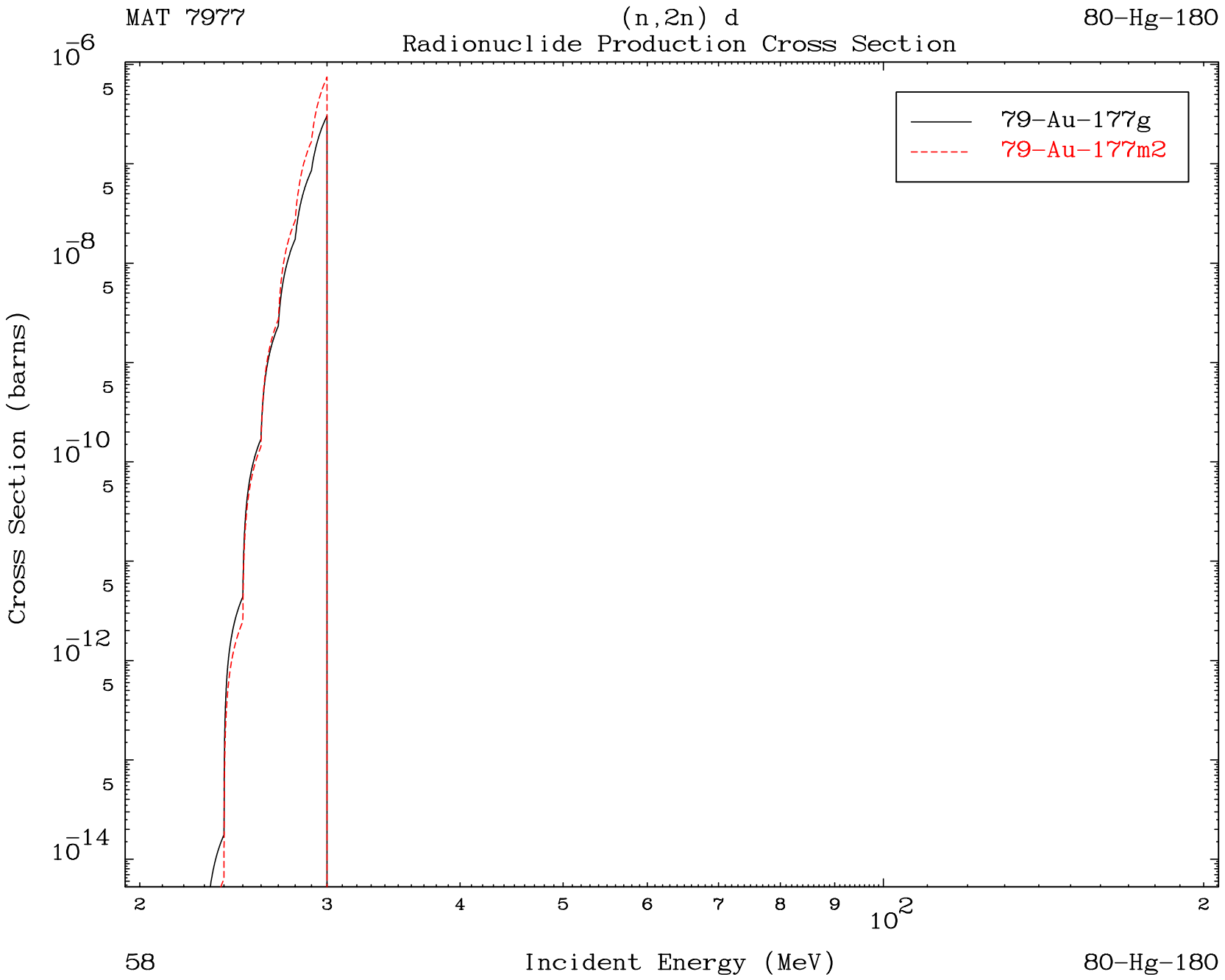

MAT 7977
MT= 59 (n,n') Level
Legendre Coefficients
80-Hg-180
X10-5
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
53
Incident Energy (MeV)
80-Hg-180
P28
P29
P30
P31
P32
P33
P34
P35
P36

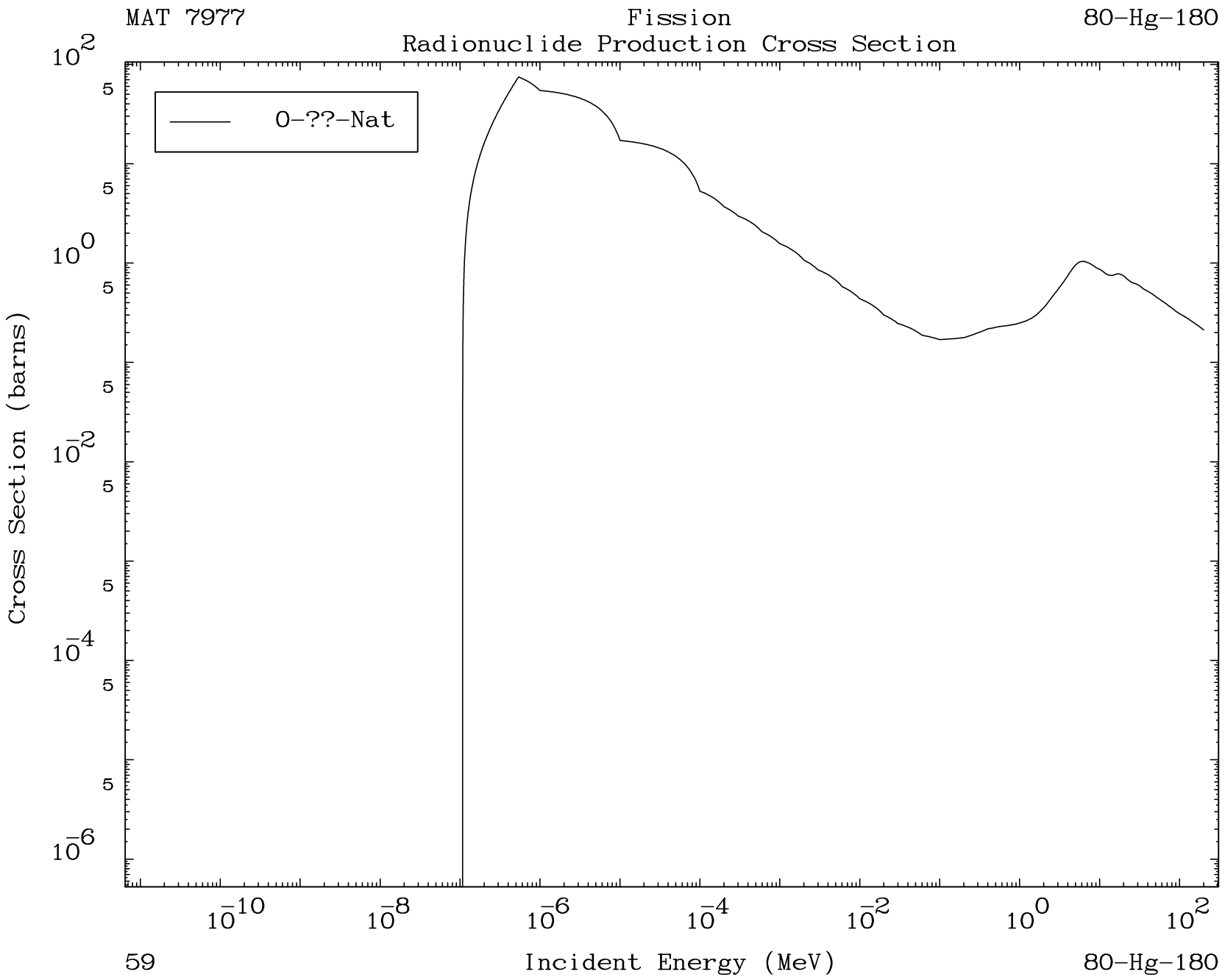

MAT 7977
MT= 60 (n,n') Level
Legendre Coefficients
80-Hg-180
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
54
Incident Energy (MeV)
80-Hg-180
P1
P2
P3
P4
P5
P6
P7
P8
P9

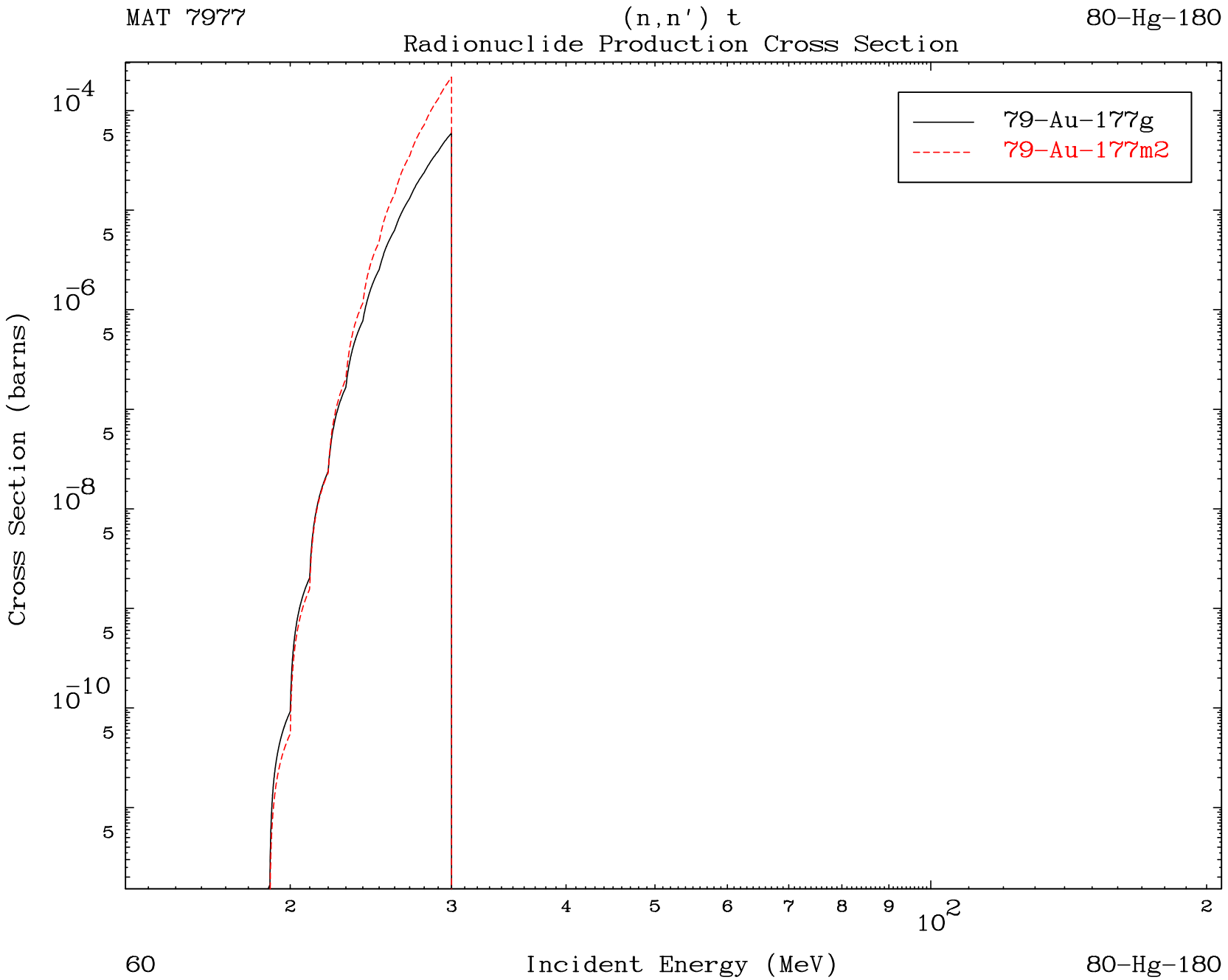

MAT 7977
MT= 60 (n,n') Level
Legendre Coefficients
80-Hg-180
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
55
Incident Energy (MeV)
80-Hg-180

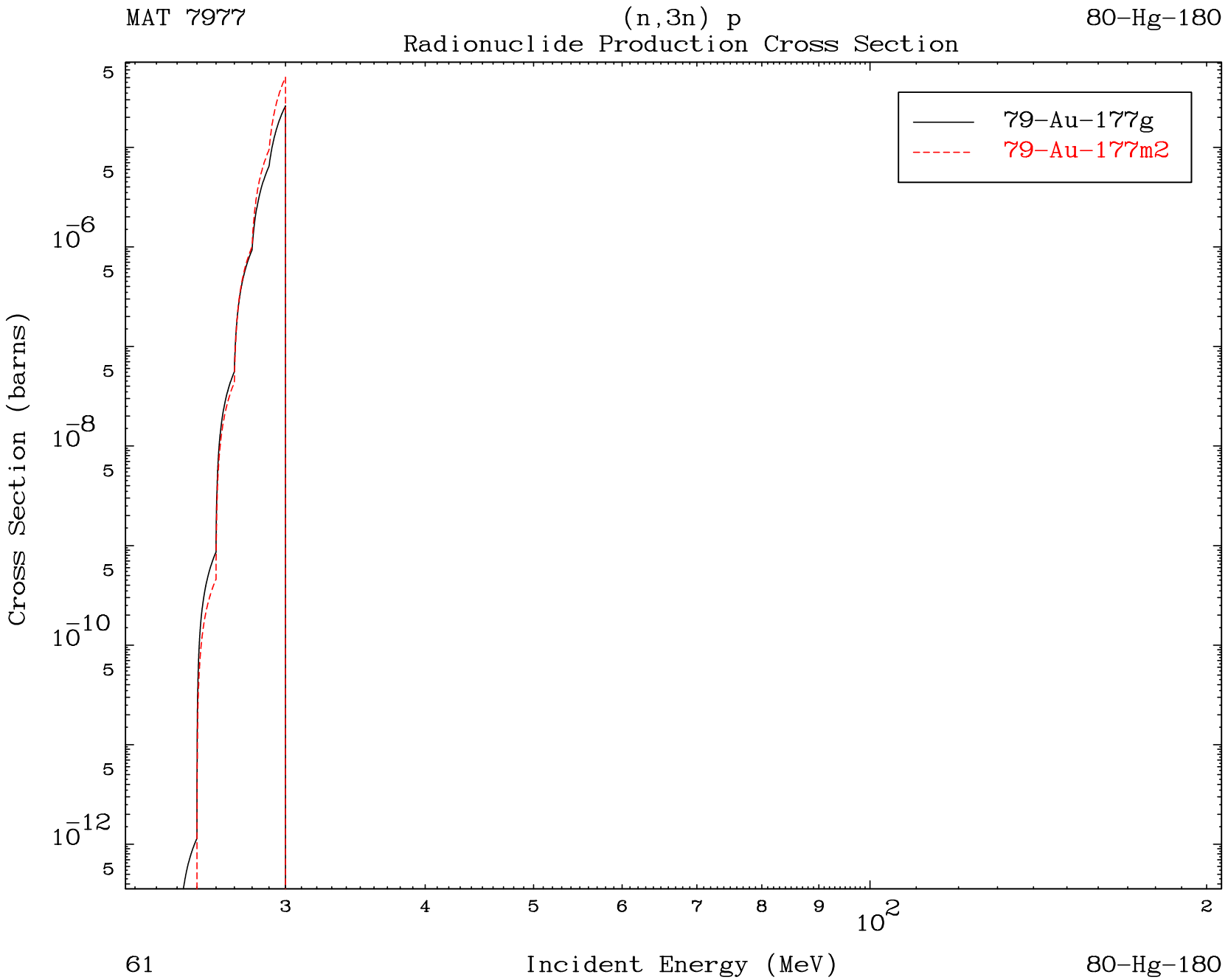

MAT 7977
MT= 60 (n,n') Level
Legendre Coefficients
80-Hg-180
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.004
0.002
0.000
-0.002
-0.004
Legendre (CM)
50
100
150
200
56
Incident Energy (MeV)
80-Hg-180


MAT 7977
MT= 60 (n,n') Level
Legendre Coefficients
80-Hg-180
0.0
X10^-5
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
57
Incident Energy (MeV)
80-Hg-180
P28
P29
P30
P31
P32
P33
P34
P35
P36


MAT 7977
(n,2n) d
80-Hg-180
Radionuclide Production Cross Section
79-Au-177g
79-Au-177m2
Cross Section (barns)
Incident Energy (MeV)
58
80-Hg-180


MAT 7977
Fission
80-Hg-180
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
59
80-Hg-180


MAT 7977
(n,n') t
80-Hg-180
Radionuclide Production Cross Section
79-Au-177g
79-Au-177m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
Incident Energy (MeV)
10^2
60
80-Hg-180


MAT 7977
(n,3n) p
80-Hg-180
Radionuclide Production Cross Section
79-Au-177g
79-Au-177m2
Cross Section (barns)
10-6
10-8
10-10
10-12
5
3
4
5
6
7
8
9
10 2
2
61
Incident Energy (MeV)
80-Hg-180