

Program EVALPLOT  
(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

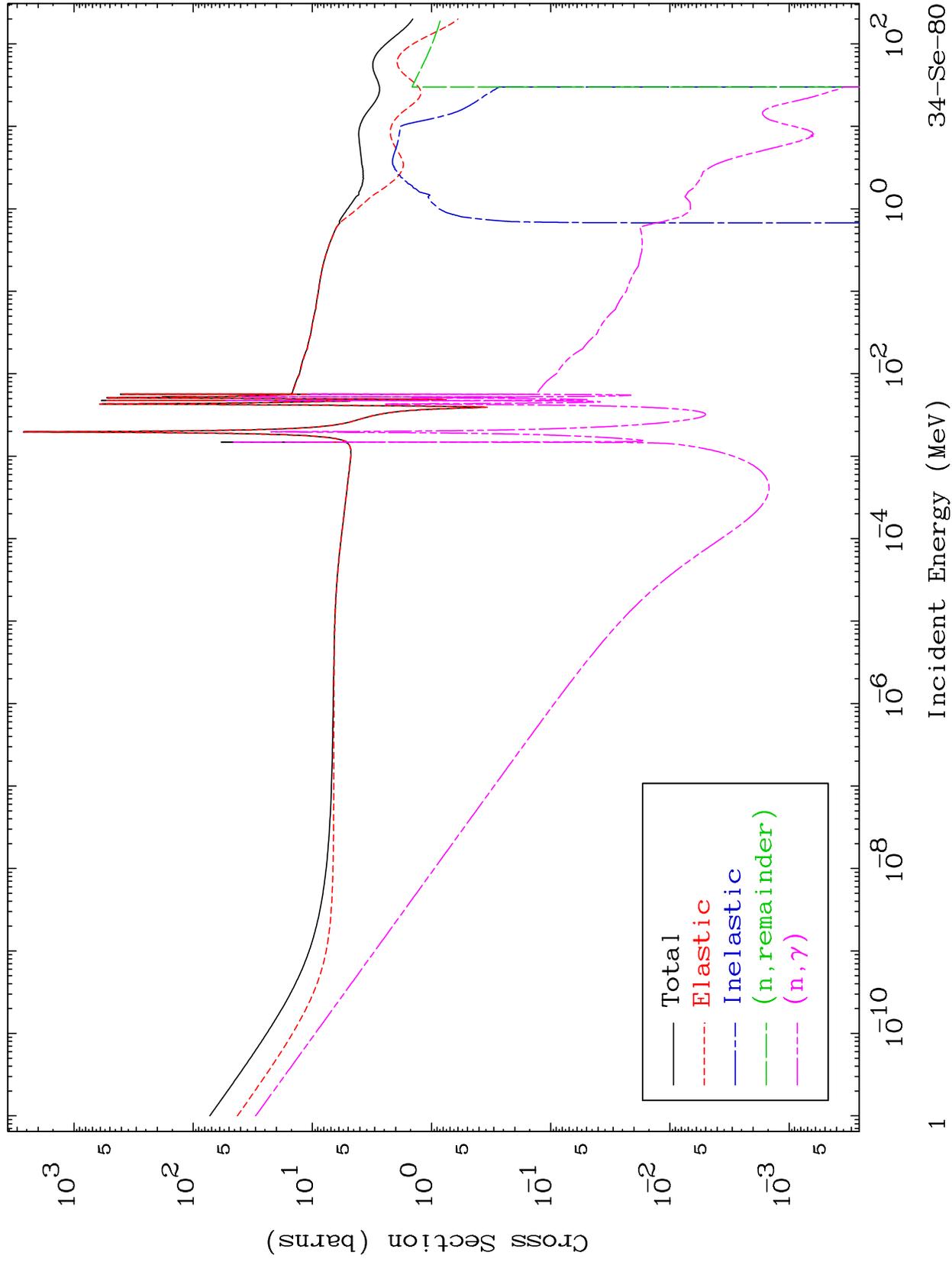
E.Mail:redcullen1@comcast.net  
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 3443

Major  
293 Kelvin Cross Sections

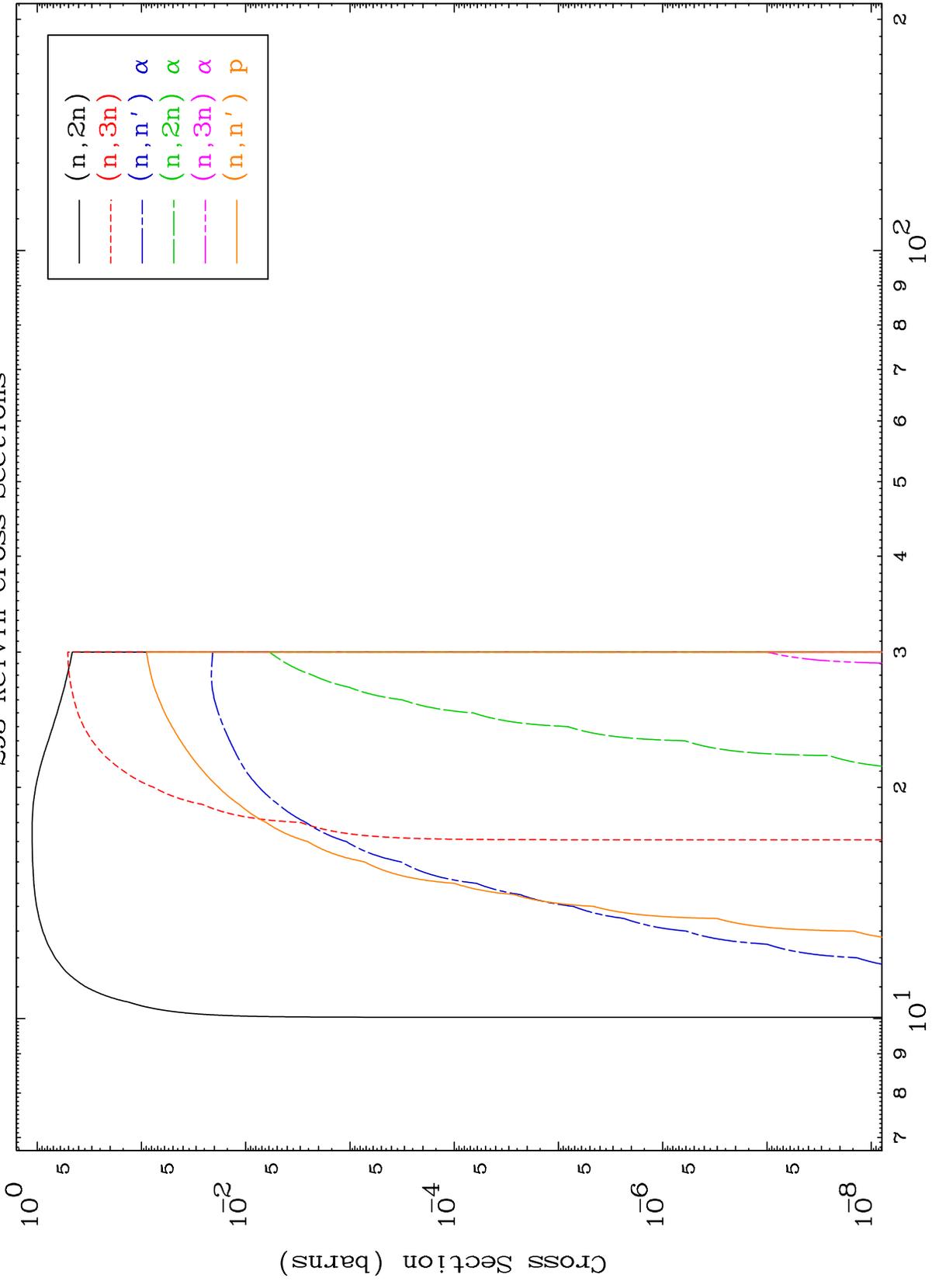
<sup>34</sup>Se-80



MAT 3443

### Neutron Production 293 Kelvin Cross Sections

34-Se-80



2

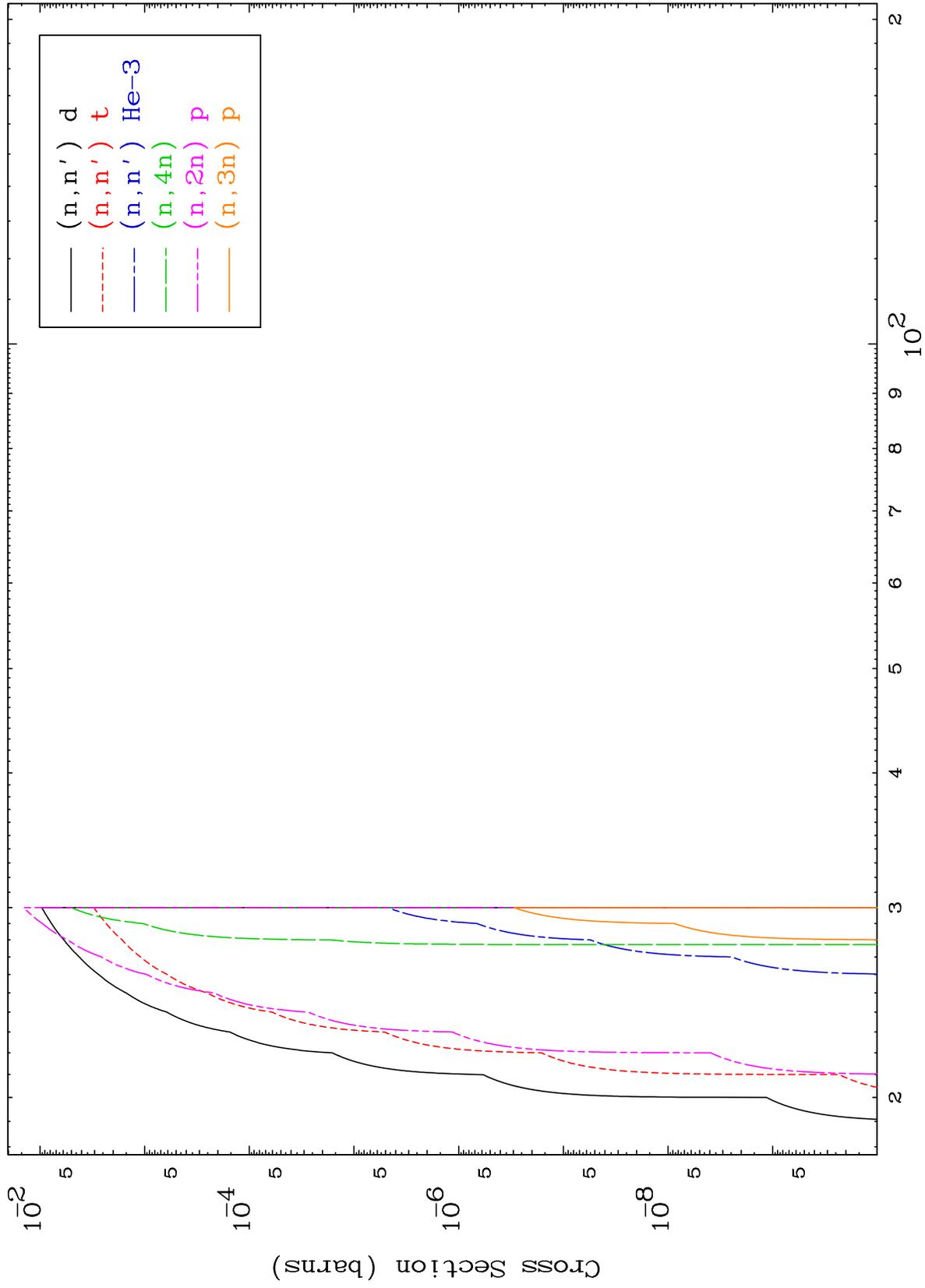
Incident Energy (MeV)

34-Se-80

MAT 3443

Neutron Production  
293 Kelvin Cross Sections

34-Se-80



3

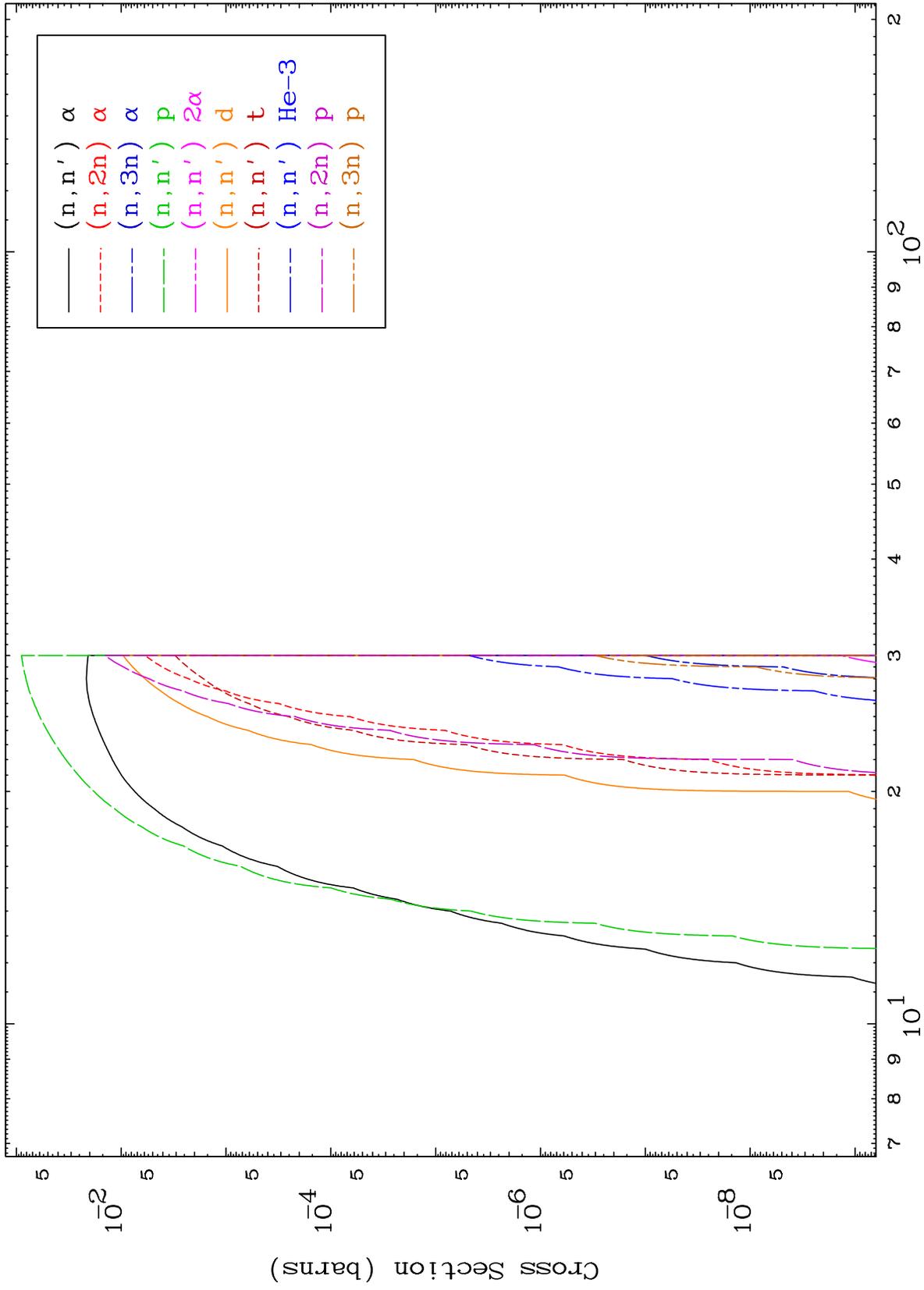
Incident Energy (MeV)

34-Se-80

MAT 3443

Charged Particle  
293 Kelvin Cross Sections

34-Se-80



4

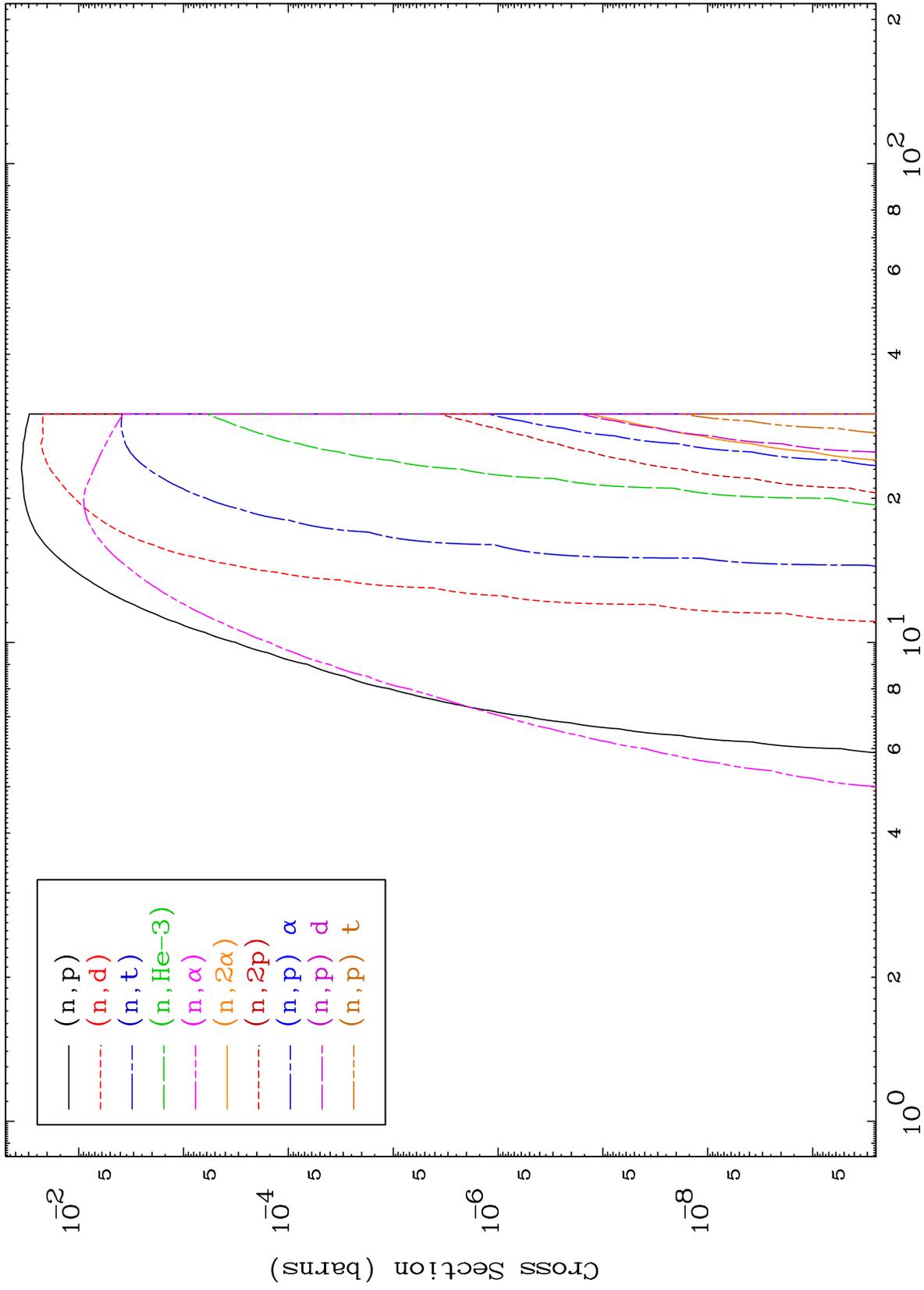
Incident Energy (MeV)

34-Se-80

MAT 3443

293 Kelvin Cross Sections

34-Se-80



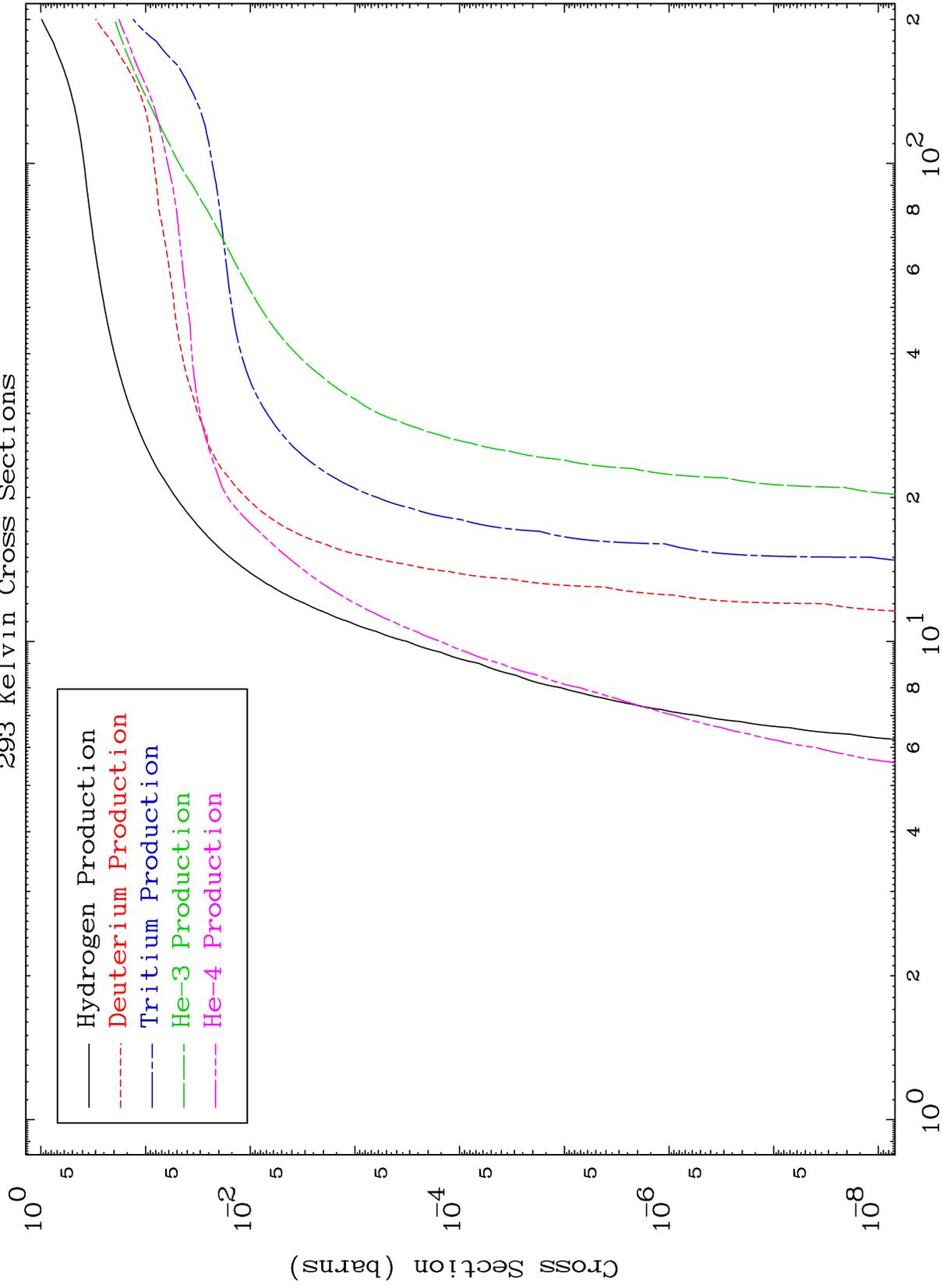
Incident Energy (MeV)

34-Se-80

MAT 3443

293 Kelvin Cross Sections

34-Se-80



Incident Energy (MeV)

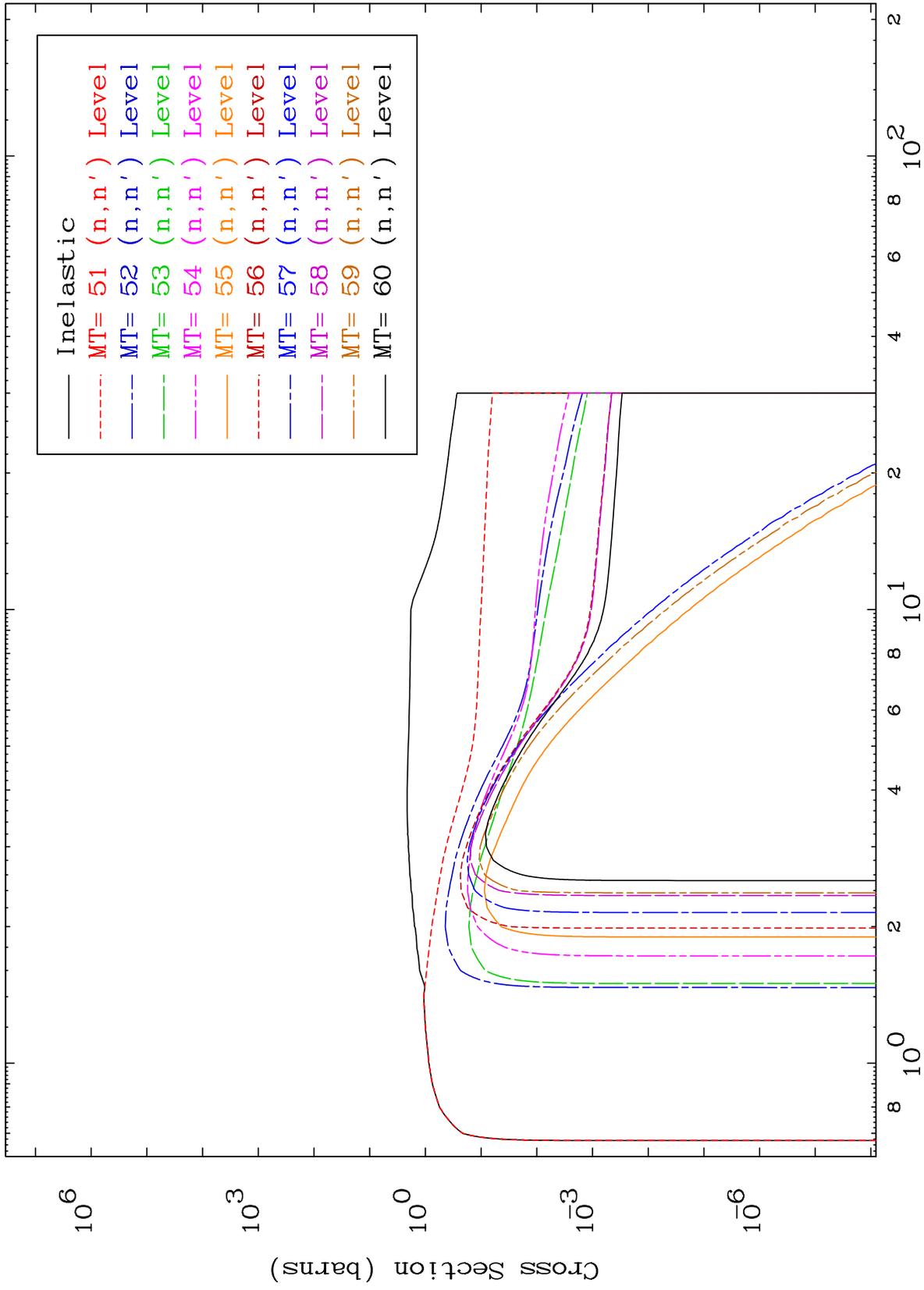
34-Se-80

MAT 3443

(n,n') Level

34-Se-80

293 Kelvin Cross Sections



7

Incident Energy (MeV)

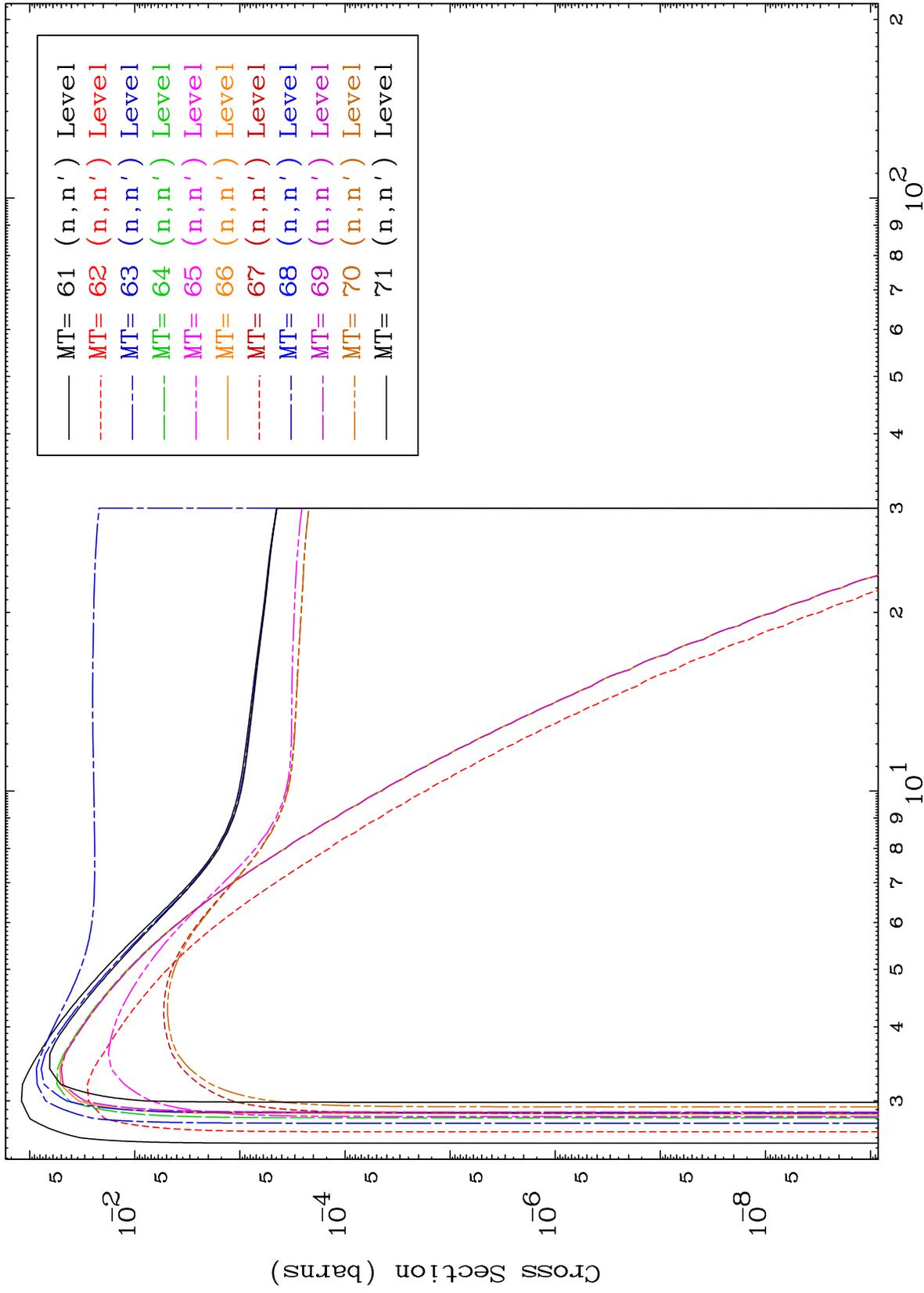
34-Se-80

MAT 3443

(n,n') Level

34-Se-80

293 Kelvin Cross Sections



8

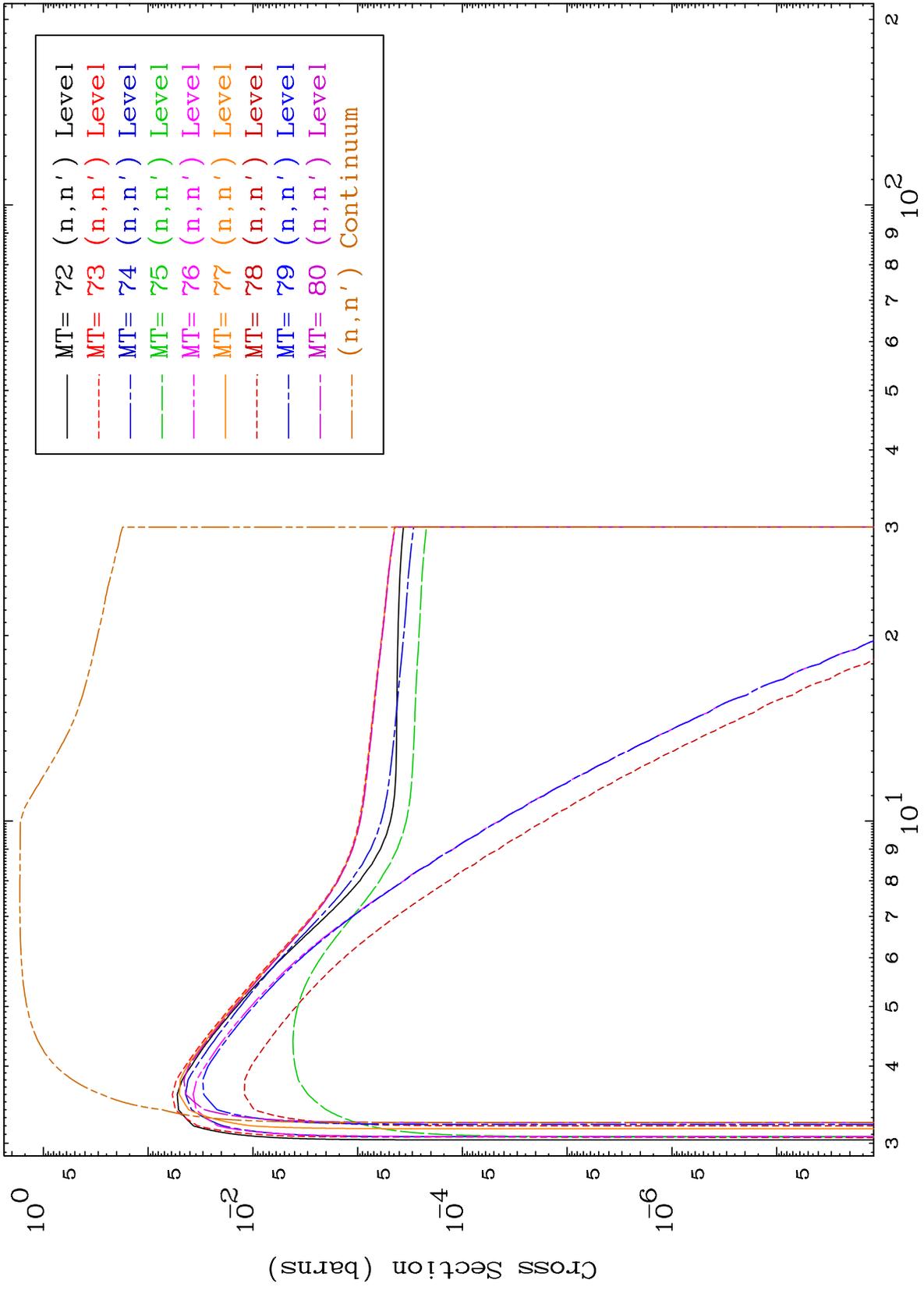
Incident Energy (MeV)

34-Se-80

MAT 3443

(n,n') Level  
293 Kelvin Cross Sections

34-Se-80



9

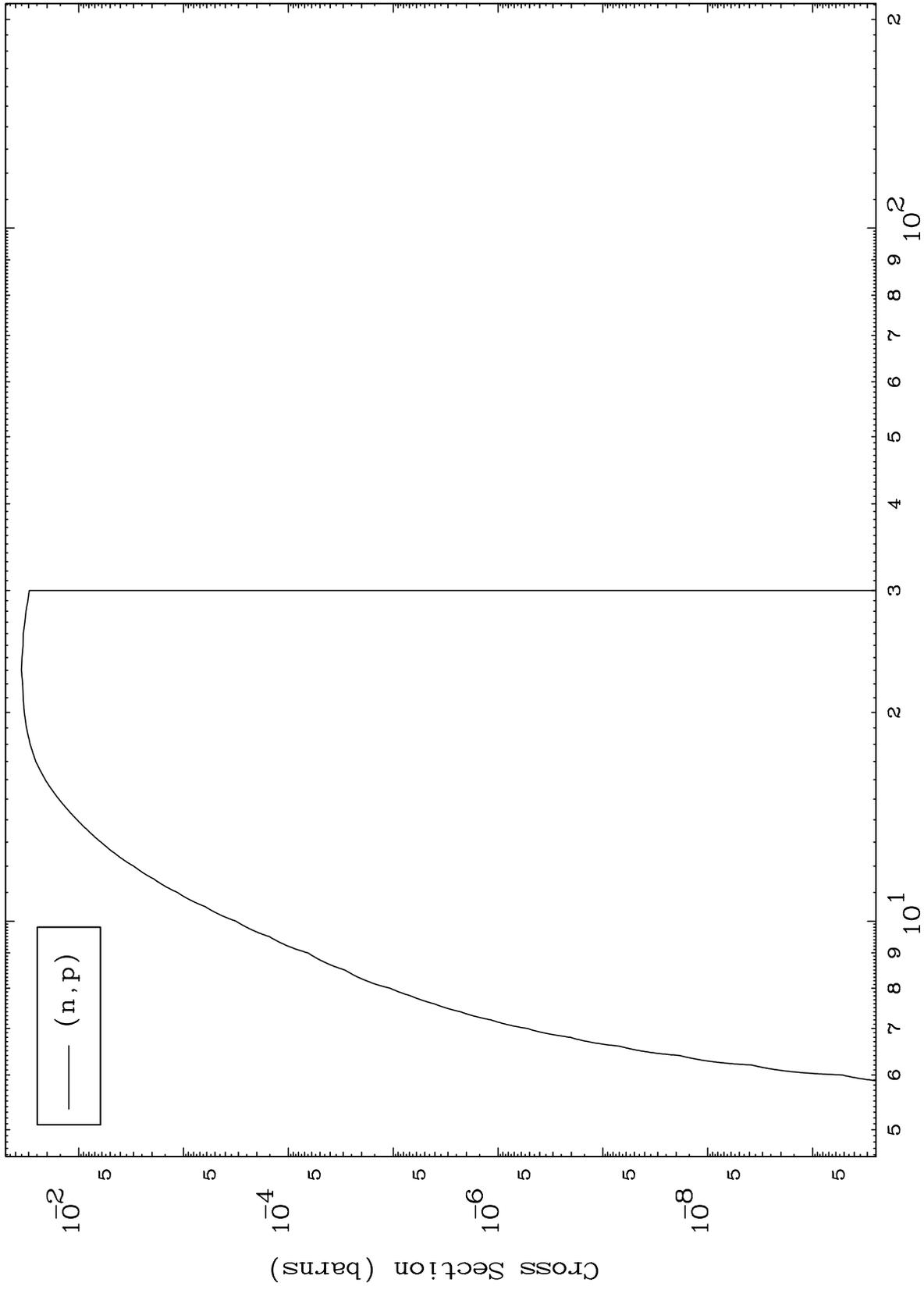
Incident Energy (MeV)

34-Se-80

MAT 3443

(n,p) Levels  
293 Kelvin Cross Sections

34-Se-80



10

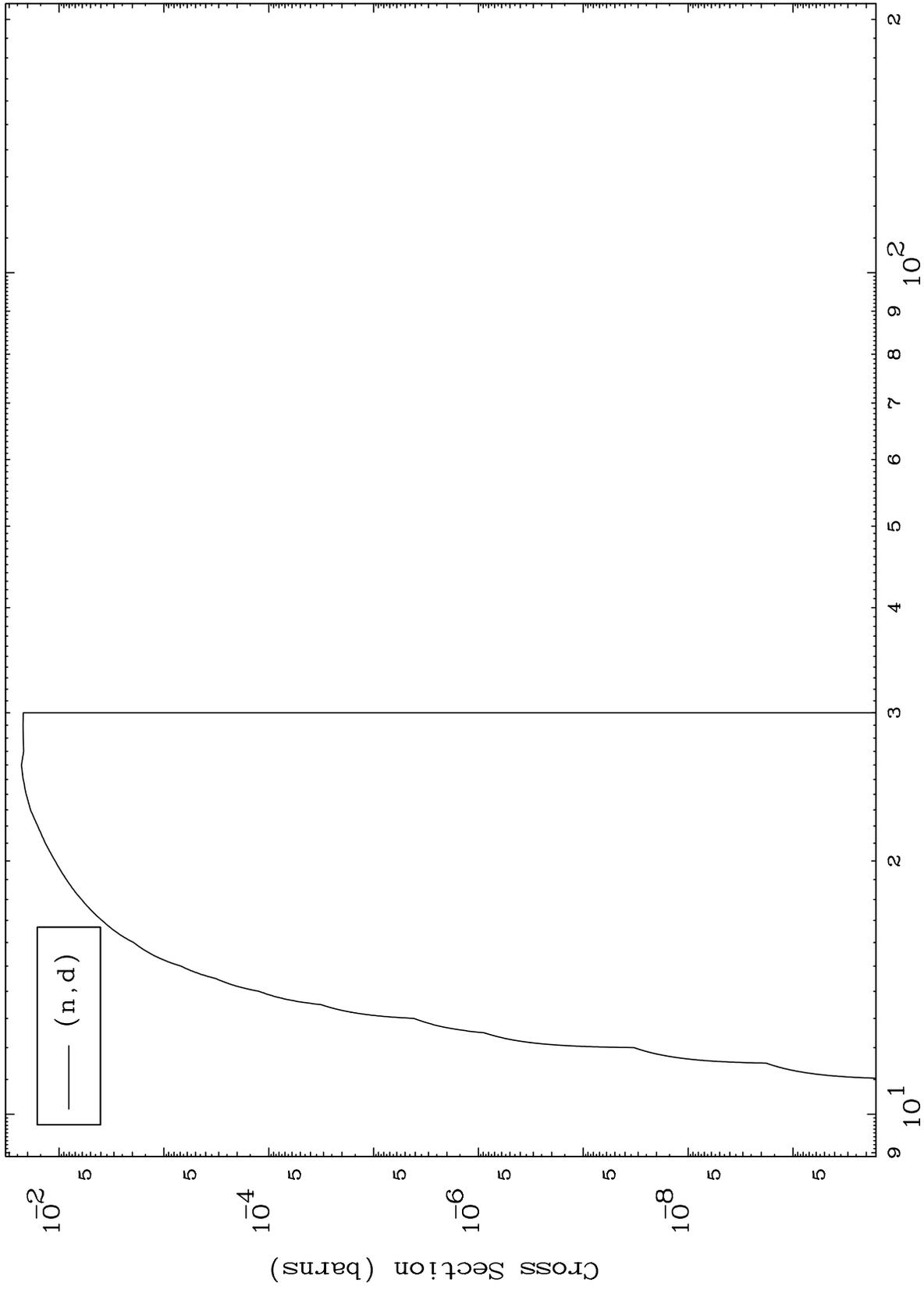
Incident Energy (MeV)

34-Se-80

MAT 3443

(n,d) Levels  
293 Kelvin Cross Sections

34-Se-80



11

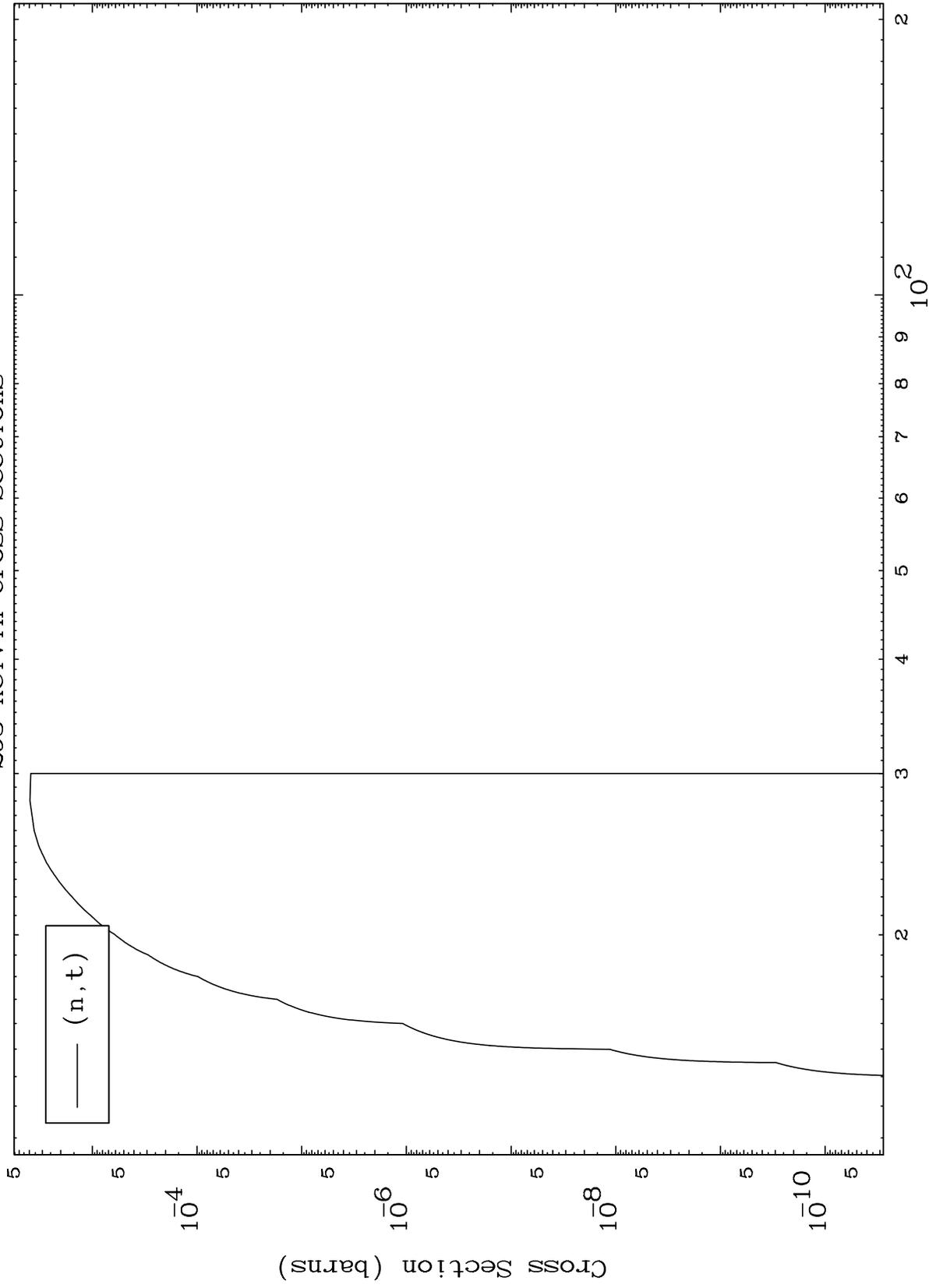
Incident Energy (MeV)

34-Se-80

MAT 3443

(n,t) Levels  
293 Kelvin Cross Sections

34-Se-80



12

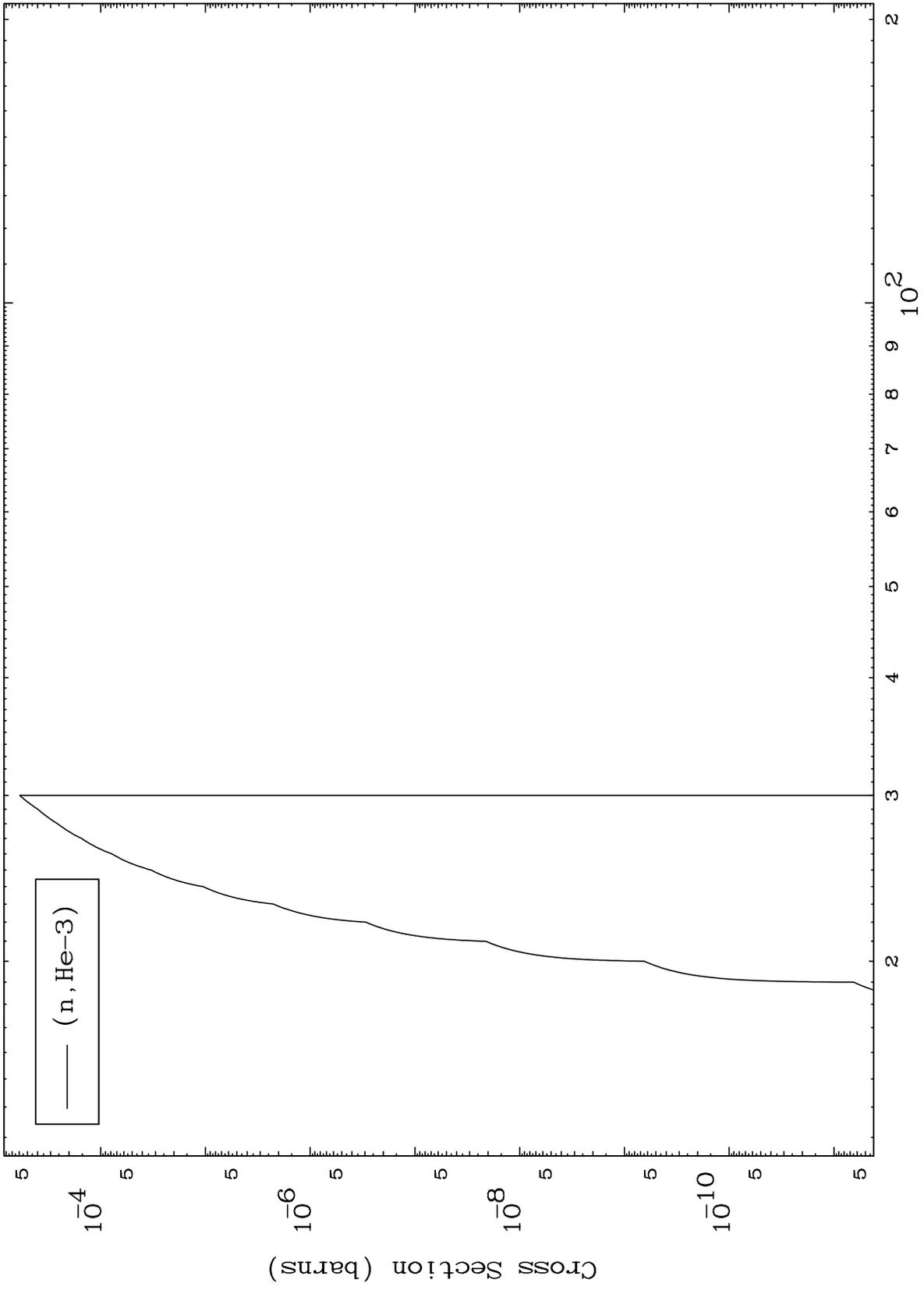
Incident Energy (MeV)

34-Se-80

MAT 3443

(n,He3) Levels  
293 Kelvin Cross Sections

34-Se-80



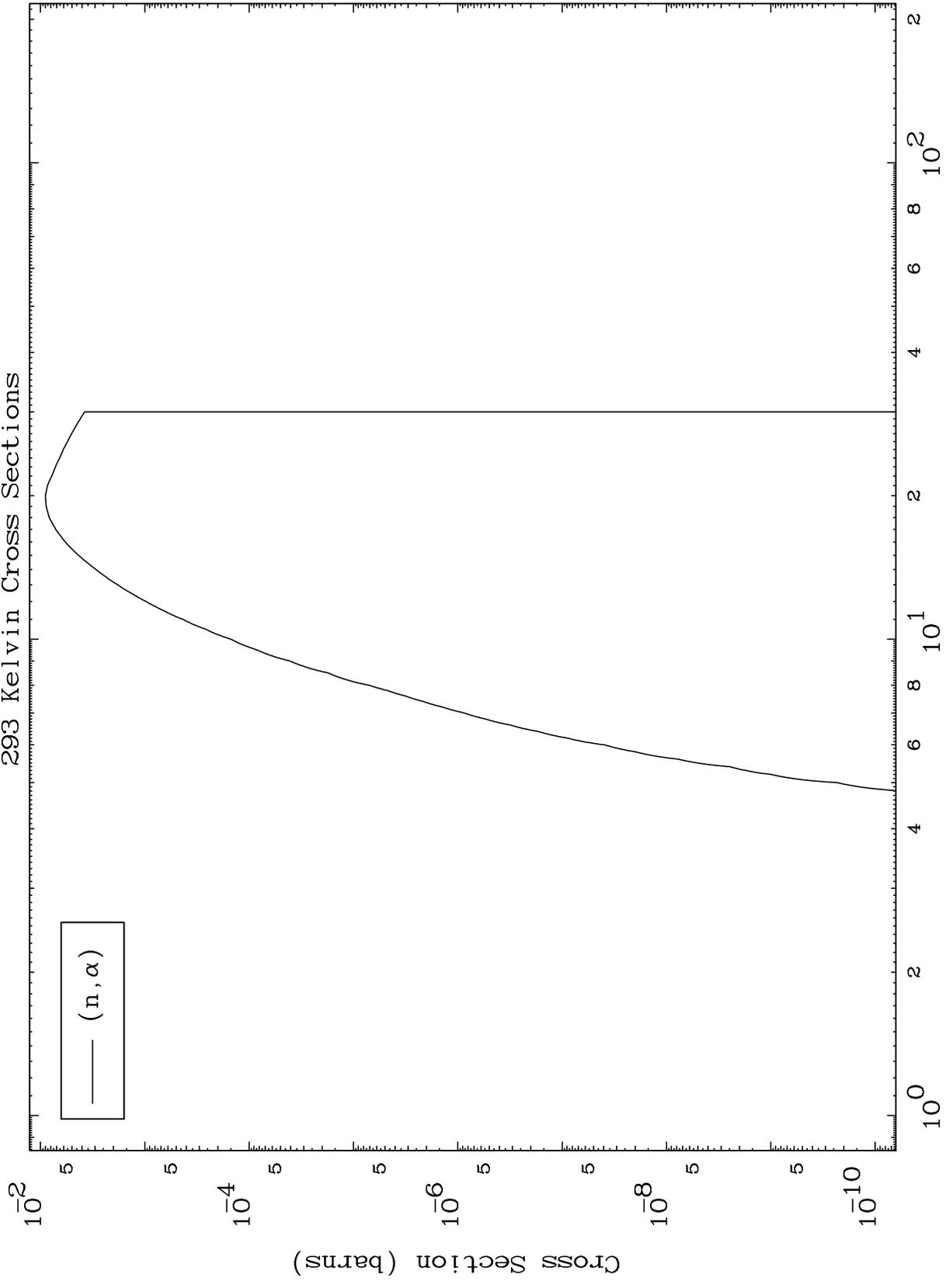
13

34-Se-80

MAT 3443

(n,α) Levels  
293 Kelvin Cross Sections

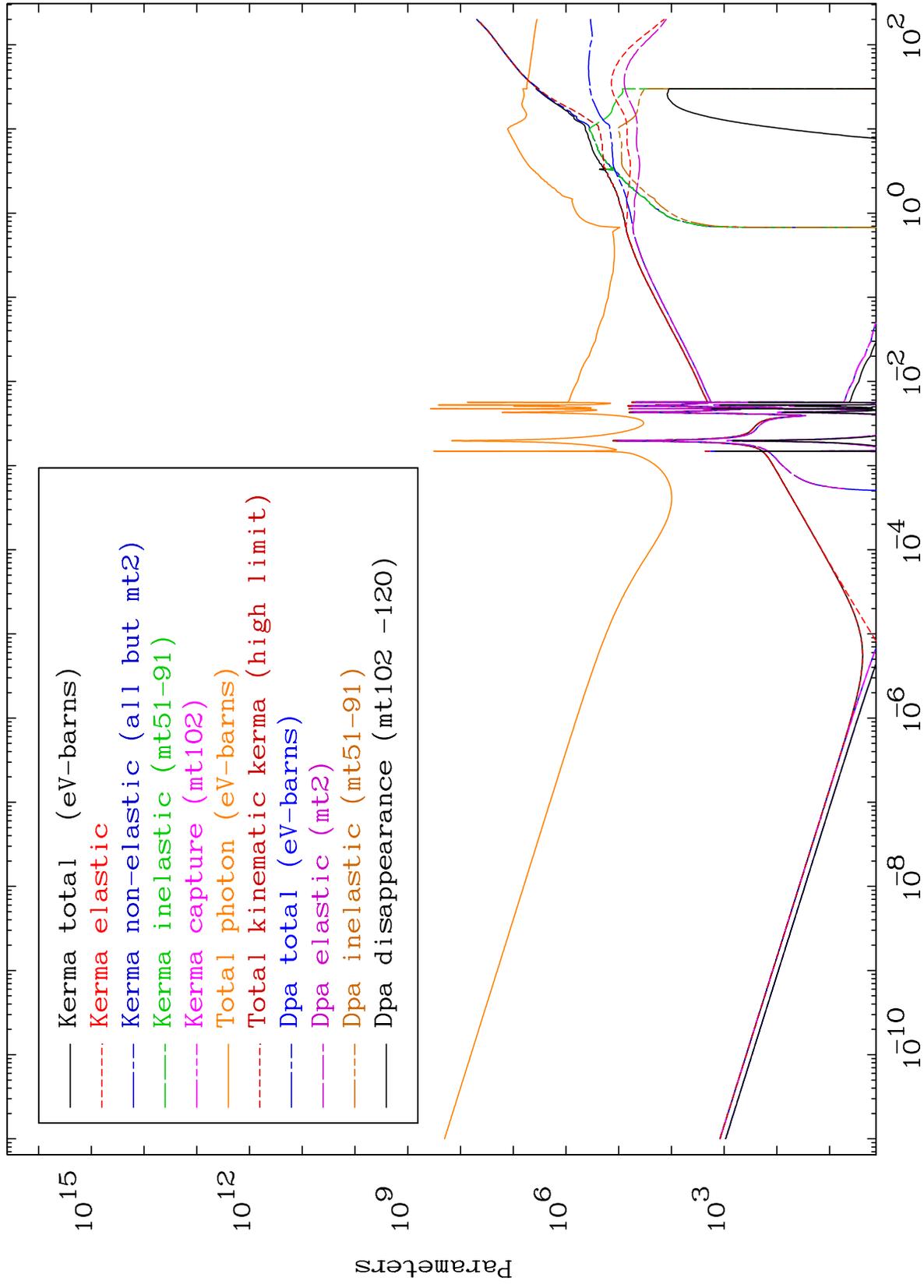
34-Se-80



14

Incident Energy (MeV)

34-Se-80



MAT 3443

Elastic Legendre Coefficients

<sup>34</sup>Se-80



16

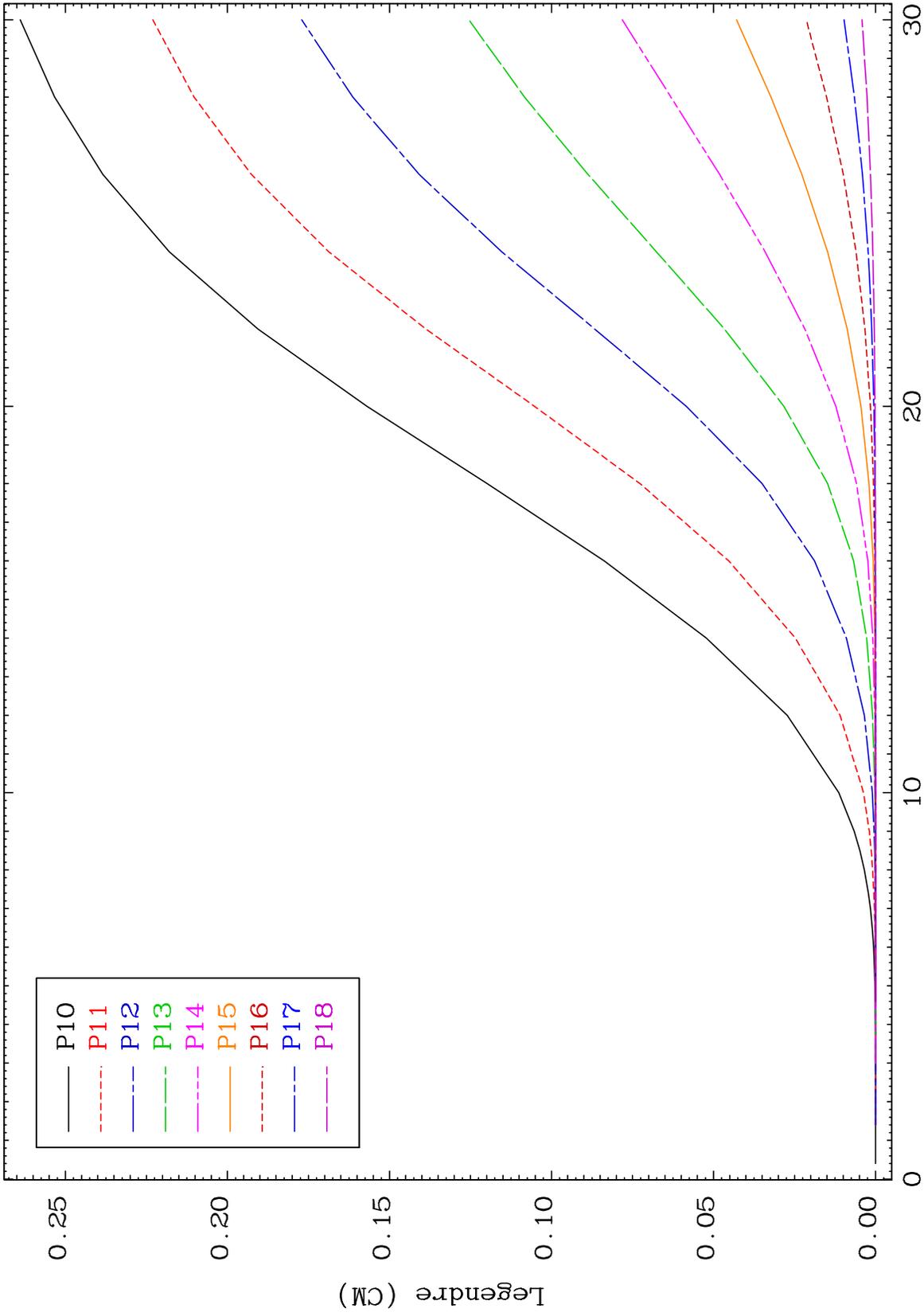
Incident Energy (MeV)

<sup>34</sup>Se-80

MAT 3443

Elastic Legendre Coefficients

<sup>34</sup>Se-80



17

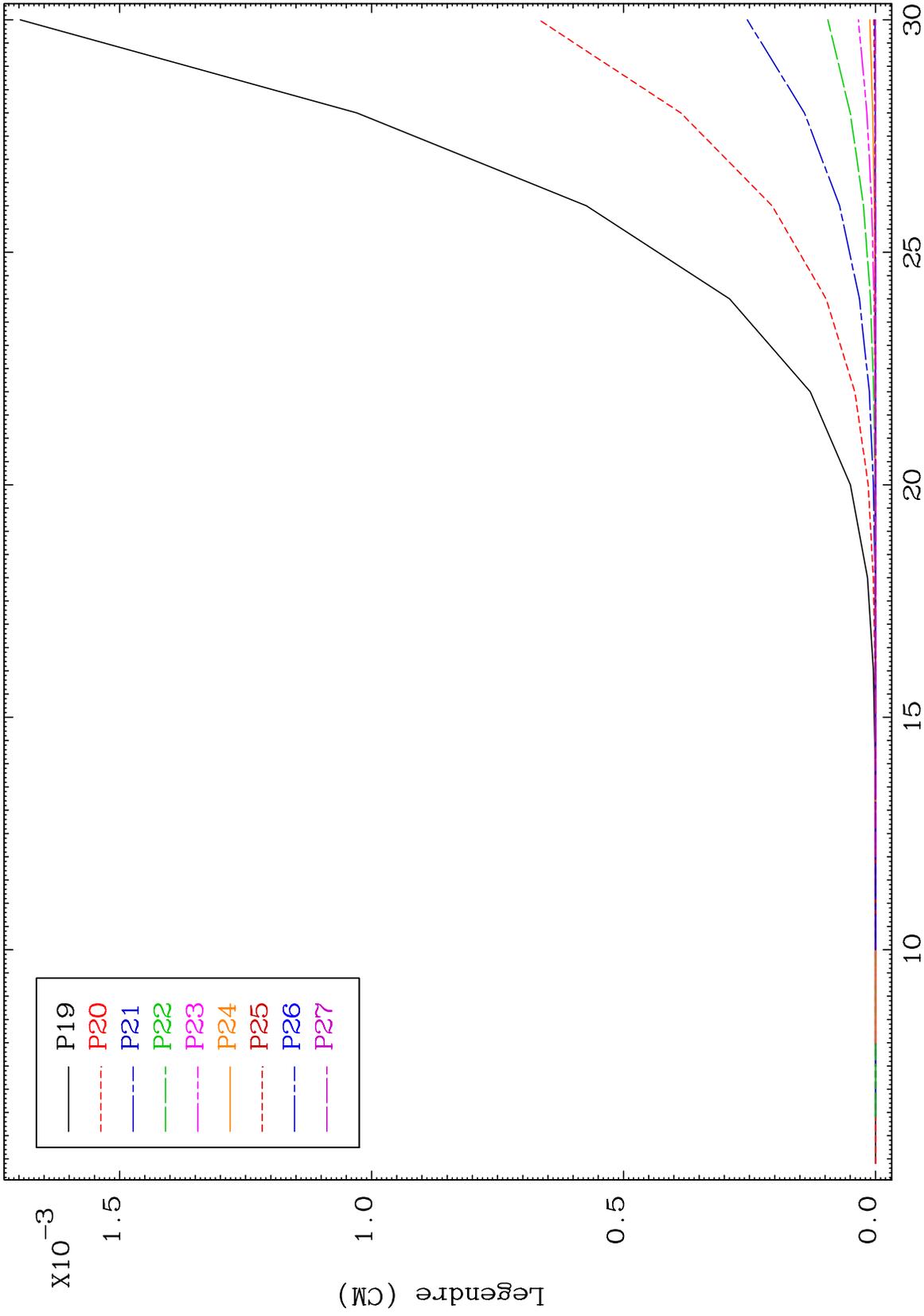
Incident Energy (MeV)

<sup>34</sup>Se-80

MAT 3443

### Elastic Legendre Coefficients

34-Se-80



18

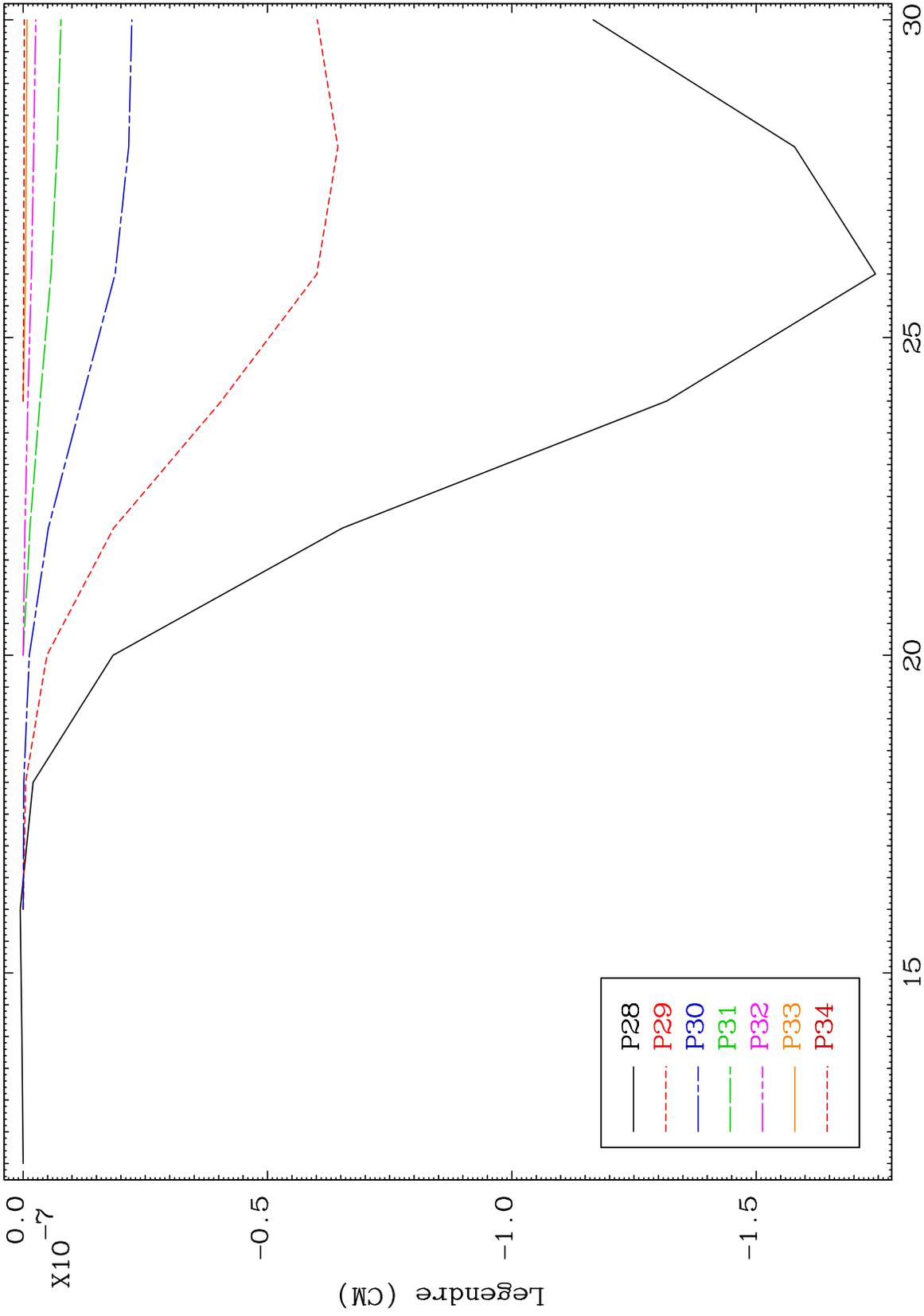
Incident Energy (MeV)

34-Se-80

MAT 3443

34-Se-80

Elastic Legendre Coefficients

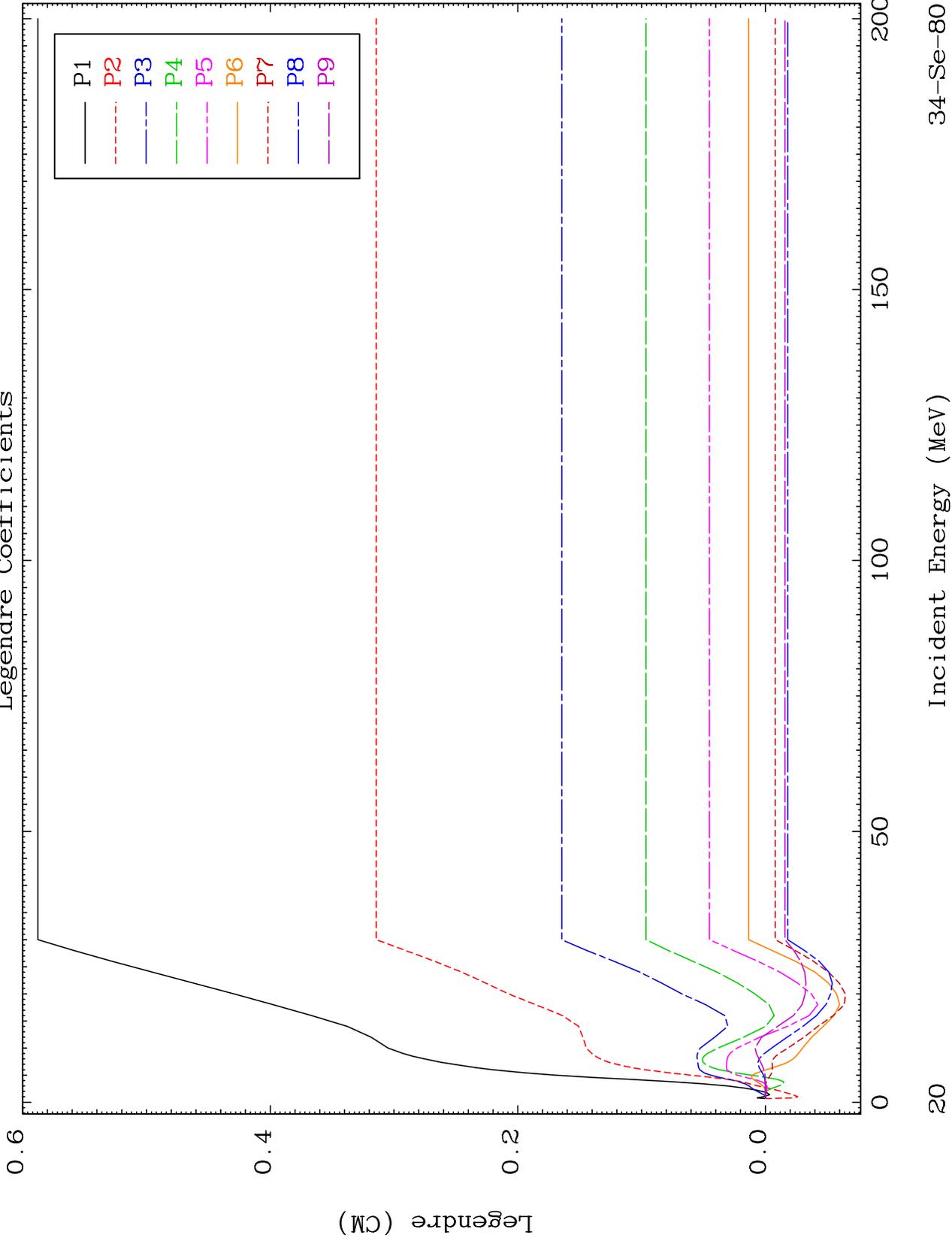


19

Incident Energy (MeV)

34-Se-80

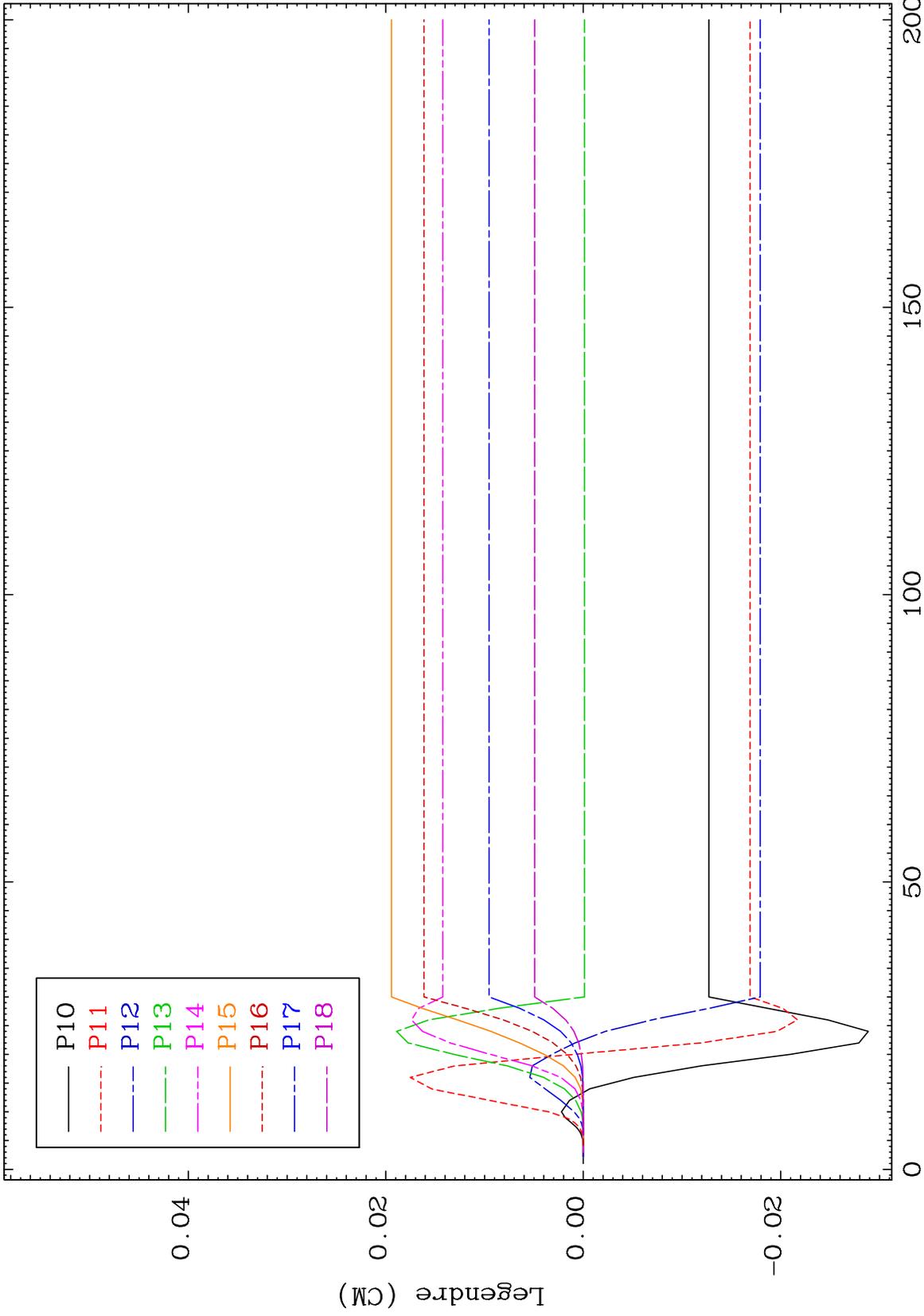
MAT 3443 MT= 51 (n,n') Level Legendre Coefficients 34-Se-80



MAT 3443

MT= 51 (n,n') Level  
Legendre Coefficients

34-Se-80



21

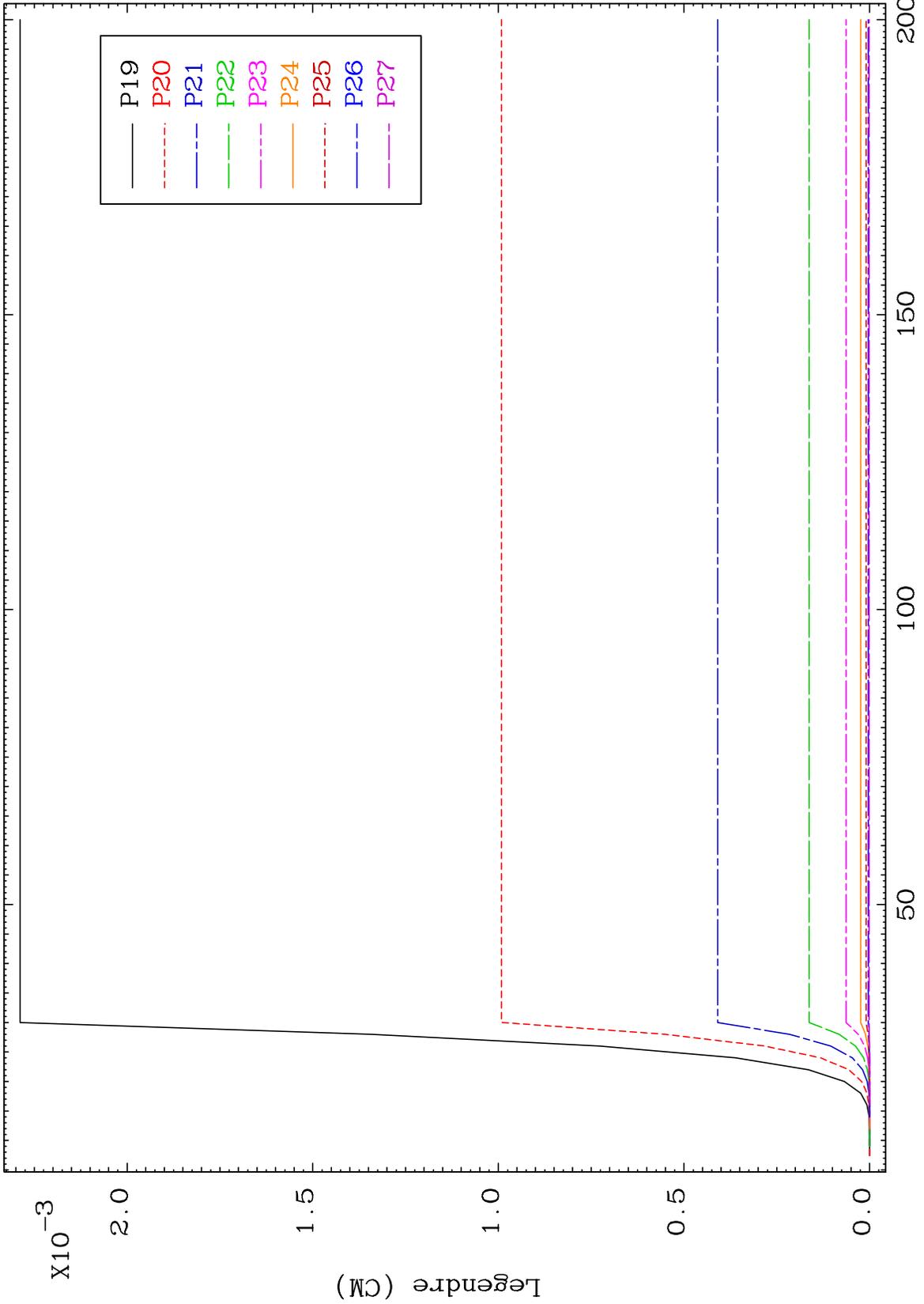
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 51 (n,n') Level  
Legendre Coefficients

34-Se-80



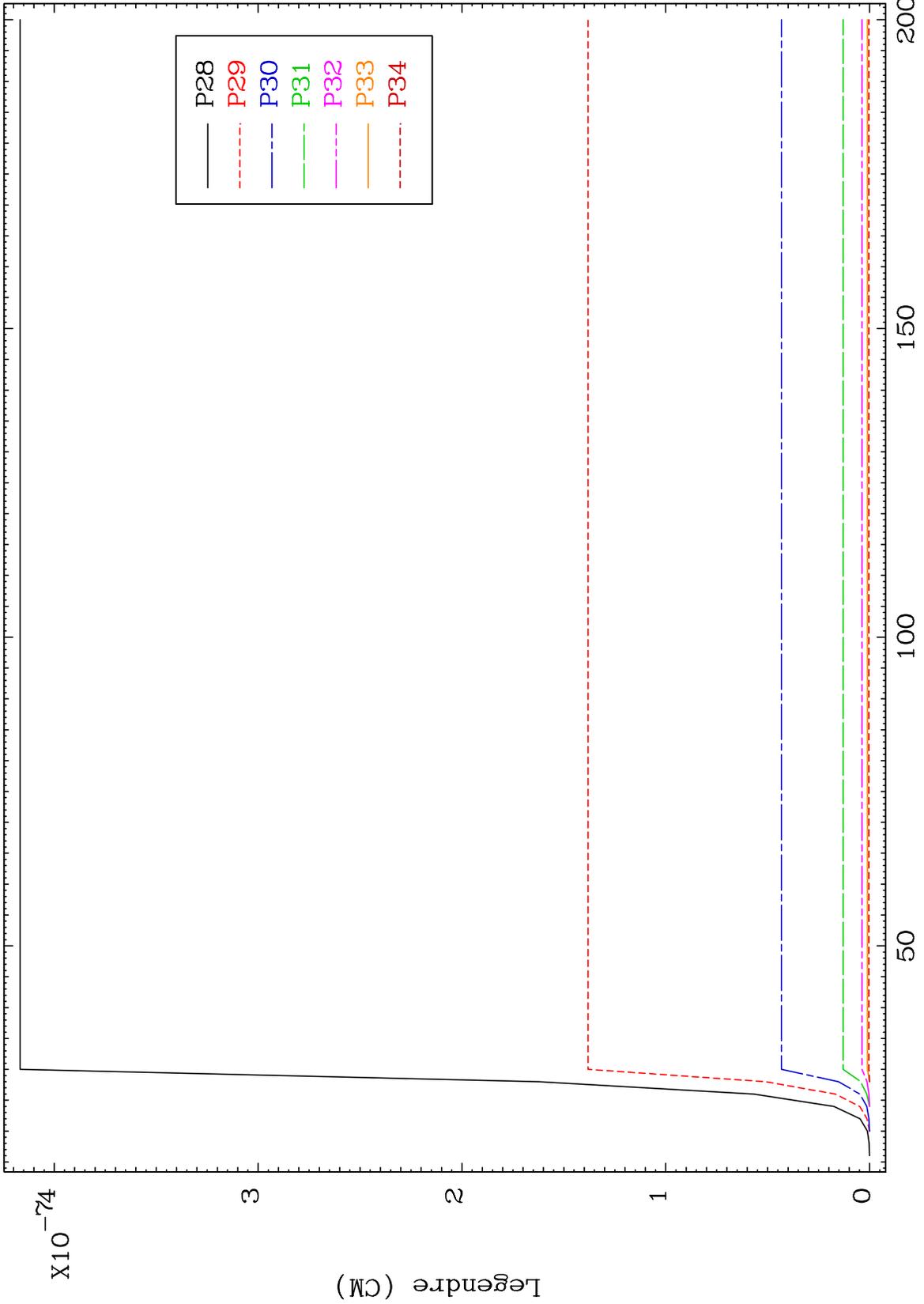
22

34-Se-80

MAT 3443

MT= 51 (n,n') Level  
Legendre Coefficients

34-Se-80



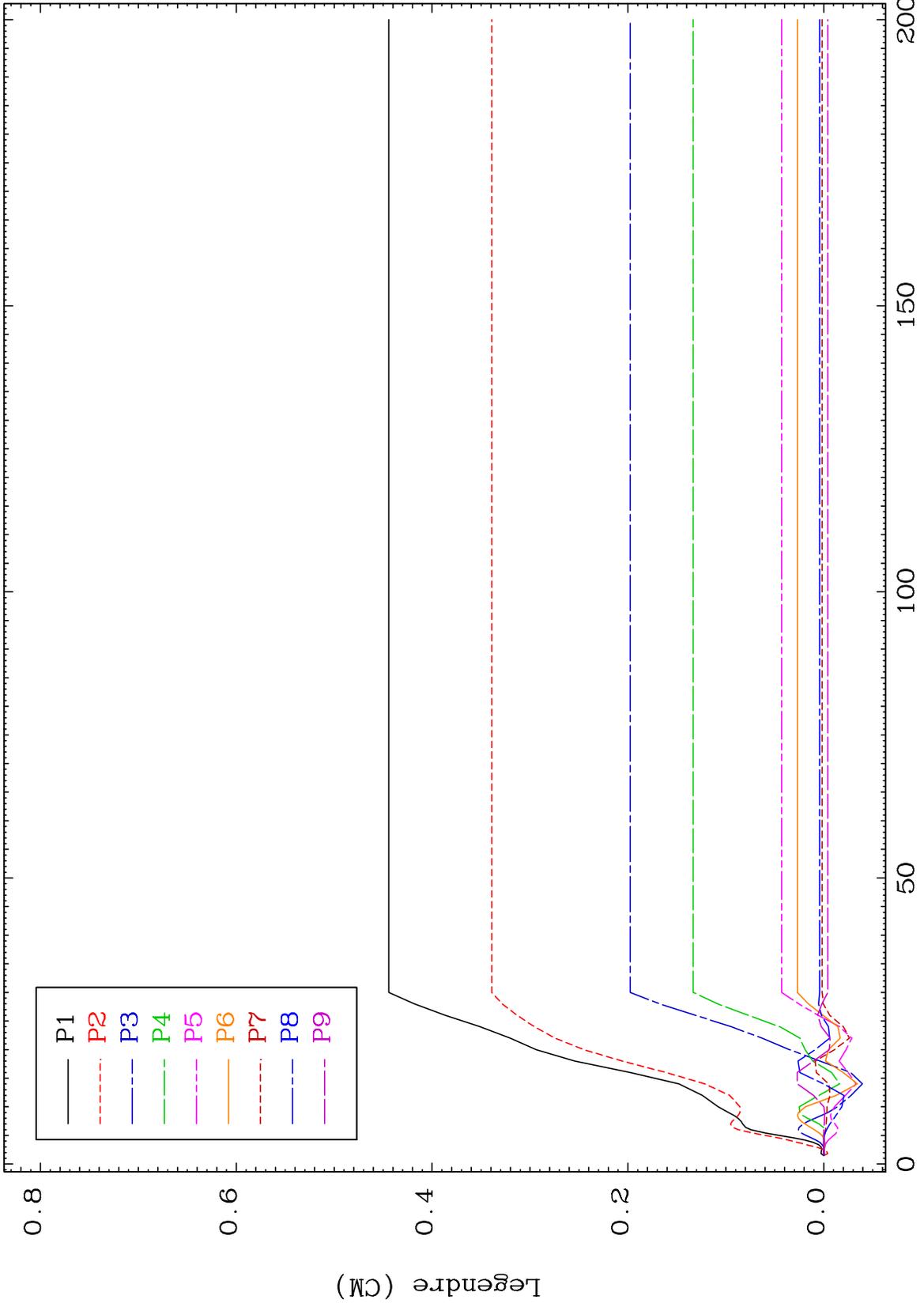
23

34-Se-80

MAT 3443

MT= 52 (n,n') Level  
Legendre Coefficients

34-Se-80



24

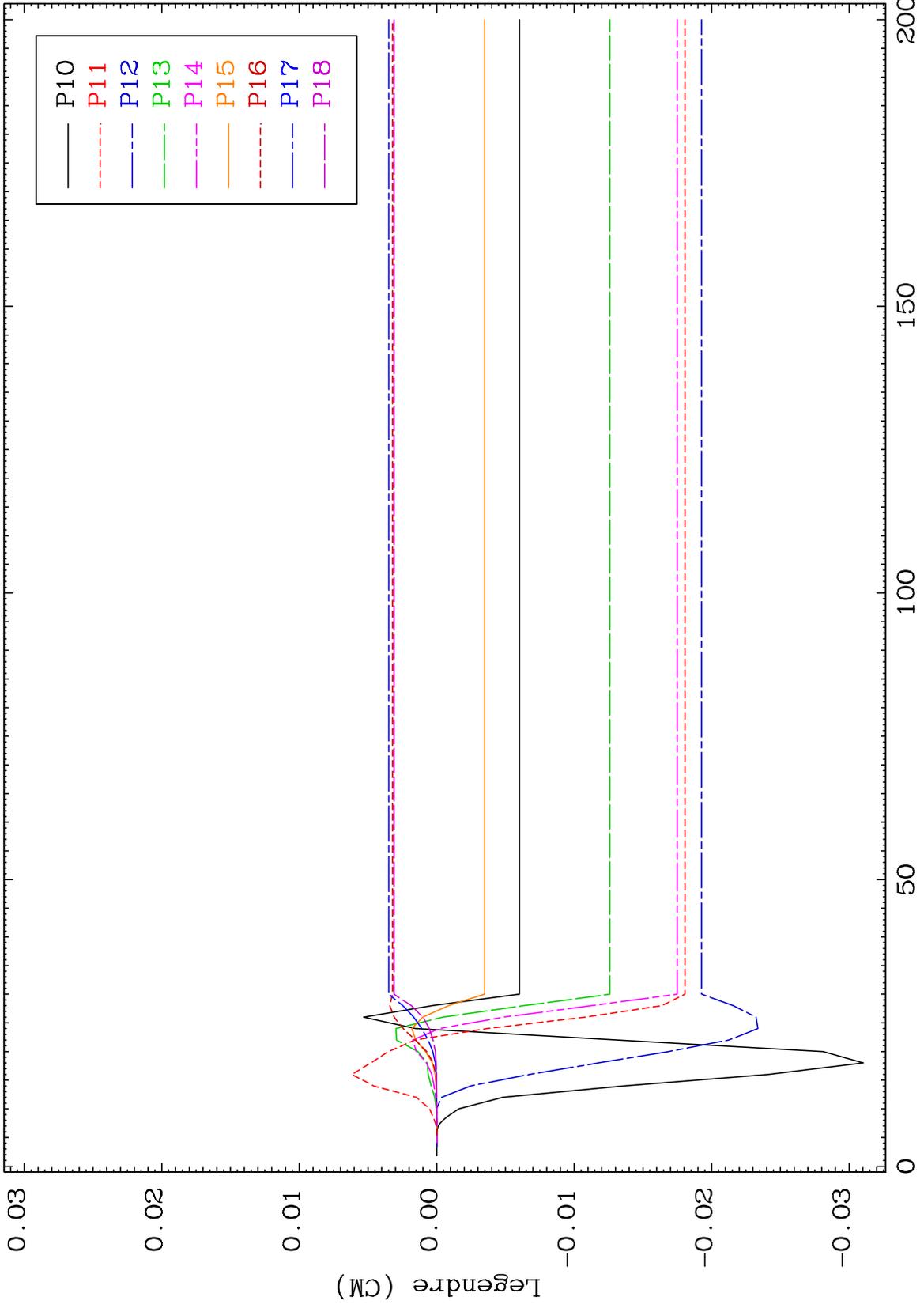
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 52 (n,n') Level  
Legendre Coefficients

34-Se-80



25

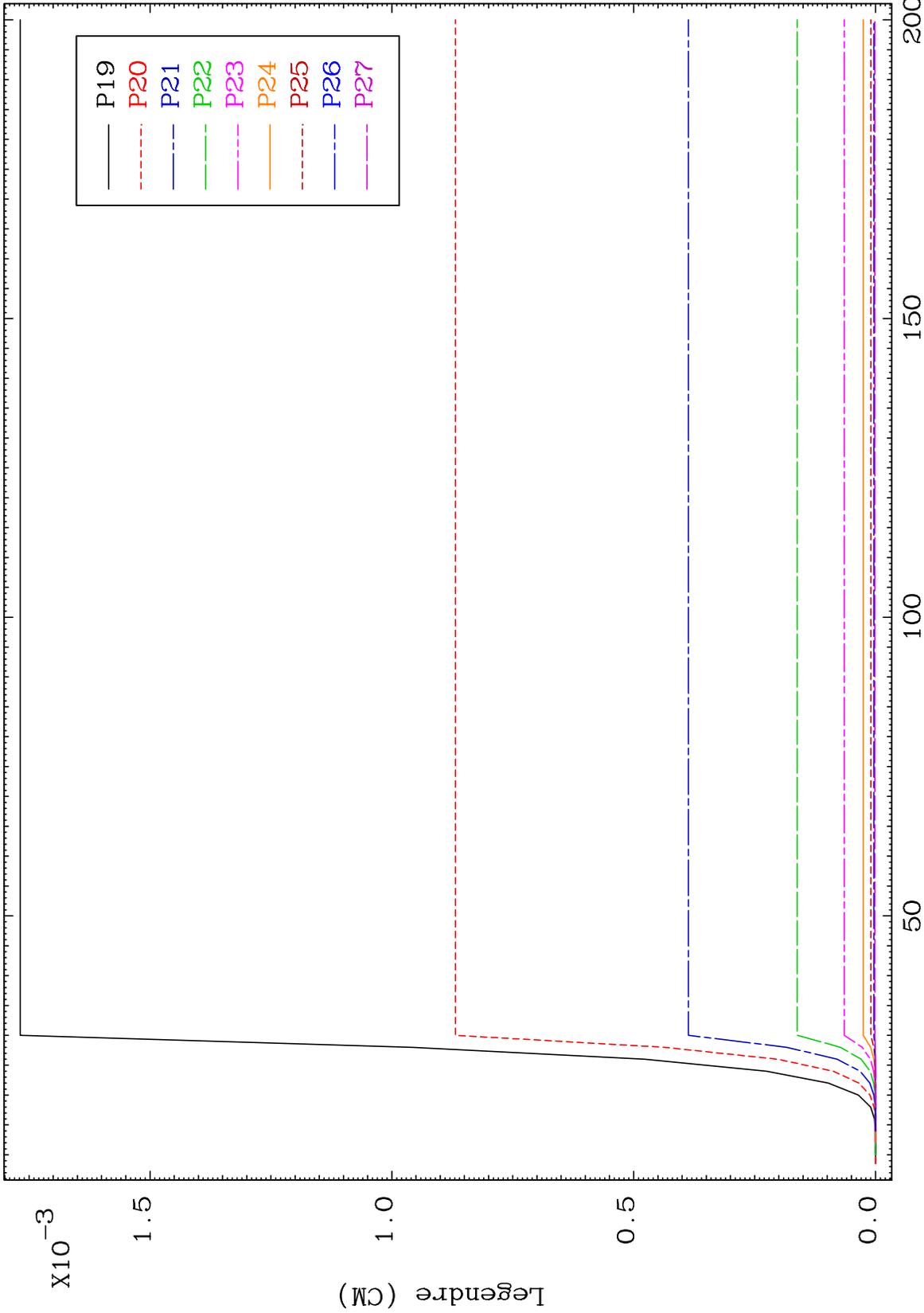
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 52 (n,n') Level  
Legendre Coefficients

34-Se-80



26

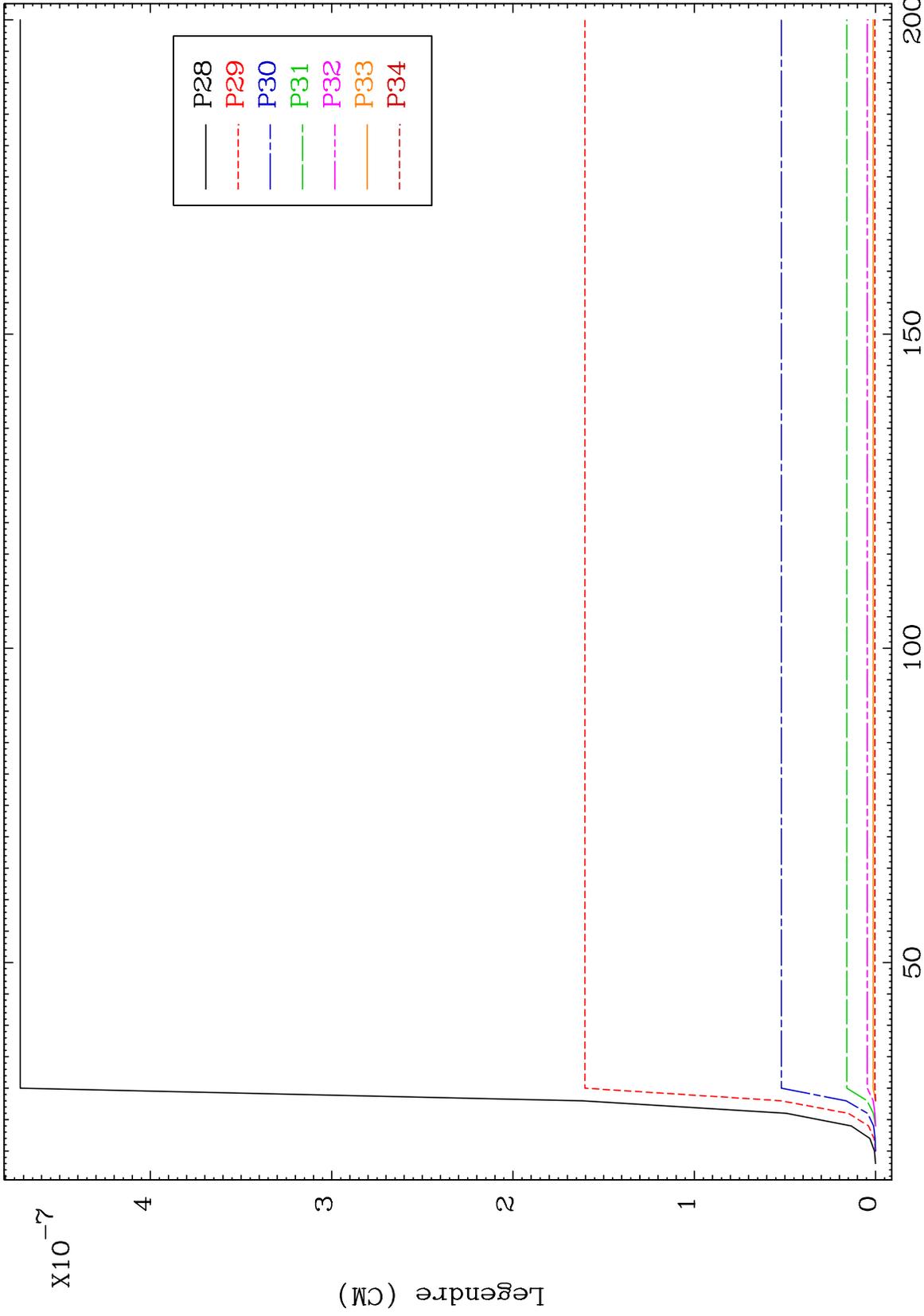
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 52 (n,n') Level  
Legendre Coefficients

34-Se-80



27

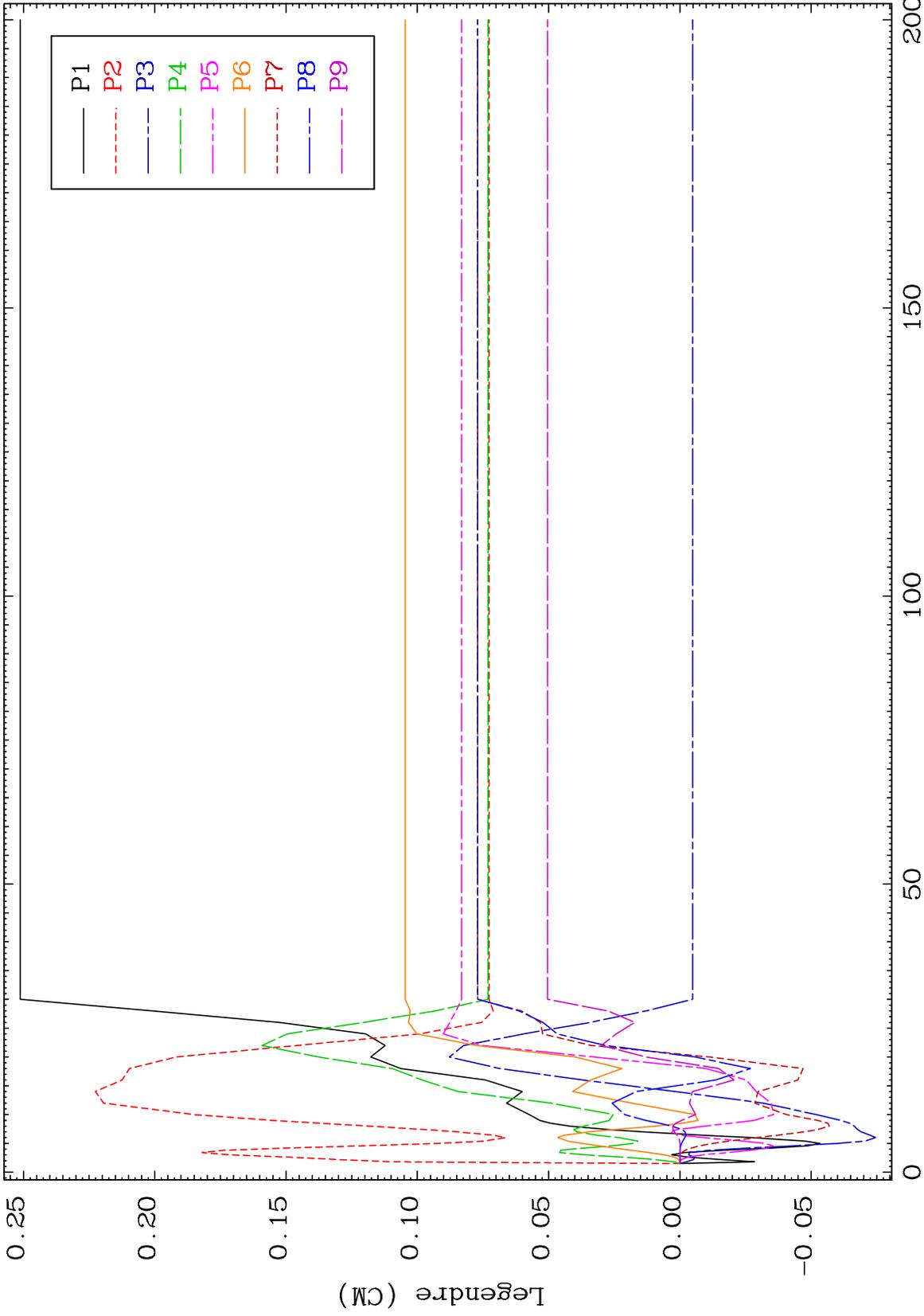
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 53 (n,n') Level  
Legendre Coefficients

34-Se-80



28

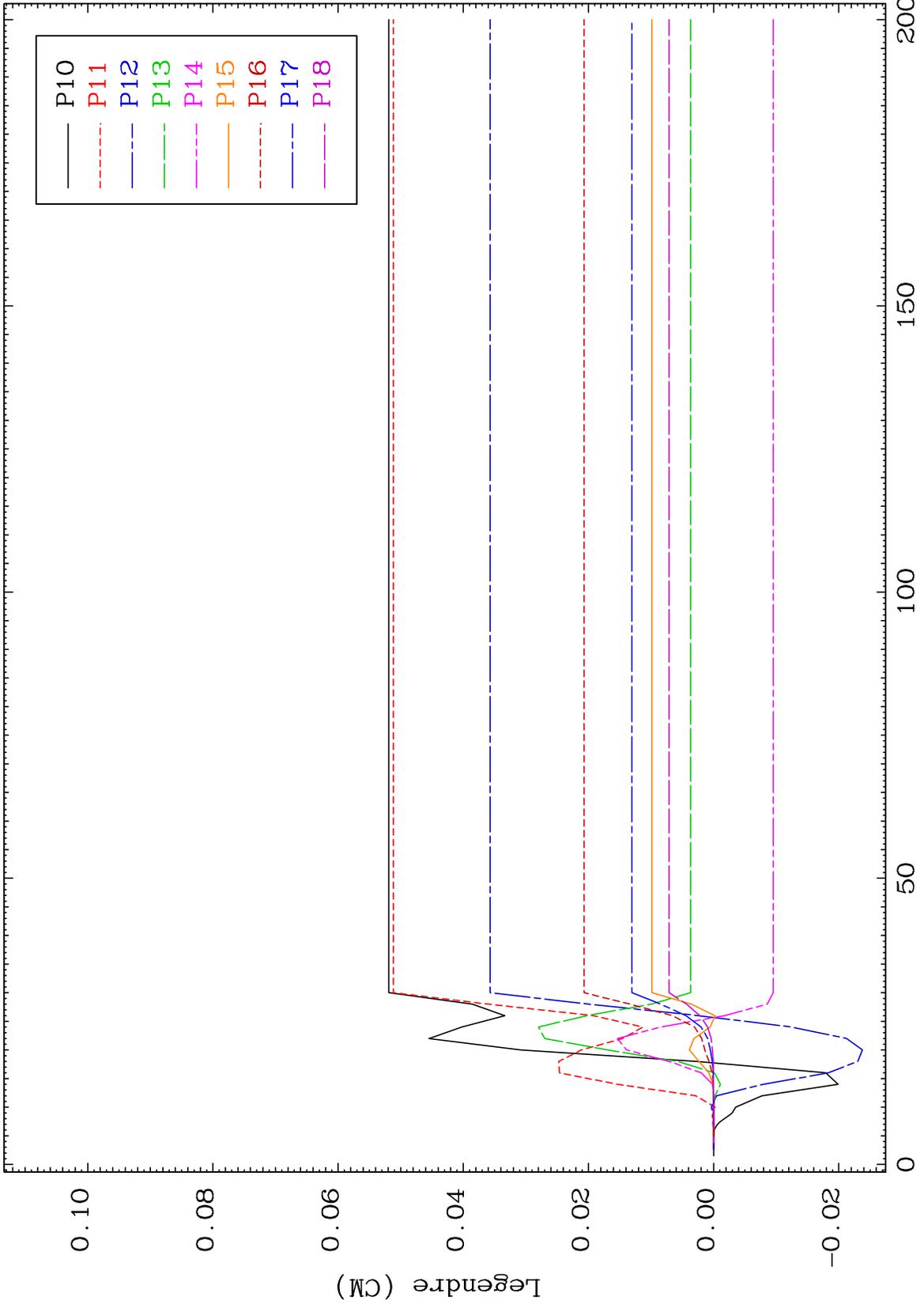
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 53 (n,n') Level  
Legendre Coefficients

34-Se-80



29

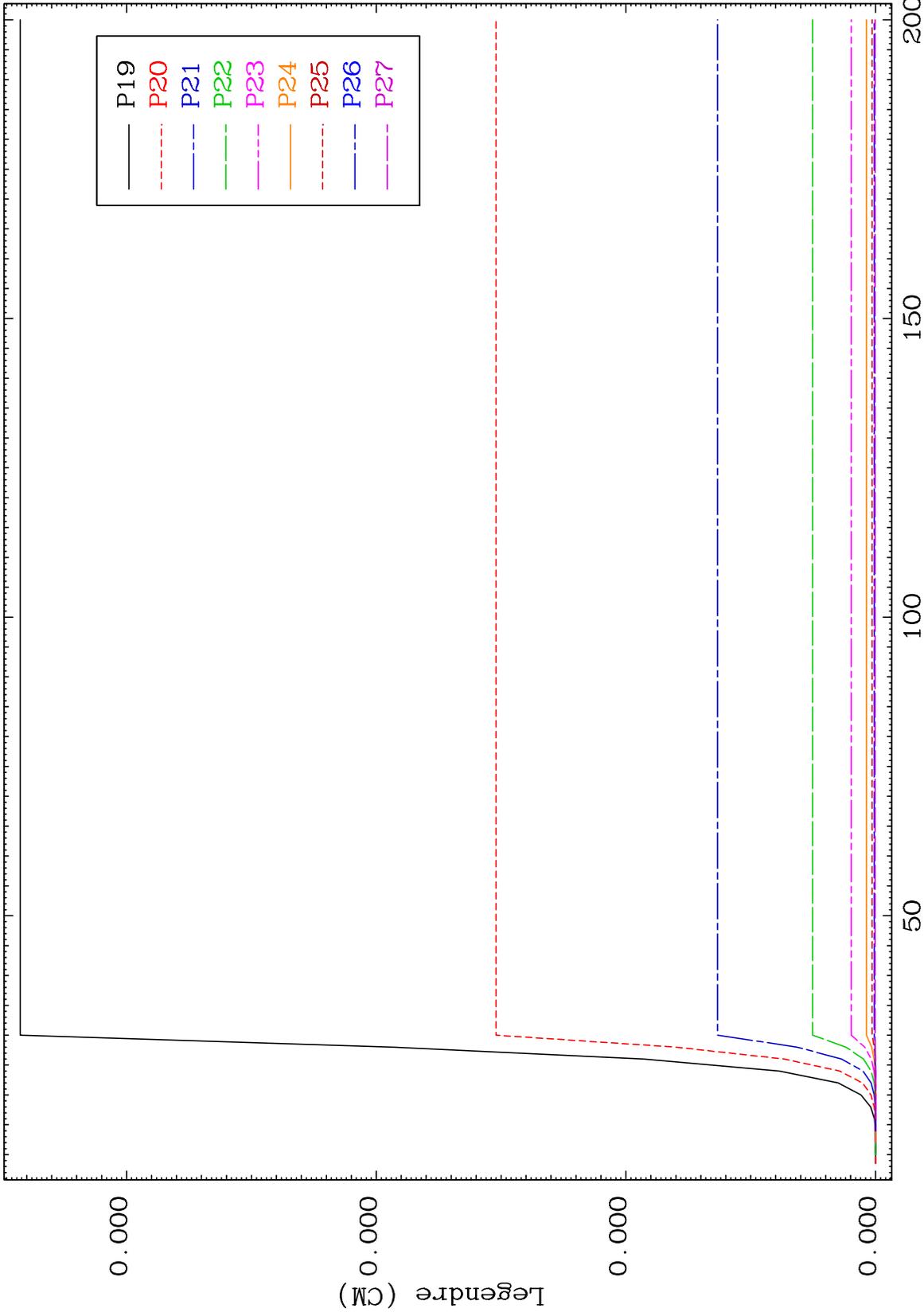
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 53 (n,n') Level  
Legendre Coefficients

34-Se-80



30

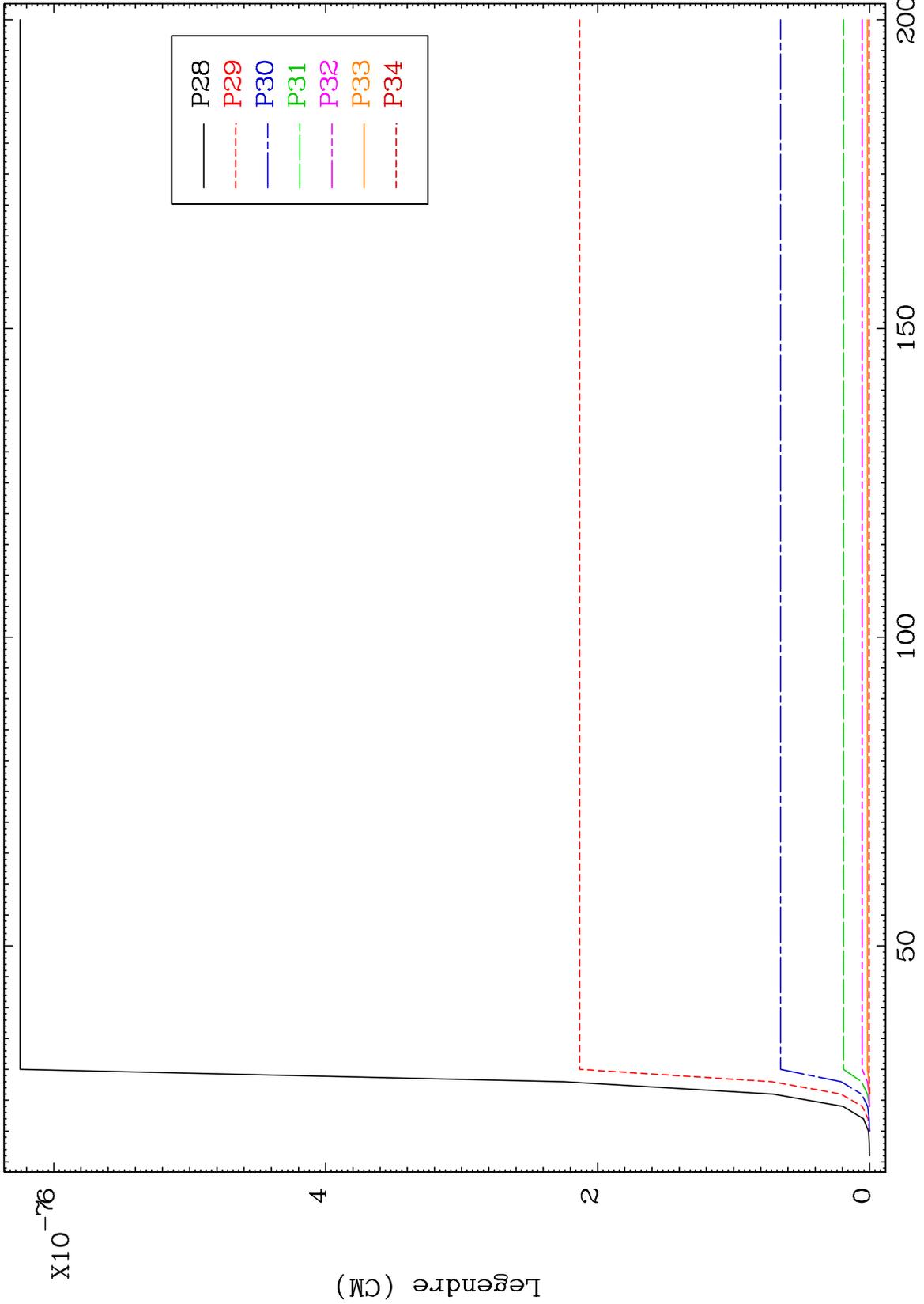
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 53 (n,n') Level  
Legendre Coefficients

34-Se-80



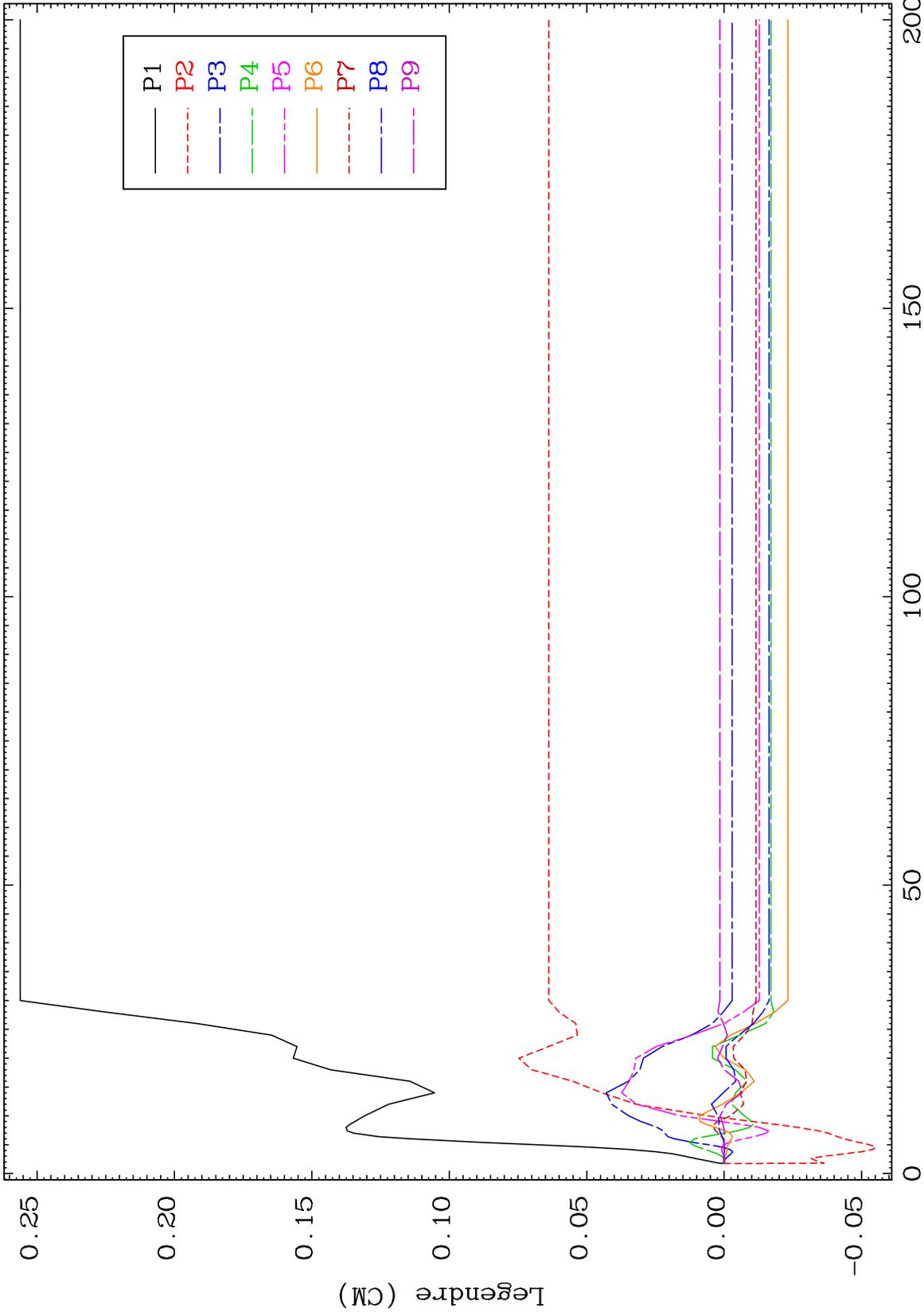
31

34-Se-80

MAT 3443

MT= 54 (n,n') Level  
Legendre Coefficients

34-Se-80



32

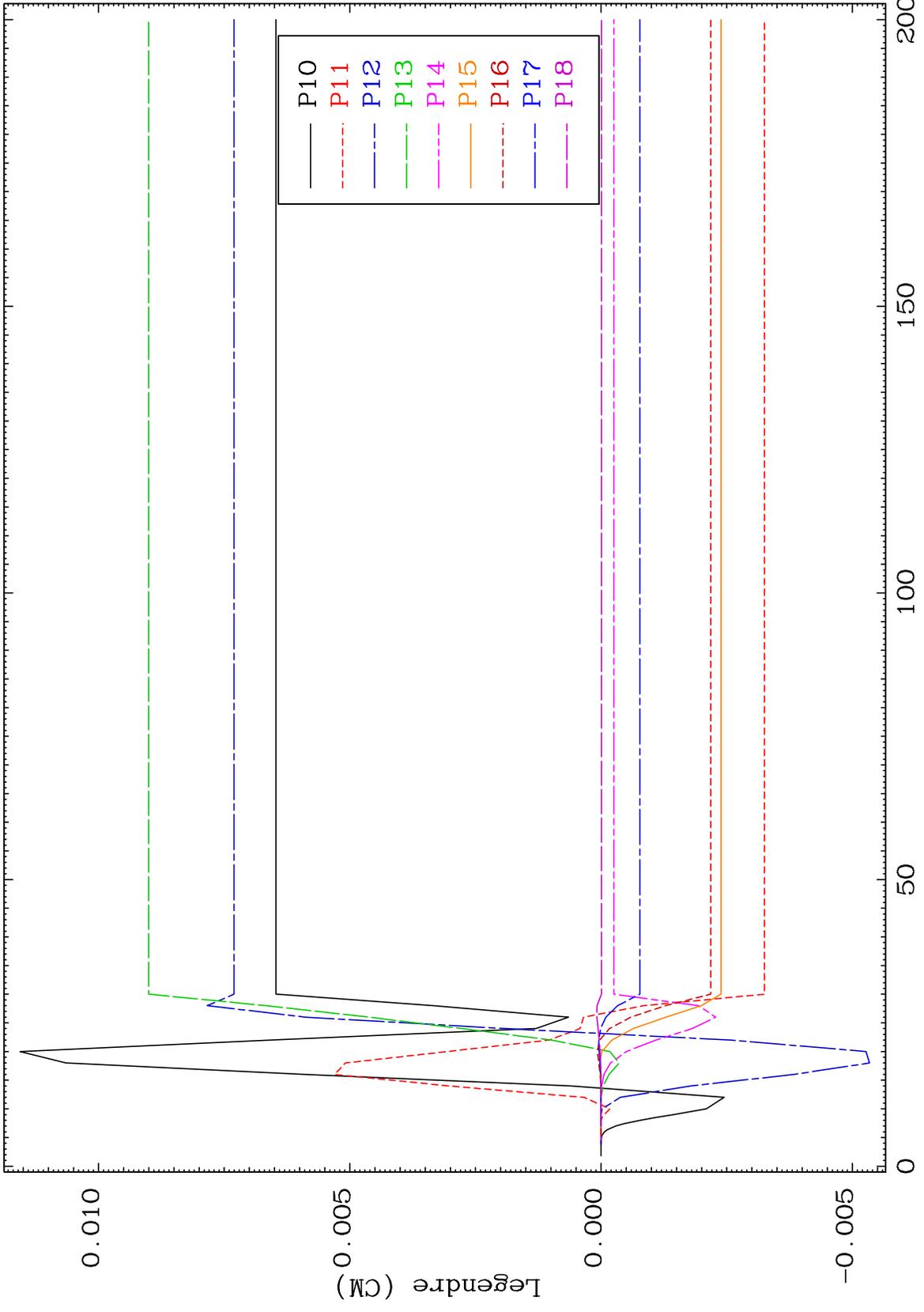
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 54 (n,n') Level  
Legendre Coefficients

34-Se-80



33

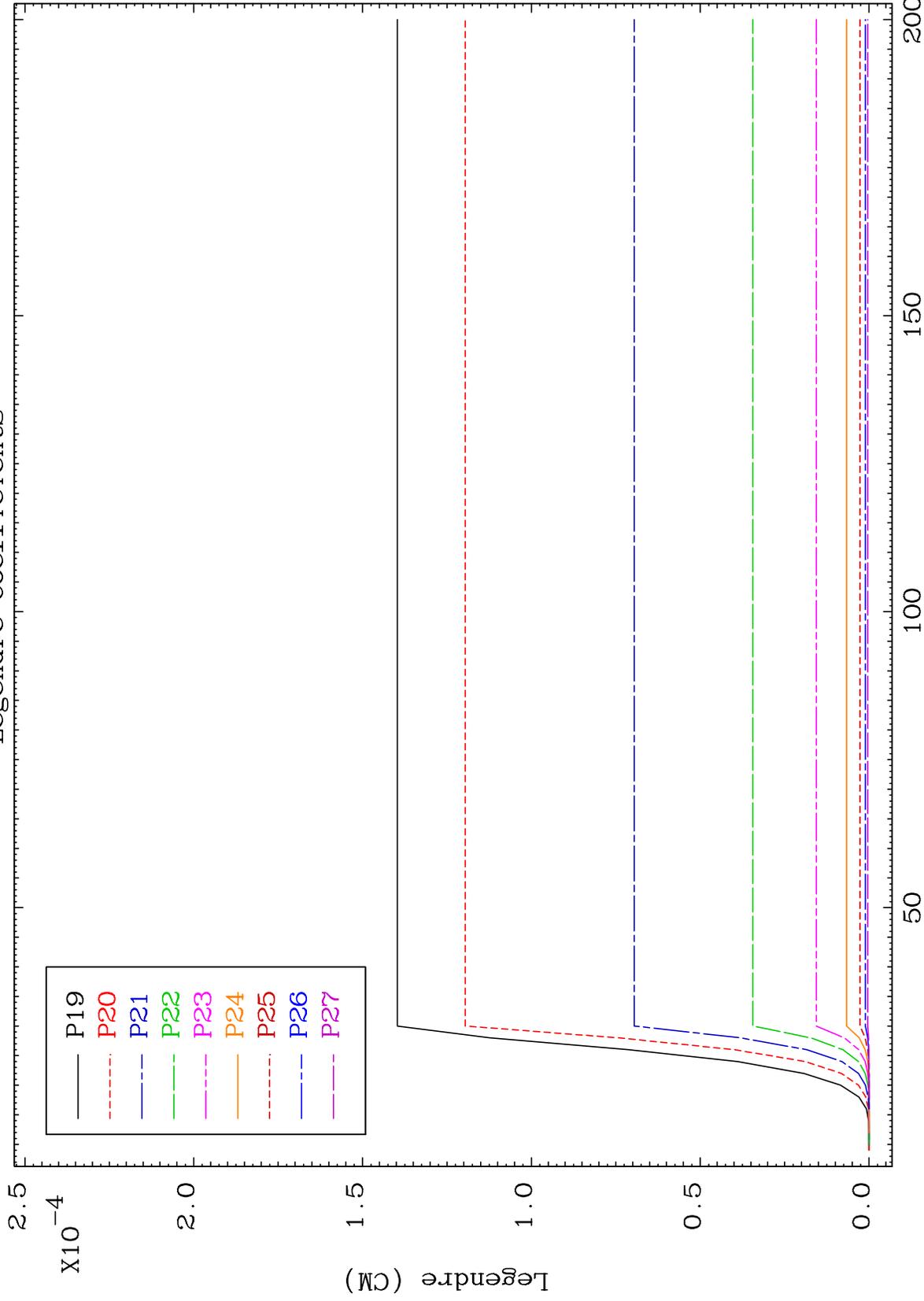
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 54 (n,n') Level  
Legendre Coefficients

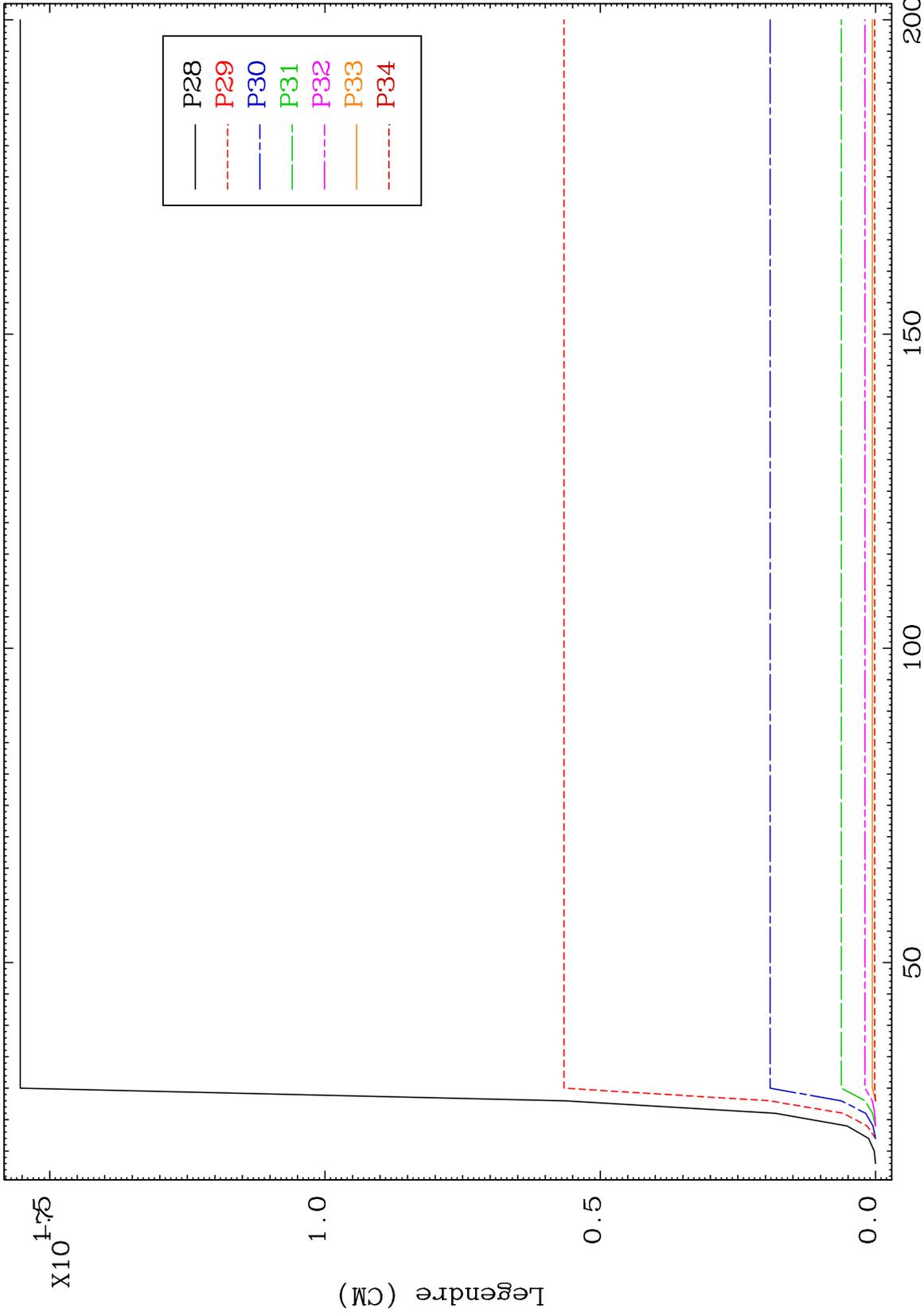
34-Se-80



MAT 3443

MT= 54 (n,n') Level  
Legendre Coefficients

34-Se-80

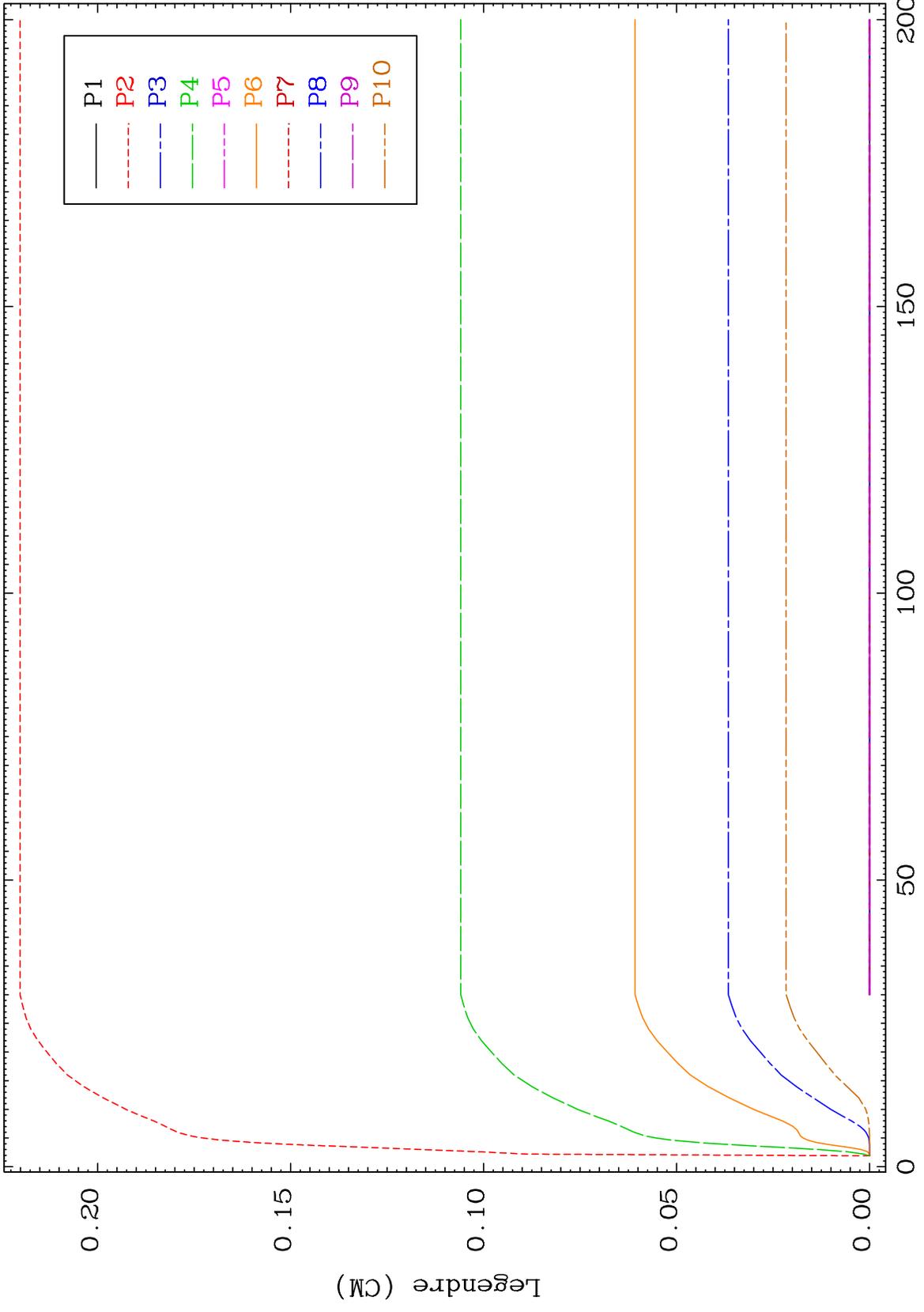


35

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 55 (n,n') Level Legendre Coefficients 34-Se-80

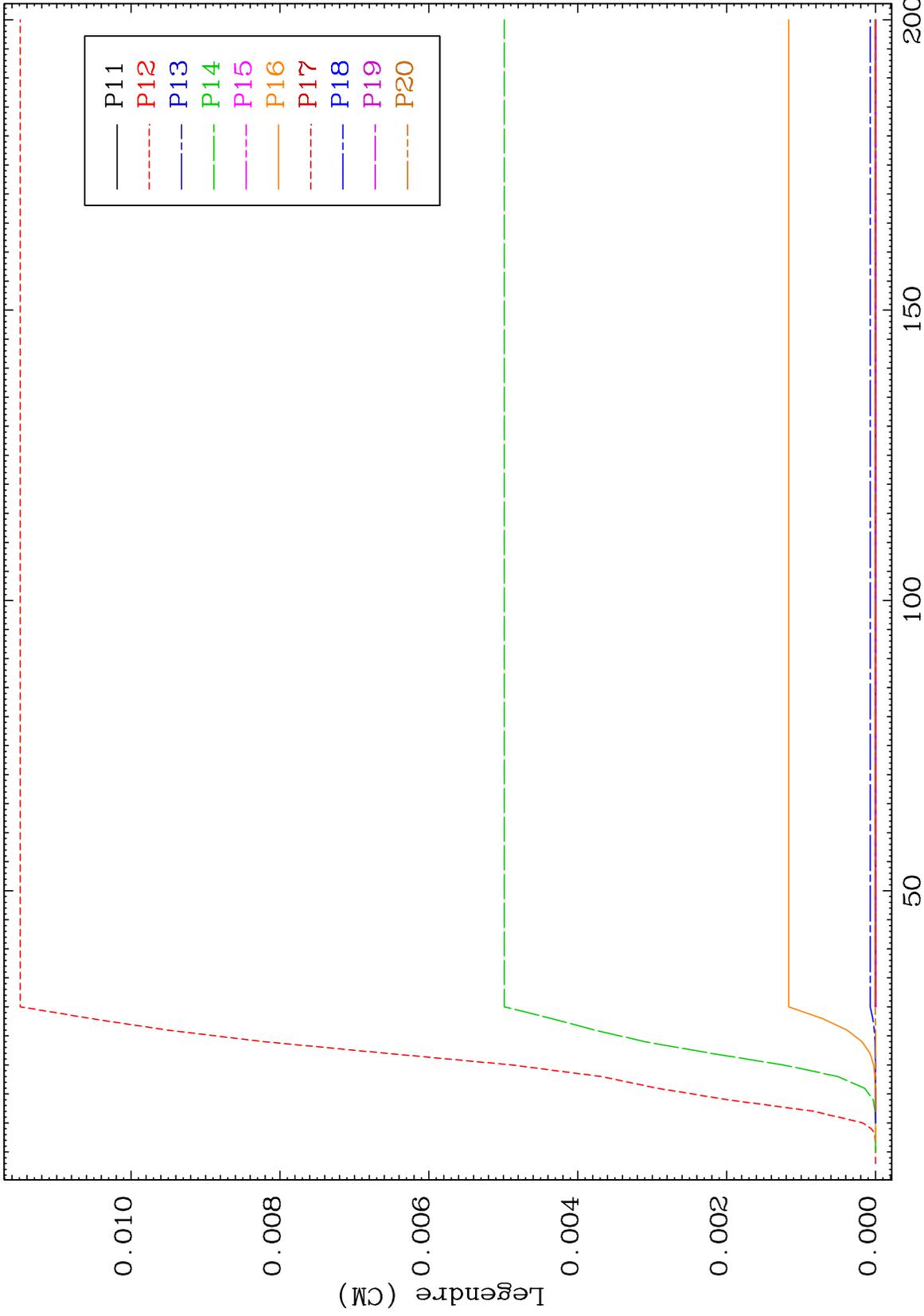


36 34-Se-80

MAT 3443

MT= 55 (n,n') Level  
Legendre Coefficients

34-Se-80

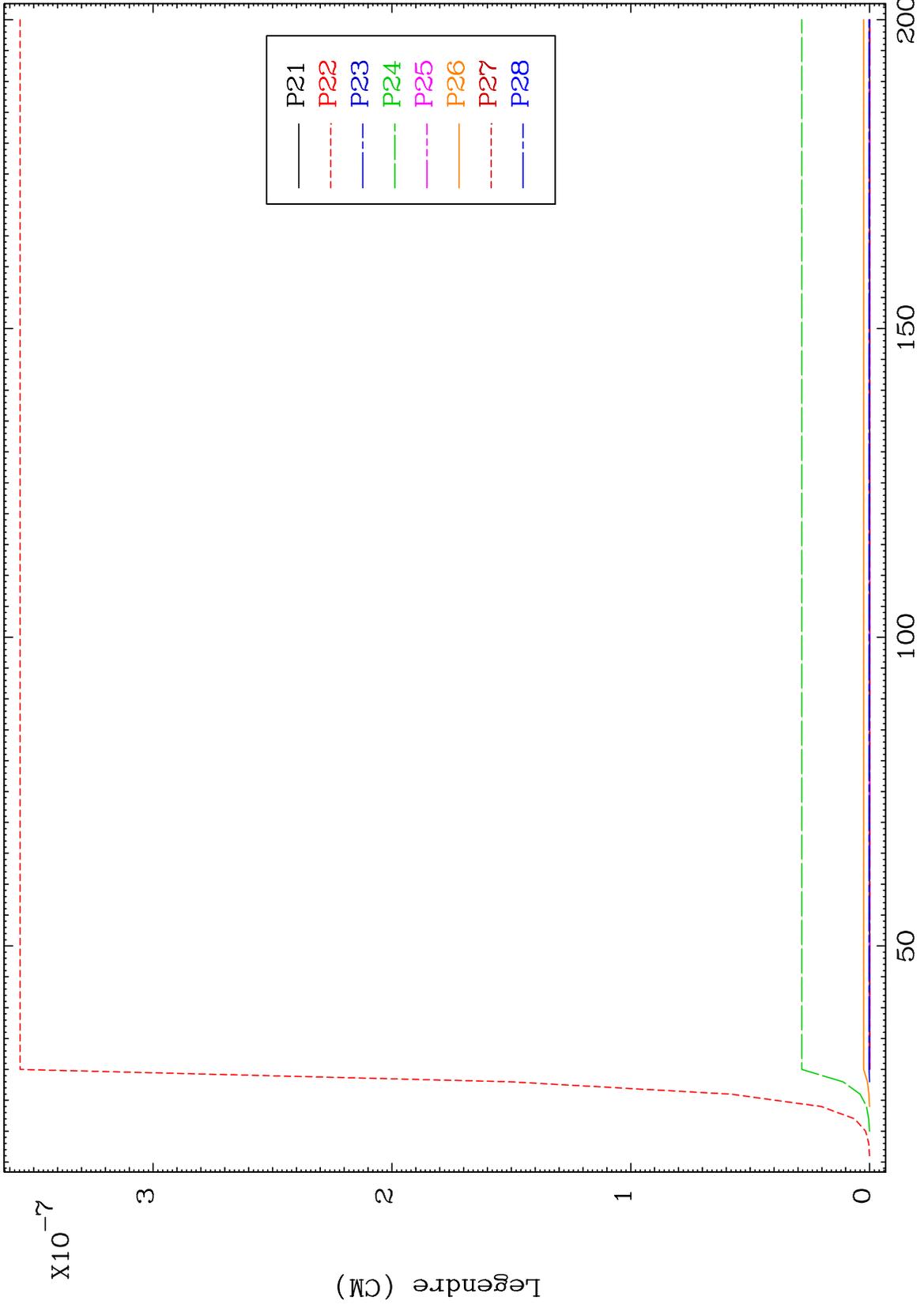


37

Incident Energy (MeV)

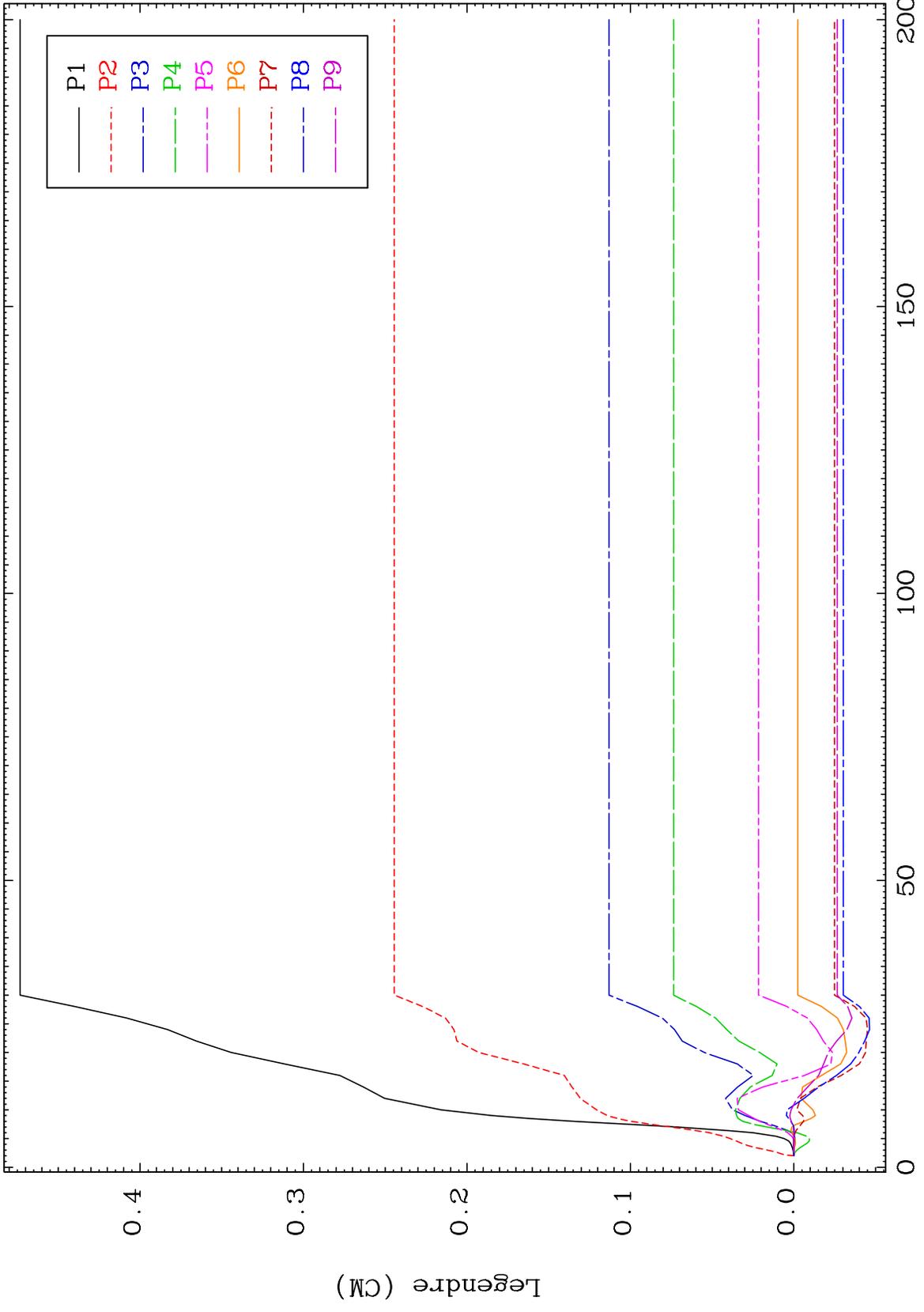
34-Se-80

MAT 3443 MT= 55 (n,n') Level Legendre Coefficients 34-Se-80



38 Incident Energy (MeV) 34-Se-80

MAT 3443 MT= 56 (n,n') Level Legendre Coefficients 34-Se-80

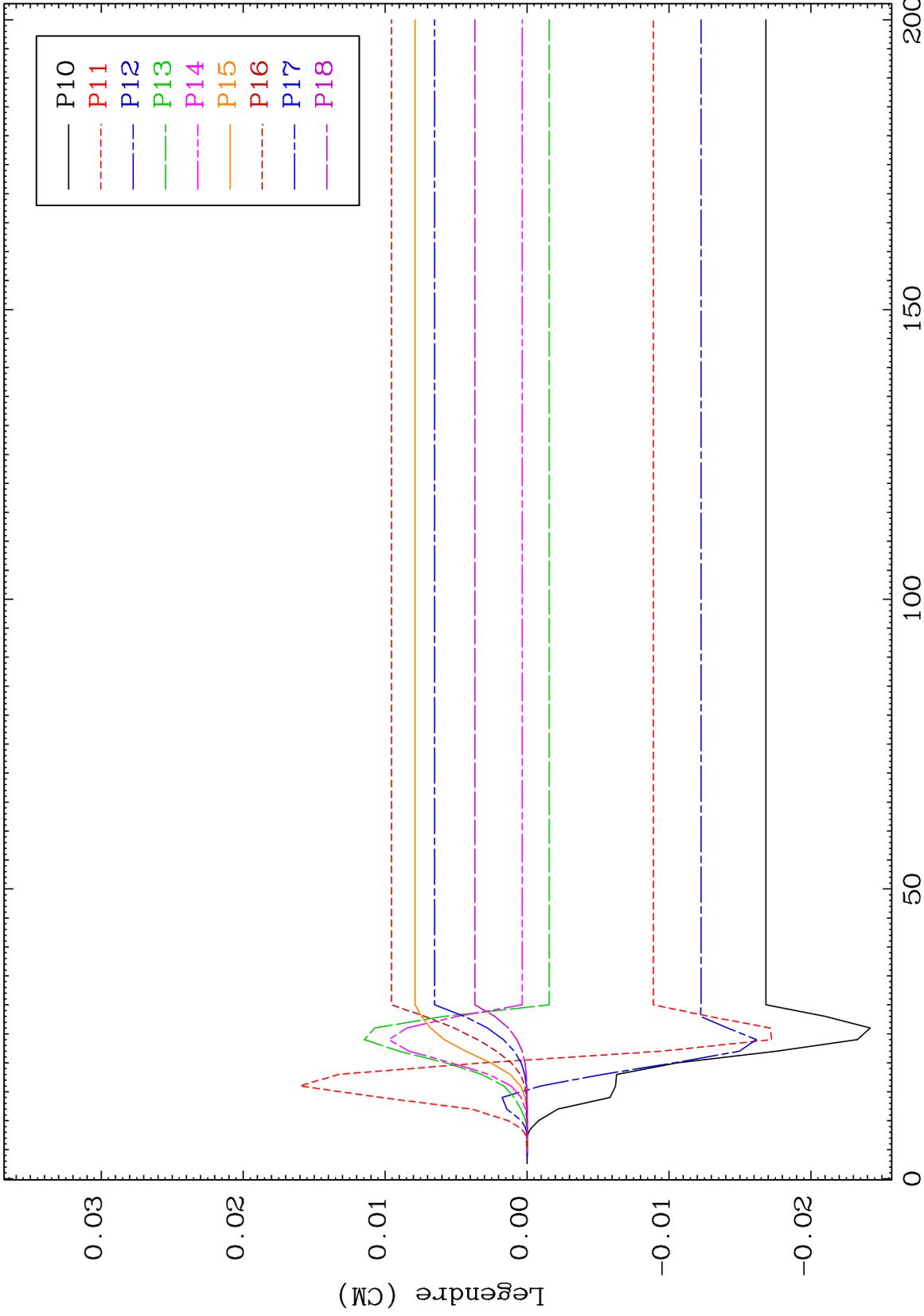


39 34-Se-80

MAT 3443

MT= 56 (n,n') Level  
Legendre Coefficients

34-Se-80



40

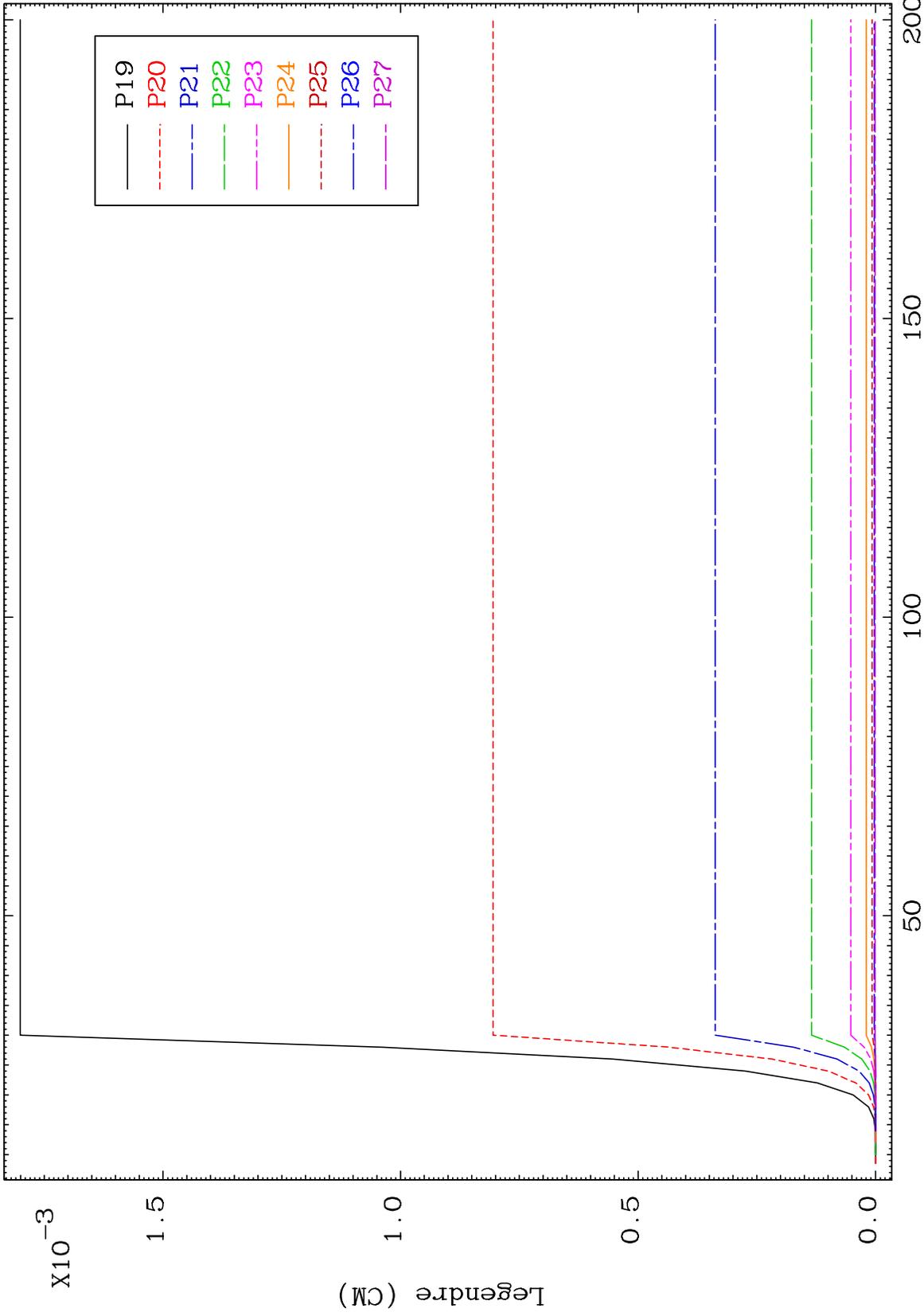
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 56 (n,n') Level  
Legendre Coefficients

34-Se-80



41

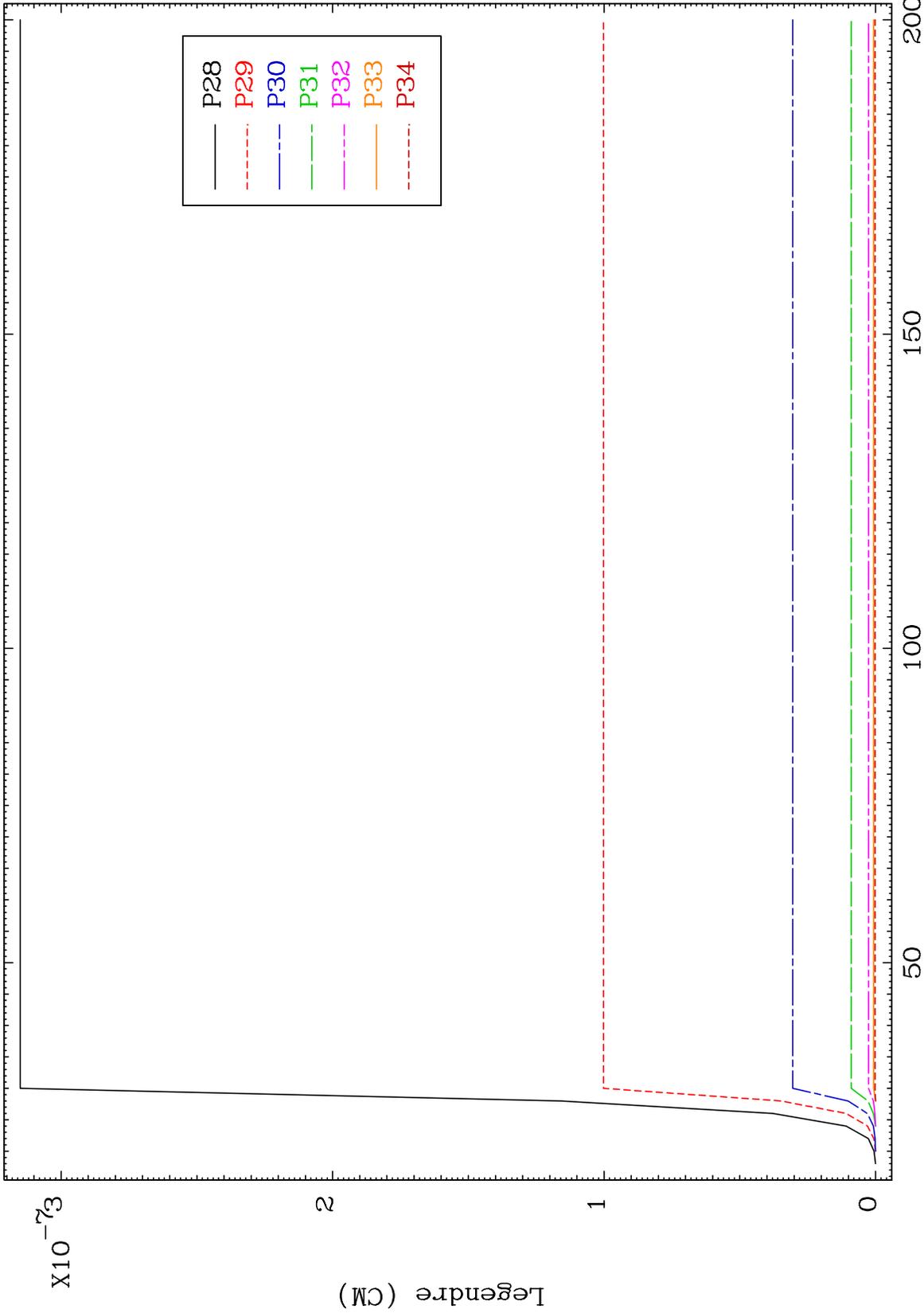
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 56 (n,n') Level  
Legendre Coefficients

34-Se-80



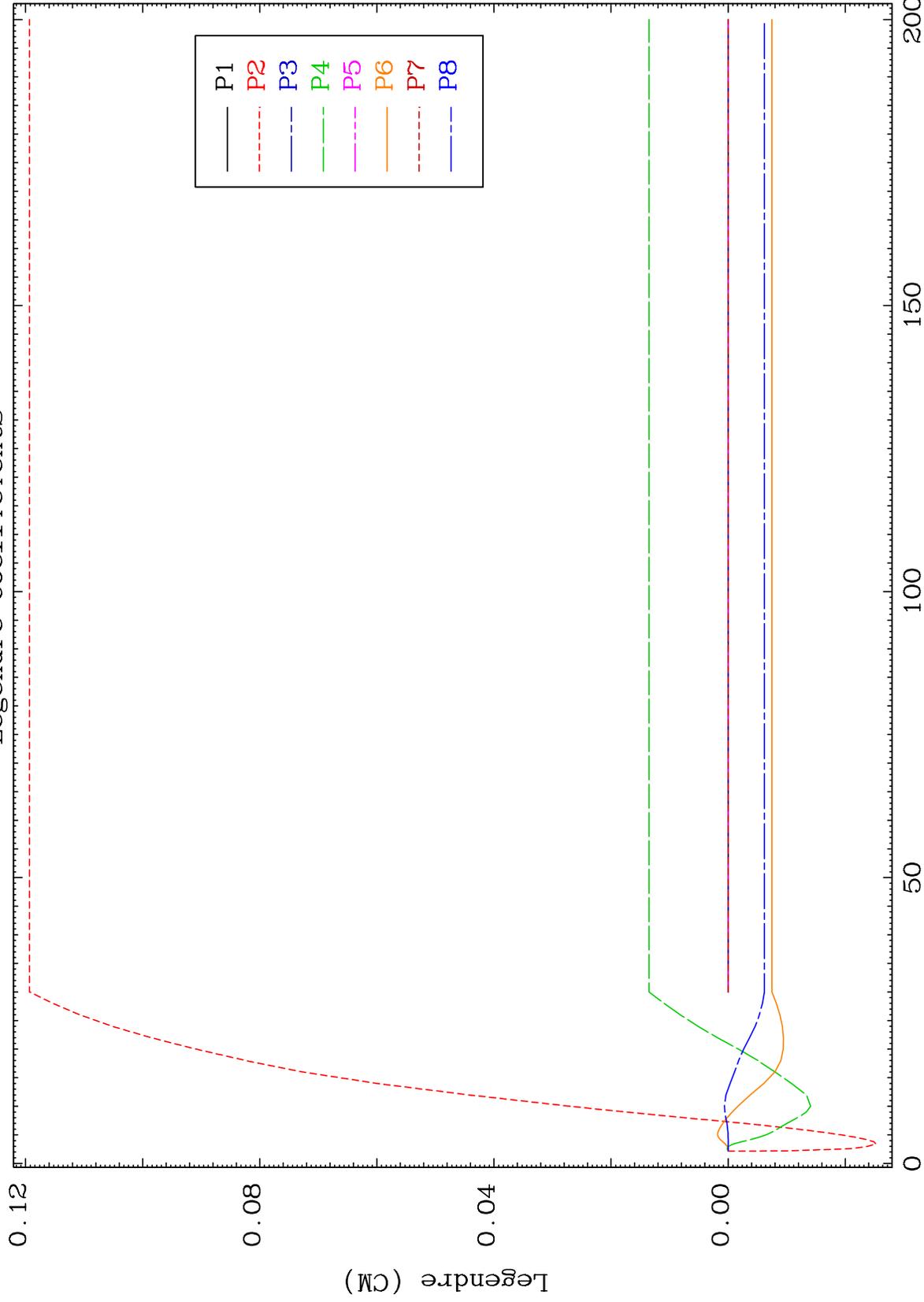
42

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 57 (n,n') Level Legendre Coefficients

34-Se-80



34-Se-80

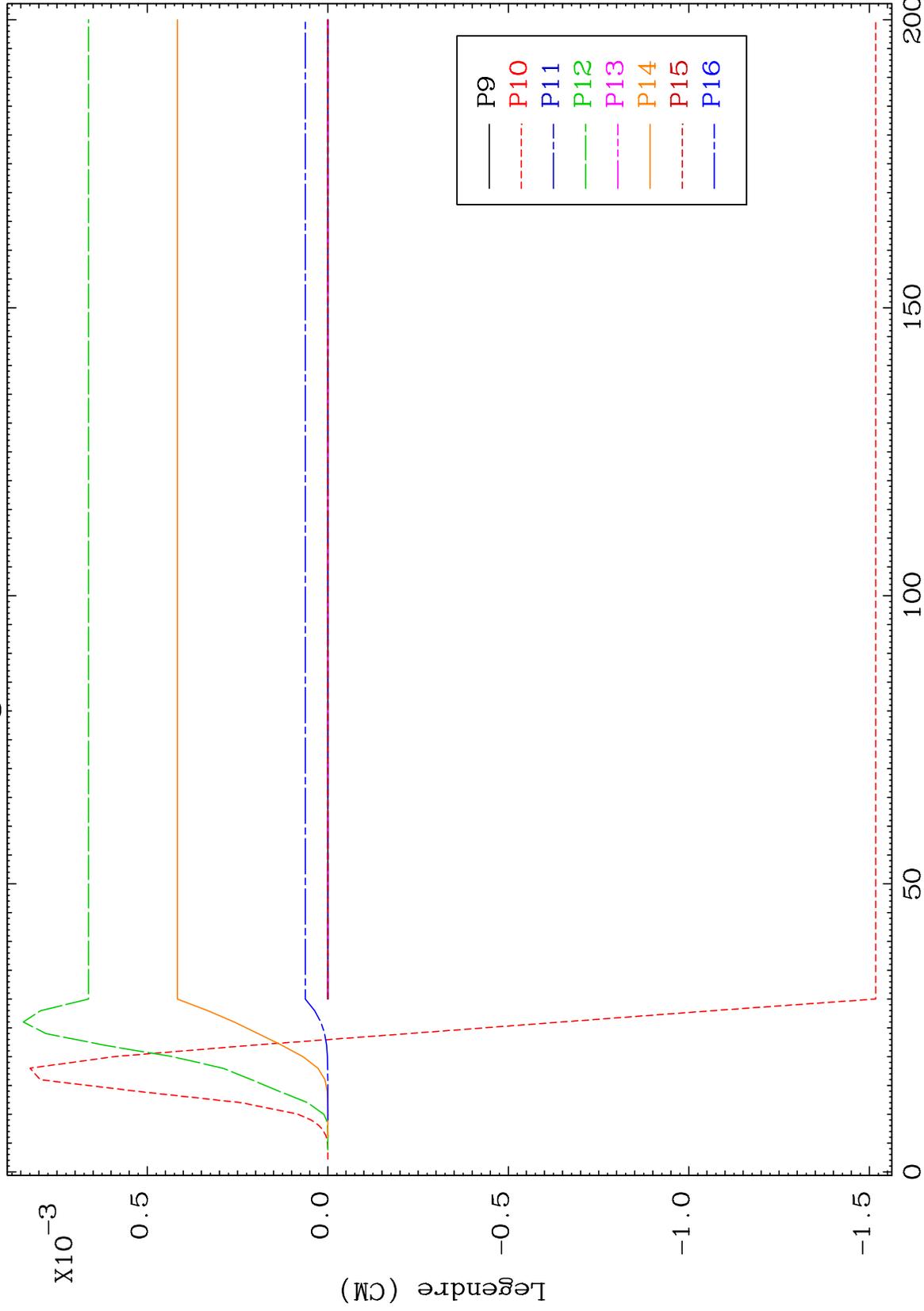
Incident Energy (MeV)

43

MAT 3443

MT= 57 (n,n') Level  
Legendre Coefficients

34-Se-80

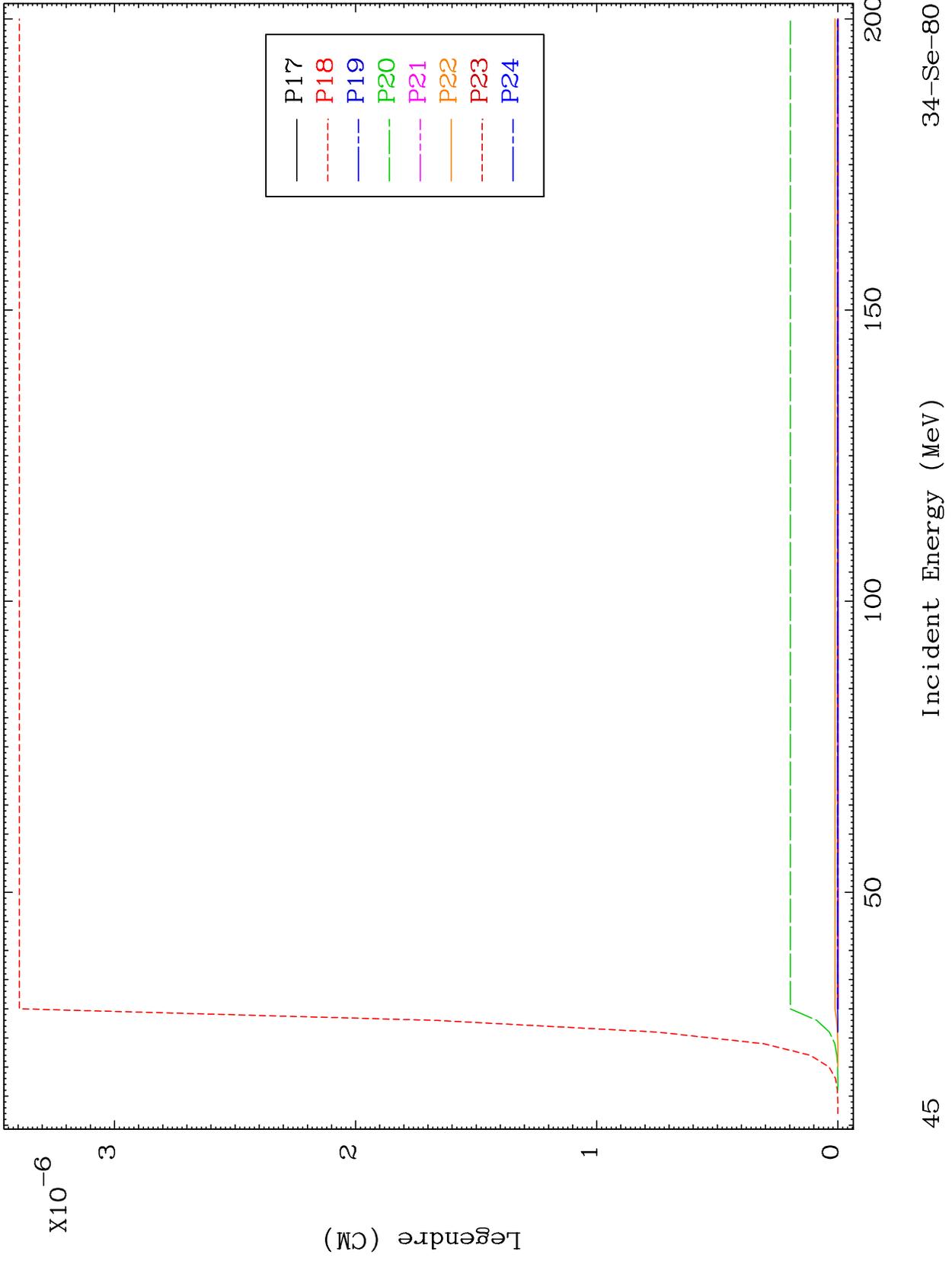


44

Incident Energy (MeV)

34-Se-80

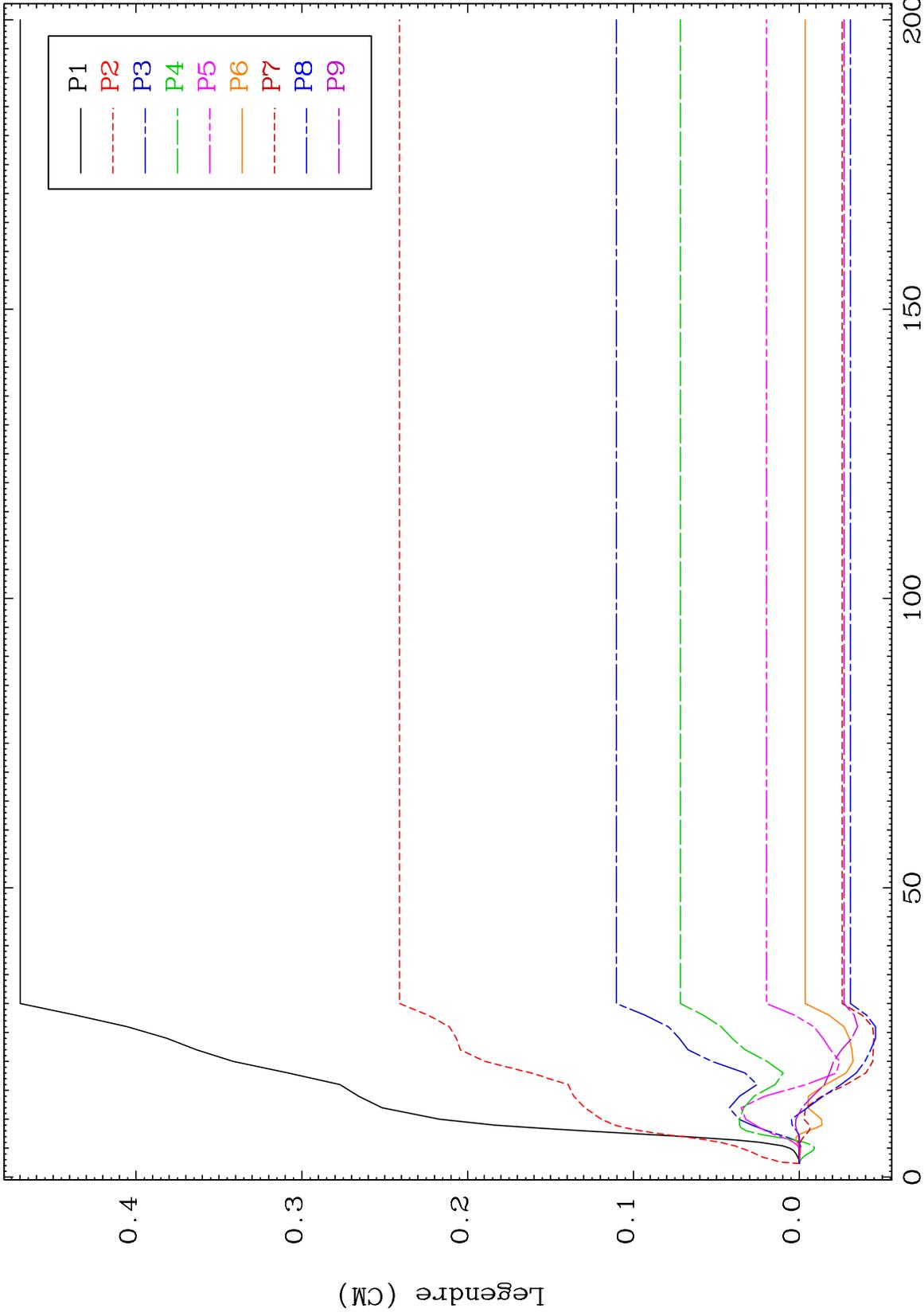
MAT 3443 MT= 57 (n,n') Level Legendre Coefficients 34-Se-80



MAT 3443

MT= 58 (n,n') Level  
Legendre Coefficients

34-Se-80



46

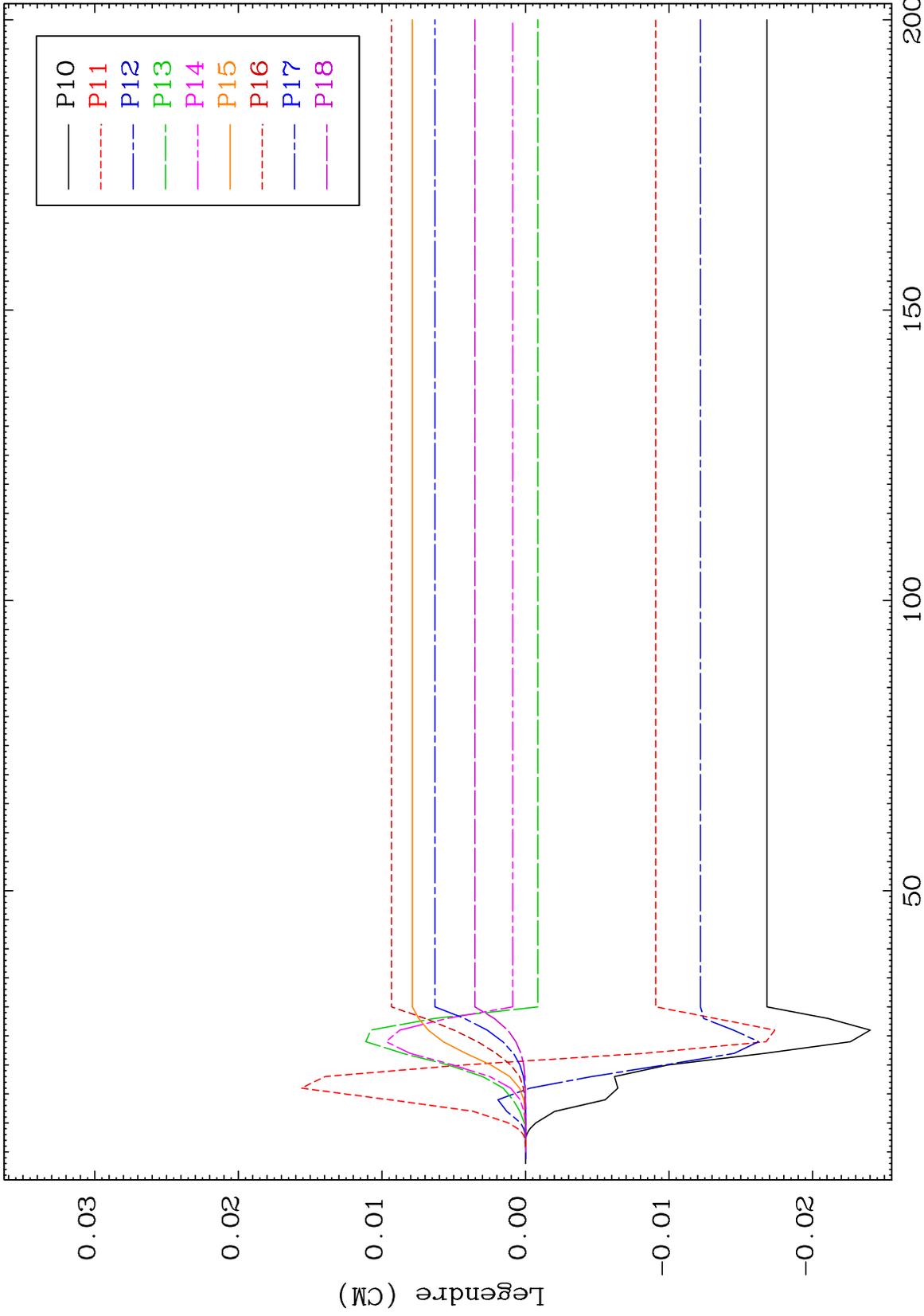
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 58 (n,n') Level  
Legendre Coefficients

34-Se-80



47

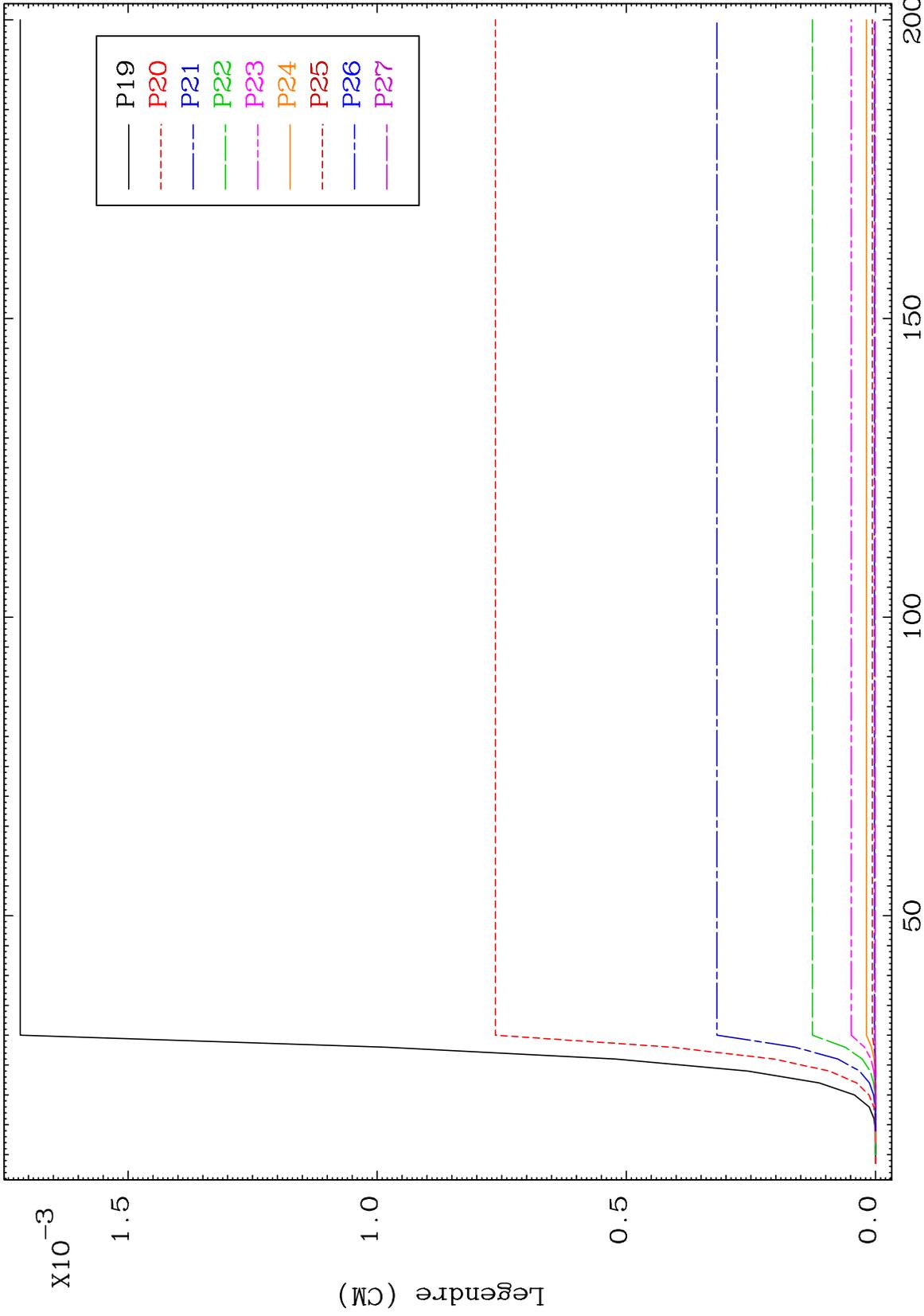
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 58 (n,n') Level  
Legendre Coefficients

34-Se-80



48

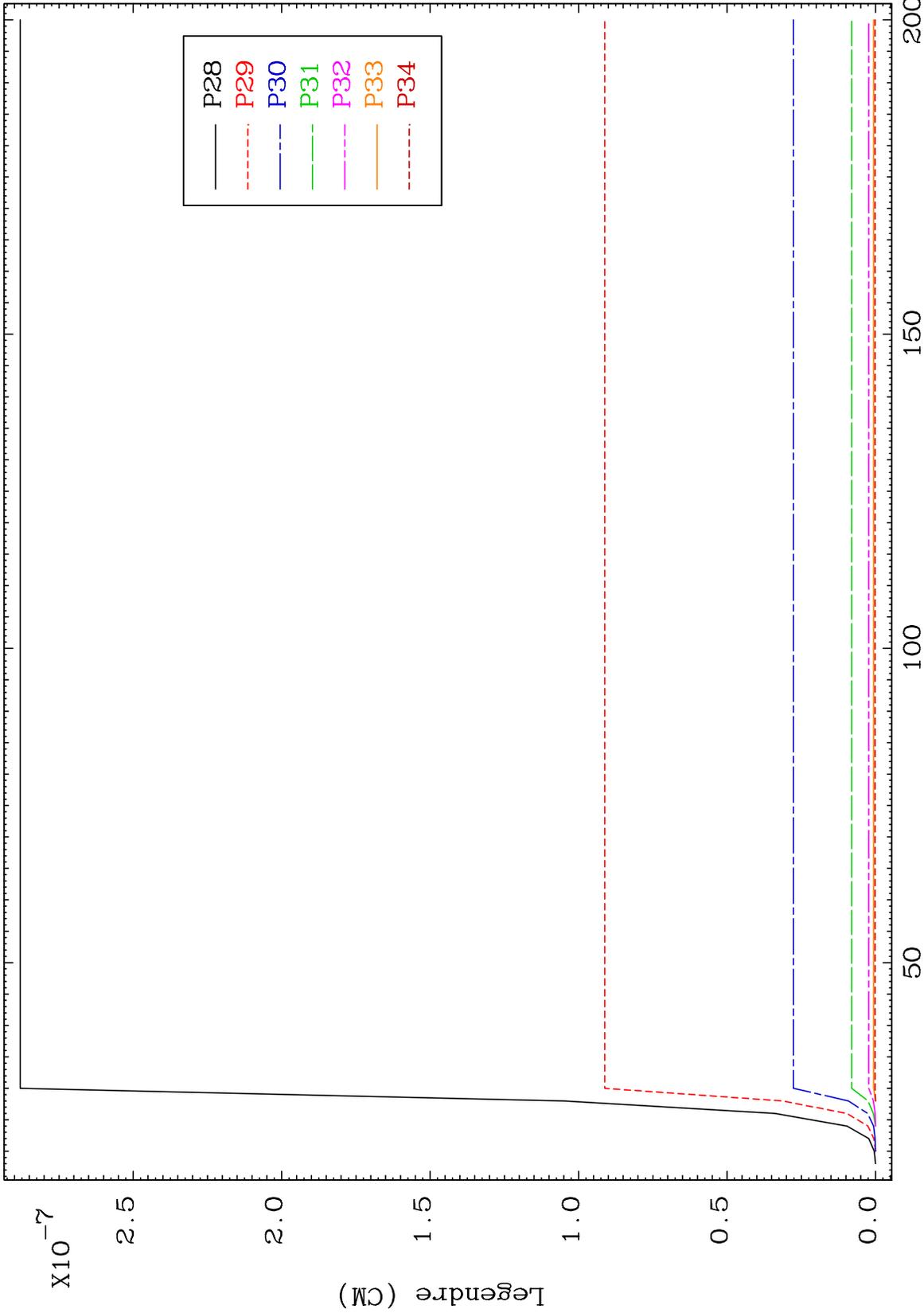
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 58 (n,n') Level  
Legendre Coefficients

34-Se-80

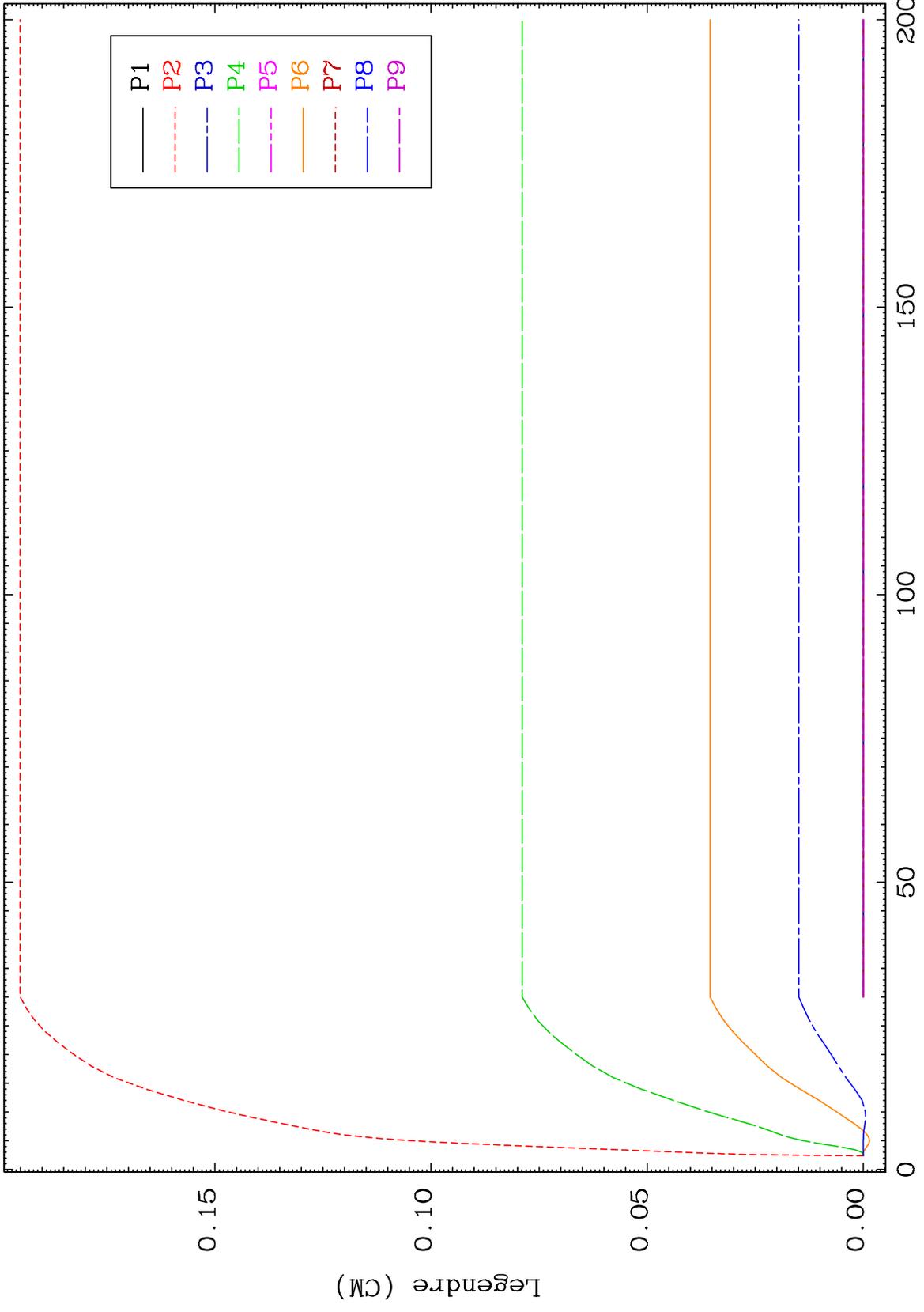


49

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 59 (n,n') Level Legendre Coefficients 34-Se-80

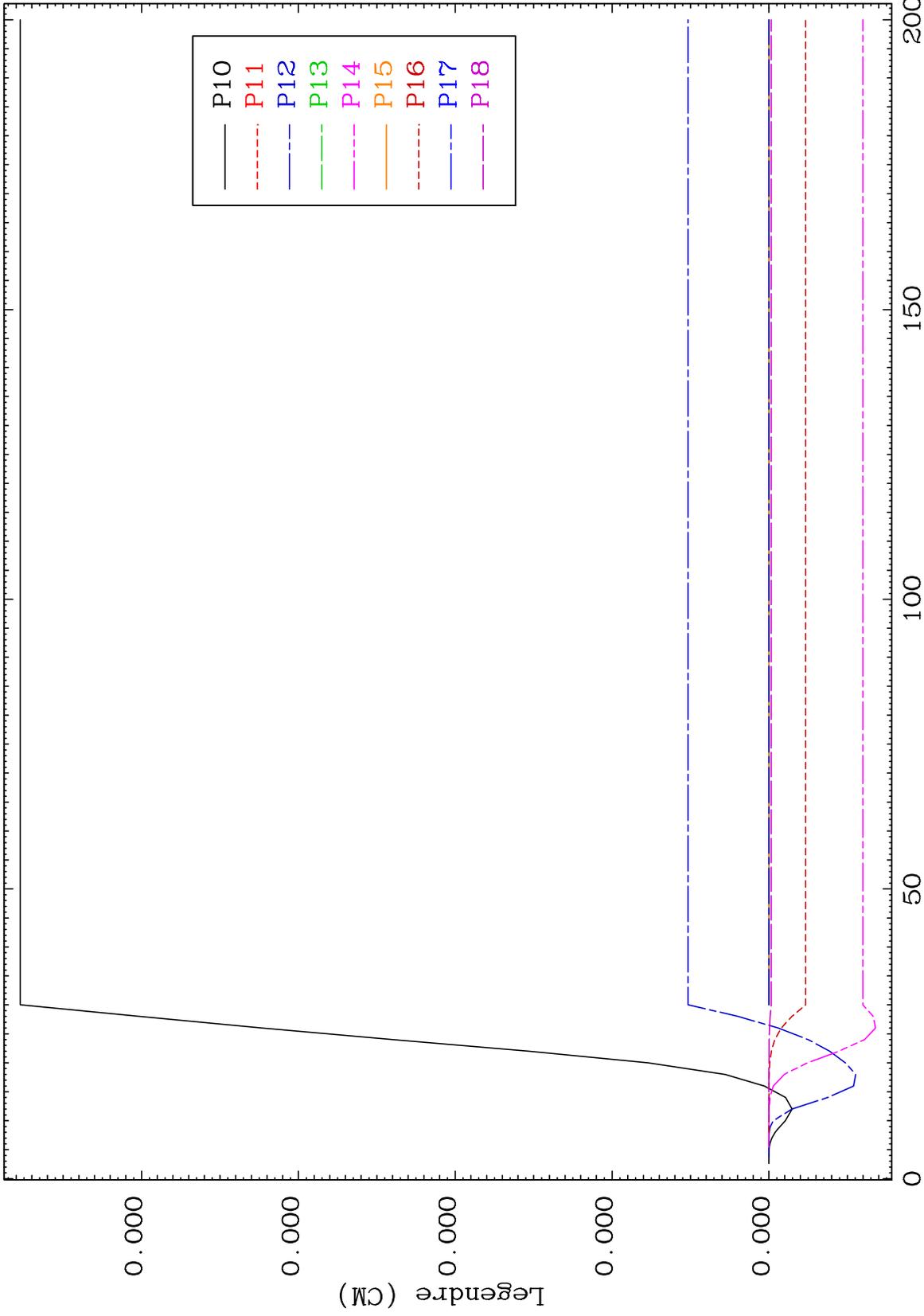


Incident Energy (MeV) 34-Se-80

MAT 3443

MT= 59 (n,n') Level  
Legendre Coefficients

34-Se-80



51

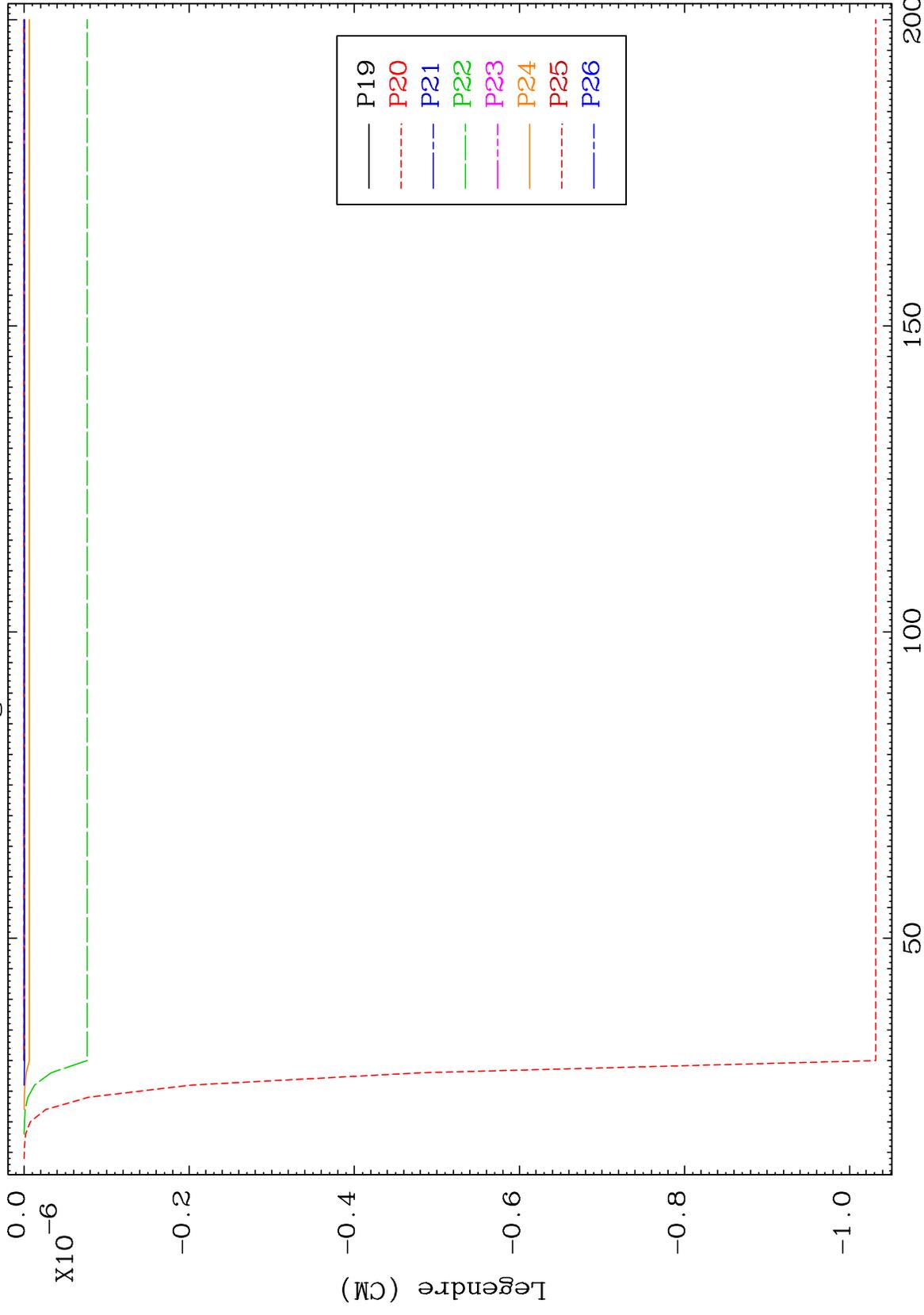
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 59 (n,n') Level  
Legendre Coefficients

34-Se-80



34-Se-80

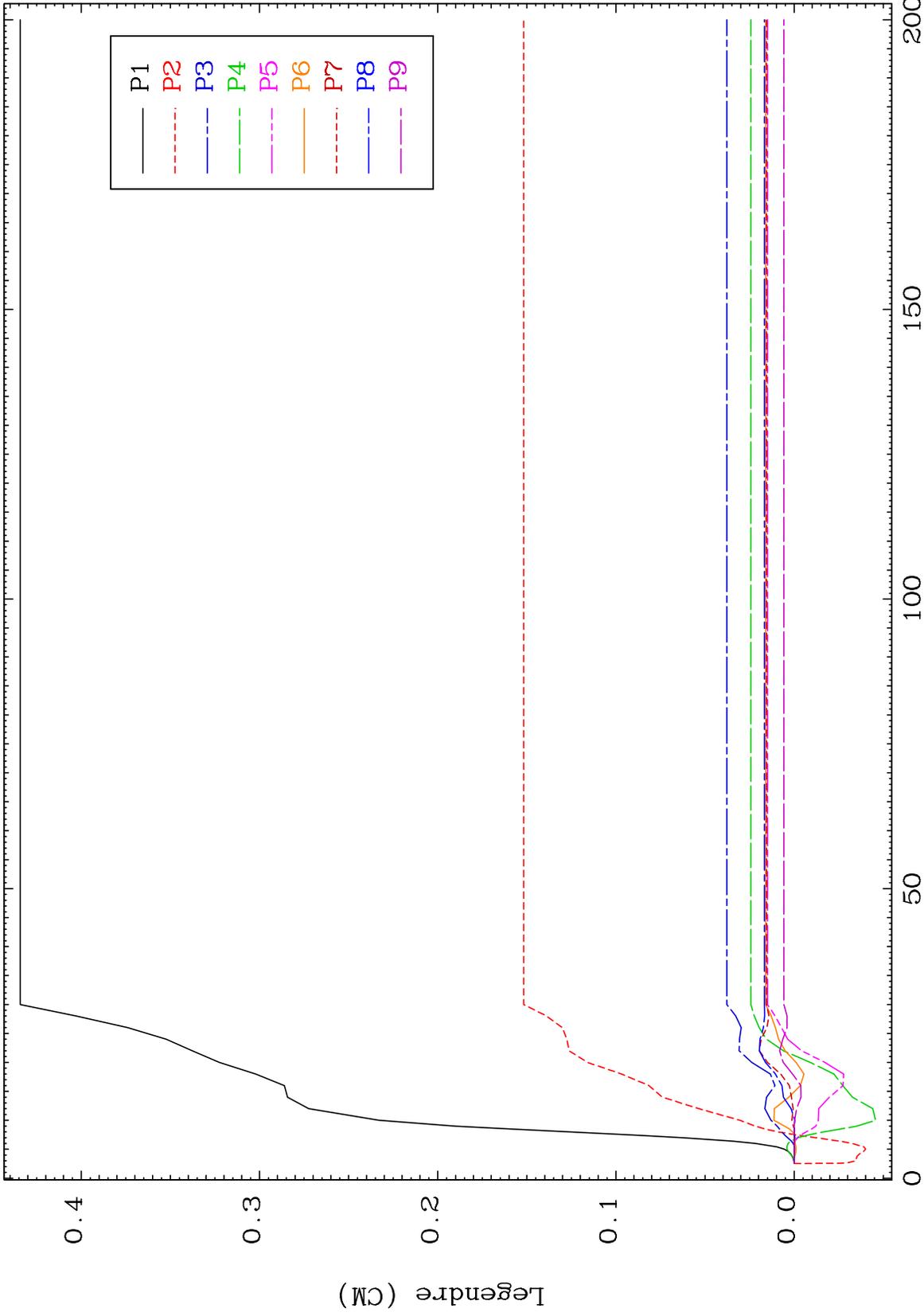
Incident Energy (MeV)

52

MAT 3443

MT= 60 (n,n') Level  
Legendre Coefficients

34-Se-80



53

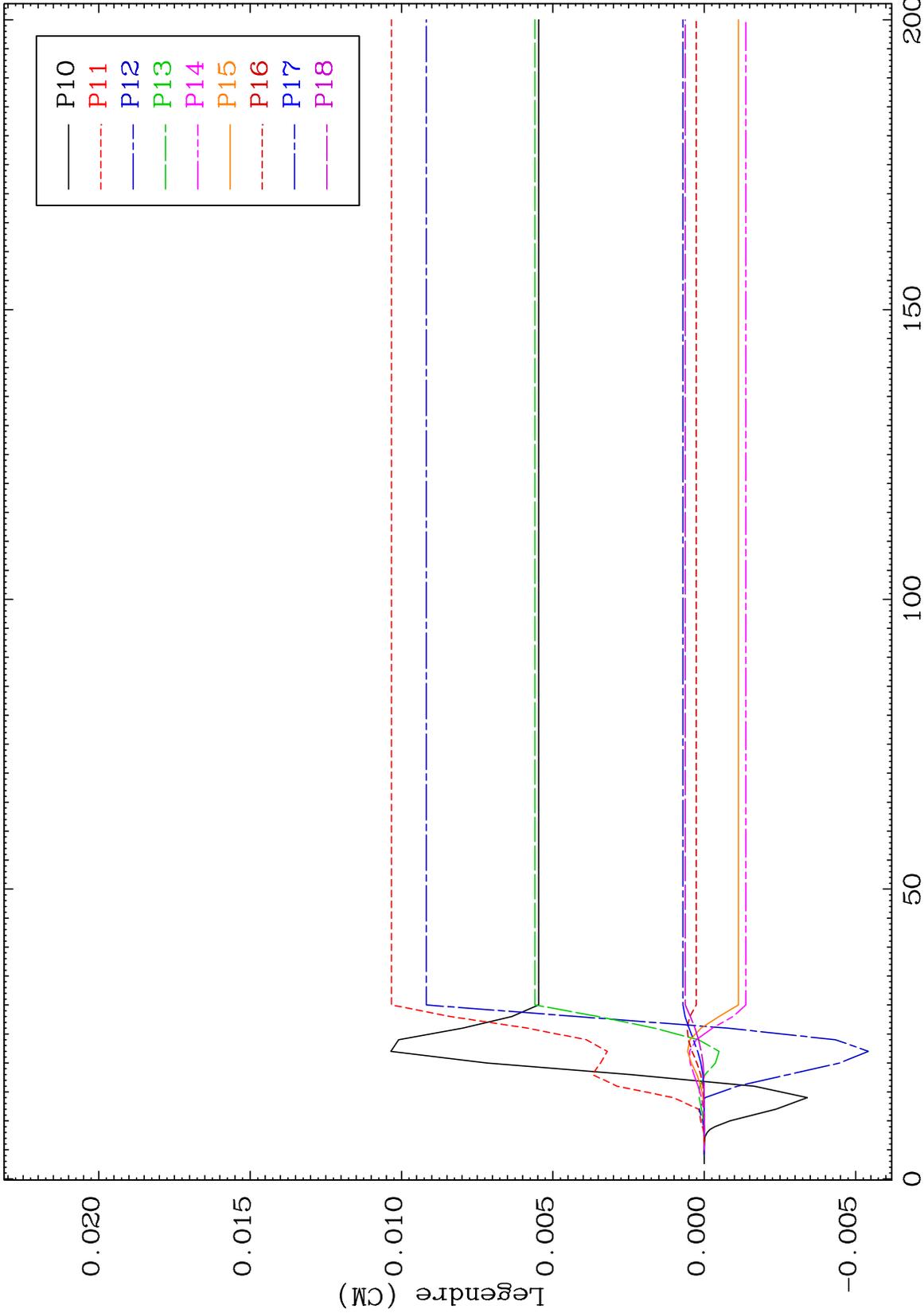
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 60 (n,n') Level  
Legendre Coefficients

34-Se-80

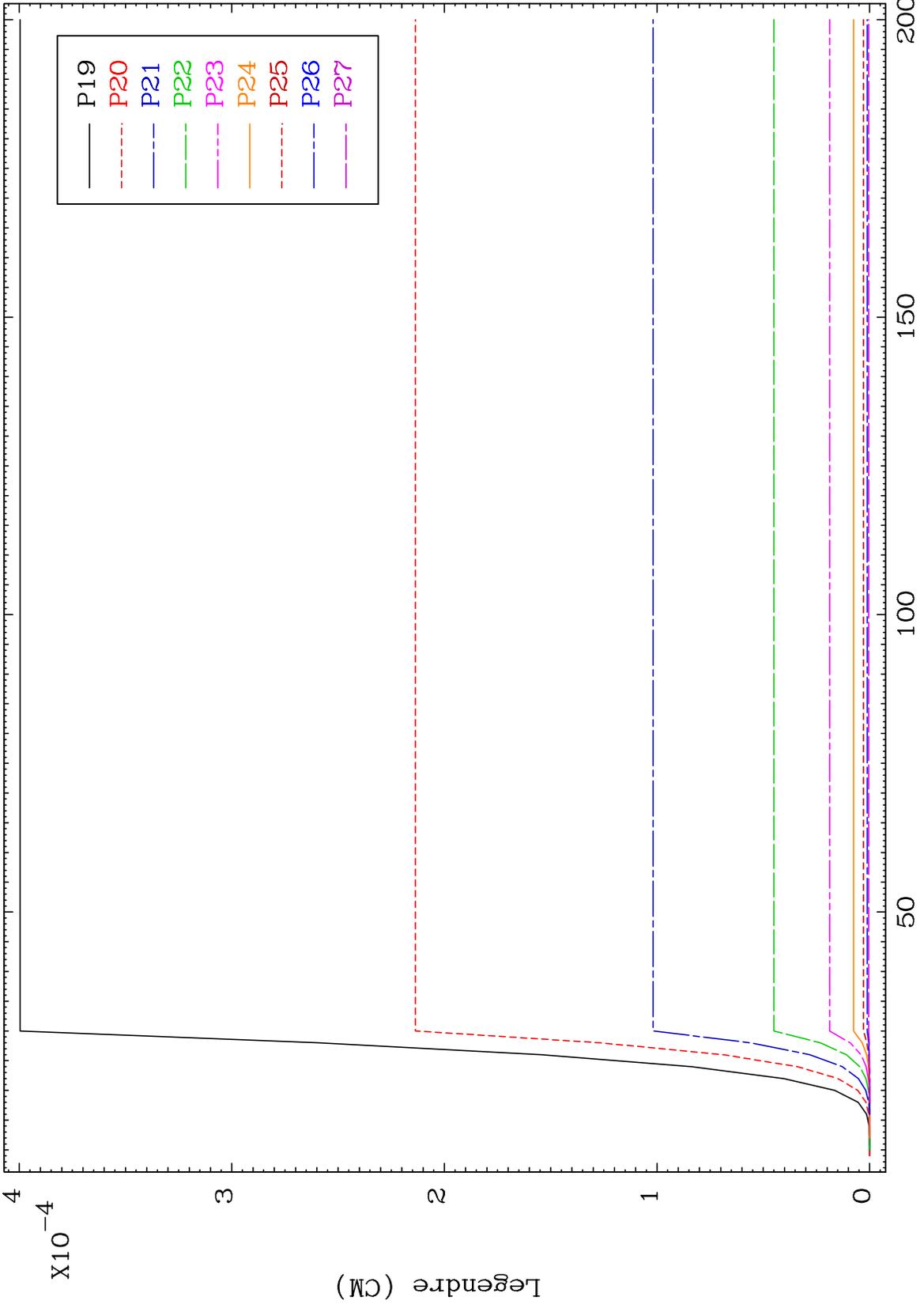


54

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 60 (n,n') Level Legendre Coefficients 34-Se-80

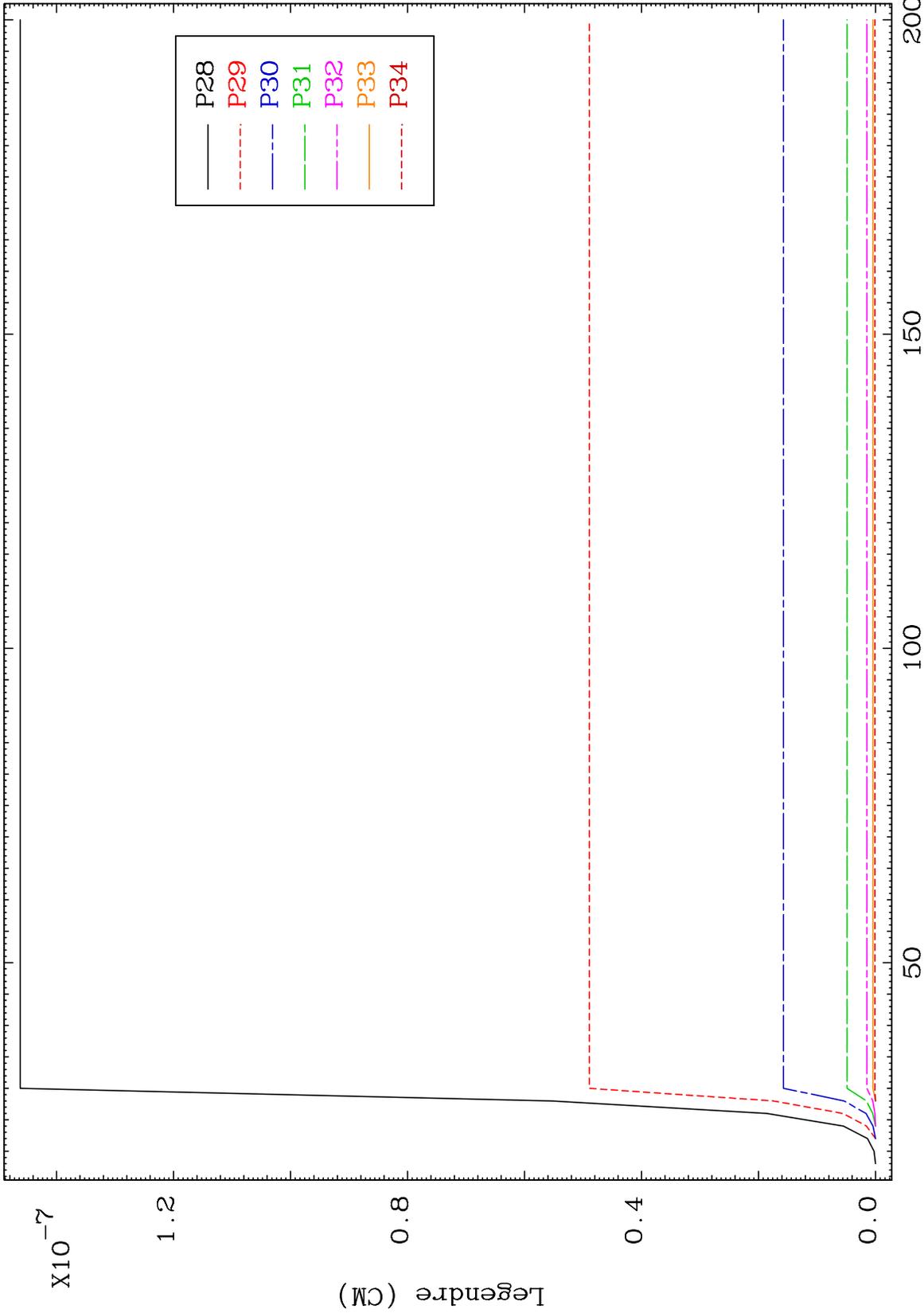


55 Incident Energy (MeV) 200 34-Se-80

MAT 3443

MT= 60 (n,n') Level  
Legendre Coefficients

34-Se-80

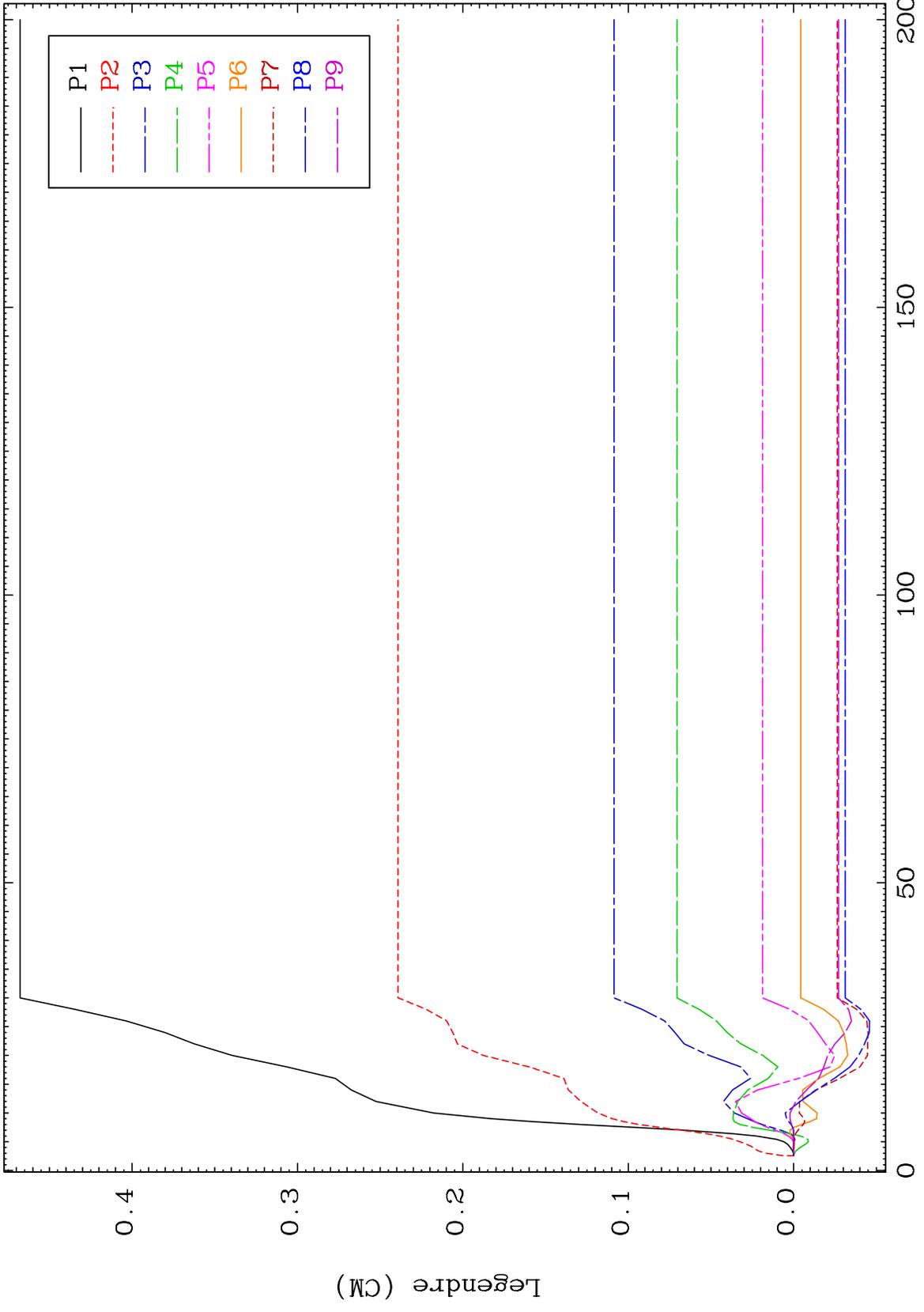


56

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 61 (n,n') Level Legendre Coefficients 34-Se-80

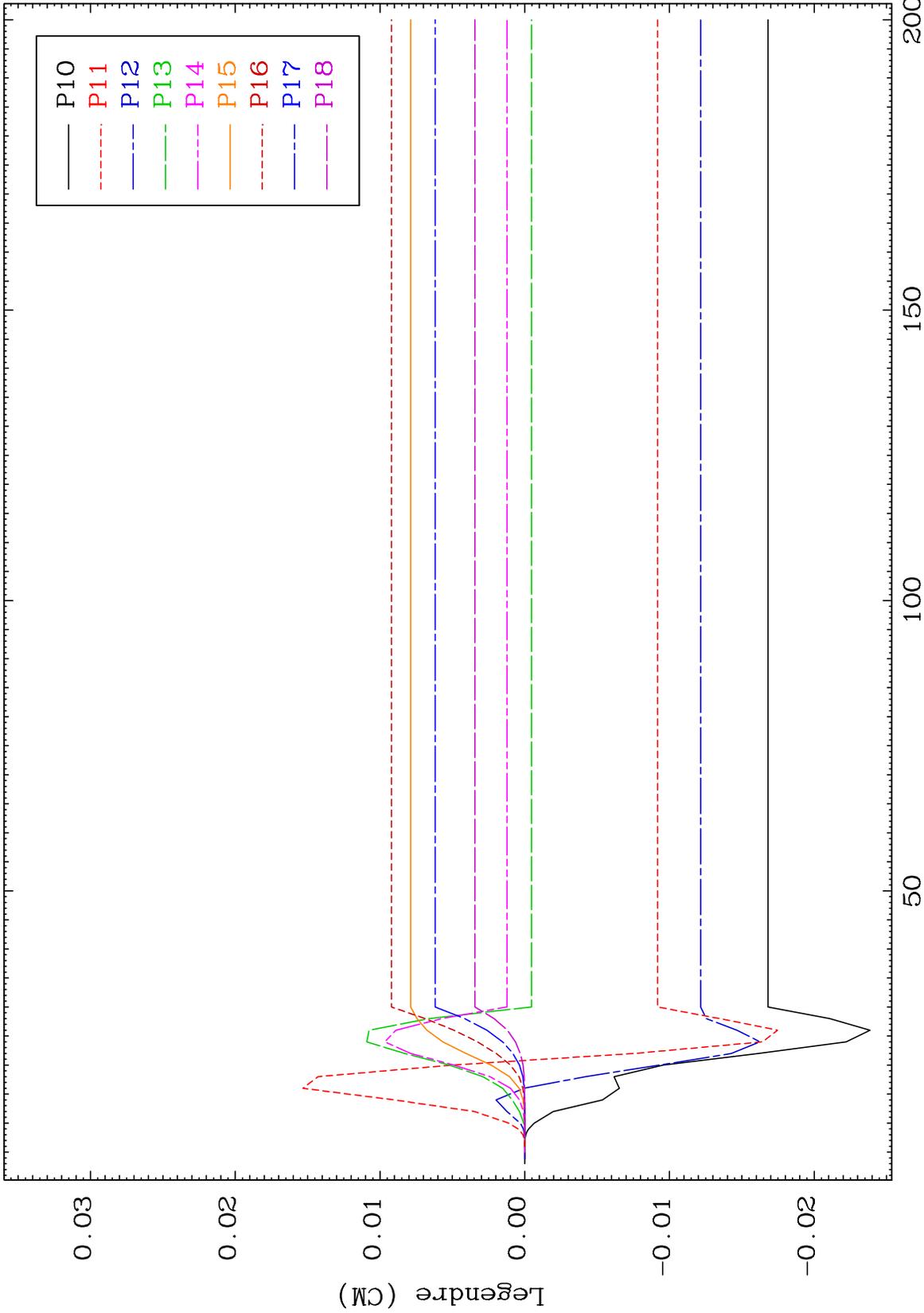


57 34-Se-80

MAT 3443

MT= 61 (n,n') Level  
Legendre Coefficients

34-Se-80



58

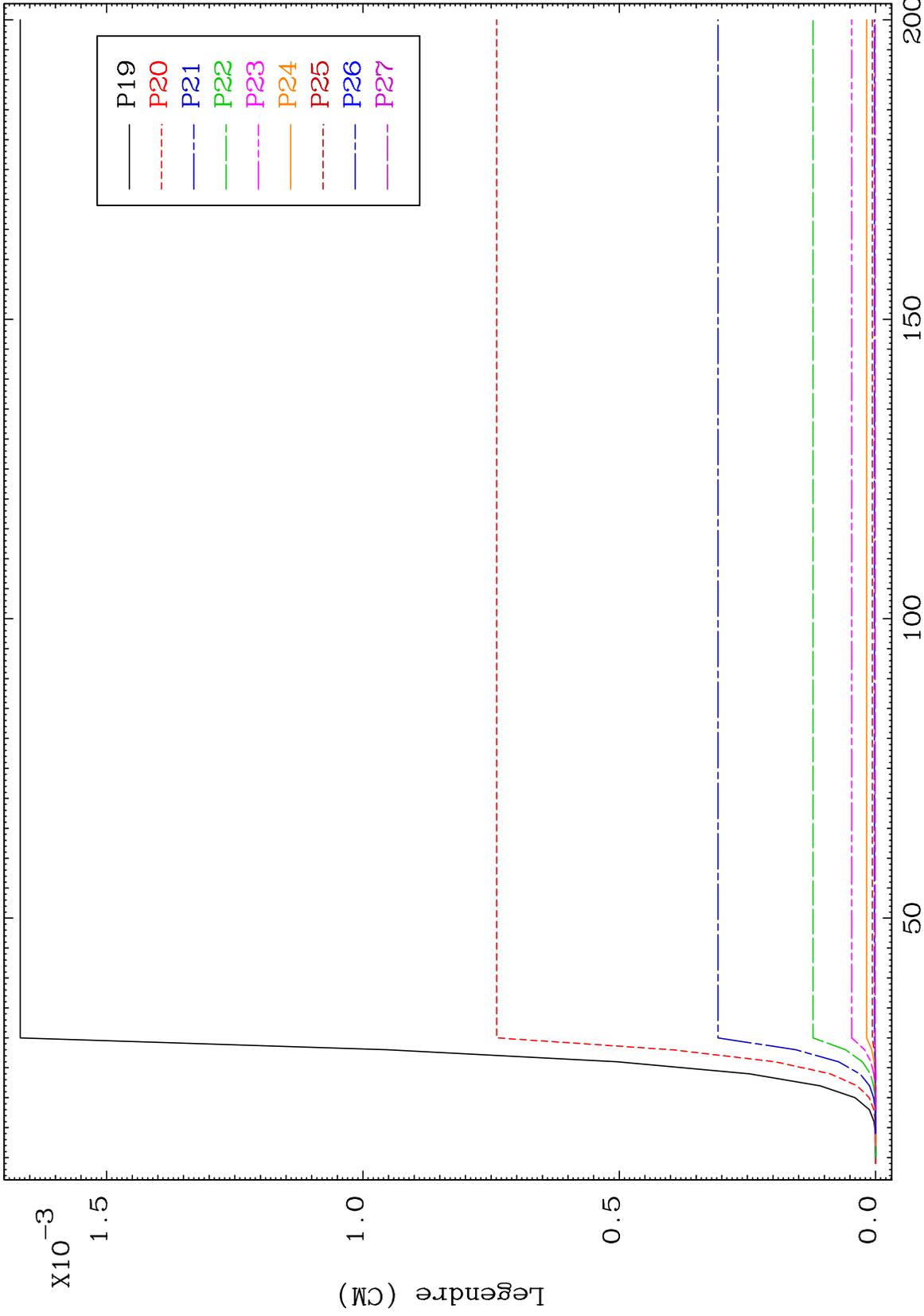
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 61 (n,n') Level  
Legendre Coefficients

34-Se-80



34-Se-80

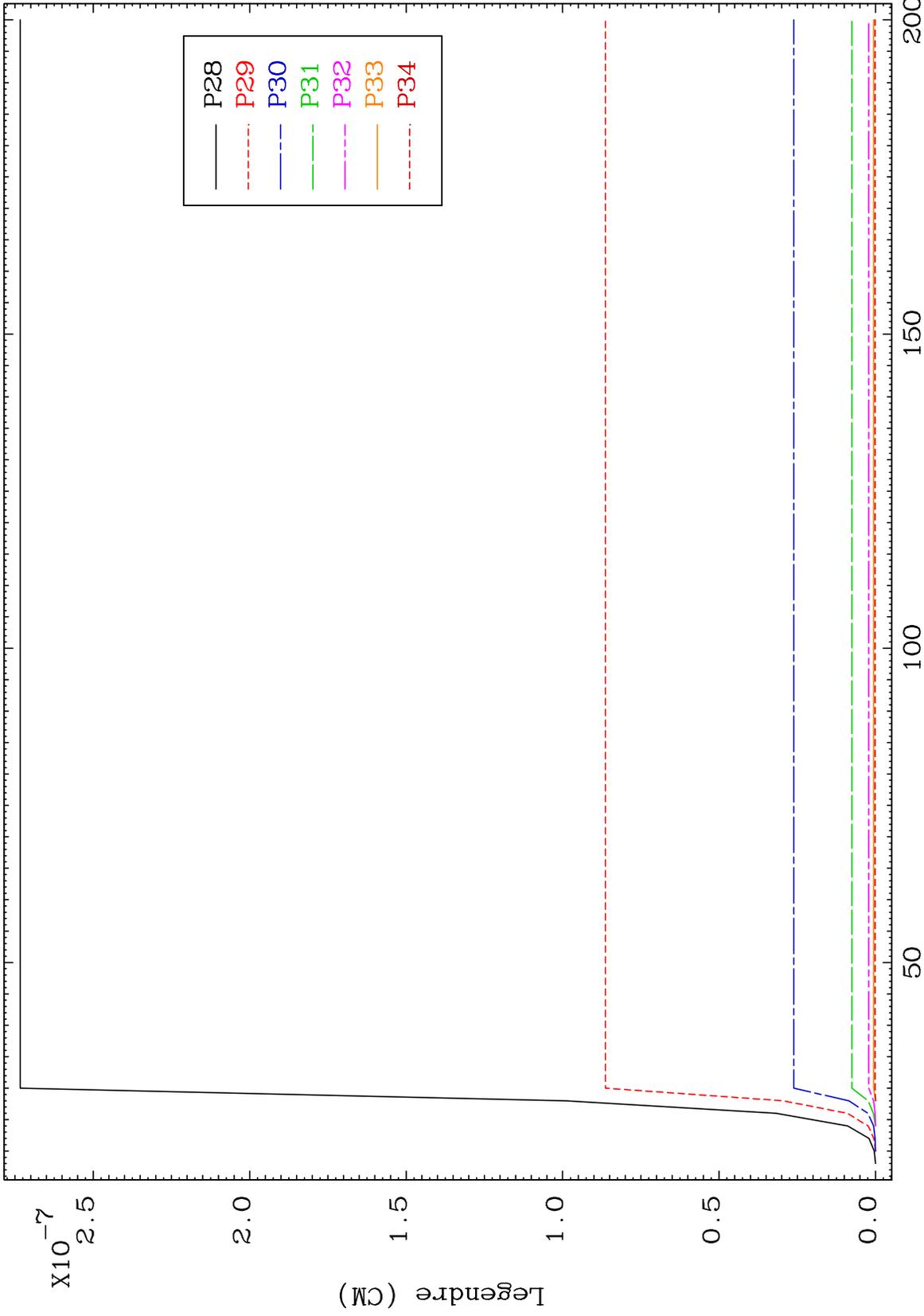
Incident Energy (MeV)

59

MAT 3443

MT= 61 (n,n') Level  
Legendre Coefficients

34-Se-80



60

50

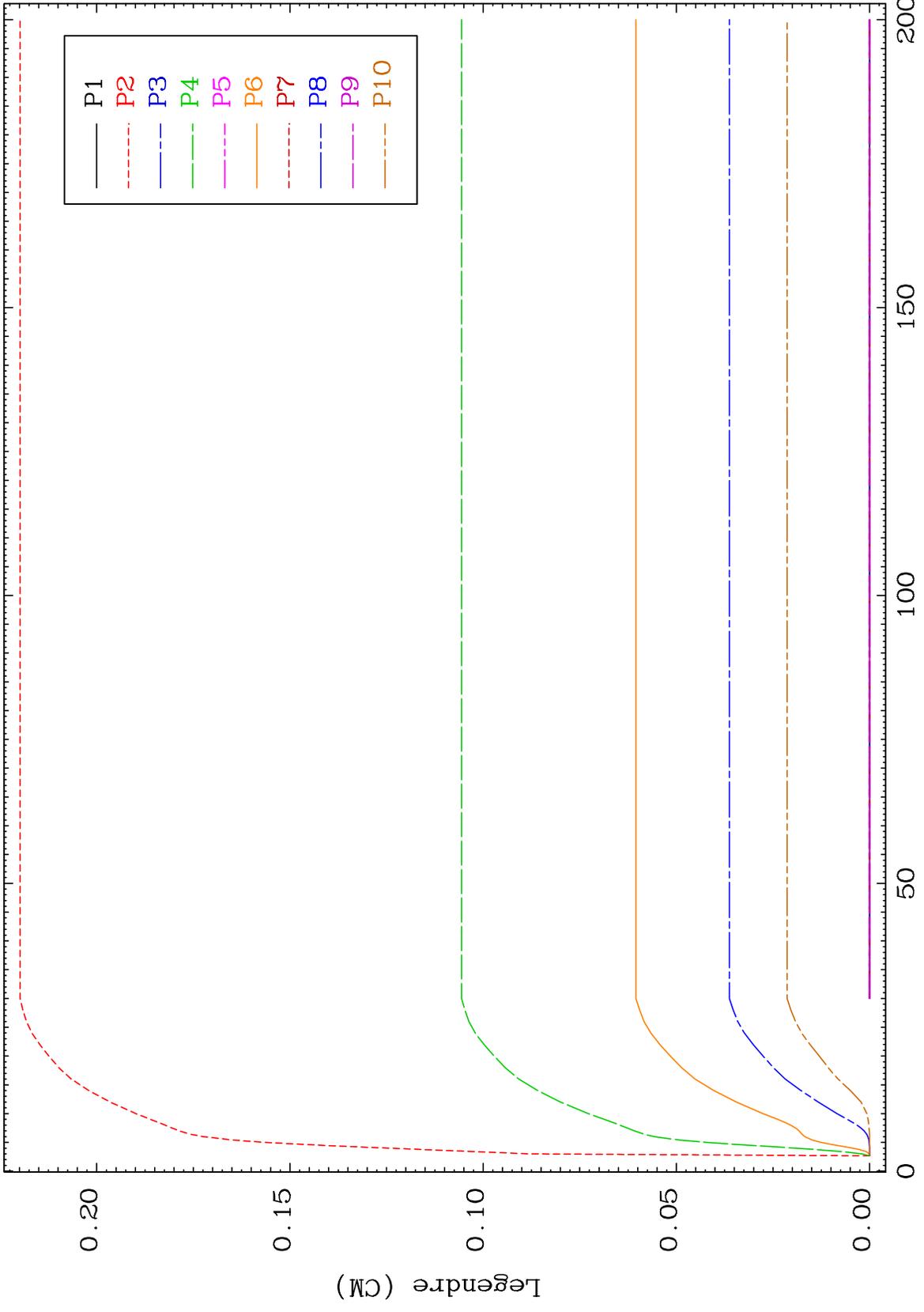
100

150

200

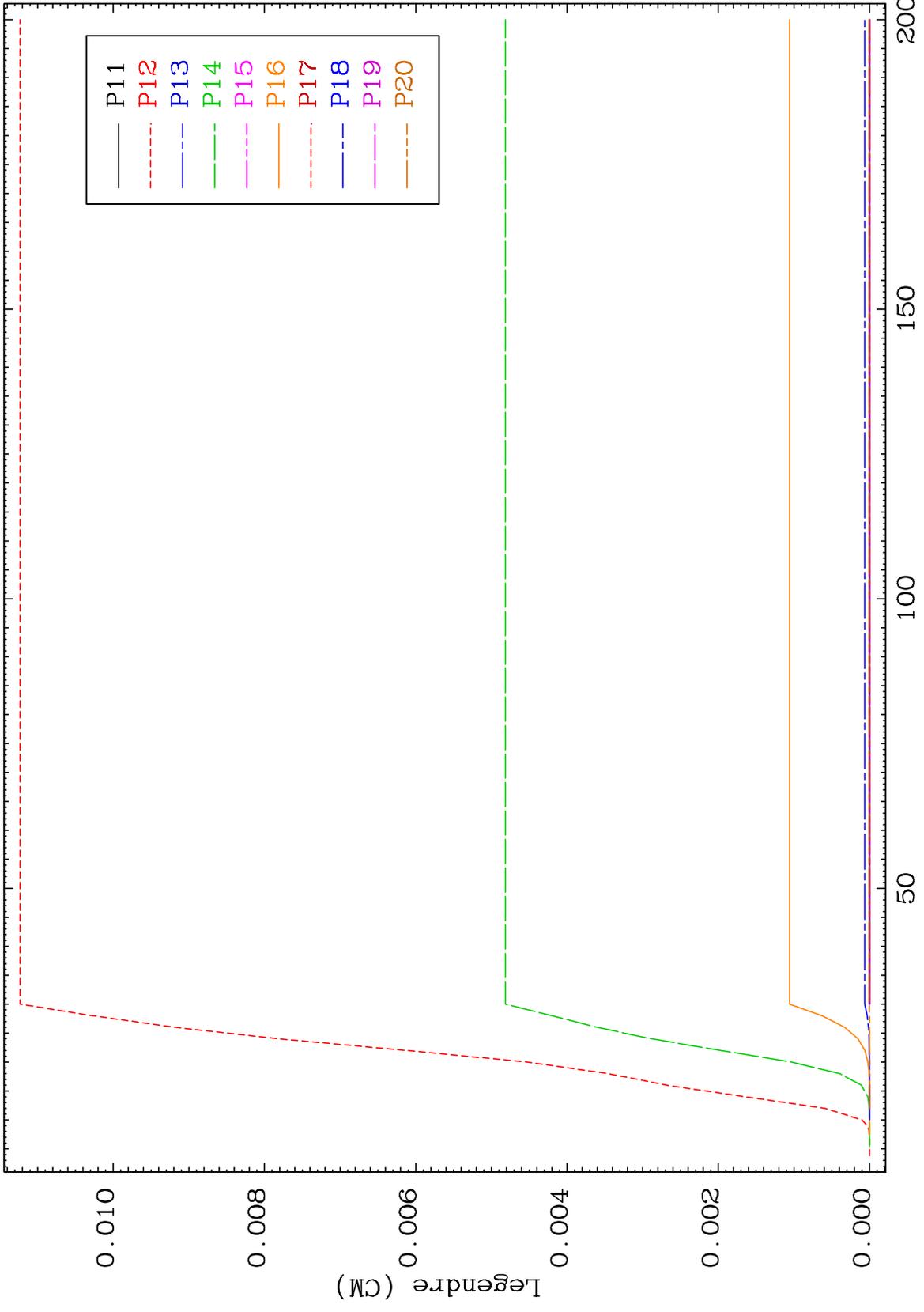
34-Se-80

MAT 3443 MT= 62 (n,n') Level Legendre Coefficients 34-Se-80



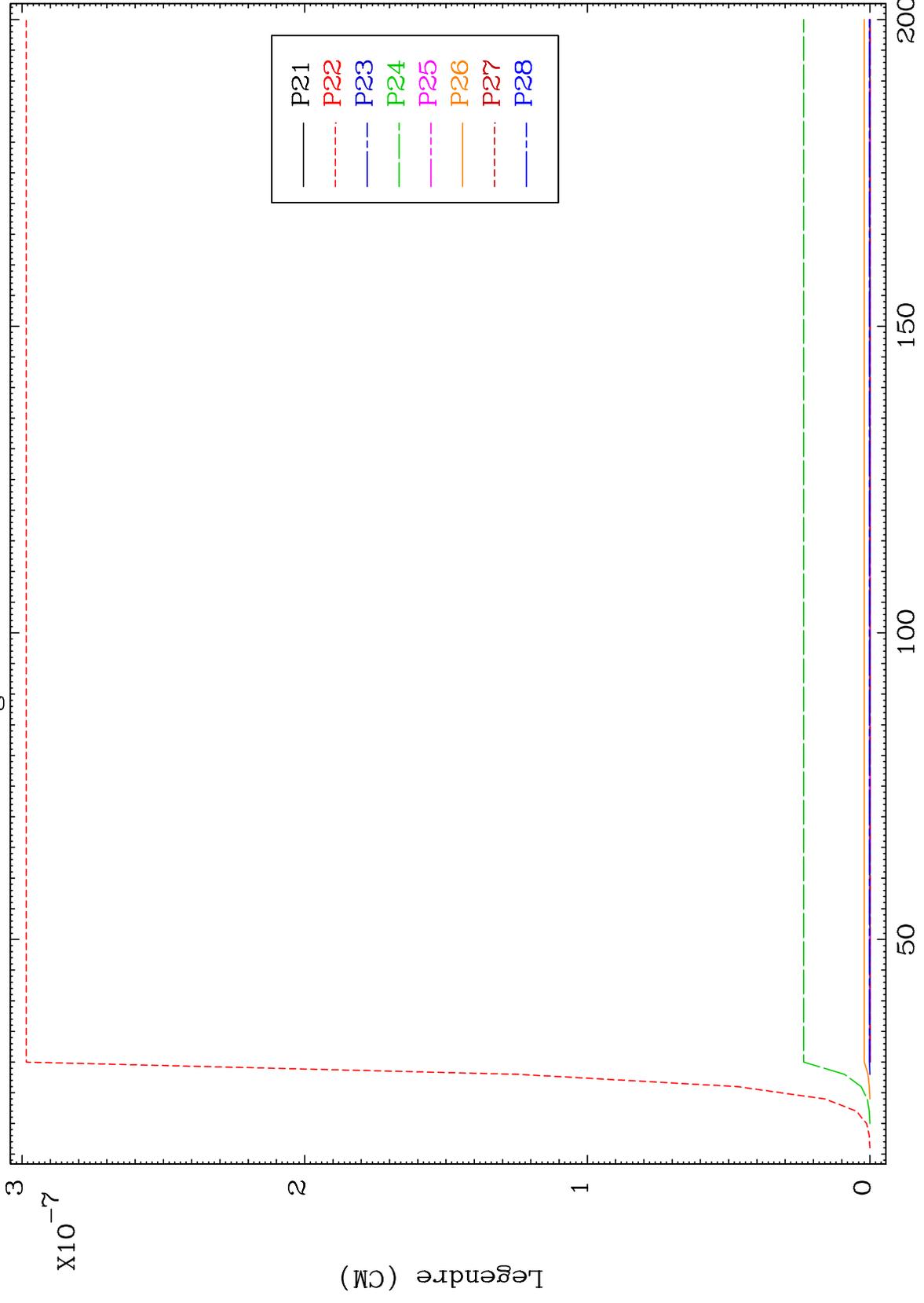
61 34-Se-80

MAT 3443 MT= 62 (n,n') Level Legendre Coefficients 34-Se-80



62 Incident Energy (MeV) 34-Se-80

MAT 3443 MT= 62 (n,n') Level Legendre Coefficients 34-Se-80

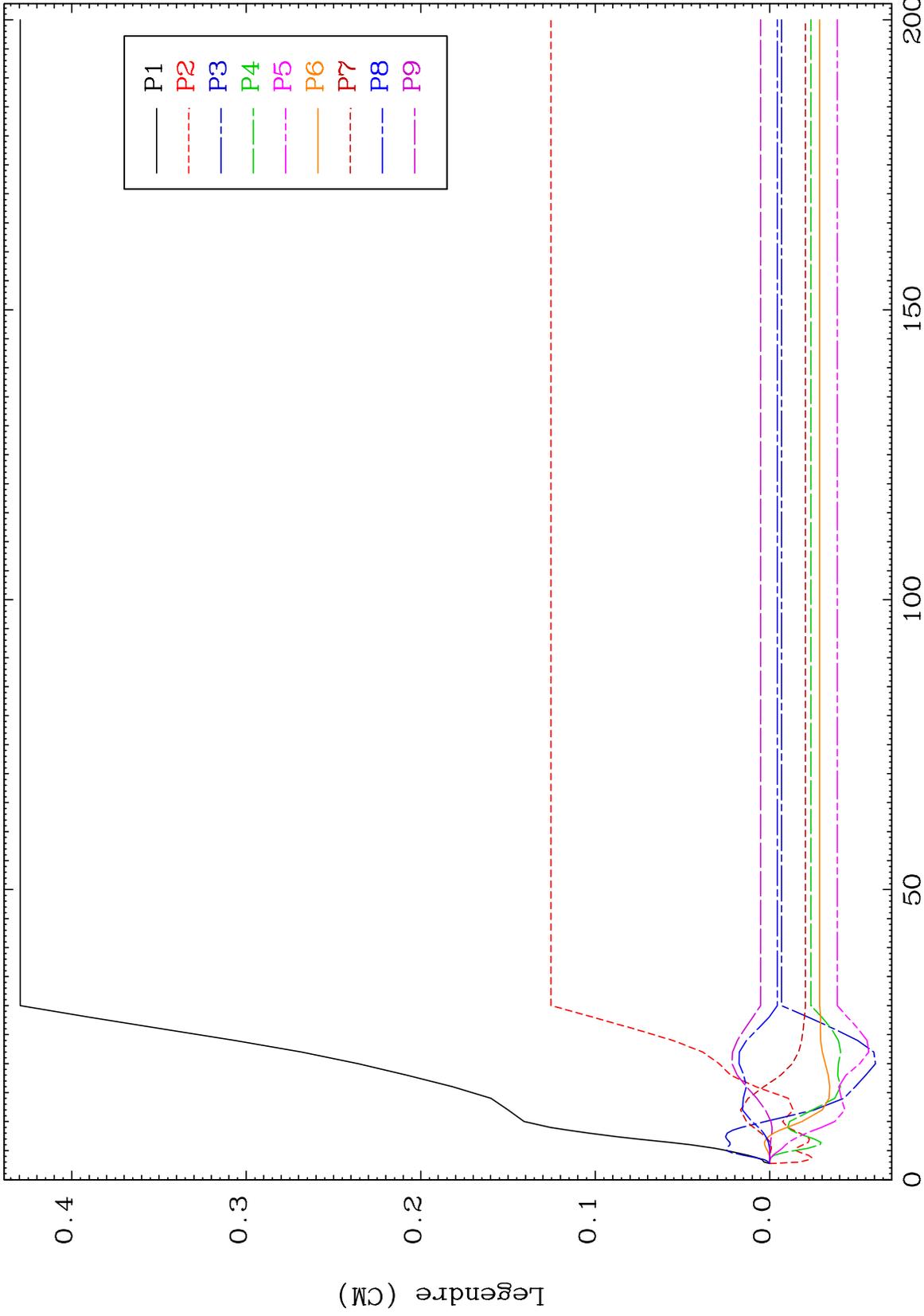


63 34-Se-80

MAT 3443

MT= 63 (n,n') Level  
Legendre Coefficients

34-Se-80

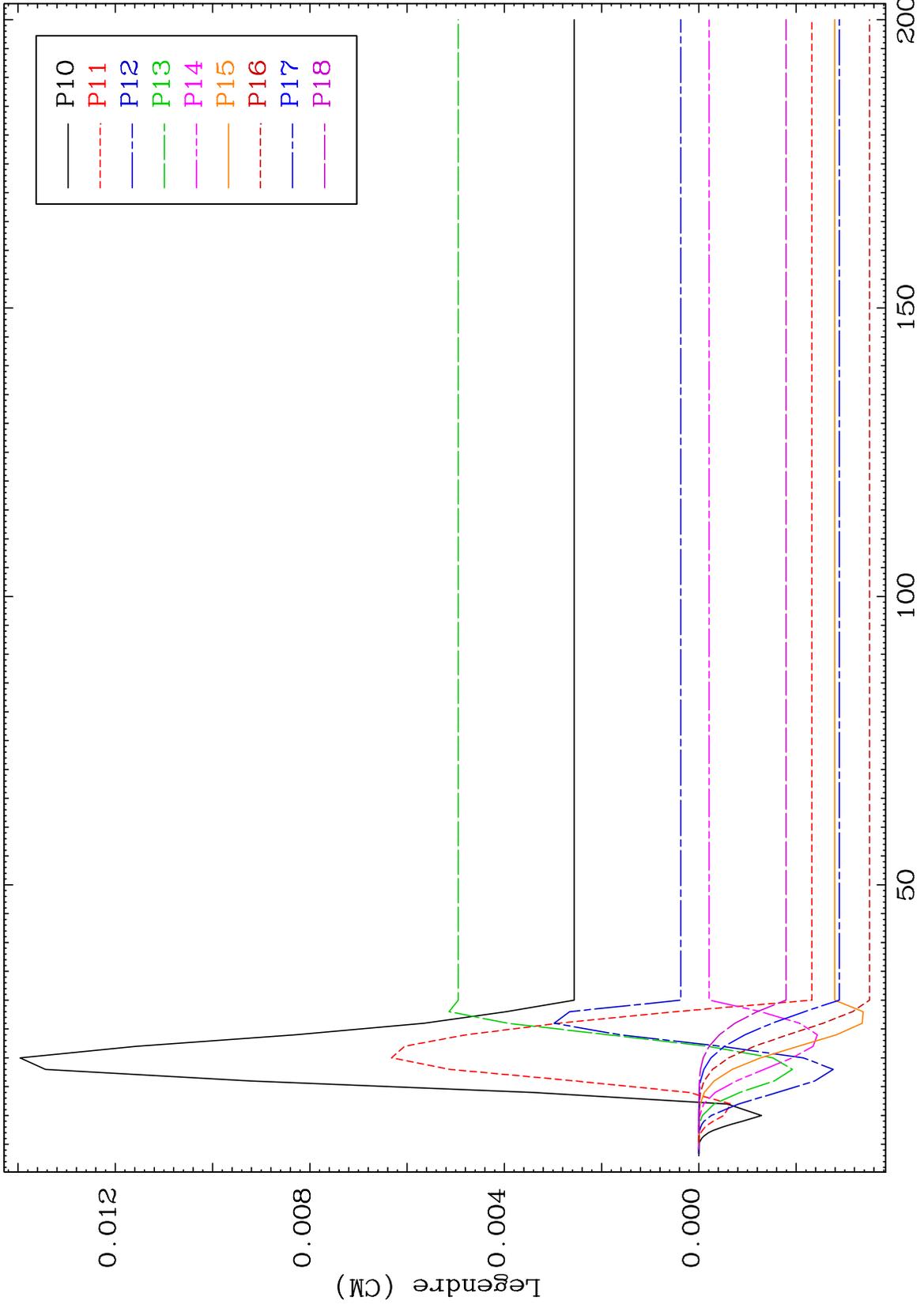


64

Incident Energy (MeV)

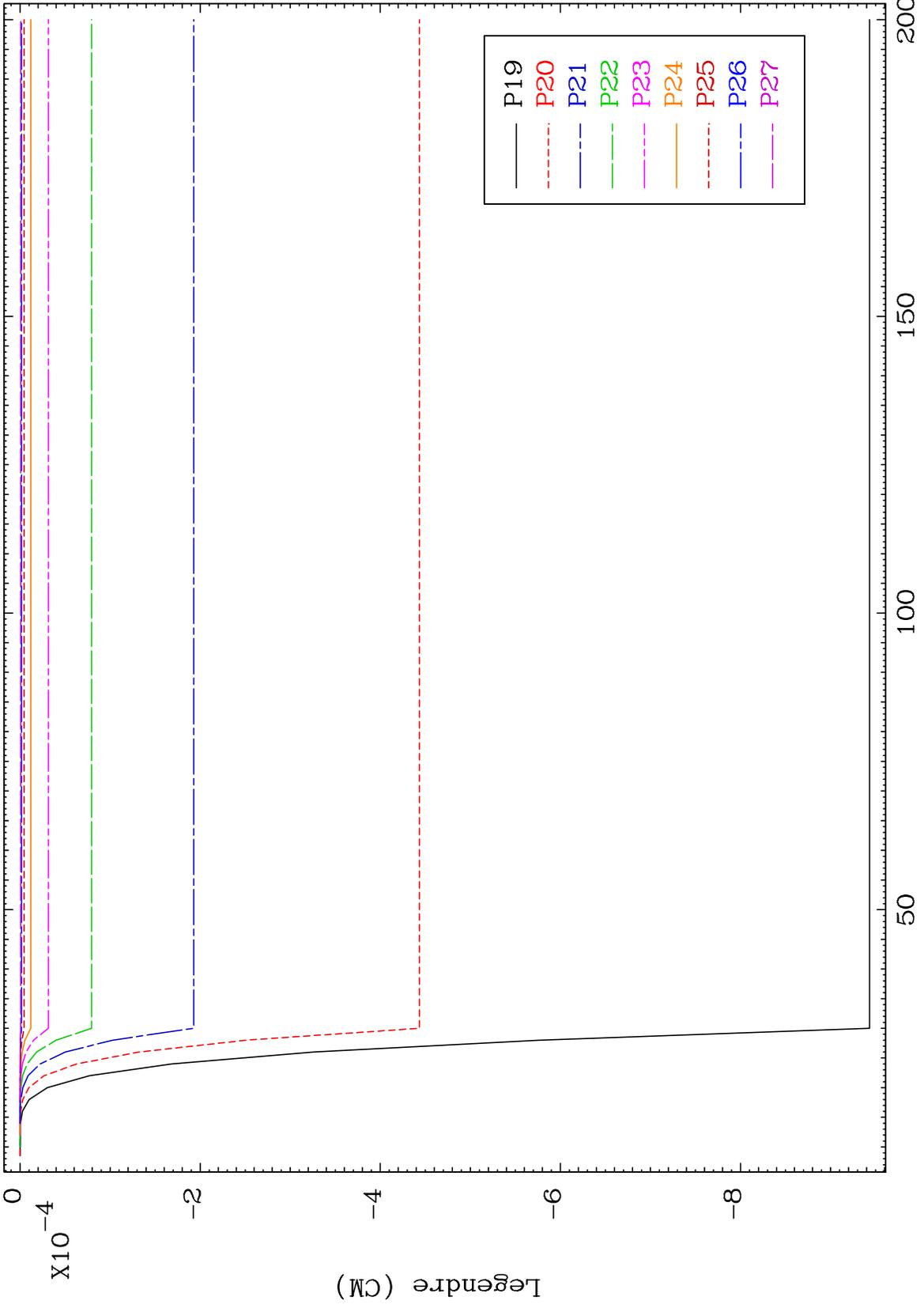
34-Se-80

MAT 3443 MT= 63 (n,n') Level Legendre Coefficients 34-Se-80



65 50 100 150 200 Incident Energy (MeV) 34-Se-80

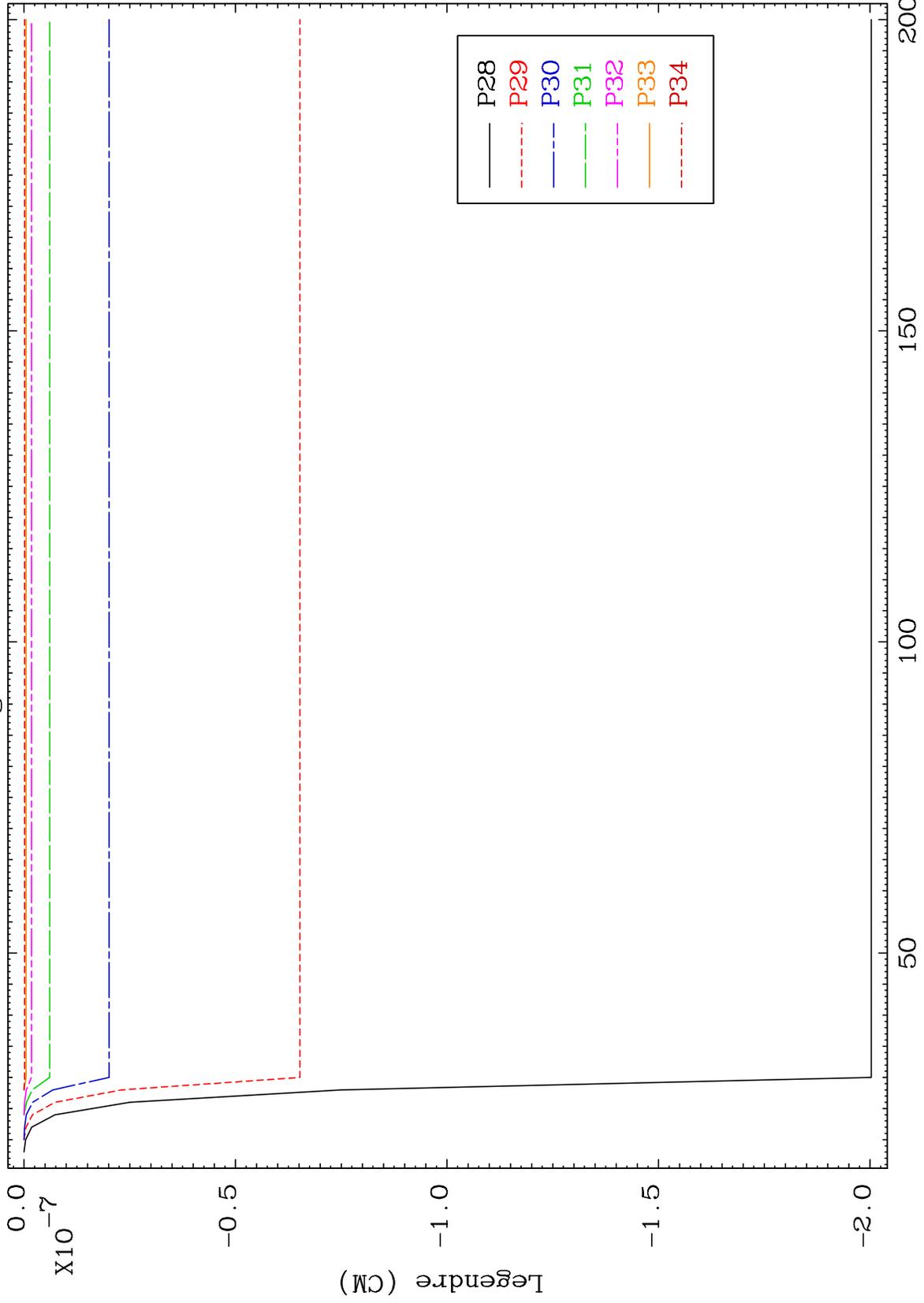
MAT 3443 MT= 63 (n,n') Level Legendre Coefficients 34-Se-80



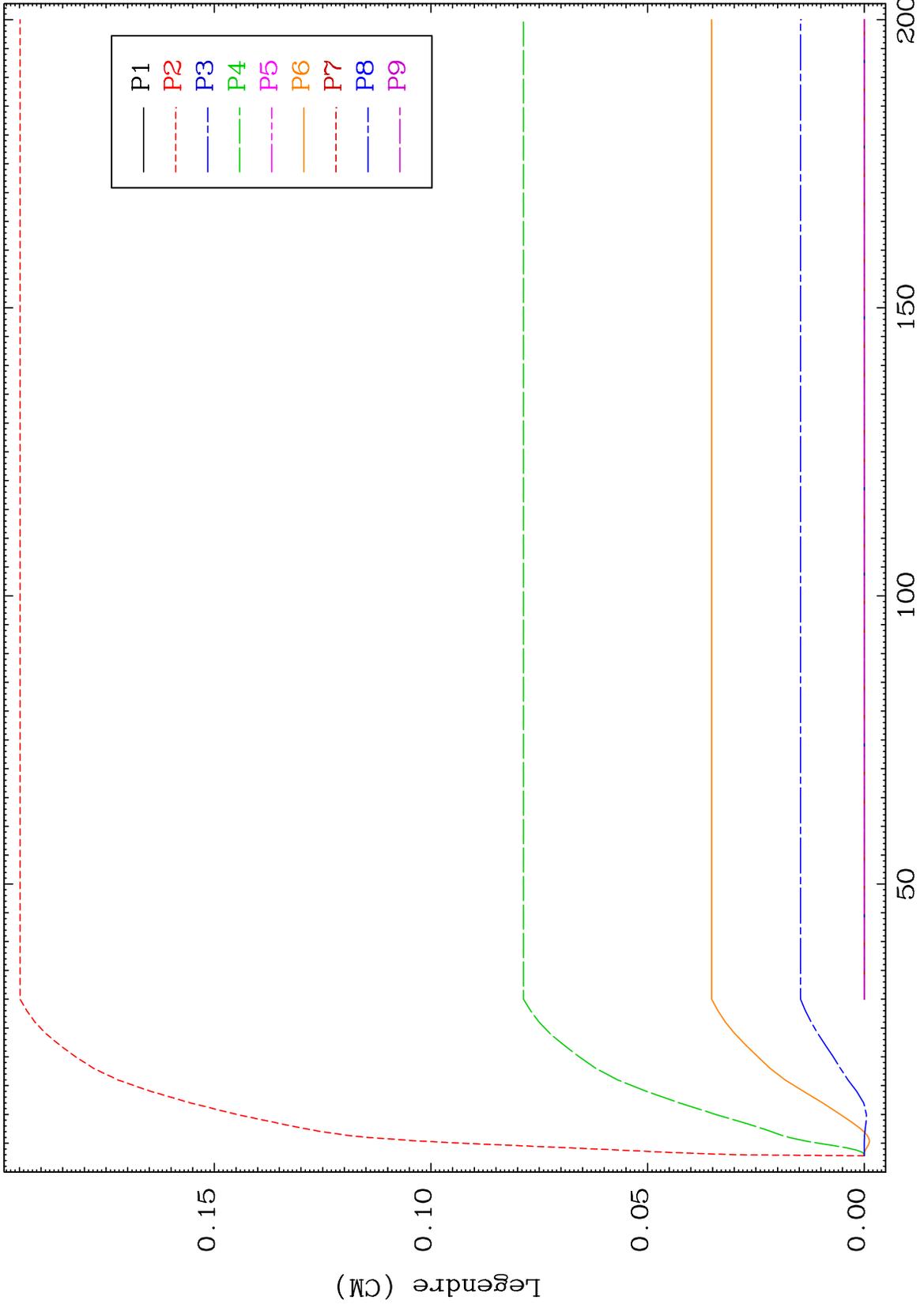
MAT 3443

MT= 63 (n,n') Level  
Legendre Coefficients

34-Se-80



MAT 3443 MT= 64 (n,n') Level Legendre Coefficients 34-Se-80

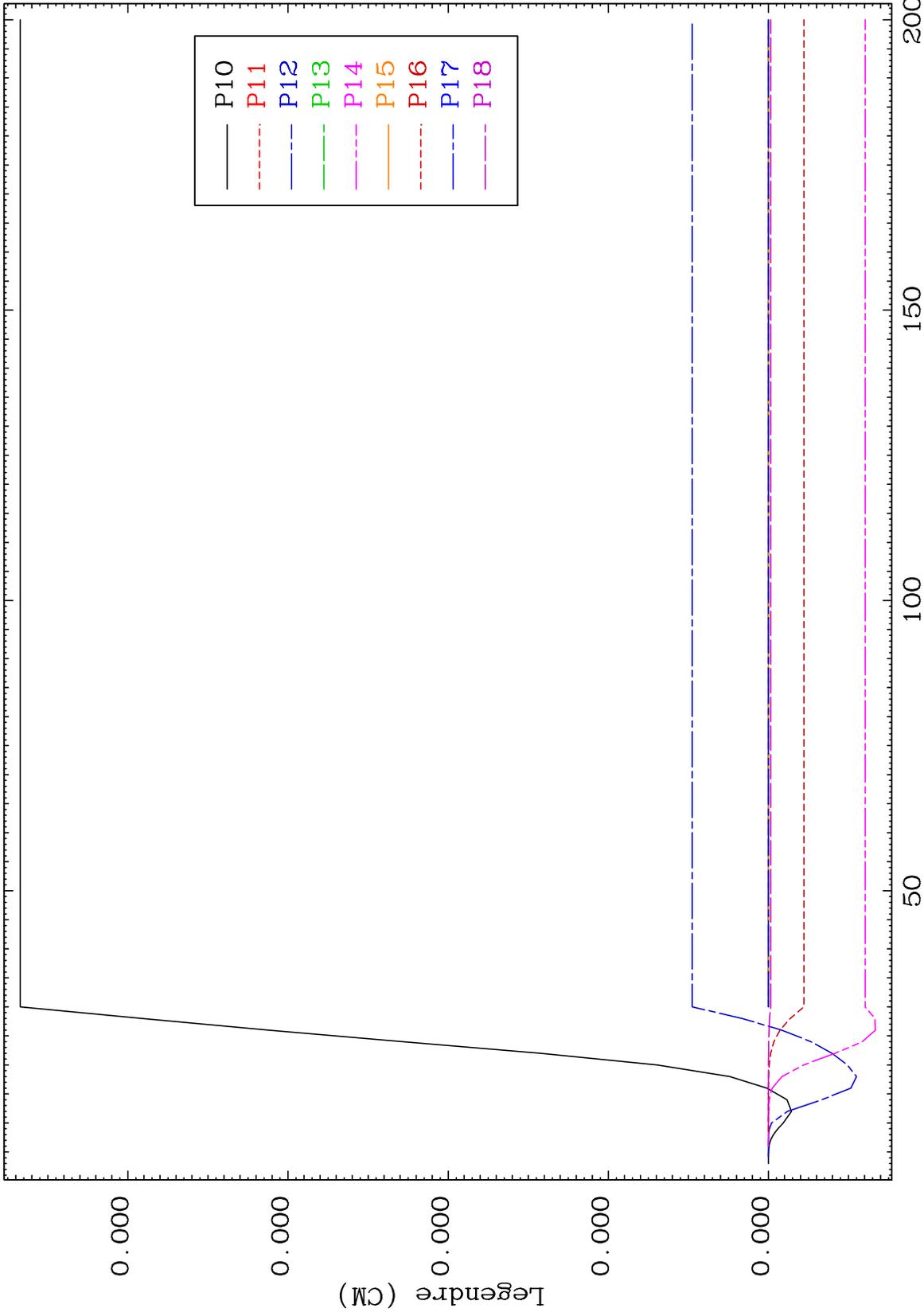


68 Incident Energy (MeV) 34-Se-80

MAT 3443

MT= 64 (n,n') Level  
Legendre Coefficients

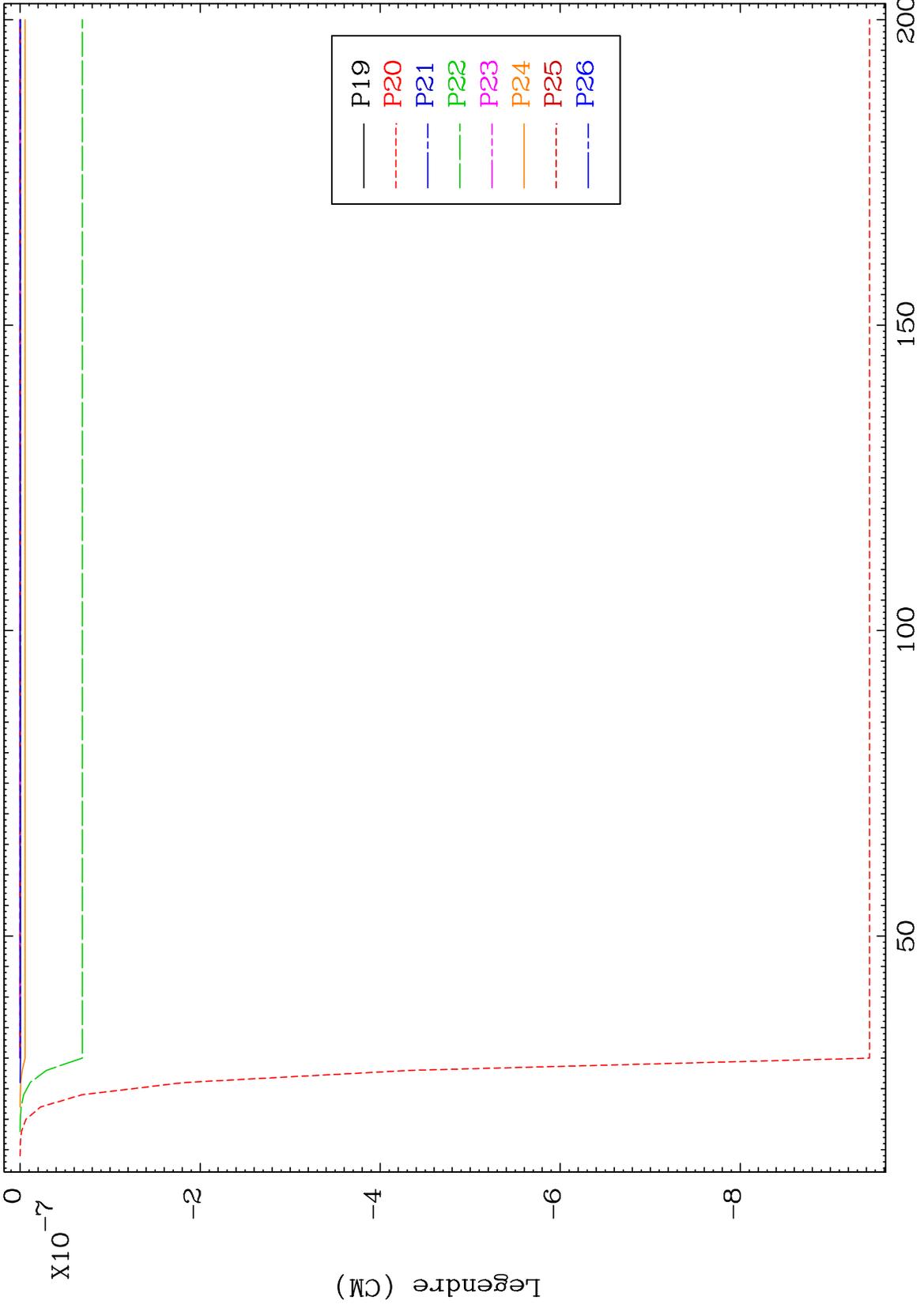
34-Se-80



69

34-Se-80

MAT 3443 MT= 64 (n,n') Level Legendre Coefficients 34-Se-80

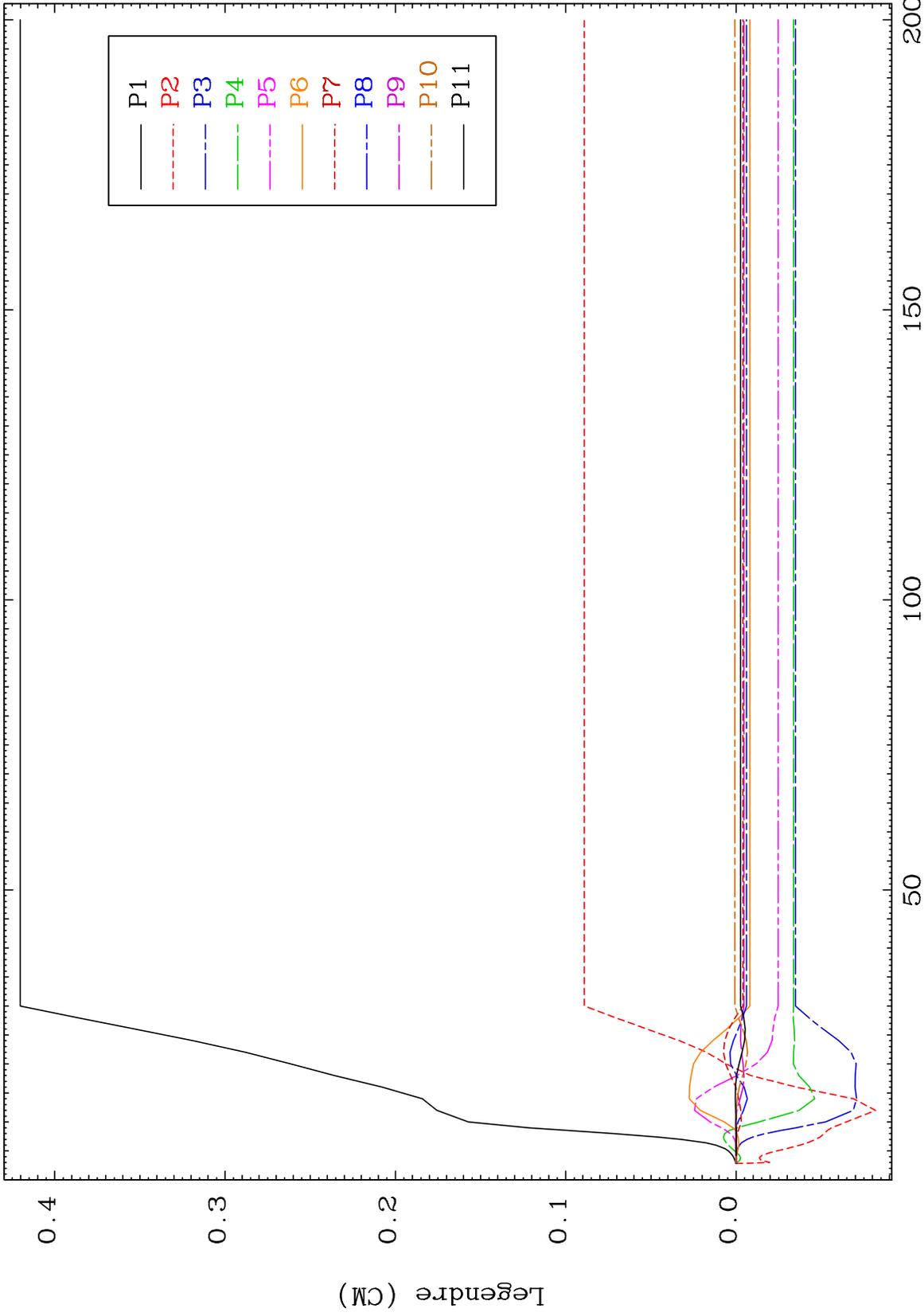


70 Incident Energy (MeV) 150 200 34-Se-80

MAT 3443

MT= 65 (n,n') Level  
Legendre Coefficients

34-Se-80



71

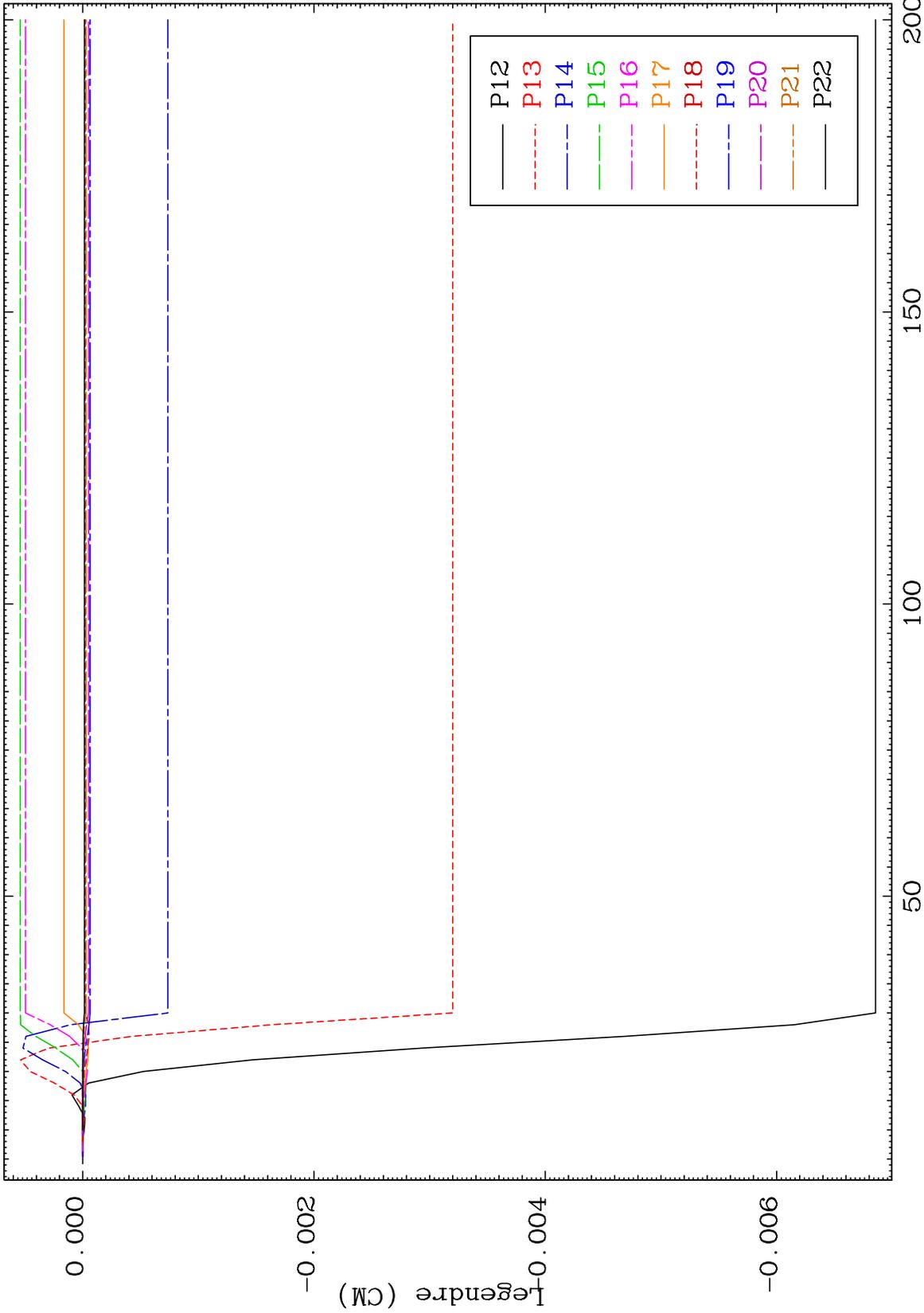
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 65 (n,n') Level  
Legendre Coefficients

34-Se-80

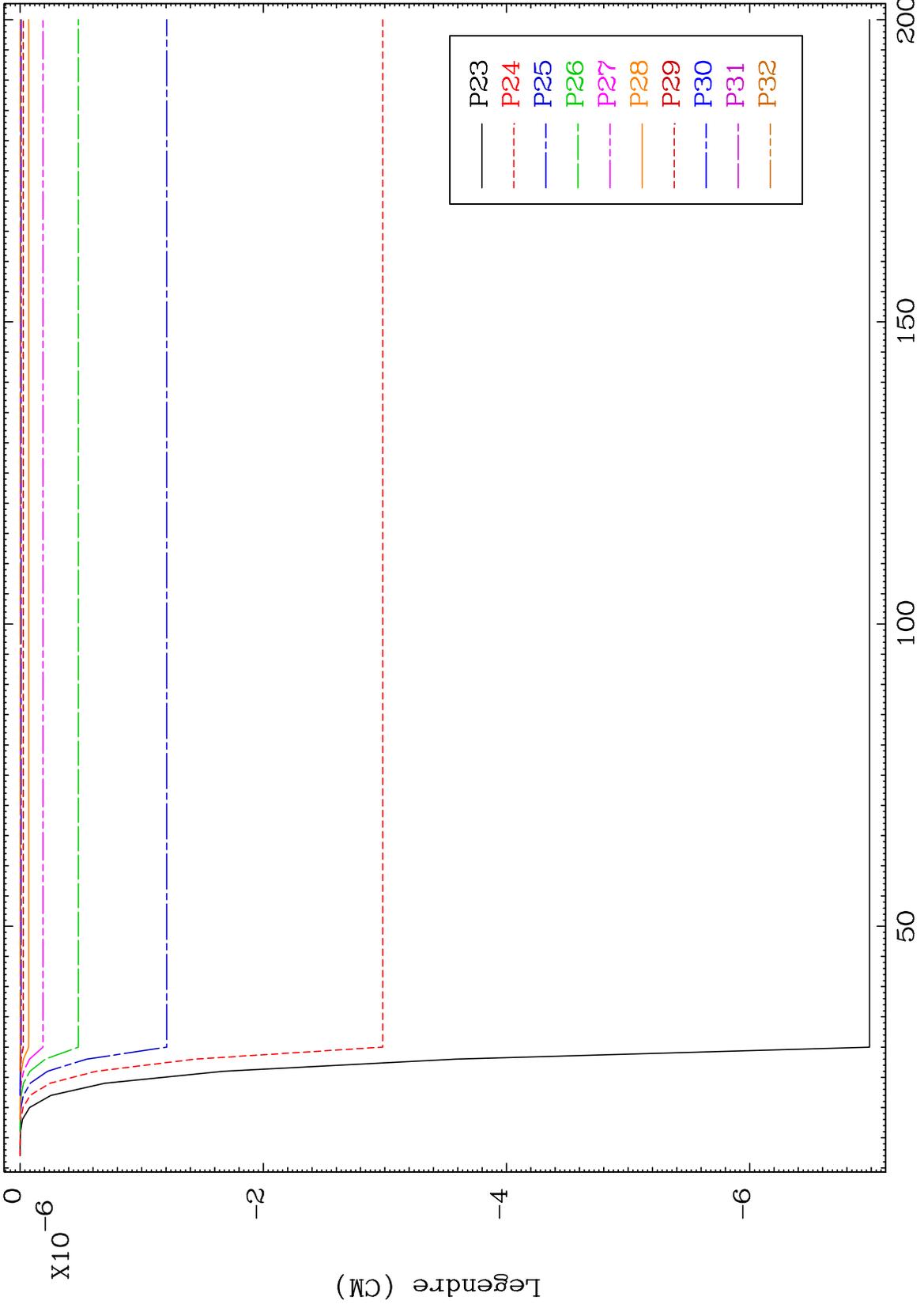


34-Se-80

Incident Energy (MeV)

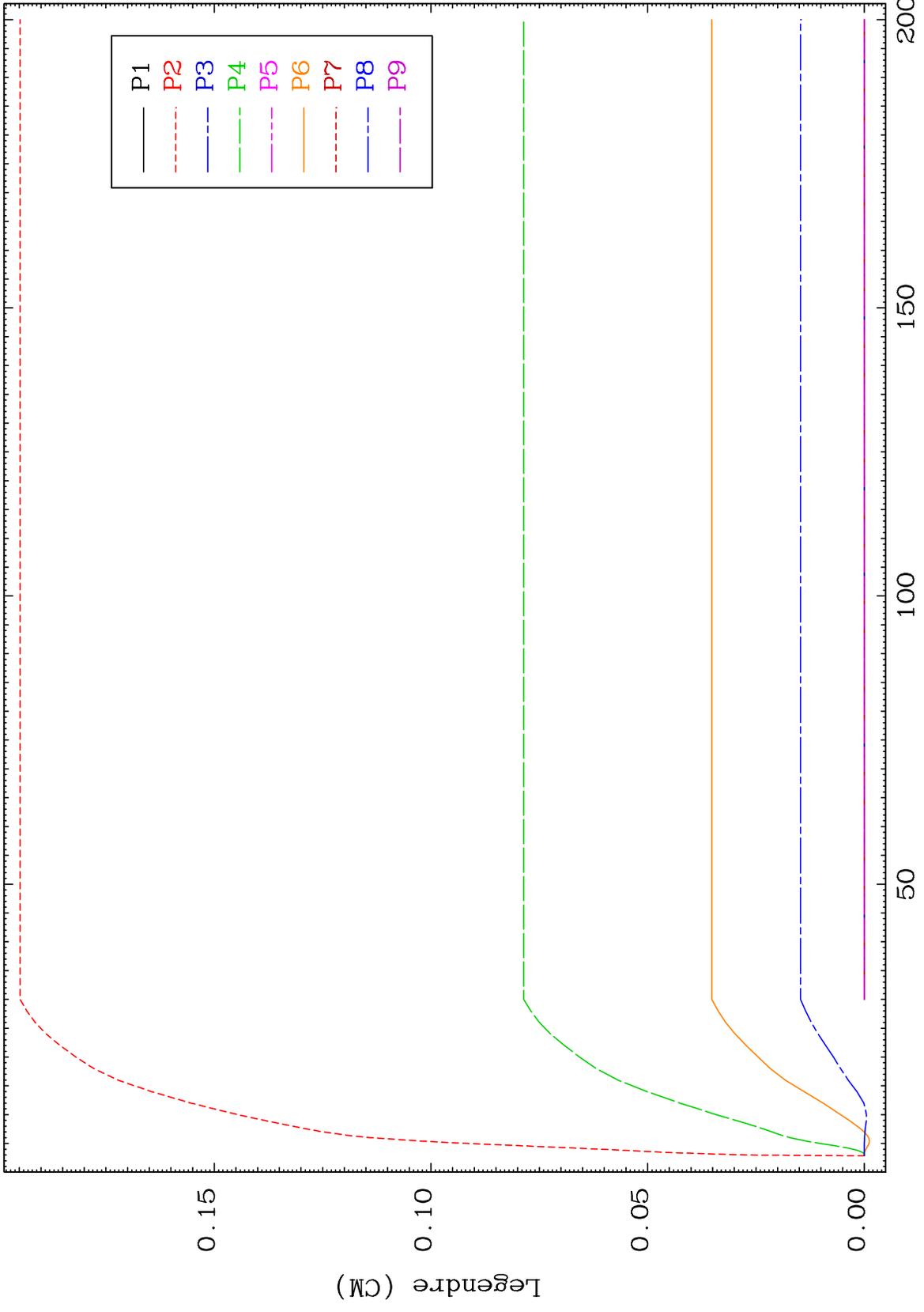
72

MAT 3443 MT= 65 (n,n') Level Legendre Coefficients 34-Se-80



73 Incident Energy (MeV) 34-Se-80

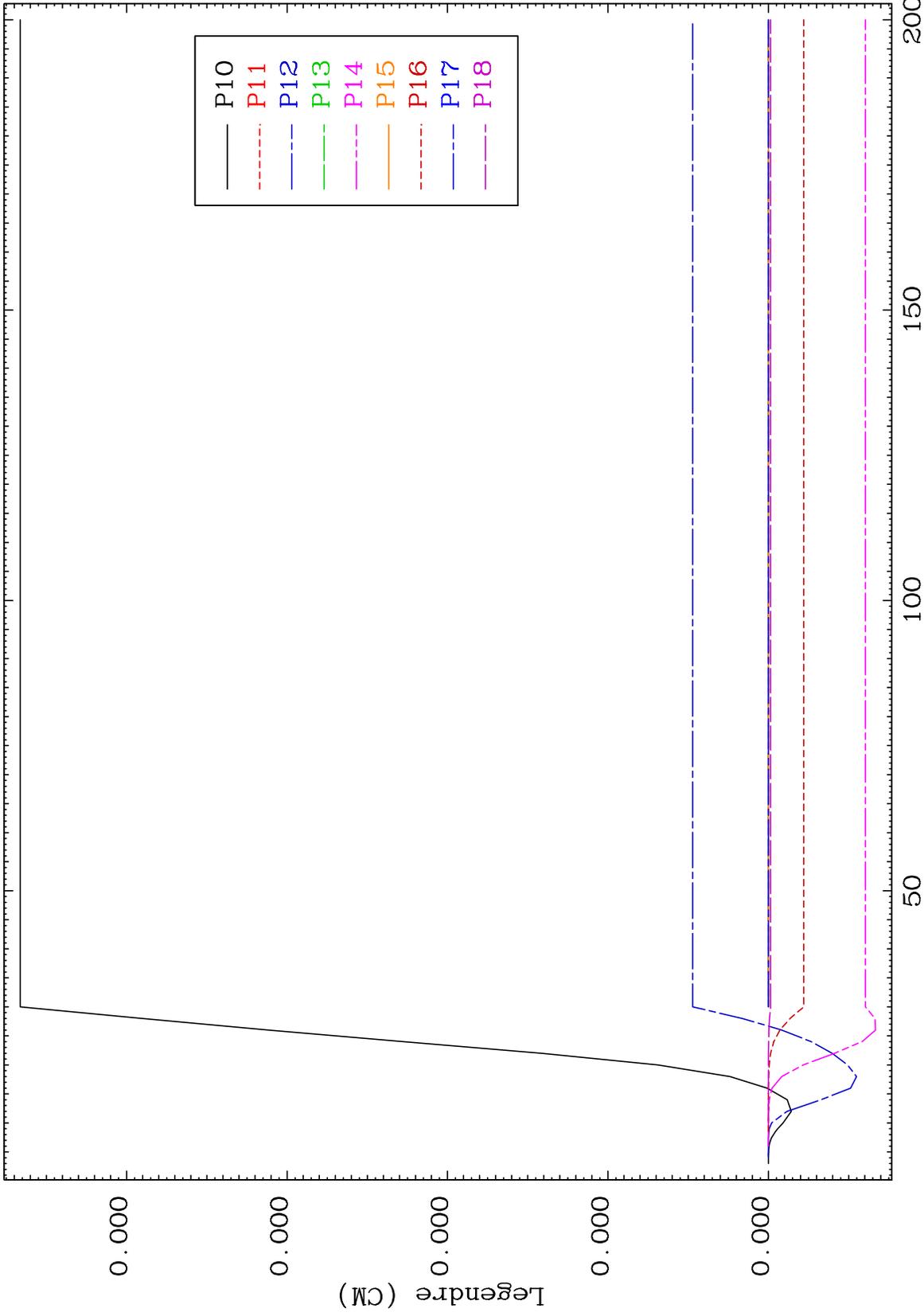
MAT 3443 MT= 66 (n,n') Level Legendre Coefficients 34-Se-80



MAT 3443

MT= 66 (n,n') Level  
Legendre Coefficients

34-Se-80

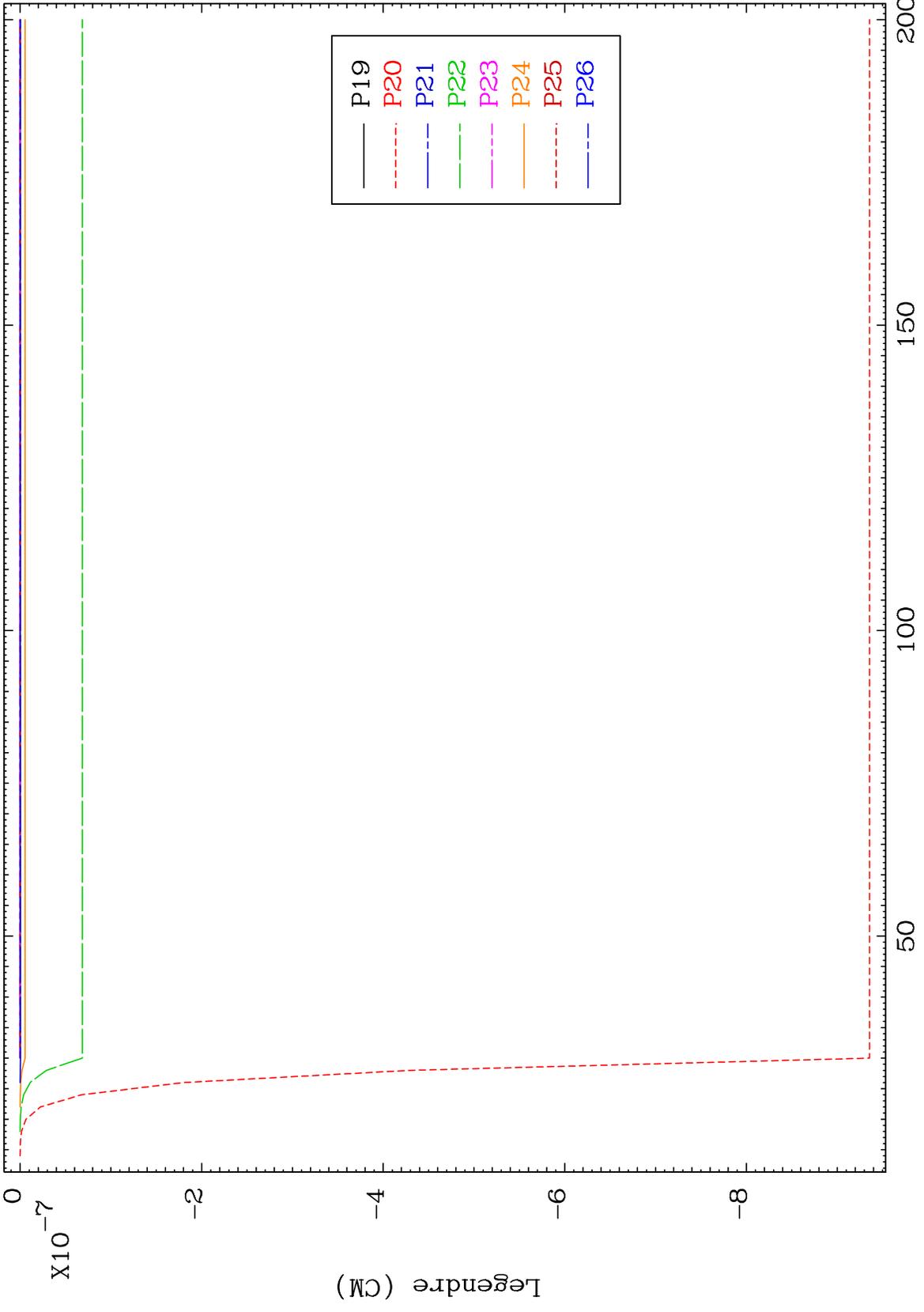


75

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 66 (n,n') Level Legendre Coefficients 34-Se-80

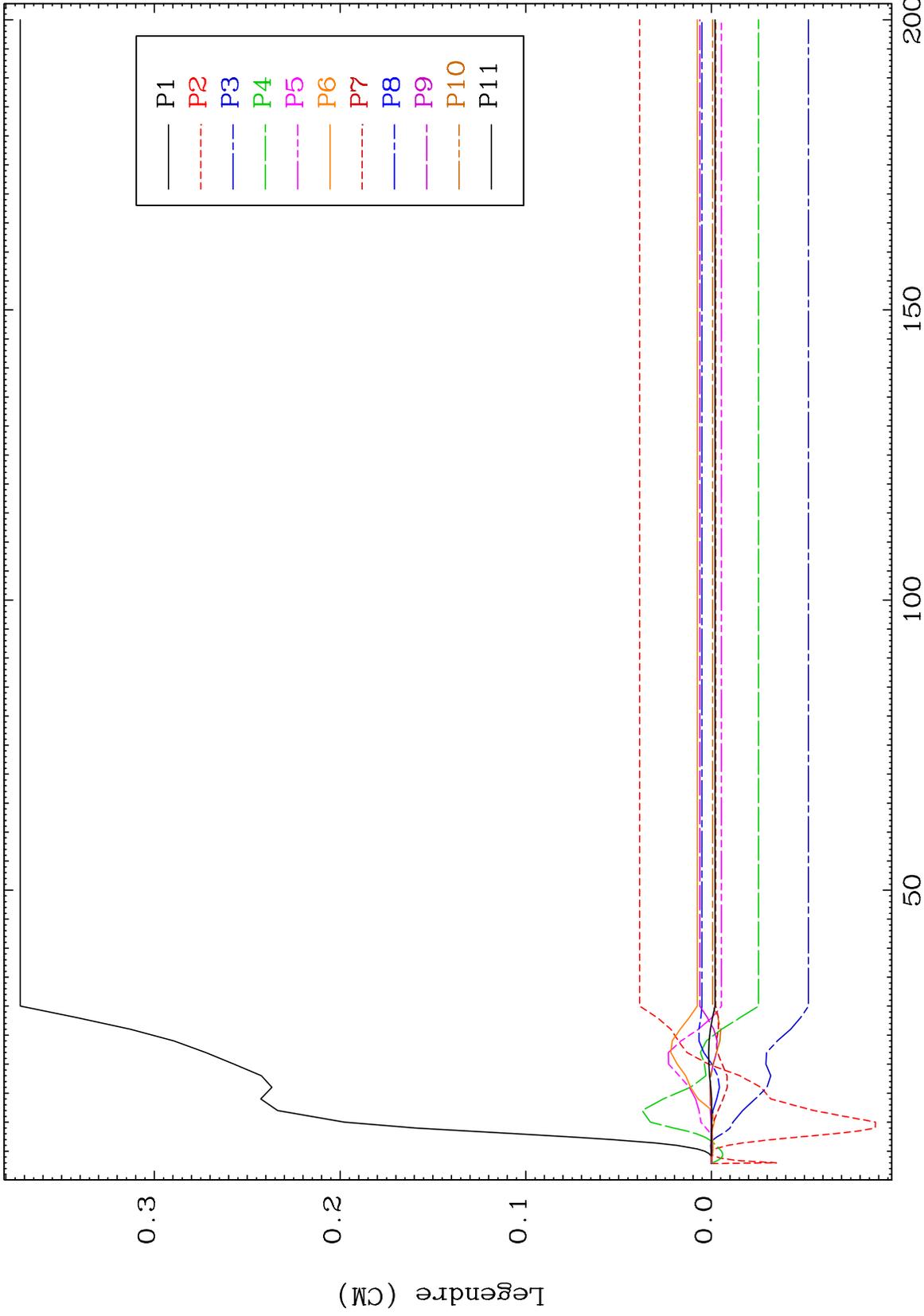


76 34-Se-80

MAT 3443

MT= 67 (n,n') Level  
Legendre Coefficients

34-Se-80



77

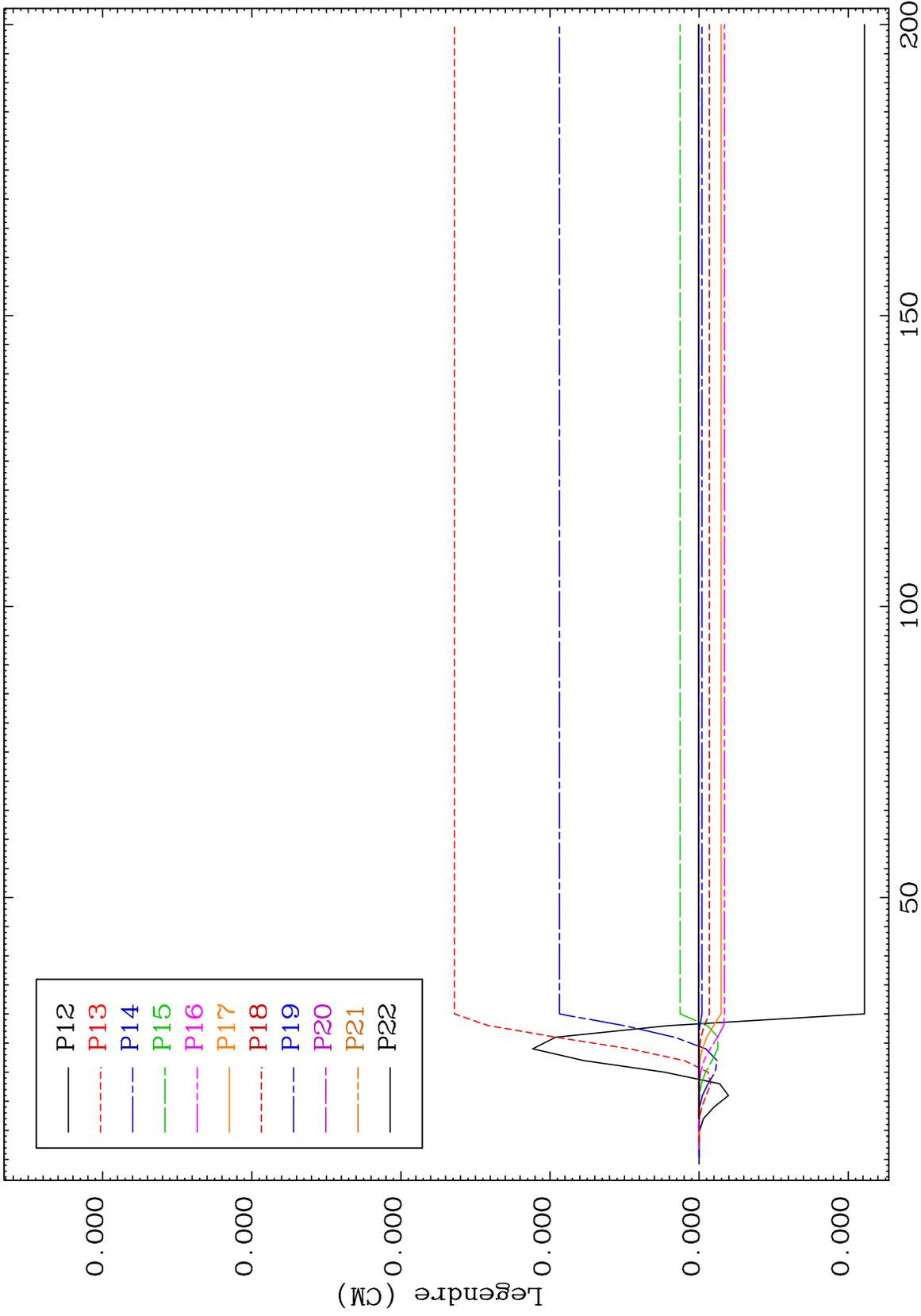
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 67 (n,n') Level  
Legendre Coefficients

34-Se-80



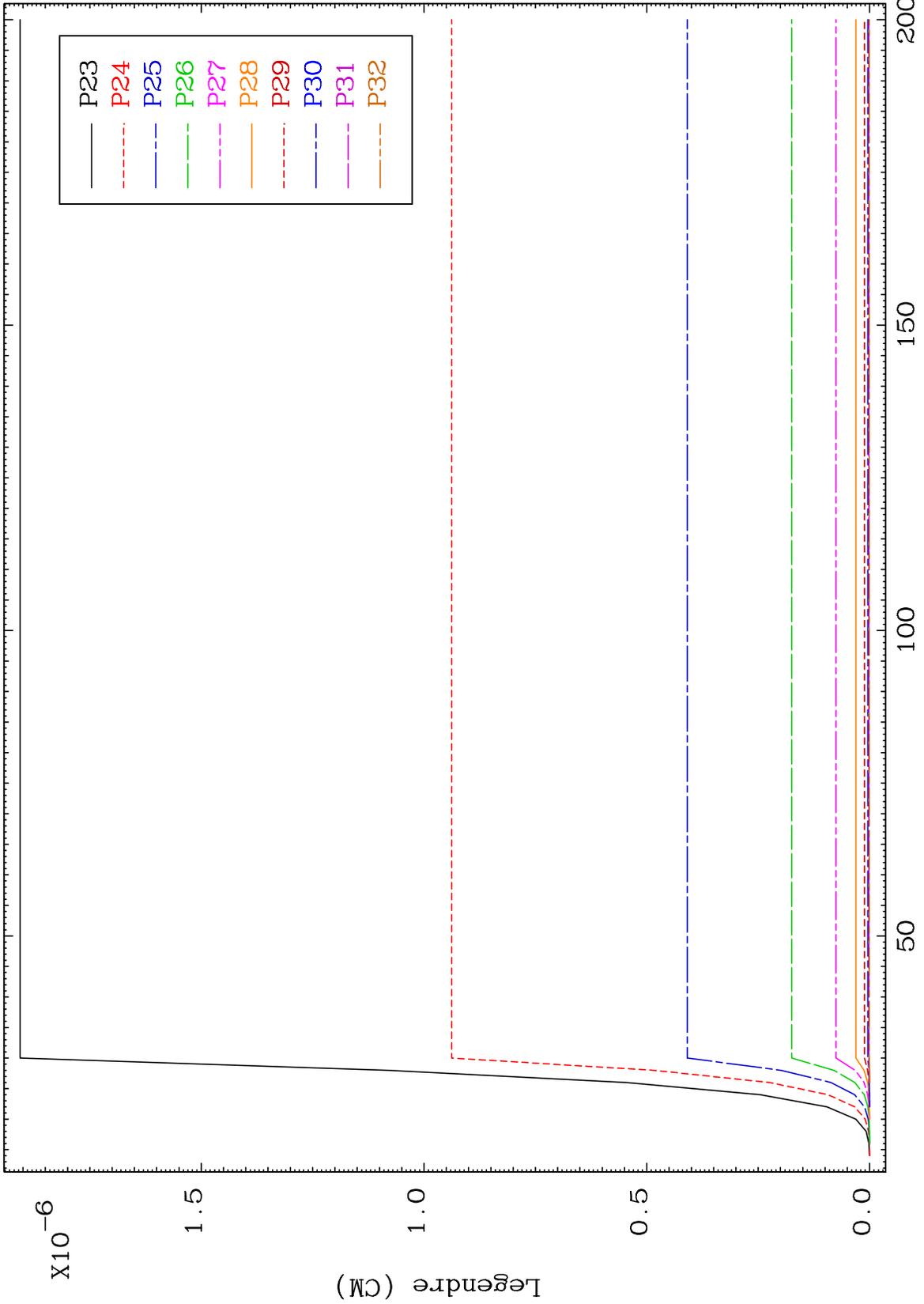
78

34-Se-80

MAT 3443

MT= 67 (n,n') Level  
Legendre Coefficients

34-Se-80

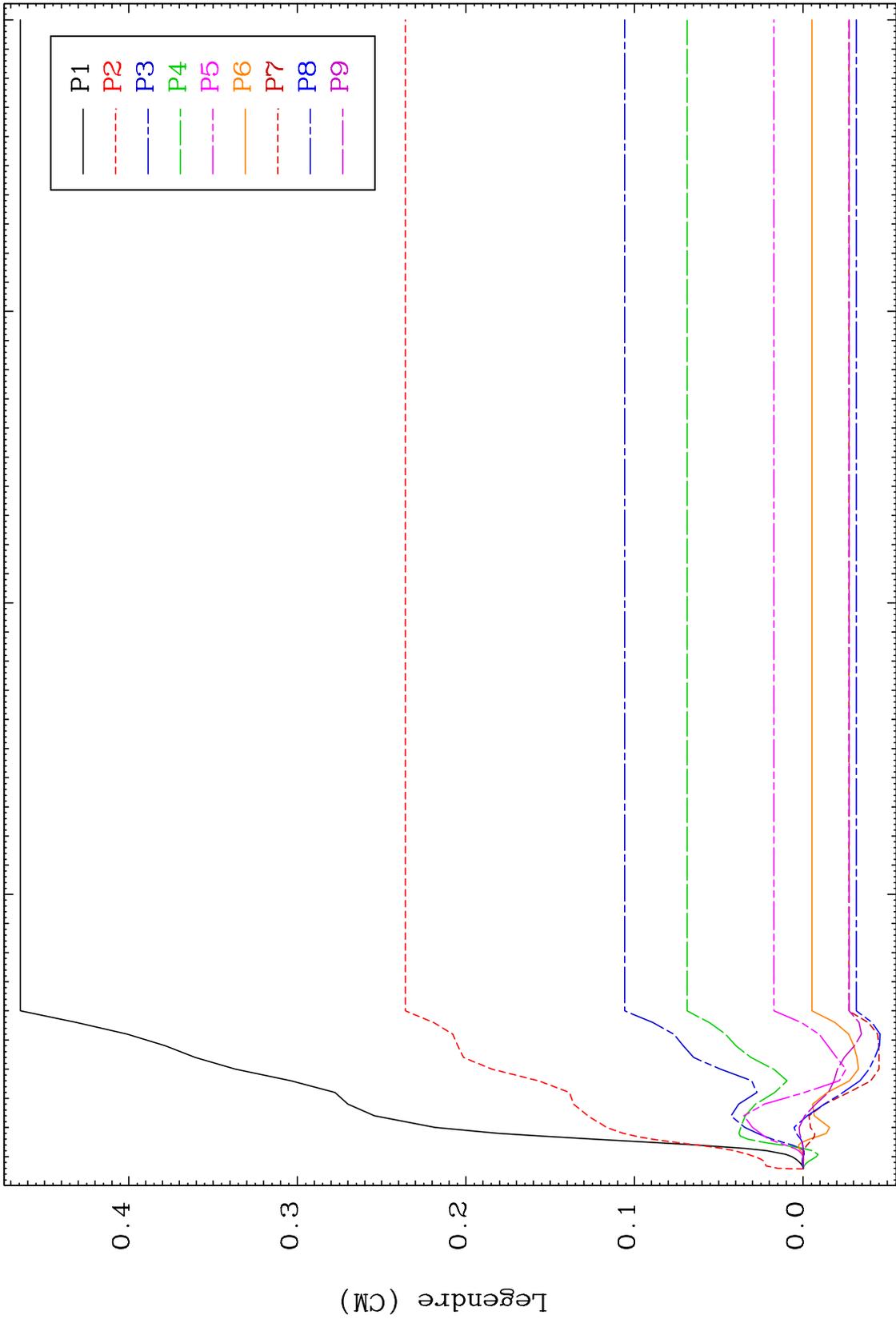


79

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 68 (n,n') Level Legendre Coefficients 34-Se-80

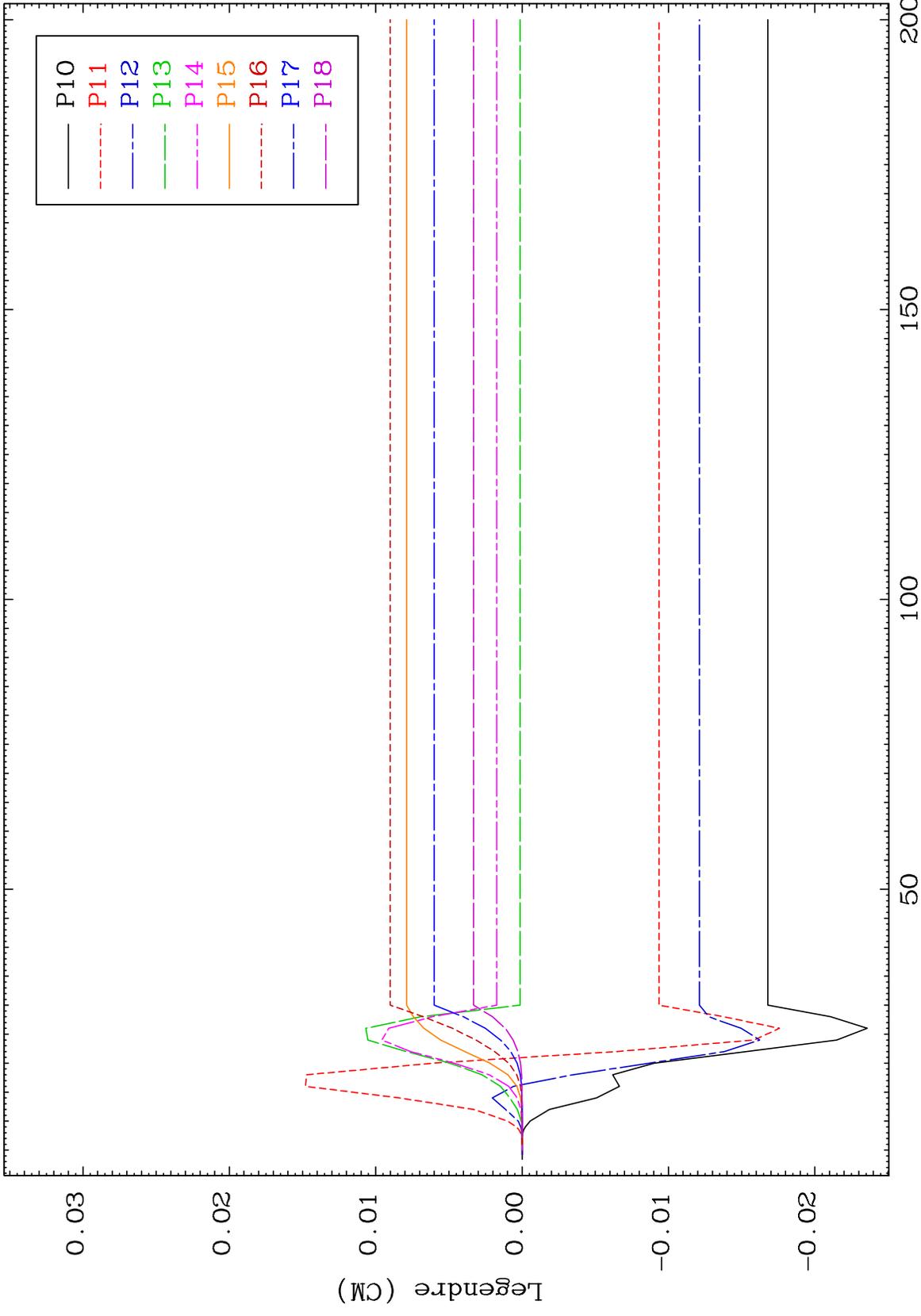


Legendre (CM) Incident Energy (MeV) 34-Se-80

MAT 3443

MT= 68 (n,n') Level  
Legendre Coefficients

34-Se-80



81

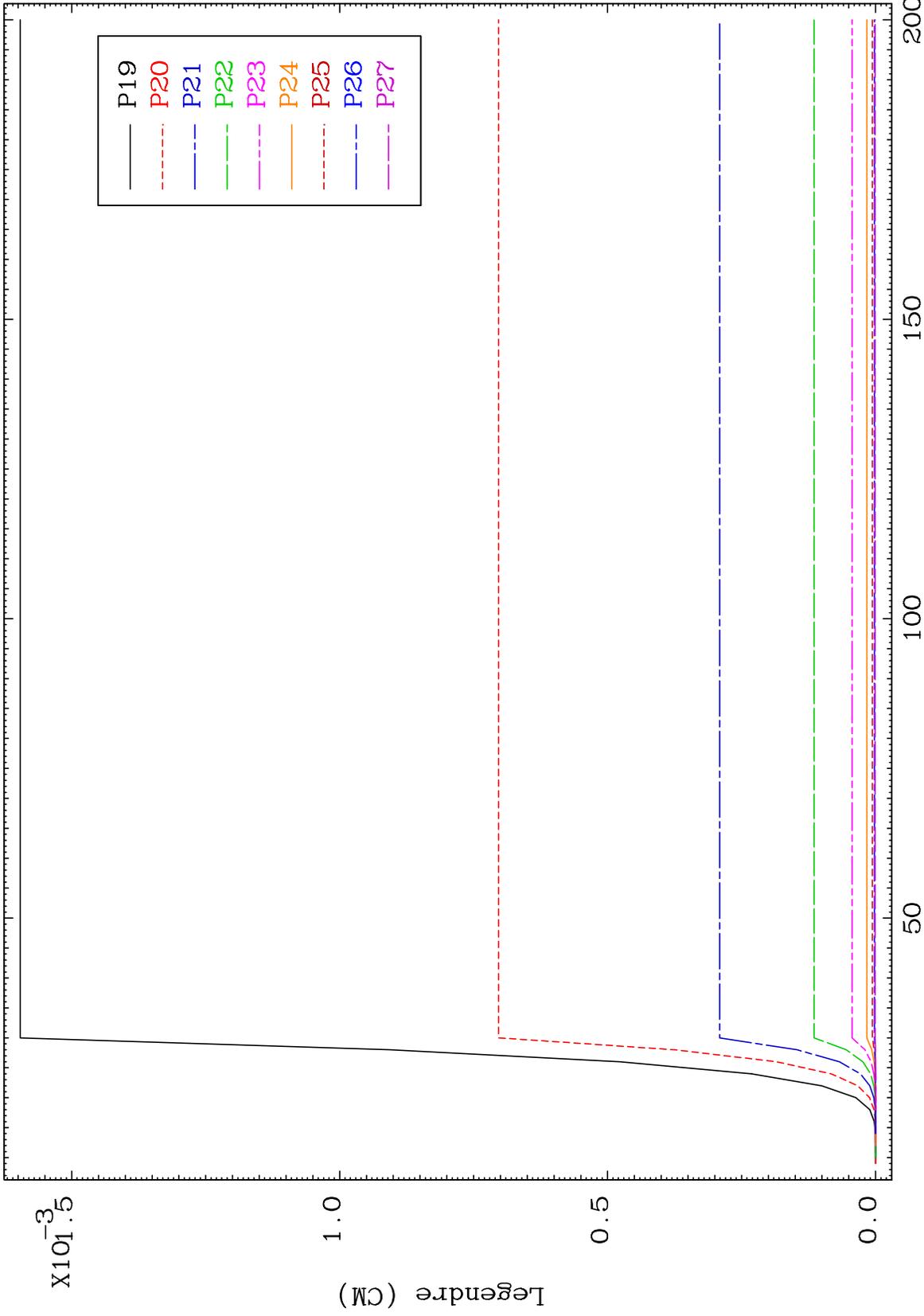
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 68 (n,n') Level  
Legendre Coefficients

34-Se-80



82

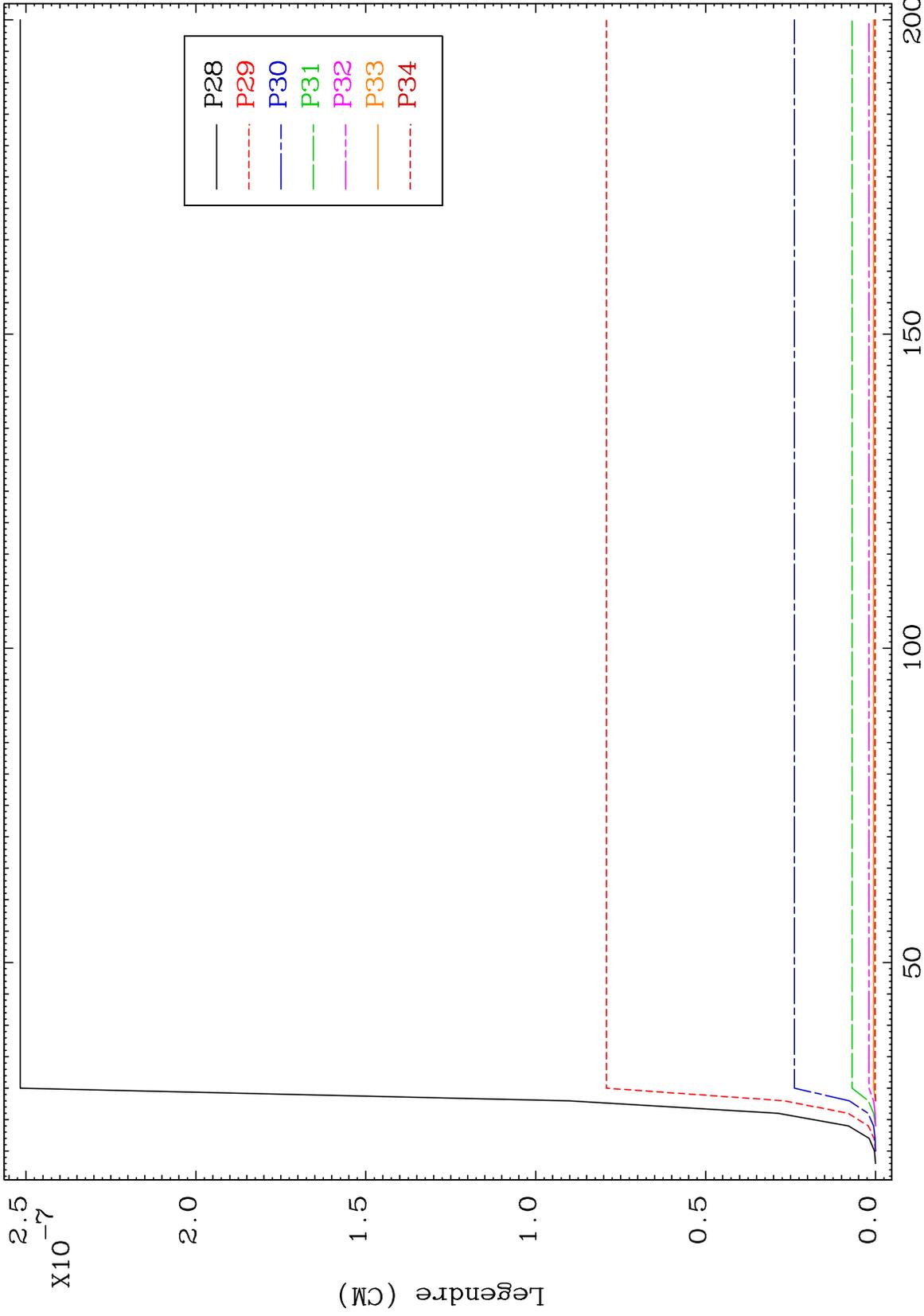
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 68 (n,n') Level  
Legendre Coefficients

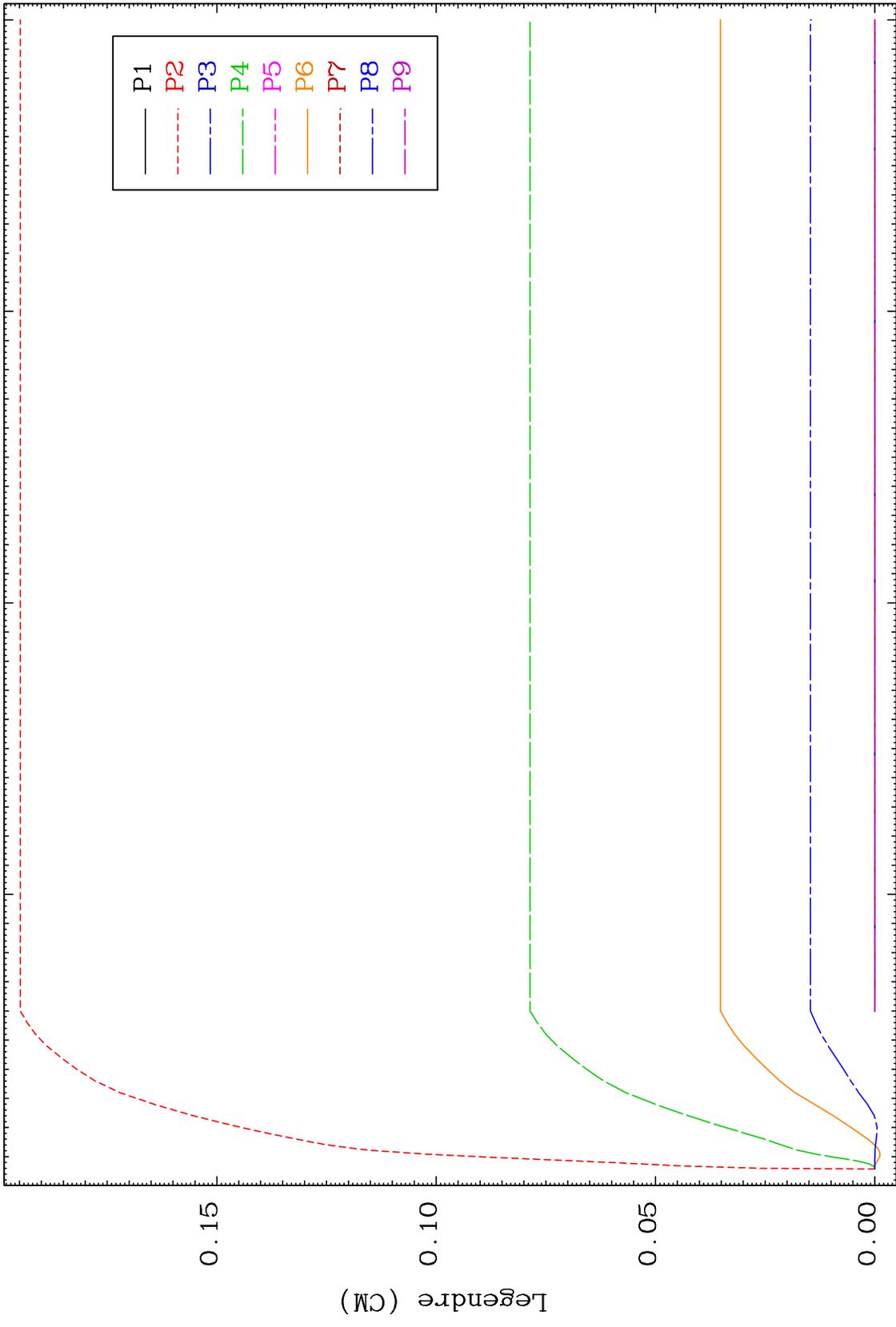
34-Se-80



83

34-Se-80

MAT 3443 MT= 69 (n,n') Level Legendre Coefficients 34-Se-80

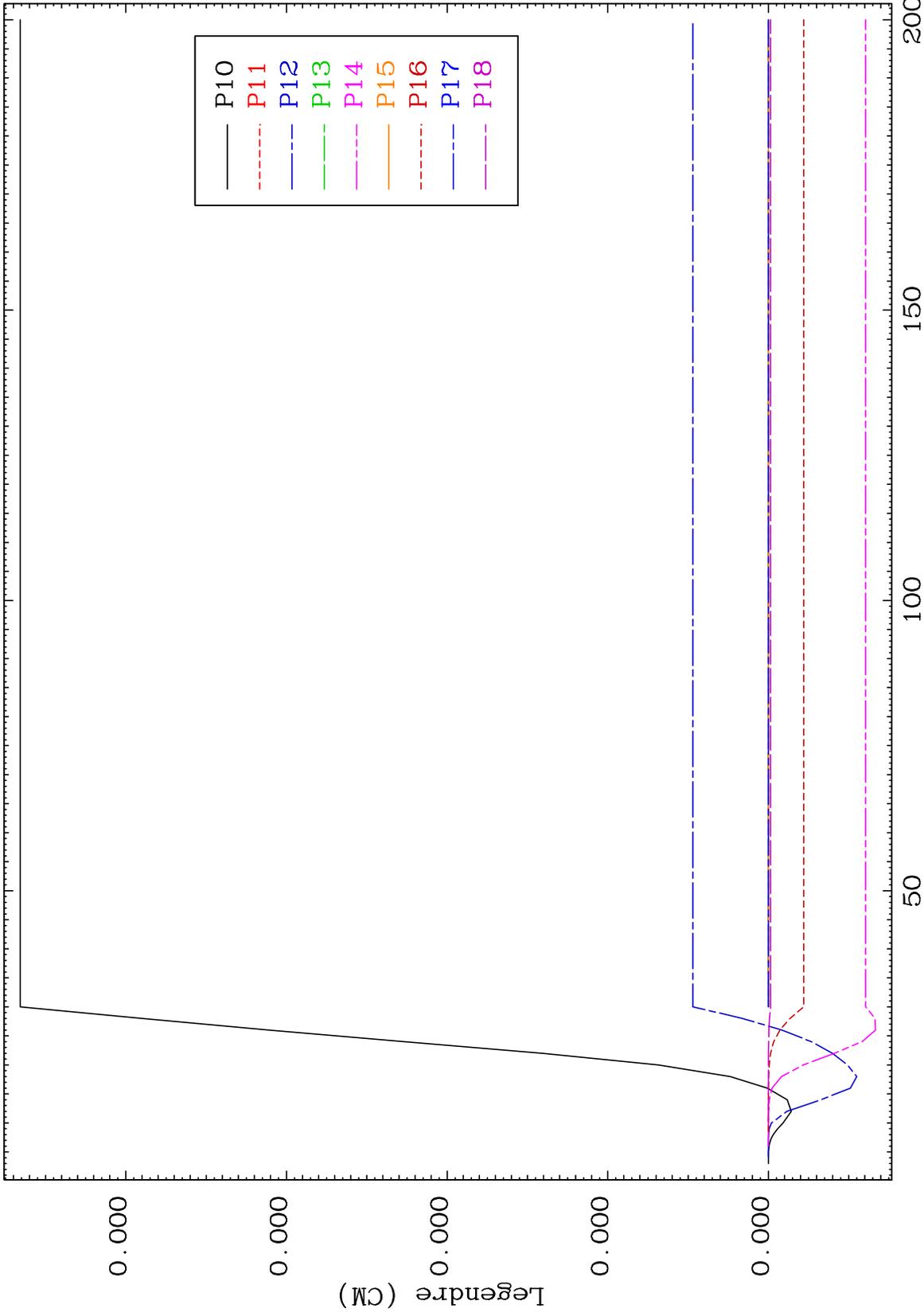


84 Incident Energy (MeV) 34-Se-80

MAT 3443

MT= 69 (n,n') Level  
Legendre Coefficients

34-Se-80



85

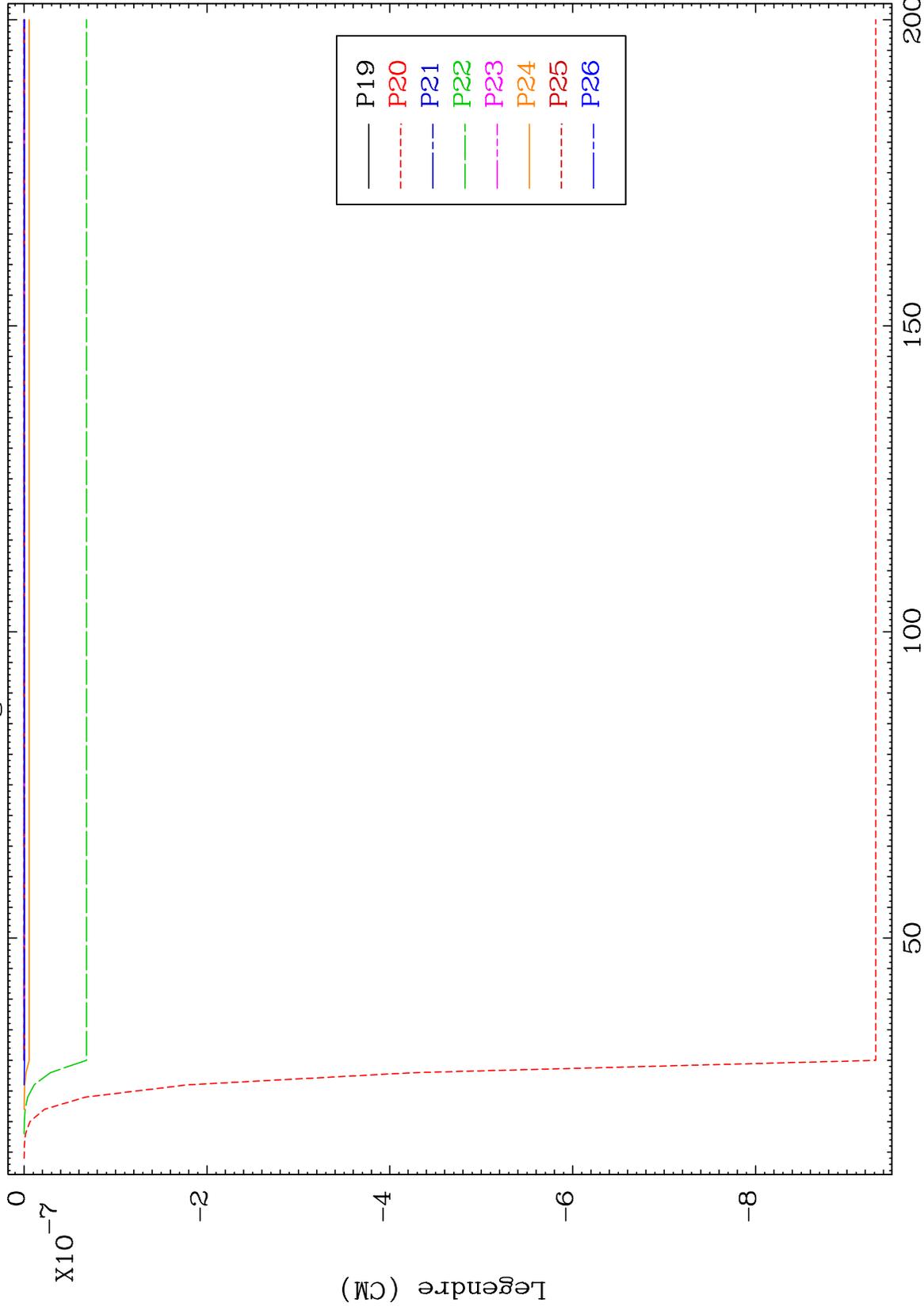
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 69 (n,n') Level  
Legendre Coefficients

34-Se-80



86

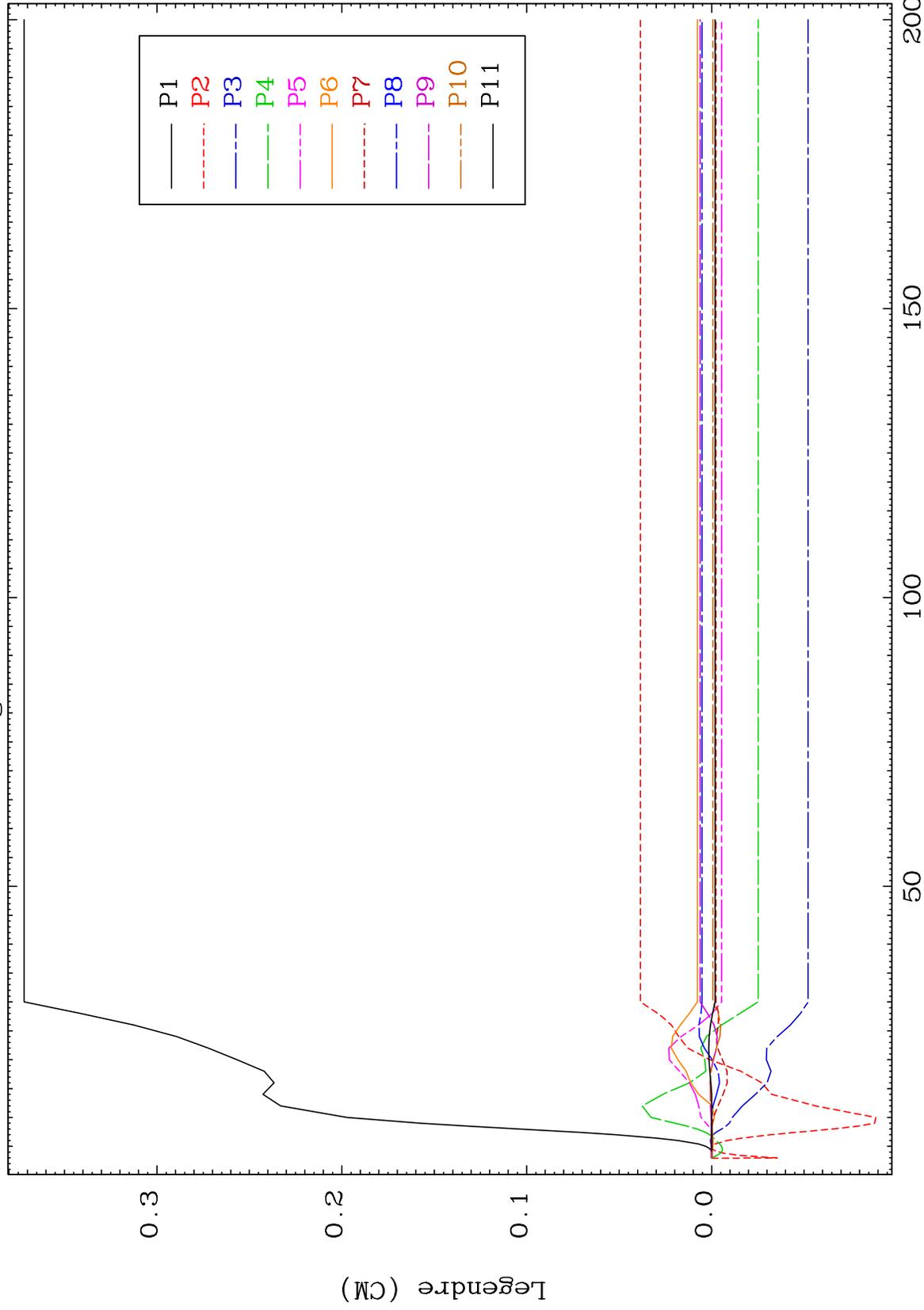
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 70 (n,n') Level  
Legendre Coefficients

34-Se-80



87

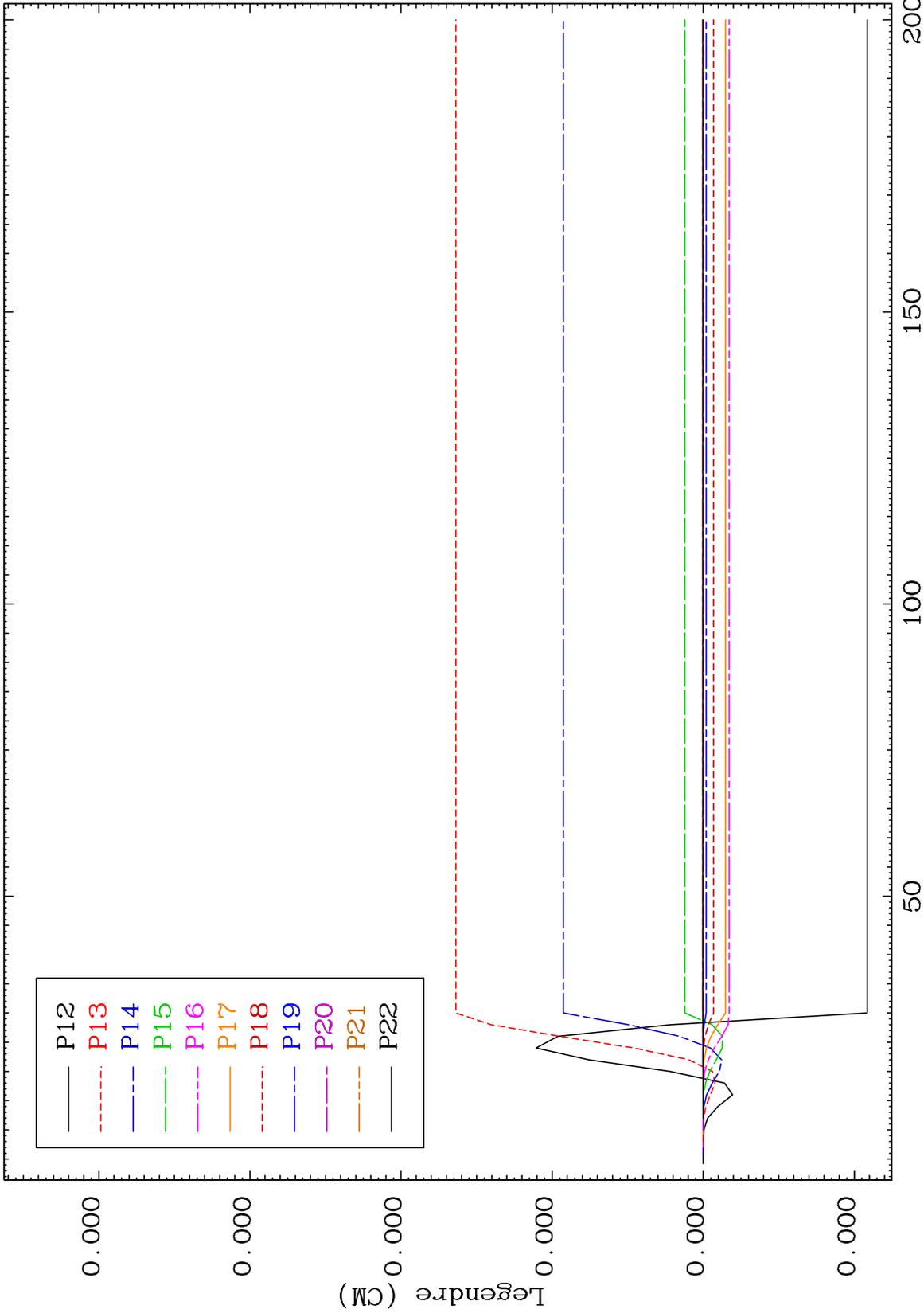
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 70 (n,n') Level  
Legendre Coefficients

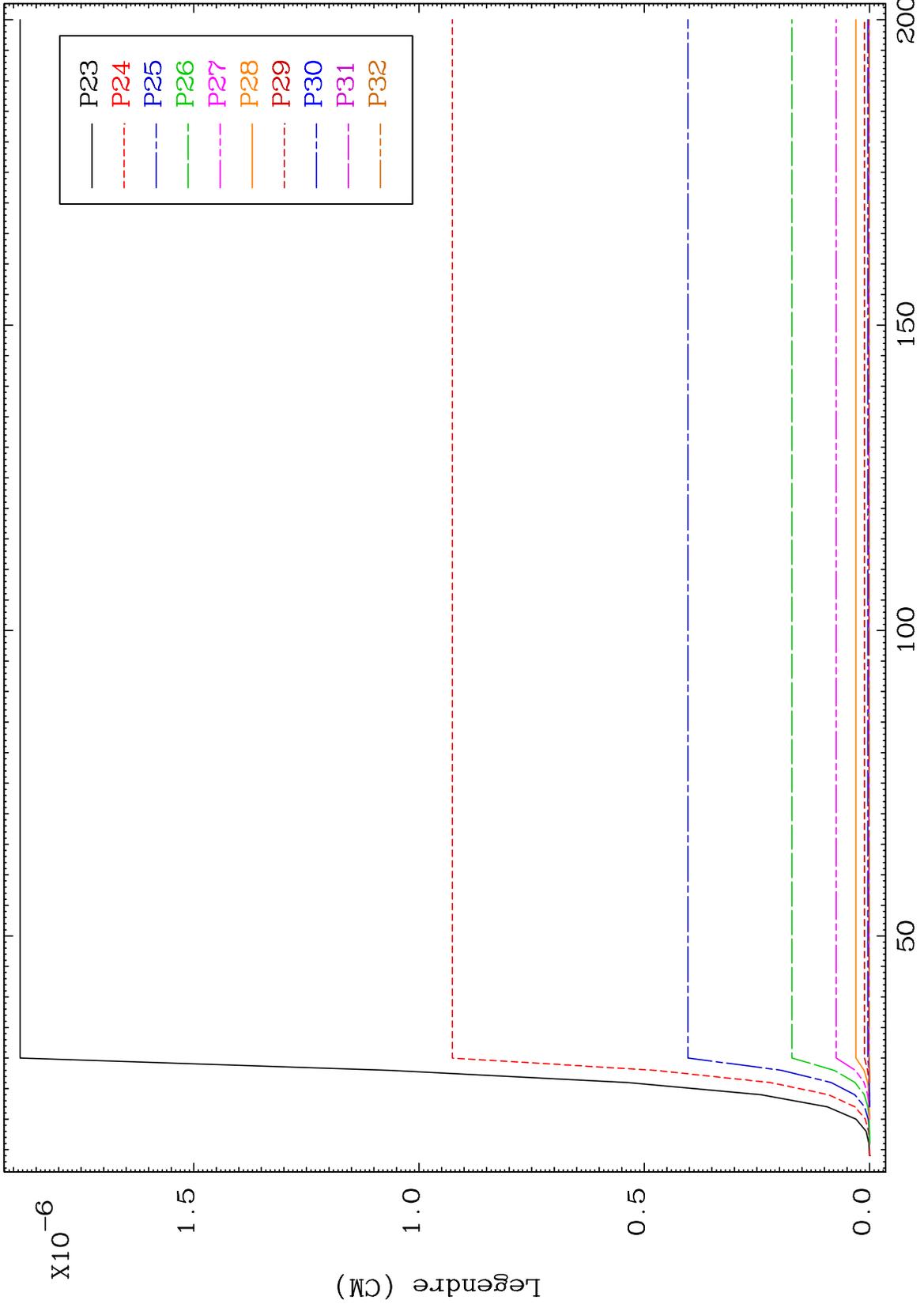
34-Se-80



MAT 3443

MT= 70 (n,n') Level  
Legendre Coefficients

34-Se-80



89

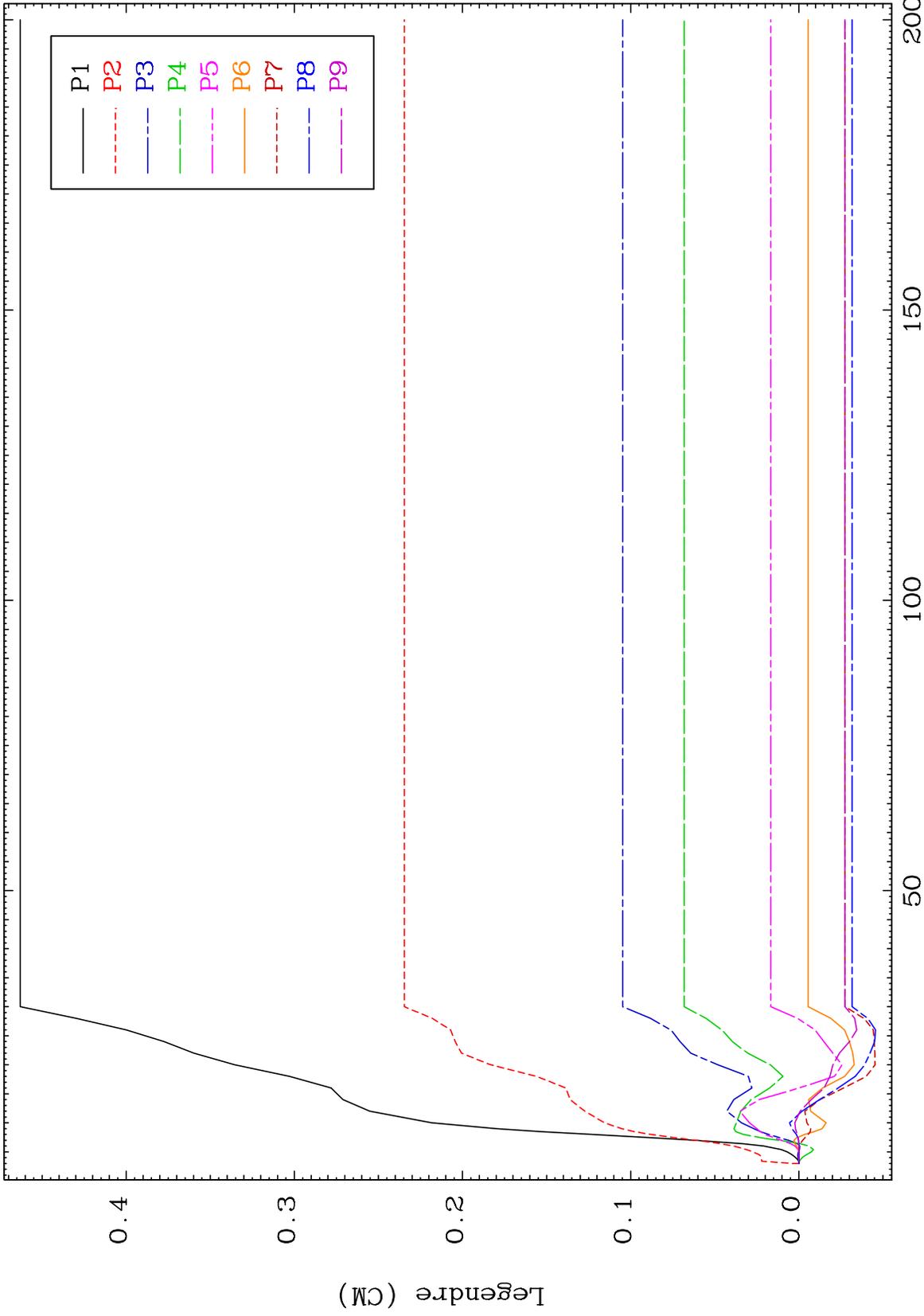
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 71 (n,n') Level  
Legendre Coefficients

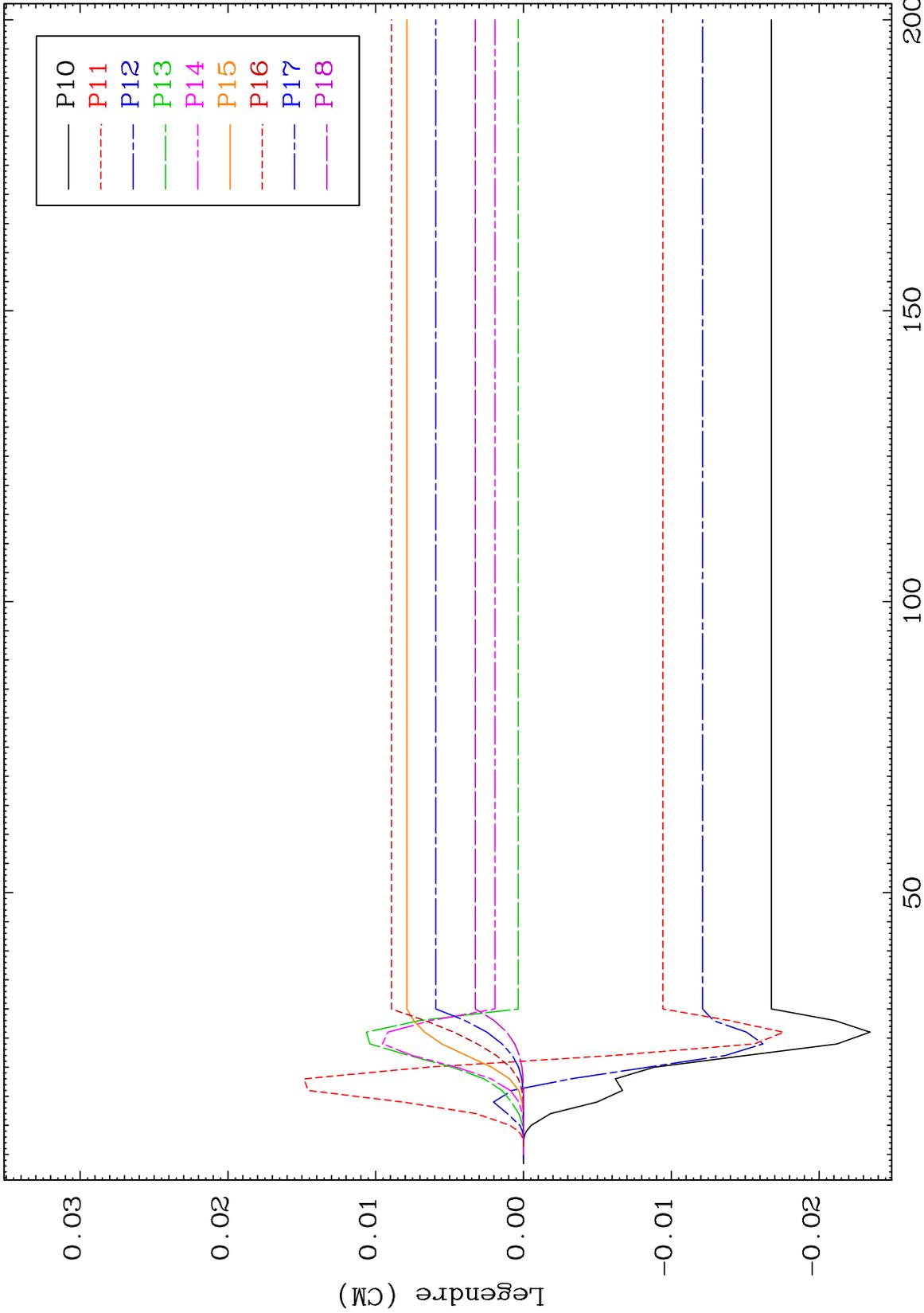
34-Se-80



MAT 3443

MT= 71 (n,n') Level  
Legendre Coefficients

34-Se-80



91

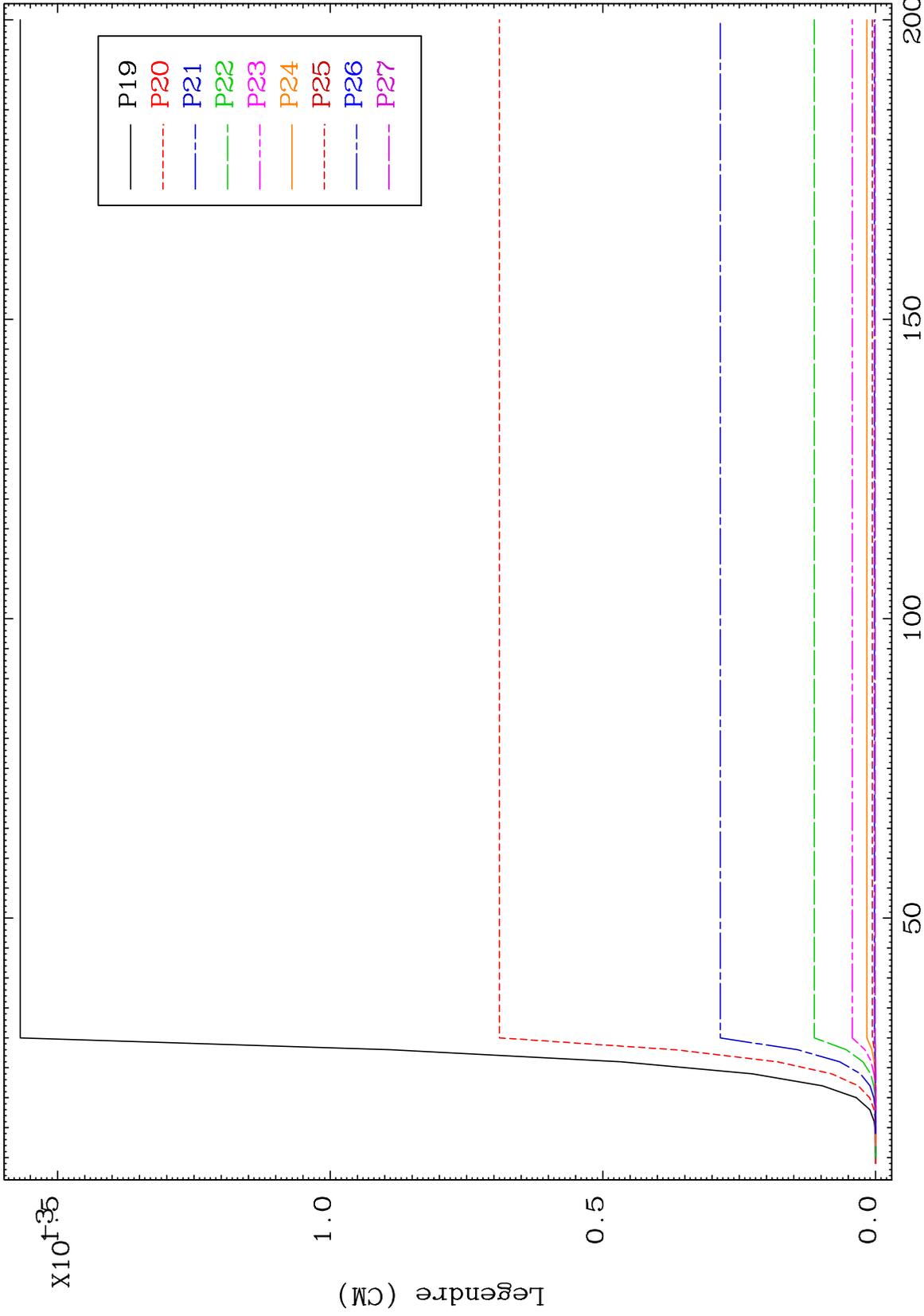
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 71 (n,n') Level  
Legendre Coefficients

34-Se-80



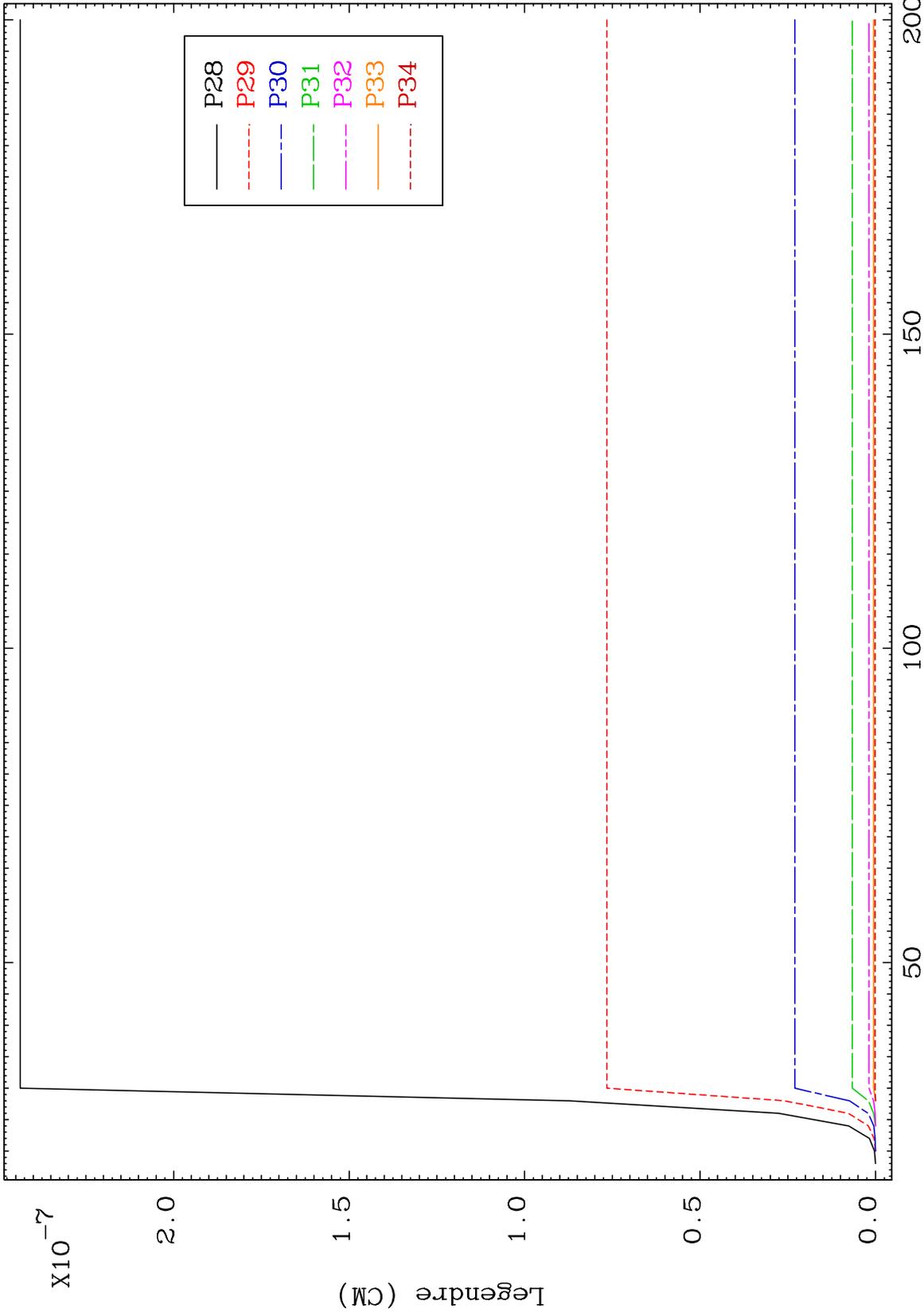
92

34-Se-80

MAT 3443

MT= 71 (n,n') Level  
Legendre Coefficients

34-Se-80



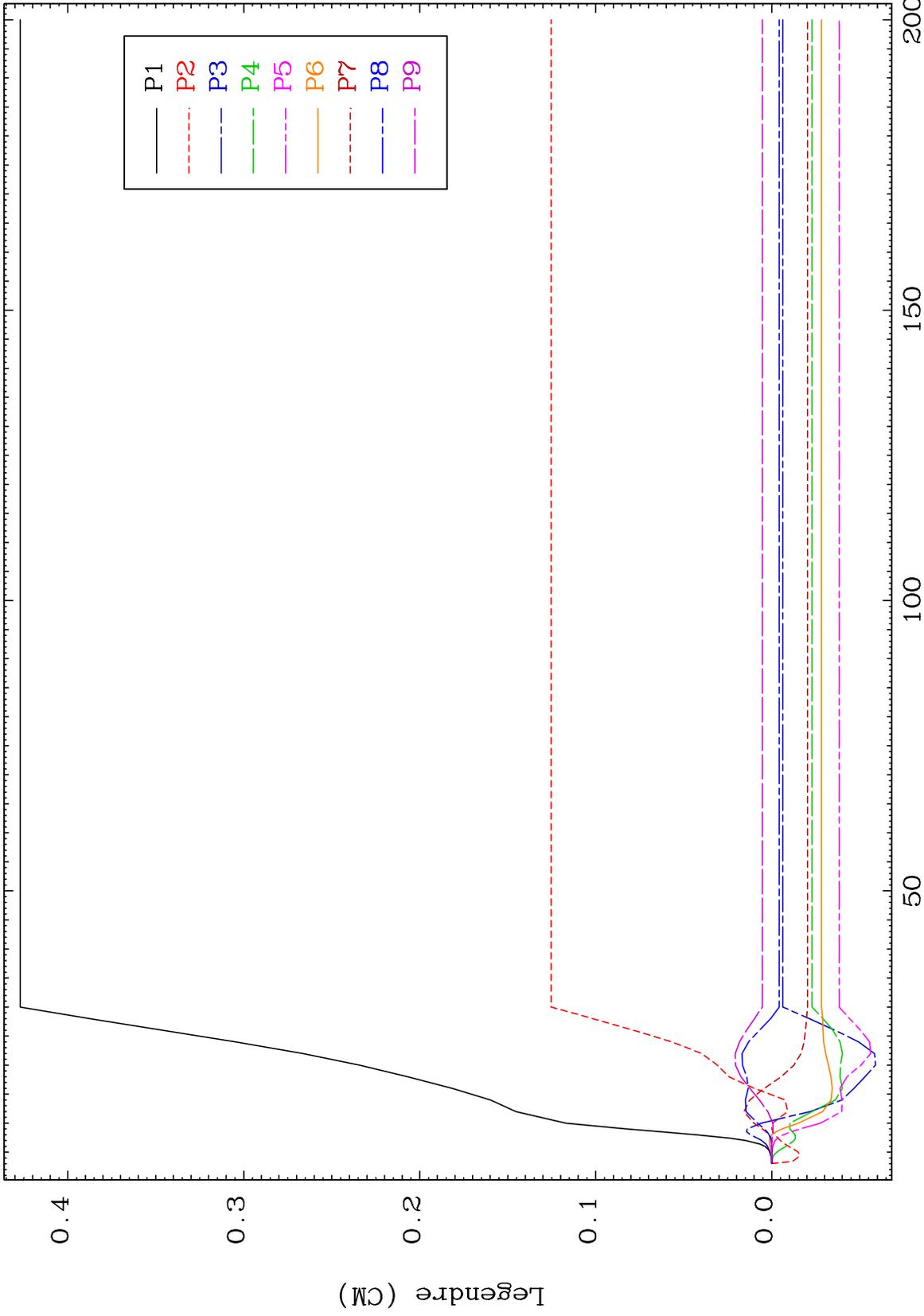
93

34-Se-80

MAT 3443

MT= 72 (n,n') Level  
Legendre Coefficients

34-Se-80

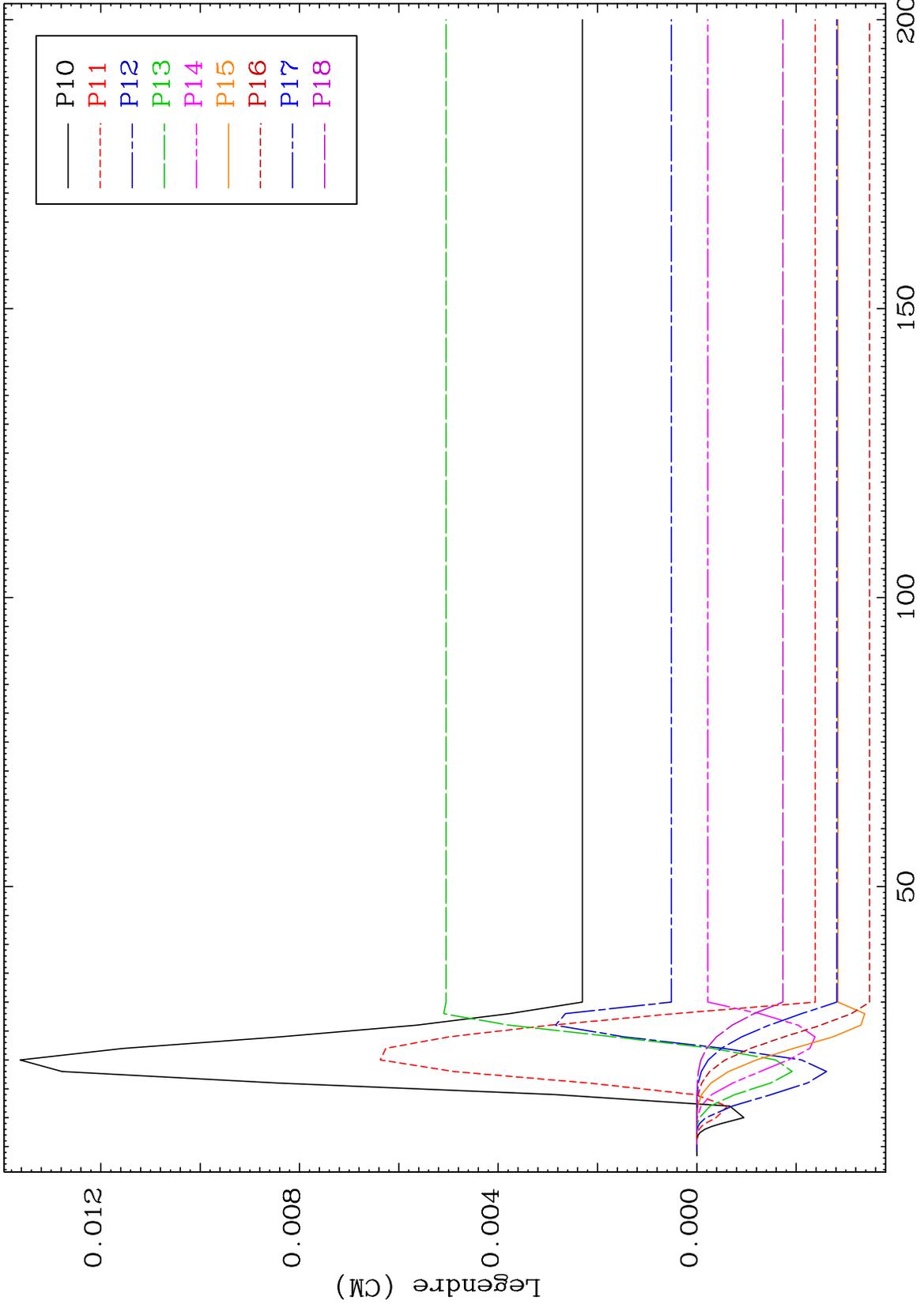


94

Incident Energy (MeV)

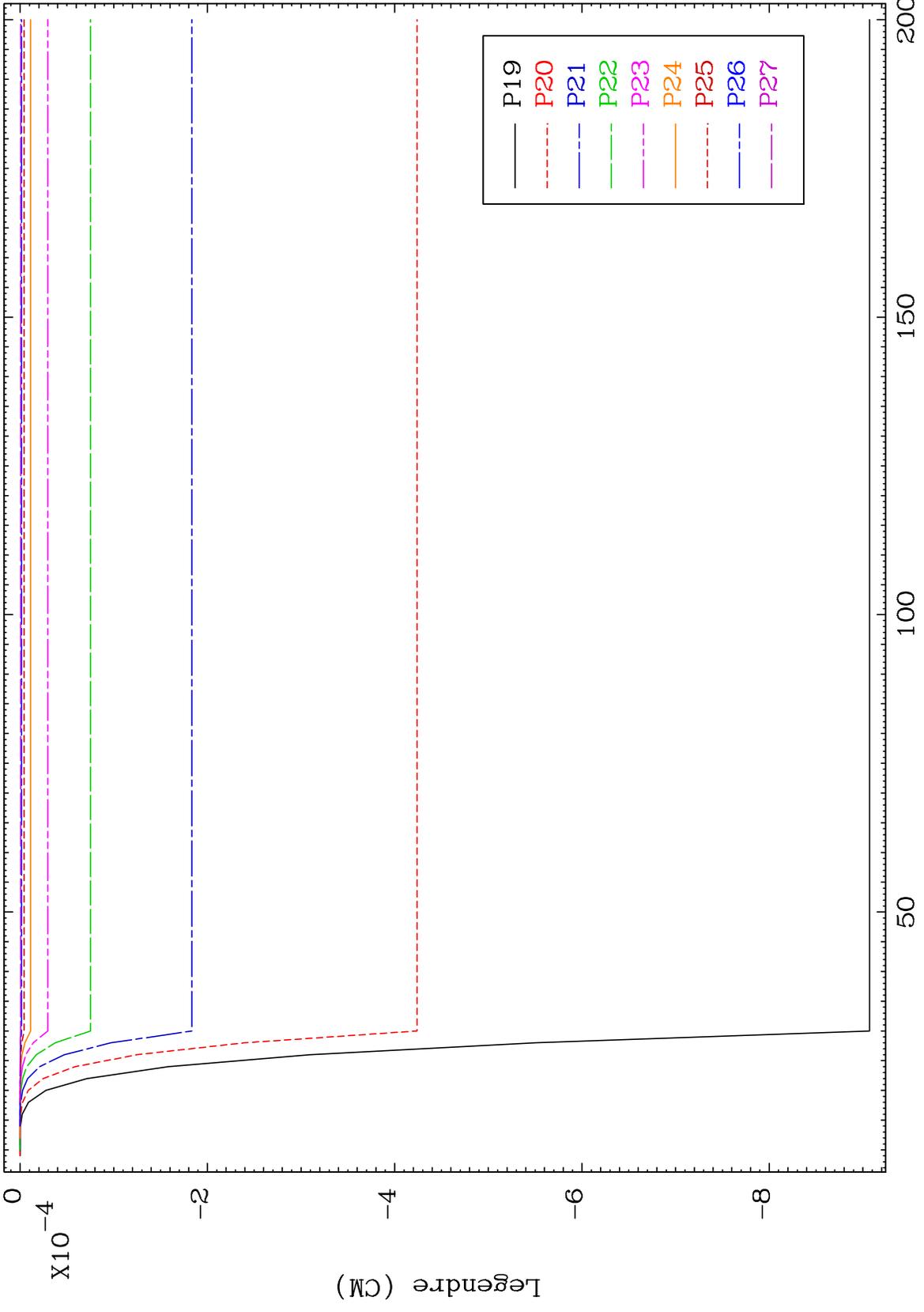
34-Se-80

MAT 3443 MT= 72 (n,n') Level Legendre Coefficients 34-Se-80



95 50 100 150 200 Incident Energy (MeV) 34-Se-80

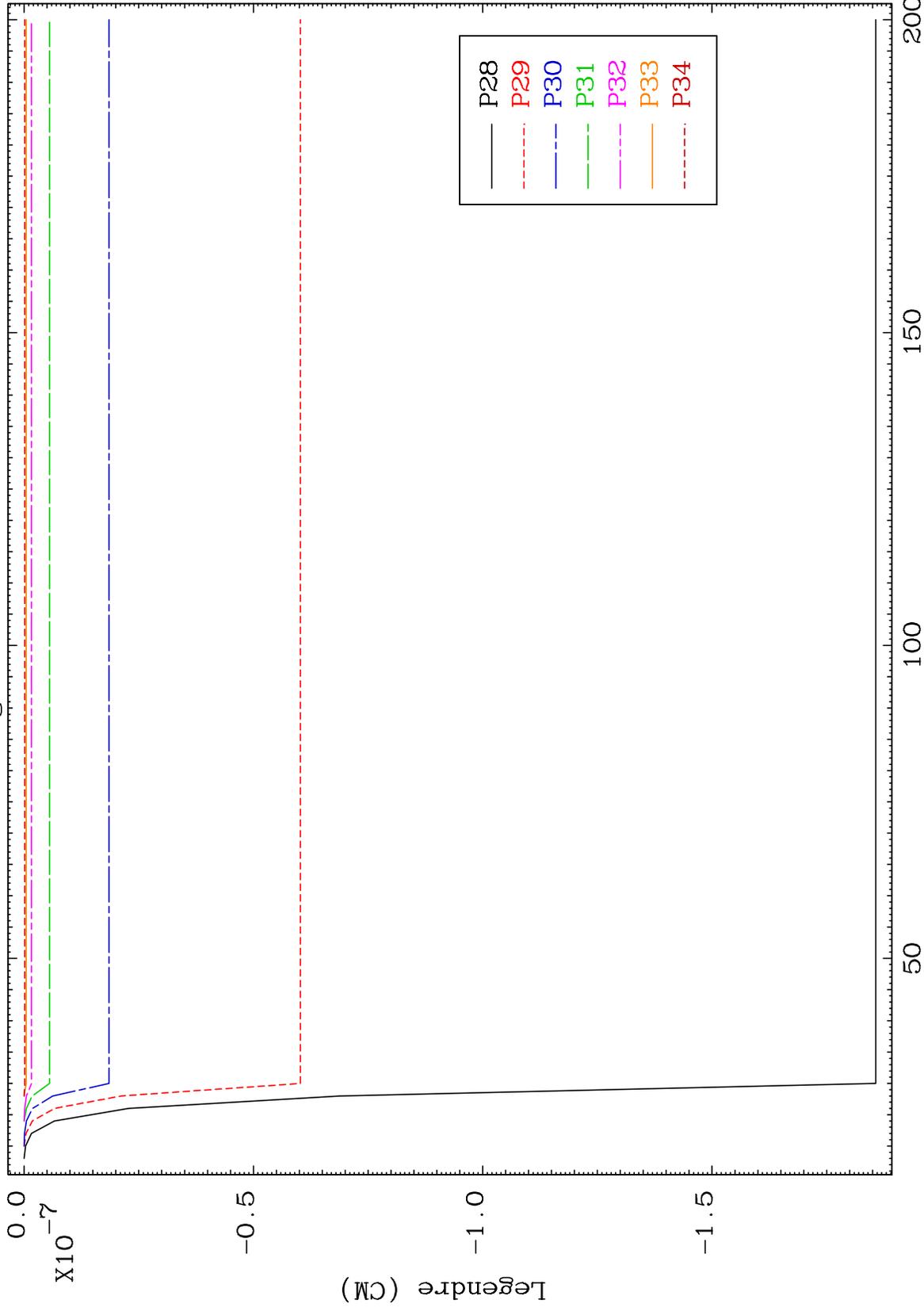
MAT 3443 MT= 72 (n,n') Level Legendre Coefficients 34-Se-80



MAT 3443

MT= 72 (n,n') Level  
Legendre Coefficients

34-Se-80



34-Se-80

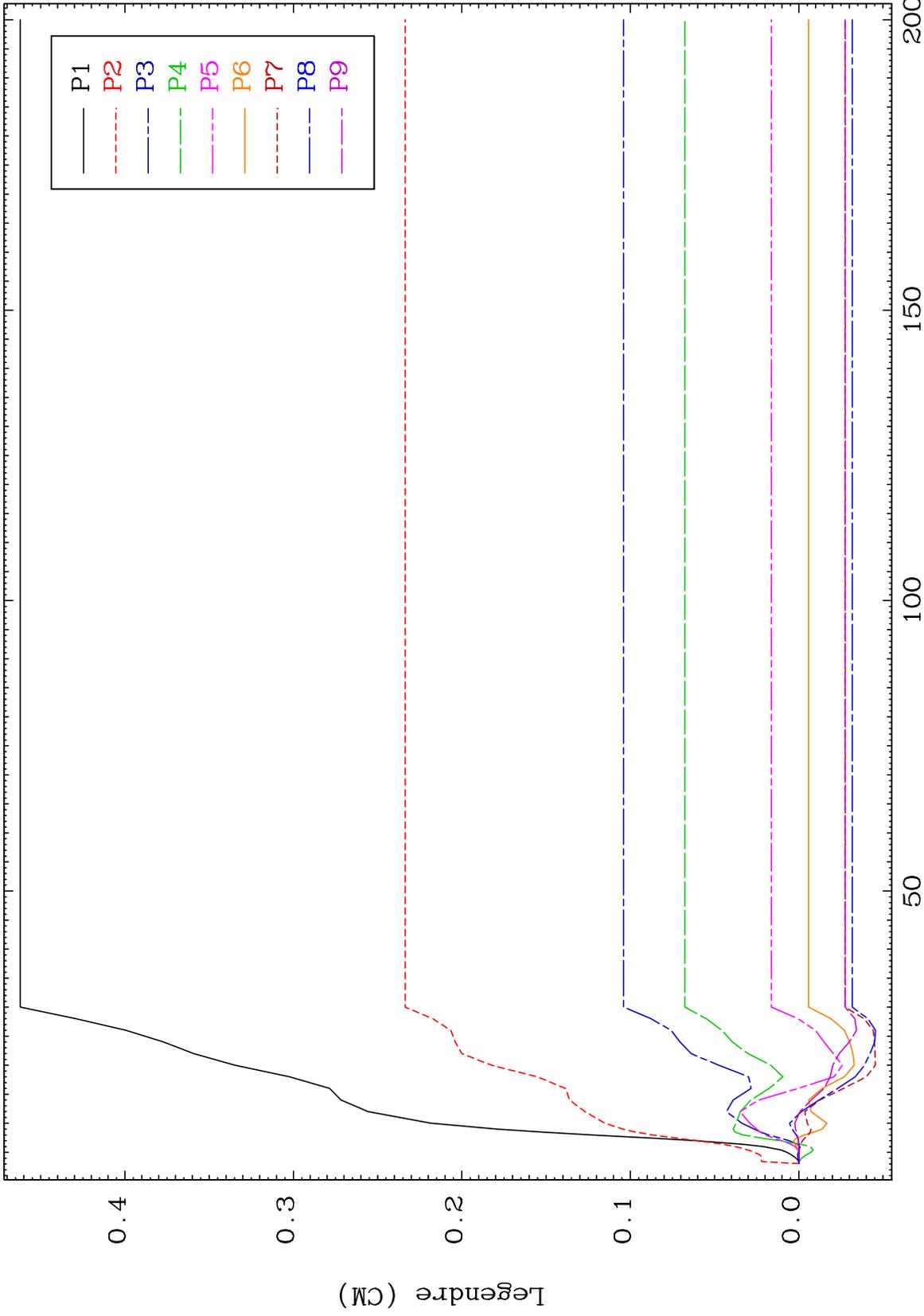
Incident Energy (MeV)

97

MAT 3443

MT= 73 (n,n') Level  
Legendre Coefficients

34-Se-80



98

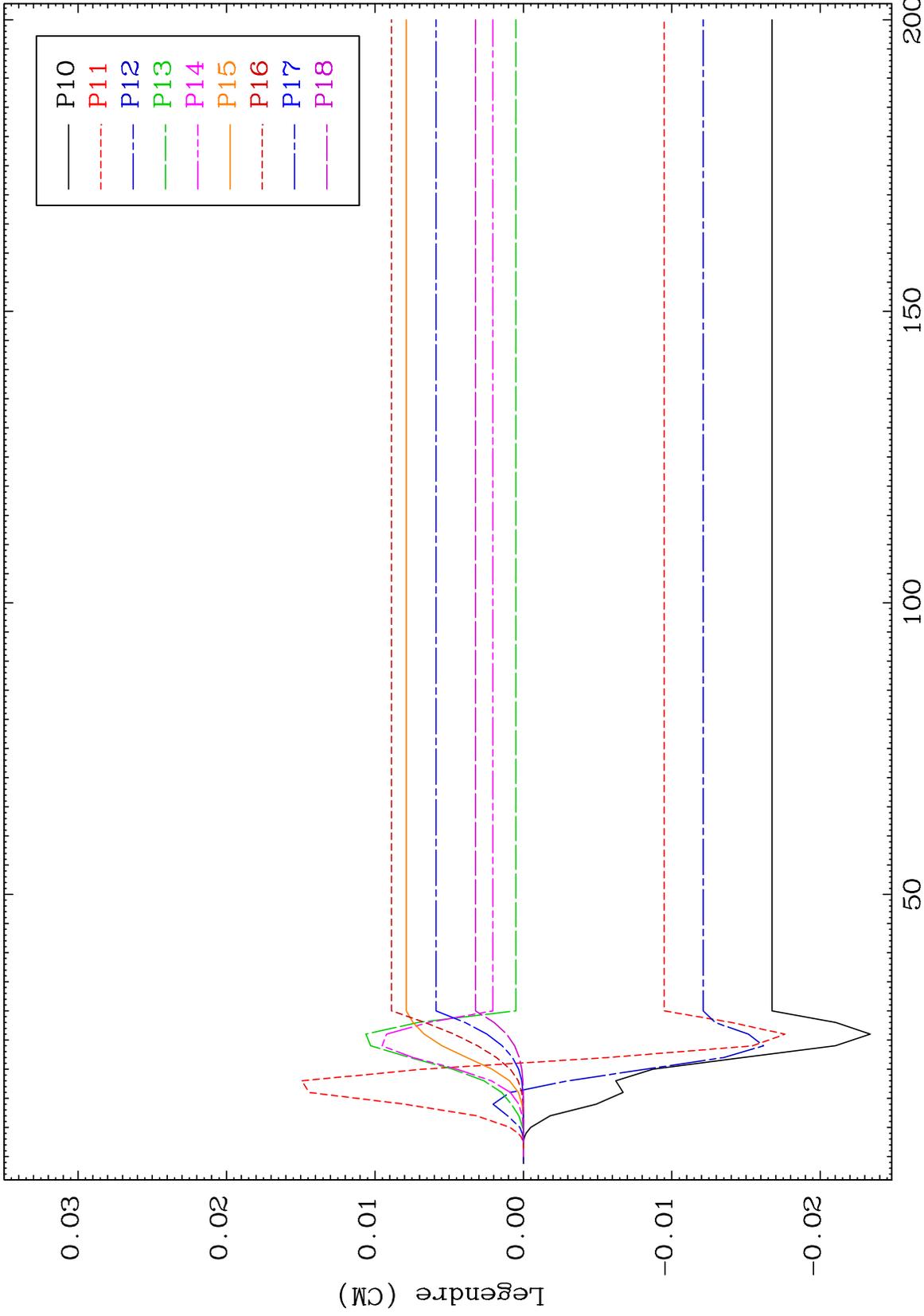
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 73 (n,n') Level  
Legendre Coefficients

34-Se-80



99

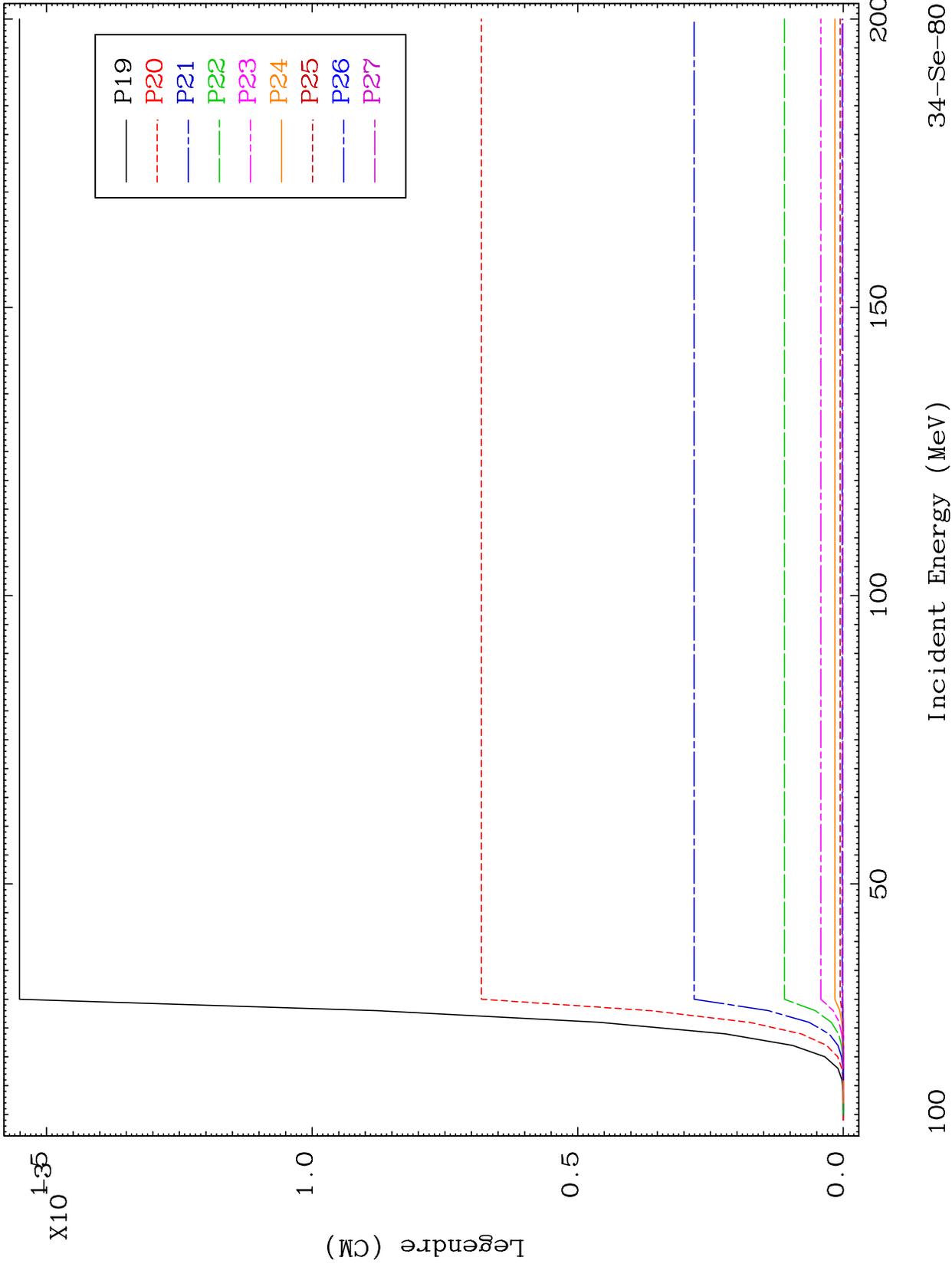
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 73 (n,n') Level  
Legendre Coefficients

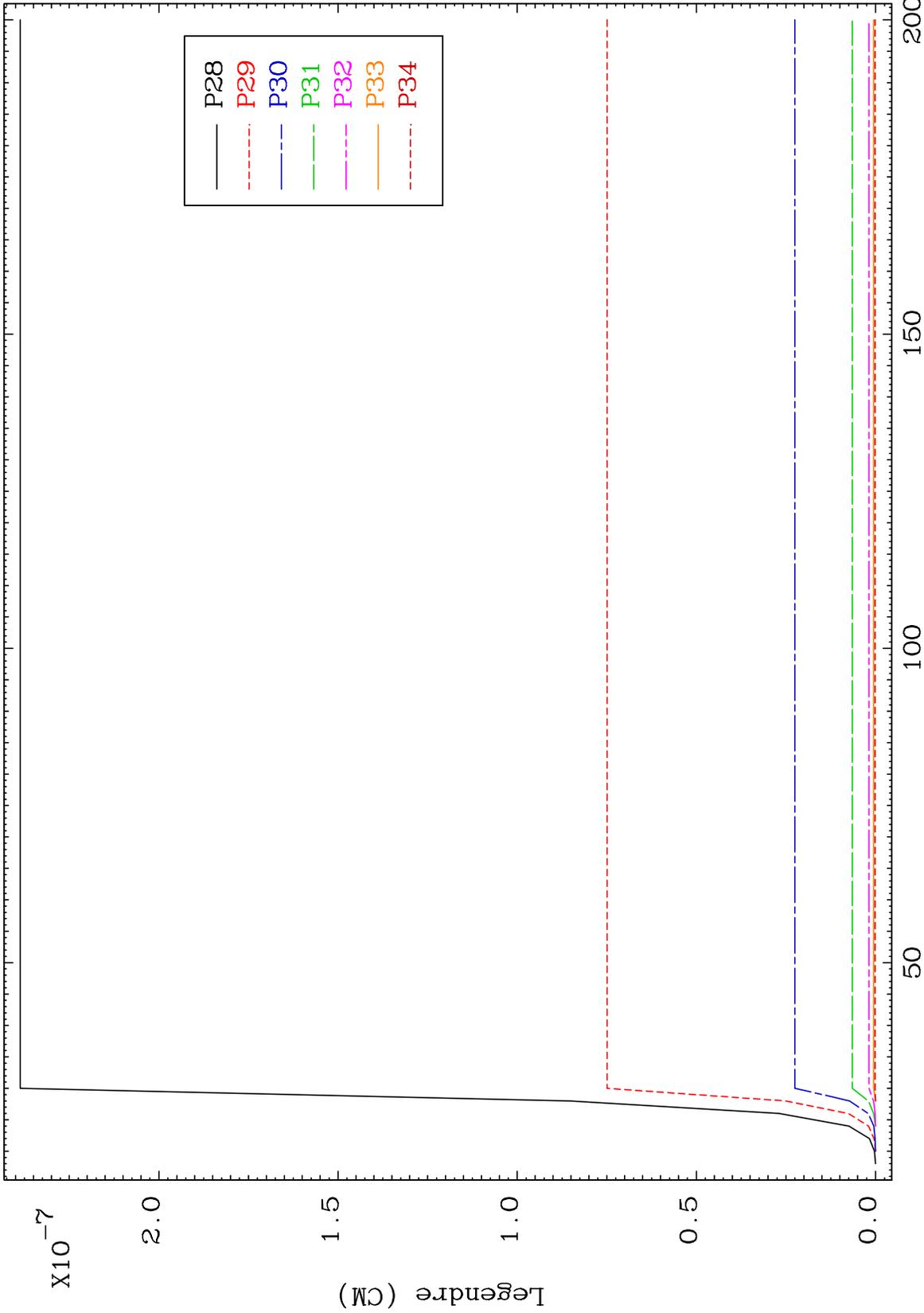
34-Se-80



MAT 3443

MT= 73 (n,n') Level  
Legendre Coefficients

34-Se-80



101

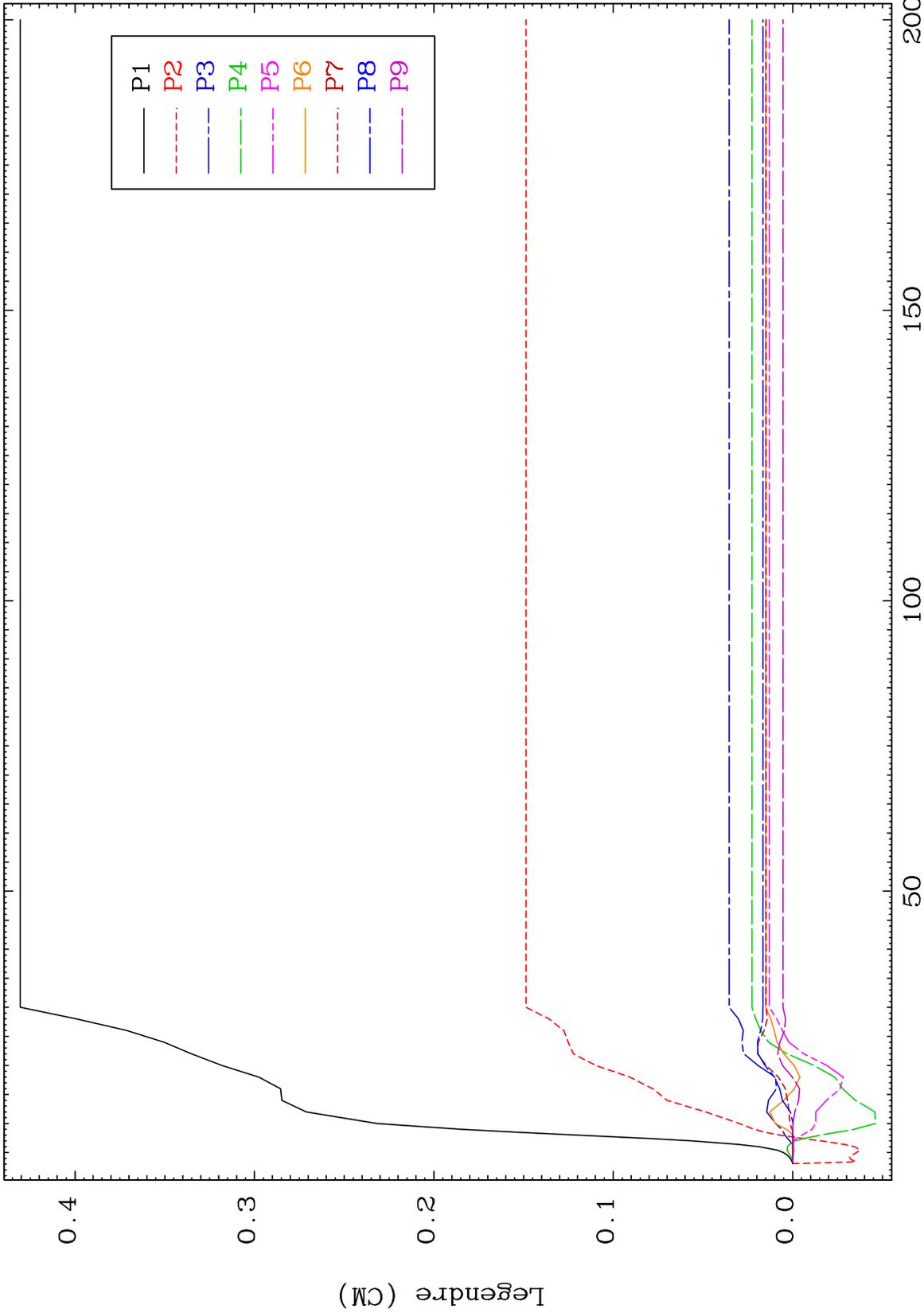
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 74 (n,n') Level  
Legendre Coefficients

34-Se-80



102

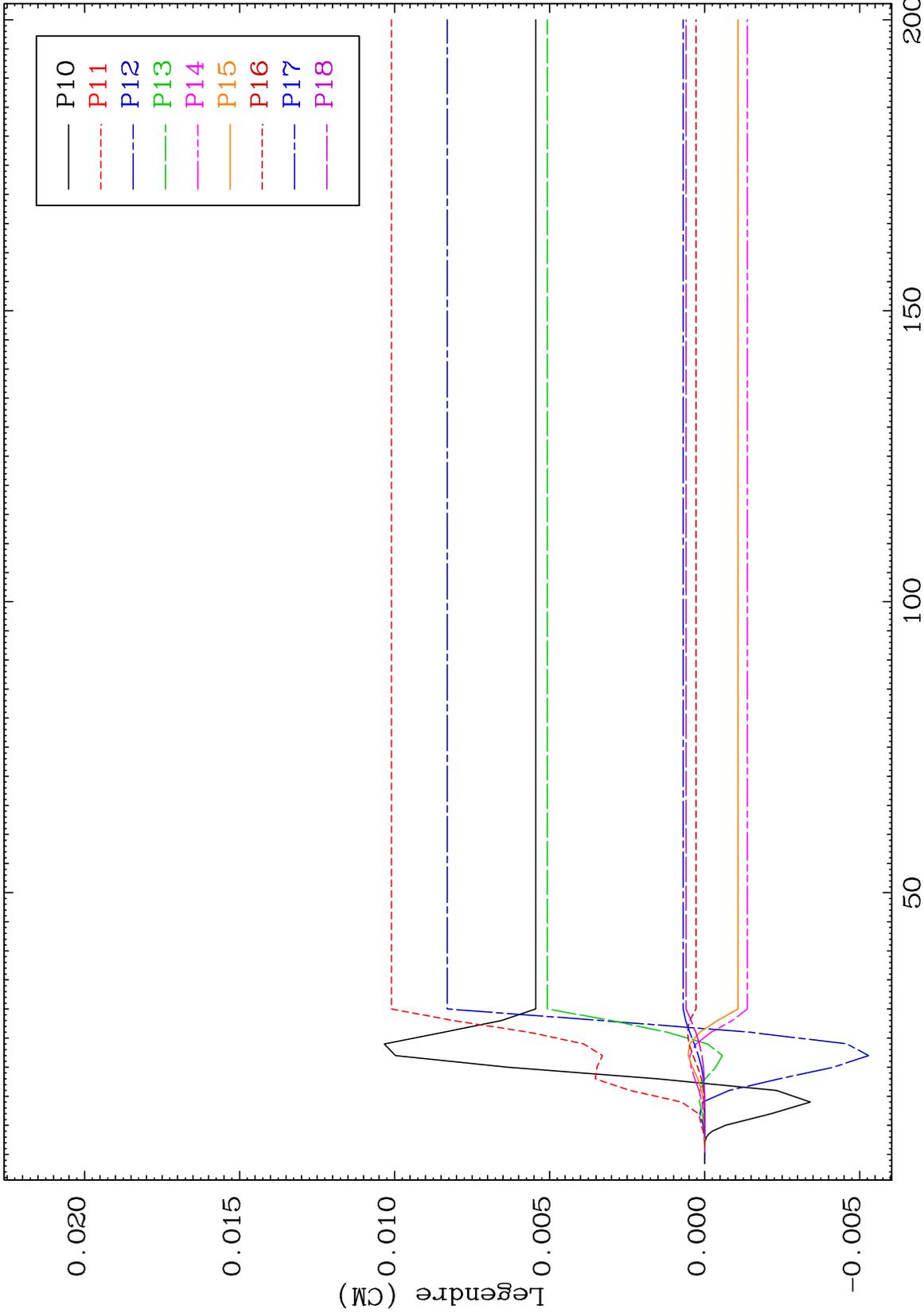
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 74 (n,n') Level  
Legendre Coefficients

<sup>34</sup>Se-80



103

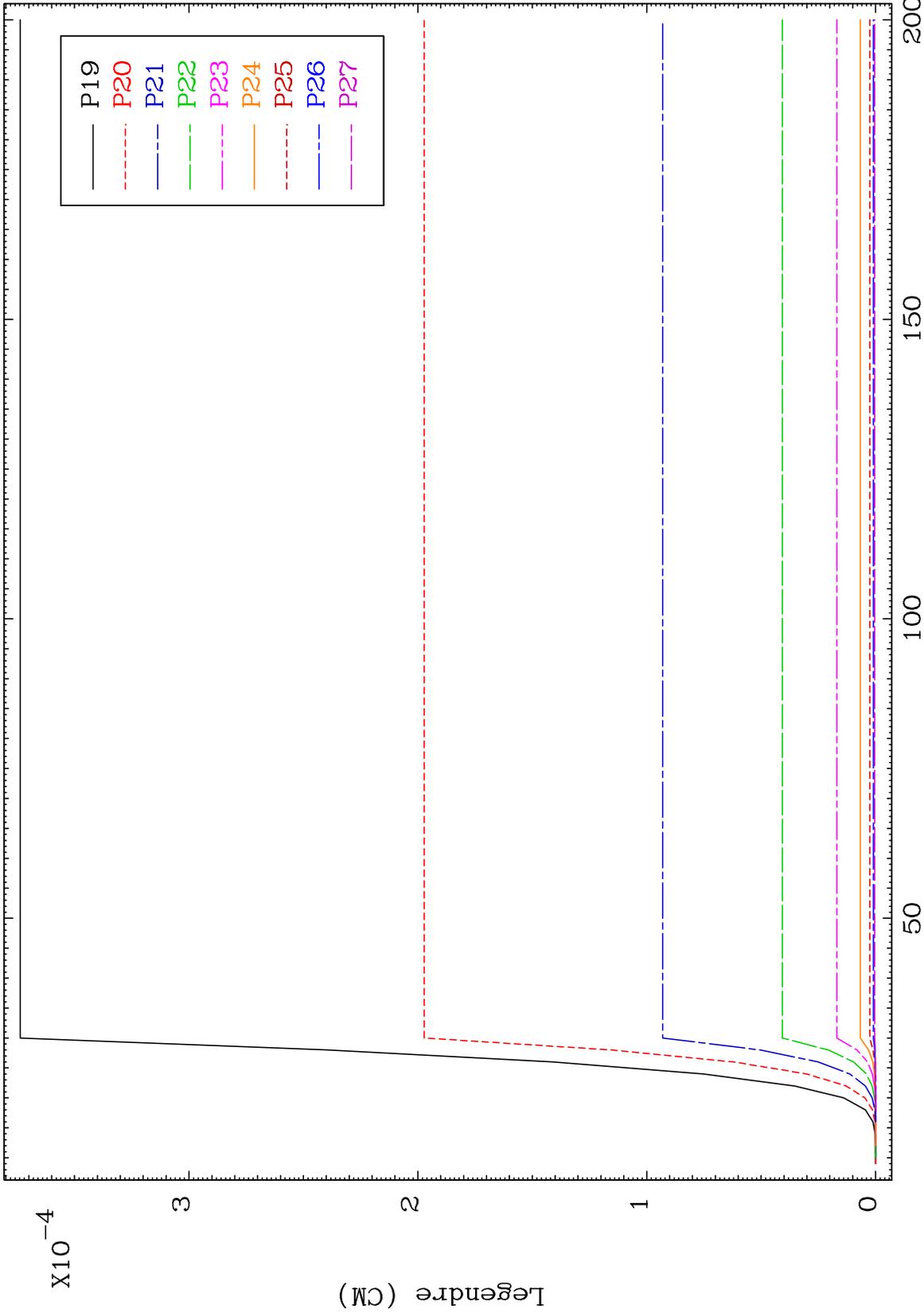
Incident Energy (MeV)

<sup>34</sup>Se-80

MAT 3443

MT= 74 (n,n') Level  
Legendre Coefficients

34-Se-80



104

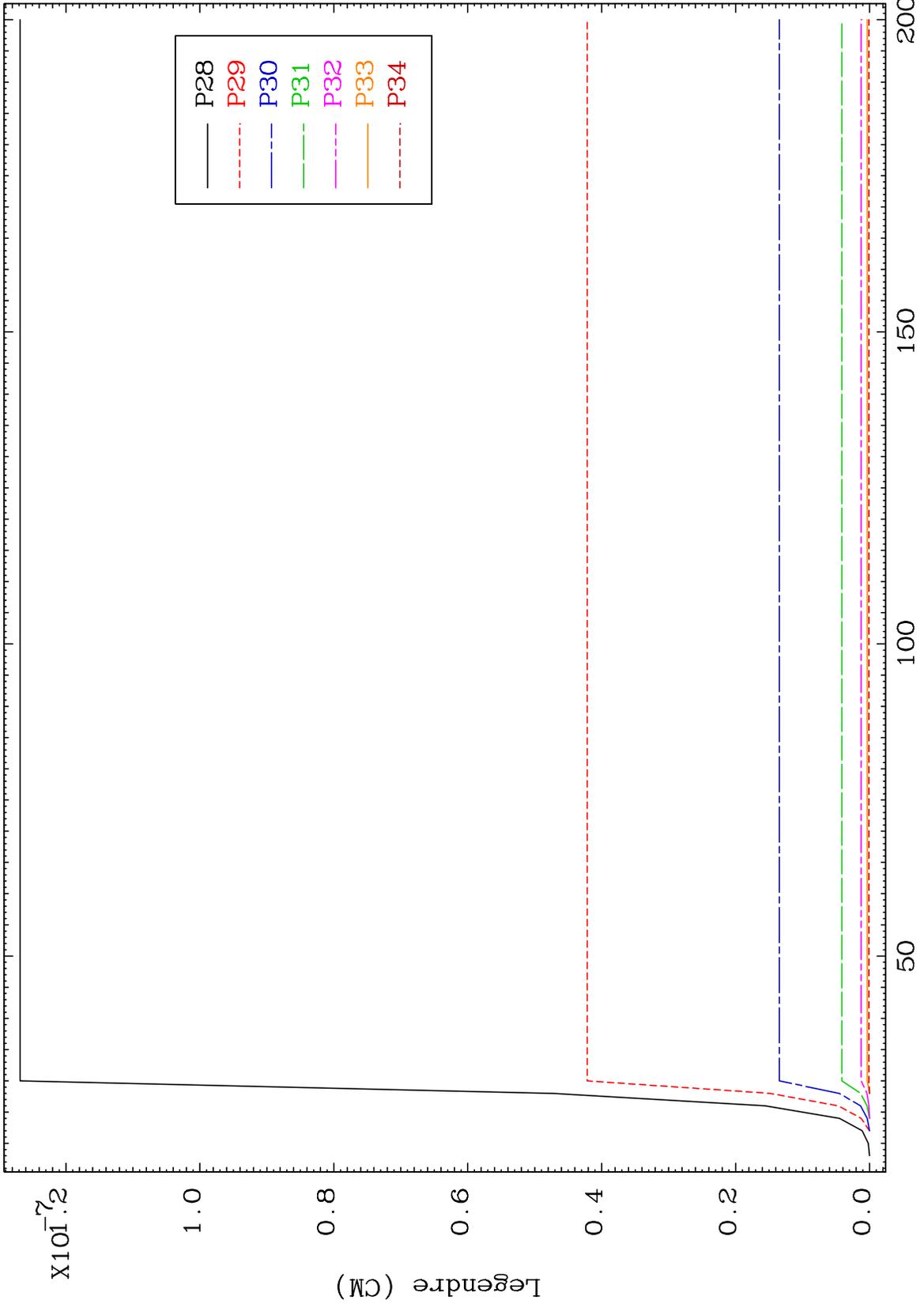
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 74 (n,n') Level  
Legendre Coefficients

34-Se-80



105

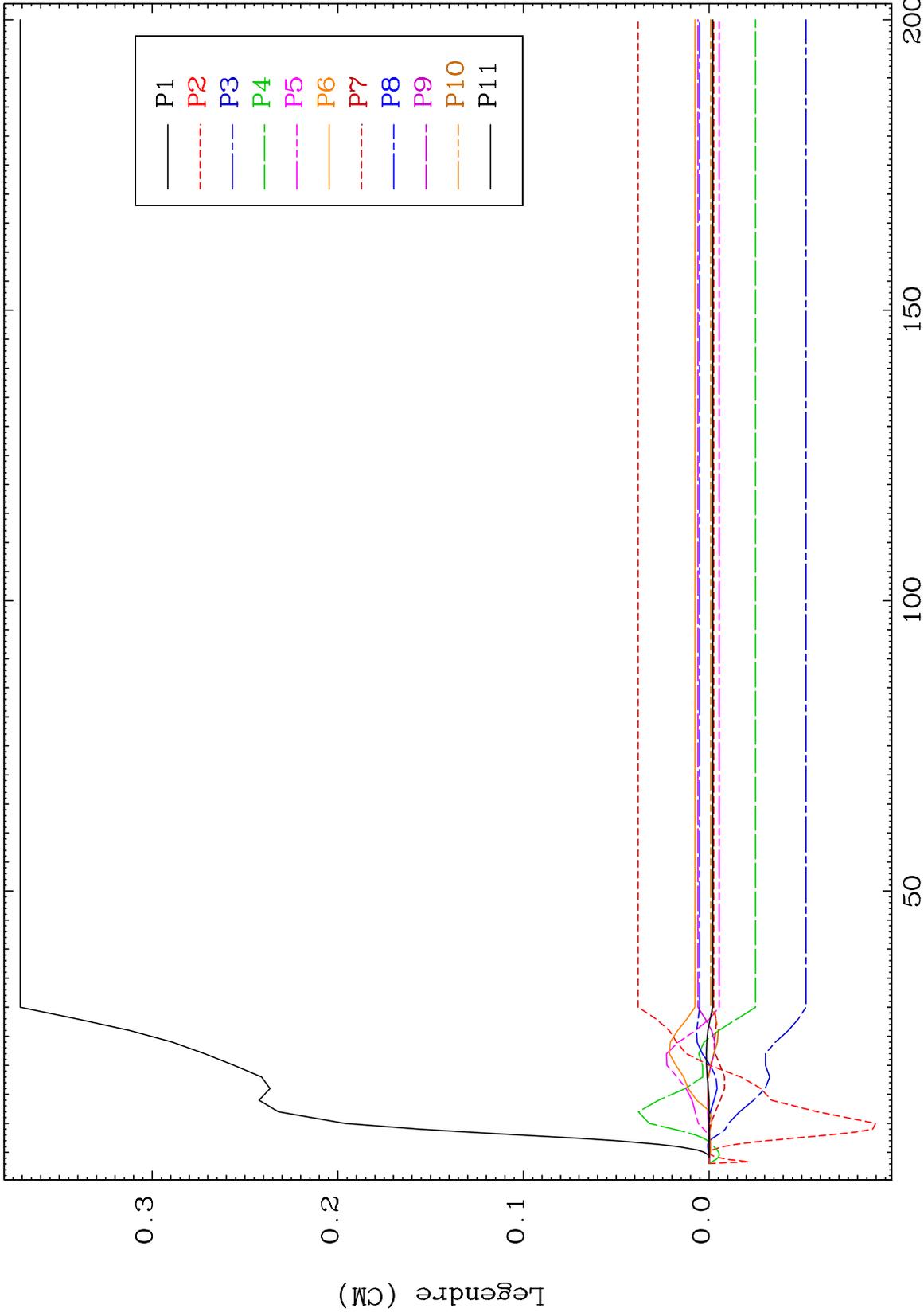
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 75 (n,n') Level  
Legendre Coefficients

34-Se-80



106

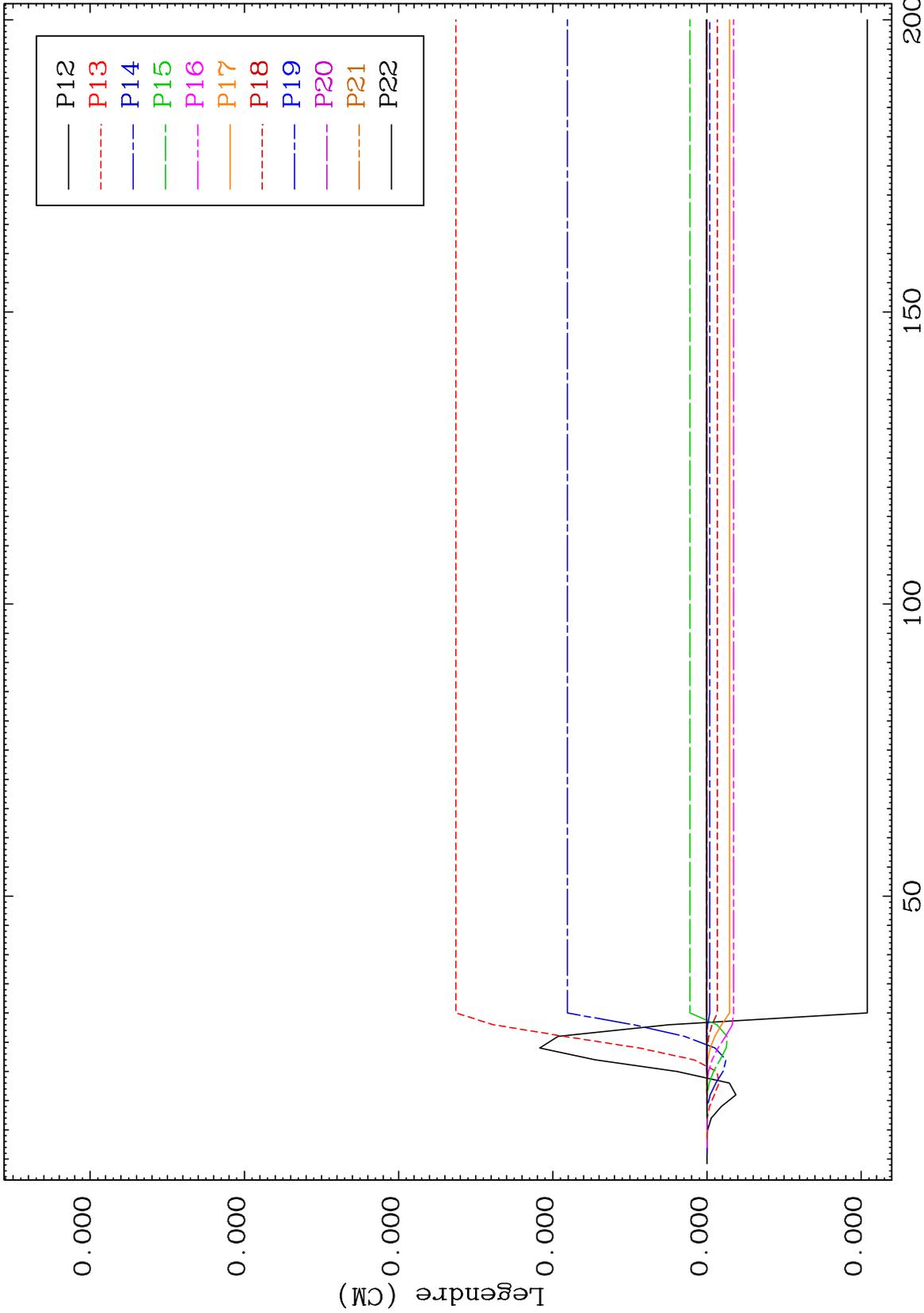
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 75 (n,n') Level  
Legendre Coefficients

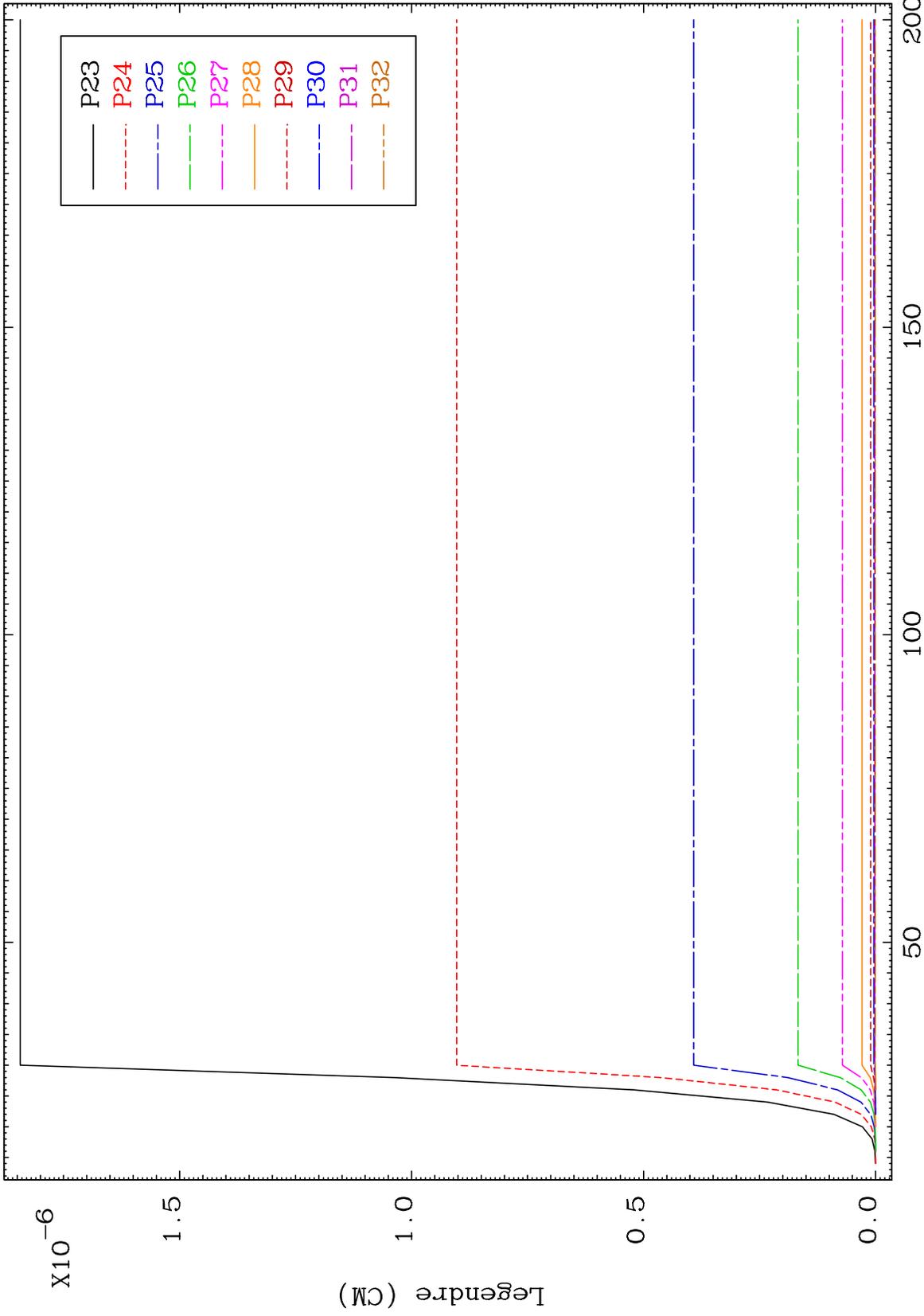
34-Se-80



MAT 3443

MT= 75 (n,n') Level  
Legendre Coefficients

34-Se-80

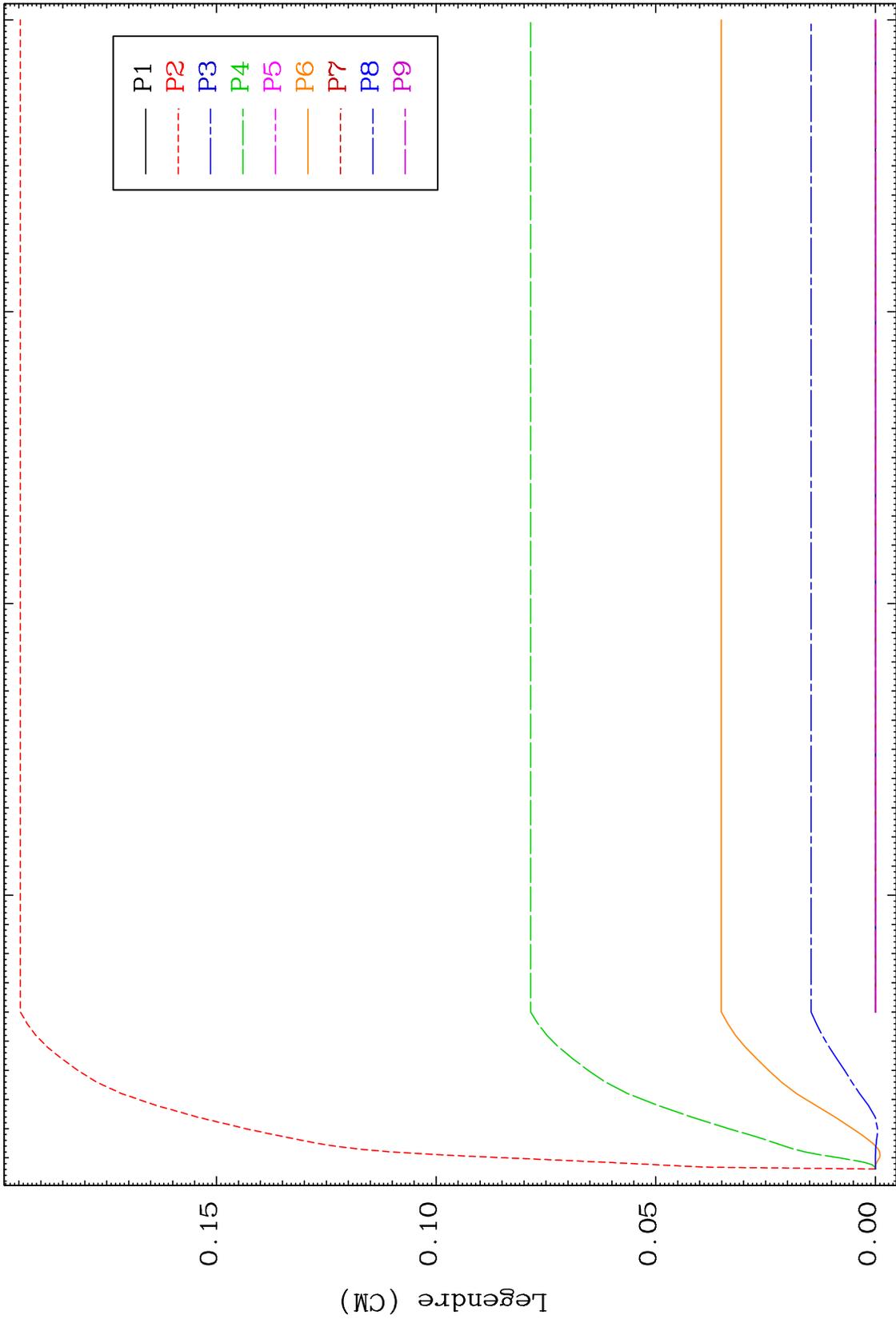


108

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 76 (n,n') Level Legendre Coefficients 34-Se-80

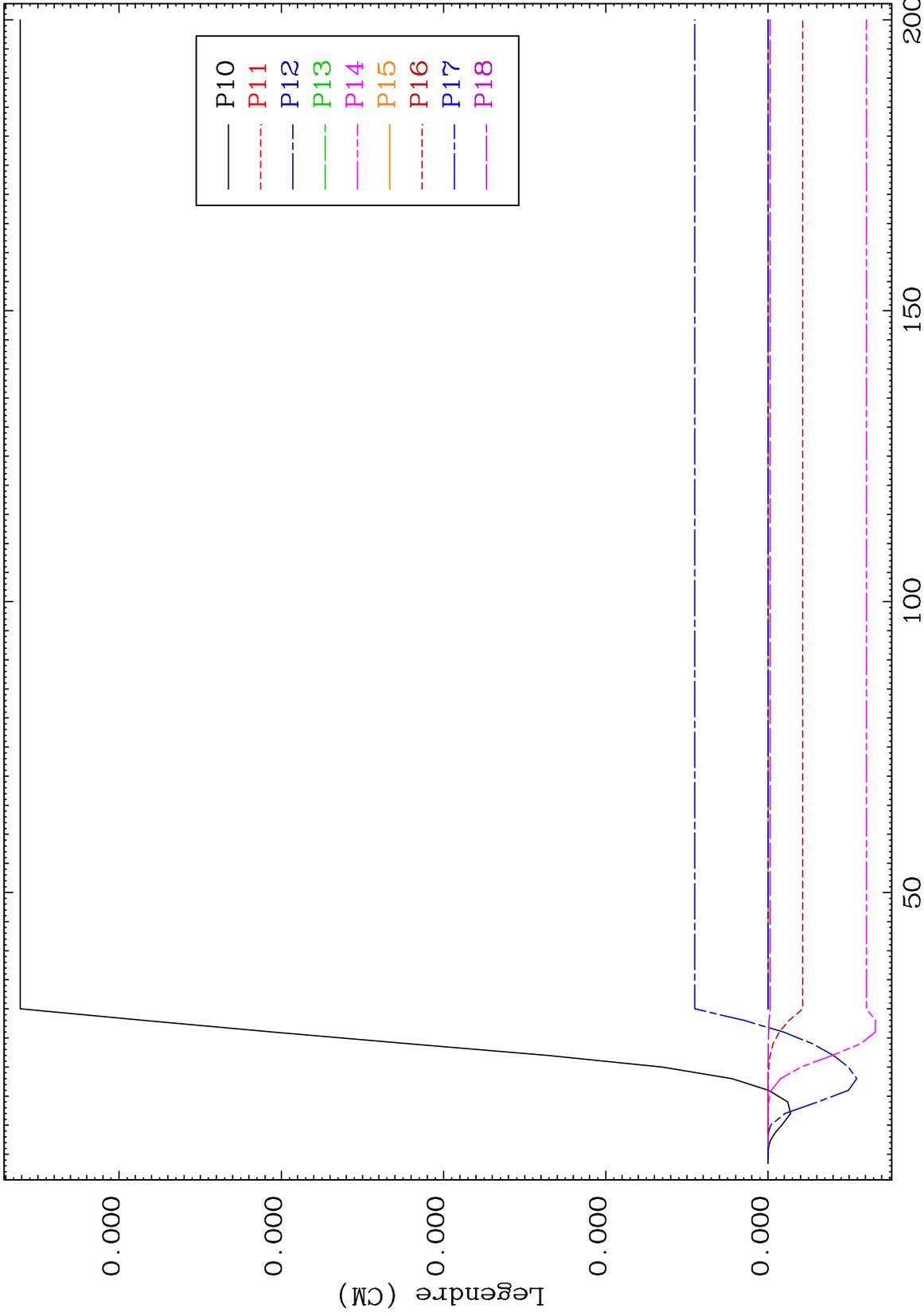


109 Incident Energy (MeV) 34-Se-80

MAT 3443

MT= 76 (n,n') Level  
Legendre Coefficients

34-Se-80

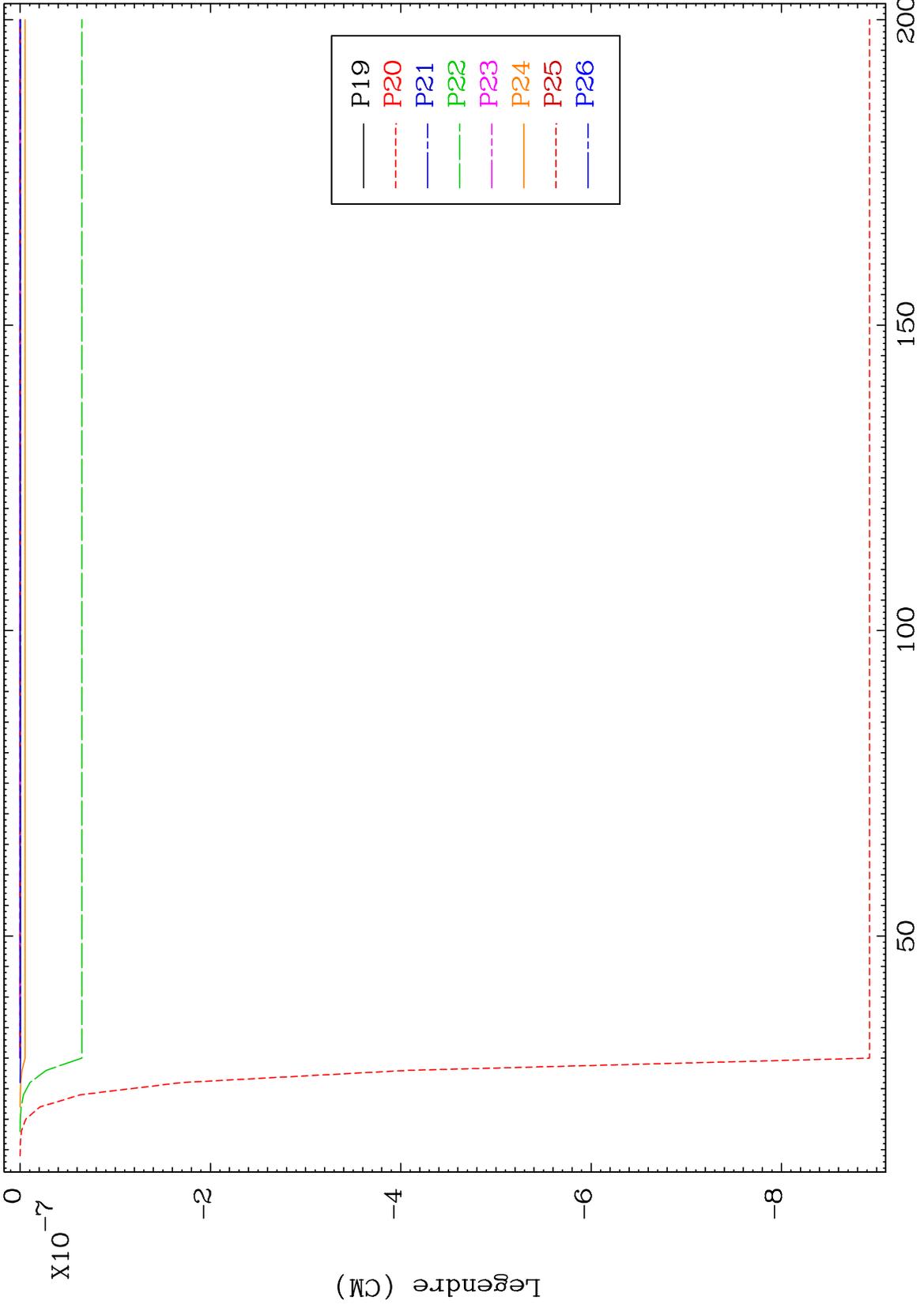


110

Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 76 (n,n') Level Legendre Coefficients 34-Se-80

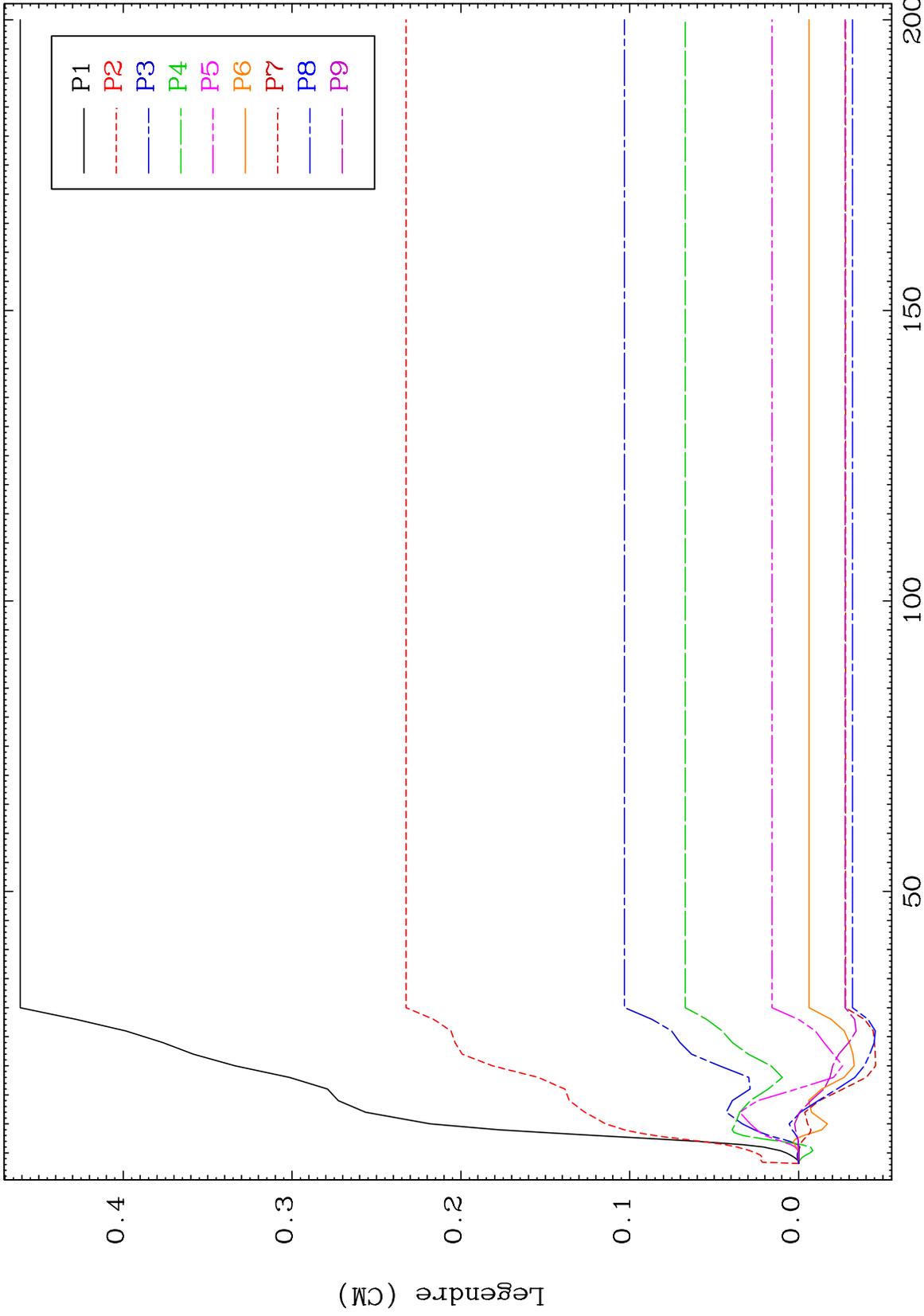


111 34-Se-80

MAT 3443

MT= 77 (n,n') Level  
Legendre Coefficients

34-Se-80



112

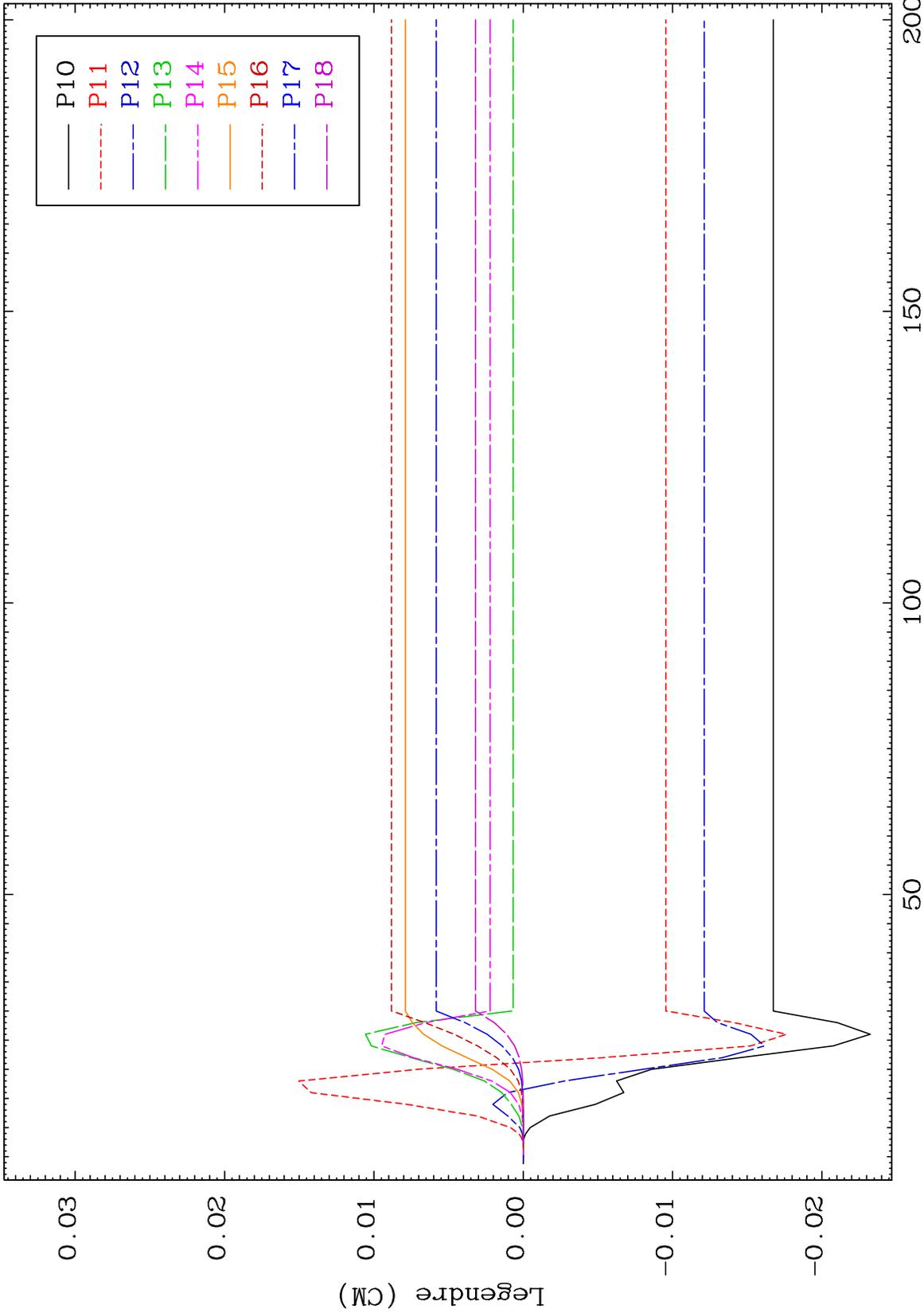
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 77 (n,n') Level  
Legendre Coefficients

34-Se-80



113

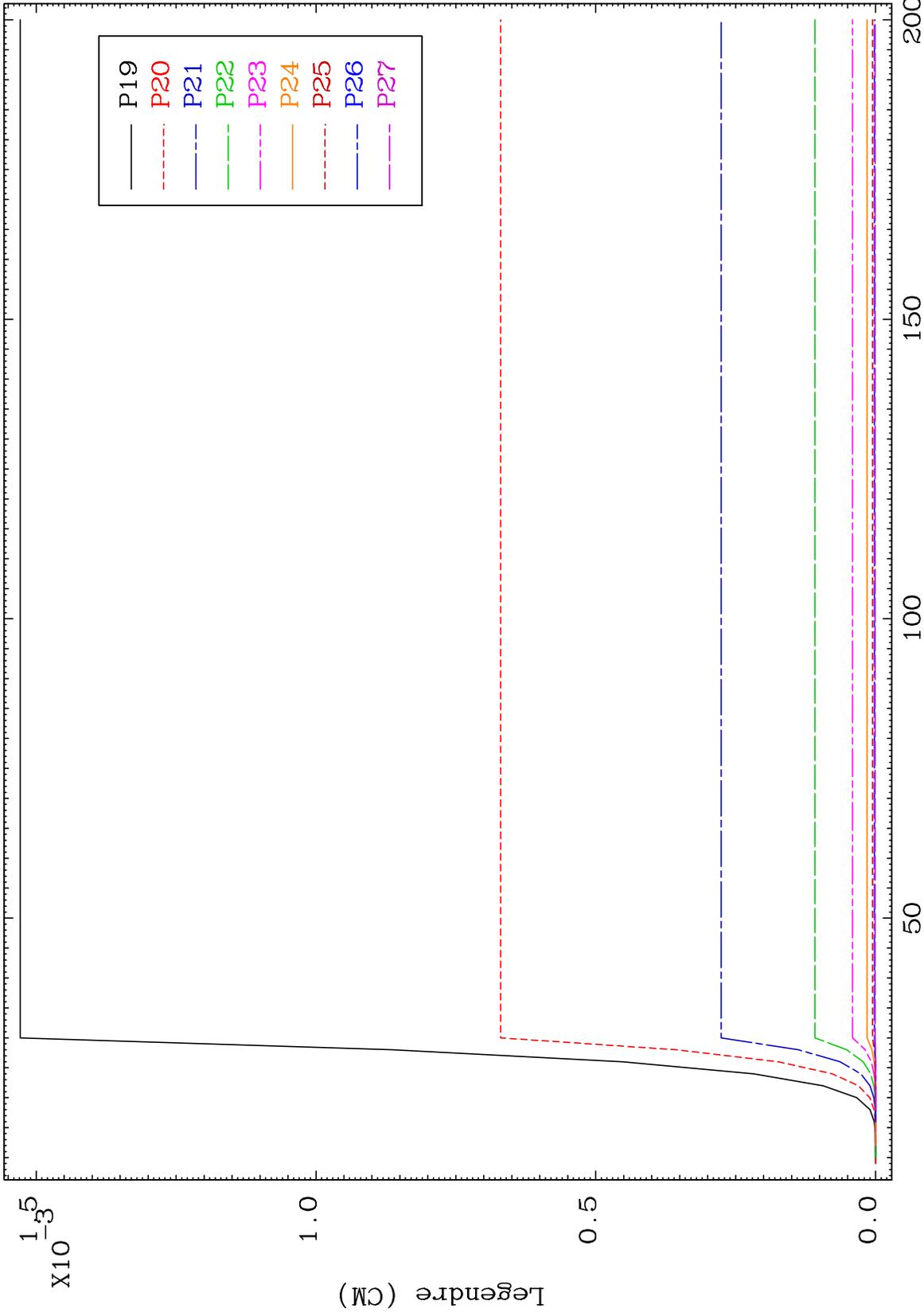
Incident Energy (MeV)

34-Se-80

MAT 3443

MT= 77 (n,n') Level  
Legendre Coefficients

34-Se-80



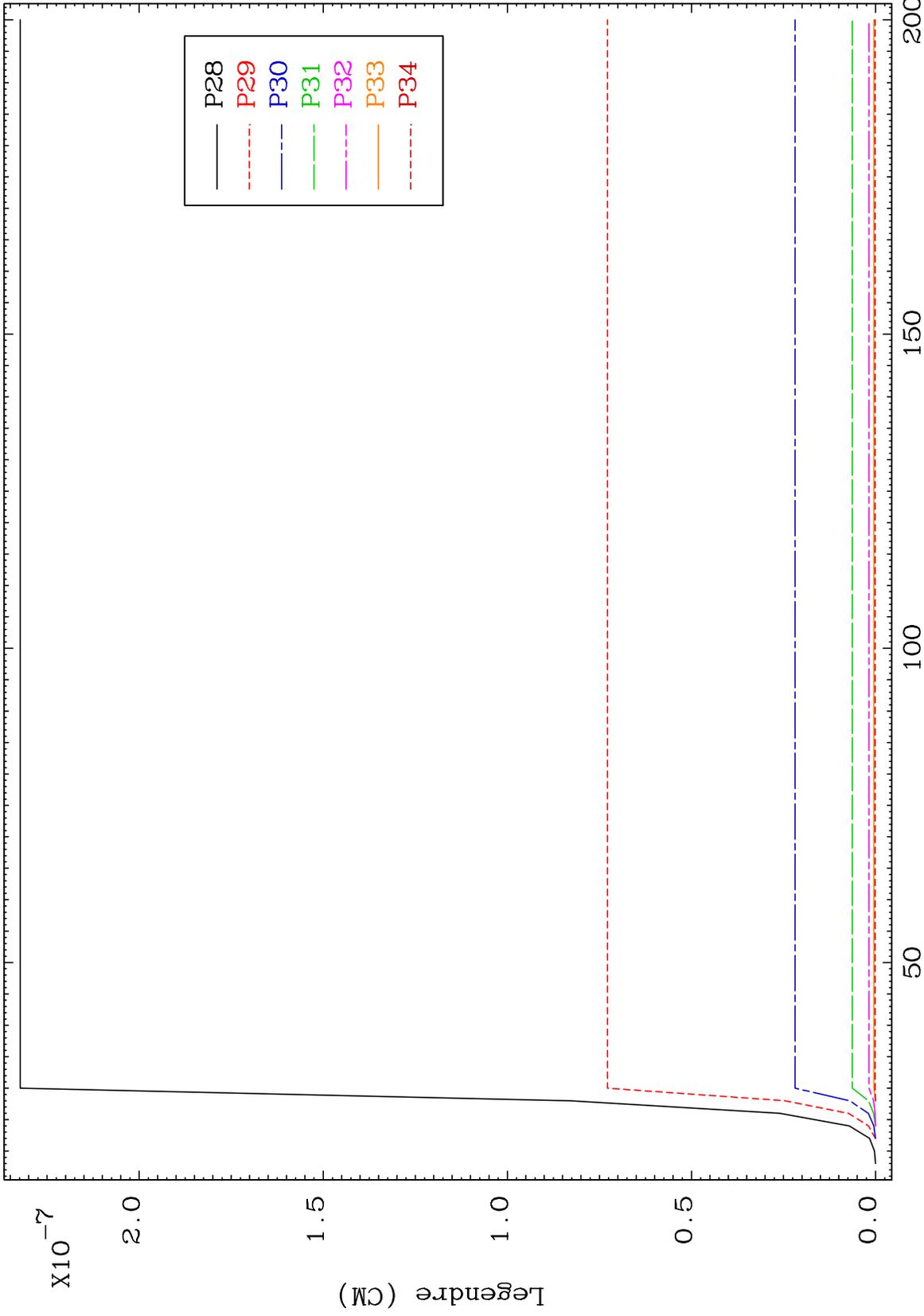
114

34-Se-80

MAT 3443

MT= 77 (n,n') Level  
Legendre Coefficients

34-Se-80

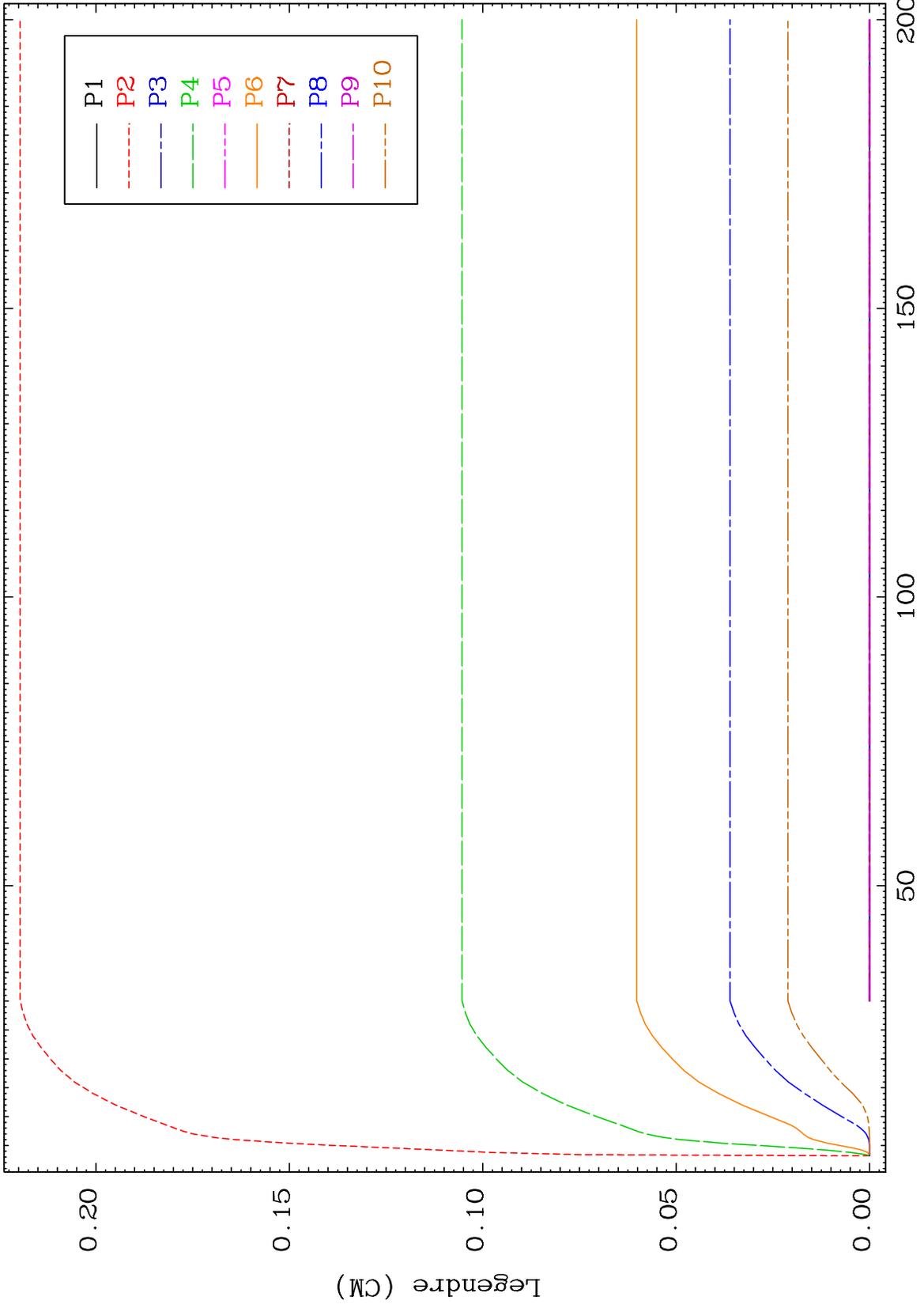


115

Incident Energy (MeV)

34-Se-80

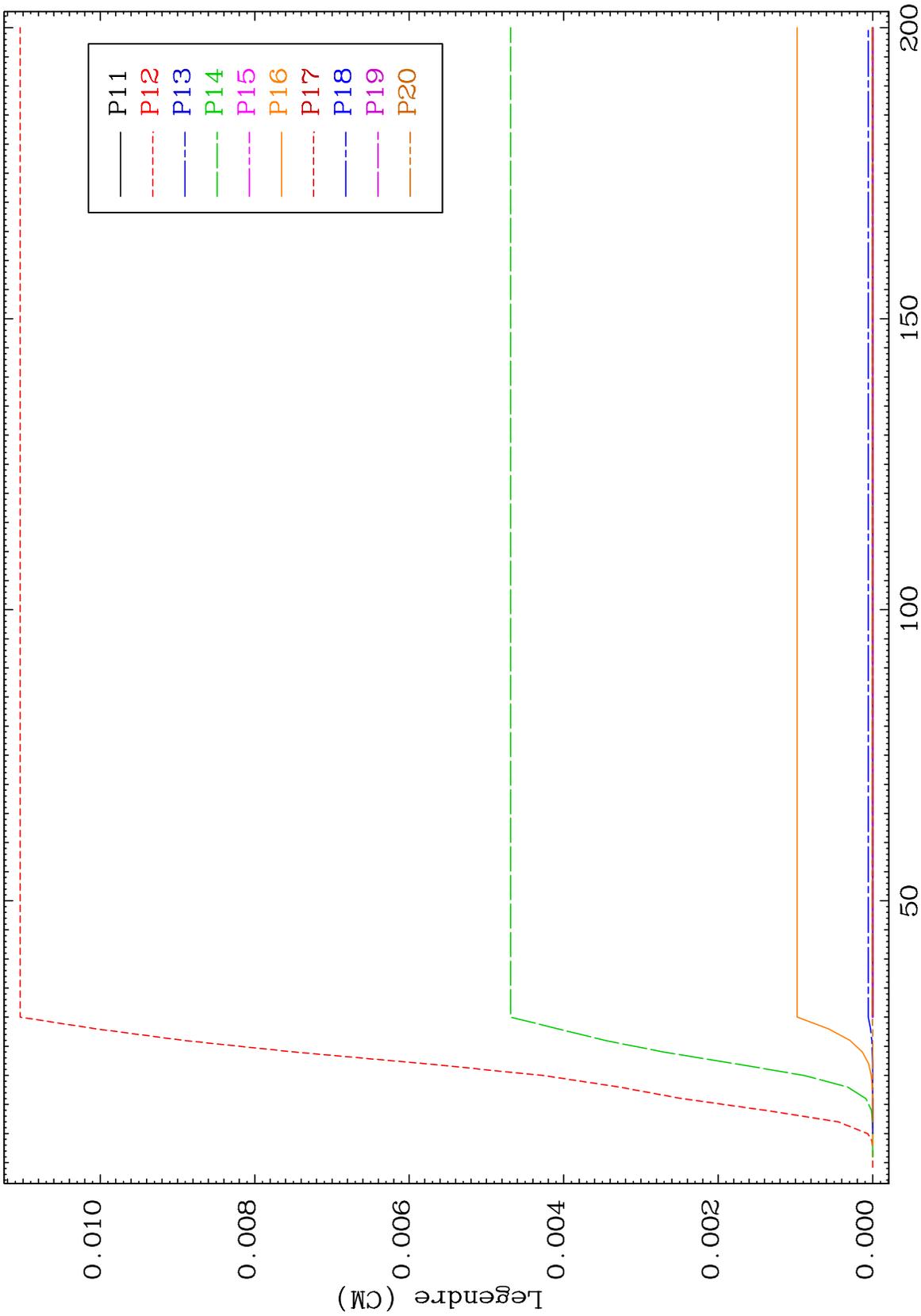
MAT 3443 MT= 78 (n,n') Level Legendre Coefficients 34-Se-80



MAT 3443

MT= 78 (n,n') Level  
Legendre Coefficients

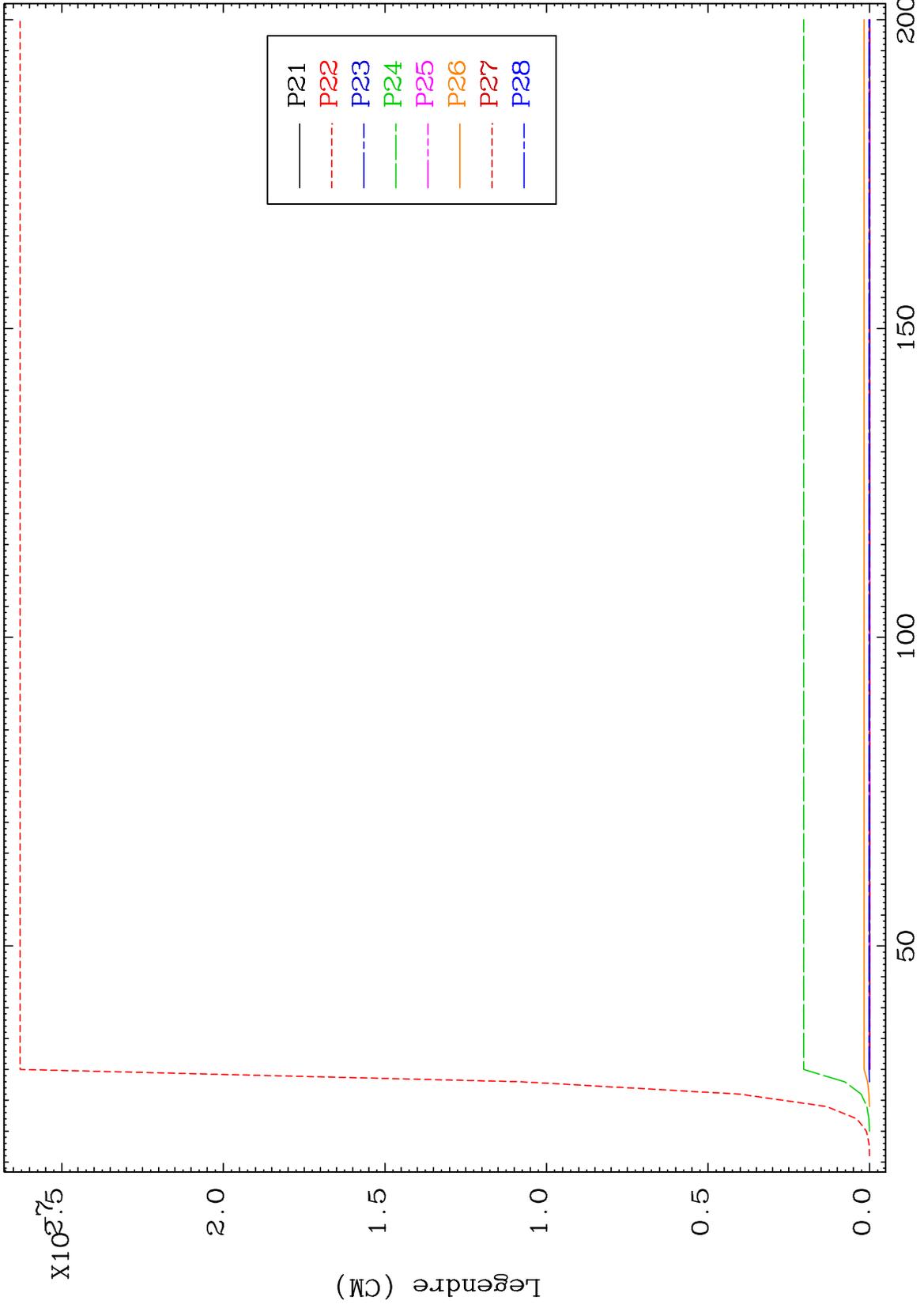
34-Se-80



117

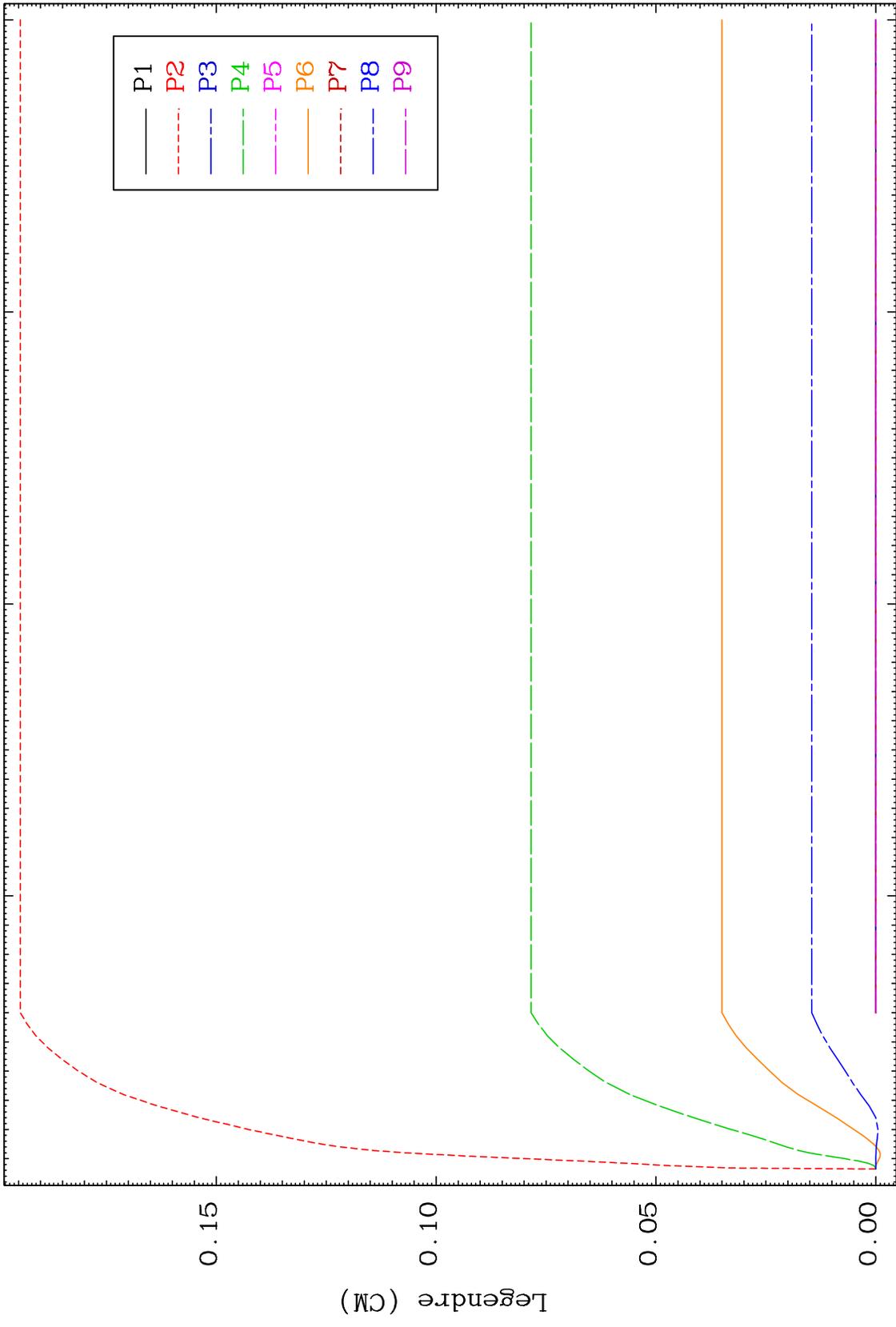
34-Se-80

MAT 3443 MT= 78 (n,n') Level Legendre Coefficients 34-Se-80



118 34-Se-80

MAT 3443 MT= 79 (n,n') Level Legendre Coefficients 34-Se-80

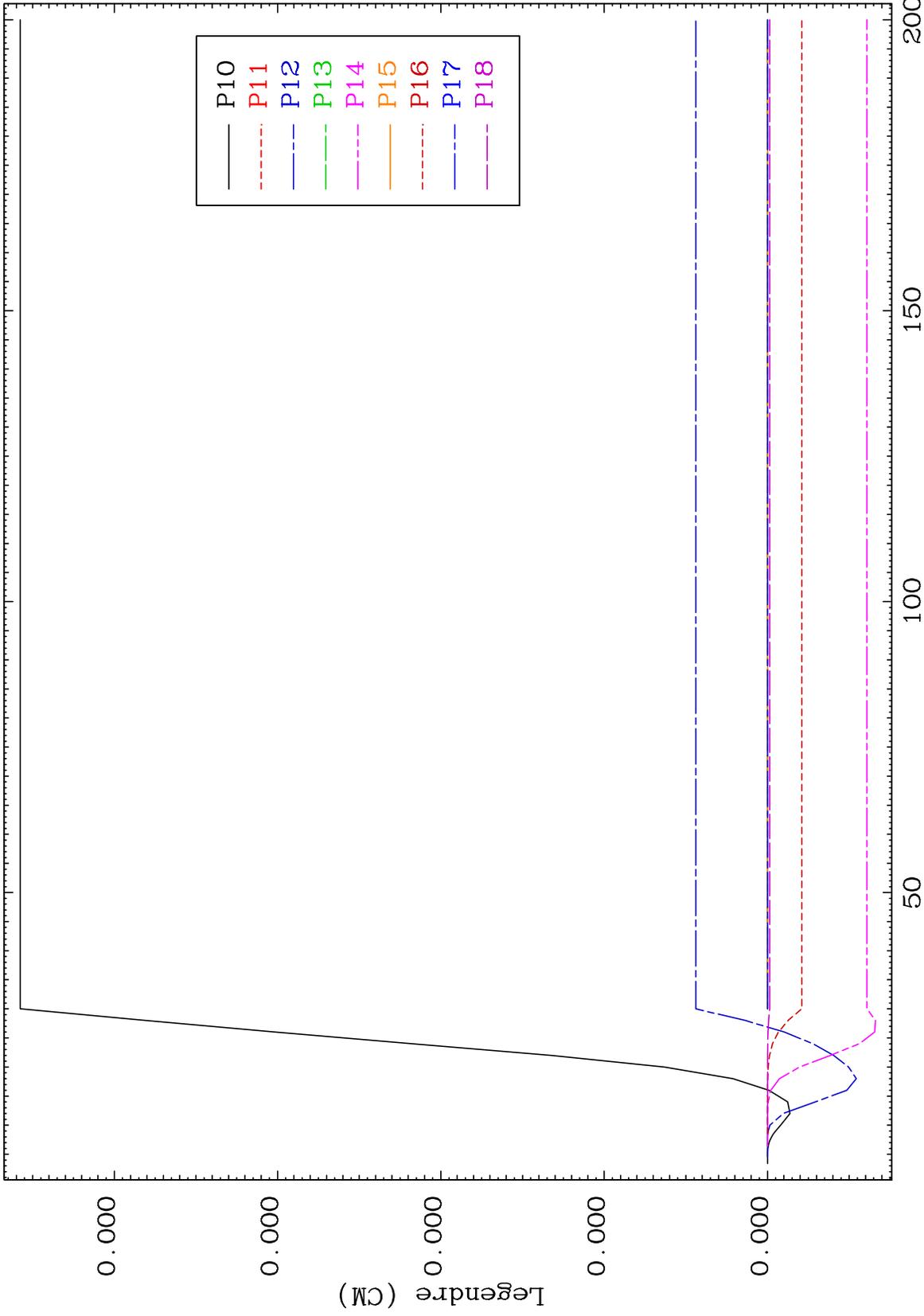


119 50 100 150 200 Incident Energy (MeV) 34-Se-80

MAT 3443

MT= 79 (n,n') Level  
Legendre Coefficients

34-Se-80

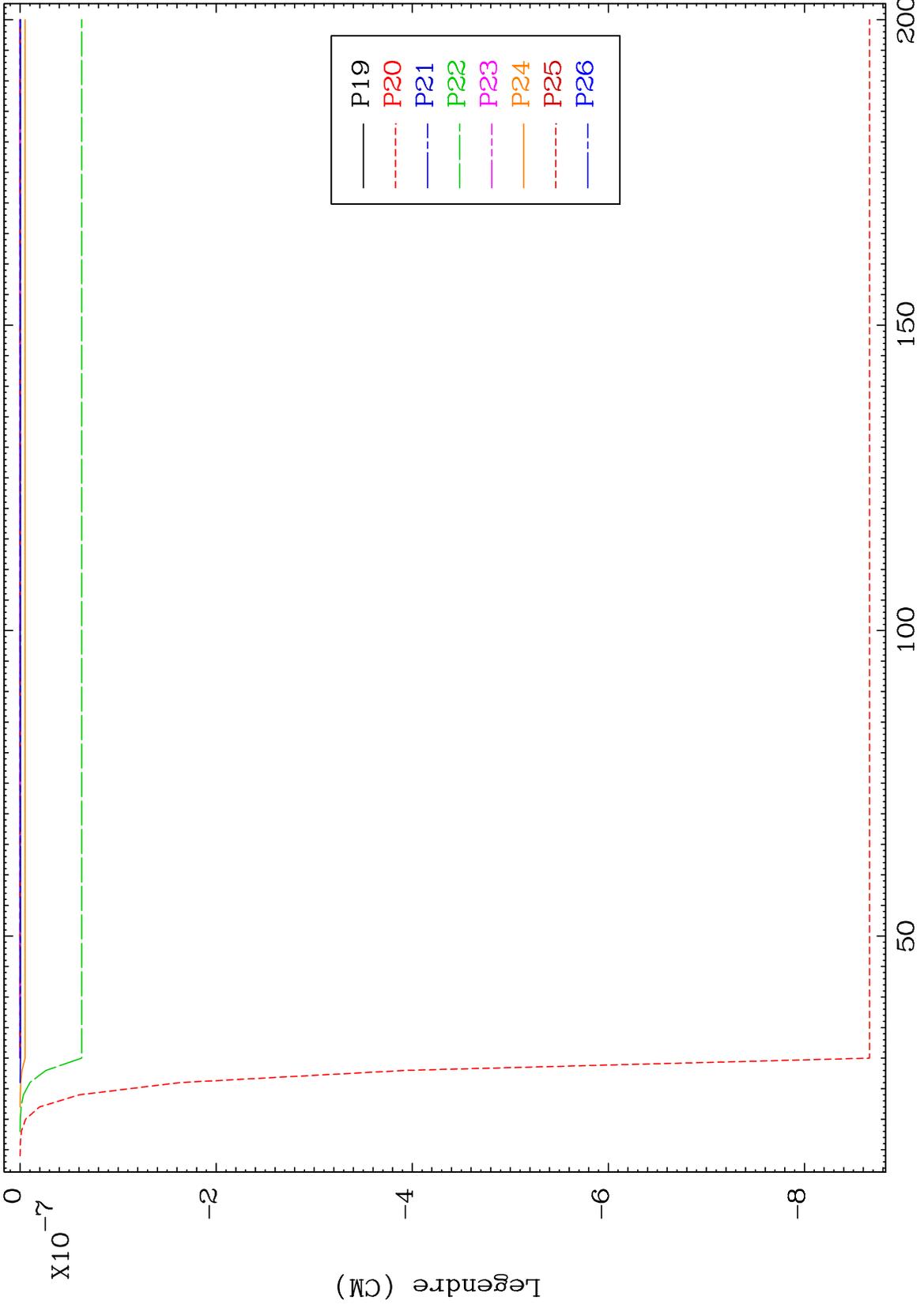


120

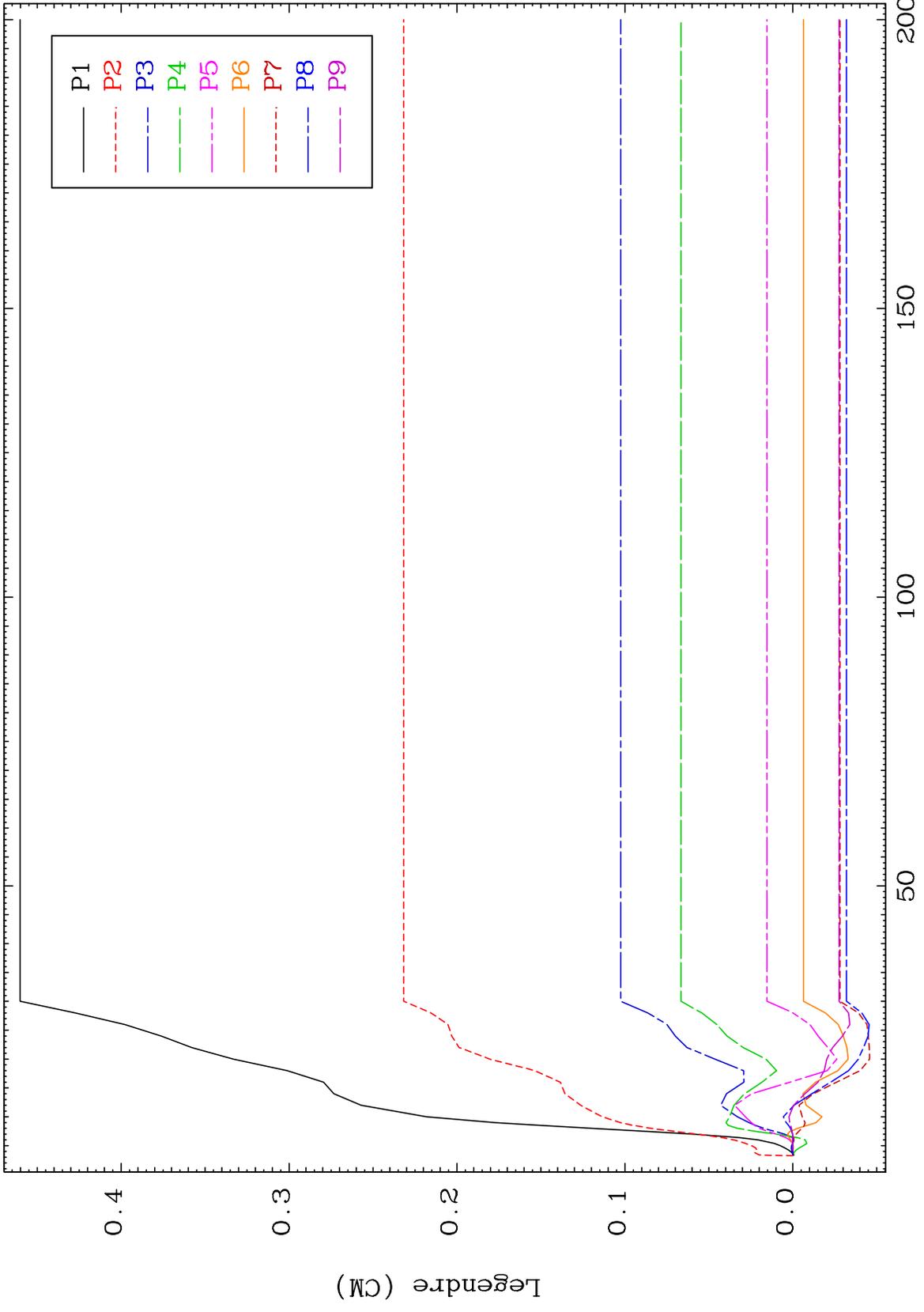
Incident Energy (MeV)

34-Se-80

MAT 3443 MT= 79 (n,n') Level Legendre Coefficients 34-Se-80



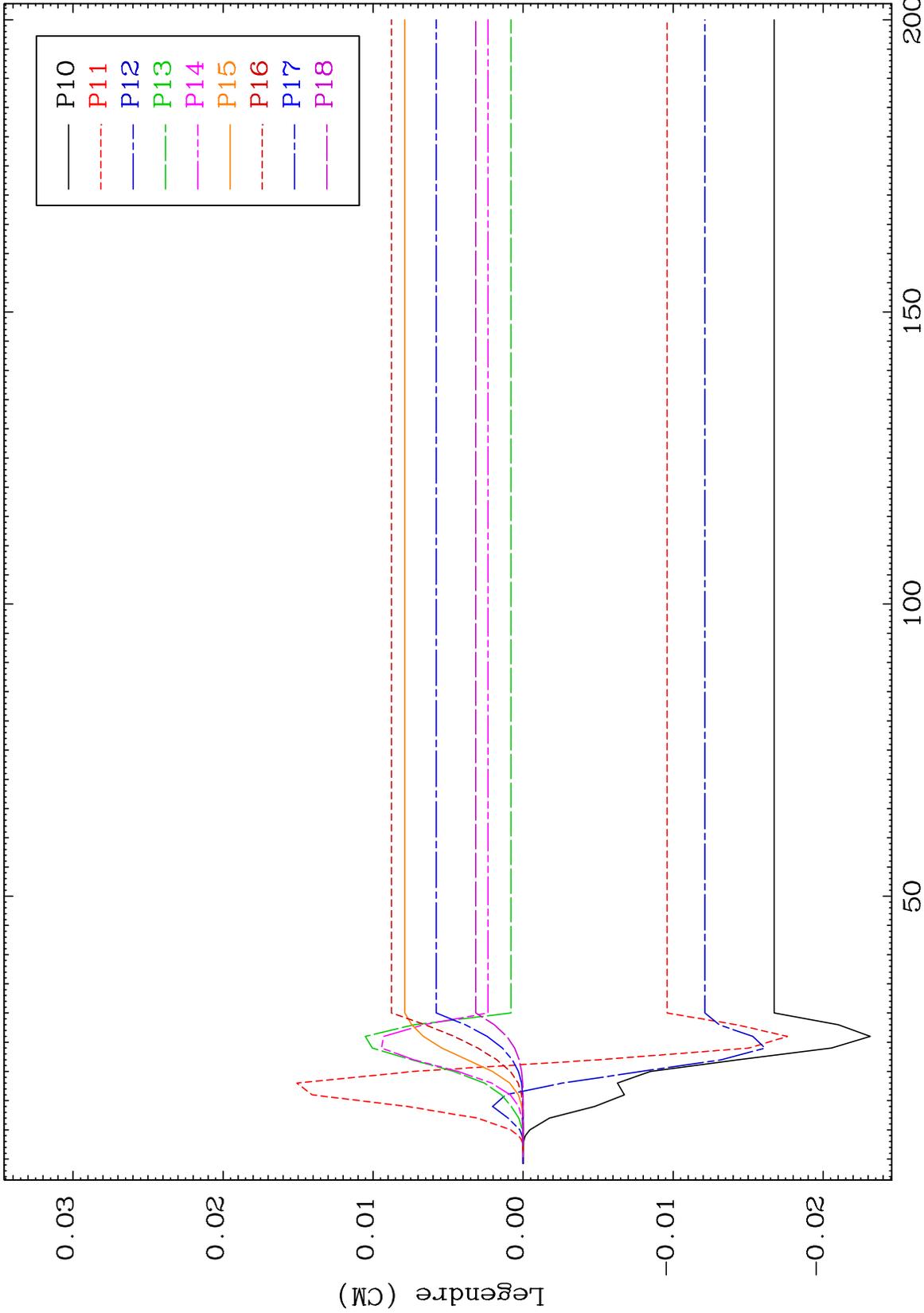
MAT 3443 MT= 80 (n,n') Level Legendre Coefficients 34-Se-80



MAT 3443

MT= 80 (n,n') Level  
Legendre Coefficients

34-Se-80

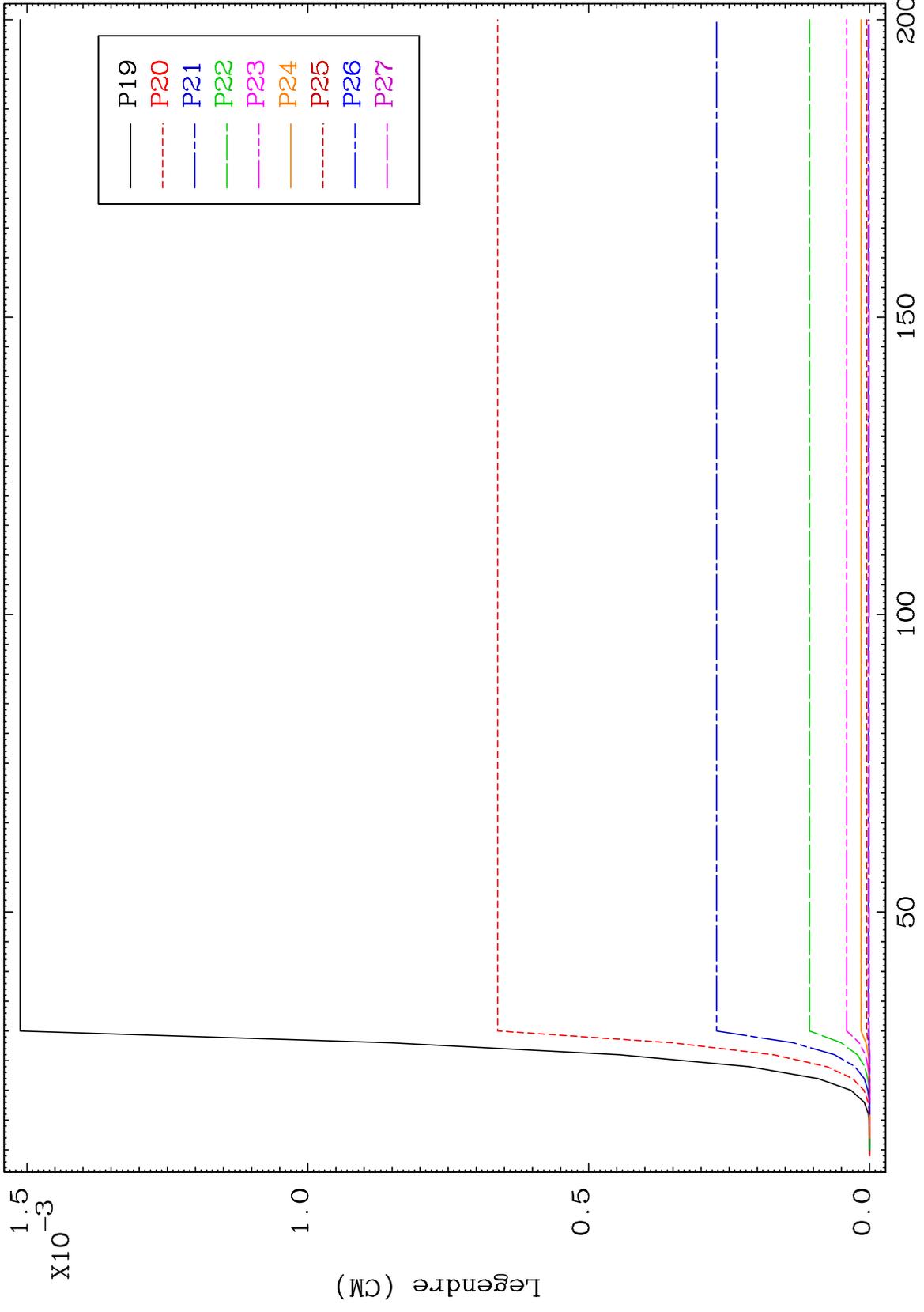


123

Incident Energy (MeV)

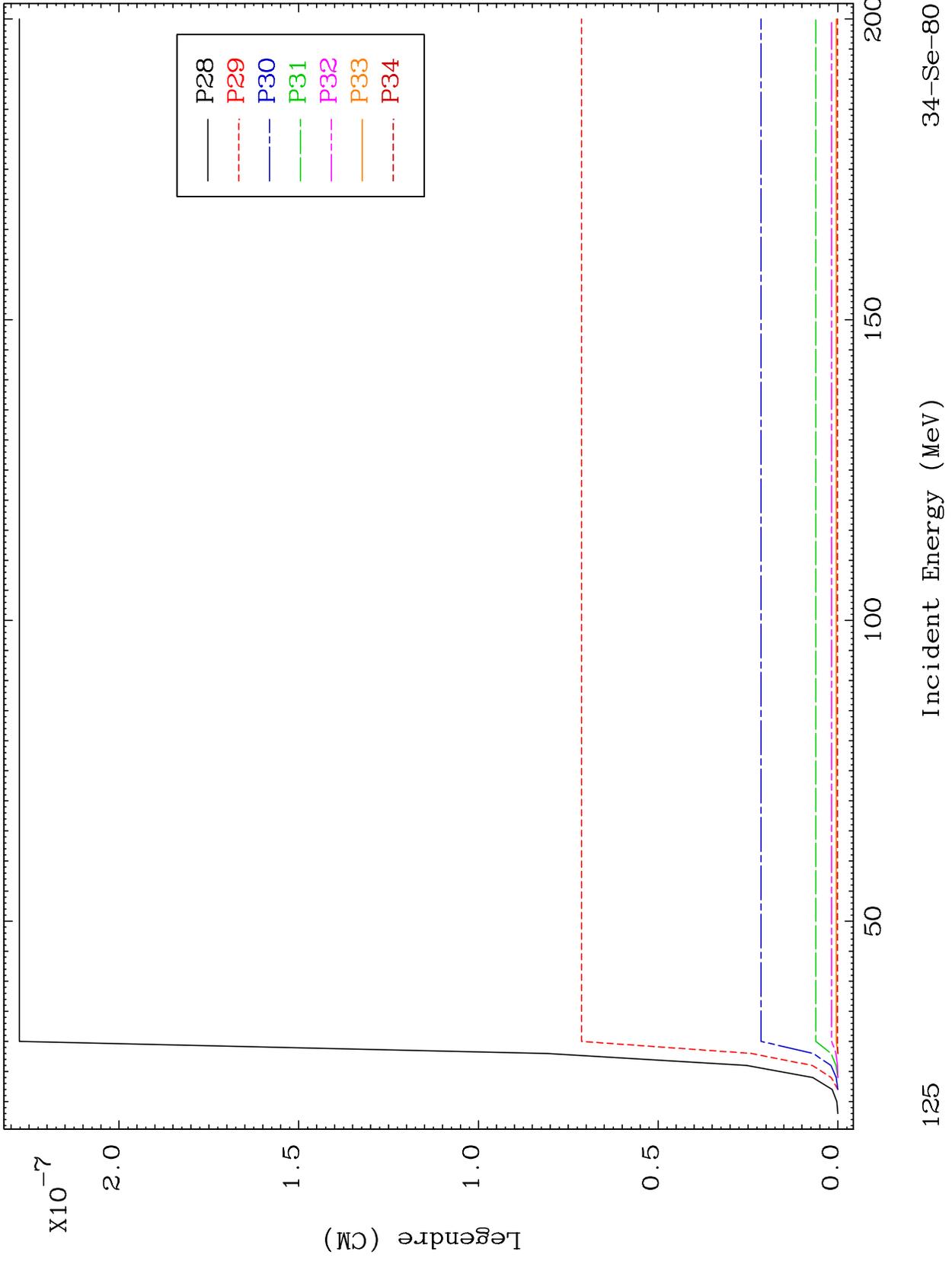
34-Se-80

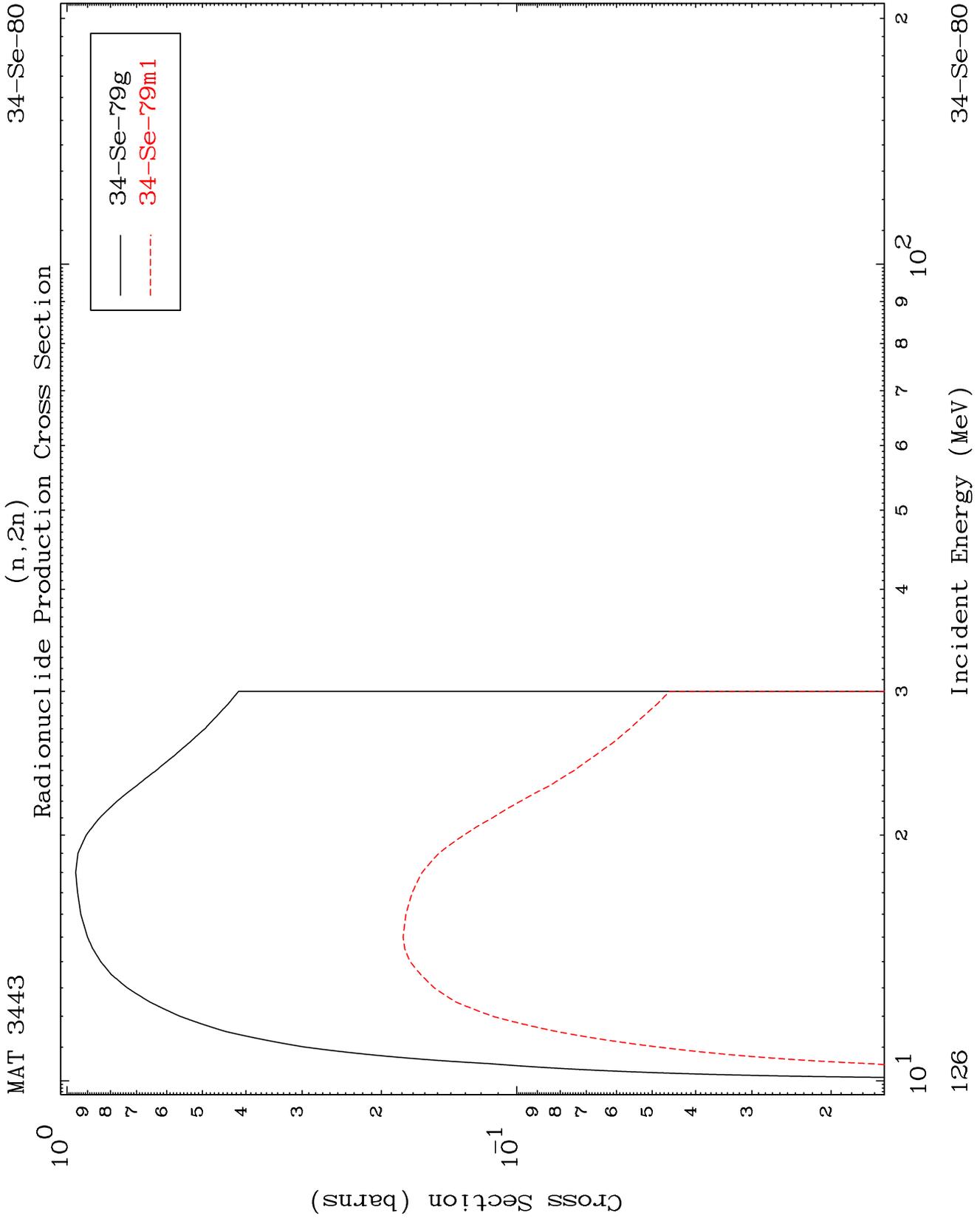
MAT 3443 MT= 80 (n,n') Level Legendre Coefficients 34-Se-80



124 34-Se-80

MAT 3443 MT= 80 (n,n') Level Legendre Coefficients 34-Se-80



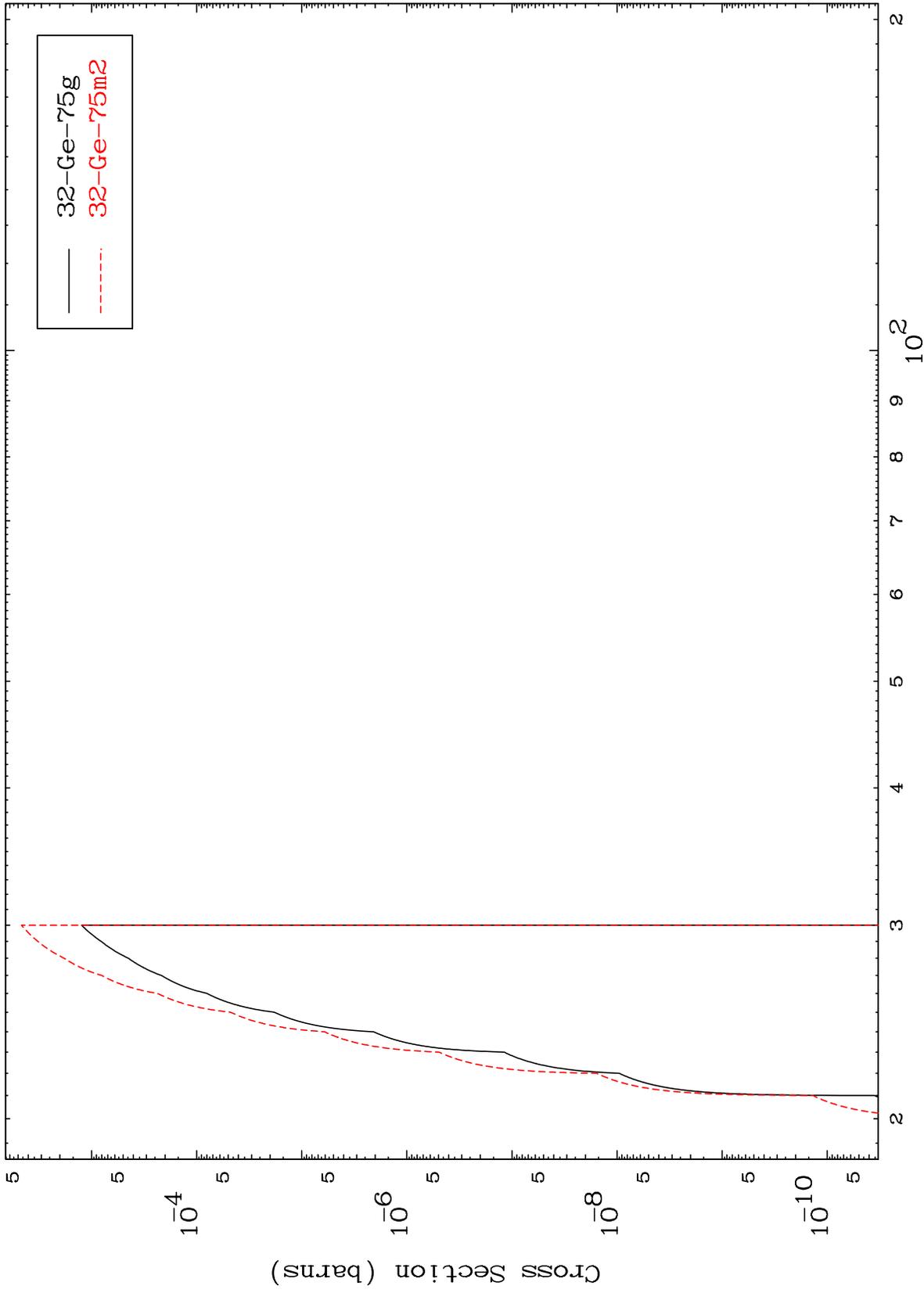


MAT 3443

(n,2n)  $\alpha$

34-<sup>Se</sup>-80

Radionuclide Production Cross Section



127

Incident Energy (MeV)

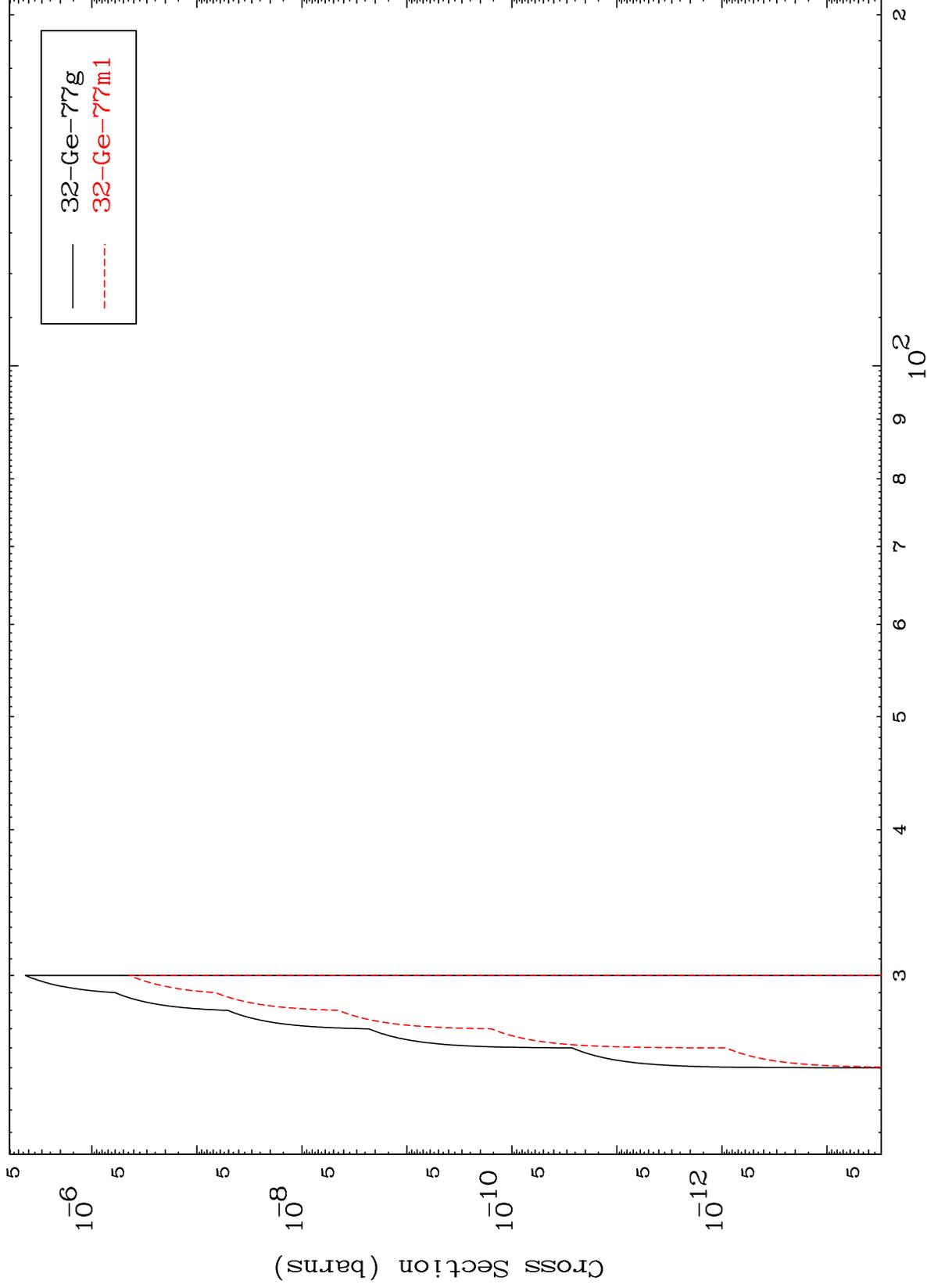
34-<sup>Se</sup>-80

MAT 3443

(n, n') He-3

34-Ge-80

Radionuclide Production Cross Section



128

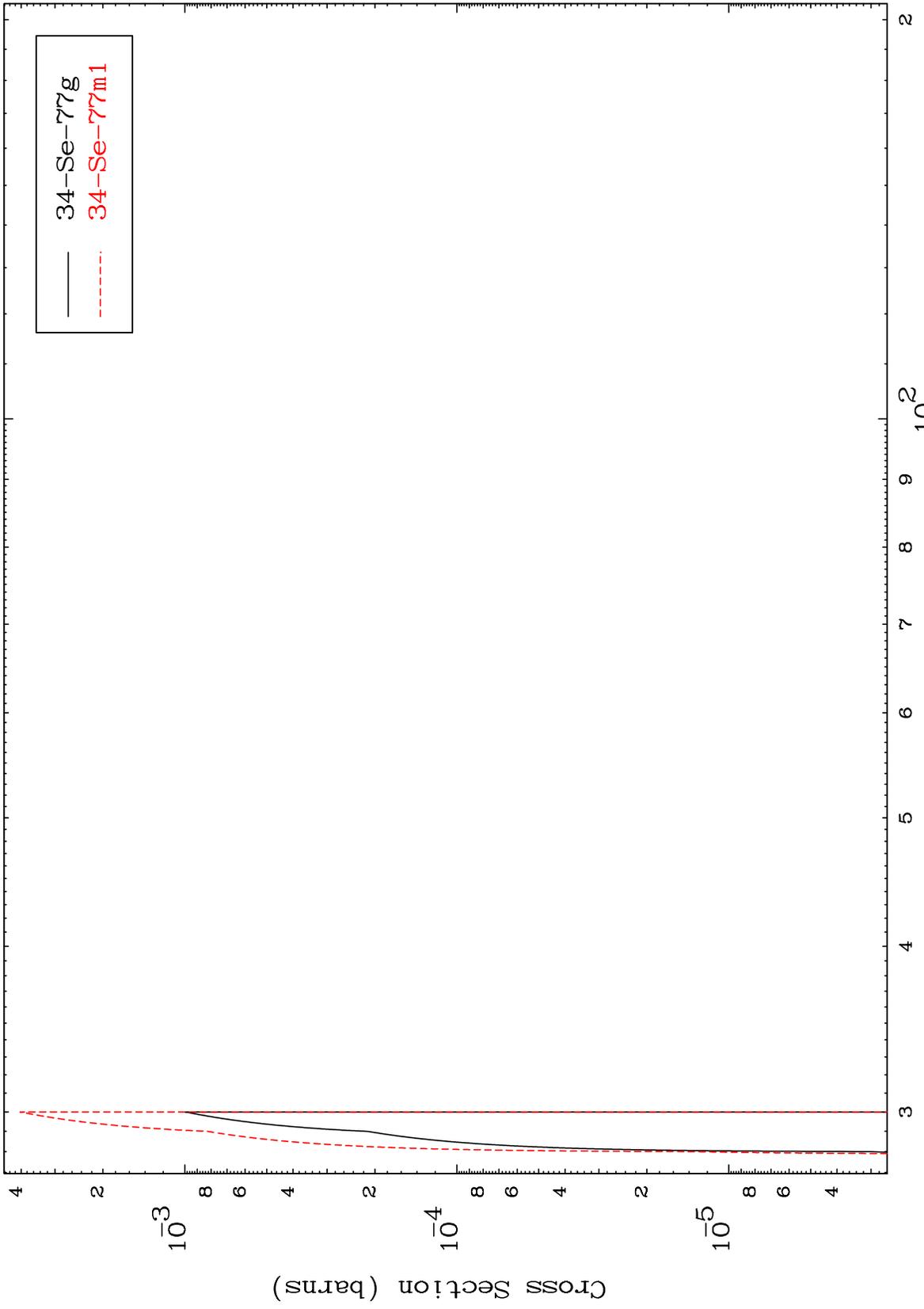
Incident Energy (MeV)

34-Ge-80

MAT 3443

34-Se-80

(n,4n)  
Radionuclide Production Cross Section



129

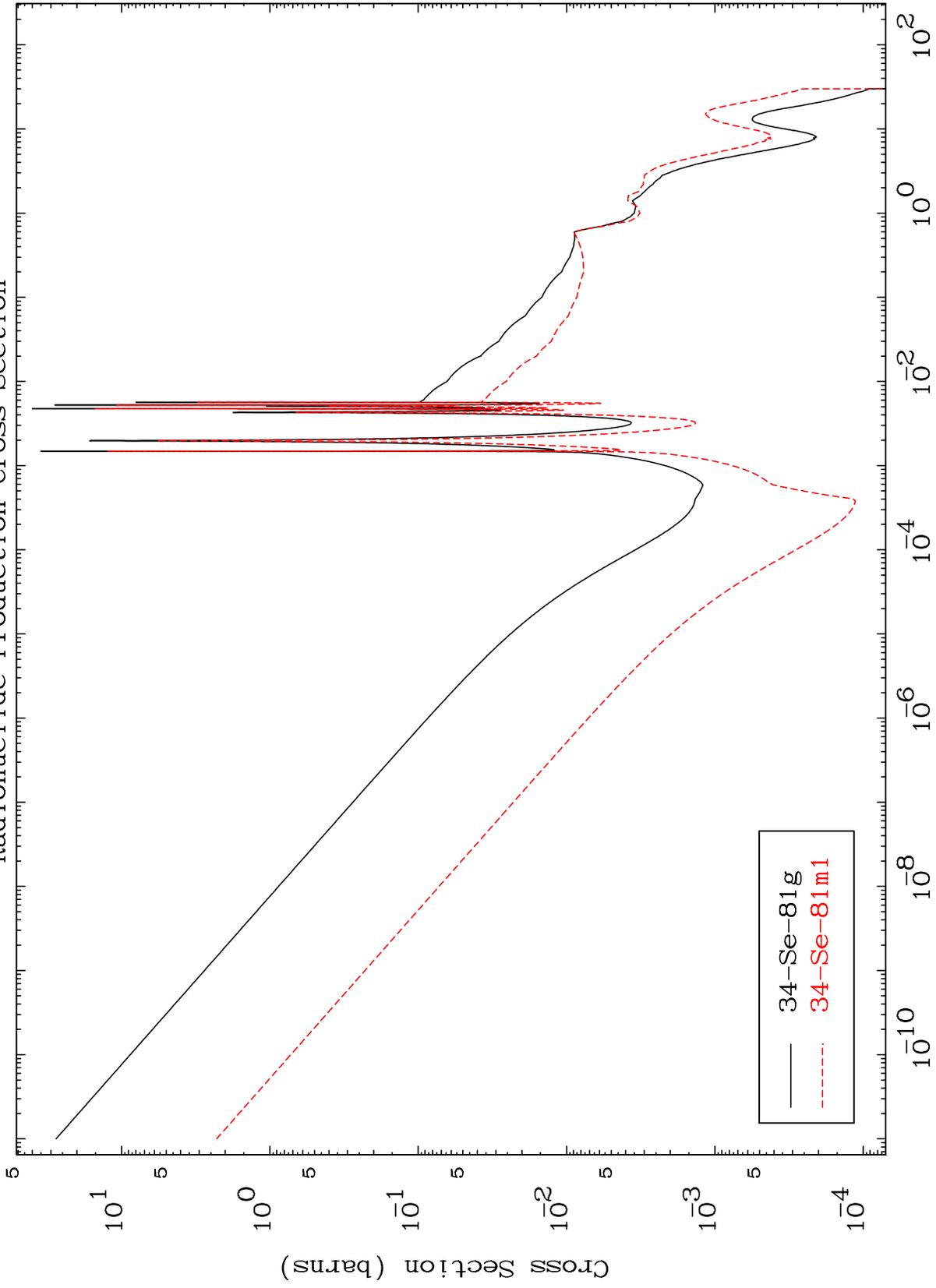
Incident Energy (MeV)

34-Se-80

MAT 3443

<sup>34</sup>Se-80

Radionuclide Production Cross Section  
(n,γ)



130

Incident Energy (MeV)

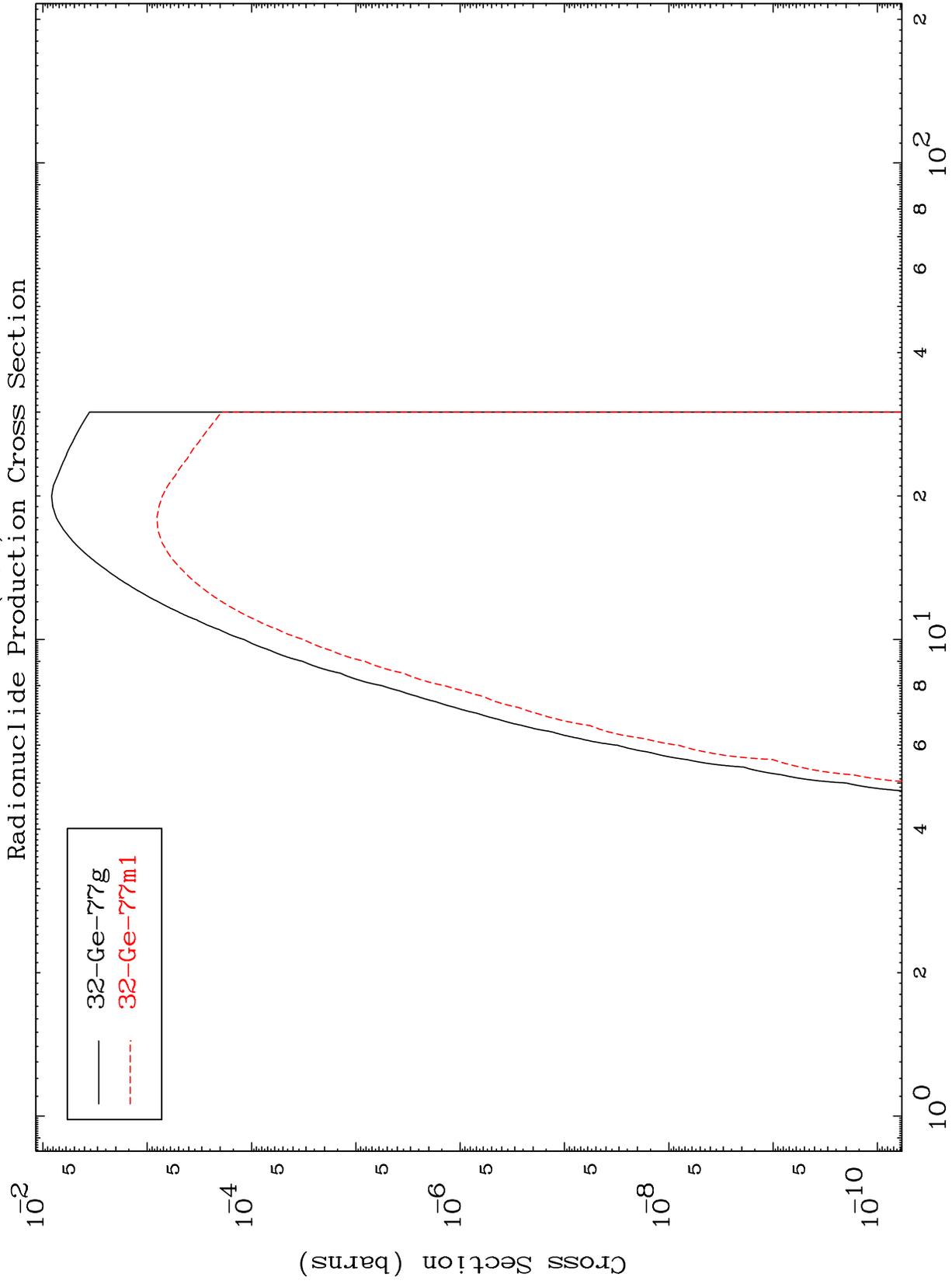
<sup>34</sup>Se-80

MAT 3443

34-<sup>Se</sup>-80

Radionuclide Production Cross Section

(n,  $\alpha$ )



— 32-Ge-77g  
- - - 32-Ge-77m1

131

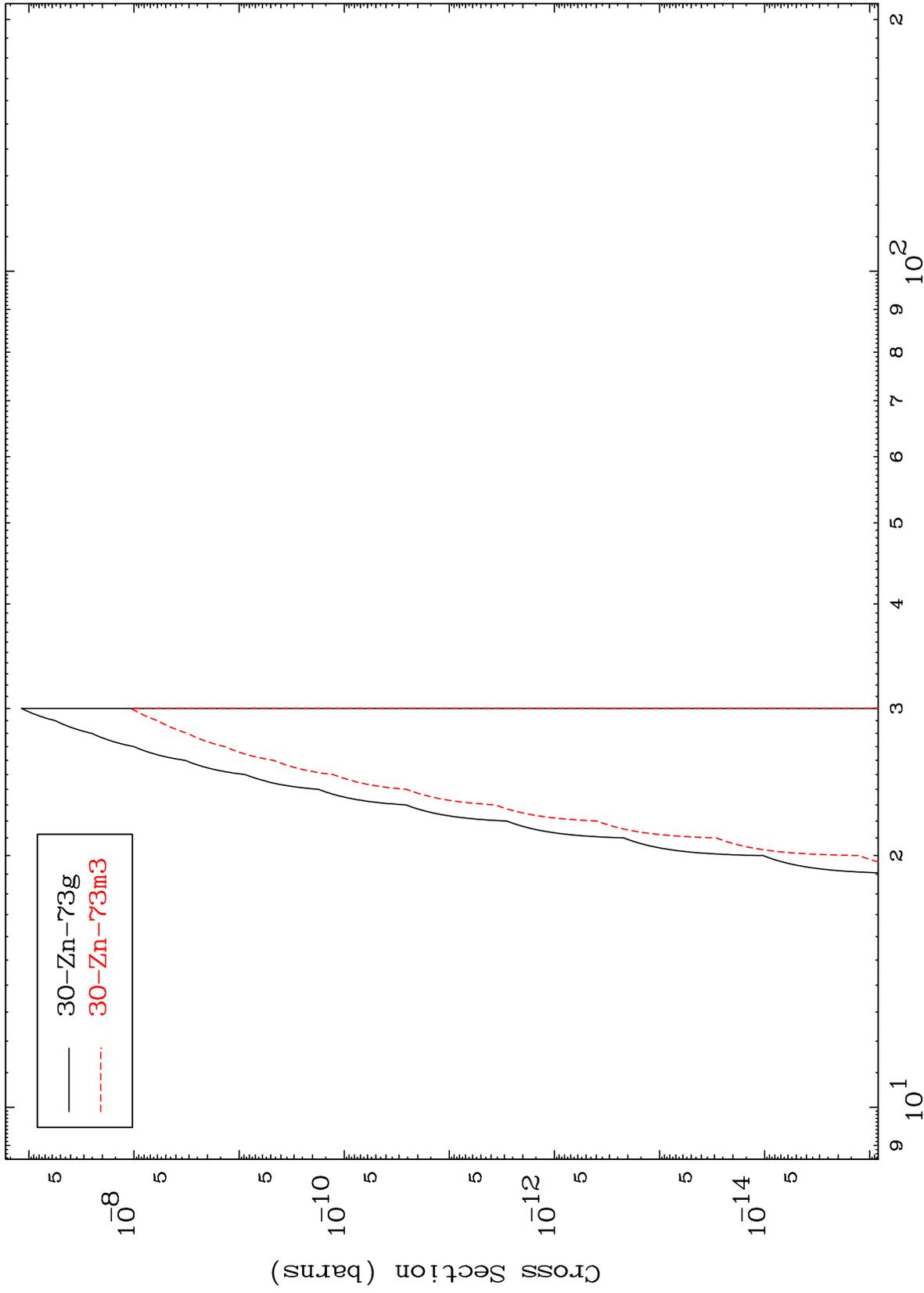
Incident Energy (MeV)

34-<sup>Se</sup>-80

MAT 3443

34-Se-80

Radionuclide Production Cross Section  
(n,2α)



132

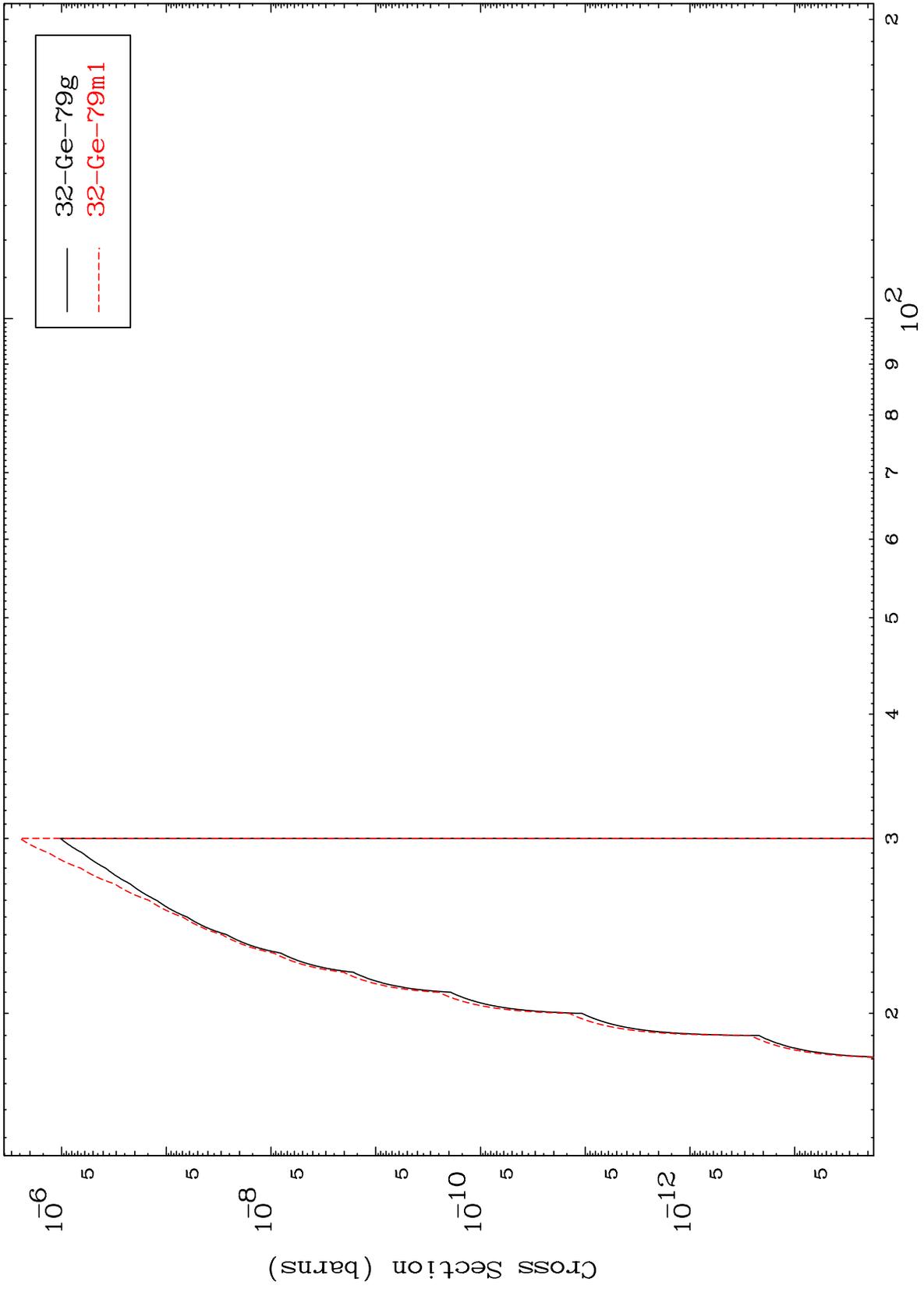
Incident Energy (MeV)

34-Se-80

MAT 3443

34-<sup>Se</sup>-80

(n,2p)  
Radionuclide Production Cross Section



133

34-<sup>Se</sup>-80

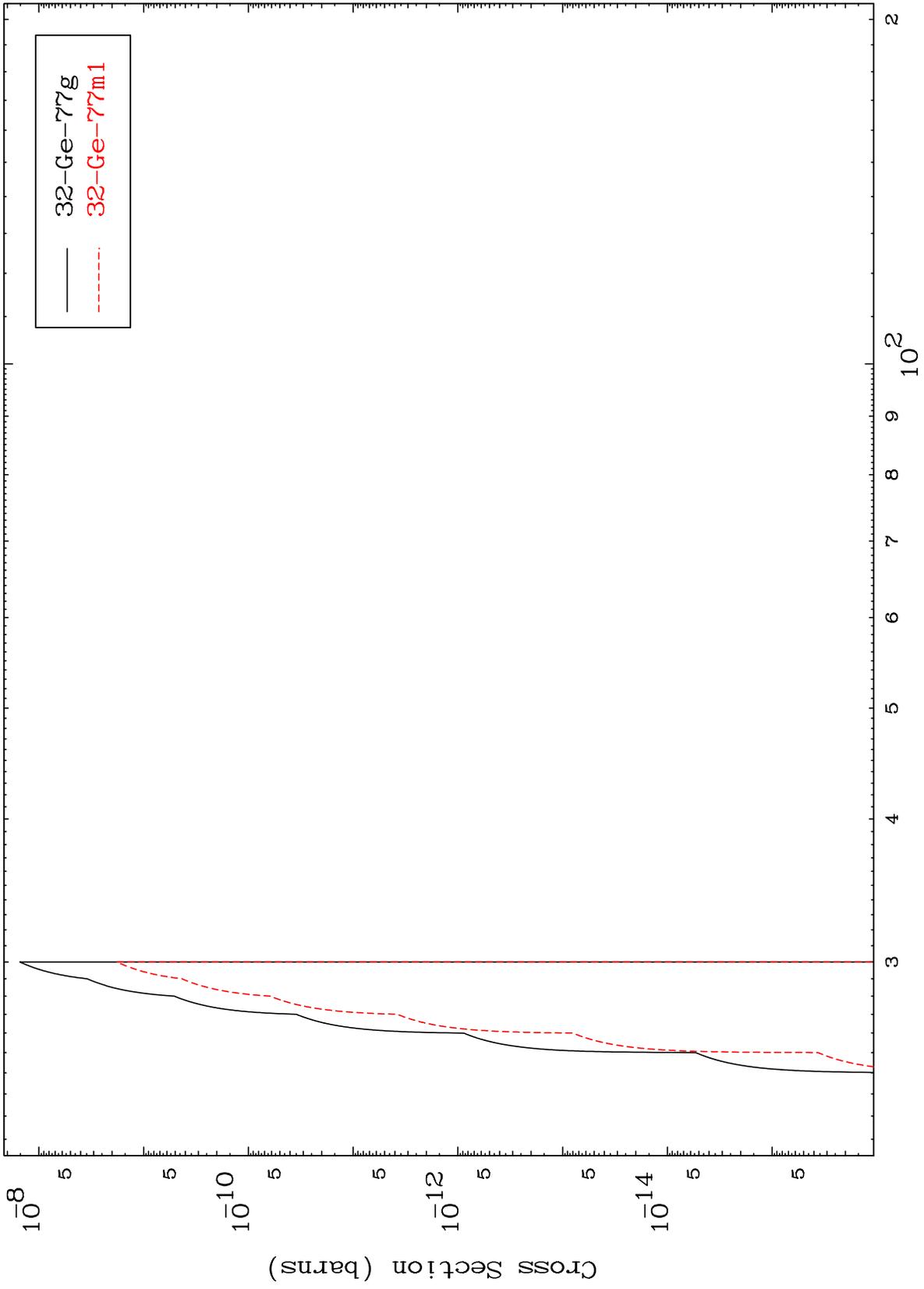
Incident Energy (MeV)

MAT 3443

(n,p) t

34-<sup>Se</sup>-80

Radionuclide Production Cross Section



134

Incident Energy (MeV)

34-<sup>Se</sup>-80