

Program EVALPLOT
(Version 2021-1)

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

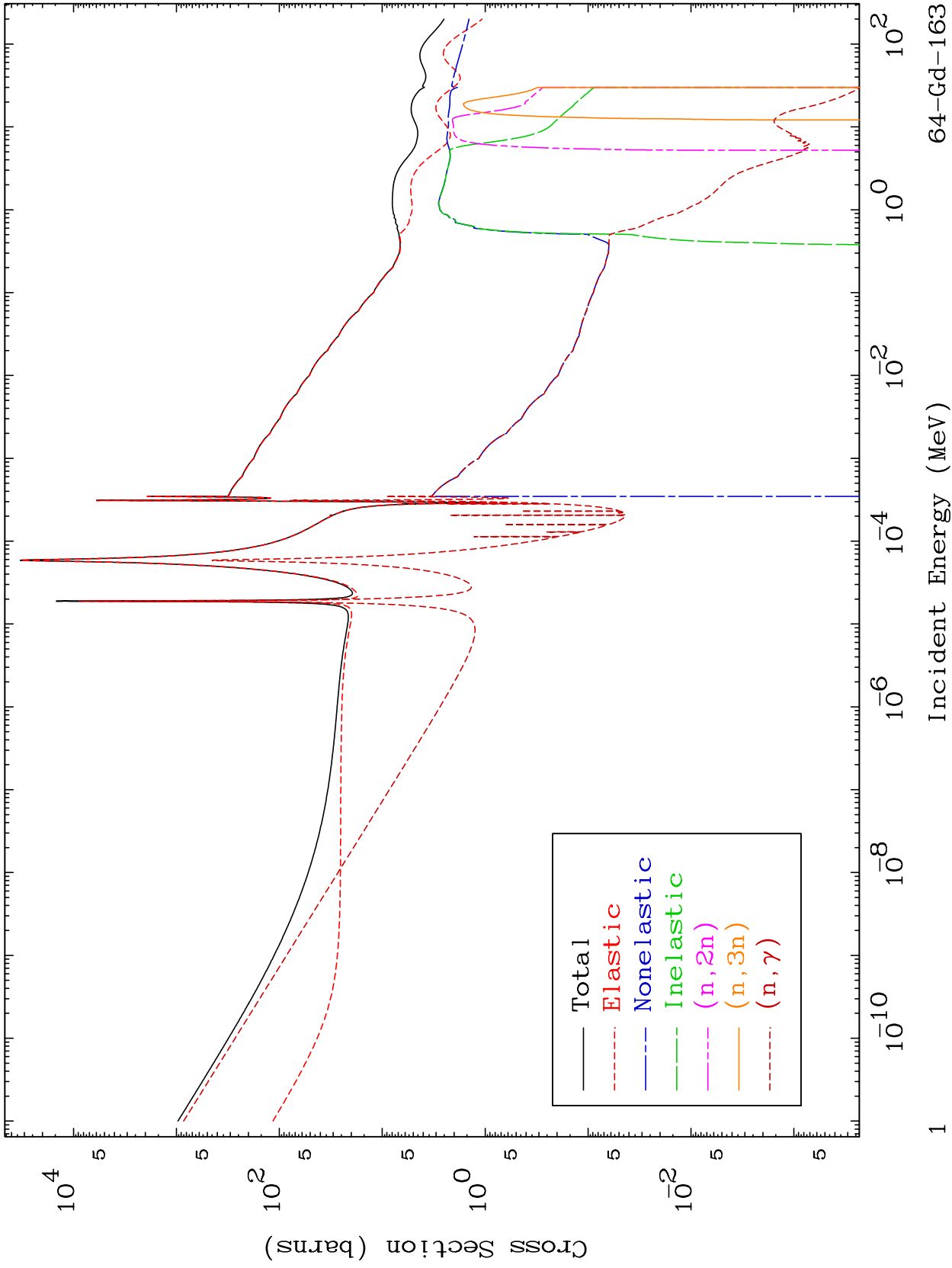
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6458

Neutron Major
293 Kelvin Cross Sections

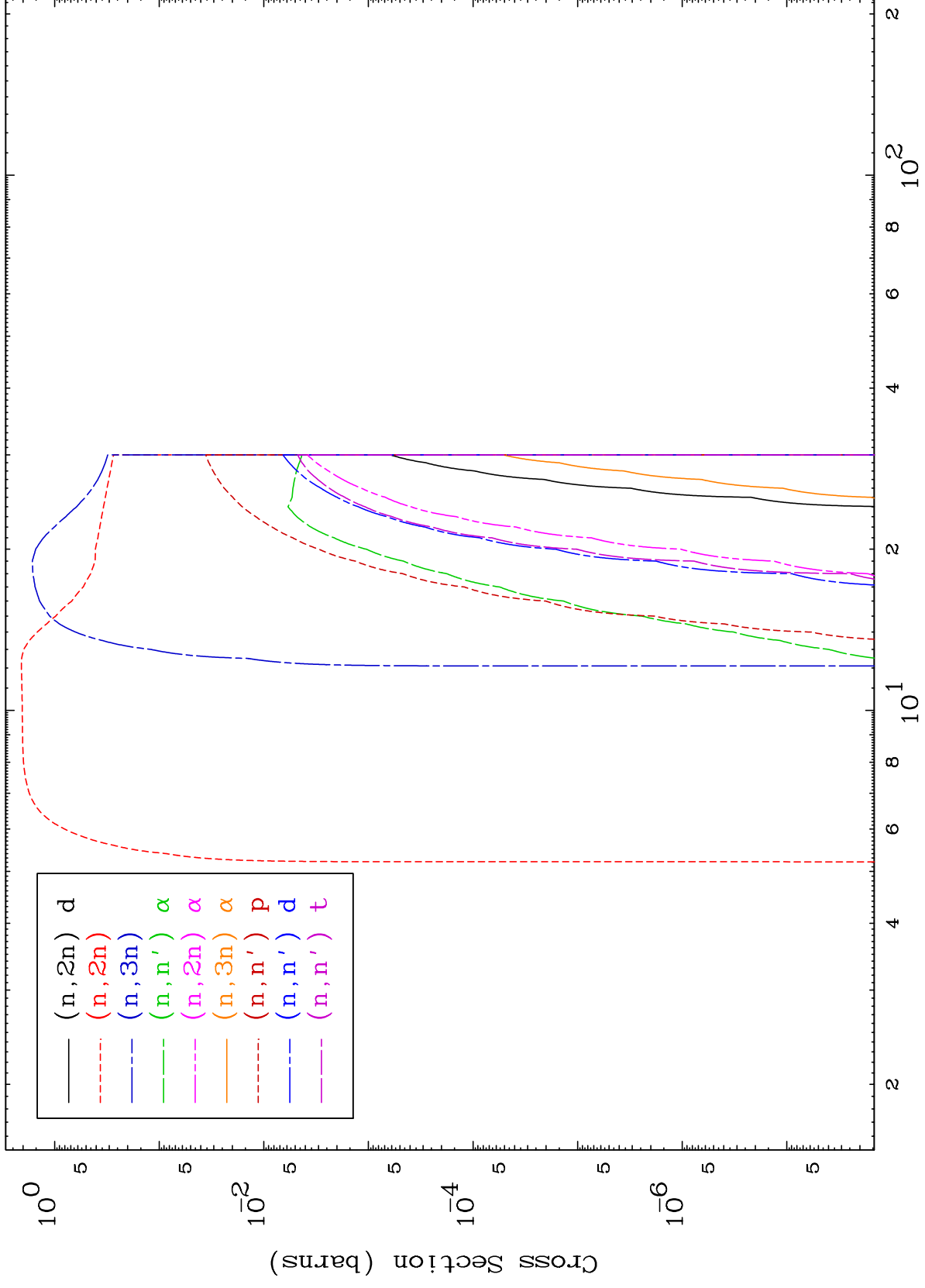
64-Gd-163



MAT 6458

Neutron Absorption
293 Kelvin Cross Sections

64-Gd-163



2

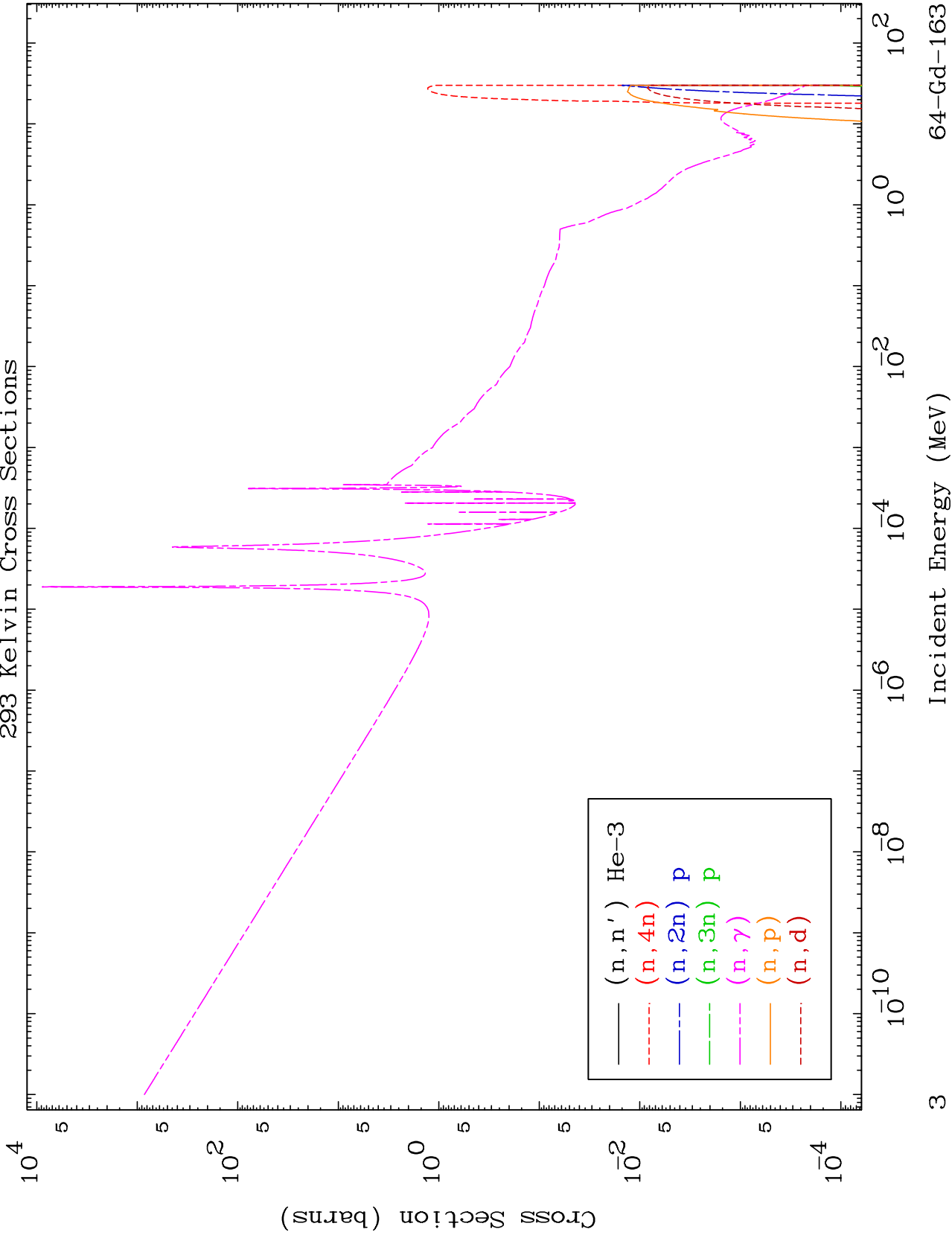
Incident Energy (MeV)

64-Gd-163

MAT 6458

Neutron Absorption
293 Kelvin Cross Sections

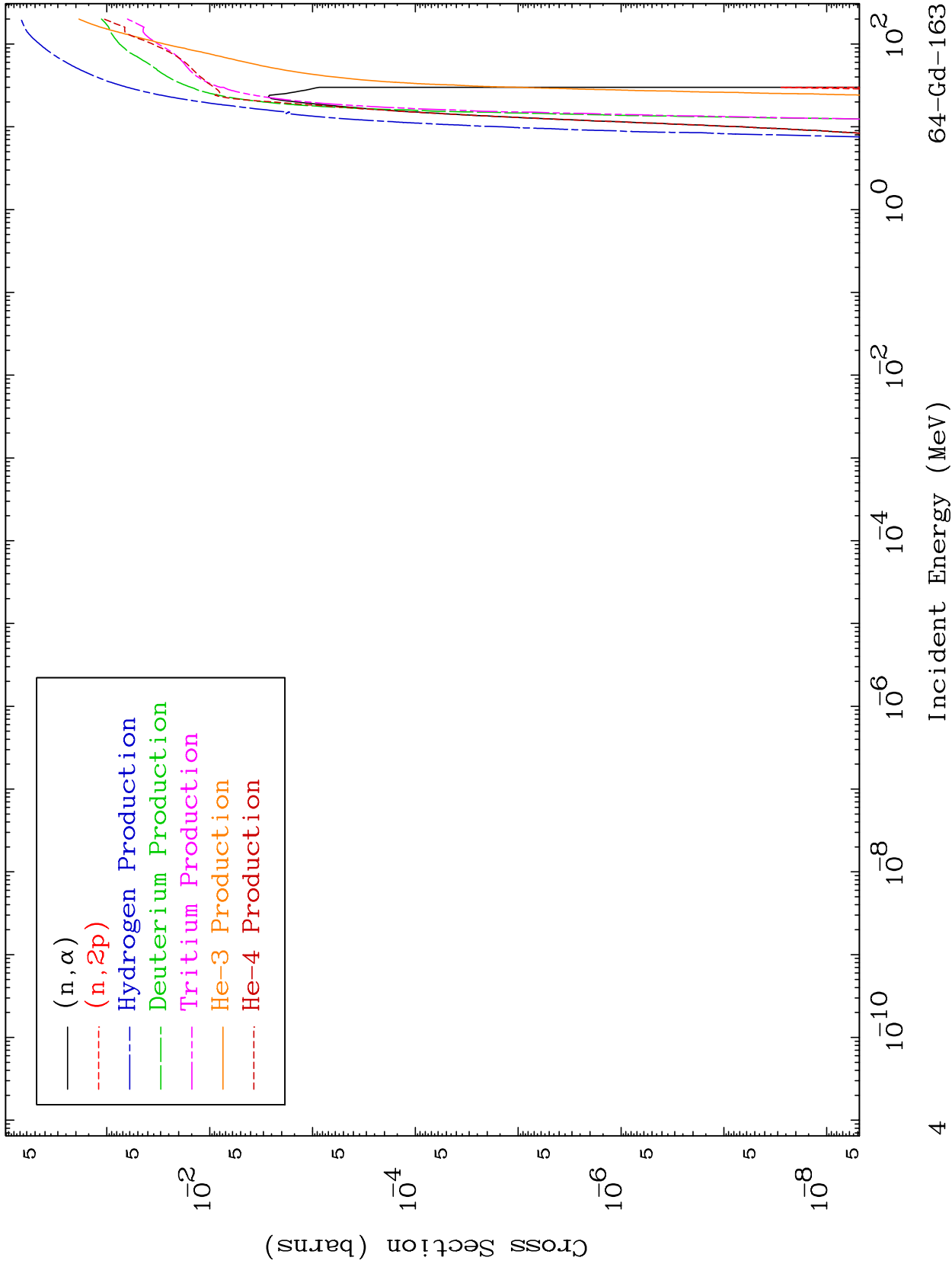
64-Gd-163



MAT 6458

Neutron Absorption
293 Kelvin Cross Sections

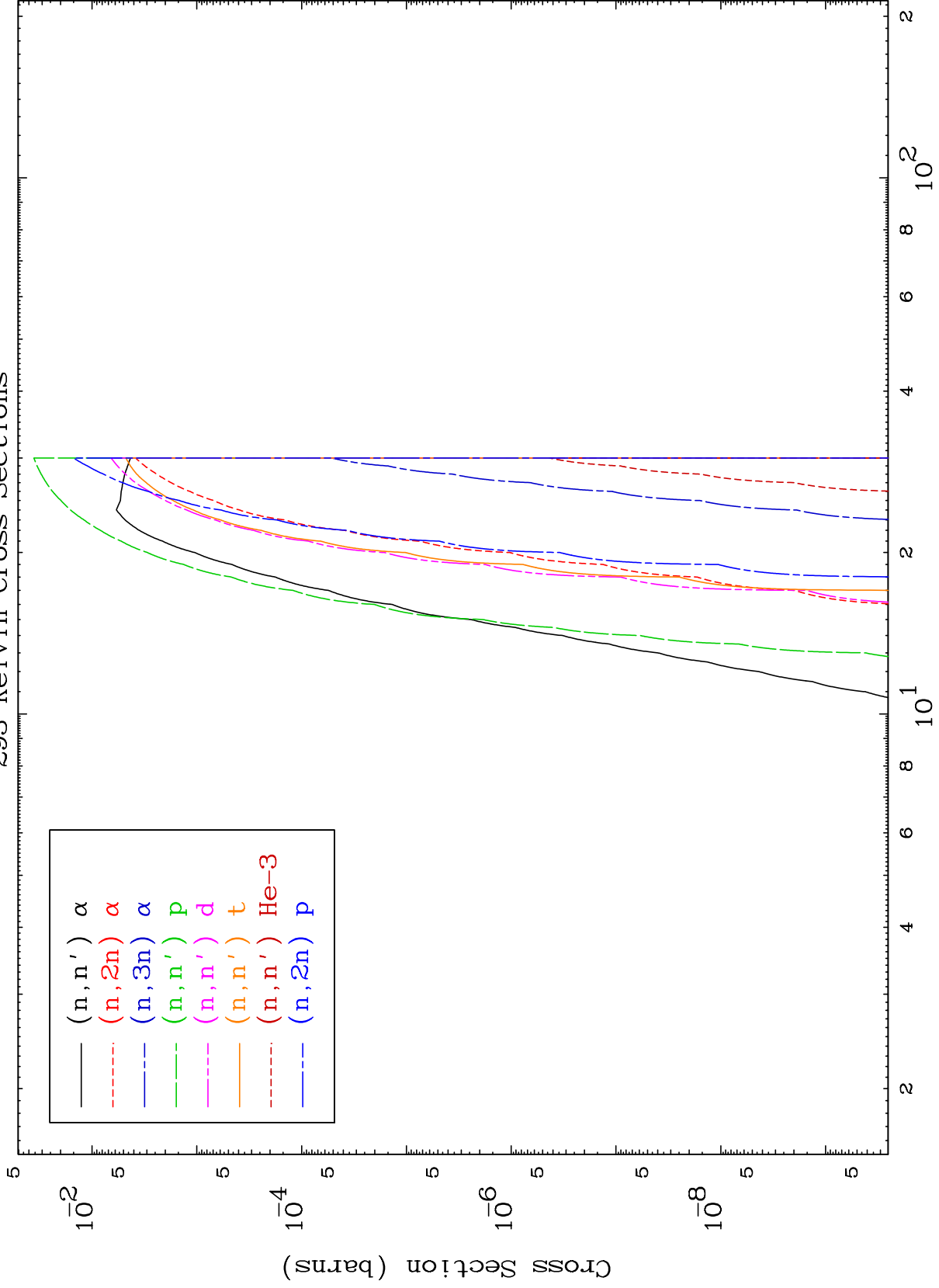
64-Gd-163



MAT 6458

Charged Particle
293 Kelvin Cross Sections

64-Gd-163



5

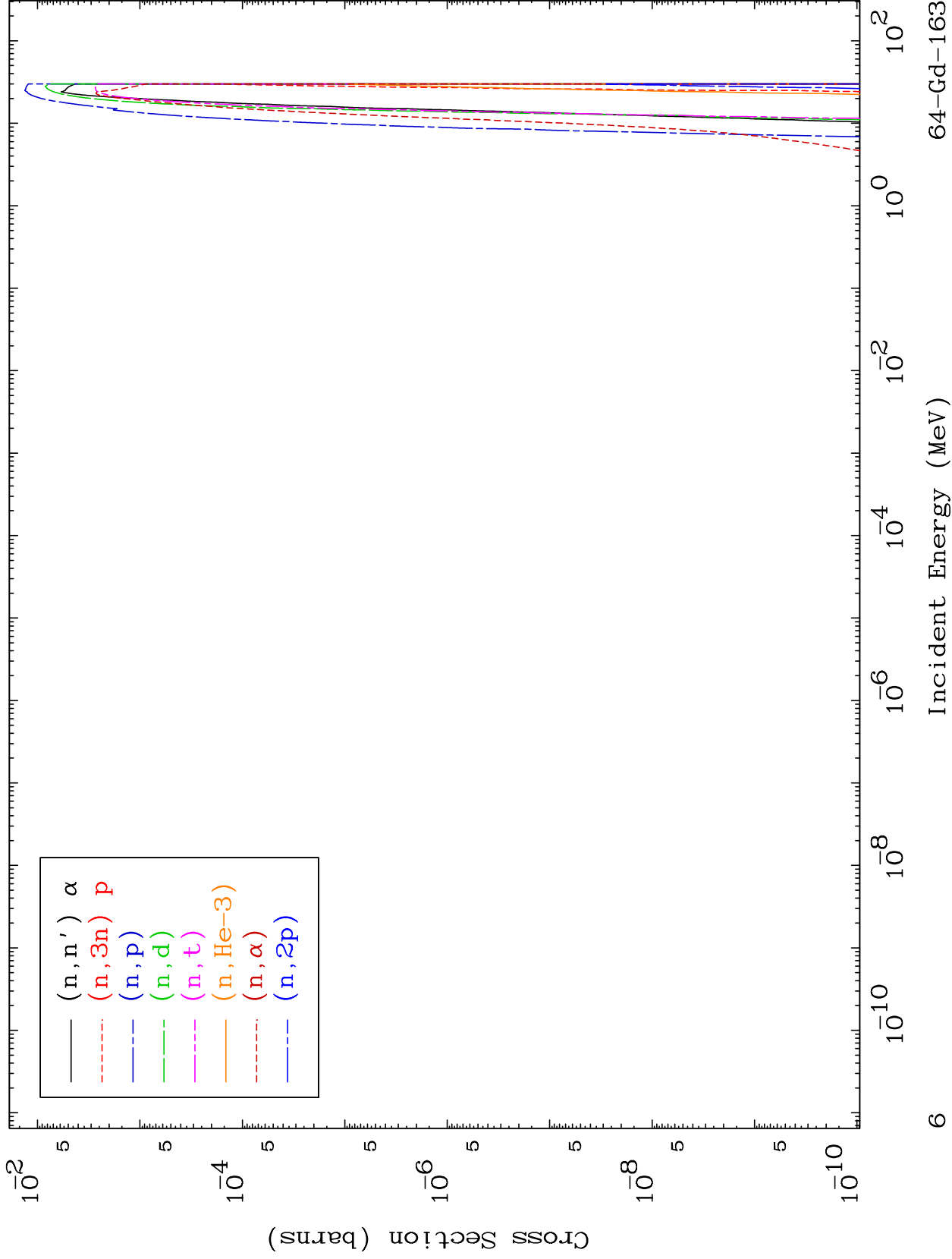
Incident Energy (MeV)

64-Gd-163

MAT 6458

Charged Particle
293 Kelvin Cross Sections

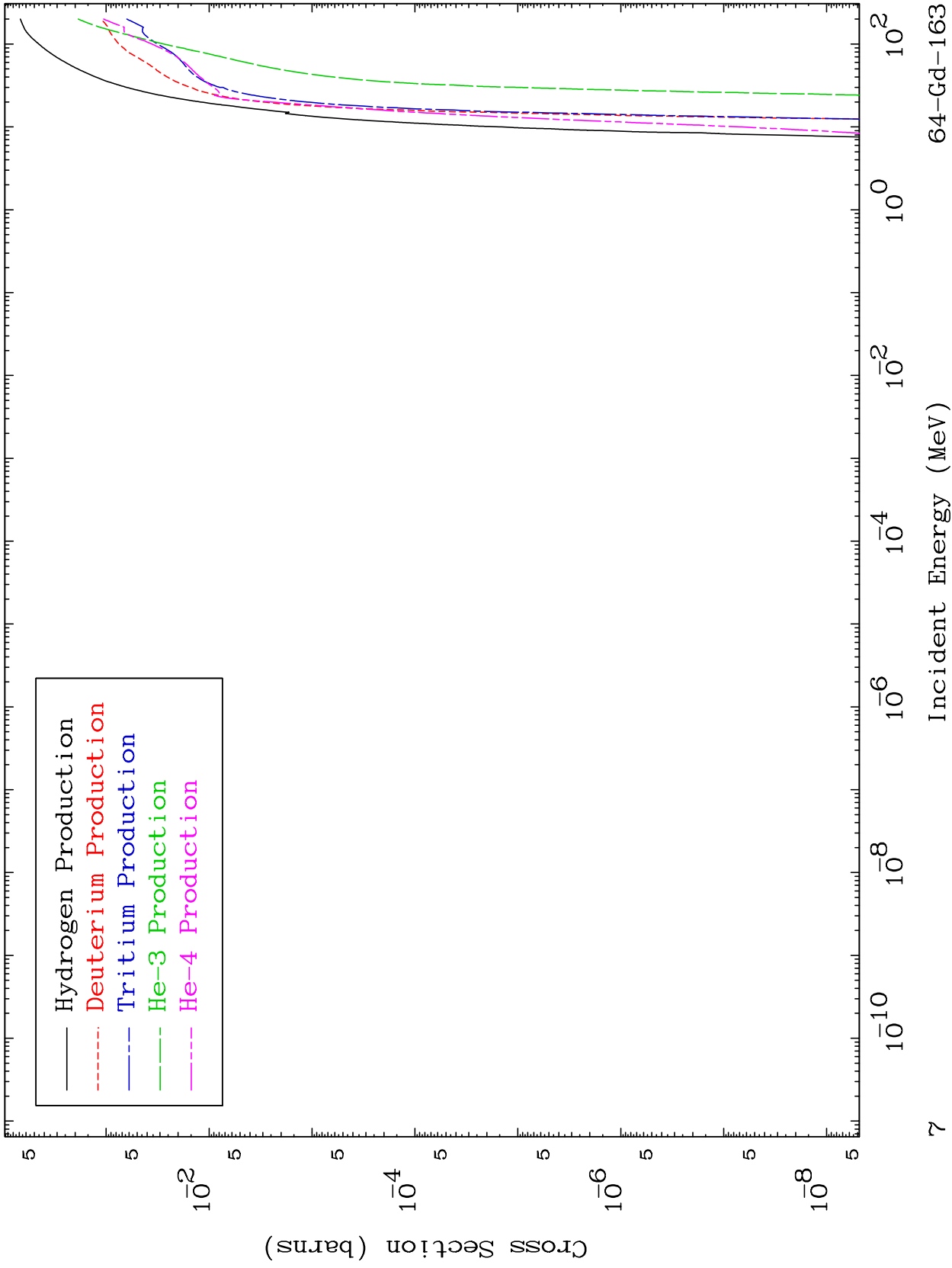
64-Gd-163



MAT 6458

Particle Production
293 Kelvin Cross Sections

64-Gd-163

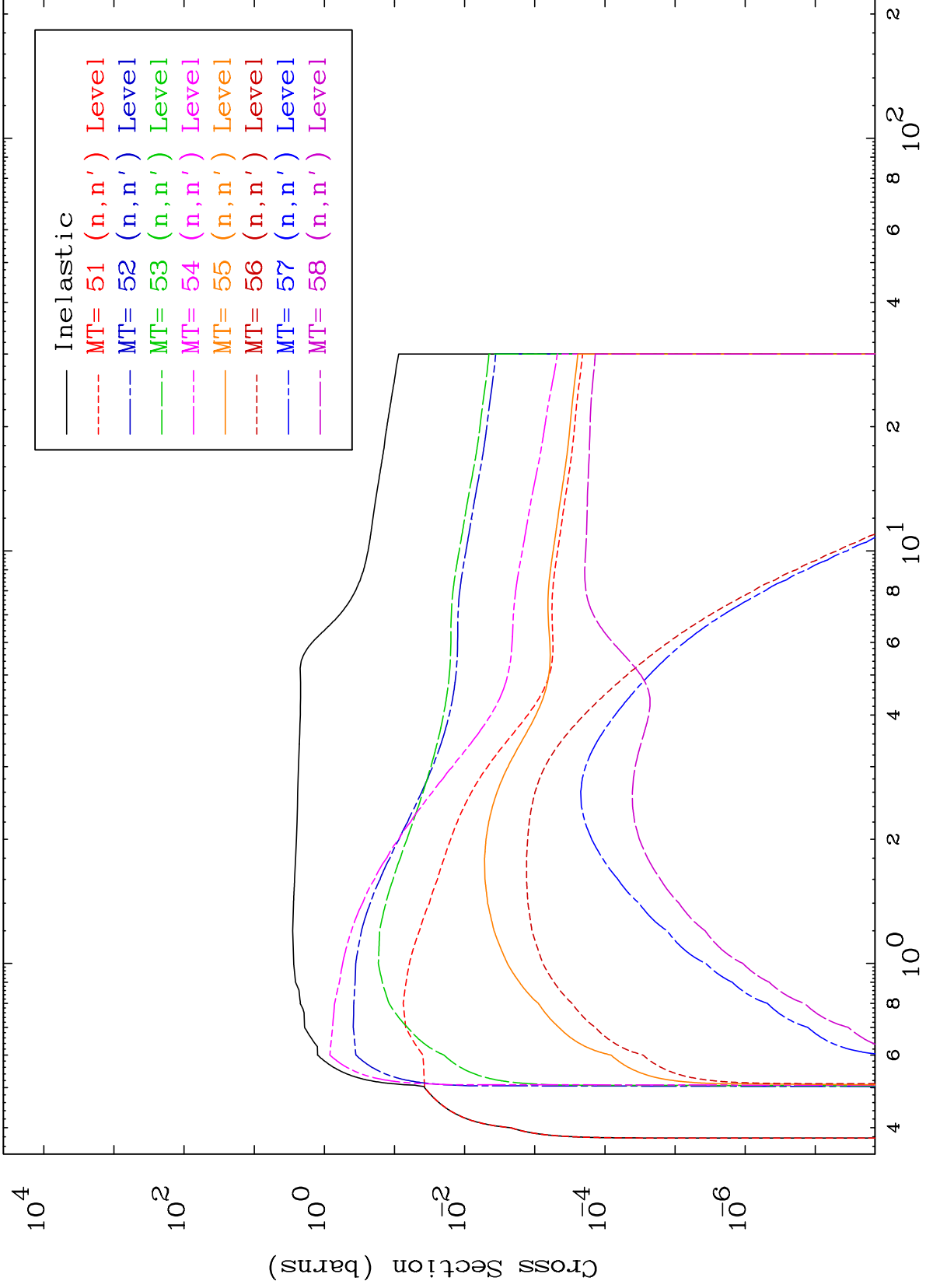


MAT 6458

(n,n') Levels

64-Gd-163

293 Kelvin Cross Sections



8

Incident Energy (MeV)

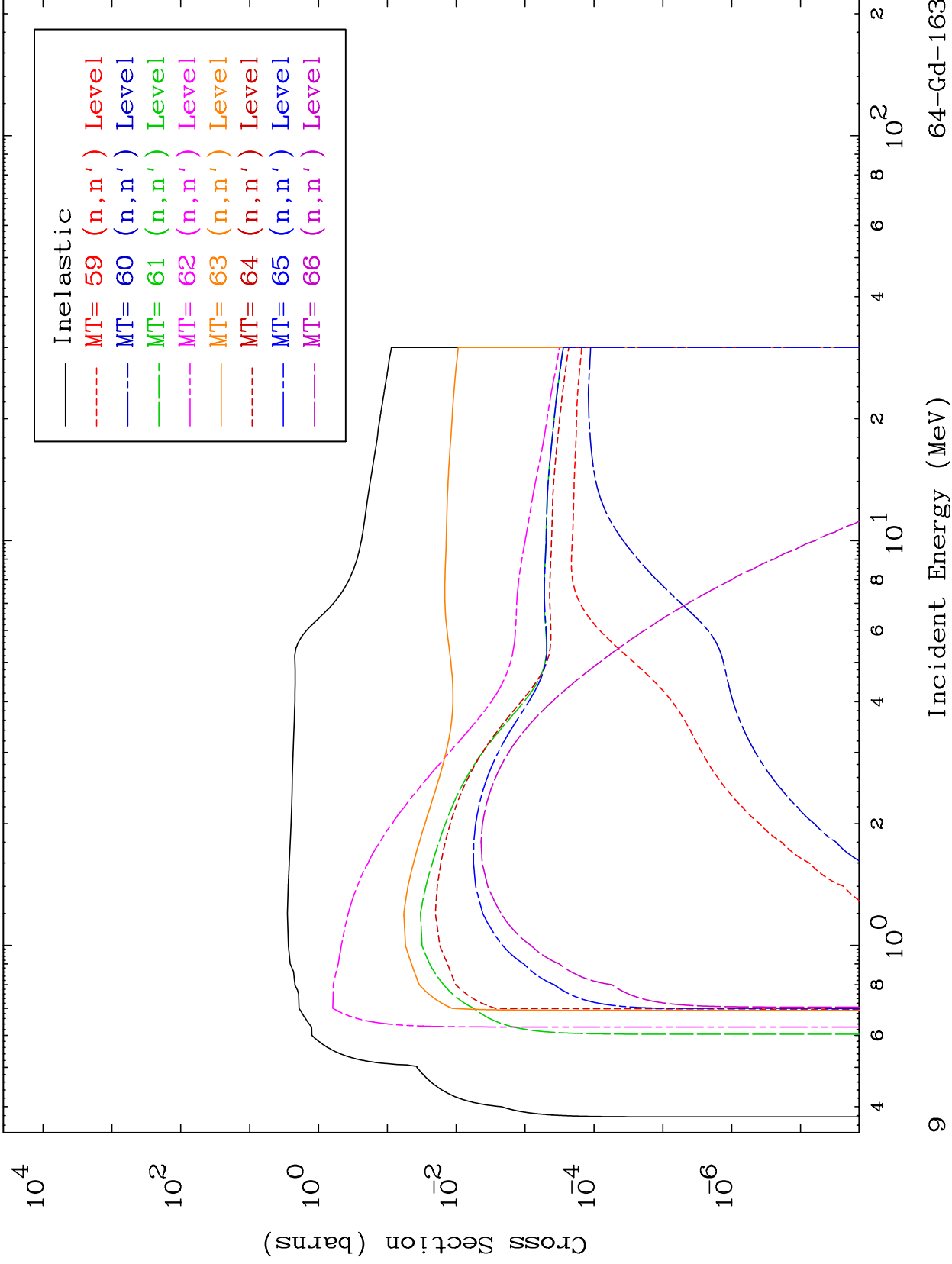
64-Gd-163

MAT 6458

(n,n') Levels

64-Gd-163

293 Kelvin Cross Sections



9

Incident Energy (MeV)

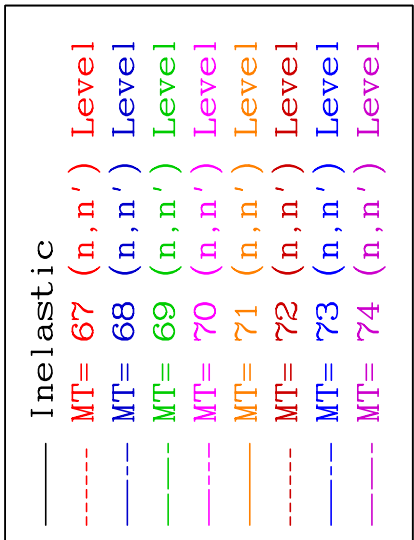
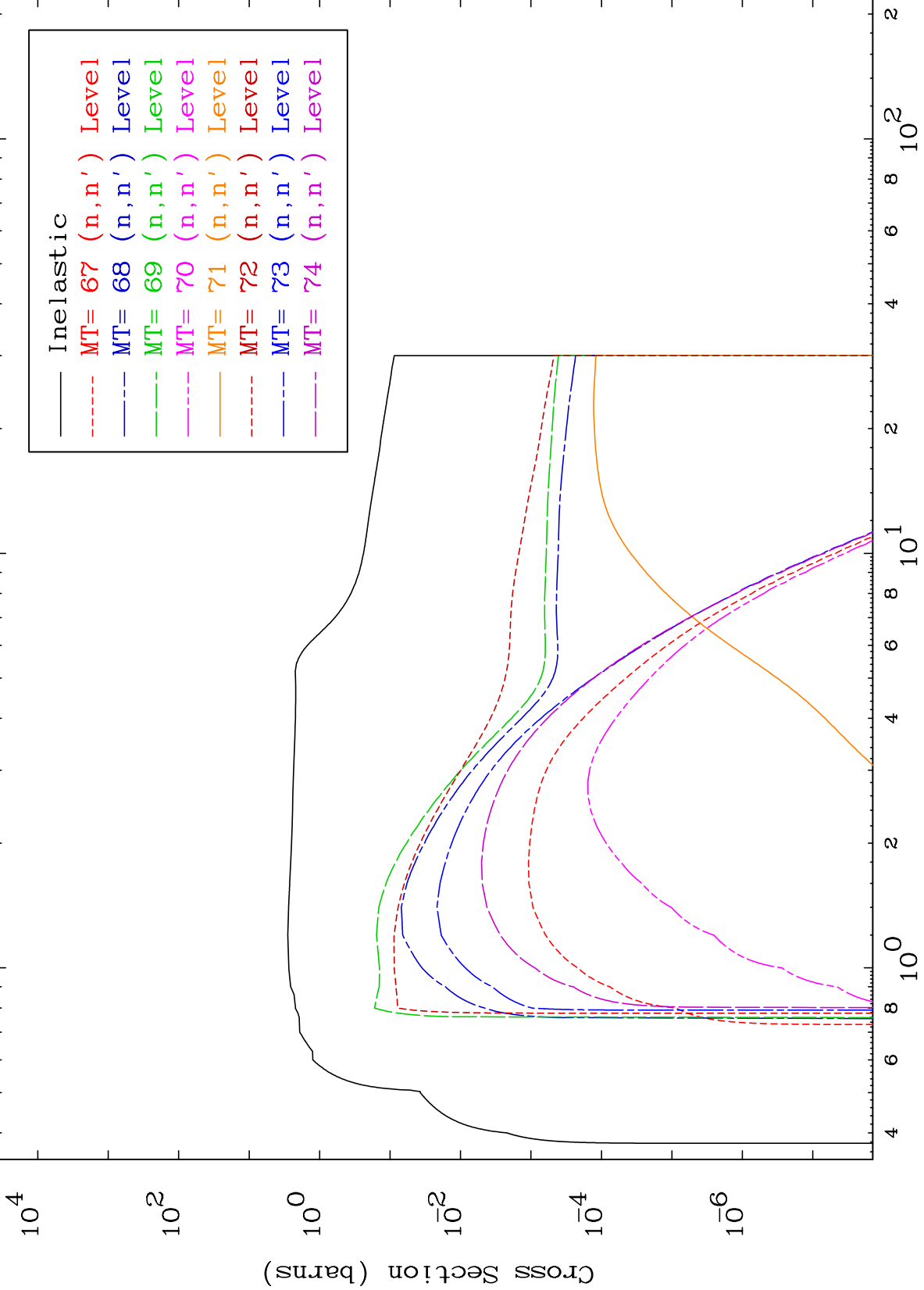
64-Gd-163

MAT 6458

(n,n') Levels

64-Gd-163

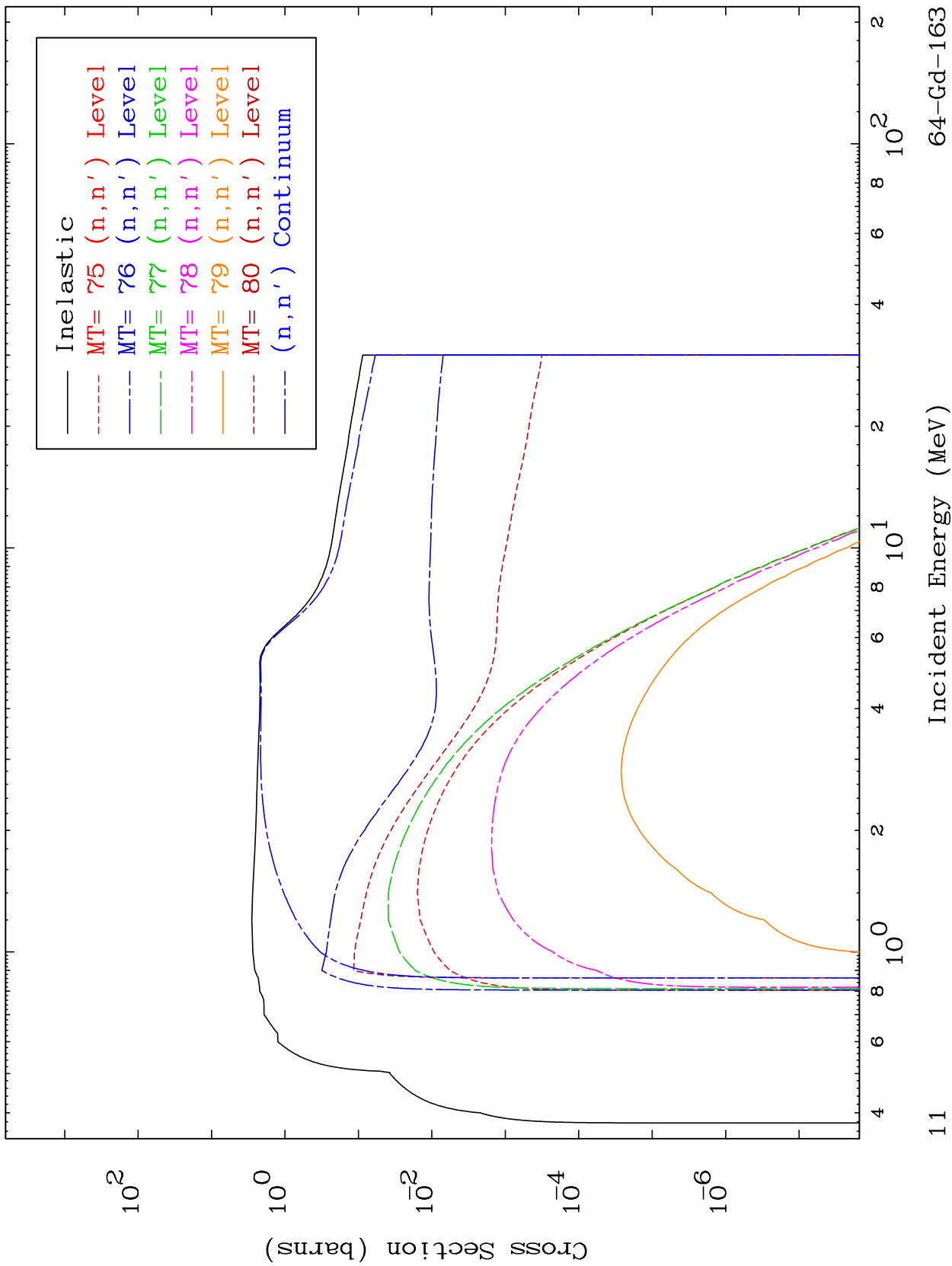
293 Kelvin Cross Sections



10

Incident Energy (MeV)

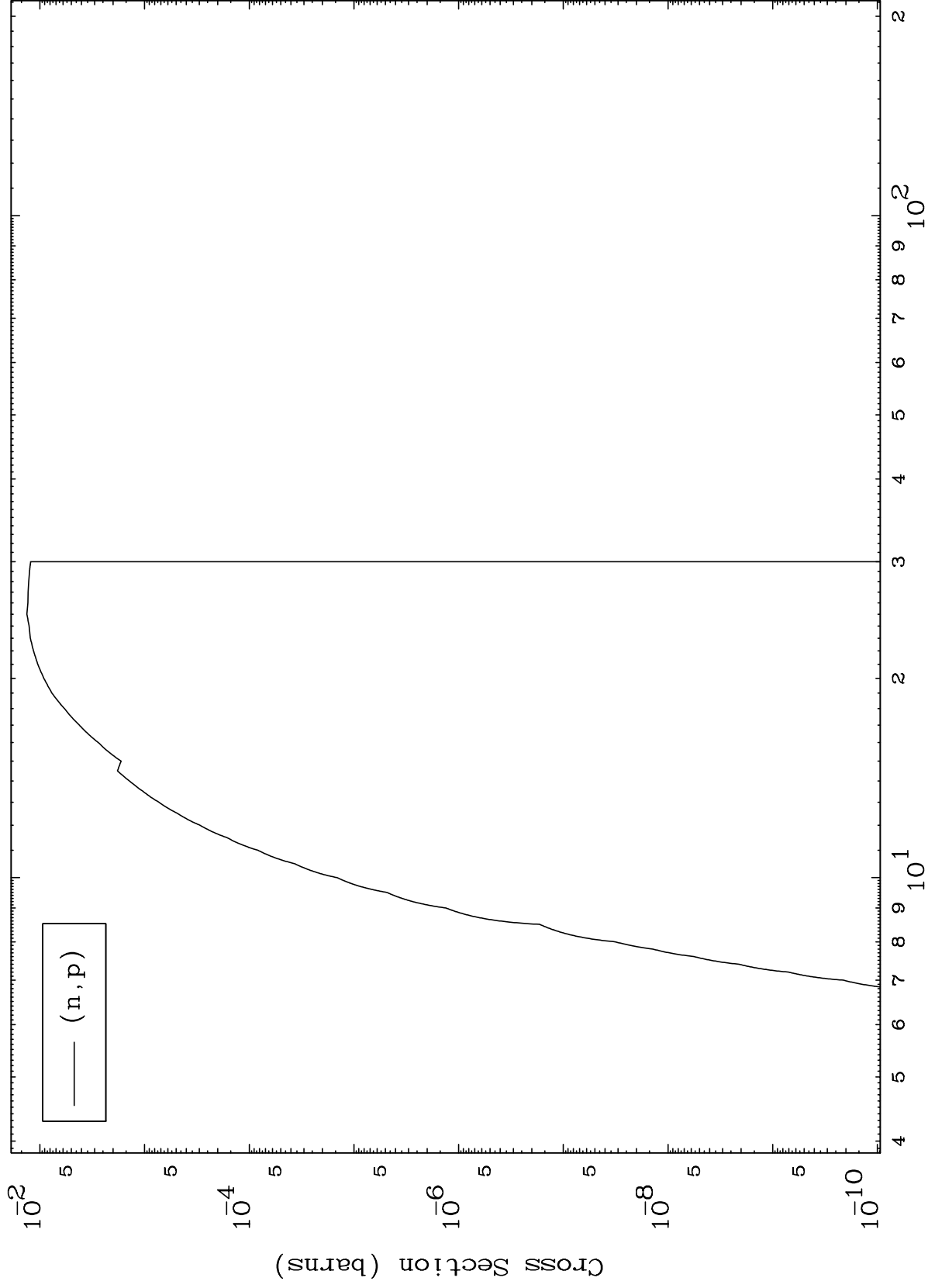
64-Gd-163



MAT 6458

(n,p) Levels
293 Kelvin Cross Sections

64-Gd-163



12

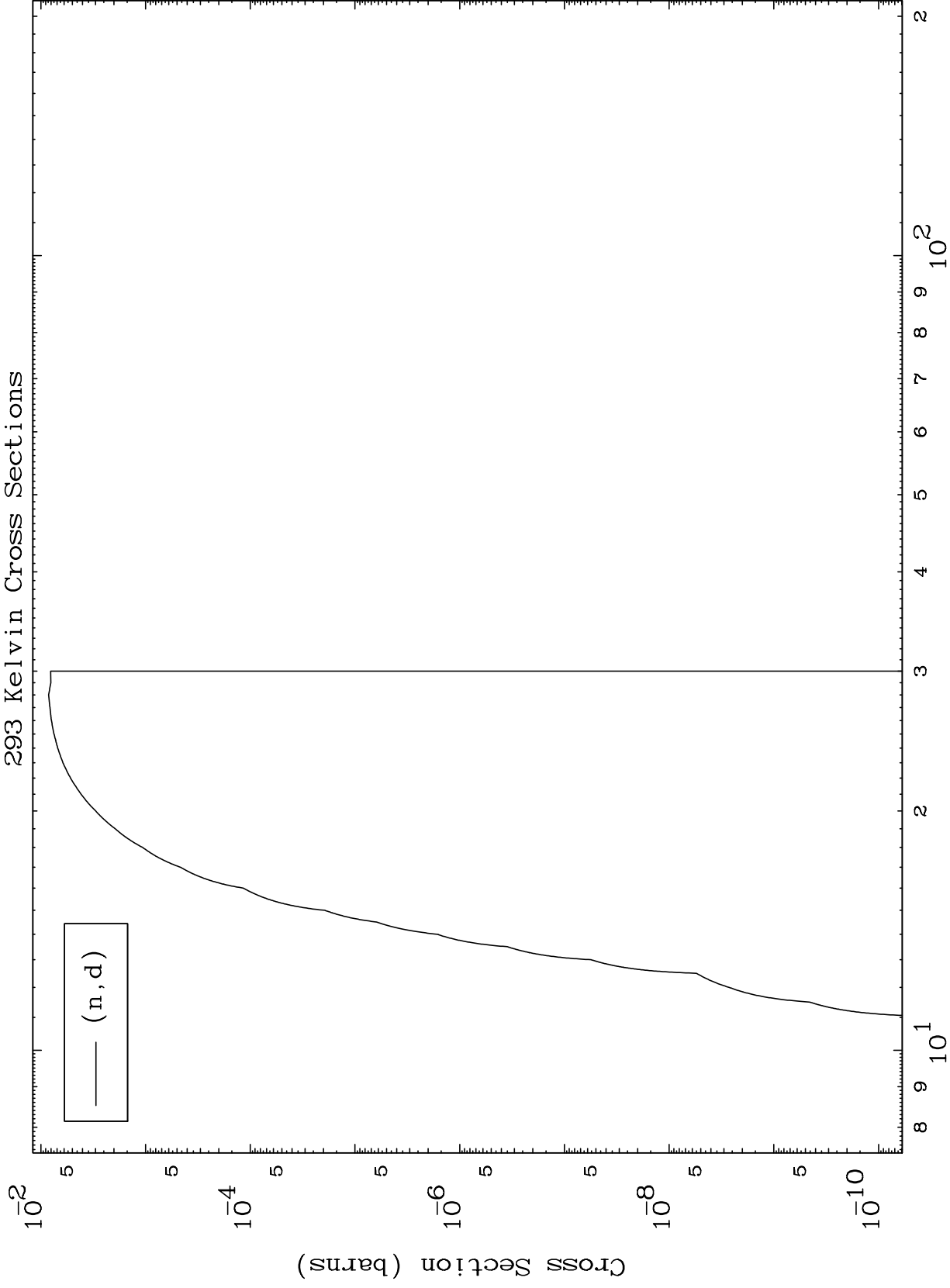
64-Gd-163

64-Gd-163

MAT 6458

(n,d) Levels
293 Kelvin Cross Sections

64-Gd-163



13

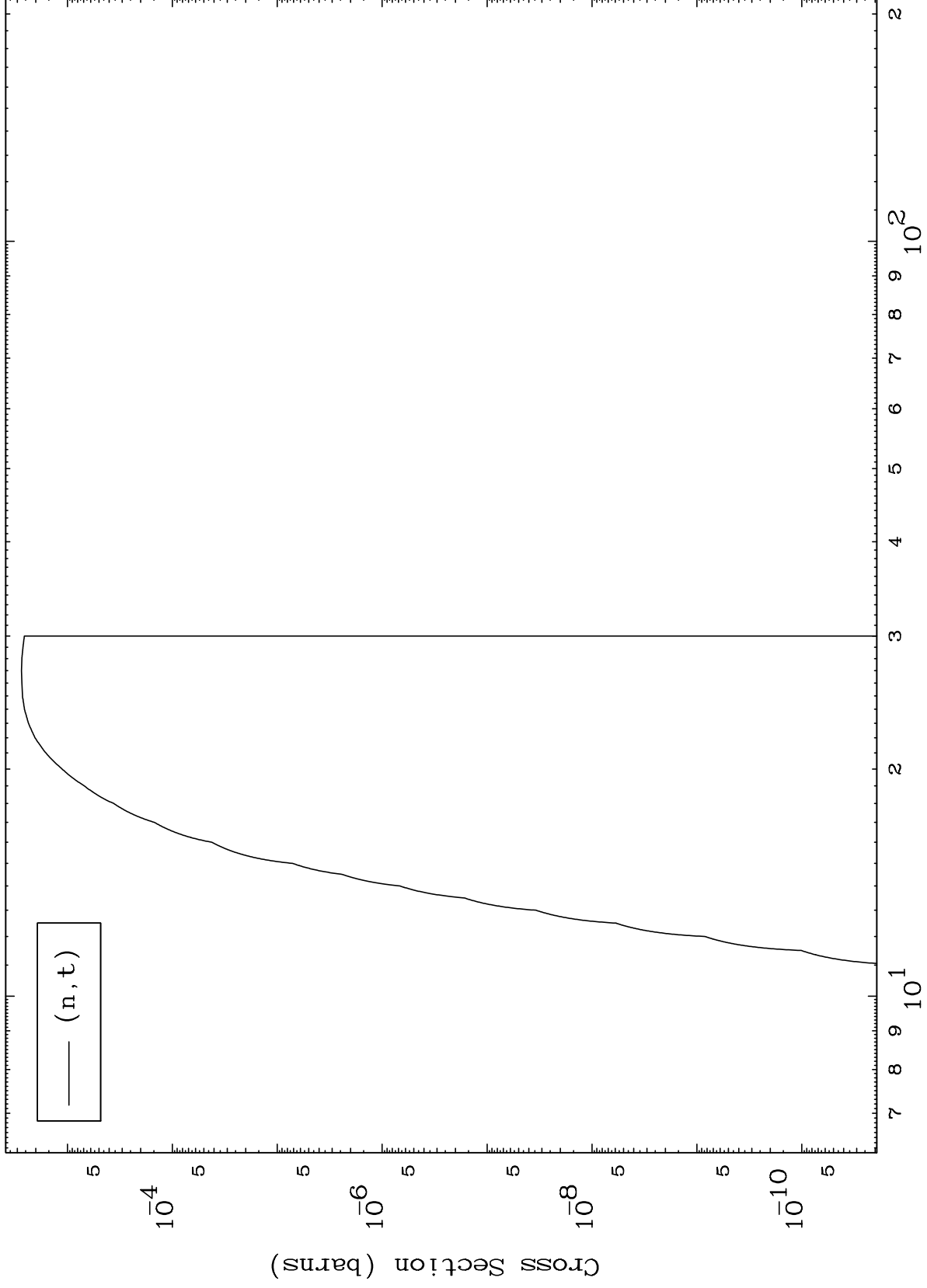
Incident Energy (MeV)

64-Gd-163

MAT 6458

(n,t) Levels
293 Kelvin Cross Sections

64-Gd-163



14

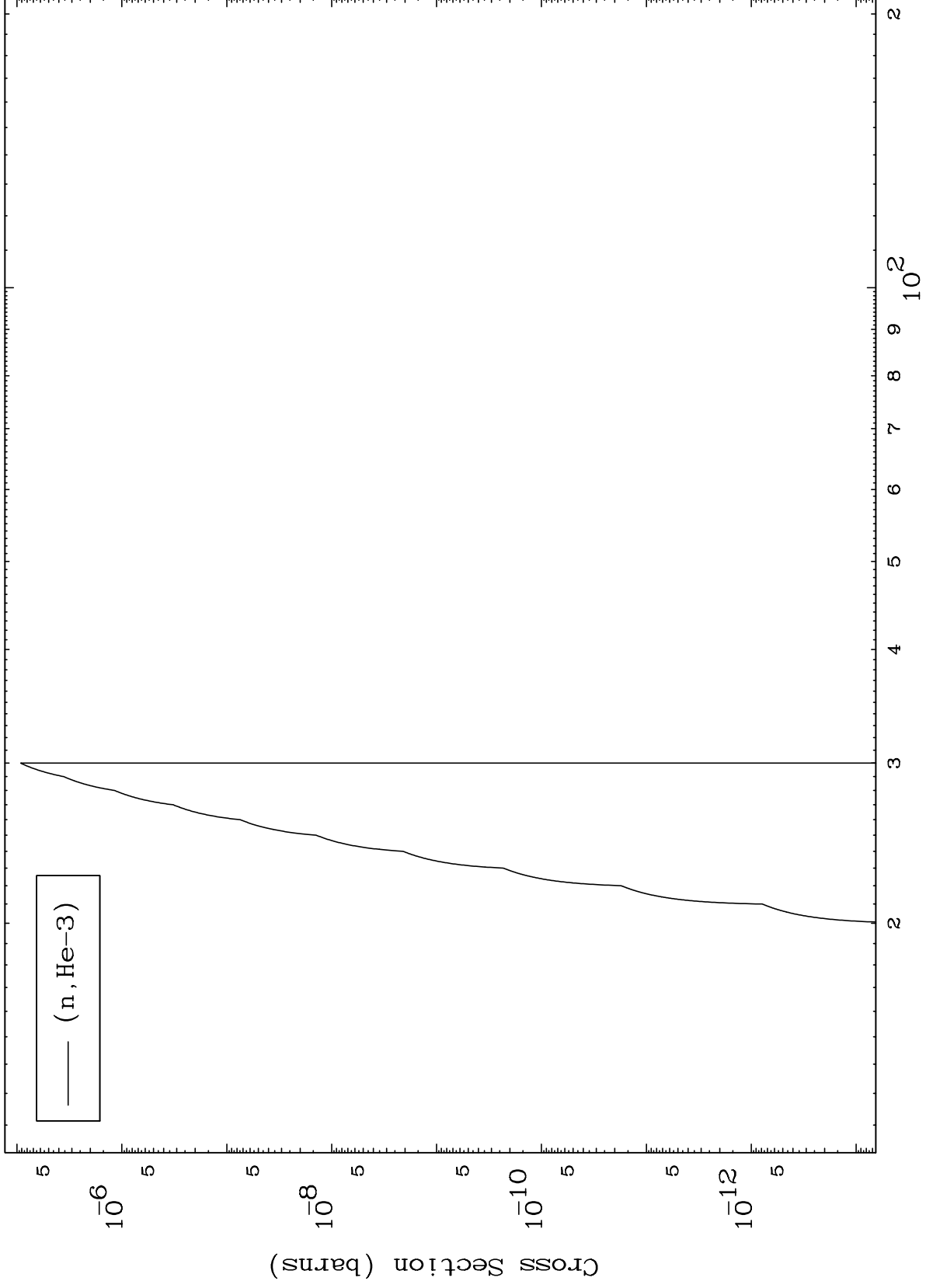
Incident Energy (MeV)

64-Gd-163

MAT 6458

(n,He3) Levels
293 Kelvin Cross Sections

64-Gd-163



15

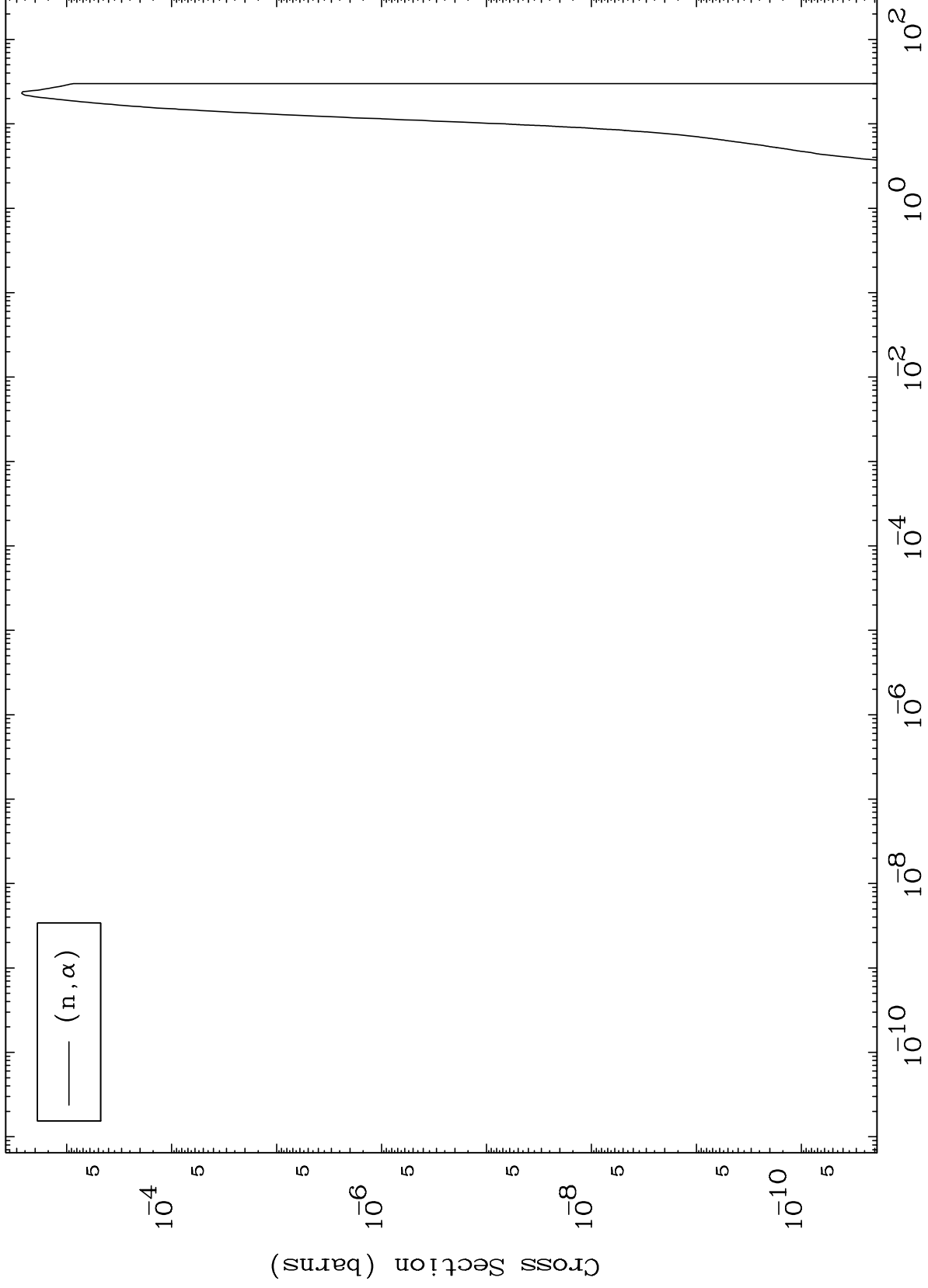
Incident Energy (MeV)

64-Gd-163

MAT 6458

(n, α) Levels
293 Kelvin Cross Sections

64-Gd-163

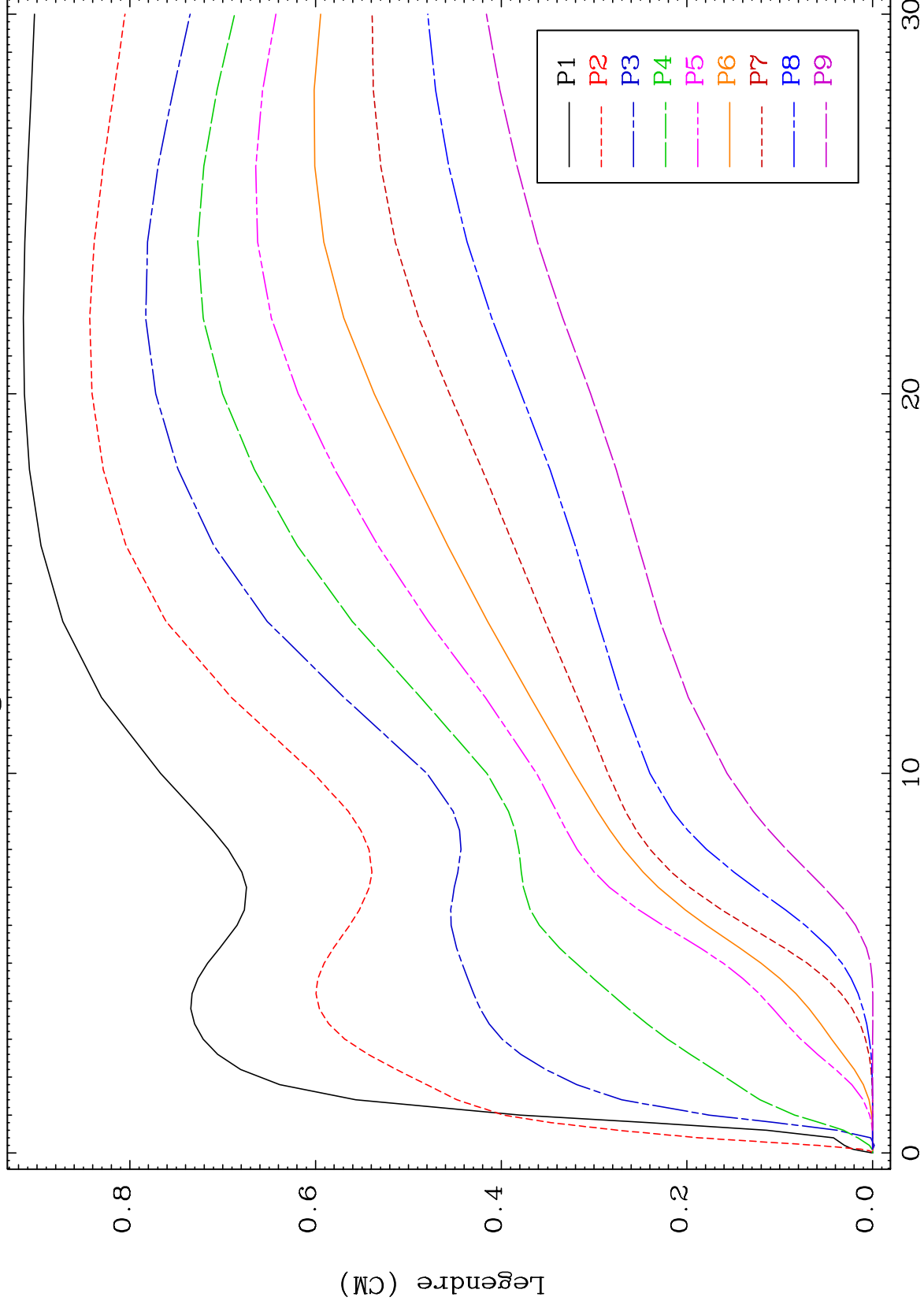


(n, α)

MAT 6458

Elastic Legendre Coefficients

64-Gd-163



17

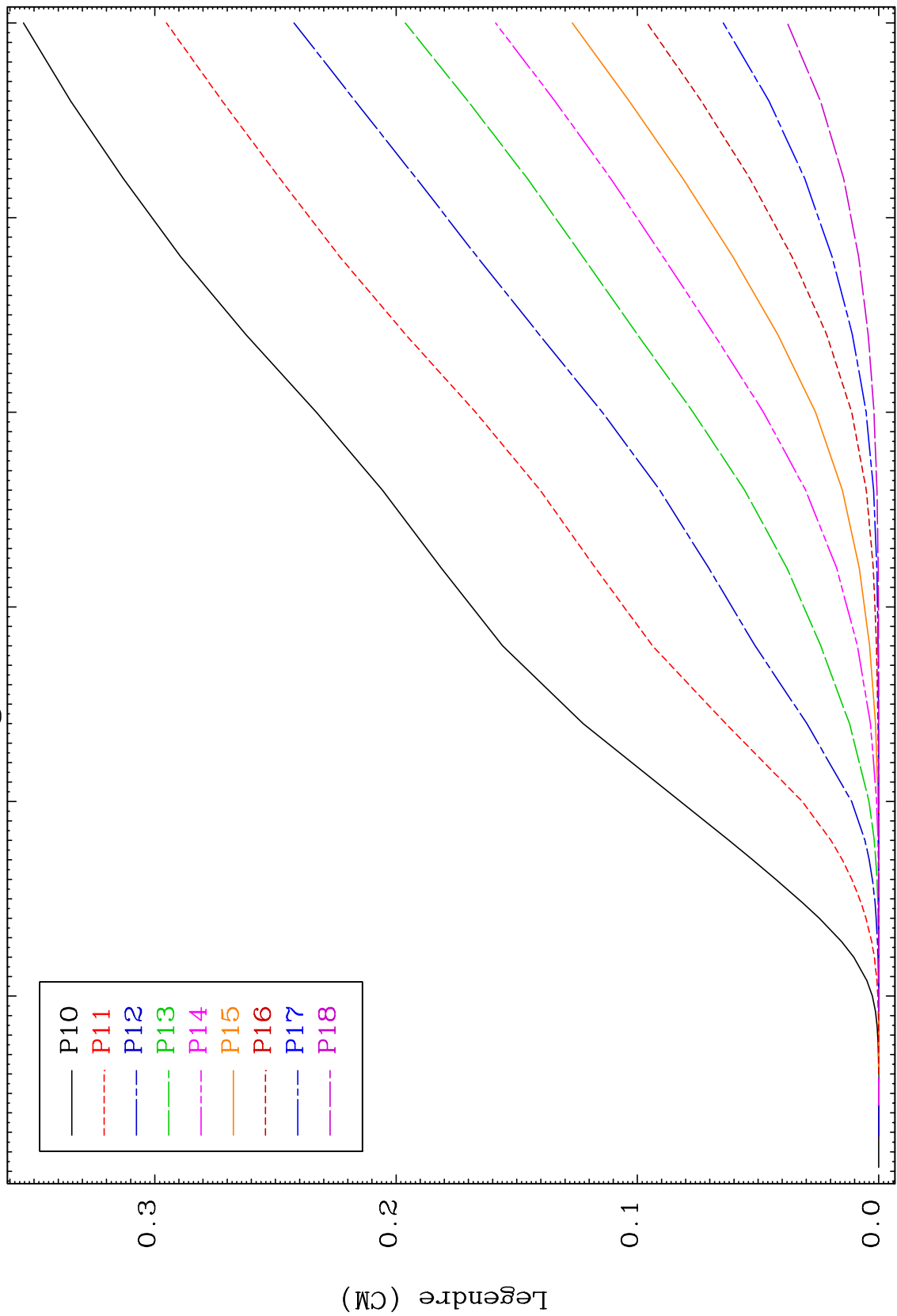
Incident Energy (MeV)

64-Gd-163

MAT 6458

Elastic Legendre Coefficients

64-Gd-163



18

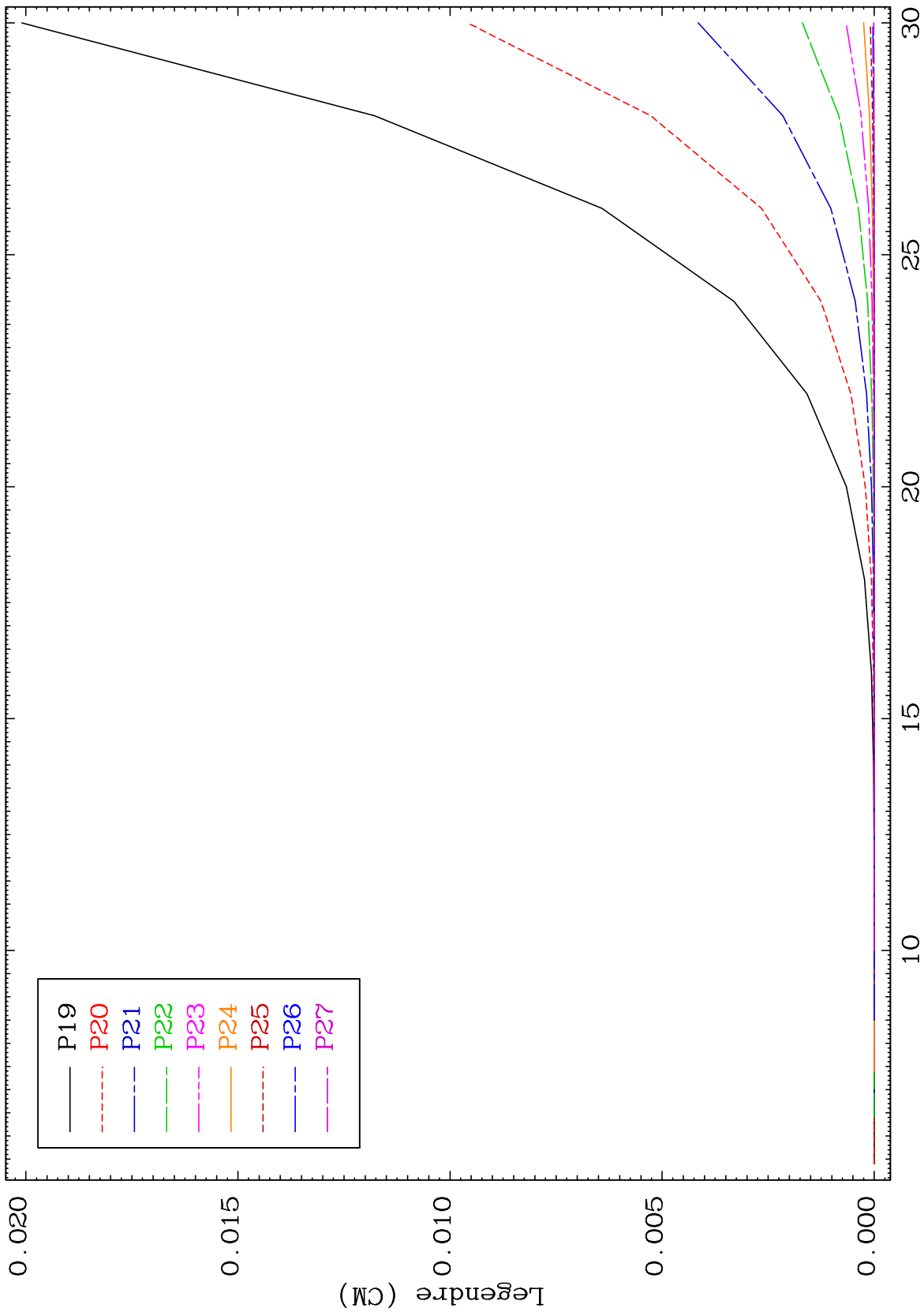
Incident Energy (MeV)

64-Gd-163

MAT 6458

Elastic
Legendre Coefficients

64-Gd-163



19

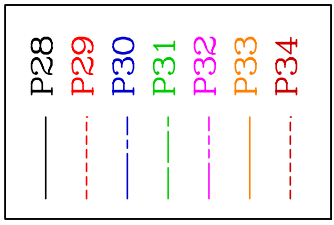
Incident Energy (MeV)

64-Gd-163

MAT 6458

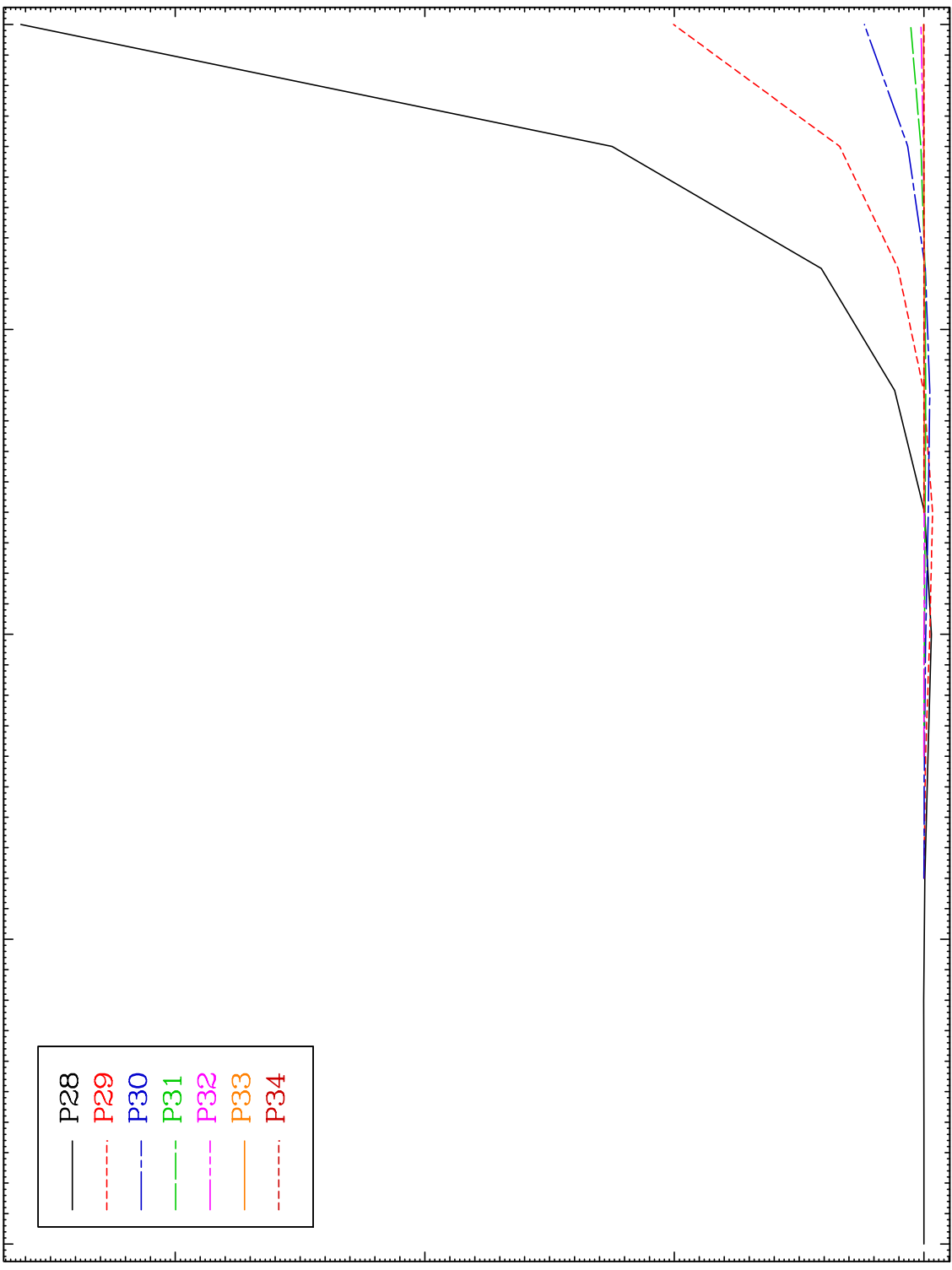
Elastic Legendre Coefficients

64-Gd-163



$\times 10^{-6}$

Legendre (CM)



30

25

20

15

10

Incident Energy (MeV)

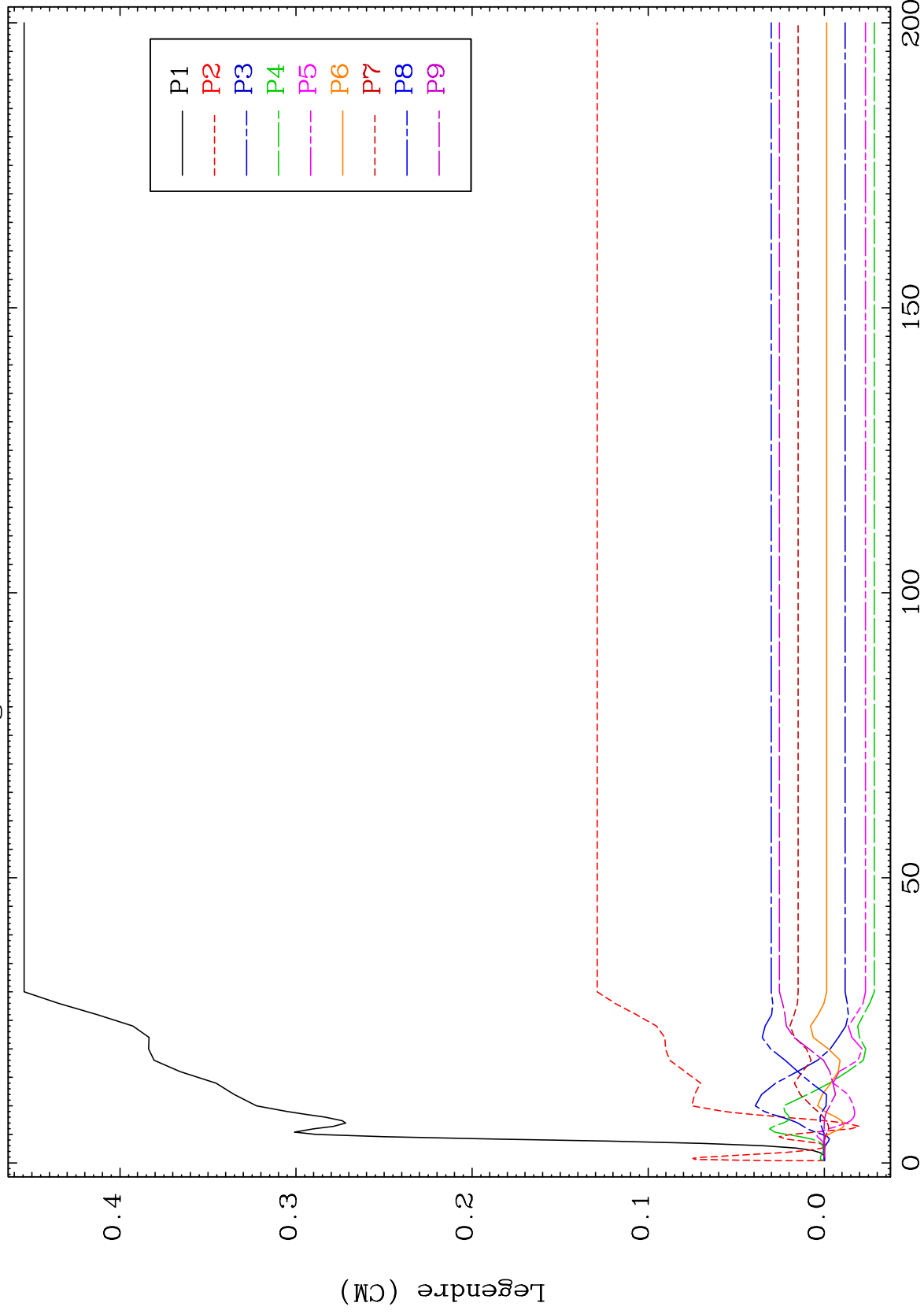
64-Gd-163

20

MAT 6458

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

64-Gd-163



21

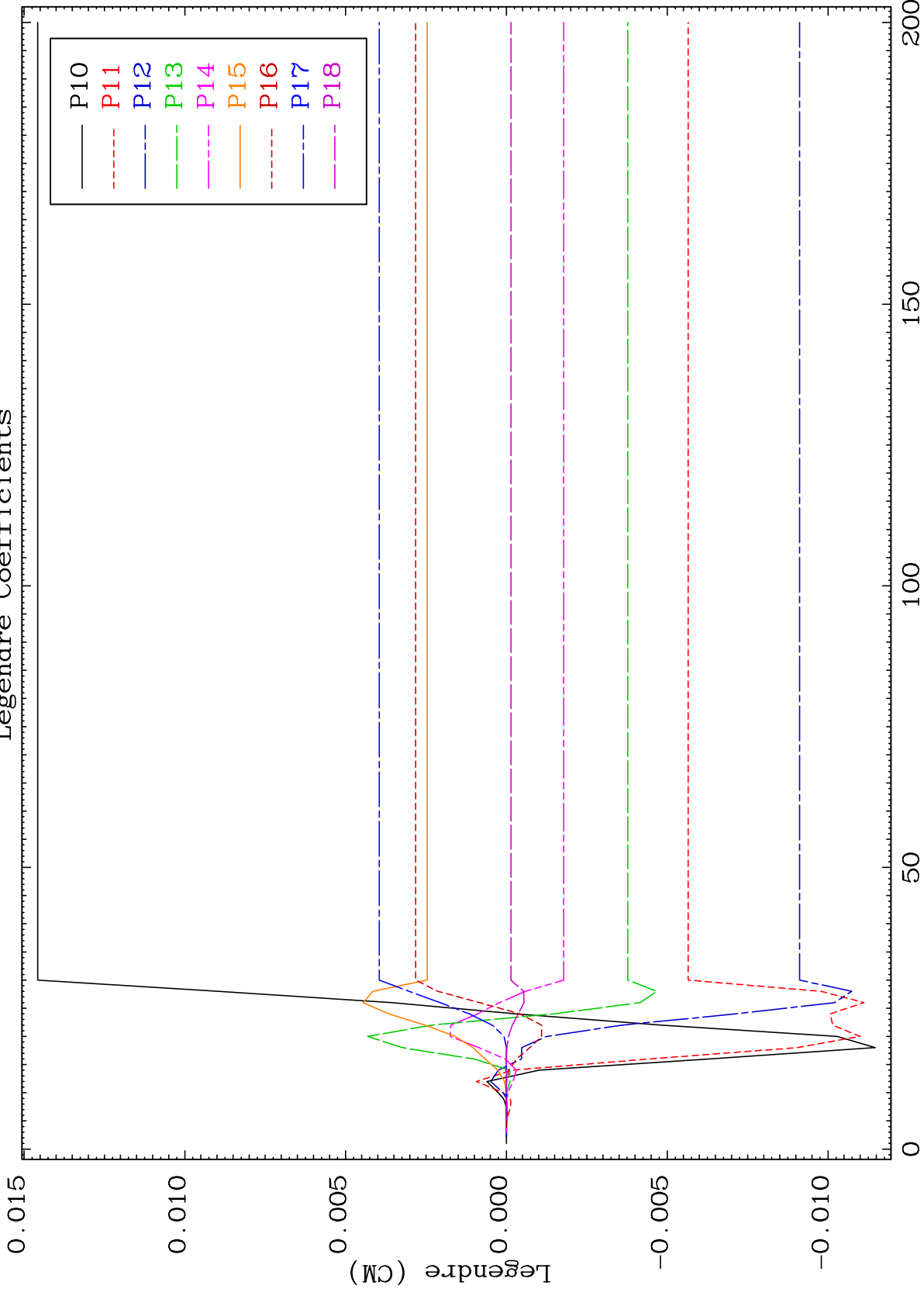
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

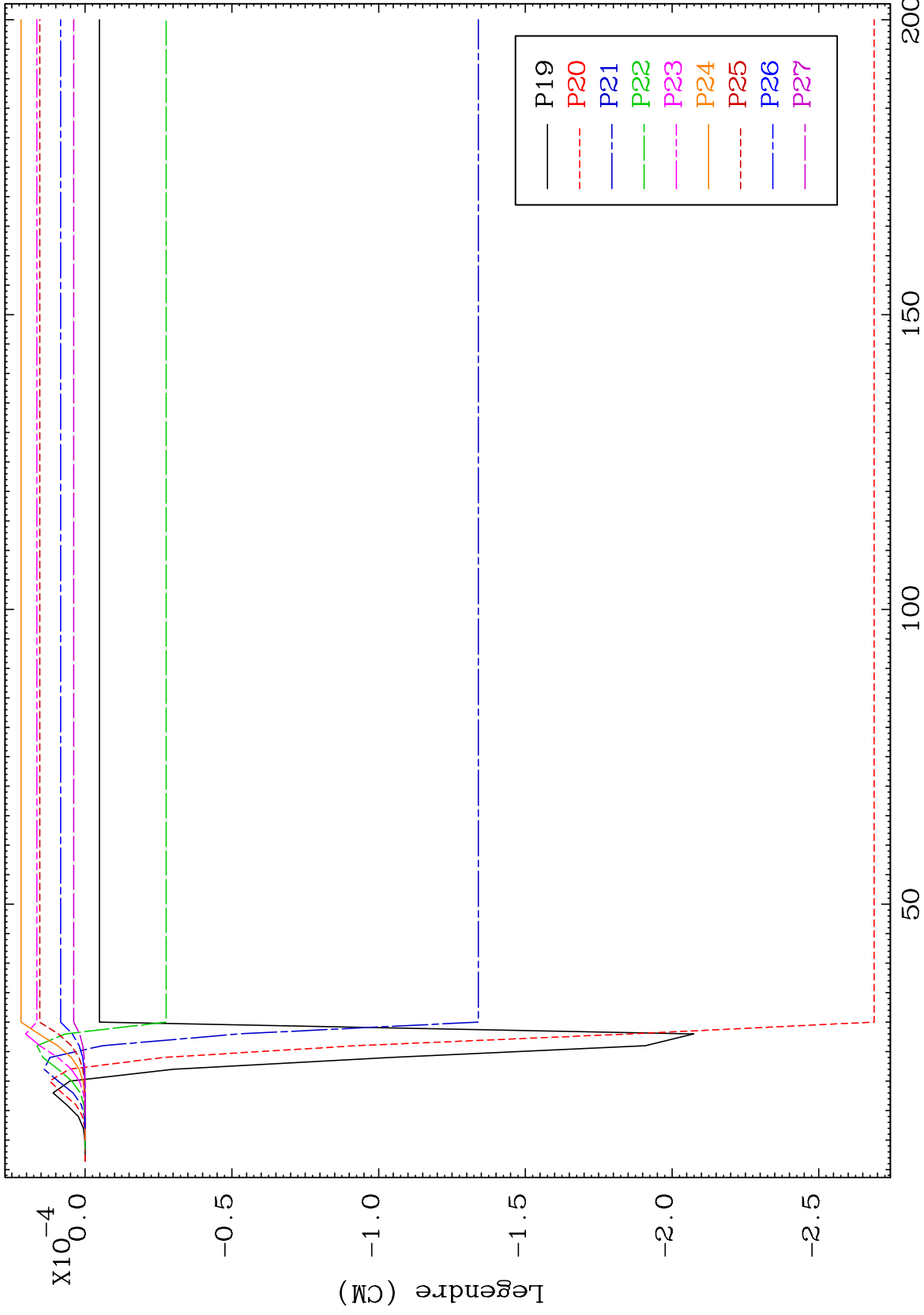
64-Gd-163



22

Incident Energy (MeV)

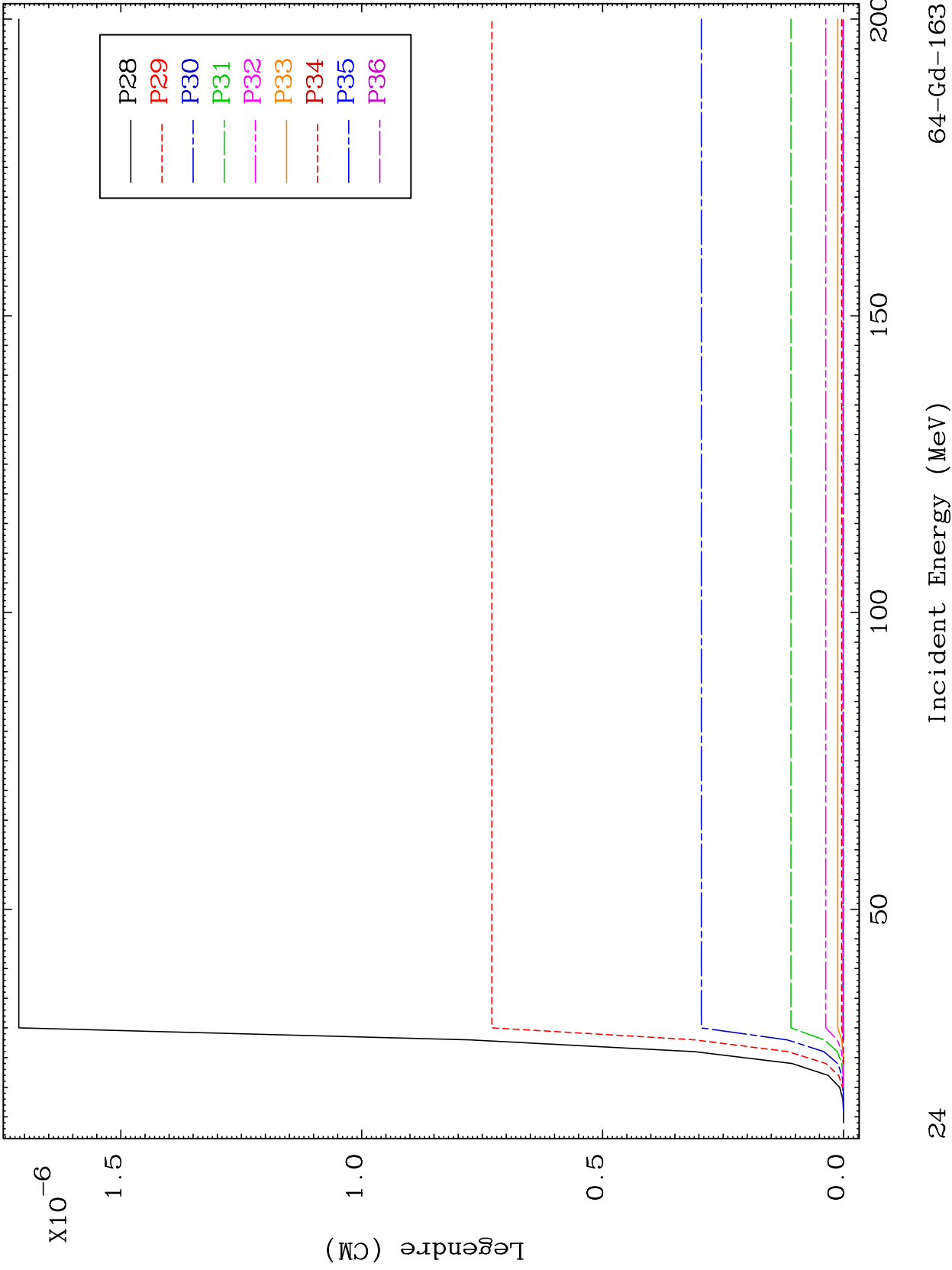
64-Gd-163



MAT 6458

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

64-Gd-163



24

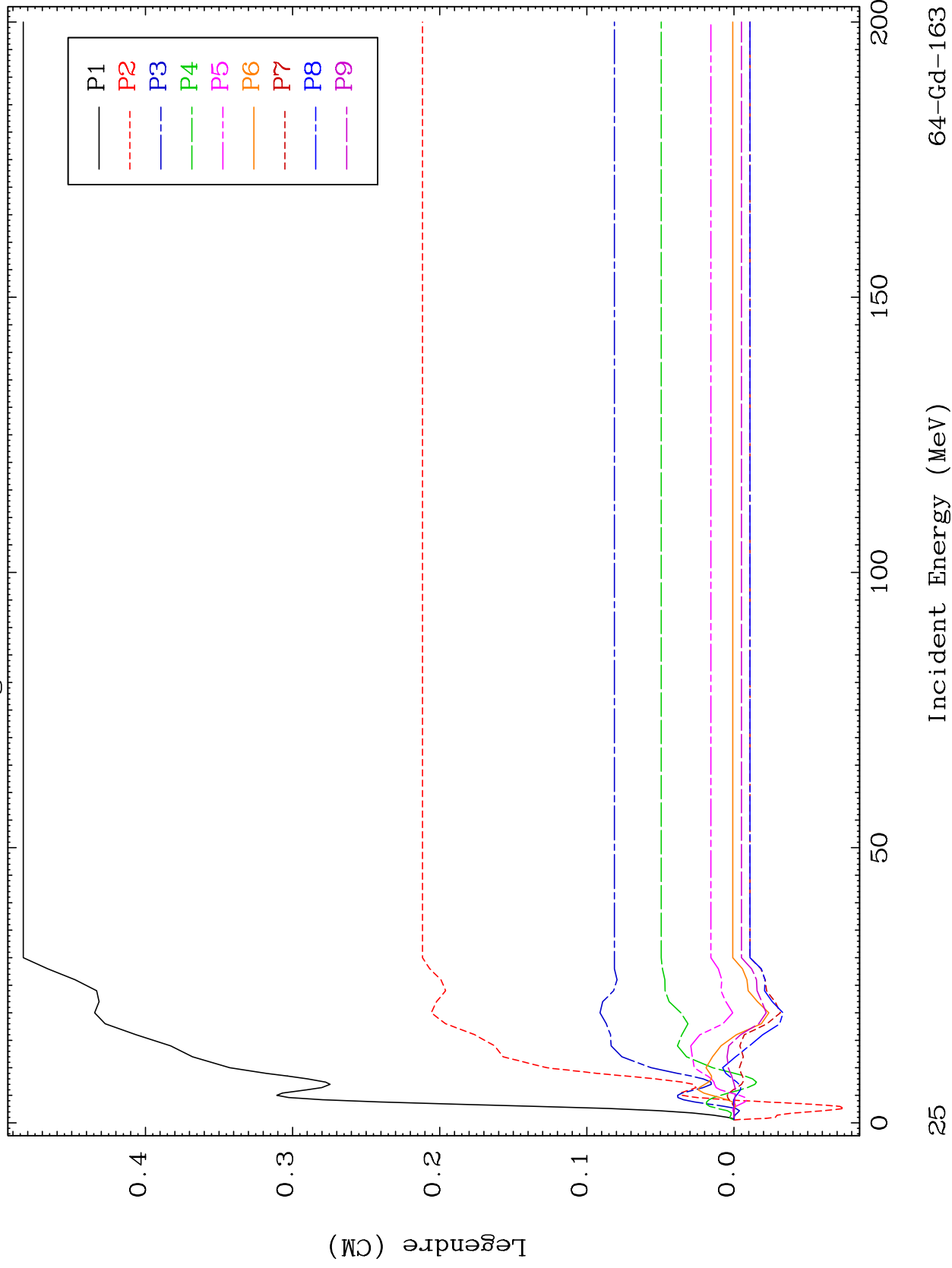
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

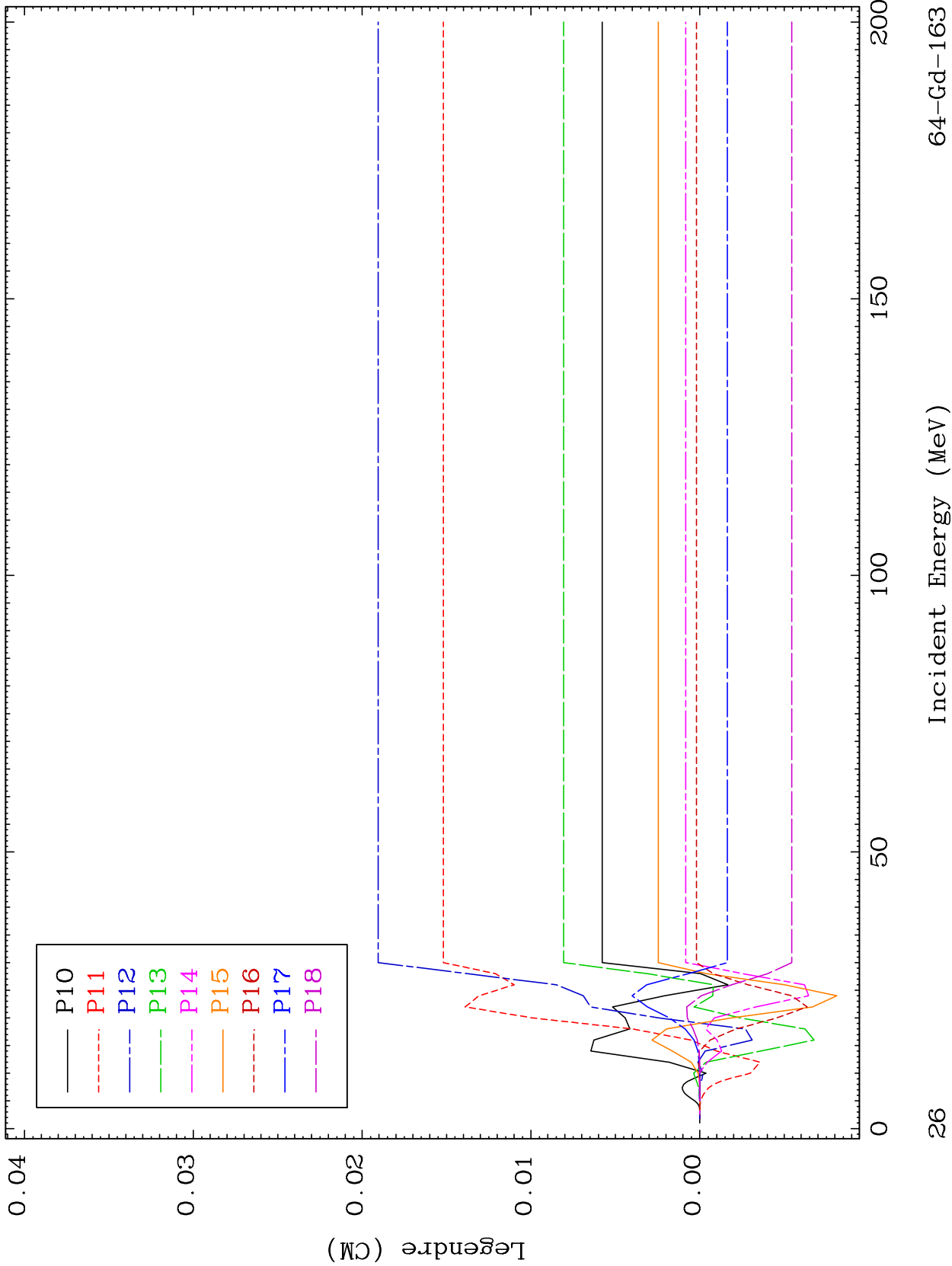
Incident Energy (MeV)

25

MAT 6458

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

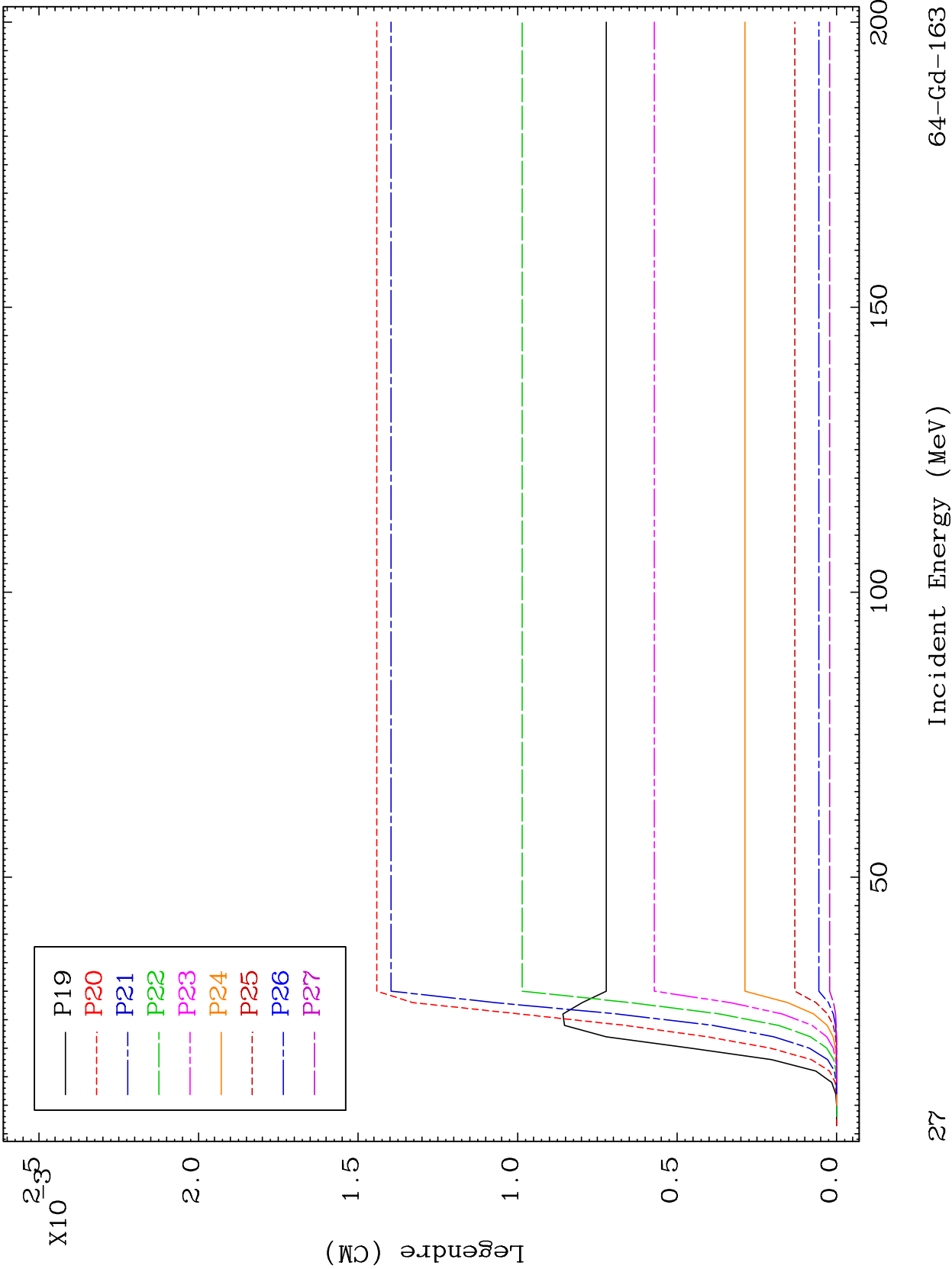
64-Gd-163



26

Incident Energy (MeV)

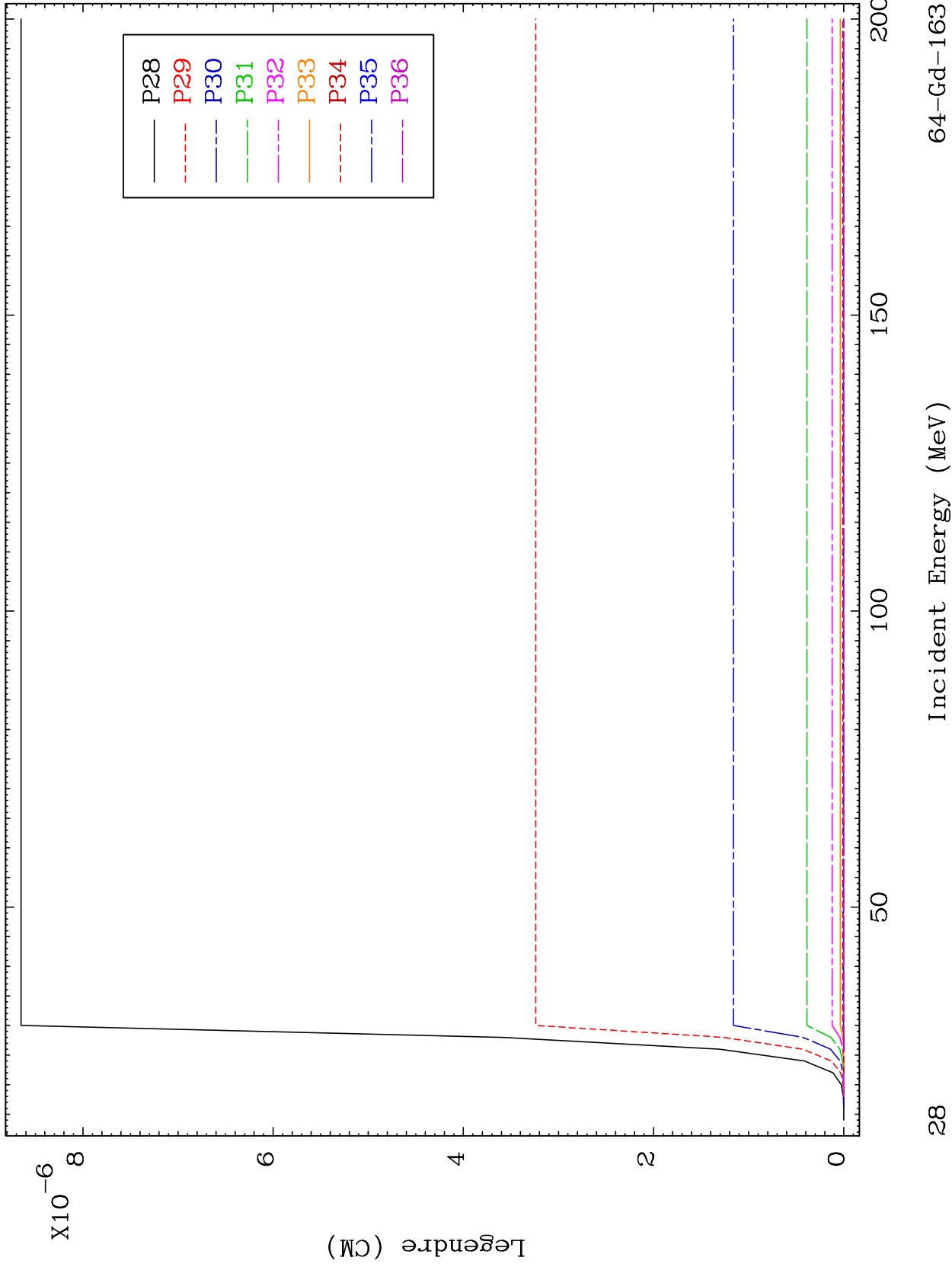
64-Gd-163



MAT 6458

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

64-Gd-163



28

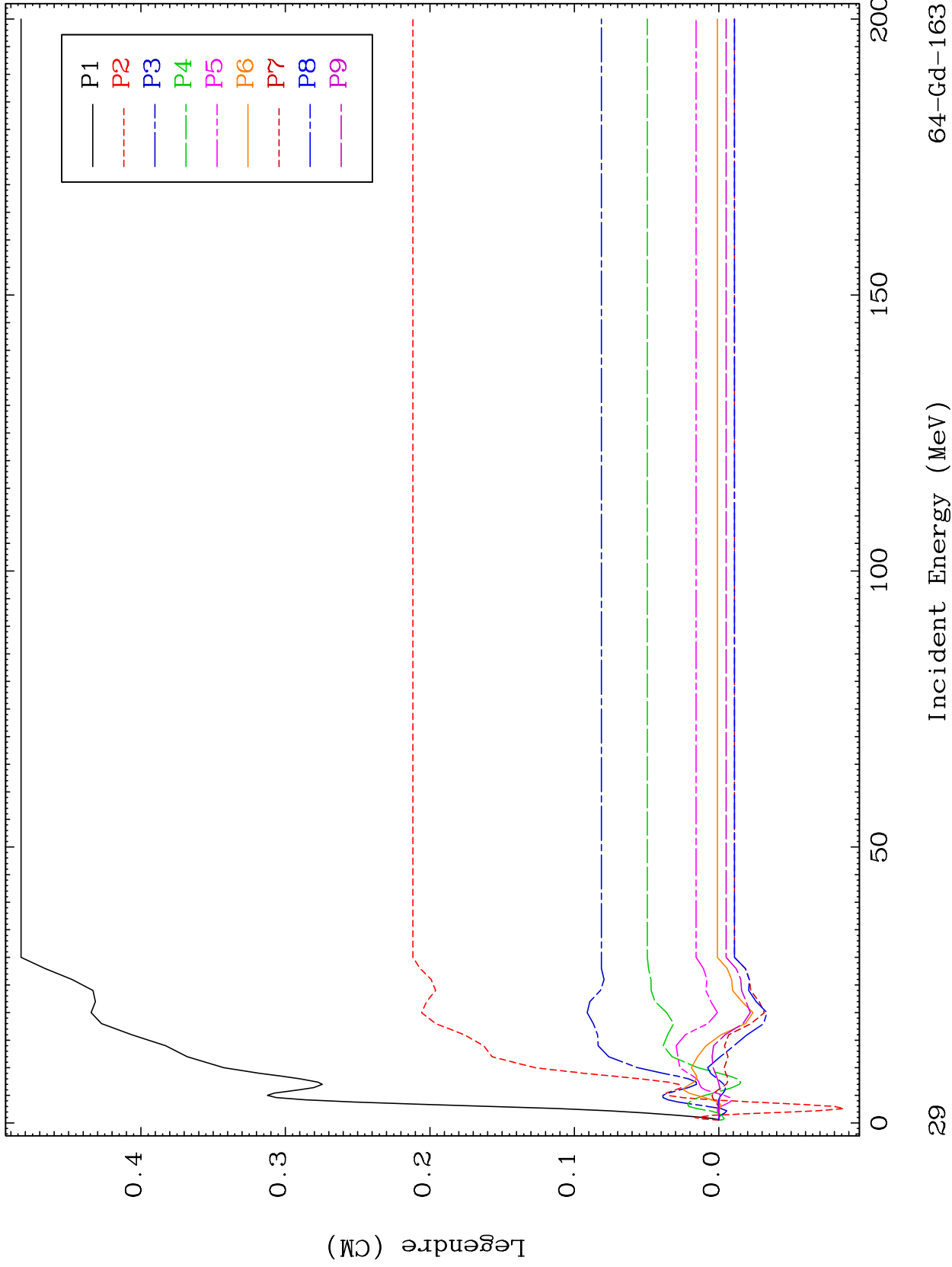
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

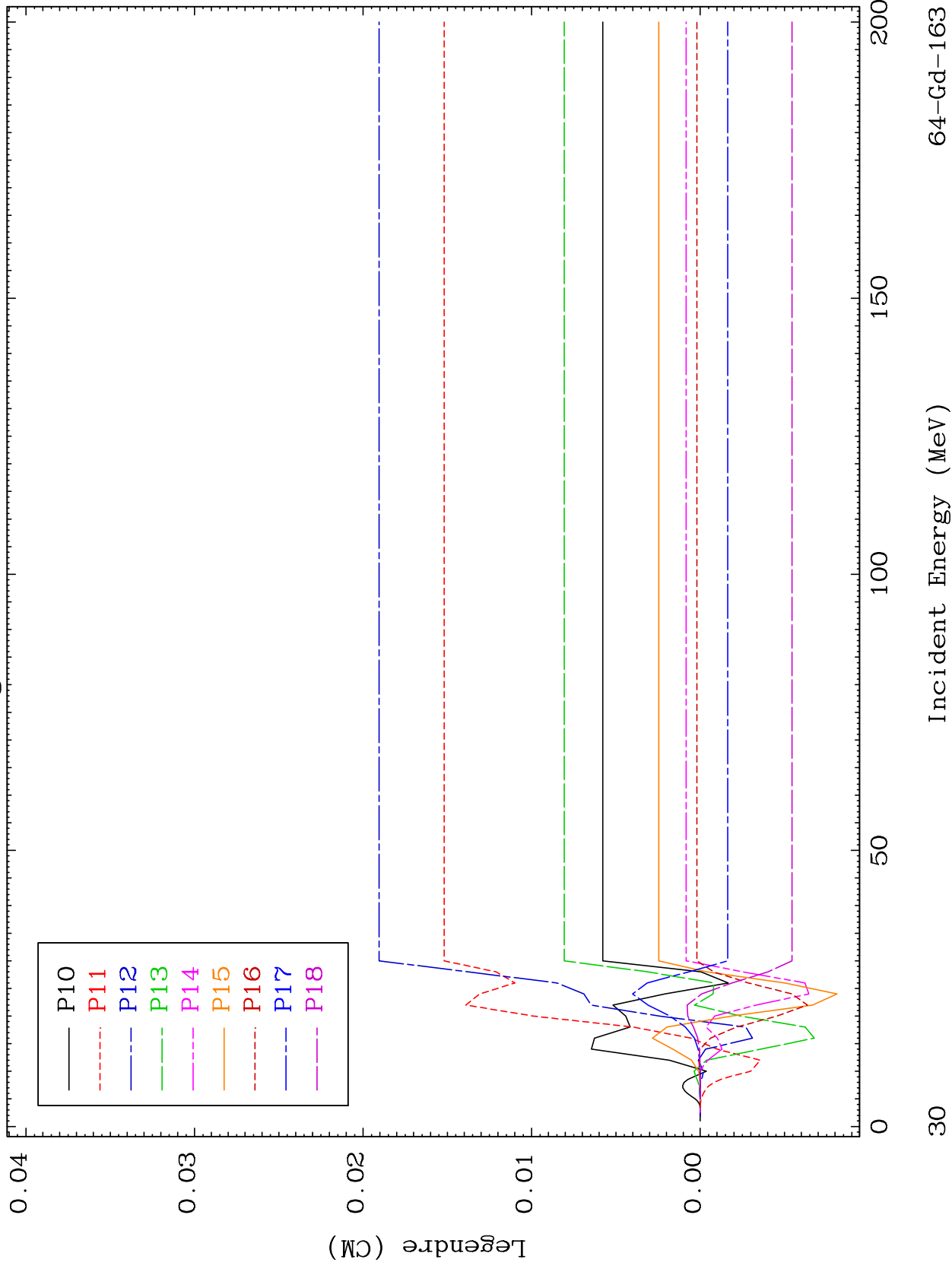
Incident Energy (MeV)

29

MAT 6458

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

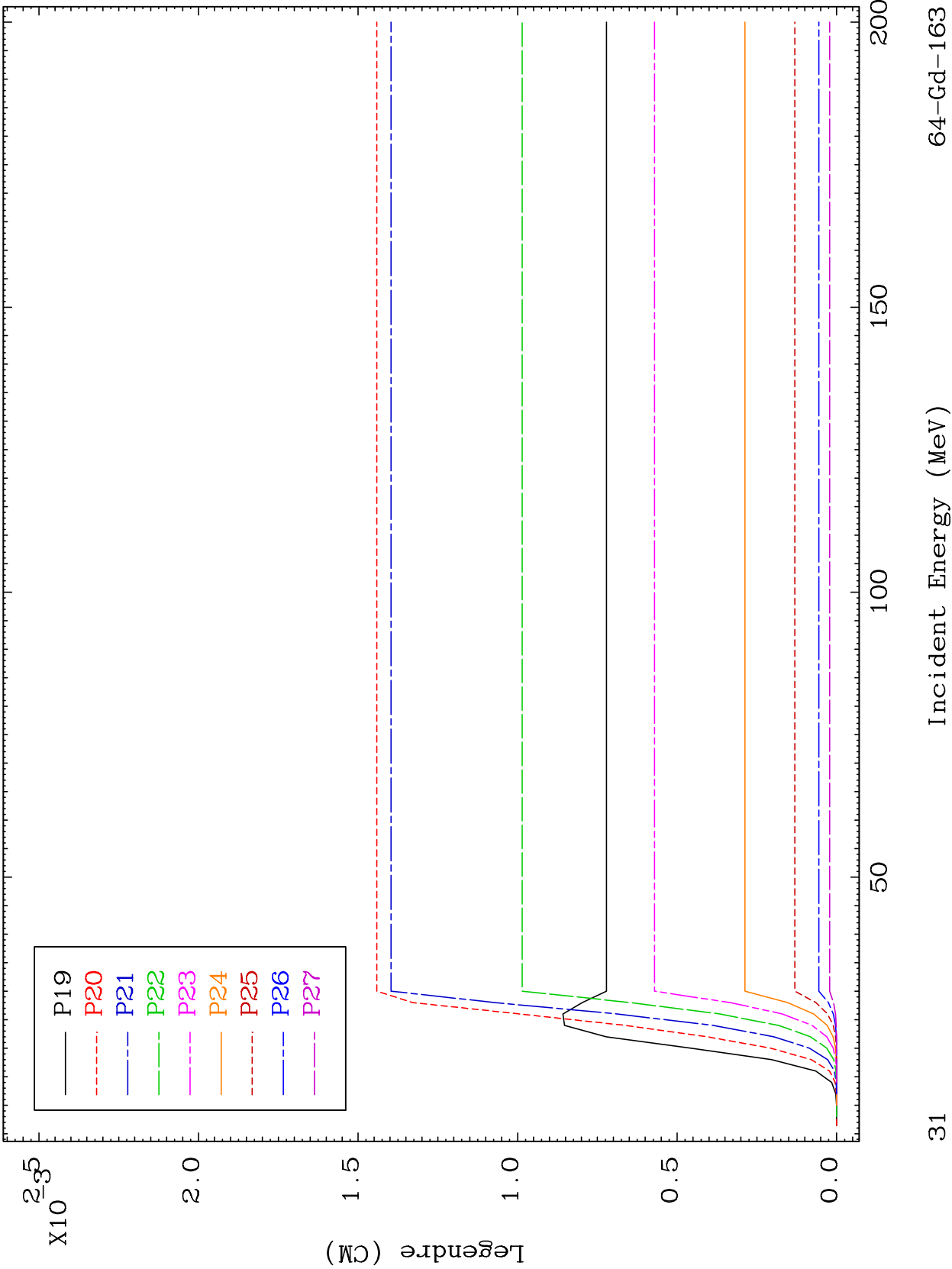
64-Gd-163



64-Gd-163

Incident Energy (MeV)

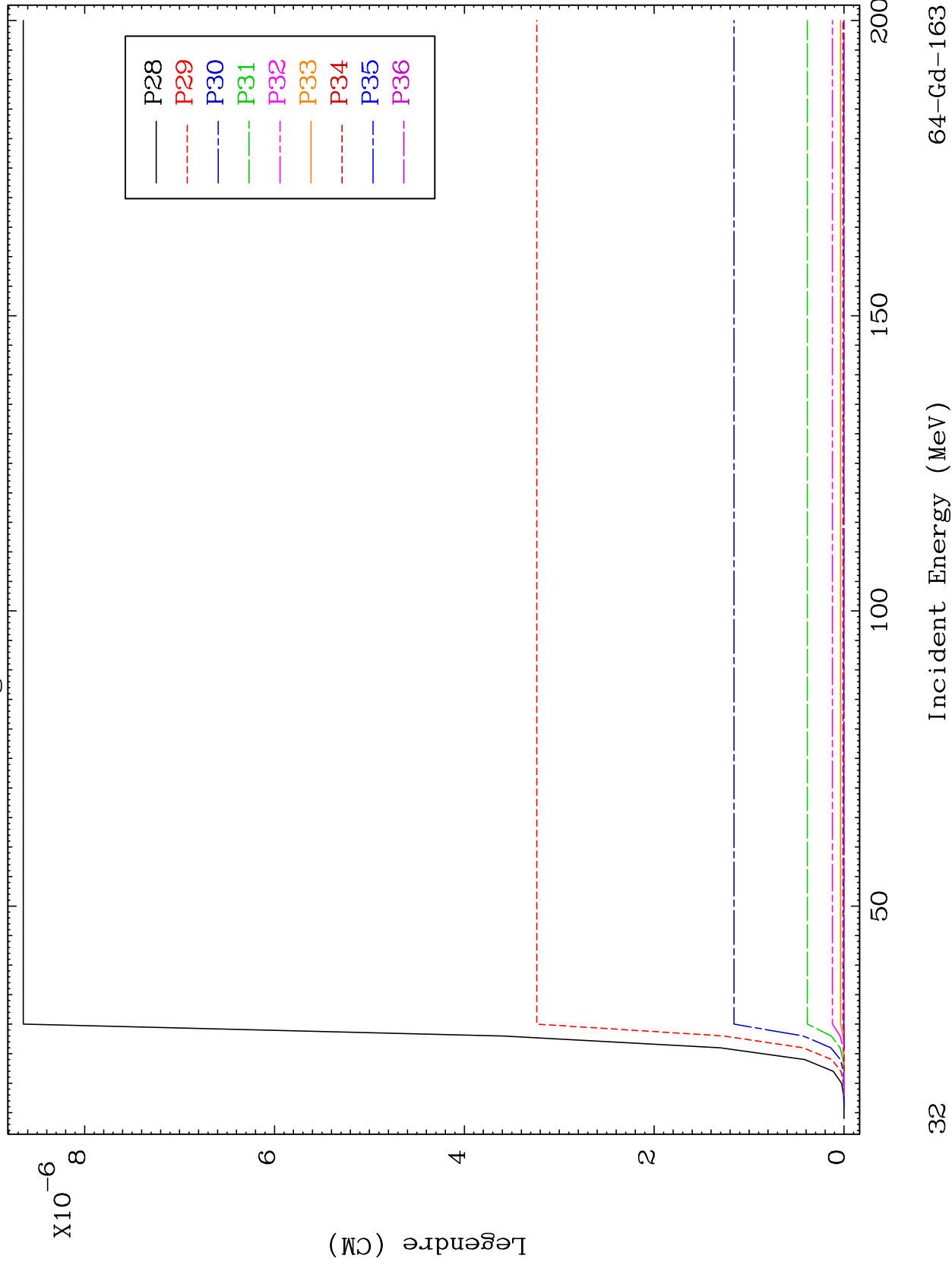
30



MAT 6458

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

64-Gd-163



32

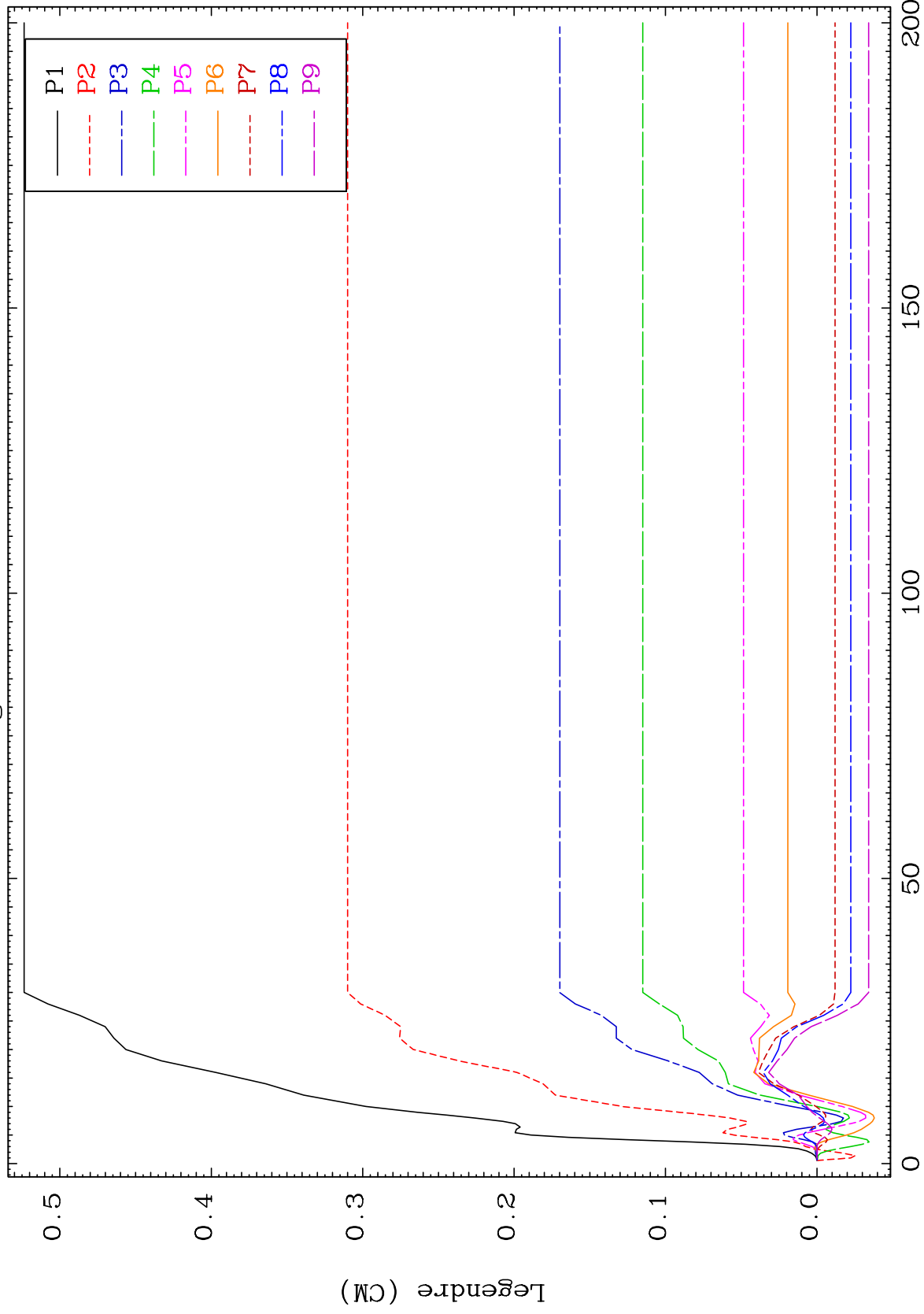
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



33

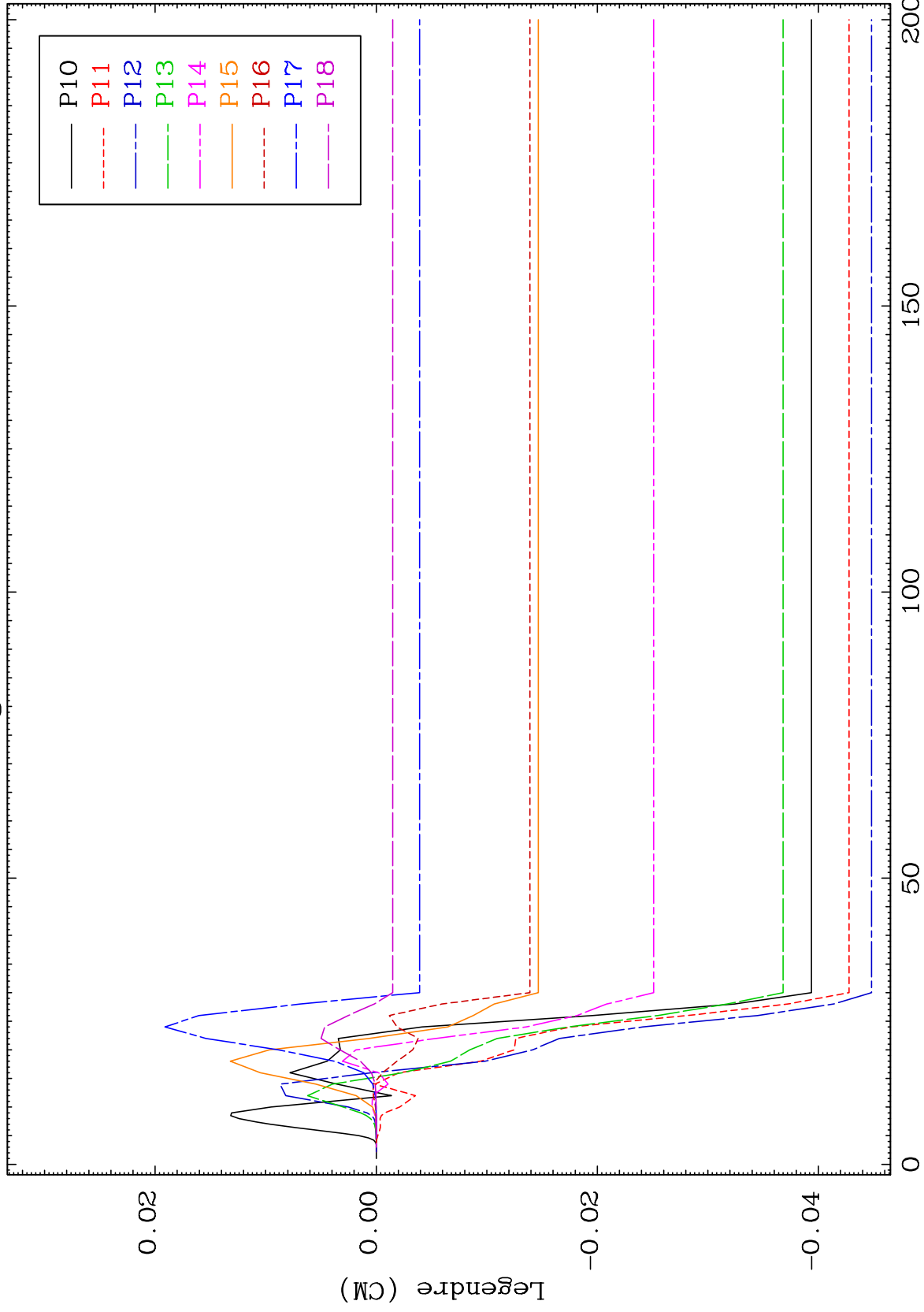
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



34

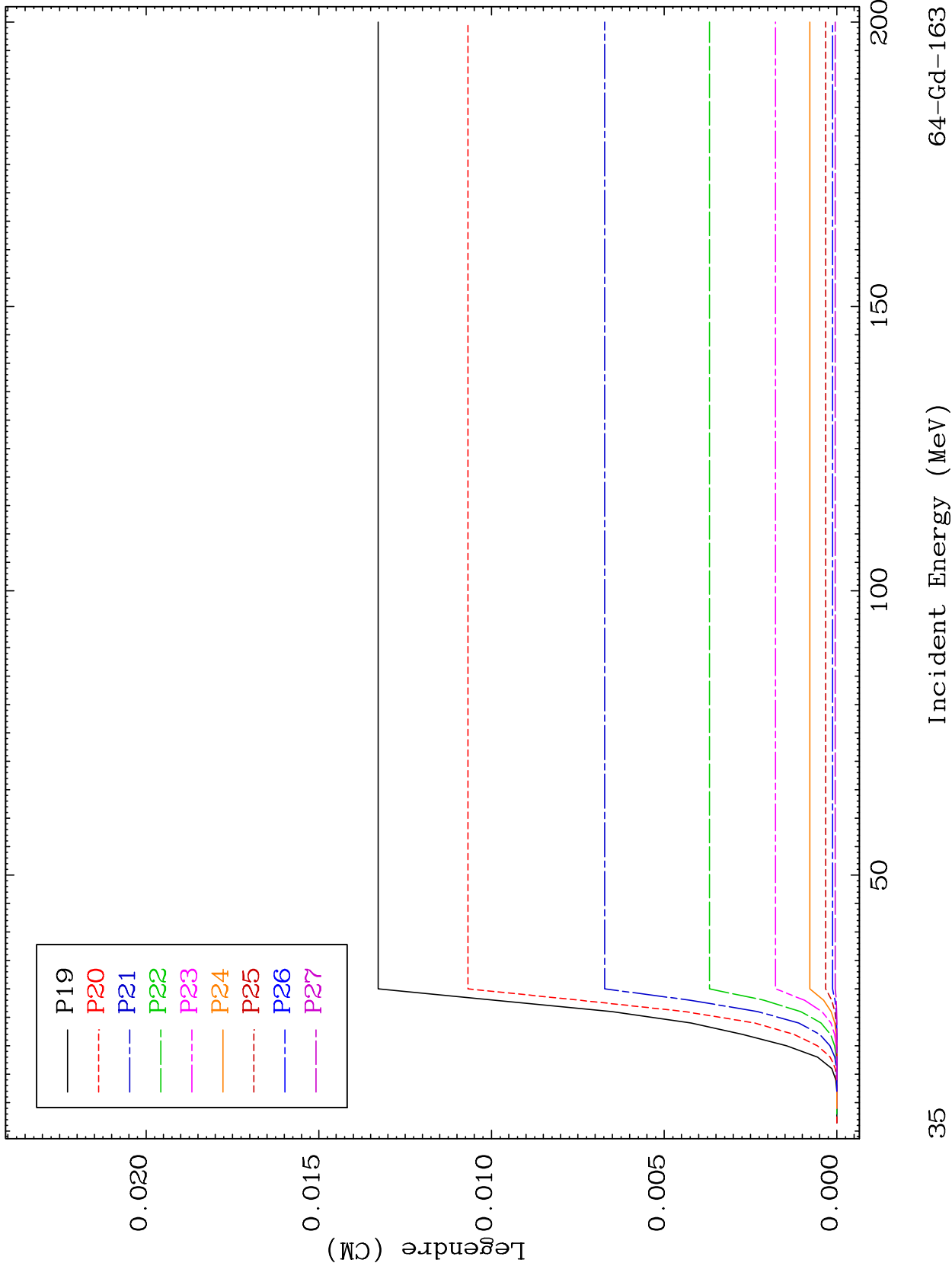
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



35

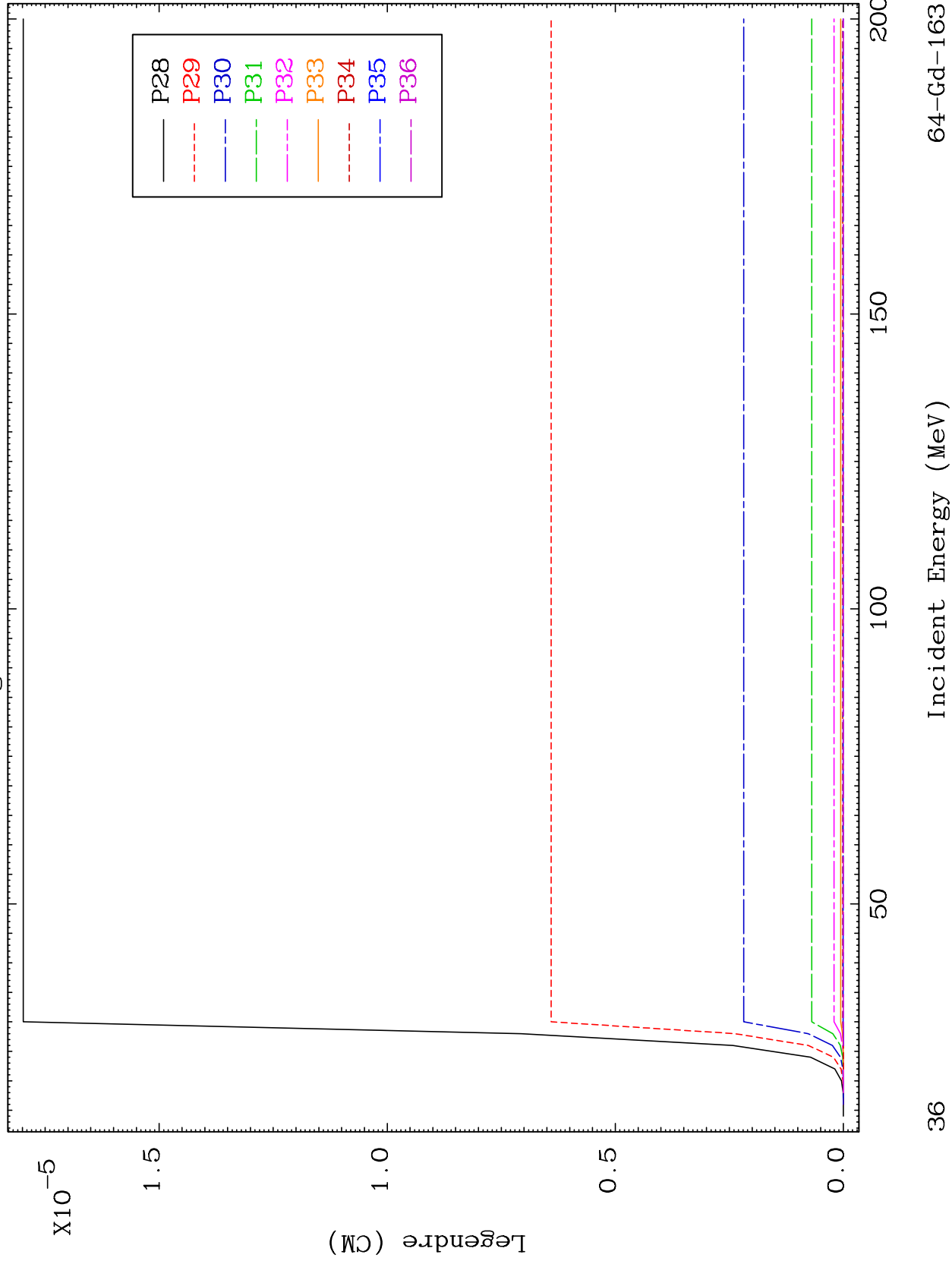
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



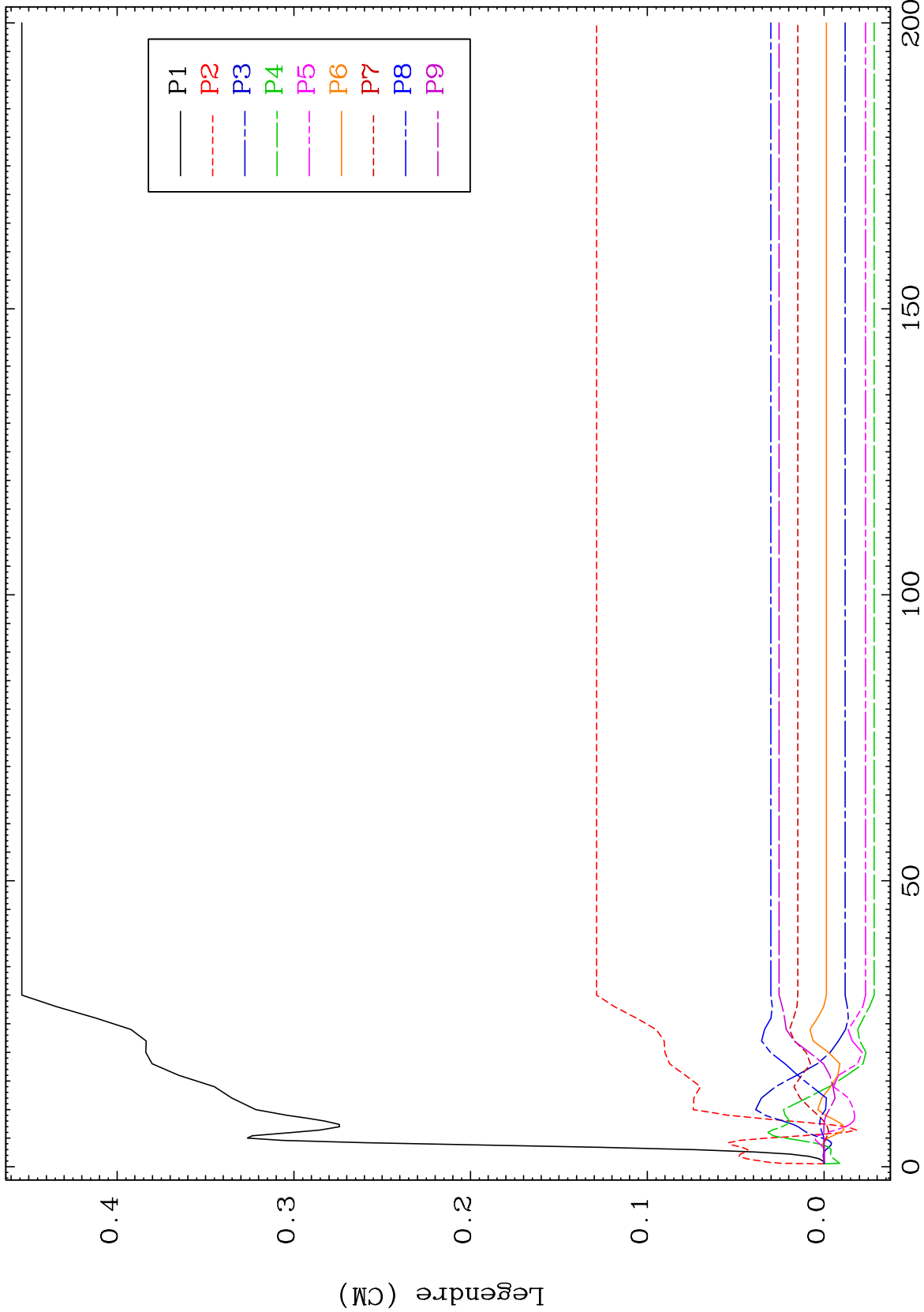
36

64-Gd-163

MAT 6458

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

64-Gd-163



37

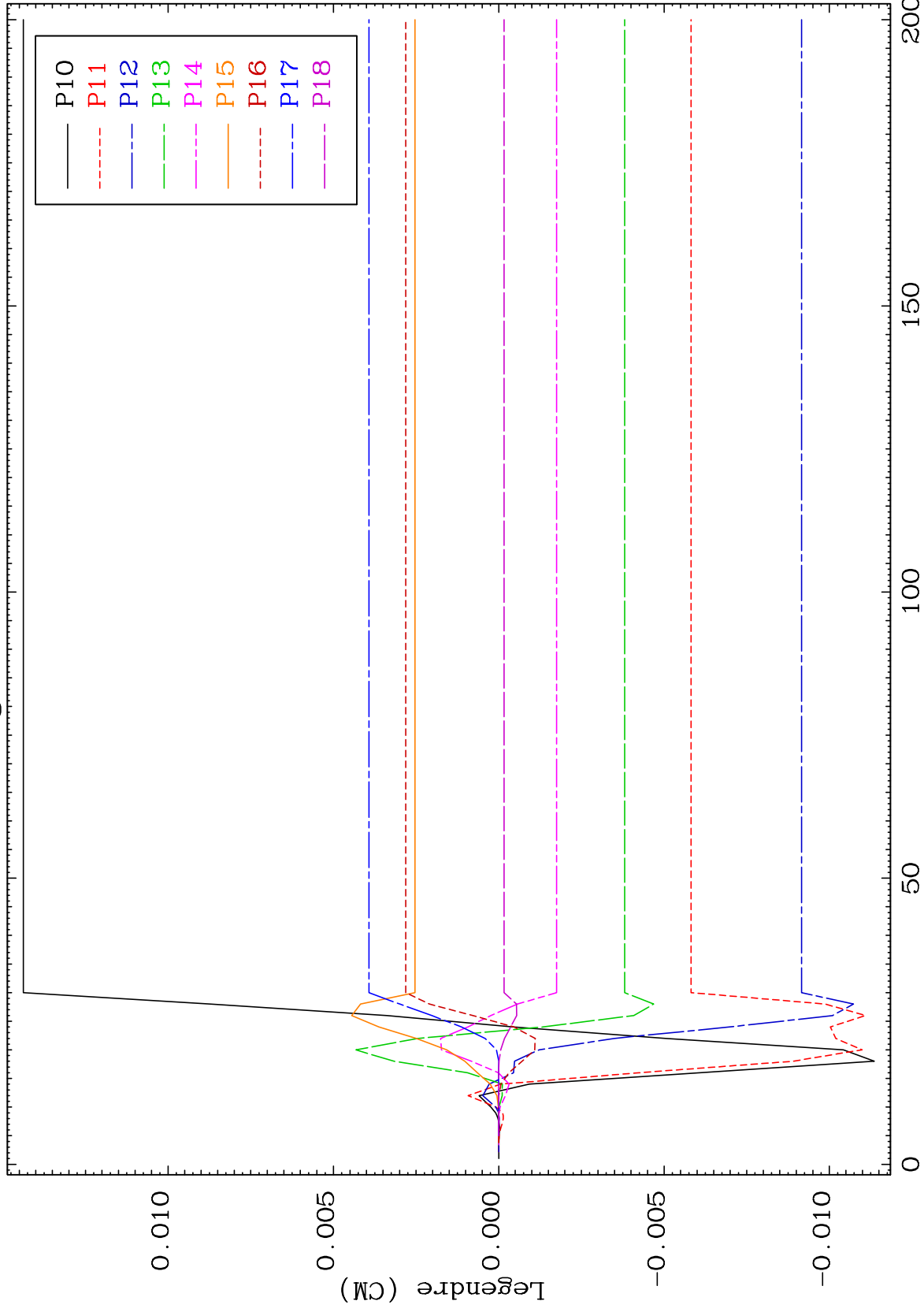
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



38

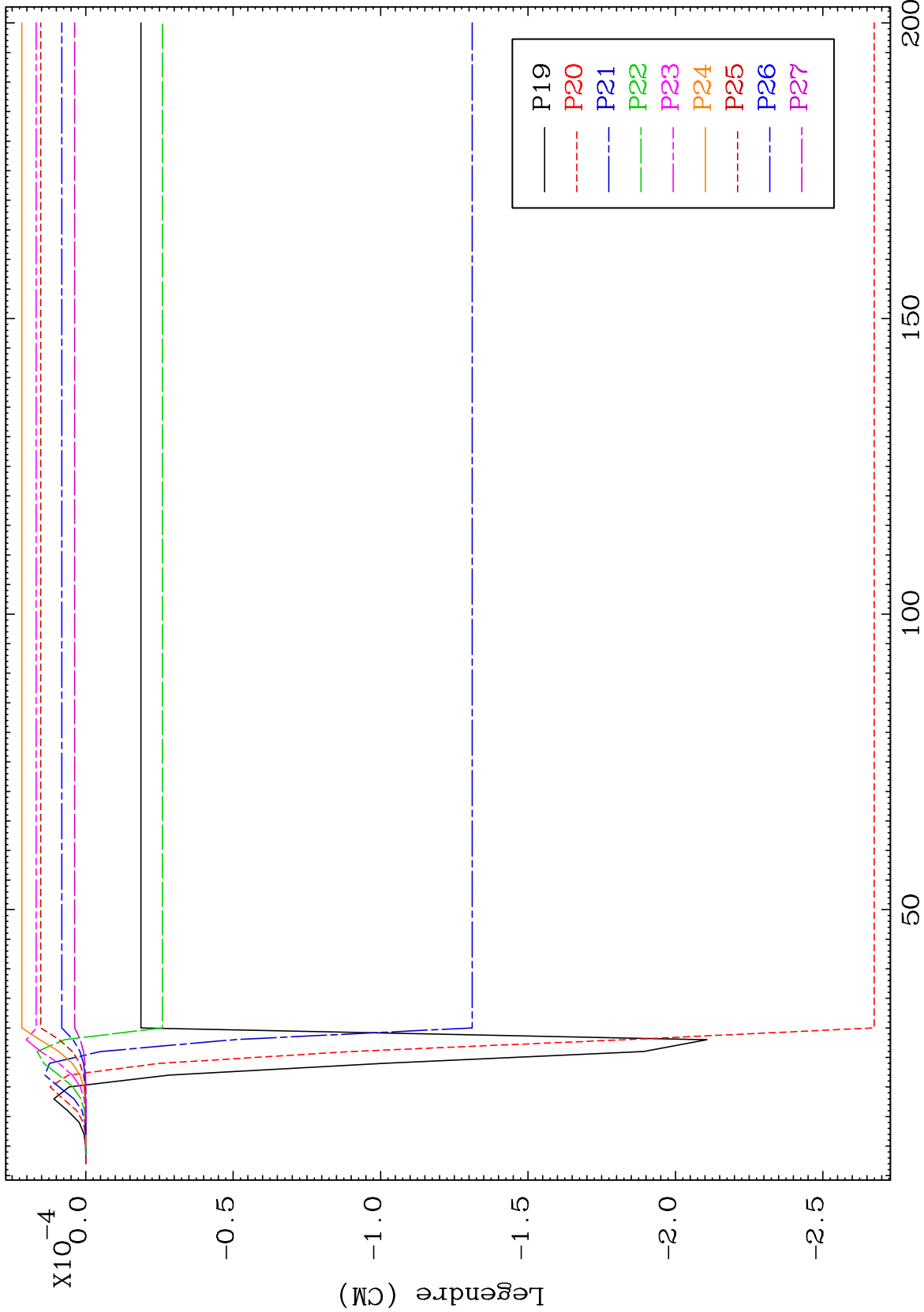
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

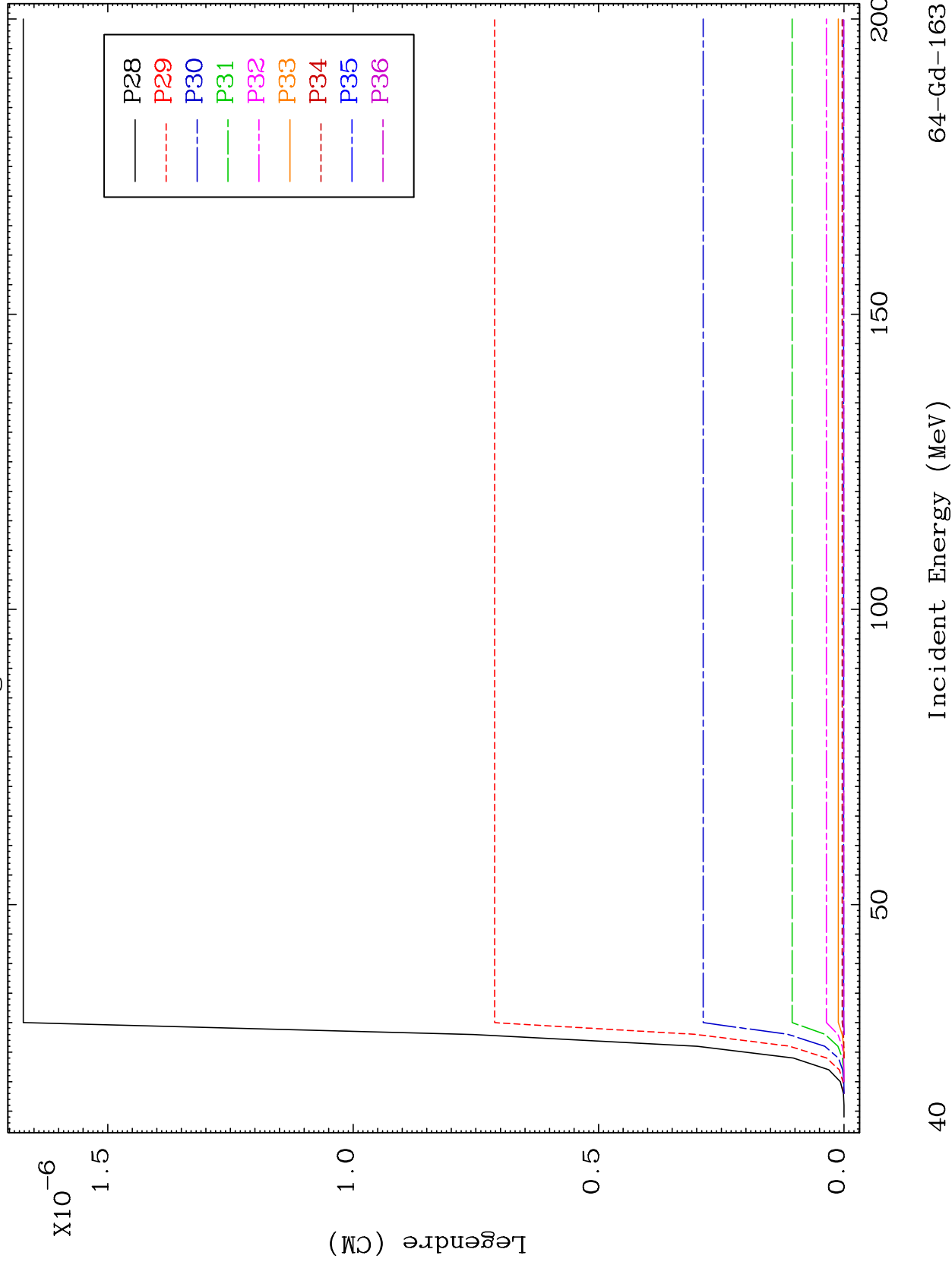
64-Gd-163



MAT 6458

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

64-Gd-163



64-Gd-163

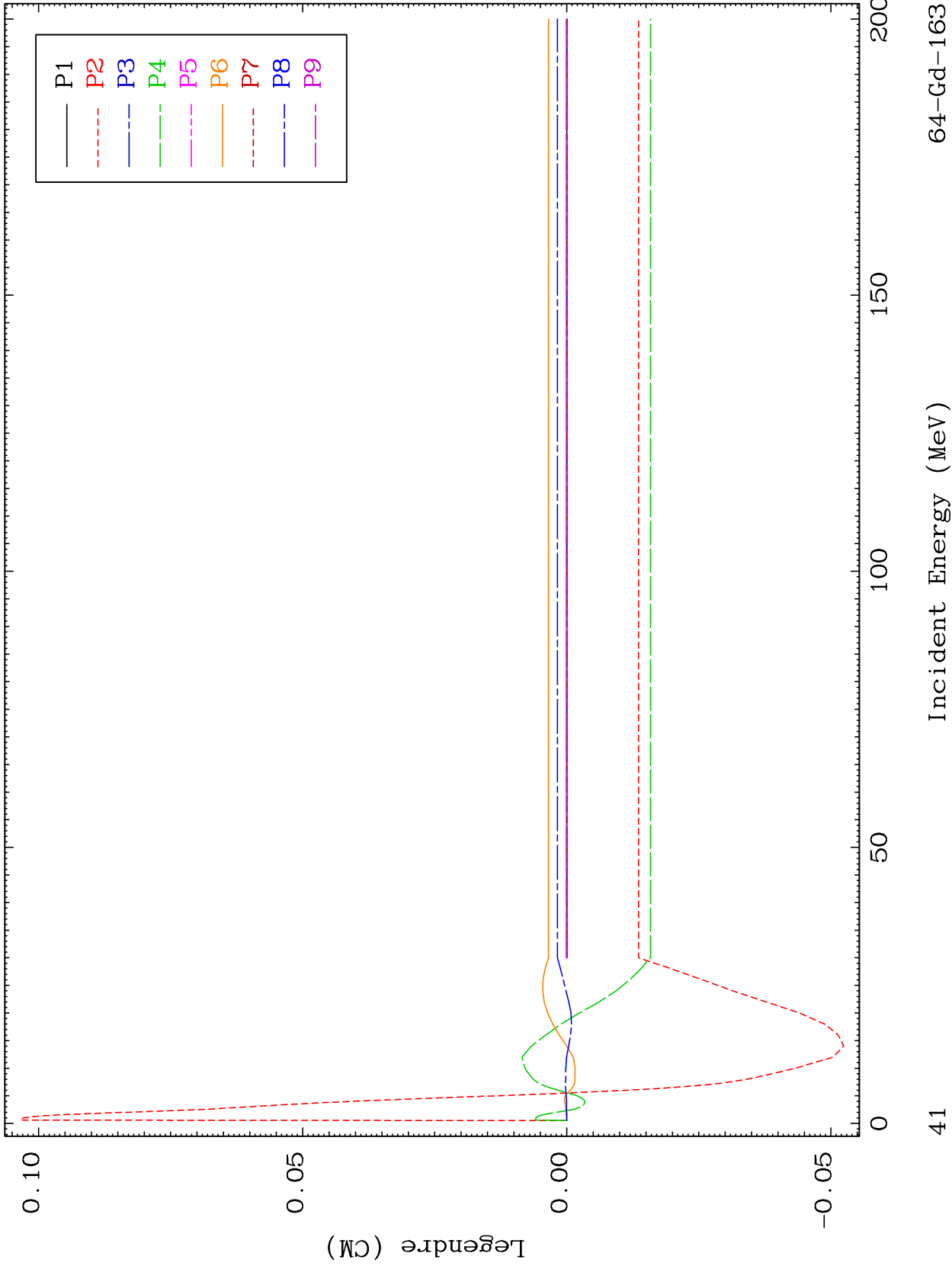
Incident Energy (MeV)

40

MAT 6458

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

64-Gd-163



41

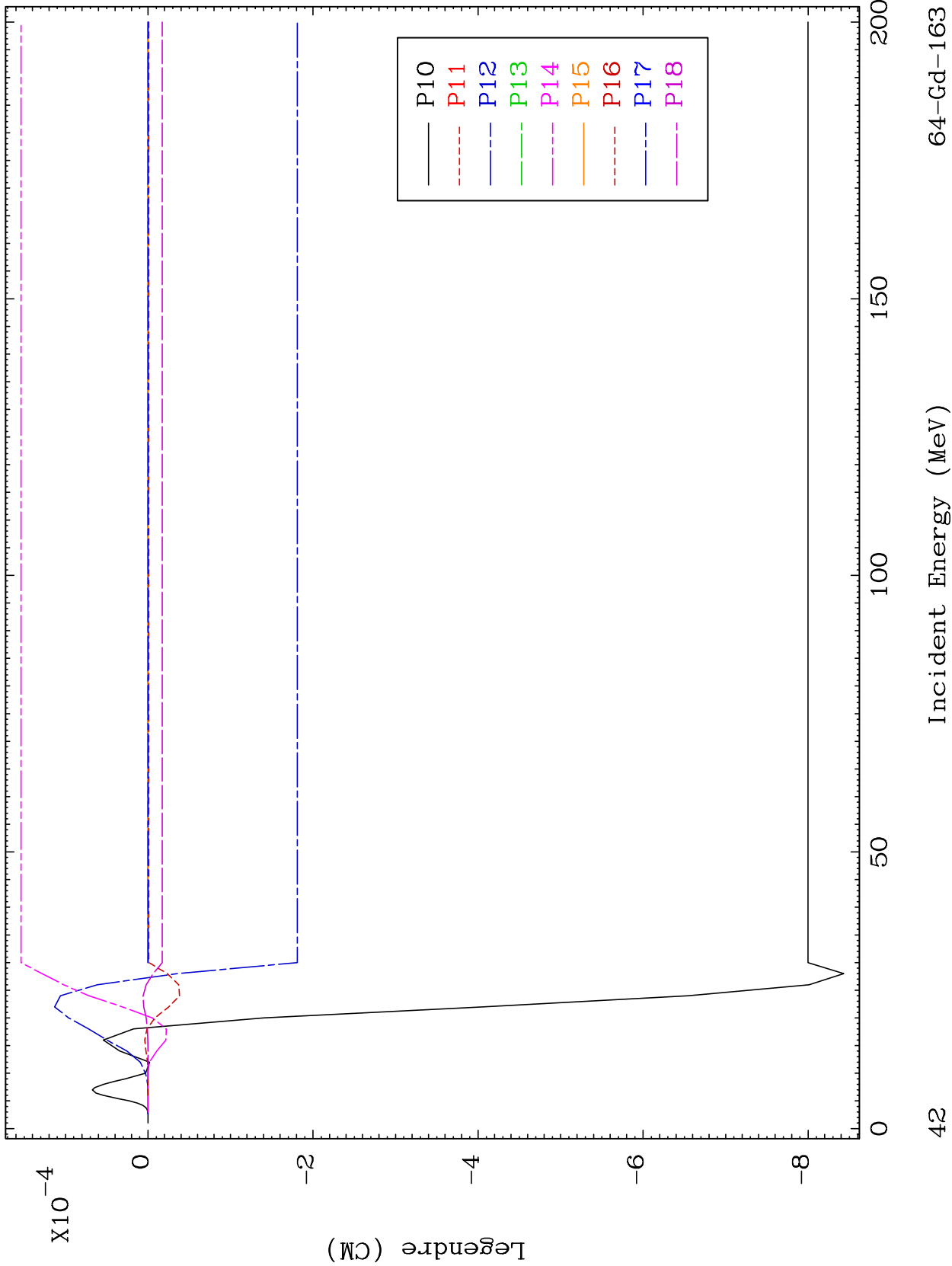
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



42

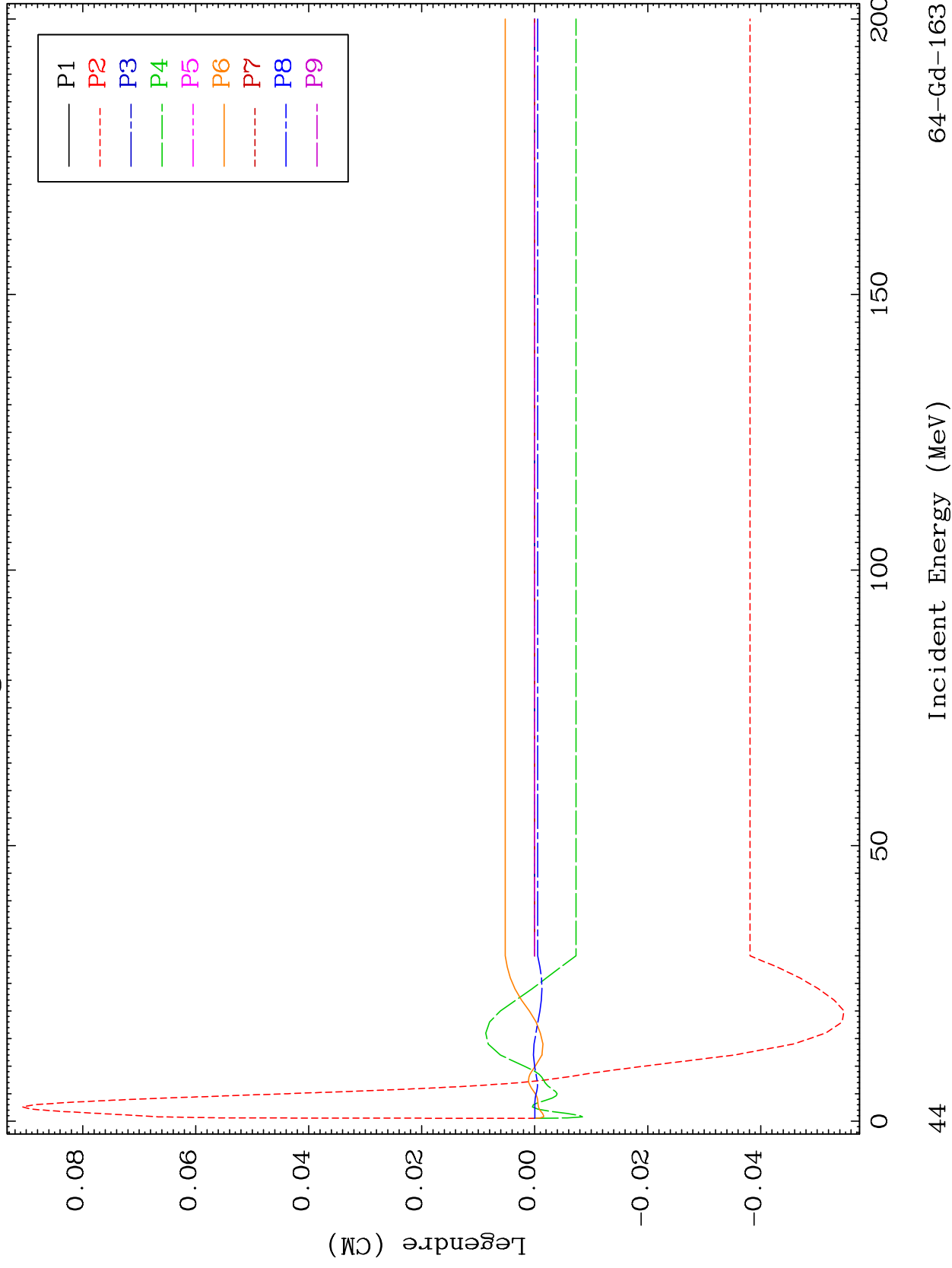
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

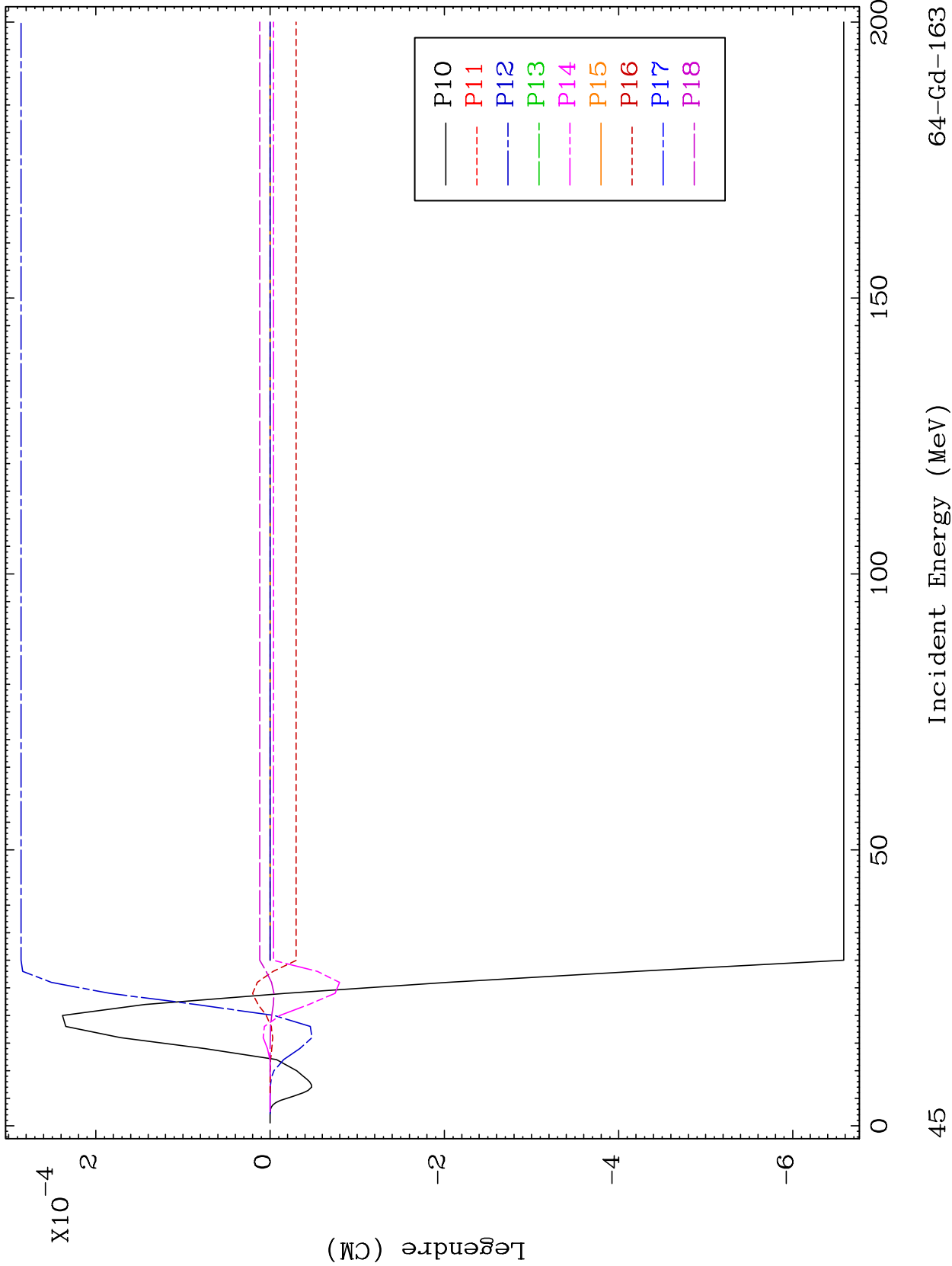
Incident Energy (MeV)

44

MAT 6458

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

64-Gd-163



64-Gd-163

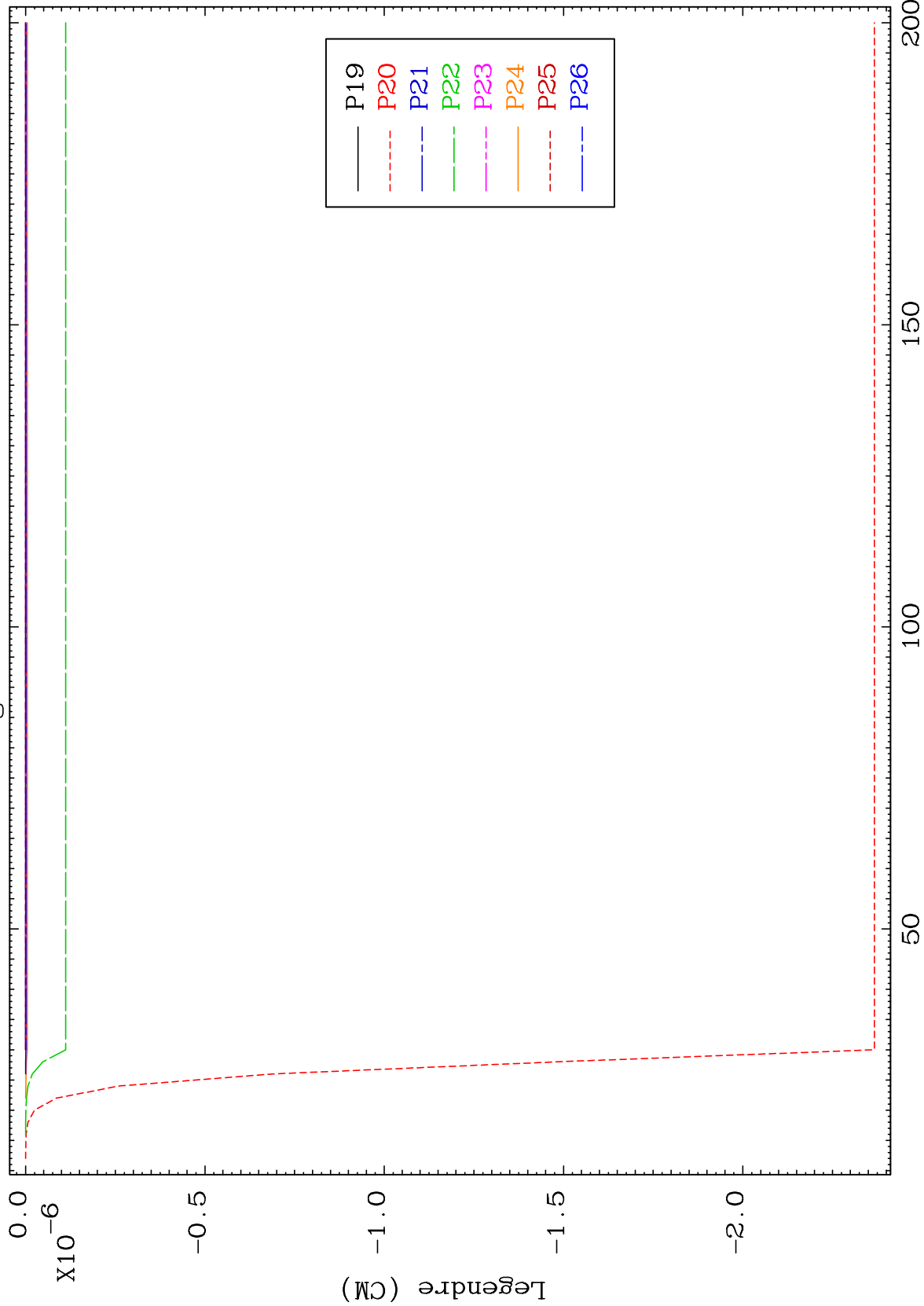
Incident Energy (MeV)

45

MAT 6458

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

64-Gd-163



46

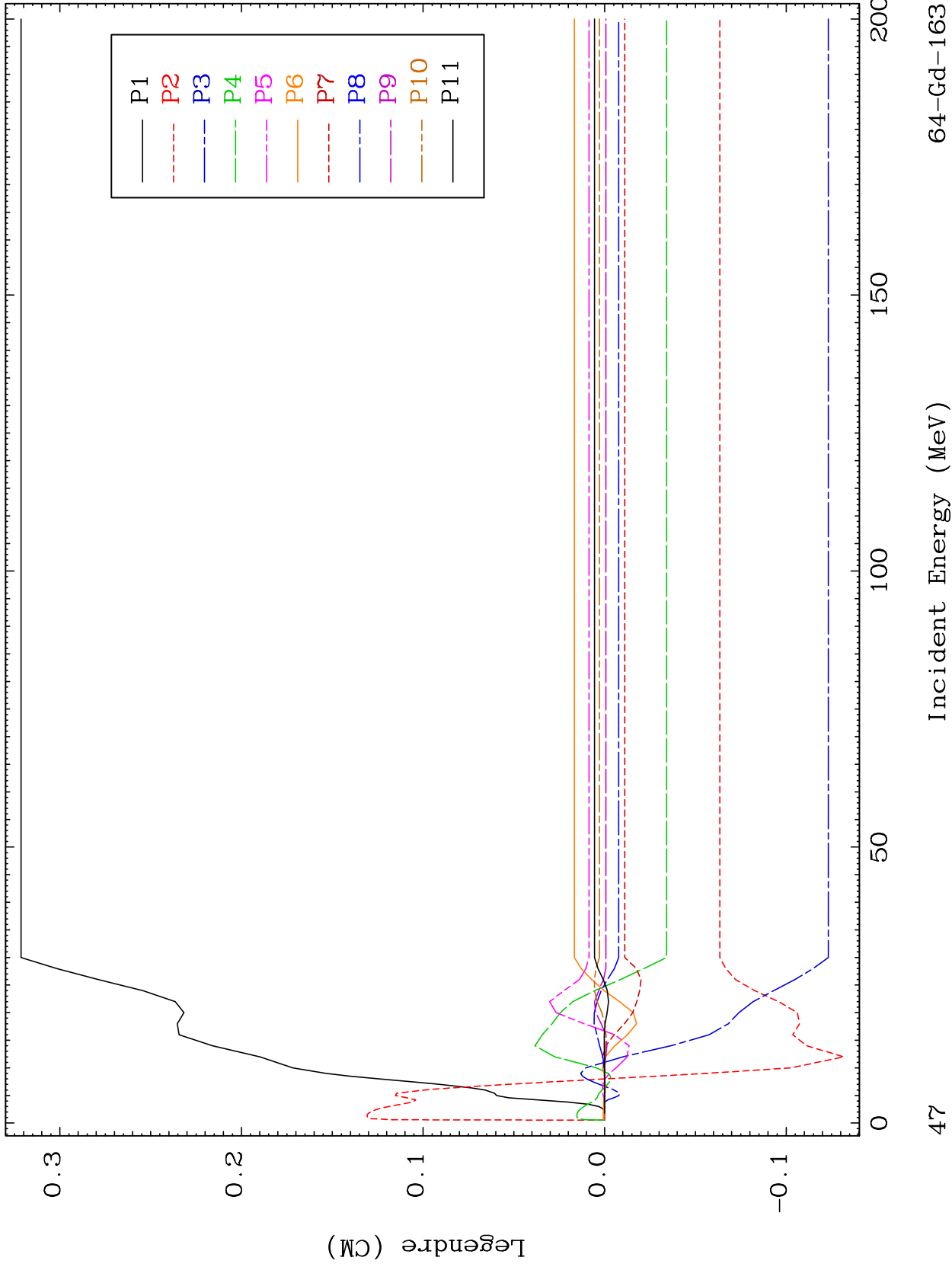
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

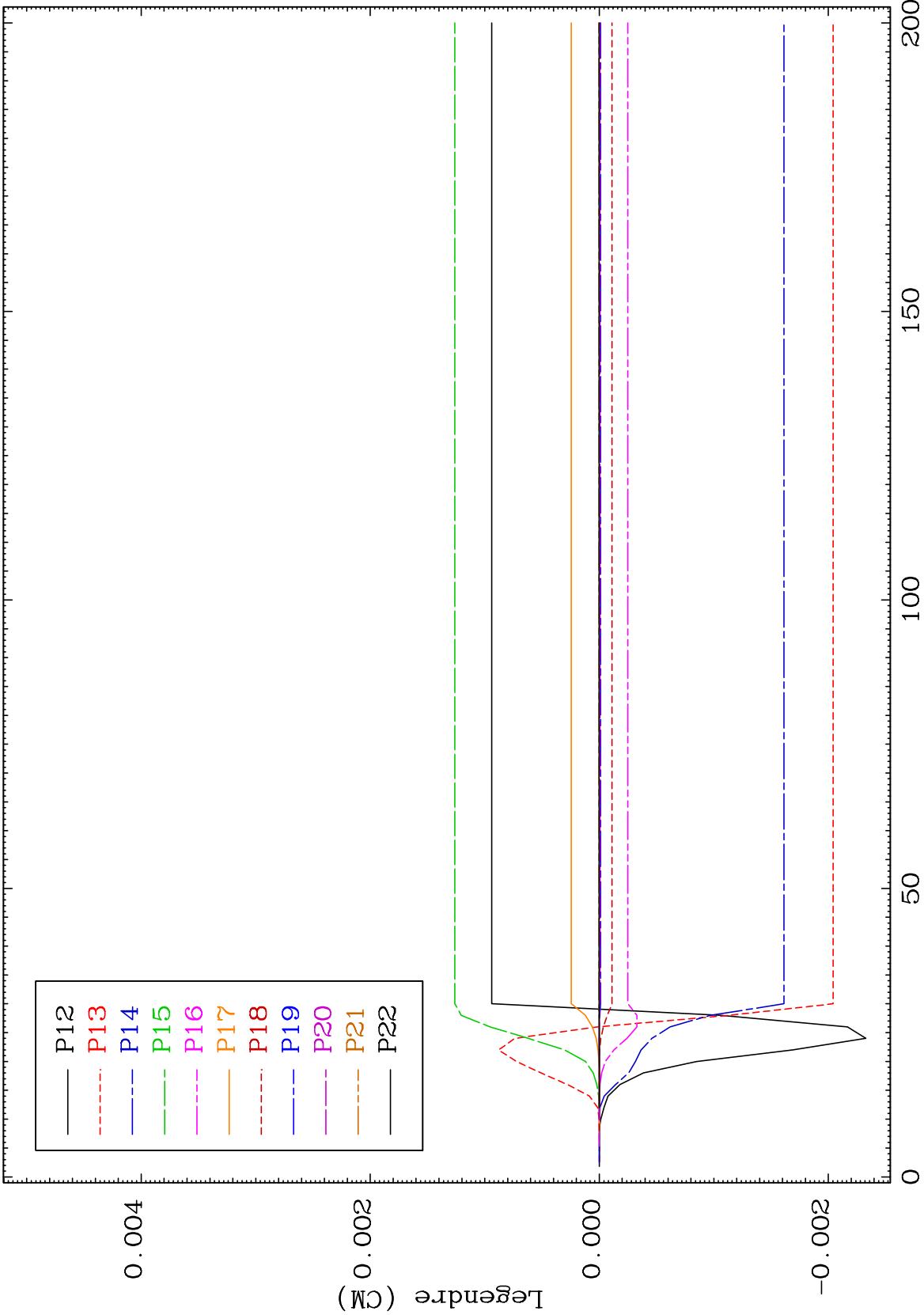
Incident Energy (MeV)

47

MAT 6458

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

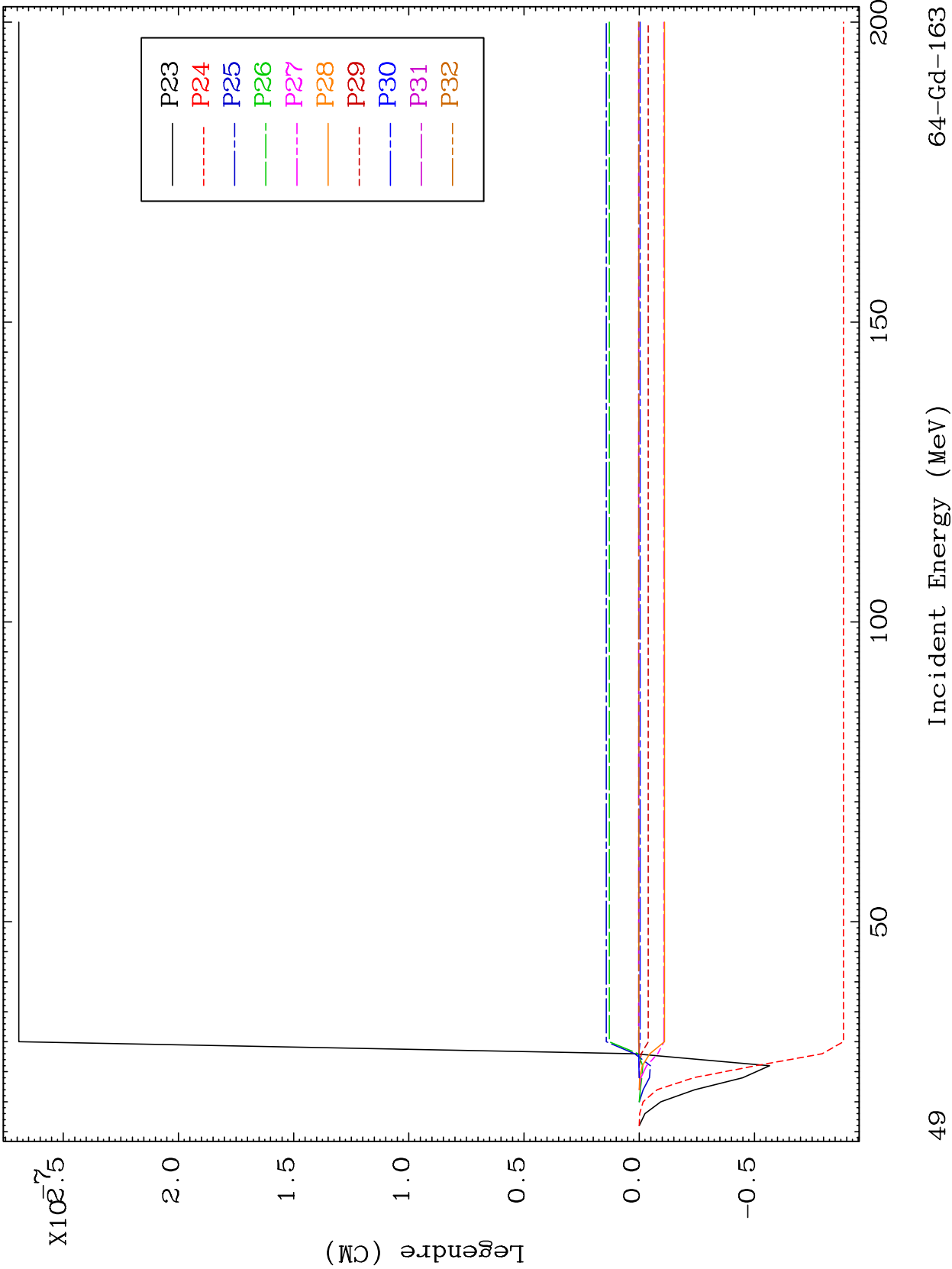
64-Gd-163



48

Incident Energy (MeV)

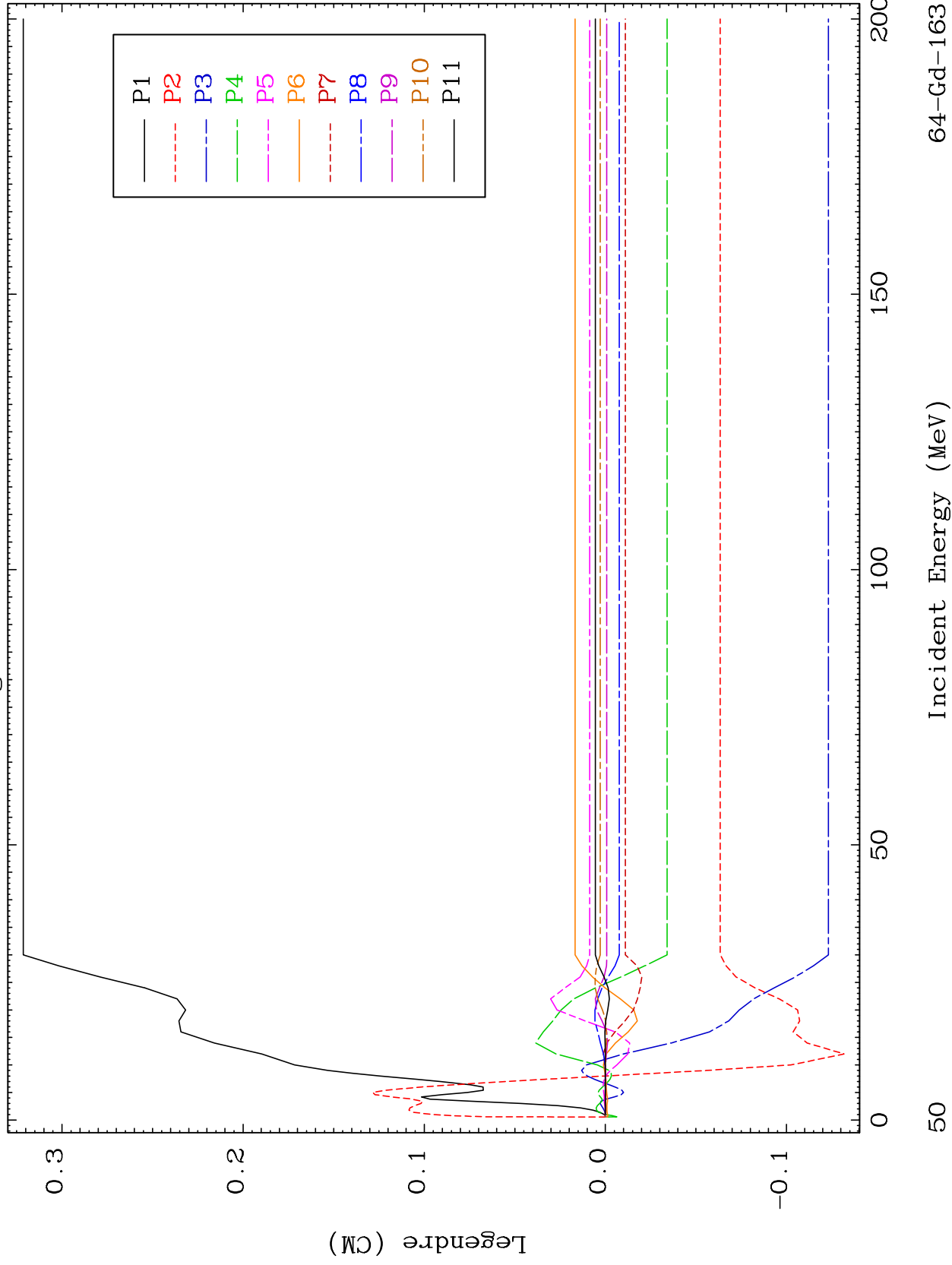
64-Gd-163



MAT 6458

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

64-Gd-163

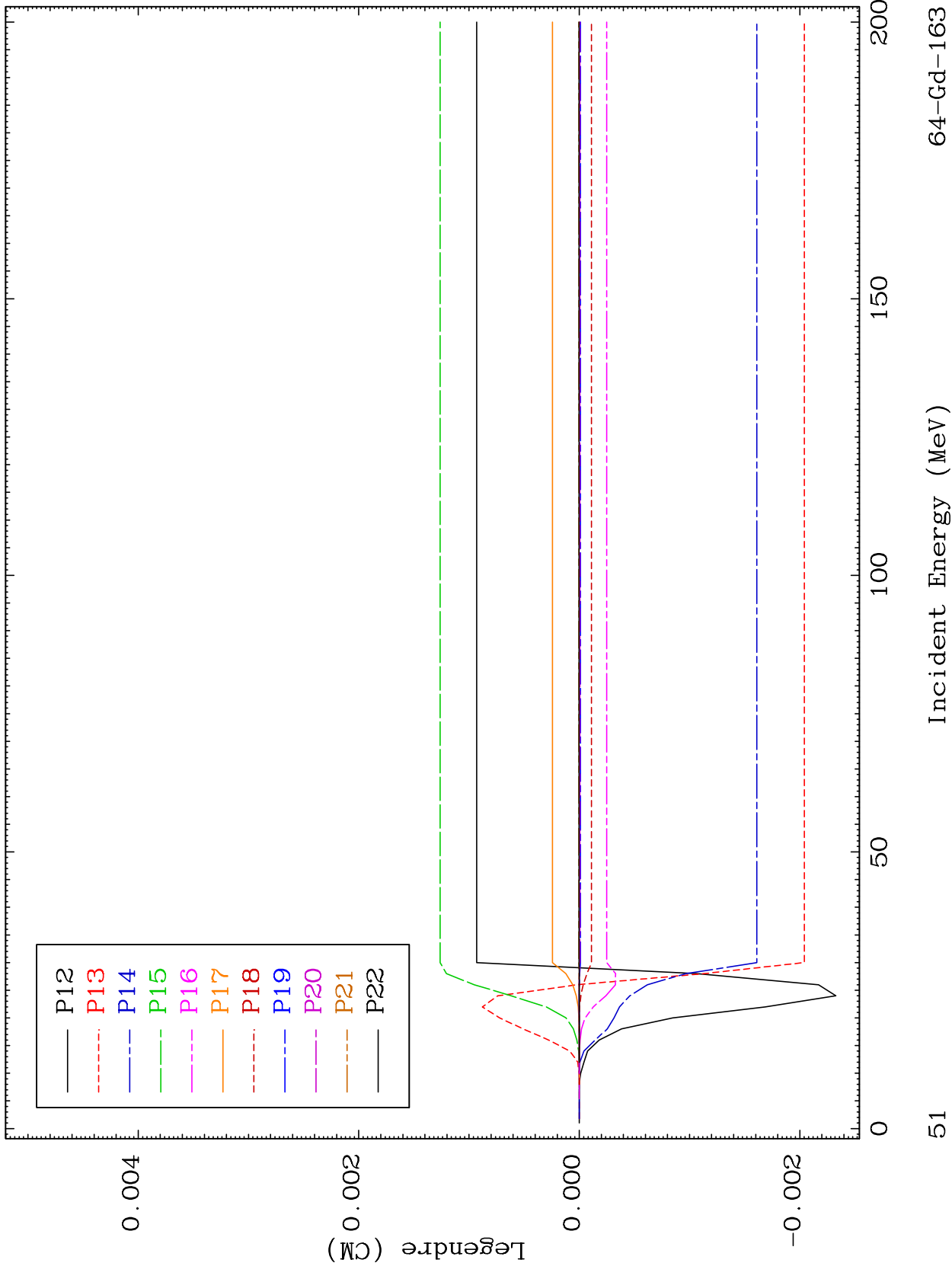


64-Gd-163

MAT 6458

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

64-Gd-163



51

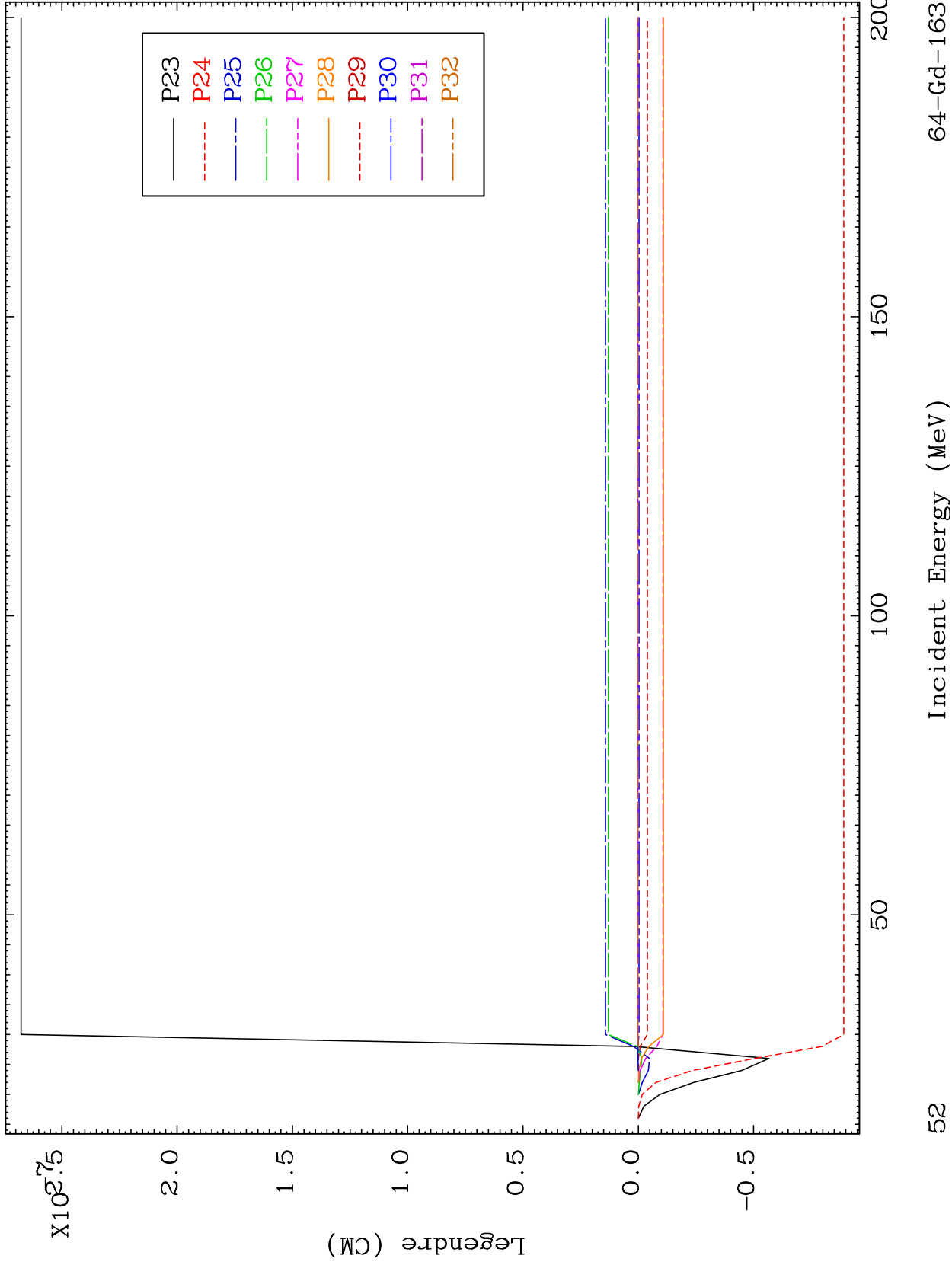
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



52

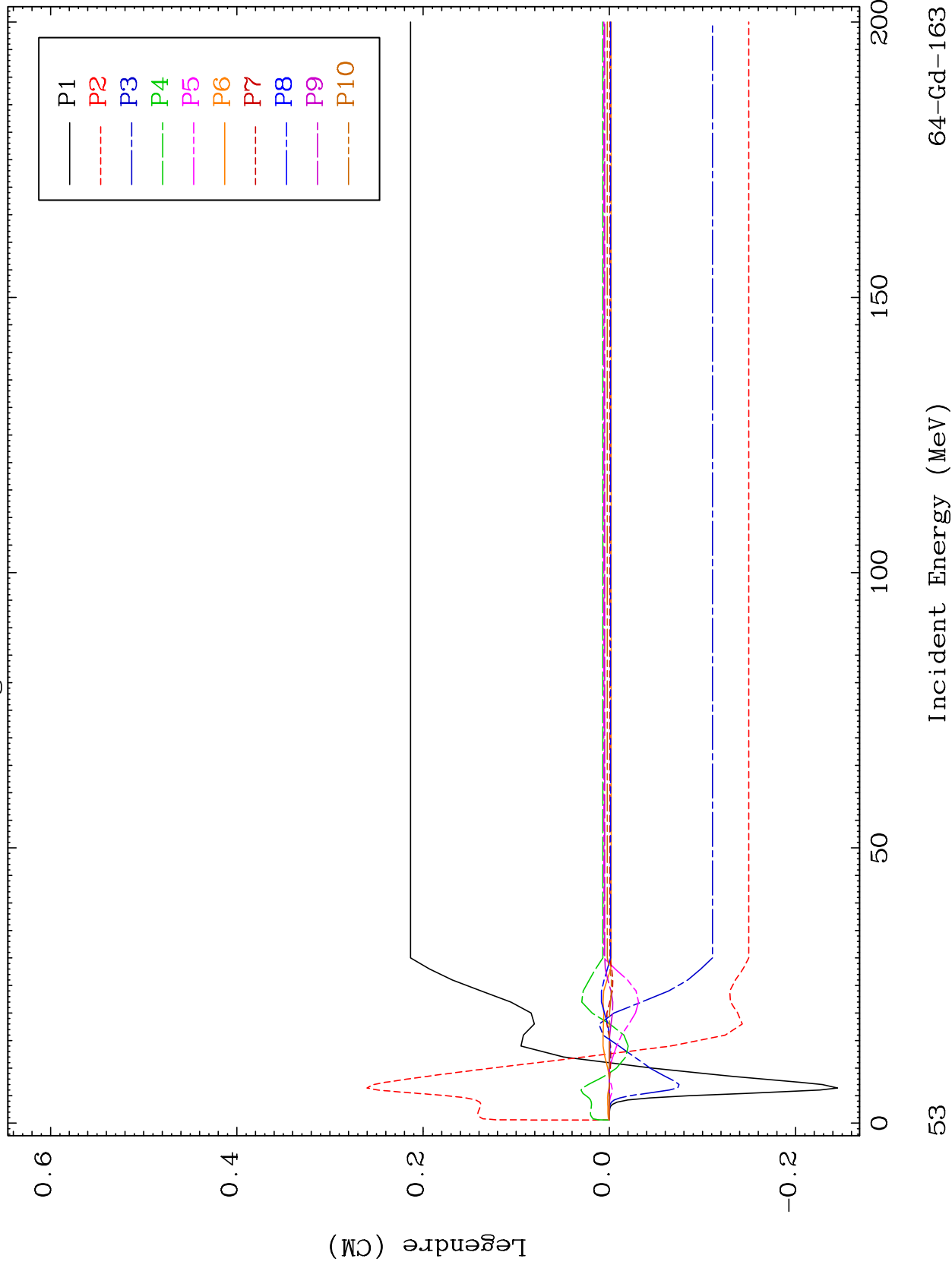
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



53

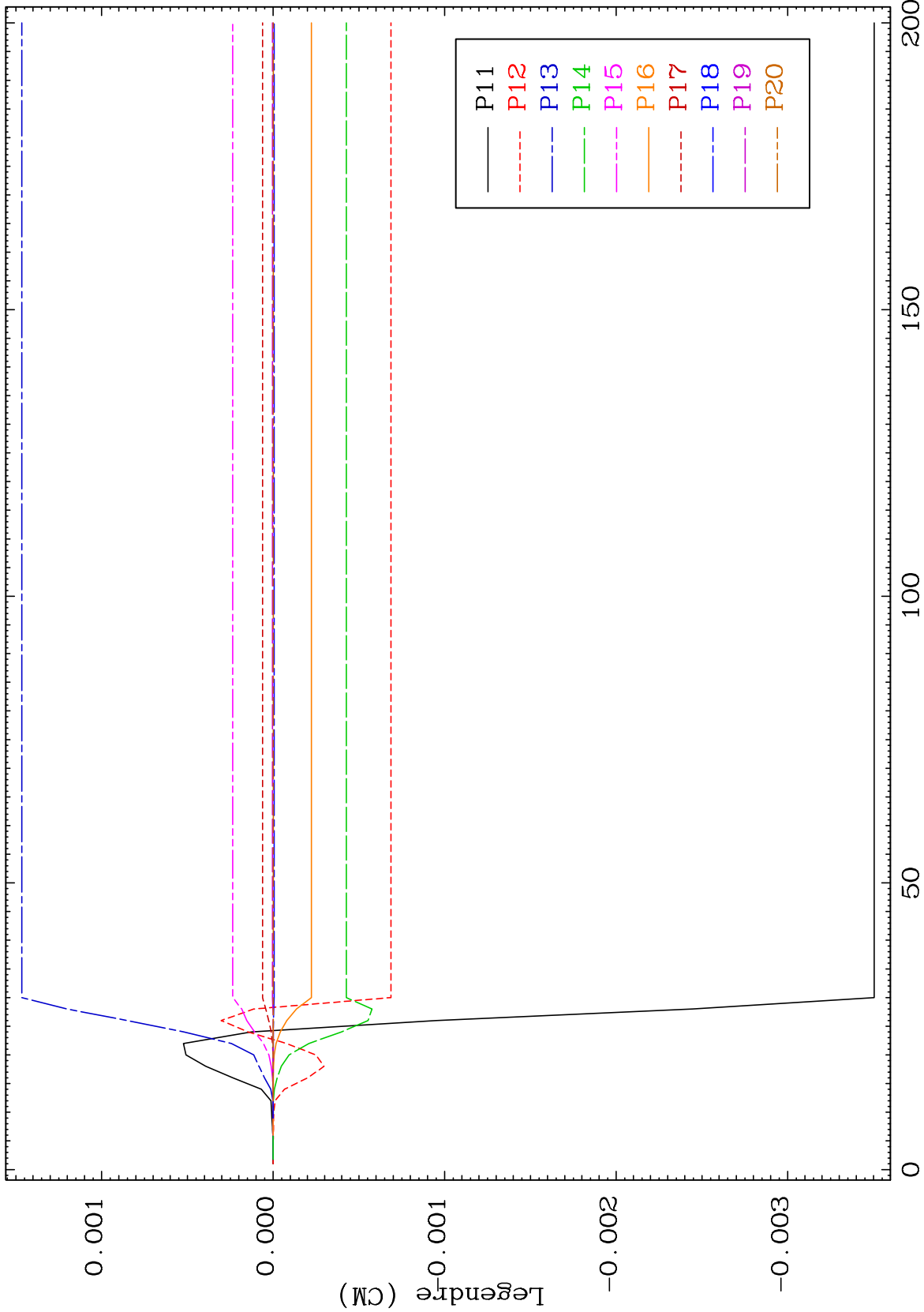
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



54

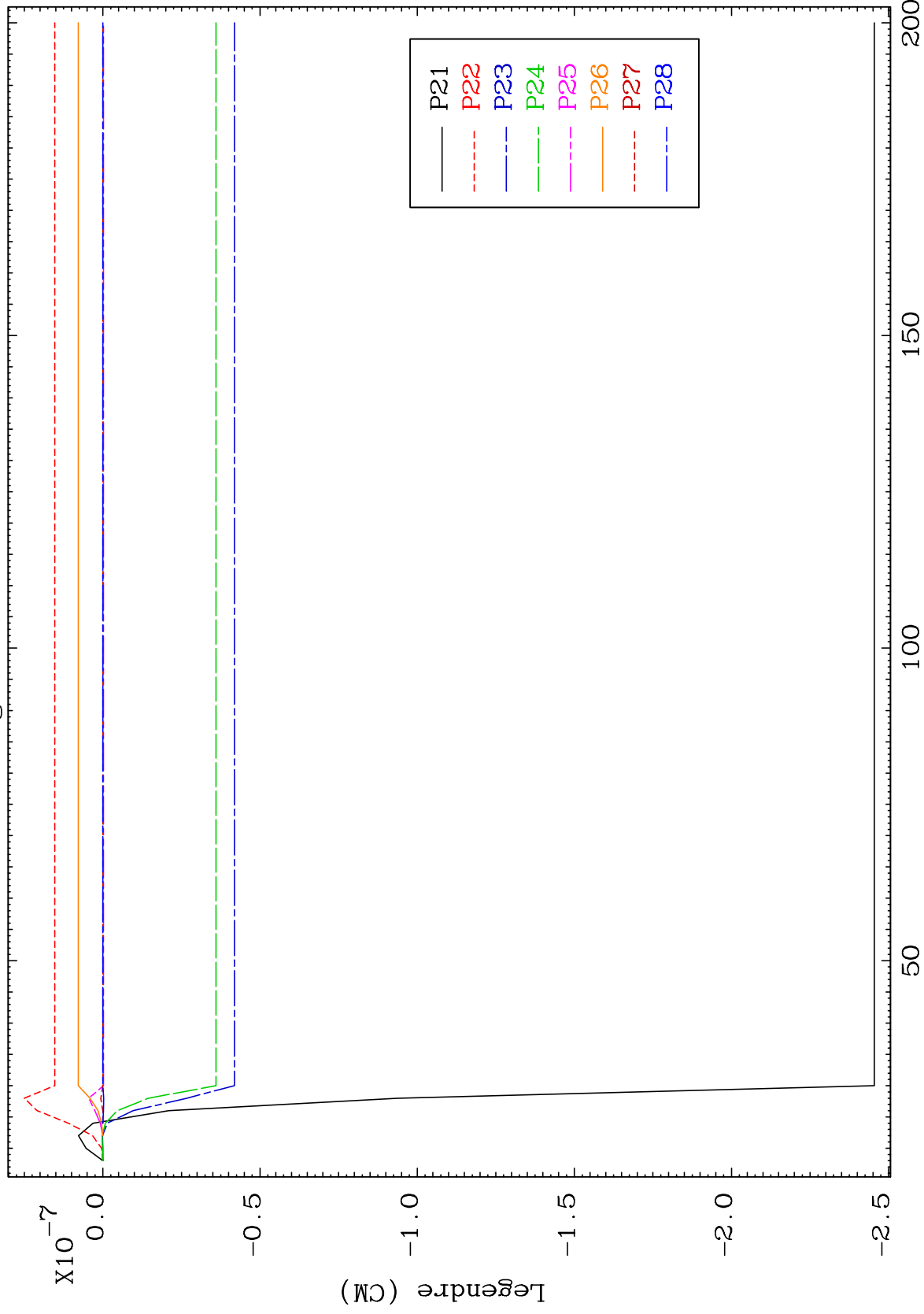
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



55

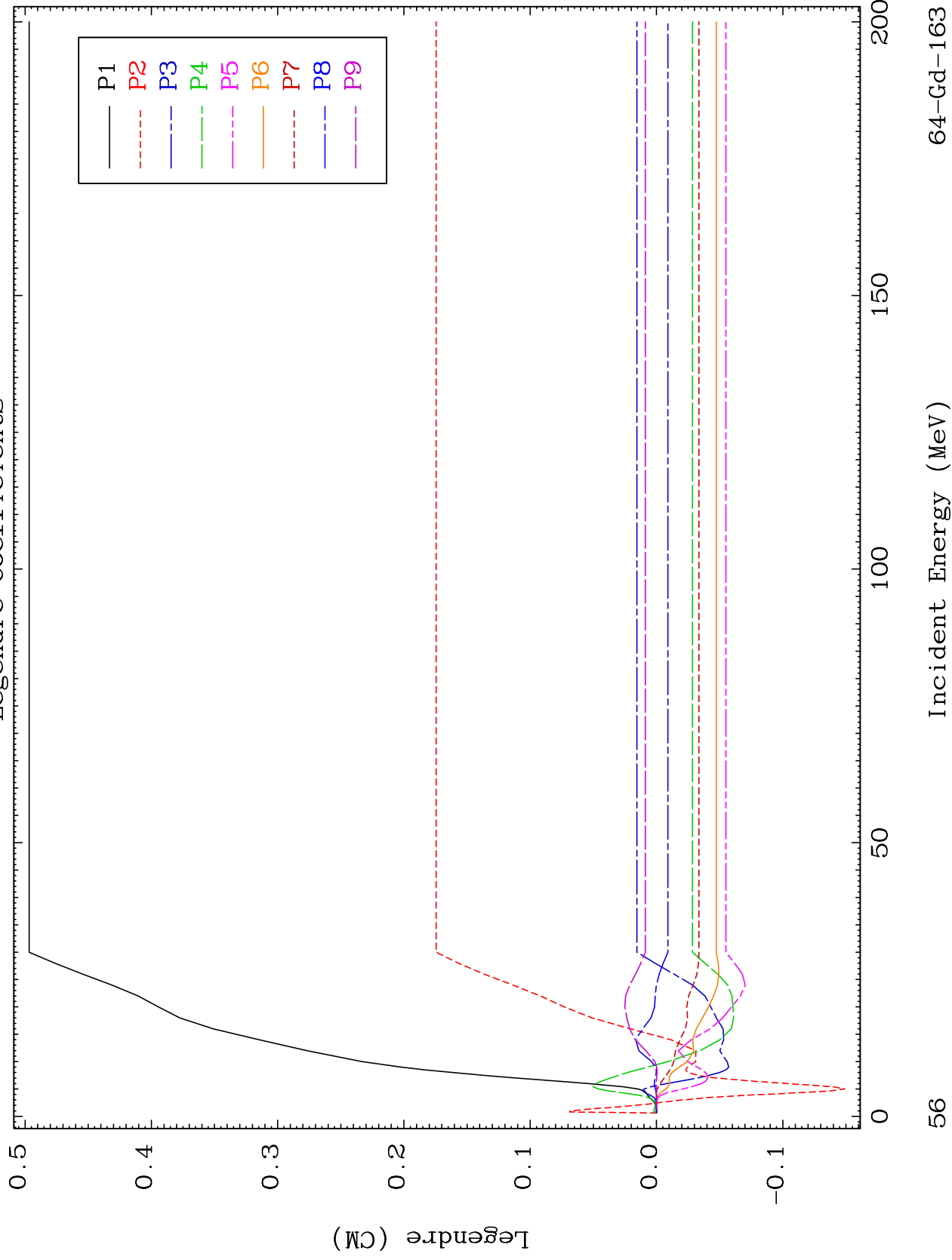
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

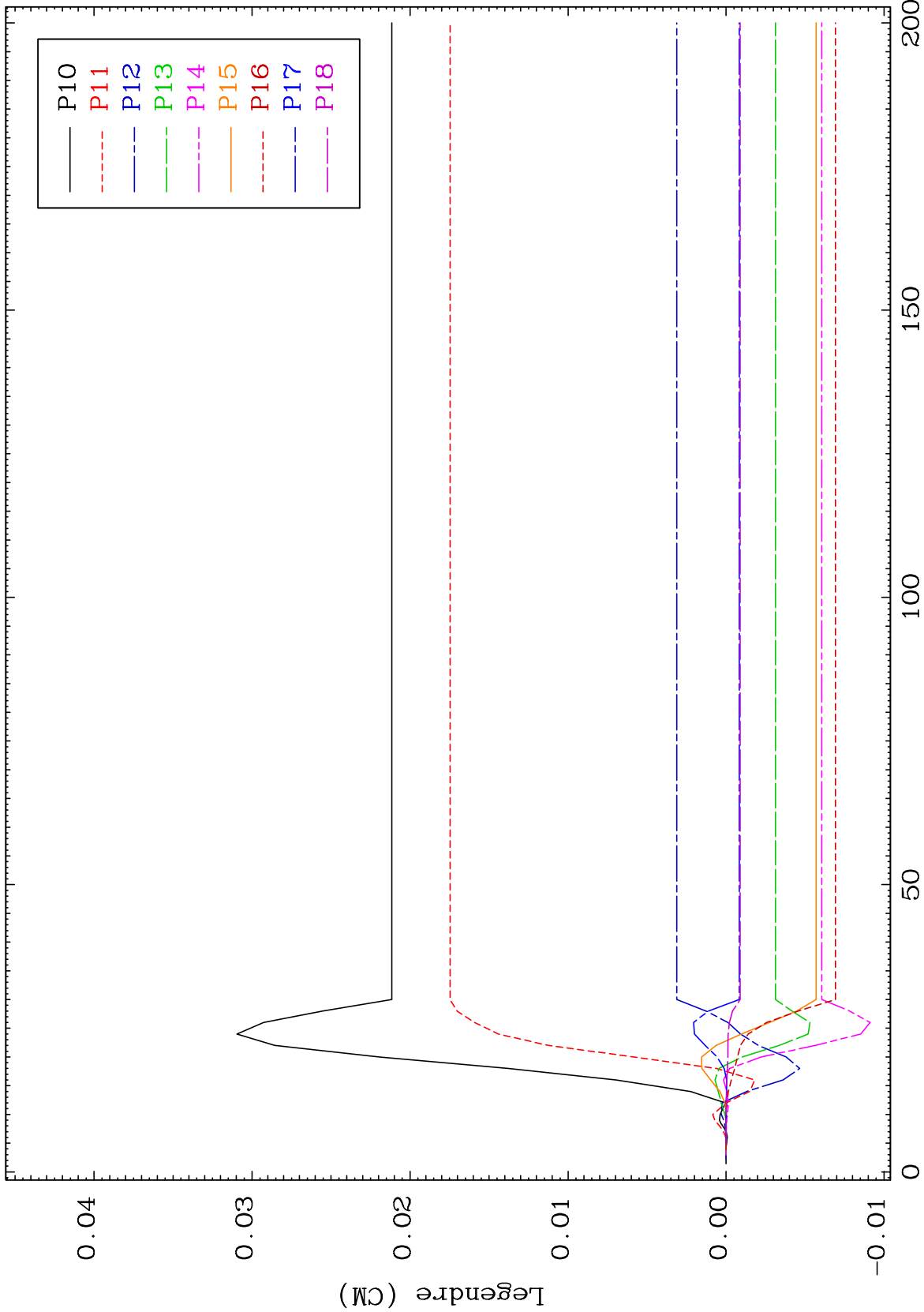
Incident Energy (MeV)

56

MAT 6458

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

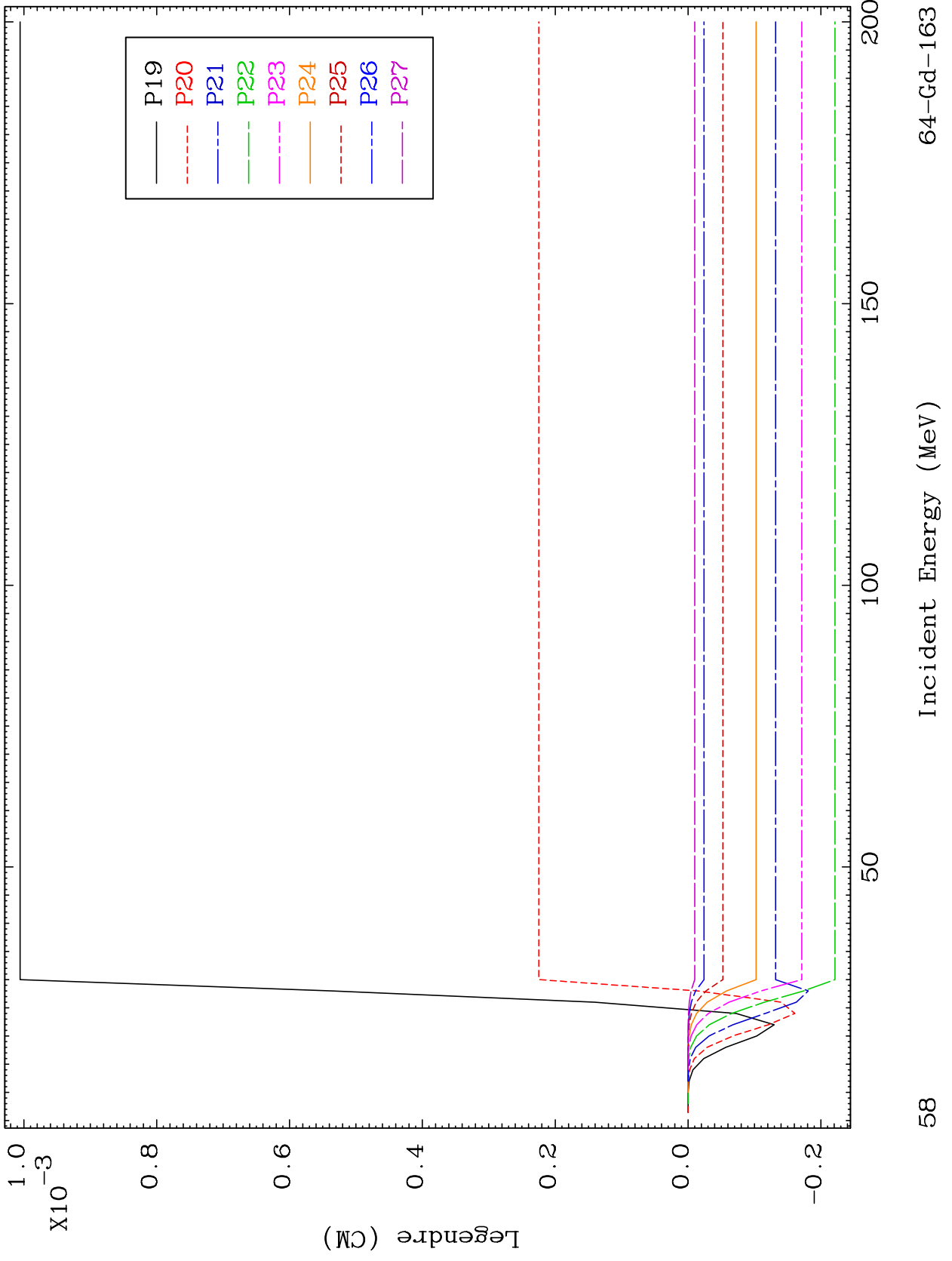
64-Gd-163



57

Incident Energy (MeV)

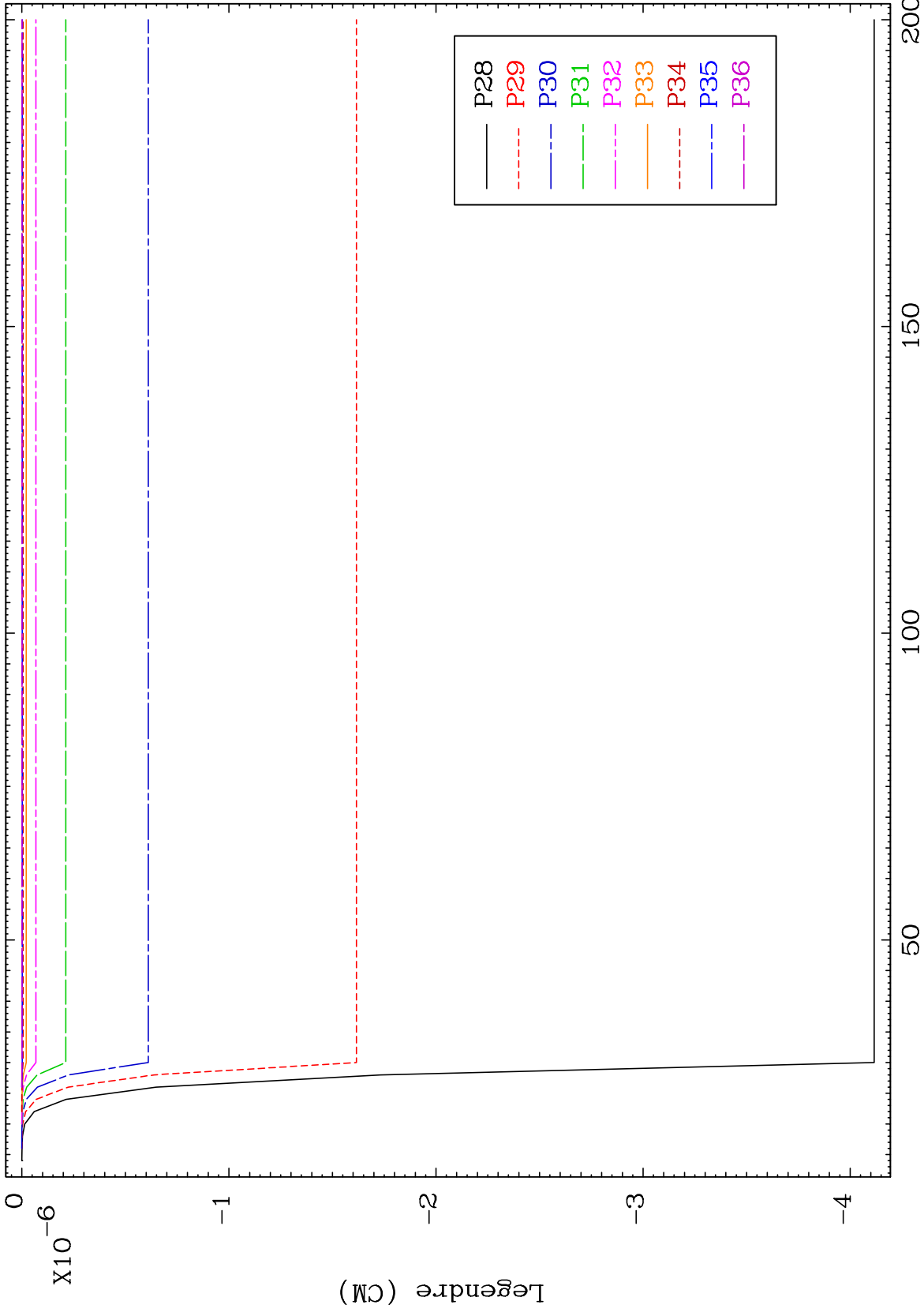
64-Gd-163



MAT 6458

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

64-Gd-163



59

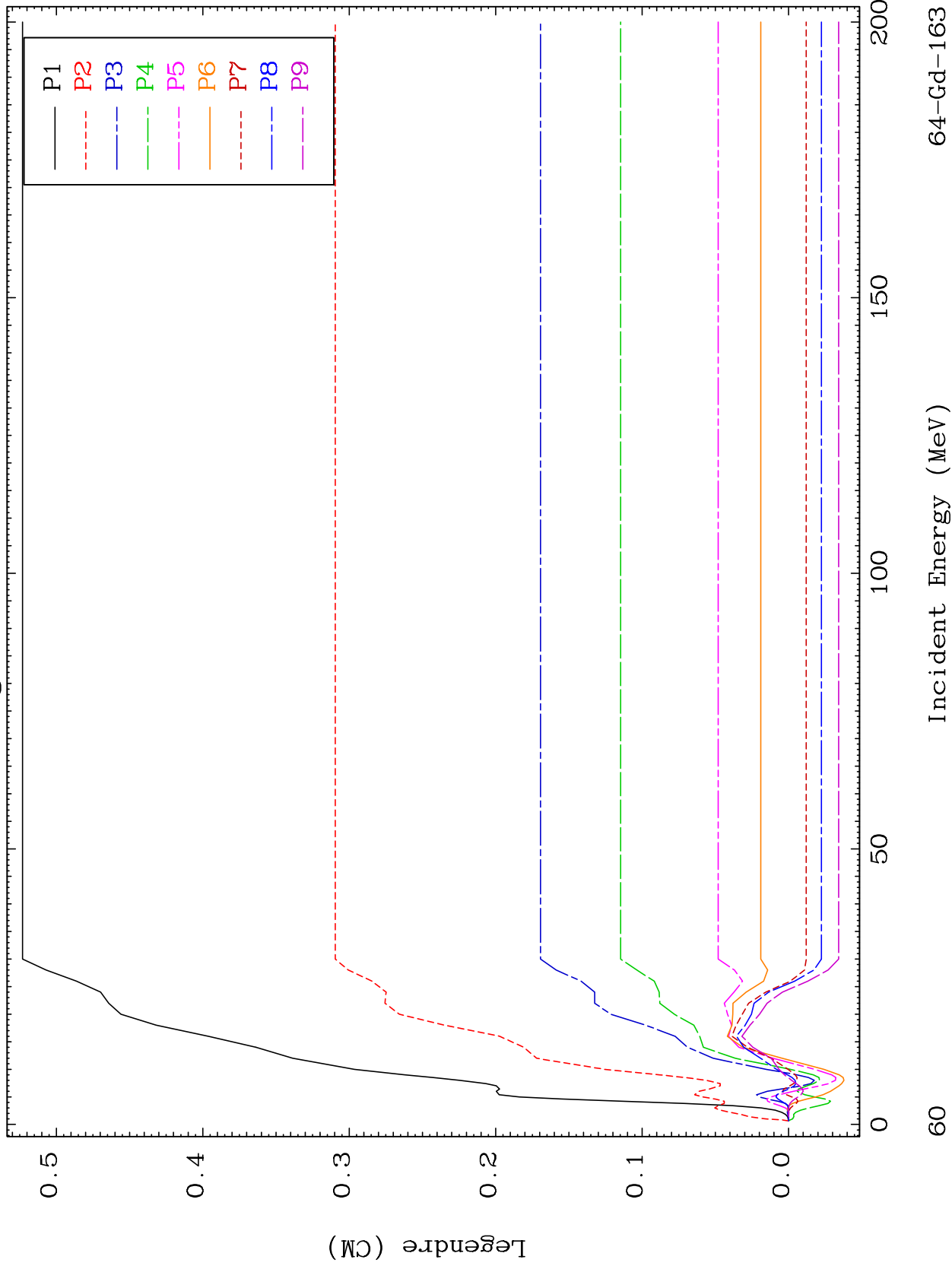
Incident Energy (MeV)

64-Gd-163

MAT 6458

MT= 62 (n,n') Level
Legendre Coefficients

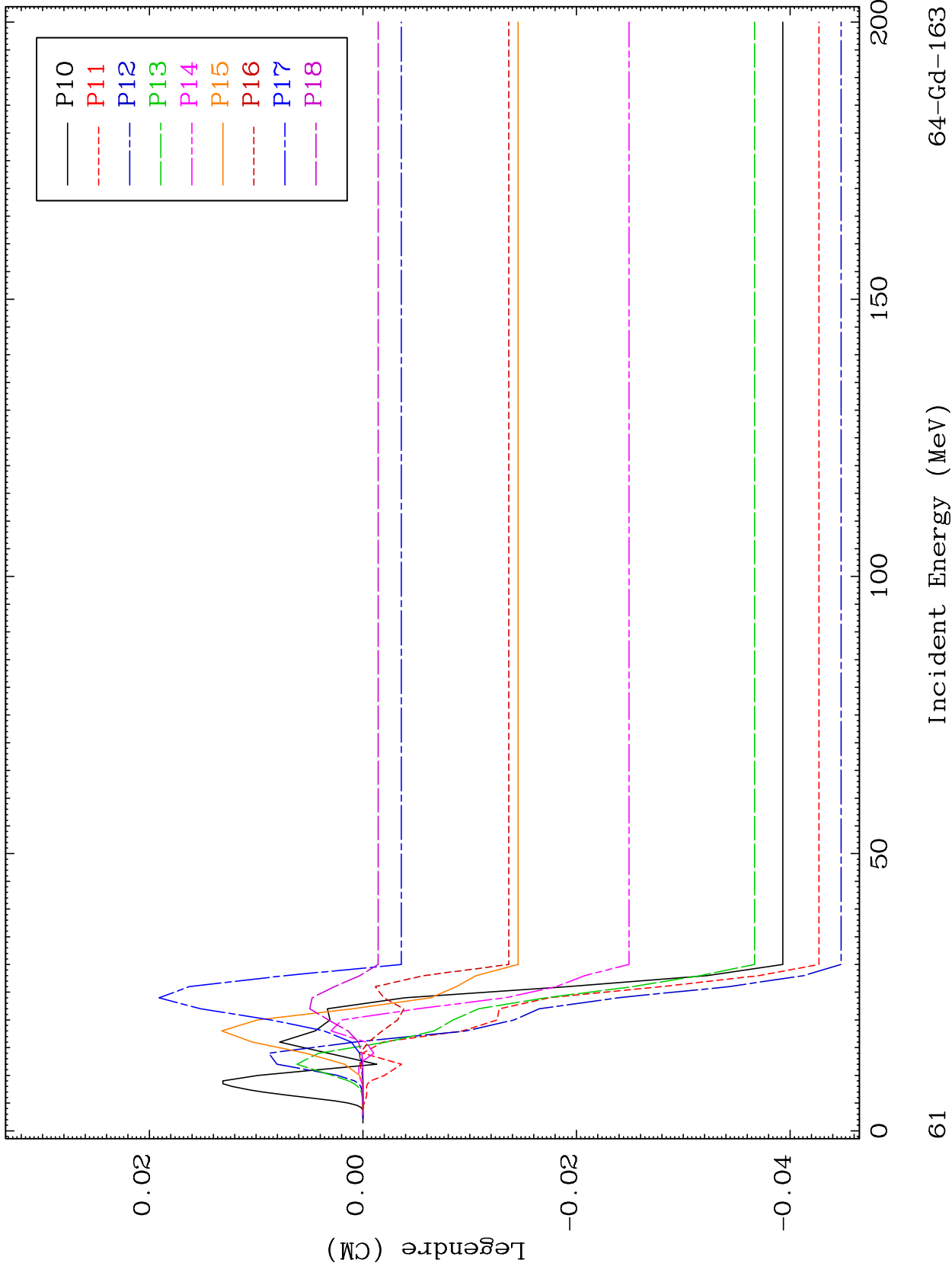
64-Gd-163



MAT 6458

MT= 62 (n,n') Level
Legendre Coefficients

64-Gd-163



61

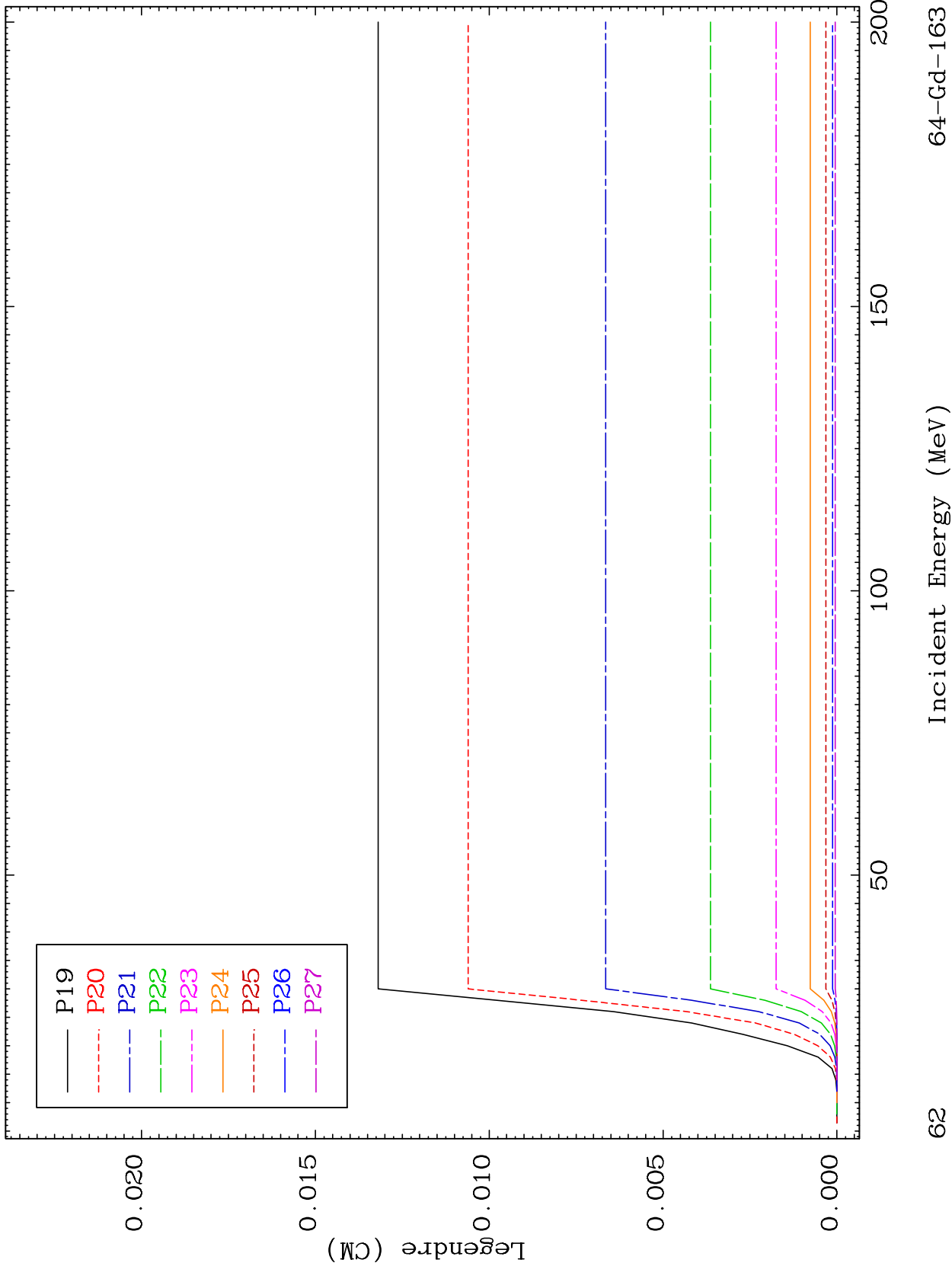
Incident Energy (MeV)

64-Gd-163

MAT 6458

MT= 62 (n,n') Level
Legendre Coefficients

64-Gd-163



62

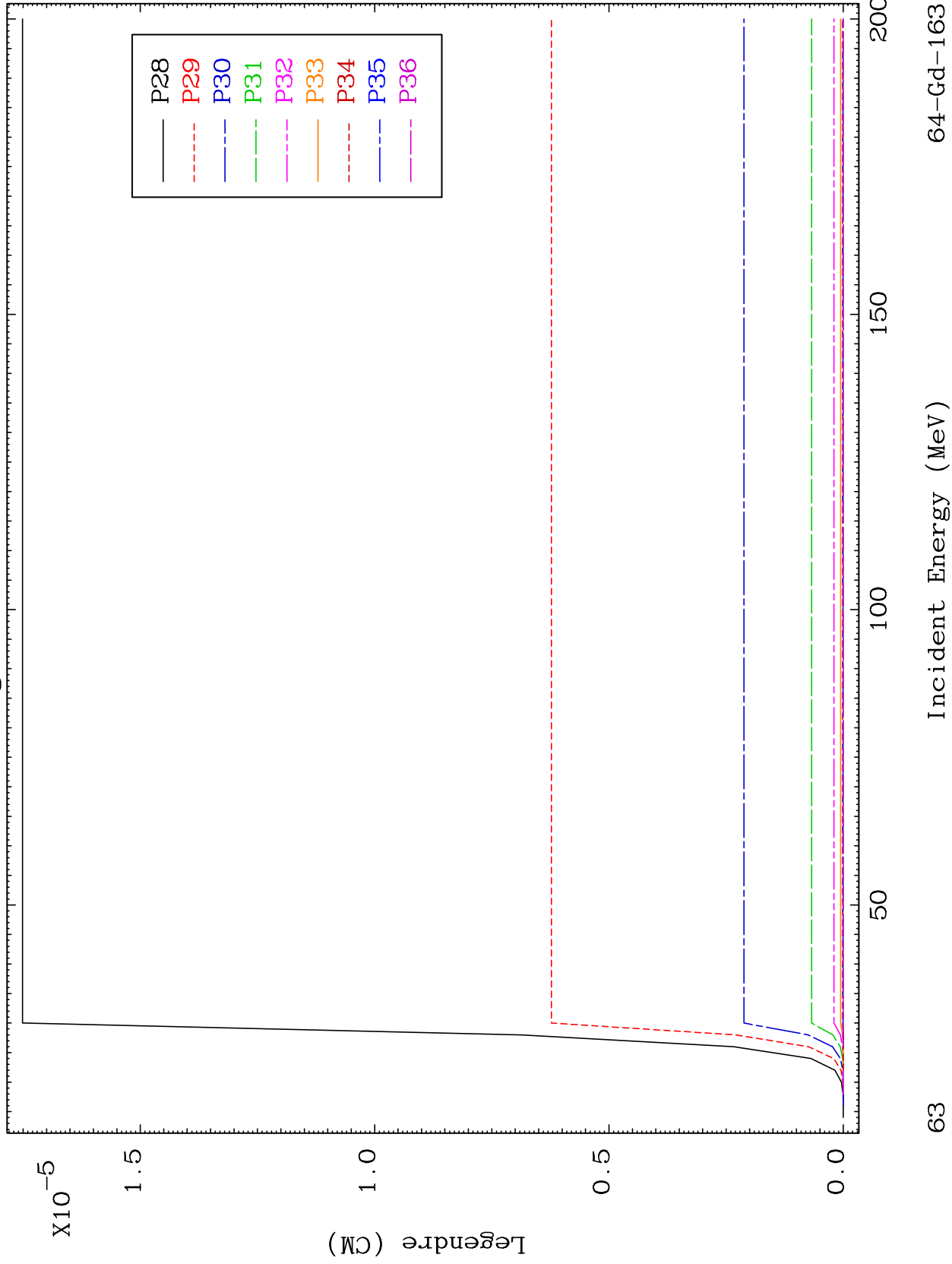
Incident Energy (MeV)

64-Gd-163

MAT 6458

MT= 62 (n,n') Level
Legendre Coefficients

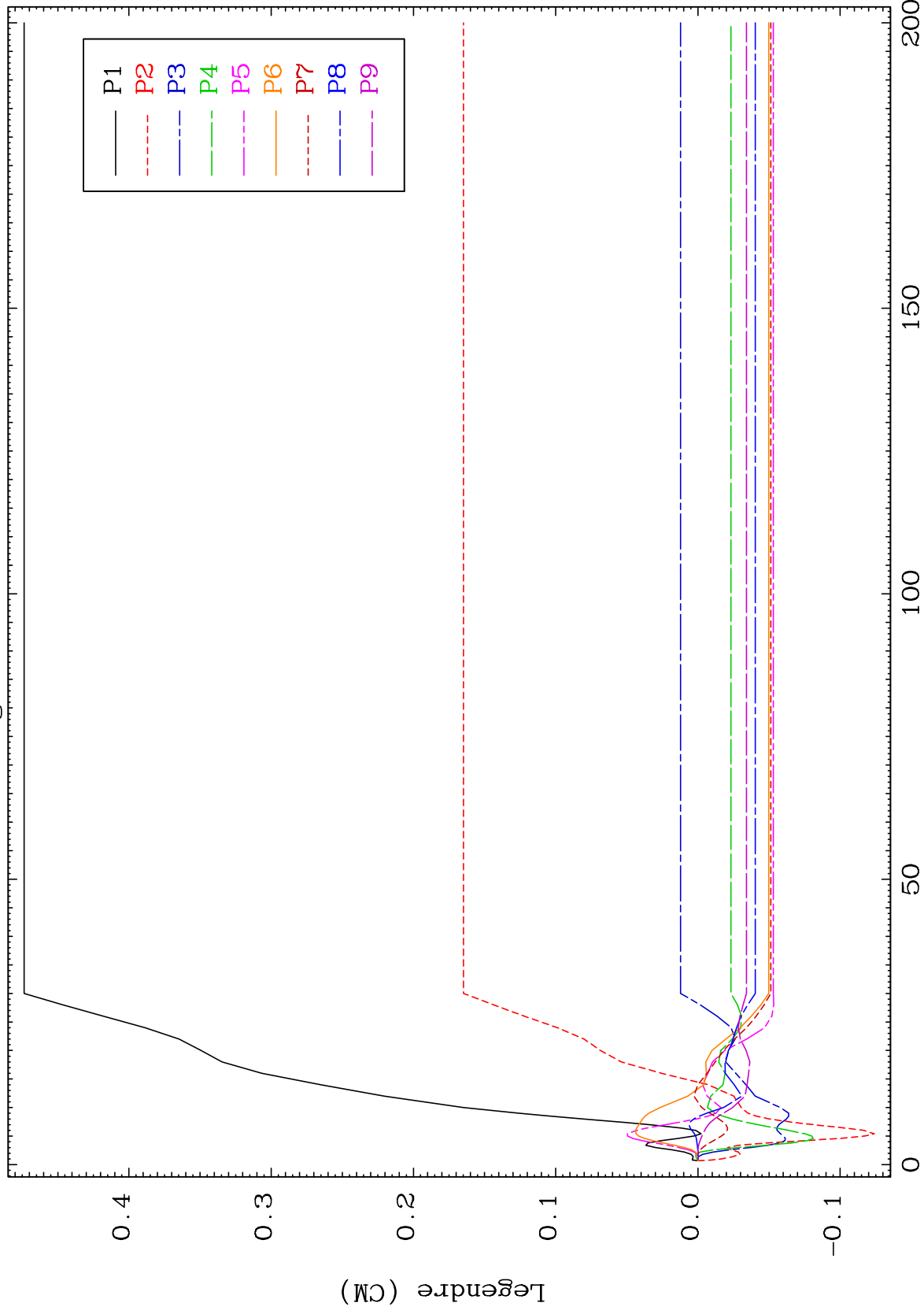
64-Gd-163



MAT 6458

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

64-Gd-163



64

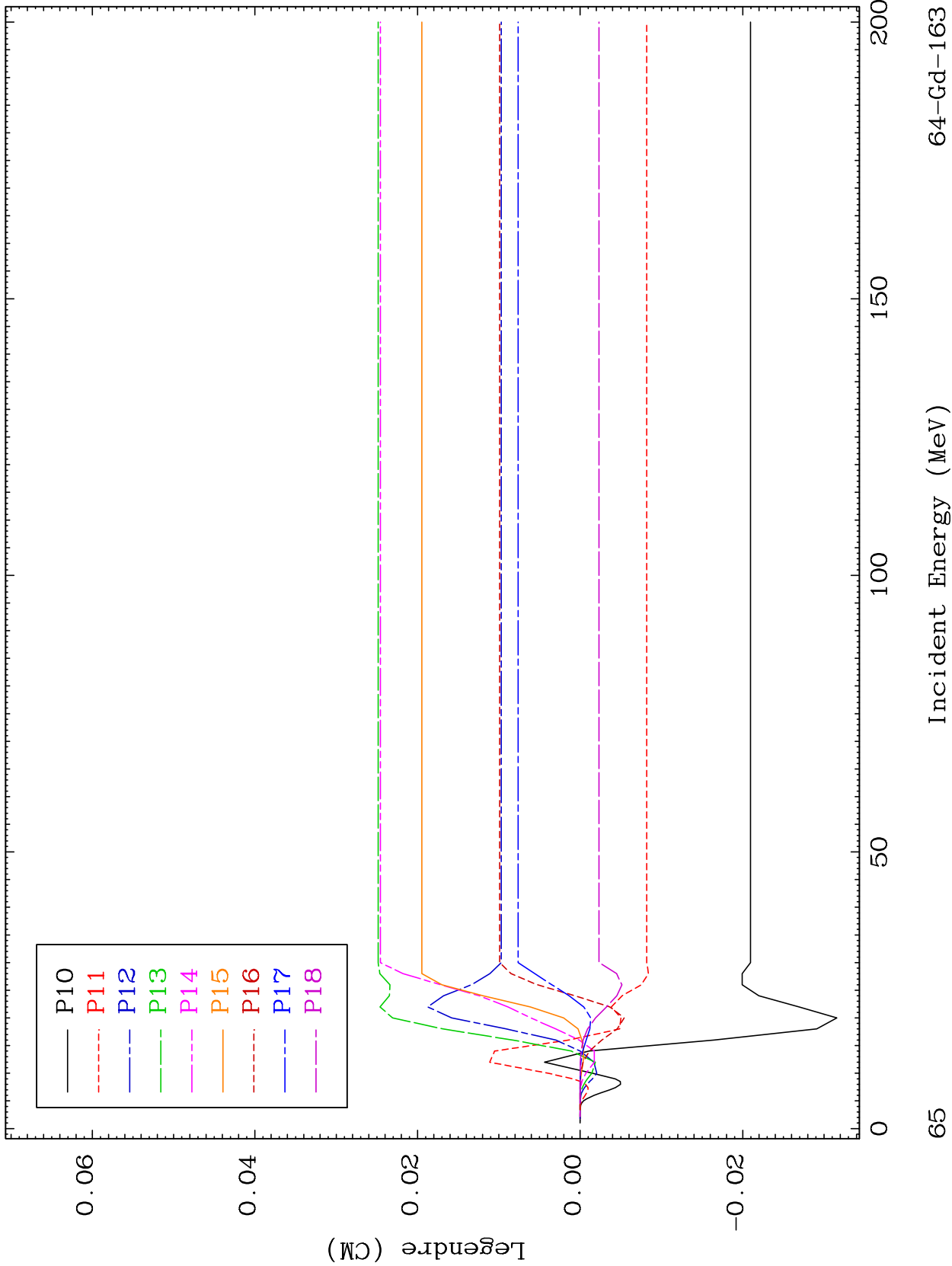
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



65

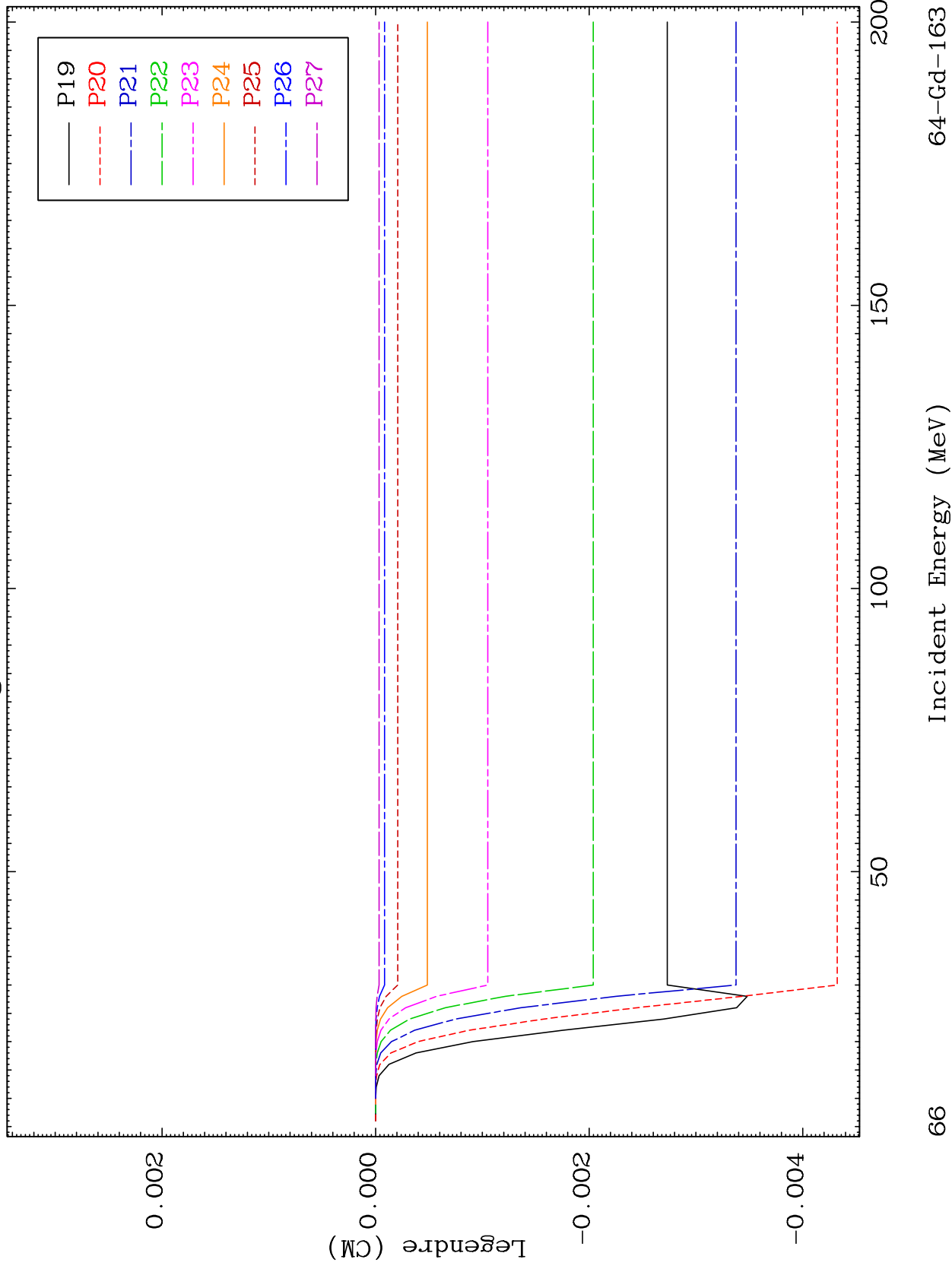
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



66

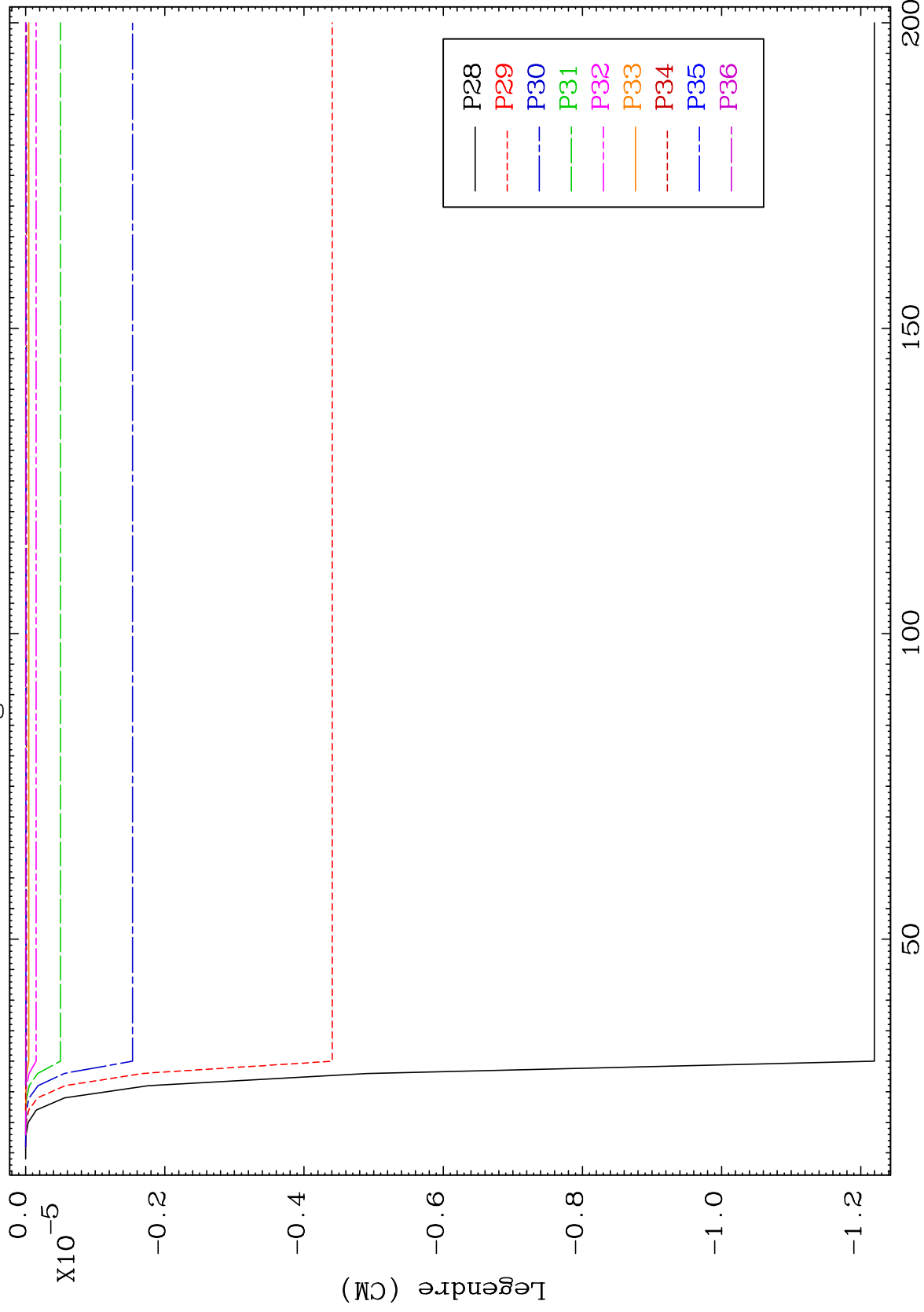
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



67

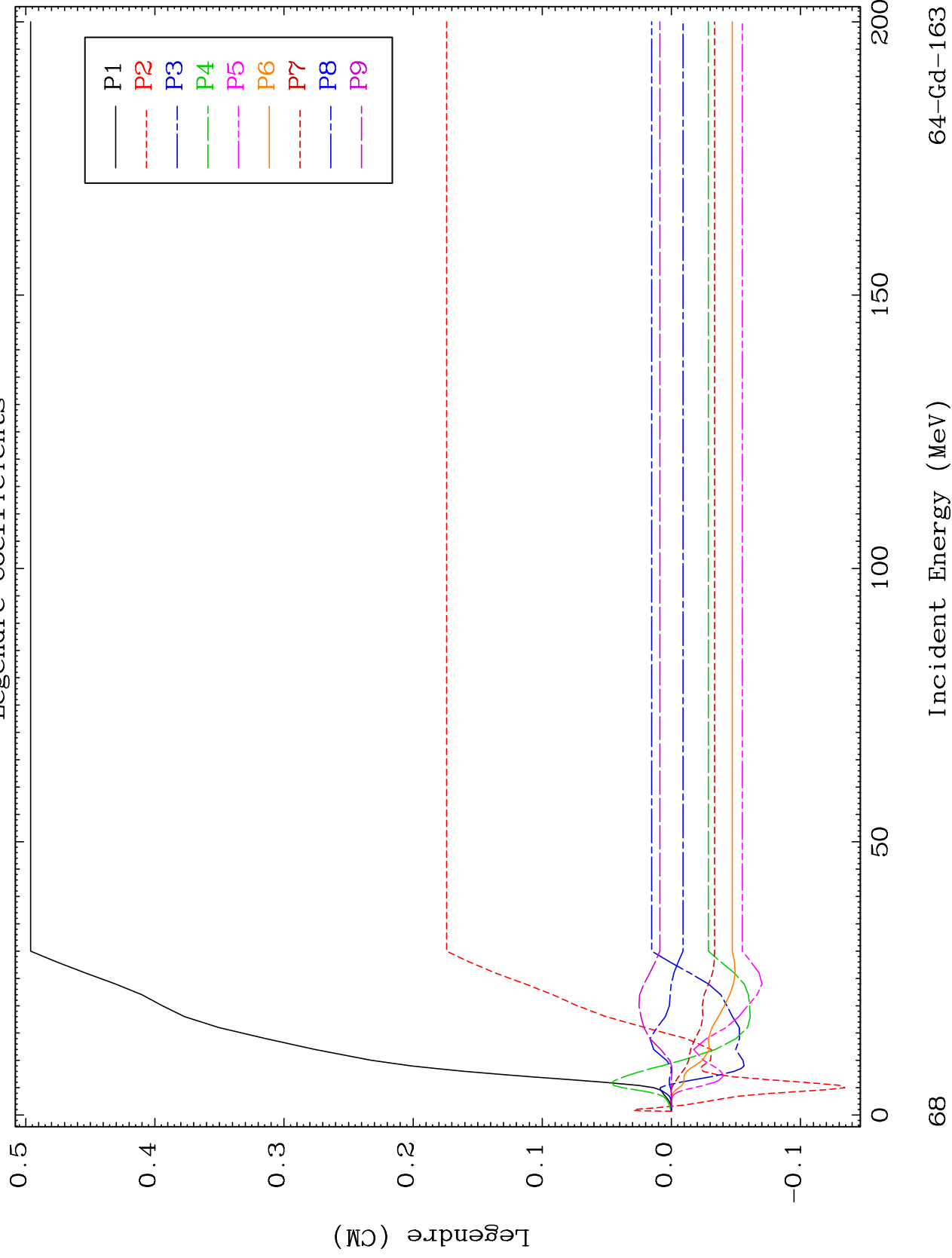
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

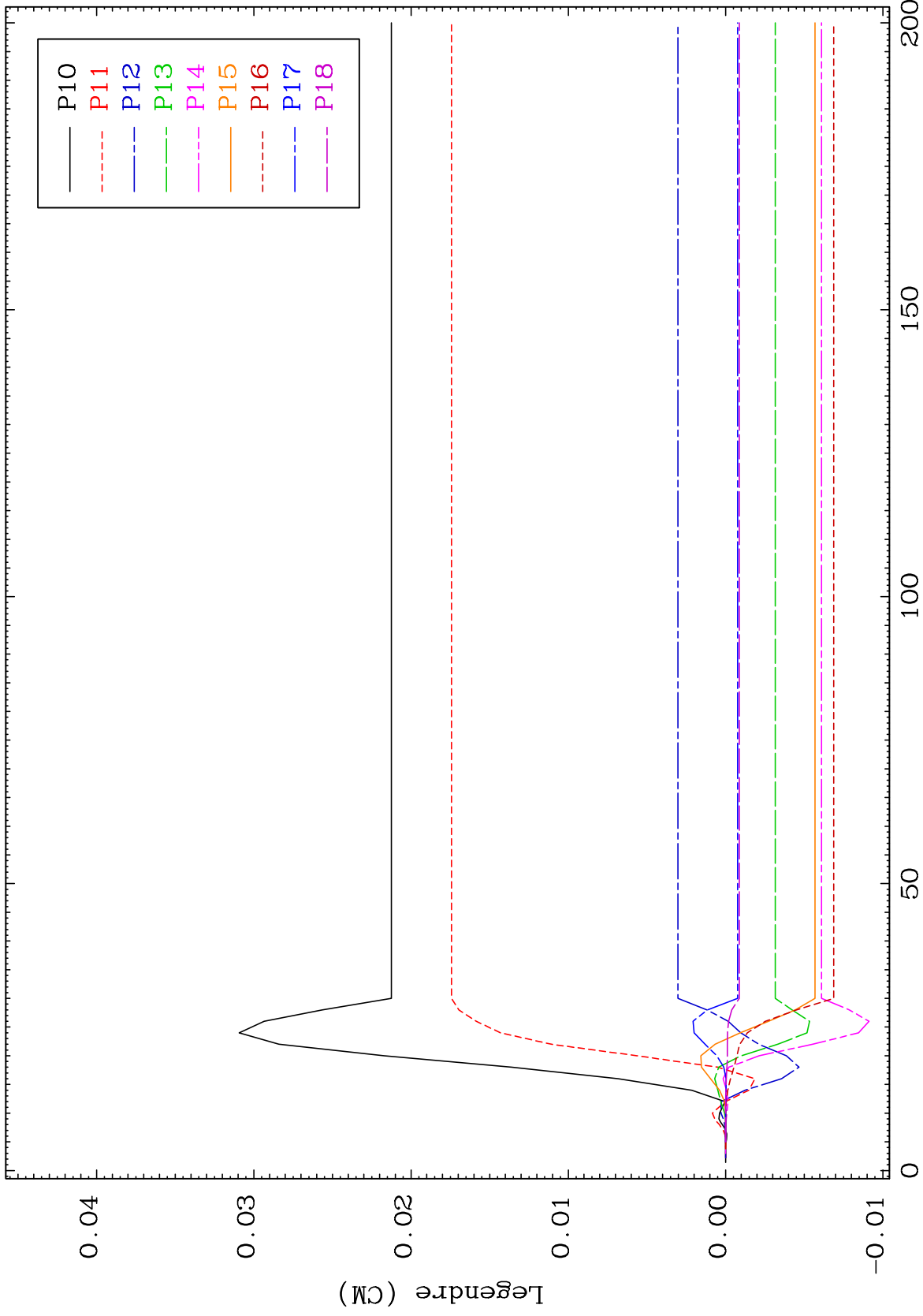
Incident Energy (MeV)

68

MAT 6458

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

64-Gd-163



69

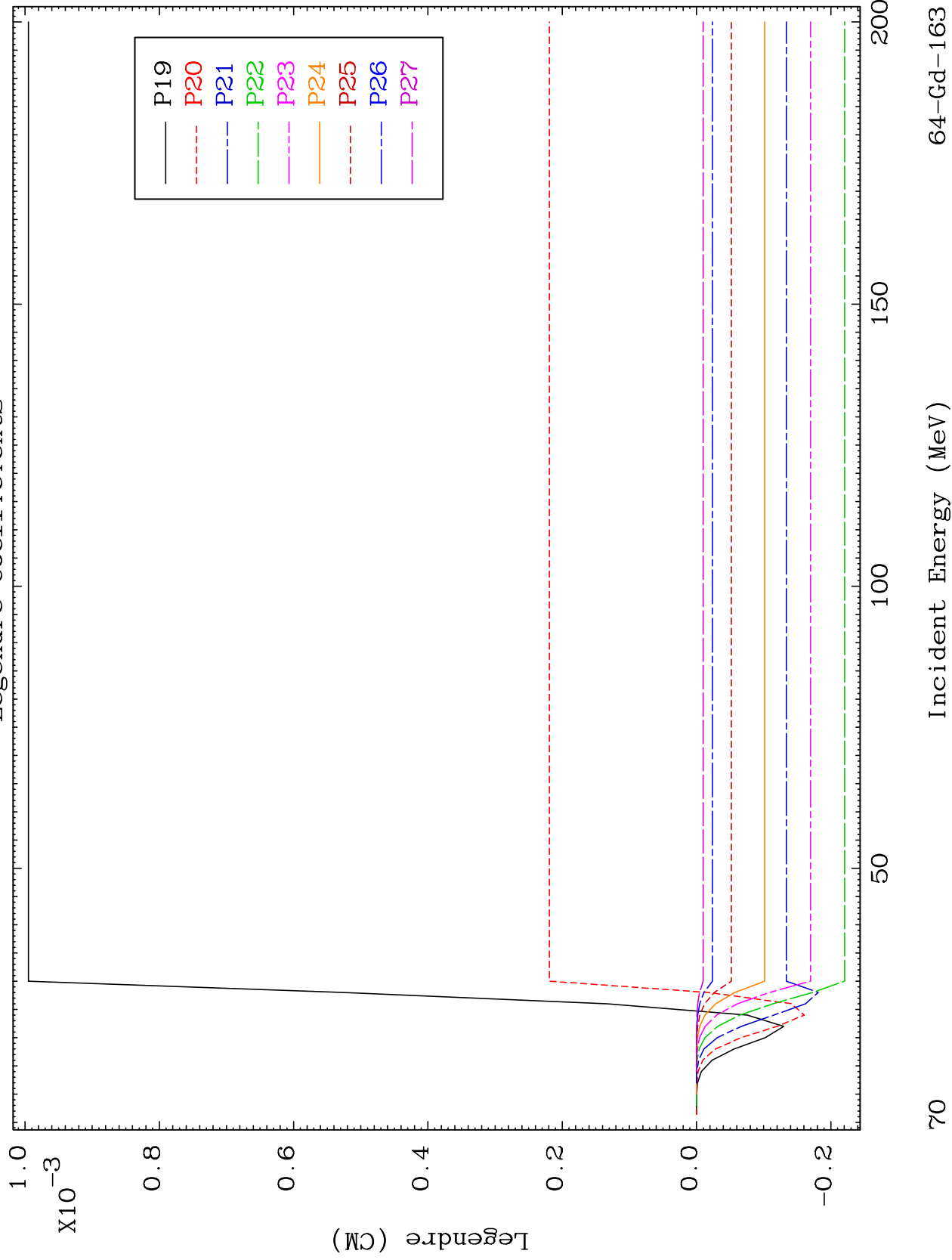
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



70

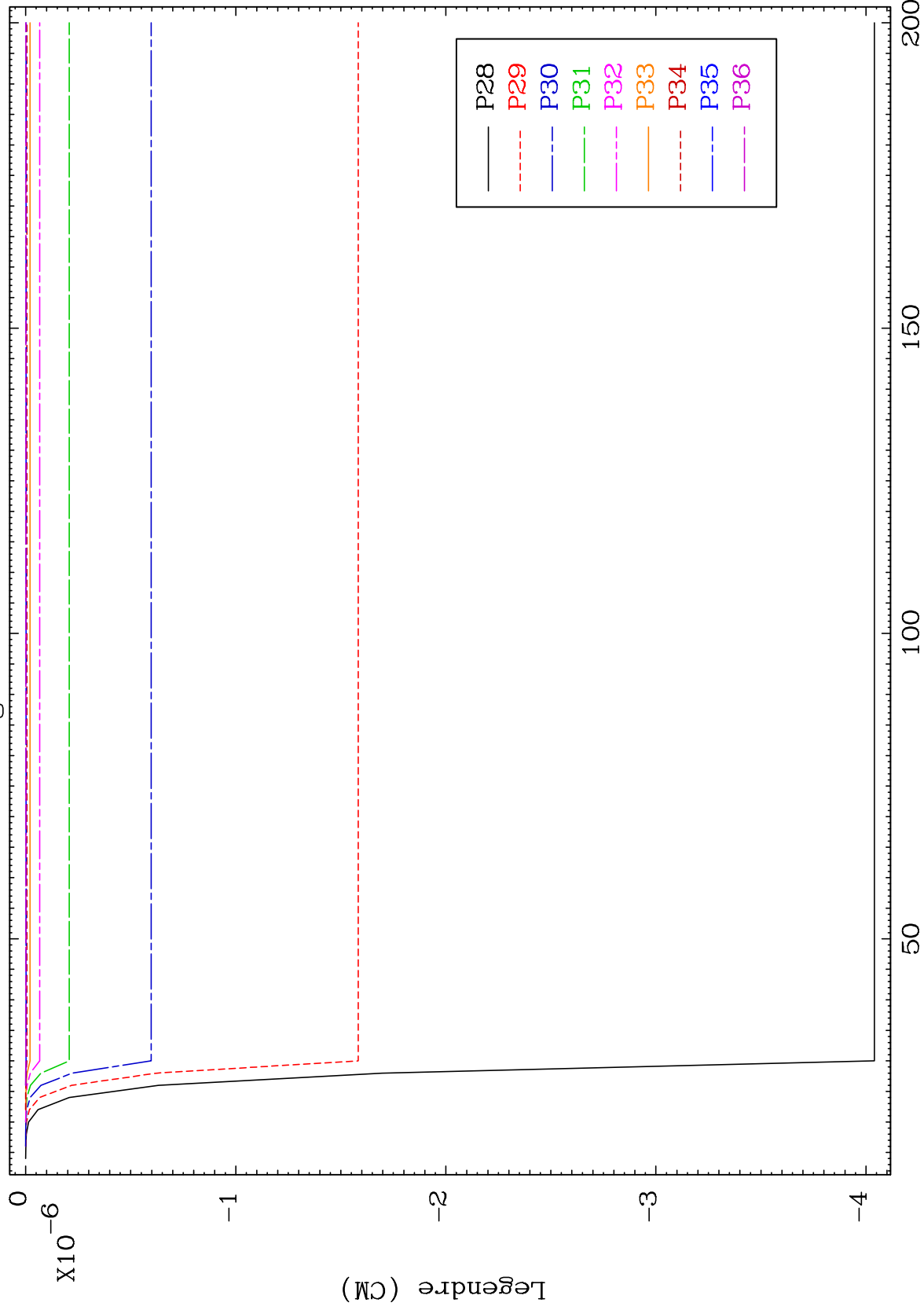
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



71

Incident Energy (MeV)

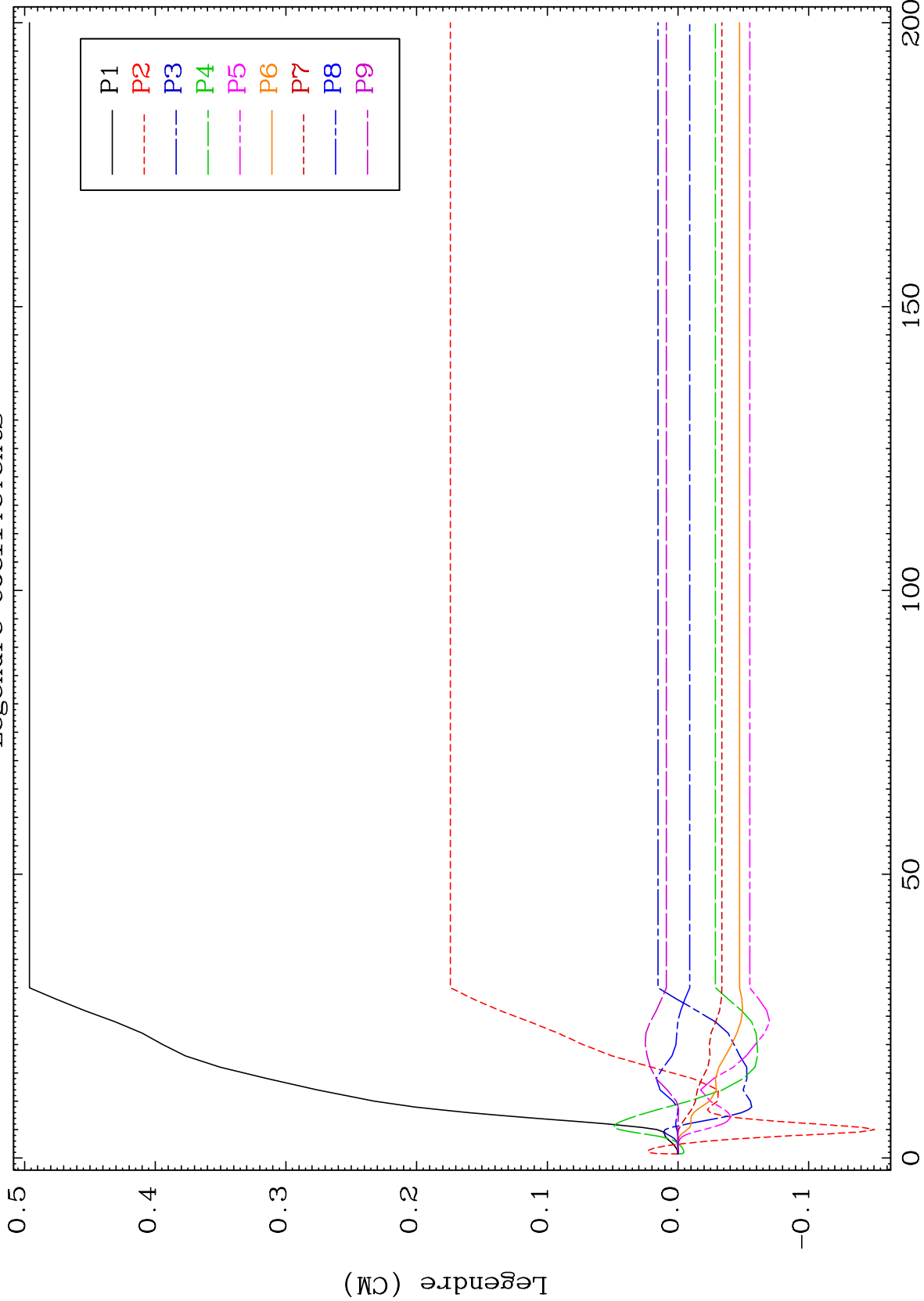
64-Gd-163

MAT 6458

MT= 65 (n,n') Level

64-Gd-163

Legendre Coefficients



72

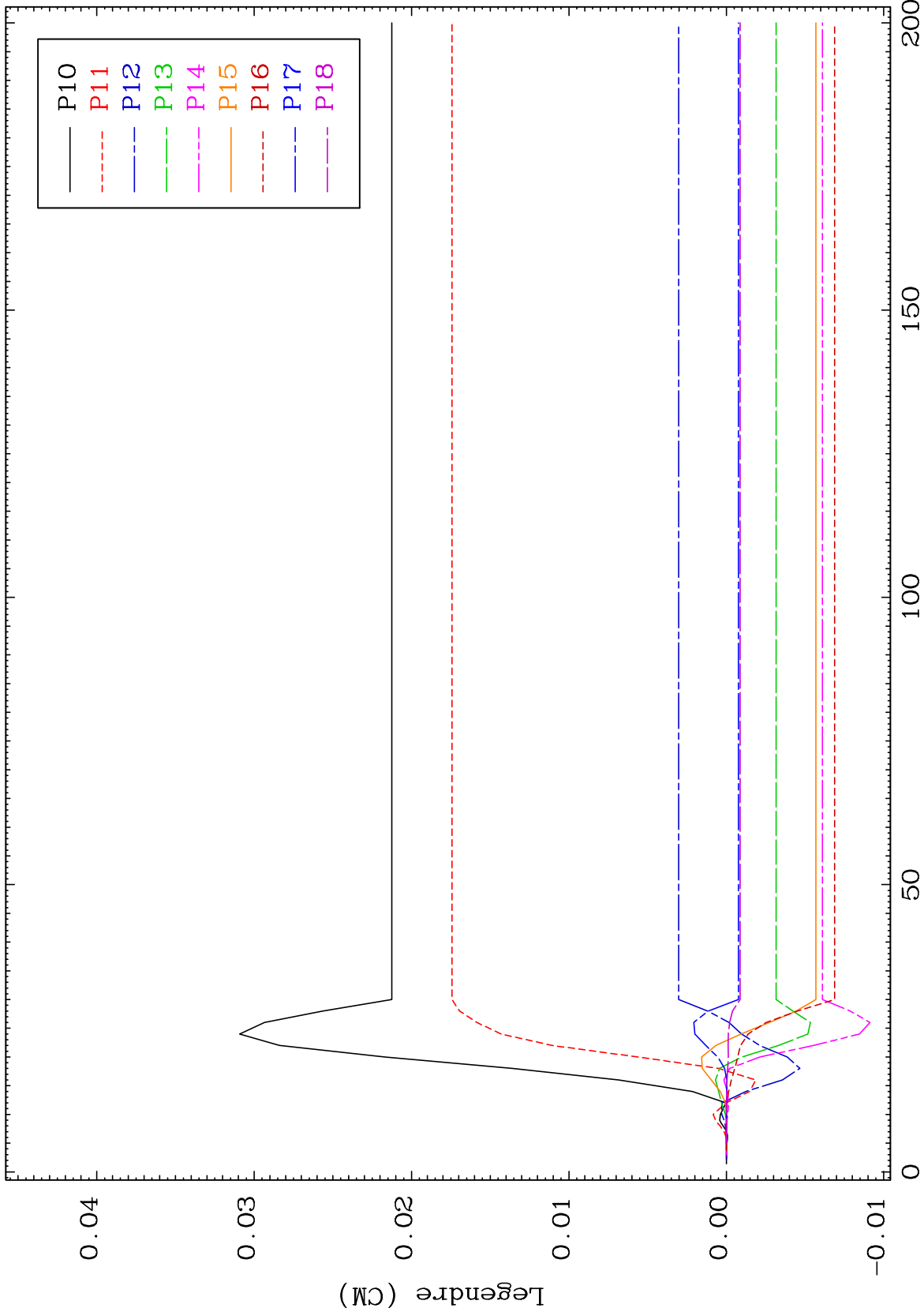
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

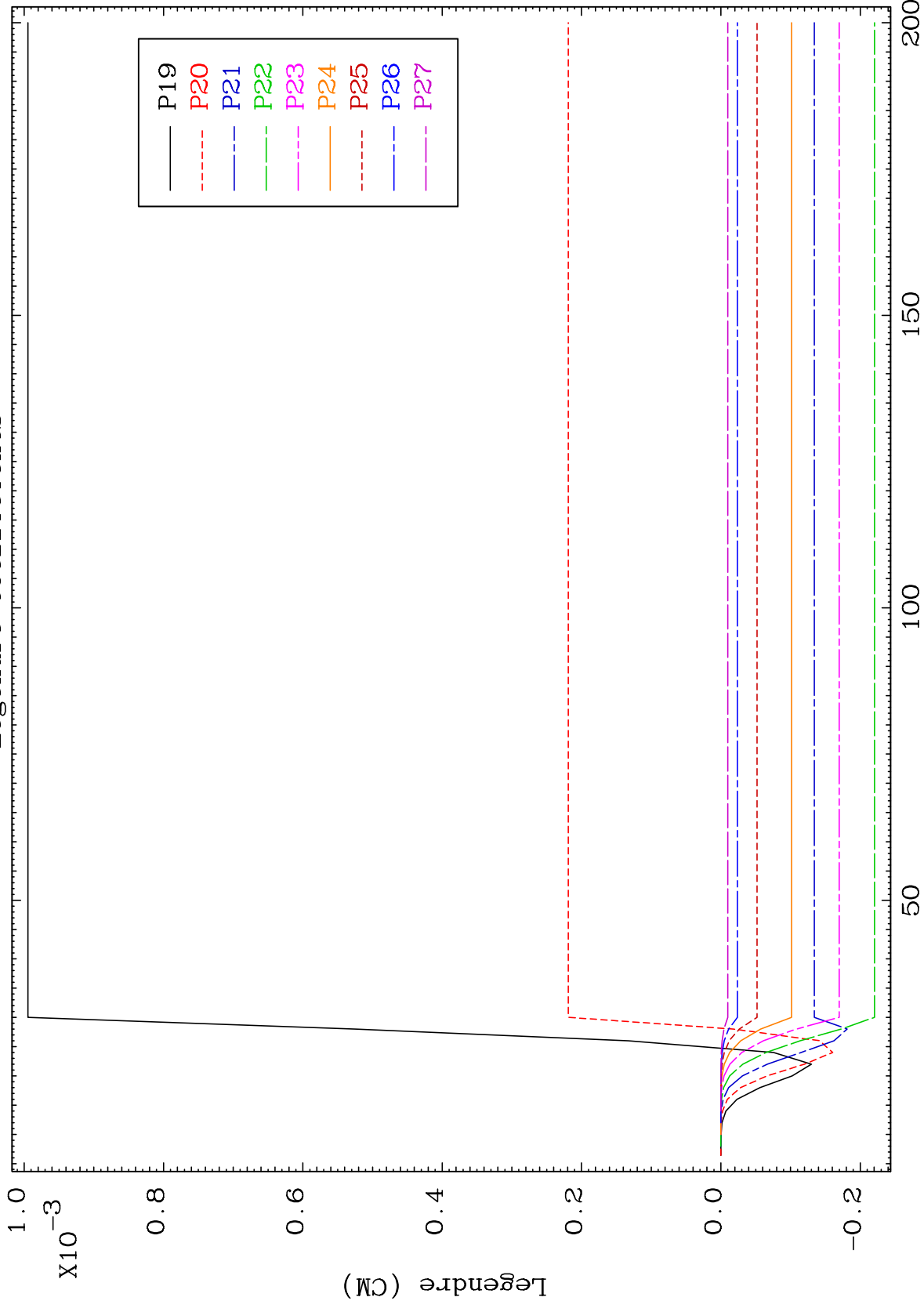
64-Gd-163



73

Incident Energy (MeV)

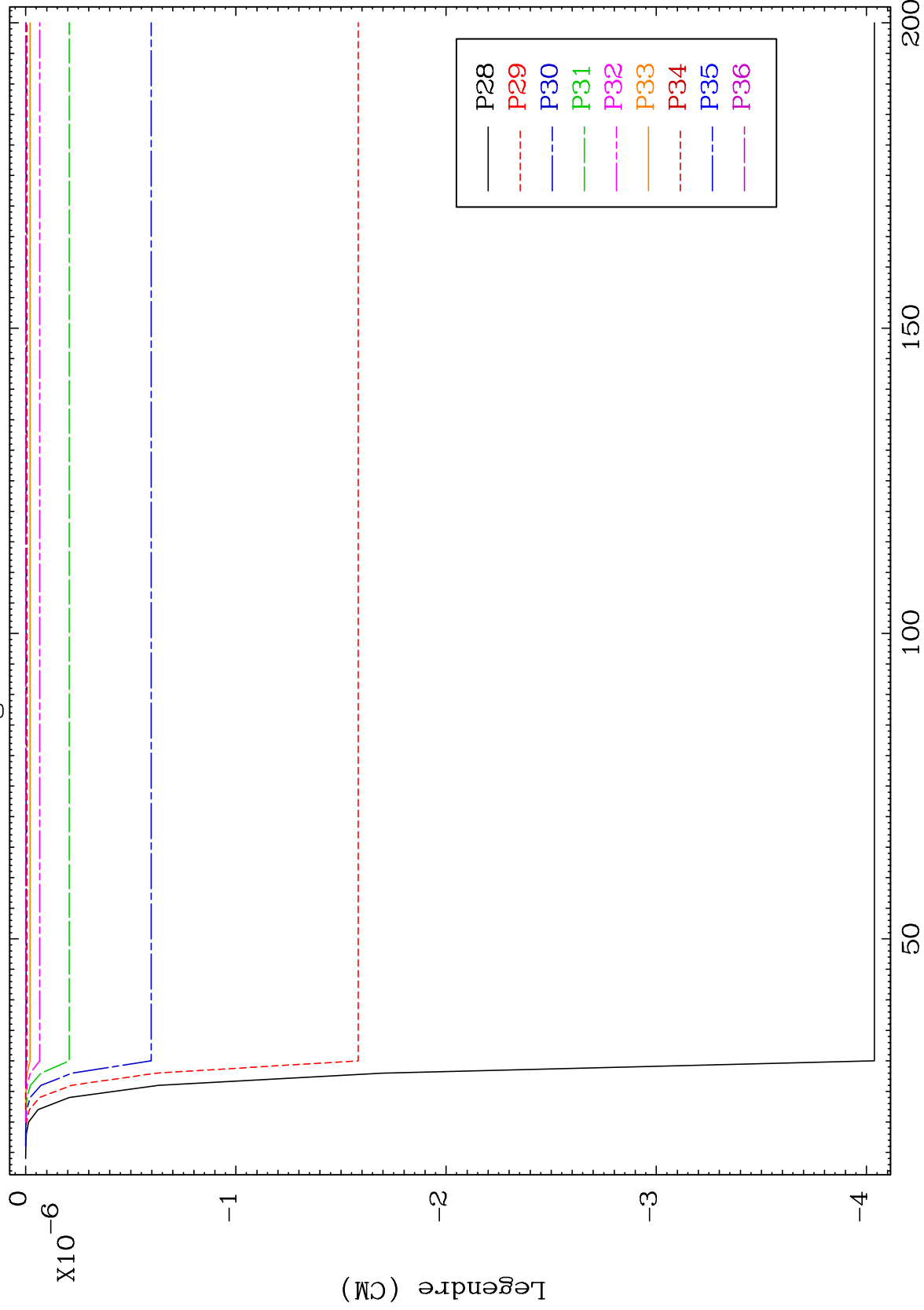
64-Gd-163



MAT 6458

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

64-Gd-163



75

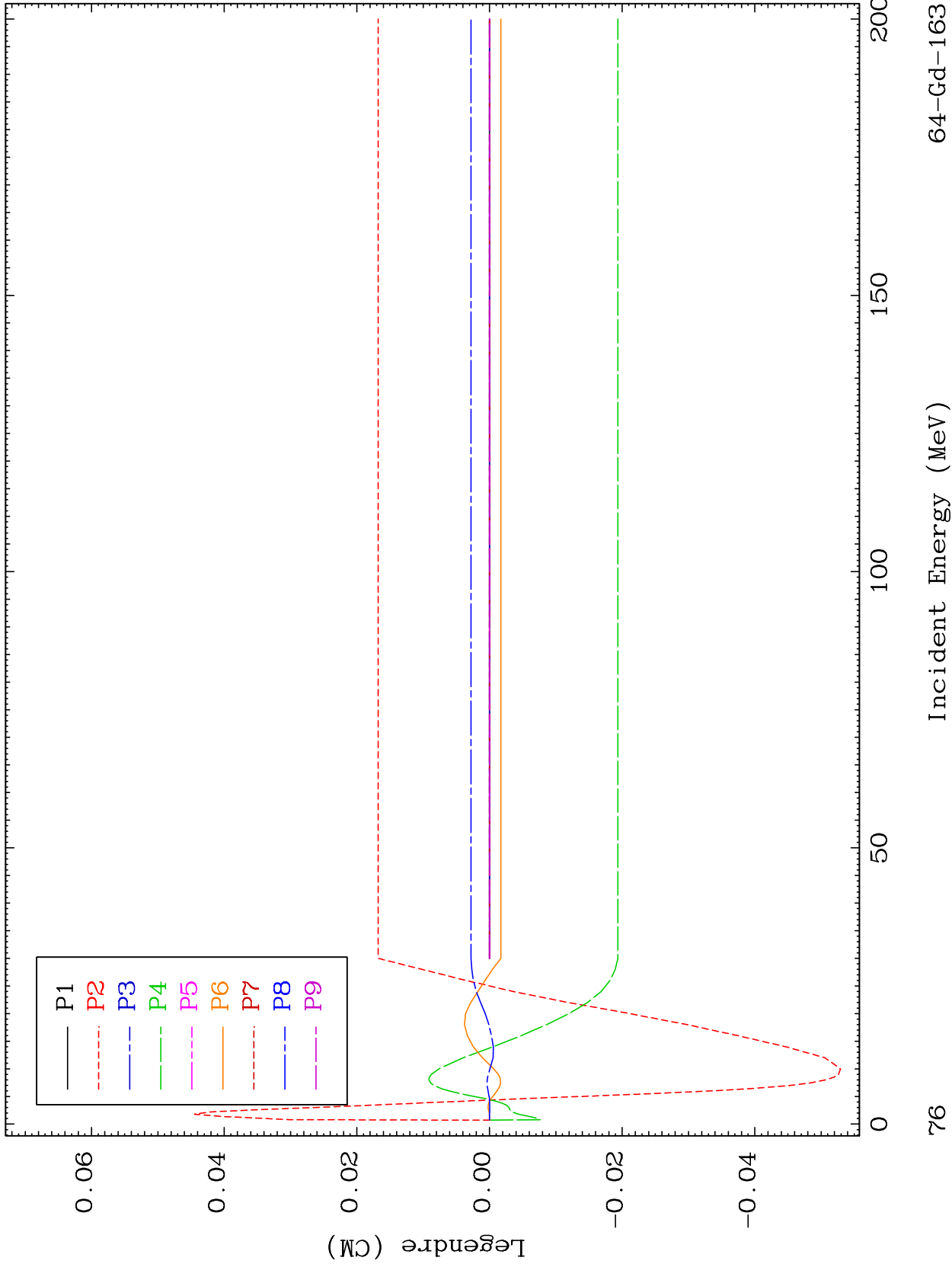
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



76

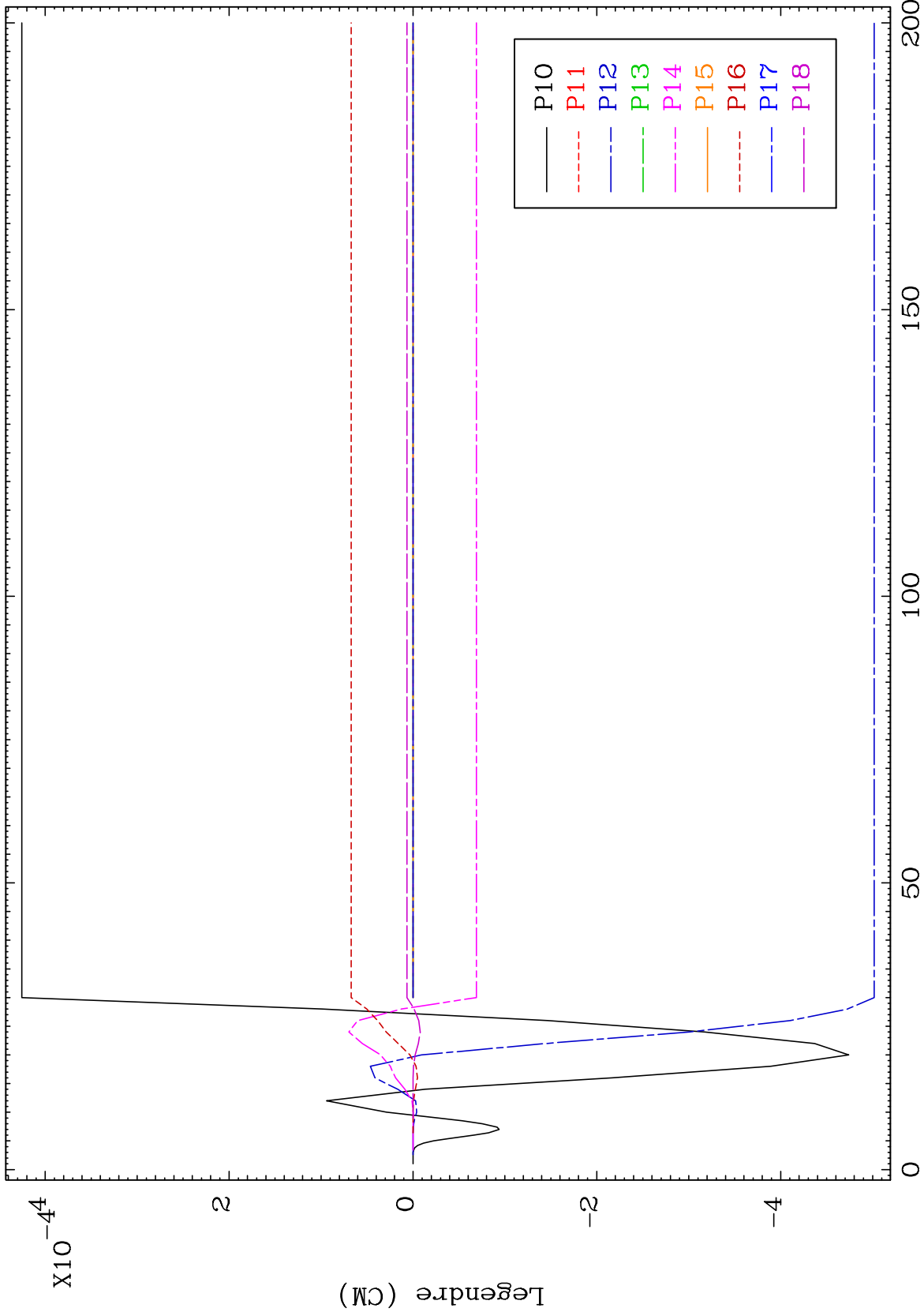
Incident Energy (MeV)

64-Gd-163

MAT 6458

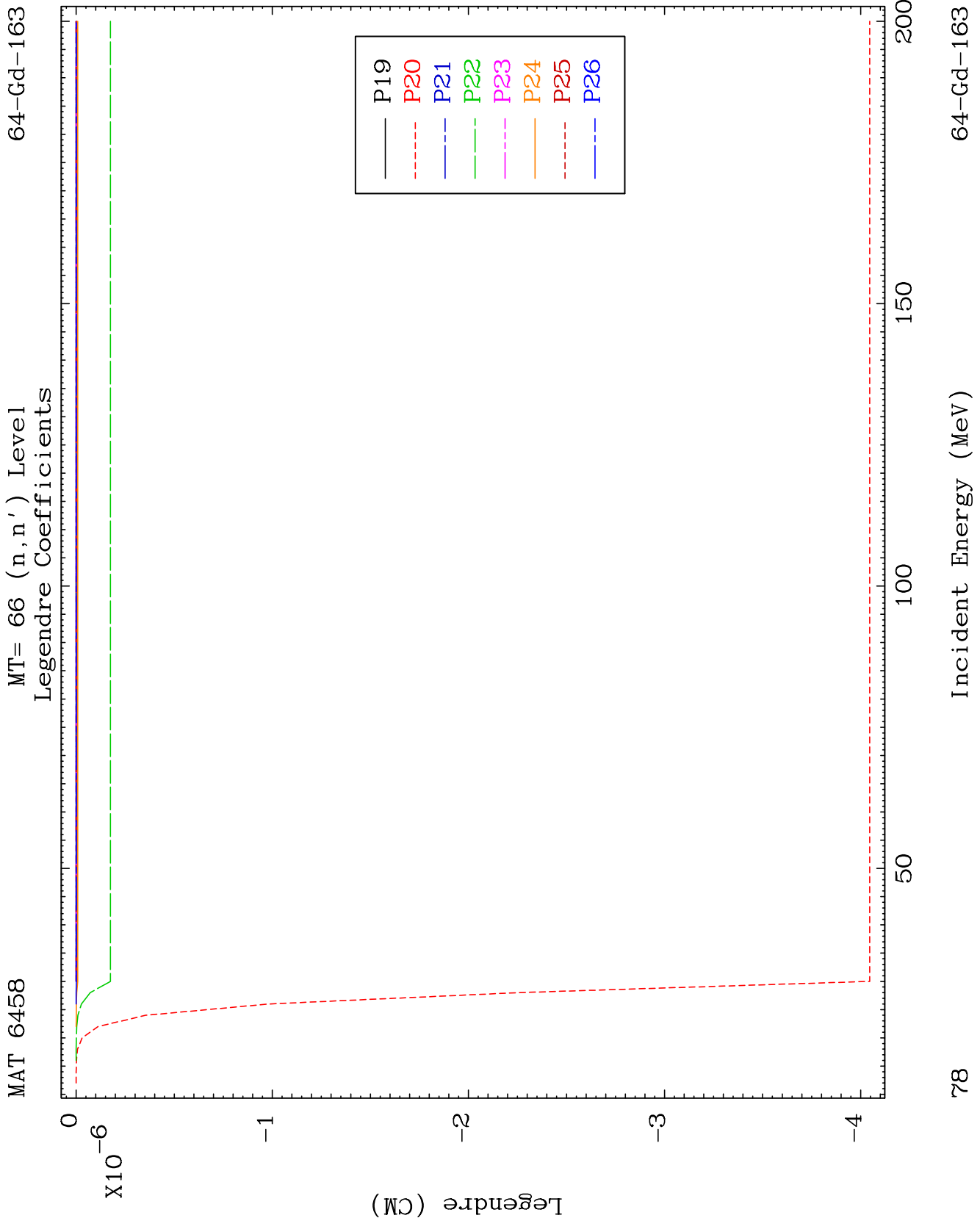
MT= 66 (n,n') Level
Legendre Coefficients

64-Gd-163



77

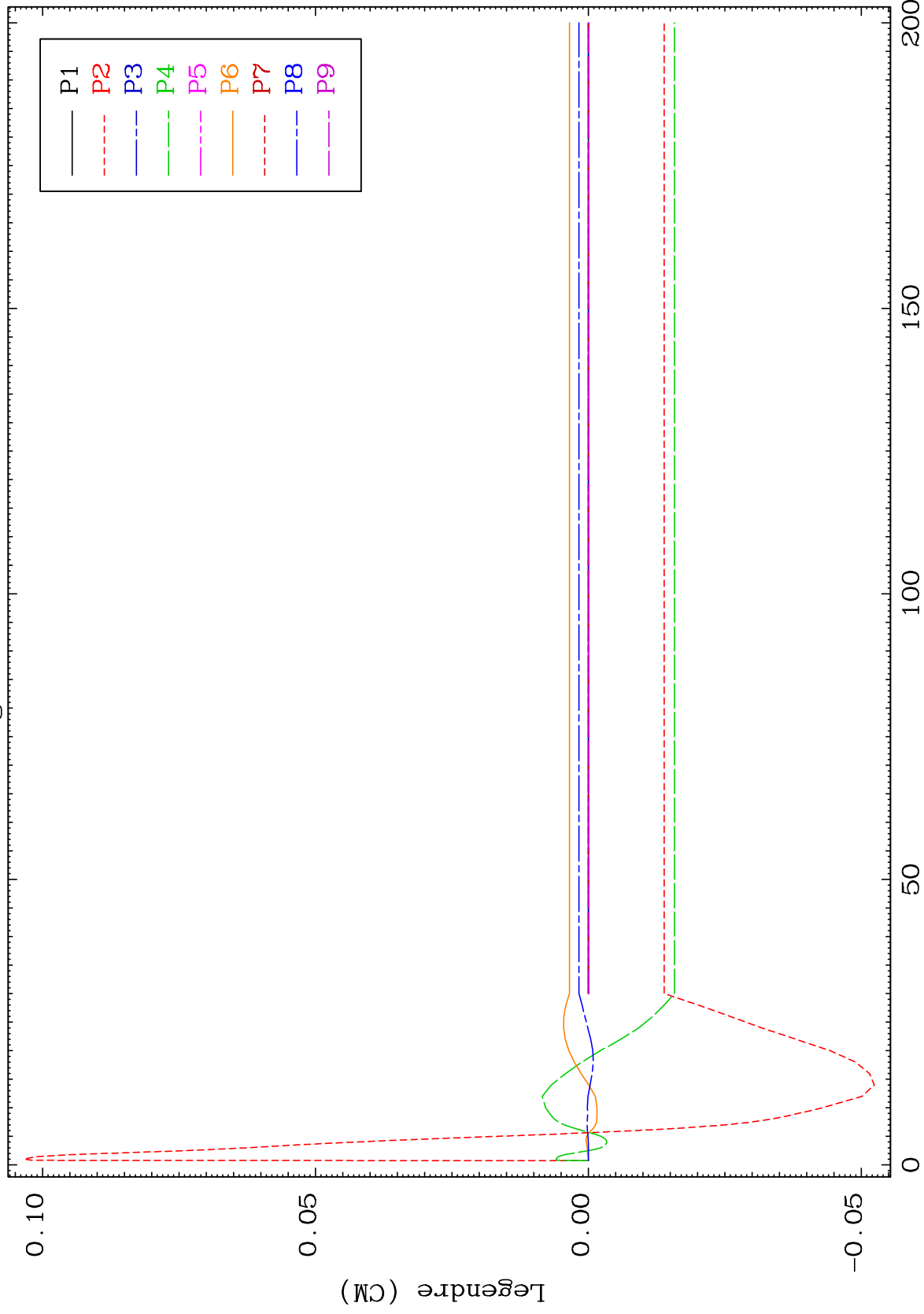
64-Gd-163



MAT 6458

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

64-Gd-163



79

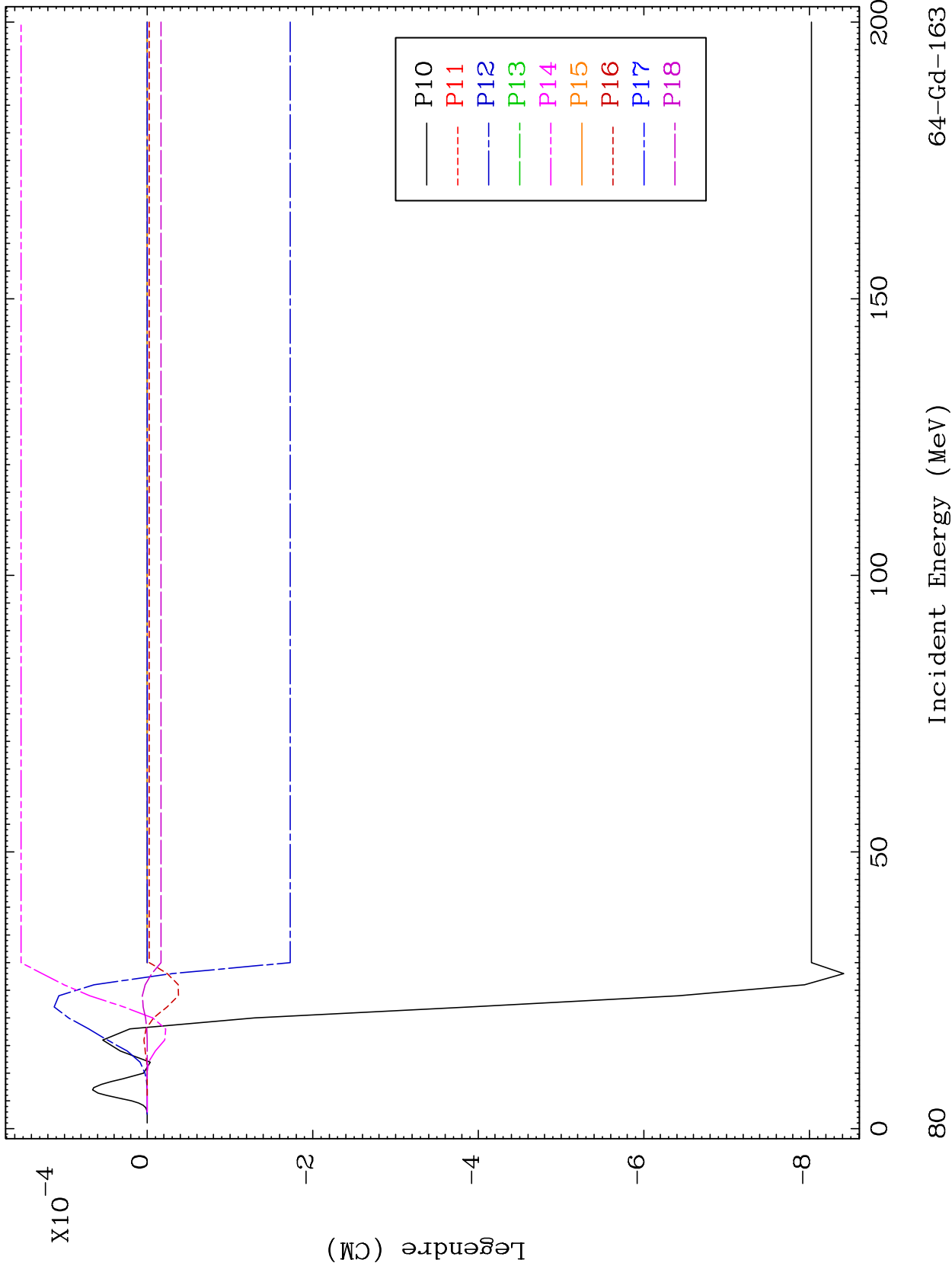
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

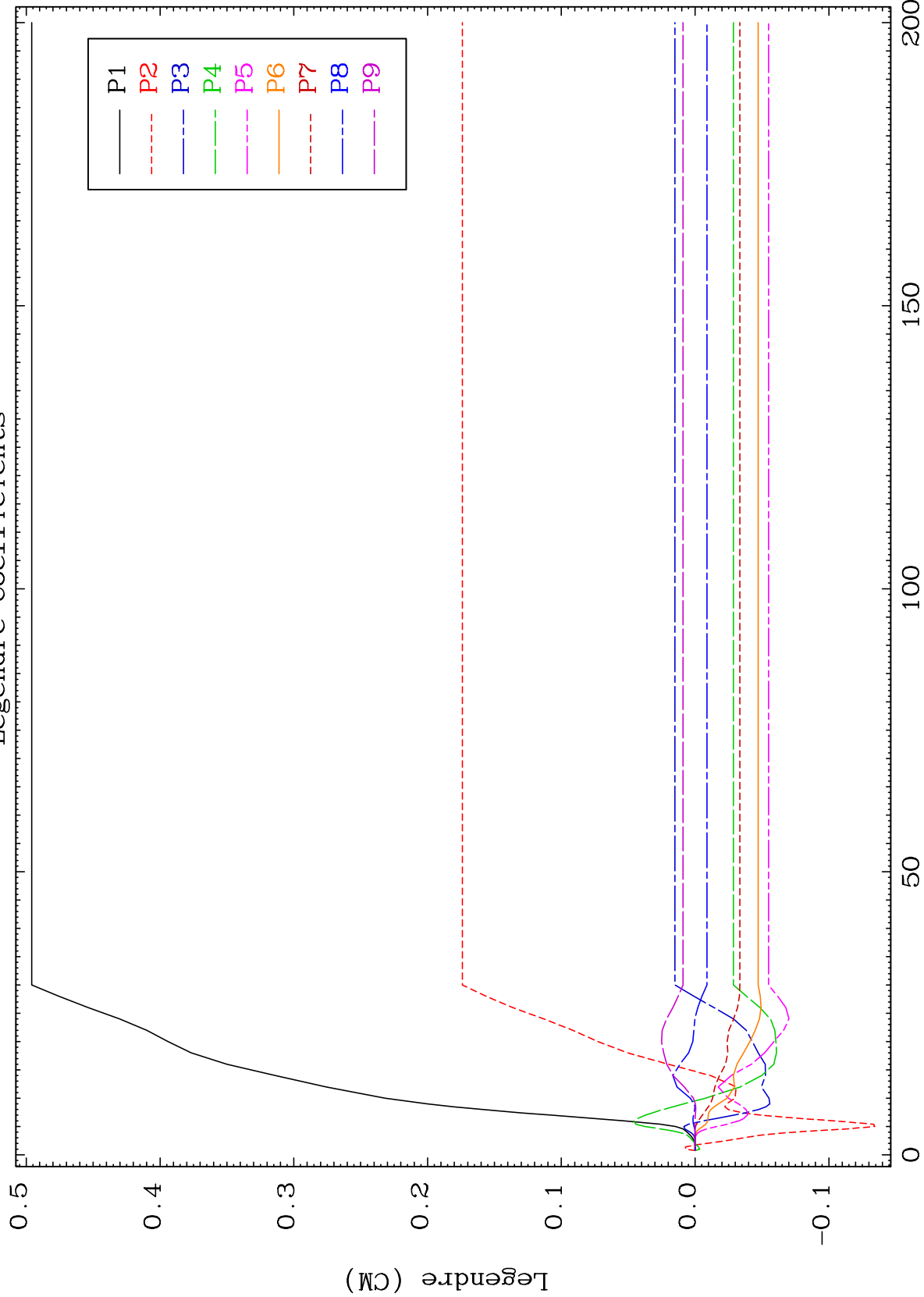
Incident Energy (MeV)

80

MAT 6458

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

64-Gd-163



82

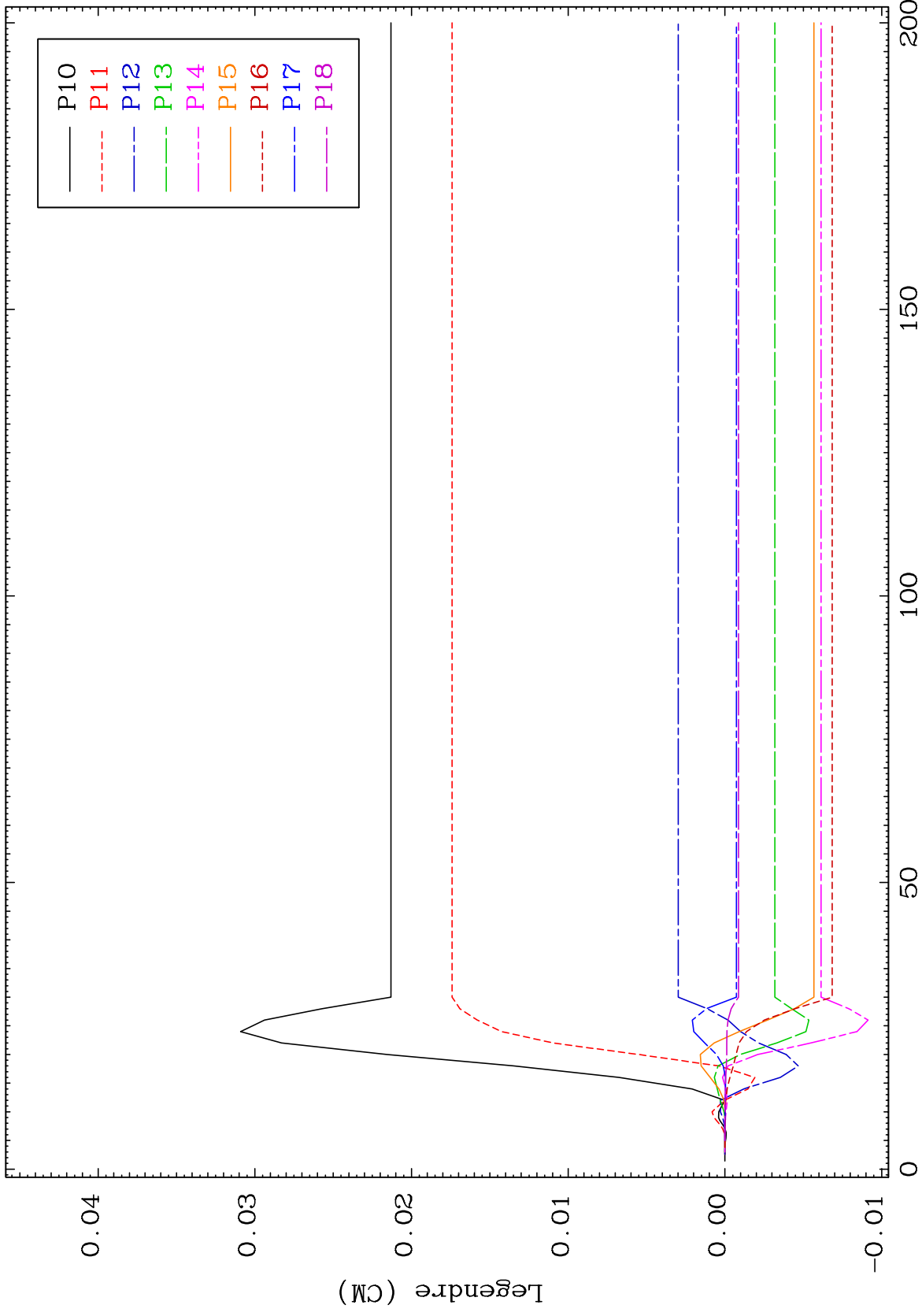
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

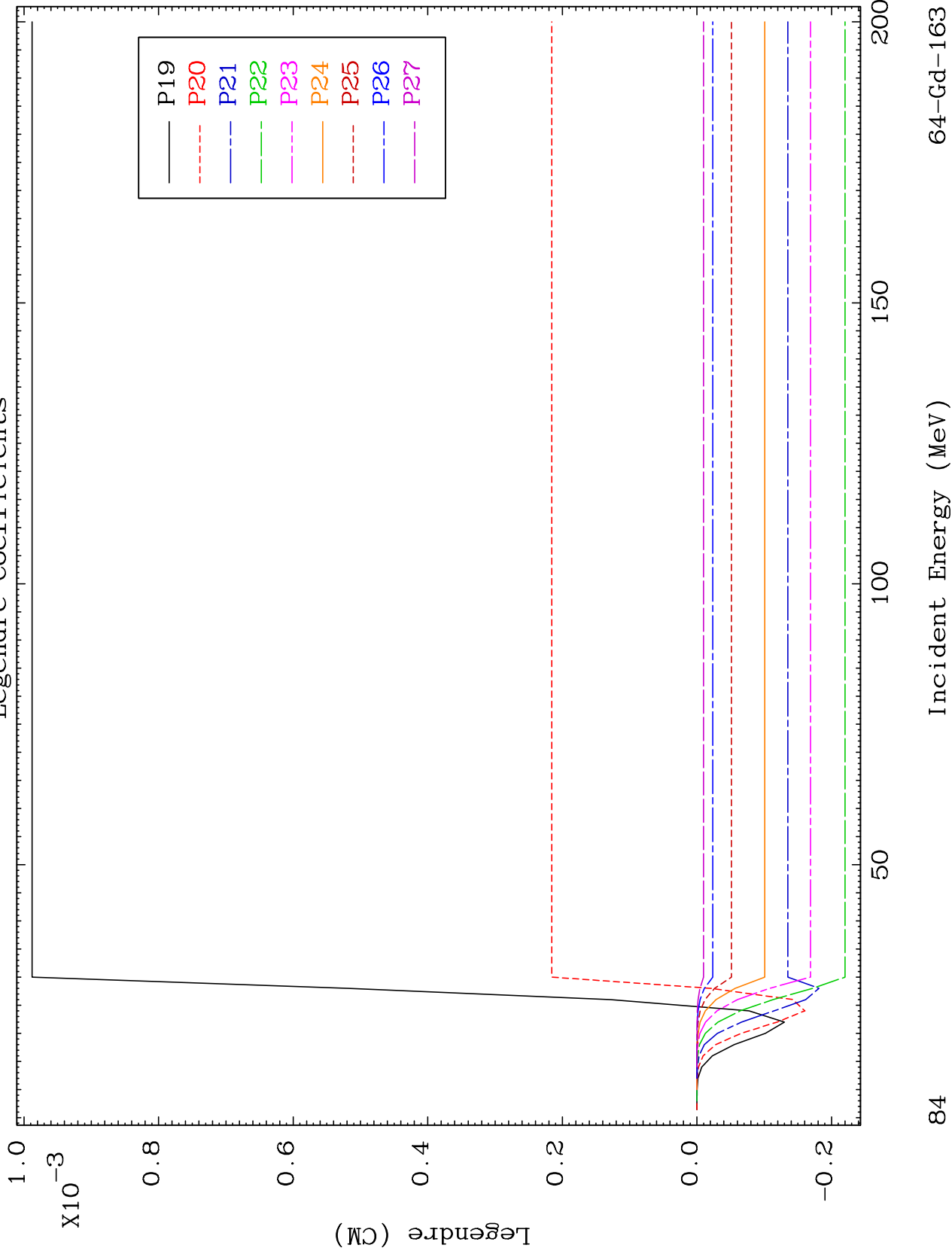
64-Gd-163



83

Incident Energy (MeV)

64-Gd-163

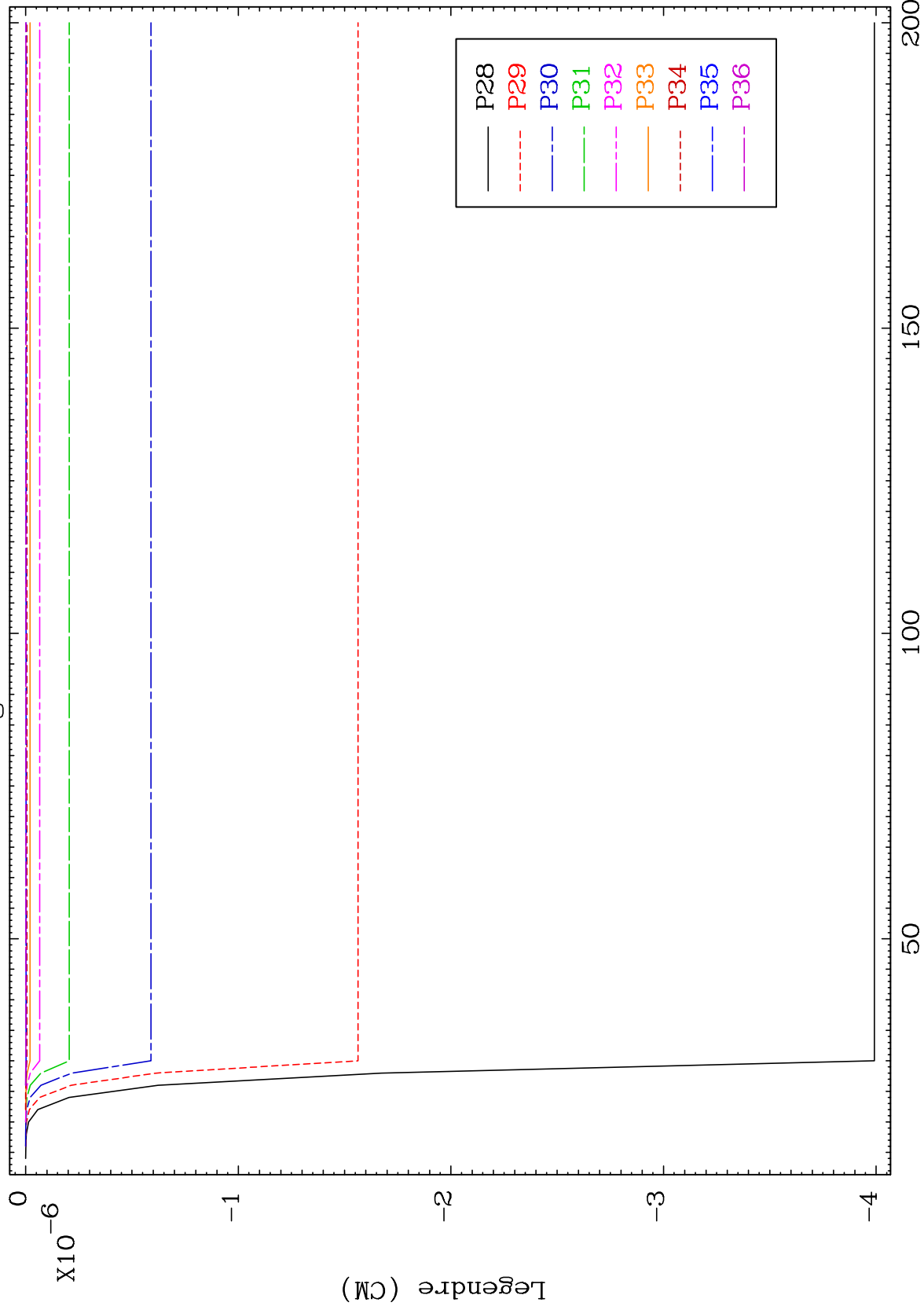


MAT 6458

MT= 68 (n,n') Level

64-Gd-163

Legendre Coefficients



85

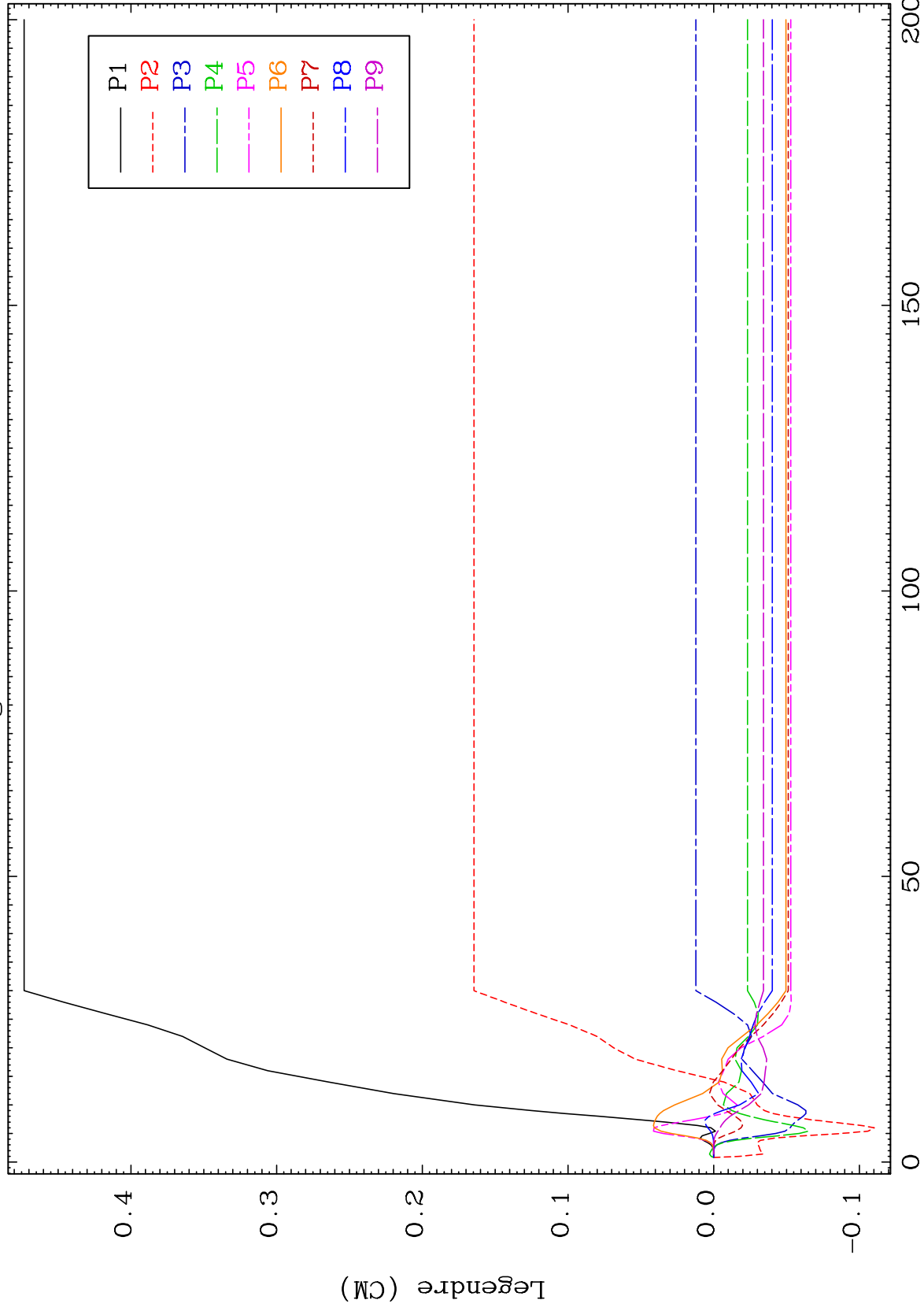
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



86

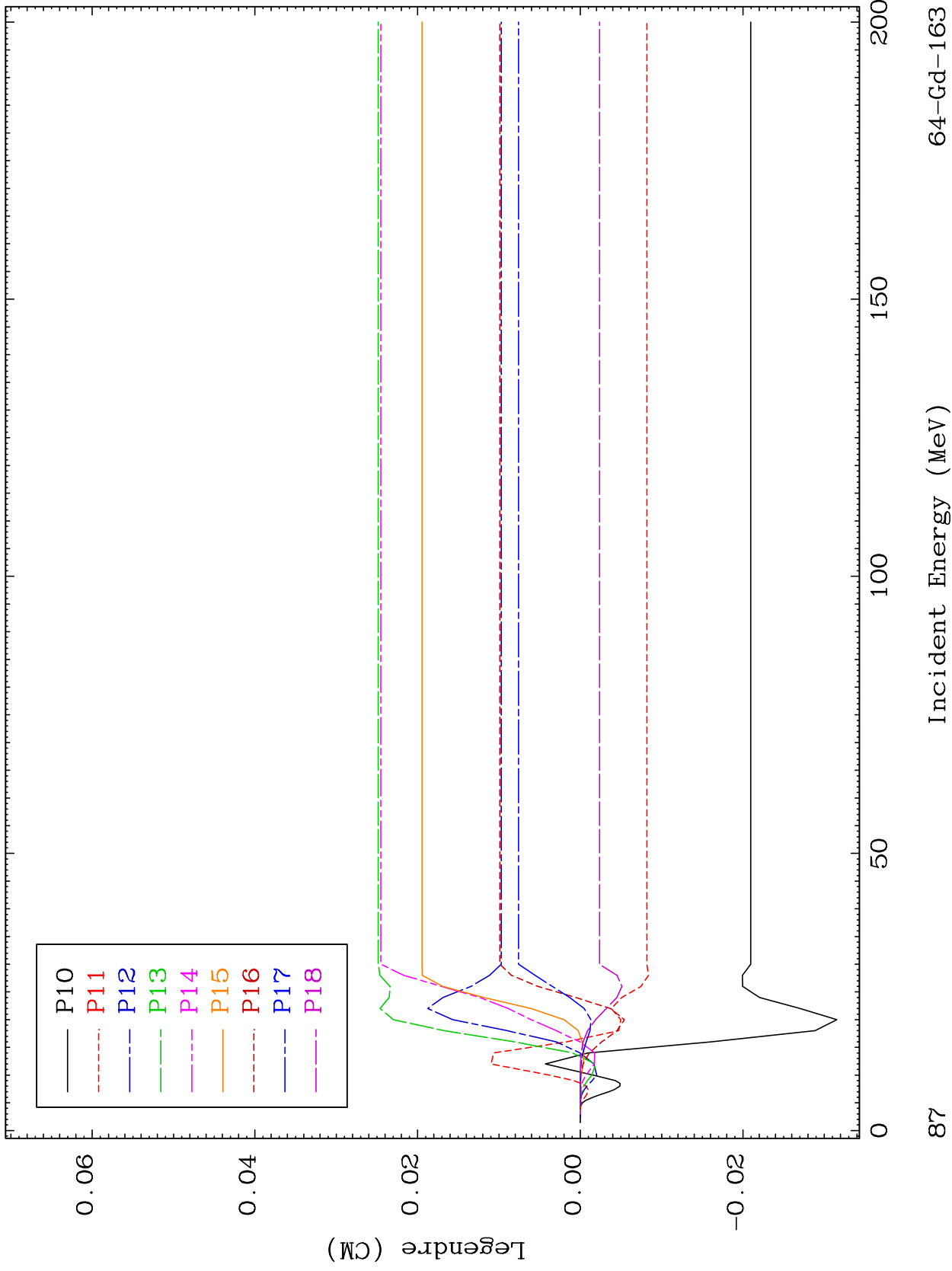
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



87

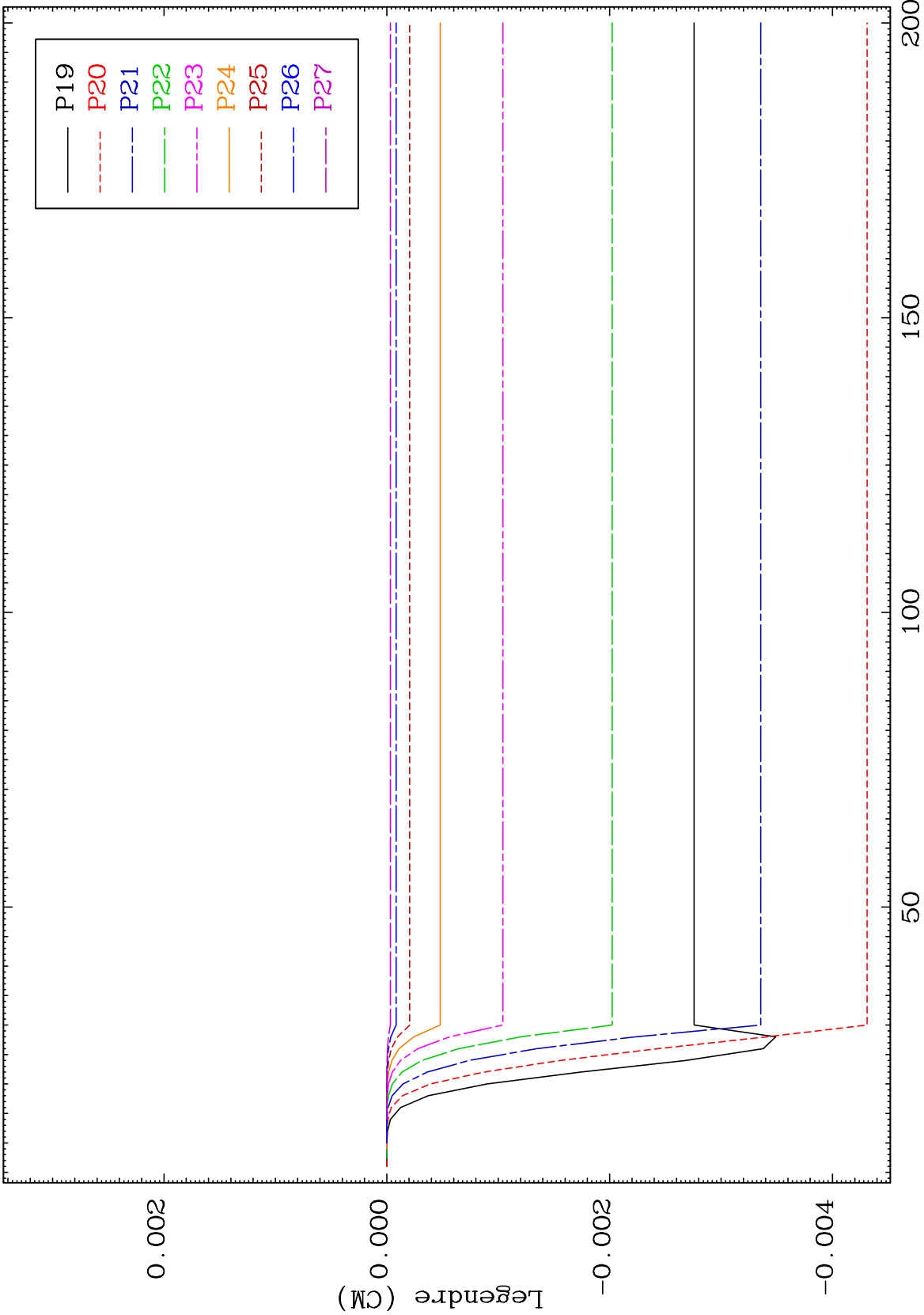
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



88

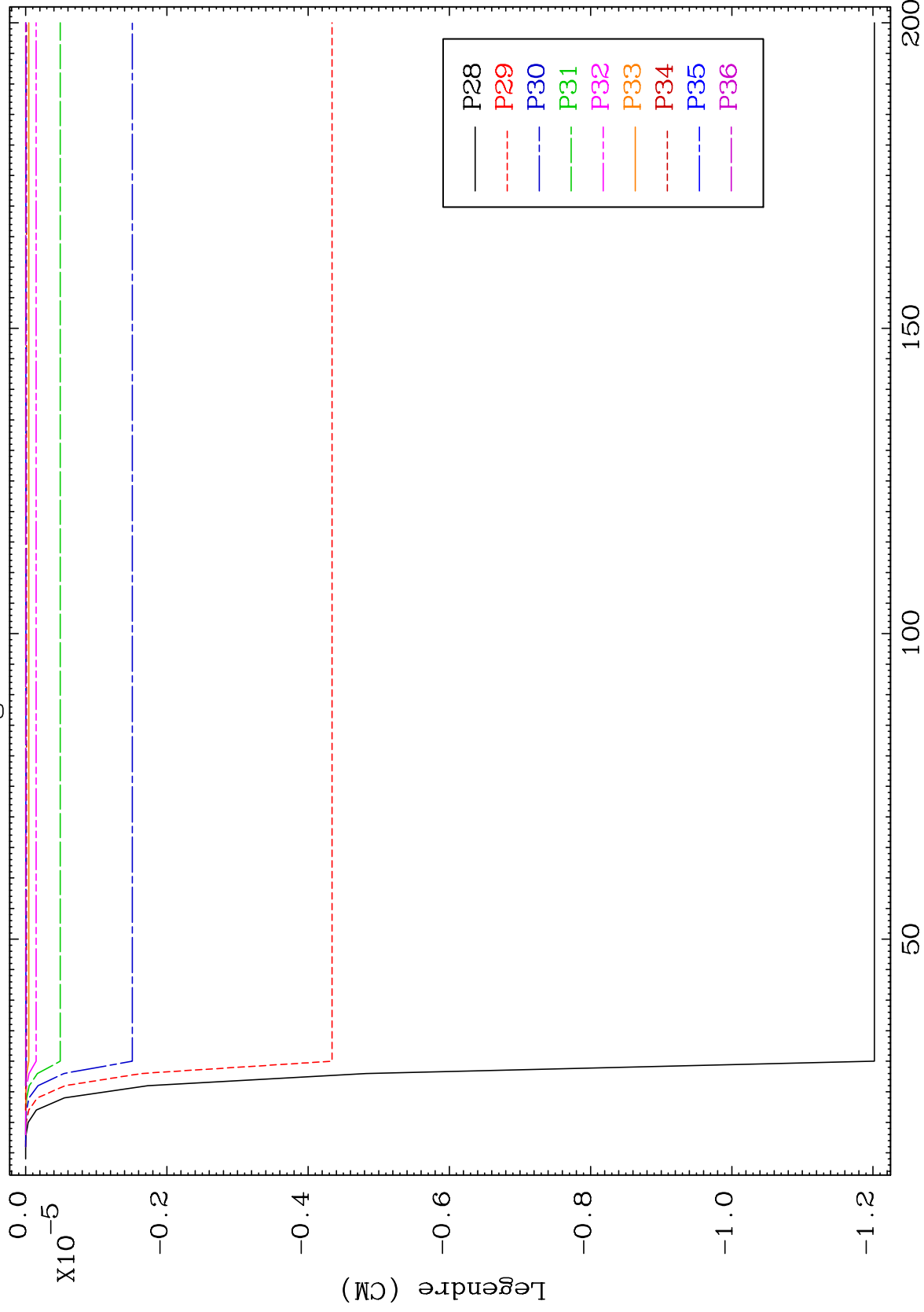
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



89

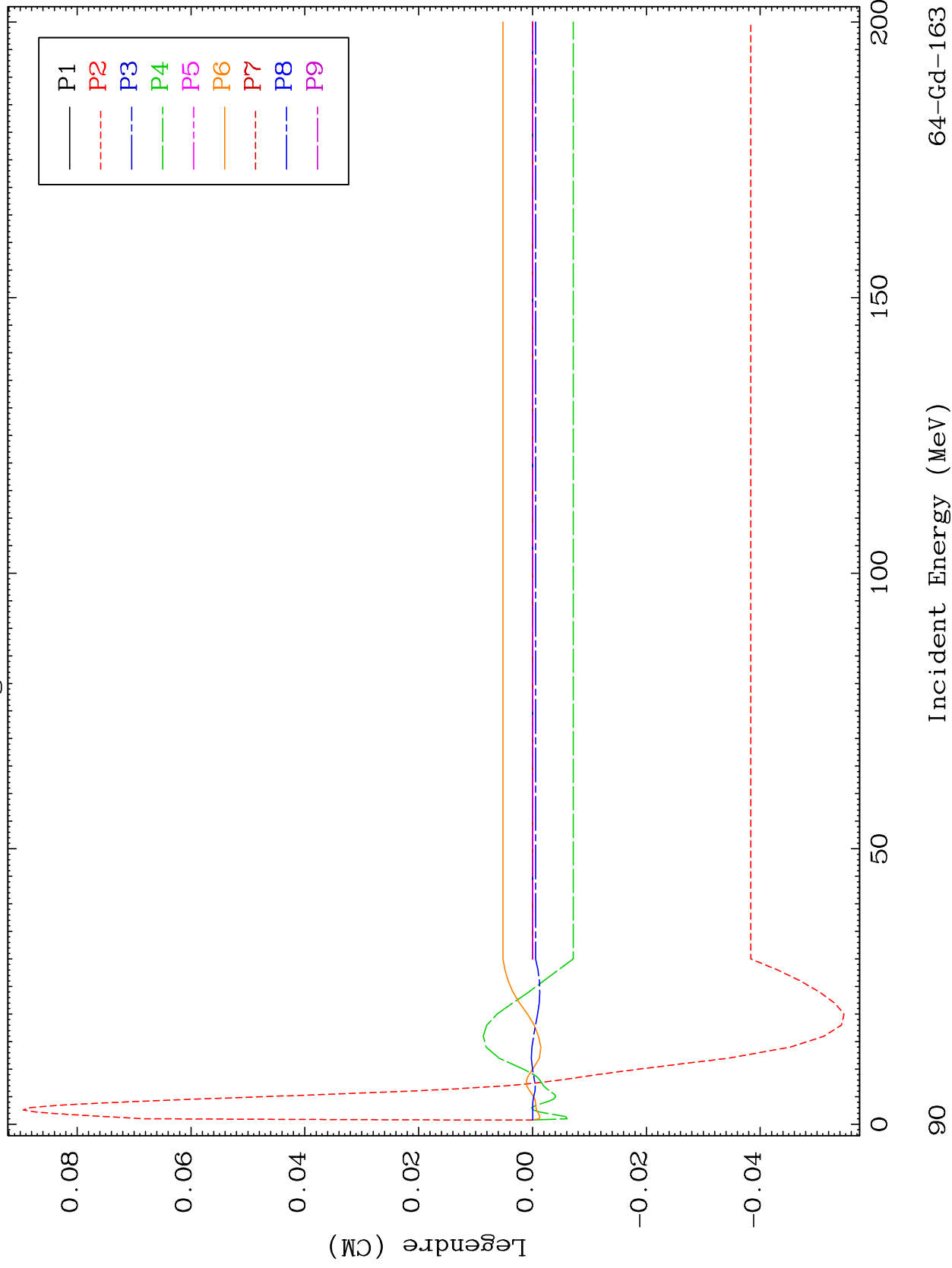
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163

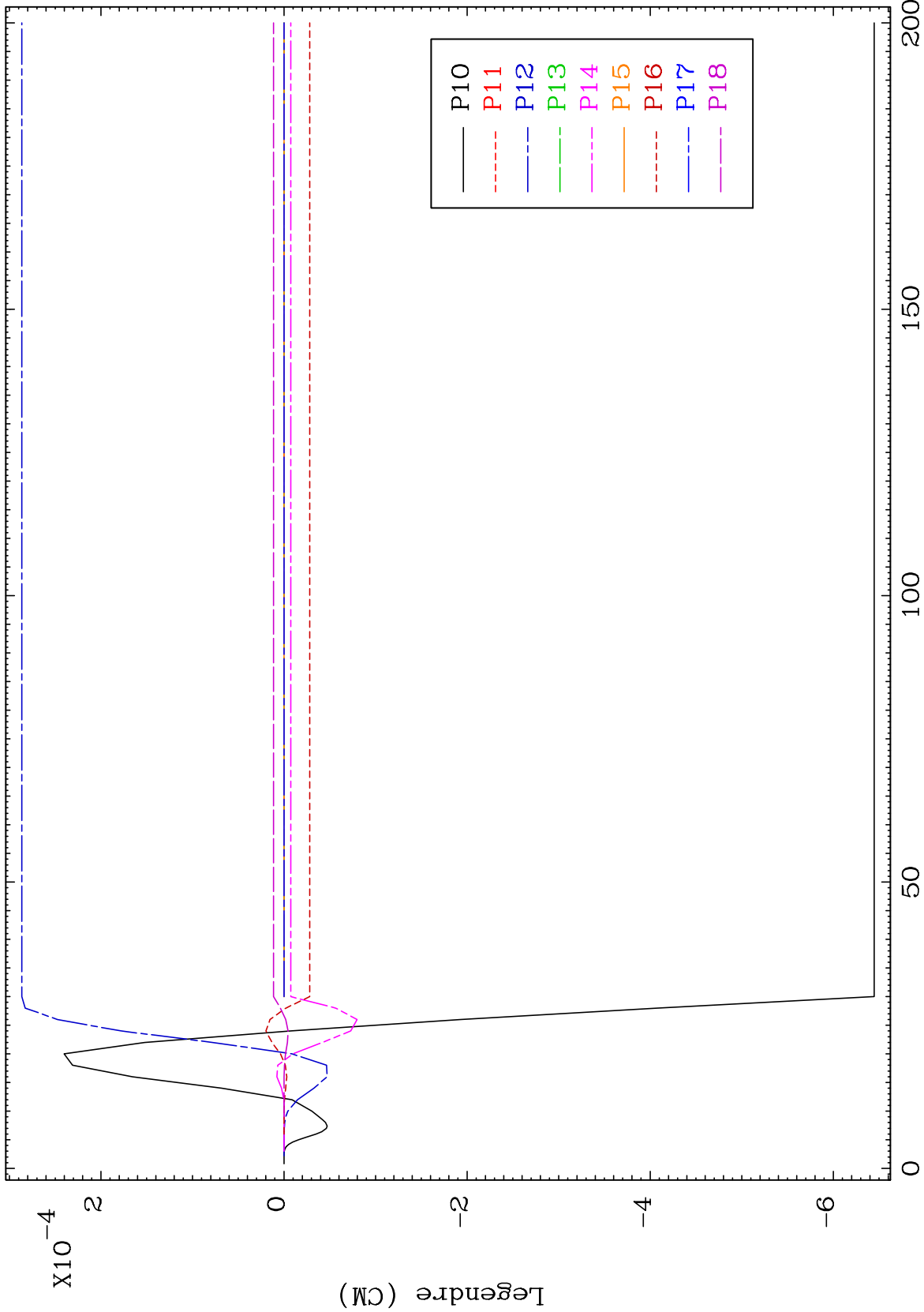


64-Gd-163

MAT 6458

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

64-Gd-163



91

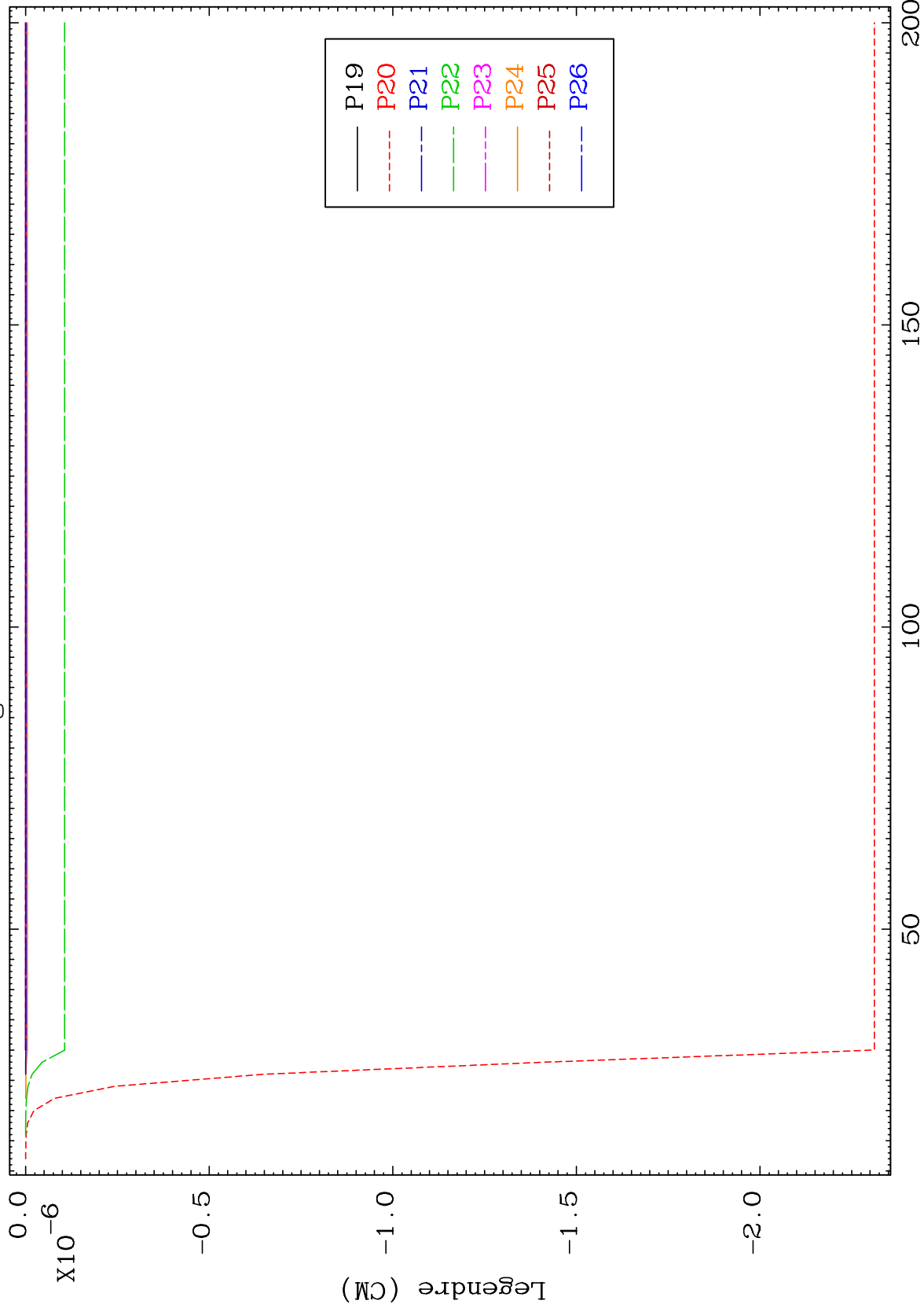
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



92

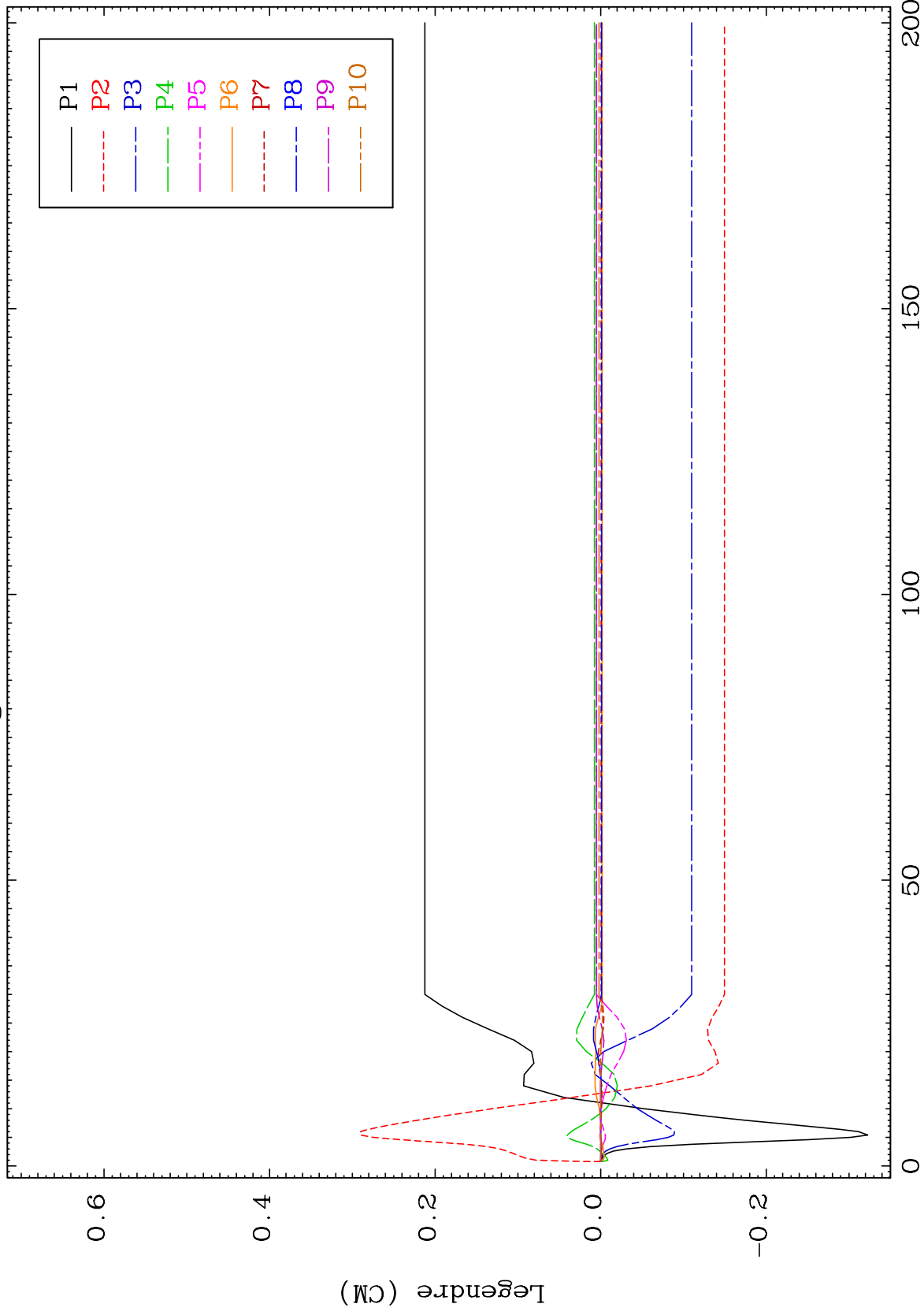
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



93

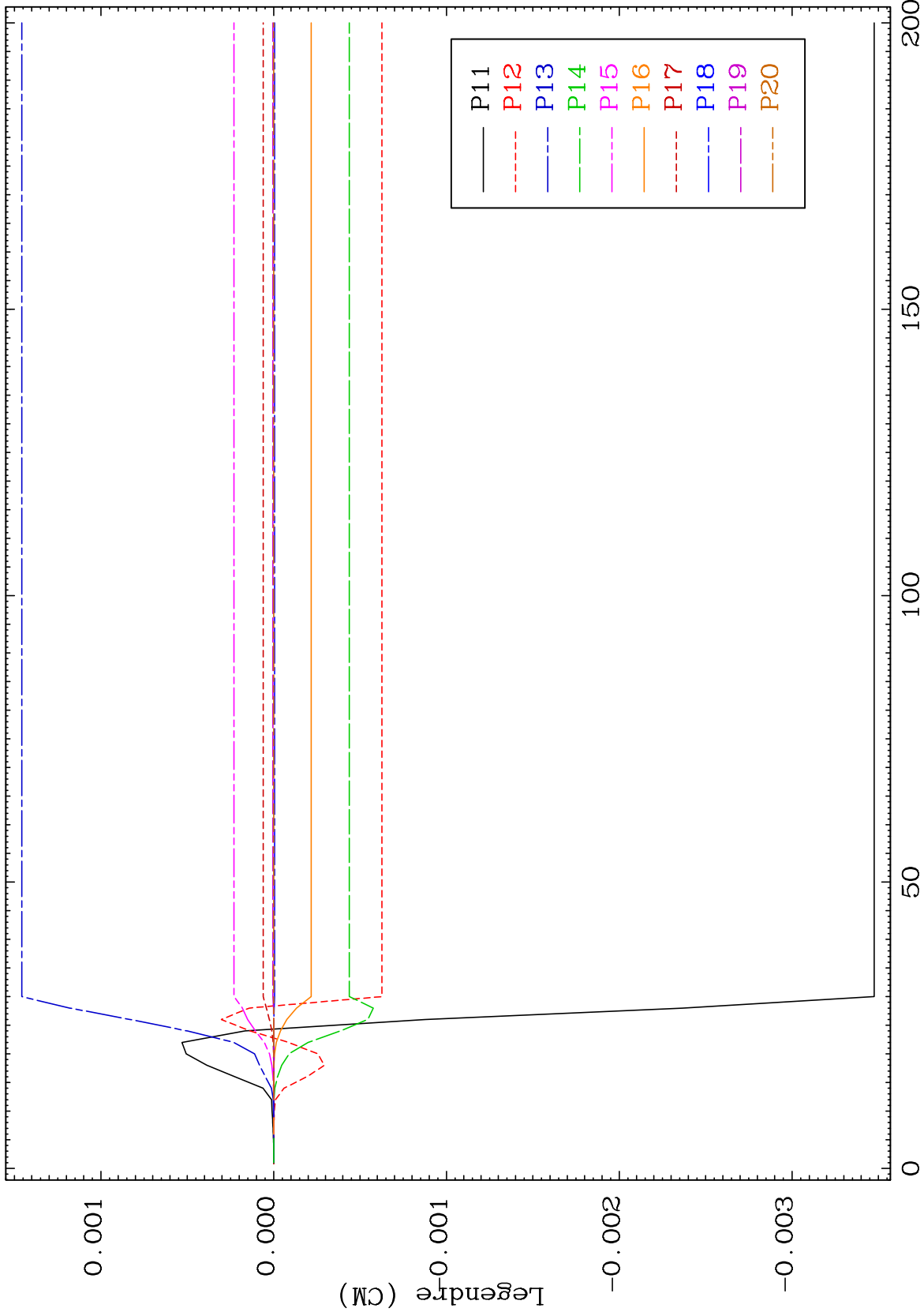
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



94

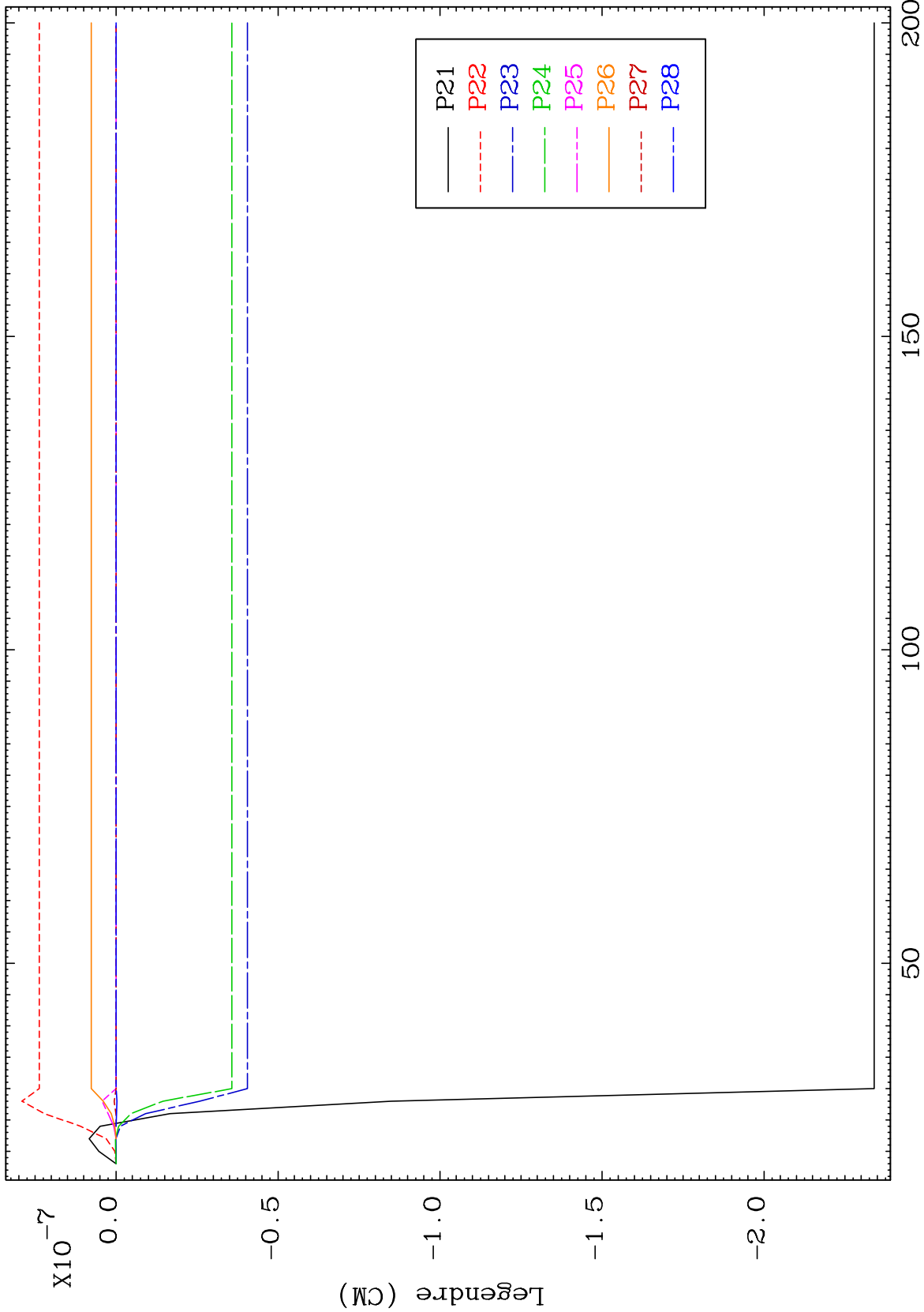
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



95

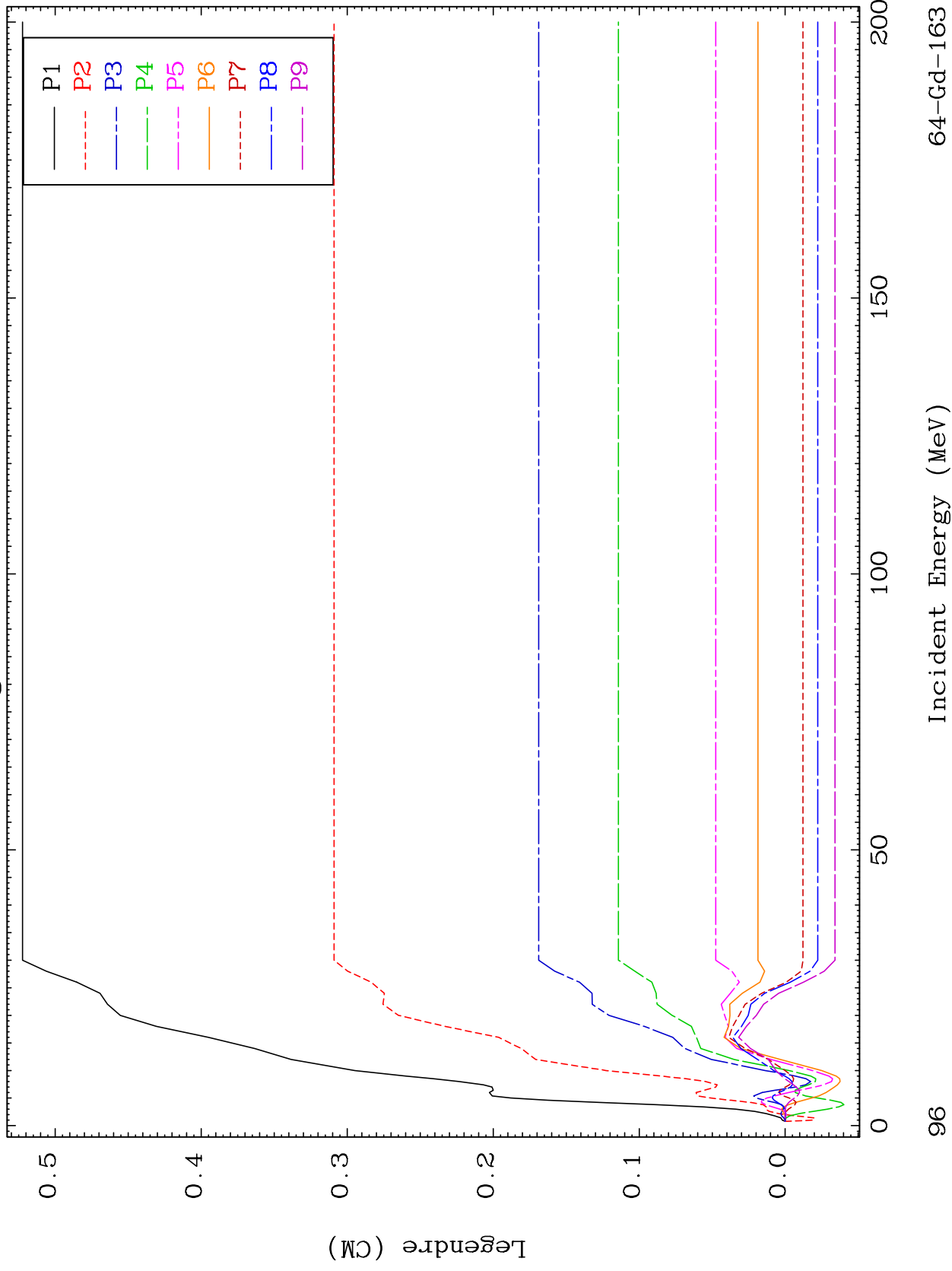
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

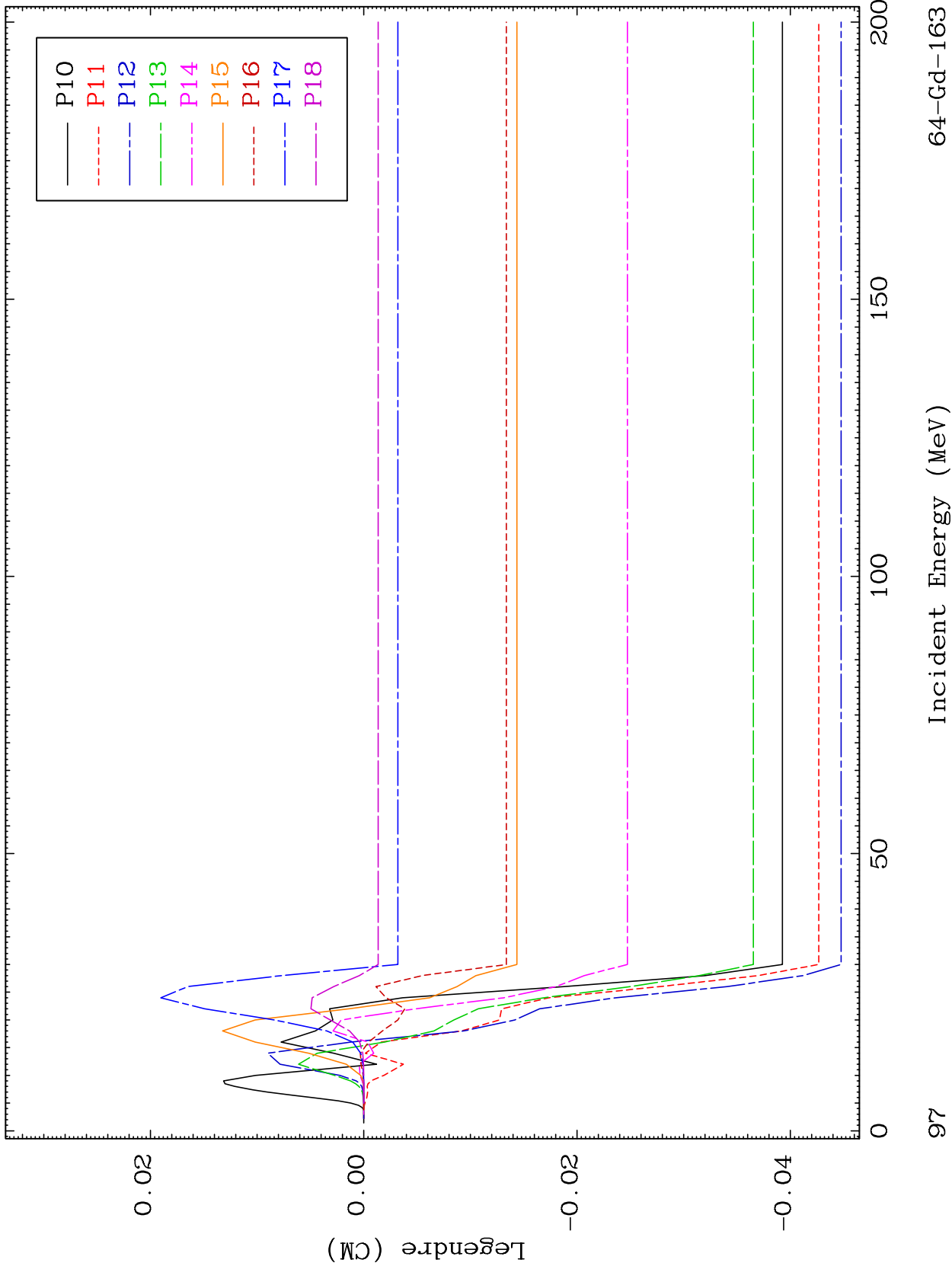
64-Gd-163



MAT 6458

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

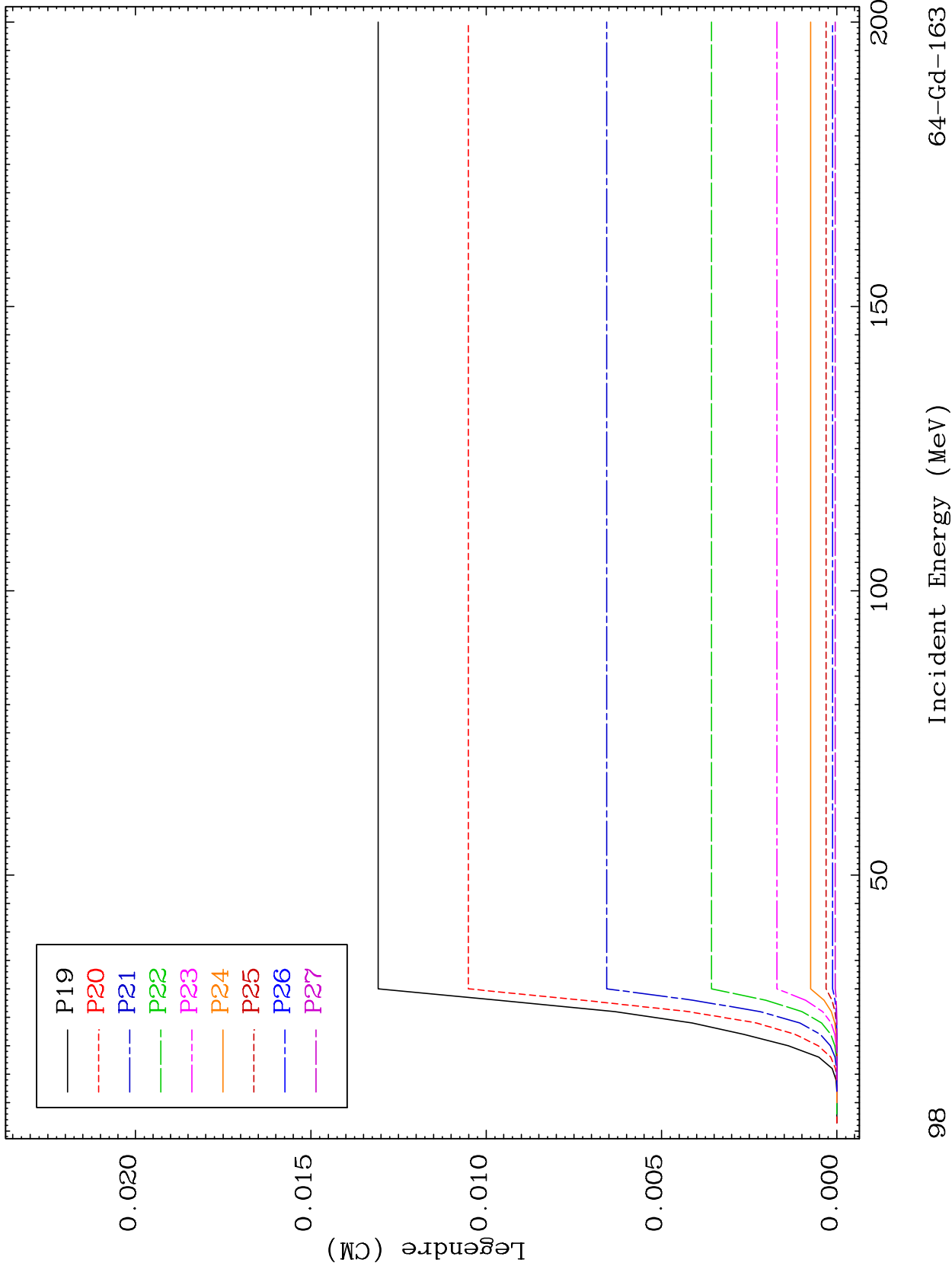
64-Gd-163



97

Incident Energy (MeV)

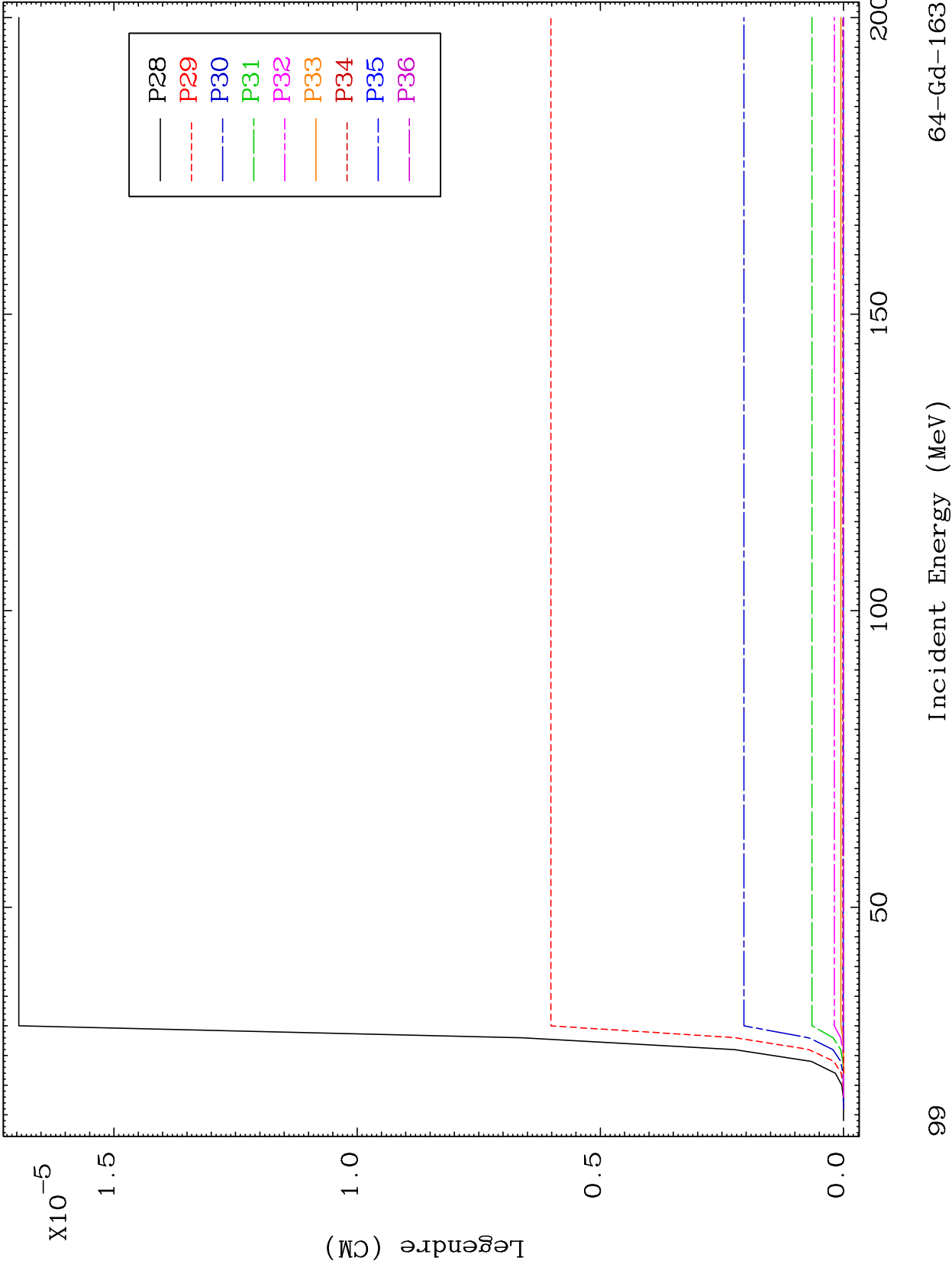
64-Gd-163



MAT 6458

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

64-Gd-163

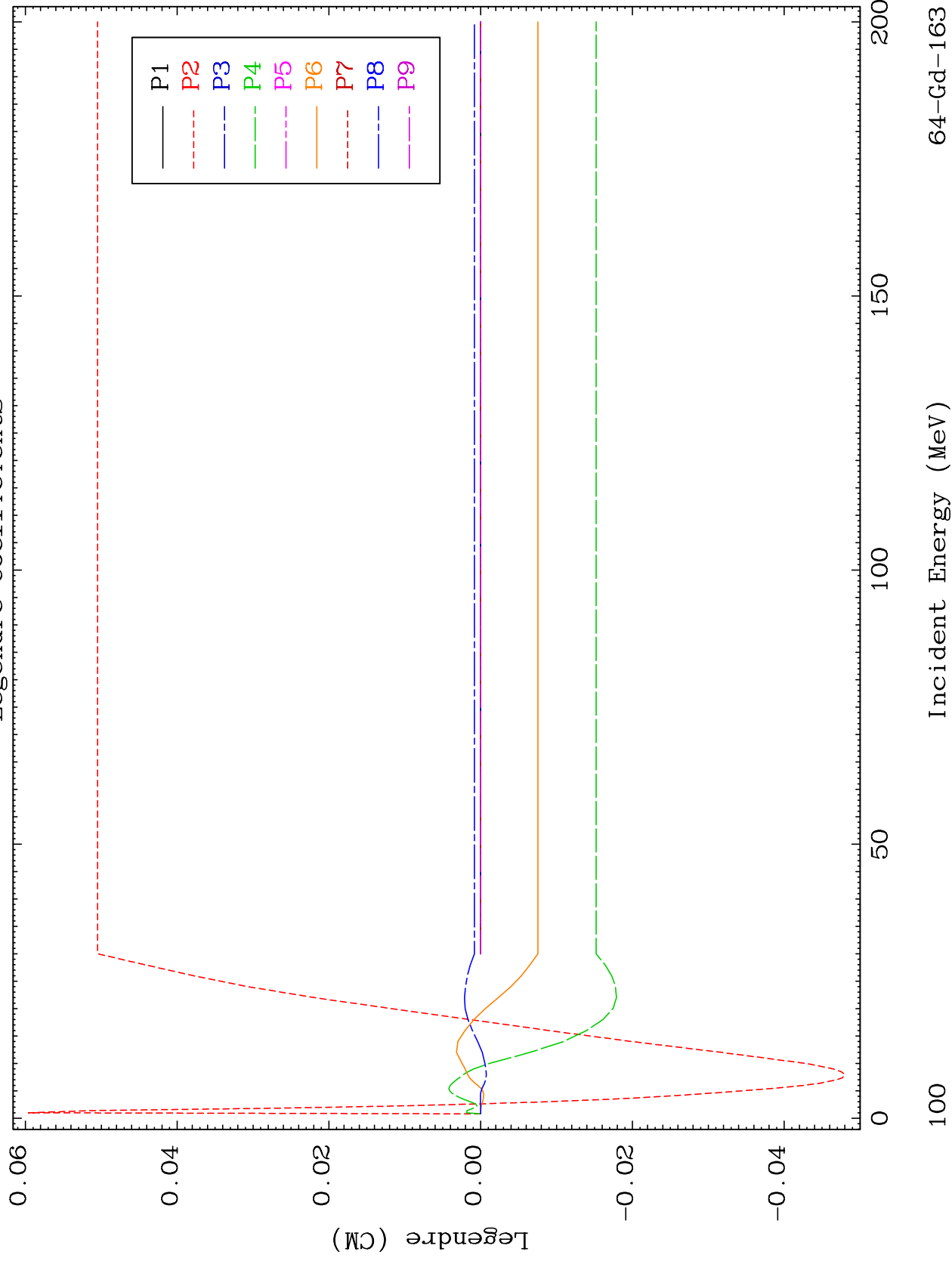


99

MAT 6458

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

64-Gd-163



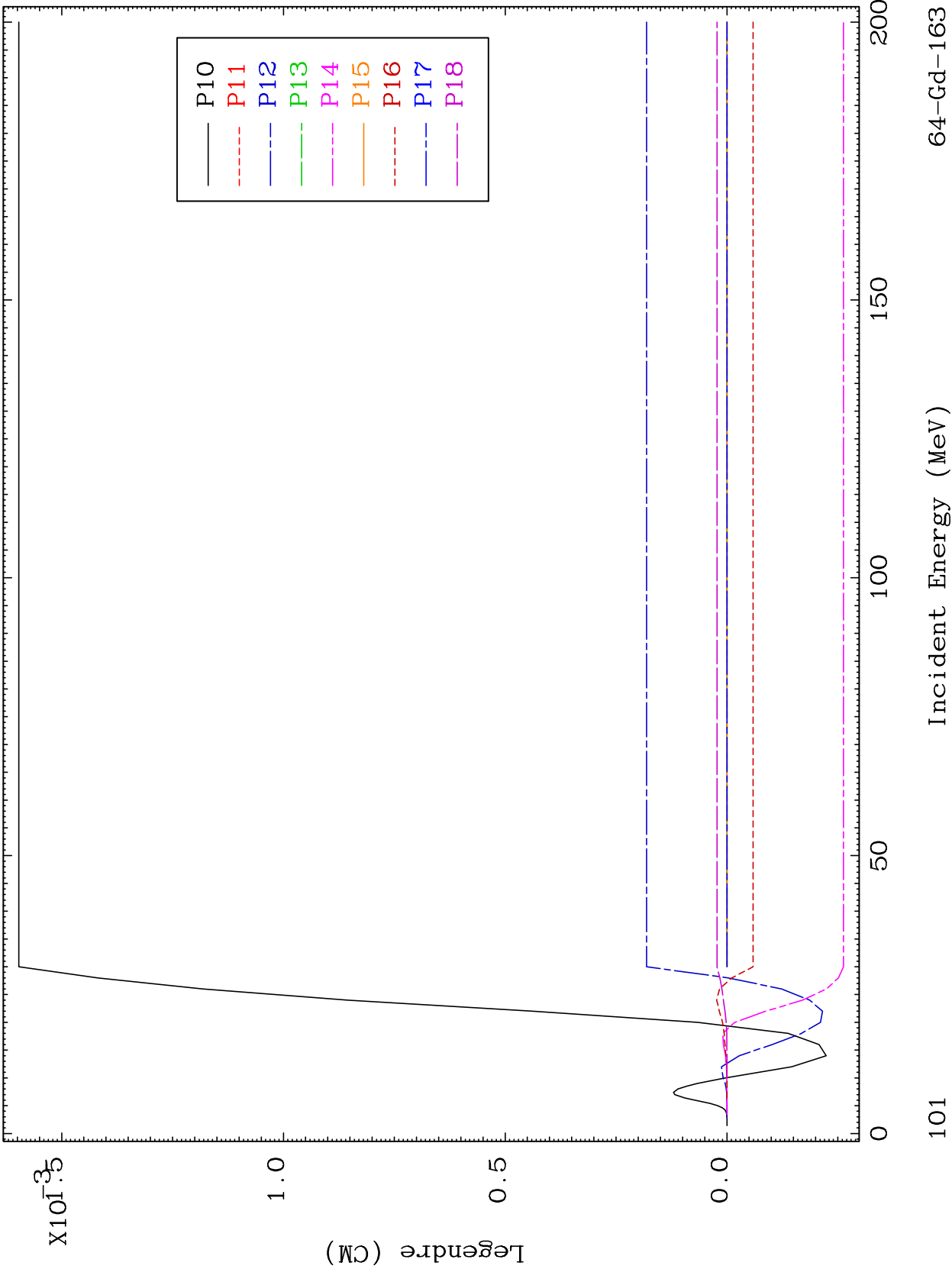
64-Gd-163

Incident Energy (MeV)

MAT 6458

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

64-Gd-163



101

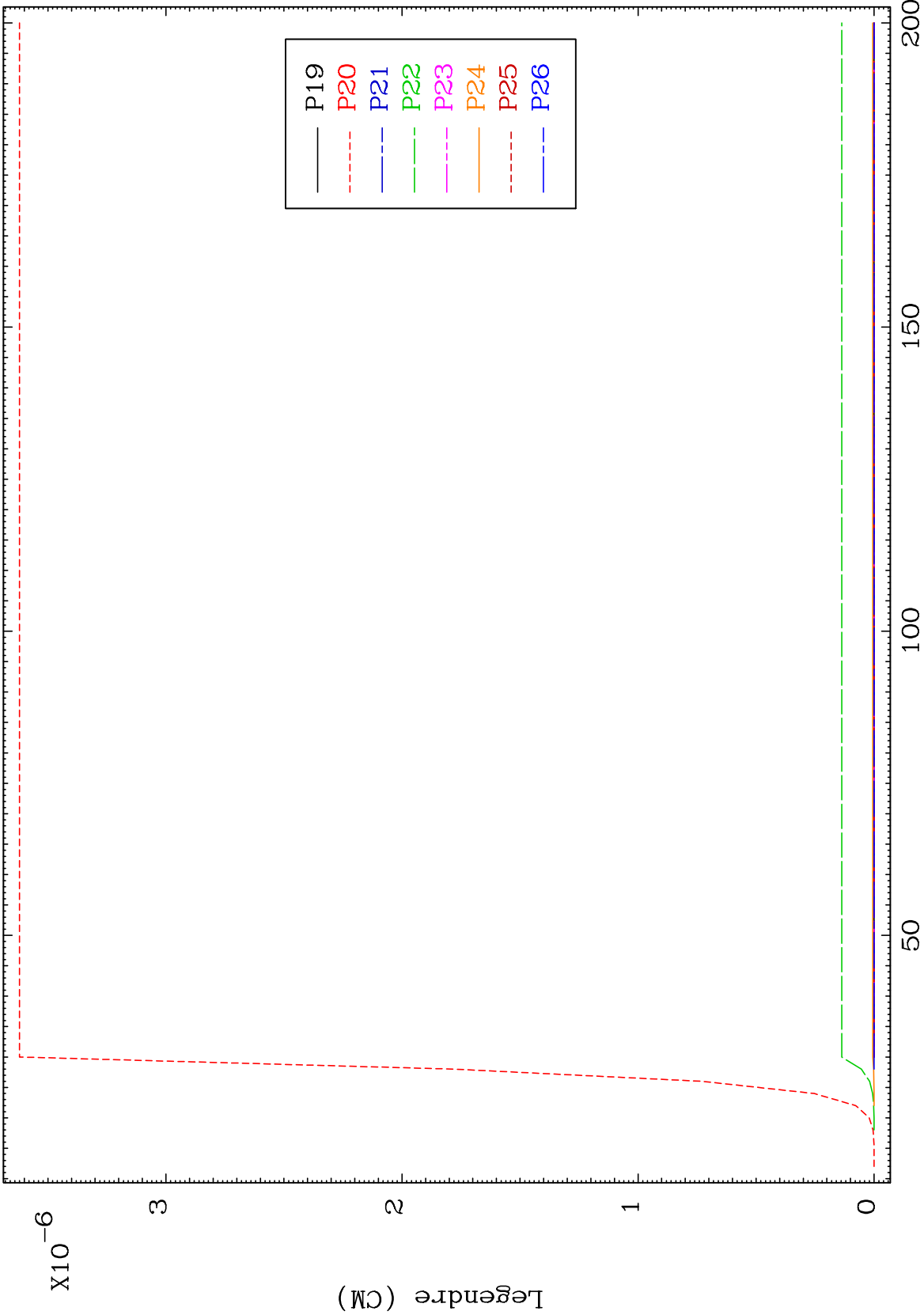
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



102

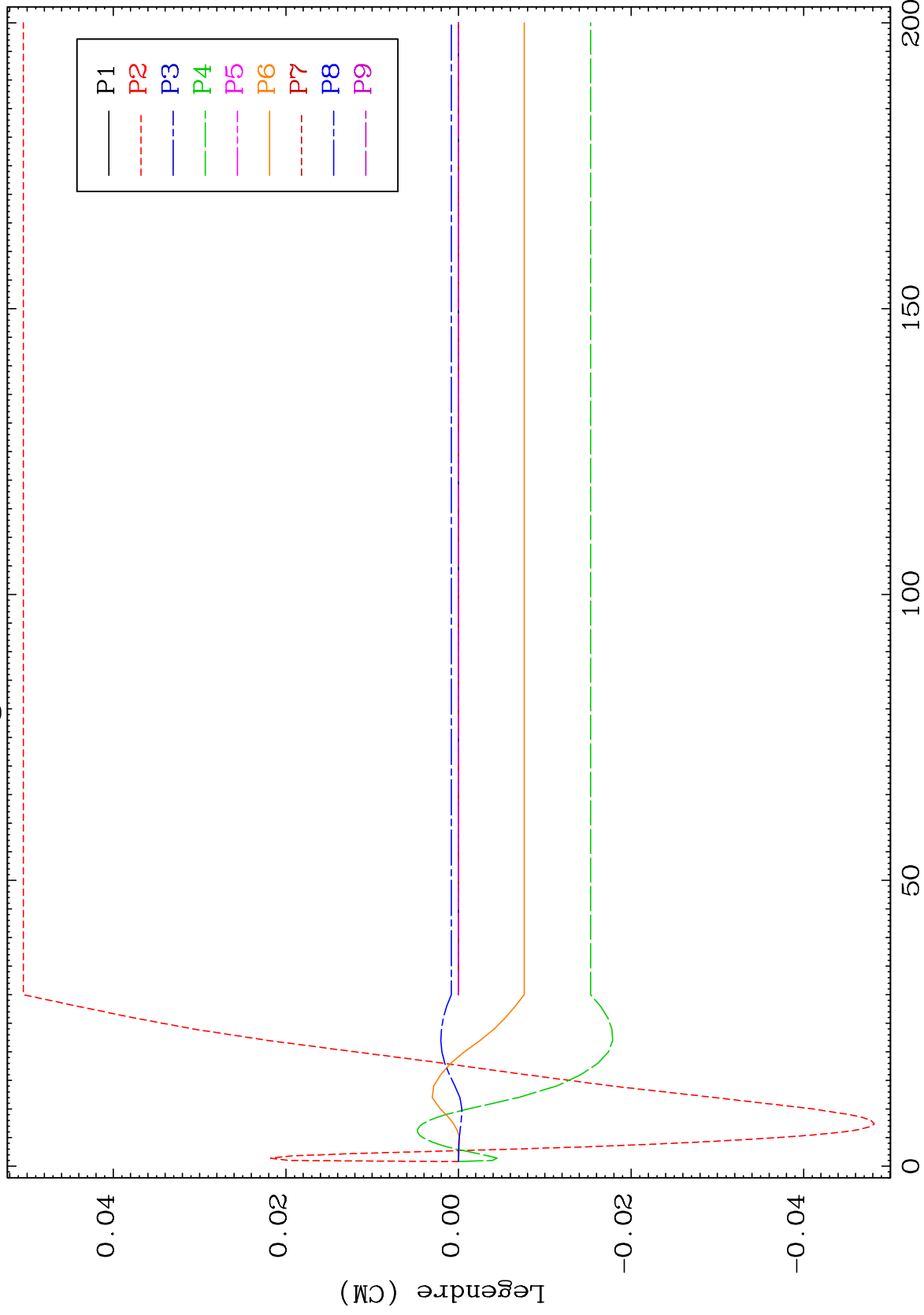
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

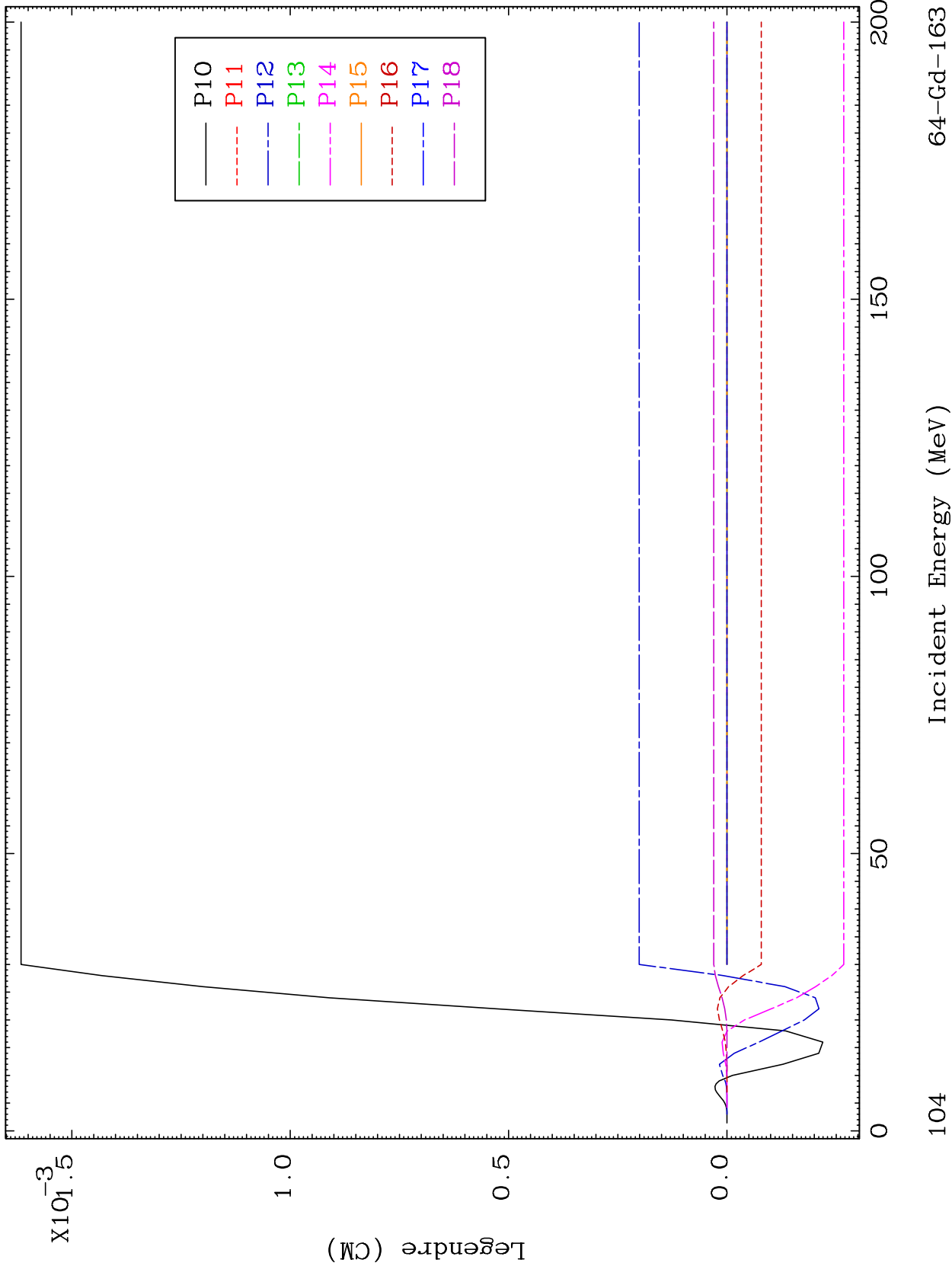
Incident Energy (MeV)

103

MAT 6458

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

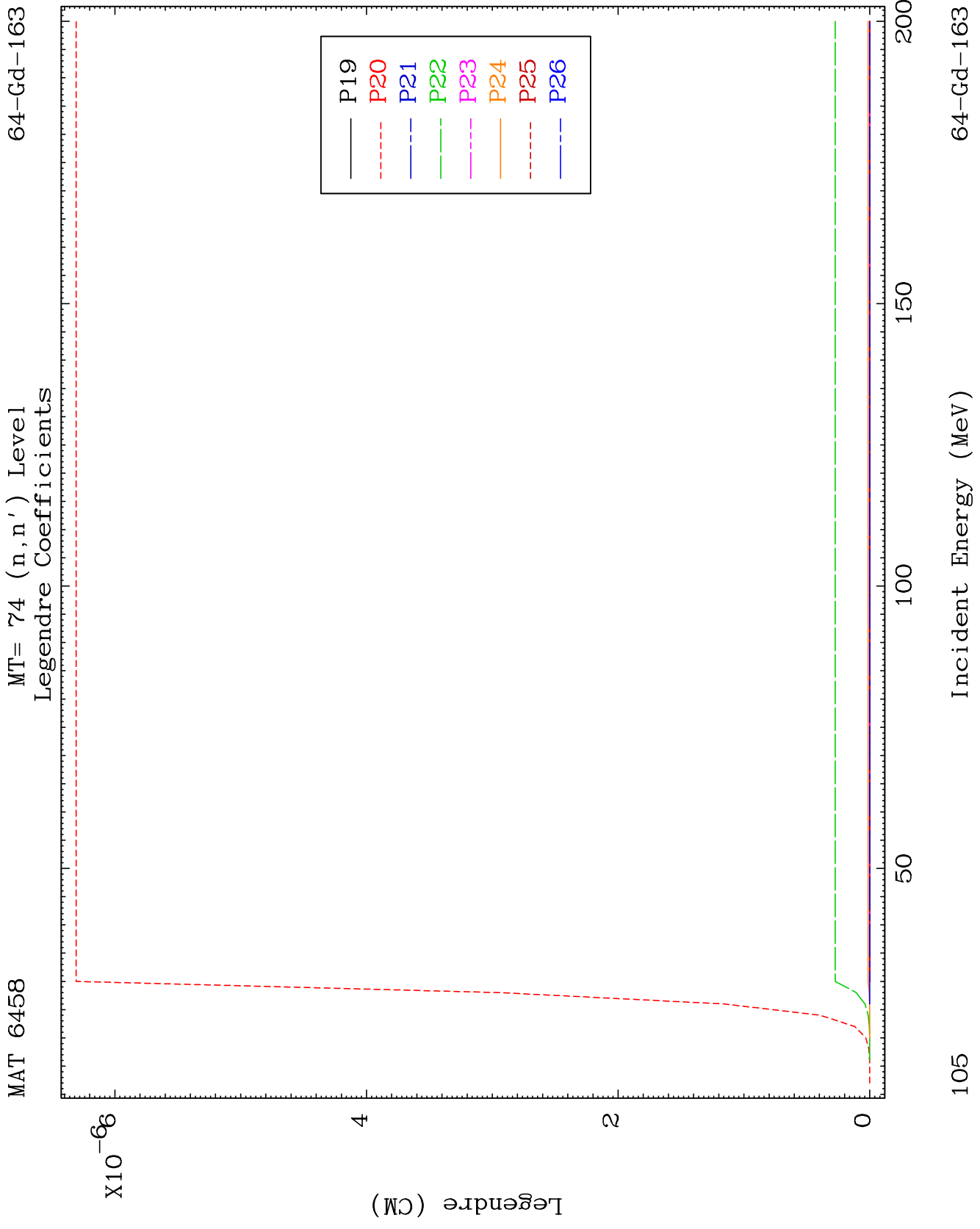
64-Gd-163



104

Incident Energy (MeV)

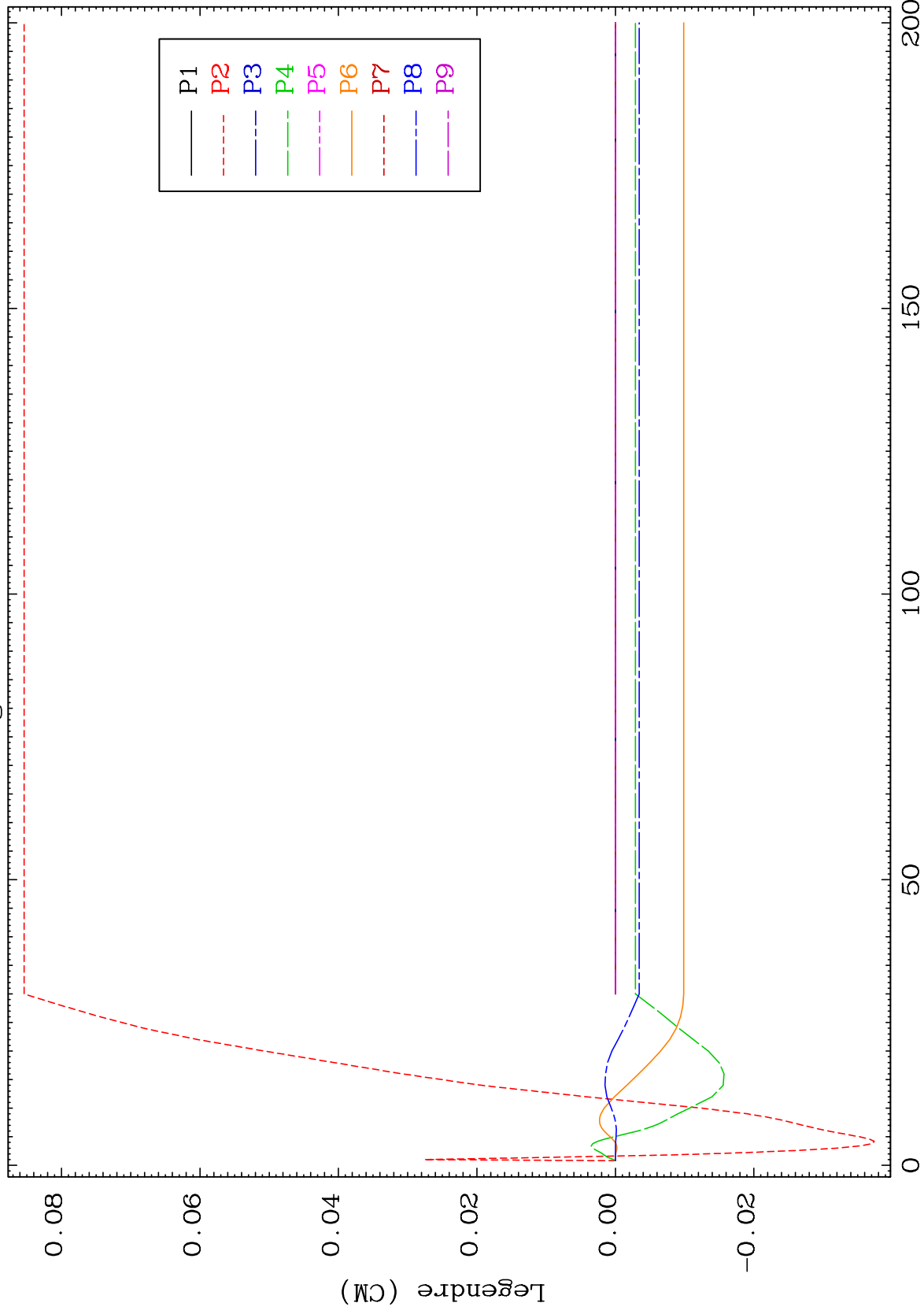
64-Gd-163



MAT 6458

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

64-Gd-163



64-Gd-163

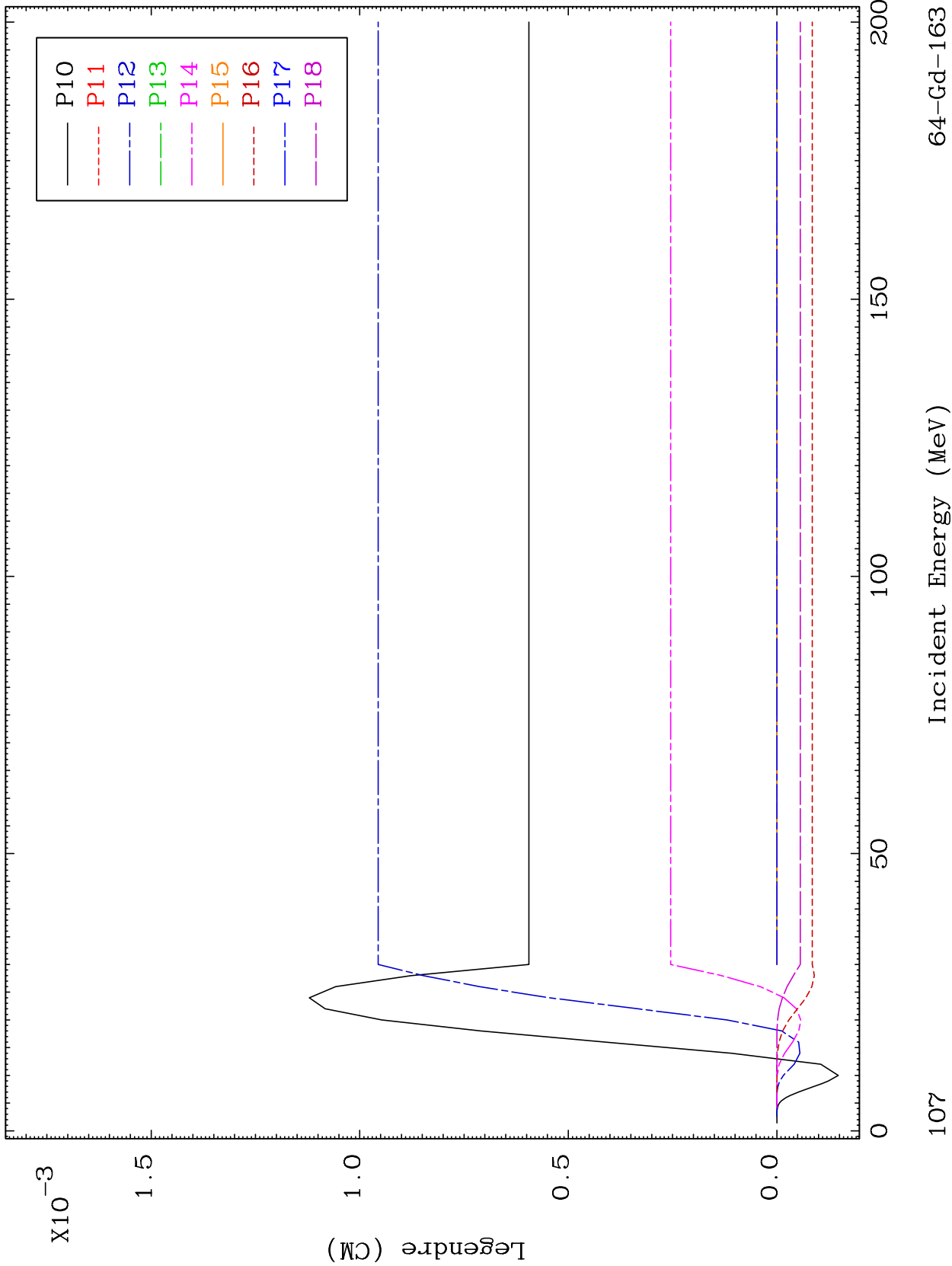
Incident Energy (MeV)

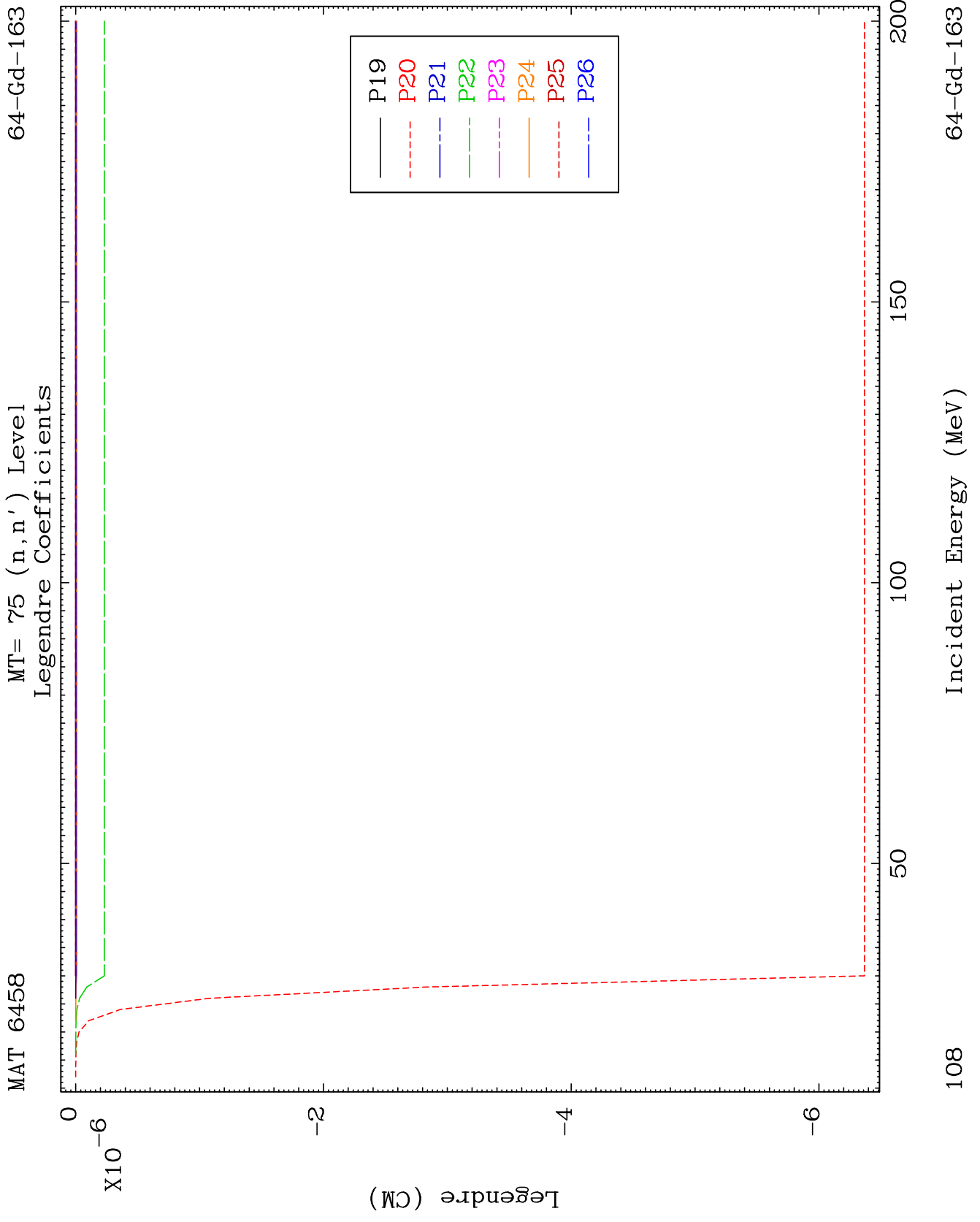
106

MAT 6458

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

64-Gd-163

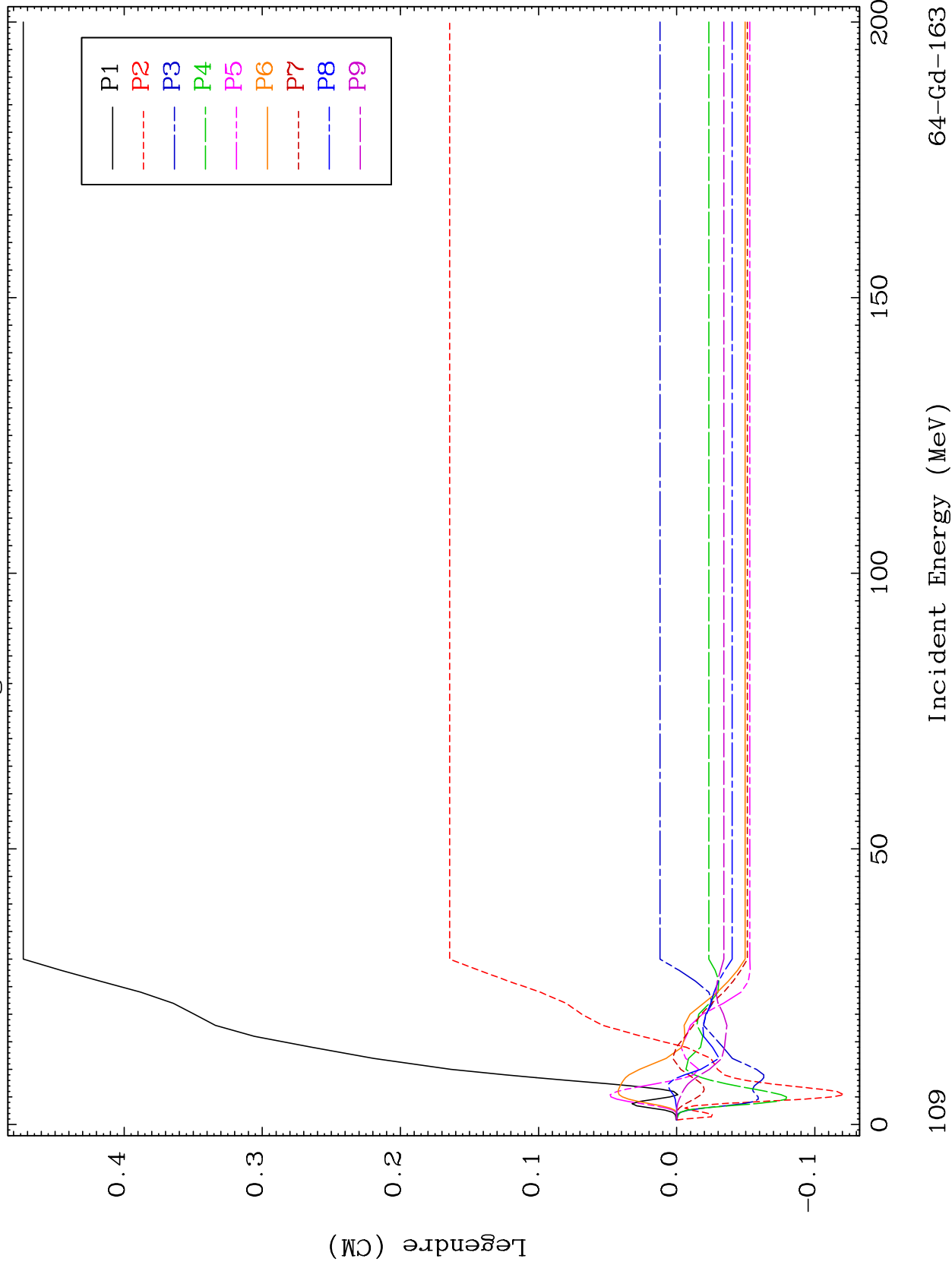




MAT 6458

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

64-Gd-163



64-Gd-163

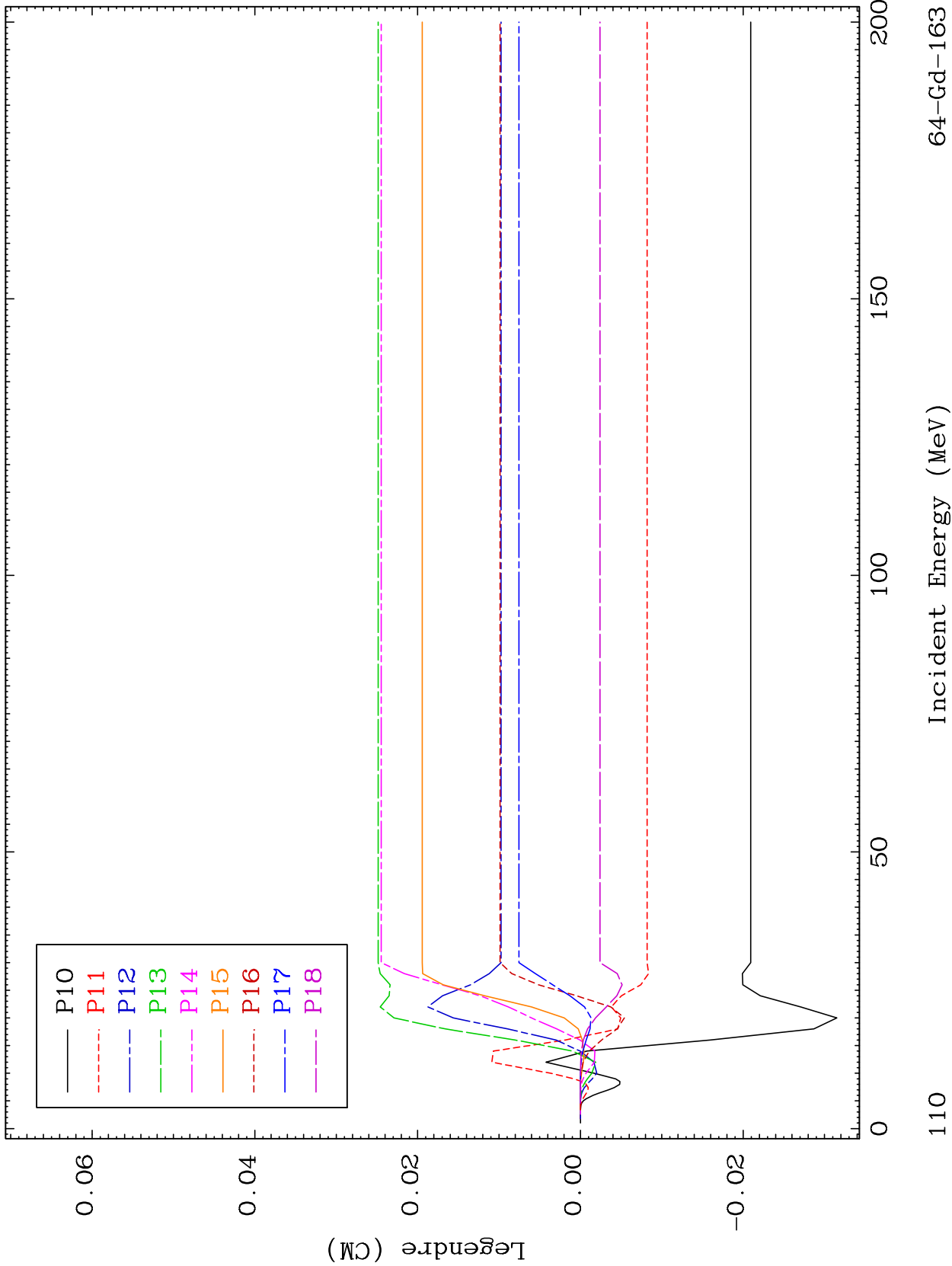
Incident Energy (MeV)

109

MAT 6458

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

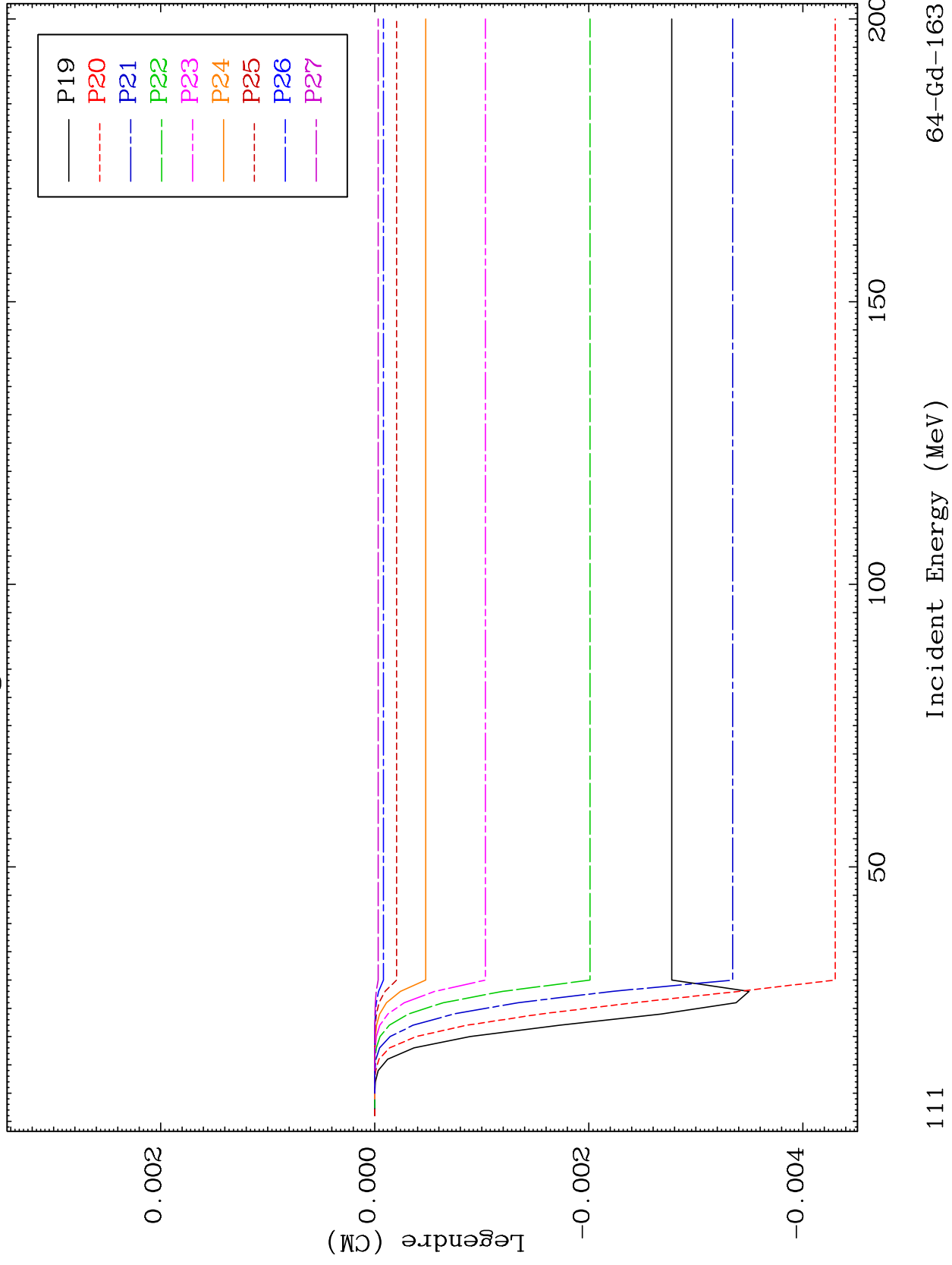
64-Gd-163



MAT 6458

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

64-Gd-163



111

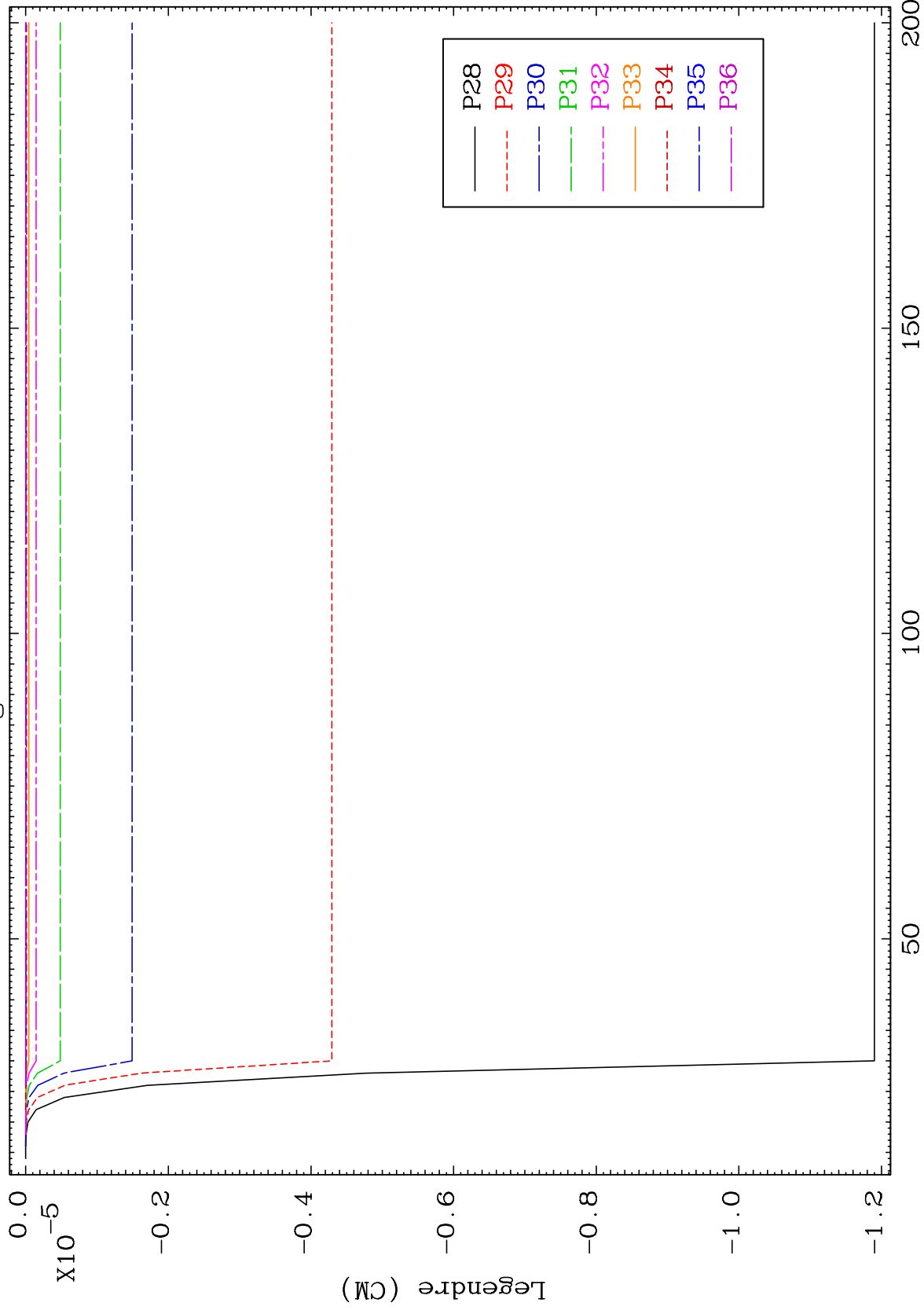
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



112

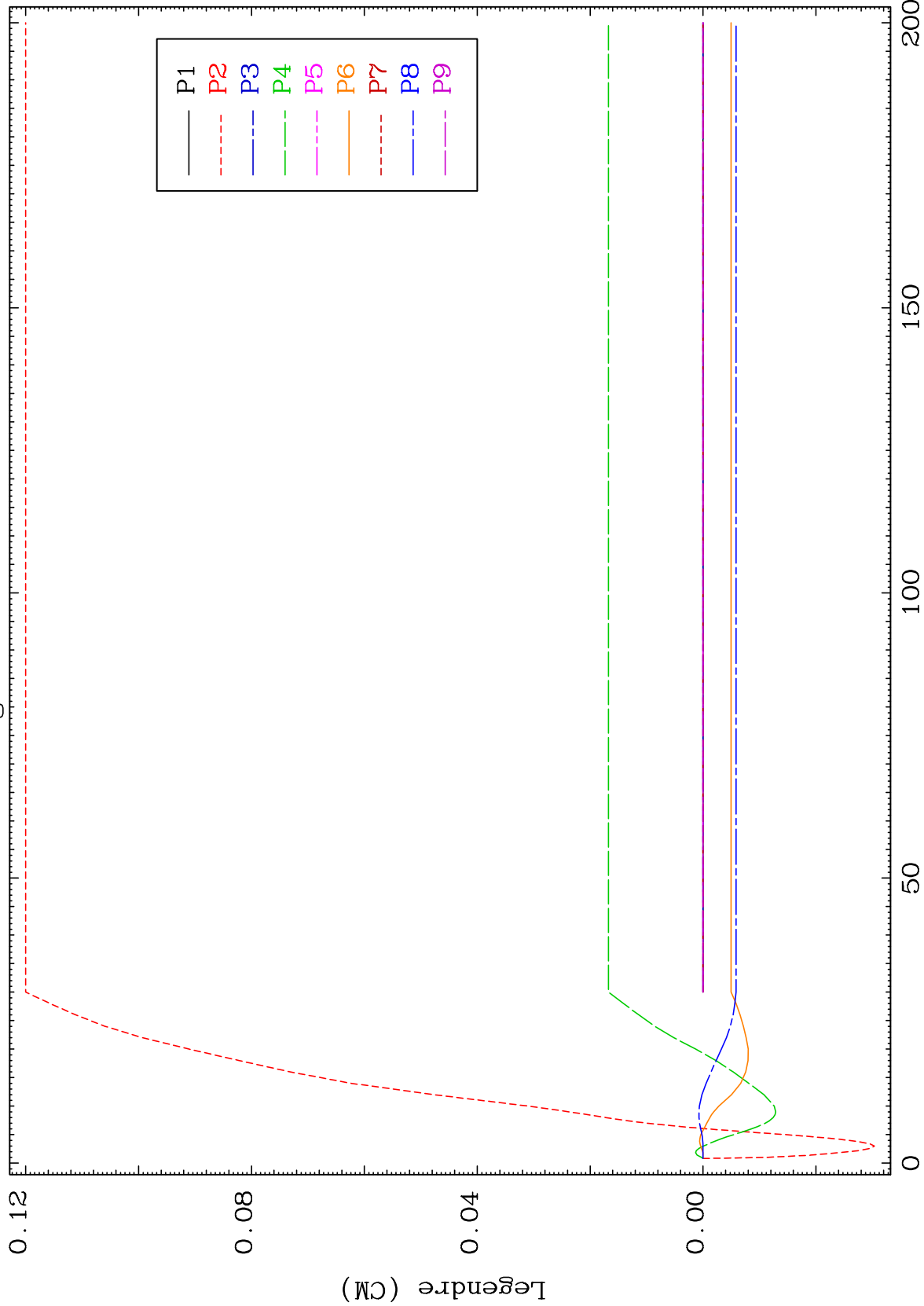
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



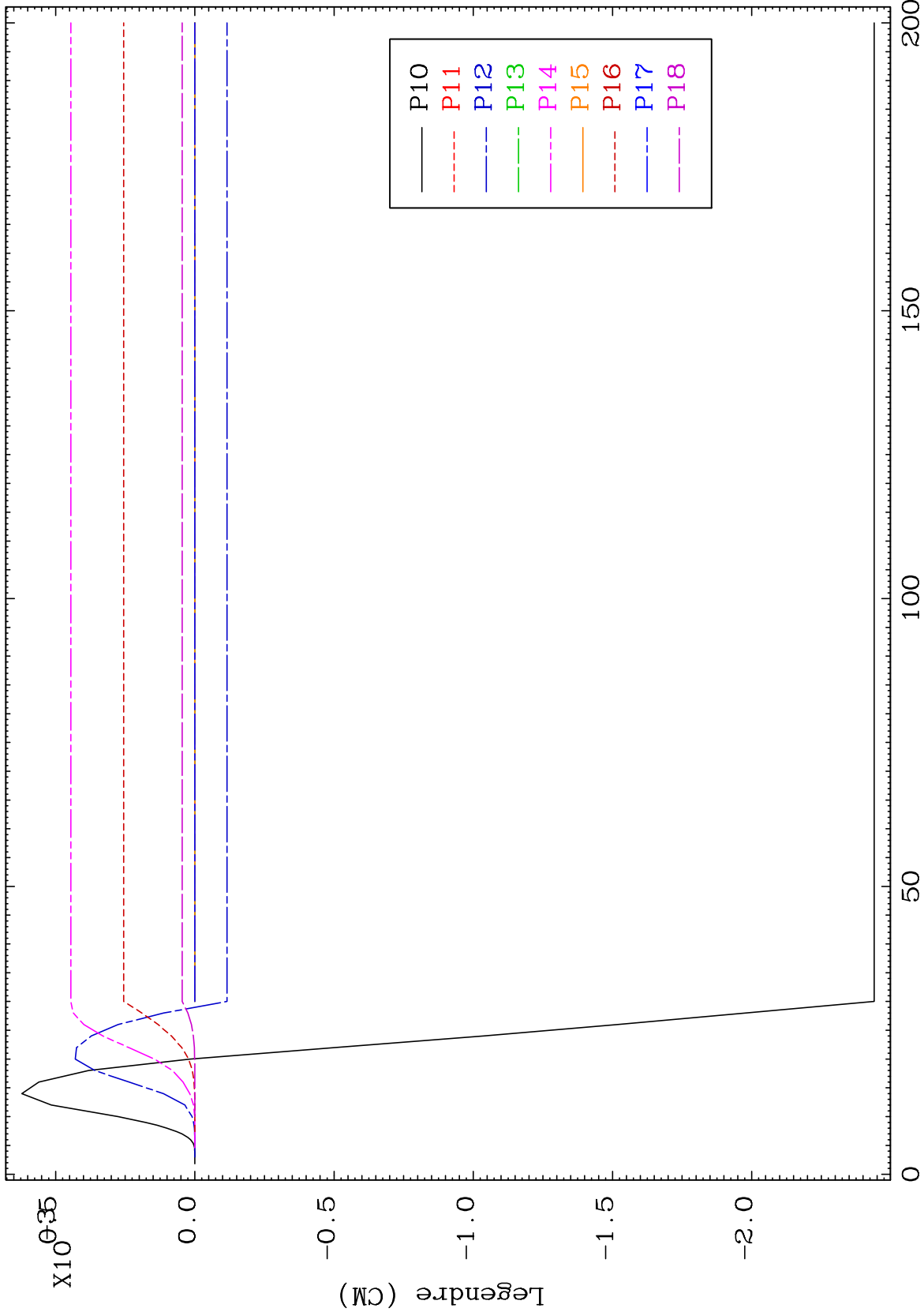
113

64-Gd-163

MAT 6458

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

64-Gd-163



114

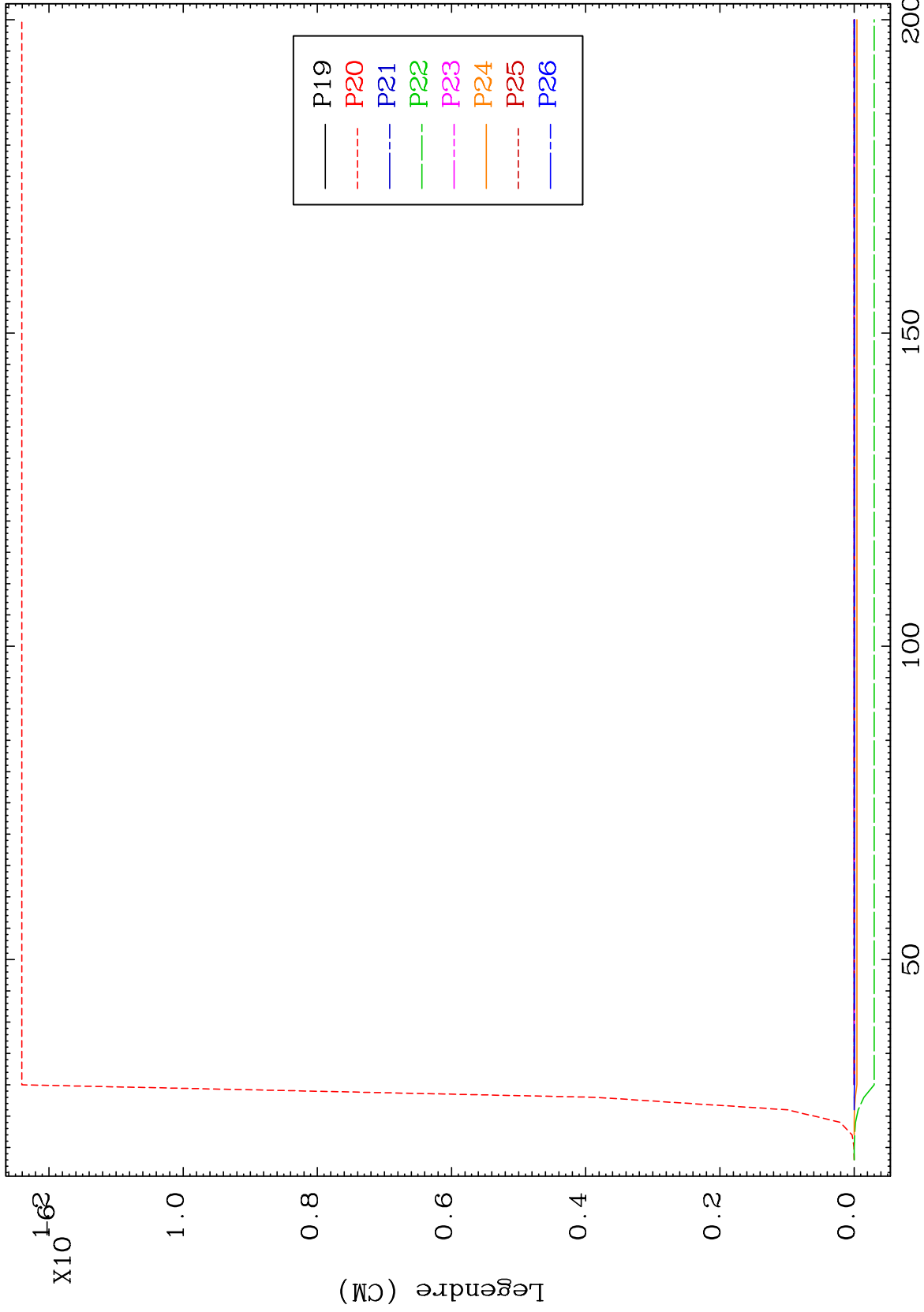
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



115

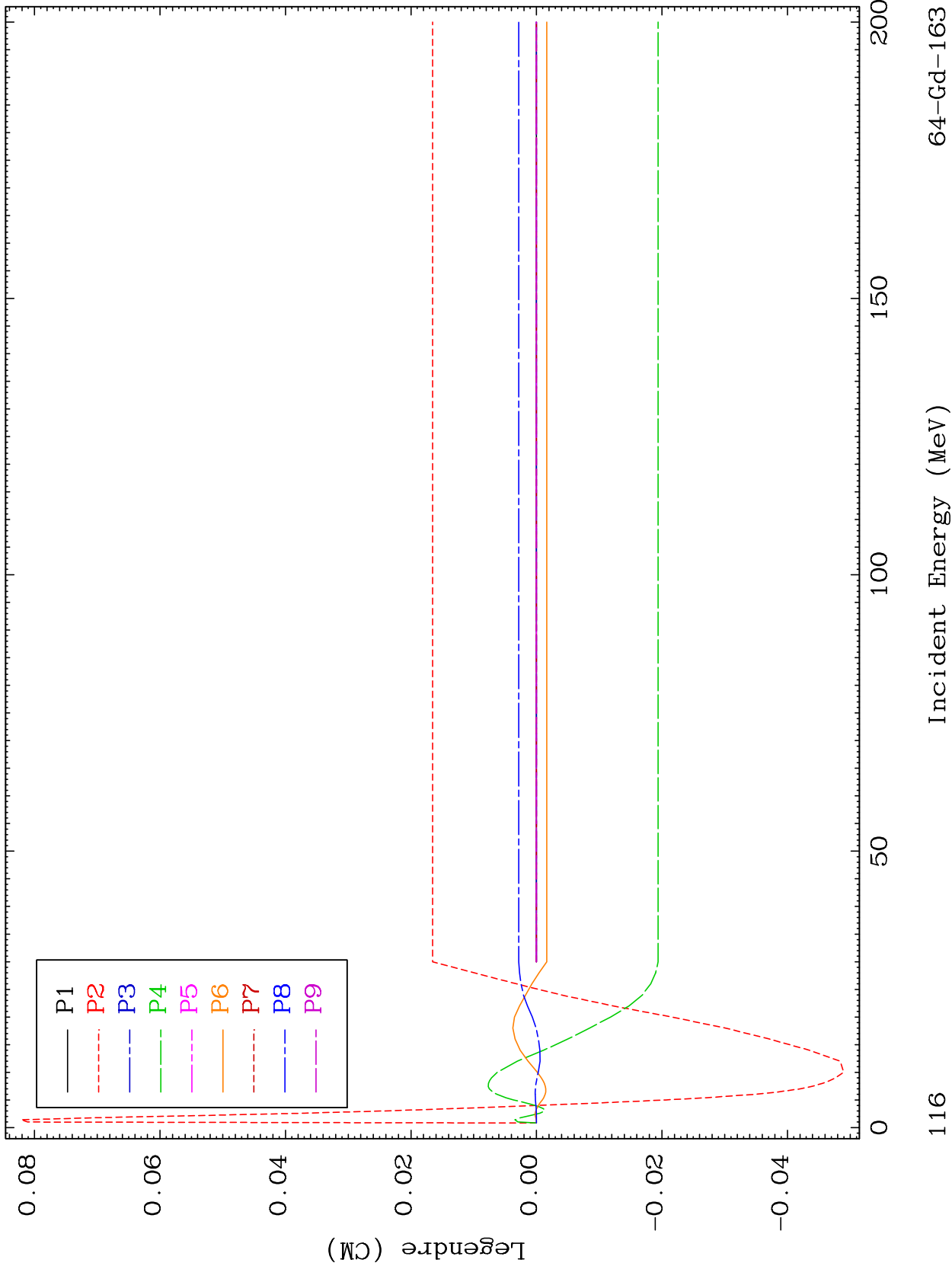
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



116

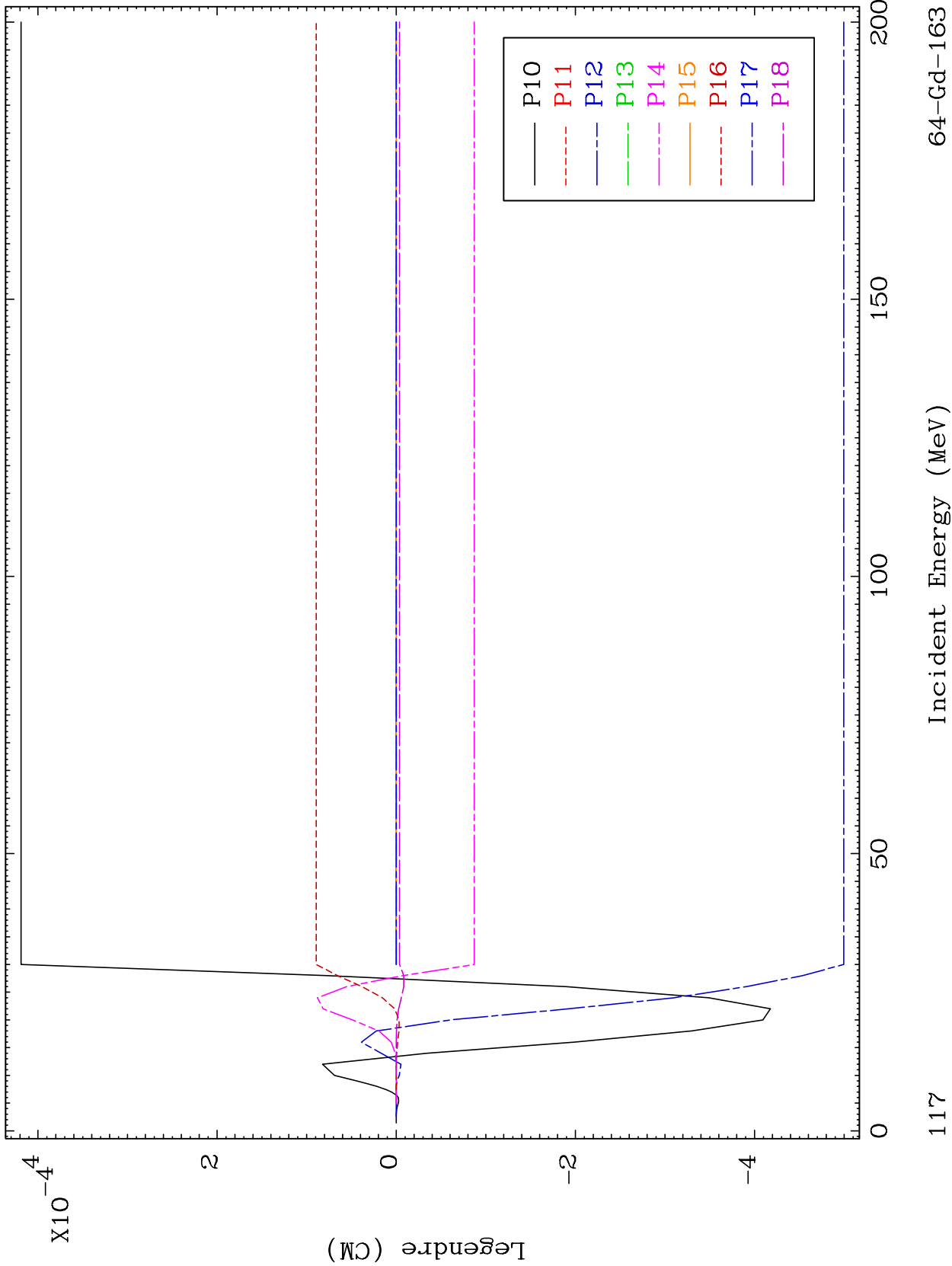
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

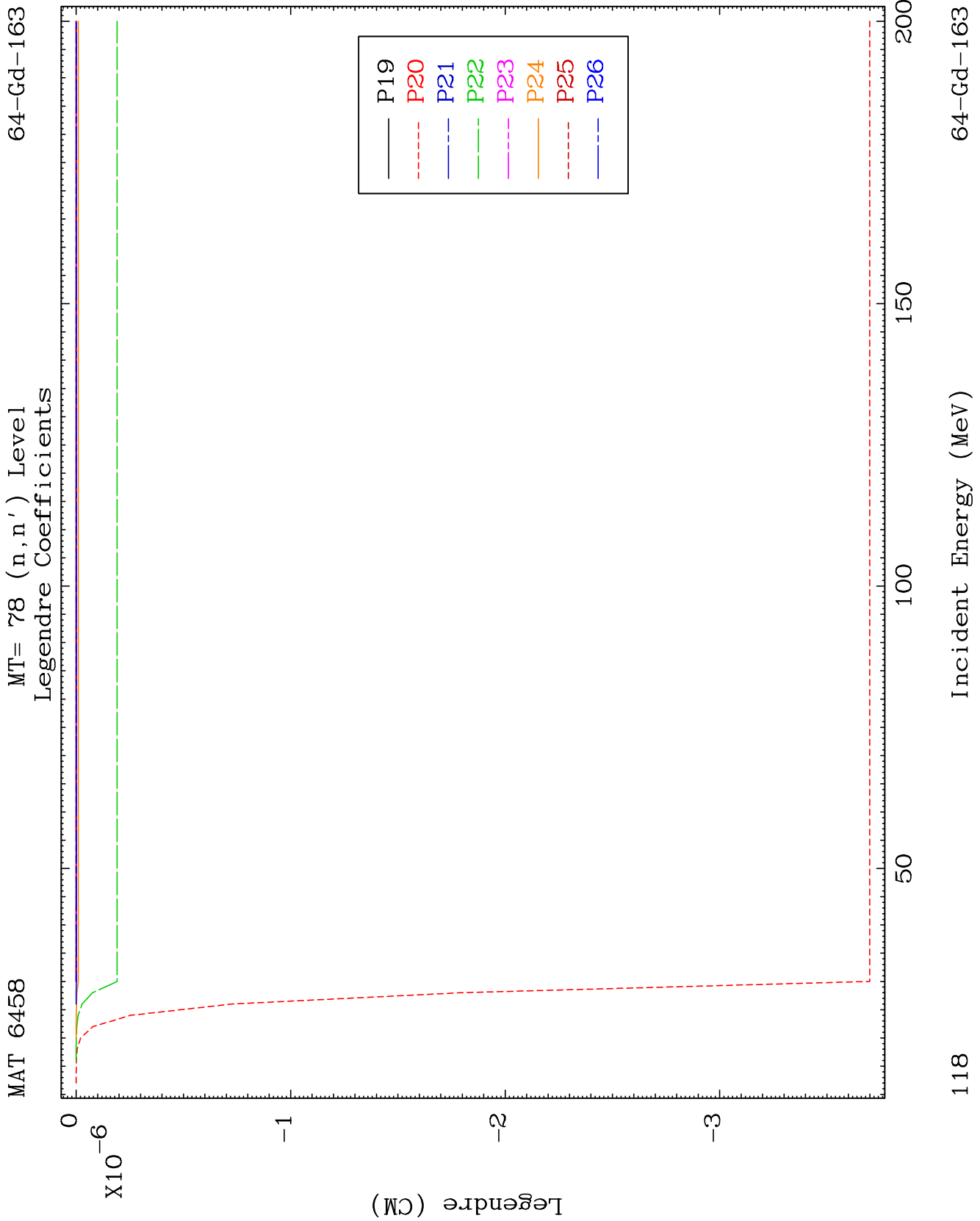
64-Gd-163



117

Incident Energy (MeV)

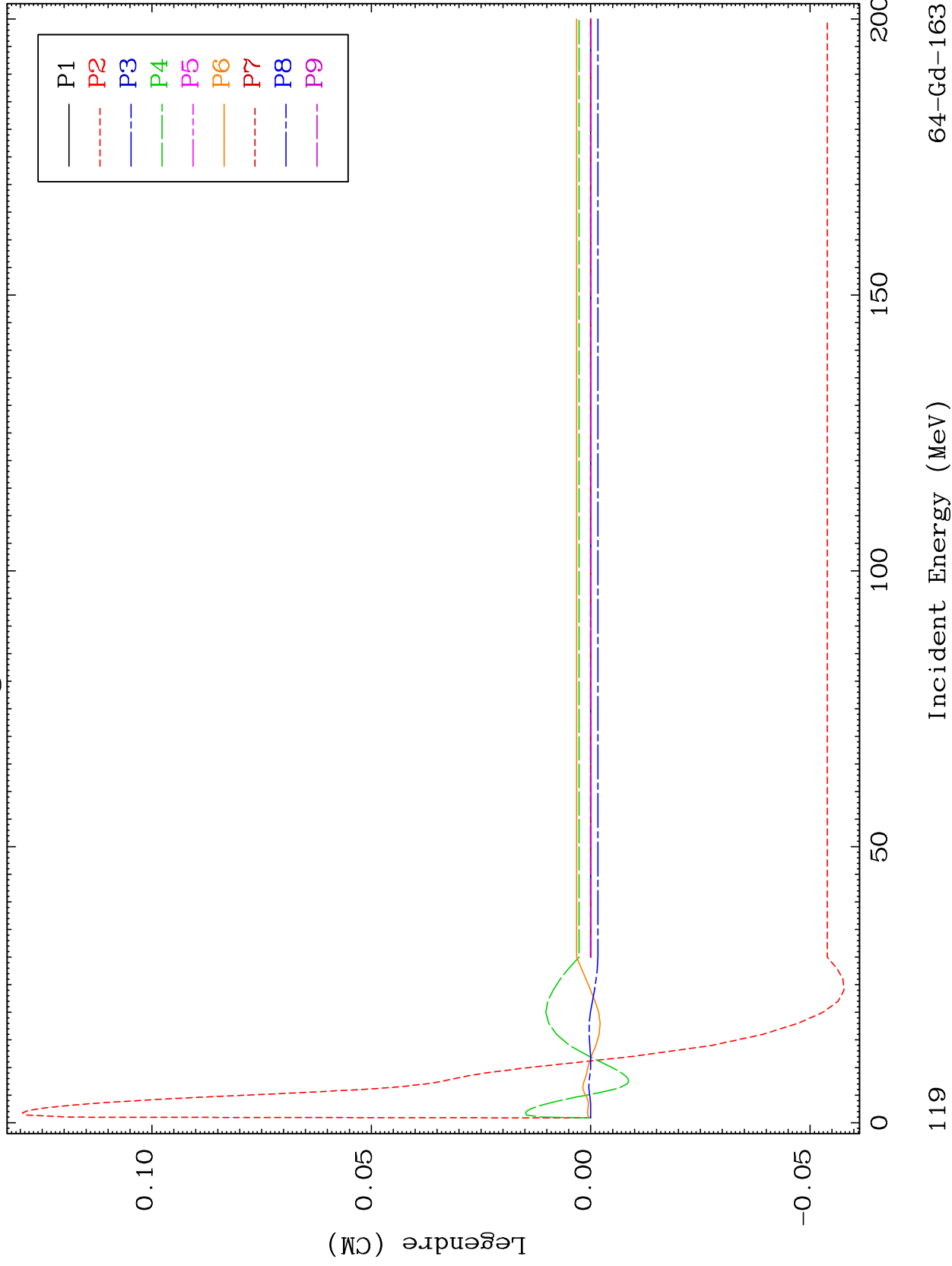
64-Gd-163



MAT 6458

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

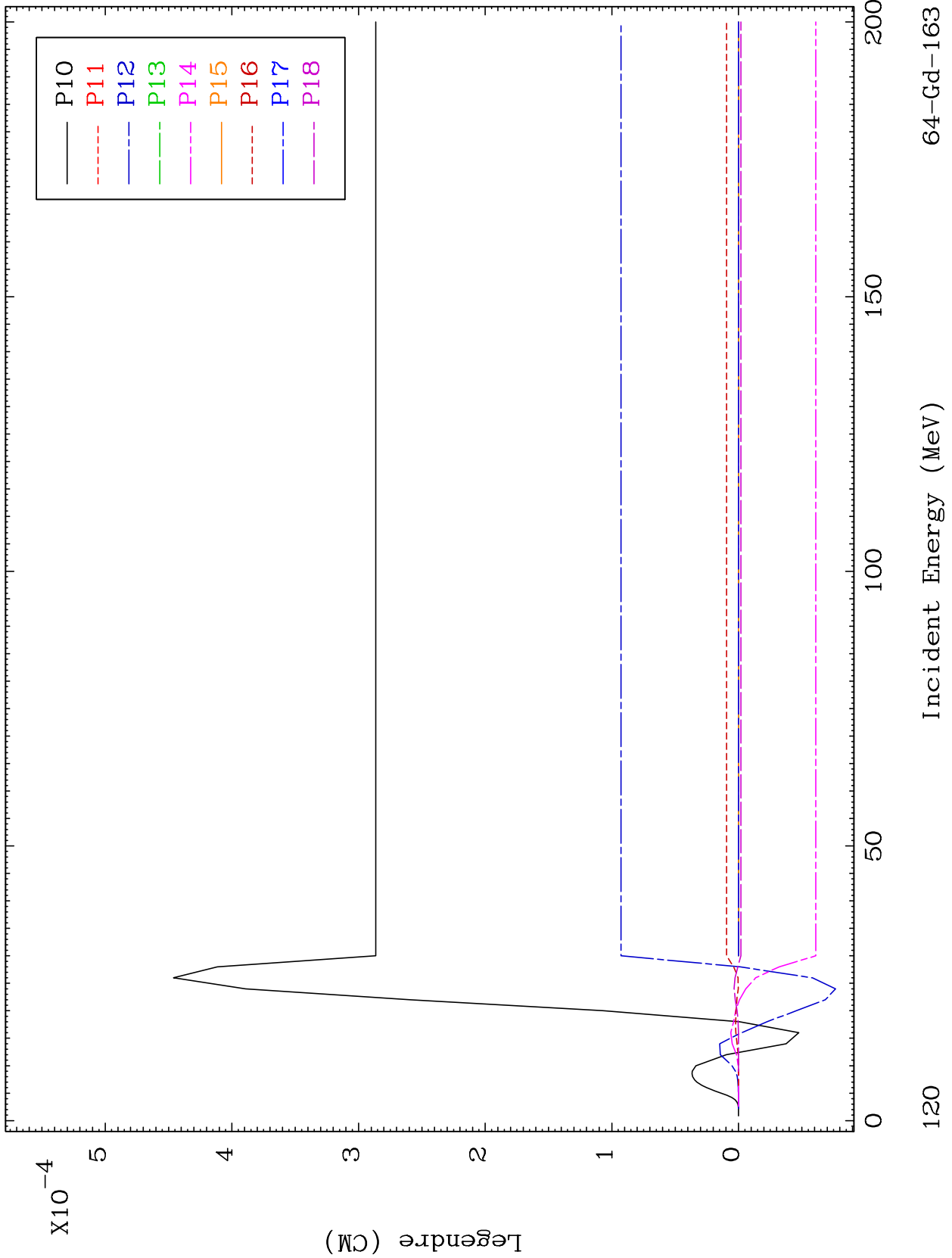
64-Gd-163



MAT 6458

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

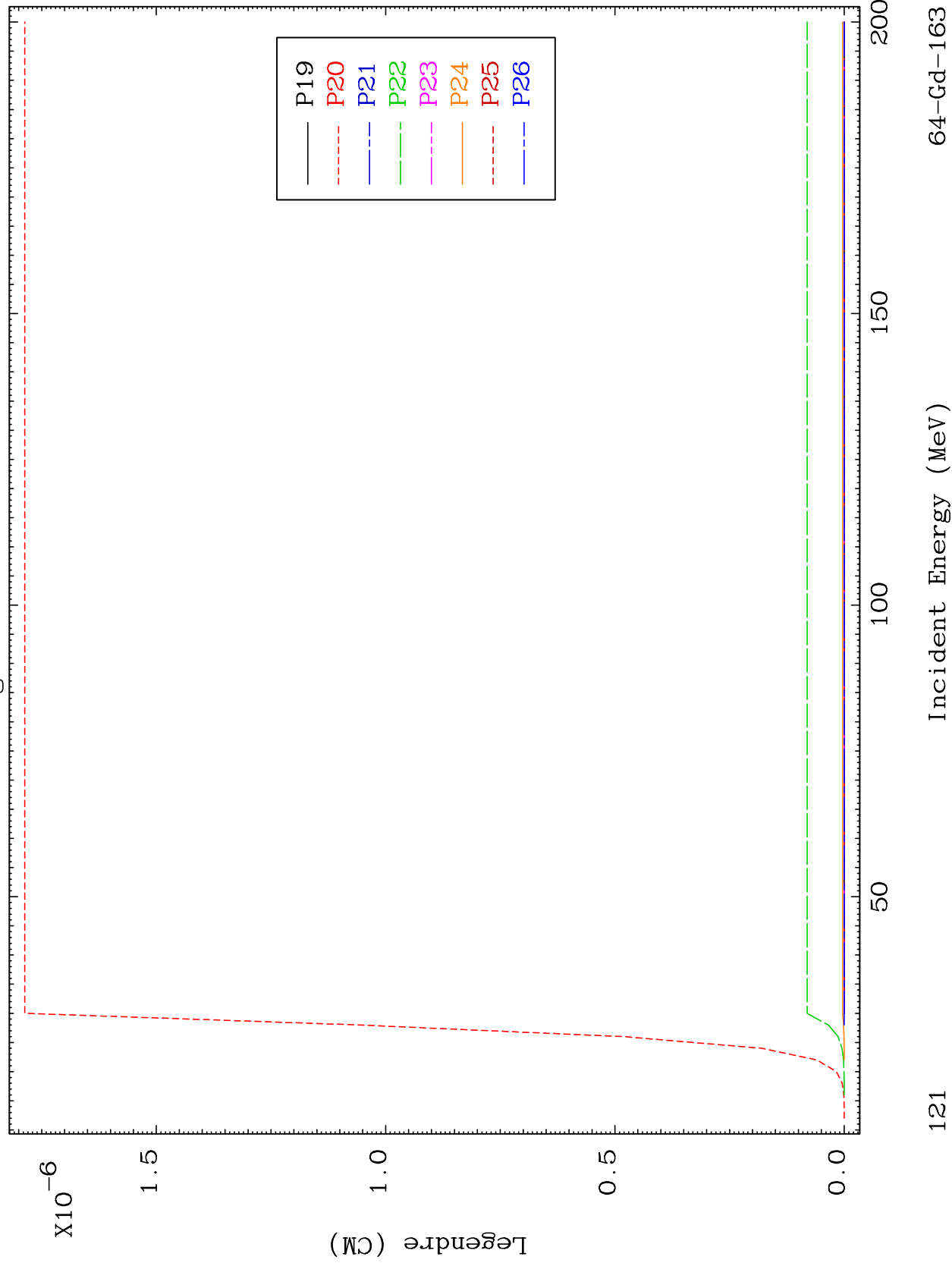
64-Gd-163



MAT 6458

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

64-Gd-163



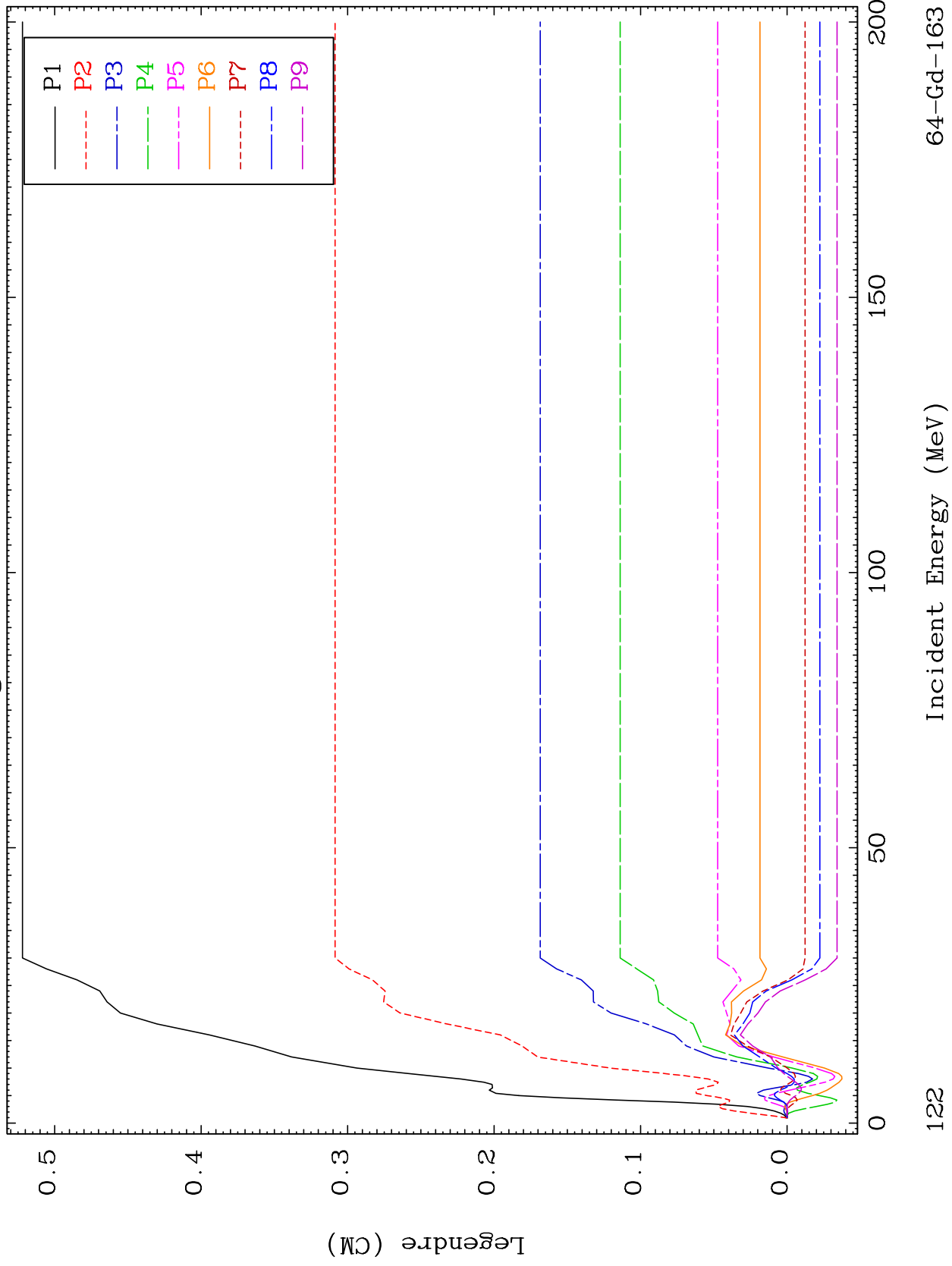
121

64-Gd-163

MAT 6458

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

64-Gd-163



64-Gd-163

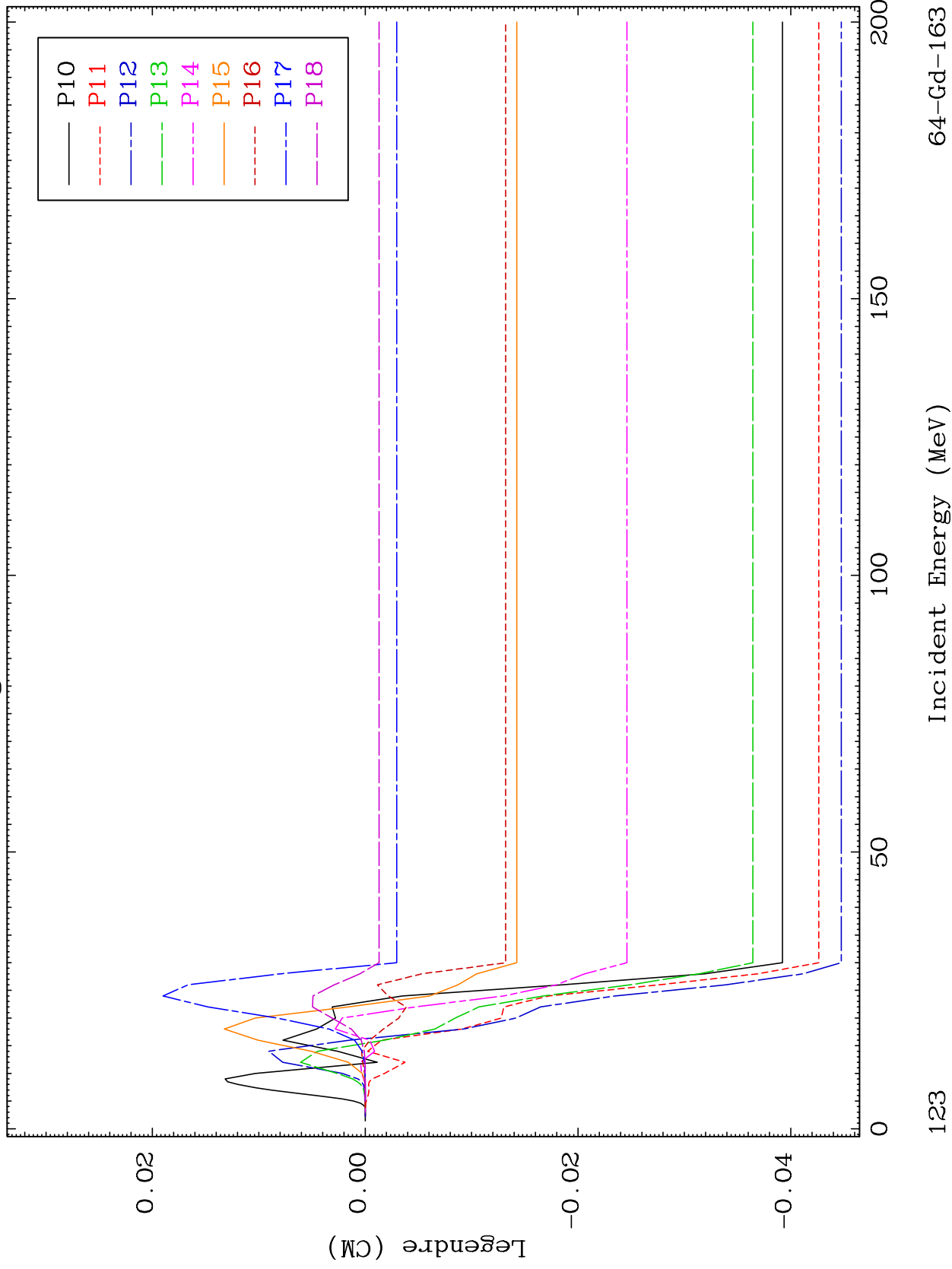
Incident Energy (MeV)

122

MAT 6458

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

64-Gd-163



64-Gd-163

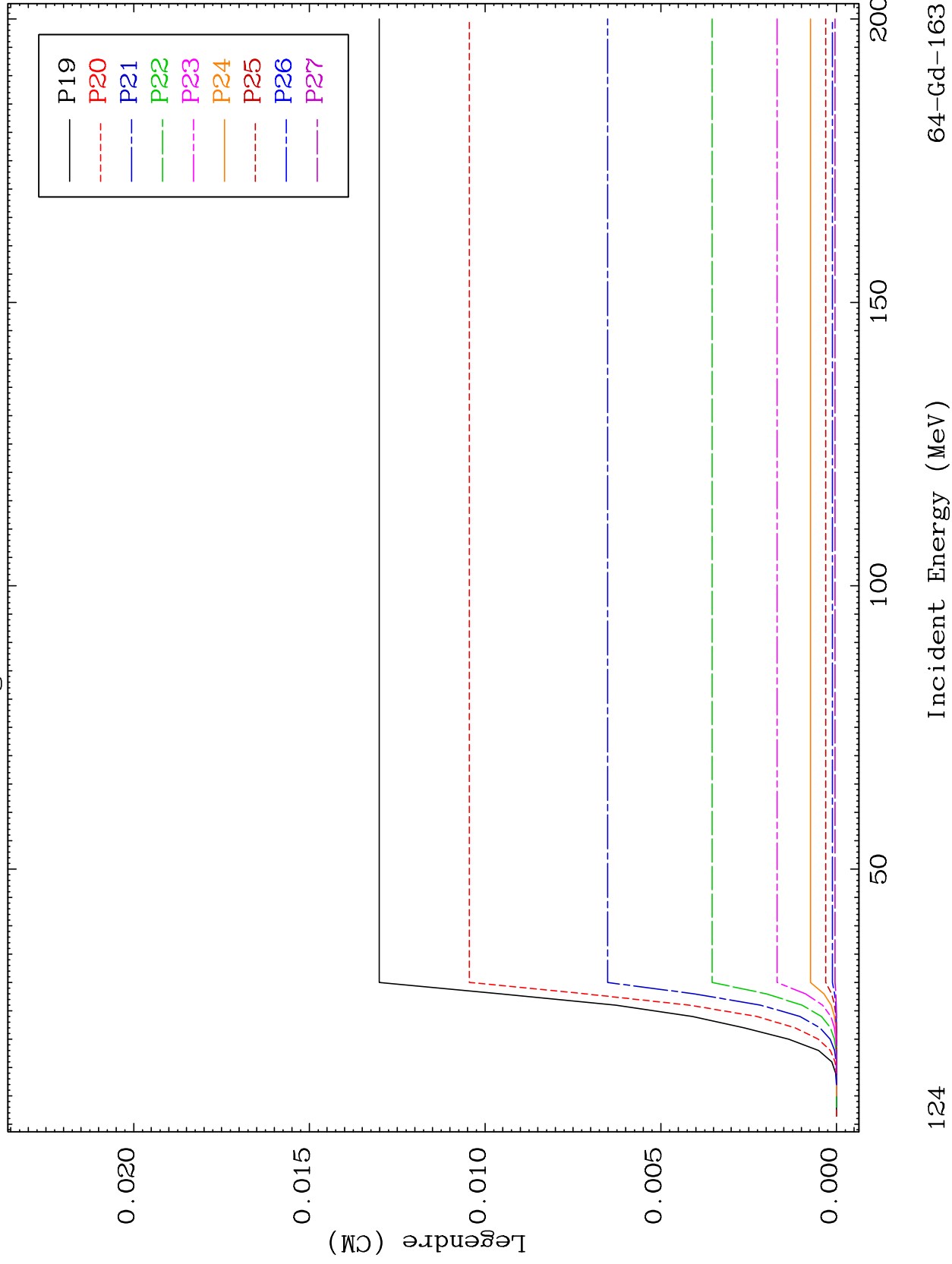
Incident Energy (MeV)

123

MAT 6458

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

64-Gd-163



124

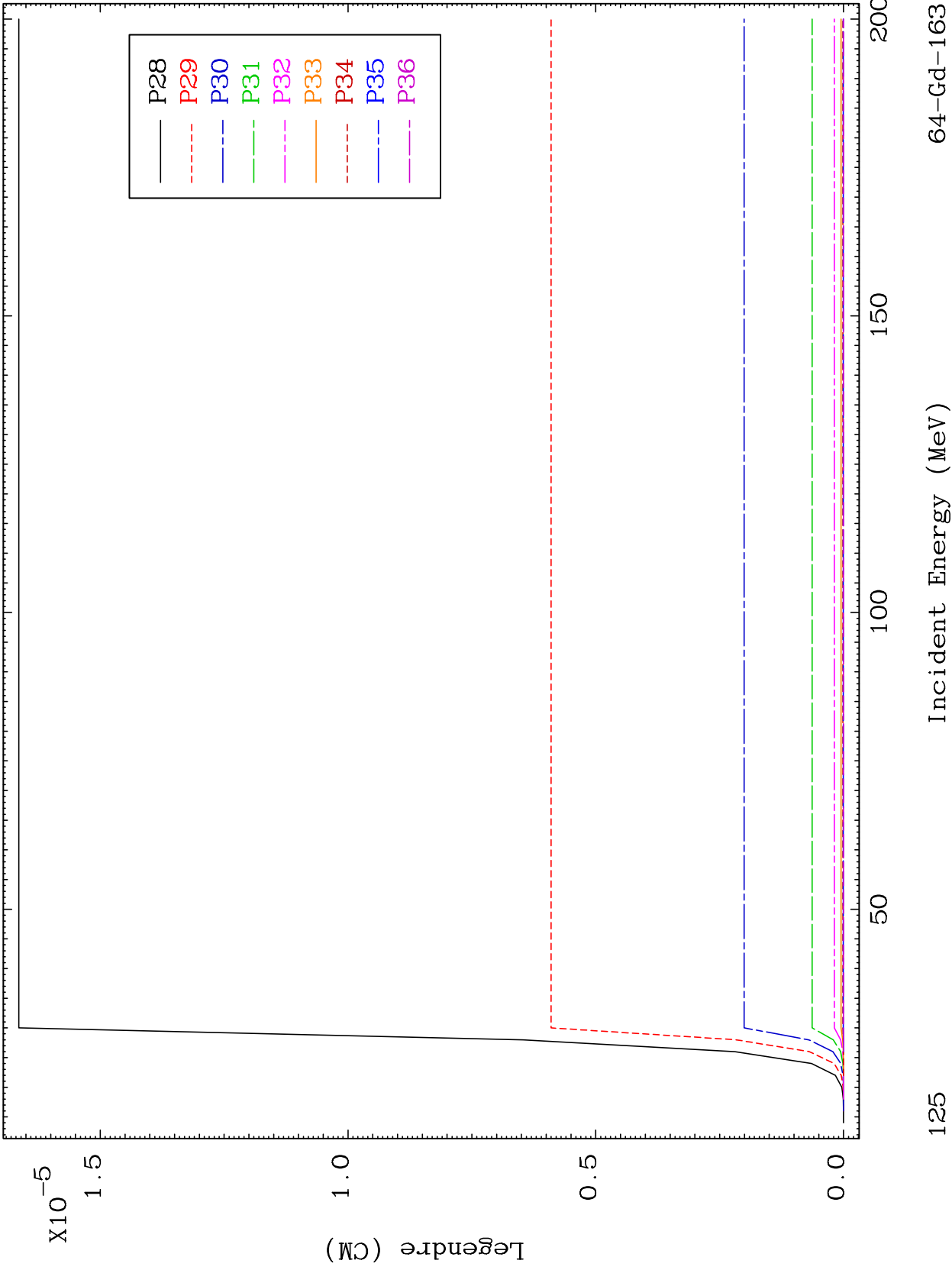
Incident Energy (MeV)

64-Gd-163

MAT 6458

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

64-Gd-163



125

Incident Energy (MeV)

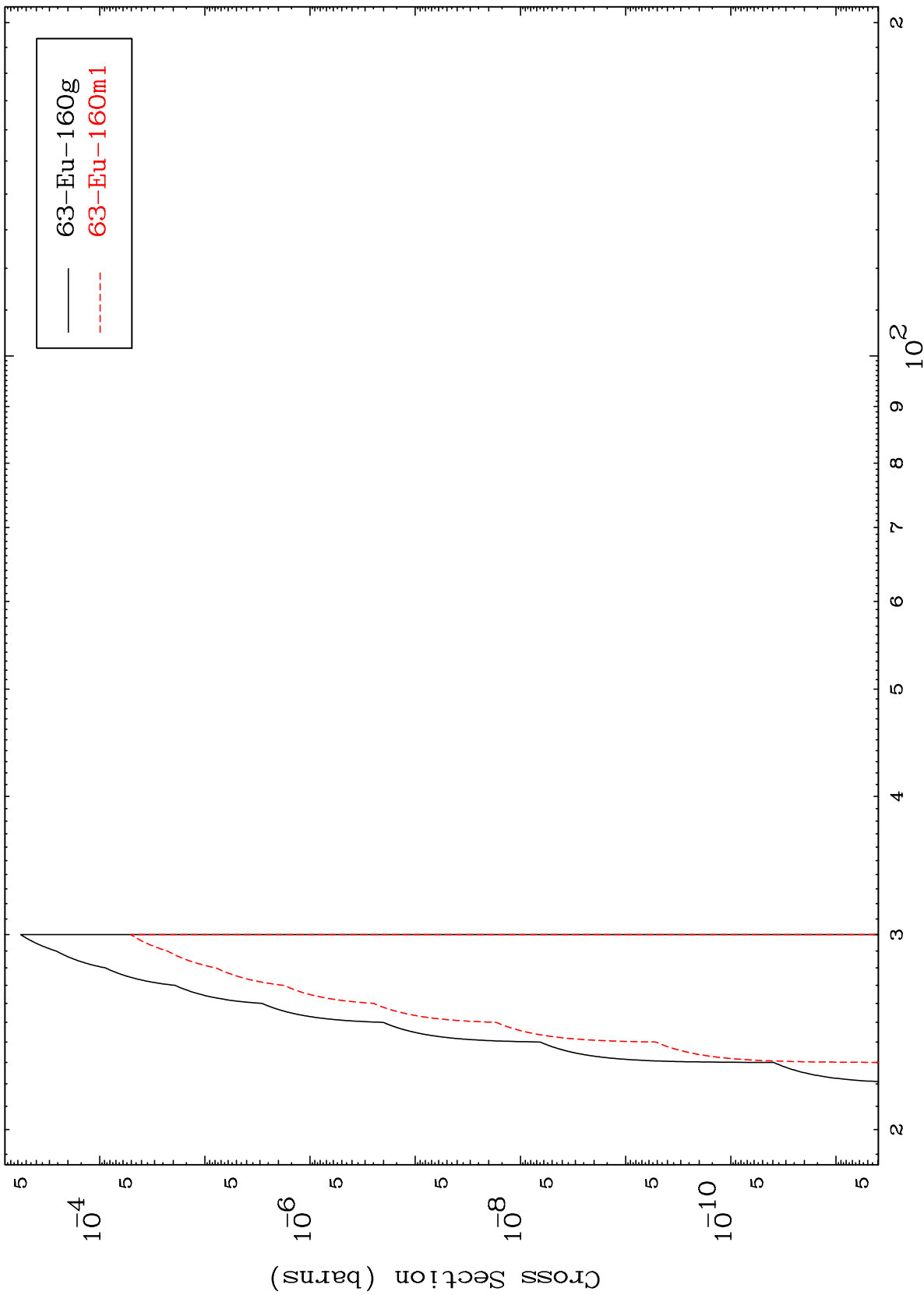
64-Gd-163

MAT 6458

(n,2n) d

64-Gd-163

Radionuclide Production Cross Section



126

Incident Energy (MeV)

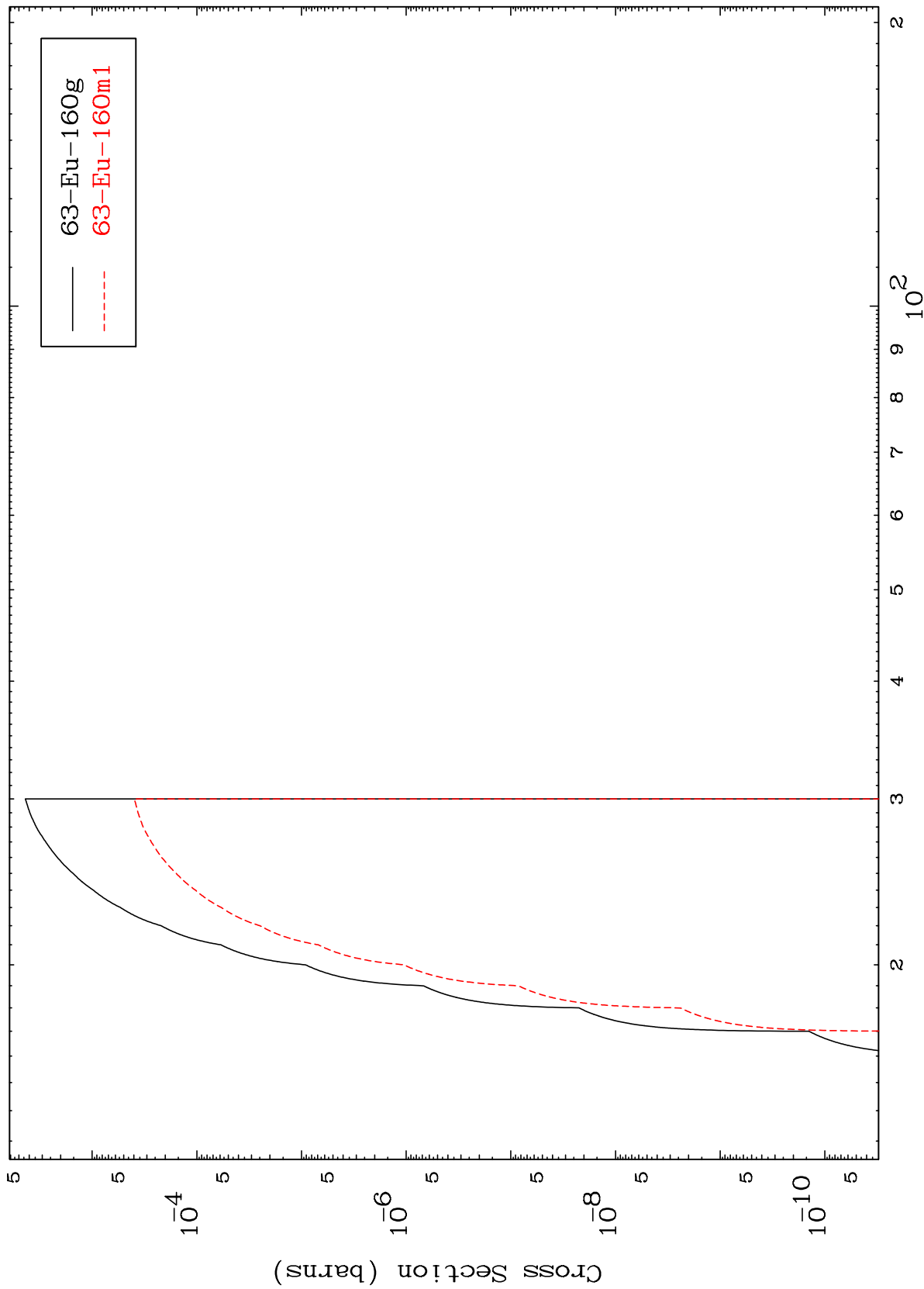
64-Gd-163

MAT 6458

(n,n') t

64-Gd-163

Radionuclide Production Cross Section



127

Incident Energy (MeV)

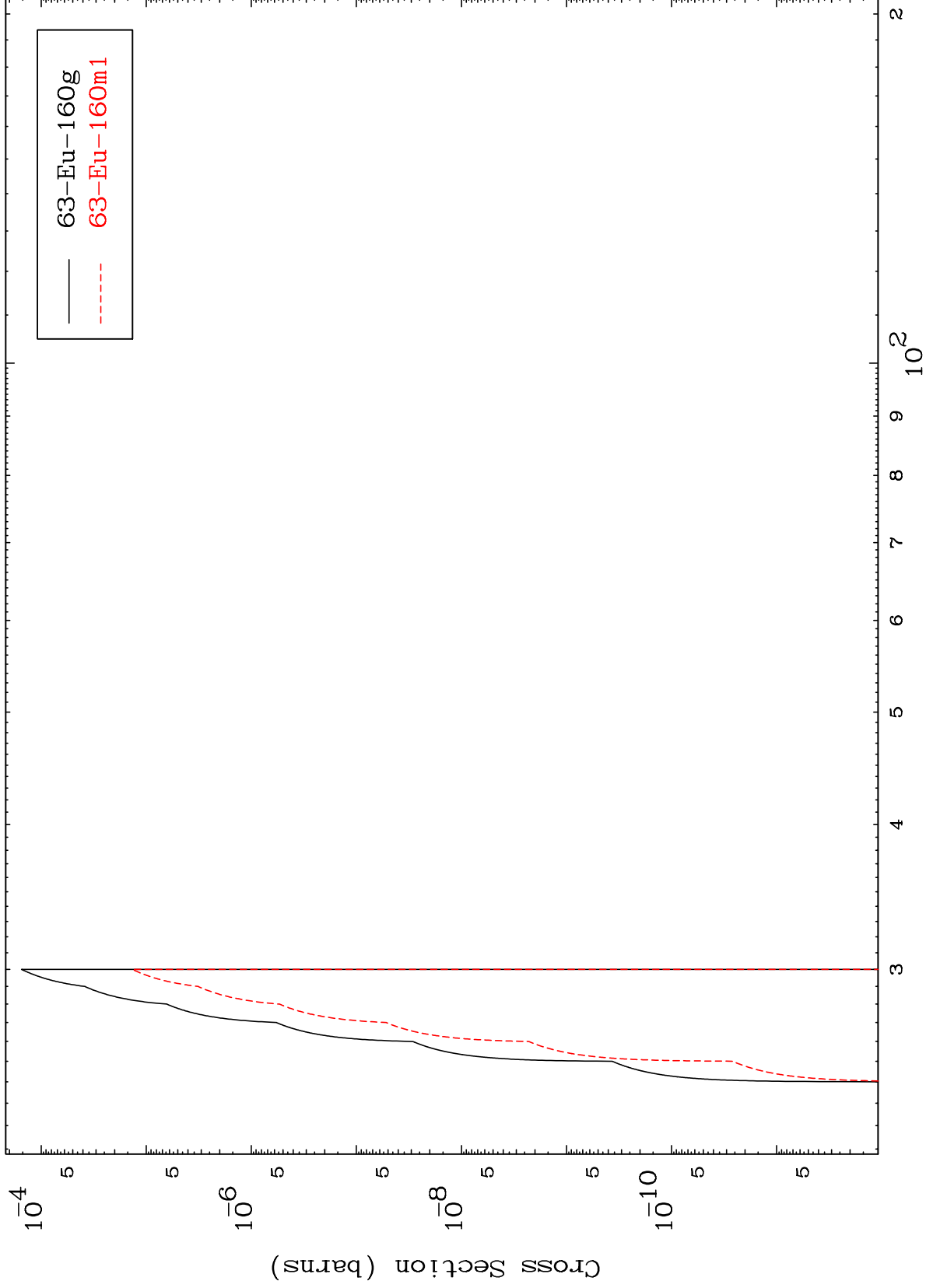
64-Gd-163

MAT 6458

(n,3n) p

64-Gd-163

Radionuclide Production Cross Section



128

Incident Energy (MeV)

64-Gd-163