

Program EVALPLOT  
(Version 2017-1)

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

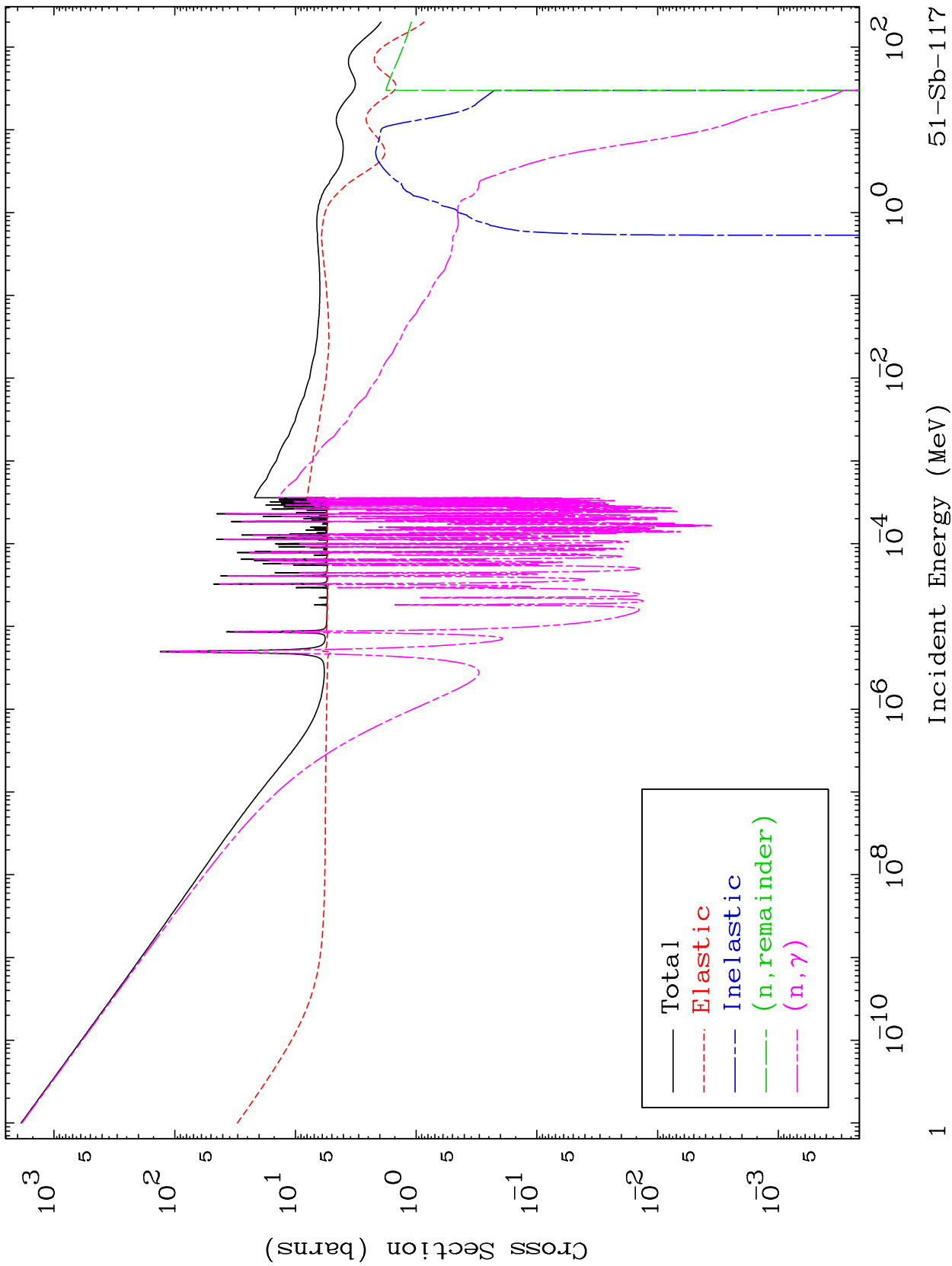
Press Mouse Button to Start

MAT 5113

Major

293 Kelvin Cross Sections

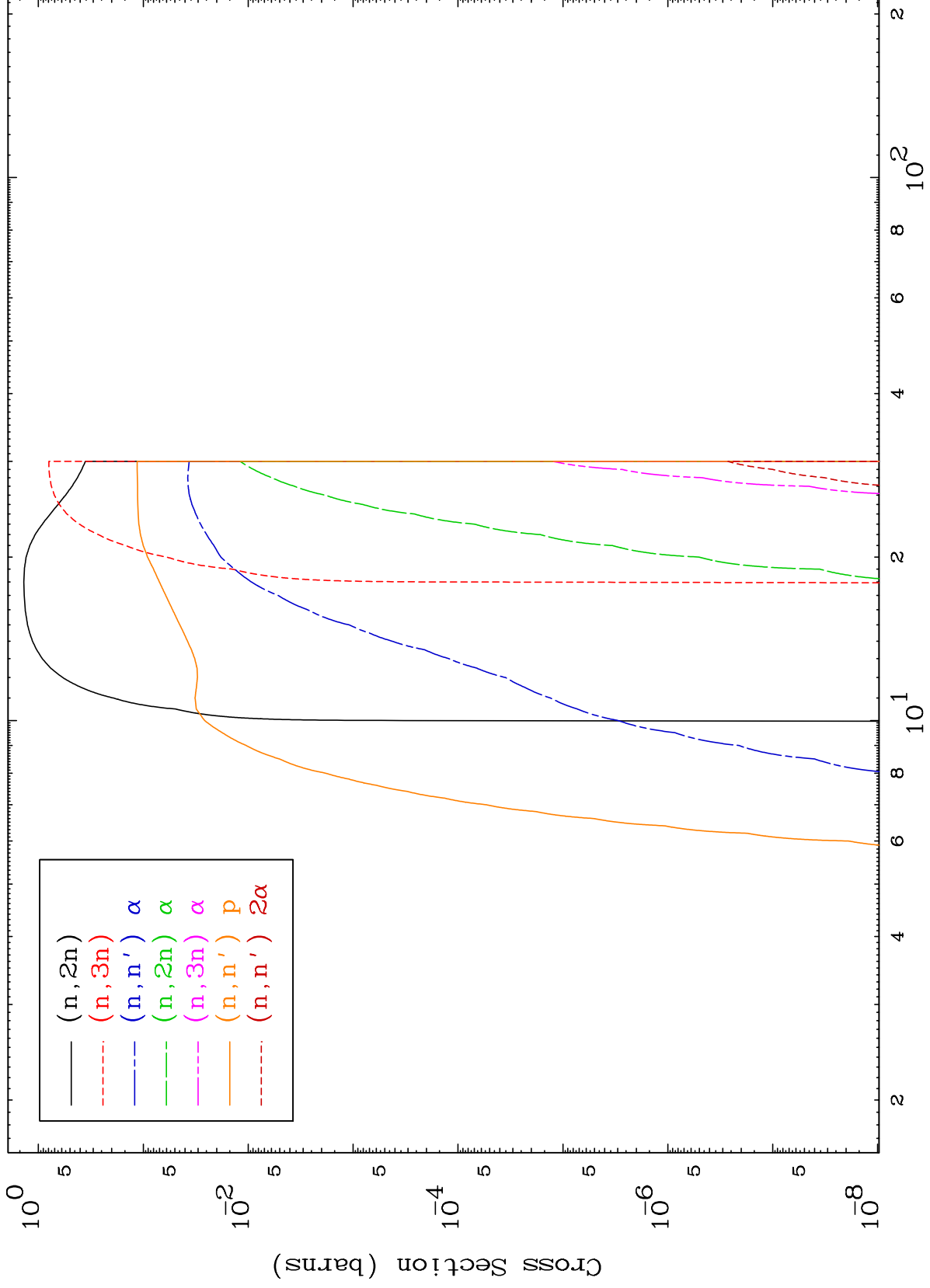
51-Sb-117



MAT 5113

Neutron Production  
293 Kelvin Cross Sections

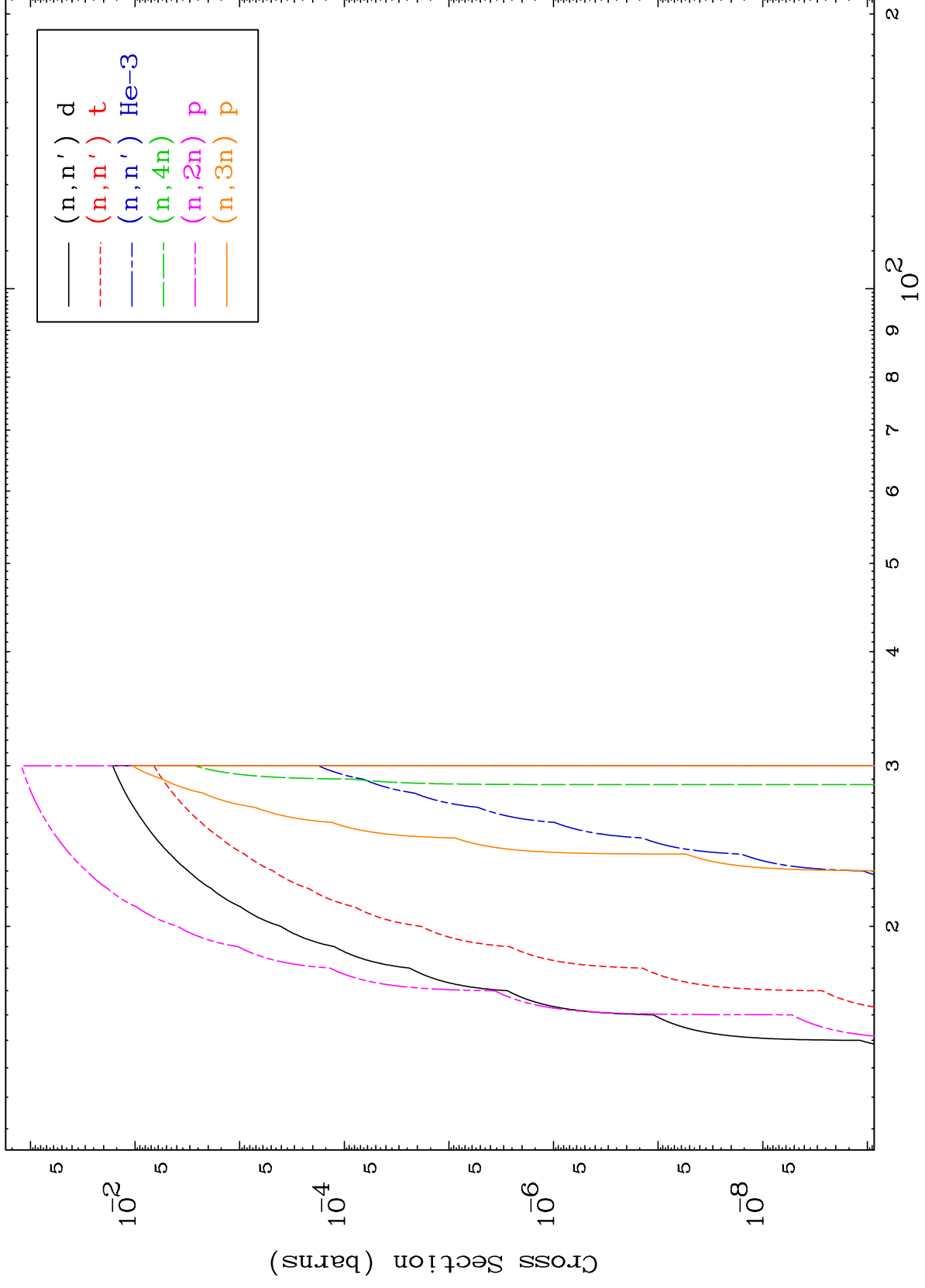
51-Sb-117

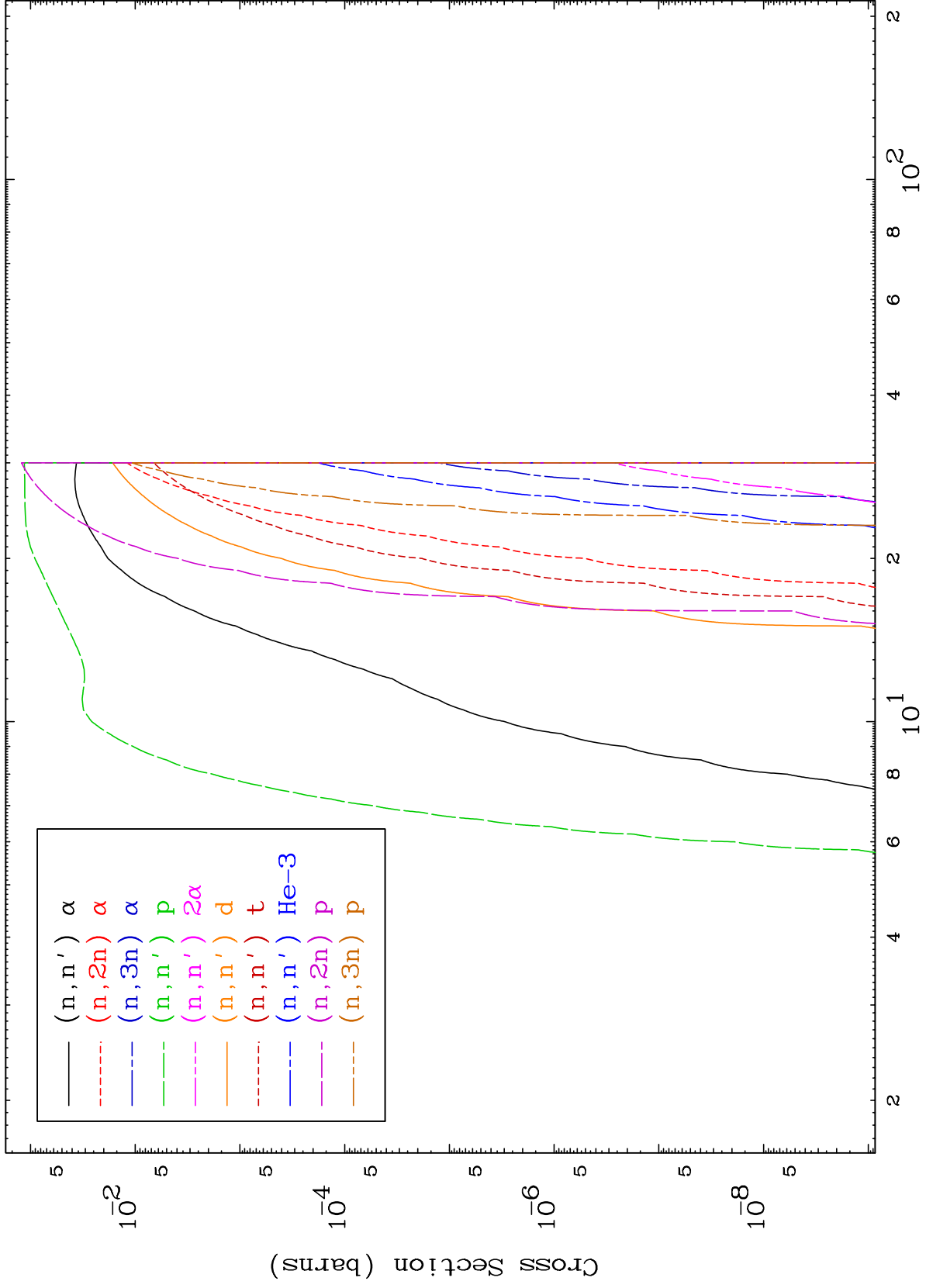


51-Sb-117

Incident Energy (MeV)

2

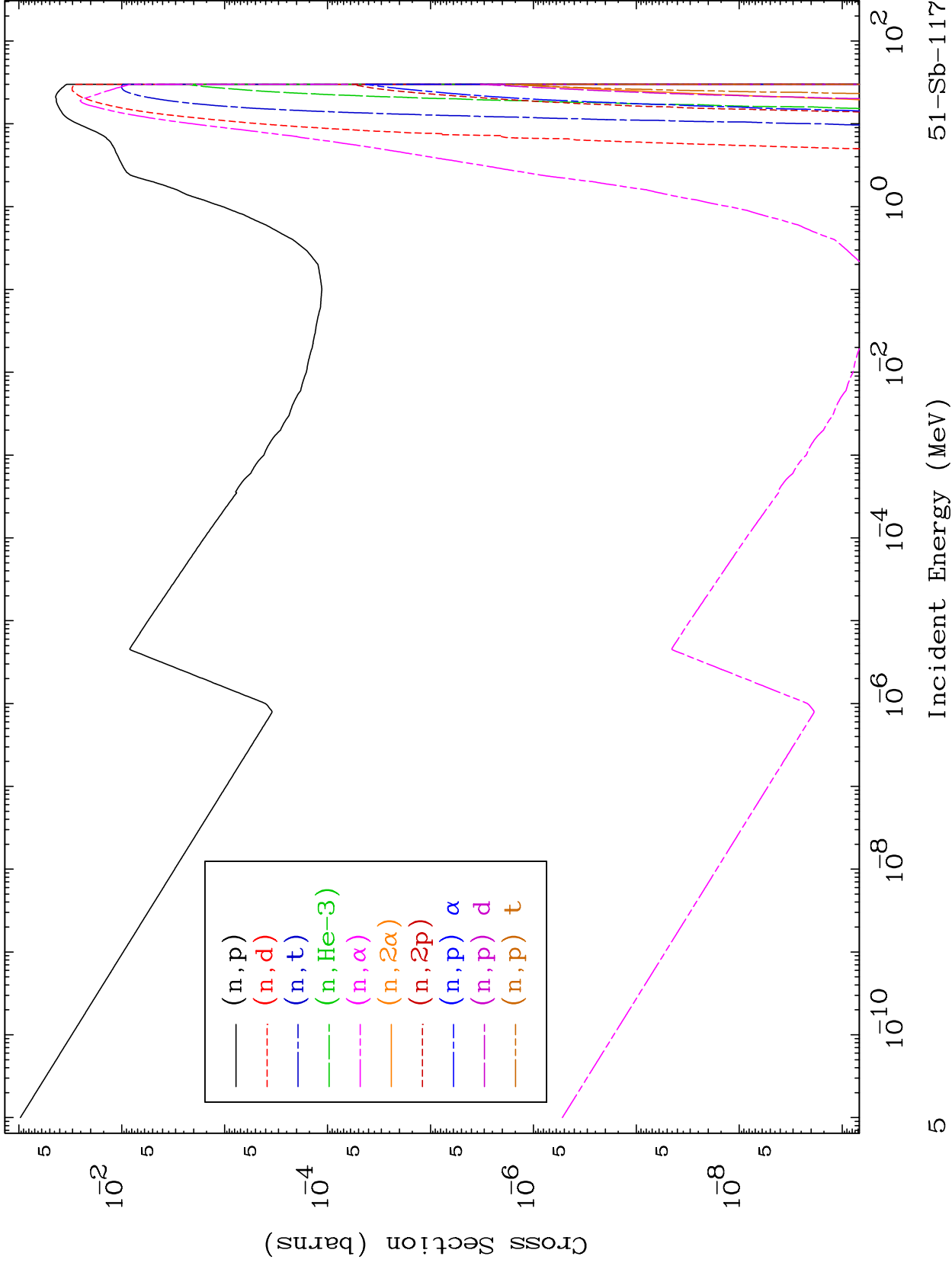




MAT 5113

Charged Particle  
293 Kelvin Cross Sections

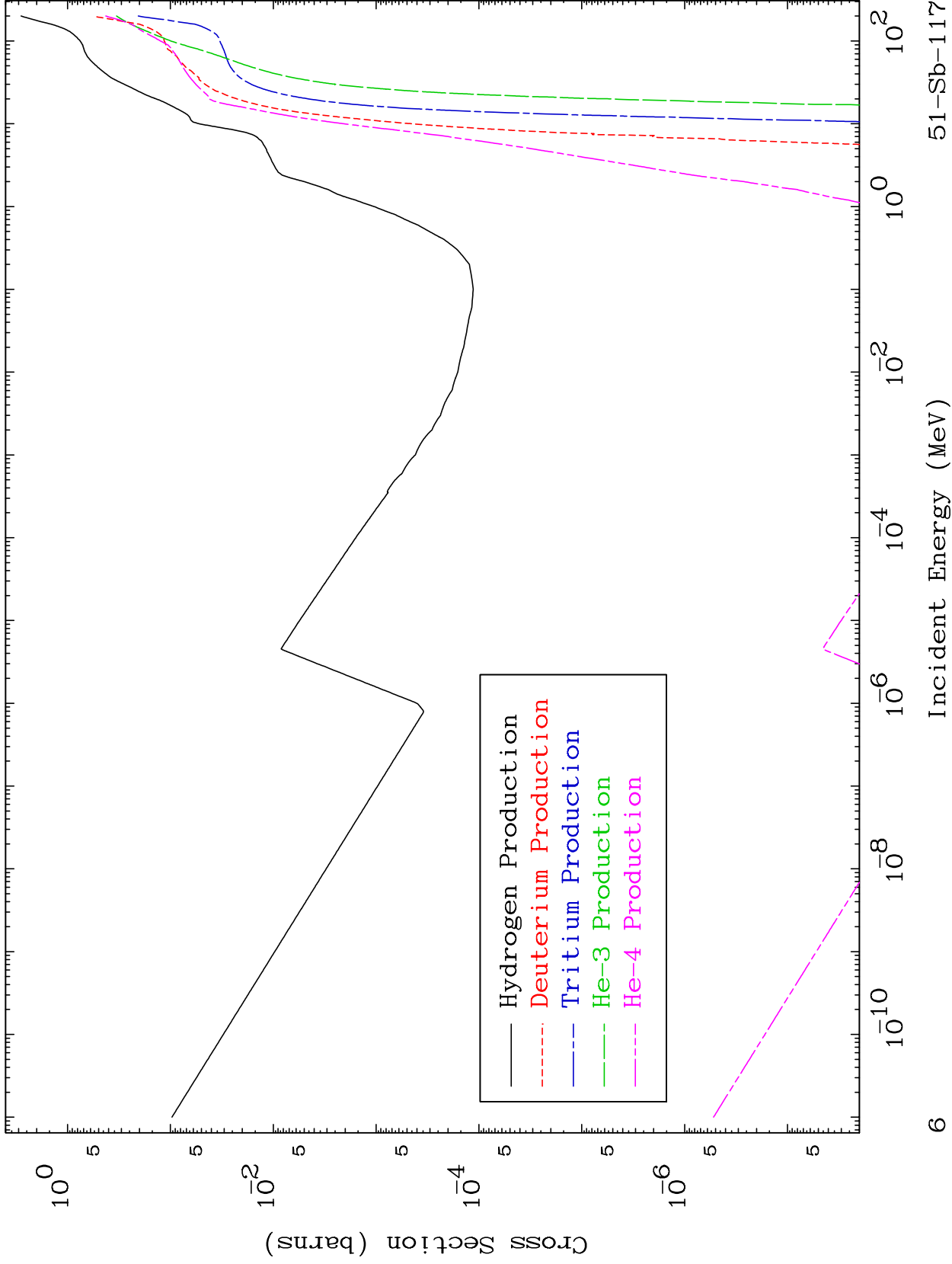
51-Sb-117



MAT 5113

Particle Production  
293 Kelvin Cross Sections

51-Sb-117

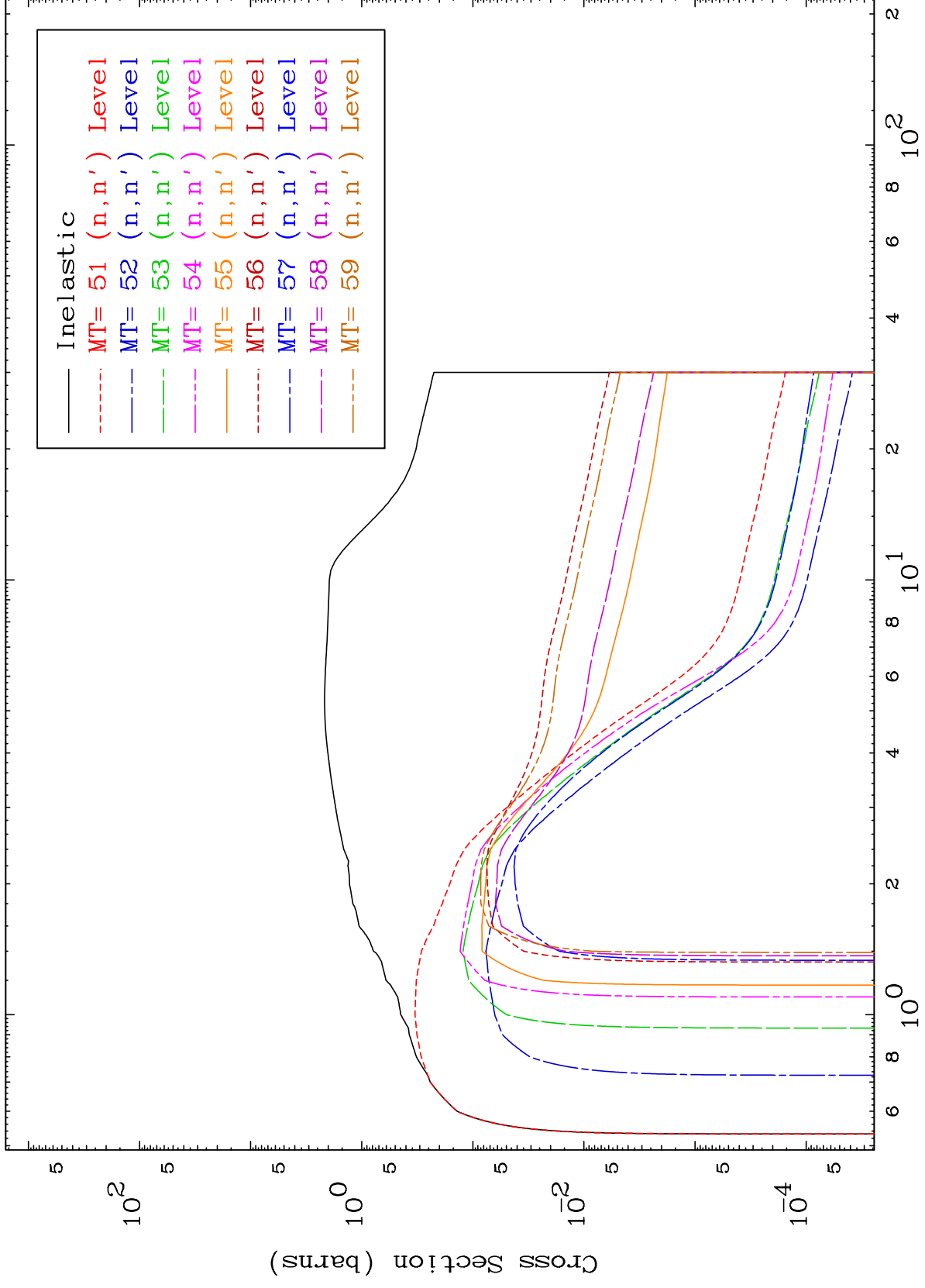


MAT 5113

(n,n') Level

51-Sb-117

293 Kelvin Cross Sections



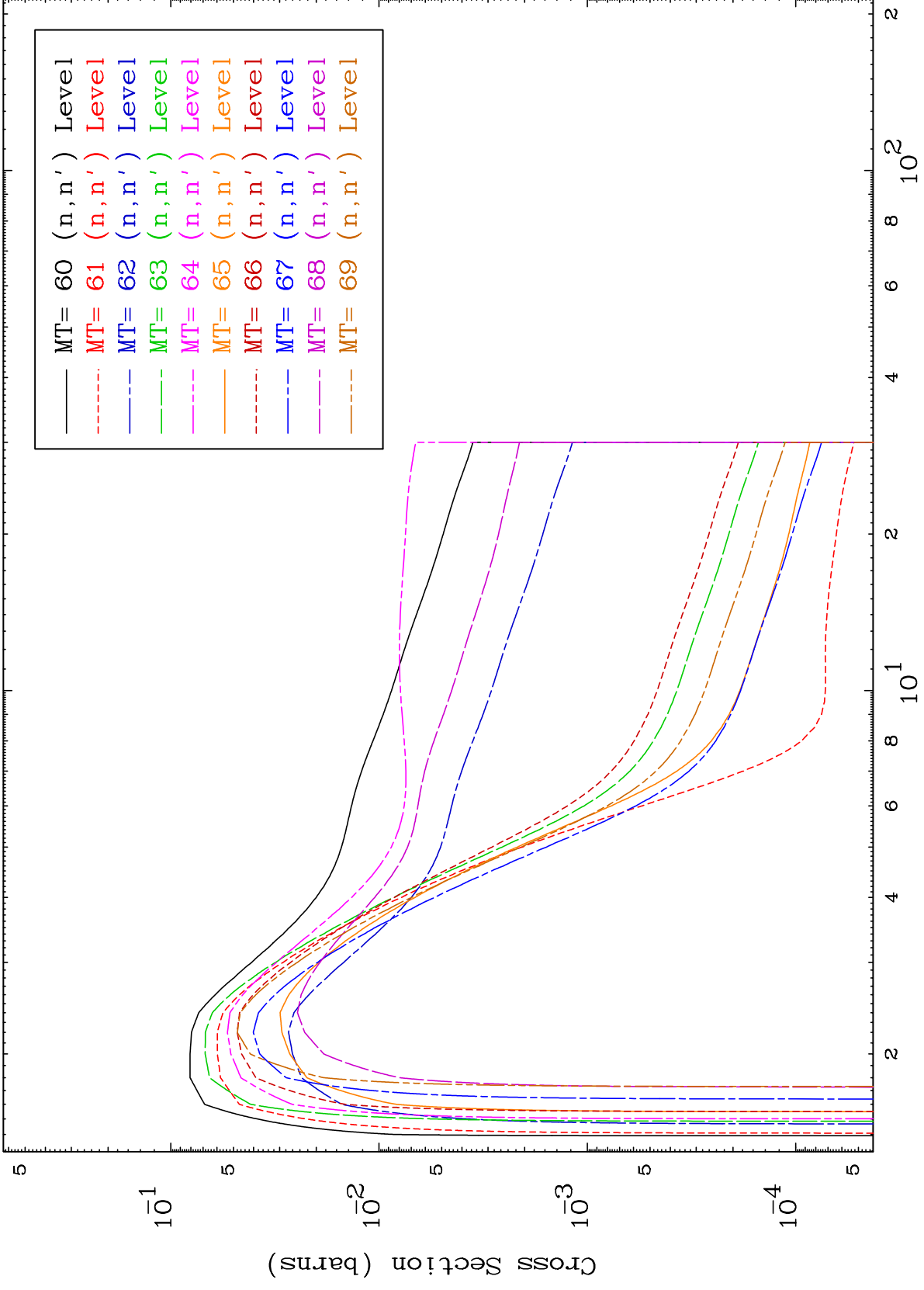


MAT 5113

(n,n') Level

51-Sb-117

293 Kelvin Cross Sections

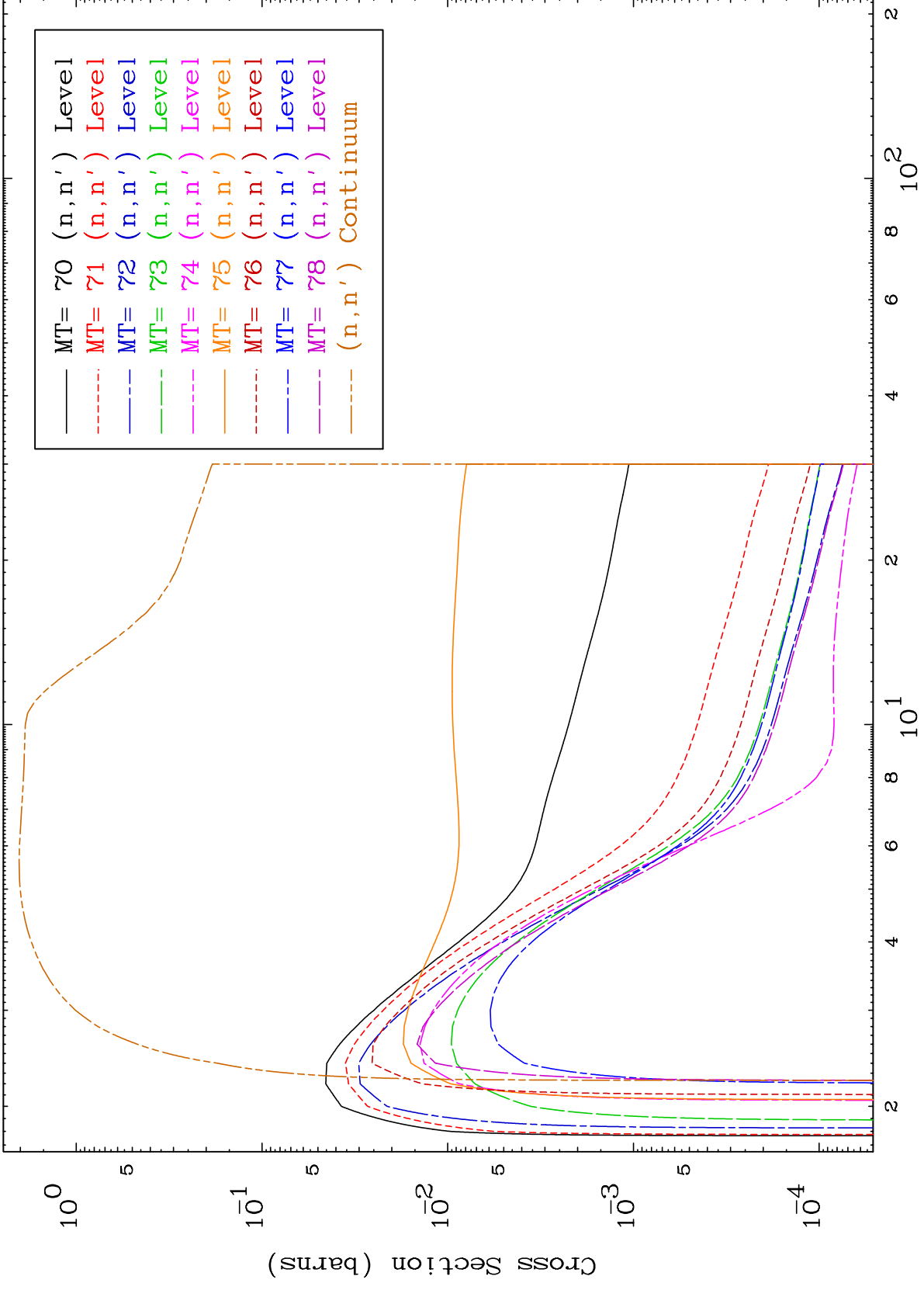


8

Incident Energy (MeV)

51-Sb-117

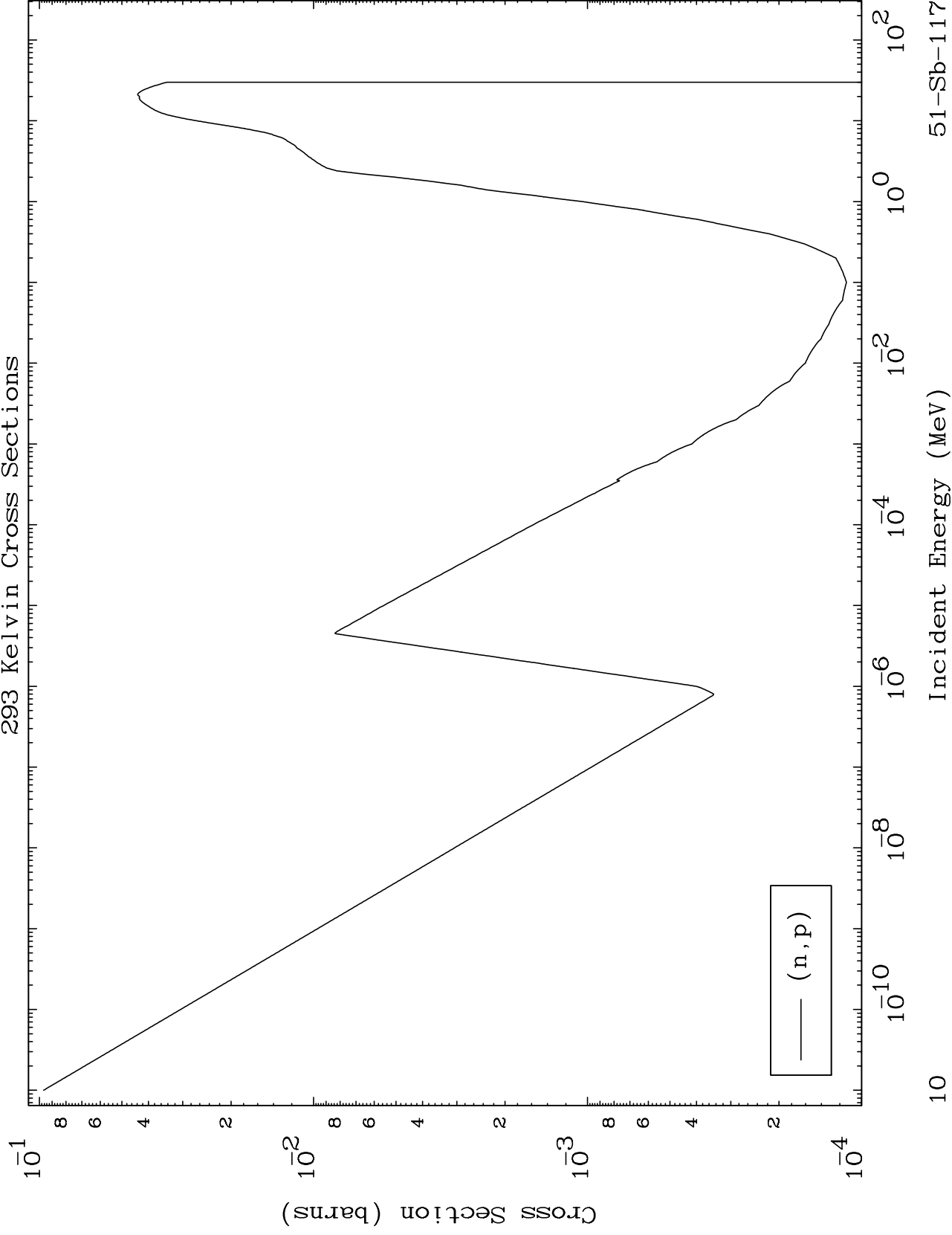
293 Kelvin Cross Sections



MAT 5113

(n,p) Levels  
293 Kelvin Cross Sections

51-Sb-117



51-Sb-117

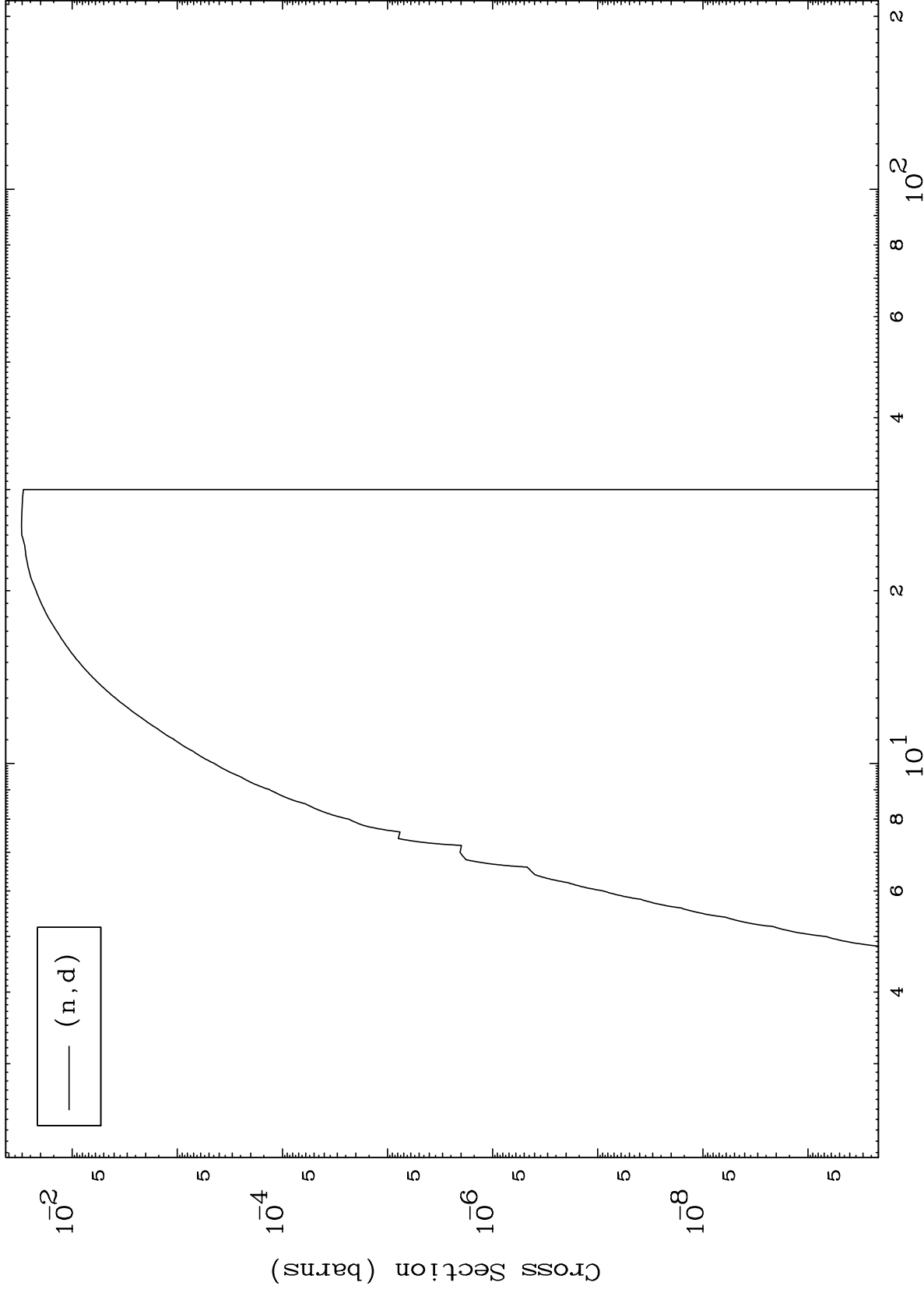
Incident Energy (MeV)

10

MAT 5113

(n,d) Levels  
293 Kelvin Cross Sections

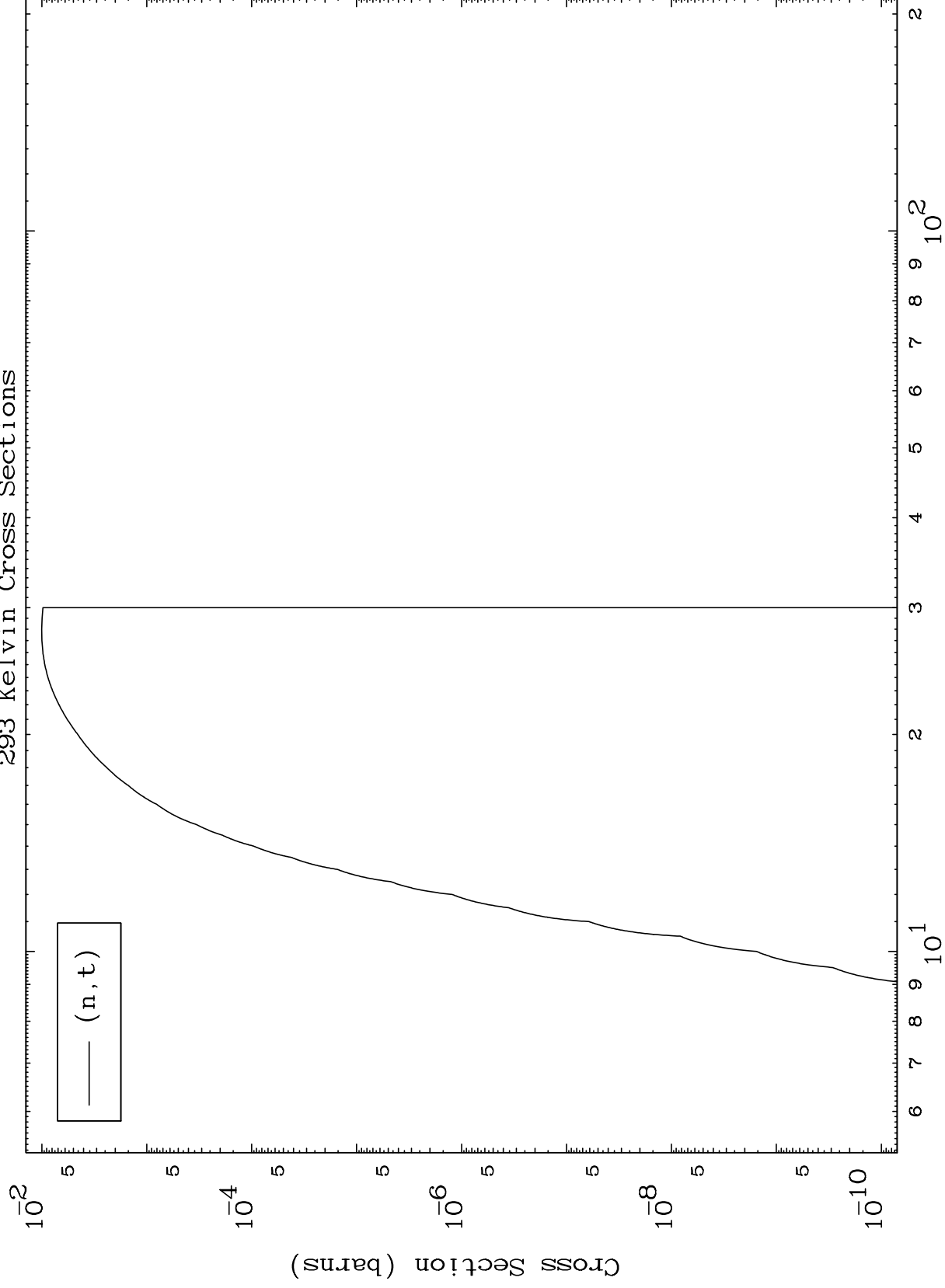
51-Sb-117



MAT 5113

(n,t) Levels  
293 Kelvin Cross Sections

51-Sb-117



12

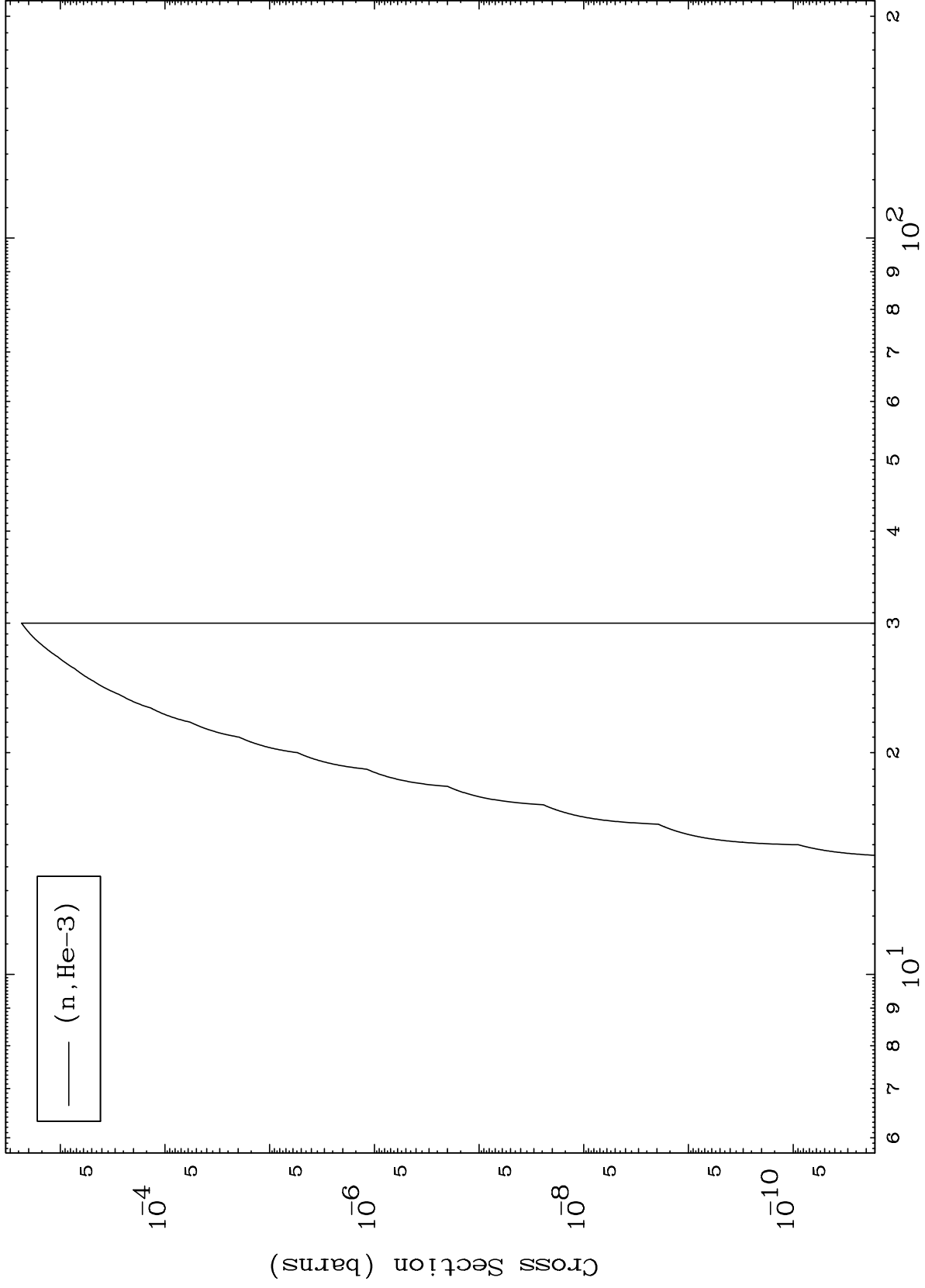
Incident Energy (MeV)

51-Sb-117

MAT 5113

(n,He3) Levels  
293 Kelvin Cross Sections

51-Sb-117



13

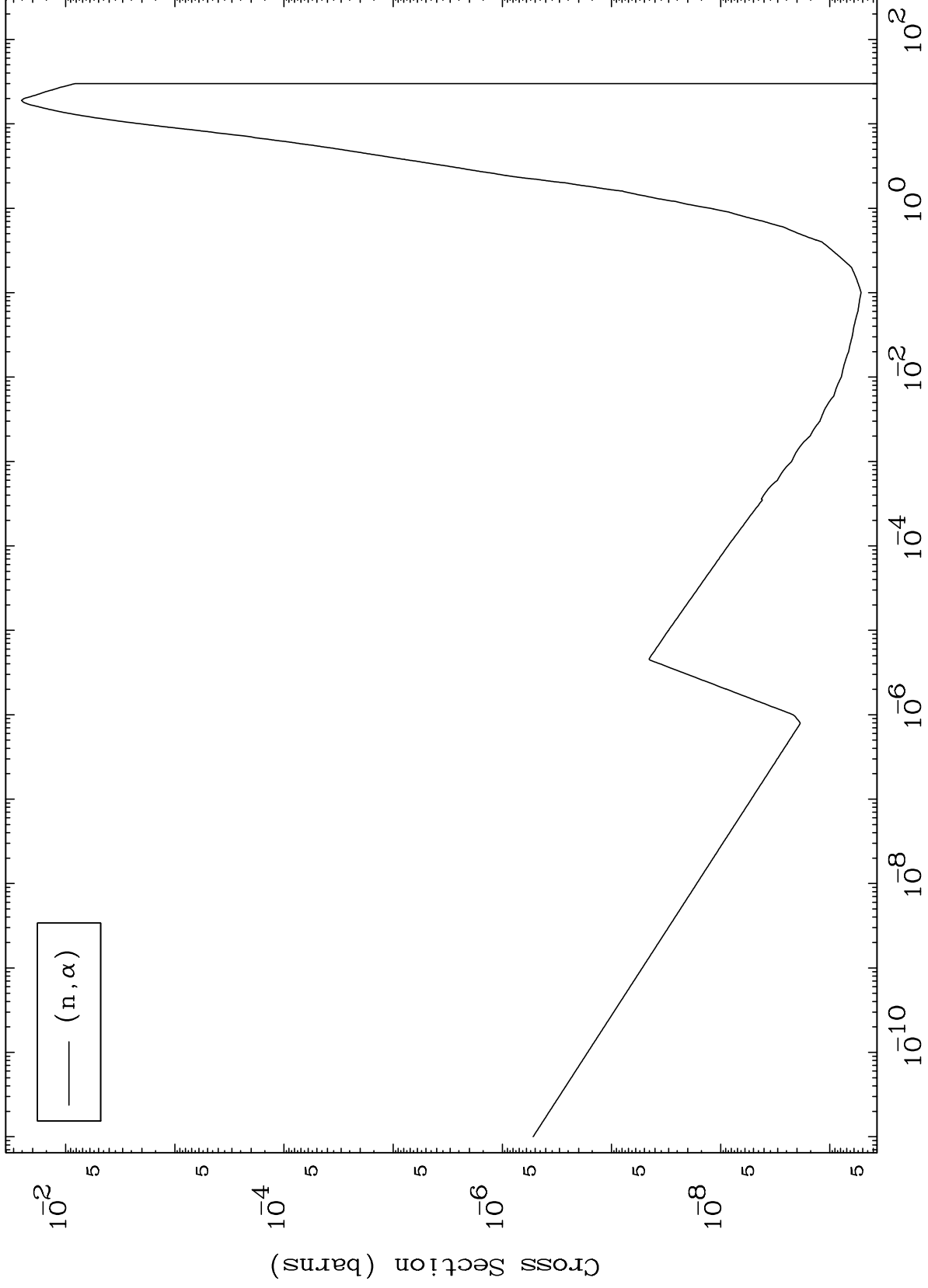
Incident Energy (MeV)

51-Sb-117

MAT 5113

(n,  $\alpha$ ) Levels  
293 Kelvin Cross Sections

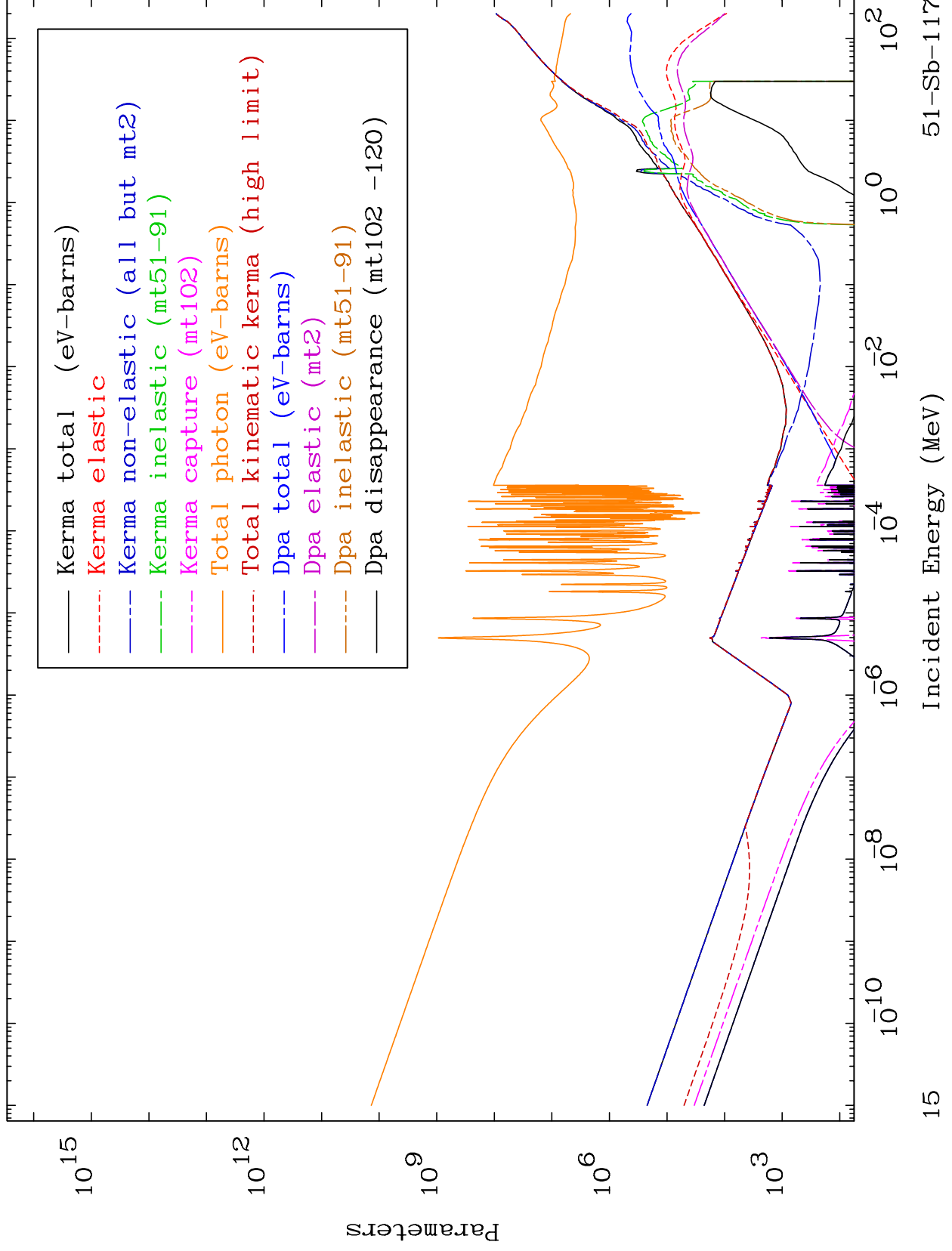
51-Sb-117



14

Incident Energy (MeV)

51-Sb-117

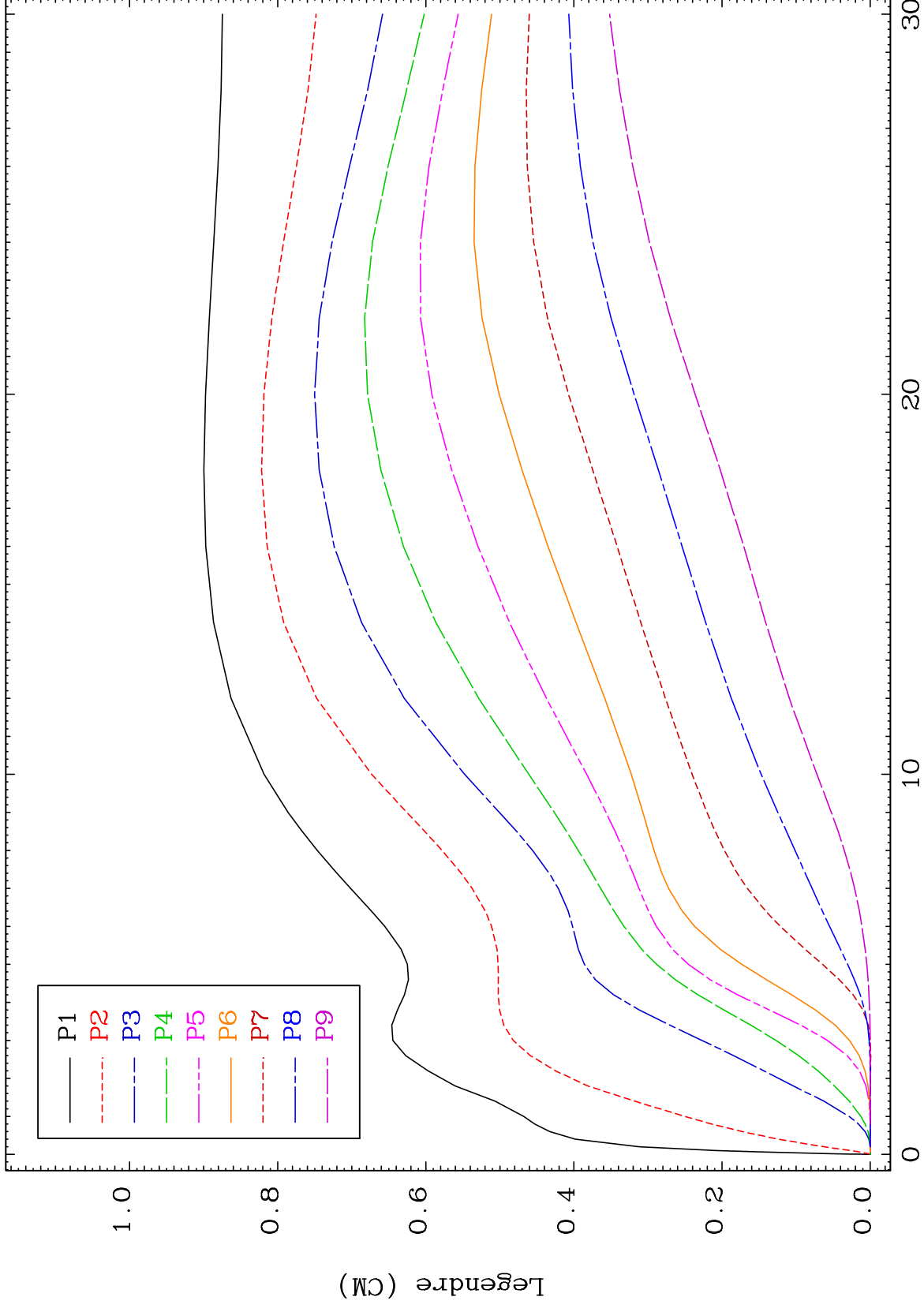




MAT 5113

Elastic Legendre Coefficients

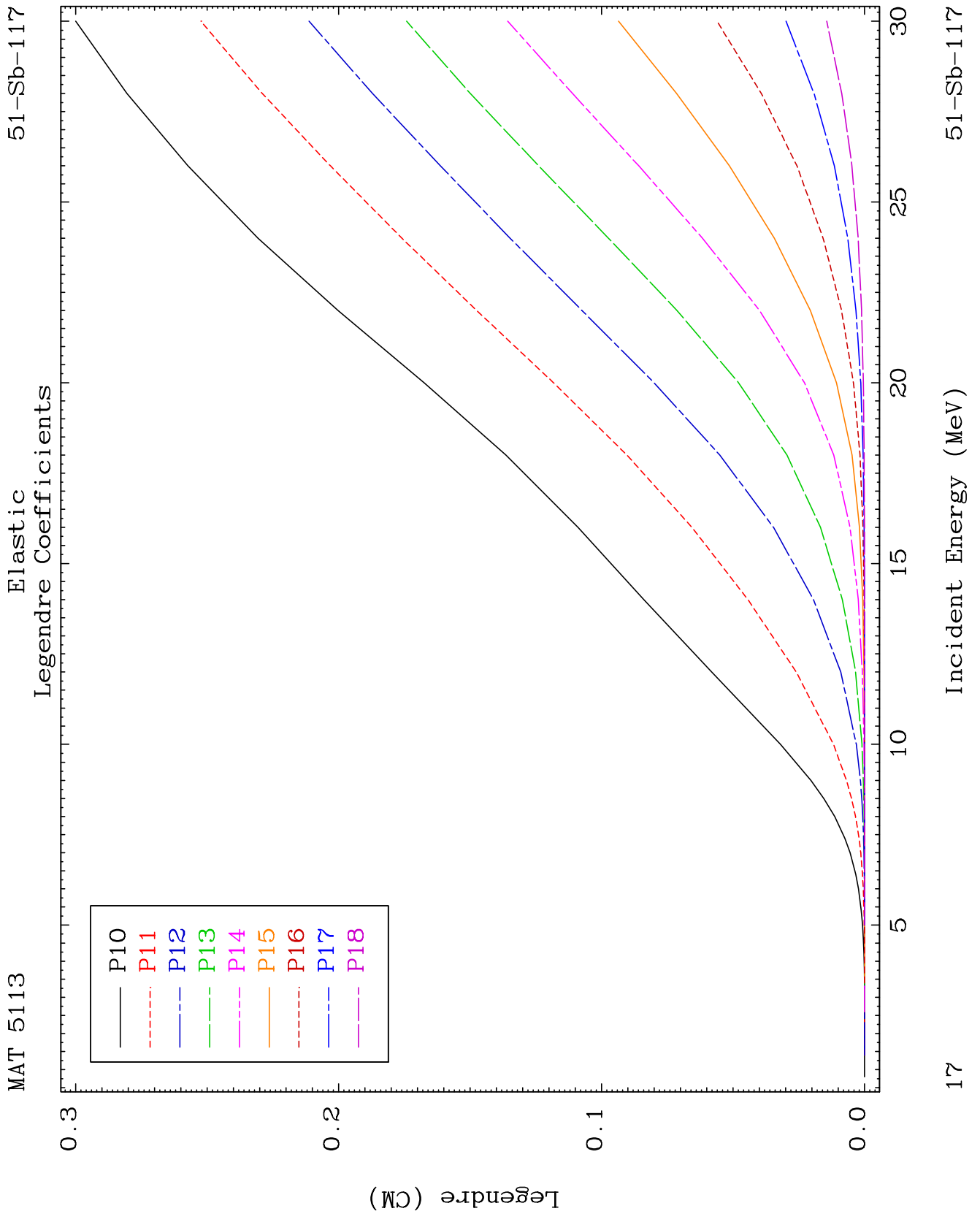
51-Sb-117



16

Incident Energy (MeV)

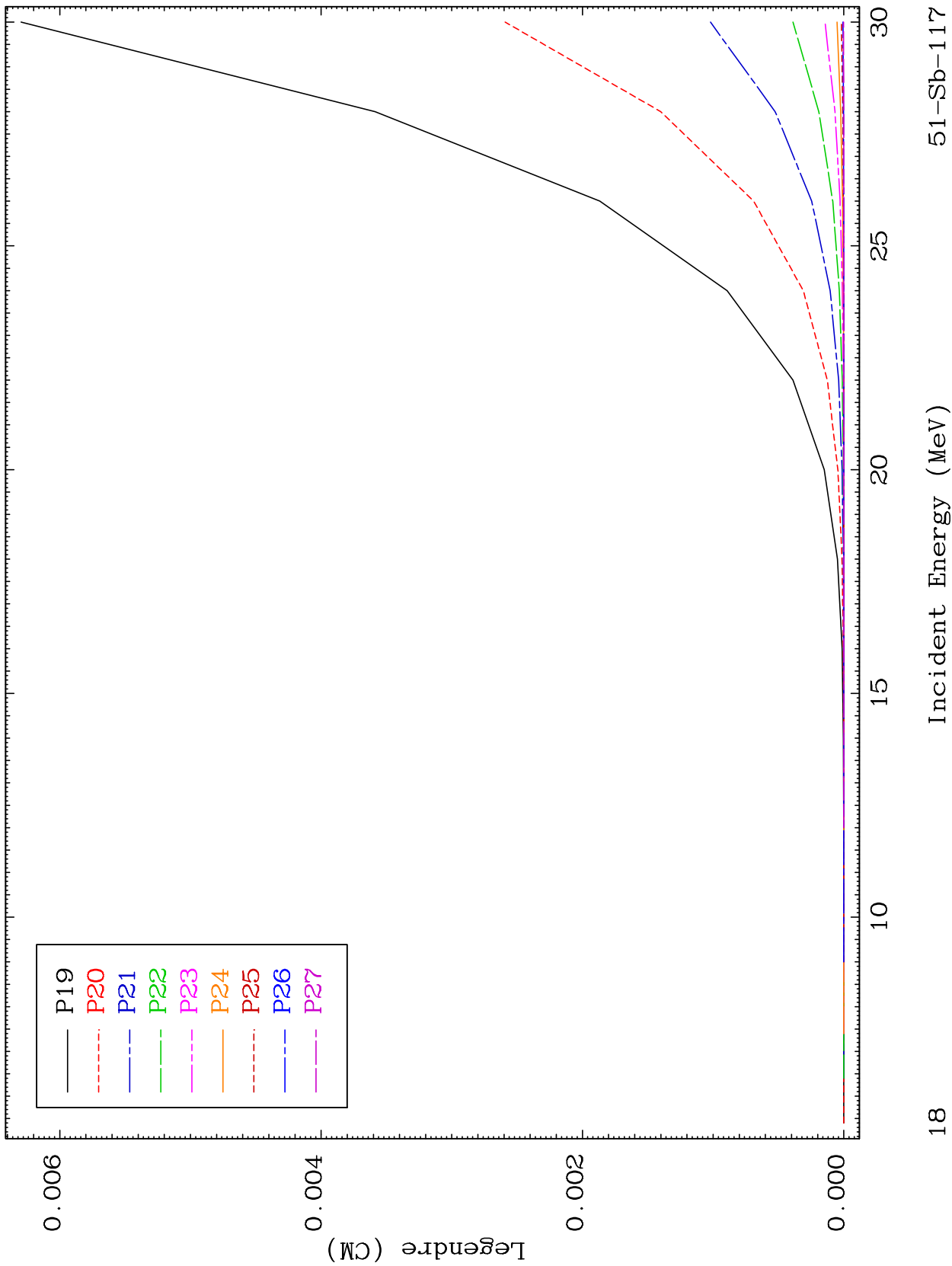
51-Sb-117



MAT 5113

Elastic Legendre Coefficients

51-Sb-117



18

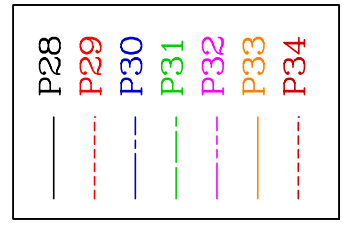
Incident Energy (MeV)

51-Sb-117

MAT 5113

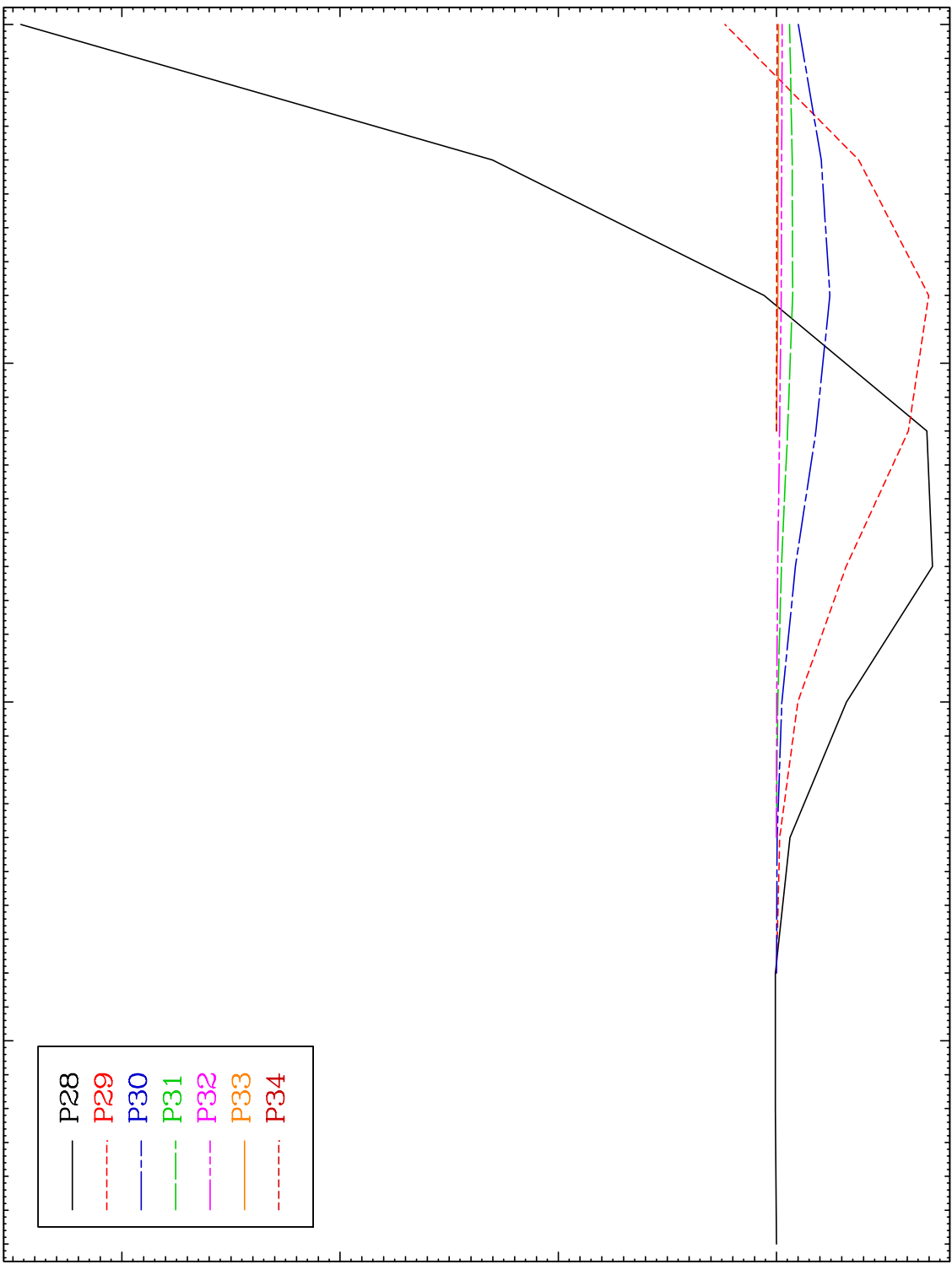
Elastic  
Legendre Coefficients

51-Sb-117



$\times 10^{-7}$

Legendre (CM)



19

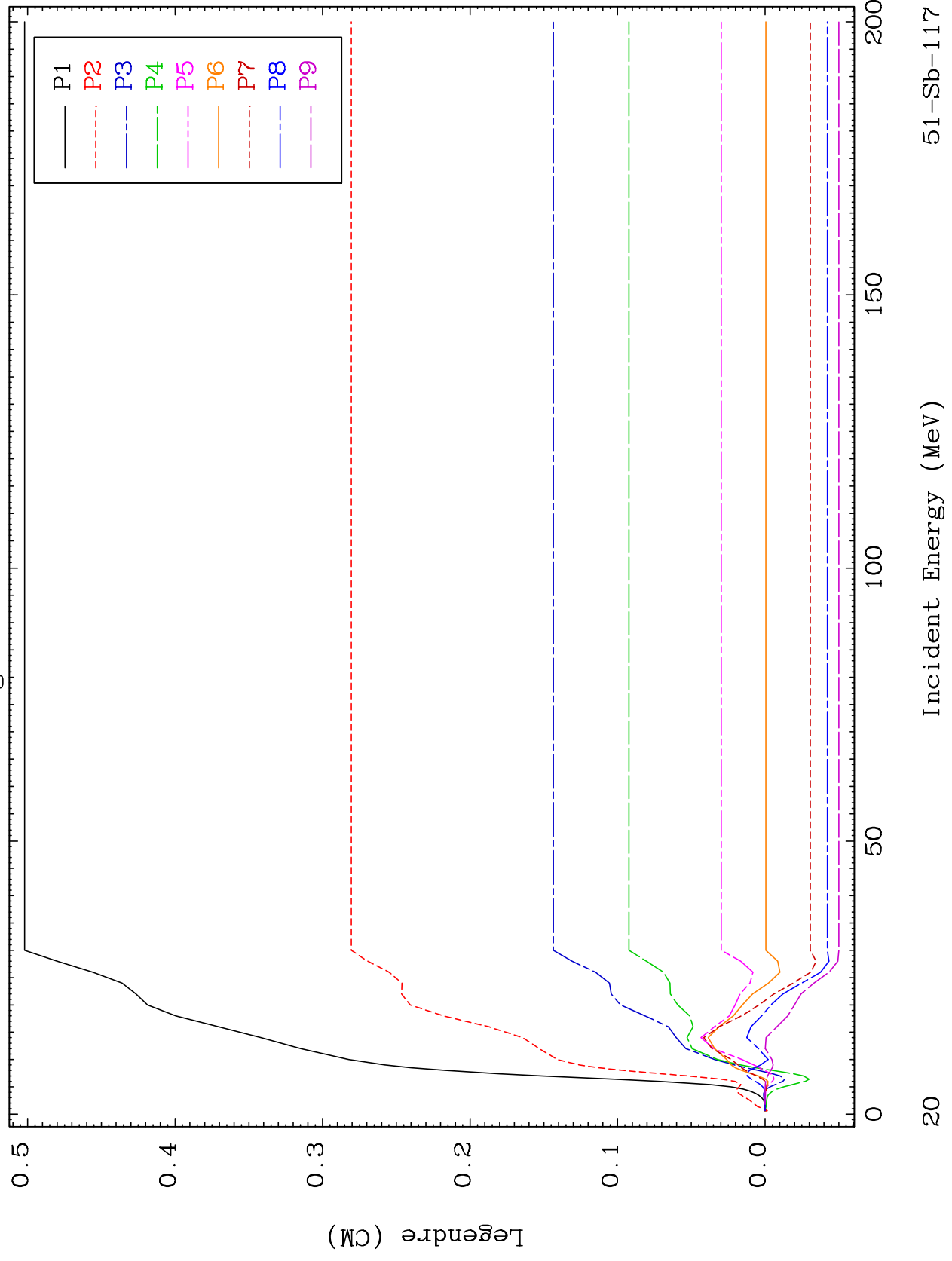
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

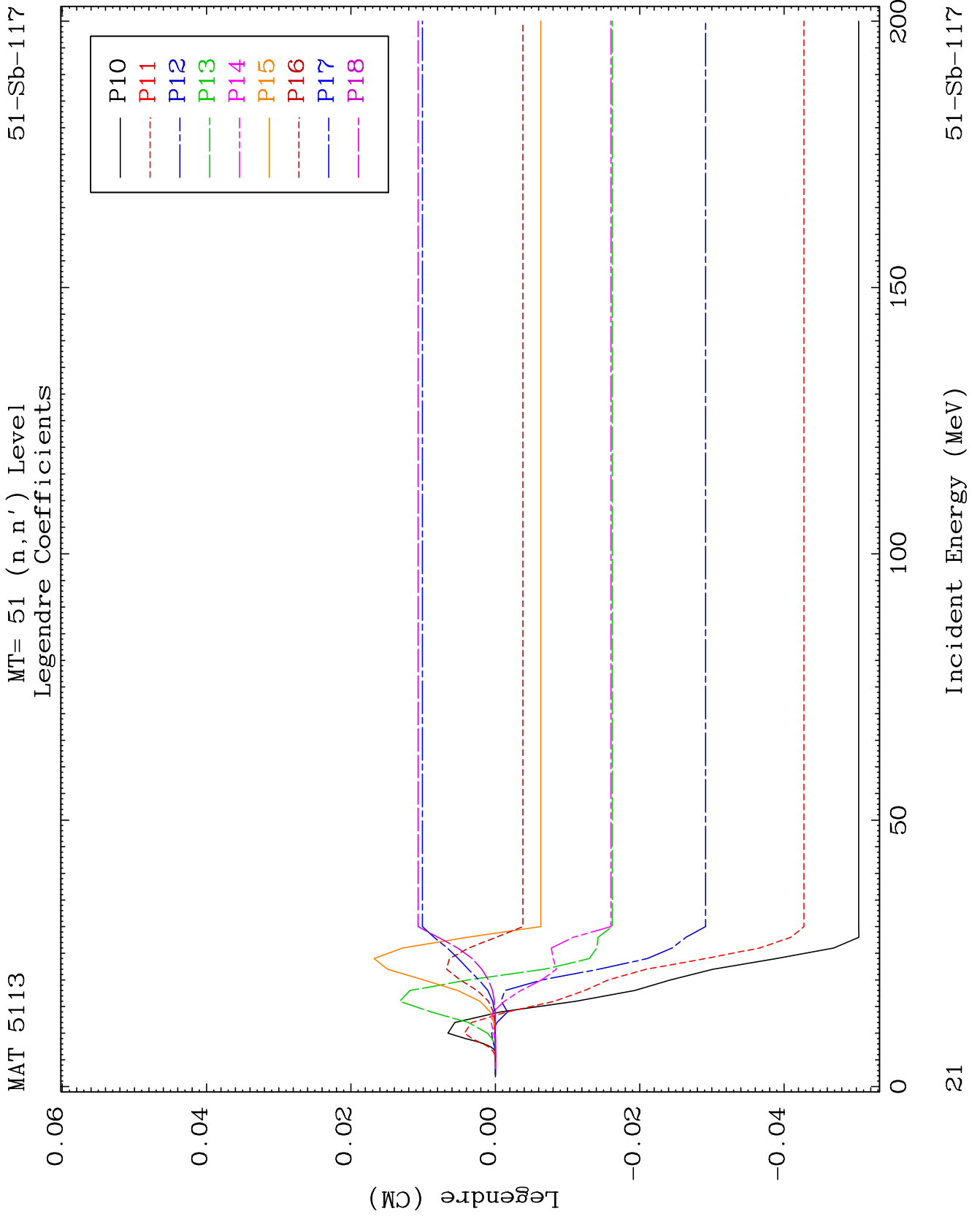
51-Sb-117



51-Sb-117

Incident Energy (MeV)

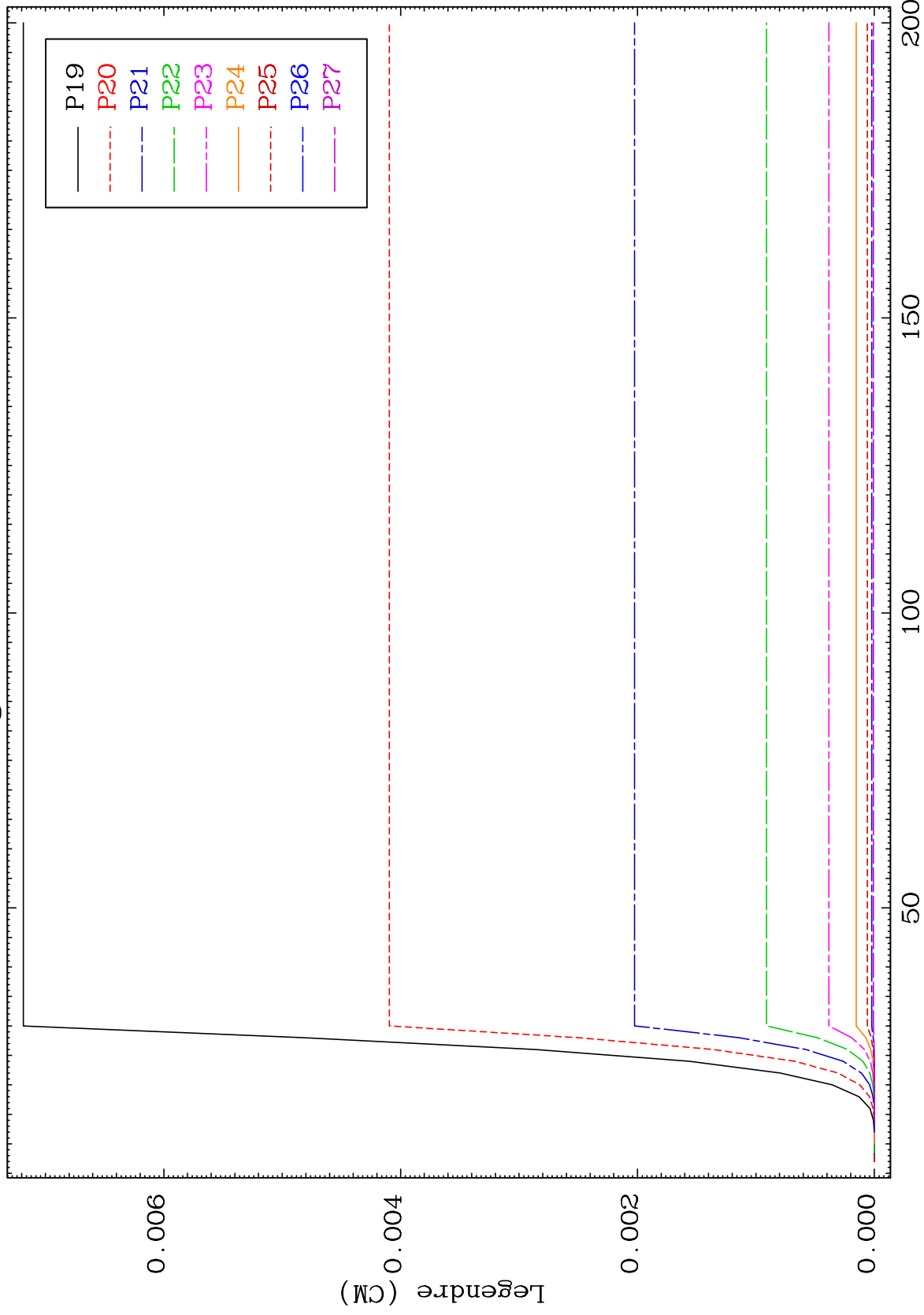
20



MAT 5113

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

51-Sb-117



22

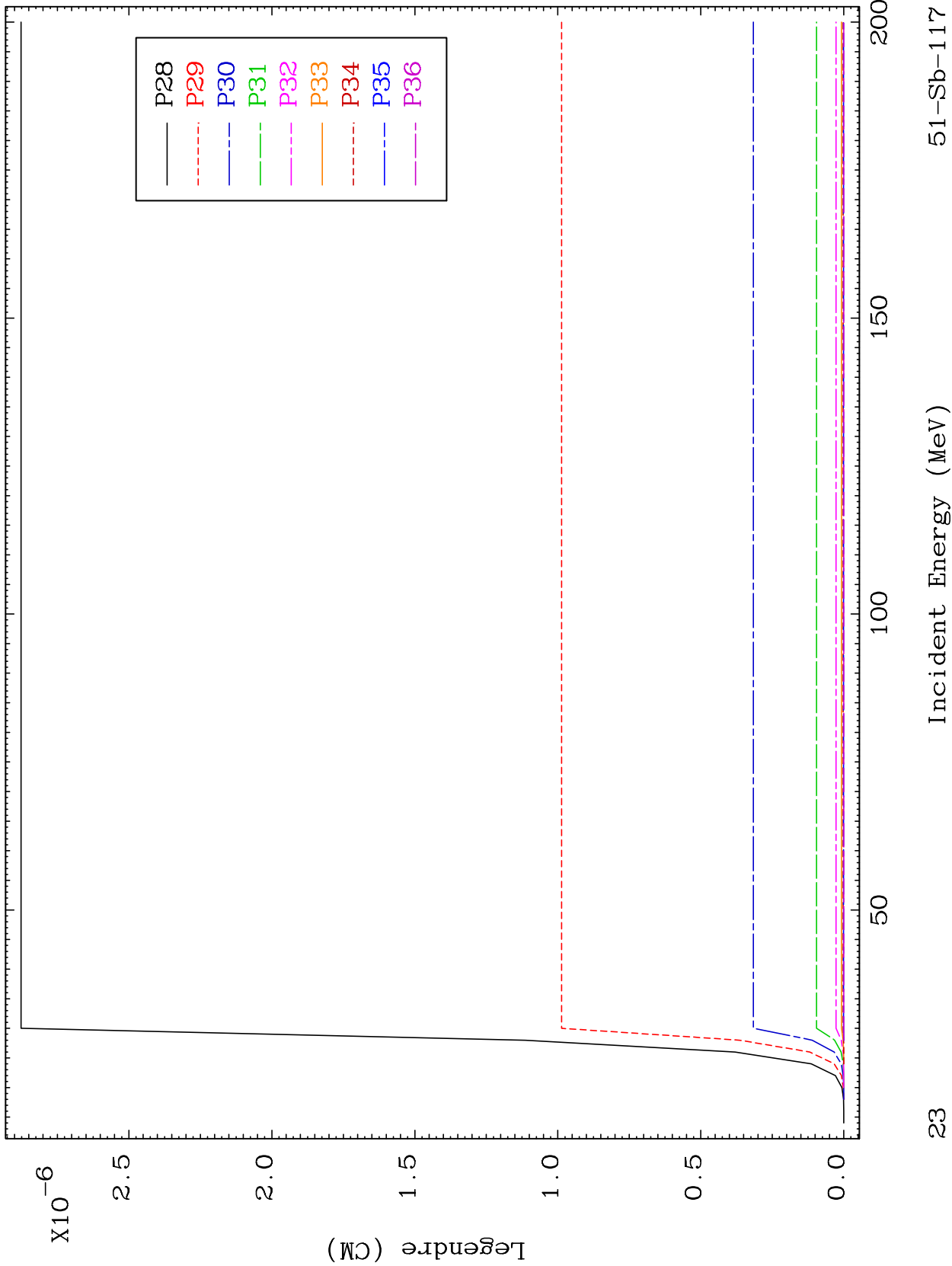
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



23

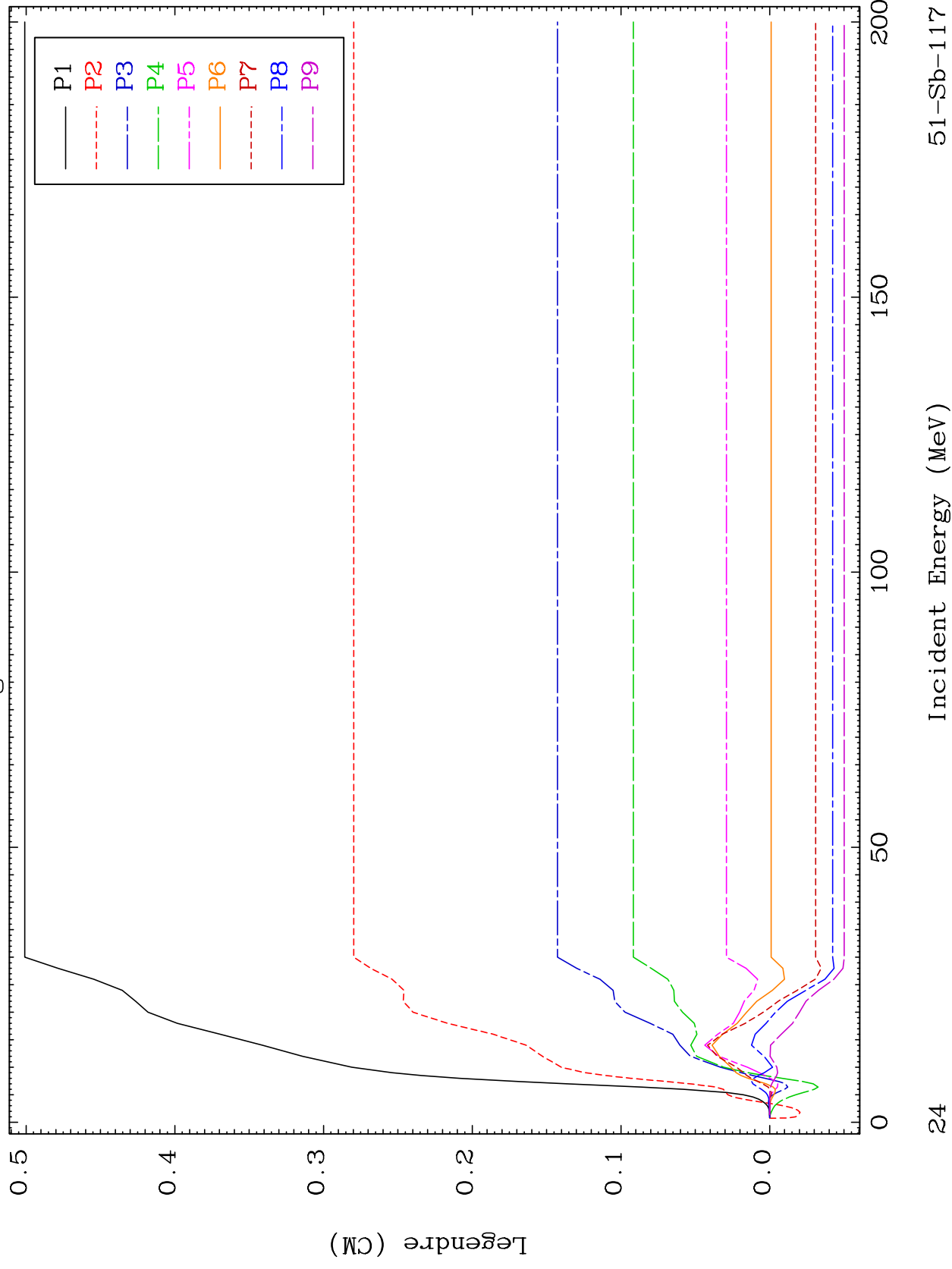
51-Sb-117

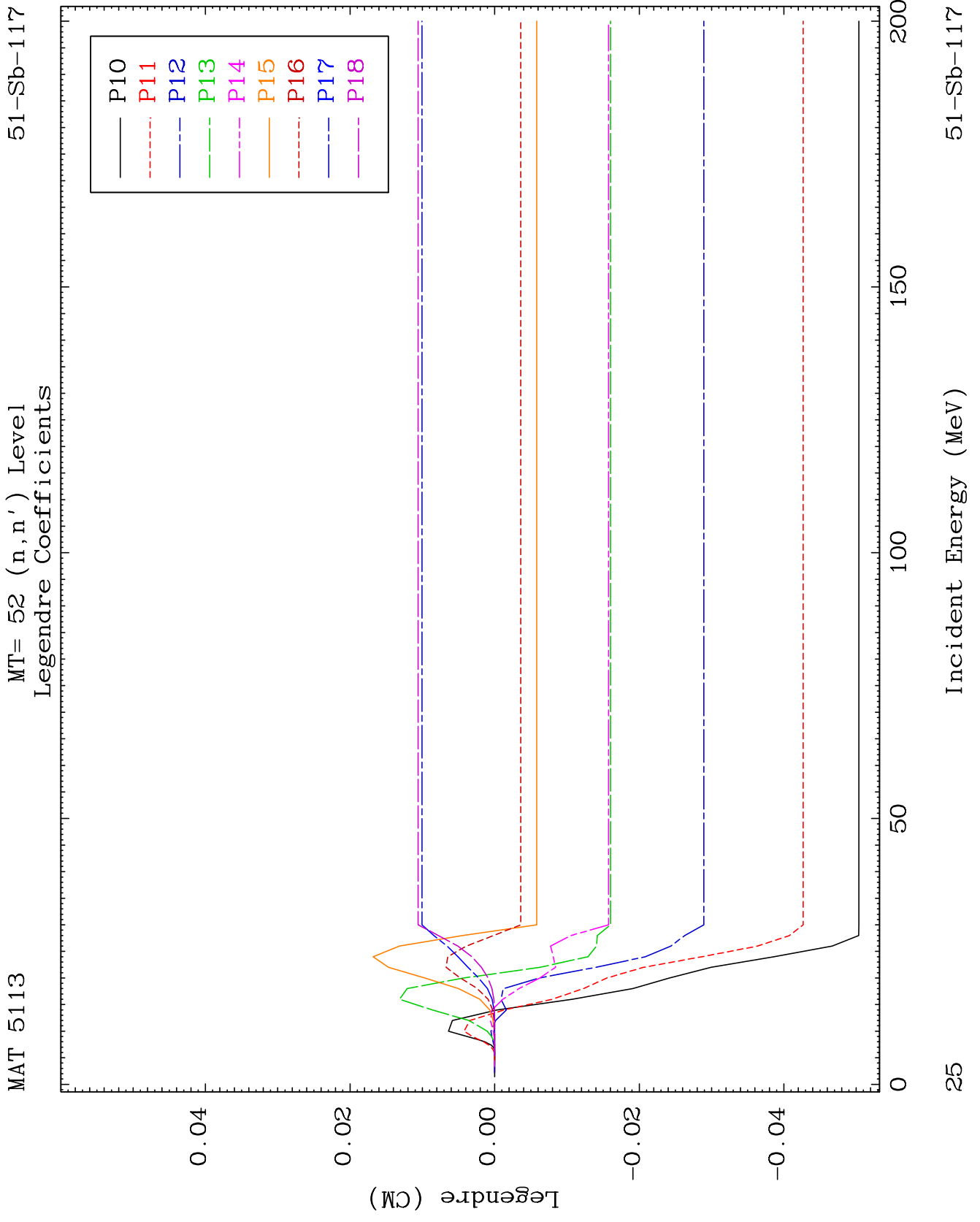


MAT 5113

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

51-Sb-117

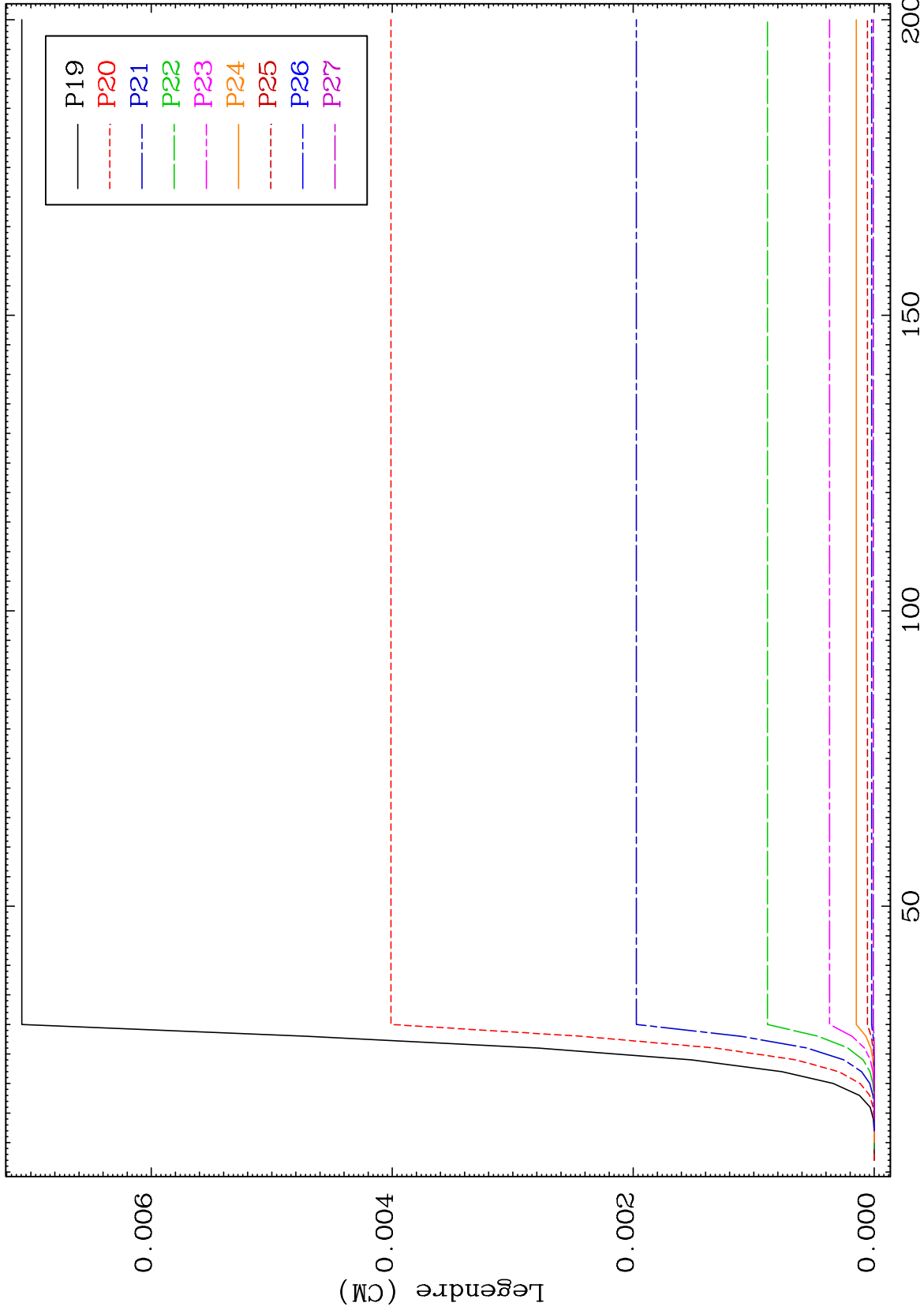




MAT 5113

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

51-Sb-117



26

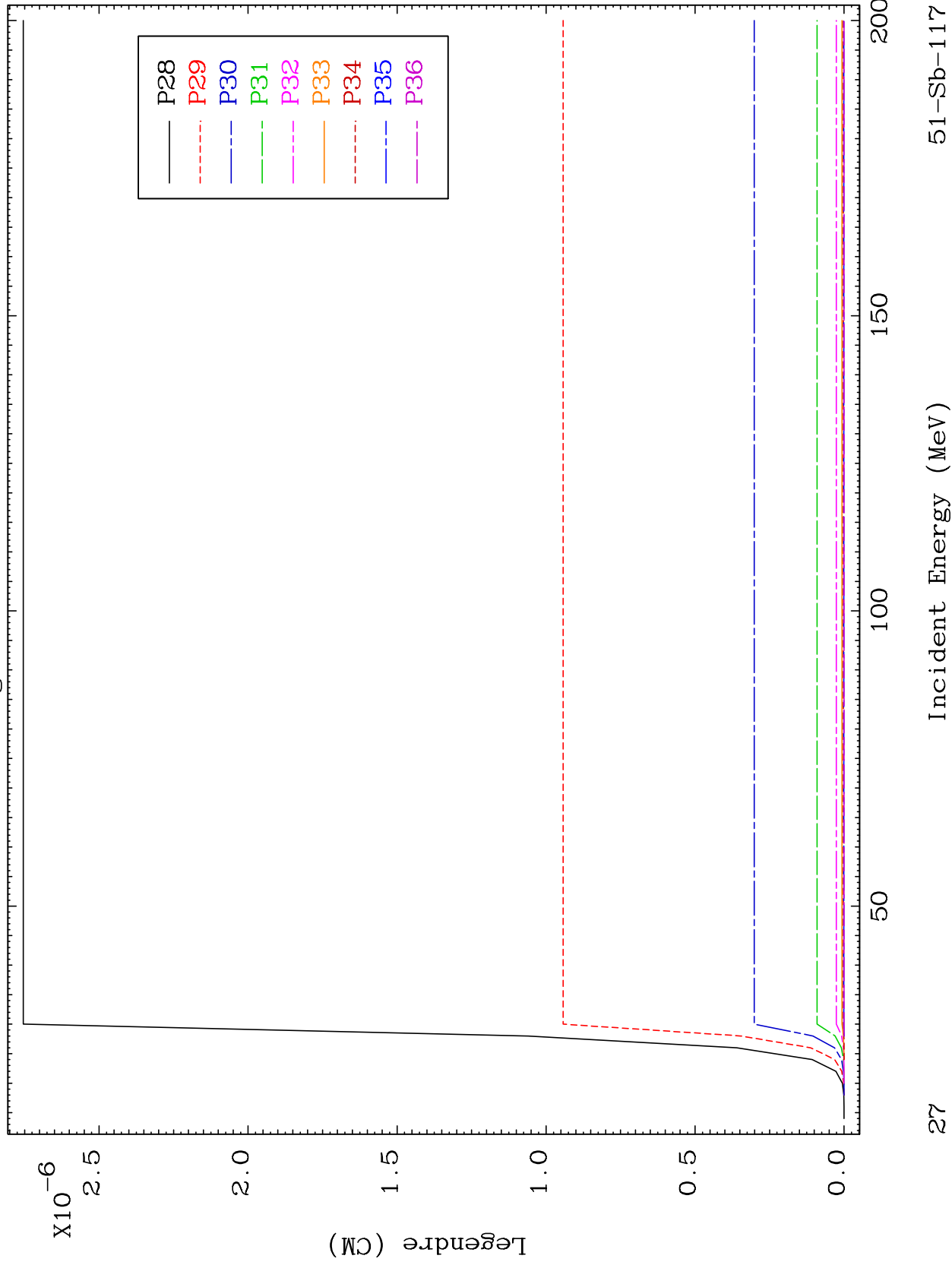
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117

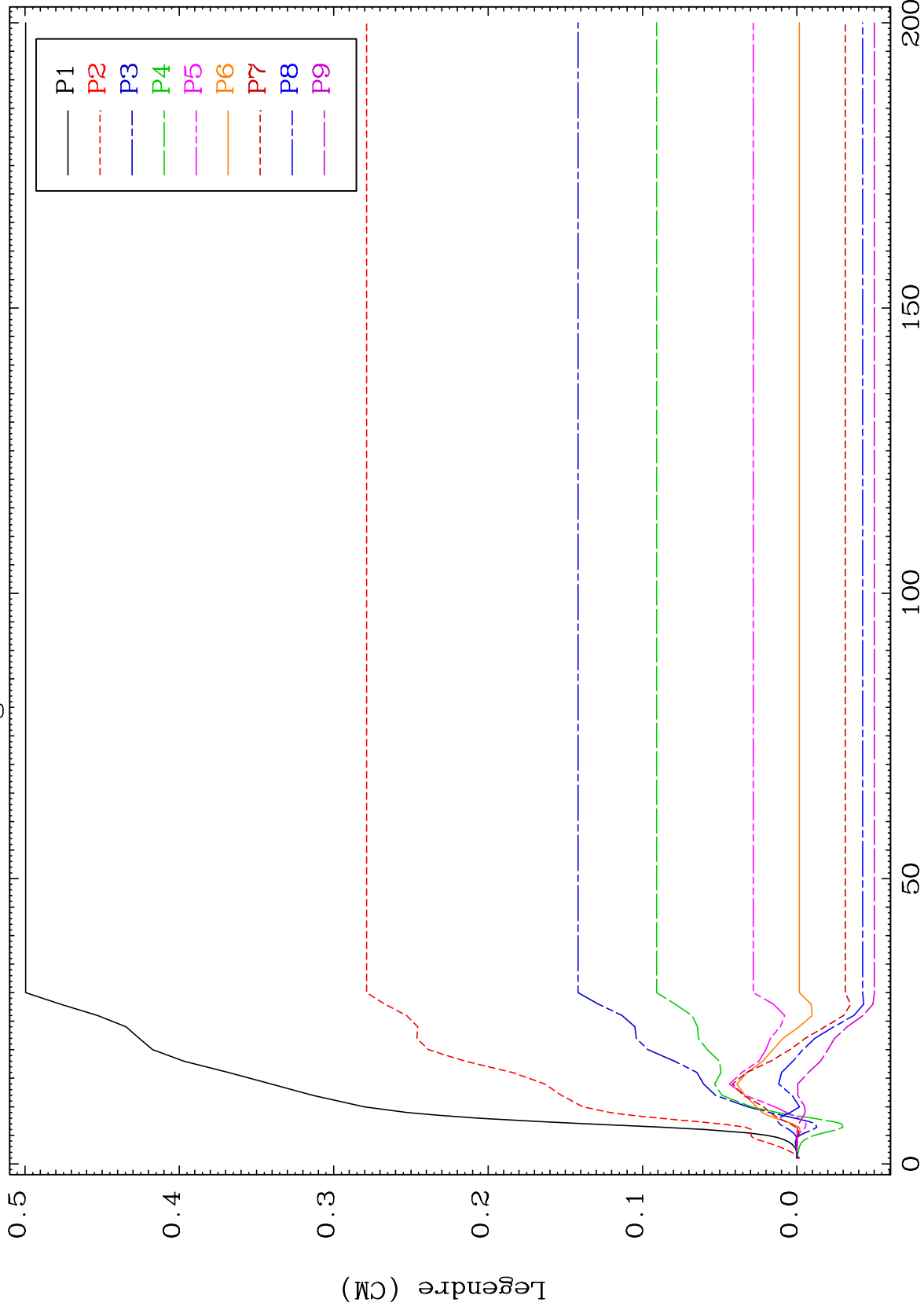


MAT 5113

MT= 53 (n,n') Level

51-Sb-117

Legendre Coefficients



28

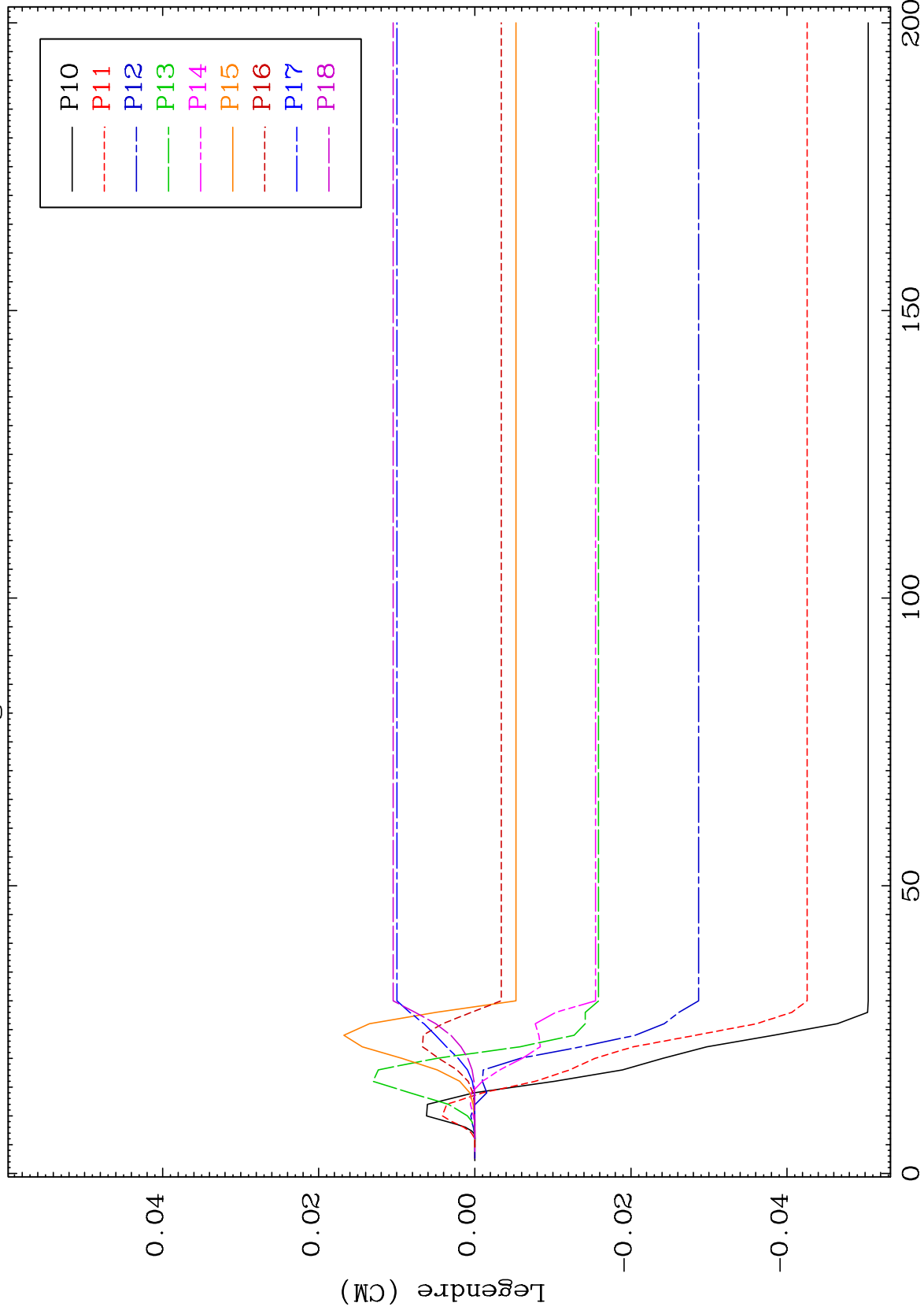
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



29

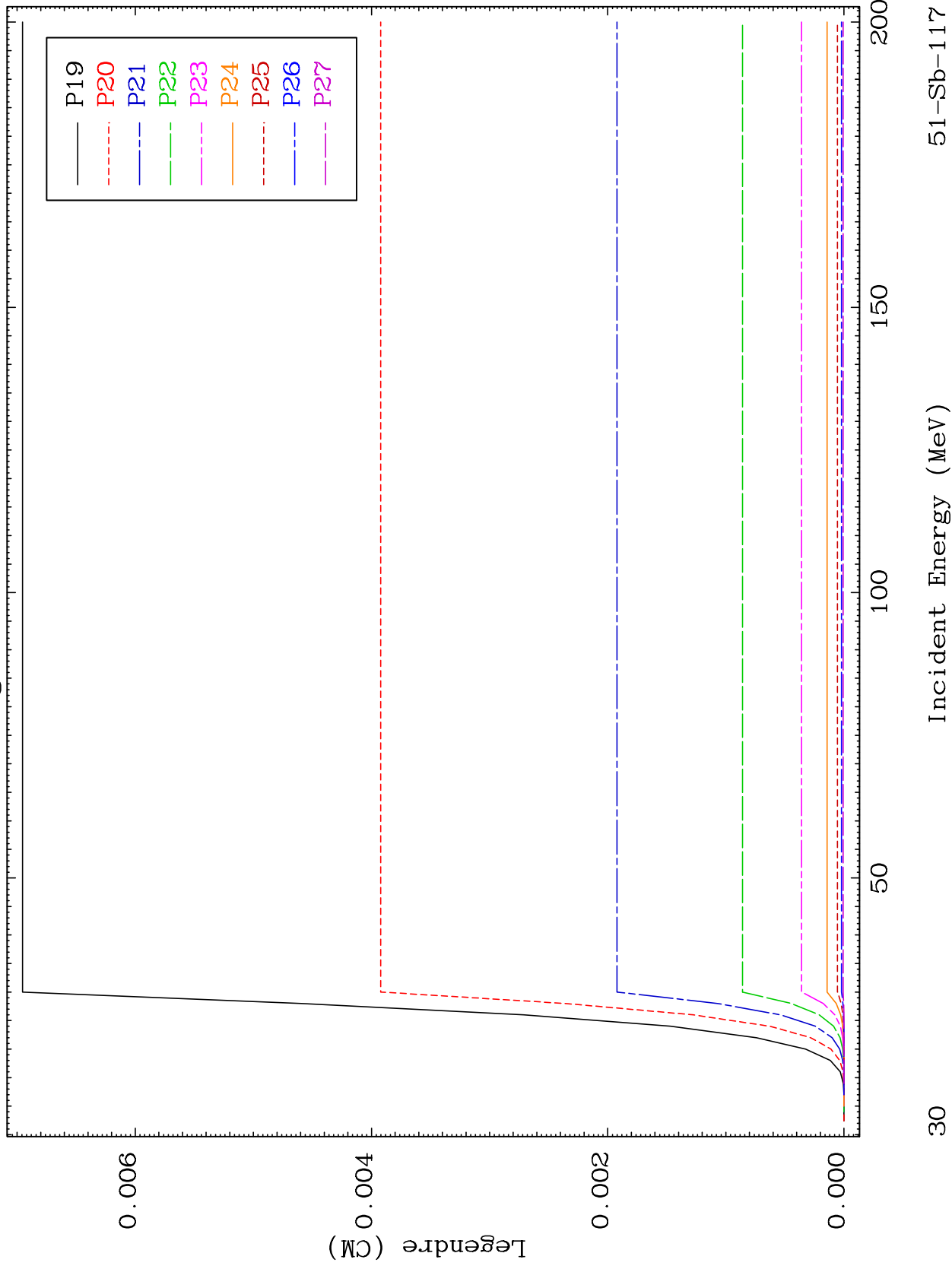
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

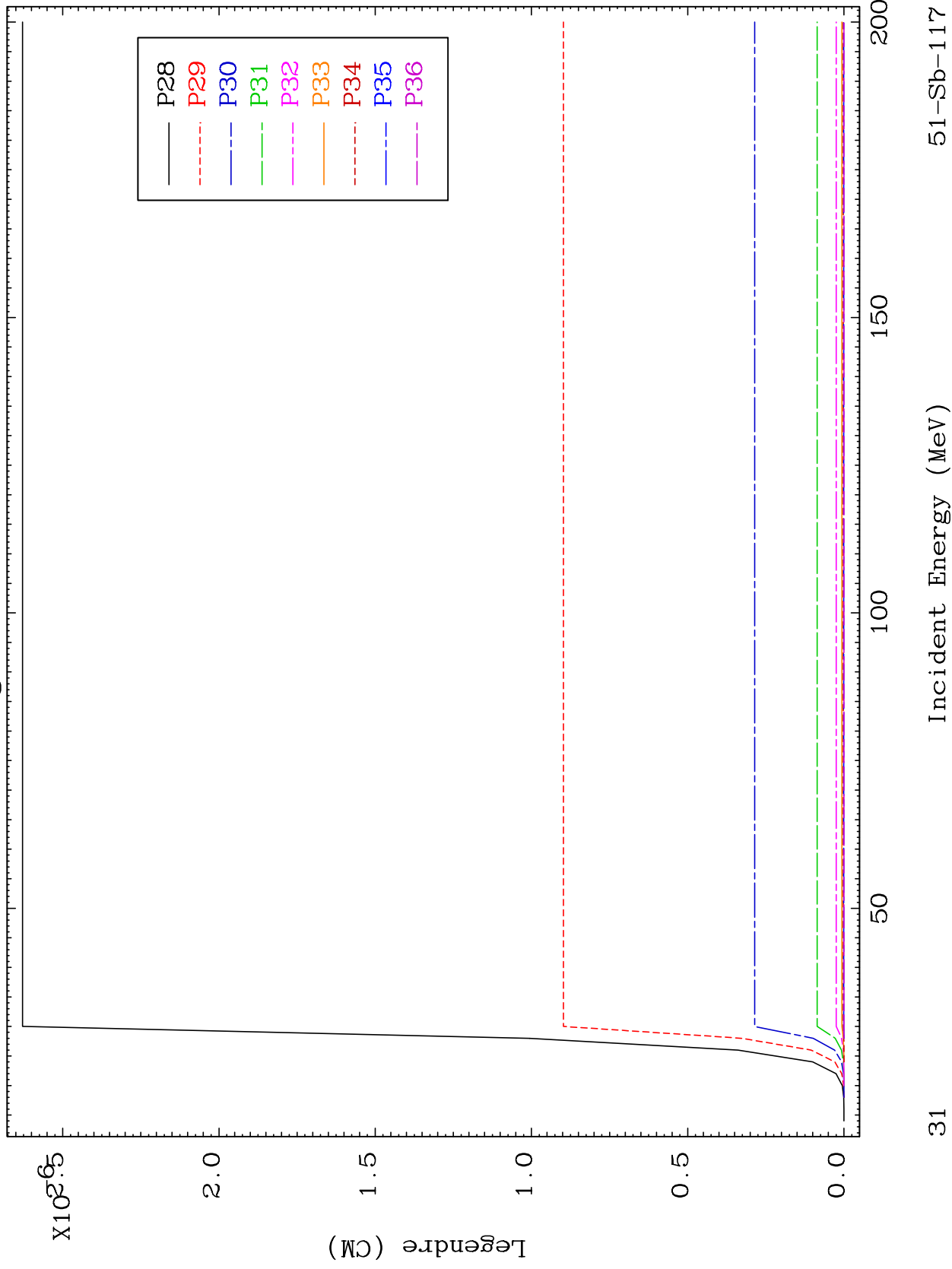
Incident Energy (MeV)

30

MAT 5113

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

51-Sb-117



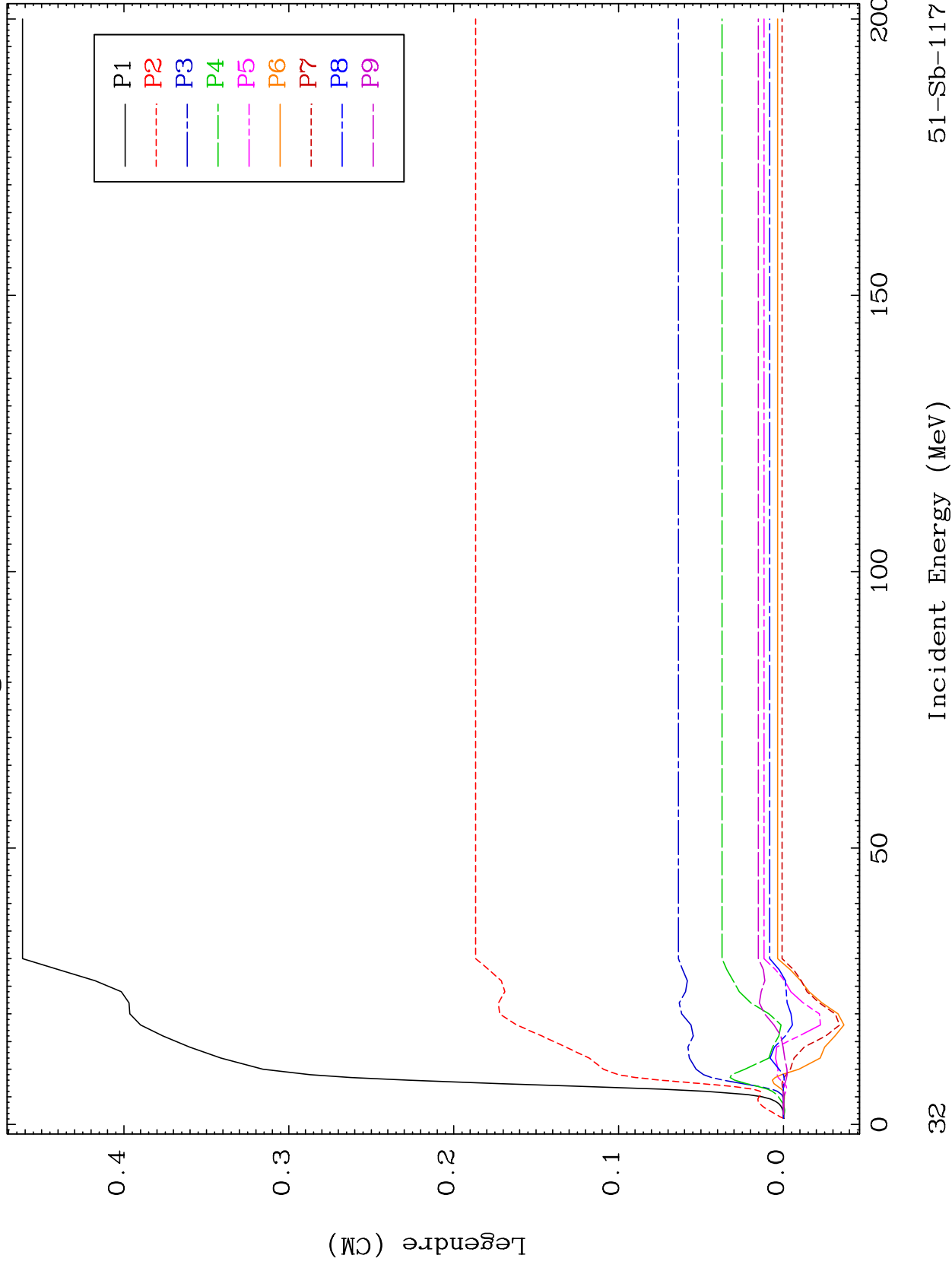
31



MAT 5113

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

51-Sb-117



32

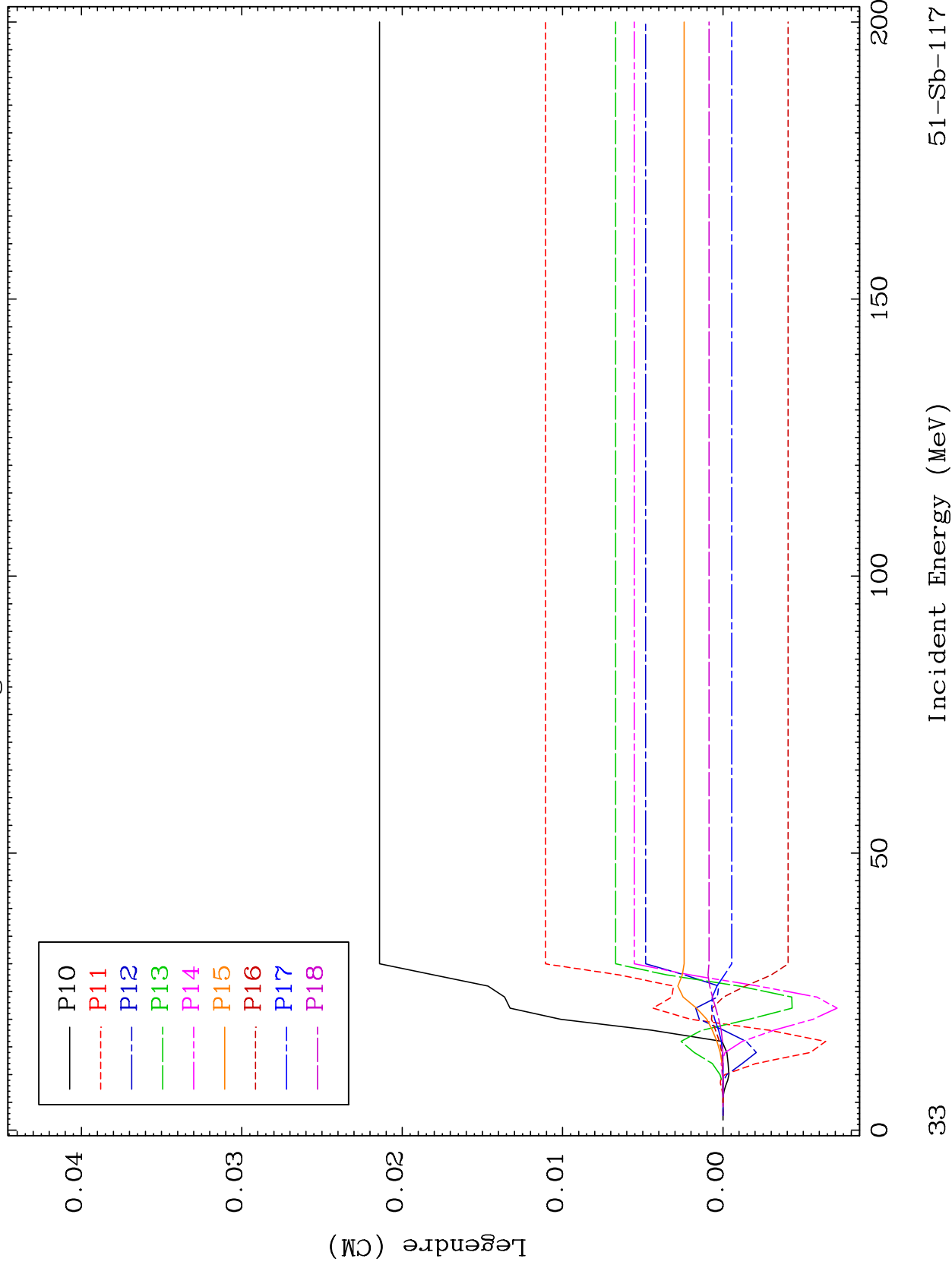
Incident Energy (MeV)

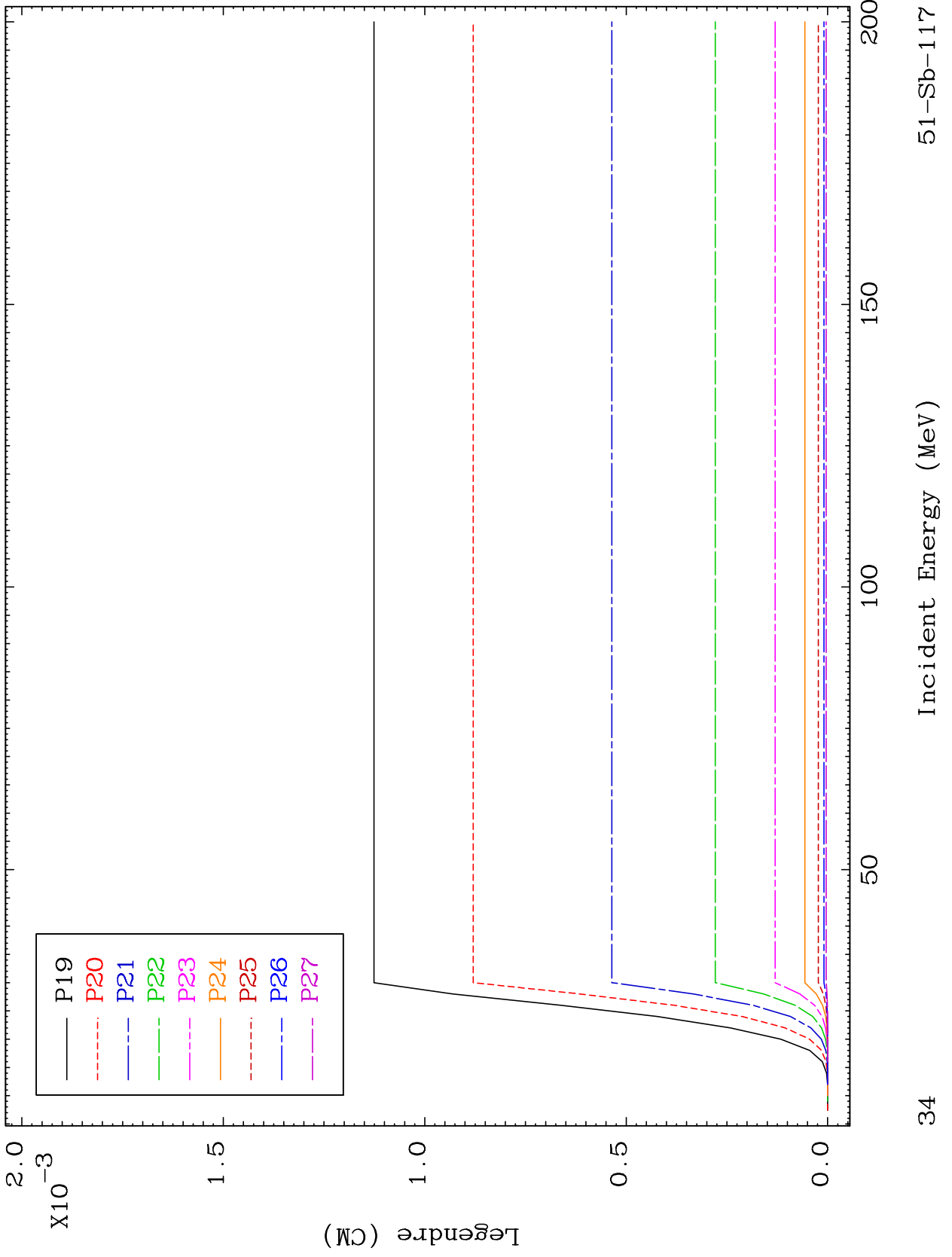
51-Sb-117

MAT 5113

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

51-Sb-117

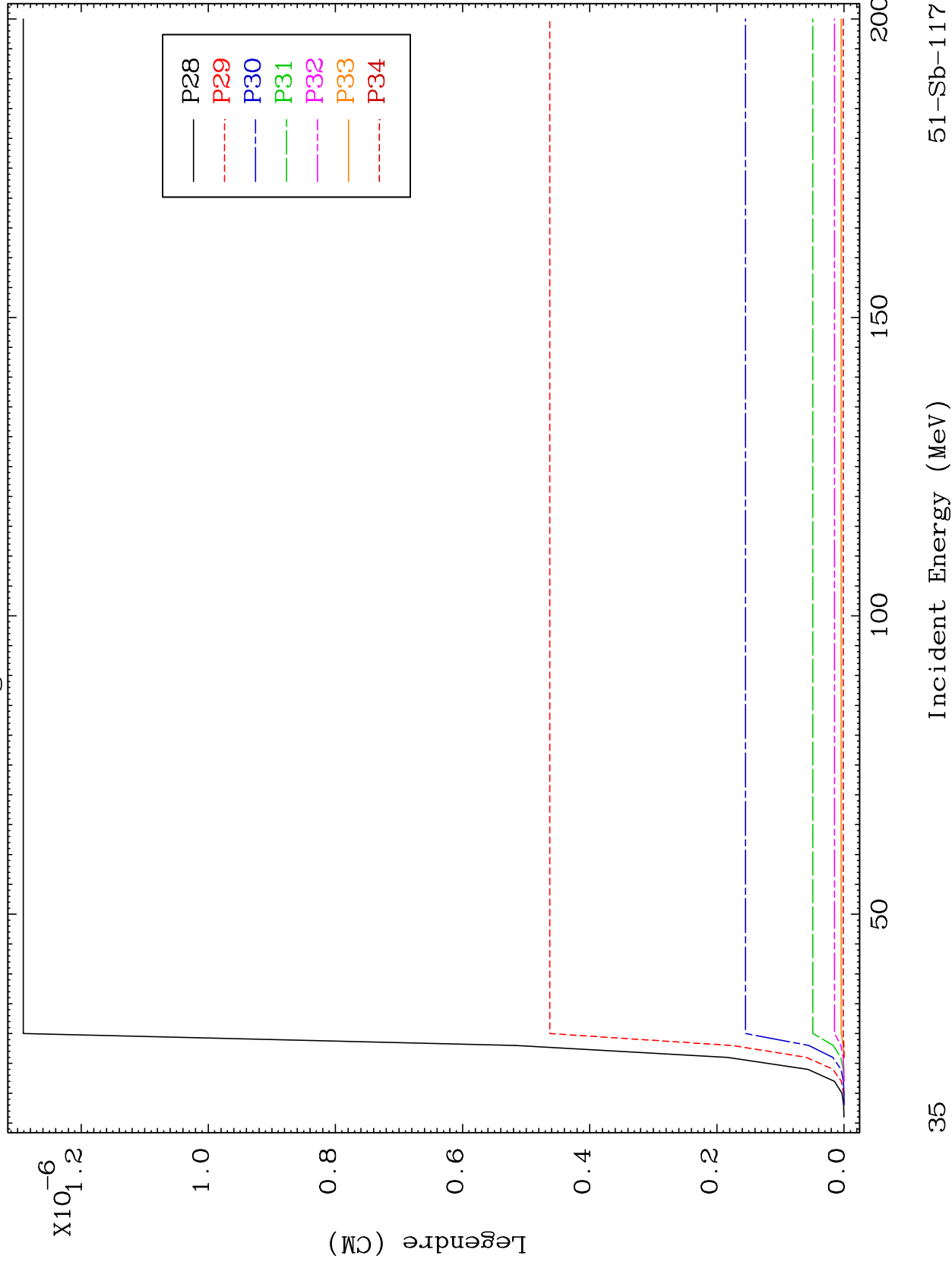




MAT 5113

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

51-Sb-117



35

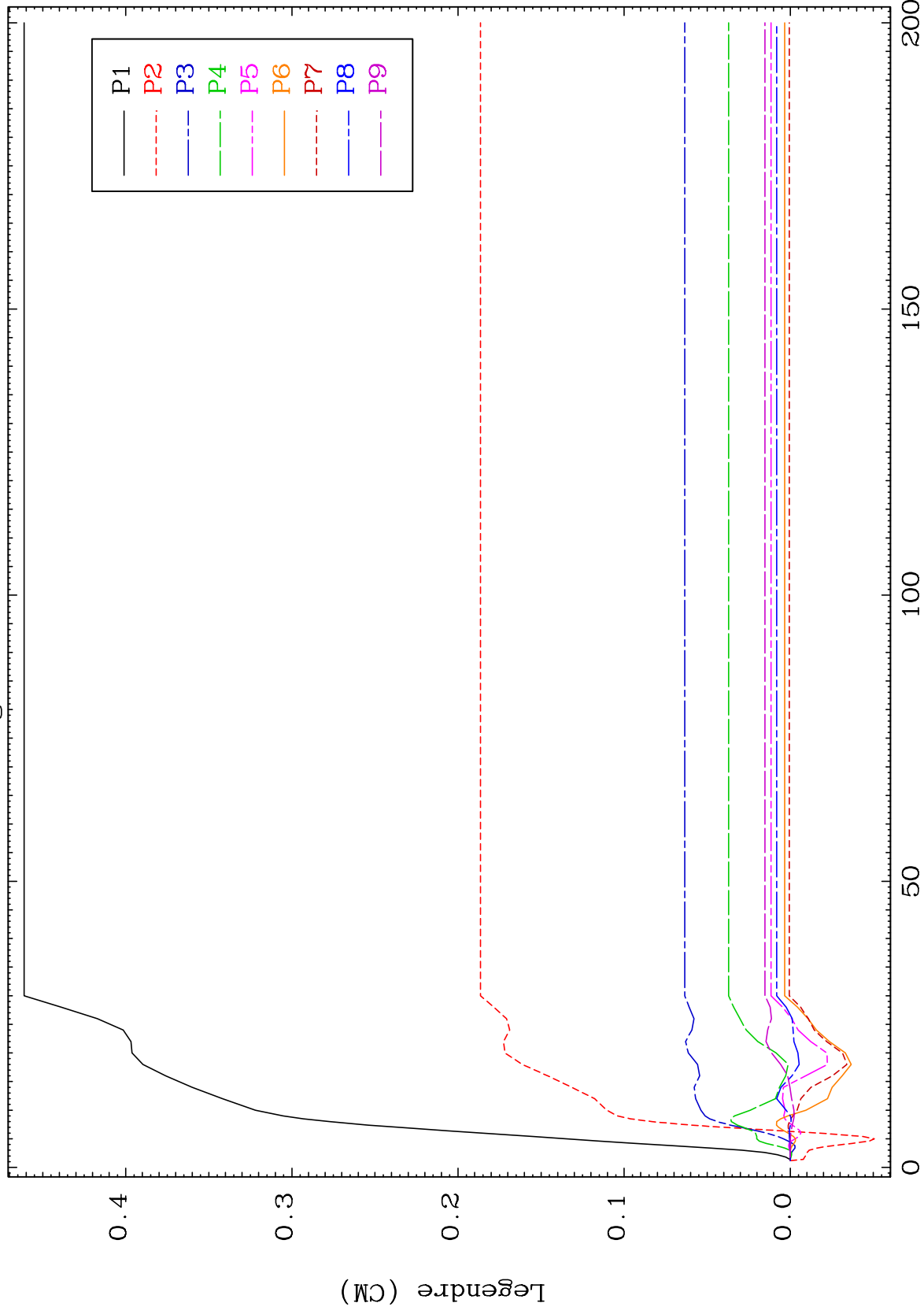
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



36

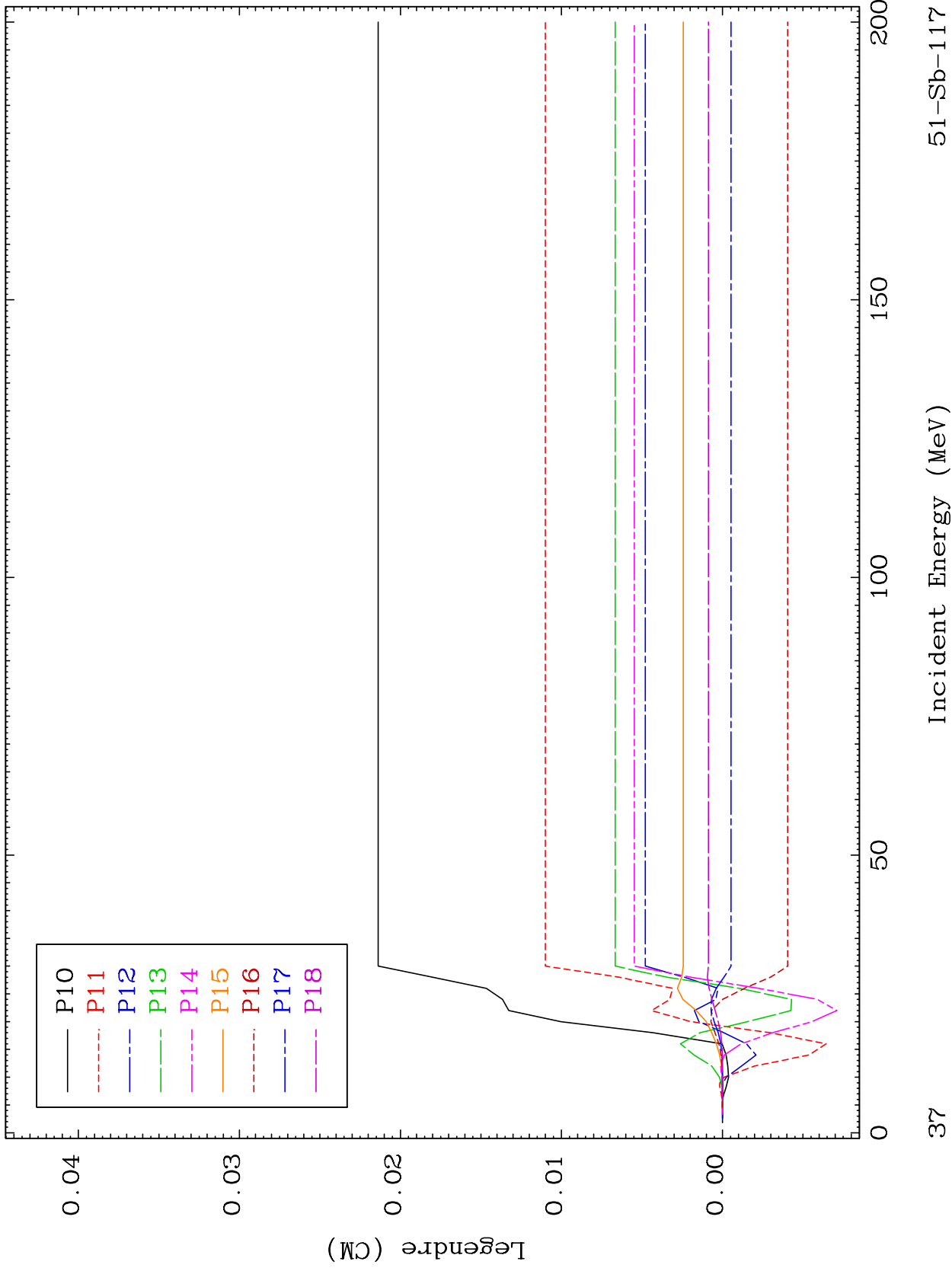
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

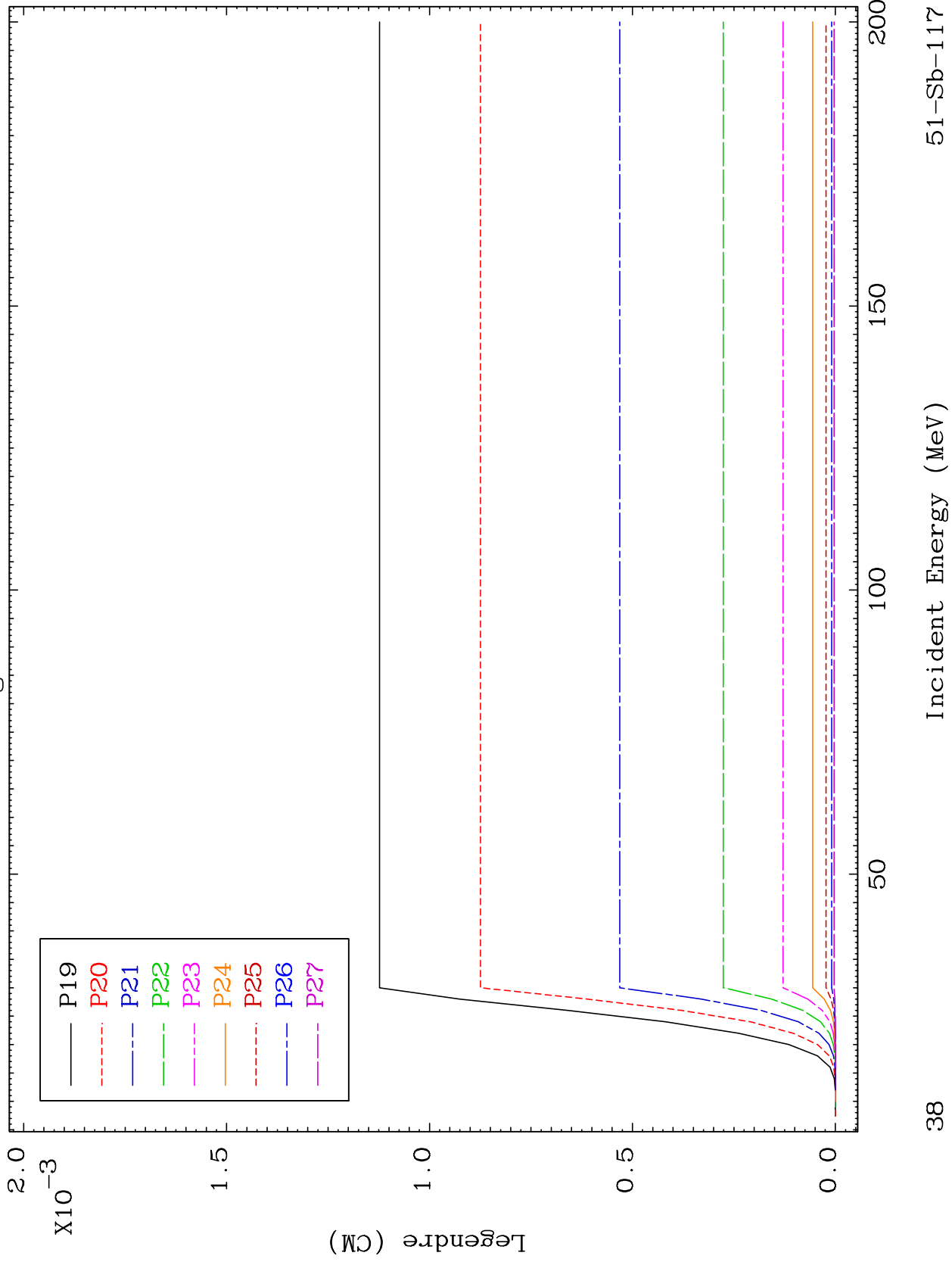
Incident Energy (MeV)

37

MAT 5113

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

51-Sb-117



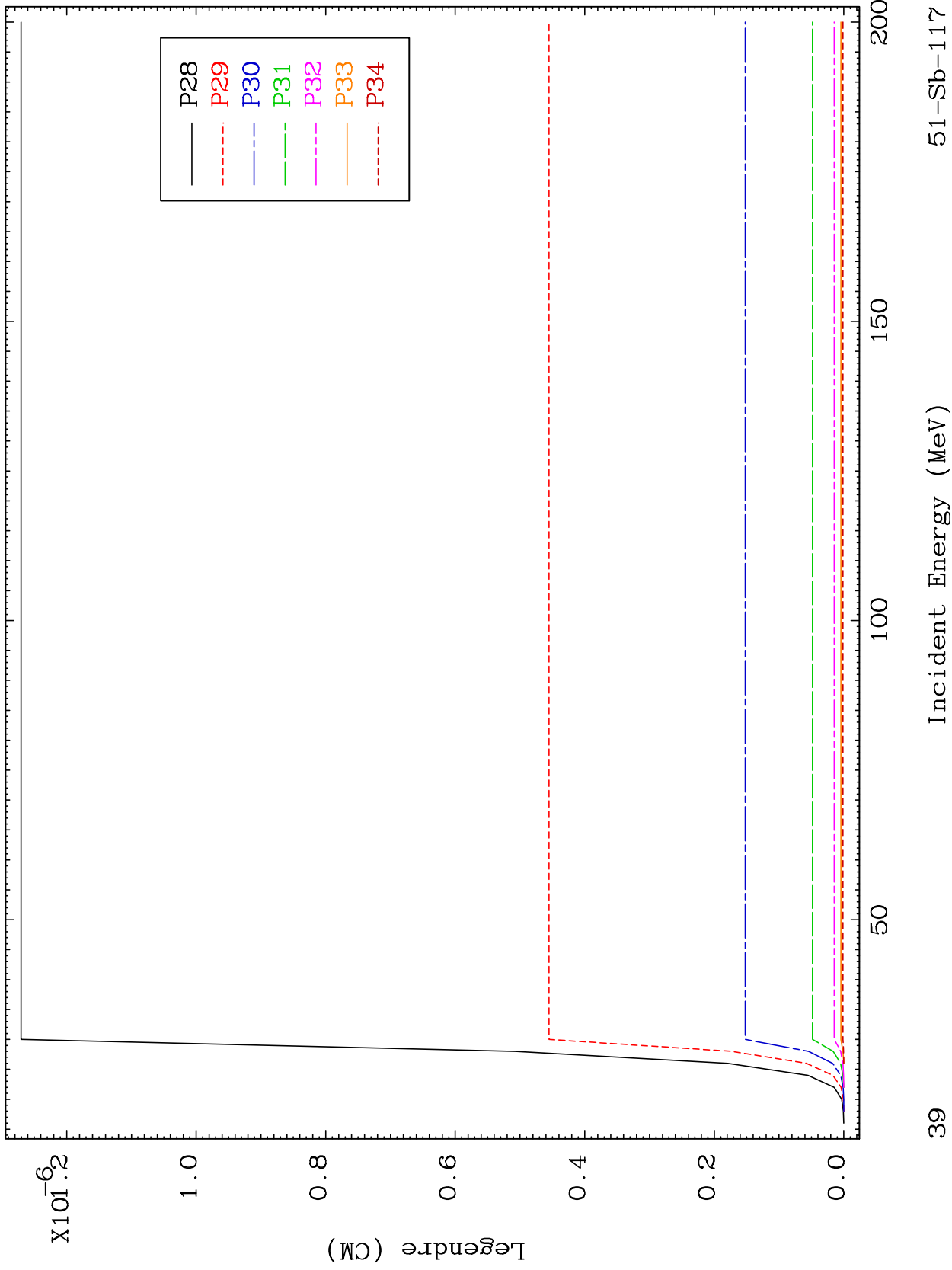
38

51-Sb-117

MAT 5113

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

51-Sb-117

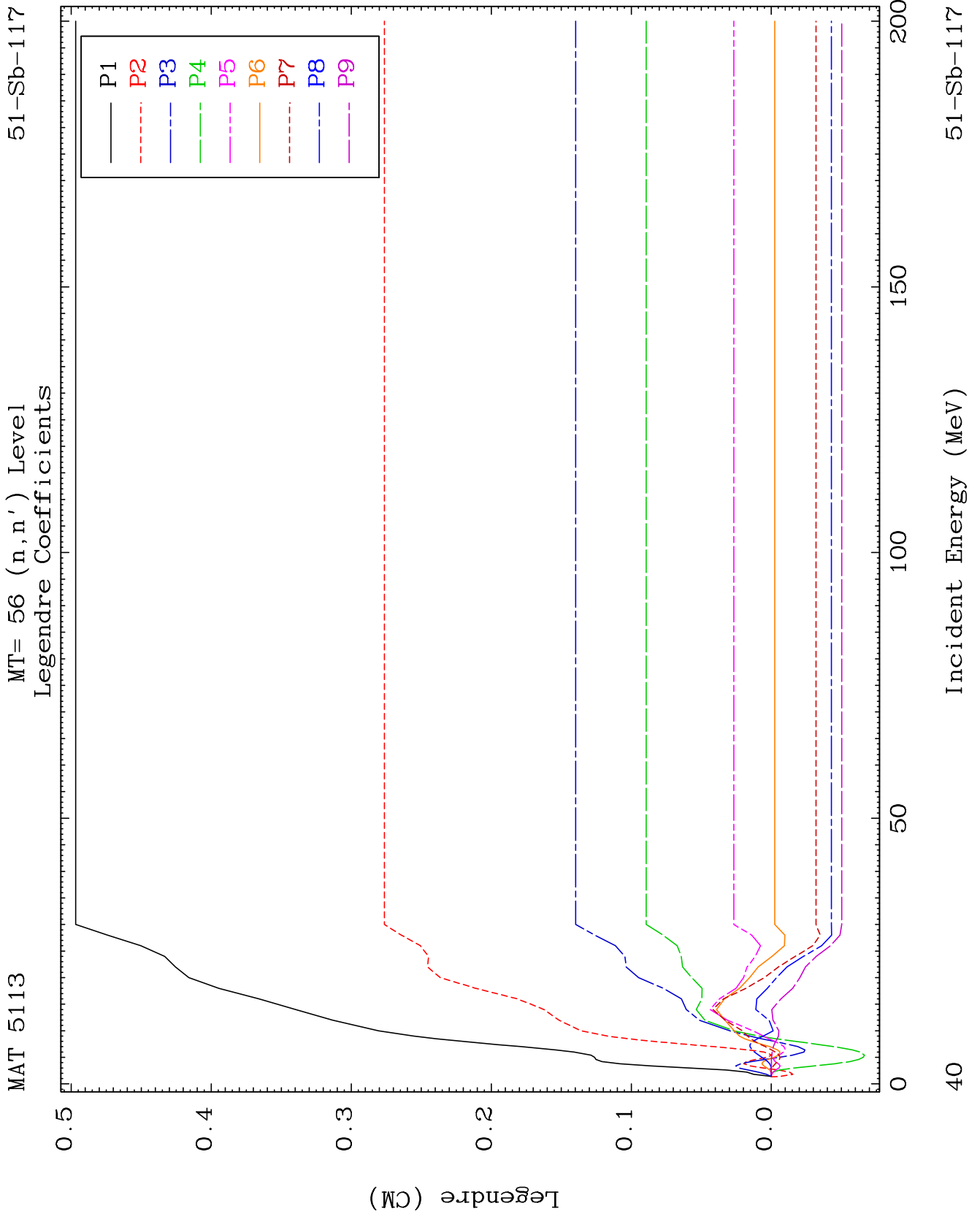


39

Incident Energy (MeV)

51-Sb-117

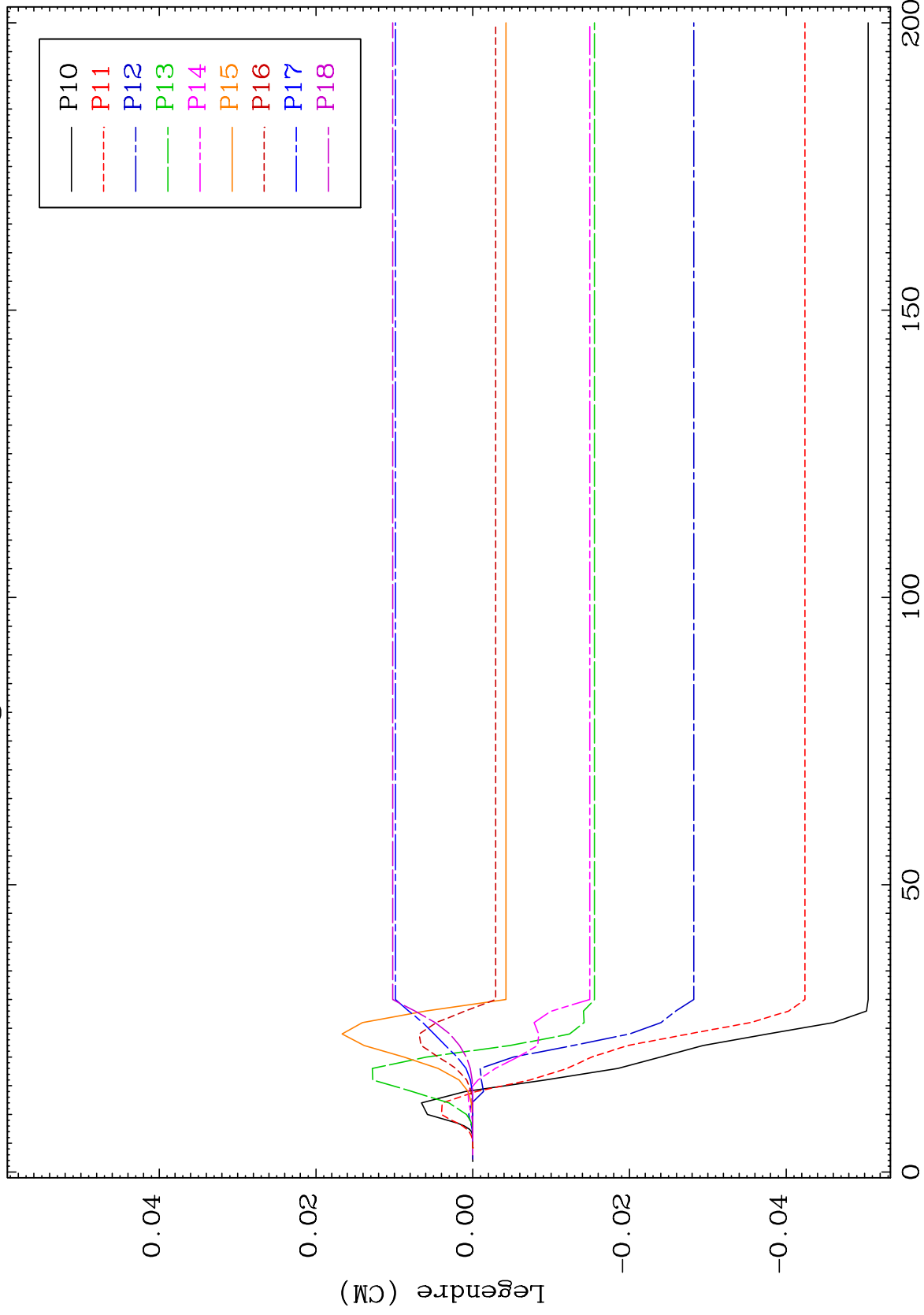




MAT 5113

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

51-Sb-117



41

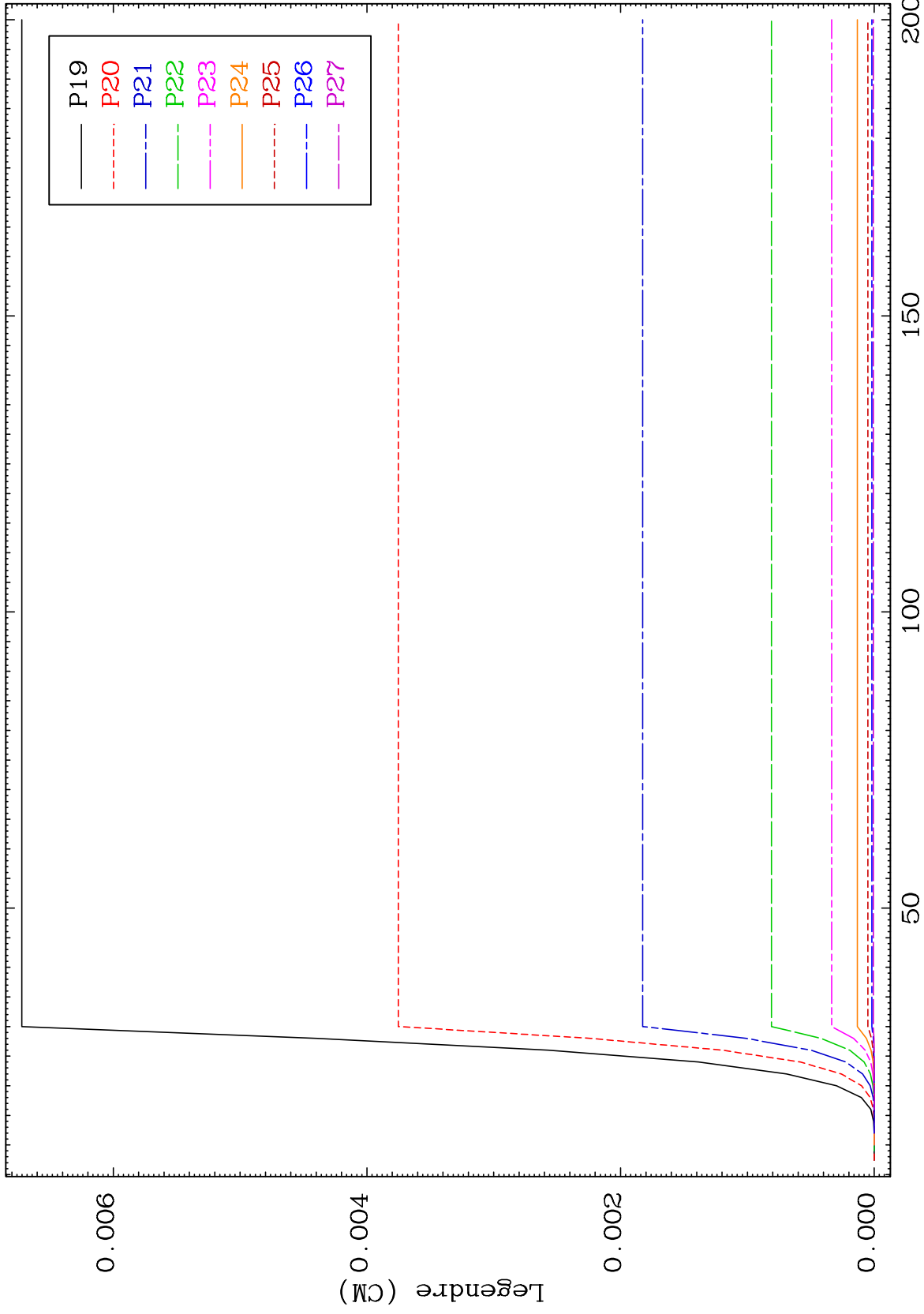
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



42

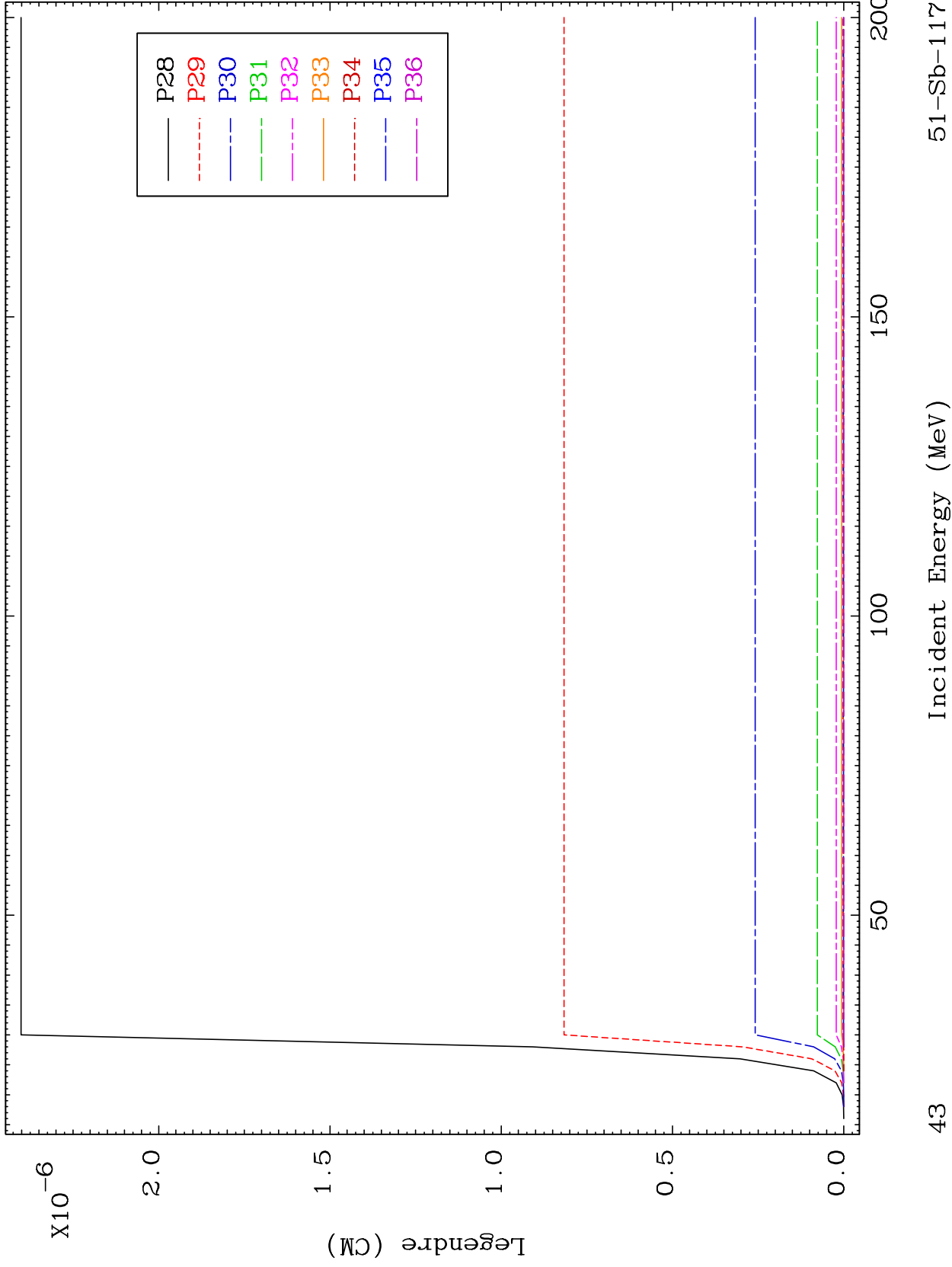
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

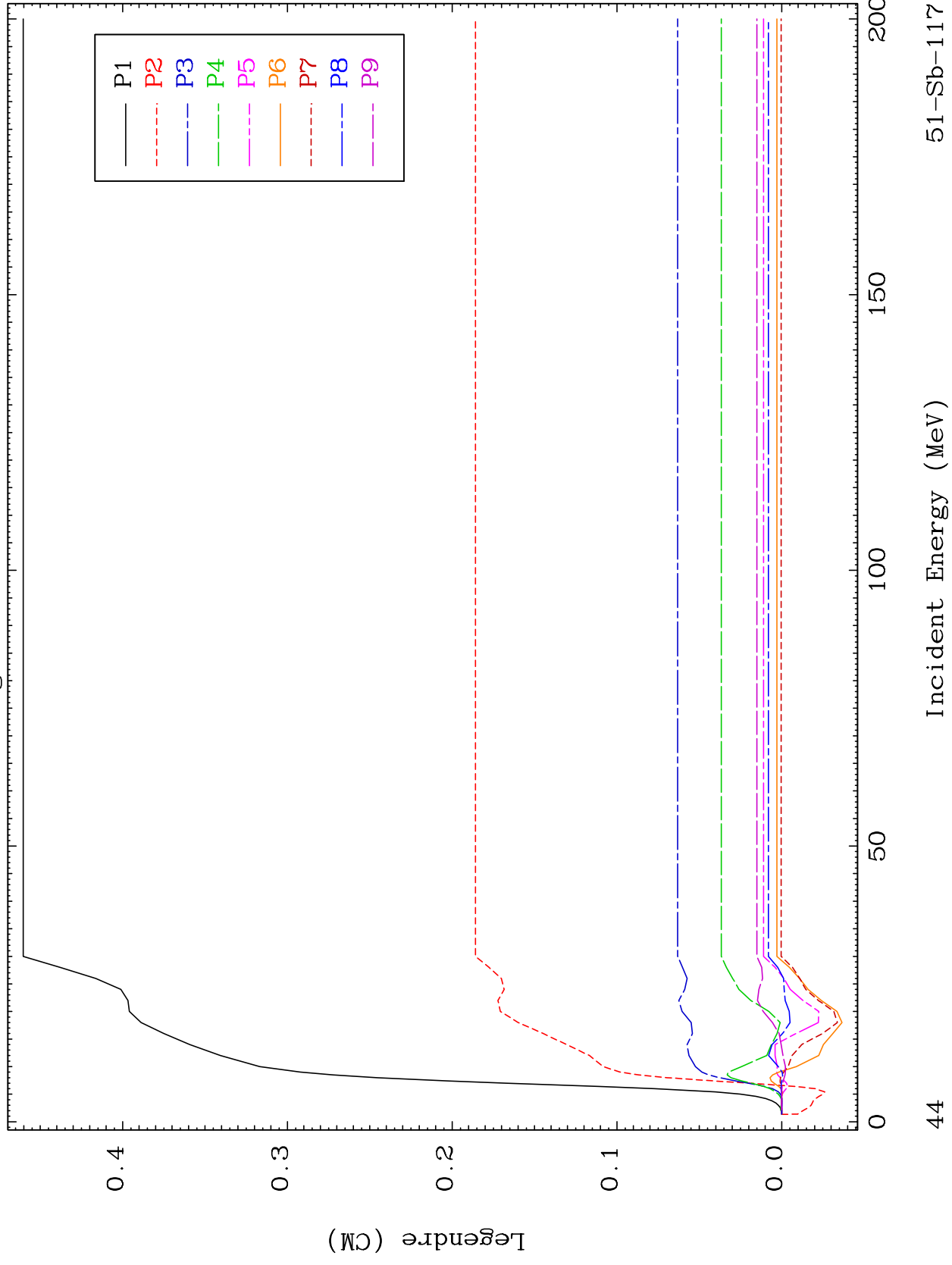
51-Sb-117



MAT 5113

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

51-Sb-117



51-Sb-117

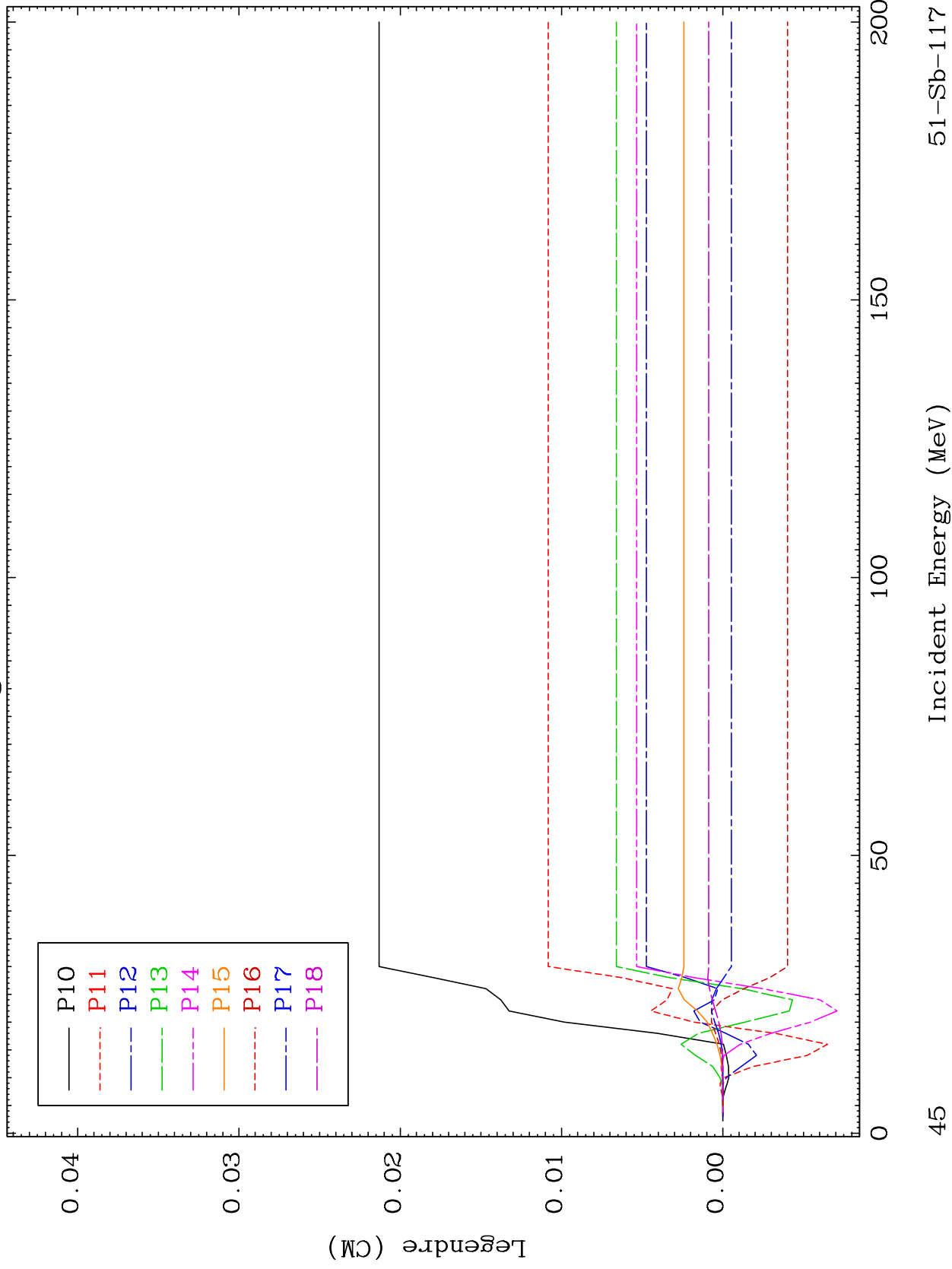
Incident Energy (MeV)

44

MAT 5113

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

51-Sb-117



51-Sb-117

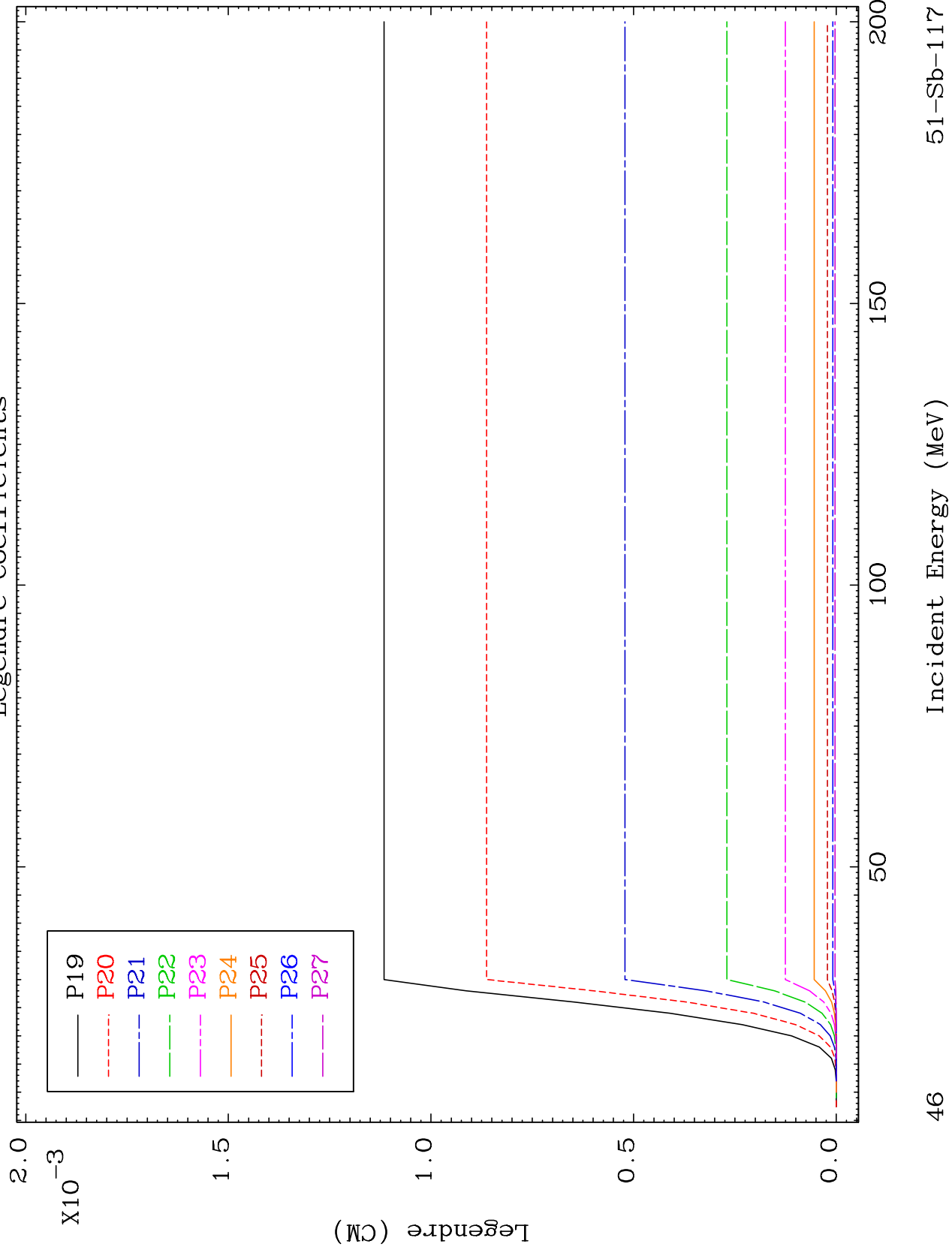
Incident Energy (MeV)

45

MAT 5113

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

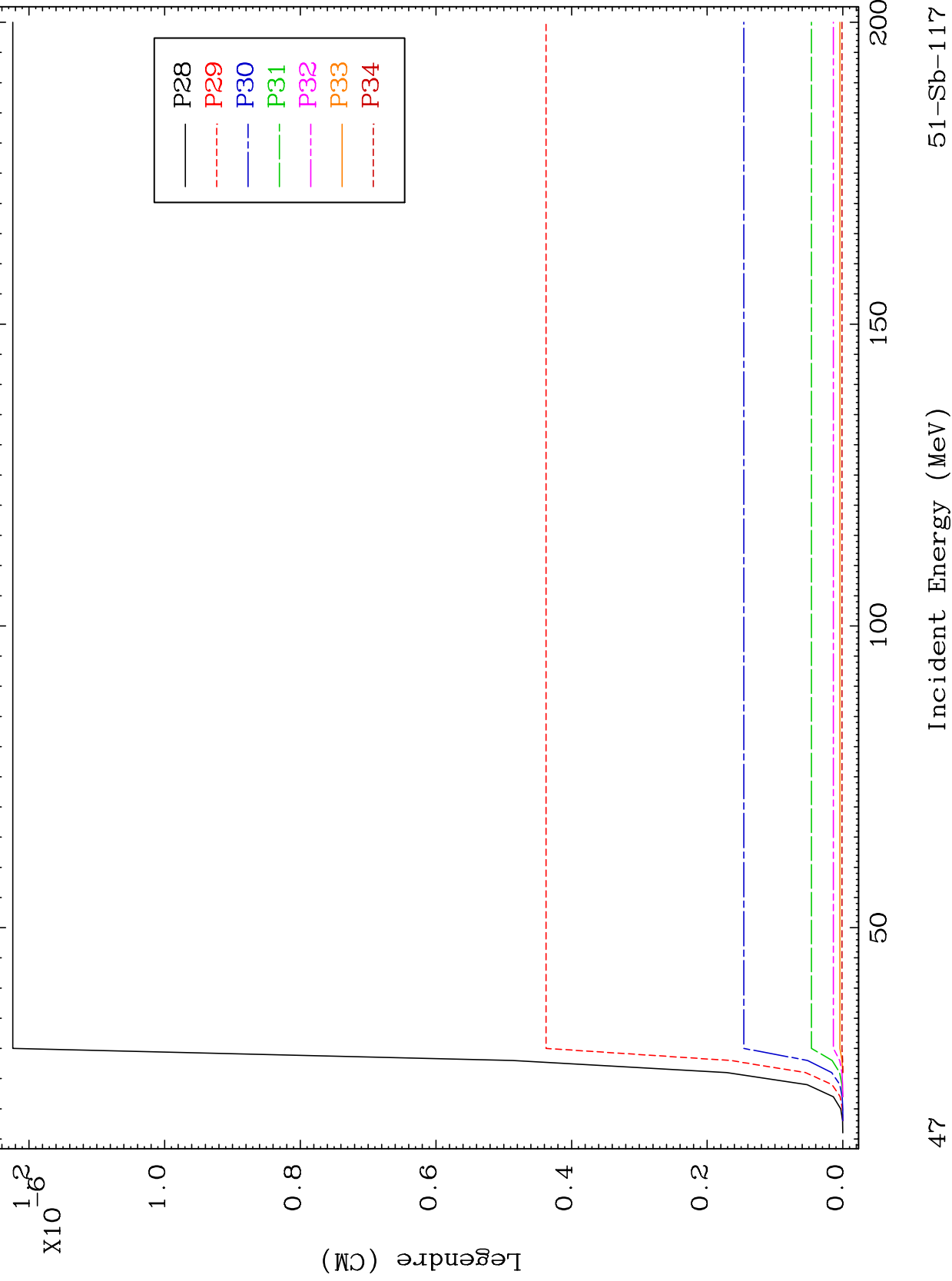
51-Sb-117



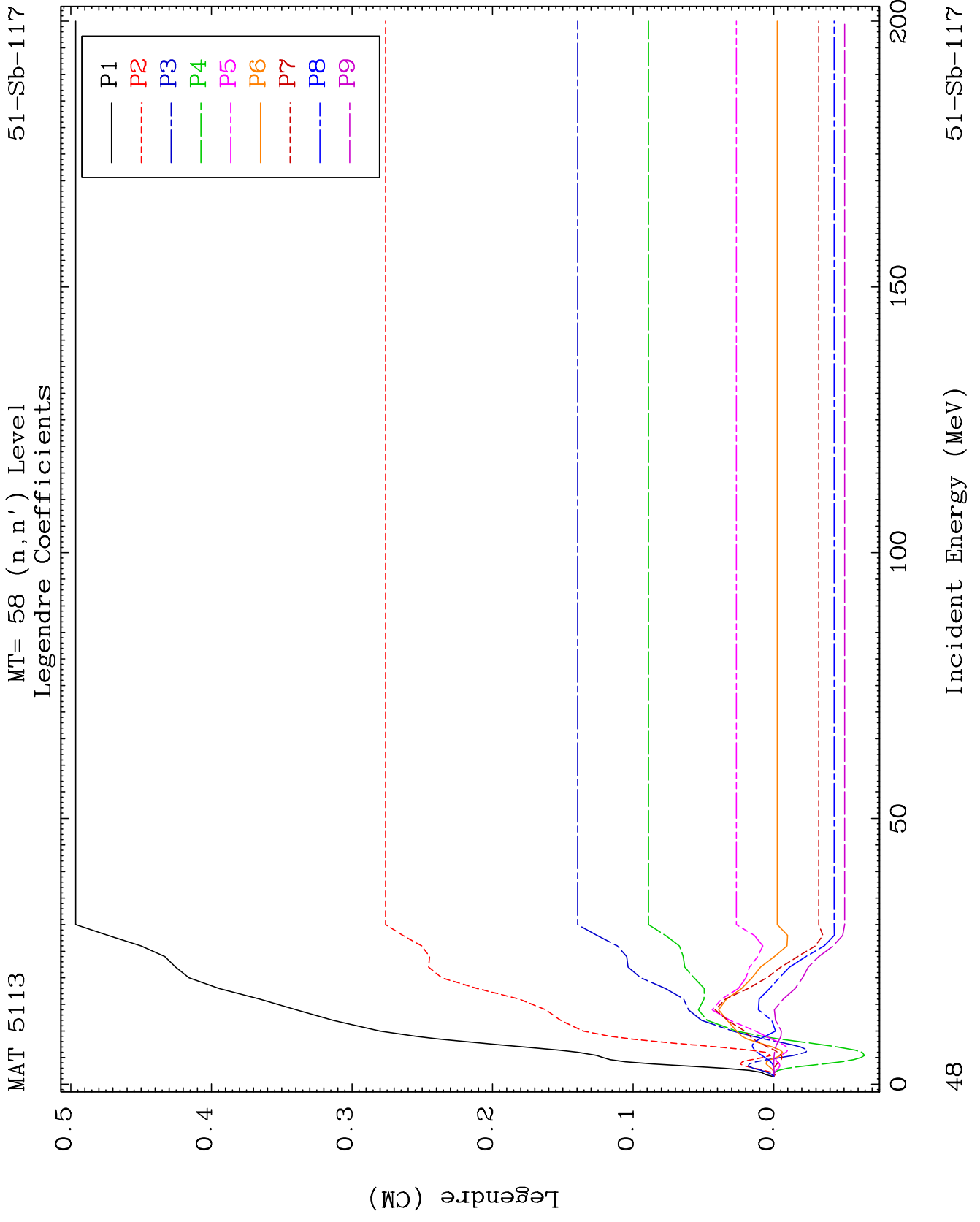
MAT 5113

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

51-Sb-117



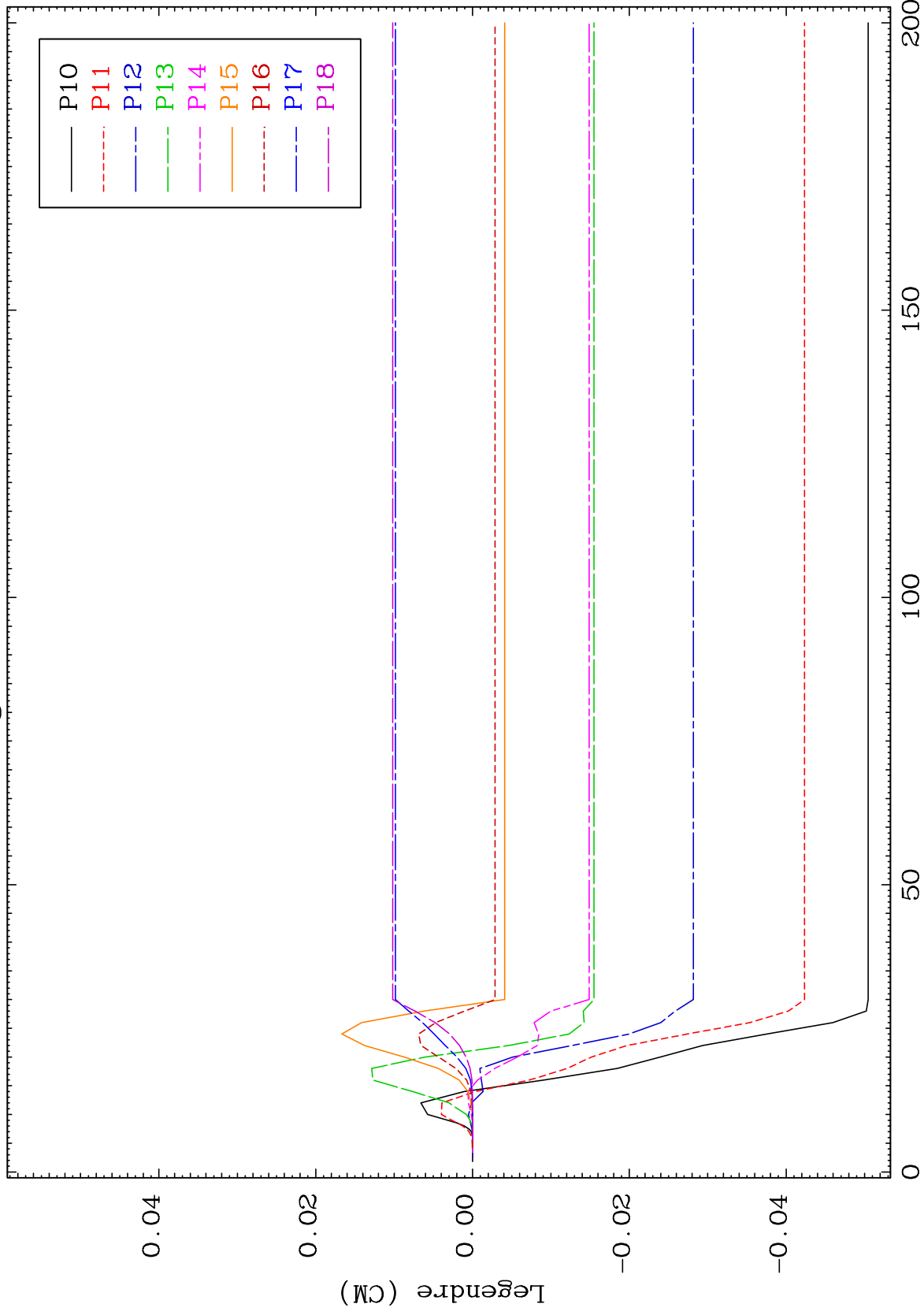




MAT 5113

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

51-Sb-117



49

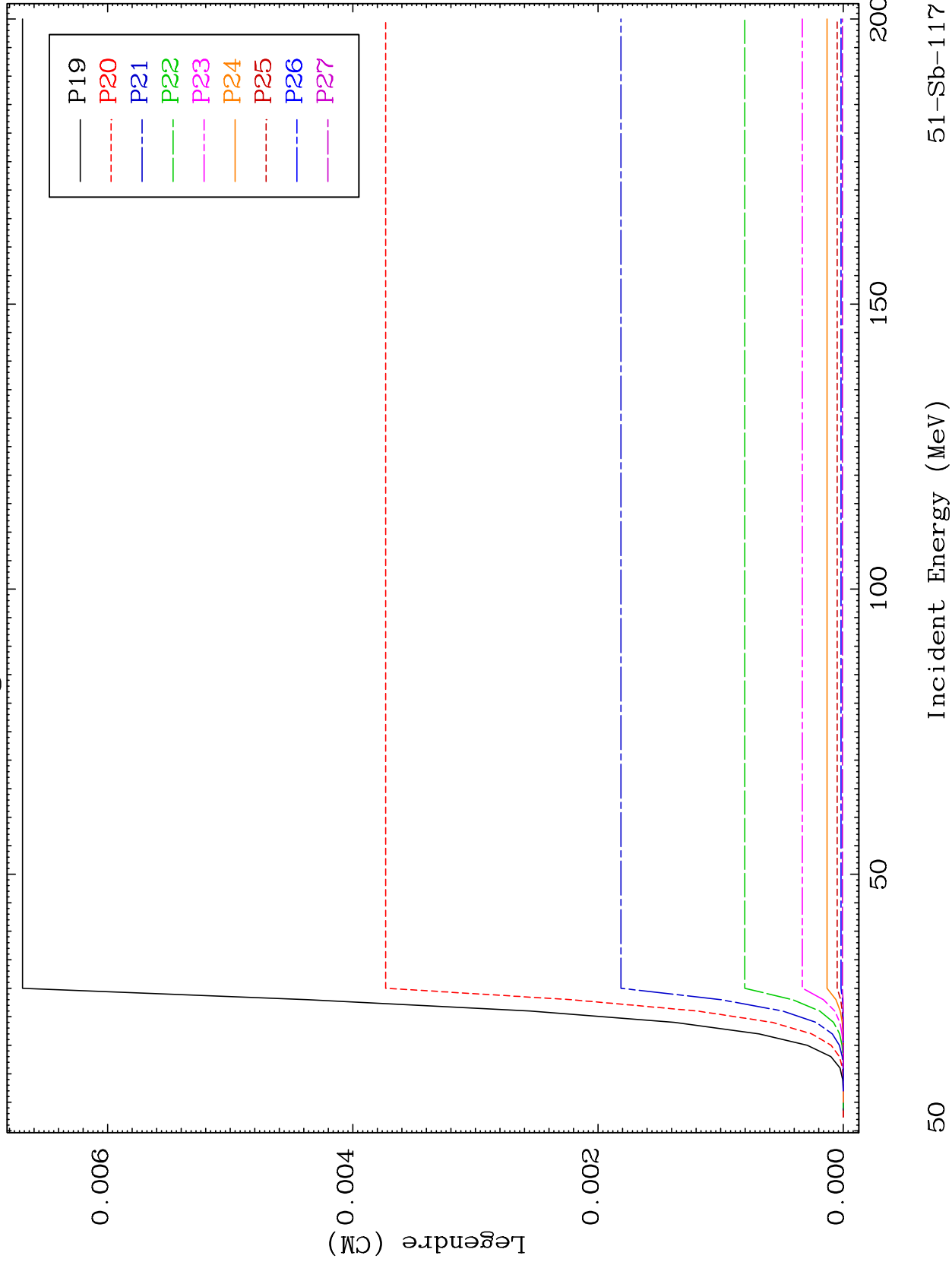
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

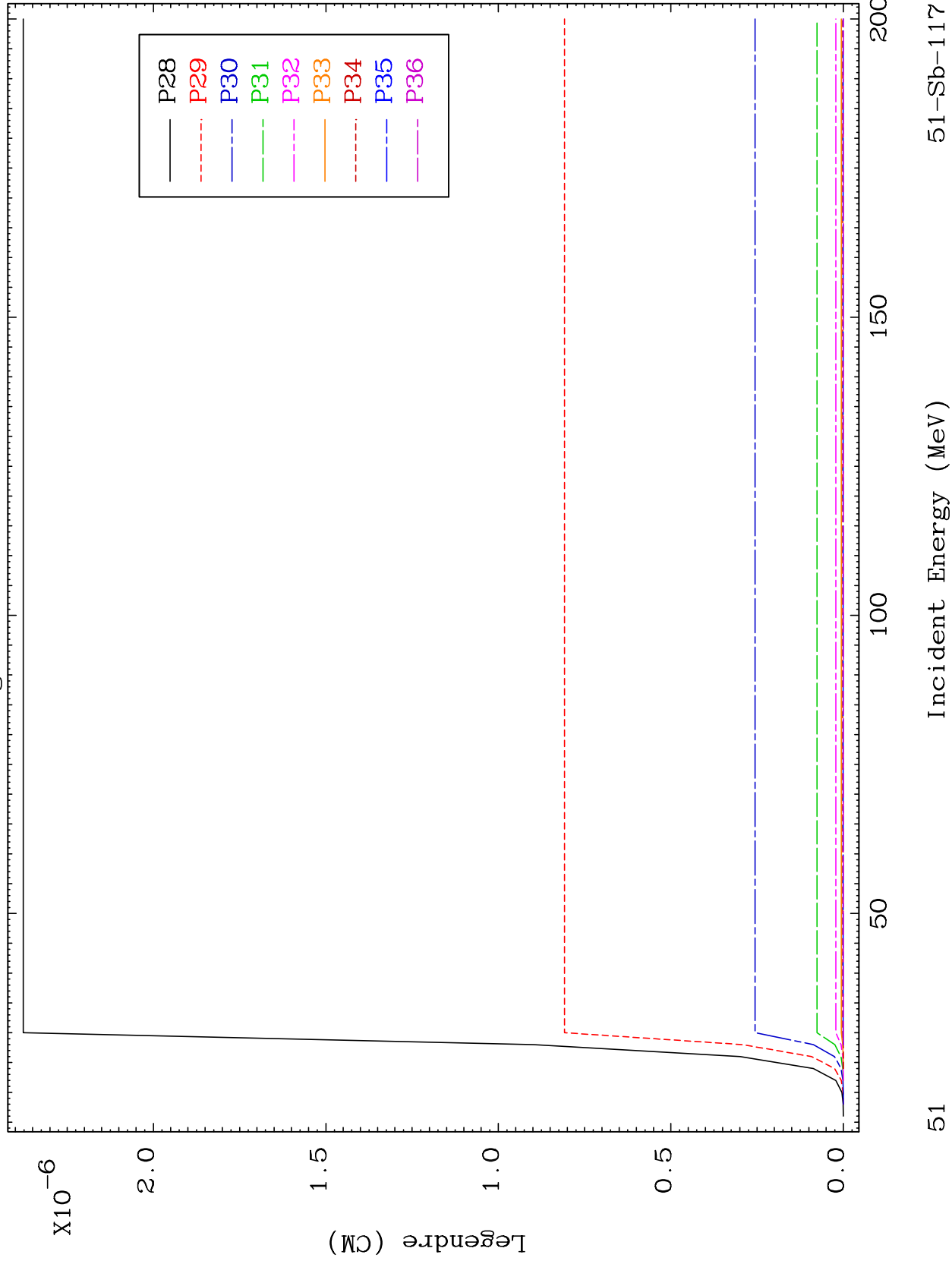
Incident Energy (MeV)

50

MAT 5113

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

51-Sb-117



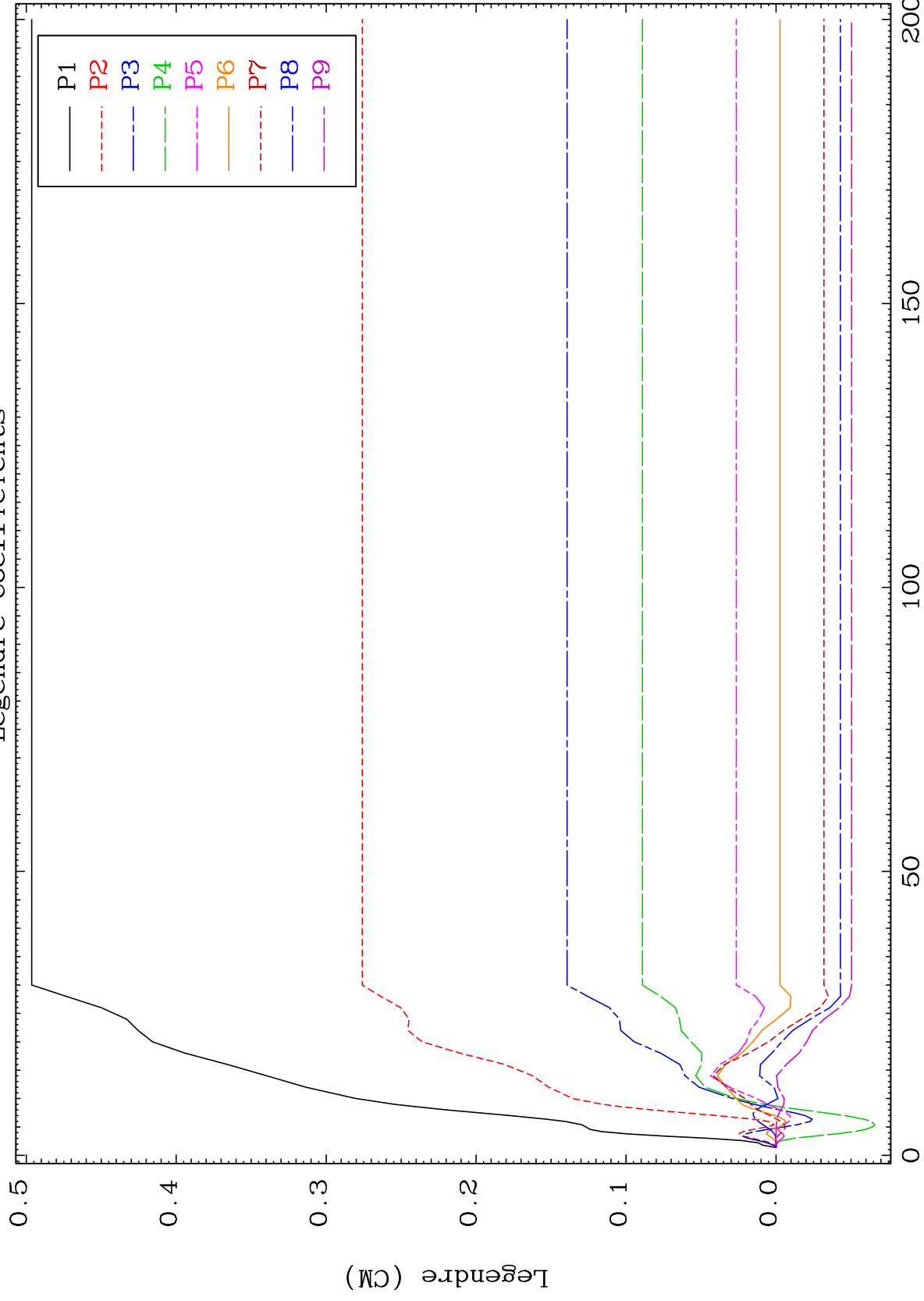
51

MAT 5113

MT= 59 (n,n') Level

51-Sb-117

Legendre Coefficients



52

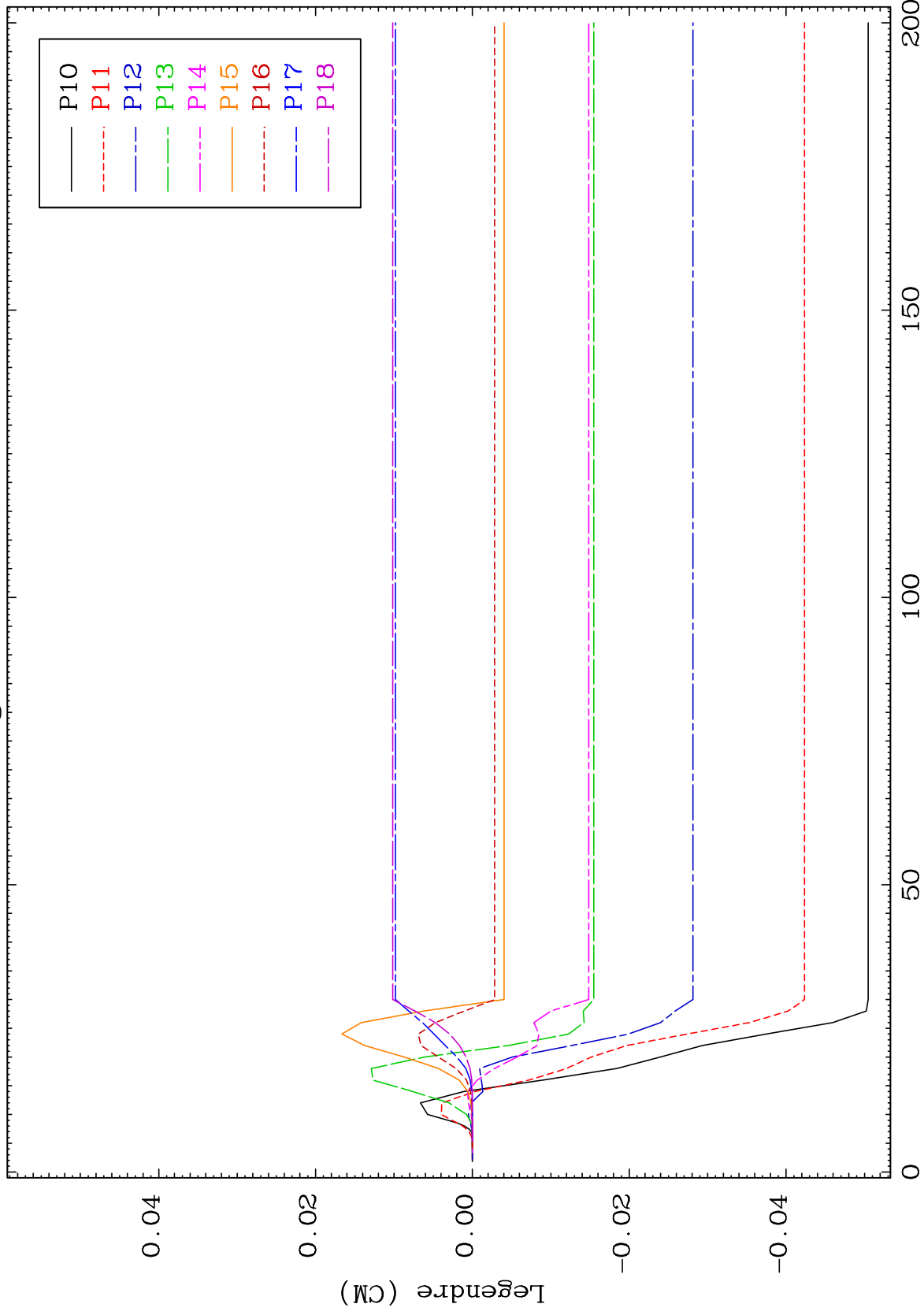
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



53

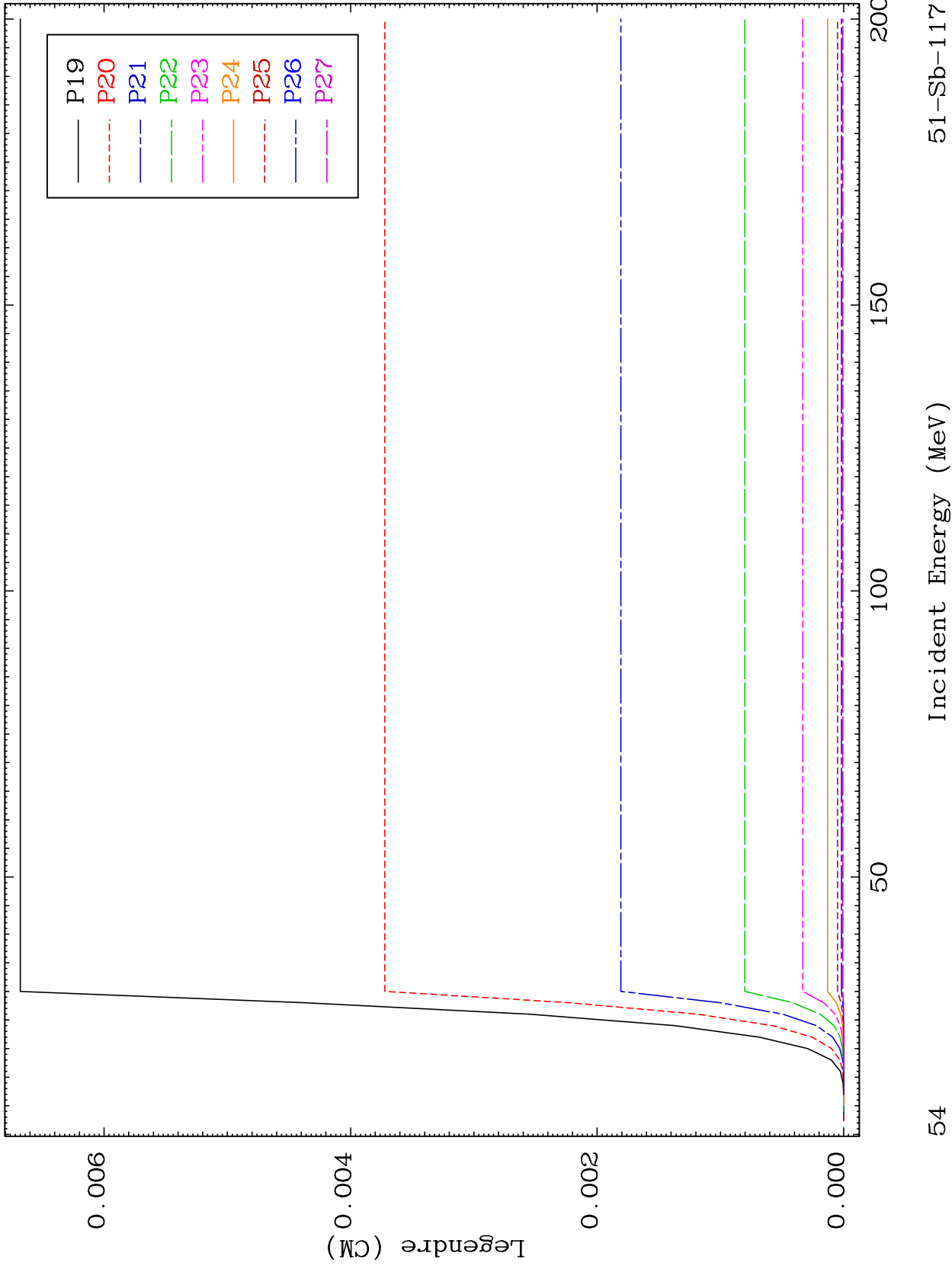
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



54

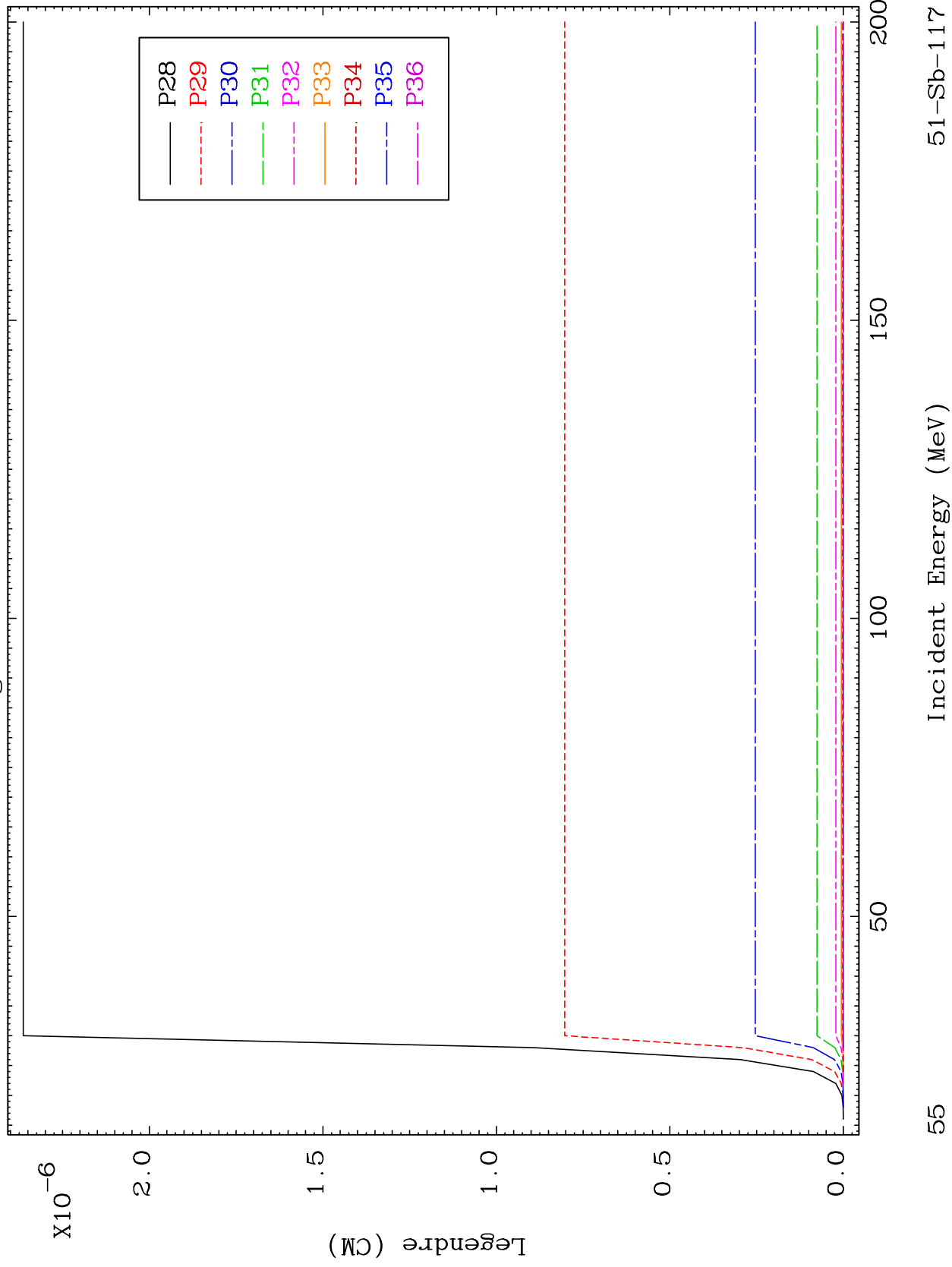
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



55

Incident Energy (MeV)

51-Sb-117

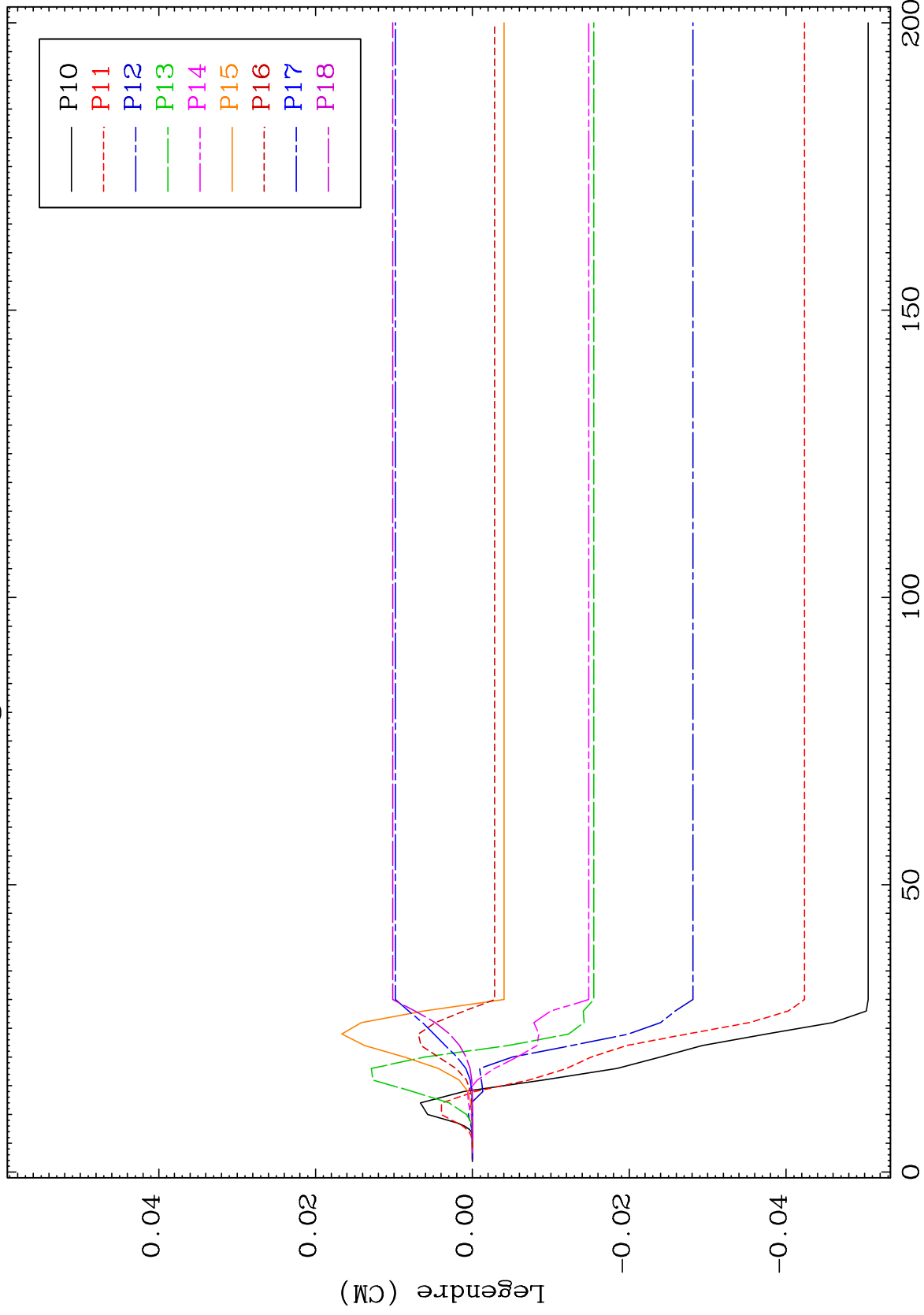




MAT 5113

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

51-Sb-117



57

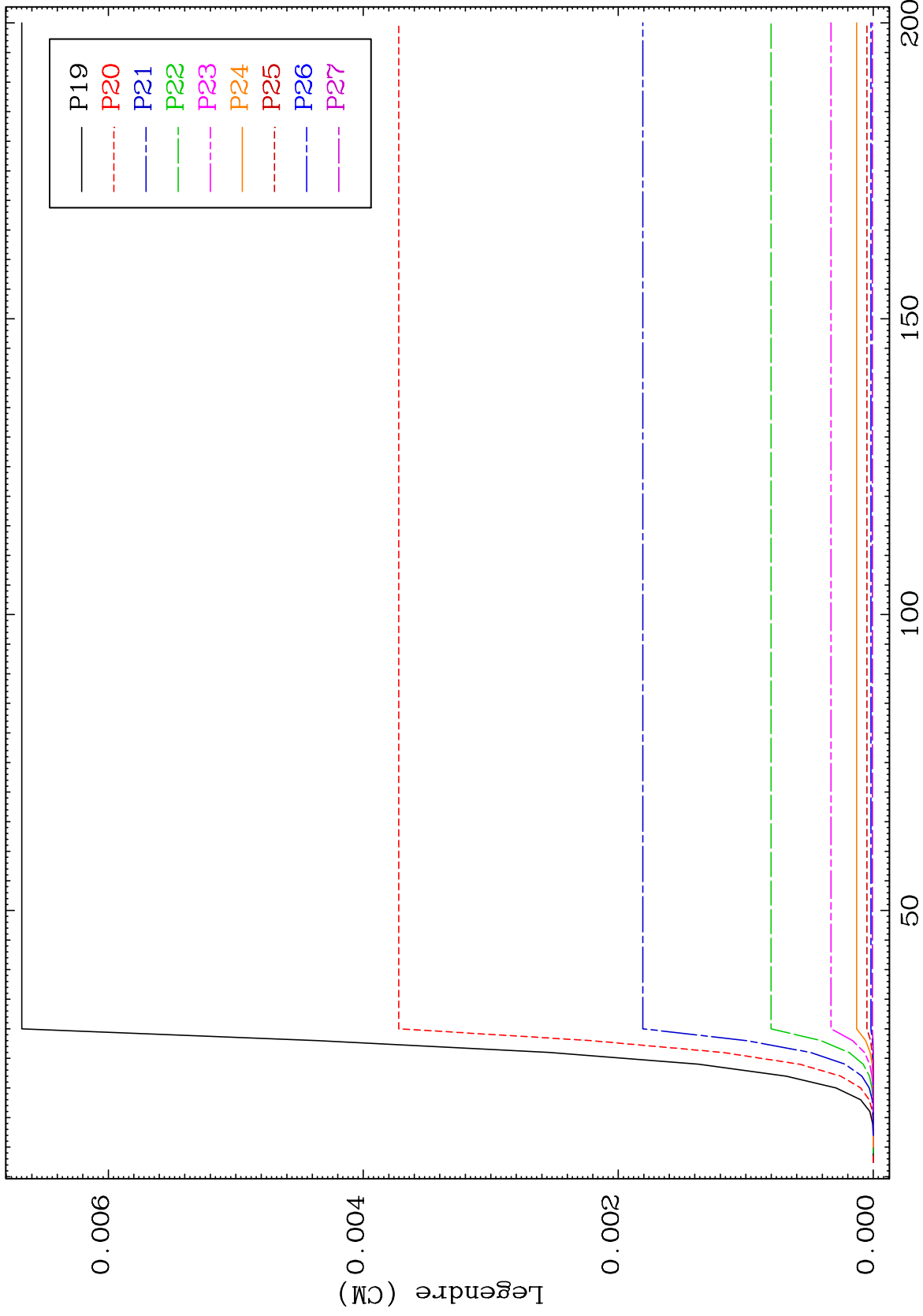
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



58

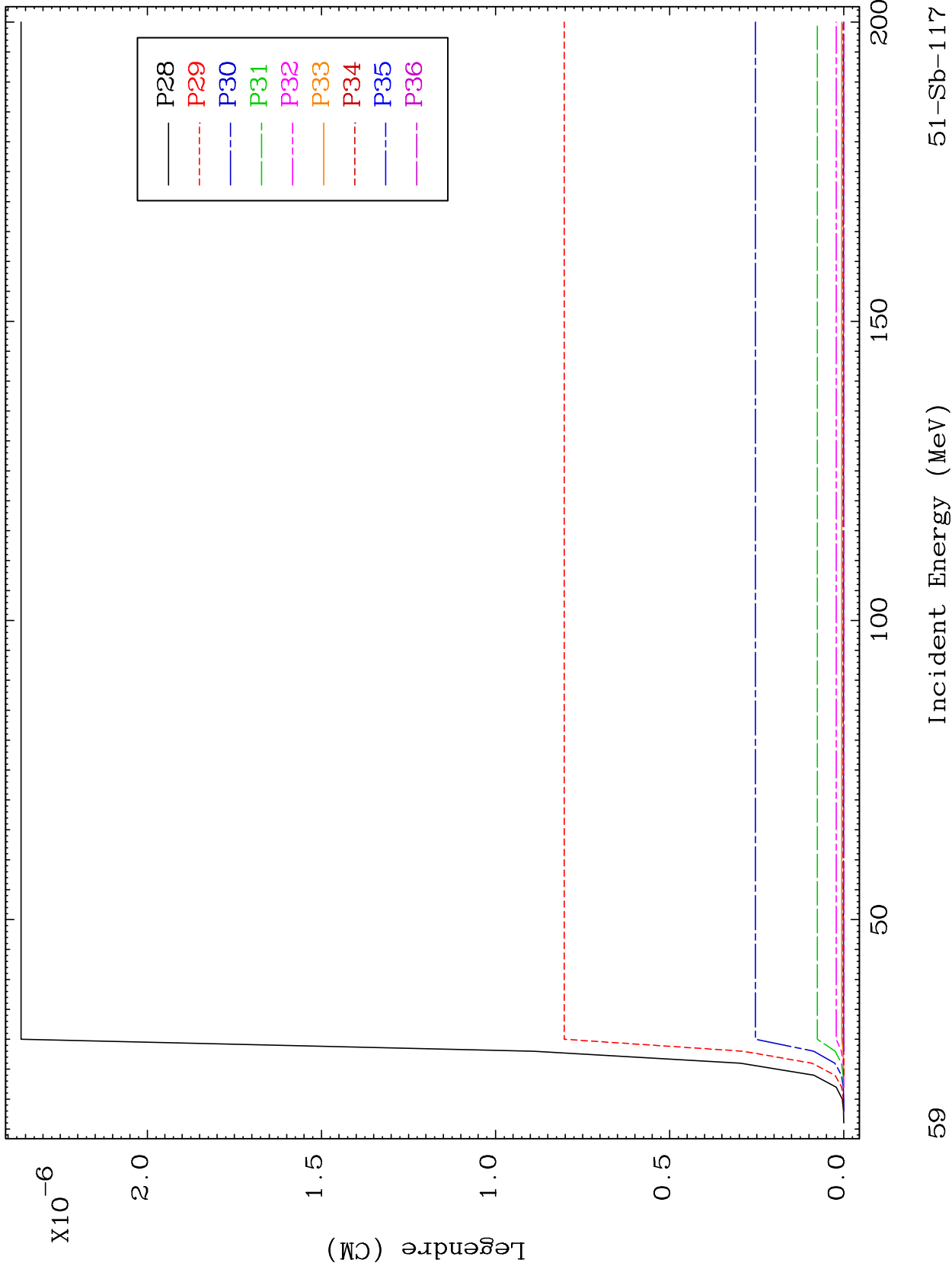
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



59

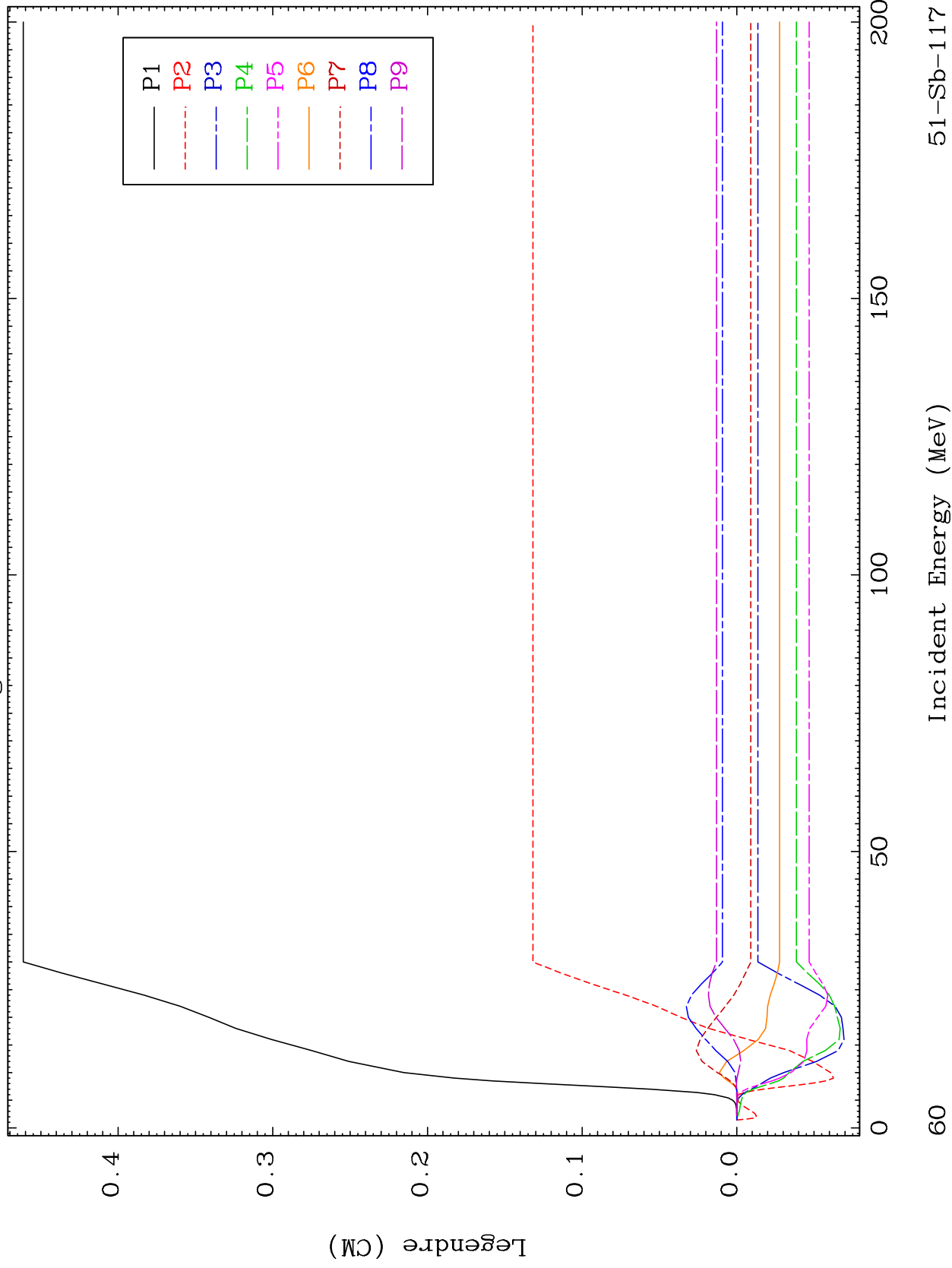
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

Incident Energy (MeV)

60

0

50

100

150

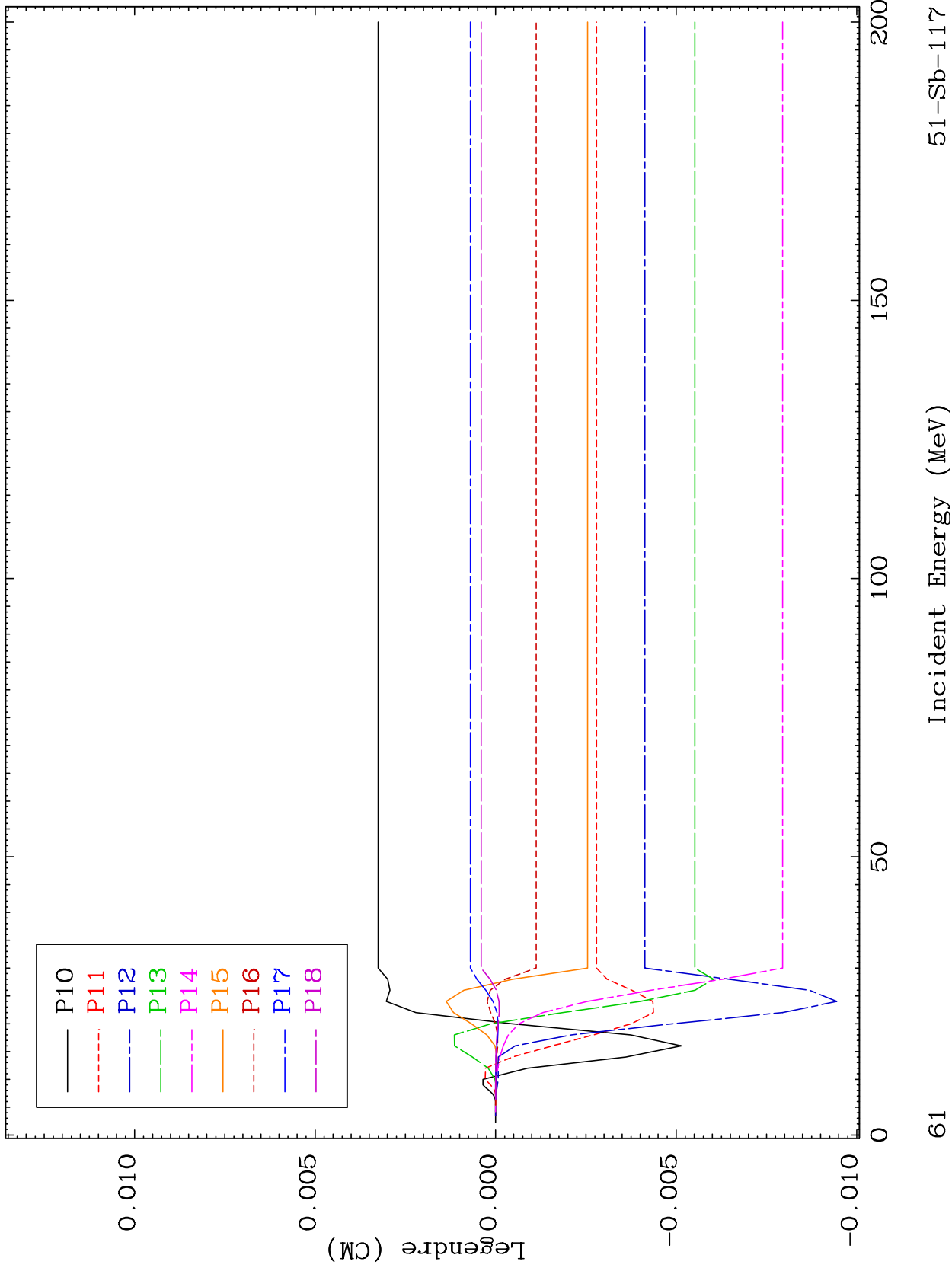
200

Legendre (CM)

MAT 5113

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

51-Sb-117



61

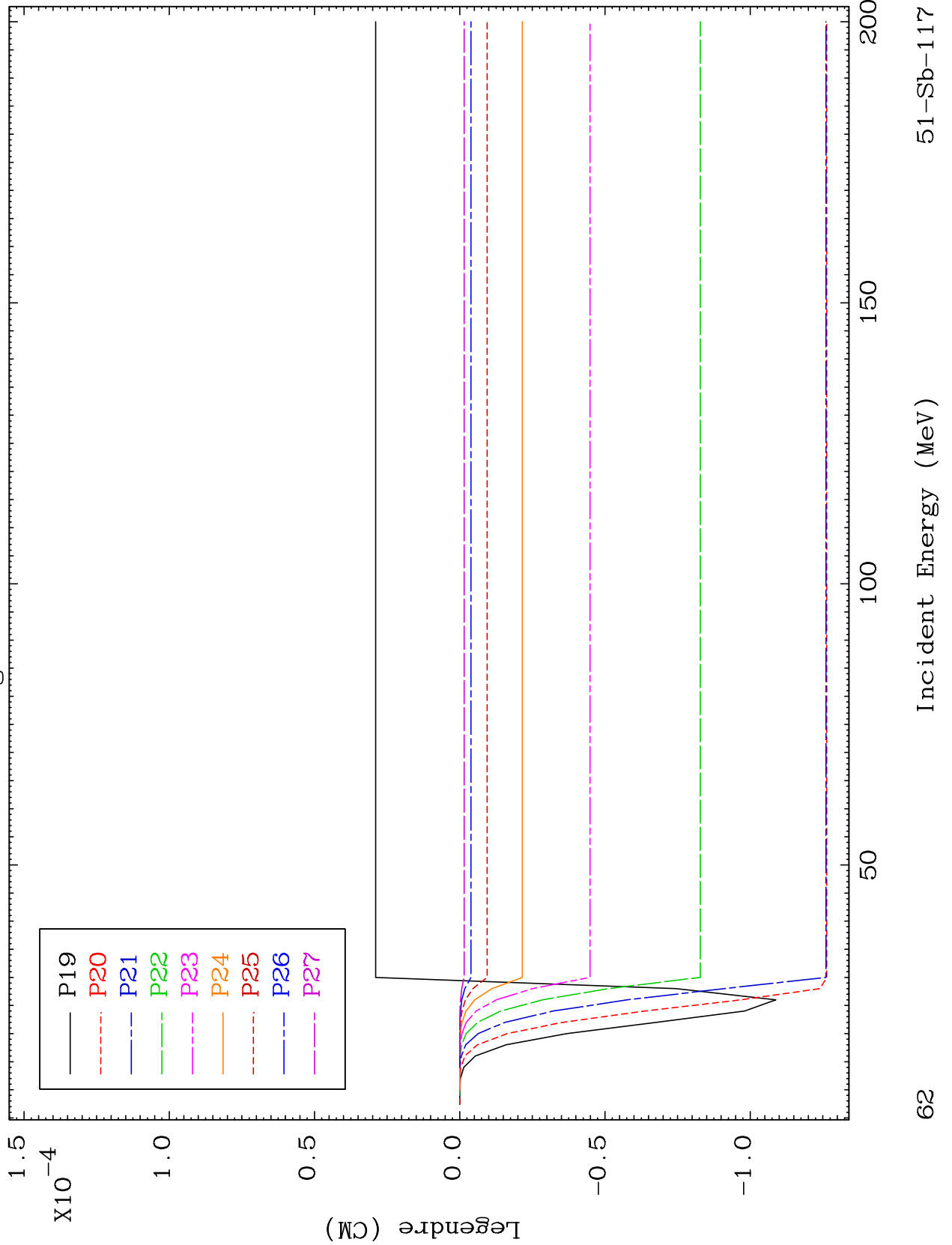
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



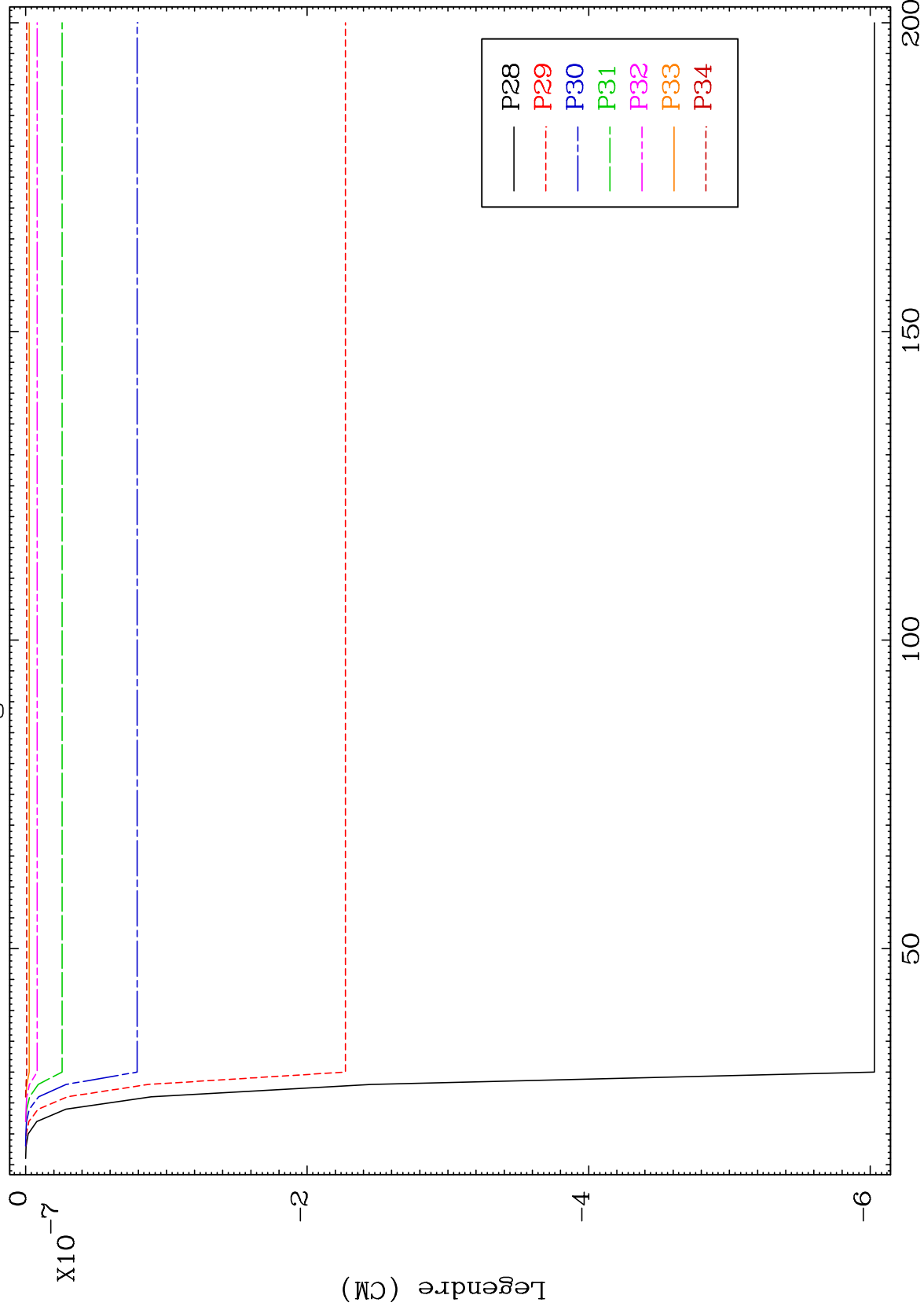
62

MAT 5113

MT= 61 (n,n') Level

51-Sb-117

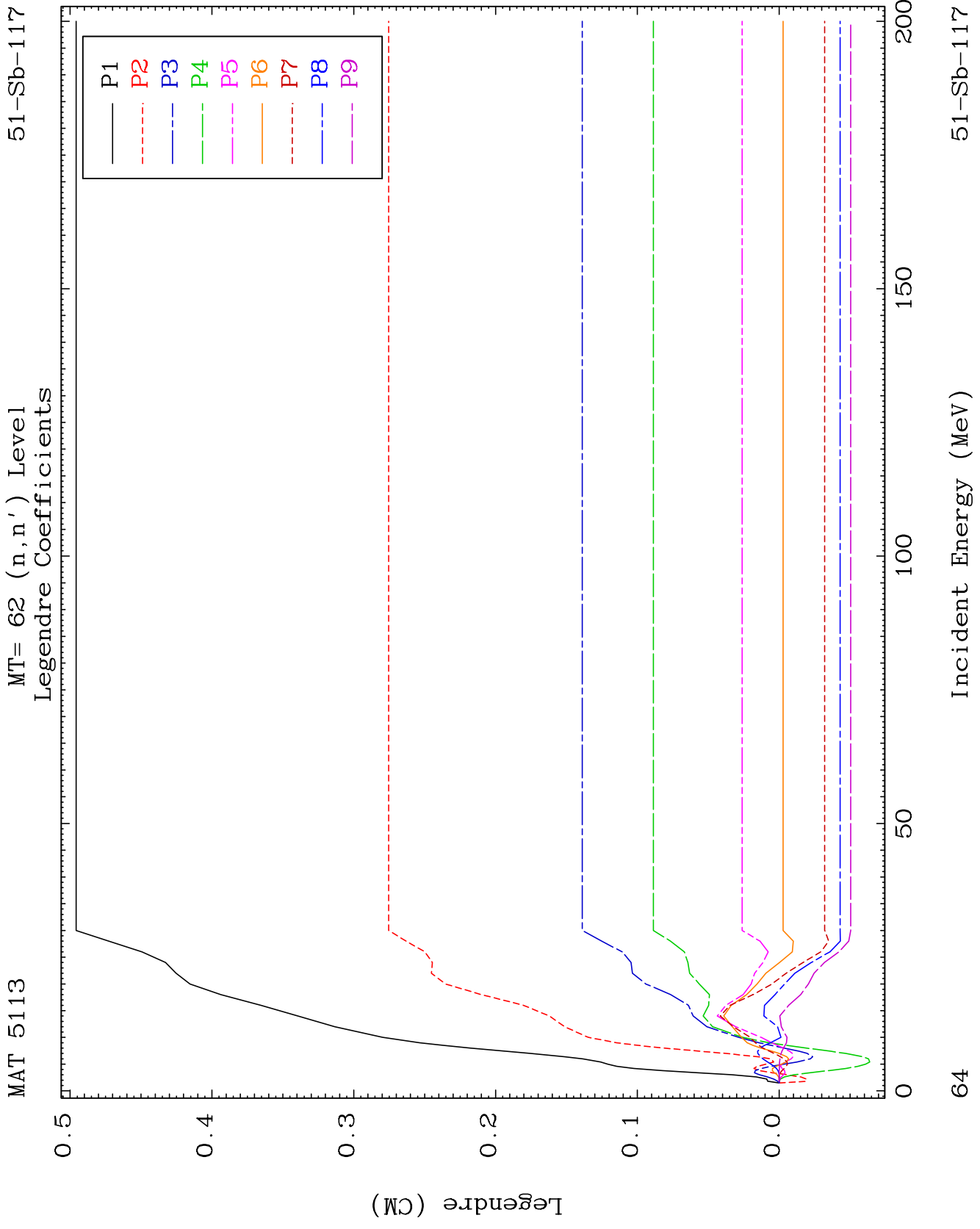
Legendre Coefficients



63

51-Sb-117

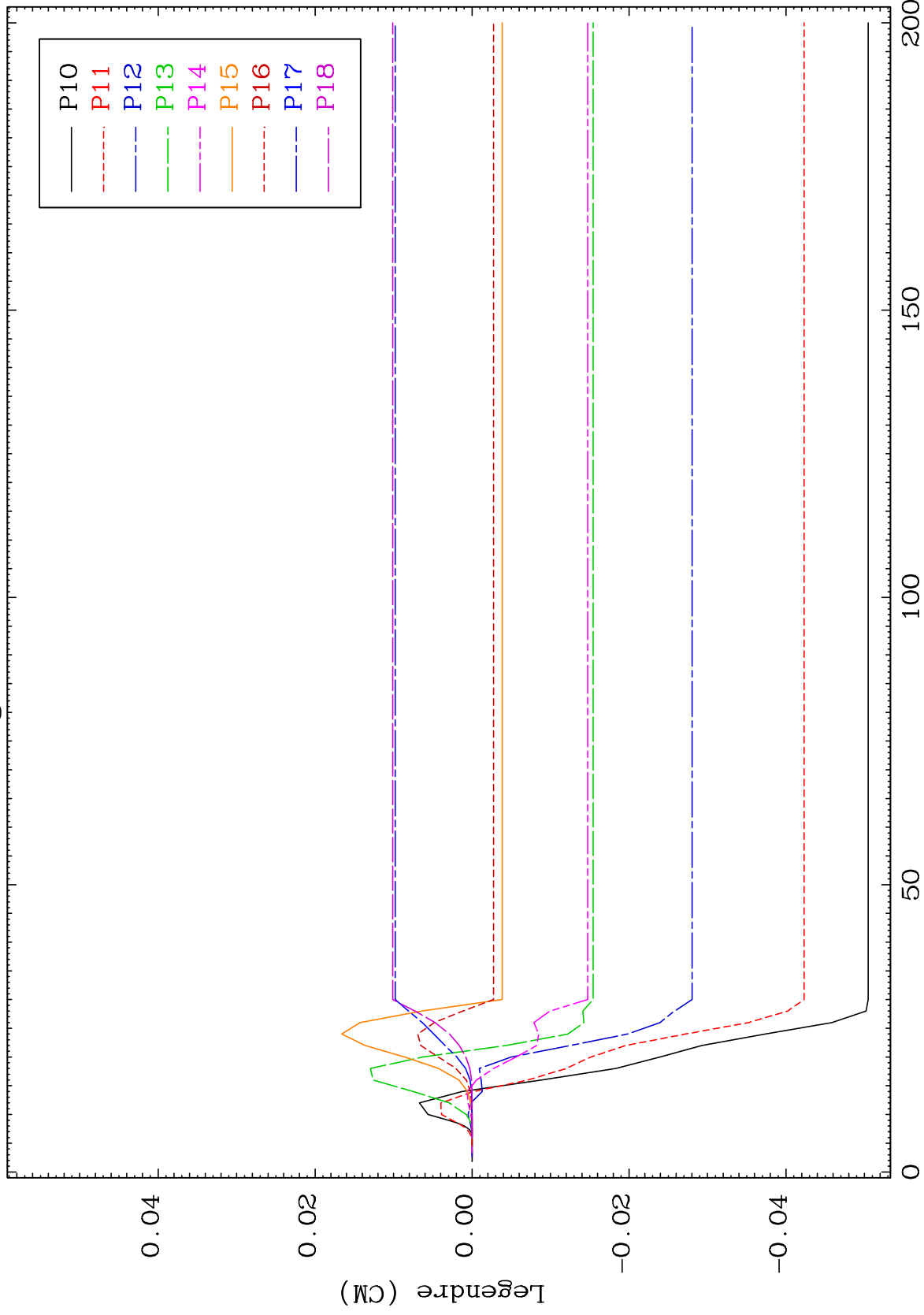




MAT 5113

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

51-Sb-117



65

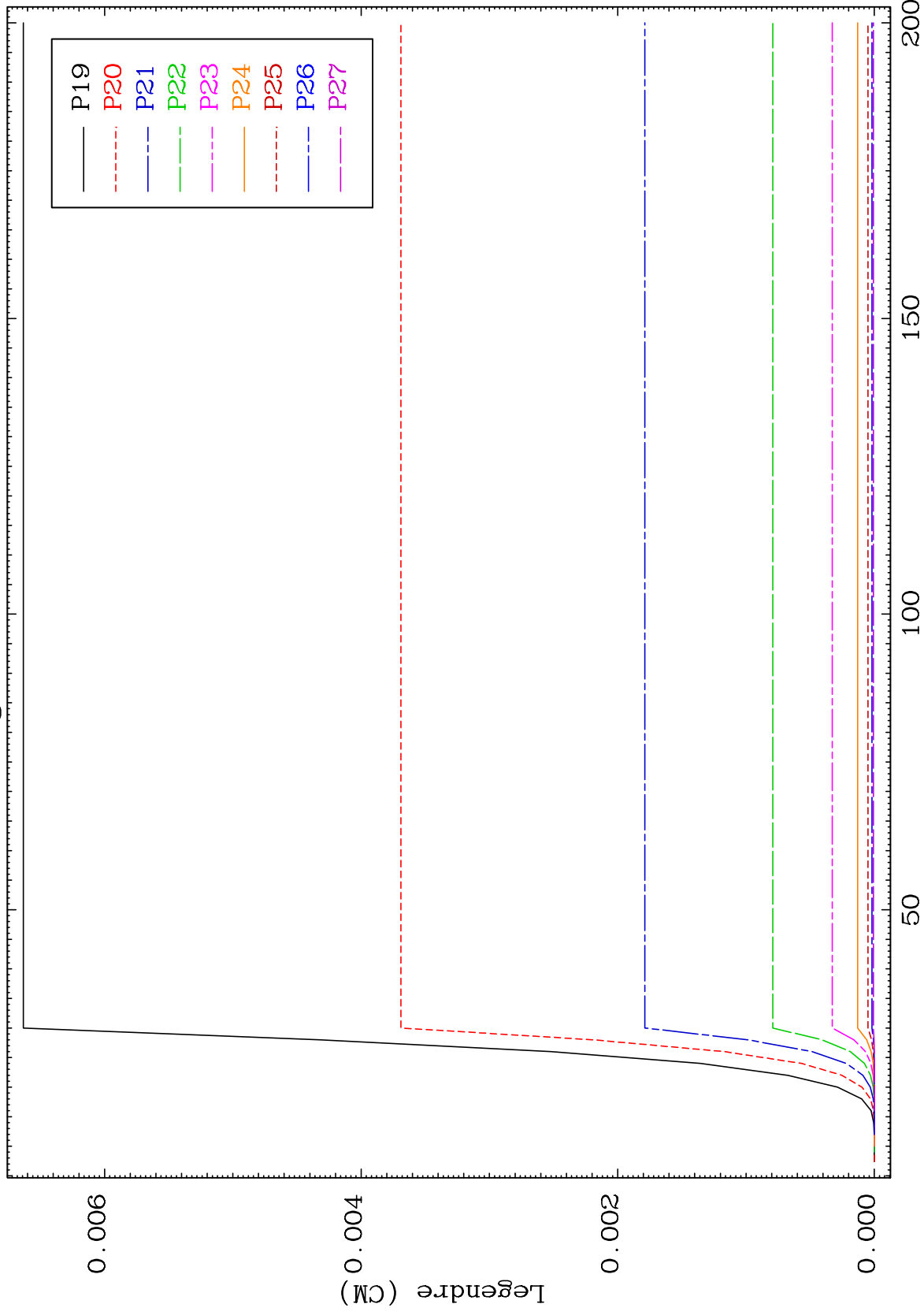
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



66

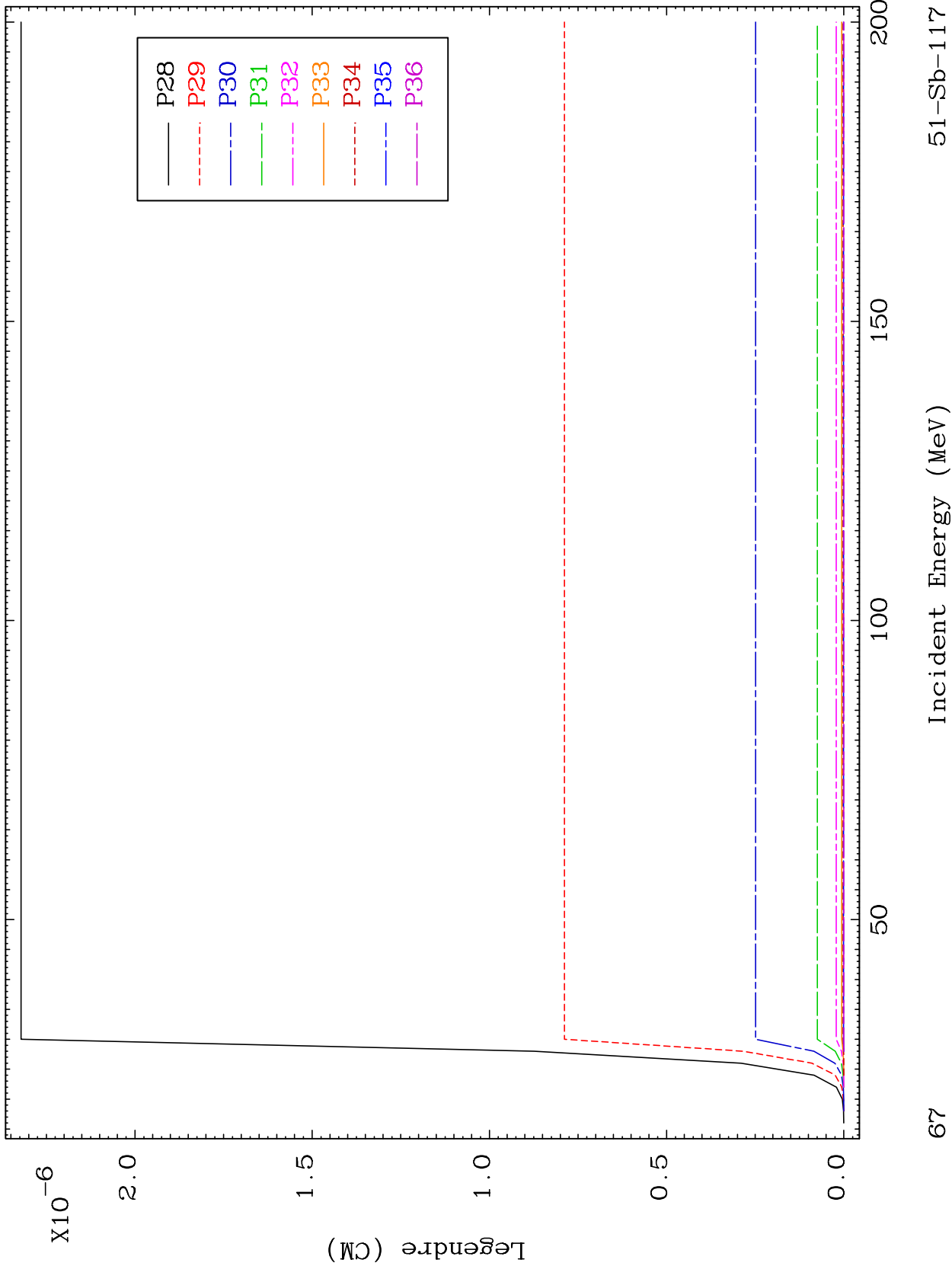
Incident Energy (MeV)

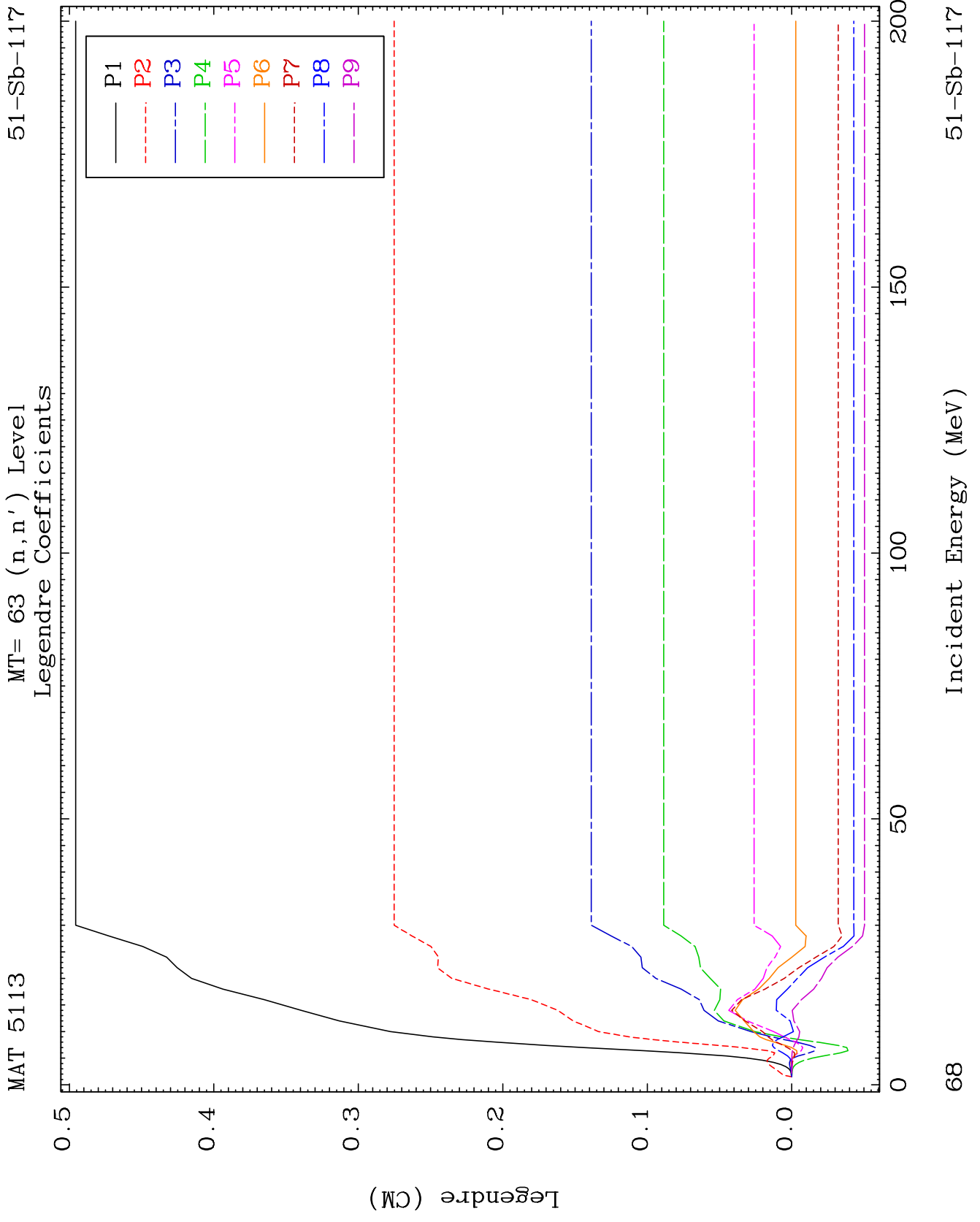
51-Sb-117

MAT 5113

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

51-Sb-117

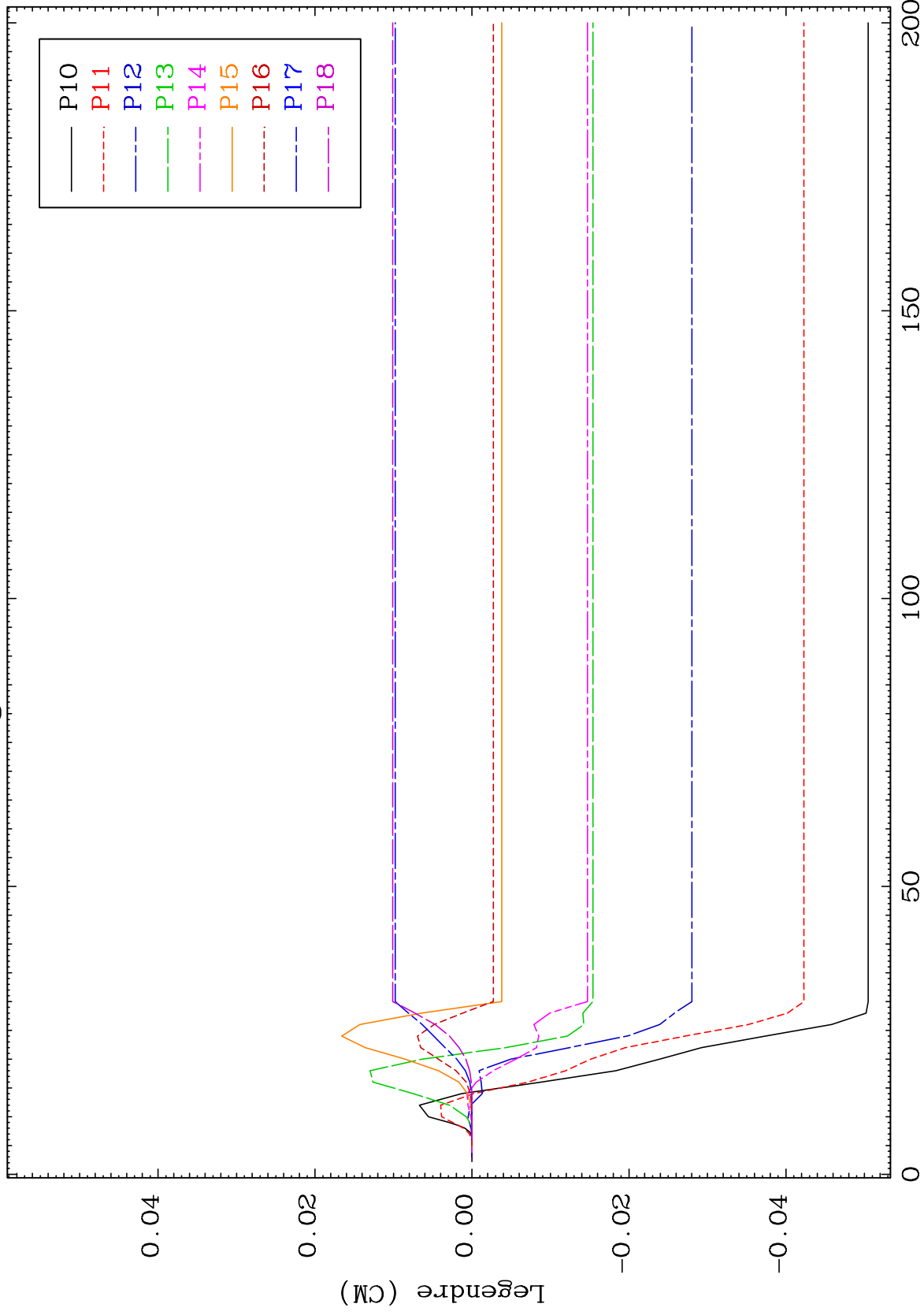




MAT 5113

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

51-Sb-117



69

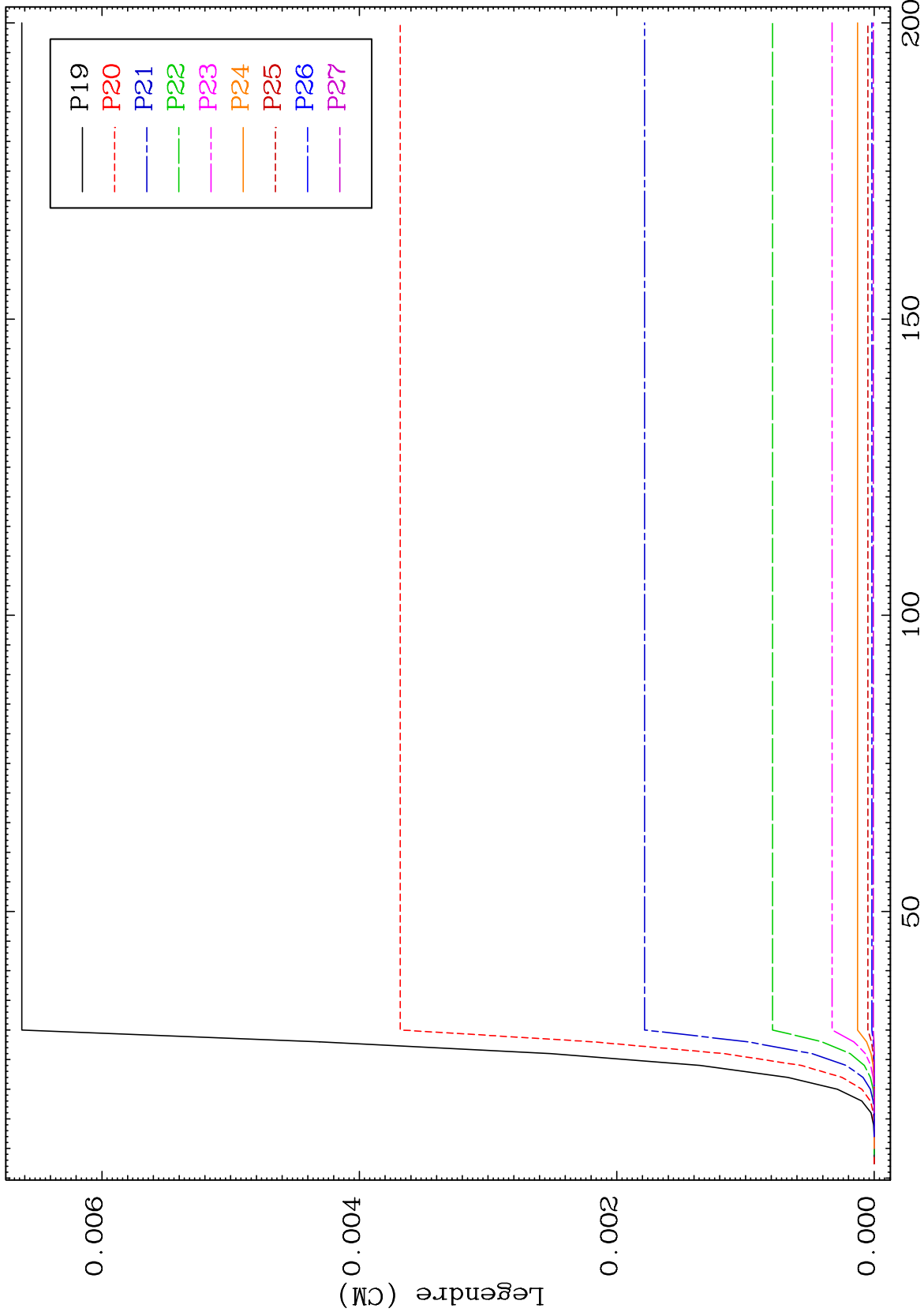
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



70

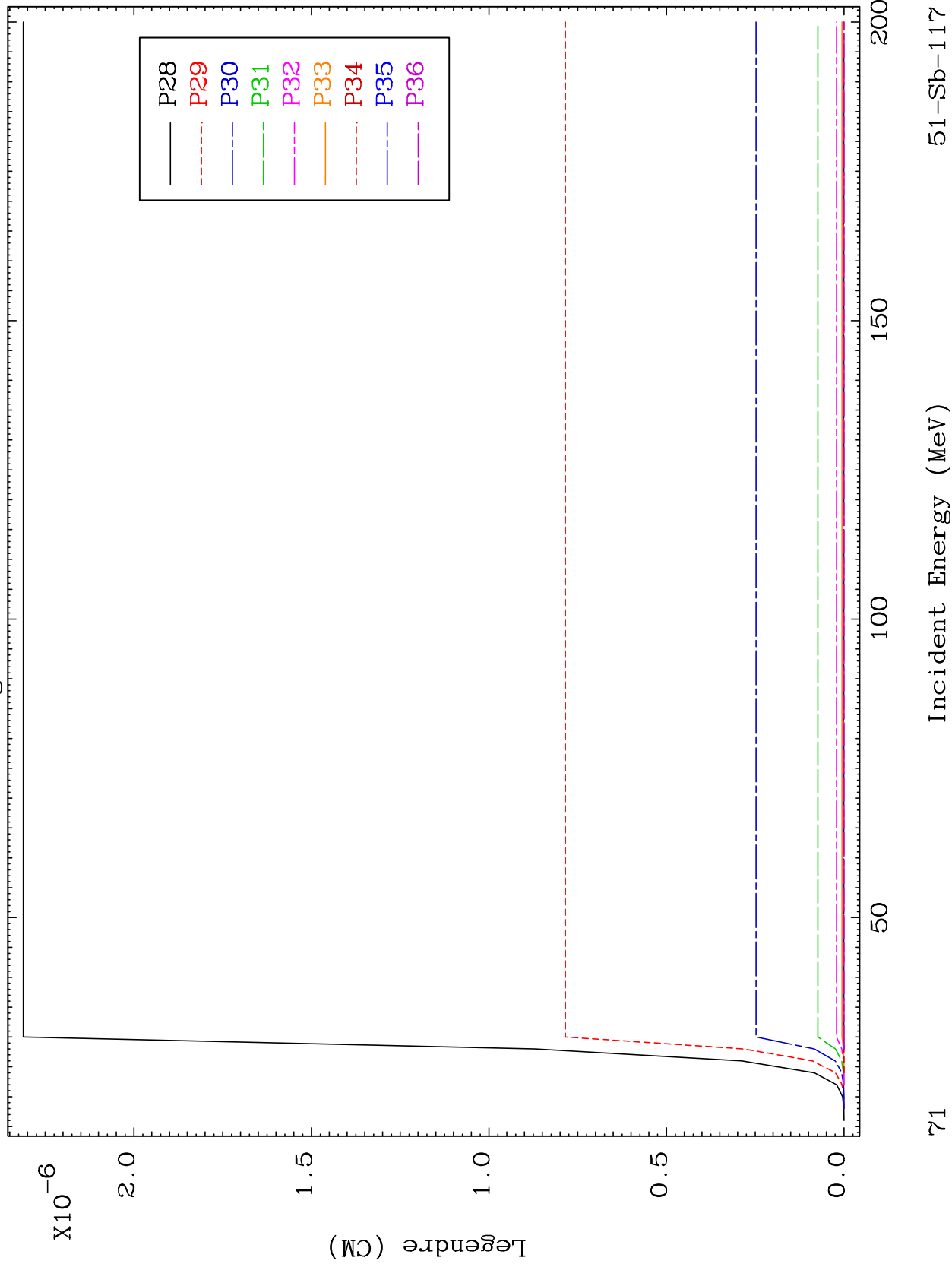
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117

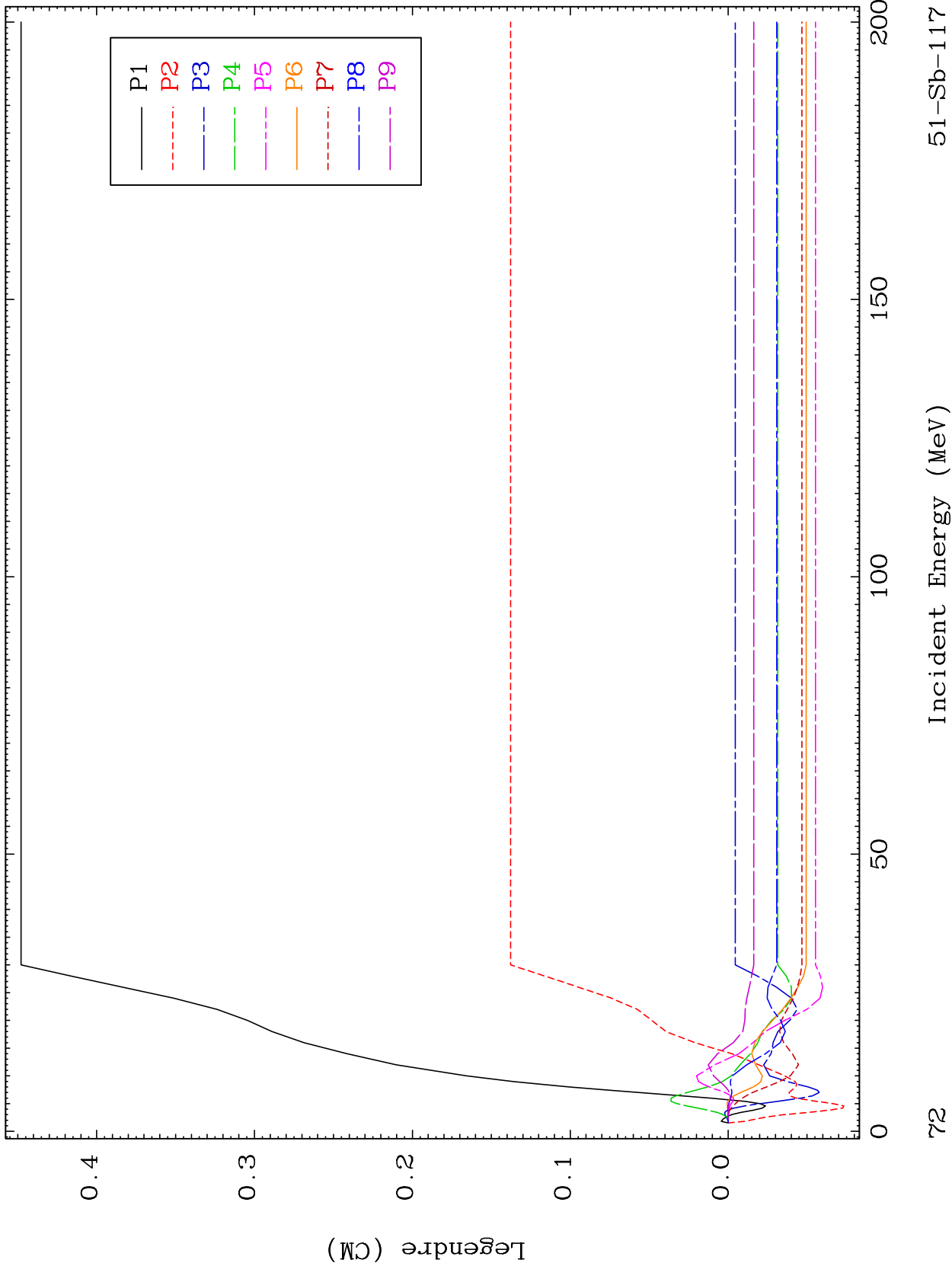




MAT 5113

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

51-Sb-117

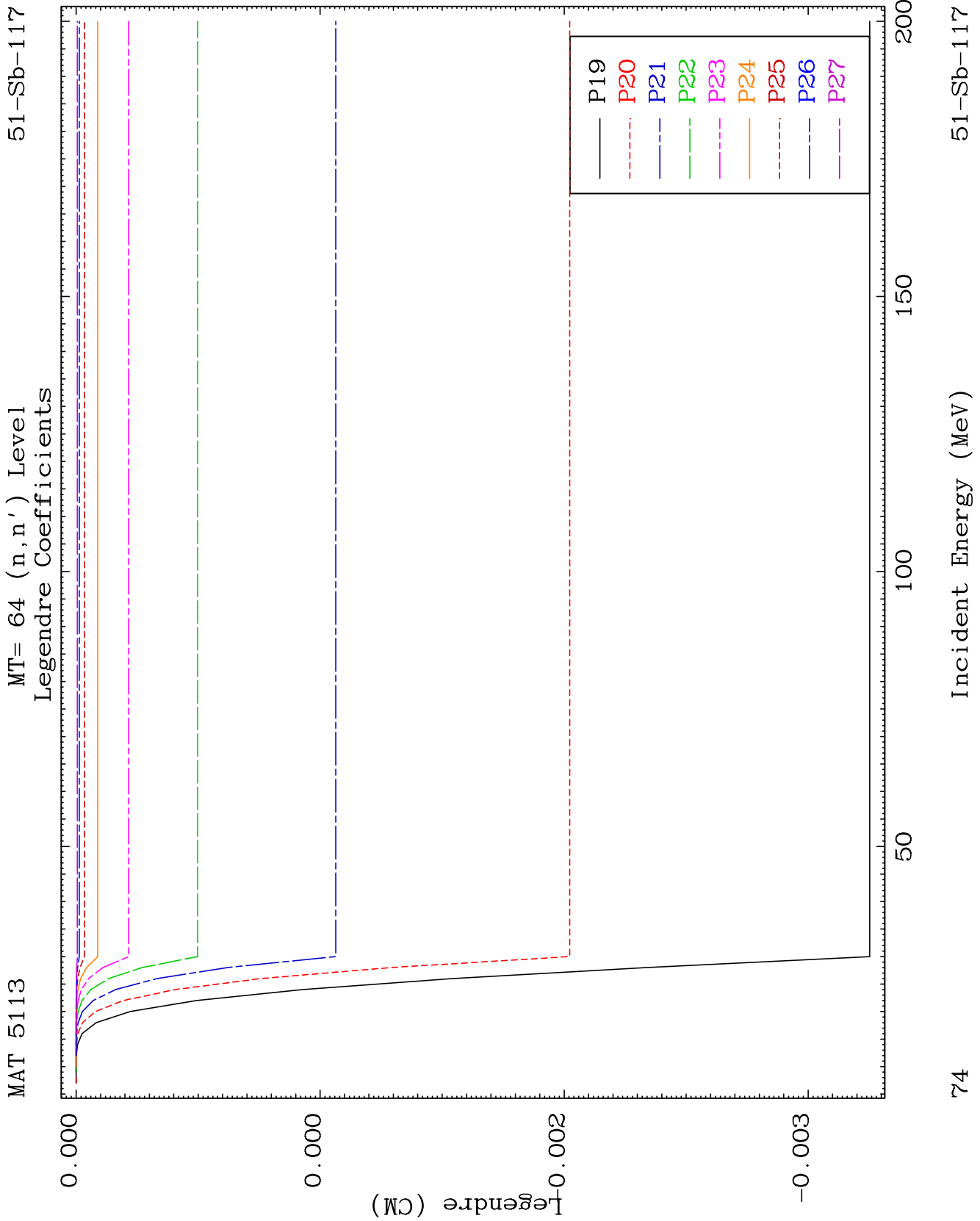


51-Sb-117

Incident Energy (MeV)

72

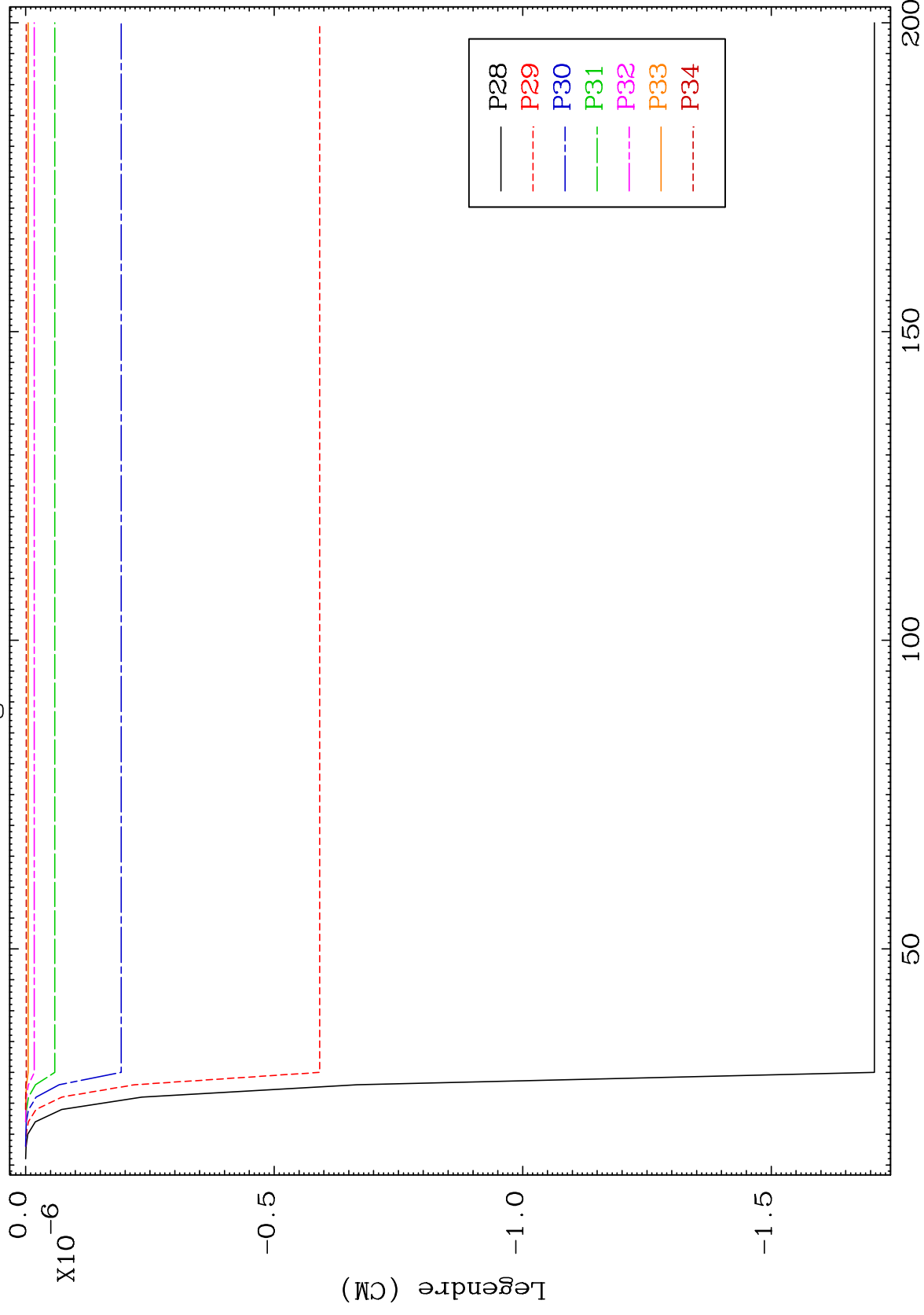




MAT 5113

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

51-Sb-117



75

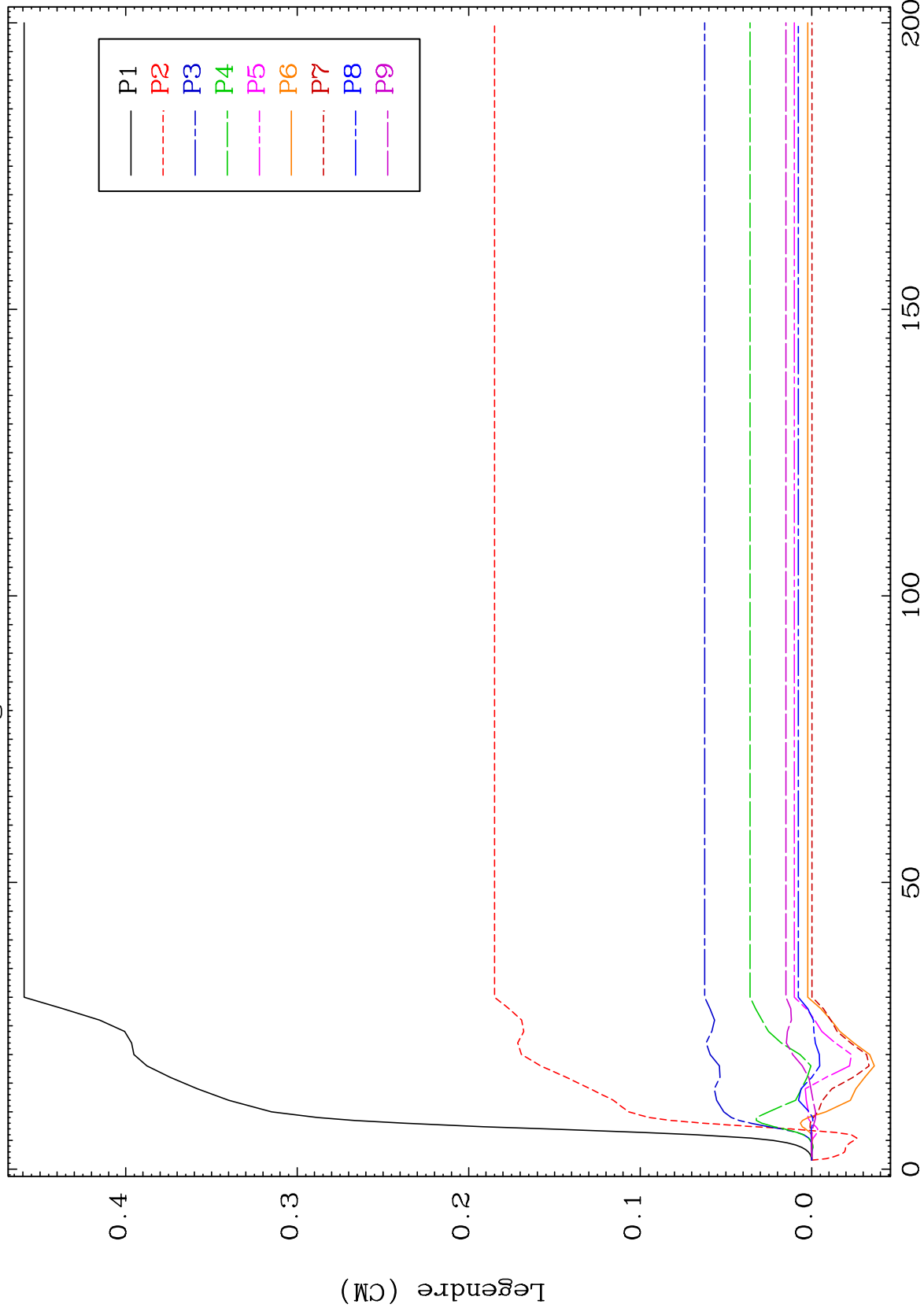
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



76

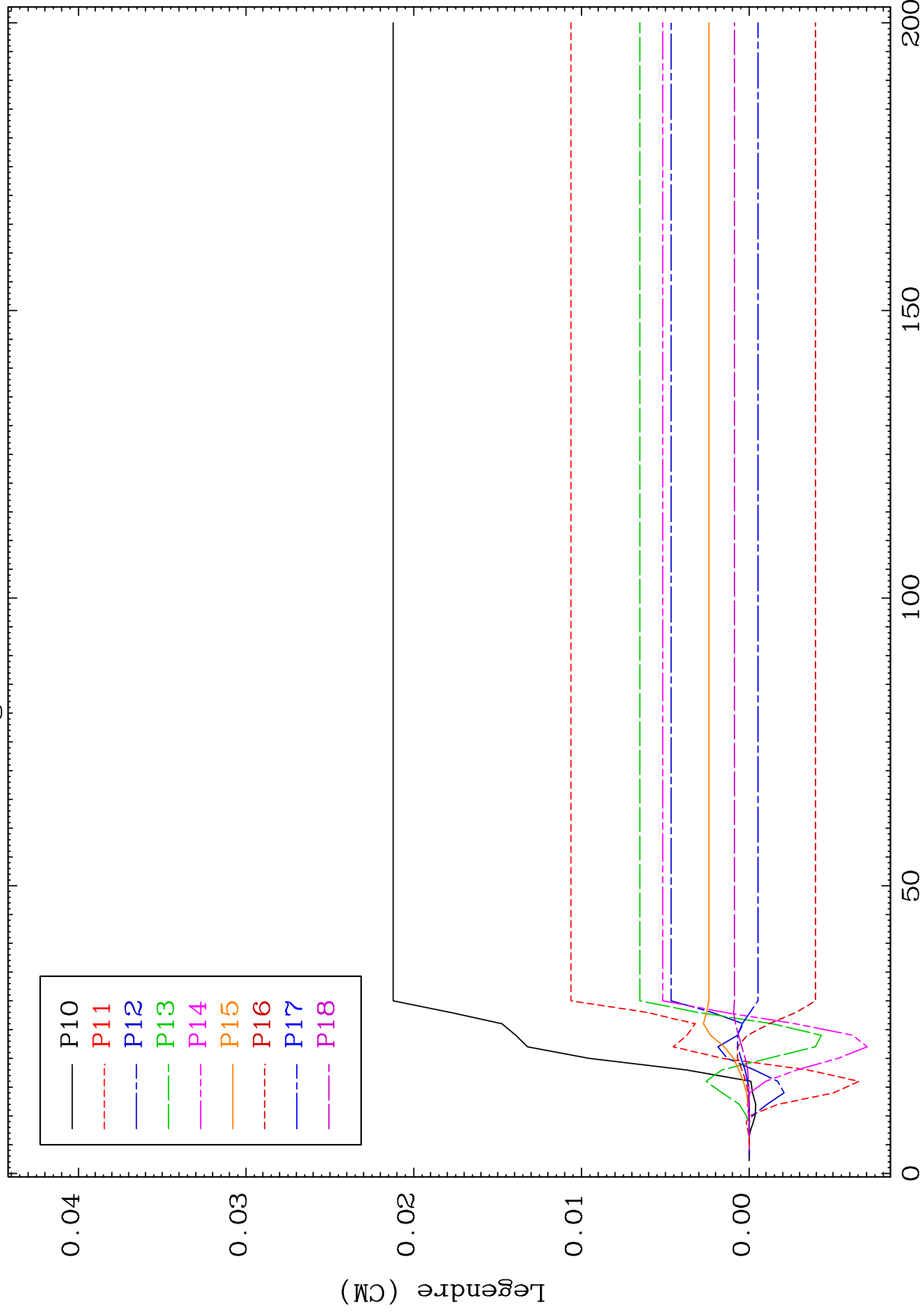
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



77

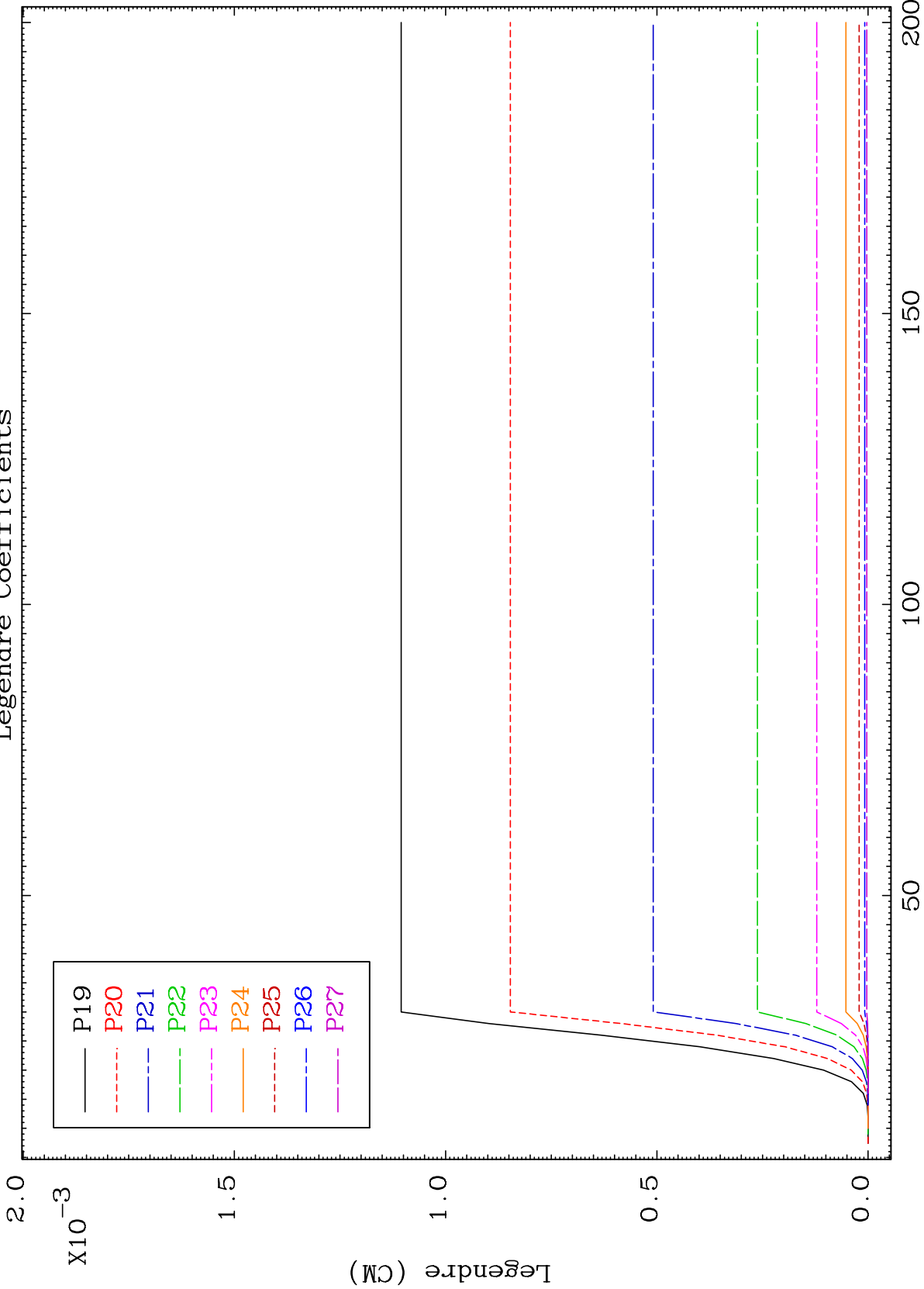
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



78

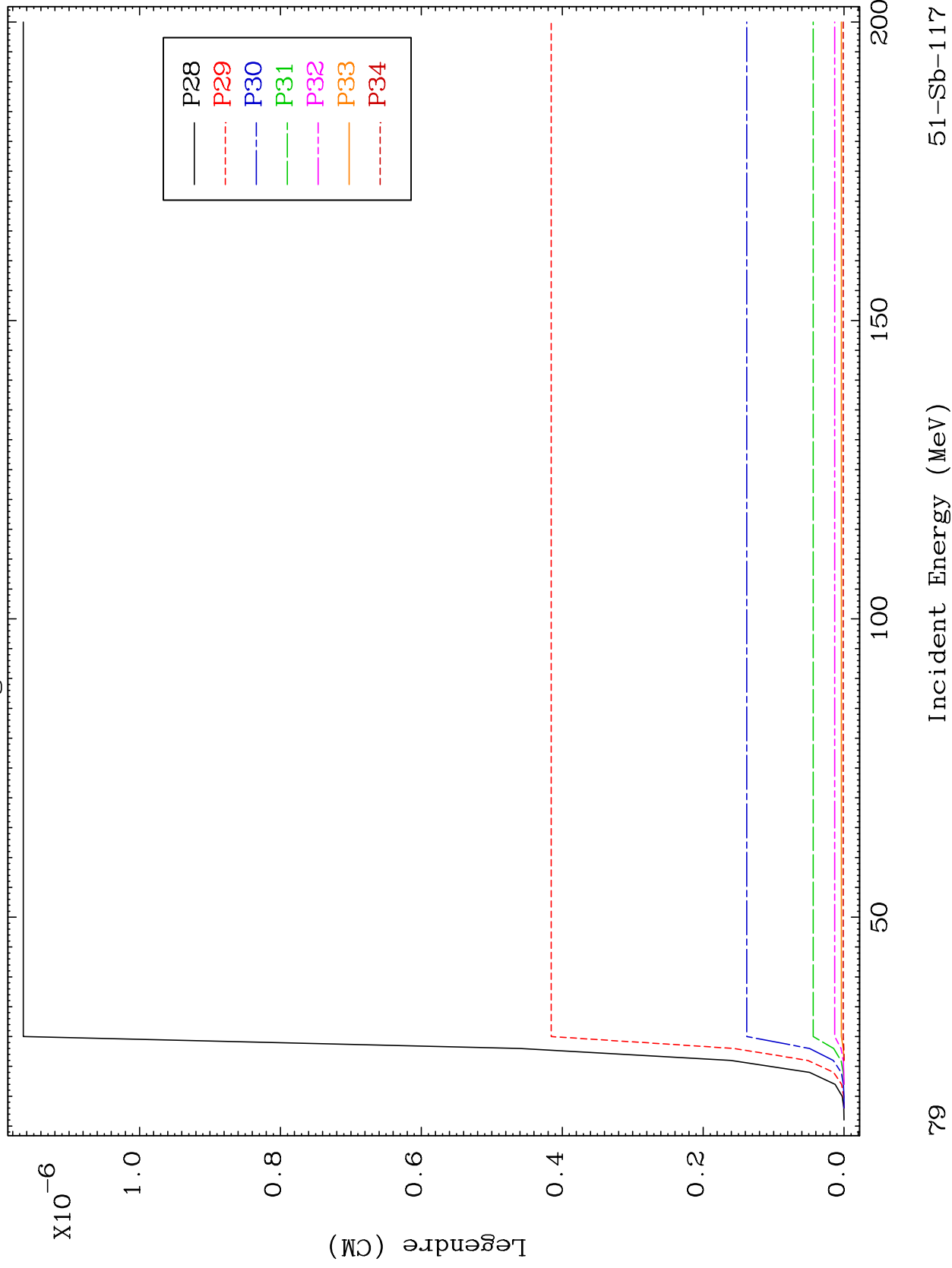
Incident Energy (MeV)

51-Sb-117

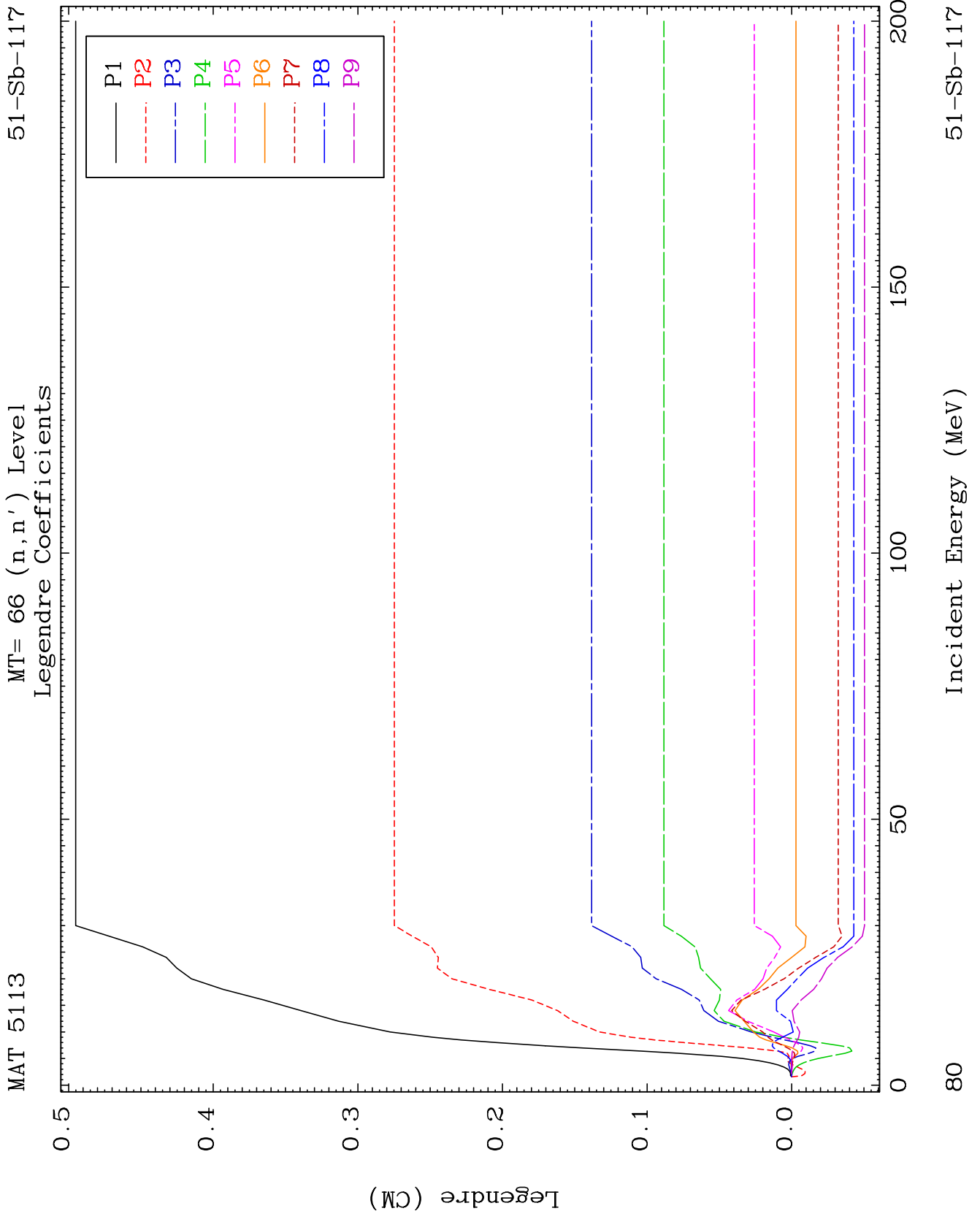
MAT 5113

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

51-Sb-117



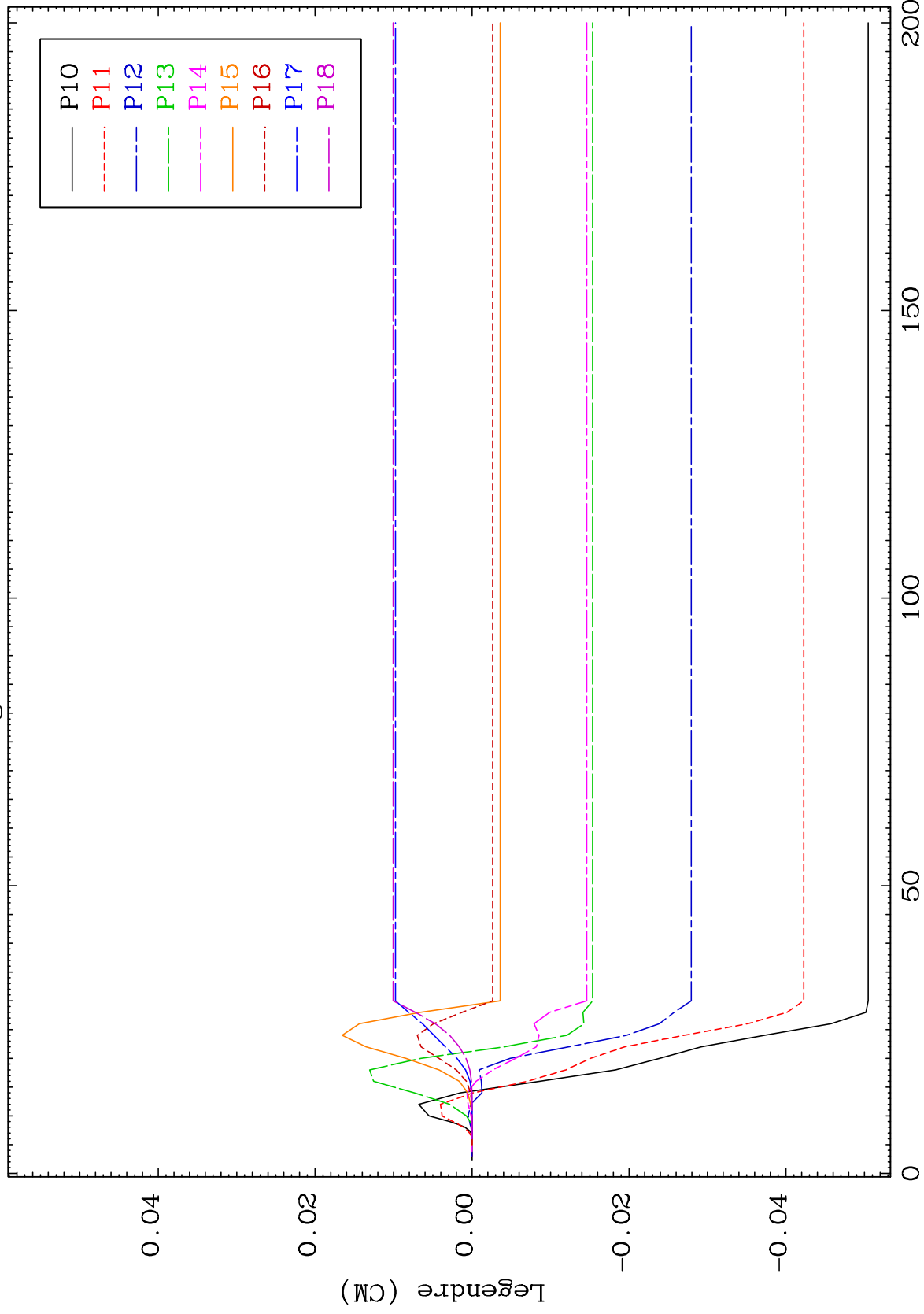




MAT 5113

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

51-Sb-117



81

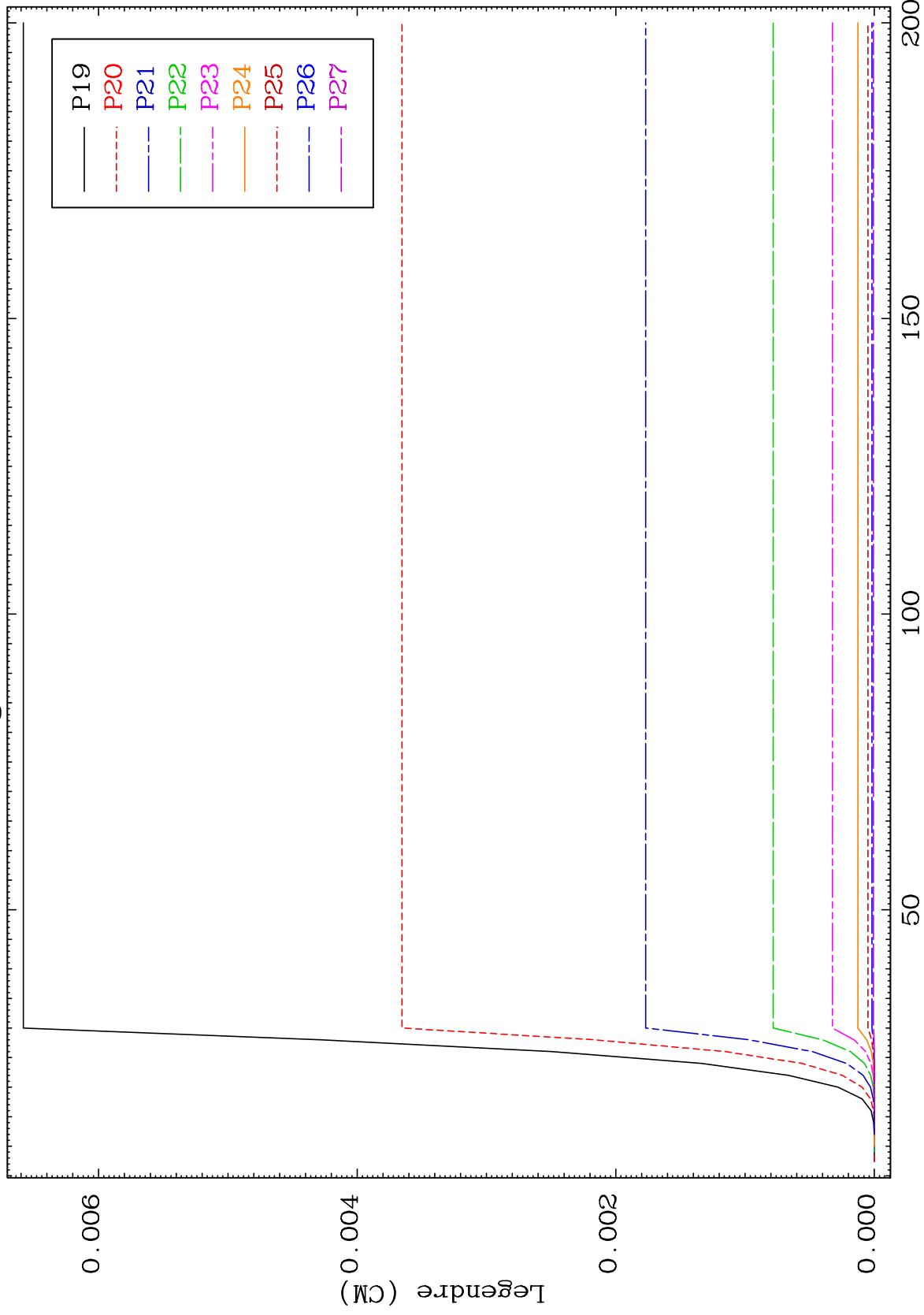
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



82

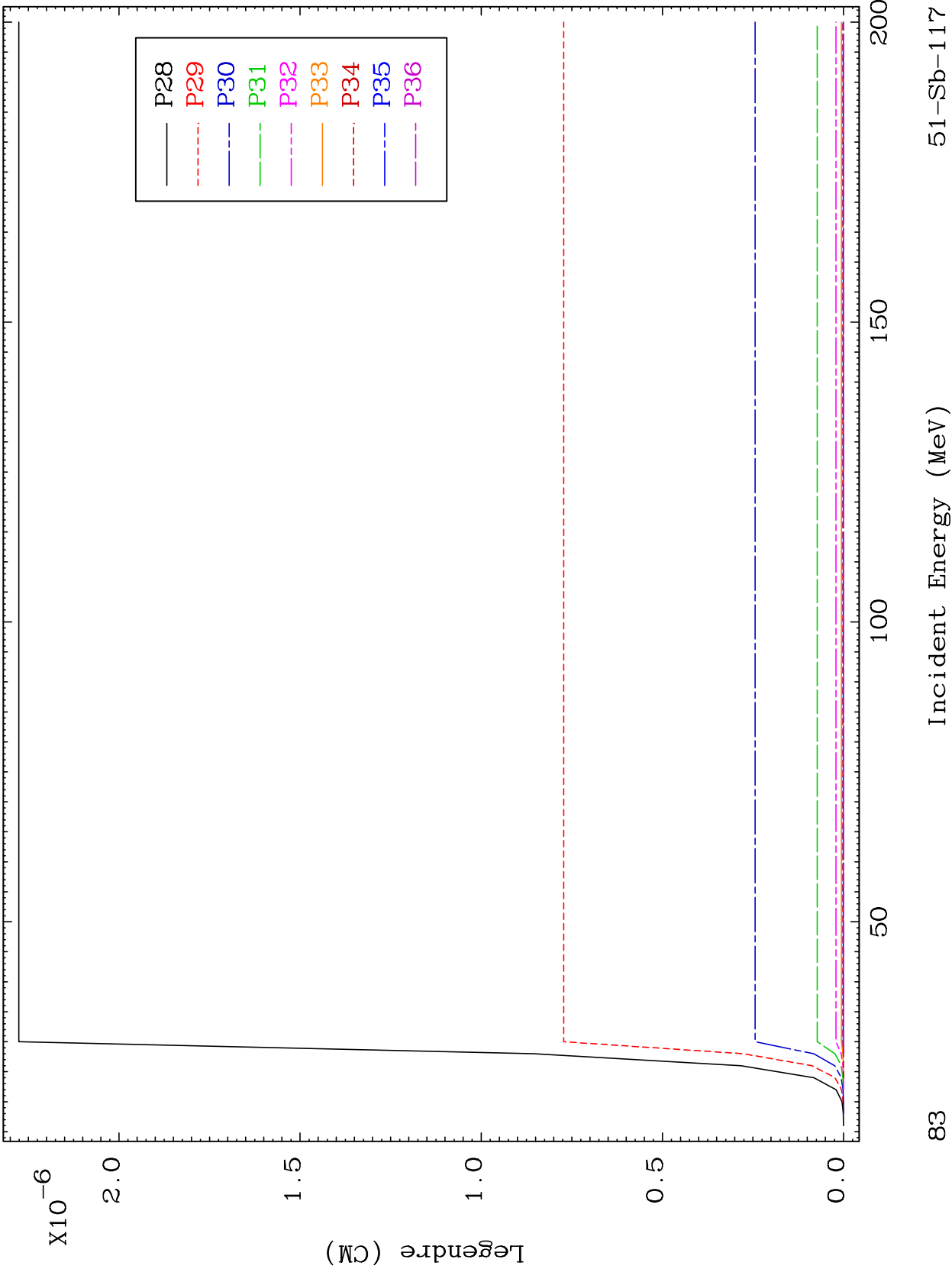
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



83

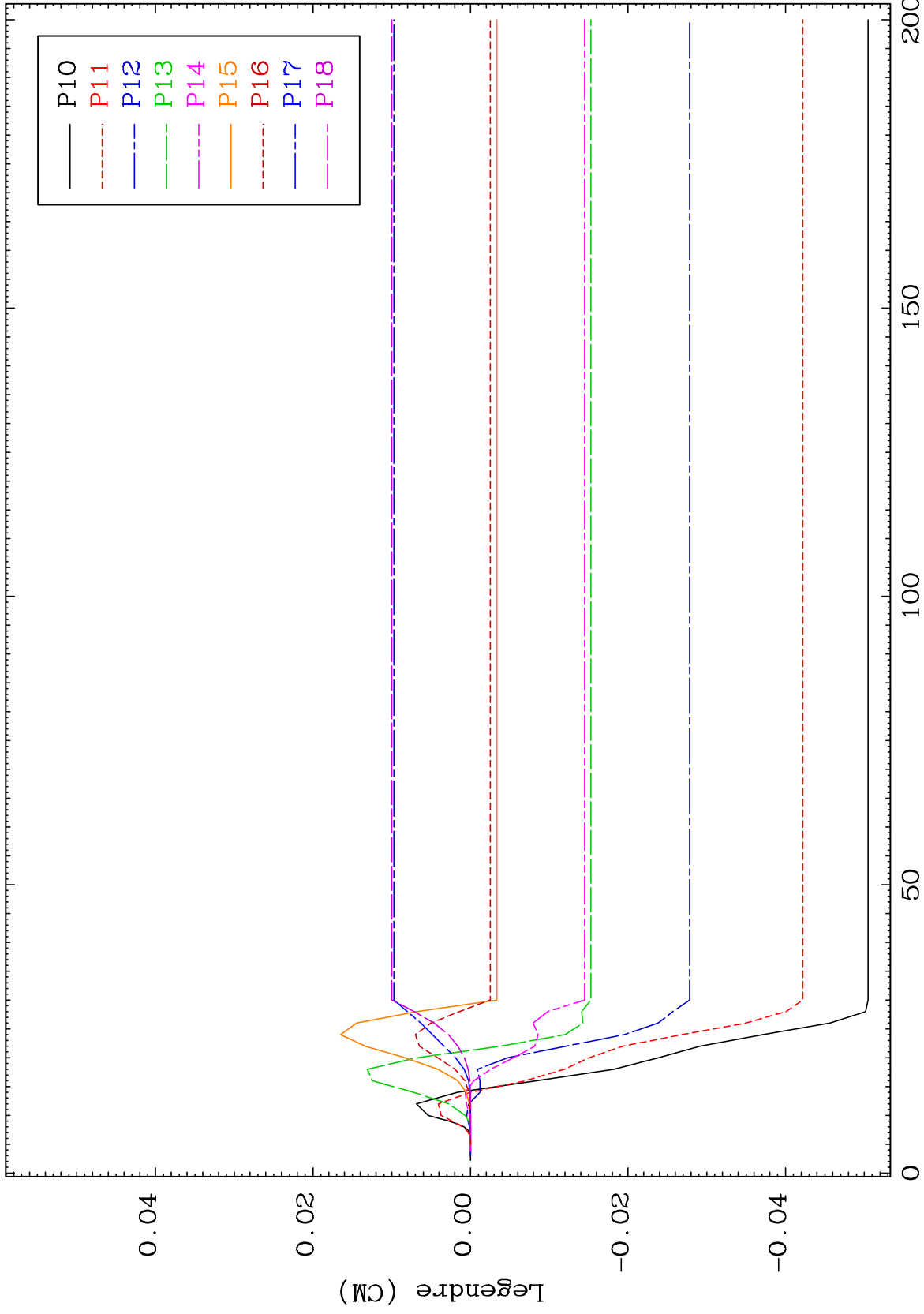
51-Sb-117



MAT 5113

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

51-Sb-117



85

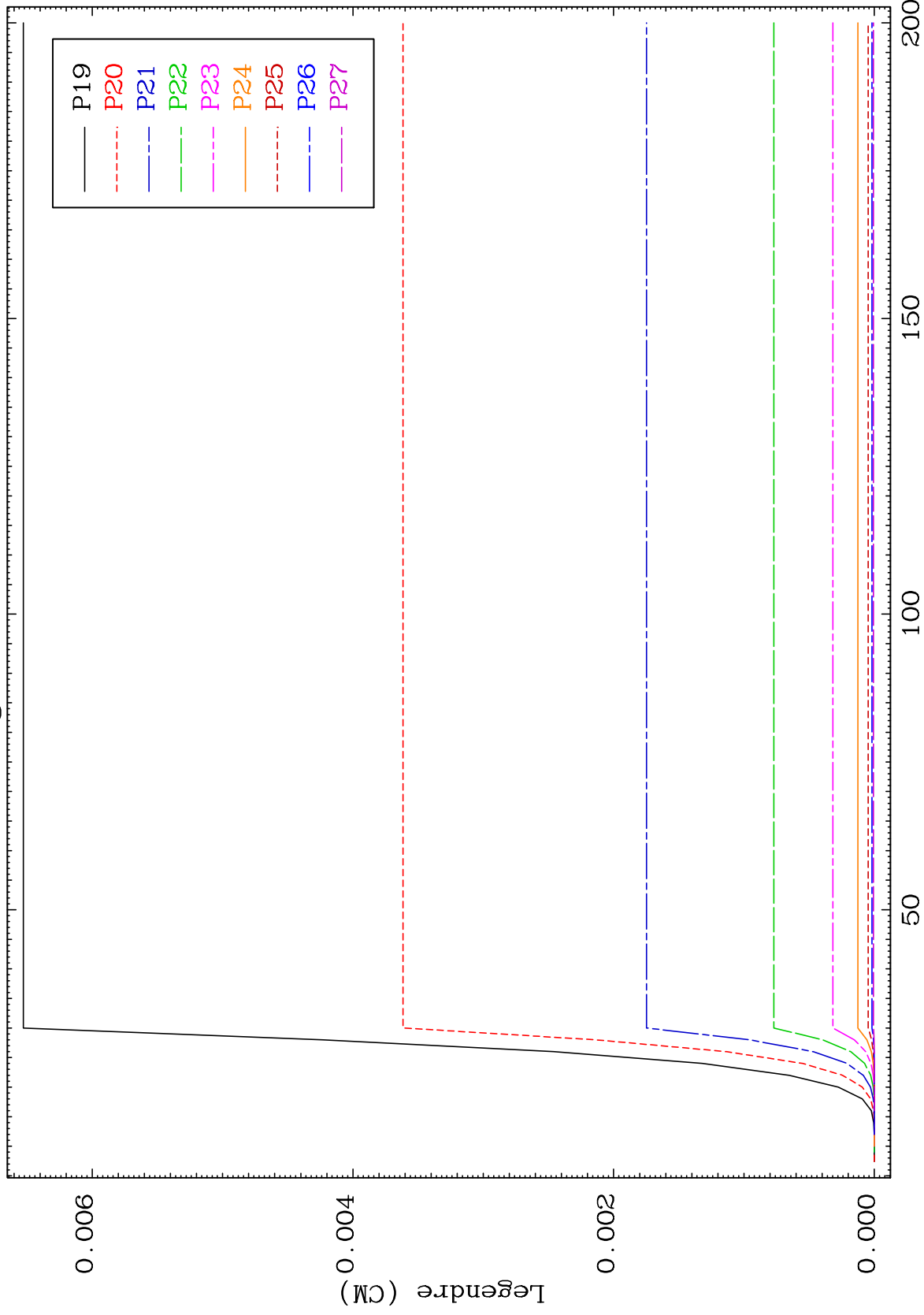
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



86

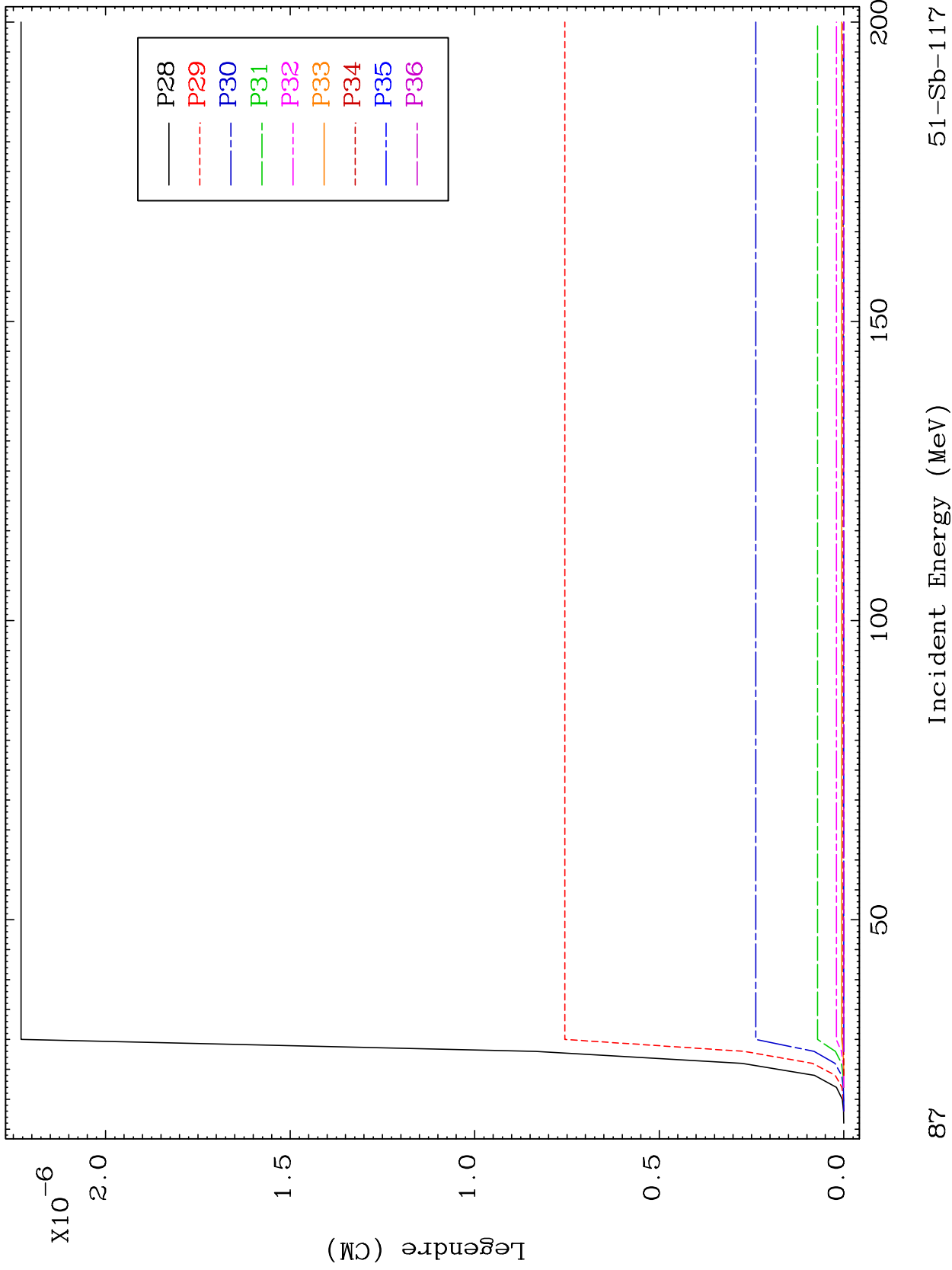
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117

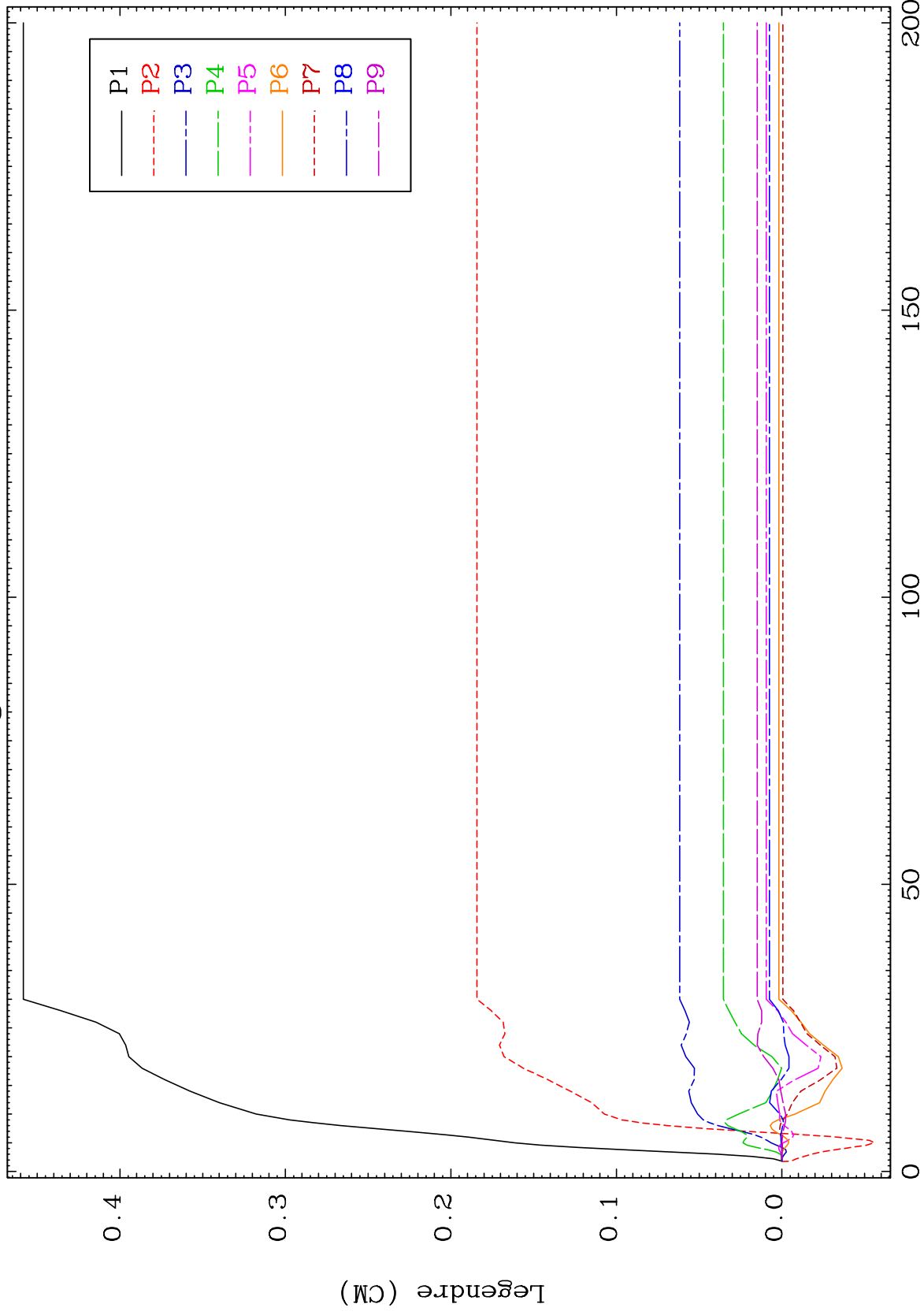




MAT 5113

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

51-Sb-117



88

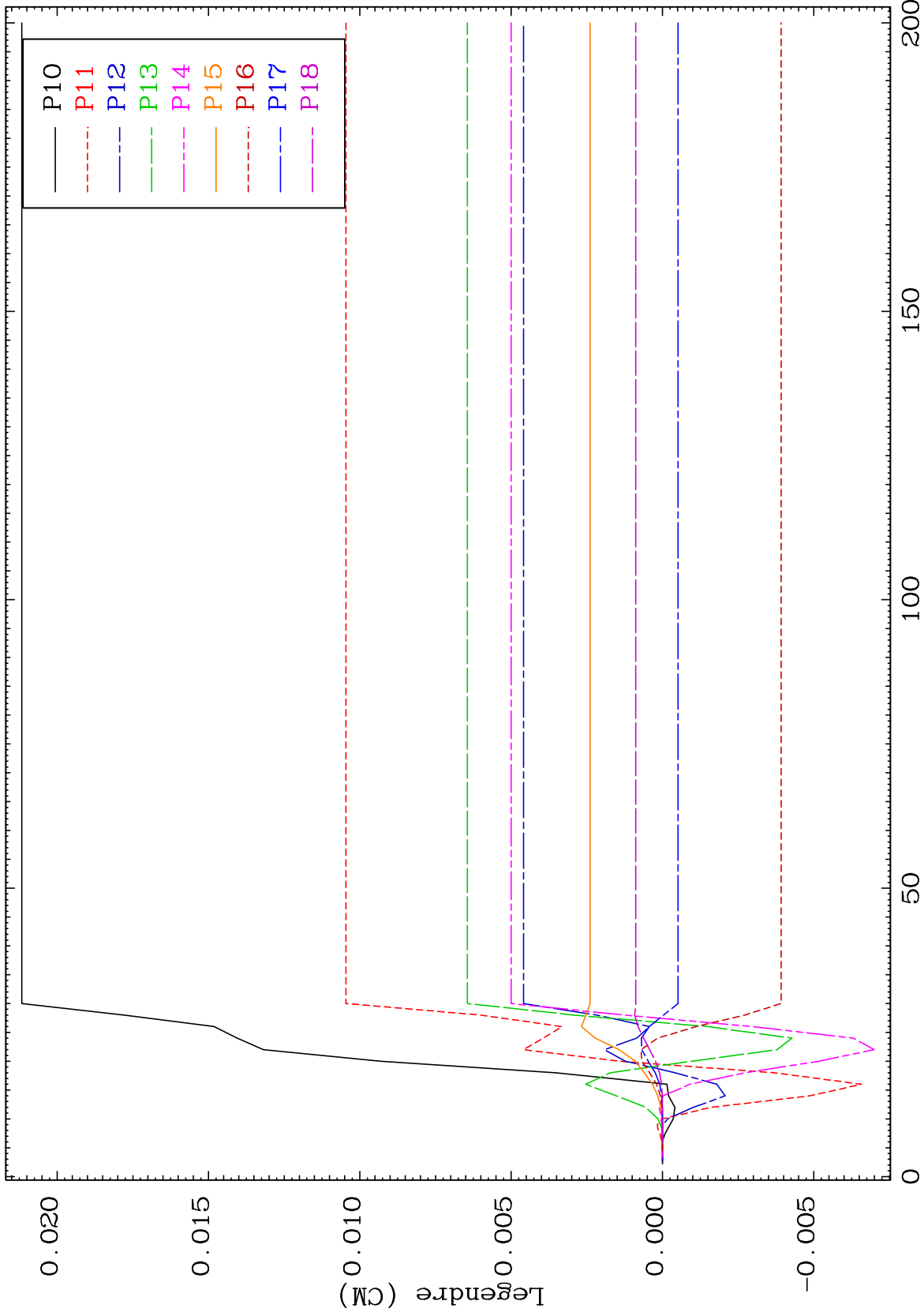
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



89

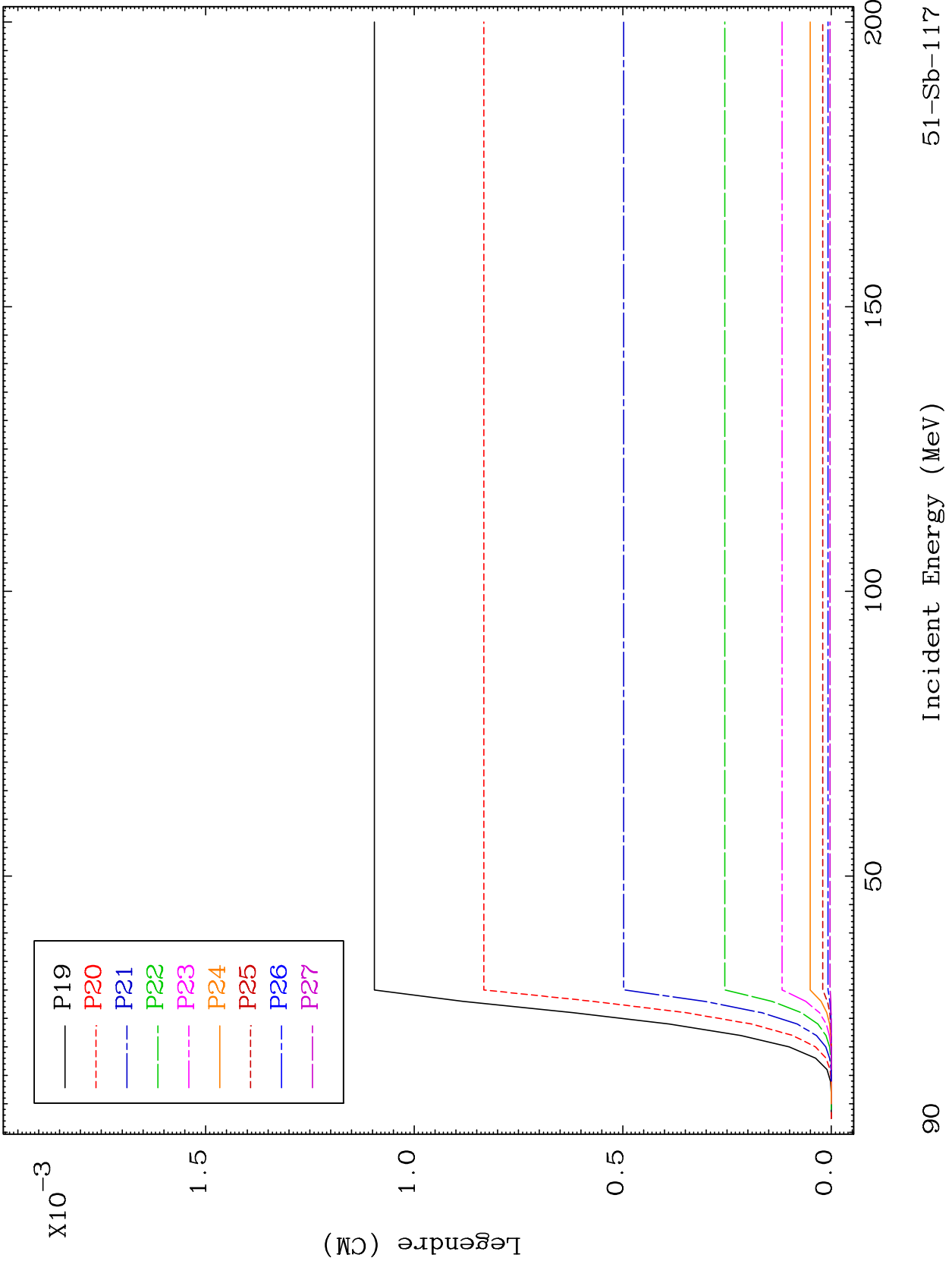
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

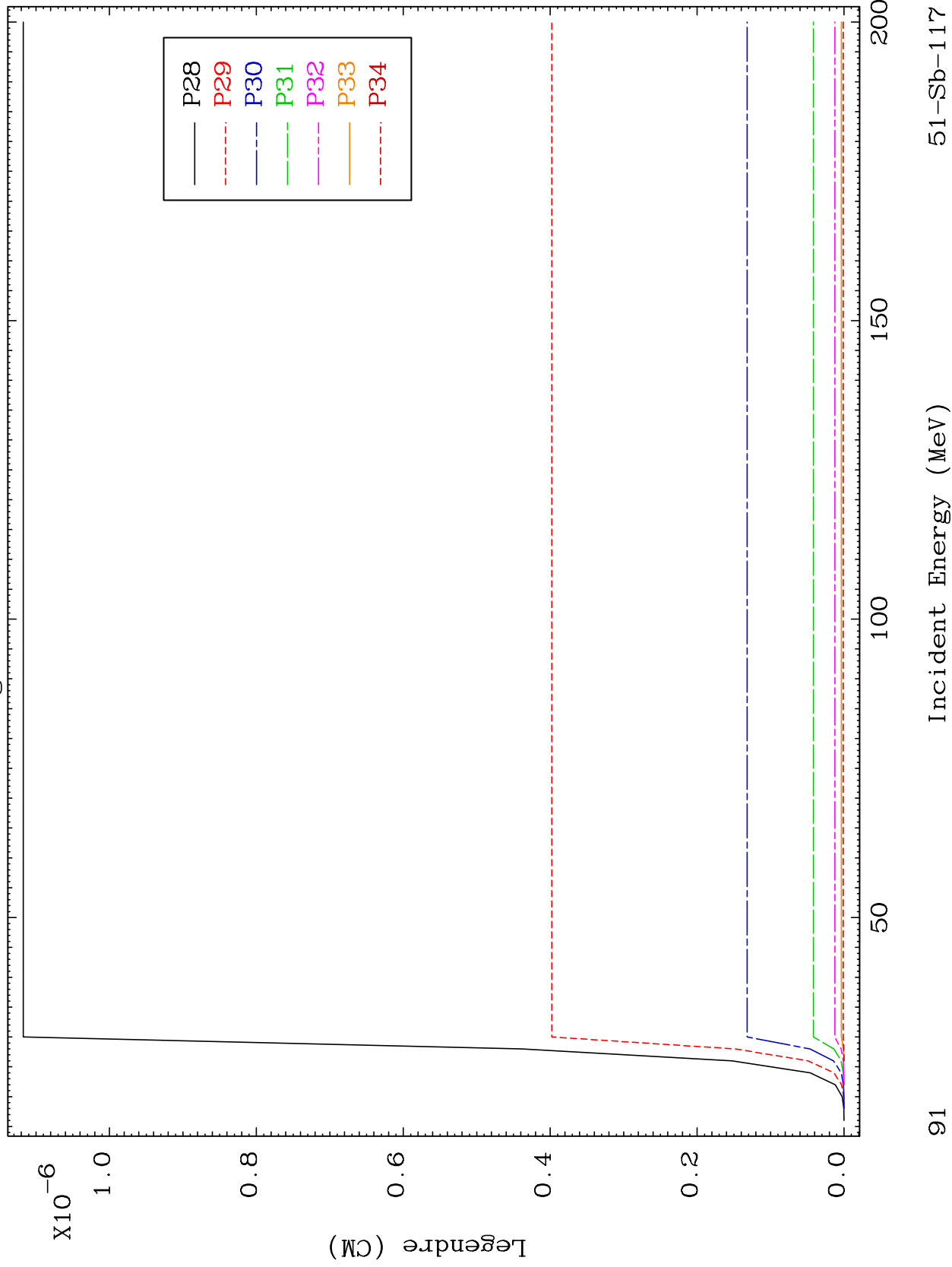
51-Sb-117

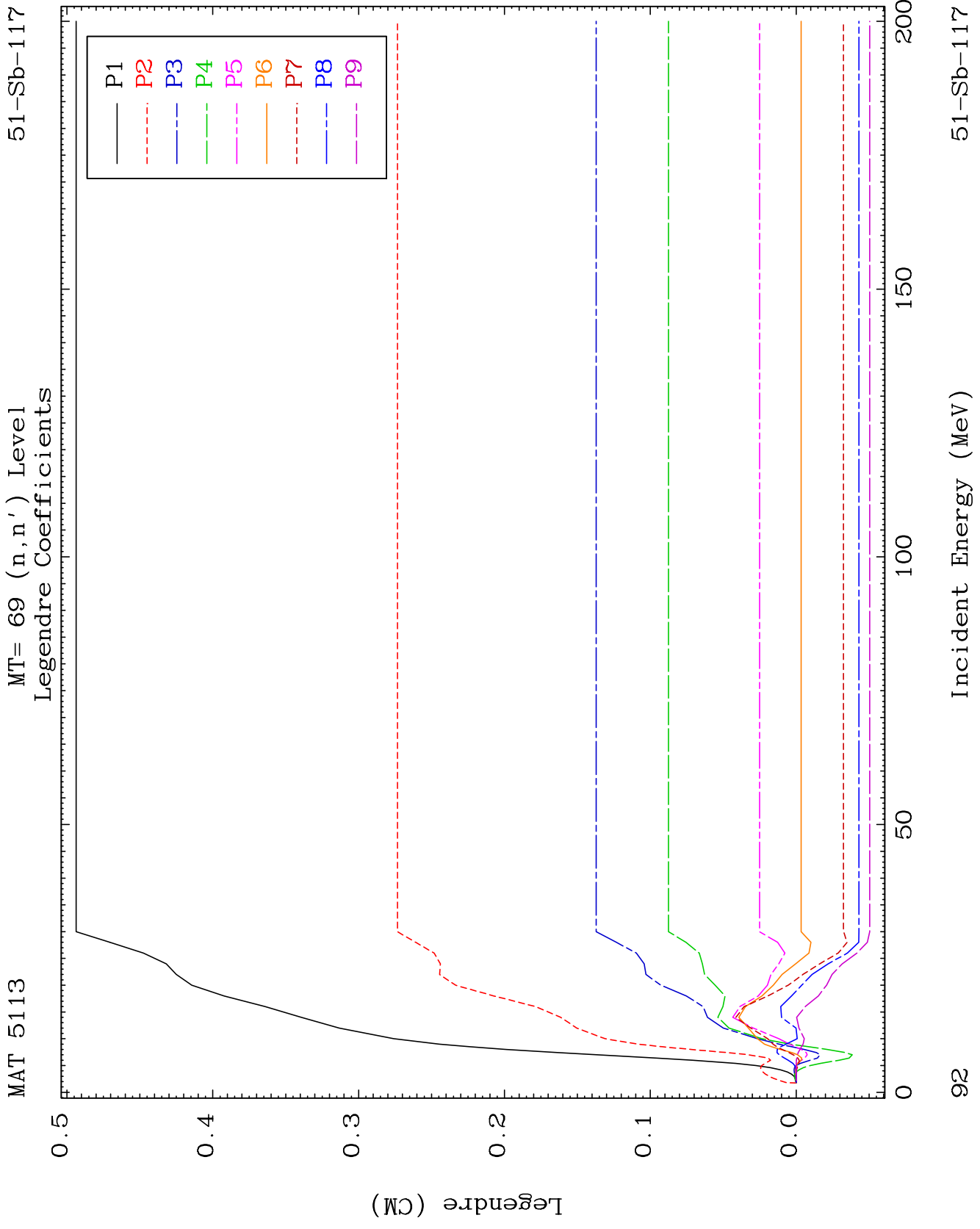


MAT 5113

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

51-Sb-117

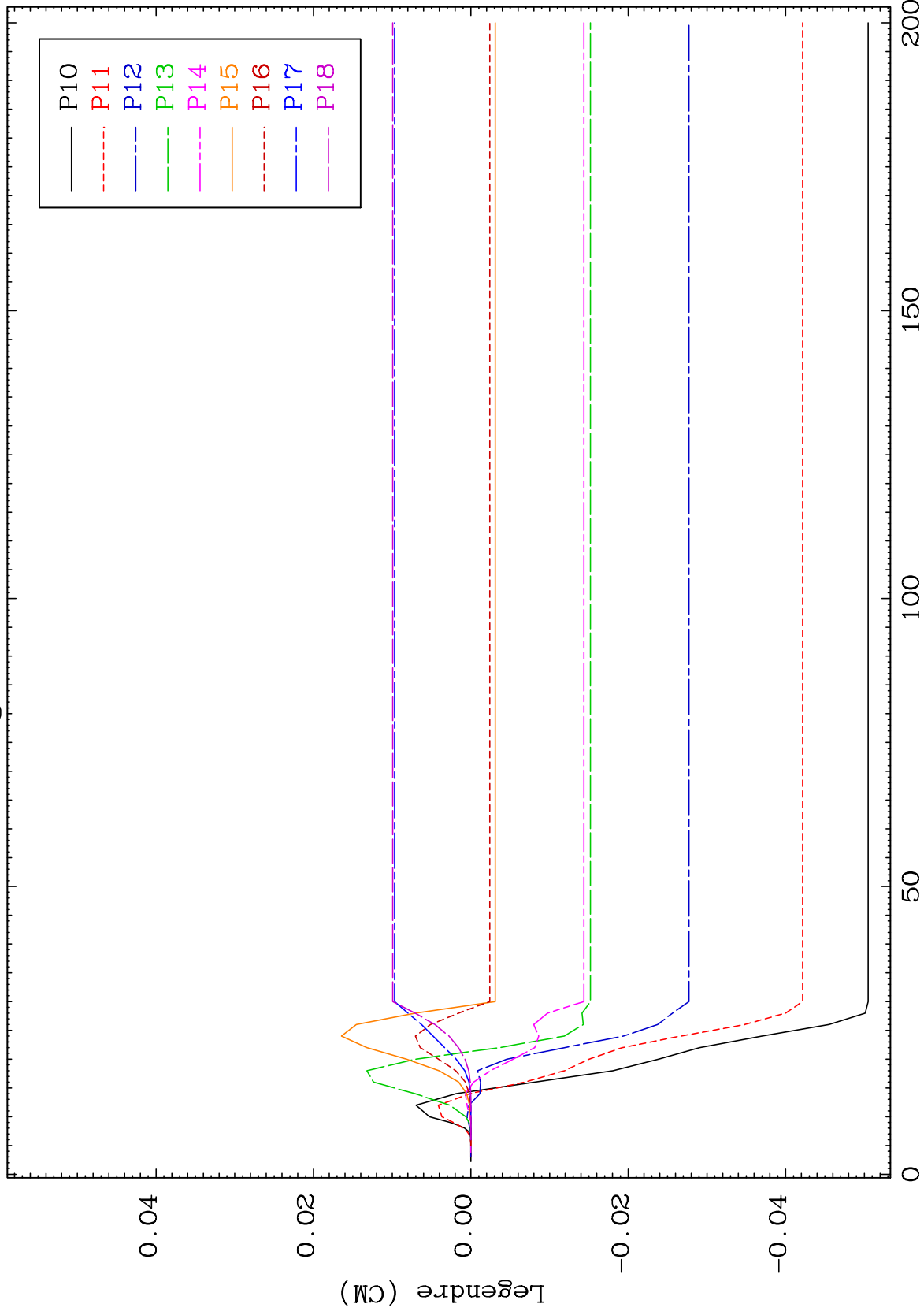




MAT 5113

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

51-Sb-117



93

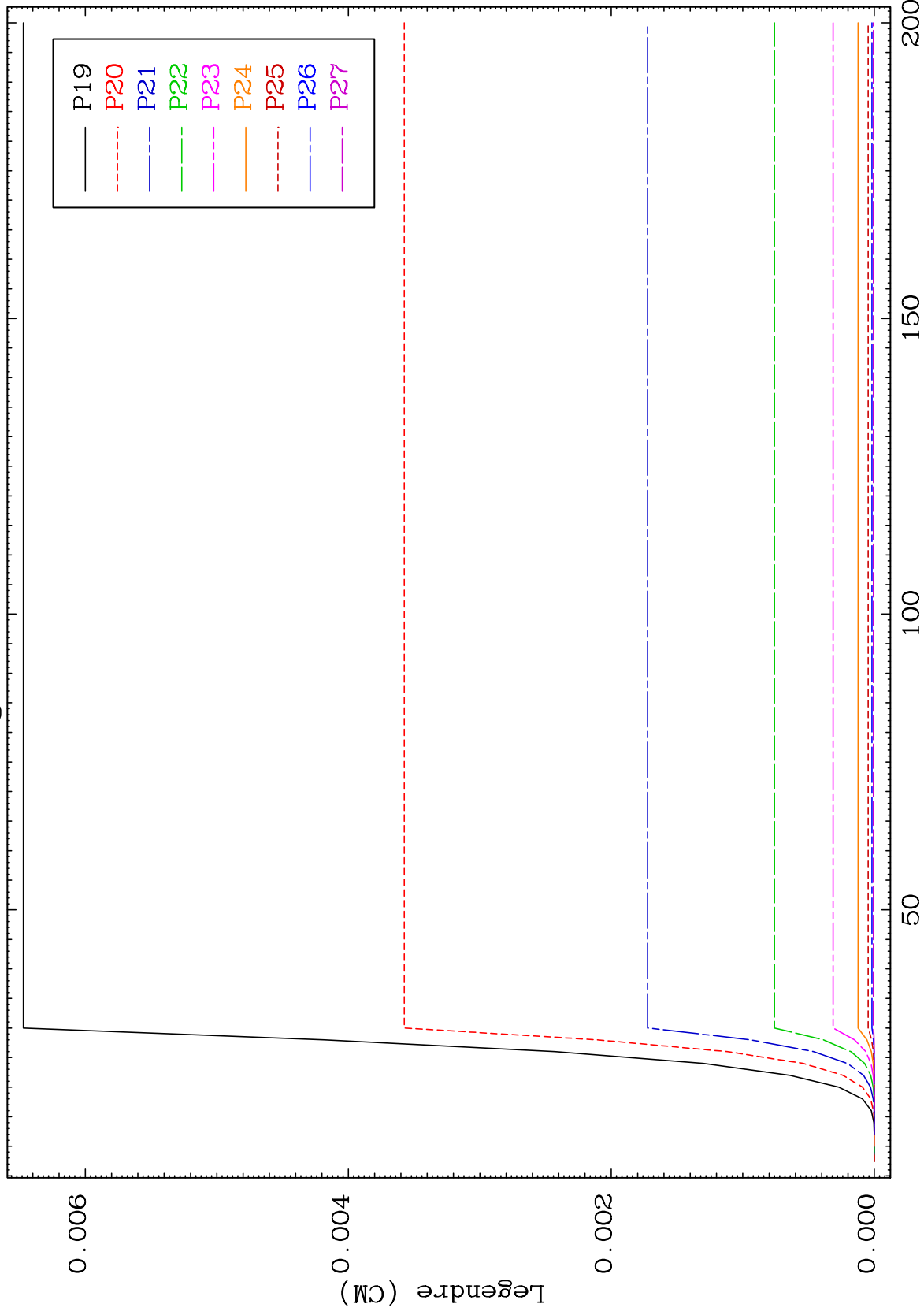
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



94

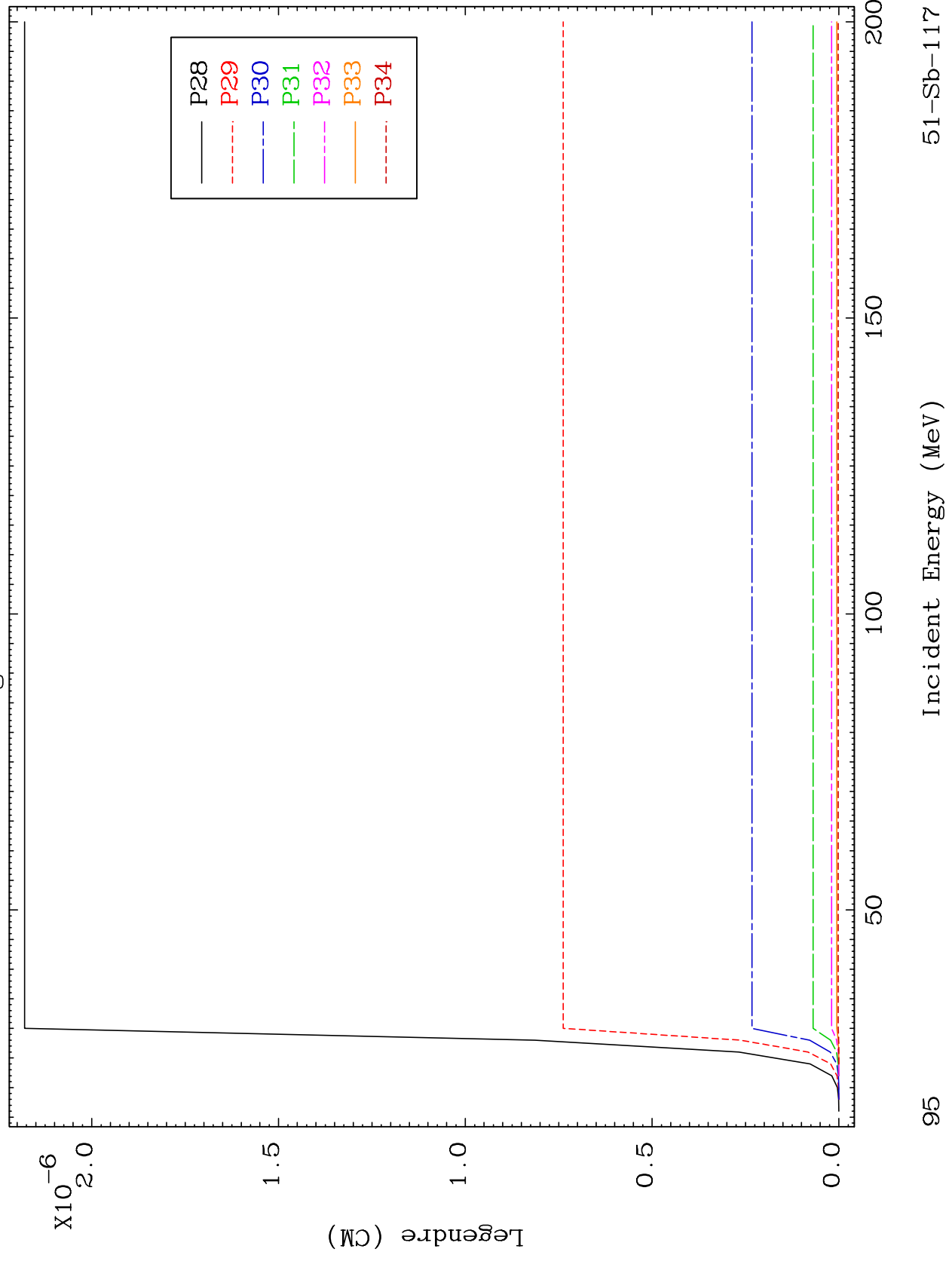
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



95

Incident Energy (MeV)

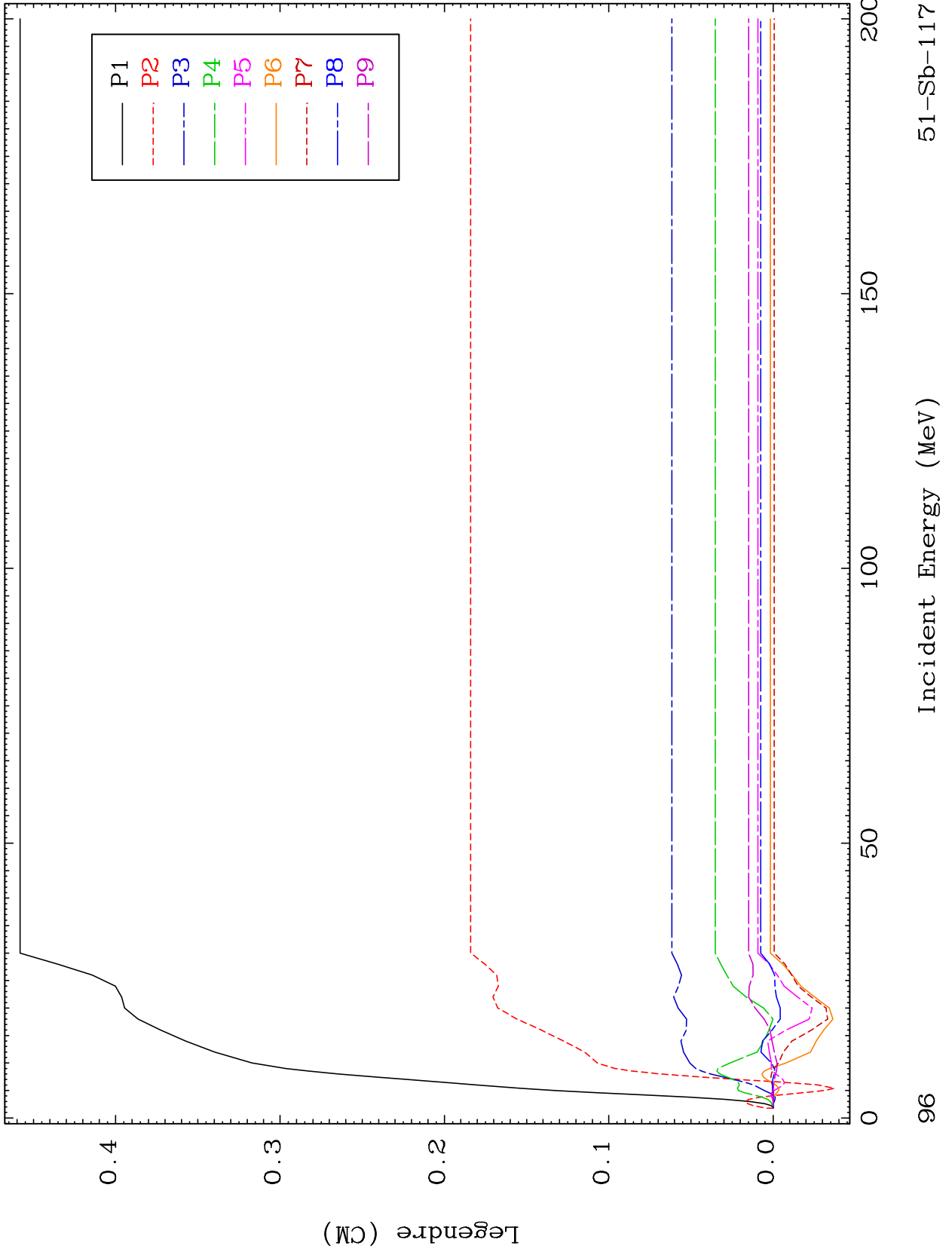
51-Sb-117



MAT 5113

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

51-Sb-117



51-Sb-117

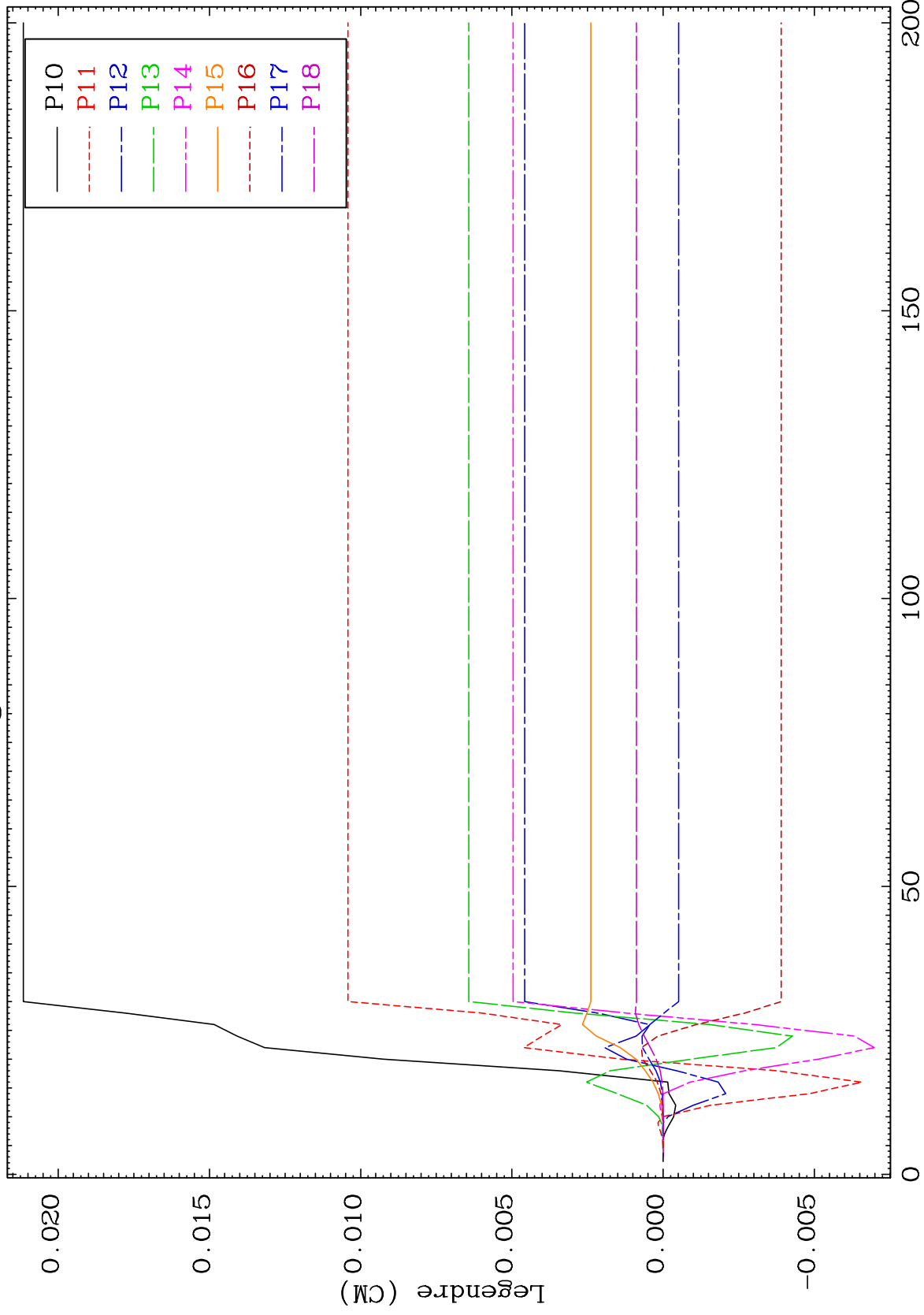
Incident Energy (MeV)

96

MAT 5113

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

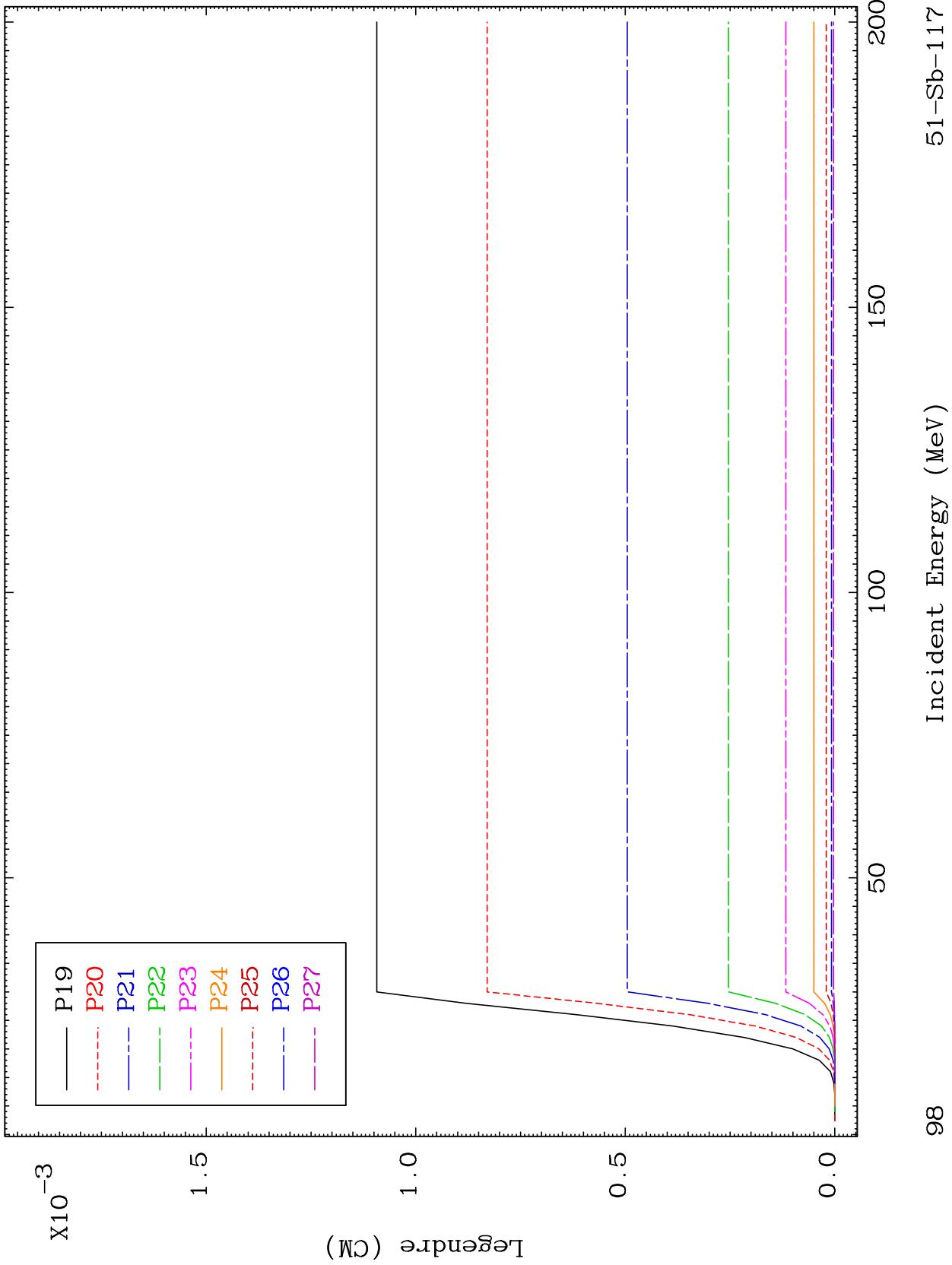
51-Sb-117



97

Incident Energy (MeV)

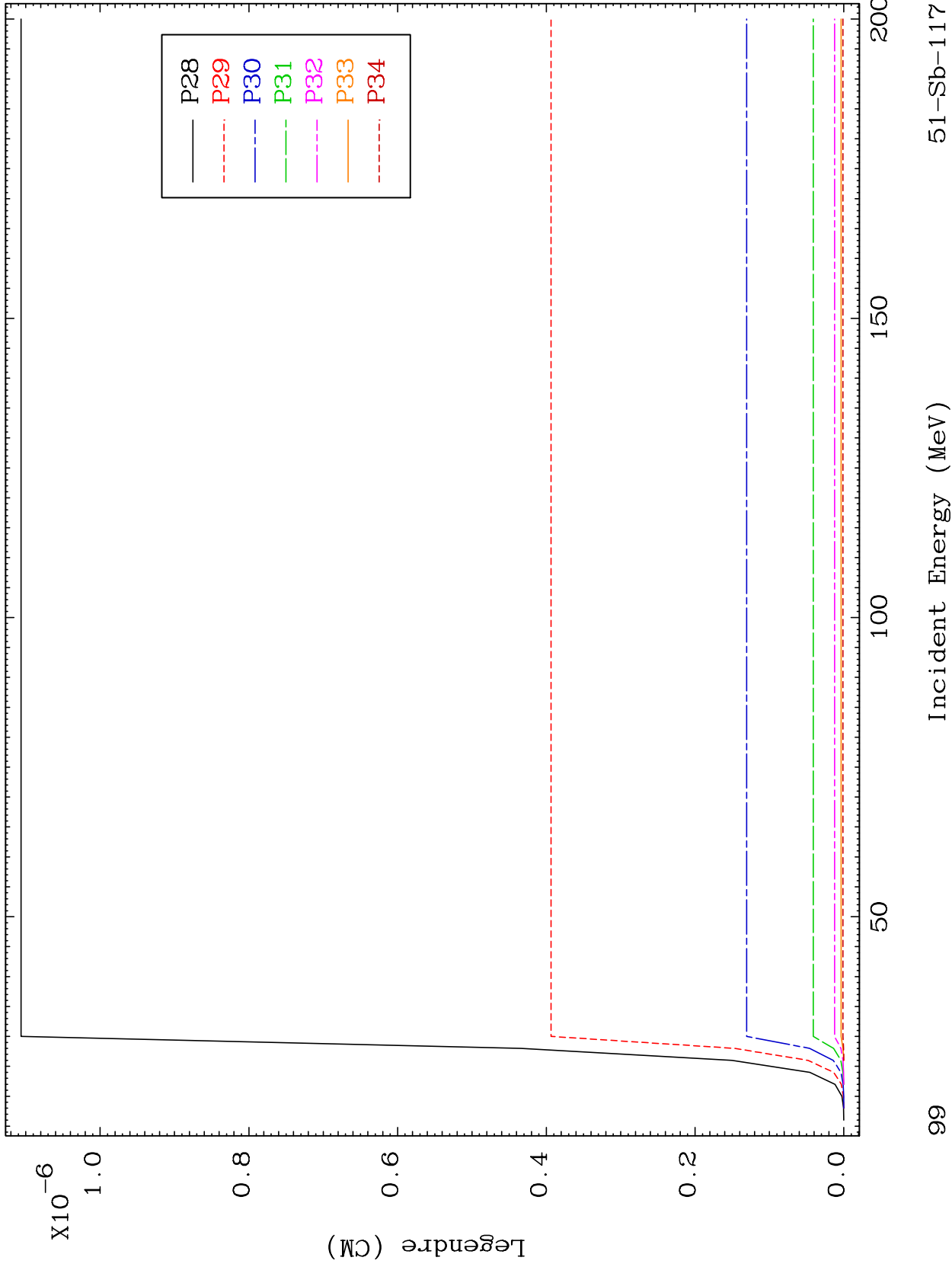
51-Sb-117

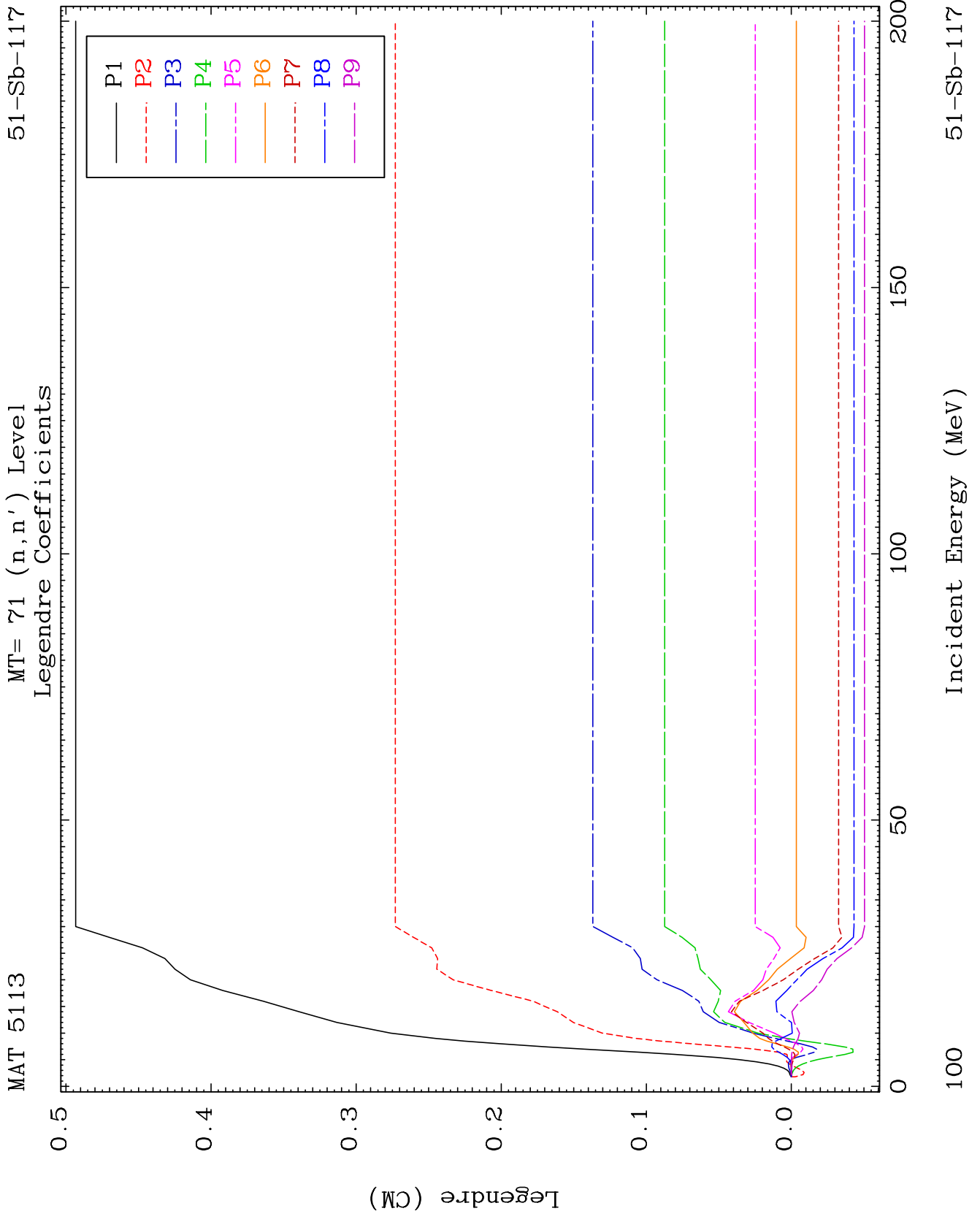


MAT 5113

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

51-Sb-117

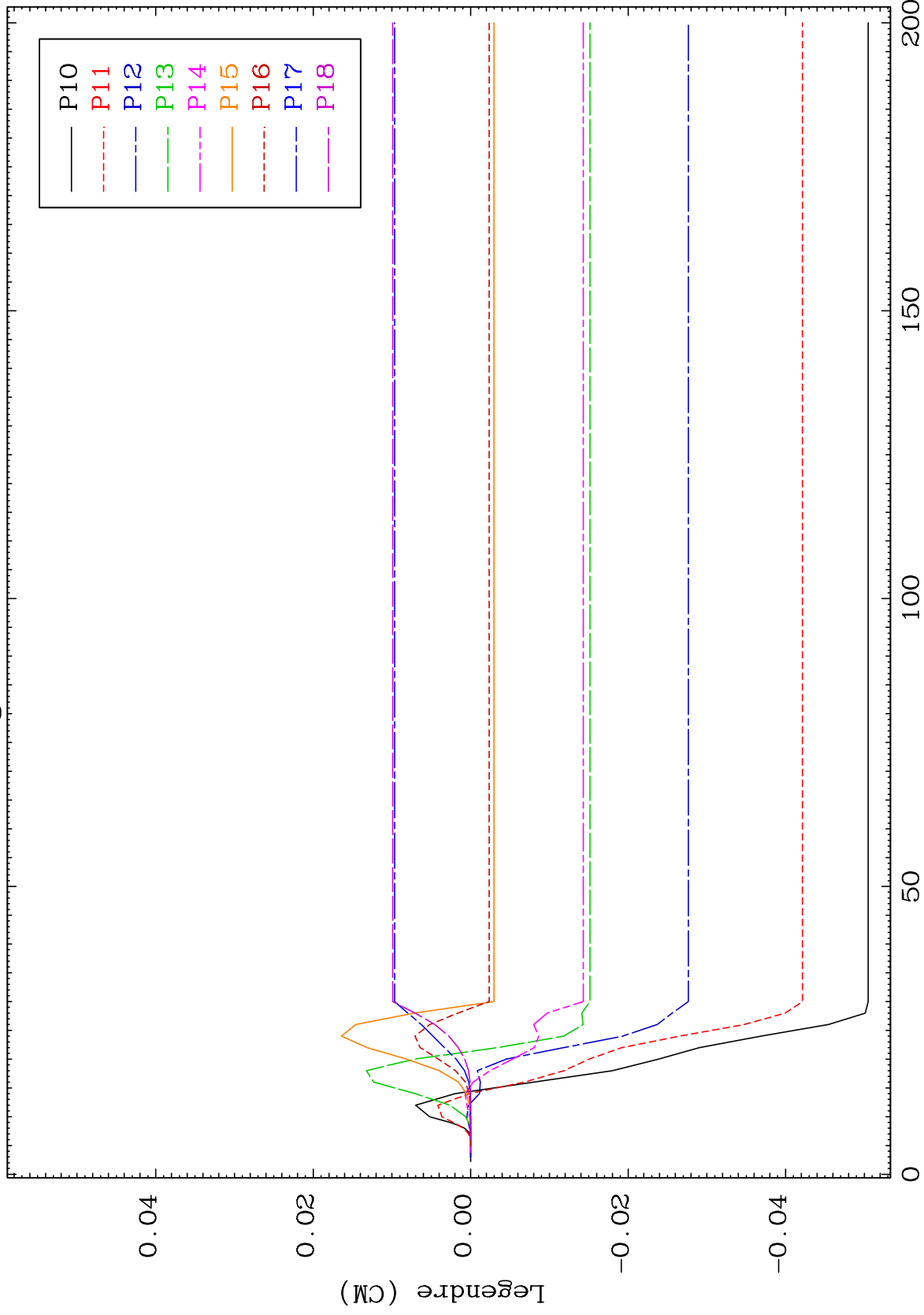




MAT 5113

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

51-Sb-117



101

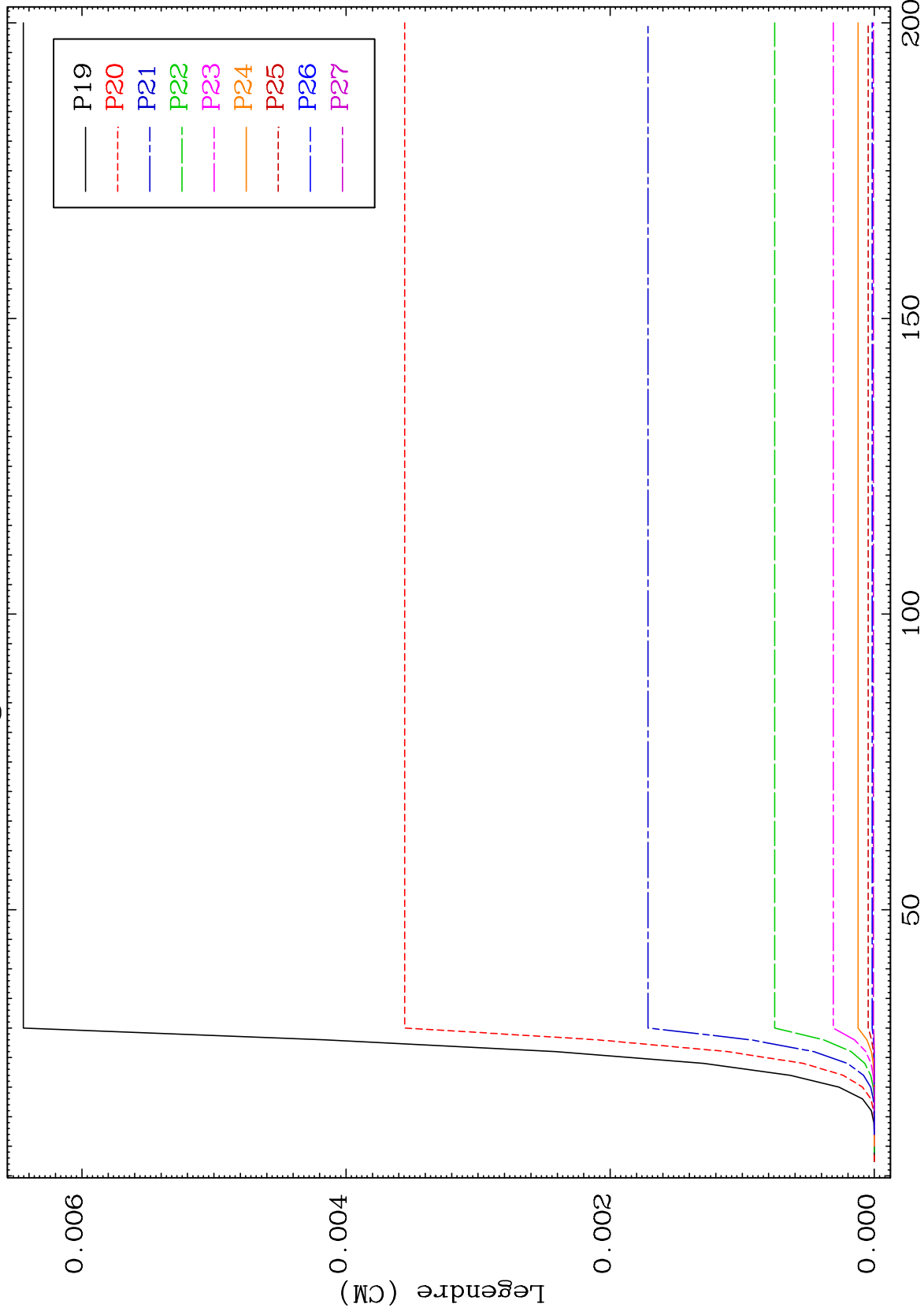
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



102

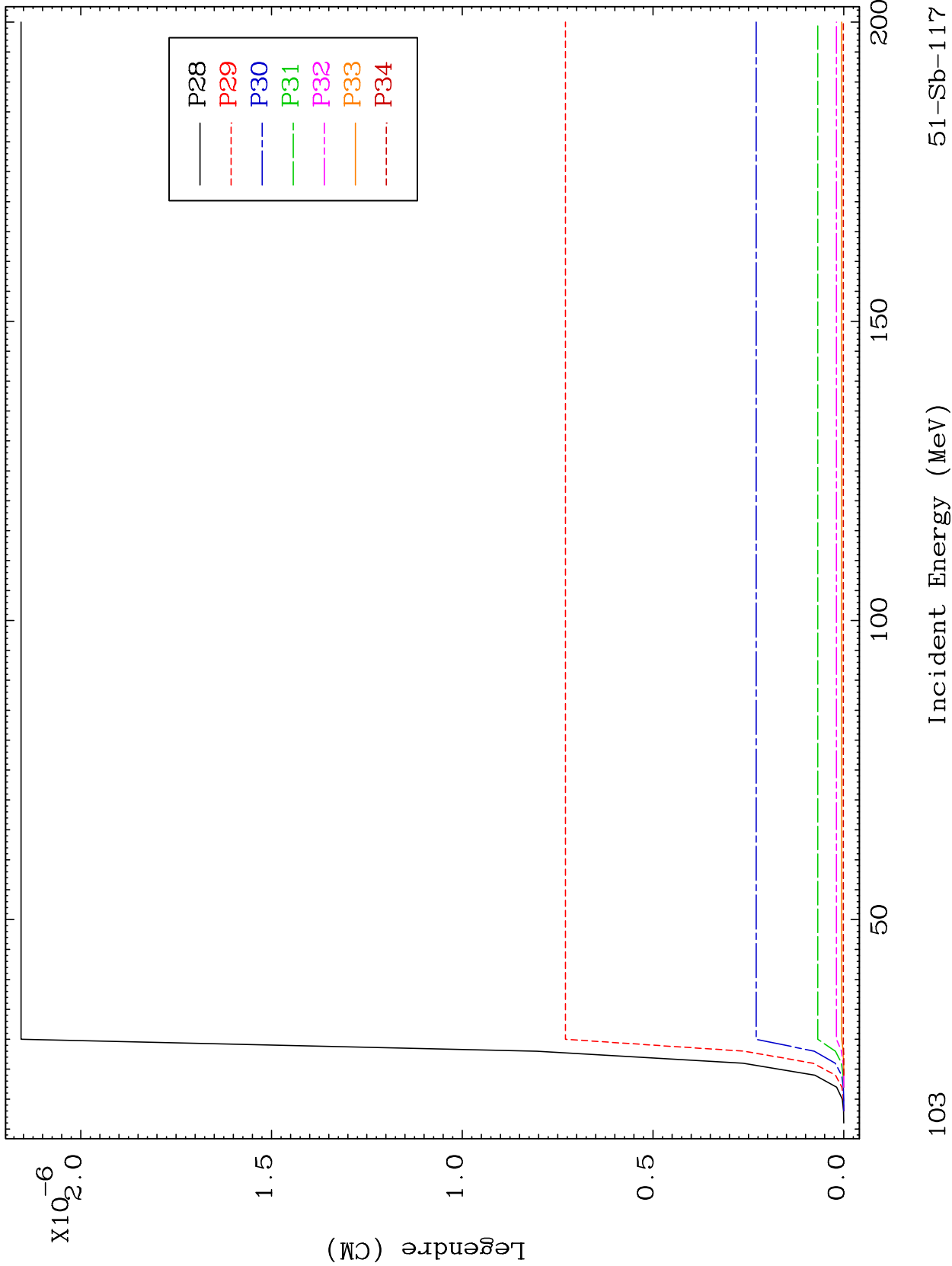
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

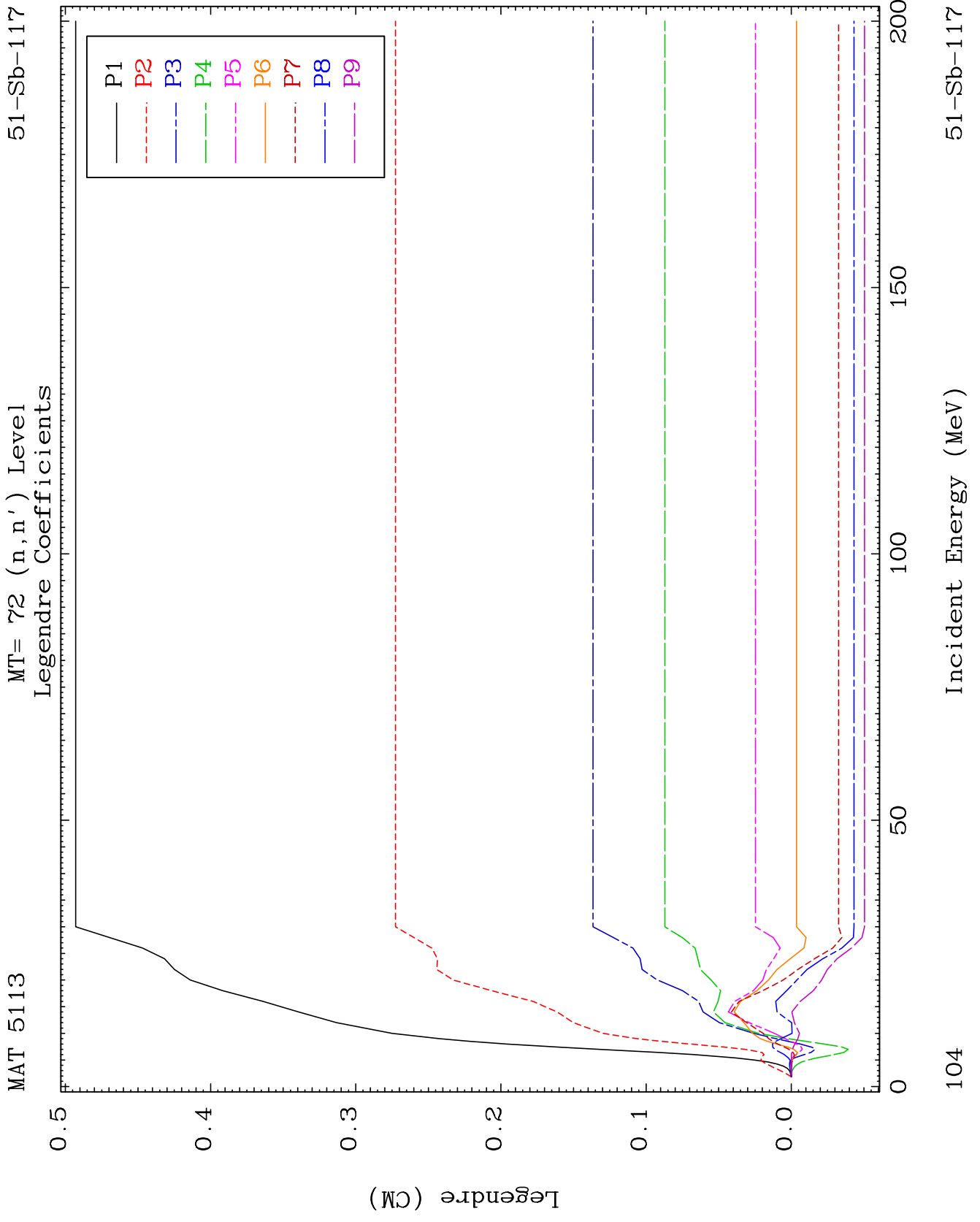
51-Sb-117



103

51-Sb-117

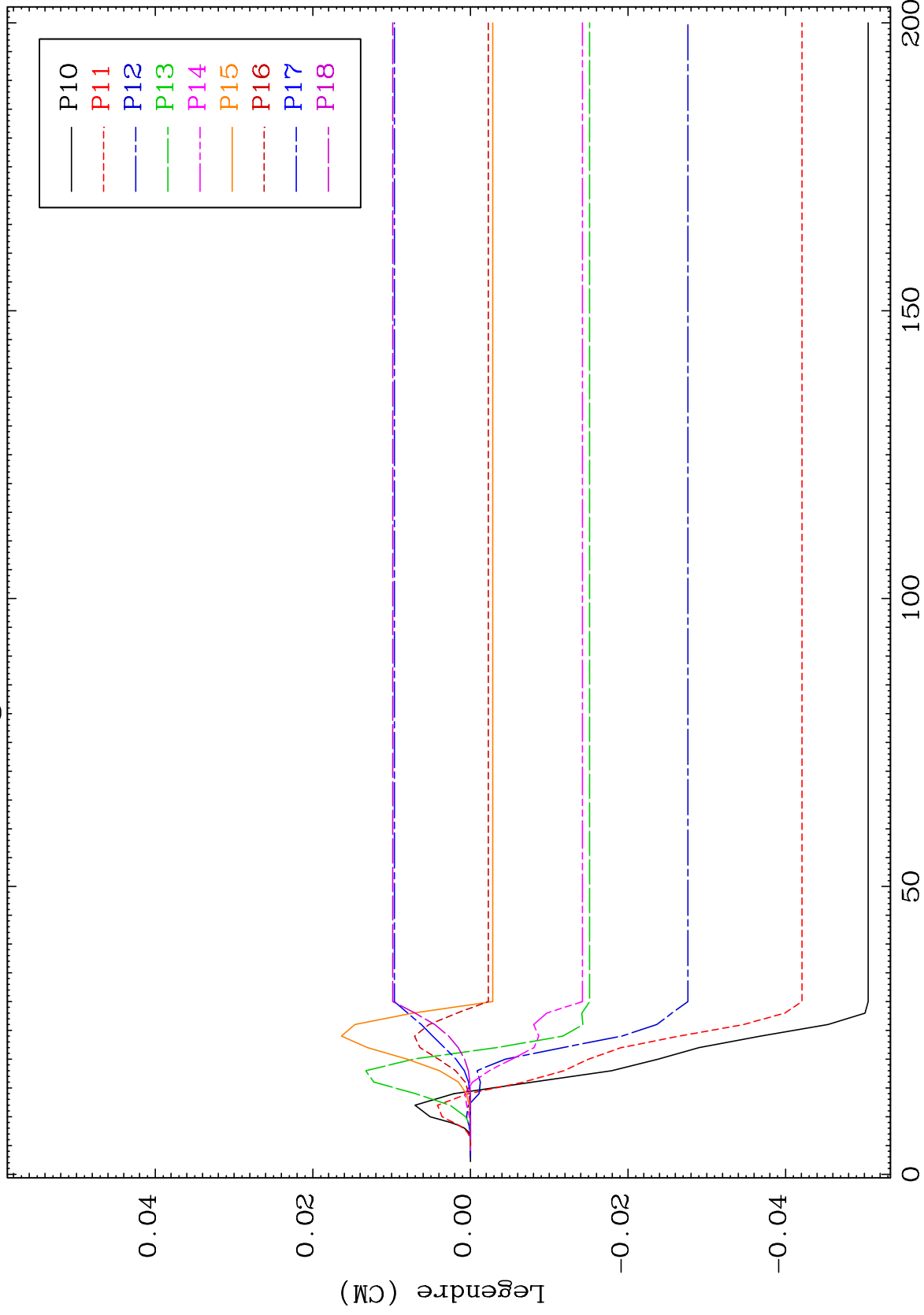




MAT 5113

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

51-Sb-117



105

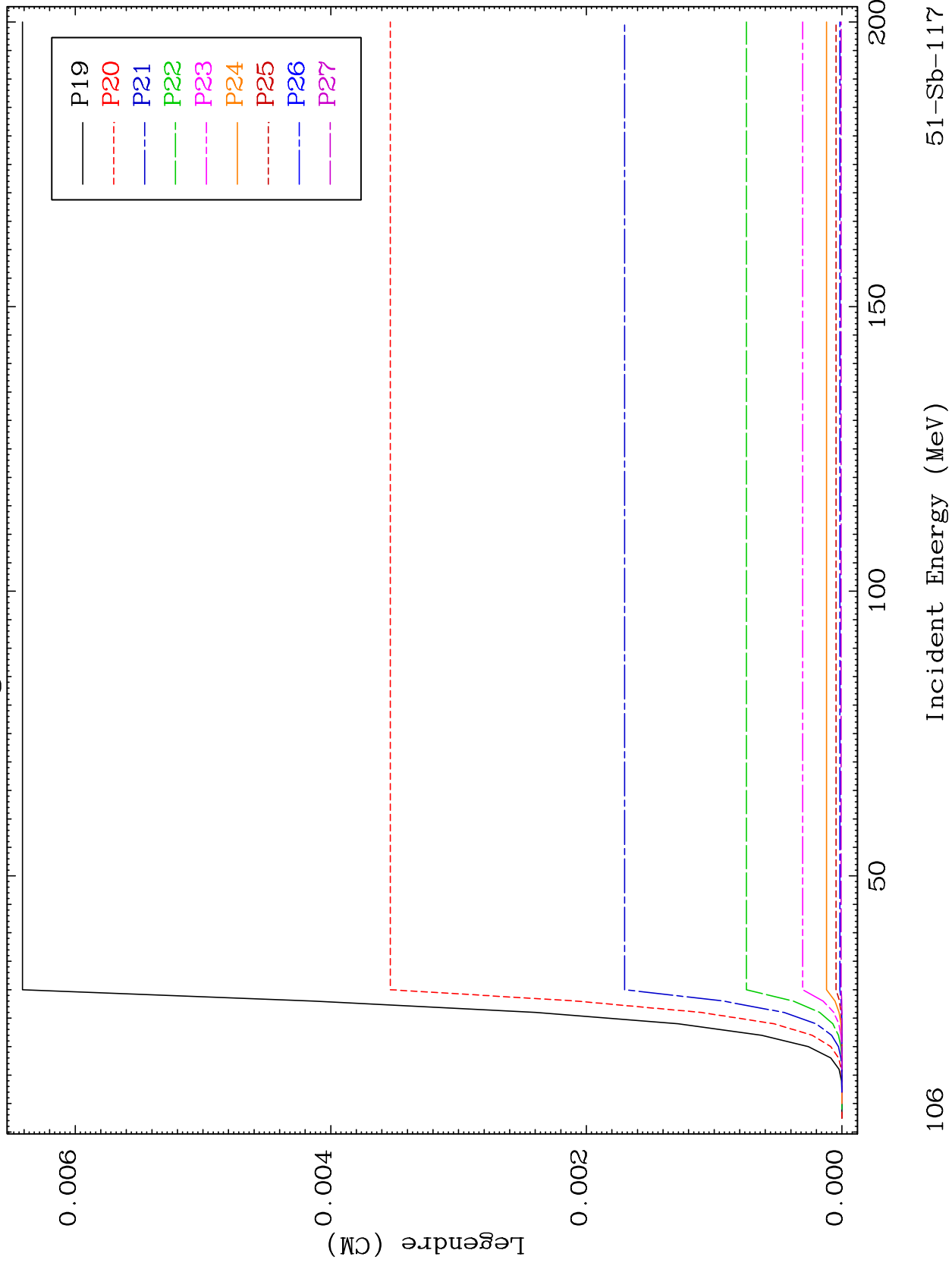
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



106

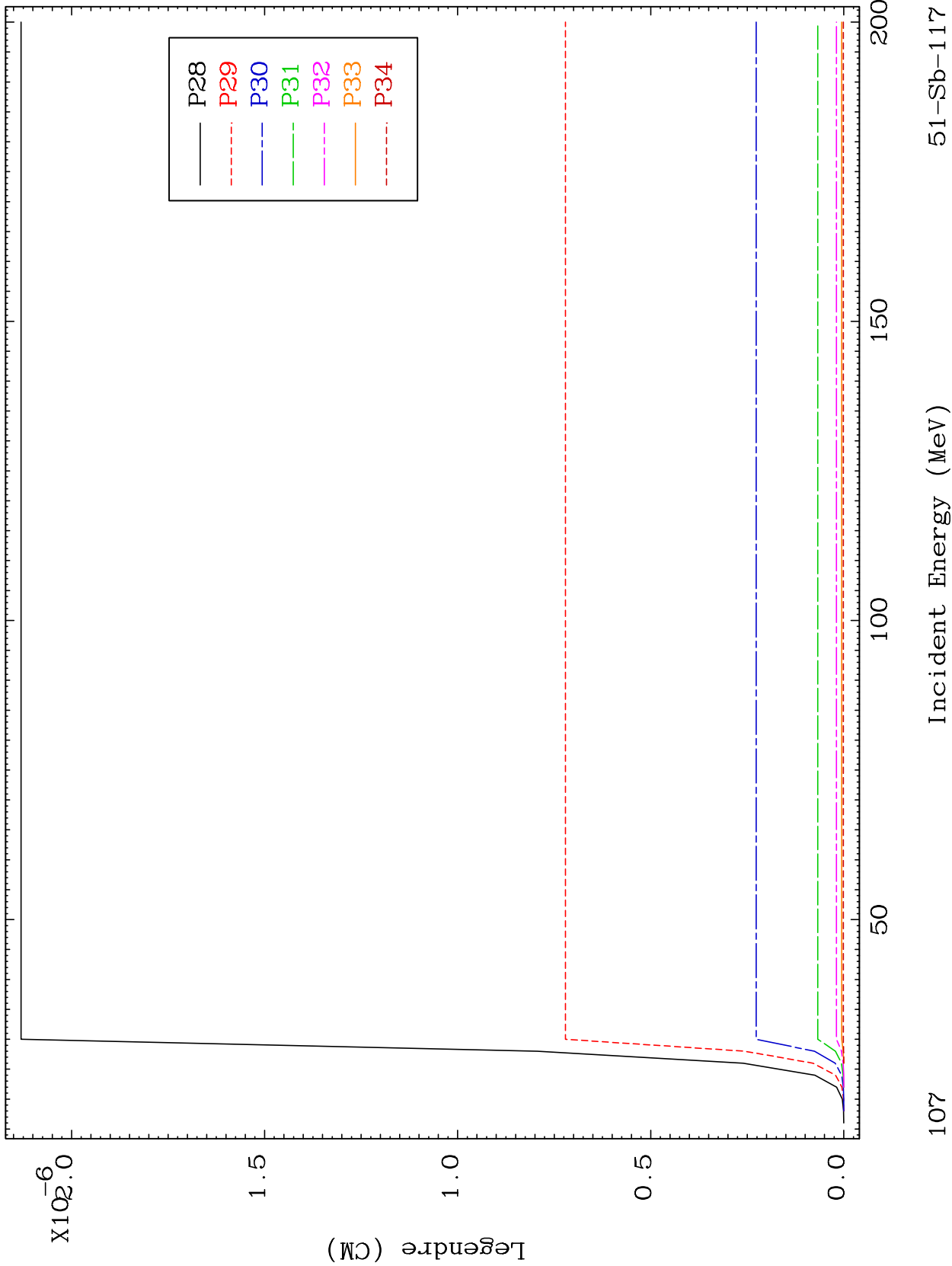
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117

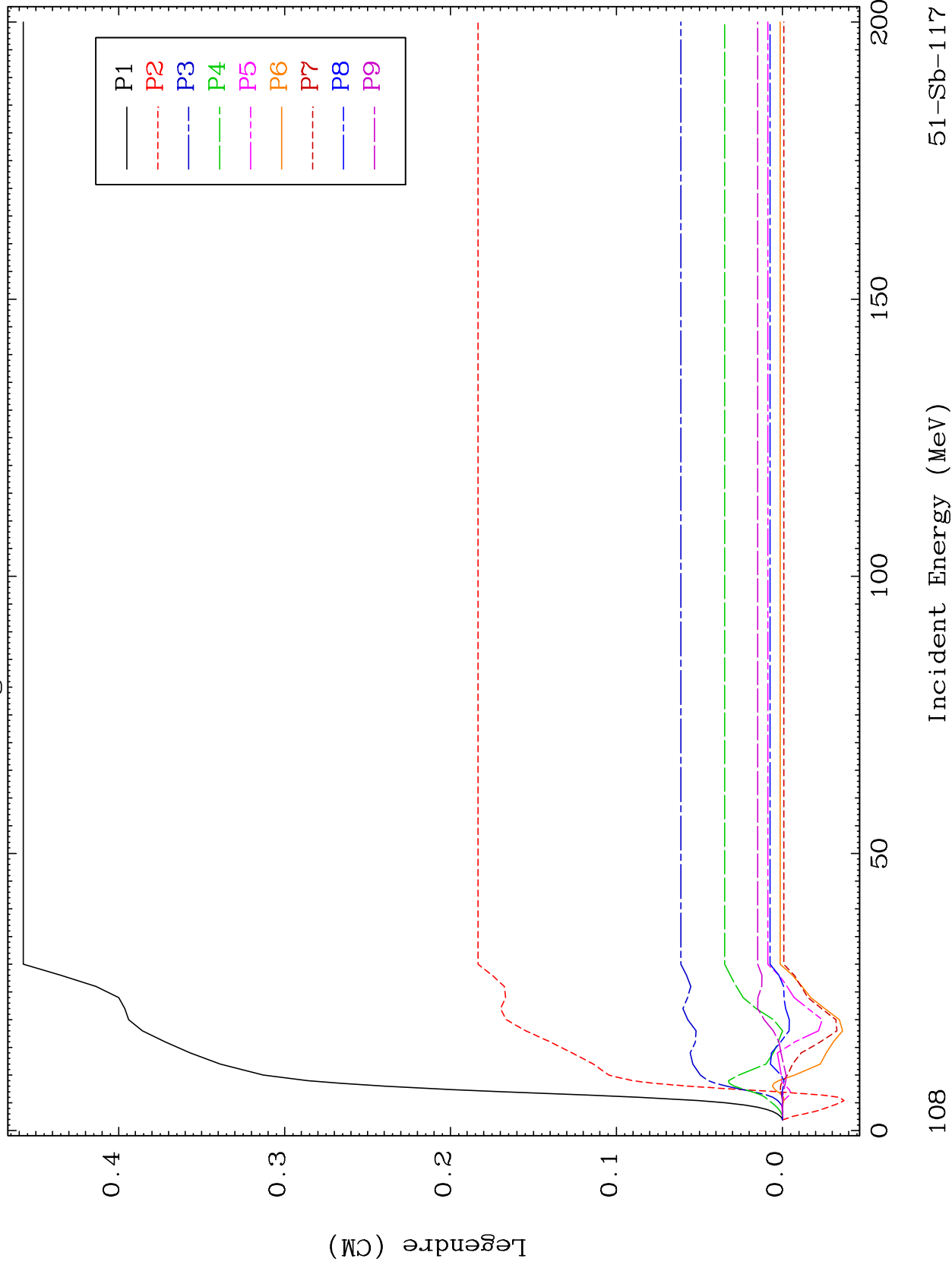


107

MAT 5113

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

51-Sb-117



51-Sb-117

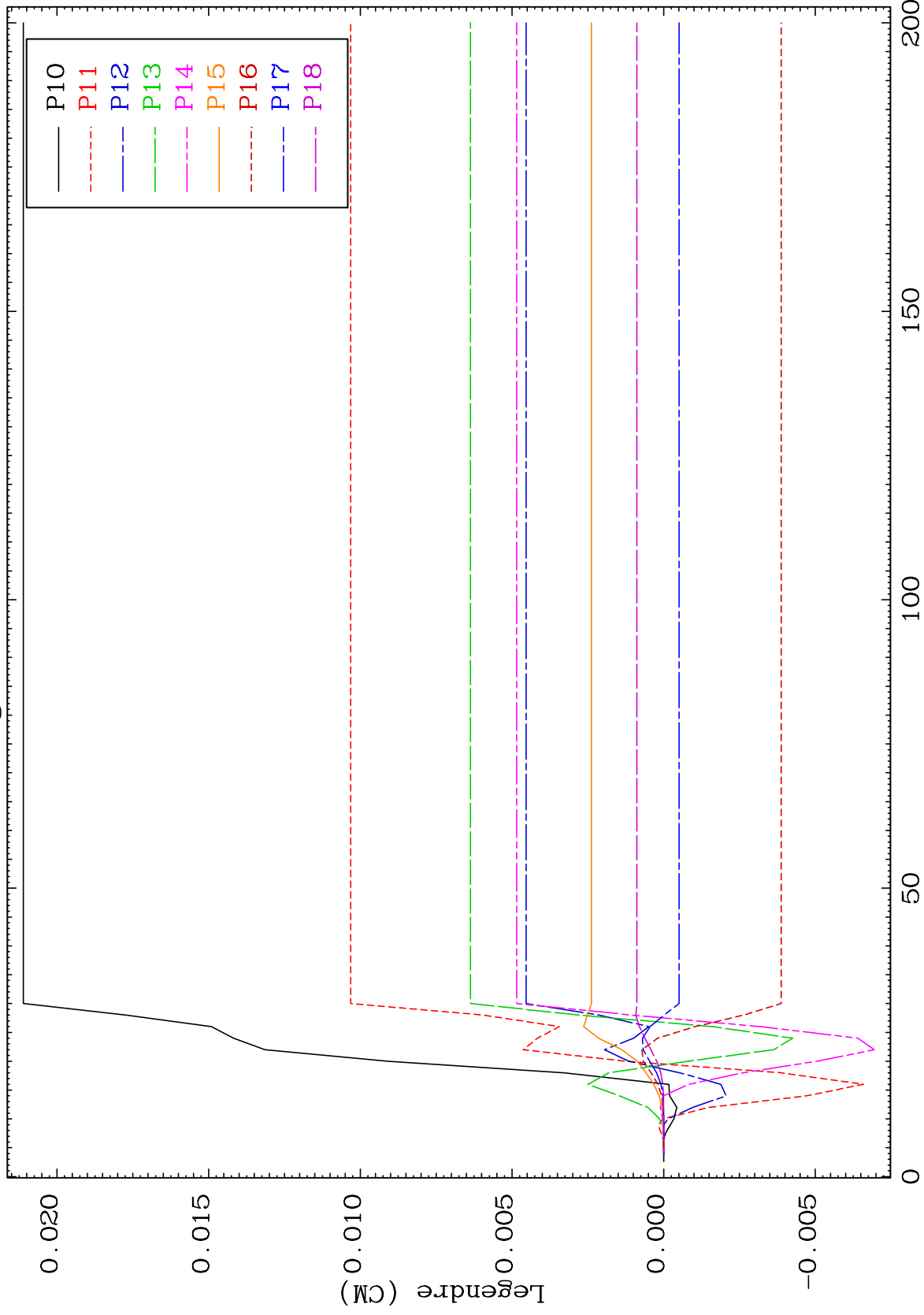
Incident Energy (MeV)

108

MAT 5113

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

51-Sb-117



109

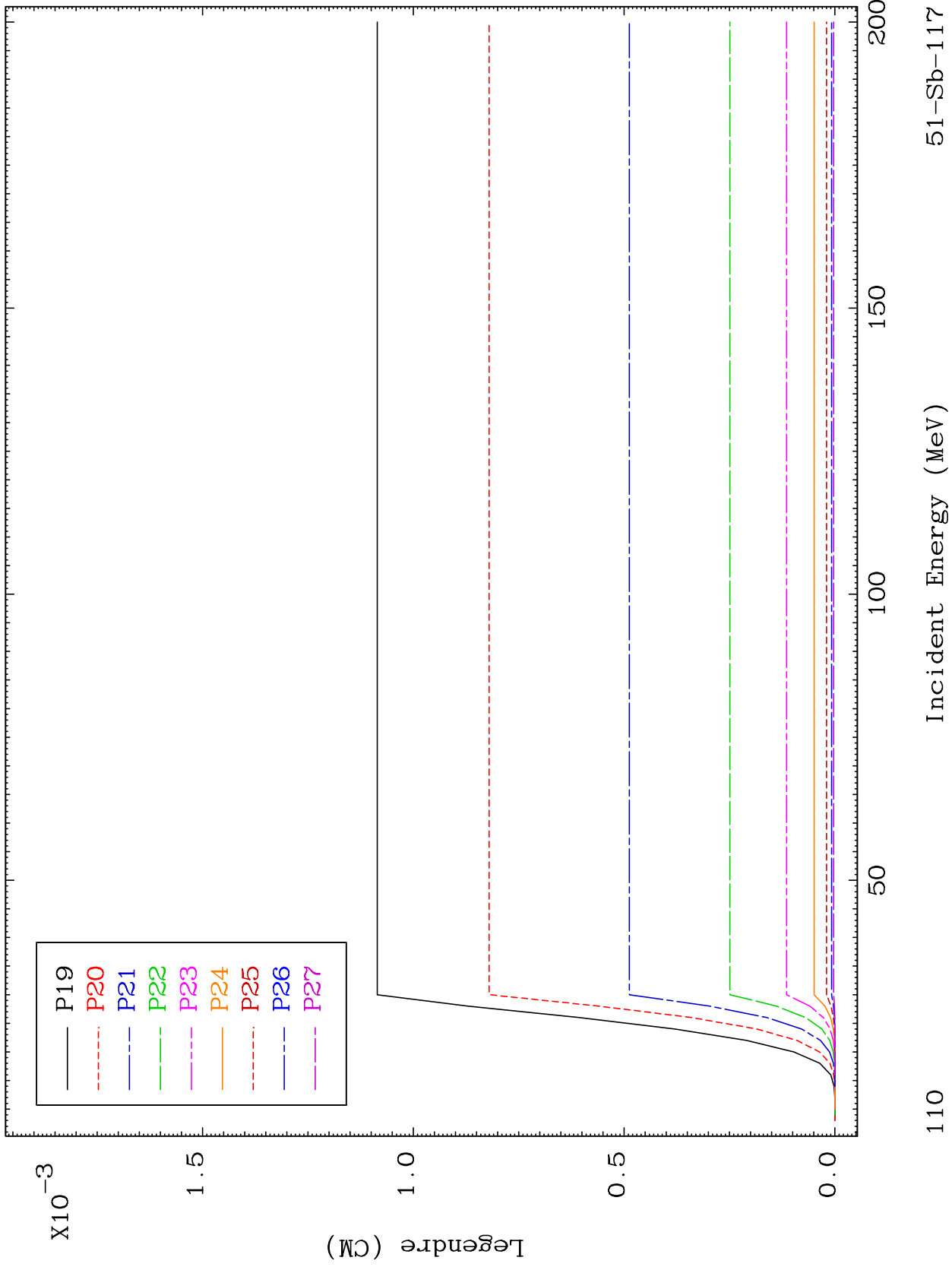
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

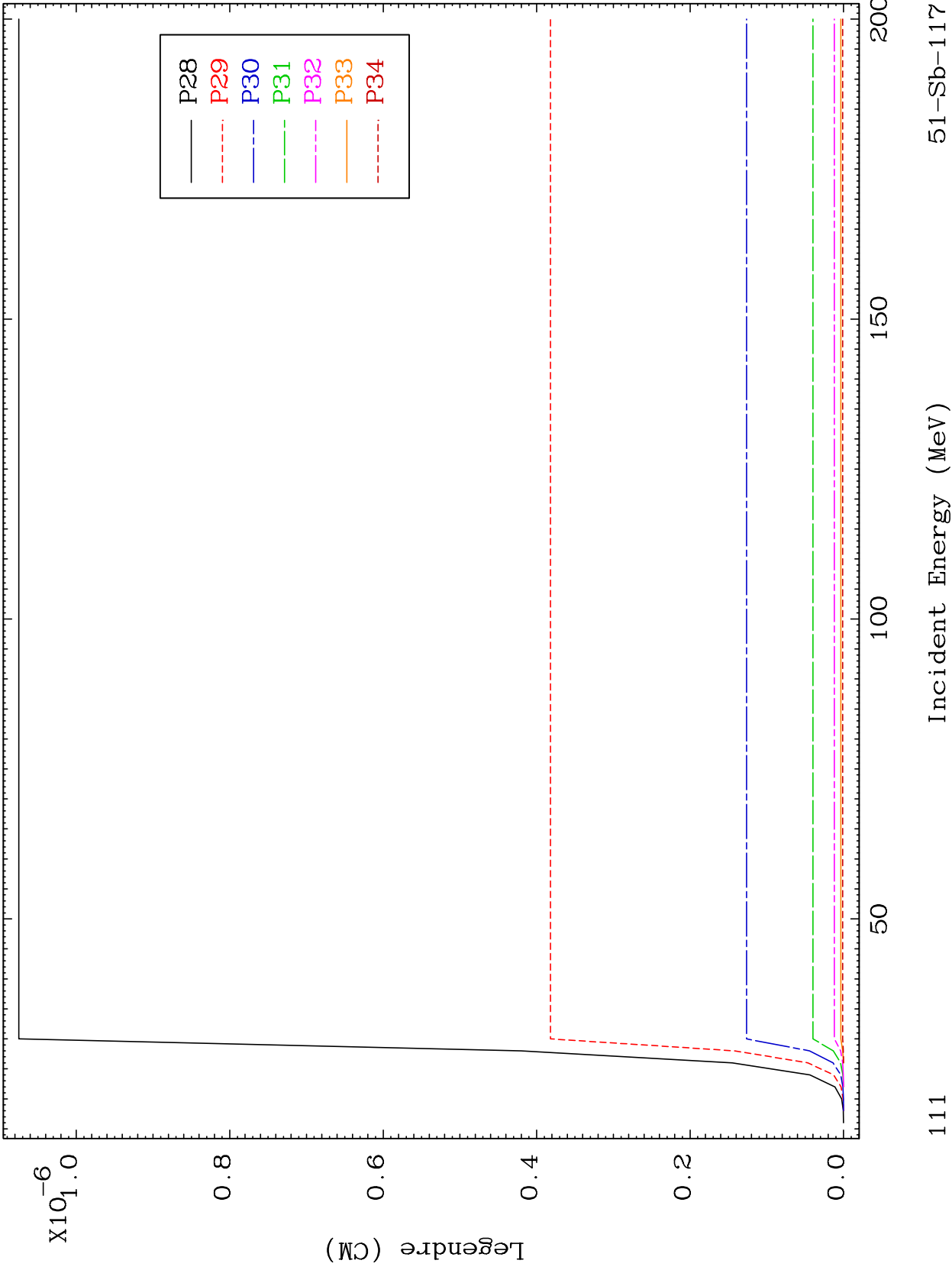
51-Sb-117



MAT 5113

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

51-Sb-117



111

Incident Energy (MeV)

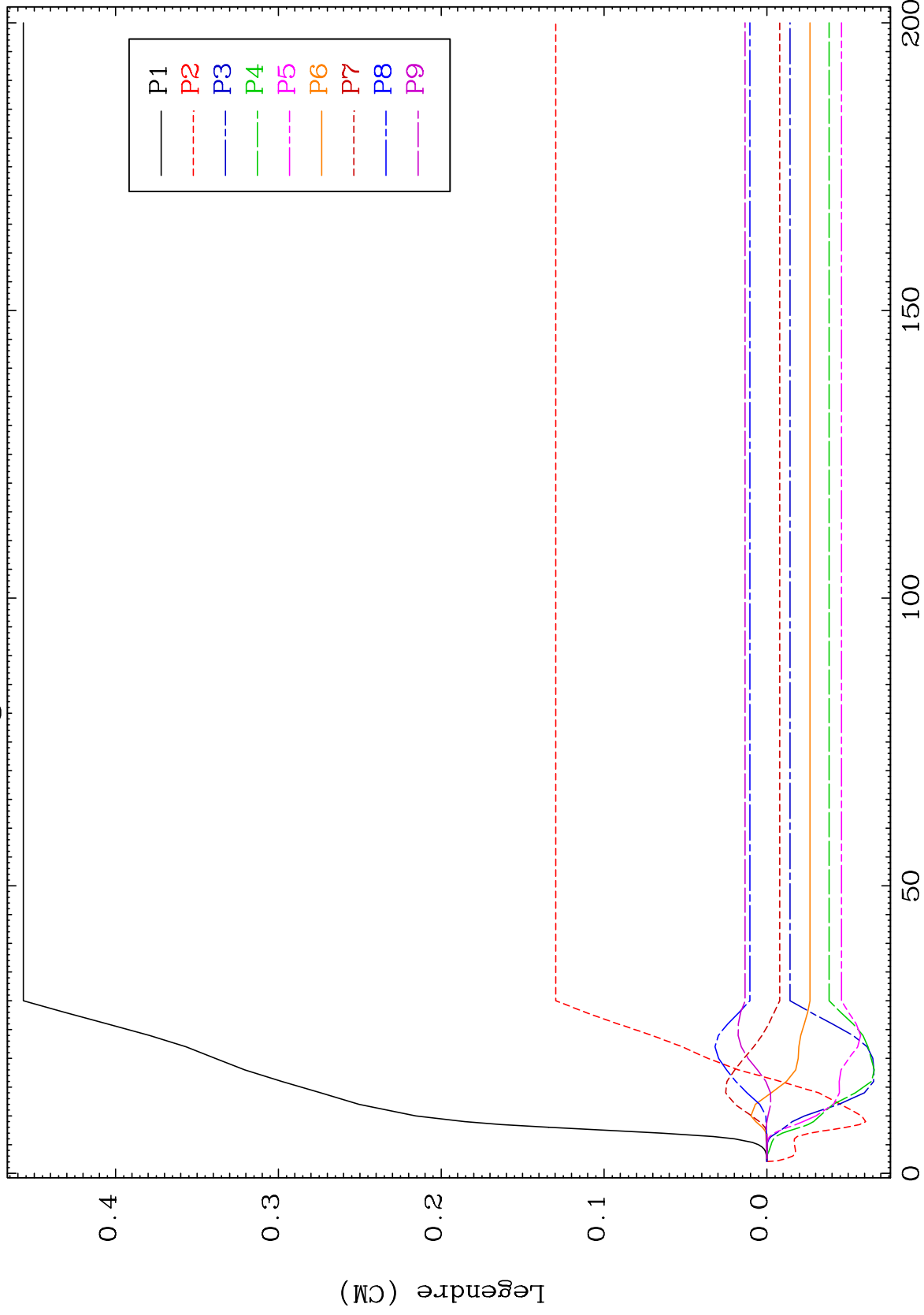
51-Sb-117



MAT 5113

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

51-Sb-117



112

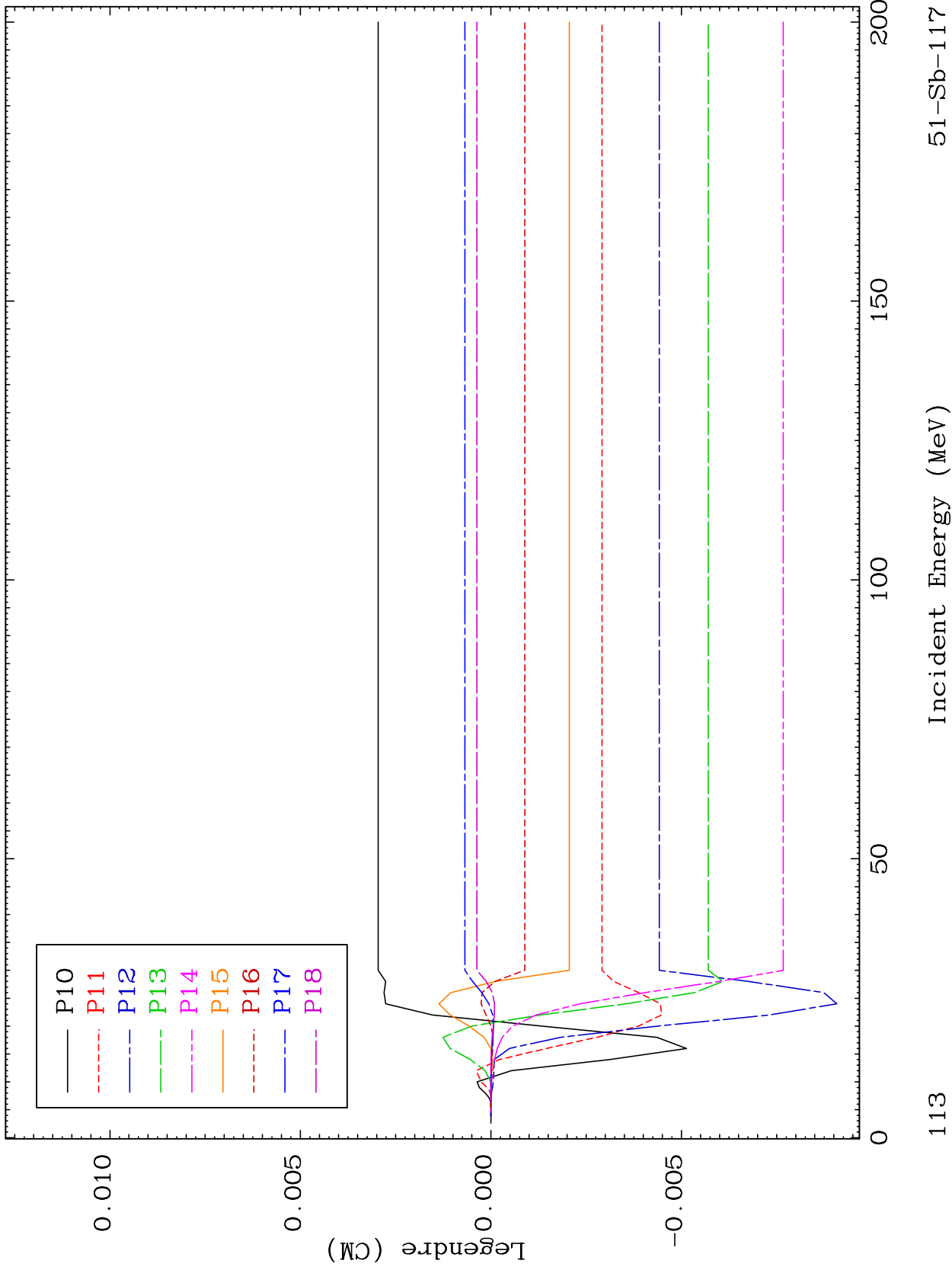
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

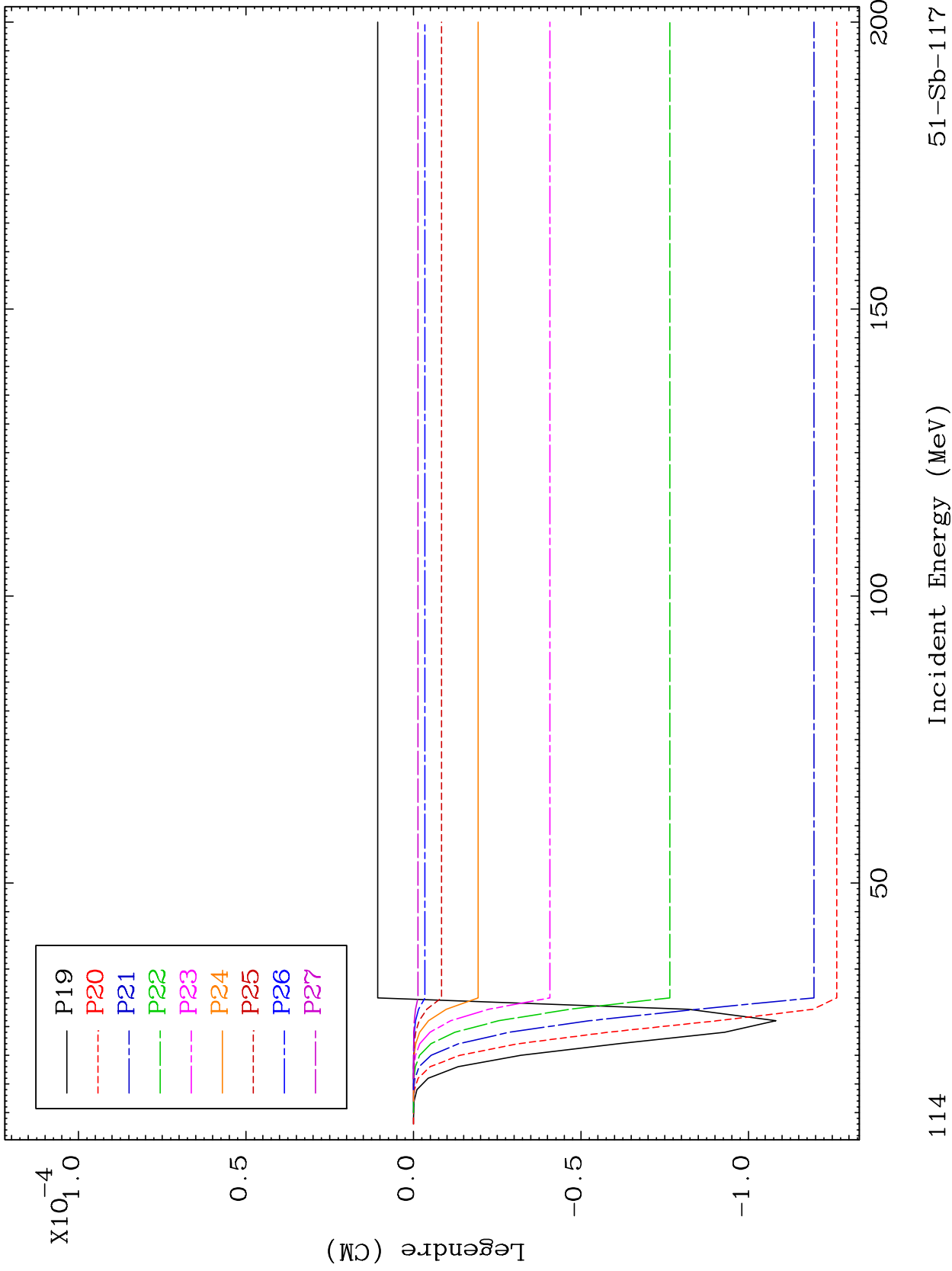
51-Sb-117



113

Incident Energy (MeV)

51-Sb-117

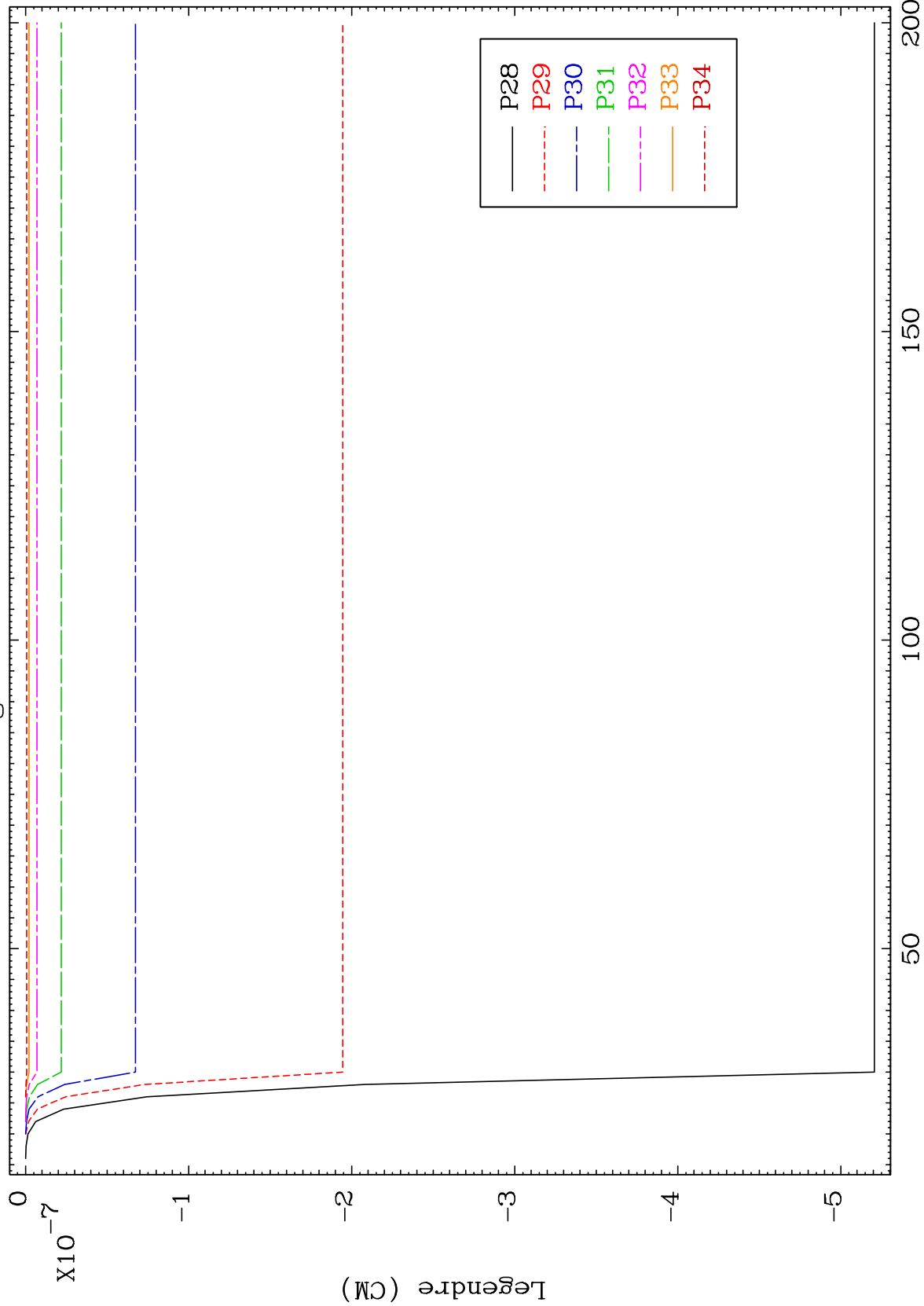


MAT 5113

MT= 74 (n,n') Level

51-Sb-117

Legendre Coefficients



115

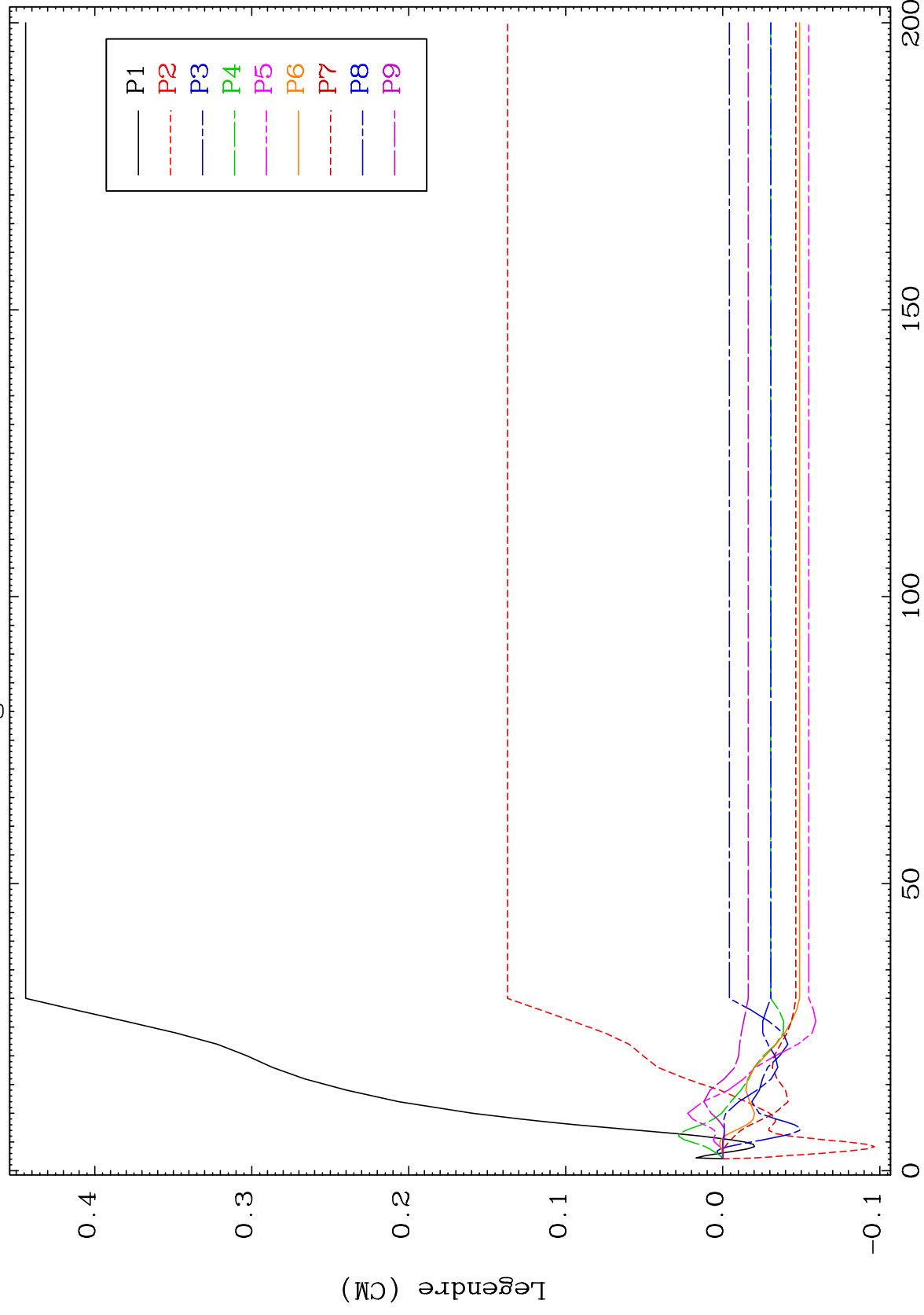
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

Incident Energy (MeV)

116

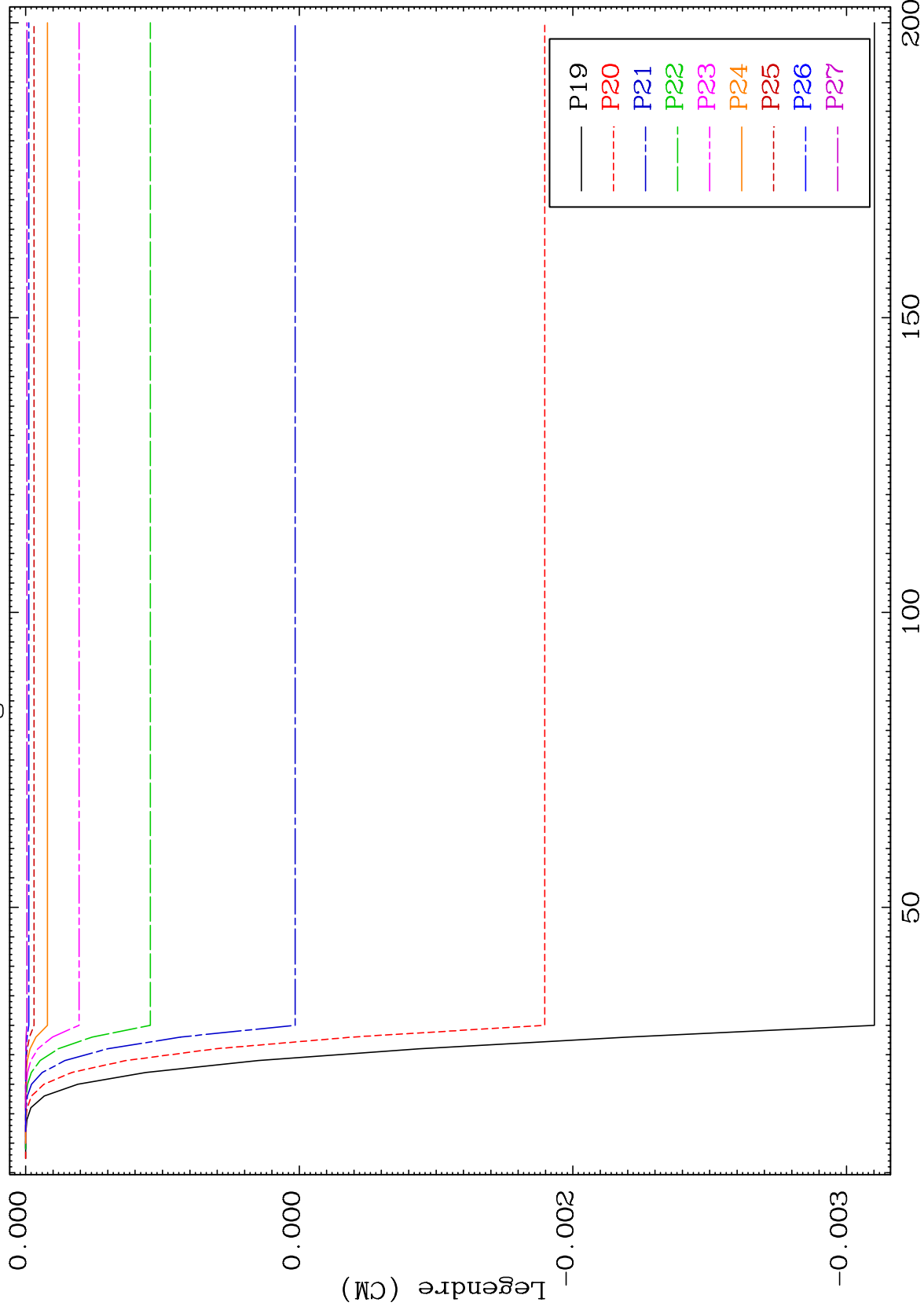


MAT 5113

MT= 75 (n,n') Level

51-Sb-117

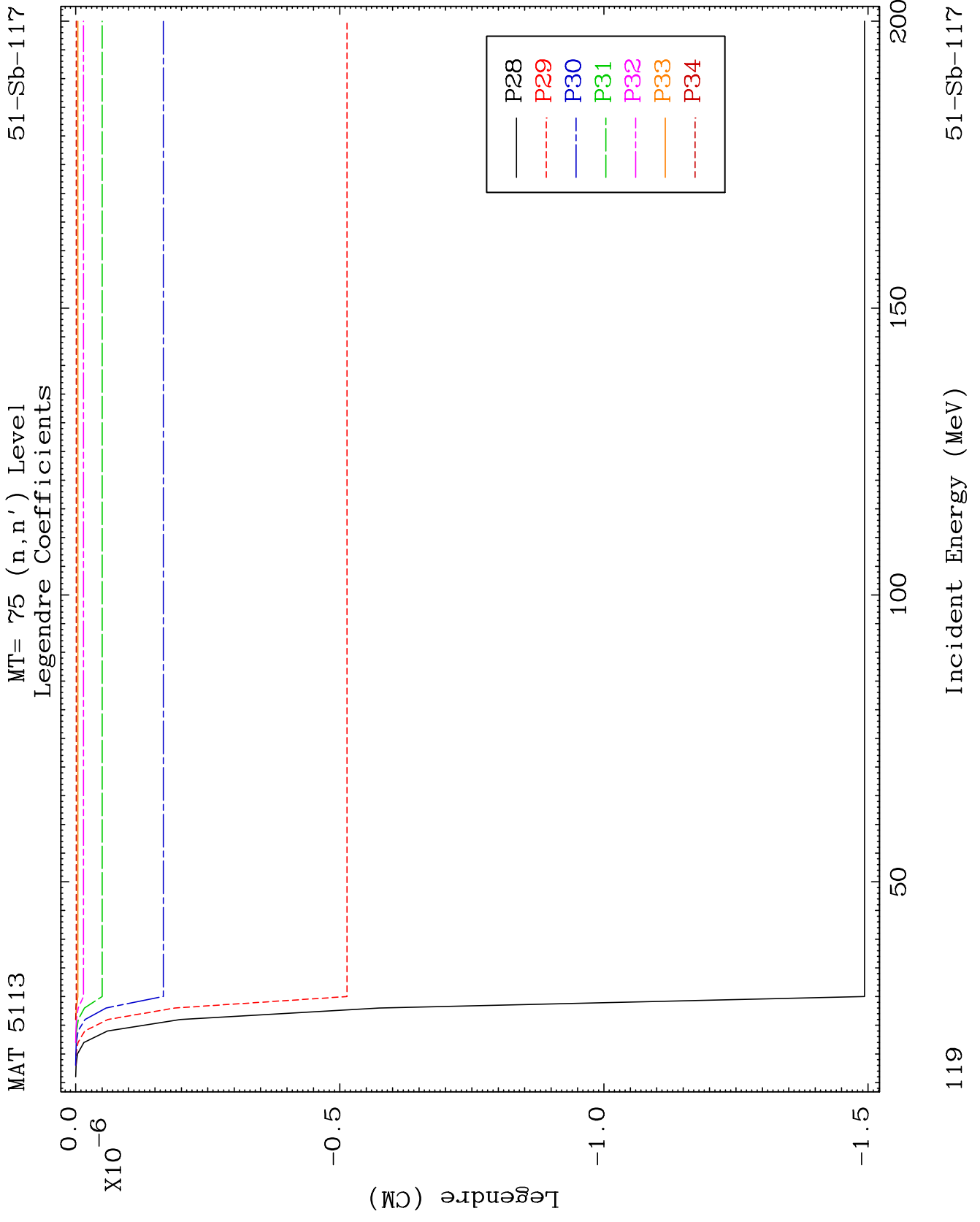
Legendre Coefficients



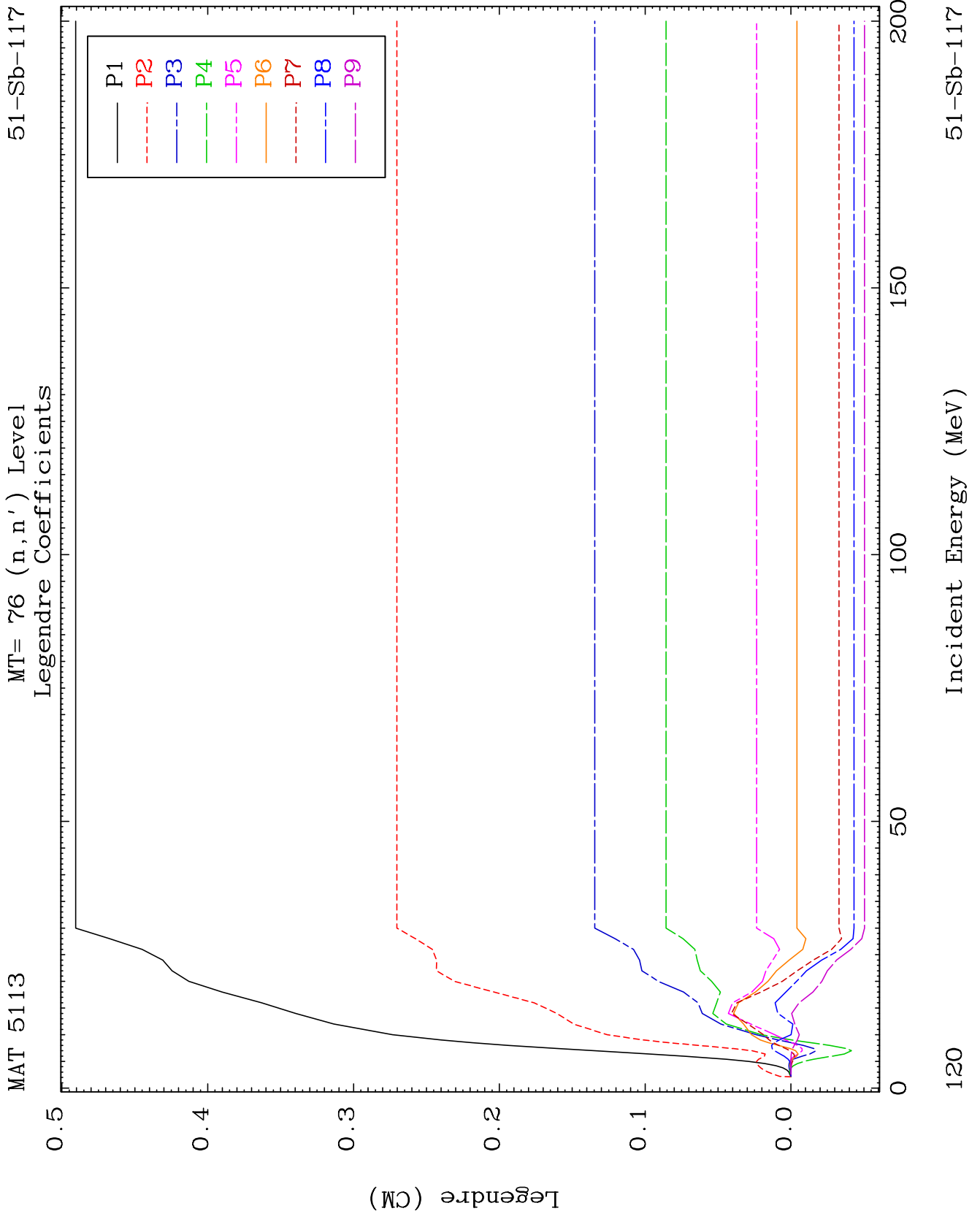
51-Sb-117

Incident Energy (MeV)

118



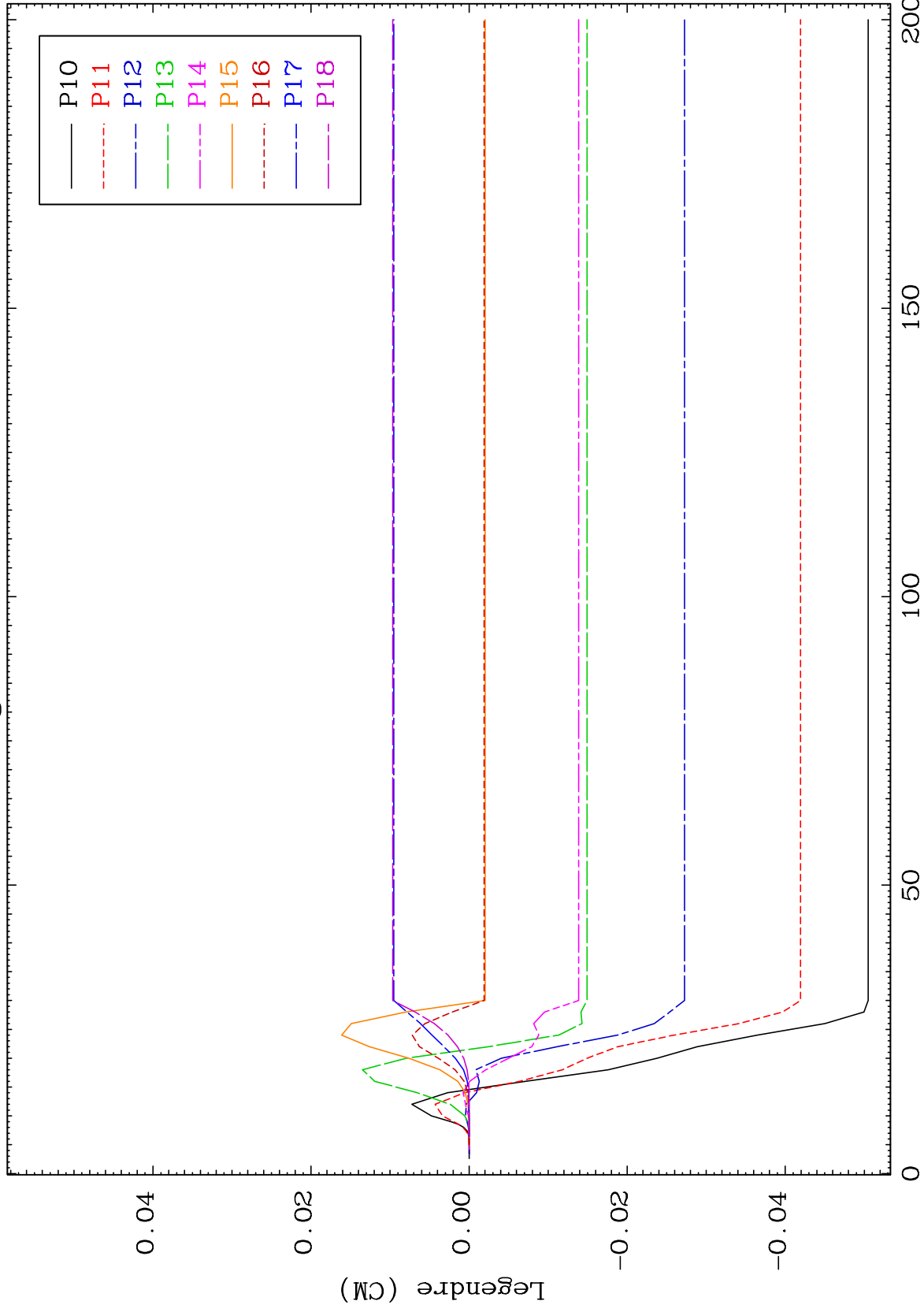




MAT 5113

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

51-Sb-117



121

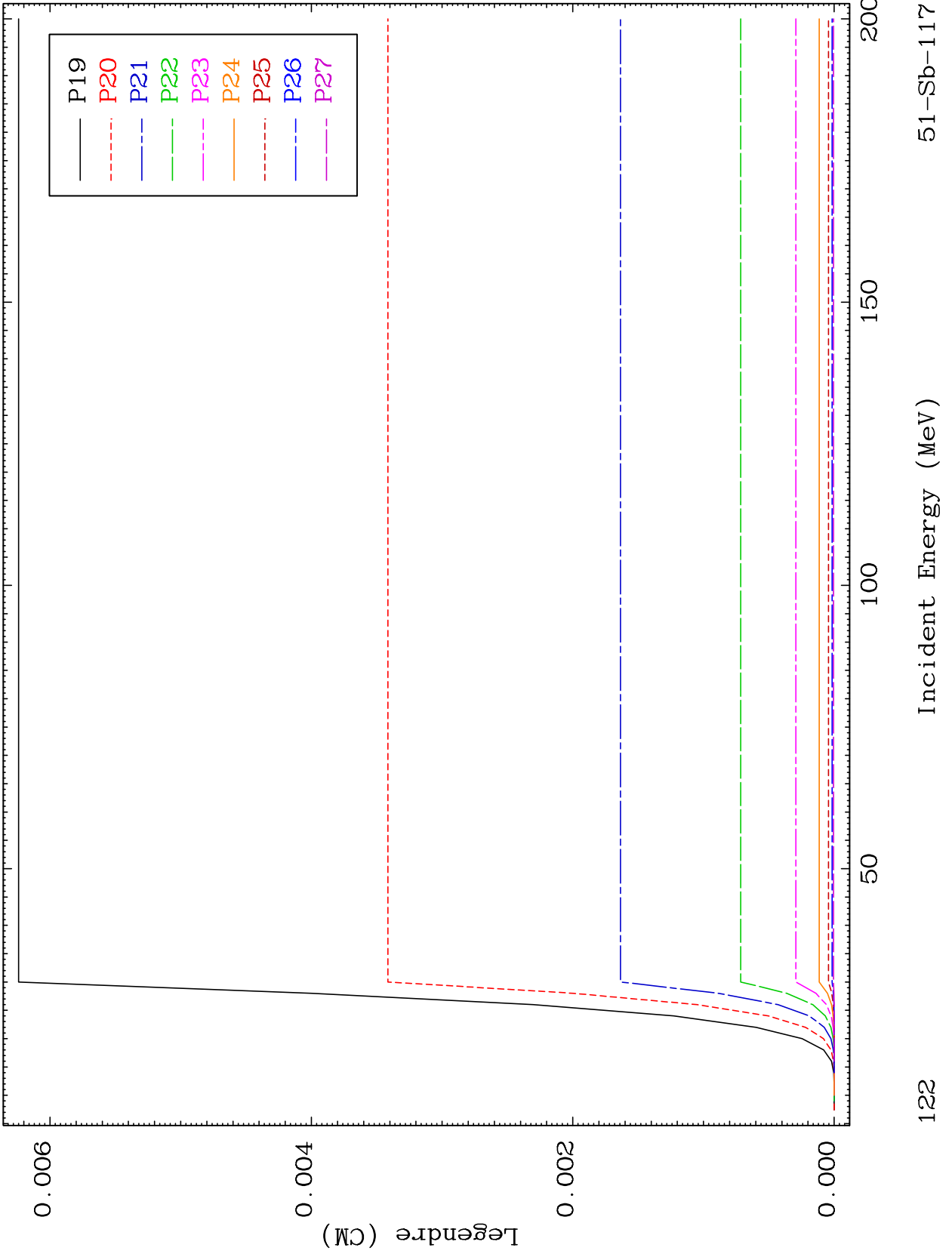
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

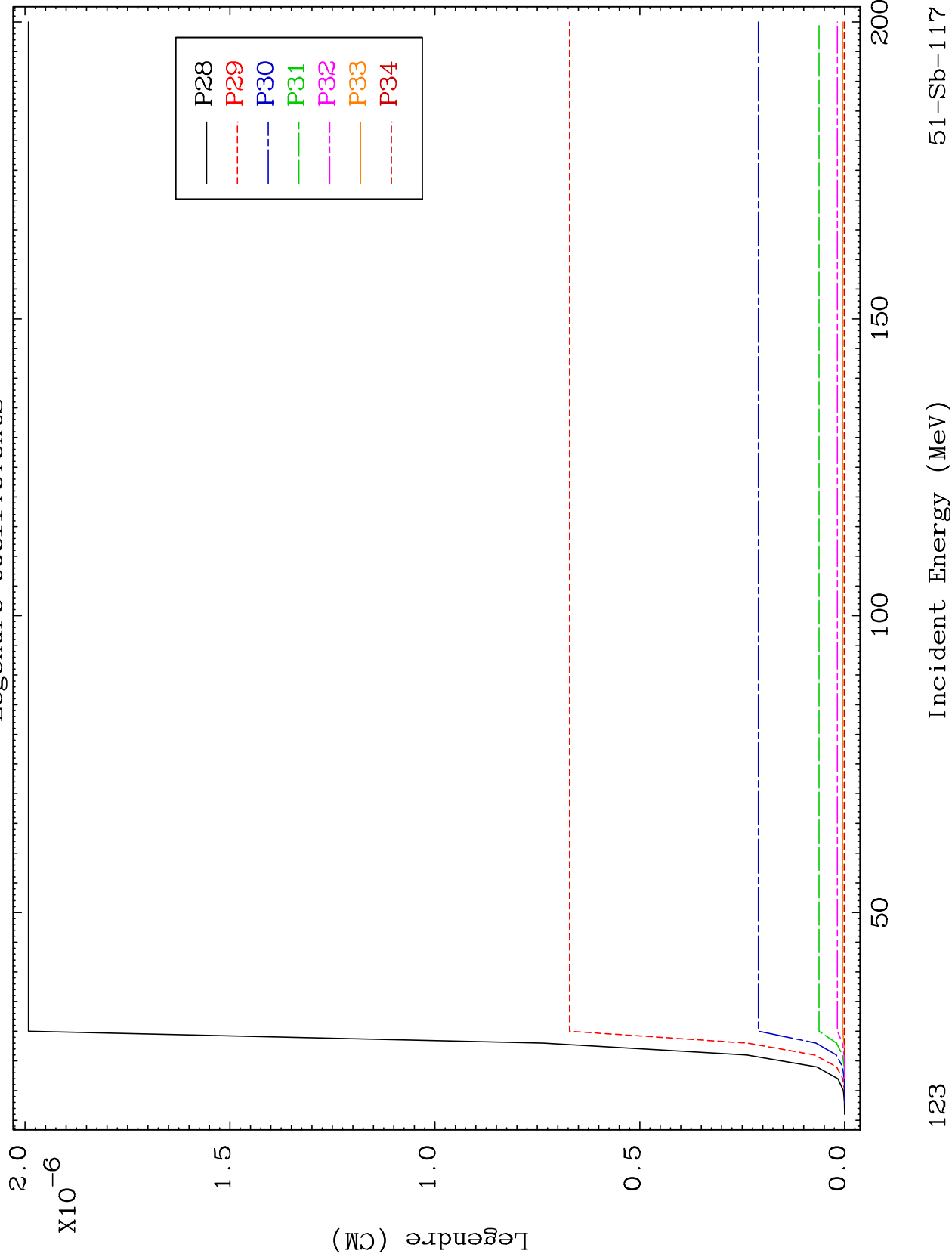
51-Sb-117



MAT 5113

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

51-Sb-117



123

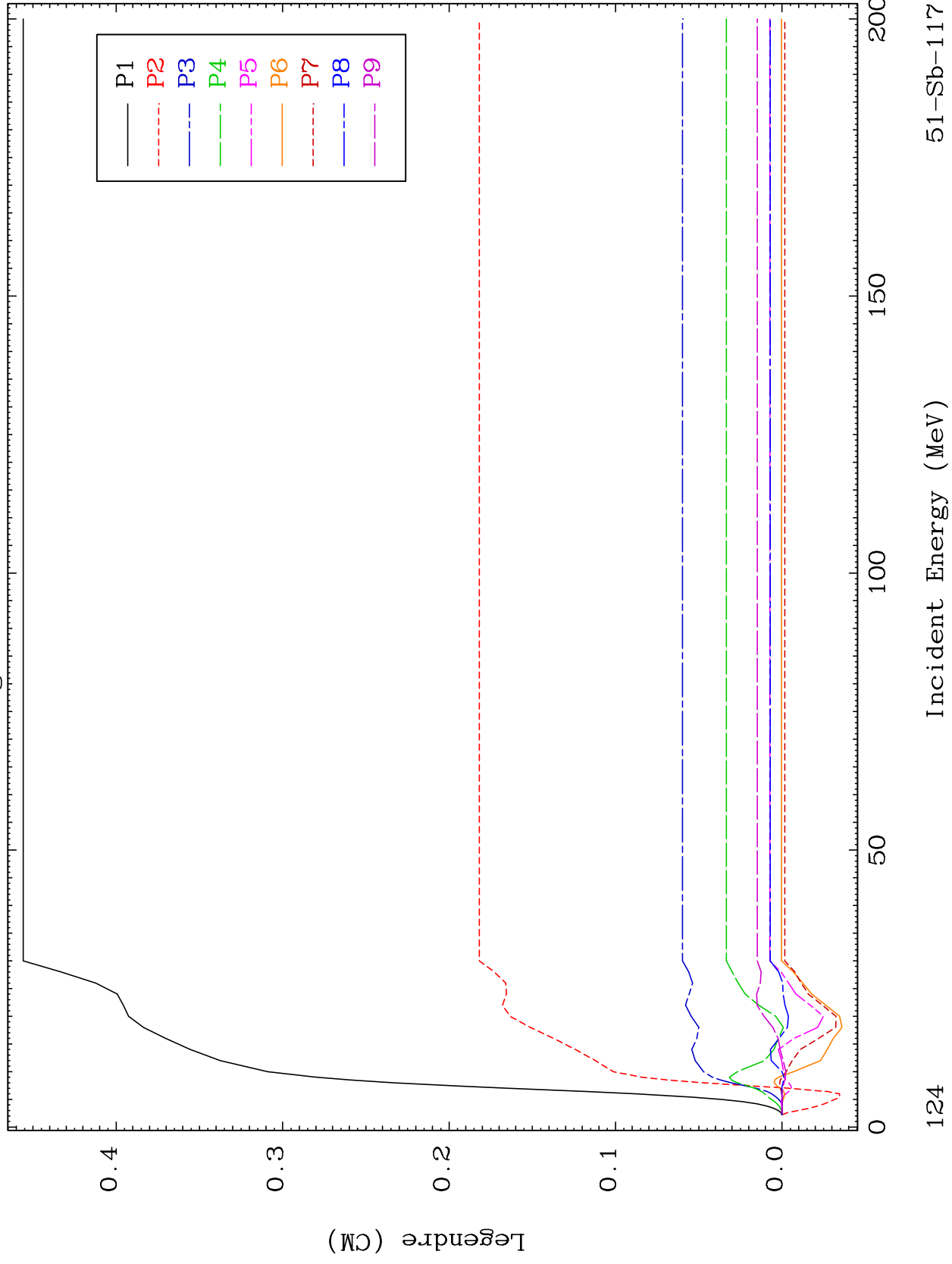
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

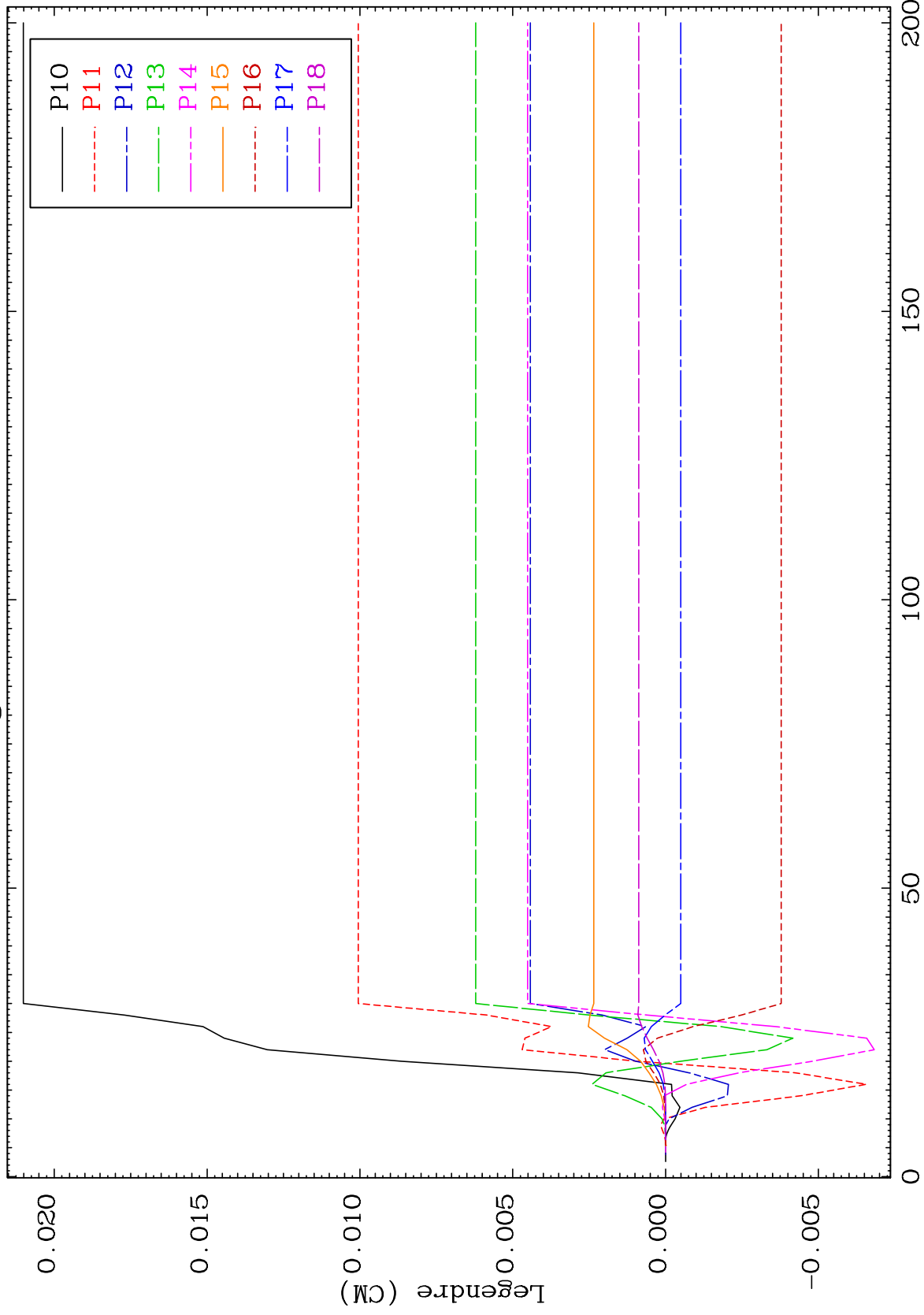
Incident Energy (MeV)

124

MAT 5113

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

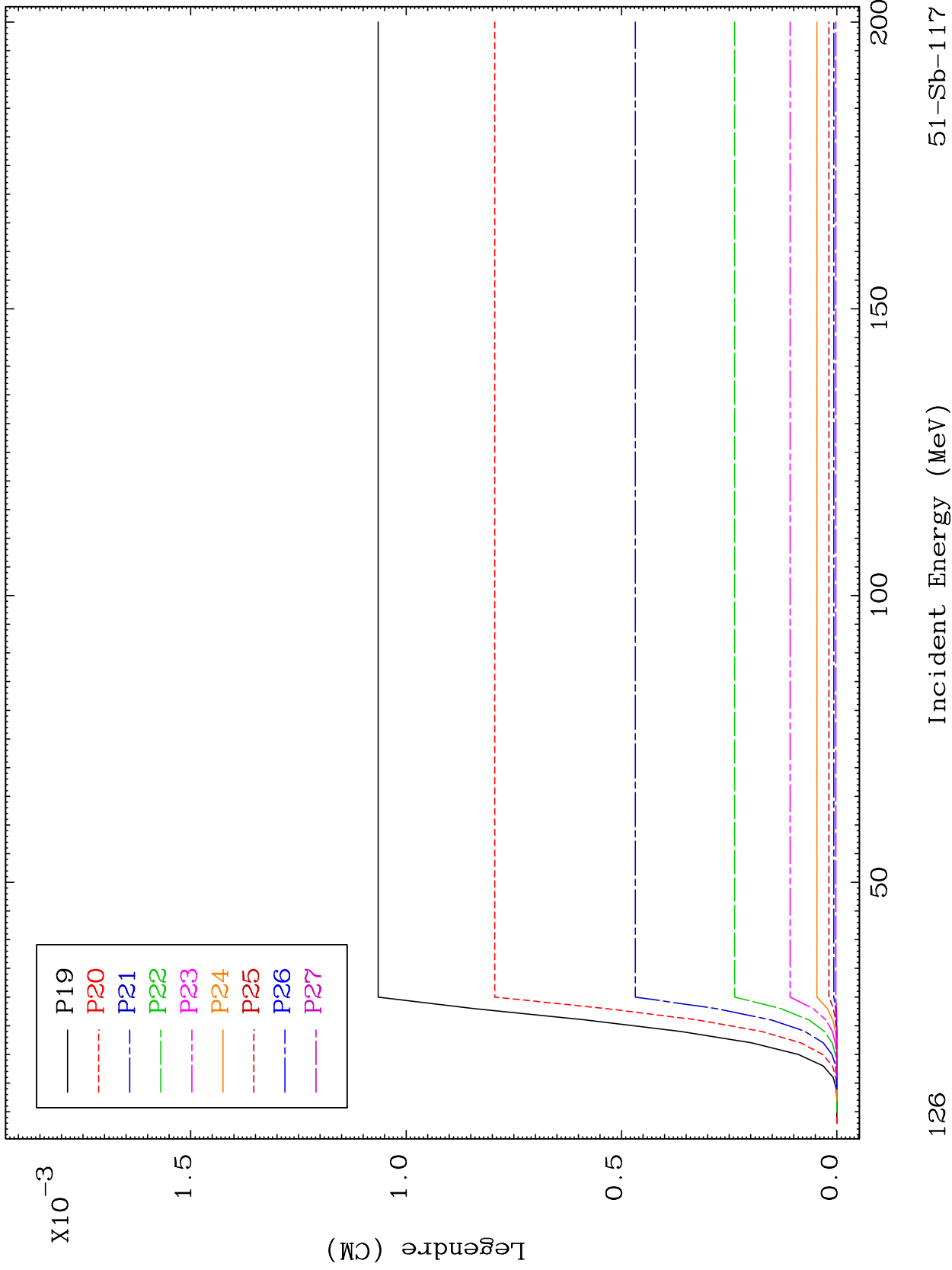
51-Sb-117



125

Incident Energy (MeV)

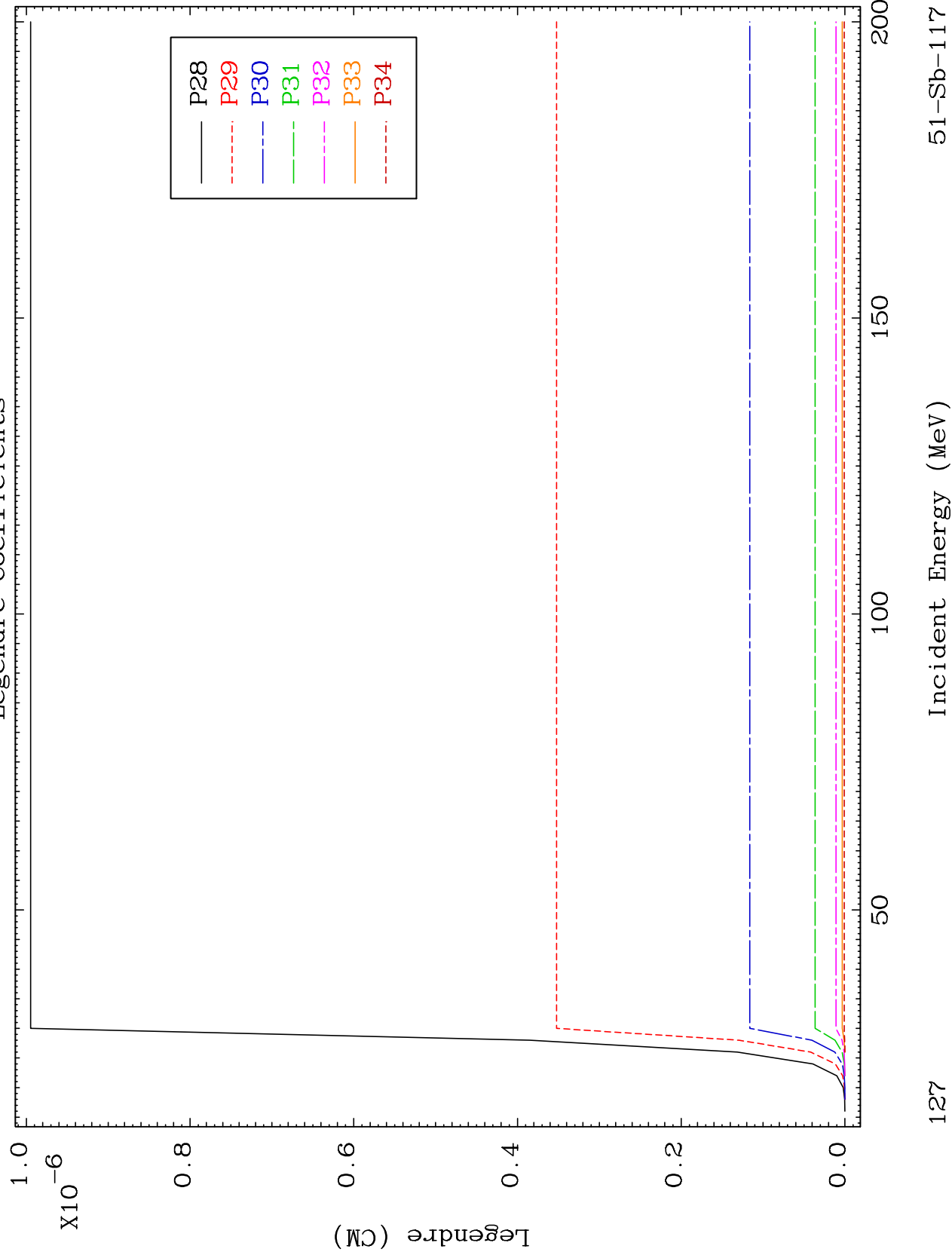
51-Sb-117



MAT 5113

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

51-Sb-117



127

Incident Energy (MeV)

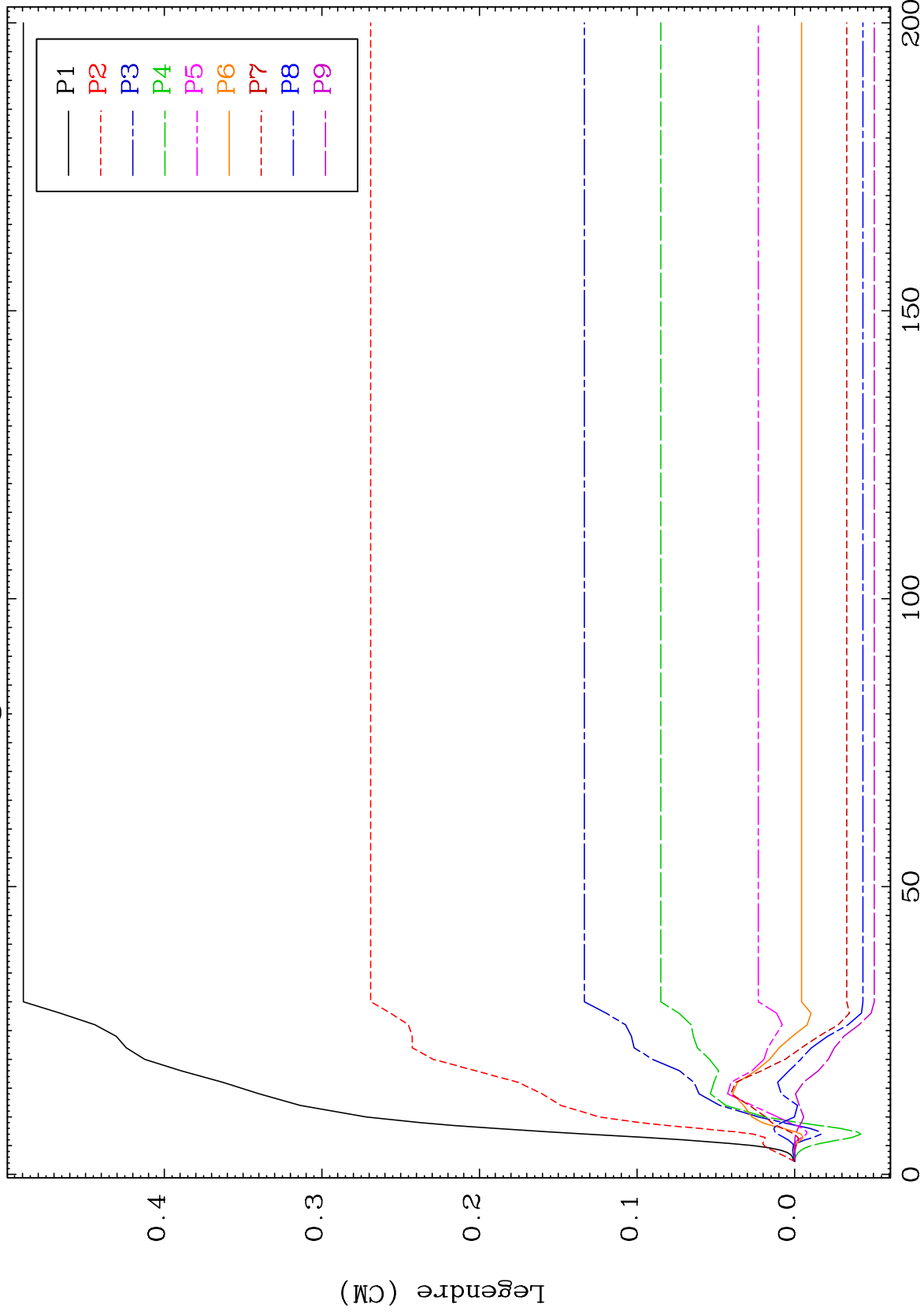
51-Sb-117



MAT 5113

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

51-Sb-117



51-Sb-117

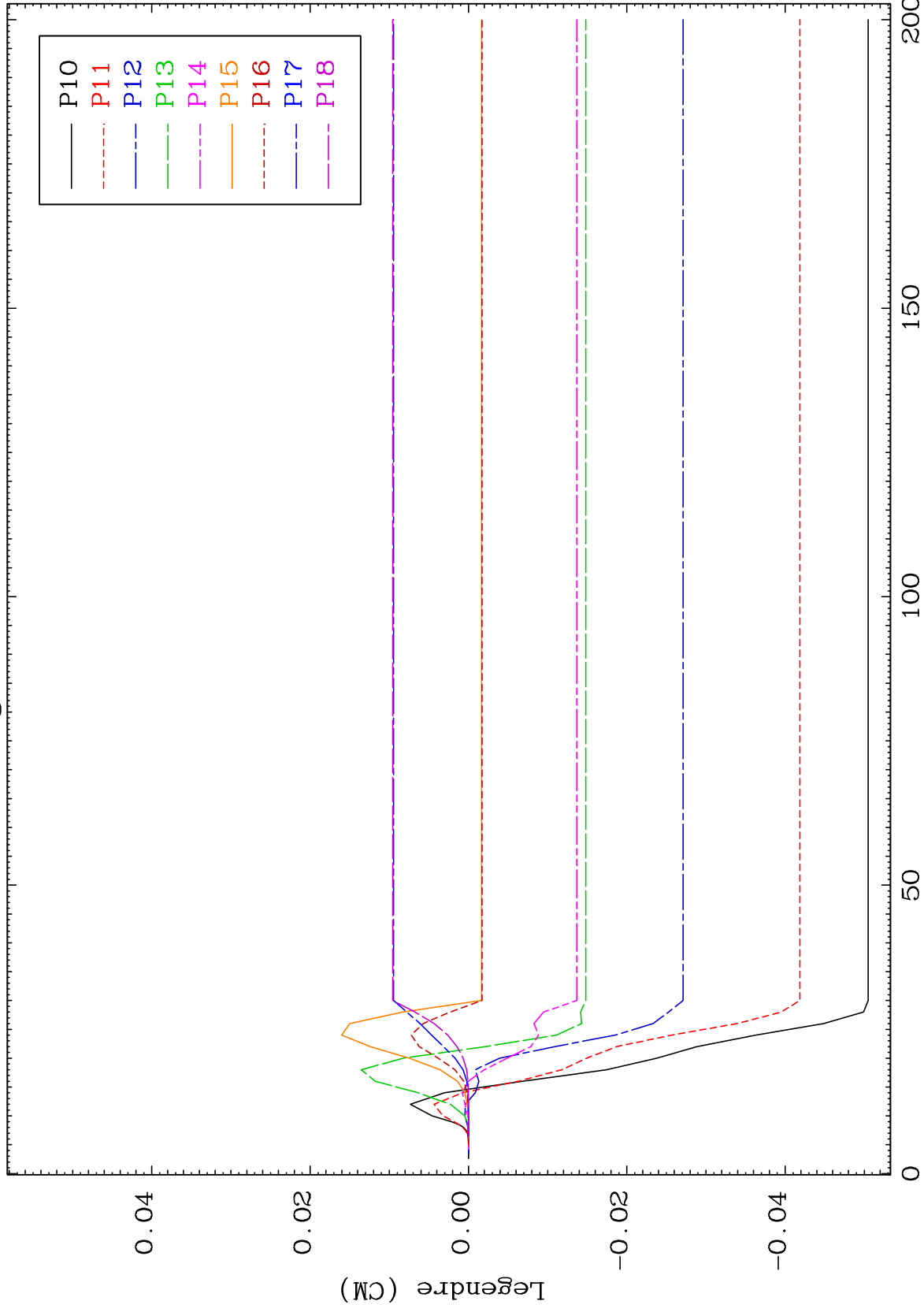
Incident Energy (MeV)

128

MAT 5113

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

51-Sb-117



129

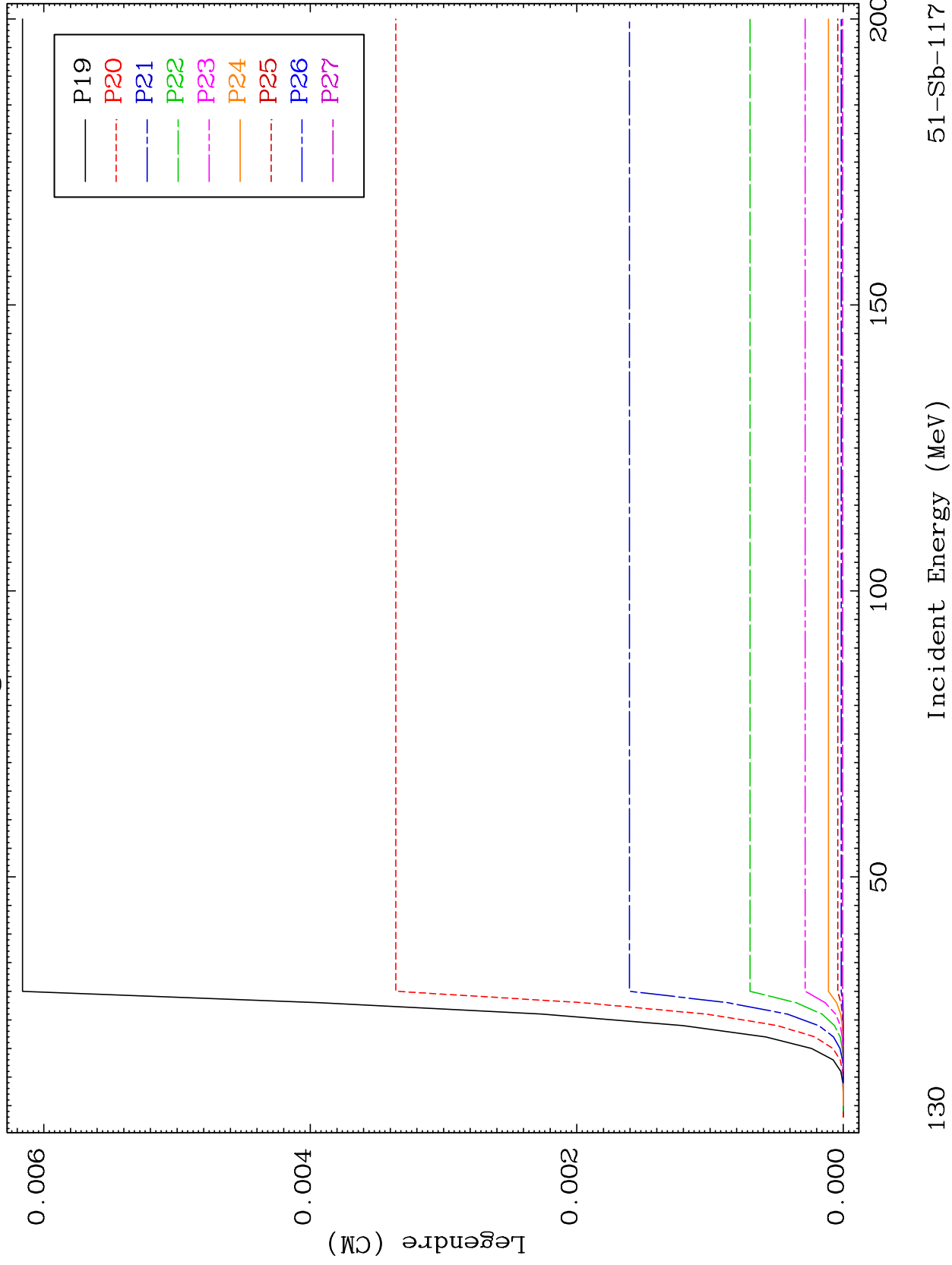
Incident Energy (MeV)

51-Sb-117

MAT 5113

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

51-Sb-117



51-Sb-117

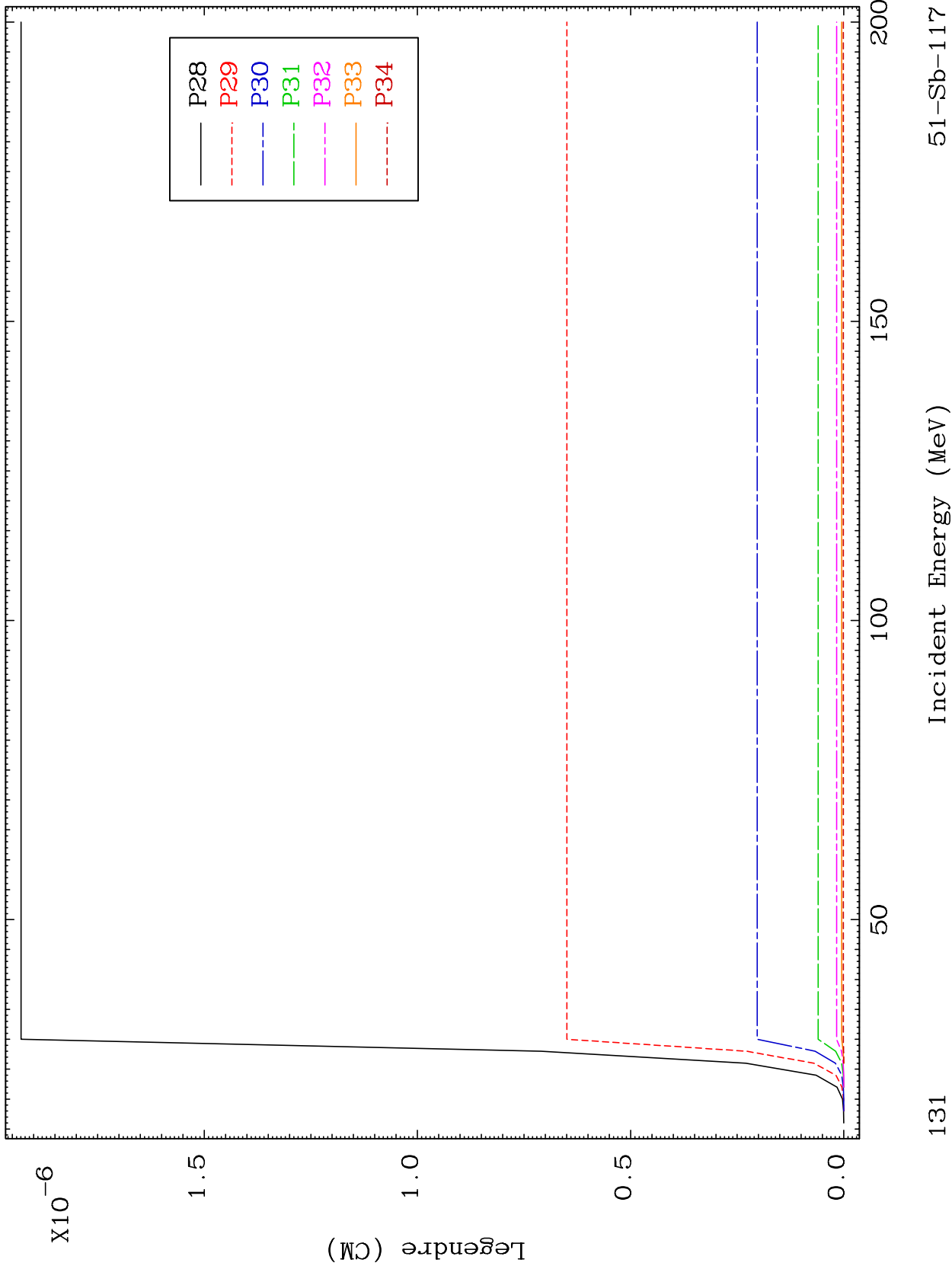
Incident Energy (MeV)

130

MAT 5113

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

51-Sb-117



131

Incident Energy (MeV)

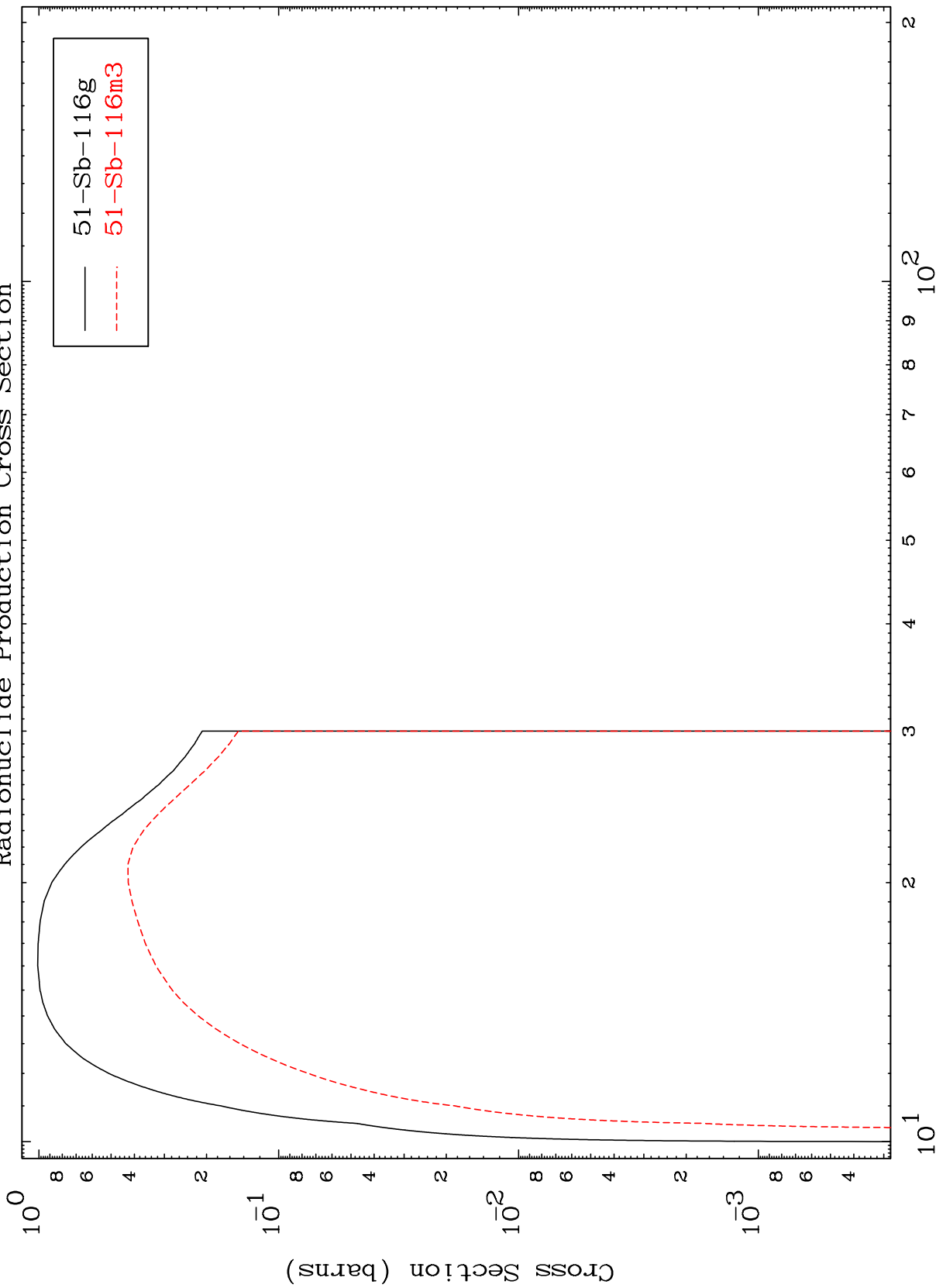
51-Sb-117

MAT 5113

51-Sb-117

(n,2n)

Radionuclide Production Cross Section



51-Sb-116g  
51-Sb-116m3

51-Sb-117

Incident Energy (MeV)

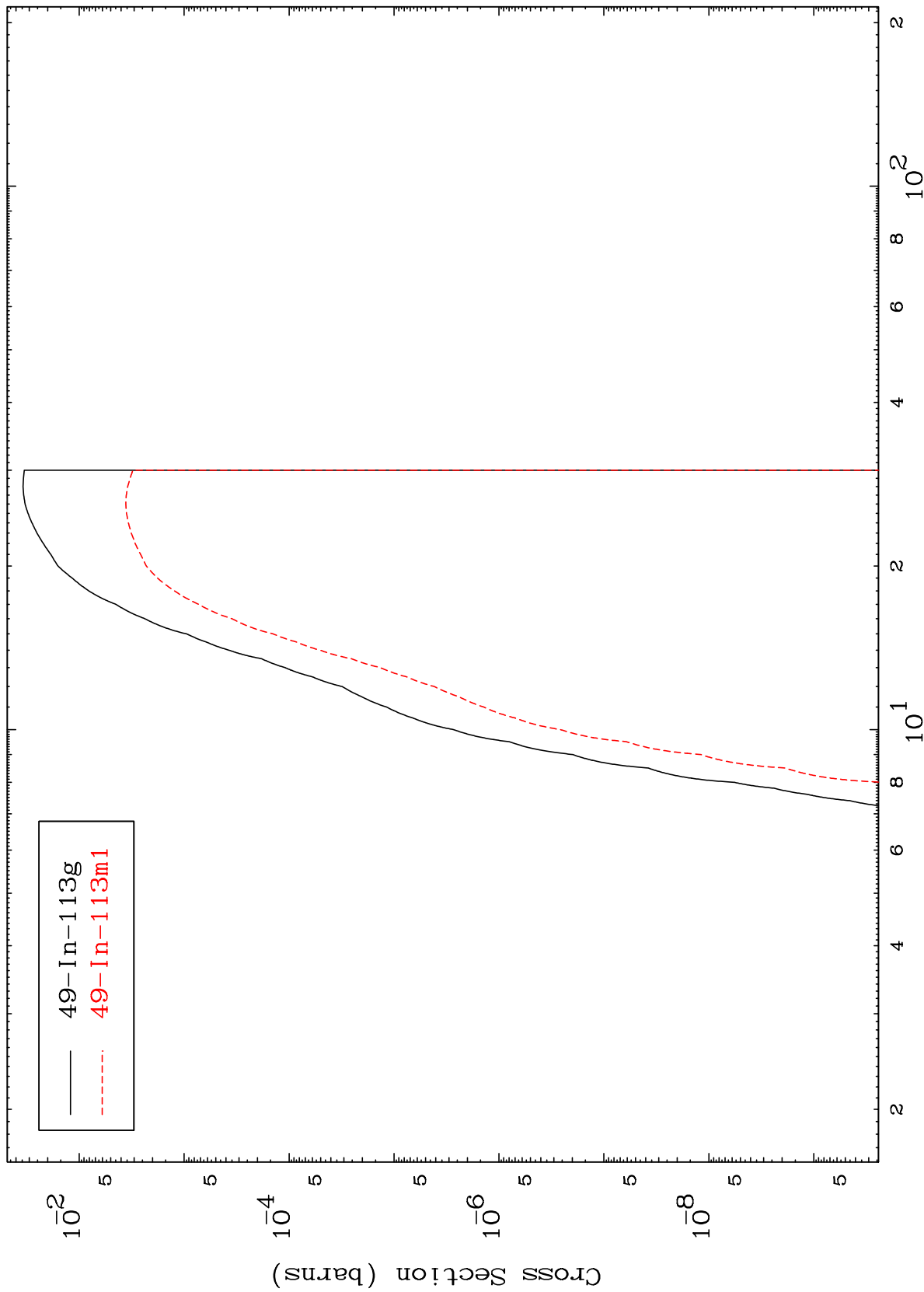
132

MAT 5113

(n,n')  $\alpha$

51-Sb-117

Radionuclide Production Cross Section



— 49-In-113g  
- - - 49-In-113m1

133

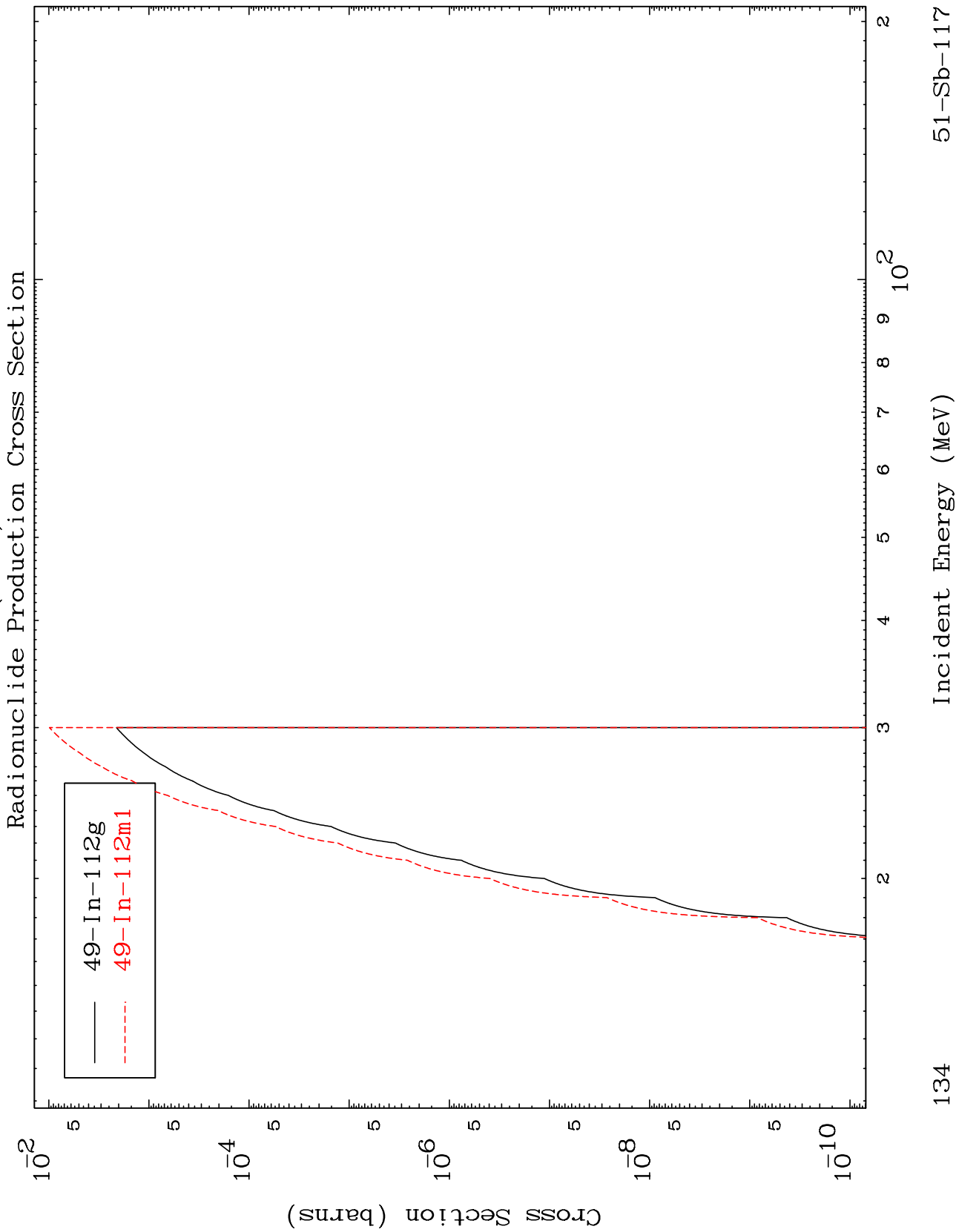
Incident Energy (MeV)

51-Sb-117

MAT 5113

(n,2n)  $\alpha$

51-Sb-117



134

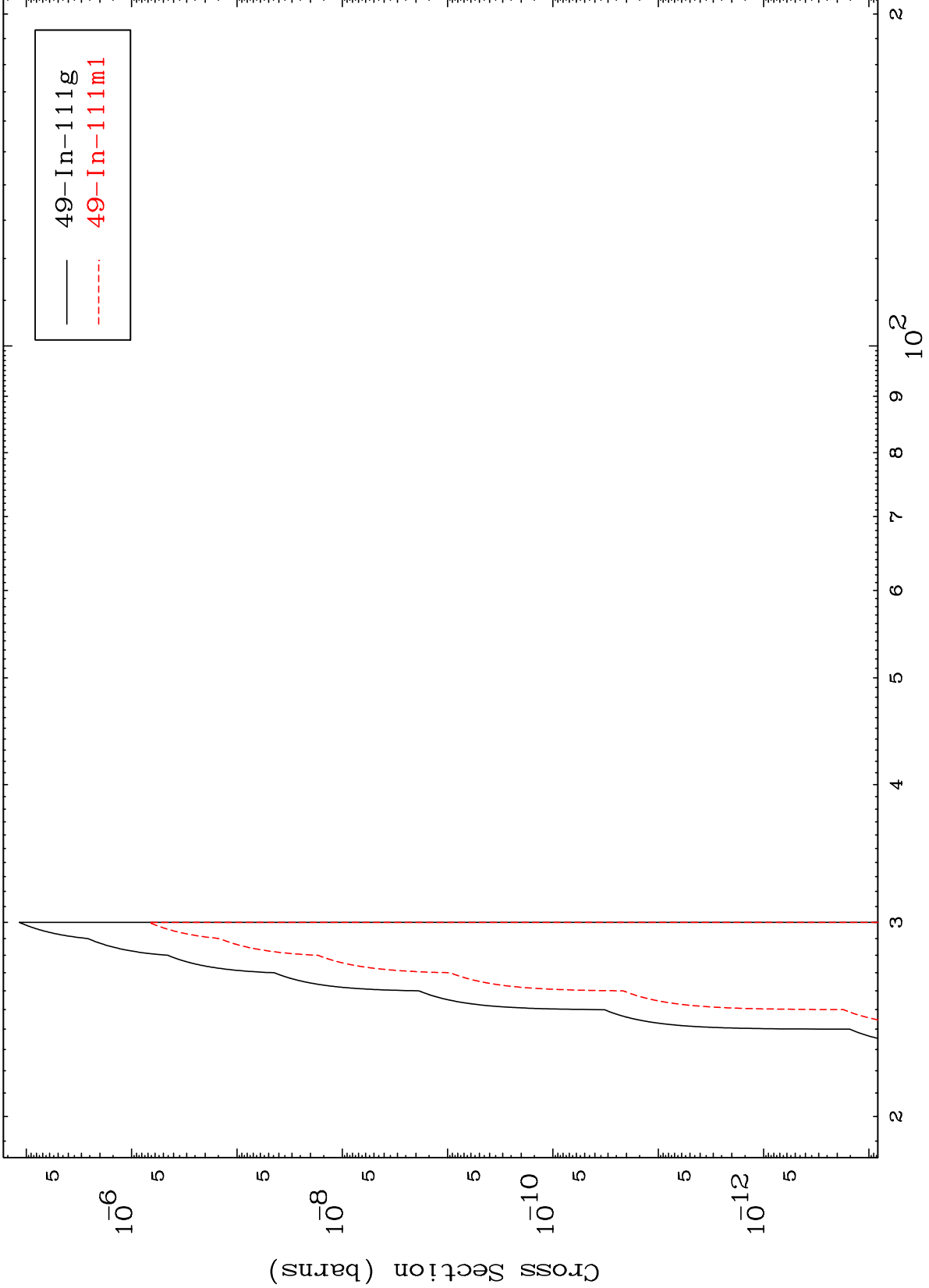
51-Sb-117

MAT 5113

(n,3n)  $\alpha$

51-Sb-117

Radionuclide Production Cross Section



49-In-111g  
49-In-111m1

135

Incident Energy (MeV)

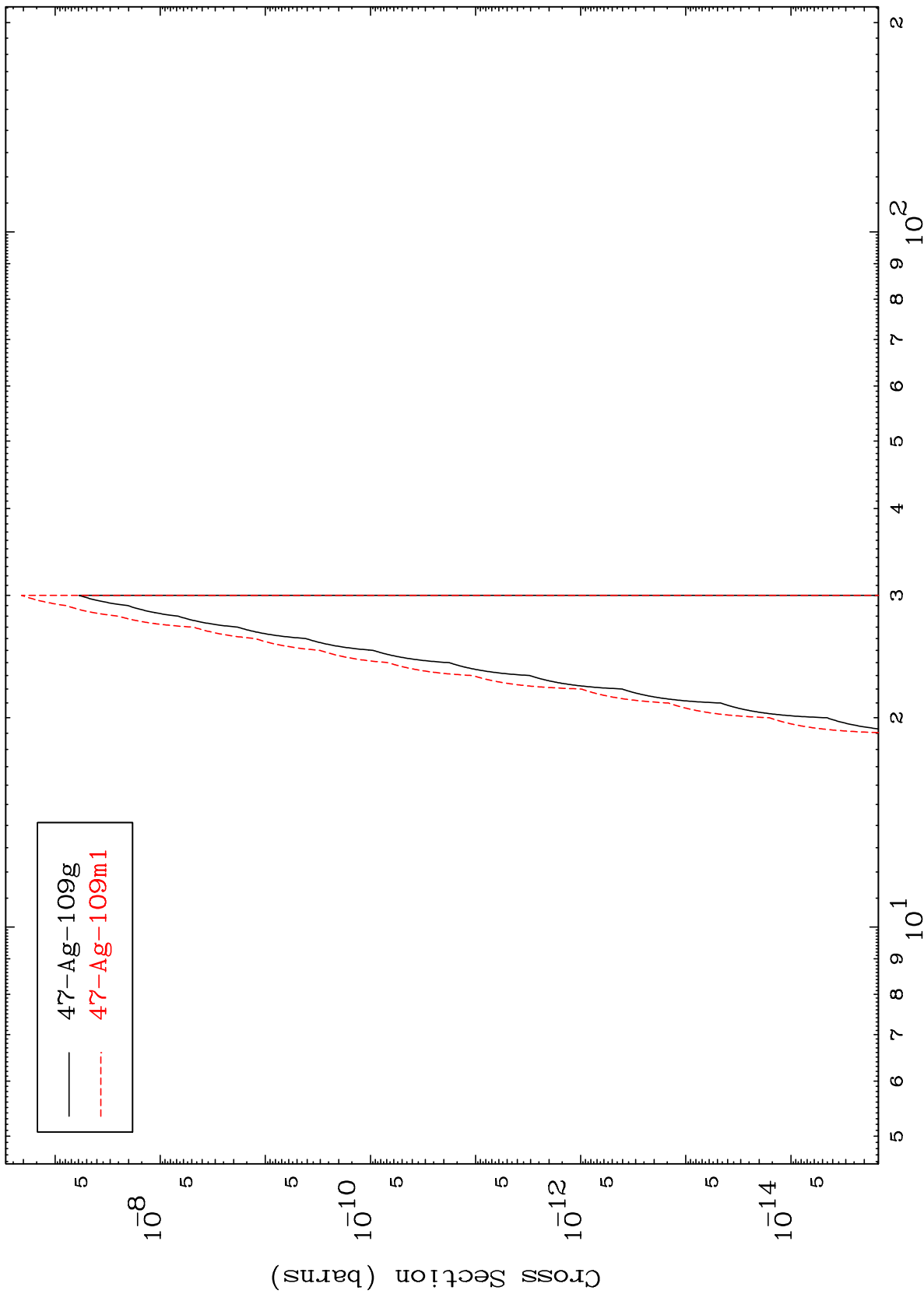
51-Sb-117



MAT 5113

51-Sb-117

(n,n') 2 $\alpha$   
Radionuclide Production Cross Section



136

51-Sb-117

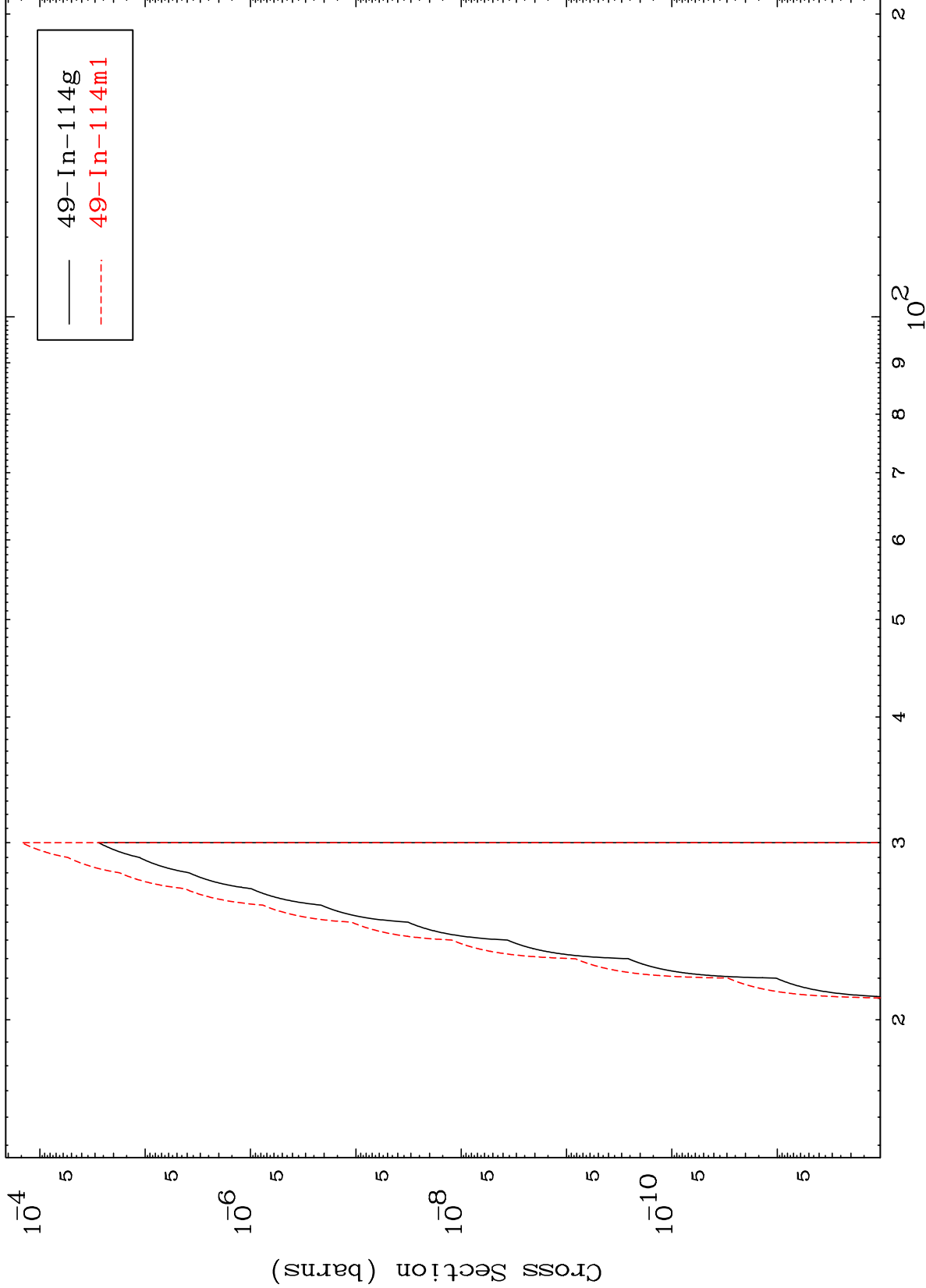
Incident Energy (MeV)

MAT 5113

(n,n') He-3

51-Sb-117

Radionuclide Production Cross Section



137

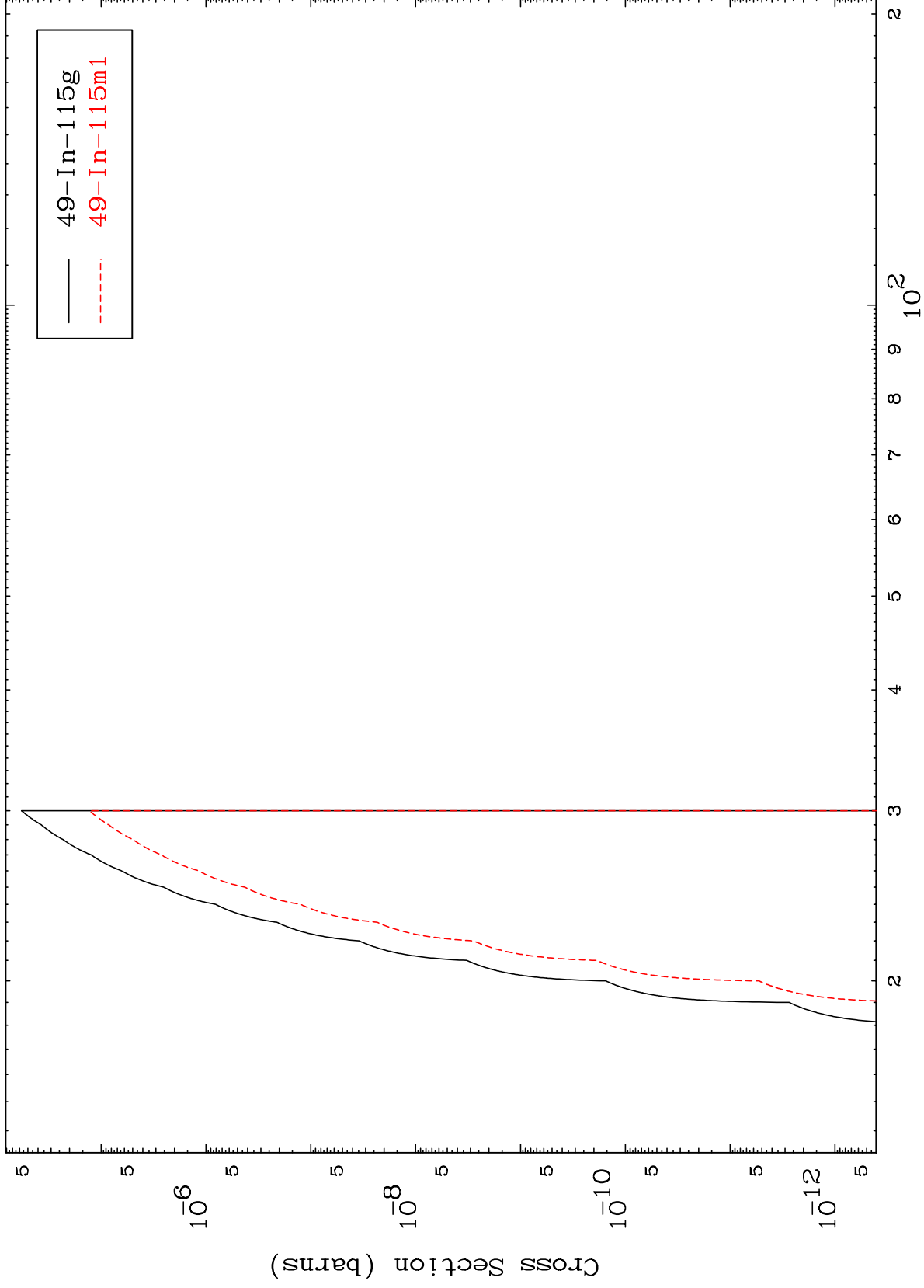
Incident Energy (MeV)

51-Sb-117

MAT 5113

51-Sb-117

(n,2n) p  
Radionuclide Production Cross Section



138

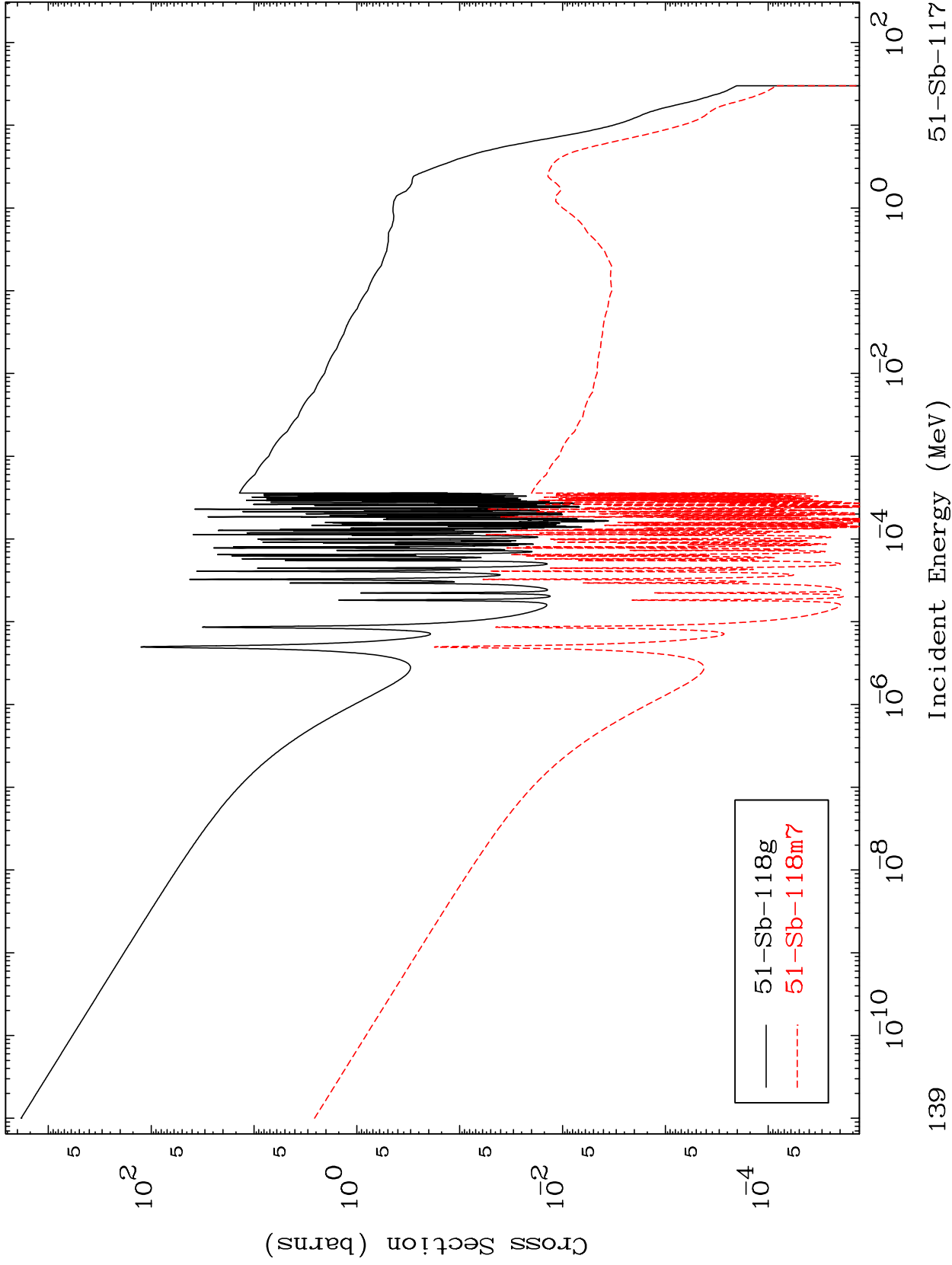
51-Sb-117

Incident Energy (MeV)

MAT 5113

51-Sb-117

$(n, \gamma)$   
Radionuclide Production Cross Section

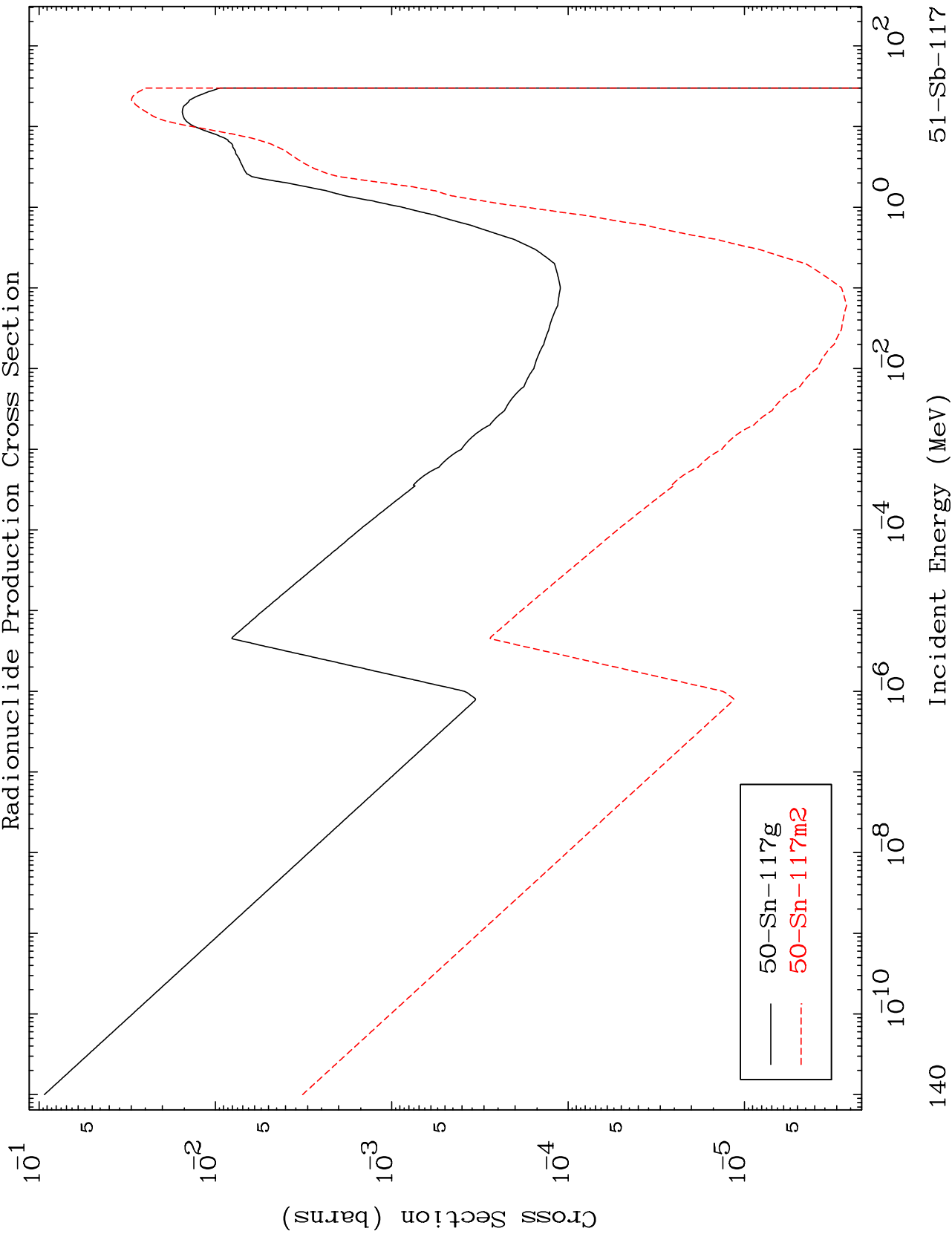


MAT 5113

(n,p)

51-Sb-117

Radionuclide Production Cross Section

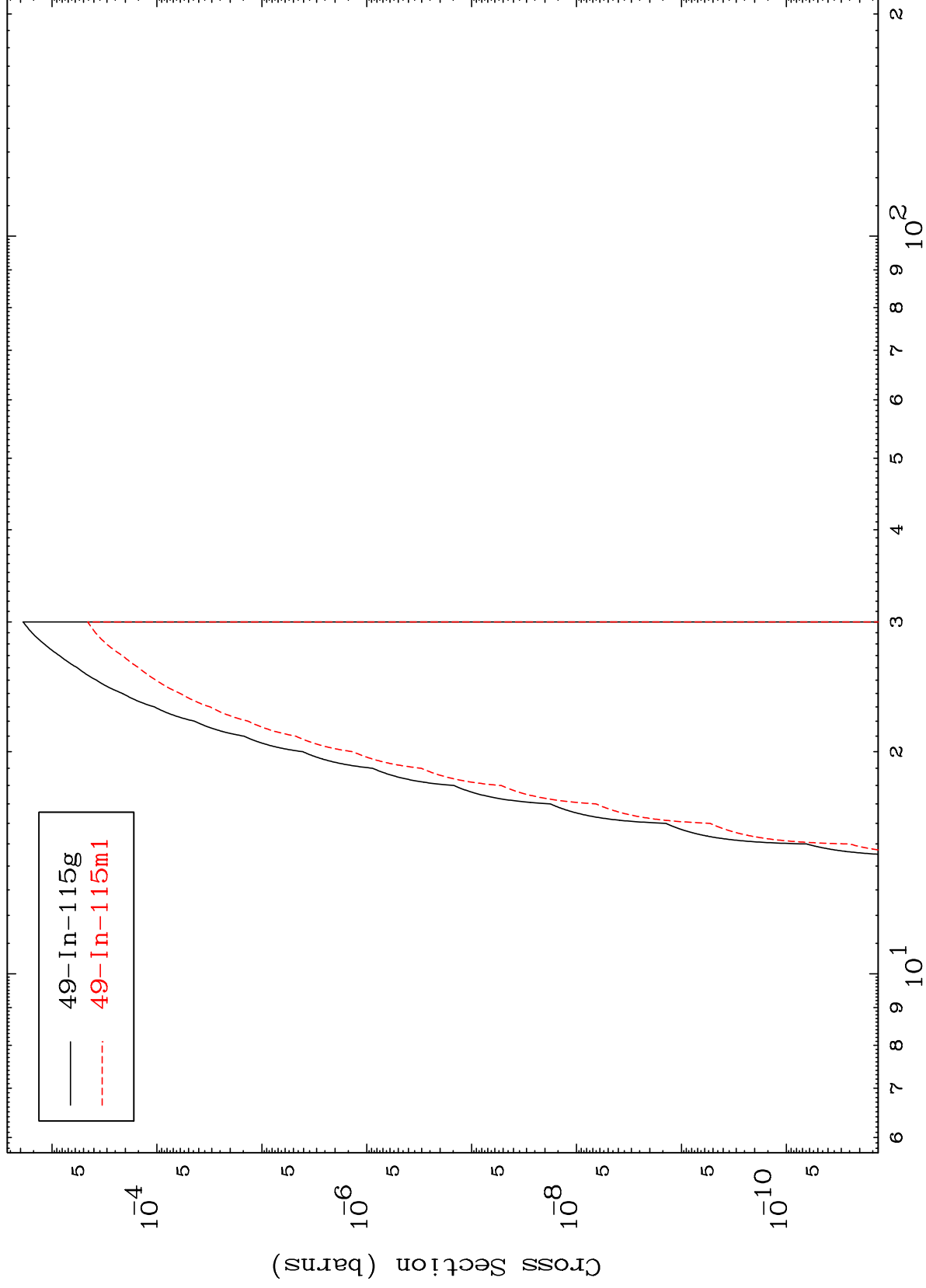


MAT 5113

(n,He-3)

51-Sb-117

Radionuclide Production Cross Section



141

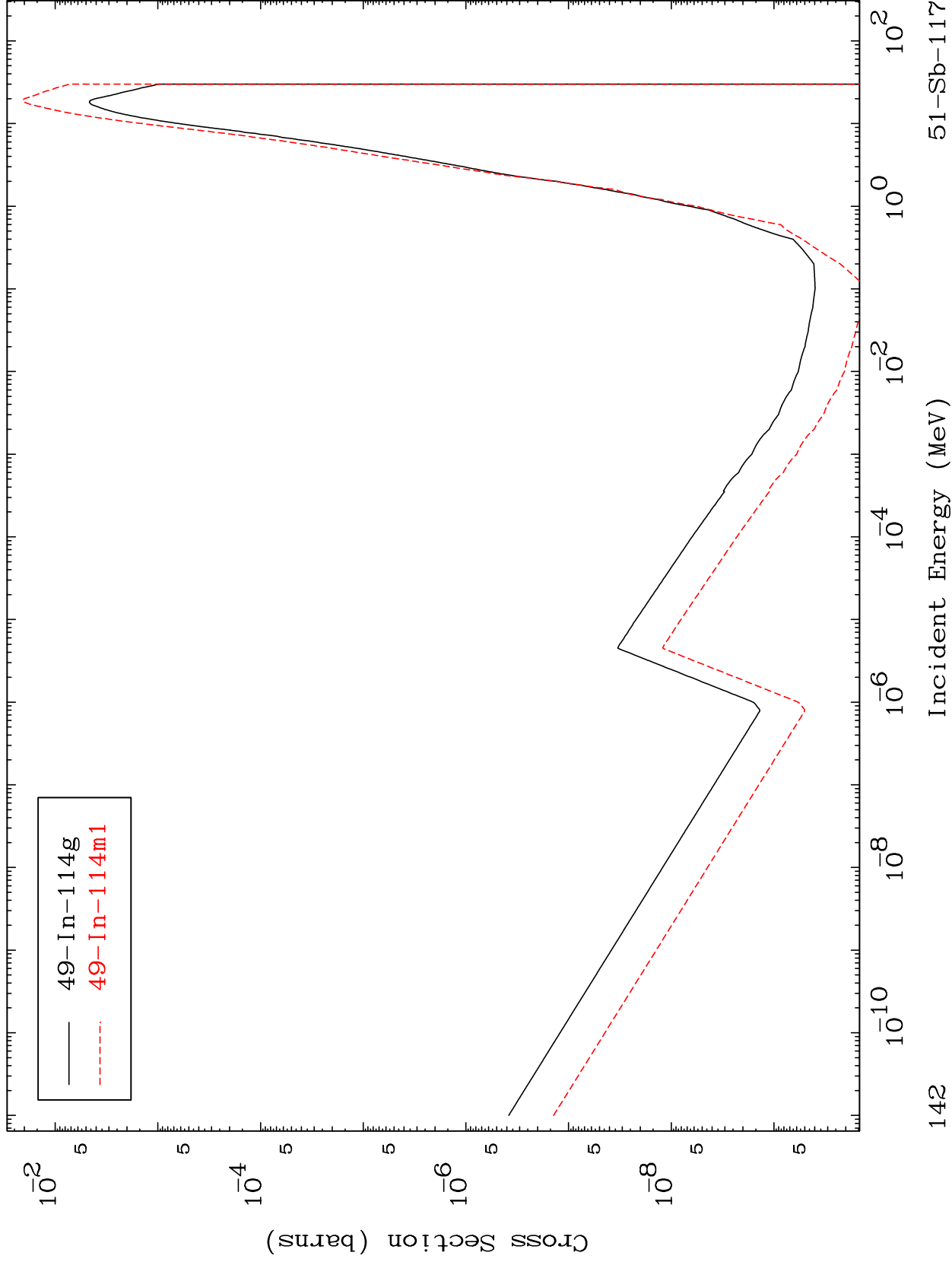
Incident Energy (MeV)

51-Sb-117

MAT 5113

51-Sb-117

Radionuclide Production Cross Section  
(n,  $\alpha$ )



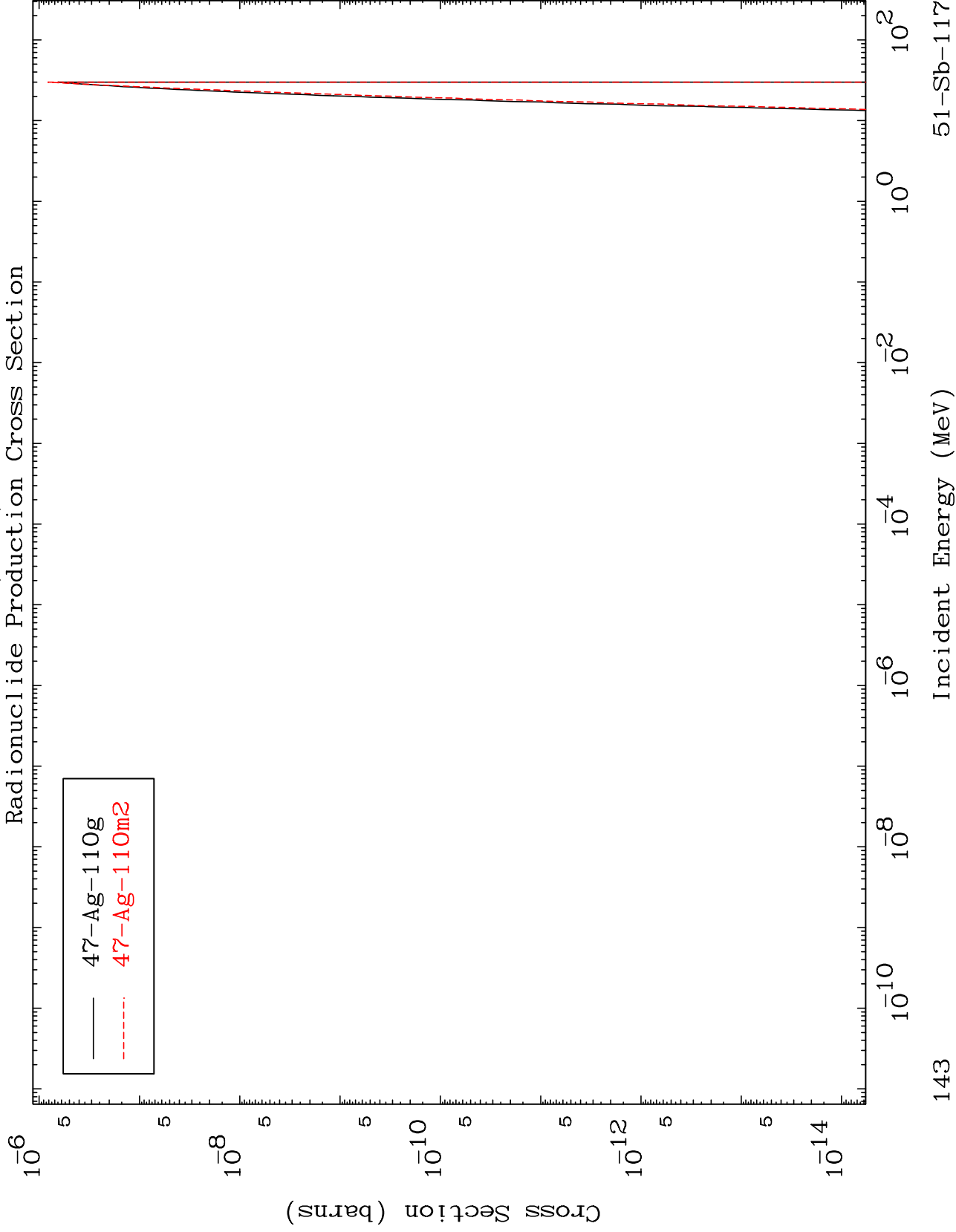
142

MAT 5113

(n,2α)

51-Sb-117

Radionuclide Production Cross Section



143

Incident Energy (MeV)

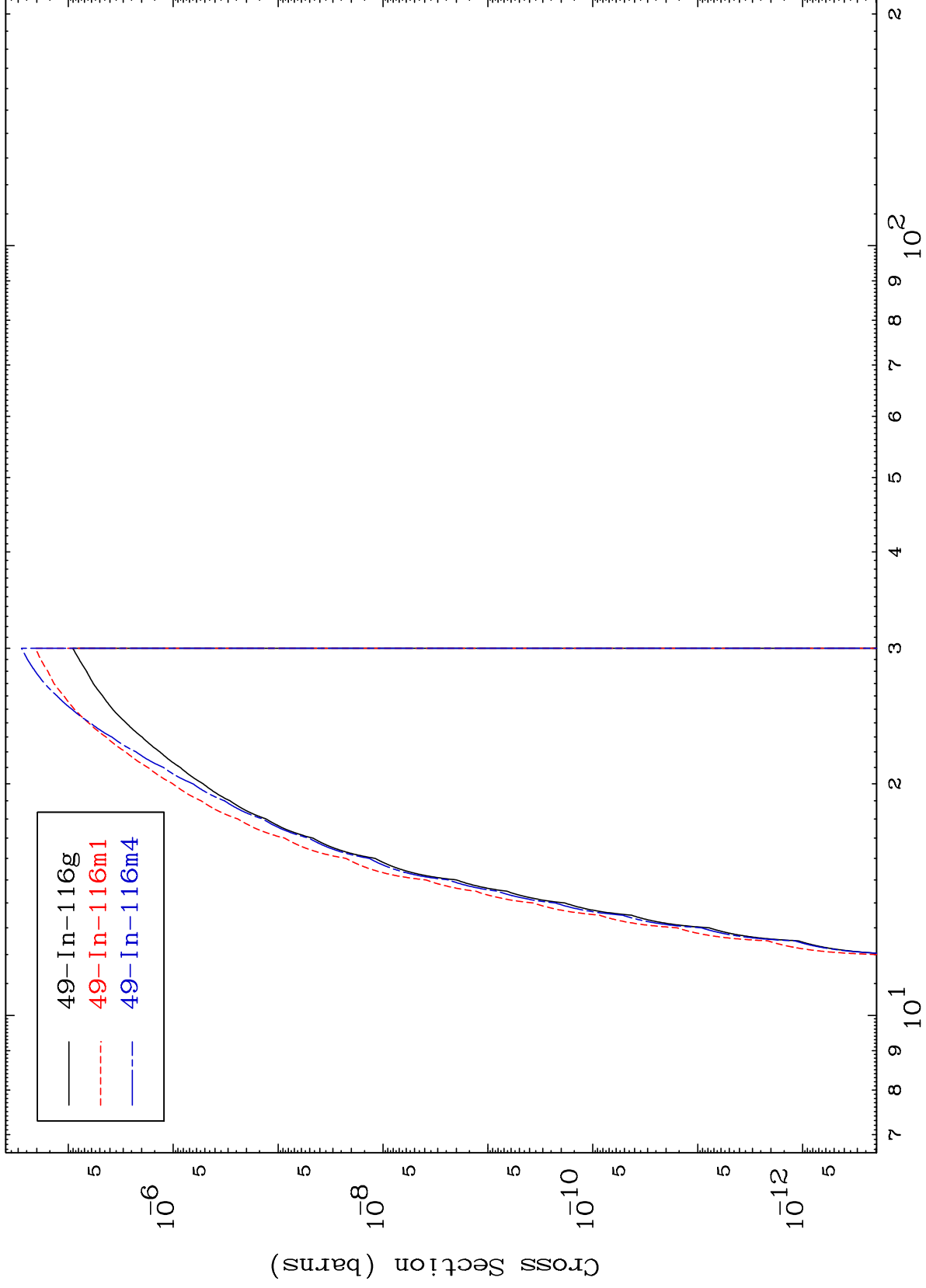
51-Sb-117



MAT 5113

51-Sb-117

(n,2p)  
Radionuclide Production Cross Section



144

51-Sb-117

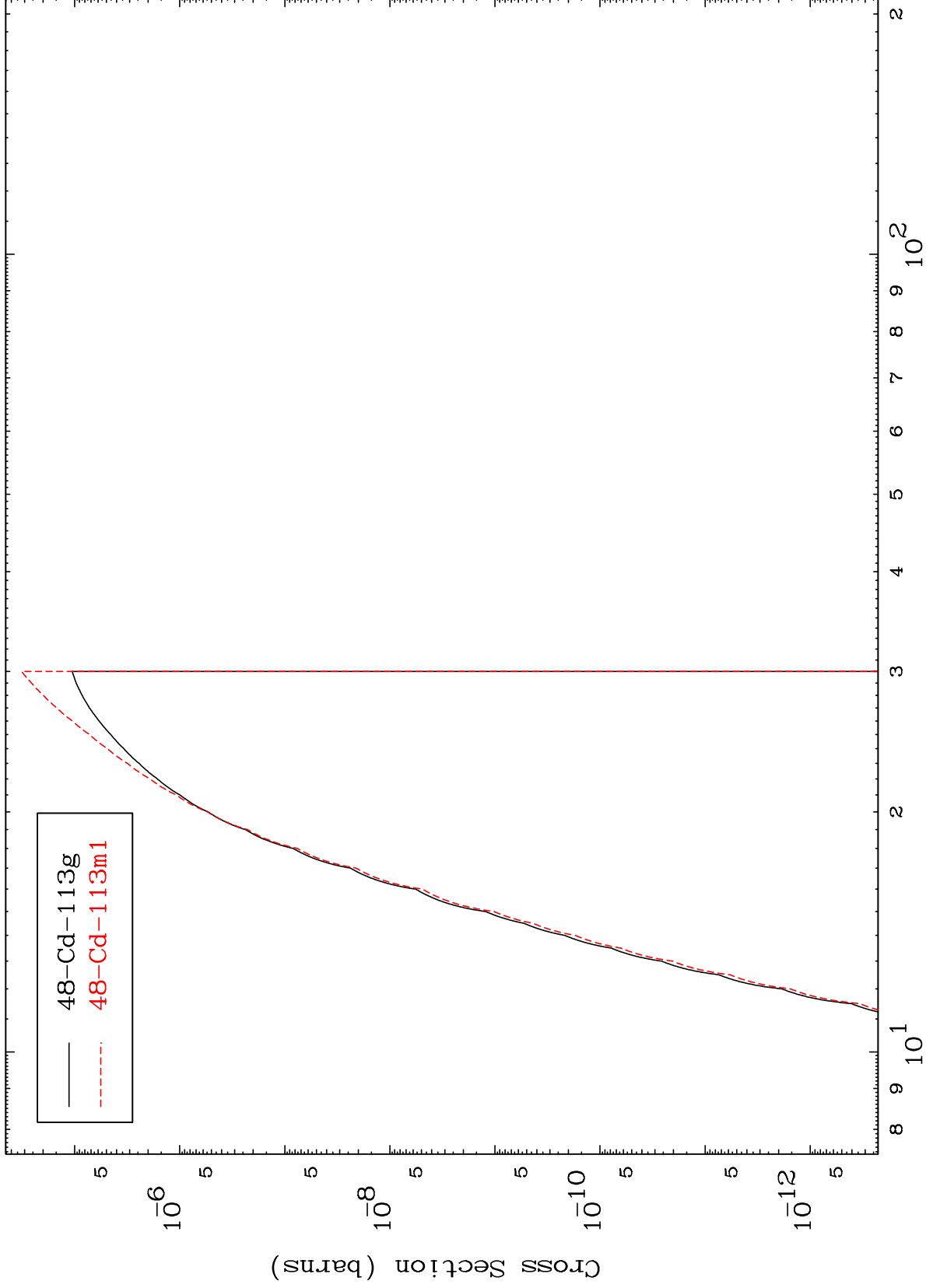
Incident Energy (MeV)

MAT 5113

(n,p)  $\alpha$

51-Sb-117

Radionuclide Production Cross Section

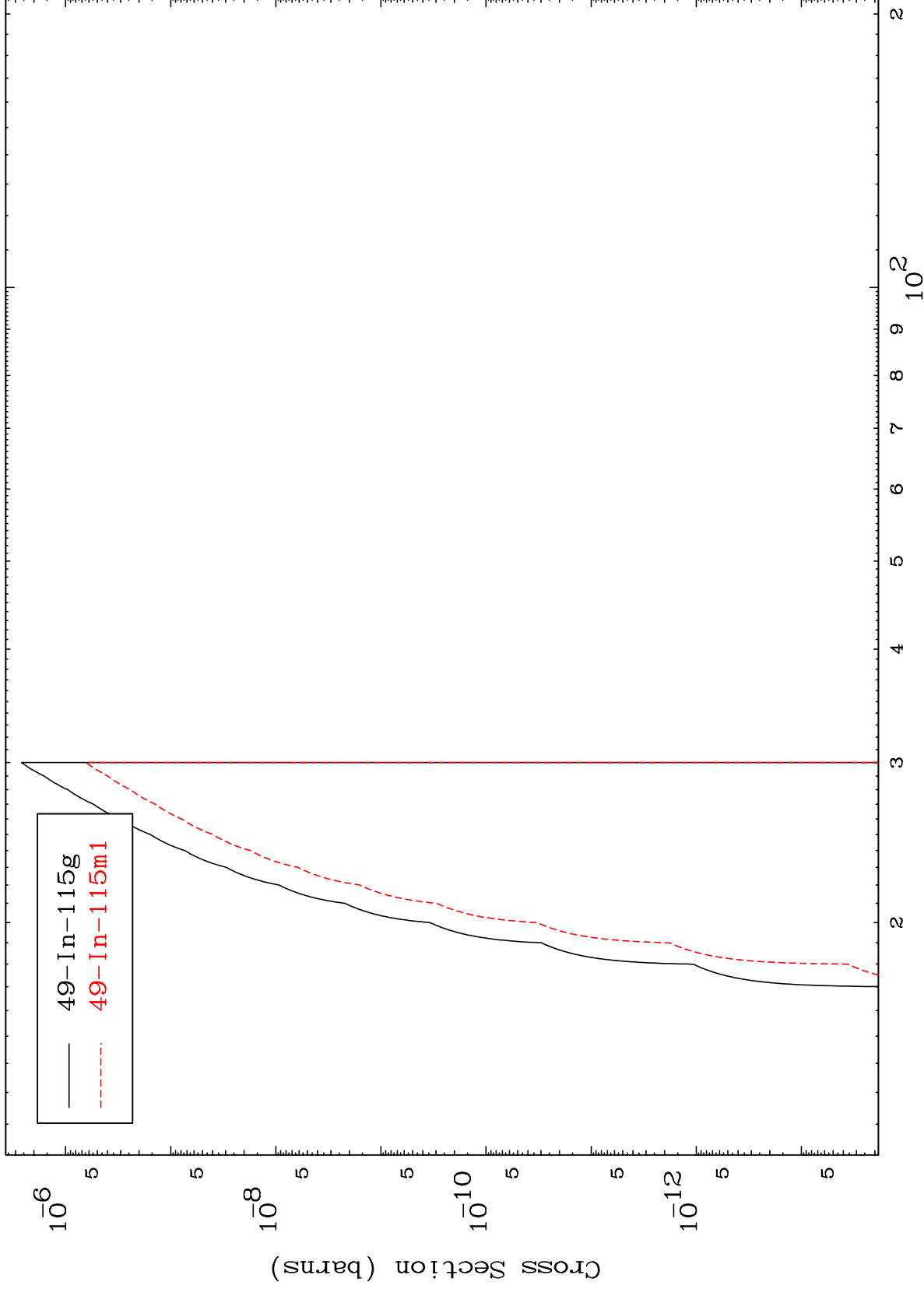


145

Incident Energy (MeV)

51-Sb-117

Radionuclide Production Cross Section

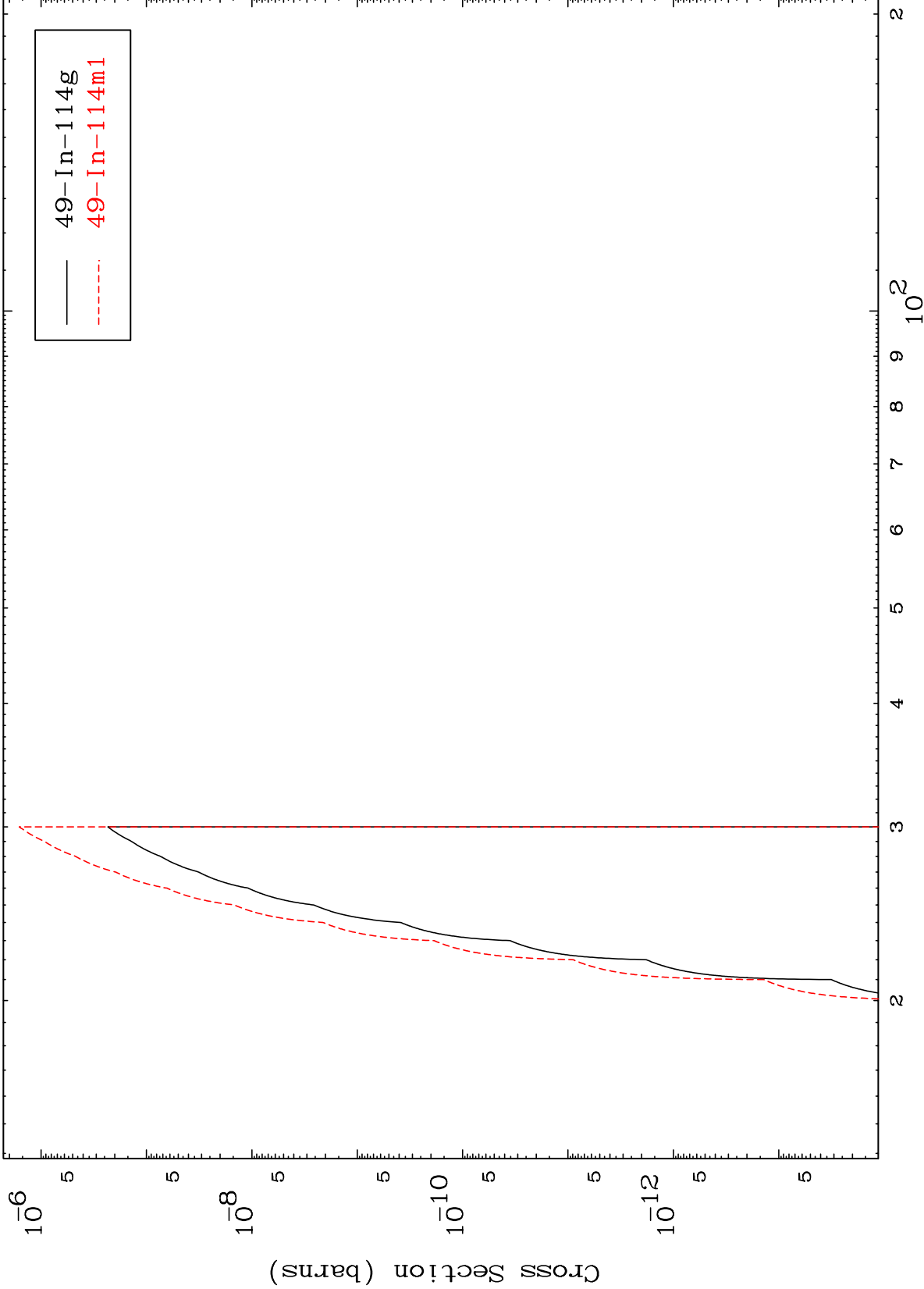


MAT 5113

(n,p) t

51-Sb-117

Radionuclide Production Cross Section



49-In-114g  
49-In-114m1

147

Incident Energy (MeV)

51-Sb-117