

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

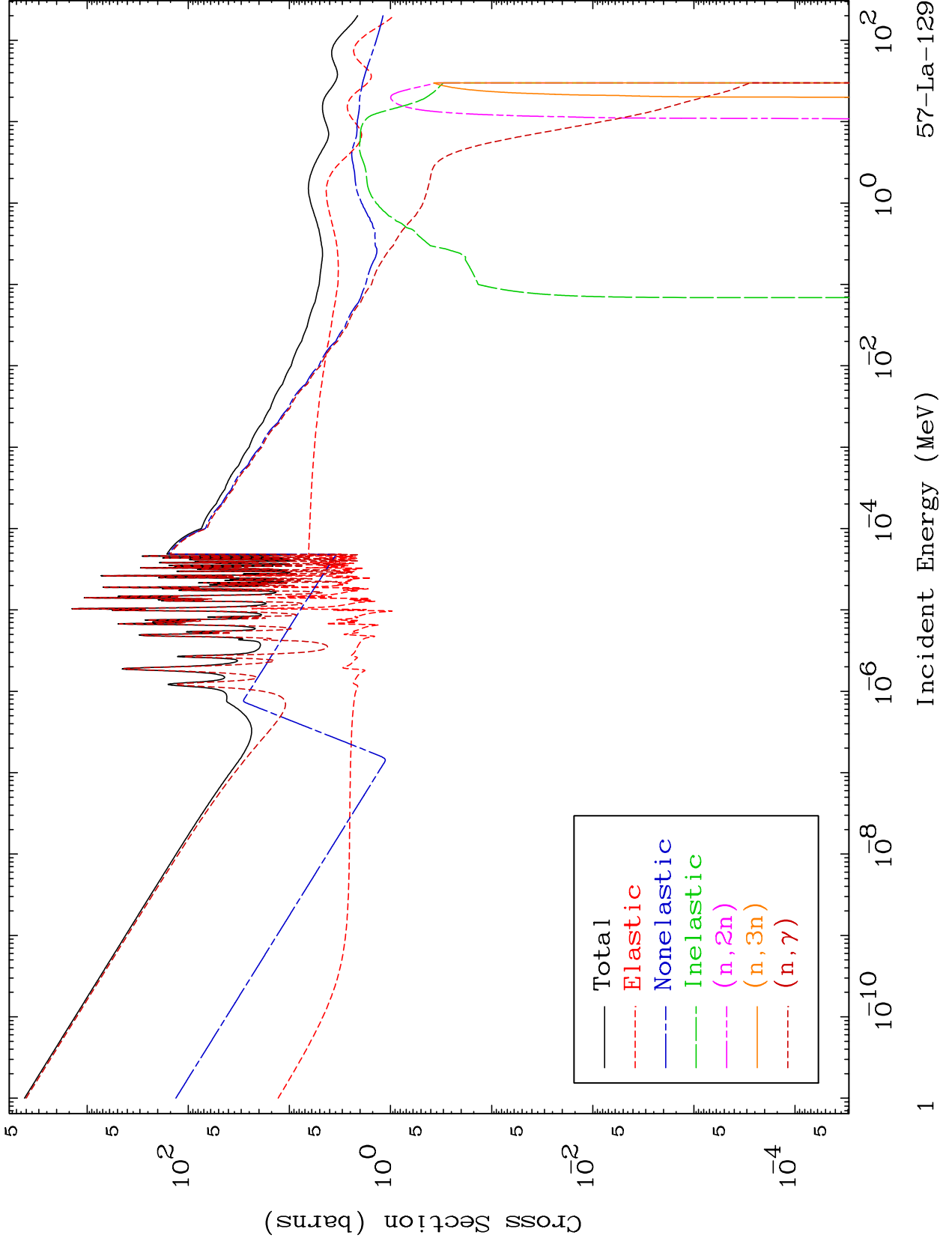
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 5698

Neutron Major  
293 Kelvin Cross Sections

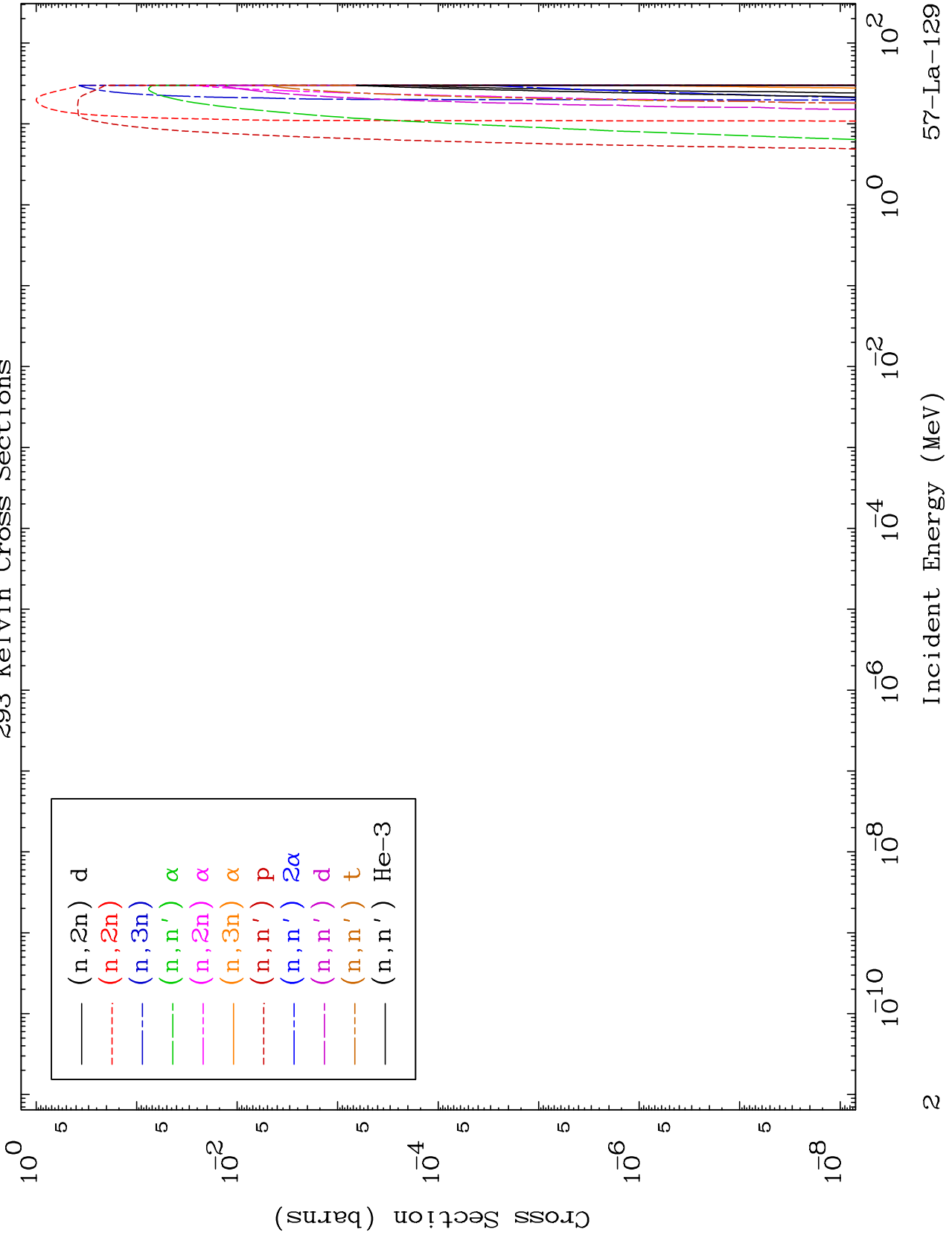
57-La-129

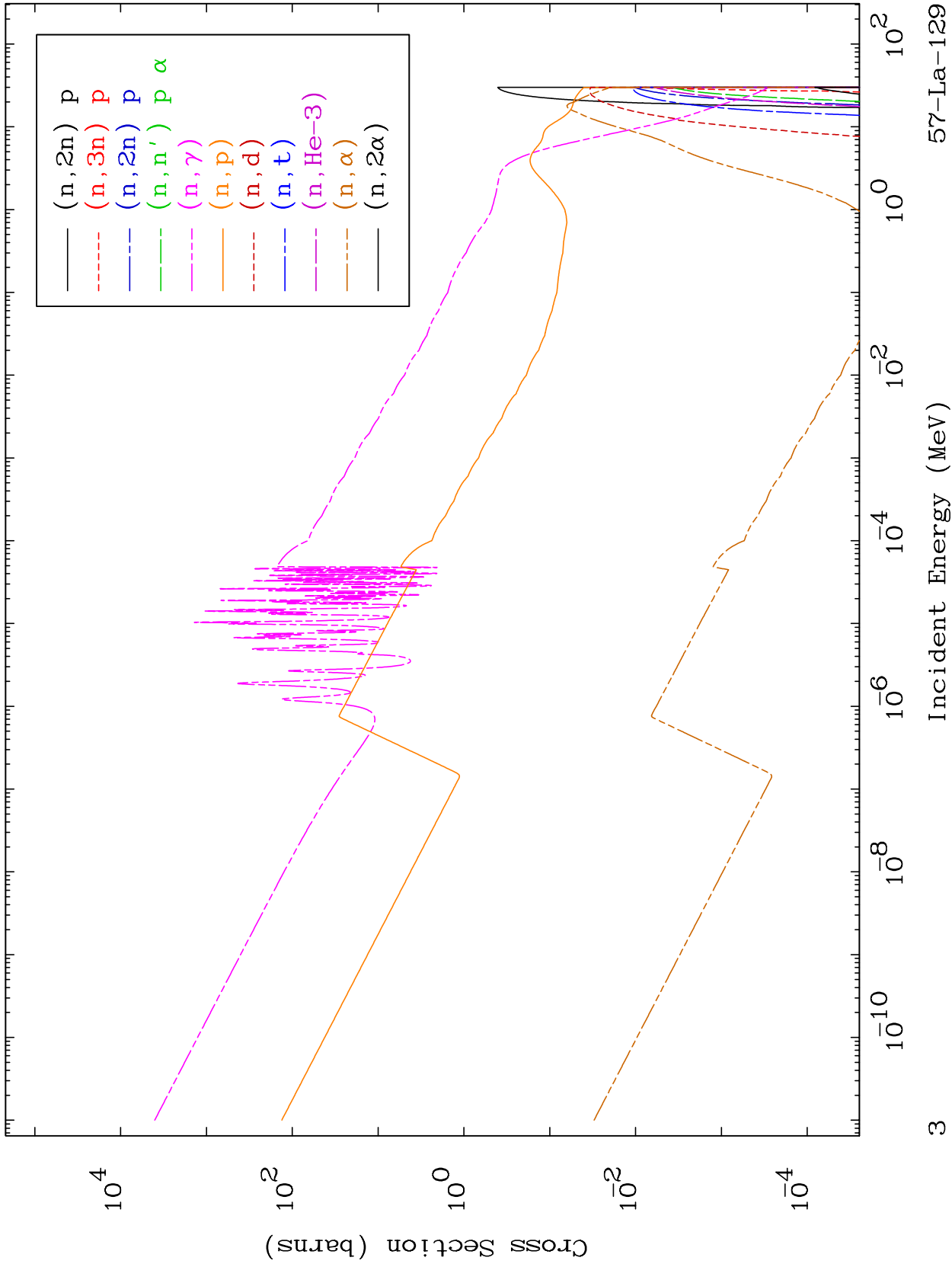


MAT 5698

Neutron Absorption  
293 Kelvin Cross Sections

57-La-129

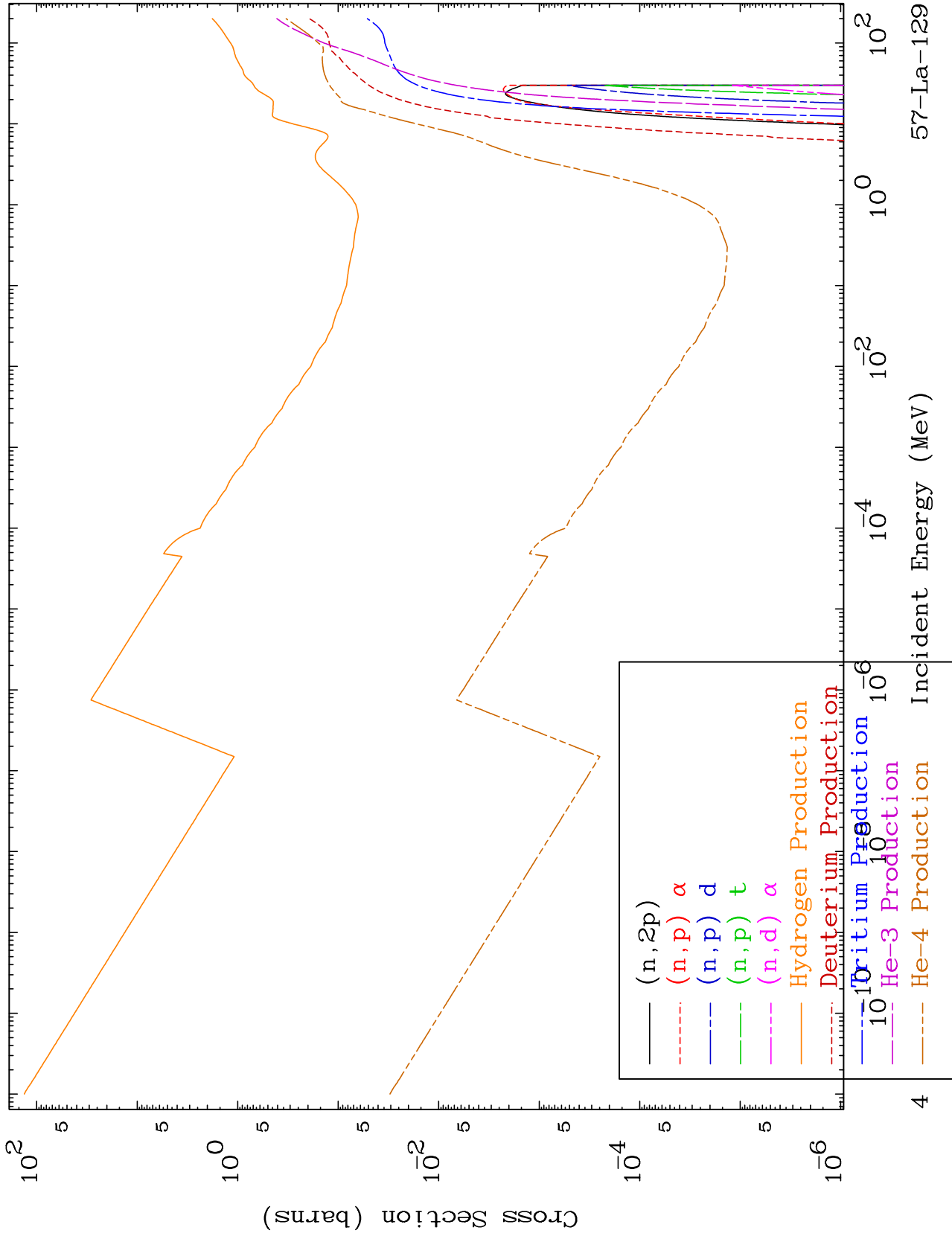




MAT 5698

Neutron Absorption  
293 Kelvin Cross Sections

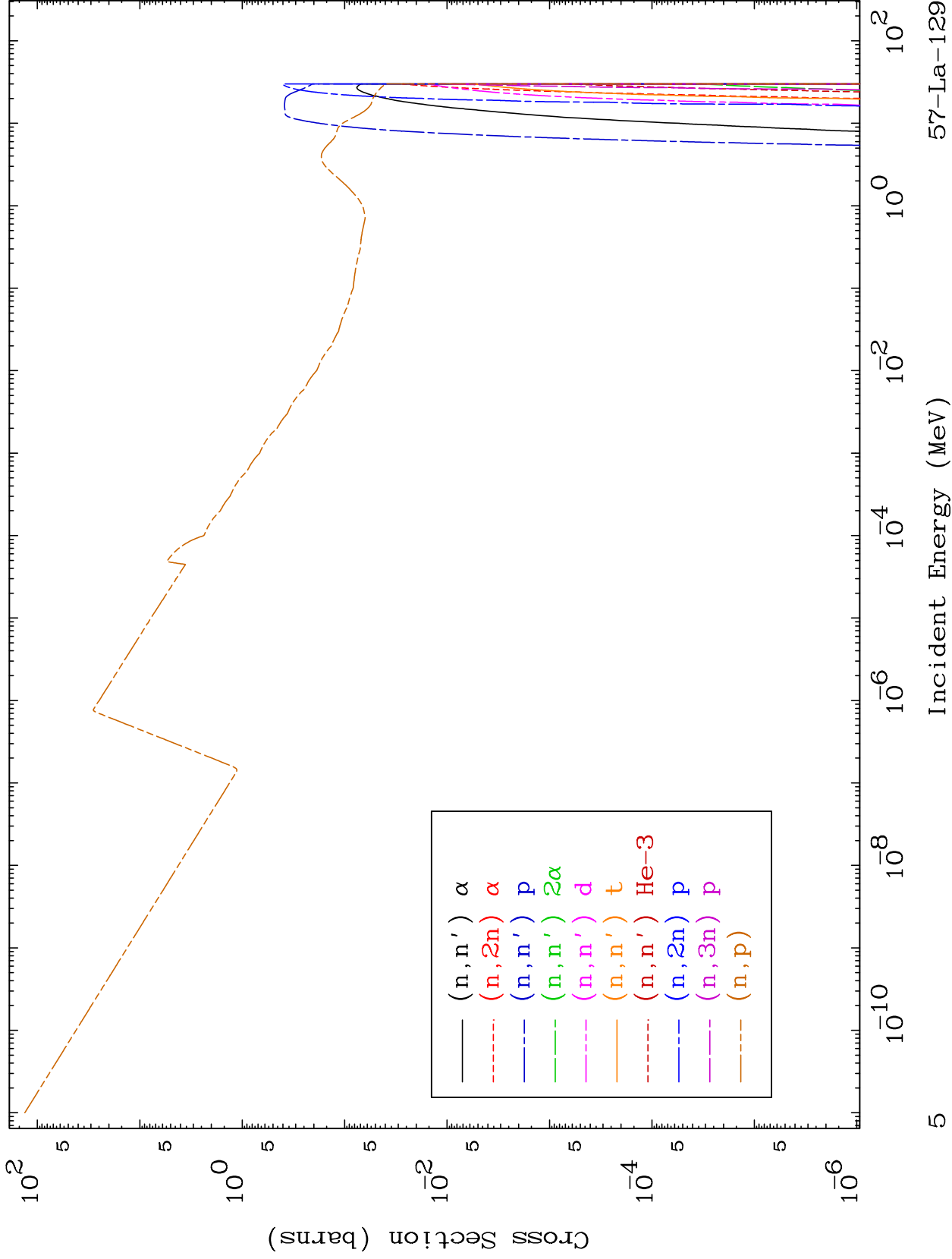
57-La-129



MAT 5698

Charged Particle  
293 Kelvin Cross Sections

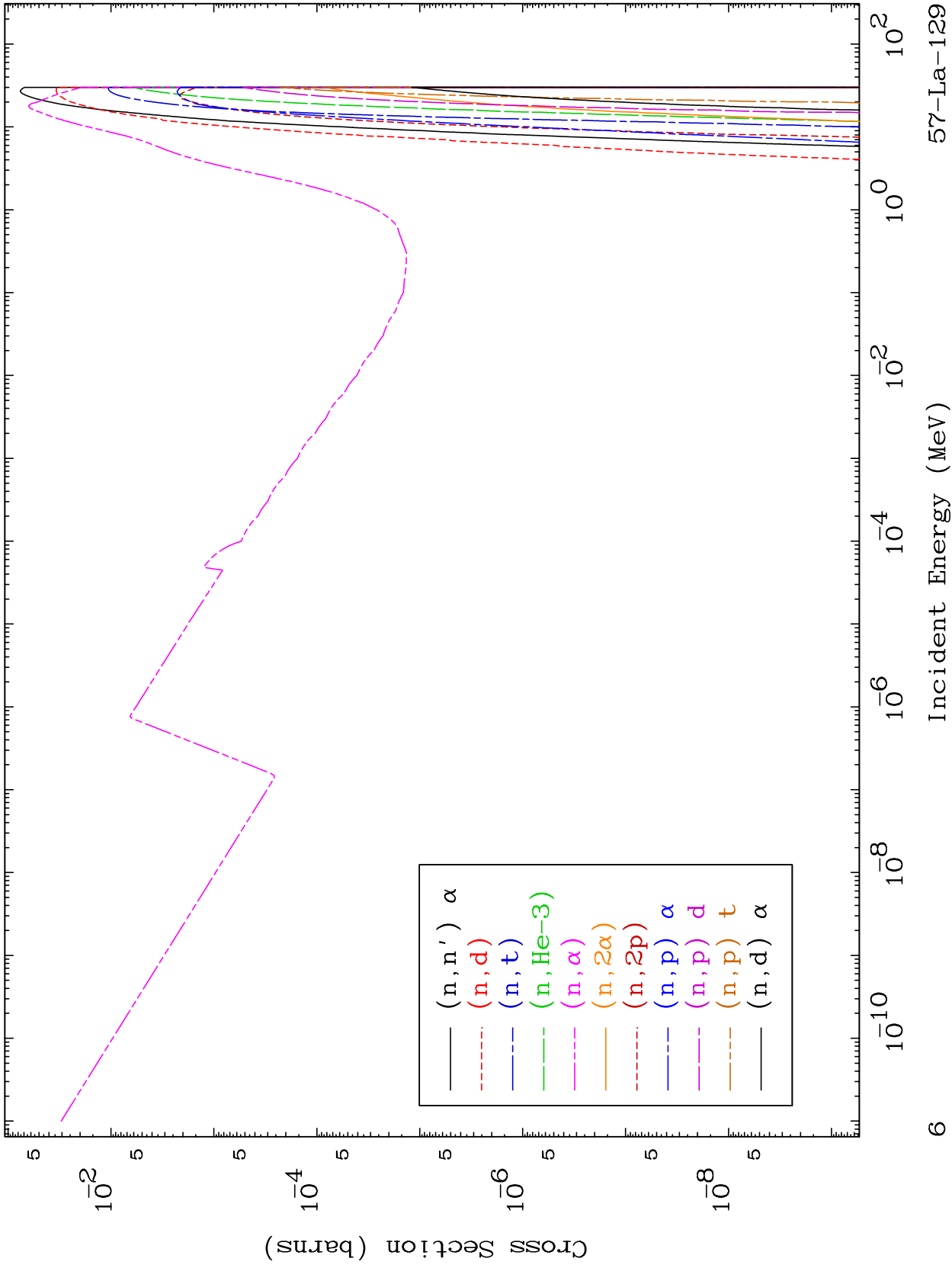
57-La-129



MAT 5698

Charged Particle  
293 Kelvin Cross Sections

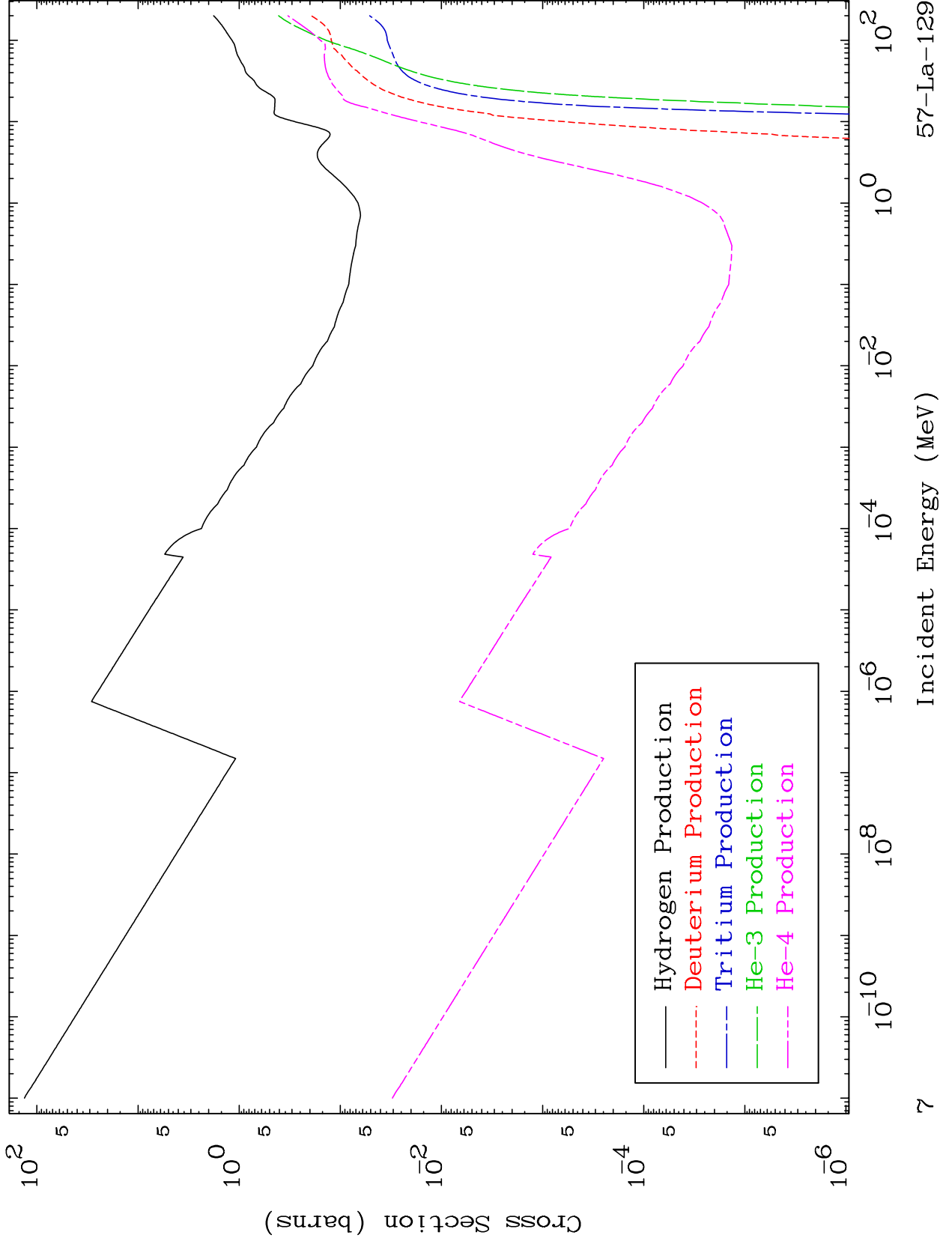
57-La-129



MAT 5698

Particle Production  
293 Kelvin Cross Sections

57-La-129



57-La-129

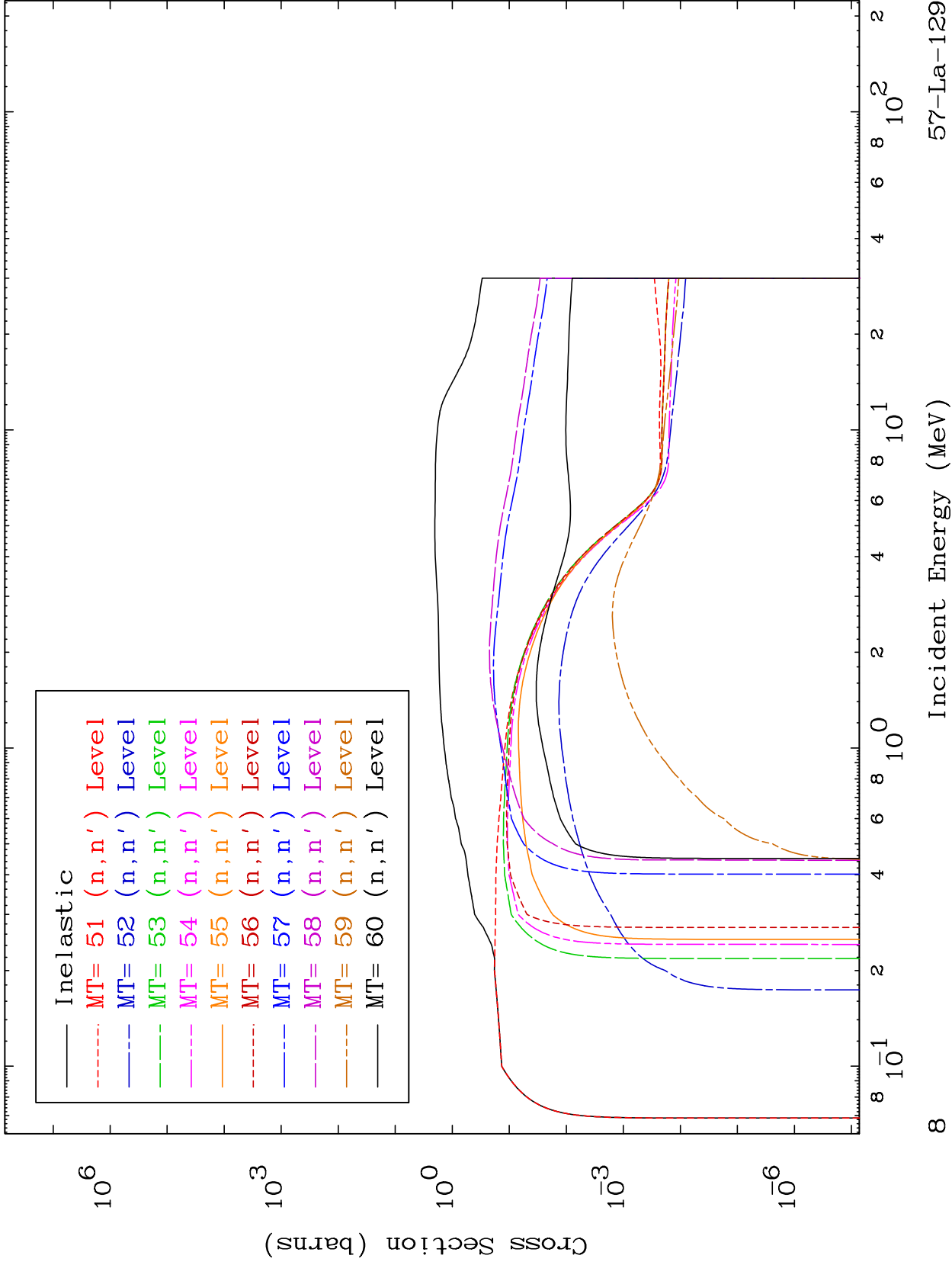
Incident Energy (MeV)



MAT 5698

(n,n') Levels  
293 Kelvin Cross Sections

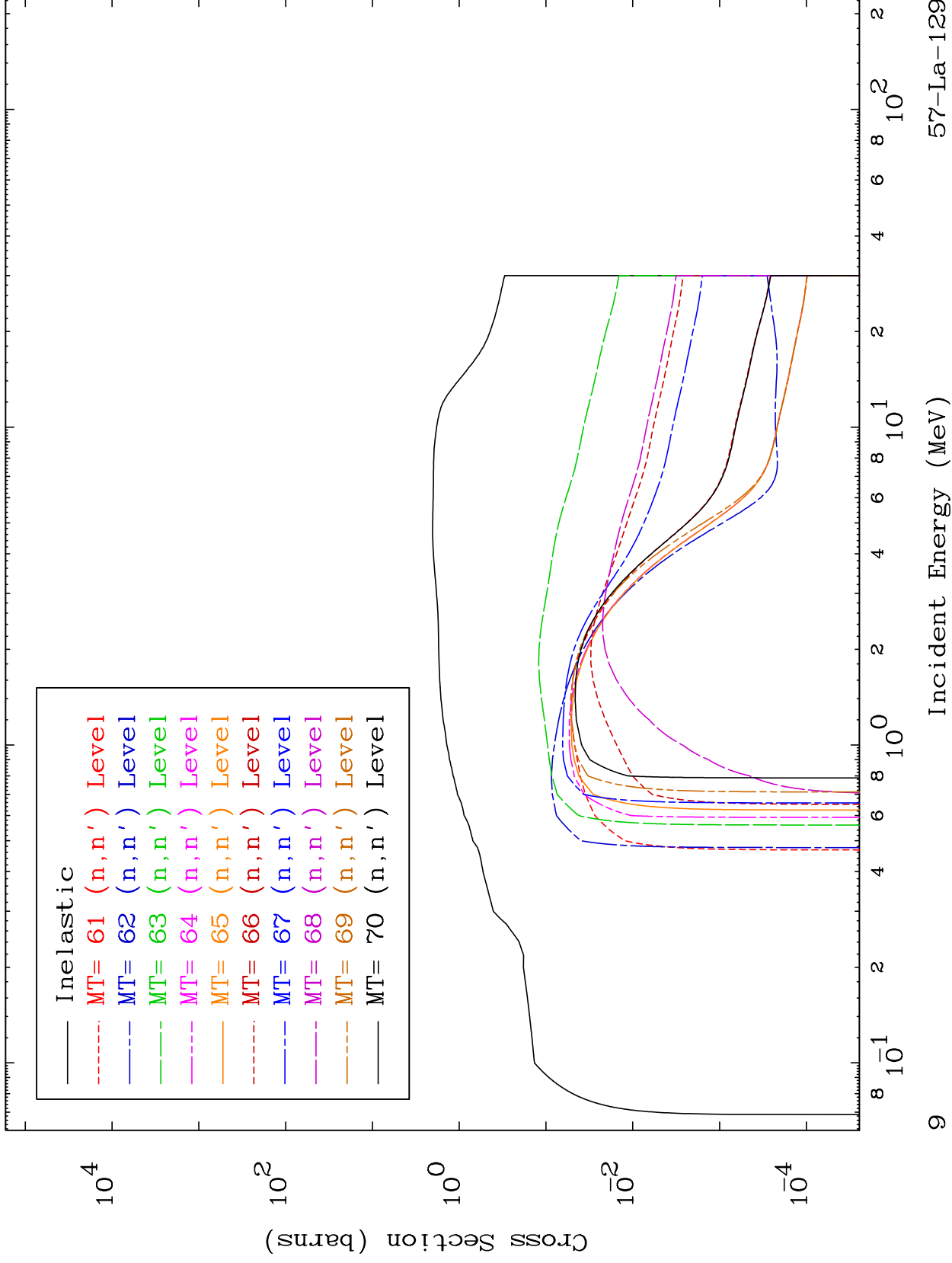
57-La-129



MAT 5698

(n,n') Levels  
293 Kelvin Cross Sections

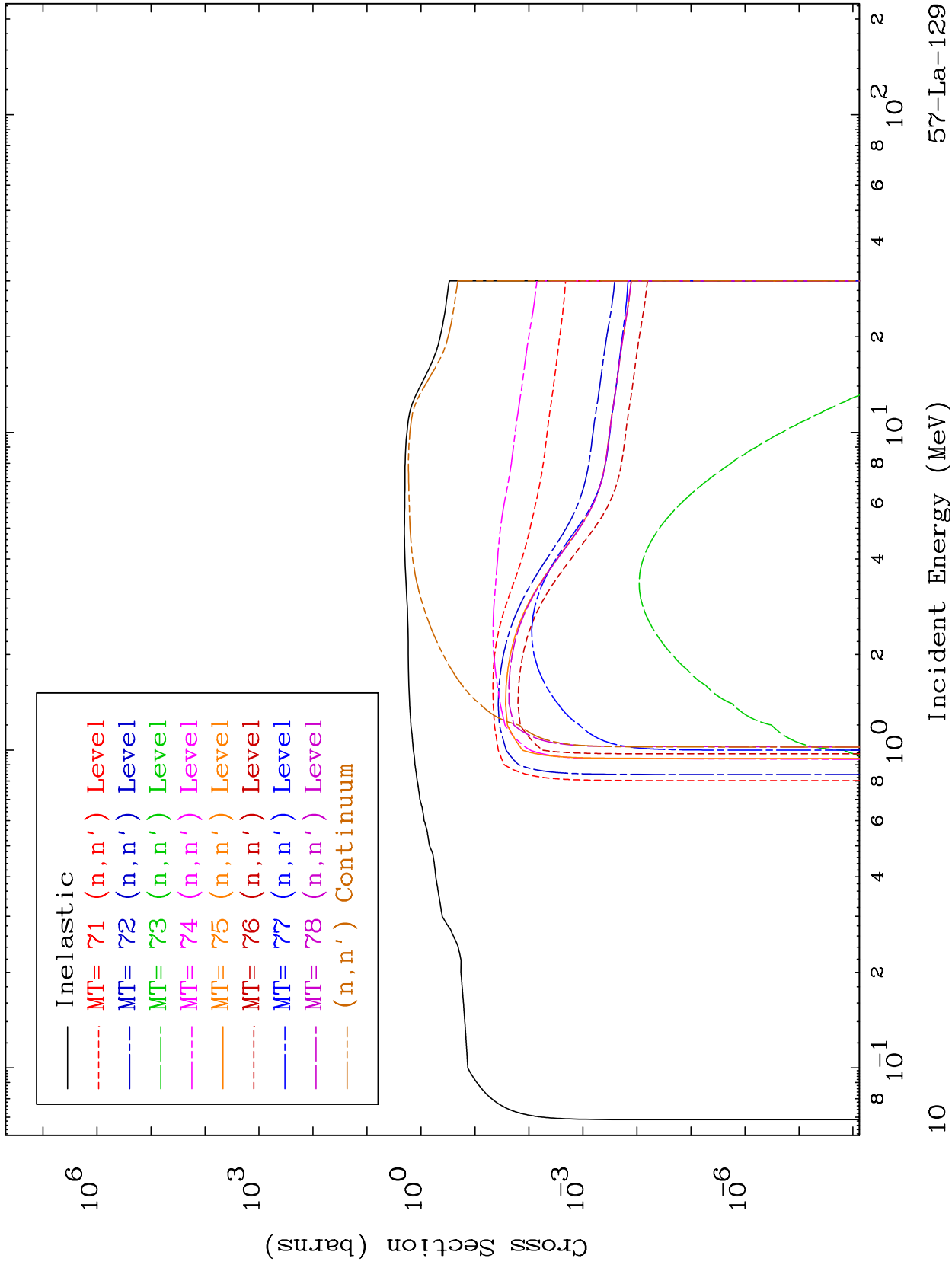
57-La-129



MAT 5698

(n,n') Levels  
293 Kelvin Cross Sections

57-La-129



10

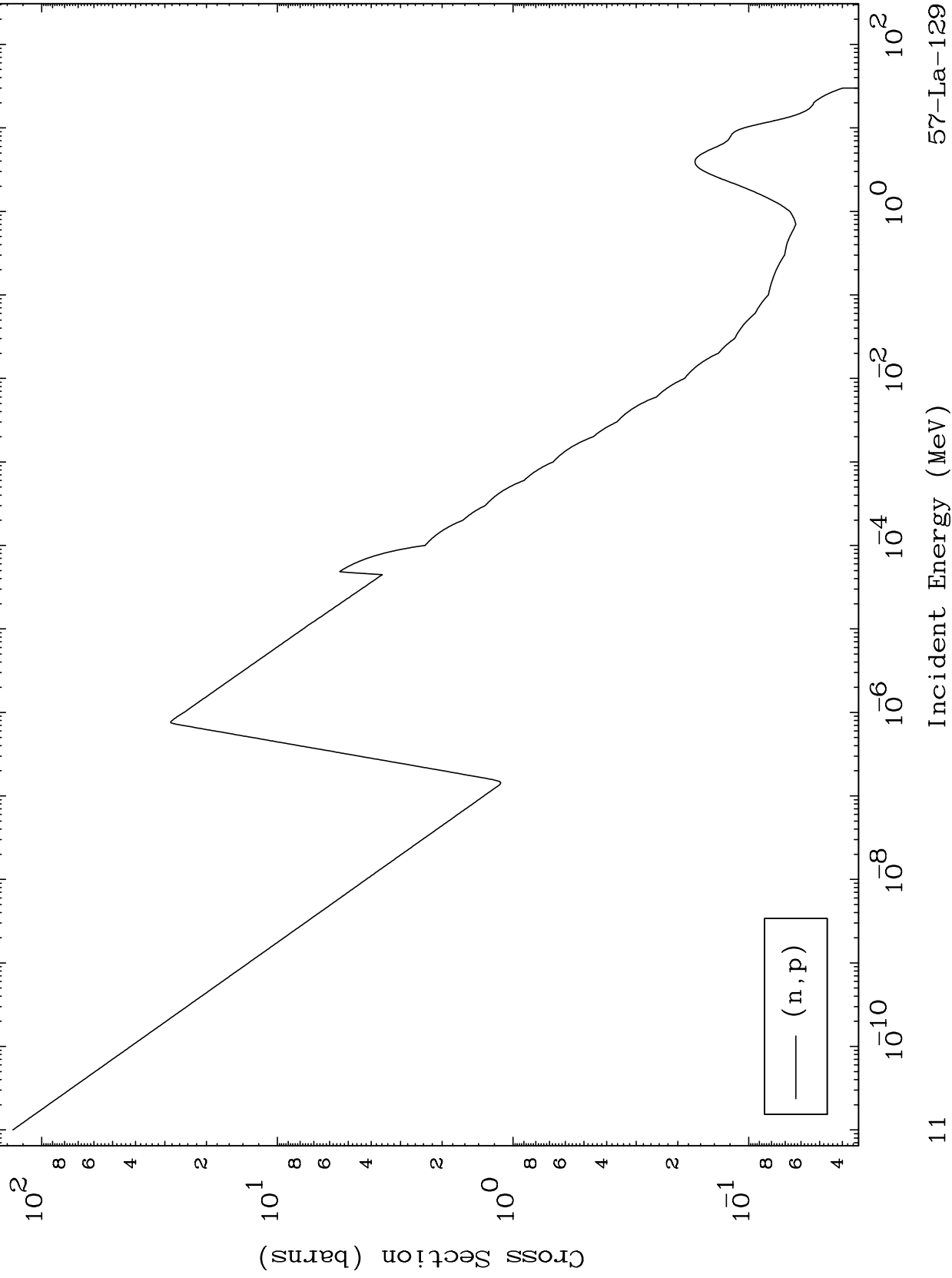
Incident Energy (MeV)

57-La-129

MAT 5698

(n,p) Levels  
293 Kelvin Cross Sections

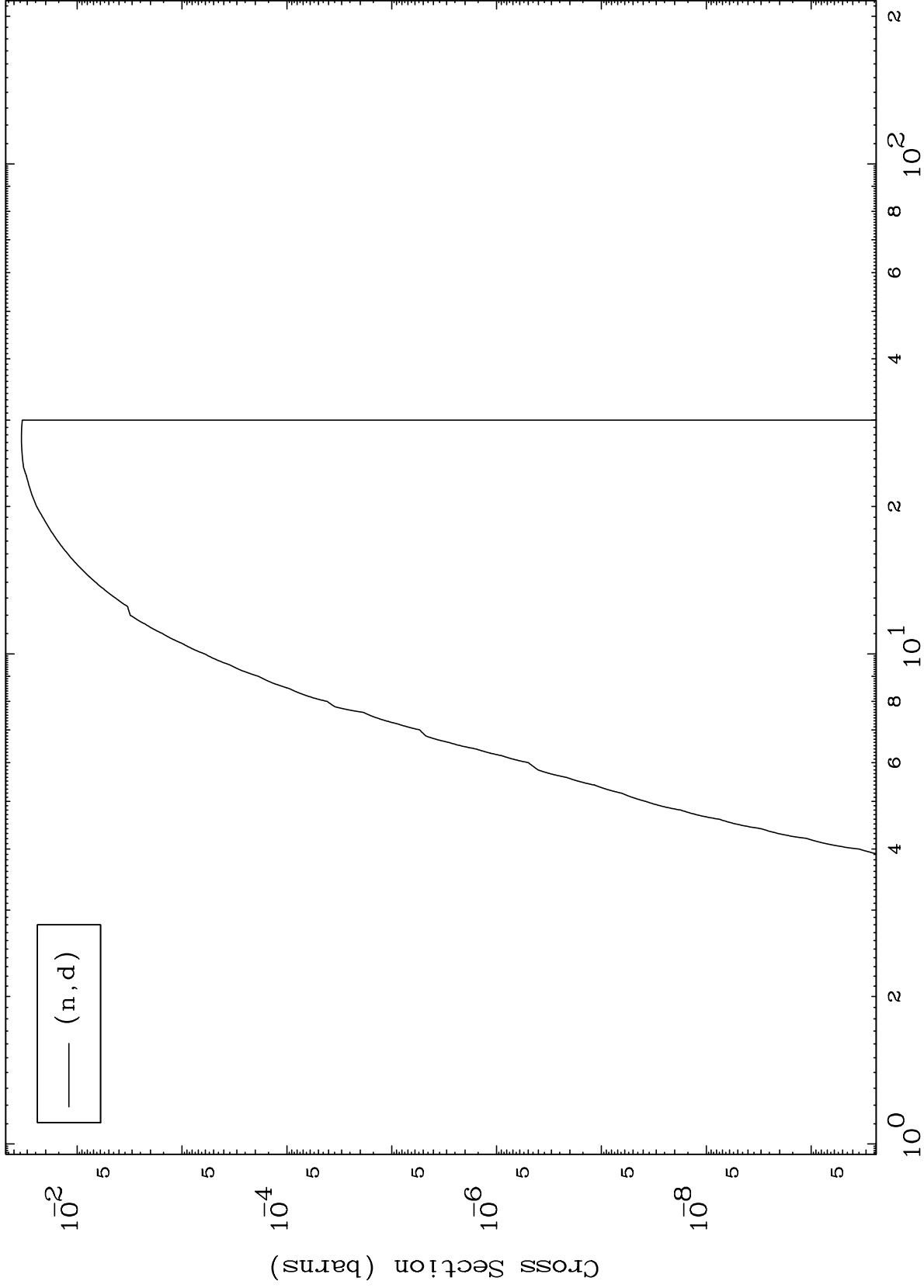
57-La-129



MAT 5698

(n,d) Levels  
293 Kelvin Cross Sections

57-La-129



12

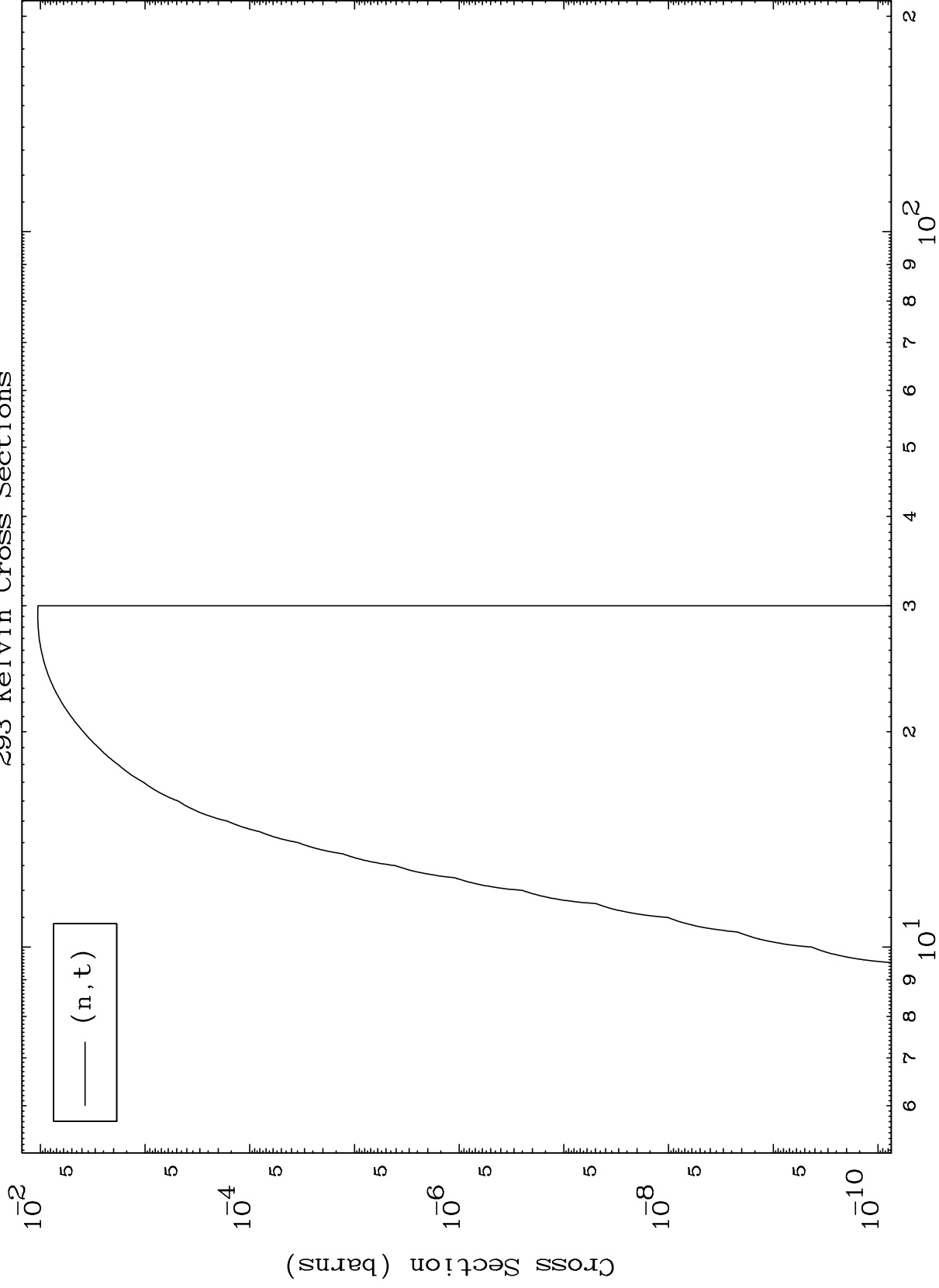
Incident Energy (MeV)

57-La-129

MAT 5698

(n,t) Levels  
293 Kelvin Cross Sections

57-La-129



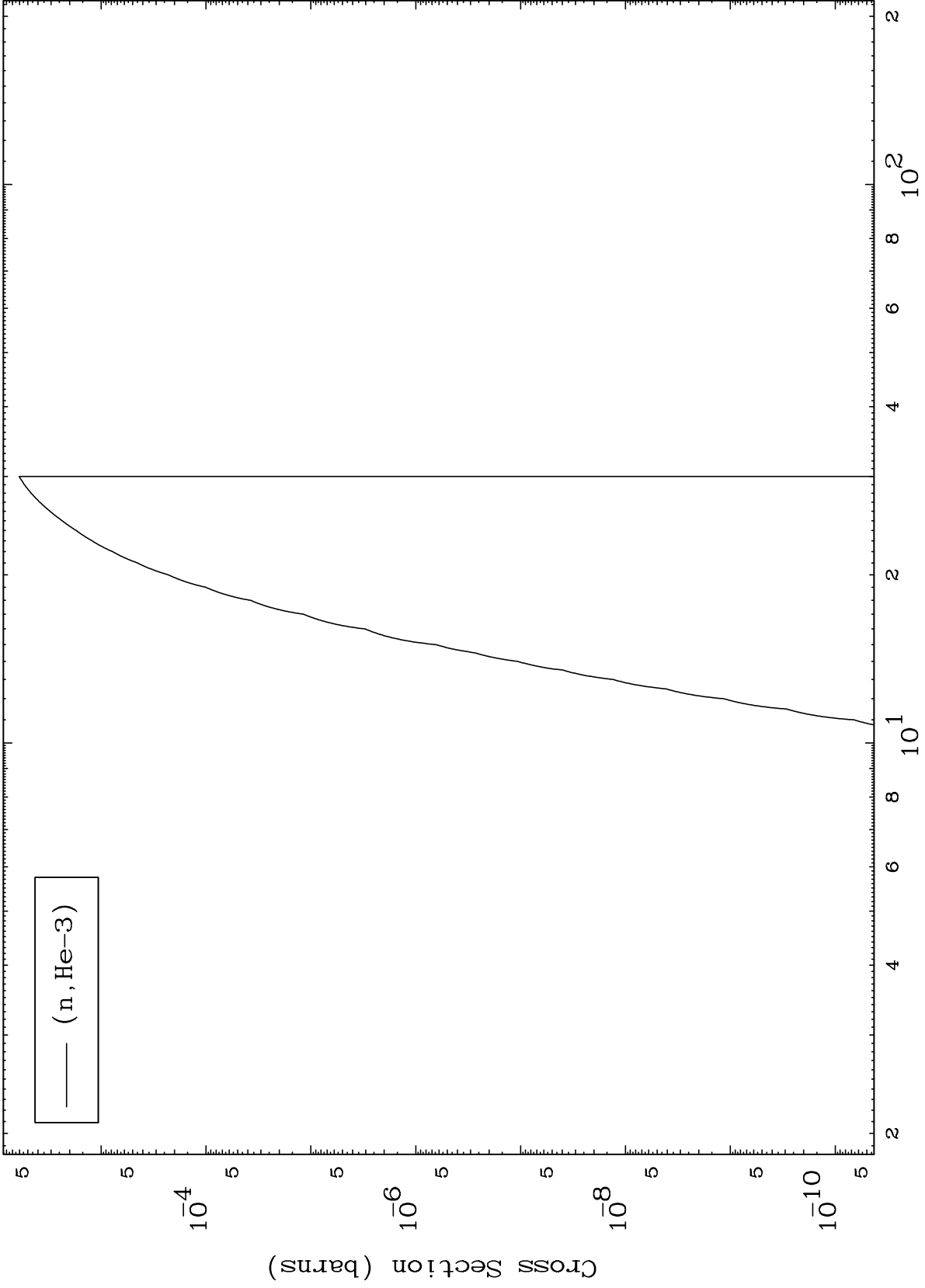
13

57-La-129

MAT 5698

(n,He3) Levels  
293 Kelvin Cross Sections

57-La-129



14

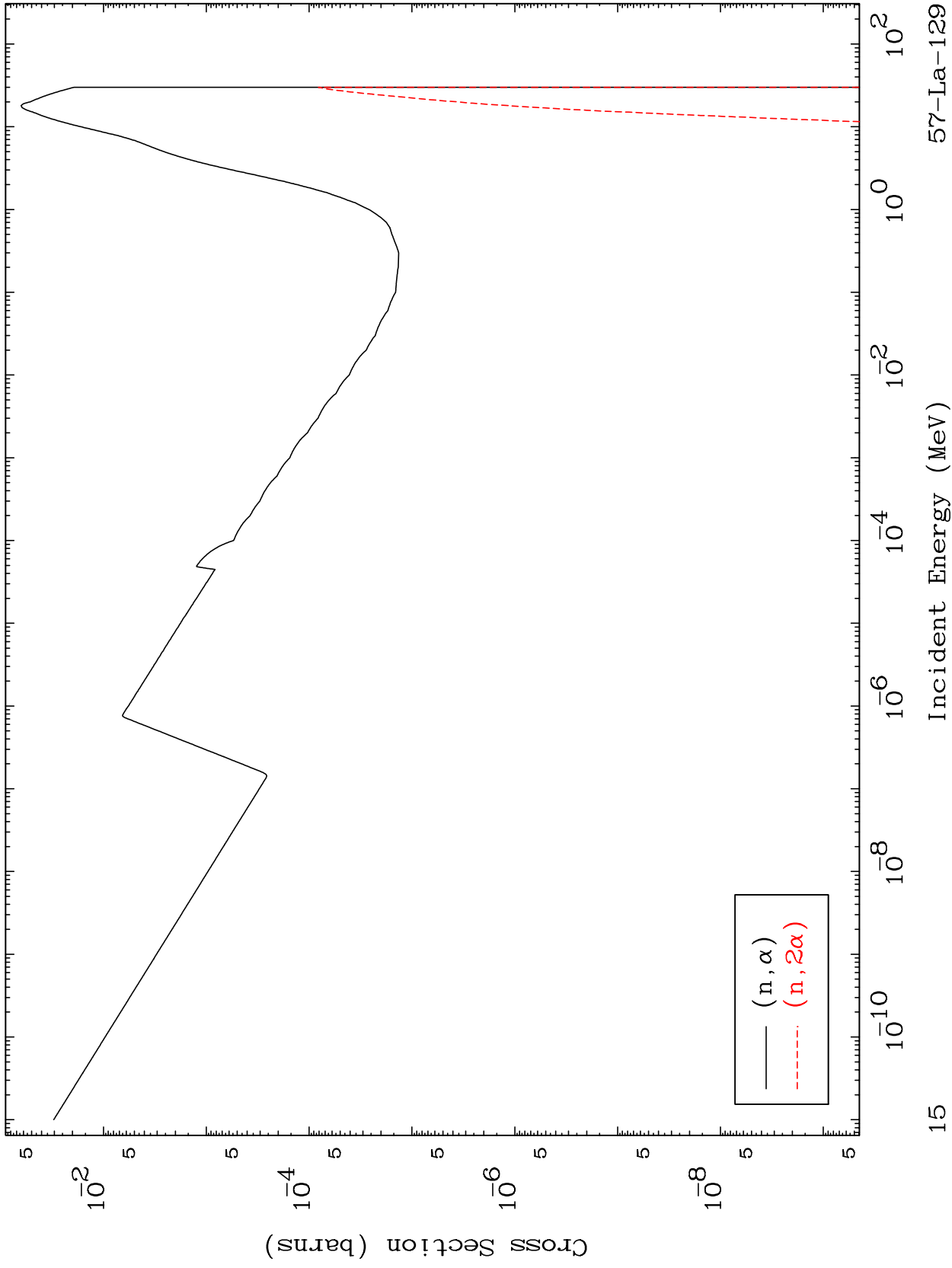
Incident Energy (MeV)

57-La-129

MAT 5698

(n,α) Levels  
293 Kelvin Cross Sections

57-La-129

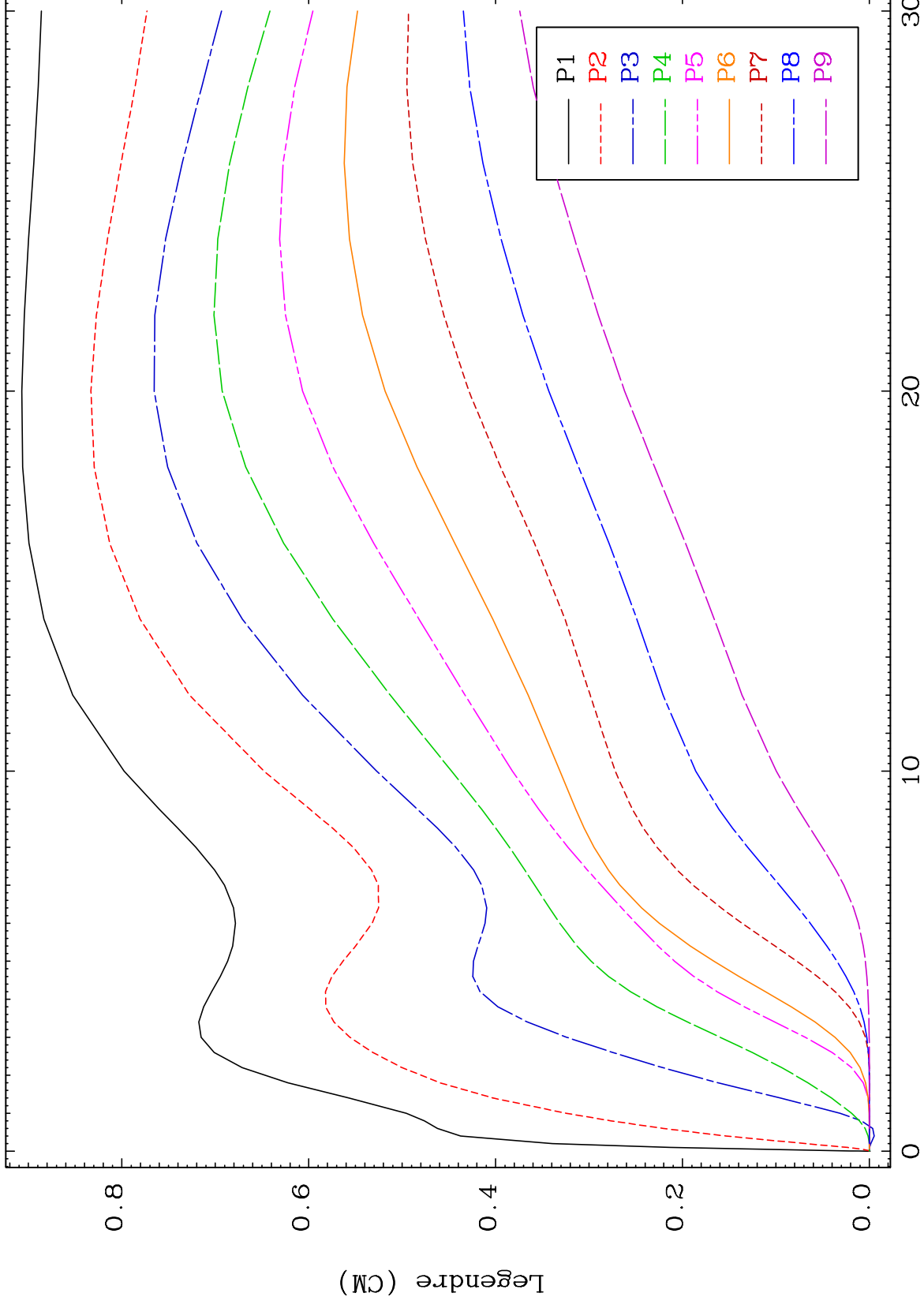




MAT 5698

57-La-129

Elastic Legendre Coefficients



16

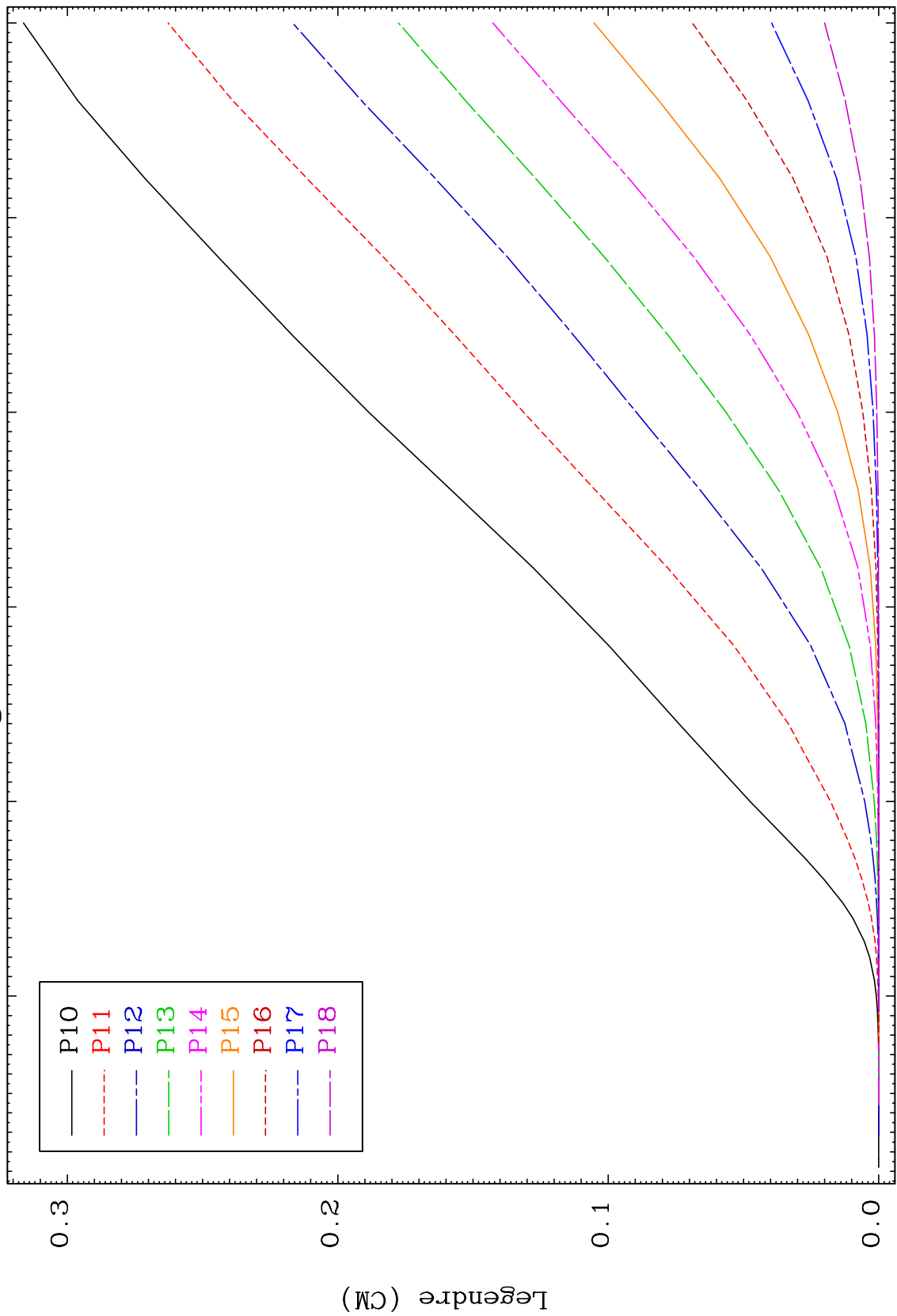
Incident Energy (MeV)

57-La-129

MAT 5698

Elastic Legendre Coefficients

57-La-129



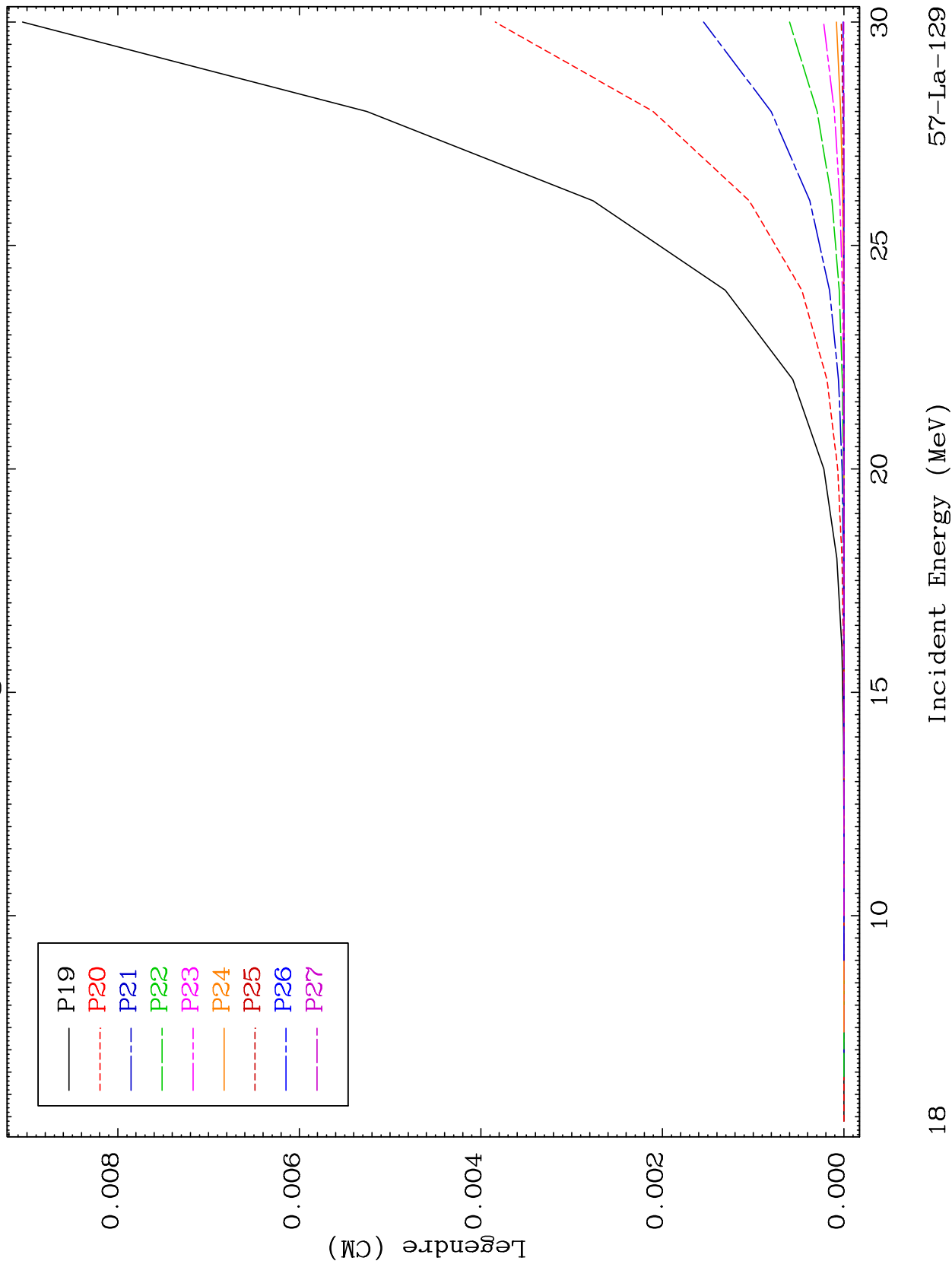
17

57-La-129

MAT 5698

### Elastic Legendre Coefficients

57-La-129



18

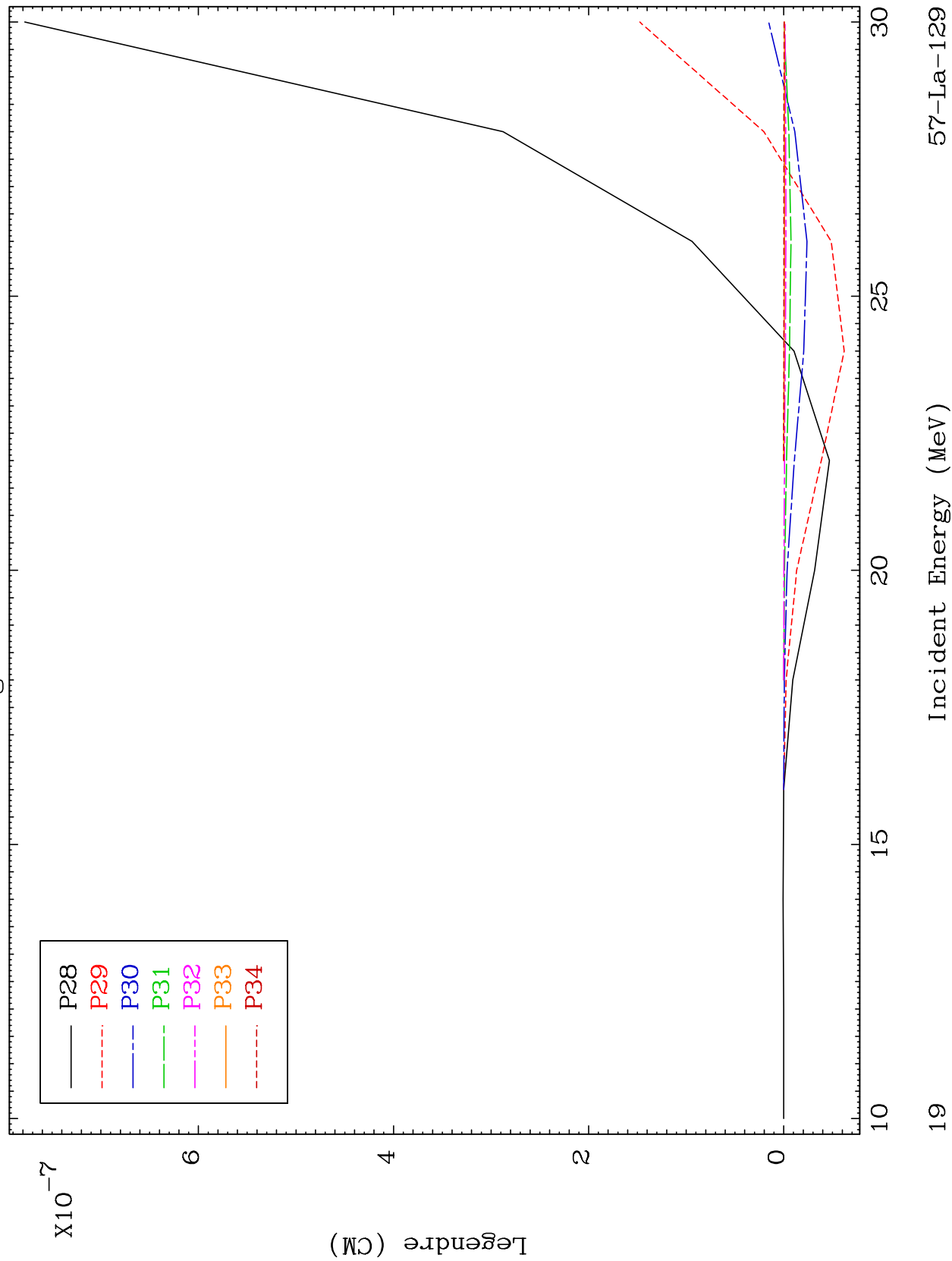
Incident Energy (MeV)

57-La-129

MAT 5698

Elastic Legendre Coefficients

57-La-129



19

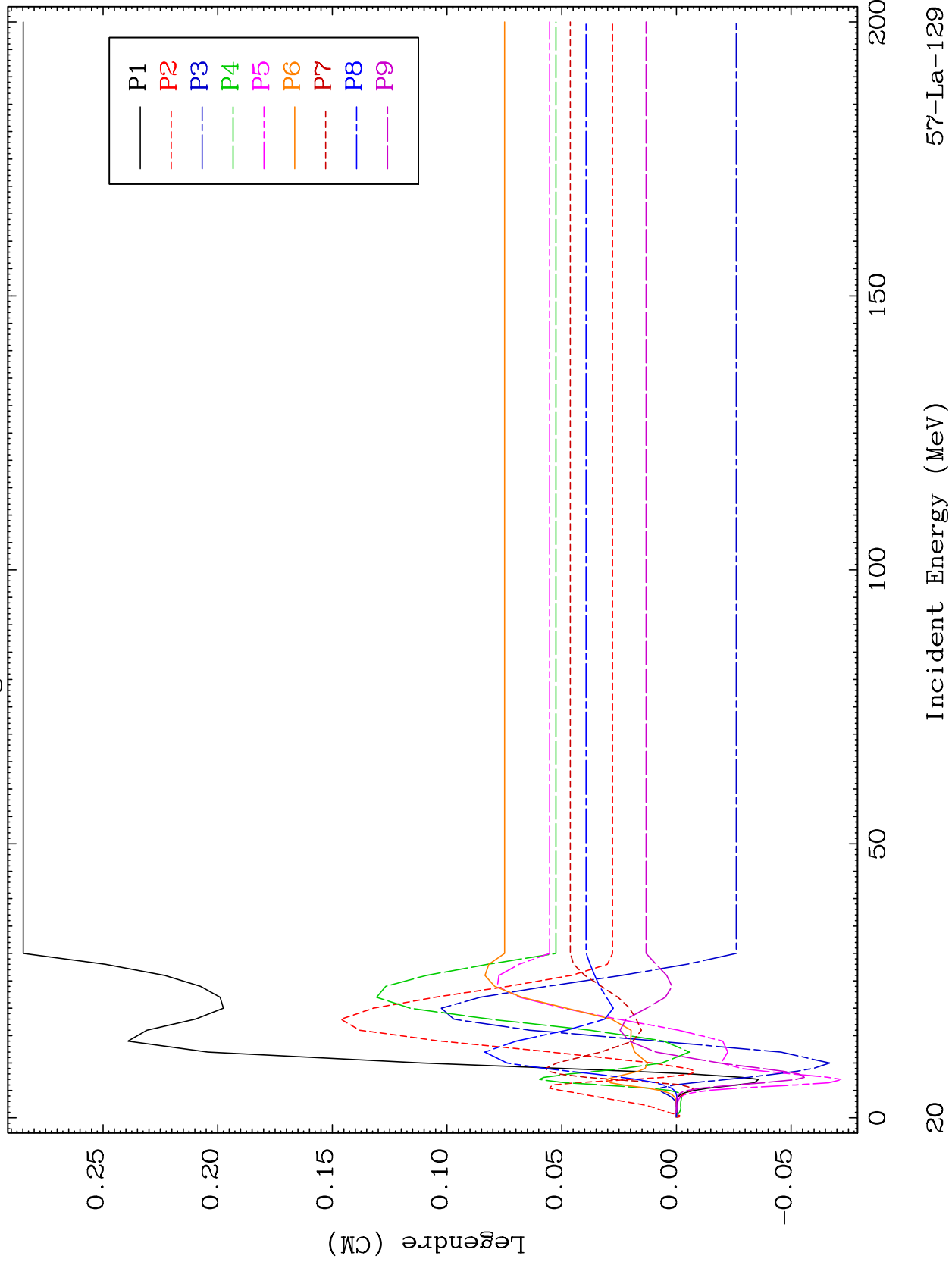
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129

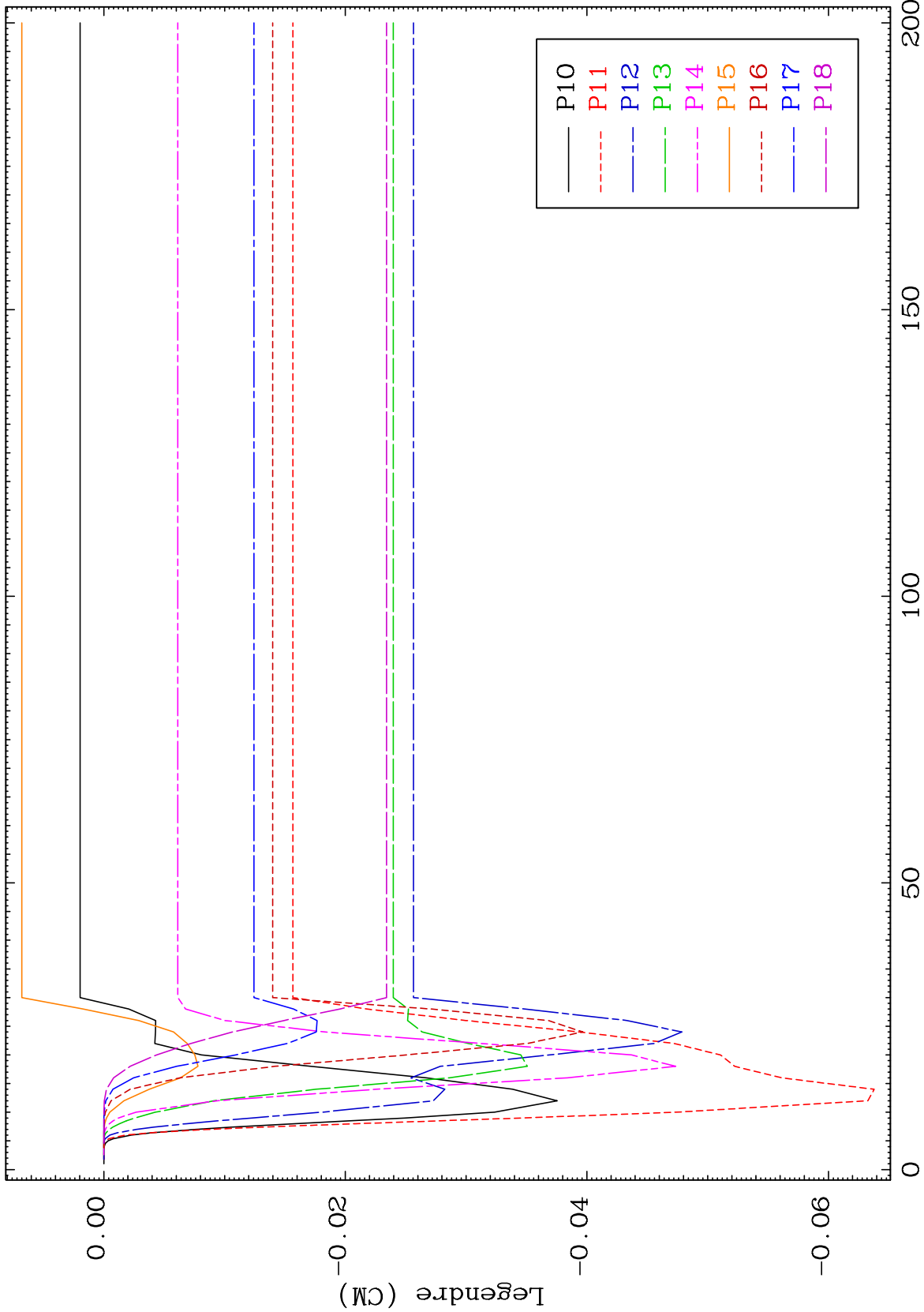


57-La-129

MAT 5698

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

57-La-129



21

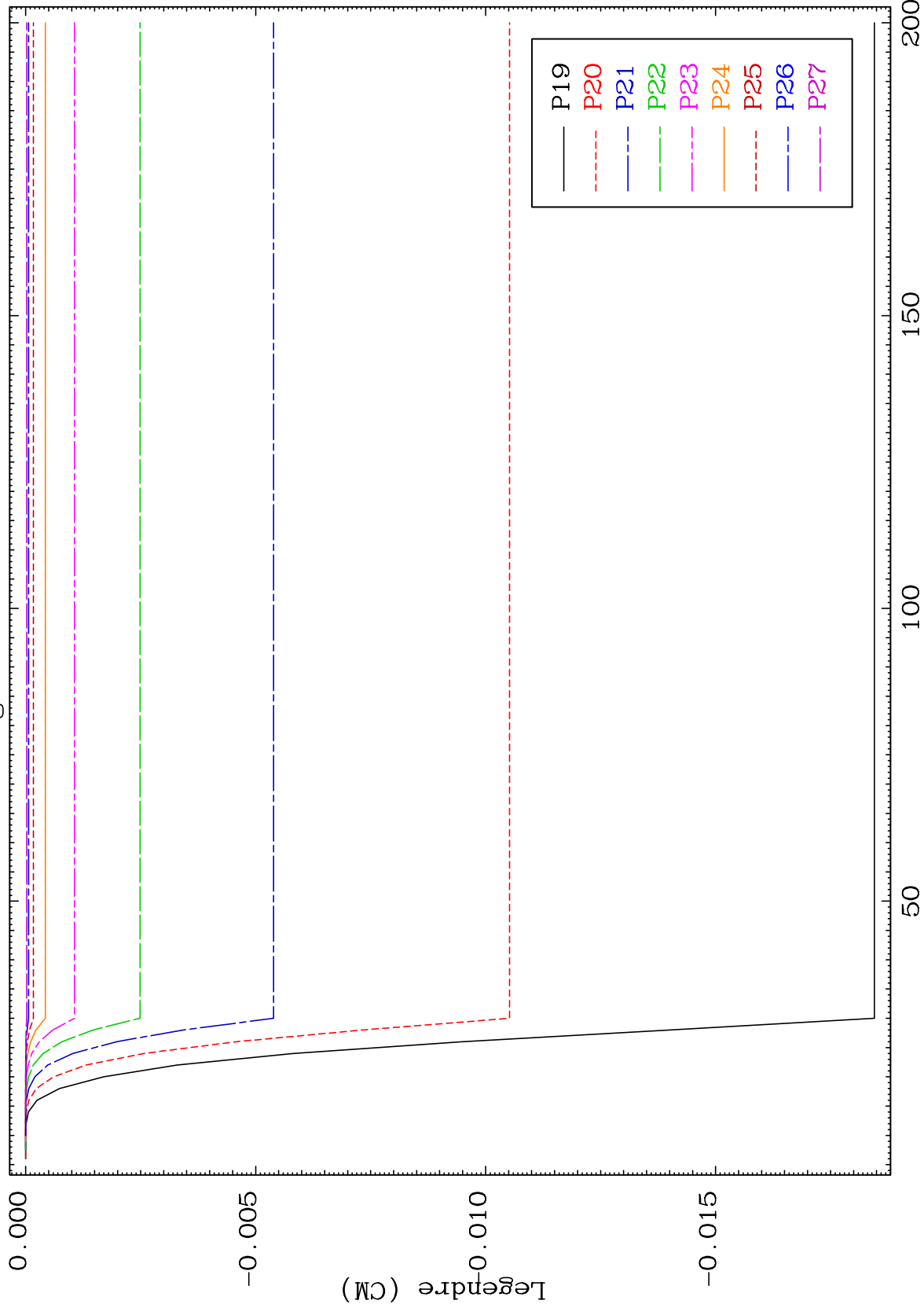
Incident Energy (MeV)

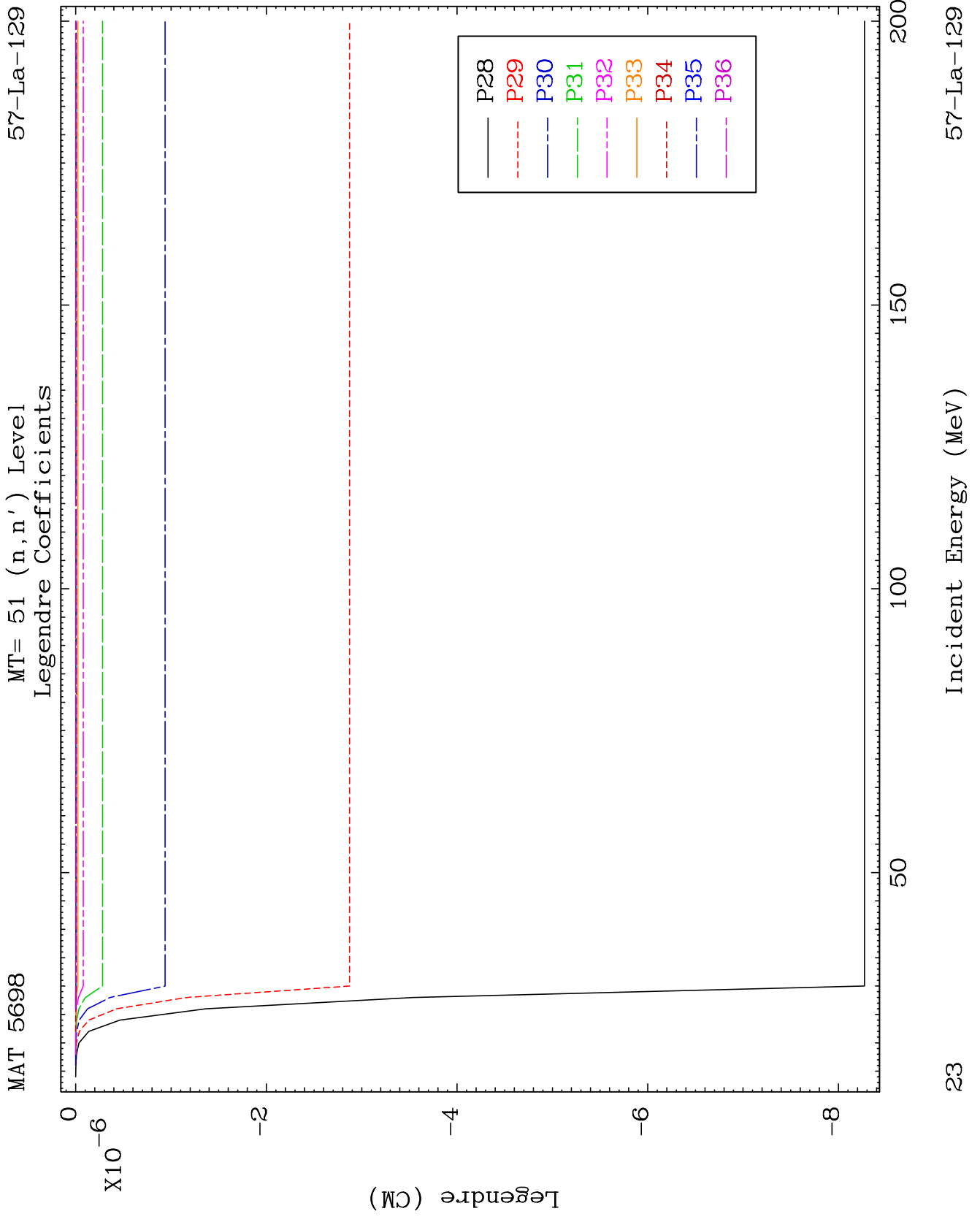
57-La-129

MAT 5698

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

57-La-129



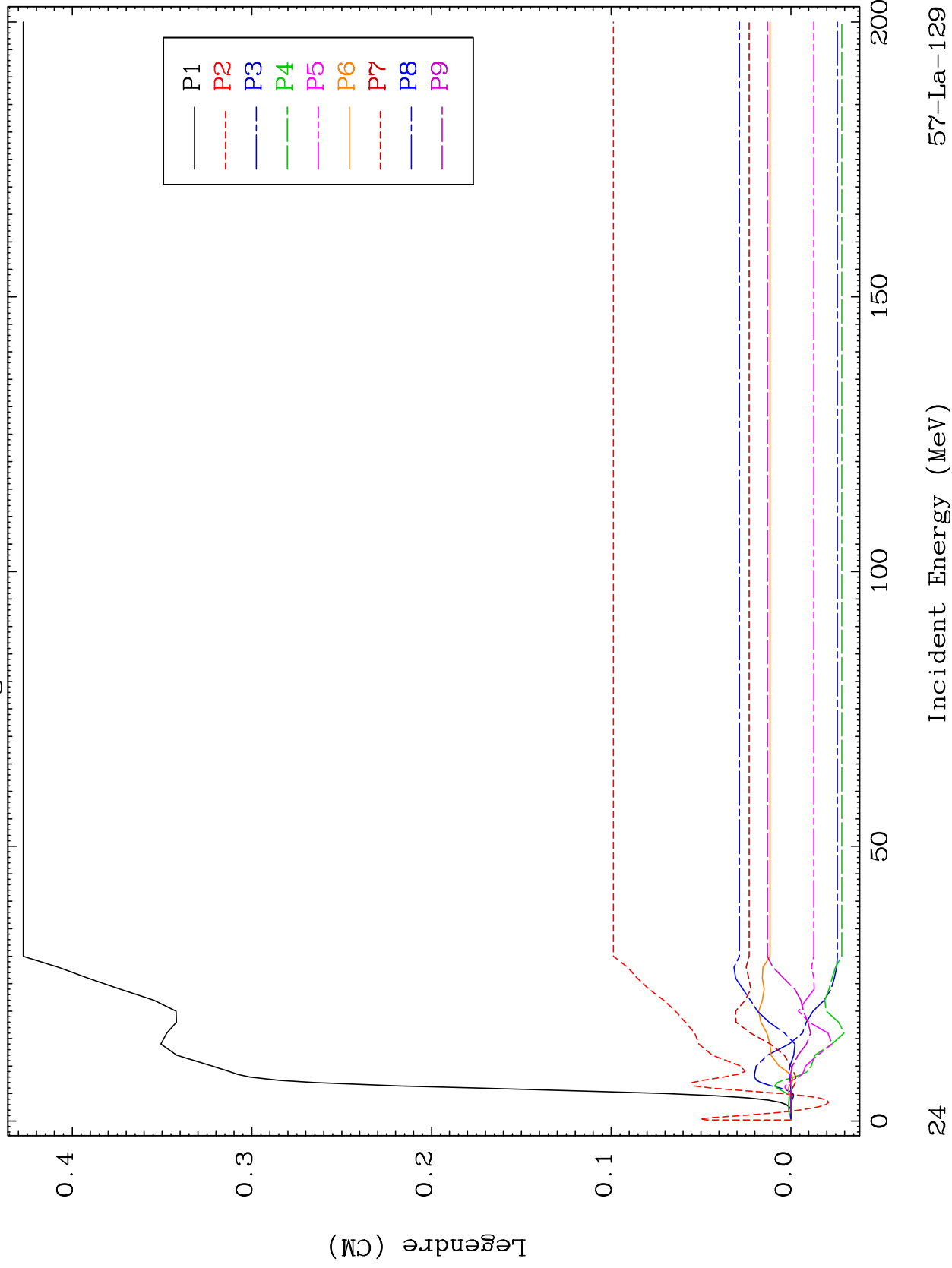




MAT 5698

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

57-La-129



57-La-129

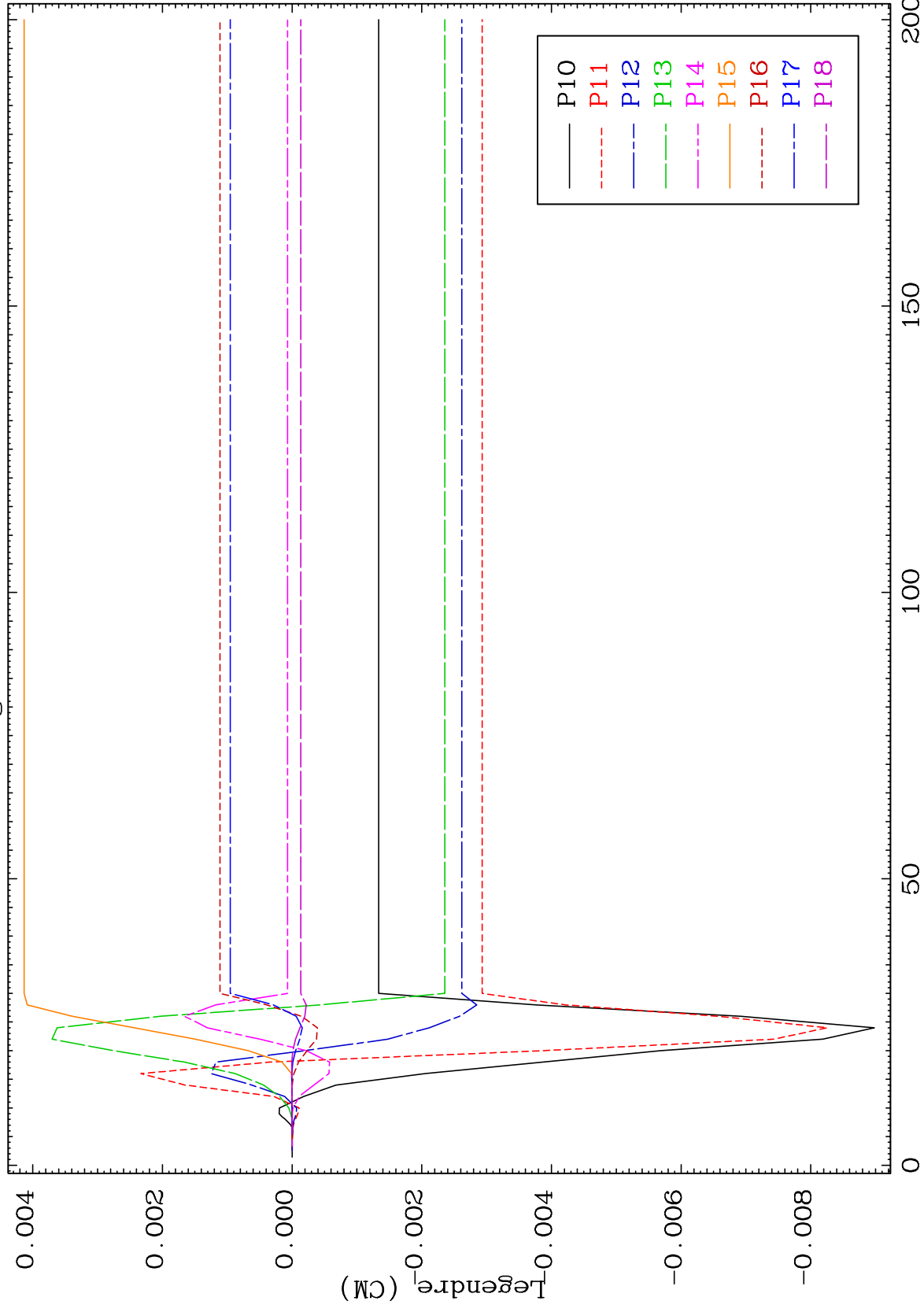
Incident Energy (MeV)

24

MAT 5698

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

57-La-129



25

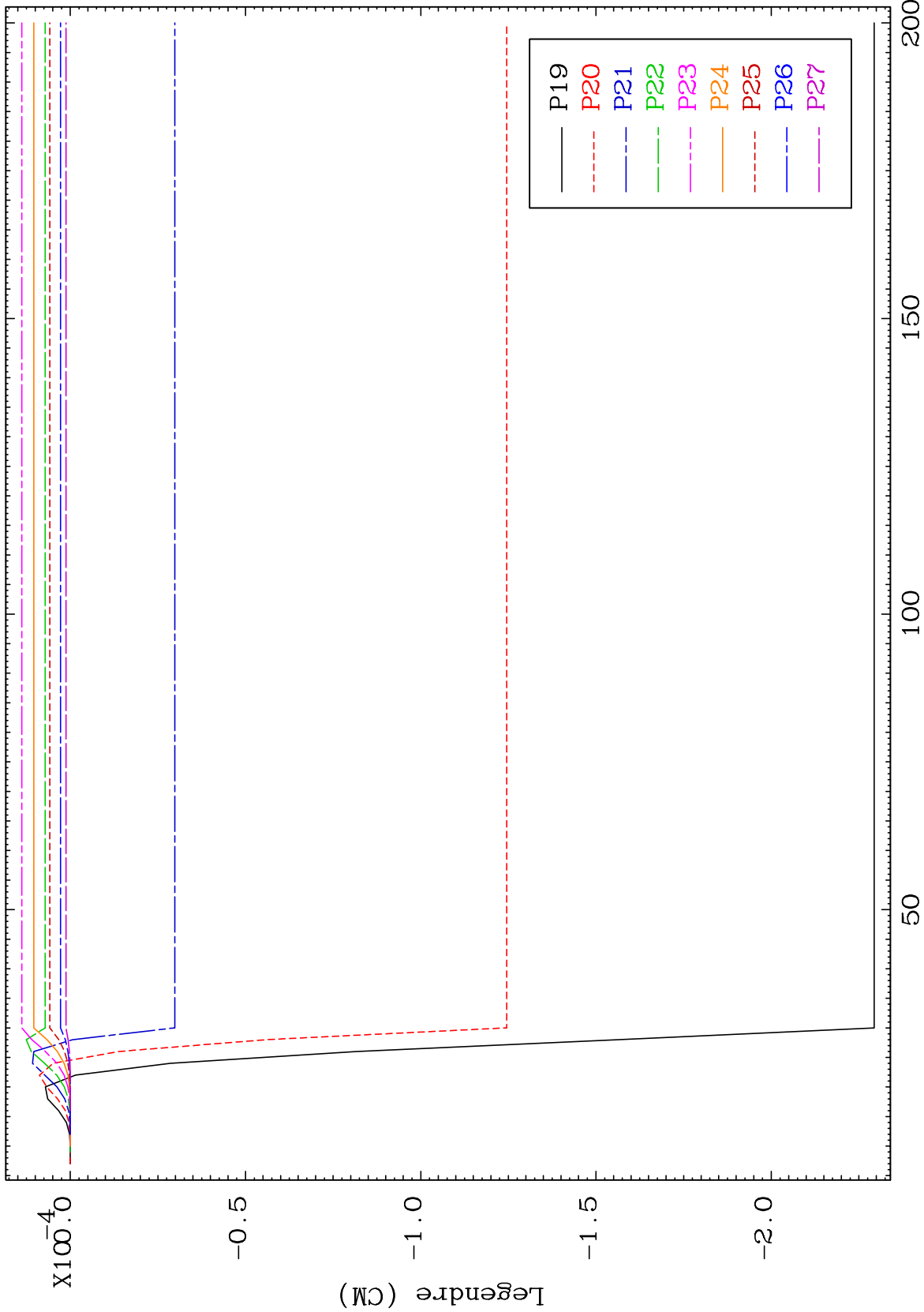
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



26

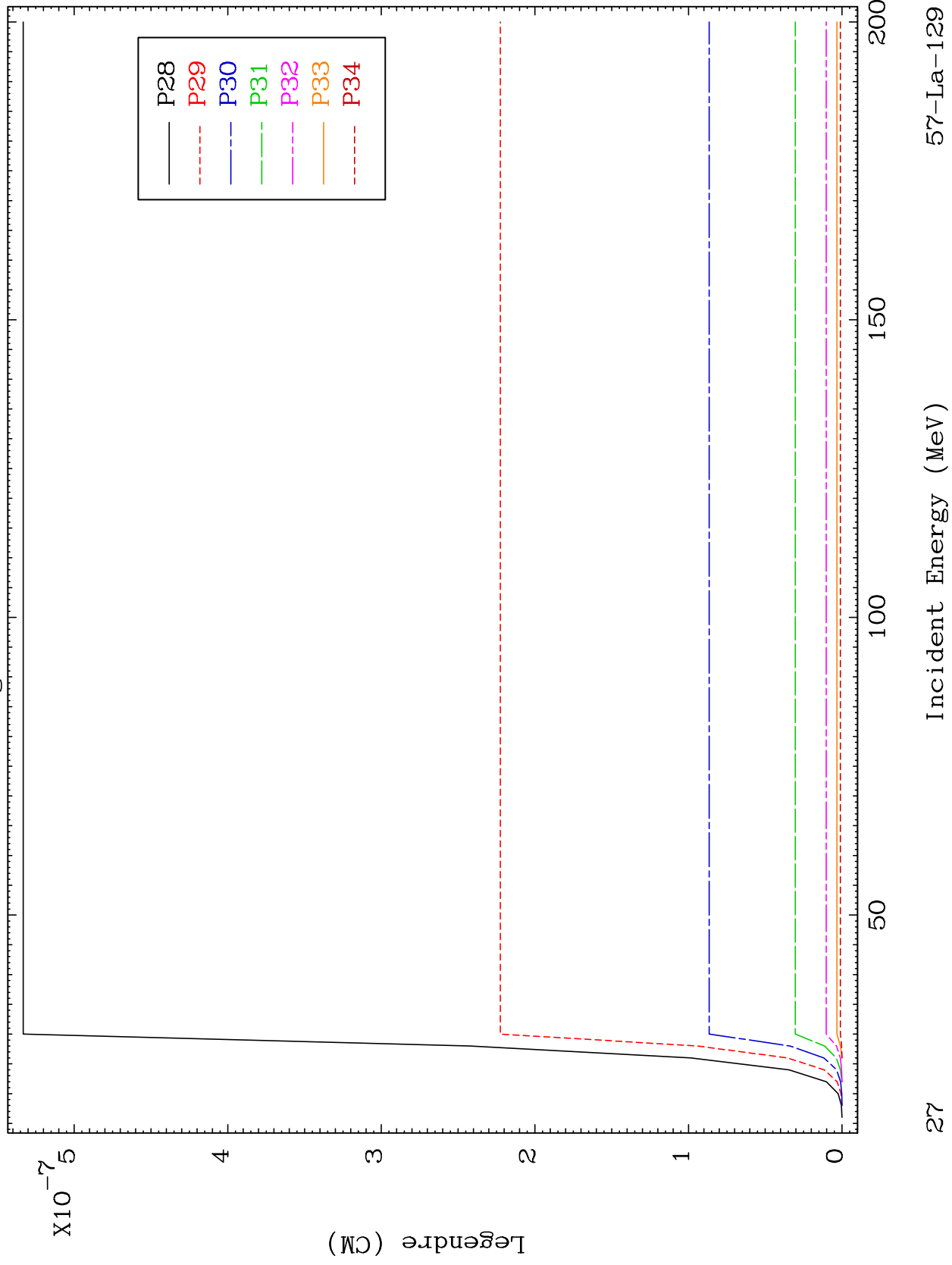
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



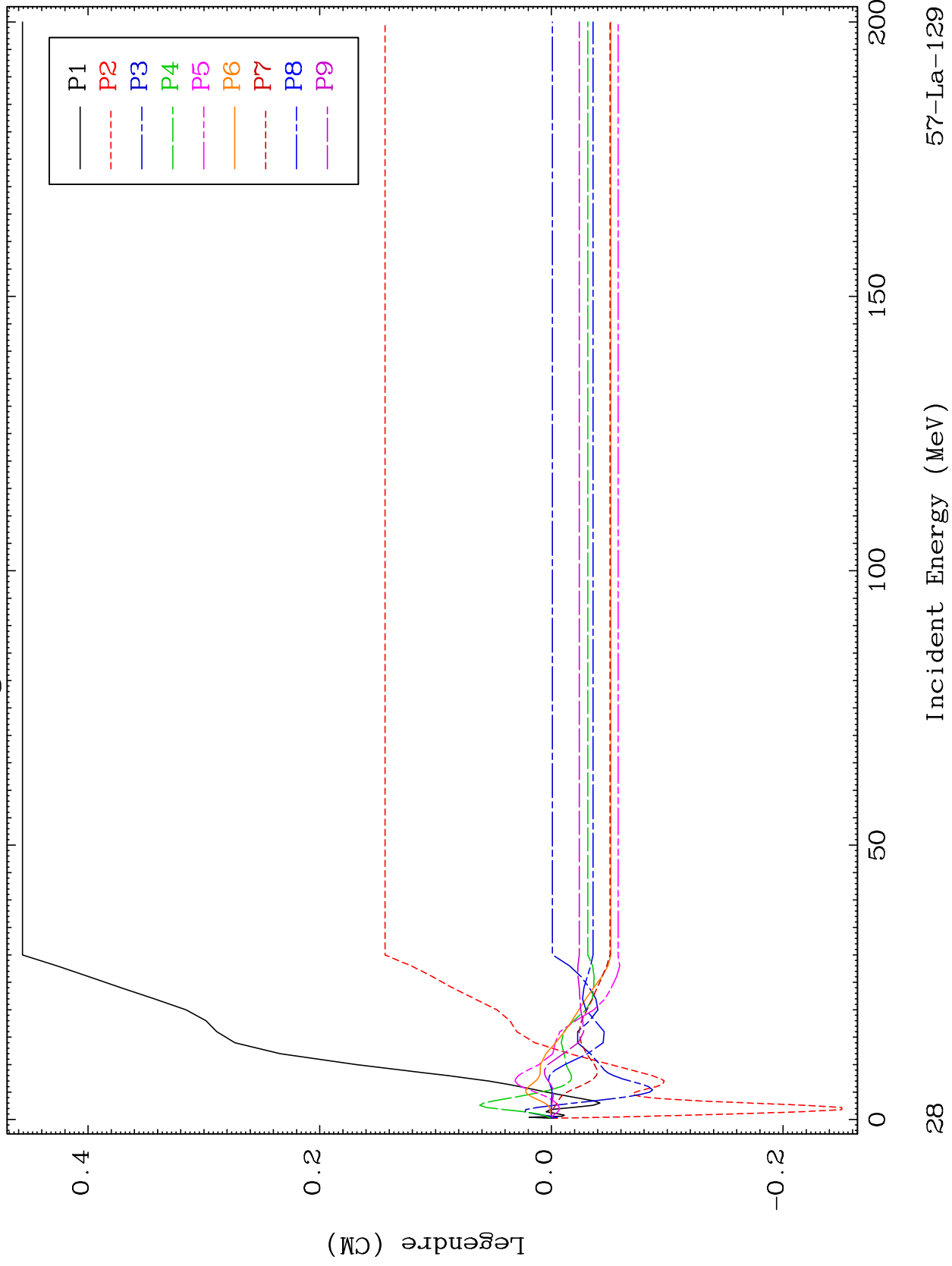
27

57-La-129

MAT 5698

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

57-La-129



57-La-129

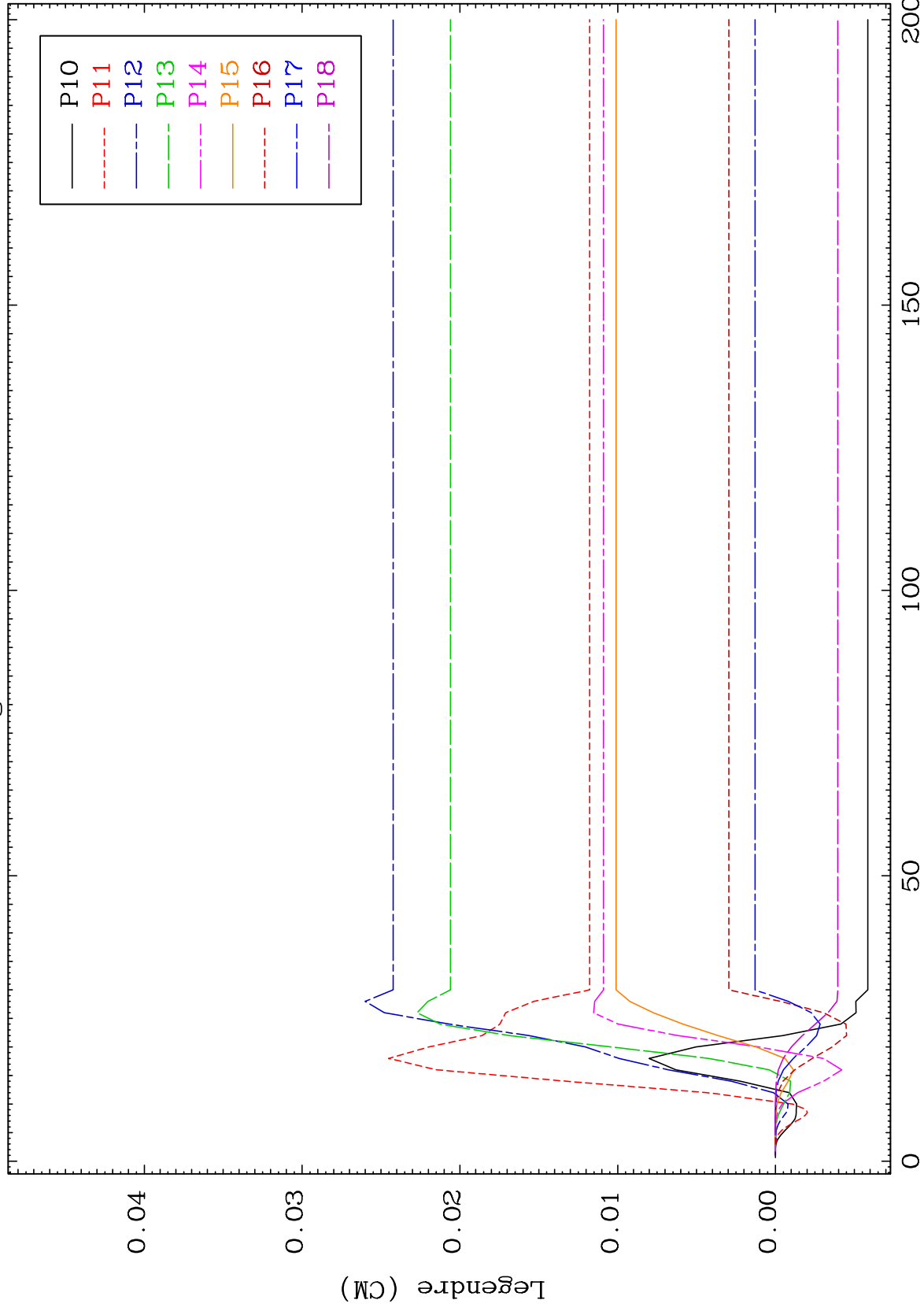
Incident Energy (MeV)

28

MAT 5698

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

57-La-129



29

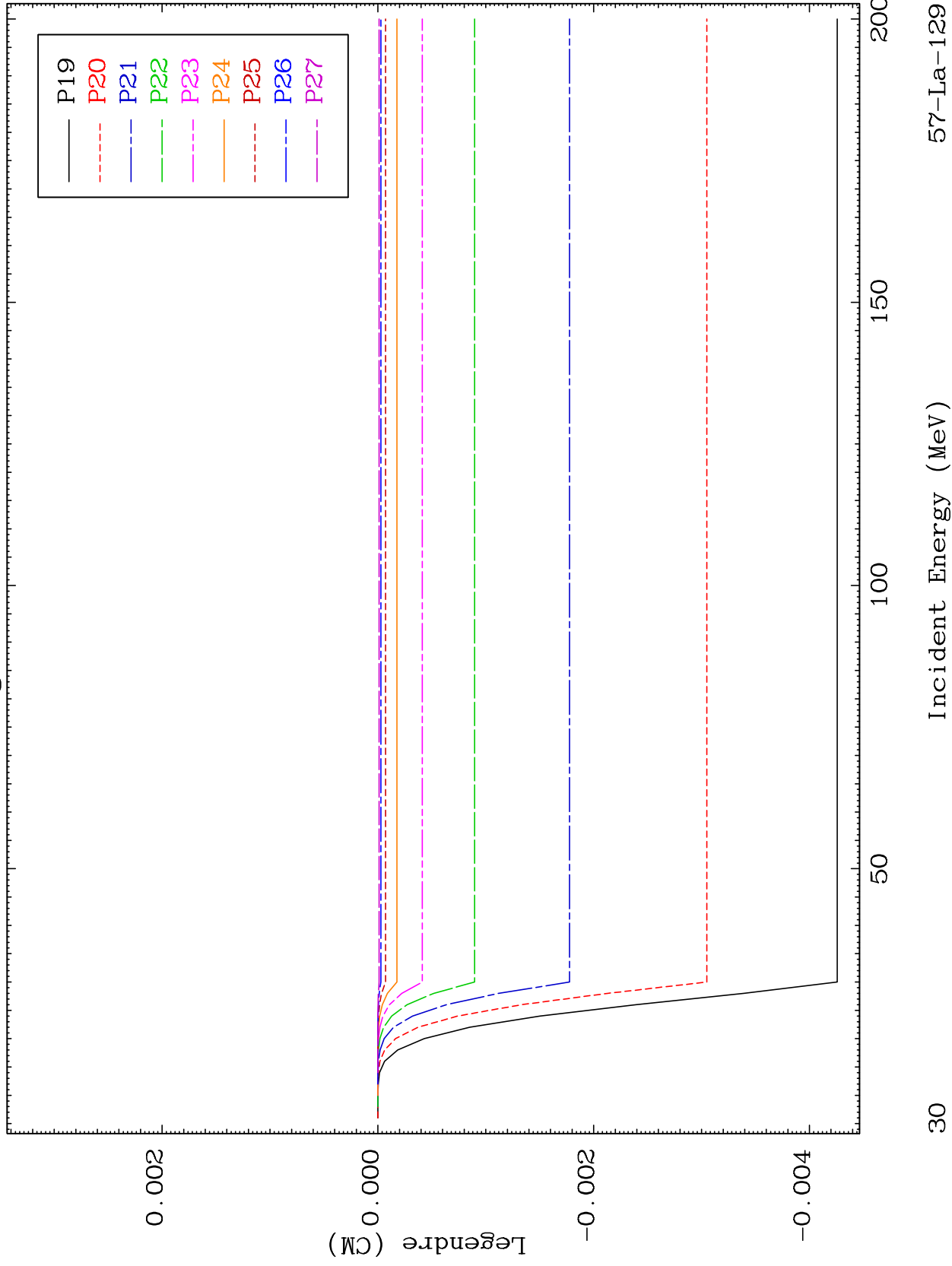
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



57-La-129

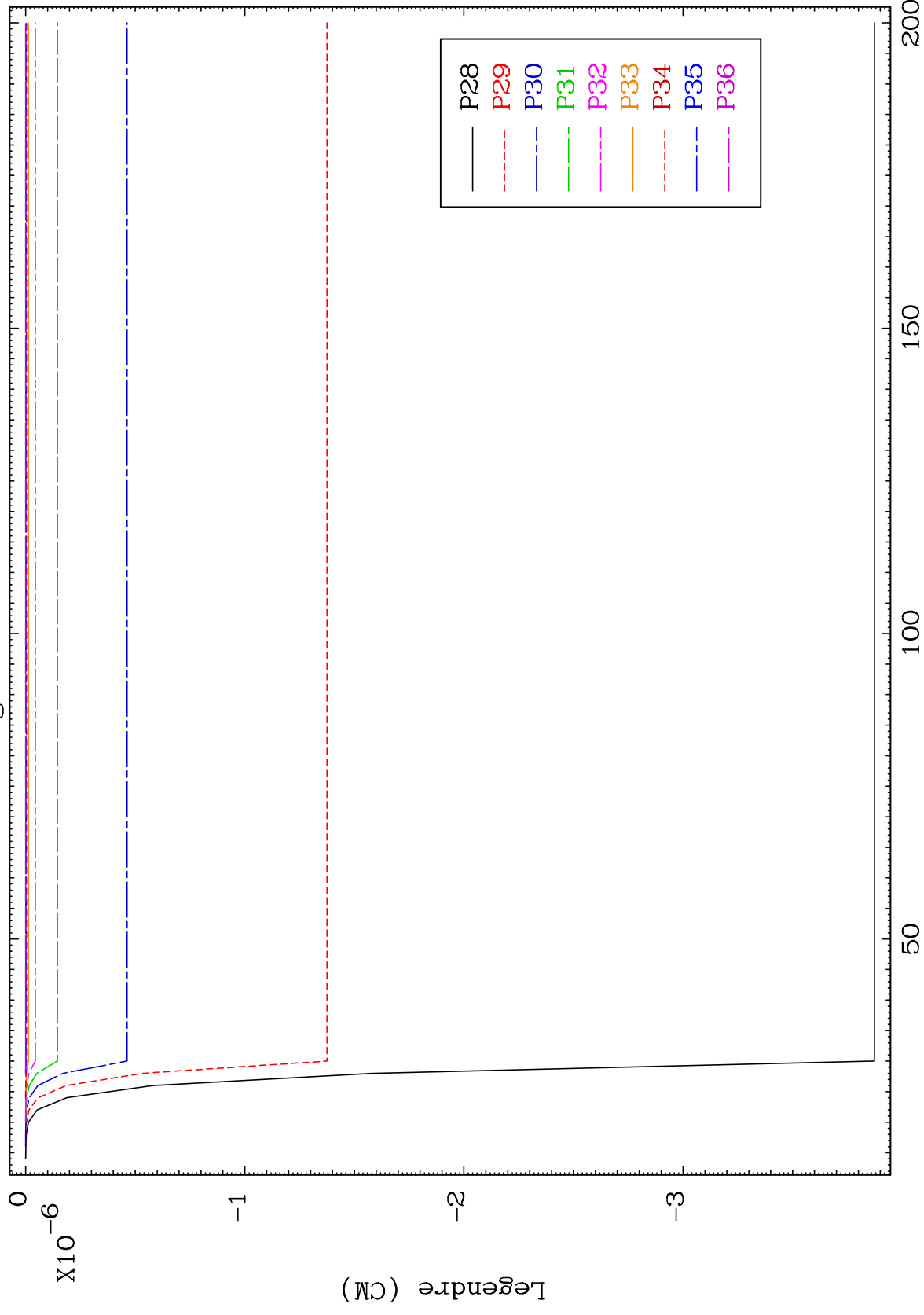
Incident Energy (MeV)

30

MAT 5698

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

57-La-129

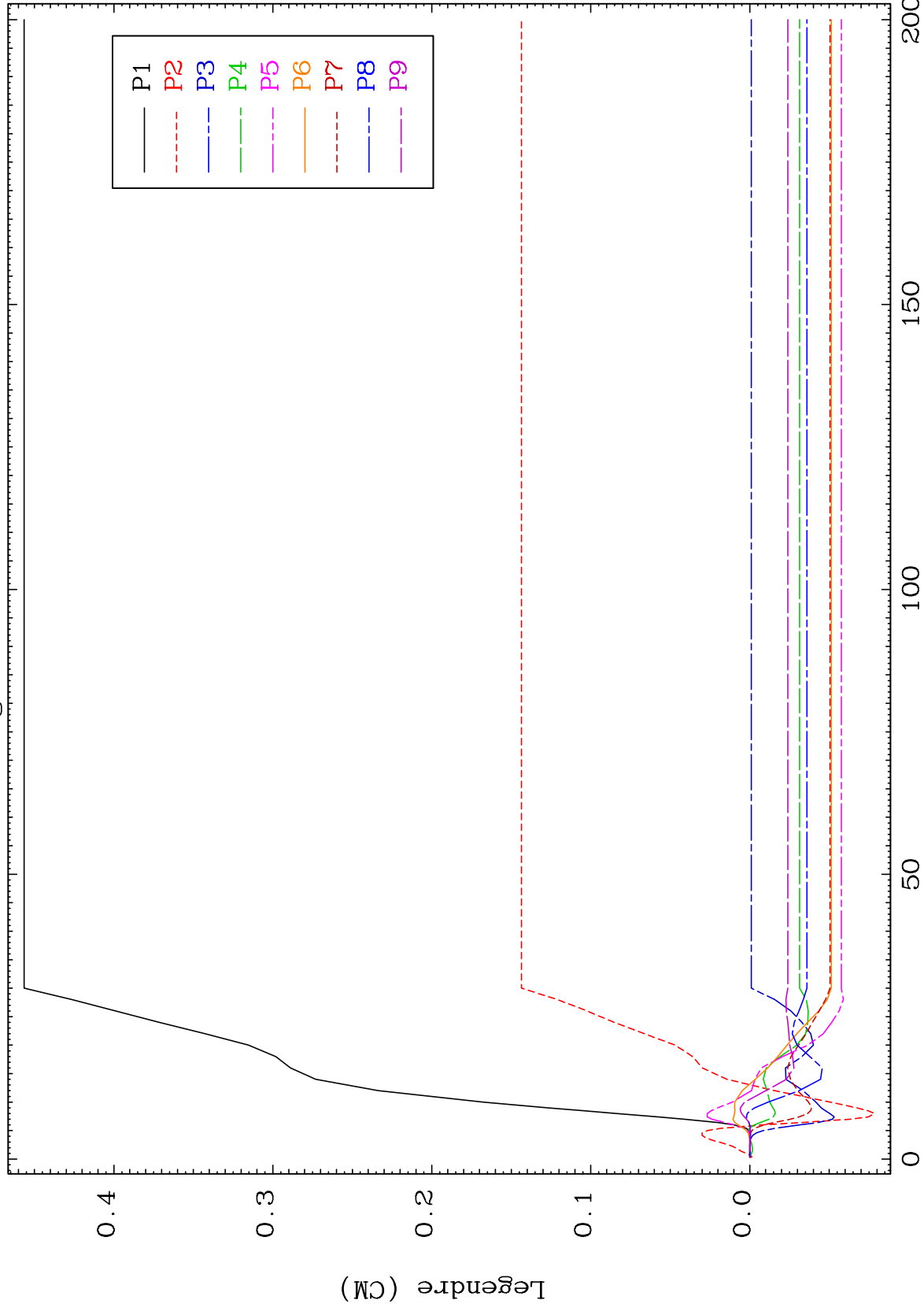




MAT 5698

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

57-La-129



32

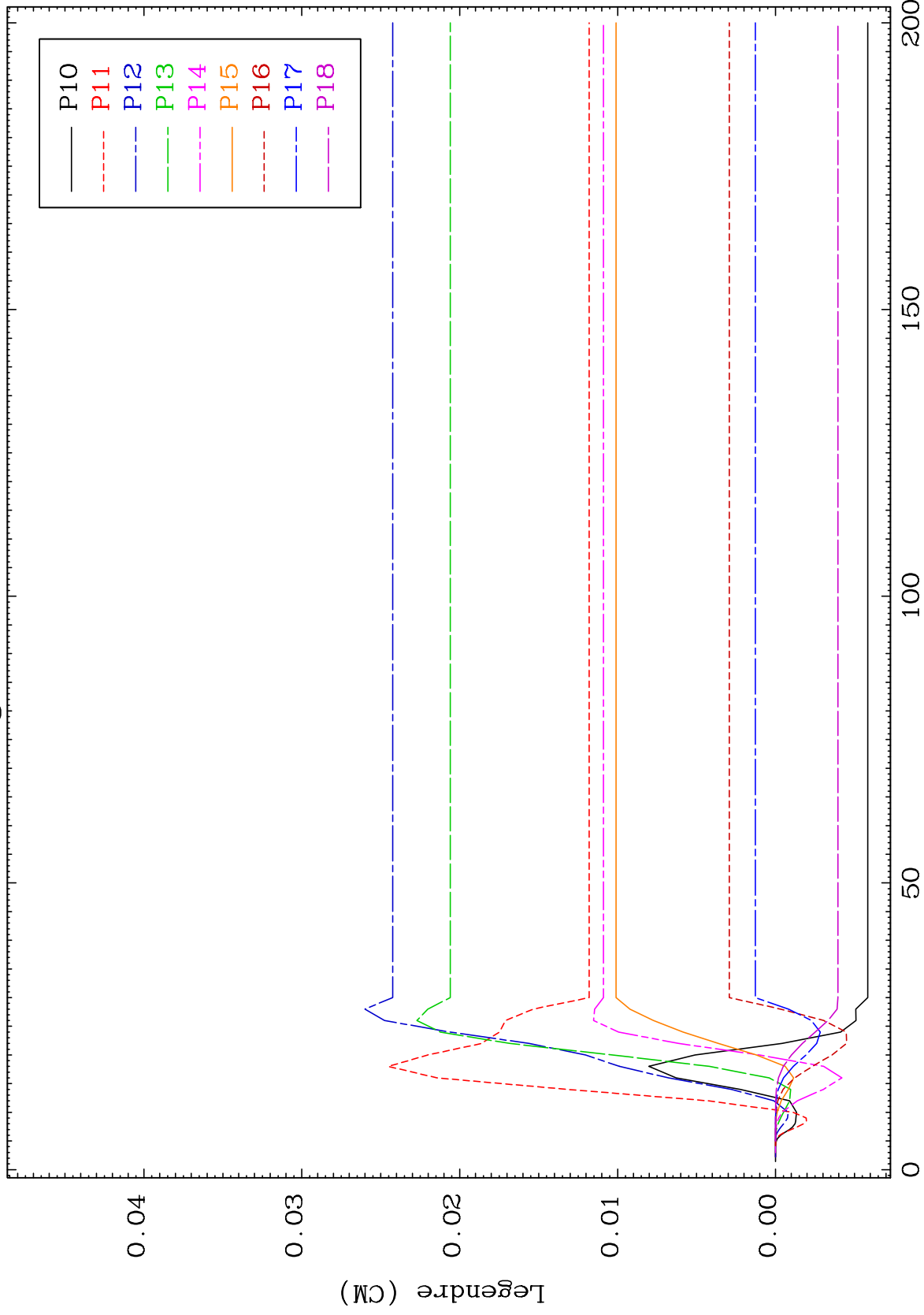
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



33

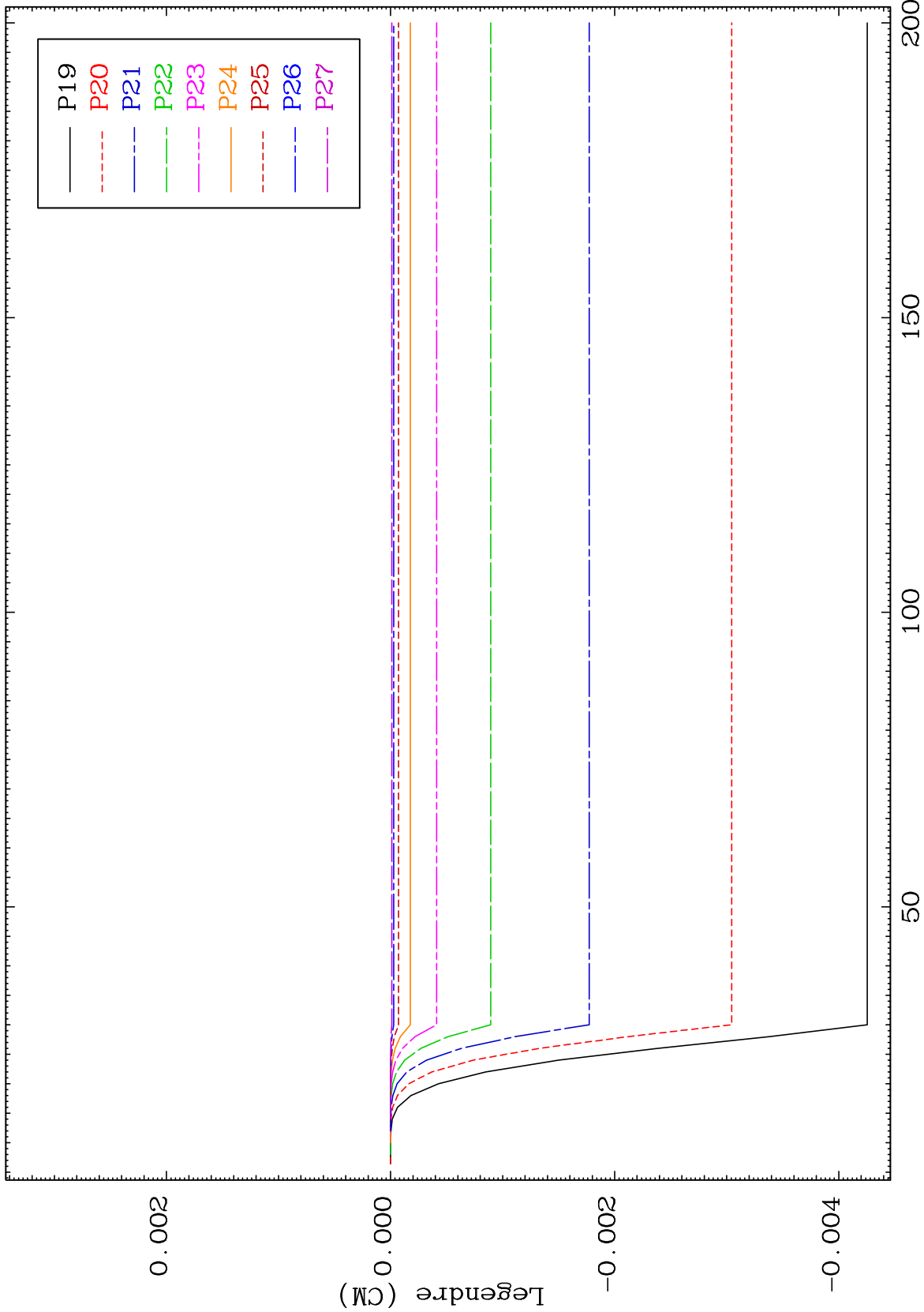
Incident Energy (MeV)

57-La-129

MAT 5698

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

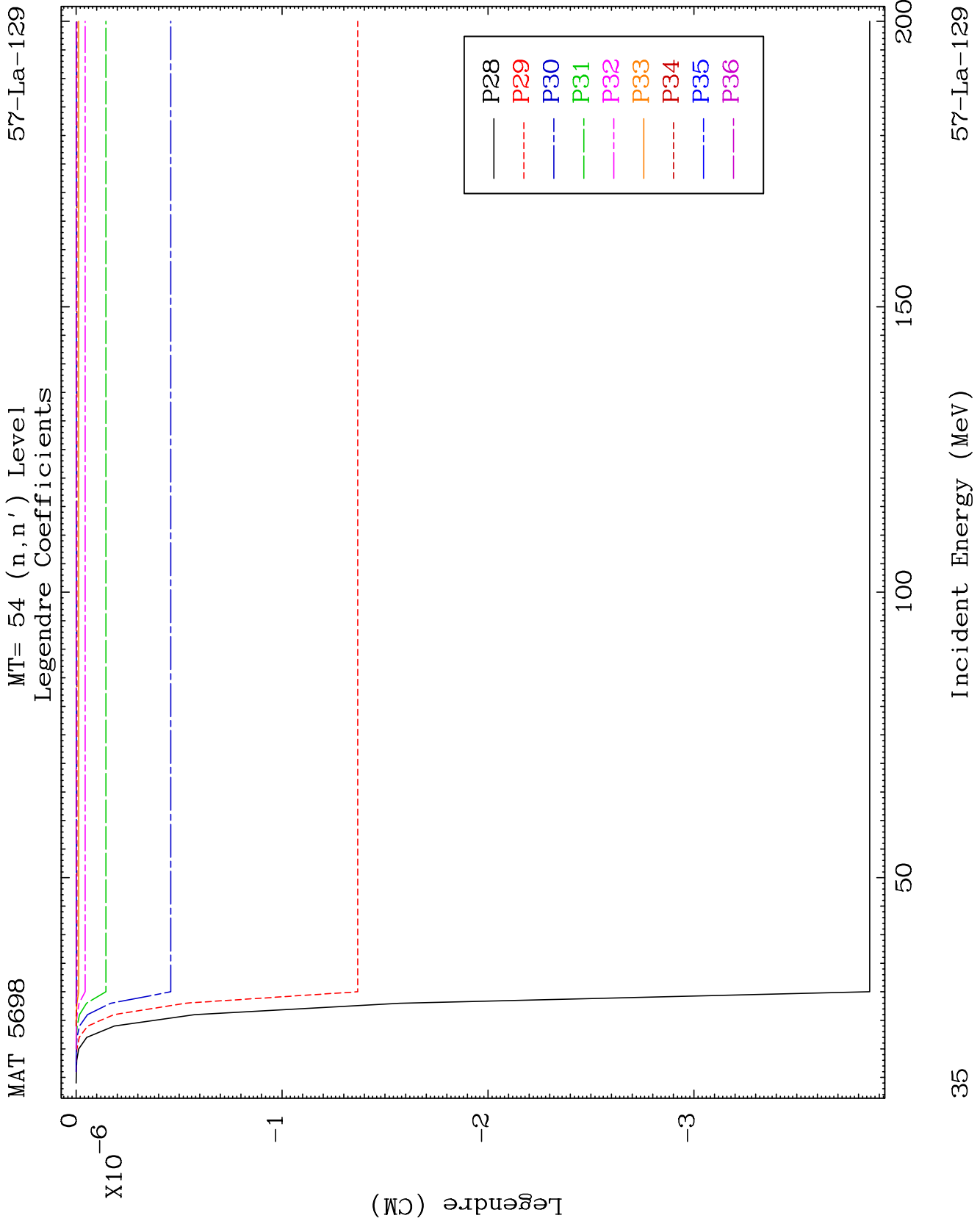
57-La-129



34

Incident Energy (MeV)

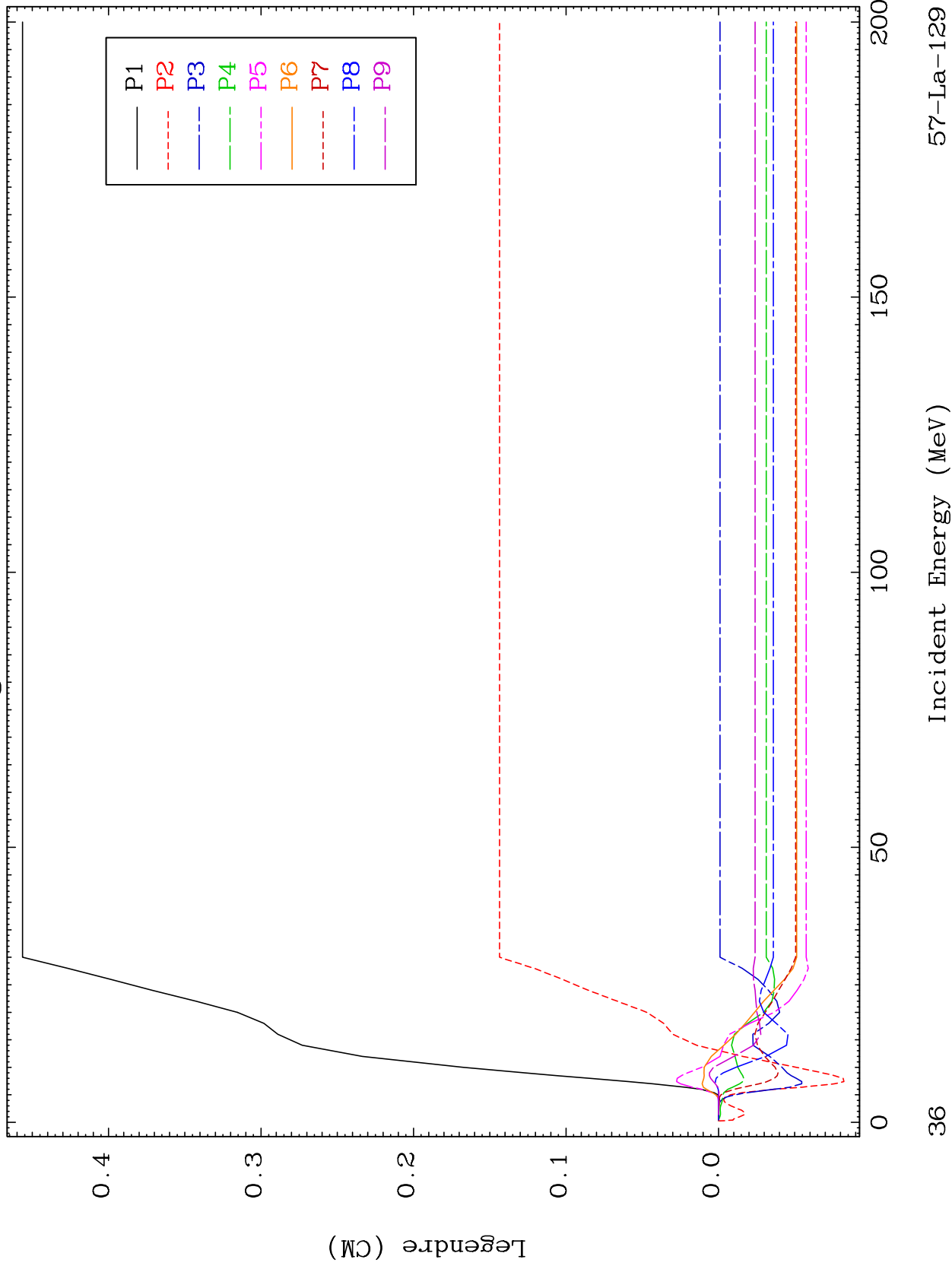
57-La-129



MAT 5698

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

57-La-129



57-La-129

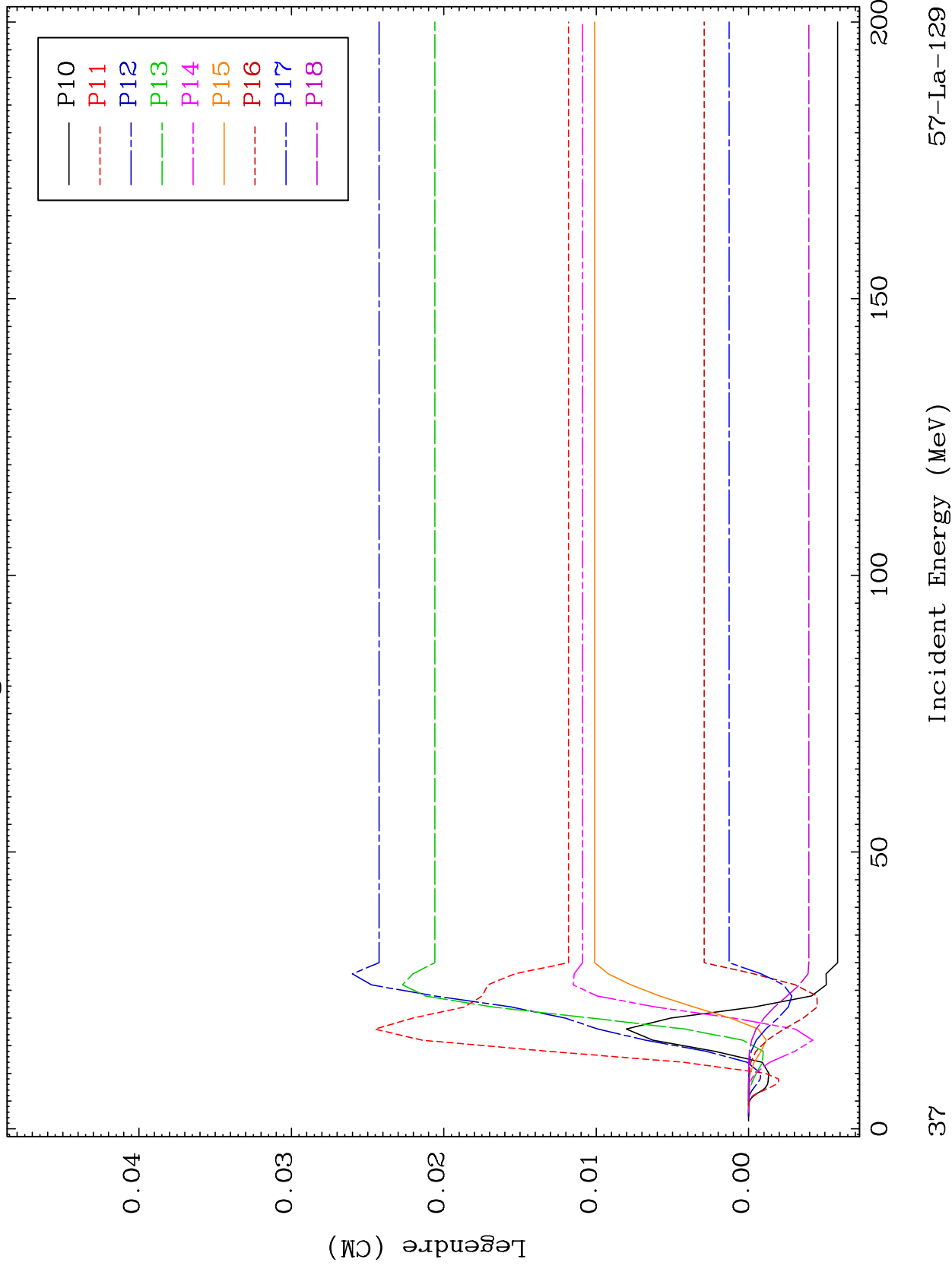
Incident Energy (MeV)

36

MAT 5698

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

57-La-129



37

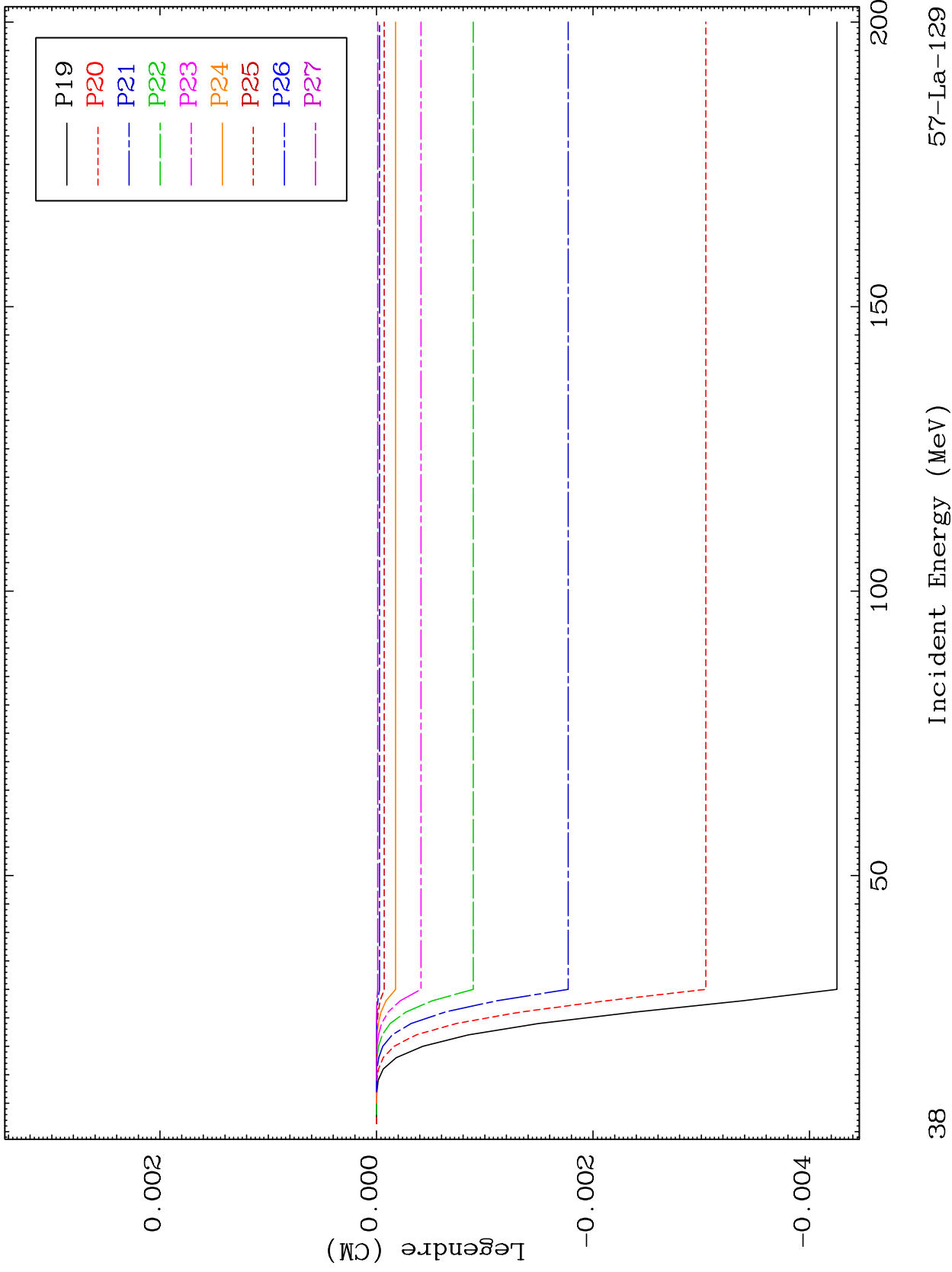
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



38

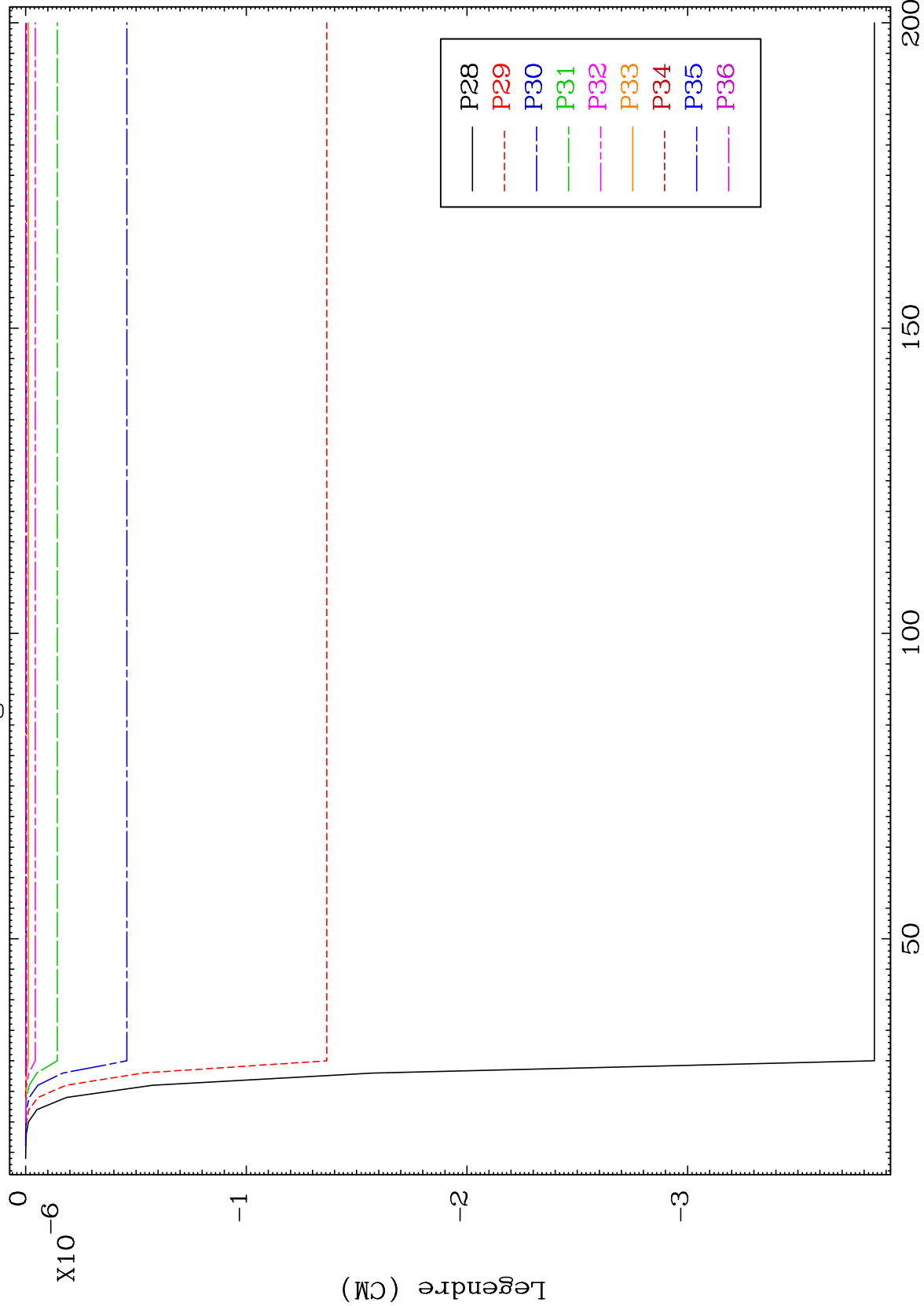
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



39

Incident Energy (MeV)

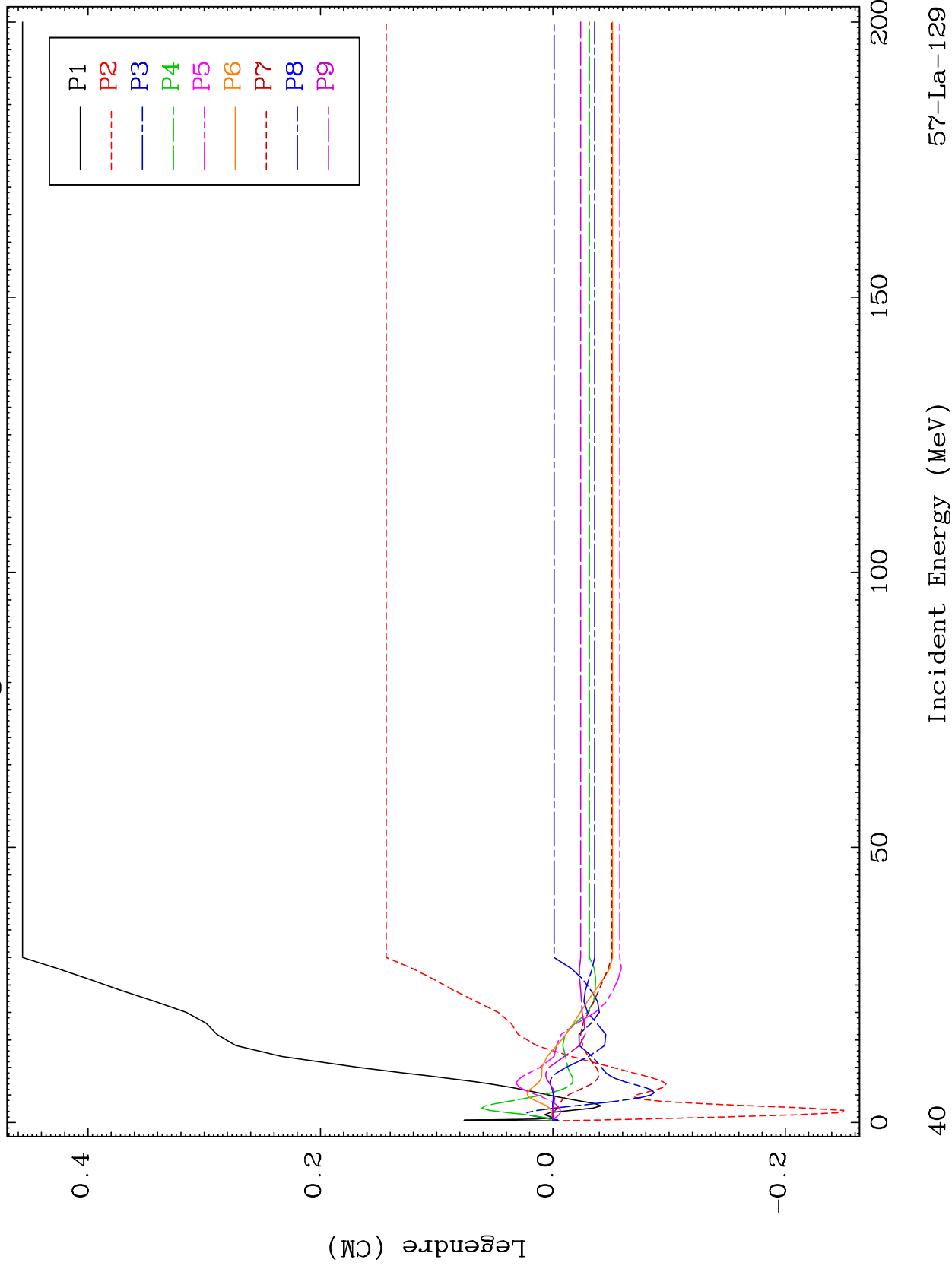
57-La-129



MAT 5698

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

57-La-129



57-La-129

Incident Energy (MeV)

0

50

100

150

200

0.4

0.2

0.0

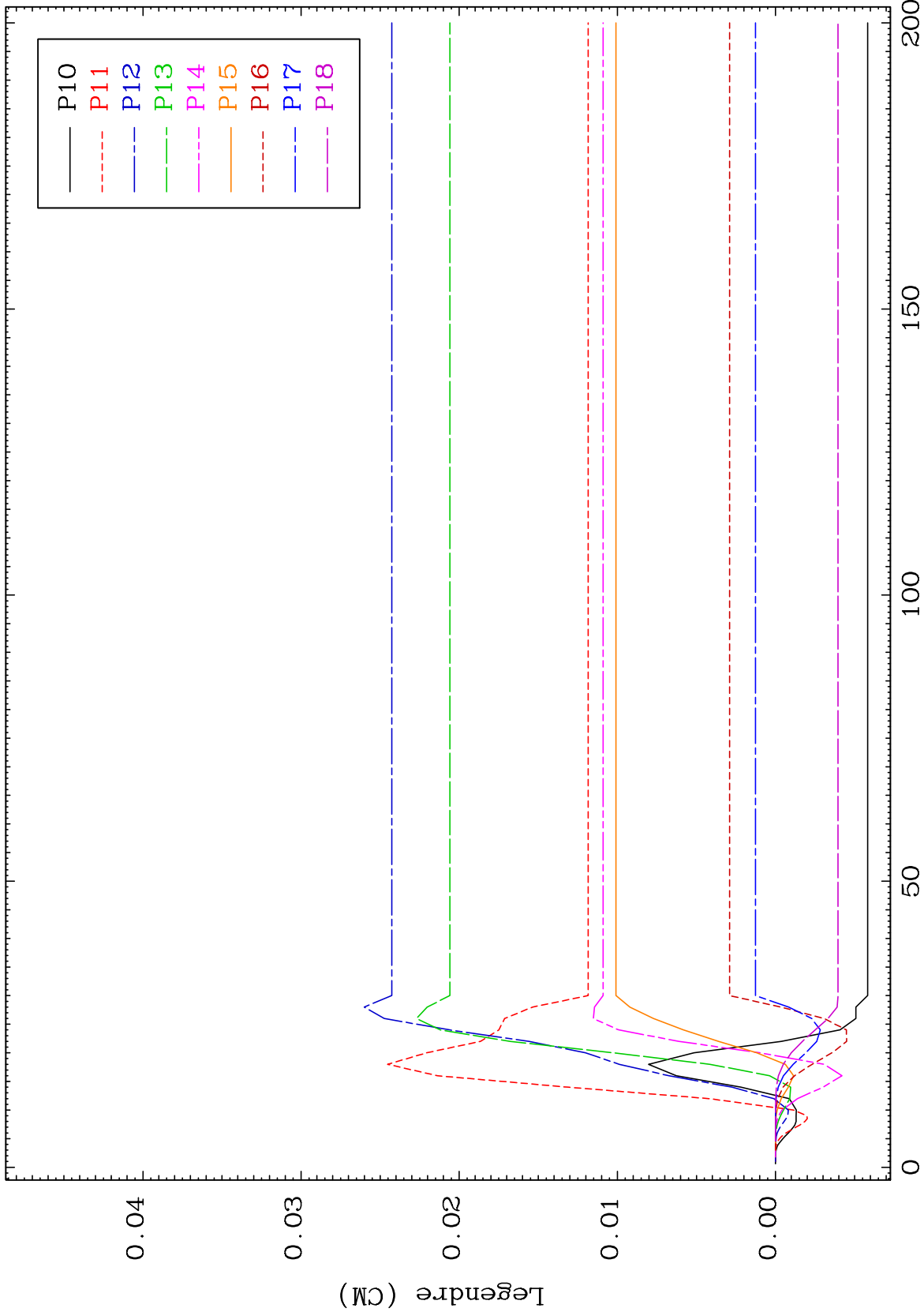
-0.2

Legendre (CM)

MAT 5698

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

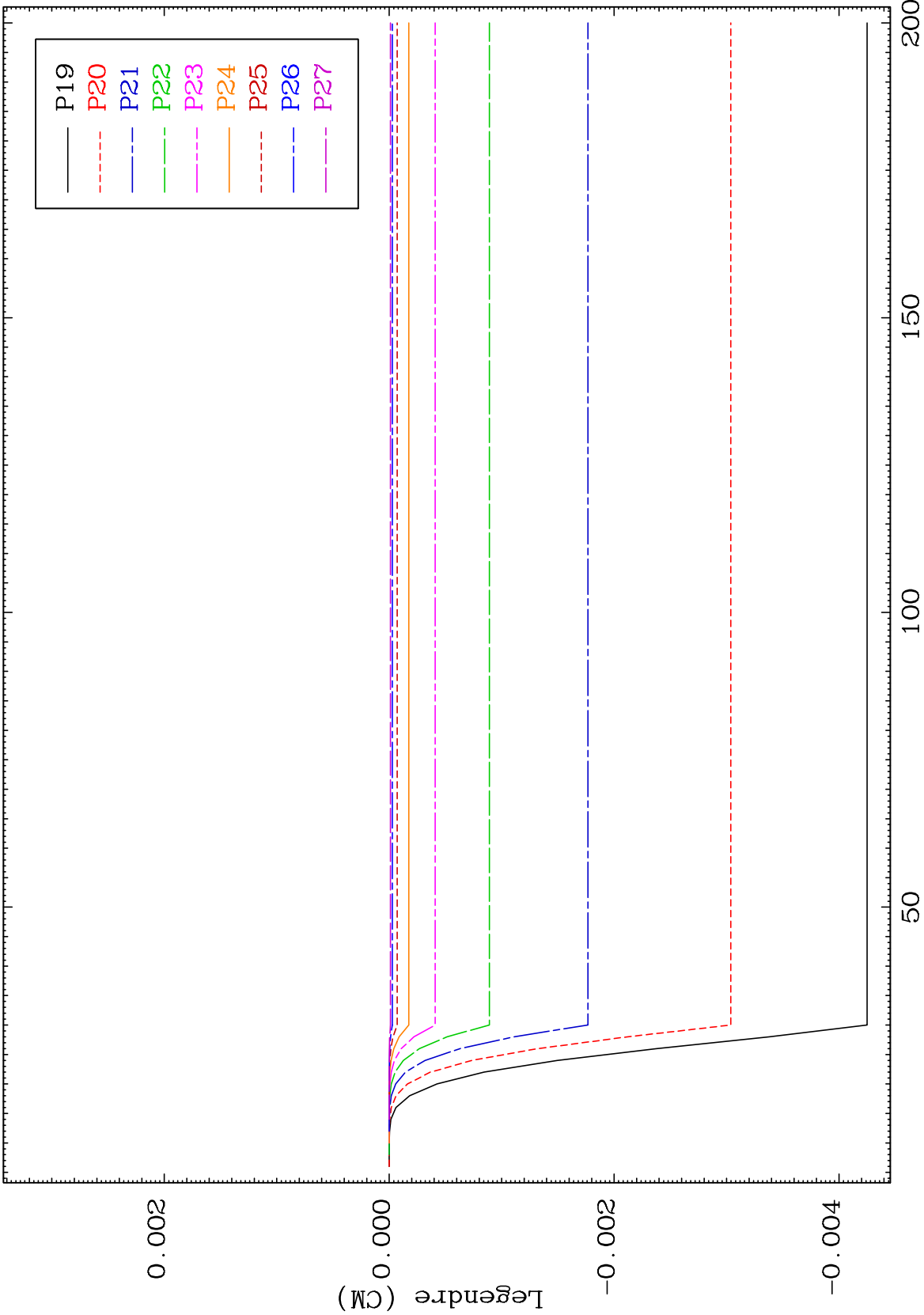
57-La-129



MAT 5698

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

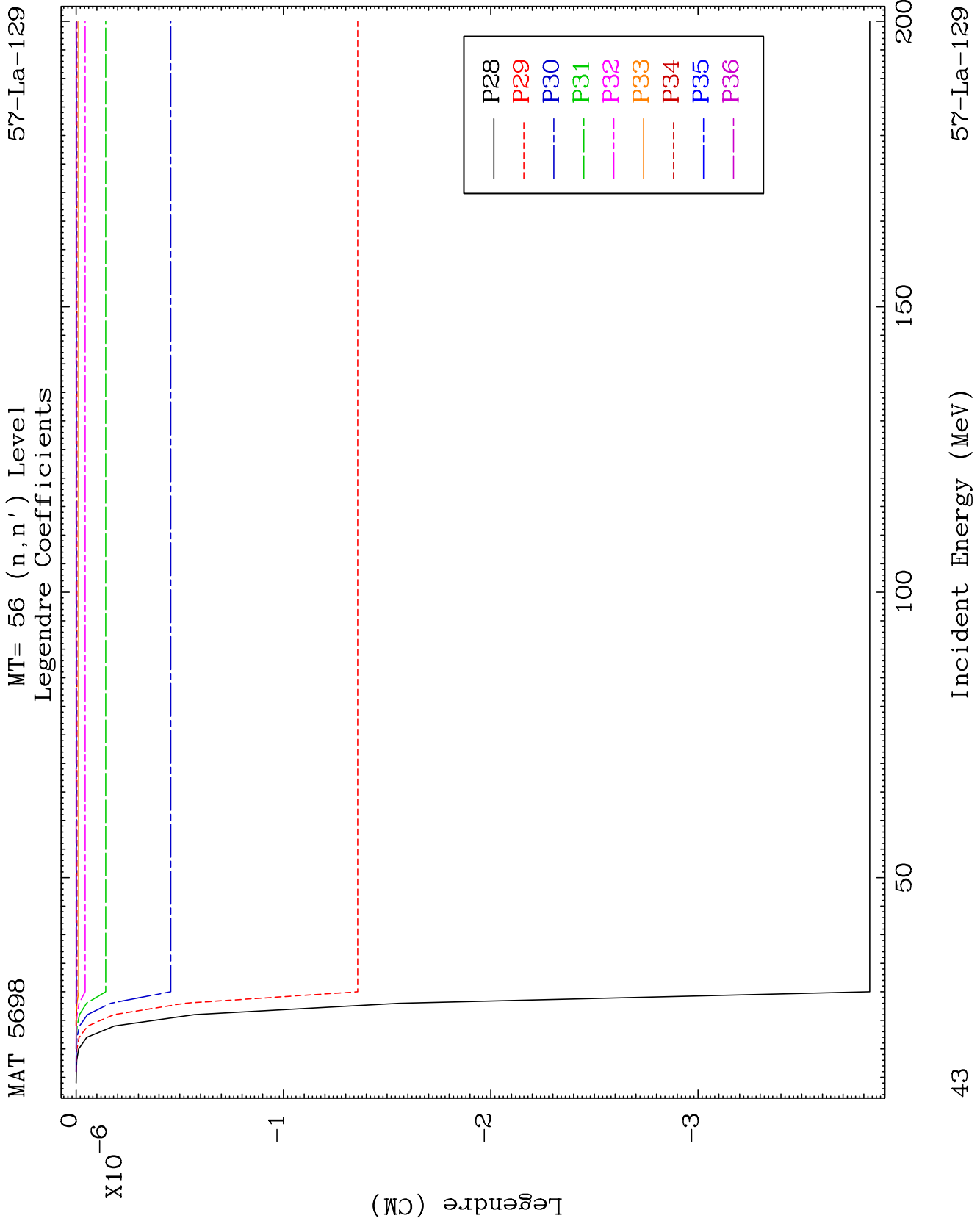
57-La-129



42

Incident Energy (MeV)

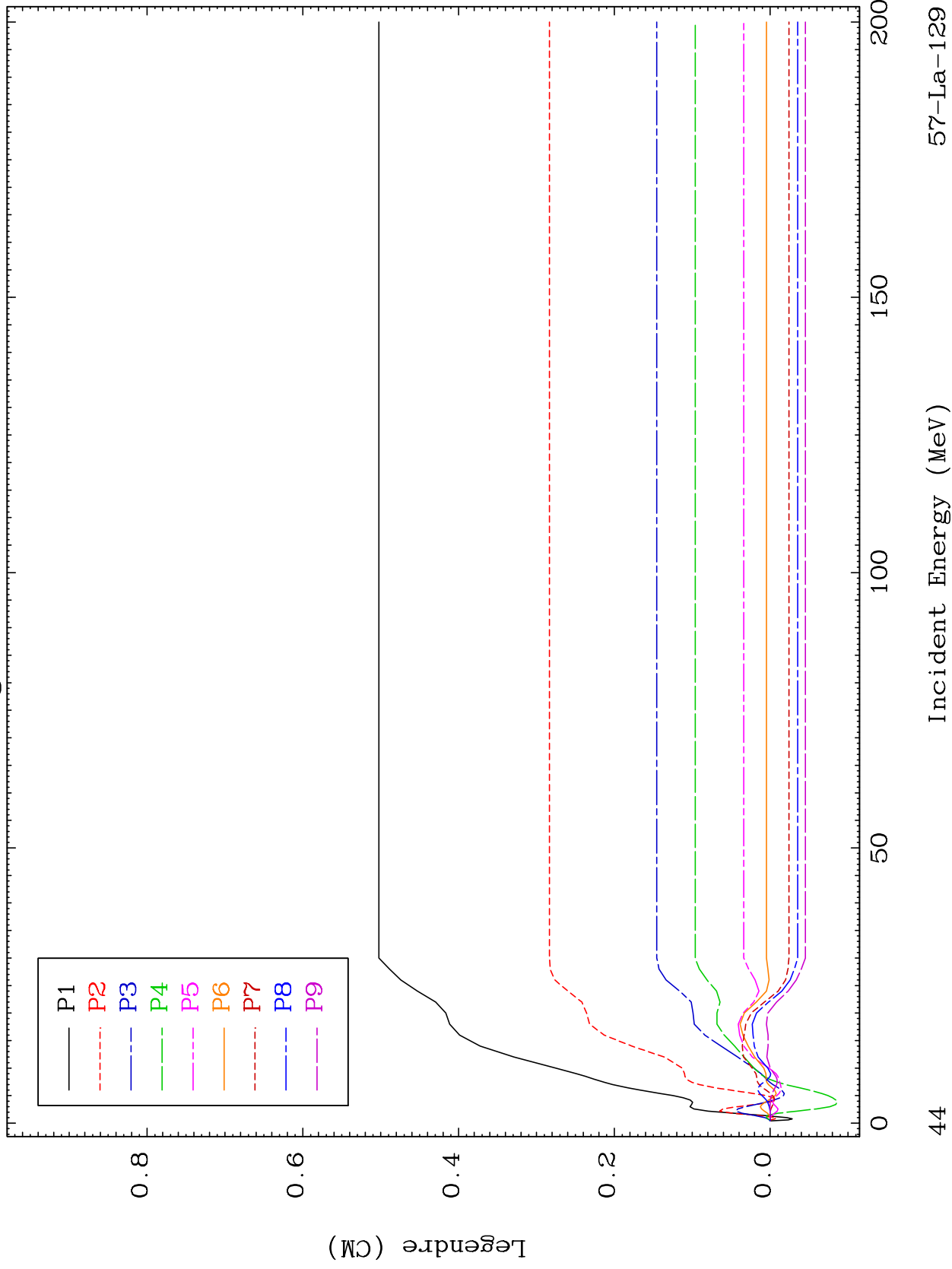
57-La-129



MAT 5698

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

57-La-129



44

Incident Energy (MeV)

57-La-129

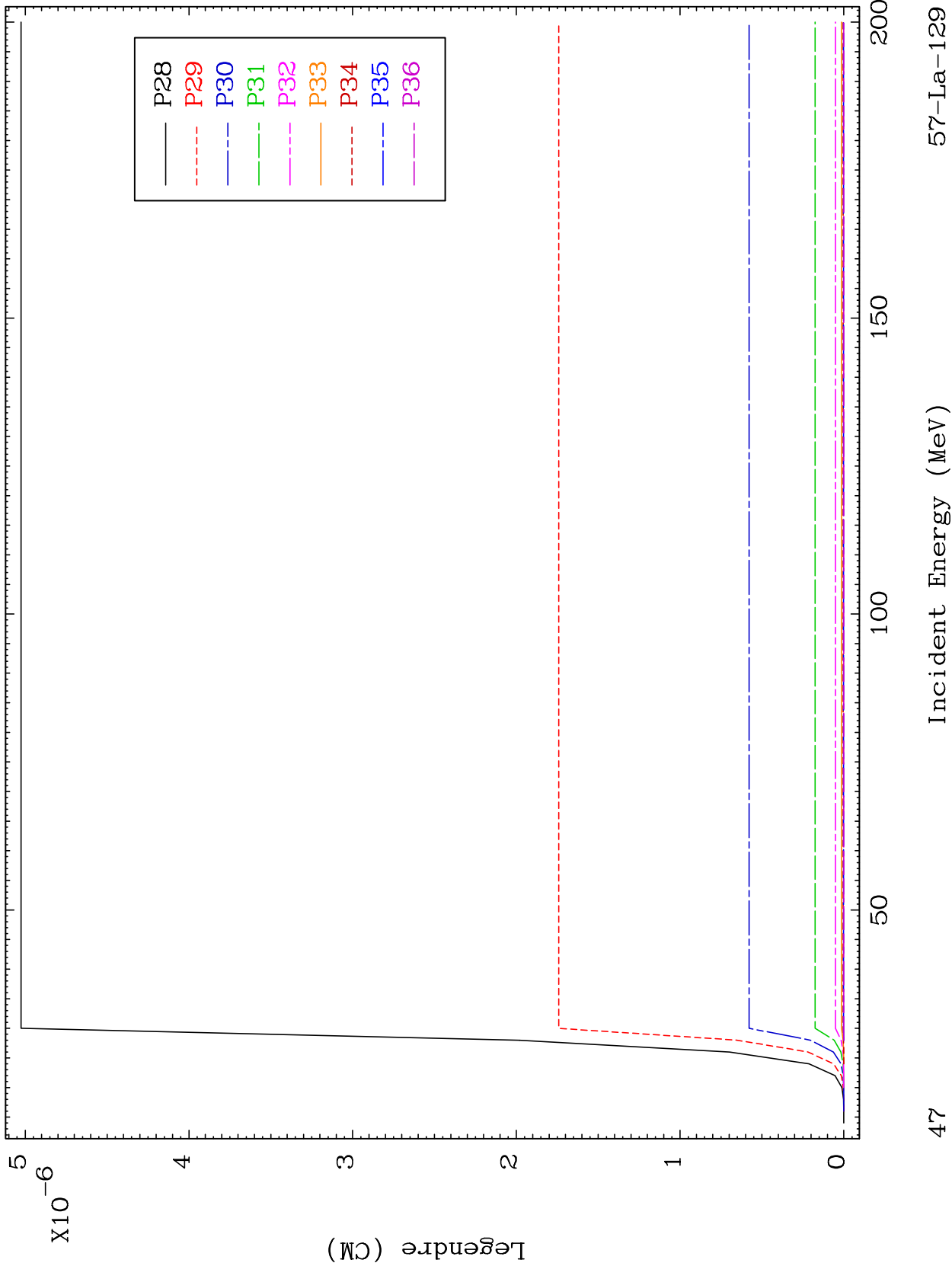




MAT 5698

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

57-La-129



47

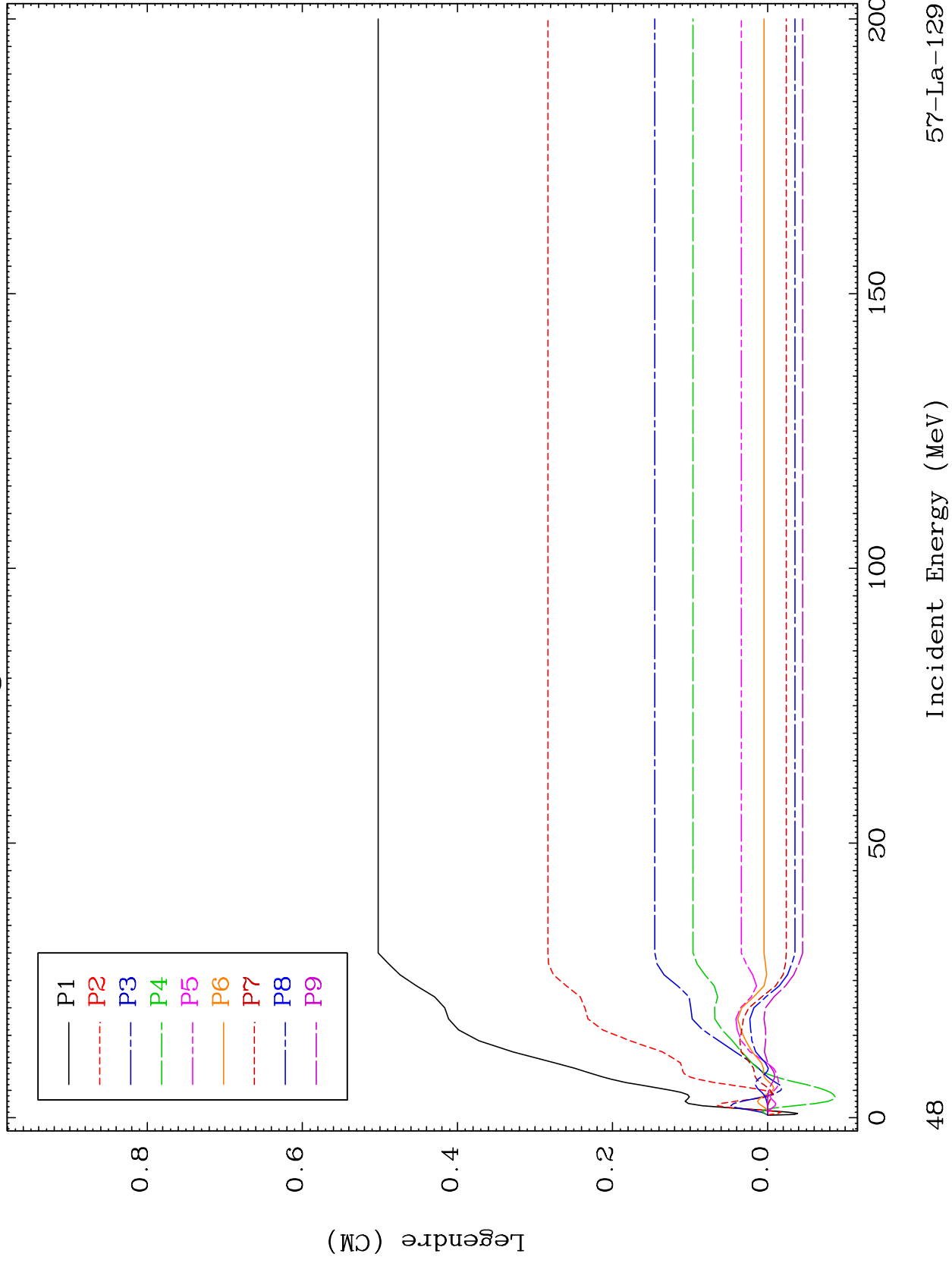
57-La-129



MAT 5698

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

57-La-129



57-La-129

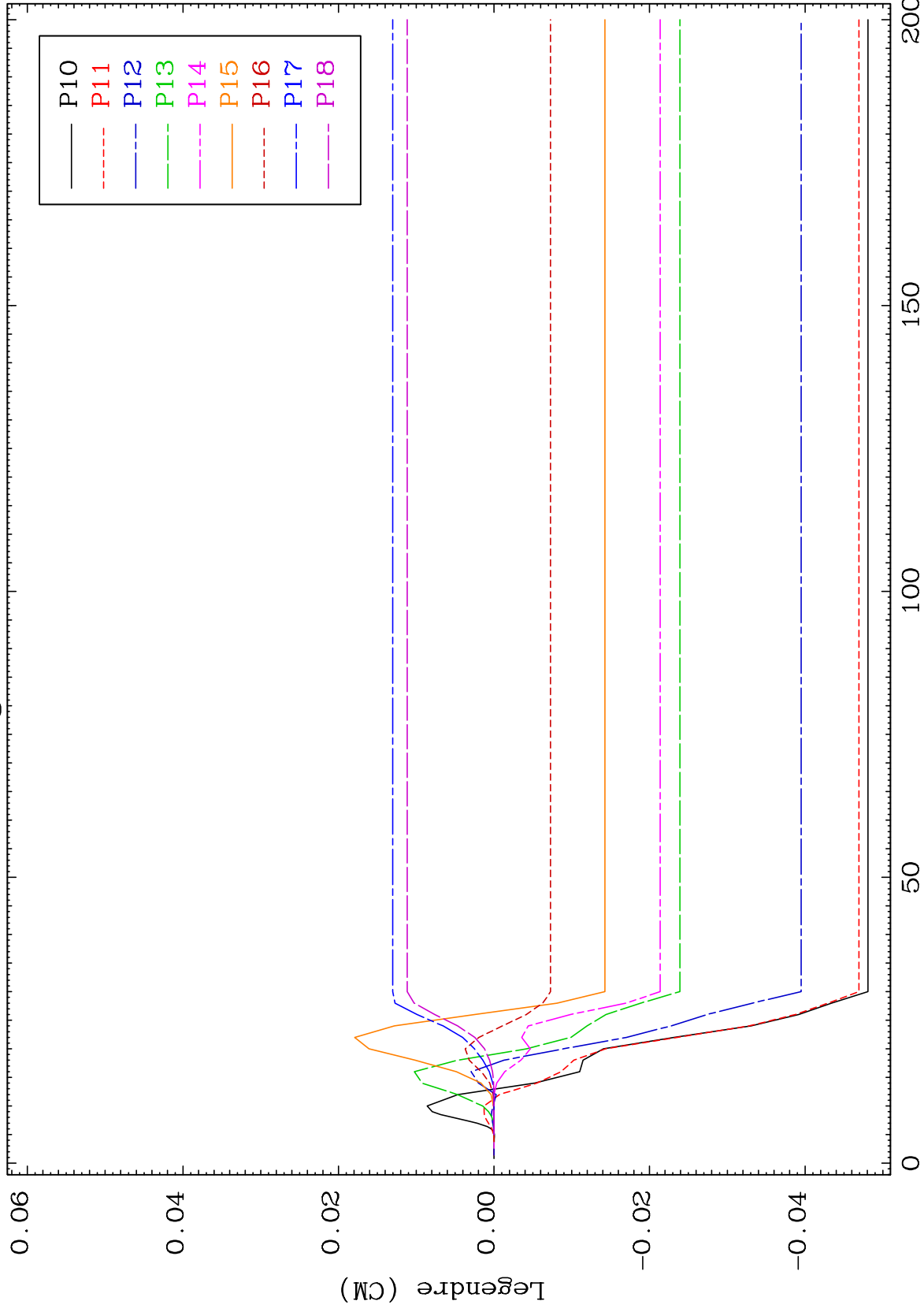
Incident Energy (MeV)

48

MAT 5698

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

57-La-129



57-La-129

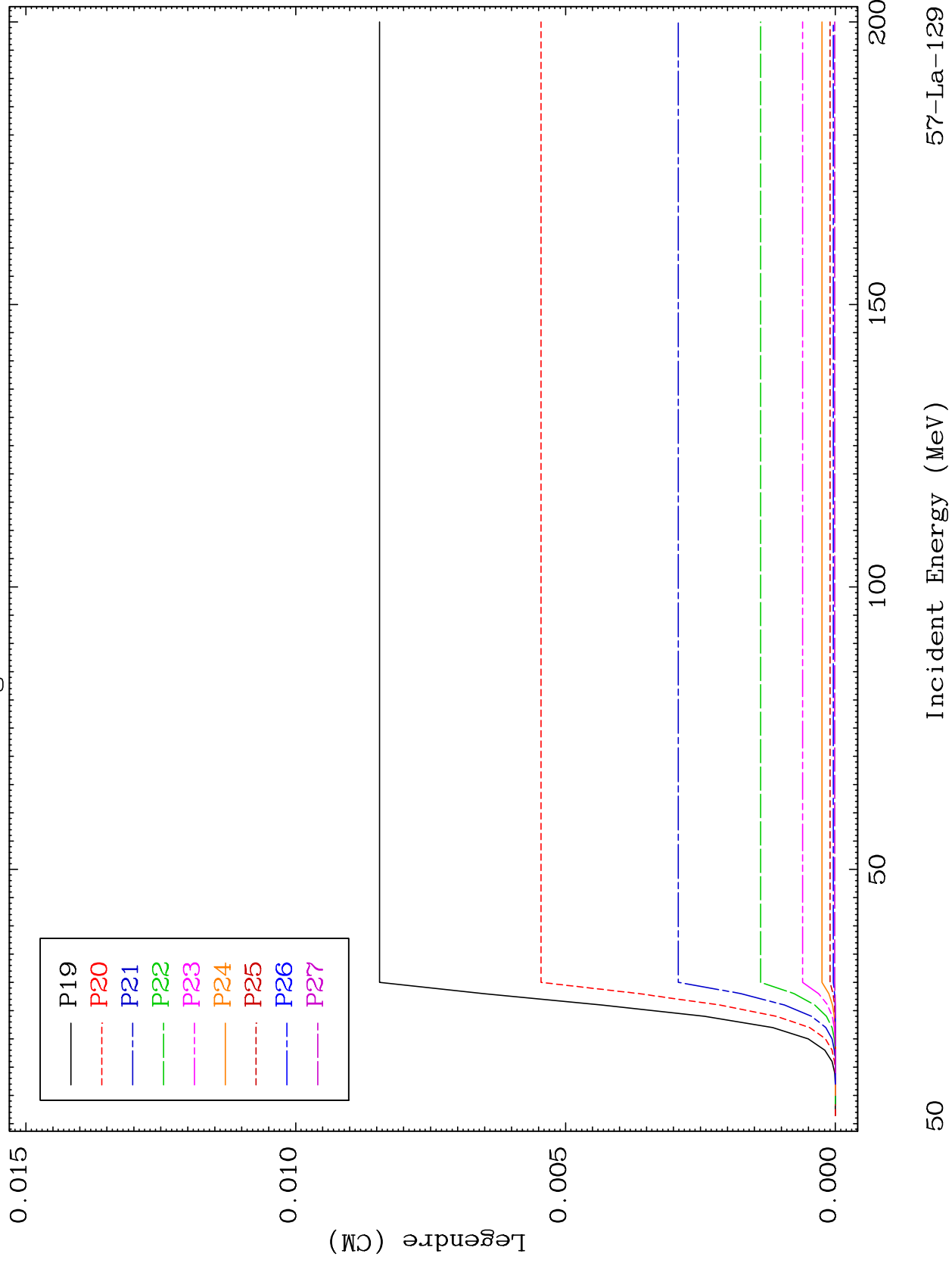
Incident Energy (MeV)

49

MAT 5698

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

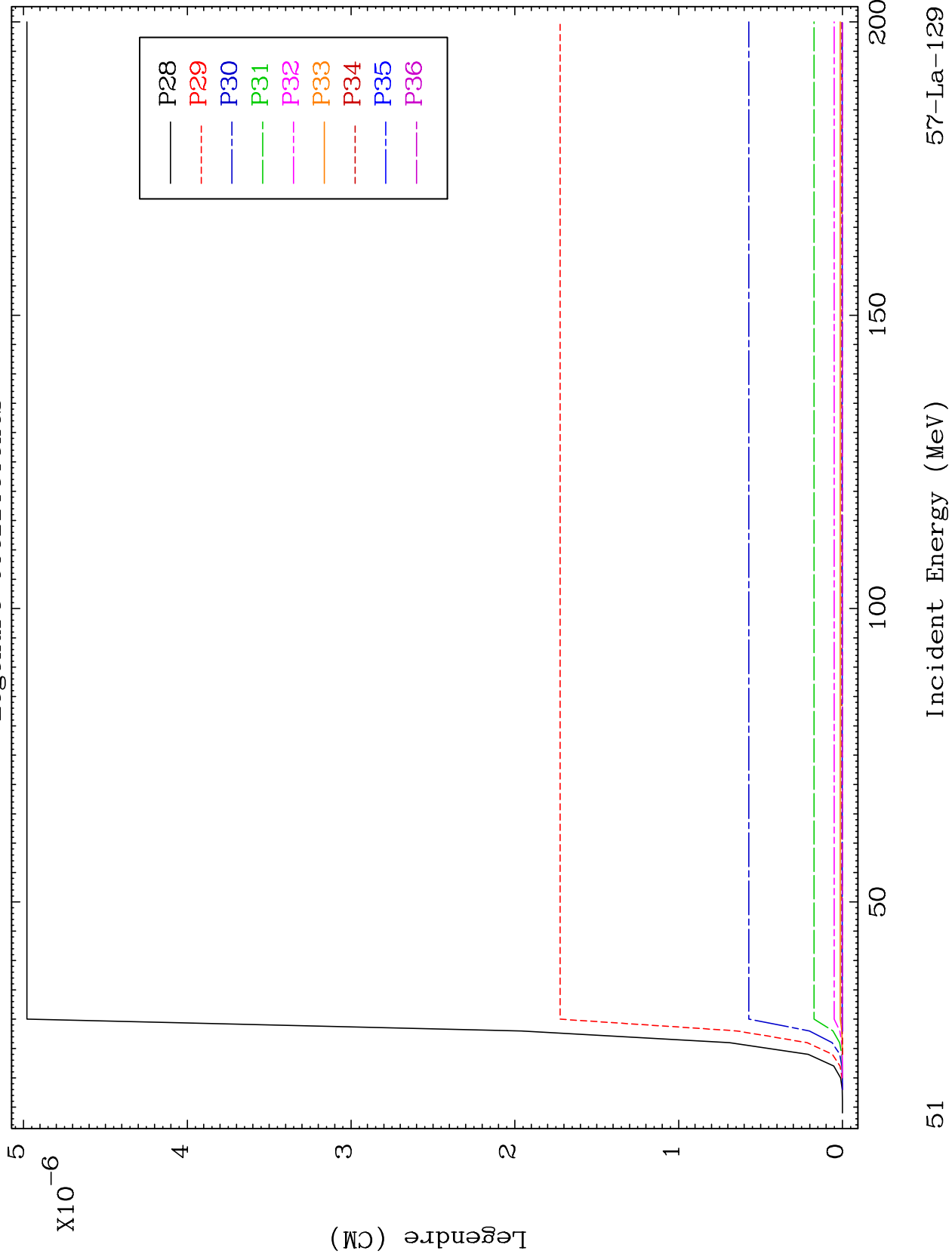
57-La-129



MAT 5698

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

57-La-129



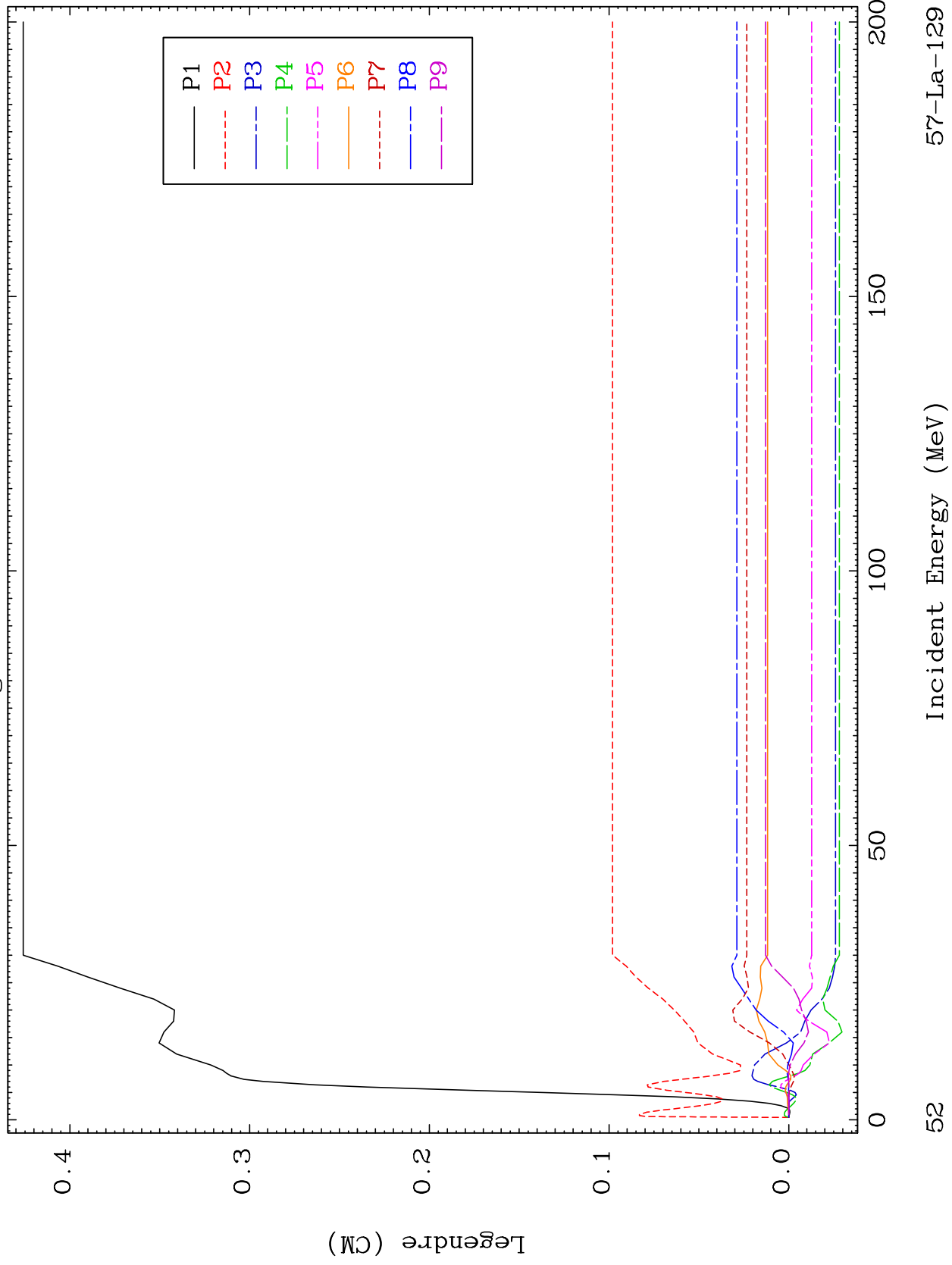
51

200

MAT 5698

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

57-La-129



57-La-129

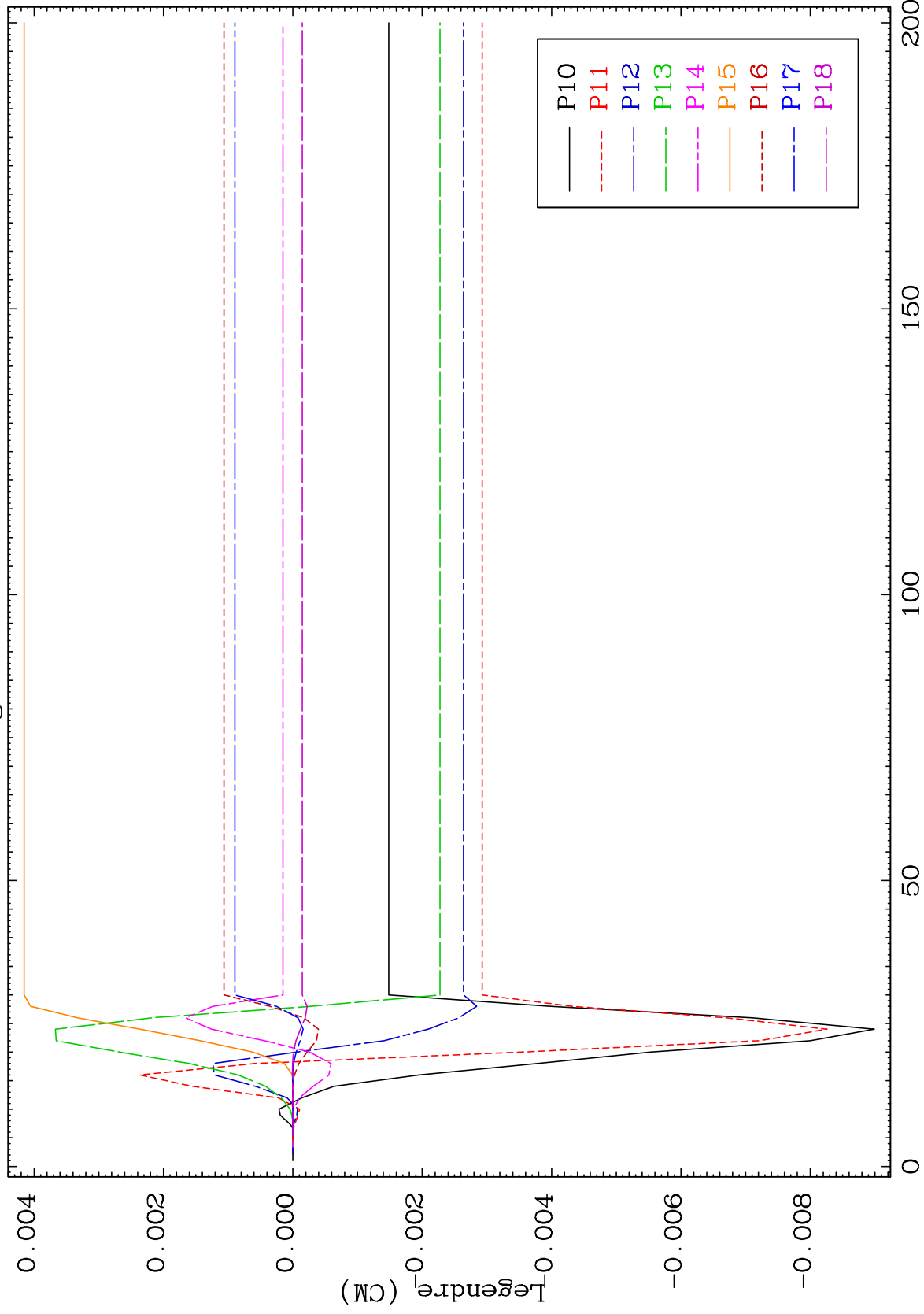
Incident Energy (MeV)

52

MAT 5698

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

57-La-129



53

Incident Energy (MeV)

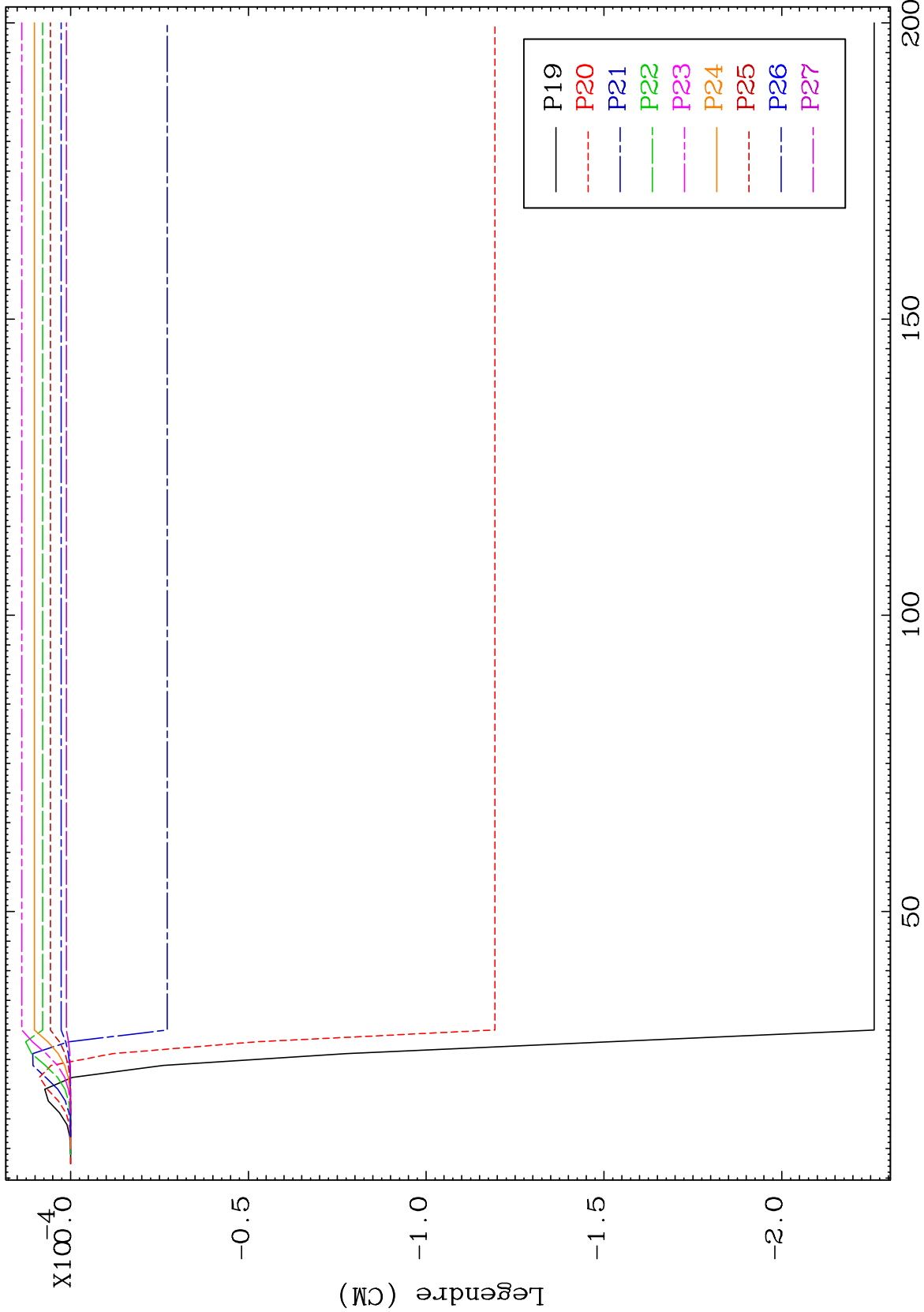
57-La-129

MAT 5698

MT= 59 (n,n') Level

57-La-129

Legendre Coefficients



54

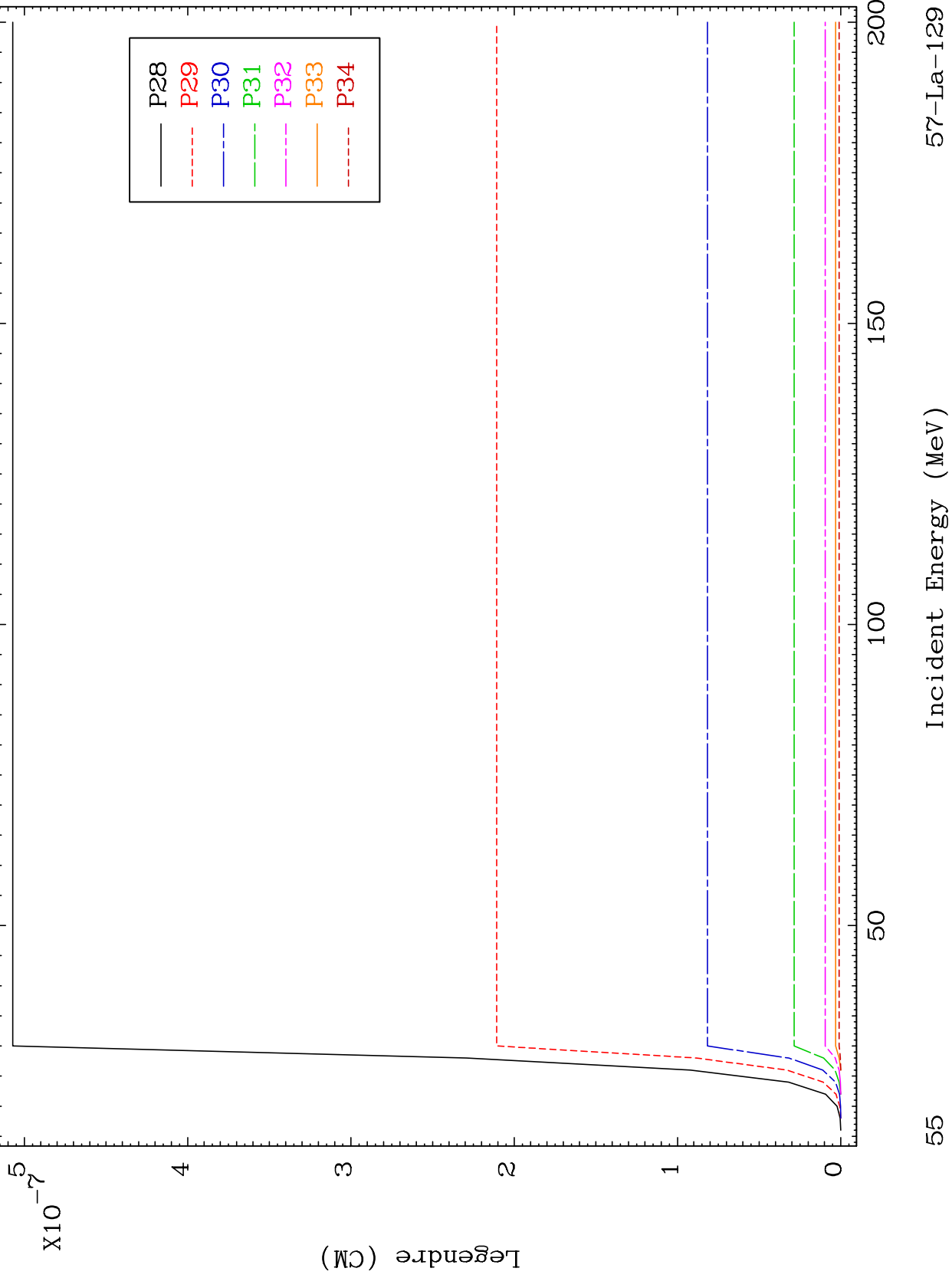
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129

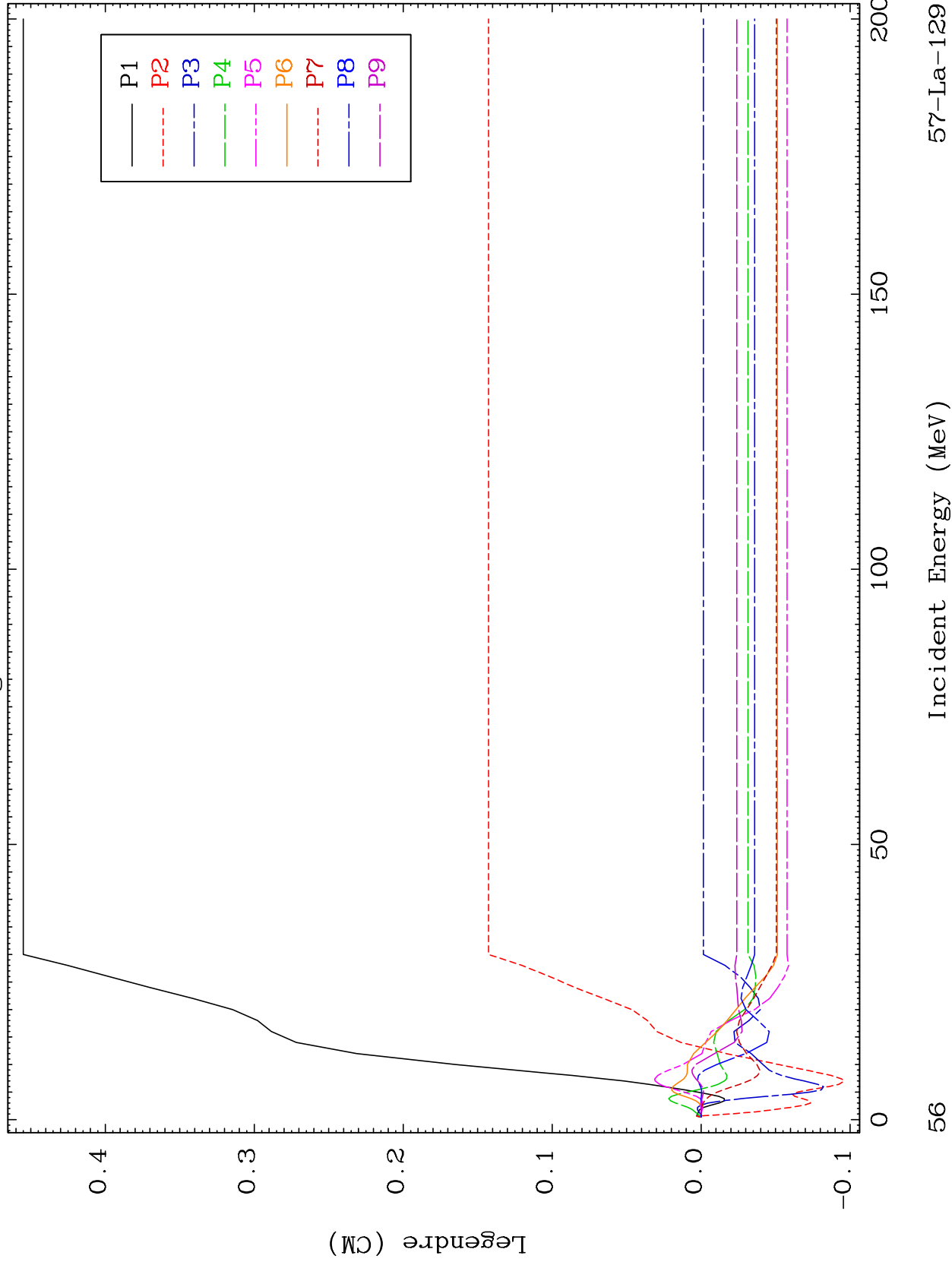




MAT 5698

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

57-La-129



57-La-129

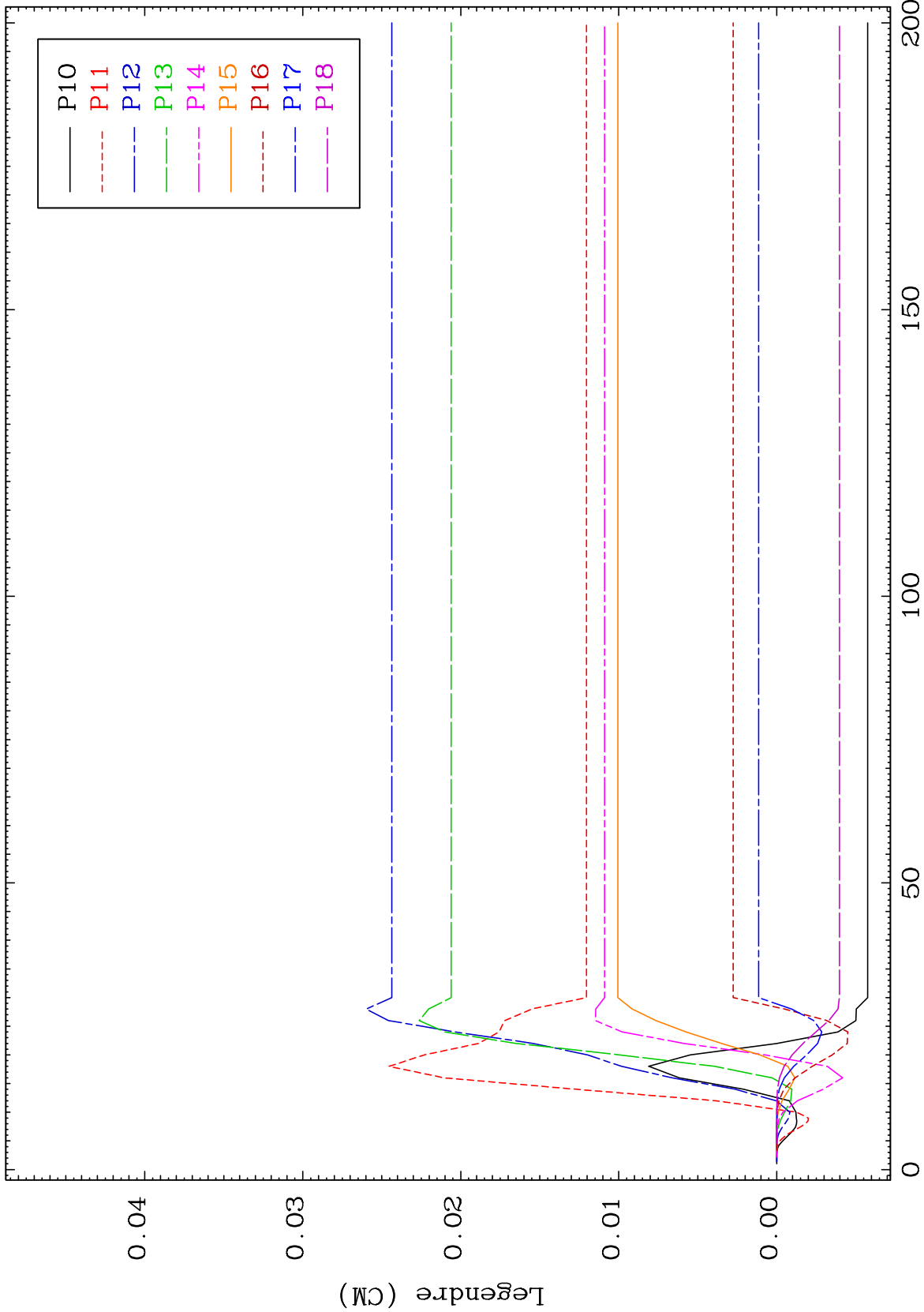
Incident Energy (MeV)

56

MAT 5698

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

57-La-129



57

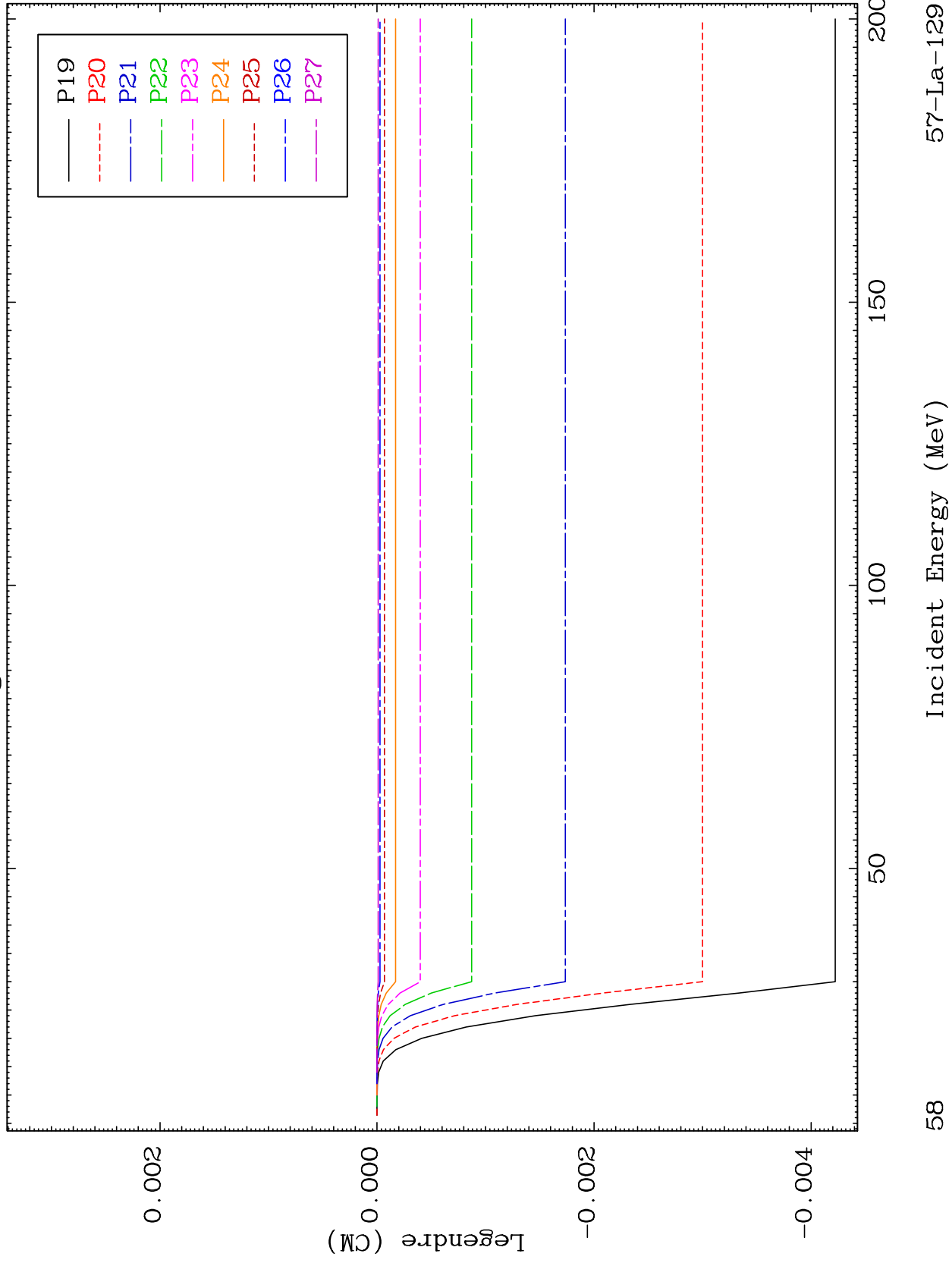
Incident Energy (MeV)

57-La-129

MAT 5698

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

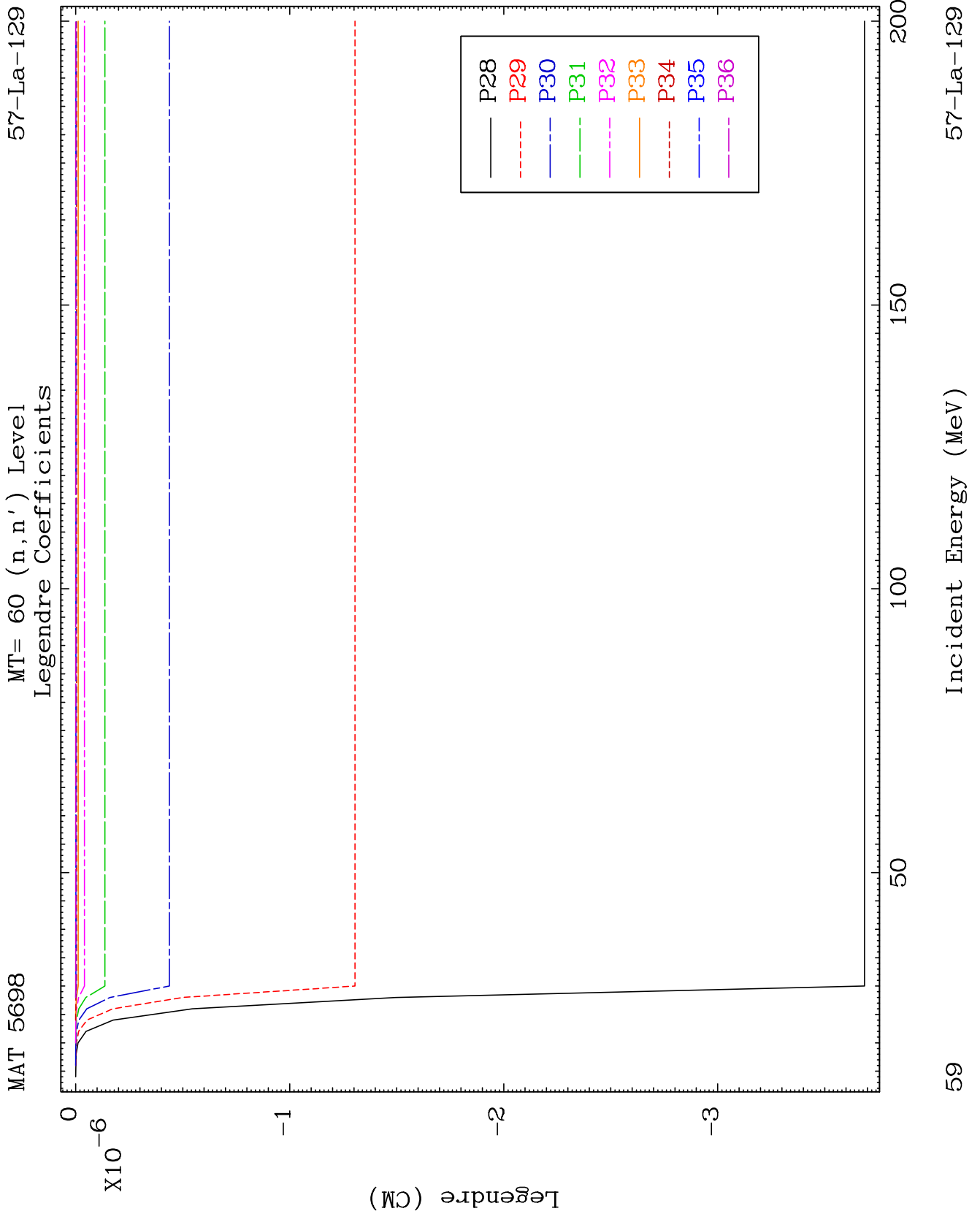
57-La-129



58

Incident Energy (MeV)

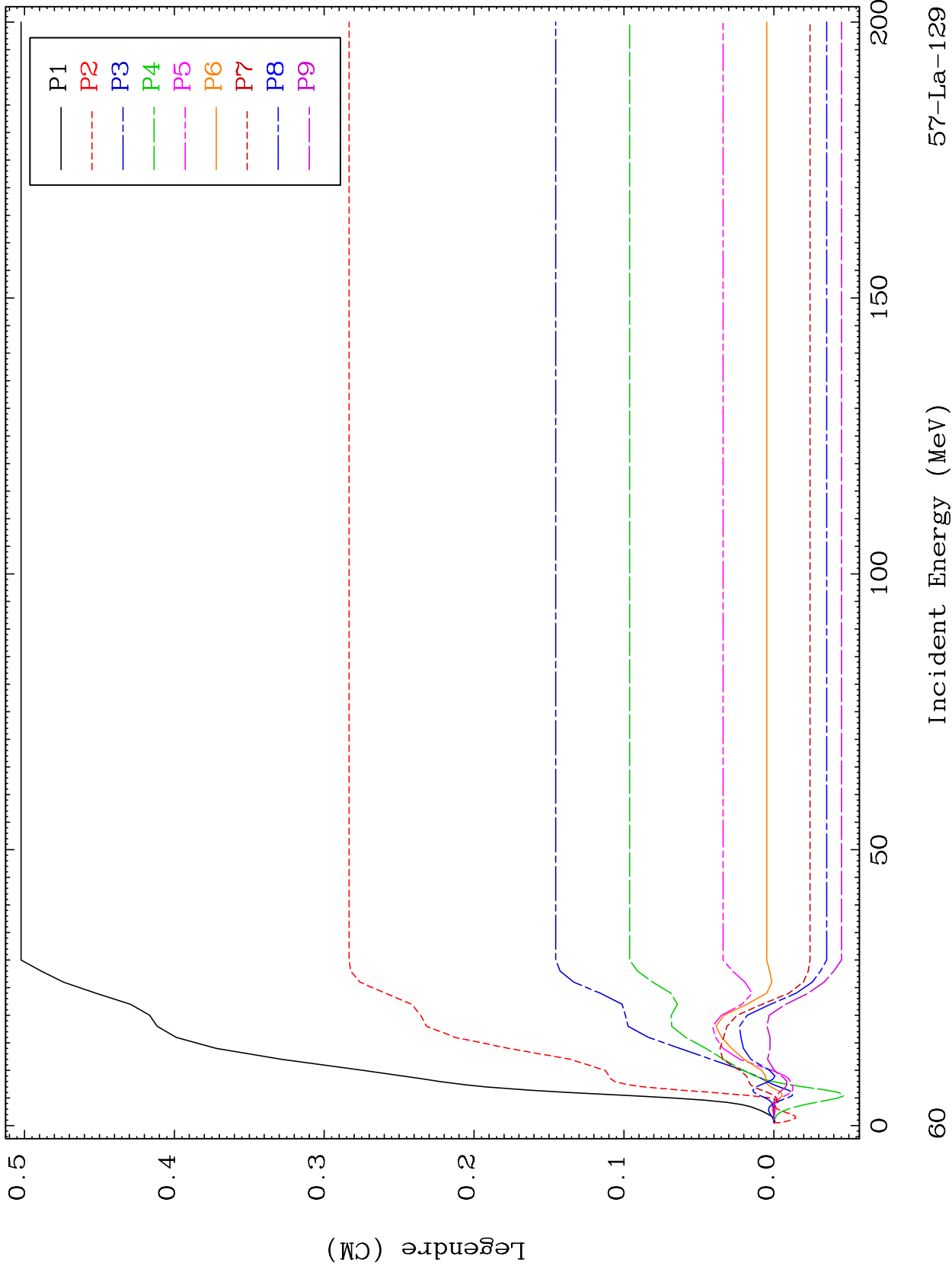
57-La-129



MAT 5698

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

57-La-129



57-La-129

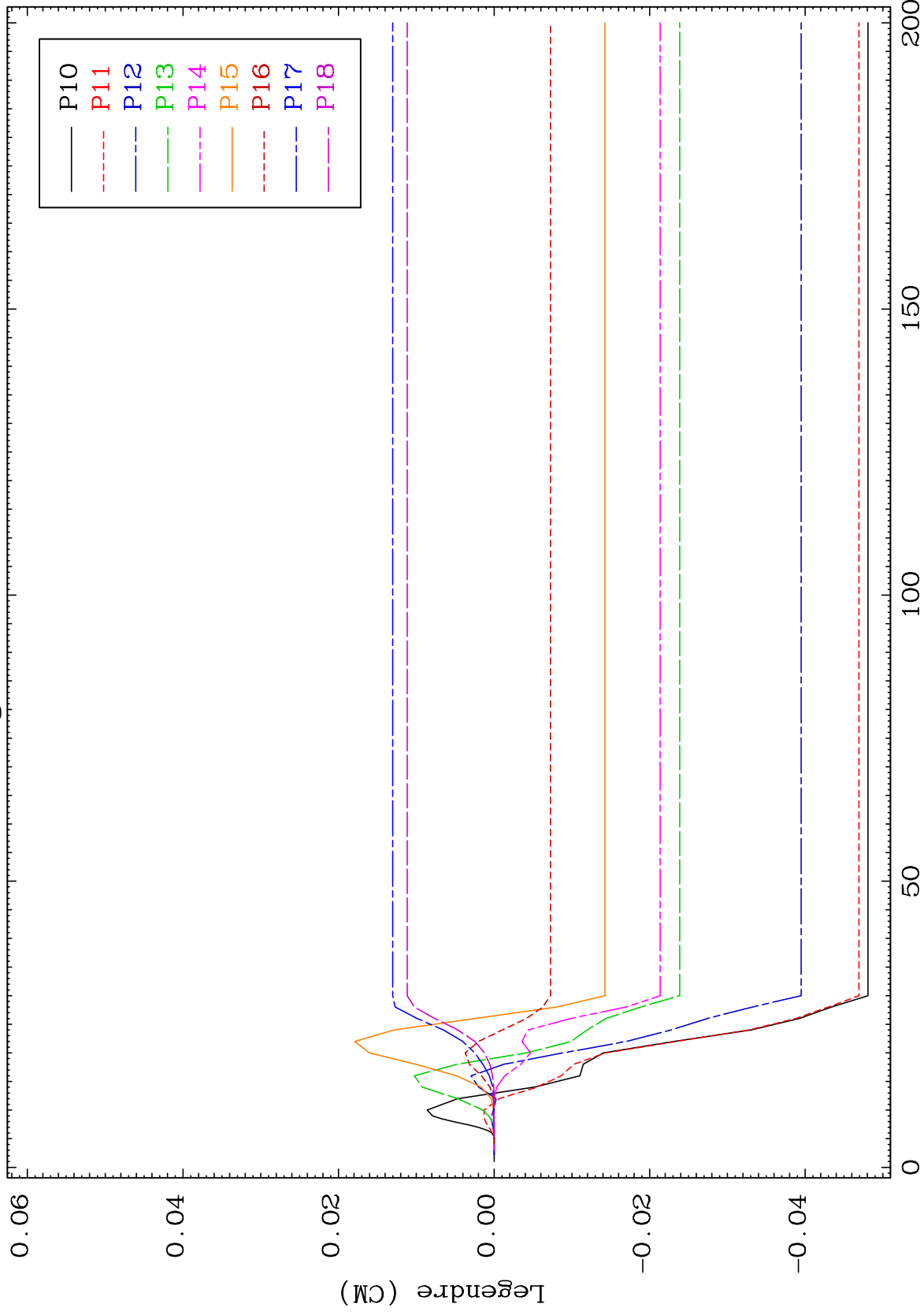
Incident Energy (MeV)

60

MAT 5698

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

57-La-129



61

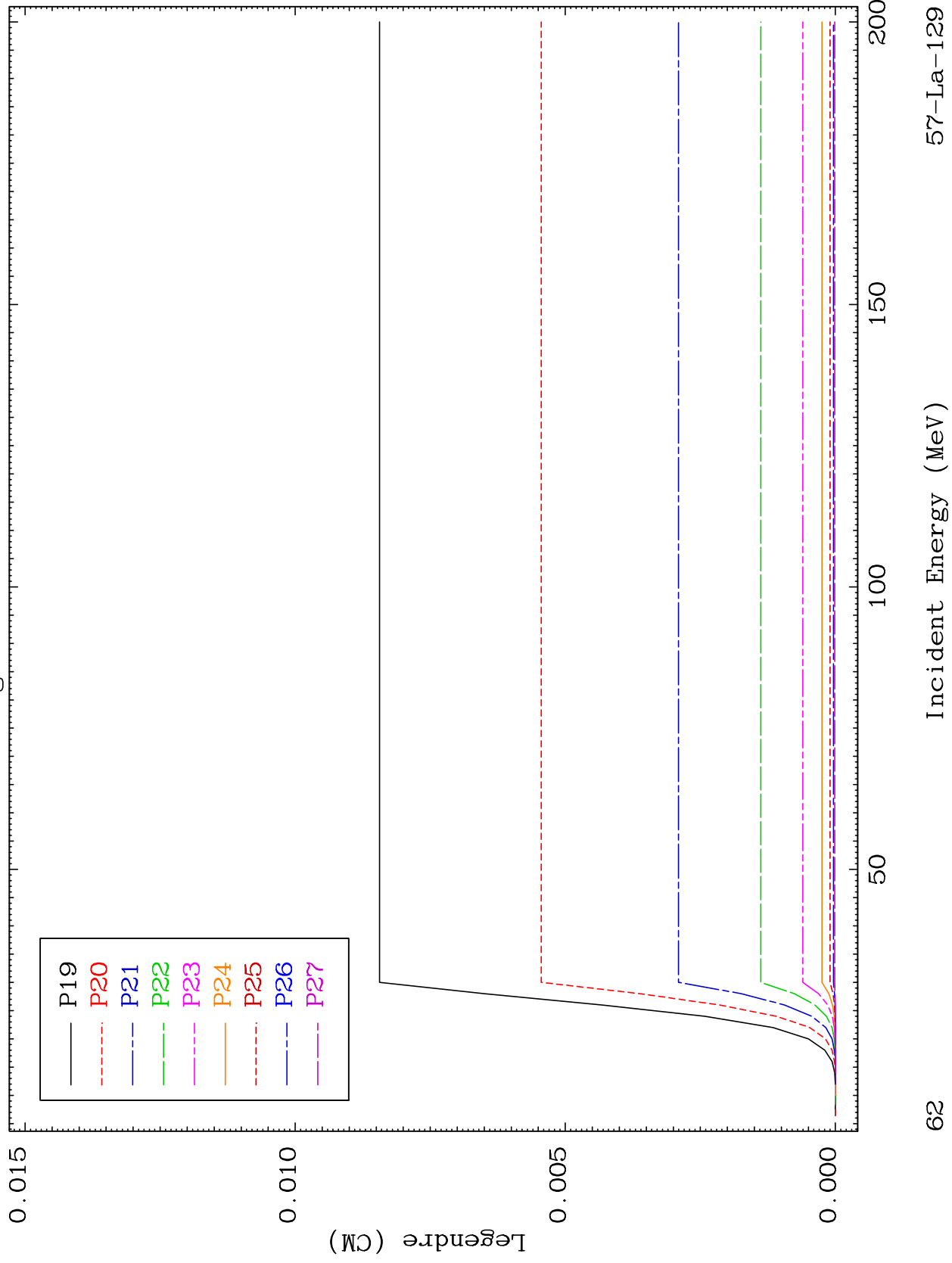
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



62

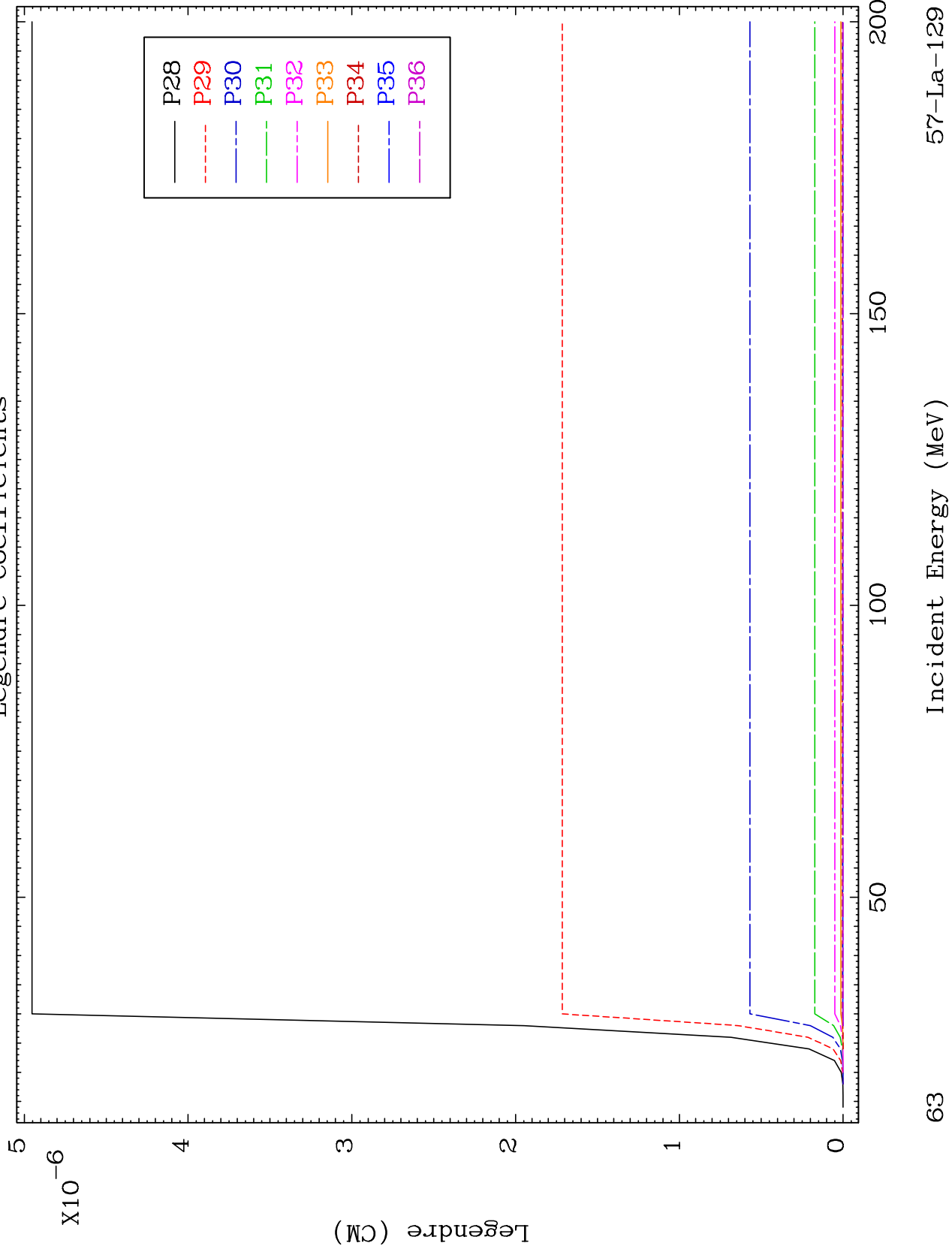
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



63

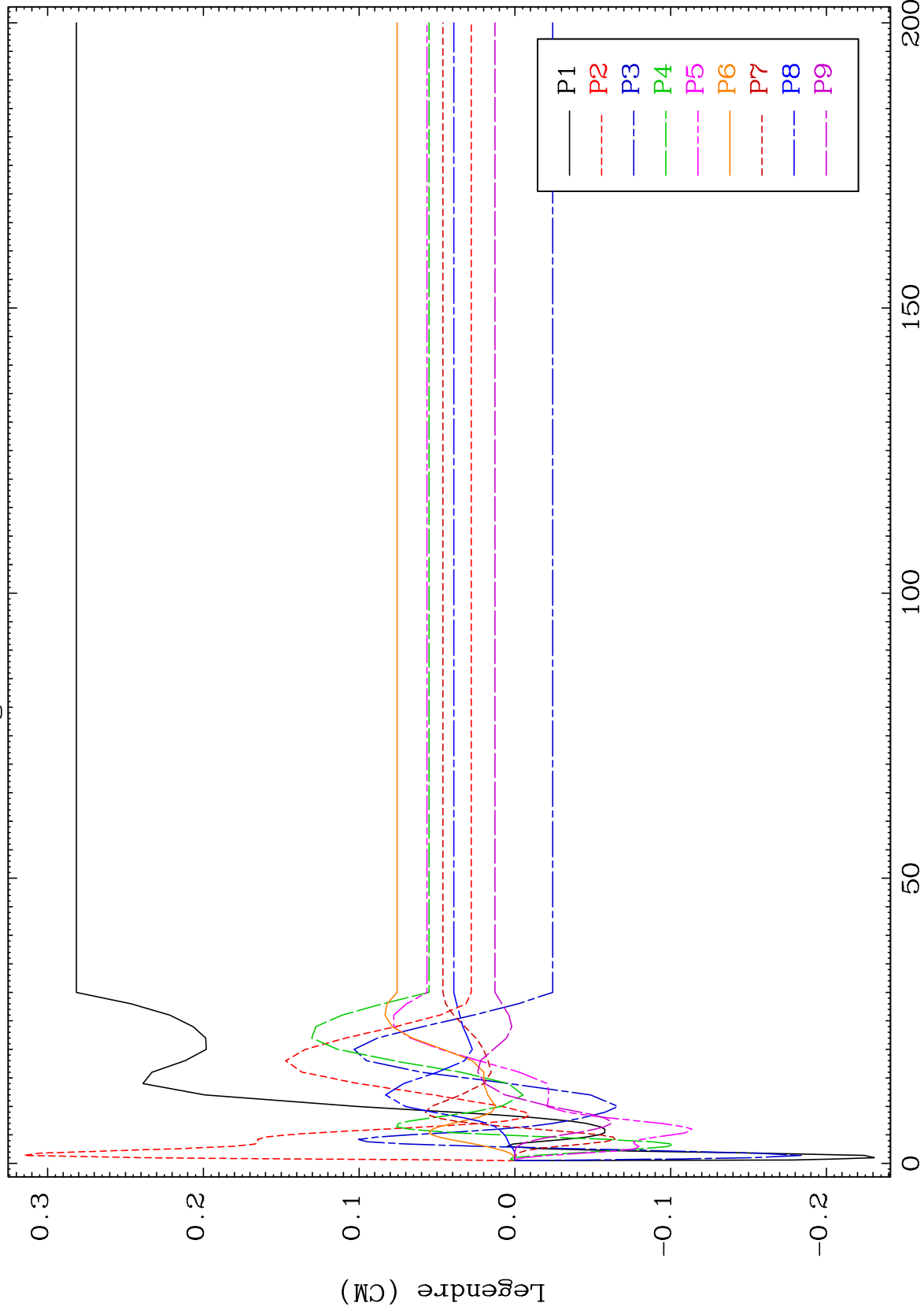
57-La-129



MAT 5698

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

57-La-129



64

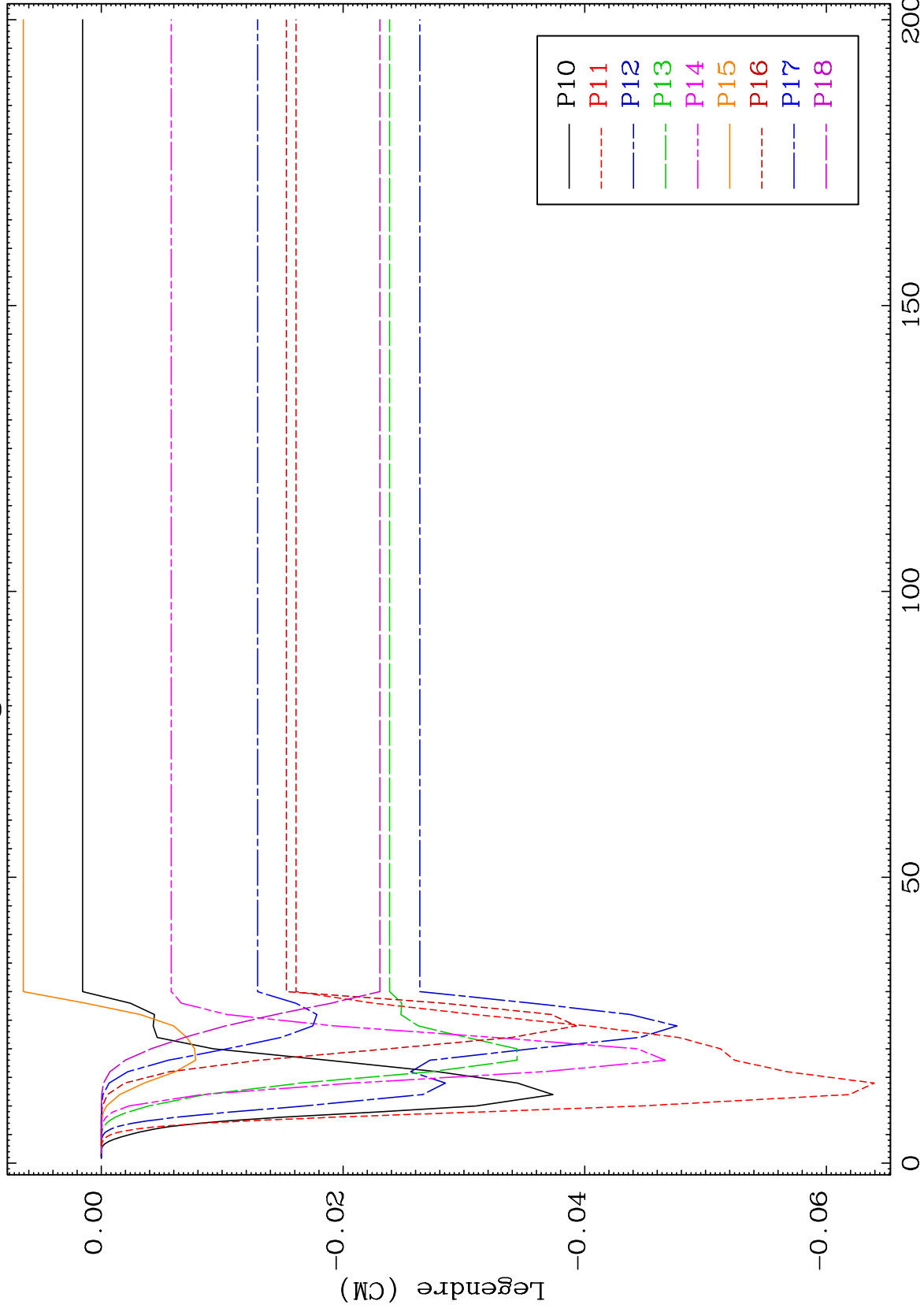
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



57-La-129

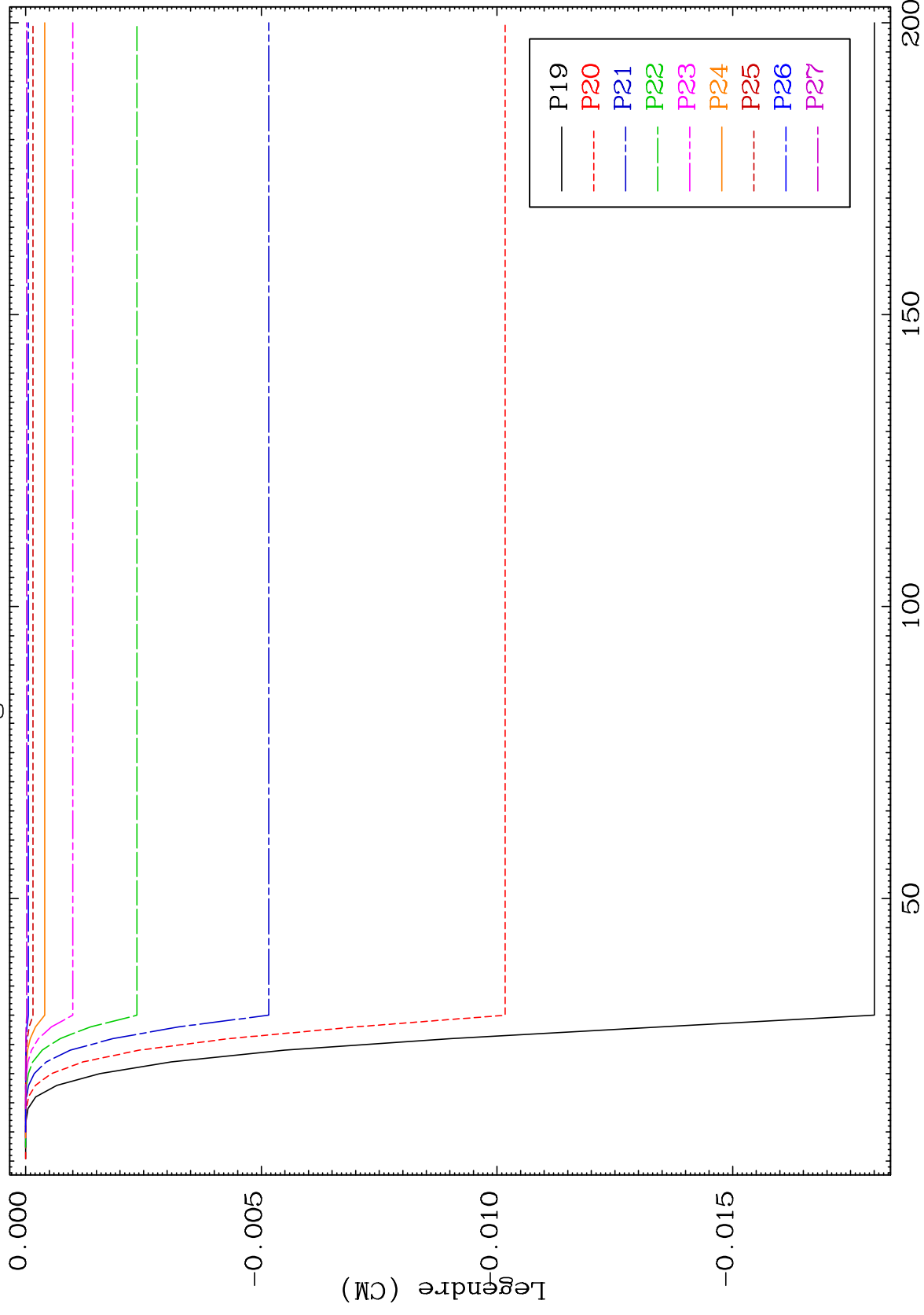
Incident Energy (MeV)

65

MAT 5698

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

57-La-129



66

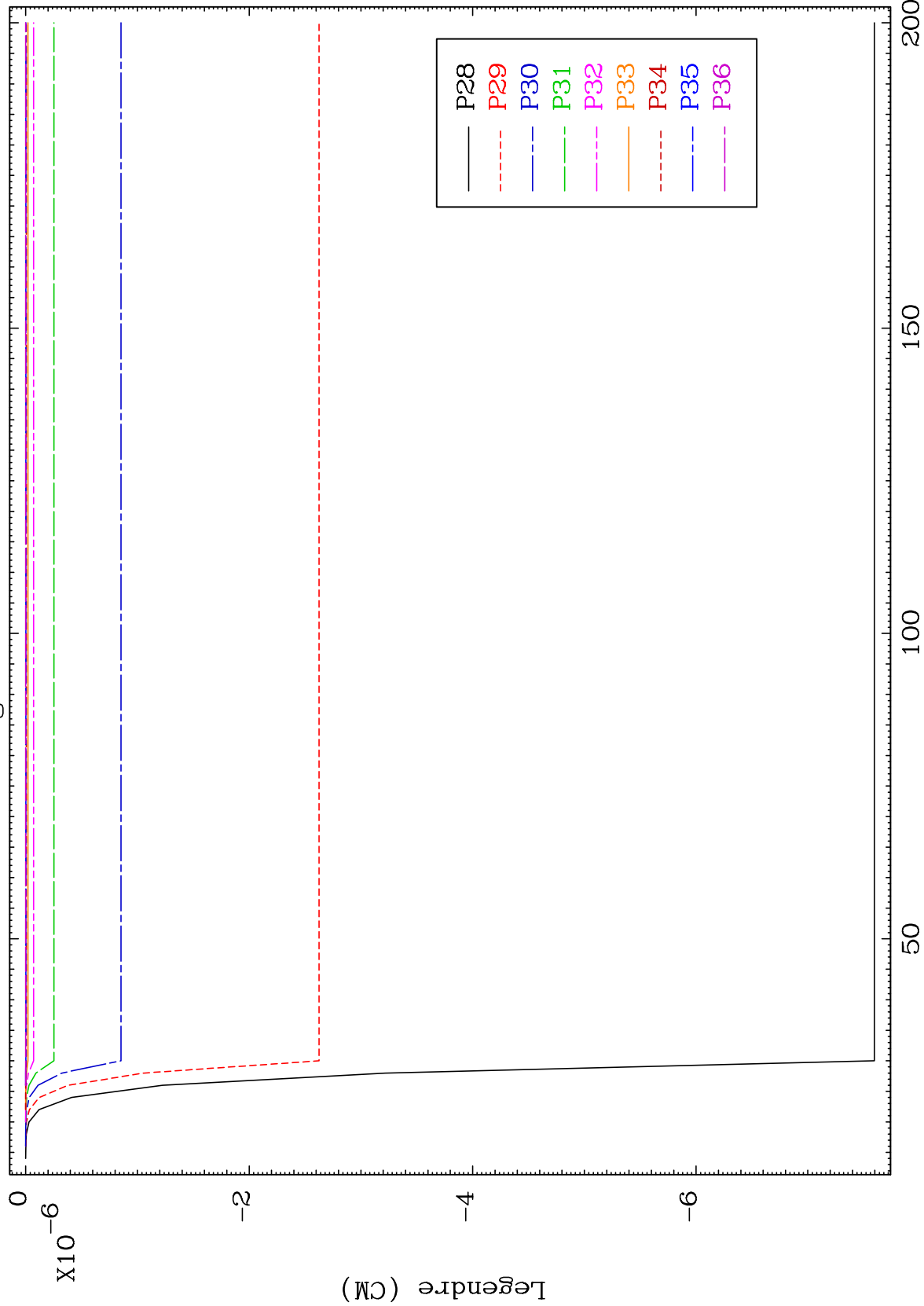
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



67

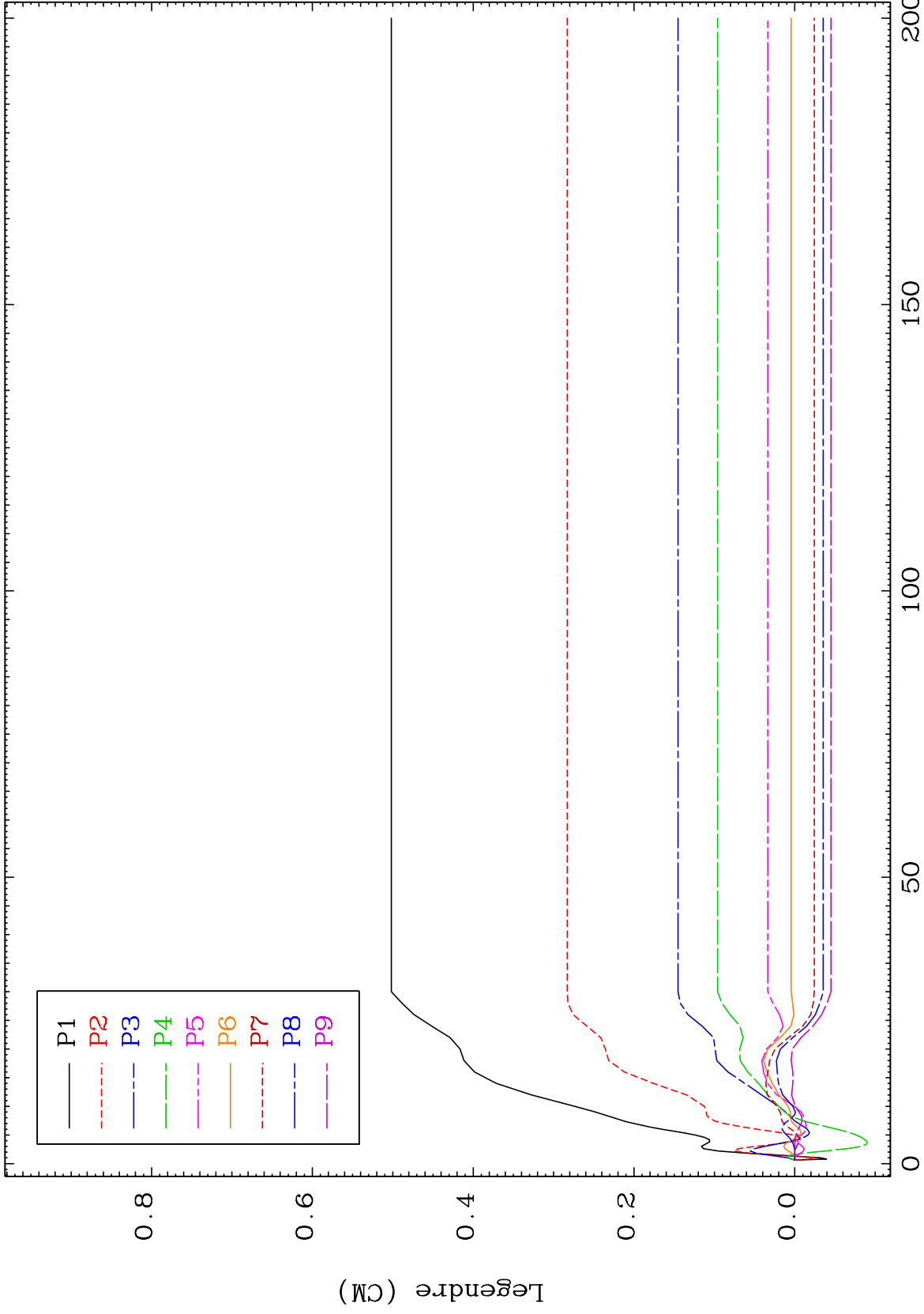
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



68

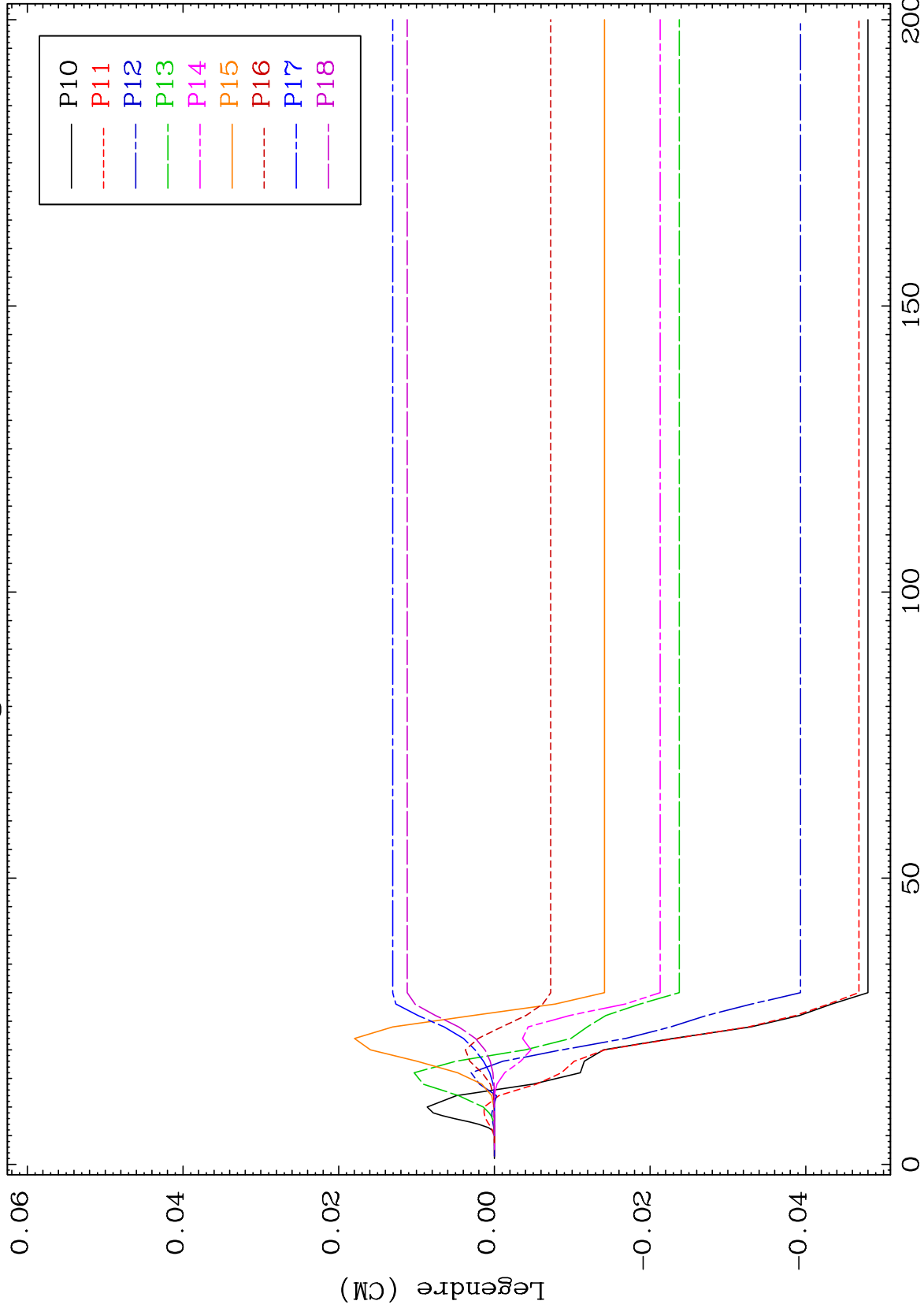
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



69

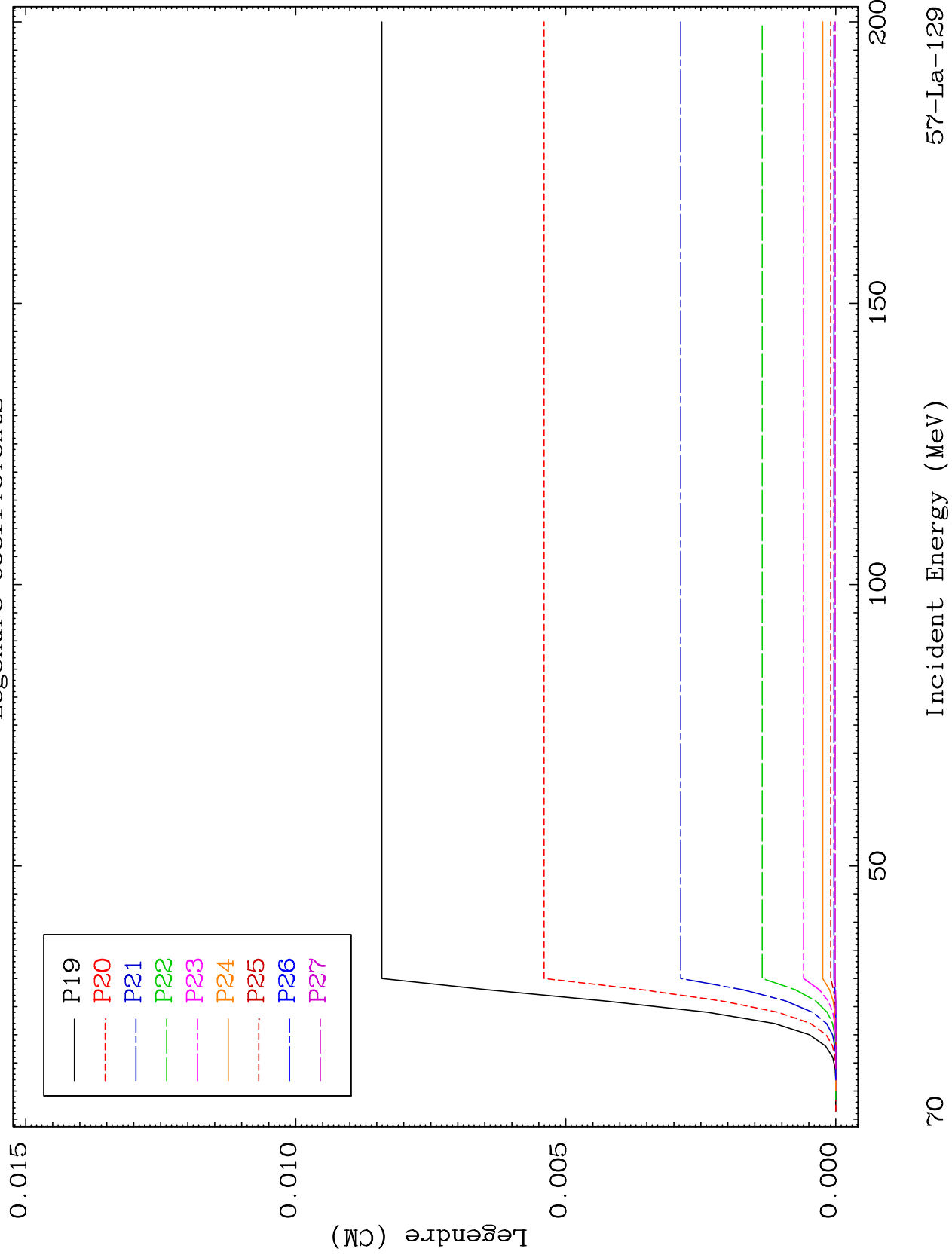
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



70

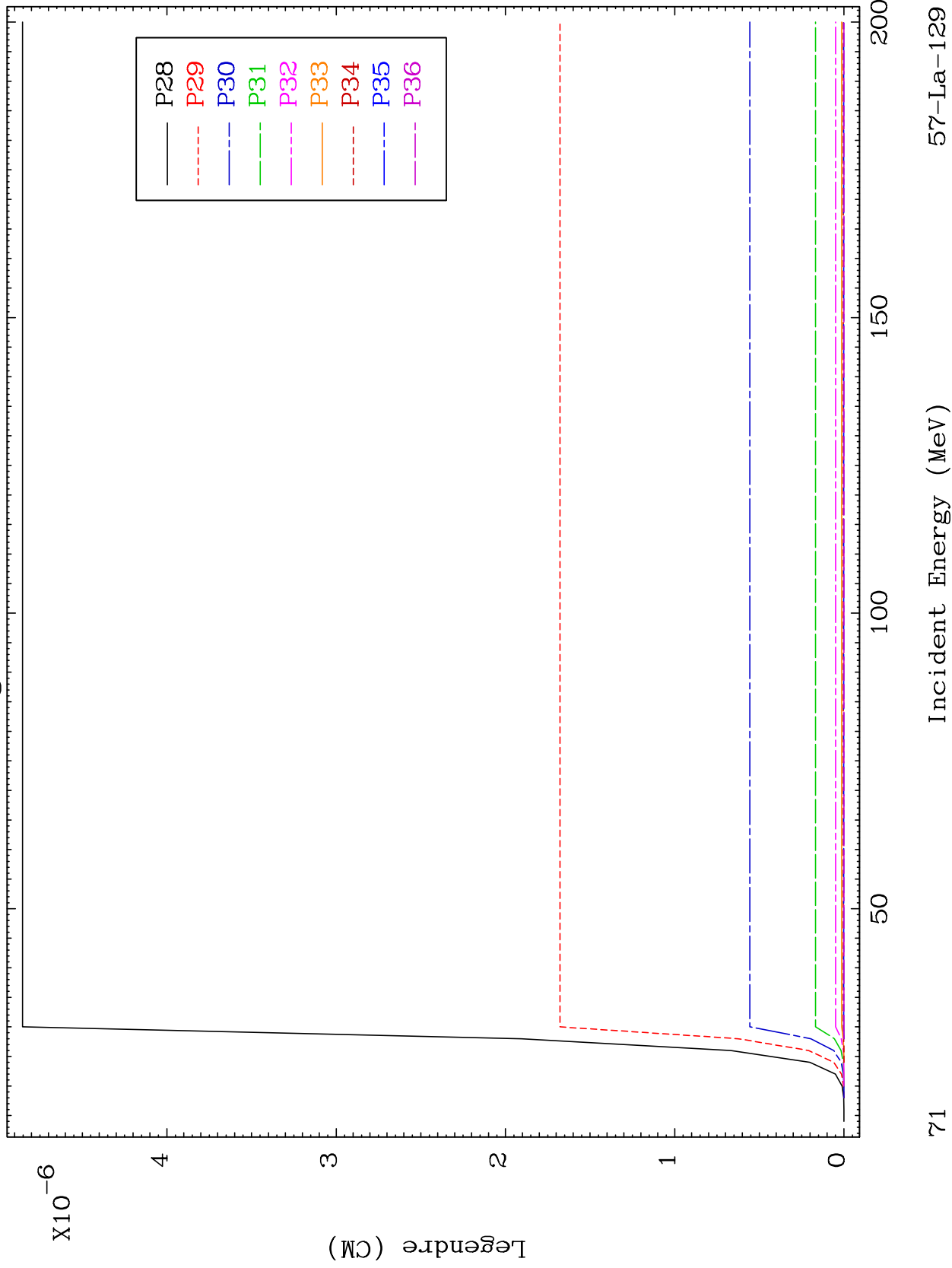
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129

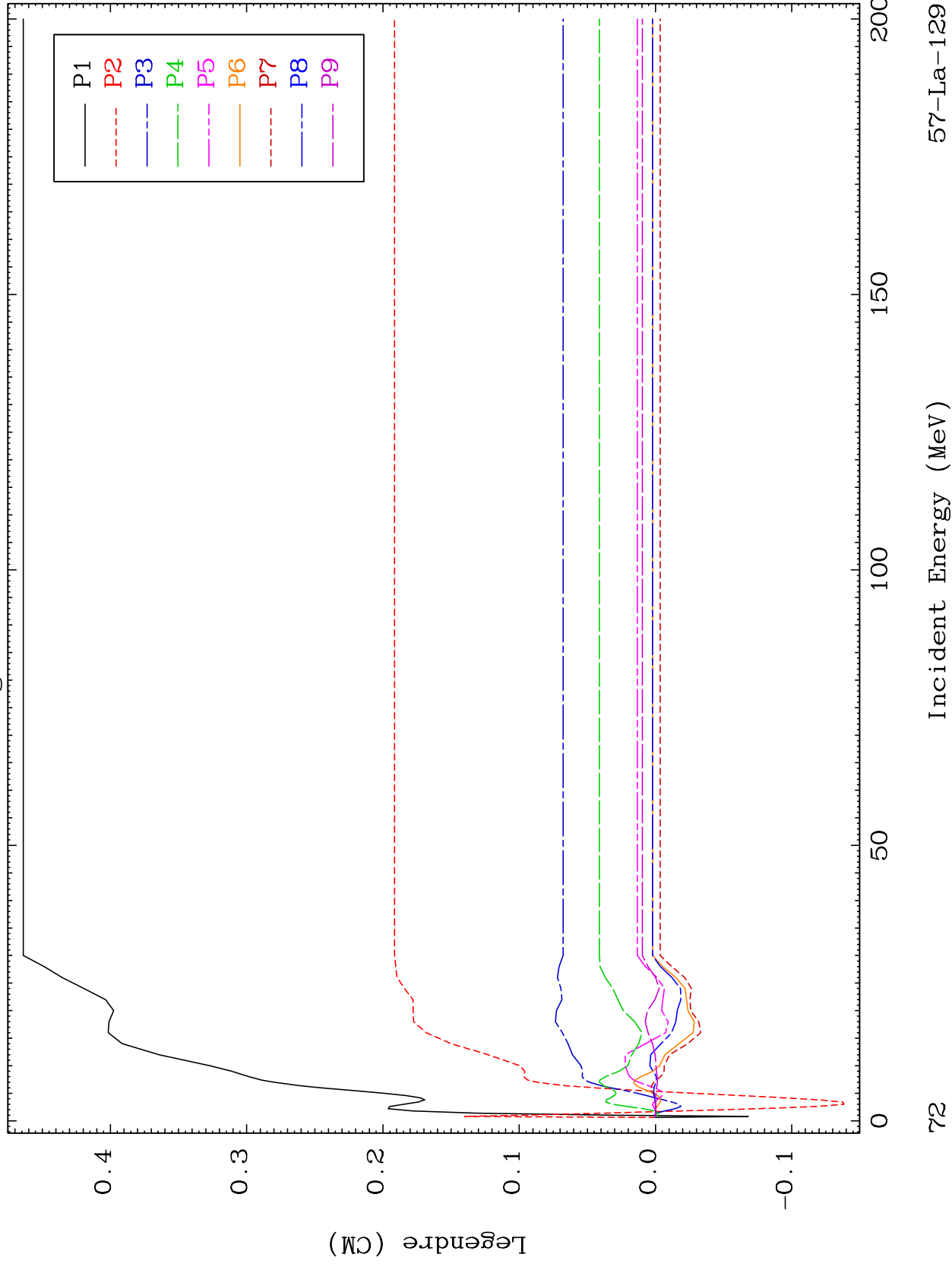




MAT 5698

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

57-La-129



57-La-129

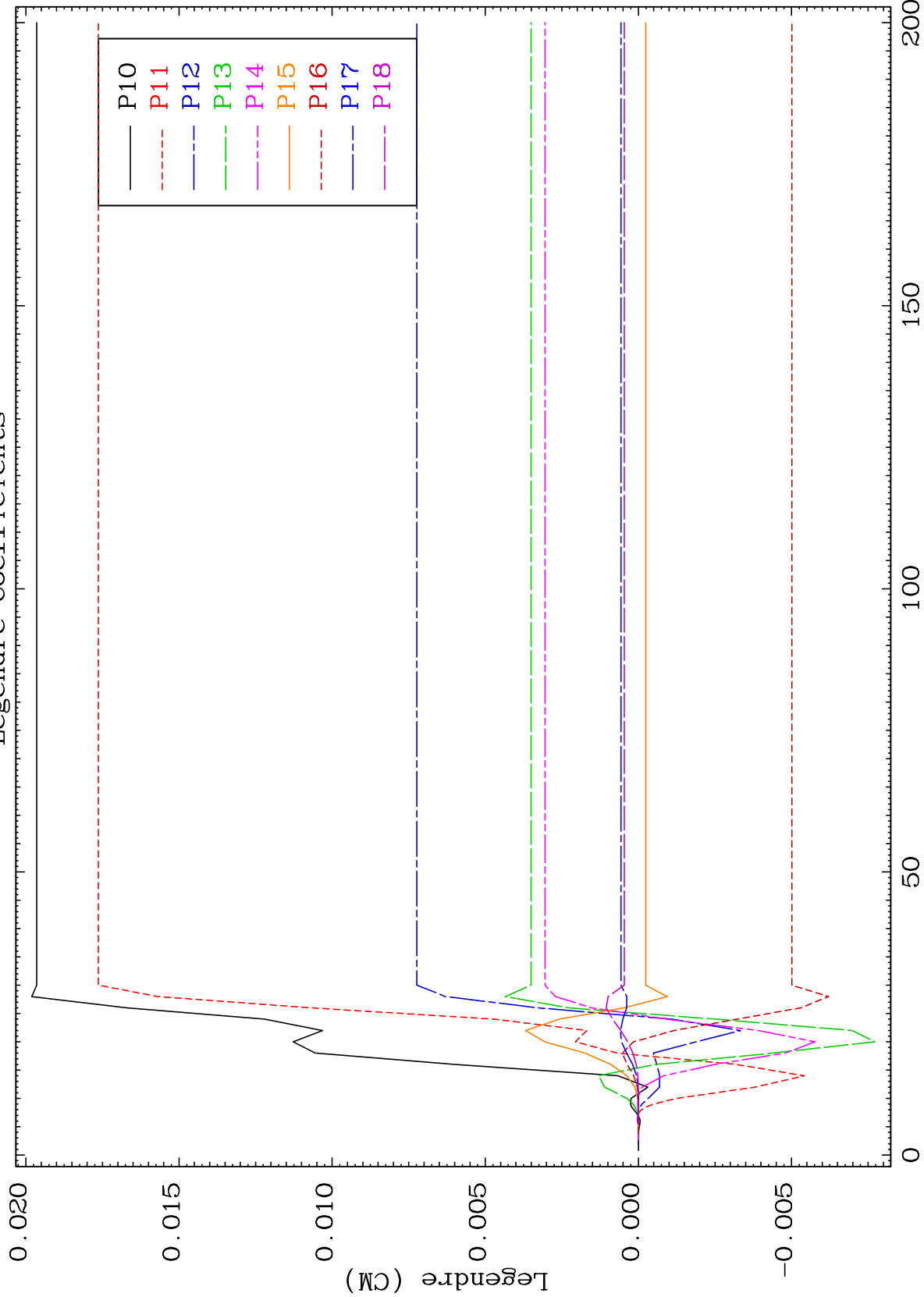
Incident Energy (MeV)

72

MAT 5698

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

57-La-129



73

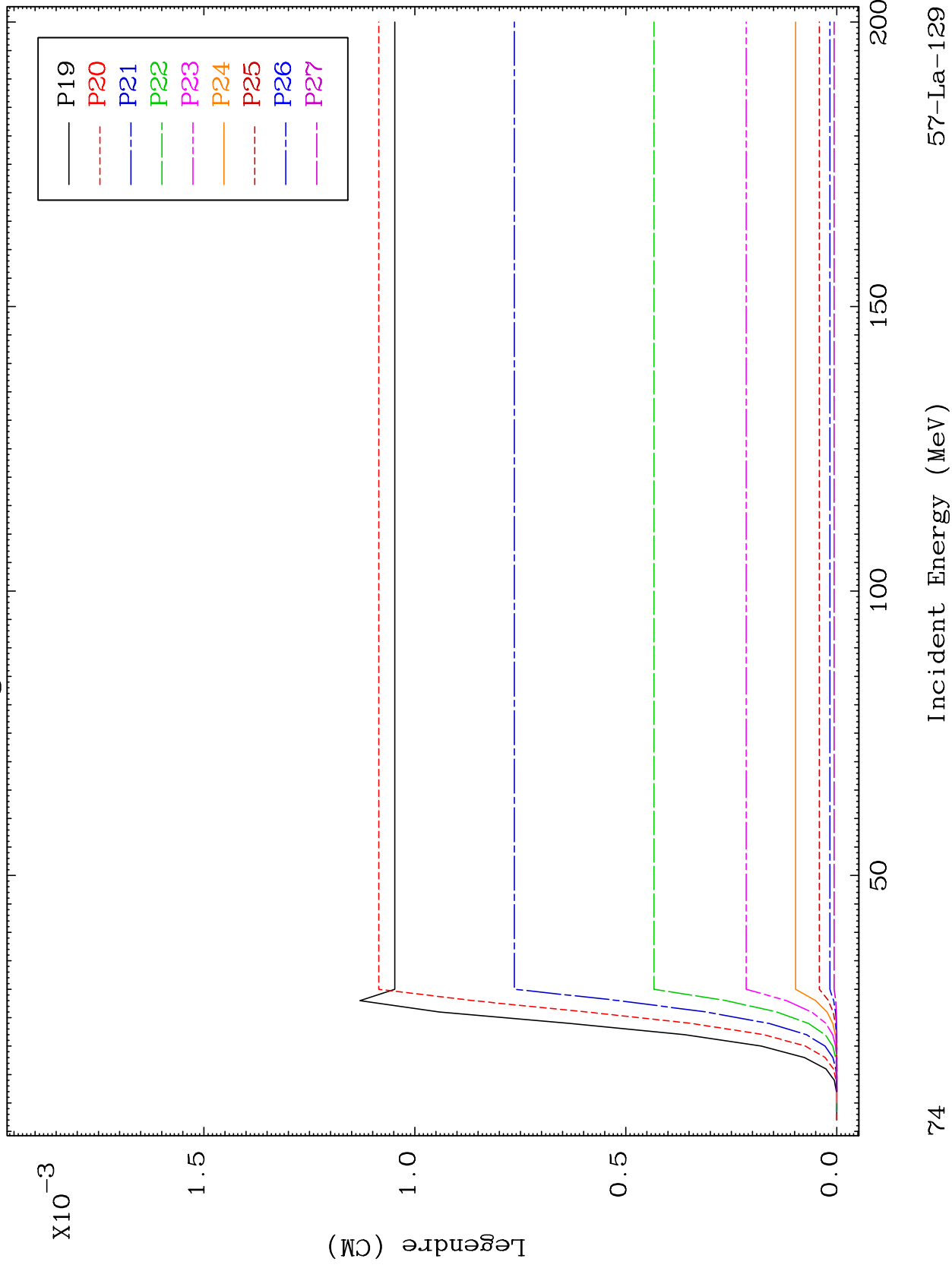
Incident Energy (MeV)

57-La-129

MAT 5698

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

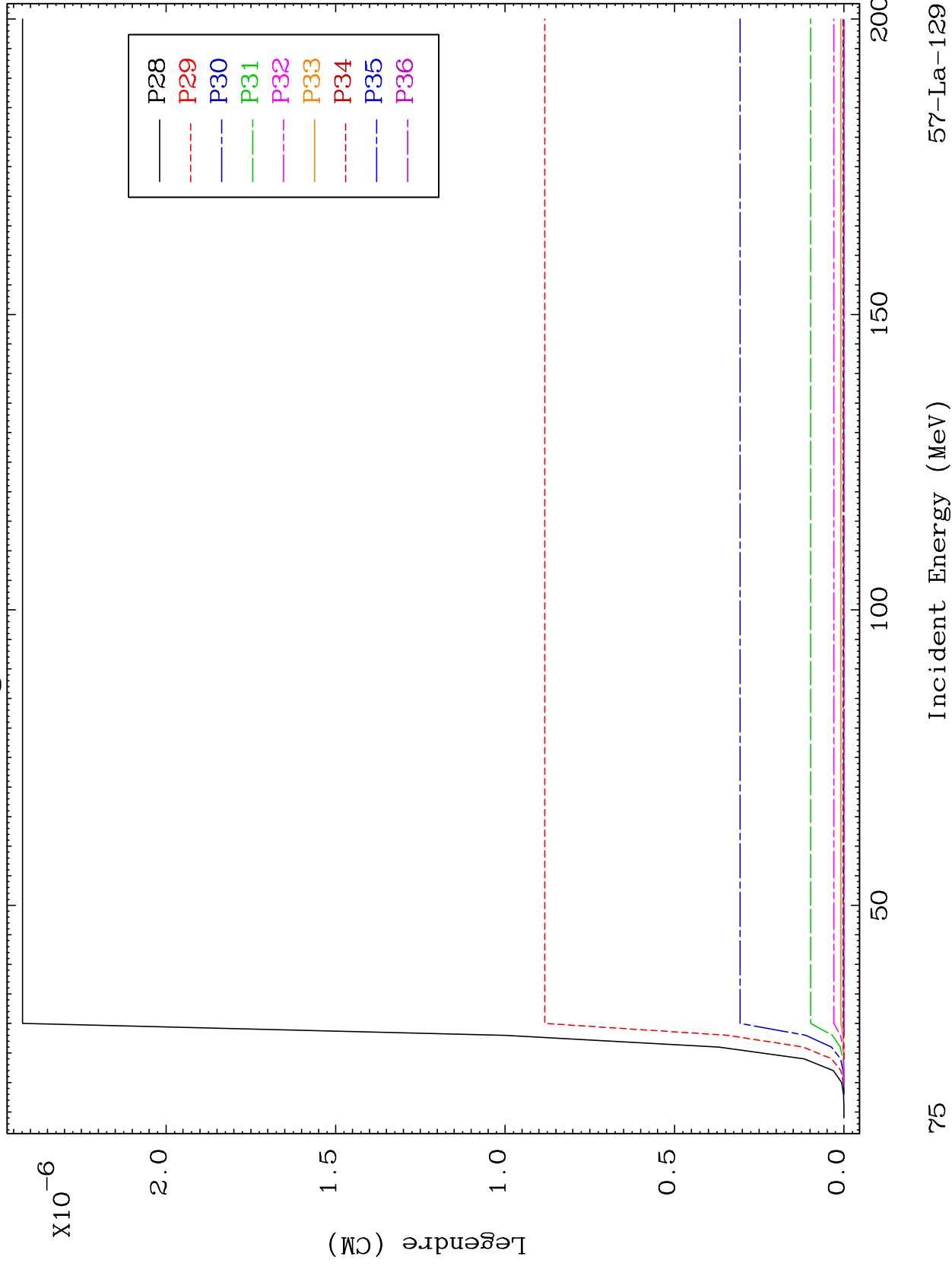
57-La-129



MAT 5698

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

57-La-129



75

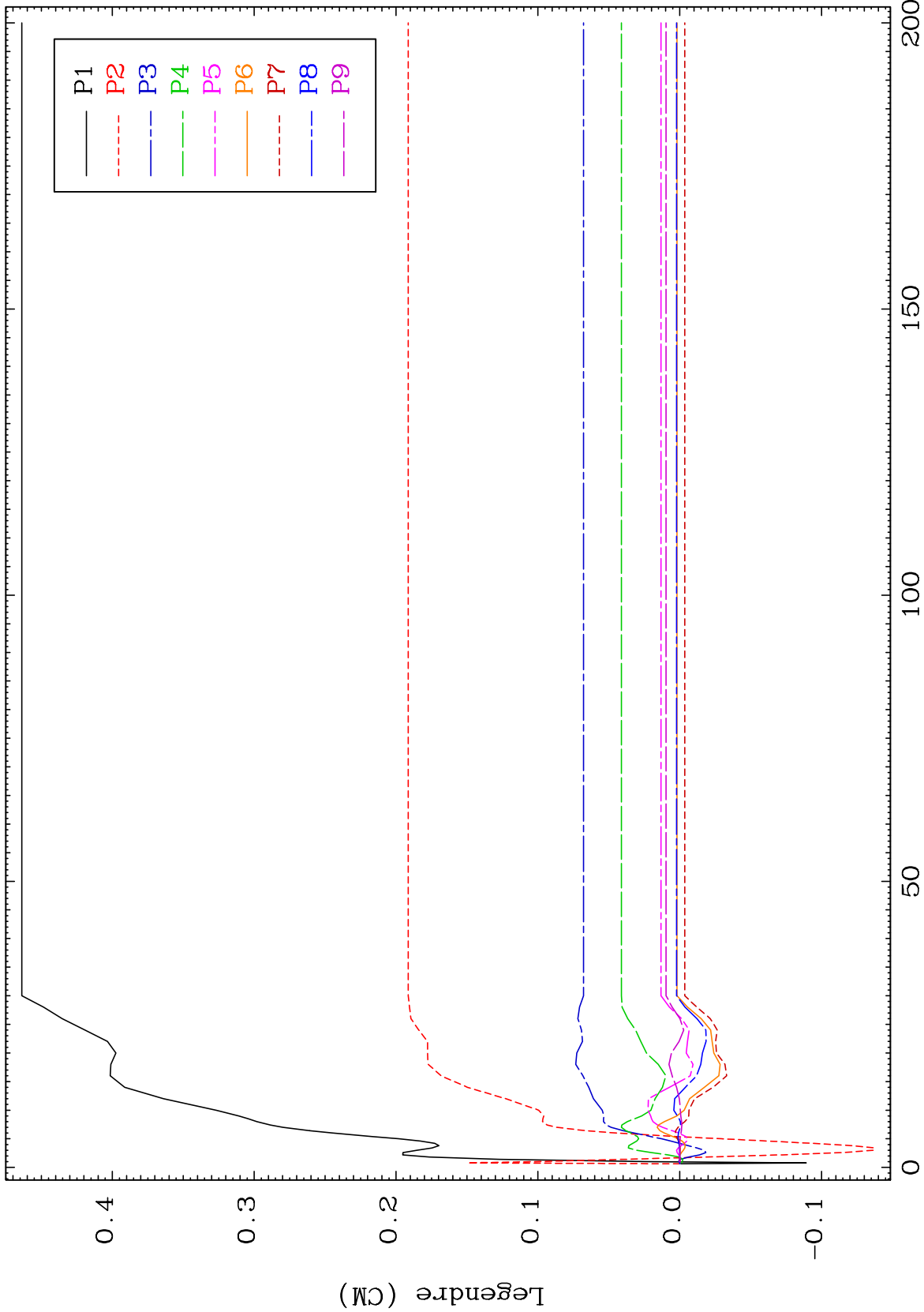
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



57-La-129

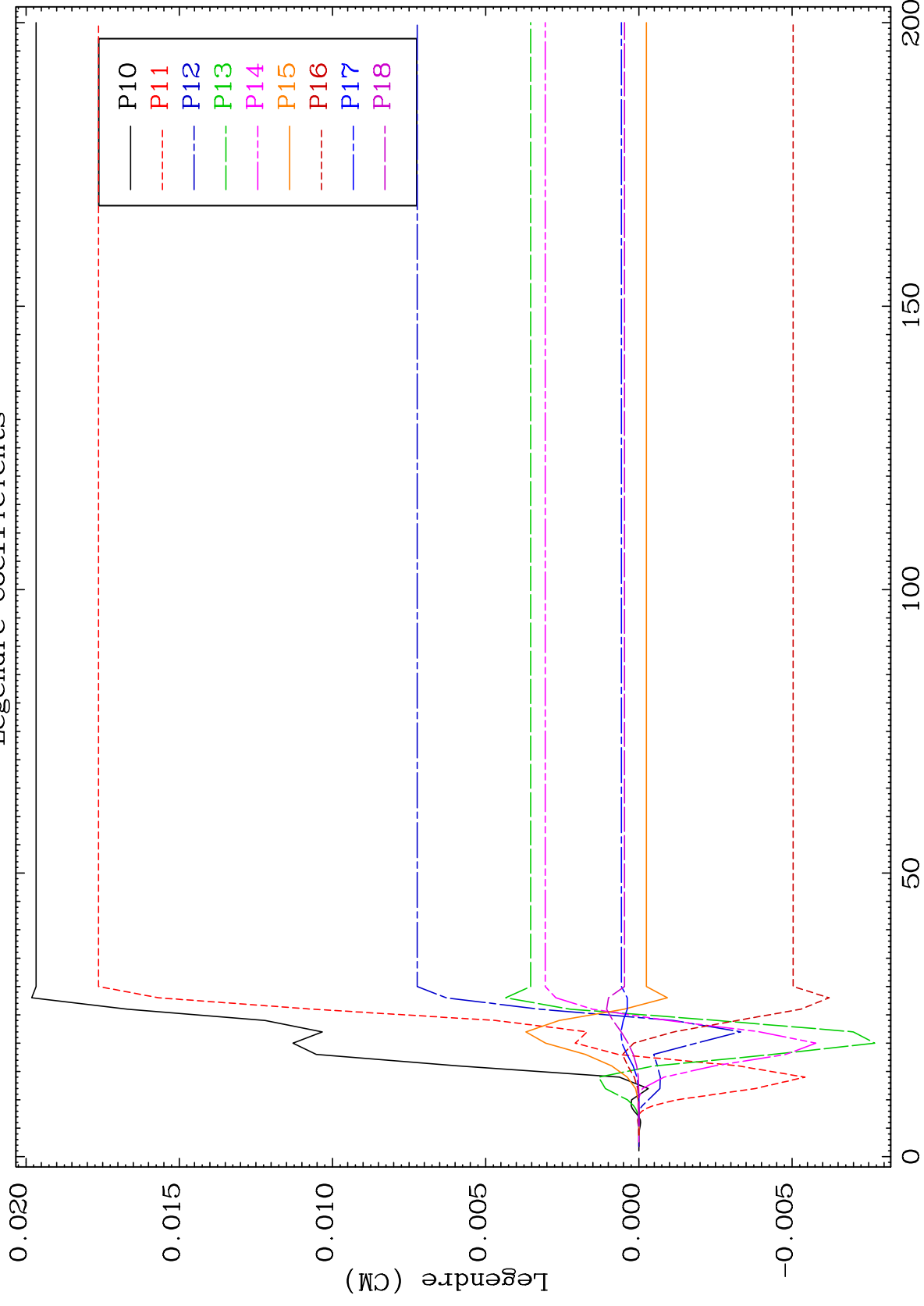
Incident Energy (MeV)

76

MAT 5698

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

57-La-129



77

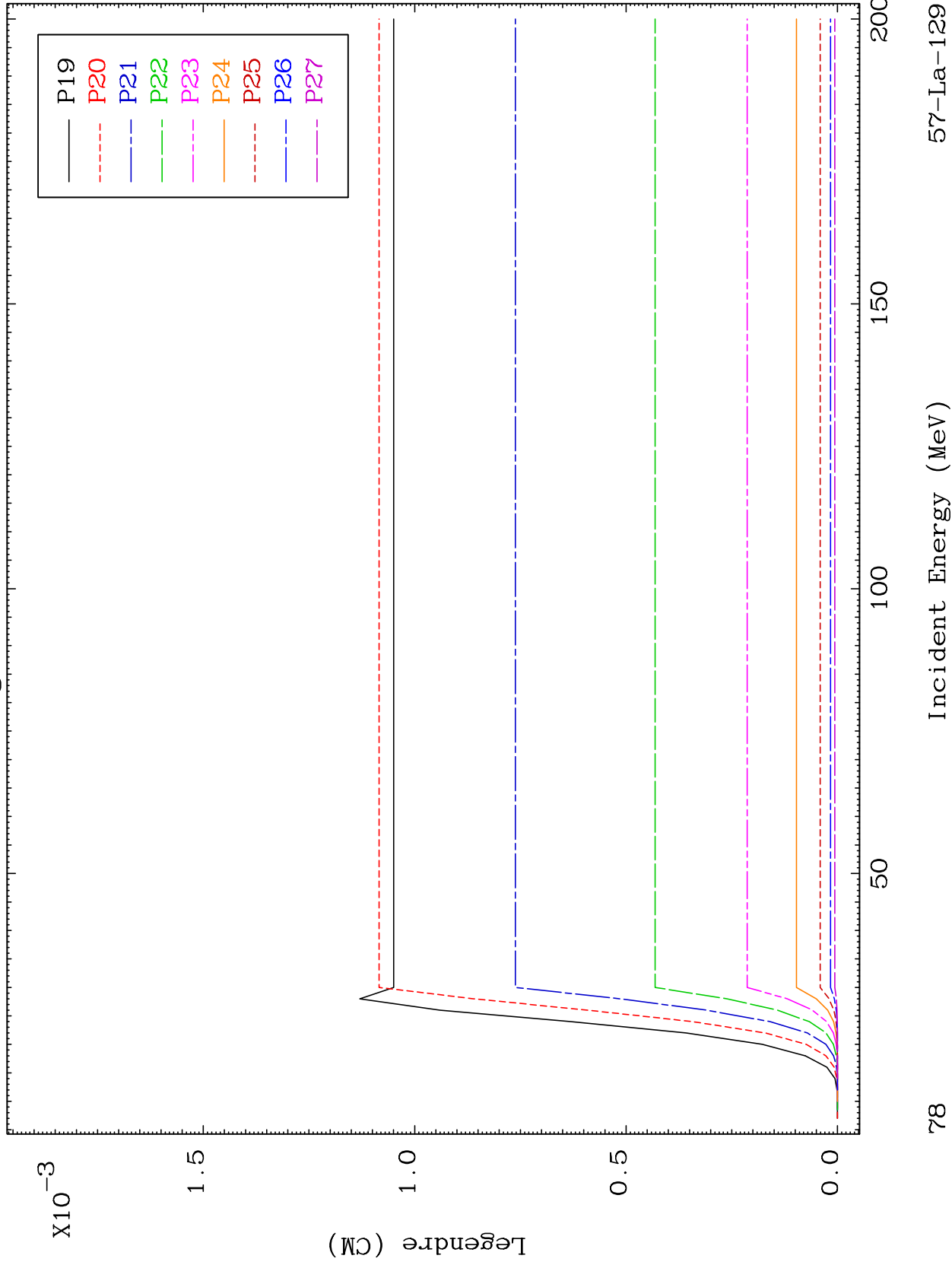
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



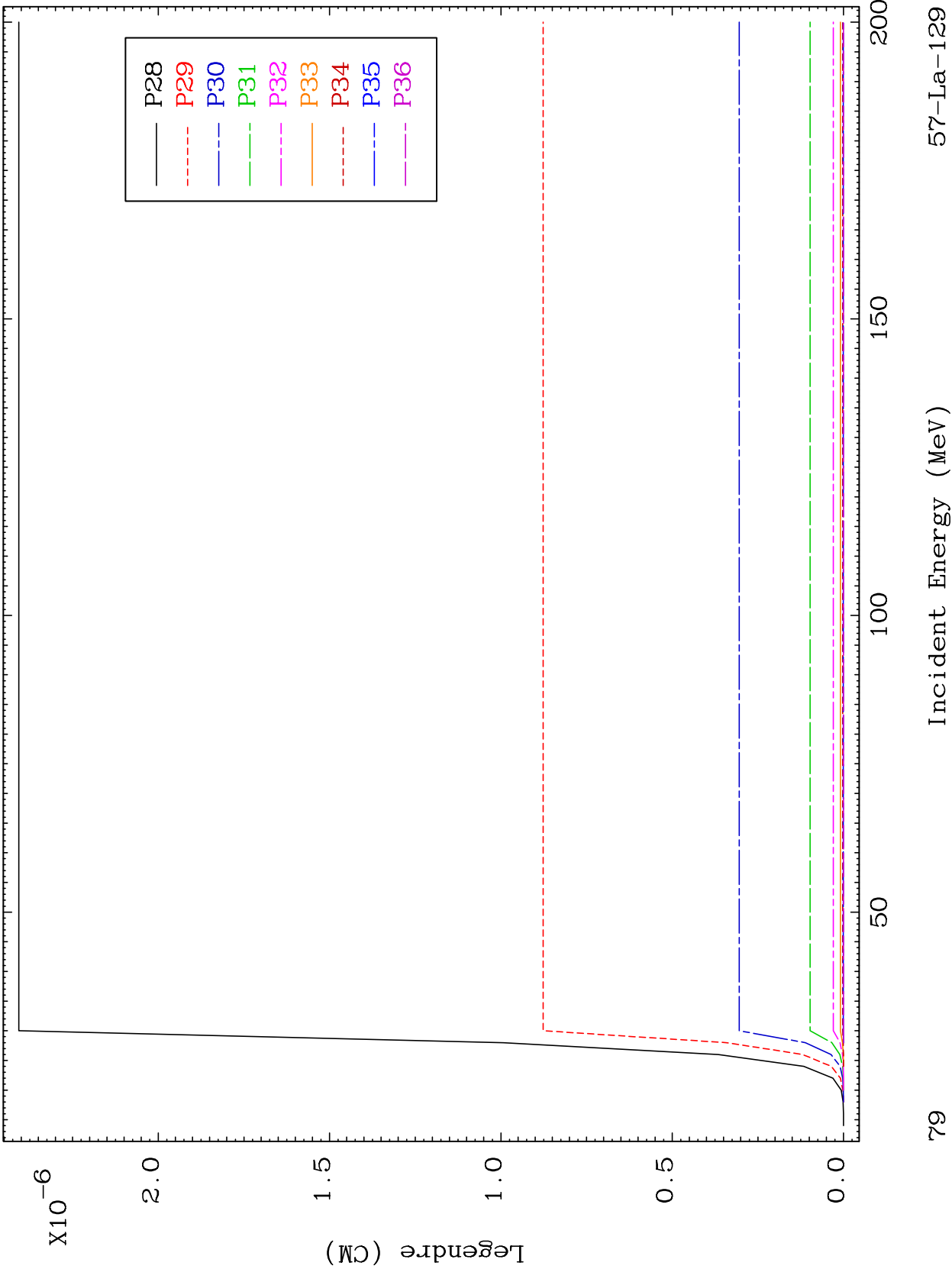
78

57-La-129

MAT 5698

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

57-La-129



79

Incident Energy (MeV)

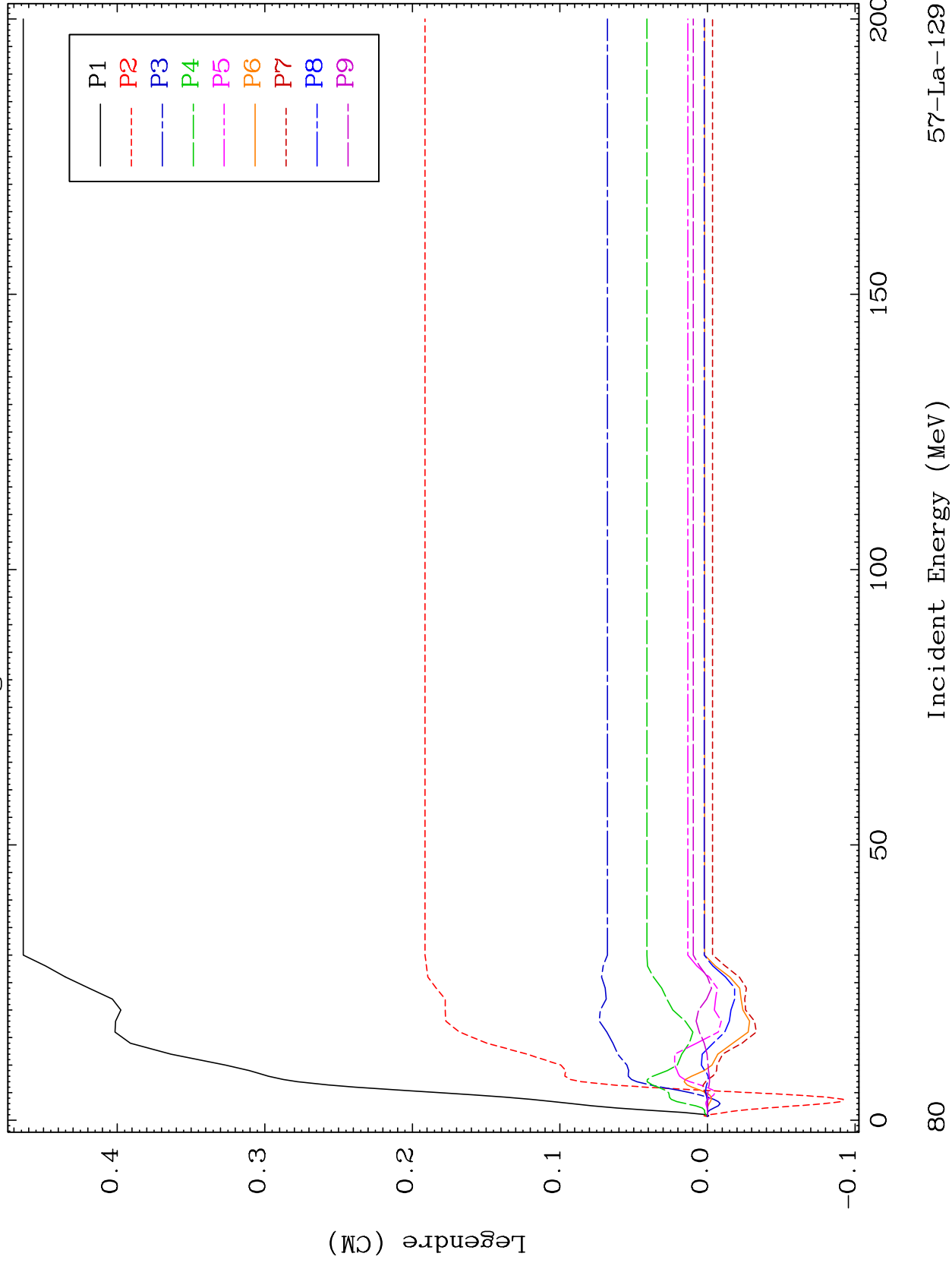
57-La-129



MAT 5698

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

57-La-129

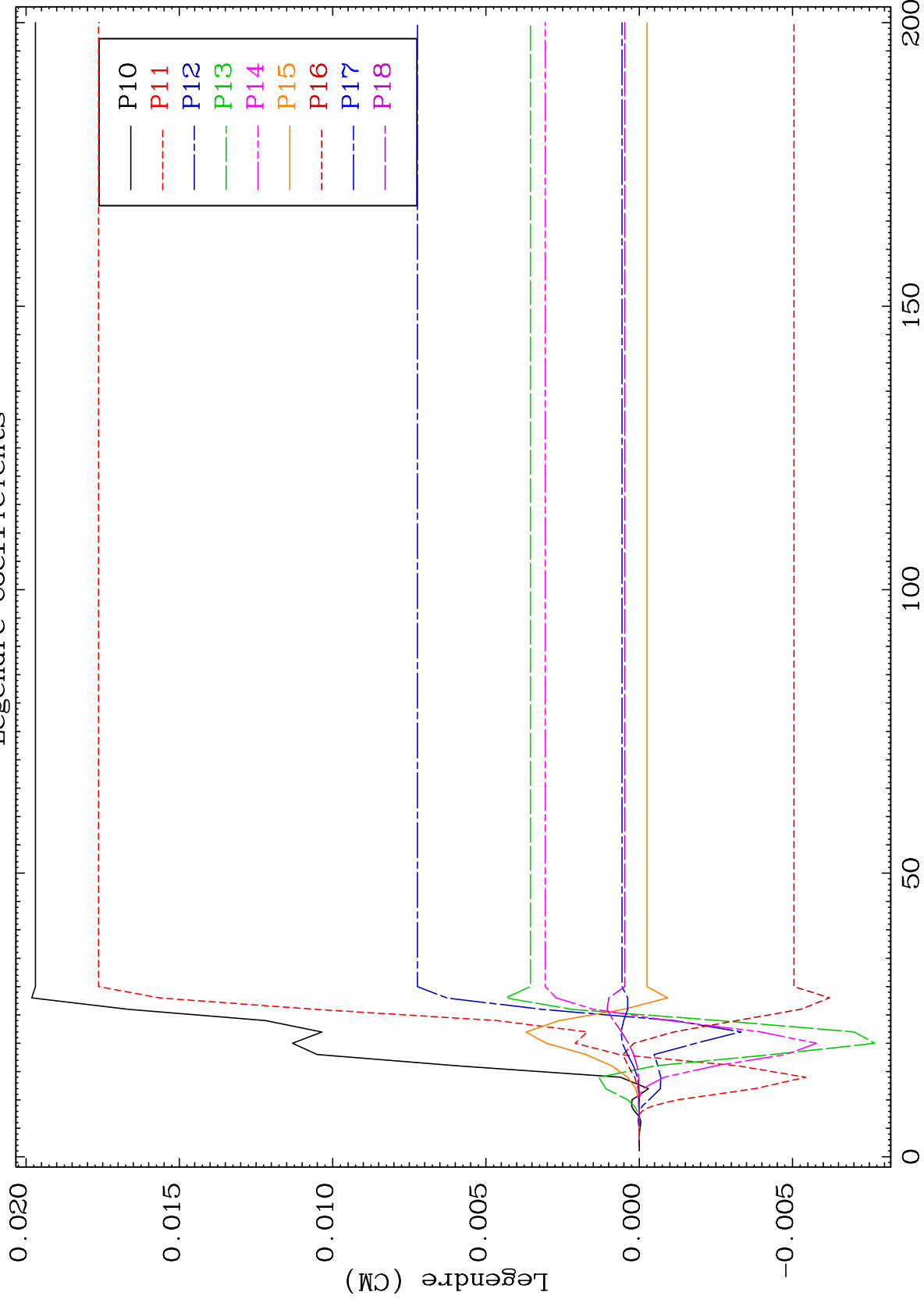


57-La-129

MAT 5698

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

57-La-129



81

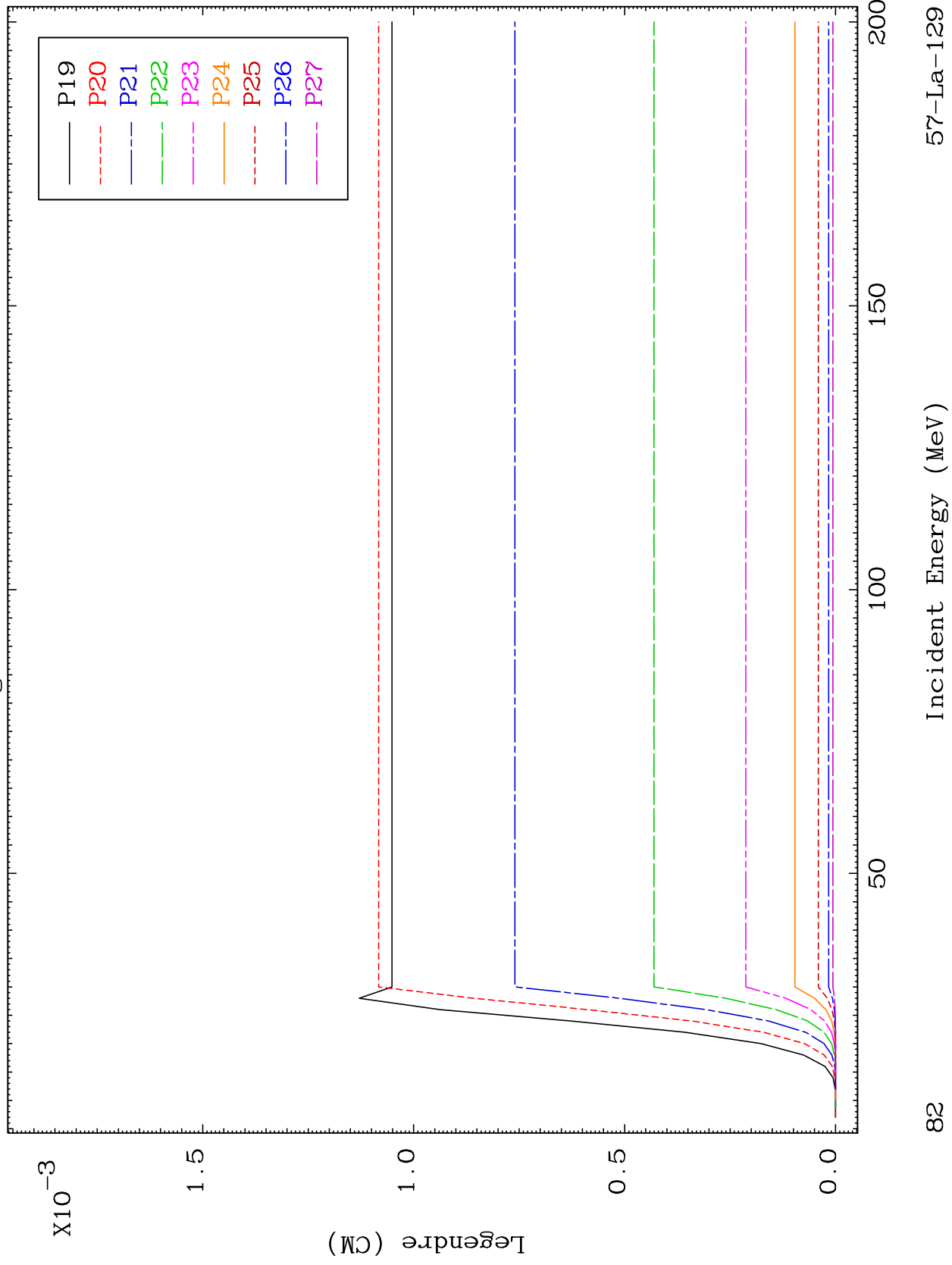
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



82

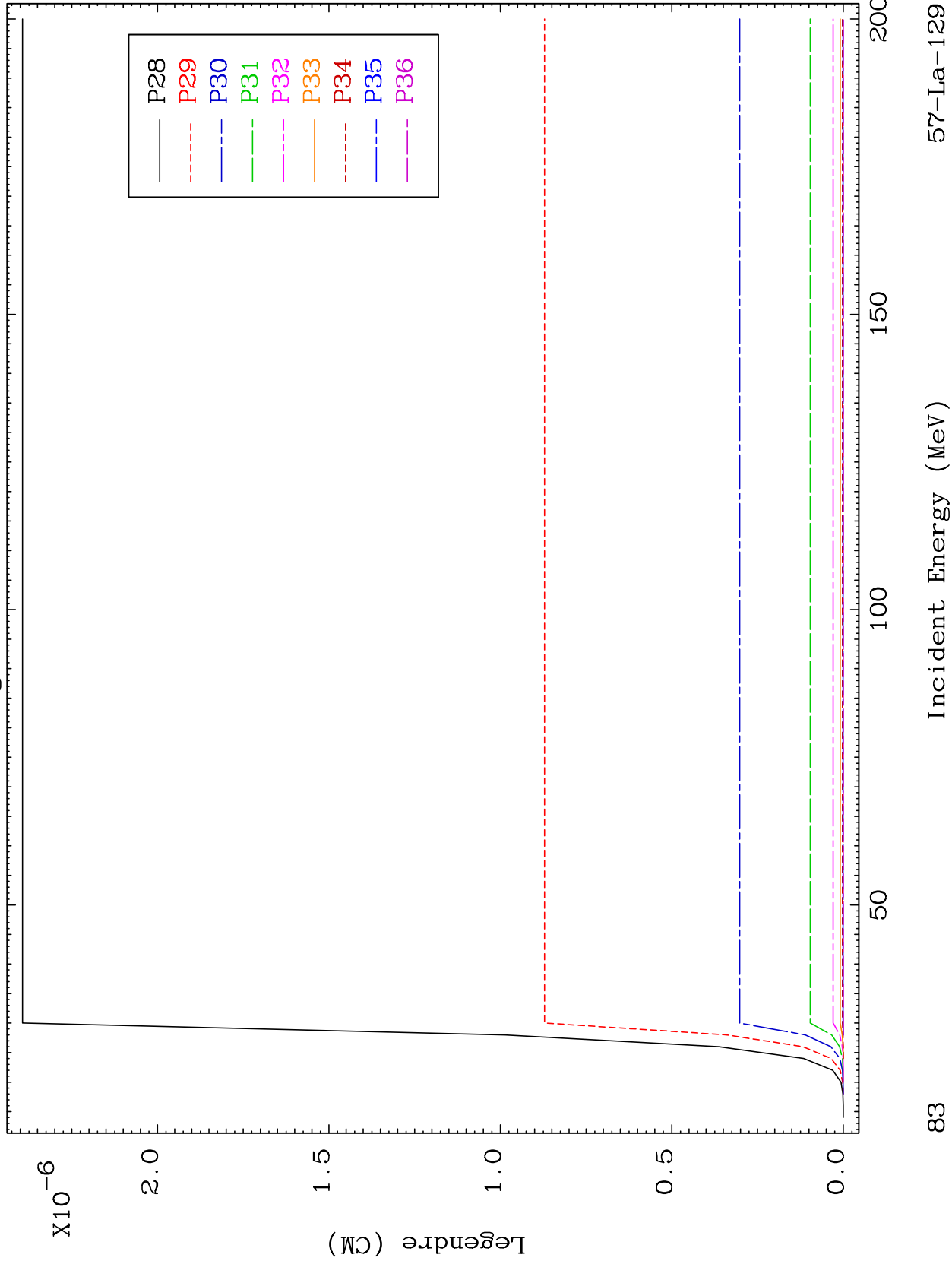
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



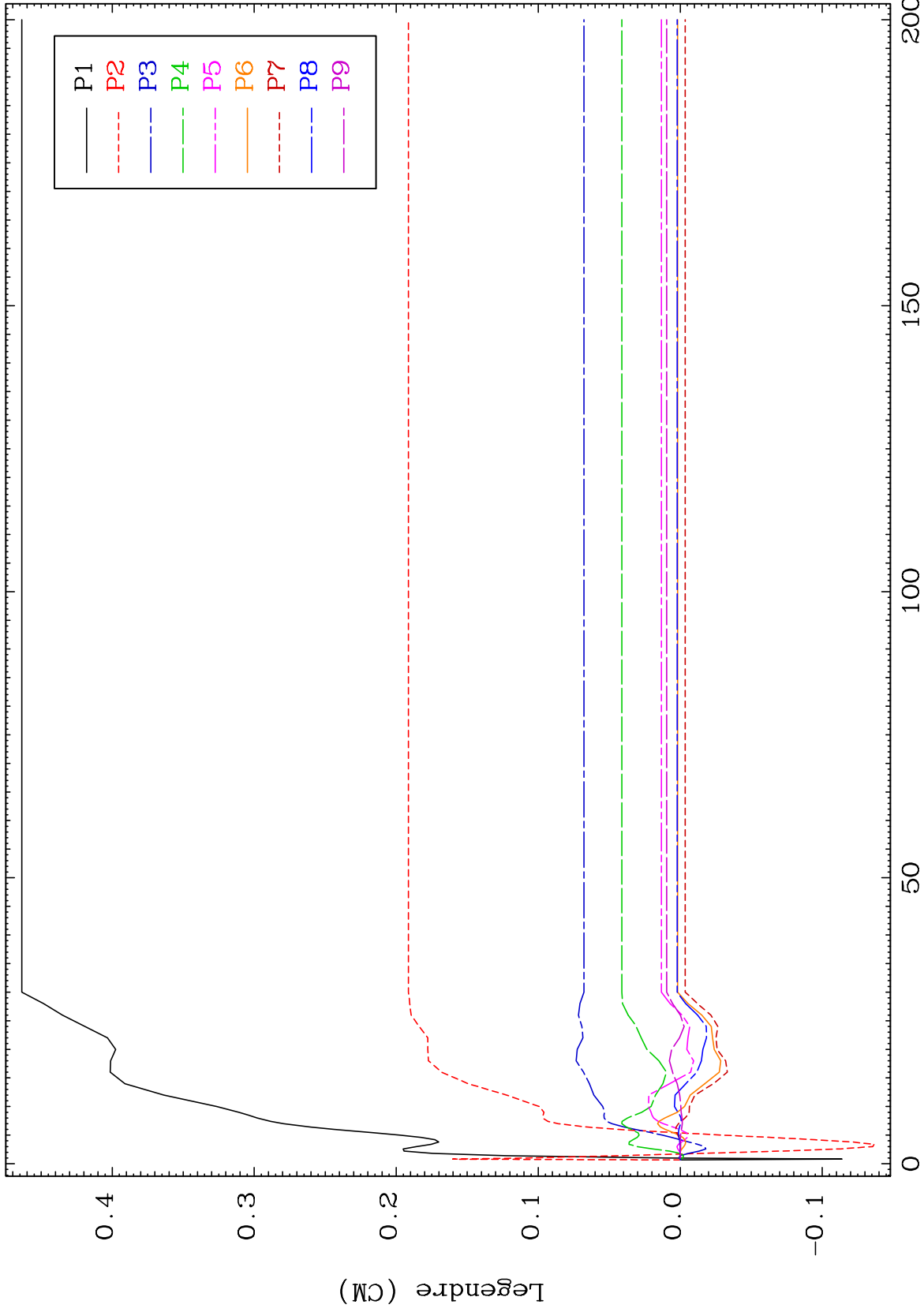
83

57-La-129

MAT 5698

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

57-La-129



84

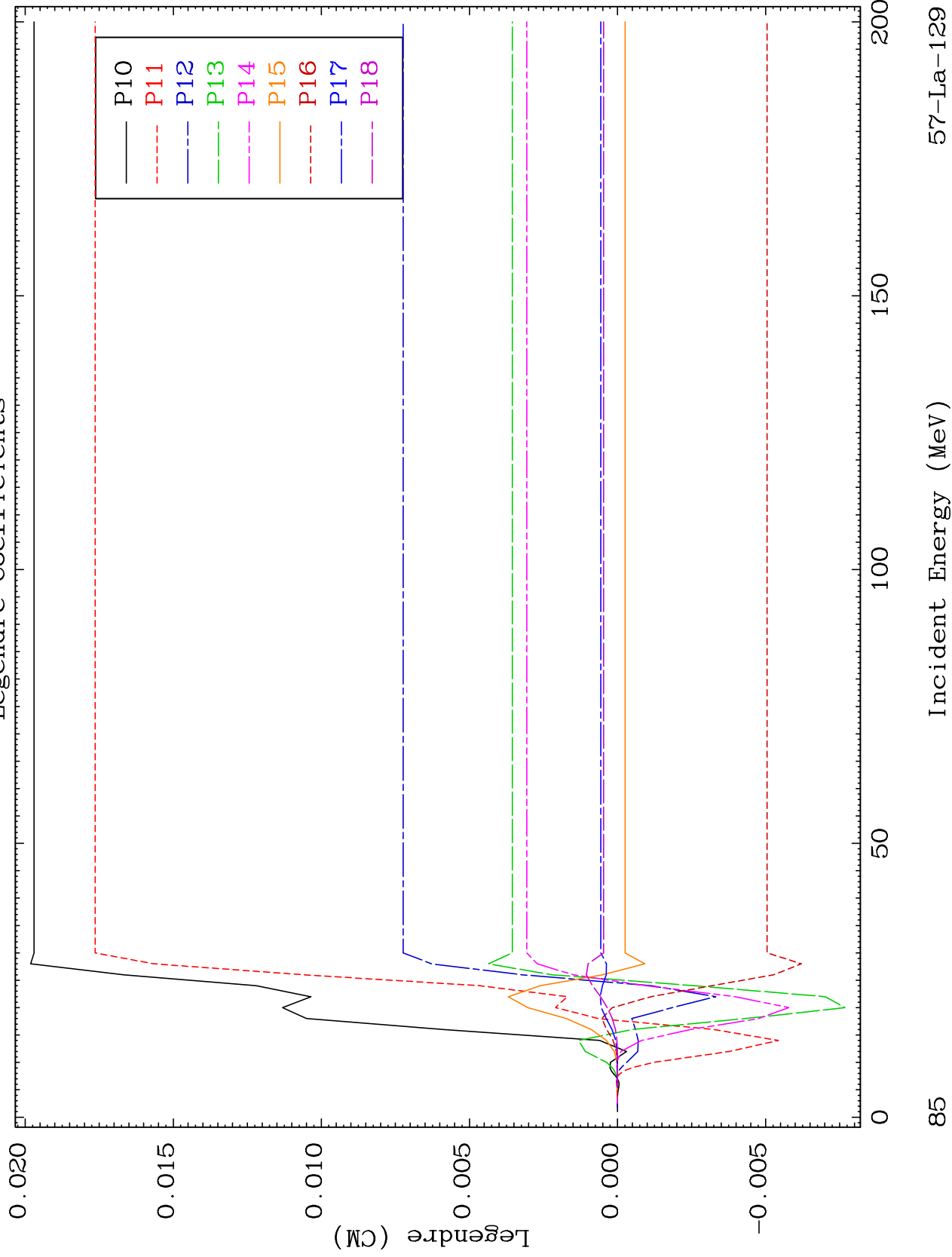
Incident Energy (MeV)

57-La-129

MAT 5698

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

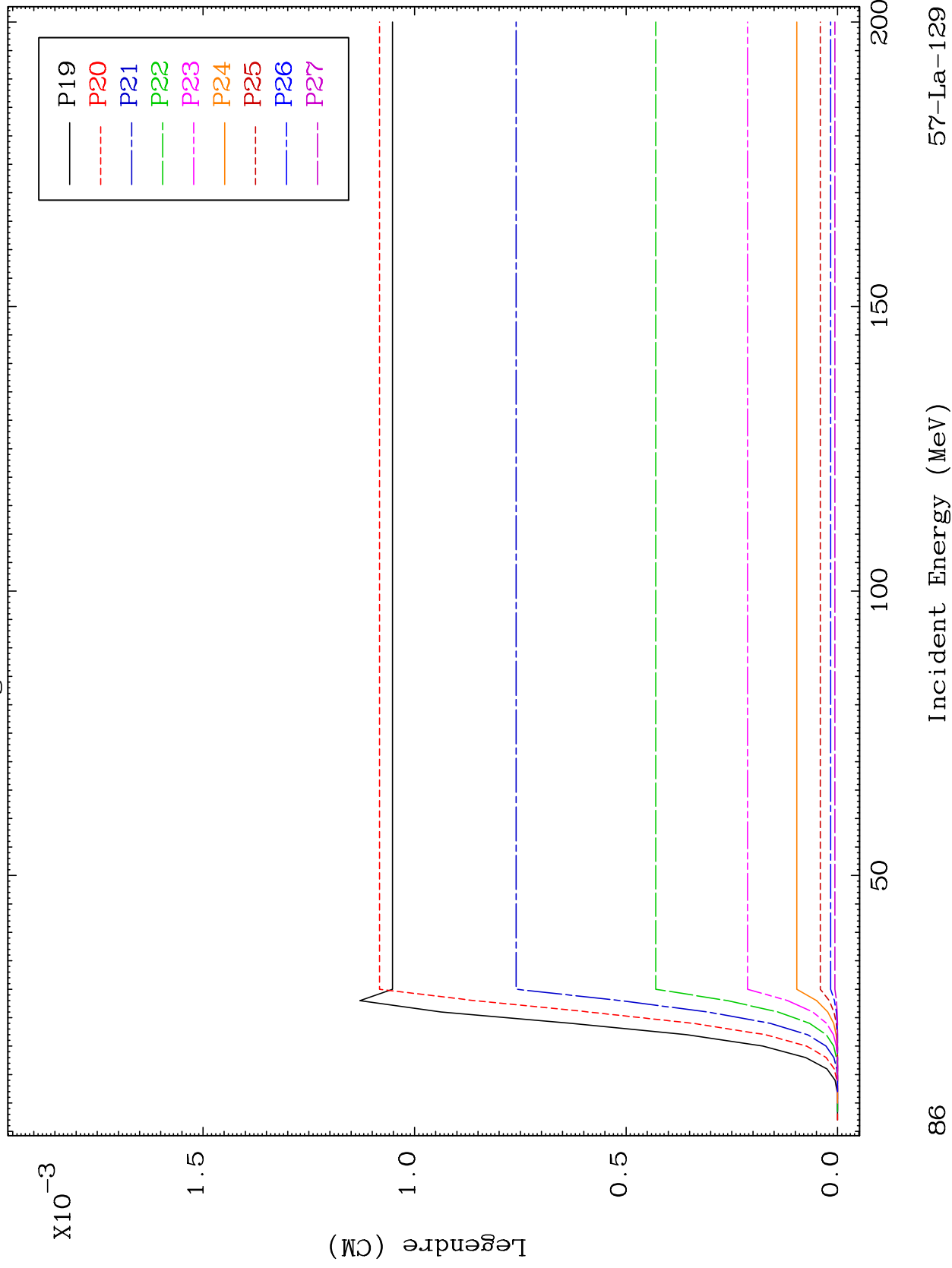
57-La-129



57-La-129

Incident Energy (MeV)

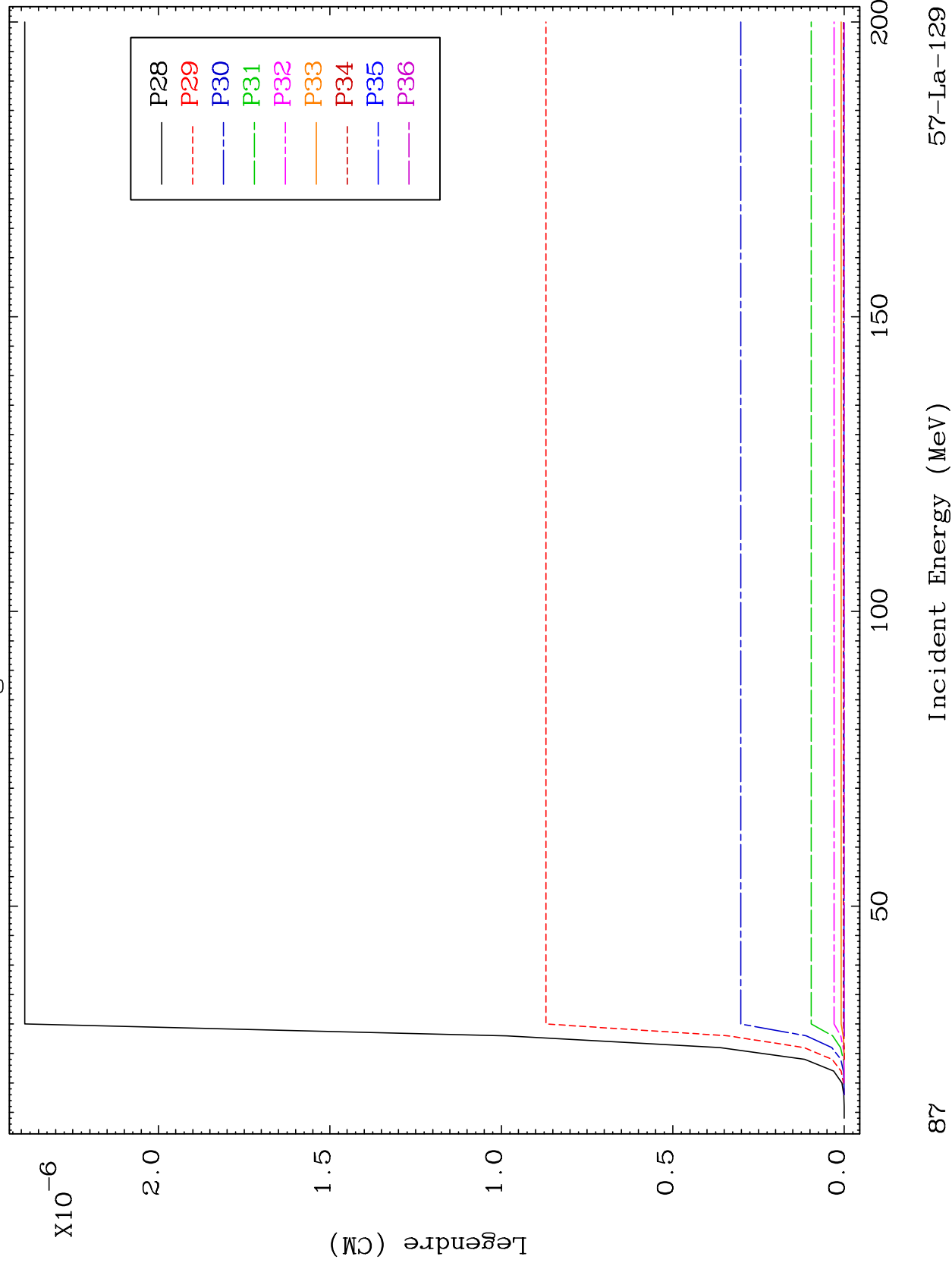
85



MAT 5698

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

57-La-129



87

Incident Energy (MeV)

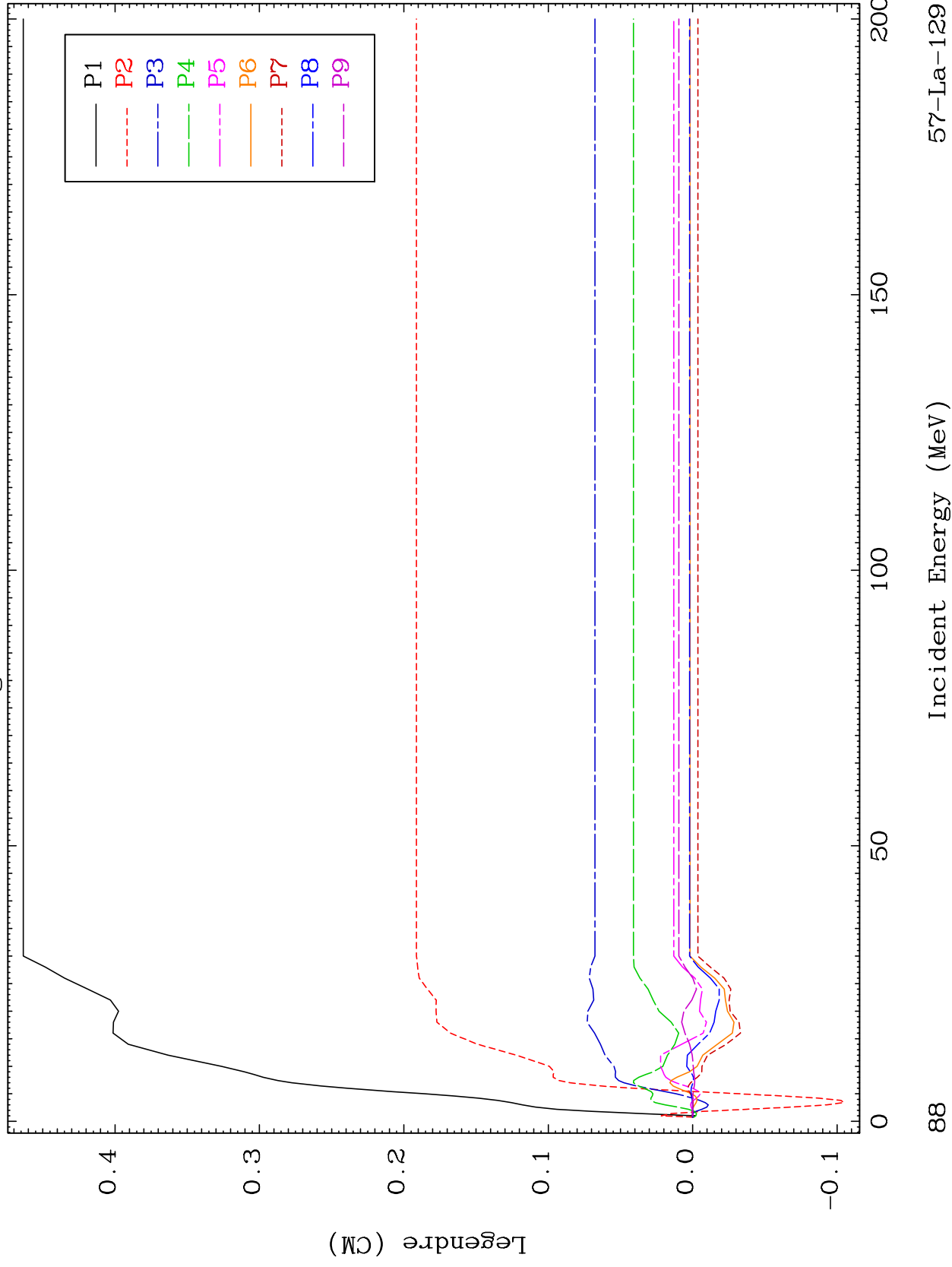
57-La-129



MAT 5698

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

57-La-129



57-La-129

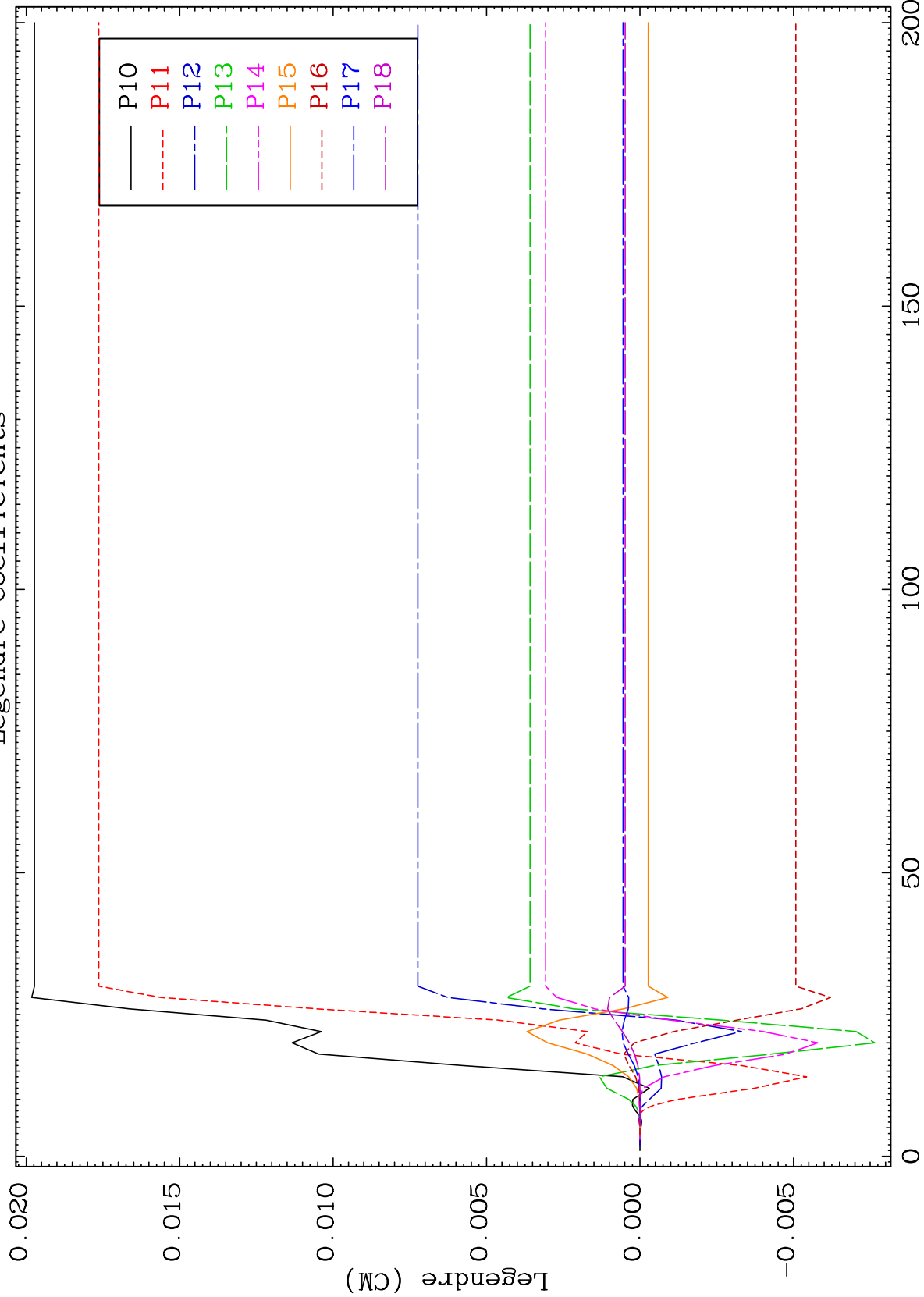
Incident Energy (MeV)

88

MAT 5698

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

57-La-129



89

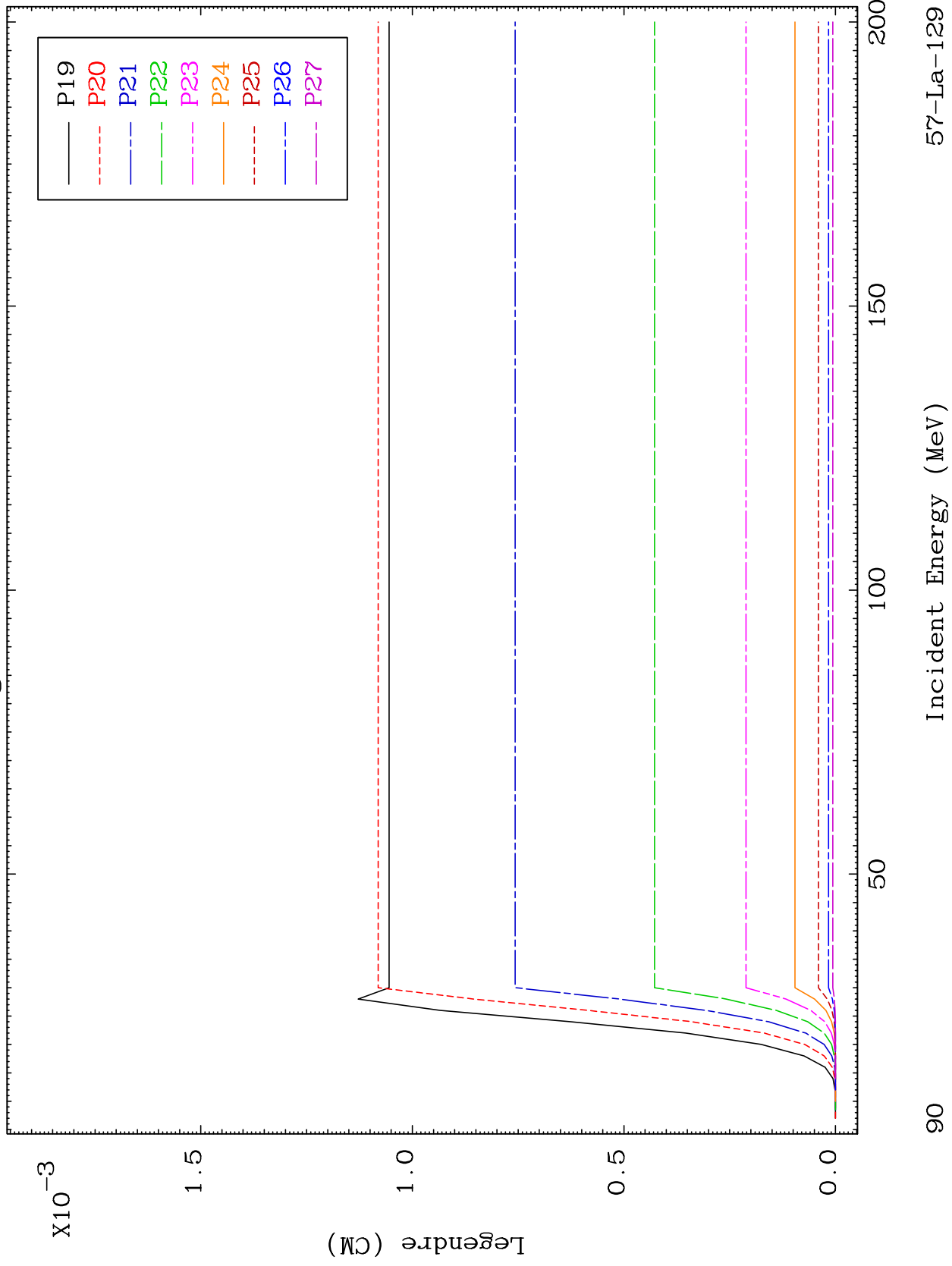
Incident Energy (MeV)

57-La-129

MAT 5698

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

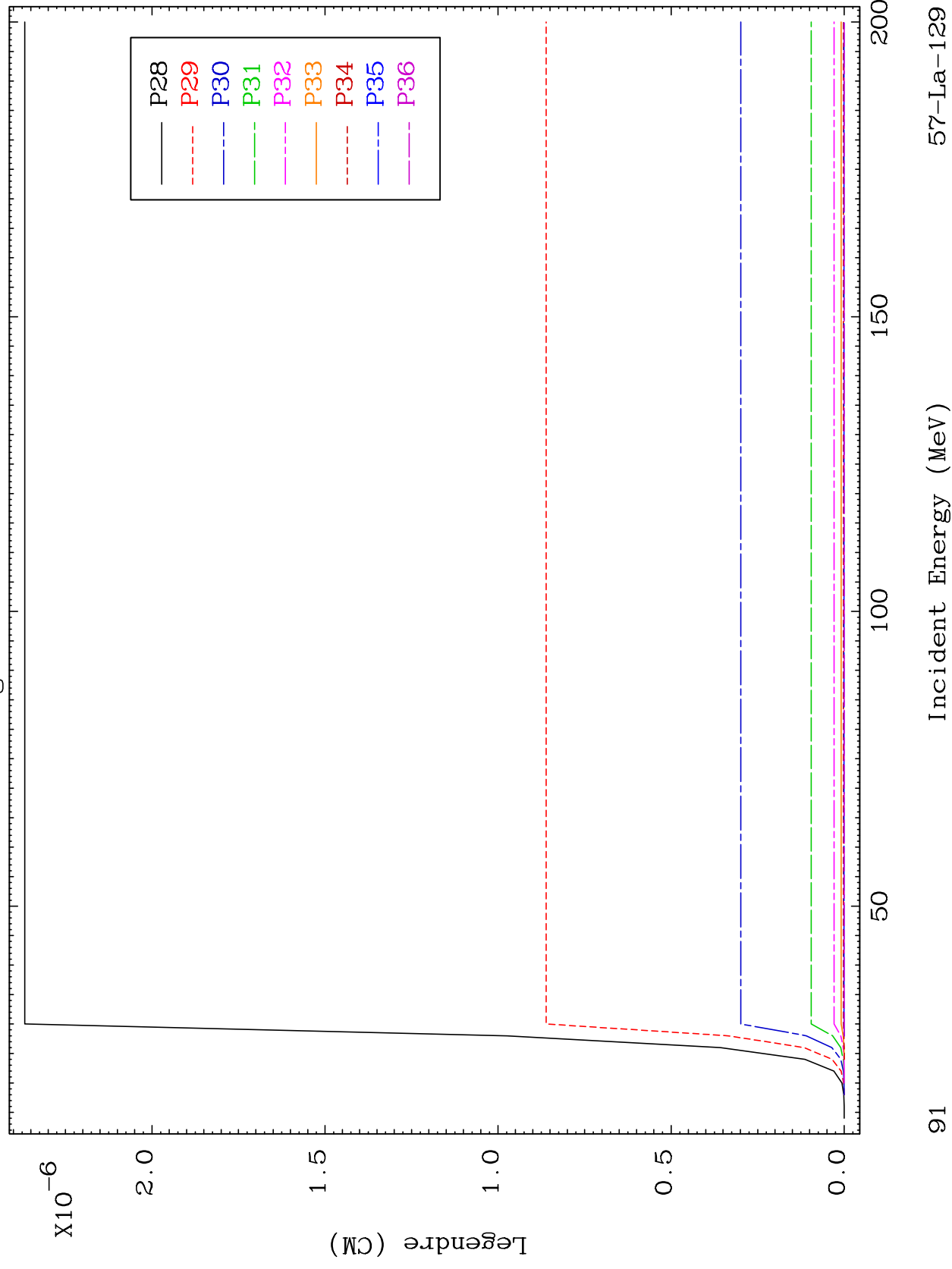
57-La-129



MAT 5698

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

57-La-129



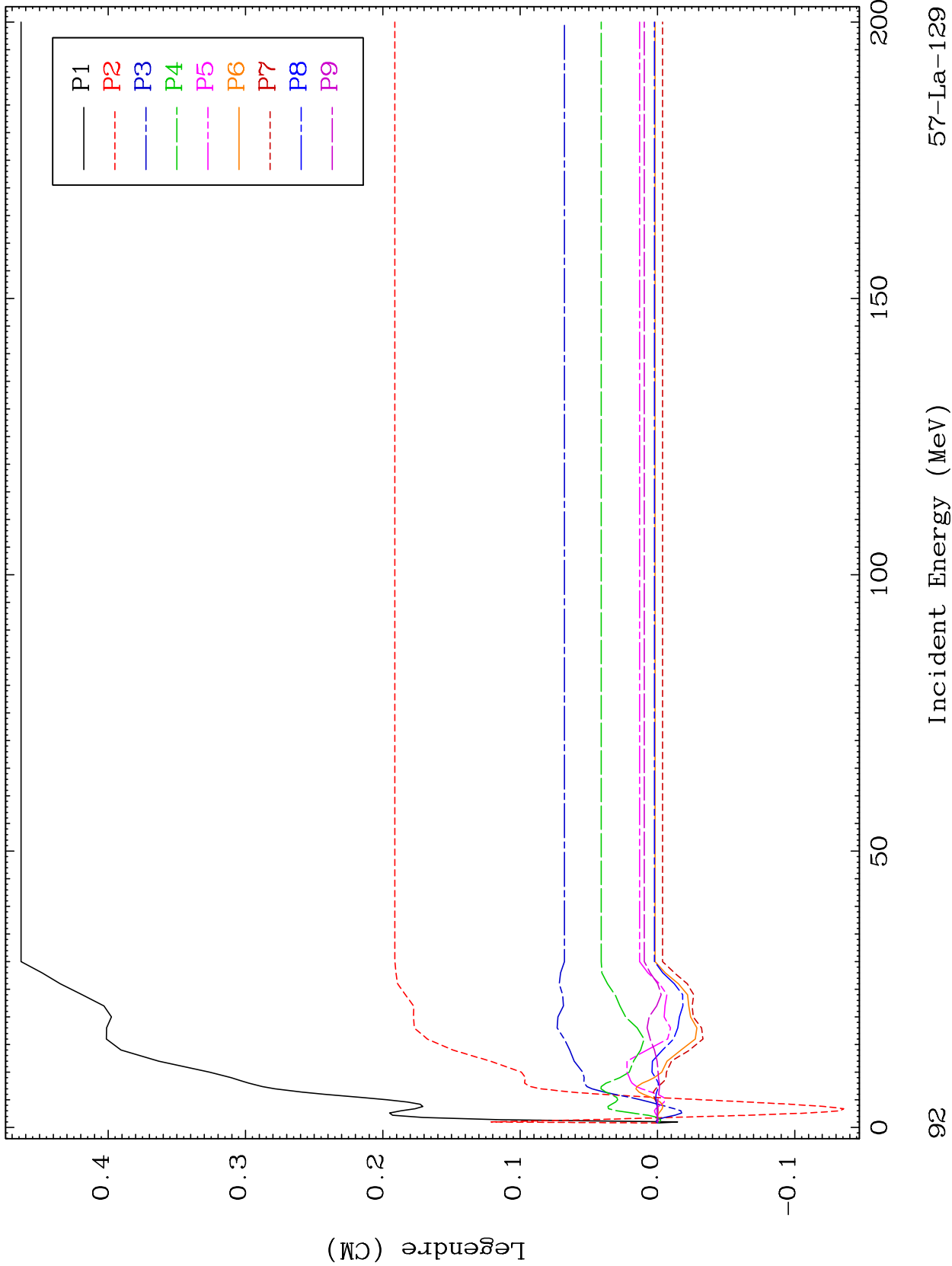
91

57-La-129

MAT 5698

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

57-La-129



57-La-129

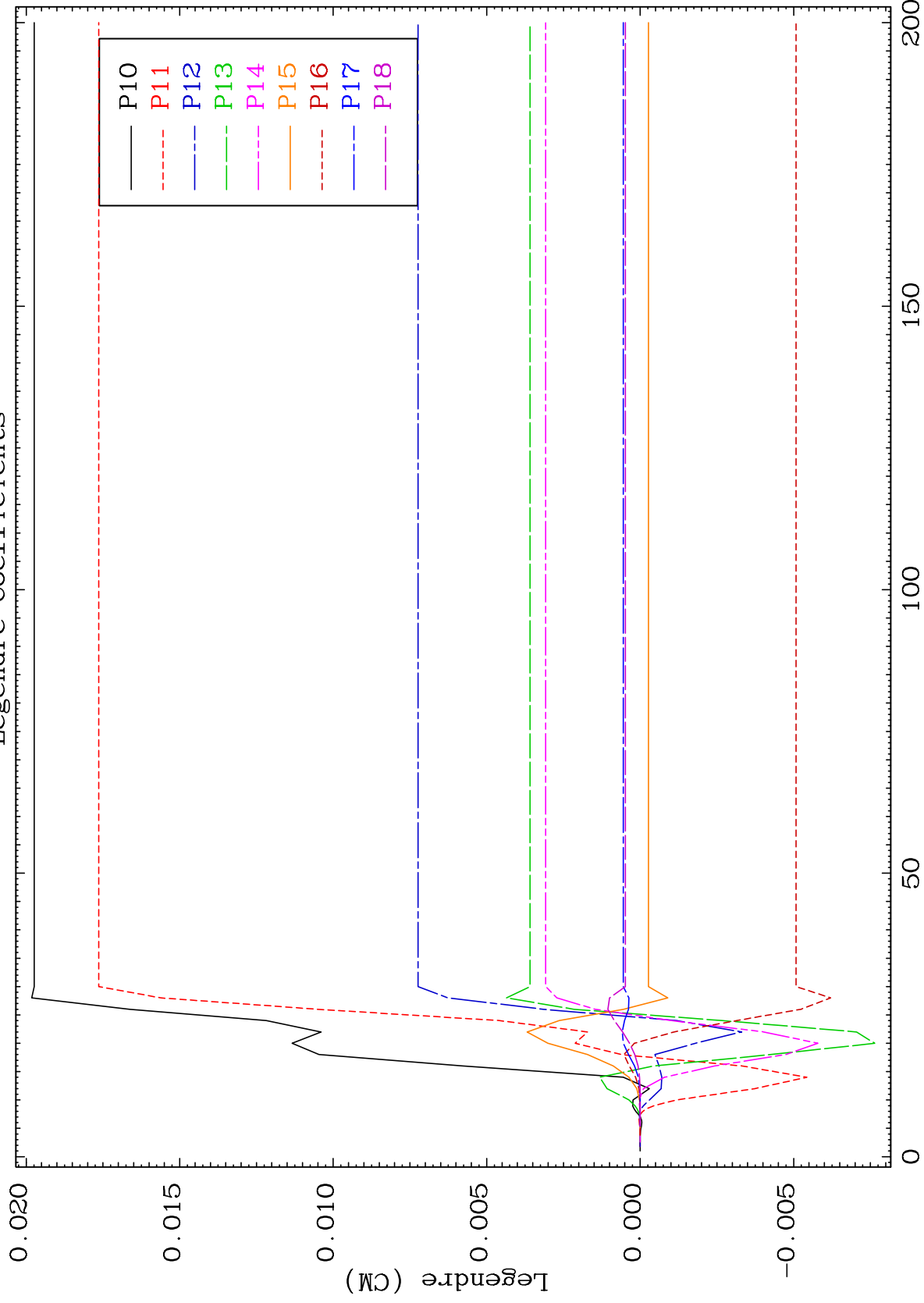
Incident Energy (MeV)

92

MAT 5698

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

57-La-129



93

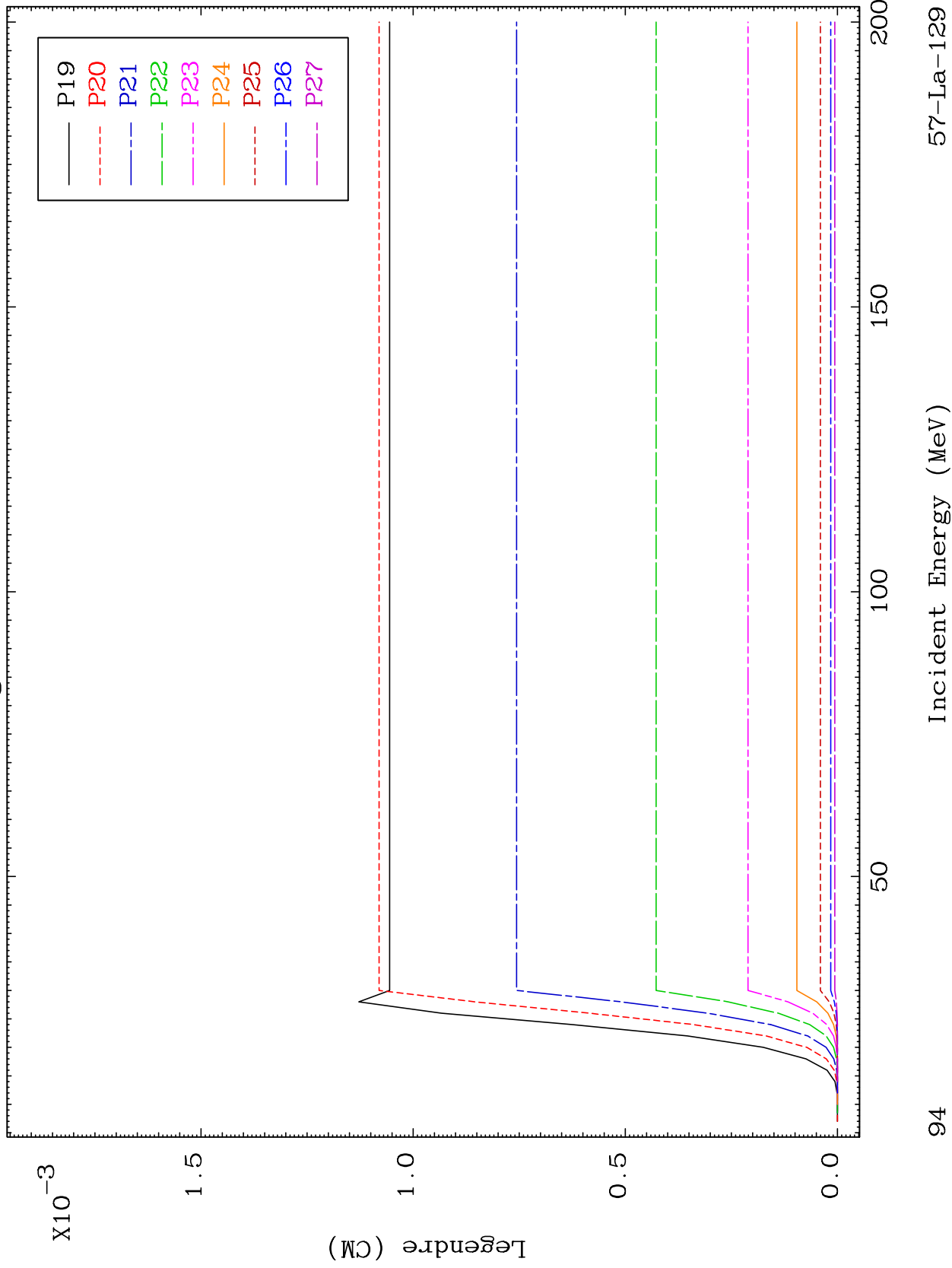
Incident Energy (MeV)

57-La-129

MAT 5698

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

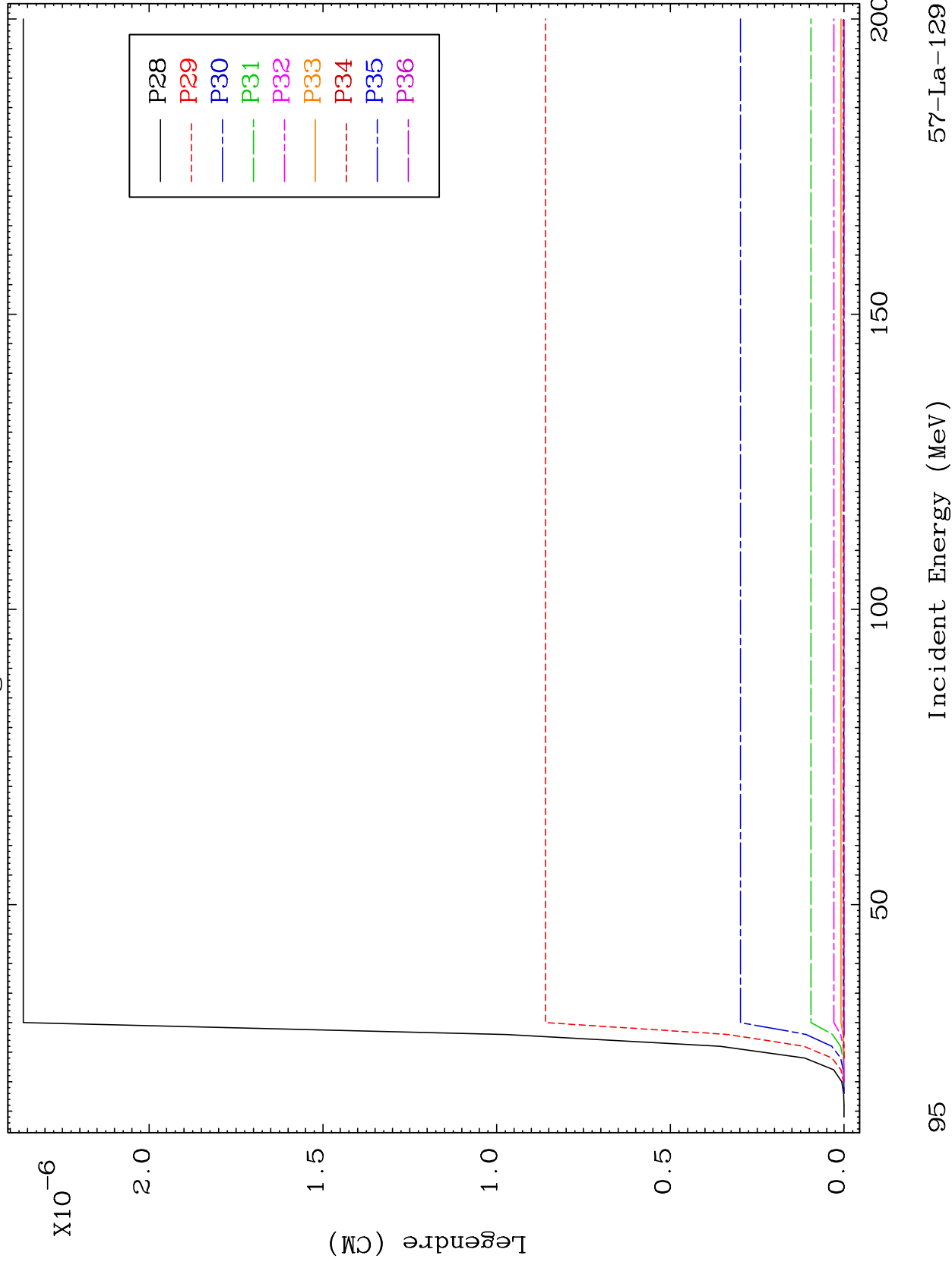
57-La-129



MAT 5698

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

57-La-129



57-La-129

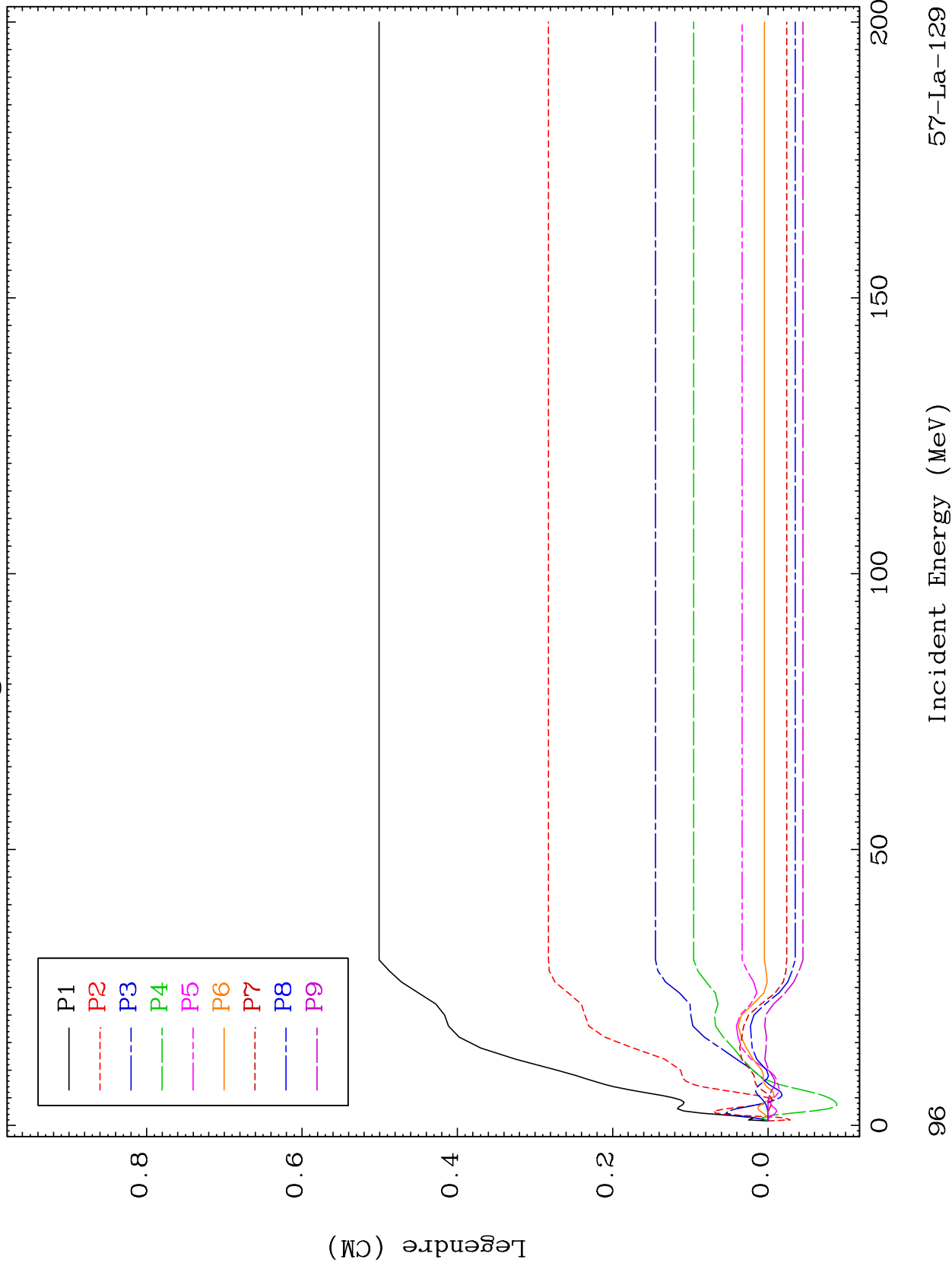
95



MAT 5698

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

57-La-129



96

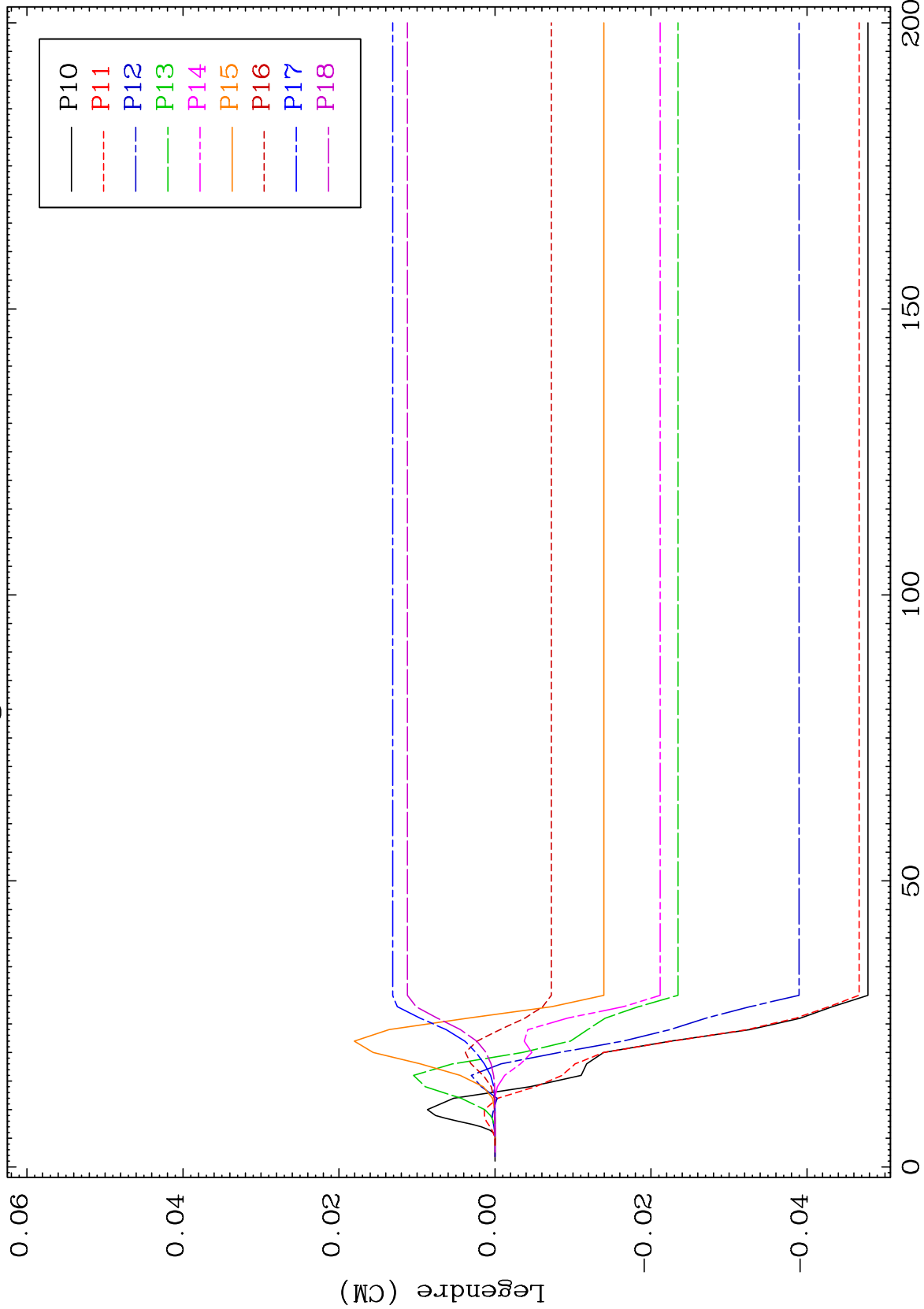
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



97

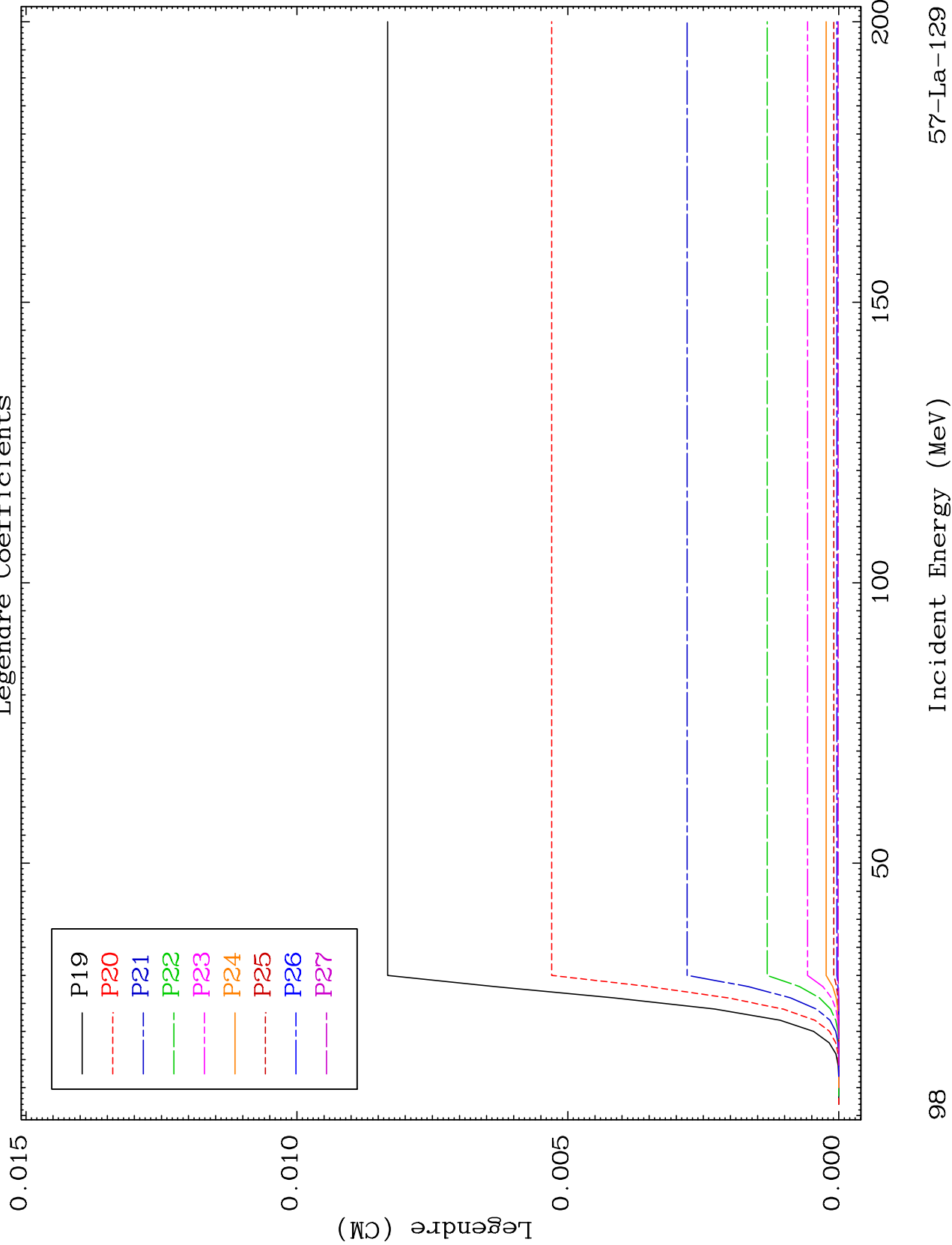
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



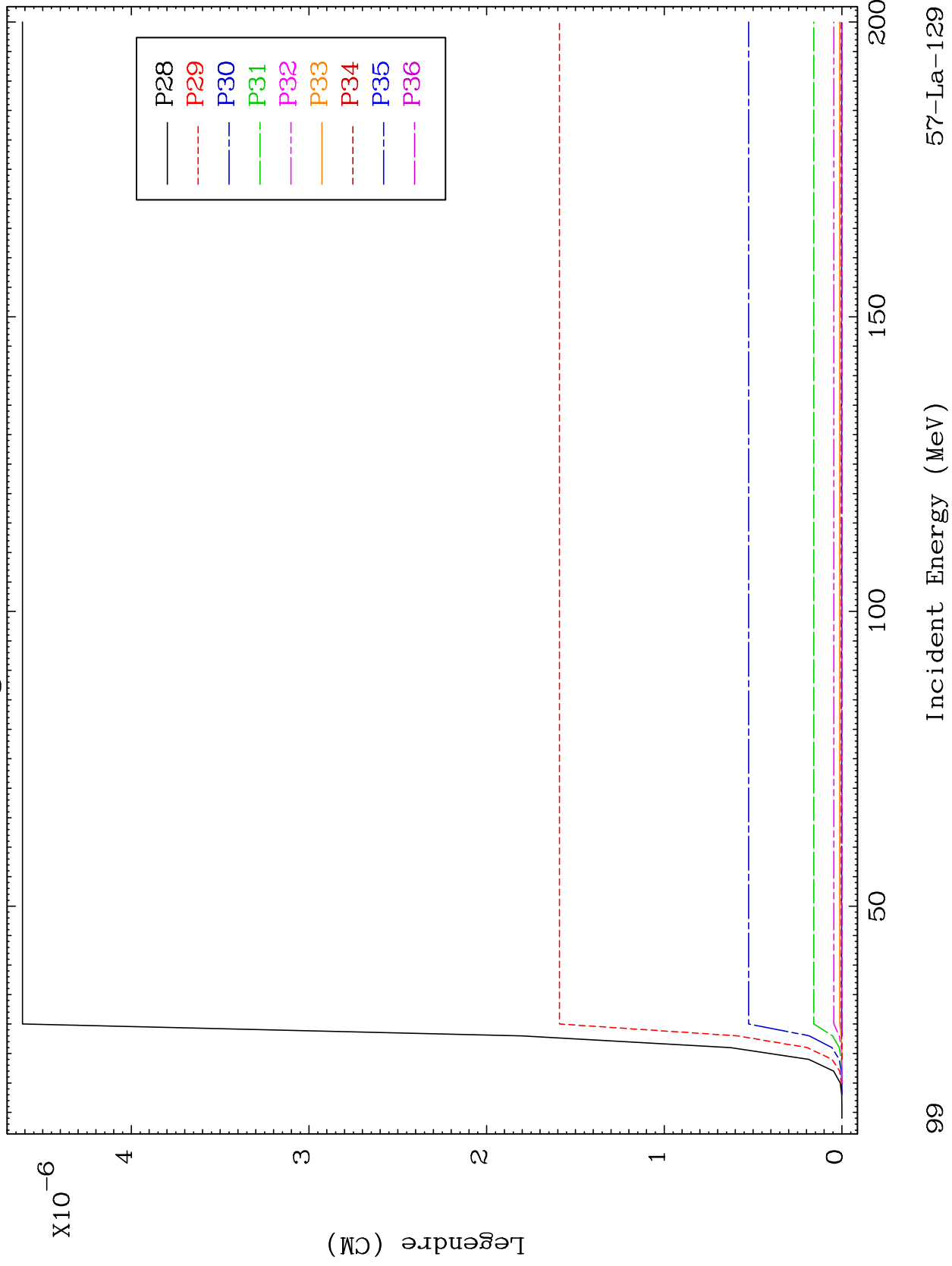
98

57-La-129

MAT 5698

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

57-La-129



99

Incident Energy (MeV)

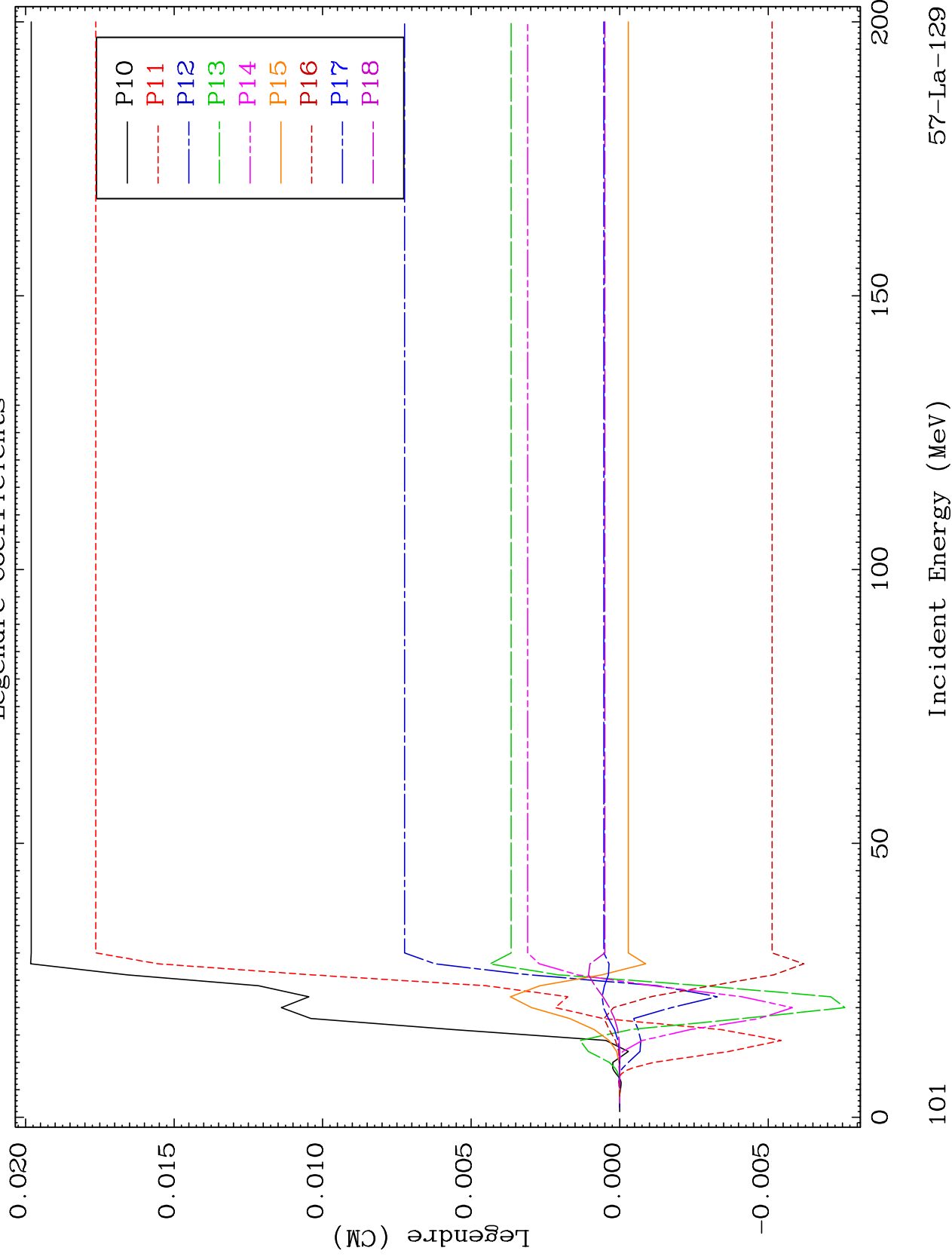
57-La-129



MAT 5698

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

57-La-129



57-La-129

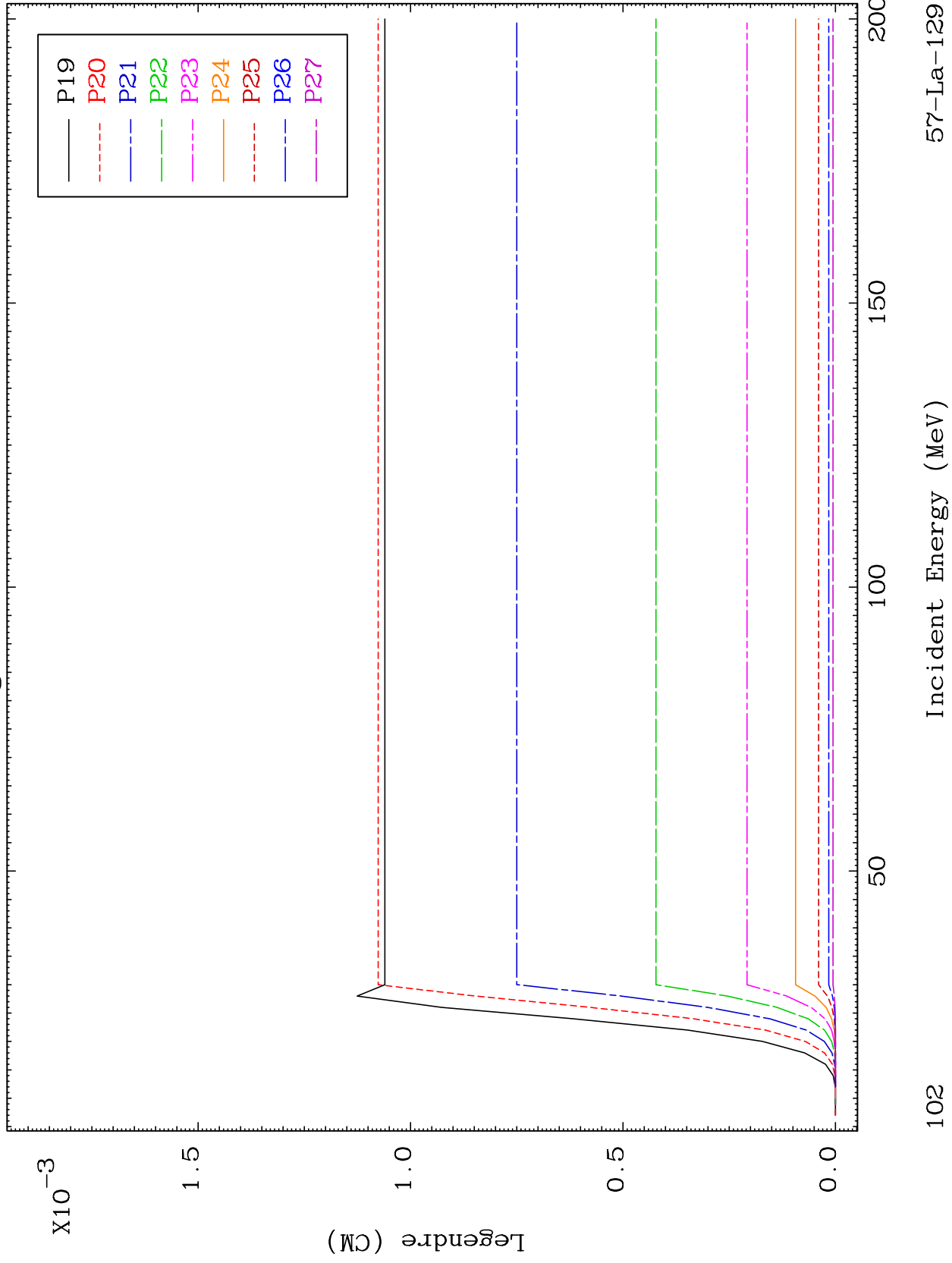
Incident Energy (MeV)

101

MAT 5698

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

57-La-129



57-La-129

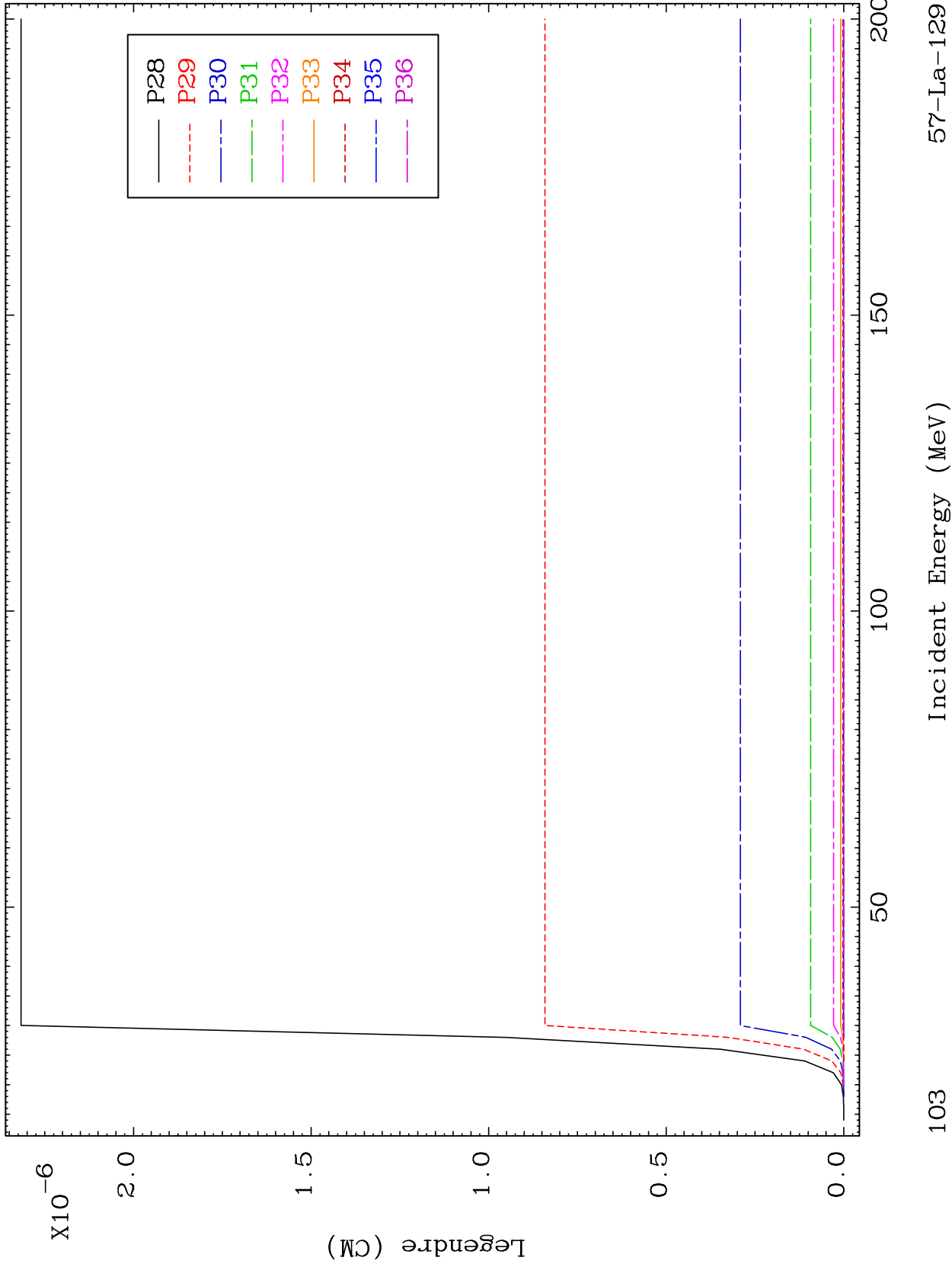
Incident Energy (MeV)

102

MAT 5698

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

57-La-129



103

Incident Energy (MeV)

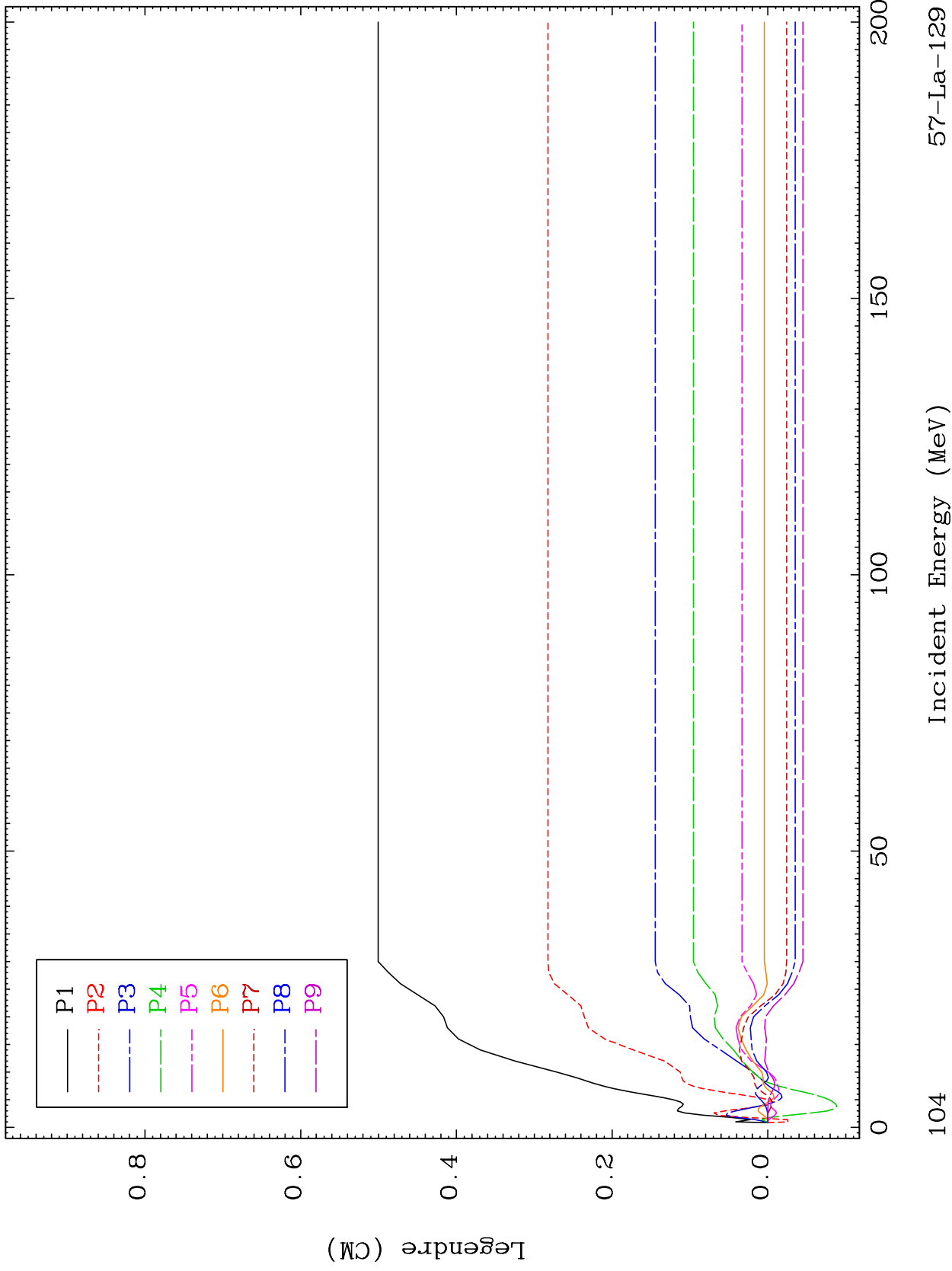
57-La-129



MAT 5698

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

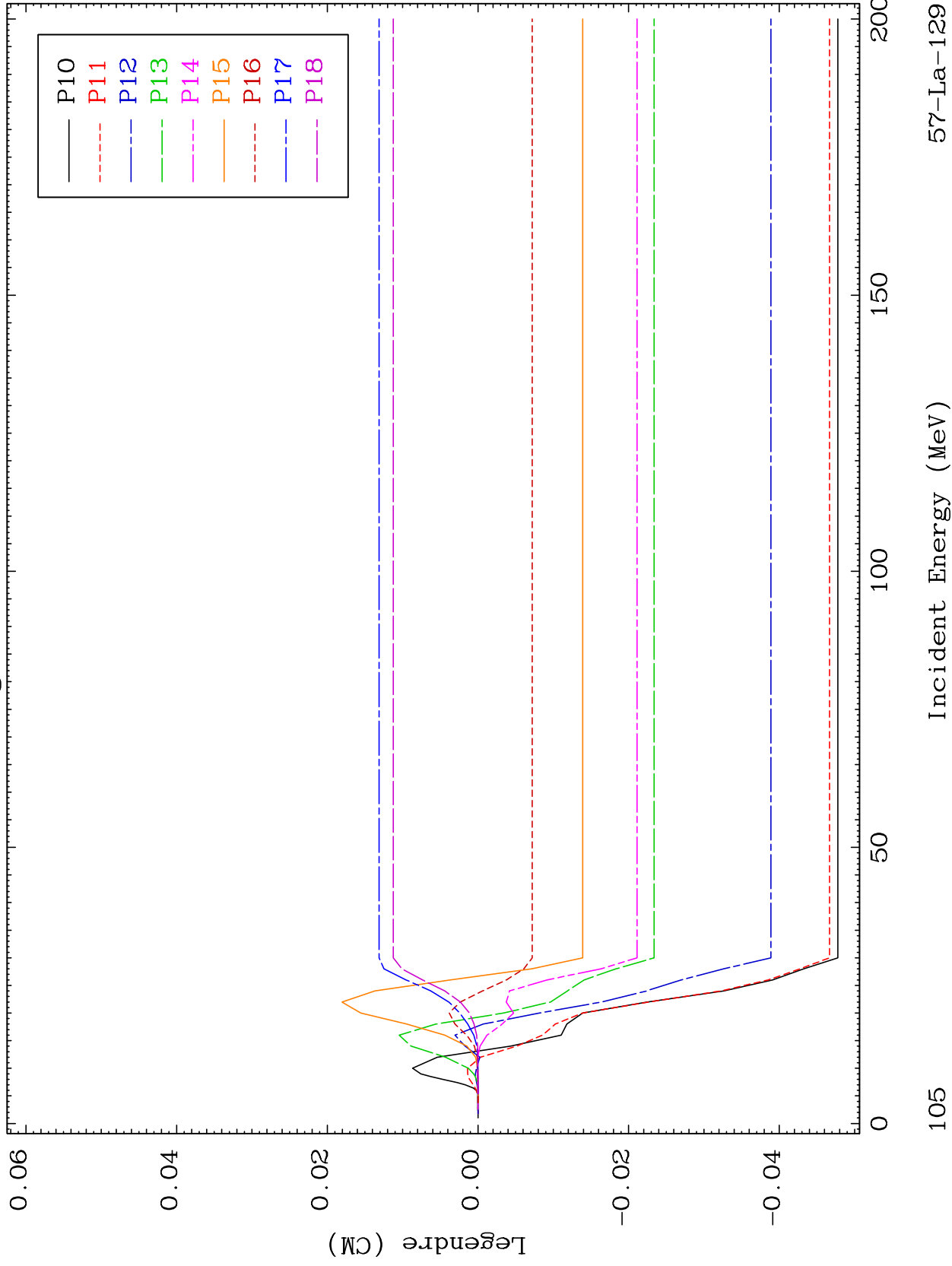
57-La-129



MAT 5698

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

57-La-129



57-La-129

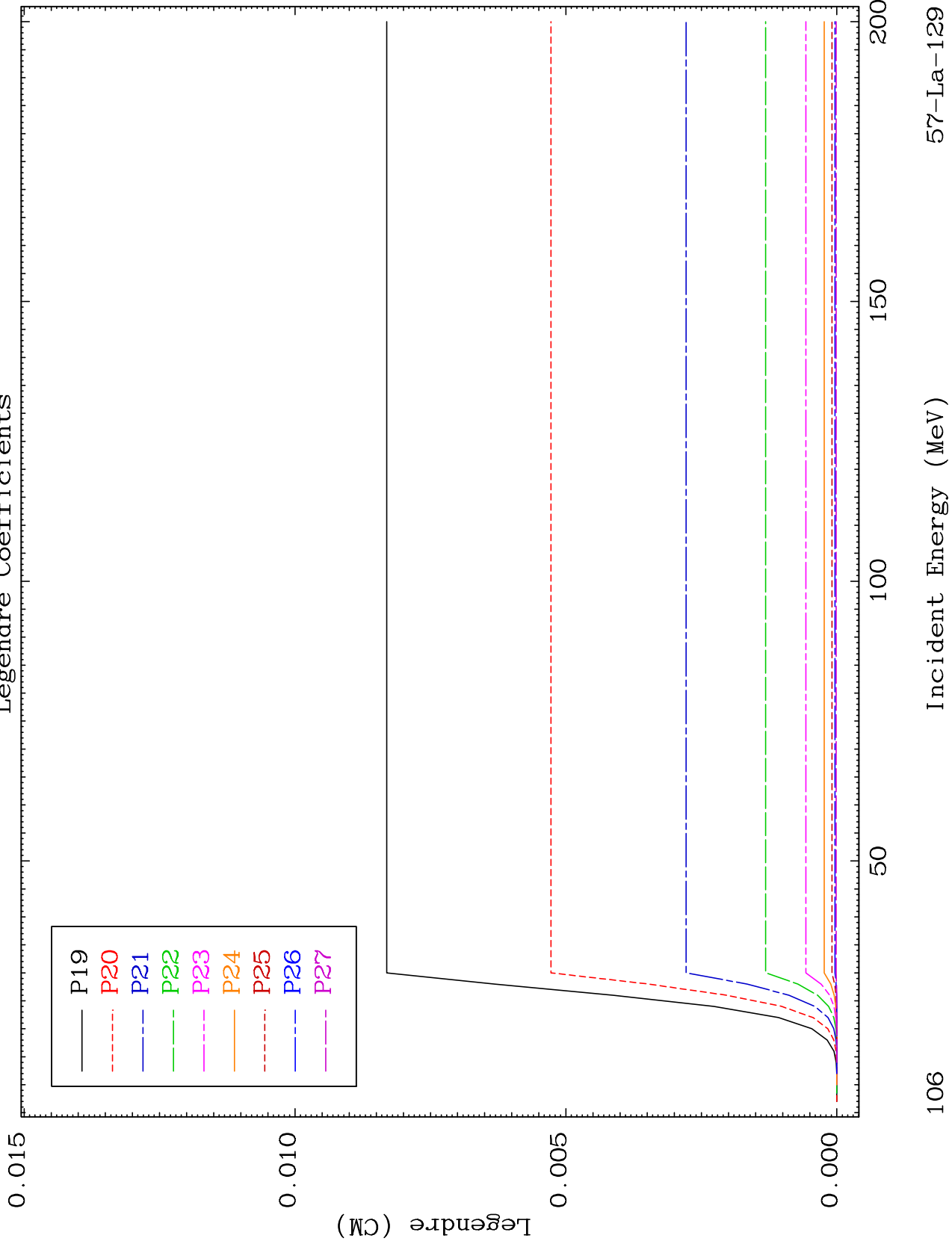
Incident Energy (MeV)

105

MAT 5698

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

57-La-129



106

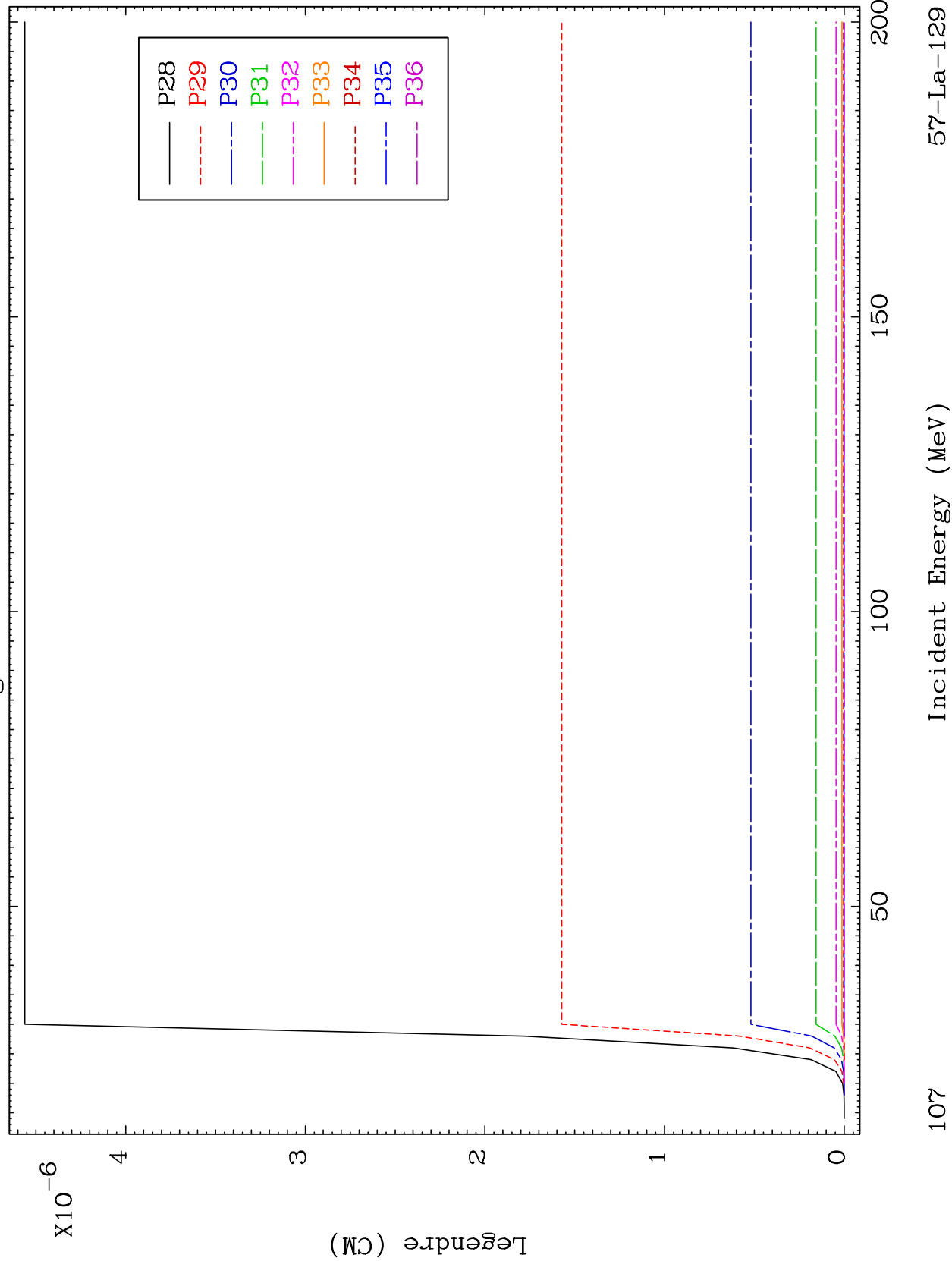
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



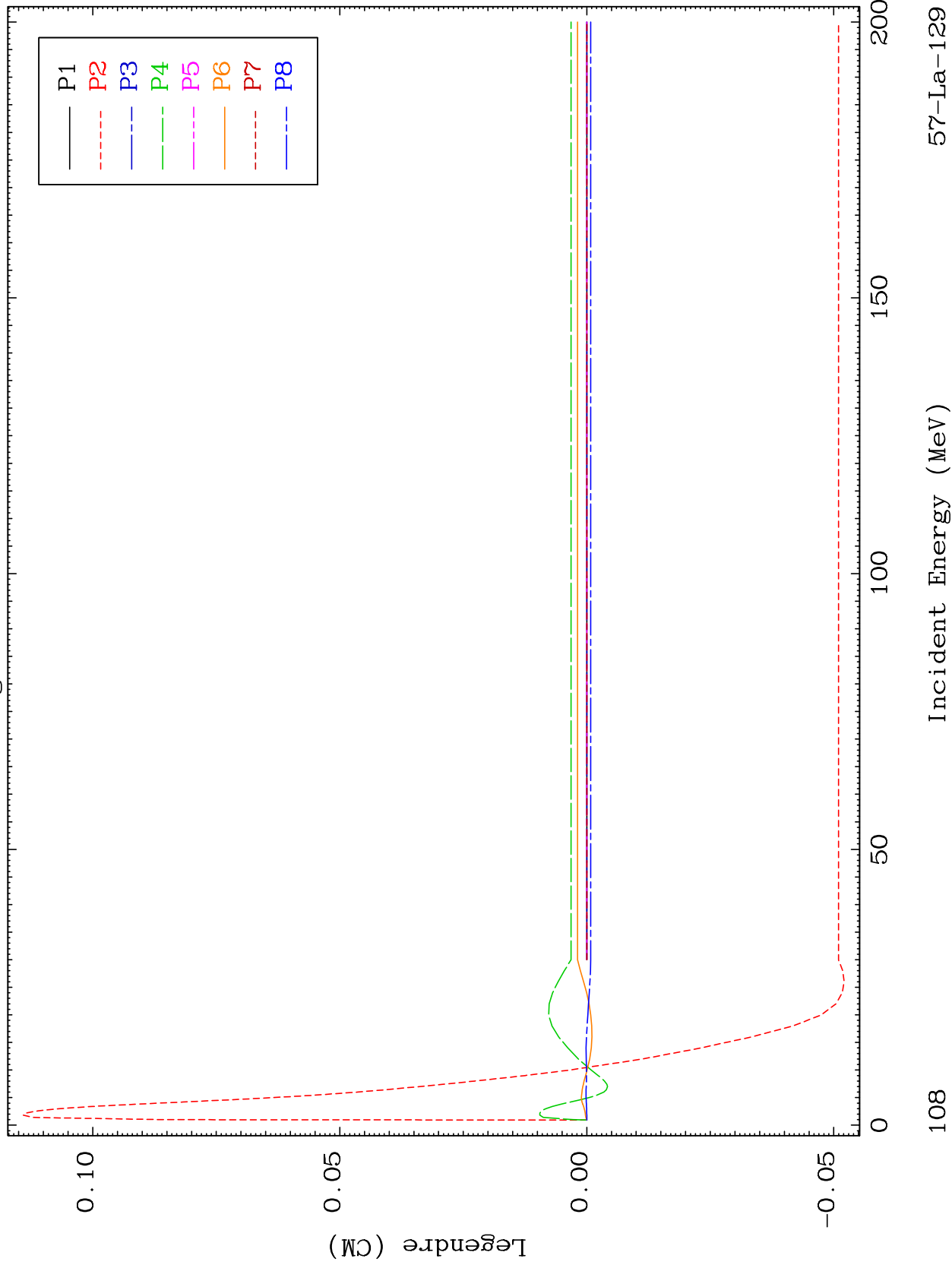
107

57-La-129

MAT 5698

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

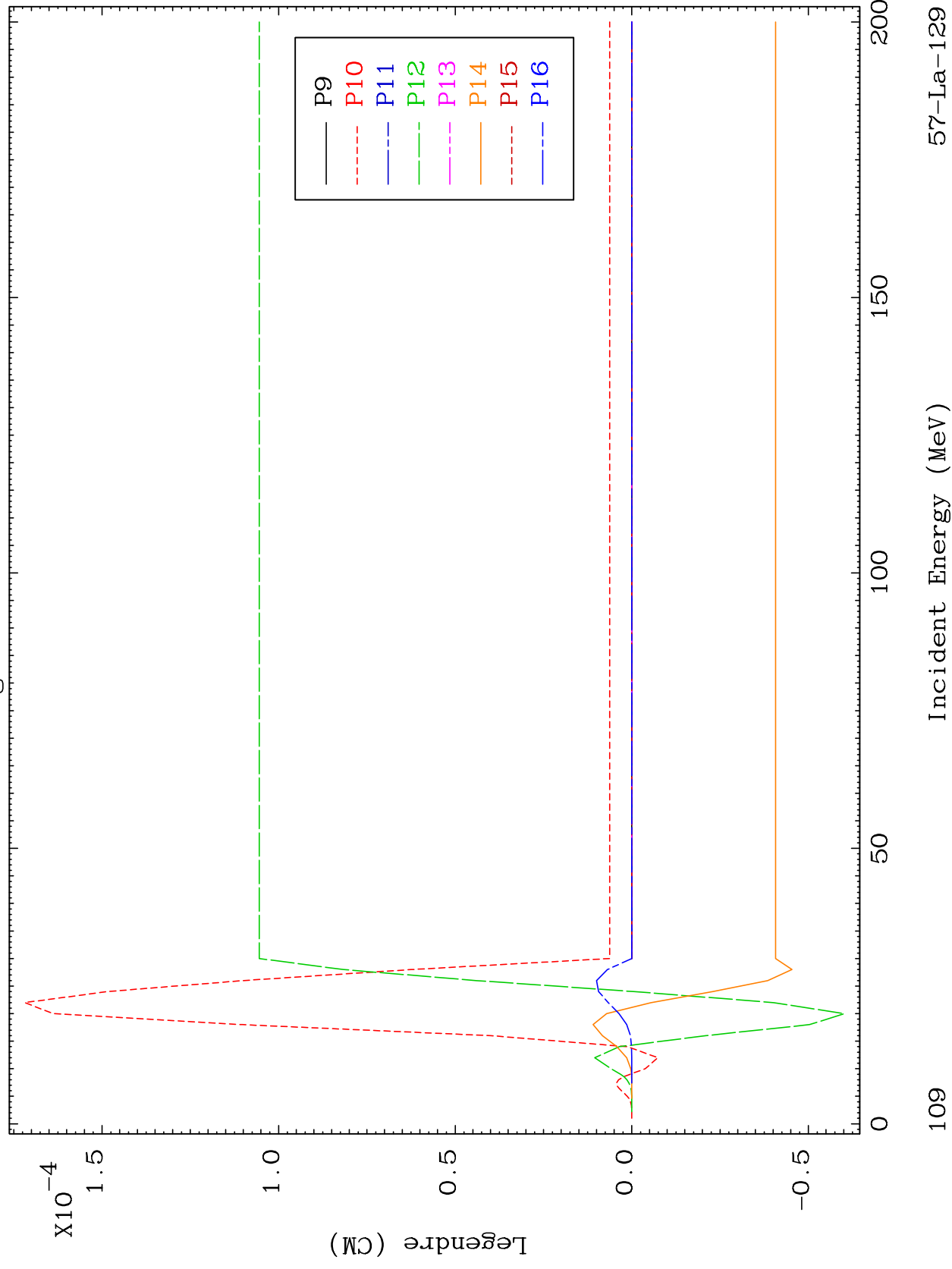
57-La-129



MAT 5698

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

57-La-129



57-La-129

Incident Energy (MeV)

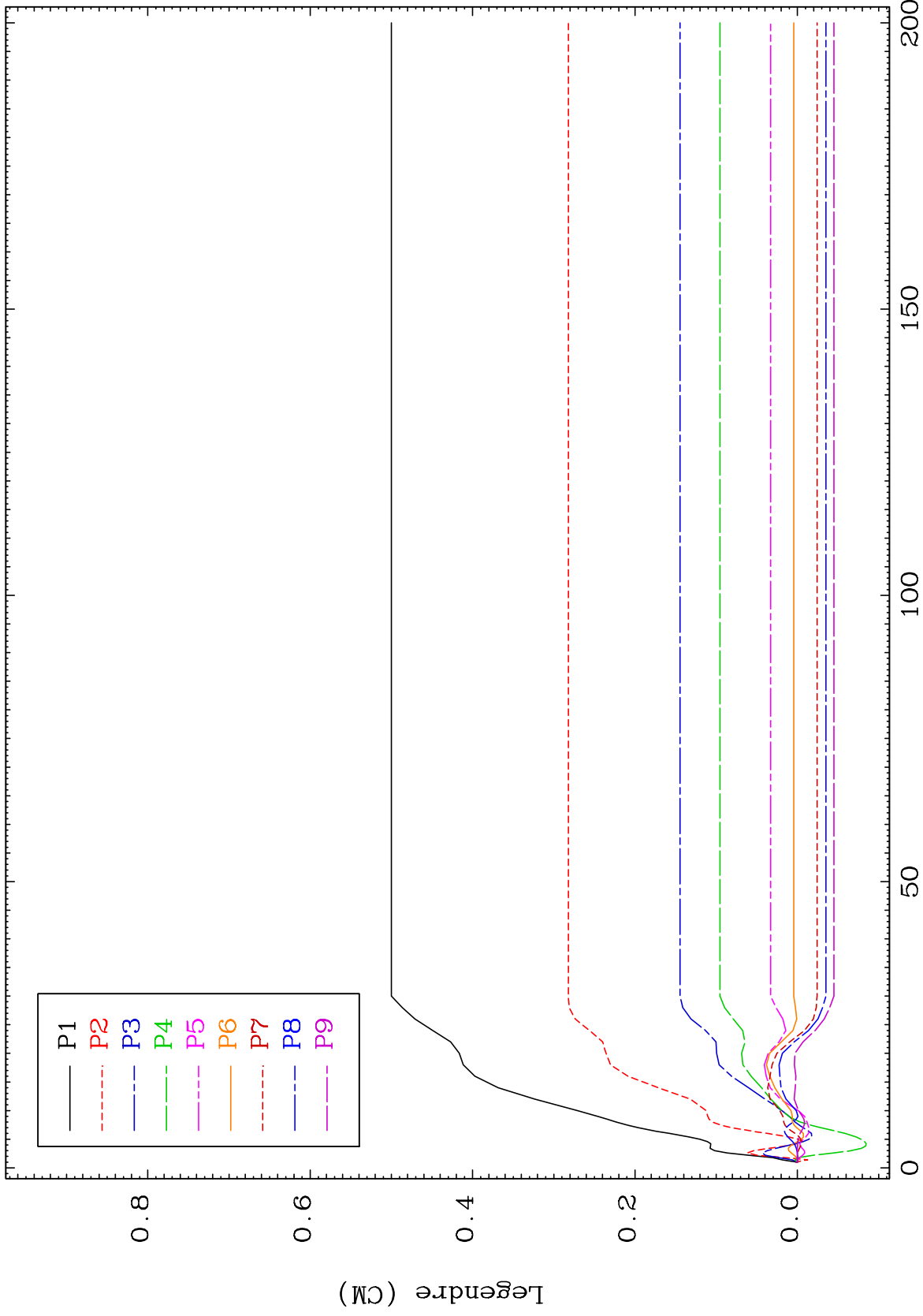
109



MAT 5698

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

57-La-129



111

Incident Energy (MeV)

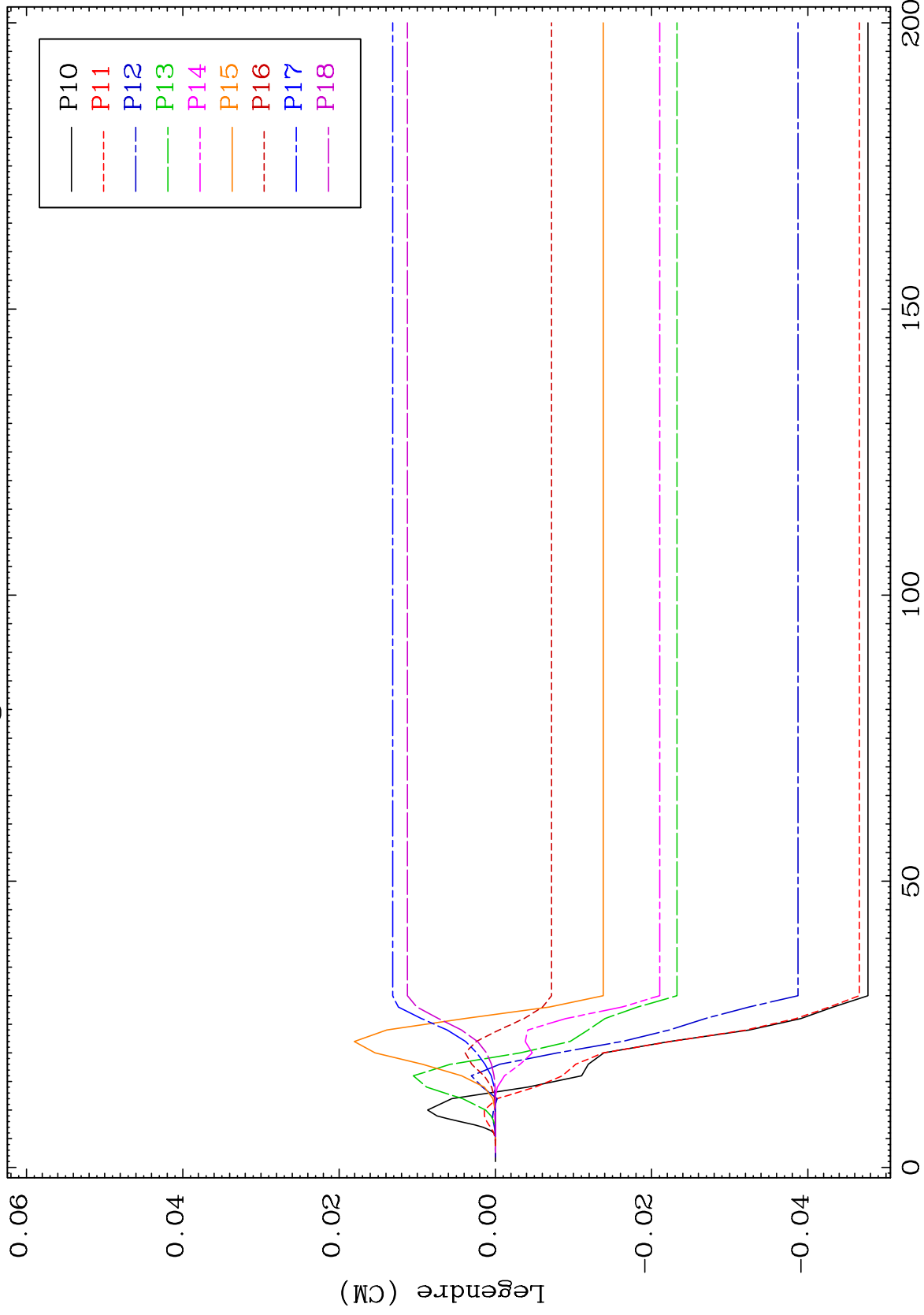
57-La-129



MAT 5698

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

57-La-129



112

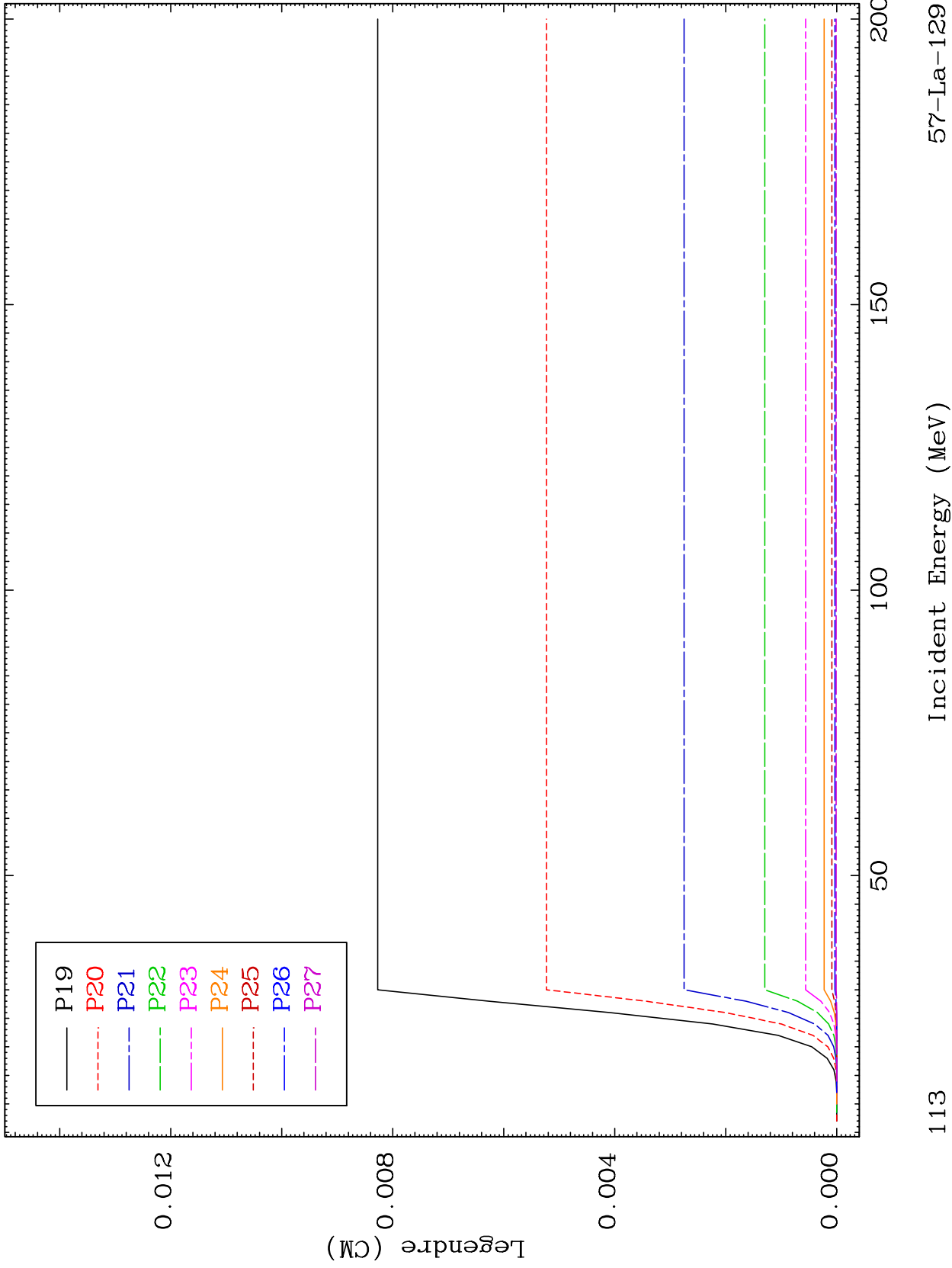
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



113

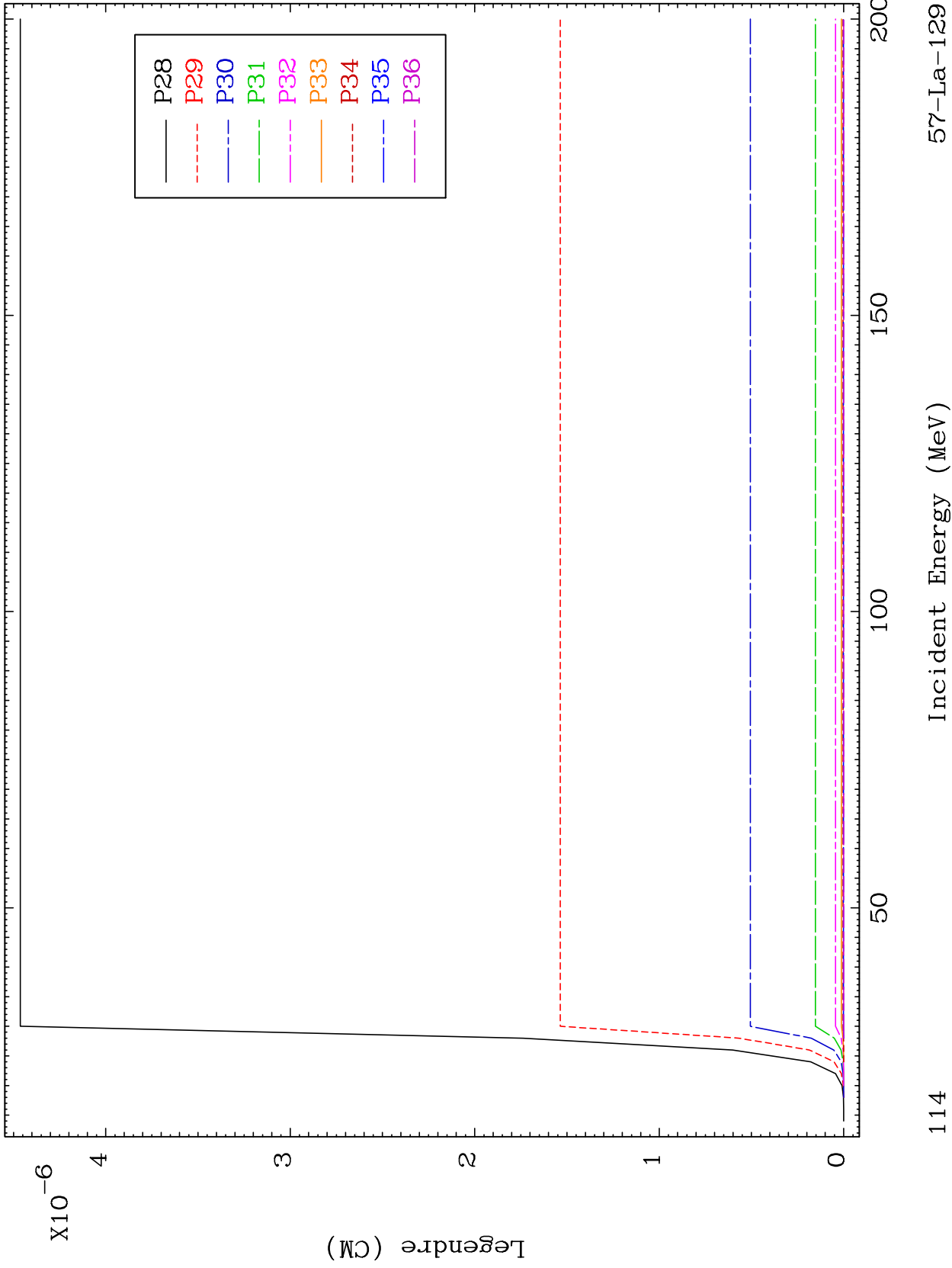
Incident Energy (MeV)

57-La-129

MAT 5698

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

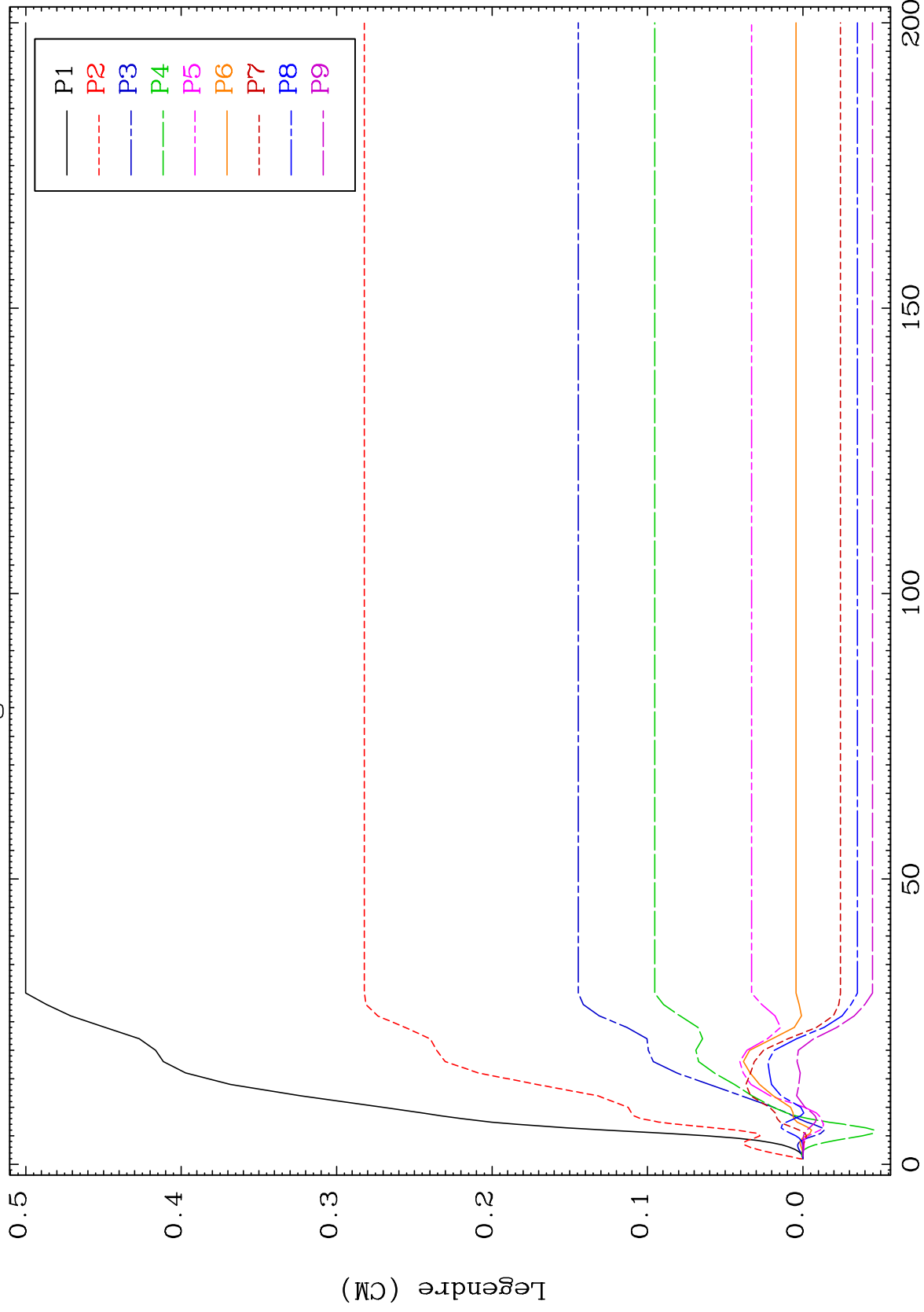
57-La-129



MAT 5698

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

57-La-129



115

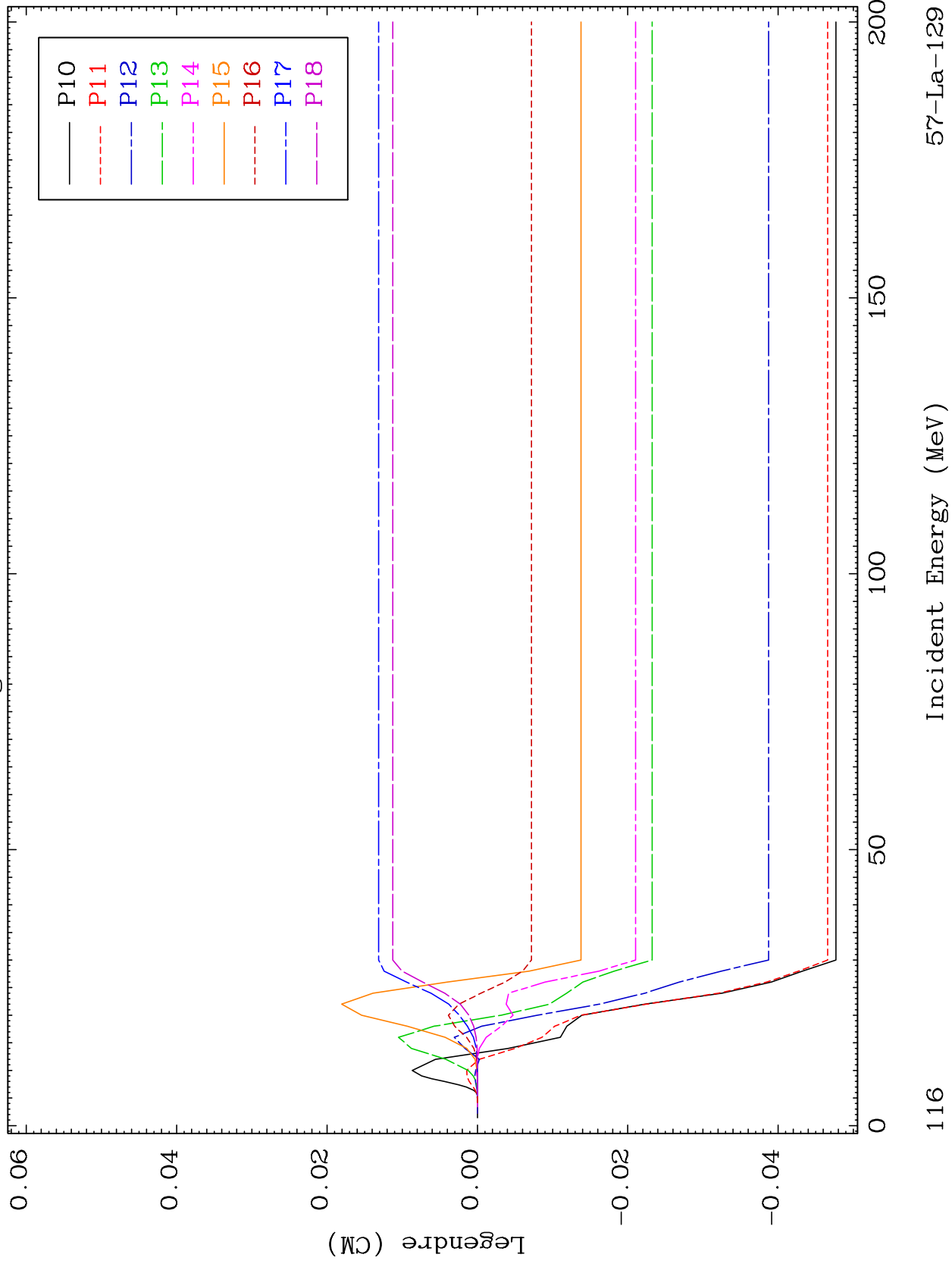
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



116

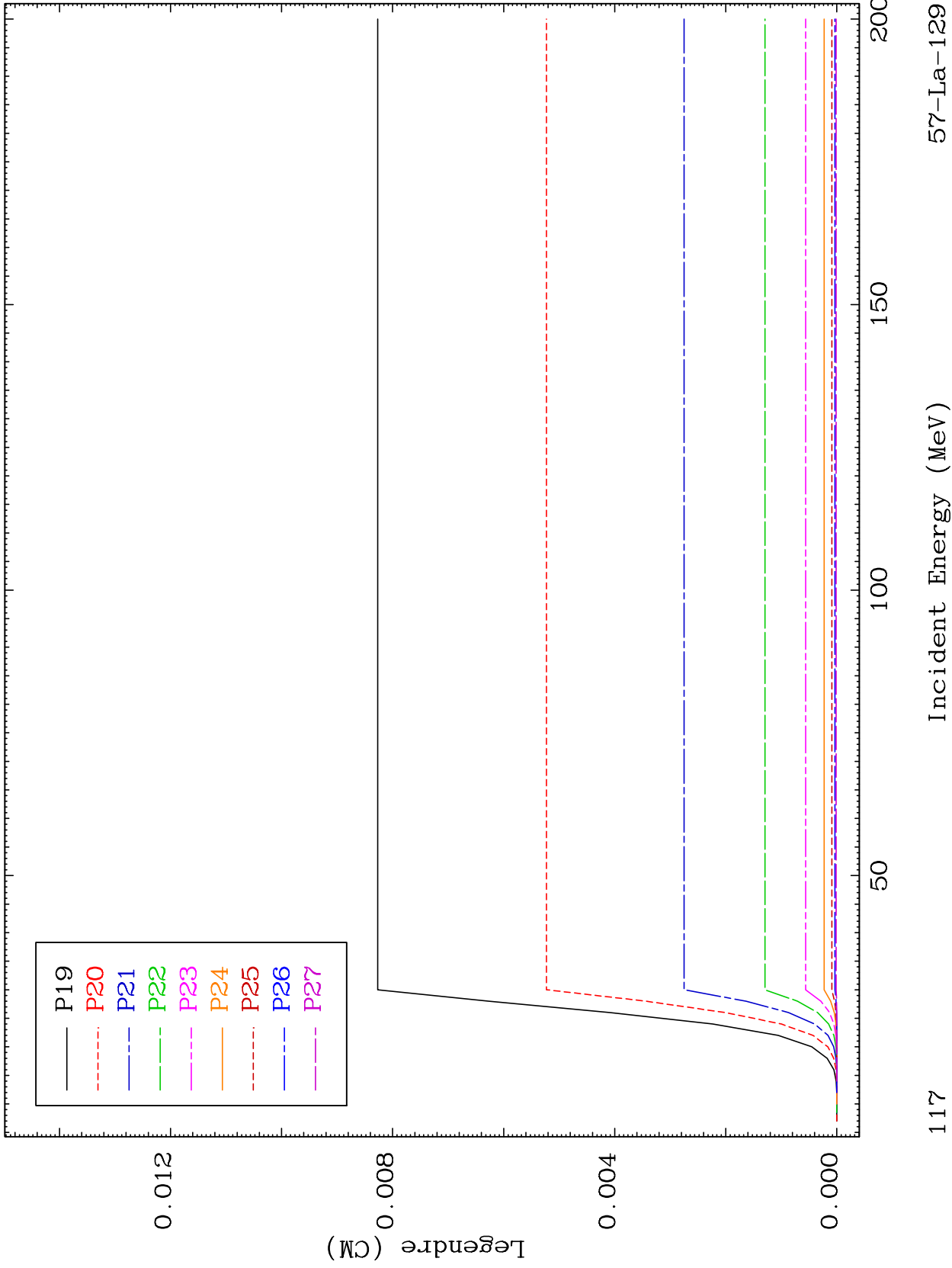
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



117

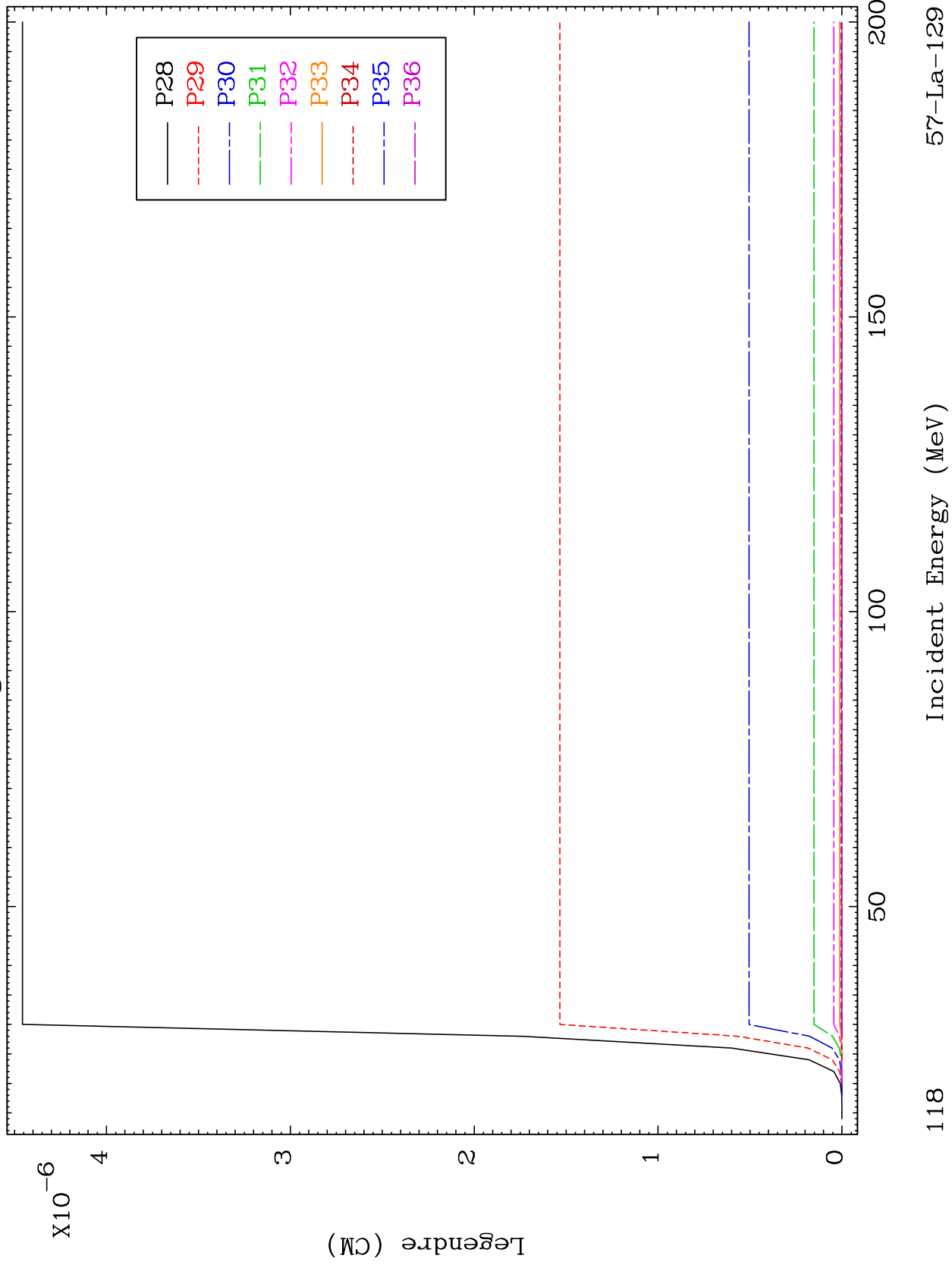
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129

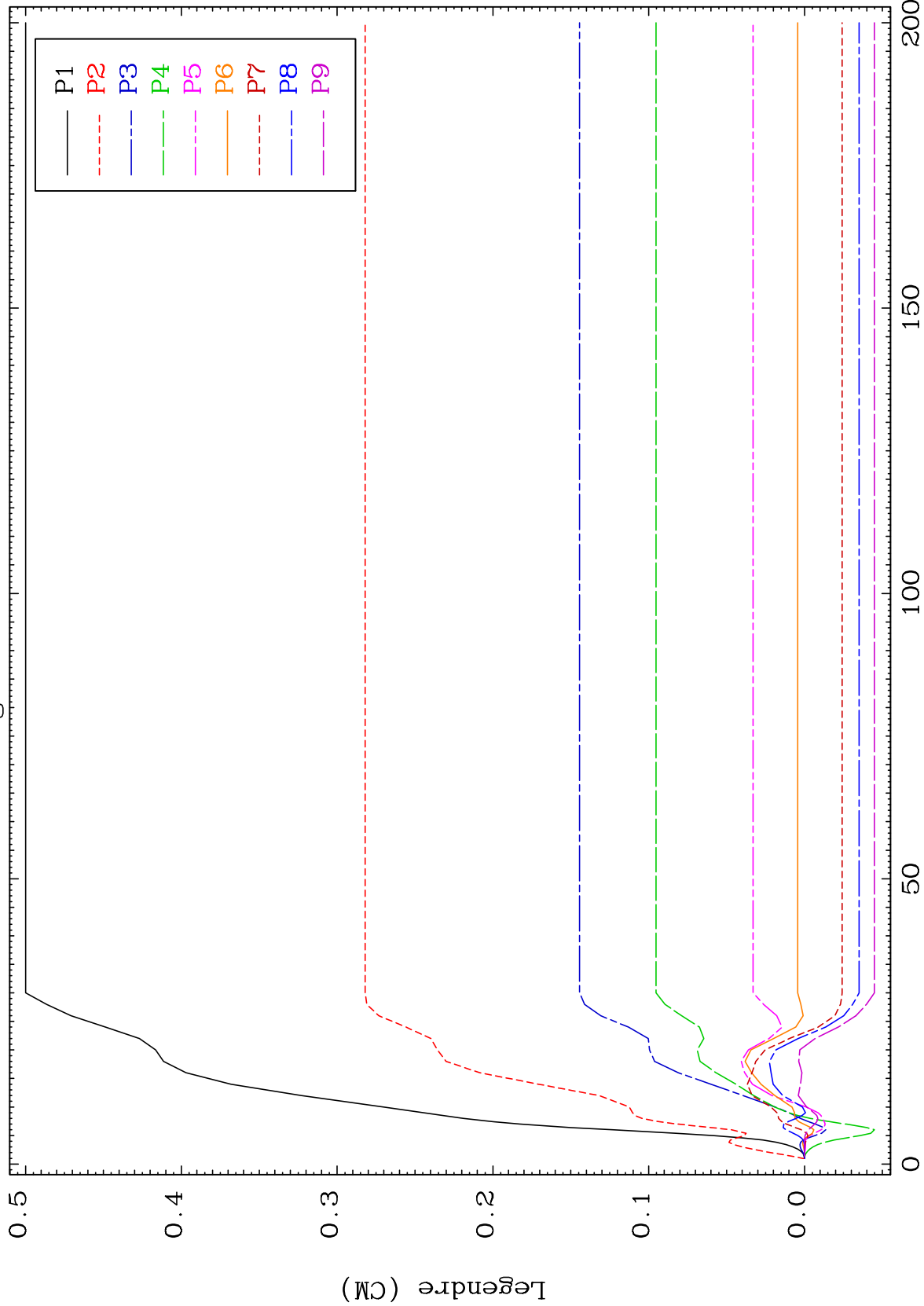


MAT 5698

MT= 76 (n,n') Level

57-La-129

Legendre Coefficients



119

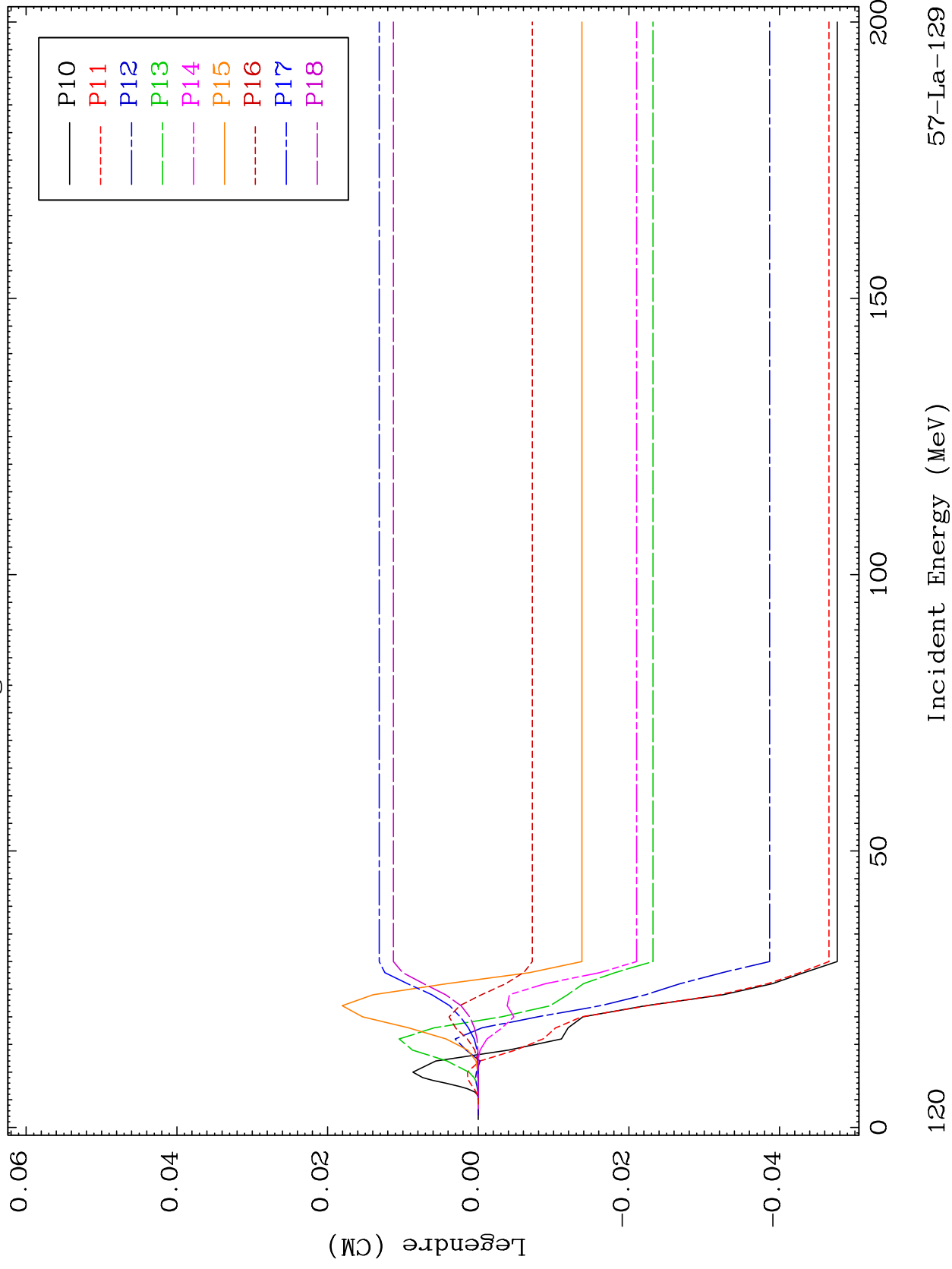
57-La-129



MAT 5698

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

57-La-129



57-La-129

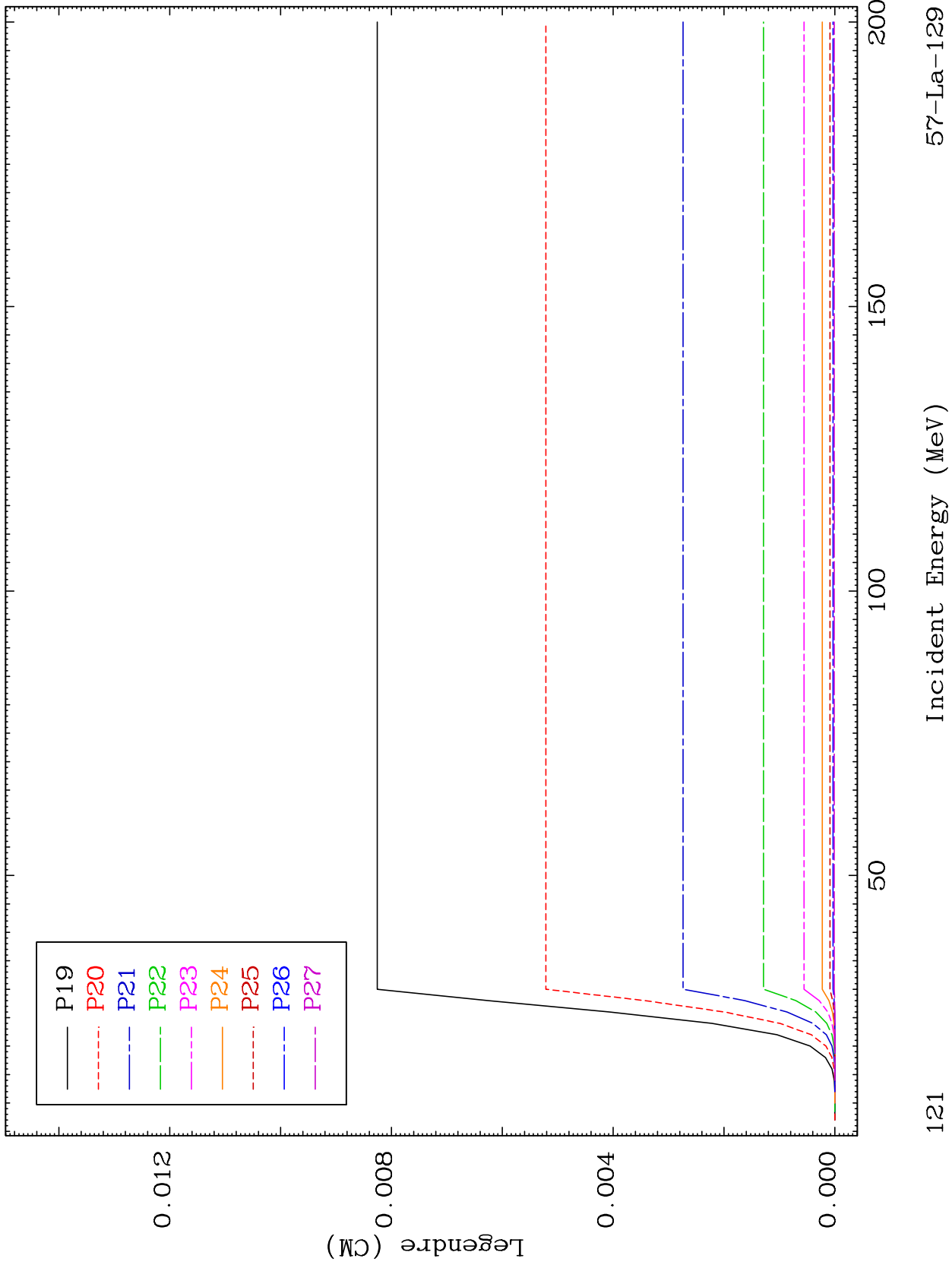
Incident Energy (MeV)

120

MAT 5698

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

57-La-129



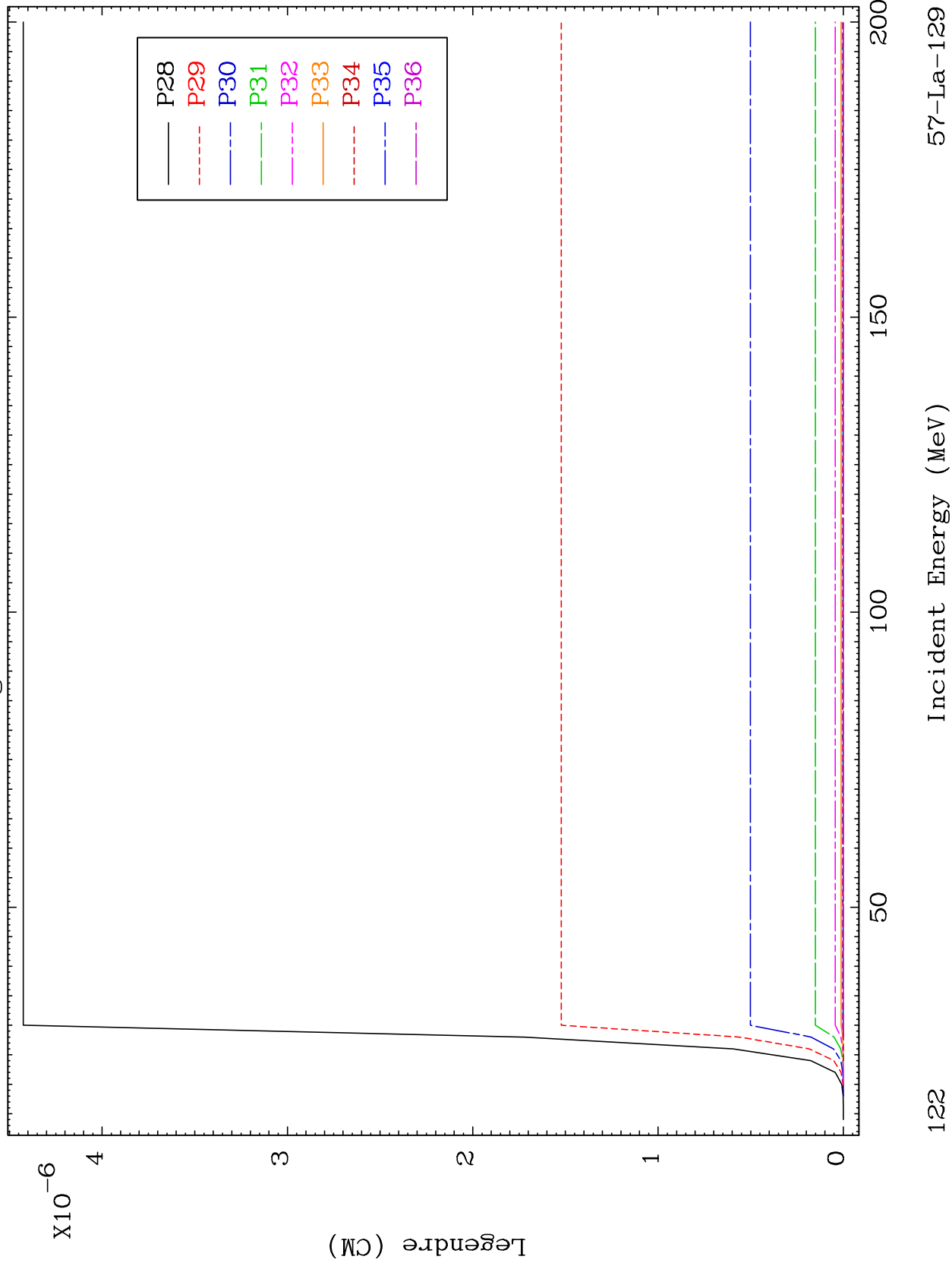
121

57-La-129

MAT 5698

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

57-La-129



122

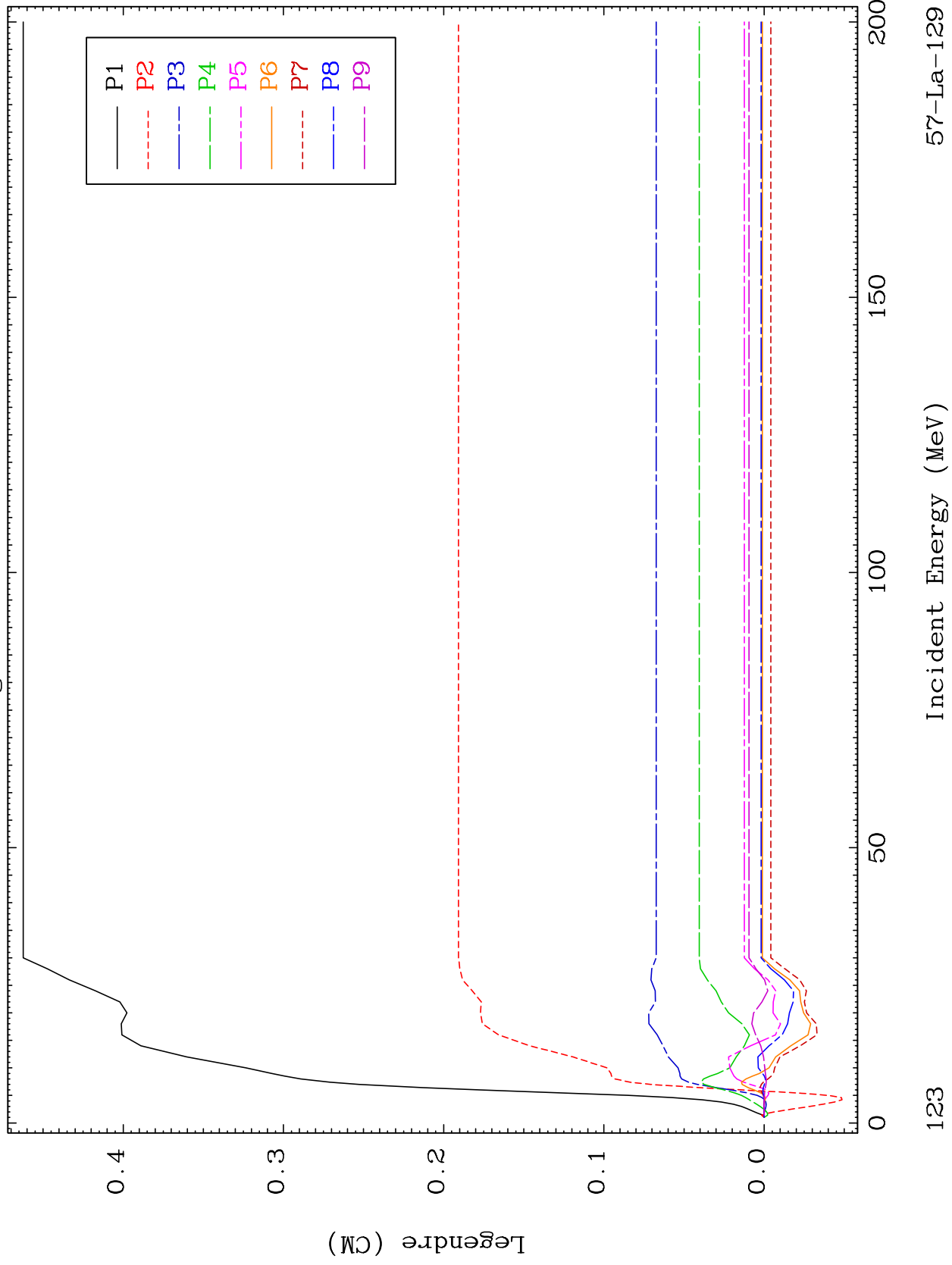
Incident Energy (MeV)

57-La-129

MAT 5698

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

57-La-129



57-La-129

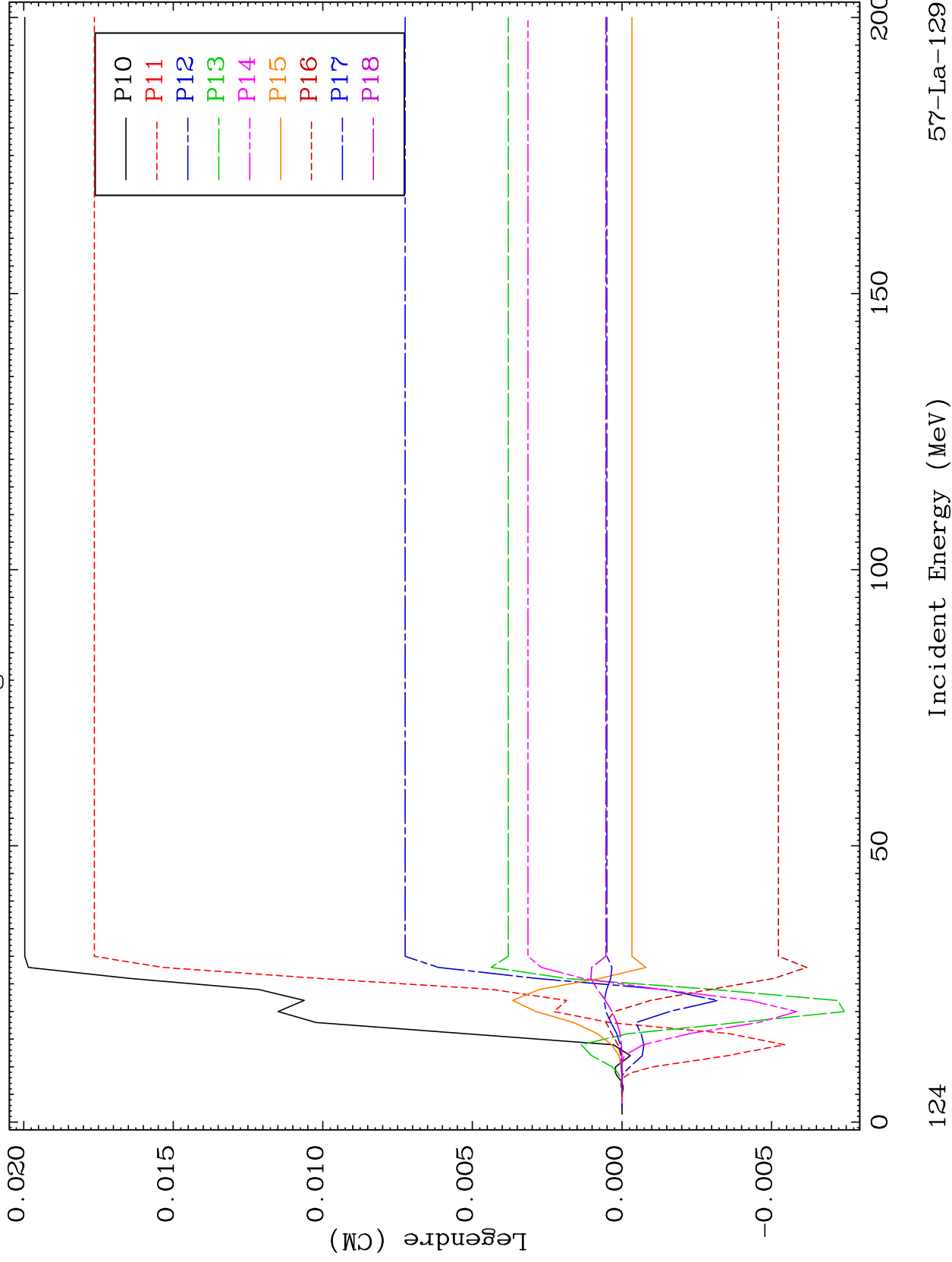
Incident Energy (MeV)

123

MAT 5698

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

57-La-129



57-La-129

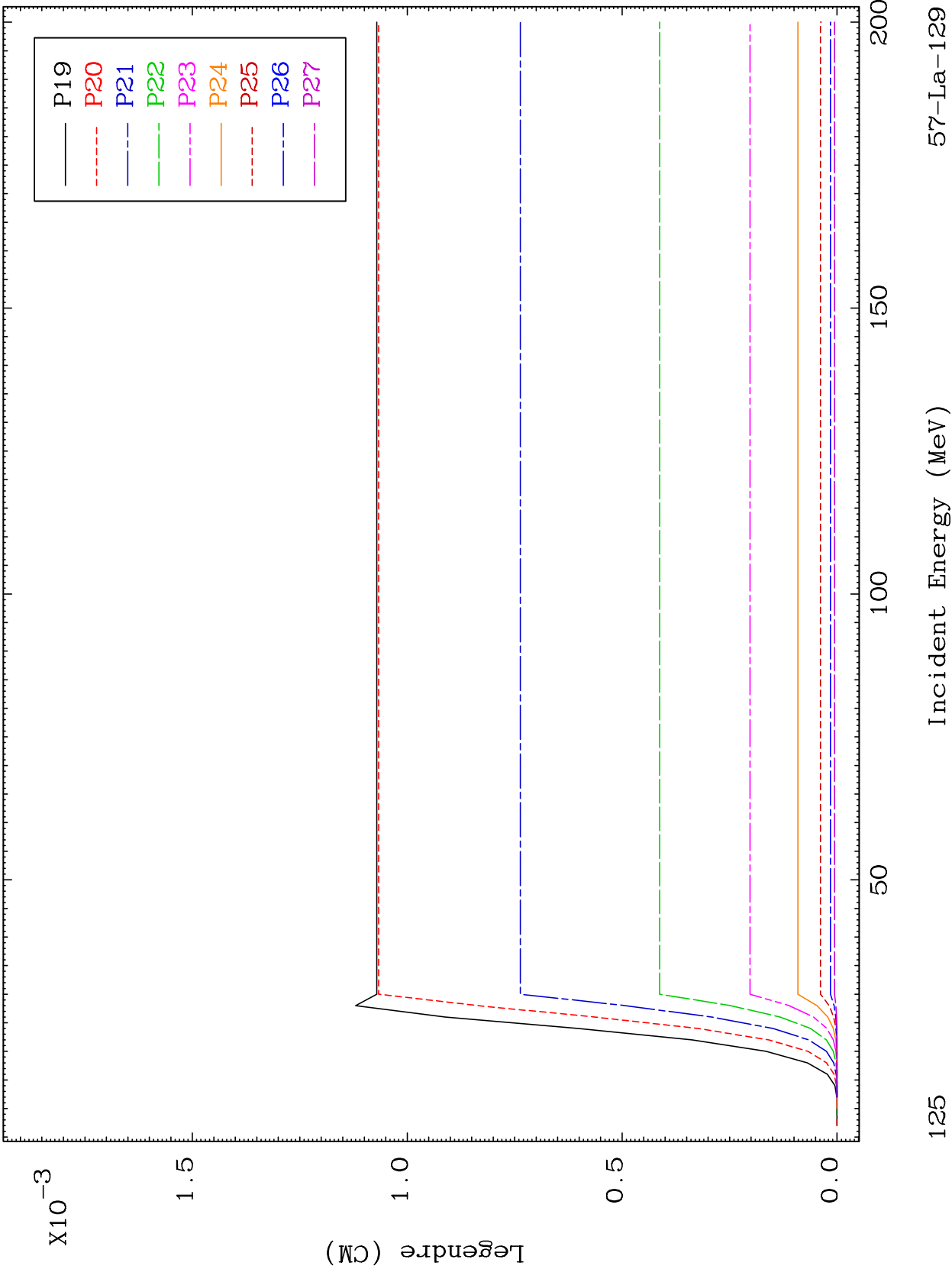
Incident Energy (MeV)

124

MAT 5698

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

57-La-129



125

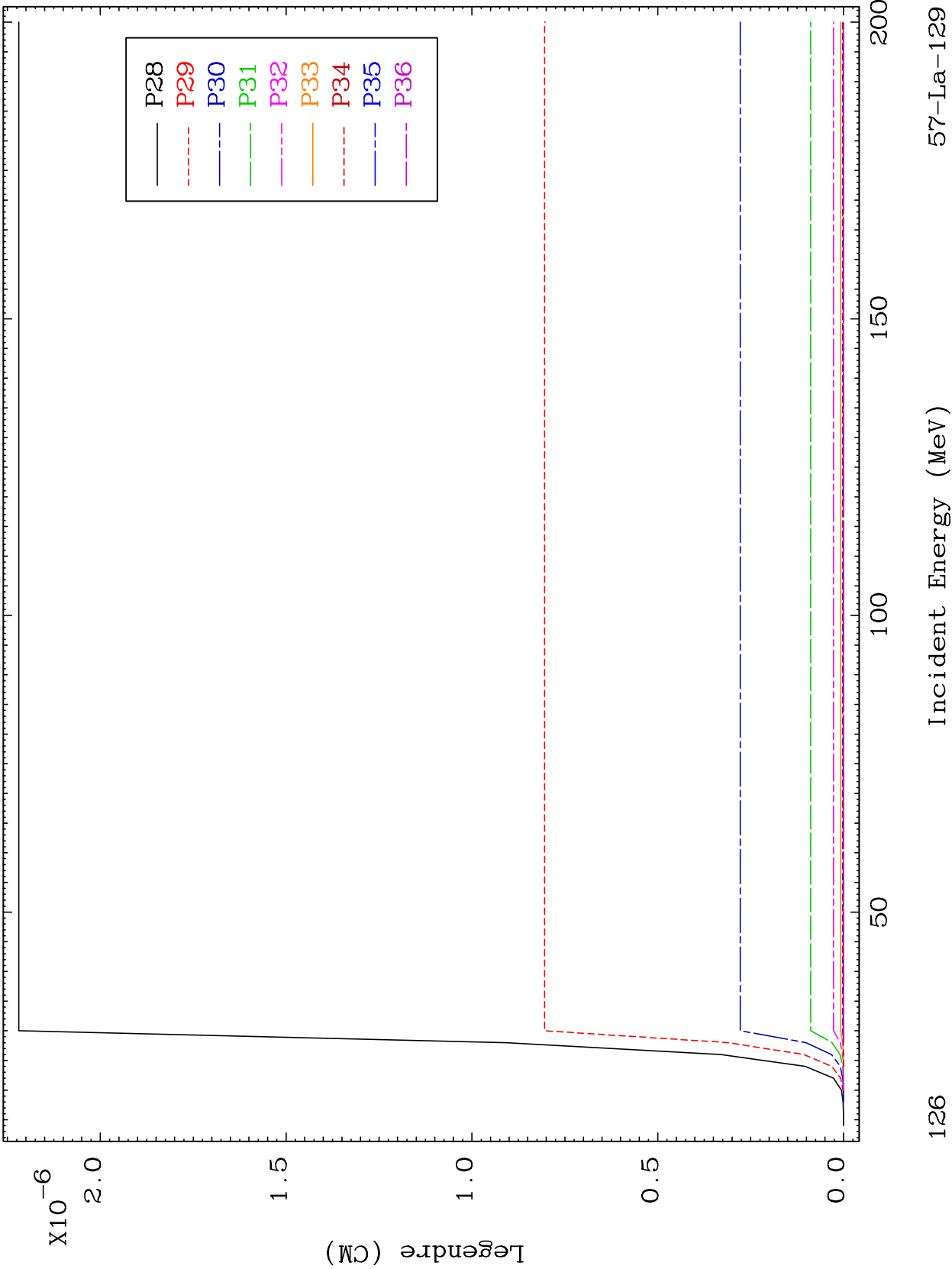
Incident Energy (MeV)

57-La-129

MAT 5698

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

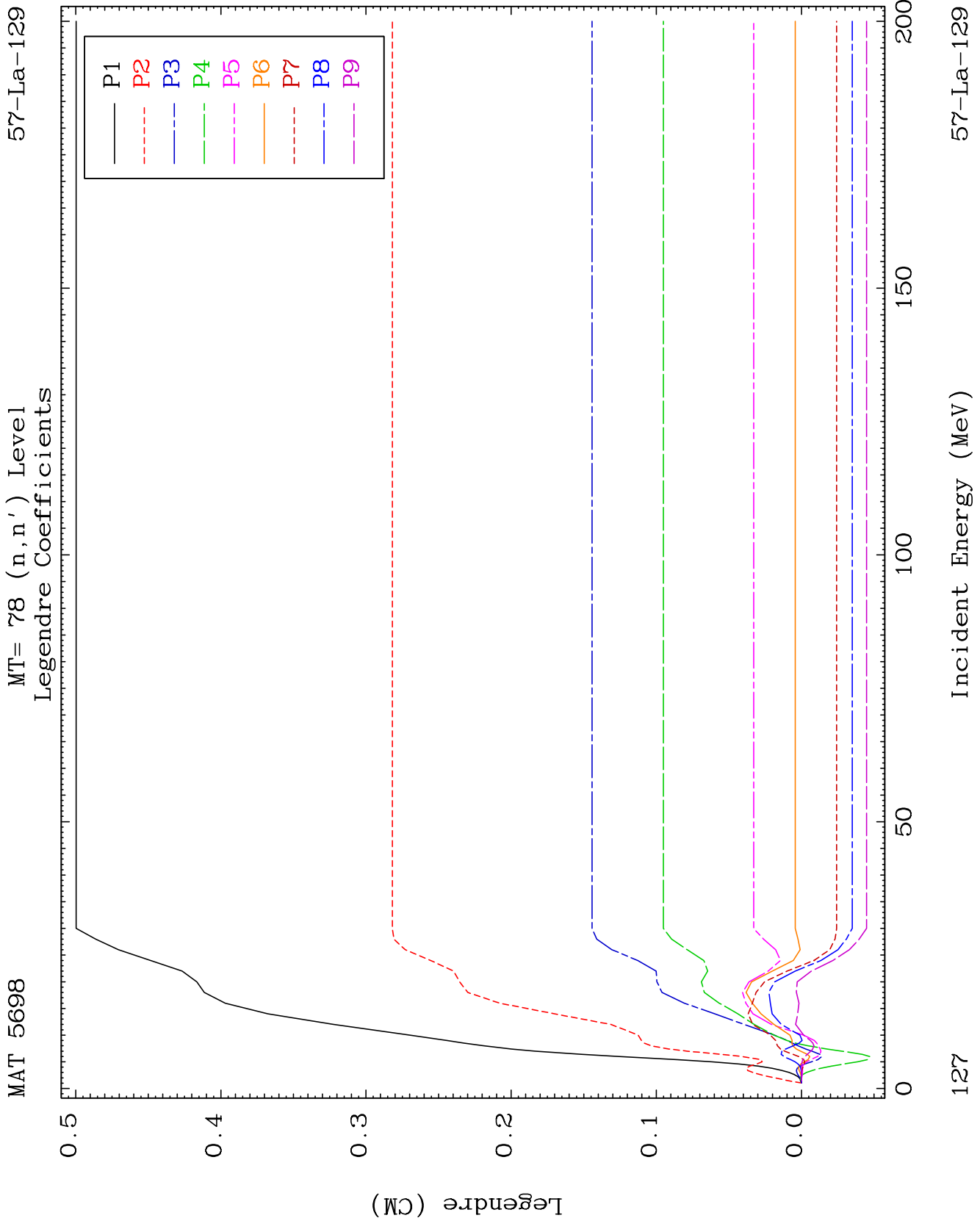
57-La-129



126

Incident Energy (MeV)

57-La-129

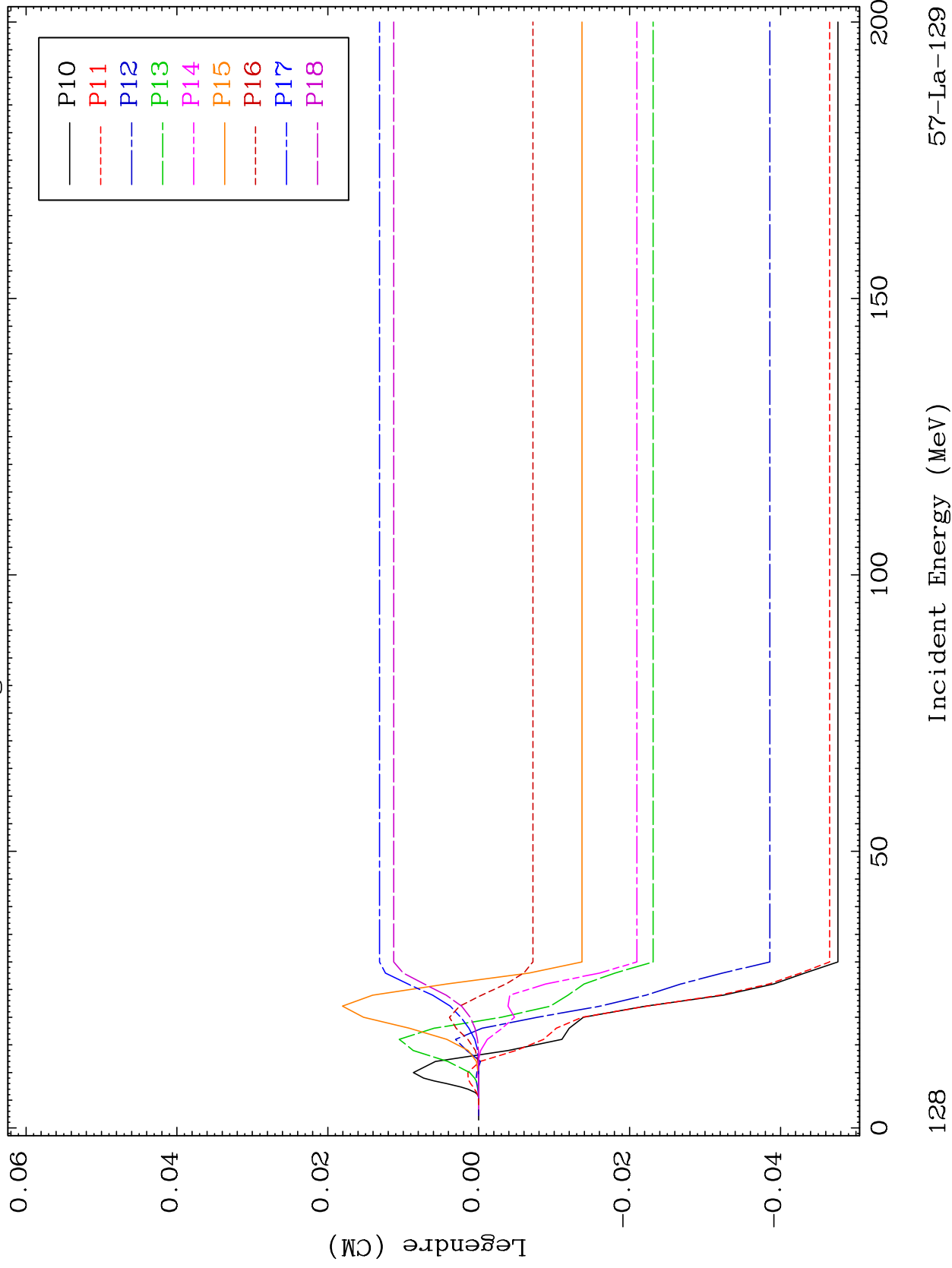




MAT 5698

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

57-La-129



57-La-129

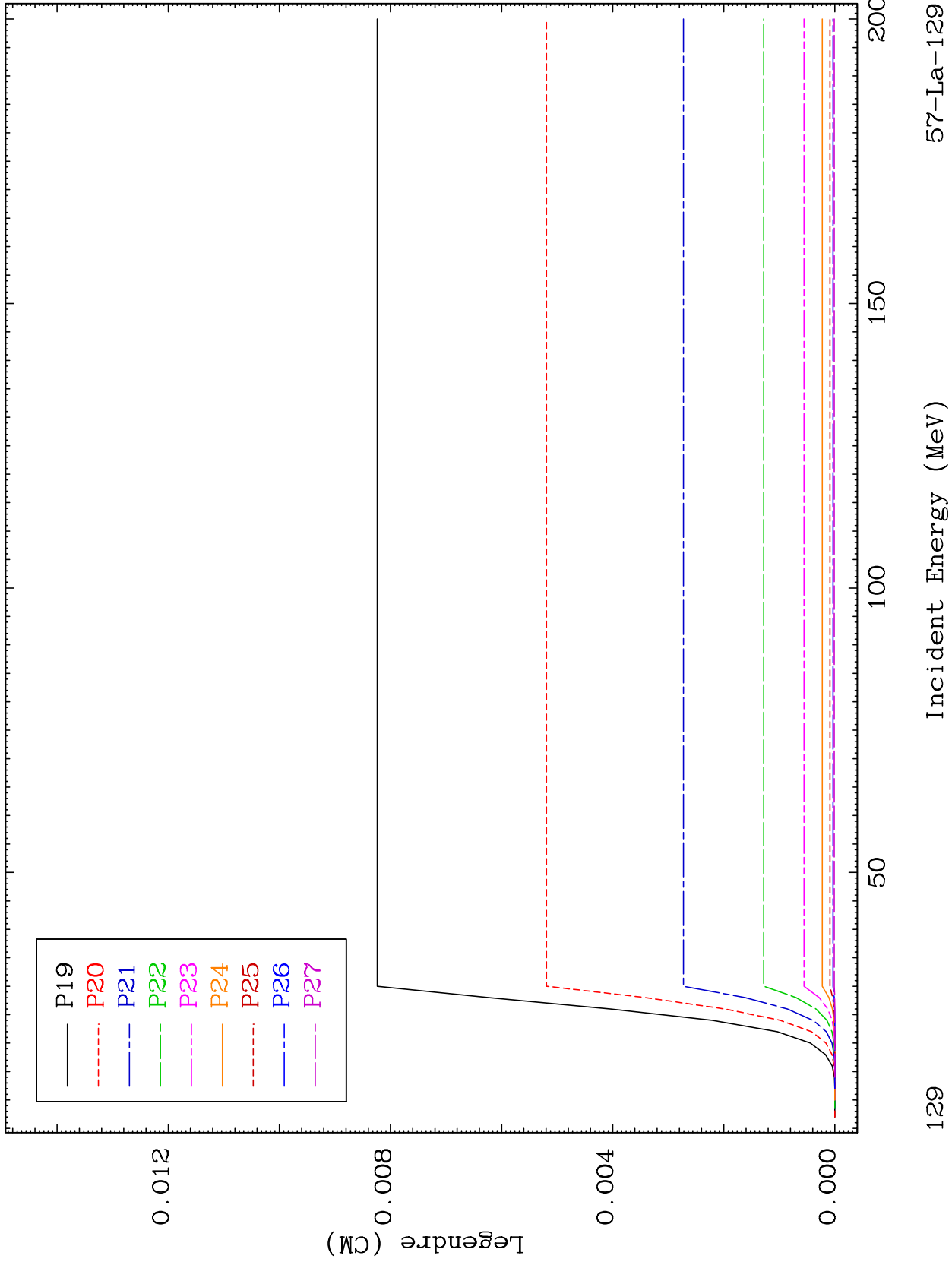
Incident Energy (MeV)

128

MAT 5698

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

57-La-129



129

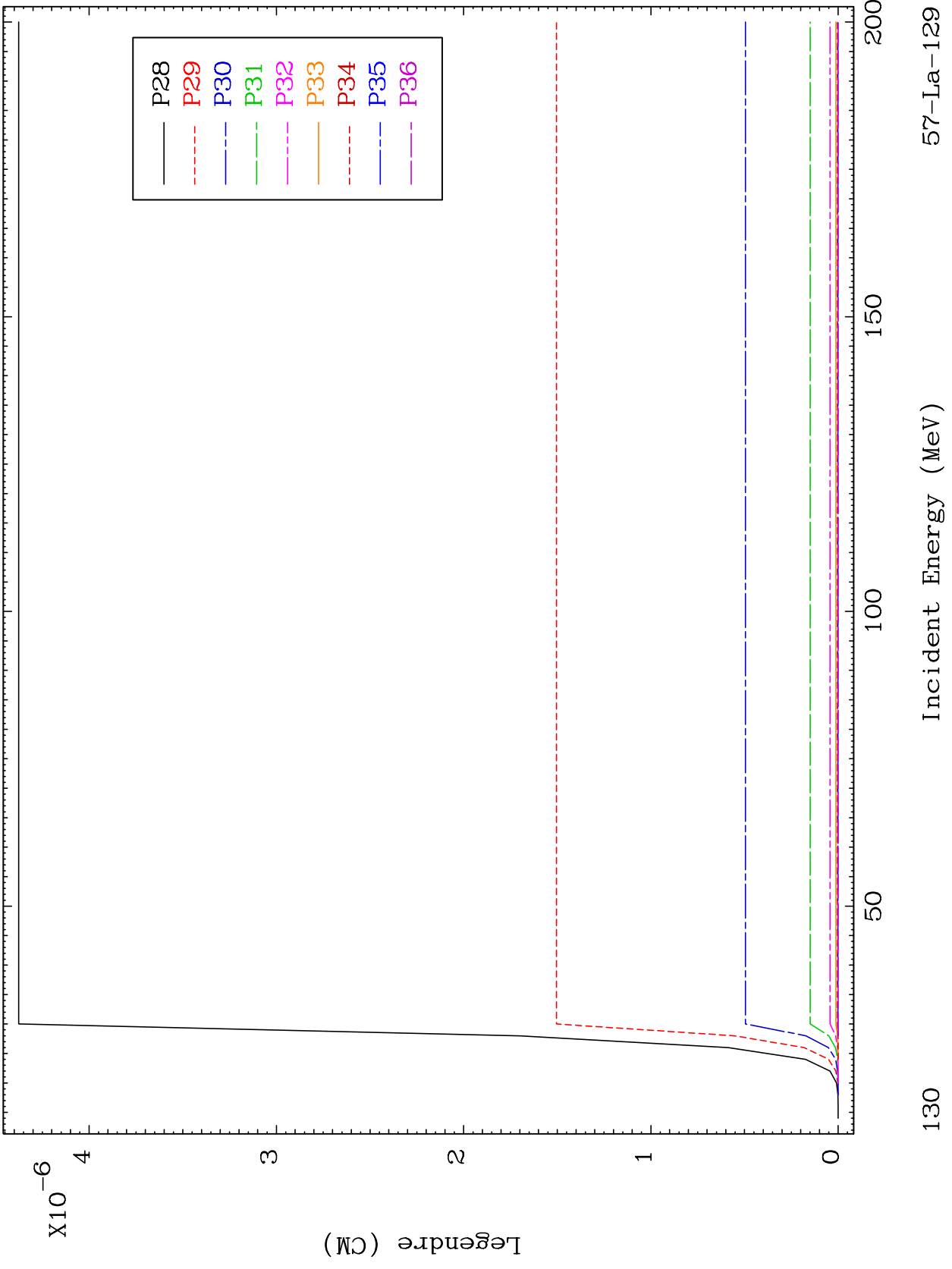
Incident Energy (MeV)

57-La-129

MAT 5698

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

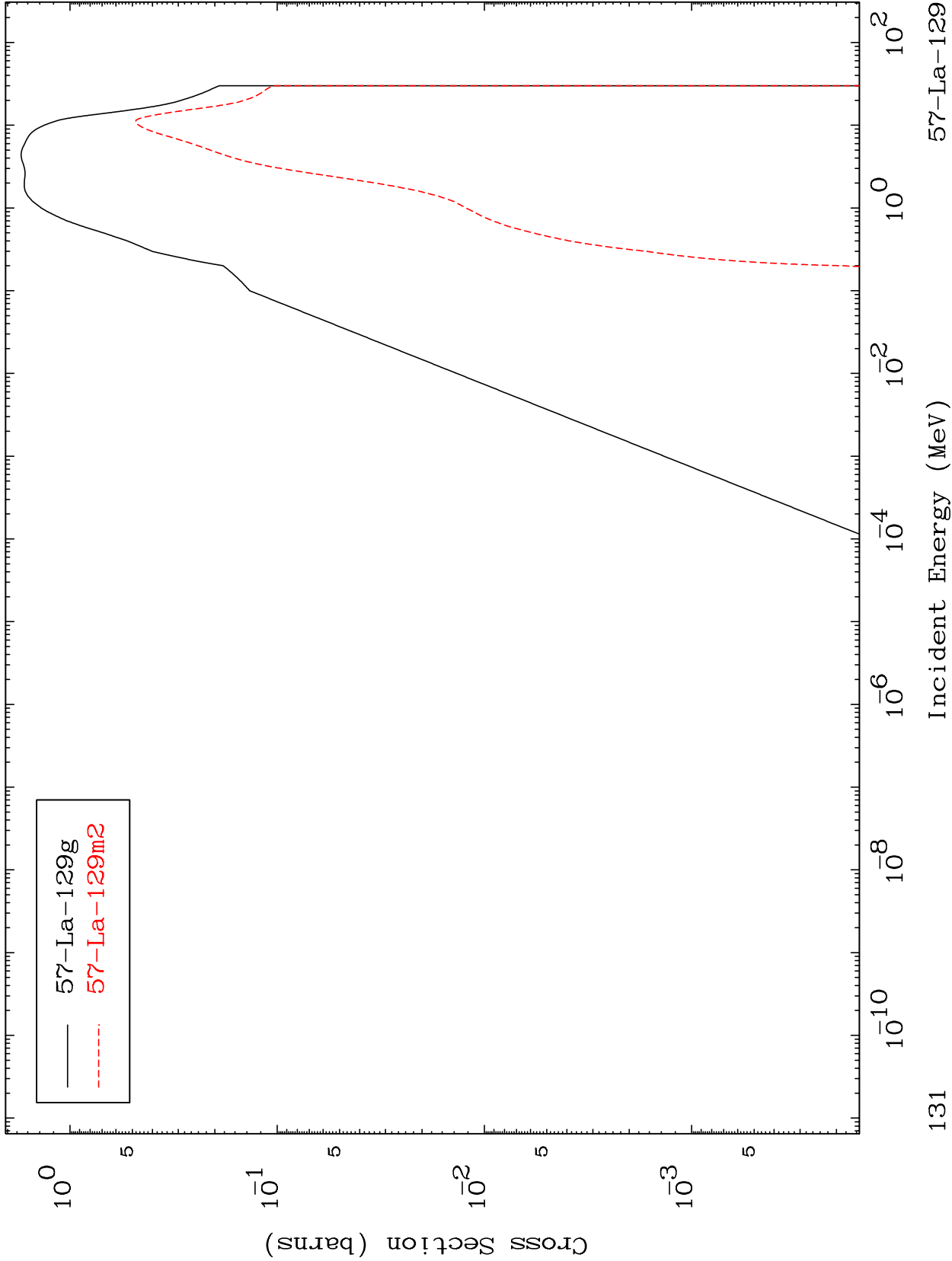
57-La-129



MAT 5698

Inelastic  
Radionuclide Production Cross Section

57-La-129



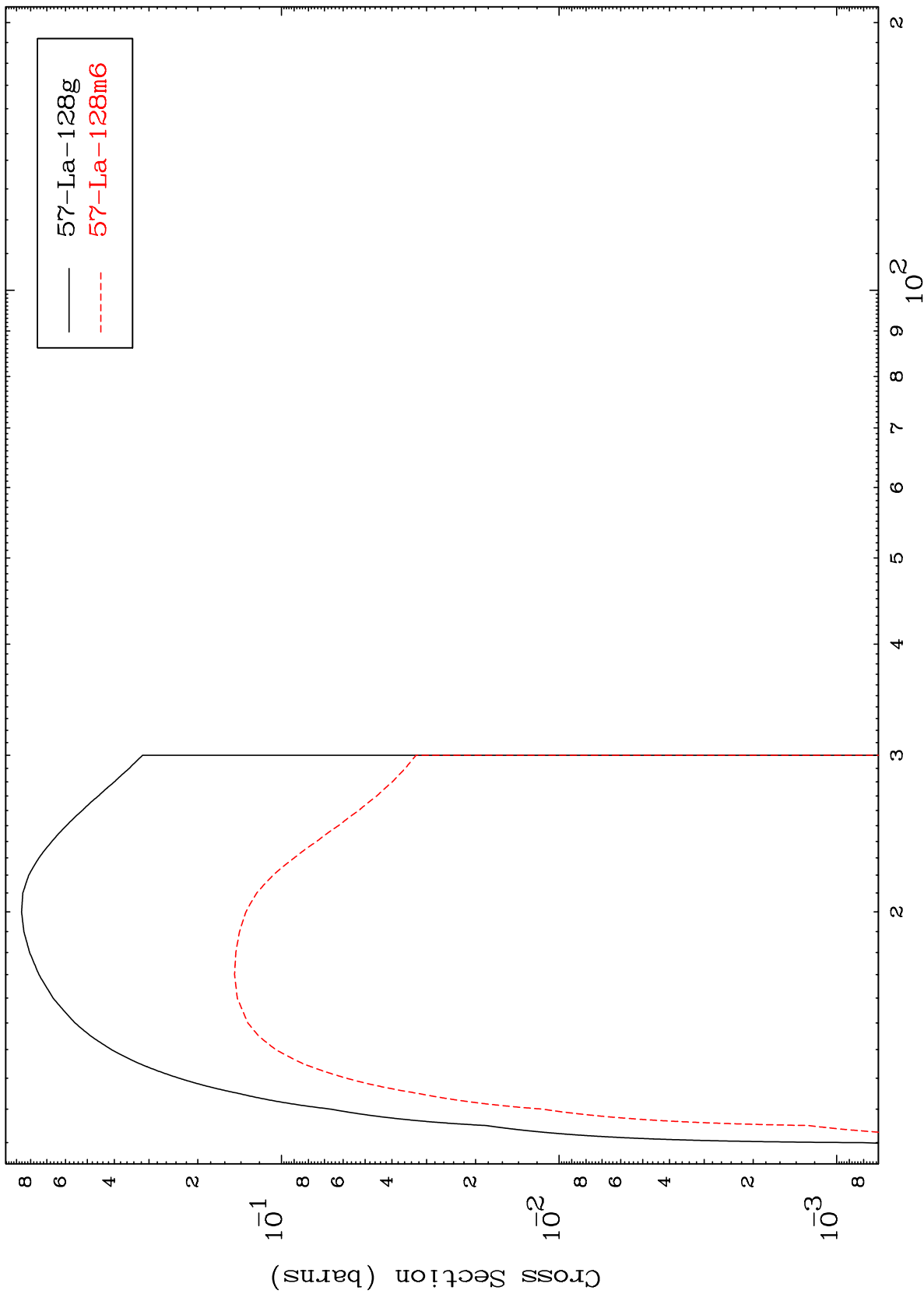
131

57-La-129

MAT 5698

57-La-129

(n,2n)  
Radionuclide Production Cross Section



132

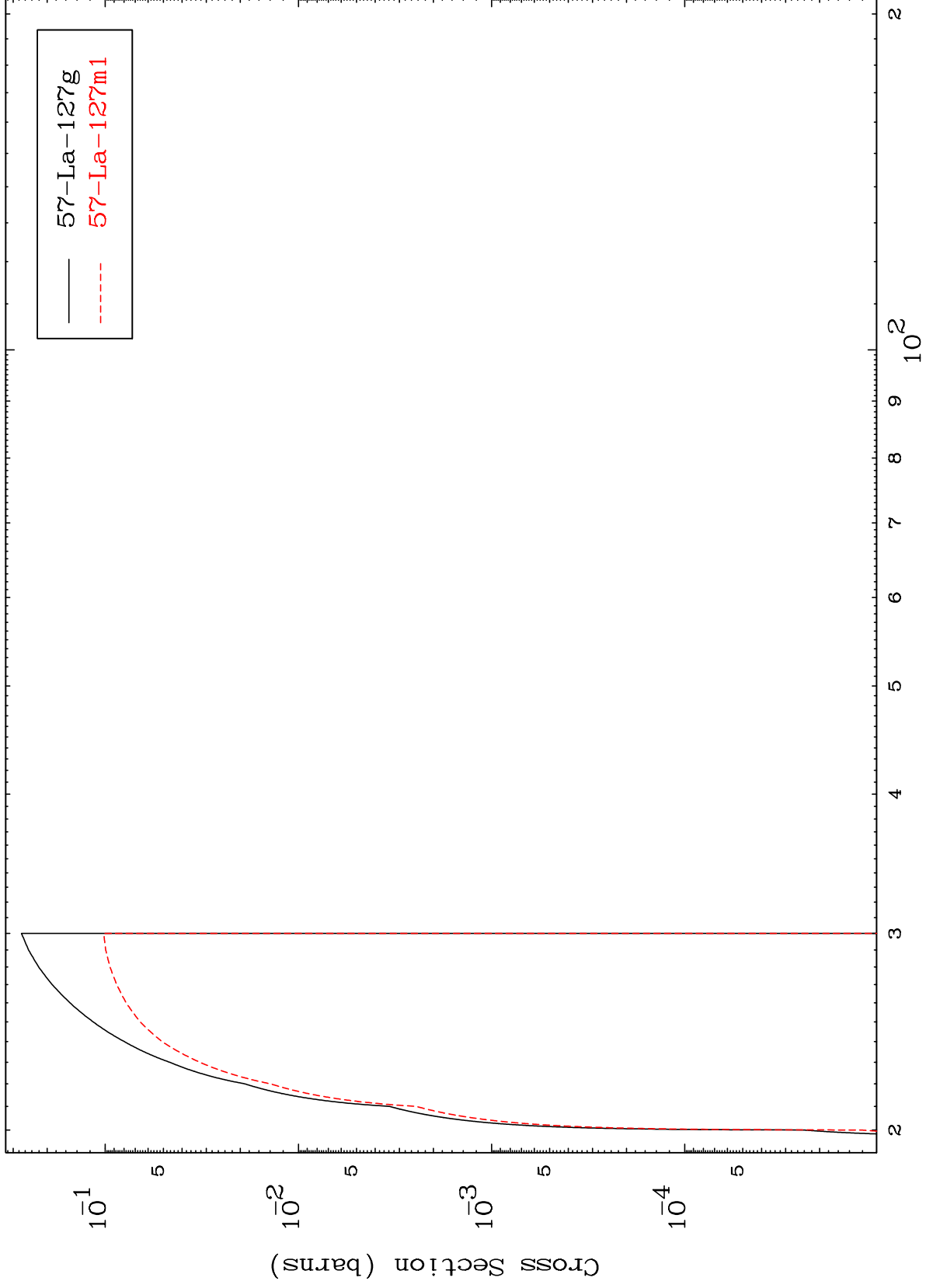
57-La-129

Incident Energy (MeV)

MAT 5698

57-La-129

(n,3n)  
Radionuclide Production Cross Section



57-La-129

Incident Energy (MeV)

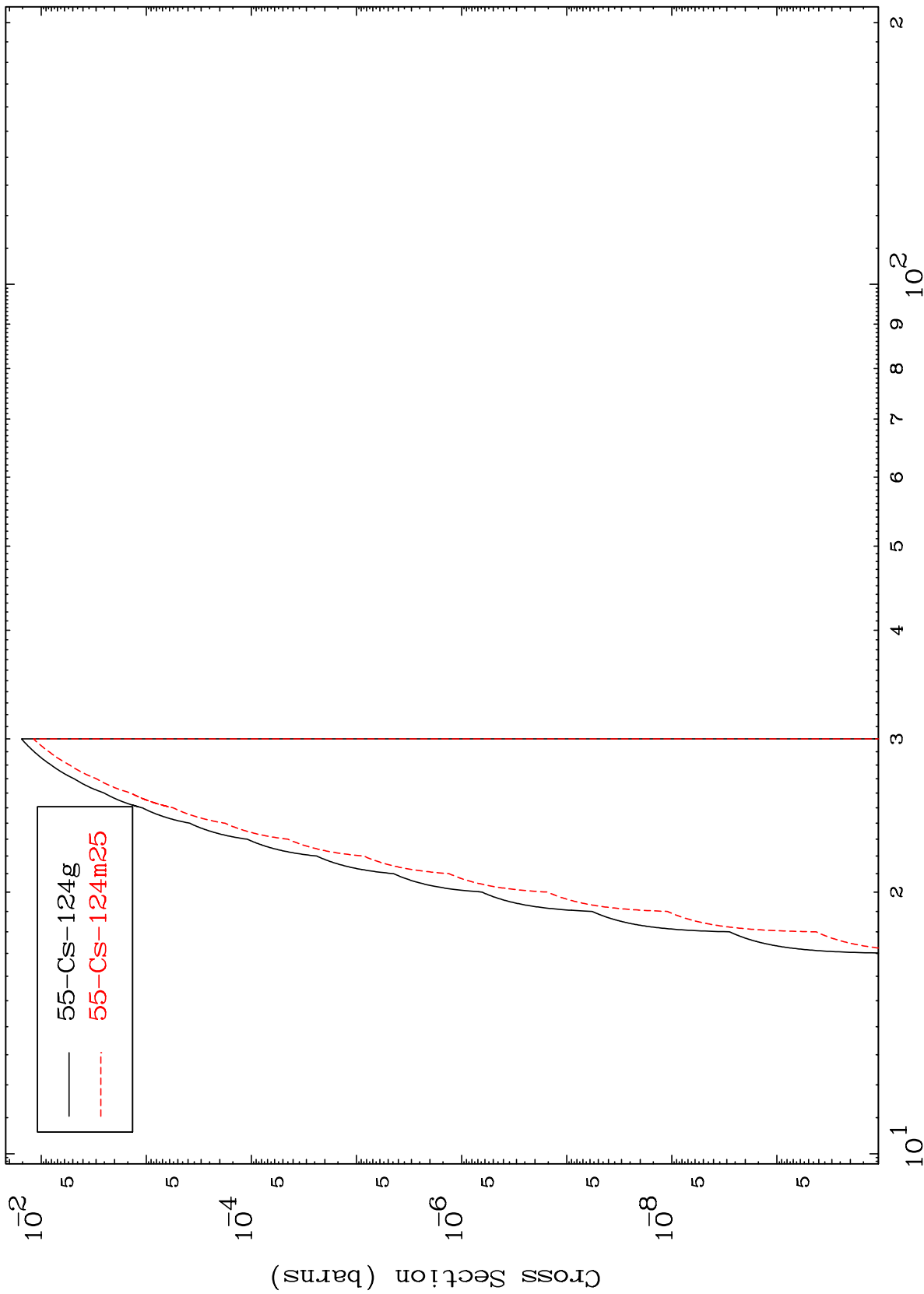
133

MAT 5698

(n,2n)  $\alpha$

57-La-129

Radionuclide Production Cross Section



55-Cs-124g  
55-Cs-124m25

Incident Energy (MeV)

57-La-129

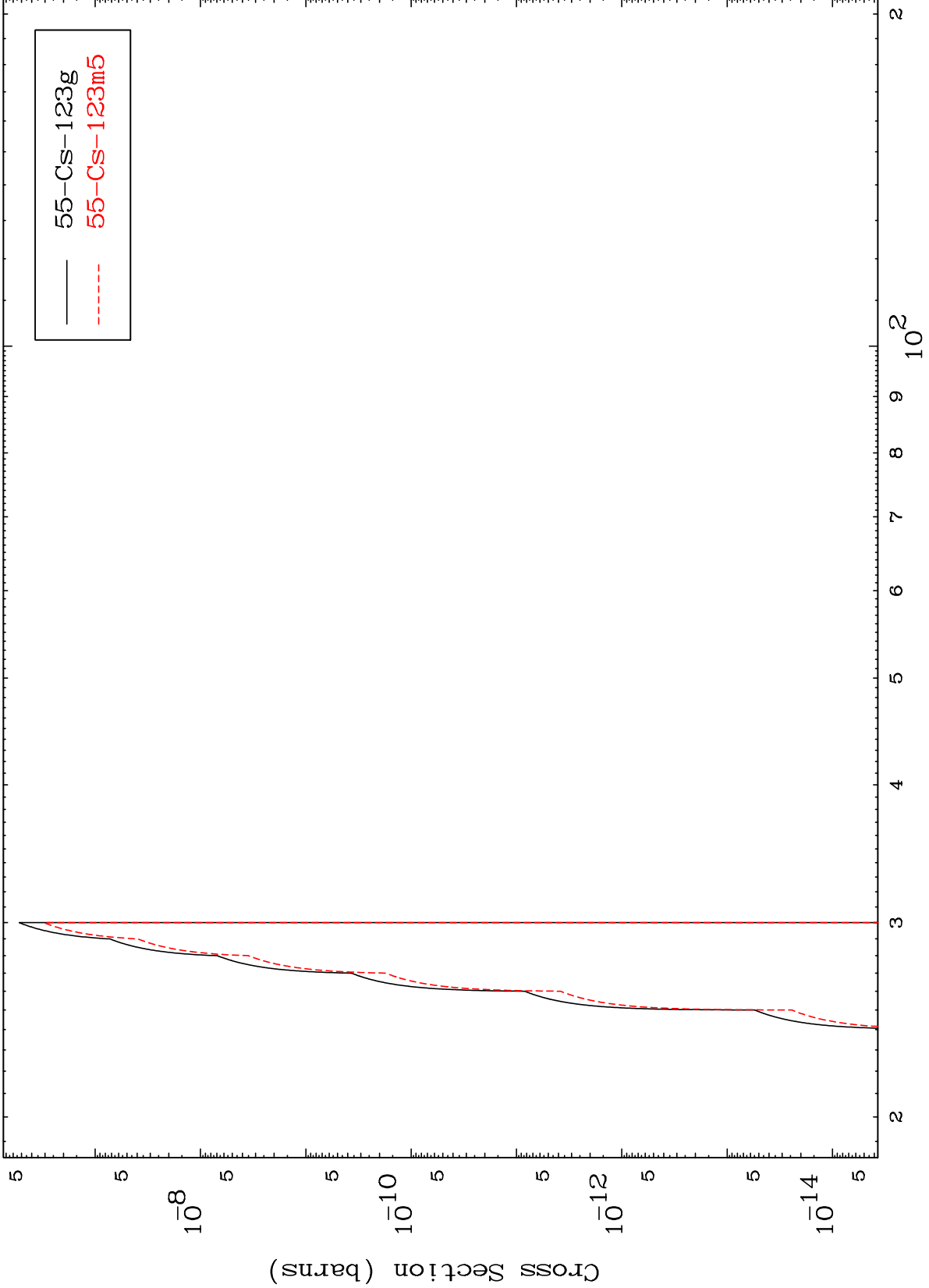
134

MAT 5698

(n,3n)  $\alpha$

57-La-129

Radionuclide Production Cross Section



135

Incident Energy (MeV)

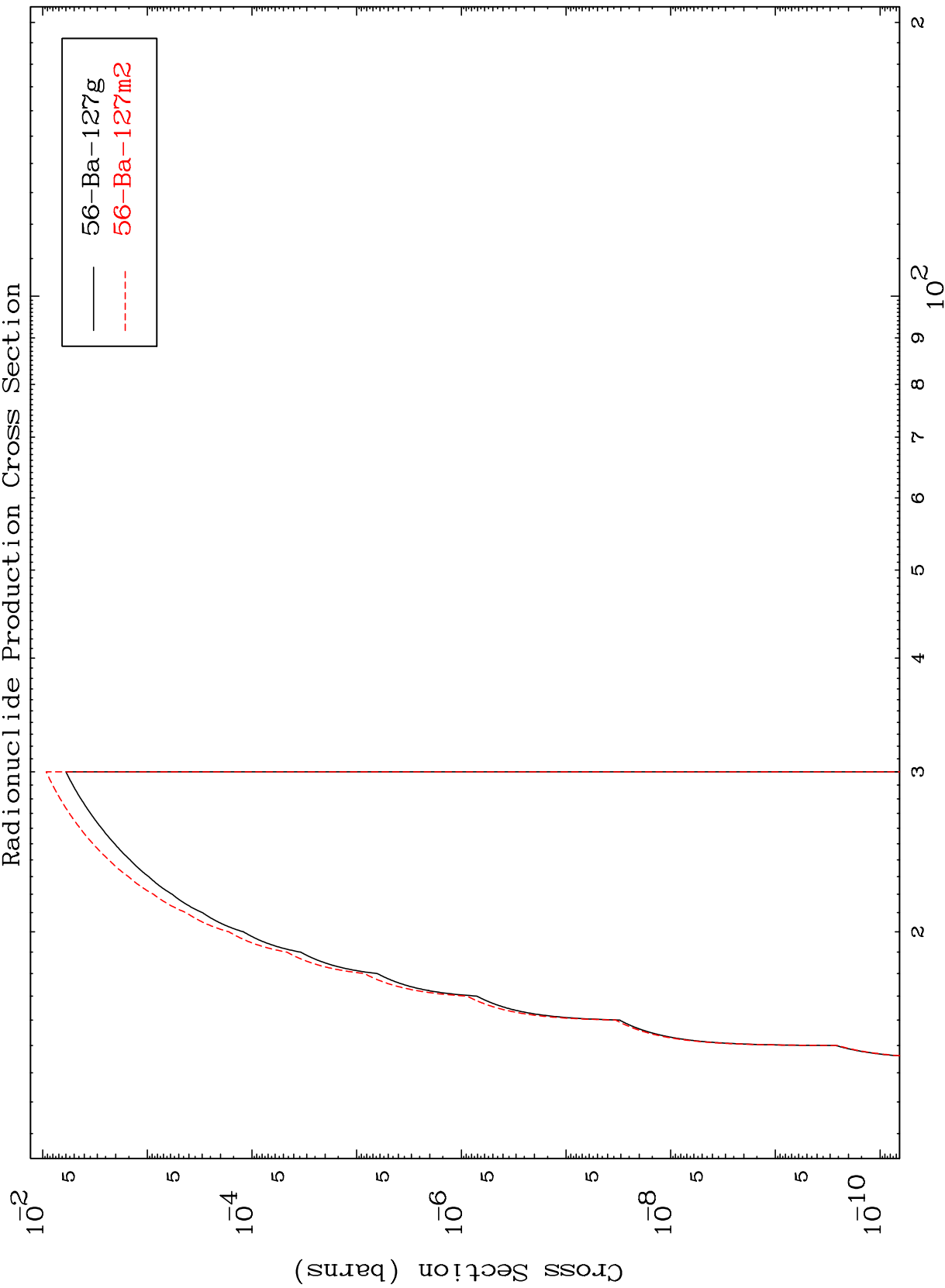
57-La-129



MAT 5698

57-La-129

$(n, n') d$   
Radionuclide Production Cross Section

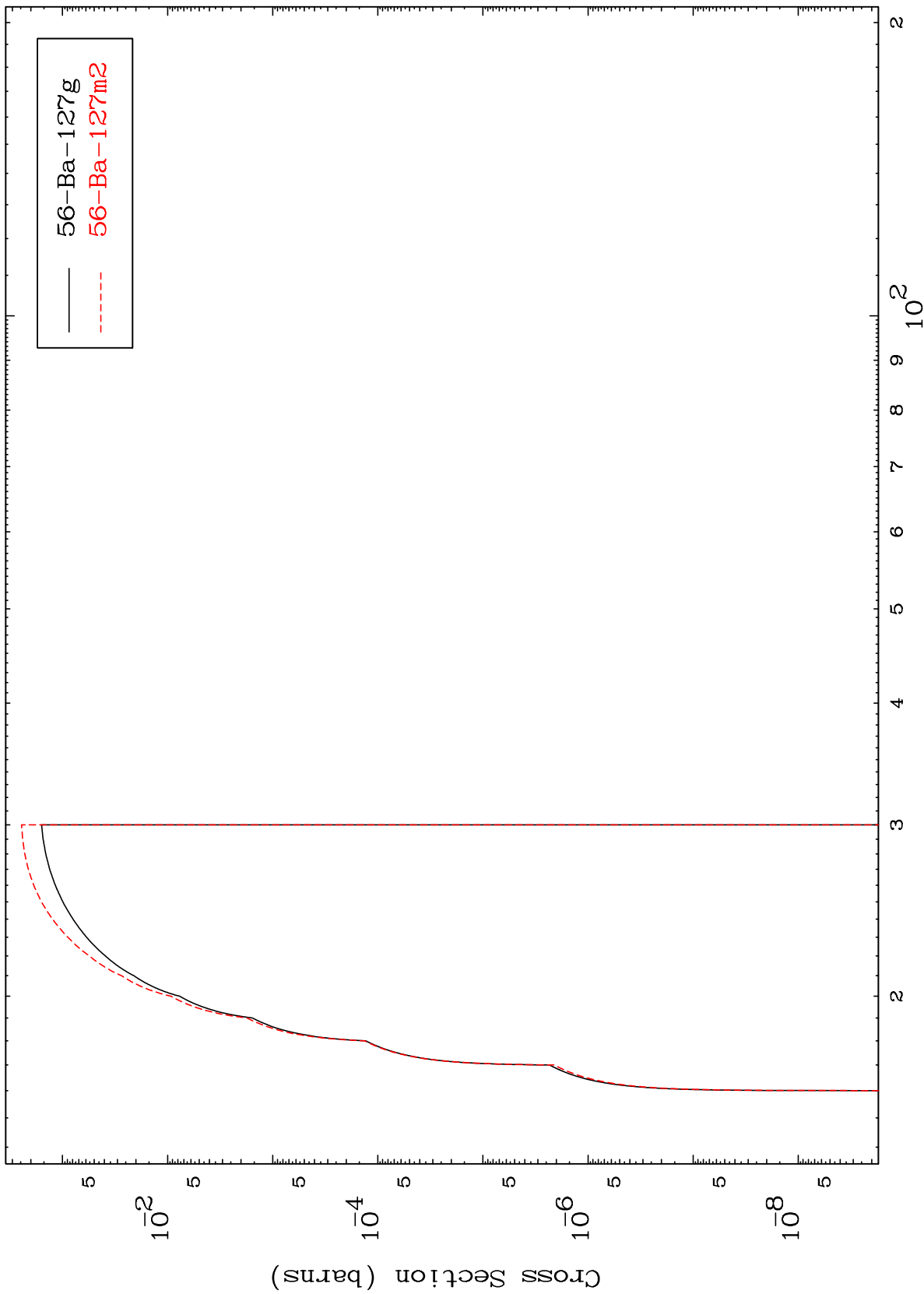


136

57-La-129

Incident Energy (MeV)

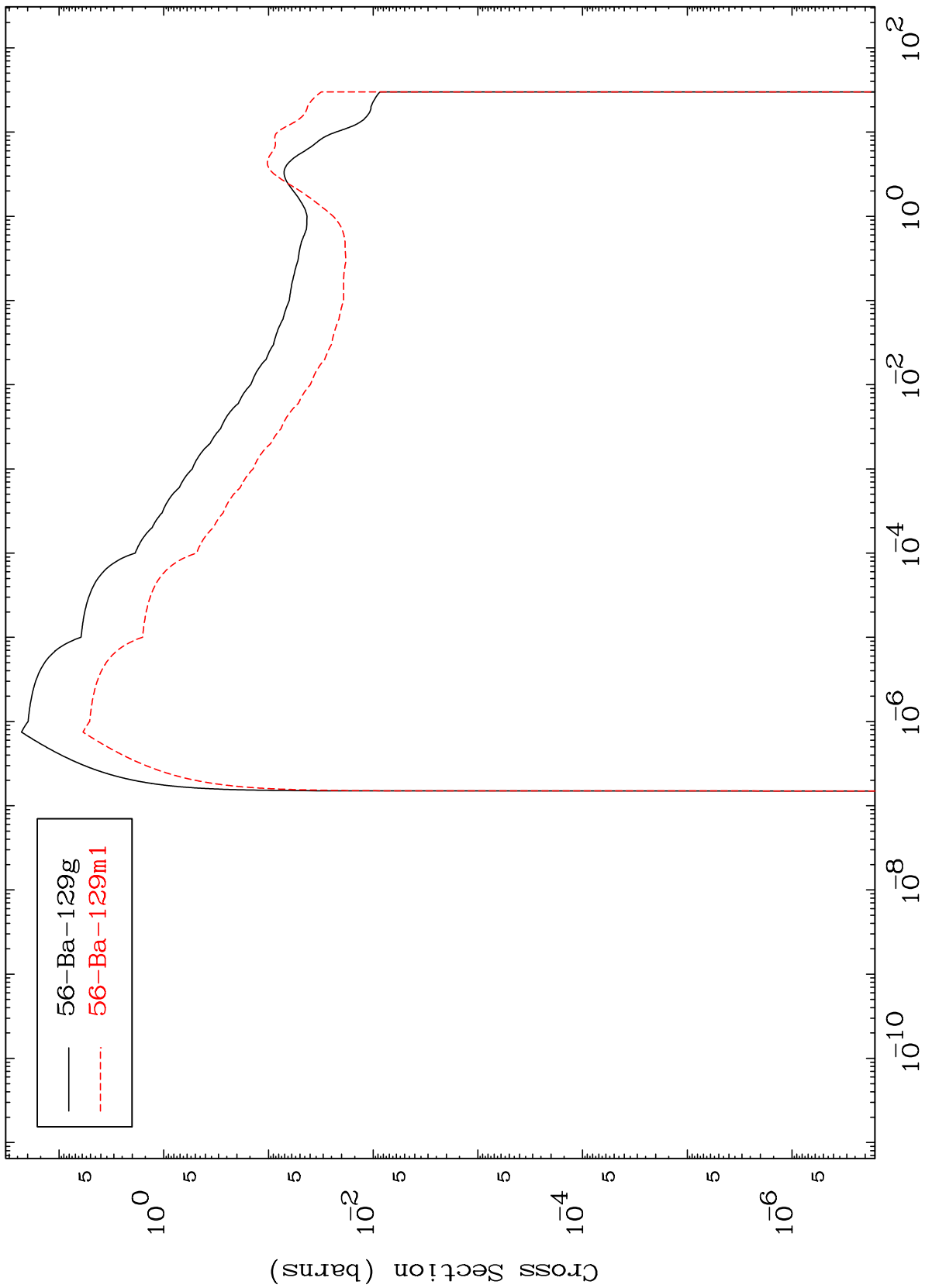
(n,2n) p  
Radionuclide Production Cross Section



MAT 5698

57-La-129

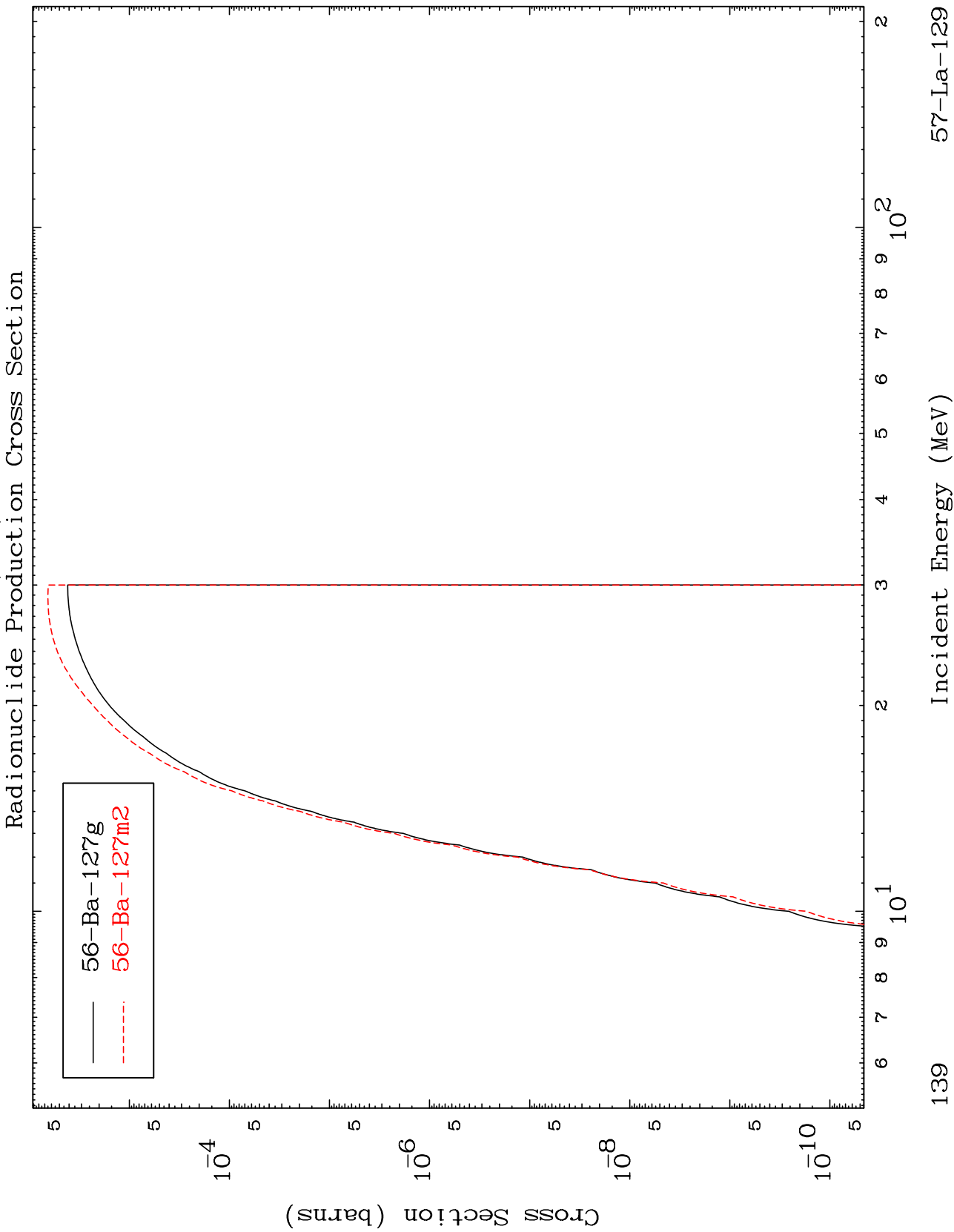
(n,p)  
Radionuclide Production Cross Section



— 56-Ba-129g  
- - - 56-Ba-129m1

MAT 5698

57-La-129



139

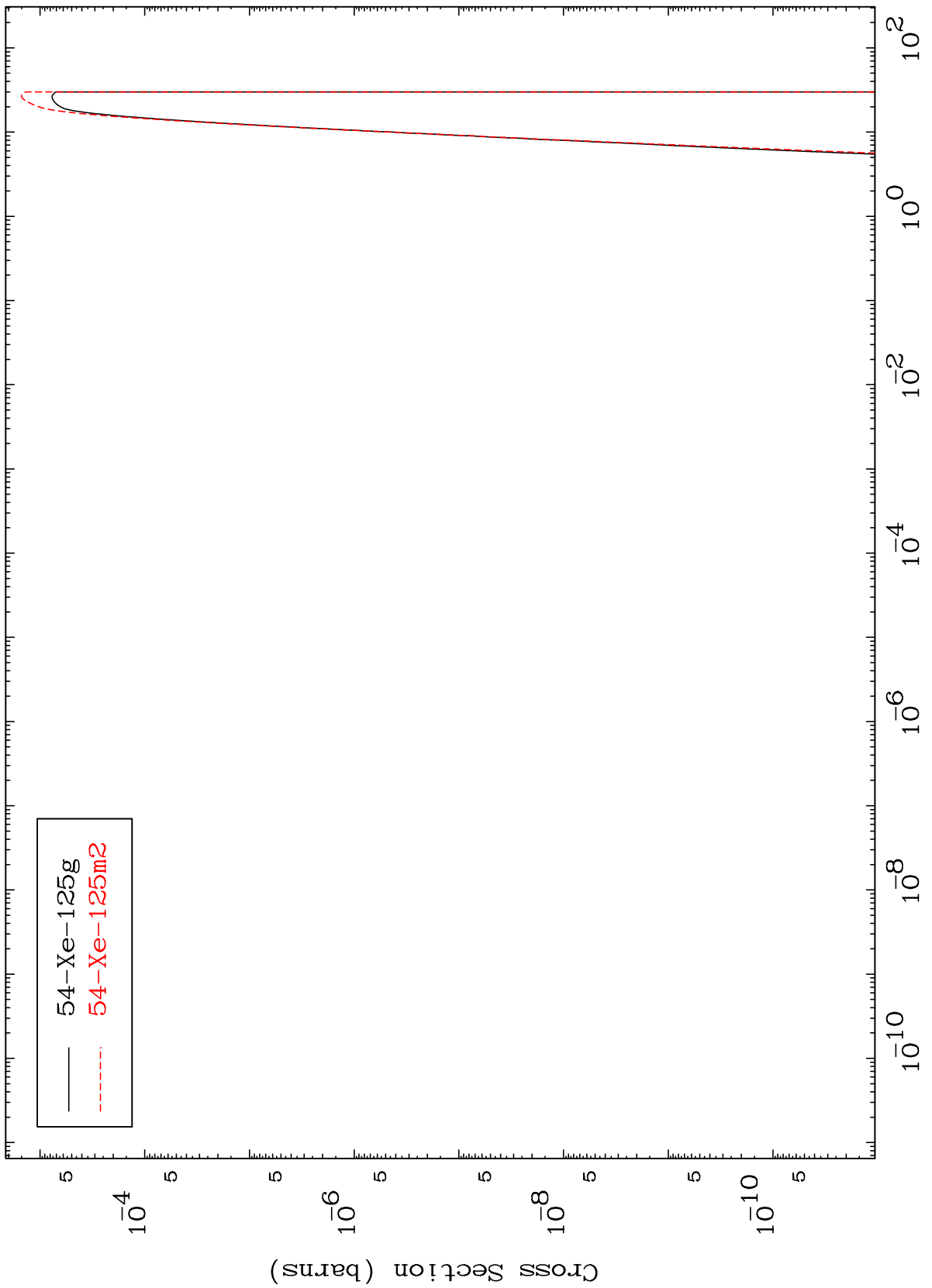
57-La-129

MAT 5698

(n,p)  $\alpha$

57-La-129

Radionuclide Production Cross Section



54-Xe-125g  
54-Xe-125m2

140

Incident Energy (MeV)

57-La-129