

Program EVALPLOT  
(Version 2018-1)

by

Dermott E. Cullen  
(Present Contact Information)

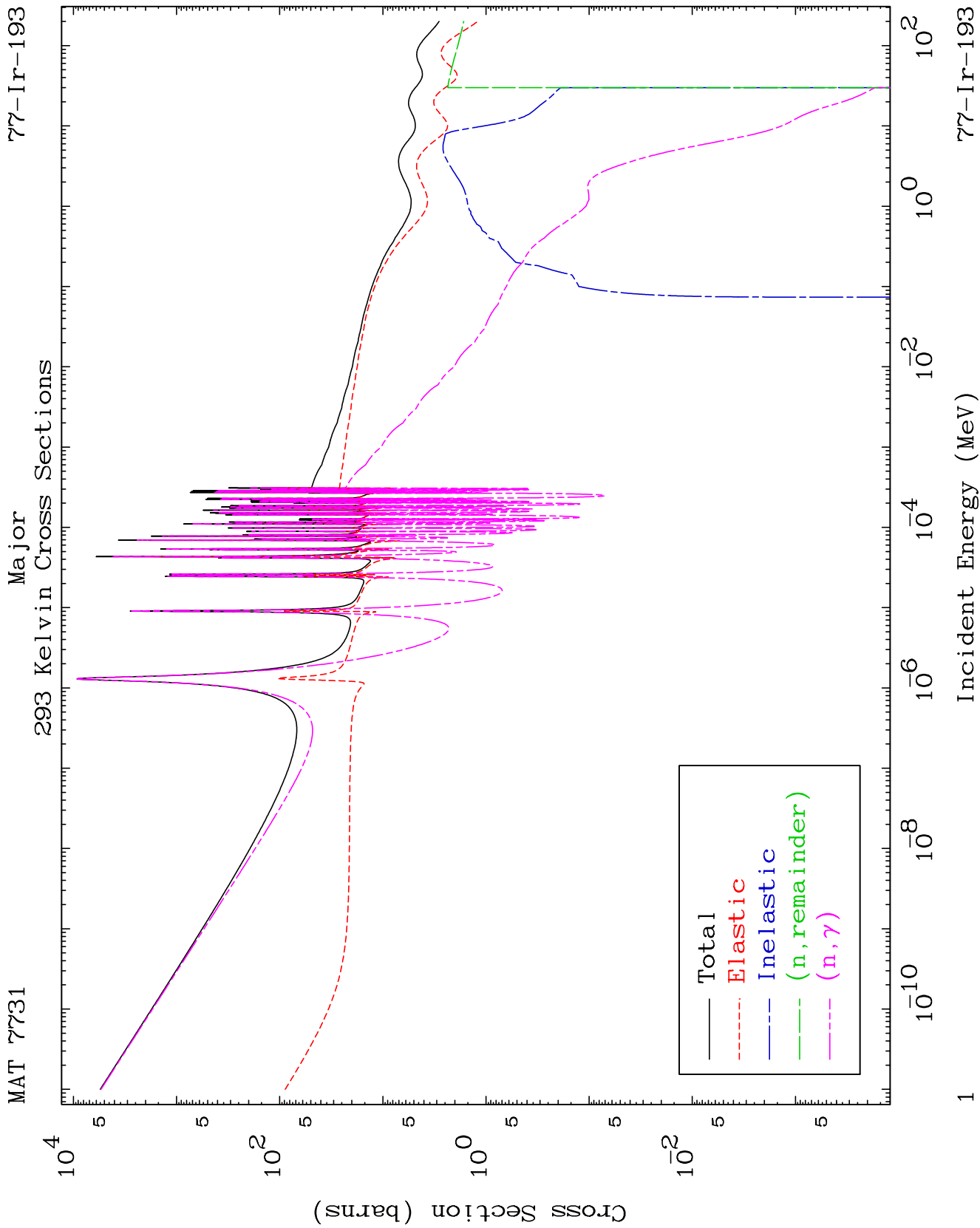
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Tele: 925-443-1911

E.Mail:redcullen1@comcast.net

Web:redcullen1.net/HOMEPAGE.NEW

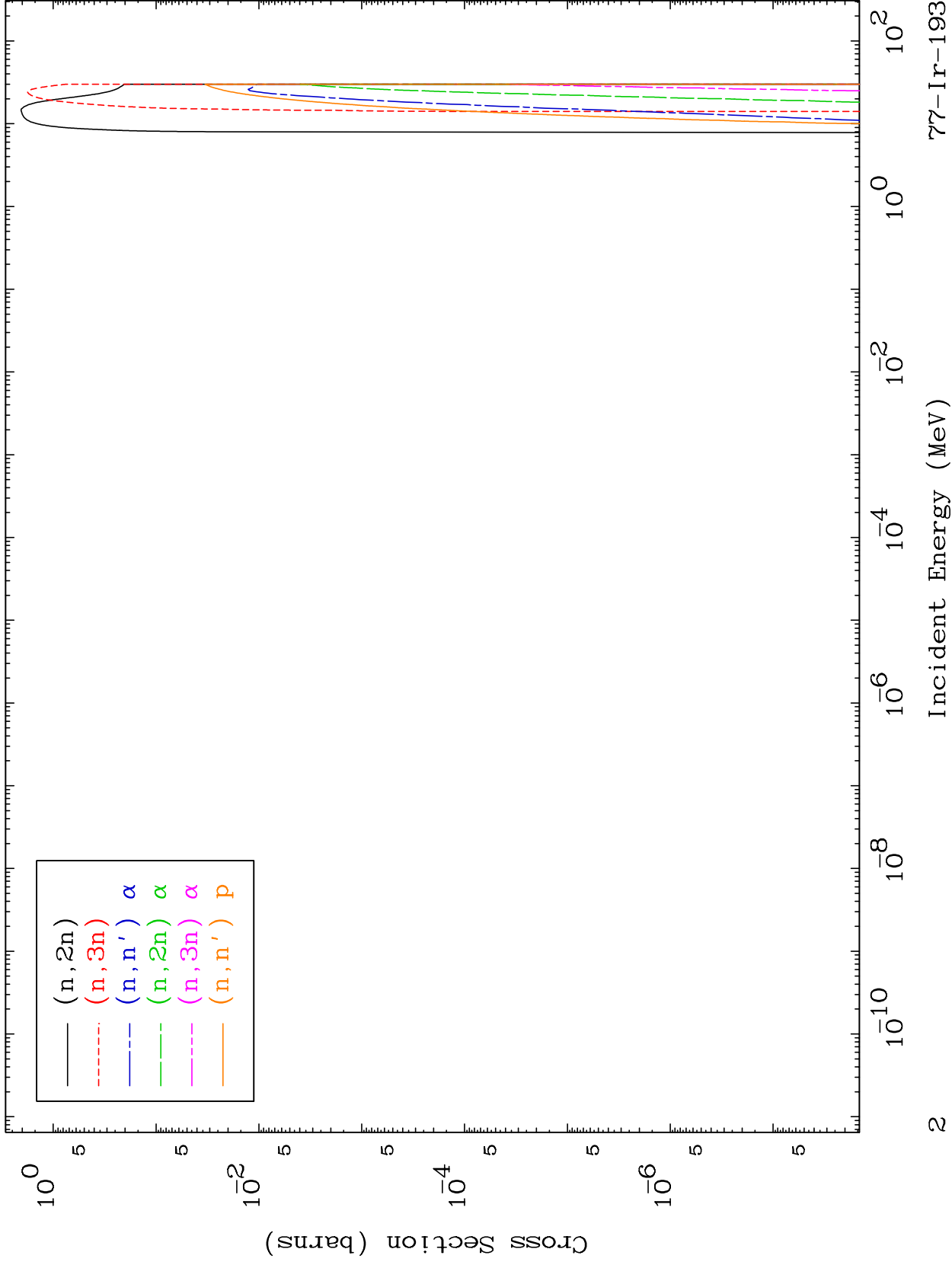
Press Mouse Button to Start

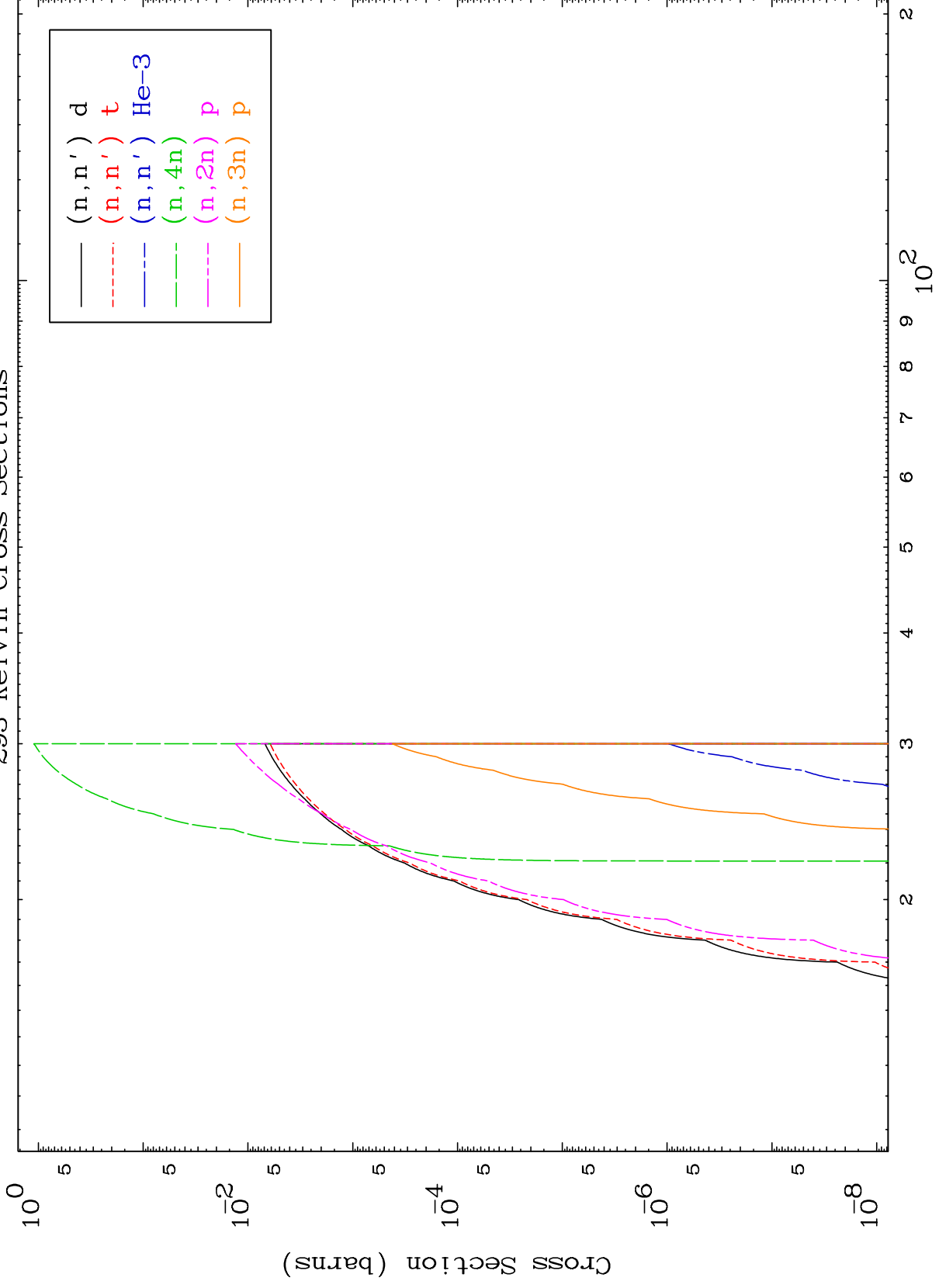


MAT 7731

Neutron Production  
293 Kelvin Cross Sections

77-Ir-193

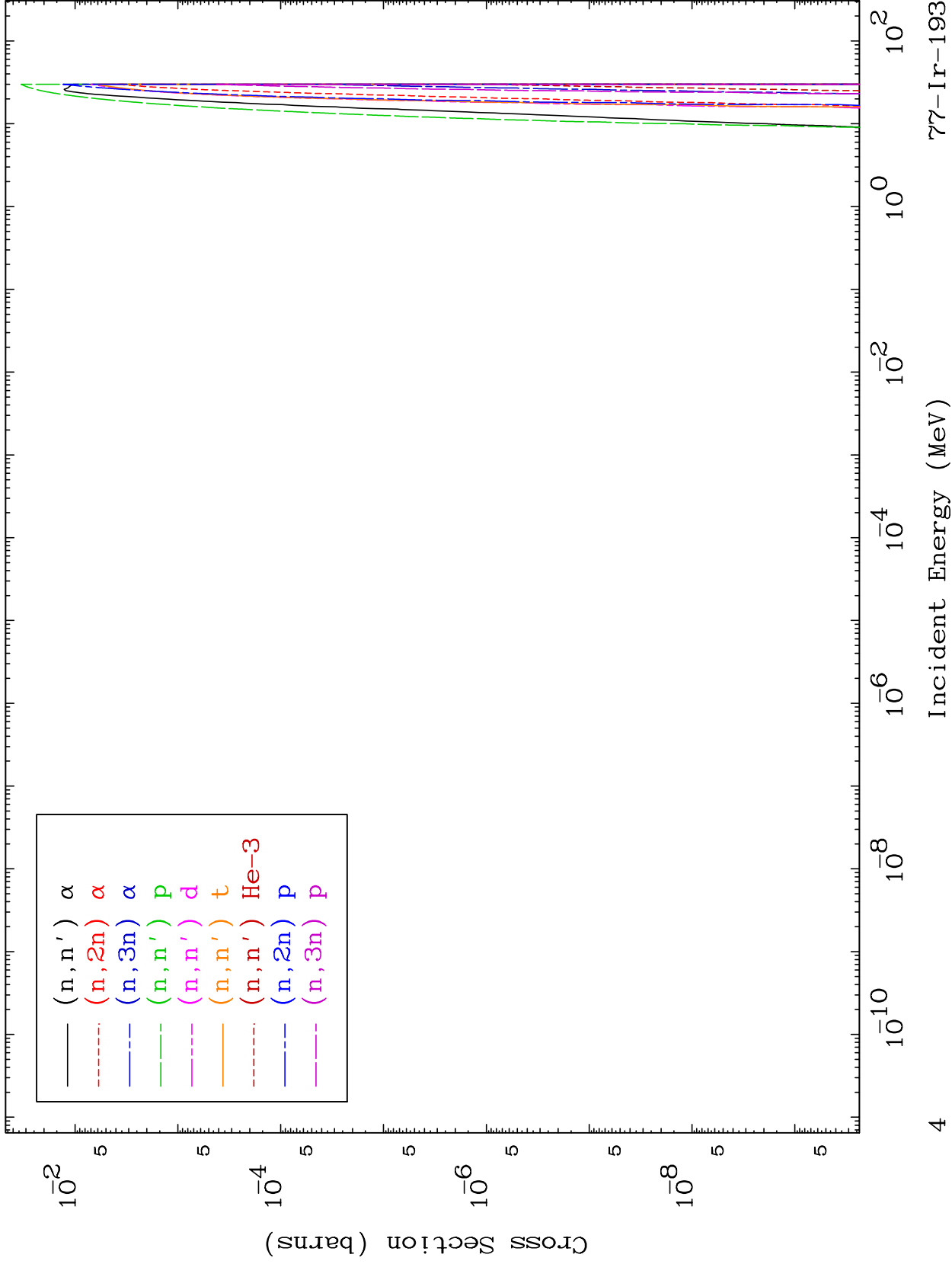




MAT 7731

Charged Particle  
293 Kelvin Cross Sections

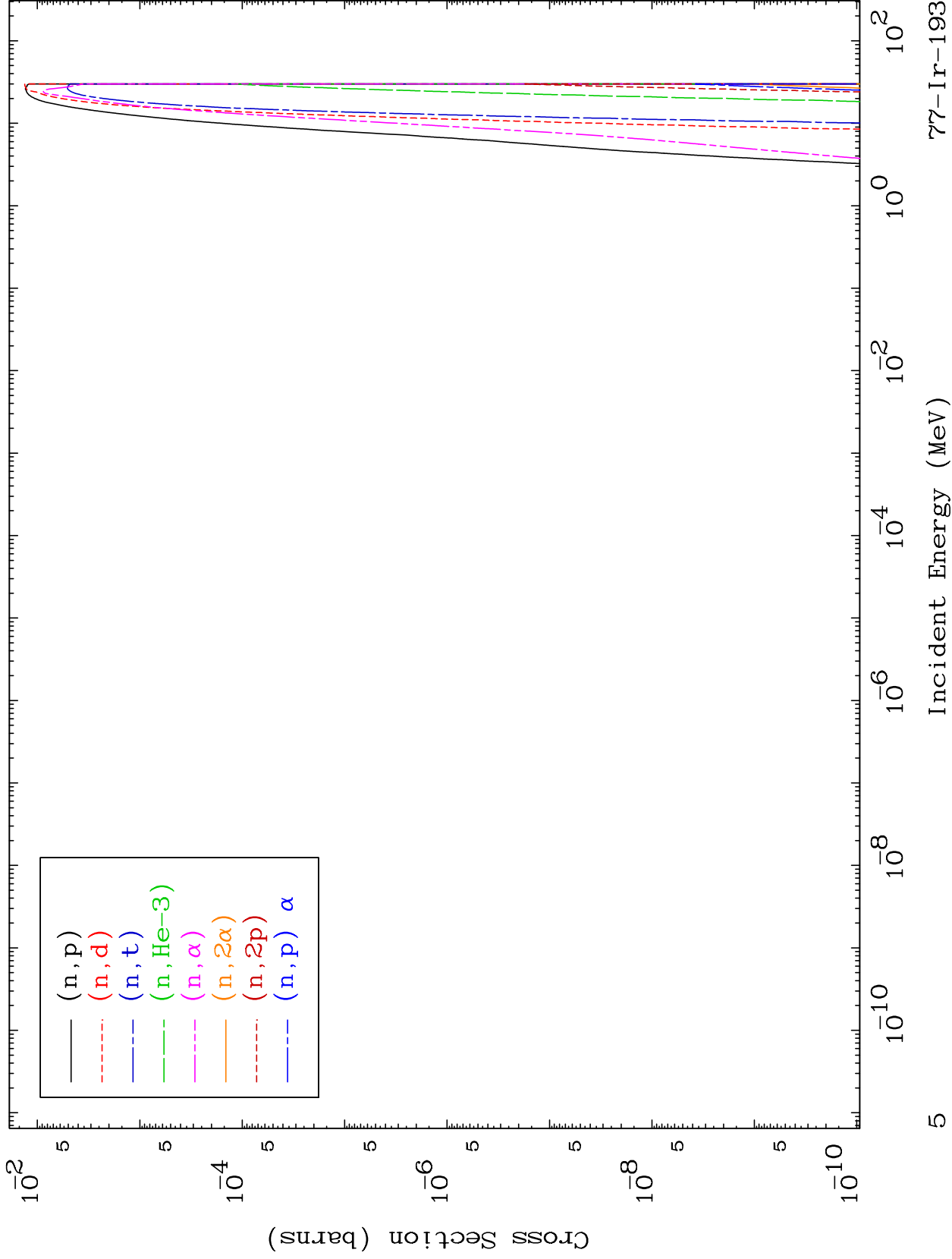
77-Ir-193



MAT 7731

Charged Particle  
293 Kelvin Cross Sections

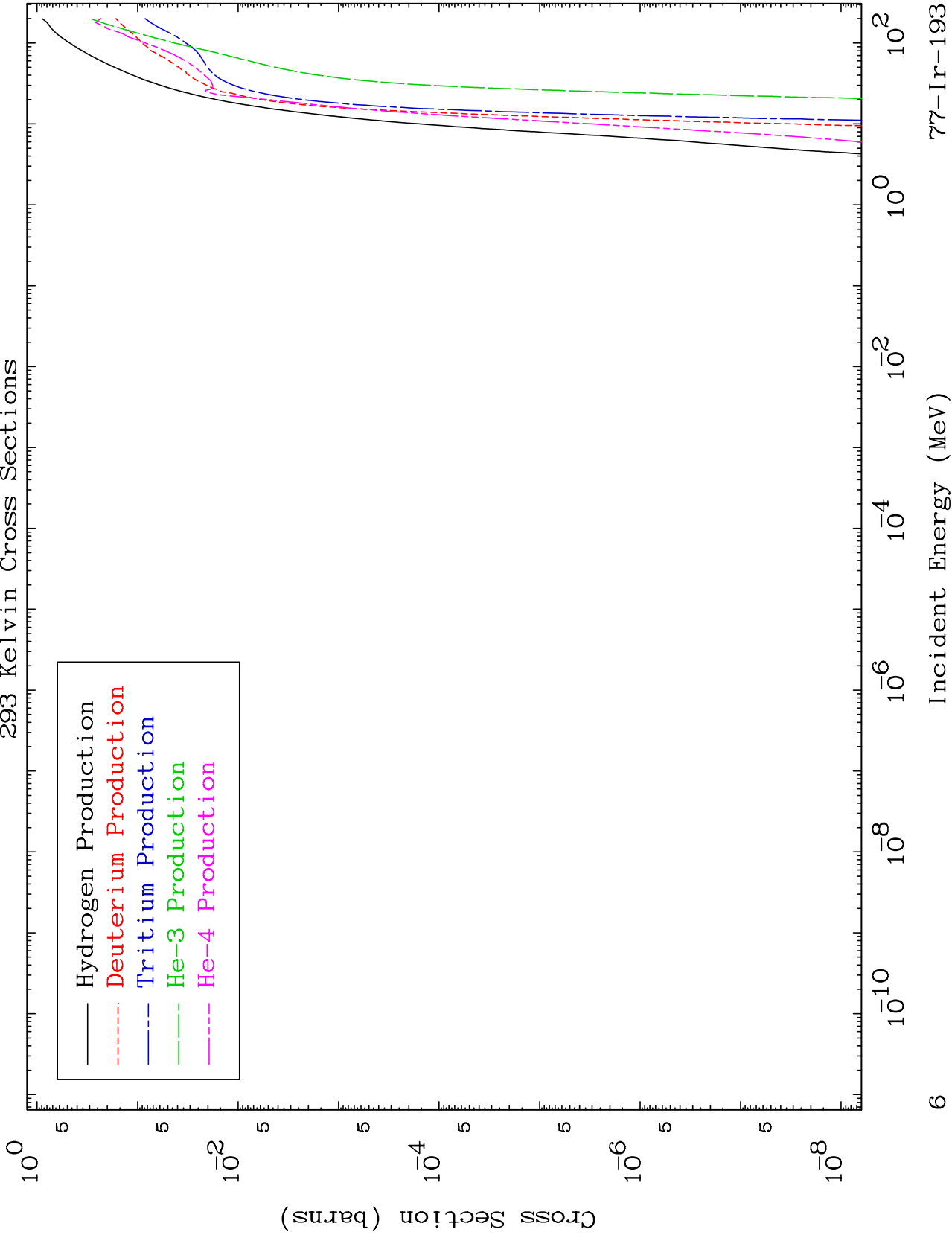
77-Ir-193



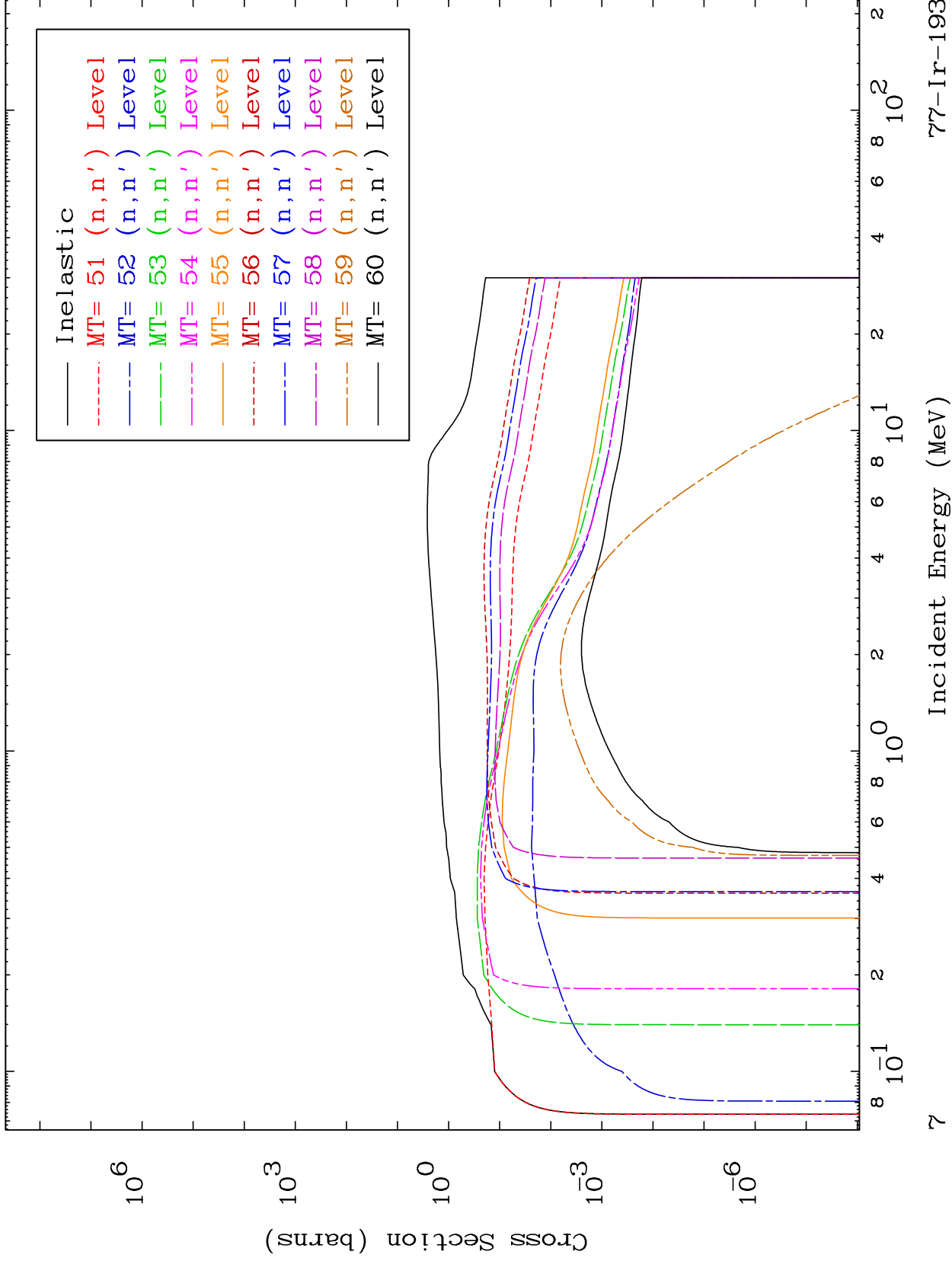
MAT 7731

Particle Production  
293 Kelvin Cross Sections

77-Ir-193



293 Kelvin Cross Sections



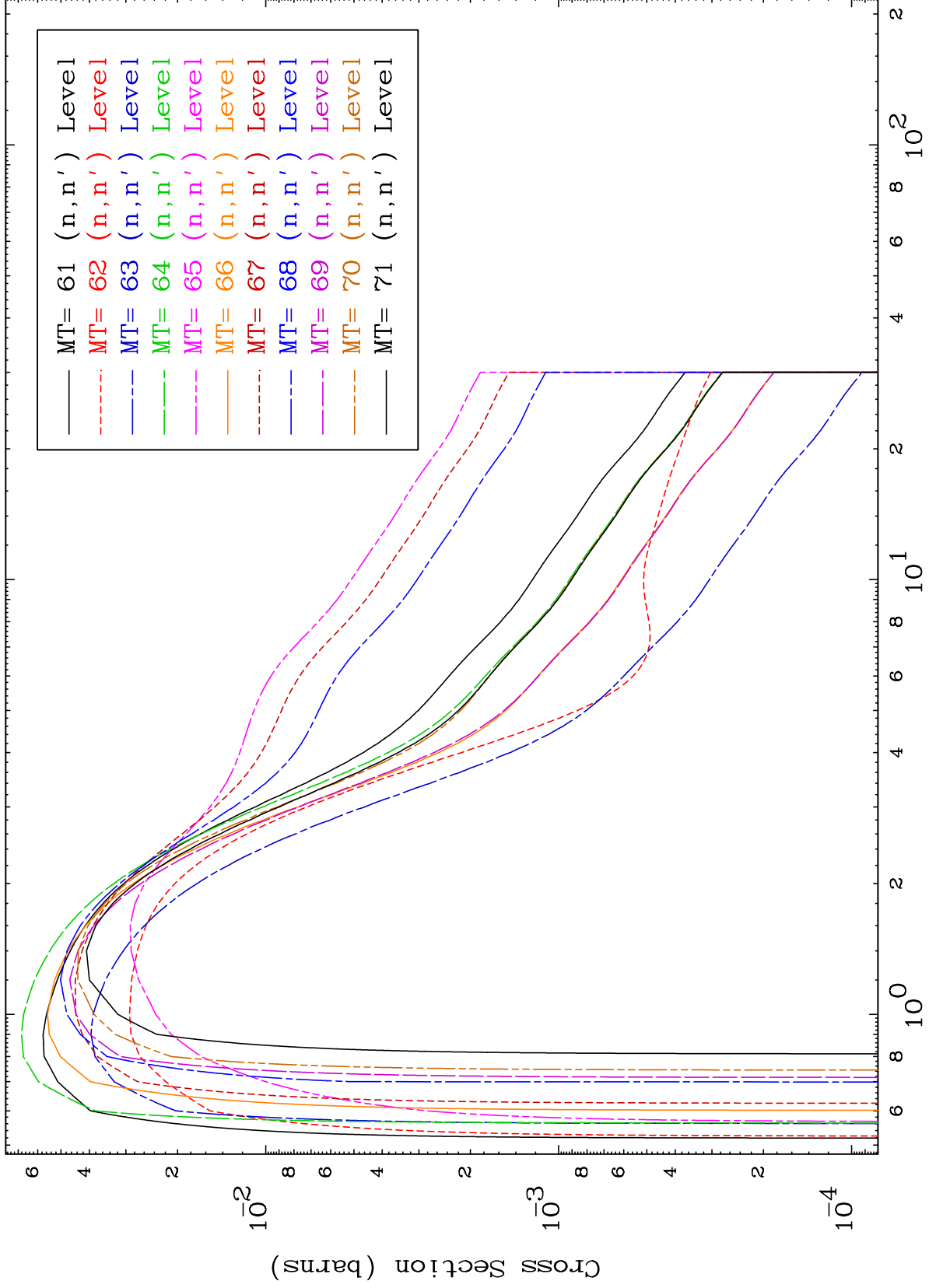


MAT 7731

(n,n') Level

77-Ir-193

293 Kelvin Cross Sections



8

Incident Energy (MeV)

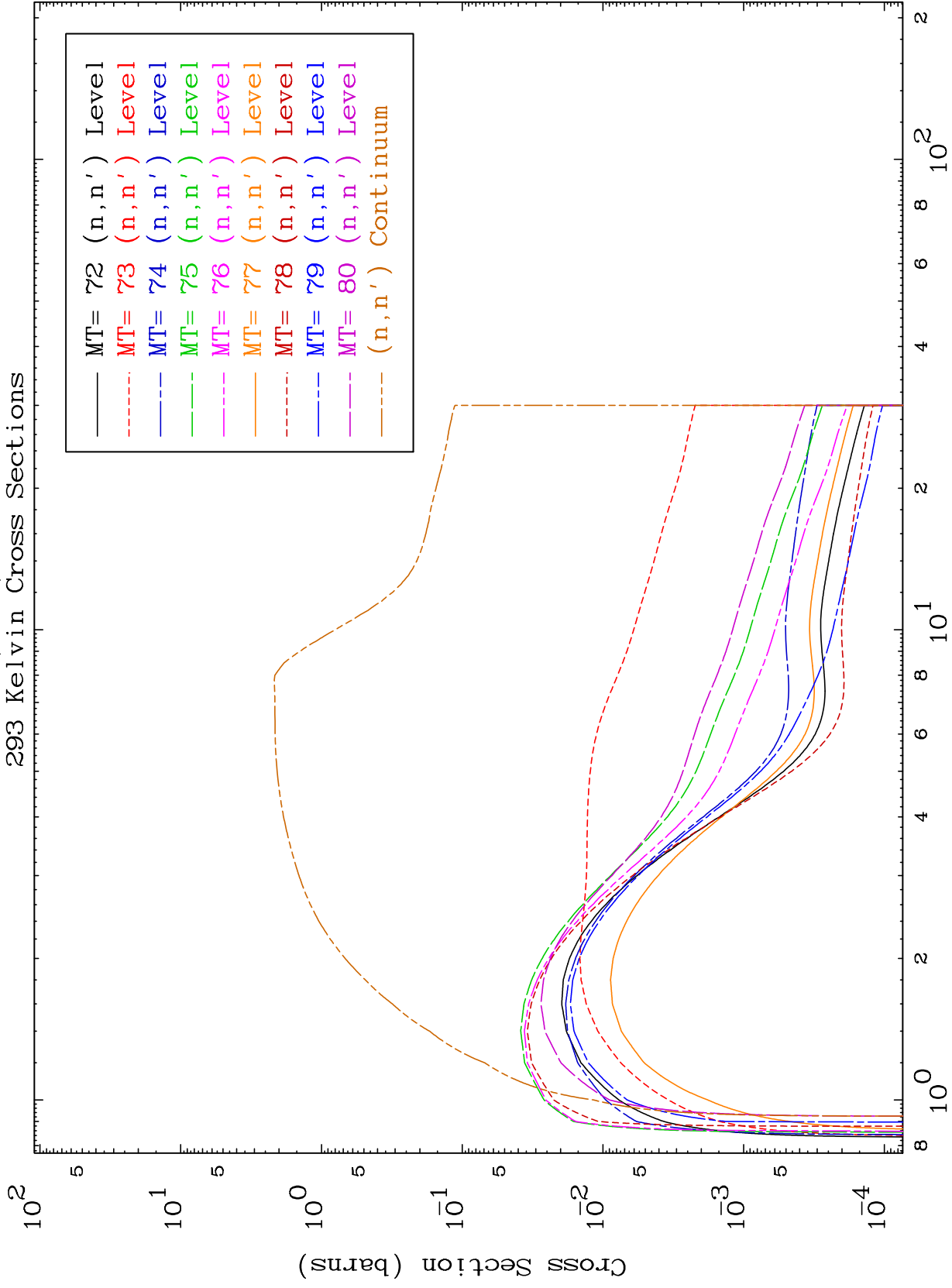
77-Ir-193

MAT 7731

(n,n') Level

77-Ir-193

293 Kelvin Cross Sections



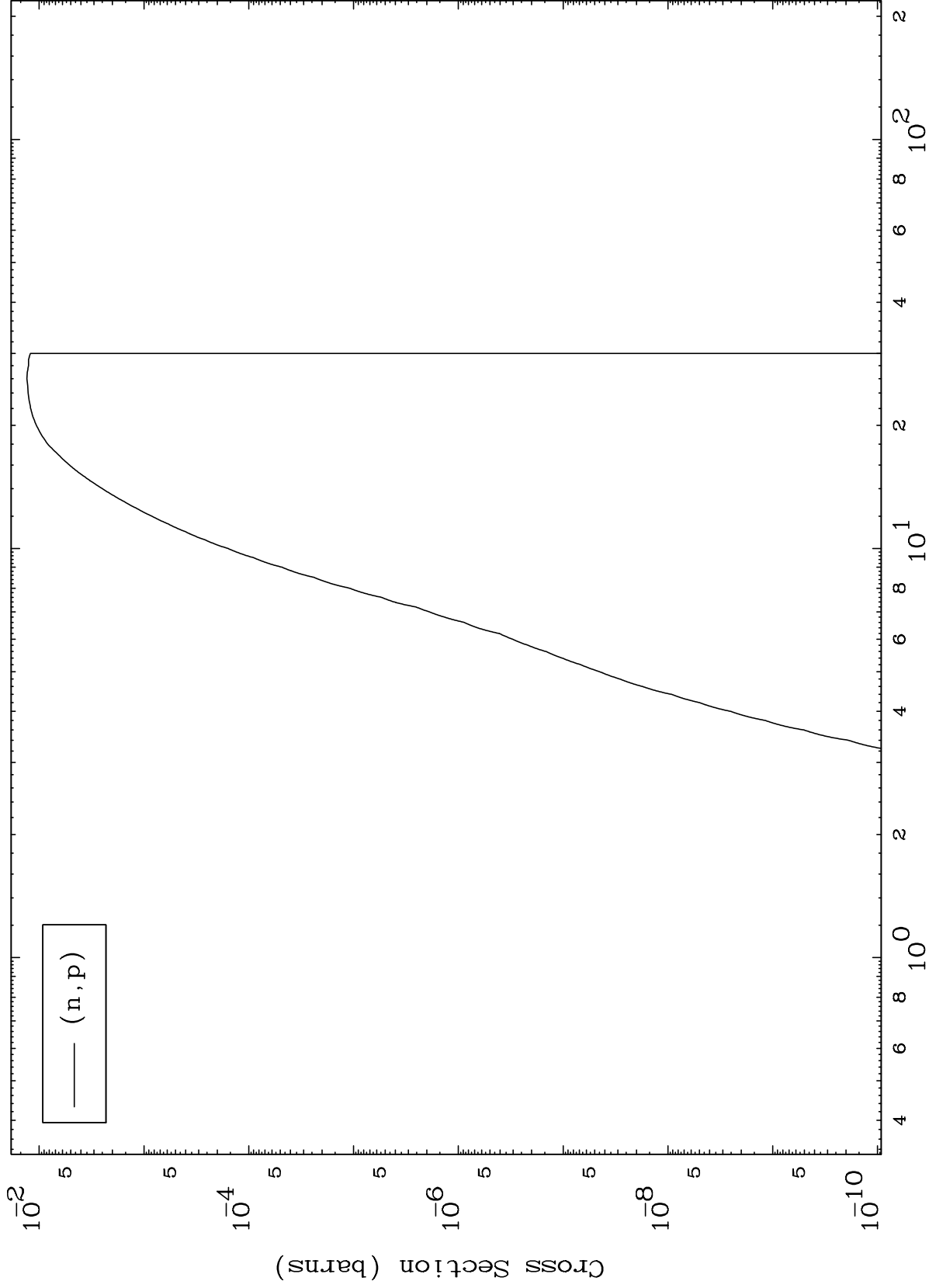
Incident Energy (MeV)

77-Ir-193

MAT 7731

(n,p) Levels  
293 Kelvin Cross Sections

77-Ir-193



Incident Energy (MeV)

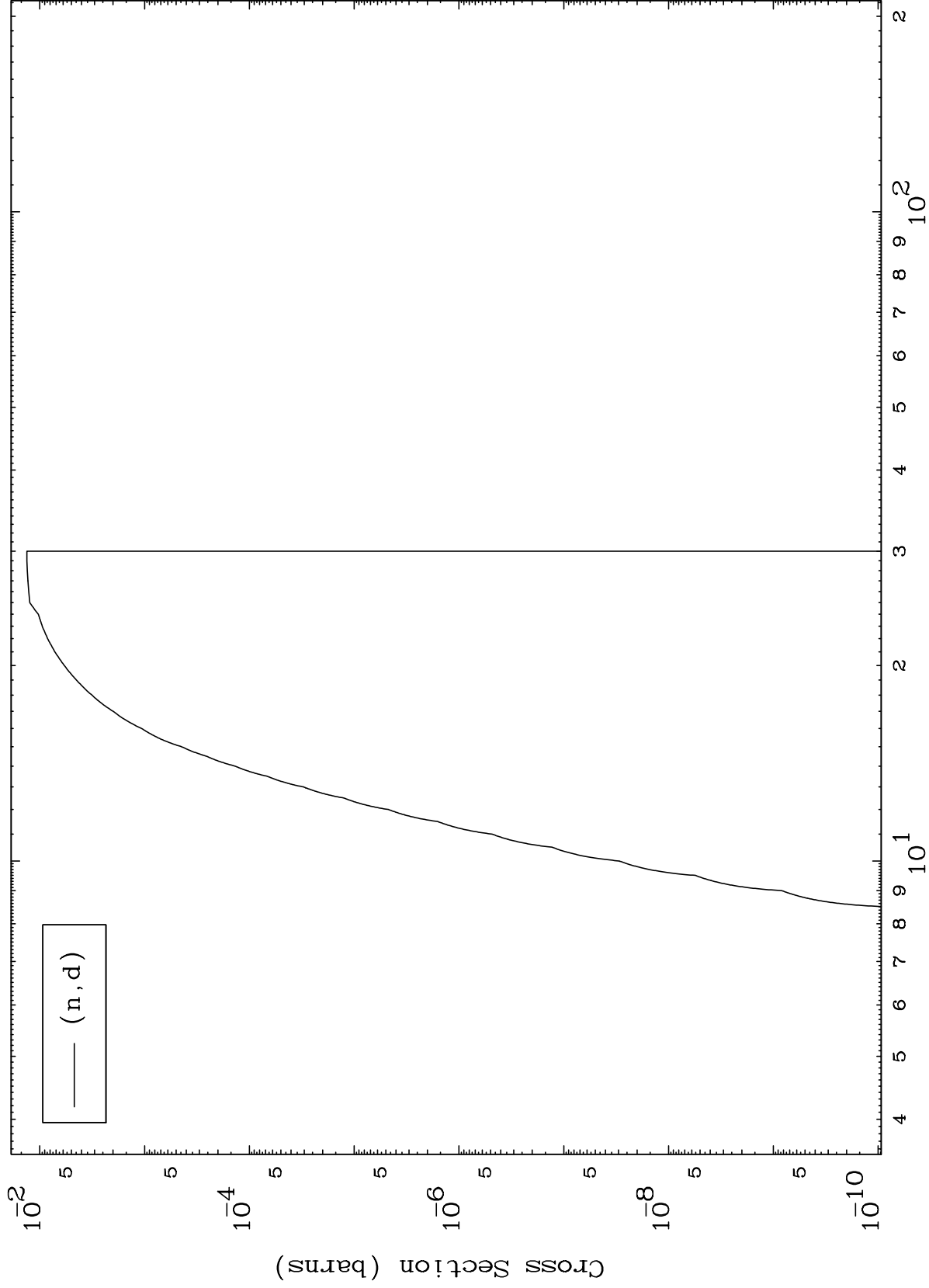
77-Ir-193

10

MAT 7731

(n,d) Levels  
293 Kelvin Cross Sections

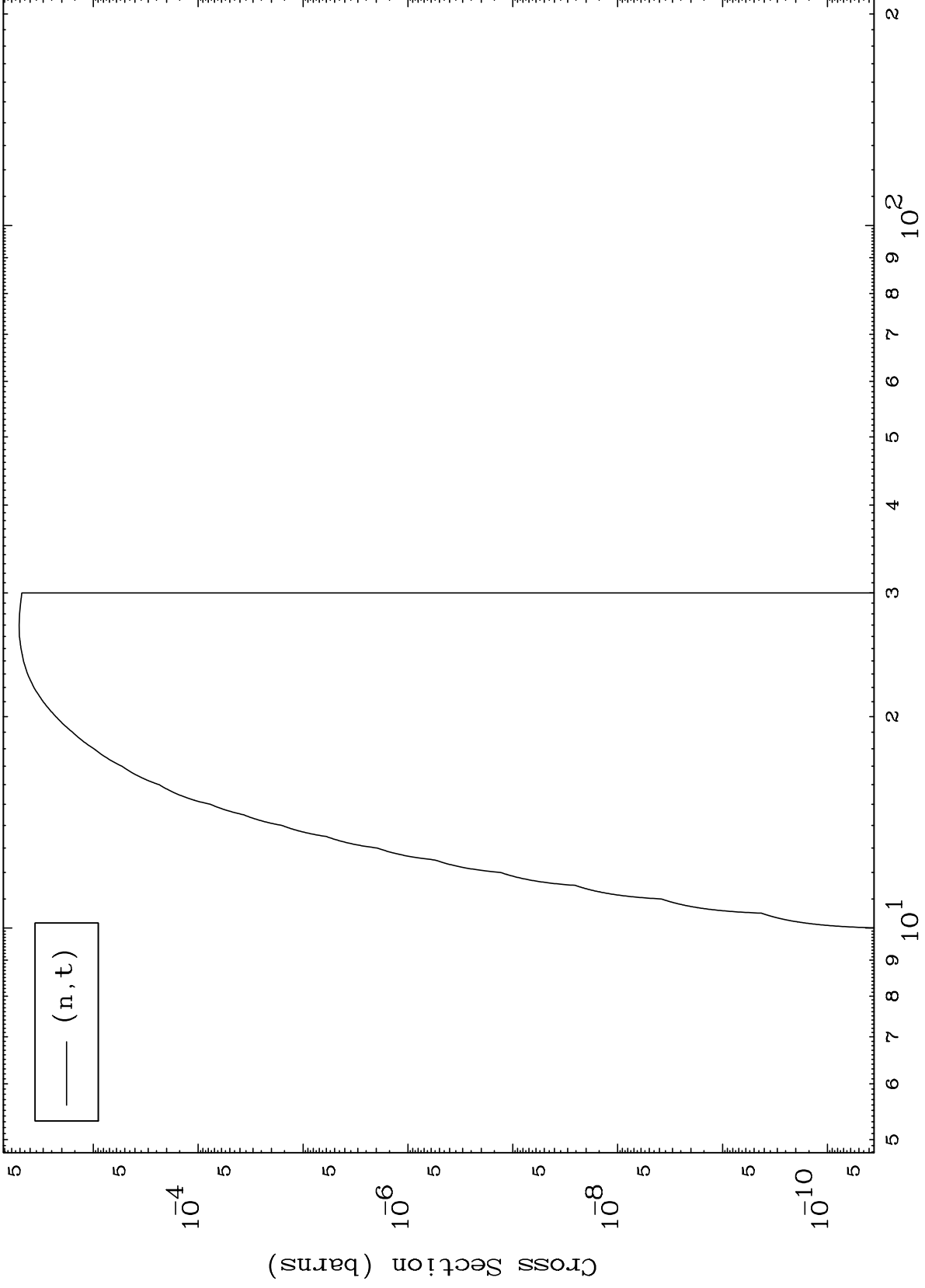
77-Ir-193



MAT 7731

(n,t) Levels  
293 Kelvin Cross Sections

77-Ir-193



12

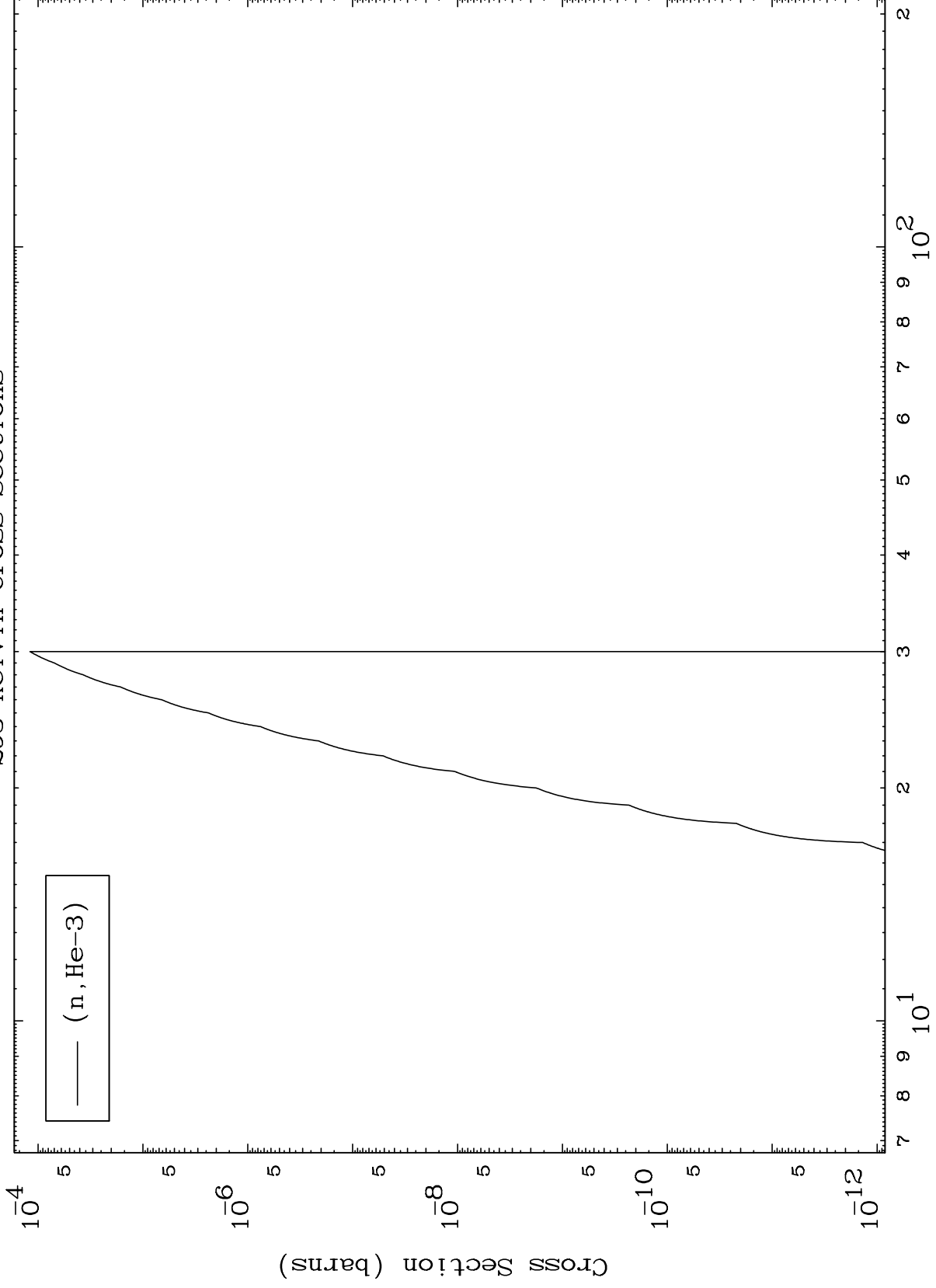
Incident Energy (MeV)

77-Ir-193

MAT 7731

(n,He3) Levels  
293 Kelvin Cross Sections

77-Ir-193



13

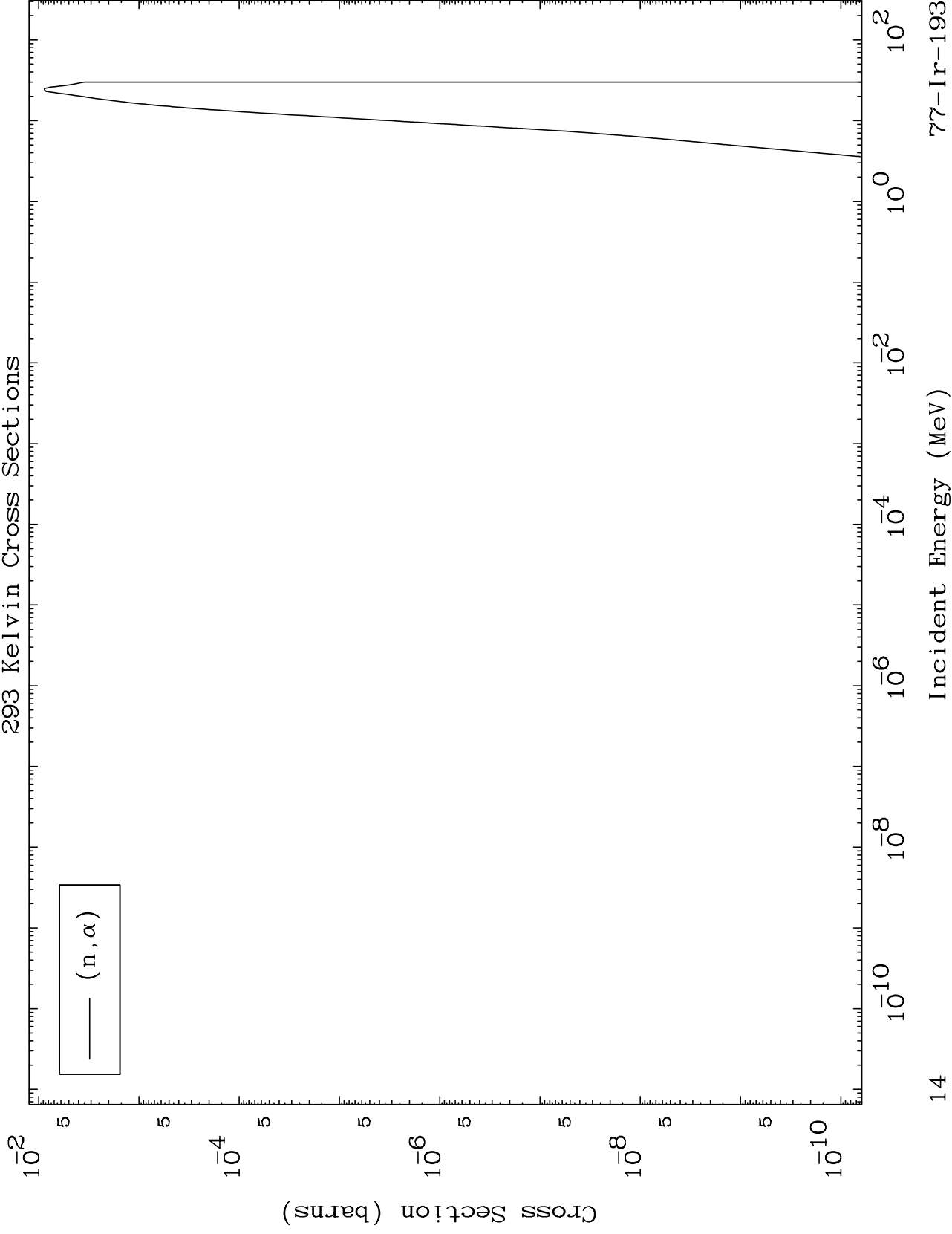
Incident Energy (MeV)

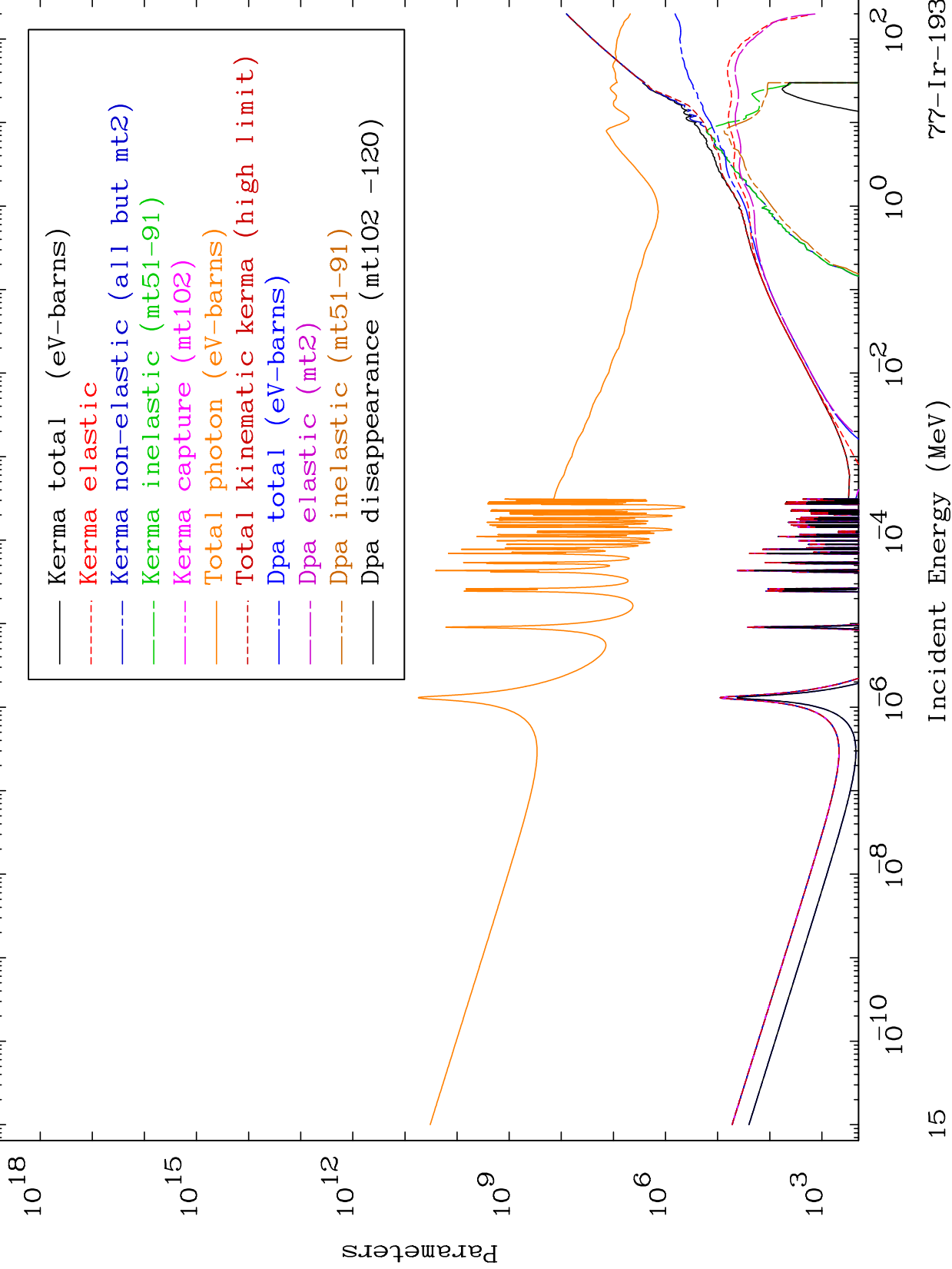
77-Ir-193

MAT 7731

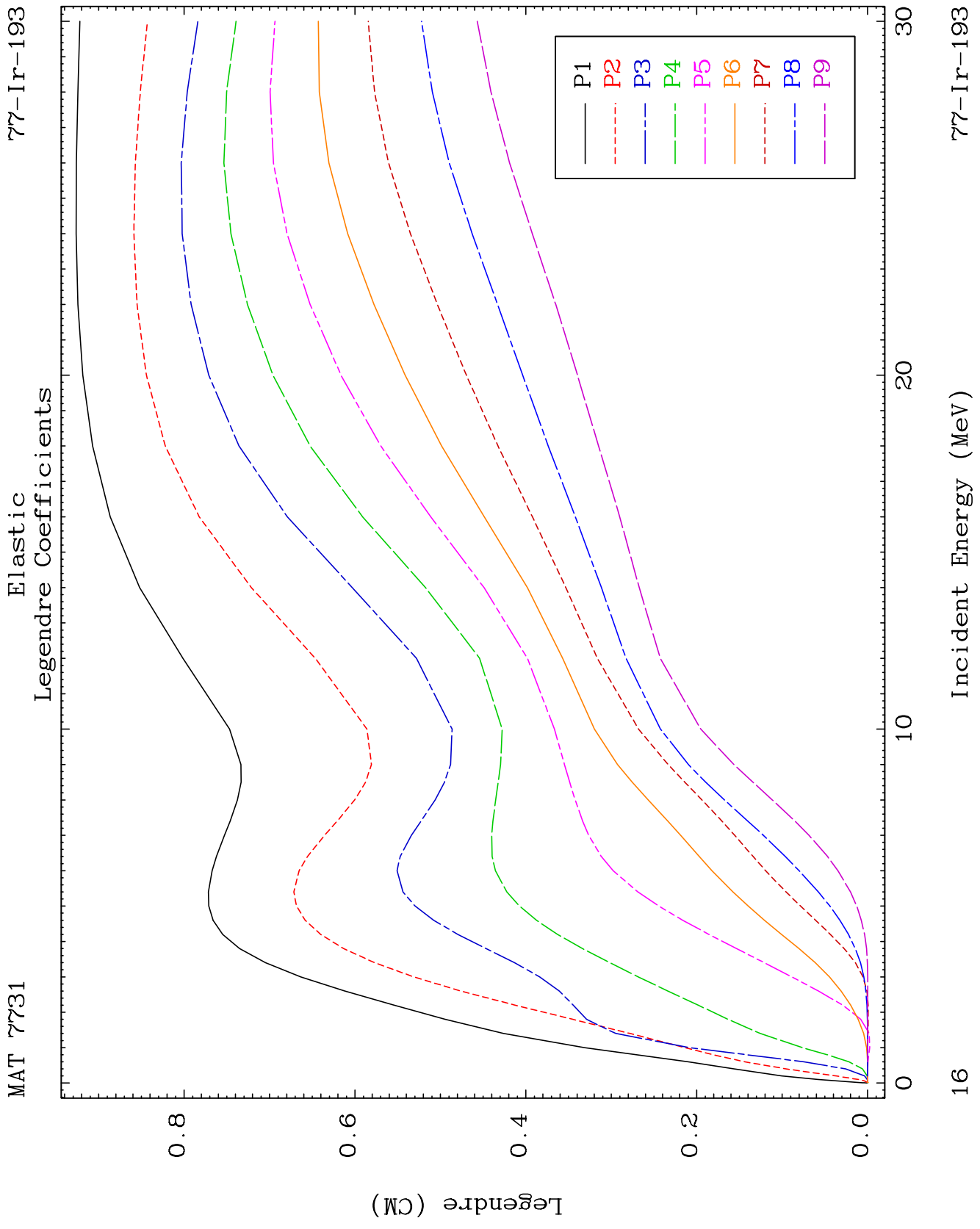
(n,  $\alpha$ ) Levels  
293 Kelvin Cross Sections

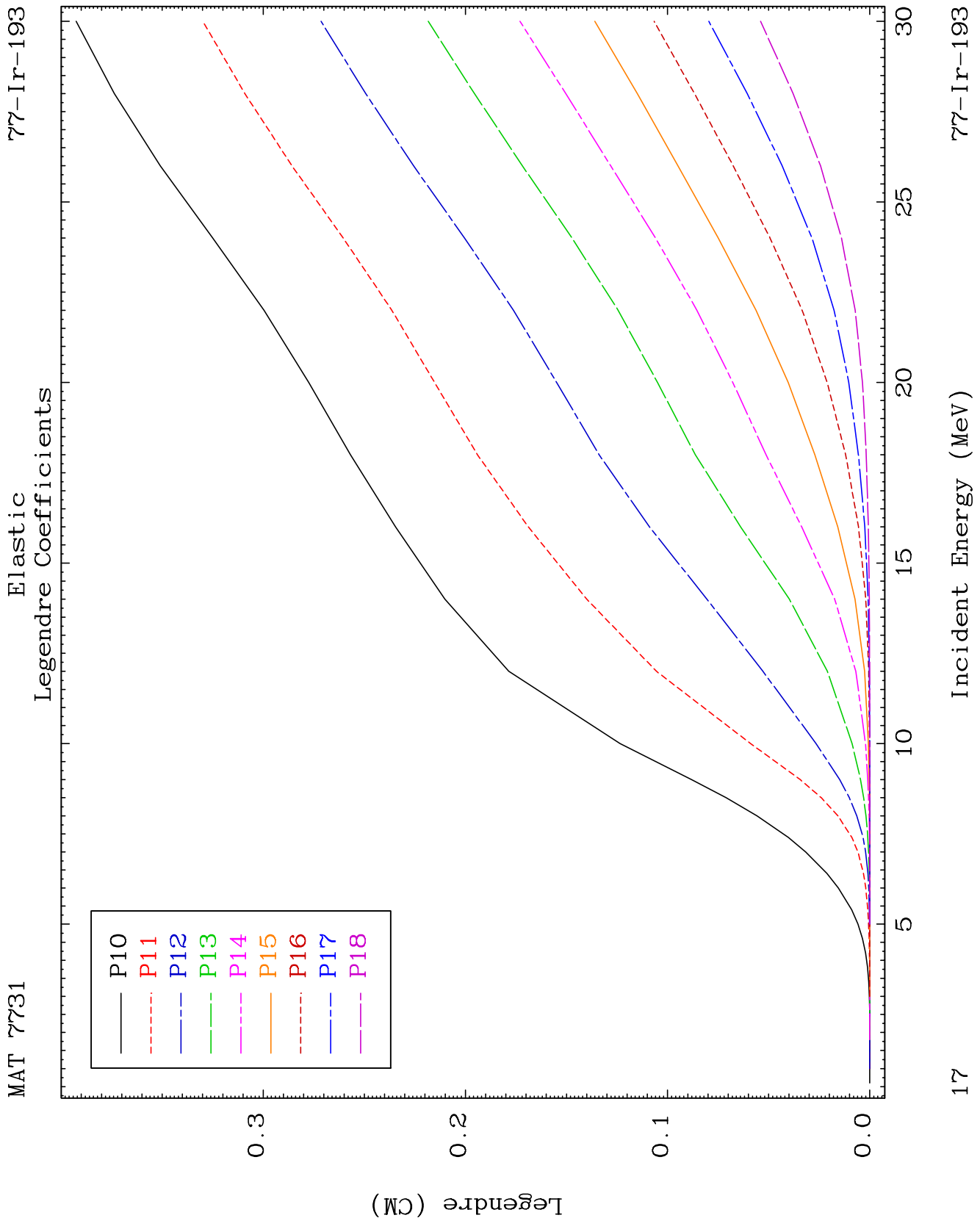
77-Ir-193







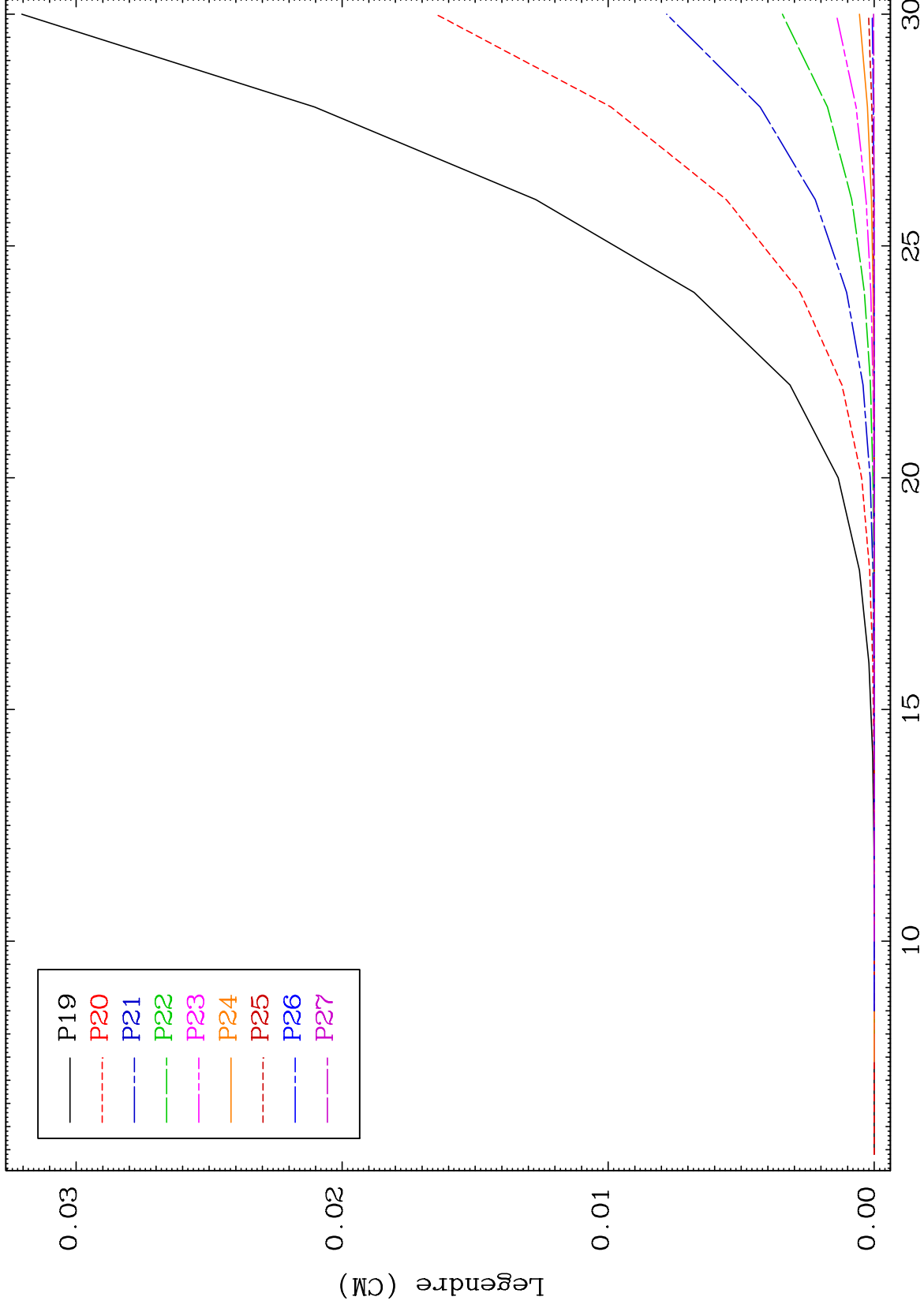




MAT 7731

### Elastic Legendre Coefficients

77-Ir-193



18

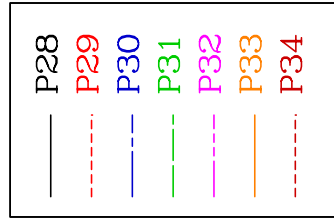
Incident Energy (MeV)

77-Ir-193

MAT 7731

Elastic  
Legendre Coefficients

77-Ir-193



$\times 10^{-6}$

Legendre (CM)

8

6

4

2

0

15

20

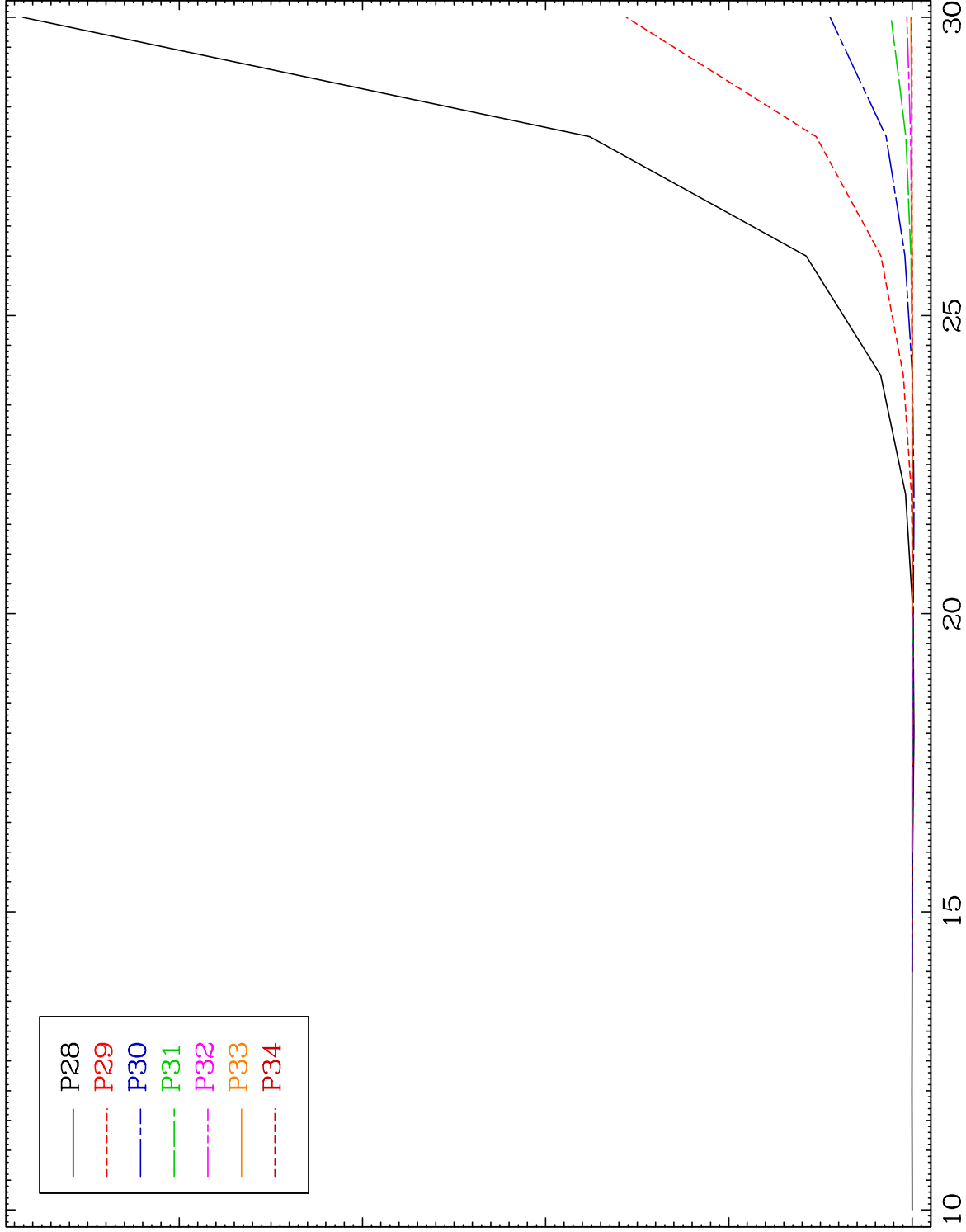
25

30

19

Incident Energy (MeV)

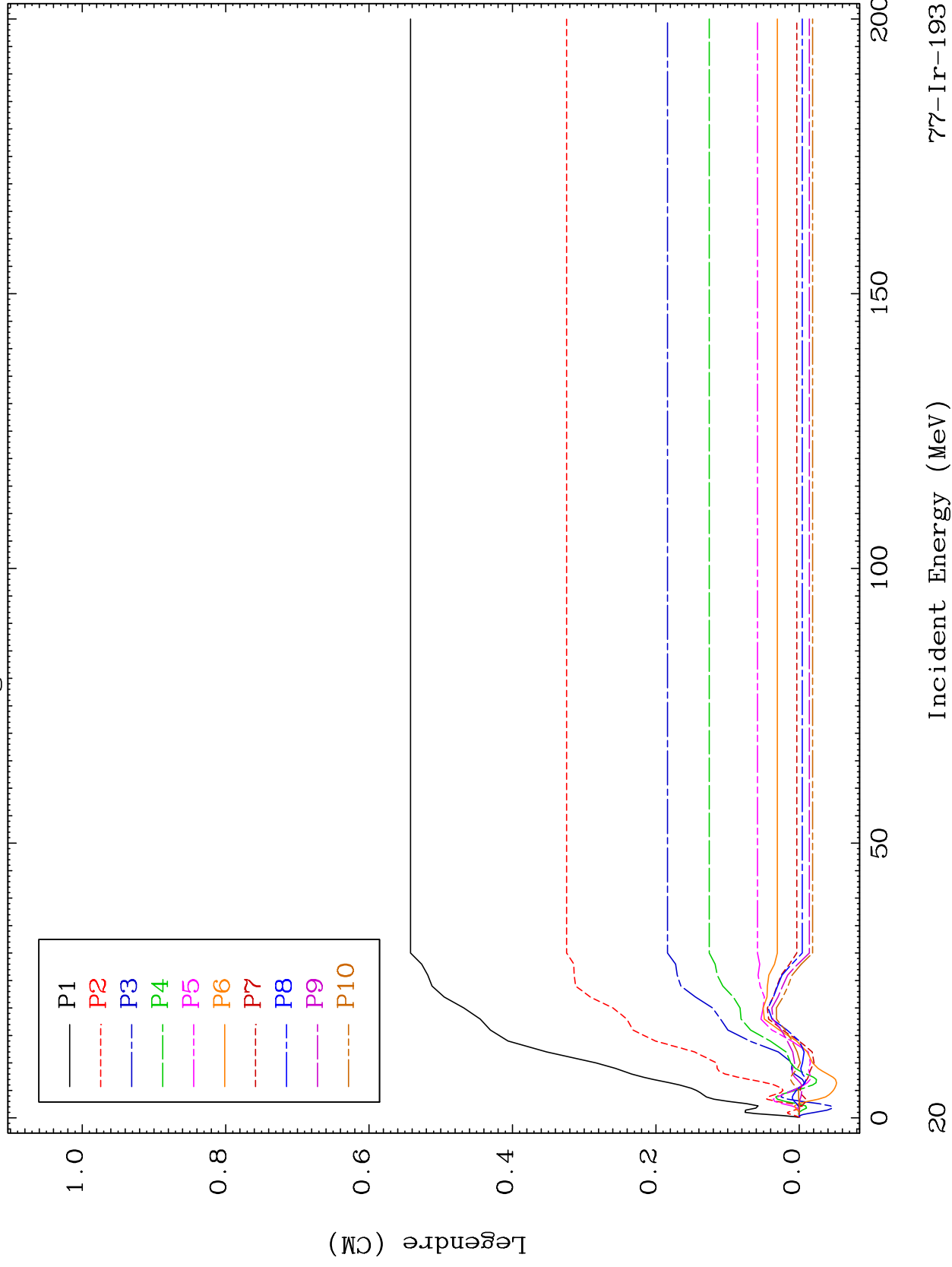
77-Ir-193



MAT 7731

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

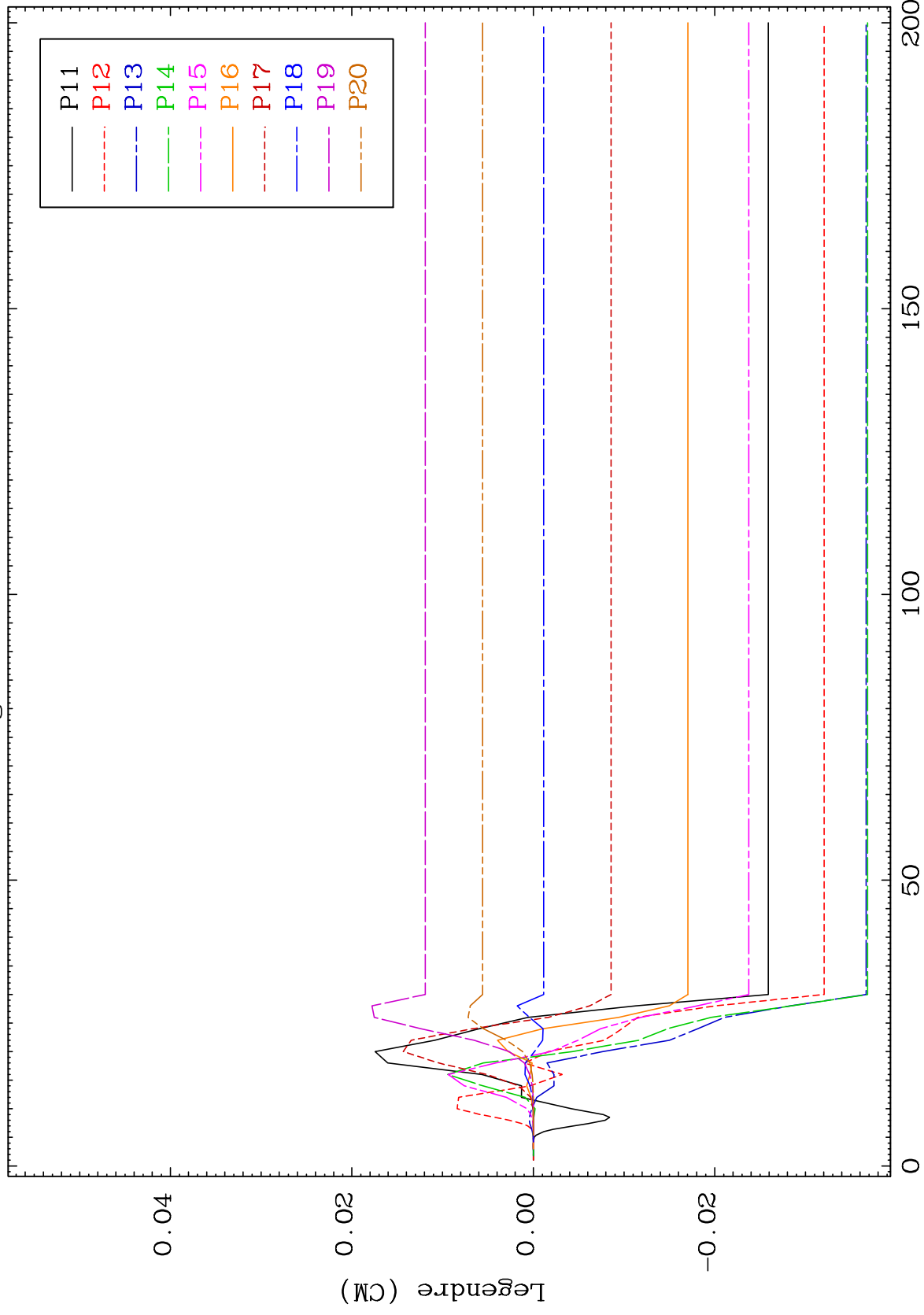
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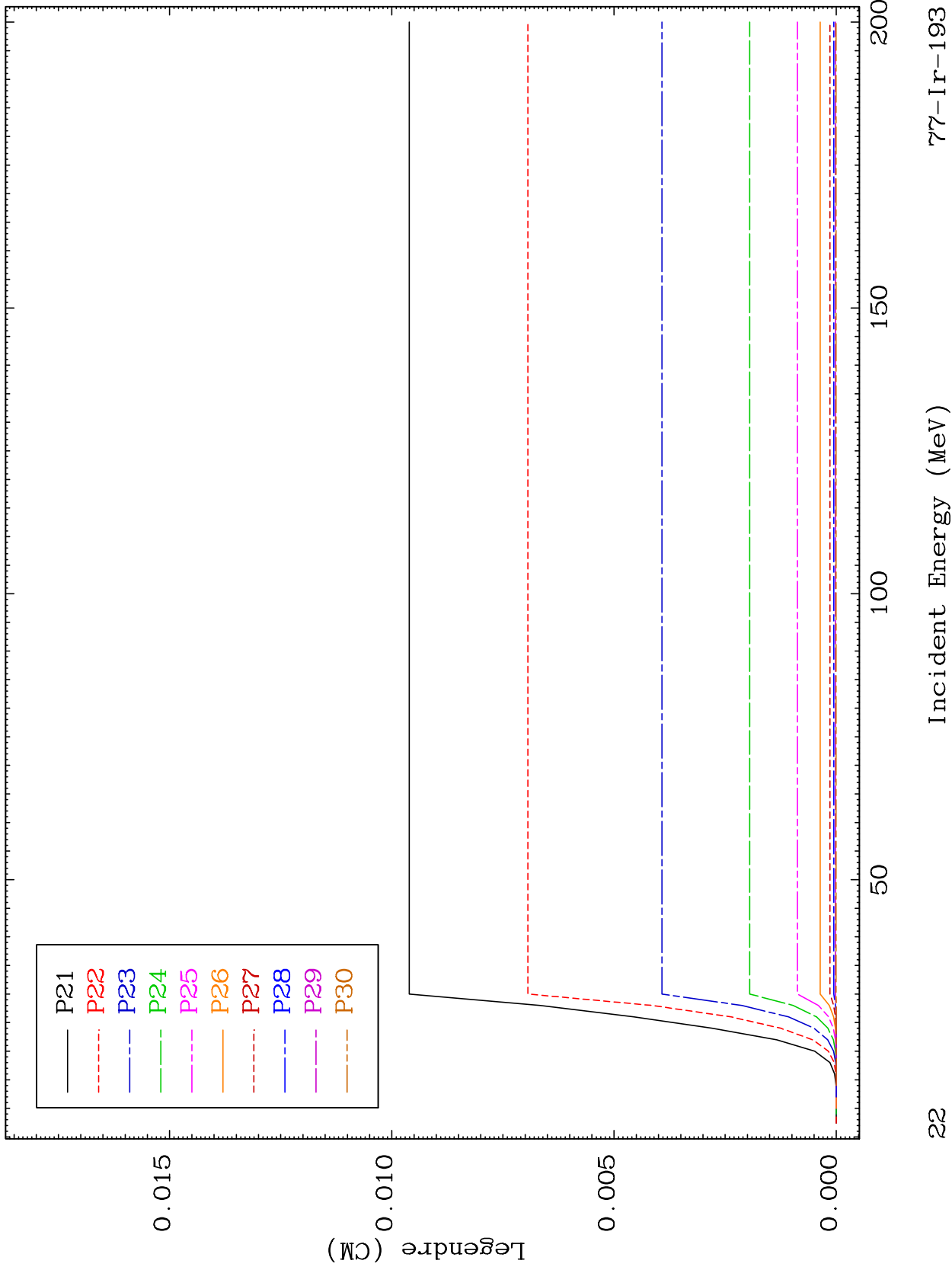


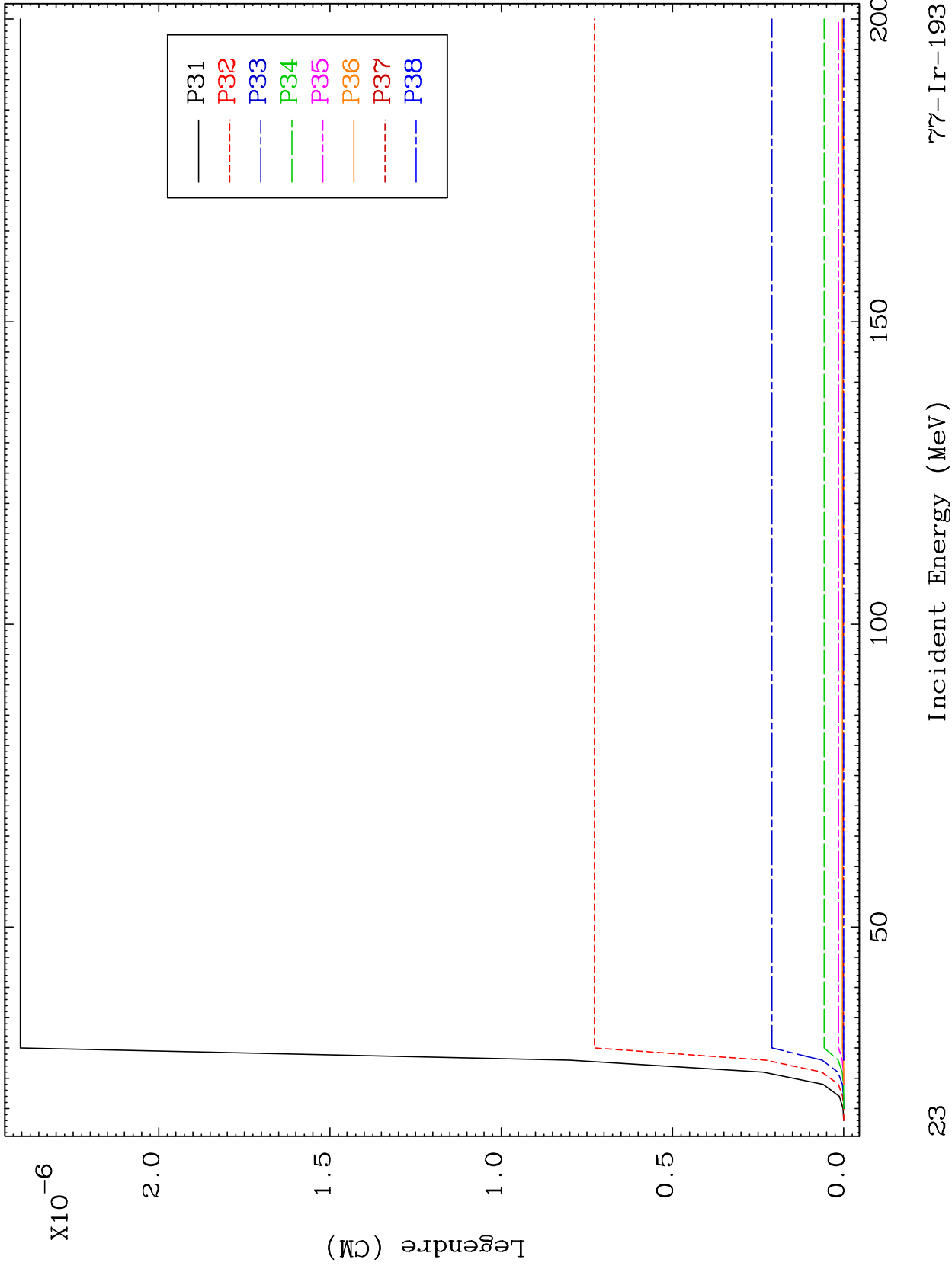
77-Ir-193

Incident Energy (MeV)

20





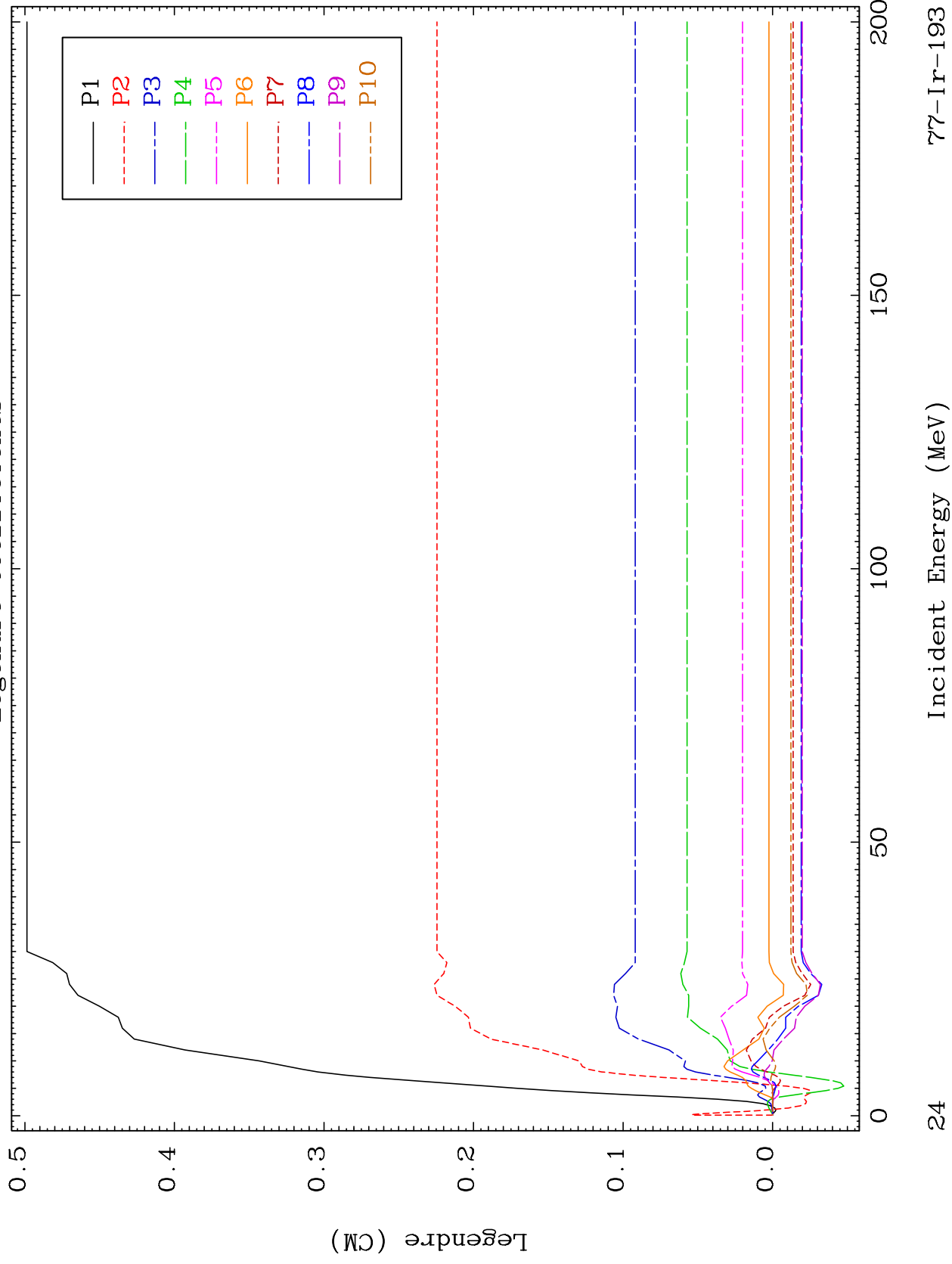




MAT 7731

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

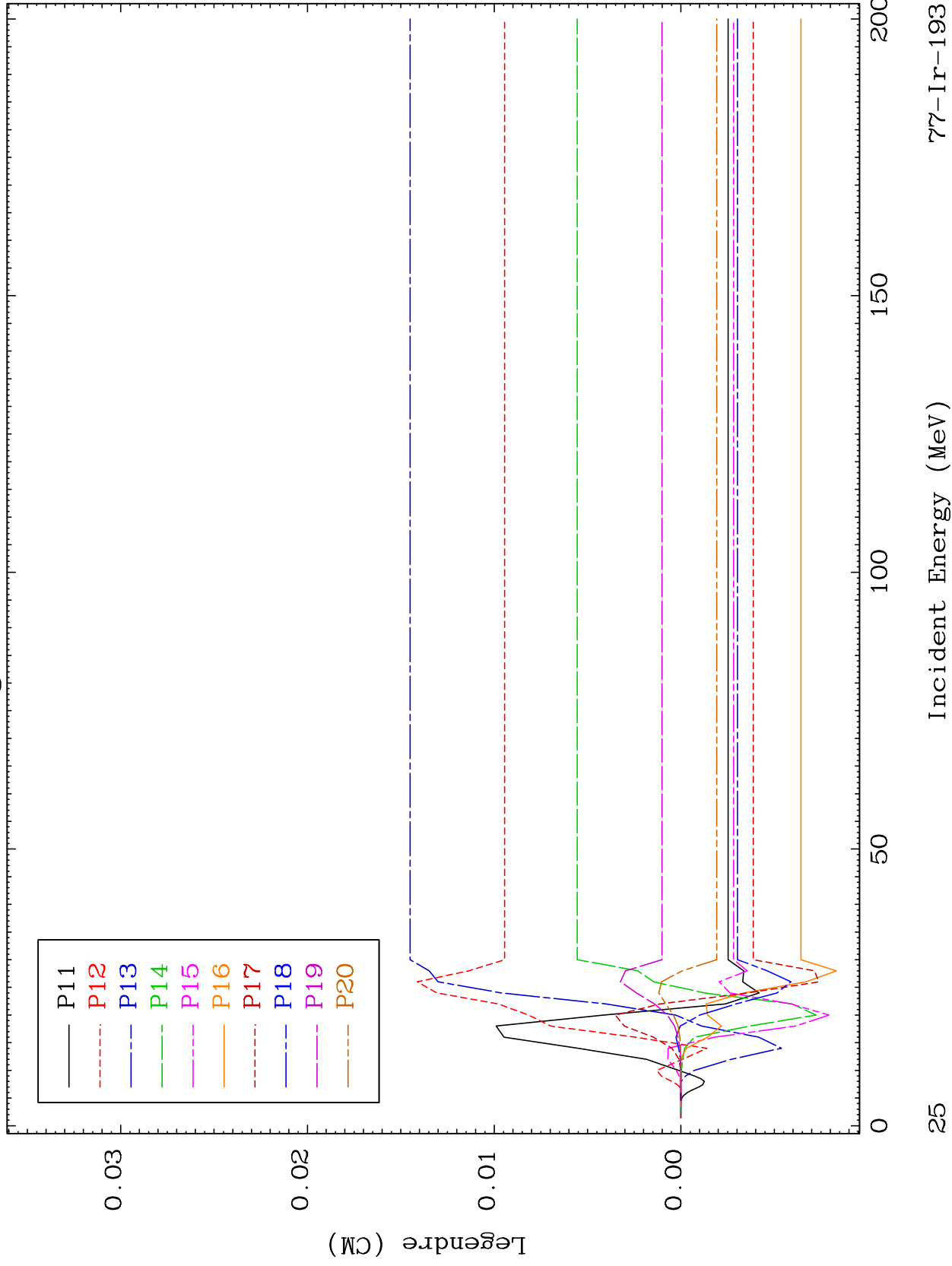
77-Ir-193



MAT 7731

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

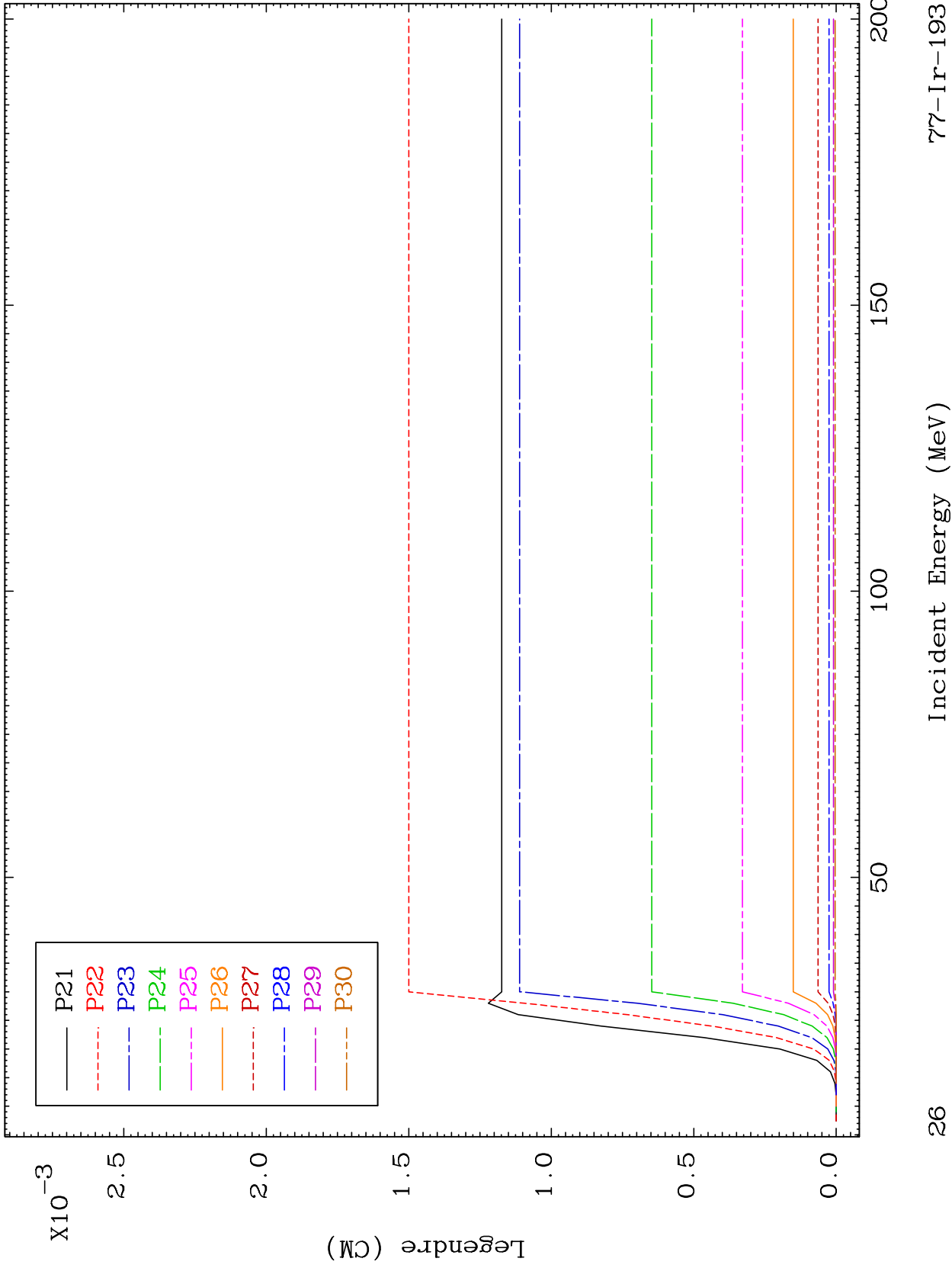
77-Ir-193



77-Ir-193

Incident Energy (MeV)

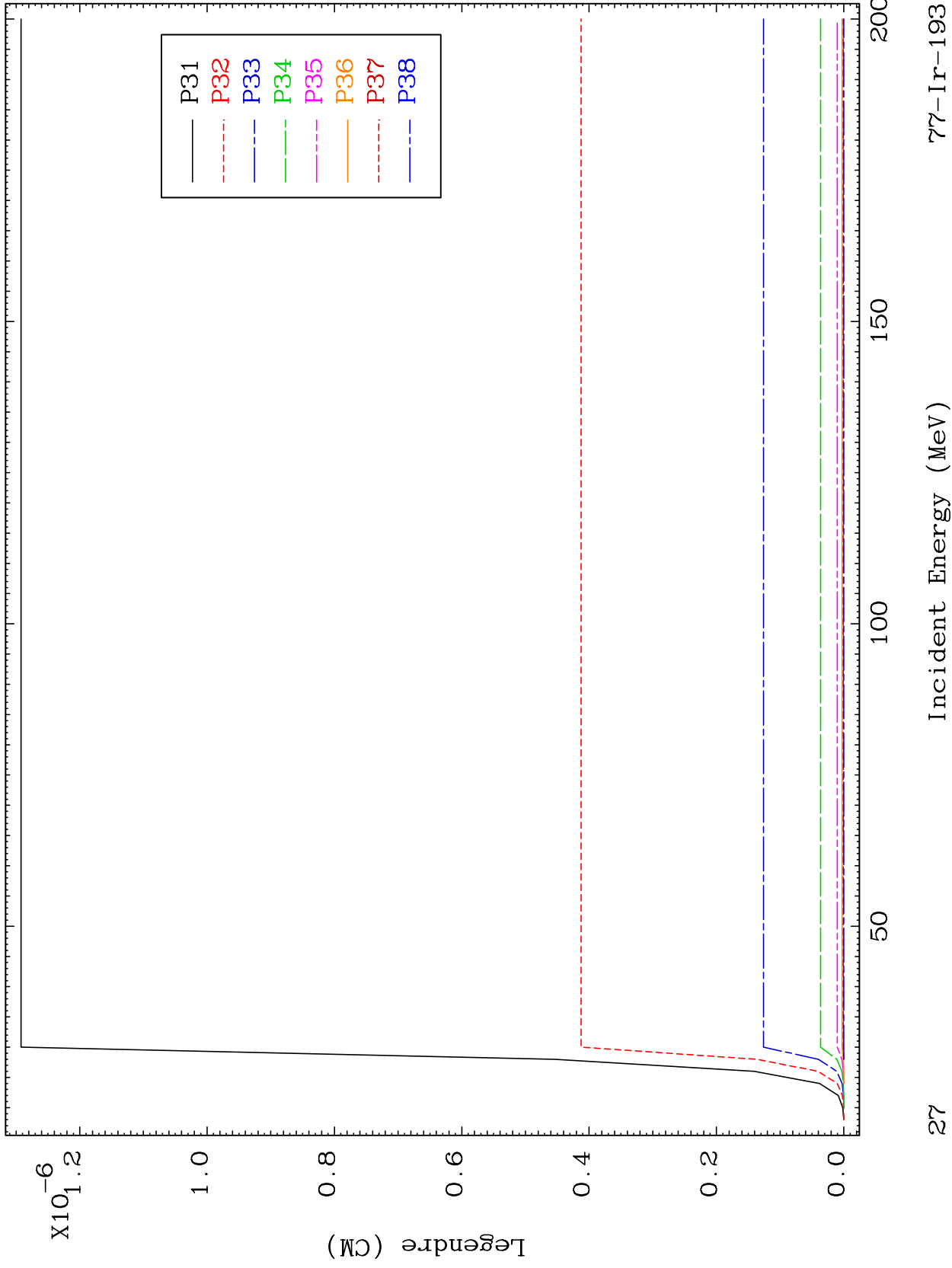
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MAT 7731

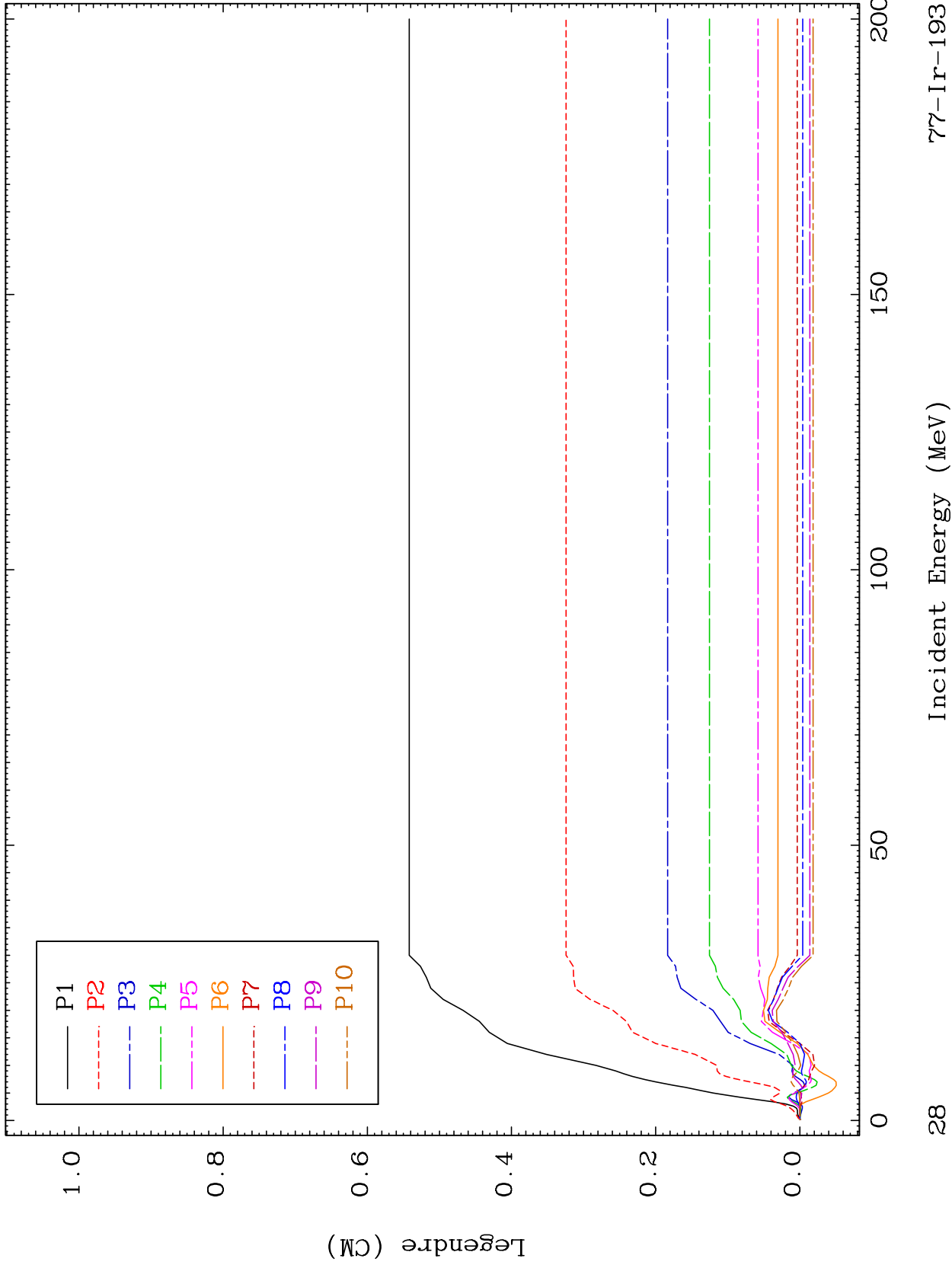
MT= 52 (n,n') Level  
Legendre Coefficients

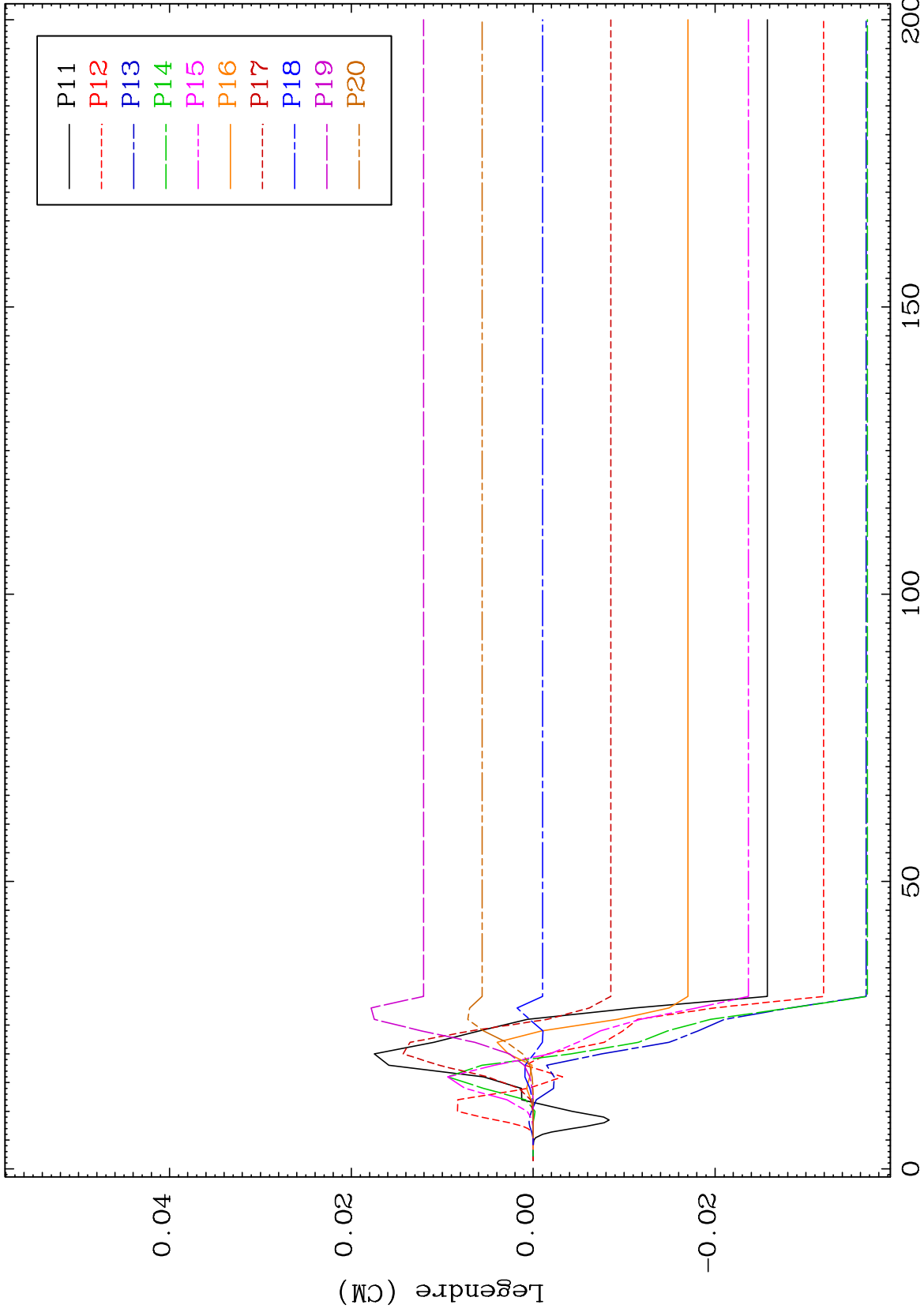
77-Ir-193



27

77-Ir-193

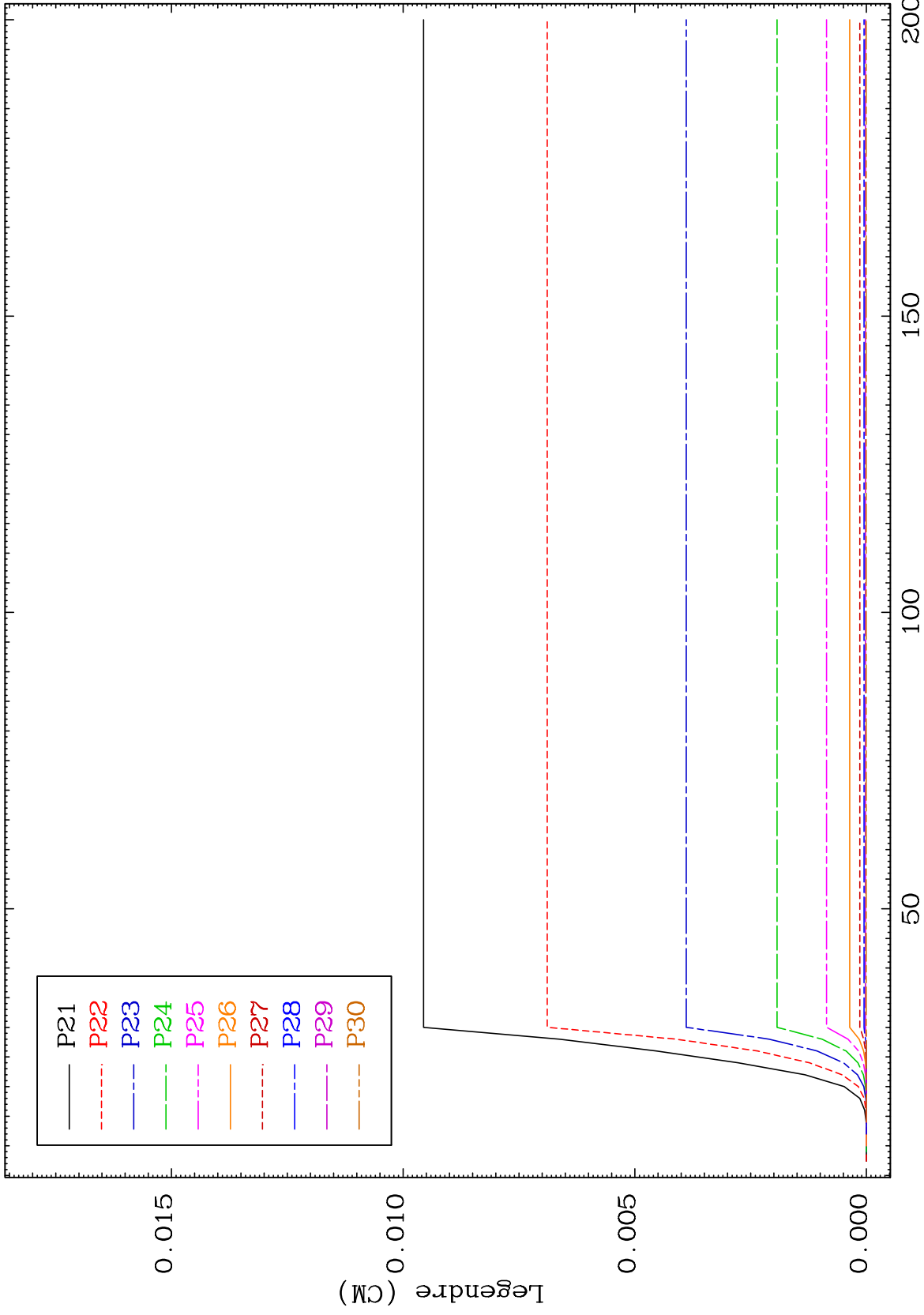




MAT 7731

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

77-Ir-193



30

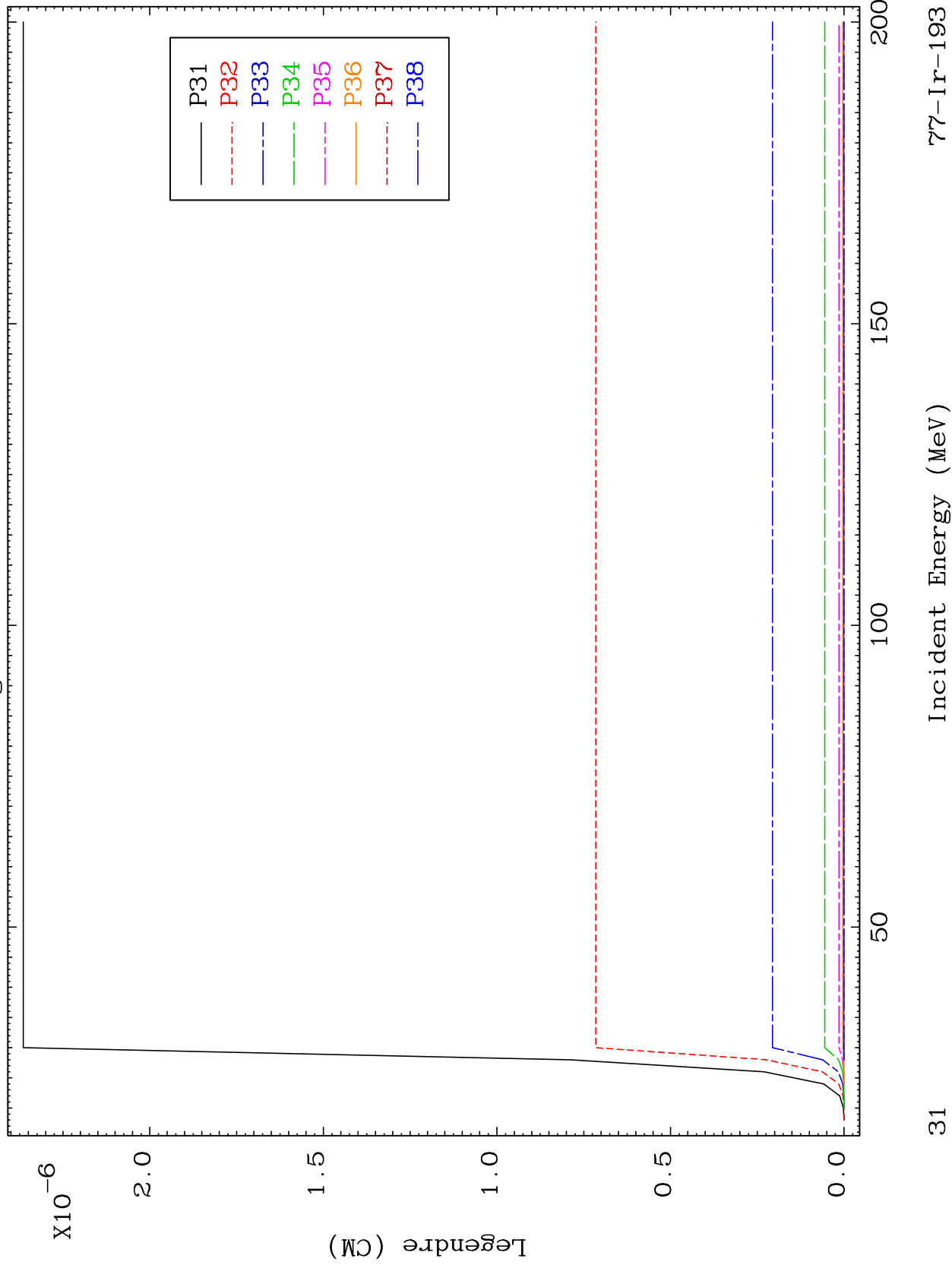
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



31

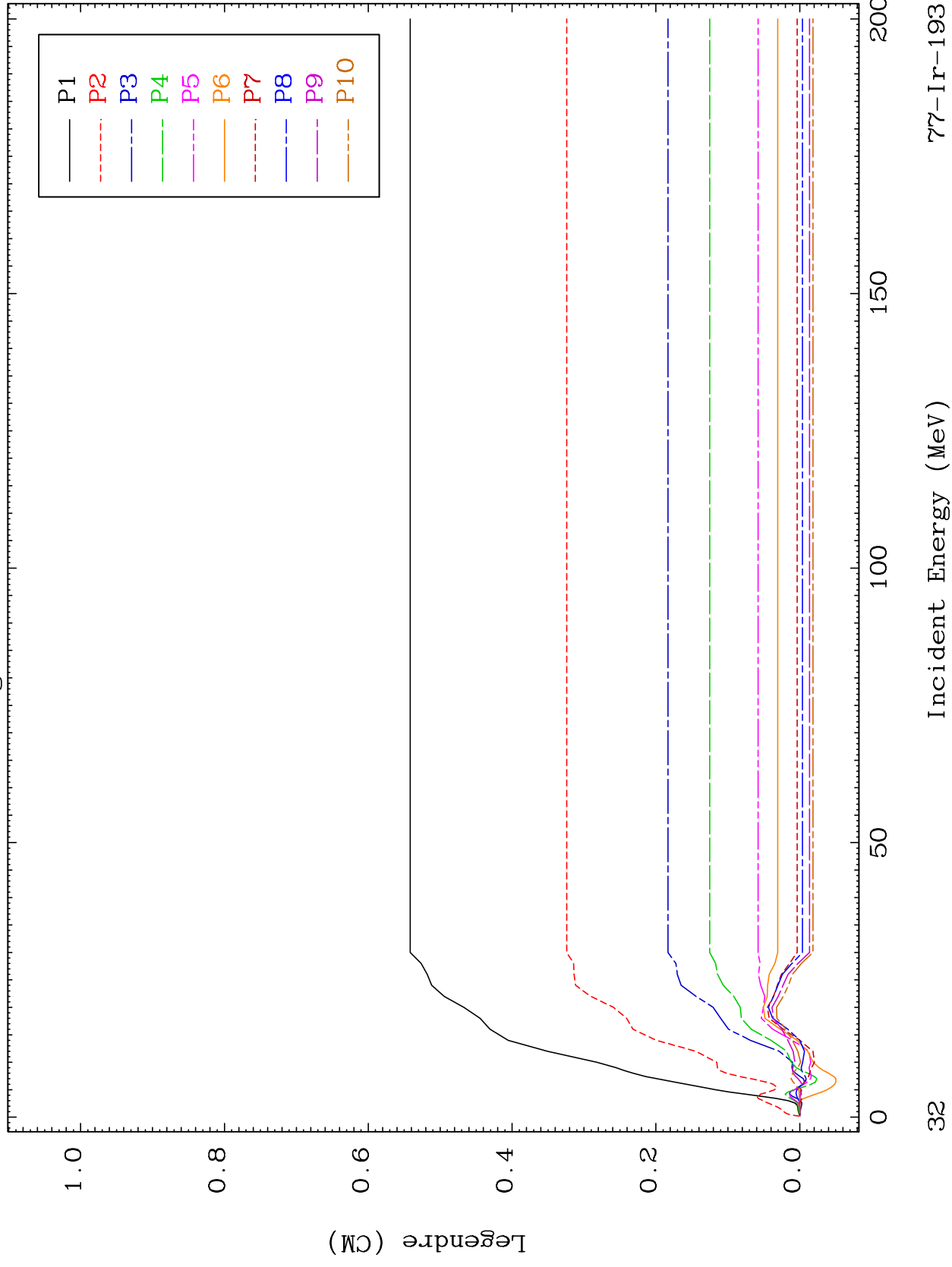
77-Ir-193



MAT 7731

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

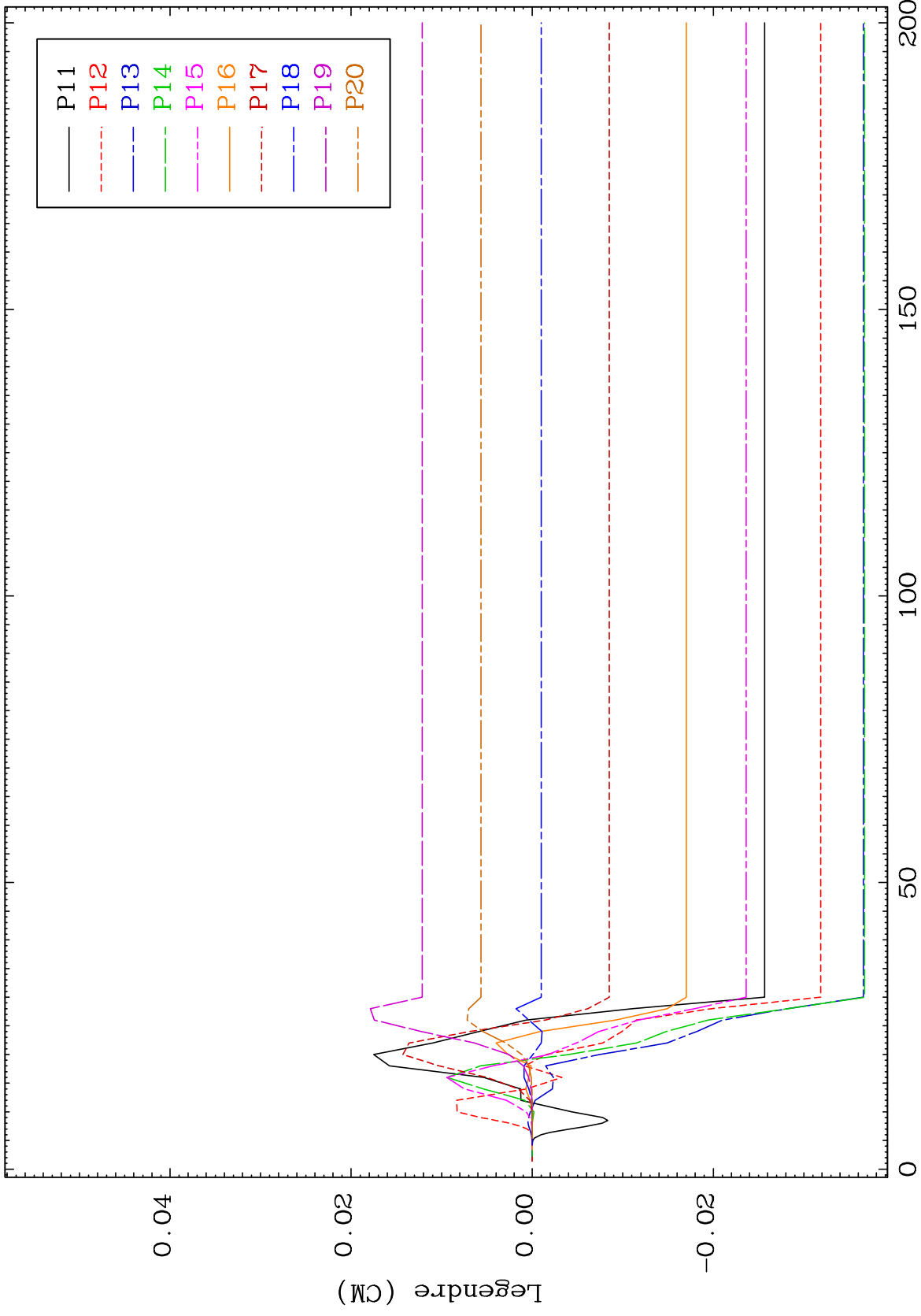
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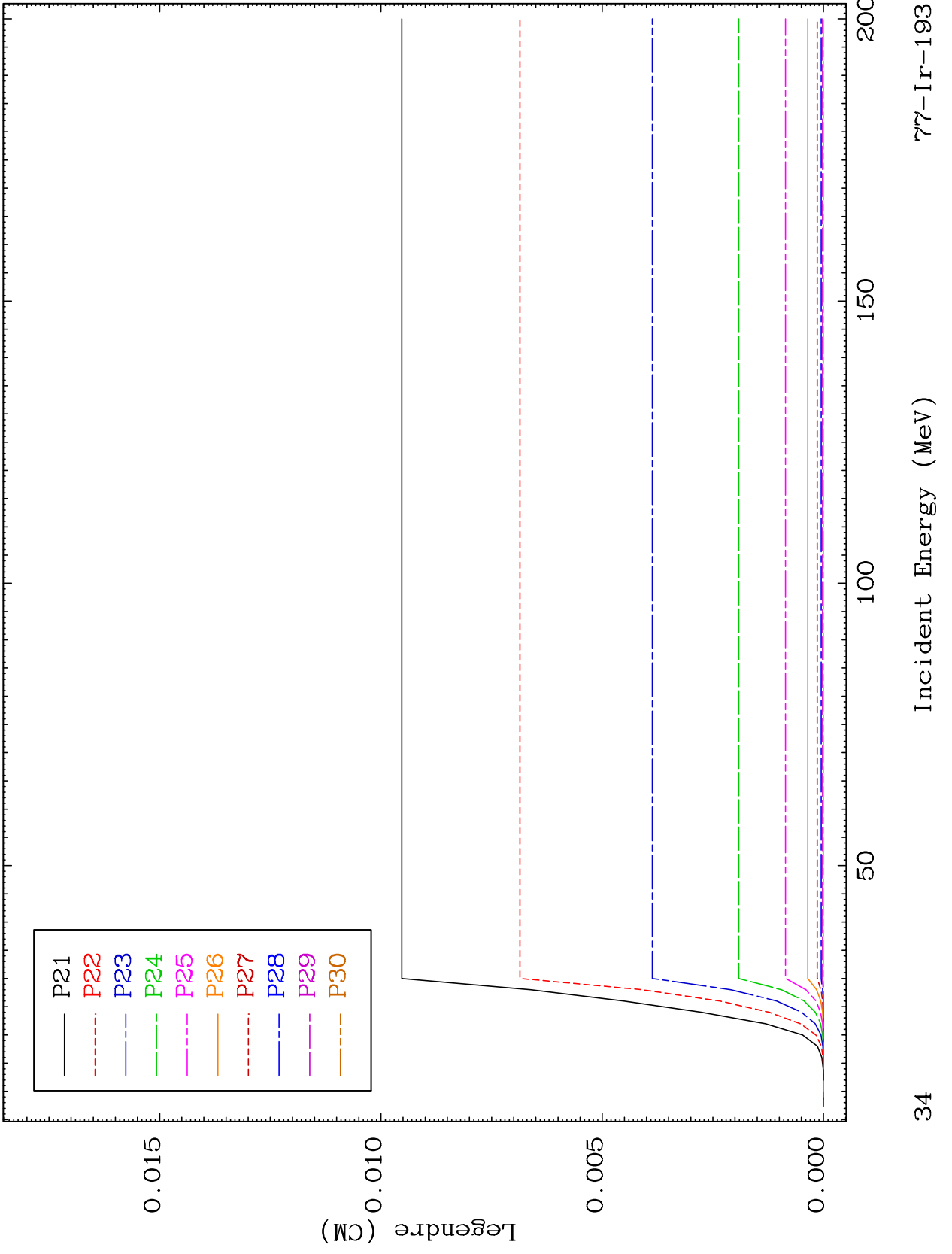


77-Ir-193

Incident Energy (MeV)

32

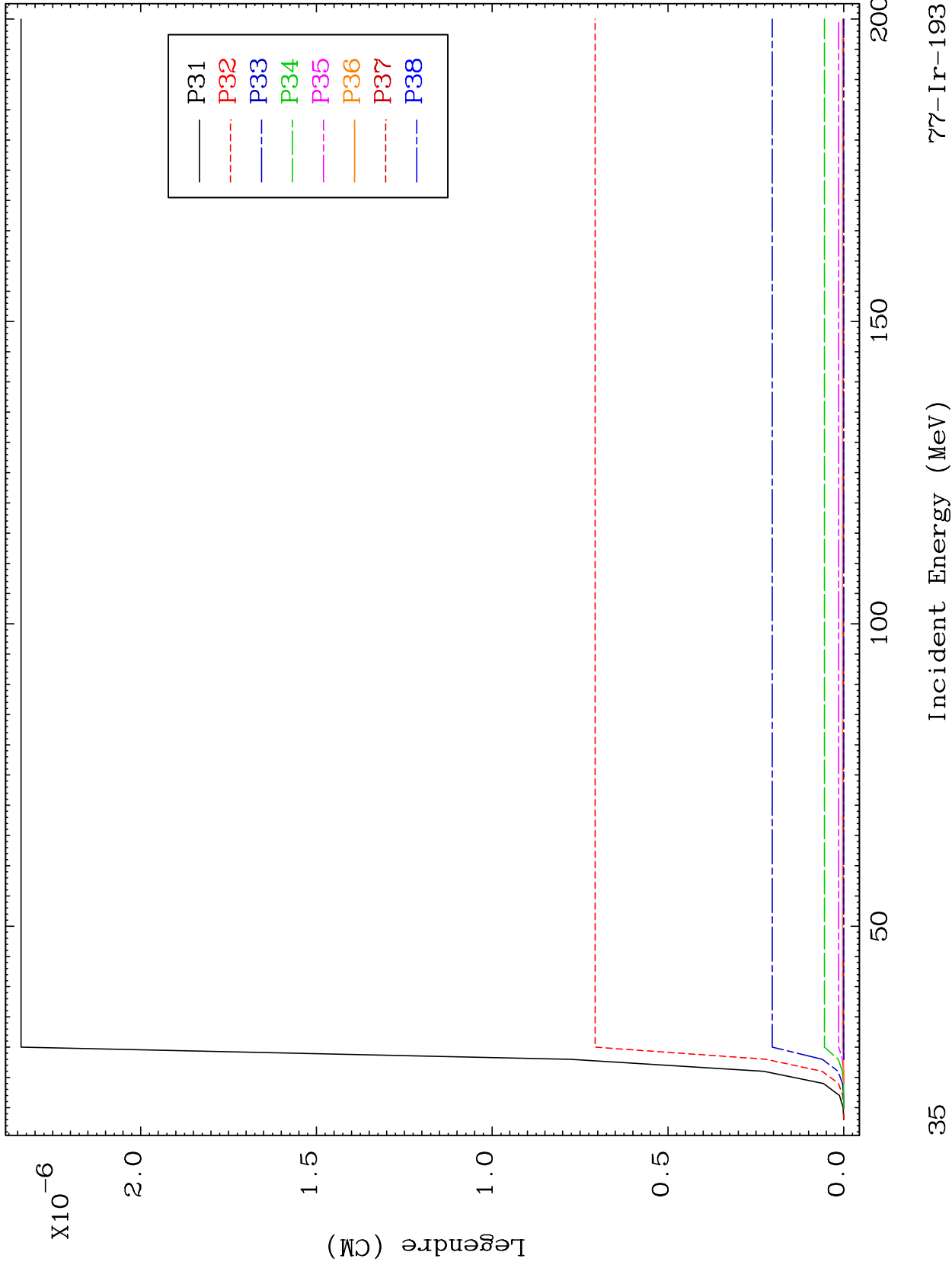




MAT 7731

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

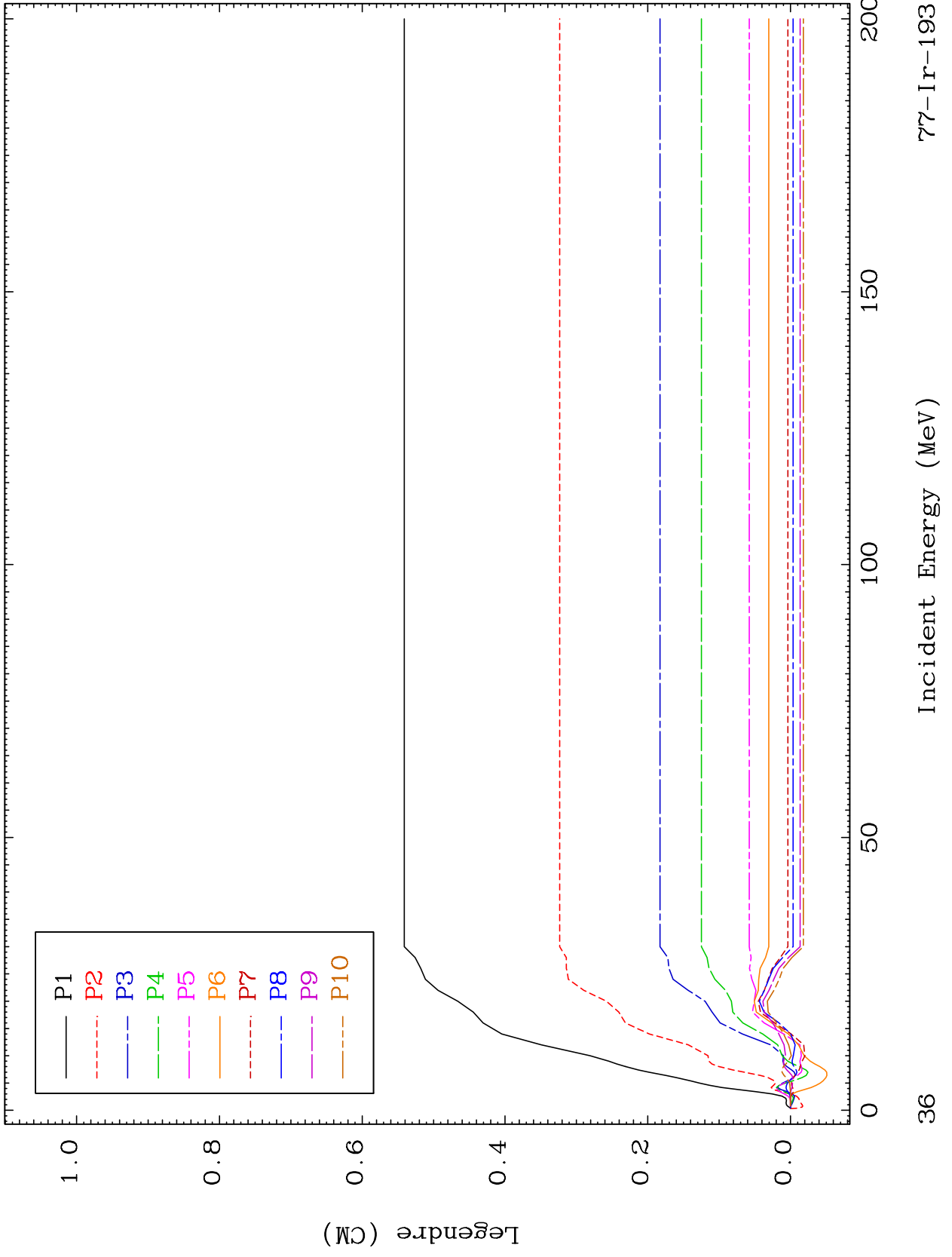
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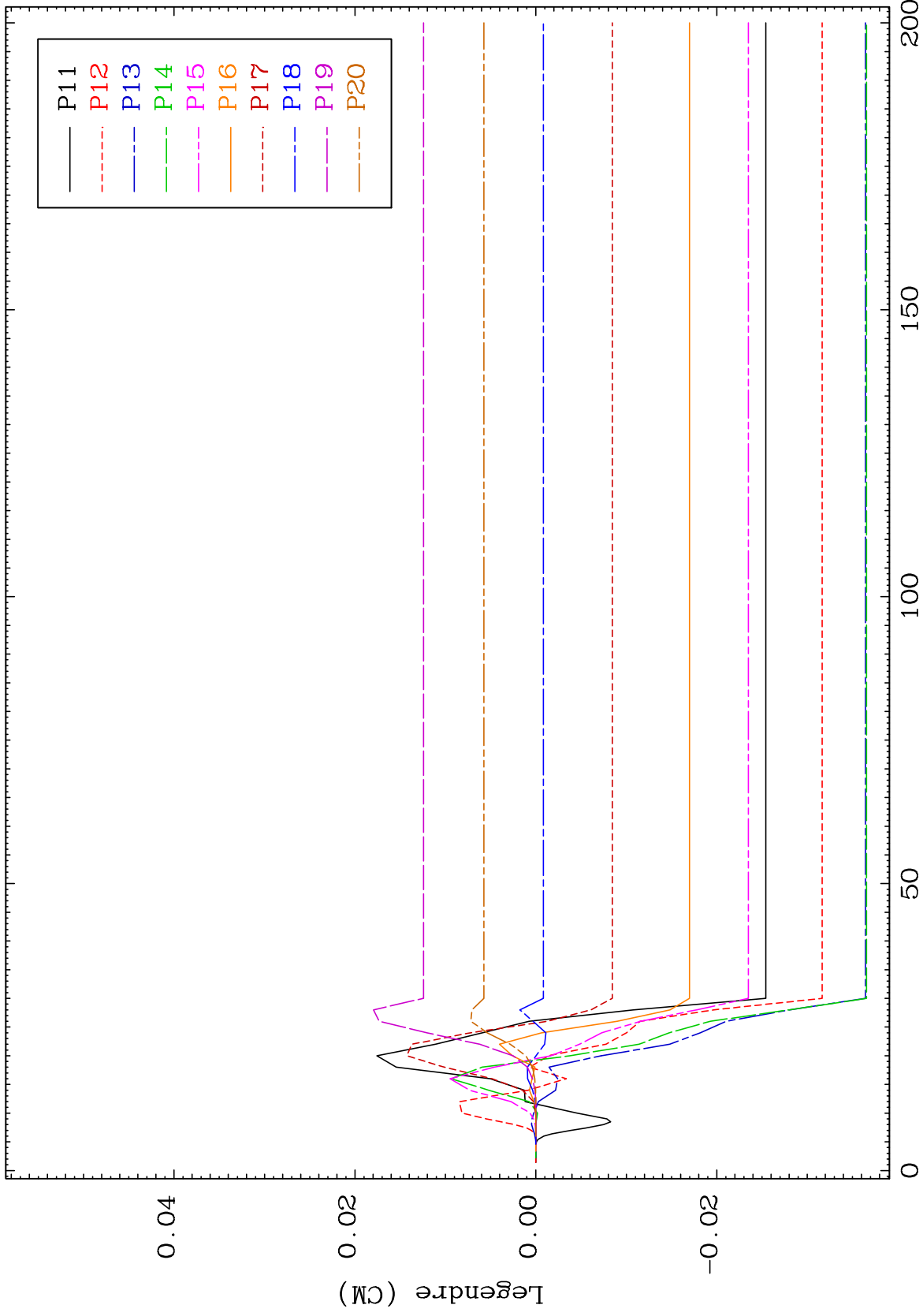


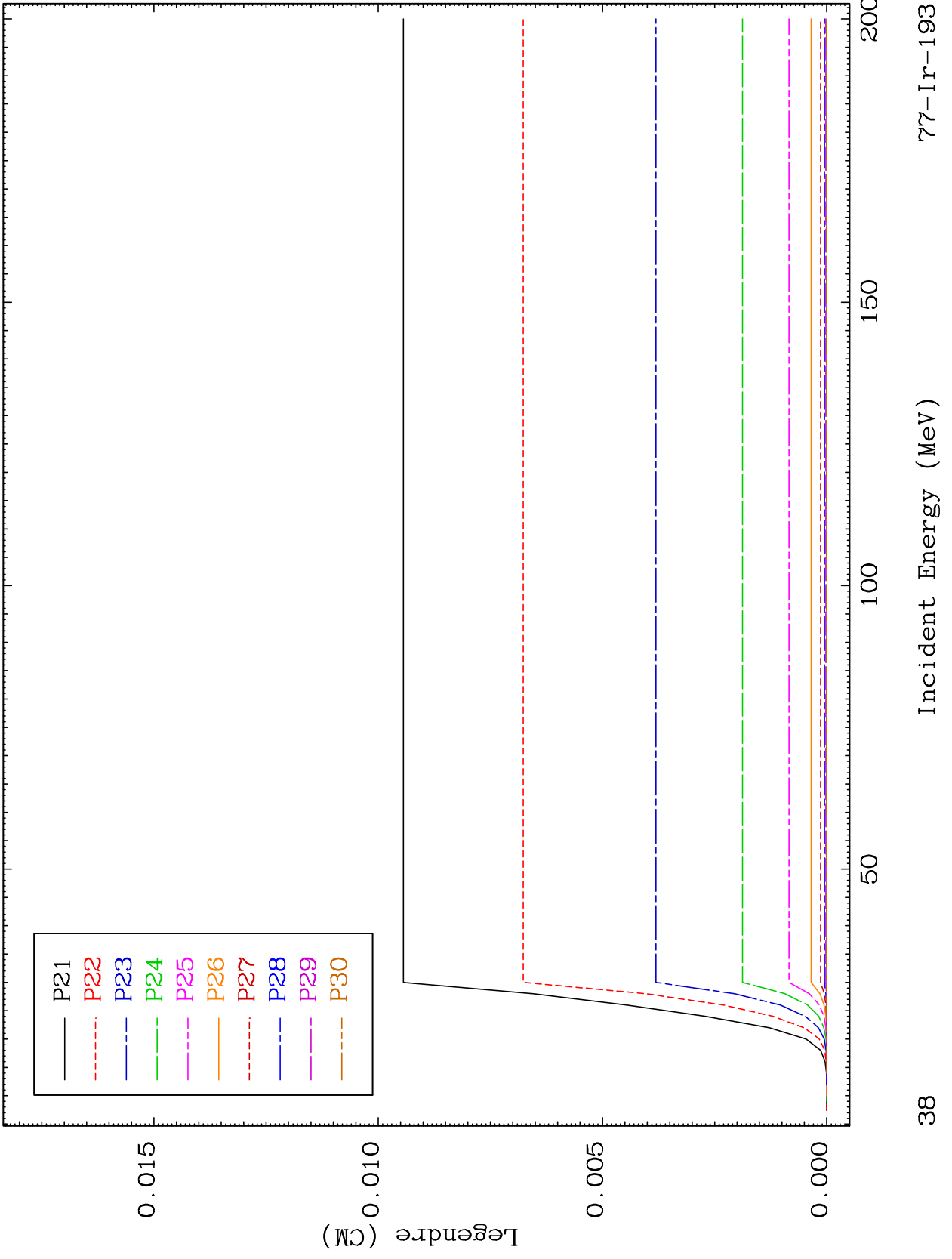
35

Incident Energy (MeV)

77-Ir-193



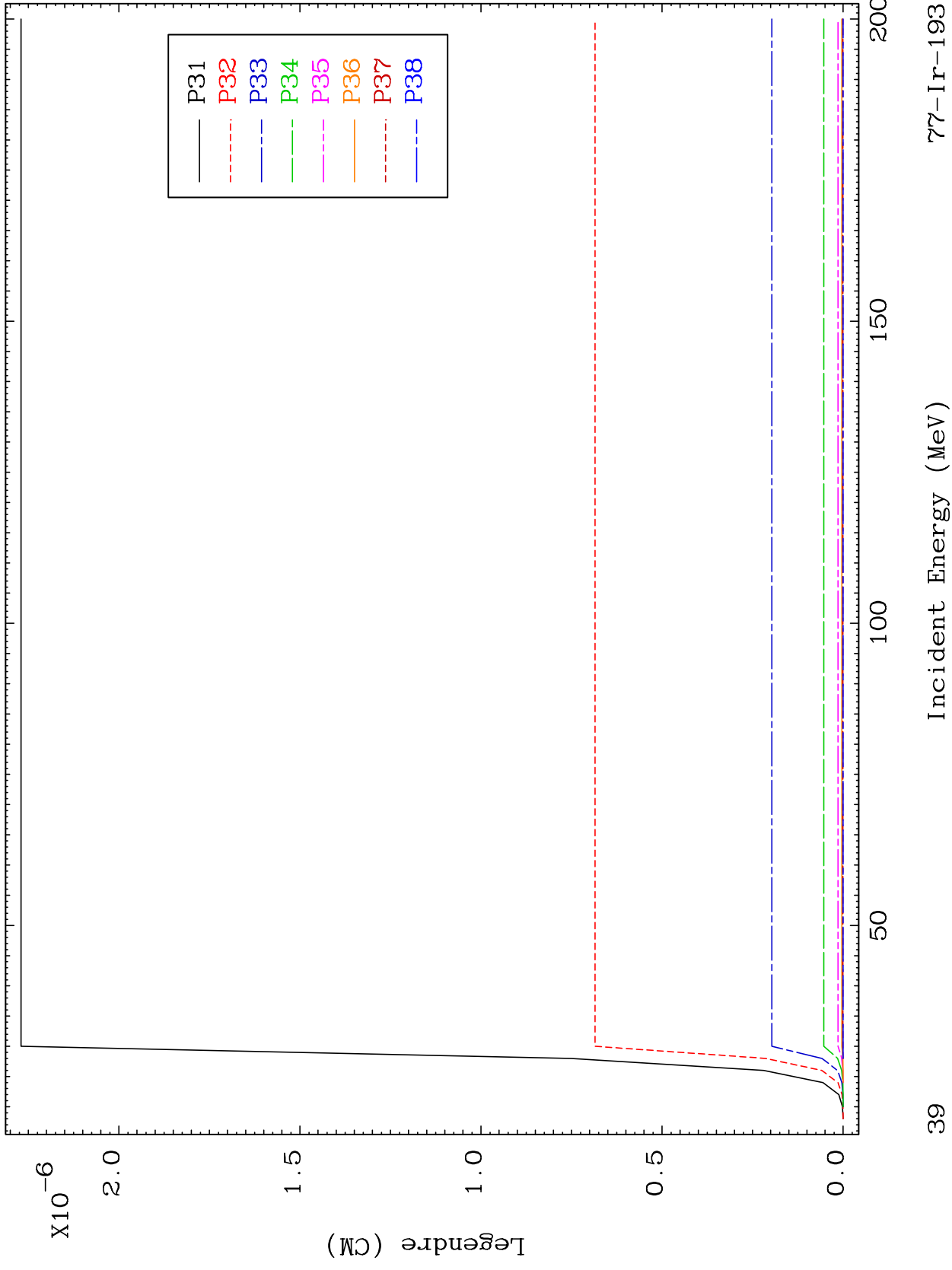




MAT 7731

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

77-Ir-193

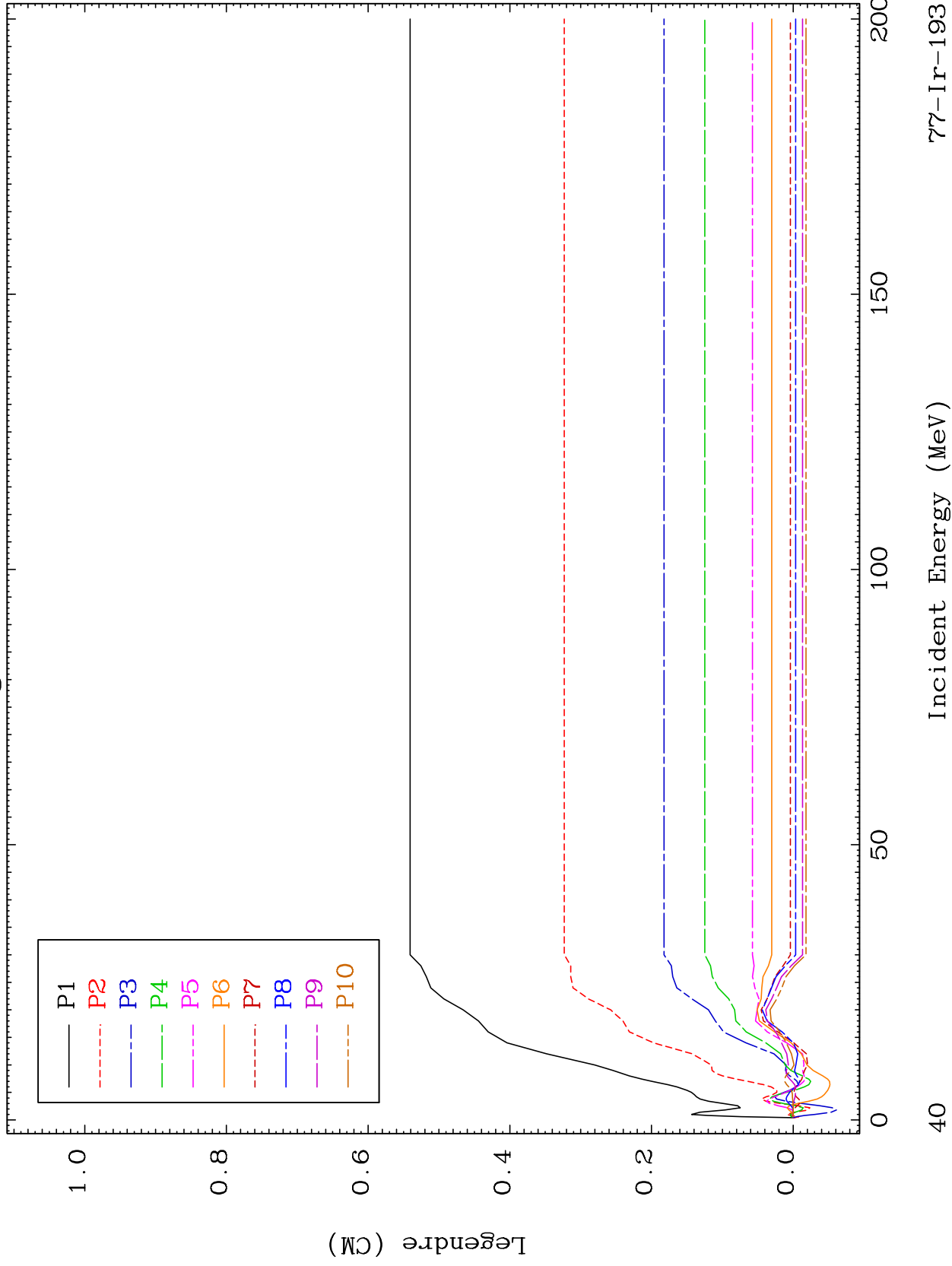




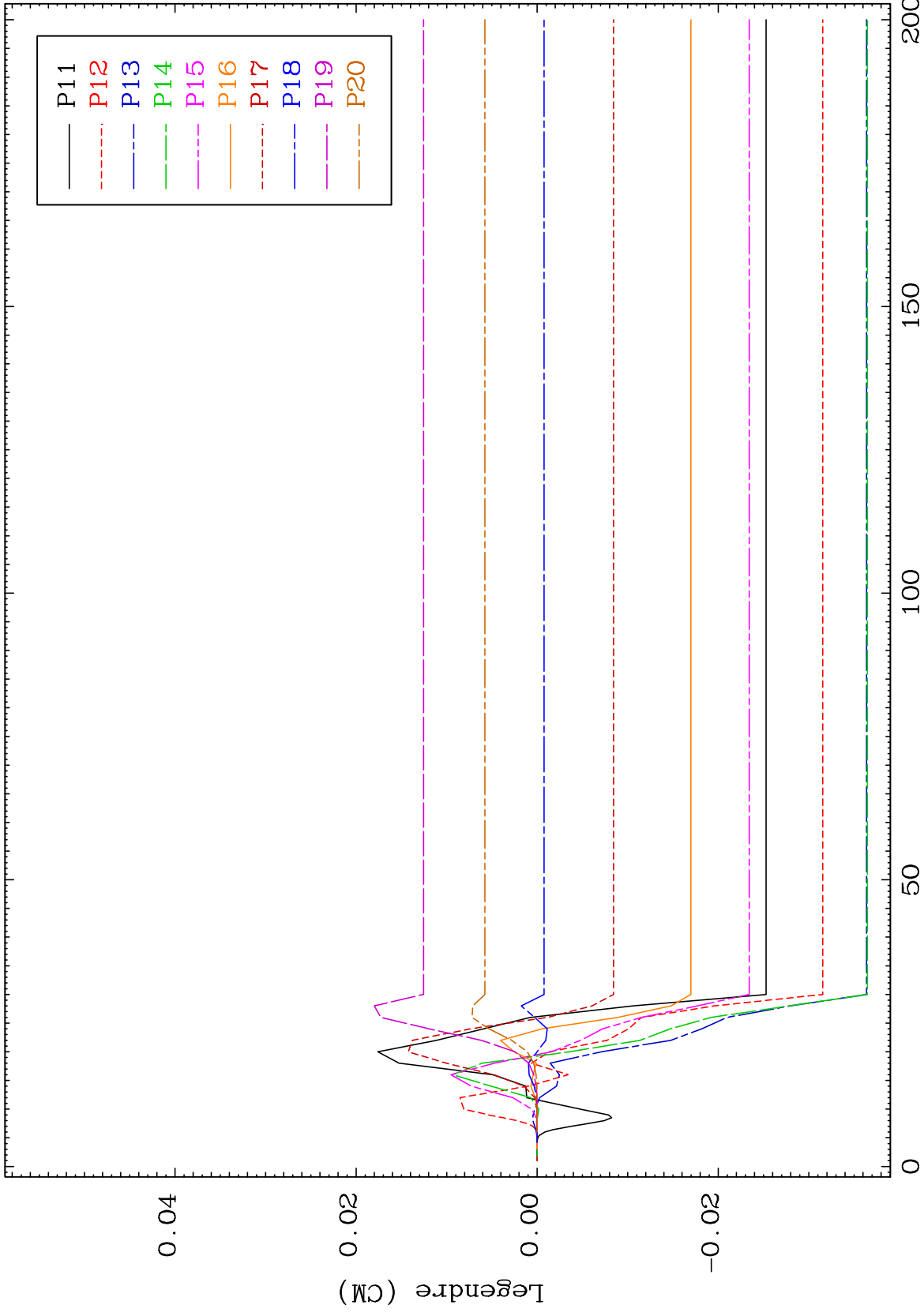
MAT 7731

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

77-Ir-193



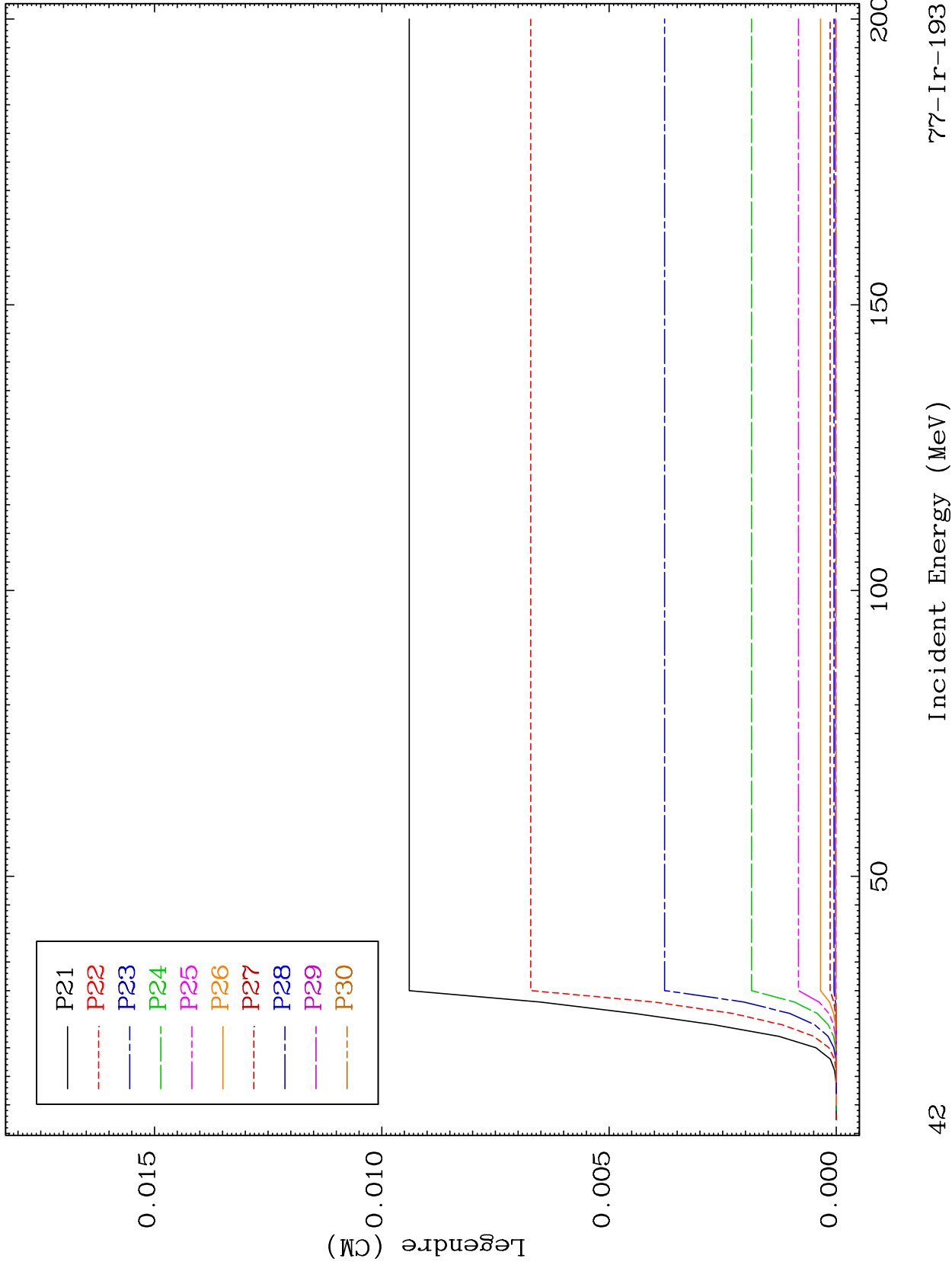
77-Ir-193



MAT 7731

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

77-Ir-193



42

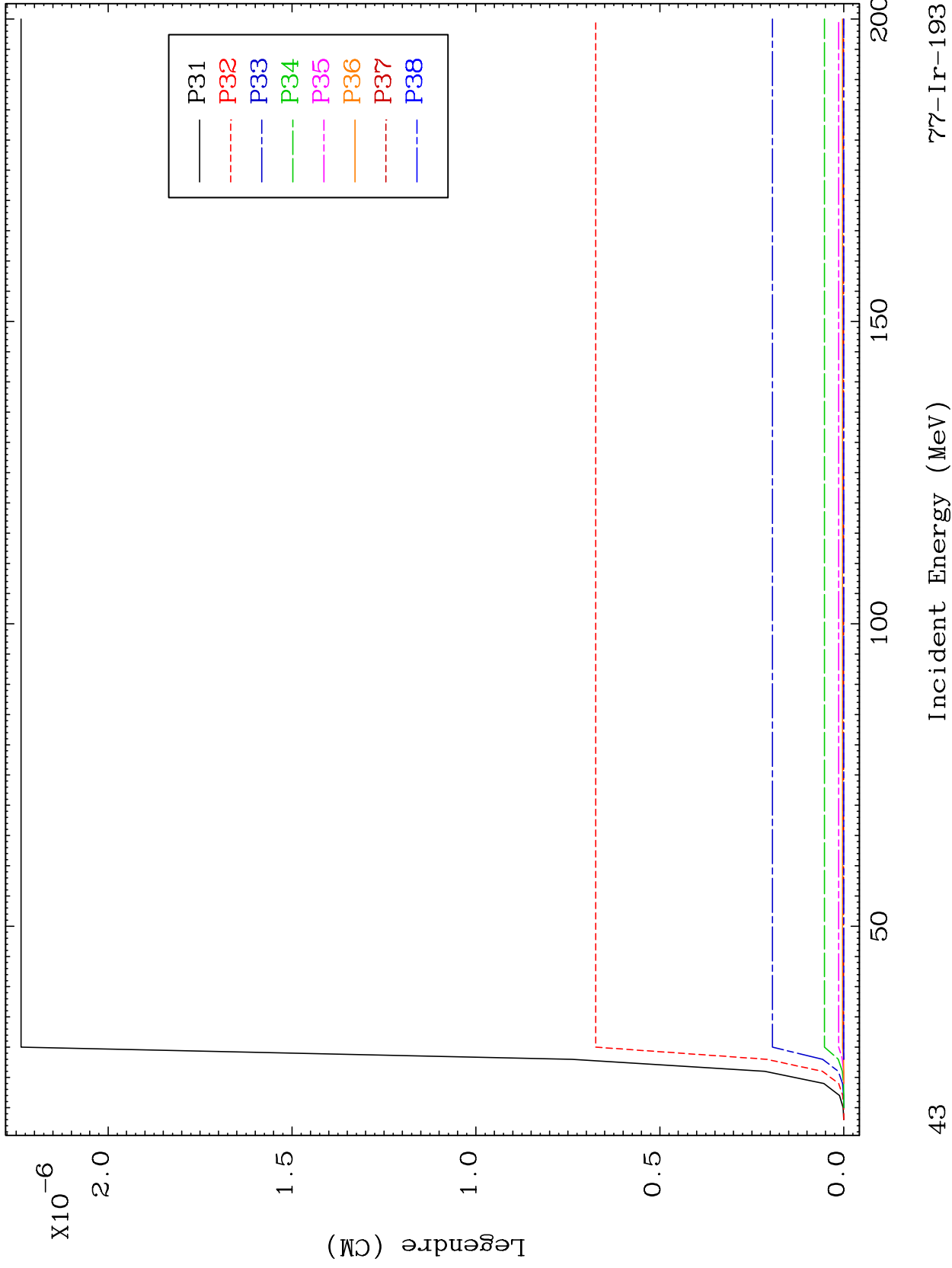
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

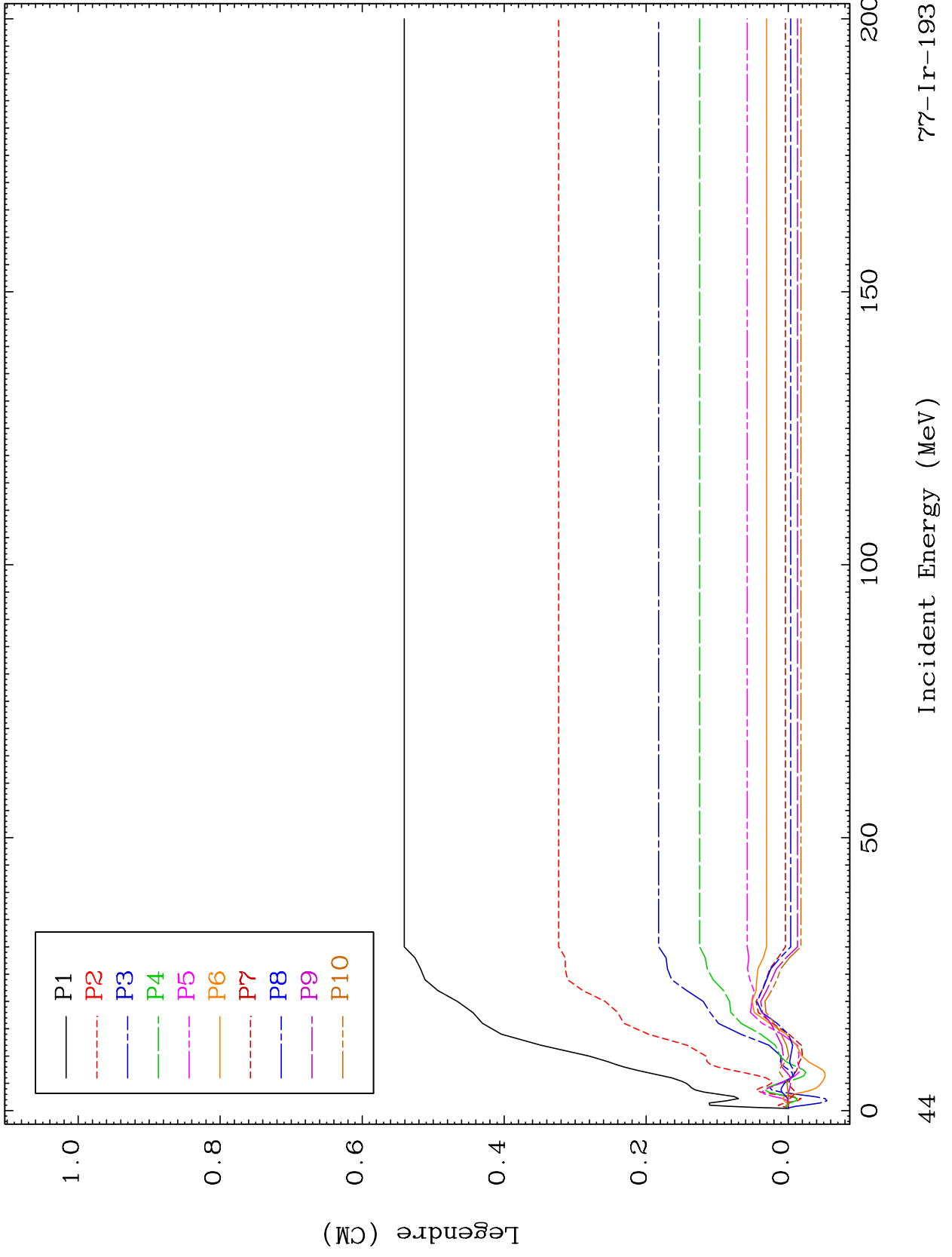
77-Ir-193



43

Incident Energy (MeV)

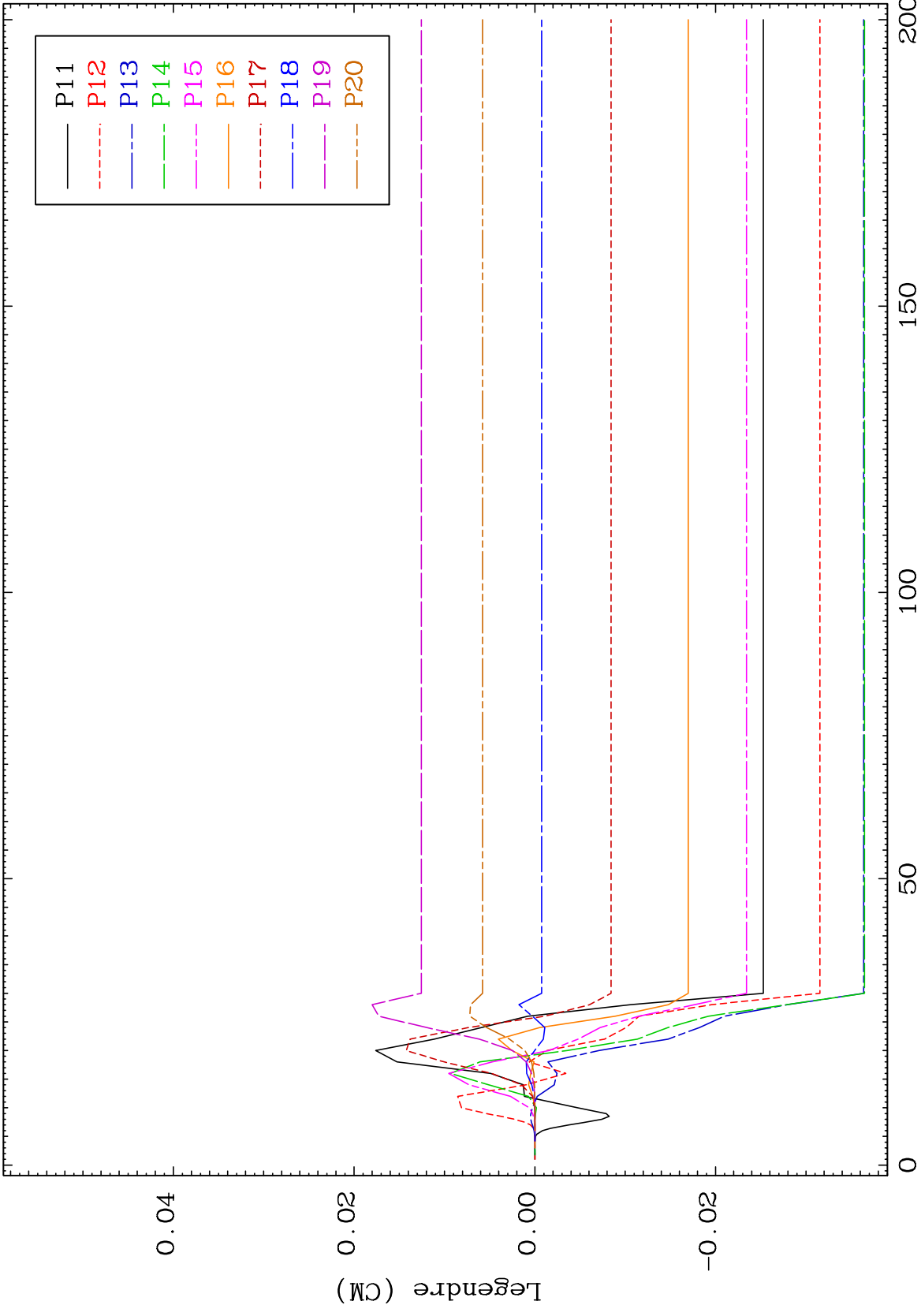
77-Ir-193



MAT 7731

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

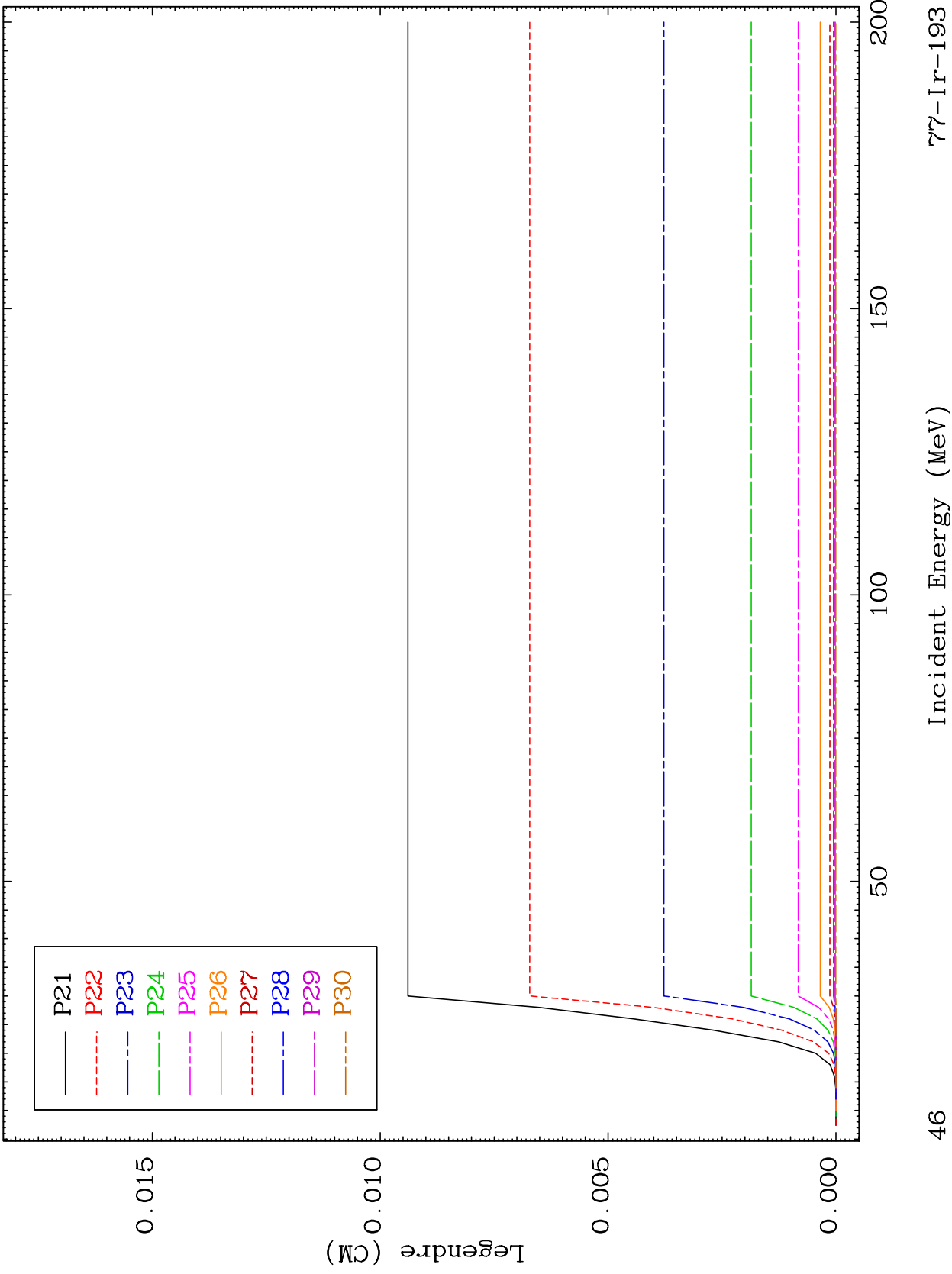
77-Ir-193



45

Incident Energy (MeV)

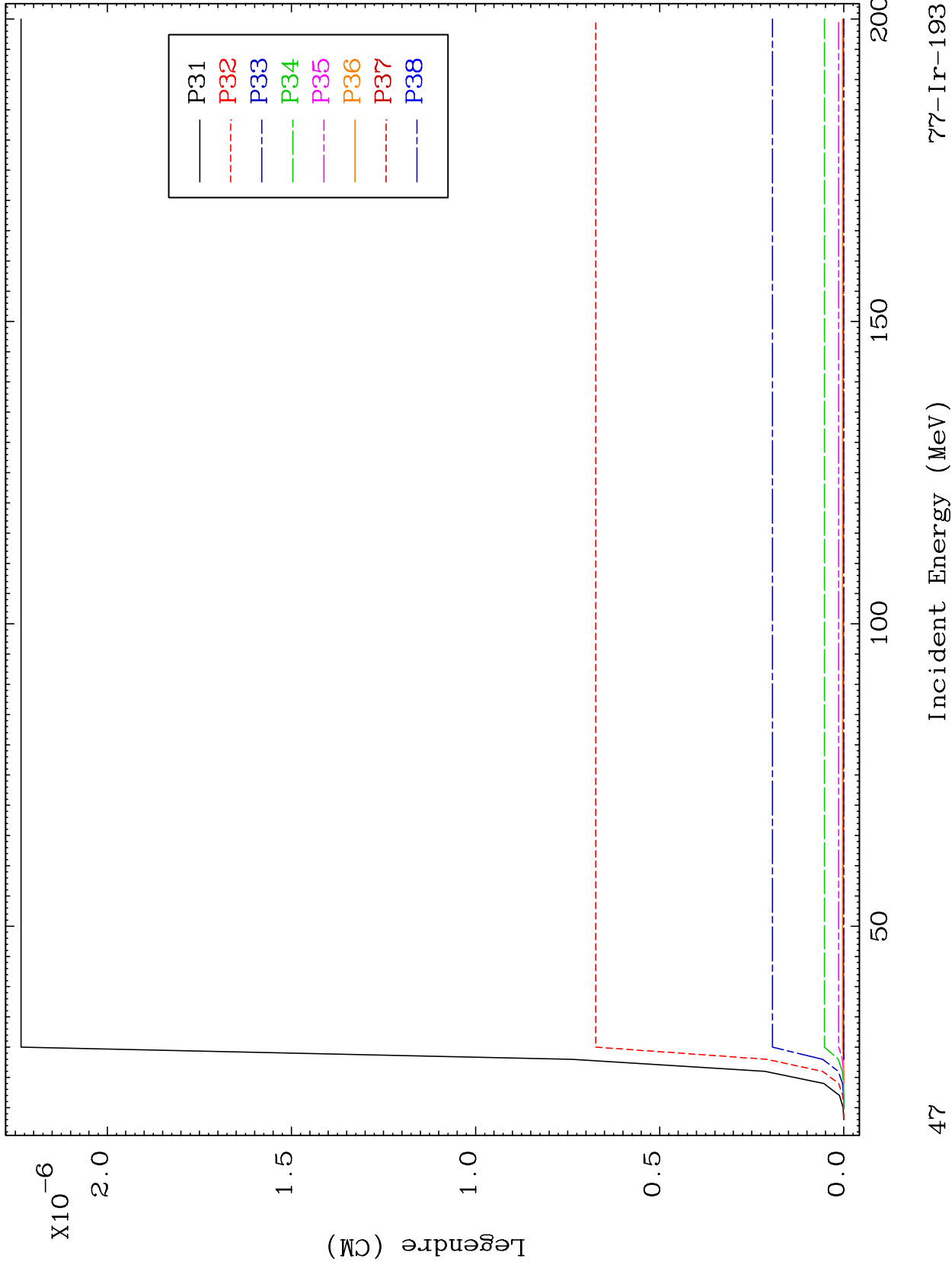
77-Ir-193



MAT 7731

77-Ir-193

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



47

Incident Energy (MeV)

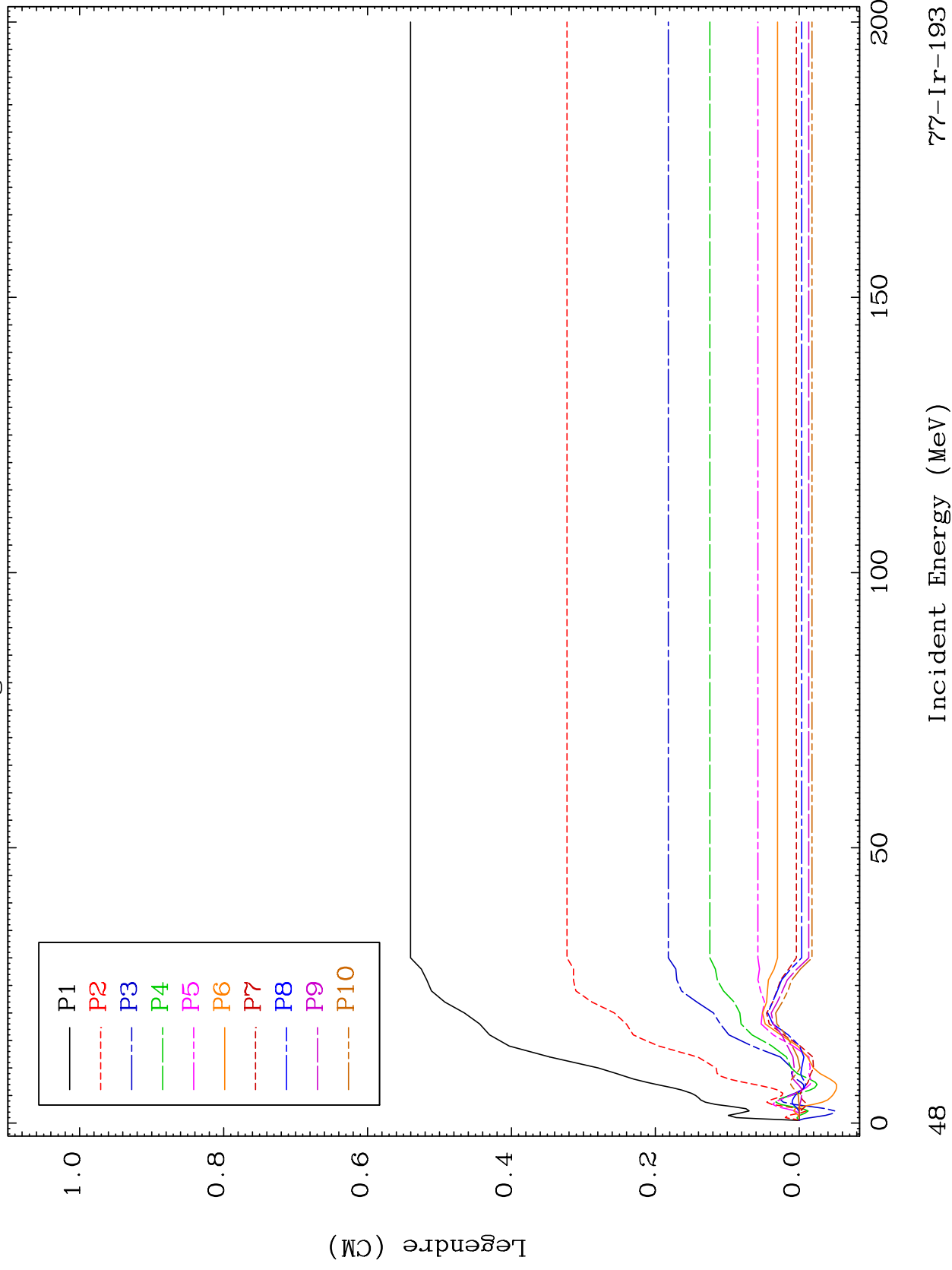
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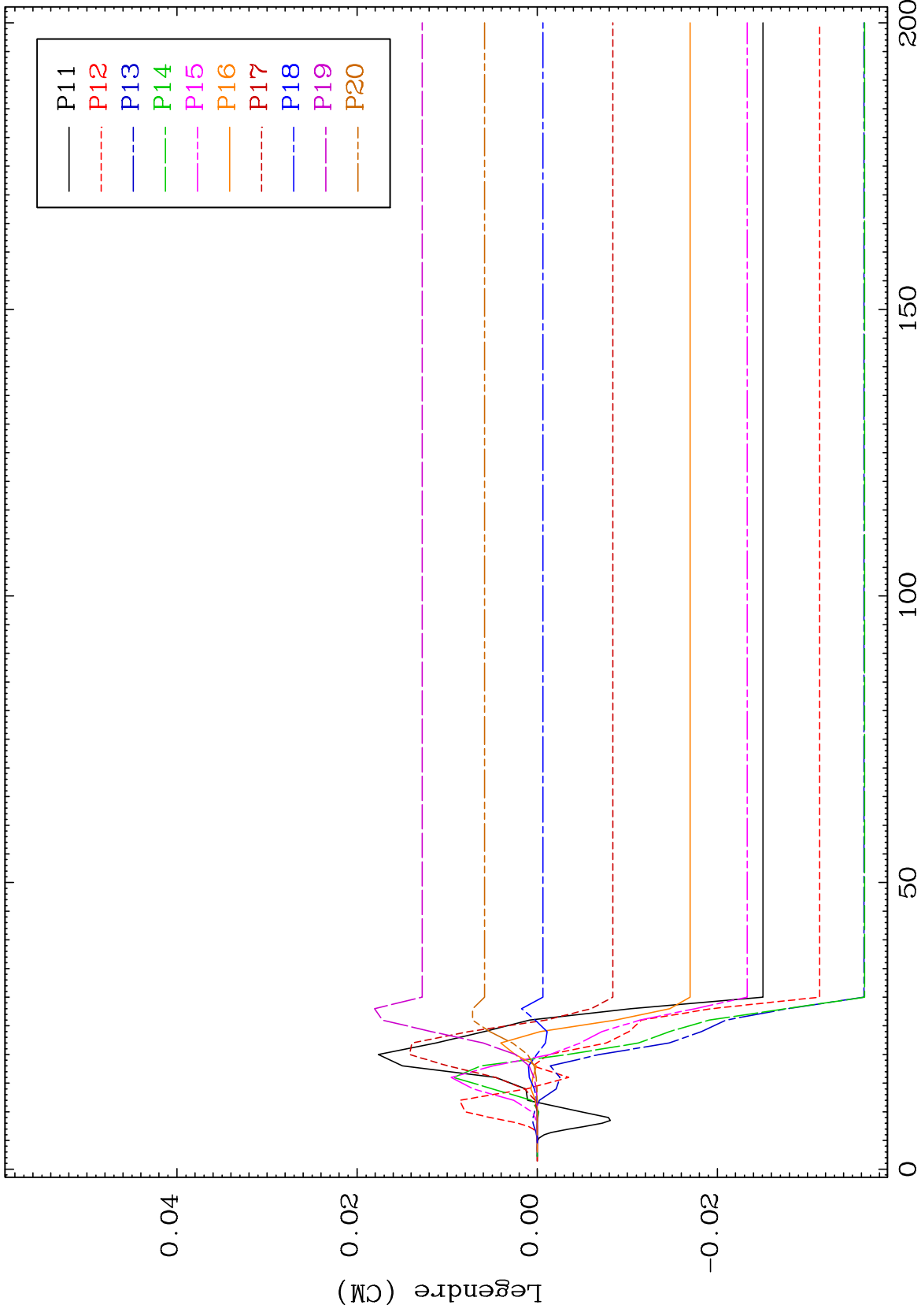


MAT 7731

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

77-Ir-193

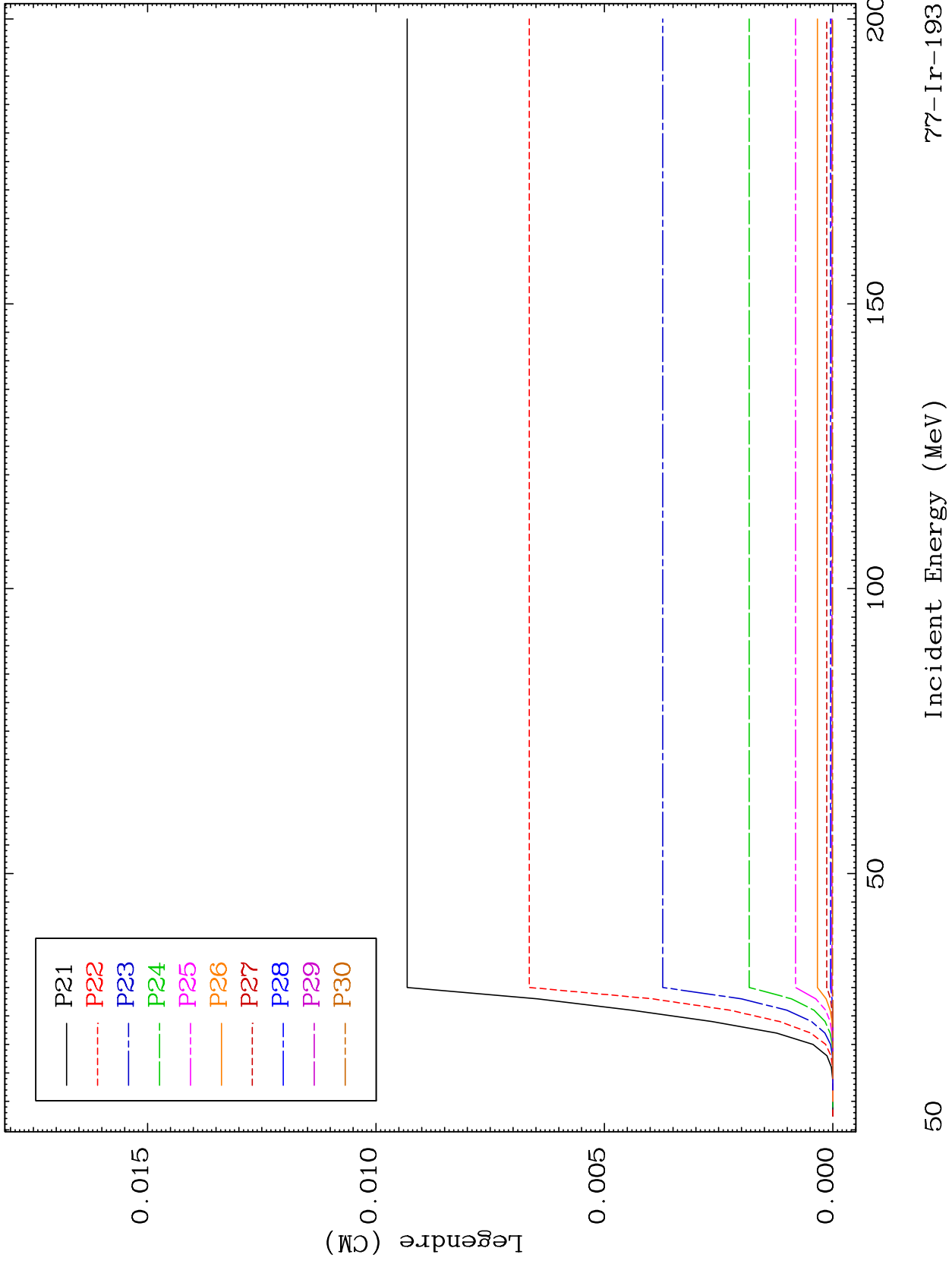




MAT 7731

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

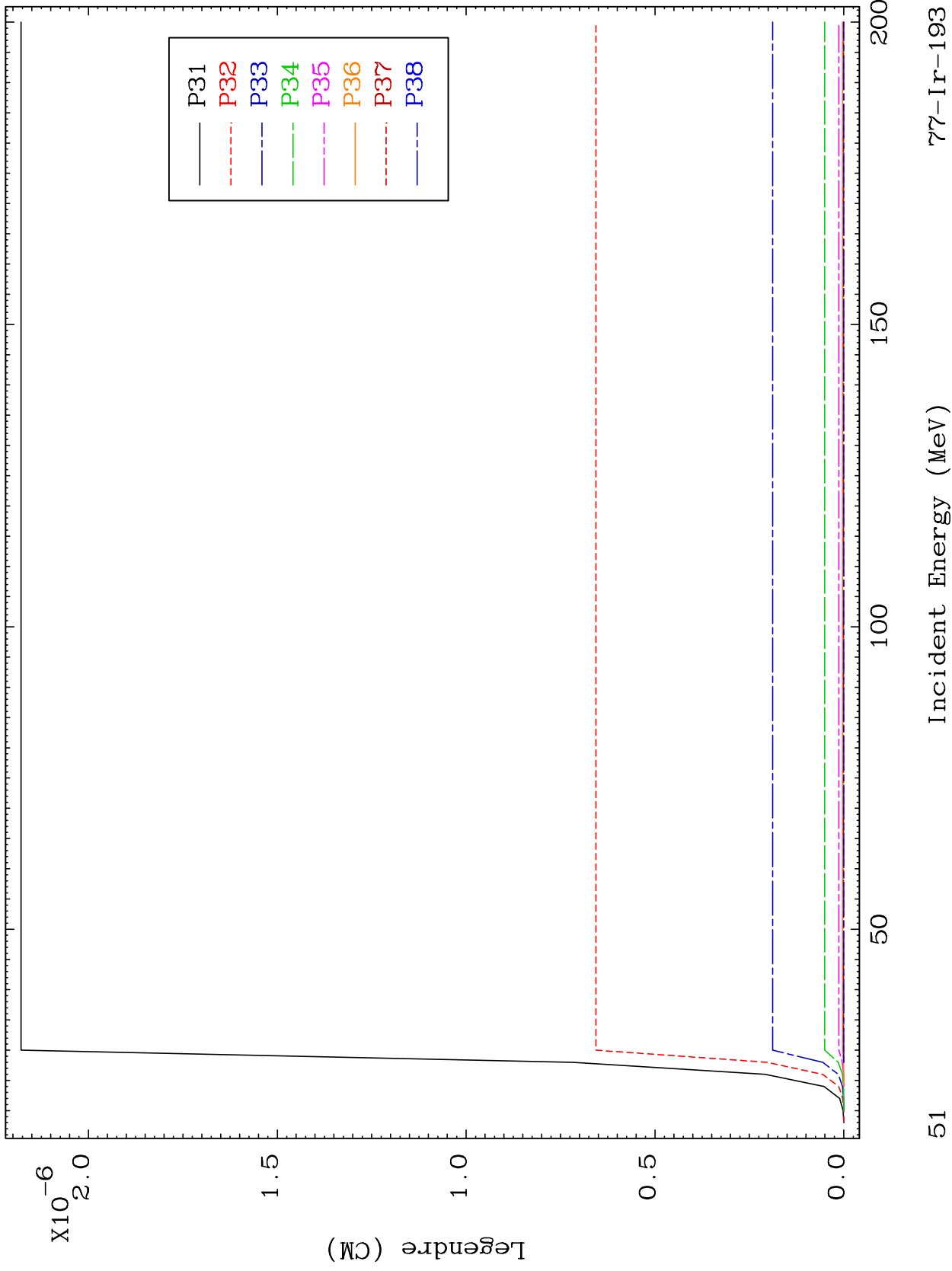
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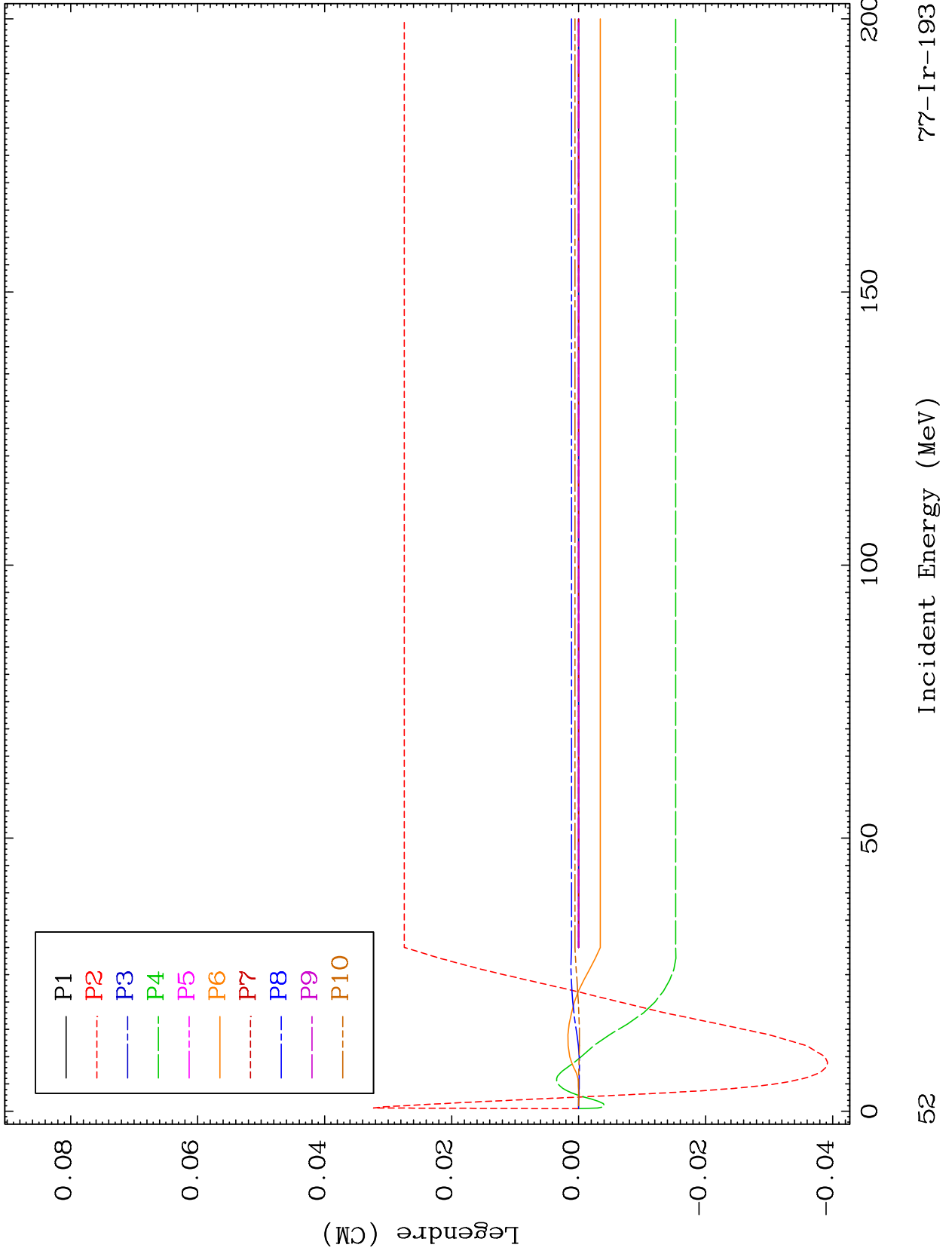


77-Ir-193

Incident Energy (MeV)

50

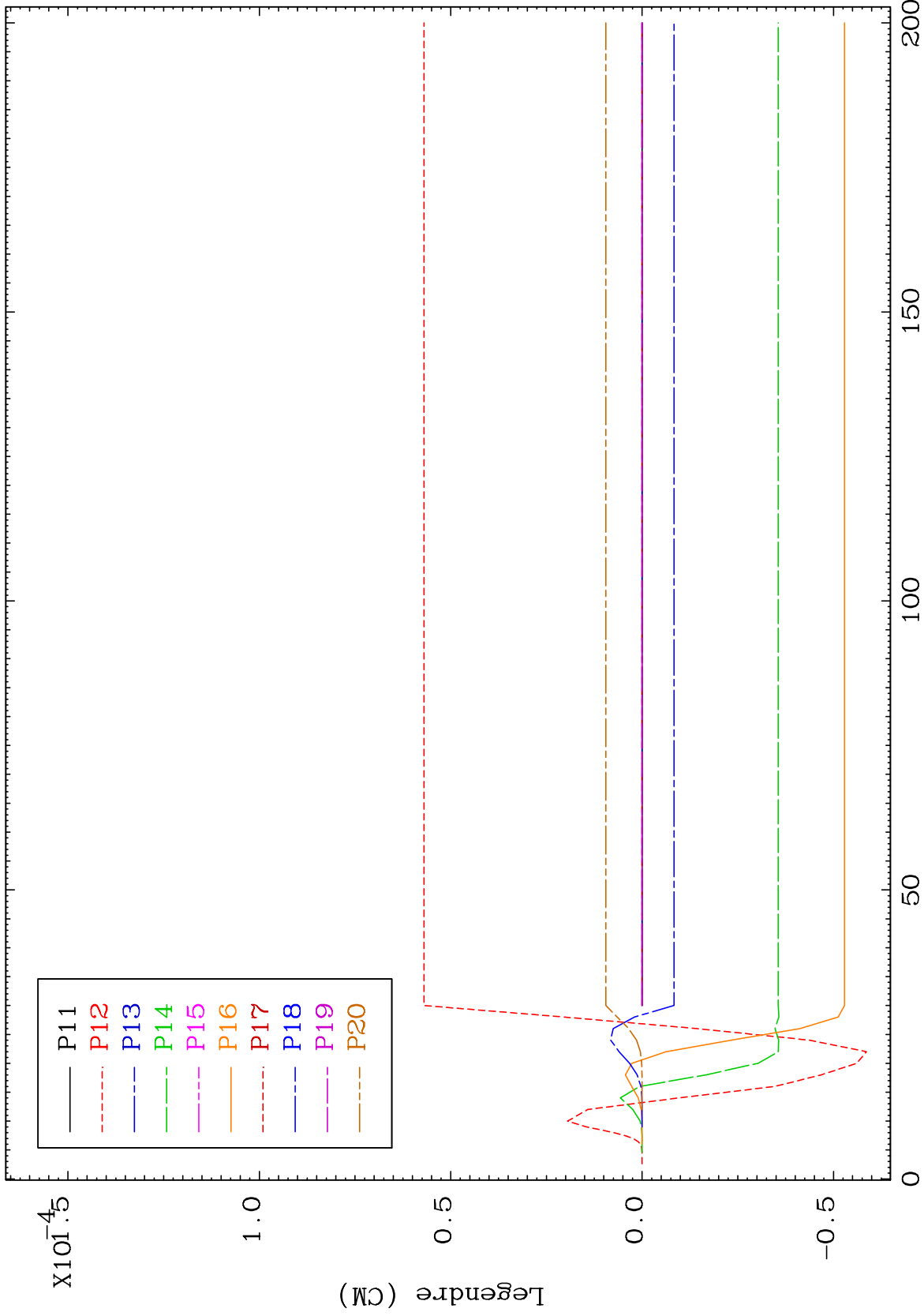




MAT 7731

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

77-Ir-193



53

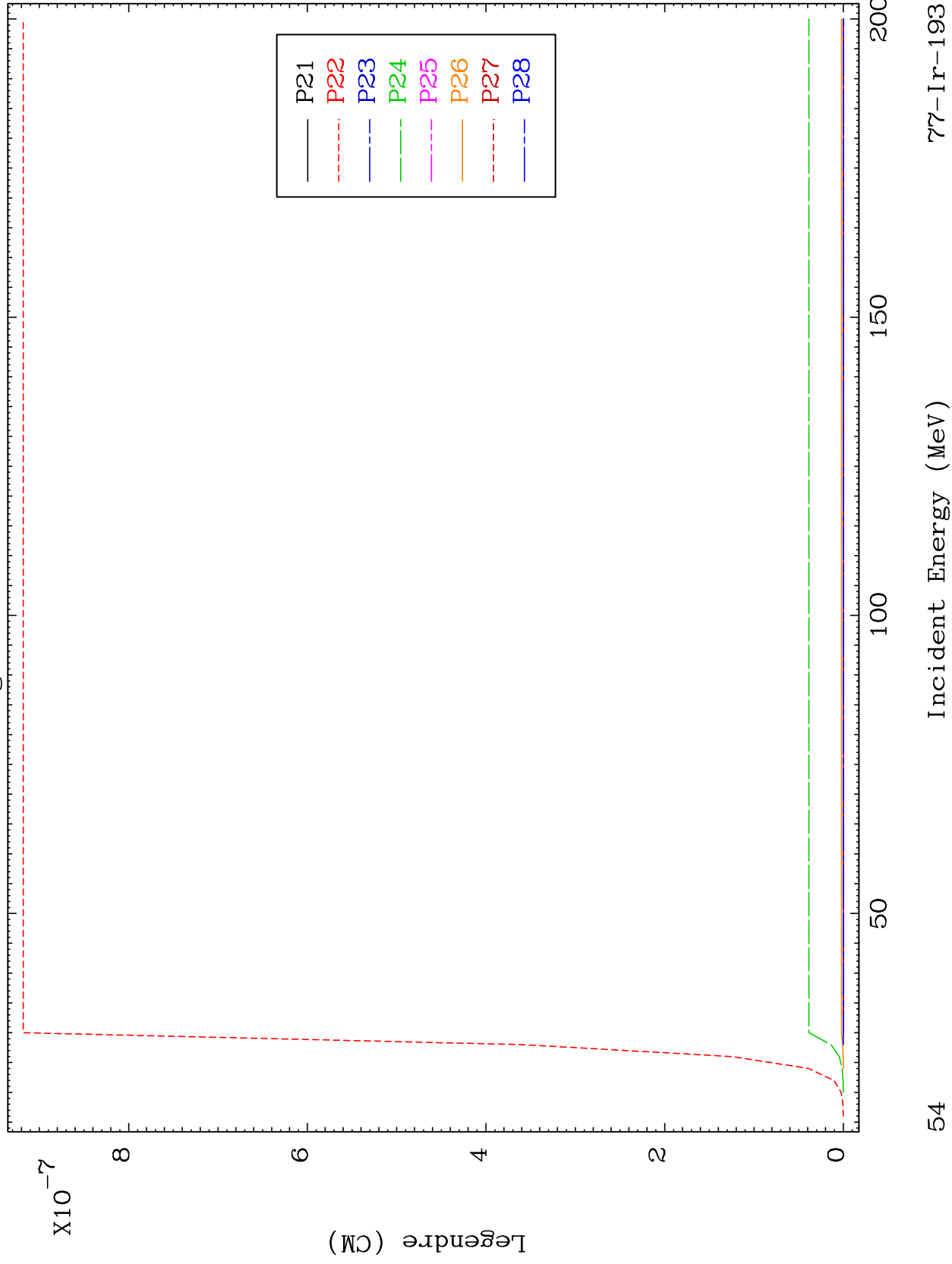
77-Ir-193

77-Ir-193

MAT 7731

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

77-Ir-193



54

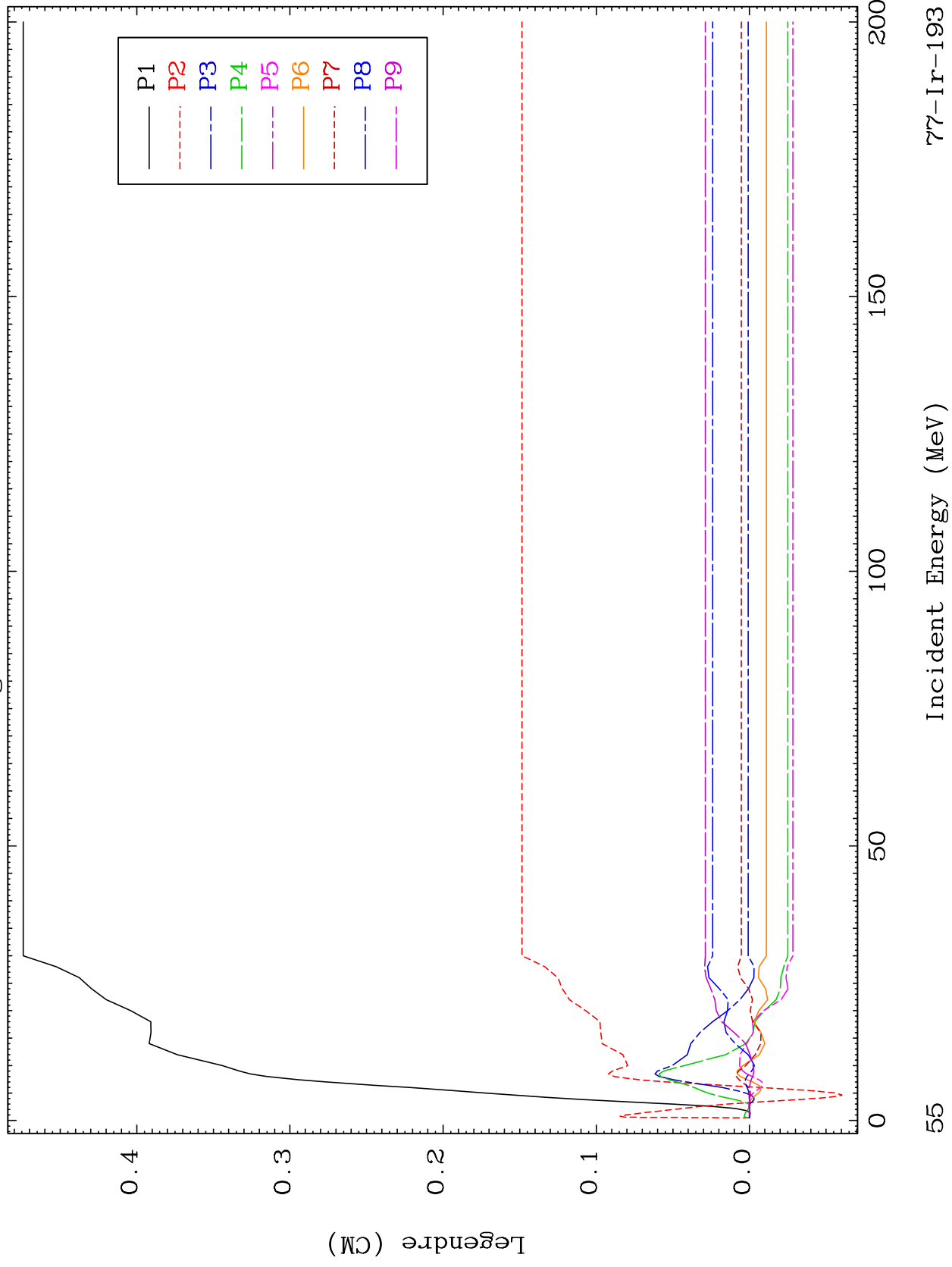
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



77-Ir-193

Incident Energy (MeV)

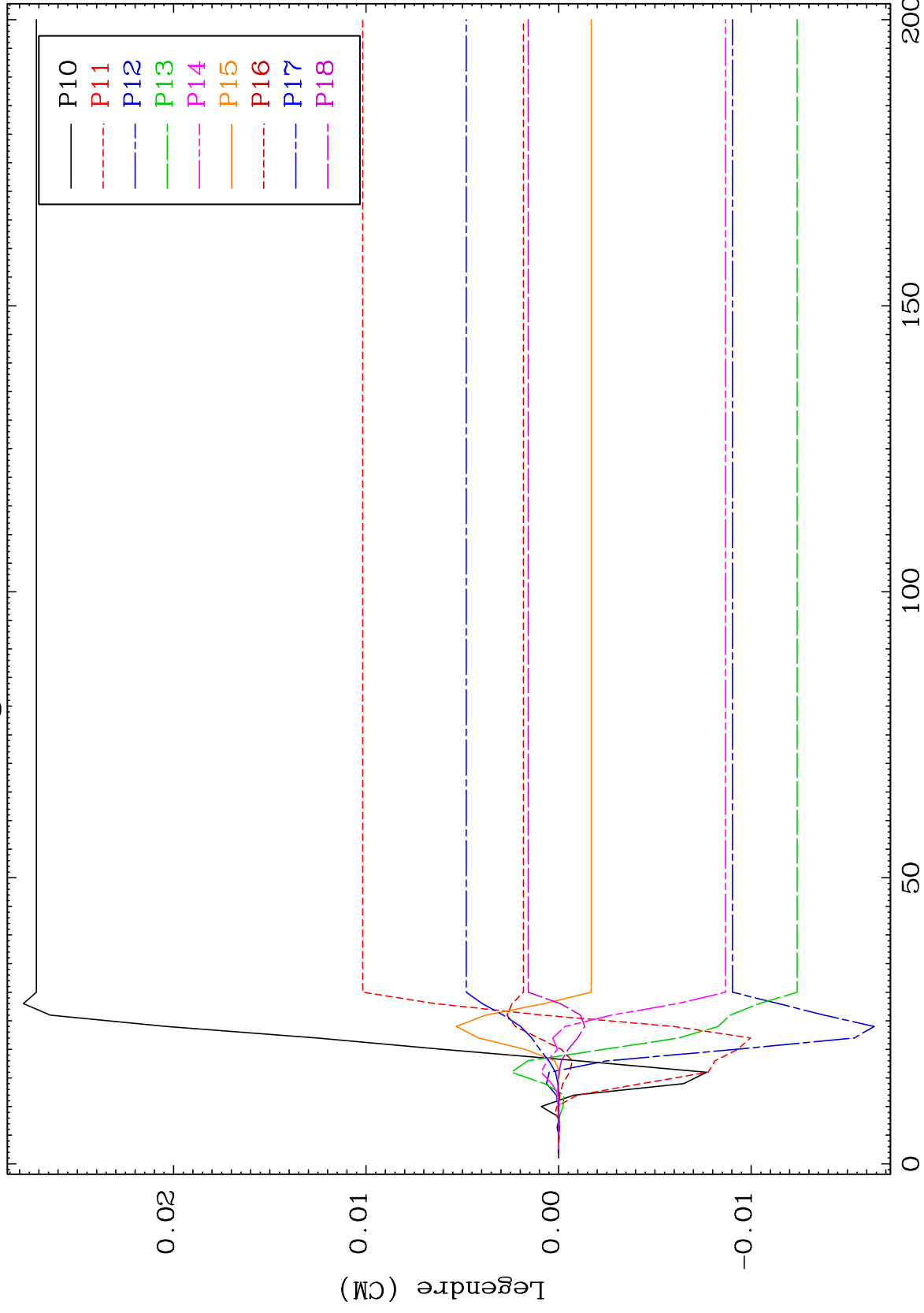
55



MAT 7731

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

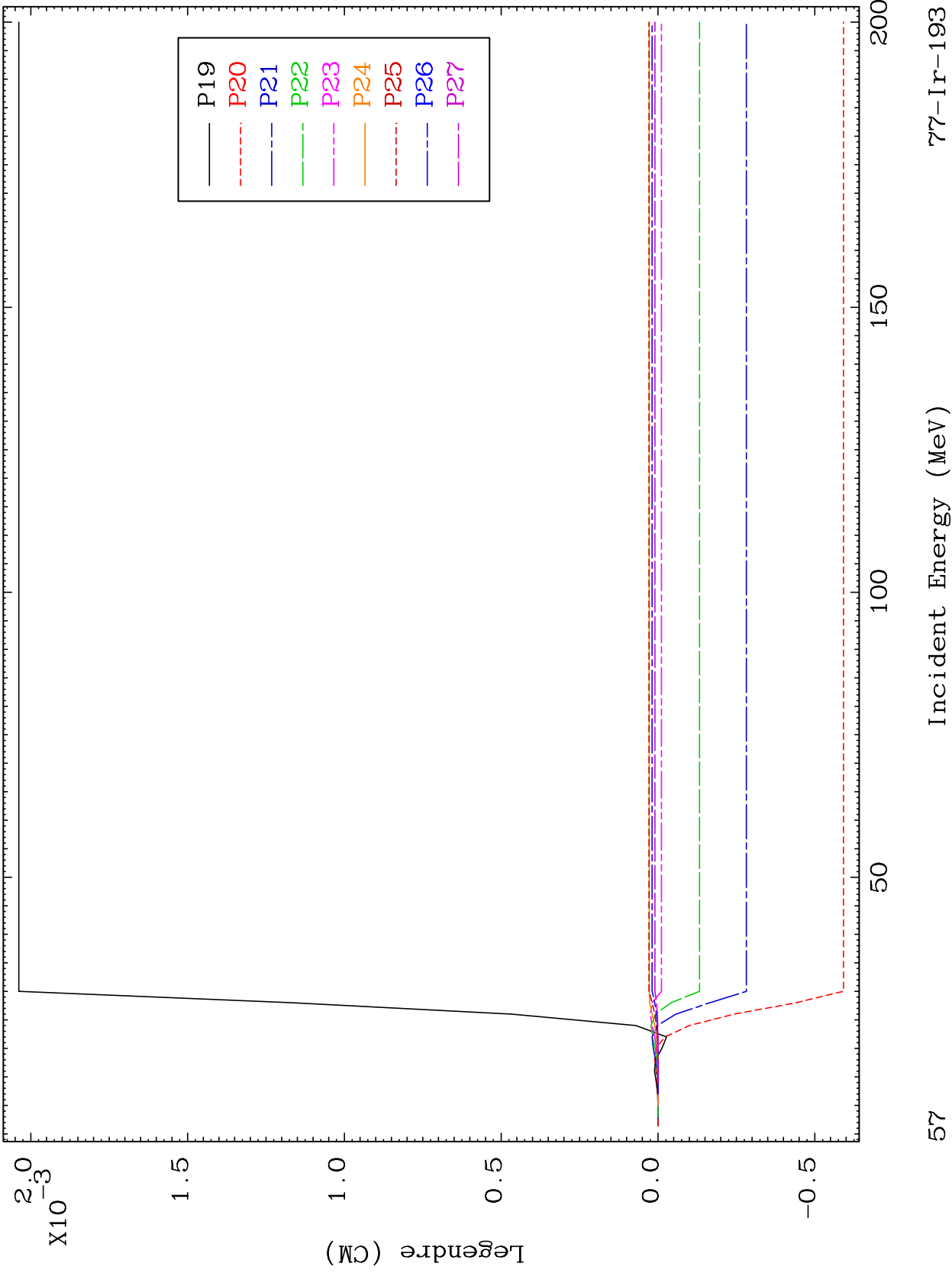
77-Ir-193



56

Incident Energy (MeV)

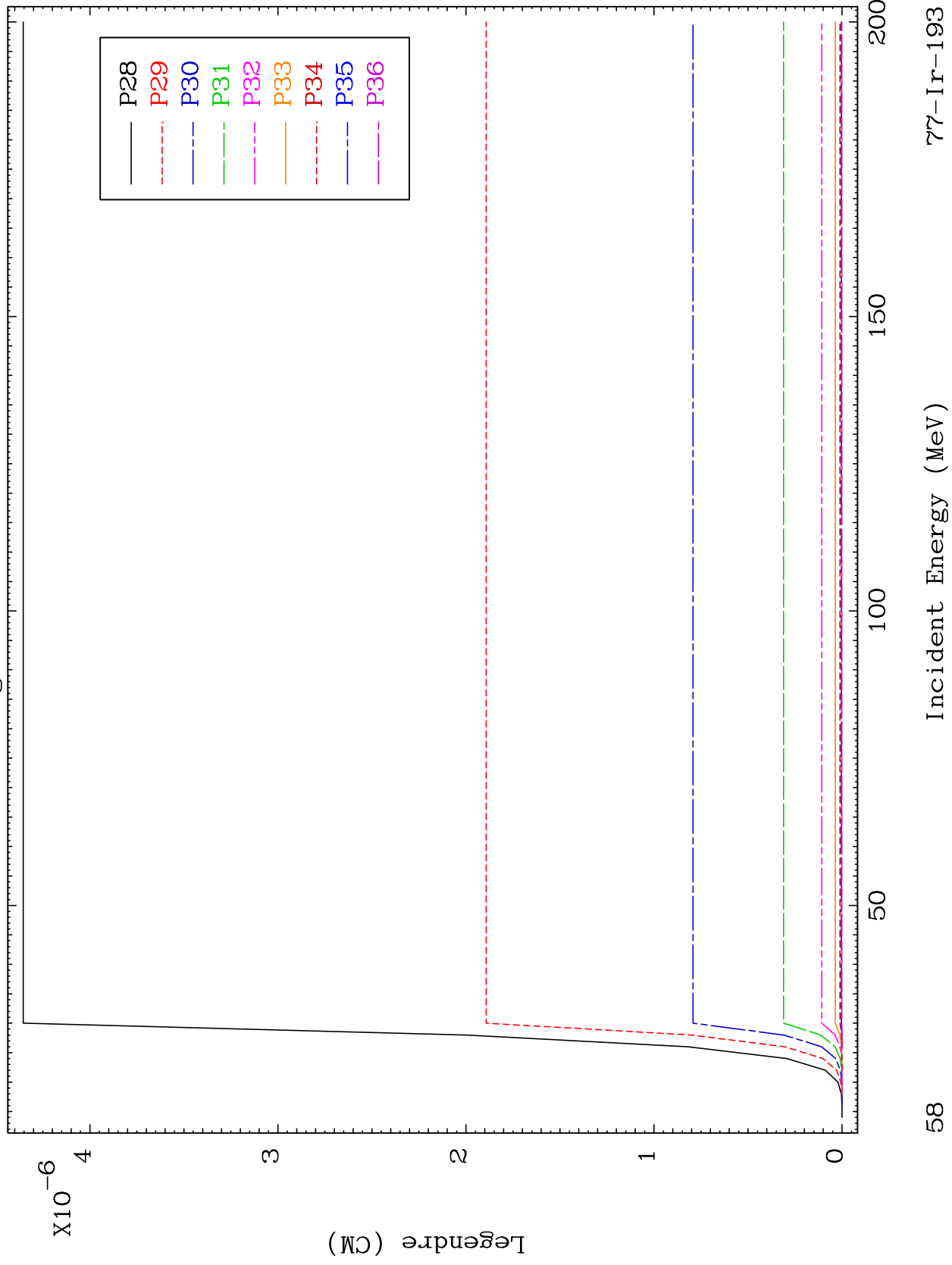
77-Ir-193



MAT 7731

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

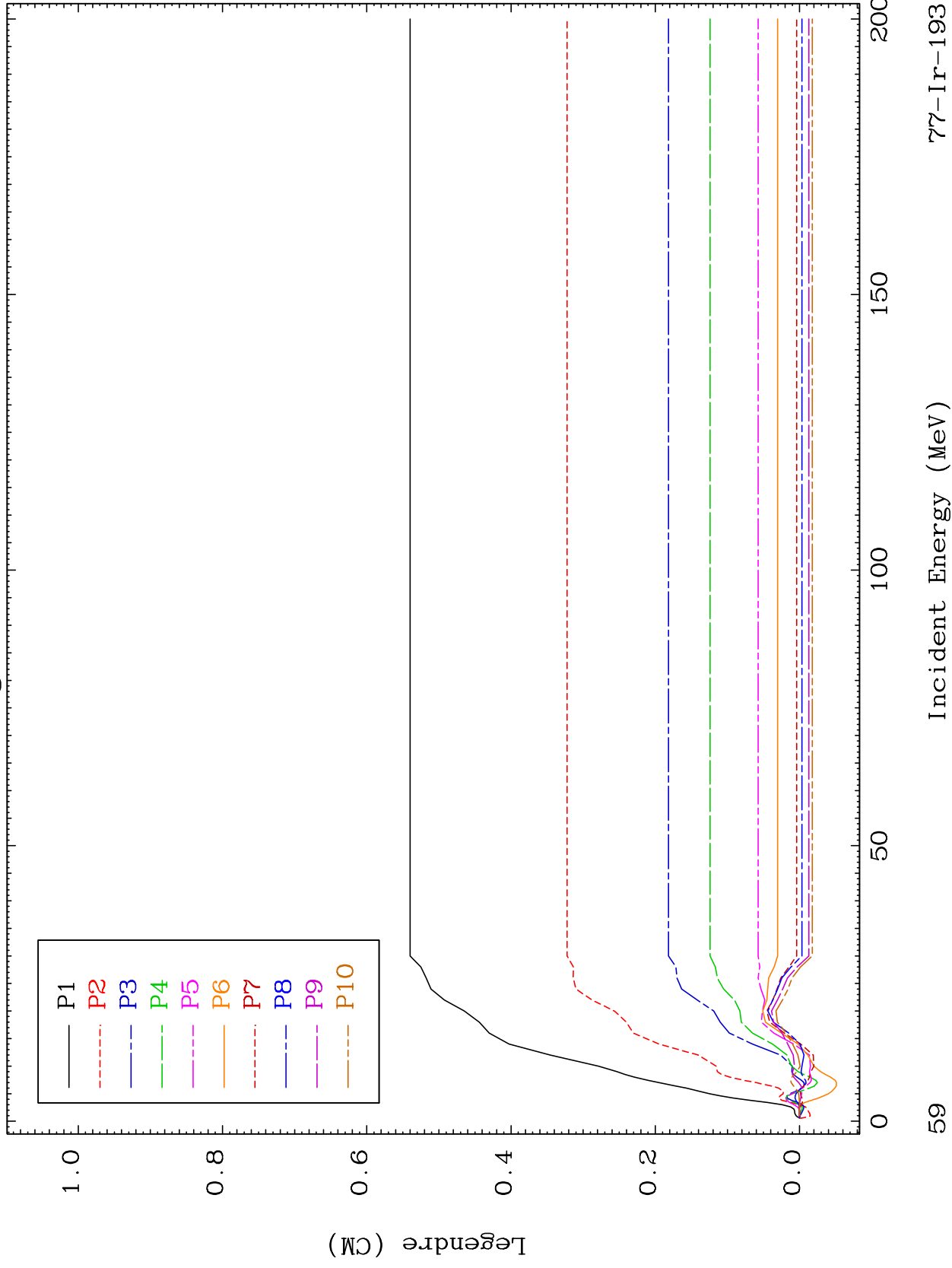
77-Ir-193



58

Incident Energy (MeV)

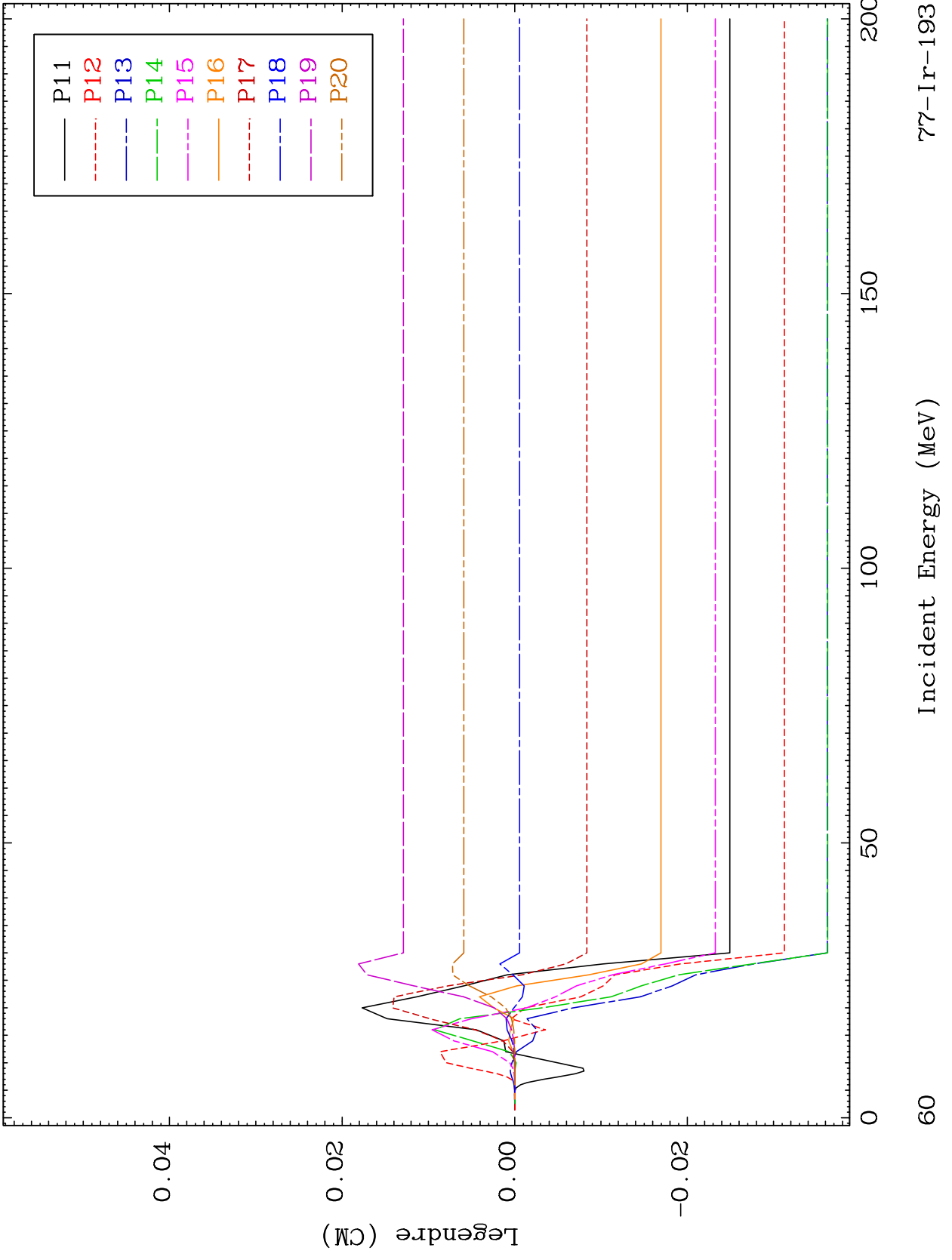
77-Ir-193



MAT 7731

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

77-Ir-193

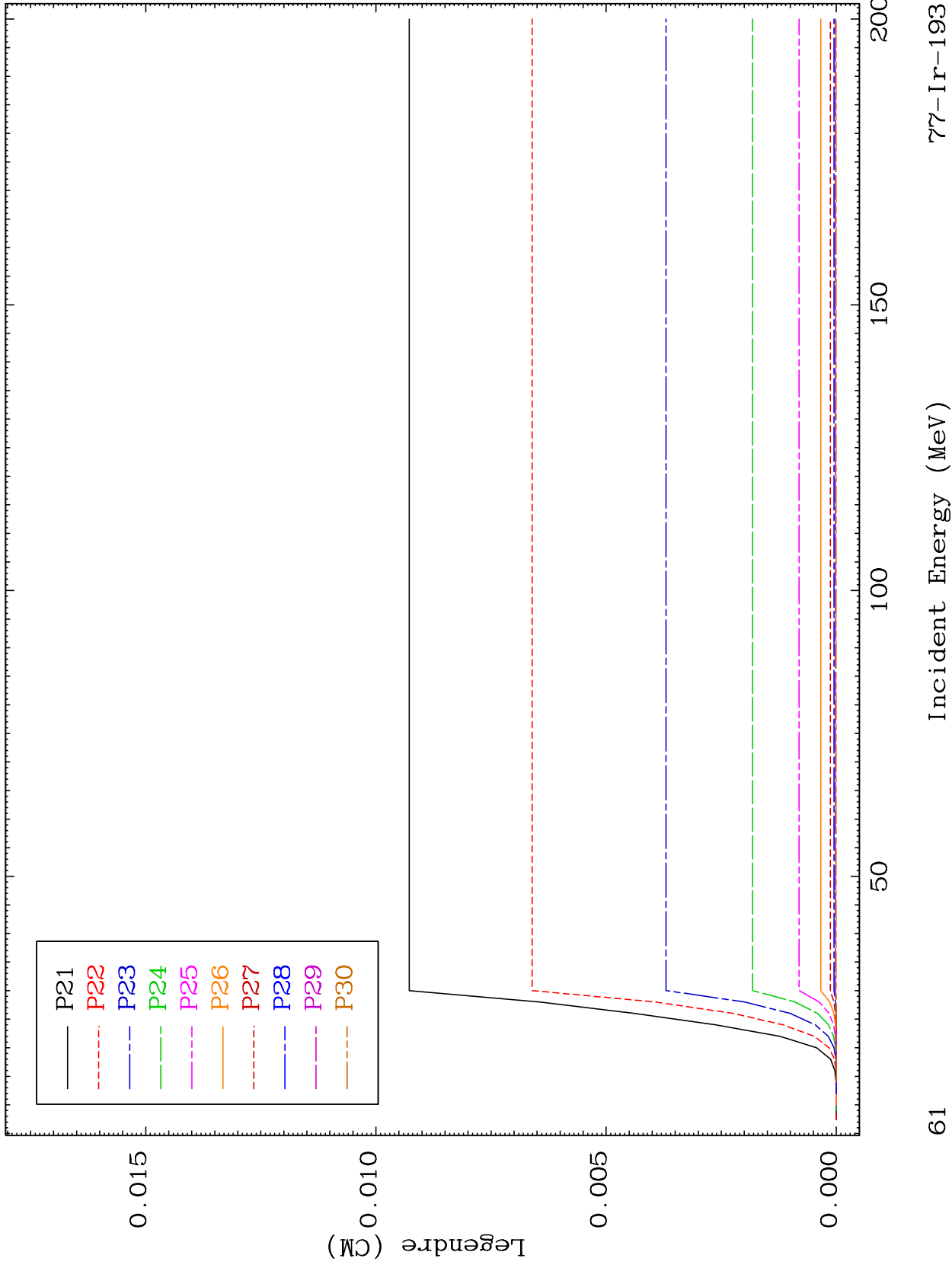


77-Ir-193

MAT 7731

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

77-Ir-193



61

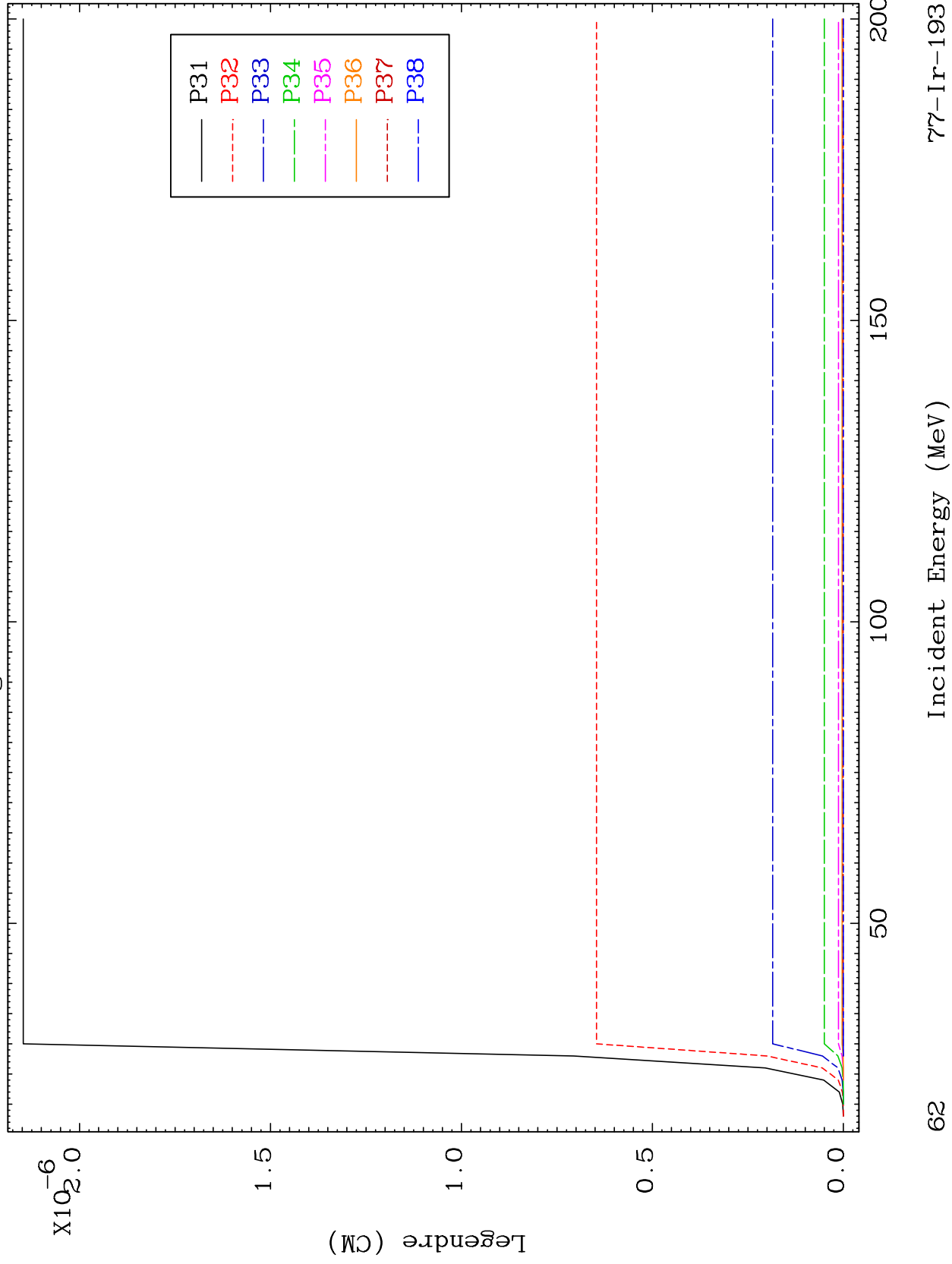
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193

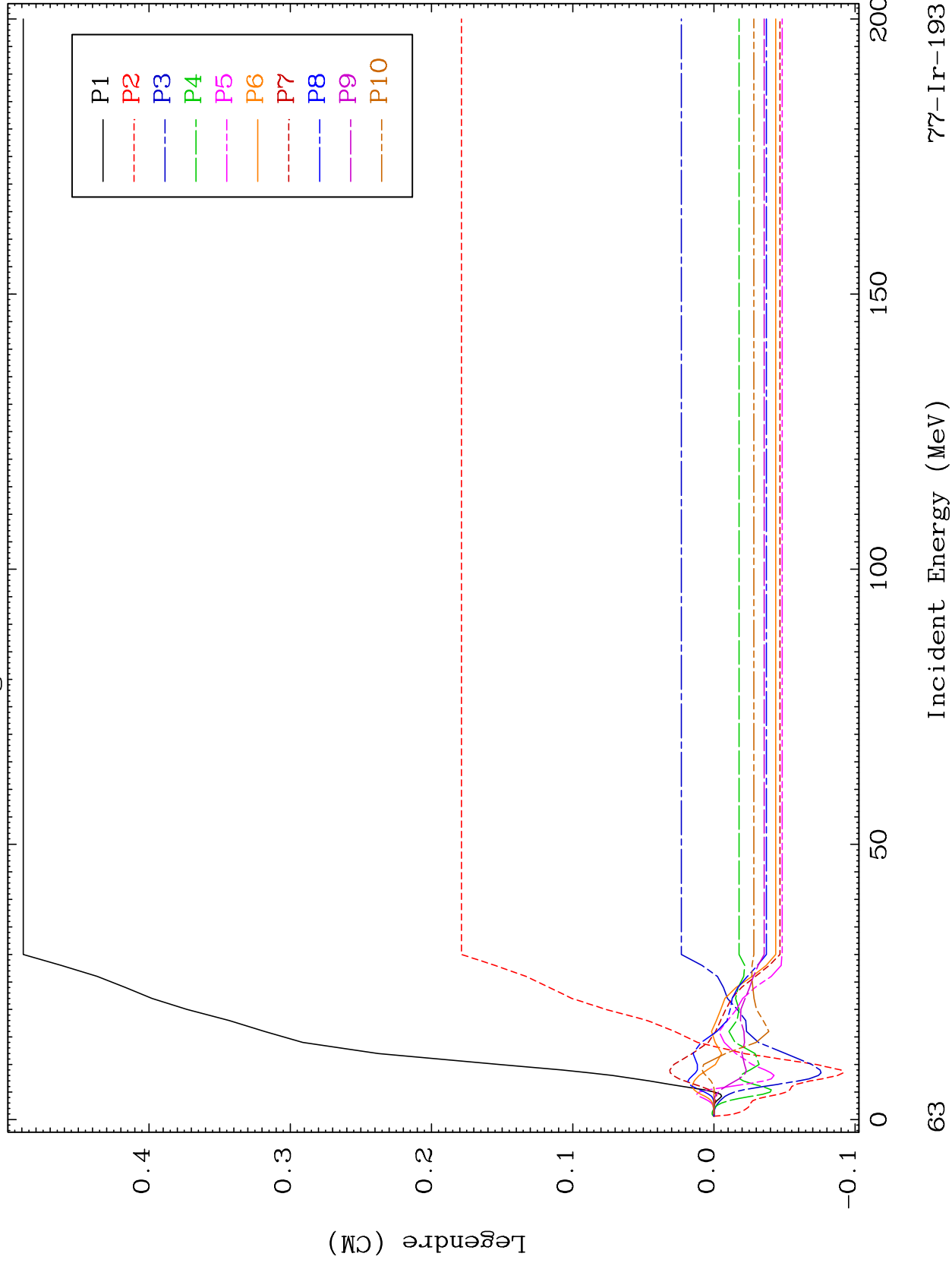


62

MAT 7731

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

77-Ir-193



77-Ir-193

Incident Energy (MeV)

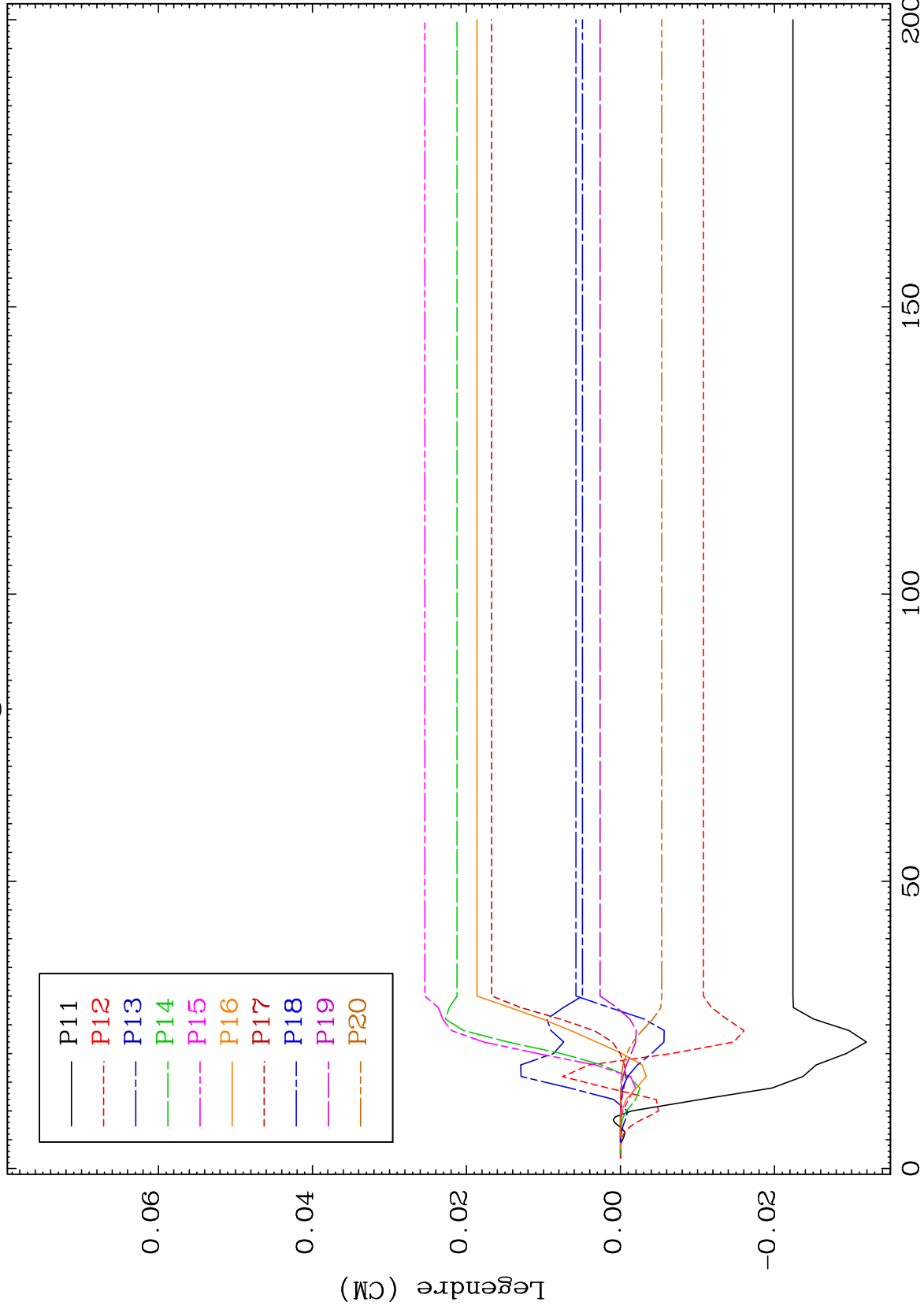
63



MAT 7731

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

77-Ir-193



64

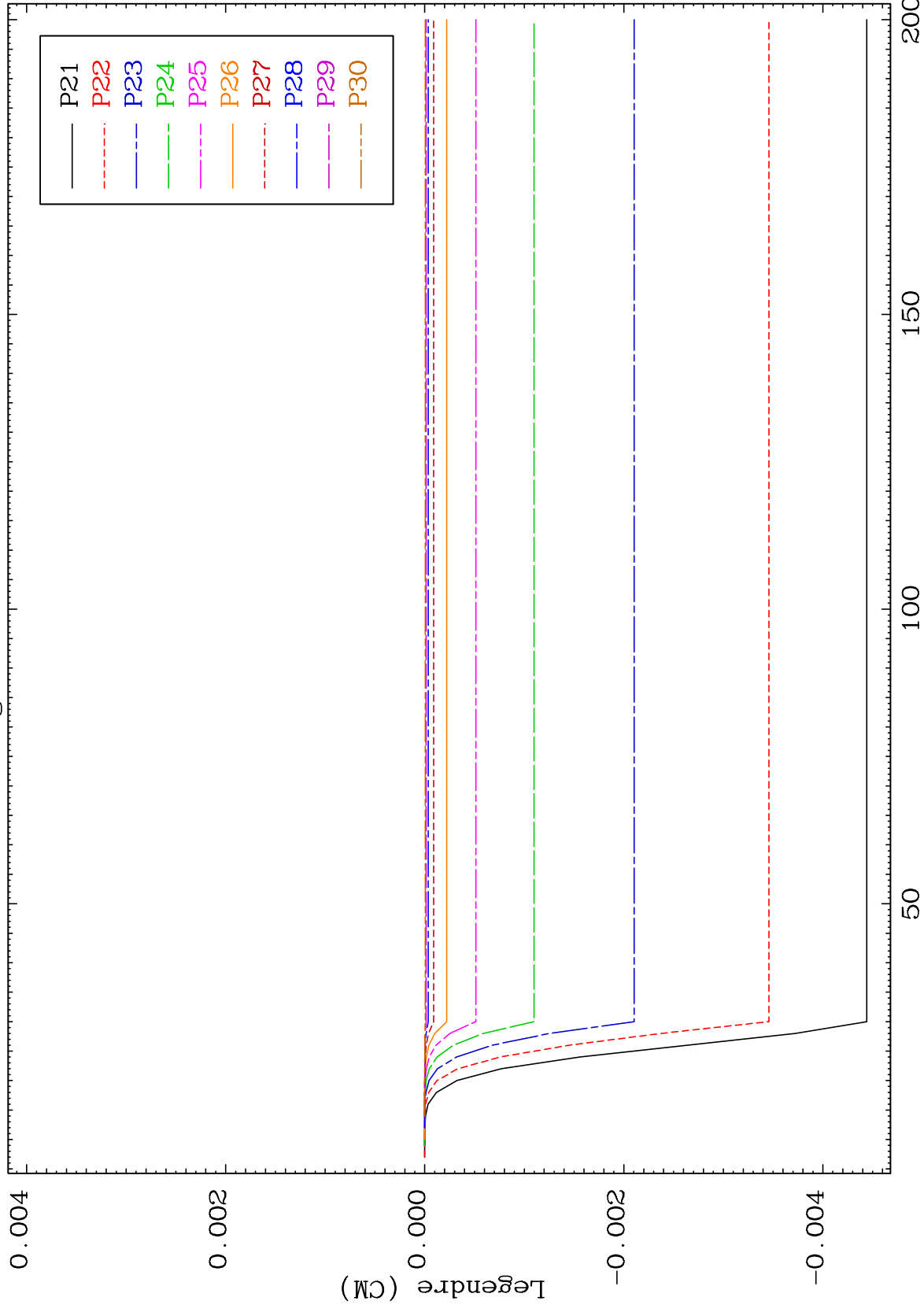
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

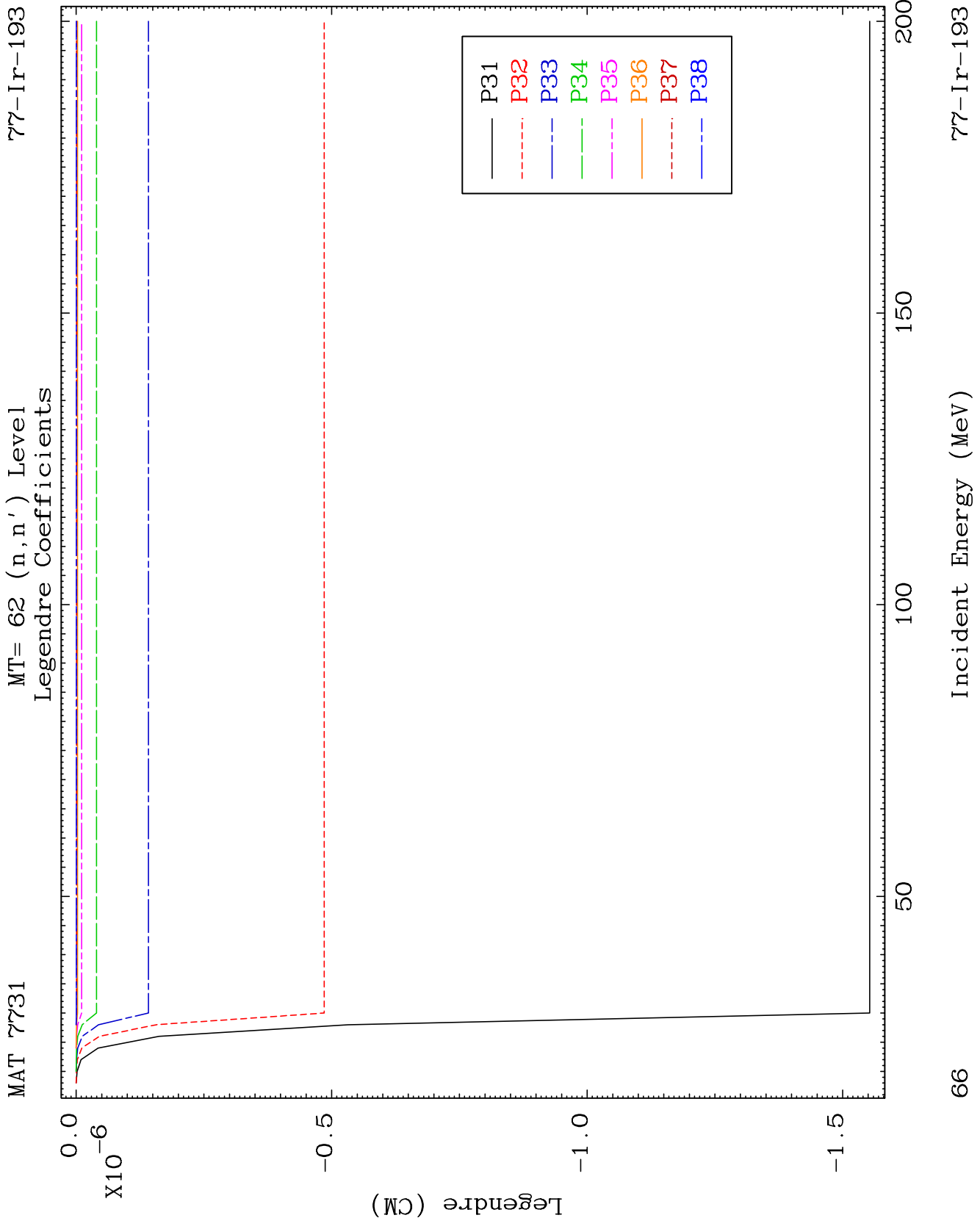
77-Ir-193



65

Incident Energy (MeV)

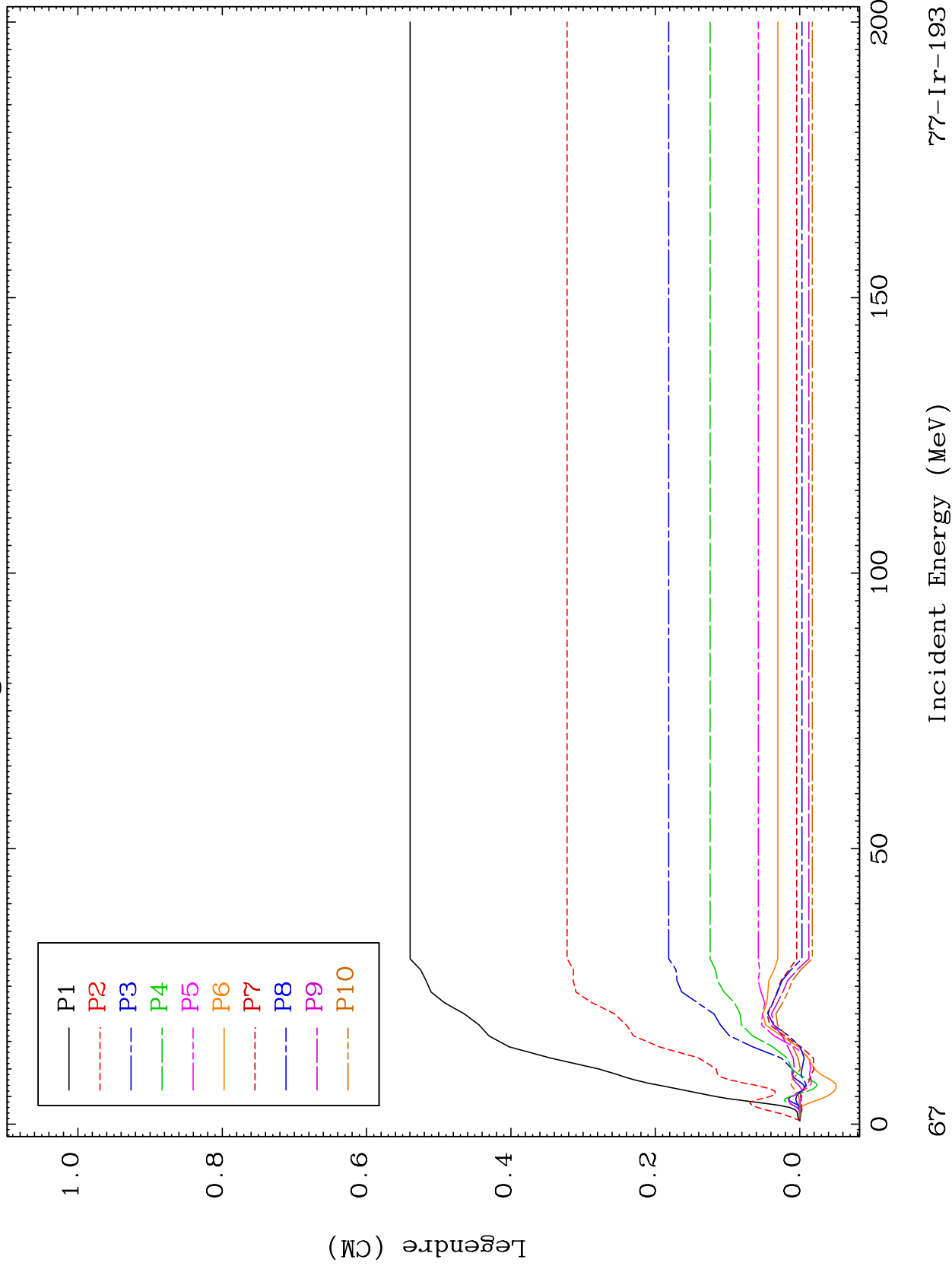
77-Ir-193



MAT 7731

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

77-Ir-193



77-Ir-193

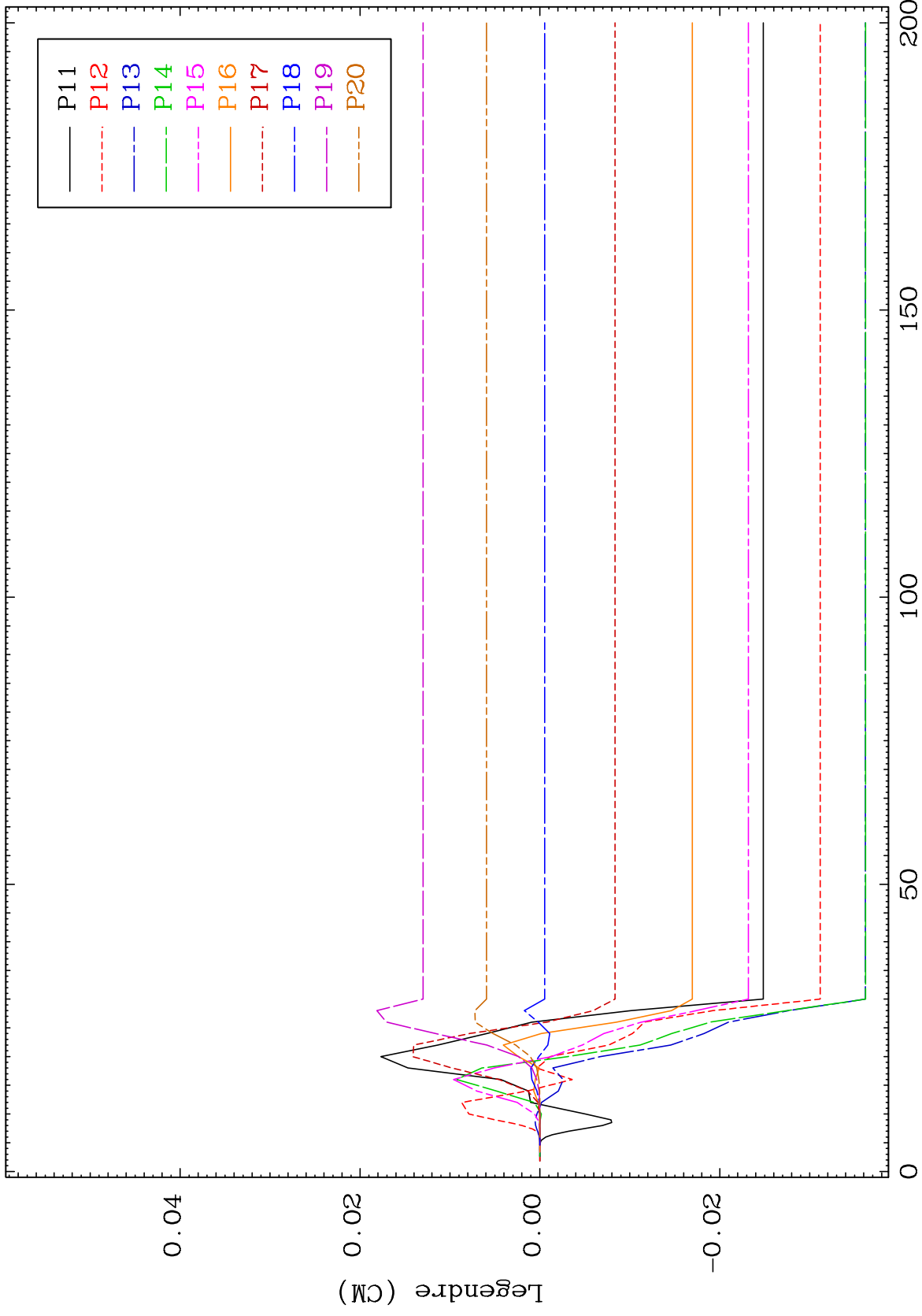
Incident Energy (MeV)

67

MAT 7731

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

77-Ir-193



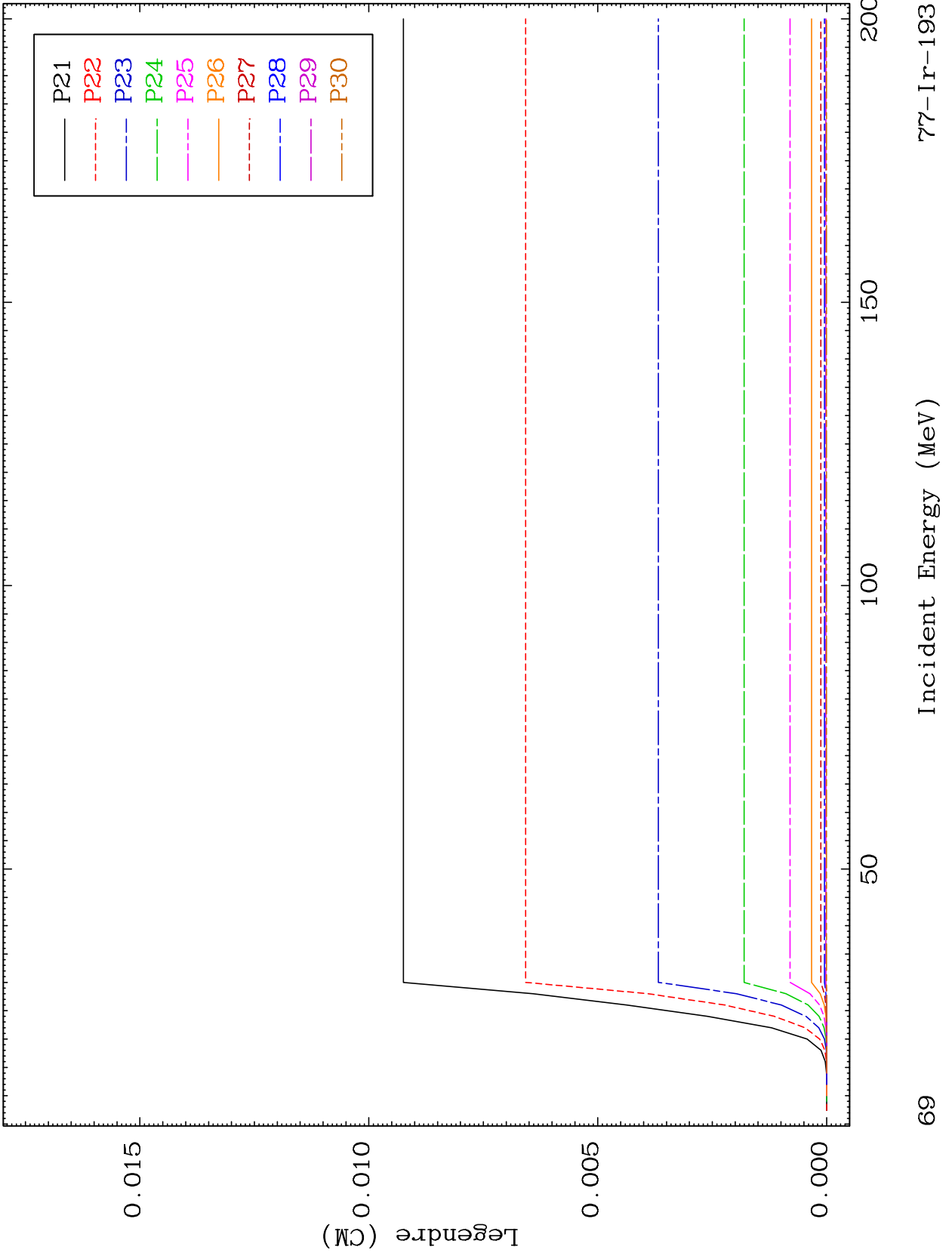
68

77-Ir-193

MAT 7731

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

77-Ir-193



69

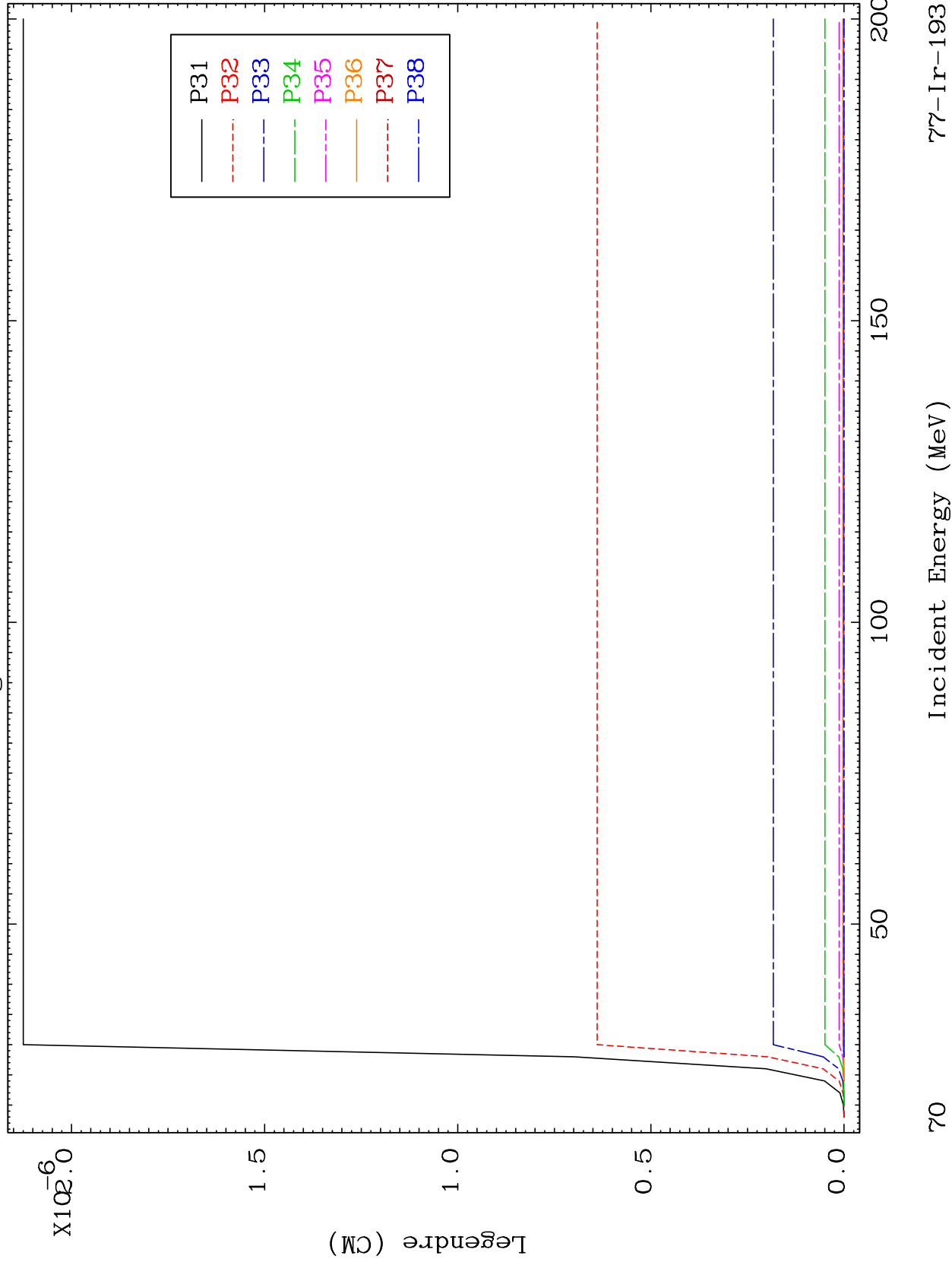
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



77-Ir-193

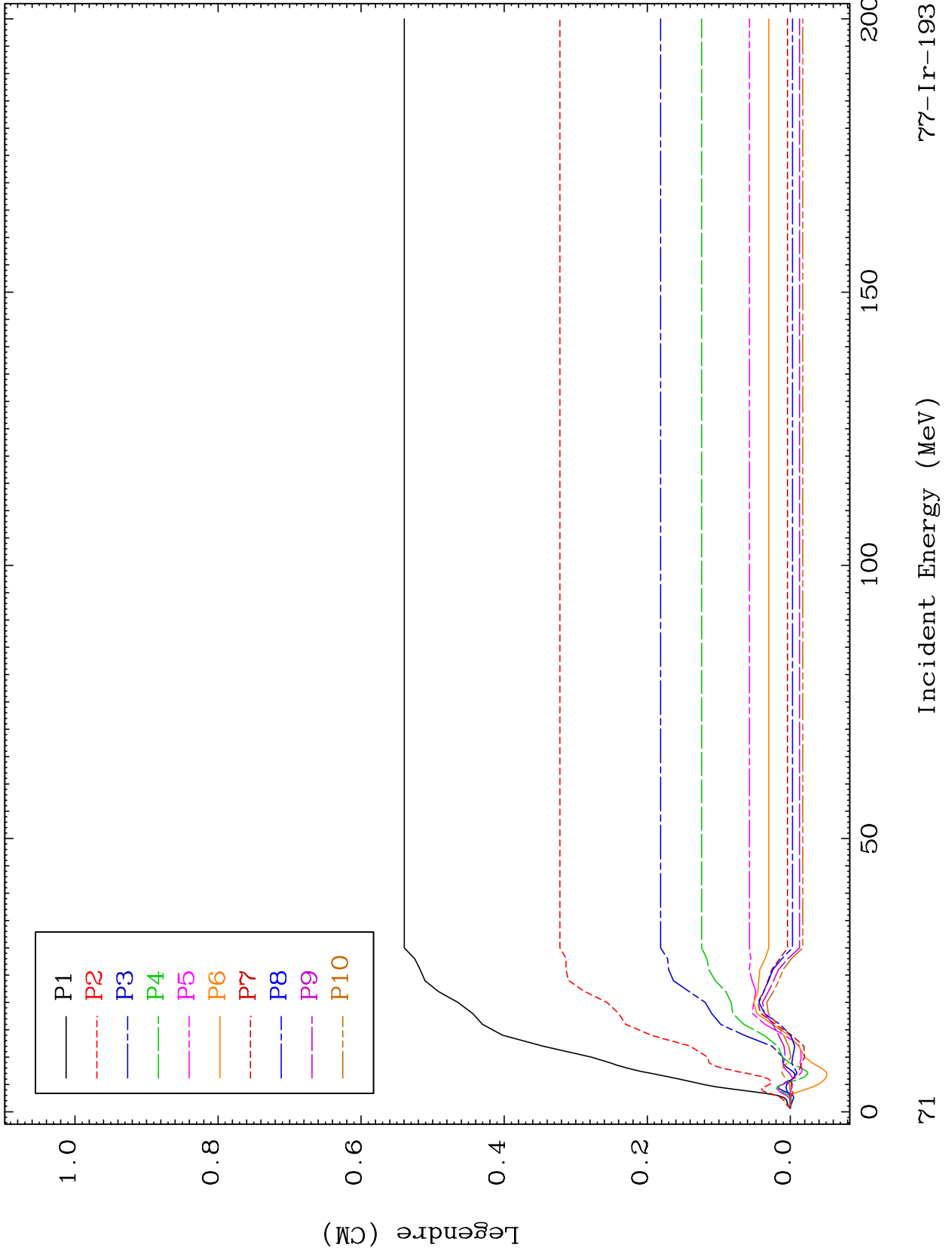
Incident Energy (MeV)

70

MAT 7731

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

77-Ir-193

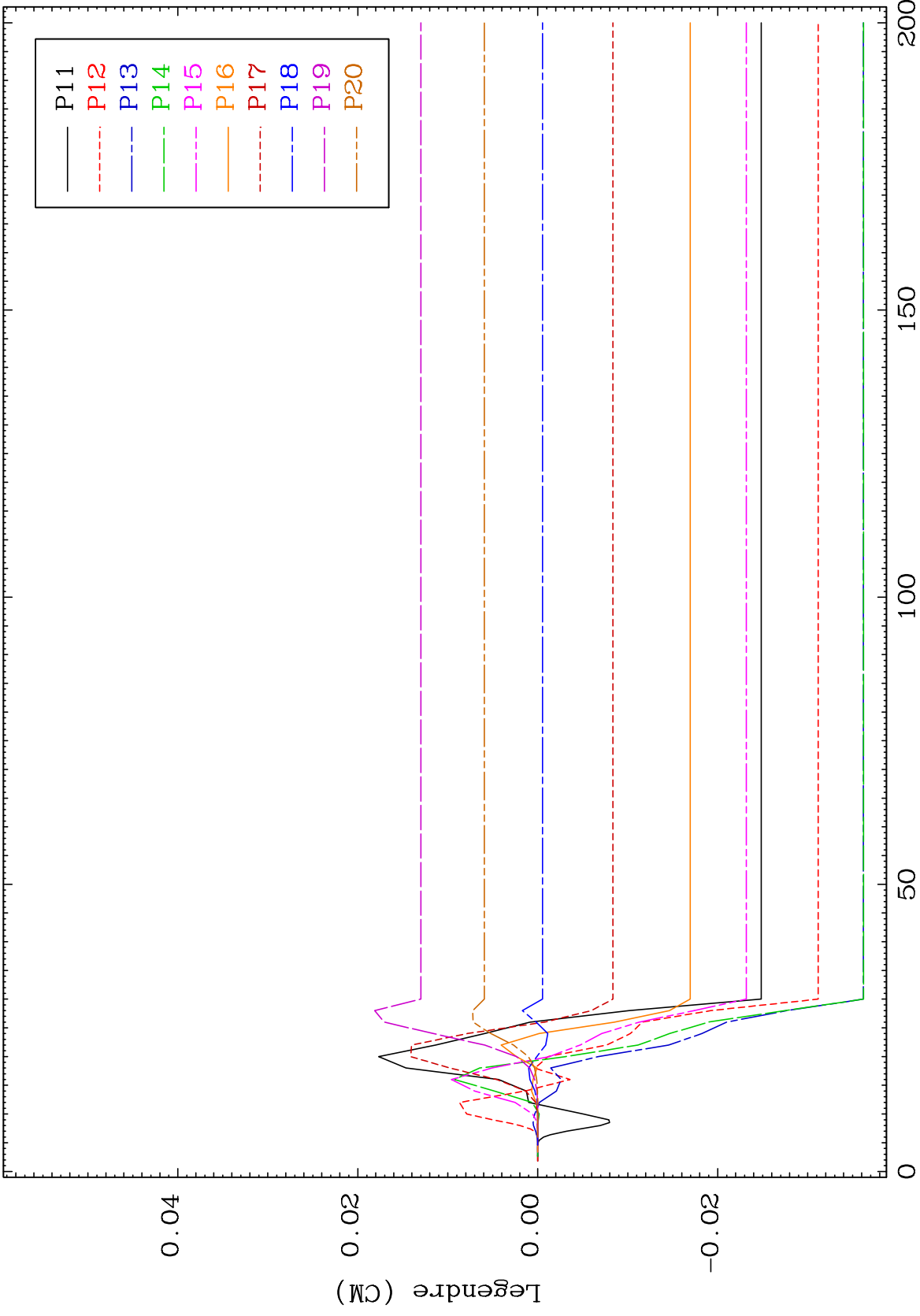




MAT 7731

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

77-Ir-193



72

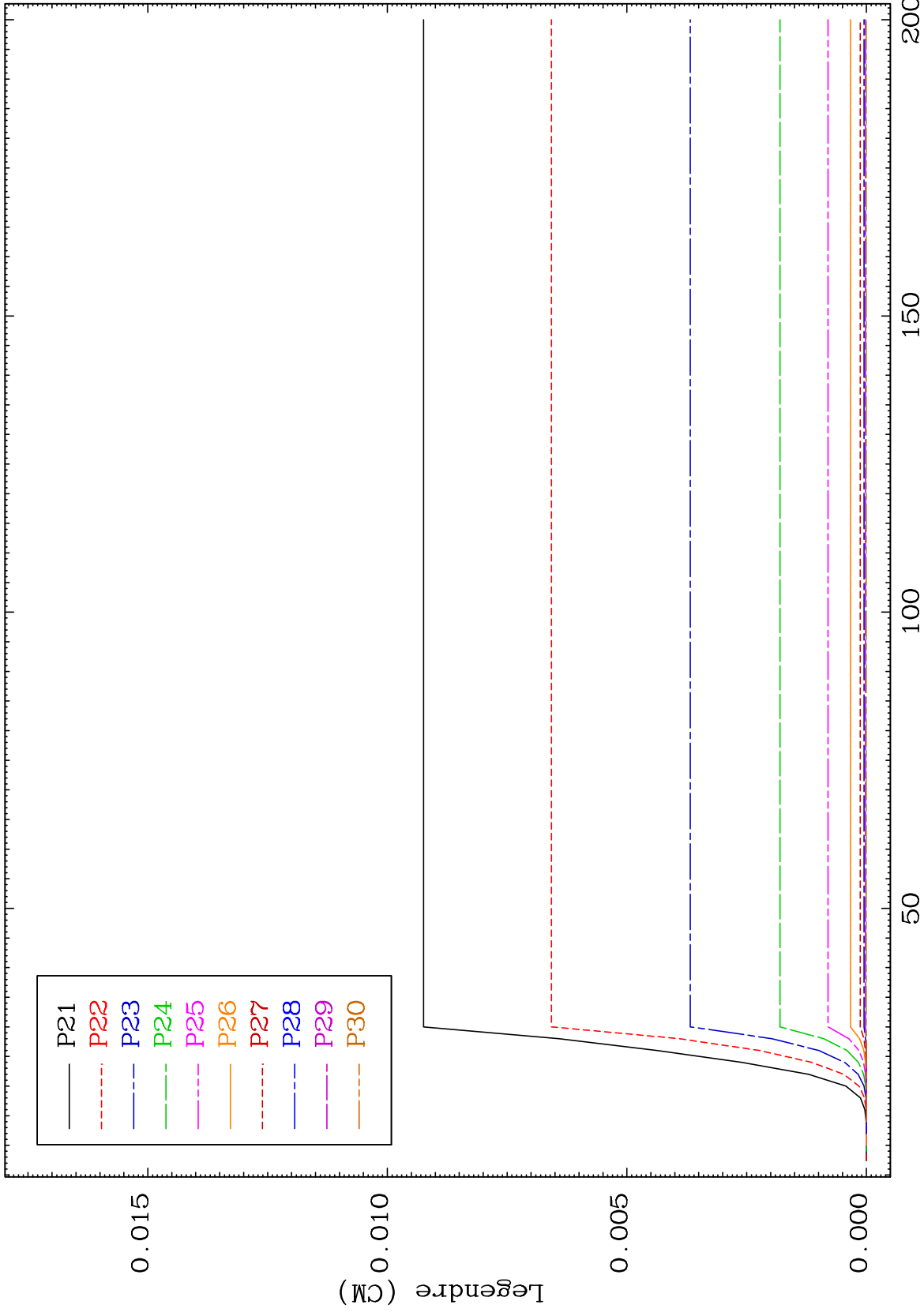
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



73

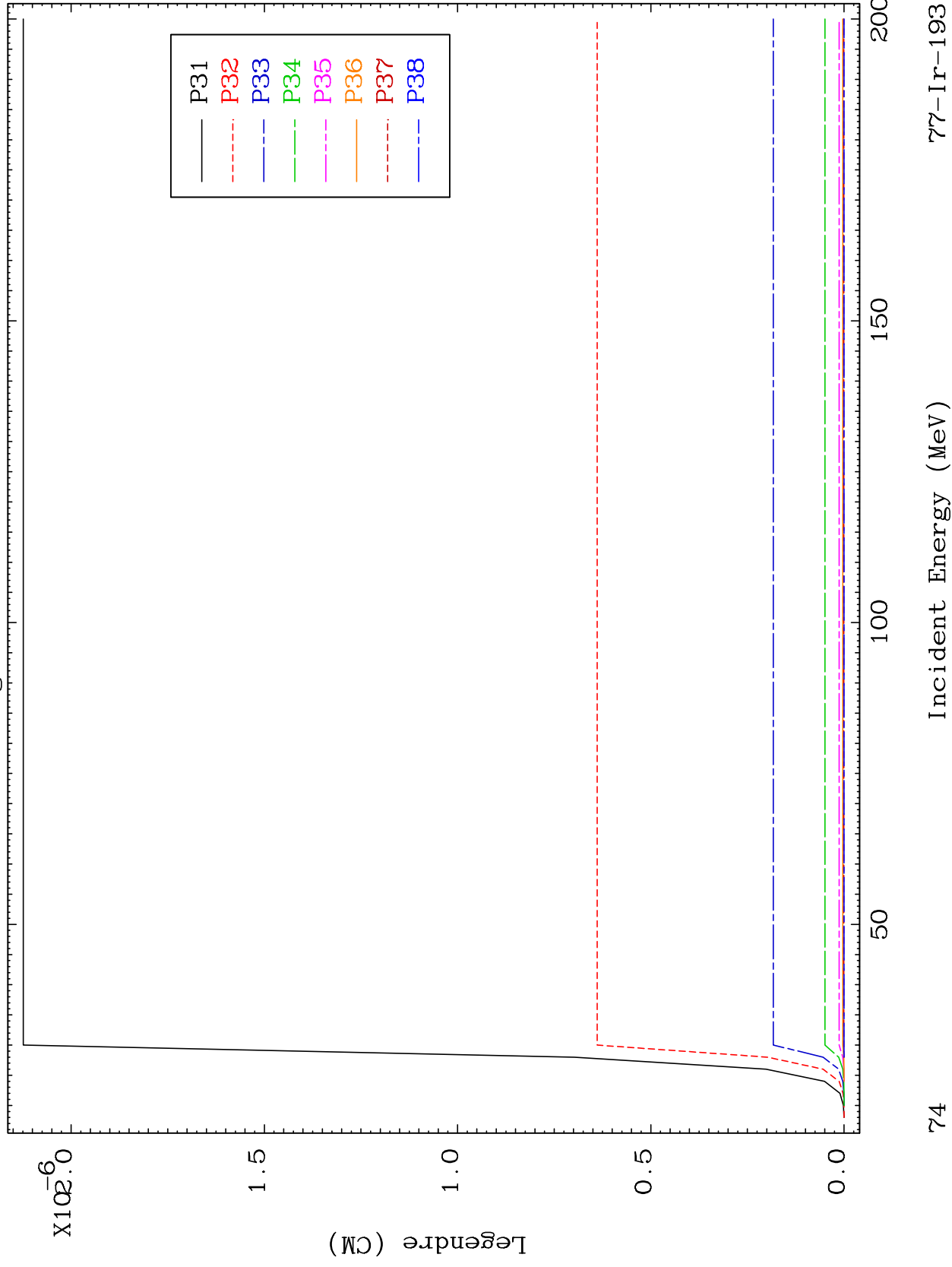
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



74

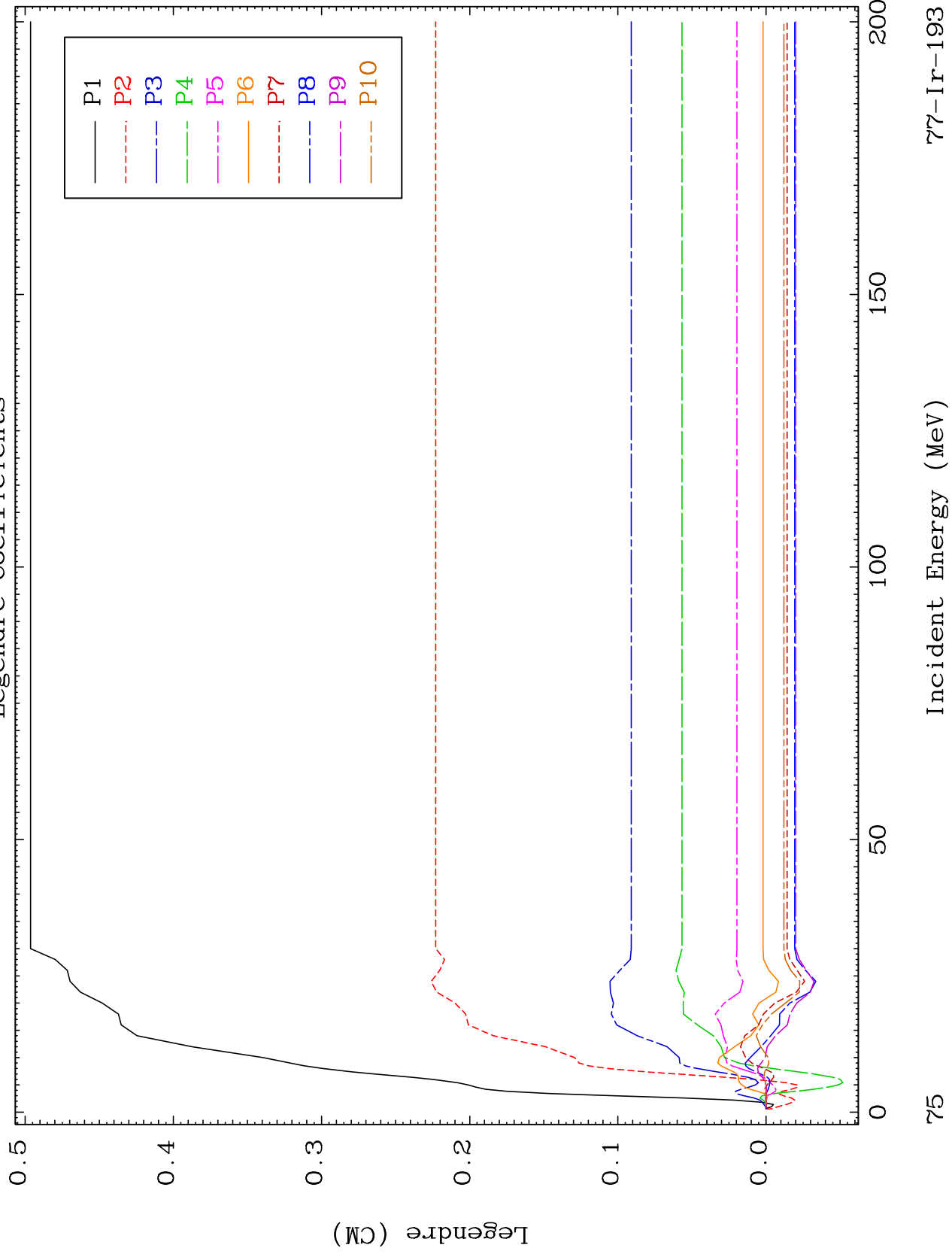
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



77-Ir-193

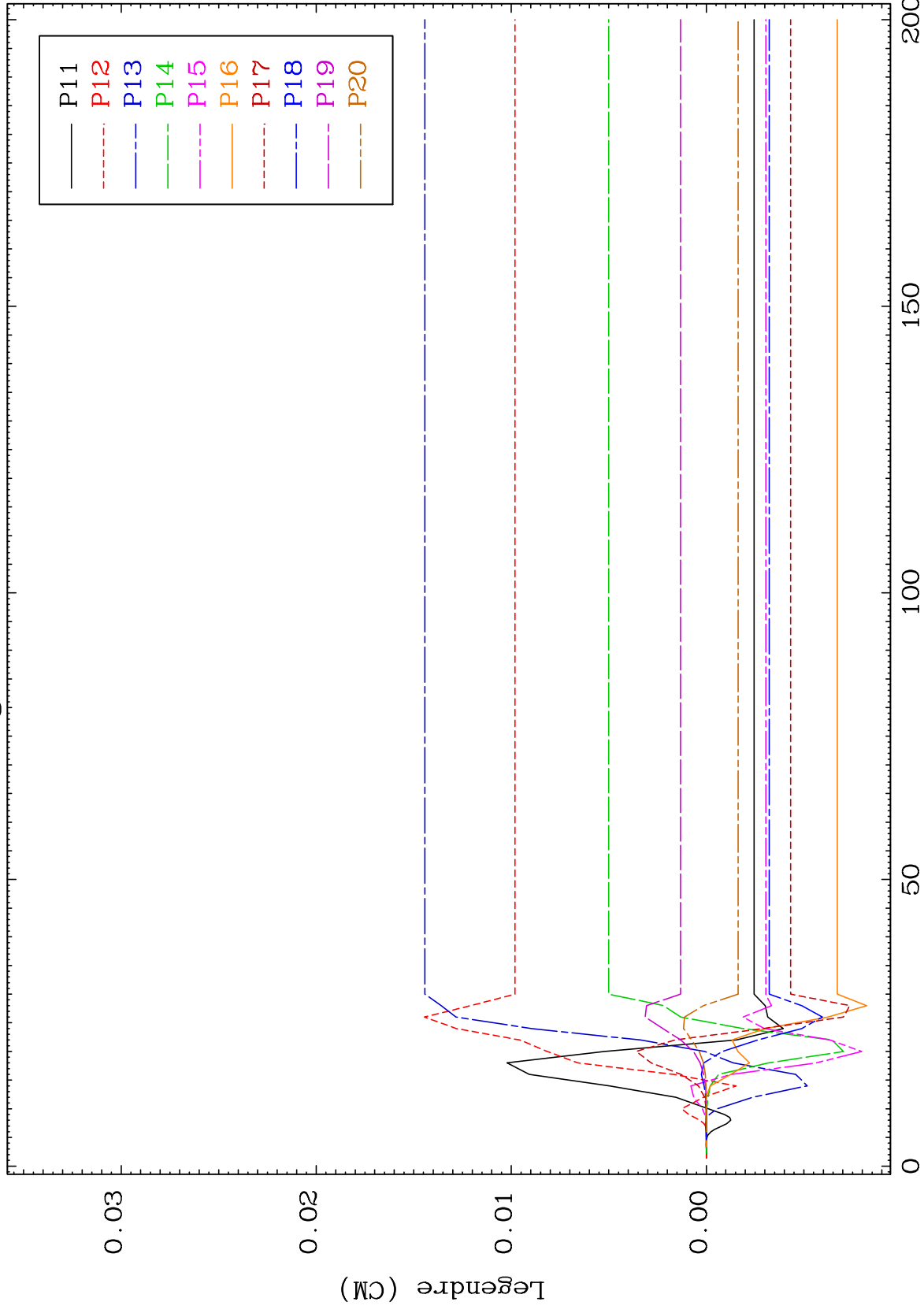
Incident Energy (MeV)

75

MAT 7731

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

77-Ir-193



76

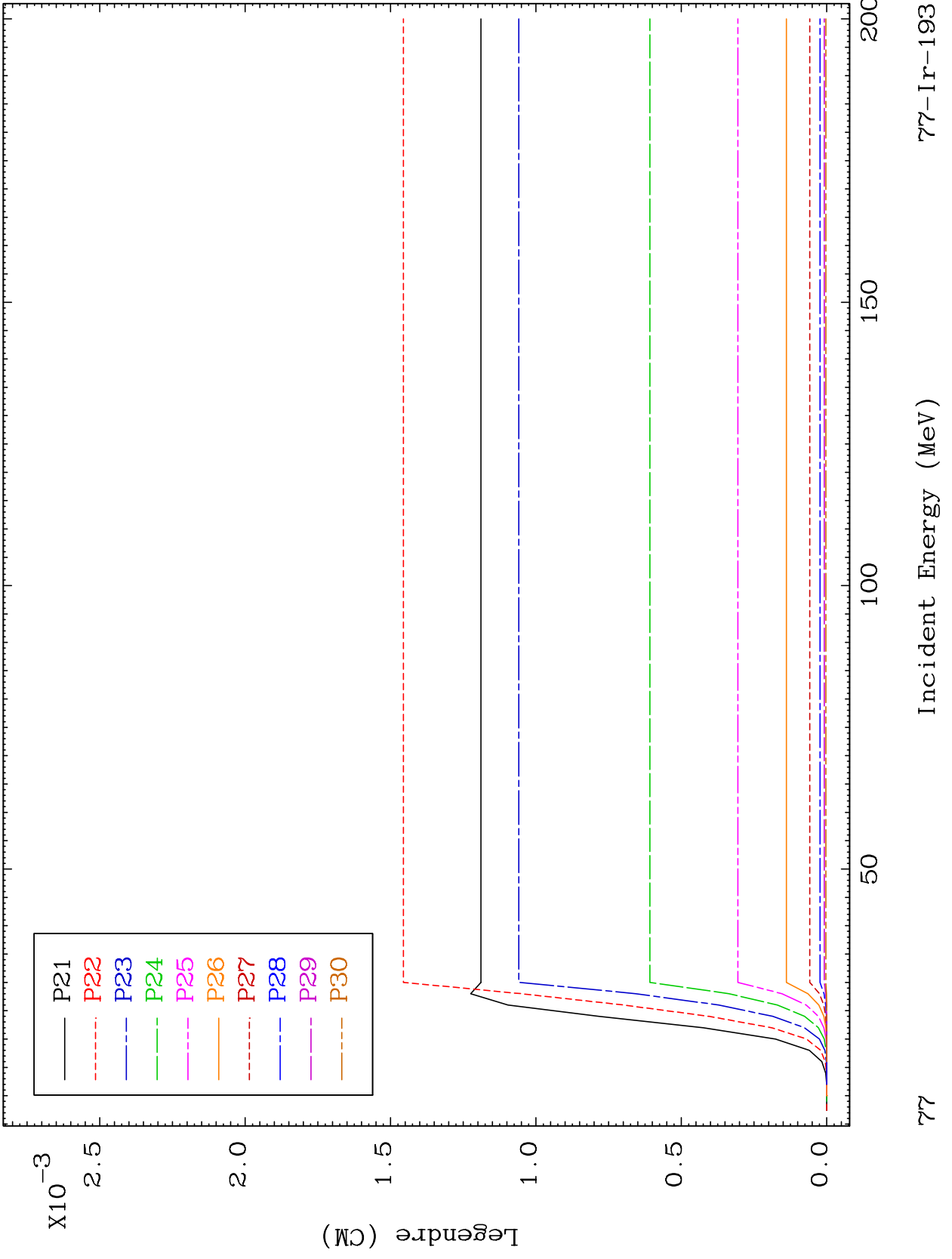
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

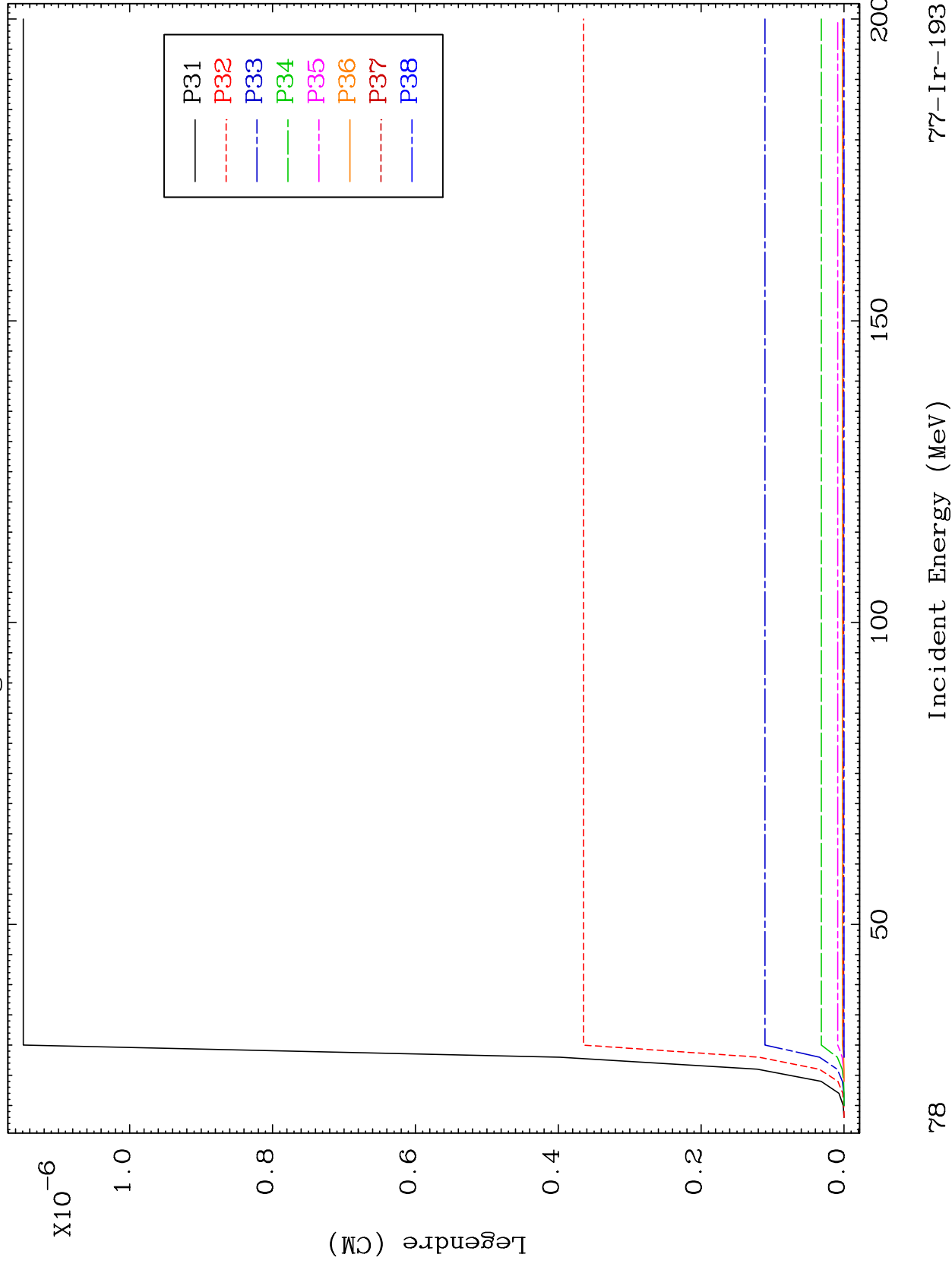
77-Ir-193



MAT 7731

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

77-Ir-193



78

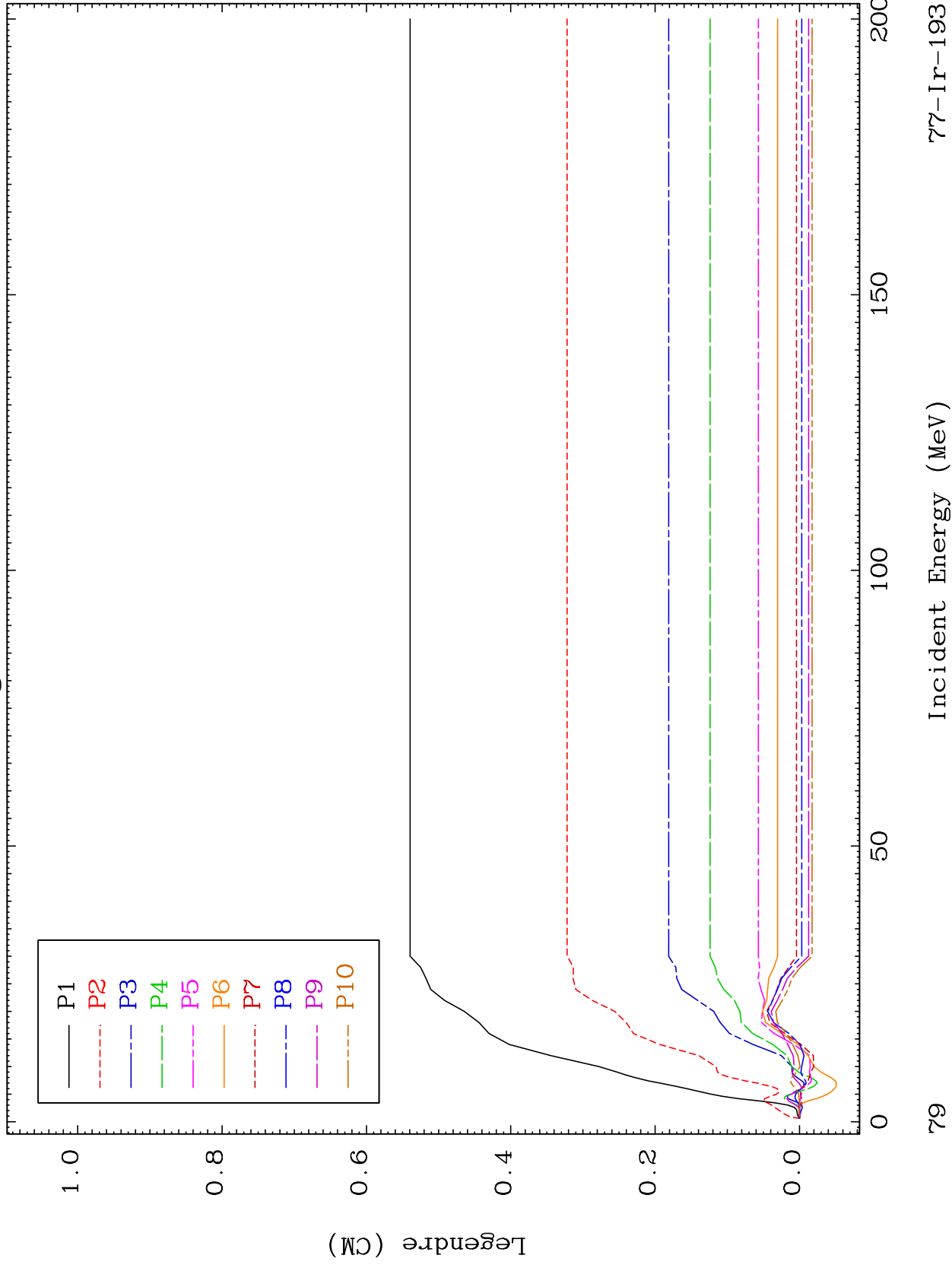
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



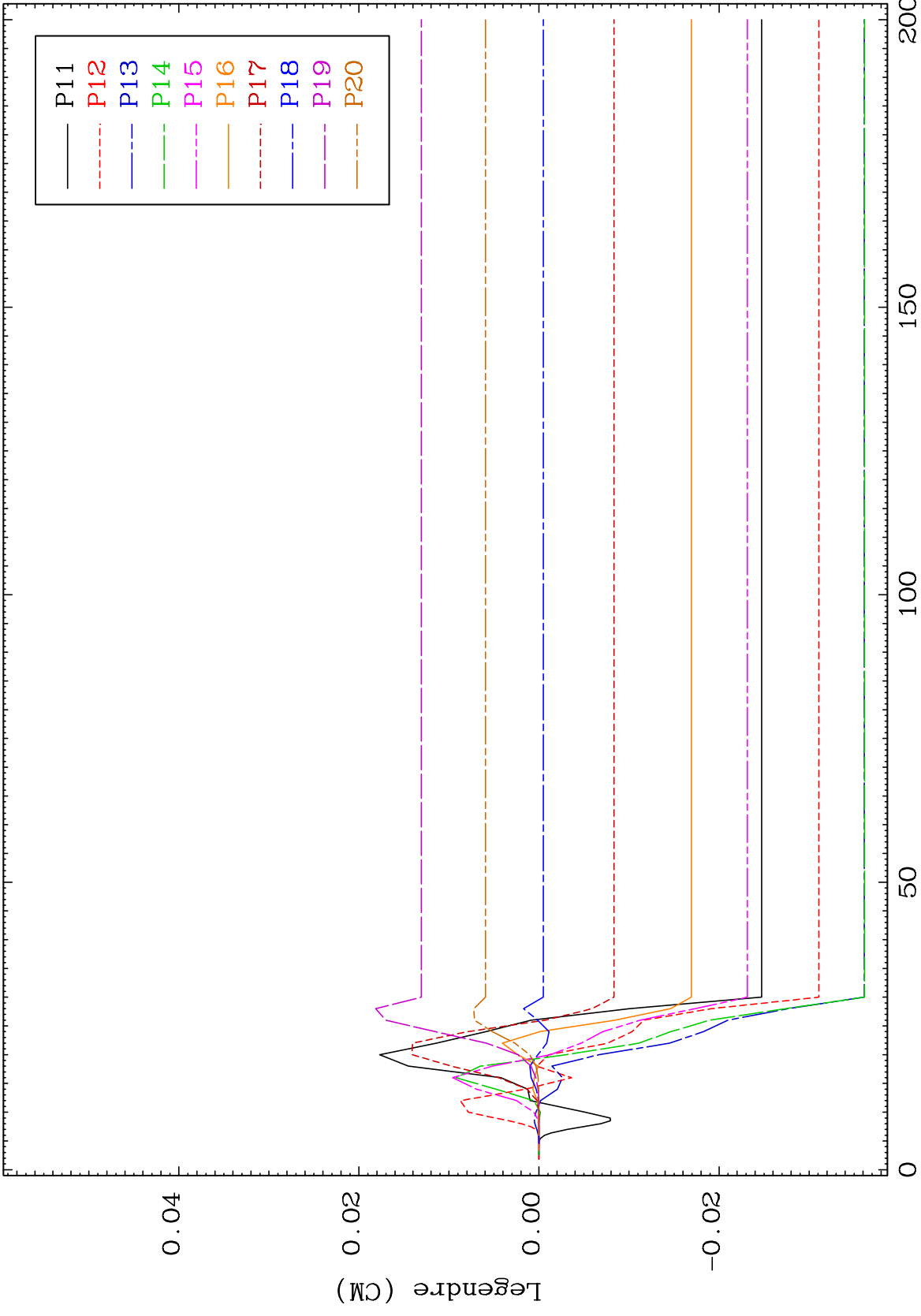
79



MAT 7731

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

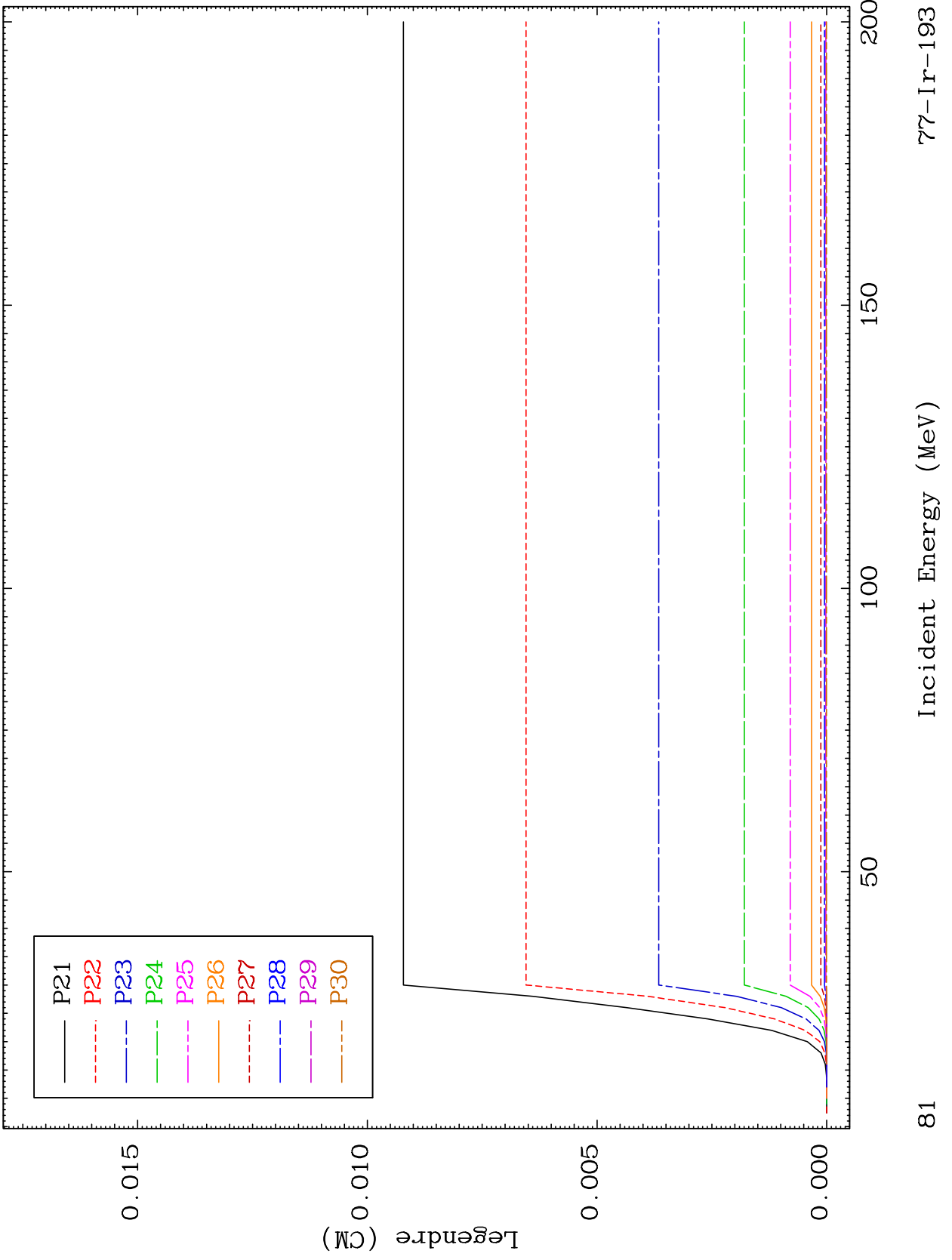
77-Ir-193



80

Incident Energy (MeV)

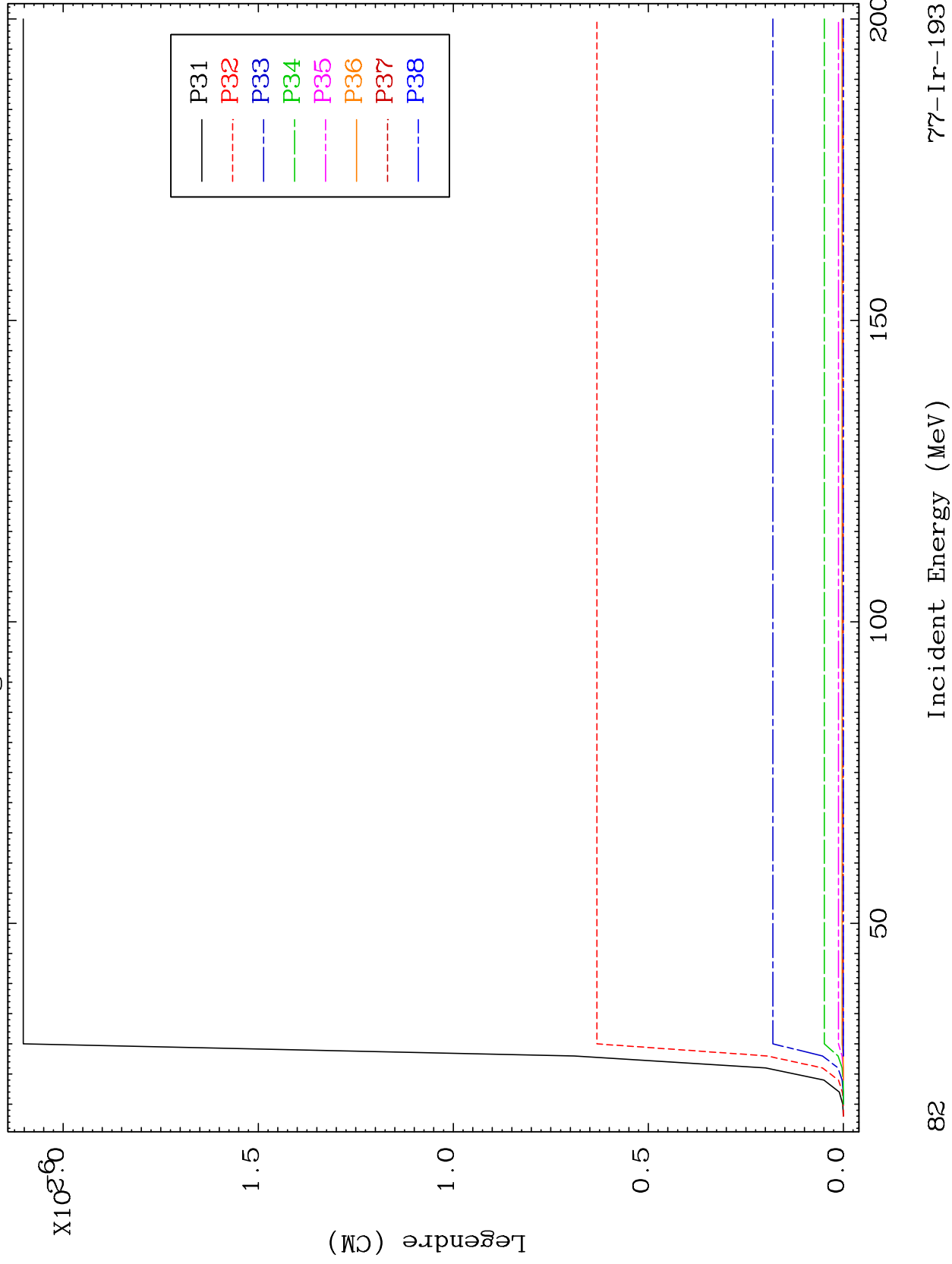
77-Ir-193



MAT 7731

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

77-Ir-193

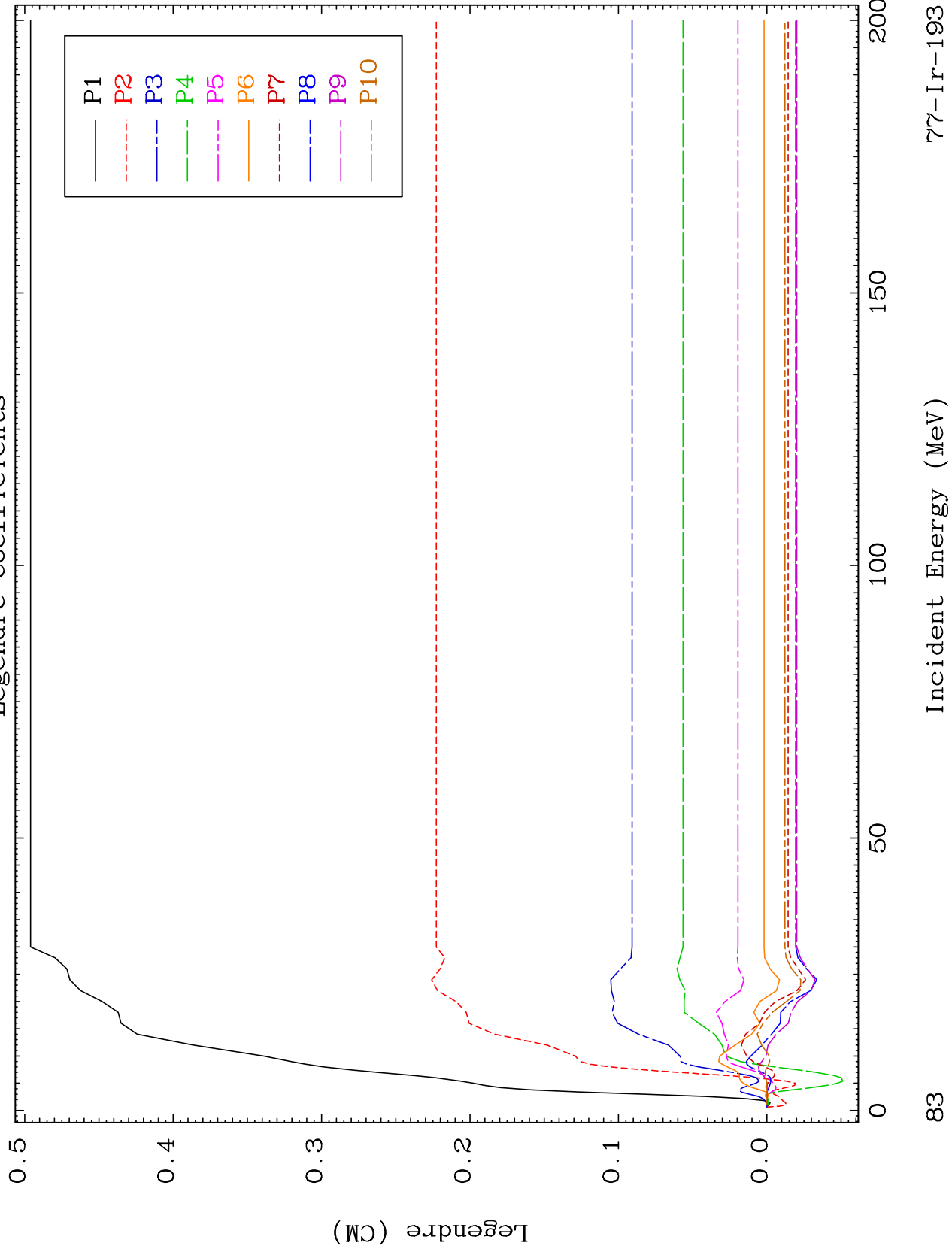


82

MAT 7731

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

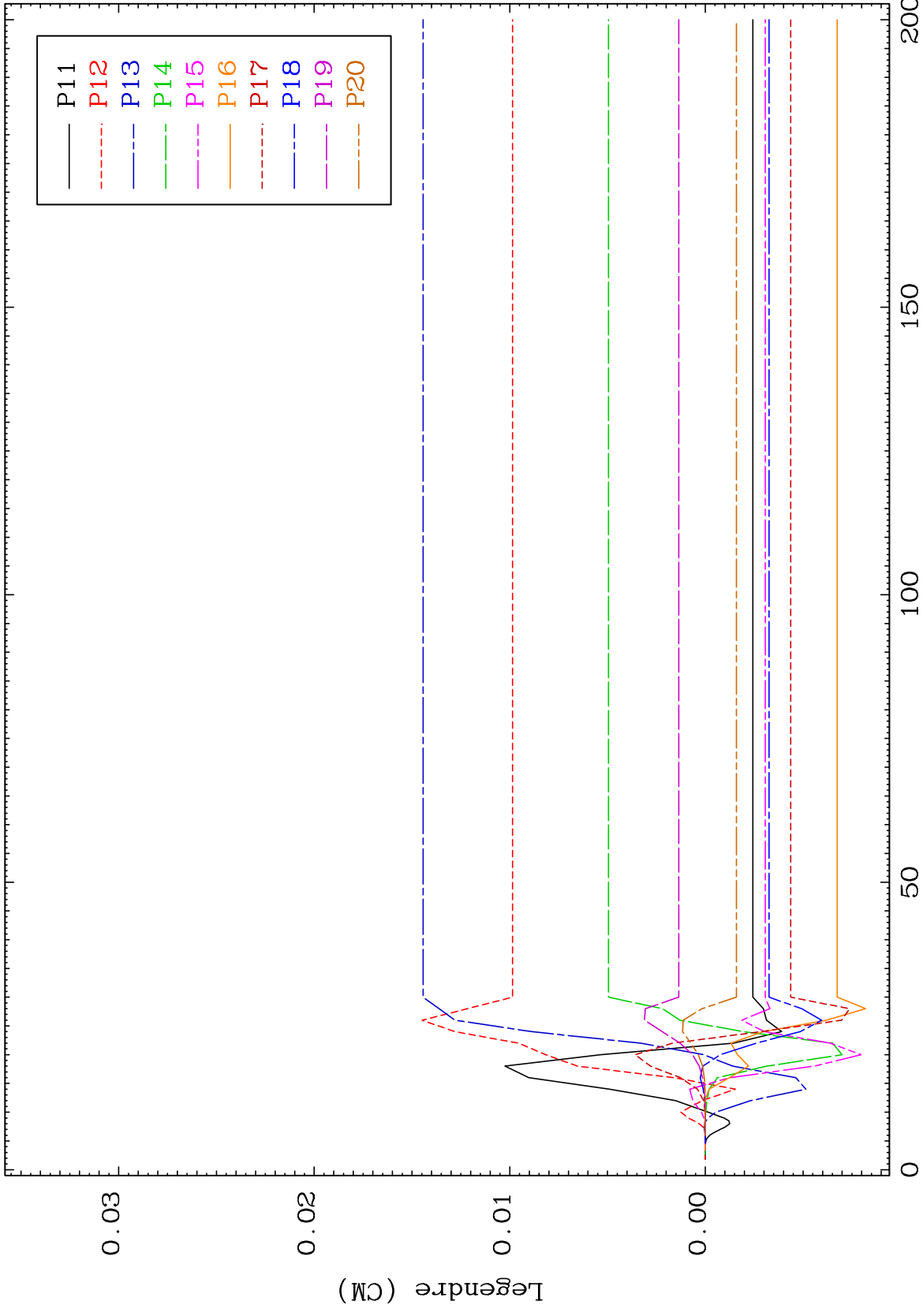
77-Ir-193



MAT 7731

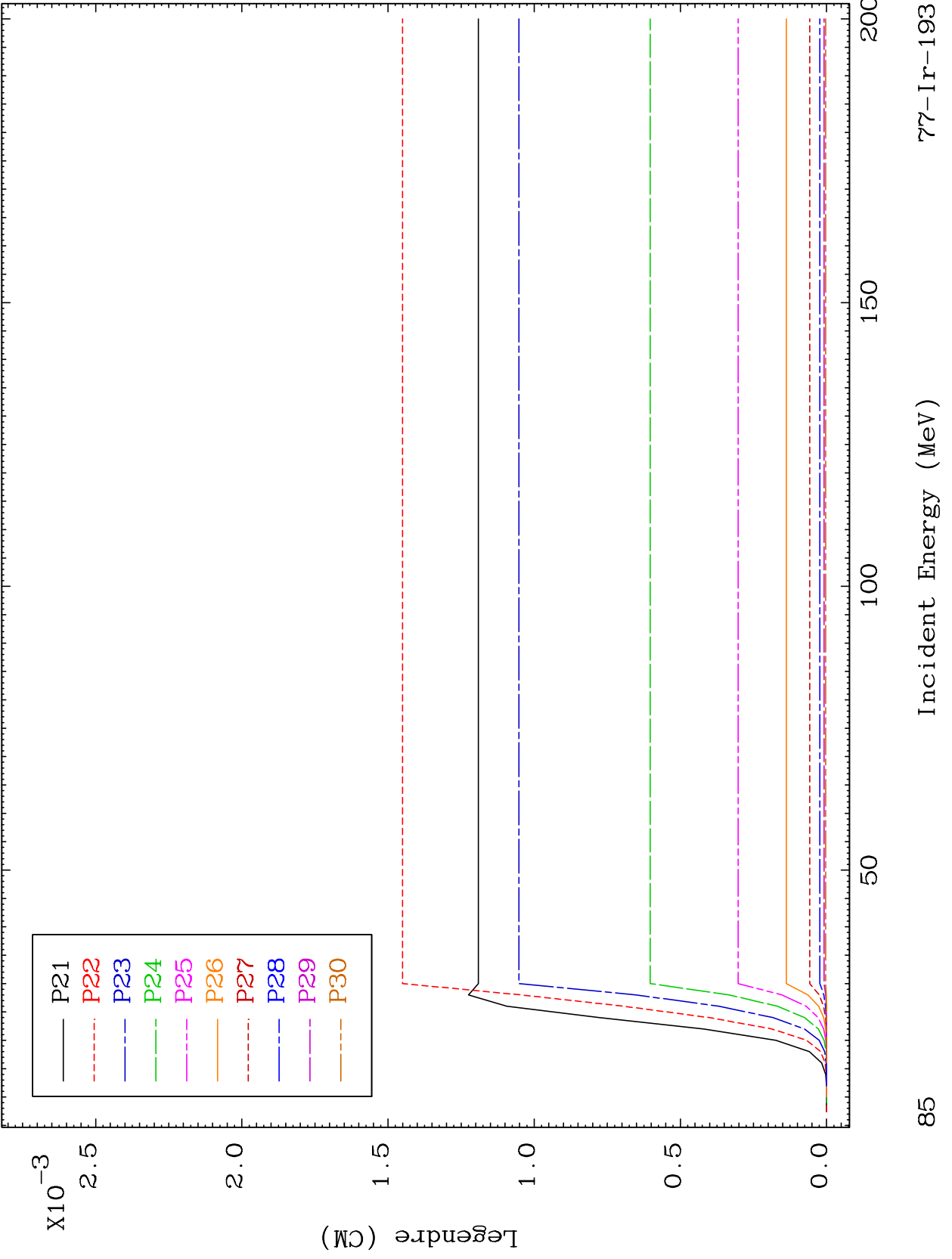
MT= 67 (n,n') Level  
Legendre Coefficients

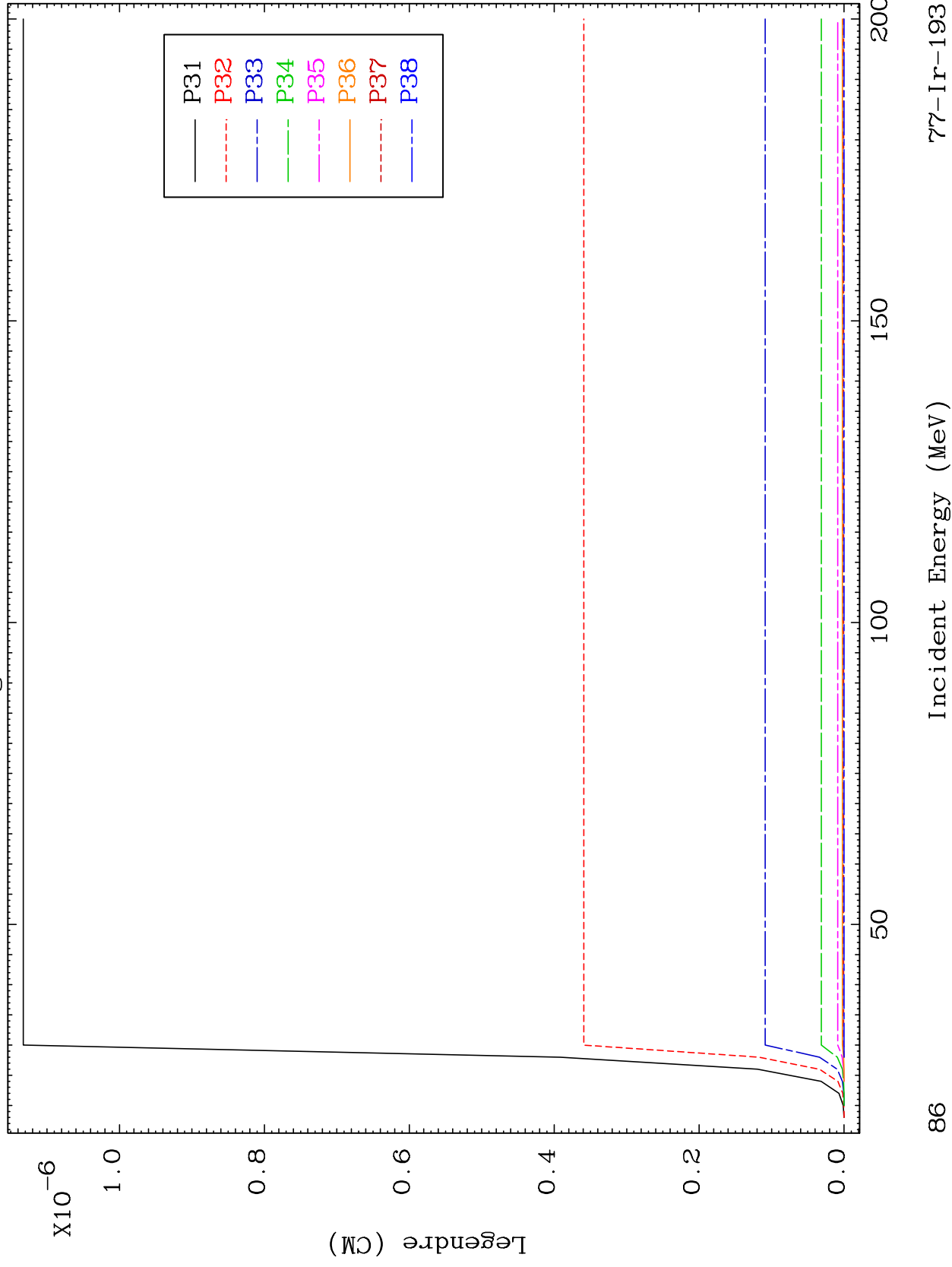
77-Ir-193



84

77-Ir-193

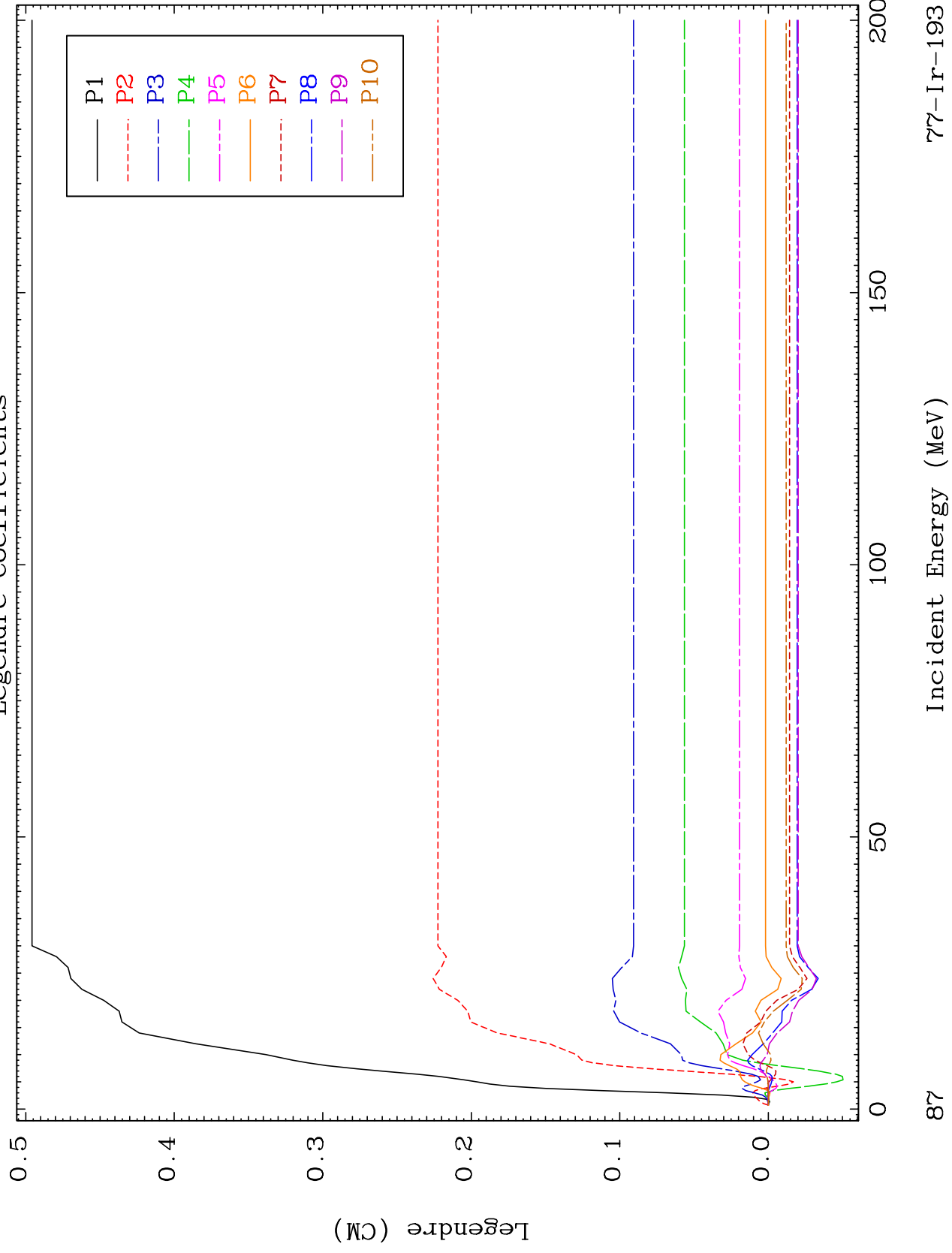




MAT 7731

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

77-Ir-193



77-Ir-193

Incident Energy (MeV)

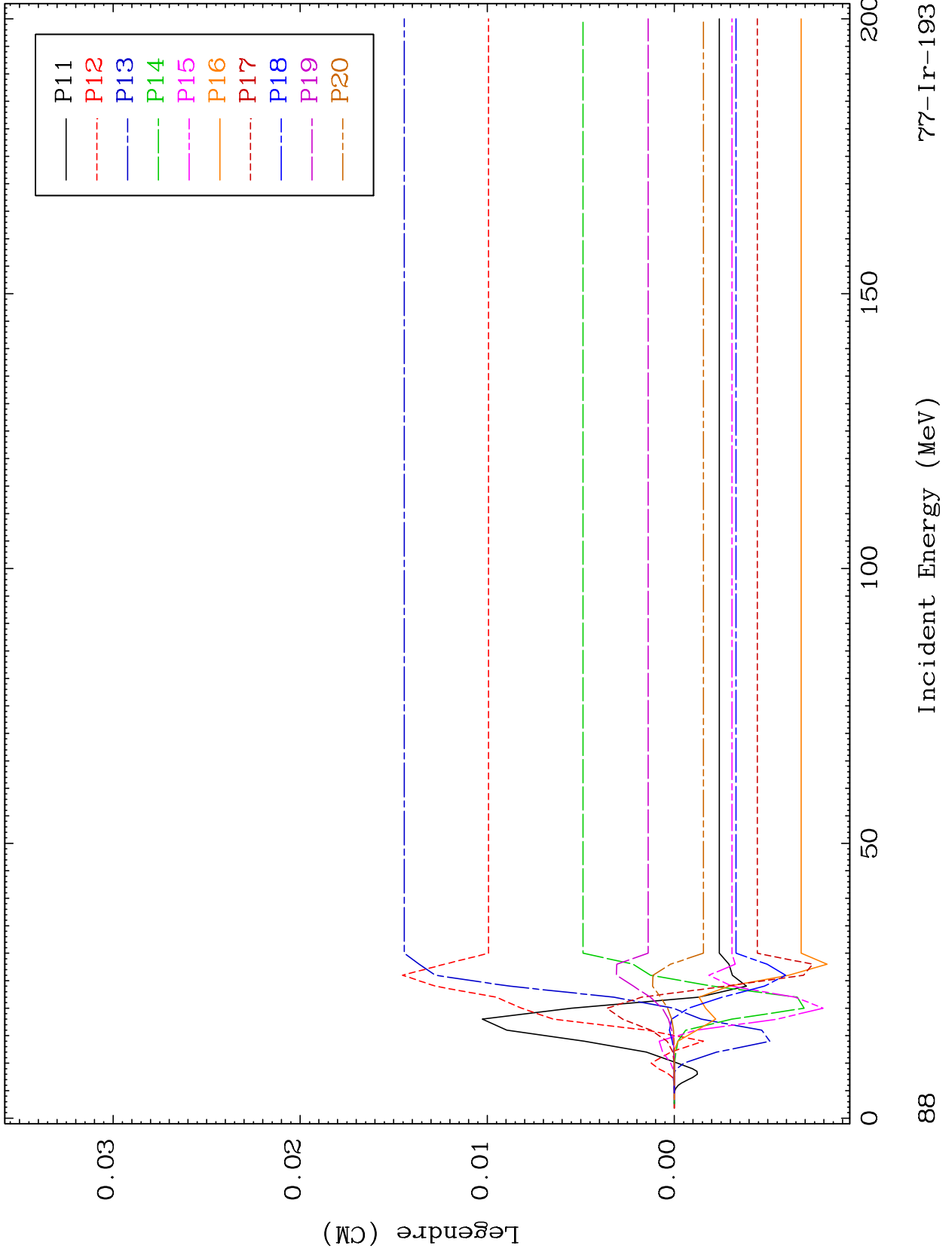
87

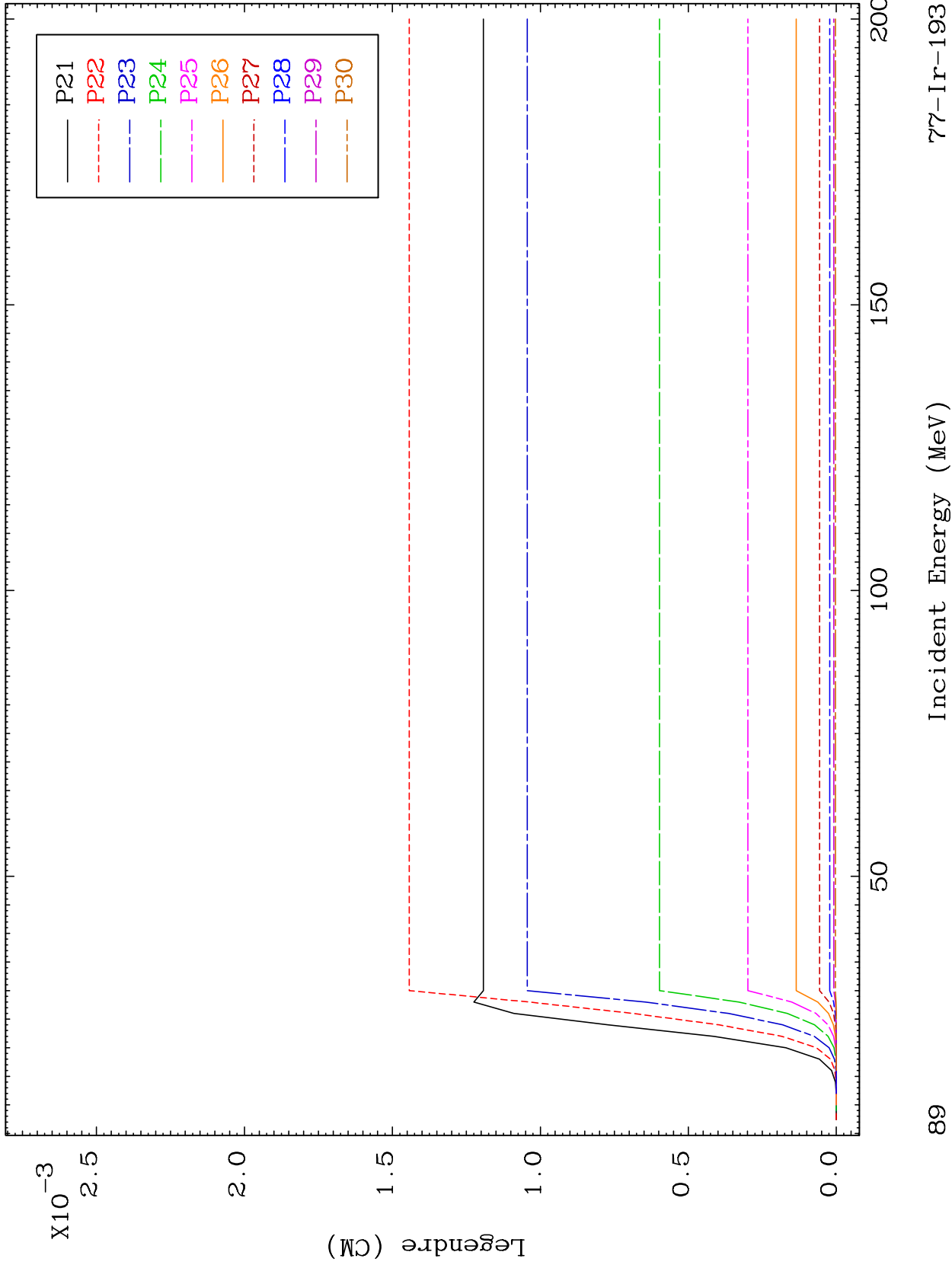


MAT 7731

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

77-Ir-193

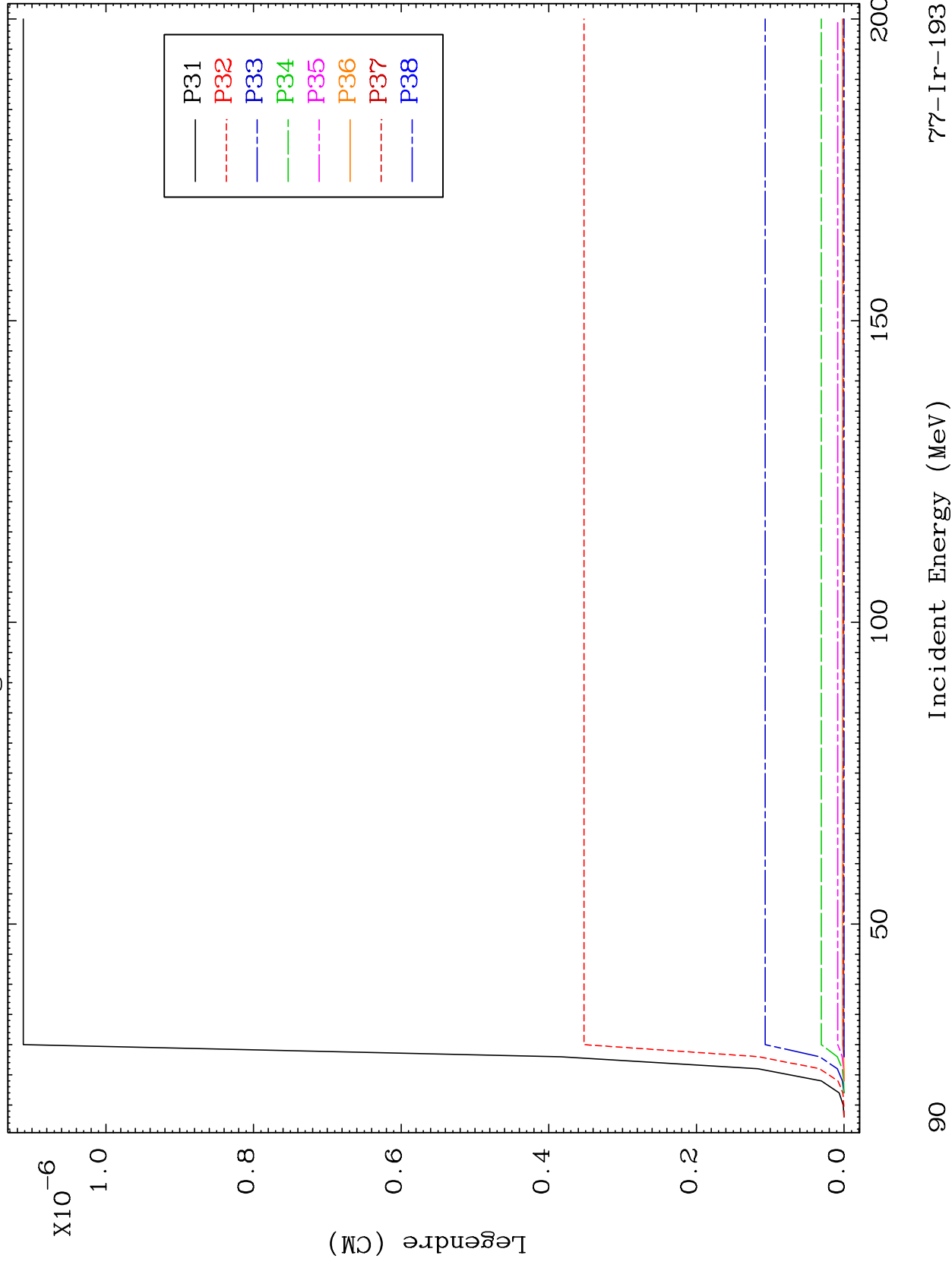




MAT 7731

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

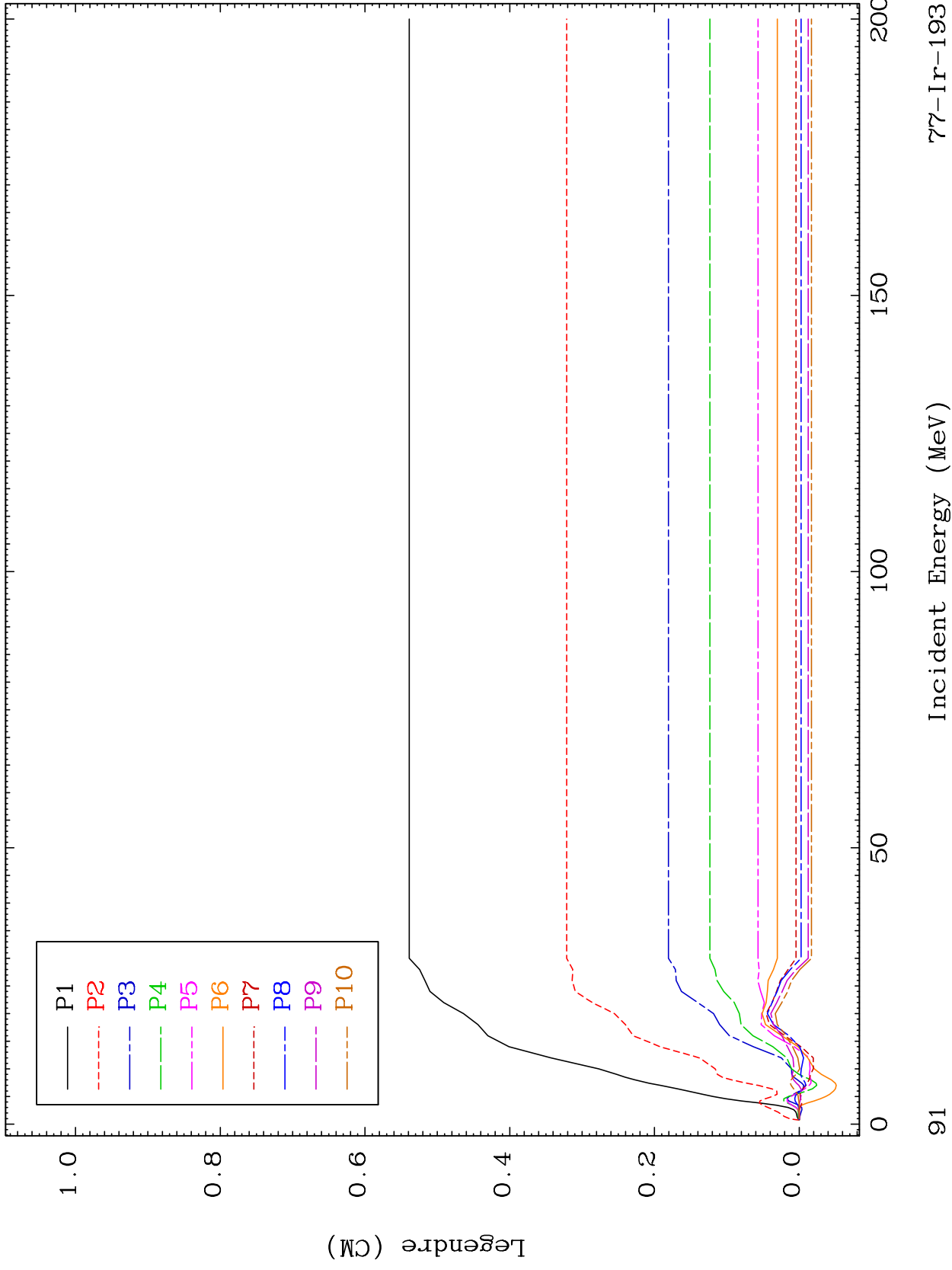
77-Ir-193



77-Ir-193

Incident Energy (MeV)

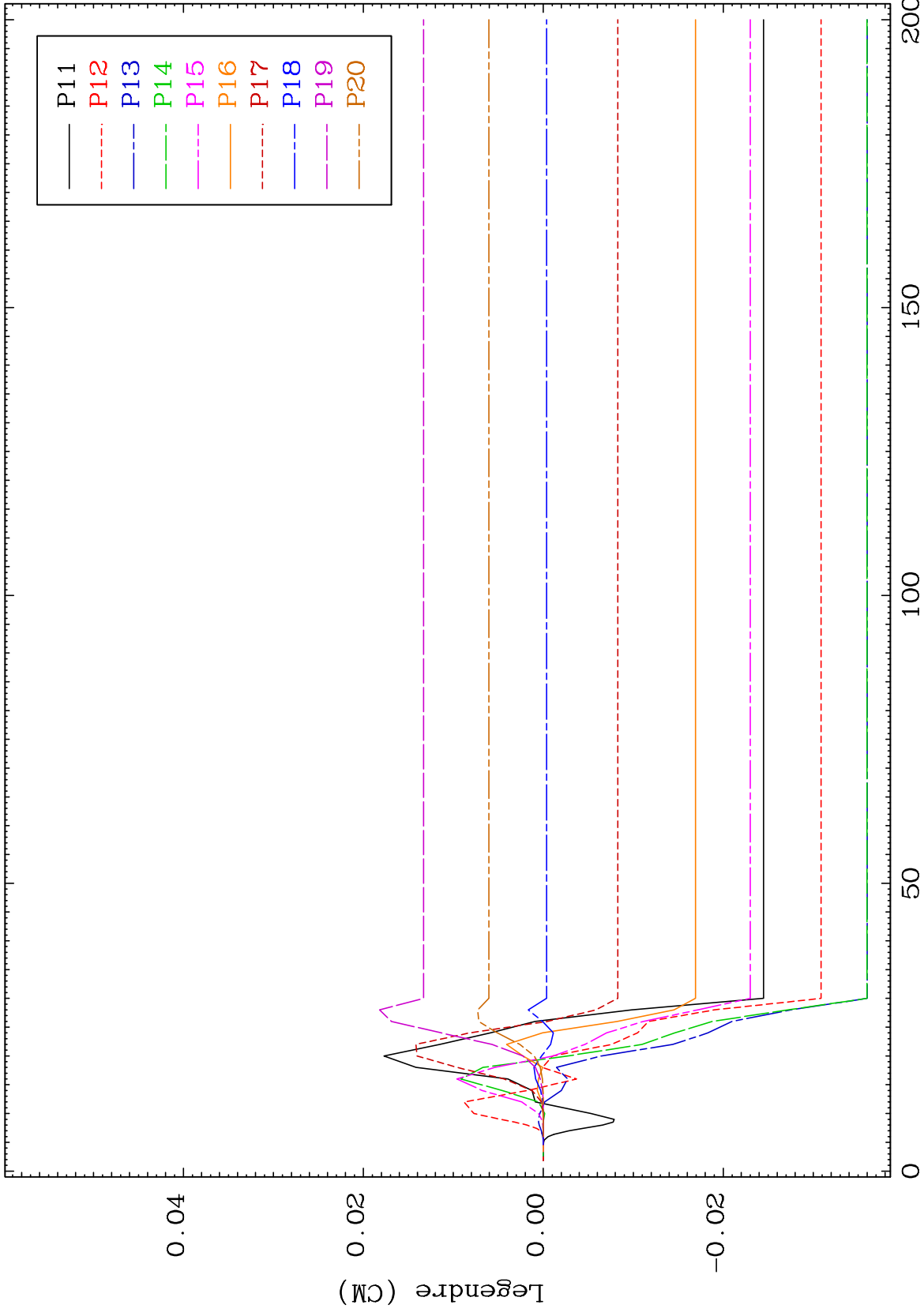
90



MAT 7731

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

77-Ir-193



92

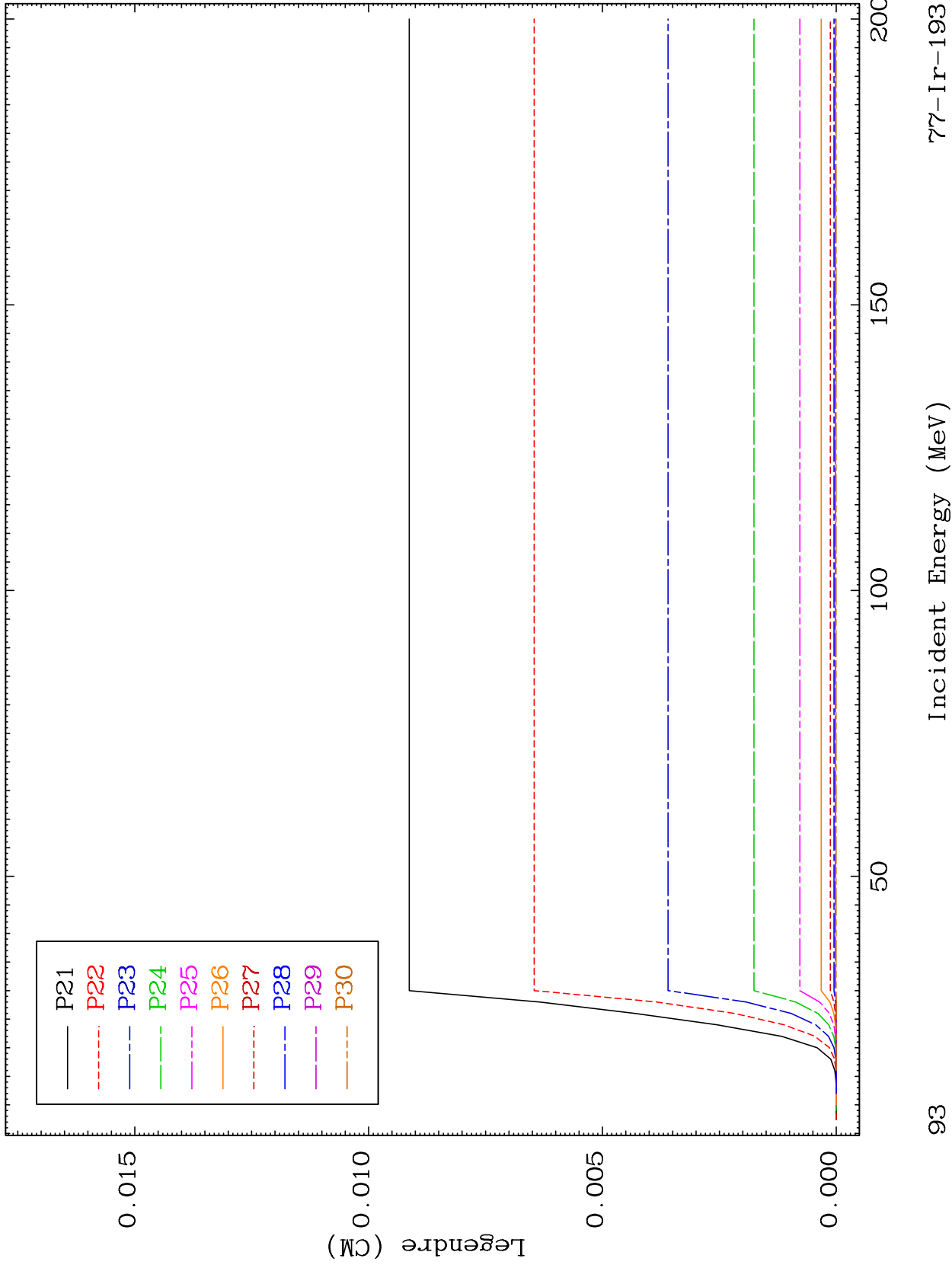
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

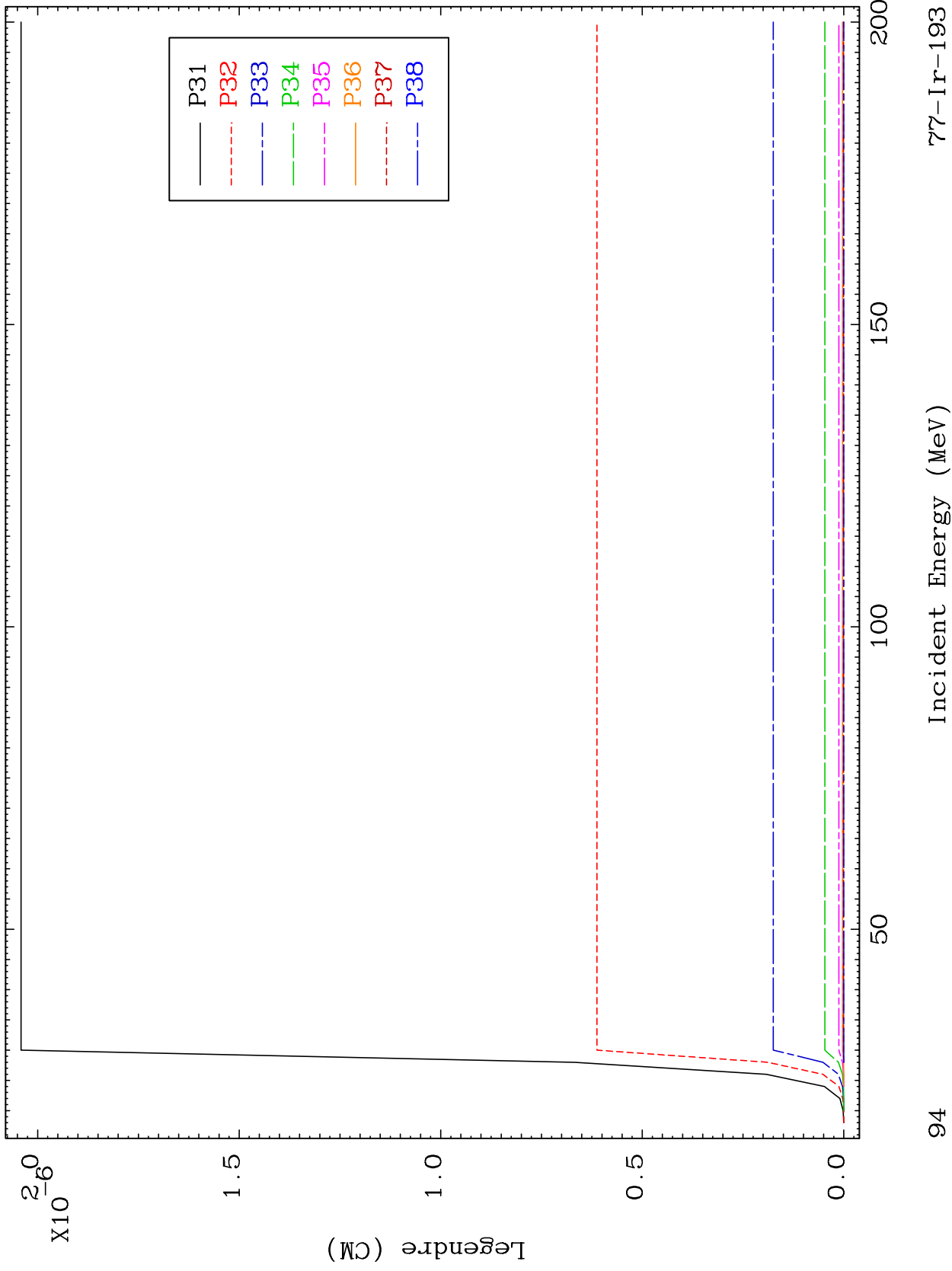
77-Ir-193



93

Incident Energy (MeV)

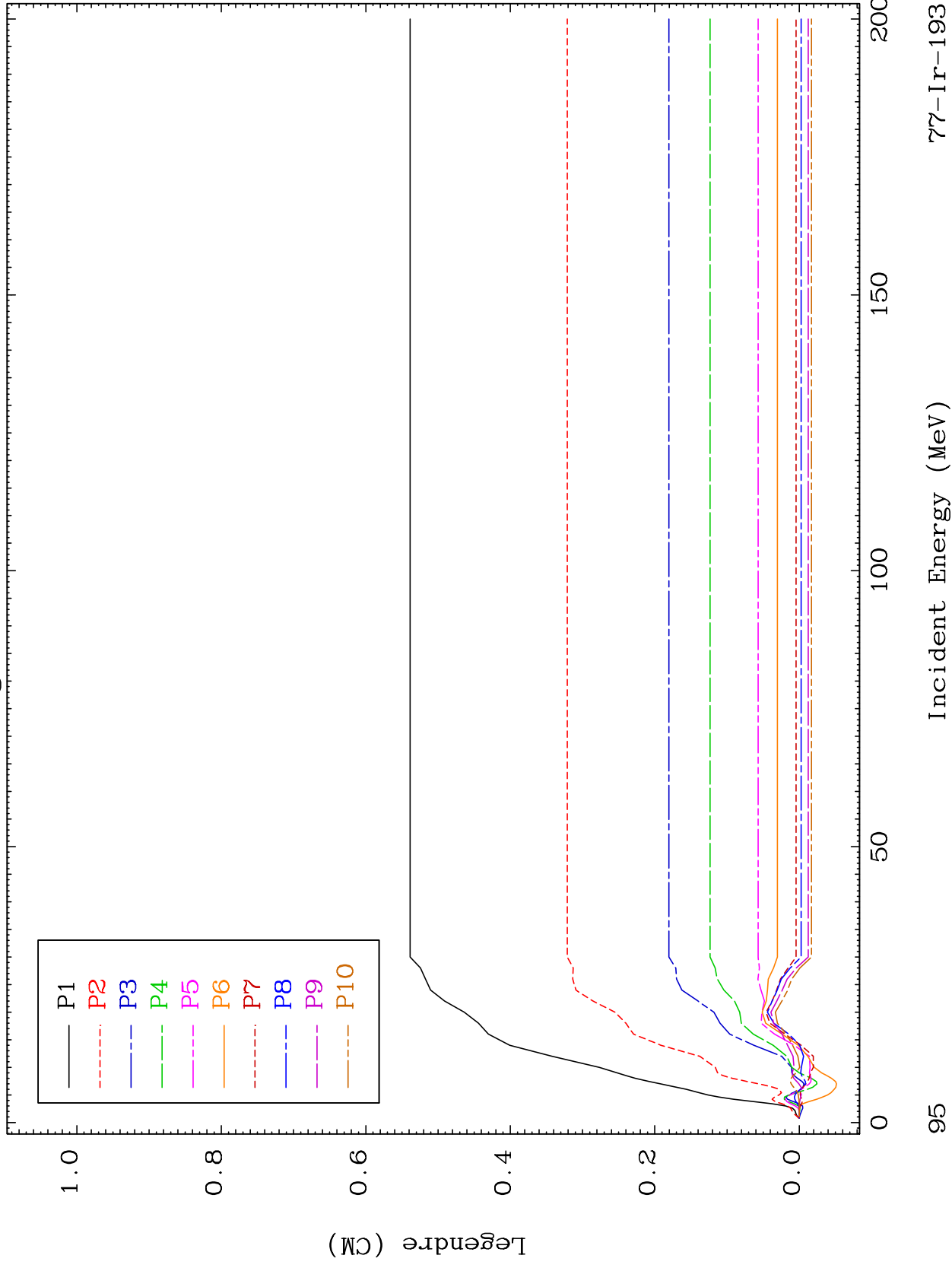
77-Ir-193



MAT 7731

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

77-Ir-193

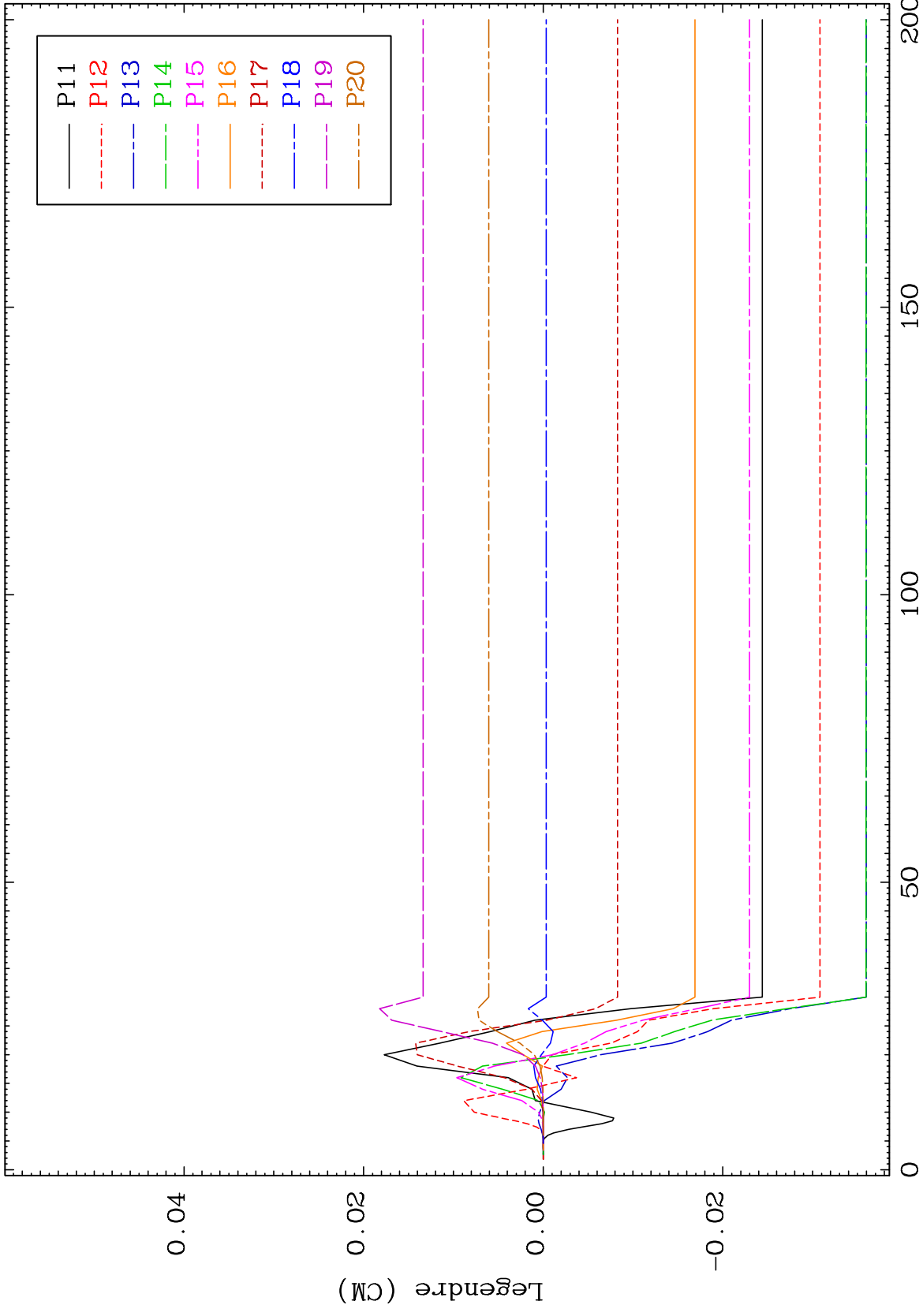




MAT 7731

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

77-Ir-193



96

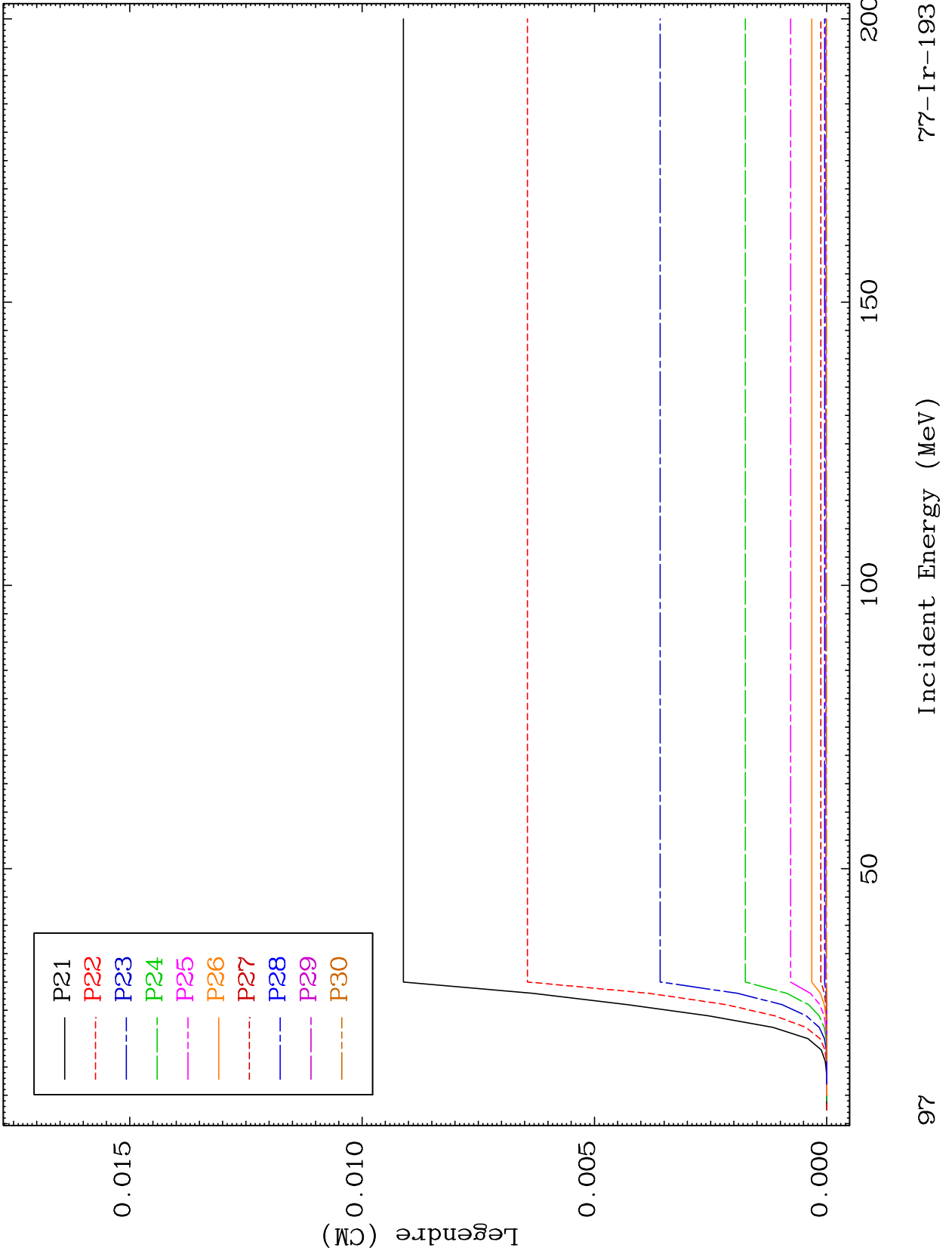
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



97

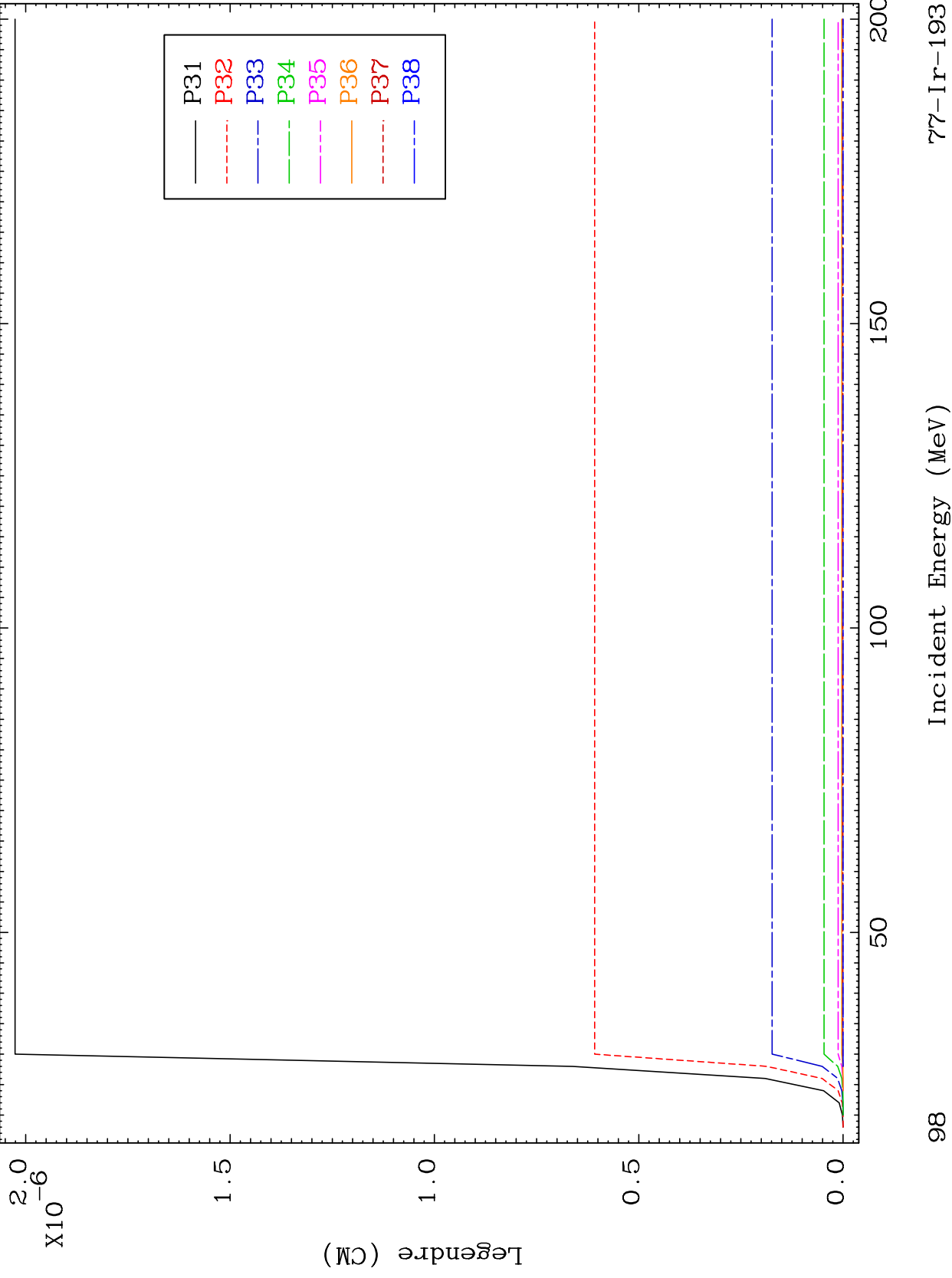
Incident Energy (MeV)

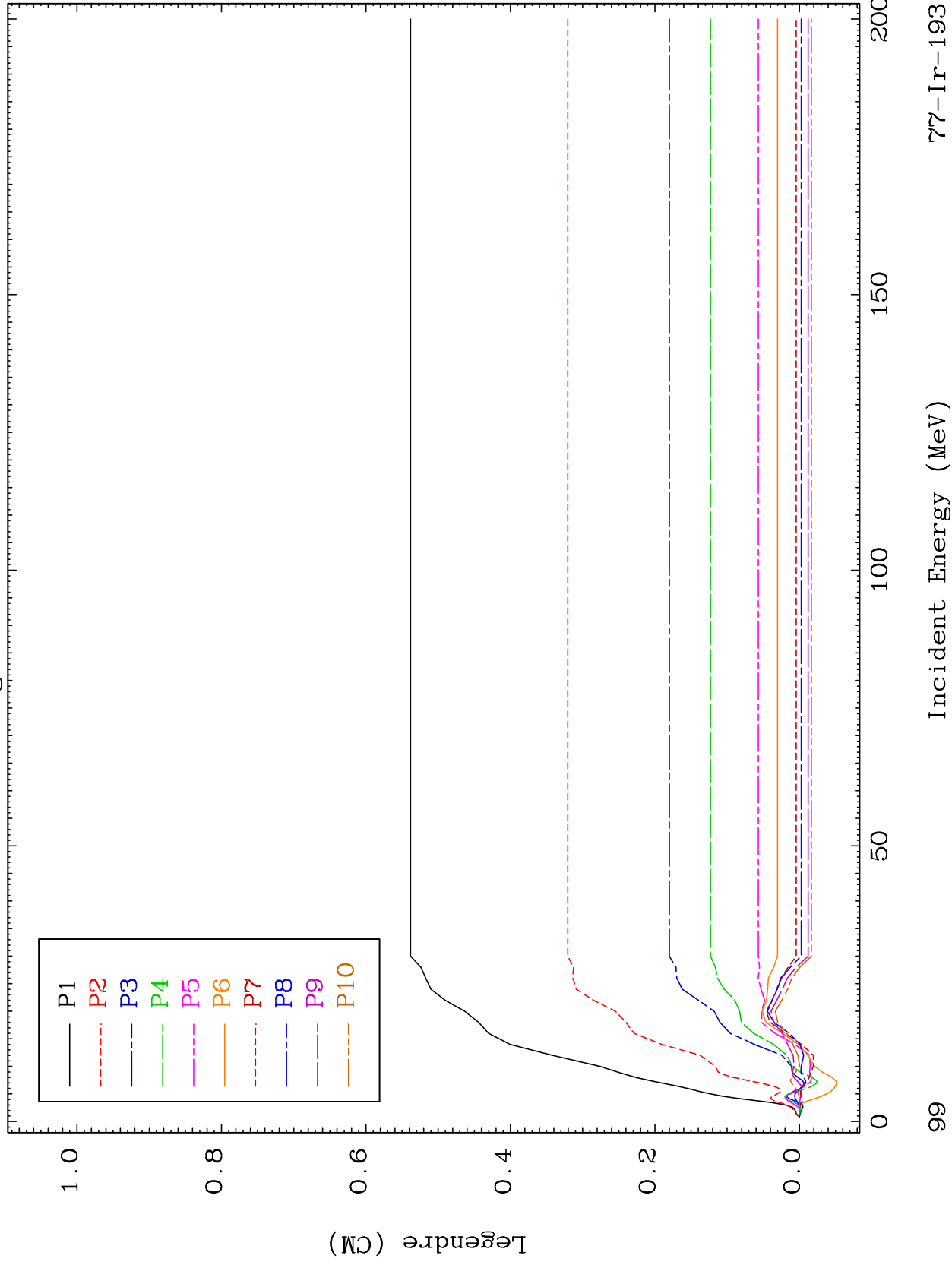
77-Ir-193

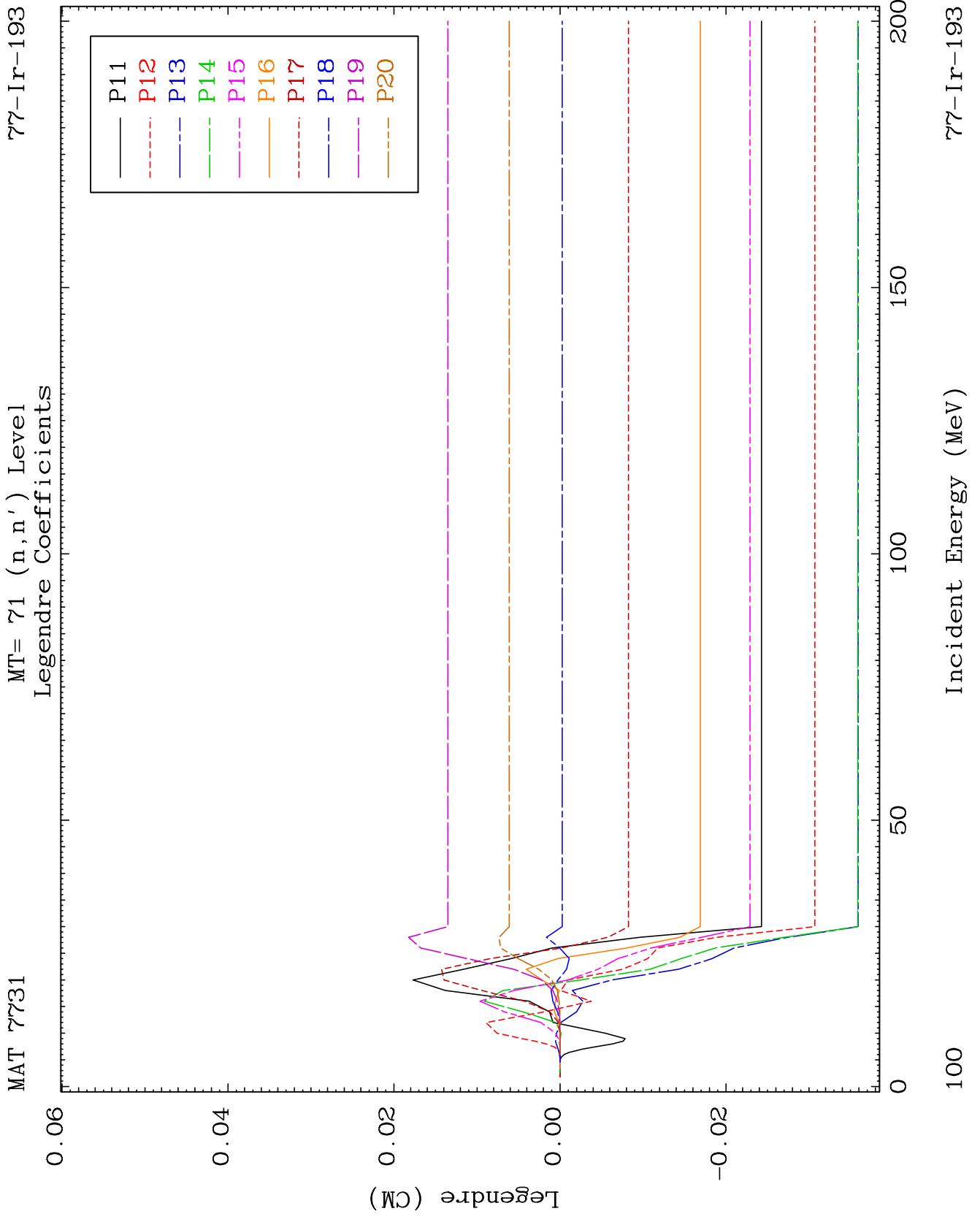
MAT 7731

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

77-Ir-193



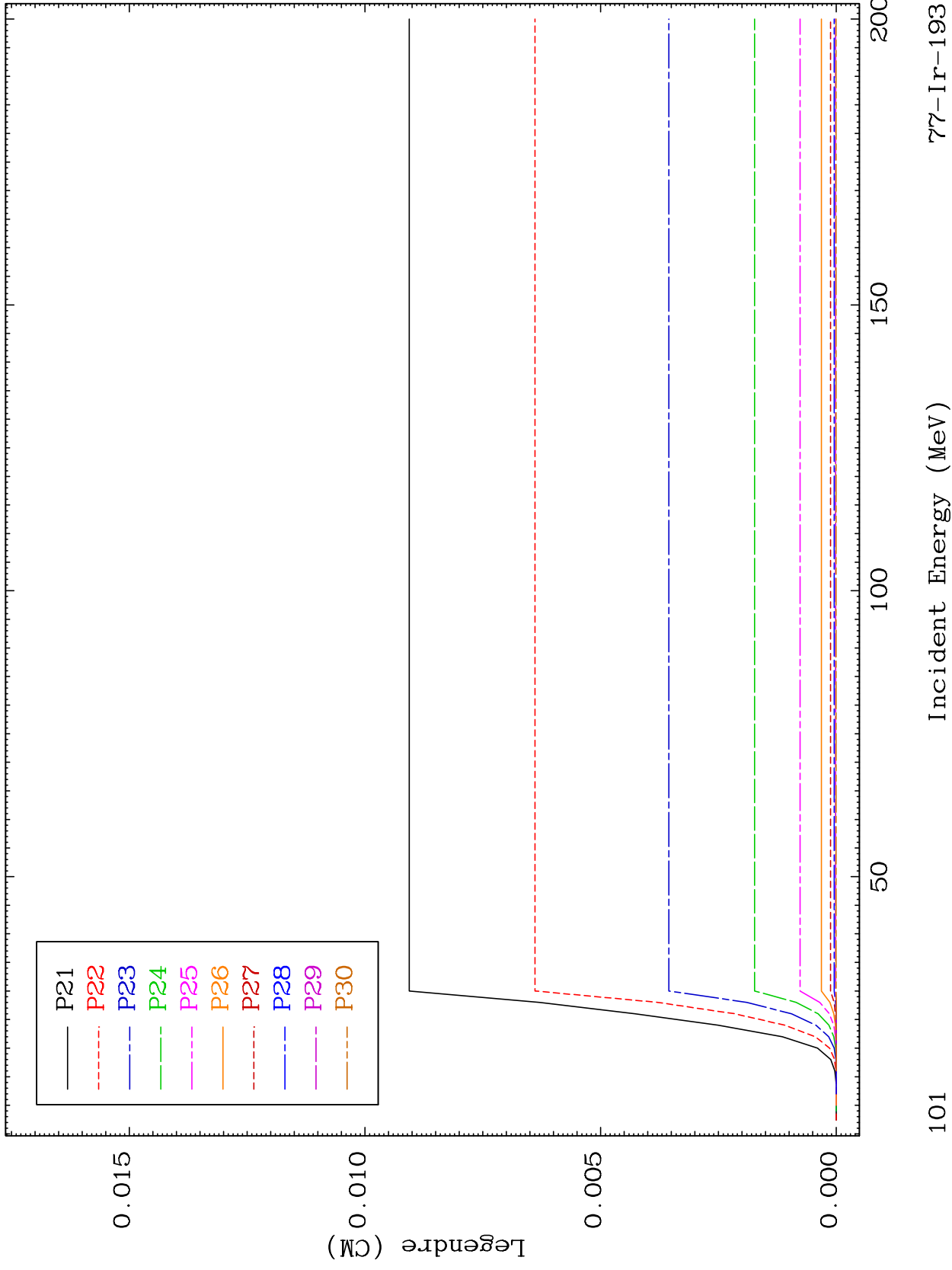




MAT 7731

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

77-Ir-193



101

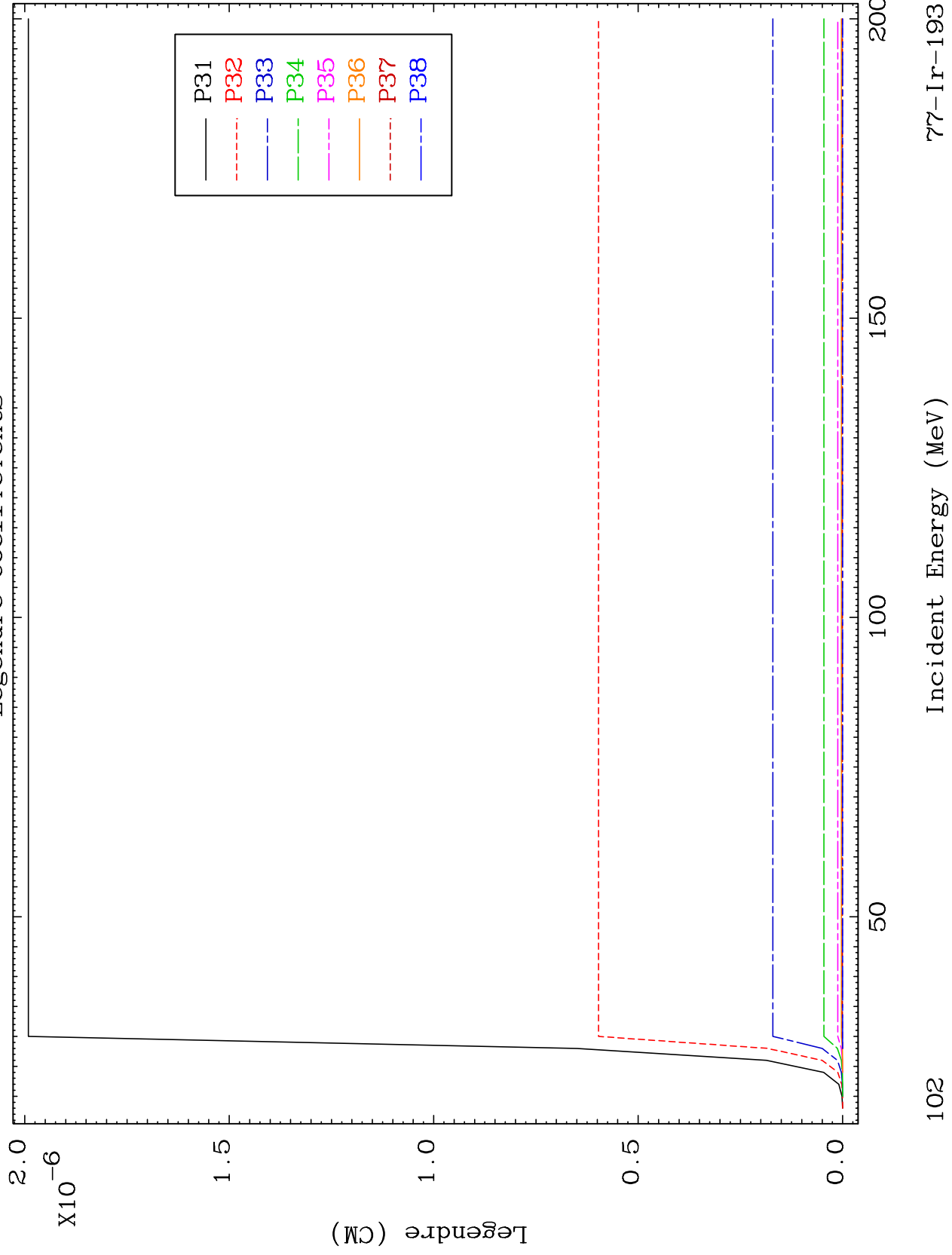
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



102

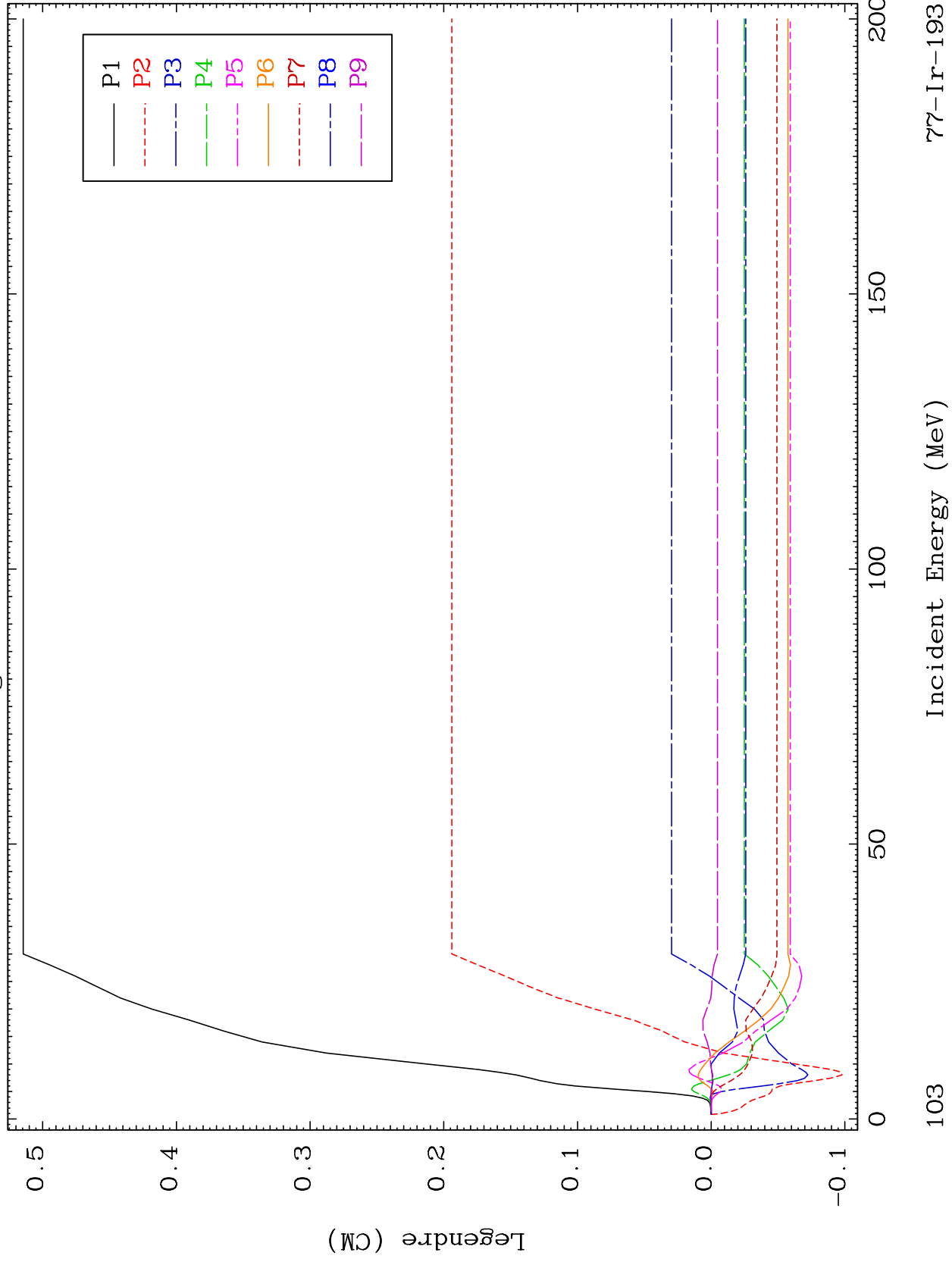
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

77-Ir-193



77-Ir-193

Incident Energy (MeV)

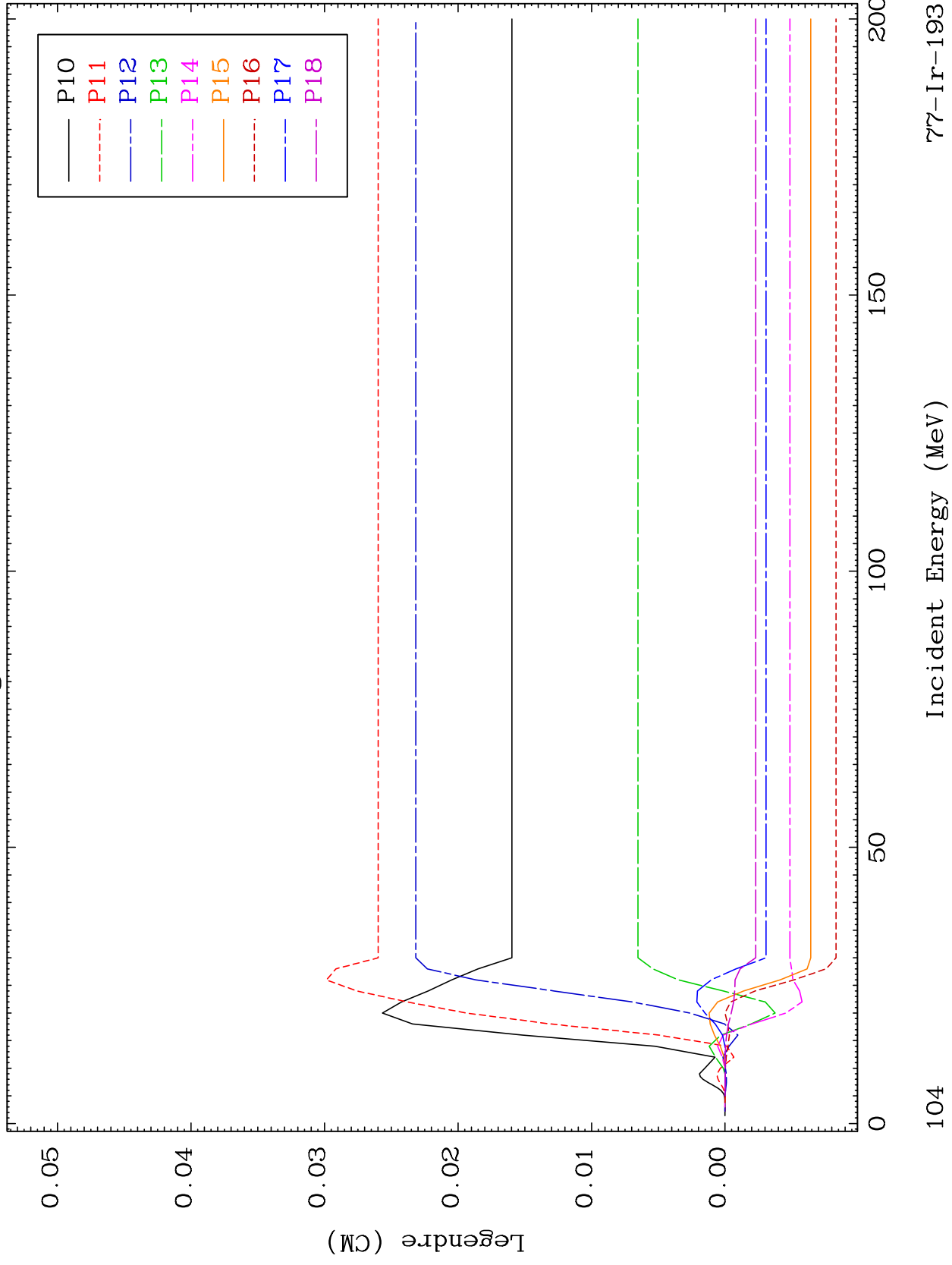
103



MAT 7731

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

77-Ir-193



104

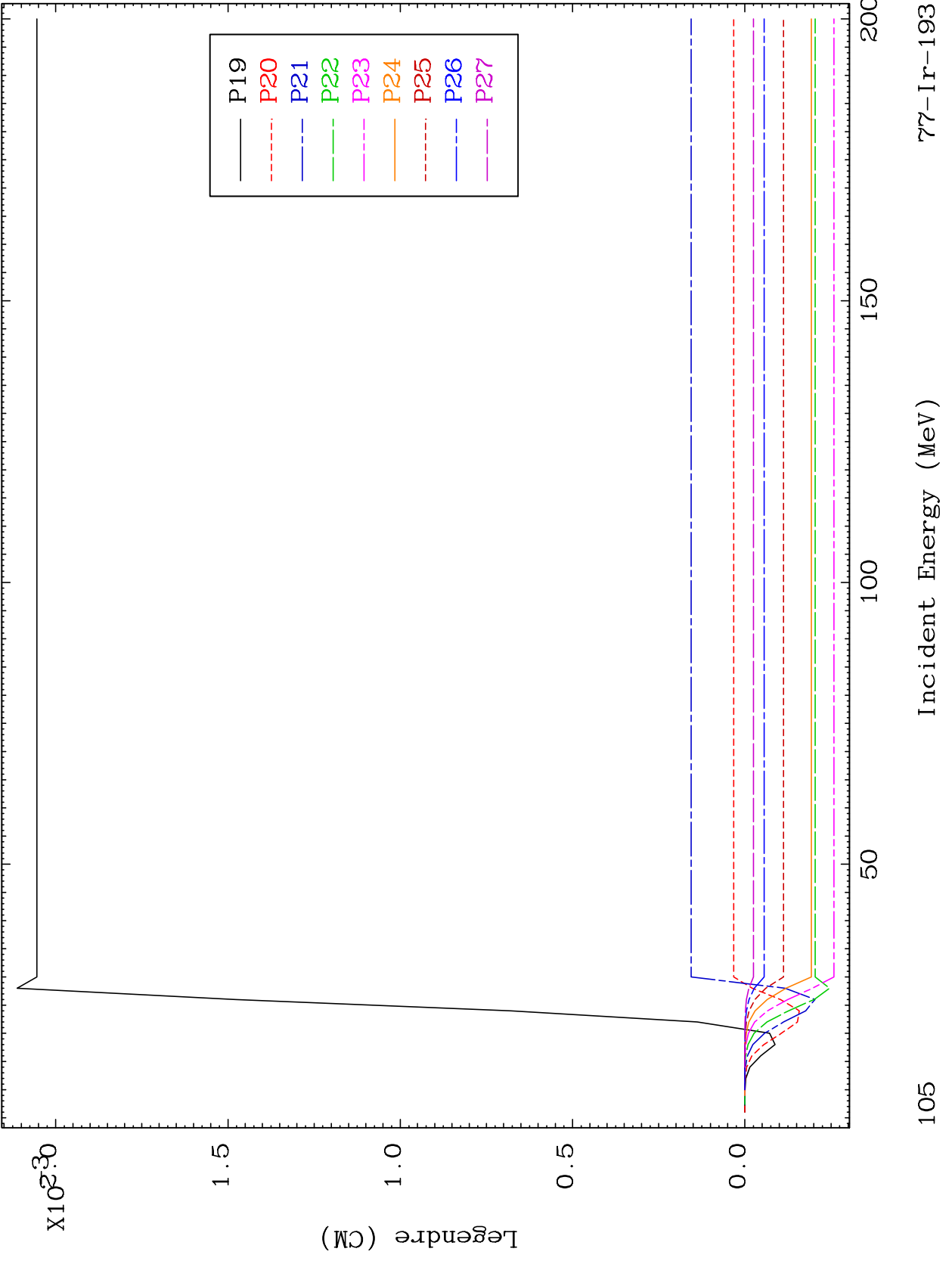
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

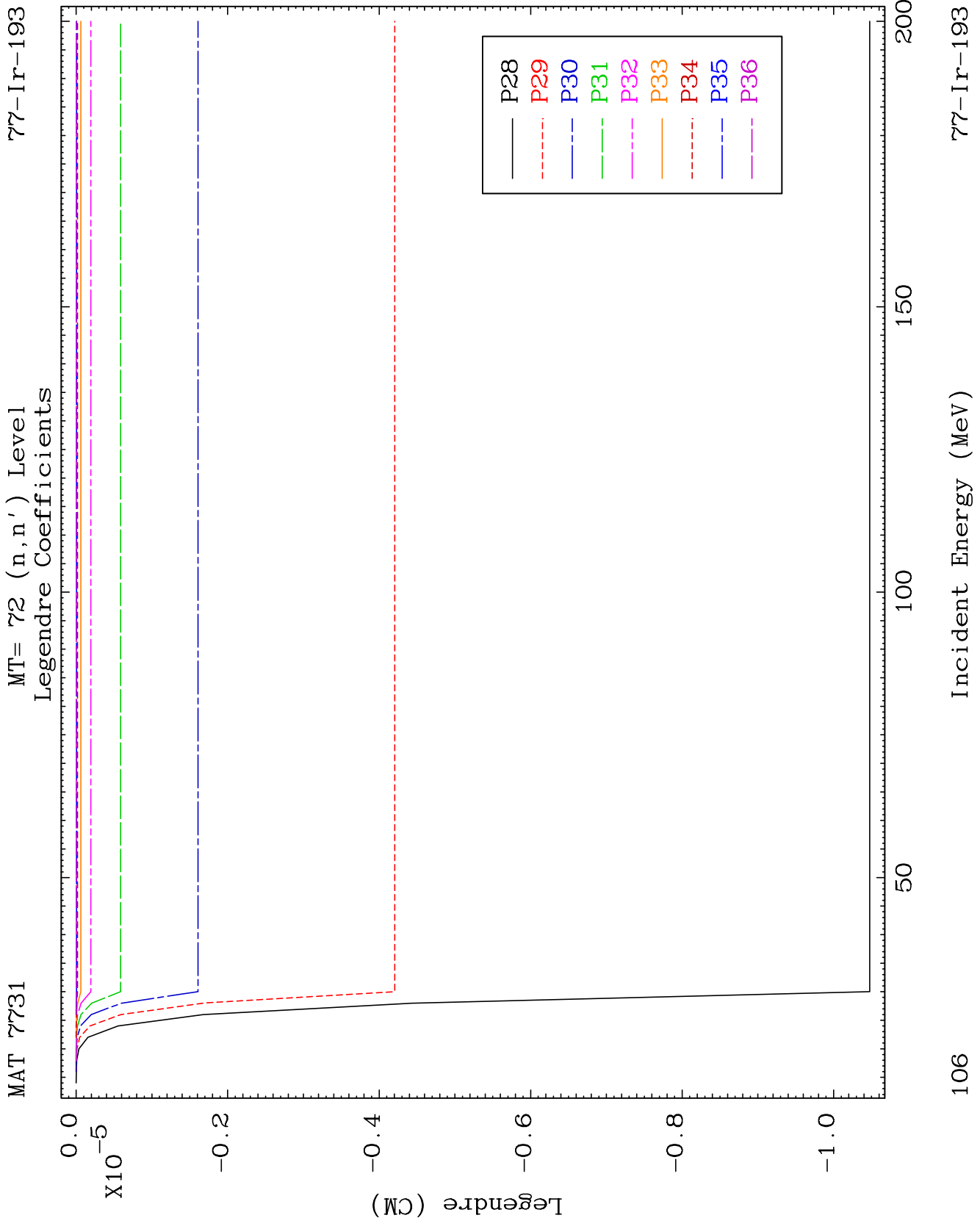
77-Ir-193



105

Incident Energy (MeV)

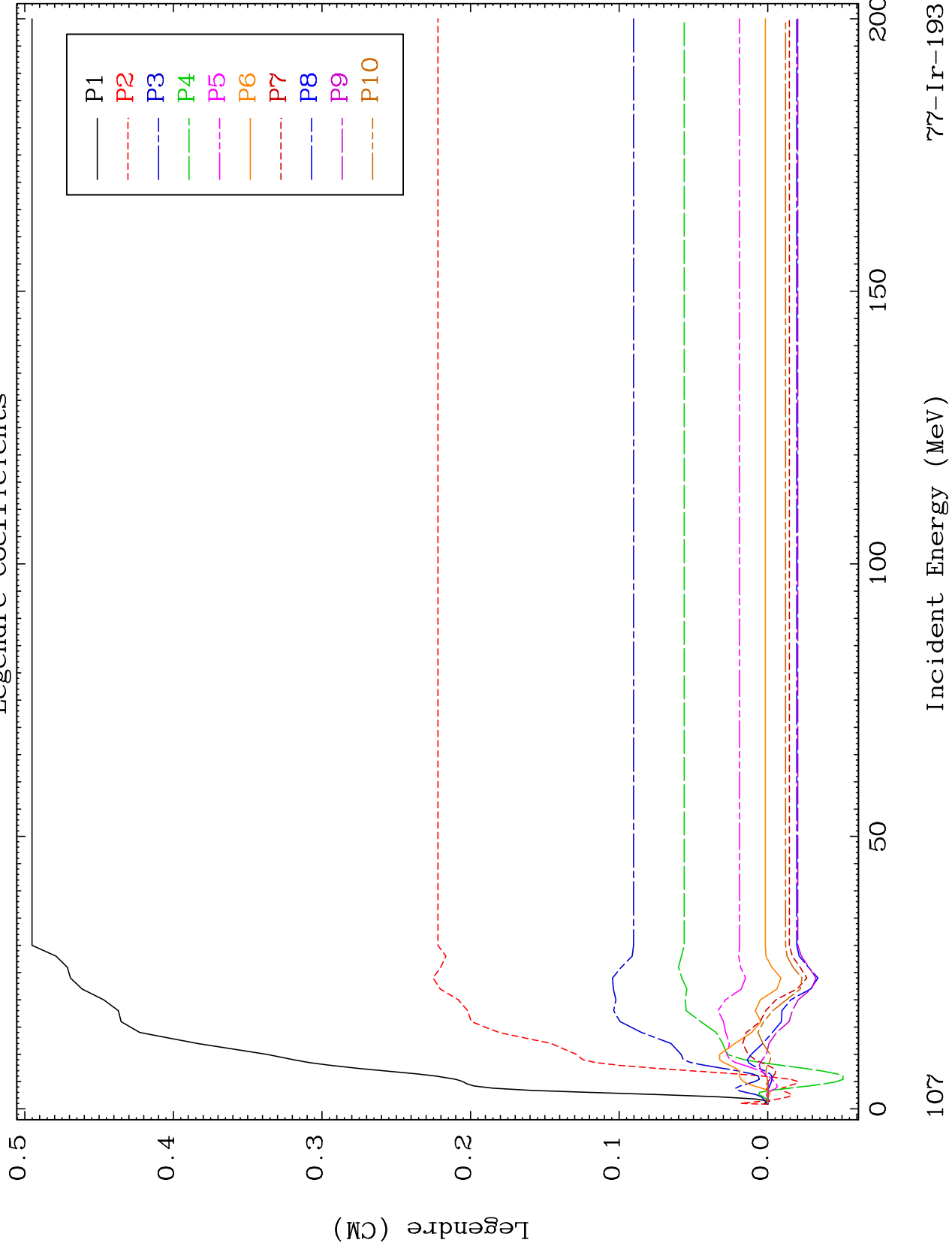
77-Ir-193



MAT 7731

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

77-Ir-193

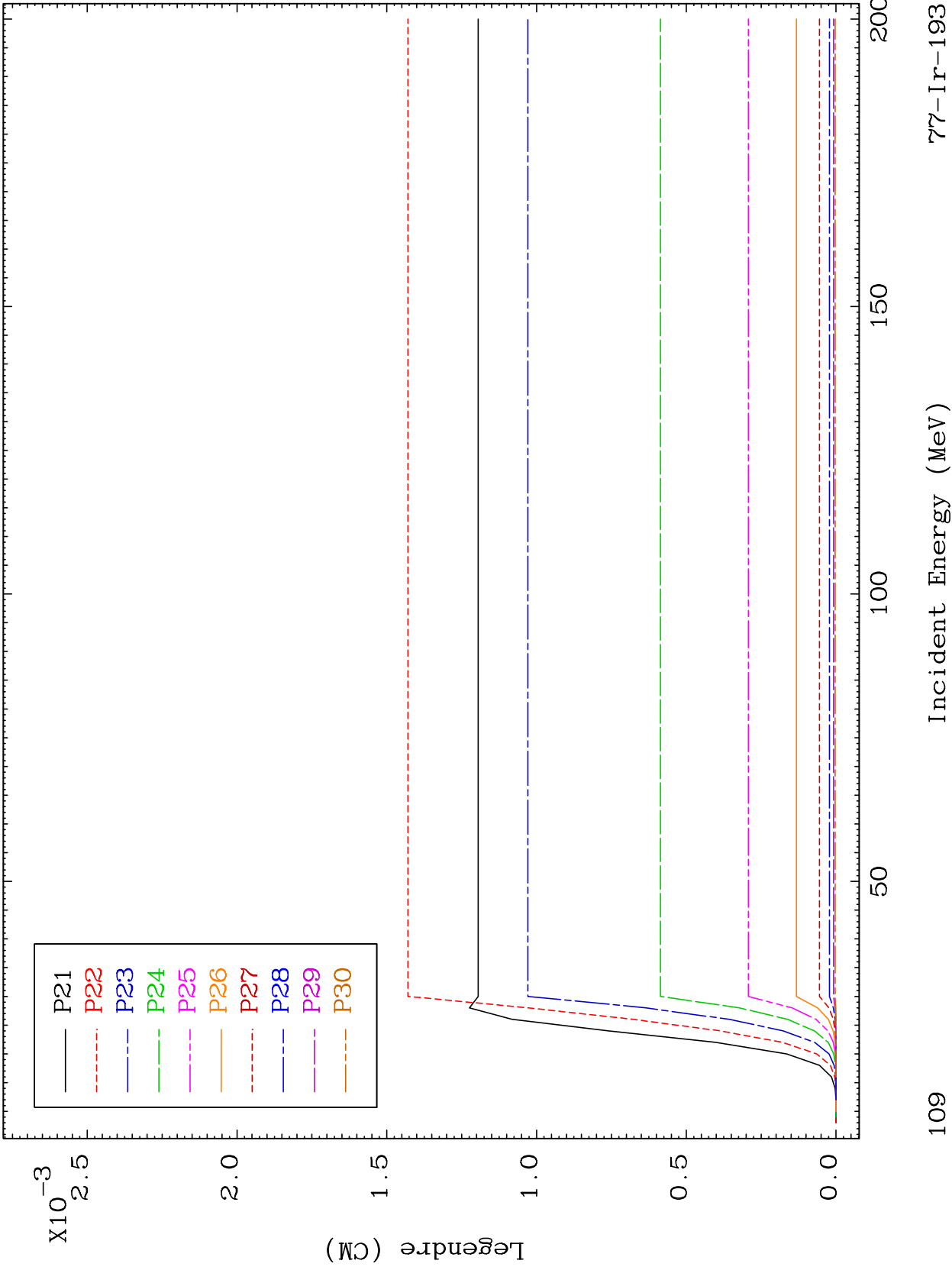


77-Ir-193

Incident Energy (MeV)

107

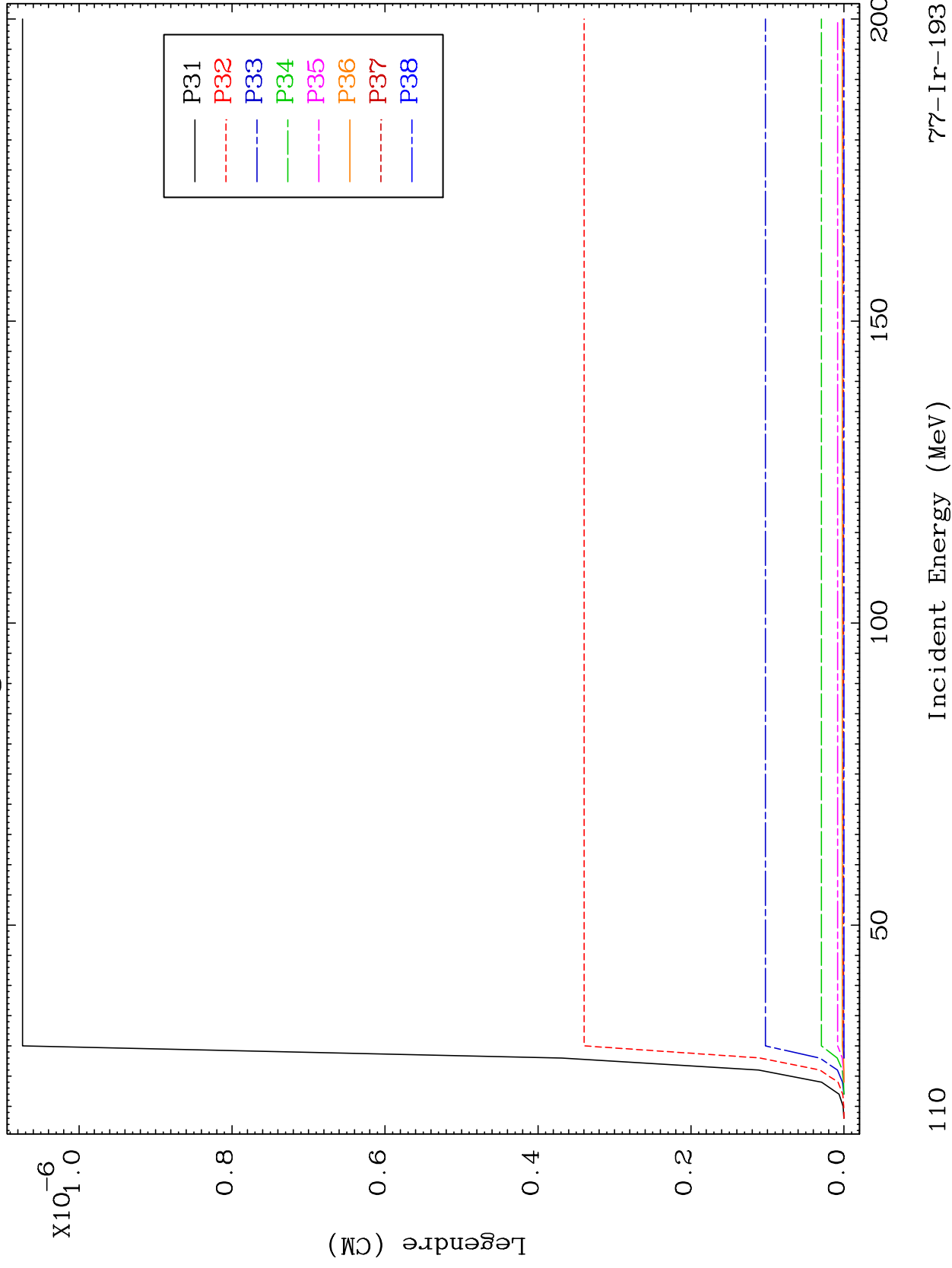




MAT 7731

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

77-Ir-193



77-Ir-193

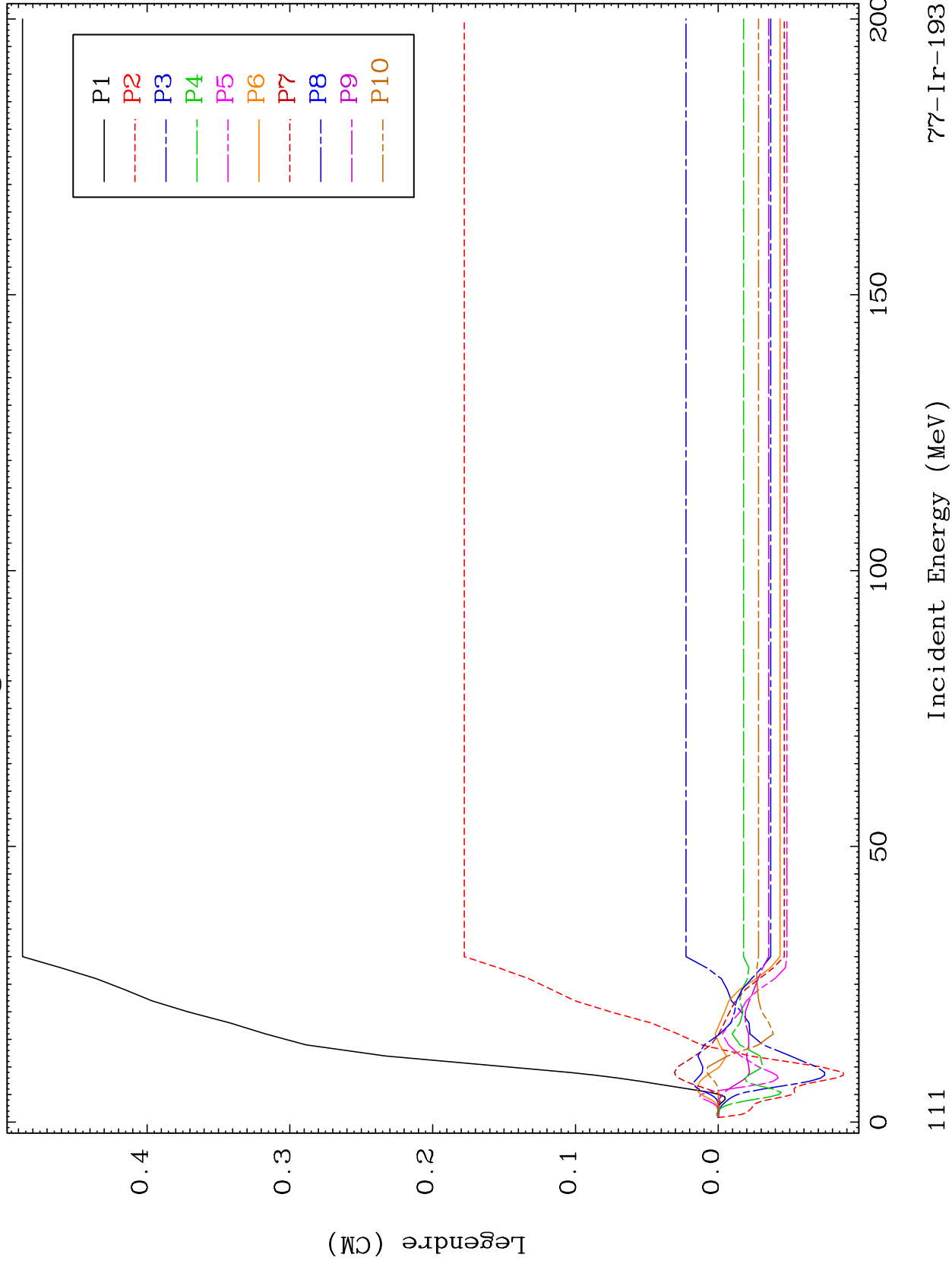
Incident Energy (MeV)

110

MAT 7731

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

77-Ir-193



111

Incident Energy (MeV)

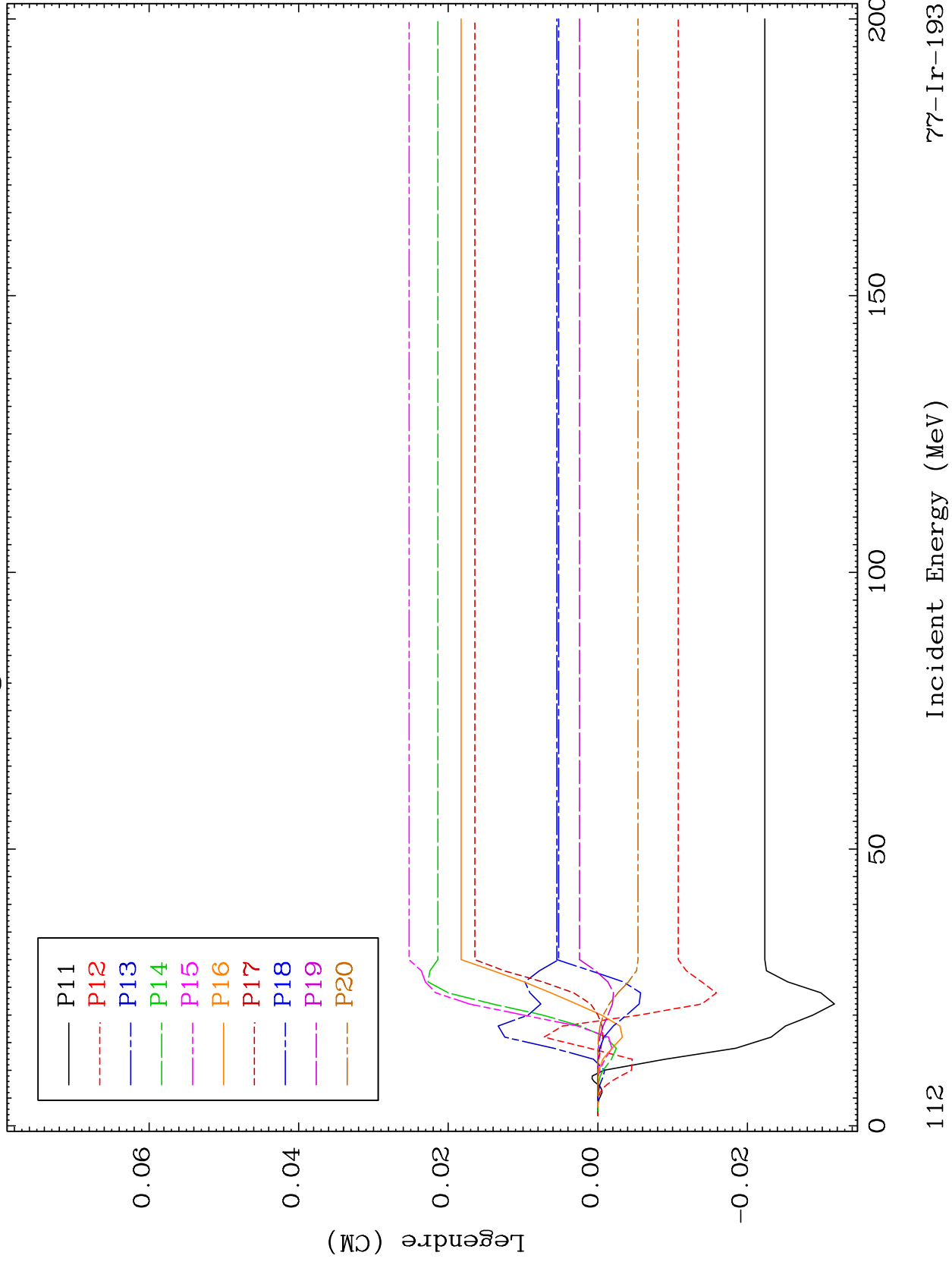
77-Ir-193



MAT 7731

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

77-Ir-193



112

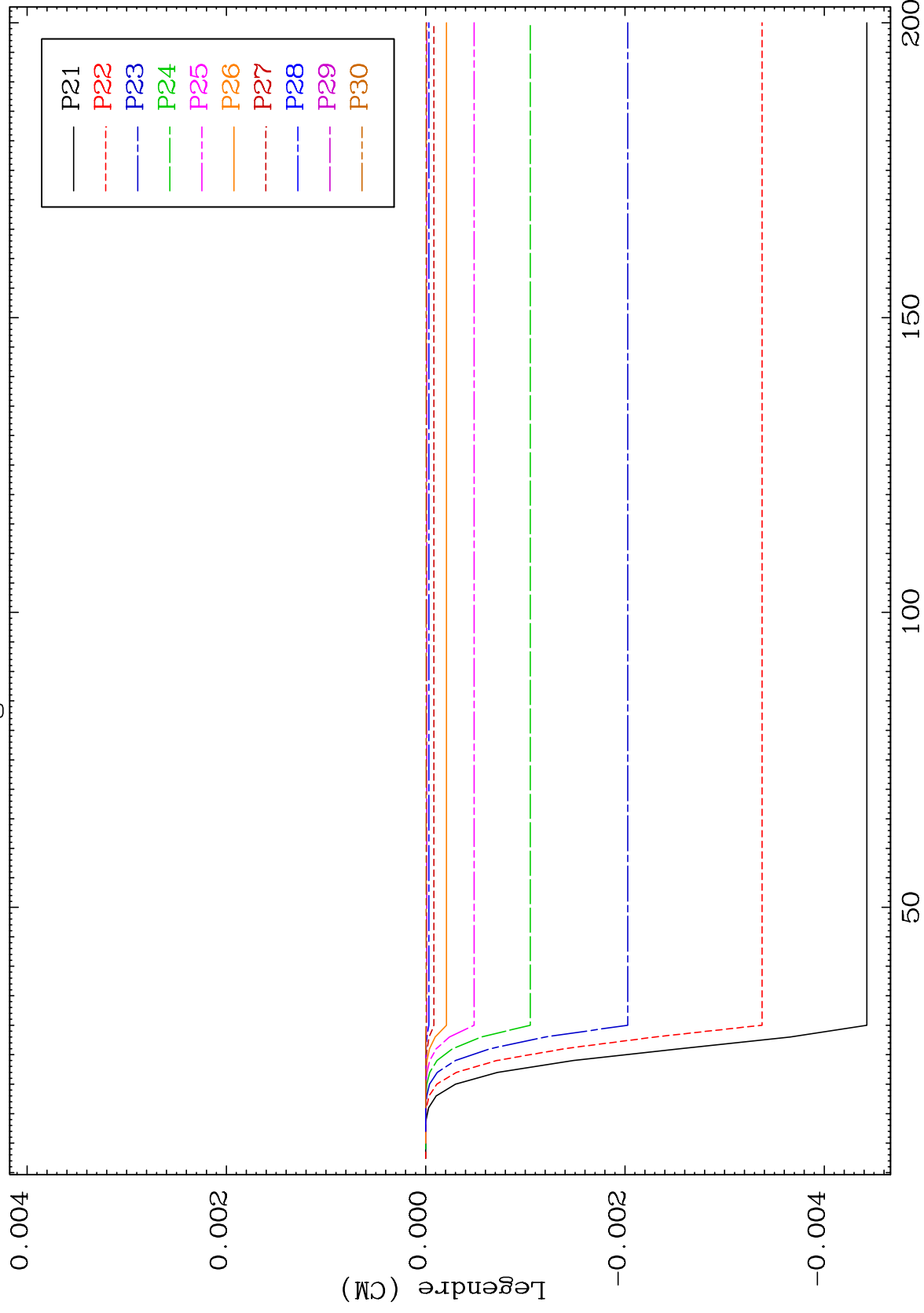
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

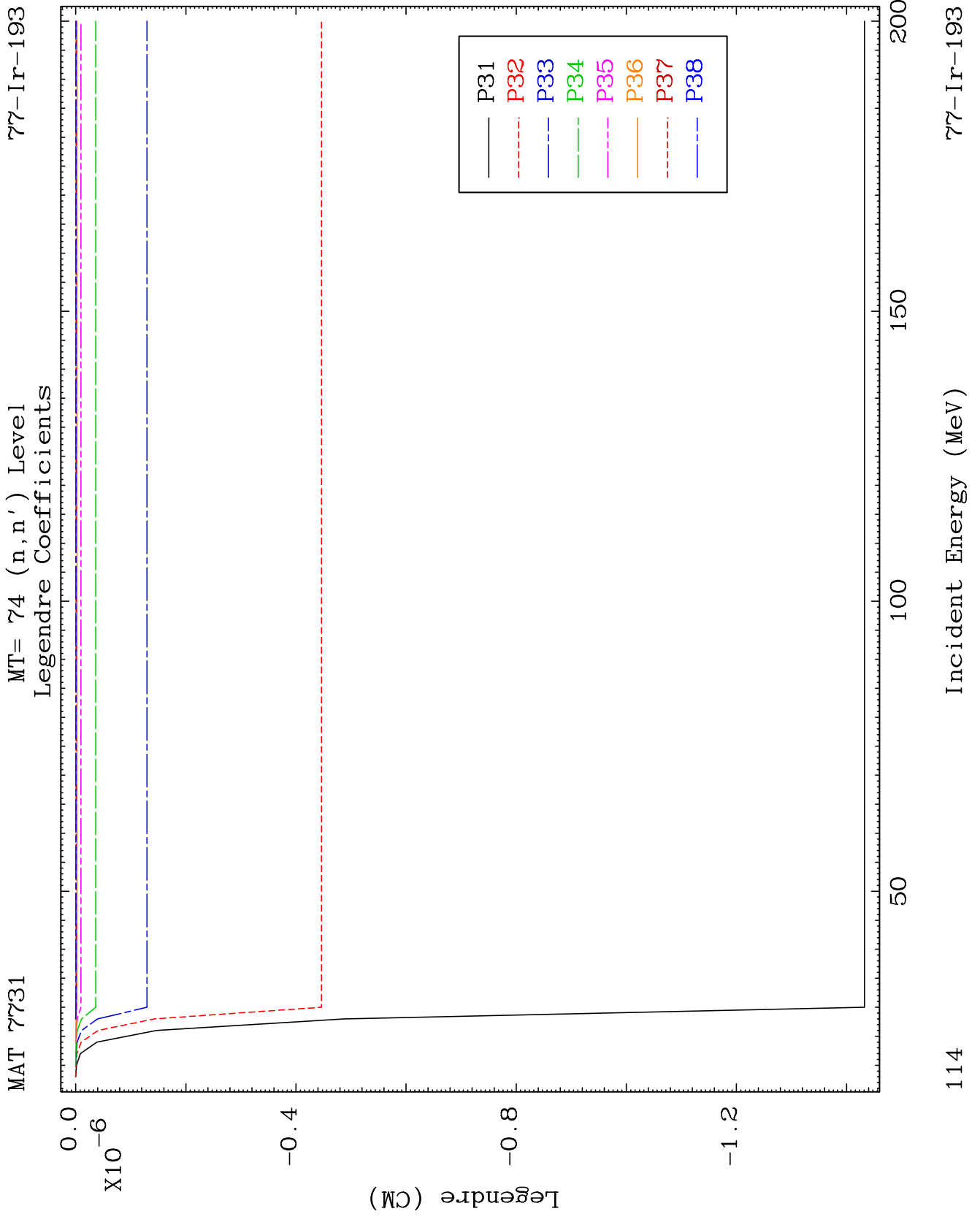
77-Ir-193



113

Incident Energy (MeV)

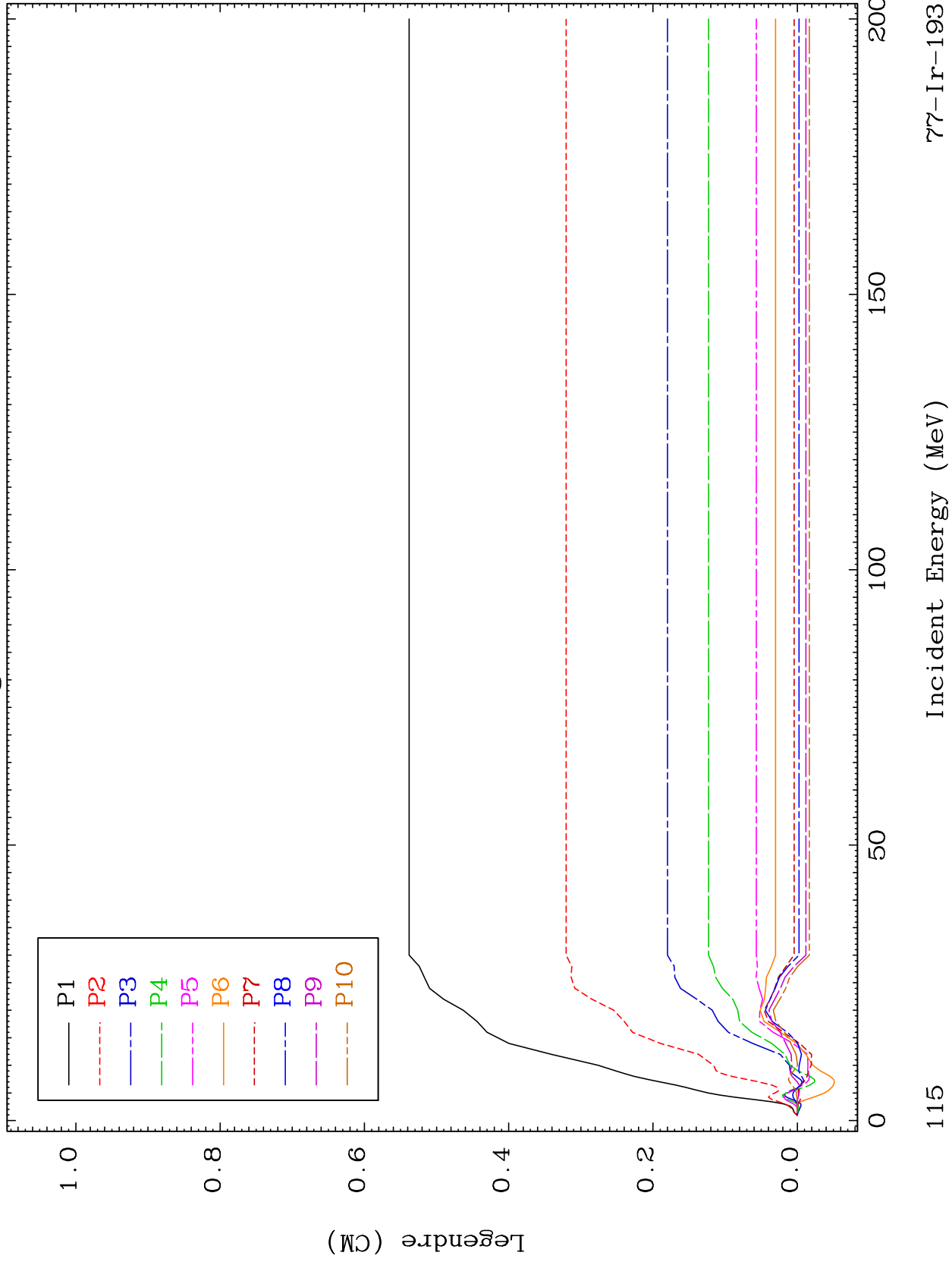
77-Ir-193



MAT 7731

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

77-Ir-193

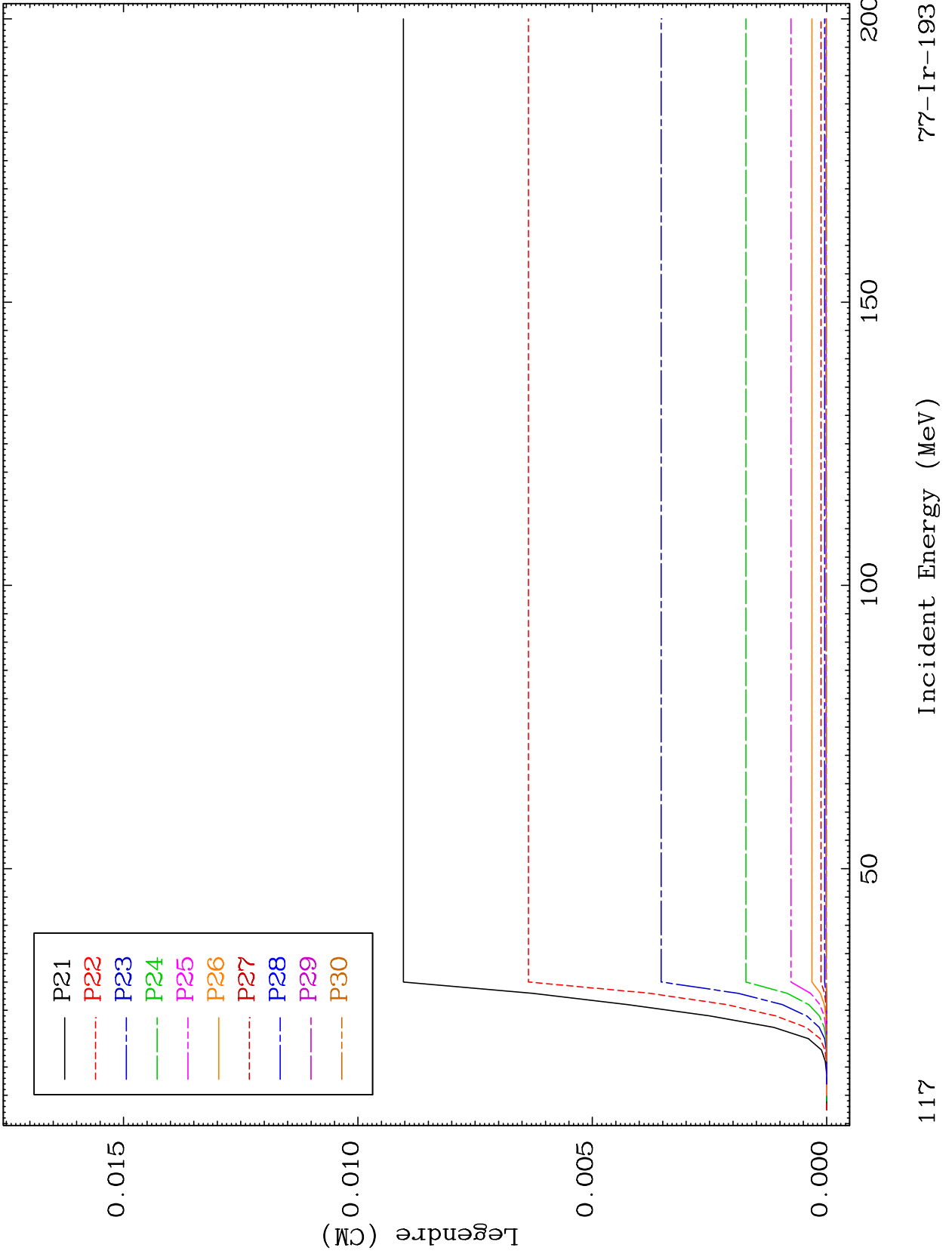




MAT 7731

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

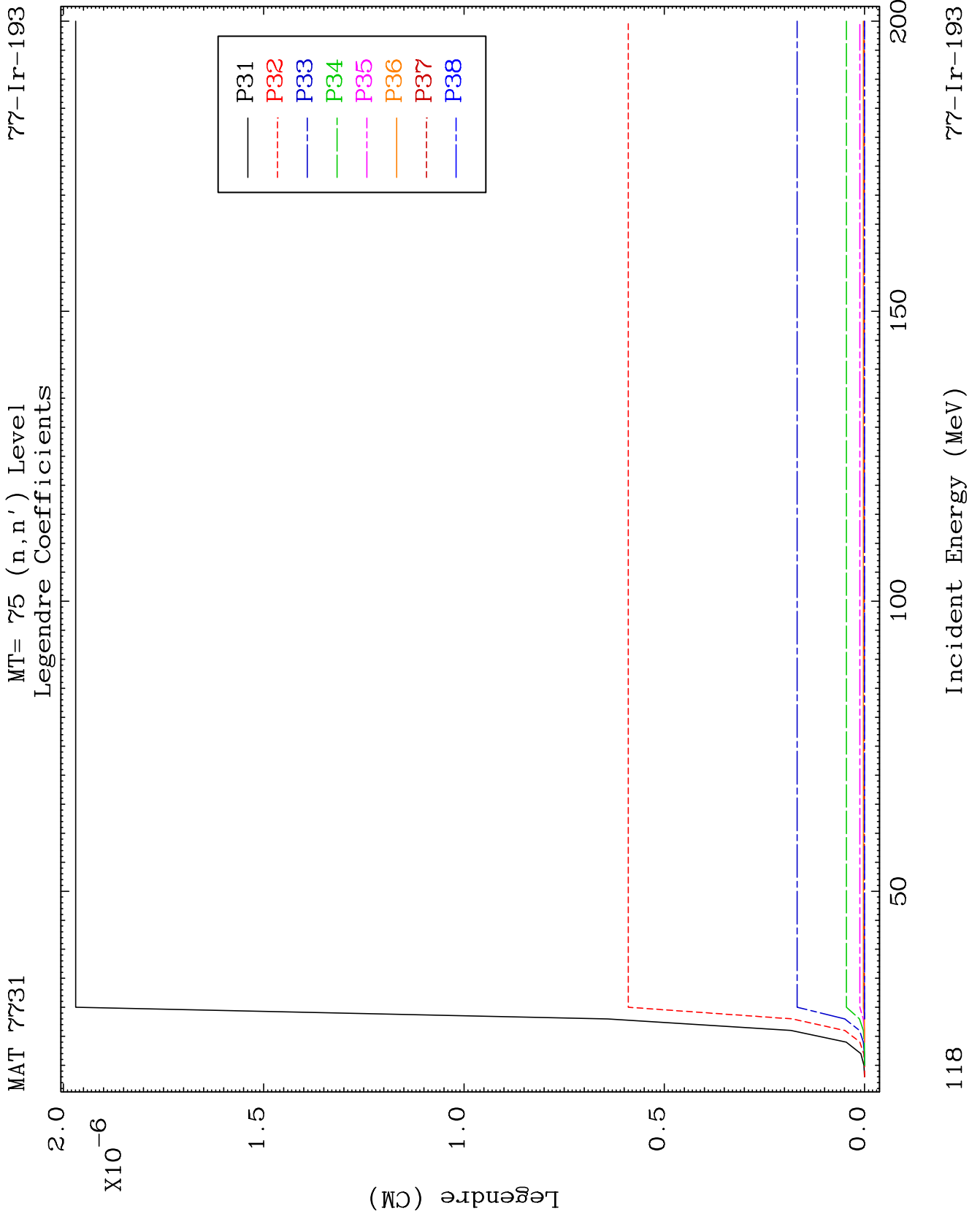
77-Ir-193



117

Incident Energy (MeV)

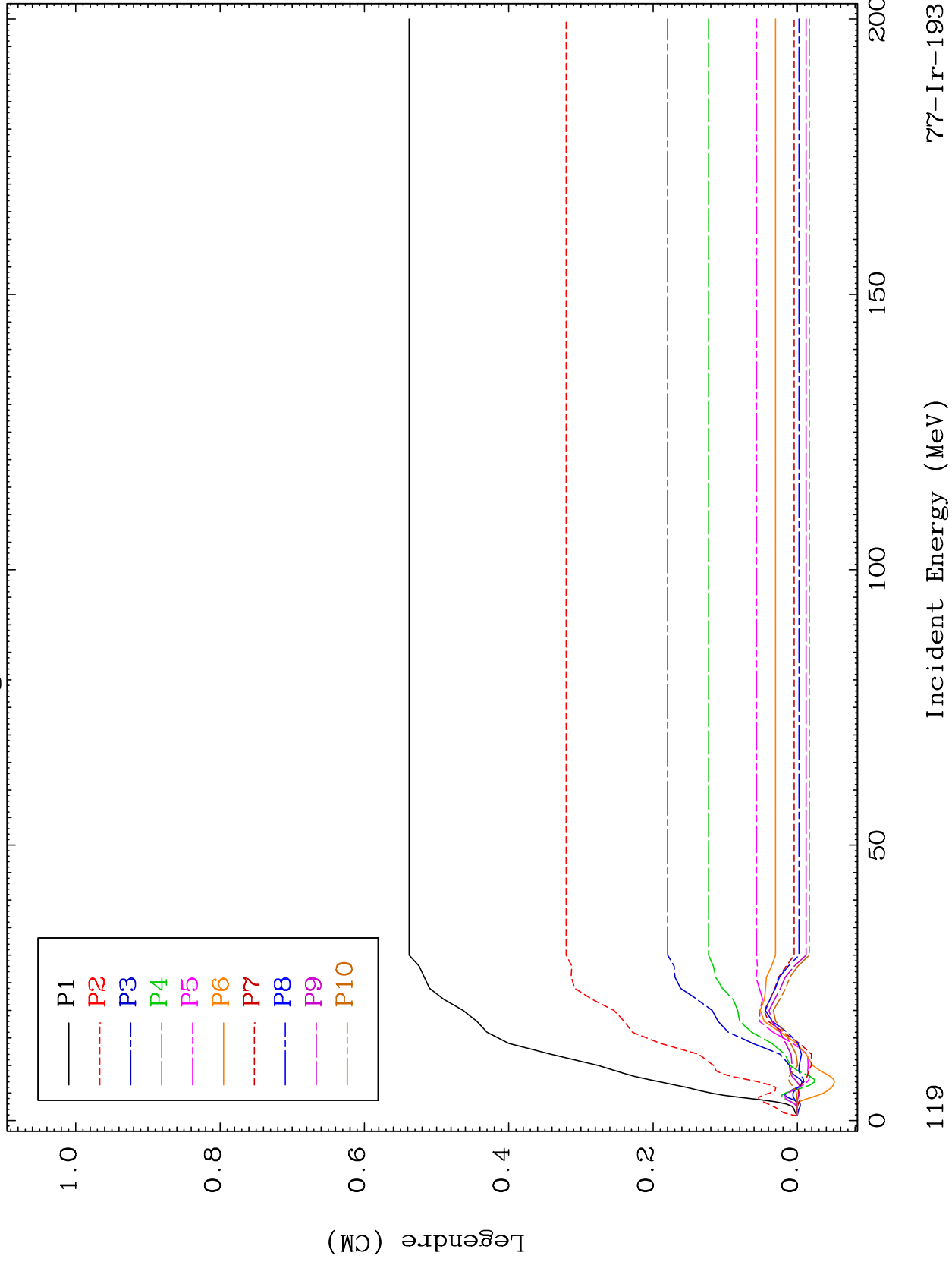
77-Ir-193



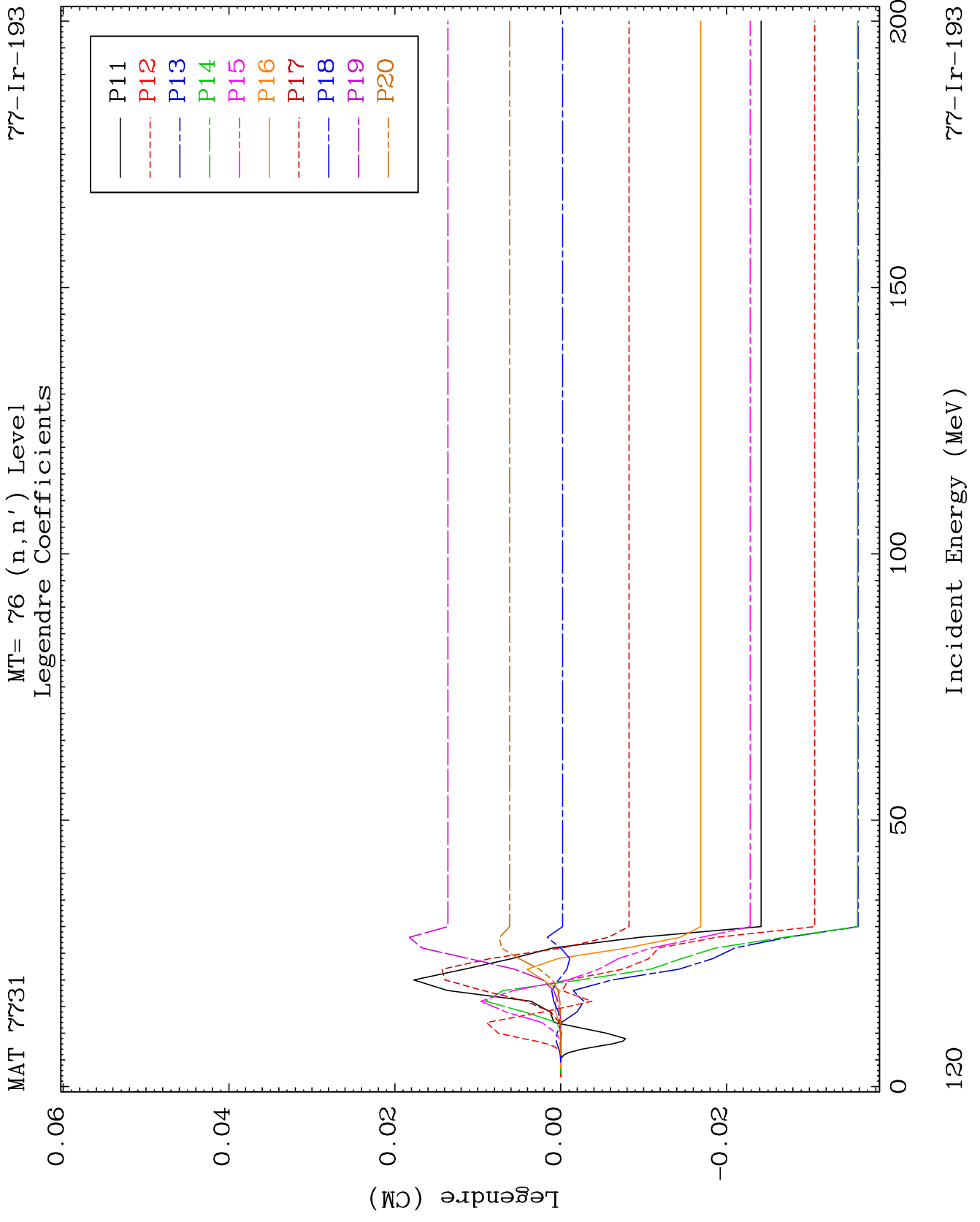
MAT 7731

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

77-Ir-193



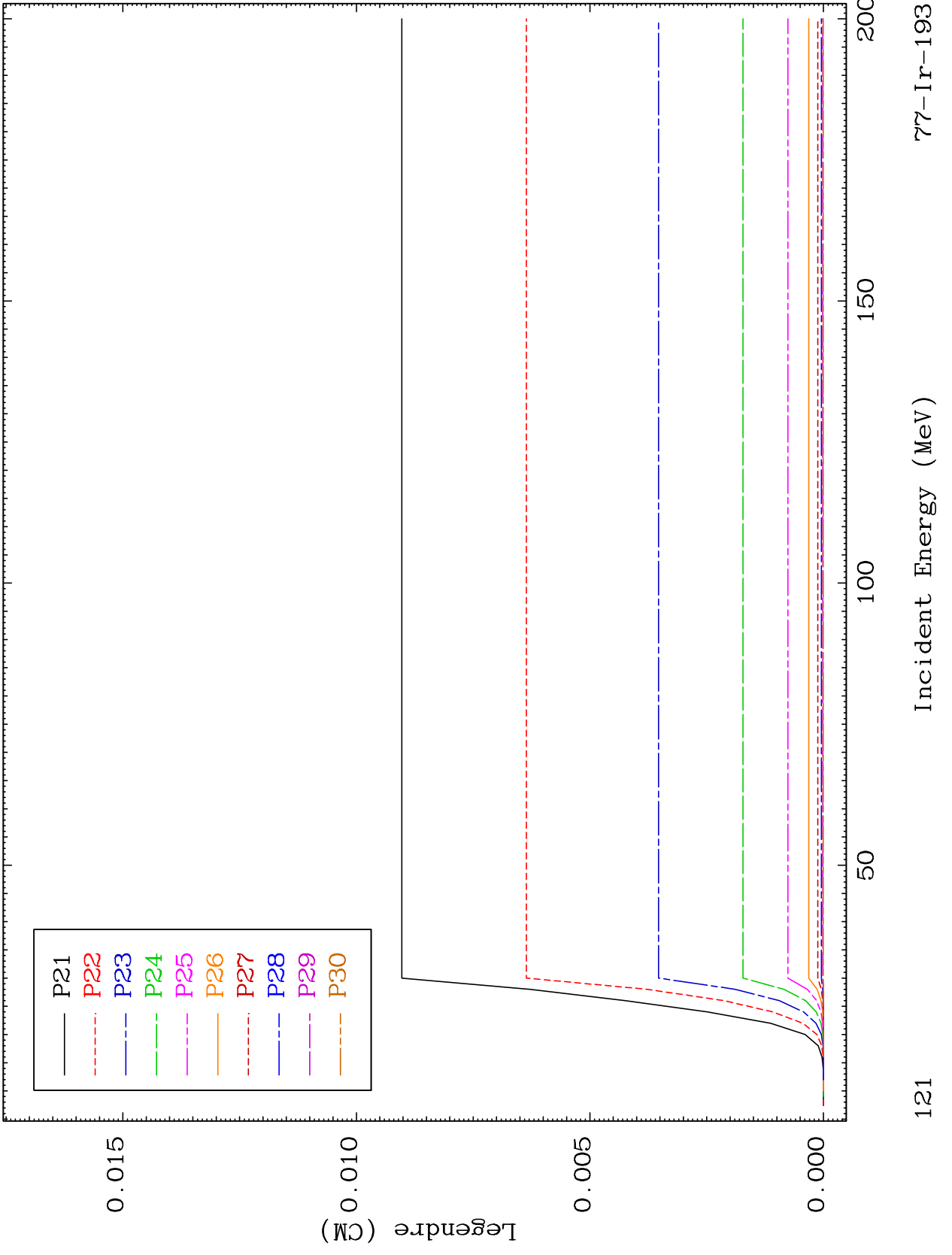




MAT 7731

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

77-Ir-193



121

Incident Energy (MeV)

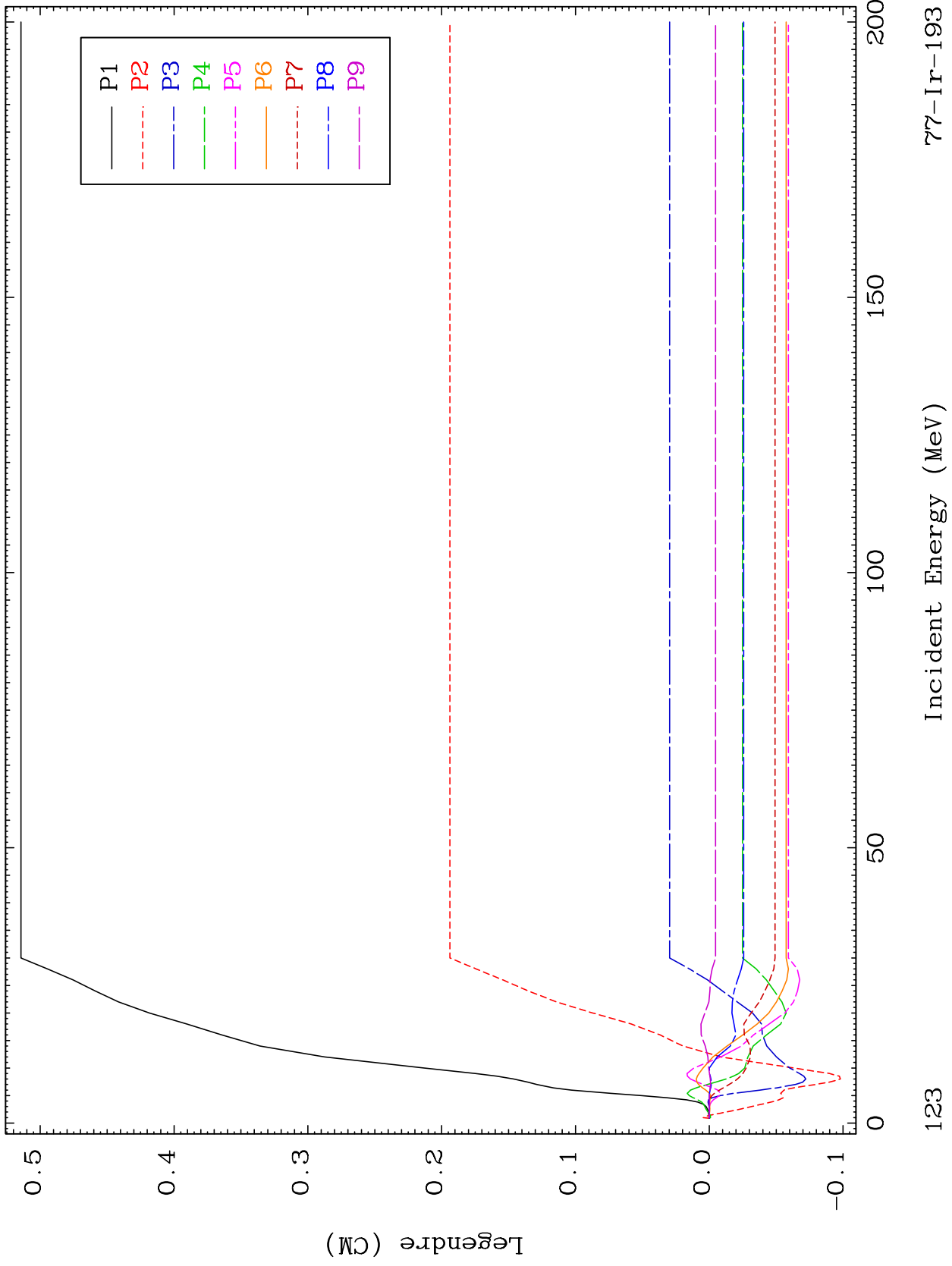
77-Ir-193



MAT 7731

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

77-Ir-193



77-Ir-193

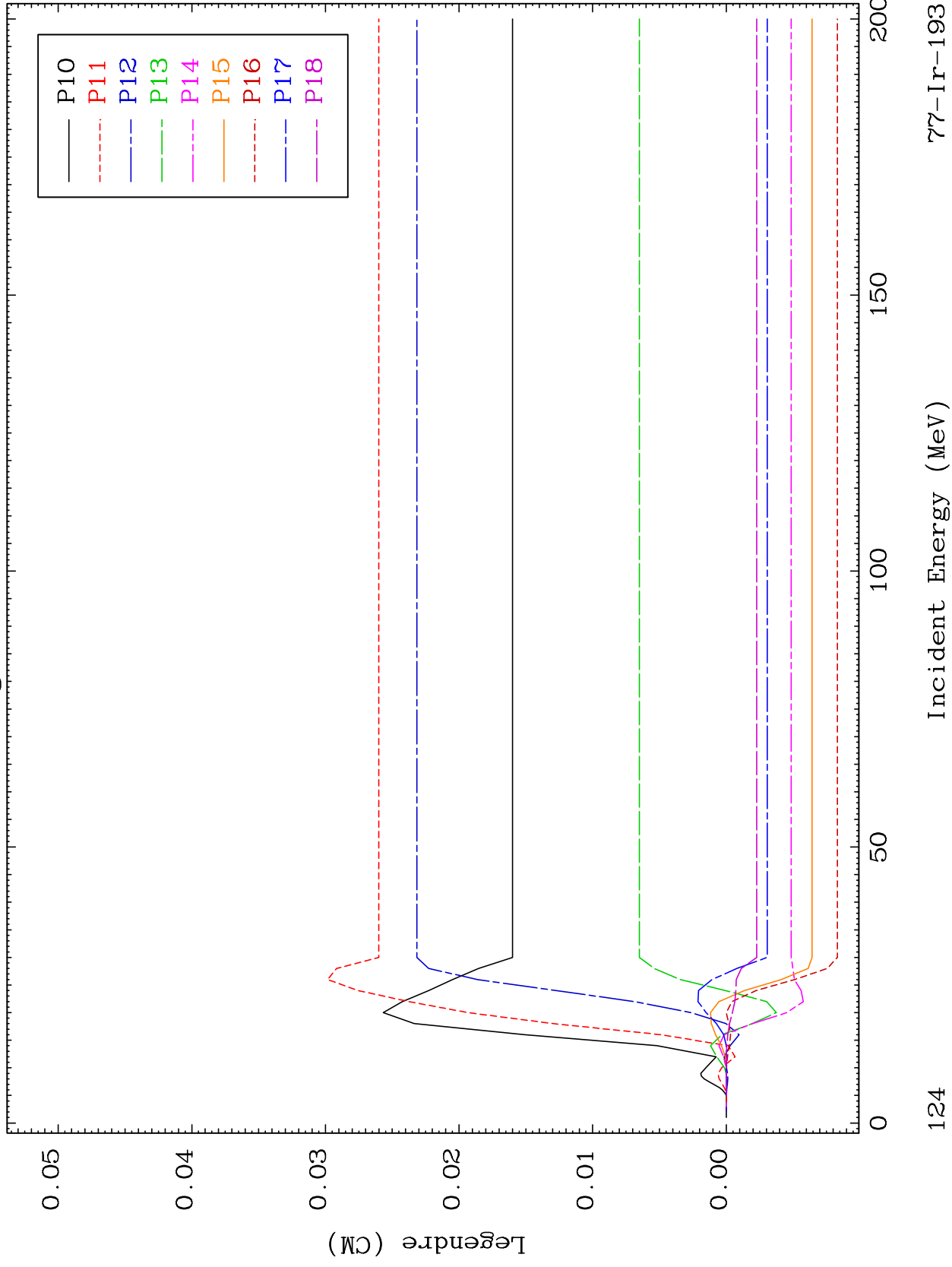
Incident Energy (MeV)

123

MAT 7731

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

77-Ir-193



124

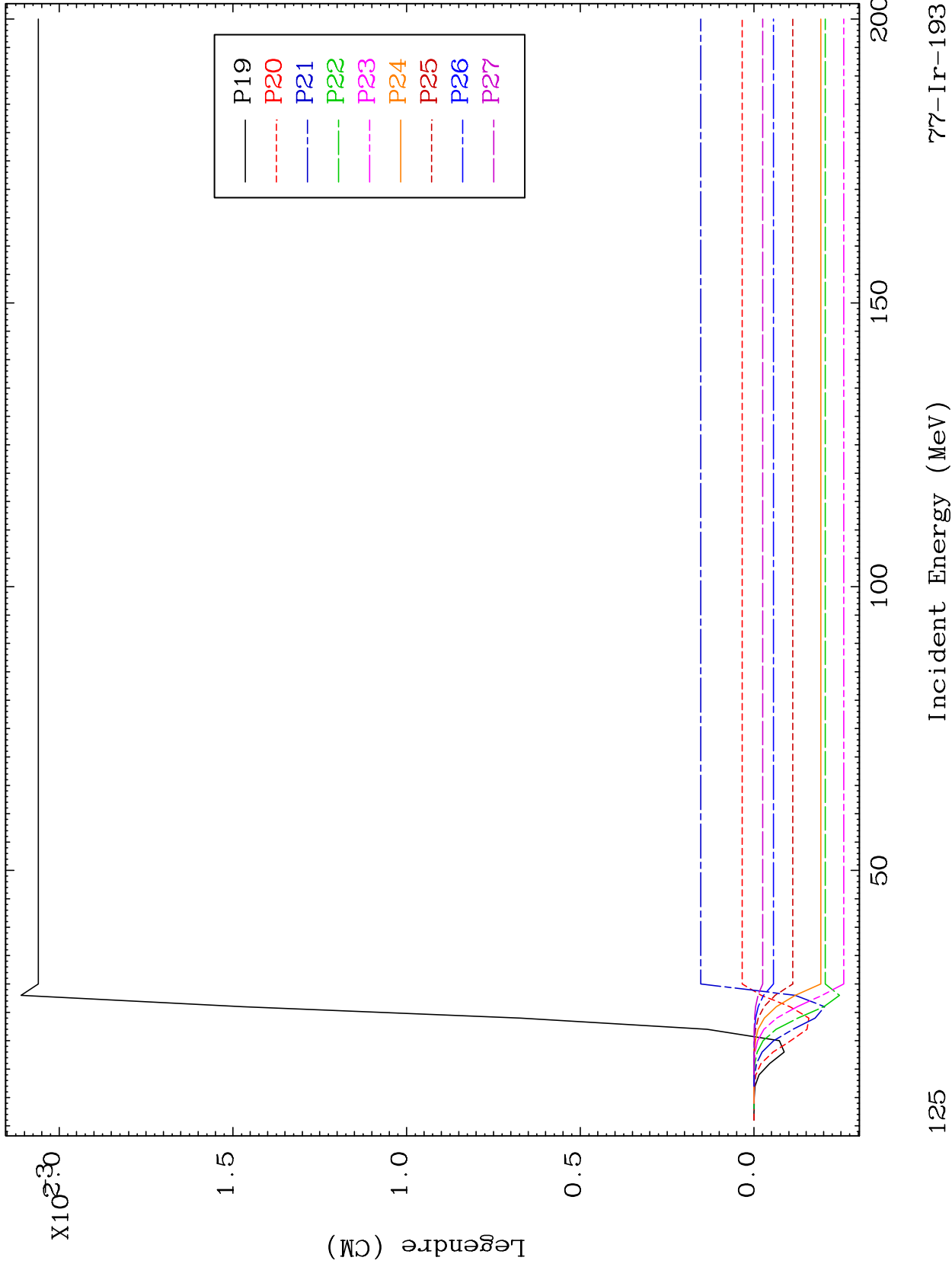
Incident Energy (MeV)

77-Ir-193

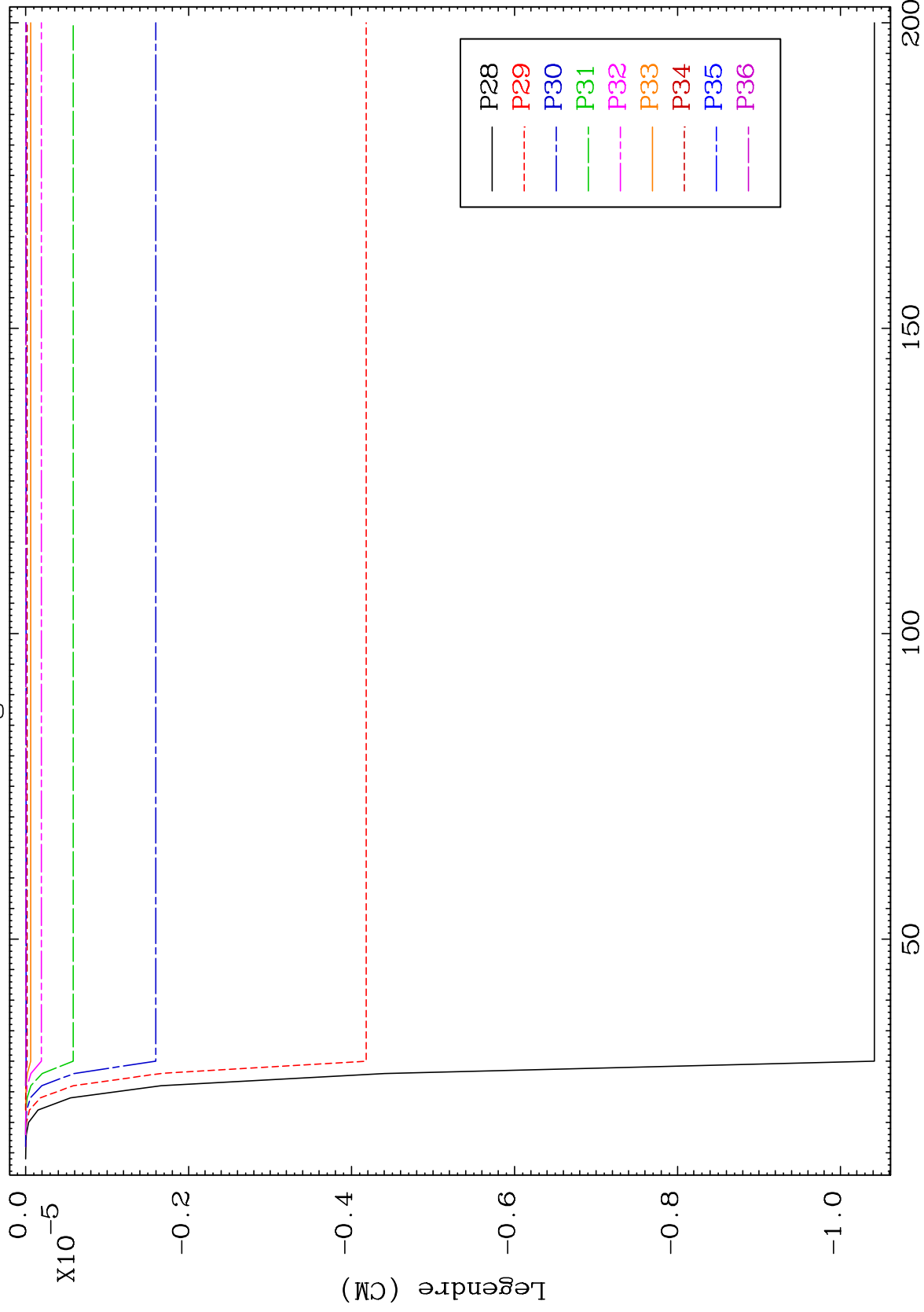
MAT 7731

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

77-Ir-193



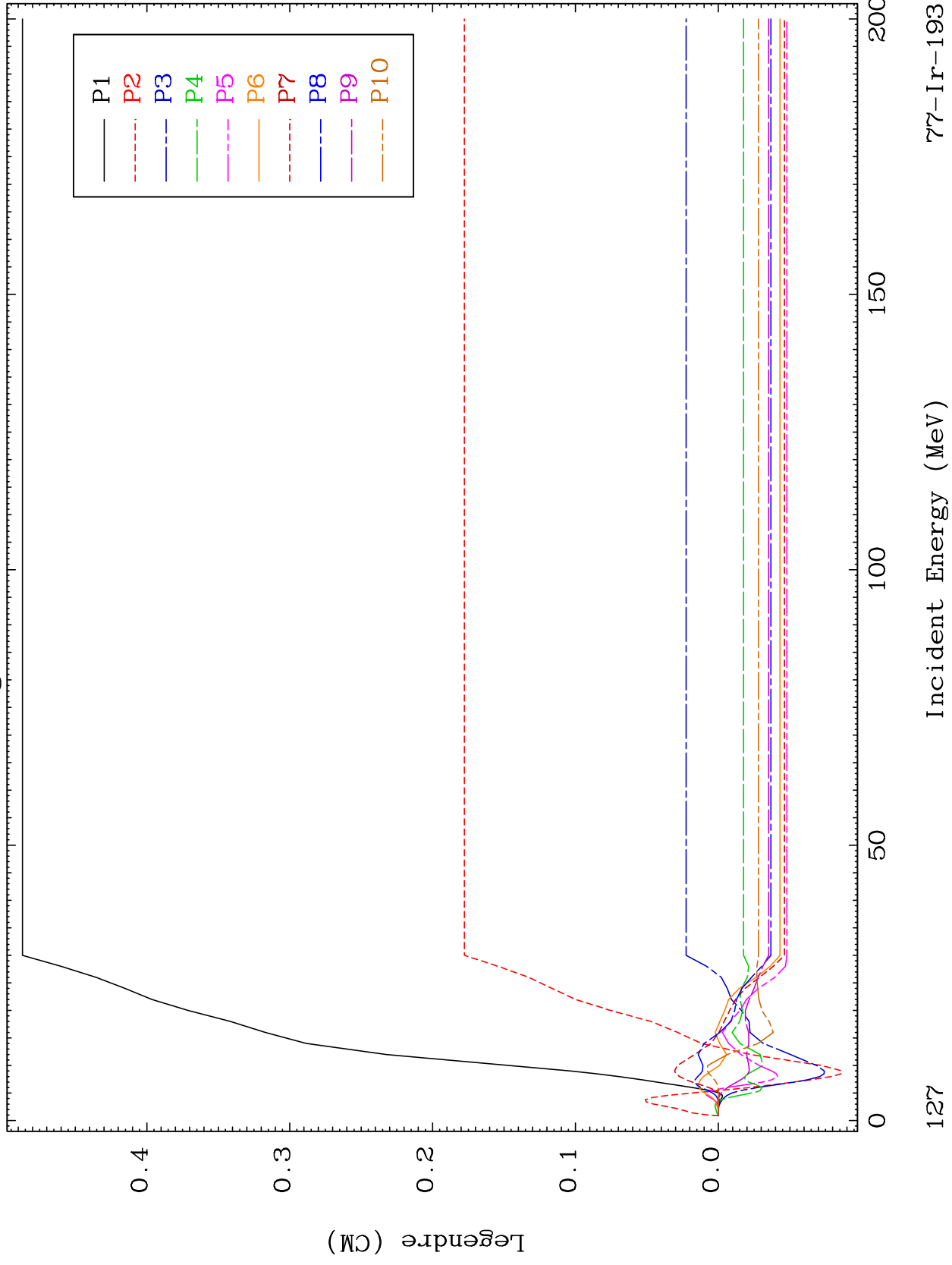
125



MAT 7731

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

77-Ir-193



127

Incident Energy (MeV)

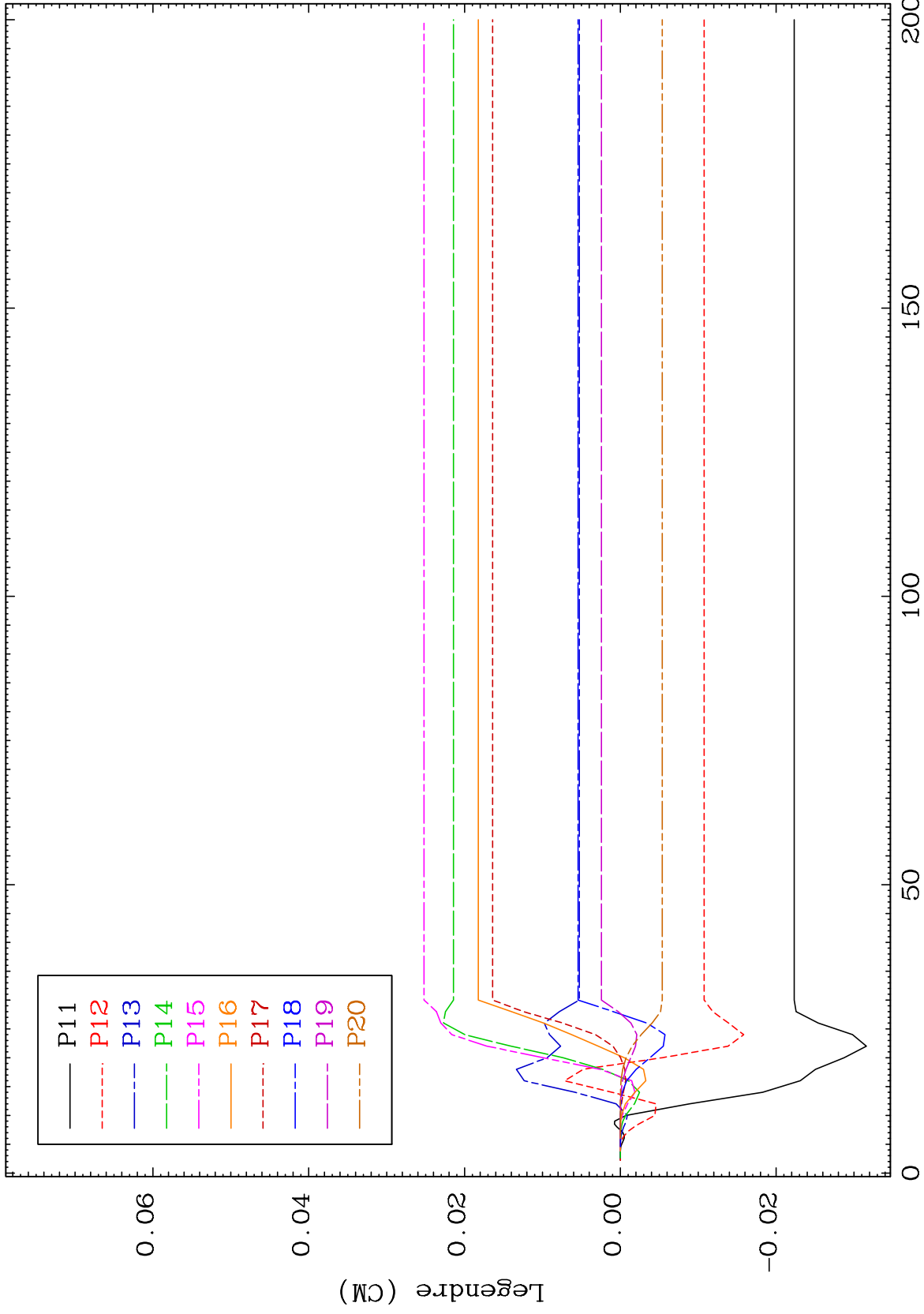
77-Ir-193



MAT 7731

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

77-Ir-193



128

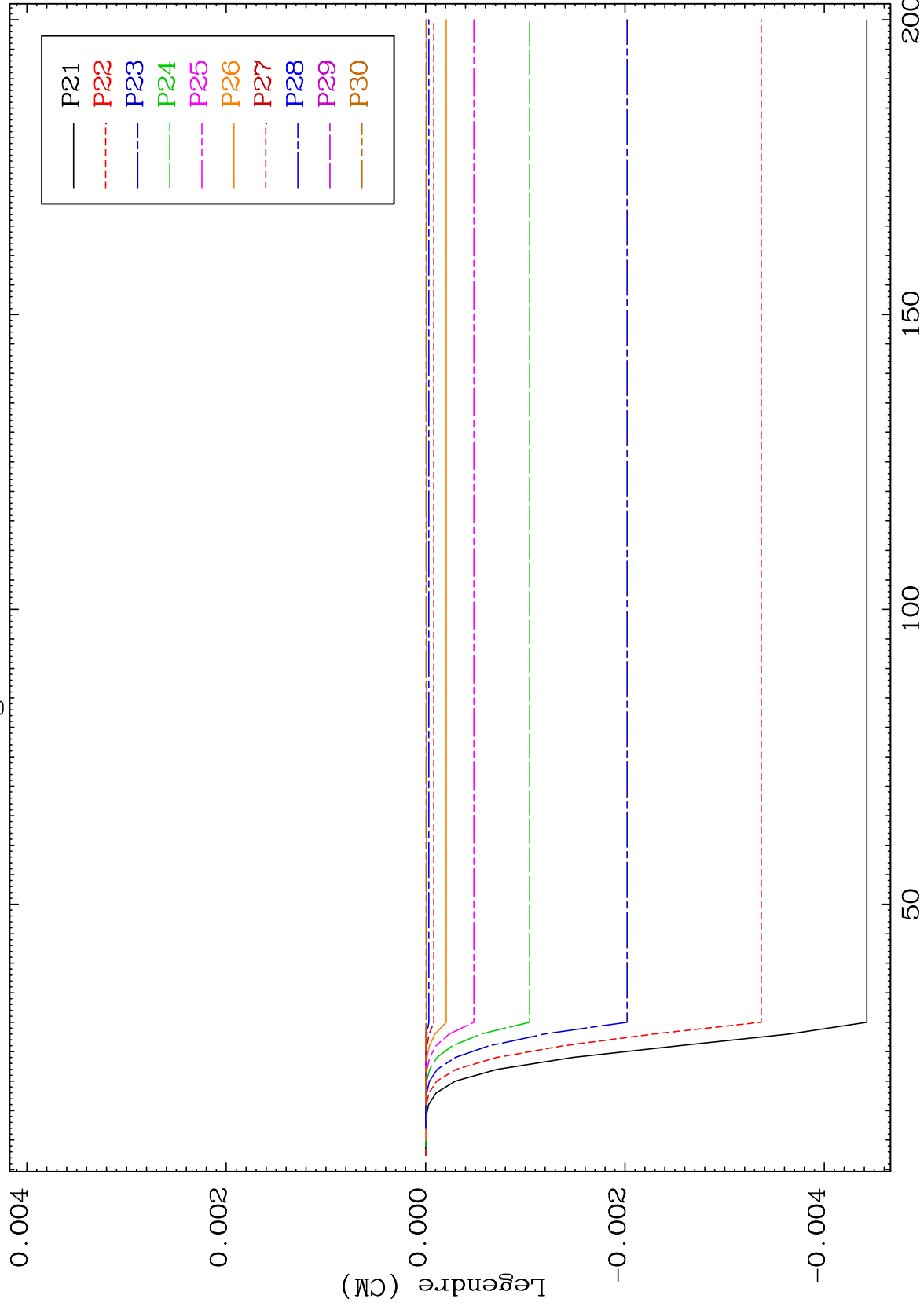
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

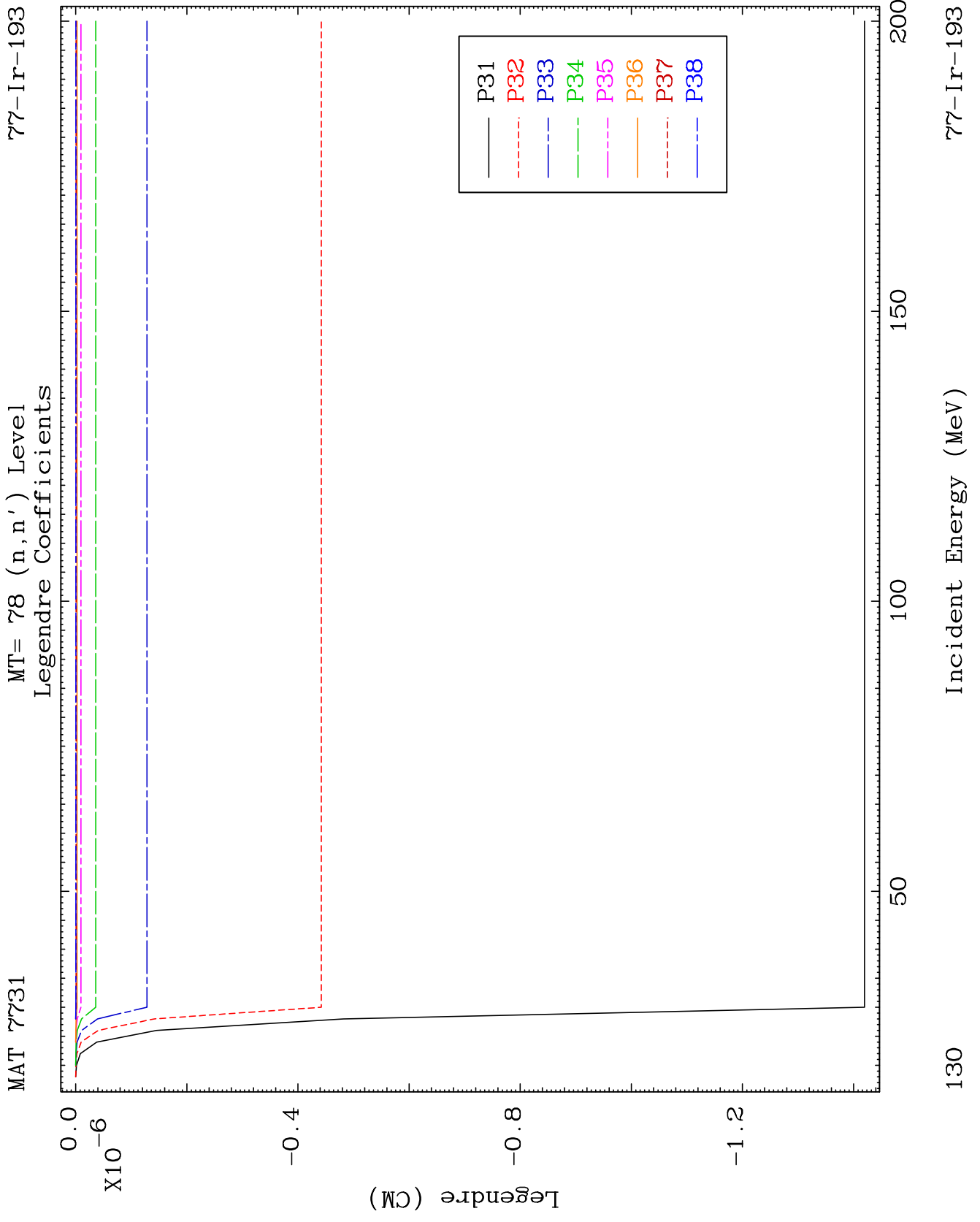
77-Ir-193



129

Incident Energy (MeV)

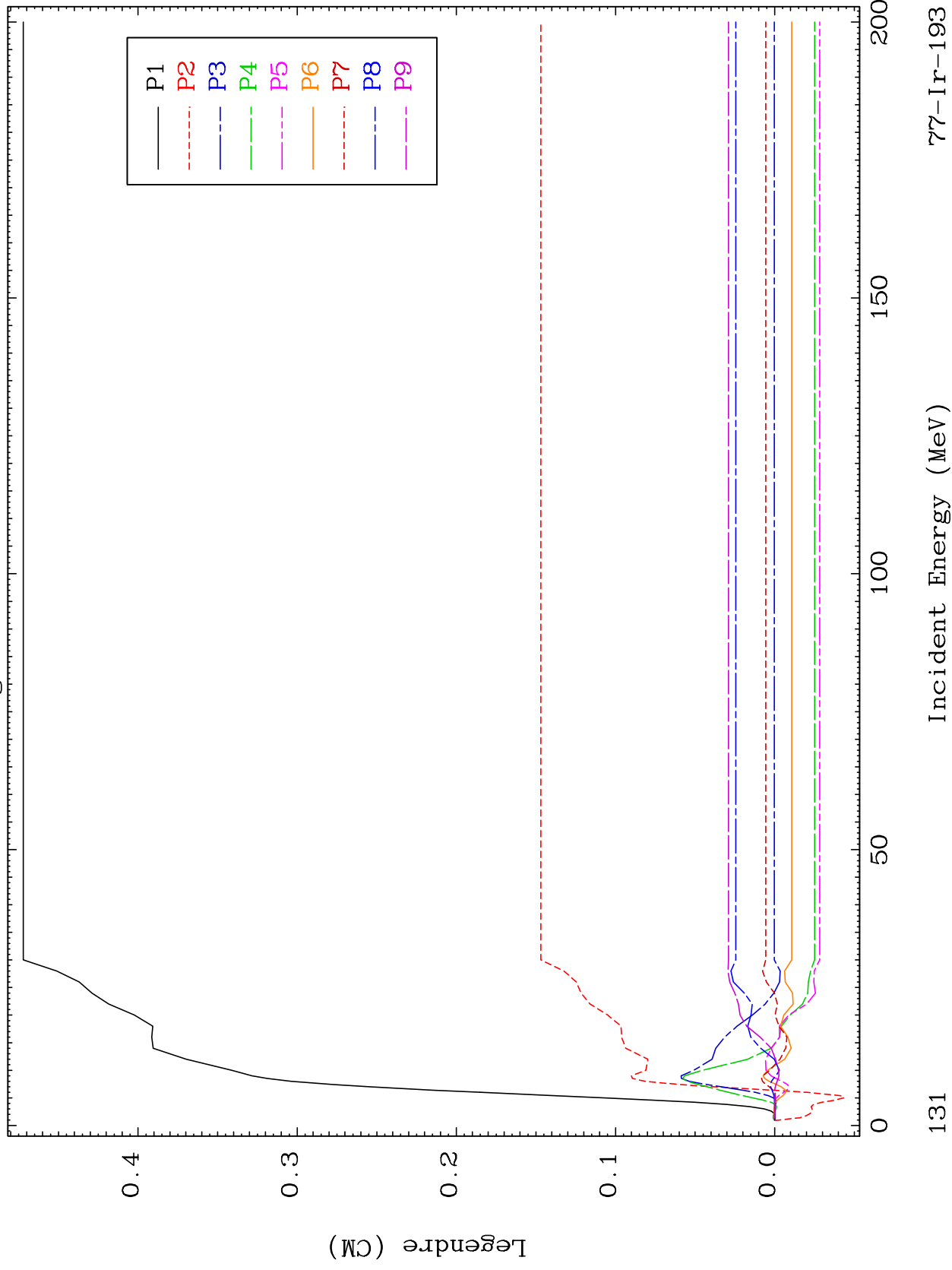
77-Ir-193



MAT 7731

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

77-Ir-193



131

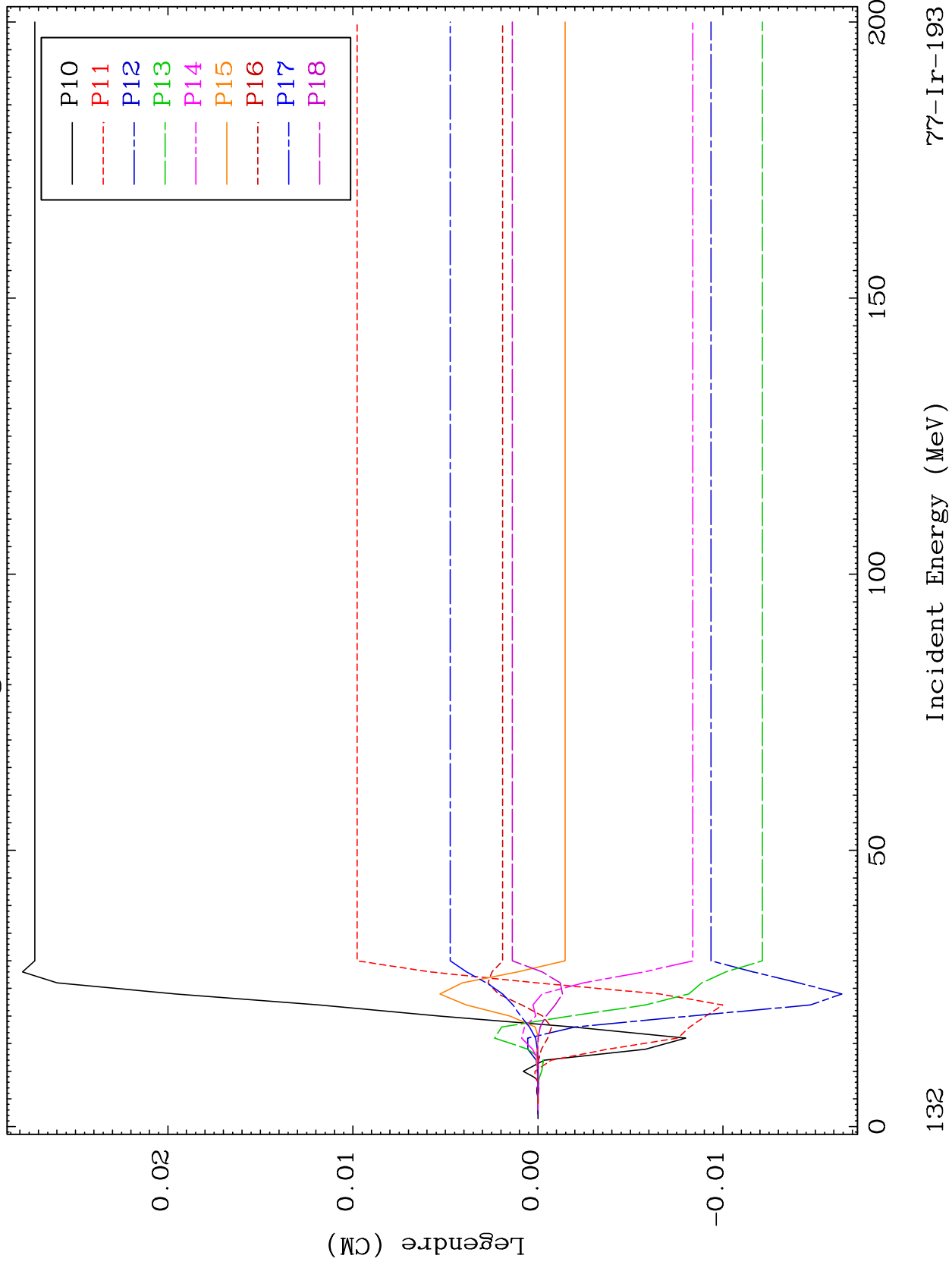
Incident Energy (MeV)

77-Ir-193

MAT 7731

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

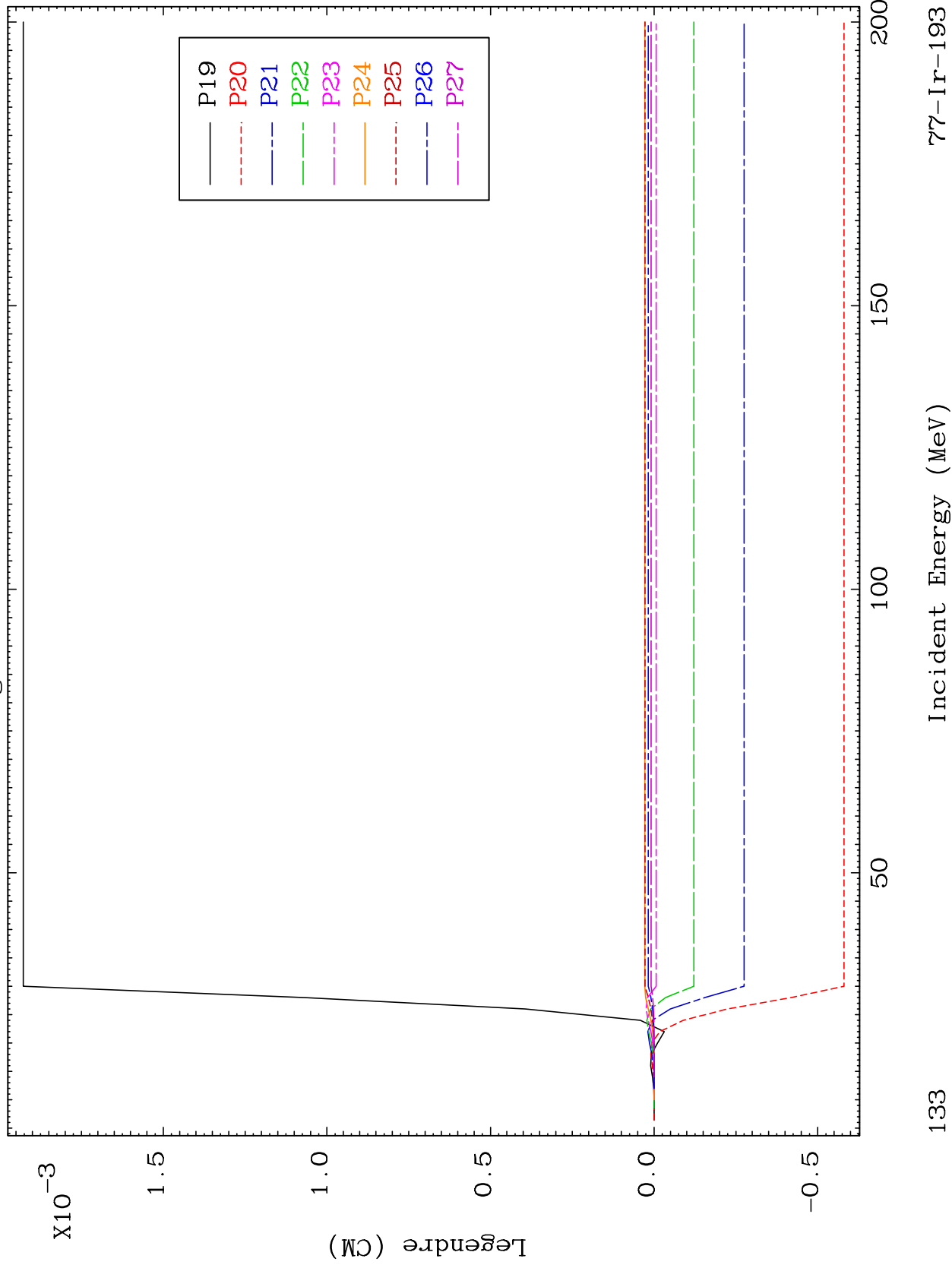
77-Ir-193



77-Ir-193

Incident Energy (MeV)

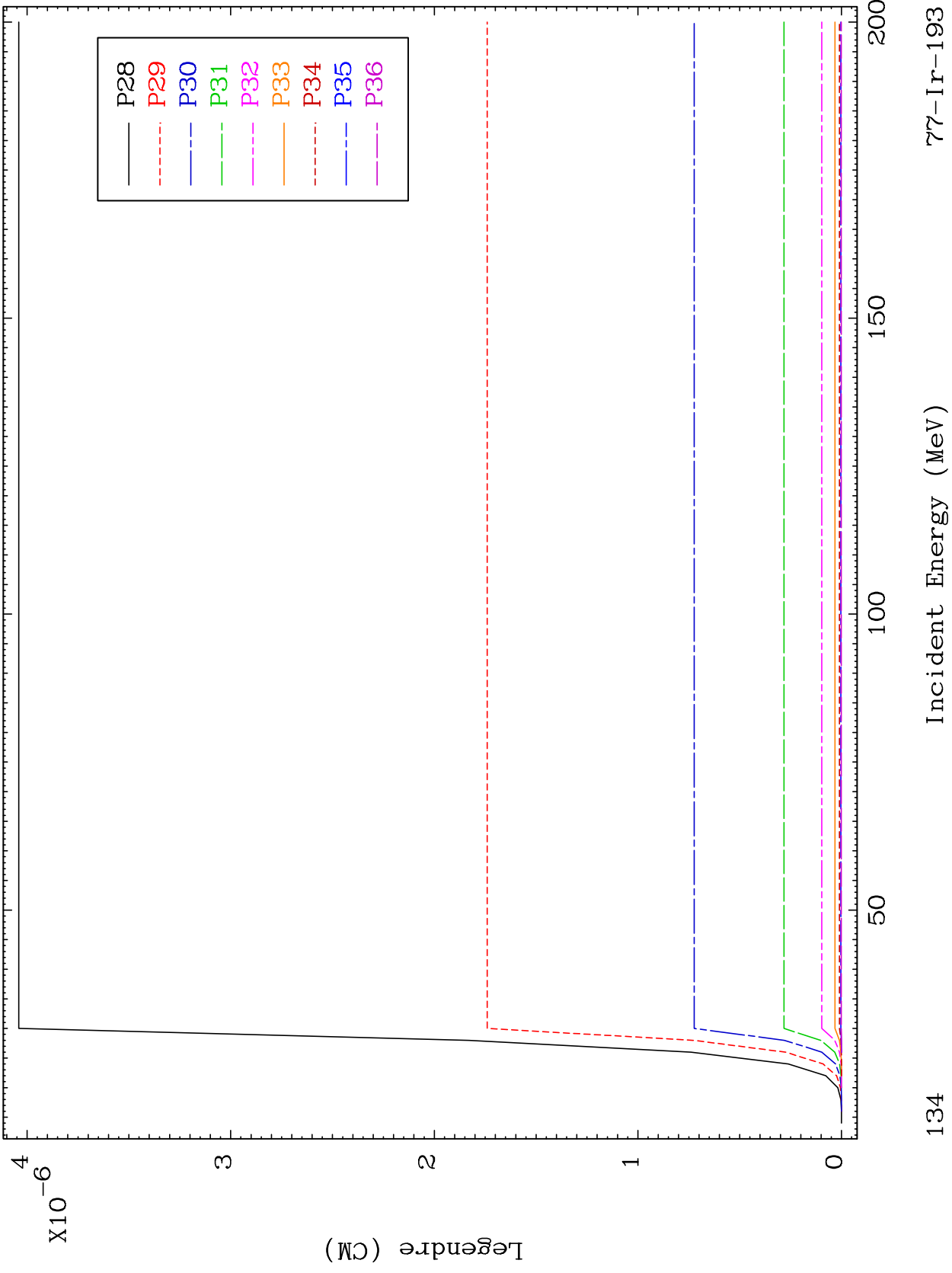
132



MAT 7731

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

77-Ir-193

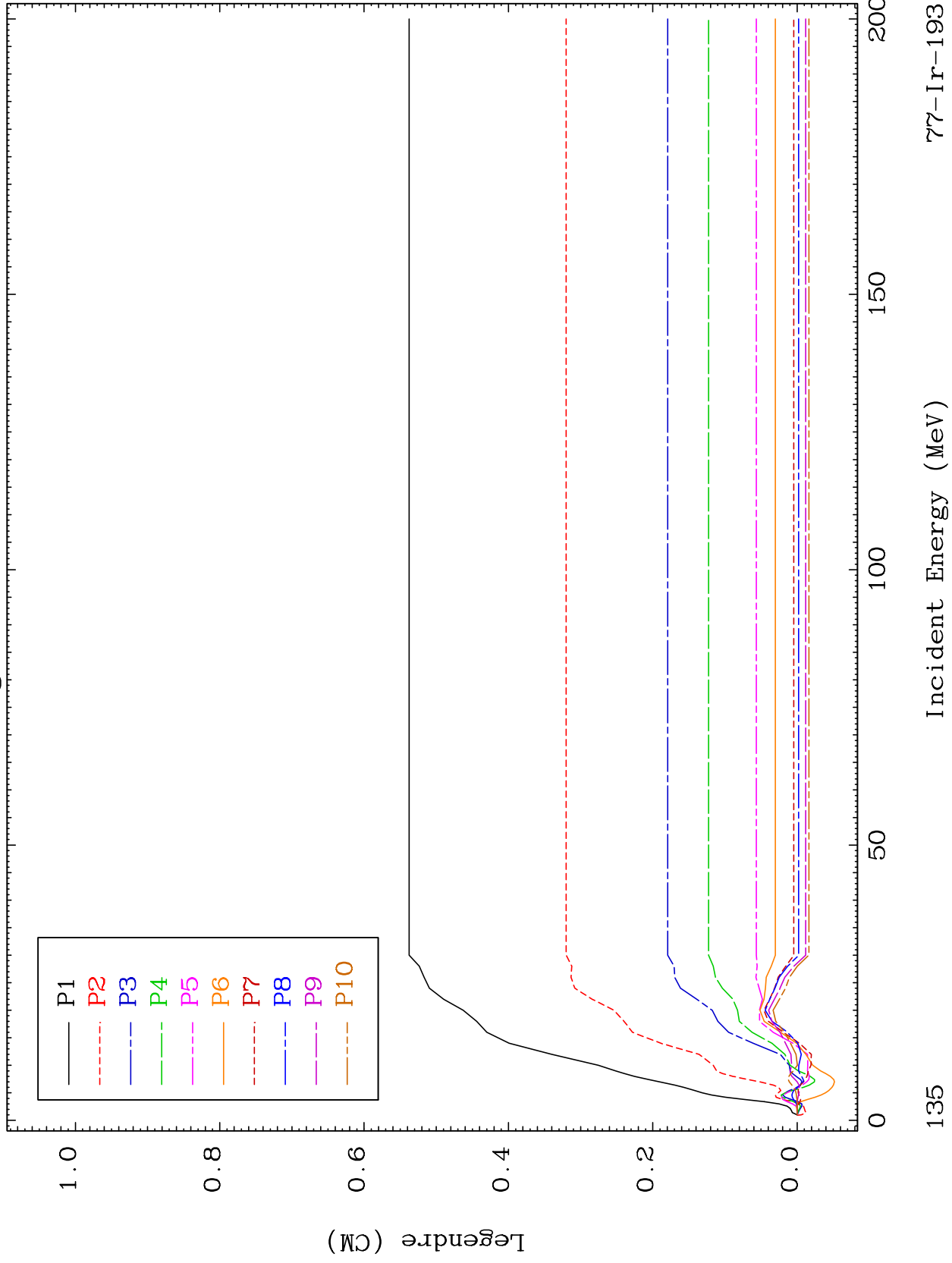


134

MAT 7731

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

77-Ir-193



77-Ir-193

Incident Energy (MeV)

135

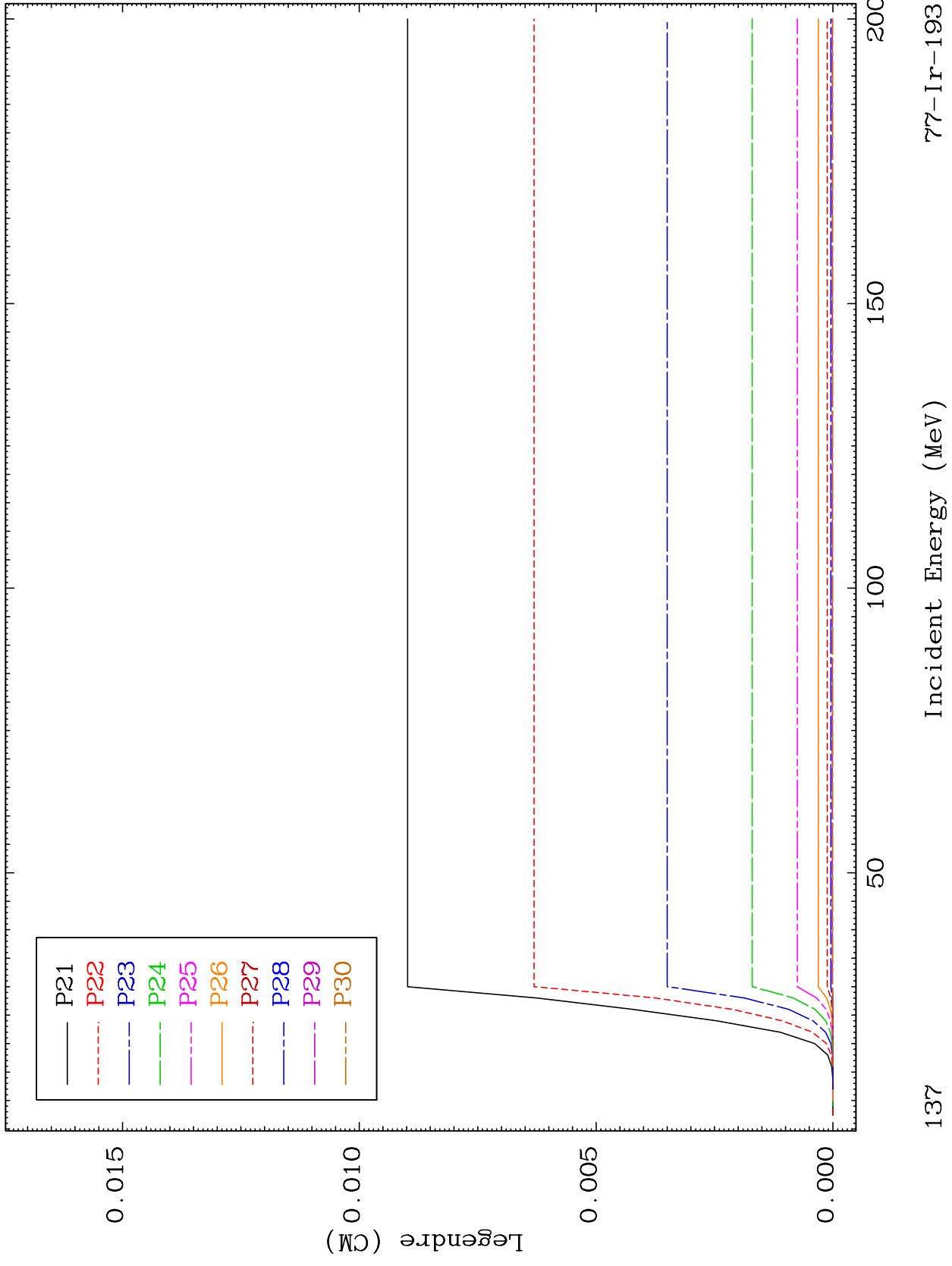




MAT 7731

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

77-Ir-193



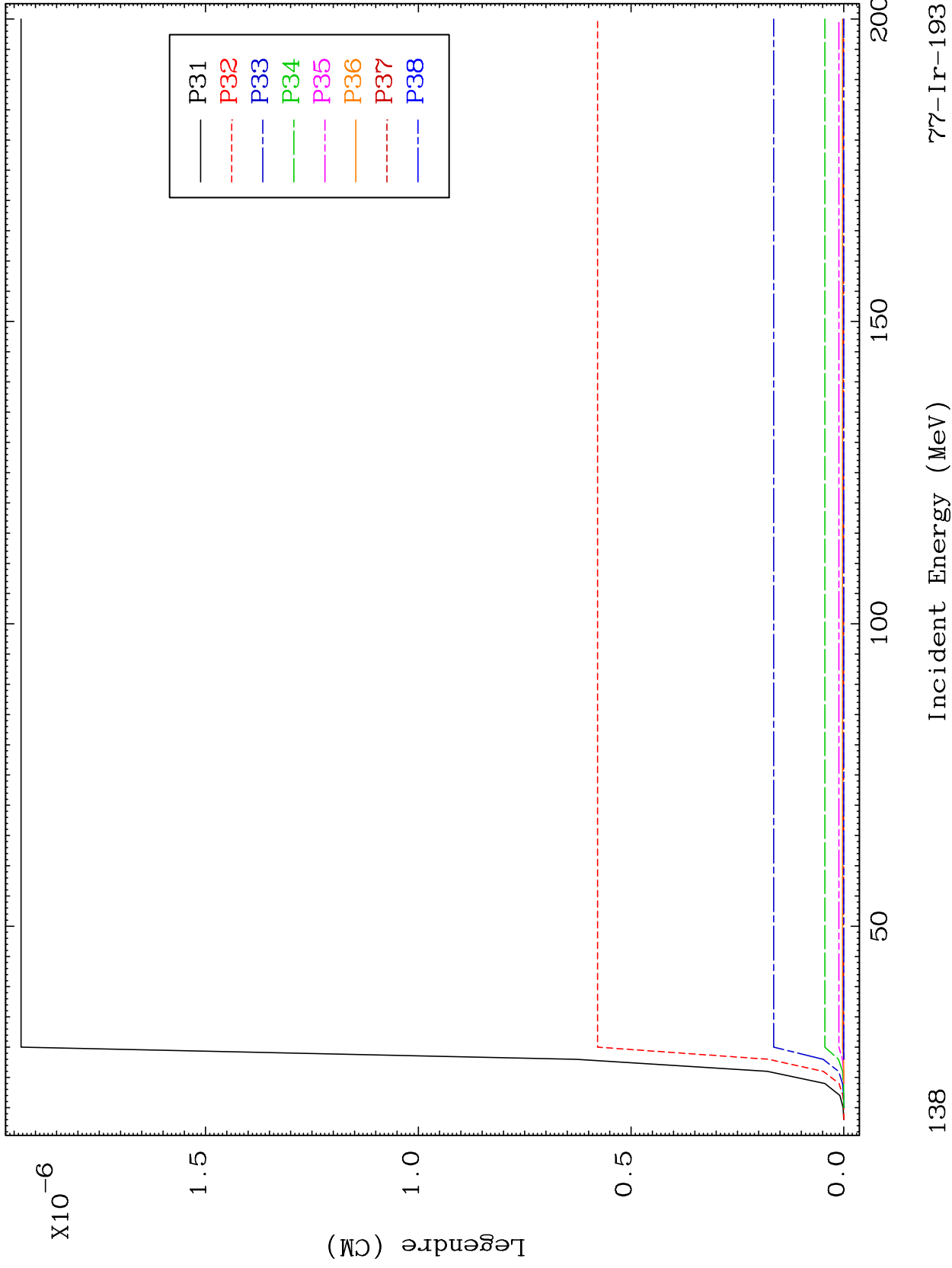
137

77-Ir-193

MAT 7731

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

77-Ir-193



138

Incident Energy (MeV)

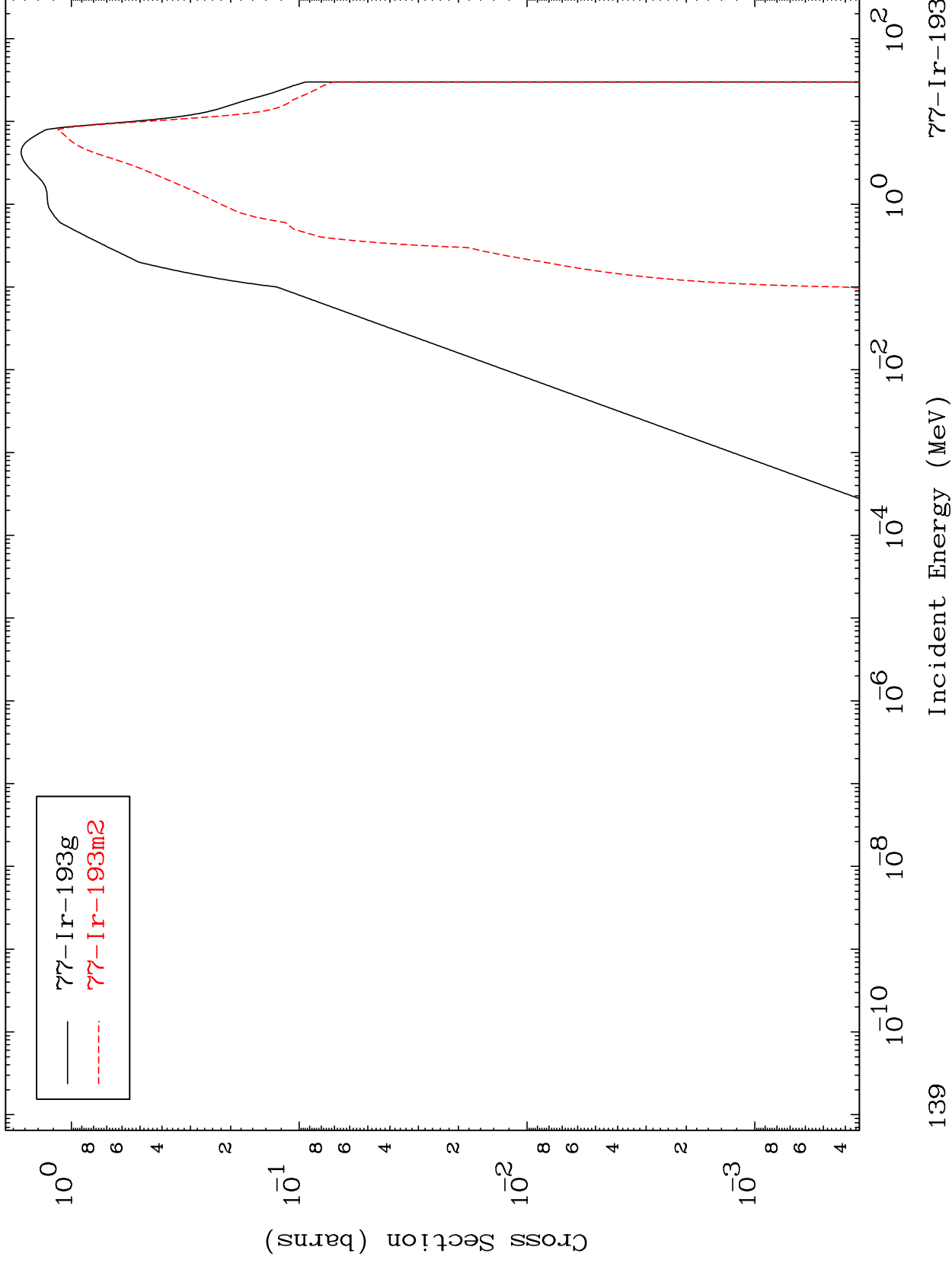
77-Ir-193

MAT 7731

Inelastic

<sup>77</sup>Ir-193

Radionuclide Production Cross Section

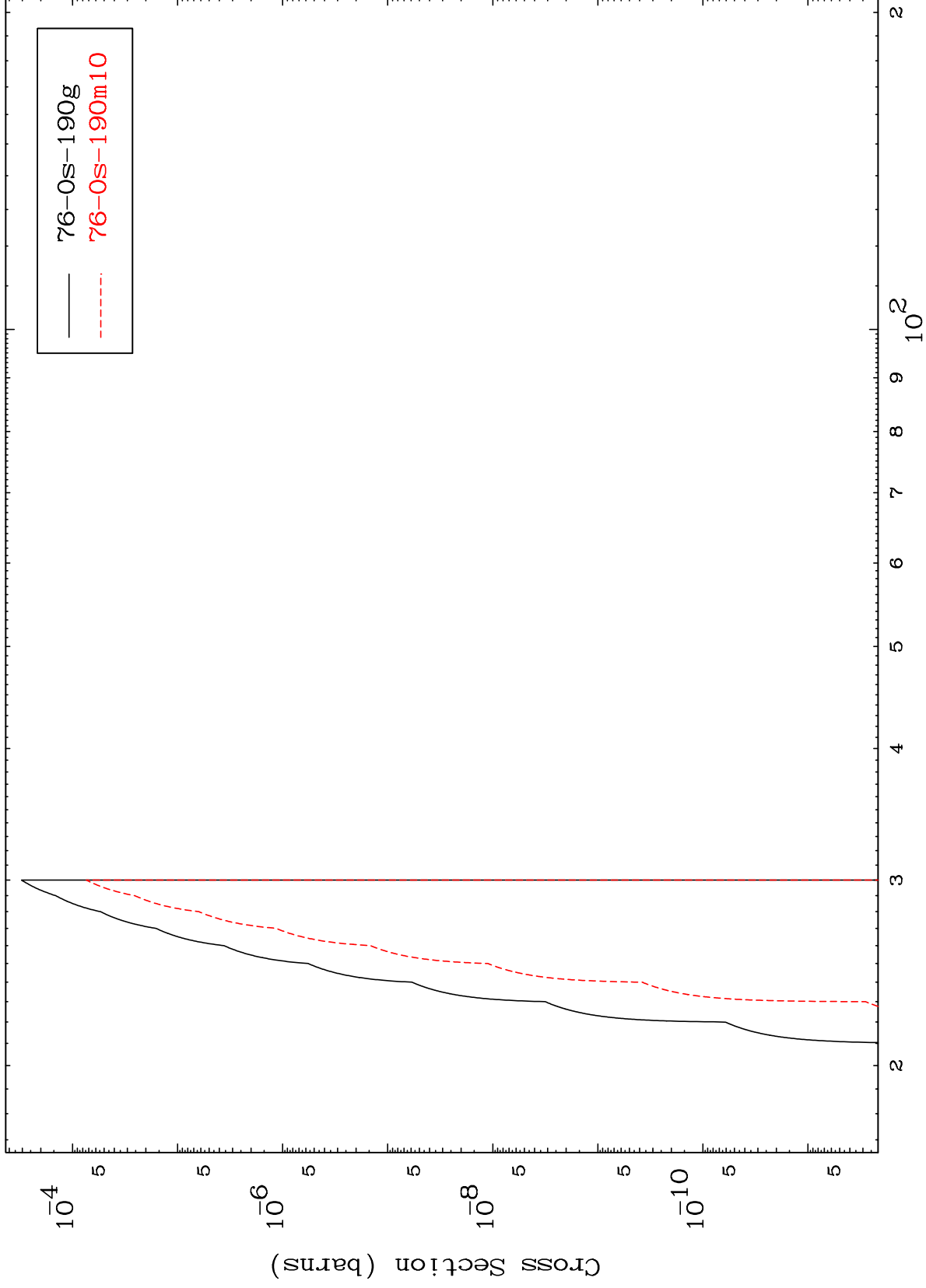


MAT 7731

(n,2n) d

77-Ir-193

Radionuclide Production Cross Section



140

Incident Energy (MeV)

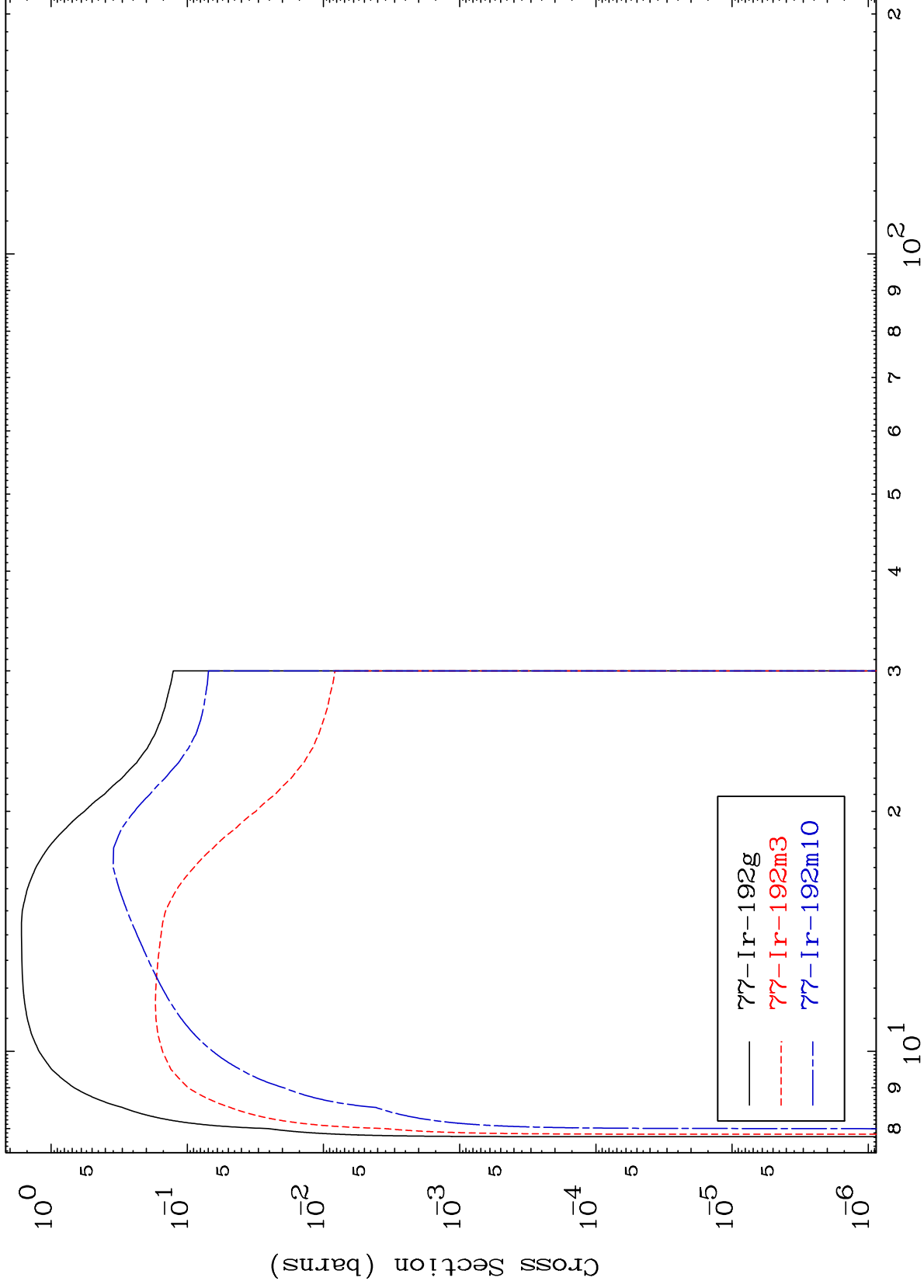
77-Ir-193

MAT 7731

(n,2n)

<sup>77</sup>Ir-193

Radionuclide Production Cross Section

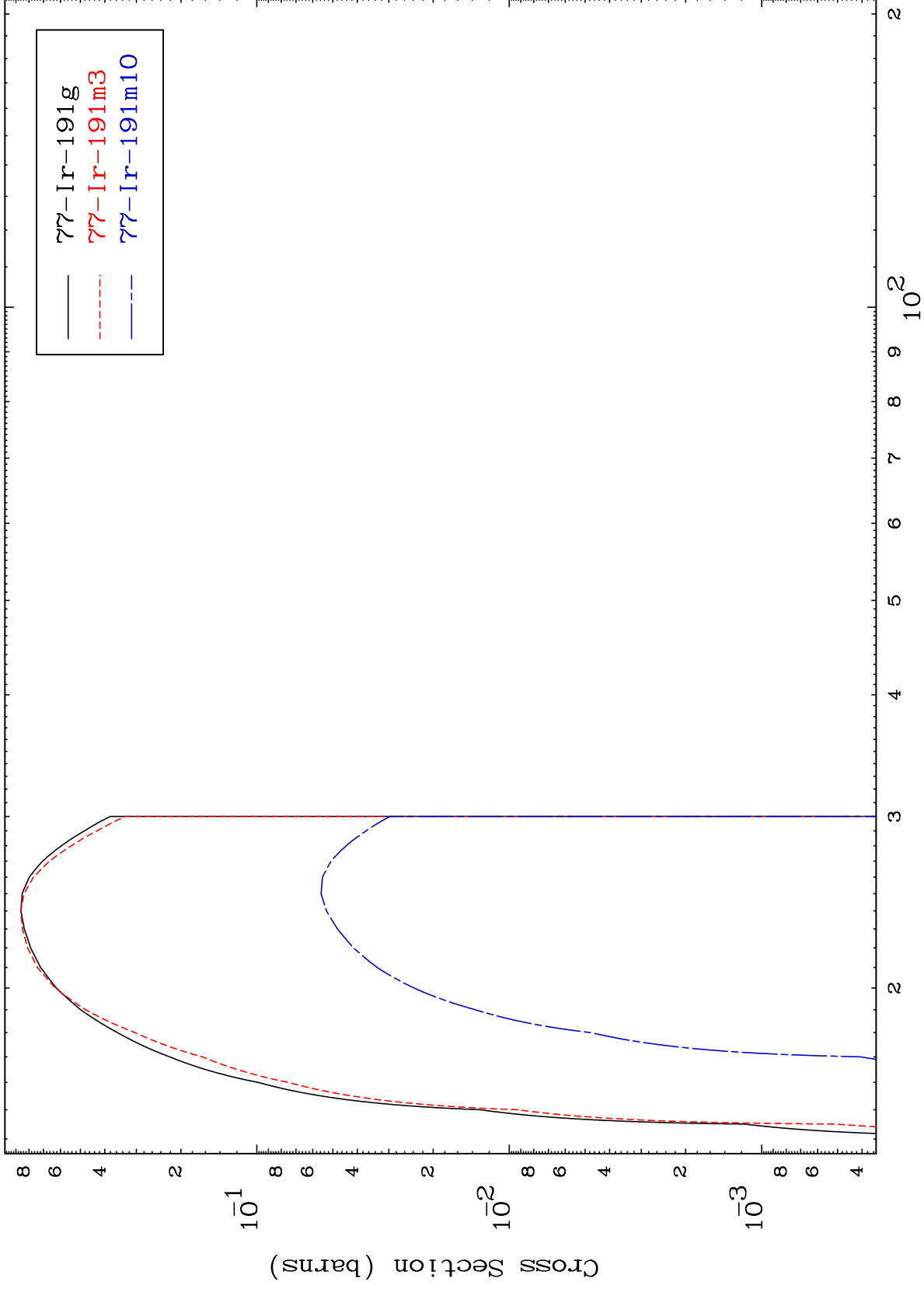


141

Incident Energy (MeV)

<sup>77</sup>Ir-193

Radionuclide Production Cross Section

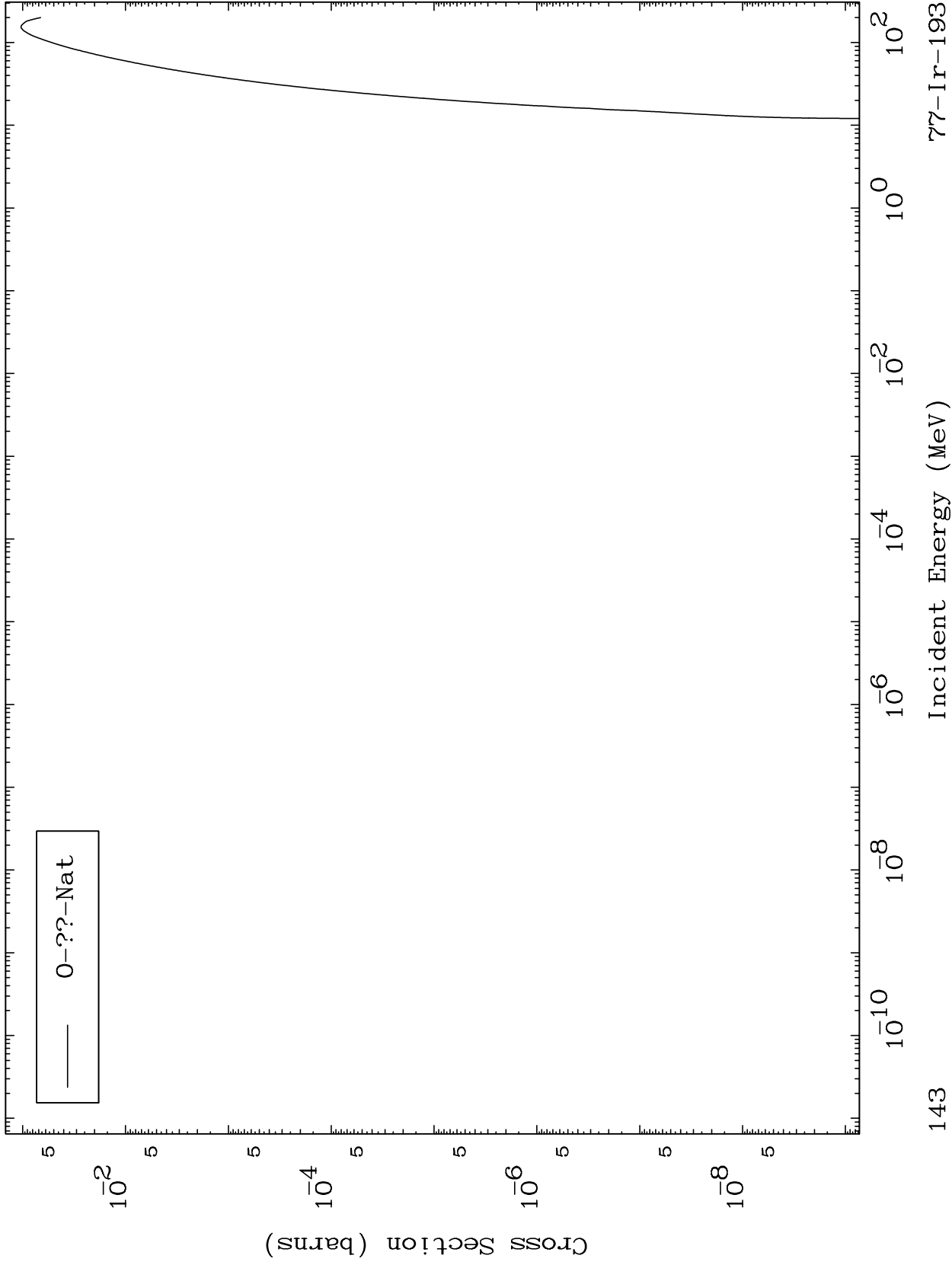


MAT 7731

Fission

77-Ir-193

Radionuclide Production Cross Section



143

Incident Energy (MeV)

77-Ir-193

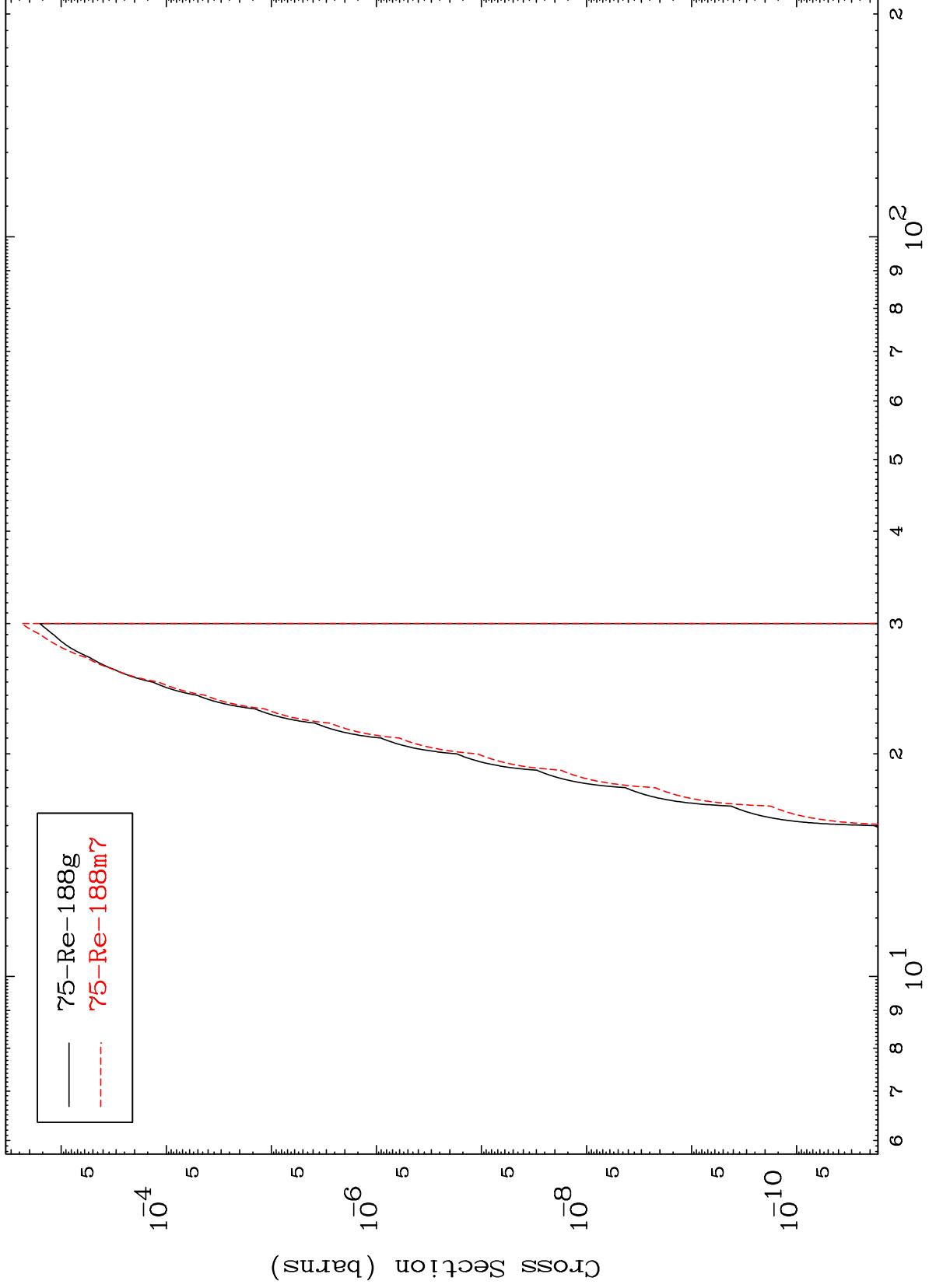


MAT 7731

$^{77}\text{Ir-193}$   $\alpha$

$^{77}\text{Ir-193}$

Radionuclide Production Cross Section



144

Incident Energy (MeV)

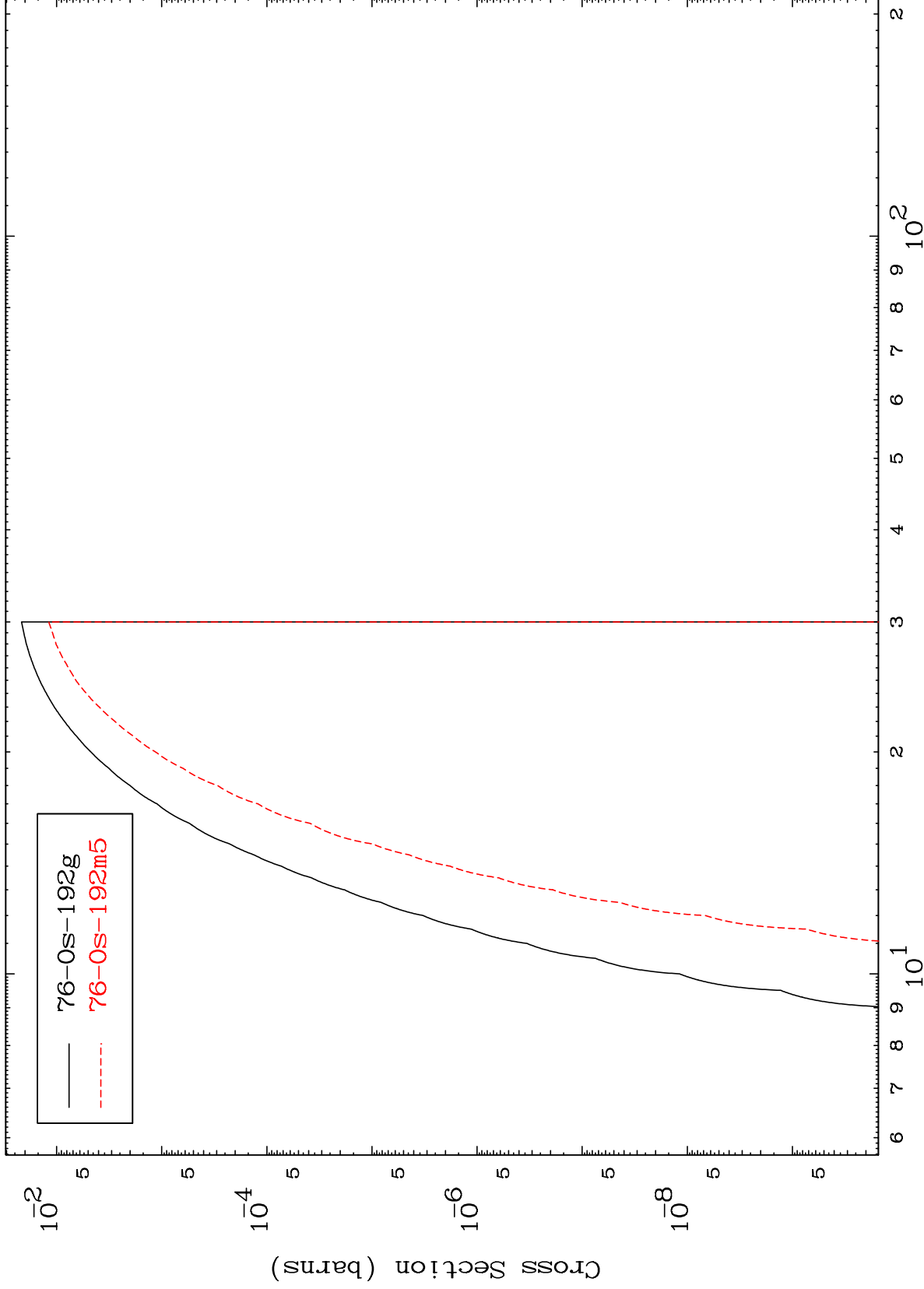
$^{77}\text{Ir-193}$

MAT 7731

(n,n') p

<sup>77</sup>Ir-193

Radionuclide Production Cross Section



145

Incident Energy (MeV)

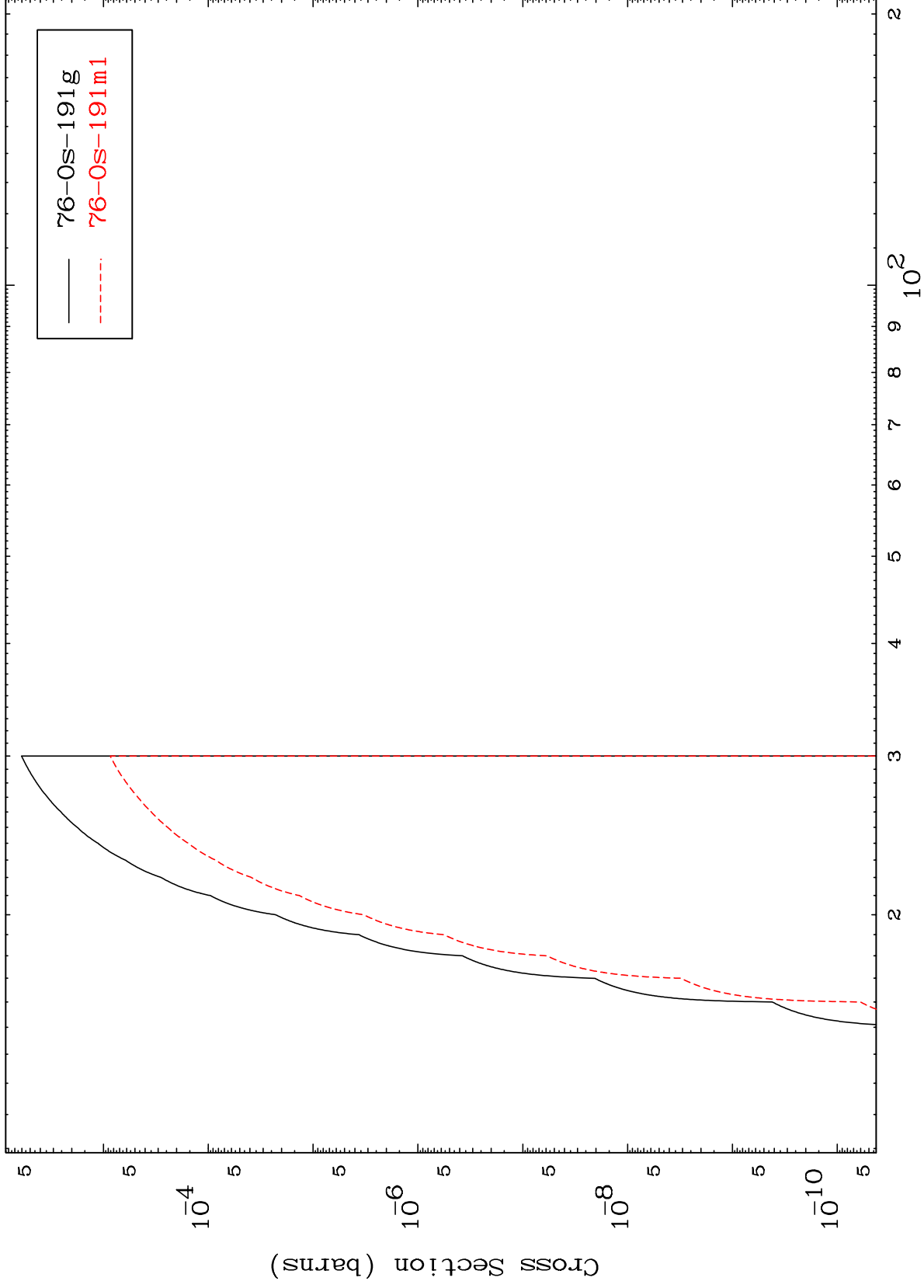
<sup>77</sup>Ir-193

MAT 7731

(n,n') d

77-Ir-193

Radionuclide Production Cross Section



146

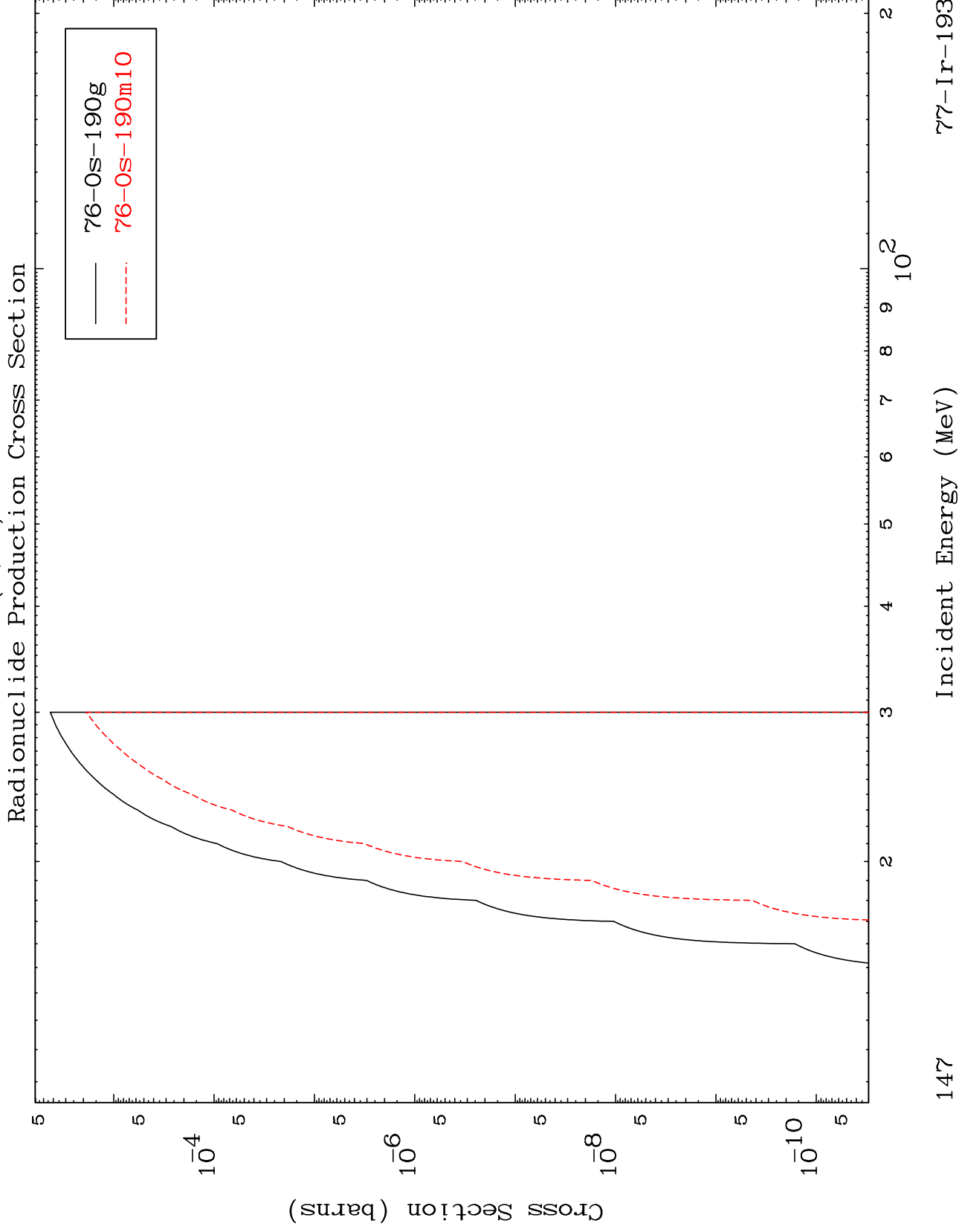
Incident Energy (MeV)

77-Ir-193

MAT 7731

(n,n') t

77-Ir-193

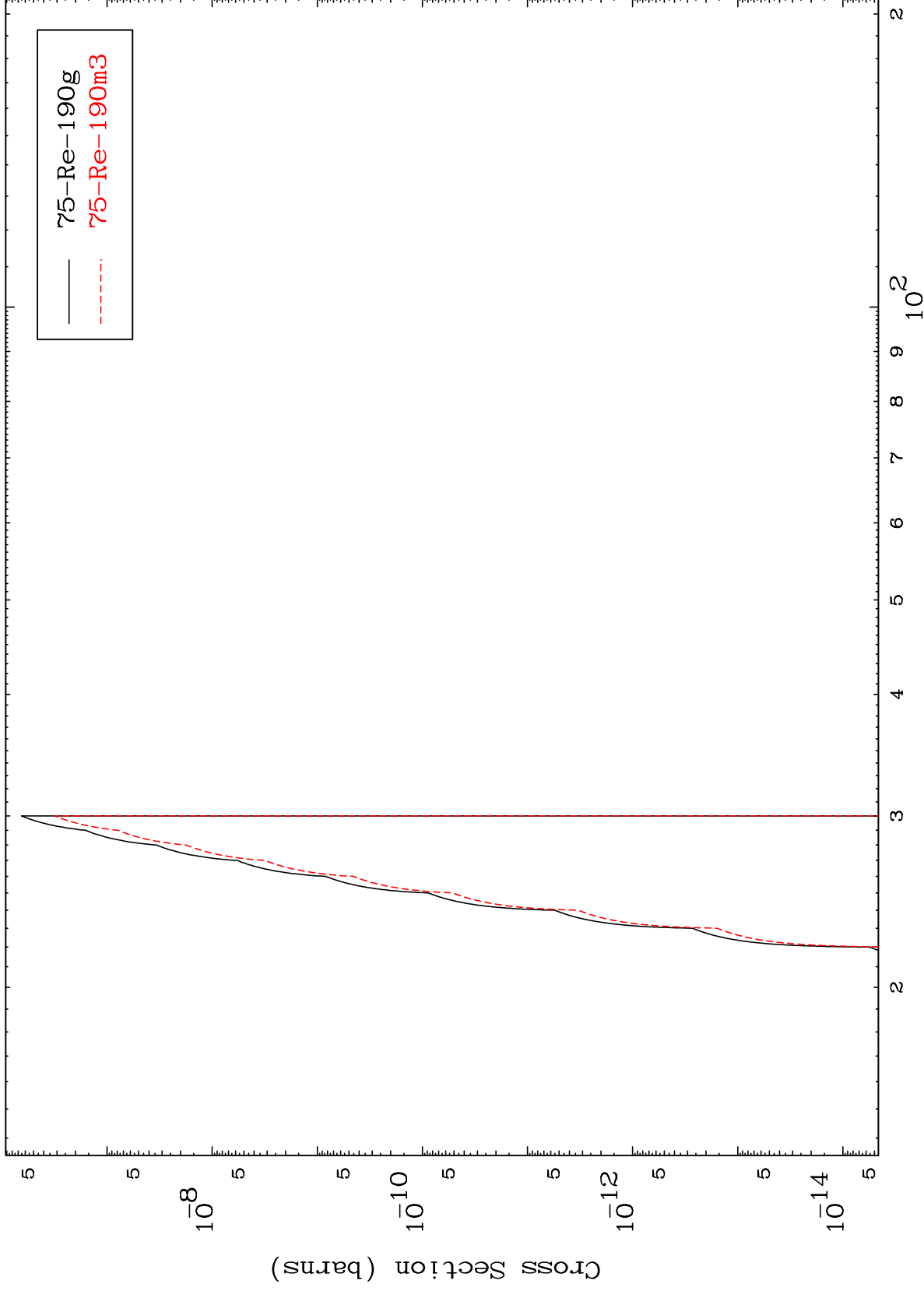


147

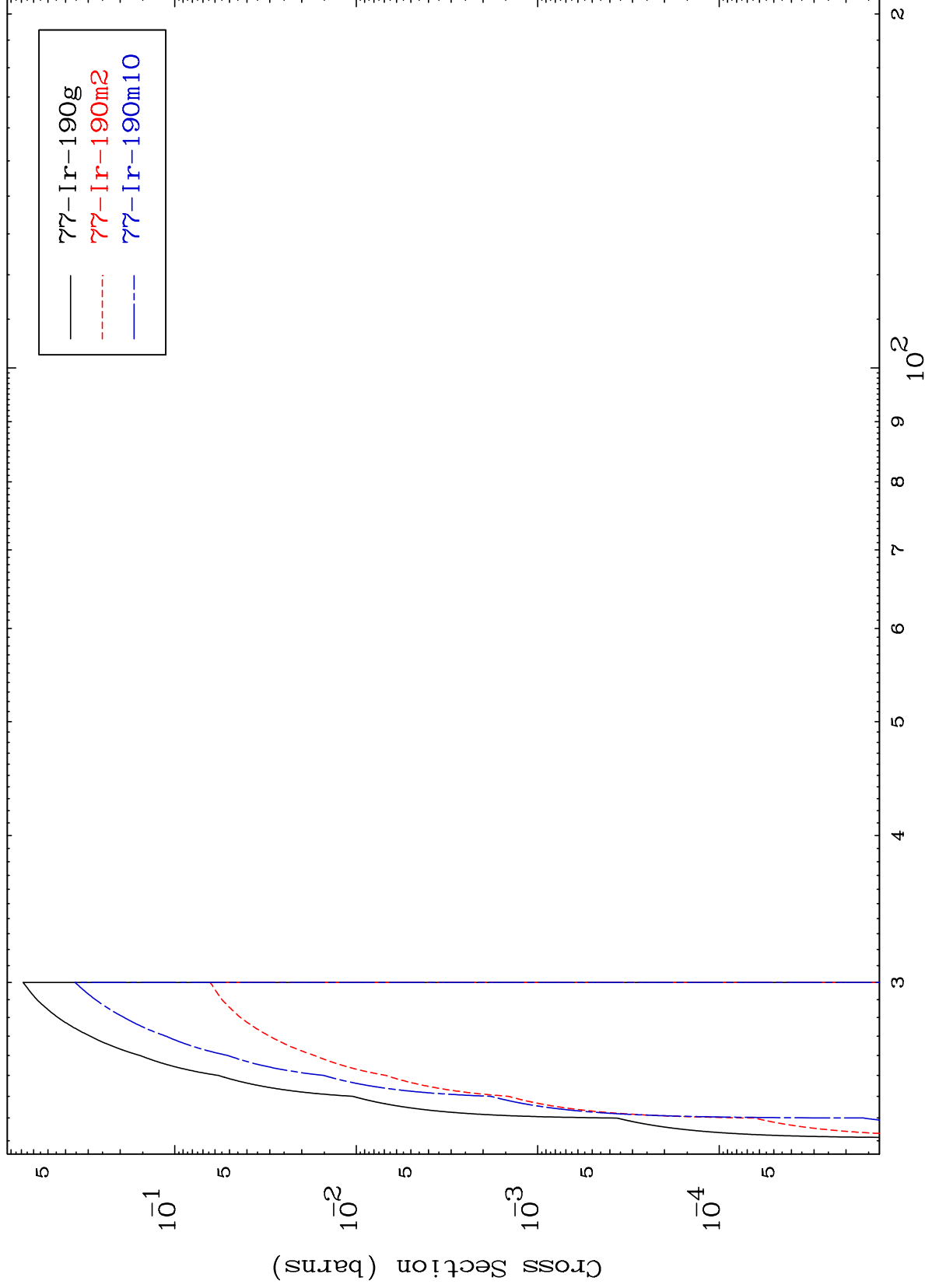
Incident Energy (MeV)

77-Ir-193

Radionuclide Production Cross Section



(n,4n)  
Radionuclide Production Cross Section

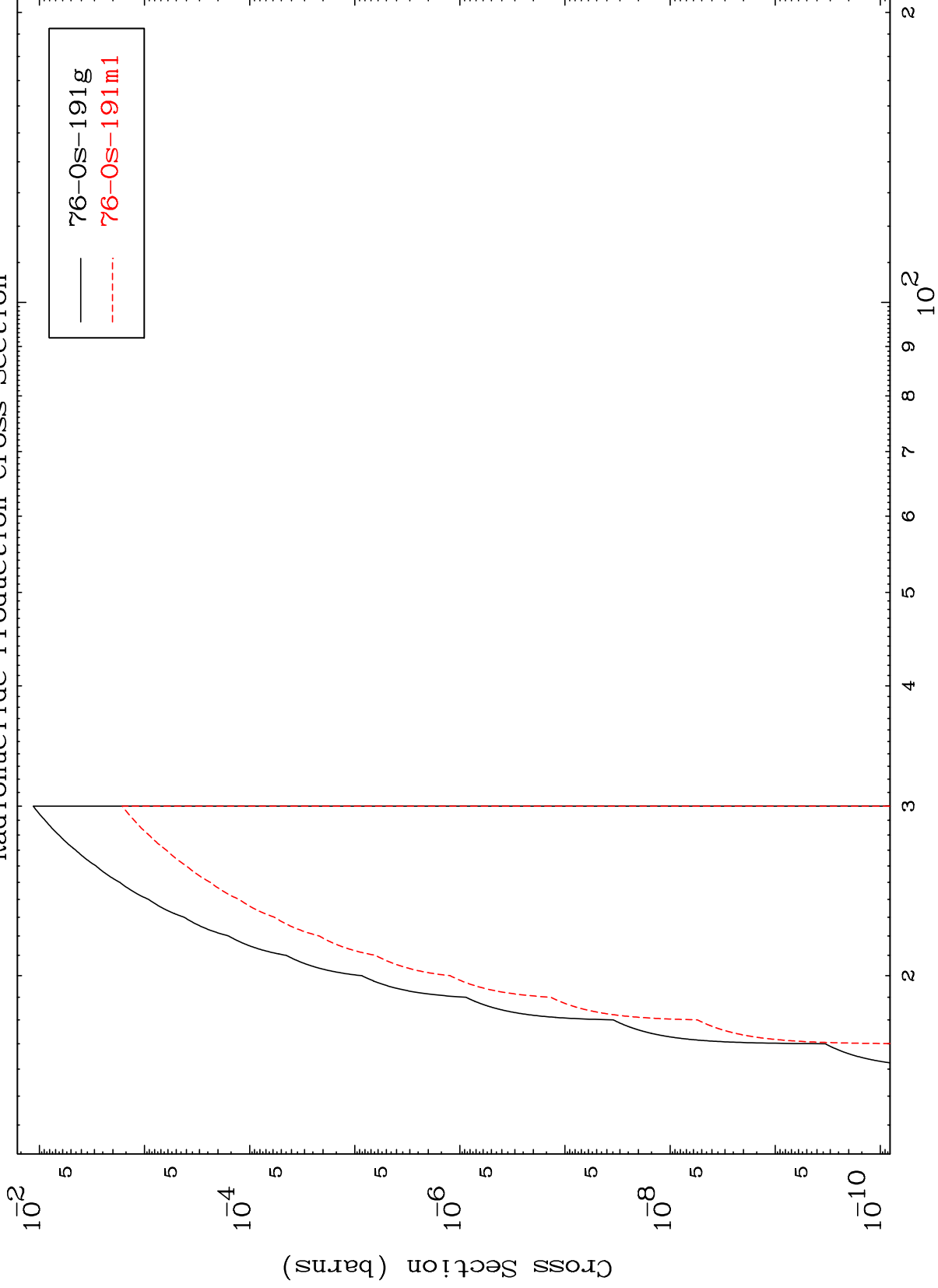


MAT 7731

(n,2n) p

77-Ir-193

Radionuclide Production Cross Section



150

Incident Energy (MeV)

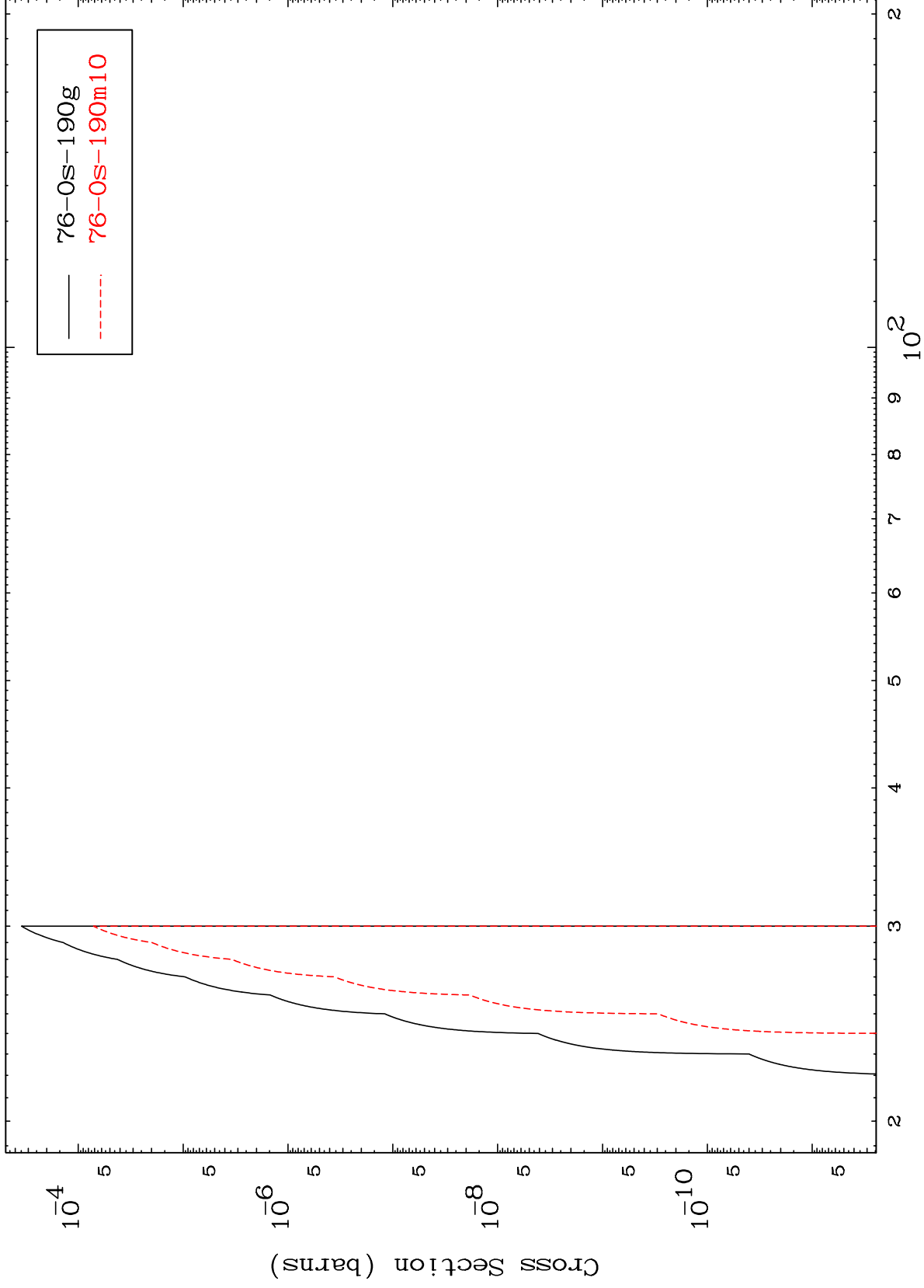
77-Ir-193

MAT 7731

(n,3n) p

77-Ir-193

Radionuclide Production Cross Section



151

Incident Energy (MeV)

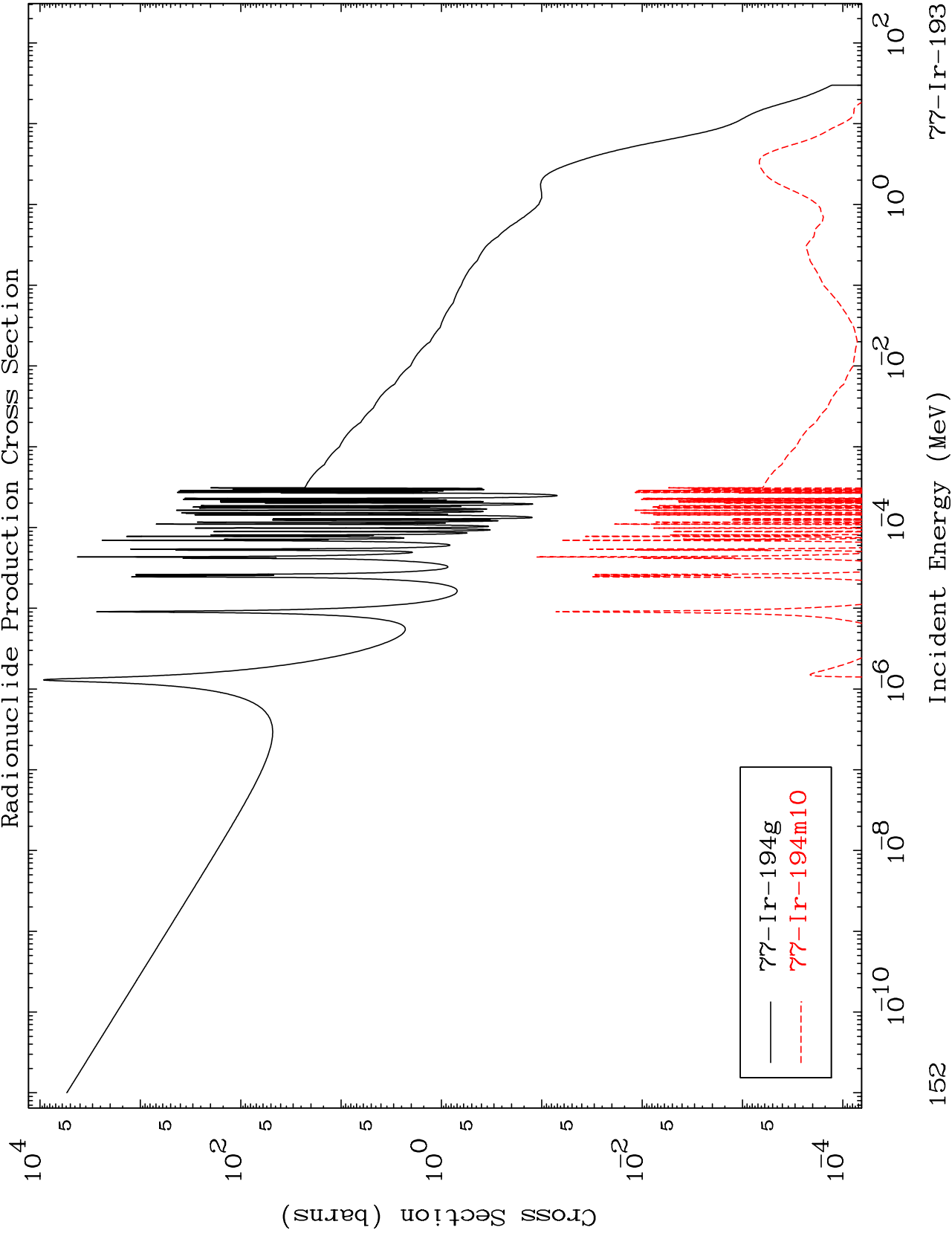
77-Ir-193



MAT 7731

<sup>77</sup>Ir-193

<sup>(n,γ)</sup>  
Radionuclide Production Cross Section



152

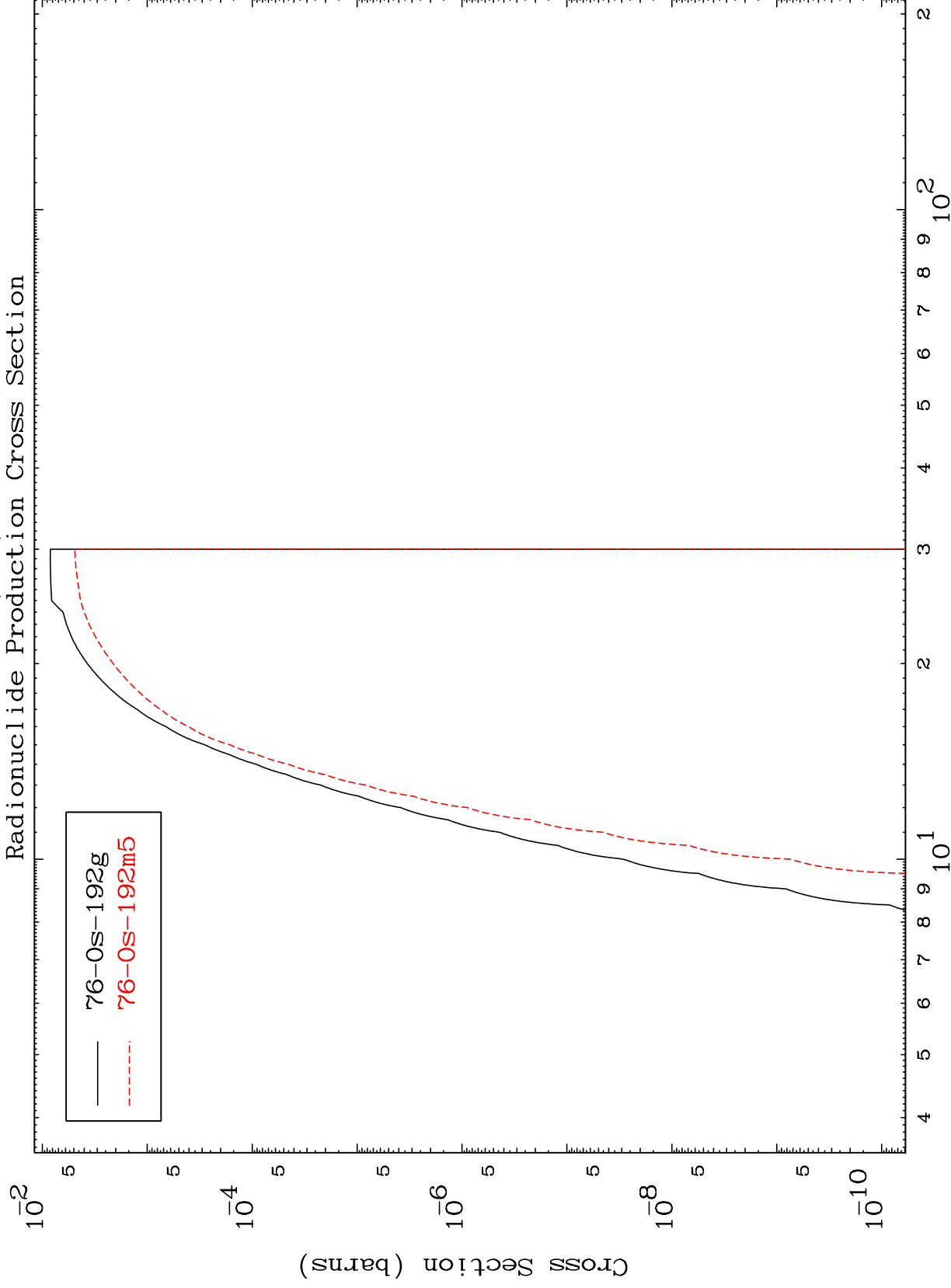
<sup>77</sup>Ir-193

MAT 7731

(n,d)

<sup>77</sup>Ir-193

Radionuclide Production Cross Section



153

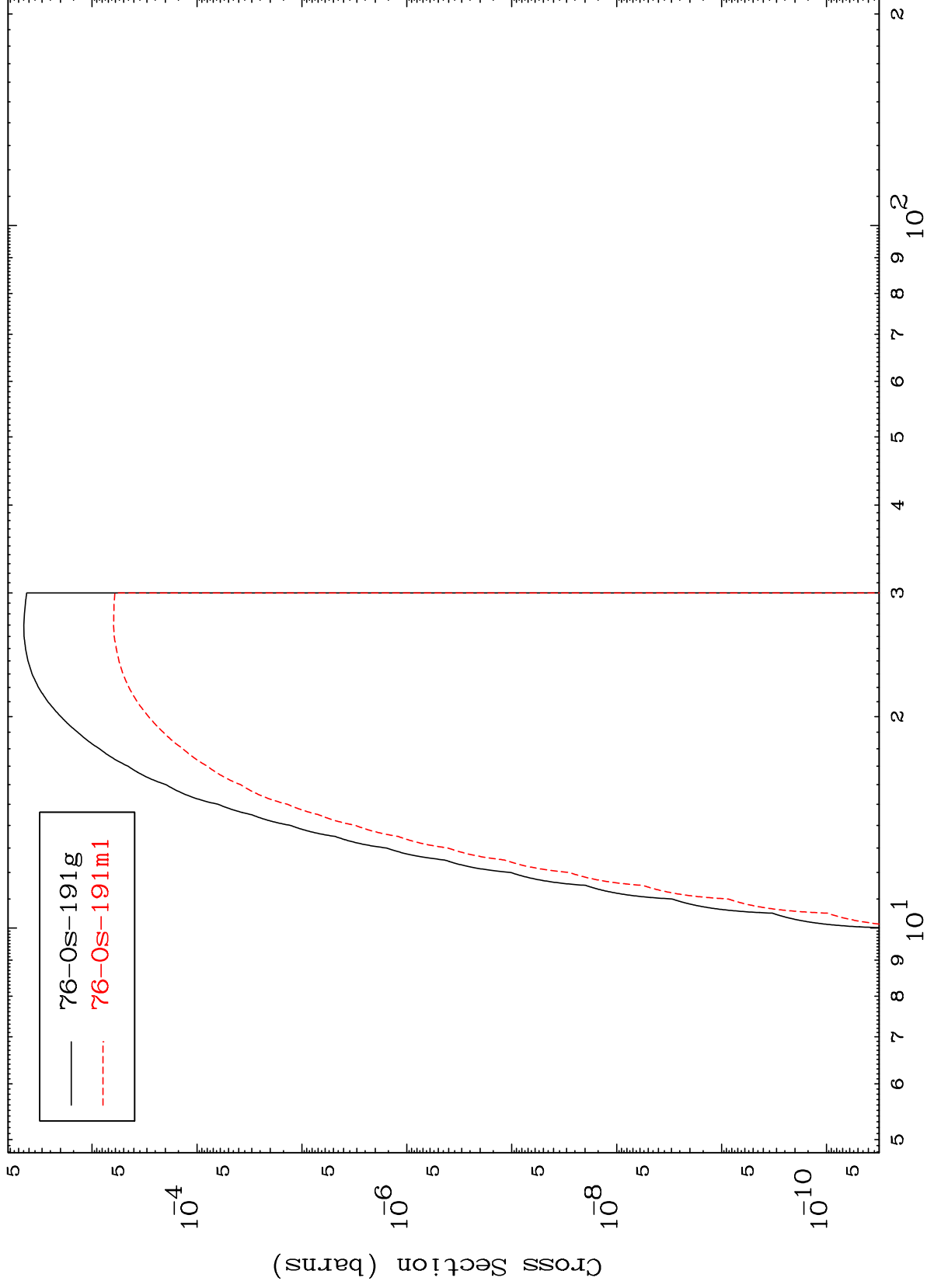
Incident Energy (MeV)

<sup>77</sup>Ir-193

MAT 7731

77-Ir-193

(n, t)  
Radionuclide Production Cross Section



154

Incident Energy (MeV)

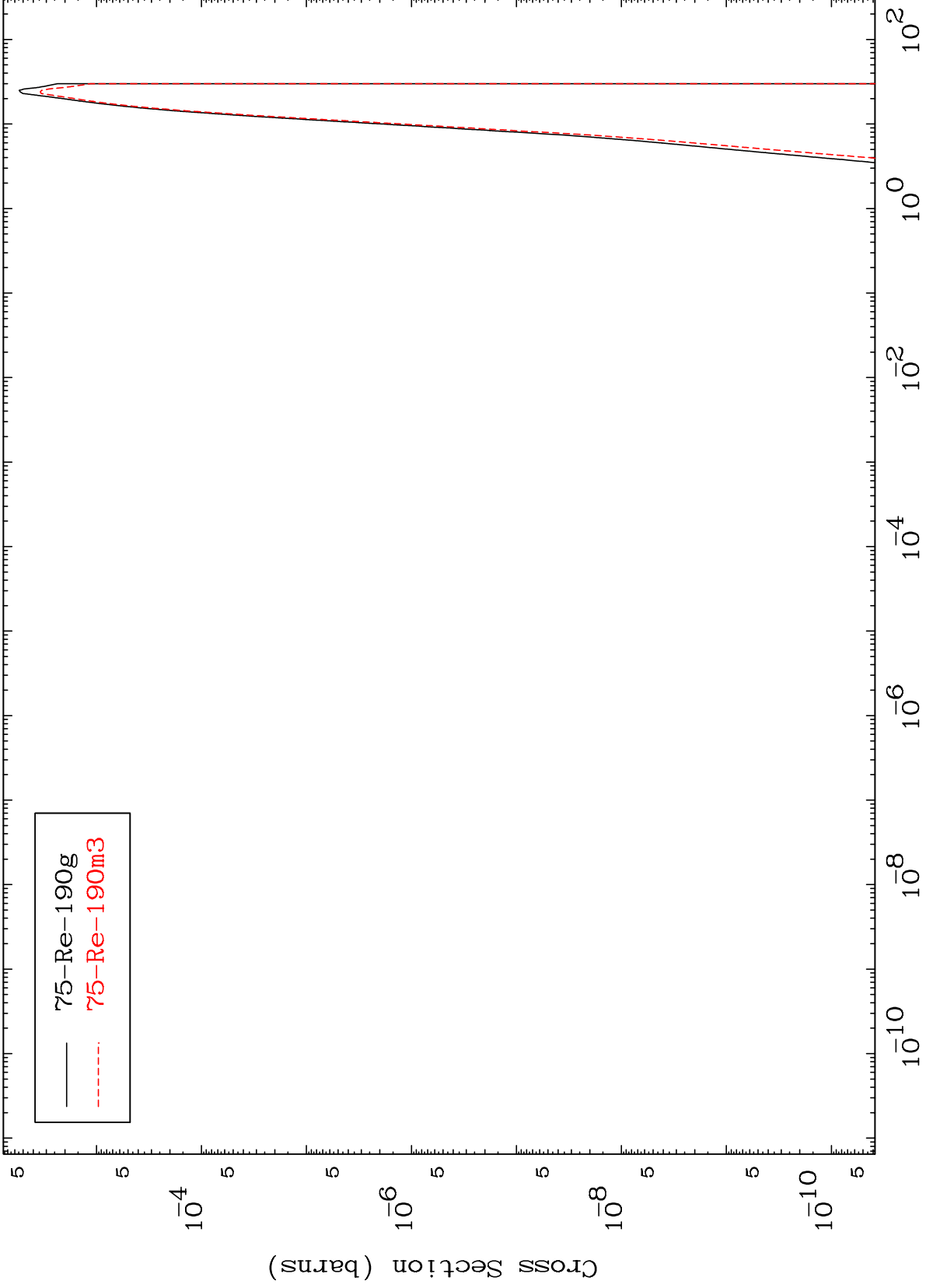
77-Ir-193

MAT 7731

(n,  $\alpha$ )

<sup>77</sup>Ir-193

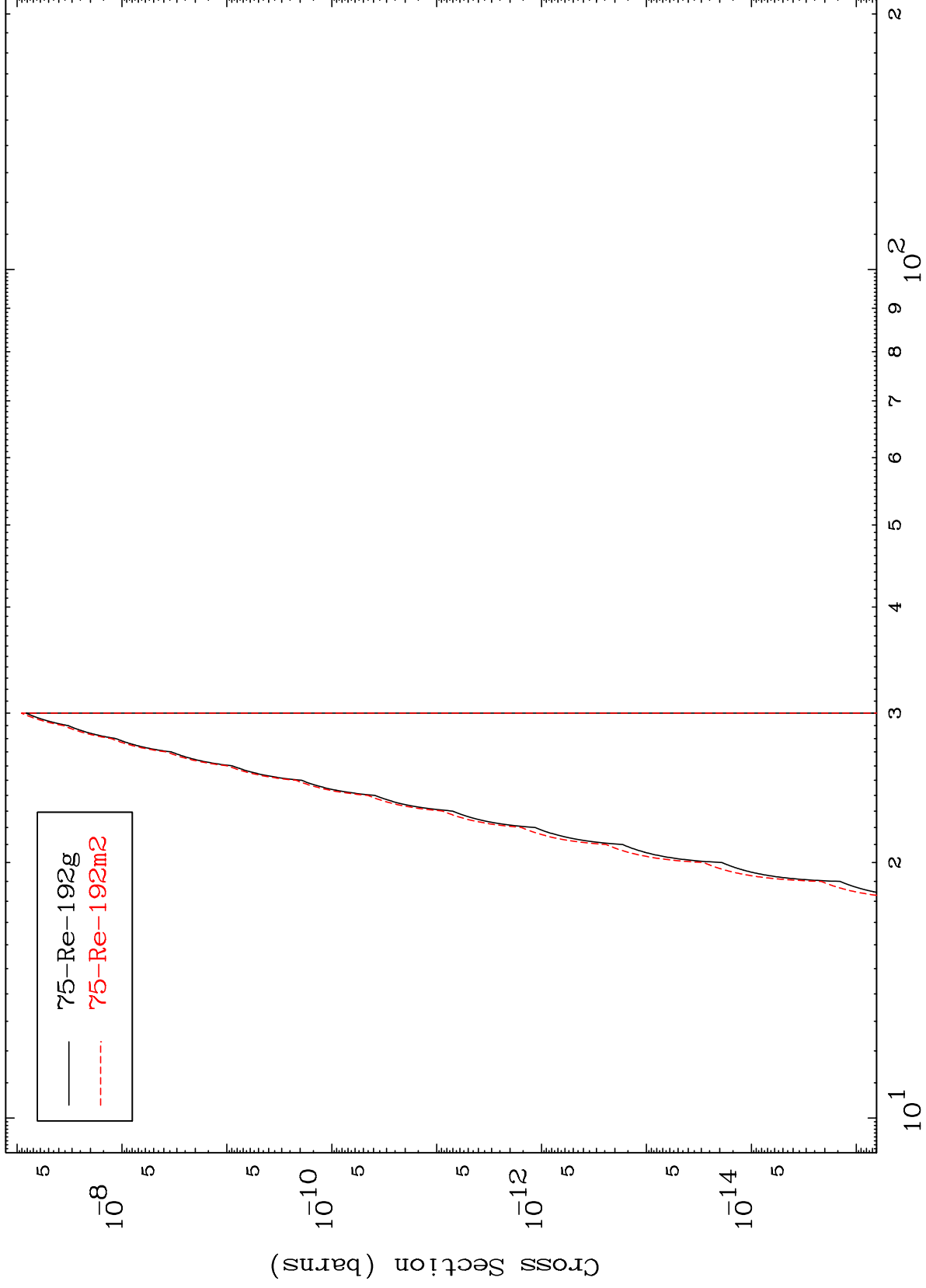
Radionuclide Production Cross Section



MAT 7731

77-Ir-193

(n,2p)  
Radionuclide Production Cross Section



75-Re-192g  
75-Re-192m2

77-Ir-193

Incident Energy (MeV)

156