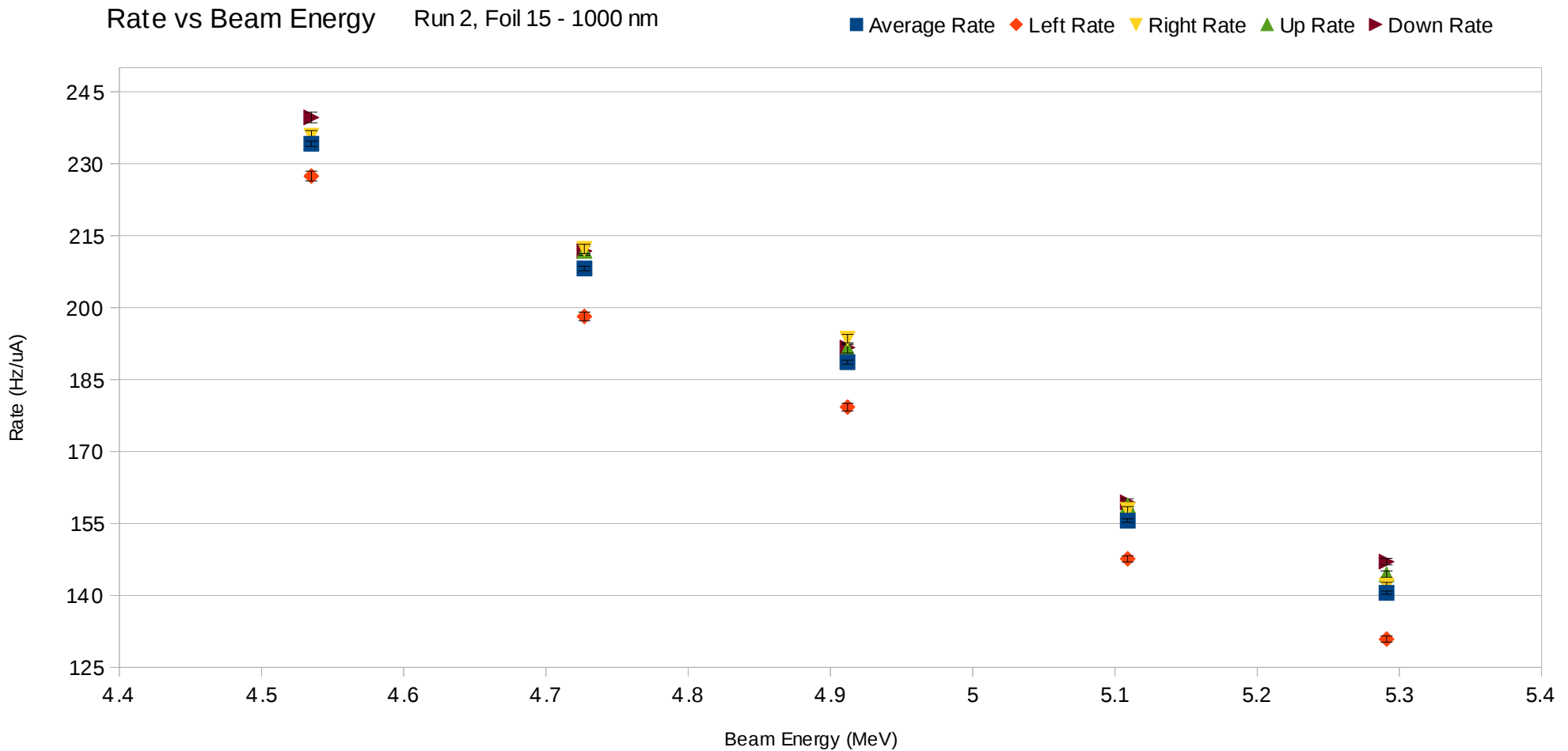


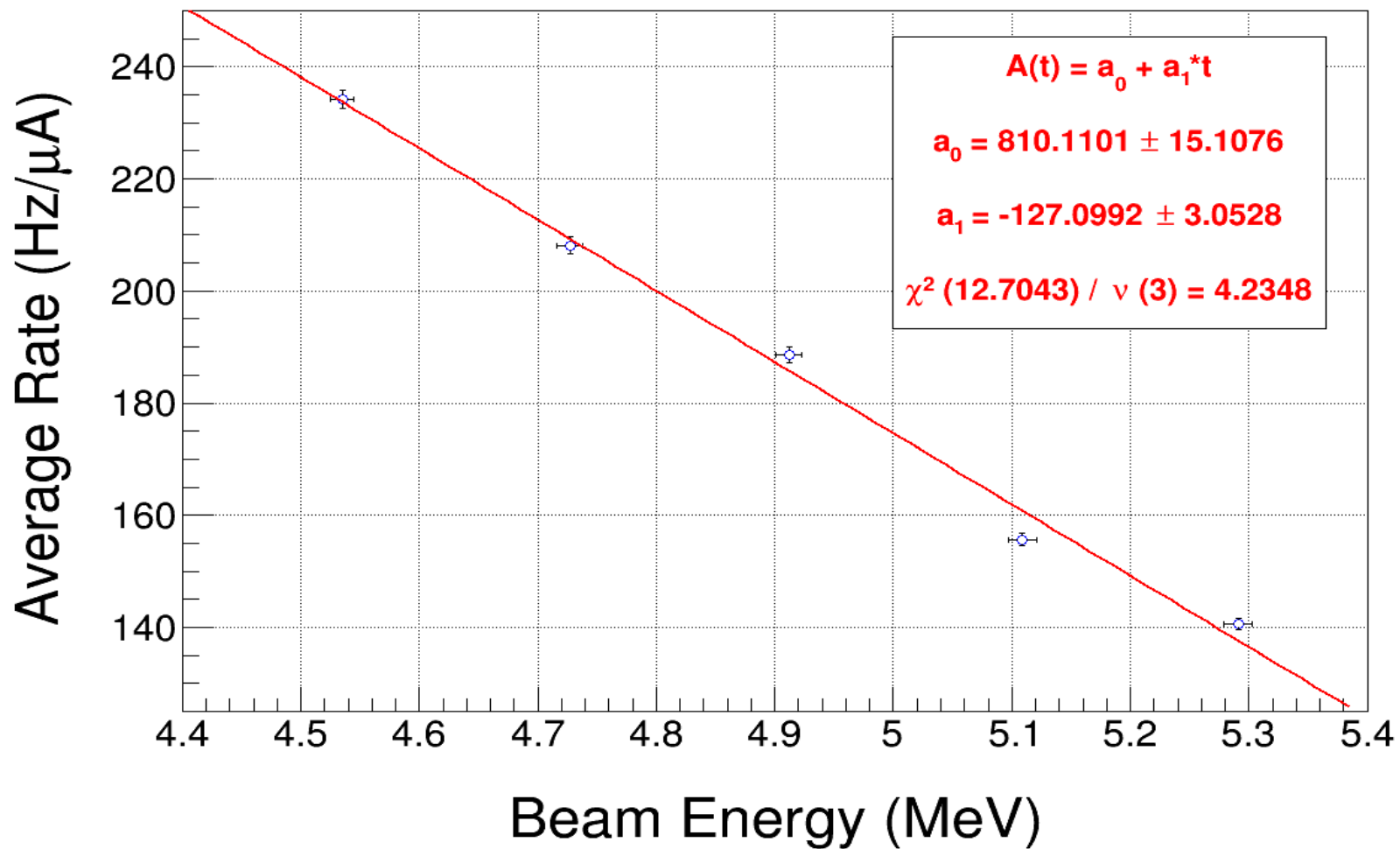
# Run 2 Rates vs Beam Energy (T), Foil 15 – 1000 nm

Foil 15 – 1000 nm												
R028	T	dT	Average Rate	dR_avg	Left Rate	dR_L	Right Rate	dR_R	Up Rate	dR_U	Down Rate	dR_D
MV/m	MeV	MeV	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA
3.350	4.535	0.010	234.140	1.633	227.404	3.182	235.824	3.299	234.260	3.277	239.620	3.314
3.740	4.727	0.011	208.148	1.460	198.157	2.780	212.221	2.974	211.850	2.969	211.781	2.969
4.120	4.912	0.011	188.620	1.324	179.266	2.517	193.517	2.714	191.416	2.685	191.679	2.687
4.500	5.109	0.012	155.603	1.091	147.628	2.072	157.830	2.213	158.752	2.226	159.419	2.231
4.890	5.291	0.012	140.568	0.986	130.905	1.841	142.039	1.996	144.403	2.028	147.052	2.046



# Run 2 Rates vs Beam Energy (T), Foil 15 – 1000 nm

Linear Fit of average rate accounting for both X and Y errorbars



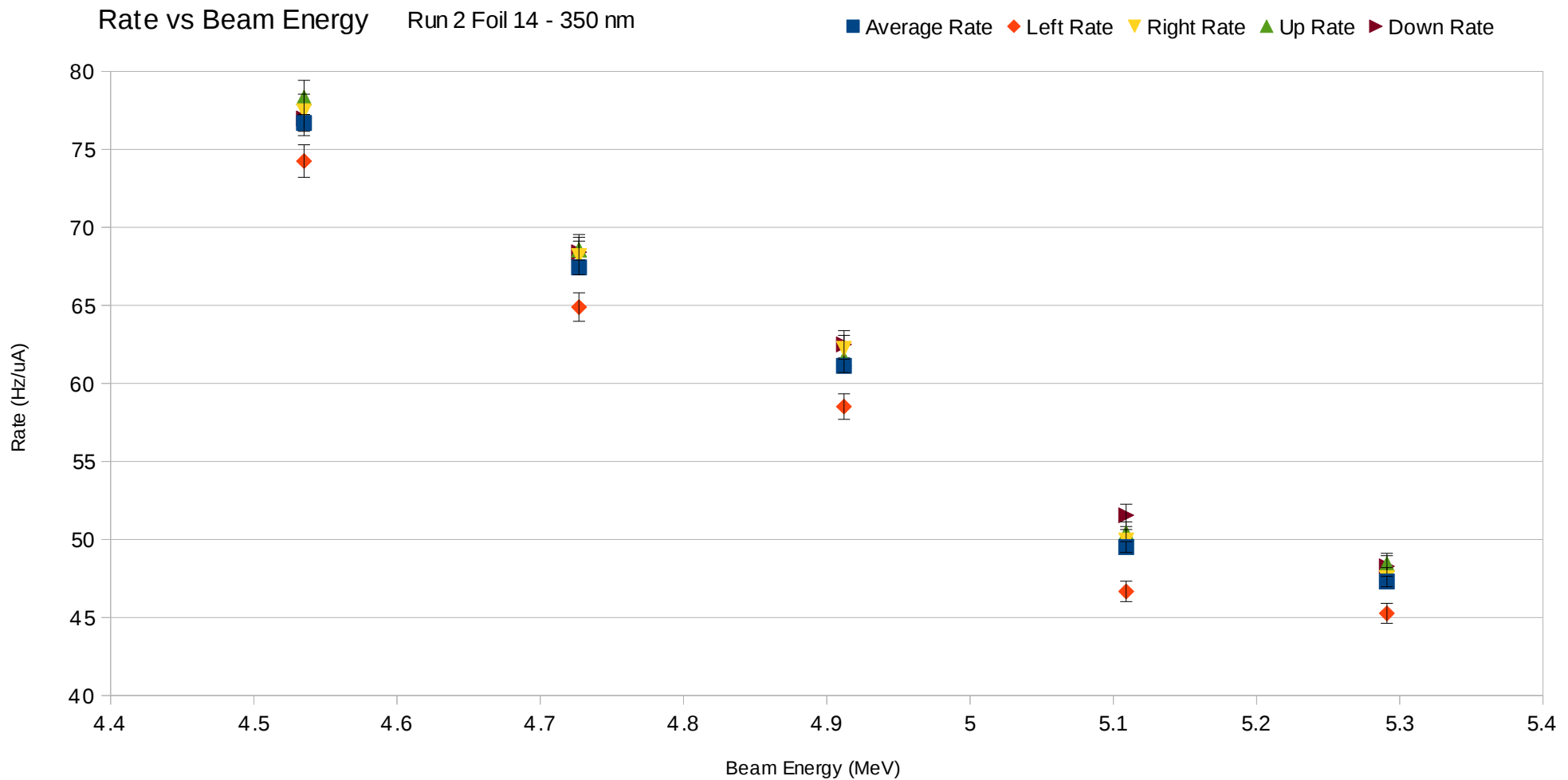
Offset = 810.11 +/- 15.1076 (Hz/uA)

Slope = -127.099 +/- 3.05281 (Hz/uA / MeV)

Reduced chi-quared = 4.23476

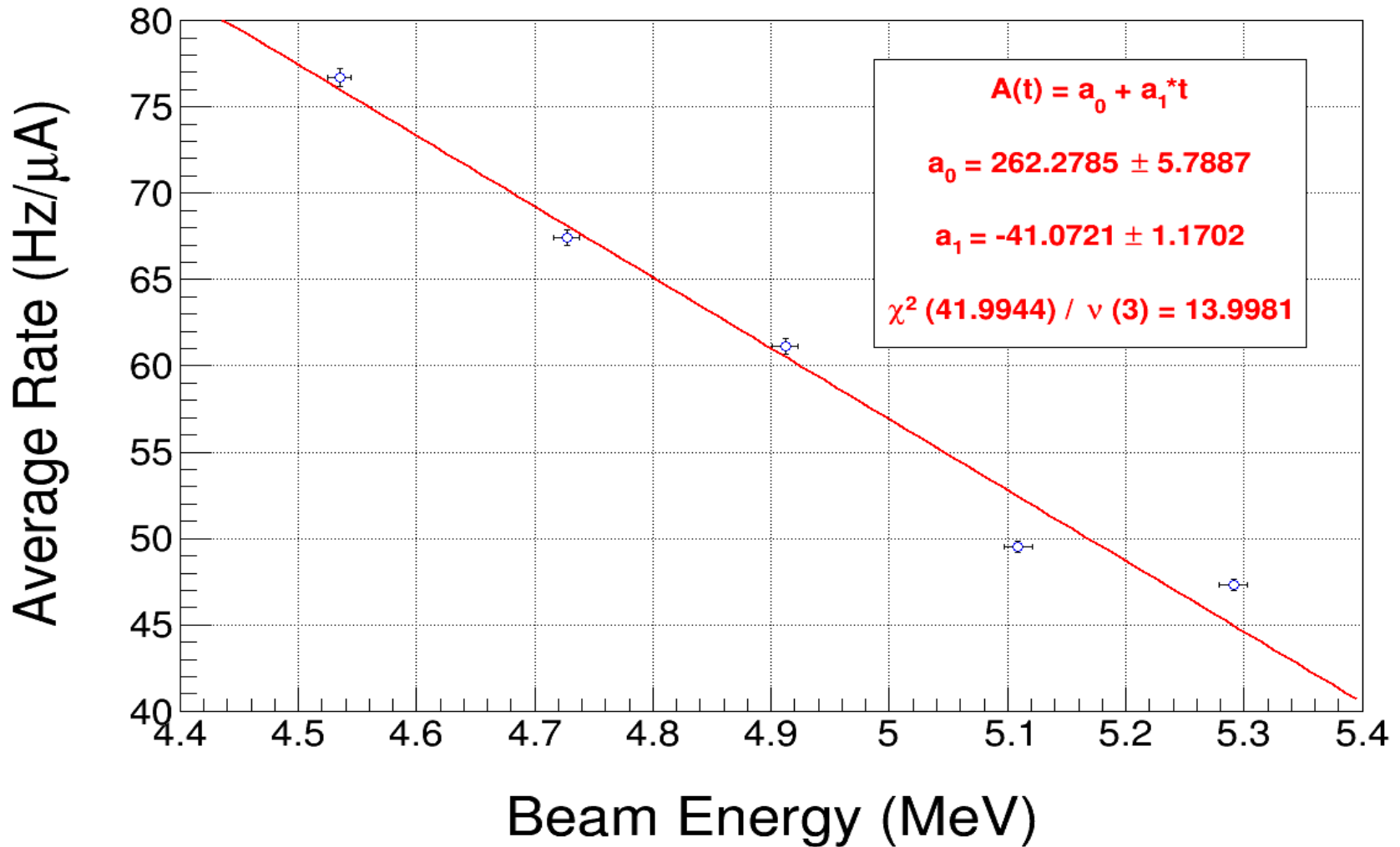
# Run 2 Rates vs Beam Energy (T), Foil 14 – 350 nm

Foil 14 – 350 nm												
R028	T	dT	Average Rate	dR_avg	Left Rate	dR_L	Right Rate	dR_R	Up Rate	dR_U	Down Rate	dR_D
MV/m	MeV	MeV	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA
3.350	4.535	0.010	76.690	0.538	74.252	1.040	77.451	1.085	78.332	1.097	76.973	1.087
3.740	4.727	0.011	67.440	0.473	64.897	0.910	68.162	0.956	68.575	0.961	68.409	0.960
4.120	4.912	0.011	61.129	0.428	58.519	0.822	62.215	0.873	61.593	0.864	62.507	0.871
4.500	5.109	0.012	49.520	0.348	46.671	0.657	49.937	0.702	50.420	0.709	51.554	0.717
4.890	5.291	0.012	47.310	0.333	45.269	0.636	47.533	0.668	48.436	0.680	48.281	0.679



# Run 2 Rates vs Beam Energy (T), Foil 14 – 350 nm

Linear Fit of average rate accounting for both X and Y errorbars



Offset = 262.2785 +/- 5.7887 (Hz/uA)

Slope = -41.0721 +/- 1.1702 (Hz/uA / MeV)

Reduced chi-quared = 13.9881

# Run I Beam Energy from Run II Rates vs Beam Energy

## Run I Asymmetry vs Thickness Runs, Rates Averaged Together for Foils 14 and 15

T	Foil	Average Rate	dR_avg	Left Rate	dR_L	Right Rate	dR_R	Up Rate	dR_U	Down Rate	dR_D
MeV	nm – TL pos	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA	Hz/uA
?	1000 – 15	201.059	0.090	194.574	0.177	203.705	0.182	206.280	0.183	200.098	0.182
?	350 – 14	65.500	0.054	64.411	0.107	66.384	0.108	66.585	0.109	64.661	0.108

## Predicted Run I Beam Energy

	Foil	Slope	d(Slope)	Offset	d(Offset)	Average Rate	d(R_avg)		T	dT	
	nm – TL pos	(Hz/uA)/MeV	(Hz/uA)/MeV	Hz/uA	Hz/uA	Hz/uA	Hz/uA		MeV	MeV	
	1000 – 15	-127.099	3.053	810.110	15.108	201.059	0.090	=>	4.792	0.013	
	350 – 14	-41.072	1.170	262.279	5.789	65.500	0.054	=>	4.791	0.019	