Table I. Cross sections for inelastic electron scattering from protons for SLAC experiment NE11. The errors shown include statistical and point-to-point systematic uncertainties added in quadrature, but do not include an overall normalization error of about 1.8%. Also shown are RC, the applied multiplicative radiative corrections to the raw cross sections after elastic tail subtraction, and RT, the subtracted elastic radiative tail.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	RT (nb/sr-GeV)	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
			$E = 5.507$ GeV $\theta = 15.146°$		
4.437	1.698	0.944	1.82	7.58	4.21 ± 1.04
4.429	1.694	0.944	1.73	7.20	4.85 ± 1.06
4.420	1.691	0.943	1.68	6.86	5.86 ± 1.08
4.411	1.687	0.943	1.64	6.57	8.76 ± 1.13
4.402	1.684	0.943	1.62	6.3	12.1 ± 1.2
4.393	1.681	0.942	1.60	6.0	15.4 ± 1.2
4.384	1.677	0.942	1.59	5.8	17.5 ± 1.3
4.375	1.674	0.941	1.58	5.6	22.5 ± 1.4
4.367	1.670	0.941	1.57	5.4	26.4 ± 1.5
4.358	1.667	0.940	1.56	5.3	32.9 ± 1.6
4.349	1.664	0.940	1.56	5.1	37.6 ± 1.7
4.340	1.660	0.940	1.55	5.0	48.5 ± 1.9
4.331	1.657	0.939	1.53	4.8	56.1 ± 2.0
4.322	1.654	0.939	1.51	4.7 [2]	62.2 ± 2.1
4.313	1.650	0.938	1.49	4.6	64.3 ± 2.1

Table I. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	RT (nb/sr-GeV)	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
			$E = 5.507$ GeV $\theta = 18.981°$		
4.060	2.431	0.906	2.10	1.450	0.549 ± 0.144
4.048	2.424	0.905	1.80	1.337	0.814 ± 0.129
4.035	2.417	0.904	1.70	1.24	1.21 ± 0.13
4.024	2.409	0.903	1.64	1.17	1.76 ± 0.14
4.011	2.402	0.903	1.61	1.10	2.13 ± 0.15
3.999	2.395	0.902	1.59	1.04	2.94 ± 0.18
3.987	2.388	0.901	1.58	0.99	4.20 ± 0.20
3.975	2.380	0.900	1.57	0.95	6.19 ± 0.23
3.963	2.373	0.899	1.55	0.91	7.57 ± 0.25
3.951	2.366	0.898	1.53	0.87	9.30 ± 0.27
3.938	2.359	0.898	1.50	0.8	10.8 ± 0.3
3.927	2.351	0.897	1.45	0.8	11.4 ± 0.3
3.914	2.344	0.896	1.40	0.8	11.3 ± 0.3
3.902	2.337	0.895	1.35	0.8	10.7 ± 0.3
3.890	2.330	0.894	1.31	0.75	9.99 ± 0.30
3.878	2.322	0.893	1.28	0.73	9.38 ± 0.32
3.866	2.315	0.892	1.26	0.71	9.53 ± 0.37
3.854	2.308	0.891	1.24	0.70	9.08 ± 0.47
3.842	2.300	0.890	1.23	0.68	8.84 ± 0.64
3.830	2.293	0.889	1.22	0.67	7.57 ± 1.26

			$E = 5.507$ GeV $\theta = 22.805°$		

Table I. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	RT (nb/sr-GeV)	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
3.483	2.999	0.839	1.26	0.18	2.66 ± 0.12
3.468	2.986	0.837	1.25	0.18	2.26 ± 0.18
3.454	2.973	0.836	1.24	0.17	2.08 ± 0.57
		$E = 5.507$ GeV	$\theta = 26.823°$		
3.279	3.886	0.794	1.97	0.1056	0.0376 ± 0.0086
3.263	3.867	0.793	1.69	0.0938	0.0820 ± 0.0080
3.247	3.847	0.791	1.61	0.085	0.130 ± 0.009
3.230	3.828	0.789	1.57	0.078	0.231 ± 0.011
3.214	3.809	0.787	1.55	0.073	0.382 ± 0.013
3.198	3.789	0.785	1.52	0.069	0.557 ± 0.015
3.181	3.770	0.783	1.48	0.065	0.744 ± 0.017
3.165	3.750	0.781	1.40	0.063	0.790 ± 0.018
3.149	3.731	0.779	1.33	0.060	0.808 ± 0.019
3.132	3.712	0.777	1.29	0.058	0.802 ± 0.021
3.116	3.692	0.775	1.27	0.057	0.818 ± 0.028
3.100	3.673	0.773	1.26	0.055	0.851 ± 0.046
3.083	3.654	0.771	1.26	0.054	0.575 ± 0.171
		$E = 9.800$ GeV	$\theta = 13.248°$		
7.545	3.936	0.942	2.11	0.427^4	0.234 ± 0.062
7.525	3.925	0.941	1.80	0.374	0.391 ± 0.055

Table I. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	RT (nb/sr-GeV)	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
		$E = 9.800$ GeV	$\theta = 15.367^\circ$		
7.016	4.916	0.914	1.99	0.1150	0.0844 ± 0.0190
6.988	4.896	0.913	1.74	0.096	0.183 ± 0.019
6.958	4.876	0.912	1.67	0.083	0.360 ± 0.023
6.929	4.855	0.911	1.63	0.074	0.595 ± 0.028
6.900	4.835	0.909	1.56	0.067	0.880 ± 0.039
6.870	4.815	0.908	1.46	0.06	1.04 ± 0.05
6.842	4.794	0.907	1.40	0.057	0.994 ± 0.062
6.812	4.774	0.905	1.38	0.054	0.908 ± 0.100
		$E = 9.800$ GeV	$\theta = 17.516^\circ$		
6.492	5.900	0.881	2.00	0.0381	0.0195 ± 0.0070
6.466	5.875	0.879	1.73	0.0319	0.0755 ± 0.0078
6.438	5.851	0.878	1.66	0.028	0.115 ± 0.009
6.412	5.826	0.876	1.62	0.025	0.203 ± 0.011
6.384	5.802	0.875	1.56	0.022	0.284 ± 0.014
6.358	5.777	0.873	1.47	0.021	0.317 ± 0.018
6.330	5.753	0.872	1.42	0.019	0.342 ± 0.023
6.304	5.728	0.871	1.40	0.018	0.315 ± 0.033
6.277	5.704	0.869	1.39	0.017	0.370 ± 0.114

		$E = 9.800$ GeV	$\theta = 19.753^\circ$		

Table II. Per nucleon deuteron cross sections in the quasielastic and inelastic resonance regions from SLAC experiment NE11. The errors shown include statistical and point-to-point systematic uncertainties added in quadrature, but do not include an overall normalization error of about 2%. Also shown are RC, the applied multiplicative radiative corrections to the raw cross sections.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
$E = 5.507$ GeV $\quad \theta = 15.146°$				
4.809	1.840	.957	1.50	1.02 ± 0.23
4.800	1.836	.957	1.50	0.87 ± 0.20
4.791	1.833	.957	1.51	1.13 ± 0.17
4.783	1.830	.956	1.51	1.31 ± 0.17
4.774	1.826	.956	1.52	1.71 ± 0.17
4.765	1.823	.956	1.52	2.12 ± 0.19
4.756	1.819	.956	1.53	2.14 ± 0.18
4.747	1.816	.955	1.53	2.37 ± 0.17
4.738	1.813	.955	1.53	3.10 ± 0.18
4.729	1.809	.955	1.54	3.55 ± 0.19
4.721	1.806	.955	1.54	4.56 ± 0.21
4.712	1.803	.954	1.54	5.11 ± 0.22
4.703	1.799	.954	1.55	5.90 ± 0.25
4.694	1.796	.954	1.55	6.94 ± 0.27
4.685	1.792	.954	1.55	8.36 ± 0.29

Table II. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
4.570	1.748	.950	1.44	54.0 ± 1.2
4.561	1.745	.949	1.40	53.1 ± 1.1
4.552	1.742	.949	1.36	49.9 ± 1.0
4.544	1.738	.949	1.31	45.6 ± 1.0
4.535	1.735	.948	1.27	40.2 ± 0.9
4.526	1.731	.948	1.22	35.5 ± 0.9
4.517	1.728	.948	1.17	31.4 ± 0.9
4.508	1.725	.947	1.13	27.8 ± 0.8
4.499	1.721	.947	1.10	24.9 ± 0.8
4.490	1.718	.946	1.07	22.8 ± 0.9
4.482	1.714	.946	1.04	20.9 ± 0.8
4.473	1.711	.946	1.03	19.2 ± 0.8
4.464	1.708	.945	1.02	18.0 ± 0.9
4.455	1.704	.945	1.01	17.8 ± 0.9
4.446	1.701	.945	1.02	17.7 ± 1.0
4.437	1.698	.944	1.03	17.3 ± 0.9
4.429	1.694	.944	1.05	17.2 ± 1.0
4.420	1.691	.943	1.07	18.1 ± 1.0
4.411	1.687	.943	1.10	19.8 ± 1.1
4.402	1.684	.943	1.13	20.9 ± 1.0
4.393	1.681	.942	1.15	22.5 ± 1.0
4.384	1.677	.942	1.18	24.2 ± 1.0
4.375	1.674	.941	1.20	25.5 ± 0.9
4.367	1.670	.941	1.22	27.3 ± 0.9

Table II. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
4.243	1.623	.934	1.19	41.3 ± 3.8
4.234	1.620	.934	1.18	43.6 ± 4.1
4.225	1.616	.933	1.17	40.9 ± 4.1
4.216	1.613	.933	1.16	38.9 ± 4.3
4.207	1.610	.932	1.15	39.1 ± 4.5
4.198	1.606	.932	1.14	35.9 ± 5.9
$E = 5.507$ GeV $\theta = 18.981°$				
4.496	2.692	.928	1.41	$.048 \pm 0.017$
4.484	2.685	.928	1.42	$.055 \pm 0.016$
4.472	2.678	.927	1.42	$.128 \pm 0.021$
4.460	2.671	.927	1.43	$.156 \pm 0.022$
4.448	2.663	.926	1.43	$.141 \pm 0.019$
4.435	2.656	.926	1.44	$.133 \pm 0.019$
4.423	2.649	.925	1.44	$.174 \pm 0.022$
4.411	2.642	.925	1.45	$.228 \pm 0.024$
4.399	2.634	.924	1.46	$.282 \pm 0.025$
4.387	2.627	.924	1.46	$.314 \pm 0.027$
4.375	2.620	.923	1.47	$.361 \pm 0.030$
4.363	2.613	.923	1.47	$.428 \pm 0.032$
4.351	2.605	.922	1.48	$.510 \pm 0.032$
4.338	2.598	.921	1.48	$.624 \pm 0.032$
4.326	2.591	.921	1.49	$.787 \pm 0.035$

Table II. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
4.157	2.489	.912	1.36	7.08 ± 0.18
4.145	2.482	.911	1.31	6.61 ± 0.18
4.132	2.475	.910	1.26	6.04 ± 0.17
4.120	2.467	.910	1.21	5.32 ± 0.17
4.108	2.460	.909	1.17	4.75 ± 0.17
4.096	2.453	.908	1.14	4.31 ± 0.17
4.084	2.446	.907	1.11	3.94 ± 0.16
4.072	2.438	.907	1.10	3.71 ± 0.18
4.060	2.431	.906	1.10	3.51 ± 0.19
4.048	2.424	.905	1.11	3.64 ± 0.18
4.035	2.417	.904	1.12	3.71 ± 0.16
4.024	2.409	.903	1.14	4.01 ± 0.17
4.011	2.402	.903	1.17	4.18 ± 0.17
3.999	2.395	.902	1.19	4.53 ± 0.14
3.987	2.388	.901	1.21	5.00 ± 0.13
3.975	2.380	.900	1.23	5.40 ± 0.11
3.963	2.373	.899	1.24	5.67 ± 0.13
3.951	2.366	.898	1.24	5.99 ± 0.19
3.938	2.359	.898	1.25	6.44 ± 0.30
3.927	2.351	.897	1.24	6.88 ± 0.35
3.914	2.344	.896	1.24	7.23 ± 0.40
3.902	2.337	.895	1.23	7.45 ± 0.45
3.890	2.330	.894	1.22	7.62 ± 0.52
3.878	2.322	.893	1.21	7.85 ± 0.57

Table II. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
3.848	3.313	.870	1.46	0.676 ± 0.025
3.834	3.300	.869	1.46	0.865 ± 0.030
3.819	3.288	.868	1.45	1.03 ± 0.04
3.804	3.275	.867	1.44	1.24 ± 0.04
3.790	3.263	.866	1.41	1.40 ± 0.04
3.775	3.250	.865	1.38	1.54 ± 0.05
3.761	3.238	.864	1.34	1.52 ± 0.05
3.746	3.225	.862	1.30	1.43 ± 0.05
3.731	3.212	.861	1.25	1.33 ± 0.05
3.717	3.200	.860	1.21	1.23 ± 0.05
3.702	3.187	.859	1.17	1.10 ± 0.04
3.687	3.175	.858	1.15	1.05 ± 0.05
3.673	3.162	.856	1.14	1.01 ± 0.05
3.659	3.149	.855	1.15	1.01 ± 0.05
3.644	3.137	.854	1.16	1.02 ± 0.05
3.629	3.124	.852	1.17	1.09 ± 0.05
3.614	3.112	.851	1.19	1.16 ± 0.04
3.600	3.099	.850	1.21	1.31 ± 0.03
3.585	3.087	.848	1.22	1.39 ± 0.04
3.571	3.074	.847	1.23	1.51 ± 0.04
3.556	3.061	.846	1.23	1.67 ± 0.07
3.541	3.049	.844	1.22	1.79 ± 0.08
3.527	3.036	.843	1.22	1.83 ± 0.09
3.512	3.024	.841	1.21	1.95 ± 0.11

Table II. Continued.

E' (GeV)	Q^2 (GeV/c)^2	ϵ	RC	$d\sigma/d\Omega dE'$ (nb/sr-GeV)
3.426	4.060	.810	1.41	0.256 ± 0.011
3.410	4.041	.808	1.41	0.306 ± 0.013
3.393	4.021	.806	1.37	0.352 ± 0.015
3.377	4.002	.805	1.34	0.389 ± 0.017
3.361	3.983	.803	1.31	0.407 ± 0.016
3.344	3.963	.801	1.28	0.395 ± 0.018
3.328	3.944	.800	1.24	0.370 ± 0.018
3.312	3.925	.798	1.20	0.346 ± 0.015
3.295	3.905	.796	1.18	0.331 ± 0.019
3.279	3.886	.794	1.17	0.324 ± 0.018
3.263	3.867	.793	1.17	0.321 ± 0.016
3.247	3.847	.791	1.18	0.349 ± 0.016
3.230	3.828	.789	1.19	0.367 ± 0.013
3.214	3.809	.787	1.20	0.404 ± 0.014
3.198	3.789	.785	1.21	0.450 ± 0.011
3.181	3.770	.783	1.21	0.499 ± 0.018
3.165	3.750	.781	1.21	0.527 ± 0.021
3.149	3.731	.779	1.21	0.585 ± 0.022
3.132	3.712	.777	1.20	0.594 ± 0.034
3.116	3.692	.775	1.20	0.670 ± 0.043
3.100	3.673	.773	1.19	0.673 ± 0.052
3.083	3.654	.771	1.19	0.707 ± 0.174

Table III. Resonance widths and masses used in fits. The index i = Δ, 2, or 3 denotes the $\Delta(1232)$ resonance and resonances 2 and 3, respectively. Q^2 is in units of $(\mathrm{GeV/c})^2$

i	Γ_i (GeV)	M_i (GeV)
Δ	0.120	1.232
2	0.074	1.503
3	0.094	$1.677(1 + 0.0102Q^2 - 0.00084Q^4)$

Table IV. Results [?] of a global fit to the proton inelastic cross sections in units of μb and normalized to $[G_D(Q^2)]^2$. These coefficients are defined in Eqs. 3, 5, and 8. As described in the text, each coefficient has a polynomial dependence on Q^2 which is in $(\mathrm{GeV/c})^2$. The global fit gives a χ^2 per 523 degrees of freedom of 1.56.

$Q^{(2*n)}$	$\lvert F_\Delta\rvert_n^2$	A_{2n}	A_{3n}	C_{1n}	C_{2n}	C_{3n}
Q^0	1.396E+01	−3.153E+00	−4.540E−01	3.167E+02	−1.711E+01	−1.836E+02
Q^2	−2.879E+00	2.933E+01	1.935E+01	1.490E+03	−5.320E+03	4.144E+03
Q^4	1.587E−01			6.120E+02	5.364E+03	−4.890E+03
Q^6				1.823E+01	−1.224E+03	1.229E+03
Q^8				−6.437E+00	7.816E+01	−7.934E+01

Table V. NE11 and E133 $\Delta(1232)$ transition form factor results determined from cross section data and normalized to $\mu_p G_D(Q^2)$. The first uncertainty is statistical, and the second is systematic including modeling and normalization uncertainties. Also shown are the χ^2/dof values.

Q^2 (GeV/c)^2	$F_\Delta(Q^2)/\mu_p G_D(Q^2)$	χ^2/dof	Experiment
1.64	1.139± 0.007 ± 0.023	0.82	NE11
2.34	1.014± 0.007 ± 0.021	1.01	NE11
3.05	0.911± 0.008 ± 0.022	1.87	NE11
3.75	0.804± 0.008 ± 0.024	5.30	NE11
3.86	0.856± 0.014 ± 0.038	1.17	NE11
4.82	0.732± 0.020 ± 0.040	1.92	NE11
5.79	0.656± 0.024 ± 0.047	0.73	NE11
6.75	0.513± 0.052 ± 0.070	1.27	NE11
2.41	1.017± 0.009 ± 0.068	1.48	E133
3.90	0.773± 0.017 ± 0.069	0.91	E133
5.87	0.557± 0.017 ± 0.131	2.22	E133
7.86	0.431± 0.034 ± 0.174	1.50	E133
9.83	0.317± 0.046 ± 0.245	1.60	E133

Table VI. Ratios σ_n/σ_p extracted from inelastic e-d cross sections in the region of the $\Delta(1232)$ resonance for both resonant and non-resonant cross section components. The first uncertainty is statistical and the second is the quadratically combined systematic and modeling (dominant) uncertainties. The last line gives the combined χ^2/dof for each fit.

Q^2 $(\frac{\text{GeV}}{\text{c}})^2$	$(\sigma_n/\sigma_p)_\Delta$ Fit I	$(\sigma_n/\sigma_p)_{nres}$ Fit I	$(\sigma_n/\sigma_p)_{nres}$ Fit II	$(\sigma_n/\sigma_p)_{total}$ Fit III	Exp.
1.64	0.81±0.10±0.05	0.69±0.15±0.12	0.41±0.04±0.15	0.76±0.02±0.07	NE11
2.34	0.73±0.13±0.09	0.77±0.12±0.11	0.53±0.04±0.14	0.75±0.02±0.08	NE11
3.05	0.63±0.22±0.10	0.63±0.13±0.11	0.43±0.04±0.13	0.63±0.03±0.09	NE11
3.75	0.14±0.35±0.21	0.69±0.14±0.10	0.37±0.04±0.12	0.54±0.03±0.10	NE11
2.41	0.71±0.05±0.16	0.53±0.02±0.17	0.45±0.02±0.15	0.57±0.01±0.11	E133
3.90	0.61±0.10±0.21	0.45±0.03±0.13	0.36±0.02±0.12	0.48±0.01±0.10	E133
5.87	0.83±0.24±0.43	0.43±0.02±0.13	0.42±0.02±0.11	0.46±0.01±0.11	E133
7.86	1.03±1.02±0.92	0.46±0.04±0.13	0.47±0.02±0.11	0.48±0.02±0.11	E133
χ^2/dof	1.41		1.52	1.40	