

**Table 3.** Calculated characteristics (i.e. proton peak flux and fluence) of all 314 SEP events at E>10; 30; 60 and 100 MeV. The gaps denote that the event did not reach the specific energy threshold.

Proton Event								
No	Proton Peak Flux [pfu]				Fluence [cm <sup>-2</sup> sr <sup>-1</sup> ]			
	>10 MeV	>30 MeV	>60 MeV	>100 MeV	>10 MeV	>30 MeV	>60 MeV	>100 MeV
1	3.99				2.24E+05			
2	372.27	175.54	84.28	40.83	4.77E+06	1.63E+06	6.34E+05	2.68E+05
3	40.83	3.39	0.87	0.39	7.62E+06	7.83E+05	2.80E+05	1.34E+05
4	66.61	14.95	7.19	3.01	2.50E+06	6.41E+05	2.46E+05	1.12E+05
5	1733.64	126.85	14.36	2.51	8.53E+07	8.19E+06	1.31E+06	3.62E+05
6	3.11				4.86E+04			
7	13.56				5.80E+05			
8	9.18	1.8	0.63		1.90E+05	6.06E+04	2.85E+04	
9	6.28	2.13	0.89	0.39	5.58E+05	2.02E+05	9.70E+04	4.88E+04
10	102.82	3.33	1.28	0.56	6.06E+06	5.54E+05	2.01E+05	9.54E+04
11	85.68	15.21	3.69	1.12	1.23E+06	2.54E+05	8.35E+04	3.58E+04
12	6.27	1.82			1.41E+05	5.22E+04		
13	6.47	1.35			2.87E+05			
14	83.97	14.02	3.22	1.22	3.60E+06	7.27E+05	1.97E+05	6.70E+04
15	125.92	25	5.56	1.53	6.62E+06	9.73E+05	2.55E+05	9.39E+04
16	5.14	1.87	0.76	0.35	2.71E+05	1.11E+05	5.35E+04	2.71E+04
17	166.57	17.62	3.64	1.09	1.26E+07	1.39E+06	3.71E+05	1.50E+05
18	19.38	2.49	0.76		4.12E+05	1.11E+05	5.55E+04	
19	13.1	3.17	1.14	0.49	5.78E+05	2.36E+05	1.18E+05	6.14E+04
20	78.11	3.94			2.45E+06	3.11E+05		
21	7.34				5.87E+05			
22	64.64	4.65	0.89		6.22E+06	5.66E+05	2.08E+05	
23	25.09	5.03	1.66	0.75	4.67E+05	1.63E+05	8.60E+04	4.93E+04
24	4.48				6.47E+04			
25	10.46	2.6	0.84	0.4	3.72E+05	1.11E+05	5.78E+04	3.34E+04
26	2.19				1.33E+05			
27	2.12				1.94E+05			
28	13.54				1.61E+06			
29	6.41	1.77	0.75	0.39	1.99E+05	7.01E+04	3.49E+04	1.95E+04
30	6.7	2.38	1.13	0.57	6.98E+05	2.56E+05	1.29E+05	7.08E+04
31	3.68	1.86	1.07	0.64	3.85E+05	1.98E+05	1.20E+05	7.14E+04
32	12.39	2.44	1.44	0.86	1.51E+06	4.74E+05	2.58E+05	1.47E+05
33	10.43				3.67E+05			
34	111.85	3.89			8.23E+06	4.62E+05		
35	3641.16	58.29	1.92	0.47	2.79E+07	1.10E+06	2.43E+05	1.12E+05
36	896.12	46.16	2.11		3.98E+07	1.48E+06	1.65E+05	
37	23.27	4.71	1.09	0.4	7.25E+05	1.09E+05	4.08E+04	2.10E+04
38	177.27	5			1.39E+07	6.12E+05		
39	3.13				3.64E+05			
40	9.78				3.49E+05			
41	41.15				9.87E+05			
42	18.29				1.39E+06			
43	25.97	1.27	0.63	0.35	1.94E+06	4.29E+05	2.28E+05	1.33E+05
44	9.24	2.78	0.92	0.39	2.65E+05	1.15E+05	6.19E+04	3.52E+04
45	1.11	0.62	0.38	0.24	3.10E+04	1.80E+04	1.15E+04	7.01E+03
46	4.79				9.24E+04			
47	5.9				1.96E+05			

48	6.59				2.95E+05			
49	31.11	14.71	7.08	3.61	1.24E+06	4.67E+05	2.08E+05	1.02E+05
50	4749.12	999.31	137.96	21.66	3.30E+08	4.91E+07	5.11E+06	7.04E+05
51	1090.87	204.32	65.29	28.63	6.66E+07	1.08E+07	2.63E+06	9.68E+05
52	755.27	143.04	26.45	6.69	4.01E+07	6.94E+06	1.27E+06	3.30E+05
53	229.25	25.81	5.06	1.5	9.39E+06	1.25E+06	2.68E+05	8.63E+04
54	21.7	2.75	0.69	0.3	4.11E+06	7.25E+05	2.29E+05	1.05E+05
55	3.91				4.41E+05			
56	16.77				1.14E+06			
57	25.6	2.08			1.56E+06	1.72E+05		
58	2434.72	864.37	340.86	148.18	2.55E+08	7.13E+07	2.21E+07	8.41E+06
59	33667.42	4602.76	963.04	287.19	8.11E+08	1.20E+08	3.13E+07	1.76E+06
60	4071.13	805.69	218.41	121.08	2.78E+08	5.63E+07	1.42E+07	4.80E+06
61	1975.19	421.96	147.68	68.86	1.47E+08	2.61E+07	8.38E+06	3.69E+06
62	23.47	7.14	3.01	1.38	1.74E+06	5.87E+05	2.70E+05	1.33E+05
63	4.72				1.09E+06			
64	5.18				5.77E+05			
65	14.24				4.80E+05			
66	4.85	1.59	0.7	0.32	3.72E+05	1.11E+05	5.57E+04	3.08E+04
67	140.78	3.64	0.44		4.61E+06	2.05E+05	7.81E+04	
68	2857.19	111.23	5.66	0.88	1.37E+08	6.02E+06	4.18E+05	7.91E+04
69	697.29	20.51	1.05		3.14E+07	6.05E+05	8.92E+04	
70	2.14				1.03E+05			
71	15.31				1.64E+06			
72	13.54				2.32E+05			
73	10.53				1.88E+06			
74	110.84	9.79	0.99		4.57E+06	2.91E+05	5.49E+04	
75	2				2.09E+05			
76	5.82				7.54E+05			
77	333.53	71.91	25.35	10.65	8.67E+06	2.28E+06	8.16E+05	3.52E+05
78	147.53	35.62	20.29	11.34	8.38E+06	2.35E+06	9.84E+05	4.73E+05
79	84.68	33.56	15.96	7.93	3.09E+06	1.14E+06	5.10E+05	2.49E+05
80	39.01	12.26	5.21	2.66	4.96E+06	1.50E+06	6.32E+05	3.04E+05
81	69.56	2.31	0.48		2.79E+06	1.64E+05	6.28E+04	
82	3.69				2.15E+05			
83	17.76	2.24	0.78	0.35	2.50E+06	3.24E+05	1.30E+05	6.83E+04
84	183.38	6	0.64		1.10E+07	5.92E+05	1.63E+05	
85	5.03				5.31E+05			
86	4.98				6.38E+05			
87	200	3.35	0.51		5.97E+06	1.76E+05	7.55E+04	
88	8.17				4.44E+05			
89	10.73	1.09			5.15E+05	1.29E+05		
90	8.3	1.18			1.03E+06	1.90E+05		
91	2.26				1.79E+05			
92	32113.12	5051.46	492.45	58.54	5.84E+08	8.18E+07	7.54E+06	9.30E+05
93	3.04				3.44E+05			
94	45.61	1.65			5.09E+06	4.09E+05		
95	1.3				2.71E+04			
96	3.93				4.10E+05			
97	4.84				4.09E+05			

98	274.11	34.19	8.78	3.36	8.82E+06	9.72E+05	2.27E+05	8.57E+04
99	6.38	1.18			2.86E+05			
100	6.7				3.80E+05			
101	4.68				5.82E+05			
102	5.79				1.13E+06			
103	20.68	1.12			1.53E+06	1.08E+05		
104	45.61	9.64	3.55	1.53	1.72E+06	3.73E+05	1.37E+05	5.87E+04
105	184.24	35.39	8.68	2.65	3.92E+07	7.75E+06	1.98E+06	6.33E+05
106	2282.42	448.18	93.99	25.55	9.69E+07	1.84E+07	4.25E+06	1.24E+06
107	1029.4	187.98	73.25	39.49	6.64E+07	1.26E+07	3.06E+06	1.09E+06
108	21.53	2.91			1.39E+06	2.25E+05		
109	84.37	6.03	0.95		1.14E+07	9.02E+05	1.89E+05	
110	2001.58	13.48			7.76E+07	7.81E+05		
111	24.38	0.98			1.50E+06	1.18E+05		
112	193.86	5.09	0.63		9.12E+06	4.37E+05	1.73E+05	
113	3.93				2.83E+05			
114	11.43	1.11			1.27E+06	2.59E+05		
115	32.88				4.23E+05			
116	71.84	11.03	4.27	2.02	1.97E+06	5.20E+05	2.12E+05	
117	2.03				2.46E+05			
118	2.73				2.12E+05			
119	69.05	1.05			3.77E+06	1.66E+05		
120	4.25				9.27E+04			
121	2.66				1.45E+05			
122	7.08				2.82E+05			
123	9.11	1.61	0.59		6.66E+05	1.88E+05	9.63E+04	
124	2.57				1.48E+05			
125	3849.09	47.46	2.07	0.41	4.46E+07	9.91E+05	2.28E+05	1.20E+05
126	1.55				5.74E+04			
127	4.08				1.43E+05			
128	284.72	41.91	17.2	7.74	1.80E+07	2.65E+06	6.64E+05	2.71E+05
129	13.12	1.2			8.25E+05	2.05E+05		
130	1962.07	363.46	42.12	6.72	1.57E+08	2.06E+07	2.04E+06	2.92E+05
131	904.72	301.43	137.96	65.74	5.66E+07	1.43E+07	4.54E+06	1.73E+06
132	2.73				1.70E+05			
133	7.76	1.12			4.20E+05	1.67E+05		
134	14.22	3.43	1.35	0.61	6.71E+05	1.99E+05	9.92E+04	5.58E+04
135	9.73	1.61			7.70E+05	2.32E+05		
136	35.13	7.67	2.87	1.32	1.64E+06	3.57E+05	1.48E+05	7.59E+04
137	5.66	1.74			2.47E+05	9.33E+04		
138	8447.91	16.54	1.02	0.45	6.54E+07	4.52E+05	1.46E+05	8.55E+04
139	30.26	2.66	0.93	0.45	1.15E+06	1.71E+05	8.69E+04	5.06E+04
140	46.97	4.76	1.19		1.87E+06	4.17E+05	2.08E+05	
141	54.49	16.38	4.88	1.51	2.63E+06	7.17E+05	2.61E+05	1.13E+05
142	437.32	159.11	62.19	25.58	3.32E+07	9.94E+06	3.23E+06	1.13E+06
143	1212.01	229.26	23.91	2.58	9.74E+07	1.69E+07	1.83E+06	3.37E+05
144	3.58				5.70E+05			
145	121.9	39.13	13.69	5.5	4.54E+06	1.47E+06	5.33E+05	2.17E+05
146	173.59	33.53	8.16	2.45	2.76E+06	6.67E+05	2.36E+05	1.03E+05
147	10.49	2.33			9.02E+05	3.31E+05		

148	3.38	1.54			7.48E+05	4.17E+05		
149	4.16				6.84E+05			
150	475.22	26.87	5.88	2.27	3.35E+07	3.02E+06	6.90E+05	2.76E+05
151	33.32	1.58			4.66E+05	1.06E+05		
152	802.19	78.5	8.25	1.59	3.23E+07	2.51E+06	4.45E+05	1.68E+05
153	4.79	1.73			4.12E+05	2.04E+05		
154	9.65				9.67E+05			
155	245.35	51.97	11.01	2.59	9.18E+06	2.07E+06	5.42E+05	1.91E+05
156	11.76	1.91	0.9		1.85E+06	6.24E+05	3.24E+05	
157	24.2	2.58			1.45E+06	3.03E+05		
158	11.56				1.39E+06			
159	8.18	2.15			4.46E+05	1.99E+05		
160	36.79	5.54	1.42	0.67	2.83E+06	5.07E+05	1.80E+05	8.44E+04
161	46.24	3.42	0.95		3.36E+06	5.25E+05	2.35E+05	
162	10.79	2.72	0.95	0.53	3.72E+05	1.14E+05	5.18E+04	2.62E+04
163	39.25	1.44			2.33E+06	2.31E+05		
164	2.38				2.39E+05			
165	60.14	1.62			3.76E+06	2.77E+05		
166	35.26	9.83	2.85	0.85	1.53E+06	3.14E+05	1.06E+05	4.58E+04
167	4.3				5.53E+05			
168	7.32				3.27E+05			
169	18133.72	3467.59	639.84	203.39	3.96E+07	2.17E+08	3.33E+07	6.61E+06
170	14.07	3.38	0.99	0.49	6.29E+05	1.57E+05	7.10E+04	3.66E+04
171	15.71	1.31			6.15E+05	1.61E+05		
172	4.34				2.74E+05			
173	222.17	6.74	1.05	0.47	1.57E+07	9.63E+05	2.70E+05	1.18E+05
174	12.05	3.1	0.85	0.45	1.34E+06	3.71E+05	1.65E+05	8.47E+04
175	11.82	1.39			9.68E+05	2.08E+05		
176	4.08				5.31E+05			
177	10989.65	3053.99	650.54	116	7.08E+08	1.67E+08	2.88E+07	4.68E+06
178	10.19	2.6	0.94	0.43	1.94E+05	6.17E+04	2.41E+04	1.05E+04
179	68.85	10.14	2.35	0.72	2.55E+06	3.56E+05	9.52E+04	3.47E+04
180	669.89	53.88	4.52	0.63	2.39E+07	1.88E+06	2.43E+05	6.11E+04
181	3.42	1.01	0.55		5.63E+05	2.22E+05	1.22E+05	
182	36.73	4.5	1.02	0.45	2.36E+06	3.77E+05	1.40E+05	6.68E+04
183	5.96				2.48E+05			
184	26.65	3.17	0.83		2.75E+06	3.57E+05	1.21E+05	
185	832.63	128.45	14.51	2.18	3.93E+07	5.15E+06	8.23E+05	2.13E+05
186	832.63	128.45	14.51	2.18	3.81E+07	4.89E+06	7.03E+05	1.50E+05
187	5.99	2.37	1.06	0.55	2.52E+05	9.99E+04	4.36E+04	1.96E+04
188	249.42	9.3	1.44		1.37E+07	1.04E+06	1.60E+05	
189	41.31	10.31	2.68	0.86	2.43E+06	5.26E+05	1.76E+05	7.28E+04
190	825.07	379.93	200.66	105.45	3.61E+07	9.79E+06	3.72E+06	1.56E+06
191	257.46	63.03	19.3	7.32	1.15E+07	2.56E+06	7.66E+05	2.77E+05
192	43.12				4.79E+05			
193	21.71	1.61	0.67		1.70E+06	2.80E+05	1.41E+05	
194	8.4	2.92	1.25	0.57	4.33E+05	1.70E+05	7.57E+04	3.59E+04
195	20.2	3.67	0.96	0.7	1.61E+06	3.08E+05	1.38E+05	7.18E+04
196	13.29	1.26			6.21E+05	1.52E+05		
197	523.8	218.88	52.64	11.25	2.12E+07	6.39E+06	1.78E+06	5.63E+05

198	9.49	1.49	0.67		3.29E+05	1.11E+05	5.92E+04	
199	9235.54	776.03	70.5	10.56	4.36E+08	5.86E+07	6.78E+06	9.28E+05
200	1602.2	101.93	3.21		5.43E+07	4.24E+06	4.23E+05	
201	5.01				6.86E+05			
202	6.17	1.81	0.74		2.39E+05	7.55E+04	3.19E+04	
203	9.53	2.42	0.78		8.33E+05	2.35E+05	1.11E+05	
204	20.59	4.57	1.61	0.73	1.52E+06	5.48E+05	2.43E+05	1.15E+05
205	23895.46	4253.31	596.06	86.64	9.14E+08	1.66E+08	2.10E+07	3.05E+06
206	22.83				2.37E+06			
207	13285.65	633.44	26.25	1.84	4.57E+08	3.75E+07	2.26E+06	2.92E+05
208	2.42				2.14E+05			
209	615.04	258.42	78.27	22.36	2.31E+07	4.80E+06	1.17E+06	3.29E+05
210	54.9	3.44			1.84E+06	2.37E+05		
211	75.92	4.52	0.87		1.47E+07	1.16E+06	3.97E+05	
212	65.11	2.71			6.80E+06	4.94E+05		
213	12.22	1.81			2.27E+06	4.11E+05		
214	7.6	1.79	0.65		2.24E+05	7.22E+04	3.54E+04	
215	38.94	2.41	0.78		3.17E+06	3.82E+05	1.76E+05	
216	15.45				4.98E+05			
217	12.21				9.42E+05			
218	18.58	1.67	0.64		1.06E+06	2.39E+05	1.27E+05	
219	1822.47	406.24	57	7.59	1.77E+08	3.36E+07	4.40E+06	6.48E+05
220	574.35	7.09			6.48E+06	3.99E+05		
221	17.26	2.56	0.78		1.50E+06	4.89E+05	2.46E+05	
222	163.94	3.4	0.83		6.72E+06	4.41E+05	1.58E+05	
223	21.62	2.51			7.06E+06	9.74E+05		
224	19.17	1.18			6.27E+05	1.17E+05		
225	4.54	1.07			9.15E+05	3.32E+05		
226	29.6	9.85	2.97	0.92	1.44E+06	3.97E+05	1.34E+05	5.26E+04
227	241.41	104.46	39.6	15.58	1.99E+07	3.06E+06	8.55E+05	2.96E+05
228	145.94	2.86			2.34E+06	2.89E+05		
229	2.54				1.91E+05			
230	278	8.04	0.87		8.29E+06	4.57E+05	1.26E+05	
231	2.73				3.25E+05			
232	3.86				1.27E+05			
233	86.55	2.4	0.69	0.52	2.74E+06	2.72E+05	1.16E+05	6.07E+04
234	22.46	5.43	1.69	0.58	8.10E+05	1.87E+05	5.92E+04	2.29E+04
235	24.71	0.89			2.24E+06	1.67E+05		
236	5.62				4.40E+05			
237	458.32	25.43	2.77	0.65	1.38E+07	9.60E+05	1.28E+05	3.79E+04
238	25849.21	3098.57	388.29	50.17	8.39E+08	1.48E+08	1.82E+07	2.48E+06
239	3238.28	613.87	151.22	42.72	1.58E+08	2.73E+07	5.37E+06	1.24E+06
240	1445.06	287.93	62.64	20	1.08E+08	9.61E+06	1.37E+06	3.00E+05
241	326.98	34.65	3.53	1.16	1.69E+07	1.87E+06	3.24E+05	1.07E+05
242	8.17	1.19			2.68E+05	5.55E+04		
243	16.53	1.36			2.48E+06	2.86E+05		
244	104.76	2.44			4.41E+06	2.75E+05		
245	45.03	1.9			2.03E+06	1.63E+05		
246	5.9	1.47			6.21E+05	2.29E+05		
247	2350.25	20.16	1.11		1.34E+07	5.95E+05	1.72E+05	

248	9.12	1.91			5.79E+05	1.99E+05		
249	315.71	5.24	0.98		1.45E+07	4.86E+05	2.05E+05	
250	56.42	6.17	3.04	2.92	1.95E+06	3.79E+05	1.46E+05	7.33E+04
251	3.96				3.37E+05			
252	58.3	12.1	2.82	0.73	1.58E+06	3.75E+05	1.15E+05	4.60E+04
253	522.56	16.29	1.74		1.38E+07	4.52E+05	7.47E+04	
254	144.11	4.62			6.39E+06	2.27E+05		
255	415.2	30.19	4.15	1.08	2.22E+07	2.10E+06	4.25E+05	1.60E+05
256	5.15				6.95E+05			
257	10.66	2.14	0.83		3.49E+05	8.17E+04	3.57E+04	
258	356.2	30.63	2.75		2.18E+07	1.62E+06	1.84E+05	
259	4220.47	771.52	72.48	7.24	1.76E+08	2.91E+07	2.91E+06	3.22E+05
260	2684.11	1405.89	861.13	480	7.36E+07	2.46E+07	8.74E+06	3.22E+06
261	5.67				6.27E+05			
262	4019.83	10.18			3.65E+07	5.28E+05		
263	43	13.33	4.45	1.36	2.31E+06	6.91E+05	2.17E+05	7.91E+04
264	15.13	1.69			5.14E+05	8.18E+04		
265	121.65	9.19	1.11		1.10E+07	8.26E+05	1.75E+05	
266	22.71	3.35	0.77		1.80E+06	4.10E+05	1.80E+05	
267	43.86	3.04	0.92		1.21E+07	1.33E+06	5.28E+05	
268	8.99	1.41	0.77		2.87E+05	6.38E+04	3.13E+04	
269	345.68	16.18	1.52	0.97	2.47E+07	1.09E+06	2.20E+05	9.86E+04
270	1941.83	108.1	14.54	3.25	1.54E+08	1.52E+07	2.42E+06	5.63E+05
271	276.2	8.04	1.04		1.57E+07	7.58E+05	1.51E+05	
272	4.18	1.64			3.08E+05	1.41E+05		
273	10.29	2.68			4.83E+05	1.62E+05		
274	1901.34	229.35	33.66	6.89	1.50E+08	1.70E+07	2.46E+06	5.11E+05
275	690.88	302.84	109.86	39.97	3.98E+07	9.86E+06	2.74E+06	8.04E+05
276	17.77	3.66	1.12	0.52	8.07E+05	2.20E+05	9.02E+04	4.32E+04
277	7.46				2.40E+05			
278	16.19	2.32			8.58E+05	4.23E+05		
279	5.61				4.00E+05			
280	32.91	3.71	1.08		3.90E+06	6.41E+05	3.01E+05	
281	7.29	2.77	1.12		2.45E+05	1.02E+05	4.64E+04	
282	11.1	2.43			6.43E+05	2.41E+05		
283	4.82	1.95			5.22E+05	2.45E+05		
284	55.45	19	5.93	1.75	4.01E+06	1.34E+06	4.81E+05	1.94E+05
285	4.52				1.06E+06			
286	59	13.56	2.99	0.85	6.28E+06	1.01E+06	3.44E+05	1.60E+05
287	3.88	1.43			1.05E+05	5.69E+04		
288	27.25	11.79	3.8	1.24	9.56E+05	3.72E+05	1.64E+05	7.91E+04
289	7.66	2.99	1.22	0.63	9.00E+05	4.55E+05	2.41E+05	1.30E+05
290	22.99	2.15	0.98		4.63E+06	9.50E+05	4.66E+05	
291	7.88				8.24E+05			
292	3.83	1.77	0.89		6.93E+05	4.04E+05	2.32E+05	
293	48.14	2.77	0.98		4.12E+06	6.00E+05	3.12E+05	
294	3.5	1.47			1.41E+05	6.97E+04		
295	3.35				6.01E+05			
296	3806.43	204.33	8.71	0.84	2.41E+08	1.65E+07	9.15E+05	1.69E+05
297	535.77	83.95	16	4.43	4.54E+07	6.67E+06	1.18E+06	3.37E+05

298	4.02				6.14E+05			
299	3.76				5.32E+05			
300	4200.59	431.01	102.68	23.14	2.35E+08	4.69E+07	8.96E+06	1.85E+06
301	297.34	34.57	4.33	0.81	9.05E+06	9.93E+05	2.63E+05	1.11E+05
302	215.65	98.86	29.89	9.48	6.82E+06	1.99E+06	6.82E+05	2.65E+05
303	10.24				8.01E+05			
304	10.17				3.25E+05			
305	15.91	5.05	1.52	0.59	2.01E+06	6.94E+05	3.25E+05	1.67E+05
306	58.61	2.98	0.91		3.45E+06	4.73E+05	2.48E+05	
307	82.25	4.53	0.92		3.18E+06	2.60E+05	8.74E+04	
308	54.92	10.03	1.95	0.52	5.26E+06	8.03E+05	2.51E+05	1.15E+05
309	11.53	4.96	1.58	0.5	2.28E+06	9.20E+05	3.08E+05	1.15E+05
310	34.44	1.73			3.30E+06	4.95E+05		
311	19.6	2.81	0.84		9.96E+05	3.29E+05	1.65E+05	
312	6.01				5.38E+05			
313	2.71				1.88E+05			
314	10.42	1.46			1.08E+06	3.21E+05		

---