

RBSPA (MagEIS electrons)

LOW/M75/HIGH

All energies in keV

Does not include any channel changes on M35

Array	2012/09/19 00:00:00	2012/10/04 19:00:00	2013/02/24 00:00:00	2013/03/31 00:00:00	2013/08/03 00:00:00	Start UTC
index	2012/10/04 19:00:00	2013/02/24 00:00:00	2013/03/31 00:00:00	2013/08/03 00:00:00	PRESENT	Stop UTC
0	15*	15*	15*	15*	15*	
1	23^	23^	23^	20^	20^	
2	38	38	38	33	33	
3	58	58	58	54	54	
4	82	82	82	80	80	
5	110	110	110	108	108	
6	132*	145	132*	132*	132*	
7	145	182	145	143	143	
8	154^	221	154^	144^	144^	
9	182	224	182	184	184	
10	221	249	221	226	226	
11	243	323	243	235	235	
12	338	354	338	346	346	
13	460	460	460	470	470	
14	597	584	597	597	597	
15	741	741	741	749	749	
16	879	879	879	909	909	
17	1042	1042	1042	1064	1064	
18	1088*	1088	1088	1079	1079	
19	1650*	1650	1650	1650	1575	
20	1768*	1768	1768	1768	1728	
21	2280*	2280	2280	2333	2280	
22	2680*	2680	2680	2680	2619	
23	3455*	3455	3455	3618	3618	
24	3969*	3969	3969	4062	4062	

LUT: 16385/24577/XXXXX 16385/24578/29698 16385/24577/29698 16386/24579/29699 16386/24579/29699

25 possible channels: 9 (LOW) + 9 (M75) + 7 (HIGH).

HIGH threshold changes

Channels 0 and 1 on both LOW and M75 are often noisy and set to FILL VALUES in the public data files.

*FILL VALUES IN ALL DATA FILES

^FILL VALUES IN PUBLIC DATA FILES

RBSPB (MagEIS electrons)

LOW/M75/HIGH

All energies in keV

Does not include any channel changes on M35

Array	2012/09/19 00:00:00	2012/09/28 16:00:00	2012/10/04 16:30:00	2012/10/17 00:00:00	2012/10/24 00:00:00	2013/02/24 00:00:00	2013/03/31 00:00:00	2013/08/03 00:00:00	Start UTC
index	2012/09/28 16:00:00	2012/10/04 16:30:00	2012/10/17 00:00:00	2012/10/24 00:00:00	2013/02/24 00:00:00	2013/03/31 00:00:00	2013/08/03 00:00:00	PRESENT	Stop UTC
0	15*	15*	15*	15*	15*	15*	15*	15*	
1	27^	27^	27^	23^	23^	23^	24^	24^	
2	38	38	38	37	37	37	32	32	
3	60	60	60	55	55	55	54	54	
4	78	78	78	77	77	77	75	75	
5	100	100	100	103	103	103	102	102	
6	129	129	129	133*	134	133*	132	132	
7	133*	133*	133*	134	168	134	133*	133*	
8	149^	166	166	168	199	168	154^	154^	
9	166	169^	169^	169^	217	169^	168	168	
10	201	201	201	199	249	199	208	208	
11	235	249	249	249	334	249	246	246	
12	339	350	350	350	362	350	354	354	
13	459	465	465	465	465	465	470	470	
14	584	584	584	584	584	584	604	604	
15	726	733	733	733	733	733	749	749	
16	875	879	879	879	879	879	899	899	
17	1040	1042	1042	1042	1042	1042	1064	1064	
18	1088*	1088*	1088	1088	1088	1088	1066	1066	
19	1612*	1612*	1612	1612	1612	1612	1575	1575	
20	1809*	1809*	1809	1809	1809	1809	1728	1728	
21	2333*	2333*	2333	2333	2333	2333	2333	2228	
22	2742*	2742*	2742	2742	2742	2742	2619	2559	
23	3455*	3455*	3455	3455	3455	3455	3455	3455	
24	3969*	3969*	3969	3969	3969	3969	3969	3878	

LUT: 17408/25600/XXXXX 17408/25601/XXXXX 17408/25601/31746 18433/25601/31746 18433/26626/31746 18433/25601/31746 18434/26627/31747 18434/26627/31747

25 possible channels: 9 (LOW) + 9 (M75) + 7 (HIGH).

HIGH threshold changes

Channels 0 and 1 on both LOW and M75 are often noisy and set to FILL VALUES in the public data files.

*FILL VALUES IN ALL DATA FILES

^FILL VALUES IN PUBLIC DATA FILES

RBSPA (MagEIS protons)

HIGH (proton telescope is housed in HIGH unit).

All energies in keV

Array	2012/09/29 00:00:00	2013/03/31 00:00:00	Start UTC
index	2013/03/31 00:00:00	PRESENT	Stop UTC
0	64	58	
1	75	69	
2	88	83	
3	105	99	
4	121	118	
5	140	140	
6	164	164	
7	191	194	
8	224	229	
9	256	267	
10	294	308	
11	346	357	
12	403	414	
13	468	479	
14	544	555	
15	631	636	
16	734	728	
17	853	840	
18	994	967	
19	1154	1111	
20	1295	1271	

LUT: 29952/29953 29954

21 possible channels.

NOTE: MagEIS proton measurements are severely degraded, due to detector damage. Please read the data caveats document available at the ECT SOC. MagEIS proton data can only reliably be used until ~mid 2013. After that the low energy channels become very noisy, and the high energy channels have degraded efficiency. WE RECOMMEND USING RBSPICE PROTONS.

RBSPB (MagEIS protons)

HIGH (proton telescope is housed in HIGH unit).

All energies in keV

Array	2012/09/29 00:00:00	Start UTC
index	PRESENT	Stop UTC
0		63
1		74
2		84
3		98
4		114
5		133
6		155
7		179
8		206
9		239
10		277
11		320
12		371
13		431
14		499
15		577
16		669
17		772
18		891
19		1032
20		1206

LUT: 32001

21 possible channels.

NOTE: MagEIS proton measurements are severely degraded, due to detector damage. Please read the data caveats document available at the ECT SOC. MagEIS proton data can only reliably be used until ~mid 2013. After that the low energy channels become very noisy, and the high energy channels have degraded efficiency. WE RECOMMEND USING RBSPICE PROTONS.