

Helios - A Backups of Compressed L.V.L. (1 of 1)  
 Copied by Tapescan utility from Den 3 to Den 4 at a 3 to 1 ratio  
 with the exception of HAL009 which was divided into HAL09A + HAL09B

	BACKUP TAPE NO.	'HAL000' TAPENO.	NUMBER OF FILES	NUMBER OF TAPEMARKS	STARTING TAPEMARK
in Library 40438	HAC001	HAL001	49	147	1
		HAL002	49	147	148
		HAL003	50	150+EOV	295
	HAC002	HAL004	47	141	1
		HAL005	49	147	142
		HAL006	38	114+EOV	289
L	HAC003	HAL007	44	132	1
		HAL008	44	132	133
		HAL009	67	201+EOV	265
	HAC004	HAL010	54	162	1
		HAL011	76	228	163
		HAL012	69	207+EOV	399
	HAC005	HAL013	<del>81</del> 81	243	1
		HAL014	25	645	244
		HAL015	105	315+EOV	889 ✓
L	HAC006	HAL016	53	159	1
		HAL017	55	165	160
		HAL018	132	396+EOV	325
	HAC007	HAL019	86	258	1
		HAL020	125	325	259
		HAL021	118	354+EOV	634
	HAC008	HAL022	107	321	1
		HAL023	147	441	322
		HAL024	218	654+EOV	763
	HAC09A	HAL025	95	285	1
		HAL026	299	897+EOV	286
	HAC09B	HAL027	599	1797+EOV	1
L	HAC010	HAL028	50	150	1
		HAL029	205	615	151
		HAL030	140	420+EOV	766
	HAC011	HAL031	154	462	1
		HAL032	133	399	463
		HAL033	43	129+EOV	862

HELIOS - A no. of files x 3 = 6 Tapes, 2 of plus 1 = starting Tapermark for next file

	BACKUP TAPE NO.	'HAL000' TAPE NO.	NUMBER OF FILES	NUMBER OF TAPEMARKS	STARTING TAPE MARK file #
	HAC012	HAL034	56	168	1
		HAL035	45	135	169
		HAL036	132	396+EOV	305
	HAC013	HAL037	72	216	1
		HAL038	86	258	257
		HAL039	116	348+EOV	475
	HAC014	HAL040	162	486	1
		HAL041	134	402	487
		HAL042	65	195+EOV	889
	HAC015	HAL043	<del>185</del> 185	555	1
		HAL044	194	582	556
		HAL045	189	567+EOV	1138
	HAC016	HAL046	139	417	1
		HAL047	35	105	418
		HAL048	214	642+EOV	524
ONLY 2 TAPES WOULD FIT	HAC017	HAL049	675	2025	1
		HAL050	145	435+EOV	2026
	HAC018	HAL051	192	576	1
		HAL052	192	576	577
		HAL053	334	1002+EOV	1153
ONLY 2 TAPES WOULD FIT	HAC019	HAL054	246	738	1
		HAL055	361	1083+EOV	739
	HAC020	HAL056	269 x3	807+	1
		HAL057	644	1932+EOV	808
	HAC021	HAL058	340	1020	1
		HAL059	353	1059	1021
		HAL060	350	1050+EOV	1060
no longer need TH1 - only 2 Tapes would fit	HAC022	HAL061	244	starting file for next tape 245	
		HAL062	400	645+EOV	
	HAC023	HAL063	584	1752	001
		HAL064	352	1056+EOV	585
only 2 tapes	HAC024	HAL065	317	951	001
		HAL066	254	762+EOV	318

Helios - H

LTSCPVA

3 TM = Natives

BACKUP TAPE NO.	'HAL 000' TAPE NO.	NUMBER OF FILES	NUMBER OF TAPE MARKS	STARTING FILE #
HAC025	HAL067	266	798	001
	HAL068	322	966+EOV	267
HAC026	HAL069	331	993	001
	HAL070	454	1362+EOV	332
HAC027	HAL071	458	1374	001
	HAL072	500	1500+EOV	459
HAC028	HAL073	242	726	001
	HAL074	294	882	243
	HAL075	335	486+EOV	537
HAC029	HAL076	319	957	001
	HAL077	340	1020+EOV	320
HAC030	HAL078	371	1113	001
	HAL079	322	966+EOV	372
in library 24077 HAC031	HAL080			001

HELIOS-A

PHA

BACKUPS

DO NOT USE E03547  
- E03549 FOR BACKUPS

NO. OF FT. WRITTEN	CATALOG TAPE NO.	BACKUP TAPE NO.	START DAY	STOP DAY	ERRORS ON INPUT	ERRORS ON OUTPUT
✓ 2201	E03444	E03526	12/14/74	2/9/75	0	0
✓ 19	E03448	E03527	2/9/75	2/9/75	0	0
✓ 49	E03449	E03528	2/9/75	2/12/75	0	0
✓ 2199	E03432	E03529	2/12/75	10/8/75	0	0
✓ 368	E03436	E03530	10/8/75	11/16/75	0	0
✓ 2199	E03426	E03531	11/16/75	3/28/76	0	0
✓ 1837	E03428	E03532	3/28/76	1/5/77	0	0
✓ 2199	E03441	E03533	1/5/77	3/26/77	0	0
✓ 1860	E03446	E03534	3/26/77	11/16/77	0	0
✓ 454	E03429	E03535	11/16/77	12/23/77	0	0
✓ 1457	E03447	E03536	12/23/77	1/5/79	0	0
✓ 2199	E03442	E03537	4/5/79	6/2/81	0	0
1221	E03427	E03538	6/2/81	2/12/84	0	0

as of 8/17/84

HELIOS-A REDD CATALOG PHA BACKUPS  
SOLAR FLARE PERIODS ONLY

NO. OF FT. WRITTEN	CATALOG TAPE NO.	BACKUP TAPE NO.	START DAY	STOP DAY	ERRORS ON INPUT	ERRORS ON OUTPUT
2199	HARPO4	HARPO1	12/15/74	11/25/75	0	0
1093	HARPO1	HARPO2	11/26/75	7/25/77	0	0

as of 7/30/82

HELIOS-B REDD CATALOG PHA BACKUPS

NO. OF FT. WRITTEN	CATALOG TAPE NO.	BACKUP TAPE NO.	START DAY	STOP DAY	ERRORS ON INPUT	ERRORS ON OUTPUT
2199	HBRP10	HBRP01	1/19/76	3/8/76	0	0
1783	HBRP04	HBRP02	3/8/76	4/7/76	0	0

HELIOS-A		RATES		BACKUPS	
NO. OF FEET	CATALOG TAPE NO.	BACKUP TAPE NO.	START DAY	STOP DAY	
✓ 2199	E03414	E03501	12/16/74	4/10/75	
✓ 647	E03415	E03502	4/10/75	10/1/75	
✓ 1689	E03403	E03503	10/1/75	12/6/76	
✓ 2199	E03406	E03504	12/6/76	3/24/77	
✓ 1326	E03402	E03505	3/24/77	11/16/77	
✓ 1935	E03409	E03506	11/16/77	12/9/78	
✓ 2199	E03404	E03507	12/9/78	11/24/79	
✓ 2199	E03411	E03508	11/24/79	10/19/80	
✓ 2199	E03408	E03509	10/19/80	6/4/82	
689	E03420	E03510	6/4/82	2/12/84	

as of 8/17/84

HELIOS-A		REDO CATALOG		RATE BACKUPS	
		SOLAR FLARE		PERIODS ONLY	
NO. OF FEET	CATALOG TAPE NO.	BACKUP TAPE NO.	START DAY	STOP DAY	
2199	HARRO2	HARB01	12/15/74	1/26/77	
261	HARRO3	HARB02	1/26/77	7/25/77	

as of 7/30/82

HELIOS-B		REDO CATALOG		RATE BACKUPS	
NO. OF FEET	CATALOG TAPE NO.	BACKUP TAPE NO.	START DAY	STOP DAY	
2199	HBRR09	HBRB01	1/11/76	5/1/76	
189	HBRR10	HBRB02	5/1/76	4/7/77	

ITELIUS - A FLUX TAPES & BACKUPS FROM NEWA

FLUX

NEWA FLUX	BACKUP TAPE NO.	START DATE	STOP DATE	START AFN	COPY ERRORS	# BLOC WRITE
E03161	E03101 F1	74/12/15	75/2/14	103585	0	1113
72	01 F2	75/2/14	75/4/27	109471	0	1089
75	01 F3	75/4/27	75/07/16	116404	0	1037
E03158	E03102 F1	75/7/16	75/9/29	124089	0	1105
37	02 F2	75/9/29	75/12/5	131268	0	1096
45	02 F3	75/12/5	76/2/11	137685	0	1087
E03173	E03103 F1	76/2/11	76/4/19	144232	0	1094
46	03 F2	76/4/17	76/7/10	150777	0	1088
50	03 F3	76/7/10	76/10/3	158649	0	1092
E03155	E03104 F1	76/10/3	76/12/13	166787	0	1084
64	04 F2	76/12/13	77/2/23	173611	0	1090
40	04 F3	77/2/23	77/5/7	180498	0	1117
E03163	E03105 F1	77/5/7	77/7/31	187570	0	1098
39	05 F2	77/7/31	77/10/23	195719	0	1103
42	05 F3	77/10/23	78/1/3	203779	0	1141
E03152	E03106 F1	78/1/3	78/3/16	210678		1111
74	06 F2	78/3/16	78/5/24	217611		1131
43	06 F3	78/5/27	78/8/13	224212		1069
E03147	E03107 F1	78/8/13	78/11/2	231956	0	1069
51	07 F2	78/11/2	79/1/19	239745	0	1153
54	07 F3	79/1/19	79/4/6	247282	0	1129
E03156	E03108 F1	79/4/6	79/6/30	254627	0	1250
57	08 F2	79/6/30	79/9/22	262840	0	1105
65	08 F3	79/9/22	79/12/10	270825	0	1100
E03166	E03109 F1	79/12/10	80/02/24	278491	0	1102
48	F2	80/02/24	80/05/21	285733	0	1240
70	F3	80/05/21	80/07/18	294123	0	1135
E03159	E03110 F1	80/07/18	80/10/10	301594	0	1078
60	10 F2	80/10/10	81/01/7	307773	0	1203
67	10 F3	81/01/7	81/03/31	316230	0	1149

MELIUS - H FLUX TAPES + BACKUPS FROM NEWA (CONT.)

FTPCPYA

H00062 per  
4/1/82

	NEWA FLUX	BACKUP TAPE NO.	START DATE	STOP DATE	START AFN	COPY ERRORS	# BLOCK WRITTEN
✓	E03136	E03111 F1	3/31/81	6/16/81	324194	0	1138
✓	E03138	E03111 F2	6/16/81	9/6/81	331669	0	1154
✓	E03149	E03111 F3	9/6/81	11/27/81	339535	0	1154
✓	E03171	E03112 F1	11/28/81	2/20/82	347425	0	1200
	E03144	E03112 F2	2/20/82	5/9/82	355560	0	1100
	E03131	E03112 F3	5/9/82	7/28/82	363050	0	1200
	E03128	E03113 F1	7/28/82	10/16/82	370709	0	1100
✓	E03129	E03113 F2	10/16/82	12/29/82	378345	0	1100
✓	E03132	E03113 F3	12/29/82	3/30/83	385459	0	1200
✓	E03141	E03114 F1	83/3/30	83/6/24	394218		1100
	E03153	E03114 F2	83/6/24	83/9/18	402461		1100
	E03162	E03114 F3	83/9/18	83/12/13	410704		1100
	E03168	E03115 F1	83/12/13	84/2/12	418947		827

HELIOS A \ 6250 FLUX TAPES

EXCEPT

NEWA FLUX TAPES	6250 FLUX TAPES	START DATE	STOP DATE	(F4T01A) START AFN	COPY ERRORS
EΦ3161	HELIAΦ1	74/12/15	75/9/29	103585	Φ
EΦ3172	⋮				
EΦ3175	⋮				
EΦ3158	⋮				
EΦ3137	HELIAΦ2	75/9/29	76/7/10	131268	Φ
EΦ3145	⋮				
EΦ3173	⋮				
EΦ3146	⋮				
EΦ315Φ	HELIAΦ3	76/7/10	77/5/7	158649	Φ
EΦ3155	⋮				
EΦ3164	⋮				
EΦ314Φ	⋮				
EΦ3163	HELIAΦ4	77/5/7	78/3/16	187570	Φ
EΦ3139	⋮				
EΦ3142	⋮				
EΦ3152	⋮				
EΦ3174	HELIAΦ5	78/3/16	79/1/19	217611	Φ
EΦ3143	⋮				
EΦ3147	⋮				
EΦ3151	⋮				

HELIOS A 6250 FLUX TAPES (F4T01A)

NEW FLUX TAPES	6250 FLUX TAPES	START DATE	STOP DATE	START AFU	COPY ERROR
LΦ3154	HELAΦ6	79/1/19	79/12/10	247282	Φ
EΦ3156	} ↓				
EΦ3157					
EΦ3165					
EΦ3166	HELAΦ7	79/12/10	80/10/10	272491	Φ
EΦ3148	} ↓				
EΦ317Φ					
EΦ3159					
EΦ316Φ	HELAΦ8	80/10/10	81/9/6	316229	Φ
EΦ3167	} ↓				
EΦ3136					
EΦ3138					
EΦ3149	HELAΦ9	81/9/6	82/7/28	339535	Φ
EΦ3171	} ↓				
LΦ3144					
EΦ3121					
EΦ3128	HELA1Φ	82/07/28			Φ
EΦ3129	} ↓				
EΦ3132					
EΦ3141					

no. 10 obited

HELIOS A 6250 Flux Tapes

NEWA Flux Tapes	6250 Flux Tapes	START DATE	STOP DATE	START AFN	COPY ERRORS
Eφ 3153	HELA11	83/6/24	84/2/12	424863	
Eφ 3162	⋮				
Eφ 3168	⋮				

Helios - 0 Backups of compressed ED 110 1 of  
 Copied by tapescan utility from Den 3 to Den 4 at a  
 3 to 1 ratio.

BACKUP TAPE NO.	'HBL000' TAPE NO.	NUMBER OF FILES	NUMBER OF TAPE MARKS	STARTING TAPE MARK	
✓	HBC001	HBL001	37	111	1
		HBL002	37	111	112
		HBL003	42	126+EOU	223
✓	HBC002	HBL004	43	129	1
		HBL005	33	99	130
		HBL006	42	126+EOU	229
✓	HBC003	HBL007	38	114	1
		HBL008	37	111	115
		HBL009	45	135+EOU	226
✓	HBC004	HBL010	41	123	1
		HBL011	39	117	124
		HBL012	35	105+EOU	241
✓	HBC005	HBL013	40	120	1
		HBL014	98	294	121
		HBL015	89	267+EOU	415
✓	HBC006	HBL016	50	150	1
		HBL017	85	255	151
		HBL018	395	1185+EOU	406
✓	HBC007	HBL019	6	18	1
		HBL020	121	363	19
		HBL021	59	177+EOU	382
✓	HBC008	HBL022	134	402	1
		HBL023	71	213	403
		HBL024	83	249+EOU	616
✓	HBC009	HBL025	88	264	1
		HBL026	77	231	265
		HBL027	83	249+EOU	496
✓	HBC010A	HBL028	91	273	1
		HBL029	94	282+EOU	274
	HBC10B	HBL030	85	255+EOU	<del>526</del> 1
✓	HBC011	HBL031	103	309	1
		HBL032	67	202	310
		HBL033	67	201+EOU	51R

	BACKUP TAPE NO.	'HBL 000' TAPE NO.	NUMBER OF FILES	NUMBER OF TAPEMARKS	STARTING TAPE MARK
✓	HBC012	HBL034	89	267	1
		HBL035	9	27	268
		HBL036	127	381+EOU	295
✓	HBC013	HBL037	95	285	1
		HBL038	98	294	286
		HBL039	124	372+EOU	580
✓	HBC014	HBL040	39	117	1
		HBL041	37	111	118
		HBL042	37	111+EOU	229
✓	HBC015	HBL043	84	252	1
		HBL044	39	117	253
		HBL045	43	129+EOU	370
✓	HBC016	HBL046	47	141	1
		HBL047	33	99	142
		HBL048	41	123+EOU	241
✓	HBC017	HBL049	39	117	1
		HBL050	36	108	118
		HBL051	44	132+EOU	226
✓	HBC018	HBL052	69	207	1
		HBL053	63	189	208
		HBL054	70	210+EOU	397
✓	HBC019	HBL055	257	771	1
		HBL056	313	939	772
→	HBC020	HBL057	528	1584	1
		HBL058	118	354	1585
		HBL059	54	162+EOU	1939
✓	HBC021	HBL060	66	198	1
		HBL061	87	261	1919
		HBL062	86	258+EOU	460
✓	HBC022	HBL063	72	216	1
		HBL064	82	246	217
		HBL065	82	246	463

NO. OF FILES  
NECESSARY  
CHANGED

BACKUP TP NO	'HBL000' TAPE NO.	NUMBER OF FILES	NUMBER OF TAPEMARKS	STARTING TAPEMARK	File
✓	HBL023	HBL066	93	279	1
		HBL067	129	387	280
		HBL068	90	270+EOV	667
✓	HBL024	HBL069	126	408	1
		HBL070	86	258	409
		HBL071	148	444+EOV	667
✓	HBL025	HBL072	68	204	1
		HBL073	84	252	205
		HBL074	142	426+EOV	457
✓	HBL026	HBL075	155	465	1
		HBL076	357	1074+EOV	466
✓	HBL027	HBL077	265	795	1
		HBL078	63	789	796
		HBL079	17	61	985
✓	HBL028	HBL080	63	189	001
		HBL081	36	108	190
		HBL082	91	273+EOV	298
✓	HBL029	HBL083	51	153	1
		HBL084	70	210	154
		HBL085	72	216+EOV	364
✓	HBL030	HBL086	75	225	001
		HBL087	59	177	226
		HBL088	104	312+EOV	403
✓	HBL031	HBL089	121	363	001
		HBL090	82	246	364
		HBL091	143	429+EOV	610
only 2 would fit ✓	HBL032	HBL092	65	195	001
		HBL093	354	987	66
✓	HBL033	HBL094	510	1530	001
		HBL095	318	954	511
		HBL096	116+EOV	348+EOV	829
✓	HBL034	HBL097	49	147	001
		HBL098	84	252	850
		HBL099	100	300+EOV	134
✓	HBL035	HBL100	134	402+EOV	001

(subtracted 3  
T m blc. last  
file during)

Starting file on  
next tape

used 8/26/81

HELIOS - B

PHA

BACKUPS

DEN 3  
TO  
DEN 43 TO 1  
RATIO

NO. OF FEET	CATALOG TAPE NO.	BACKUP TAPE NO.	START DATE	STOP DATE	ERRORS ON INPUT	ERROR ON OUTPUT
2199	E04061	E04101 (FI)	1/22/76	1/25/76	0	0
1907	E04062	E04101 2	1/25/76	1/30/76	0	0
2199	E04056	E04101 3	1/30/76	2/5/76	0	0
1080	E04057	E04102 (FI)	2/5/76	2/8/76	0	0
2199	E04058	E04102 2	2/8/76	2/13/76	0	0
2199	E04059	E04102 3	2/13/76	2/19/76	0	0
449	E04060	E04103 (FI)	2/19/76	2/20/76	0	0
2199	E04063	E04103 2	2/20/76	2/25/76	0	0
2199	E04064	E04103 3	2/25/76	3/1/76	0	0
1232	E04051	E04104 (FI)	3/1/76	3/5/76	0	0
2199	E04045	E04104 2	3/5/76	3/11/76	0	0
382	E04033	E04104 3	3/11/76	3/12/76	0	0
2199	E04026	E04105 (FI)	3/12/76	3/17/76	0	0
2199	E04071	E04105 2	3/17/76	4/5/76	0	0
1964	E04036	E04105 3	4/5/76	4/14/76	0	0
2199	E04074	E04106 (FI)	4/14/76	4/22/76	0	0
1342	E04066	E04106 2	4/22/76	11/20/76	0	0
878	E04075	E04106 3	11/20/76	1/4/77	0	0
1911	E04050	E04107 (FI)	1/4/77	2/26/77	0	0
303	E04065	E04107 2	2/26/77	3/1/77	0	0
2199	E04037	E04107 3	3/1/77	3/14/77	0	0
2199	E04044	E04108 (FI)	3/14/77	3/24/77	0	0
64	E04046	E04108 2	3/24/77	3/24/77	0	0
2199	E04052	E04108 3	3/24/77	4/15/77	0	0
2177	E04031	E04109 (FI)	4/15/77	9/18/77	0	0
2011	E04043	E04109 2	9/18/77	2/2/78	0	0
1084	E04030	E04109 3	2/2/78	4/9/78	0	0
2198	E04034	E04110 (FI)	4/9/78	2/4/79	0	0
1552	E04032	E04110 2	2/4/79	03/08/80	0	0
		E04110 3				
		E04111 (FI)				
		E04111 2				
		E04111 3				
		E04112 (FI)				
		E04112 2				
		E04112 3				
		E04113 (FI)				
		E04113 2				

HELIOS-B

RATES

BACKUPS

LEN  
IR  
DENH

3 701  
RATIO

NO. OF FEET	CATALOG TAPE NO.	BACKUP TAPE NO.	START DATE	STOP DATE	ERRORS ON INPUT	ERROR ON OUTPUT
344	E04015	E04126(F1)	1/18/76	2/1/76	0	0
711	E04010	E04126(F2)	2/1/76	2/8/76	0	0
2199	E04020	E04126(F3)	2/8/76	2/22/76	0	0
1304	E04024	E04127(F1)	2/22/76	3/7/76	0	0
2199	E04001	E04127(F2)	3/7/76	3/21/76	0	0
2199	E04019	E04127(F3)	3/21/76	4/15/76	0	0
2199	E04017	E04128(F1)	4/15/76	3/13/77	0	0
894	E04002	E04128(F2)	3/13/77	4/01/77	0	0
1630	E04003	E04128(F3)	4/01/77	4/11/77	0	0
929	E04092	E04129(F1)	11/11/77	1/5/78	0	0
1254	E04004	E04129(F2)	1/5/78	3/28/78	0	0
2199	E04030	E04129(F3)	3/28/78	2/14/79	0	0
1626	E04078	E04130(F1)	2/14/79	3/8/80	0	0
		E04130(F2)				
		E04130(F3)				

MELIUS - B FLUX TAPES & BACKUPS FROM NEWB

NEWB FLUX	BACKUP TAPE NO.	START DATE	STOP DATE	START AFN	COPY ERRORS	# BLOC WRITE
E03199	E03116 F1	76/1/18	76/3/16	141889	∅	1126
81	16 F2	76/3/16	76/5/23	147528	∅	1117
93	✓ 16 F3	76/5/23	76/8/17	154077	∅	1097
E03197	E03117 F1	76/8/17	76/11/8	162293	∅	1093
176	17 F2	76/11/8	77/1/10	170230	∅	1074
183	✓ 17 F3	77/1/10	77/3/14	176258	∅	1085
E03191	E03118 F1	77/3/14	77/5/25	182322	∅	1108
85	✓ 18 F2	77/5/25	77/8/17	189253	∅	1182
94	18 F3	77/8/17	77/10/31	197369	∅	1131
E03178	E03119 F1	77/10/31	78/1/3	204546	∅	1193
79	✓ 19 F2	78/1/3	78/3/5	210675	∅	1185
99	19 F3	78/3/5	78/5/3	216572	∅	1130
E03200	E03120 F1	78/5/3	78/7/16	222183	∅	1060
177	20 F2	78/7/16	78/9/27	229272	∅	1033
✓ 80	20 F3	78/9/27	78/12/8	236350	∅	1050
E03182	E03121 F1	78/12/8	79/2/9	243206	∅	1179
96	21 F2	79/2/9	79/4/5	249272	∅	1129
✓ 84	21 F3	79/4/5	79/7/1	254559	∅	1240
E03186	E03122 F1	79/7/1	79/9/18	262872	∅	1079
87	22 F2	79/9/18	79/12/11	270472	∅	1258
✓ 88	22 F3	79/12/11	80/1/13	278544	∅	1480
E03192	E03123 F1	80/1/13	80/03/08	281681	∅	076
✓	23 F2					
	23 F3					
	E03124 F1					
	24 F2					
	24 F3					
	E03125 F1					
	25 F2					
	25 F3					

no of  
9/1/82

HELIOS-B 6250 FLUX TAPES

(F4TO1B)

NEWB FLUX TAPES	6250 FLUX TAPES	START DATE	STOP DATE	START AFN	COPY ERRORS
Eφ3189	HELBφ1	76/11/18	76/11/18	141889	φ
Eφ3181					
Eφ3193					
Eφ3197					
Eφ3176	HELBφ2	76/11/18	77/8/17	170230	φ
Eφ3183					
Eφ3191					
( Eφ3195					
Eφ3194	HELBφ3	77/8/17	78/5/3	197369	φ
Eφ3178					
Eφ3179					
Eφ3199					
Eφ32φφ	HELBφ4	78/5/3	79/2/9	222183	φ
Eφ3177					
Eφ318φ					
Eφ3182					
Eφ3196	HELBφ5	79/2/9	79/12/11	249272	φ
Eφ3184					
Eφ3186					
Eφ3187					
Eφ3188	HELBφ6	79/12/11	80/3/8	278544	φ
Eφ3192					