

APPENDIX I
Soil Sample Analyses



Job: 3DN1281
O/N: 849250

Final

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn
849250	7	12	7
849251	6	11	6
849252	10	24	18
849253	9	8	35
849254	9	8	14
849255	10	10	31
849256	10	22	36
849257	10	27	28
849258	15	11	29
849261	19	550	58
849267	11	31	44
849268	12	74	37
849269	12	77	37
849270	17	120	65
849271	10	46	56
849272	11	30	16
849273	13	61	29
849274	10	73	25
849275	11	63	56
849276	26	930	71
849277	56	900	66
849280	12	115	15
849281	11	56	12
849282	7	43	15
849283	16	130	76
849284	30	55	25
849285	13	60	55
849286	14	60	52
849287	14	105	45
849288	9	88	24
849289	10	83	22
849290	15	135	57
849291	18	155	47
849292	26	160	49
849293	38	150	75
849294	37	160	87
849295	57	970	105
849296	60	650	68
849297	16	165	31
849298	11	170	42
849299	34	530	105
849300	10	64	32
849301	14	93	29
849302	14	75	17
849303	9	54	22
849304	14	105	94
849305	15	98	83
849306	13	125	54
849307	17	195	69
849308	22	230	79

UNITS	ppm	ppm	ppm
DET. LIM	2	4	2
SCHEME	AA1	AA1	AA1



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SAMPLE	Cu	Pb	Zn
849309	27	320	95
849310	17	145	115
849311	19	200	69
849312	20	220	45
849313	20	210	39
849314	29	260	44
849315	26	155	44
849316	51	540	65
849317	65	950	69
849318	170	2020	81
849319	300	2310	85
849320	110	4100	66
849321	88	4200	73
849322	41	880	46
849323	14	115	57
849324	13	91	50
849325	16	34	31
849326	32	92	30
849327	18	48	41
849328	18	78	62
849329	17	45	43
849330	12	29	40
849331	26	105	85
849332	250	420	44
849333	220	650	43
849334	390	1750	98
849335	290	3350	57
849336	160	3050	61
849337	100	980	53
849338	84	620	38
849339	49	330	46
849340	54	540	49
849341	22	160	55
849342	22	150	66
849343	25	195	65
849344	13	31	17
849345	12	32	22
849346	24	56	30
849347	33	185	66
849348	47	230	80
849349	140	490	57
849350	87	240	55
849351	87	250	51
849352	155	680	48
849353	57	450	40
849354	33	300	42
849355	29	240	43
849356	23	89	54
849357	11	38	21
849358	17	12	8
UNITS	ppm	ppm	ppm
DET.LIM	2	4	2
SCHEME	AA1	AA1	AA1

Final

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn
849359	29	64	65
849360	24	56	47
849361	17	58	35
849362	25	105	48
849363	35	90	53
849364	35	71	43
849365	35	105	34
849366	34	99	26
849367	34	125	29
849368	55	370	33
849369	44	150	40
849370	20	59	46
849371	13	44	37
849372	21	45	36
849373	16	30	24
849374	23	48	33
849375	22	56	48
849376	22	57	51
849377	25	51	64
849378	29	60	73
849379	37	120	78
849380	51	290	52
849381	33	200	55
849382	21	91	55
849383	14	53	51
849384	10	26	43
849385	10	31	73
849386	15	18	29
849387	8	17	26
849388	23	43	67
849389	20	39	38
849390	17	41	18
849391	26	76	35
849392	19	77	26
849393	14	62	25
849394	12	49	26
849395	13	30	16
849396	14	30	29
849397	11	29	19
849398	9	32	18
849399	7	21	9
849400	5	11	3
849401	6	13	3
849402	5	10	4
849403	6	13	5
849404	6	13	11
849405	7	16	12
849406	8	23	11
849407	9	31	10
849408	10	34	7
UNITS	ppm	ppm	ppm
DET.LIM	2	4	2
SCHEME	AA1	AA1	AA1



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ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn
849409	11	55	10
849410	11	37	14
849411	15	52	12
849412	13	58	9
849413	12	53	14

UNITS	ppm	ppm	ppm
DET.LIM	2	4	2
SCHEME	AA1	AA1	AA1

Soil geochemistry of samples taken in EL 8078, "Lynott" 1994
 Values above threshold in bold (see bottom of table)

SAMPLE	HYCE	HYCN	AMGE	AMGN	CU	PB	ZN
840207	146800	181800	607000	8182300	4	14	19
840208	146800	181850	607000	8182350	6	14	33
840209	146800	181900	607000	8182400	4	15	31
840210	146800	181950	607000	8182450	6	18	42
840211	146800	182000	607000	8182500	8	37	115
840212	146800	182050	607000	8182550	9	41	89
840213	146800	182100	607000	8182600	10	43	96
840214	146800	182150	607000	8182650	4	19	46
840215	146800	182200	607000	8182700	3	21	29
840216	146800	182250	607000	8182750	5	6	15
840217	146800	182300	607000	8182800	4	5	5
840218	146800	182350	607000	8182850	4	0	2
840219	146800	182400	607000	8182900	3	6	0
840220	146800	182450	607000	8182950	5	7	5
840221	146800	182500	607000	8183000	5	0	5
840222	146800	182550	607000	8183050	4	0	6
840223	146800	182600	607000	8183100	6	0	12
840224	146800	182650	607000	8183150	10	7	27
840225	146800	182700	607000	8183200	6	9	26
840226	146800	182750	607000	8183250	3	5	7
840227	146800	182800	607000	8183300	3	4	9
840228	146800	182850	607000	8183350	6	0	14
840229	146800	182900	607000	8183400	4	5	14
840230	146800	182950	607000	8183450	3	0	5
840231	146800	183000	607000	8183500	3	7	2
840232	146800	183050	607000	8183550	2	6	0
840233	146800	183100	607000	8183600	2	10	2
840234	146800	183150	607000	8183650	4	7	4
840235	146800	183200	607000	8183700	5	12	8
840236	146800	183250	607000	8183750	5	17	3
840237	146800	183300	607000	8183800	6	24	3
840176	147100	183300	607300	8182300	3	7	2
840177	147100	183250	607300	8182350	3	7	5
840178	147100	183200	607300	8182400	3	6	4
840179	147100	183150	607300	8182450	3	9	2
840180	147100	183100	607300	8182500	2	5	2
840181	147100	183050	607300	8182550	3	0	2
840182	147100	183000	607300	8182600	2	0	2
840183	147100	182950	607300	8182650	3	7	2
840184	147100	182900	607300	8182700	4	11	0
840185	147100	182850	607300	8182750	2	0	0
840186	147100	182800	607300	8182800	0	0	0
840187	147100	182750	607300	8182850	4	0	0
840188	147100	182700	607300	8182900	3	0	0
840189	147100	182650	607300	8182950	3	6	3
840190	147100	182600	607300	8183000	4	7	3
840191	147100	182550	607300	8183050	4	7	0
840192	147100	182500	607300	8183100	4	9	5
840193	147100	182450	607300	8183150	3	6	6
840194	147100	182400	607300	8183200	3	0	5
840195	147100	182350	607300	8183250	4	15	9
840196	147100	182300	607300	8183300	5	14	69
840197	147100	182250	607300	8183350	9	36	240
840198	147100	182200	607300	8183400	6	21	120
840199	147100	182150	607300	8183450	8	20	110
840200	147100	182100	607300	8183500	6	19	105
840201	147100	182050	607300	8183550	6	13	110
840202	147100	182000	607300	8183600	9	77	170
840203	147100	181950	607300	8183650	6	48	77
840204	147100	181900	607300	8183700	5	19	37
840205	147100	181850	607300	8183750	4	13	84
840206	147100	181800	607300	8183800	4	14	63
840145	147300	181800	607500	8182300	12	52	175
840146	147300	181850	607500	8182350	5	22	52
840147	147300	181900	607500	8182400	8	31	160
840148	147300	181950	607500	8182450	6	14	135
840149	147300	182000	607500	8182500	6	61	200
840150	147300	182050	607500	8182550	9	37	140
840151	147300	182100	607500	8182600	5	82	70

840152	147300	182150	607500	8182650	7	57	77
840153	147300	182200	607500	8182700	6	29	160
840154	147300	182250	607500	8182750	7	16	165
840155	147300	182300	607500	8182800	4	21	32
840156	147300	182350	607500	8182850	6	19	28
840157	147300	182400	607500	8182900	3	12	12
840158	147300	182450	607500	8182950	3	8	5
840159	147300	182500	607500	8183000	2	9	3
840160	147300	182550	607500	8183050	3	10	0
840161	147300	182600	607500	8183100	8	24	5
840162	147300	182650	607500	8183150	4	13	6
840163	147300	182700	607500	8183200	3	11	3
840164	147300	182750	607500	8183250	5	7	2
840165	147300	182800	607500	8183300	6	10	8
840166	147300	182850	607500	8183350	6	15	5
840167	147300	182900	607500	8183400	5	14	3
840168	147300	182950	607500	8183450	3	0	3
840169	147300	183000	607500	8183500	2	13	3
840170	147300	183050	607500	8183550	0	23	3
840171	147300	183100	607500	8183600	4	8	2
840172	147300	183150	607500	8183650	3	7	2
840173	147300	183200	607500	8183700	3	6	0
840174	147300	183250	607500	8183750	2	8	0
840175	147300	183300	607500	8183800	2	2	0
840118	147700	182000	607900	8182500	6	5	87
840119	147700	182050	607900	8182550	6	0	47
840120	147700	182100	607900	8182600	8	10	59
840121	147700	182150	607900	8182650	5	0	75
840122	147700	182200	607900	8182700	8	21	39
840123	147700	182250	607900	8182750	9	16	45
840124	147700	182300	607900	8182800	5	19	12
840125	147700	182350	607900	8182850	3	10	6
840126	147700	182400	607900	8182900	3	6	6
840127	147700	182450	607900	8182950	6	11	6
840128	147700	182500	607900	8183000	5	6	6
840129	147700	182550	607900	8183050	4	0	6
840130	147700	182600	607900	8183100	3	15	6
840131	147700	182650	607900	8183150	3	8	8
840132	147700	182700	607900	8183200	3	14	5
840133	147700	182750	607900	8183250	5	17	14
840134	147700	182800	607900	8183300	5	10	16
840135	147700	182850	607900	8183350	4	0	6
840136	147700	182900	607900	8183400	3	0	5
840137	147700	182950	607900	8183450	7	15	5
840138	147700	183000	607900	8183500	6	16	9
840139	147700	183050	607900	8183550	5	15	9
840140	147700	183100	607900	8183600	3	6	4
840141	147700	183150	607900	8183650	3	5	2
840142	147700	183200	607900	8183700	6	14	4
840143	147700	183250	607900	8183750	4	11	4
840144	147700	183300	607900	8183800	3	10	4
840091	147900	182000	608100	8182500	2	8	2
840092	147900	182050	608100	8182550	3	0	3
840093	147900	182100	608100	8182600	4	4	3
840094	147900	182150	608100	8182650	4	8	2
840095	147900	182200	608100	8182700	3	8	2
840096	147900	182250	608100	8182750	3	4	2
840097	147900	182300	608100	8182800	3	6	3
840098	147900	182350	608100	8182850	3	8	4
840099	147900	182400	608100	8182900	3	7	4
840100	147900	182450	608100	8182950	5	8	5
840101	147900	182500	608100	8183000	6	17	6
840102	147900	182550	608100	8183050	6	15	5
840103	147900	182600	608100	8183100	5	11	7
840104	147900	182650	608100	8183150	6	17	12
840105	147900	182700	608100	8183200	7	22	15
840106	147900	182750	608100	8183250	6	6	15
840107	147900	182800	608100	8183300	4	10	20
840108	147900	182850	608100	8183350	7	17	88
840109	147900	182900	608100	8183400	4	9	27
840110	147900	182950	608100	8183450	6	8	30
840111	147900	183000	608100	8183500	4	0	12

840112	147900	183050	608100	8183550	4	0	10
840113	147900	183100	608100	8183600	8	0	24
840114	147900	183150	608100	8183650	5	0	38
840115	147900	183200	608100	8183700	8	4	86
840116	147900	183250	608100	8183750	6	8	68
840117	147900	183300	608100	8183800	7	11	100
840064	148200	182000	608400	8182500	11	18	14
840065	148200	182050	608400	8182550	8	9	17
840066	148200	182100	608400	8182600	6	13	26
840067	148200	182150	608400	8182650	7	12	45
840068	148200	182200	608400	8182700	6	13	26
840069	148200	182250	608400	8182750	5	13	17
840070	148200	182300	608400	8182800	7	11	11
840071	148200	182350	608400	8182850	7	10	14
840072	148200	182400	608400	8182900	6	13	9
840073	148200	182450	608400	8182950	5	4	3
840074	148200	182500	608400	8183000	5	4	20
840075	148200	182550	608400	8183050	3	16	4
840076	148200	182600	608400	8183100	5	0	12
840077	148200	182650	608400	8183150	3	0	7
840078	148200	182700	608400	8183200	3	112	7
840079	148200	182750	608400	8183250	0	6	5
840080	148200	182800	608400	8183300	3	4	6
840081	148200	182850	608400	8183350	4	0	3
840082	148200	182900	608400	8183400	4	0	2
840083	148200	182950	608400	8183450	3	0	2
840084	148200	183000	608400	8183500	4	0	2
840085	148200	183050	608400	8183550	4	5	3
840086	148200	183100	608400	8183600	4	12	4
840087	148200	183150	608400	8183650	4	4	3
840088	148200	183200	608400	8183700	4	0	4
840089	148200	183250	608400	8183750	3	0	4
840090	148200	183300	608400	8183800	4	13	2
840033	148400	182000	608600	8182500	4	43	17
840034	148400	182050	608600	8182550	11	25	23
840035	148400	182100	608600	8182600	8	15	9
840036	148400	182150	608600	8182650	4	30	5
840037	148400	182200	608600	8182700	2	12	9
840038	148400	182250	608600	8182750	5	47	34
840039	148400	182300	608600	8182800	6	14	12
840040	148400	182350	608600	8182850	6	13	9
840041	148400	182400	608600	8182900	3	18	4
840042	148400	182450	608600	8182950	3	810	4
840043	148400	182500	608600	8183000	2	9	7
840044	148400	182550	608600	8183050	6	9	7
840045	148400	182600	608600	8183100	4	14	7
840046	148400	182650	608600	8183150	3	22	5
840047	148400	182700	608600	8183200	4	10	41
840048	148400	182750	608600	8183250	7	5	49
840049	148400	182800	608600	8183300	4	8	6
840050	148400	182850	608600	8183350	5	4	9
840051	148400	182900	608600	8183400	5	9	5
840052	148400	182950	608600	8183450	5	10	26
840053	148400	183000	608600	8183500	5	8	26
840054	148400	183050	608600	8183550	7	9	23
840055	148400	183100	608600	8183600	7	13	41
840056	148400	183150	608600	8183650	8	24	62
840057	148400	183200	608600	8183700	8	13	73
840058	148400	183250	608600	8183750	7	13	49
840059	148400	183300	608600	8183800	6	20	64
840060	148400	183350	608600	8183850	9	24	23
840061	148400	183400	608600	8183900	12	25	22
840062	148400	183450	608600	8183950	11	27	11
840063	148400	183500	608600	8184000	12	22	8
mean					4.917	17.02	26.439
std dev					2.22	57.499	41.416
threshold (mean + 2 * std dev)					9.358	132.02	109.27

APPENDIX II

Anomaly Description Notes for the Aerodata "HYC" 1992 Airborne Electromagnetic (QUESTEM) and Magnetic Survey

APPENDIX 2

ANOMALY DESCRIPTION NOTES FOR THE AERODATA 'HYC' 1992 AIRBORNE ELECTROMAGNETIC (QUESTEM) AND MAGNETIC SURVEY

T.V.Harvey

October 1993

Anomaly 1 (Lynott EL 8078).

Consistent 11-12 channel, moderately-anomalous response.

strike extent : >1 kilometre (open to west beyond limit of survey)
strike direction : east, north dip (?)
time constant : 0.25 - 0.45
peak response : lines 10010 - 10060 inclusive

Anomaly 1 occurs in alluvium-covered area, with outcropping north-dipping Pmn and some Pmnl adjacent to the north. A mapped northwest-trending fault may truncate the anomaly in the east; Pmx mapped adjacent to the east appears to preclude the source material swinging to the southeast parallel to Pmn mapped further to the east.

Source is interpreted to be virtually non-outcropping, weathered Pmnl (upper section).

A small 11 channel, 0.25-0.4 time constant, anomaly is present at depth on north-flying lines between Anomaly 1 and Anomaly 2. This feature is open to the west (edge of survey) and diminishes to the east, with any extension east of line 10030 ill-defined.

Anomaly 2 (Lynott EL 8078).

Consistent 9-10 channel, moderately-anomalous response.

strike extent : >1 kilometre (open to southwest beyond survey)
strike direction : contorted
time constant : 0.25 - 0.3
peak response : lines 10010 - 10030 inclusive

Anomaly 2 occurs in alluvium-covered area, with outcropping west-dipping Pmn and some Pmnl to the west.

Source is interpreted to be virtually non-outcropping, weathered Pmnl (upper section).

An apparent extension of Anomaly 2 to the southeast may be fault or fold controlled, or may reflect effects from a tributary of Deep Creek.

Anomaly 3 (Lynott EL 8078).

Discrete 8-11 channel, weak-moderately anomalous response.

strike extent : >1.5 kilometre (open to west beyond limit of survey)

strike direction : east-northeast

time constant : 0.2 - 0.5

peak response : line 10020 ; weakens to the east

Anomaly 3 occurs in area of alluvial cover with some outcrops of Pmnl; south-dipping resistive Pmn occurs adjacent to the south.

Source is interpreted to be mainly non-outcropping, weathered Pmnl (upper section). Broadening of the anomaly to the west is consistent with a change in strike direction towards south.

Anomaly 4 (Lynott EL 8078).

Minor, discrete 6-9 channel, weakly-anomalous response.

strike extent : >0.5 kilometre (open to west beyond limit of survey)

strike direction : east, north dip (?)

time constant : 0.2 - 0.4

peak response : line 10030 ; weakens to the west and east

Anomaly 4 occurs in area of north-dipping Pmx outcrop.

Correlation with Anomaly 3 to the north suggests the source of Anomaly 4 to be mainly non-outcropping, weathered Pmnl, on the southern limb of an east-west syncline. The weaker tenor of Anomaly 4 suggests a thinning of the sequence to the south.

Anomaly 5 (Lynott EL 8078).

Minor, discrete 6-9 channel, weakly-anomalous response.

strike extent : >1 kilometre (open to west beyond limit of survey)

strike direction : near east, north dip (?)

time constant : <0.25

peak response : line 10010 ; weakens west to east

Anomaly 5 occurs in area of alluvial cover with mapped Pmp and Pmei adjacent to the south.

Source is interpreted to be surficial cover, possibly an 'edge effect', although trend direction is somewhat transgressive.

North-east trending, weakly-anomalous responses to the north are tentatively attributed to weathered Pmq in a much-attenuated section.

Anomaly 6 (Lynott EL 8078).

Minor 5-11 channel, weakly-anomalous response.

strike extent : <1 kilometre

strike direction : east

time constant : <0.3

peak response : line 10060 ; weakens to the west and east

Anomaly 6 occurs in area of alluvial cover between outcropping Pmp to the north and Pmea to the south.

Source is interpreted to be surficial cover, possibly related to a weathered section within the Pmei.

Anomaly 7 (Lynott EL 8078).

Reasonably consistent 7-12 channel, weak-moderately anomalous response.

strike extent : 2 kilometres

strike direction : east

time constant : 0.2 - 0.45

peak response : lines 10230 - 10250 inclusive

Anomaly 7 occurs in area of alluvial cover adjacent to the south of outcropping north-dipping Pmx. In the west, the anomaly trend swings to the southwest as a markedly attenuated feature; in the east, the anomaly trend continues as Anomaly 8 via a flexure to the northeast.

Source is interpreted to be non-outcropping, weathered Pmq; some anomaly enhancement due to effects from Buffalo Creek may be present.

Anomaly 8 (Lynott EL 8078).

Reasonably consistent 8-12 channel, weakly-moderately anomalous response.

strike extent : 2 kilometres

strike direction : variable, overall east

time constant : 0.25 - 0.4

peak response : lines 10090 - 10110 inclusive

Anomaly 8 occurs in area of alluvial cover adjacent to the south of outcrops of north-dipping Pmx. In the west, the anomaly trend continues as Anomaly 7 via a flexure to the southwest; in the east, the anomaly trend continues as an increasingly subtle feature.

Source is interpreted to be non-outcropping, weathered Pmq. Source of the subtle eastern extension could be a fault or fold repetition of the main anomaly source material, or could be related to conductive material lower in the stratigraphy.

Drillhole Teena 3DD is positioned to test the down-dip continuation of the anomaly source, but to the east of the peak QUESTEM anomaly position.

Anomaly 9 (Lynott EL 8078).

Complex pattern centred on a localised 10-12 channel, twin-peaked strongly-anomalous response.

strike extent : irregular feature with extensions to other zones

strike direction : variable, north (?)

time constant : 0.3 - 0.4

peak response : lines 10140 - 10160 inclusive

Anomaly 9 occurs in area of alluvial cover between outcropping west-dipping Pmx to the east and Pmn to the west. Extensions to the north-northwest and southwest connect with Anomalies 3 and 4 respectively, and an extension to the south-southeast trends towards Anomaly 10.

Source is interpreted to be non-outcropping, weathered Pmnl, which is consistent with that interpreted for Anomalies 3 and 4. Source of the east-southeastern extension could be a fault- or fold-controlled Pmnl or Pmq; there is no evidence in the results for any substantial thickness of Pmx between Anomaly 9 and its east-southeastern extension.

Drillholes Boko 1DD and Boko 2DD are positioned to test the main anomaly source.

Anomaly 10 (Lynott EL 8078).

Sharply-defined 9-13 channel, moderately-anomalous response.

strike extent : 1 kilometre (up to 3 kilometres?)

strike direction : 1250

time constant : 0.3 - 0.4

peak response : line 10200

Anomaly 10 is apparently transgressive, best developed in area of alluvial cover possibly over Pmei. Trend is abruptly terminated in northwest, and runs into extensive area of anomalous response in southeast.

Source is unknown, possibly of structural origin; anomaly trend coincides with one of many subtle linear magnetic features, but other such features do not appear conductive.

Anomaly 11 (Lynott EL 8078).

Discrete 10-11 channel, moderately-anomalous response.

strike extent : <1 kilometre
strike direction : approximately east
time constant : 0.3 - 0.35
peak response : line 10100

Anomaly 11 occurs in area of alluvial cover, with a somewhat transgressive trend to that of Pmea outcrop mapped to the south. Anomaly diminishes to the west towards Anomaly 6, and runs into extensive area of anomalous response to the east.

Source is unknown, but correlation with Anomaly 6 would suggest surficial cover, possibly related to a weathered section within the Pmei.

Anomaly 12 (Lynott EL 8078).

Sharp, discrete 11-12 channel, moderately-anomalous response.

strike extent : <1 kilometre
strike direction : approximately east, north dip(?)
time constant : 0.25 - 0.55
peak response : lines 10290 and 10300

Anomaly 12 occurs in area of alluvial cover, adjacent to the south of mapped north-dipping Pmx outcrop. In the west, the anomaly trend continues as Anomaly 8 via a flexure to the southwest; in the east, the anomaly trend continues as Anomaly 13 via a flexure to the southeast.

Source is interpreted to be non-outcropping, weathered Pmq; anomalous time constants to the north of the QUESTEM anomaly trend confirm a flat north dip for the source conductor beneath resistive Pmx.

Drillholes Teena 1DD and 6DD are positioned to test the down-dip continuation of the anomaly source.

Anomaly 13 (Lynott EL 8078).

Linear feature comprising a consistent sharp 7-15 channel, weak-moderately anomalous response.

strike extent : >1 kilometre (open to east beyond lease boundary)
strike direction : east
time constant : 0.15 - 0.30
peak response : line 10350

Anomaly 13 occurs in area of alluvial cover, adjacent to the south of mapped north-dipping Pmx outcrop. In the west, the anomaly trend continues as Anomaly 12 via a flexure to the northwest.

Source is interpreted to be non-outcropping, weathered Pmq.

Anomaly 14 (Lynott EL 8078).

Complex feature comprising a central 8-15 channel, three-peaked moderately-strong anomalous response, with possible less-anomalous extensions to the northwest, east and east-southeast.

strike extent : main anomaly 1 kilometre square, plus extensions
strike direction : complex feature, possibly mainly east
time constant : 0.2 - 0.4 ; 0.15 - 0.35 to the east
peak response : lines 10140 and 10150 ; 10210 - 10230 to the east

Anomaly 14 occurs in areas of alluvial cover, adjacent and around outcrops mapped as Pmx and Pmnl. In the northwest, a diminished anomaly trends towards Anomaly 1 along a resistive margin; in the east, the anomaly bifurcates about a resistive core with the southern zone being the stronger.

Source is interpreted to be non-outcropping, weathered Pmnl, although Pmq could also be present overlying north-dipping Pmea mapped to the southwest.

Anomaly 15 (Lynott EL 8078).

Minor but persistent 5-11 channel, weakly-anomalous response.

strike extent : 1 kilometre
strike direction : east ; north dip(?)
time constant : 0.3 - 0.4
peak response : lines 10110 and 10130

Anomaly 15 occurs in area of alluvial cover adjacent to the north of outcropping north-dipping Pmea. In the west the anomaly trend is apparently truncated, although it may extend to Anomaly 2; in the east the anomaly continues as a lesser feature towards Anomaly 14.

Source is interpreted to be non-outcropping, weathered Pmq, possibly with a contribution from 'edge effects'.

Anomaly 16 (Lynott EL 8078).

Very minor 10-15 channel, weakly-anomalous response.

strike extent : <1 kilometre
strike direction : east ; south dip(?)
time constant : 0.2 - 0.5
peak response : line 10120

Anomaly 16 occurs in area of alluvial cover adjacent to the south of Pmx outcrops. No evidence of an extension to the west; in the east the anomaly may continue through a flexure to the northeast.

Source is interpreted to be non-outcropping, weathered Pmnl.

Anomaly 17 (Lynott EL 8078).

Minor 7-15 channel, weakly-anomalous response.

strike extent : 1 kilometre
strike direction : east
time constant : 0.25 - 0.4
peak response : lines 10190 and 10200

Anomaly 17 occurs in area of alluvial cover, between mapped Pmea outcrops in the west. Diminishes east to west, and may be truncated in the east.

Source is unknown, perhaps changing in character across a northwest-oriented fault postulated to define the extent of Pmea outcrop. In the west the source could merely be surficial material over Pmea; in the east the source could be non-outcropping weathered Pmq, possibly as a southeast extension to Anomaly 15.

Anomaly 18 (Lynott EL 8078).

Discrete, variable 5-13 channel, weak-moderately anomalous response.

strike extent : >3 kilometres (open to east beyond lease boundary)
strike direction : east ; north dip(?)
time constant : 0.2 - 0.4
peak response : line 10210 in west ; lines 10270 - 10350 in east

Anomaly 18 occurs in area of mainly alluvial cover. Extends into a broad conductive area to the west, and extends beyond the lease boundary to the east.

Source is interpreted to be non-outcropping, weathered Pmn (probably Pmnl, or Pmnh?), possibly fault-truncated to the west and east; two zones may be present.

Anomaly 19 (Lynott EL 8078).

Complex, discrete, variable 7-13 channel, moderate to moderately-strong anomalous response.

strike extent : >2 kilometres (open to east beyond lease boundary)

strike direction : east ; south dip(?)

time constant : 0.2 - 0.4

peak response : lines 10320 - 10340

Anomaly 19 occurs in area of mainly alluvial cover, in core of syncline. Extends towards Anomaly 17 in the west, and extends beyond lease boundary to the east.

Source is interpreted to be non-outcropping, weathered Pmn (probably Pmnl, or possibly Pmnh?); two zones may be present.

Drillhole Reward 1DD is positioned adjacent to the north of this anomaly on line 10300.

Anomaly 20 (Lynott EL 8078).

Minor, discrete 8-11 channel, weakly-anomalous response.

strike extent : 2 kilometres

strike direction : 1100; south dip(?)

time constant : 0.25 - 0.3

peak response : line 10320 (adjacent to Anomaly 19 peak response)

Anomaly 20 occurs in area of alluvial cover between mapped outcrops of south-dipping Pmnl. Extends into southern section of Anomaly 14 in the west, and extends into peak anomaly section of Anomaly 19 in the east.

Source could be non-outcropping, weathered Pmnl, or could relate to preferential weathering along an interpreted fault zone for which there is strong magnetic support.

Anomaly 21 (Lynott EL 8078).

Broad approximately elliptical area of variable 2-15 channel, weak-moderately anomalous responses.

strike extent : almost 7 kilometres E-W and up to 3 kilometres N-S

strike direction : long axis east

time constant : 0.2 - 0.65

peak response : lines 10150 - 10170 in west ; 10300 - 10320 in east

Anomaly 21 coincides with an extensive area of mainly north-dipping Pmn outcrop, with notable coincidence between the northern margin of anomaly and the limit of Pmn outcrop; anomaly strength decreases south to north. The anomaly zone is sharply

truncated in the west, and decreases gradually to the east.

Source is interpreted to be conductive Pmn.

Anomaly 22 (Lynott EL 8078).

Minor, consistent 5-12 channel, often twin-peaked, weakly-anomalous response.

strike extent : >2 kilometres

strike direction : near east ; north dip(?)

time constant : 0.2 - 0.4

peak response : north-flying lines better than south-flying lines

Anomaly 22 occurs in an area of alluvial cover adjacent to the south of outcropping north-dipping Pmnl and Pmn. The anomaly zone extends westwards into Anomaly 14, and decreases gradually to the east. High resistivities occur to the south.

Source is interpreted to be non-outcropping weathered Pmnl.

Anomaly 23 (Lynott EL 8078).

Anomaly 23 lies mainly beyond the northern lease boundary; its source is interpreted to be similar to that for Anomaly 21 which it resembles in character, extent and mapped geological associations.

Anomaly 24 (Lynott EL 8078).

Extensive anomaly system comprising broad, featureless 6-9 channel weakly-anomalous response in west, and sharp, 3-8 channel, often twin-peaked, weakly-anomalous response in east.

strike extent : approximately 5 kilometres

strike direction : west-northwest ; south dip(?)

time constant : 0.2 - 0.35 in west ; <0.3 in east

peak response : lines 10540 - 10580 in west ; line 10710 in east

Anomaly 24 occurs in an area of alluvial cover and Pmnl outcrops, adjacent to the north of outcropping Pmn. To the west the anomaly zone broadens and diminishes in strength; to the east there is an associated highly resistive response and a possible strike change.

Source is interpreted to be partly-outcropping weathered Pmnl (upper section), with the broadening to the west possibly due to flatter dips.

Anomaly 25 (Lynott EL 8078).

Discrete, broad, consistent 6-12 channel weak-moderately anomalous response.

strike extent : 3 kilometres

strike direction : west-northwest

time constant : 0.2 - 0.3

peak response : lines 10520 - 10570 inclusive

Anomaly 25 coincides with outcropping Pmn within the core of a syncline.

Source is interpreted to be conductive Pmn (cf Anomaly 21).

Anomaly 26 (Lynott EL 8078).

Complex anomaly system of variable 1-12 channel, 3-4 peaked, very-weakly to moderately-anomalous responses.

strike extent : >1 kilometre (open to southeast beyond edge of lease)

strike direction : west-northwest

time constant : 0.15 - 0.3

peak response : line 10490

Anomaly 26 occurs in an area of alluvial cover with outcrops of north-dipping Pmn and Pmnl adjacent to the north. The anomaly pattern merges with a broad weakly-anomalous area to the west, and extends beyond the lease to the southeast.

Source is interpreted to be non-outcropping weathered Pmnl, probably fold-repeated over an anticline.

Anomaly 29 (Lynott EL 8078).

Somewhat irregular area of 3-10 channel, weak-moderately anomalous response.

strike extent : ? (open to east beyond lease boundary)

strike direction : east(?)

time constant : <0.3

peak response : line 10730

Anomaly 29 occurs in an area of alluvial cover, and appears to comprise two widely-separated features. The pattern broadens and decreases in amplitude to the west, and is open to the east, beyond the lease boundary.

Source is interpreted to be non-outcropping weathered Pmnl.

Anomaly 30 (Lynott EL 8078).

Broad, well-defined 8-10 channel weakly-anomalous response with resistive southern margin.

strike extent : >2 kilometres (open to east beyond lease boundary)
strike direction : east ; north dip (?)
time constant : 0.2 - 0.35
peak response : lines 10690 - 10710 inclusive

Anomaly 30 occurs in an area of alluvial cover. The anomaly pattern merges with a broad weakly-anomalous area to the west, and is open to the east beyond the lease boundary.

Source is interpreted to be non-outcropping weathered Pmn (probably Pmnl).

Anomaly 31 (Lynott EL 8078).

Broad 9-15 channel, twin-peaked, weak-moderately anomalous response.

strike extent : >3 kilometres (open to west beyond limit of survey)
strike direction : elliptical, trending southeast ; synclinal form(?)
time constant : 0.15 - 0.5
peak response : western and central sections

Anomaly 31 coincides with an outcropping syncline of Pmn and adjacent alluvium-covered areas. The anomaly zone is closed to the east by marginal resistive material.

Source is interpreted to be conductive Pmn (cf Anomalies 21 and 25).

Drillhole Lynott 1DD is positioned adjacent to the southeast of this anomaly and did not test the anomaly source.

Anomaly 32 (Lynott EL 8078).

Broad 6-8 channel, sometime twin-peaked, weakly-anomalous response.

strike extent : approximately 1 kilometre
strike direction : east
time constant : 0.15 - 0.25
peak response : line 10910

Anomaly 32 occurs in an area of alluvial cover, with outcrops of Pmt to the south. The anomaly zone becomes diffuse to the west and east.

Source is interpreted to be non-outcropping, weathered Pmf, possibly on the nose of the anticline outlined by Pmt outcrops to the south. Alternatively the anomaly could relate to

a west-northwest oriented fault interpreted to pass through the area, for which there is magnetic support further to the west.

Anomaly 33 (Lynott EL 8078).

Broad 6-12 channel, often multi-peaked, weakly-anomalous response, with resistive northern margin.

strike extent : >4 kilometres (open to east beyond limit of survey)

strike direction : 0600 ; north dip(?)

time constant : 0.15 - 0.4

peak response : lines 10470 and 10590 in west ; 10620 & 10630 in east

Anomaly 33 occurs in an area of alluvial cover to the north of outcropping, mainly-north dipping P_{mea}. Line to line anomaly correlation is uncertain, particularly through an area of strongly anomalous response on lines 10470 and 10490 ; further west the anomaly zone appears to be closed by resistive material.

Source is interpreted to be alluvial cover and/or non-outcropping weathered P_{mf}. Anomaly 33 is strikingly similar to Anomaly 34 which trends subparallel to the south.

Anomaly 34 (Lynott EL 8078).

Broad, consistent 7-11 channel, often multi-peaked, weakly-anomalous response.

strike extent : >3 kilometres (open to east beyond limit of survey)

strike direction : 0600

time constant : 0.25 - 0.4

peak response : lines 10530 - 10580 inclusive

Anomaly 34 occurs in an area of alluvial cover between outcropping P_{mea} to the north and P_{mt} to the south. Anomaly appears to be truncated by resistive material to the west.

Source is interpreted to be alluvial cover and/or non-outcropping weathered P_{mf}. Anomaly 34 is strikingly similar to Anomaly 33, suggesting fold or fault repetition of P_{mf}.

Anomaly 35 (Lynott EL 8078).

Sharp 10-12 channel strongly-anomalous response, in an asymmetric environment conductive to the north and resistive to the south.

strike extent : 2 kilometres

strike direction : 0600

time constant : 0.2 - 0.4

peak response : lines 10590 and 10600

Anomaly 35 occurs in an area of alluvial cover, with some outcrops of north-dipping Pmea to the south. Anomaly intensity decreases markedly in the east, and anomaly broadens with additional peaks west of line 10550.

Source is interpreted to be non-outcropping, weathered Pmq, bordered by conductive alluvial cover to the north and resistive Pmea to the south; some 'edge effect' enhancement may be present. Source of anomaly extension to the southwest may be Pmq present in small closed synclinal basin tested by drillholes Mitchell Yard 1DD and 2DD.

Anomaly 36 (Lynott EL 8078).

Well-defined 6-12 channel, multi-peaked, moderate-strongly anomalous response, in an asymmetric environment conductive to the south and resistive to the north.

strike extent : 3 kilometres

strike direction : east ; north dip(?)

time constant : 0.2 - 0.5

peak response : consistent east of 10360 ; intensifies east of 10460

Anomaly 36 occurs in an area of alluvial cover, with outcrops of north-dipping Pmea to the north. To the west, anomaly intensity decreases and the feature either swings west-southwest or is terminated; to the east, anomaly intensity increases and the feature runs into east-northeast trending Anomaly 37.

Source is interpreted to be non-outcropping, weathered Pmq, extending beneath north-dipping resistive Pmea to the north. The anomaly pattern is enhanced and complicated by effects from conductive overburden.

Anomaly 37 (Lynott EL 8078).

Distinctive 9-13 channel, twin-peaked, strongly-anomalous response, with subsidiary subparallel trends adjacent to the north.

strike extent : >4 kilometres (open to northeast beyond lease area)

strike direction : 0550

time constant : 0.25 - 0.45

peak response : lines 10510 - 10620 inclusive ; maximum on 10530

Anomaly 37 occurs entirely within an area of alluvial cover, and is usually stronger on north-flying lines. To the northeast, the anomaly is open beyond the lease boundary; to the west, the anomaly probably runs into Anomaly 36.

Source is interpreted to be alluvial cover, perhaps locally deeper over old McArthur River channel or preferentially weathered rock type such as Pmf or Pmq. The response is stronger than that seen over weathered Pmf elsewhere, but may be enhanced by conductive alluvium.

Anomaly 38 (Lynott EL 8078).

Distinctive 12-13 channel, multi-peaked, strongly-anomalous response, with subsidiary subparallel trends adjacent to the north and south.

strike extent : >4 kilometres (open to west beyond limit of survey)
strike direction : east-northeast
time constant : 0.3 - 0.5
peak response : lines 10330 - 10470 inclusive ; maximum on 10350

Anomaly 38 occurs entirely within an area of alluvial cover. To the east, anomaly intensity decreases with a possible fold or fault displacement to Anomaly 37.

Source is interpreted to be alluvial cover over preferentially weathered Pmf encountered in drillhole Barney Creek 1DD. Resistive material to the south is interpreted to be Pmea which outcrops further to the southwest.

Anomaly 39 (Lynott EL 8078).

Possibly arcuate, 8-10 channel moderate-strongly anomalous response, bounded to the north and south by high resistivities.

strike extent : 2 kilometres east-west by 1 kilometre north-south
(open to south and west beyond limits of survey)
strike direction : arcuate trend(?)
time constant : 0.25 - 0.4
peak response : lines 10360 - 10380 inclusive - northern margin
: lines 10370 - 10390 inclusive - southern margin

Anomaly 39 occurs in an area of alluvial cover, with outcrops of Pmea to the north and southeast.

Source is interpreted to be alluvial cover, possibly over preferentially weathered rock types. There is potential for this anomaly to represent a basin or fault-bounded block of Pmq. Resistive material to the north and east is interpreted to be Pmea.

Anomaly 40 (Lynott EL 8078).

Reasonably well-defined, 8-13 channel, multi-peaked moderate-strongly anomalous response.

strike extent : 2 kilometres east-west by 1 kilometre north-south
strike direction : elliptical, trending 0650
time constant : 0.25 - 0.5
peak response : lines 10410 - 10420

Anomaly 40 occurs in an area of alluvial cover, with possible extensions to Anomaly 39 to

the southwest and Anomaly 35 to the northeast.

Source is interpreted to be alluvial cover, possibly over preferentially weathered rock types. There is potential for this anomaly to represent a basin or fault-bounded block of Pmq.

Anomaly 41 (Lynott EL 8078).

Single or twin-peaked, 9-14 channel moderately-anomalous response within generally conductive environment.

strike extent : 1 kilometre
strike direction : northeast
time constant : 0.25 - 0.45
peak response : lines 10570 - 10590

Anomaly 41 occurs entirely within an area of alluvial cover to the north of Mitchell Yard. Anomaly amplitude diminishes to the southwest and northeast.

Source is interpreted to be alluvial cover, possibly over preferentially weathered rock types such as Pmf or Pmq.

Anomaly 42 (Lynott EL 8078).

Broad, well-defined, arcuate, complex 10-15 channel strong to very strongly-anomalous response with resistive environment to the east.

strike extent : >2 kilometres (open to nth & sth beyond lease area)
strike direction : north-northeast
time constant : 0.2 - 0.75
peak response : intensity and complexity increase from west to east

Anomaly 42 occurs in an area of alluvial cover, and extends beyond the lease area to the north and south.

Source is interpreted to be Pmq pyritic shales, enhanced by conductive alluvial cover and preferential weathering.

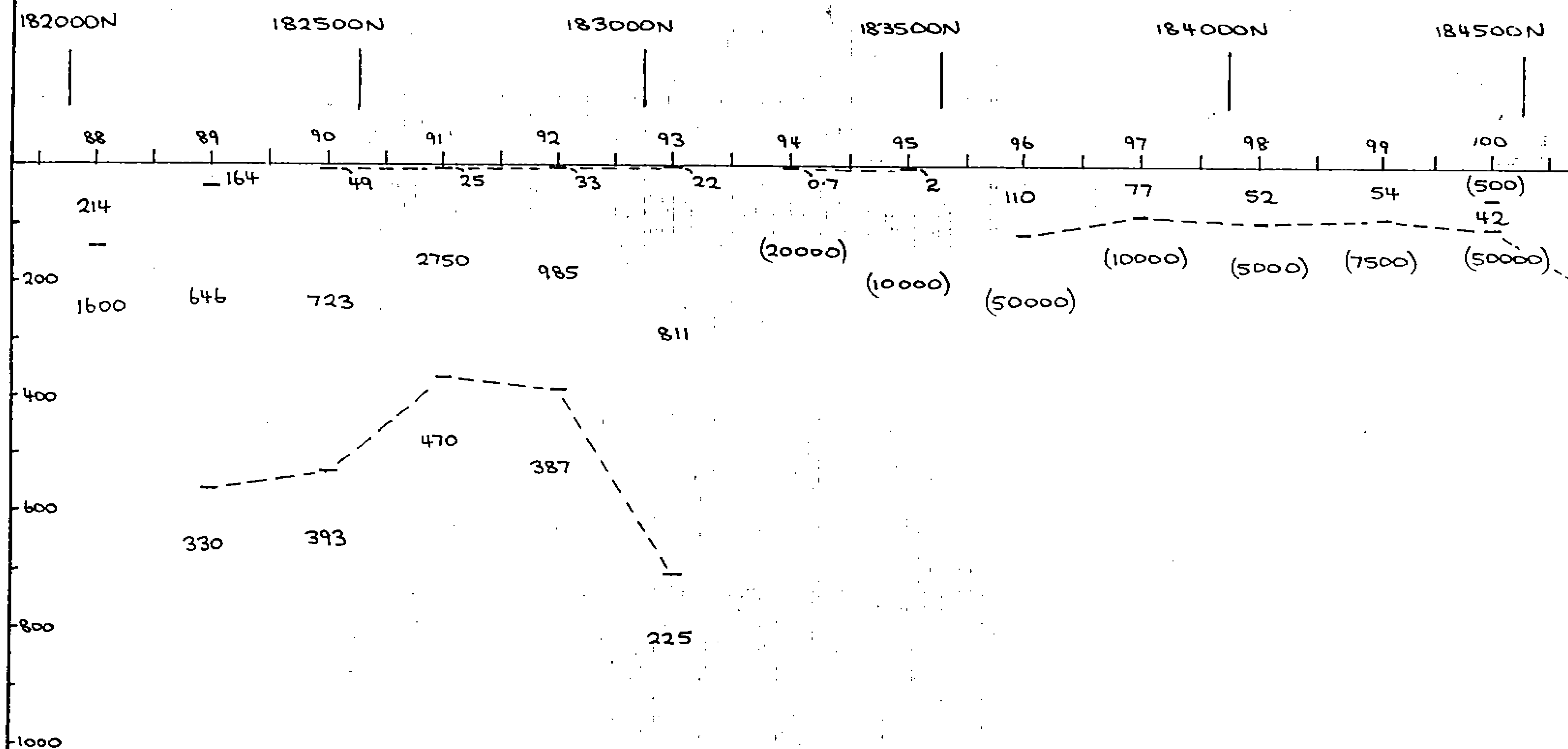
Anomaly 46 (Lynott EL 8078).

strike extent : >1 kilometre (open to nth & sth beyond lease area)
strike direction : north
time constant :
peak response : lines 11020 and 11030

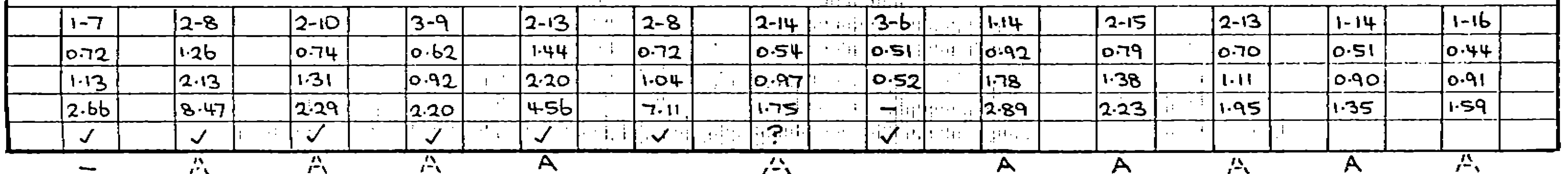
Anomaly 46 coincides with the western margin of the extensive Bukalara Plateau, where

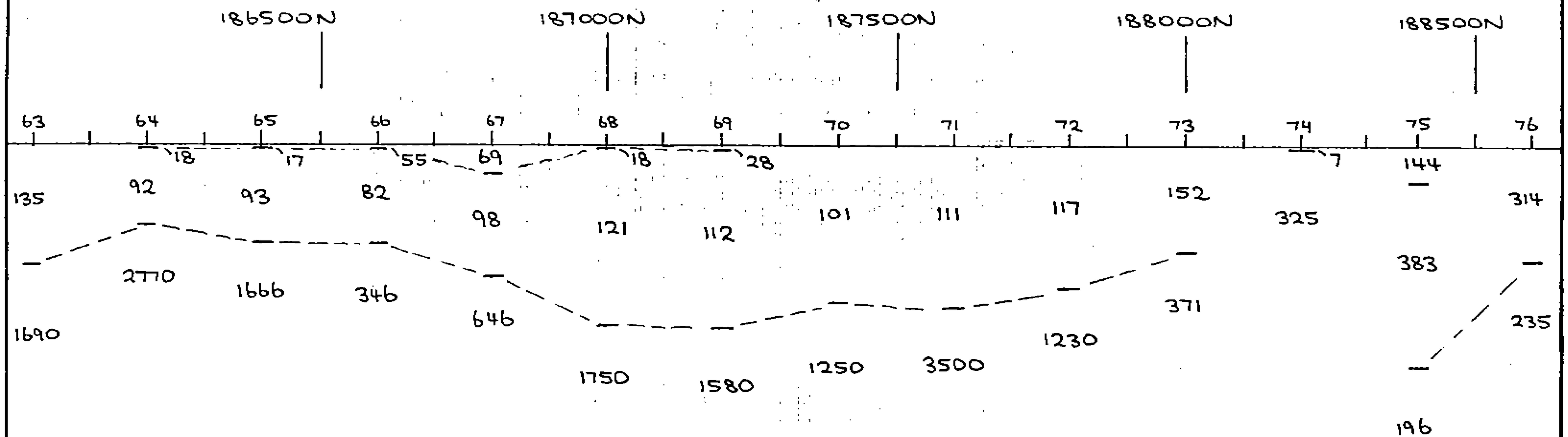
APPENDIX III

**SIROTEM Interpreted
Goelectric Sections
1:10,000**

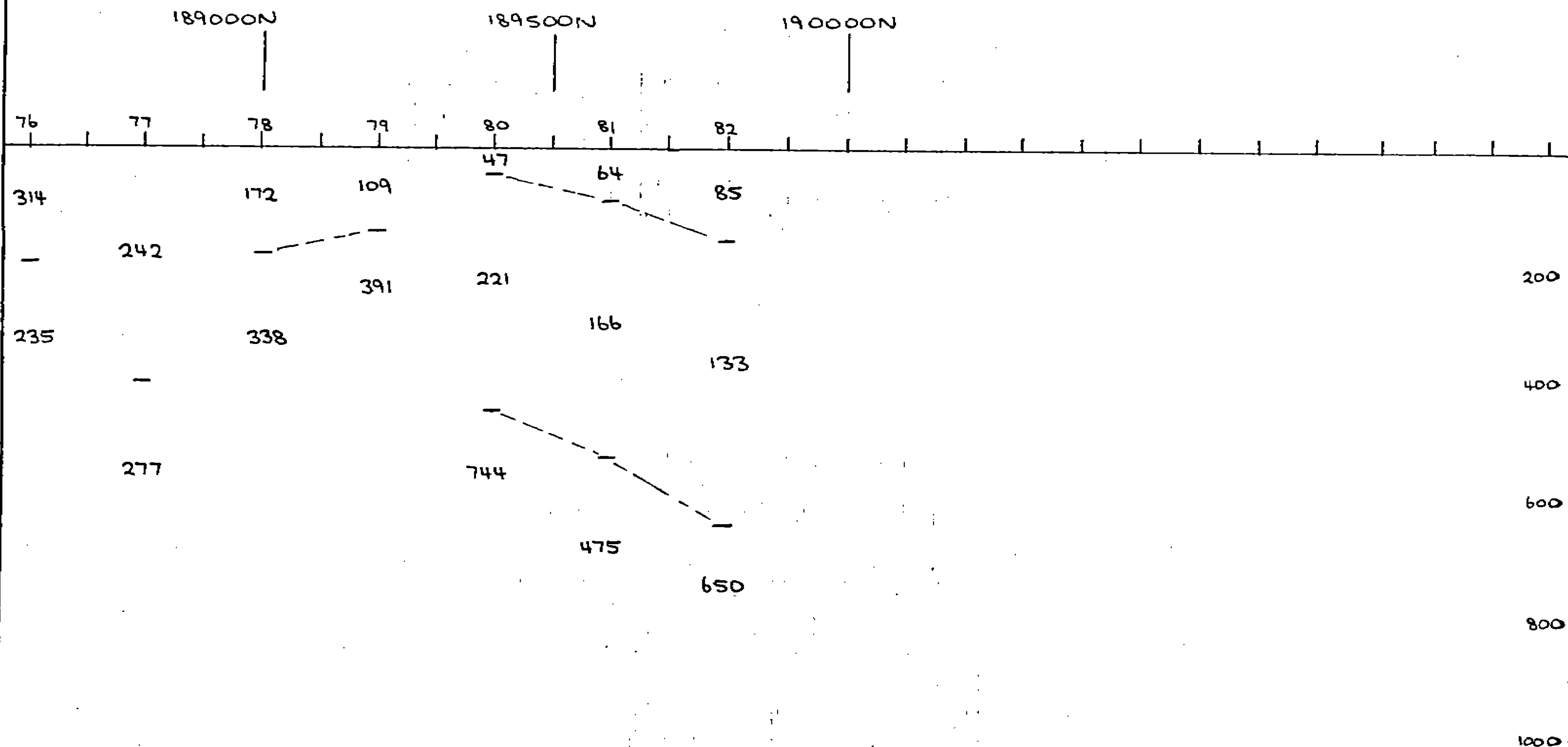


2-14	3-13	2-16	2-13	1-13	1-12	1-5	2-14	1-15	1-9	1-6	1-6	1-13
1-07	0-70	1-19	0-96	0-85	1-08	8-65	2-40	0-69	0-65	0-86	0-94	0-66
2-22	1-33	2-21	1-63	1-43	1-72	11-13	5-14	1-24	1-06	1-41	1-37	1-41
2-78	2-33	3-48	4-05	2-59	3-64	59-84	7-00	1-79	1-93	3-27	4-37	2-24
						✓	✓		✓	✓	✓	✓
-	A	A	A	A	A							



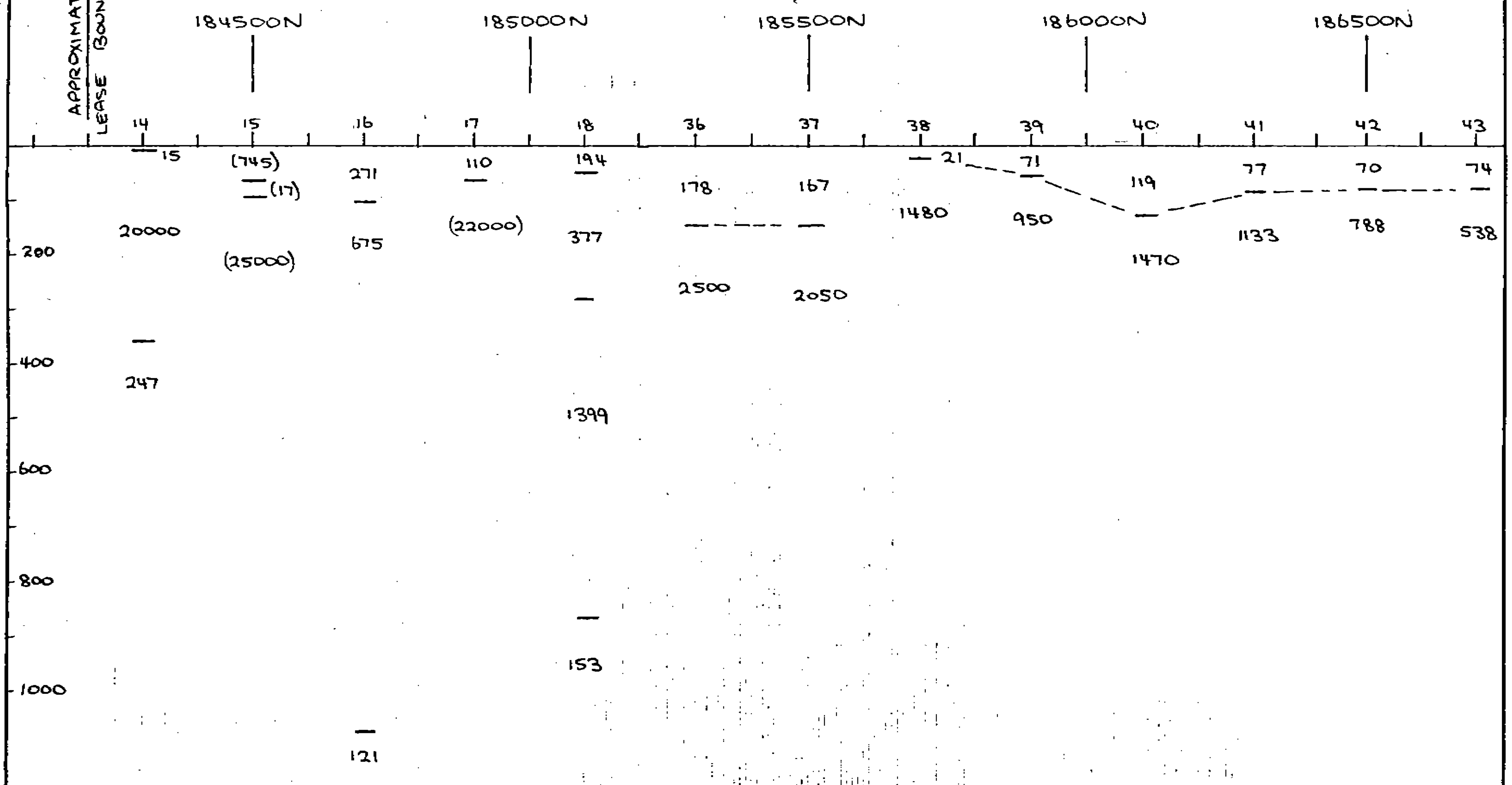


2-14		1-17		1-14		1-13		1-15		1-16		1-15		2-15		2-18		2-19		3-17		2-17		3-14		1-17
0.42		0.55		0.65		0.54		0.71		0.87		0.77		0.63		0.66		0.79		0.62		0.76		0.46		0.52
0.85		1.20		1.32		0.93		1.49		1.80		1.61		1.13		1.27		1.69		1.24		1.49		0.87		1.04
1.17		1.49		2.28		3.18		2.50		2.77		2.12		1.66		1.64		2.04		1.65		1.99		1.83		1.38
*				✓				✓																		
A		A		A		A										A		A		A		A		A		

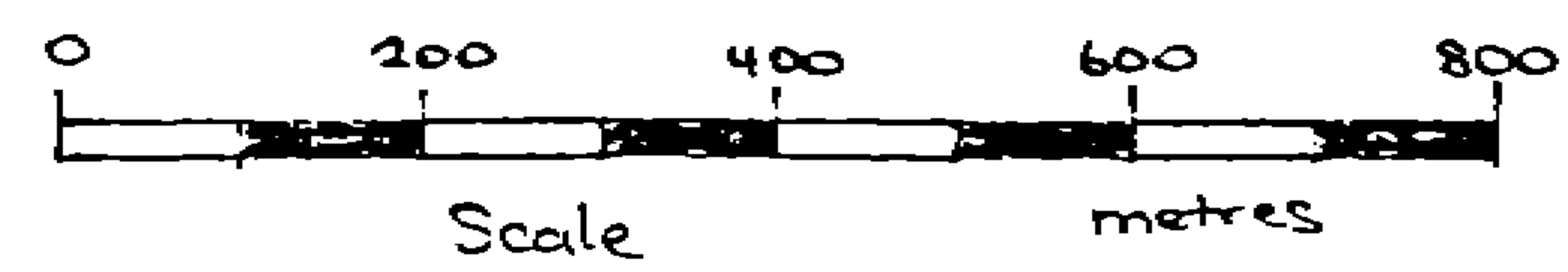
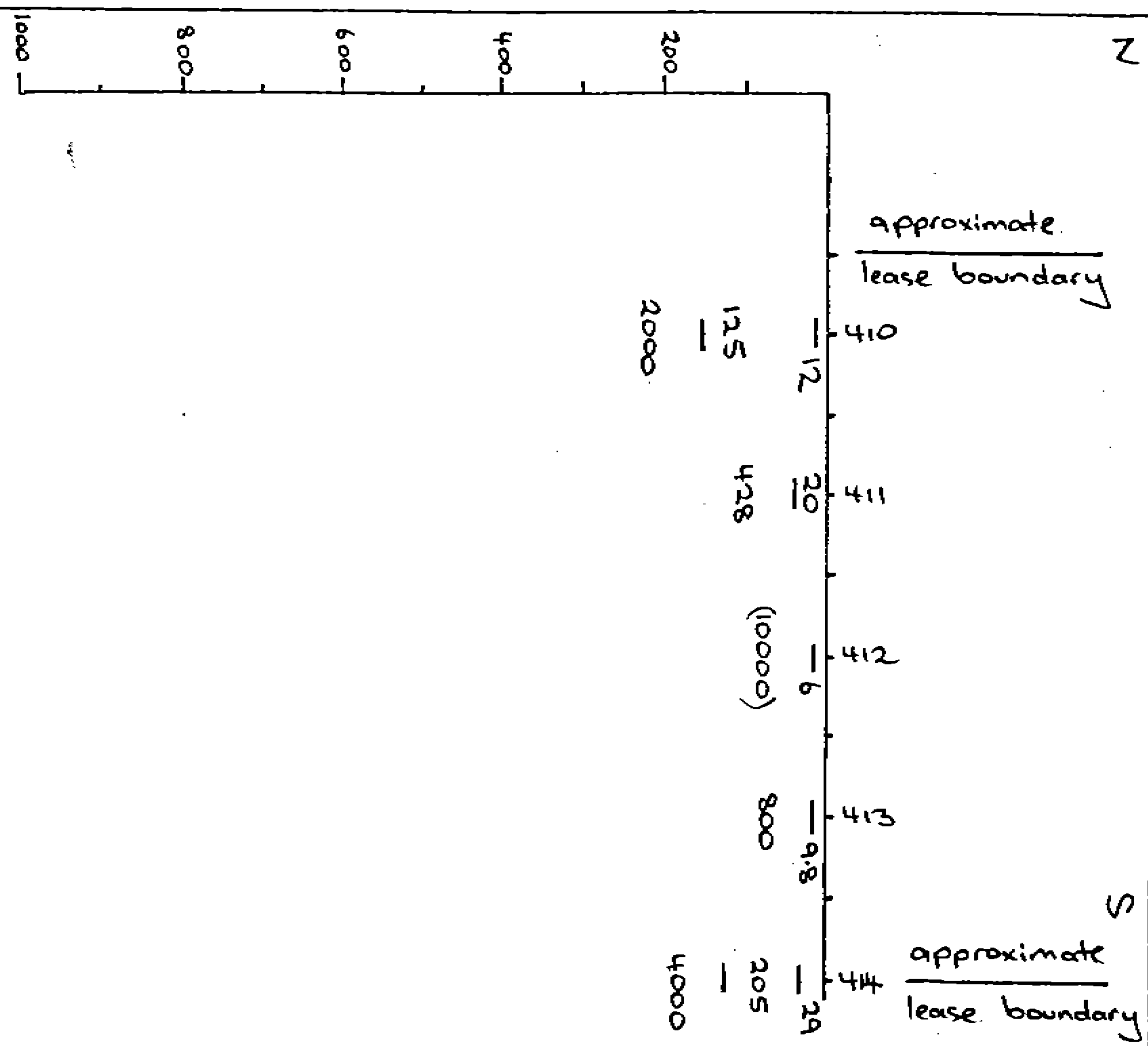
[illegible]

LYNOTT EL 8078 SIROTEM 'SECTION' LINE 1487.00E

APPROXIMATE
LEASE BOUNDARY



		1-15		2-10		2-14		3-8		3-14		3-12		1-14		2-12		3-15		2-15		2-17		2-15		2-14
		1.32		0.99		0.61		2.05		0.81		0.43		0.98		0.50		0.59		0.66		0.65		0.35		0.32
		2.52		1.49		1.08		2.41		1.44		0.61		1.88		0.77		1.08		1.31		1.33		0.66		0.58
		3.83		7.56		1.84		8.42		3.90		1.13		2.61		1.34		1.61		1.75		1.61		0.92		0.82
				✓				✓												?						



Channels	1-14	2-13	3-7	2-9	2-14
RMS	0.77	0.97	0.79	0.43	0.65
SE	1.49	1.69	0.87	0.60	1.24
APAE	2.94	2.76	3.22	1.65	2.42
(I/A)		✓	✓	✓	A

SIROTEM 'SIROEX' INVERSIONS LYNOTT EL 8078 HOMESTEAD LINE 1

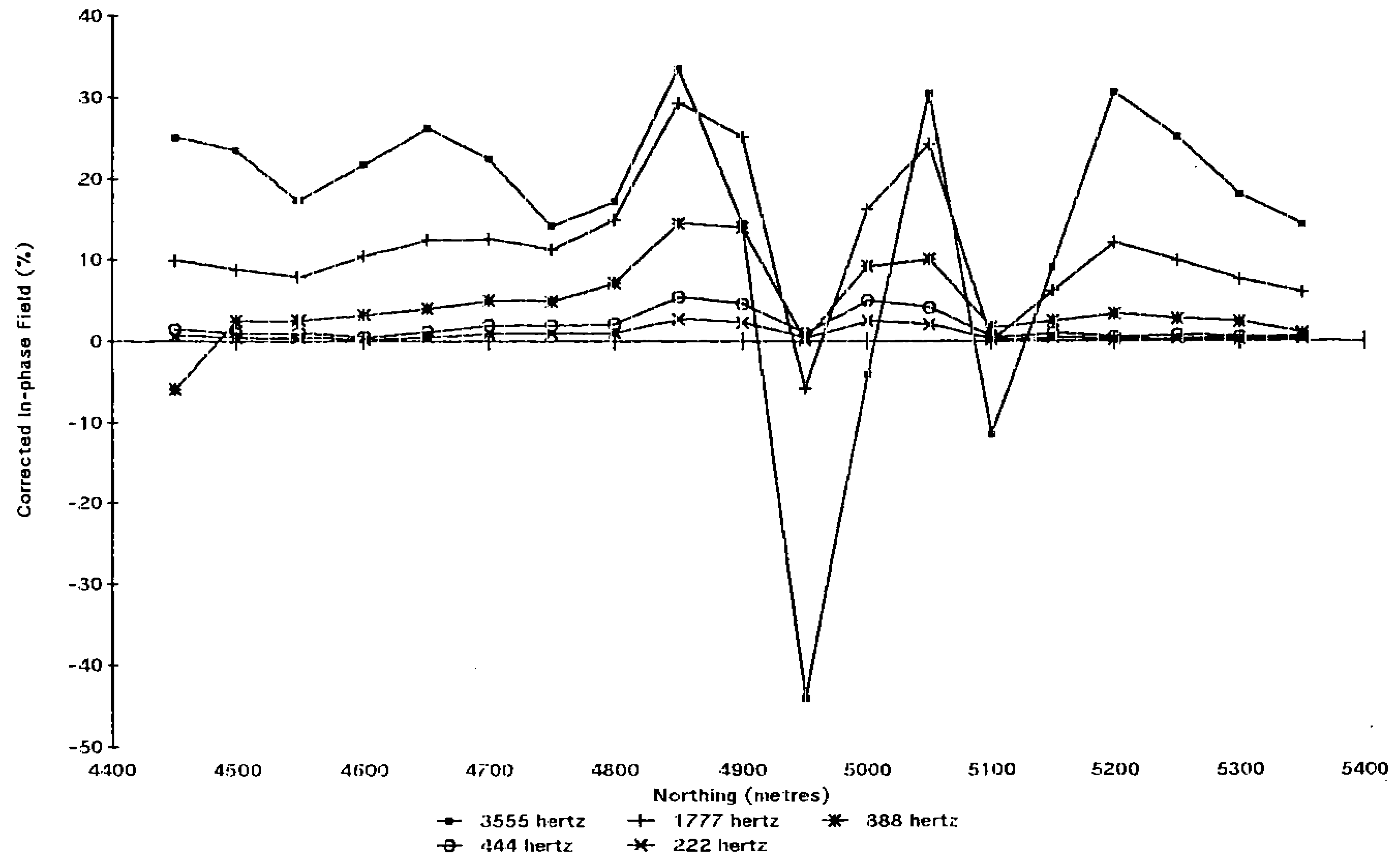
SIROTEM MARK III COMPOSITE TIMES
200 metre moving loop, in-loop array
Delay : 200µsec Channels: 32 Ramp: 251-263
Surveyed : Solo Geophysics, Date: 12/7/92

APPENDIX IV

**MaxMin Stacked Profiles Corrected
in-phase and out-of-phase.
Arbitrary scales.**

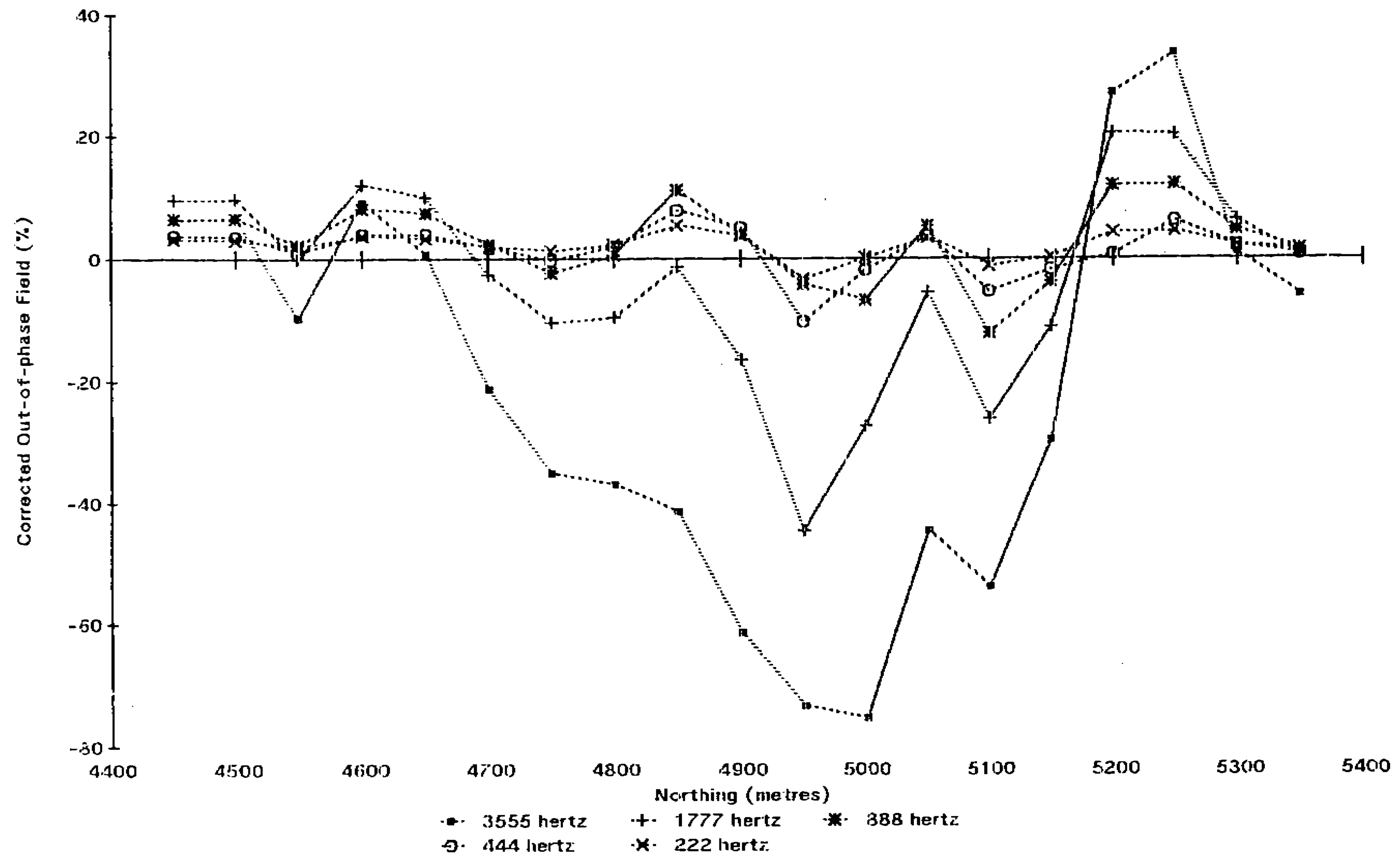
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 5000E - 100m Tx-Rx



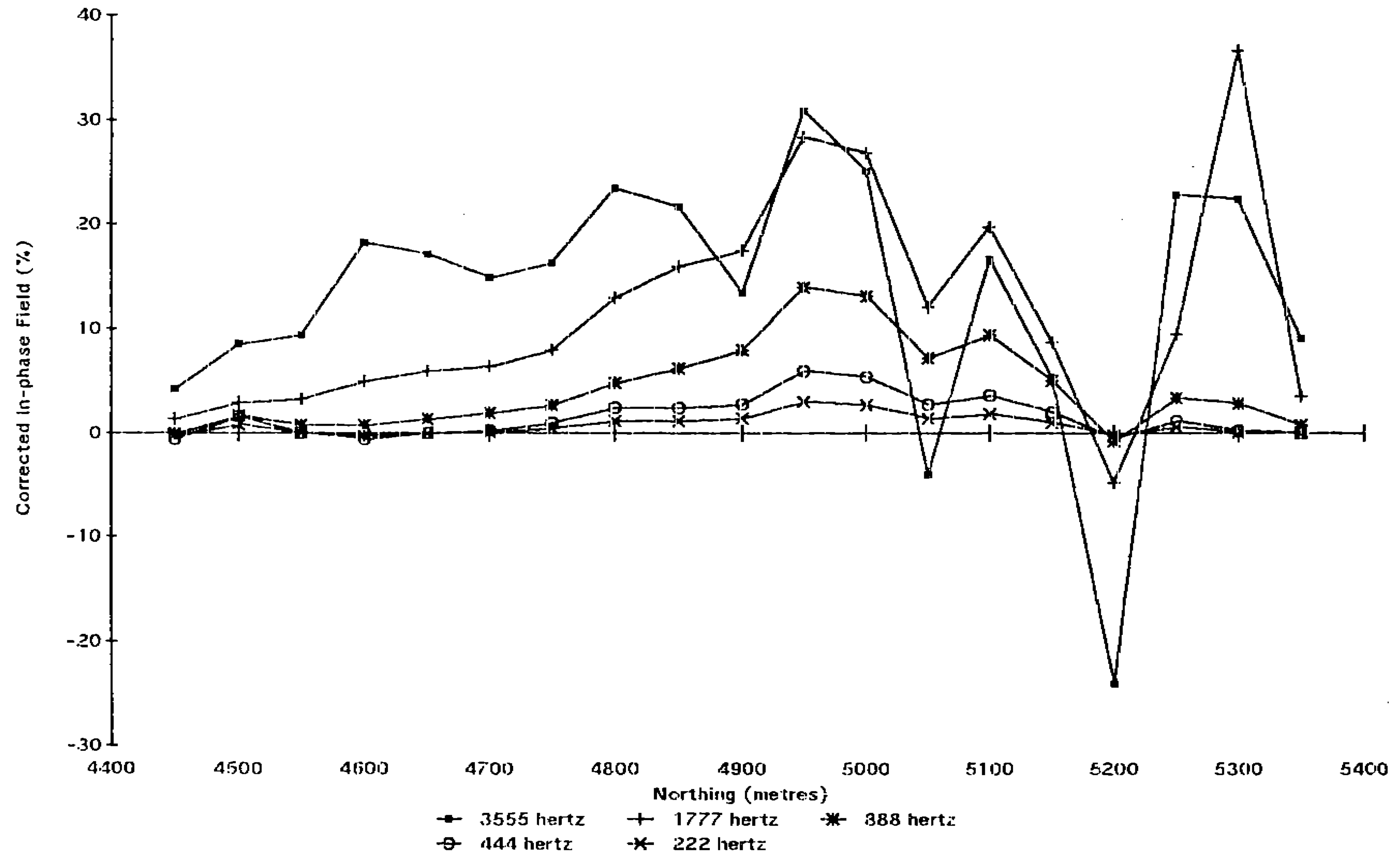
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 5000E - 100m Tx-Rx



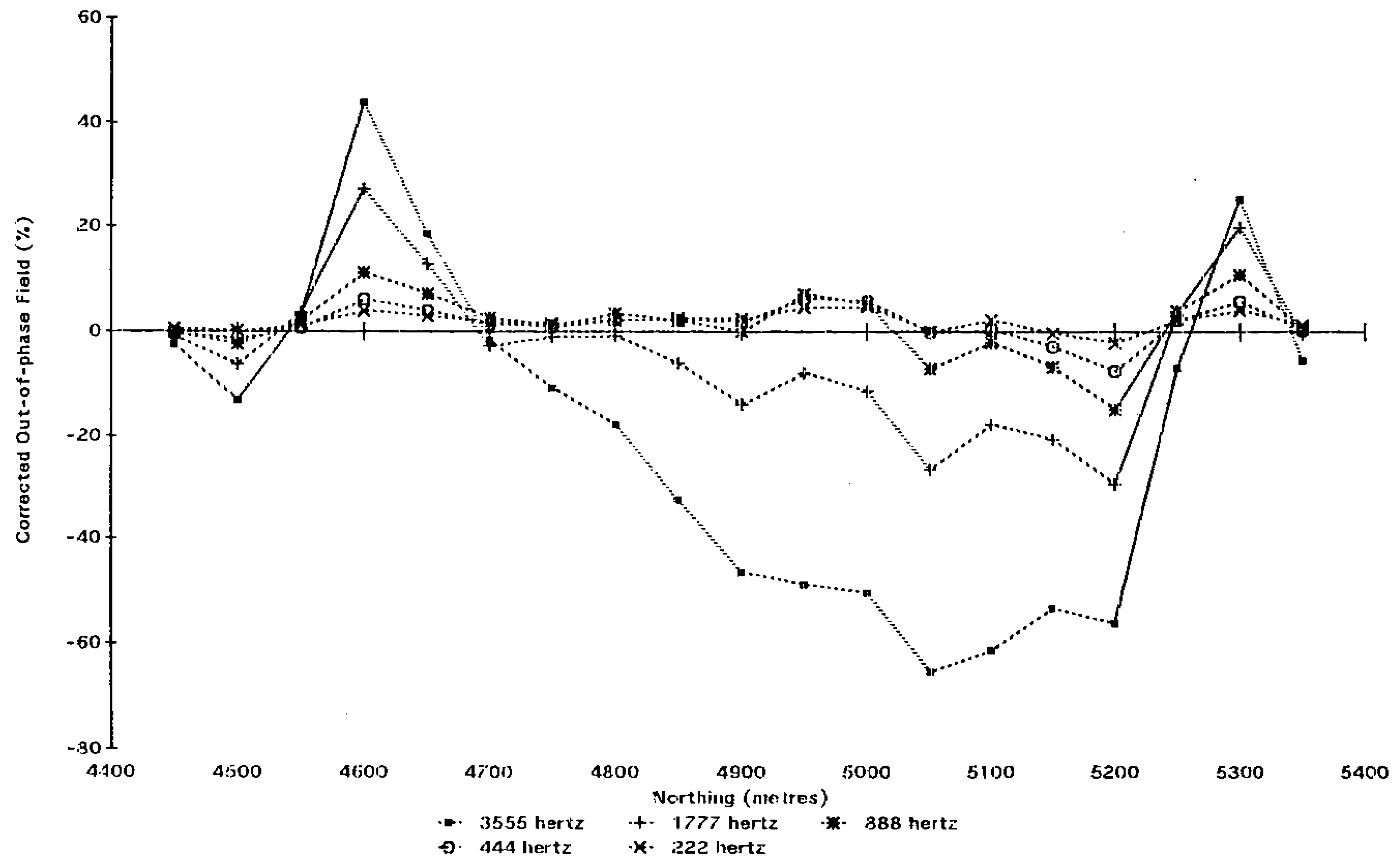
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 5200E - 100m Tx-Rx



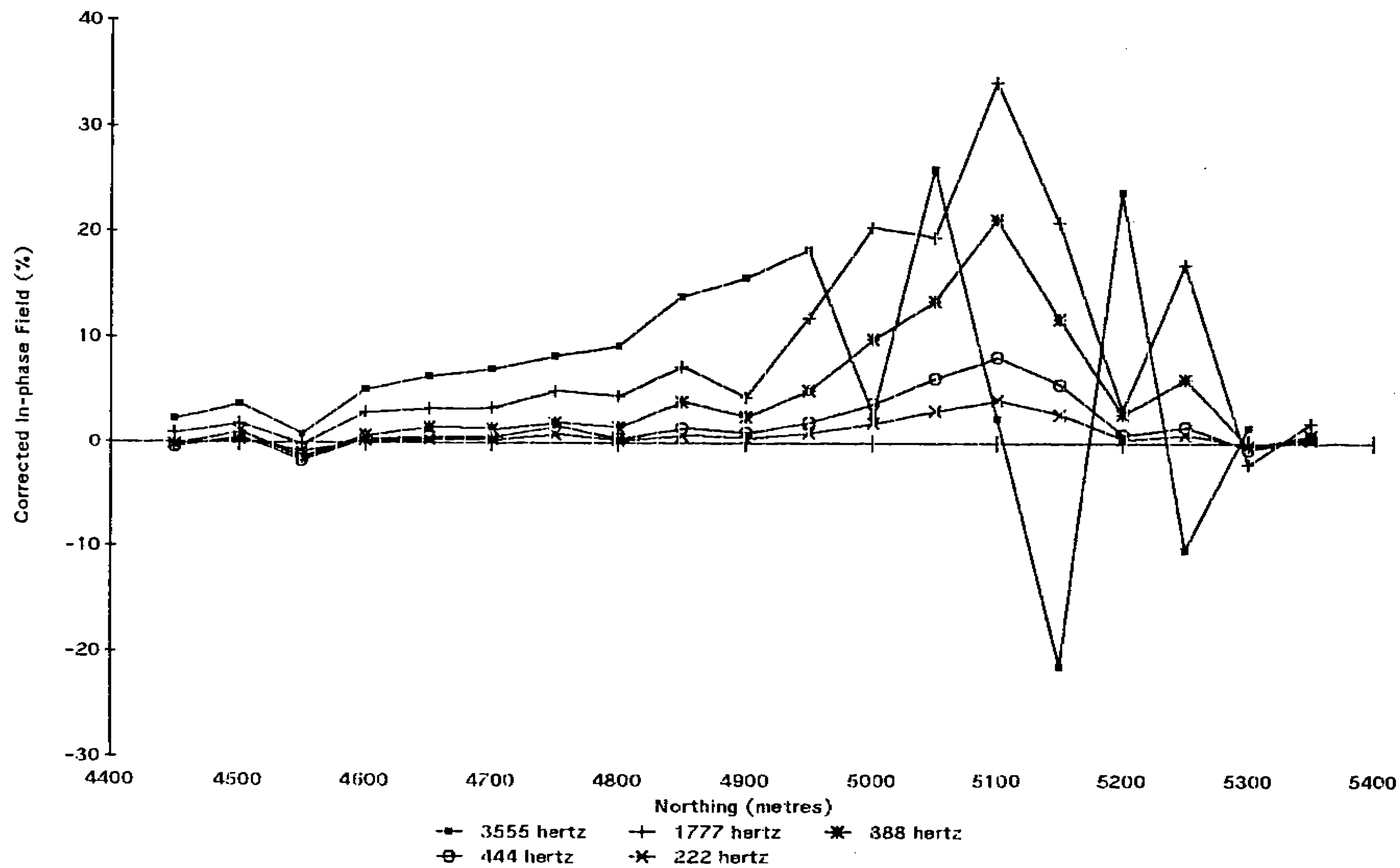
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 5200E - 100m Tx-Rx



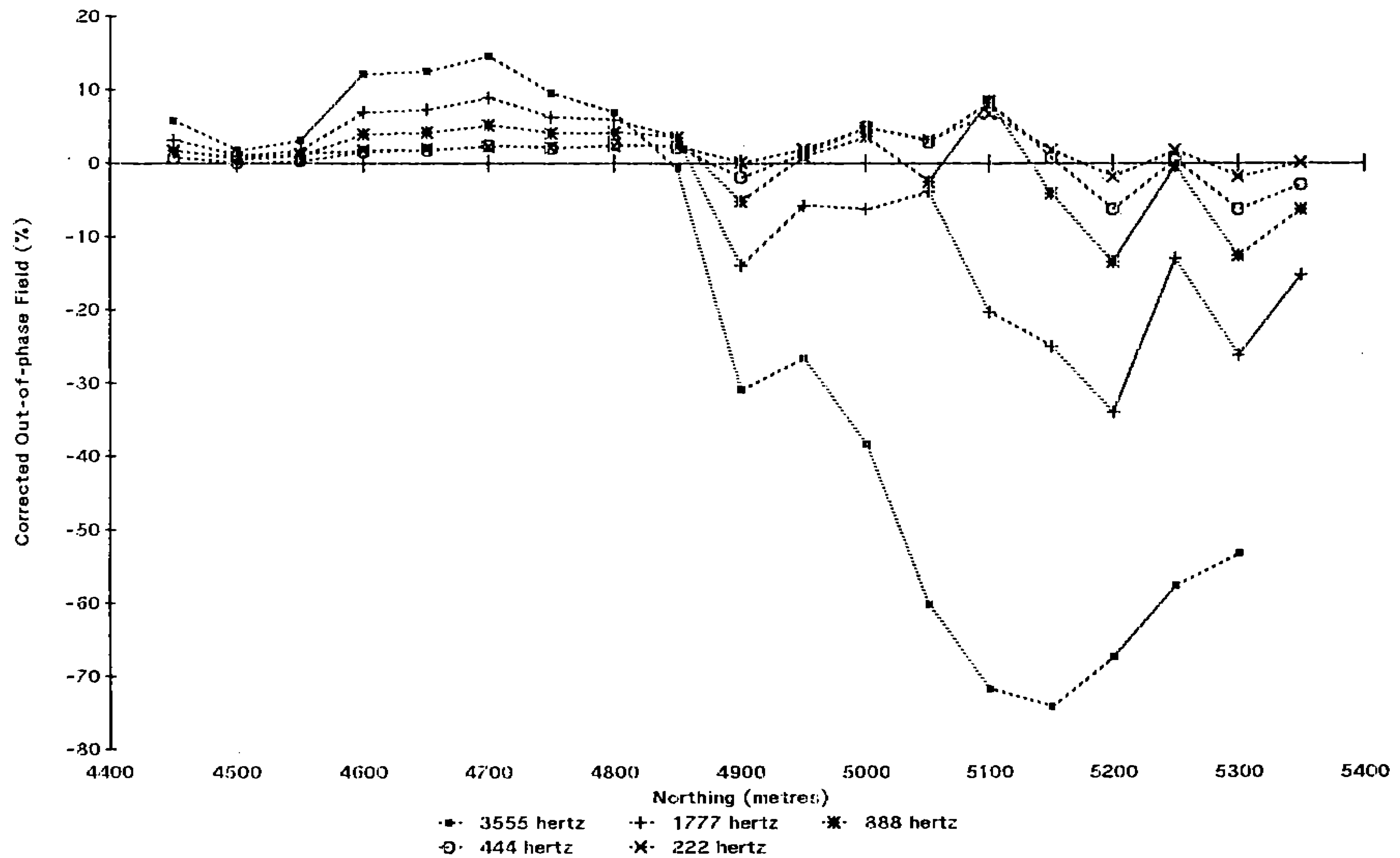
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 5400E - 100m Tx-Rx



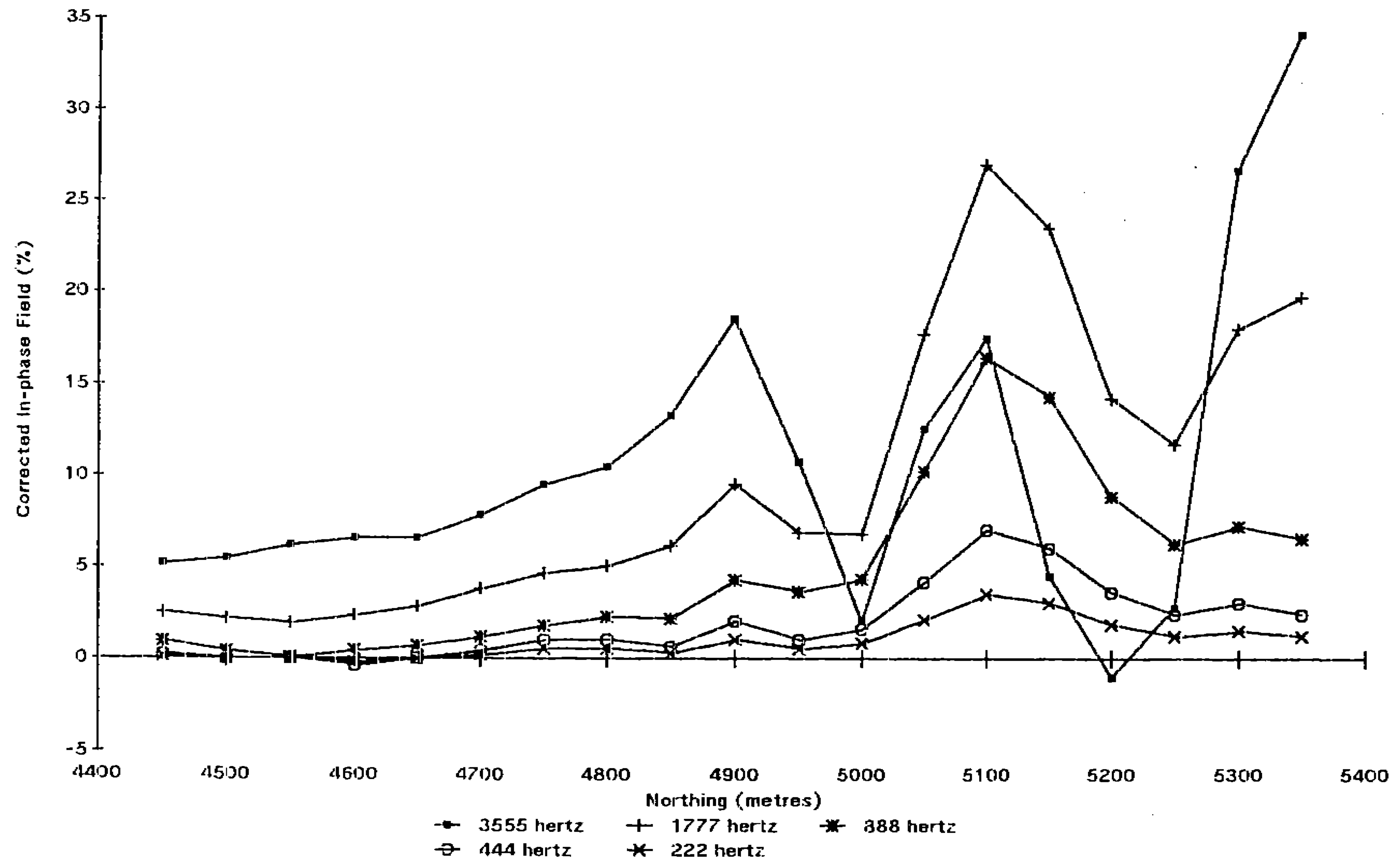
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 5400E - 100m Tx-Rx



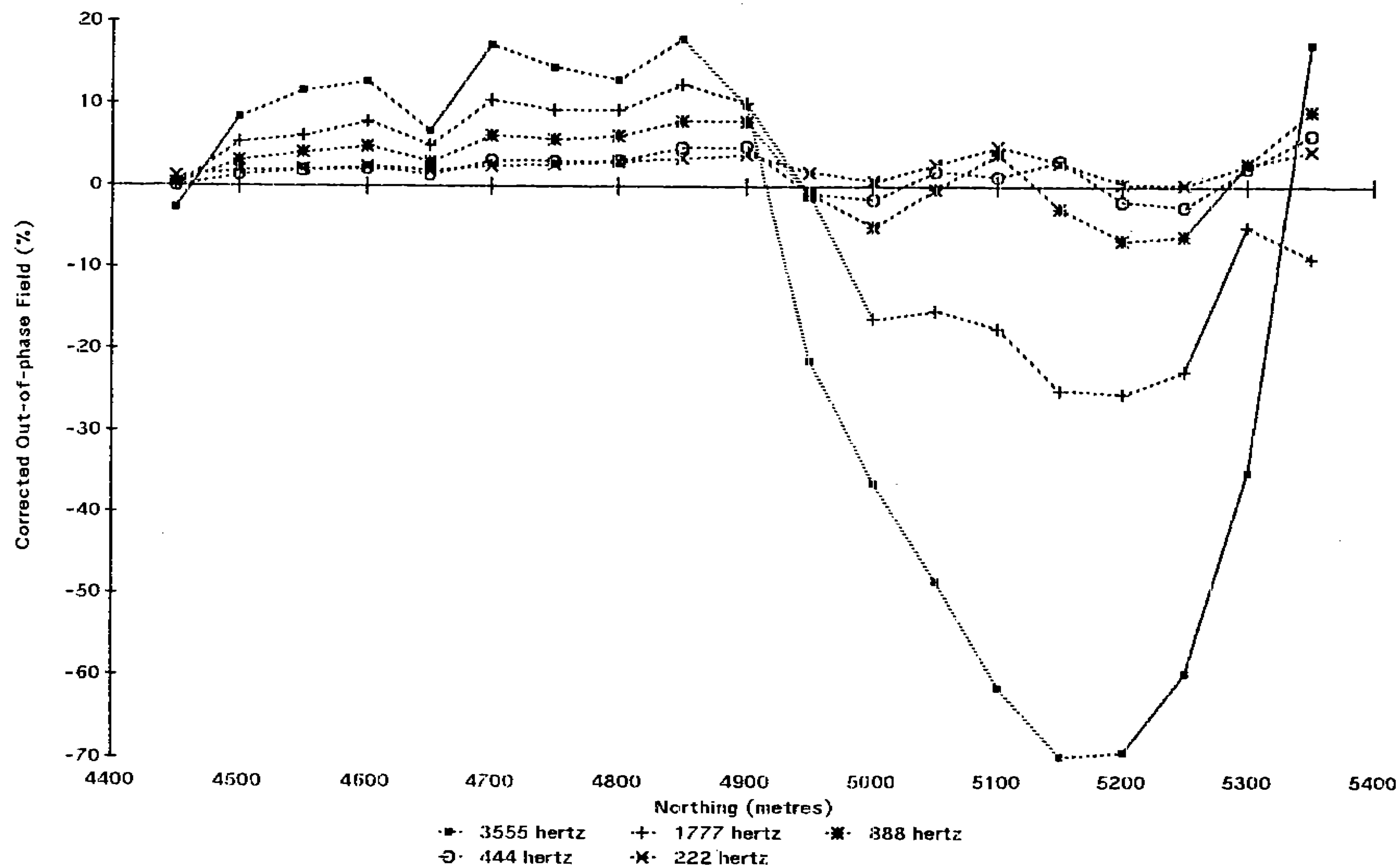
LYNOTT EL8078 MAX-MIN EM SURVEY

BUFFALO EAST 560QE - 100m Tx-Rx

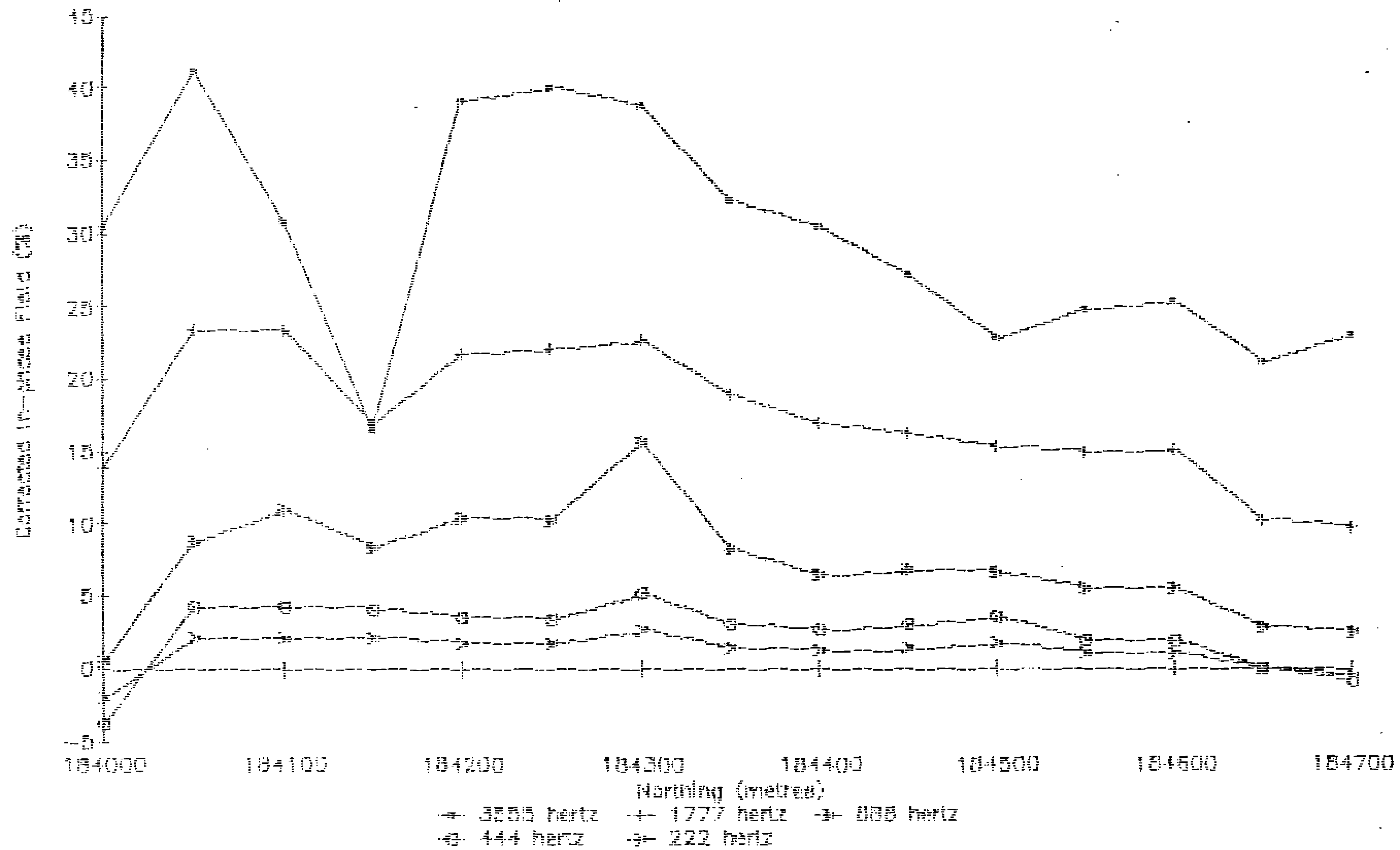


LYNOTT EL8078 MAX-MIN EM SURVEY

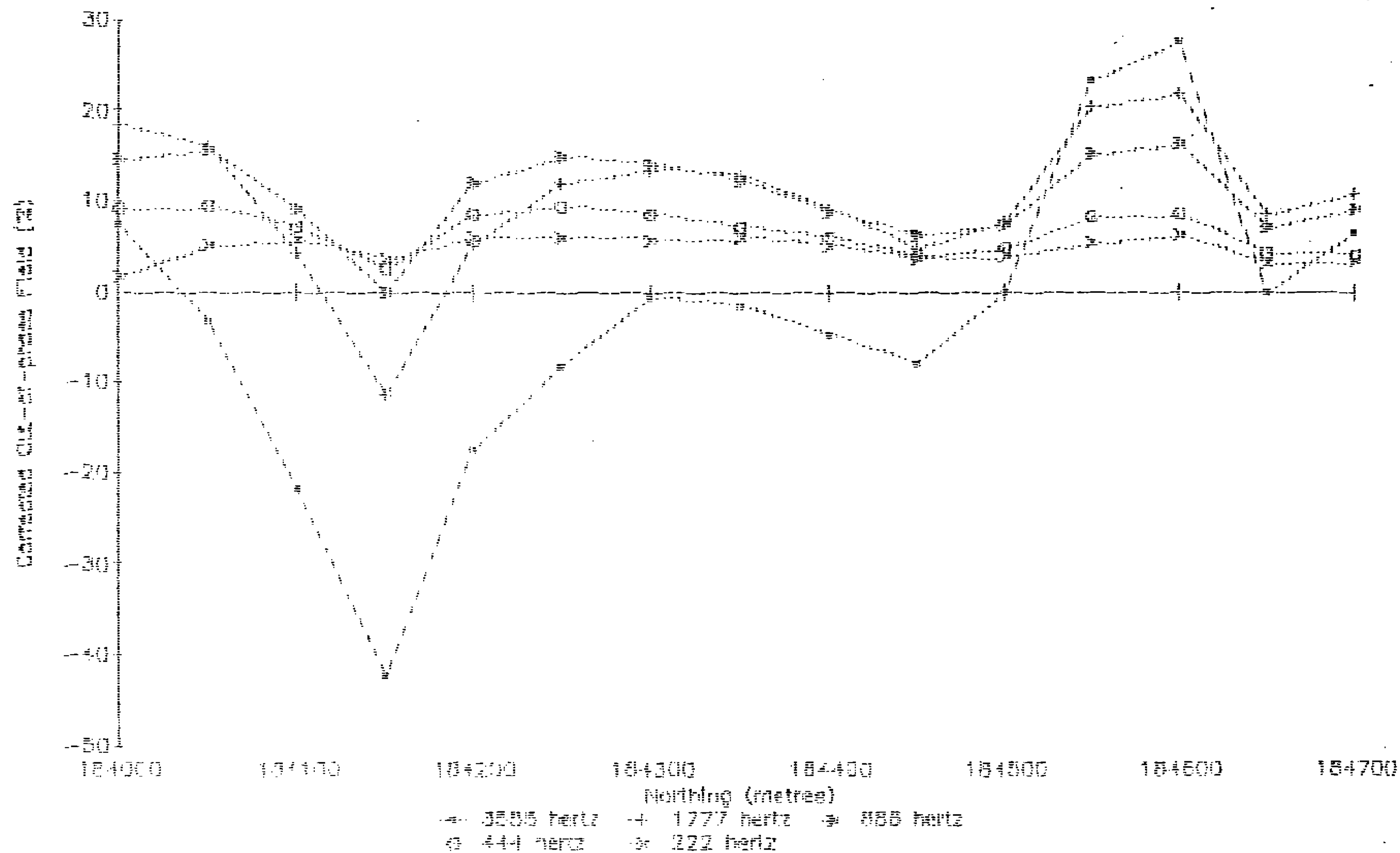
BUFFALO EAST 5600E - 100m Tx-Rx



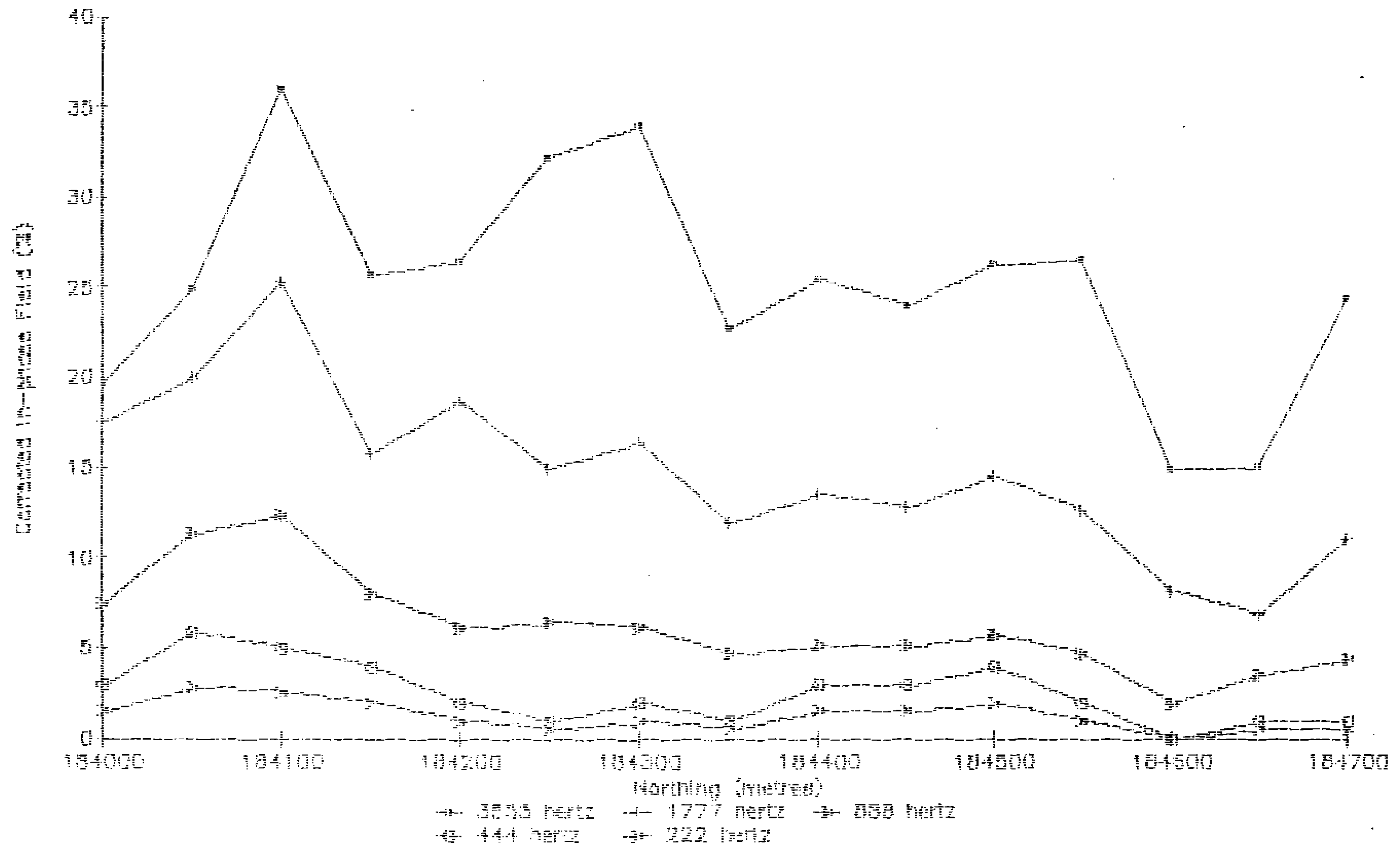
• **RE:**



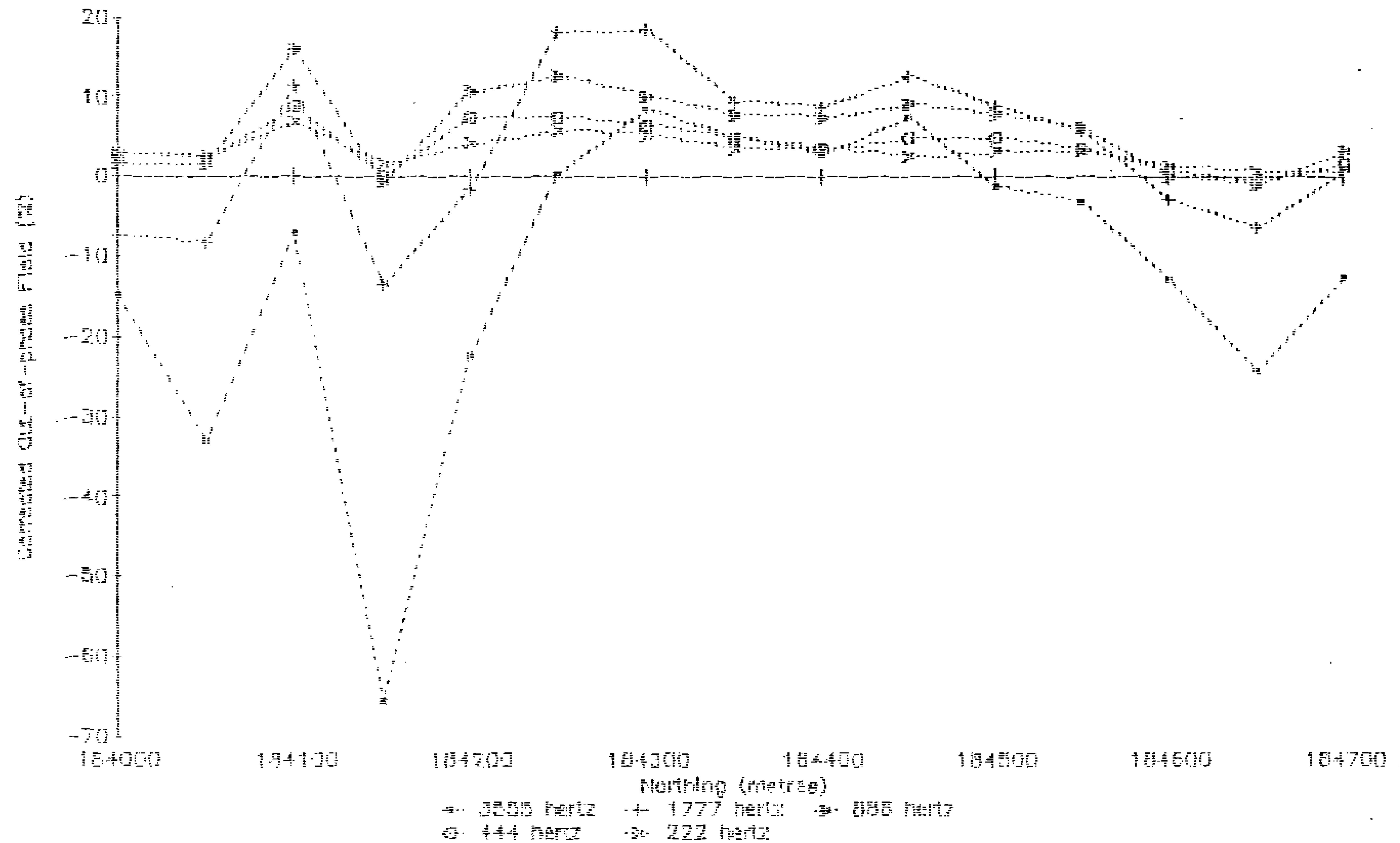
LYNDOTT EL8078 MAX--MIN EM SURVEY Line 142000E - 100m T₂-R₂



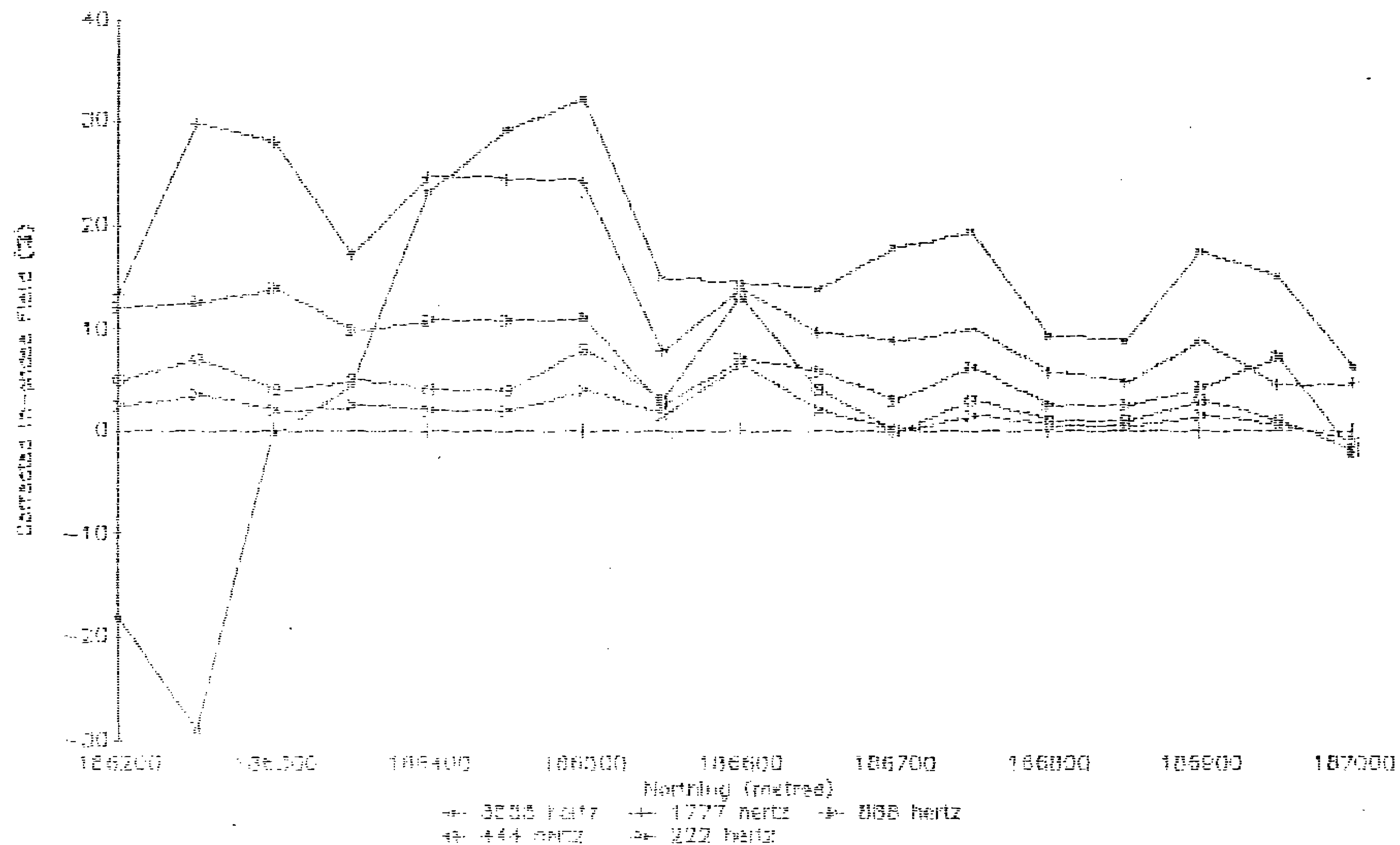
LYNOTT EL8078 MAX-MIN EM SURVEY Line 142200E - 100m T₂-R₂



LYNOTT ELBO78 MAX-MIN EM SURVEY Line 142200E - 100m T2-P2

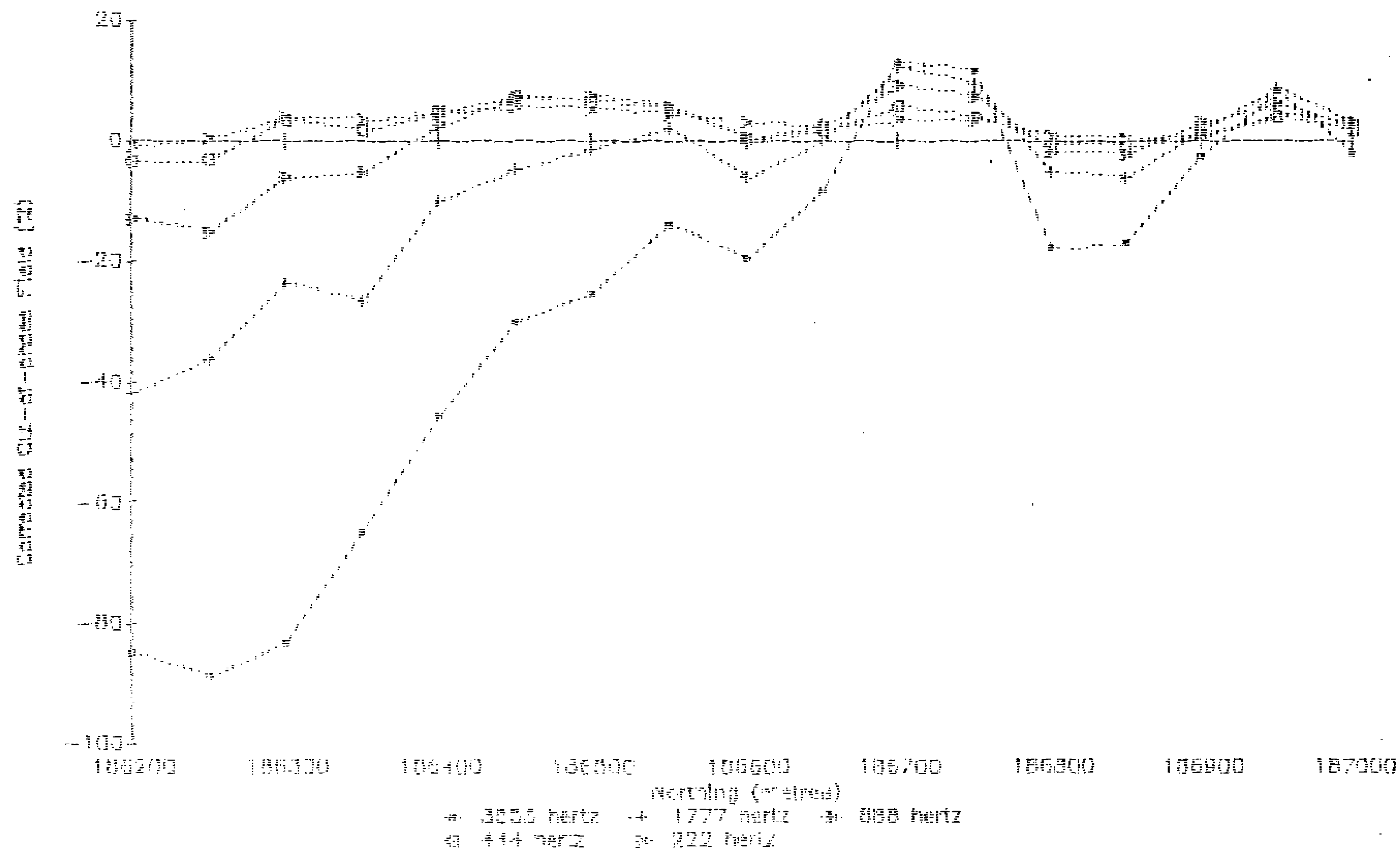


LYNOTT EL8078 MAX--MIN EM SURVEY Line 142000E -- 1001m T2-R2

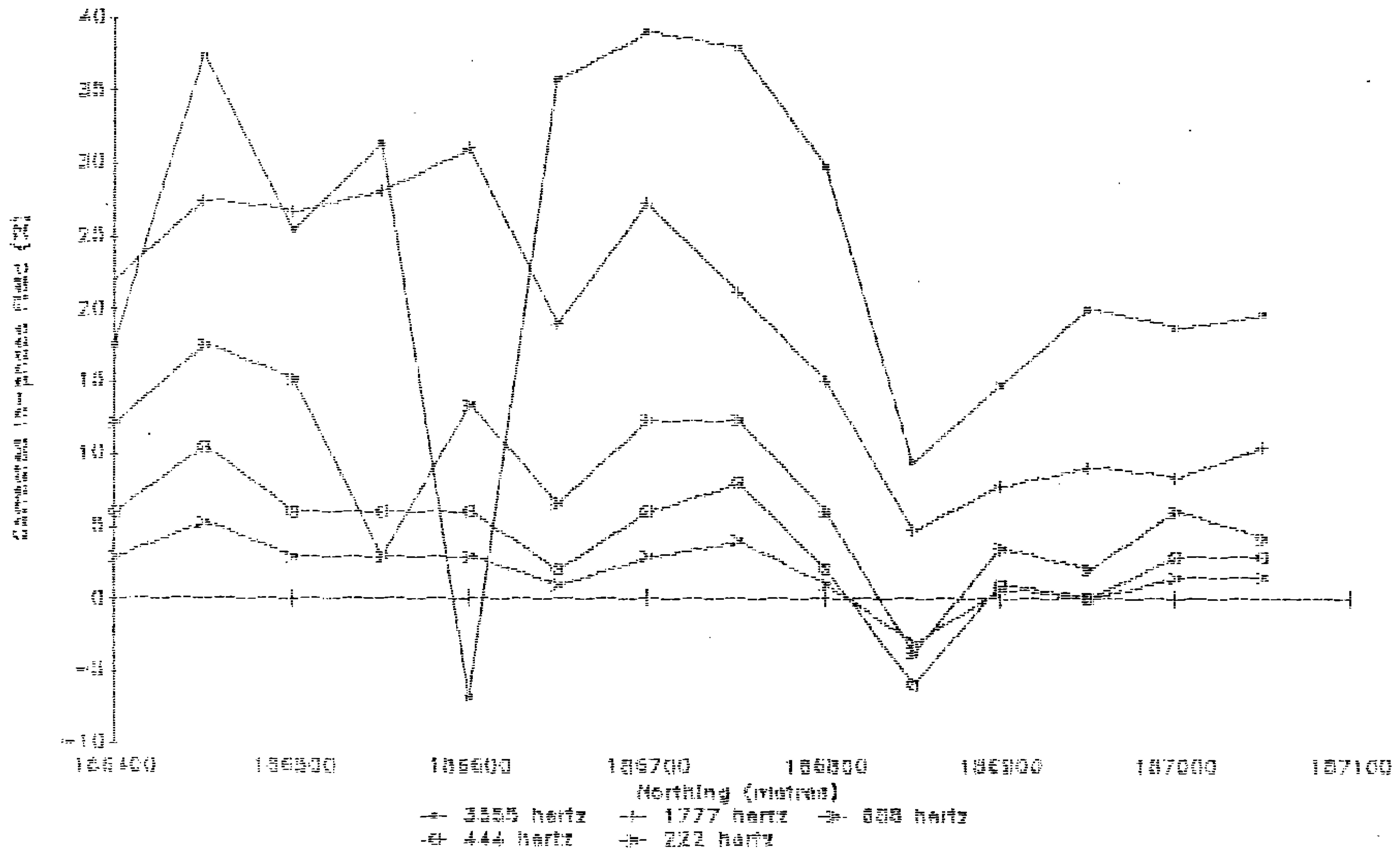


LYNOTT EL8078 MAX-MIN EM SURVEY

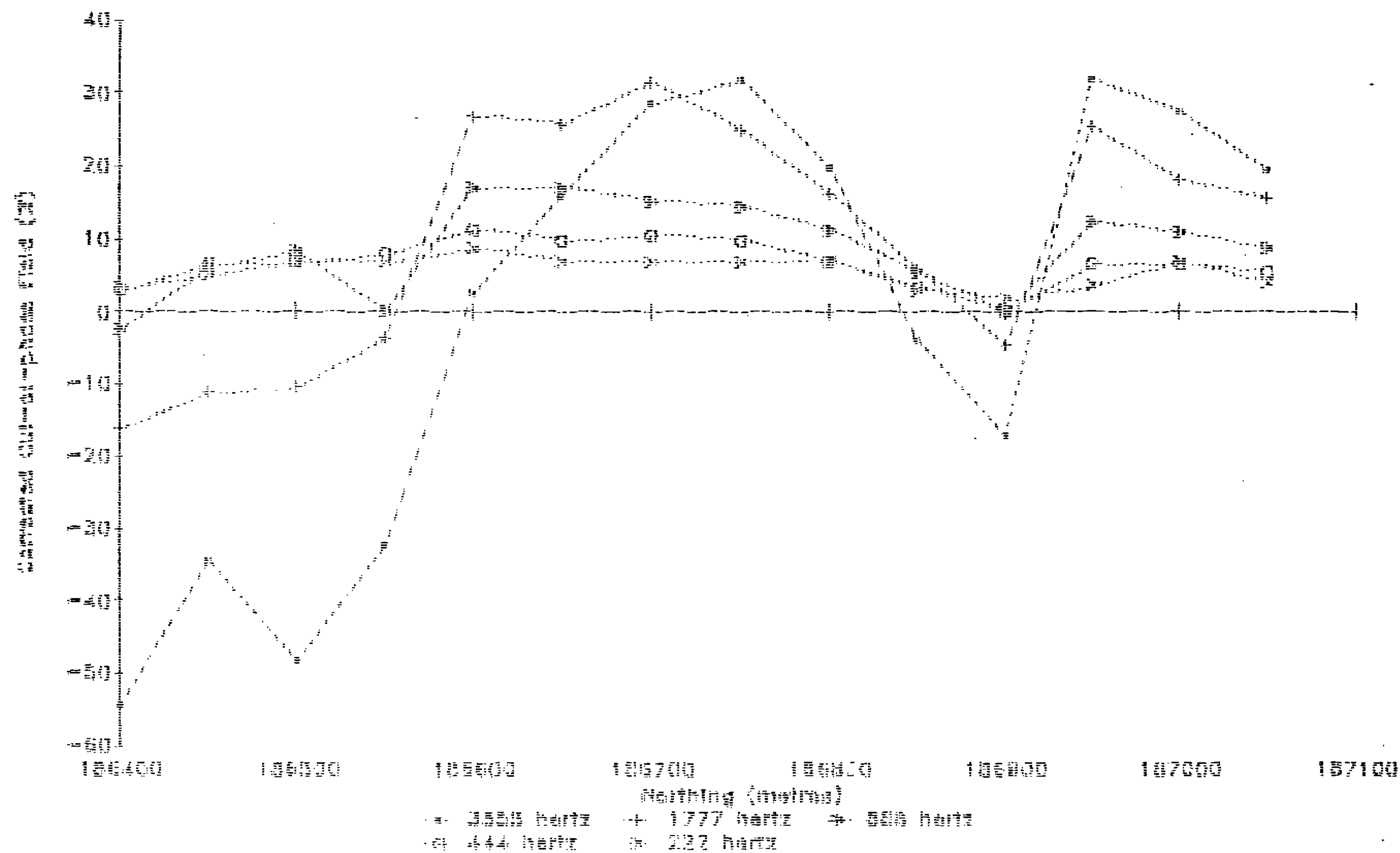
Line 142000E -- 100m T₂-R₂



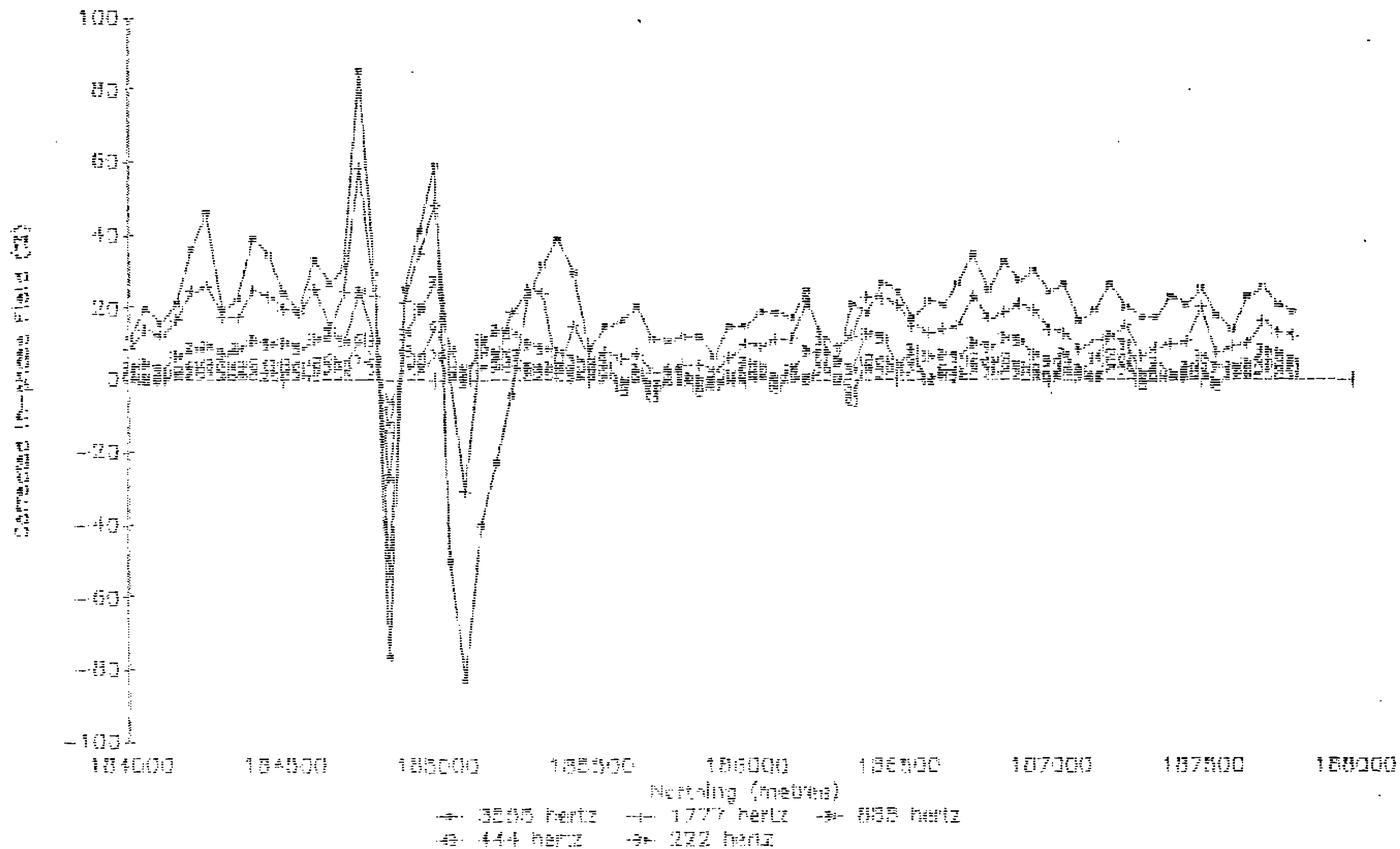
LYNOTT EL8078 MAX-MIN EM SURVEY Line 142200E - 100m Tx-Rx



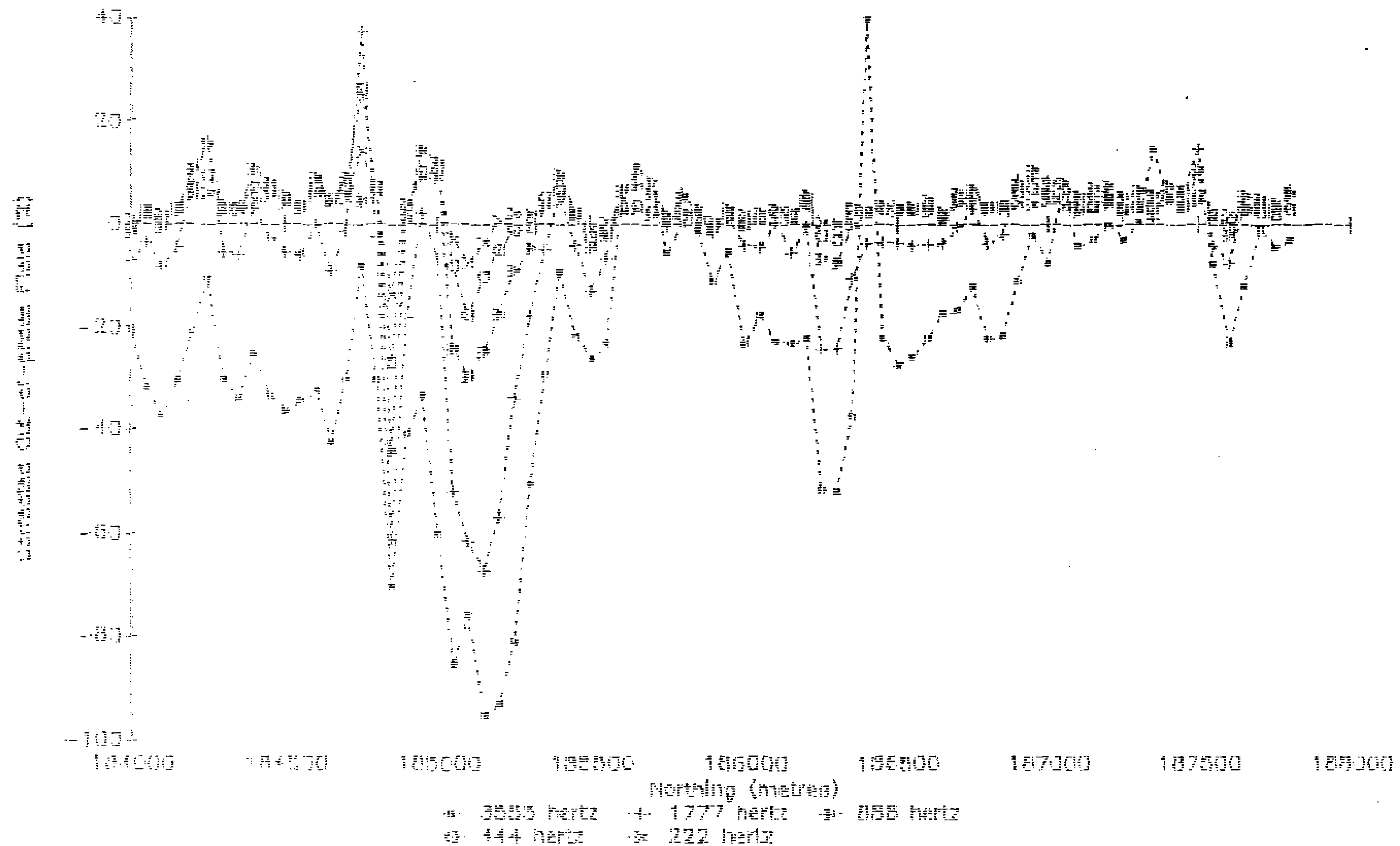
LYNOTT ELBO78 MAX-MIN EM SURVEY Line 142200E - 100m Tx-Rx



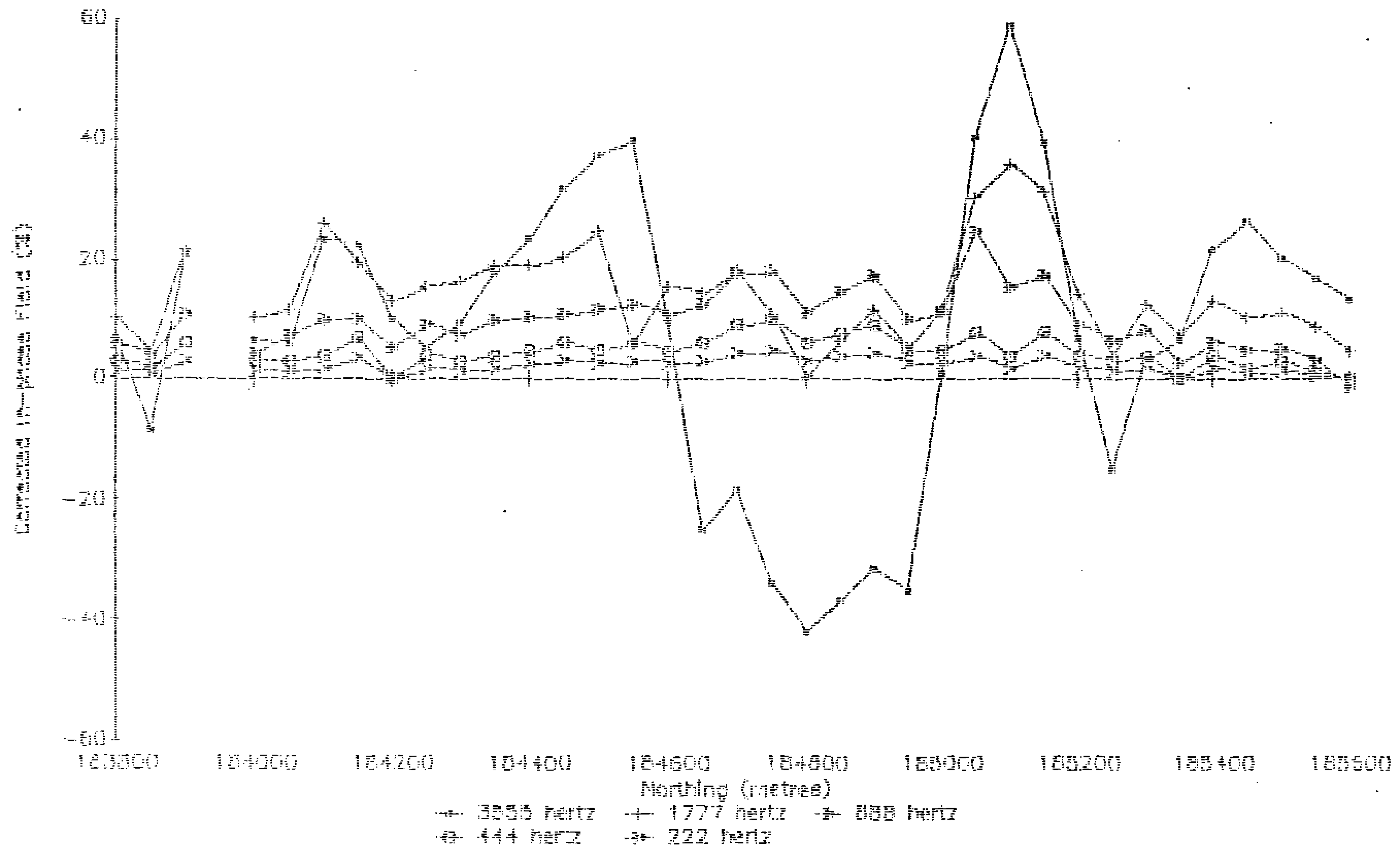
LYNOTT EL8075 MAX-MIN EM SURVEY Line 143000E - 100m Tx-Rx



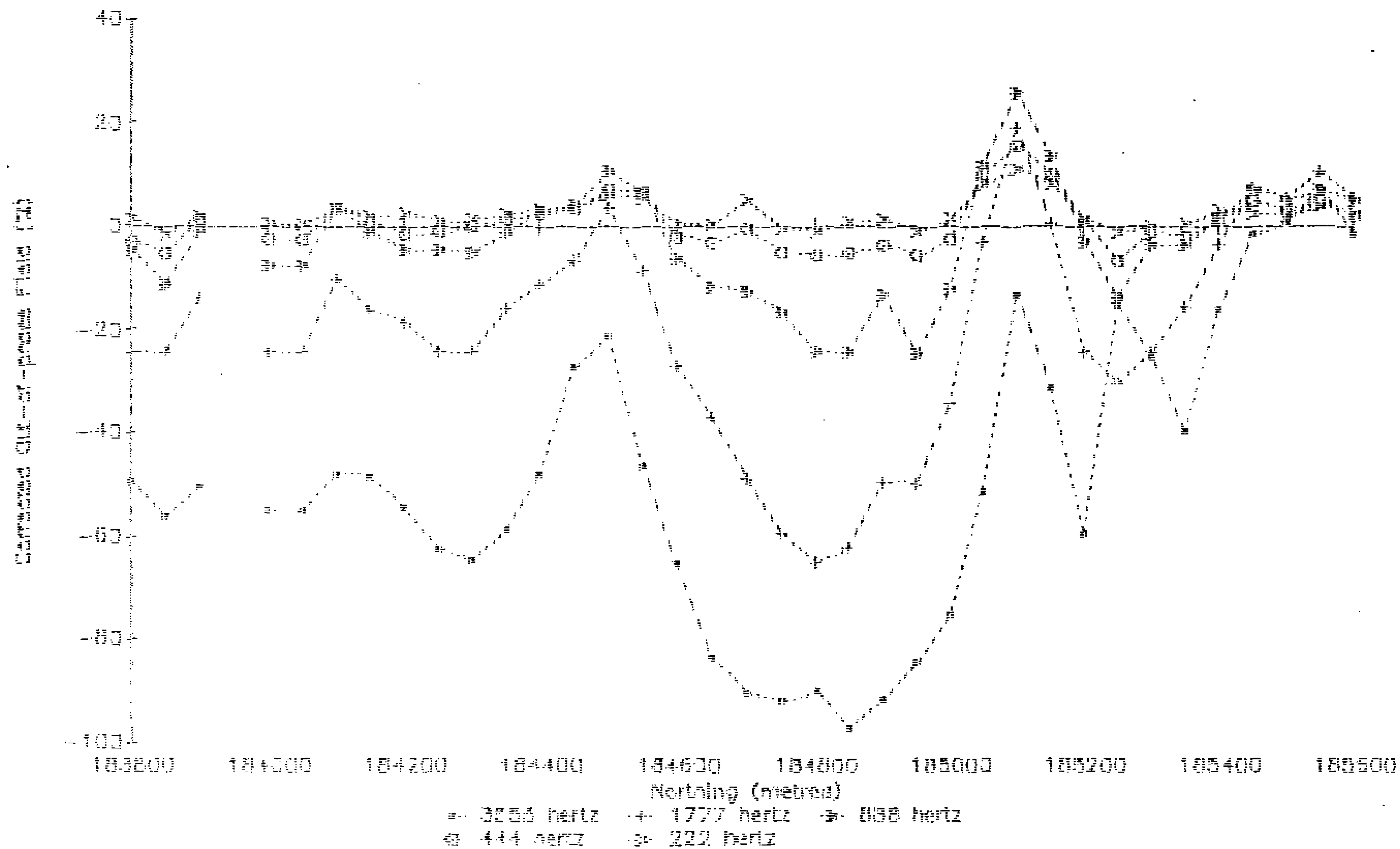
LYNOTT EL8078 MAX--MIN EM SURVEY Line 14300GE -- 100m Tx-Rx



LYNOTT EL8076 MAX--MIN EM SURVEY Line 144000E -- 100m Tx-Rx

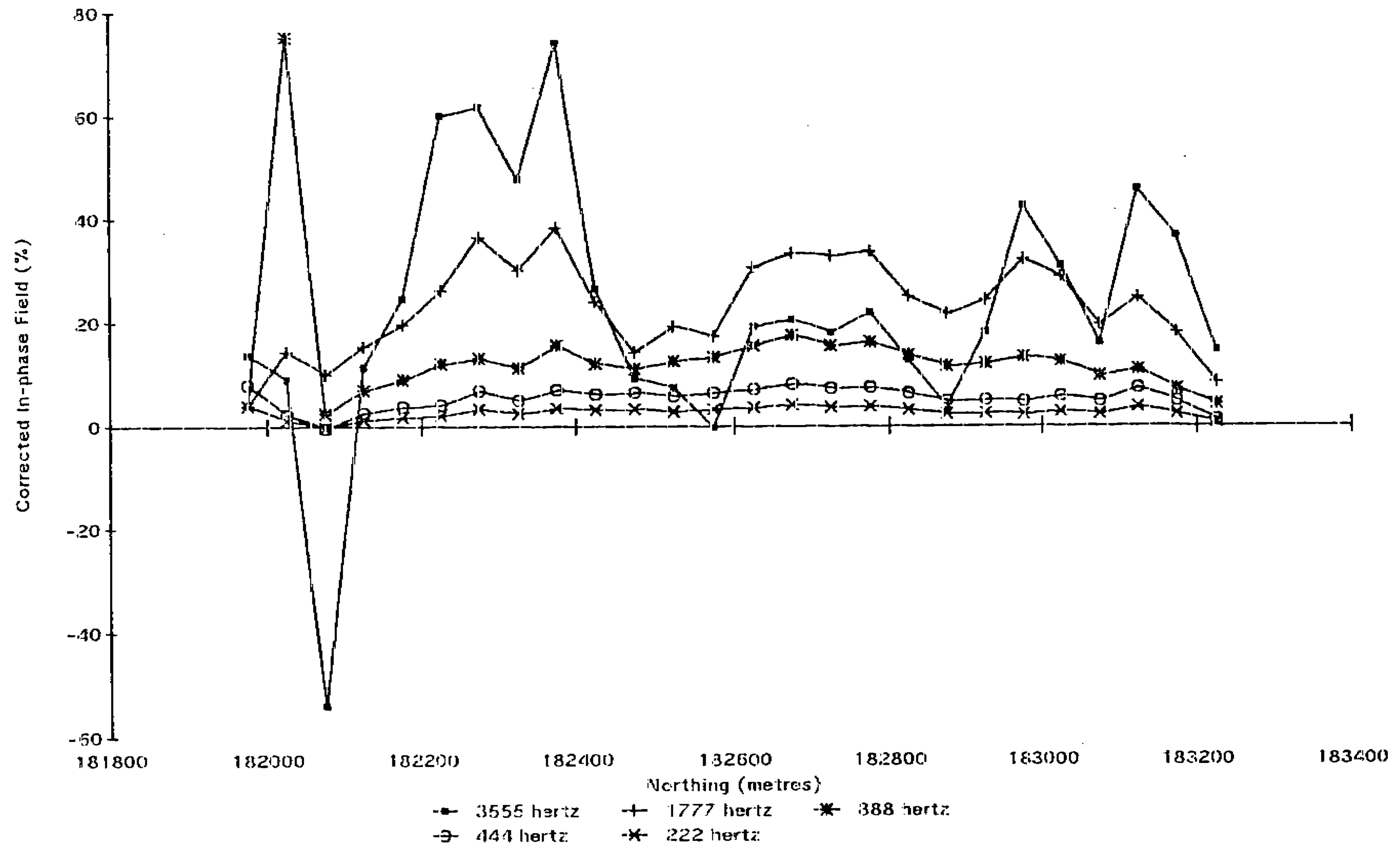


LYNOTT EL8078 MAX--MIN EM SURVEY Line 144000E -- 100m T₂-R₂



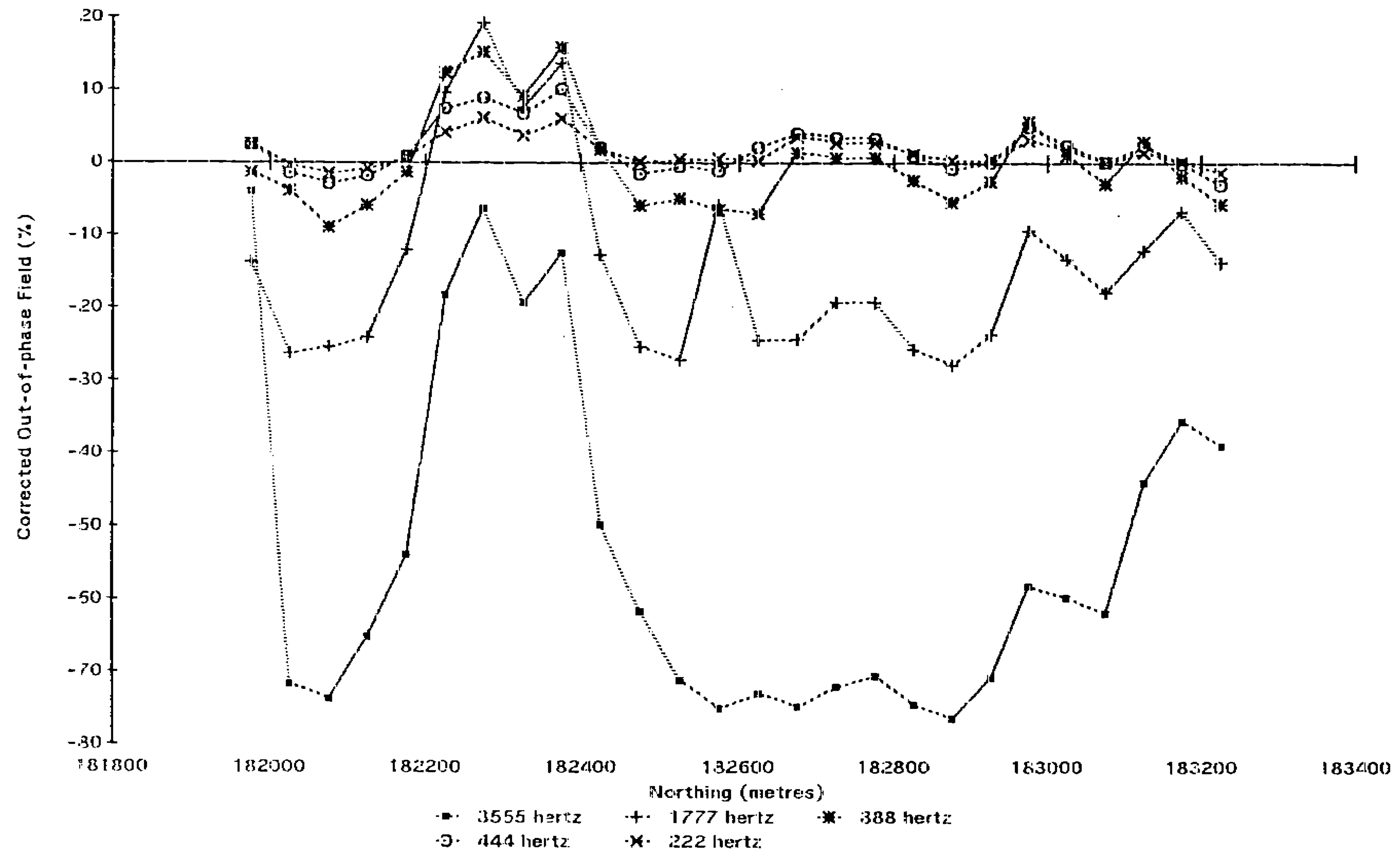
LYNOTT EL8078 MAX-MIN EM SURVEY

Line 145450E - 100m Tx-Rx



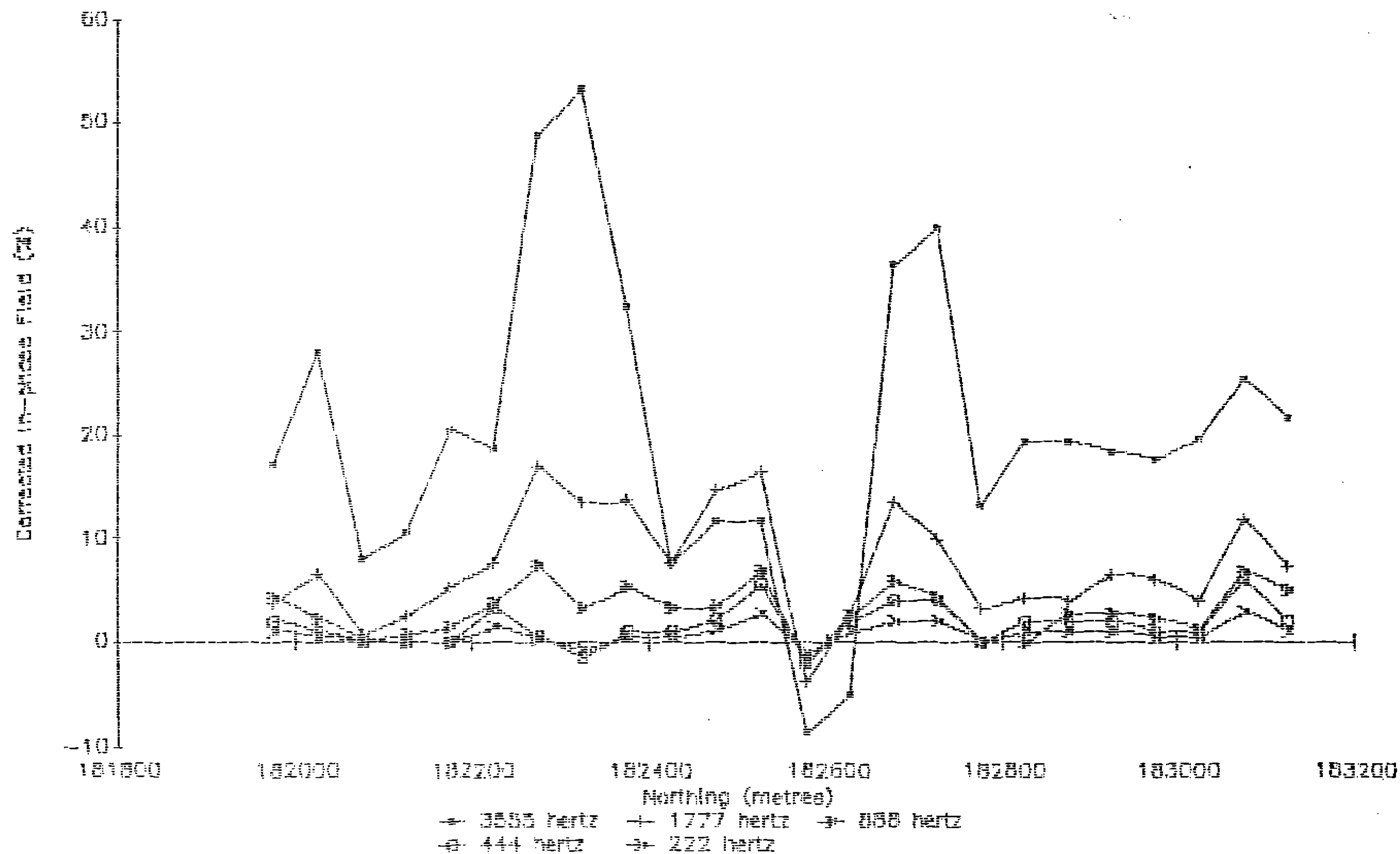
LYNOTT EL8078 MAX-MIN EM SURVEY

Line 145450E ~100m Tx-Rx



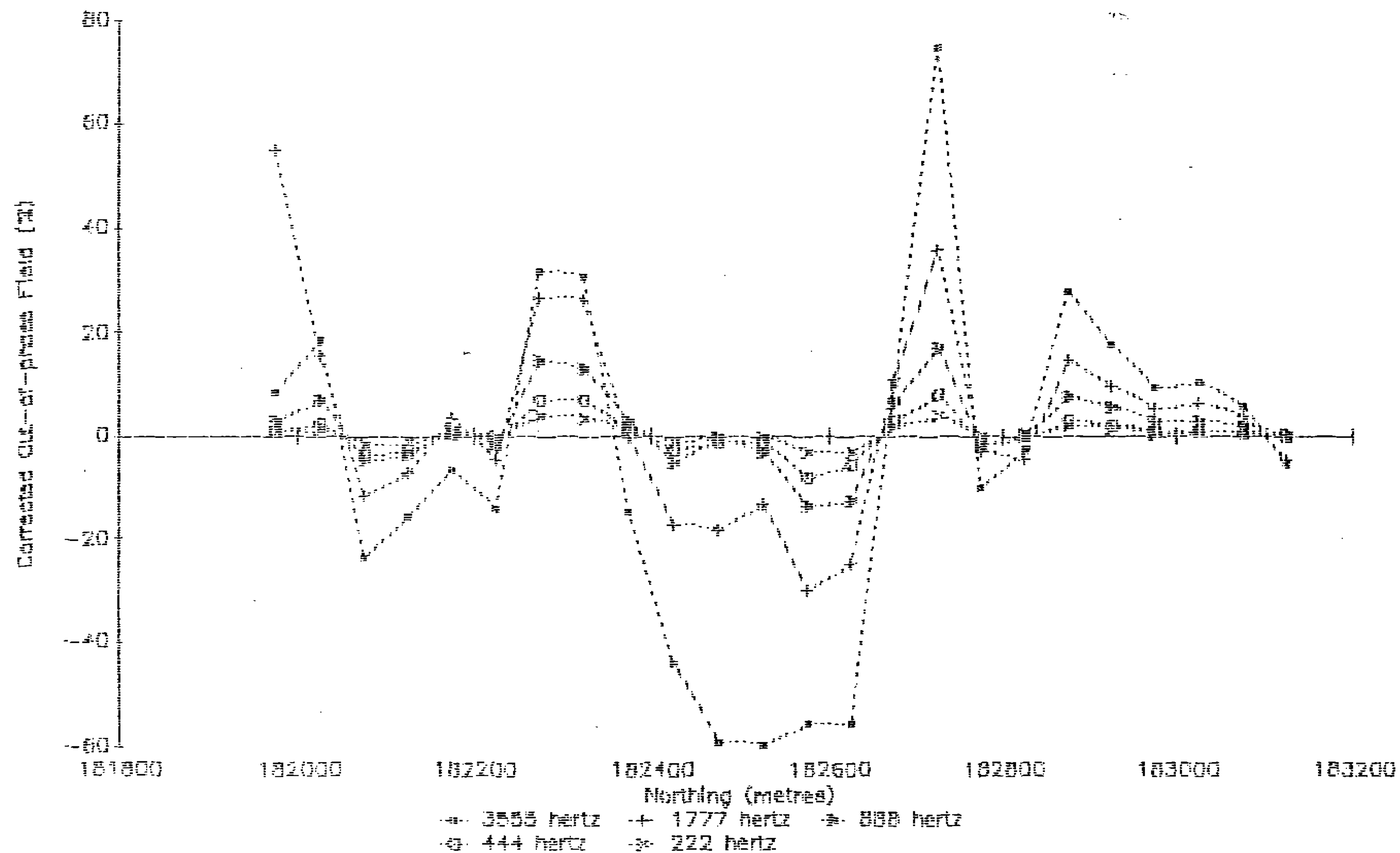
LYNOTT EL8078 MAX-MIN EM SURVEY

Line 146050E → 100m Tx-Rx



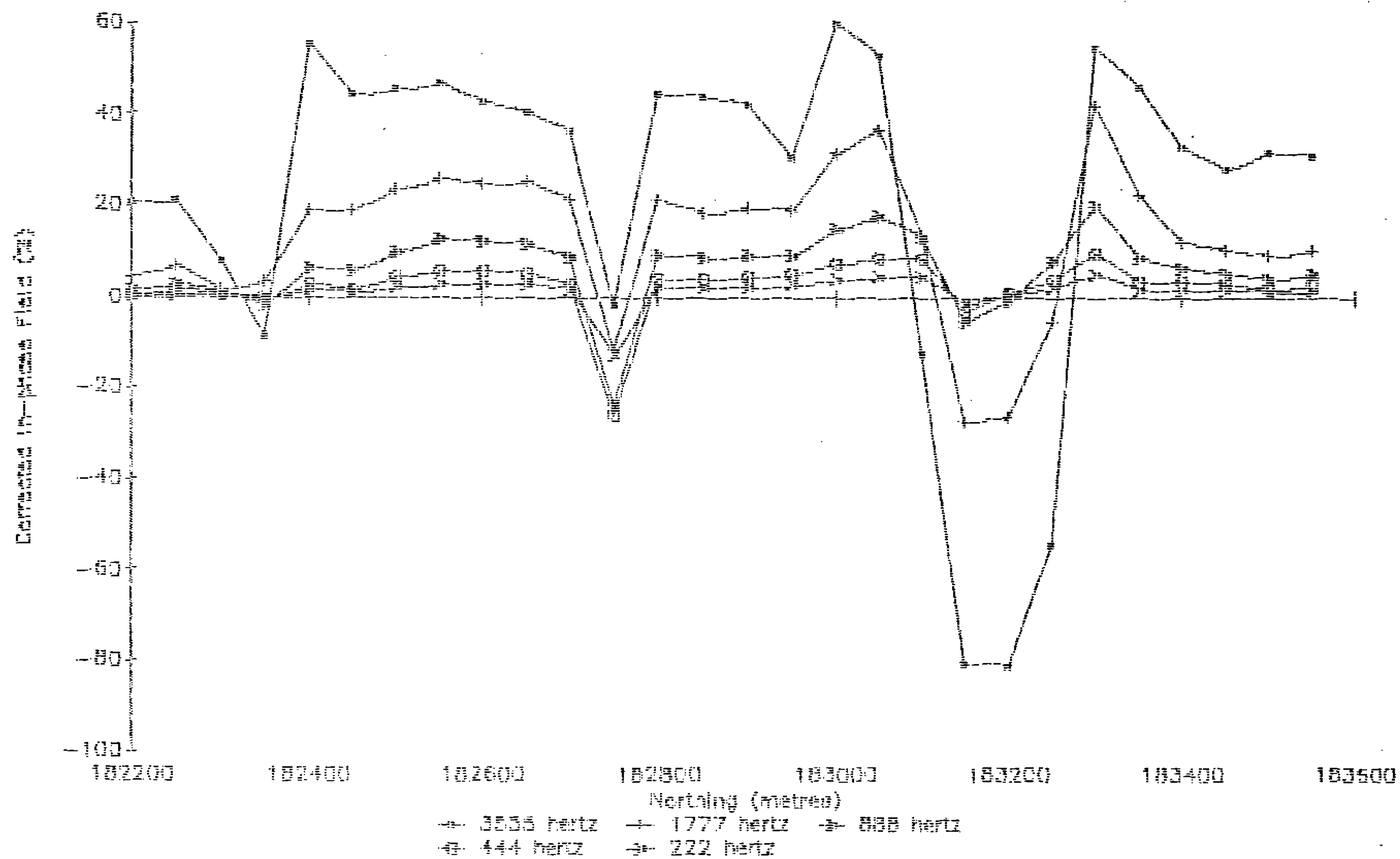
LYNOTT EL8078 MAX-MIN EM SURVEY

Line 146050E → 100m Tx-Rx

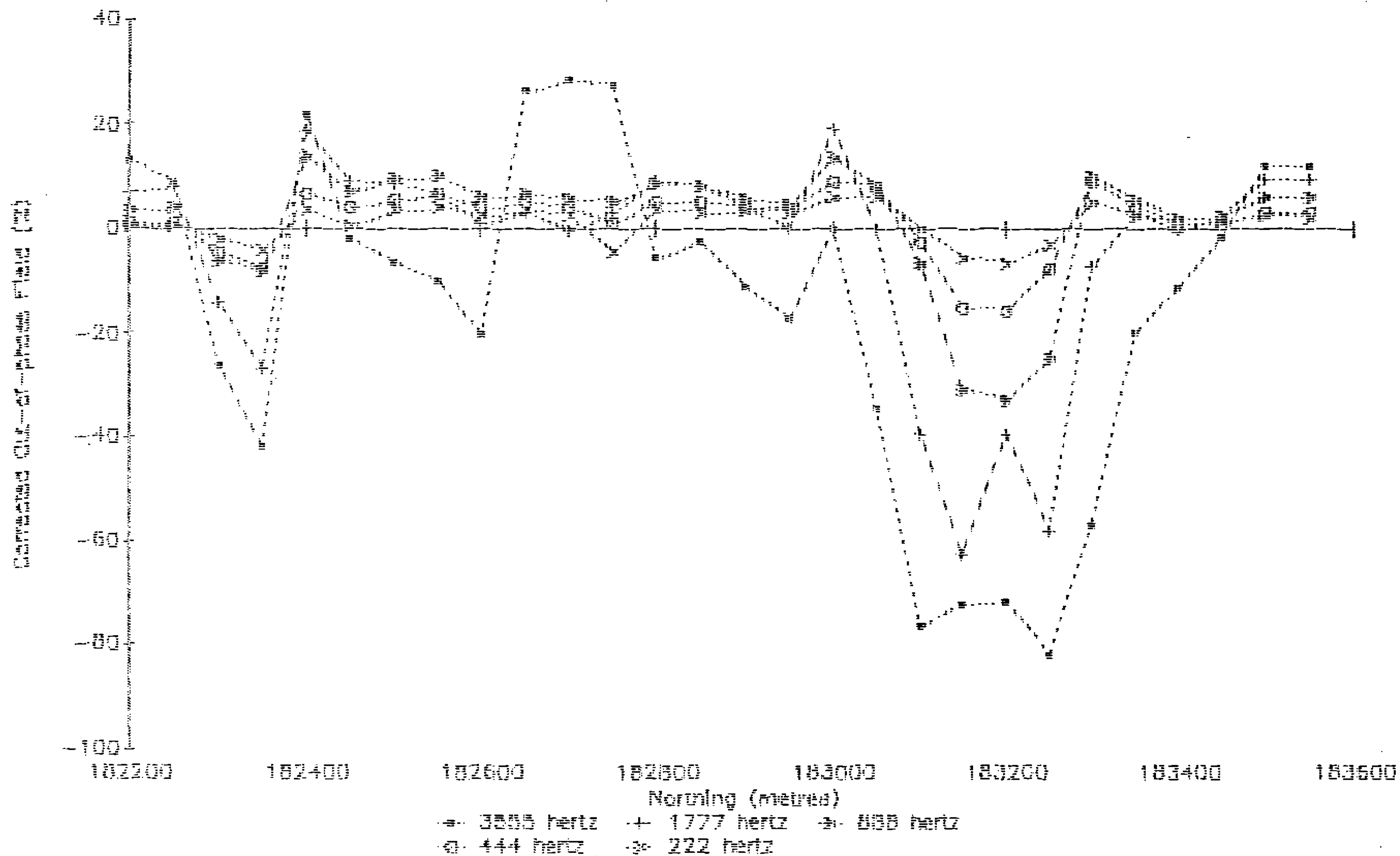


LYNOTT EL8078 MAX-MIN EM SURVEY

Line 147530E - 100m Tx-Rx

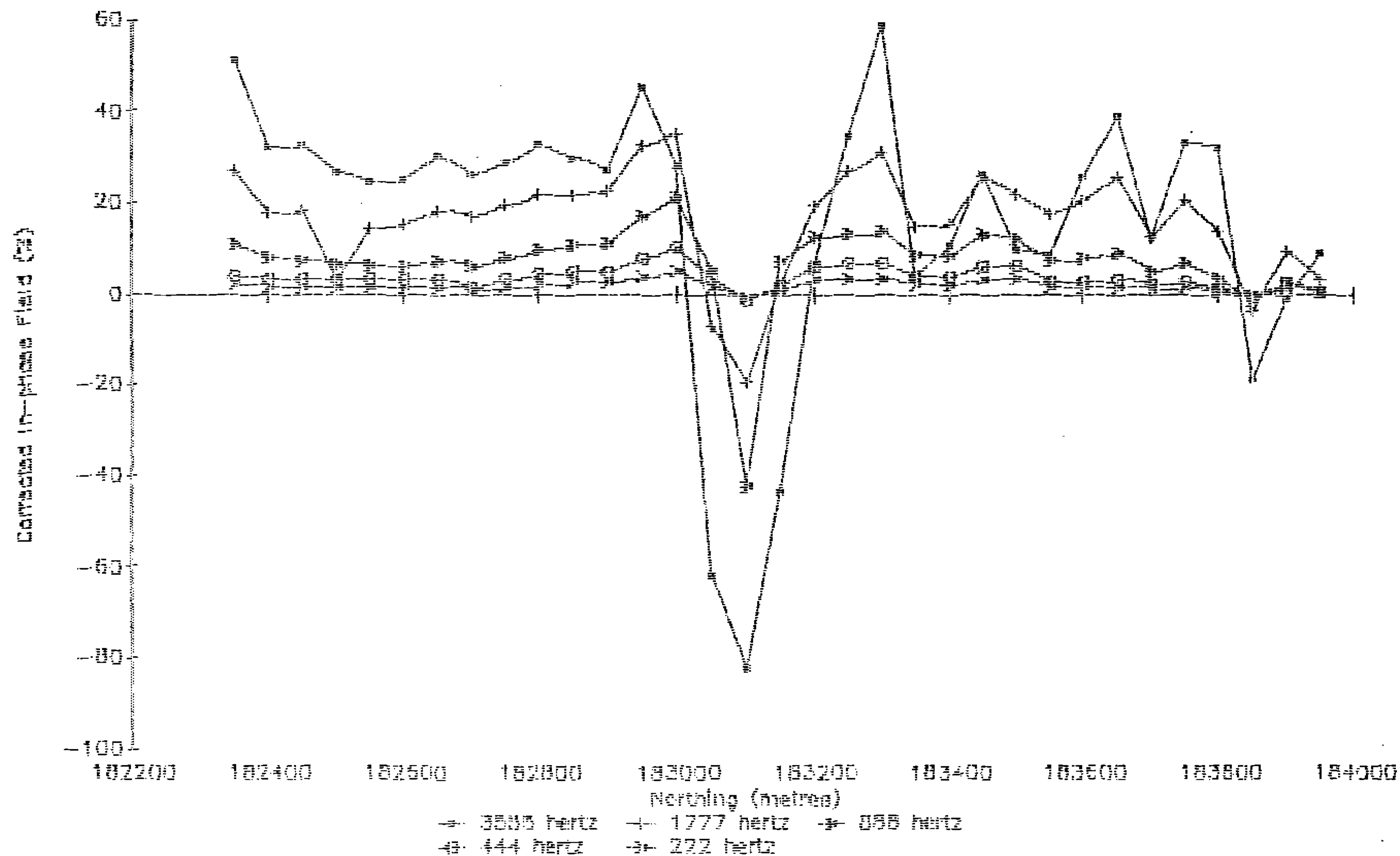


LYNOTT EL8078 MAX--MIN EM SURVEY Line 147530E -- 100m T₂--R₂



LYNOTT EL8078 MAX-MIN EM SURVEY

Line 148040E - 100m T₂-R₂



LYNOTT EL8078 MAX-MIN EM SURVEY
Line 14804GE - 100m T5-Rx

Line 14804GE - 100m Tz-Rz

