

SITE INFORMATION

Site Name Myers Wood
Area Trench C
Context No
Description Slag dump: sample Group C
Latitude (+ve N) 53.60
Longitude (+ve E) -1.73
Magnetic Var -3.72
Date Sampled 24/9/02

MAGNETIC MEASUREMENTS

Sample no.	NRM			Field	After partial demag			Pilot?	Comments
	D	I	Int		D	I	Int		
	<i>degs.</i>	<i>degs.</i>	<i>mA m⁻¹</i>	<i>mT</i>	<i>degs.</i>	<i>degs.</i>	<i>mA m⁻¹</i>	Y/N	
21	5.0	34.2	12.21						
22	76.7	-27.8	37.68						
23	24.4	28.8	50.82					Y	
24	82.4	9.9	17.96						
25	226.4	12.8	7.77					Y	
26	55.9	50.5	5.95						
27	358.2	55.6	71.80						
28	19.1	40.8	58.77						
29	37.4	-79.8	78.35					Y	
30	254.4	50.4	41.93						

STATISTICS FOR NRM

Sample no.	NRM				
	D	I	x	y	z
	<i>degs.</i>	<i>degs.</i>			
21	5.0	34.2	0.82393	0.07208	0.56208
22	76.7	-27.8	0.20350	0.86086	-0.46639
23	24.4	28.8	0.79804	0.36201	0.48175
24	82.4	9.9	0.13029	0.97646	0.17193
25	226.4	12.8	-0.67248	-0.70618	0.22155
26	55.9	50.5	0.35661	0.52671	0.77162
27	358.2	55.6	0.56469	-0.01775	0.82511
28	19.1	40.8	0.71532	0.24770	0.65342
29	37.4	-79.8	0.14068	0.10756	-0.98420
30	254.4	50.4	-0.17142	-0.61394	0.77051

Number = 10
 Sum x = 2.88916
 Sum y = 1.81551
 Sum z = 3.00740
 R = 4.54838
 x bar = 0.63521
 y bar = 0.39915
 z bar = 0.66120

Mean Dec = 32.14
Mean Inc = 41.39
Alpha95 = 58.22

STATISTICS FOR PARTIAL DEMAGNETISATION

Sample no.	Demagnetisation				
	D	I	x	y	z
	degs.	degs.			
21	5.0	34.2	0.82393	0.07208	0.56208
22	76.7	-27.8	0.20350	0.86086	-0.46639
23	24.4	28.8	0.79804	0.36201	0.48175
24	82.4	9.9	0.13029	0.97646	0.17193
25	226.4	12.8	-0.67248	-0.70618	0.22155
26	55.9	50.5	0.35661	0.52671	0.77162
27	358.2	55.6	0.56469	-0.01775	0.82511
28	19.1	40.8	0.71532	0.24770	0.65342
29	37.4	-79.8	0.14068	0.10756	-0.98420
30	254.4	50.4	-0.17142	-0.61394	0.77051

Number = 10
 Sum x = 2.88916
 Sum y = 1.81551
 Sum z = 3.00740
 R = 4.54838
 x bar = 0.63521
 y bar = 0.39915
 z bar = 0.66120

Mean Dec = 32.14
 Mean Inc = 41.39
 Alpha95 = 58.22

Alpha68 = 33.05

CORRECTIONS

Mean Dec = 32.14
Mean Inc = 41.39

Correction for magnetic variation

Mean Dec = 28.42
Mean Inc = 41.39

Correction to Meriden (CVP)

Uncorrected Dec = 28.42
Uncorrected Inc = 41.39
Latitude = 53.60
Longitude = -1.73

Kai = 66.22
Latitude of pole = 53.34
Beta1 = 46.84
Longitude of pole = 131.43
Geomag colat = 67.22
Corrected Inc = 40.03
Beta 2 = 46.95
Corrected Dec = 28.25

FINAL RESULT

Corrected Dec = 28.25
Corrected Inc = 40.03
Alpha95 = 58.22

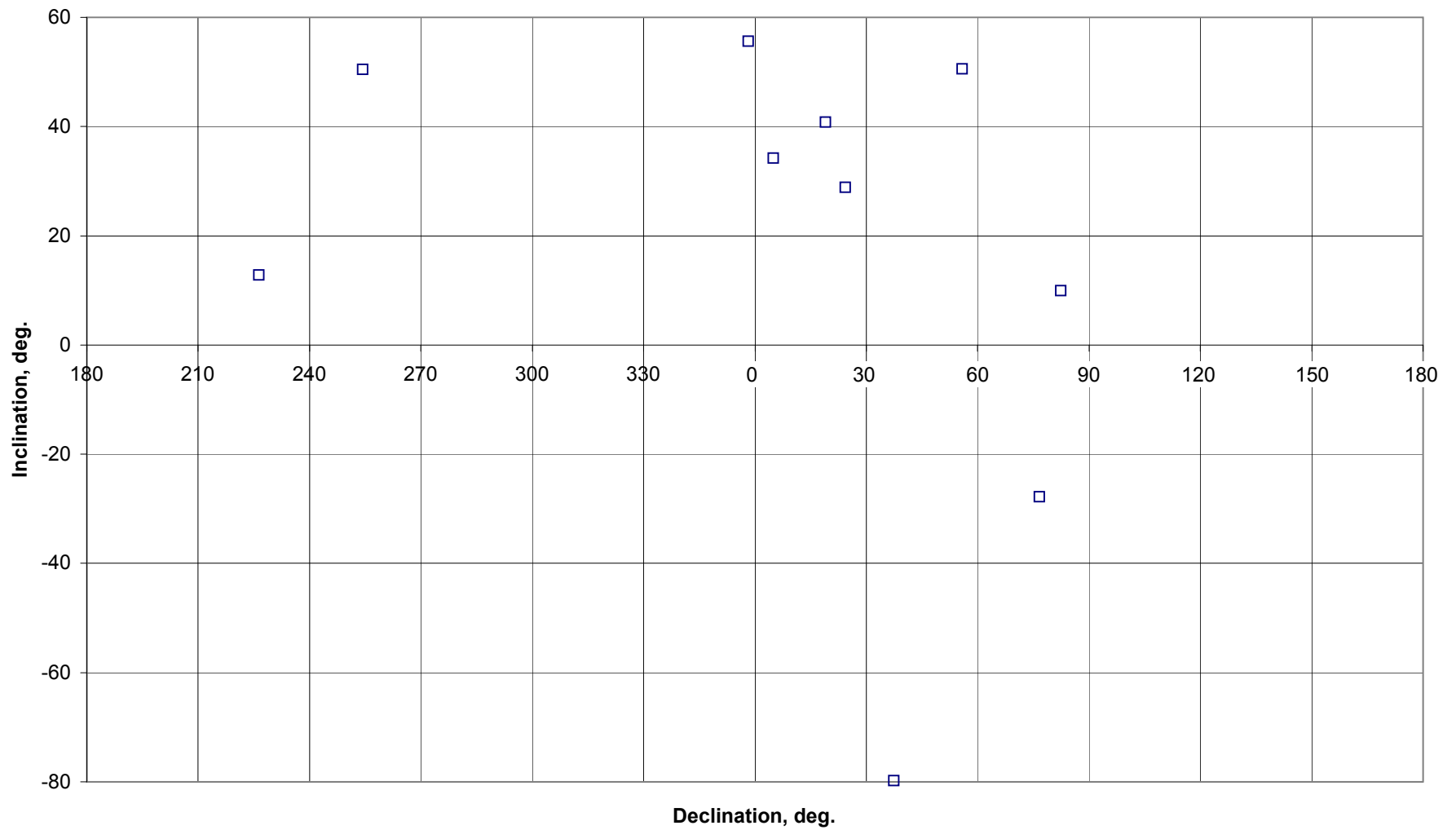
ERROR BARS

Alpha95		Alpha68	
δDec = ±	76.04	δDec = ±	43.16
δInc = ±	58.22	δInc = ±	33.05

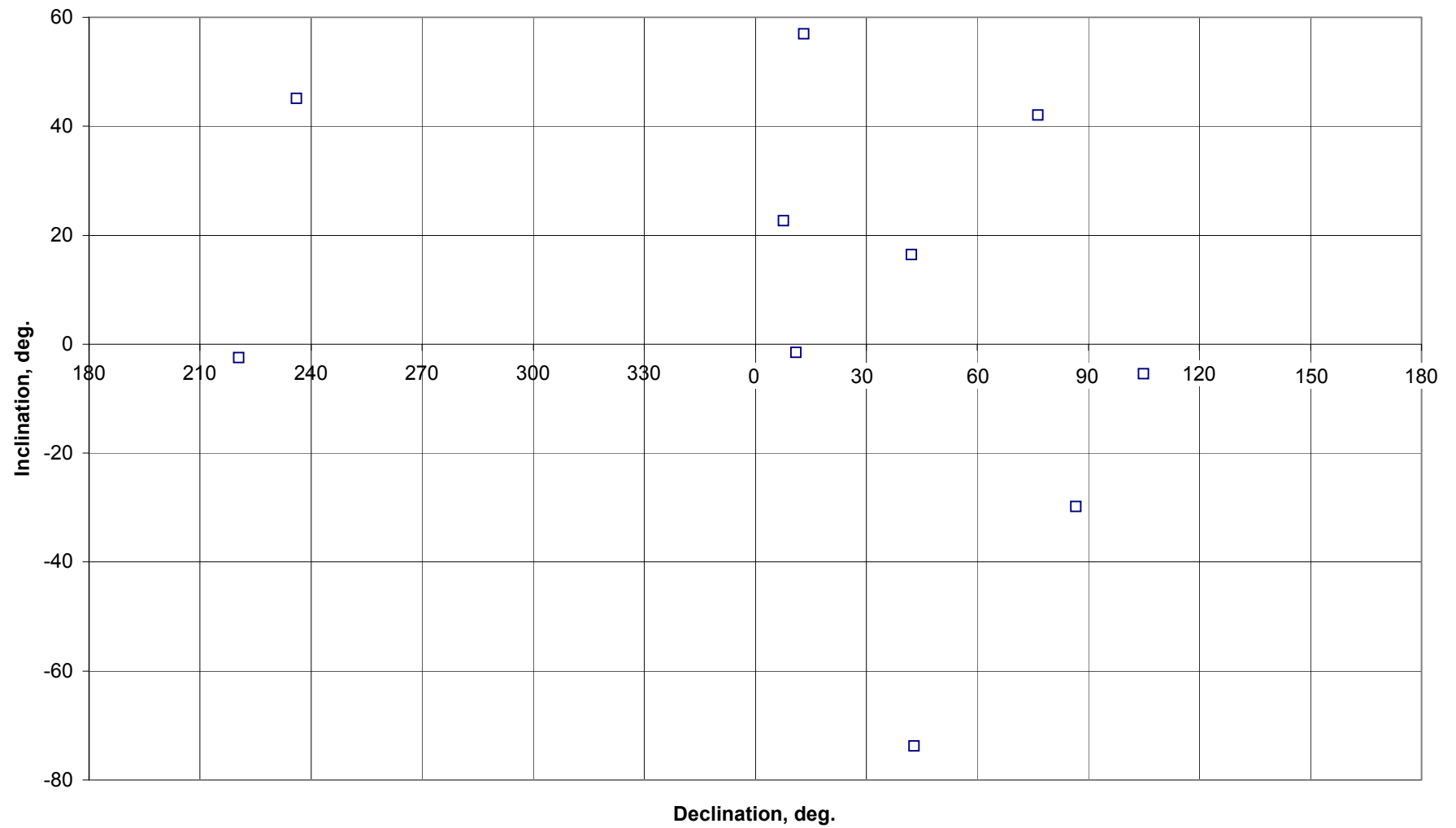
SUMMARY OF PARTIAL DEMAGNETISATION STATISTICAL RESULT:

Demag Field <i>mT</i>	No. of samples	Samples removed	Alpha95 <i>± degs.</i>	Mean Corrected	
				Dec <i>degs.</i>	Inc <i>degs.</i>
0	10		58.22	28.25	40.03
	6	22,25,29,30	26.70	28.71	39.38
	5	22,24,25,29,30	18.26	16.26	42.07
10	10		72.72	46.45	19.10
	4	21, 22, 24, 25, 29, 30	37.34	30.83	36.05
15	10		77.72	-63.71	12.93
	3	22, 23, 24, 25, 28, 29, 30	98.30	27.68	9.31

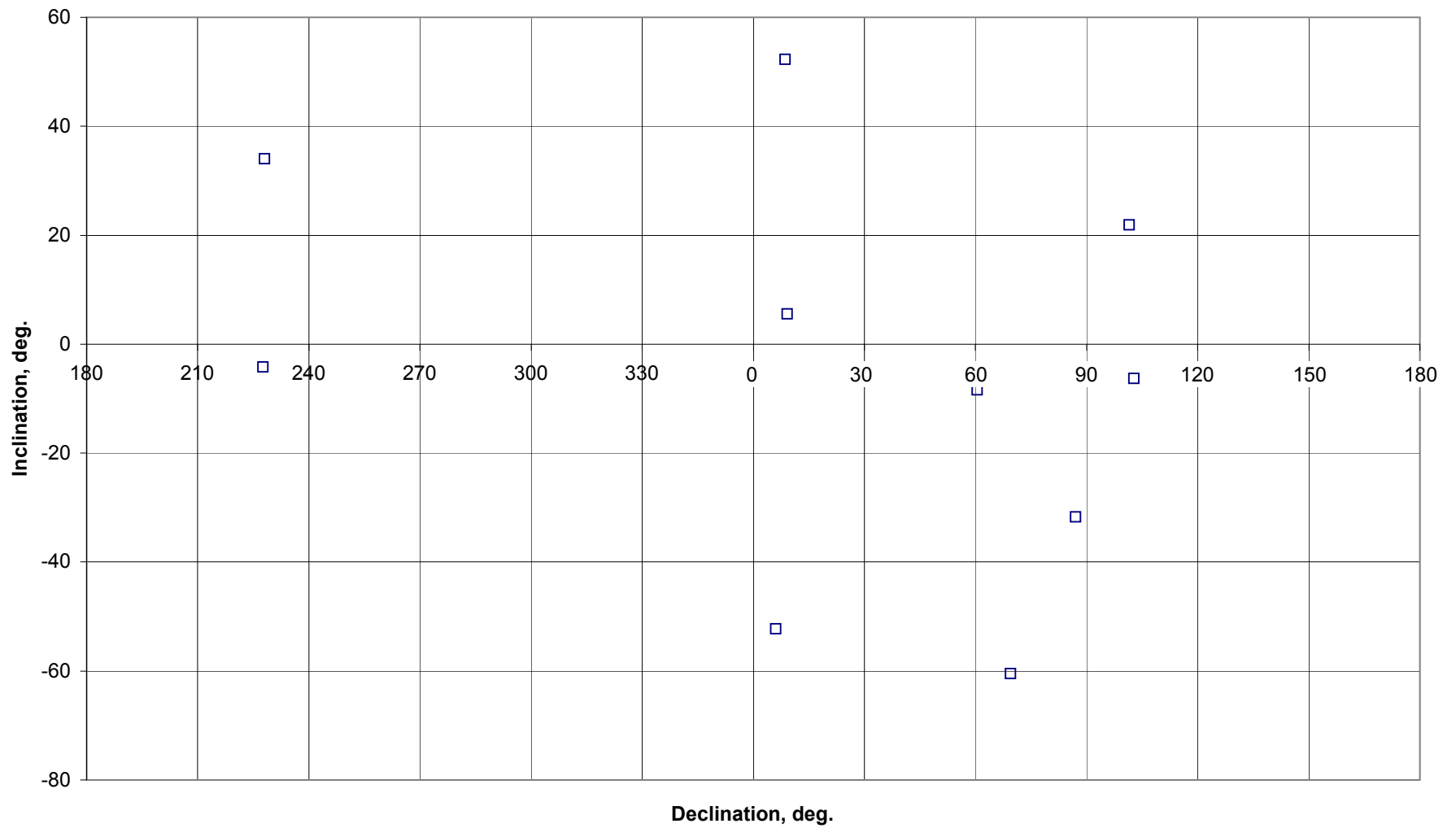
INITIAL SAMPLE SCATTER



10mT DEMAGNETISED SAMPLE SCATTER



15mT DEMAGNETISED SAMPLE SCATTER



PILOT STEPPED A.F. DEMAGNETISATION MEASUREMENTS

Sample No. 23

Demag Step <i>mT</i>	NRM						
	Intensity <i>mA m⁻¹</i>	Normalised intensity	Co-ordinates			Dec.	Inc.
			X	Y	Z	<i>degs.</i>	<i>degs.</i>
0.0	49.08	1.00	38.77	19.38	23.02	26.6	28.0
2.5	49.81	1.01	39.19	14.32	27.21	20.1	33.1
5.0	46.09	0.94	34.59	15.67	26.11	24.4	34.5
7.5	37.00	0.75	26.51	19.36	17.07	36.1	27.5
10.0	29.37	0.60	20.82	18.98	8.29	42.3	16.4
15.0	19.29	0.39	9.40	16.61	-2.82	60.5	-8.4
20.0	12.77	0.26	5.34	10.24	-5.45	62.5	-25.3
30.0	8.08	0.16	5.48	2.99	-5.13	28.6	-39.4
40.0	7.26	0.15	5.62	1.01	-4.48	10.2	-38.1
60.0	7.76	0.16	6.66	0.33	-3.96	2.8	-30.7
80.0	7.95	0.16	7.13	1.00	-3.37	8.0	-25.1
100.0	7.68	0.16	6.76	0.38	-3.64	3.2	-28.2

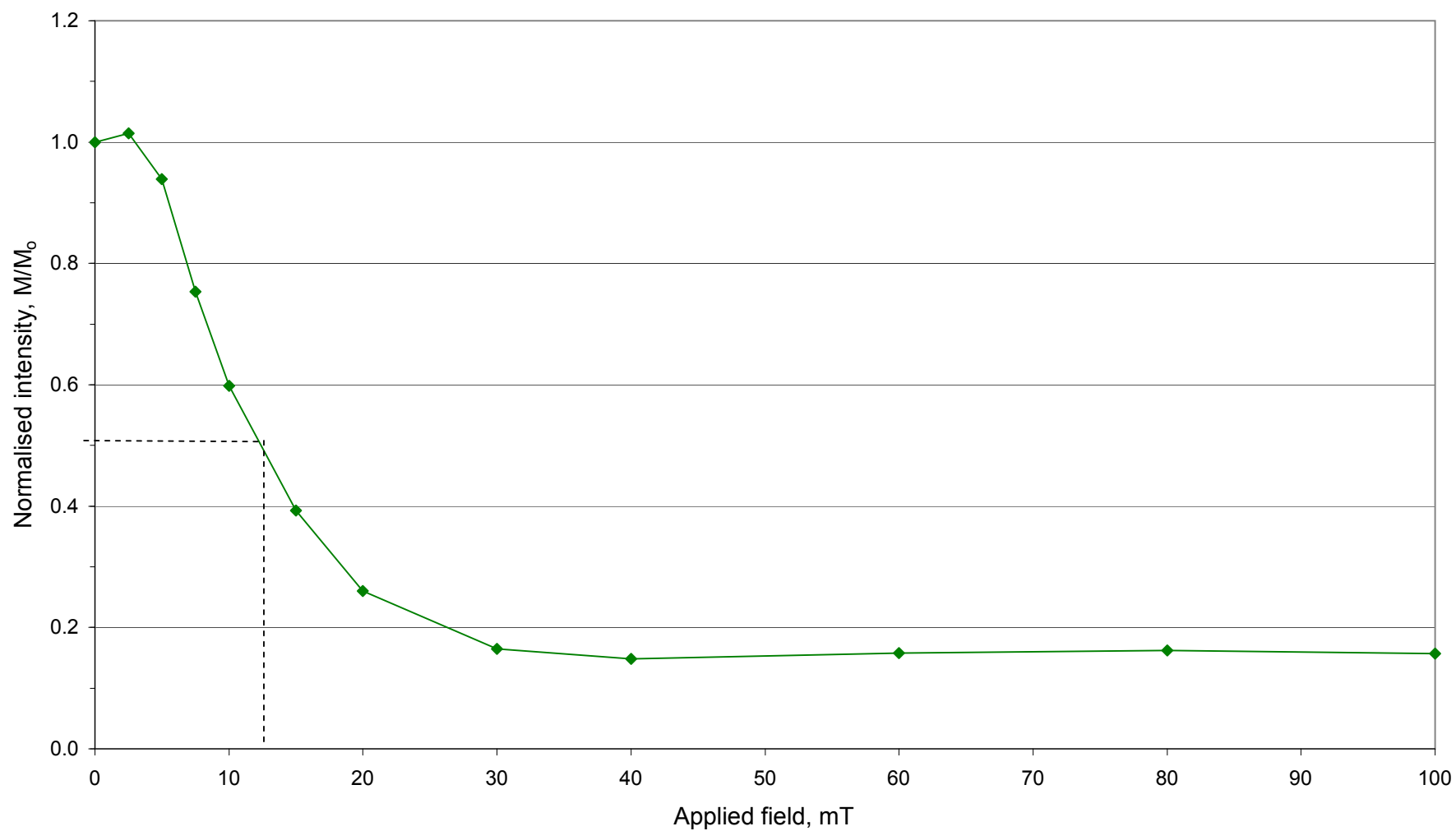
Sample No. 25

Demag Step <i>mT</i>	NRM						
	Intensity <i>mA m⁻¹</i>	Normalised intensity	Co-ordinates			Dec.	Inc.
			X	Y	Z	<i>degs.</i>	<i>degs.</i>
0.0	7.29	1.00	-5.44	-4.75	0.98	221.1	7.7
2.5	7.24	0.99	-5.48	-4.63	0.96	220.2	7.6
5.0	7.44	1.02	-5.75	-4.67	0.68	219.1	5.2
7.5	7.79	1.07	-5.90	-5.08	0.34	220.7	2.5
10.0	7.37	1.01	-5.59	-4.78	-0.33	220.5	-2.5
15.0	5.74	0.79	-3.86	-4.22	-0.42	227.6	-4.2
20.0	3.03	0.42	-1.93	-2.26	-0.58	229.6	-11.1
30.0	1.15	0.16	-0.64	-0.78	-0.56	230.8	-29.2
40.0	0.95	0.13	-0.43	-0.64	-0.57	236.3	-36.4
60.0	0.95	0.13	-0.39	-0.69	-0.52	240.7	-33.3
80.0	0.90	0.12	-0.57	-0.51	-0.48	221.3	-31.9
100.0	0.78	0.11	-0.47	-0.45	-0.42	223.6	-32.7

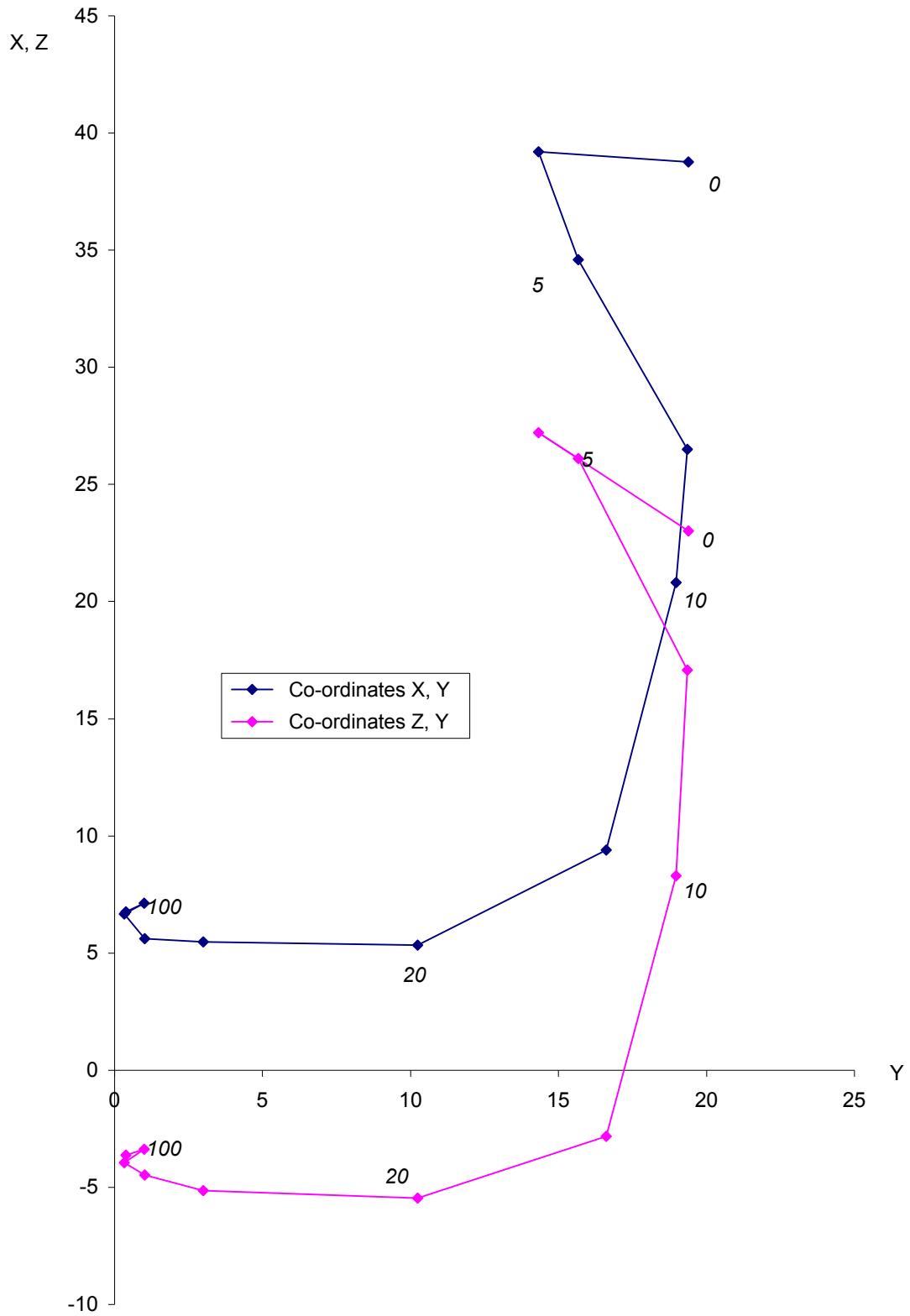
Sample No. 29

Demag Step <i>mT</i>	NRM						
	Intensity <i>mA m⁻¹</i>	Normalised intensity	Co-ordinates			Dec.	Inc.
			X	Y	Z	<i>degs.</i>	<i>degs.</i>
0.0	78.18	1.00	12.69	13.51	-75.95	46.8	-76.3
2.5	75.74	0.97	11.70	17.39	-72.78	56.1	-73.9
5.0	70.81	0.91	11.09	11.76	-68.95	46.7	-76.8
7.5	64.51	0.83	9.42	8.88	-63.20	43.3	-78.4
10.0	54.97	0.70	11.20	10.44	-52.80	43.0	-73.8
15.0	26.91	0.34	4.64	12.43	-23.41	69.5	-60.5
20.0	13.32	0.17	4.87	10.45	-6.68	65.0	-30.1
30.0	6.29	0.08	2.79	5.54	1.01	63.3	9.2
40.0	4.31	0.06	1.75	3.60	1.58	64.1	21.6
60.0	2.05	0.03	0.91	1.71	0.67	62.0	19.2
80.0	1.85	0.02	0.64	1.63	0.61	68.6	19.1
100.0	1.19	0.02	0.64	0.91	0.42	55.1	20.6

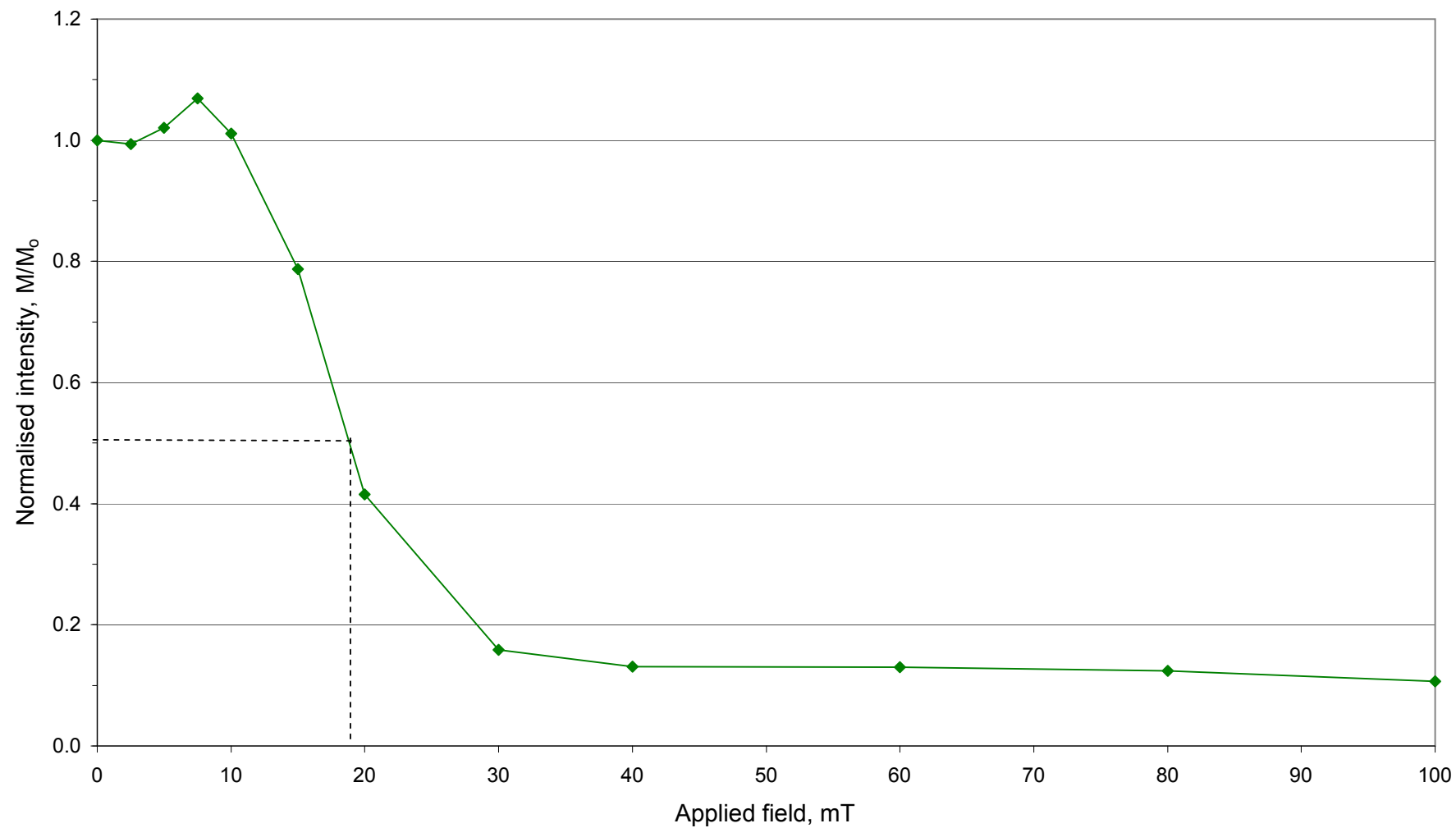
MYERS WOOD - SAMPLE POINT C23 DEMAGNETISATION: INTENSITY SPECTRUM



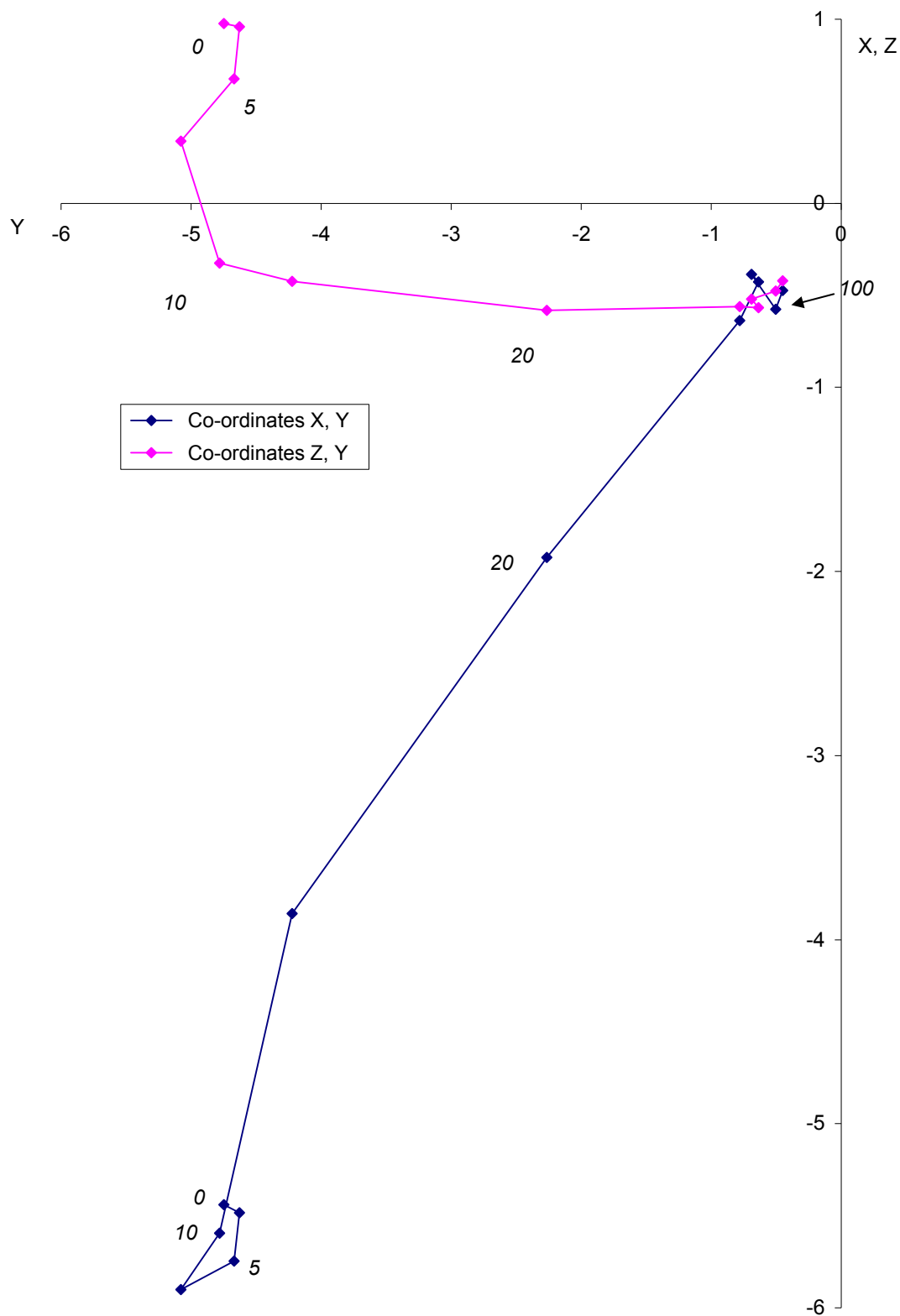
MYERS WOOD - SAMPLE POINT C23 - ZIJDERVELD PLOT



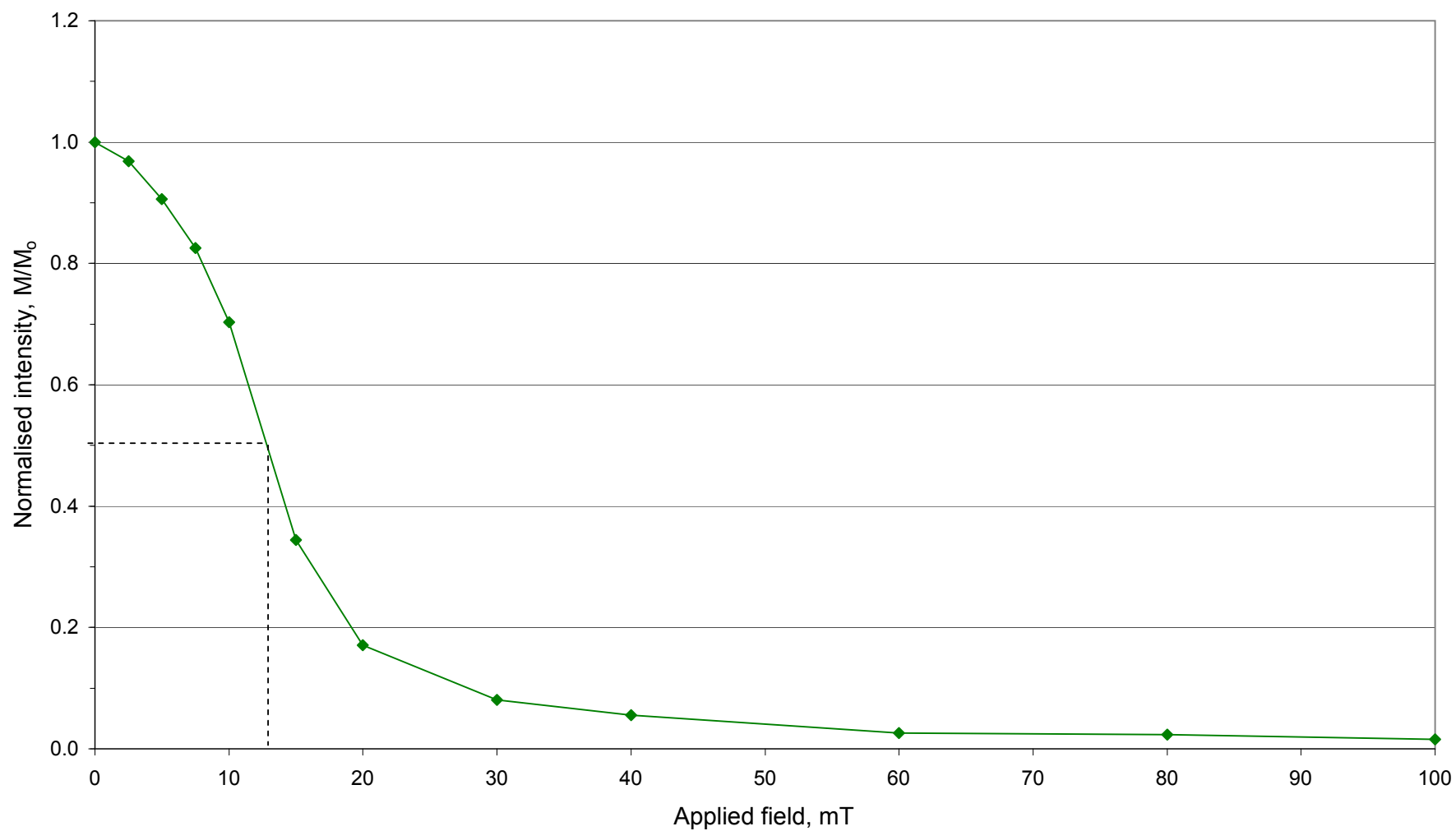
MYERS WOOD - SAMPLE POINT C25 DEMAGNETISATION: INTENSITY SPECTRUM



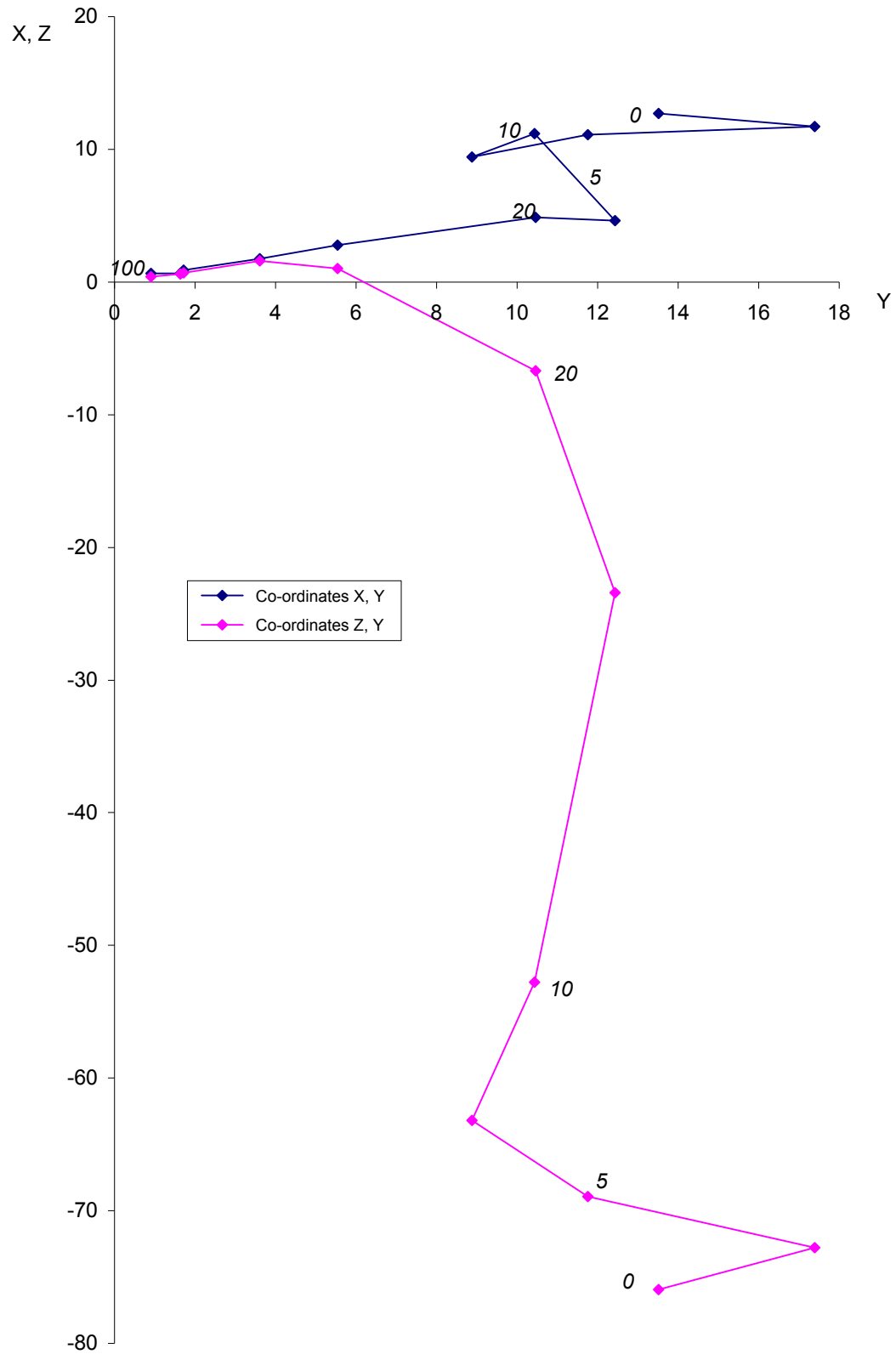
MYERS WOOD - SAMPLE POINT C25 - ZIJDERVELD PLOT



MYERS WOOD - SAMPLE POINT C29 DEMAGNETISATION: INTENSITY SPECTRUM



MYERS WOOD - SAMPLE POINT C29 - ZIJDERVELD PLOT



STABILITY INDEX

Sample No. 23

Demag Step	NRM				
	D	I	x	y	z
<i>mT</i>	<i>degs.</i>	<i>degs.</i>			
0.0	26.6	28.0	0.78949	0.39535	0.46947
2.5	20.1	33.1	0.78670	0.28789	0.54610
5.0	24.4	34.5	0.75052	0.34045	0.56641
7.5	36.1	27.5	0.71670	0.52262	0.46175
10.0	42.3	16.4	0.70954	0.64563	0.28234
15.0	60.5	-8.4	0.48714	0.86102	-0.14608
20.0	62.5	-25.3	0.41746	0.80193	-0.42736
30.0	28.6	-39.4	0.67845	0.36990	-0.63473
40.0	10.2	-38.1	0.77450	0.13935	-0.61704
60.0	2.8	-30.7	0.85883	0.04200	-0.51054
80.0	8.0	-25.1	0.89676	0.12603	-0.42420
100.0	3.2	-28.2	0.87993	0.04920	-0.47255

Number = 12
Sum x = 8.74600
Sum y = 4.58138
Sum z = -0.90643
R = 9.91479
x bar = 0.88212
y bar = 0.46208
z bar = -0.09142

Mean Dec = 27.65
Mean Inc = -5.25
Alpha95 = 20.91

k = 5
Theta63 = 35.27
Range = 100
S.I. = 0.9

Sample No. 23

Number	Range	S.I.	*
3	5	1.6	
4	7.5	1.3	
5	10	0.9	
6	15	0.6	
7	20	0.5	
8	30	0.5	
9	40	0.6	
10	60	0.7	
11	80	0.8	
12	100	0.9	

Sample No. 25

Demag Step	NRM				
	D	I	x	y	z
<i>mT</i>	<i>degs.</i>	<i>degs.</i>			
0.0	221.1	7.7	-0.74677	-0.65145	0.13399
2.5	220.2	7.6	-0.75709	-0.63979	0.13226
5.0	219.1	5.2	-0.77285	-0.62808	0.09063
7.5	220.7	2.5	-0.75741	-0.65148	0.04362
10.0	220.5	-2.5	-0.75968	-0.64883	-0.04362
15.0	227.6	-4.2	-0.67249	-0.73647	-0.07324
20.0	229.6	-11.1	-0.63600	-0.74729	-0.19252
30.0	230.8	-29.2	-0.55171	-0.67647	-0.48786
40.0	236.3	-36.4	-0.44659	-0.66963	-0.59342
60.0	240.7	-33.3	-0.40903	-0.72888	-0.54902
80.0	221.3	-31.9	-0.63780	-0.56032	-0.52844
100.0	223.6	-32.7	-0.60940	-0.58032	-0.54024

Number = 12
Sum x = -7.75682
Sum y = -7.91902
Sum z = -2.60787
R = 11.38772
x bar = -0.68116
y bar = -0.69540
z bar = -0.22901

Mean Dec = 45.59
Mean Inc = -13.24
Alpha95 = 10.53

k = 18
Theta63 = 19.11
Range = 100
S.I. = 1.7

Sample No. 25

Number	Range	S.I.	*
3	5	4.1	
4	7.5	3.3	
5	10	2.3	
6	15	2.1	
7	20	1.7	
8	30	1.3	
9	40	1.2	
10	60	1.3	
11	80	1.5	
12	100	1.7	

Sample No. 29

Demag Step	NRM				
	D	I	x	y	z
<i>mT</i>	<i>degs.</i>	<i>degs.</i>			
0.0	46.8	-76.3	0.16213	0.17265	-0.97155
2.5	56.1	-73.9	0.15467	0.23017	-0.96078
5.0	46.7	-76.8	0.15661	0.16619	-0.97358
7.5	43.3	-78.4	0.14634	0.13790	-0.97958
10.0	43.0	-73.8	0.20404	0.19027	-0.96029
15.0	69.5	-60.5	0.17245	0.46124	-0.87036
20.0	65.0	-30.1	0.36563	0.78409	-0.50151
30.0	63.3	9.2	0.44354	0.88188	0.15988
40.0	64.1	21.6	0.40613	0.83639	0.36812
60.0	62.0	19.2	0.44336	0.83383	0.32887
80.0	68.6	19.1	0.34479	0.87980	0.32722
100.0	55.1	20.6	0.53556	0.76771	0.35184

Sample No. 29

Number	Range	S.I.
3	5	3.4
4	7.5	3.8
5	10	4.2 *
6	15	1.7
7	20	0.8
8	30	0.6
9	40	0.5
10	60	0.6
11	80	0.6
12	100	0.7

Number = 12
Sum x = 3.53524
Sum y = 6.34213
Sum z = -4.68171
R = 8.63938
x bar = 0.40920
y bar = 0.73410
z bar = -0.54190

Mean Dec = 60.86
Mean Inc = -32.81
Alpha95 = 28.57

k = 3
Theta63 = 44.77
Range = 100
S.I. = 0.7