

SITE INFORMATION

Site Name Myers Wood
Area Trench C
Context No
Description Slag dump: sample Group A
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	
1	18.0	68.6	35.15	5	24.7	60.3	32.08		
2	13.2	68.8	48.06	5	11.7	59.8	33.69	Y	
3	37.6	68.0	40.03	5	25.4	62.1	33.61		
4	345.4	66.3	75.06	5	7.7	61.3	63.84		
5	17.2	63.9	96.39	5	12.6	62.8	84.74		
6	17.9	67.9	28.57	5	13.5	70.0	21.91	Y	
7	33.6	72.8	20.90	5	14.8	66.3	16.43	Y	
8	6.0	59.4	23.91	5	13.4	58.3	21.21		
9	11.6	69.2	22.60	5	14.6	66.7	21.71		
10	4.8	66.8	53.49	5	6.5	61.4	52.27		
11	4.5	69.1	0.73	5	357.4	82.9	0.77		Outlier
12	27.1	69.4	21.01	5	13.40	65.10	17.64		

STATISTICS FOR NRM

Sample no.	NRM				
	D	I	x	y	z
	<i>degs.</i>	<i>degs.</i>			
1	18.0	68.6	0.34702	0.11275	0.93106
2	13.2	68.8	0.35207	0.08258	0.93232
3	37.6	68.0	0.29680	0.22856	0.92718
4	345.4	66.3	0.38897	-0.10132	0.91566
5	17.2	63.9	0.42026	0.13009	0.89803
6	17.9	67.9	0.35801	0.11564	0.92653
7	33.6	72.8	0.24630	0.16364	0.95528
8	6.0	59.4	0.50625	0.05321	0.86074
9	11.6	69.2	0.34785	0.07140	0.93483
10	4.8	66.8	0.39256	0.03296	0.91914
11	4.5	69.1	0.35564	0.02799	0.93420
12	27.1	69.4	0.31321	0.16028	0.93606

Number = 12
 Sum x = 4.32495
 Sum y = 1.07779
 Sum z = 11.07103
 R = 11.93459
 x bar = 0.36239
 y bar = 0.09031
 z bar = 0.92764

Mean Dec = 13.99
Mean Inc = 68.07
Alpha95 = 3.36

STATISTICS FOR PARTIAL DEMAGNETISATION

Sample no.	Demagnetisation				
	D	I	x	y	z
	<i>degs.</i>	<i>degs.</i>			
1	24.7	60.3	0.45013	0.20704	0.86863
2	11.7	59.8	0.49257	0.10201	0.86427
3	25.4	62.1	0.42270	0.20071	0.88377
4	7.7	61.3	0.47589	0.06434	0.87715
5	12.6	62.8	0.44609	0.09971	0.88942
6	13.5	70.0	0.33257	0.07984	0.93969
7	14.8	66.3	0.38861	0.10268	0.91566
8	13.4	58.3	0.51117	0.12178	0.85081
9	14.6	66.7	0.38277	0.09970	0.91845
10	6.5	61.4	0.47561	0.05419	0.87798
11					
12	13.4	65.1	0.40957	0.09757	0.90704

Number = 11
 Sum x = 4.78769
 Sum y = 1.22957
 Sum z = 9.79287
 R = 10.96969
 x bar = 0.43645
 y bar = 0.11209
 z bar = 0.89272

Mean Dec = 14.40
Mean Inc = 63.22
Alpha95 = 2.52

Alpha68 = 1.48

CORRECTIONS

Mean Dec = 14.40
Mean Inc = 63.22

Correction for magnetic variation

Mean Dec = 10.68
Mean Inc = 63.22

Correction to Meriden (CVP)

Uncorrected Dec = 10.68
Uncorrected Inc = 63.22
Latitude = 53.60
Longitude = -1.73

Kai = 45.27
Latitude of pole = 78.73
Beta1 = 42.39
Longitude of pole = 135.88
Geomag colat = 46.41
Corrected Inc = 62.29
Beta 2 = 42.50
Corrected Dec = 10.50

FINAL RESULT

Corrected Dec = 10.50
Corrected Inc = 62.29
Alpha95 = 2.52

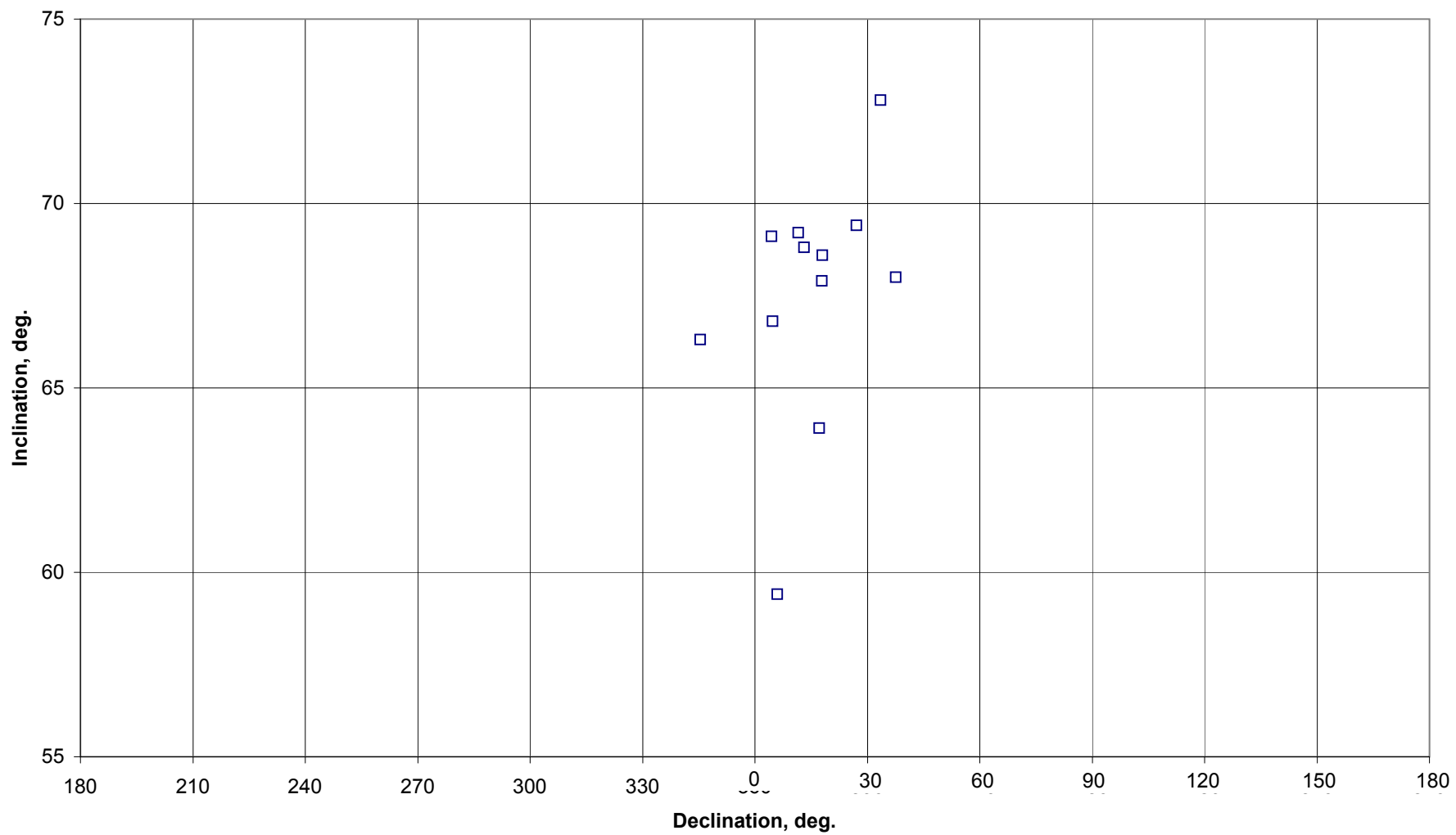
ERROR BARS

Alpha95		Alpha68	
δDec = ±	5.41	δDec = ±	3.18
δInc = ±	2.52	δInc = ±	1.48

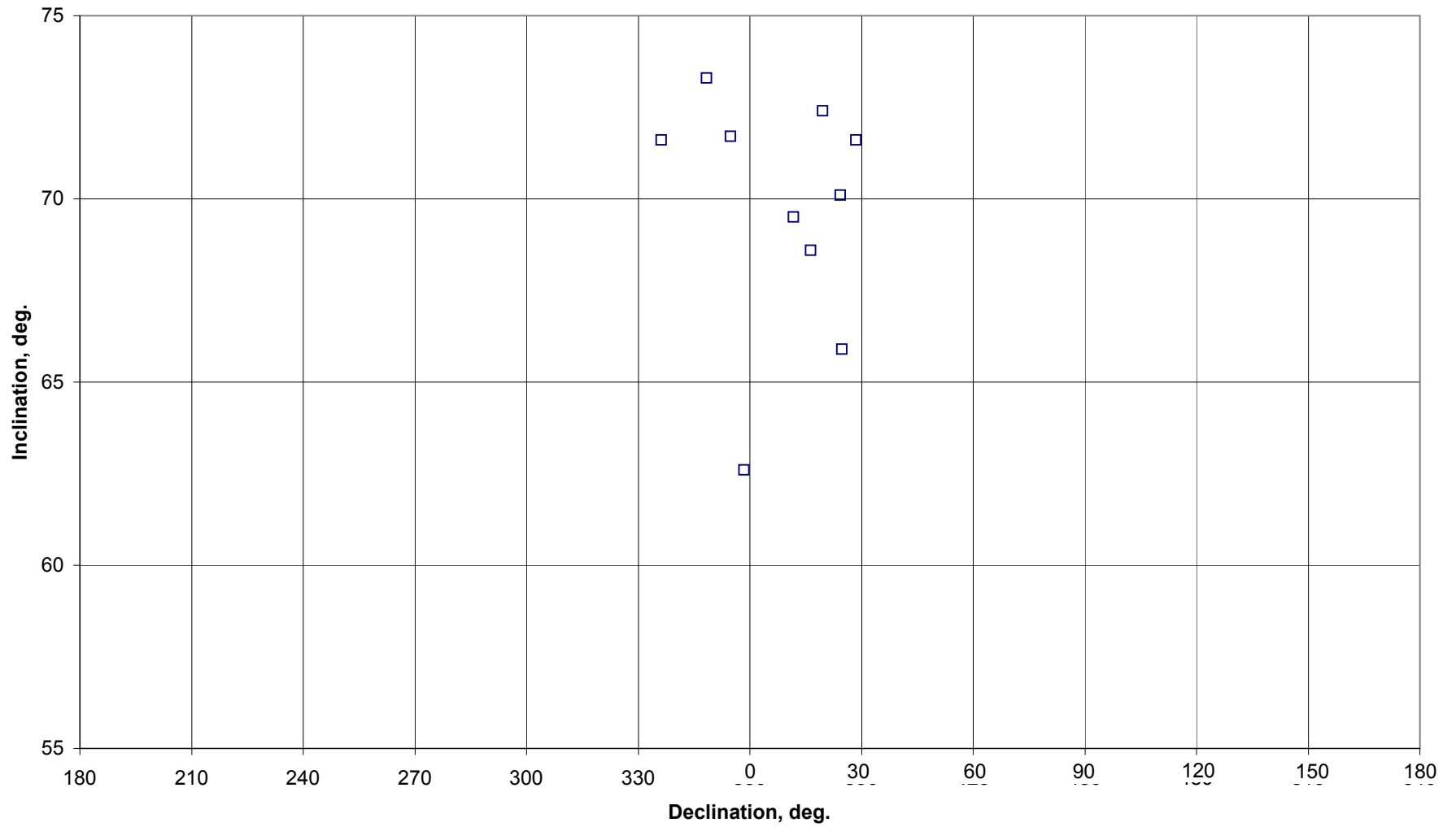
SUMMARY OF PARTIAL DEMAGNETISATION STATISTICAL RESULTS

Demag Field <i>mT</i>	No. of samples	Samples removed	Alpha95 \pm <i>degs.</i>	Mean Corrected	
				Dec <i>degs.</i>	Inc <i>degs.</i>
0	12		3.36	10.03	67.25
	10	7, 8	3.31	9.59	67.53
2.5	12		4.44	10.20	71.44
	11	11	3.93	4.62	70.53
	10	9, 11	4.04	4.99	69.71
5	12		3.88	10.08	63.97
	11	11	2.52	10.50	62.29
7.5	12		4.60	5.82	66.75
	11	11	3.00	8.17	65.00
10	12		3.21	6.13	64.54
	11	2	3.16	5.95	65.33

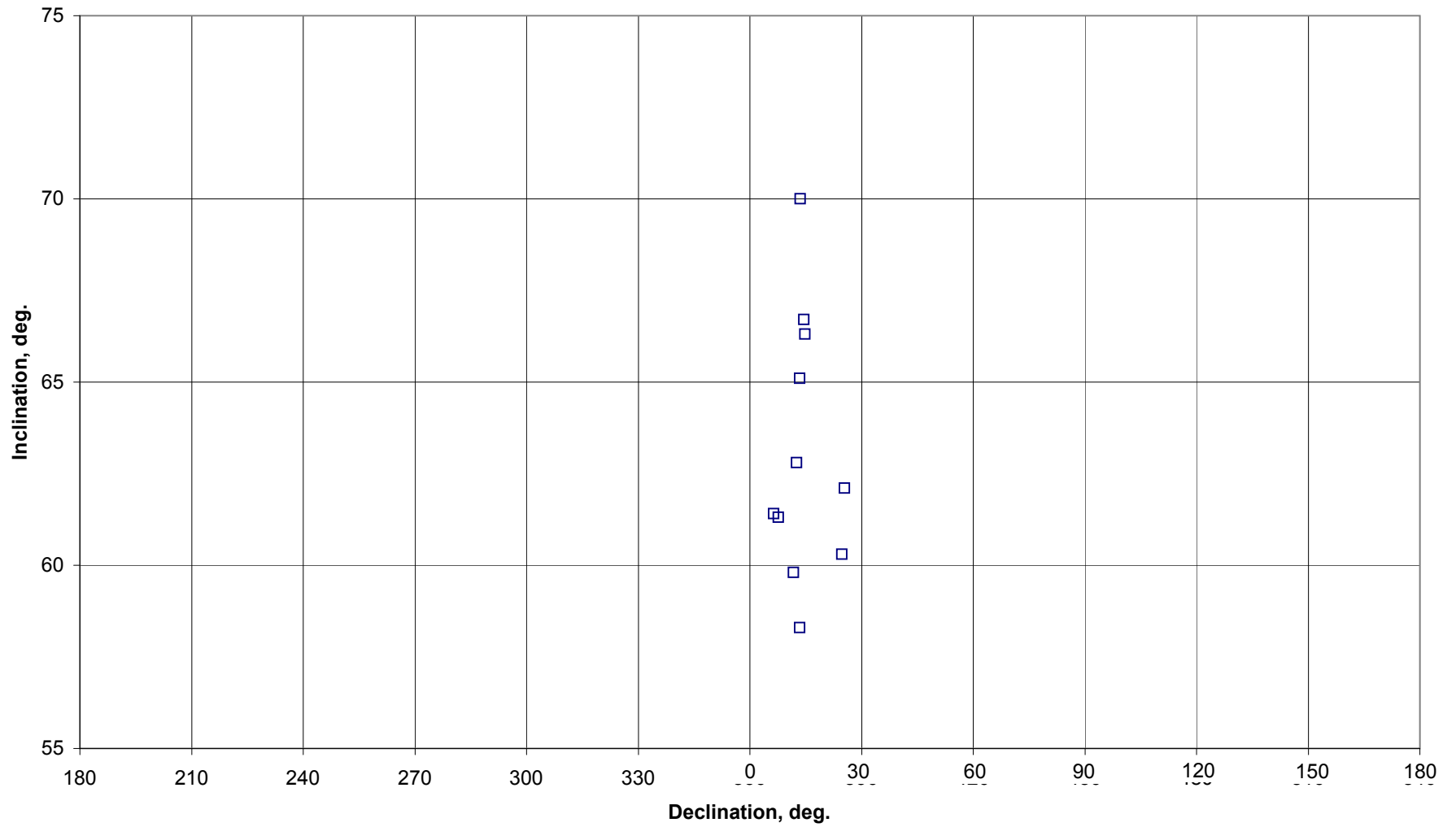
INITIAL SAMPLE SCATTER



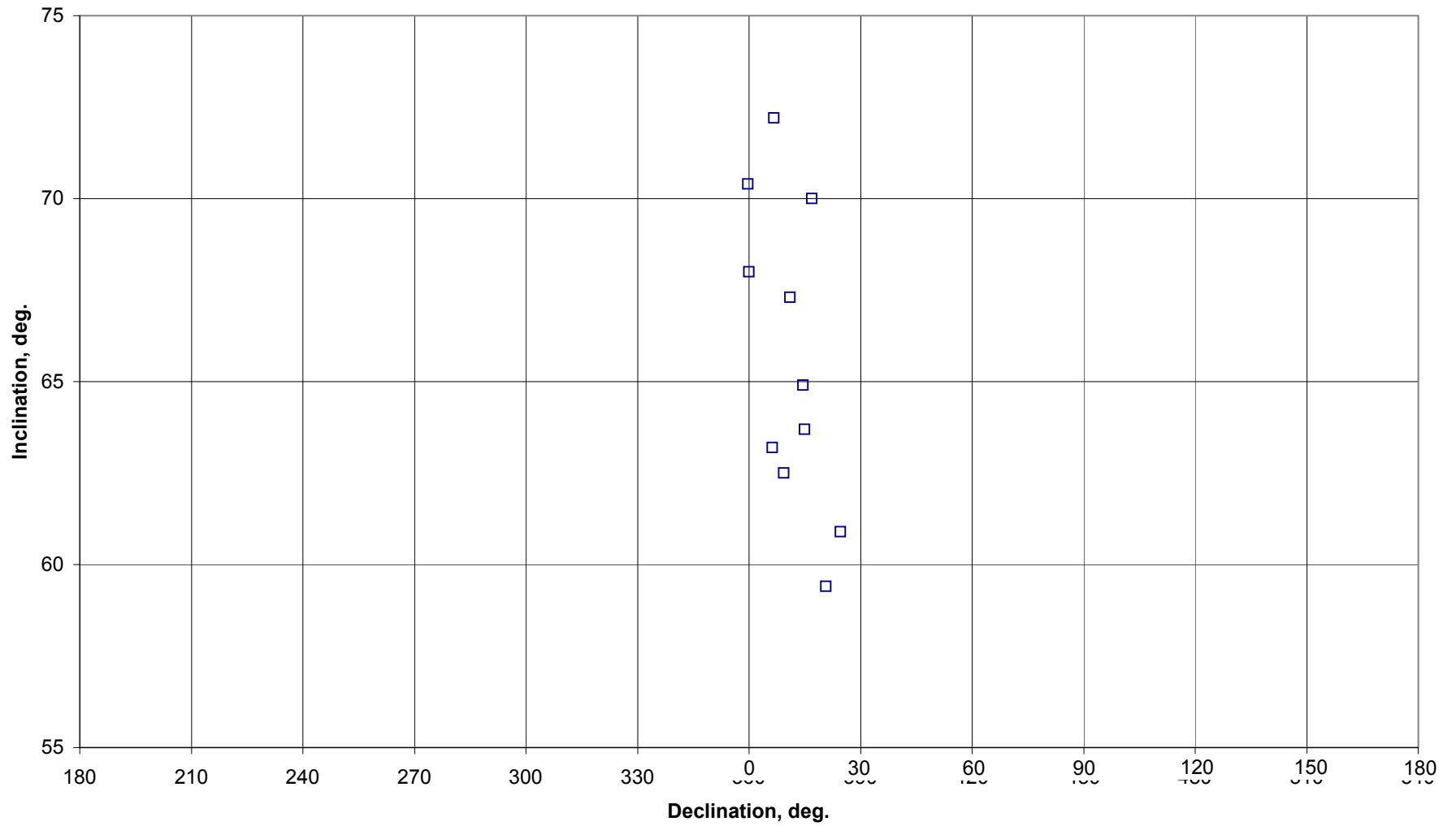
2.5mT DEMAGNETISED SAMPLE SCATTER



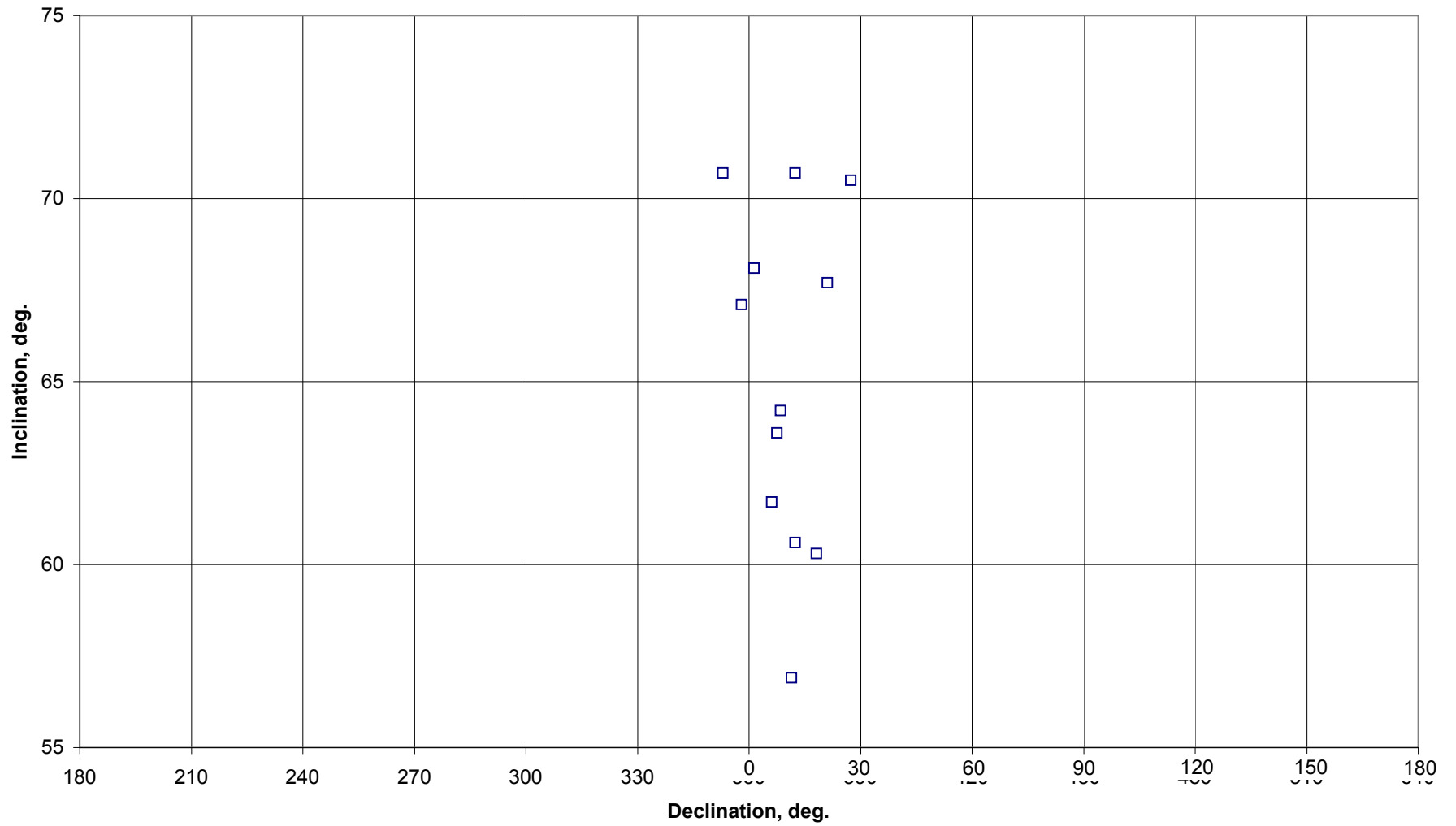
5mT DEMAGNETISED SAMPLE SCATTER



7.5mT DEMAGNETISED SAMPLE SCATTER



10mT DEMAGNETISED SAMPLE SCATTER



PILOT STEPPED A.F. DEMAGNETISATION MEASUREMENTS

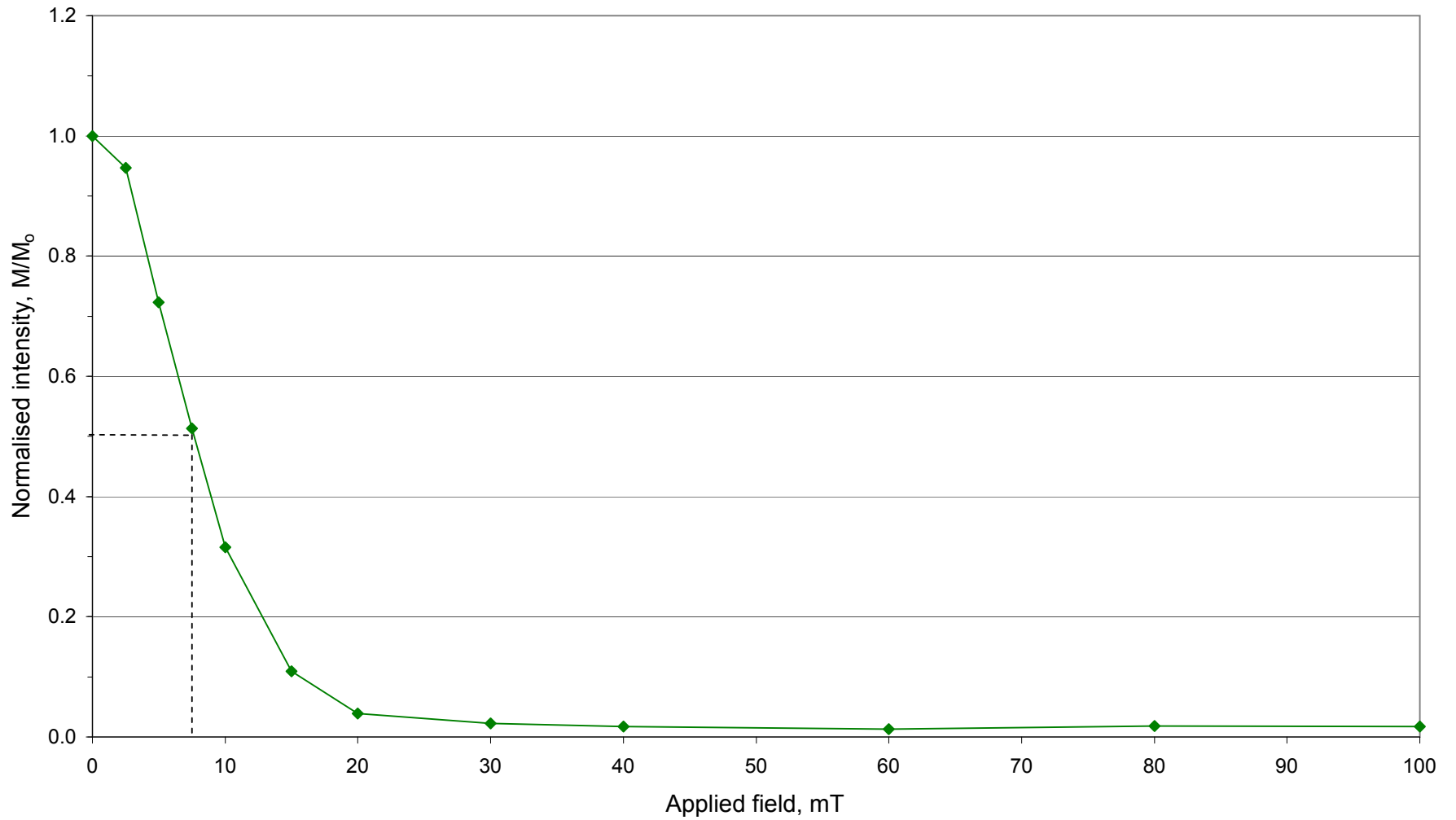
Sample No. 2

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	46.58	1.00	14.60	1.73	44.19	6.8	71.6
2.5	44.10	0.95	15.12	3.12	41.31	11.7	69.5
5.0	33.69	0.72	16.59	3.43	29.12	11.7	59.8
7.5	23.89	0.51	11.38	4.31	20.56	20.7	59.4
10.0	14.68	0.32	7.85	1.58	12.30	11.4	56.9
15.0	5.07	0.11	2.45	-0.22	4.43	354.9	60.9
20.0	1.80	0.04	1.20	-0.43	1.27	340.2	44.7
30.0	1.03	0.02	0.53	-0.65	0.60	309.6	35.6
40.0	0.79	0.02	0.54	-0.36	0.46	326.3	35.0
60.0	0.61	0.01	0.36	-0.06	0.48	350.5	53.1
80.0	0.86	0.02	0.53	-0.38	0.56	324.2	40.5
100.0	0.79	0.02	0.38	-0.40	0.56	313.3	45.3

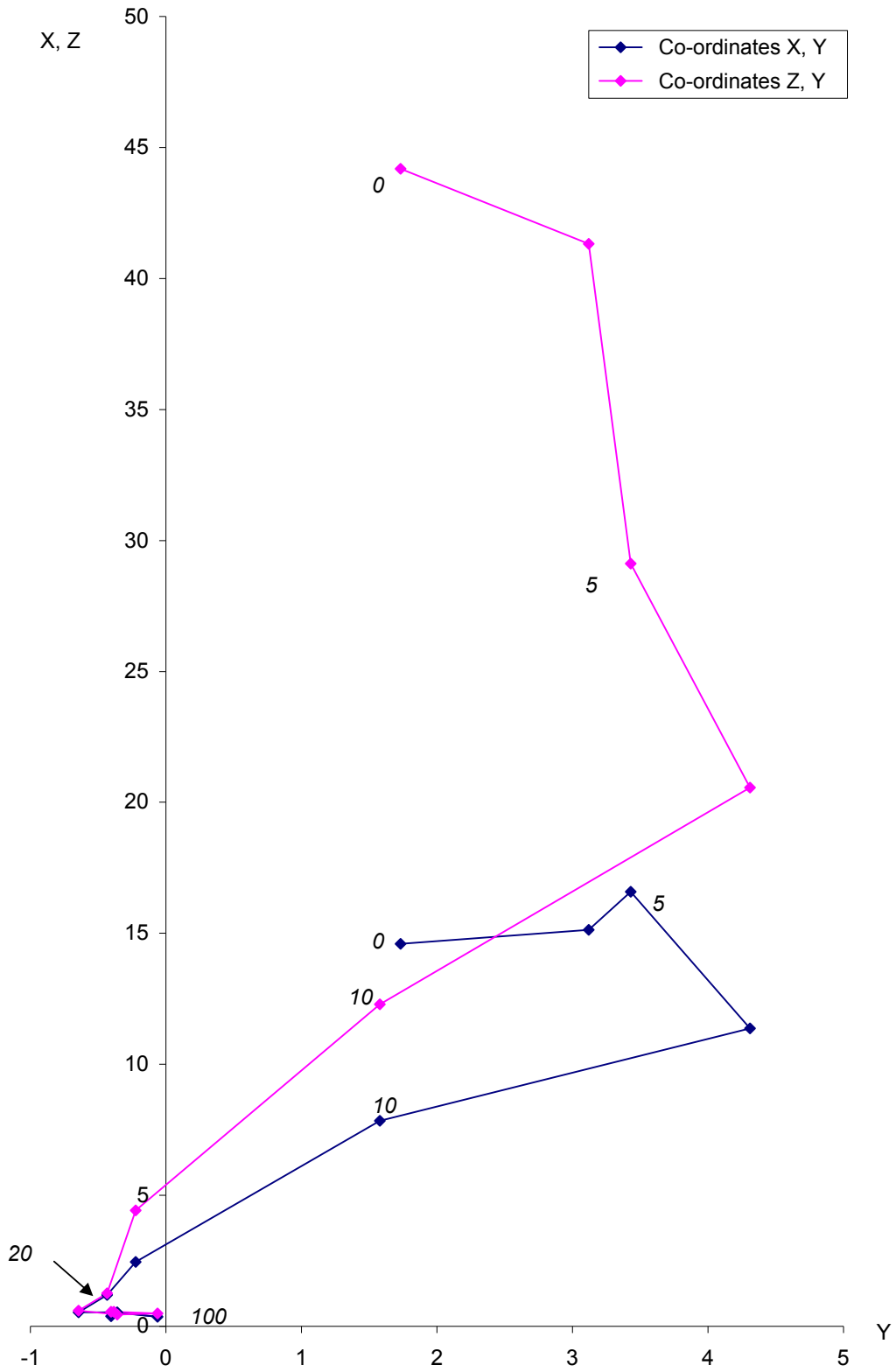
Sample No. 6

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	28.63	1.00	9.91	3.23	26.66	18.0	68.6
2.5	27.65	0.97	10.24	4.74	25.24	24.8	65.9
5.0	21.91	0.77	7.30	1.75	20.58	13.5	70.0
7.5	15.48	0.54	5.07	1.55	14.54	16.9	70.0
10.0	10.04	0.35	3.56	1.37	9.28	21.1	67.7
15.0	3.53	0.12	1.43	-0.03	3.23	359.0	66.1
20.0	1.34	0.05	0.59	-0.25	1.18	337.3	61.3
30.0	0.61	0.02	0.33	-0.30	0.41	317.1	42.6
40.0	0.48	0.02	0.14	-0.17	0.42	309.4	62.3
60.0	0.53	0.02	0.22	-0.21	0.43	315.9	54.6
80.0	0.42	0.01	0.15	-0.11	0.37	323.3	62.4
100.0	0.49	0.02	0.20	-0.20	0.40	314.9	54.4

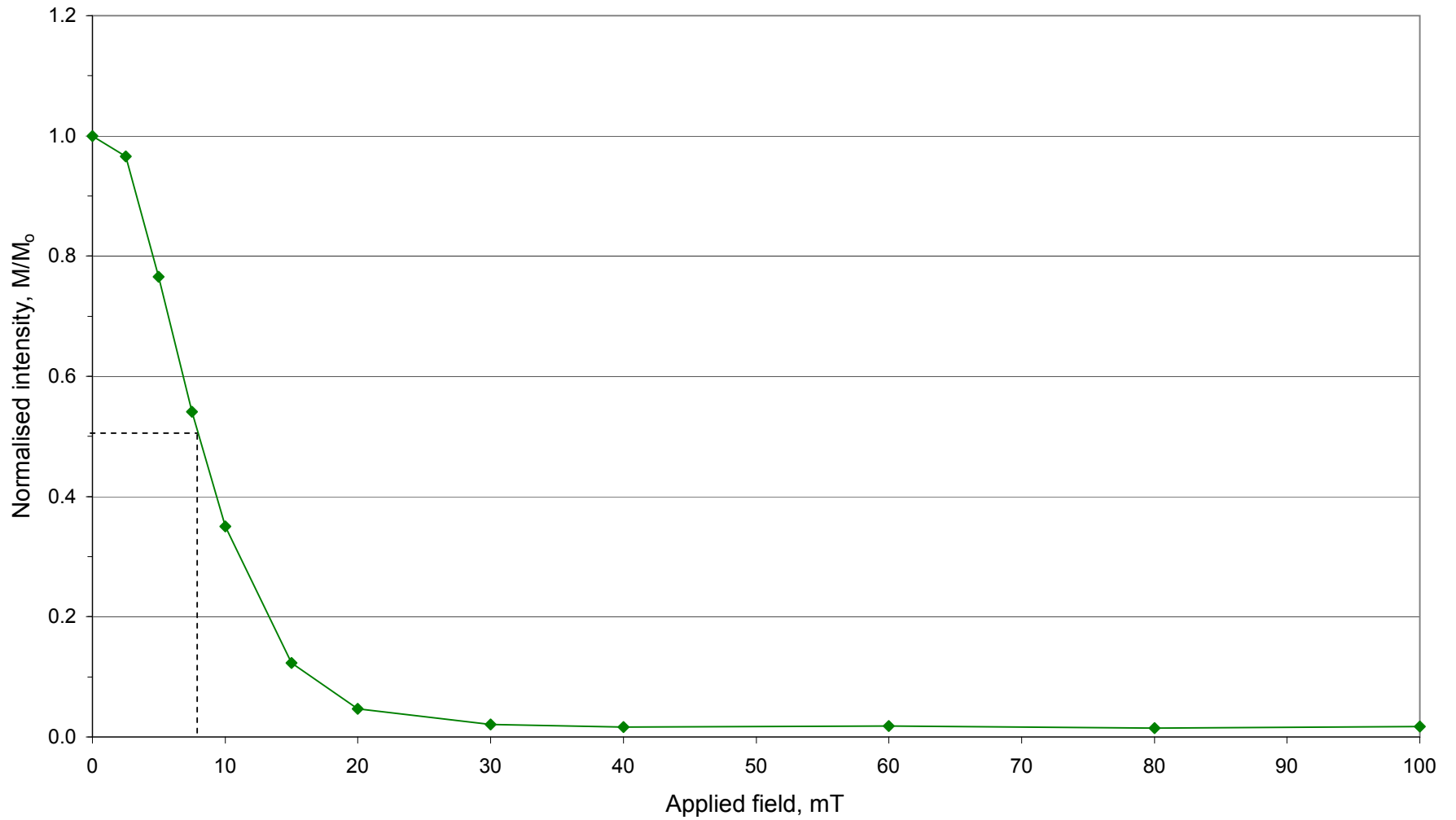
MYERS WOOD - SAMPLE POINT C2 DEMAGNETISATION: INTENSITY SPECTRUM



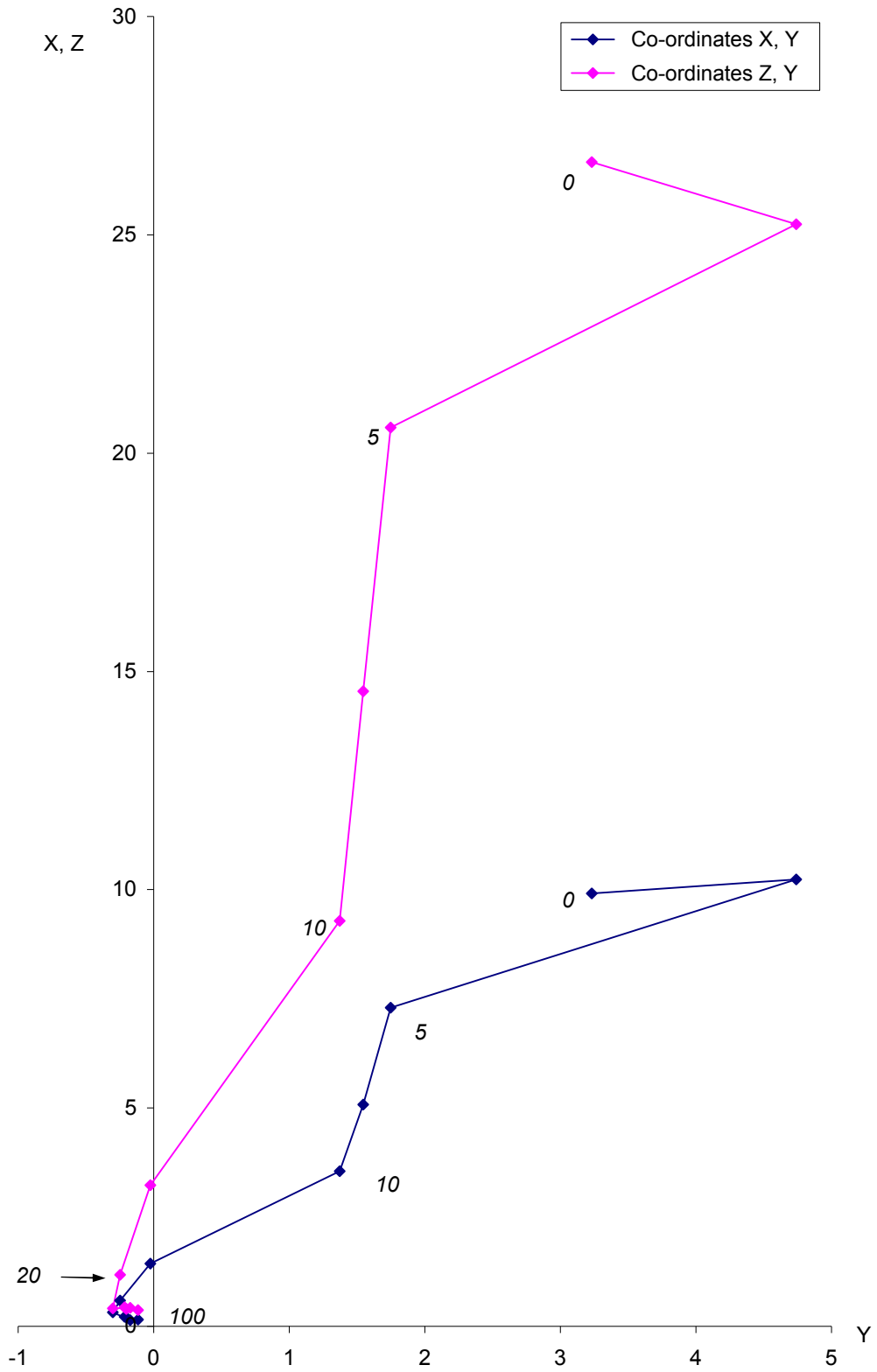
MYERS WOOD - SAMPLE POINT C2 - ZIJDERVELD PLOT



MYERS WOOD - SAMPLE POINT C6 DEMAGNETISATION: INTENSITY SPECTRUM



MYERS WOOD - SAMPLE POINT C6 - ZIJDERVELD PLOT

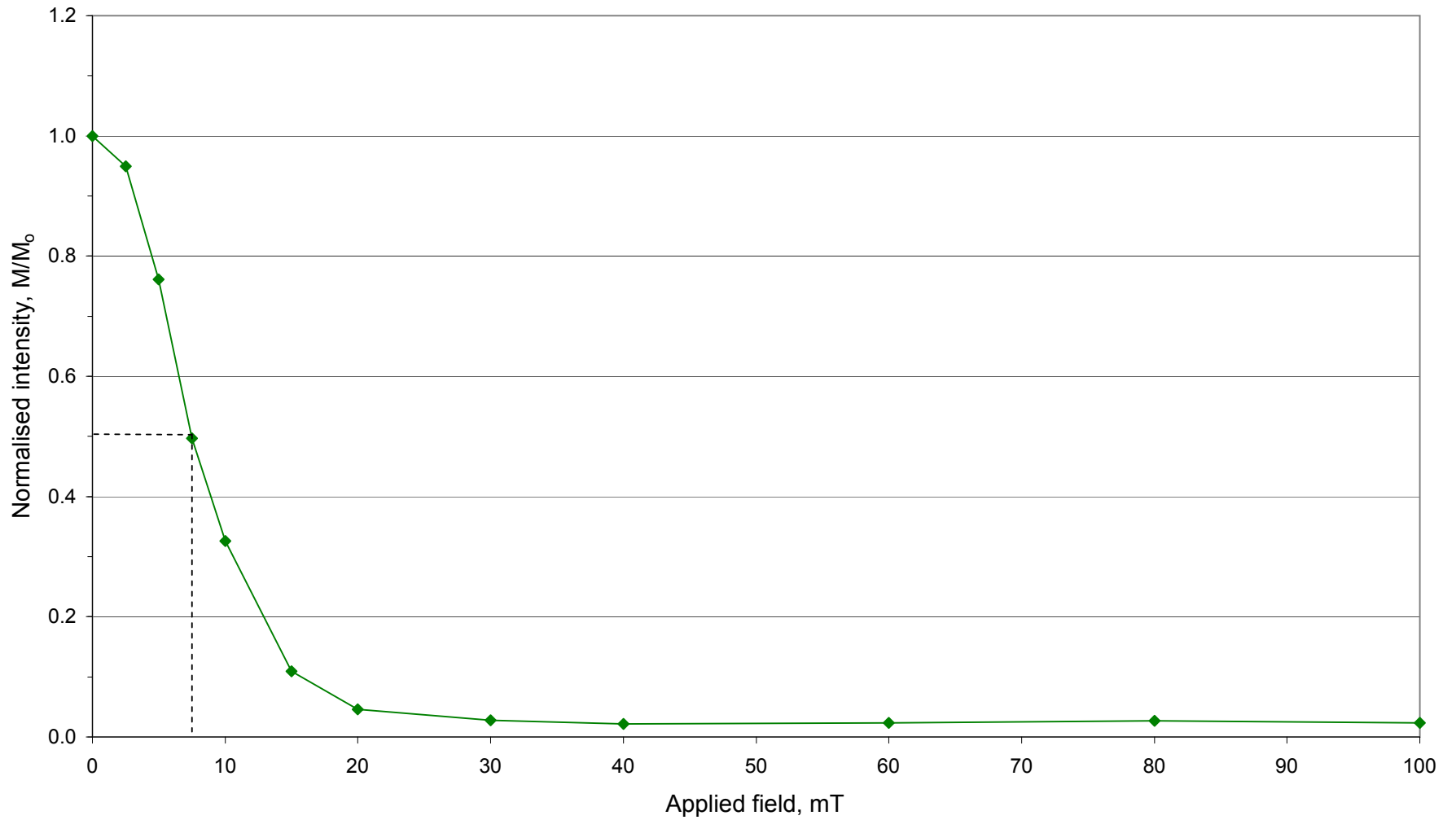


STEPPED A.F. DEMAGNETISATION MEASUREMENTS FOR OUTLIERS

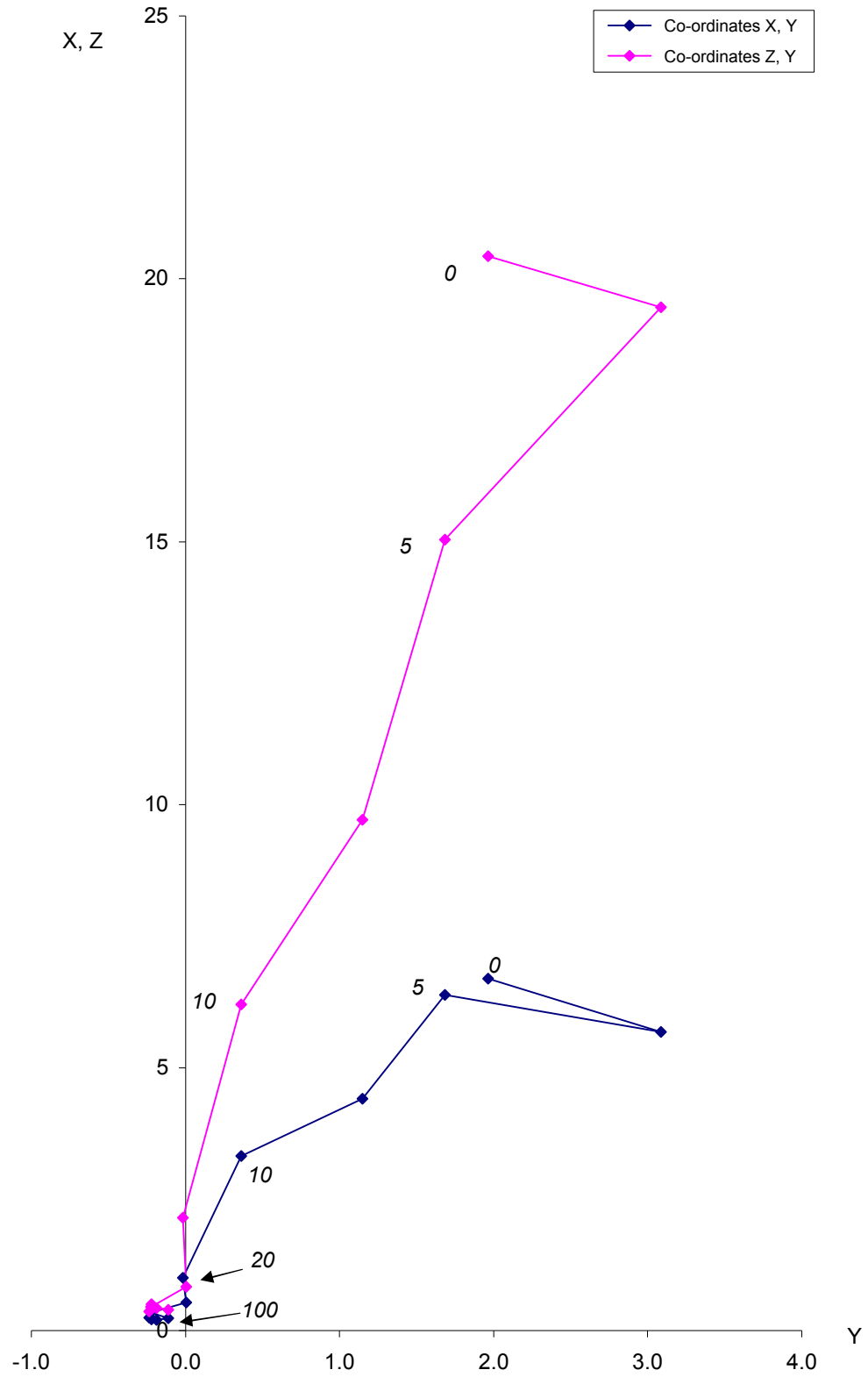
Sample No. 7

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	21.59	1.00	6.70	1.96	20.43	16.3	71.1
2.5	20.50	0.95	5.68	3.09	19.46	28.5	71.6
5.0	16.43	0.76	6.39	1.68	15.04	14.8	66.3
7.5	10.73	0.50	4.41	1.15	9.71	14.6	64.9
10.0	7.04	0.33	3.31	0.36	6.20	6.2	61.7
15.0	2.36	0.11	1.00	-0.02	2.14	359.0	64.9
20.0	0.99	0.05	0.53	0.00	0.84	0.4	57.5
30.0	0.60	0.03	0.34	-0.22	0.45	326.7	47.6
40.0	0.47	0.02	0.23	-0.11	0.39	334.6	56.9
60.0	0.51	0.02	0.20	-0.19	0.43	317.0	57.0
80.0	0.59	0.03	0.21	-0.22	0.50	314.1	58.5
100.0	0.50	0.02	0.25	-0.24	0.36	316.5	46.4

MYERS WOOD - SAMPLE POINT C7 DEMAGNETISATION: INTENSITY SPECTRUM



MYERS WOOD - SAMPLE POINT C7 - ZIJDERVELD PLOT



STABILITY INDEX

Sample No. 2

Demag Step	NRM		x	y	z
	D	l			
mT	degs.	degs.			
0.0	6.8	71.6	0.31343	0.03737	0.94888
2.5	11.7	69.5	0.34293	0.07102	0.93667
5.0	11.7	59.8	0.49257	0.10201	0.86427
7.5	20.7	59.4	0.47618	0.17993	0.86074
10.0	11.4	56.9	0.53533	0.10794	0.83772
15.0	354.9	60.9	0.48441	-0.04323	0.87377
20.0	340.2	44.7	0.66878	-0.24077	0.70339
30.0	309.6	35.6	0.51829	-0.62650	0.58212
40.0	326.3	35.0	0.68150	-0.45450	0.57358
60.0	350.5	53.1	0.59219	-0.09910	0.79968
80.0	324.2	40.5	0.61674	-0.44481	0.64945
100.0	313.3	45.3	0.48240	-0.51191	0.71080

Sample No. 2

Number	Range	S.I.
3	5	1.1
4	7.5	1.3
5	10	1.4
6	15	1.7 *
7	20	1.2
8	30	1.0
9	40	1.0
10	60	1.3
11	80	1.5
12	100	1.6

Number = 12
 Sum x = 6.20474
 Sum y = -1.92256
 Sum z = 9.34108
 R = 11.37764
 x bar = 0.54534
 y bar = -0.16898
 z bar = 0.82100

k = 18
 Theta63 = 19.27
 Range = 100
 S.I. = 1.6

Mean Dec = -17.22
 Mean Inc = 55.19
 Alpha95 = 10.62

Sample No. 6

Demag Step	NRM		x	y	z
	D	l			
mT	degs.	degs.			
0.0	18.0	68.6	0.34702	0.11275	0.93106
2.5	24.8	65.9	0.37067	0.17128	0.91283
5.0	13.5	70.0	0.33257	0.07984	0.93969
7.5	16.9	70.0	0.32725	0.09943	0.93969
10.0	21.1	67.7	0.35401	0.13660	0.92521
15.0	359.0	66.1	0.40508	-0.00707	0.91425
20.0	337.3	61.3	0.44302	-0.18532	0.87715
30.0	317.1	42.6	0.53922	-0.50108	0.67688
40.0	309.4	62.3	0.29505	-0.35920	0.88539
60.0	315.9	54.6	0.41600	-0.40313	0.81513
80.0	323.3	62.4	0.37146	-0.27688	0.88620
100.0	314.9	54.4	0.41090	-0.41234	0.81310

Sample No. 6

Number	Range	S.I.
3	5	2.4
4	7.5	3.3
5	10	4.3 *
6	15	3.1
7	20	1.9
8	30	1.2
9	40	1.3
10	60	1.5
11	80	1.8
12	100	2.0

Number = 12
 Sum x = 4.61226
 Sum y = -1.54511
 Sum z = 10.51659
 R = 11.58702
 x bar = 0.39805
 y bar = -0.13335
 z bar = 0.90762

k = 27
 Theta63 = 15.69
 Range = 100
 S.I. = 2.0

Mean Dec = -18.52
 Mean Inc = 65.18
 Alpha95 = 8.57

Sample No. 7

Demag Step	NRM		x	y	z
	D	I			
<i>mT</i>	<i>degs.</i>	<i>degs.</i>			
0.0	16.3	71.1	0.31090	0.09091	0.94609
2.5	28.5	71.6	0.27740	0.15061	0.94888
5.0	14.8	66.3	0.38861	0.10268	0.91566
7.5	14.6	64.9	0.41050	0.10693	0.90557
10.0	6.2	61.7	0.47132	0.05120	0.88048
15.0	359.0	64.9	0.42413	-0.00740	0.90557
20.0	0.4	57.5	0.53729	0.00375	0.84339
30.0	326.7	47.6	0.56359	-0.37021	0.73846
40.0	334.6	56.9	0.49331	-0.23424	0.83772
60.0	317.0	57.0	0.39832	-0.37144	0.83867
80.0	314.1	58.5	0.36361	-0.37522	0.85264
100.0	316.5	46.4	0.50023	-0.47470	0.72417

Sample No. 7

Number	Range	S.I.
3	5	1.8
4	7.5	2.1
5	10	1.9
6	15	2.3 *
7	20	2.2
8	30	1.5
9	40	1.6
10	60	1.9
11	80	2.0
12	100	2.1

Number = 12
 Sum x = 5.13922
 Sum y = -1.32714
 Sum z = 10.33729
 R = 11.62034
 x bar = 0.44226
 y bar = -0.11421
 z bar = 0.88959

Mean Dec = -14.48
 Mean Inc = 62.82
 Alpha95 = 8.20

k = 29
 Theta63 = 15.05
 Range = 100
 S.I. = 2.1