



Bergvesenet

Postboks 3021, N-7441 Trondheim

Rapportarkivet

Bergvesenet rapport nr BV 4103	Intern Journal nr Kasse 60	Internt arkiv nr	Rapport lokalisering Trondheim	Gradering
Kommer fra .arkiv	Ekstern rapport nr Dighem Limited 707/B	Oversendt fra Tverrfjellet	Fortrolig pga	Fortrolig fra dato:
Titel Kartbilag til "Dighem survey of Folldal area, Norway. Survey nr. 707/B".				
Forfatter Smith, P. Dovrak, Z.		Dato 21/1 1983	Bedrift Dighem Limited Folldal Verk A/S	
Kommune	Fylke Sedmark	Bergdistrikt Sørlandske	1: 50 000 kartblad	1: 250 000 kartblad
Fagområde Geofysikk	Dokument type Rapport	Forkomster		
Råstofftype	Emneord			
Sammenheng Rapporten finnes på BV 4102.				

4103

DIGHEM LIMITED

ARCHIVE DATA TAPE - TYPE 3

(SCAN RECORD FORMAT)

I. MAGNETIC TAPE STRUCTURE Job No. 707 - Follidal

Tape Name (external) DIG216

<u>Files</u>	<u>Description</u> (area, block, lines)	<u>Number of</u> <u>Tape Blocks</u>
	Sheet 2	
1	(lines 2600-3340)	9103
	Sheet 2 - tie lines	
2	(3350, 3360)	493
3		
4		
5		
6		

Data Control Parameters

Recording - 9-track
 Density - 1600 bpi
 Label - no label
 Character Code - 144
 Logical Record
 Size - 144 characters
 Block Size - 1440 characters

Sample IBM Job Control

//GO.FTO2F001 DD DSN = INPUT, UNIT = 9TR1600,
 VOL = SER = DIGH99, DISP = OLD, LABEL = (03,NL,IN),
 DCB = (RECFM = FB, LRECL = 144, BLKSIZE = 1440, DEN = 3)

- 2 -

II. GEOPHYSICAL DATA FORMAT

Magnetic tape file logical data organization is as follows:

1. Geophysical Parameter Data

Each logical record contains the following:

	<u>Characters</u>	<u>Format</u>	<u>Description</u>	<u>PARAMETER</u>	<u>Name</u>	<u>Storage Units</u>
1.	1- 6	I6	Line Number	-	-	-
2.	7- 12	I6	Fiducial	-	-	-
3.	13- 18	I6	X-coordinate of map	2	X	inches*100
4.	19- 24	I6	Y-coordinate of map	3	Y	inches*100
5.	25- 30	I6	Magnetics	20	MAG	gammas
6.	31- 36	I6	Enhanced magnetics	30	MAGE	gammas*10
7.	37- 42	I6	Radar Altimeter	21	ALT	feet*10
8.	43- 48	I6	Coaxial Spherics	28	CXS	ppm*10
9.	49- 54	I6	Coaxial Inphase	22	CXI	ppm*10
10.	55- 60	I6	Coaxial Quadrature	23	CXQ	ppm*10
11.	61- 66	I6	Coplanar Inphase	24	CPI	ppm*10
12.	67- 72	I6	Coplanar Quadrature	25	CPQ	ppm*10
13.	73- 78	I6	Coplanar Spherics	29	CPS	ppm*10
14.	79- 84	I6	Apparent Resistivity	40	RES	ln(ohm-m)
15.	85- 90	I6	Apparent Depth	41	DP	m*10-10000
16.	91- 96	I6	EM Magnetite	50	FEO%	%*100
17.	97-102	I6	Difference Inphase	33	DIFI	ppm*10
18.	103-108	I6	Difference Quad	34	DIFQ	ppm*10
19.	109-114	I6	Anomaly Recognition 1	35	REC1	ppm*10
20.	115-120	I6	Anomaly Recognition 2	36	REC2	ppm*10
21.	121-126	I6	Conductivity Contrast	42	CC	ln(mho/m)
22.	127-132	I6	Depth Contrast	43	DC	
23.	133-138	I6	Multiplication 42*43	44	CCDC	
24.	139-144	I6	Conductivity-thickness	37	SIGT	mhos

Notes:

1. The value -15500 flags invalid data at a point. If either parameter number 2 (x-coordinate) or a parameter is -15500, the data point for the parameter is to be ignored. An exception to this occurs in the conductance parameter 37. A value of -15500 embedded in an array of zeros identifies an 'x-type' response.
2. Parameter numbers 20 (MAG) and 30 (MAGE) have been offset by subtracting a base value of 55,000 gammas.
3. The resistivity parameter number 40 (RES) values are given in logarithmic form. For a given stored value V, the resistivity is:

$$\text{ohm-m} = \exp^{(V/3474)}$$

4. An end of flight line condition occurs when all parameters are set to 9999.

DIGHEM LIMITED

ARCHIVE DATA TAPE - TYPE 3

(SCAN RECORD FORMAT)

I. MAGNETIC TAPE STRUCTURE Job No. 707 - Folldal

Tape Name (external) DIGH28

<u>Files</u>	<u>Description</u> (area, block, lines)	<u>Number of</u> <u>Tape Blocks</u>
	Sheet 1	
1	lines 2010-2670	6222
	Sheet 1 tie lines	
2	(3350, 3360)	492
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____

Data Control Parameters

Recording - 9-track
 Density - 1600 bpi
 Label - no label
 Character Code - 144
 Logical Record
 Size - 144 characters
 Block Size - 1440 characters

Sample IBM Job Control

//GO.FTO2F001 DD DSN = INPUT, UNIT = 9TR1600,
 VOL = SER = DIGH99, DISP = OLD, LABEL = (03,NL,IN),
 DCB = (RECFM = FB, LRECL = 144, BLKSIZE = 1440, DEN = 3)

- 2 -

II. GEOPHYSICAL DATA FORMAT

Magnetic tape file logical data organization is as follows:

1. Geophysical Parameter Data

Each logical record contains the following:

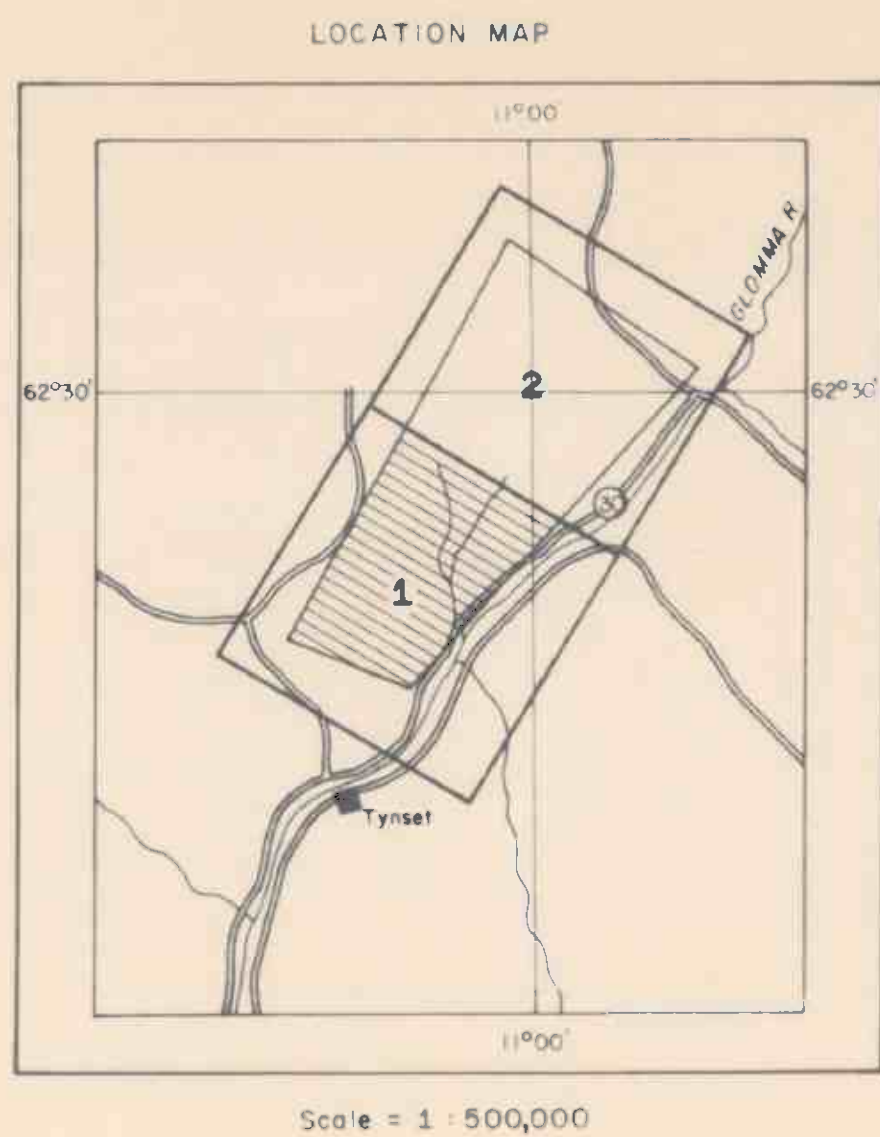
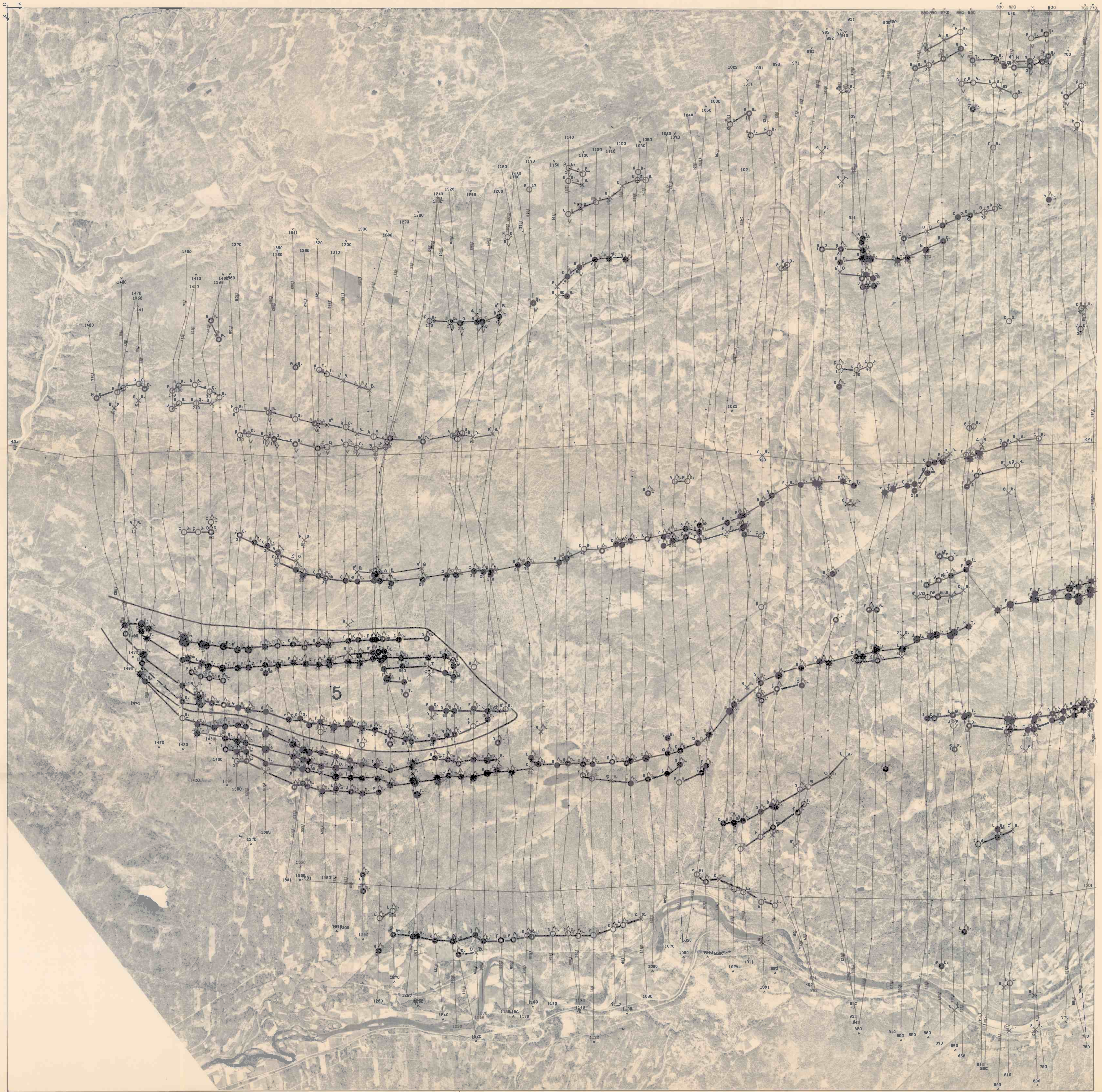
	<u>Characters</u>	<u>Format</u>	<u>Description</u>	<u>PARAMETER</u>	<u>Name</u>	<u>Storage Units</u>
1.	1- 6	I6	Line Number	-	-	-
2.	7- 12	I6	Fiducial	-	-	-
3.	13- 18	I6	X-coordinate of map	2	X	inches*100
4.	19- 24	I6	Y-coordinate of map	3	Y	inches*100
5.	25- 30	I6	Magnetics	20	MAG	gammas
6.	31- 36	I6	Enhanced magnetics	30	MAGE	gammas*10
7.	37- 42	I6	Radar Altimeter	21	ALT	feet*10
8.	43- 48	I6	Coaxial Spherics	28	CXS	ppm*10
9.	49- 54	I6	Coaxial Inphase	22	CXI	ppm*10
10.	55- 60	I6	Coaxial Quadrature	23	CXQ	ppm*10
11.	61- 66	I6	Coplanar Inphase	24	CPI	ppm*10
12.	67- 72	I6	Coplanar Quadrature	25	CPQ	ppm*10
13.	73- 78	I6	Coplanar Spherics	29	CPS	ppm*10
14.	79- 84	I6	Apparent Resistivity	40	RES	ln(ohm-m)
15.	85- 90	I6	Apparent Depth	41	DP	m*10-10000
16.	91- 96	I6	EM Magnetite	50	FEO%	%*100
17.	97-102	I6	Difference Inphase	33	DIFI	ppm*10
18.	103-108	I6	Difference Quad	34	DIFQ	ppm*10
19.	109-114	I6	Anomaly Recognition 1	35	REC1	ppm*10
20.	115-120	I6	Anomaly Recognition 2	36	REC2	ppm*10
21.	121-126	I6	Conductivity Contrast	42	CC	ln(mho/m)
22.	127-132	I6	Depth Contrast	43	DC	
23.	133-138	I6	Multiplication 42*43	44	CCDC	
24.	139-144	I6	Conductivity-thickness	37	SIGT	mhos

Notes:

1. The value -15500 flags invalid data at a point. If either parameter number 2 (x-coordinate) or a parameter is -15500, the data point for the parameter is to be ignored. An exception to this occurs in the conductance parameter 37. A value of -15500 embedded in an array of zeros identifies an 'x-type' response.
2. Parameter numbers 20 (MAG) and 30 (MAGE) have been offset by subtracting a base value of 55,000 gammas.
3. The resistivity parameter number 40 (RES) values are given in logarithmic form. For a given stored value V, the resistivity is:

$$\text{ohm-m} = \exp(V/3474)$$

4. An end of flight line condition occurs when all parameters are set to 9999.



Scale = 1 : 500,000

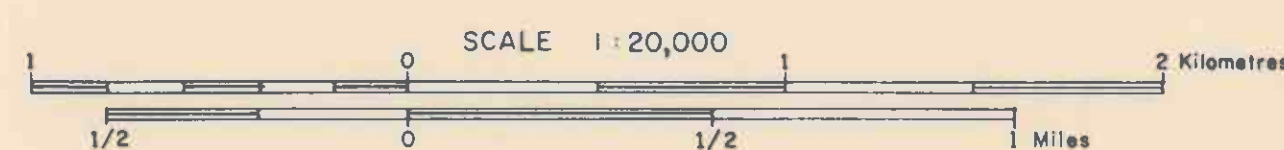
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

ELECTROMAGNETICS

FOR

FOLLDAL VERK A/S



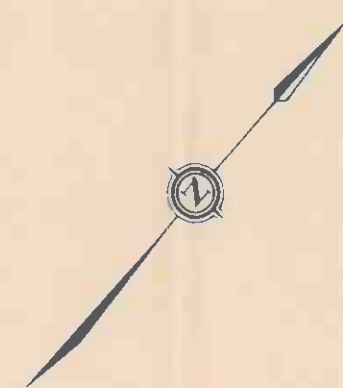
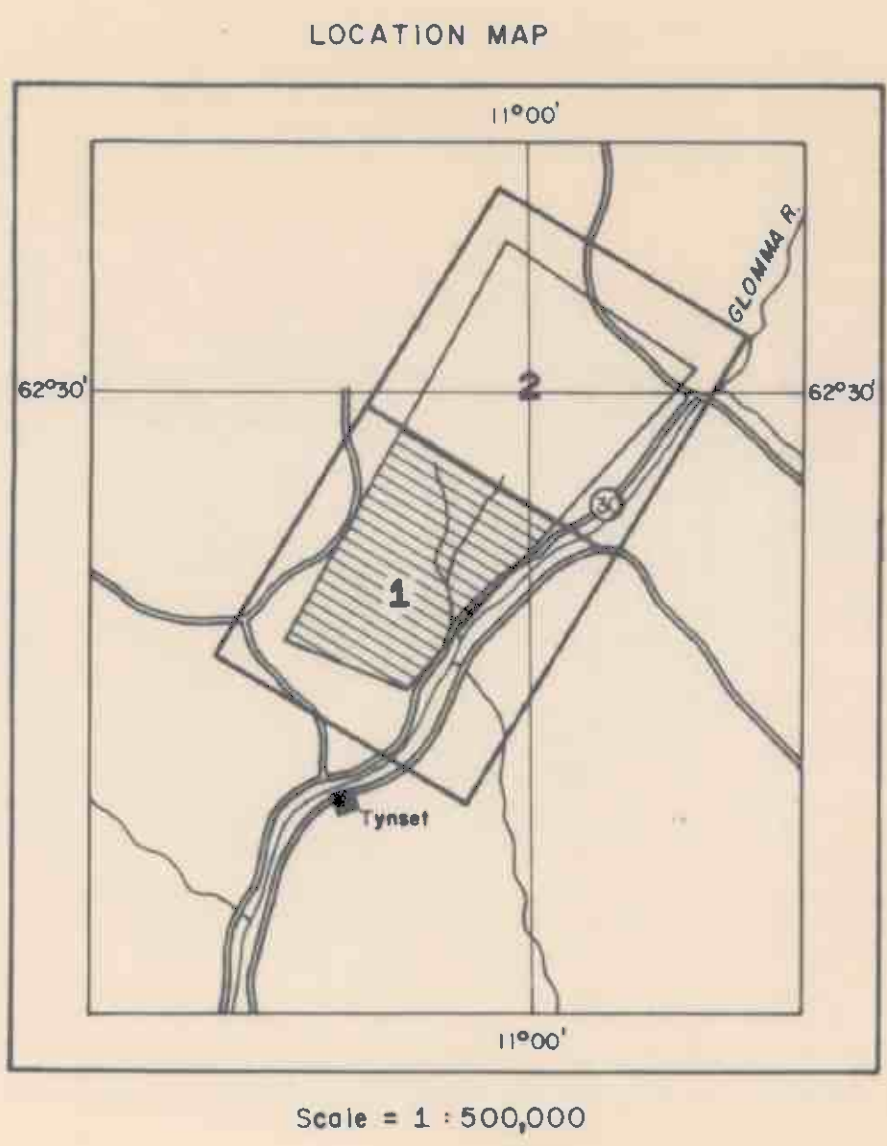
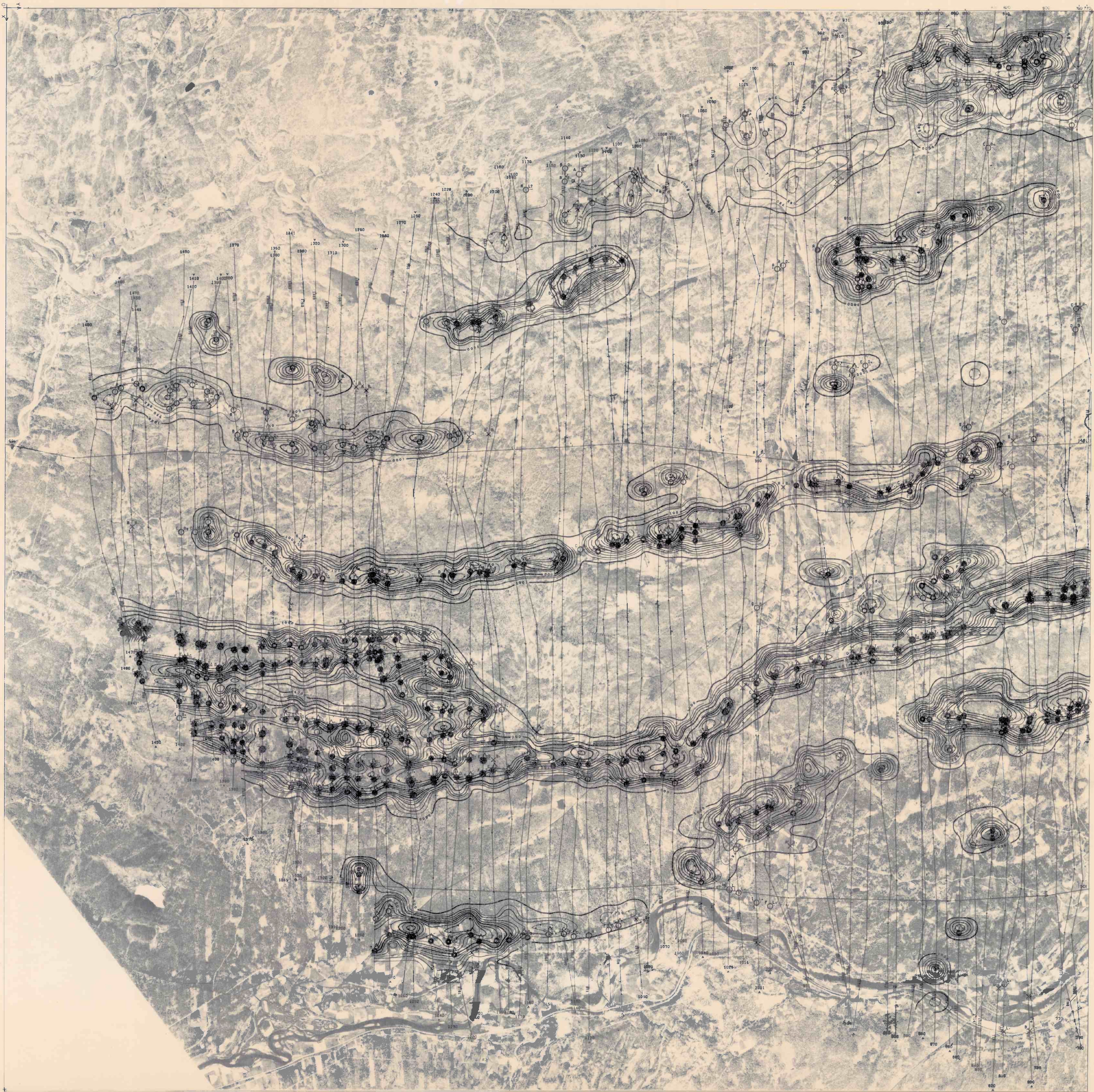
SHEET 1

Flight Line

- Fiducial 210 (Not recovered from film)
- Fiducial 218 (Recovered from film)
- Fiducial 210 (Not recovered from film)
- Fiducial 210 (Recovered from film)

Line Number and Flight direction

ANOMALY SYMBOL	ANOMALY SYMBOL	CONDUCTANCE (MICROHMS)
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30
31	32	33
34	35	36
37	38	39
40	41	42
43	44	45
46	47	48
49	50	51
52	53	54
55	56	57
58	59	60
61	62	63
64	65	66
67	68	69
70	71	72
73	74	75
76	77	78
79	80	81
82	83	84
85	86	87
88	89	90
91	92	93
94	95	96
97	98	99
100	101	102
103	104	105
106	107	108
109	110	111
112	113	114
115	116	117
118	119	120
121	122	123
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133	134	135
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145	146	147
148	149	150
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229	230	231
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244	245	246
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259	260	261
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667	668	669
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673	674	675
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694	695	696
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718	719	720
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724	725	726
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985	986	987
988	989	990
991	992	993
994	995	996
997	998	999
1000	1001	1002
1003	1004	1005
1006	1007	1008
1009	1010	1011
1012	1013	1014
1015	1016	1017
1018	1019	1020
1021	1022	1023
1024	1025	1026
1027	1028	1029
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1036	1037	1038
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1042	1043	1044
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1078	1079	1080
1081	1082	1083
1084	1085	1086
1087	1088	1089
1090	1091	1092
1093	1094	1095
1096	1097	1098
1099	1100	1101
1102	1103	1104
1105	1106	1107
1108	1109	1110
1111	1112	1113
1114	1115	1116
1117	1118	1119
1120	1121	1122
1123	1124	1125
1126	1127	1128
1129	1130	1131
1132	1133	1134
1135	1136	1137
1138	1139	1140
1141	1142	1143
1144	1145	1146
1147	1148	1149
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1177	1178	1179
1180	1181	1182
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1186	1187	1188
1189	1190	1191
1192	1193	1194
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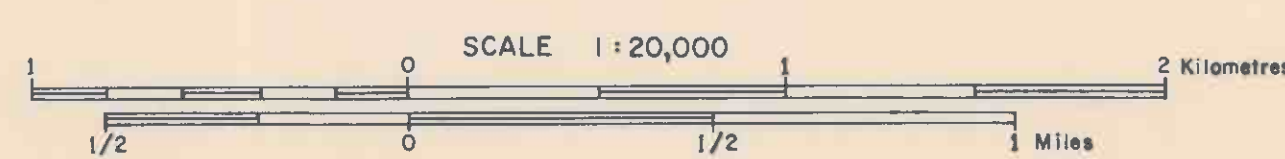
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

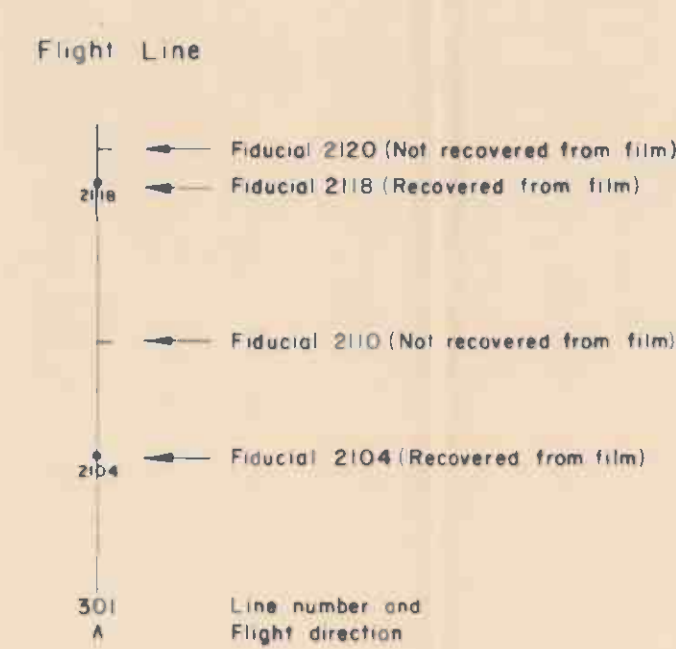
RESISTIVITY

FOR

FOLLDAL VERK A/S

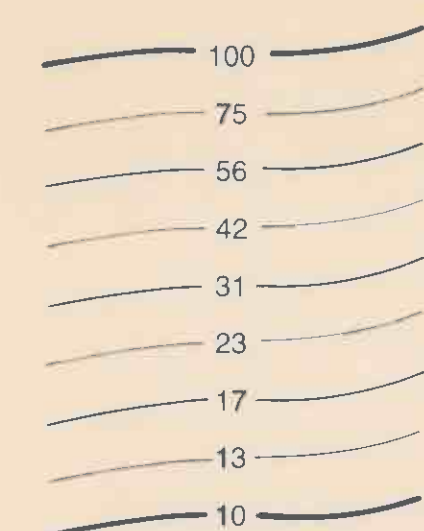


SHEET 1

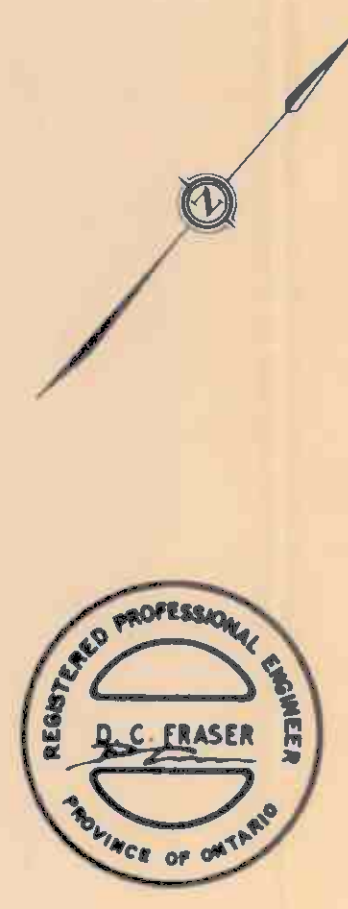
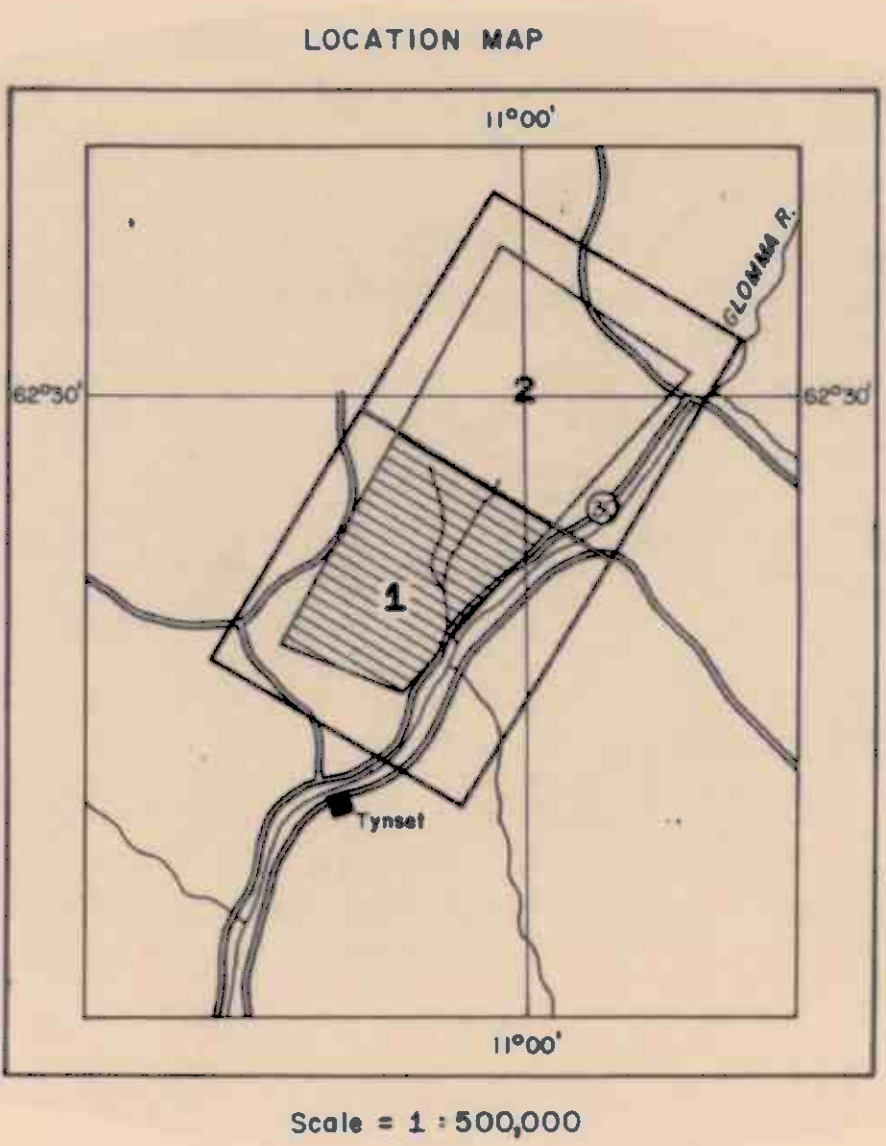
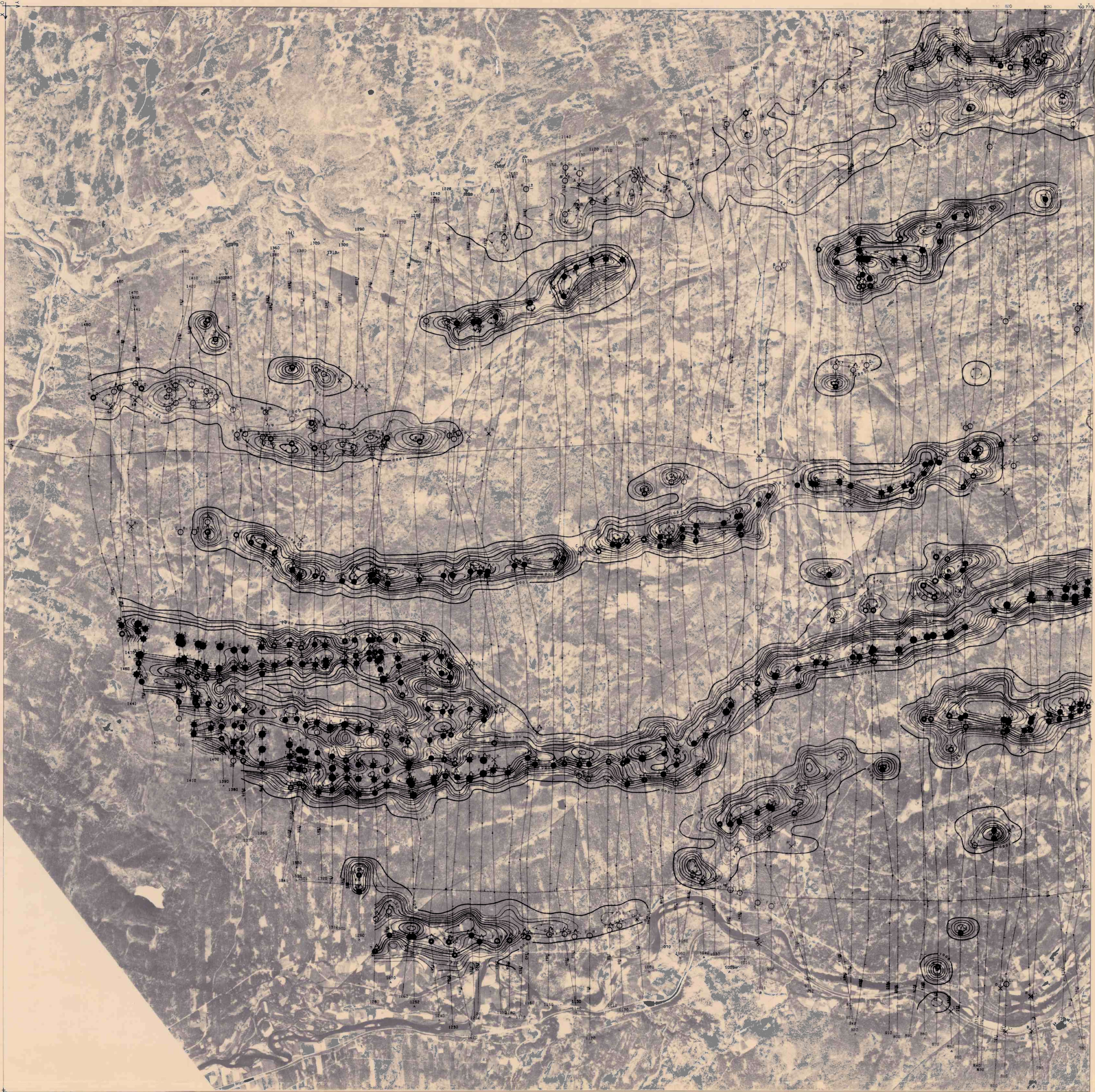


LEGEND

Contours in ohm - m
at eight intervals per decade



Note
The numbers face in the
direction of increasing value.



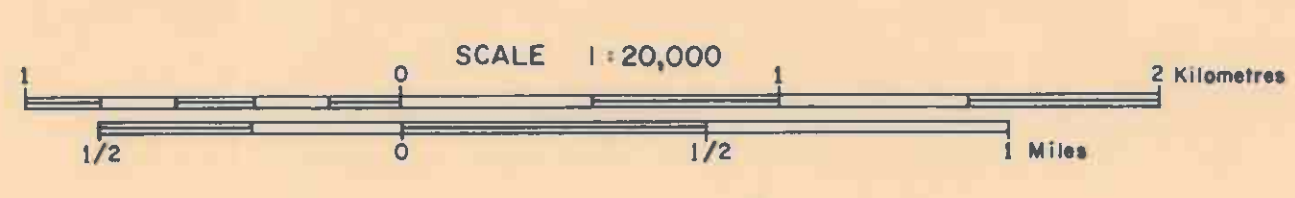
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

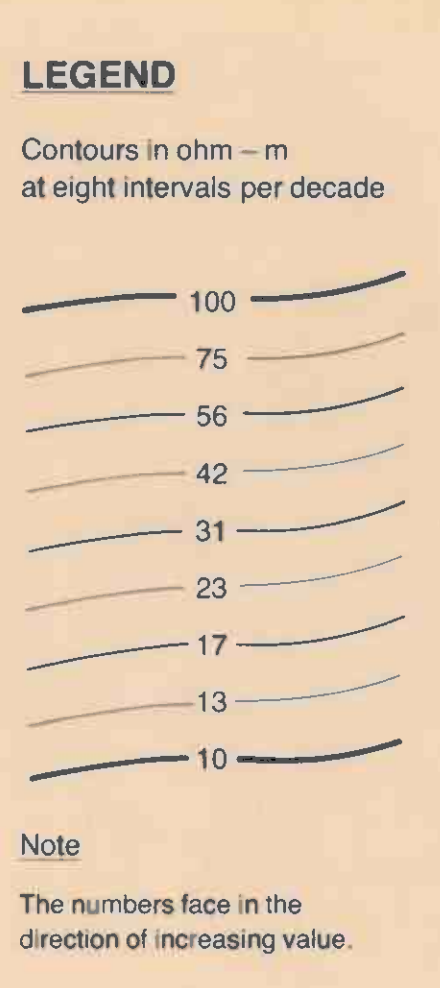
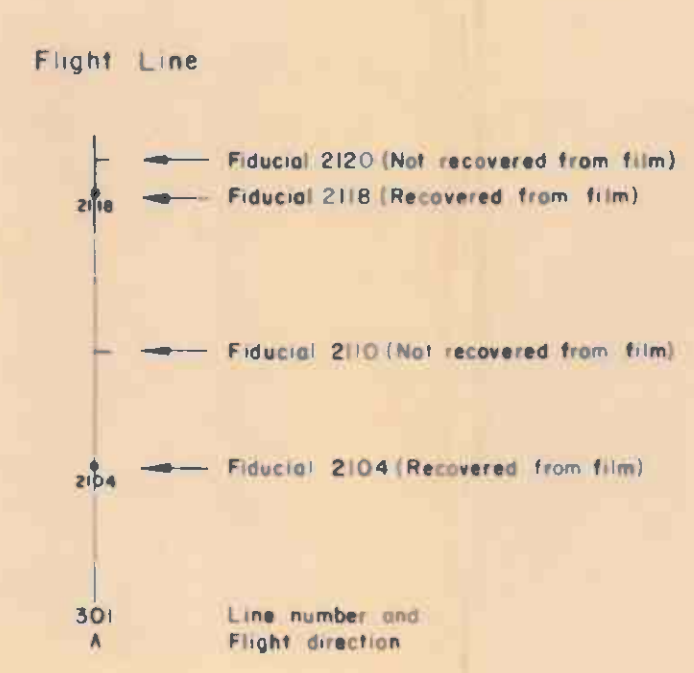
RESISTIVITY

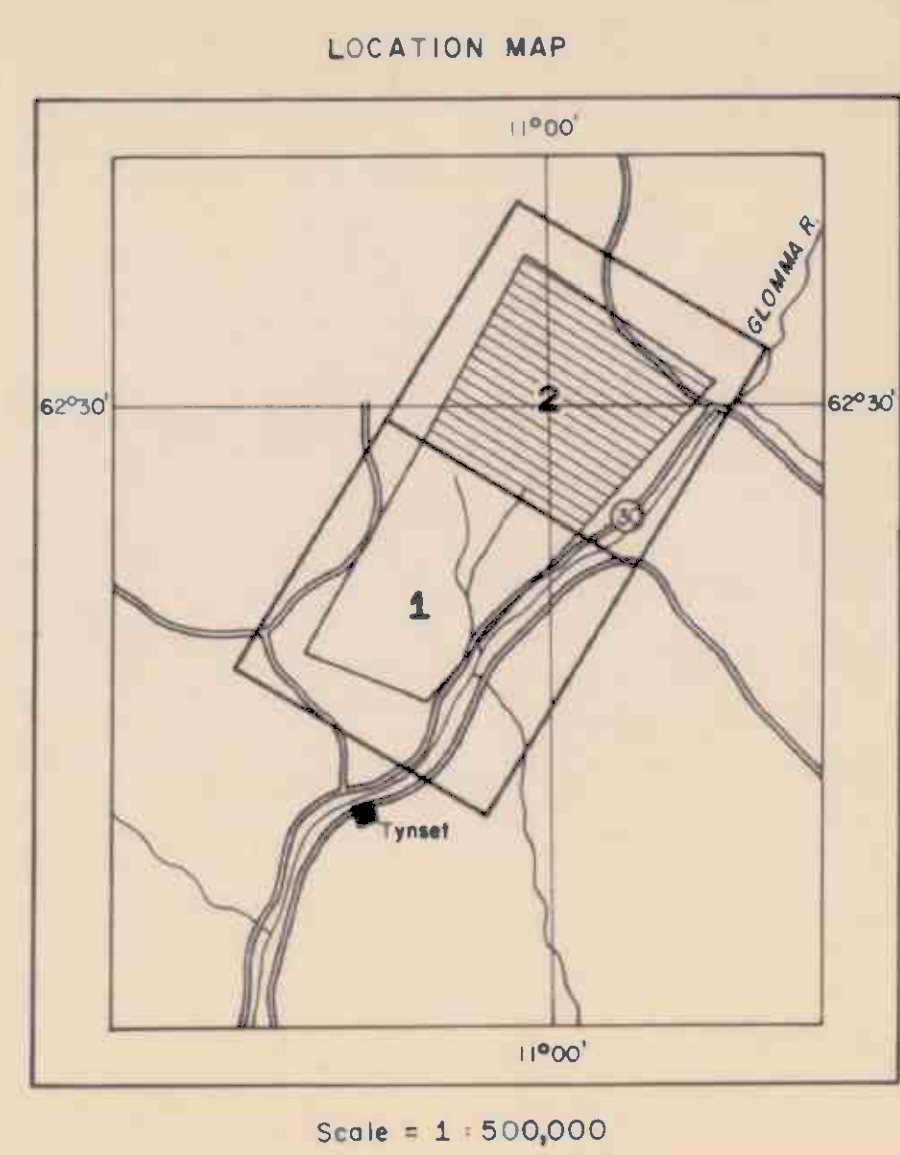
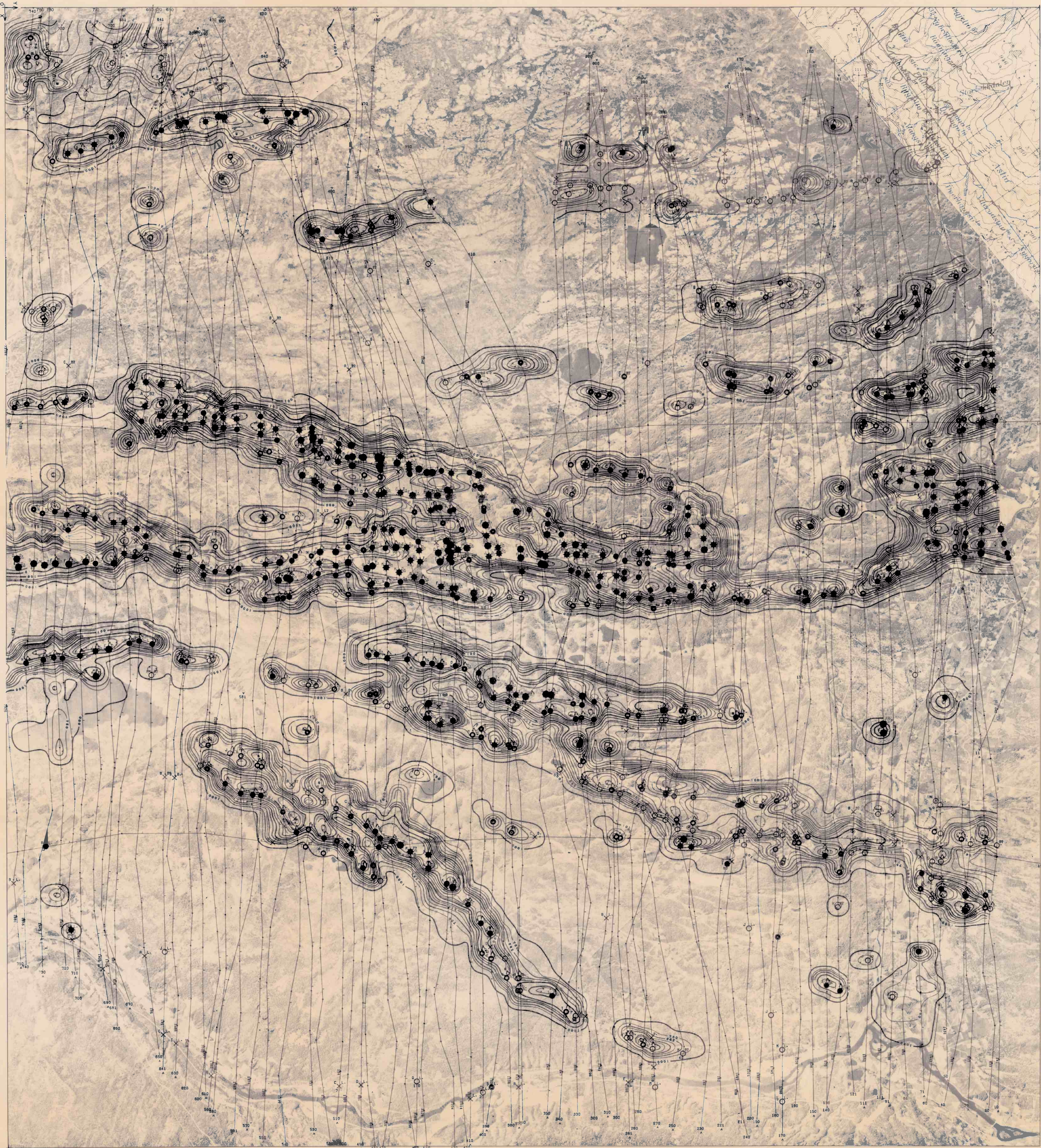
FOR

FOLLDAL VERK A/S

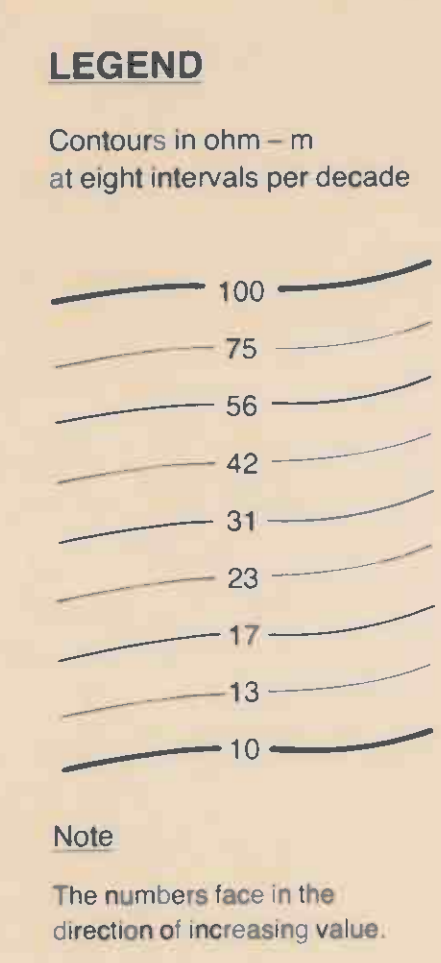
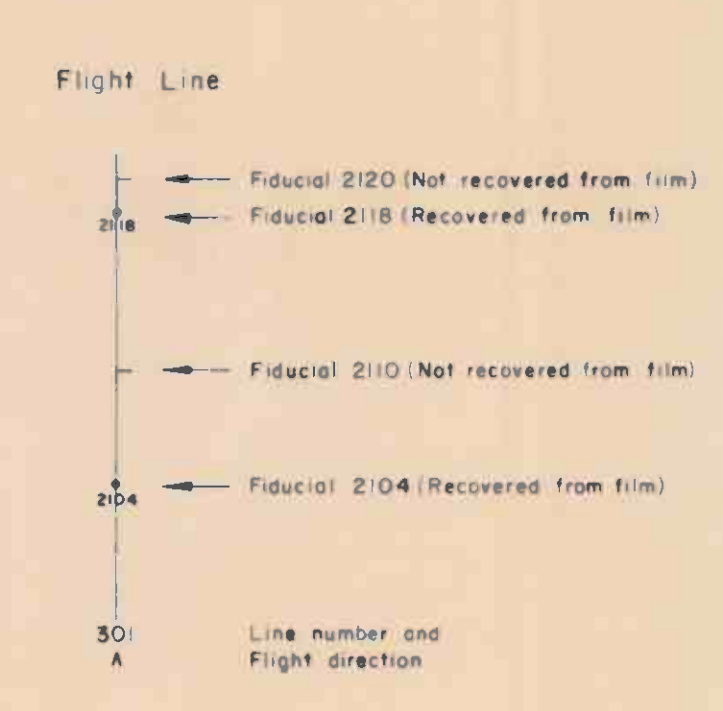
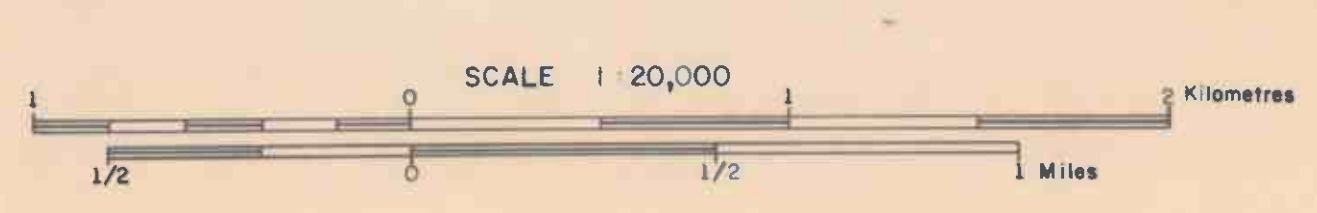


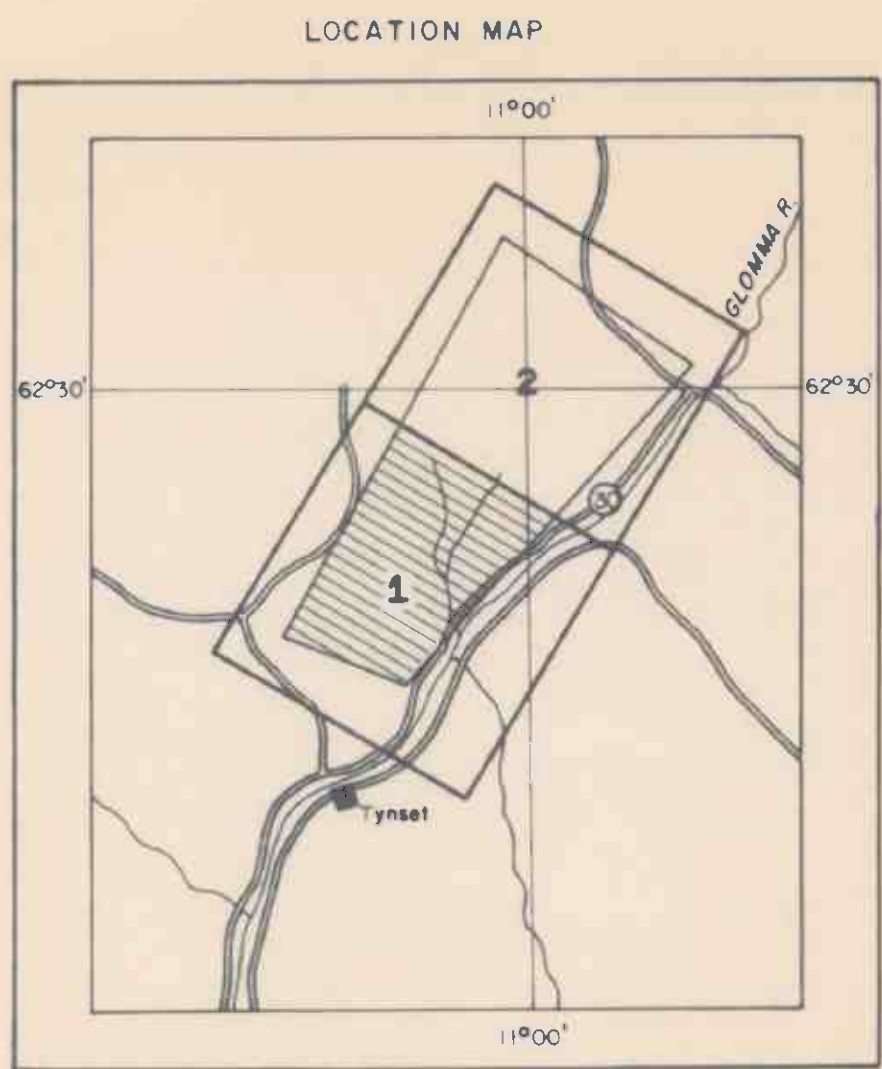
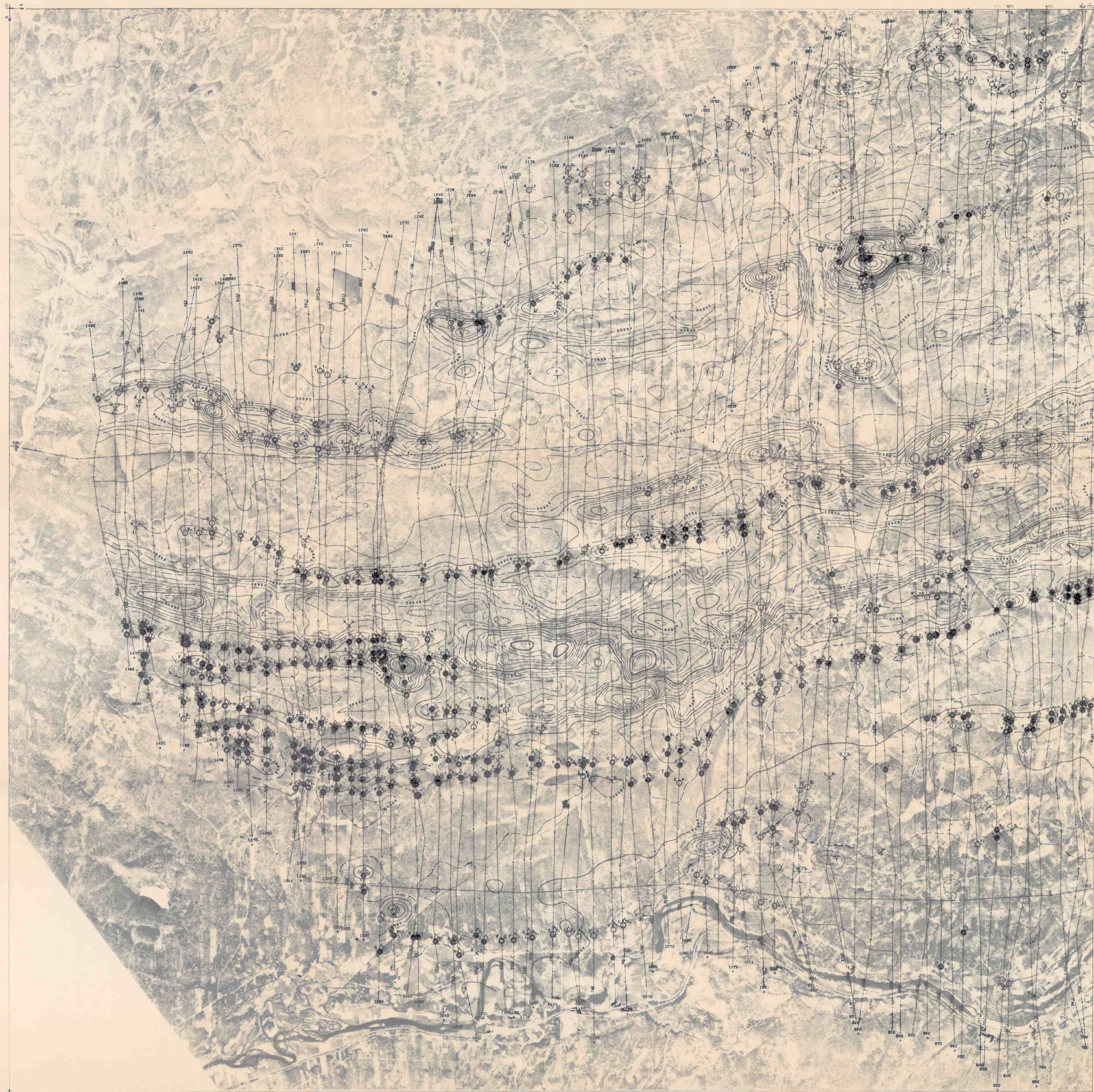
SHEET 1





DIGHEM^{II} SURVEY TYNSET AREA, NORWAY RESISTIVITY FOR FOLLDAL VERK A/S





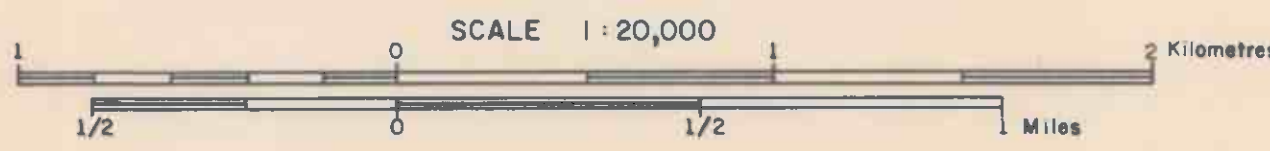
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

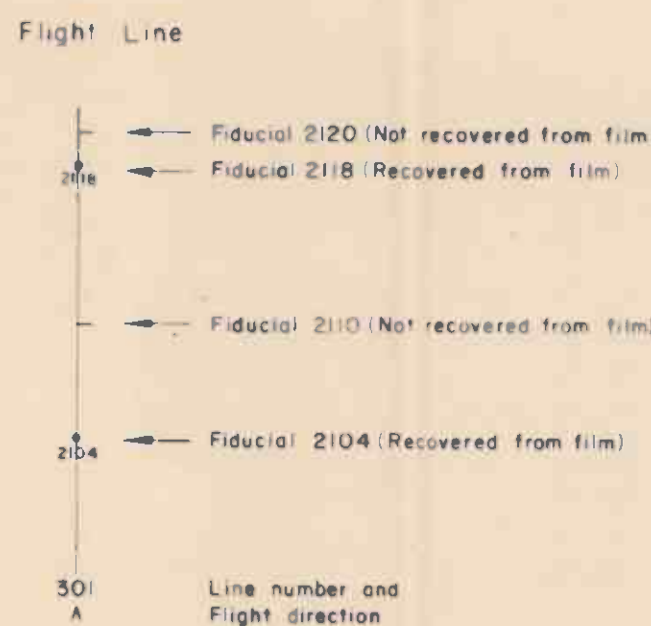
MAGNETICS (Total Field-IGRF + 50,800) nT

FOR

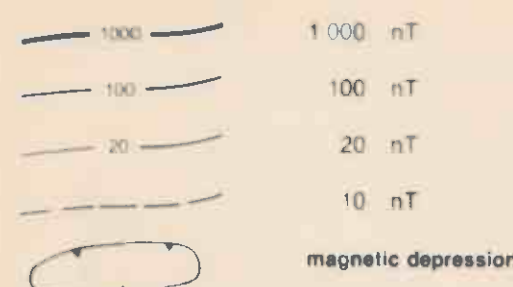
FOLLDAL VERK A/S

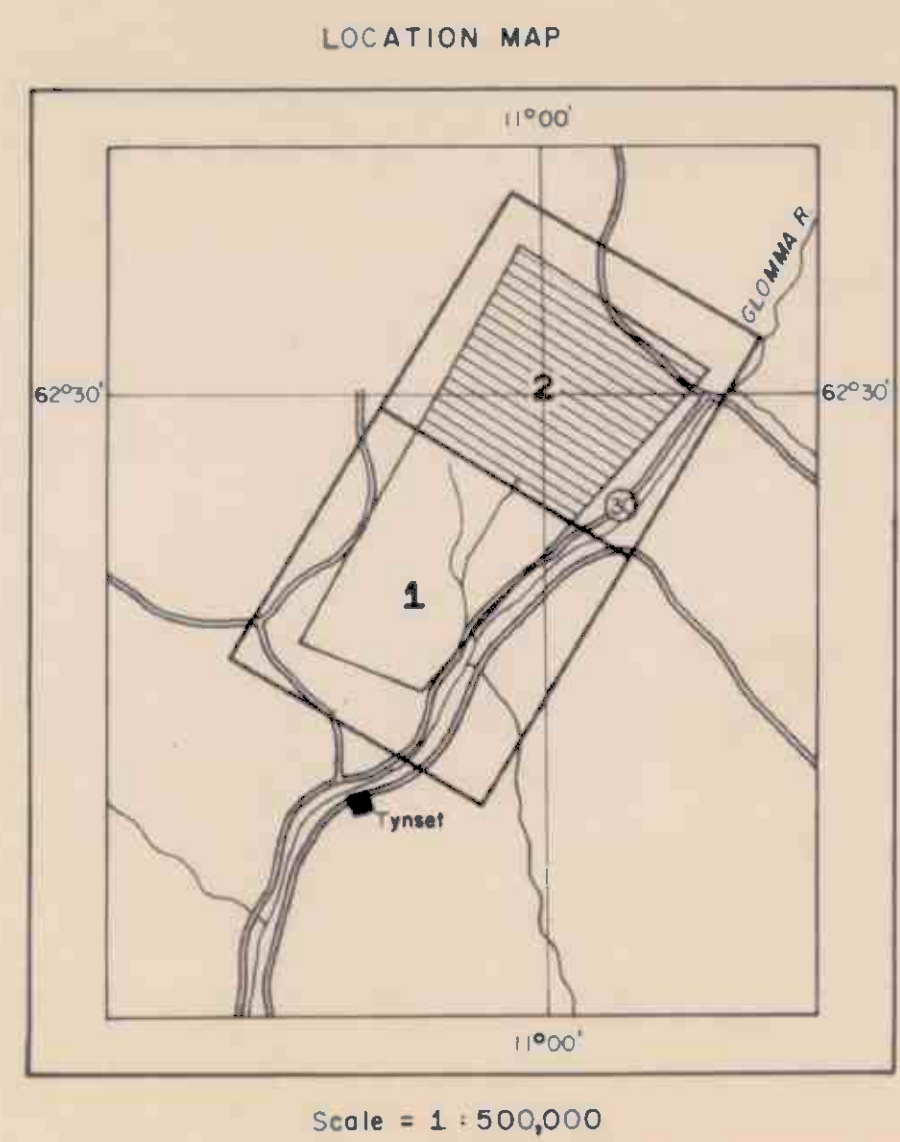
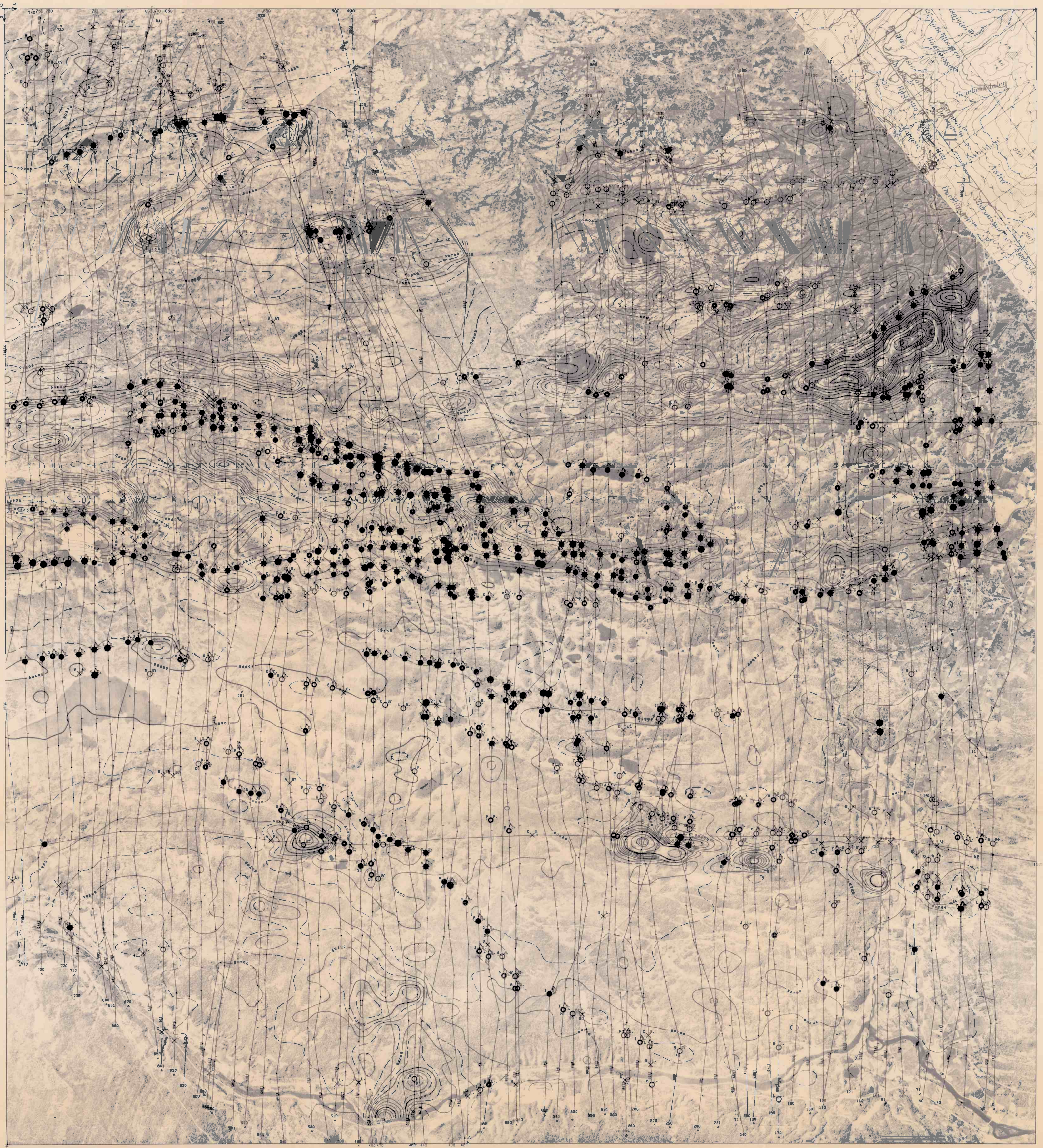


SHEET 1



ISOMAGNETIC LINES
(total field)





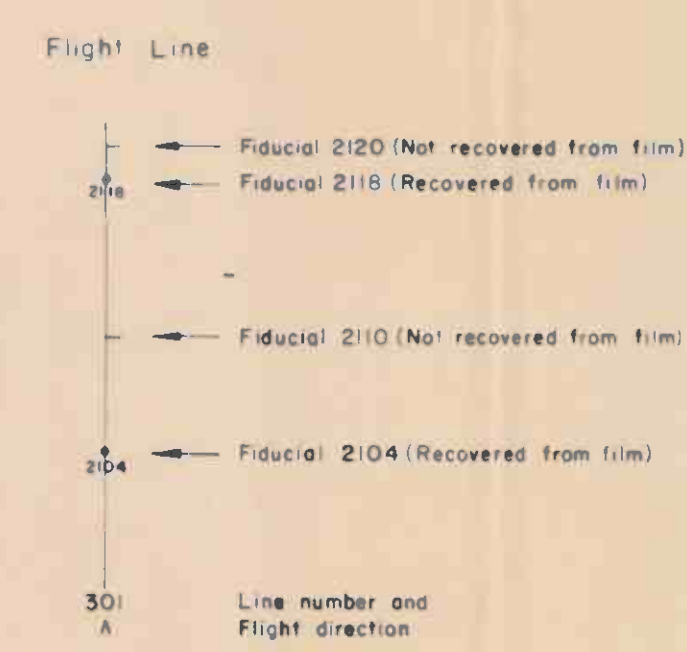
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

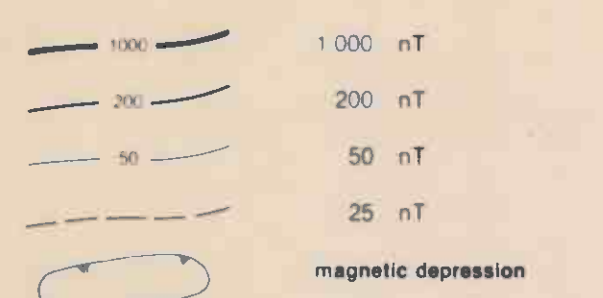
MAGNETICS (Total Field-IGRF +50,800) nT

FOR

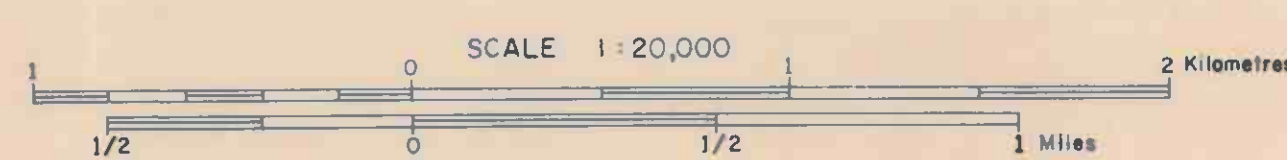
FOLLDAL VERK A/S

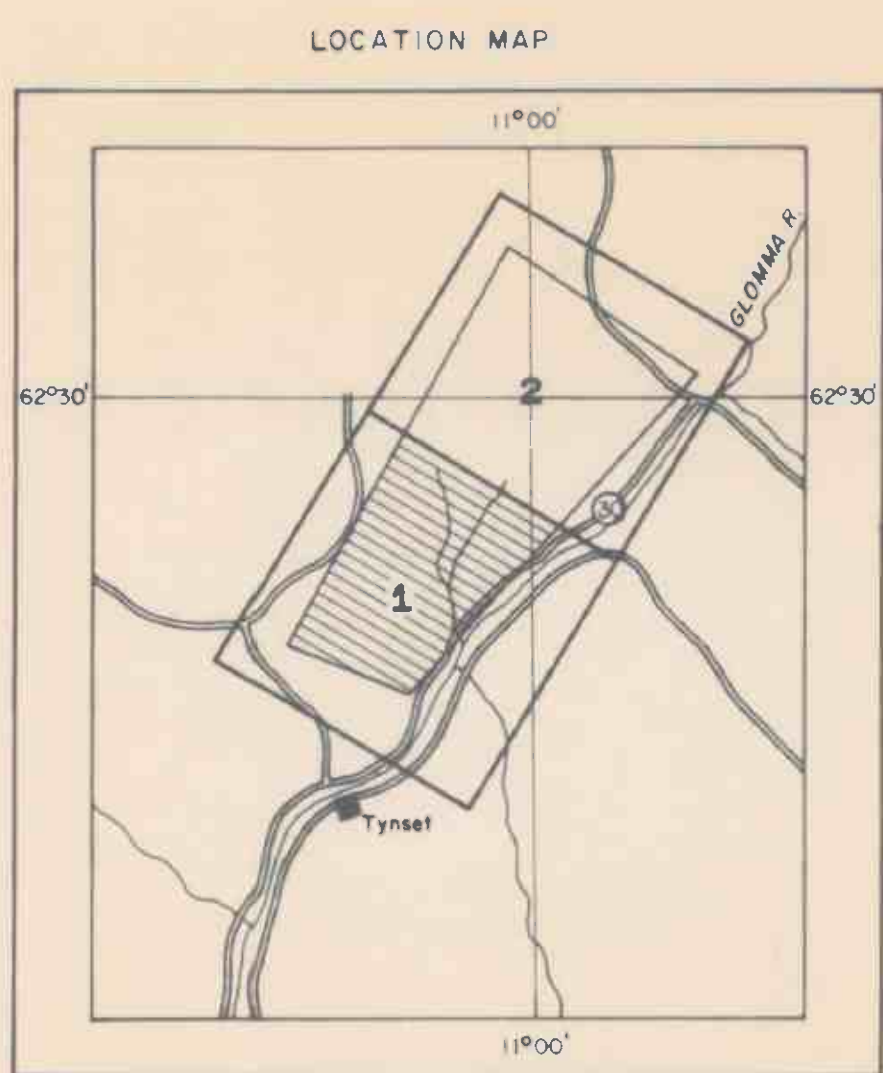
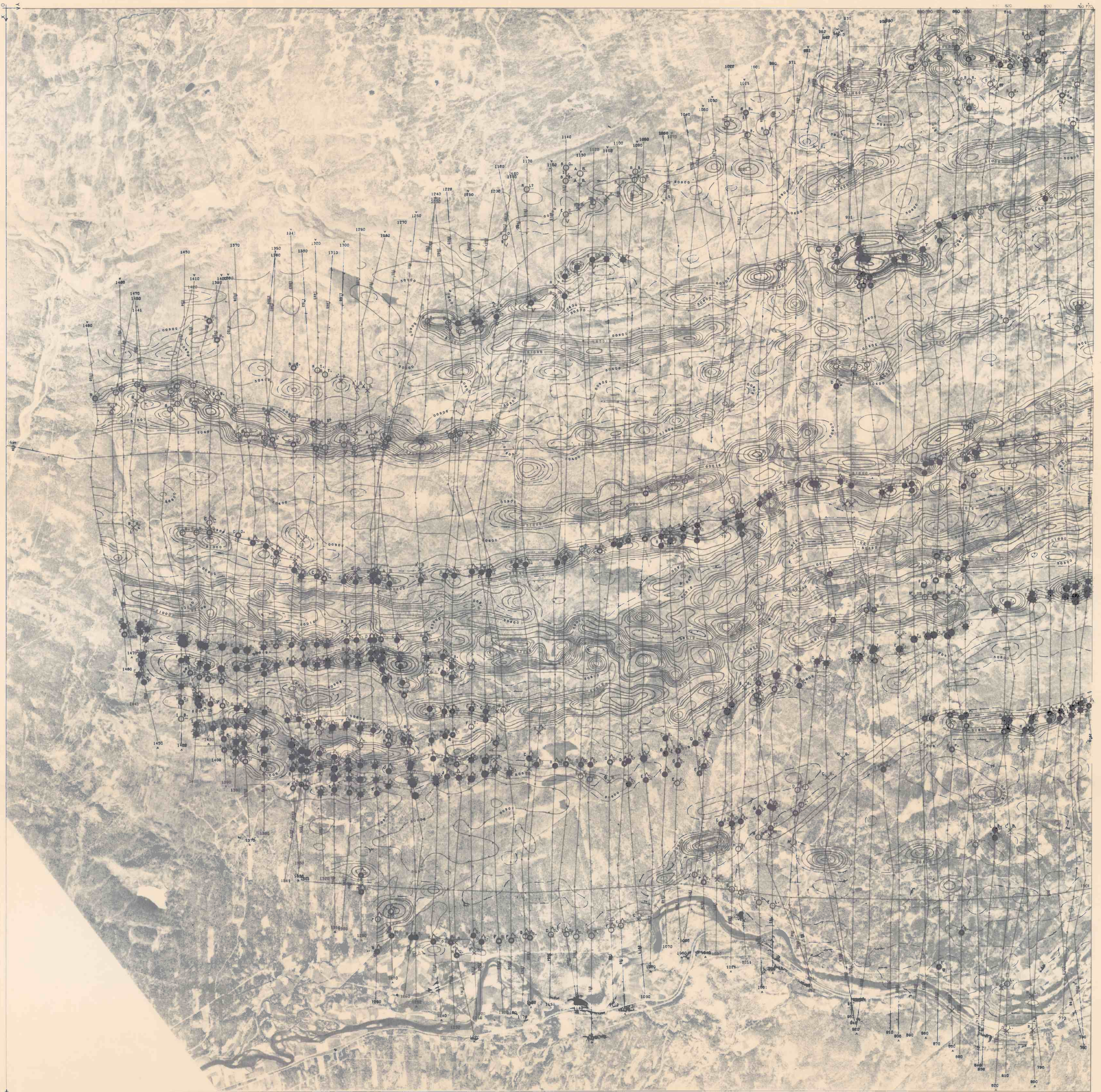


ISOMAGNETIC LINES (total field)



Magnetic inclination within the survey area 74°





Scale = 1:500,000



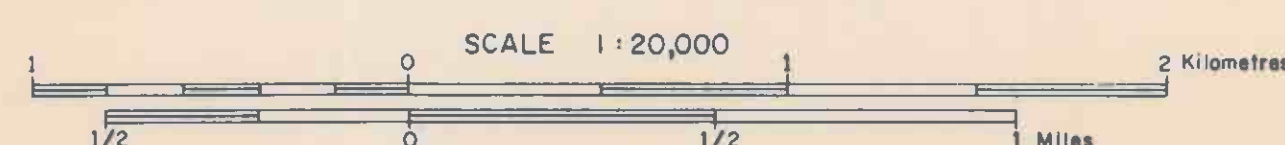
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

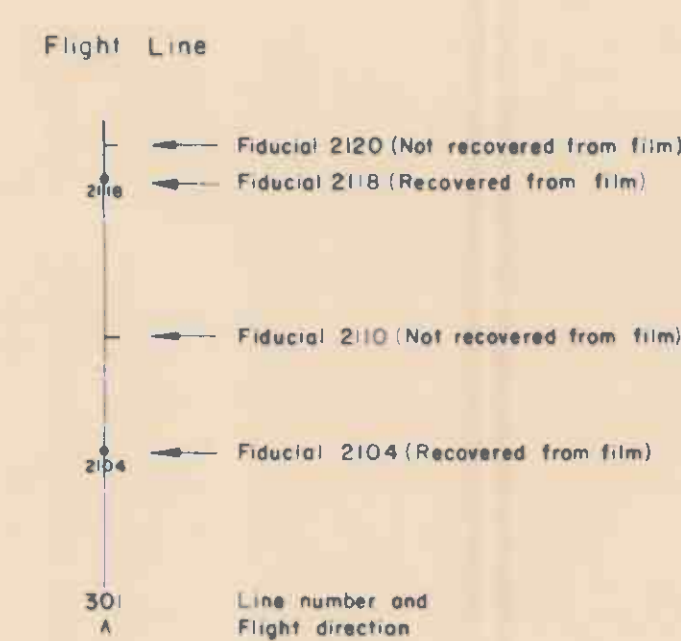
ENHANCED MAGNETICS

FOR

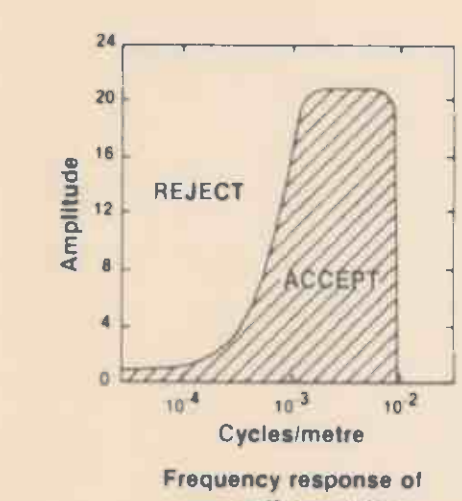
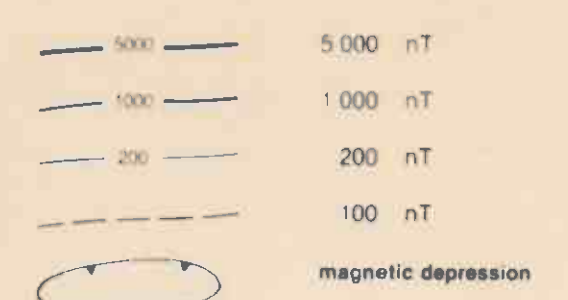
FOLLDAL VERK A/S



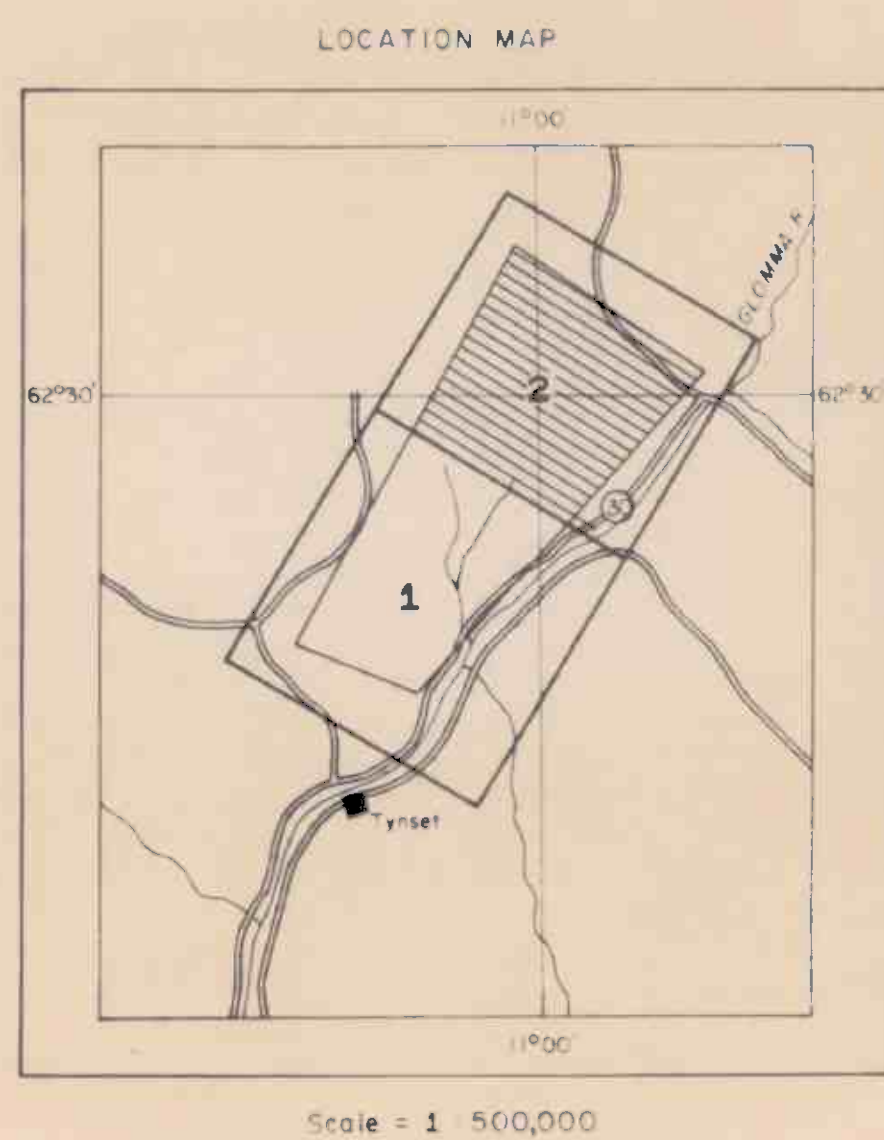
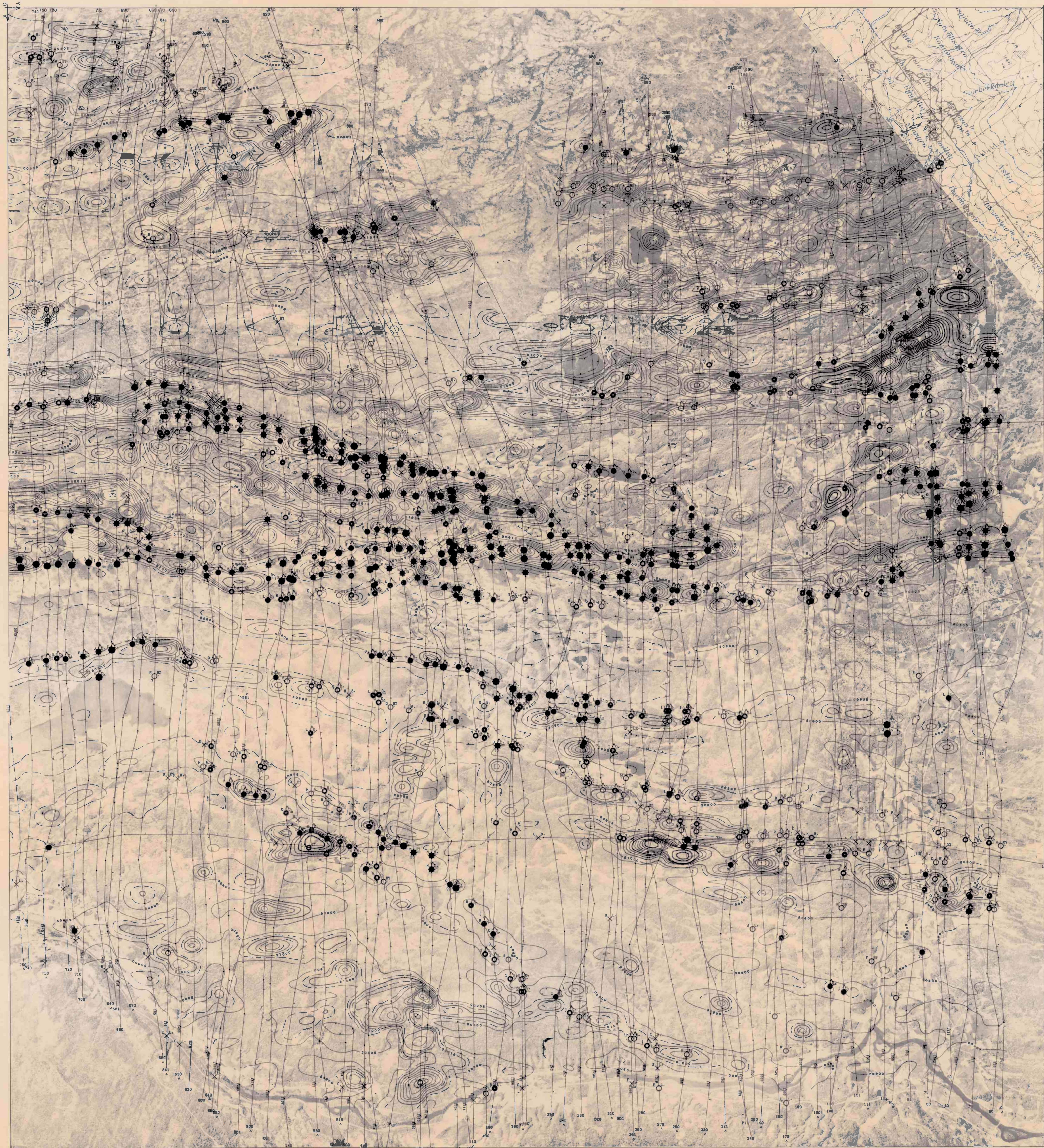
SHEET 1



ISOMAGNETIC LINES (enhanced field)



JOB	DATE	DRAWN BY	CHECKED BY
707	JANUARY, 1983		



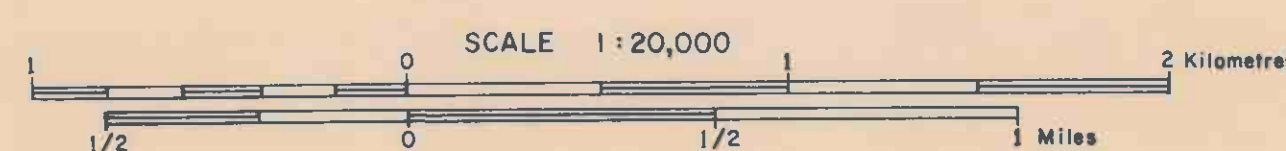
DIGHEM^{II} SURVEY

TYNSET AREA, NORWAY

ENHANCED MAGNETICS

FOR

FOLLDAL VERK A/S



SHEET 2

