

Marine gravity and magnetic
data northeast of Newfoundland.

These data have been copied on:

- 1) 7 tracks, 556 bpi
- 2) 7 tracks, 800 bpi
- 3) 9 tracks, 800 bpi

The tape contains 12 files, ordered by Natural Resource Map areas as shown on the attached list. Each file begins with an 84 character header record, followed by n blocks of data, and is terminated by a single filemark. Each block of data contains 99 80-character sets, each representing one observation point. The final block in each file is padded with 9's to maintain a consistent block size of 7920 characters. Header record and data block formats are explained in the accompanying illustrations and sample printout.

General information on the techniques followed in the preparation of these data are contained in:

Haworth, R.T. (1974). Gravity and magnetic
Natural Resource Maps (1972), offshore
eastern Canada. Philosophy and technique
in preparation by computer. International
Hydrographic Review, Vol. 51, No. 1, Jan. 1974
Mar. Sci. Paper 13, GSC Paper 74-22.

Details on the measurement and navigation techniques employed in the collection of these data appear as marginal notes on the corresponding Natural Resource Maps. It is expected that these maps will be issued in mid-1975 by the Hydrographic Chart Distribution Office, Canadian Hydrographic Service, 615 Booth Street, Ottawa K1A 0E6.

Problems arising from the data may be referred to R.F. Macnab at the Bedford Institute of Oceanography, Dartmouth, N.S. Phone (902) 426-2477.

MAGNETIC TAPE CONTENTS

<u>FILE NO.</u>	<u>NAT. RES.</u>	<u>DIGITECH</u>	<u>BOUNDS</u>		<u>NO. OF OBSERVATION POINTS</u>
	<u>MAP. NO.</u>	<u>MAP. NO.</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	
1	15092	46	49-50	52-54	3990
2	18602	47	50-51	52-54	5572
3	15090	48	49-50	50-52	6081
4	18600	49	50-51	50-52	5282
5	14998	50	49-50	48-50	4308
6	18508	51	50-51	48-50	2817
7	14996	53	49-50	46-48	3380
8	18506	54	50-51	46-48	1676
9	14994	56	49-50	44-46	3445
10	18504	57	50-51	44-46	1674
11	14992	59	49-50	42-44	260
12*	Marginal file				14108

- * The marginal file contains data from three cruises: BAFFIN 71-017 (Cruise 10), MINNA 72-015 (Cruise 17), and MINNA 73-019 (Cruise 18).
- Most of the data points are extracted from the two earlier cruises (10 and 17), and are located mainly in the map areas south of the 49th parallel. The remainder, representing some 2990 points, are from the MINNA 73-019 cruise, and are located in map areas north of the 51st parallel or in areas crossed during the outward and homeward bound legs of the survey.

FORMAT OF HEADER RECORD (RECORD 1, 84 CHARACTERS)

IGNORE	
MINIMUM DIGITECH MAP NO. CONTAINED IN FILE	
MAXIMUM DIGITECH MAP NO. CONTAINED IN FILE	
MAP NO.	
NATURAL RESOURCE MAP SHEET NO.	
FROM LAT.	
• MINIMUM LATITUDE	
TO	
• MAXIMUM LATITUDE	
LONG.	
• MINIMUM LONGITUDE	
TO	
• MAXIMUM LONGITUDE	

These numbers will be the same except in the case of marginal files.

.9's PADDING IN CHARS 81-84

FORMAT OF DATA RECORDED
BLOCKED AT 99 RECORDS PER BLOCK

Digitech Map No.
Digitech Cruise No.
DAY
HOUR G.M.T.
MIN.
LATITUDE *10⁶
46573265 = 46.573265°N

LONGITUDE *10⁶
58321759 = 58.321759°W

BATHYMETRY (metres)
ORIGINAL MAGNETIC TOTAL FIELD (g)
DIURNAL CORRECTION (gamma)
ORIGINAL MAGNETIC ANOMALY (gamma)
FINAL MAGNETIC TOTAL FIELD (gamma)
FINAL MAGNETIC ANOMALY (gamma)
ORIGINAL FREE AIR GRAVITY ANOMALY
EOTVOS CORRECTION (mgal)
DRIFT CORRECTION (mgal)
ORIGINAL BOUGUER GRAVITY ANOMALY
FINAL FREE AIR GRAVITY ANOMALY
FINAL BOUGUER GRAVITY ANOMALY

8 38 38 MAP NO. 15098 FROM LAT .49.00 TO 50.00, LONG. 58.00 TO 60.009999
 3815185 14049840000 597200000 17755790 -7 -23955783 -246 0 67 0 0999999999
 3815185 14249840000 59708133 17955797 -7 -22955790 -236 0 67 0 0999999999
 3815185 14449840000 59696267 18155824 -7 -19955d17 -206 0 67 0 0999999999
 3815185 14649840000 59684400 18455854 -7 -16755847 -174 0 67 0 0999999999
 3815185 14849840000 59672533 18855884 -7 -13455d77 -141 0 67 0 0999999999
 3815185 15049840000 59660667 19255905 -7 -11055d38 -117 0 67 0 0999999999
 3815185 15249840000 59648300 19755938 -7 -7455931 -81 0 67 0 0999999999
 3815185 15449840000 59636933 20255968 -7 -4155961 -48 -18 67 -8 -4 -19 -5
 3815185 15649840000 59625067 20855967 -7 -3955360 -46 -18 67 -8 -3 -19 -4
 3815185 15849840000 59613200 21355945 -7 -5655938 -65 -19 67 -8 -4 -20 -5
 3815185 2 049840000 59601333 21955983 -7 -1755976 -24 -20 67 -8 -4 -21 -5
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 3815185 2 649840000 59555733 23755996 -7 4555989 -3 -20 67 -8 -3 -21 -4
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 3815185 21049840000 59542000 25056065 -7 7956058 72 -20 67 -8 -2 -21 -3
 3815185 21249840000 59530133 25156014 -7 3156007 24 -21 67 -8 -3 -22 -4
 3815185 21449840000 59518267 25255979 -7 0555972 -7 -22 67 -8 -4 -23 -5
 3815185 21649840000 59506400 25456070 -7 9356063 86 -23 67 -8 -5 -24 -6
 3815185 21849840000 59494533 25656130 -5 15656124 150 -23 67 -8 -5 -24 -6
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