

DATA STORAGE AND RETRIEVAL USING GEODATABASE
WITH APPLICATION OF GEOPHYSICAL DATA
IN MARSDEN SQUARE 151

by

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ABSTRACT

Data collected from six cruises have been entered into GEODATABASE. The available data cover Marsden Squares (MSQ) 114, 115, 149, 150, 151, 186, and 187. Six-minute grid mean values of free air and magnetic anomalies in MSQ 151 are given in this report. The results are based on 96,000 data stations in MSQ 151. Although it is not the final data report of the six-minute grid mean values in MSQ 151, it may be valuable to interested parties as basic data, and to others as an example of what can be done from the available files.

1. INTRODUCTION

A geographically ordered data base called GEODATABASE has been developed (Shih and Heffler, 1972). In GEODATABASE, the geophysical data are sorted according to positions and stored on magnetic tape. The data are first sorted by Marsden squares and then by one-degree squares.

Data collected from six cruises have been entered into GEODATABASE. The available data cover Marsden squares 114, 115, 149, 150, 151, 186, and 187. The data from any Marsden square ($10^{\circ} \times 10^{\circ}$) or any one-degree square can be retrieved easily.

To illustrate the application of the data in the system, six-minute grid mean values of the gravity, magnetics, and bathymetry have been calculated. The printout of the six-minute grid mean values of bathymetry, total magnetic field, magnetic anomaly, total gravity field, free air gravity, or Bouguer anomaly in any specified one-degree square can be efficiently obtained. In this report, the printout of the six-minute grid mean values of the free air and magnetic anomaly in Marsden square 151 is given as a sample.

2. GEOFILE

2.1 Data Acquisition

On a geophysical cruise, the collection of bathymetry, gravity, and magnetics is routine. The gravity data are collected continuously using a Graf Askania sea gravimeter (Gss-2 series) mounted on an Anschutz electrically-erected gyro-stabilized platform. They are recorded in analogue form on a recorder as well as in digital form through the data logging system (BIODAL). The total magnetic field data are obtained with a Barringer proton precession magnetometer. The Geometrics sensing head is towed approximately 200 metres astern of the ship. Data are recorded in analogue form as well as in digital form through the BIODAL system.

In the BIODAL system, digital values of Julian day, GMT, gravity, and magnetics are automatically recorded on punched paper tape or on magnetic tape at one-minute intervals. The one-minute interval data is defined as one station containing one gravity reading, ten magnetic readings, and some other parameters, such as ship's log, ship's head, gravity cross coupling, etc.

The bathymetric data are recorded on an echo-sounding recorder. They are manually digitized from the records and punched on paper tape.

The navigation data are obtained using Decca, Radar, Loran-A, Loran-C, Satellite, etc.

Daily variation of the geomagnetic field is monitored at the Bedford Institute of Oceanography for the duration of the cruise.

2.2 Data Reduction

Standard geophysical programs are available for computing free air gravity and magnetic anomalies on the shipboard computer by using the BIODAL data as input with standard control data tape to provide instrument setting, navigation data, and skip command information (Shih, 1973). Programs are also available for reducing the navigation data to true positions. These routines are normally performed at sea. The data must be reprocessed on the Institute CDC-3150 computer for further error check and to reformat the data to fit the data storage and retrieval system (Ross *et al.*, 1973).

The observed gravity in milligals is obtained by weighting six consecutive one-minute gravity readings to allow for the attenuation and time delay introduced by the gravimeter. The free air gravity is obtained by subtracting the theoretical value according to the 1930 international gravity formula and adding the Eötvös correction.

The total magnetic field in gammas is obtained by averaging ten 6-second readings centered around each minute. The magnetic anomalies are obtained by subtracting the International Geomagnetic Reference Field (IGRF 1965.0) from the total magnetic field. No corrections are made for diurnal variations of the geomagnetic field.

2.3 Data Storage and Retrieval

To provide facilities for storage and retrieval of the considerable amount of data currently being collected at sea requires some form of computer-oriented data base. For this purpose, a data storage and retrieval system has been developed and used around the CDC-3150 computer. This computer is a 32K machine operating under the Mass Storage Operating System (MSOS).

The geophysical data from each cruise include bathymetry (punched on cards), control data such as navigation data (on punched cards), and the BIODAL data. The BIODAL data on magnetic tape is called RAW data file. The navigation data on magnetic tape is called navigation data file. The reduced data obtained by combining the control data, bathymetric data, and the BIODAL data are also stored on magnetic tape, which is called EDIT data file. All of these data files contain time sequence records. The programs for creating these files and the available data files are called GEOFILE in the data storage and retrieval system.

Although the GEOFILE system is quite effective and useful for data analysis and interpretation, the retrieval of all the available data from different cruises in a given area is inconvenient and time consuming. To overcome this limitation, a geographically ordered data base has been developed and used.

3. GEODATABASE3.1 NEW PROCESS

A program used to reformat the GEOFILE EDIT data is called NEW PROCESS. The new processed data are blocked and each block contains 64 stations. The block is called a record in the system.

A station is a set of data measured at a specified location on the surface of the earth: it contains the values of several variables as well as codes, which record the data source and type. Each station has 16 integral words (4 character words), which are defined in Table 1. In GEODATABASE, the station is the one-minute data available in the GEOFILE system.

Table 1. Contents of the station

<u>Word No.</u>	<u>Content</u>
01	10000* Latitude in degrees
02	10000* Longitude in degrees (negative west)
03	Cruise number, e.g. 73011
04	10000* Day + GMT
05	Bathymetry in metres
06	Data type codes
07	Total gravity in milligal
08	Magnetic anomaly in gammas (1965.0 IGRF)
09	Navigation data code
10	Gravity data codes
11	Total magnetic field in gammas
12	Eötvös correction in milligal (x100)
13	100* Free air in milligal
14	unused
15	unused
16	unused

3.2 Sort Data by Marsden Squares

The ordering scheme in the geographic data base is based on the Marsden square (MSQ) number of the area in which the station falls. Each Marsden square has an area of 10° latitude by 10° longitude and is occasionally referred to in the text as a Ten-Degree Square (TDS). The MSQ is specified by the latitude and longitude of the southern and eastern corner. The square contains the southern and eastern edges but not the northern and western edges.

The stations in the new processed data tape are sorted by Marsden squares and written on magnetic tape. At this stage, the stations in a given Marsden square are still in random order. The TDS data written on tape are in a decreasing order according to the number of the data stations

in the Marsden square. The number of data stations in each Marsden square is written on disk after the new processed data tape is obtained. The data in the Marsden square with a maximum number of stations are written on magnetic tape and the stations in other marsden squares go to a scratch disk file. This is repeated until all the data have been sorted from the scratch disk file onto magnetic tape. This step can be bypassed if the data of a cruise are only in one Marsden square.

3.3 Sort Data by One-Degree Squares

In a Marsden square there may be many thousands of data stations and another stage of division of the data is necessary. The Marsden square is then divided into One-Degree Squares (ODS). Each ODS is defined by the latitude and longitude of the southern and eastern corner. The ODS in each TDS is ordered from the southeast corner scanning west first, then north.

Any number of records may be used for each ODS. In each registered ODS, if the last record is not completely used, it will be filled with a dummy station having 4000000 and -4000000 as the latitude and logitude respectively. The ODS data in a given TDS is defined as one file ending with a file mark. The data tape format is shown in Table 2.

Table 2. Data tape format

<u>Content</u>	<u>Meaning</u>
EOF	filemark
TDS data	TDS data divided into sequential records according to ODS
EOF	filemark
2nd TDS data	TDS data divided into sequential records according to ODS
EOF	filemark
EOF	filemark, end of data

The first record of the TDS data is defined as a HEADER. The contents of the HEADER are shown in Table 3.

Table 3. Contents of the HEADER

<u>Words</u>	<u>Contents</u>
001	10000* Latitude degrees (lower left corner)
002	10000* Longitude degrees (lower left corner)
003-004	MSQ indices
005-006	Date updated
007-106	Number of stations in 100 ODS
207	Number of records in TDS
308-407	Cruise number, e.g. 73011
408-1024	Unused

In this step, the data are sorted by ODS and a TDS HEADER is created. The data in each ODS are in random order. The output on magnetic tape is called the GEODATABASE ODS data of a cruise.

3.4 Update

The update procedure is the combination of the cruise ODS data. It will combine the TDS HEADER first and then the TDS data by ODS order. In the old update program, the data in each ODS are also sorted by locations and a tape index disk file is updated for providing the magnetic tape information to the operator for mounting the magnetic tapes.

As the sorting in ODS takes a considerable amount of time with the CDC-3150 computer, the sorting procedure is removed in the new update program.

To date, the TDS data are available in the GEODATABASE for Marsden squares 114, 115, 149, 150, 151, 186, and 187. The data coverage in MSQ 150 and 151 is good for application of the GEODATABASE, such as described in the next section.

Future development for updating the GEODATABASE will include the addition of magnetic diurnal correction and error correction. Gravity drift correction is available in the program NEW PROCESS.

After the data are updated, two copies of that tape are duplicated for data recovery.

4. APPLICATION OF 'GEODATABASE'

4.1 Data Retrieval Routine

To use the data in the system for data displaying on the computer, a retrieval subroutine

```
GEODATA(IEOF,JCONT,IC,IDAY,IT,X,Y,IARRAY)
```

is given in a disk file

```
FET,SHIH,*SUB*GEODATABASE-A,960
```

When this subroutine is called, it will return one station's data as shown in Table 4.

To specify the required ODS, JCONT is defined as

```
JCONT = 1000*LAT+LONG
```

Table 4. Data returned by the subroutine

<u>Parameter</u>	<u>Meaning</u>
IC	Cruise number
IDAY	Julian day
IT	GMT
X	Latitude in degrees
Y	Longitude in degrees
IARRAY(1)	Bathymetry in fathoms
IARRAY(2)	Magnetic anomaly in gammas
IARRAY(3)	Total magnetic field in gammas
IARRAY(4)	Free air gravity in milligal
IARRAY(5)	Eötvös correction
IARRAY(6)	Bathymetry in metres
IARRAY(7)	Bouguer anomaly in milligal
IARRAY(8)	Unused
IARRAY(9)	Unused
IEOF	= 0 there is a station = 1 end of TDS data = 9 end of ODS data

where LAT and LONG are the southern latitude and eastern longitude of the ODS. For example, to retrieve the data from 45–46°N and 66–67°W, LAT = 45° and LONG = -66°.

In order that the subroutine operates correctly, it should be noted that a file mark and a HEADER should be skipped before the subroutine is called. IEOF = 1 should also be given at the beginning. COMMON IDATA(1024) is used in the main program. The input logic unit is 01.

4.2 Six-minute Grid Mean

The six-minute grid mean values of free air gravity anomalies, total gravity field, magnetic anomaly, total magnetic field, Bouguer anomaly, or bathymetry can be obtained in any specified ODS or TDS. The mean value is ascribed to the centre of the grid.

Small range anomalies that disappear in the one-degree grid mean (Fig. 1) might still be seen in the six-minute grid mean. Figure 2 is an example of six-minute grid mean values contoured in a one-degree square area.

The printout of the six-minute grid mean values can also be used for preliminary data quality control during data collection and data processing at sea. The mean free air values are useful for checking the MSD setting errors during data processing.

5. DATA AVAILABLE IN 'GEODATABASE'

5.1 Cruise Data Information

The data collected on six cruises (Table 5) have been entered into the GEODATABASE.

Table 5. Cruise data in GEODATABASE (Sept. 15, 1975)

Cruise No.	No. of Days	Data Type	No. of Stations	
			MSQ	Stations
Baffin 64-019	20 (228-260)	B.G.M.	151	12097
Baffin 68-021	98 (164-305)	B.G.M.	150	27273
			151	19071
			186	29114
			187	2503
Hudson 71-014	36 (109-147)	B.G.M.	115	540
			151	37226
Hudson 72-021	31 (187-217)	B.G.M.	114	481
			150	24182
			151	8283
Hudson 73-011	47 (115-166)	B.G.M.	114	2497
			115	682
			149	7465
			150	18501
			151	17661
Dawson 73-034	17 (317-334)	B.G.M.	149	5755
			150	12838
			151	1347

5.2 Available Data Information in ODS

The number of data stations in each ODS can be obtained from the TDS HEADER (see Table 3). This information can provide the data density in each ODS for data retrieval. Presently, ODS station information for Marsden squares 114, 115, 149, 150, 151, 186, and 187 is available. These are given in Appendix 1.

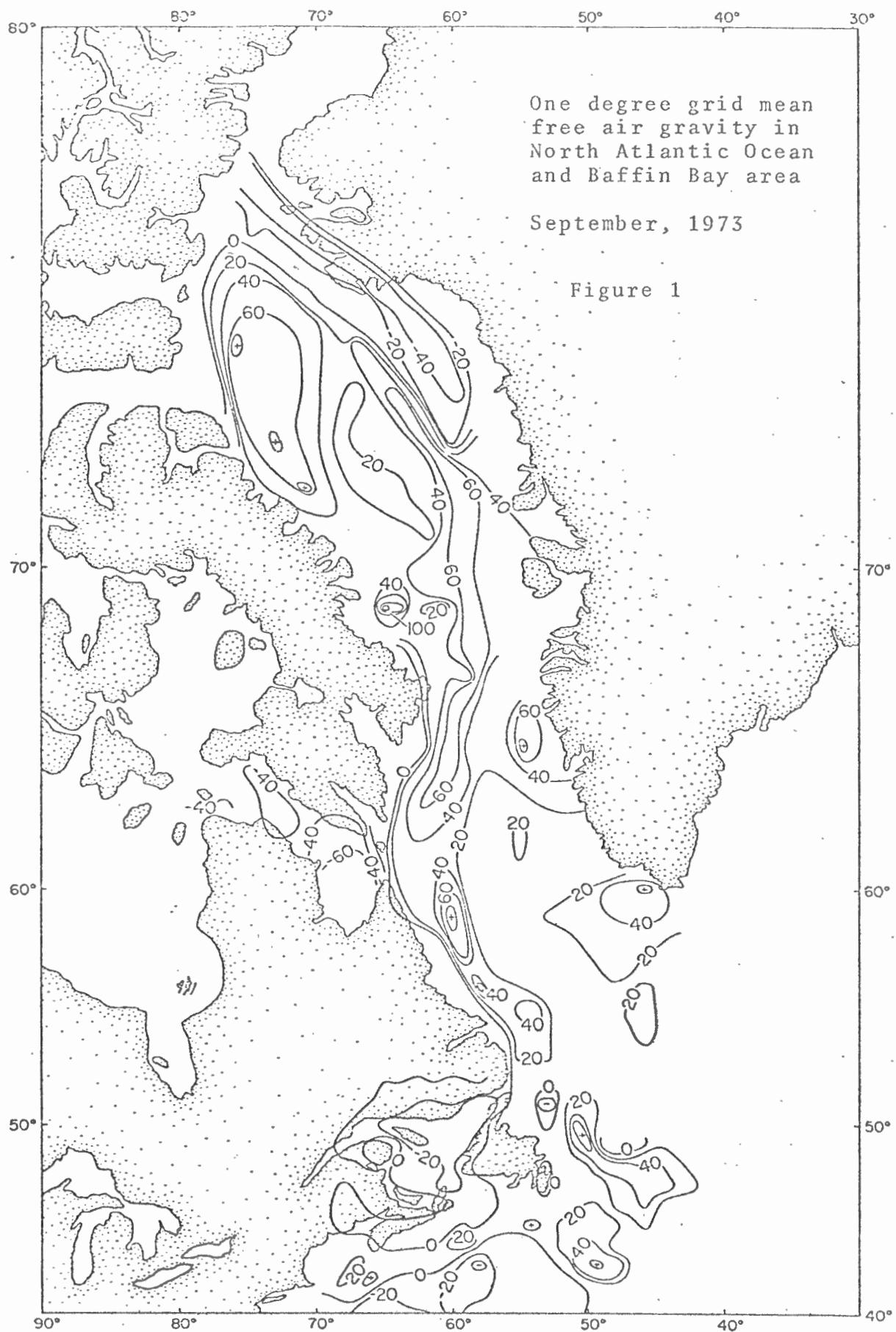
It should be noted that this information only indicates the work performed before September 1975. There will be changes in the number of stations in each ODS or new ODS data added when new cruise data are entered into the system.

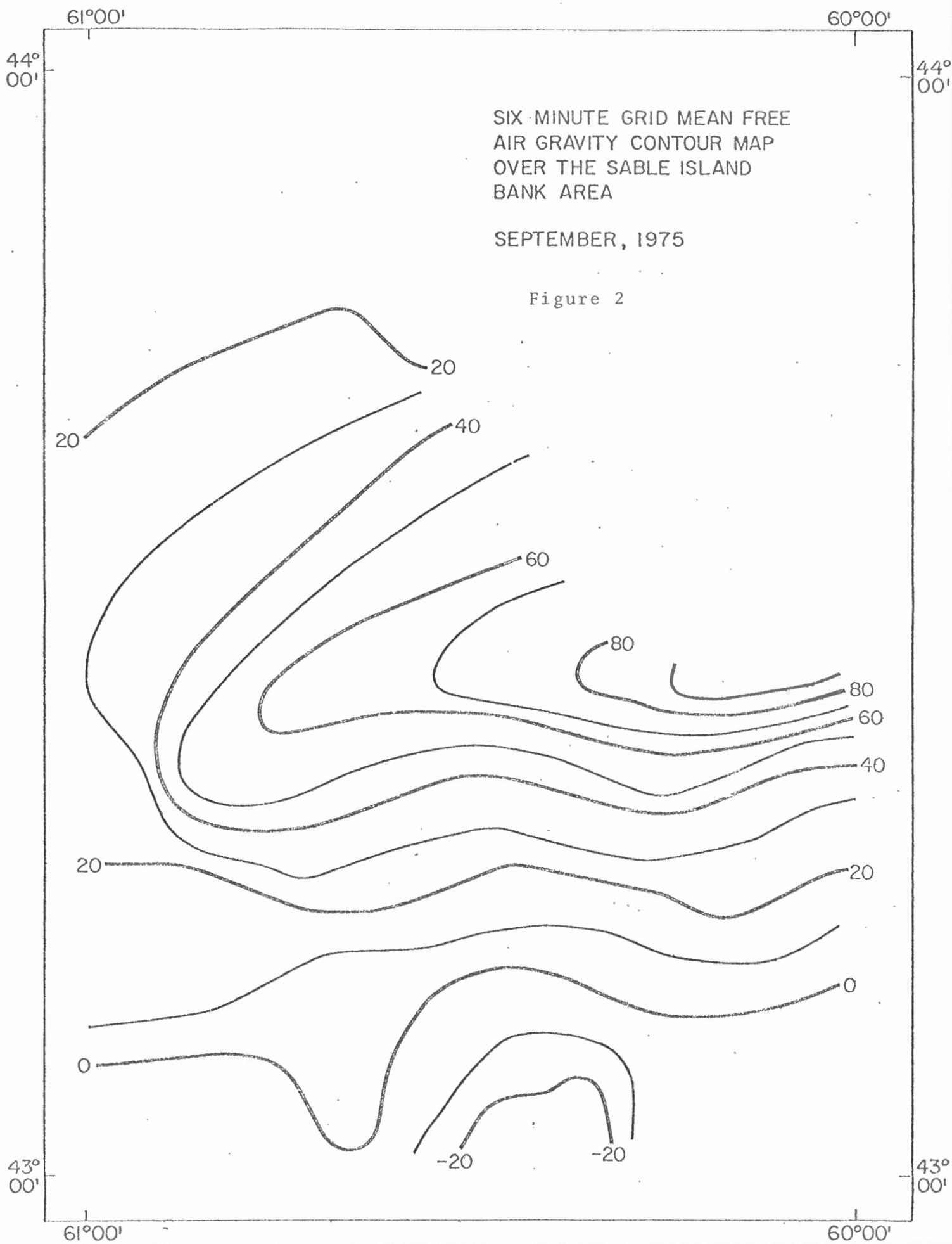
6. DATA PRESENTATION - DATA IN MSQ 151

As one example the six-minute grid mean values of free air and magnetic anomalies in MSQ 151 are given in this report. The results are based on 96,000 data stations in MSQ 151. Although it is not the final data report of the six-minute grid mean values in MSQ 151, it may be valuable to interested parties as basic data, and to others as an example of what can be obtained from the file available.

7. REFERENCES

- ROSS, D.I., K.G. SHIH, B.L. JOHNSTON and D.M. PORTEOUS. 1973. GEOFILE - a revised manual on the storage and retrieval of geophysical data. BIO Computer Note, BI-C-73-03, 171 p.
- SHIH, K.G. 1973. Shipboard computer system for processing and displaying bathymetric, gravity and magnetic data. BIO Report, BI-R-73-13, 37 p.
- SHIH, K.G. and D.E. HEFFLER. 1972. Bedford Institute geographically ordered marine geophysical data storage and retrieval system. 24th International Geological Congress, Montreal, Canada, pp. 76-81.

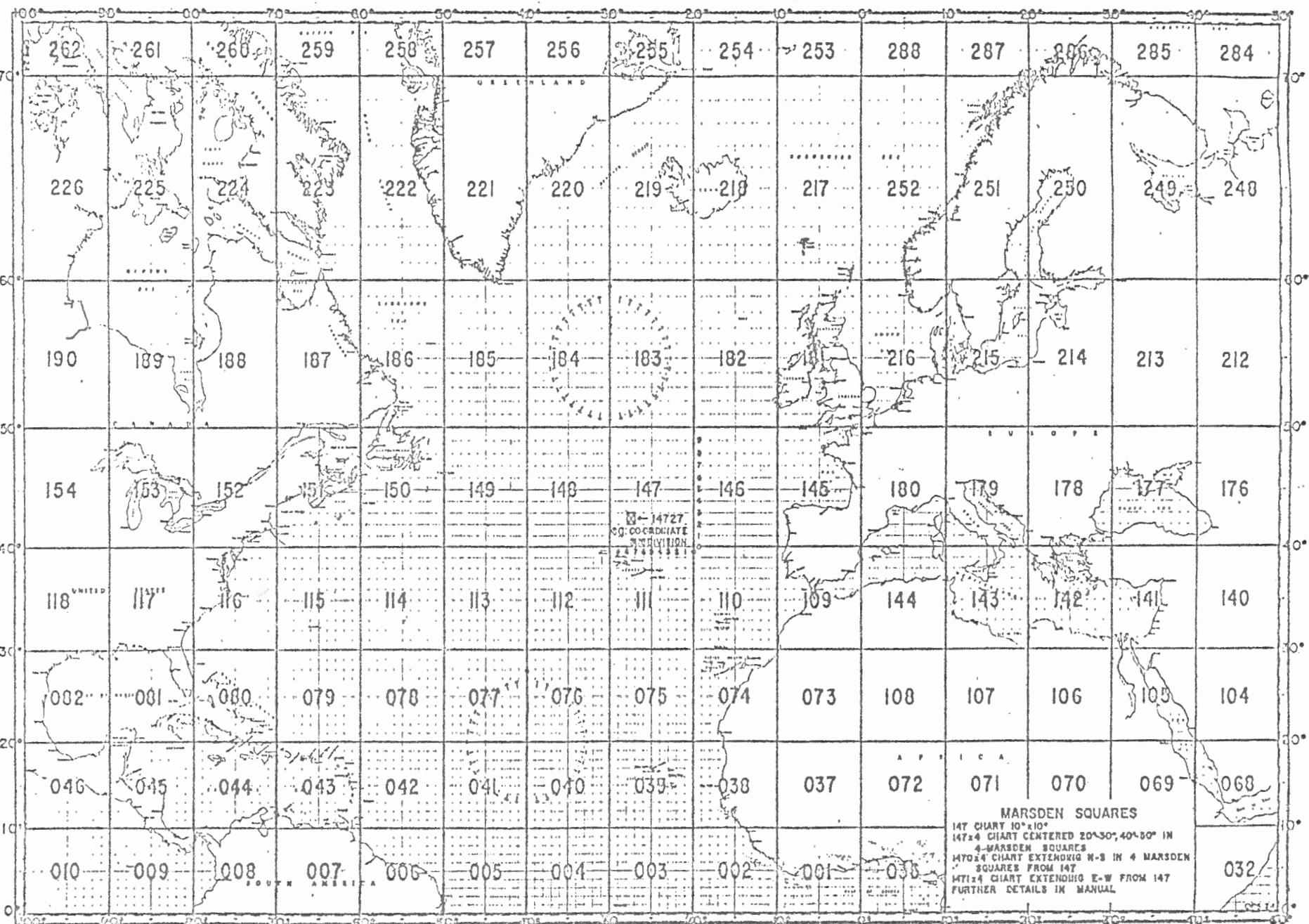




APPENDIX 1

AVAILABLE DATA INFORMATION IN MARSDEN SQUARES

15 SEPTEMBER 1975



MARSDEN SQUARE INDEX 114 NUMBER OF STATIONS

MARSDEN SQUARE INDEX 115 NUMBER OF STATIONS

MAHSDEN SQUARE INDEX 149 NUMBER OF STATIONS

MAHSDEN SQUARE INDEX 150 NUMBER OF STATIONS

	59	58	57	56	55	54	53	52	51	50
49	11320	11971	266	0	0	0	0	0	0	0
48	1962	1042	0	0	0	0	0	0	0	0
47	533	0	0	0	0	0	0	0	0	0
46	179	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	238	0	0
44	439	420	409	408	632	1256	1464	2137	2852	2772
43	2162	571	444	608	783	192	421	2857	1795	688
42	3128	398	182	18	370	342	368	1055	1390	0
41	6187	1306	646	594	583	424	87	733	0	557
40	8174	1441	0	0	0	50	309	497	1582	962

MARSDEN SQUARE INDEX 151 NUMBER OF STATIONS

	69	68	67	66	65	64	63	62	61	60
49	0	0	0	0	0	0	276	260	7533	9595
48	0	0	0	0	0	0	0	0	91	360
47	0	0	0	0	0	0	0	0	0	638
46	0	0	0	0	0	0	0	0	0	53
45	0	0	0	1083	1756	147	0	0	0	0
44	0	70	3516	14910	382	207	1171	1165	539	456
43	130	1107	3882	4573	1321	751	1222	712	1068	4147
42	0	0	2213	3128	2762	841	258	0	2035	4777
41	0	0	61	621	1036	790	496	42	565	4266
40	0	0	0	0	18	468	509	462	377	6538

MARSDEN SQUARE INDEX 186 NUMBER OF STATIONS

	59	58	57	56	55	54	53	52	51	50
59	0	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0
51	0	548	3816	66	0	0	0	0	0	0
50	4229	12889	7566	0	0	0	0	0	0	0

MARSDEN SQUARE INDEX 187 NUMBER OF STATIONS

	69	68	67	66	65	64	63	62	61	60
59	0	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0
50	0	0	0	74	437	373	92	0	596	931

APPENDIX 2

SIX-MINUTE GRID MEAN VALUES OF FA IN MSQ 151

15 SEPTEMBER 1975

MARSDEN SQUARE INDEX 151 NUMBER OF STATIONS

	69	68	67	66	65	64	63	62	61	60
49	0	0	0	0	0	0	276	260	7533	9595
48	0	0	0	0	0	0	0	0	91	360
47	0	0	0	0	0	0	0	0	0	638
46	0	0	0	0	0	0	0	0	0	53
45	0	0	0	1083	1756	147	0	0	0	0
44	0	70	3516	14910	382	207	1171	1165	539	456
43	130	1107	3882	4573	1321	751	1222	712	1068	4147
42	0	0	2213	3128	2762	841	258	0	2035	4777
41	0	0	61	621	1036	790	496	42	565	4266
40	0	0	0	0	18	468	509	462	377	6538

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

40.95	45	69	30	70	53	173	128	142	44	86
40.85	68	60	94	37	106	86	51	80	60	81
40.75	73	45	71	54	87	43	61	56	74	61
40.65	60	65	34	70	30	60	30	116	96	107
40.55	19	58	52	48	64	106	91	110	39	69
40.45	0	54	90	82	98	14	54	56	72	35
40.35	0	8	98	68	56	47	42	50	59	45
40.25	0	0	105	62	49	66	41	101	55	123
40.15	0	0	44	54	59	86	118	112	34	19
40.05	0	0	0	66	104	68	78	65	73	29

GRID MEAN OF GRAVITY(FA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
40.95	-18	-19	-18	-18	-20	-19	-20	-22	-25	-30
40.85	-18	-20	-21	-20	-17	-20	-22	-24	-25	-26
40.75	-18	-19	-21	-25	-18	-21	-23	-23	-25	-24
40.65	-16	-20	-18	-22	-23	-19	-25	-21	-19	-21
40.55	-17	-18	-20	-23	-25	-24	-24	-22	-19	-22
40.45	0	-19	-23	-23	-26	-28	-25	-27	-21	-21
40.35	0	-17	-22	-26	-28	-28	-23	-25	-24	-23
40.25	0	0	-25	-28	-26	-29	-28	-25	-24	-23
40.15	0	0	-29	-28	-29	-26	-27	-26	-22	-26
40.05	0	0	0	-29	-28	-27	-26	-27	-23	-28

GRAVITY STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

40.95	0	0	0	0	0	0	0	0	43	88
40.85	0	0	0	0	0	0	0	0	0	65
40.75	0	0	0	0	0	0	0	0	0	35
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	0	0	0	0	0	0	0	0	0	0
40.35	0	0	0	0	0	0	0	0	0	0
40.25	4	0	0	0	0	0	0	0	0	0
40.15	47	14	0	0	0	0	0	0	0	0
40.05	0	29	16	0	0	0	0	0	0	0

GRID MEAN OF GRAVITY (FA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

40.95	0	0	0	0	0	0	0	0	-19	-22
40.85	0	0	0	0	0	0	0	0	0	-18
40.75	0	0	0	0	0	0	0	0	0	-17
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	0	0	0	0	0	0	0	0	0	0
40.35	0	0	0	0	0	0	0	0	0	0
40.25	-9	0	0	0	0	0	0	0	0	0
40.15	-14	-6	0	0	0	0	0	0	0	0
40.05	0	-9	-14	0	0	0	0	0	0	0

GRAVITY STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRID MEAN OF GRAVITY (FA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRAVITY STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

40.95	0	0	0	0	0	0	0	0	0	0
40.85	0	0	0	0	0	0	0	0	0	0
40.75	0	0	0	0	0	0	0	0	0	0
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	48	40	0	0	0	0	0	0	0	0
40.35	0	0	67	22	0	0	0	0	0	0
40.25	0	0	0	104	0	0	0	0	0	0
40.15	0	0	0	8	61	0	0	0	0	0
40.05	0	0	0	0	4	30	19	0	0	0

GRID MEAN OF GRAVITY(FA)

	63.95	63.85	63.75	63.65	63.55	63.45	63.35	63.25	63.15	63.05
40.95	0	0	0	0	0	0	0	0	0	0
40.85	0	0	0	0	0	0	0	0	0	0
40.75	0	0	0	0	0	0	0	0	0	0
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	-14	-15	0	0	0	0	0	0	0	0
40.35	0	0	-14	-19	0	0	0	0	0	0
40.25	0	0	0	-19	0	0	0	0	0	0
40.15	0	0	0	-25	-24	0	0	0	0	0
40.05	0	0	0	0	-29	-16	-18	0	0	0

GRAVITY STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF GRAVITY (FA)

GRAVITY STATIONS

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

GRID MEAN OF GRAVITY (FA)

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

41.95	0	0	0	0	0	0	1	20	0	28
41.85	0	0	0	0	0	0	0	28	0	11
41.75	6	0	0	0	0	0	0	7	21	0
41.65	16	19	8	0	0	0	0	0	27	11
41.55	0	0	30	14	0	0	0	0	18	41
41.45	0	0	0	5	31	26	0	0	32	53
41.35	0	0	0	0	0	32	104	124	91	142
41.25	0	0	7	22	42	150	119	206	140	5
41.15	0	18	56	45	103	45	128	147	143	134
41.05	40	65	50	49	44	70	111	140	106	105

GRID MEAN OF GRAVITY (FA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

41.95	0	0	0	0	0	0	-27	-30	0	-34
41.85	0	0	0	0	0	0	-29	0	0	-36
41.75	-30	0	0	0	0	0	-29	-27	0	0
41.65	-27	-32	-30	0	0	0	0	0	-24	-29
41.55	0	0	-26	-23	0	0	0	0	-24	-27
41.45	0	0	0	-18	-22	-20	0	0	-28	-26
41.35	0	0	0	0	0	-19	-19	-21	-27	-26
41.25	0	0	-19	-18	-18	-20	-16	-20	-20	-21
41.15	0	-19	-19	-19	-18	-18	-19	-19	-25	-23
41.05	-20	-20	-18	-17	-17	-20	-19	-20	-25	-23

GRAVITY STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

41.95	0	0	0	0	30	0	15	37	0	0
41.85	0	0	0	0	7	0	0	0	15	0
41.75	0	0	0	0	0	0	0	0	2	30
41.65	0	0	0	0	0	0	0	0	0	0
41.55	0	0	0	0	0	0	0	0	0	0
41.45	0	0	0	0	0	0	0	0	0	0
41.35	0	0	0	0	0	0	0	0	0	0
41.25	0	0	0	0	0	0	0	0	0	0
41.15	0	0	0	0	0	0	0	0	0	0
41.05	0	0	0	0	0	0	0	16	90	59

GRID MEAN OF GRAVITY(FA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

41.95	0	0	0	0	-25	0	-28	-29	0	0
41.85	0	0	0	0	-26	0	0	0	-24	0
41.75	0	0	0	0	0	0	0	0	-25	-26
41.65	0	0	0	0	0	0	0	0	0	0
41.55	0	0	0	0	0	0	0	0	0	0
41.45	0	0	0	0	0	0	0	0	0	0
41.35	0	0	0	0	0	0	0	0	0	0
41.25	0	0	0	0	0	0	0	0	0	0
41.15	0	0	0	0	0	0	0	0	0	0
41.05	0	0	0	0	0	0	0	-21	-24	-24

GRAVITY STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRID MEAN OF GRAVITY (FA)

GRAVITY STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

GRID MEAN OF GRAVITY (FA)

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

GRAVITY STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF GRAVITY (FA)

64.95 **64.85** **64.75** **64.65** **64.55** **64.45** **64.35** **64.25** **64.15** **64.05**

GRAVITY STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

GRID MEAN OF GRAVITY (FA)

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

GRAVITY STATIONS

66.95 **66.85** **66.75** **66.65** **66.55** **66.45** **66.35** **66.25** **66.15** **66.05**

GRID MEAN OF GRAVITY (FA)

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

GRAVITY STATIONS

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

41.95	0	0	0	0	0	0	0	0	0	9
41.85	0	0	0	0	0	0	0	0	0	19
41.75	0	0	0	0	0	0	0	0	0	0
41.65	0	0	0	0	0	0	0	0	0	0
41.55	0	0	0	0	0	0	0	0	0	0
41.45	0	0	0	0	0	0	0	0	0	0
41.35	0	0	0	0	0	0	0	0	0	0
41.25	0	0	0	0	0	0	0	0	0	0
41.15	0	0	0	0	0	0	0	0	0	0
41.05	0	0	0	0	0	0	0	0	0	0

GRID MEAN OF GRAVITY (FA)

67.95 **67.85** **67.75** **67.65** **67.55** **67.45** **67.35** **67.25** **67.15** **67.05**

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

42.95	16	18	0	0	1	0	0	61	16	8
42.85	0	1	15	20	29	65	100	179	62	0
42.75	0	8	59	55	56	14	0	69	55	0
42.65	8	22	0	0	0	12	18	29	87	0
42.55	0	11	0	0	0	11	56	79	262	246
42.45	0	21	11	22	102	93	177	118	60	9
42.35	0	0	29	81	34	39	0	27	71	0
42.25	0	0	4	35	7	19	9	1	32	156
42.15	0	0	0	18	14	47	111	136	171	123
42.05	0	0	0	0	0	3	36	0	4	25

GRID MEAN OF GRAVITY (FA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
42.95	-29	-26	0	0	-38	0	0	-19	-43	-36
42.85	0	-33	-38	-26	-30	-46	-41	-38	-48	0
42.75	0	-64	-64	-55	-48	-51	0	-41	-34	0
42.65	-62	-67	0	0	0	-53	-53	-42	-32	0
42.55	0	-68	0	0	0	-43	-48	-50	-37	-34
42.45	0	-68	-69	-62	-55	-50	-46	-42	-39	-34
42.35	0	0	-62	-62	-34	-34	0	-38	-37	0
42.25	0	0	-56	-51	-49	-27	-24	-35	-34	-40
42.15	0	0	0	-41	-49	-39	-36	-42	-42	-43
42.05	0	0	0	0	0	-39	-27	0	-34	-33

GRAVITY STATIONS

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
42.95	0	66	0	0	0	5	94	203	202	58
42.85	0	48	47	0	0	0	31	33	0	0
42.75	0	20	69	0	0	0	0	0	0	0
42.65	0	0	35	52	0	0	0	0	0	0
42.55	0	0	7	41	21	0	0	0	0	0
42.45	0	0	7	15	65	0	0	0	0	0
42.35	0	0	0	23	26	28	0	0	0	0
42.25	0	0	0	13	0	62	0	0	0	0
42.15	0	0	0	22	7	18	41	0	0	0
42.05	0	0	0	0	29	0	68	0	0	0

GRID MEAN OF GRAVITY (FA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

42.95	0	39	0	0	0	-14	-25	-29	-29	-31
42.85	0	18	10	0	0	0	-32	-44	0	0
42.75	0	3	-1	0	0	0	0	0	0	0
42.65	0	0	-7	-12	0	0	0	0	0	0
42.55	0	0	-14	-23	-33	0	0	0	0	0
42.45	0	0	-30	-36	-41	0	0	0	0	0
42.35	0	0	0	-40	-44	-47	0	0	0	0
42.25	0	0	0	-43	0	-50	0	0	0	0
42.15	0	0	0	-44	-44	-49	-43	0	0	0
42.05	0	0	0	0	-36	0	-34	0	0	0

GRAVITY STATIONS

63.95 **63.85** **63.75** **63.65** **63.55** **63.45** **63.35** **63.25** **63.15** **63.05**

GRID MEAN OF GRAVITY(FA)

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

42.95	0	0	0	0	0	13	0	0	0	0
42.85	0	0	0	0	2	2	0	0	0	0
42.75	0	0	0	0	-14	0	0	0	0	0
42.65	0	0	0	6	0	0	0	0	0	0
42.55	0	0	-1	2	0	0	0	0	0	0
42.45	0	-7	-5	0	0	0	0	0	0	0
42.35	0	-10	0	0	0	0	0	0	0	0
42.25	-7	-8	0	0	0	0	0	0	0	0
42.15	0	0	0	0	0	0	0	0	0	0
42.05	0	0	0	0	0	0	0	0	0	0

GRAVITY STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

42.95	0	0	0	0	0	29	0	0	0	0
42.85	0	0	0	0	28	2	0	0	0	0
42.75	5	0	0	16	13	0	0	0	0	0
42.65	24	15	0	18	0	0	0	0	0	0
42.55	11	38	30	0	0	0	0	0	0	0
42.45	48	0	0	13	0	0	0	0	0	0
42.35	14	30	11	0	0	0	0	0	0	0
42.25	0	0	22	5	0	7	25	0	0	0
42.15	24	0	0	0	47	10	1	19	4	2
42.05	0	2	17	0	0	39	35	0	14	27

GRID MEAN OF GRAVITY(FA)

	64.95	64.85	64.75	64.65	64.55	64.45	64.35	64.25	64.15	64.05
42.95	0	0	0	0	0	-31	0	0	0	0
42.85	0	0	0	0	27	-33	0	0	0	0
42.75	28	0	0	-36	26	0	0	0	0	0
42.65	30	-38	0	47	0	0	0	0	0	0
42.55	45	48	54	0	0	0	0	0	0	0
42.45	51	0	0	-28	0	0	0	0	0	0
42.35	51	17	0	0	0	0	0	0	0	0
42.25	0	0	-3	-5	0	-10	-12	0	0	0
42.15	7	0	0	0	-3	-5	-15	-8	-1	-11
42.05	0	-5	-5	0	0	-4	0	0	0	-3

GRAVITY STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

42.95	21	44	72	89	21	21	18	31	0	0
42.85	21	22	22	29	88	59	26	25	27	0
42.75	21	21	33	4	0	43	46	4	4	29
42.65	48	20	8	58	50	23	19	62	3	0
42.55	0	26	6	0	20	30	1	0	46	19
42.45	0	0	21	11	0	7	23	9	7	54
42.35	18	5	0	16	16	0	0	28	34	0
42.25	22	31	32	19	8	16	24	14	8	16
42.15	15	0	17	31	28	8	19	0	0	2
42.05	36	43	18	28	31	4	3	5	10	0

GRID MEAN OF GRAVITY(FA)

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

42.95	9	9	6	7	3	5	6	29	0	0
42.85	-3	4	3	8	13	18	16	16	31	0
42.75	8	7	11	9	0	31	36	32	26	27
42.65	22	24	29	26	23	22	41	43	48	0
42.55	0	37	39	0	42	40	29	0	47	48
42.45	0	0	41	43	0	49	53	41	44	47
42.35	29	27	0	41	40	0	0	56	57	0
42.25	-3	22	28	38	44	59	57	52	60	25
42.15	27	0	39	54	65	62	41	0	0	12
42.05	45	64	61	58	62	43	22	7	-2	0

GRAVITY STATIONS

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
42.95	52	42	46	74	40	66	50	29	27	41
42.85	37	32	37	51	40	29	31	63	55	39
42.75	19	25	52	22	27	44	19	20	35	42
42.65	0	12	18	13	26	22	39	32	20	26
42.55	62	50	20	12	17	12	0	18	18	0
42.45	3	86	20	20	21	31	45	21	31	39
42.35	19	20	36	3	0	0	4	32	2	0
42.25	80	21	20	73	22	22	22	22	56	31
42.15	41	38	24	0	54	0	0	0	0	28
42.05	21	18	53	42	21	61	22	9	0	11

GRID MEAN OF GRAVITY (FA)

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
42.95	30	26	21	29	10	0	-3	-10	-9	5
42.85	32	28	26	32	29	7	0	-5	-6	-5
42.75	19	23	42	33	26	20	8	5	1	4
42.65	0	52	52	17	29	21	23	15	10	11
42.55	29	43	34	35	34	29	0	24	21	0
42.45	37	32	17	5	2	12	20	13	17	20
42.35	24	32	20	13	0	0	29	31	35	0
42.25	25	13	9	19	11	12	16	23	23	8
42.15	31	13	10	0	20	0	0	0	0	22
42.05	19	11	7	11	19	18	25	31	0	42

GRAVITY STATIONS

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

42.95	0	0	33	30	65	61	93	56	46	63
42.85	0	0	25	0	2	57	42	60	21	21
42.75	0	0	18	21	20	37	21	24	47	19
42.65	0	0	0	31	18	0	0	0	0	28
42.55	0	0	0	32	0	0	11	27	49	39
42.45	0	0	0	5	0	0	0	0	29	3
42.35	0	0	0	0	6	20	20	20	29	57
42.25	0	0	0	12	21	20	19	19	19	31
42.15	0	0	0	16	0	0	0	0	0	0
42.05	0	0	0	16	6	18	18	18	18	43

GRID MEAN OF GRAVITY (FA)

	67.95	67.85	67.75	67.65	67.55	67.45	67.35	67.25	67.15	67.05
42.95	0	0	24	12	17	11	26	24	10	19
42.85	0	0	18	0	42	33	19	21	23	23
42.75	0	0	26	12	40	47	27	17	28	25
42.65	0	0	0	14	45	0	0	0	0	20
42.55	0	0	0	21	0	0	39	15	9	19
42.45	0	0	0	21	0	0	0	0	21	16
42.35	0	0	0	0	10	14	13	11	16	19
42.25	0	0	0	42	31	30	30	24	22	21
42.15	0	0	0	31	0	0	0	0	0	0
42.05	0	0	0	31	34	33	28	32	31	28

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	2	20	0	0	0	0	0	0	0	0
43.75	0	4	24	23	11	0	0	0	0	0
43.65	0	0	0	0	4	46	0	0	0	0
43.55	0	0	0	0	0	19	60	0	0	0
43.45	19	30	6	39	44	44	91	77	23	56
43.35	0	12	21	4	0	18	65	120	193	18
43.25	0	19	30	47	40	63	122	120	244	277
43.15	39	38	63	187	185	167	91	9	0	9
43.05	160	164	139	20	0	4	23	62	0	0

GRID MEAN OF GRAVITY(FA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
43.95	0	0	0	0	0	0	0	0	0	0
43.85	14	17	0	0	0	0	0	0	0	0
43.75	0	19	23	29	19	0	0	0	0	0
43.65	0	0	0	0	42	50	0	0	0	0
43.55	0	0	0	0	0	60	71	0	0	0
43.45	34	40	59	67	70	77	81	88	98	92
43.35	0	52	53	47	0	39	43	58	37	31
43.25	0	15	22	29	24	13	13	19	25	15
43.15	12	12	8	1	0	-4	-1	0	0	-3
43.05	-8	-10	-7	3	0	-21	-28	-6	0	0

GRAVITY STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

43.95	22	12	0	0	14	21	21	21	21	16
43.85	21	30	24	23	6	0	0	0	0	0
43.75	0	0	20	21	10	23	15	0	0	0
43.65	0	0	0	0	14	20	21	23	23	2
43.55	0	0	0	0	0	0	7	20	20	10
43.45	0	0	0	0	0	0	0	0	0	20
43.35	0	0	0	0	0	0	0	0	0	0
43.25	1	0	0	0	0	0	0	0	0	0
43.15	47	0	0	0	0	0	0	0	28	39
43.05	46	50	0	0	0	0	0	32	61	83

GRID MEAN OF GRAVITY(FA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
43.95	6	8	0	0	-5	-10	-7	-4	0	-4
43.85	-1	2	5	5	9	0	0	0	0	0
43.75	0	0	2	8	9	11	6	0	0	0
43.65	0	0	0	0	7	2	3	7	13	16
43.55	0	0	0	0	0	0	1	4	14	20
43.45	0	0	0	0	0	0	0	0	0	26
43.35	0	0	0	0	0	0	0	0	0	0
43.25	15	0	0	0	0	0	0	0	0	0
43.15	36	0	0	0	0	0	0	0	-17	11
43.05	49	51	0	0	0	0	0	-8	-16	-20

GRAVITY STATIONS

62.95 **62.85** **62.75** **62.65** **62.55** **62.45** **62.35** **62.25** **62.15** **62.05**

GRID MEAN OF GRAVITY (FA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRAVITY STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

43.95	12	16	17	21	0	30	0	3	0	0
43.85	14	0	15	14	38	24	5	11	0	0
43.75	0	0	2	25	77	30	30	0	0	0
43.65	0	0	0	0	70	28	60	3	18	0
43.55	0	0	0	0	56	0	42	30	9	0
43.45	19	20	20	19	56	20	35	0	1	0
43.35	0	0	0	0	27	0	29	0	0	0
43.25	0	0	0	0	11	0	5	21	0	0
43.15	0	0	0	0	0	0	0	0	0	0
43.05	0	0	0	0	0	2	2	0	0	0

GRID MEAN OF GRAVITY (FA)

	63.95	63.85	63.75	63.65	63.55	63.45	63.35	63.25	63.15	63.05
43.95	-28	-32	-22	-20	0	-10	0	-10	0	0
43.85	-24	0	-57	-26	-18	-8	-4	-7	0	0
43.75	0	0	-59	-53	-16	-4	1	0	0	0
43.65	0	0	0	0	-6	-24	7	0	-1	0
43.55	0	0	0	0	10	0	-7	1	6	0
43.45	11	14	14	14	16	15	26	0	14	0
43.35	0	0	0	0	30	0	33	0	0	0
43.25	0	0	0	0	38	0	35	33	0	0
43.15	0	0	0	0	0	0	0	0	0	0
43.05	0	0	0	0	0	39	31	0	0	0

GRAVITY STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	0	0	0	0	0	0	16	18	0	21
43.75	0	0	0	0	7	26	9	0	21	14
43.65	0	0	0	15	18	0	0	23	14	0
43.55	0	0	11	0	0	2	30	7	0	0
43.45	24	0	0	0	3	30	0	0	9	19
43.35	23	16	0	2	34	0	0	12	17	0
43.25	0	6	17	2	0	0	0	9	0	0
43.15	0	0	0	0	0	0	15	6	0	0
43.05	0	0	0	0	0	9	21	0	0	0

GRID MEAN OF GRAVITY (FA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	0	0	0	0	0	0	-18	-20	0	-21
43.75	0	0	0	0	-12	-16	-18	0	-21	-19
43.65	0	0	0	-6	-11	0	0	-10	-18	0
43.55	0	0	0	0	0	-12	-13	-8	0	0
43.45	0	0	0	0	-16	-10	0	0	18	9
43.35	-4	9	0	0	-5	0	0	12	12	0
43.25	0	7	8	15	0	0	0	-17	0	0
43.15	0	0	0	0	0	0	20	18	0	0
43.05	0	0	0	0	0	-26	21	0	0	0

GRAVITY STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	0	0	0	0	0	0	0	0	0	0
43.75	0	0	0	0	0	0	0	0	0	0
43.65	0	0	0	0	0	0	0	0	0	0
43.55	0	0	0	0	0	0	0	0	0	0
43.45	0	0	0	0	0	0	0	2	8	7
43.35	0	0	0	0	0	0	0	0	20	27
43.25	20	35	23	2	6	33	0	0	0	0
43.15	48	14	0	12	74	34	21	7	0	0
43.05	66	83	47	50	62	50	37	13	0	0

GRID MEAN OF GRAVITY(FA)

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	0	0	0	0	0	0	0	0	0	0
43.75	0	0	0	0	0	0	0	0	0	0
43.65	0	0	0	0	0	0	0	0	0	0
43.55	0	0	0	0	0	0	0	0	0	0
43.45	0	0	0	0	0	0	0	-27	-11	-1
43.35	0	0	0	0	0	0	0	0	-19	-7
43.25	-19	-17	-21	-21	-24	-24	0	0	0	0
43.15	-10	-9	0	-12	-19	-23	-14	-3	0	0
43.05	-1	4	0	-6	-13	-11	-3	0	0	0

GRAVITY STATIONS

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
43.95	136	139	90	96	91	77	2	0	0	0
43.85	132	102	44	92	8	0	0	0	0	0
43.75	98	35	86	37	48	33	0	0	0	0
43.65	69	16	0	36	38	30	5	0	0	0
43.55	75	41	63	31	30	57	48	0	0	0
43.45	38	5	5	13	16	4	27	48	2	0
43.35	12	61	18	1	20	6	0	20	37	0
43.25	26	18	52	55	52	54	17	4	25	70
43.15	54	47	38	60	85	47	58	23	28	25
43.05	12	24	0	14	22	58	39	51	66	59

GRID MEAN OF GRAVITY (FA)

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

43.95	28	28	12	17	17	27	9	0	0	0
43.85	35	24	21	24	33	0	0	0	0	0
43.75	32	20	24	23	23	33	0	0	0	0
43.65	40	22	0	24	34	32	25	0	0	0
43.55	43	25	26	20	32	28	23	0	0	0
43.45	55	57	28	27	44	42	23	12	1	0
43.35	41	47	41	14	19	14	0	8	-5	0
43.25	61	49	43	28	30	14	8	9	-2	-15
43.15	21	27	19	22	26	3	-3	-11	-8	-11
43.05	29	35	0	39	27	2	-8	-10	-7	-8

GRAVITY STATIONS

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

43.95	21	24	36	29	22	21	28	88	60	158
43.85	65	37	37	54	58	35	33	45	115	82
43.75	0	29	52	40	48	69	50	13	42	112
43.65	8	0	17	20	0	0	21	17	0	4
43.55	53	59	39	45	33	7	19	50	30	41
43.45	0	8	28	3	0	8	4	1	14	19
43.35	18	0	0	25	21	5	15	21	0	0
43.25	42	16	7	28	30	35	19	26	62	42
43.15	13	2	55	43	26	54	64	35	35	58
43.05	0	0	32	16	51	28	36	25	22	0

GRID MEAN OF GRAVITY (FA)

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

43.95	55	59	47	33	32	44	37	45	29	17
43.85	30	29	17	13	15	17	25	42	20	17
43.75	0	25	19	11	15	24	28	25	9	25
43.65	36	0	24	26	0	0	31	19	0	37
43.55	26	19	23	21	24	24	15	5	17	13
43.45	0	20	15	20	0	29	27	25	26	40
43.35	11	0	0	22	29	36	29	21	0	0
43.25	15	18	24	34	31	35	26	38	41	55
43.15	25	21	19	23	35	41	23	19	18	22
43.05	0	0	31	20	9	10	34	23	20	0

GRAVITY STATIONS

68.95 68.85 68.75 68.65 68.55 68.45 68.35 68.25 68.15 68.05

GRID MEAN OF GRAVITY (FA)

68,95 68,85 68,75 68,65 68,55 68,45 68,35 68,25 68,15 68,05

GRAVITY STATIONS

69.95 69.85 69.75 69.65 69.55 69.45 69.35 69.25 69.15 69.05

GRID MEAN OF GRAVITY (FA)

69.95 69.85 69.75 69.65 69.55 69.45 69.35 69.25 69.15 69.05

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRID MEAN OF GRAVITY (FA)

60.95 **60.85** **60.75** **60.65** **60.55** **60.45** **60.35** **60.25** **60.15** **60.05**

GRAVITY STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	3	20	19	19	20	19	19	20	20	20
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	24	24	26	26	18	24	25	3	18	25
44.25	0	0	0	0	0	0	0	0	0	0
44.15	22	3	0	0	0	0	0	0	0	0
44.05	0	19	22	22	7	0	0	0	0	0

GRID MEAN OF GRAVITY(FA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	-26	-30	-30	-27	-31	-35	-40	-40	-42	-49
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	-16	-16	-12	-14	-20	-24	-30	-30	-36	-38
44.25	0	0	0	0	0	0	0	0	0	0
44.15	3	3	0	0	0	0	0	0	0	0
44.05	0	4	0	0	-1	0	0	0	0	0

GRAVITY STATIONS

	62.95	62.85	62.75	62.65	62.55	62.45	62.35	62.25	62.15	62.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	4
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	89	63	61	37	29	27	24	25	25	26
44.25	43	79	76	34	5	18	22	3	0	0
44.15	0	0	11	62	44	23	0	19	21	22
44.05	30	0	0	0	14	9	42	33	15	0

GRID MEAN OF GRAVITY(FA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	-23
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	-10	-16	-29	-29	-22	-15	-11	-2	-4	-9
44.25	-15	-19	-24	-18	-13	3	4	0	0	0
44.15	0	0	-14	-9	1	7	0	-2	3	10
44.05	-6	0	0	0	19	0	4	5	7	0

GRAVITY STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	0
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	10	60	65	27	5
44.35	4	21	20	20	37	32	4	43	92	99
44.25	11	0	5	26	9	19	28	0	0	0
44.15	18	19	18	0	0	28	5	0	11	23
44.05	5	18	30	0	0	29	9	4	0	7

GRID MEAN OF GRAVITY(FA)

	63.95	63.85	63.75	63.65	63.55	63.45	63.35	63.25	63.15	63.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	0
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	-90	-16	-18	-17	-16
44.35	-17	-15	-17	-18	-23	-74	-83	-23	-20	-13
44.25	-16	0	-15	-20	-22	-23	-81	0	0	0
44.15	-20	-20	-15	0	0	-15	-76	0	-36	-24
44.05	-16	-19	-27	0	0	-13	-68	-64	0	-13

GRAVITY STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF GRAVITY (FA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRAVITY STATIONS

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

GRID MEAN OF GRAVITY (FA)

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

GRAVITY STATIONS

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

44.95	0	0	0	54	111	157	143	181	215	192
44.85	0	0	0	159	79	207	206	165	132	148
44.75	0	0	4	87	129	184	152	202	135	229
44.65	0	0	0	15	155	246	154	217	175	51
44.55	0	0	0	32	149	288	157	200	49	0
44.45	7	47	53	172	114	399	259	55	1	0
44.35	121	174	113	193	317	87	31	0	0	0
44.25	242	245	192	190	202	25	4	0	0	0
44.15	273	301	151	249	289	12	0	0	0	0
44.05	181	68	151	156	66	126	27	0	0	0

GRID MEAN OF GRAVITY (FA)

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

44.95	0	0	0	-24	-24	-26	-22	-17	-16	-13
44.85	0	0	0	-24	-19	-20	-19	-16	-15	-20
44.75	0	0	0	-12	-14	-16	-13	-10	-11	-15
44.65	0	0	0	-6	-3	-10	-8	-8	-3	-6
44.55	0	0	0	31	7	-4	-6	-6	-3	0
44.45	13	20	26	19	2	-1	-3	0	0	0
44.35	13	11	-5	0	0	-8	5	0	0	0
44.25	3	-1	1	0	7	18	17	0	0	0
44.15	8	8	14	15	5	-7	0	0	0	0
44.05	18	15	23	22	33	5	27	0	0	0

GRAVITY STATIONS

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

44.95	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	22	0
44.55	0	0	0	0	0	0	59	23	0
44.45	0	0	0	0	0	6	52	67	70
44.35	0	0	0	13	42	27	25	66	136
44.25	0	0	10	2	5	128	36	98	162
44.15	22	20	20	35	37	34	112	107	166
44.05	13	23	0	0	0	0	32	44	75

GRID MEAN OF GRAVITY(FA)

	67.95	67.85	67.75	67.65	67.55	67.45	67.35	67.25	67.15	67.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	21	0
44.55	0	0	0	0	0	0	0	22	17	0
44.45	0	0	0	0	0	34	29	34	49	25
44.35	0	0	0	16	37	33	21	17	16	15
44.25	0	0	-38	-36	37	16	16	9	12	11
44.15	42	41	40	34	25	13	17	37	21	9
44.05	40	48	0	0	0	0	10	39	14	17

GRAVITY STATIONS

68.95 68.85 68.75 68.65 68.55 68.45 68.35 68.25 68.15 68.05

GRID MEAN OF GRAVITY (FA)

68.95 68.85 68.75 68.65 68.55 68.45 68.35 68.25 68.15 68.05

GRAVITY STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF GRAVITY (FA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRAVITY STATIONS

	65.95	65.85	65.75	65.65	65.55	65.45	65.35	65.25	65.15	65.05
45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	0	29	49
45.35	0	0	0	0	0	0	47	25	30	102
45.25	0	6	1	15	19	55	11	7	48	70
45.15	59	57	65	0	0	0	46	22	0	93
45.05	16	30	60	44	45	0	0	31	7	0

GRID MEAN OF GRAVITY(FA)

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	-17	-22	
45.35	0	0	0	0	0	0	-19	-16	-19	-8
45.25	0	4	8	7	0	-3	-10	-10	-9	-9
45.15	1	-2	-6	0	0	0	-9	-5	0	-10
45.05	-3	-8	-8	-4	-1	0	0	-2	1	0

GRAVITY STATIONS

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	0	0	0
45.35	0	0	0	0	0	0	0	0	0	0
45.25	0	0	0	0	0	0	0	0	0	0
45.15	0	0	0	0	0	0	3	0	26	76
45.05	0	0	0	15	20	52	73	155	156	161

GRID MEAN OF GRAVITY (FA)

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	0	0	0
45.35	0	0	0	0	0	0	0	0	0	0
45.25	0	0	0	0	0	0	0	0	0	0
45.15	0	0	0	0	0	0	5	0	-8	-5
45.05	0	0	0	-13	-25	-23	-19	-18	-18	-18

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRID MEAN OF GRAVITY (FA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

47.95	0	29	3	0	0	25	0	0	0	24
47.85	0	0	25	0	0	27	0	0	0	0
47.75	0	0	9	5	0	27	0	0	0	0
47.65	0	0	0	30	0	24	0	0	0	0
47.55	0	0	0	17	15	8	0	0	0	0
47.45	0	0	0	0	31	25	0	0	0	0
47.35	0	0	0	0	6	50	0	0	0	0
47.25	0	0	0	0	0	43	3	0	0	0
47.15	0	0	0	0	0	0	24	11	0	0
47.05	0	0	0	0	0	0	0	40	33	14

GRID MEAN OF GRAVITY(FA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

47.95	0	-20	-15	0	0	-42	0	0	0	-42
47.85	0	0	-8	0	0	-27	0	0	0	0
47.75	0	0	-8	-13	0	-34	0	0	0	0
47.65	0	0	0	-23	0	-47	0	0	0	0
47.55	0	0	0	-48	-47	-53	0	0	0	0
47.45	0	0	0	0	-32	-33	0	0	0	0
47.35	0	0	0	0	-26	-28	0	0	0	0
47.25	0	0	0	0	0	-32	-25	0	0	0
47.15	0	0	0	0	0	0	-19	-17	0	0
47.05	0	0	0	0	0	0	0	-18	-7	-3

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

48.95	0	0	0	0	0	0	0	0	0	0
48.85	0	0	0	0	0	0	0	0	0	0
48.75	0	0	0	0	0	0	0	0	0	0
48.65	0	0	0	0	0	0	0	0	0	0
48.55	0	0	0	0	0	0	0	0	0	0
48.45	0	0	0	0	16	0	0	0	26	0
48.35	0	0	0	0	29	0	0	0	7	21
48.25	5	0	0	0	26	2	0	0	0	28
48.15	30	0	0	0	0	28	0	0	0	15
48.05	11	20	0	0	0	6	0	0	0	18

GRID MEAN OF GRAVITY (FA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

48.95	0	0	0	0	0	0	0	0	0	0
48.85	0	0	0	0	0	0	0	0	0	0
48.75	0	0	0	0	0	0	0	0	0	0
48.65	0	0	0	0	0	0	0	0	0	0
48.55	0	0	0	0	0	0	0	0	0	0
48.45	0	0	0	0	-38	0	0	0	-37	0
48.35	0	0	0	0	-37	0	0	0	-37	-39
48.25	-21	0	0	0	-37	-36	0	0	0	-40
48.15	-20	0	0	0	0	-36	0	0	0	-41
48.05	-21	-22	0	0	0	-32	0	0	0	-42

GRAVITY STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRID MEAN OF GRAVITY (FA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRAVITY STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRID MEAN OF GRAVITY (FA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRAVITY STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRID MEAN OF GRAVITY (FA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRAVITY STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRID MEAN OF GRAVITY(FA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

49.95	-36	-37	0	0	0	0	0	0	0	0
49.85	-45	-39	-40	0	0	0	0	0	0	0
49.75	0	-42	-46	-45	-42	0	0	0	0	0
49.65	0	0	0	0	-42	-42	-42	-42	0	0
49.55	0	0	0	0	0	0	0	-42	-42	-39
49.45	0	0	0	0	0	0	0	0	0	-37
49.35	0	0	0	0	0	0	0	0	0	0
49.25	0	0	0	0	0	0	0	0	0	0
49.15	0	0	0	0	0	0	0	0	0	0
49.05	0	0	0	0	0	0	0	0	0	0

EOF
1

GRAVITY STATIONS

63.95 **63.85** **63.75** **63.65** **63.55** **63.45** **63.35** **63.25** **63.15** **63.05**

GRID MEAN OF GRAVITY (FA)

63.95 **63.85** **63.75** **63.65** **63.55** **63.45** **63.35** **63.25** **63.15** **63.05**

APPENDIX 3

SIX-MINUTE GRID MEAN VALUES OF MA IN MSQ 151

15 SEPTEMBER 1975

IMARSDEN SQUARE INDEX 151 NUMBER OF STATIONS

	69	68	67	66	65	64	63	62	61	60
49	0	0	0	0	0	0	276	260	7533	9595
48	0	0	0	0	0	0	0	0	91	360
47	0	0	0	0	0	0	0	0	0	638
46	0	0	0	0	0	0	0	0	0	53
45	0	0	0	1083	1756	147	0	0	0	0
44	0	70	3516	14910	382	207	1171	1165	539	456
43	130	1107	3882	4573	1321	751	1222	712	1068	4147
42	0	0	2213	3128	2762	841	258	0	2035	4777
41	0	0	61	621	1036	790	496	42	565	4266
40	0	0	0	0	18	468	509	462	377	6538

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

40.95	56	69	30	70	67	181	129	163	49	86
40.85	68	60	94	37	143	86	51	80	60	81
40.75	73	45	71	54	90	64	61	56	74	62
40.65	60	65	34	70	30	60	30	116	97	126
40.55	19	58	52	48	64	106	91	116	39	69
40.45	0	54	109	82	110	28	54	56	72	35
40.35	0	10	101	68	56	47	42	56	59	45
40.25	0	0	105	68	49	66	41	106	76	123
40.15	0	0	44	60	59	123	159	112	44	36
40.05	0	0	0	87	104	68	78	65	73	29

GRID MEAN OF MAG(MA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

40.95	-215	-164	-199	-167	-209	-236	-239	-208	-229	-210
40.85	-219	-209	-192	-225	-212	-231	-201	-222	-240	-215
40.75	-215	-204	-225	-263	-216	-231	-242	-238	-240	-205
40.65	-192	-195	-220	-227	-237	-180	-189	-219	-225	-206
40.55	-216	-211	-194	-216	-228	-175	-181	-205	-189	-194
40.45	0	-214	-213	-213	-205	-211	-183	-166	-160	-178
40.35	0	-186	-188	-211	-235	-253	-200	-188	-195	-212
40.25	0	0	-191	-207	-227	-254	-235	-229	-241	-199
40.15	0	0	-197	-210	-211	-240	-247	-240	-236	-222
40.05	0	0	0	-238	-227	-235	-253	-257	-248	-220

MAG STATIONS

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
40.95	0	0	0	0	0	0	0	0	47	99
40.85	0	0	0	0	0	0	0	0	0	65
40.75	0	0	0	0	0	0	0	0	0	35
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	0	0	0	0	0	0	0	0	0	0
40.35	0	0	0	0	0	0	0	0	0	0
40.25	4	0	0	0	0	0	0	0	0	0
40.15	47	14	0	0	0	0	0	0	0	0
40.05	0	33	33	0	0	0	0	0	0	0

GRID MEAN OF MAG (MA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
40.95	0	0	0	0	0	0	0	0	-264	-232
40.85	0	0	0	0	0	0	0	0	0	-246
40.75	0	0	0	0	0	0	0	0	0	-232
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	0	0	0	0	0	0	0	0	0	0
40.35	0	0	0	0	0	0	0	0	0	0
40.25	-104	0	0	0	0	0	0	0	0	0
40.15	-97	-81	0	0	0	0	0	0	0	0
40.05	0	-83	-108	0	0	0	0	0	0	0

MAG STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRID MEAN OF MAG(MA)

62.95 **62.85** **62.75** **62.65** **62.55** **62.45** **62.35** **62.25** **62.15** **62.05**

MAG STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

40.95	0	0	0	0	0	0	0	0	0	0
40.85	0	0	0	0	0	0	0	0	0	0
40.75	0	0	0	0	0	0	0	0	0	0
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	48	51	2	0	0	0	0	0	0	0
40.35	0	0	77	22	0	0	0	0	0	0
40.25	0	0	1	119	11	0	0	0	0	0
40.15	0	0	0	8	61	0	0	0	0	0
40.05	0	0	0	0	9	76	19	0	0	0

GRID MEAN OF MAG(MA)

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

40.95	0	0	0	0	0	0	0	0	0	0
40.85	0	0	0	0	0	0	0	0	0	0
40.75	0	0	0	0	0	0	0	0	0	0
40.65	0	0	0	0	0	0	0	0	0	0
40.55	0	0	0	0	0	0	0	0	0	0
40.45	-133	-90	-93	0	0	0	0	0	0	0
40.35	0	0	-119	-96	0	0	0	0	0	0
40.25	0	0	0	-97	-112	0	0	0	0	0
40.15	0	0	0	-133	-143	0	0	0	0	0
40.05	0	0	0	0	-150	-146	-145	0	0	0

MAG STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF MAG(MA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

MAG STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

GRID MEAN OF MAG (MA)

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

41.95	0	0	0	0	0	0	1	26	0	28
41.85	0	0	0	0	0	0	0	28	0	11
41.75	18	0	0	0	0	0	0	7	21	0
41.65	39	41	8	0	0	0	0	0	27	13
41.55	0	14	52	47	0	0	0	0	18	41
41.45	0	0	0	10	54	49	8	0	32	72
41.35	0	0	0	0	0	37	128	260	175	176
41.25	0	0	10	24	64	123	161	263	179	39
41.15	1	21	91	62	103	45	129	148	143	227
41.05	61	82	50	62	50	80	111	140	110	117

GRID MEAN OF MAG(MA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
41.95	0	0	0	0	0	0	-191	-187	0	-193
41.85	0	0	0	0	0	0	0	-166	0	-189
41.75	-241	0	0	0	0	0	0	-160	-165	0
41.65	-225	-228	-221	0	0	0	0	0	-166	-217
41.55	0	-202	-202	-194	0	0	0	0	-177	-196
41.45	0	0	0	-200	-213	-231	-234	0	-215	-196
41.35	0	0	0	0	0	-223	-232	-224	-208	-200
41.25	0	0	-186	-172	-200	-207	-227	-224	-203	-157
41.15	-252	-231	-218	-214	-203	-203	-229	-228	-202	-201
41.05	-253	-228	-220	-200	-186	-216	-247	-224	-197	-183

MAG STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

41.95	0	0	0	0	30	0	15	58	0	0
41.85	0	0	0	0	11	24	16	20	28	0
41.75	0	0	0	0	0	0	8	23	25	37
41.65	0	0	0	0	0	0	0	0	0	22
41.55	0	0	0	0	0	0	0	0	0	0
41.45	0	0	0	0	0	0	0	0	0	0
41.35	0	0	0	0	0	0	0	0	0	0
41.25	0	0	0	0	0	0	0	0	0	0
41.15	0	0	0	0	0	0	0	0	0	0
41.05	0	0	0	0	0	0	0	43	120	81

GRID MEAN OF MAG(MA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
41.95	0	0	0	0	-50	0	-82	-159	0	0
41.85	0	0	0	0	-135	-171	-184	-203	-220	0
41.75	0	0	0	0	0	0	-179	-187	-212	-233
41.65	0	0	0	0	0	0	0	0	0	-214
41.55	0	0	0	0	0	0	0	0	0	0
41.45	0	0	0	0	0	0	0	0	0	0
41.35	0	0	0	0	0	0	0	0	0	0
41.25	0	0	0	0	0	0	0	0	0	0
41.15	0	0	0	0	0	0	0	0	0	0
41.05	0	0	0	0	0	0	0	-233	-249	-255

MAG STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRID MEAN OF MAG(MA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

MAG STATIONS

	63.95	63.85	63.75	63.65	63.55	63.45	63.35	63.25	63.15	63.05
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0
16	47	0	0	0	0	0	0	0	0	0
0	0	50	12	0	0	0	0	0	0	0
0	0	0	40	27	0	0	0	0	0	0
0	0	0	0	25	42	0	0	0	0	0
0	0	0	0	0	10	52	4	0	0	0
0	0	0	0	0	0	0	45	30	0	0
0	0	0	0	0	0	0	0	15	43	0

GRID MEAN OF MAG(MA)

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

41.95	0	0	0	0	0	0	0	0	0	0
41.85	0	0	0	0	0	0	0	0	0	0
41.75	34	0	0	0	0	0	0	0	0	0
41.65	65	48	0	0	0	0	0	0	0	0
41.55	0	0	-6	-13	0	0	0	0	0	0
41.45	0	0	0	-44	-92	0	0	0	0	0
41.35	0	0	0	0	-126	-149	0	0	0	0
41.25	0	0	0	0	0	-135	-119	-122	0	0
41.15	0	0	0	0	0	0	0	-124	-132	0
41.05	0	0	0	0	0	0	0	0	-150	-154

MAG STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF MAG (MA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

MAG STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

GRID MEAN OF MAG(MA)

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

MAG STATIONS

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

GRID MEAN OF MAG (MA)

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

MAG STATIONS

67,95 67,85 67,75 67,65 67,55 67,45 67,35 67,25 67,15 67,05

GRID MEAN OF MAG(MA)

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

42.95	52	32	0	0	29	0	30	67	7	51
42.85	0	6	24	24	40	83	92	150	45	0
42.75	0	9	47	48	48	33	0	69	55	0
42.65	10	22	0	0	0	12	18	34	87	0
42.55	9	21	0	0	0	11	67	33	100	80
42.45	0	21	11	43	79	34	31	25	69	9
42.35	0	0	29	99	0	19	0	27	71	0
42.25	0	0	4	48	24	19	9	1	31	139
42.15	0	0	0	18	15	33	89	102	127	102
42.05	0	0	0	0	0	0	46	0	4	25

GRID MEAN OF MAG(MA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
42.95	-228	-199	0	0	-28	0	-56	-102	-43	-36
42.85	0	-158	-108	-51	-32	-64	-101	-85	-60	0
42.75	0	-106	-75	-34	-24	-114	0	-54	-28	0
42.65	-154	-146	0	0	0	-163	-115	-40	-35	0
42.55	-132	-93	0	0	0	-71	-50	-25	-76	-166
42.45	0	-83	-93	-54	-62	-59	1	-111	-126	-187
42.35	0	0	-66	-18	0	-117	0	-179	-156	0
42.25	0	0	5	0	-108	-171	-175	-196	-196	-164
42.15	0	0	0	-92	-145	-179	-171	-161	-171	-167
42.05	0	0	0	0	0	0	-192	0	-198	-198

MAG STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

42.95	5	95	0	0	0	12	148	248	163	70
42.85	0	48	45	0	0	0	54	74	0	0
42.75	0	20	75	0	0	0	0	0	0	0
42.65	0	0	35	71	0	0	0	0	0	0
42.55	0	0	29	41	21	0	0	0	0	0
42.45	0	0	14	15	65	0	0	0	0	0
42.35	0	0	0	29	32	28	0	0	0	0
42.25	0	0	0	30	0	62	0	0	0	0
42.15	0	0	0	22	7	18	41	0	0	0
42.05	0	0	0	0	29	0	68	0	0	0

GRID MEAN OF MAG(MA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
42.95	-221	-215	0	0	0	-162	-175	-186	-202	-213
42.85	0	-197	-183	0	0	0	-174	-165	0	0
42.75	0	-170	-136	0	0	0	0	0	0	0
42.65	0	0	-144	-105	0	0	0	0	0	0
42.55	0	0	-146	-102	-100	0	0	0	0	0
42.45	0	0	-126	-164	-101	0	0	0	0	0
42.35	0	0	0	-142	2	19	0	0	0	0
42.25	0	0	0	-60	0	-17	0	0	0	0
42.15	0	0	0	-51	-86	-68	-63	0	0	0
42.05	0	0	0	0	-46	0	-19	0	0	0

MAG STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

GRID MEAN OF MAG(MA)

63.95 **63.85** **63.75** **63.65** **63.55** **63.45** **63.35** **63.25** **63.15** **63.05**

MAG STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

42.95	0	0	0	0	0	29	0	0	0	0
42.85	0	0	0	0	28	2	0	0	0	0
42.75	5	0	0	16	13	0	0	0	0	0
42.65	24	15	8	24	0	0	0	0	0	0
42.55	11	38	39	0	0	0	0	0	0	0
42.45	48	0	6	27	0	0	0	0	0	0
42.35	14	47	11	0	0	0	0	0	0	0
42.25	0	0	34	34	0	10	25	0	0	0
42.15	27	8	0	13	50	10	6	32	4	3
42.05	0	20	17	0	0	39	35	0	29	38

GRID MEAN OF MAG (MA)

	64.95	64.85	64.75	64.65	64.55	64.45	64.35	64.25	64.15	64.05
42.95	0	0	0	0	0	-35	0	0	0	0
42.85	0	0	0	0	-43	-21	0	0	0	0
42.75	153	0	0	-45	-69	0	0	0	0	0
42.65	109	36	15	3	0	0	0	0	0	0
42.55	20	48	15	0	0	0	0	0	0	0
42.45	47	0	-20	-45	0	0	0	0	0	0
42.35	-16	-67	-113	0	0	0	0	0	0	0
42.25	0	0	-190	-287	0	-239	-254	0	0	0
42.15	-234	-301	0	-309	-185	67	-269	-148	-25	76
42.05	0	-232	-25	0	0	201	238	0	39	131

MAG STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

42.95	21	72	111	135	21	21	34	65	0	0
42.85	67	36	22	29	88	59	43	46	27	0
42.75	21	35	43	4	0	43	55	23	4	29
42.65	48	20	23	65	50	23	56	80	3	0
42.55	0	26	6	0	20	30	20	16	46	19
42.45	3	0	21	11	0	7	39	23	7	54
42.35	28	5	0	16	16	0	0	73	34	0
42.25	22	45	33	19	31	55	44	34	11	25
42.15	15	0	17	31	28	19	23	0	0	2
42.05	36	52	18	28	31	4	3	26	10	0

GRID MEAN OF MAG(MA)

	65.95	65.85	65.75	65.65	65.55	65.45	65.35	65.25	65.15	65.05
42.95	33	180	233	107	205	257	306	315	0	0
42.85	224	147	99	183	204	161	163	185	140	0
42.75	276	171	210	207	0	124	98	48	66	113
42.65	159	108	125	153	124	75	76	97	131	0
42.55	0	59	39	0	72	96	91	103	132	129
42.45	-50	0	2	10	0	147	117	84	46	77
42.35	-33	-11	0	55	2	0	0	63	50	0
42.25	-19	2	11	13	5	-8	27	11	7	-62
42.15	-17	0	-7	-74	-61	-60	-166	0	0	-139
42.05	-41	-103	-129	-110	-161	-219	-231	-315	-353	0

MAG STATION

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

42.95	52	42	66	80	40	67	50	29	27	44
42.85	37	43	40	51	41	66	42	63	55	39
42.75	19	25	78	22	27	44	20	20	33	42
42.65	0	12	18	37	33	22	44	32	20	26
42.55	62	50	20	12	17	18	0	18	18	0
42.45	3	86	20	20	21	31	45	21	31	44
42.35	34	20	42	3	0	0	4	32	2	3
42.25	93	21	20	73	22	22	22	22	56	31
42.15	41	49	24	0	54	0	0	0	0	28
42.05	21	18	53	82	21	61	22	9	0	11

GRID MEAN OF MAG(MA)

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
42.95	-42	-119	-108	-107	-30	81	111	95	42	40
42.85	-168	-62	-159	-109	-132	19	13	89	147	233
42.75	-144	-125	-117	-143	-172	-81	7	74	161	236
42.65	0	-70	-86	-170	-88	-76	-11	20	71	202
42.55	-46	-105	-148	-194	-102	-144	0	5	104	0
42.45	53	-151	-164	-191	-161	-112	25	26	13	-48
42.35	-156	-133	-134	-191	0	0	28	23	32	-66
42.25	-183	119	99	-16	-7	41	111	49	-5	-27
42.15	-51	-1	8	0	51	0	0	0	0	-5
42.05	8	96	74	136	185	129	156	206	0	11

MAG STATIONS

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

GRID MEAN OF MAG(MA)

67.95 **67.85** **67.75** **67.65** **67.55** **67.45** **67.35** **67.25** **67.15** **67.05**

42.95	0	0	-72	-141	-208	-166	-145	-151	-156	-150
42.85	0	0	-138	-160	-231	-168	-117	-96	-160	-210
42.75	0	0	-146	-141	-160	-93	-143	-102	-80	-104
42.65	0	0	-145	-103	-125	0	0	0	-127	-114
42.55	0	0	0	-85	0	0	-64	-137	-122	-85
42.45	0	0	0	-83	0	0	0	0	-133	-139
42.35	0	0	0	-81	-99	-106	-118	-117	-172	-165
42.25	0	0	0	0	0	-64	-97	-156	-198	-198
42.15	0	0	0	0	0	0	0	0	0	0
42.05	0	0	0	0	0	0	0	0	-119	-102

MAG STATIONS

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
43.95	5	0	0	0	0	0	0	0	0	0
43.85	29	19	0	0	0	0	0	0	0	0
43.75	0	4	24	23	17	0	0	0	0	0
43.65	0	0	0	0	38	84	0	0	0	0
43.55	0	0	0	0	0	19	60	0	0	0
43.45	23	34	20	15	10	29	27	0	0	0
43.35	0	12	22	42	6	23	86	82	250	12
43.25	0	0	0	32	18	41	107	59	150	240
43.15	0	0	23	132	112	121	93	3	0	13
43.05	93	105	99	30	8	4	44	62	0	0

GRID MEAN OF MAG(MA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
43.95	-106	0	0	0	0	0	0	0	0	0
43.85	-132	-156	0	0	0	0	0	0	0	0
43.75	0	-166	-171	-179	-199	0	0	0	0	0
43.65	0	0	0	0	-204	-92	0	0	0	0
43.55	0	0	0	0	0	71	99	0	0	0
43.45	-202	-213	-218	-208	-114	-73	17	0	0	0
43.35	0	-191	-186	-157	-80	-16	41	34	-26	-195
43.25	0	0	0	-106	-36	55	39	-32	-78	-105
43.15	0	0	-181	-87	-28	23	-13	7	0	-96
43.05	-215	-208	-159	-78	-39	-7	-50	-84	0	0

MAG STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRID MEAN OF MAG(NA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
43.95	-150	-157	0	0	-39	-44	-31	-29	-25	-77
43.85	-563	-756	-194	-141	-130	0	0	0	0	0
43.75	0	0	-569	-336	-99	22	63	0	0	0
43.65	0	0	0	0	16	92	49	-53	-164	-198
43.55	0	0	0	0	0	0	10	-62	-131	-208
43.45	0	0	0	0	0	0	0	0	0	-184
43.35	0	0	0	0	0	0	0	0	0	0
43.25	-177	0	0	0	0	0	0	0	0	0
43.15	-208	0	0	0	0	0	0	0	0	0
43.05	-215	-221	0	0	0	0	0	0	-230	-207

MAG STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

GRID MEAN OF MAG(MA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

MAG STATIONS

	63.95	63.85	63.75	63.65	63.55	63.45	63.35	63.25	63.15	63.05
43.95	19	22	17	21	0	30	0	26	0	0
43.85	14	18	22	14	24	24	5	27	0	0
43.75	0	0	2	25	20	30	30	19	7	0
43.65	0	0	0	0	13	28	65	3	27	0
43.55	0	0	0	0	0	0	67	60	50	0
43.45	19	20	20	19	19	20	35	0	2	0
43.35	0	0	0	0	0	0	29	0	0	0
43.25	0	0	0	0	0	0	5	23	0	0
43.15	0	0	0	0	0	0	0	0	0	0
43.05	0	0	0	0	0	2	1	0	0	0

GRID MEAN OF MAG(MA)

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

43.95	-121	-196	-60	-133	0	-127	0	-125	0	0
43.85	-123	-223	-281	-139	-115	-100	-78	-15	0	0
43.75	0	0	-277	-212	-132	-42	-48	-12	-12	0
43.65	0	0	0	0	-163	-130	-36	-42	-42	0
43.55	0	0	0	0	0	0	-81	-59	-89	0
43.45	-95	-93	-40	-83	-111	-86	-33	0	-24	0
43.35	0	0	0	0	0	0	-41	0	0	0
43.25	0	0	0	0	0	0	19	-32	0	0
43.15	0	0	0	0	0	0	0	0	0	0
43.05	0	0	0	0	0	-94	-94	0	0	0

MAG STATIONS

	64.95	64.85	64.75	64.65	64.55	64.45	64.35	64.25	64.15	64.05
43.95	0	0	0	0	0	0	0	5	25	12
43.85	0	0	0	0	0	0	16	21	0	21
43.75	0	0	0	0	7	26	9	0	21	14
43.65	0	0	0	24	18	0	0	23	14	0
43.55	0	17	24	1	0	2	30	7	0	0
43.45	26	10	0	0	3	30	0	0	28	19
43.35	23	16	0	28	51	0	0	12	17	0
43.25	0	6	23	34	0	0	0	29	0	0
43.15	0	0	0	0	0	0	21	6	0	0
43.05	0	0	0	0	0	9	21	0	0	0

GRID MEAN OF MAG(MA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

43.95	0	0	0	0	0	0	0	-6	-53	-81
43.85	0	0	0	0	0	0	-1	-18	0	-164
43.75	0	0	0	0	-132	-149	37	0	-126	-161
43.65	0	0	0	-112	-58	0	0	-245	-217	0
43.55	0	-24	-66	-80	0	-188	-191	-216	0	0
43.45	10	16	0	0	-117	-169	0	0	-154	-62
43.35	33	39	0	-52	-26	0	0	-107	-126	0
43.25	0	3	1	-44	0	0	0	-95	0	0
43.15	0	0	0	0	0	0	-92	-99	0	0
43.05	0	0	0	0	0	-54	-71	0	0	0

MAG STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	0	0	0	0	0	0	0	0	0	0
43.75	0	0	0	0	0	0	0	0	0	0
43.65	0	0	0	0	0	0	0	0	0	0
43.55	0	0	0	0	0	0	0	0	0	0
43.45	0	0	0	0	0	0	10	25	8	7
43.35	0	0	0	1	0	2	19	0	43	47
43.25	57	54	52	40	7	34	9	25	1	0
43.15	56	24	17	18	74	49	39	7	0	0
43.05	72	83	65	58	87	69	54	31	0	0

GRID MEAN OF MAG (MA)

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

43.95	0	0	0	0	0	0	0	0	0	0
43.85	0	0	0	0	0	0	0	0	0	0
43.75	0	0	0	0	0	0	0	0	0	0
43.65	0	0	0	0	0	0	0	0	0	0
43.55	0	0	0	0	0	0	0	0	0	0
43.45	0	0	0	0	0	0	-132	-128	-37	25
43.35	0	0	0	-168	0	-70	-102	0	50	47
43.25	30	-49	-51	-94	29	-36	133	40	-17	0
43.15	71	-3	32	43	76	130	155	57	0	0
43.05	14	-52	-163	47	144	170	225	225	0	0

MAG STATIONS

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

43.95	128	98	80	96	70	114	0	0	0	0
43.85	132	92	44	115	9	0	0	0	0	0
43.75	98	35	103	63	83	33	0	0	0	0
43.65	89	36	17	36	48	50	3	0	0	0
43.55	90	53	63	38	45	80	49	2	0	0
43.45	46	5	5	30	28	8	40	57	2	0
43.35	12	78	32	20	47	6	0	34	65	0
43.25	40	26	86	77	84	96	49	37	63	95
43.15	54	48	38	69	85	51	82	48	28	25
43.05	12	24	0	20	22	58	39	51	66	59

GRID MEAN OF IMAG(MA)

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

43.95	-28	-42	-141	-98	-62	-71	0	0	0	0
43.85	-49	-77	-118	-110	-59	0	0	0	0	0
43.75	-19	-118	-158	-143	-115	-69	0	0	0	0
43.65	-58	-131	-184	-179	-26	-44	-112	0	0	0
43.55	-116	-123	-156	-147	8	-99	-162	243	0	0
43.45	-130	-193	-134	-102	-50	-68	4	17	-70	0
43.35	-152	-127	-160	-124	-29	294	0	49	49	0
43.25	-105	-101	-142	43	118	247	227	71	80	102
43.15	-246	-186	-116	-12	29	144	147	145	137	231
43.05	-235	-185	0	-55	2	30	29	37	52	70

MAG STATICNS

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

43.95	37	26	48	37	36	37	35	82	38	45
43.85	65	37	37	54	58	35	33	56	54	35
43.75	0	32	52	40	48	69	50	44	29	112
43.65	8	0	17	20	0	0	21	17	11	27
43.55	59	57	39	45	45	13	45	51	67	41
43.45	0	8	28	3	0	31	32	21	14	25
43.35	18	0	0	49	36	14	15	21	0	0
43.25	42	37	16	30	35	46	22	45	66	42
43.15	28	2	64	43	45	54	67	48	37	62
43.05	0	0	28	16	51	32	45	49	22	0

GRID MEAN OF MAG(MA)

	67.95	67.85	67.75	67.65	67.55	67.45	67.35	67.25	67.15	67.05
43.95	93	50	130	-131	-81	76	-51	-26	-53	9
43.85	-58	-15	-39	-23	-17	-40	-108	-6	-64	-76
43.75	0	-34	-141	-223	-187	-144	92	13	-62	-102
43.65	-87	0	-113	-128	0	0	65	-15	-145	-144
43.55	-32	278	172	-92	-204	-191	52	-45	-179	-141
43.45	0	-155	-74	74	0	-142	-109	-238	-239	-155
43.35	-106	0	0	-8	-36	118	-118	-238	0	0
43.25	-159	-99	-14	-28	173	133	-60	-241	-226	-24
43.15	-169	-151	-178	-95	200	-64	-83	-231	-195	-203
43.05	0	0	299	38	22	-31	-159	-206	-191	0

MAG STATIONS

	68.95	68.85	68.75	68.65	68.55	68.45	68.35	68.25	68.15	68.05
43.95	0	0	0	0	2	40	0	0	0	84
43.85	0	0	0	8	0	23	36	9	0	43
43.75	0	0	0	30	25	0	28	18	23	0
43.65	0	0	0	0	13	38	9	25	4	26
43.55	0	0	0	0	0	0	36	33	13	0
43.45	43	17	0	0	0	0	0	23	64	0
43.35	0	27	42	0	0	0	0	0	4	71
43.25	0	0	2	41	22	0	0	0	0	8
43.15	0	0	0	0	22	11	0	25	30	30
43.05	0	0	0	0	0	0	24	3	0	0

GRID MEAN OF MAG(MA)

	68.95	68.85	68.75	68.65	68.55	68.45	68.35	68.25	68.15	68.05
43.95	0	0	0	0	255	162	0	0	0	59
43.85	0	0	0	500	0	132	47	-14	0	99
43.75	0	0	0	266	78	0	-31	-115	-95	0
43.65	0	0	0	0	-120	-112	-98	-206	-58	17
43.55	0	0	0	0	0	0	110	166	-106	0
43.45	-120	50	0	0	0	0	0	-158	-188	0
43.35	0	-38	-124	0	0	0	0	0	-214	-181
43.25	0	0	117	-136	-282	0	0	0	0	-154
43.15	0	0	0	0	-99	-57	0	50	-135	-199
43.05	0	0	0	0	0	0	244	169	0	0

MAG STATIONS

69.95 69.85 69.75 69.65 69.55 69.45 69.35 69.25 69.15 69.05

GRID MEAN OF MAG(MA)

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRID MEAN OF MAG (MA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

MAG STATIONNS

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	19	20	19	19	20	19	19	20	20	20
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	24	24	26	26	24	24	25	25	24	25
44.25	0	0	0	0	0	0	0	0	0	0
44.15	22	3	0	0	0	0	0	0	0	0
44.05	0	19	22	22	7	0	0	0	0	0

GRID MEAN OF MAG(MA)

	61.95	61.85	61.75	61.65	61.55	61.45	61.35	61.25	61.15	61.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	-194	-173	-158	-130	-164	-178	-259	-277	-273	-207
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	-189	-34	-70	-87	-92	-127	-43	-24	-38	-23
44.25	0	0	0	0	0	0	0	0	0	0
44.15	-70	-102	0	0	0	0	0	0	0	0
44.05	0	-91	-78	-43	-29	0	0	0	0	0

MAG STATIONS

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	9
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	89	63	61	37	29	27	24	25	25	26
44.25	59	93	76	34	22	21	22	3	0	0
44.15	0	0	11	83	59	35	0	19	21	22
44.05	30	0	0	1	29	14	42	33	15	0

GRID MEAN OF MAG(MA)

	62.95	62.85	62.75	62.65	62.55	62.45	62.35	62.25	62.15	62.05
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44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	-207
44.55	0	0	0	0	0	0	0	0	0	0
44.45	0	0	0	0	0	0	0	0	0	0
44.35	-136	-110	-110	-145	79	-31	-77	-150	-203	-219
44.25	-80	-31	-16	6	27	-60	-60	-35	0	0
44.15	0	0	-15	-81	-208	-152	0	-45	-81	-93
44.05	-58	0	0	-88	-73	-317	-200	-224	-178	0

MAG STATIONNS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	0
44.55	0	0	0	0	0	5	0	0	0	0
44.45	0	0	0	0	0	27	75	65	26	5
44.35	4	21	20	20	46	57	4	43	92	111
44.25	30	0	5	33	35	27	29	0	0	0
44.15	18	40	29	24	0	28	29	0	11	23
44.05	24	31	38	0	0	29	20	9	0	7

GRID MEAN OF MAG(MA)

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	0
44.65	0	0	0	0	0	0	0	0	0	0
44.55	0	0	0	0	0	-113	0	0	0	0
44.45	0	0	0	0	0	-127	-140	-106	-49	-34
44.35	-149	-113	-73	44	-150	-126	-51	-130	-137	-156
44.25	-101	0	-285	-169	-84	-117	-74	0	0	0
44.15	-15	-54	-78	-99	0	-78	-171	0	-228	-170
44.05	96	-154	-135	0	0	-146	-169	-161	0	-106

MAG STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF IMAG(MA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

MAG STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

GRID MEAN OF MAG(MA)

65.95 **65.85** **65.75** **65.65** **65.55** **65.45** **65.35** **65.25** **65.15** **65.05**

MAG STATIONS

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

44.95	0	54	75	79	135	229	192	221	283	227
44.85	0	35	65	214	95	259	262	243	183	179
44.75	45	7	4	147	150	227	207	271	218	338
44.65	0	0	0	19	161	289	214	255	223	92
44.55	0	0	0	49	213	323	209	254	84	19
44.45	7	82	121	220	175	464	353	126	6	0
44.35	175	277	234	240	353	121	95	2	0	0
44.25	343	297	329	286	268	50	28	0	0	0
44.15	279	319	281	357	316	1	0	0	0	0
44.05	94	68	168	159	70	114	47	0	0	0

GRID MEAN OF MAG(MA)

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
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44.95	0	97	1	-17	-35	-54	-50	-39	-73	-87
44.85	0	-52	-38	-45	-50	-56	-47	-44	-58	-60
44.75	-98	-39	10	-23	-76	-80	-64	-57	-48	-23
44.65	0	0	0	-47	-70	-97	-91	-73	-20	14
44.55	0	0	0	-147	-72	-102	-101	-76	-10	58
44.45	-126	-209	-184	72	-37	-81	-57	-82	-51	0
44.35	-97	-54	35	-27	-36	-32	-40	10	0	0
44.25	63	11	2	-3	-16	-49	-40	0	0	0
44.15	42	35	26	-65	-96	-92	0	0	0	0
44.05	30	-14	-40	-39	-55	-68	-99	0	0	0

MAG STATIONS

	67.95	67.85	67.75	67.65	67.55	67.45	67.35	67.25	67.15	67.05
44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	13
44.65	0	0	0	0	0	0	0	0	31	37
44.55	0	0	0	0	0	0	0	51	23	0
44.45	0	0	0	0	0	15	70	91	99	26
44.35	0	0	0	16	30	63	50	102	186	267
44.25	0	0	35	20	32	129	39	145	184	356
44.15	30	20	20	46	37	34	140	125	194	213
44.05	17	23	0	0	0	0	54	44	46	71

GRID MEAN OF MAG(MA)

67.95 67.85 67.75 67.65 67.55 67.45 67.35 67.25 67.15 67.05

44.95	0	0	0	0	0	0	0	0	0	0
44.85	0	0	0	0	0	0	0	0	0	0
44.75	0	0	0	0	0	0	0	0	0	-150
44.65	0	0	0	0	0	0	0	-115	-125	
44.55	0	0	0	0	0	0	-215	-150	0	
44.45	0	0	0	0	0	-1205	-798	-38	-5	-49
44.35	0	0	0	-1227	-1033	-227	-54	-21	-19	-57
44.25	0	0	-323	-610	-61	-74	-57	-103	-34	63
44.15	149	137	-264	-233	-180	-249	-197	15	56	41
44.05	308	469	0	0	0	0	-9	-55	21	14

MAG STATIONS

68.95 68.85 68.75 68.65 68.55 68.45 68.35 68.25 68.15 68.05

GRID MEAN OF MAG (MA)

68.95 68.85 68.75 68.65 68.55 68.45 68.35 68.25 68.15 68.05

MAG STATIONS

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

GRID MEAN OF MAG (MA)

64.95 64.85 64.75 64.65 64.55 64.45 64.35 64.25 64.15 64.05

MAG STATIONS

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	3	50	75
45.35	0	0	0	0	2	96	128	31	30	102
45.25	0	15	10	25	69	66	81	22	64	70
45.15	85	92	77	0	0	0	78	69	26	99
45.05	16	30	60	50	45	0	0	31	36	0

GRID MEAN OF MAG(MA)

65.95 65.85 65.75 65.65 65.55 65.45 65.35 65.25 65.15 65.05

45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	86	94	77
45.35	0	0	0	0	-84	-38	13	37	58	134
45.25	0	-43	-15	-73	-97	5	43	93	89	100
45.15	-98	-54	-61	0	0	0	25	-36	8	-1
45.05	-71	-109	-93	-73	-70	0	0	-16	-14	0

MAG STATIONS

66.95 66.85 66.75 66.65 66.55 66.45 66.35 66.25 66.15 66.05

45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	0	0	0
45.35	0	0	0	0	0	0	0	0	0	0
45.25	0	0	0	0	0	0	0	0	0	0
45.15	0	0	0	0	0	0	3	0	61	150
45.05	0	0	0	21	20	75	101	211	225	198

GRID MEAN OF MAG (MA)

	66.95	66.85	66.75	66.65	66.55	66.45	66.35	66.25	66.15	66.05
45.95	0	0	0	0	0	0	0	0	0	0
45.85	0	0	0	0	0	0	0	0	0	0
45.75	0	0	0	0	0	0	0	0	0	0
45.65	0	0	0	0	0	0	0	0	0	0
45.55	0	0	0	0	0	0	0	0	0	0
45.45	0	0	0	0	0	0	0	0	0	0
45.35	0	0	0	0	0	0	0	0	0	0
45.25	0	0	0	0	0	0	0	0	0	0
45.15	0	0	0	0	0	0	-85	0	-24	-117
45.05	0	0	0	-13	-106	-102	-116	-111	-82	-103

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRID MEAN OF MAG(MA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

47.95	0	29	3	0	0	27	0	0	0	24
47.85	0	0	30	0	0	27	0	0	0	0
47.75	0	0	26	5	0	27	0	0	0	0
47.65	0	0	0	30	0	26	0	0	0	0
47.55	0	0	0	17	15	26	0	0	0	0
47.45	0	0	0	0	31	25	0	0	0	0
47.35	0	0	0	0	6	50	0	0	0	0
47.25	0	0	0	0	0	49	5	0	0	0
47.15	0	0	0	0	0	13	48	11	0	0
47.05	0	0	0	0	0	0	0	40	33	14

GRID MEAN OF MAG (MA)

	60.95	60.85	60.75	60.65	60.55	60.45	60.35	60.25	60.15	60.05
47.95	0	-72	-48	0	0	-164	0	0	0	-237
47.85	0	0	-65	0	0	-95	0	0	0	0
47.75	0	0	-16	44	0	-12	0	0	0	0
47.65	0	0	0	48	0	-21	0	0	0	0
47.55	0	0	0	17	-22	-49	0	0	0	0
47.45	0	0	0	0	-77	-85	0	0	0	0
47.35	0	0	0	0	-93	-81	0	0	0	0
47.25	0	0	0	0	0	-28	-18	0	0	0
47.15	0	0	0	0	0	-18	27	61	0	0
47.05	0	0	0	0	0	0	0	54	86	110

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

48.95	0	0	0	0	0	0	0	0	0	0
48.85	0	0	0	0	0	0	0	0	0	0
48.75	0	0	0	0	0	0	0	0	0	0
48.65	0	0	0	0	0	0	0	0	0	0
48.55	0	0	0	0	12	0	0	0	0	0
48.45	0	0	0	0	29	0	0	0	26	0
48.35	0	0	0	0	29	0	0	0	7	21
48.25	5	0	0	0	26	2	0	0	0	28
48.15	30	0	0	0	0	28	0	0	0	29
48.05	11	20	0	0	0	28	0	0	0	28

GRID MEAN OF MAG(MA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

48.95	0	0	0	0	0	0	0	0	0	0
48.85	0	0	0	0	0	0	0	0	0	0
48.75	0	0	0	0	0	0	0	0	0	0
48.65	0	0	0	0	0	0	0	0	0	0
48.55	0	0	0	0	-71	0	0	0	0	0
48.45	0	0	0	0	-135	0	0	0	23	0
48.35	0	0	0	0	-158	0	0	0	76	49
48.25	1	0	0	0	-161	-180	0	0	0	7
48.15	-64	0	0	0	0	-189	0	0	0	-31
48.05	-123	-118	0	0	0	-191	0	0	0	-152

MAG STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRID MEAN OF MAG(MA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

MAG STATIONS

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

GRID MEAN OF MAG (MA)

60.95 60.85 60.75 60.65 60.55 60.45 60.35 60.25 60.15 60.05

MAG STATIONS

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

GRID MEAN OF MAG(MA)

61.95 61.85 61.75 61.65 61.55 61.45 61.35 61.25 61.15 61.05

MAG STATIONS

62.95 **62.85** **62.75** **62.65** **62.55** **62.45** **62.35** **62.25** **62.15** **62.05**

GRID MEAN OF MAG(MA)

62.95 62.85 62.75 62.65 62.55 62.45 62.35 62.25 62.15 62.05

49.95	532	37	0	0	0	0	0	0	0	0
49.85	304	-4	-113	0	0	0	0	0	0	0
49.75	0	-140	436	482	-45	0	0	0	0	0
49.65	0	0	0	0	192	265	-49	437	0	0
49.55	0	0	0	0	0	0	0	85	-83	-52
49.45	0	0	0	0	0	0	0	0	0	-116
49.35	0	0	0	0	0	0	0	0	0	0
49.25	0	0	0	0	0	0	0	0	0	0
49.15	0	0	0	0	0	0	0	0	0	0
49.05	0	0	0	0	0	0	0	0	0	0

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MAG STATIONS

63.95 63.85 63.75 63.65 63.55 63.45 63.35 63.25 63.15 63.05

GRID MEAN OF MAG(MA)