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SCINTREX

A REPORT ON
GRAVITY CHECK SURVEY OVER RMIP ANOMALIES
ON THE BOCO SIDING AREA
WITHIN E.L. 17/88, QUE RIVER, TASMANIA
ON BEHALF OF
SAMISEN PTY. LTD.

SCINTREX

PRIVATE AND CONFIDENTIAL

A REPORT ON GRAVITY CHECK SURVEY OVER RMIP ANOMALIES ON THE BOCO SIDING AREA WITHIN E.L. 17/88, QUE RIVER, TASMANIA ON BEHALF OF SAMISEN PTY. LTD.

BY

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SYDNEY, N.S.W.

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SCINTREX PTY. LTD.
GEOPHYSICAL CONSULTANTS AND CONTRACTORS

SUMMARY

A series of five areas where induced polarization anomalies were defined, were selected for detailing with a gravity survey.

Only one of the RPS anomalies defined in the February-March RMIP survey showed higher than background mass surplus, and then not to a sufficiently high degree to be judged significant.

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INTRODUCTION

Following an RMIP survey carried out by Scintrex Pty. Ltd. in the Boco Siding area of EL 17/88 between 15th February and 13th March, 1989, and described in a report by the author dated May, 1989, Scintrex Pty. Ltd. carried out a series of short gravity traverses over selected RMIP anomalies.

The work was requested by MR. I. Shulman, Chairman of Samisen Pty. Ltd., and carried out by Mr. P. Brown,BSc, and Mr. M. Joint,BSc, over $5\frac{1}{4}$ production days between 20th July and 5th August, 1989. The author visited the site during the survey.

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EQUIPMENT

The gravity meter employed was the Scintrex CG-3 microprocessor based IGS autograv model. The meter has many advantages over existing meters in the button grass plains environment of the Boco Siding, not least of which was the electronic tilt sensor feature, and being able to be remote from the meter during reading time, thus reducing problems generated by the meter settling in the soft ground. A specification sheet is appended.

Levels were read only locally along the line using a Fuji T-202 theodolite and staff with no attempt being made to tie in the stations to one another.

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DATA PRESENTATION

The Bouguer gravity data is presented in profile form in absolute units using a density correction factor of 1.8.

The elevation, together with the MMR and RPS data are also shown on the same profile.

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DISCUSSION OF RESULTS

While some seven zones of internal polarization were defined over the section of the grid surveyed, the associated MMR data showed that the sources had little resistive contrast with the enclosing rocks. Ideally the massive copper (lead-zinc) or lead-zinc lenses sought would be expected to show strong and weak conduction relative to the enclosing rocks. Nevertheless six of the anomalies showing internal polarization were selected for detailing, plus one area in the southern section of the RMIP survey grid which showed strong conduction but weak polarization.

Each section surveyed is separately discussed below.

Lines 4500N 3600E to 4000E
4600N 3600E to 4000E

This section of the grid was characterised by a broad moderate MMR response of up to +60% with some sharp **relatively** high RPS peaks to +0.5° RPS.

The gravity data shows a broad low of approximately one milligal which mirrors the MMR data.

Conclusion It would appear that the anomaly on the RMIP survey was due to polarization within a rock unit less resistive than the enclosing rocks. Pyritic and/or graphitic shales are the suggested source.

Line 4600N 3300E to 3700E

A series of low amplitude internal polarization anomalies +0.5° RPS **relative** to background at 3425E, 3475E and 3575E showed no response in the MMR data. The gravity data over this section shows no significant response over these minor anomalies.

Conclusion The source is disseminated sulphides (and/or graphite) within a rock unit showing no resistive contrast with the enclosing rocks.

Lines 5100N 3400E to 3800E
5000N 3400E to 3800E

A series of +0.5° to +0.7° RPS responses from a flat section of MMR were interpreted to be due to disseminated sulphides and/or graphite from within a uniform sequence of rocks.

The gravity data shows no specific significant responses associated with these maxima.

Conclusion The RPS features observed are due to minor disseminated sulphides (and/or graphite), probably of 'formational' origin.

Line 5600N 3400E to 4000E

Two significant groups of internal polarization responses were recorded- +1.1°RPS at 3450E and +0.5° at 3525E and to the east up to 1½° RPS at 3800E. The MMR data over these responses is essentially featureless, implying either a disseminated source, or if massive, electrically discontinuous. The gravity data similarly shows only minor increases (after allowing for the gradient in the field).

Conclusions The RPS anomalies defined are due to a disseminated source (sulphides and/or graphite) within rocks having little resistive contrast with the enclosing rocks.

Lines 6100N 2975E to 3500E
6000N 2975E to 3550E

The best RMIP response was recorded on line 6000N centred at 3175E with subsidiary maxima at 3225E and 3325E. While this was accompanied by a depression in the MMR from a local background of about zero to -30%, indicating a resistive host, the magnitude of the RPS anomaly was considered worthy of further investigation.

The gravity data on line 6100N showed a local increase of 0.6 milligals with individual maxima in the gravity data tending to coincide with individual RPS maxima.

Conclusion While sulphides almost certainly contribute to the gravity anomaly, the magnitude thereof does not warrant further work.

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CONCLUSIONS

The RMIP survey carried out over a section of EL 17/88 in the Boco Siding area, yielded a series of polarization sources which are interpreted as being due to disseminated (formational ?) sulphides and/or graphite.

The gravity survey carried out showed only a weak to moderate anomaly of 0.6 milligals (±) over the sections of lines 6000N and 6100N centred at 3175E ±50 metres and east and west thereof. However, this is not considered to have economic potential.

Respectfully submitted on behalf of:
SCINTREX PTY. LTD.

A.W. Howland-Rose,MSc,DIC,FIMM,FAusIMM,FAIG,FGS,CEng.
Geophysicist

SCINTREX CG-3 and IGS-2/CG-4

Autograv Automated Gravity Meters

How the Autograv's microprocessor-based automation contributes to ease of operation and high accuracy in gravity surveying:

- Reading resolution of 0.01 mGal
- Worldwide range without resetting
- Repeatability of 0.01 mGal
- Measures at the simple press of a key
- Samples each second, stacks, calculates standard deviations and rejects spurious values
- Records in solid state memory
- Outputs to a printer or computer
- No need to pack and unpack between stations

Brief Description

The New Scintrex Autograv is a microprocessor-based, automated gravity meter with numerous revolutionary features. The CG-3 Autograv provides the essentials of a full worldwide range of 7000 mGals, without the need for resetting, combined with a measurement resolution of 0.01 mGal. Operator error is reduced through the automatic taking of readings which are continuously sampled for real time signal enhancement and statistical analysis. This ensures accurate readings which the Autograv then automatically corrects for earth tides and tilt errors. These readings are then stored in solid-state memory for later outputting to a printer, modem or microcomputer. All of this capability comes in a rugged, compact transit case which will slide conveniently under an aircraft seat.

The sensing element of this Gravity Meter is based on a fused quartz elastic system which takes full advantage of the remarkable elastic properties and strength of this material. The gravitational force on the proof-mass is balanced by a spring and a relatively small electrostatic restoring force. A change in gravity alters the position of the mass which is sensed by a capacitive displacement transducer. An automatic feedback circuit applies DC voltages to the capacitor plates producing an electrostatic force on the mass which brings it back to a null position. The feedback voltage, which is a measure of the relative value of gravity at the reading site, is converted to a digital signal and then transmitted to the instrument's data acquisition system for processing, display and storage.

The parameters of the CG-3 gravity sensor and its electronic circuits are chosen so that the feedback voltage covers a range of over 7,000 mGals without resetting. The use of low noise electronic design together with a highly accurate autocalibrating analog-to-digital converter results in a resolution of 0.01 mGal, enabling the gravity meter to be used for both detailed field investigations and large scale regional or geodetic surveys.

One of the convenient new features of the Autograv design is its electronic tilt sensors which provide greater accuracy than conventional bubble levels. The outputs from the sensors are displayed on high resolution meters on the instrument front panel and also transmitted to the data acquisition system for storage and digital display.

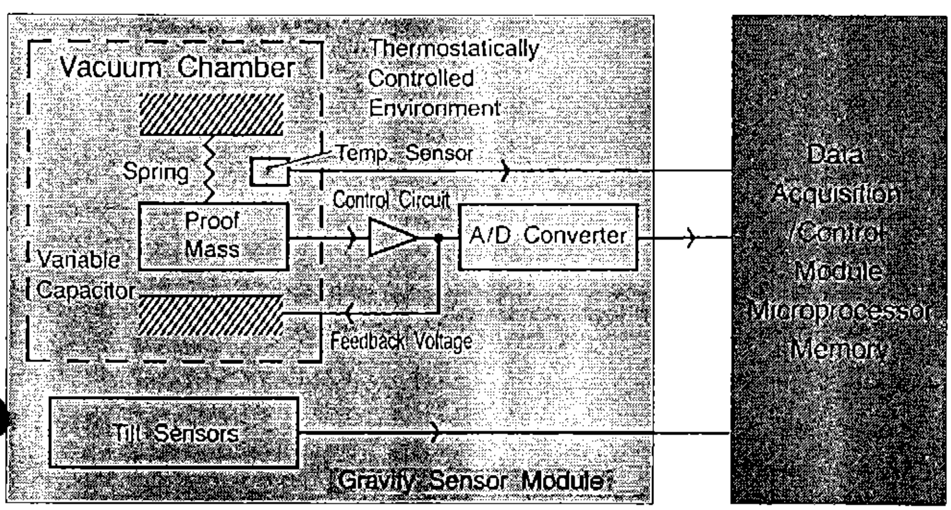
Protection from ambient temperature changes is provided by locating the quartz elastic system, the analog-to-digital converter, sensitive electronic components and the tilt sensors inside a high stability, two-stage, thermostatically-controlled environment. In addition, the entire gravity sensing mechanism is enclosed in a sealed vacuum chamber, isolating it from variations in atmospheric pressure. The instrument is inherently free from errors due to magnetic field variations as the sensor is made from non-magnetic fused quartz.

The Autograv is very simple to operate, requiring only a few keystrokes to take a measurement, store data in the solid-state memory and advance the station coordinates. Information is clearly displayed on a 32 character LCD display. The stored data can be output to a printer, modem, cassette recorder or microcomputer.

The packaging represents another innovation which makes operation easier. The integrated housing doubles as a carrying case, eliminating the need for unpacking and packing the sensor at each station. The lack of a cable connecting the sensor and battery minimizes accidental upsets.

Scintrex can supply software for use on a microcomputer. These fully documented, easy to use programs will correct, process, grid and plot your gravity data.

A gravity meter capability identical to that of the CG-3 is available by selecting instrumentation from the Scintrex IGS Integrated Portable Geophysical System. Details regarding the IGS-2/CG-4 *Autograv* Automated Gravity Meter configuration and its additional features are provided later in this brochure. In terms of use for gravity measurements all specifications of the CG-3 are also met by the IGS-2/CG-4.



Autograv principle of operation.

Features

Worldwide coverage with 0.01 mGal resolution. The CG-3 combines a measurement range of over 7,000 mGals without resetting and a reading resolution of 0.01 mGal. These two features enable the gravity meter to be used for detailed local investigations, comprehensive regional surveys or large scale geodetic studies.

Accurate, automatic measurements. With the fully automated capabilities of the Autograv, reading errors common to other older gravity meters due to optical parallax, operator judgement and mechanical design, are eliminated. Accurate measurements are taken by simply pressing a key. The measurement, along with other survey information, is stored in fail-safe, solid-state memory for later retrieval. As noise reduction is accomplished by a signal averaging technique, measurement time depends on local seismicity. Under most conditions reading duration is 20 seconds.

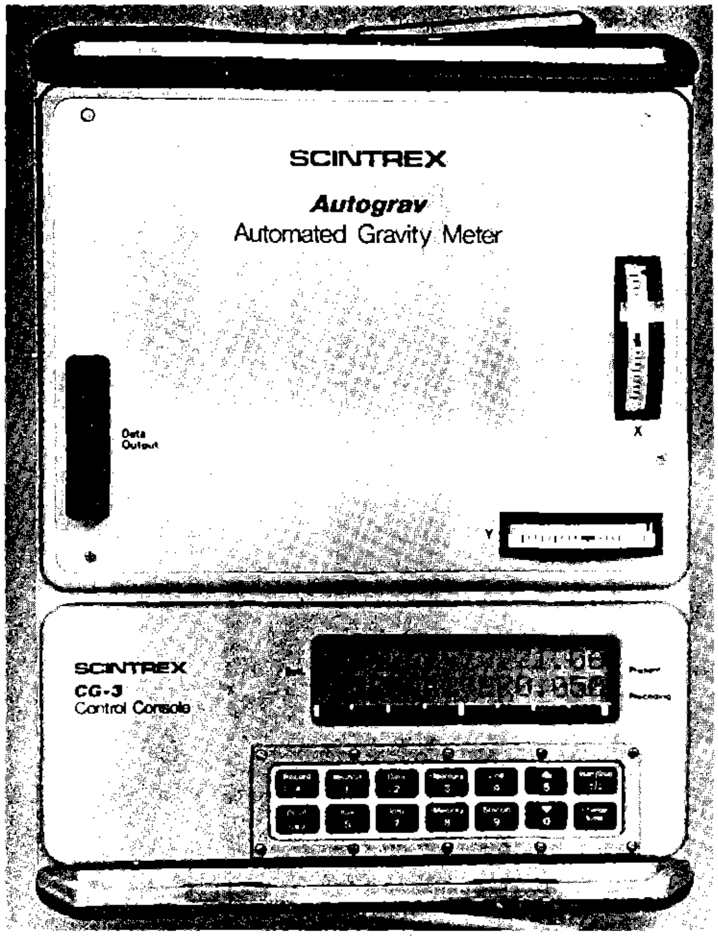
It is not necessary to record every measurement. Several readings can be taken before one is selected for recording. Alternatively, more than one value can be recorded with identical coördinates at different times.

Additional information can also be entered at the time of measurement for recording in memory. Eight blocks of data, each containing up to a five digit signed number can be recorded.

Accurate calibration. The use of a well defined guidance system for the proof-mass allows the gravity meter to be initially calibrated with an accuracy of approximately 0.01% on a tilt table. The calibration curve is linearized in software and the output is displayed directly in mGals. The accuracy of the calibration is ensured by the use of high stability electronic components and a software controlled procedure in which the analog-to-digital converter is calibrated by an internal reference before each reading.

Before shipment the calibration of each instrument is checked on a 120 mGal test range established and maintained by the Geological Survey of Canada.

Low drift. The extremely stable operating environment of the quartz elastic system allows the long-term drift of the sensor to be accurately predicted and a real time software correction reduces it to less than 0.02 mGals per day.



Rugged, robust sensor. The inherent strength and excellent elastic properties of fused quartz together with limit stops around the proof-mass permit the instrument to be operated without internal clamping. Further protection is provided by a durable shock mount system.

Temperature and pressure control. The Autograv sensing element is sealed in a temperature-stabilized vacuum chamber to protect it from variations in the ambient temperature and changes in atmospheric pressure. The signal from a temperature sensor in close contact with the elastic system is used to make a software correction for any small residual temperature changes.

Electronic tilt sensors. Easy-to-read meters mounted on top of the instrument are connected to electronic tilt sensors which provide greater accuracy, reliability and stability than conventional bubble levels. Leveling can be accomplished faster and operator errors reduced through this feature. Instrument tilt can also be displayed digitally and, as an aid to data quality control, it is automatically recorded at each station.

Automatic tilt compensation. Using constantly updated information supplied from the internal tilt sensors, the Autograv can automatically compensate measurements for changes in orientation. This operator selectable feature ensures that when measurements are taken on unstable ground errors due to instrument movement will be automatically eliminated.

Features

Automatic tidal corrections. Based upon geographical location and time zone information entered by the operator, the Autograv will automatically calculate and apply a real time tidal correction to each reading. This feature is operator selectable.

Solid-state data recording. Header information, observed values, station number, line number and time for each observation are all recorded for each measurement. The standard, internal 16K RAM solid-state memory is large enough to store up to 420 stations. To store more data, the memory can be expanded in 8K RAM increments to a maximum of 48K.

A set of built-in miniature batteries, charged from the main batteries, will keep the memory intact for several days in the event of main battery failure.

Outputs to many peripheral devices. The RS-232C port with keypad selectable baud rates and carriage return delays permit data to be output to many commonly available devices. A digital printer can be used to print data as listings or as profile plots. A modem can be used to transmit data to head office via a telephone line, or a magnetic tape recorder can store data for future computer processing.

Data can be output directly into a portable microcomputer so that data archiving on floppy disk, or additional processing, can be done in the field. In addition, several data dumps can be made sequentially from the memory.

Simple, automatic plots. Only a printer is required to output header information as well as data listings or profile plots in the field. This immediate, error-free output enhances in-field quality control and saves time and effort compared to manual data compilation.

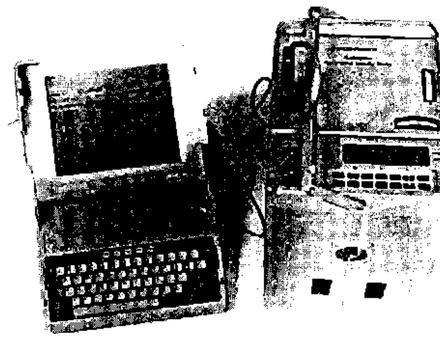
When profiles are output onto a printer, any two parameters can be selected for simultaneous plot printing. Scale factors can then be selected which greatly enhance the resolution of the data to be plotted as well as a bias value which can be selected to establish a predetermined threshold for the plotting of data. In the profile displays, the actual station numbers and data values are also printed numerically.

Statistical parameters. A reading is obtained by continuously averaging a series of one second samples. The standard deviation of these samples can be viewed on the display and used by the operator to estimate the measurement time to obtain sufficient accuracy. The standard deviation is stored in memory.

Noise rejection. Measurement interference due to locally induced shocks and vibrations can be eliminated on a sample-by-sample basis. Values of more than four standard deviations from the mean during a measurement are automatically rejected.

Cycling mode. The cycling mode can be employed to automatically record a series of gravity measurements at a fixed site.

Analog output. A digital-to-analog converter provides an output for use with a chart recorder. When this feature is used with the cycling mode it provides a pseudo-analog record of the gravity meter output in real time.



Autograv outputs data to computers.

Header Information

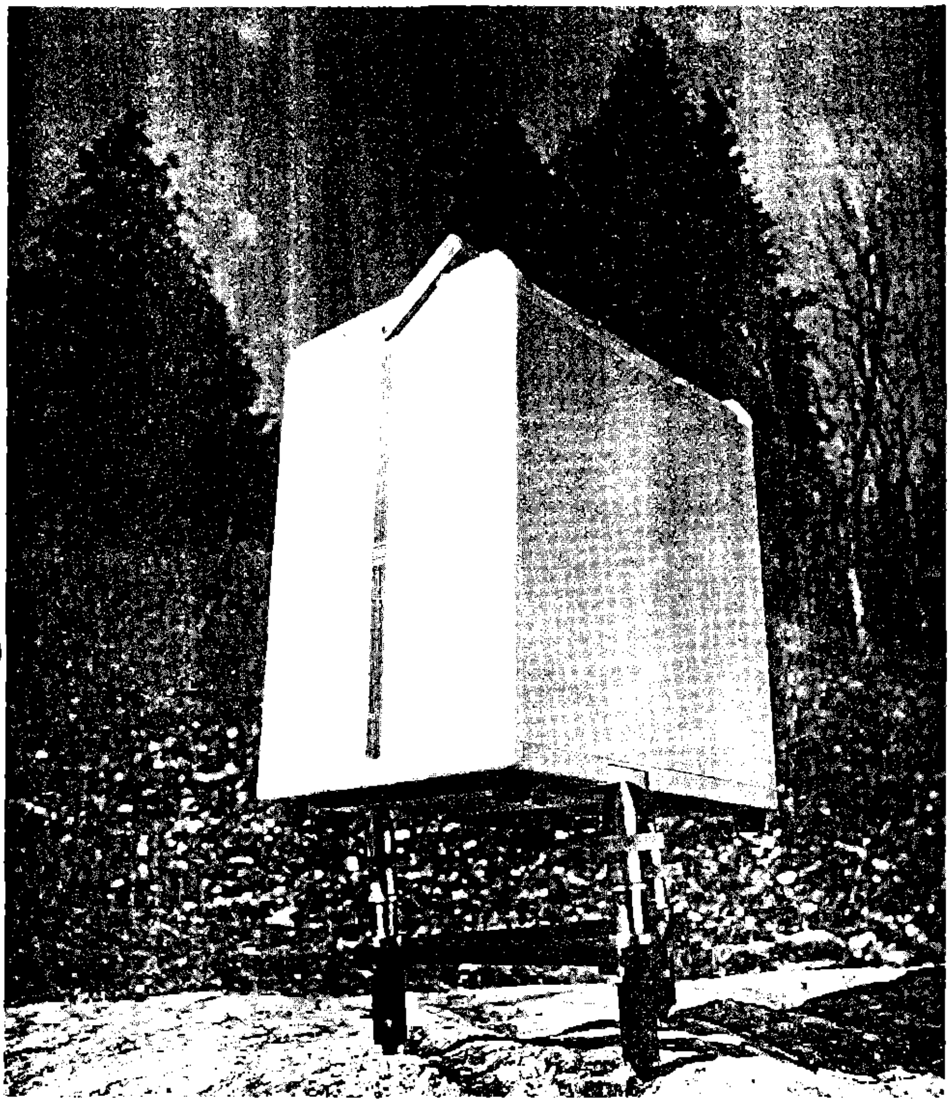
```
SCINTREX V1.6        CG-3  GRAVIMETER / Cycling Mode  R1.0
Cycle Time:      58                                          Ser No:       2.
Line:     1.  Grid:       1.  Job:      0.  Date: 88/02/08   Operator:     1.

Drift Correction Start   Time: 09:30:11        On-Line Tilt Corrected = "*"
                         Date: 88/02/03
Gravity Reference:             0.5             Tilt y sensitivity:       178.6
Gravity constant #1:    5485.938               Tilt x sensitivity:       175.4
Gravity constant #2:    -7.76229               Temperature constant:    -0.183
Drift constant:                0.2             Deg.Latitude:             43.67
GMT Difference:                5.              Deg.Longtitude:           79.61
```

Data

Station	Grav.	ER.	Tilt x	Tilt y	Temp.	Tide	Dur	# Rej	Time
10.	4232.30	0.002	2.	-4.	-1.69	0.037	36	0	17:15:10
10.	4232.30	0.003	2.	-4.	-1.68	0.037	36	0	17:16:10
10.	4232.30	0.003	2.	-4.	-1.69	0.037	36	0	17:17:10
10.	4232.30	0.003	2.	-4.	-1.68	0.037	36	0	17:18:10
10.	4232.30	0.003	2.	-4.	-1.68	0.037	36	0	17:19:10
10.	4232.30	0.003	2.	-4.	-1.69	0.036	36	0	17:20:10
10.	4232.29	0.003	2.	-4.	-1.68	0.036	36	0	17:21:10

Typical Autograv Printout: *The header information presented at the top of each data listing provides a summary of the survey parameters and constants used by the instrument. Eight variables are recorded at each station: 1) corrected gravity, 2) standard deviation, 3) tilt about the X-axis, 4) tilt about the Y-axis, 5) gravity sensor temperature, 6) tidal correction, 7) duration of measurement and 8) number of rejected samples. In addition, at the end of each station's listings is the time at which the measurement was initiated.*

Features



The base of the Autograv indexes easily into the tripod.

Power Supply. The internal, rechargeable battery provides sufficient power to operate the instrument throughout a normal survey day.

Worn inside the operator's coat during cold weather operation, the Belt Battery Pack is used to keep rechargeable batteries warm so that their lifetime can be extended.

The battery voltage can be checked anytime on the display and there is an audible low battery level alarm. If the batteries are not replaced or recharged, then the instrument will eventually stop measuring in order to eliminate the chance of corrupted data being measured or recorded.

In addition, the instrument can be operated from any external 12 V DC power supply or battery capable of supplying 2 amperes. A special optional cable facilitates this application.

Speaks your language. Your operator will find it very easy to take measurements with the Autograv due to the fact that it can literally speak your own language, provided you use the Latin alphabet. The displayed messages are in actual words, not codes or symbols enabling the operator to quickly learn how to use the instrument in an error-free manner.

32 character LCD display. Messages and data are spelled out clearly in two lines of 16 characters each, on a display which is easy to read in either bright sunlight or dim conditions..

Program access lock-out. Once the survey parameters have been set, access to the programming function can be barred, preventing the unintentional change of system setup menus during surveys.

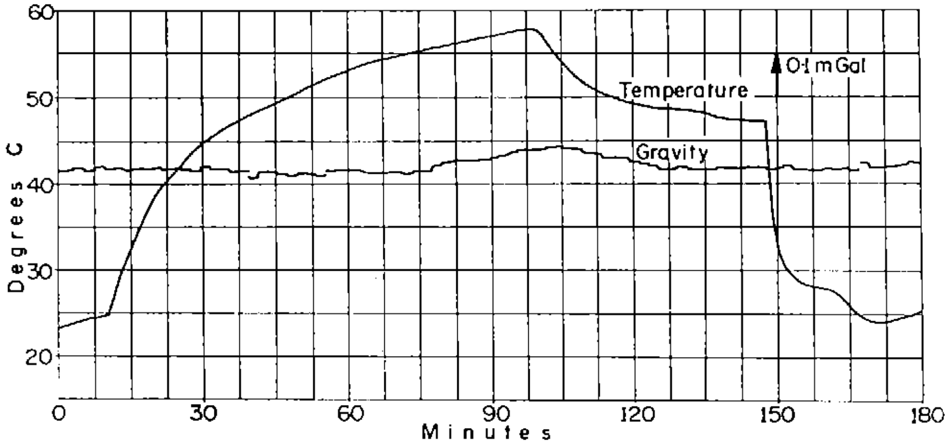
Real time clock. The built-in real time clock shows day, month and year as well as hour, minute and second, information which is recorded with each measurement. The clock is accurate to one second over 12 hours over the full operating range of the instrument. It is easily reset, if required. Time can be shown on the display, after two keystrokes.

Integrated instrument housing. The gravity sensor, solid-state control system and battery are integrated into a single, easy-to-use package. The base of the Autograv case incorporates a specially designed kinematic mounting system which indexes onto the tripod further increasing the stability of the instrument.

Wide operating temperature range. All specification are met over the –40°C to +45°C. Optionally, Autograv meters may be supplied rated to +50°C. For use below –20°C the Display Heater Option, and Belt Battery Pack should be used.

Autograv Accuracy

The high accuracy of the Autograv Gravity Meters comes about mainly through automation, robust design, low drift, precise calibration and freedom from tares. Field repeatability tests are perhaps the best measure of a gravity meter's performance. ***Field testing of Autograv meters demonstrates that the standard deviation of the difference between individual readings and station means is less than 0.01 mGal, that is, less than the reading resolution of the CG-3 and IGS-2/CG-4 instrument models.***



Autograv temperature test.

Orangeville-Orillia Test Range

Using a number of LaCoste and Romberg G and D meters, the Geological Survey of Canada has established a 140 km test profile north of Toronto which covers a 120 mGal range. Typical runs on this profile with Autograv Gravity Meters result in: 1) the largest difference between repeat readings at any station is 0.02 mGal, 2) the standard deviation of the difference between the individual readings and reference values is 0.008 mGal and 3) the linearity is 0.015%. These repeatabilities have been achieved even when the instrument is transported between stations over badly corrugated, unsealed roads.

Temperature Coefficient

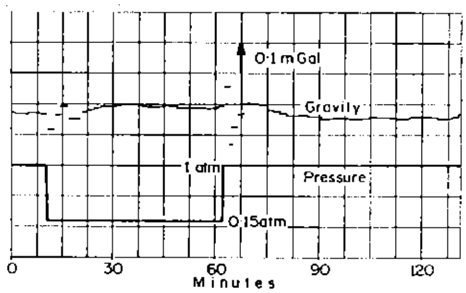
The automatic cycling mode and analog chart recorder output are ideal features for use when Autograv Gravity Meters undergo tests. They permit a permanent record of gravity to be made with changes over time.

In the high temperature test, an oven is placed over an Autograv which is heated from room temperature to above its maximum operating temperature over about 2 hours. The oven is then removed allowing the instrument to return rapidly to room temperature. Typically, the temperature coefficient of an Autograv is less than 0.001 mGal/°C within its operating temperature range.

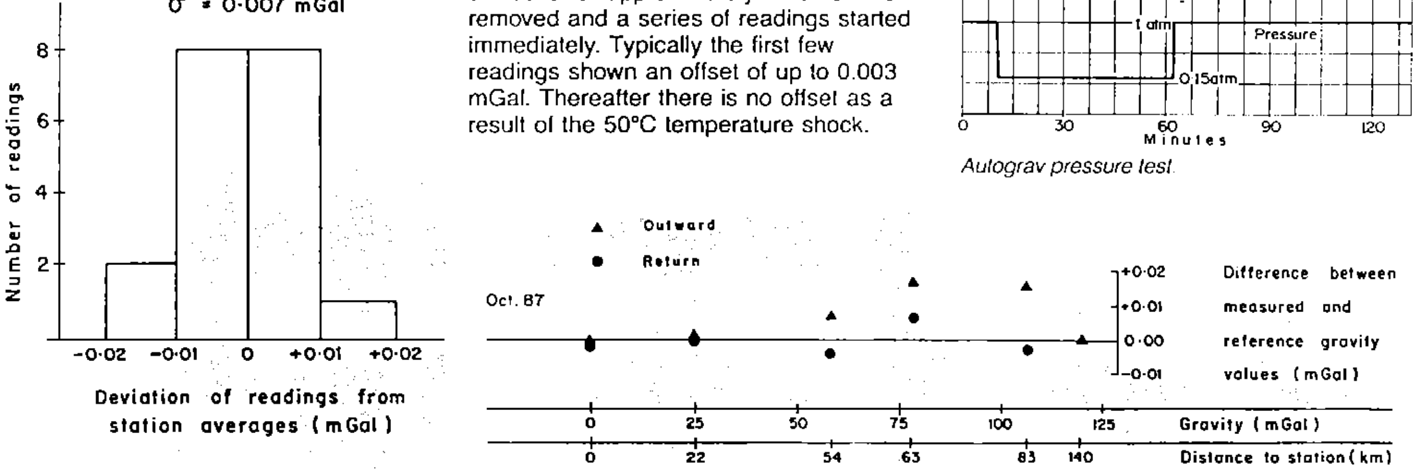
For the low temperature test, a series of readings is made at room temperature, then the Autograv is placed in a freezer at –30°C for approximately 4 hours. It is removed and a series of readings started immediately. Typically the first few readings shown an offset of up to 0.003 mGal. Thereafter there is no offset as a result of the 50°C temperature shock.

Pressure Coefficient Tests

To determine the pressure sensitivity of an Autograv it is placed in a vacuum chamber. The pressure is quickly reduced from 1 to 0.15 atmosphere where it is held for up to 1 hour before being quickly returned to normal pressure. While offsets of up to 0.1 mGal occur at the two step function changes, the observed gravity values quickly return to normal. The pressure coefficient is typically less than 0.03 mGal/atm. Errors are therefore negligible for the maximum pressure changes which might be observed in the field. This strenuous test also proves that no damage will be done to an Autograv which is transported in an unpressurized aircraft.



Autograv pressure test.

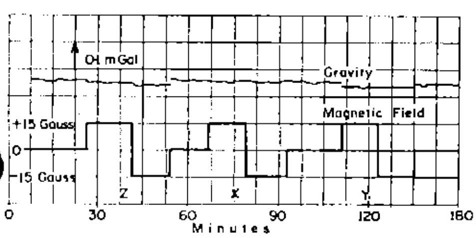


Test results for an Autograv on the Orangeville-Orillia Test Range.

Autograv Accuracy

Magnetic Field Coefficient

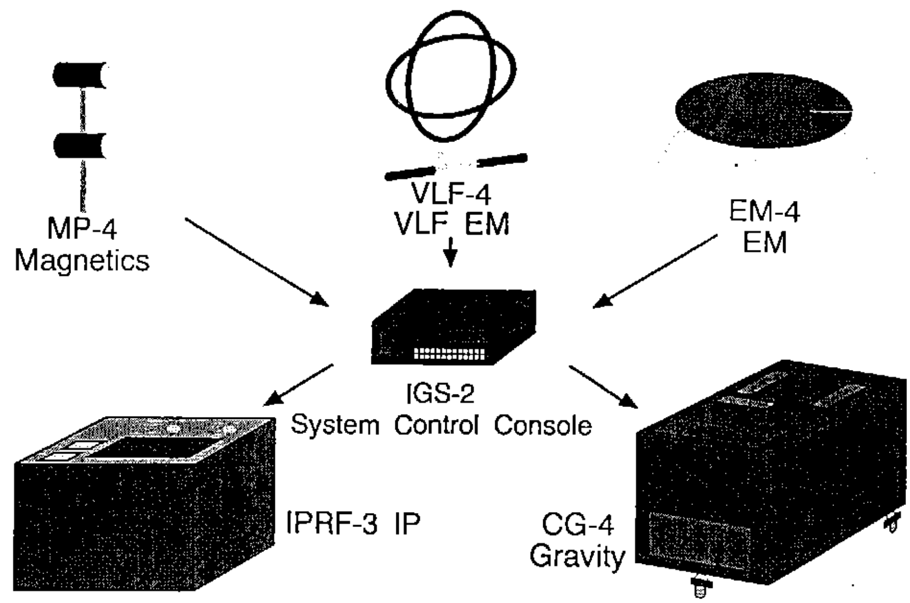
Gravity Meters having metal elastic systems may exhibit errors due to orientation in the earth's magnetic field or when used over highly magnetic rock types. To prove the insensitivity of an Autograv to such errors, a coil is oriented along each of three perpendicular axes and fields of +15 and −15 Gauss (30 to 60 times the earth's magnetic field) are applied. The maximum deflection is no more than 0.02 mGal. This test demonstrates that the earth's magnetic field will not cause measurement errors and that no damage will be done to an Autograv which is exposed to strong industrial magnetic fields.



Autograv magnetic field test

The IGS-2/CG-4/MP-4 configuration permits one operator to efficiently perform both gravity and magnetic measurements.

IGS-2/CG-4 Configuration



The versatile IGS-2 system Control Console reduces instrumentation, capital costs, servicing expenses and operator training to a minimum.

The performance specifications of the IGS-2/CG-4 configuration are identical to those of the CG-3. ***The modular design of the IGS-2/CG-4, however, allows the user greater flexibility as the IGS-2 Console can be removed from the CG-4 Console and used with a variety of other Sensor Options which are available from the IGS family of instruments.*** Combinations of these IGS Sensor Options can reduce your investment in instrumentation and permit a single operator to carry out certain combined measurements, thereby reducing survey costs.

A CG-3 can be upgraded to an IGS-2/CG-4 by returning it to the Scintrex plant for modifications to the data acquisition/control unit.

To perform gravity measurements using an IGS-2 System Control Console, the following items are required: 1) A CG-4 Carrying Case, 2) A CG-4 Automated Gravity Meter Sensor which is installed, at the factory, inside a CG-4 Carrying Case, 3) An EPROM that contains the IGS-2/CG-4 gravity program which is installed on the IGS-2 microprocessor board, 4) A Gravity Method Printed Circuit Board for installation inside an IGS-2 Console, and 5) Standard CG-3 accessories.

Technical Description of the CG-3 and IGS-2/CG-4 *Autograv* Automated Gravity Meters

Reading Resolution
0.01 milligal.

Minimum Operating Range
7000 milligals, without resetting.

Residual Long-term Drift
Less than 0.02 milligal/day.

Typical Repeatability
Less than 0.01 mGal standard deviation.

Range of Automatic Tilt Compensation
± 200 arc sec.

Dimensions
240 mm x 310 mm x 320 mm.

Weight
12 kg, including standard battery.

Power Consumption
5 W at +25°C.

Operating Temperature Range
–40°C to +45°C. Optionally to +50°C.

Interval Between Readings in Cycling Mode
Adjustable from 42 to 99999 seconds.

Standard Memory
16K RAM internal solid-state memory records up to 420 gravity observations. Memory can be expanded to 48K RAM.

Noise Rejection
Samples of more than 4 standard deviations from the average are rejected, if this feature is selected upon initialization of the instrument.

Displayed and Recorded Data
Corrected Gravity, Standard Deviation, Tilt about the X-axis, Tilt about the Y-axis, Gravity Sensor Temperature, Tidal Correction, Duration of Measurement, Time at start of measurement and Header Information (including date and initialization constants).

Digital Display
32 character, 2 line LCD display.

Keyboard Input
14 keys for entering all commands, coordinates, header and ancillary information.

Real Time Clock
Day, month, year, hour, minute and second. One second resolution, 1 second stability over 12 hours.

Digital Data Output
RS-232C serial interface. Data outputs in 7 or 8 bit ASCII, one start, two stop bits, no parity format. Baud rate is selectable at 110, 300, 600, 1200 and 2400 baud. Carriage return delay is keyboard selectable in increments of one from 0 to 999. X-on/X-off handshaking protocol.

Standard Accessories

Tripod
Gravity meter tripod with built-in bubble level and 0.5 m leg extensions; 2.0 kg.

Battery
5.7 Ah, 2.2 kg.

Battery Charger
115/230 V AC; 50/60 Hz.

Optional Accessories

Belt Battery Pack
Worn inside the operator's coat during cold weather operation, the Belt Battery Pack is used to keep rechargeable batteries warm so that their lifetime can be extended.

RS-232C Cable and Adaptor
Includes a special RS-232C data transfer cable and adaptor. Used for communicating with peripheral devices.

Minor Spare Parts Kit
Includes 2 keyboard diaphragms and two fuses.

Display Heater
Required for cold weather operation. Powered by main batteries, thermostatically-controlled to turn off above –20°C.

Chart Recorder Cable
This cable interfaces with any standard chart recorder.

External Power Cable
Required for operation of the instrument from either an external 12 V DC power supply or battery.

Carrying Case for Accessories
A case can be supplied which will accommodate the Tripod, Belt Battery Pack, Battery Charger, RS-232C Cable with adaptor and manuals.

Language Options
In addition to English, a second language using Latin characters can replace French.

Memory Expansion
Memory can be added to complement the 16K RAM Standard Memory. This can be done in up to four 8K RAM increments to raise the system memory to a total of 48K RAM. Each 16K RAM increment holds as many readings as the Standard Memory.

Peripheral Devices
Scintrex can recommend and supply suitable digital printers, microcomputers, modems and cassette tape recorders.

Applications Software
Scintrex supplies fully documented software written for the IBM family of microcomputers, and certain other microcomputers, which use the MS DOS operating system. This software permits: 1) archiving of data, 2) processing of data and 3) profile and contour plotting.

SCINTREX

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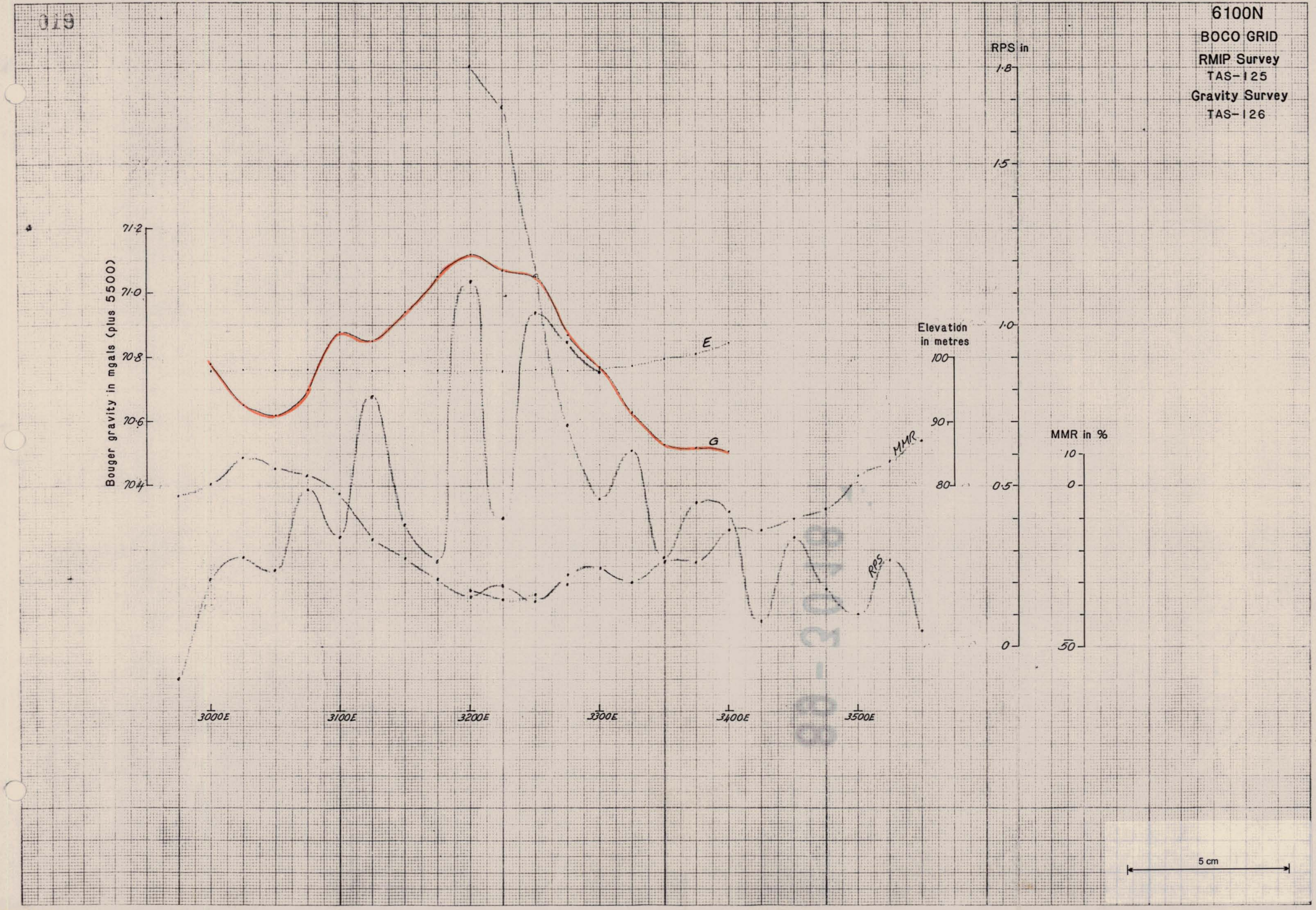
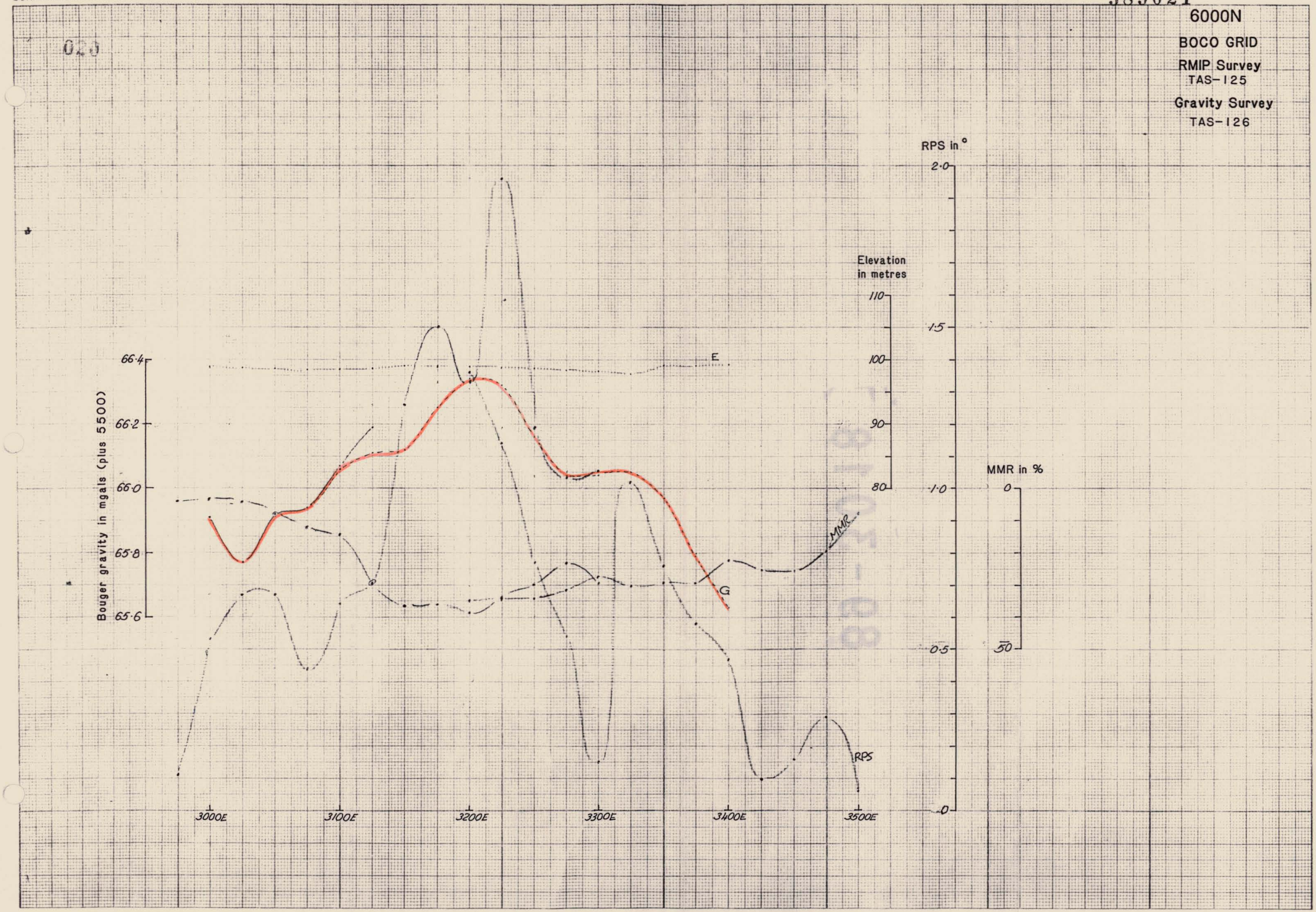
Geophysical and Geochemical Instrumentation and Services

589020


019
6100N
BOCO GRID
RMIP Survey
TAS-125
Gravity Survey
TAS-126
RPS in
1·8
1·5
1·0
0·5
0
Bouger gravity in mgals (plus 5500)
71·2
71·0
70·8
70·6
70·4
Elevation in metres
100
90
80
MMR in %
10
0
50
E
G
MMR
RPS
3000E
3100E
3200E
3300E
3400E
3500E
5 cm
88-3018

GORMACK GRAPH PAPERS : CHRISTCHURCH N.Z. C102X 40 cm x 28 cm x 1 mm

589021



021

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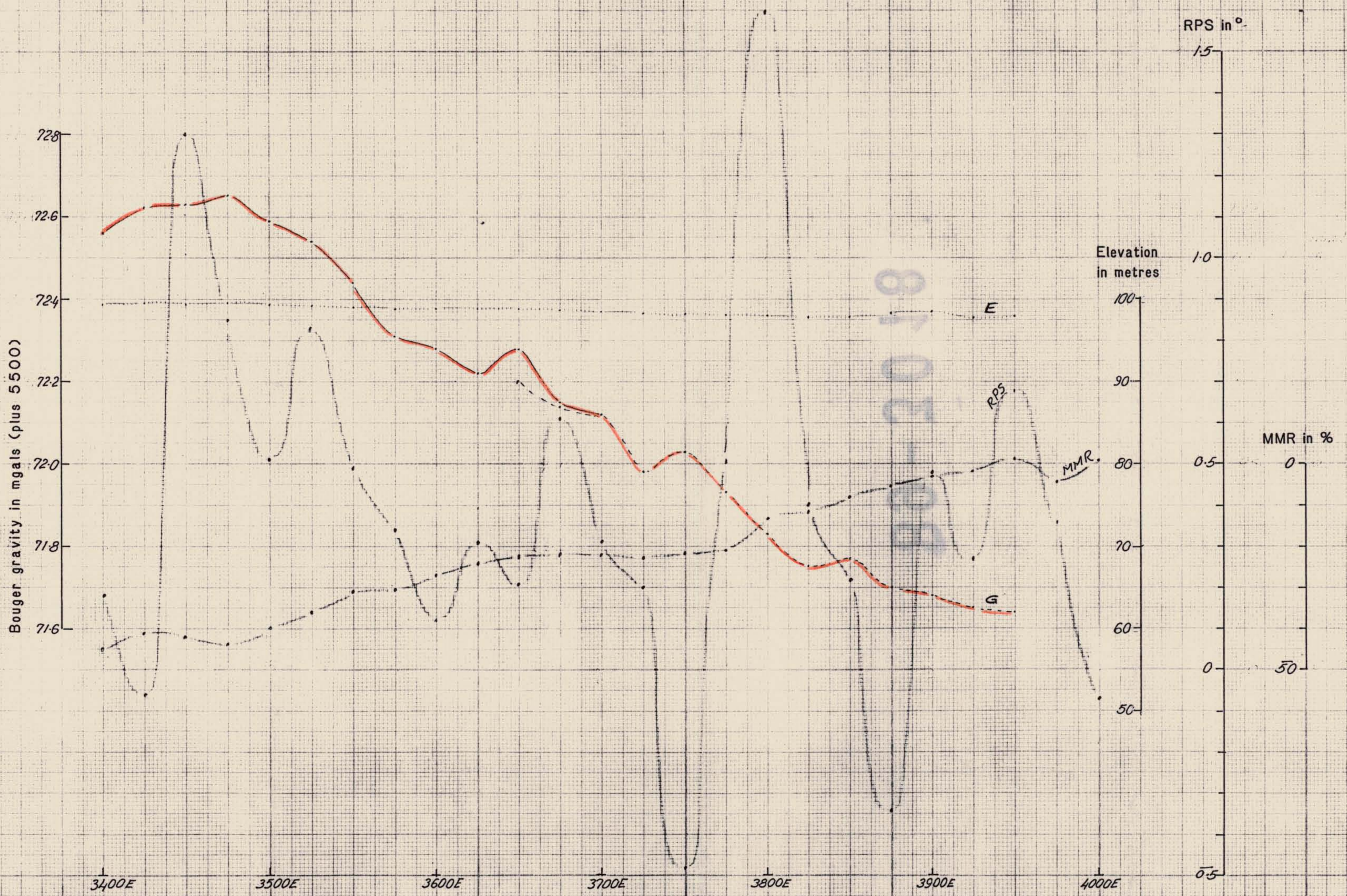
BOCO GRID
RMIP Survey
TAS-125
Gravity Survey
TAS-126



GORMACK GRAPH PAPERS · CHRISTCHURCH N.Z. C102X 40 cm x 28 cm x 1 mm

8734

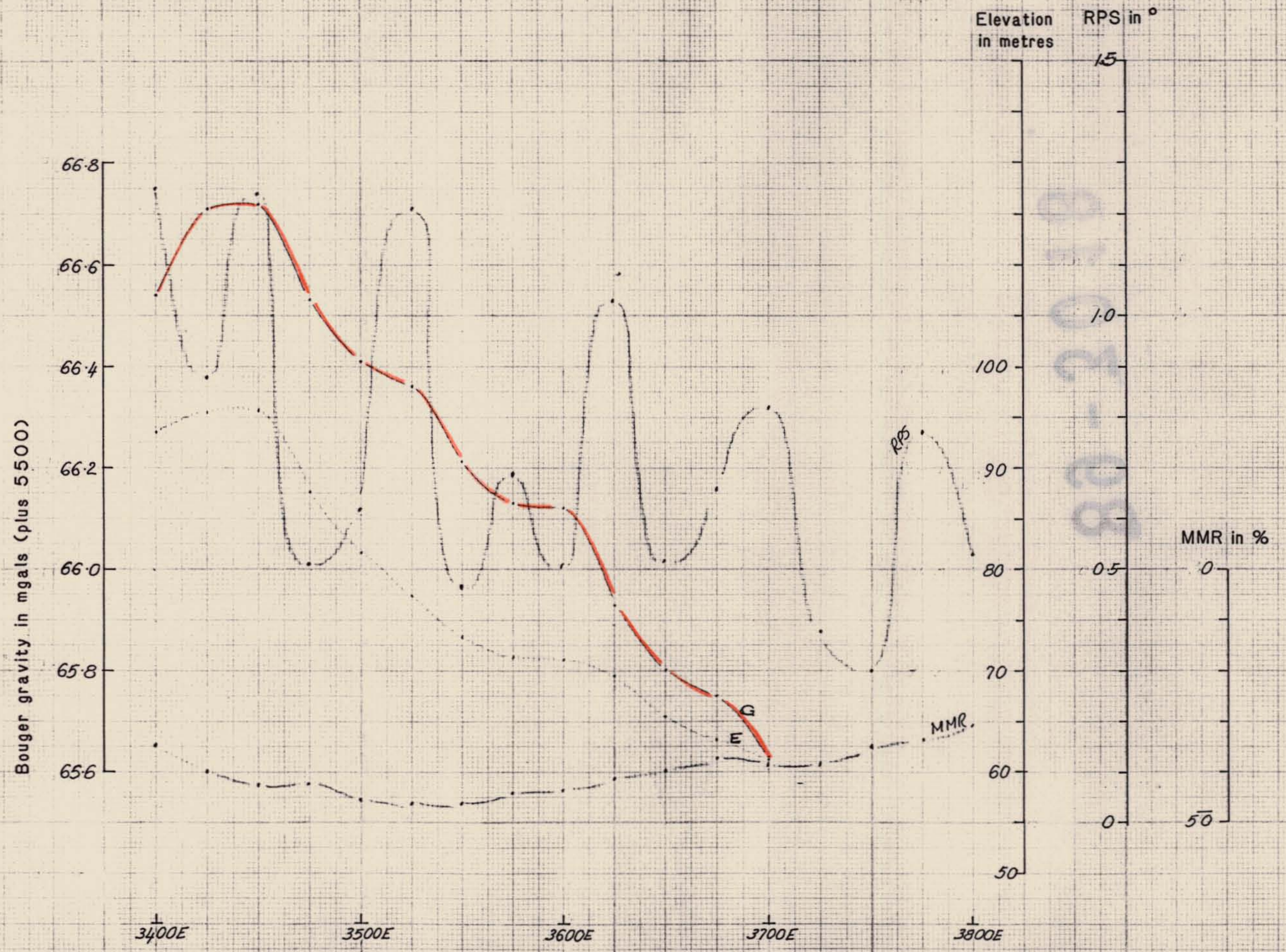
589023

5100N

BOCO GRID

RMIP Survey
TAS-125

Gravity Survey
TAS-126



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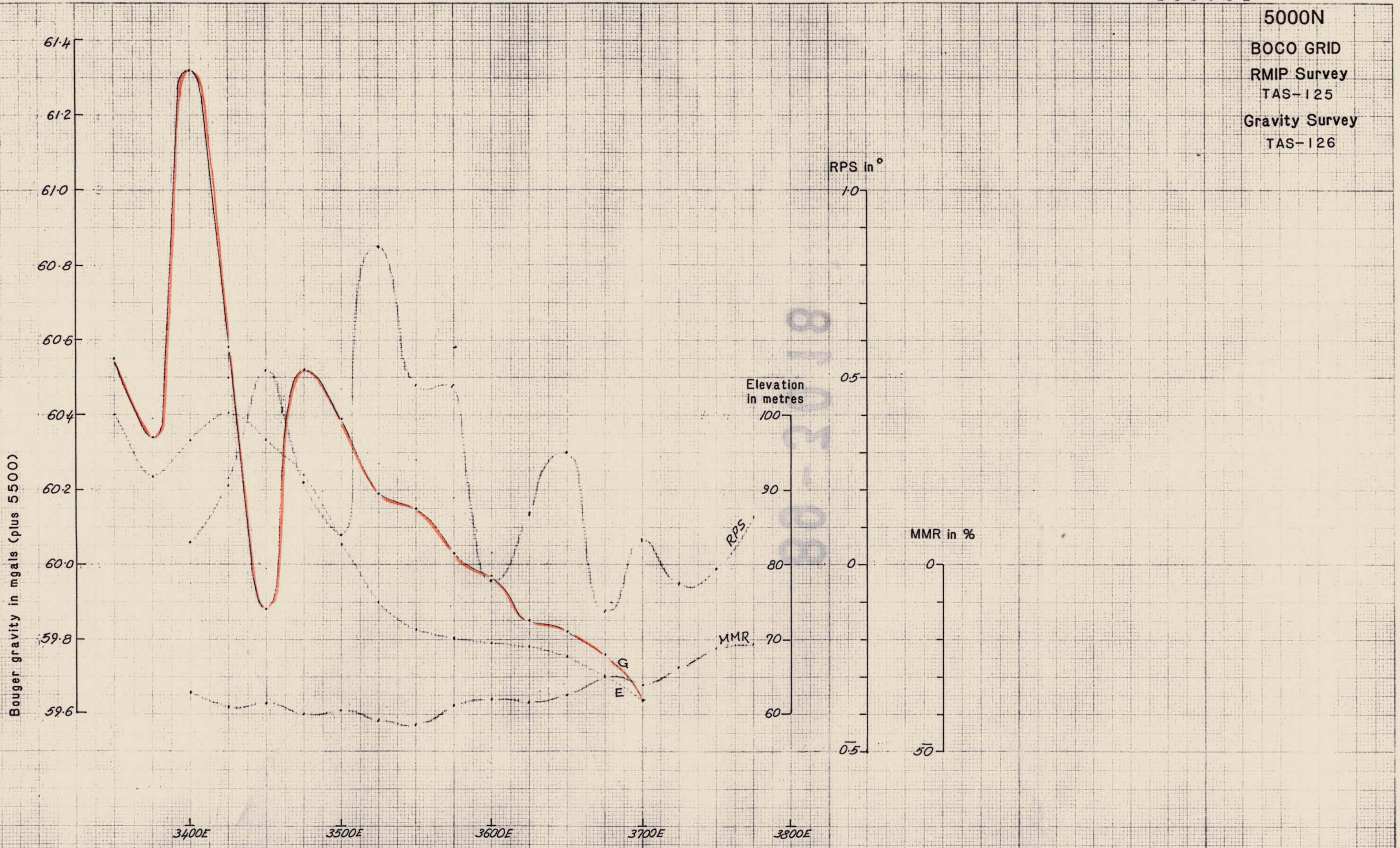
589024

3735



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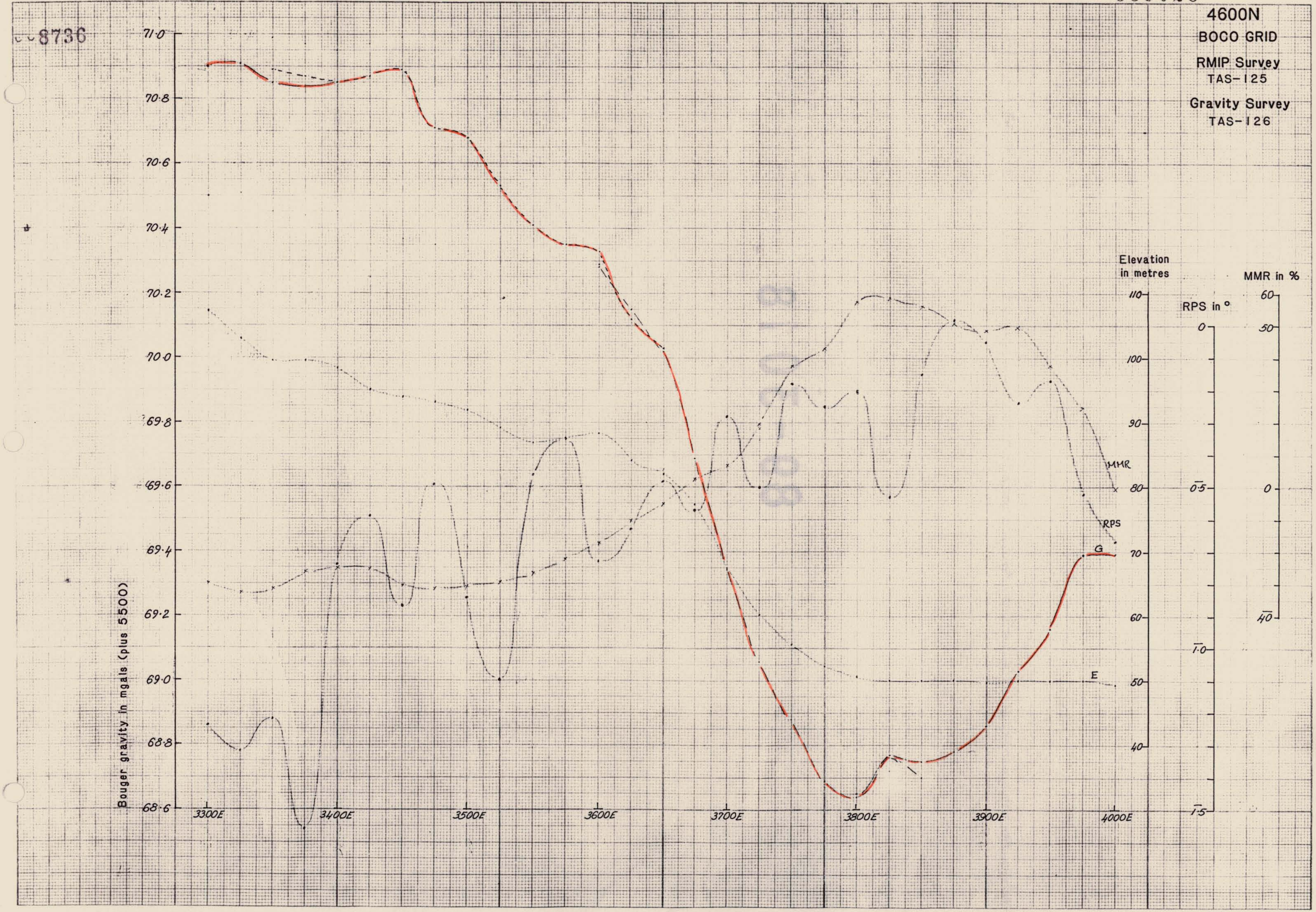

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589026

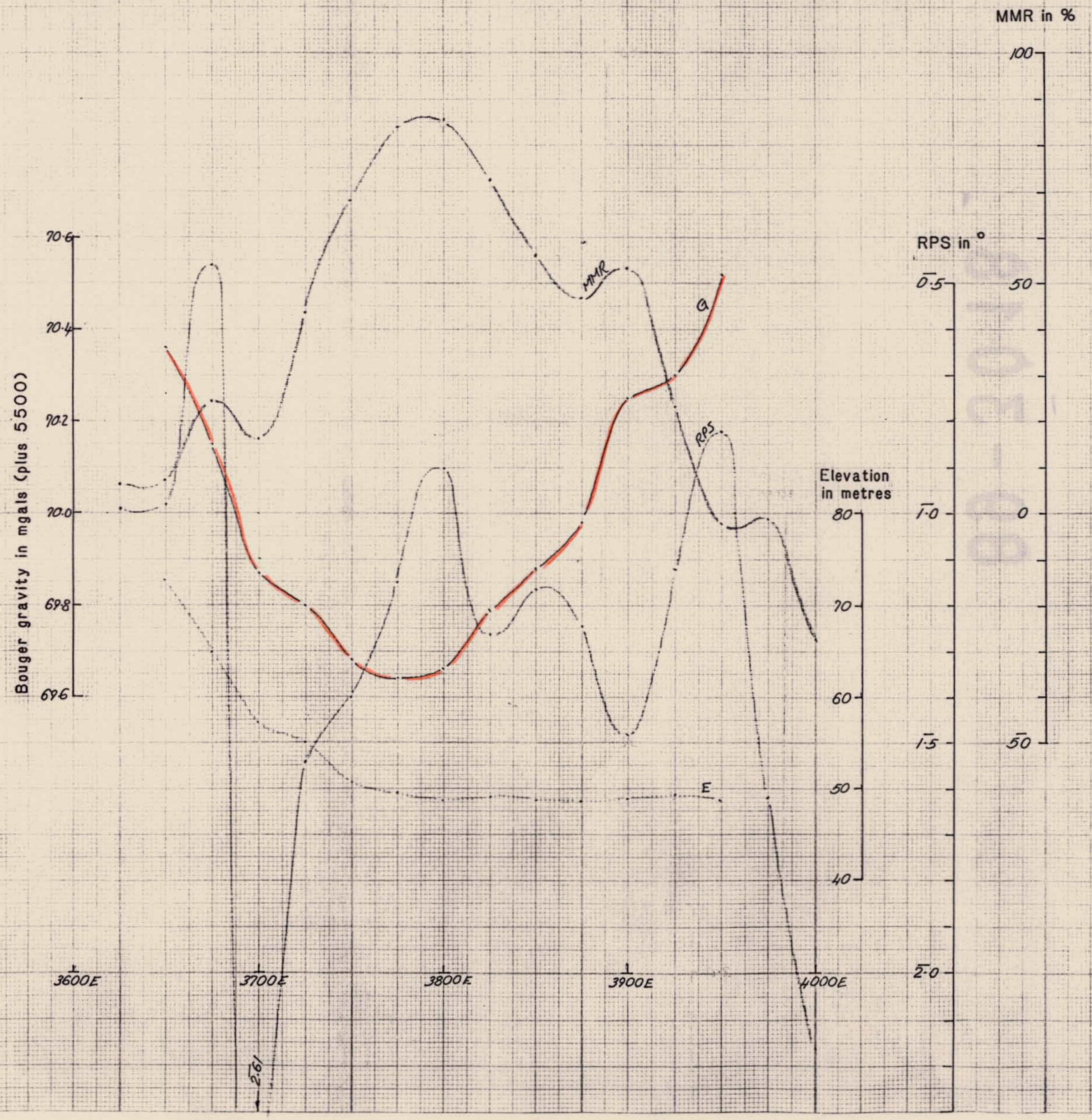
8737

4500N

BOCO GRID

RMIP Survey
TAS-125

Gravity Survey
TAS-126



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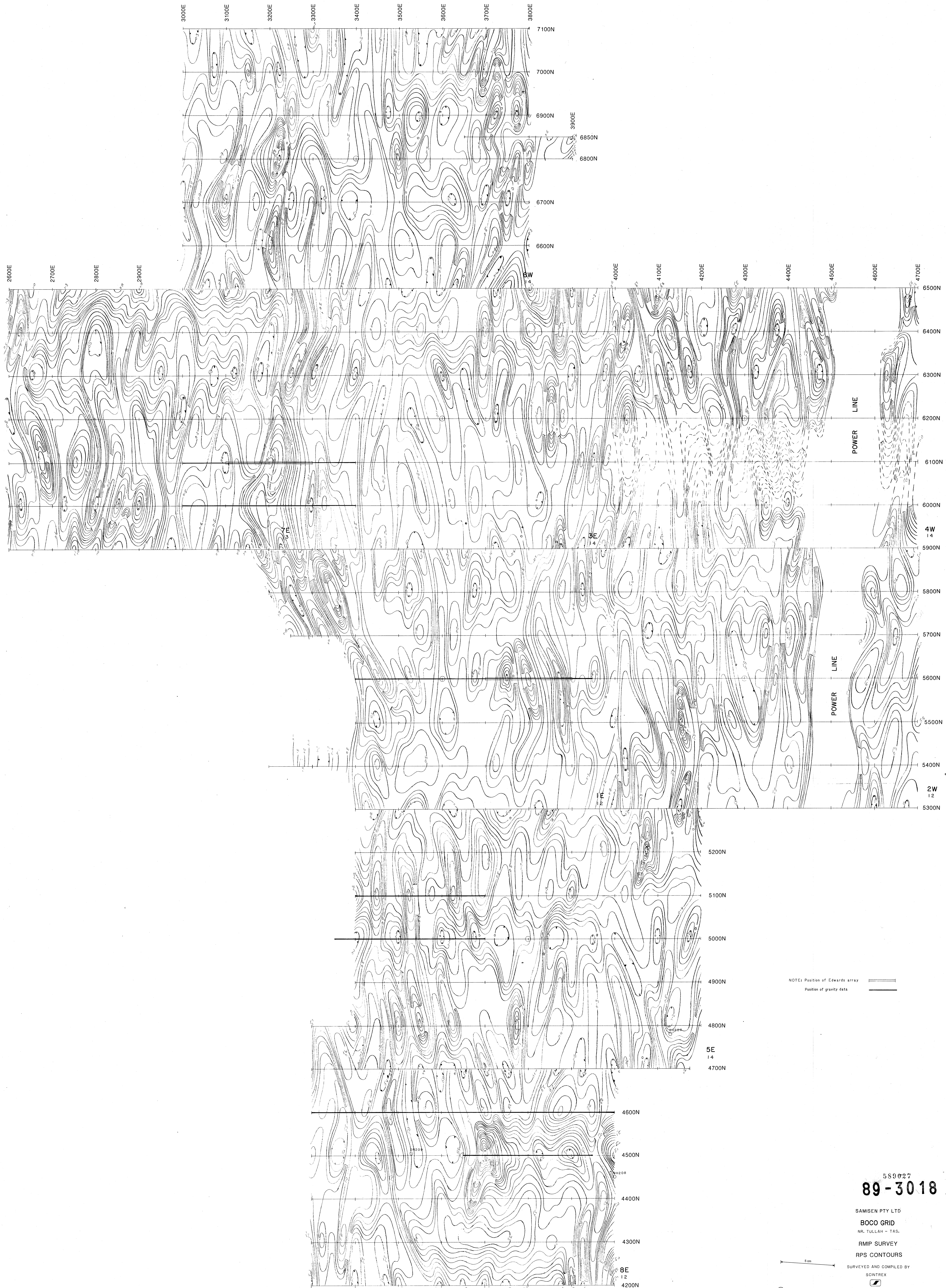

589027

89-3018

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BOCO GRID

NR. TULLAH - TAS.

RMIP SURVEY

RPS CONTOURS

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SCINTREX

FEB-MARCH 1989

SCALE 1:2500m

Job No. TAS-125/126

8738

Plate 2