

**VOLUME IV**  
**GRANULAR RESOURCE INFORMATION MAPPING SYSTEM**  
**FOR THE WEST CANADIAN ARCTIC**  
**- AN INFOCUS APPLICATION**

**SUBMITTED TO:**

Indian and Northern Affairs Canada  
Natural Resources and Economic Development  
Les Terrasses de la Chaudière  
Hull, Quebec  
K1A 0H4

**SUBMITTED BY:**

Earth & Ocean Research Ltd.  
22 Waddell Ave.  
Dartmouth, Nova Scotia  
B3B 1K3

Submission Date:  
Scientific Authority:  
EOR Project Manager:  
Report Prepared by:  
D.S.S. Contract Number:  
EOR Project Number:

March 31, 1993  
Robert Gowan  
John Peters  
Sheldon Dumont  
38ST.A/134-2-0037  
92-23



D003488

**EOR**  
Earth & Ocean Research Ltd.

# **Granular Resource Information Mapping System for Northern Canada**

**An inFOcus Application**

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## **INTRODUCTION**

This report describes work done under DSS contract no. 38ST.A7134-2-0037 in support of the Northern Granular Resources Mapping System.

The system has been developed around Earth and Ocean Research Limited's inFOcus geographic data management software that interfaces to AXYS Software LTD's QUIKMap mapping engine. Work under previous contracts has involved the compilation, digitizing and integration of seismic navigation data, borehole data, borrow deposit locations and geological maps.

The purpose of this project update was to build on the existing inFOcus application of granular resource information for the Yukon and North West Territories and Beaufort Sea described in the reports preceding this volume. While a considerable quantity of new data has been introduced in the course of this application update, one of the primary purposes was to increase the functionality of the existing data.

The objectives under this contract are the following:

- a) Create a mappable database which displays the outline of every hardcopy map applicable to the study area and subject.
- b) Rationalize all borehole, source, deposit and catalogue database files for the generation of master compilation files for each data type. Create new fields for linking to source database.
- c) Screen compilation database for duplicate entries.
- d) Conversion to database polyline of Erksak, Isserk, Herschel Sill, and Yukon shelf granular resource studies.
- e) Digitize and import deposit maps of the Issigak Borrow study.
- f) Digitize and import deposit map of the Nahidik Site 'D' survey plan.
- g) Digitize and import deposit locations from the Granular Materials Inventory of the Yukon Coastal Plain.
- h) Digitize and import several land management maps pertaining to native claims and governmental authority.
- i) Improve application menus and data categorization.
- j) Digitize and convert to database polyline a series of Mean Ice Coverage maps which encompass the full extent of Canada's Arctic region.

Details of the results are provided in the following pages as well as proposals for further work.

### **SUMMATION OF WORK COMPLETED**

#### **HARD COPY OF CONVERTED MAPS**

The corner points, name, data type, client, date and project name were tabulated for approximately 400 maps relating to geo-technical data in Canada's Arctic. This information was then converted into mappable database form and imported into the application. Each hardcopy map has been labeled with a coded reference number which links it to a single database entry by map and tube number. eg. 10.06 refers to Tube 10 and Map Number 6. This utility significantly improves the ability of the user to quickly establish the relationship between the application and hardcopy source maps but is considered only a preliminary system in its current form. Additional functionality could be achieved by further classification of the map data into sub categories of bathymetry, seismic track data, etc... Links could also be established between each database entry in the application data and the tube and map reference numbers. If this link is established the user would then be capable of a single step method of referencing a single polyline interrogation with its hardcopy source.

#### **DATABASE COMPIATION**

Users of the previous application release found the number of individual database files cumbersome for data searches based on geographic area. As an example there are 36 individual files which contain Track Line data for the entire Beaufort region, each specific to a single research cruise or client dependent grouping of cruises. While this may be useful for the display of a single project, in order to display all track lines simultaneously all 36 files would have to be selected and loaded into the selection menu. The ability to view all related application data may occasionally be required to establish overall data coverage or for the discovery of data available for a specific geographic area.

A database group has been added to the Offshore Granular Resource Application entitled COMPOSITE DATABASES which contains six composite files which duplicate all other application data for Boreholes, Prospects, Regional Fixes, Regional Track Lines, Site Survey Fixes and Site Survey Track Lines. Each file which comprises these compilation sets were first rationalized for field name and data contents and then appended to a master file. Included in the transfer process was the inclusion of a field used to indicate the source database file.

The same procedure was performed on the database files contained in the Onshore Granular Resource Application but in this case the composite files are contained in the appropriate group designation. All composite files, in both the Onshore and Offshore applications, have been screened for duplicate entries, these have been either deleted or flagged as questionable dependent upon data specifics.

#### **BEAUFORT BORROW PROSPECTS DATABASE CONVERSION**

The Isserk, Erksak, Issigak, Herschel Sill and Yukon Shelf basemaps of deposit potential have been traced as database polylines. Each prospective, probable and proven boundary has been entered as a separate entity and given a coded reference which uniquely identifies its extent. As an example, the boundary of a relatively small proven area (ISS1a1), lies within an area of probable resources (ISS1a), which in turn falls within a larger prospective area (ISS1) in the Isserk borrow block (ISS). This coding system is described with more detail in the section "Suggestions for Further Work" in the report of the 1991 update of the same project (EOR, 1991).

#### **ISSIGAK BORROW STUDY MAPS**

Tabloid page size geological maps resulting from the study of the Issigak Borrow Block by EBA Engineering have been digitized and converted to database files where applicable. The scale and hardcopy nature of the source information limits the data resolution but should be suitable for general purpose application.

## **Granular Resource Information Mapping System for Northern Canada**

---

A serious registration error was encountered with figure 4.8, Sidescan Interpretation of Seabed Conditions, that calls into question the validity of the posted UTM coordinates. Further work must be undertaken to correct this situation as the basemap is not useable in its current form. All other maps produced satisfactory results. Figure 4.9, Resource and Zone Boundaries, was converted to database polylines and included in the Offshore Prospect Compilation database as described in the previous section.

### **AKPAK PLATEAU AND NAHDIK SITE 'D'**

Target areas from the H.R. Seismic Interpretation Services Inc. plot of the Akpak Plateau, PL.I, have been digitized and imported into the application as a basemap. The section lines 'A' through 'C' have also been digitized and imported as a separate database file, in anticipation of including the scanned drawings as PCX images at some later date.

Site 'D' target area, as well as the boundaries describing the area of prospective resources, was digitized from PL II of the same project and imported into the application as a basemap and a database respectively.

### **GRANULAR MATERIALS INVENTORY OF THE YUKON COASTAL PLAIN**

Reference information for this catalogue of 71 granular deposit locations was received in three different forms; air photos with no coordinate information, an index map with posted (but irregular) coordinates, and a series of 5, 1:125 000 mylar plots. All digitizing was performed on the mylar version but with constant reference to the air photos and index map as site boundaries were often poorly defined or generalized versions of other sources.

The deposit polylines were digitized directly into database format within the QUIKMap environment. The North Slope Material Inventory exists as a separate database as well as being included in the Granular Resource Deposit compilation database.

### **MANAGEMENT AND CLAIM AREAS**

Polylines of the Nunavut Settlement Area, the Gwich'in Settlement Area and a low resolution map of the DIAND Resource Management Areas have been digitized into databases.

Due to time and budget constraints, this portion of the project is currently incomplete.

### **MEAN ICE COVERAGE**

A series of 10 Mean Ice Coverage maps of Canada's Arctic, indicating percentage of ice density, were digitized and converted to database polylines. The source map, The Ice Atlas from the Atmospheric Environment Service, contains serious locational errors in regards to the placement of the Arctic islands. This was compensated for in the digitizing process through constant calibration with a corrected coastline. This procedure was performed under the assumption that the ice boundaries relate directly to the coastline location and not to the obviously incorrect lat/long grid.

### **ESEBase for FOXPRO**

As a natural extension to the Granular Information Mapping System, it was considered desirable to provide a closer linkage between the inFOCUS spatial data management capabilities and ESEBase, the borehole data management system developed by ESE Software of Edmonton. With their cooperation, a FOXPRO, version of the ESEBase functions was developed that could be run as a module within inFOCUS, and thereby provide extended, spatially-oriented queries on the borehole databases. The "alpha" version of this module extends significantly on the evaluation prototype developed under the 1991 contract.

As with the prototype, the program may be run as a stand alone application program or as an inFOcus module. It is designed to run in parallel with ESEBase and will not corrupt existing ESEBase files.

As well, a Report Module supports the running of ESEBase System Reports as well as the creation and running of user designed reports.

ESEBase for FOXPRO includes routines for the creation of new ESEBase databases, System Configuration, Borehole Log Format File support and Borehole Log Creation. Limited resources restricted the number of supported graphics routines to the Borehole Log Format.

### SUGGESTIONS FOR FURTHER WORK

The following tasks have been identified as being both possible and potentially beneficial in improving the functionality of the Granular Resources Information Mapping System:

#### 1. Catalogue of Hard Copy Maps

Significant potential exists to further improve the functionality of this database through linking individual database entities to their hardcopy map source. This would involve the addition of new linking fields to each of the application data files.

Selective display of map coverage by topic could be facilitated by establishing a coded classification system which allows the user to select only maps of a specific type. eg. bathymetry.

Additions to the database are also required to include maps delivered during the course of this project stage.

#### 2. Indigenous Lands

There are numerous maps of good quality describing Inuit and Native Indian owned (and claimed) lands of Canada's Arctic. These could be included within the application to identify potential access restrictions due to land ownership. There is potential for cost sharing of such an undertaking between other governmental departments which may have an interest in compiling this information in digital form.

#### 3. Coastline and Drainage

The coastline and drainage basemap currently being used by this application is a subset of the ESL basemap of North America. While this map is suitable for most applications it is of insufficient resolution for display of very small geographic areas. The disparity between digitizing scales of the basemap and the data displayed on it can lead to significant shifting between deposit boundaries and coastline location.

An example extraction of the Digital Chart of the World is included in this application update which containing only the coastline of the Beaufort region and the surrounding islands. This data is clearly of higher quality and should be considered for further extraction for later stages of the project development.

#### 4. Surficial Sediment

The application does not yet include a regional surficial sediment map for the Arctic region. Though it has been suggested by a number of sources that a digital version of such a map exists for the area of interest, one has not yet been made available for conversion and importation.

**APPENDIX A - APPLICATION AND BASEMAP DIRECTORY STRUCTURE**

**:\GRAN\_RES**

- |-----BEAUDATA - offshore granular resource application
- |-----GRAN\_LND - onshore granular resource application
- |-----MAPS
  - |-----AKPAK
  - |-----ARCBATH
  - |-----DCWBEAU
  - |-----NAHIDIK

**:\ISSIGAK**

- |-----MAPS
  - |---IGAKBATH
  - |---IGAKBORR
  - |---IGAKFEAT
  - |---IGAKORGA
  - |---IGAKRESO

**:\ISS\_ERK**

- |-----MAPS
  - |---BANKS\_IS
  - |---ERKABC
  - |---ERKBATH
  - |---ERKCONT
  - |---ERKISOC
  - |---ERKPROS
  - |---ERKSAND
  - |---ERKSURF
  - |---ERKZONE
  - |---ISSBATH
  - |---ISSCONT
  - |---ISSLWSND
  - |---ISSSURF
  - |---ISSUNITC
  - |---ISSUPSND



**APPENDIX B - ATLAS OF SELECTED MAPS**

- Map 1: Yukon North Slope Granular Resource Database
- Map 2: Detail of Granular Deposits near Herschel Island
- Map 3: The Granular Deposit Compilation Database
- Map 4: Akpak Plateau Target Areas with Site 'D' Resource Boundary
- Map 5: Issigak Block Bathymetry
- Map 6: Issigak Block Overburden Isopach

**LOW RESOLUTION OUTPUT**

- Map 7: Issigak Block Resource Potential with Bathymetry
- Map 8: Issigak Block Cross Section Lines with Bathymetry
- Map 9: Compilation Database of Beaufort Borrow Prospects
- Map 10: Median Ice Distribution for August 6th

### APPENDIX C - INSTALLATION PROCEDURE FOR ESEBASE FOR FOXPRO

The Floppy disk contains a file called **ESEFOX.EXE**. This is a self-extracting **ZIP** file containing all the necessary files for running **ESEBase** for **FOXPRO**.

Copy this file to the existing **ESEBase** home directory. Change to the **ESEBase** directory and type **ESEFOX <RETURN>**. This will unpack the files.

The **ESEBase** for **FOXPRO** program uses standard **ESEBase** files such as the **DRIVERS** database, Format files etc... It will **NOT** corrupt these files. The system is designed to co-exist with the standard **ESEBase** program files and database files (**DBF's**).

The program may be run in two modes:

#### MODE 1 : STAND ALONE

The **ESEBase** home directory **MUST** be included in the DOS path command. As well, a minimum setting of **FILES=50** is recommended.

*eg. in the AUTOEXEC.BAT file:*

**Files=50**

To run the program type **ESE <RETURN>** at the prompt. The program may be run from any default drive and directory.

#### MODE 2 : INFOCUS MODULE

The **ESEBase** home directory **MUST** be included in the DOS path command **AND** the **QUIKMap** environment variable **QUIKPATH**. As well, a minimum setting of **files=99** is recommended. The extra files are needed to handle the additional overhead of both **inFOcus** and **ESEBase**.

*eg. in the AUTOEXEC.BAT file :*

**path=C:\;C:\dos;C:\esebase;C:\infocus**

**set QUIKPATH=C:\esebase**

*eg. in the CONFIG.SYS file:*

**FILES=99**

To install the program, activate **inFOcus** and choose any application. Add the **ESE.EXE** program (as a **FOXPRO** compatible program) to the Modules Menu. If it is desired for **inFOcus** and **ESEBase** to operate on the same **ESEBase** database, it will be necessary to add the **ESEBase** database as an **inFOcus** Application. The **ESE.EXE** file should be then activated from this Application.

### **BIBLIOGRAPHY**

1. Updating of the Northern Granular Resources Information Mapping System, Earth & Ocean Research Limited. March 31, 1992. DSS file 038ST.A7134-1-0039.
2. Atlas of Granular Resource Information Phase II, Earth & Ocean Research Limited. March 31, 1991. DSS file 38ST-A7134-0-0036.
3. Granular Resource Information for the West Canadian Arctic, Earth & Ocean Research Limited, March 31, 1990. DSS file A7134-9-0027101-ST.
4. Synthesis and Interpretation of Bathymetric, Geophysical, Geological and Geotechnical Data: Isserk Borrow Block - South Central Beaufort Sea, Earth & Ocean Research Limited, March 31, 1988. Rev. Aug 1989.
5. Synthesis and Interpretation of Bathymetric, Geophysical, Geological and Geotechnical Data: Erksak Borrow Block - South Central Beaufort Sea, Earth & Ocean Research Limited, March 31, 1988. DSS file A0632-7-5011/C1ST.

Sent: Sep 23, 1993 6:05 PM EDT MSG: TNGA-4283-5300  
To: John Peters - EOR (FAX:902 468 2771)  
CC:  
BCC:  
Subject: Final Report - GranRes Mapping (EOR #92-23)  
Send-opt.: REC

---

John:

I spoke to Sheldon about this report and was supposed to hear back from Dan on it. I still haven't heard anything from Dan, either on this one or the Envir. Constraints study.

This report requires very little more work, and I am very anxious to get it out of the way. I ask you as Project Manager to expedite its completion.

#### ADDITIONAL COMMENTS

PAGE	SECTION	COMMENT
4	Akpak Plateau ...	in title, add 2nd "I" in "NAHIDIK"
4	Management and ...	in previous review, I asked that the report list: a) names of individual databases containing each of these series of polylines, and b) maps or information collected (e.g. boundaries of individual areas of native-owned lands), but not yet digitized - these have not yet been provided.
5	Surficial Sediment	as indicated in previous review, a series of (I think) 4? maps were delivered to Dan by Steve Blasco for digitizing. Sheldon did not receive these and thinks AGC came and recovered them. They have not yet been digitized, but should be listed for future digitization - Bob Harmes can likely provide titles.
9	Bibliography	the following references (sources of information digitized in this study) should be added to your listing (note that I do not have citation for Ice Atlas, but I understand EOR has a copy)

#### Report References for Data Digitized in 1992/93 EOR project for DIAND

Author EBA Engineering Consultants Ltd.  
Year 1987  
Title Synthesis and Interpretation of Bathymetric, Geophysical and  
Publtyp rpt  
Ref1 Report prepared for Indian and Northern Affairs Canada  
Ref2 by N.R. MacLeod, EBA Engineering Consultants Ltd., Calgary  
Ref3 April, 1987  
Pages 42 p., Refs, Tbls, Figs

Author H.R. Seismic Interpretation Services Inc.

Year 1989  
Title Analysis of Granular Resource Potential based on High-Resolution  
Refraction and Reflection Data, Southern Akpak Plateau, Beaufort Sea.  
Publtyp rpt  
Ref1 Report prepared for Indian and Northern Affairs Canada  
Ref2 by Guy Fortin, H.R. Seismic Interpretation Services Inc., Hull  
Ref3 August, 1989  
Pages

Author R.M. Hardy & Associates Ltd. and Terrain Analysis and Mapping Services  
Year 1977  
Title Granular Materials Inventory: Yukon Coastal Plain and Adjacent Areas  
Publtyp rpt  
Ref1 Report prepared for Indian and Northern Affairs Canada  
Ref2 by T.J. Fujino, R.M. Hardy & Associates Ltd., Calgary, and V.N.  
Ref3 January, 1977  
Pages 38 p., Sites, Appendices

\*\*\*\*\* NOTE - Please add this reference also - EOR obtained source document

Author Environment Canada - Atmospheric Environment Service  
Year  
Title Ice Atlas  
Ref

**VOLUME IV**

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- g) Digitize and import deposit locations from the Granular Materials Inventory of the Yukon Coastal Plain.
- h) Digitize and import several land management maps pertaining to native claims and jurisdictional boundaries.
- i) Improve application menus and data categorization.
- j) Digitize and convert to database polygon format a series of Mean Ice Coverage maps which encompass the full extent of Canada's arctic region.

Details of the project results are provided in the following pages as well as suggestions for further work.

## SUMMARY OF WORK COMPLETED

### HARD COPY MAP CATALOGUE DATABASE

The corner points, name, data type, client, date and project name were tabulated for approximately 400 maps relating to geotechnical data in Canada's Arctic. This information was then converted into mappable database form and imported into the application. Each hardcopy map has been labelled with a coded reference number which links it to a single database entry by map and tube number. eg. 10.06 refers to Tube 10 and Map Number 6. This utility significantly improves the ability of the user to quickly establish the relationship between the application and hardcopy source maps but is considered only a preliminary system in its current form. Additional functionality could be achieved by further classification of the map data into sub categories of bathymetry, seismic track data, etc... Links could also be established between each database entry in the application data and the tube and map reference numbers. If this link is established the user would then have access to a single step procedure of referencing a single polyline entity with its hardcopy source.

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### BEAUFORT BORROW PROSPECTS DATABASE CONVERSION

*1551a1/Hatched Sill*  
The Isserk, Erksak, and ~~Tukon~~ <sup>Yukon</sup> shelf basemaps of deposit potential have been traced as database polylines. Each prospective, probable and proven boundary has been entered as a separate entity and given a coded reference which uniquely identifies its ~~parent deposit boundary~~ <sup>extent</sup>. As an example, a proven resource boundary in the Isserk study is named ISS1a1, to identify the study name (ISS), the prospective boundary (1), the probable boundary (a) and finally the proven boundary (1). This coding system is ~~also~~ <sup>well noted detail</sup> described in the section "Suggestions for Further Work" in the report of the 1991 update of the same project. (EOR, 1991)

*As an example:  
the boundary of a  
relatively small proven area (ISS 1a 1), <sup>lies</sup> within  
an area of probable resources  
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Target areas from the H.R. Seismic Interpretation Services Inc. plot of the Akpak Plateau, PL.I, have been digitized and imported into the application as a basemap. The section lines 'A' through 'C' have also been digitized and imported as a separate database file, in anticipation of including the scanned drawings as PCX images at some later date.

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## MANAGEMENT AND CLAIM AREAS

Due to time and budget constraints, this portion of the project is currently incomplete. ~~Information to date is limited to digitized Database polylines of the Nunavut Settlement Area, the Gwich'in Settlement Area and a low resolution map of the DIAND Resource Management Areas~~ *have been digitized in a database (S) entitled ---? Remaining to be digitized are --- (list).*

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## SUGGESTIONS FOR FURTHER WORK

The following tasks have been identified to be beneficial in improving the functionality of the Granular Resources Information Mapping System:

### 1. Catalogue of Hard Copy Maps

Significant potential exists to further improve the functionality of this database through linking individual database entities to their hardcopy map source. This would involve the addition of new linking fields to each of the application data files.

Selective display of map coverage by topic could be facilitated by establishing a coded classification system which allows the user to select only maps of a specific type. eg. bathymetry.

Additions to the database are also required to include maps delivered during the course of this project stage.

### 2. Indigenous Lands

There are numerous maps of good quality describing Inuit and Native Indian owned (and claimed) lands of Canada's arctic. These could be included within the application to identify potential access restrictions due to land ownership. There is potential for cost sharing of such an undertaking between other governmental departments which may have an interest in compiling this information in digital form.

### 3. Coastline and Drainage

The coastline and drainage basemap currently being used by this application is a subset of the CIA World Databank II basemap of North America. While this map is suitable for many applications it is of insufficient resolution for display of local areas. The disparity between digitizing scales of the basemap and the data displayed on it, can lead to significant shifting between deposit boundaries and coastline location.

An example extraction of the Digital Chart of the World is included in this application update containing only the coastline of the Beaufort region and the surrounding islands. This data is clearly of higher quality and should be considered for further extraction for later stages of the project development.

### 4. Surficial Sediment

The application does not yet include a regional surficial sediment map for the arctic region. Though it has been suggested by a number of sources that a digital version of such a map exists for the area of interest, one has not yet been made available for conversion and import.

*What about Series of Maps  
Provided by Blasco*

## APPENDIX A - Application and Basemap Directory Structure

: \GRAN\_RES

-----BEAUDATA - *offshore granular resource application*

-----GRAN\_LND - *onshore granular resource application*

-----MAPS

-----AKPAK

-----ARCBATH

-----DCWBEAU

-----NAHIDIK

: \ISSIGAK

-----TRADTER

-----MAPS

---IGAKBATH

---IGAKBORR

---IGAKFEAT

---IGAKORGA

---IGAKRESO

: \ISS\_ERK

-----MAPS

---BANKS\_IS

---ERKABC

---ERKBATH

---ERKCONT

---ERKISOC

---ERKPROS

---ERKSAND

---ERKSURF

---ERKZONE

---ISSBATH

---ISSCONT

---ISSLWSND

---ISSSURF

---ISSUNITC

---ISSUPSND

:\YUK\_EOR

— MAPS

- ARCTIC
- H9STRUC
- H9ISOP
- H11STRUC
- H11ISOP
- H12STRUC
- H12ISOP
- H15STRUC
- H15ISOP
- H33STRUC
- H33ISOP
- H34STRUC
- H35STRUC
- H35TISOP
- HSURFGEOL
- YUKBASE1
- YUKBASE2

:\YUK\_OCON

— MAPS

- GRANRES
- RECLAMSD
- YUKBATH
- RIPPLE

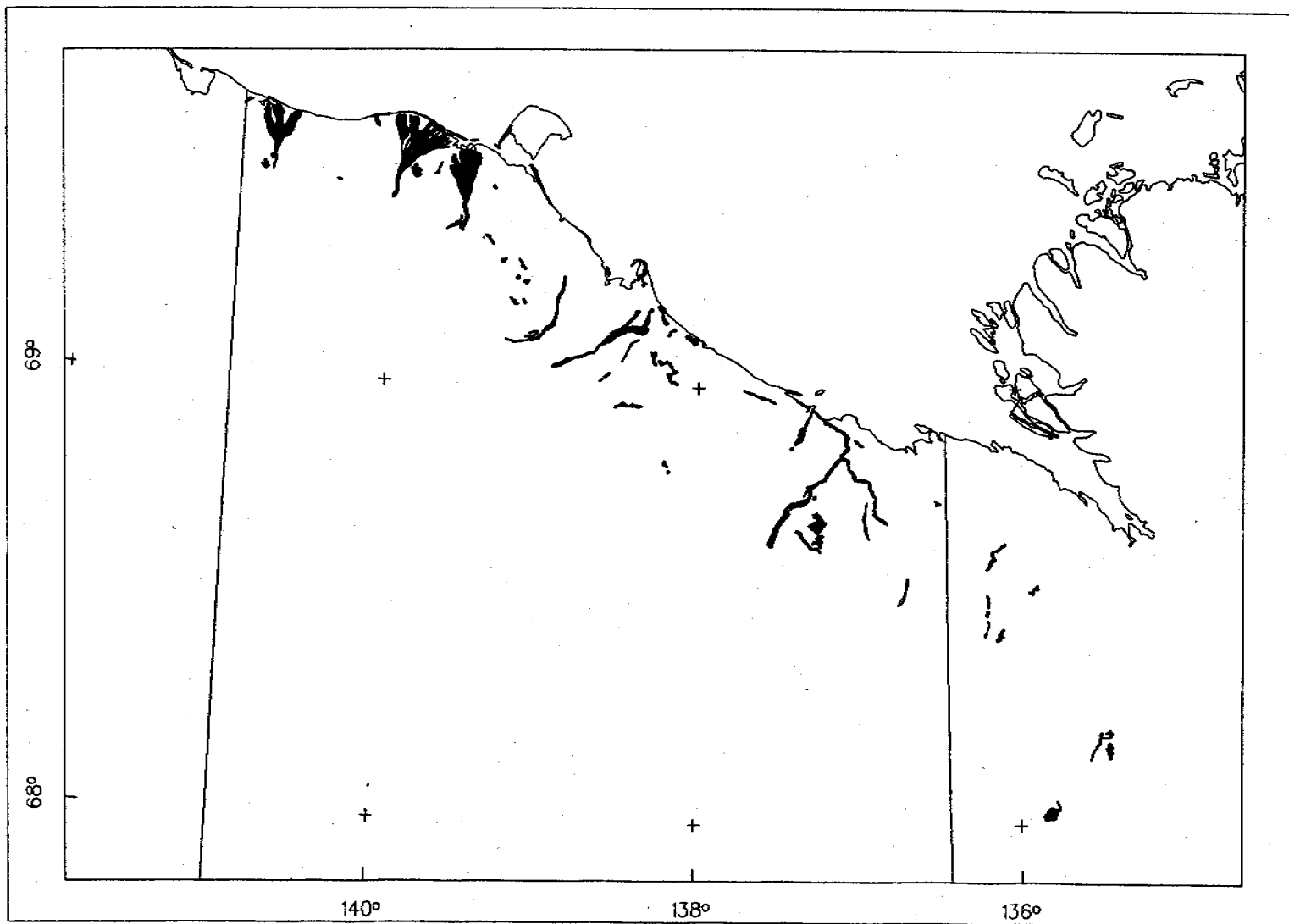
## **APPENDIX B - ATLAS OF SELECTED MAPS**

### **High Resolution Output**

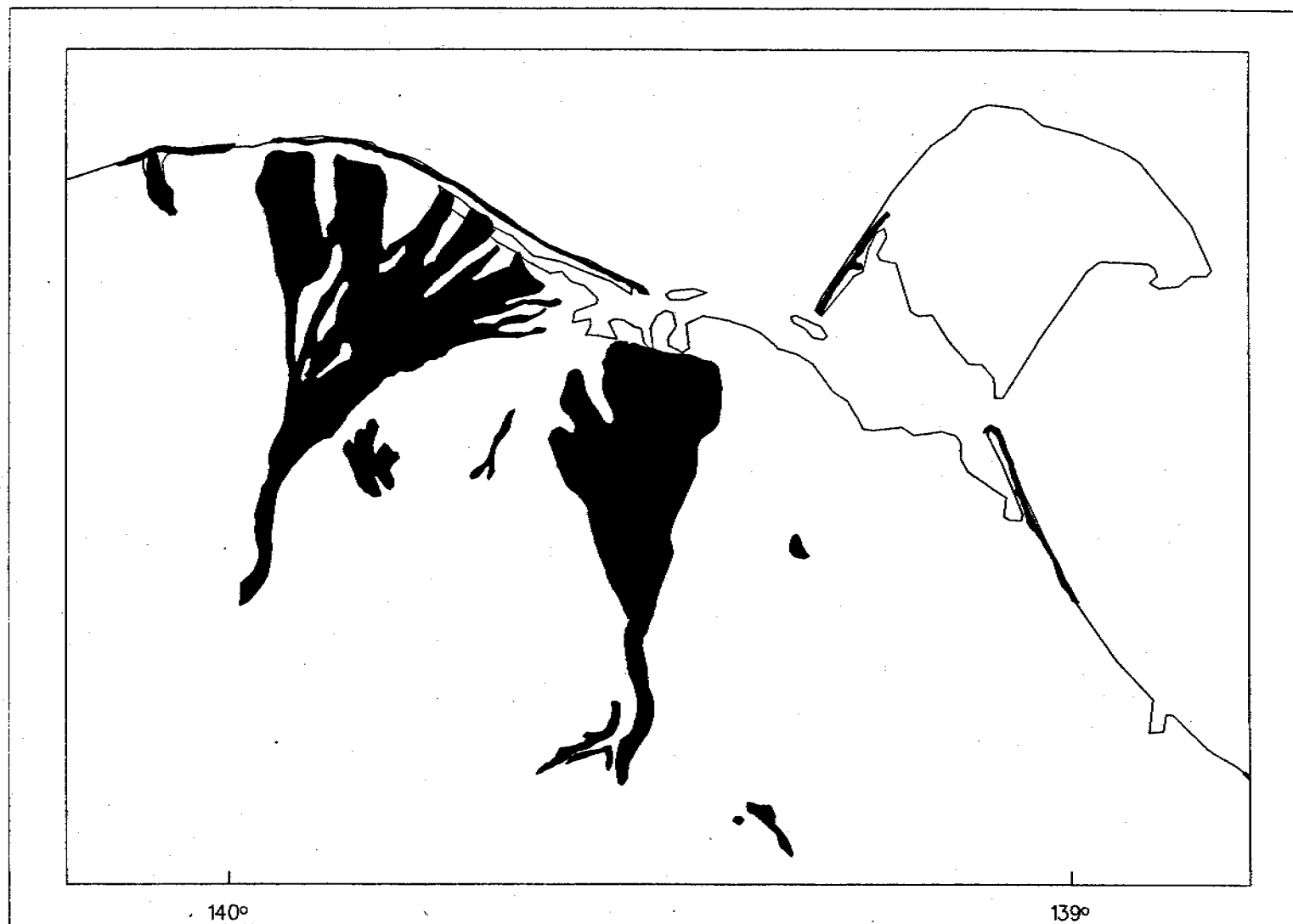
- Map 1: Yukon North Slope Granular Resource Database
- Map 2: Detail of Granular Deposits near Herschel Island
- Map 3: The Granular Deposit Compilation Database
- Map 4: Akpak Plateau Target Areas with Site 'D' Resource Boundary
- Map 5: Issigak Block Bathymetry
- Map 6: Issigak Block Overburden Isopach

### **Low Resolution Output**

- Map 7: Issigak Block Resource Potential with Bathymetry
- Map 8: Issigak Block Cross Section Lines with Bathymetry
- Map 9: Compilation Database of Beaufort Borrow Prospects
- Map 10: Median Ice Distribution for August 6th

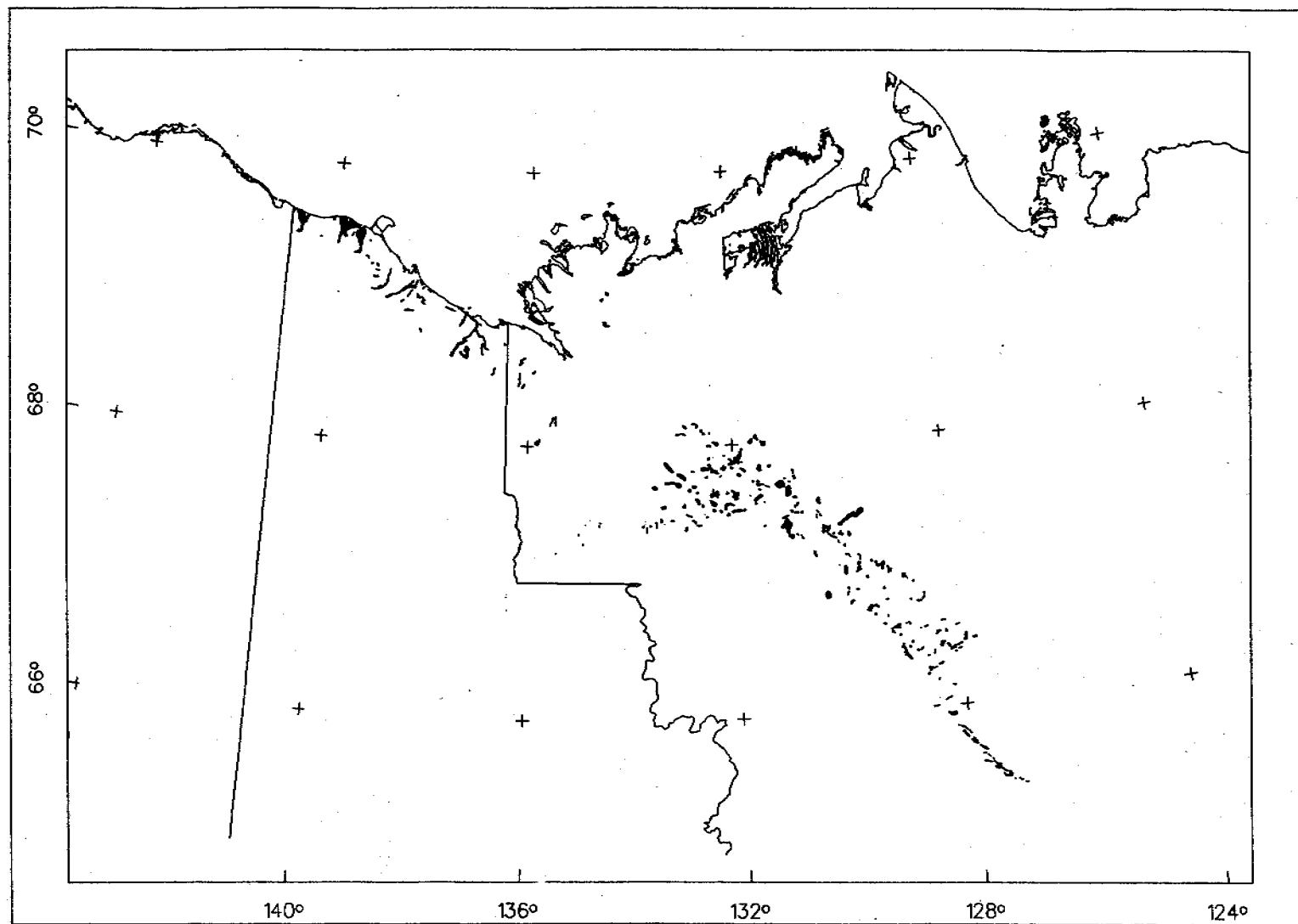


Map 1: Yukon North Slope Granular Resource Database

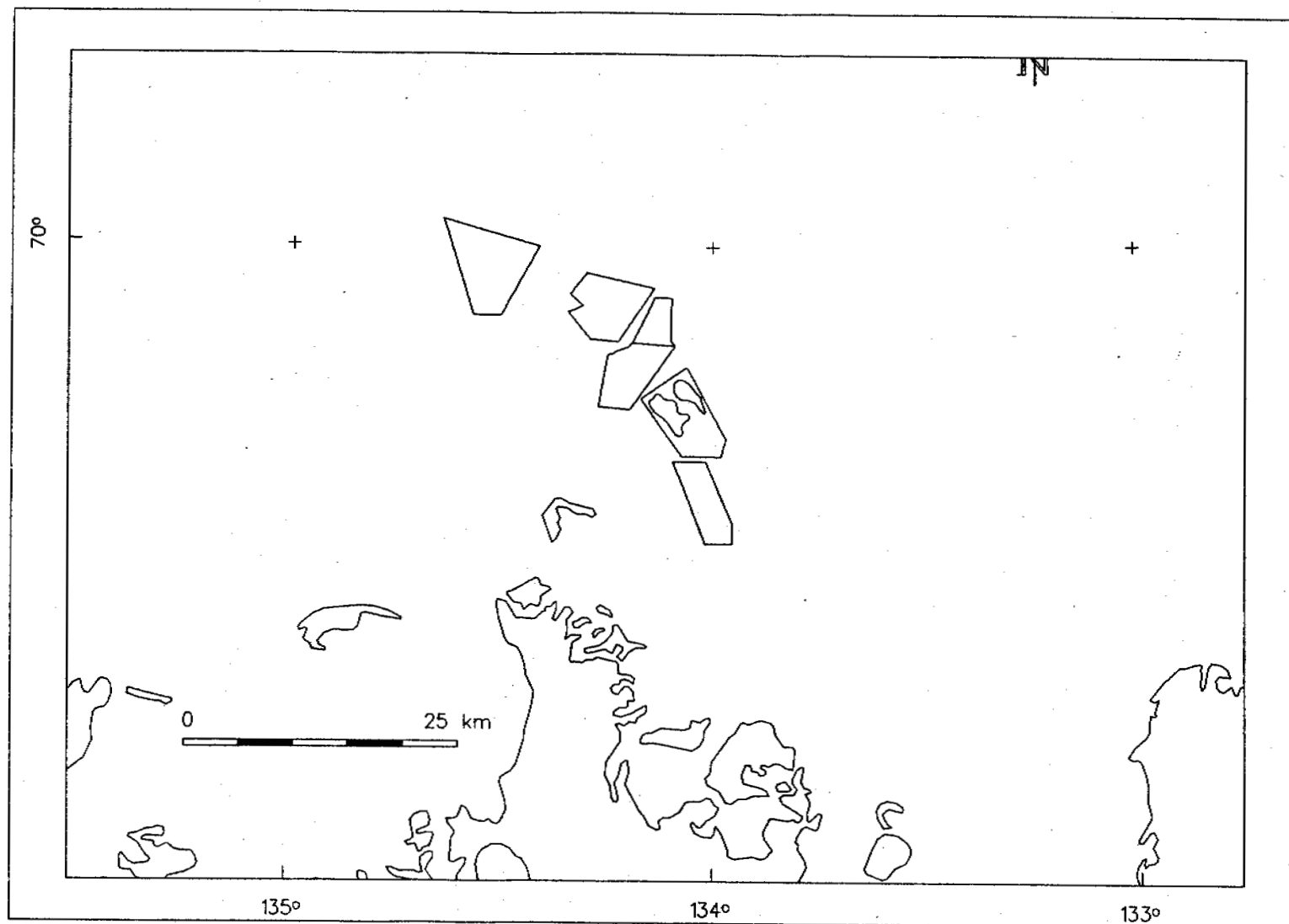


Map 2: Detail of Granular Deposits Near Herschel Island

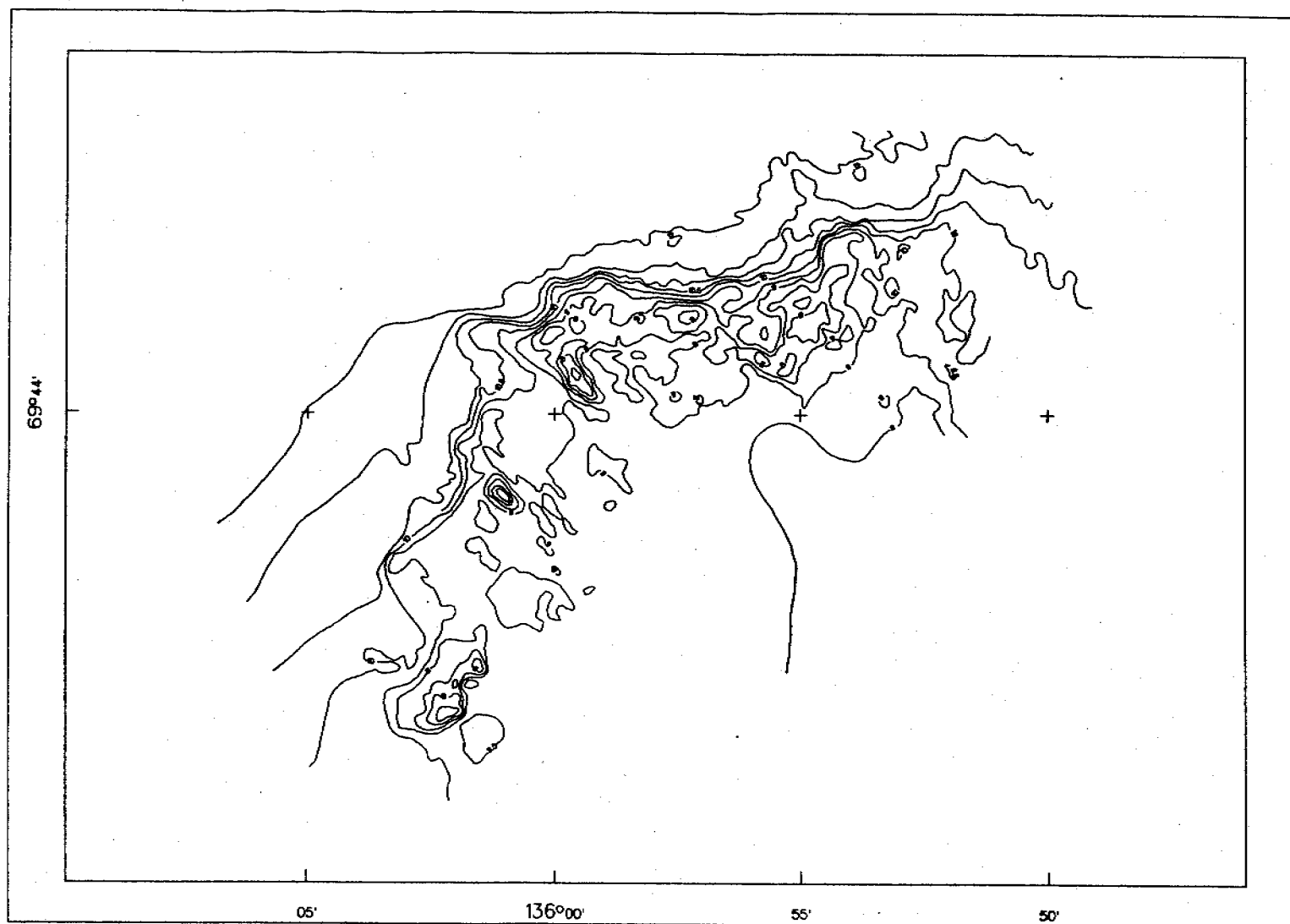




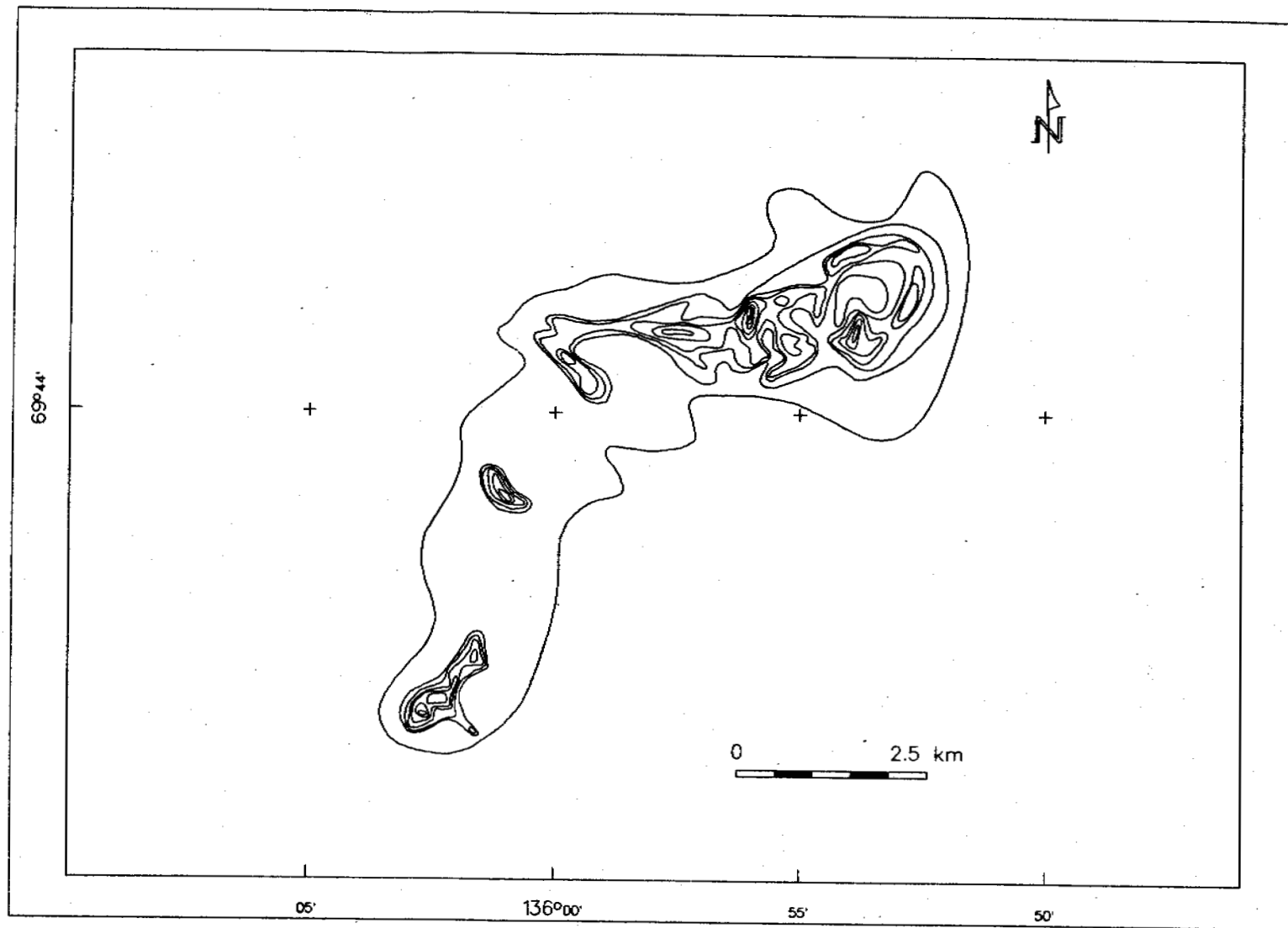
**Map 3: The Granular Deposit Compilation Database**



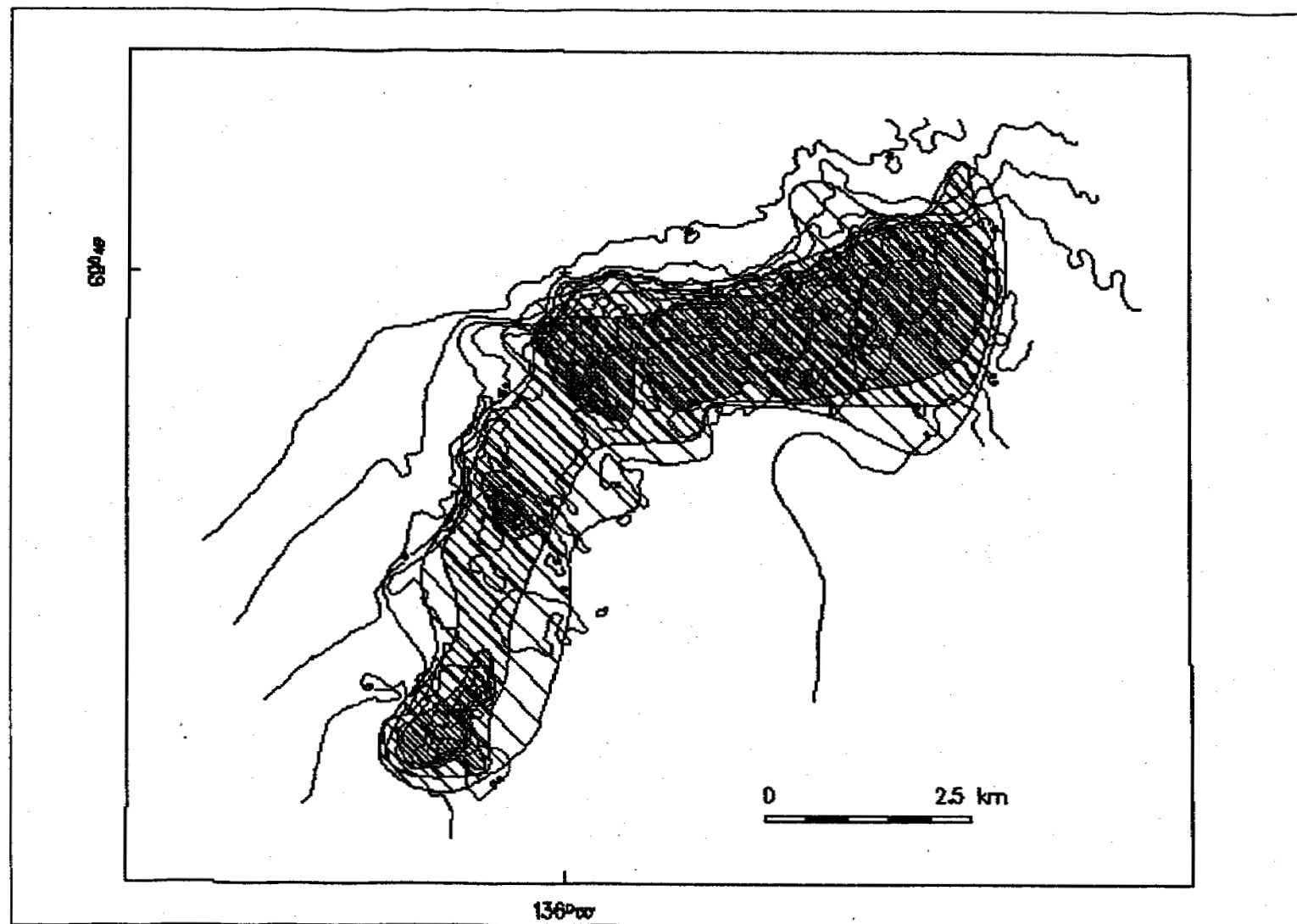
Map 4: Akpak Plateau Target Areas with Site 'D' Resource Boundary



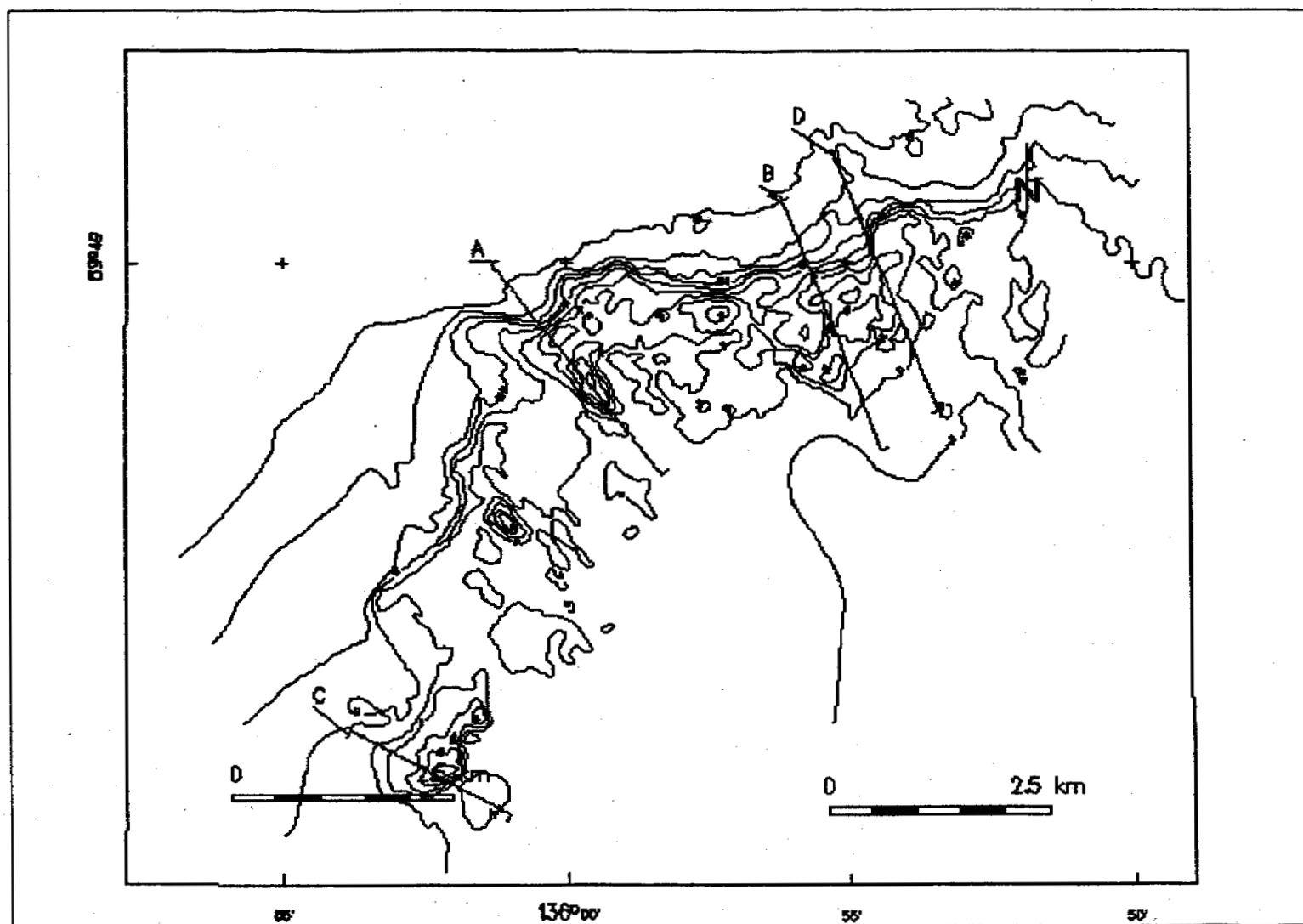
Map 5: Issigak Block Bathymetry



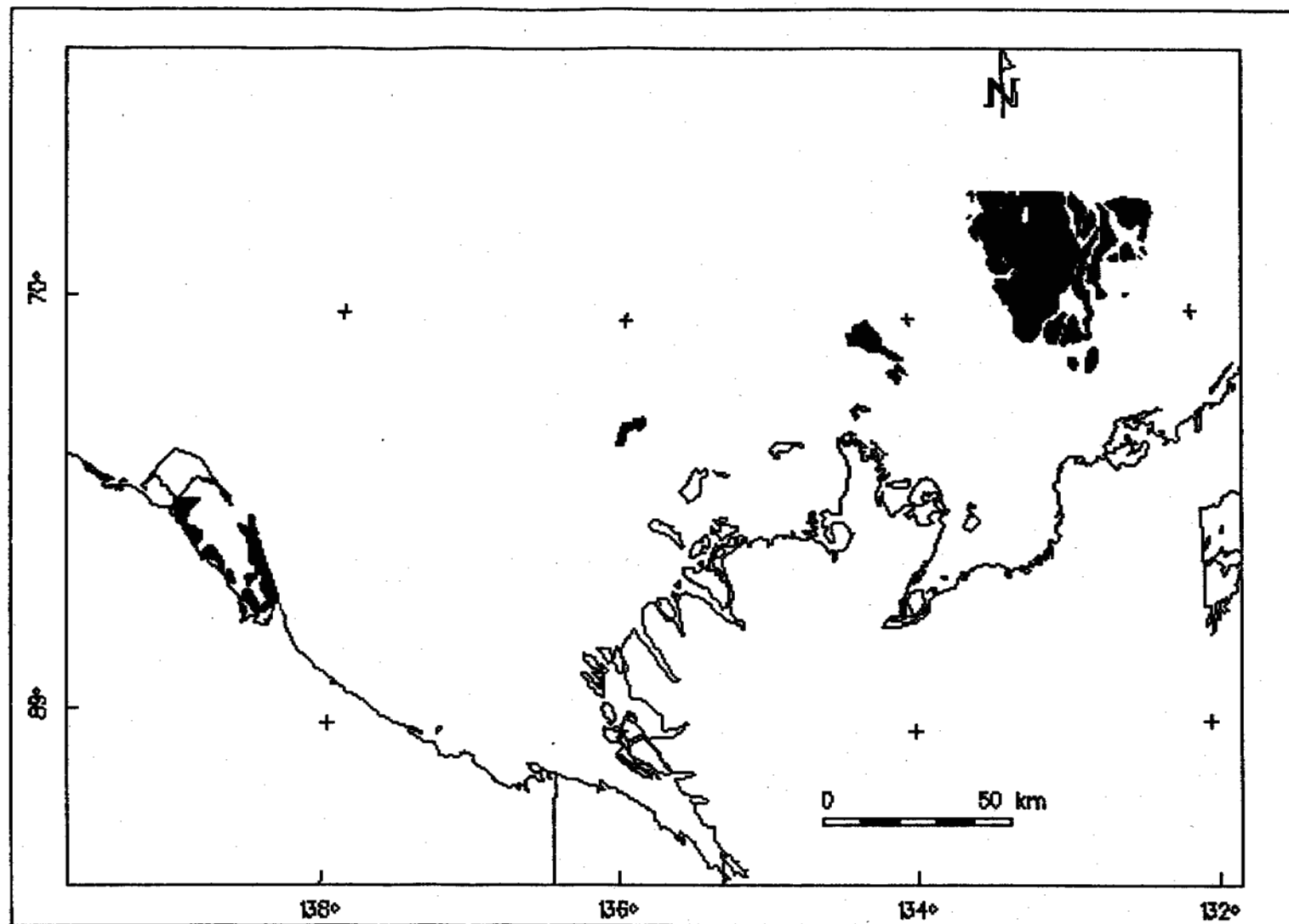
**Map 6:** Issigak Block Overburden Isopach



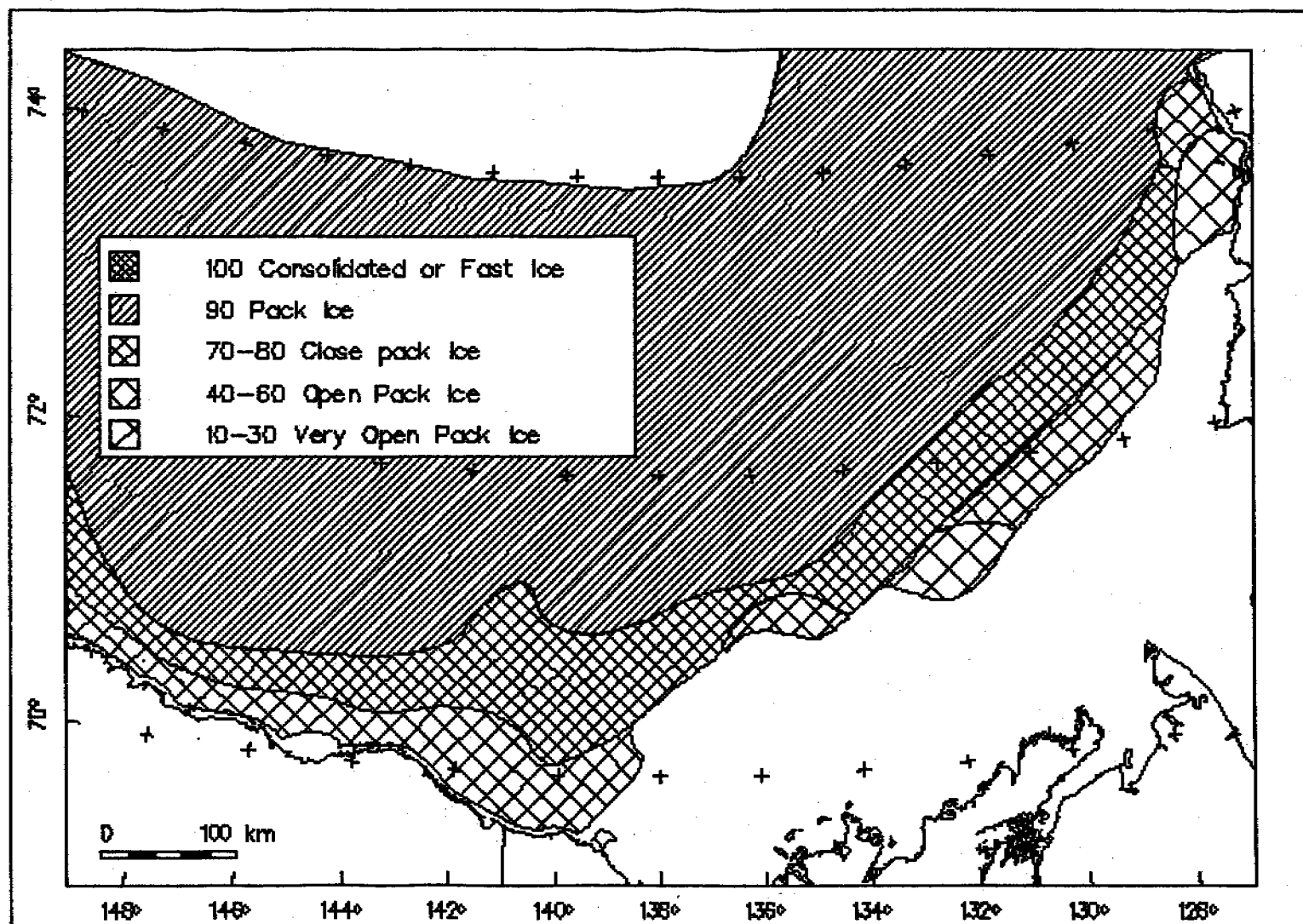
Map 7: Issigak Block Resource Potential with Bathymetry



Map 8: Issigak Block Cross Section Lines with Bathymetry



Map 9:      Compilation Database of Beaufort Borrow Prospects



Map 10: Median Ice Distribution for August 6th



## APPENDIX C

## Installation Procedure for ESEBase for Foxpro

The Floppy disk contains a file called ESEFOX.EXE. This is a self-extracting ZIP file containing all the necessary files for running ESEBase for FOXPRO.

Copy this file to the existing ESEBASE home directory. Change to the ESEBASE directory and type ESEFOX <RETURN>. This will unpack the files.

The ESEBase for FOXPRO program uses standard ESEBASE files such as the DRIVERS database, Format files etc. It will NOT corrupt these files. The system is designed to co-exist with the standard ESEBASE program files and Database Files (DBF's).

The program may be run in two modes :

Mode 1 : Stand Alone

The ESEBase home directory MUST be included in the DOS path command. As well, a minimum setting of FILES=50 is recommended.

eg. in the AUTOEXEC.BAT file :  
path=c:\;c:\dos;c:\ESEBASE

eg. in the CONFIG.SYS file :  
FILES=50

To run the program type ESE <RETURN> at the DOS prompt. The program may be run from any default drive and directory.

Mode 2 : inFOcus Module

The ESEBase home directory MUST be included in the DOS path command AND the QUIKMap environment variable QUIKPATH. As well, a minimum setting of FILES=99 is recommended. The extra files are needed to handle the additional overhead of both inFOcus and ESEBase.

eg. in the AUTOEXEC.BAT file :  
path=c:\;c:\dos;c:\ESEBASE;c:\INFOCUS  
set QUIKPATH=c:\ESEBASE

eg. in the CONFIG.SYS file :  
FILES=99

To install the program , activate inFOcus and choose any application. Add the ESE.EXE program (as a FOXPRO compatible program) to the Modules Menu. If it is desired for inFOcus and ESEBase to operate on the same ESEBase database, it will be necessary to add the ESEBase database as an inFOcus Application. The ESE.EXE file should be then activated from this Application.

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**File Listings :**

**Foxpro Runtime files :**

FOXPRO.ESL  
FOXPRO.ESO  
FOXREXE

**Program Files :**

ESE.EXE - Main EXE file  
GENPD.APP - Printer Driver setup

**System Database Files :**

ESEDIR.DBF - contains ESEBase Database directories  
ESEDIR.FPT

ESEQUERY.DBF - contains saved queries  
ESEQUERY.FPT

FOXUSER.DBF - resource files  
FOXUSER.FPT

PDRIVERS.DBF - printer drivers  
PDRIVERS.FPT

VIEWDEFS.DBF - Field lists by Viewname

VIEWS.DBF - Views  
VIEWS.CDX

**System Report Files**

SAMPLES.FRX - System Reports  
SAMPLES.FRT

INDEX.FRX  
INDEX.FRT  
ISDISKIN.BIN - External Drive tester