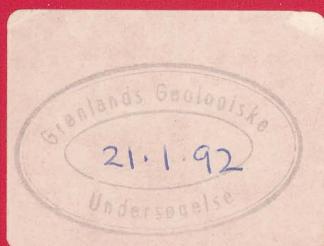


THEMATIC MAP SERIES

Regional Geoscience Compilations

Thematic Map Series 90/1

Nuuk-Maniitsoq area,
southern West Greenland



GRØNLANDS GEOLOGISKE UNDERSØGELSE
Kalaallit Nunaanni Ujarassiortut Misissuisoqarfiat
GEOLOGICAL SURVEY OF GREENLAND

With the compliments of the

Geological Survey of Greenland

The Geological Survey of Greenland (GGU) is a research institute affiliated to the Mineral Resources Administration for Greenland (MRA) within the Danish Ministry of Energy. As with all other activities involving the non-living resources in Greenland, GGU's investigations are carried out within the framework of the policies decided jointly by the Greenland Home Rule Authority and the Danish State.

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Regional compilations of geoscience data from the Nuuk – Maniitsoq area, southern West Greenland

Edited by

A. Steenfelt, L. Thorning, and T. Tukiainen



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1. Introduction

The present volume of maps is a first attempt to publish comprehensive sets of regional geodata for a selected area in Greenland in a standard scale and format. Most of the maps present information which has not previously been published. The purpose of the volume is to facilitate, visually or by integration techniques, the identification of trends and boundaries of importance to the interpretation of crustal composition and the recognition of environments favourable for ore genesis.

For each of the themes, additional information about data acquisition and the method of presentation is given below together with some comments on the results. A comprehensive interpretation of the maps is not attempted at this stage and awaits the results of more work with integrated data sets.

The maps in this volume cover the ice free part of southern West Greenland between latitudes 64°N and 66°N which is administratively divided between the municipalities of Nuuk (Godthåb) and Maniitsoq (Sukkertoppen) (see map 90/1-000).

The topography in the north-western part of the area is mostly moderate with

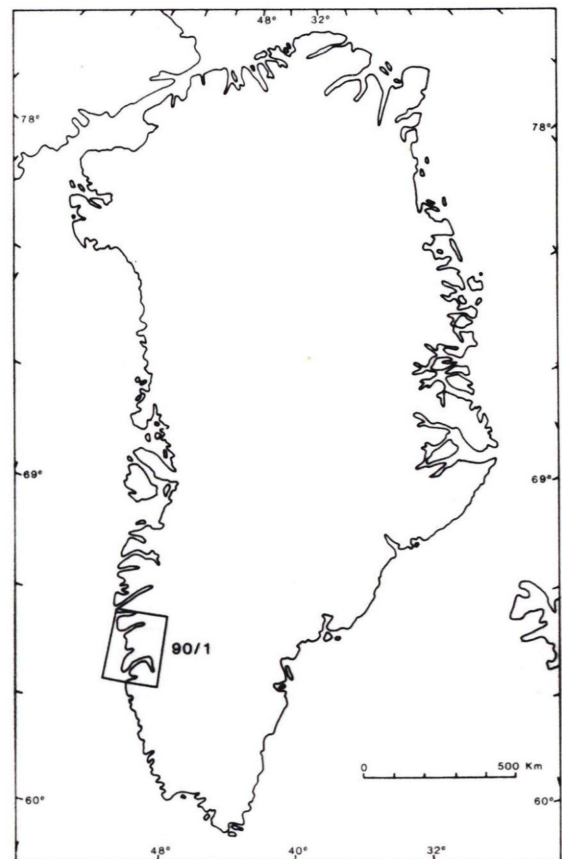


Fig. 1. Map of Greenland with position of the Nuuk-Maniitsoq area.

elevations between 300 and 900 m a.s.l. and the landscape is dominated by low rounded mountains and numerous lakes (map 90/1-000). The southern part of Nordlandet peninsula is very flat and possibly represents a marine abrasion plain or foreland. Along the coasts and in the Godthåbsfjord region the relief is accentuated by the fjords, and steep cliffs are common. The mountains in the south-eastern part are high with summits often exceeding 1400 m (maximum 1630 m). The Inland Ice rises towards the east, and in the north-western corner of the area a local ice cap is present.

The climate is arctic with severe winters and short summers. Mean temperatures for January are -7 to -8° and for July 7 to 8°C . Snow cover is in general present from September-October until May-June. The climate is influenced by a branch of the Gulf Stream so that the harbours of the west coast are usually accessible throughout the year. Periodically the area is subjected to frequent low pressure systems giving very strong winds and rain, particularly in coastal areas. Annual precipitation is about 600 mm.

Vegetation covers 50 to 90 per cent of the low-lying areas, but is very sparse at higher altitudes; hence the rock exposure is good on a regional scale. Vegetation is everywhere low and does not impede walking.

The population is small and centred in the two towns: Nuuk, the capital with 8300 inhabitants, and Maniitsoq with 3090 inhabitants (map 90/1-000). Other settlements are situated along the outer coast leaving the inland areas, including the inner fjord zone of Godthåbsfjord, uninhabited except for Kapisillit (129 inhabitants). Abandoned settlements (map 90/1-000) may still have empty buildings and jetties which may be used by operators in the area.

The main industries are fishery and governmental and commercial services. There is no mining industry in the map area. The inland areas support a large population of reindeer which is protected except in the hunting season.

The airport at Nuuk has regular connections with the international airport at Søndre Strømfjord, 300 km to the north, and occasional connections with Canada. The coastal areas are accessible by boat, but the inland areas can only be reached by helicopter (charter office in Nuuk) or on foot.

Geologically the Nuuk-Maniitsoq area forms part of the Precambrian Laurentian shield; the Godthåbsfjord and Isukasia districts host the oldest known parts of the shield, the 3.8 Ga Isua supracrustals and 3.8 to 3.6 Ga Amîtsoq gneiss complex. The greater part of the Archaean basement rocks consists of quartzofeldspathic orthogneisses formed about 3.0 to 2.6 Ga ago and contain thin layers of supracrustal sequences (map 90/1-001). The latest Archaean event was the intrusion of a granite complex (at 2.53 Ga); since then the area has been affected only by intrusion of an early Proterozoic dolerite dyke swarm, and a major carbonatite complex (173 Ma old).

Mineral exploration, undertaken largely by commercial companies, has led to discovery of the deposit of banded iron formation at Isukasia, the Qaqarssuk carbonatite complex, and scattered occurrences of sulphide mineralisation throughout the area associated with basic metavolcanics and intrusives (map 90/1-402). Recent exploration by GGU and commercial companies has concentrated on the occurrence of uranium, scheelite, and gold in Isukasia and the Godthåbsfjord region, and on gold and platinum group elements north of latitude 65° (maps 90/1-401 to 405).

The northern part of the map area is not very well known geologically; apart from the carbonatite complex exploration has been of a reconnaissance nature. More work is required to properly assess the mineral potential of this region.

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3. Comments and selected bibliography to each theme

3.1 Geology

The geological map (map 90/1-001) is essentially a lithological map showing the distribution of major rock types with indication of major age relations in the legend. The map also contains partial information about the distribution of metamorphic facies. Structural information will be included in a later update of the maps. The distribution of lithologies shown on the geological map is generally clearly reflected on the geochemical maps. However, the geophysical and geochemical maps also reveal patterns which are not identified on the geological map. These patterns may reflect unrecognised primary lithological variations and retrograde metamorphic processes in some areas, and also seem to support ideas about the composite nature of the Archaean crust, i.e. the concept of different geological terranes within the Archaean continent of southern West Greenland (Nutman *et al.*, 1989; Steenfelt, 1990).

Selected bibliography

- Geological Survey of Greenland: Geological map of Greenland 1:500 000, sheet 2, Frederikshåb Isblink - Søndre Strømfjord. Copenhagen: Geological Survey of Greenland.
- Geological Survey of Greenland: Geological map sheets 1:100 000: Qôrqu 64 V.1 S, Fiskefjord 64 V.1 N, Ivisârtoq 64 V.2 N, Isukasia 65 V.2 S.
- Kalsbeek, F. & Garde, A. A. 1989: Descriptive text to 1:500 000 sheet 2, Frederikshåb Isblink - Søndre Strømfjord, 36 pp. Copenhagen: Geological Survey of Greenland.
- Steenfelt, A. 1990: Geochemical patterns related to major tectono-stratigraphic units in the Precambrian of northern Scandinavia and Greenland. *J. Geochem. Explor.* **39**, in press.

3.2 Magnetometry

The aeromagnetic data (total field intensity) are displayed in three ways: a colour anomaly map (map 90/1-101), a shaded relief map in grey tones (map 90/1-112), and a map combining the two (map 90/1-113).

The data, which represent 17 000 km of flight lines, were originally corrected for diurnal variations using tie-lines and base station recordings of the magnetic field (Thorning, 1984, 1986). For the purpose of the thematic maps the data have been further processed using the commercially available Geosoft package of programmes for processing of potential field data. The along-flight-line corrected data were gridded and filtered in each of the four surveyed areas and the final grid was then formed by combining the four areas. In a small area of overlap between the two major surveys in the central part of the map the final grid values were calculated as means between corresponding grid values of the two original grids.

The colour anomaly map was produced by applying a standard colour spectrum scale to the data in such a way that all classes cover the same percentage of the map. The shaded relief map has the assumed light source NNW of the map at an inclination of approximately 45°. The combined map was produced by superposing the grey-scaled map on the colour map using a less saturated colour scale.

The aeromagnetic data have been commented on by Thorning (1984), hence only a few observations are given here. A large part of the regional variation in the magnetic field may be related to the metamorphic facies of the gneisses (Thorning, 1984). This

is particularly well illustrated along the Sdr. Isortoq fjord and Majorqaq valley where high amplitude anomalies and high magnetisation levels correlate with granulite facies rocks, whereas the magnetic field is generally smooth and of low amplitude over rocks in amphibolite facies (compare map 90/1-001). The lineaments in the magnetic field south of Majorqaq are directed both NE-SW and NW-SE and appear to separate granulite facies rocks from amphibolite facies rocks. This possibly indicates block faulting in the area with retrograde amphibolite facies rocks underlying granulite facies rocks. Further south lineaments displayed by the magnetic data are dominated by NE-SW trends.

In Nordlandet there is a belt of highly magnetic granulite facies rocks along the east coast, with a sharp boundary to the NW and probably also to the SE as can be seen on some extended magnetic profiles. This pattern is not readily explained by the lithological variation and further interpretation is impeded by the lack of data over the remainder of Nordlandet. However, the distribution patterns of other parameters (see later) confirm that the east coast of Nordlandet is likely to coincide with an important crustal structure.

A high magnetic field is associated with the eastern tonalite body whereas the major types of gneisses in the area, the Nûk and Amîtsoq gneisses, are not distinguished on the aeromagnetic maps. The NW-trending line of positive anomalies in the southern part of the map transects the lithological units and cannot be explained by the surface lithology.

Local anomalies are associated with the Isua supracrustal belt with the strongest positive anomaly above the deposit of banded iron formation at Isukasia (compare map 90/1-405), as well as with other occurrences of supracrustal rocks, e.g. at Ivisaartoq (compare map 90/1-001). The Qaqarssuq carbonatite complex and an anorthosite body on the west coast of Nordlandet are also distinguishable by magnetic anomalies.

3.3 Gravimetry

The Bouguer anomaly maps are based on data from the National Gravity Data Base at Kort- og Matrikelstyrelsen (KMS), containing 1162 station locations and Bouguer values. The original sources for much of these hitherto unpublished data are numerous and date back 30 to 40 years; most were made at coastal locations with only a few offshore measurements included. A large part of the data, however, has been collected recently by a group involved in deep crustal studies in the area (M. A. Speece *et al.*, manuscript in preparation). The coverage in the Nuuk - Maniitsoq area is still rather poor, which can be seen on the maps. The reader is referred to KMS for further details.

The processing of the individual gravity measurements into Bouguer anomalies by KMS did not include terrain corrections.

The Bouguer anomaly map displays a regional field dominated by a broad N-S trending minimum in the central part of the area. The minimum is part of a coast-parallel low gravity zone recognised over large parts of Greenland.

The residual Bouguer anomaly map (map 90/1-112) shows the deviations from the regional field, i.e. all anomalies with wavelengths shorter than 80 km. The small scale gravity variations may be compared with the geology and the trends observed on the other geophysical maps, notably the linear trend along the east coast of Nordlandet where anomalies are believed to be related to the same deep structures as mentioned above in the discussion of the magnetic anomaly map.

Selected bibliography

Speece, M. A., Nutman, A. P., Smithson, S. B. & McGregor, V. R. (manuscript in preparation): Crustal structure in the Godthåbsfjord region of southern West Greenland: geophysical evidence.

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3.4 Gamma-ray spectrometry

The data are derived from an airborne gamma-ray spectrometric survey covering West Greenland from 63°N to 69°N (Secher, 1976, 1977). The raw data are corrected for background radiation and variations due to height deviations. The data were then stripped and equivalent surface concentrations of U, Th and K have been calculated after calibration of the equipment at the Risø National Laboratory. The data-smoothing used here favours the display of the regional variation and spot anomalies are suppressed.

The most remarkable feature is the zone of high radiation running diagonally from Isukasia to Nuuk. The south-western part of the high radiation zone corresponds to the outcrop of the late Archaean Qôrqt granite complex, but the northern and eastern part runs through rocks mapped as Amîtsoq gneiss and Nûk gneiss.

The lowest radioactivity levels relate to two granulite facies gneiss areas also characterised by high magnetic field: Nordlandet and the area south of Majorqaq (maps 90/1-000 and 001). The sharp change in radiation level along the east coast of Nordlandet coincides with the equally sharp changes in the magnetic and gravity fields which indicate an abrupt change in crustal level (upwards from Nordlandet towards the Godthåbsfjord region).

A number of U and Th spot anomalies occur within the radioactive zone and are caused by pegmatites containing radioactive minerals including uraninite (see map 90/1-403). Radioactive pegmatites are also responsible for the elevated radioactivity in the northernmost part of the map. The Qaqarssuk carbonatite shows as a subtle Th-anomaly (map 90/1-403).

Selected bibliography

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3.5 Drainage geochemistry

Stream sediment and water

The data on drainage geochemistry are compiled from two surveys, north and south of latitude 65°N, respectively. All samples have been analysed by the same methods (XRF, INAA, DNC), but at different times, and systematic analytical differences were noted between the two data sets for some of the elements. The reanalysis of a batch including samples from both surveys provided data for a normalisation of the two chemical data sets prior to map production. The analysis of U in water differed considerably between the two areas, and as reanalysis was impossible an arbitrary background correction on one data set has been employed. Thus the relative variation is maintained, but absolute values between the two areas cannot be compared.

For the survey south of 65°N a large number of analyses by Instrumental Neutron Activation is missing (maps 90/1-221 to 232) owing to insufficient sample material.

More information about the quality of the stream sediment data, their reproducibility and representativity, is given in the literature listed below. It should be noted that since the writing of the publications listed much new analytical data have been acquired and are included on the maps in the present volume.

The scaling of the symbols was chosen to display the regional variation, and only the maximum value written in the summary statistics below the histogram gives an indication of any anomalously high values.

The most conspicuous features of the element distribution patterns are displayed by the maps of the large ion lithophile elements K, Rb, Cs, U and Th (maps 90/1-209, 215, 227, 233, 232) which are enriched in the zone of high radiation (compare with maps 90/1-121 to 124). The geochemical data confirm the observations made on the geophysical maps that the western boundary of the enriched zone is sharp and linear, and the geochemical maps further show that the boundary may be followed all the way to Isukasia (best seen in the Rb pattern, map 90/1-215). The boundary almost coincides with the Archaean terrane boundary suggested by Nutman *et al.* (1989). The south-eastern boundary of the terrane containing the early Archaean rocks is, according to Nutman *et al.* (1989), much more complicated structurally and this boundary, as mapped, does not appear to fit any of the element distribution patterns. Further evaluation of the regional geochemical data with respect to crustal composition awaits studies of integrated geophysical and geochemical data.

The Qaqarssuk carbonatite is clearly geochemically anomalous and is distinguished on a large number of maps, particularly by Nb, P_2O_5 , and Y. An area surrounding the carbonatite is enriched in Zn and As. In general the sampling density is not sufficiently high for the small occurrences of sulphide mineralised amphibolite to be reflected in the geochemical patterns. The values for As and Au are low and poorly correlated but may still be indicative of the type of mineralisation found (see maps 90/1-401, 402). Very high Cr (up to 2%) was encountered in streams draining ultramafic rocks on the north side of Fiskefjord. High Cr together with Ni, V, and Co also occur in a cluster of samples at the head of Sdr. Isortoq (map 90/1-000) and are indicative of unmapped ultramafic rocks.

Heavy mineral concentrates

The data presented are selected from a survey covering supracrustal rocks from latitude 65°N and southwards (Appel, 1989) and provide information on some elements which are not represented by the stream sediment data. The samples of heavy mineral concentrate were primarily investigated for scheelite, but were also analysed for nine trace elements (results in Appel, 1989) in addition to the five presented here. The W anomalies (map 90/1-305) are caused by stratabound scheelite mineralisation (see map 90/1-404). The fairly high Sn contents of the heavy mineral concentrates have not been explained.

Selected bibliography

- Appel, P. W. U. 1989: Investigations of heavy mineral concentrates from stream sediment samples collected during the period 1982 to 1986 in the Nuuk area, West Greenland. *Open File Ser. Grønlands geol. Unders.* 89/1, 17 pp.
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- Steenfelt, A. 1990: Geochemical patterns related to major tectono-stratigraphic units in the Precambrian of northern Scandinavia and Greenland. *J. Geochem. Explor.* **39**, in press.
- Steenfelt, A. & Dam, E. 1982: Reconnaissance study of uranium and fluorine contents of stream and lake waters, West Greenland. *Rapp. Grønlands geol. Unders.* **110**, 26-32.

3.6 Mineral occurrences

The maps are based on data stored in the Greenland Mineralisation Data Bank at GGU, which contains information on mineral occurrences provided by companies holding concessions as well as by GGU and associated research groups. The genetic classification of the mineral occurrences is assessed subjectively by GGU staff. The maps show the location of the most important types of mineralisation recorded in the area and their economic importance is indicated by symbol size; a prospect is a site which has been drilled or chip-sampled.

The early Archean Isua supracrustal rocks (map 90/1-001) host a deposit of banded iron formation (map 90/1-405) as well as stratabound and vein type base metal sulphide occurrences (map 90/1-402), some of which also contain a little Au and Ag (map 90/1-401). The middle to late Archean supracrustal sequences in the Godthåbsfjord region contain frequent occurrences of stratiform or stratabound scheelite (map 90/1-404) of which those at Ivisaartoq have shown the highest grades (Appel, 1990a). U-Th-minerals, including uraninite, occur primarily in pegmatite veins hosted by amphibolite. Au has been recorded in some of the rock samples of the supracrustal rocks; the highest values were obtained at Ivisaartoq (map 90/1-401).

North of latitude 65°N base metal sulphide mineralisation is frequently associated with amphibolite and metanorite (map 90/1-402), and a number of the samples of these rocks gave positive results when tested for PGE and Au (map 90/1-401). The Qaqarssuk carbonatite complex contains subeconomic concentrations of apatite and pyrochlore as well as late veins rich in REE.

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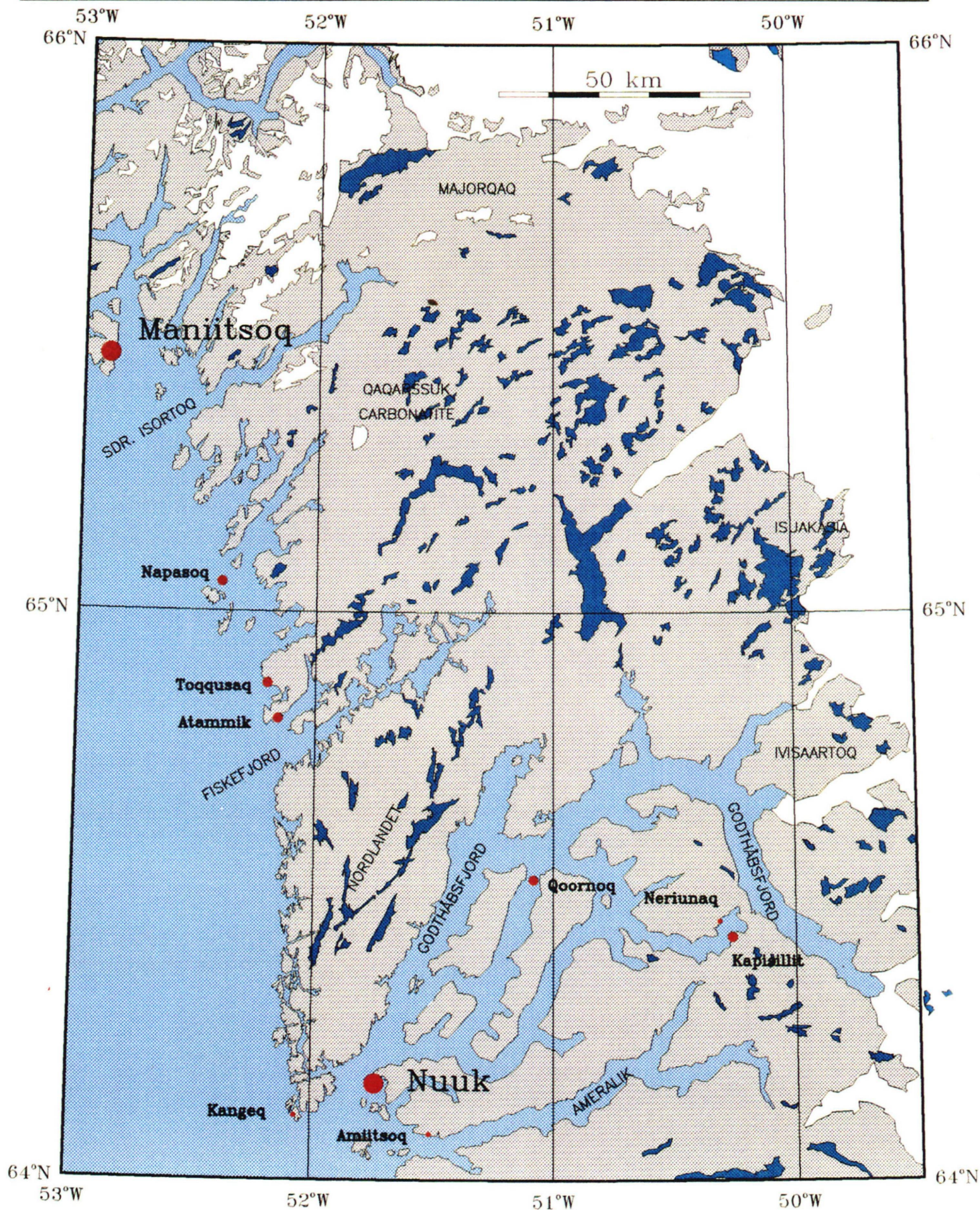
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TOPONYMIC MAP

90/1-000: Nuuk - Maniitsoq 01-DEC-90










Thematic map 90/1-000

TOPONYMIC MAP

Nuuk - Maniitsoq

LEGEND

- | | |
|---|-----------------------|
|  | Ice |
|  | Lake |
|  | Land |
|  | Sea |
|  | Town |
|  | Settlement |
|  | Settlement, abandoned |

Projection: Lambert conformal conic
Standard parallel: 66° 30' N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
from 1:250 000 topographic maps.
Permission No: KMS A.200/87

Released: 01-DEC-90

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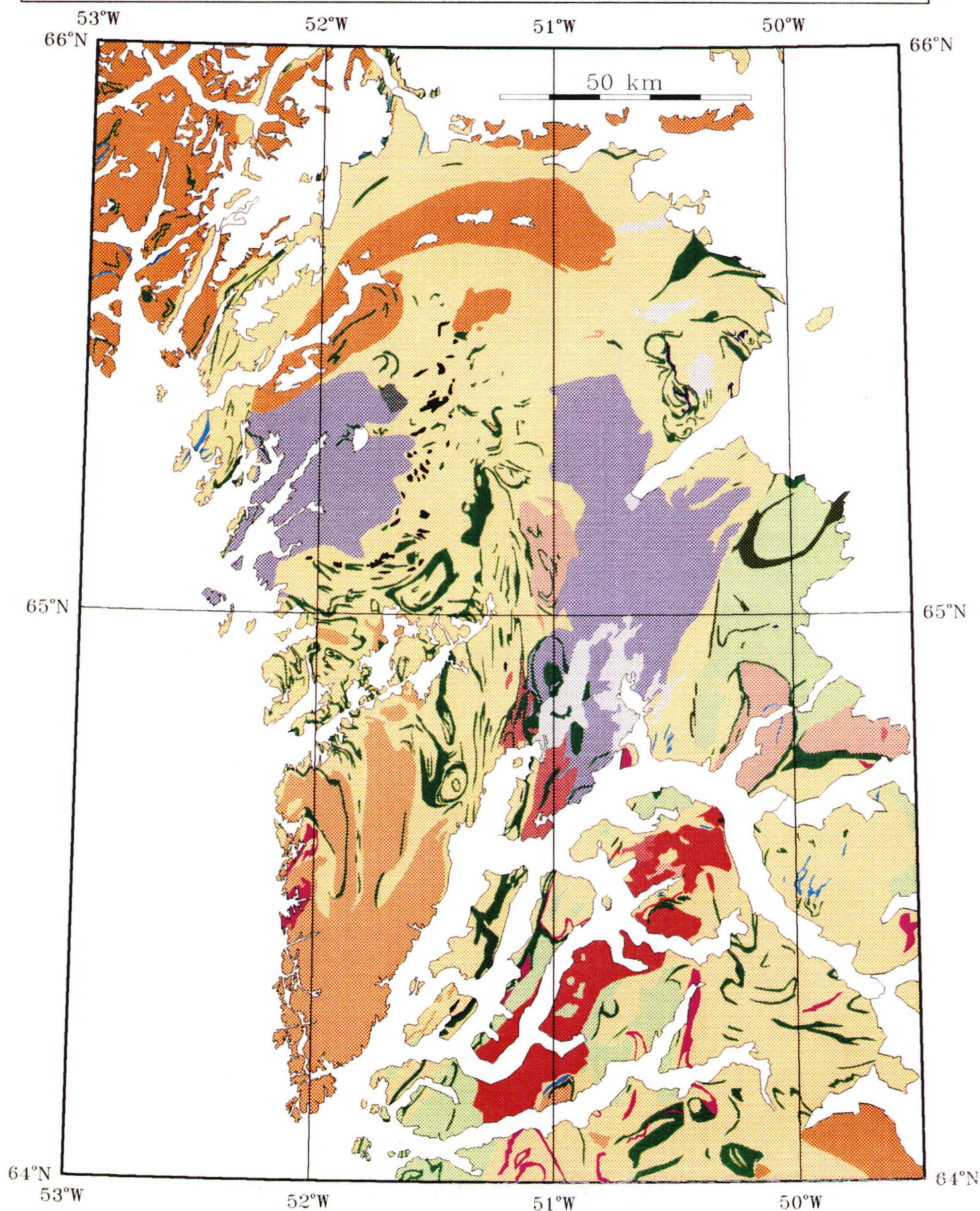




GEOLOGICAL MAP

90/1-1: Nuuk - Maniitsoq

01-DEC-90



Thematic map 90/1-1

GEOLOGICAL MAP

Nuuk – Maniitsoq

Compiled by A. Garde and T. Tukiainen

LEGEND



Quaternary deposits

MESOZOIC



Carbonatite (Qaqarssuk carbonatite, 173 Ma)

LATE ARCHAEOAN (2550 Ma)



Qorqut Granite Complex (2550 Ma)

MIDDLE TO LATE ARCHAEOAN (3100–2600 Ma)



Metagabbro (mainly metanorite)



Granite (mainly Qugssuk granite)



Predominantly tonalitic rocks (Finnefjeld gneiss, Taserssuaq Tonalite)



Undifferentiated granitic gneiss



Tonalitic gneiss, includes Nuk gneiss



Dioritic and mafic tonalitic gneiss, mainly granulite facies



Granulite facies gneiss, tonalitic to dioritic



Anorthosite and leucogabbro



Amphibolite and pyroxenite



Metasediments



Ultramafic rocks

EARLY ARCHAEOAN (3800–3600 Ma)



Amitsoq gneiss



Isua and Akilia supracrustal rocks

DATA SOURCE

Geological maps in scale 1:500 000 and 1:100 000 published by the Geological Survey of Greenland. The area east of Godthåbsfjord is revised on the basis of oral communications by C.R.L. Friend, V.R. McGregor, and A.P. Nutman. Archaeoan and Proterozoic mafic dykes and faults have been omitted.

DATA PROCESSING

The geological units were digitized as polygons in scale 1:500 000 and supplied with a lithological code. The colour coding of the polygons is controlled by the lithological code.

Projection: Lambert conformal conic
Standard parallel: 66° 30' N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
Permission No: KMS A.200/87

Released: 01-DEC-90

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GRØNLANDS GEOLOGISKE UNDERSØGELSE

Geological Survey of Greenland

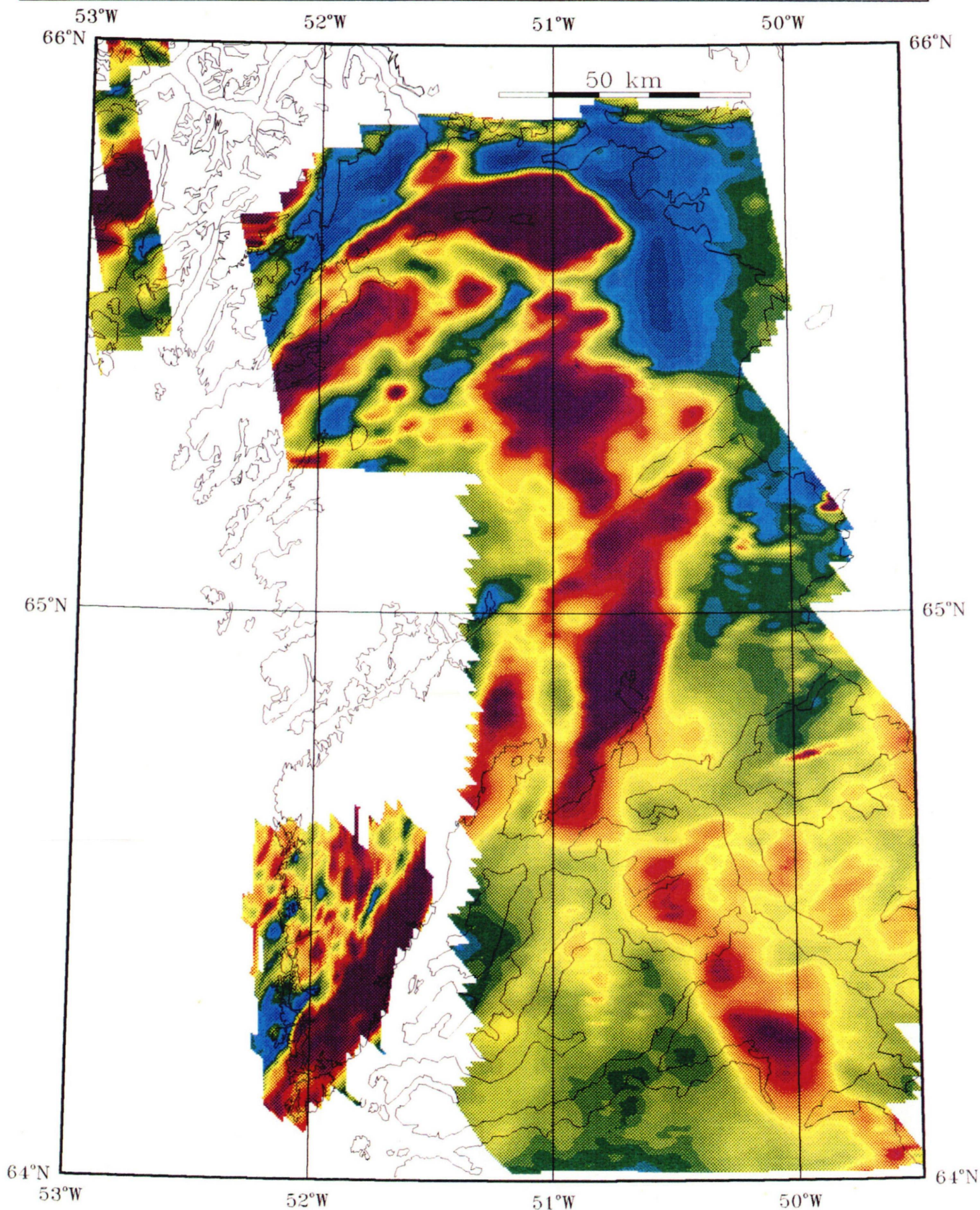
Øster Voldgade 10 DK-1350 København K Danmark





AEROMAGNETIC TOTAL INTENSITY ANOMALY MAP

90/1-101: Nuuk - Maniitsoq 01-DEC-90



Thematic Map 90/1-101

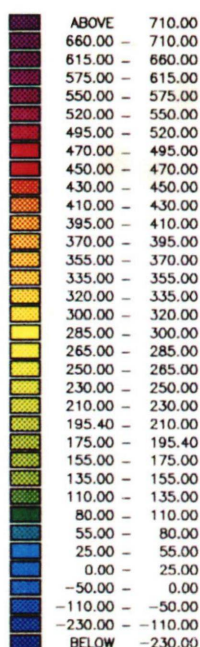
AEROMAGNETIC TOTAL INTENSITY ANOMALY MAP

Nuuk - Maniitsoq

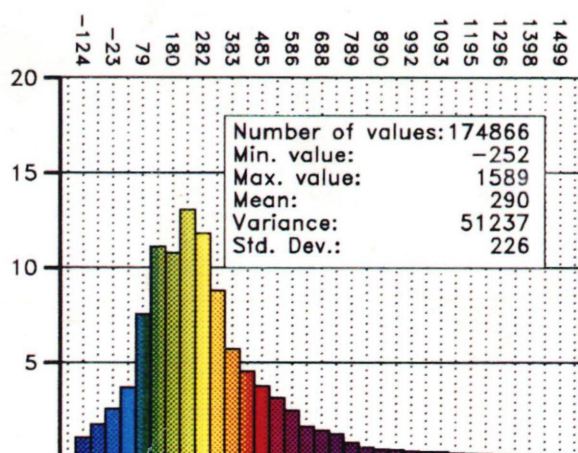
Compiled by L. Thorning

CONTOUR INTERVALS

Total intensity (nT)



STATISTICAL PARAMETERS OF GRID VALUES



DATA SOURCE

Data from aeromagnetic surveys flown by the Geological Survey of Greenland using a proton magnetometer (1 nT) stinger mounted in a fixed-wing aircraft.

SURVEY SPECIFICATIONS

The three survey areas were flown at altitude (a.s.l) and line spacing as follows:

Main survey: 1525 m and 2.0 km

NW survey: 1830 m and 2.0 km

SW survey: 300 m and 1.0 km

Flight line direction was approximately NNW-SSE except for the small SW survey, which was flown NW-SE.

DATA PROCESSING:

The original, diurnally corrected data have been further processed, including now de-corrugation (Butterworth and directional cosine filters). Gridding into a 350 m by 350 m grid was done by a bicubic spline method. The IGRF has been subtracted.

Projection: Lambert conformal conic
Standard parallel: 66° 30' N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
Permission No: KMS A.200/87

Released: 01-DEC-90

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Geological Survey of Greenland

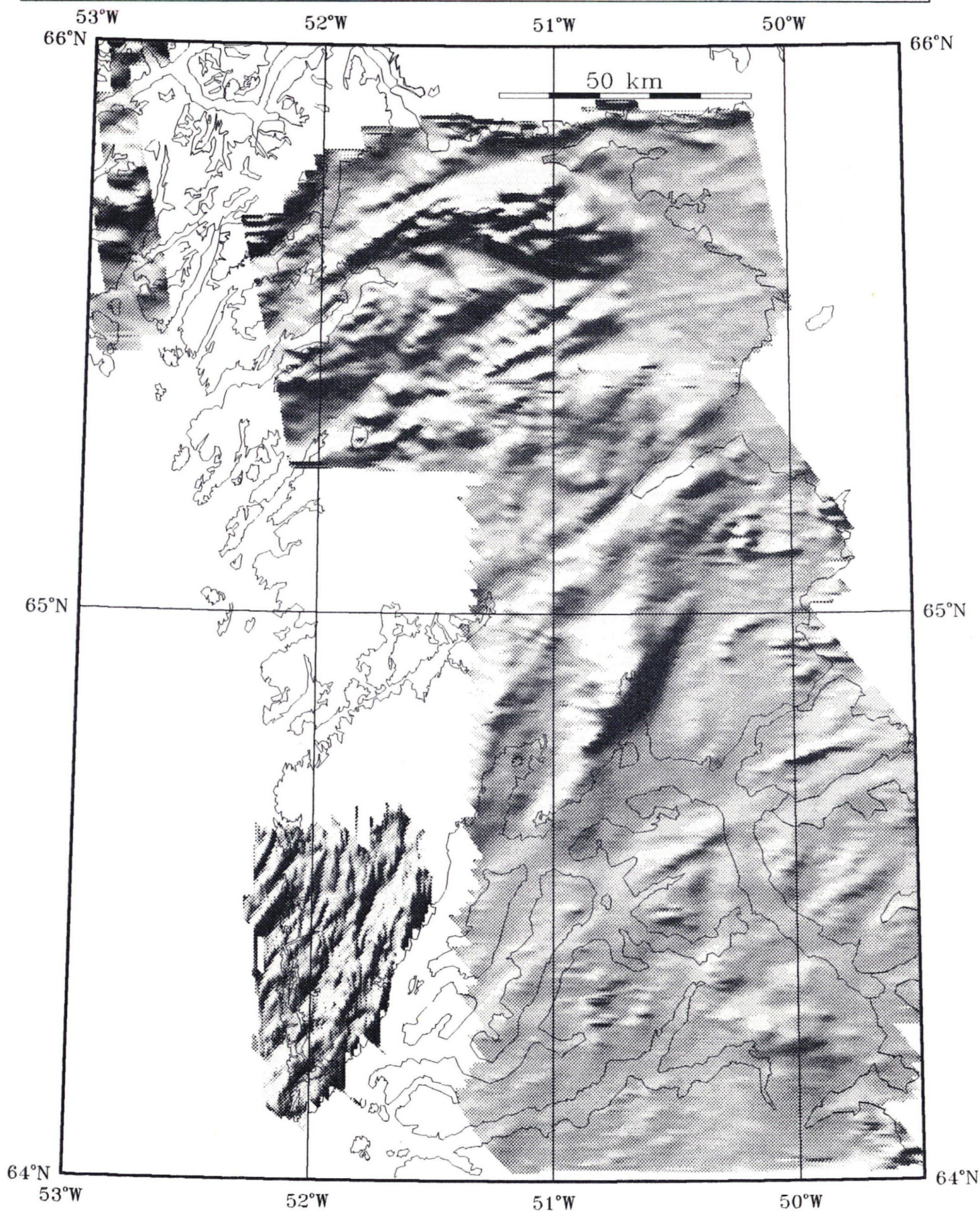
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AEROMAGNETIC TOTAL INTENSITY SHADED RELIEF MAP

90/1-102: Nuuk - Maniitsoq 01-DEC-90



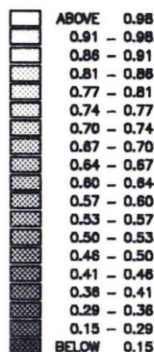
AEROMAGNETIC TOTAL INTENSITY SHADED RELIEF MAP

Nuuk - Maniitsoq

Compiled by L. Thorning

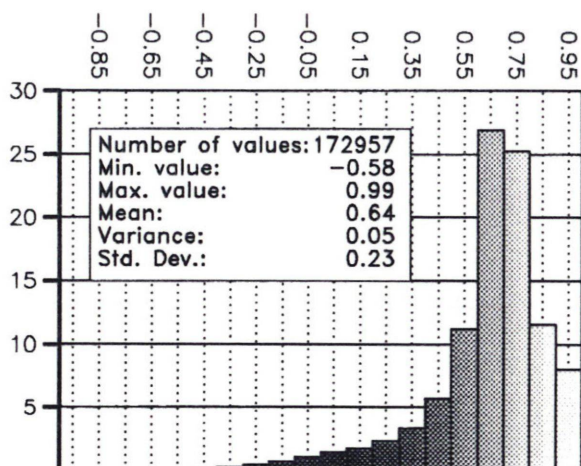
CONTOUR INTERVALS

Reflectance



The grey scale shows the reflectance from a light source placed at infinity to the NNW. A value of 1 indicates that the gridded surface is directly facing the light source. A value of 0 indicates that the gridded surface is parallel to the direction of the light.

STATISTICAL PARAMETERS OF GRID VALUES



DATA SOURCE

Data from aeromagnetic surveys flown by the Geological Survey of Greenland using a proton magnetometer (1 nT) stinger mounted in a fixed-wing aircraft.

SURVEY SPECIFICATIONS

The three survey areas were flown at altitude (a.s.l) and line spacing as follows:

Main survey: 1525 m and 2.0 km

NW survey: 1830 m and 2.0 km

SW survey: 300 m and 1.0 km

Flight line direction was approximately NNW-SSE except for the small SW survey, which was flown in a NW-SE direction.

DATA PROCESSING

The original, diurnally corrected data have been further processed, including now de-corrugation (Butterworth and directional cosine filters). Gridding into a 350 m by 350 m grid was done by a bicubic spline method. The IGRF has been subtracted.

The shaded relief surface has been calculated with the light source at infinity with an inclination of 45° to the NNW.

Projection: Lambert conformal conic

Standard parallel: 66° 30' N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.

Permission No: KMS A.200/87

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Geological Survey of Greenland

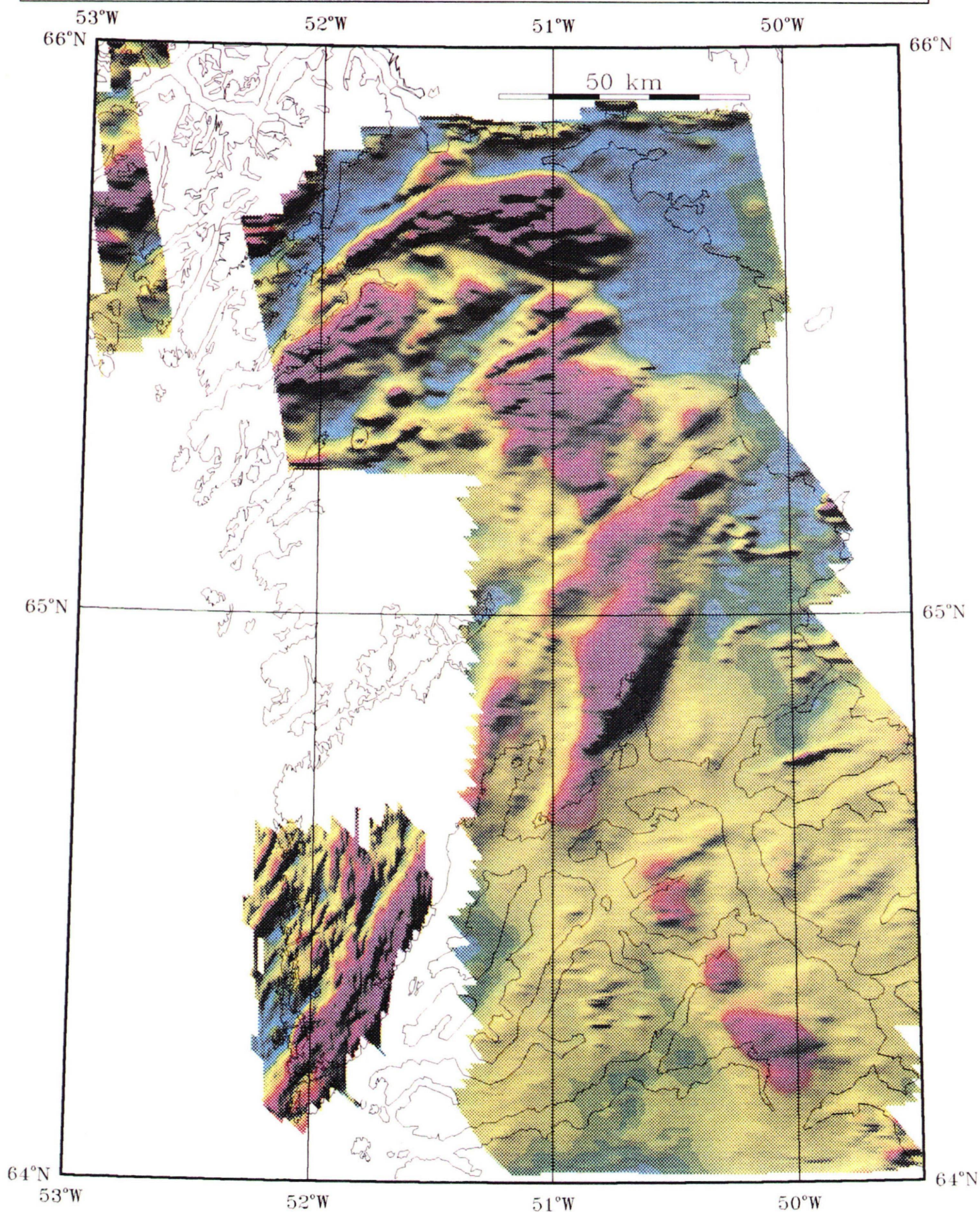
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AEROMAGNETIC TOTAL INTENSITY SHADED ANOMALY MAP

90/1-103: Nuuk - Maniitsoq 01-DEC-90



Thematic Map 90/1-103

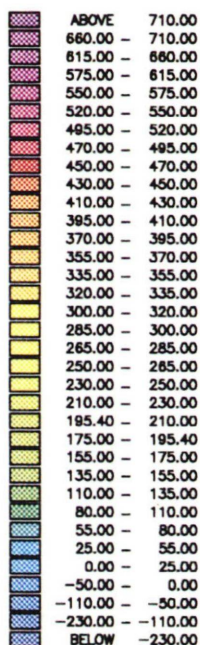
AEROMAGNETIC TOTAL INTENSITY SHADED ANOMALY MAP

Nuuk - Maniitsoq

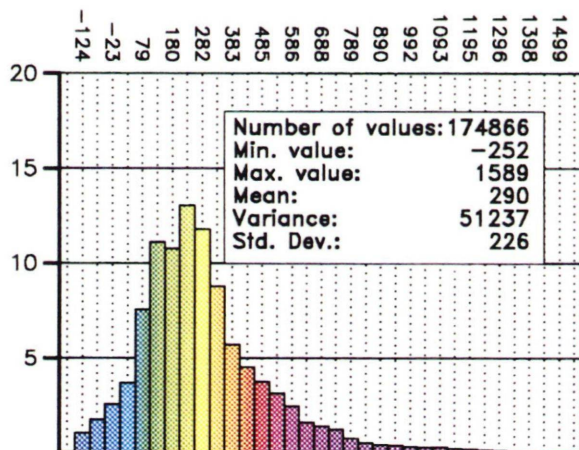
Compiled by L. Thorning

CONTOUR INTERVALS

Total intensity (nT)



STATISTICAL PARAMETERS OF GRID VALUES



DATA SOURCE

Data from aeromagnetic surveys flown by the Geological Survey of Greenland using a proton magnetometer (1 nT) stinger mounted in a fixed-wing aircraft.

SURVEY SPECIFICATIONS

The three survey areas were flown at altitude (a.s.l.) and line spacing as follows:

Main survey: 1525 m and 2.0 km

NW survey: 1830 m and 2.0 km

SW survey: 300 m and 1.0 km

Flight line direction was approximately NNW-SSE except for the small SW survey, which was flown in a NW-SE direction.

DATA PROCESSING

The original, diurnally corrected data have been further processed, including now de-corrugation (Butterworth and directional cosine filters). Gridding into a 350 m by 350 m grid was done by a bicubic spline method. The IGRF has been subtracted.

This map shows the colour anomaly map (90/1-101) in pastel colours overlayed by the shaded relief map (90/1-102).

Projection: Lambert conformal conic

Standard parallel: 66° 30' N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.

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Geological Survey of Greenland

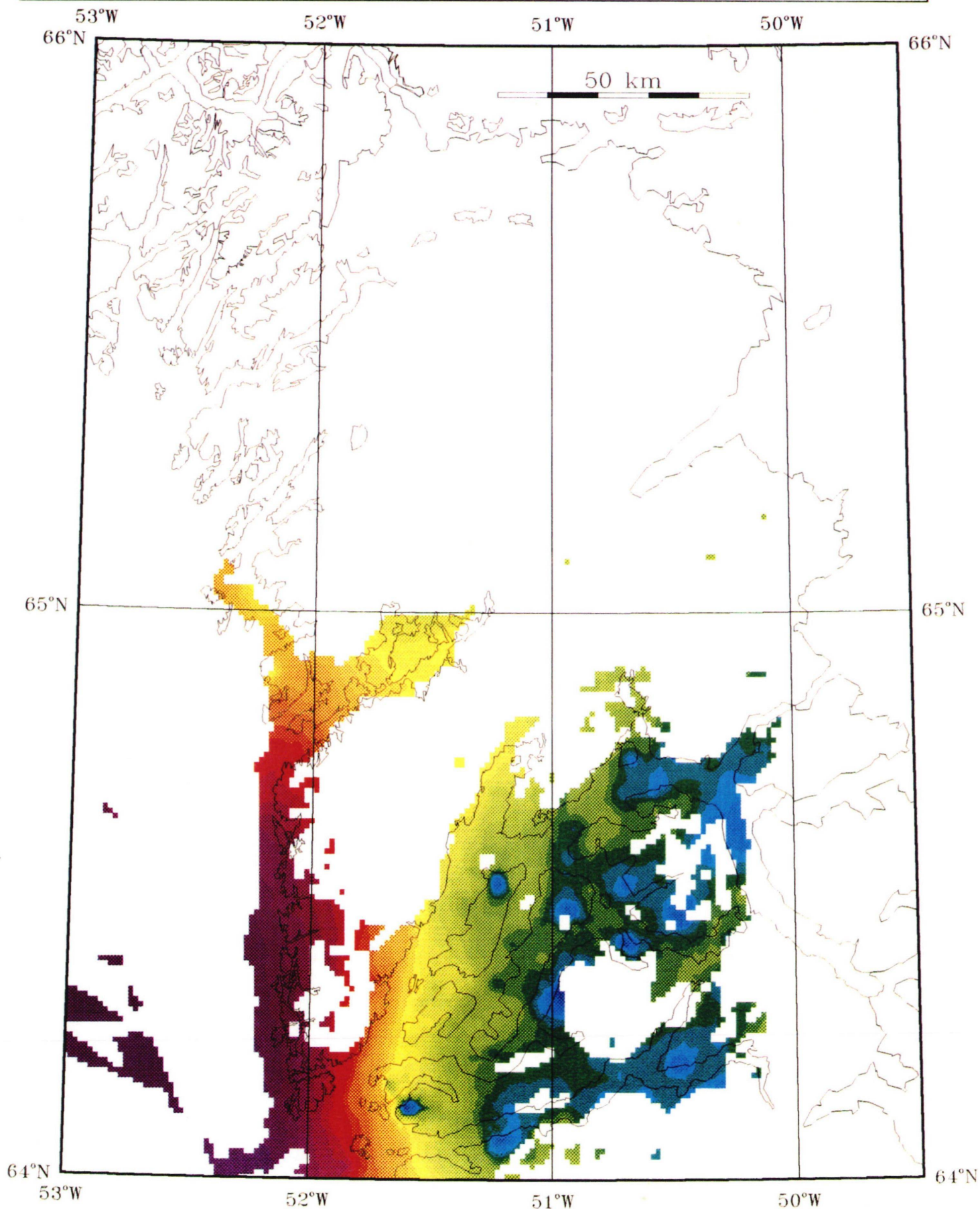
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BOUGUER ANOMALY MAP

90/1-111: Nuuk - Maniitsoq 01-DEC-90



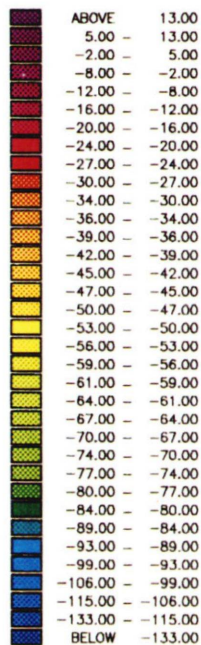
BOUGUER ANOMALY MAP

Nuuk - Maniitsoq

Compiled by L. Thorning

CONTOUR INTERVALS

Bouguer anomaly (mgal)



DATA SOURCE

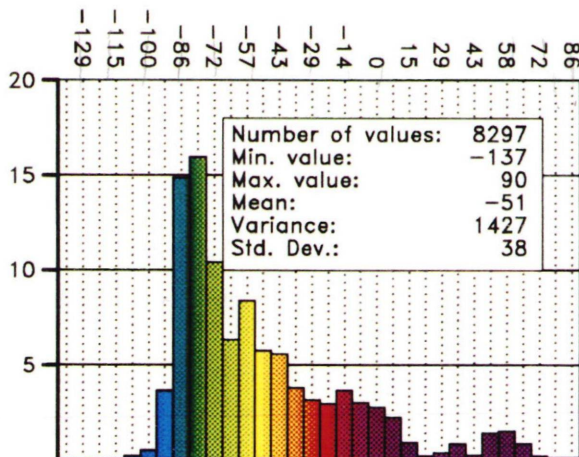
All data have been obtained from the gravity data base at Kort- og Matrikelstyrelsen (KMS), Denmark. The data were collected over a span of years and have not been previously published.

DATA PROCESSING

All processing from measurement to final, calculated anomaly have been carried out by KMS. The Bouguer correction has been carried out using a density of 2.67 g/cm³ for rocks and 1.0 g/cm³ for water. Terrain correction has not been applied. Anomalies are relative to GRS67/IGSN71.

The data were interpolated into a 1000 by 1000 m grid at GGU using a general purpose method of weighted average within sectors of a search circle. Grid points with insufficient data for the calculation are left white.

STATISTICAL PARAMETERS OF GRID VALUES



Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps
 Permission No: KMS A.200/87

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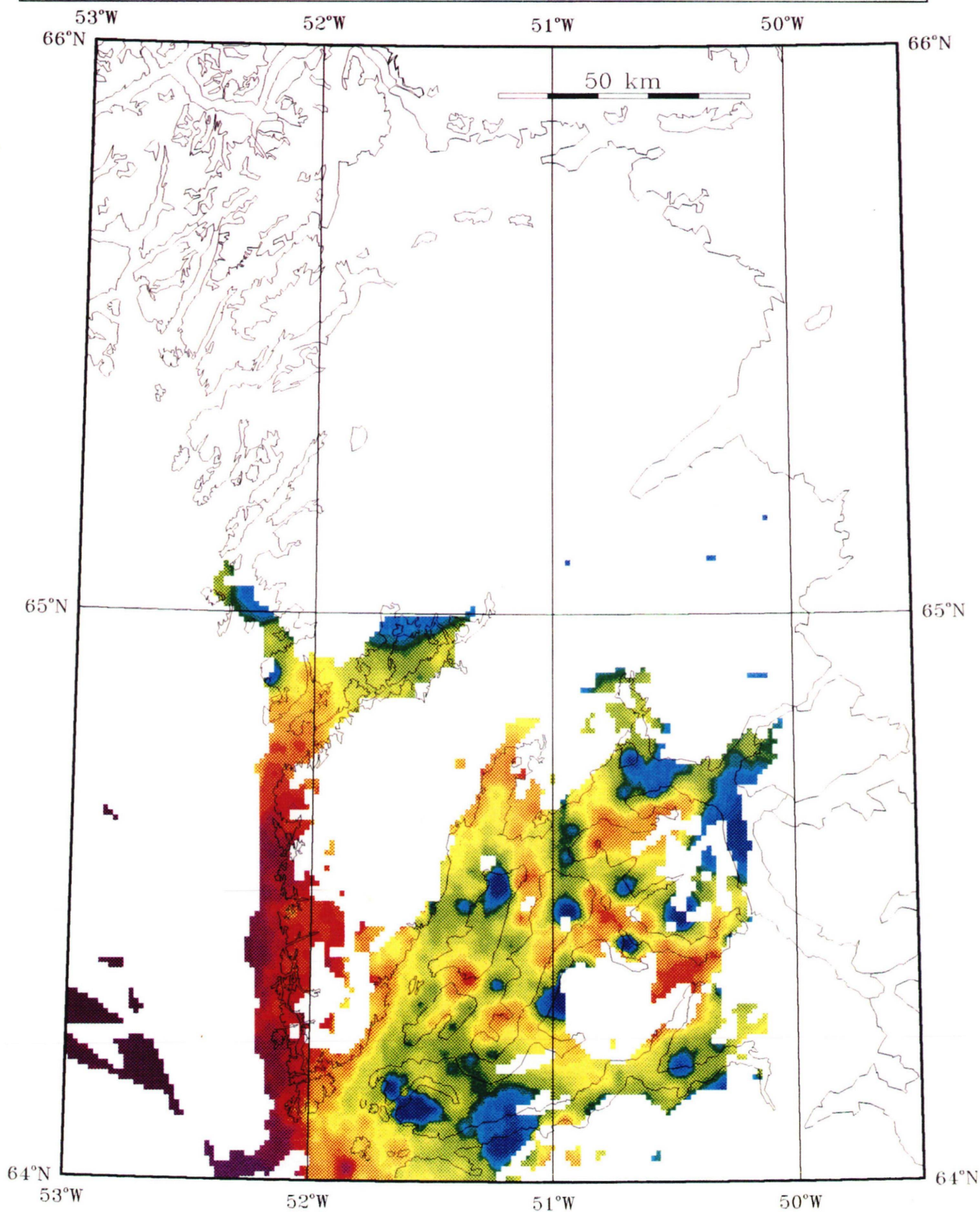
Geological Survey of Greenland

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RESIDUAL BOUGUER ANOMALY MAP
90/1-112: Nuuk - Maniitsoq 01-DEC-90



Thematic Map 90/1-112

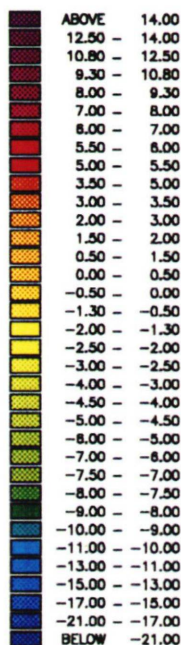
RESIDUAL BOUGUER ANOMALY MAP

Nuuk – Maniitsoq

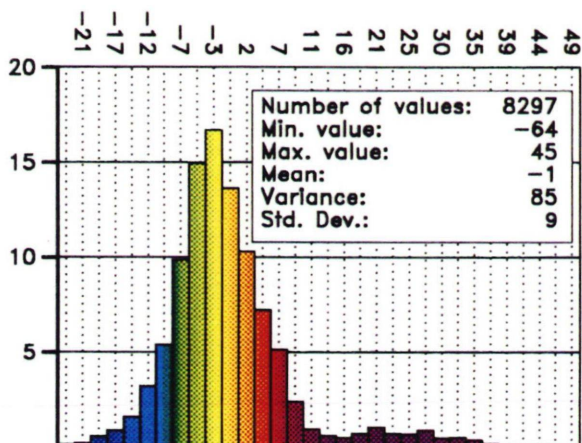
Compiled by L. Thorning

CONTOUR INTERVALS

Residual Bouguer anomaly (mgal)



STATISTICAL PARAMETERS OF GRID VALUES



DATA SOURCE

All data have been obtained from the gravity data base at Kort- og Matrikelstyrelsen (KMS), Denmark. The data were collected over a span of years and have not been previously published.

DATA PROCESSING

All processing from measurement to final, calculated anomaly have been carried out by KMS. The Bouguer correction has been carried out using a density of 2.67 g/cm³ for rocks and 1.00 g/cm³ for water. Terrain correction has not been applied. Anomalies are relative to GRS67/IGSN71.

The data were interpolated into a 1000 by 1000 m grid at GGU using a general purpose method of weighted average within sectors of a search circle. Grid points with insufficient data for the calculation are left white.

This residual map was made from map 90/1-111. by use of a Gauss residual/regional filter with a cut-off corresponding to 80 km, i.e. this map only shows anomalies with wavelengths shorter than 80 km.

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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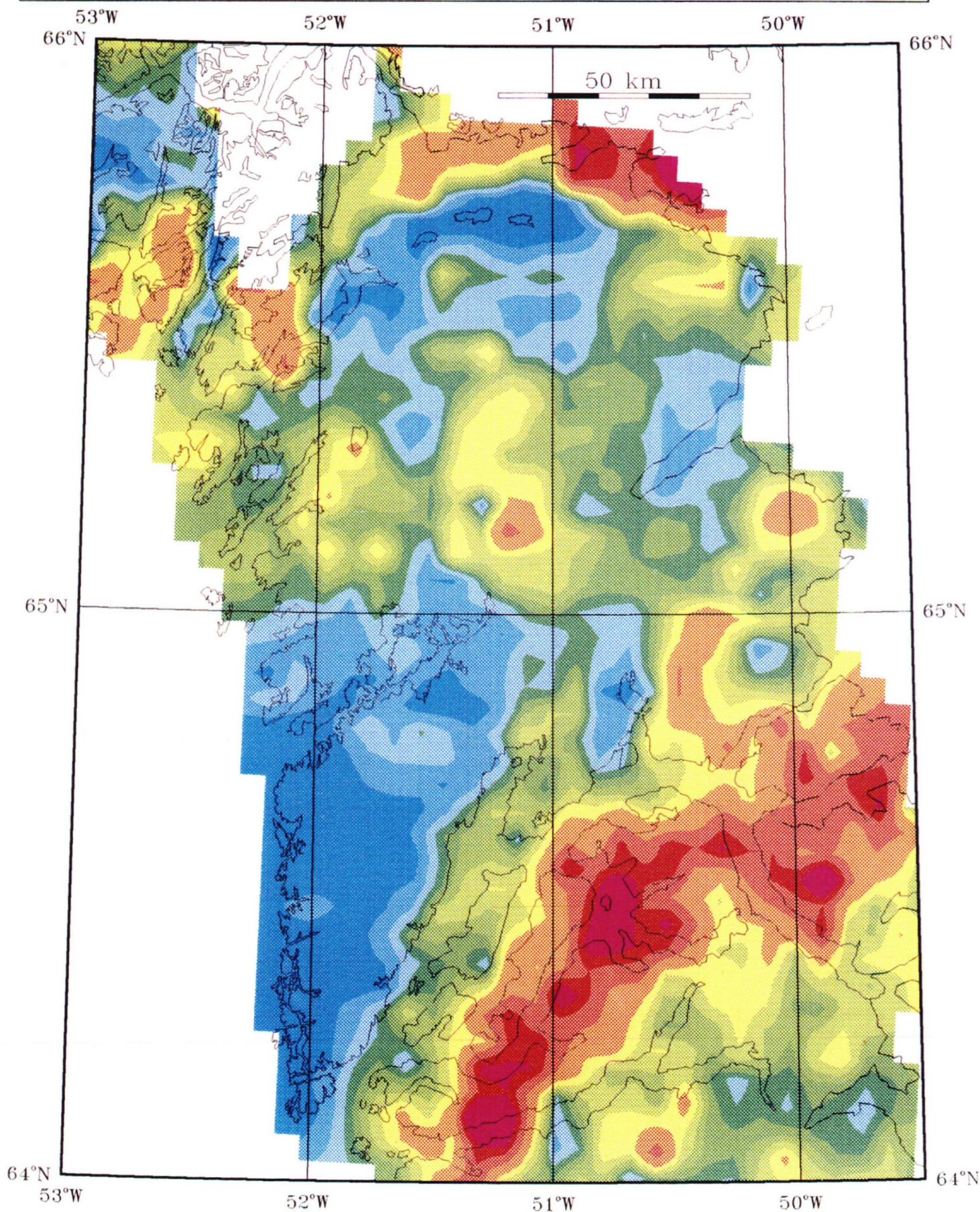
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AERORADIOMETRIC MAP: Total gamma-ray radiation

90/1-121: Nuuk - Maniitsoq 01-DEC-90















AERORADIOMETRIC MAP: Total gamma-ray radiation

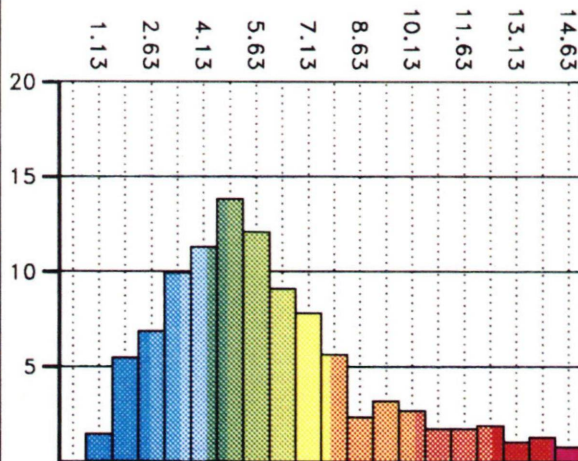
Nuuk - Maniitsoq

Compiled by T. Tuklainen

CONTOUR INTERVALS

	Ur*	Percentiles
	ABOVE 14.10	99
	12.44 - 14.10	98
	10.19 - 12.44	95
	7.76 - 10.19	90
	6.81 - 7.76	80
	5.98 - 6.81	70
	5.32 - 5.98	60
	4.80 - 5.32	50
	4.22 - 4.80	40
	3.47 - 4.22	30
	2.58 - 3.47	20
	BELOW 2.58	10

* Ur (=Unit of radioelement concentration):
One Ur is defined as the radioactivity equivalent
of one part per million of uranium which is in
radioactive equilibrium, and gives an exposure
rate on the ground of approximately 0.6 μ R/hr.

STATISTICAL PARAMETERS
OF THE GRID VALUES

Number of values: 1179
Min. value: 0.96
Max. value: 24.16
Mean: 5.98
Variance: 9.88
Std. Dev.: 3.14

DATA SOURCE

Airborne radiometric survey carried out
by the Geological Survey of Greenland and
the Risø National Laboratory during the
period 1975-1976.

SURVEY SPECIFICATIONS

Four-channel gamma-ray spectrometer
Crystal detector: 11.1 litres (TI-activated
NaI).

Aircraft: Britten-Norman islander

Average ground speed: 120 km/h

Average ground clearance: 100 m

Survey method: Contour flying

DATA PROCESSING

Data were interpolated into a regular
5000 m x 5000 m grid by the method of
total minimum curvature.

Projection: Lambert conformal conic

Standard parallel: 66° 30' N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized
from 1:250 000 topographic maps.
Permission No: KMS A.200/87

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GRØNLANDS GEOLOGISKE UNDERSØGELSE

Geological Survey of Greenland

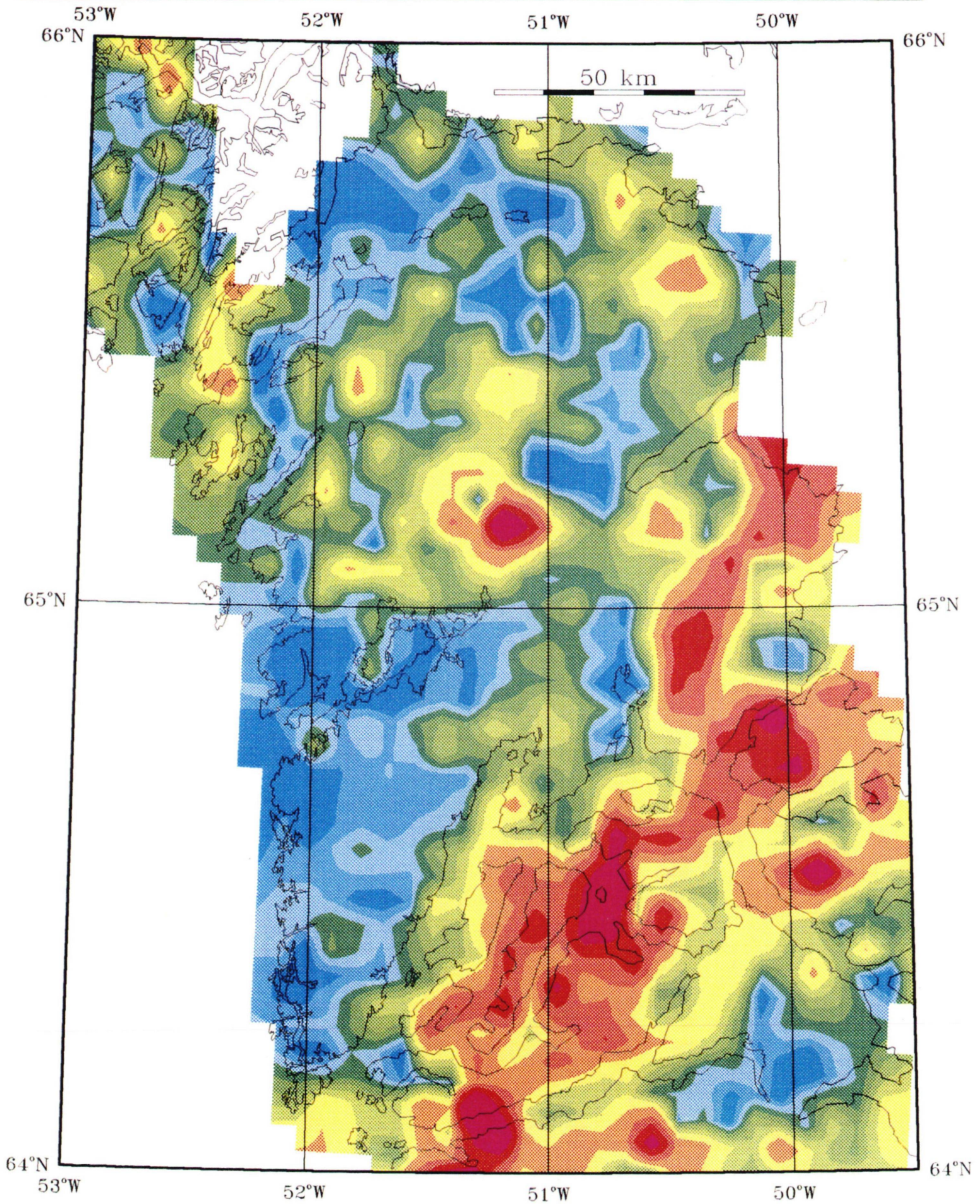
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AERORADIOMETRIC MAP: eU

90/1-122: Nuuk - Maniitsoq 01-DEC-90















AERORADIOMETRIC MAP: eU

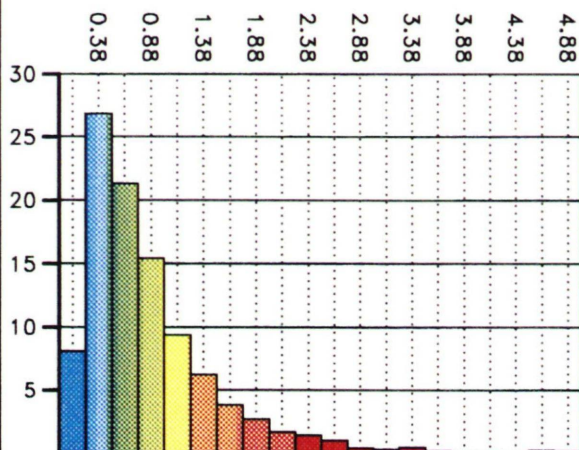
Nuuk - Maniitsoq

Compiled by T. Tukiainen

CONTOUR INTERVALS

	ppm eU	Percentiles
	ABOVE 2.99	99
	2.24 - 2.99	98
	1.70 - 2.24	95
	1.24 - 1.70	90
	0.97 - 1.24	80
	0.80 - 0.97	70
	0.67 - 0.80	60
	0.56 - 0.67	50
	0.46 - 0.56	40
	0.36 - 0.46	30
	0.28 - 0.36	20
	BELOW 0.28	10

STATISTICAL PARAMETERS OF THE GRID VALUES



Number of values: 1179
 Min. value: 0.01
 Max. value: 7.26
 Mean: 0.88
 Variance: 0.57
 Std. Dev.: 0.76

DATA SOURCE

Airborne radiometric survey carried out by the Geological Survey of Greenland and the Risø National Laboratory during the period 1975-1976.

SURVEY SPECIFICATIONS

Four-channel gamma-ray spectrometer
 Crystal detector: 11.1 litres (TI-activated NaI).

Aircraft: Britten-Norman Islander

Average ground speed: 120 km/h

Average ground clearance: 100 m

Survey method: Contour flying

DATA PROCESSING

Data were interpolated into a regular 5000 m x 5000 m grid by the method of total minimum curvature.

Projection: Lambert conformal conic

Standard parallel: 66° 30' N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps
 Permission No: KMS A.200/87

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Geological Survey of Greenland

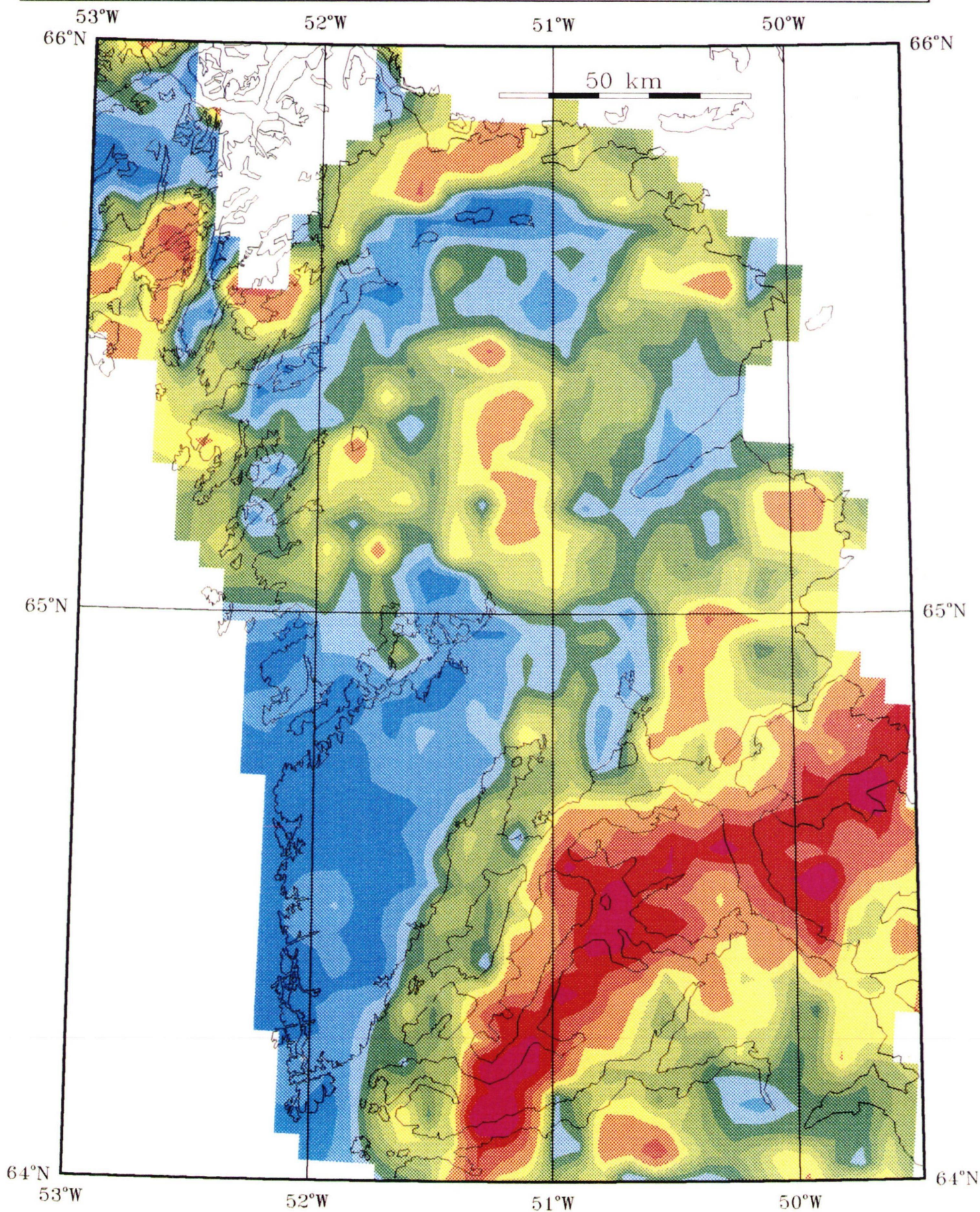
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AERORADIOMETRIC MAP: Th

90/1-123: Nuuk - Maniitsoq 01-DEC-90



AERORADIOMETRIC MAP: Th

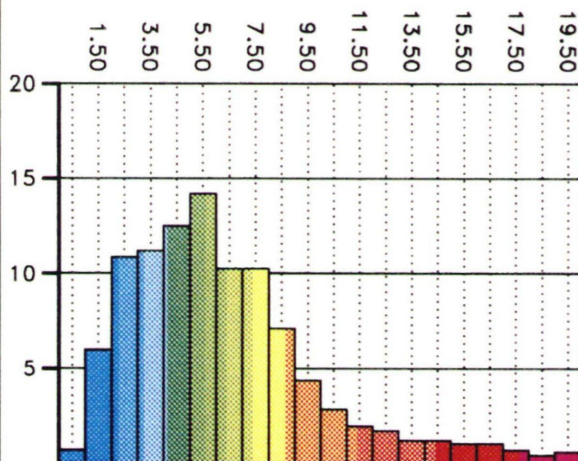
Nuuk - Maniitsoq

Compiled by T. Tukiainen

CONTOUR INTERVALS

ppm Th	Percentiles
ABOVE 17.63	99
14.43 - 17.63	98
11.44 - 14.43	95
8.65 - 11.44	90
7.39 - 8.65	80
6.38 - 7.39	70
5.59 - 6.38	60
4.96 - 5.59	50
4.17 - 4.96	40
3.28 - 4.17	30
2.27 - 3.28	20
BELOW 2.27	10

STATISTICAL PARAMETERS OF THE GRID VALUES



Number of values: 1179
 Min. value: 0.38
 Max. value: 25.57
 Mean: 6.39
 Variance: 14.91
 Std. Dev.: 3.86

DATA SOURCE

Airborne radiometric survey carried out by the Geological Survey of Greenland and the Risø National Laboratory during the period 1975-1976.

SURVEY SPECIFICATIONS

Four-channel gamma-ray spectrometer
 Crystal detector: 11.1 litres (TI-activated NaI).

Aircraft: Britten-Norman Islander

Average ground speed: 120 km/h

Average ground clearance: 100 m

Survey method: Contour flying

DATA PROCESSING

Data were interpolated into a regular 5000 m x 5000 m grid by the method of total minimum curvature.

Projection: Lambert conformal conic

Standard parallel: 66° 30' N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
 Permission No: KMS A.200/87

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Geological Survey of Greenland

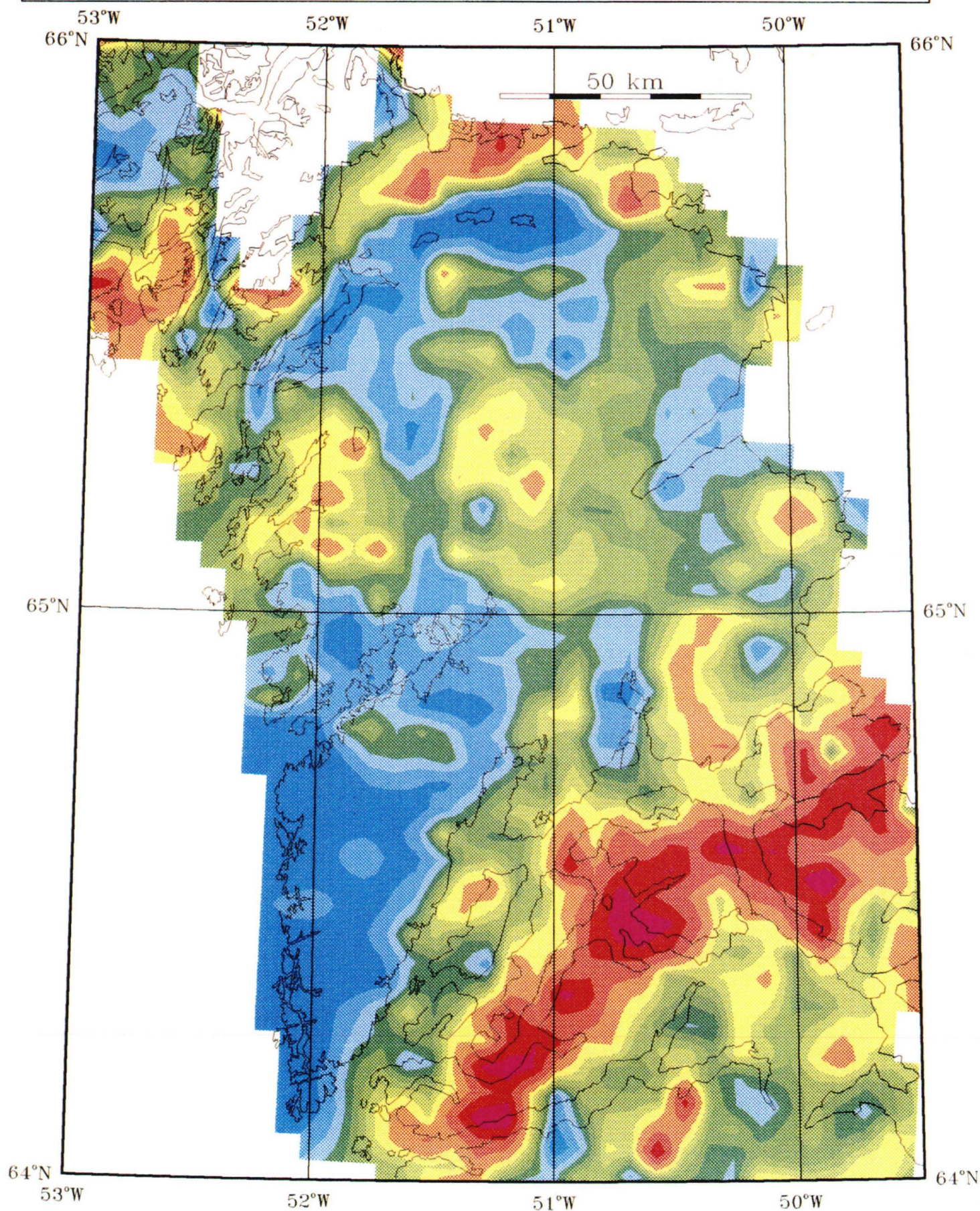
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AERORADIOMETRIC MAP: K

90/1-124: Nuuk - Maniitsoq 01-DEC-90















AERORADIOMETRIC MAP: K

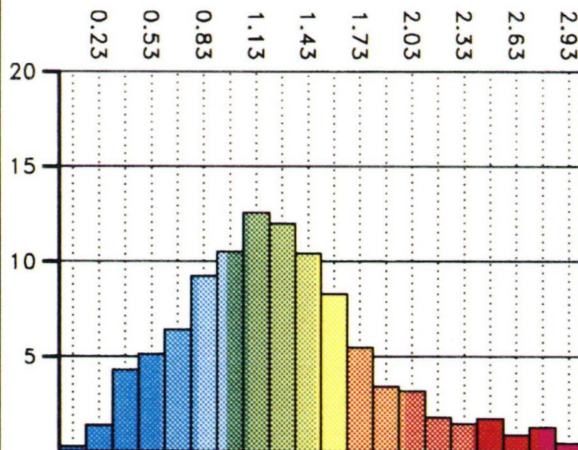
Nuuk - Maniitsoq

Compiled by T. Tukiainen

CONTOUR INTERVALS

	% K	Percentiles
	ABOVE 2.75	99
	2.38 - 2.75	98
	1.99 - 2.38	95
	1.66 - 1.99	90
	1.47 - 1.66	80
	1.33 - 1.47	70
	1.21 - 1.33	60
	1.09 - 1.21	50
	0.95 - 1.09	40
	0.79 - 0.95	30
	0.58 - 0.79	20
	BELOW 0.58	10

STATISTICAL PARAMETERS OF THE GRID VALUES



Number of values: 1179
 Min. value: 0.13
 Max. value: 4.62
 Mean: 1.27
 Variance: 0.33
 Std. Dev.: 0.58

DATA SOURCE

Airborne radiometric survey carried out by the Geological Survey of Greenland and the Risø National Laboratory during the period 1975-1976.

SURVEY SPECIFICATIONS

Four-channel gamma-ray spectrometer
 Crystal detector: 11.1 litres (TI-activated NaI).
 Aircraft: Britten-Norman Islander
 Average ground speed: 120 km/h
 Average ground clearance: 100 m
 Survey method: Contour flying

DATA PROCESSING

Data were interpolated into a regular 5000 m x 5000 m grid by the method of total minimum curvature.

Projection: Lambert conformal conic
 Standard parallel: 66° 30' N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
 Permission No: KMS A.200/87

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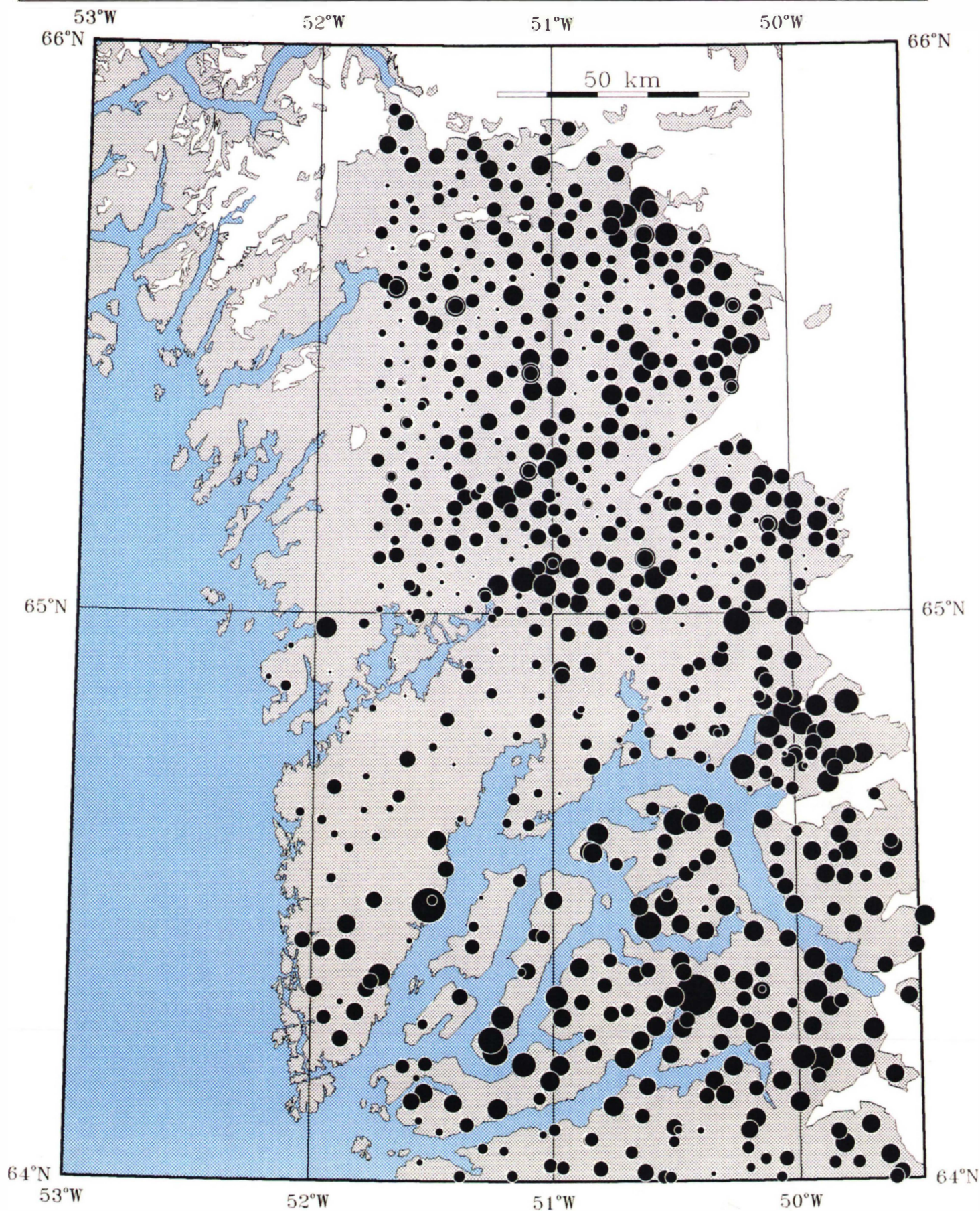
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GEOCHEMICAL MAP: SiO_2 IN STREAM SEDIMENTS

90/1-201: Nuuk - Maniitsoq 01-DEC-90



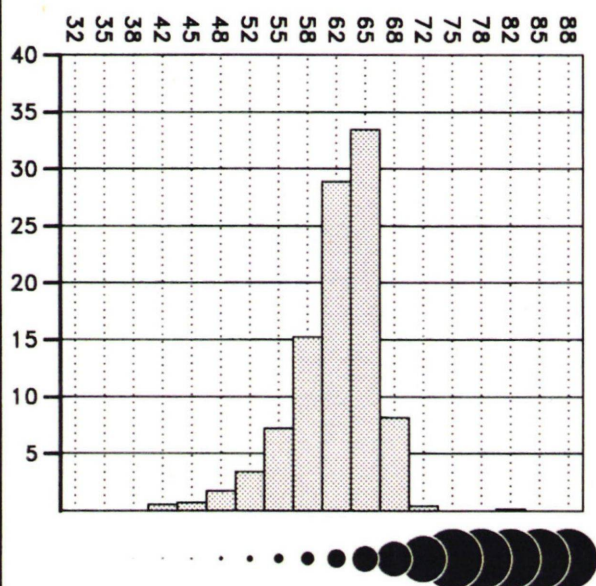
Thematic map 90/1-201

GEOCHEMICAL MAP: SiO₂ IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



SiO₂ %

Number of samples: 698
Min. value: 28.38
Max. value: 81.18
Mean: 61.52
Median: 62.56
Variance: 26.28
Std. Dev.: 5.13

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3-10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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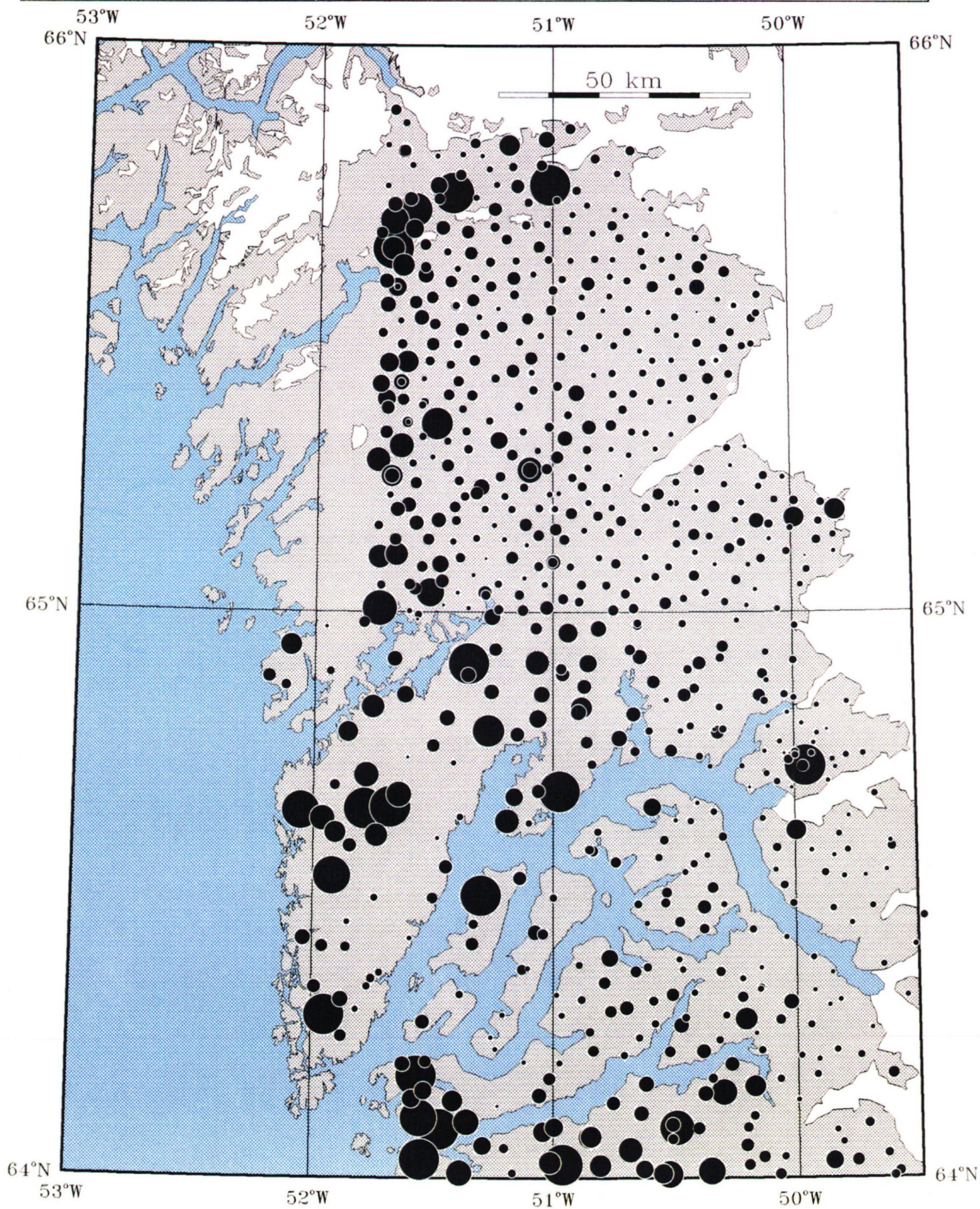
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GEOCHEMICAL MAP: TiO_2 IN STREAM SEDIMENTS

90/1-202: Nuuk - Maniitsoq 01-DEC-90

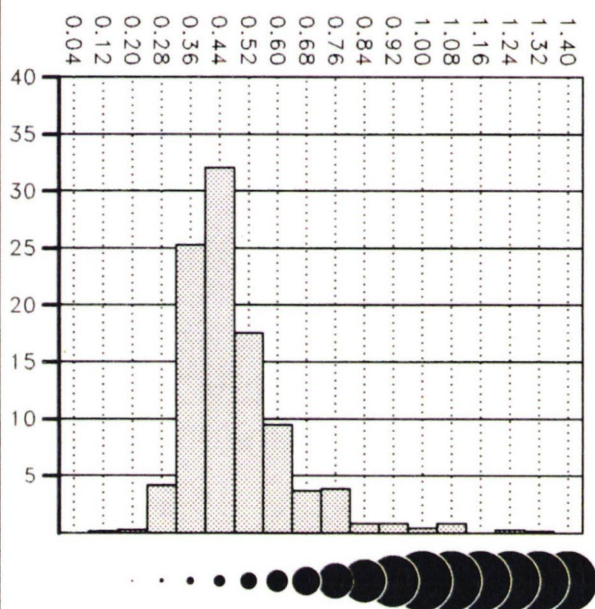


GEOCHEMICAL MAP: TiO_2 IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



TiO_2 %

Number of samples: 698
Min. value: 0.16
Max. value: 2.71
Mean: 0.49
Median: 0.45
Variance: 0.03
Std. Dev.: 0.17

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km^2
south of 65° N average 1 per 20 km^2
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: $66^\circ 30' \text{N}$
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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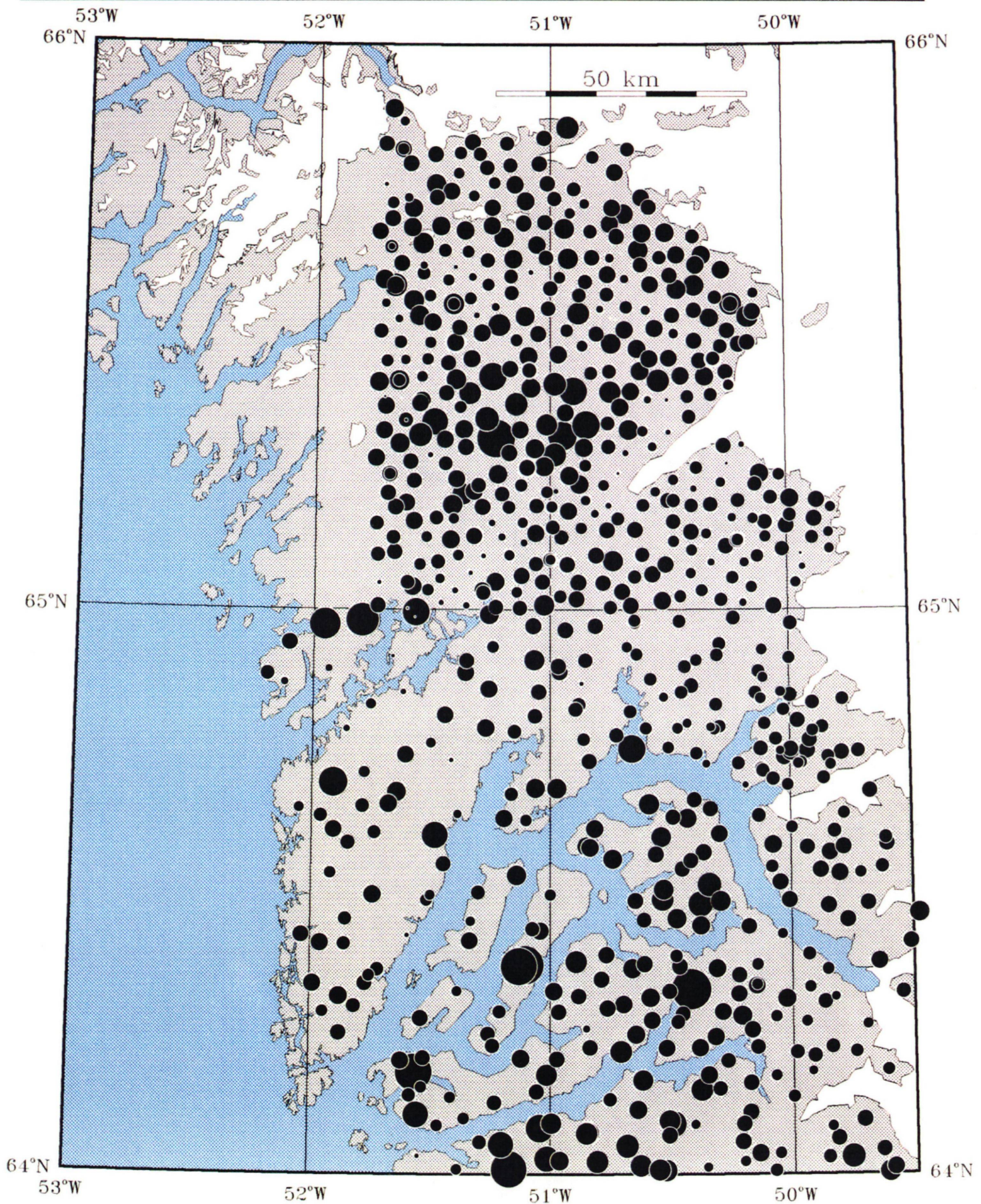
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GEOCHEMICAL MAP: Al_2O_3 IN STREAM SEDIMENTS

90/1-203: Nuuk - Maniitsoq 01-DEC-90



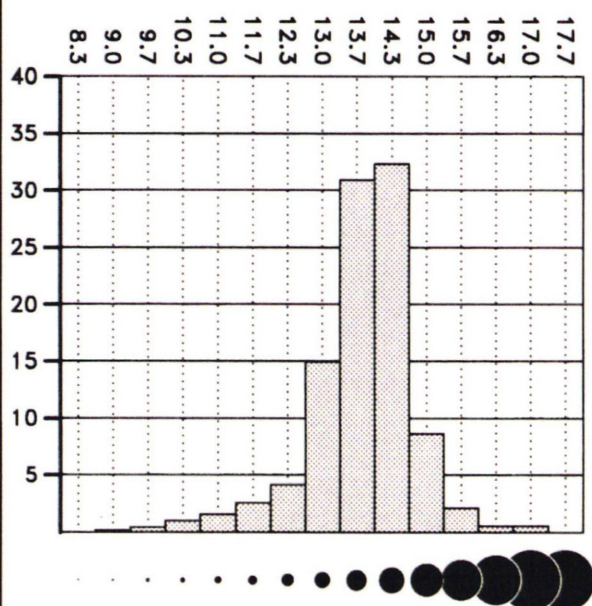
Thematic map 90/1-203

GEOCHEMICAL MAP: Al_2O_3 IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Al_2O_3 %

Number of samples: 698
Min. value: 6.33
Max. value: 16.96
Mean: 13.74
Median: 13.89
Variance: 1.13
Std. Dev.: 1.06

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3-10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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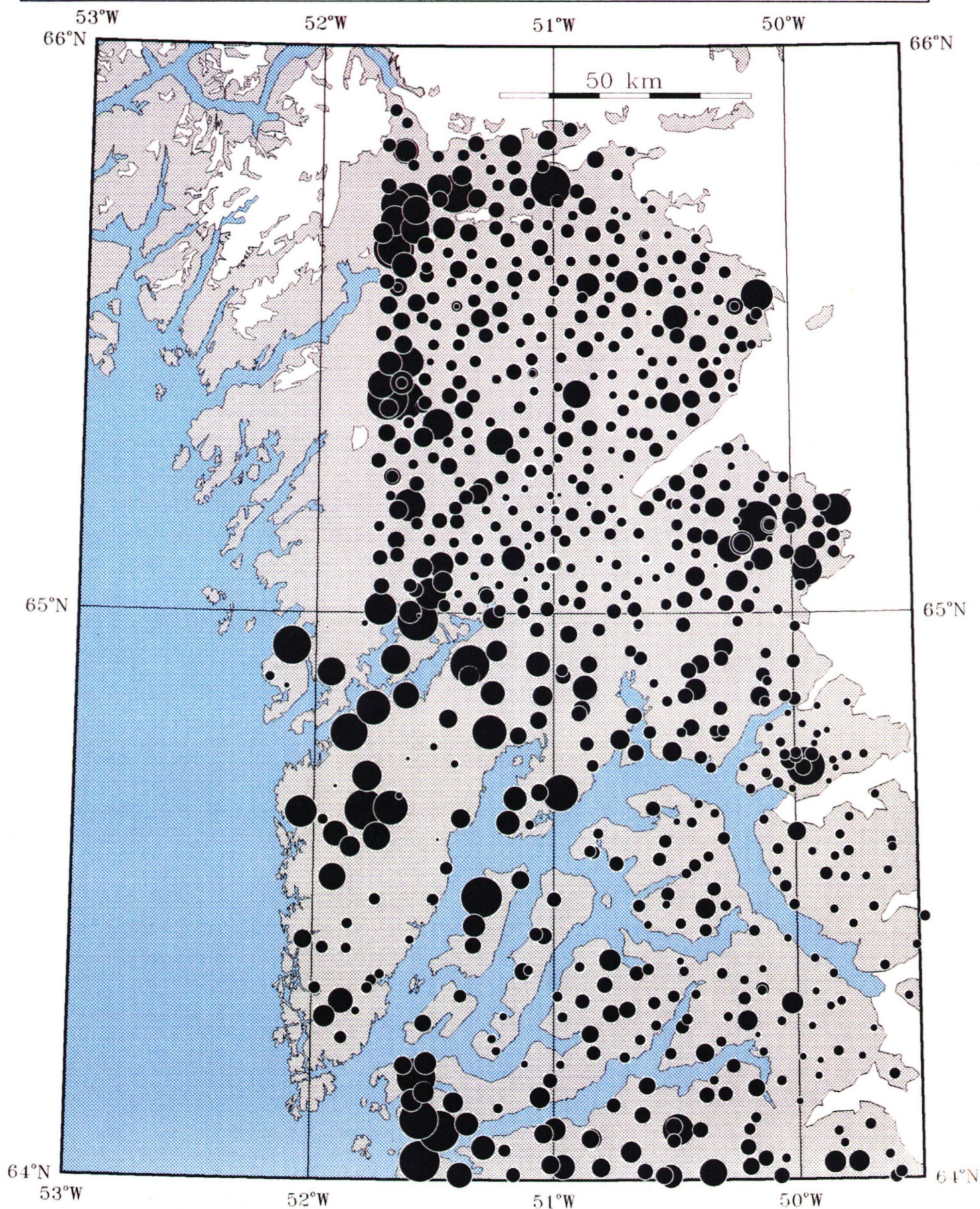
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GEOCHEMICAL MAP: Fe_2O_3 IN STREAM SEDIMENTS

90/1-204: Nuuk - Maniitsoq 01-DEC-90

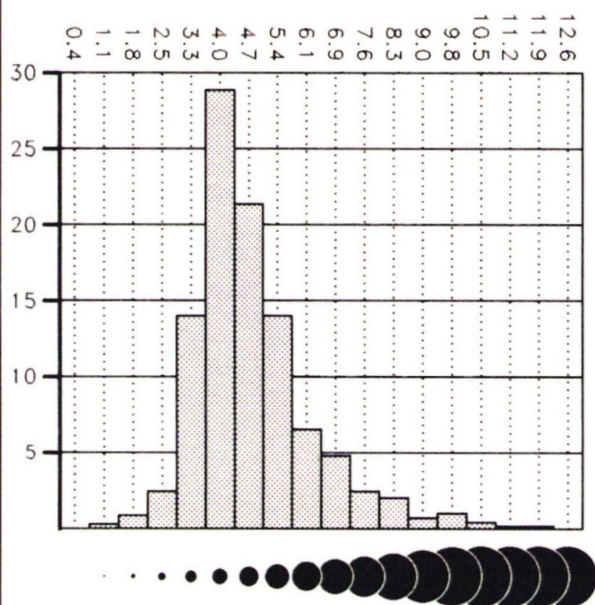


GEOCHEMICAL MAP: Fe_2O_3 IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Fe_2O_3 %

Number of samples: 698
 Min. value: 0.73
 Max. value: 15.04
 Mean: 4.83
 Median: 4.44
 Variance: 2.80
 Std. Dev.: 1.67

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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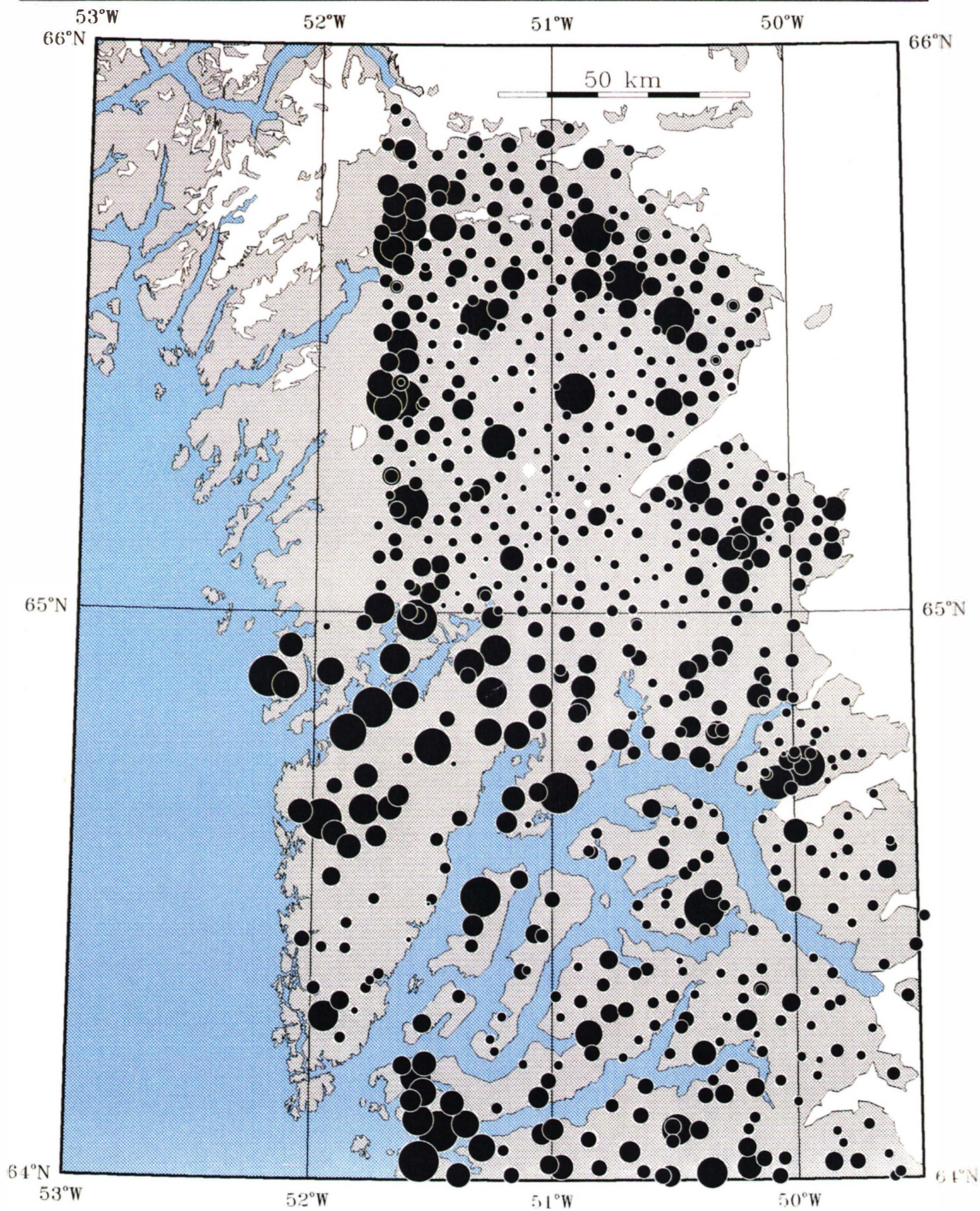
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GEOCHEMICAL MAP: MnO IN STREAM SEDIMENTS

90/1-205: Nuuk - Maniitsoq 01-DEC-90

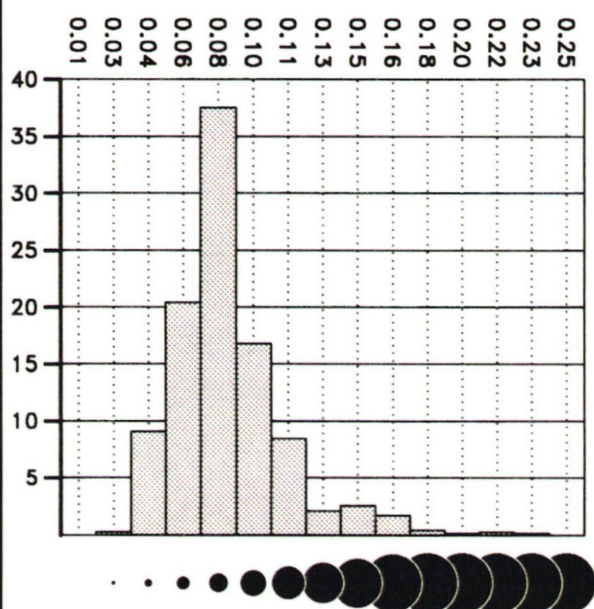


GEOCHEMICAL MAP: MnO IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



MnO %

Number of samples: 698
Min. value: 0.03
Max. value: 0.77
Mean: 0.08
Median: 0.07
Variance: 0.00
Std. Dev.: 0.04

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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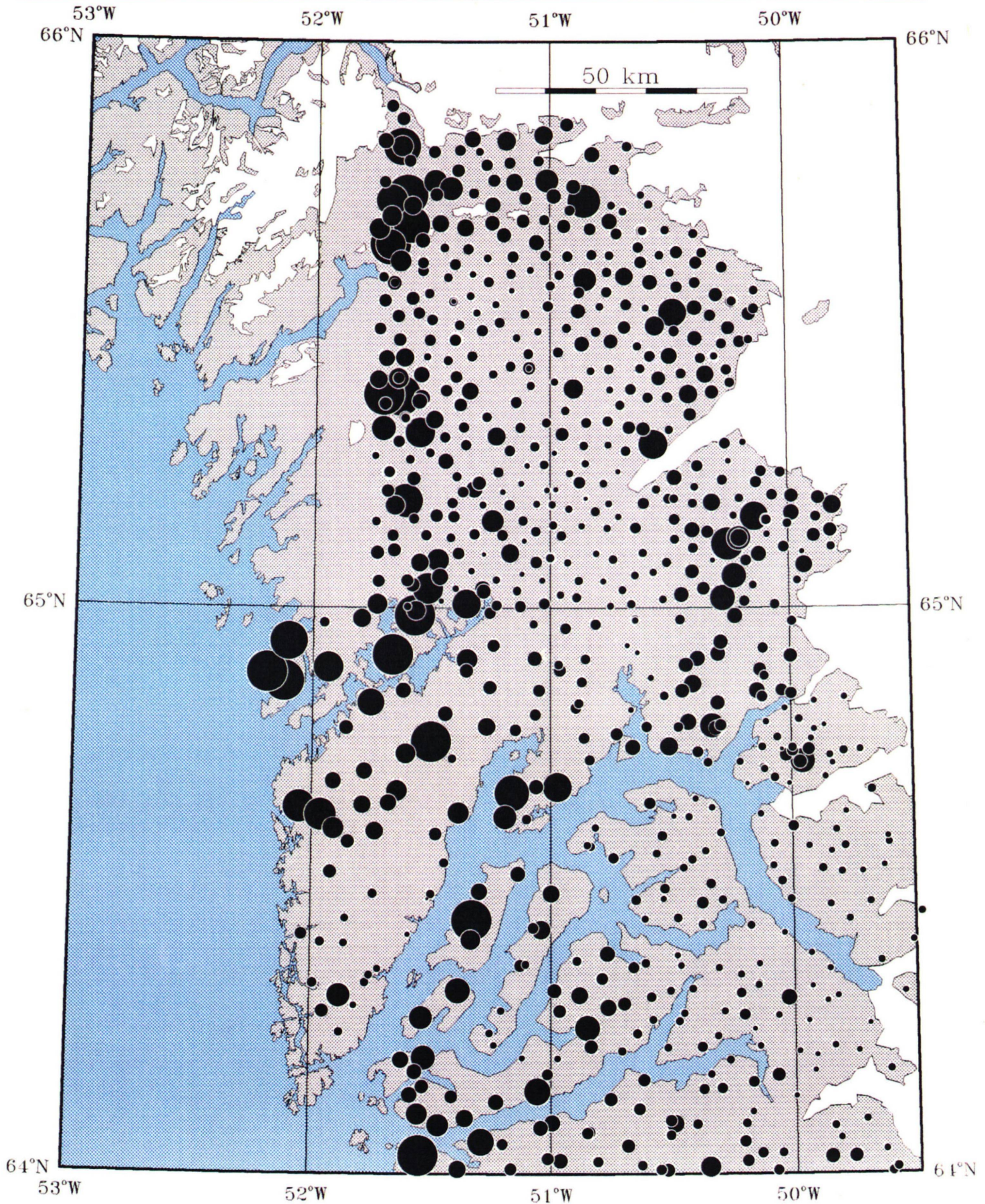
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GEOCHEMICAL MAP: MgO IN STREAM SEDIMENTS

90/1-206: Nuuk - Maniitsoq 01-DEC-90

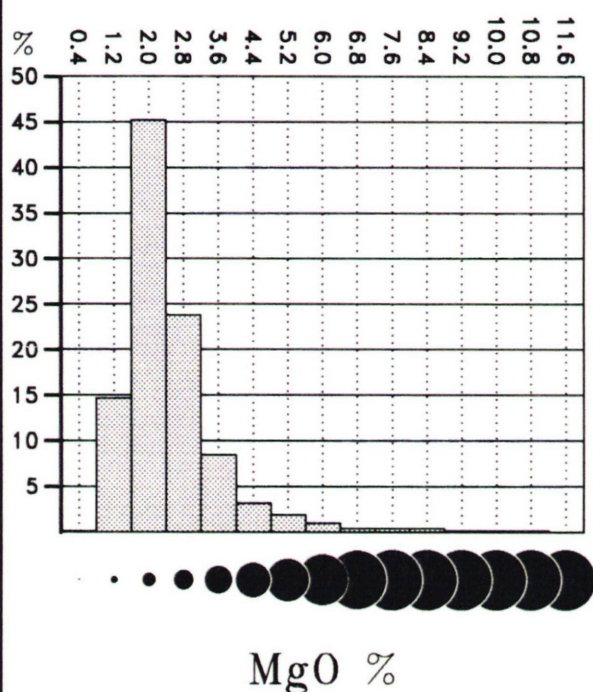


GEOCHEMICAL MAP: MgO IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



MgO %

Number of samples: 698
Min. value: 0.76
Max. value: 25.78
Mean: 2.52
Median: 2.23
Variance: 2.17
Std. Dev.: 1.47

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
mineralogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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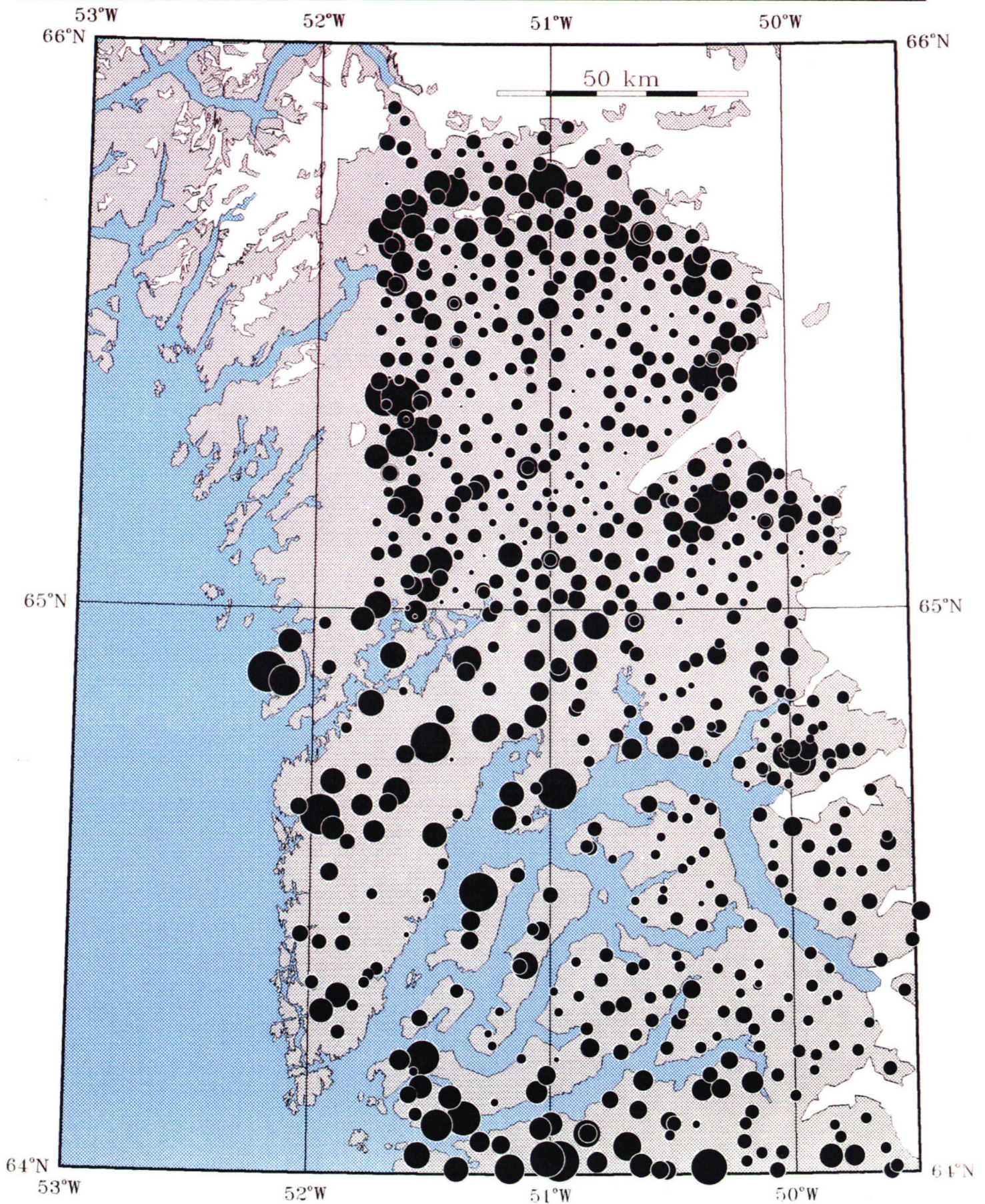
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GEOCHEMICAL MAP: CaO IN STREAM SEDIMENTS

90/1-207: Nuuk - Maniitsoq 01-DEC-90

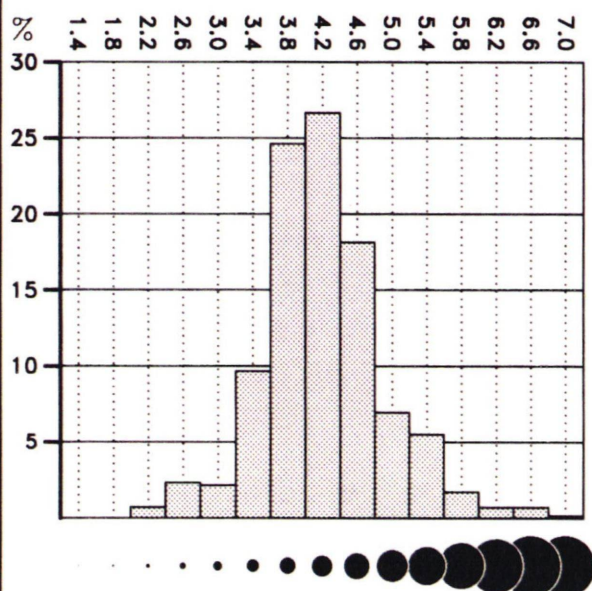


GEOCHEMICAL MAP: CaO IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



CaO %

Number of samples: 698
 Min. value: 2.03
 Max. value: 11.97
 Mean: 4.24
 Median: 4.16
 Variance: 0.70
 Std. Dev.: 0.84

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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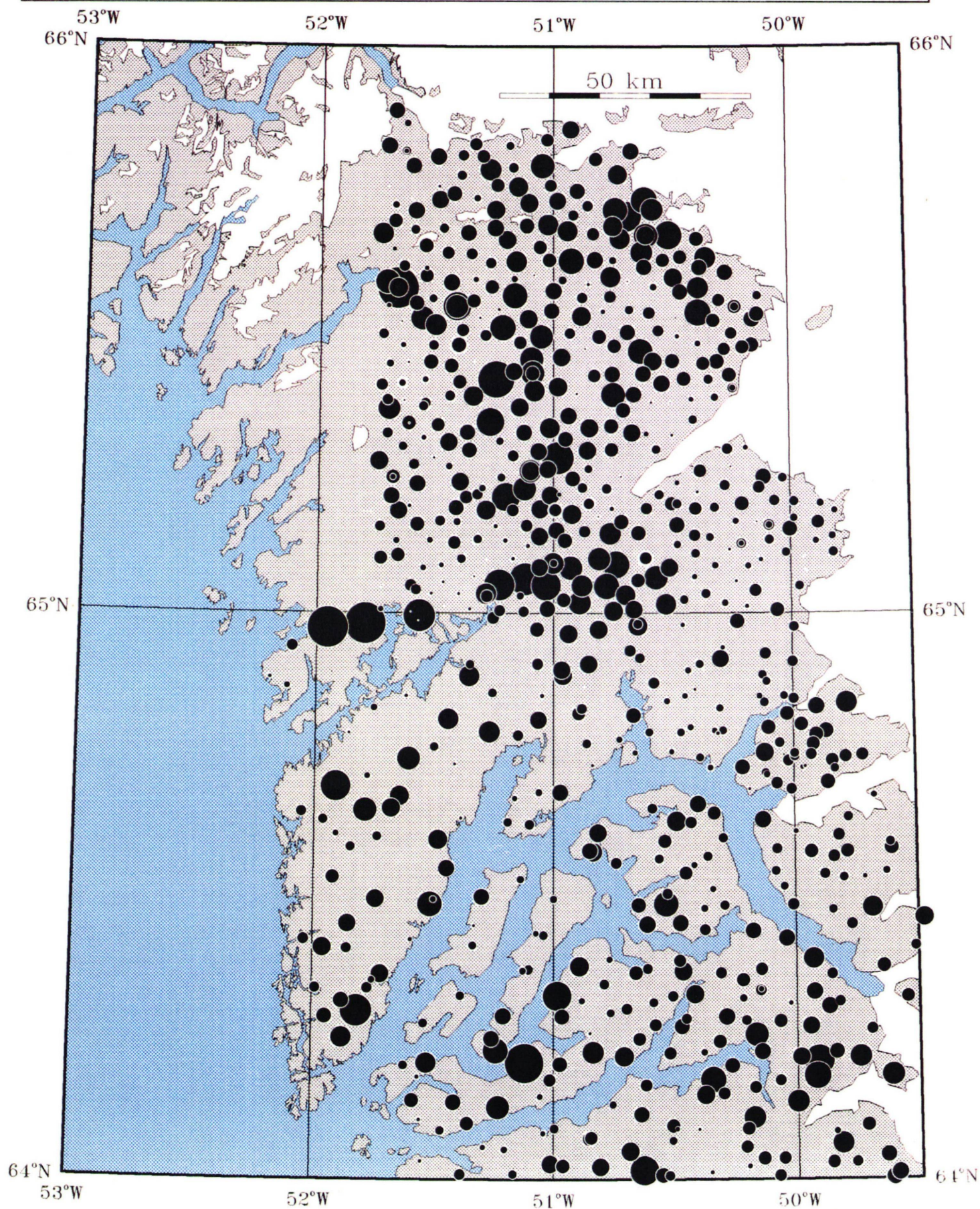
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GEOCHEMICAL MAP: Na_2O IN STREAM SEDIMENTS

90/1-208: Nuuk - Maniitsoq 01-DEC-90

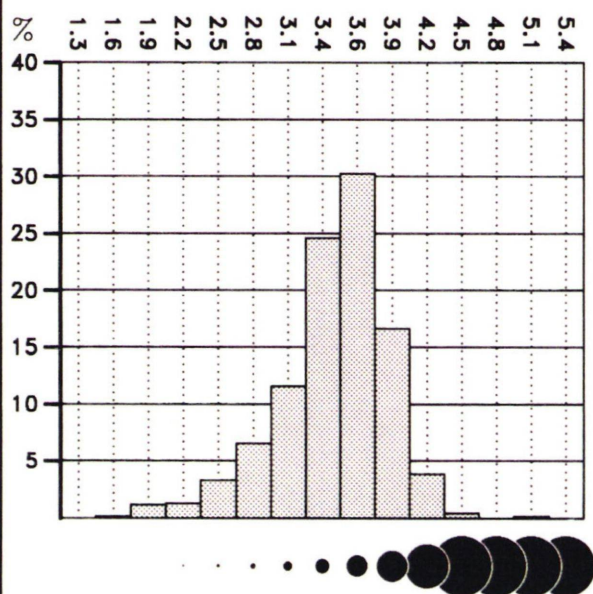


GEOCHEMICAL MAP: Na_2O IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Na_2O %

Number of samples: 698
 Min. value: 0.00
 Max. value: 5.86
 Mean: 3.41
 Median: 3.50
 Variance: 0.30
 Std. Dev.: 0.55

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
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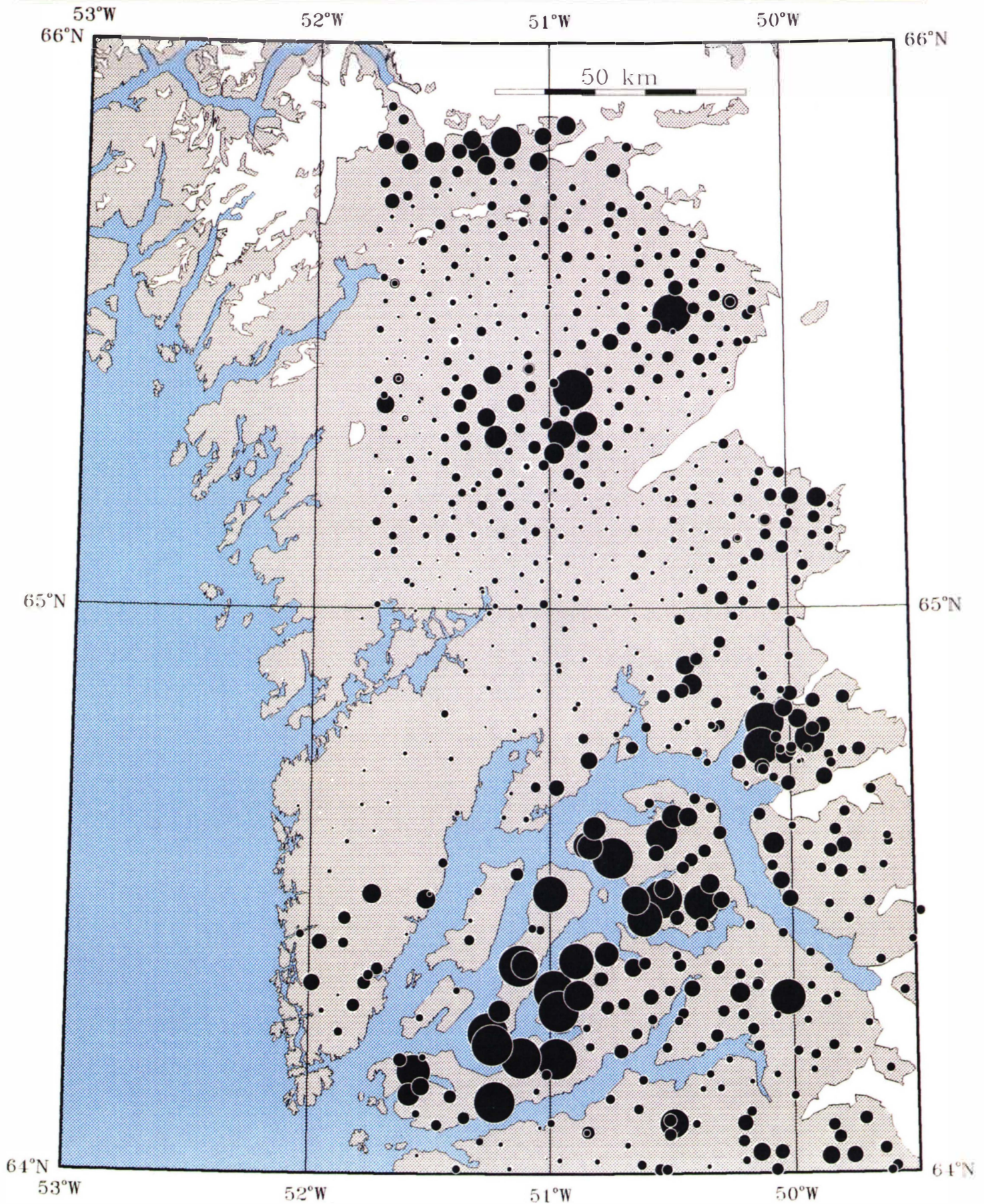
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GEOCHEMICAL MAP: K_2O IN STREAM SEDIMENTS

90/1-209: Nuuk - Maniitsoq 01-DEC-90

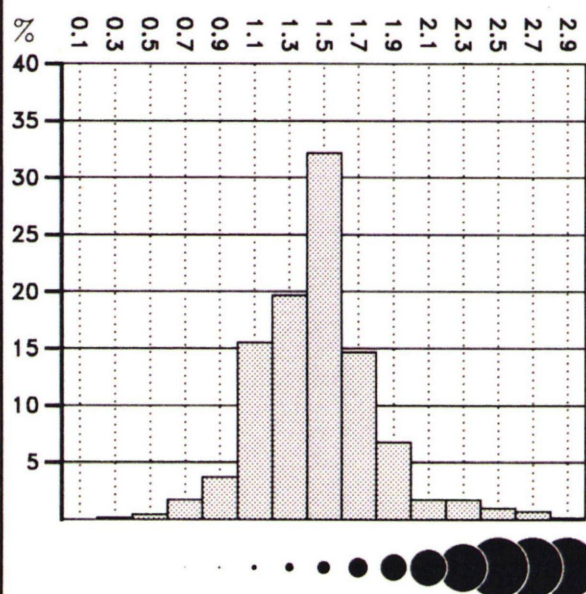


GEOCHEMICAL MAP: K₂O IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



K₂O %

Number of samples: 698
 Min. value: 0.33
 Max. value: 3.01
 Mean: 1.46
 Median: 1.45
 Variance: 0.12
 Std. Dev.: 0.35

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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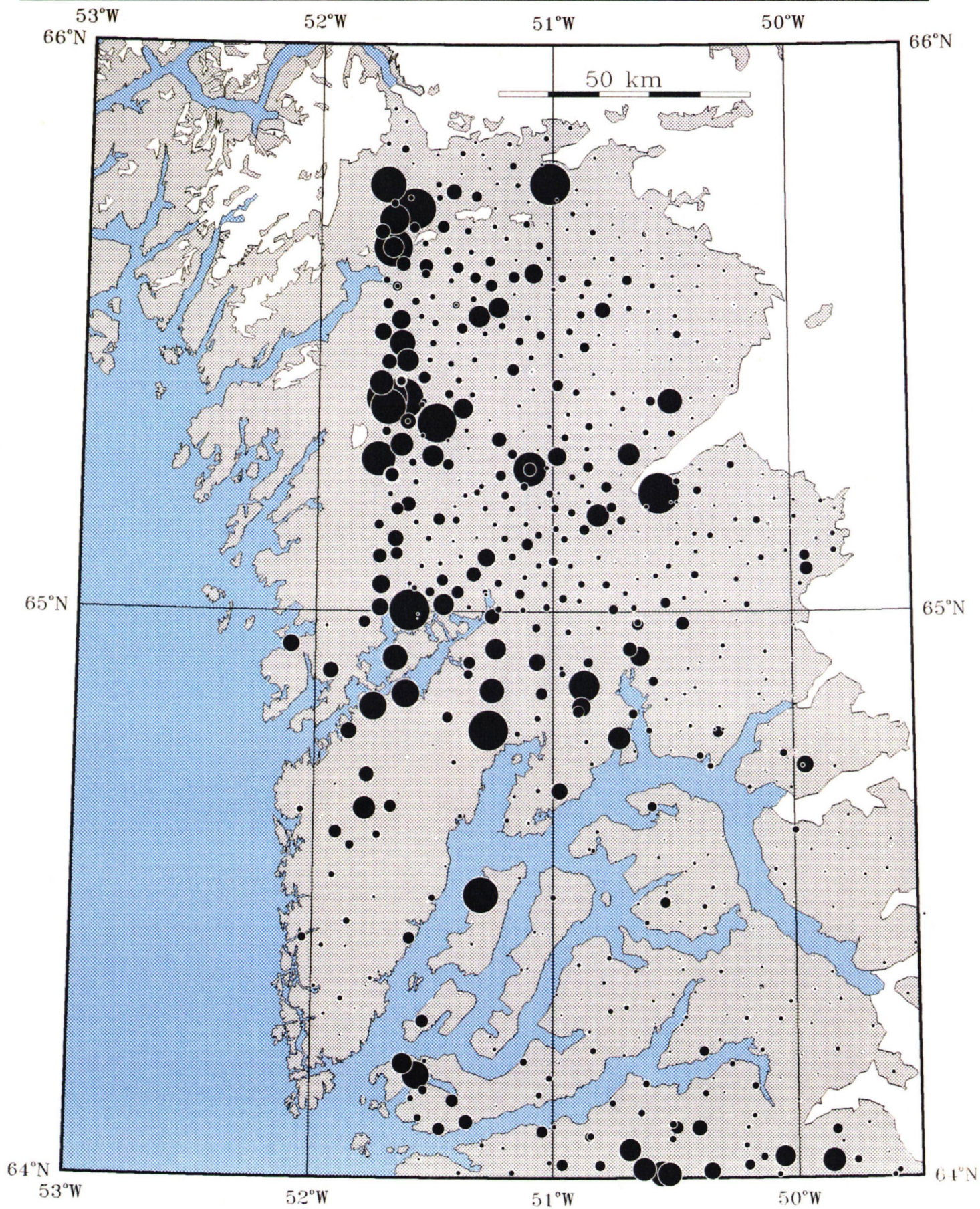
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GEOCHEMICAL MAP: P_2O_5 IN STREAM SEDIMENTS

90/1-210: Nuuk - Maniitsoq 01-DEC-90

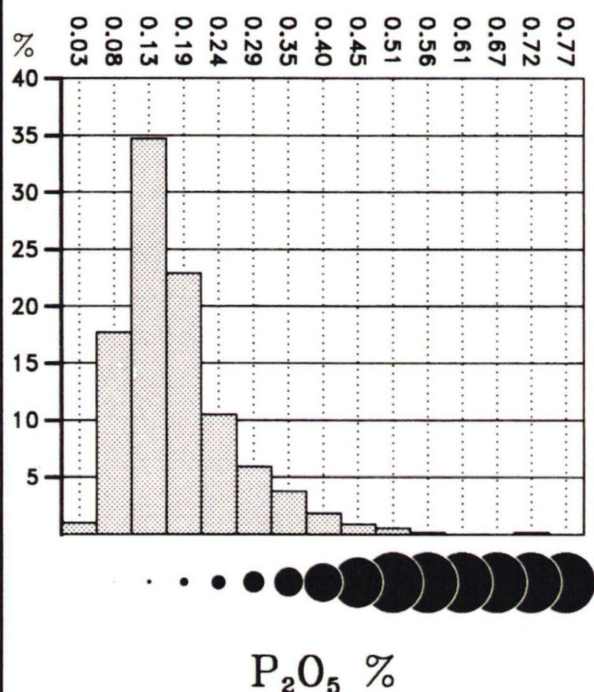


GEOCHEMICAL MAP: P_2O_5 IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Number of samples: 698
Min. value: 0.02
Max. value: 4.39
Mean: 0.19
Median: 0.15
Variance: 0.04
Std. Dev.: 0.21

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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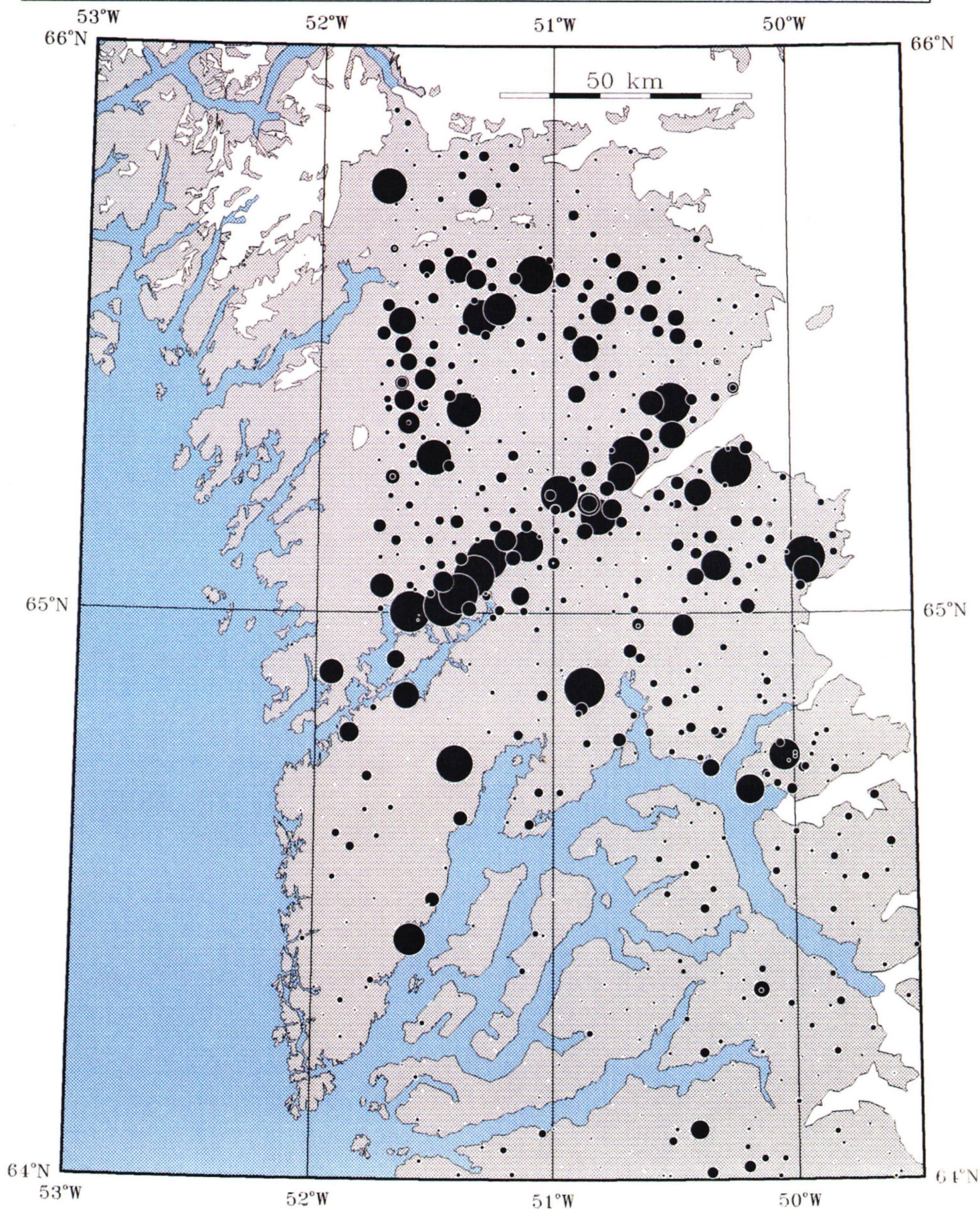
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GEOCHEMICAL MAP: VOLATILES IN STREAM SEDIMENTS

90/1-211: Nuuk - Maniitsoq 01-DEC-90

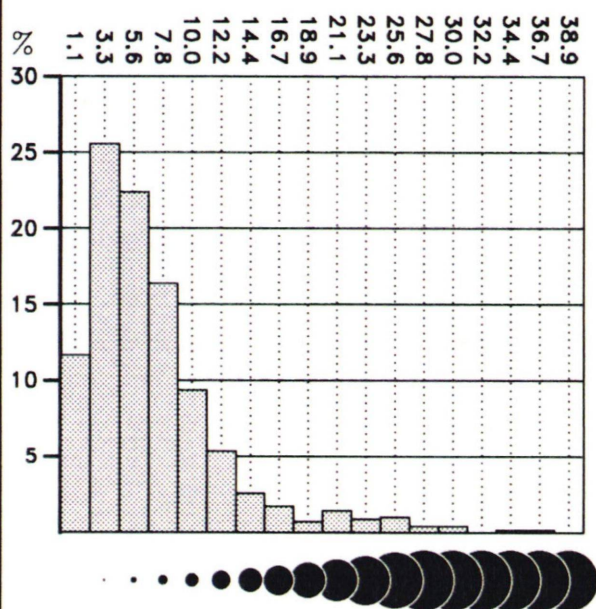


GEOCHEMICAL MAP: VOLATILES IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



VOLATILES %

Number of samples: 698
 Min. value: 0.00
 Max. value: 48.96
 Mean: 7.05
 Median: 5.58
 Variance: 31.46
 Std. Dev.: 5.61

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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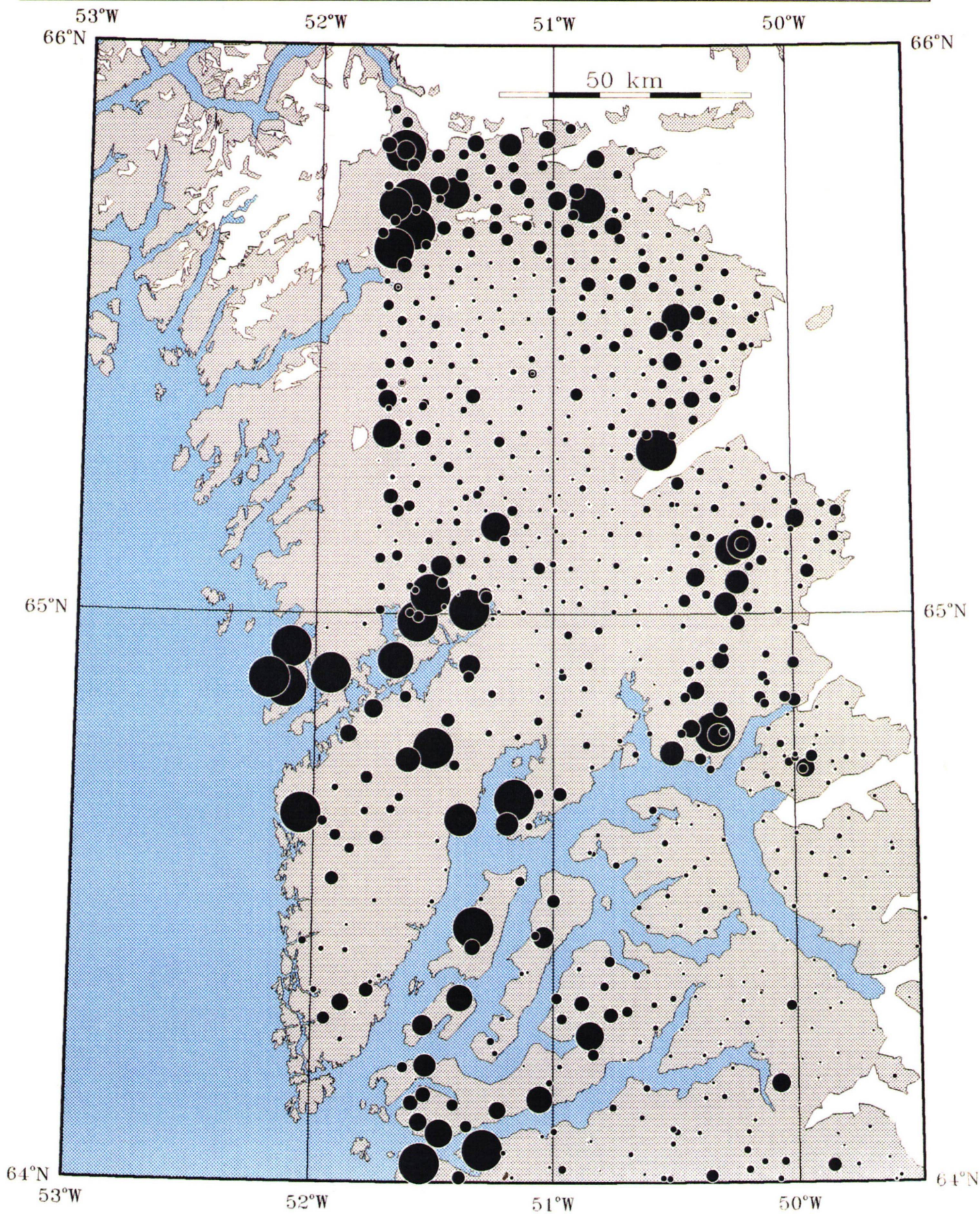
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GEOCHEMICAL MAP: Cr IN STREAM SEDIMENTS

90/1-212: Nuuk - Maniitsoq 01-DEC-90

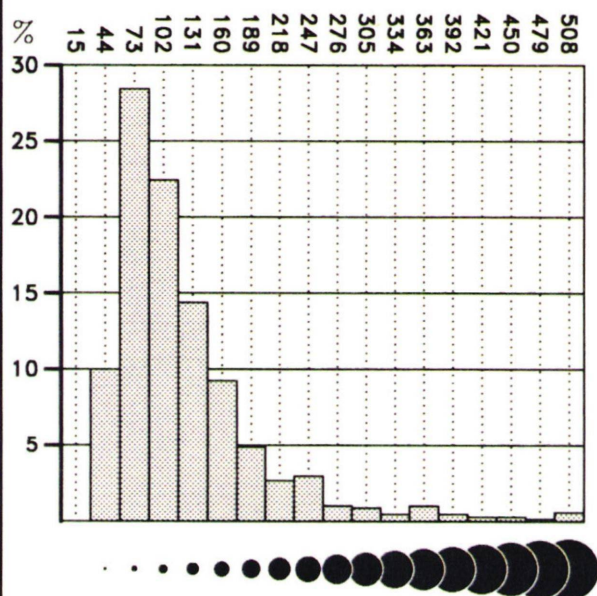


GEOCHEMICAL MAP: Cr IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Cr ppm

Number of samples: 697
 Min. value: 33.00
 Max. value: 24770.00
 Mean: 171.08
 Median: 100.00
 Variance: 890067.19
 Std. Dev.: 943.43

Max. dot size corresponds to the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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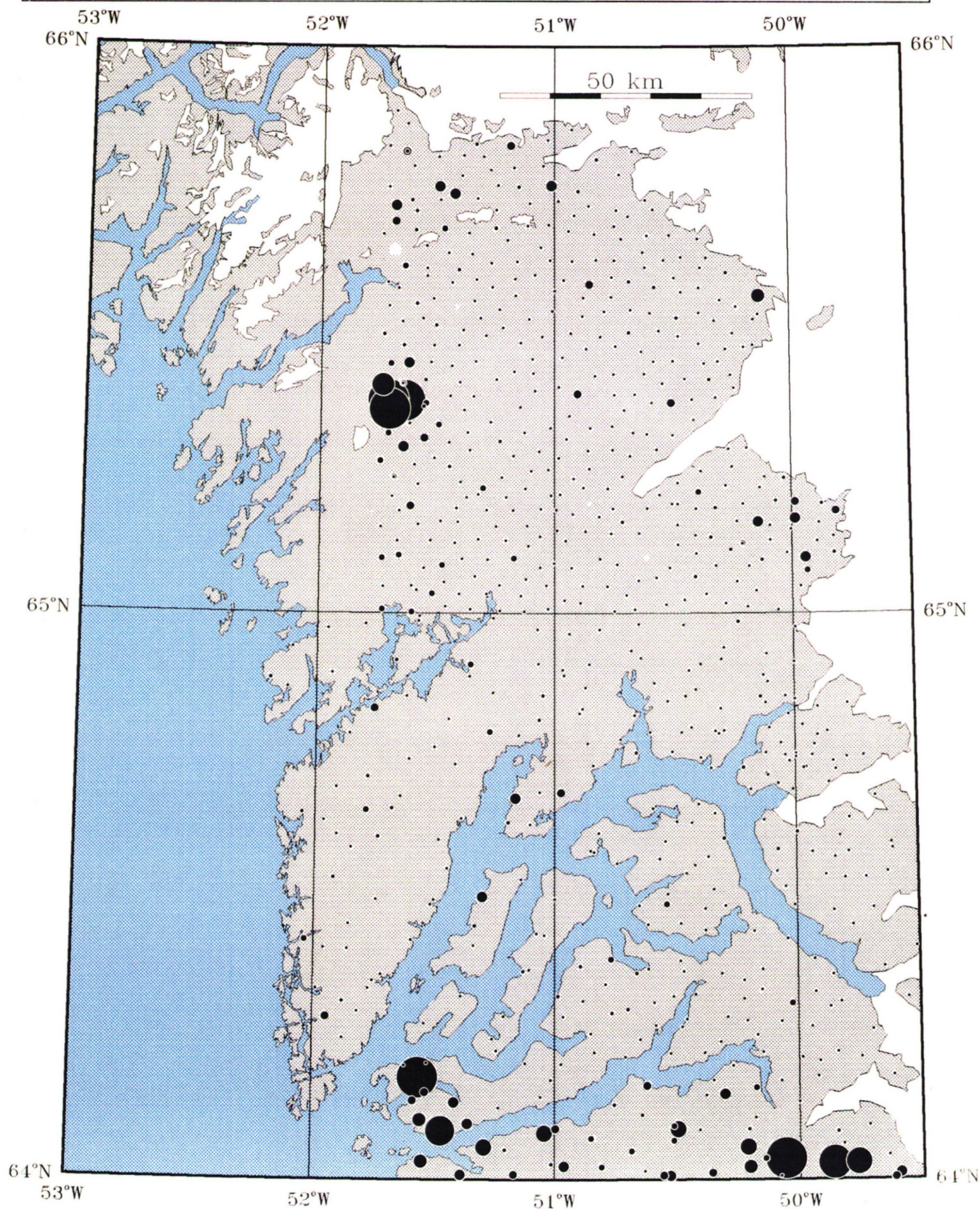
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GEOCHEMICAL MAP: Nb IN STREAM SEDIMENTS

90/1-213: Nuuk - Maniitsoq 01-DEC-90

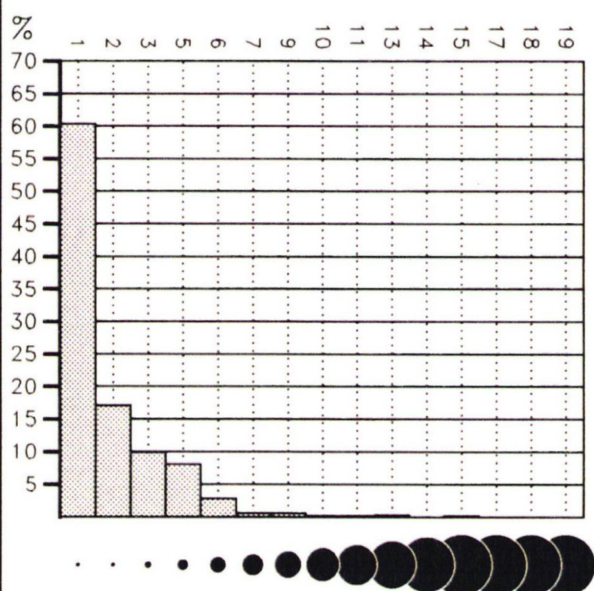


GEOCHEMICAL MAP: Nb IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Nb ppm

Number of samples: 697
Min. value: 0.00
Max. value: 208.00
Mean: 2.05
Median: 1.00
Variance: 81.77
Std. Dev.: 9.04

Max. dot size corresponds to
values above the 99th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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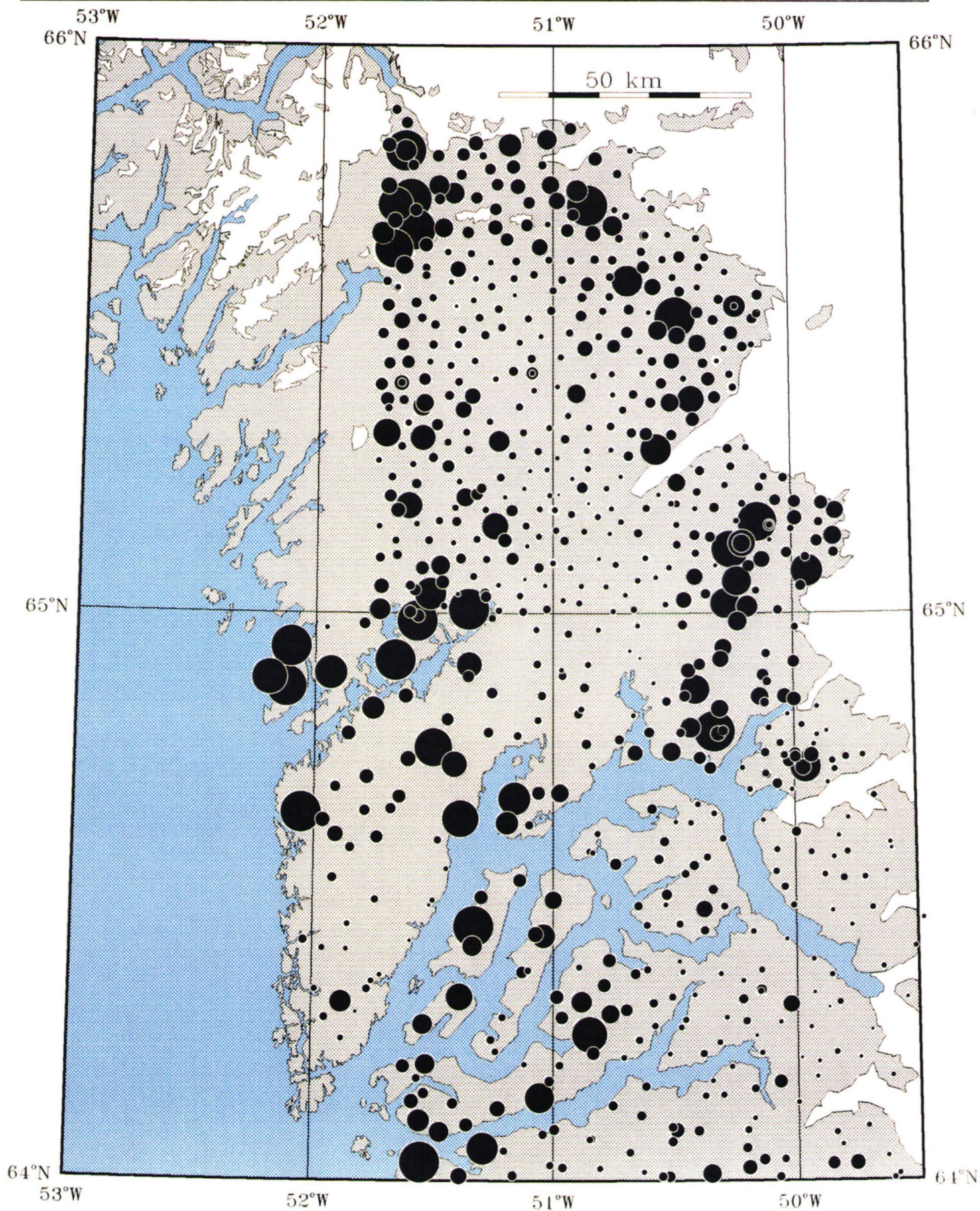
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GEOCHEMICAL MAP: Ni IN STREAM SEDIMENTS

90/1-214: Nuuk - Maniitsoq 01-DEC-90

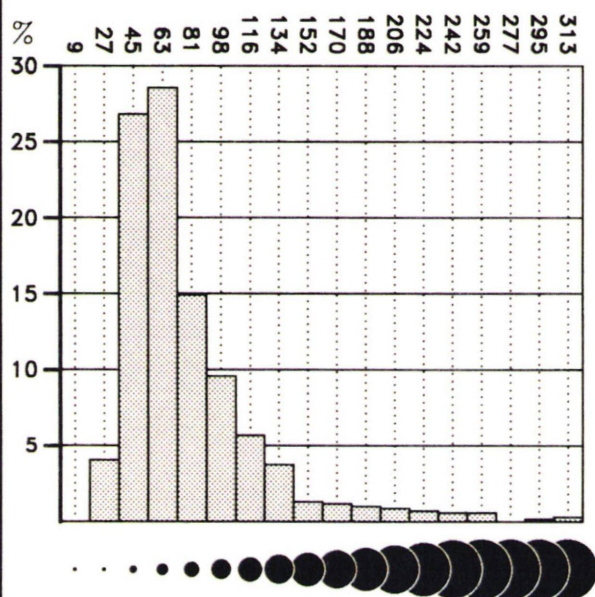


GEOCHEMICAL MAP: Ni IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Ni ppm

Number of samples: 697
Min. value: 23.00
Max. value: 1534.00
Mean: 82.35
Median: 65.00
Variance: 5580.82
Std. Dev.: 74.70

Max. dot size corresponds to
the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs
using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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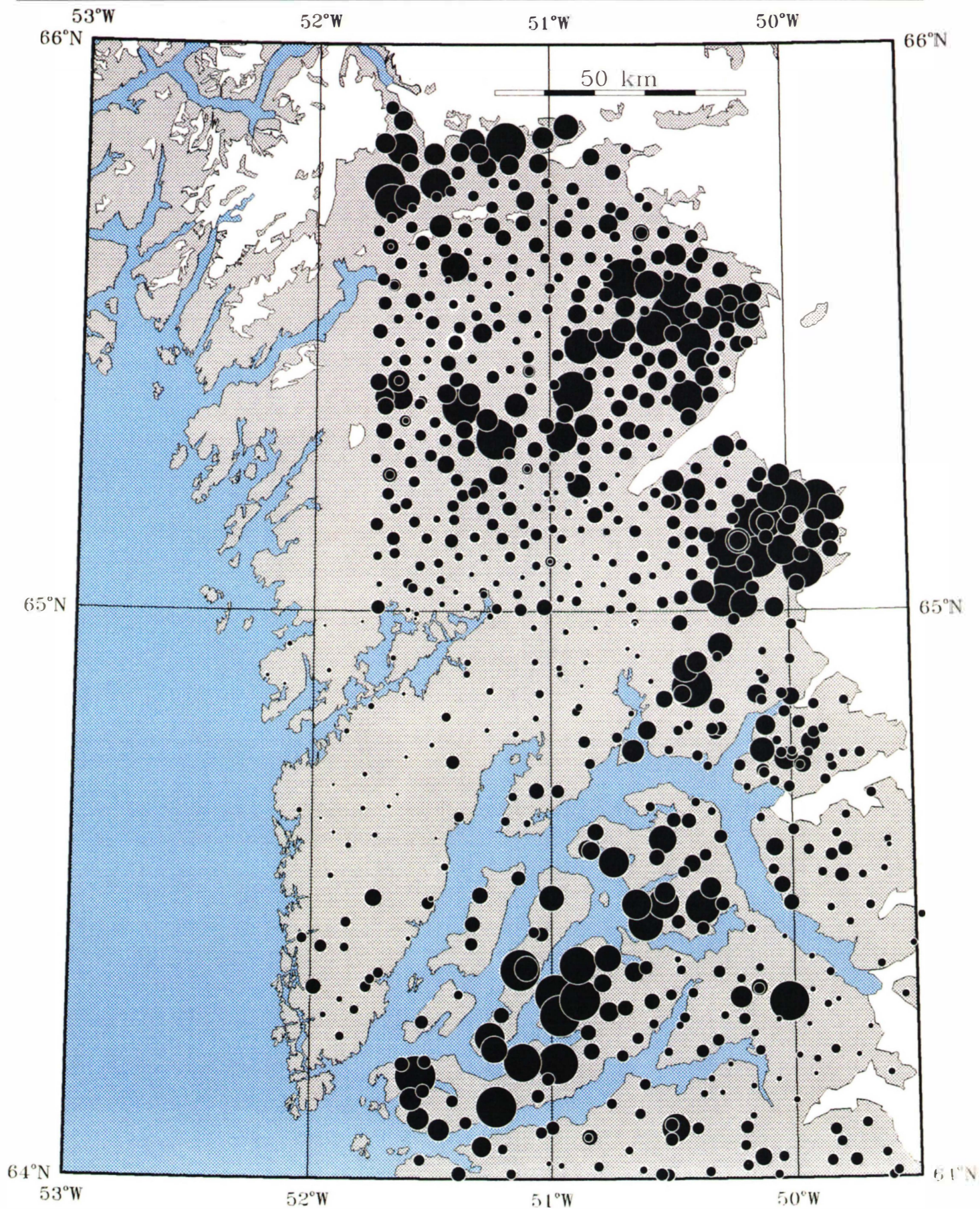
Geological Survey of Greenland
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GEOCHEMICAL MAP: Rb IN STREAM SEDIMENTS

90/1-215: Nuuk - Maniitsoq 01-DEC-90

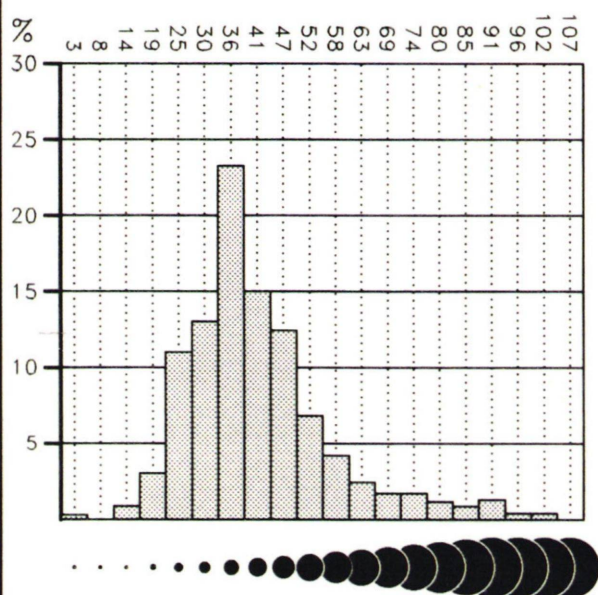


GEOCHEMICAL MAP: Rb IN STREAM SEDIMENT

Nuuk - Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Rb ppm

Number of samples: 697
 Min. value: 0.00
 Max. value: 185.00
 Mean: 41.82
 Median: 38.00
 Variance: 310.91
 Std. Dev.: 17.63

Max. dot size corresponds to the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3-10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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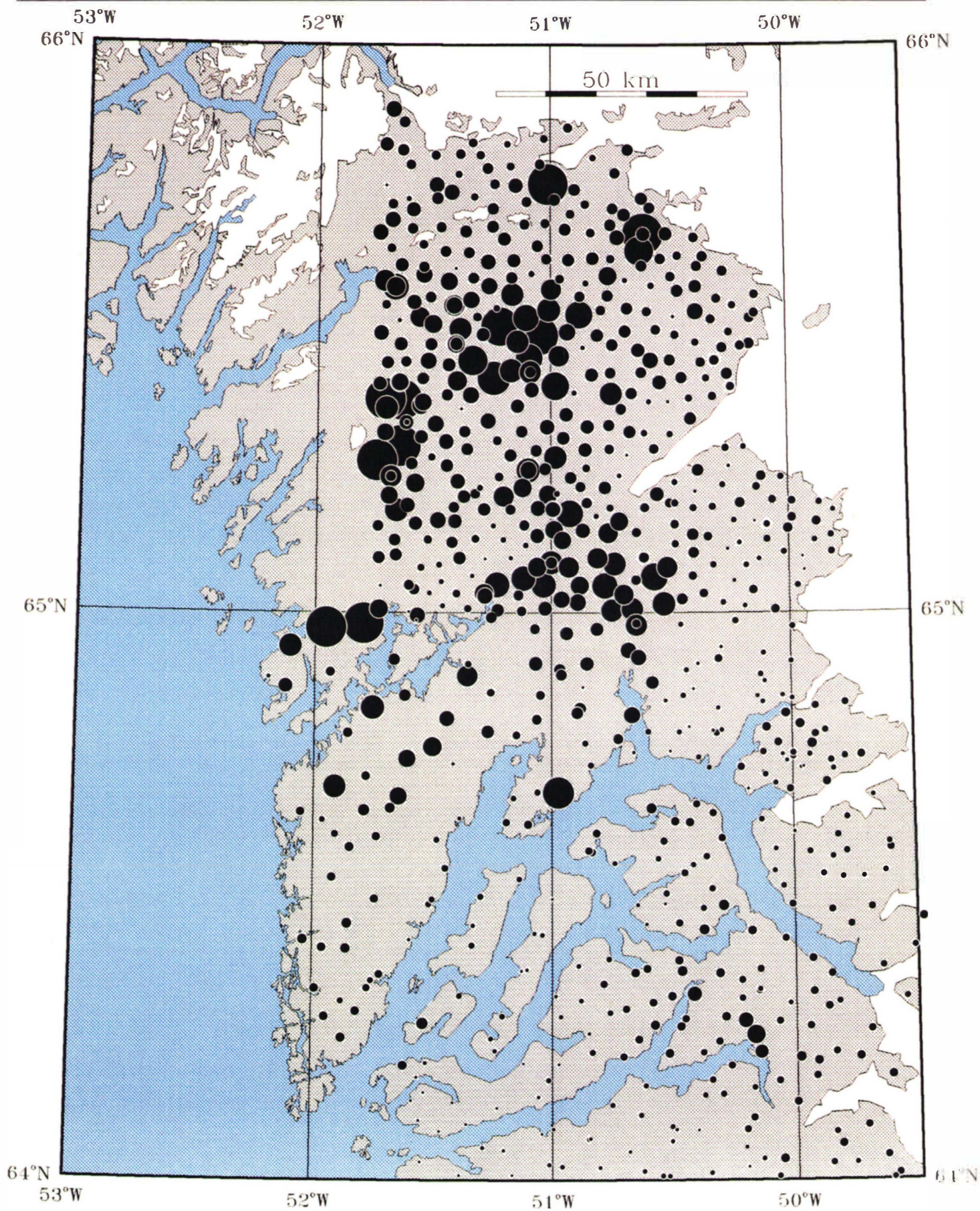
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GEOCHEMICAL MAP: Sr IN STREAM SEDIMENTS

90/1-216: Nuuk - Maniitsoq 01-DEC-90

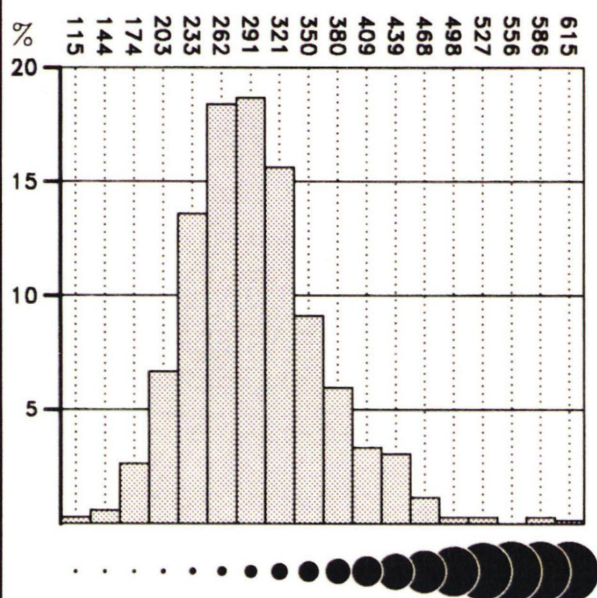


GEOCHEMICAL MAP: Sr IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Sr ppm

Number of samples: 697
 Min. value: 54.00
 Max. value: 1692.00
 Mean: 301.74
 Median: 289.00
 Variance: 11390.65
 Std. Dev.: 106.73

Max. dot size corresponds to the 99th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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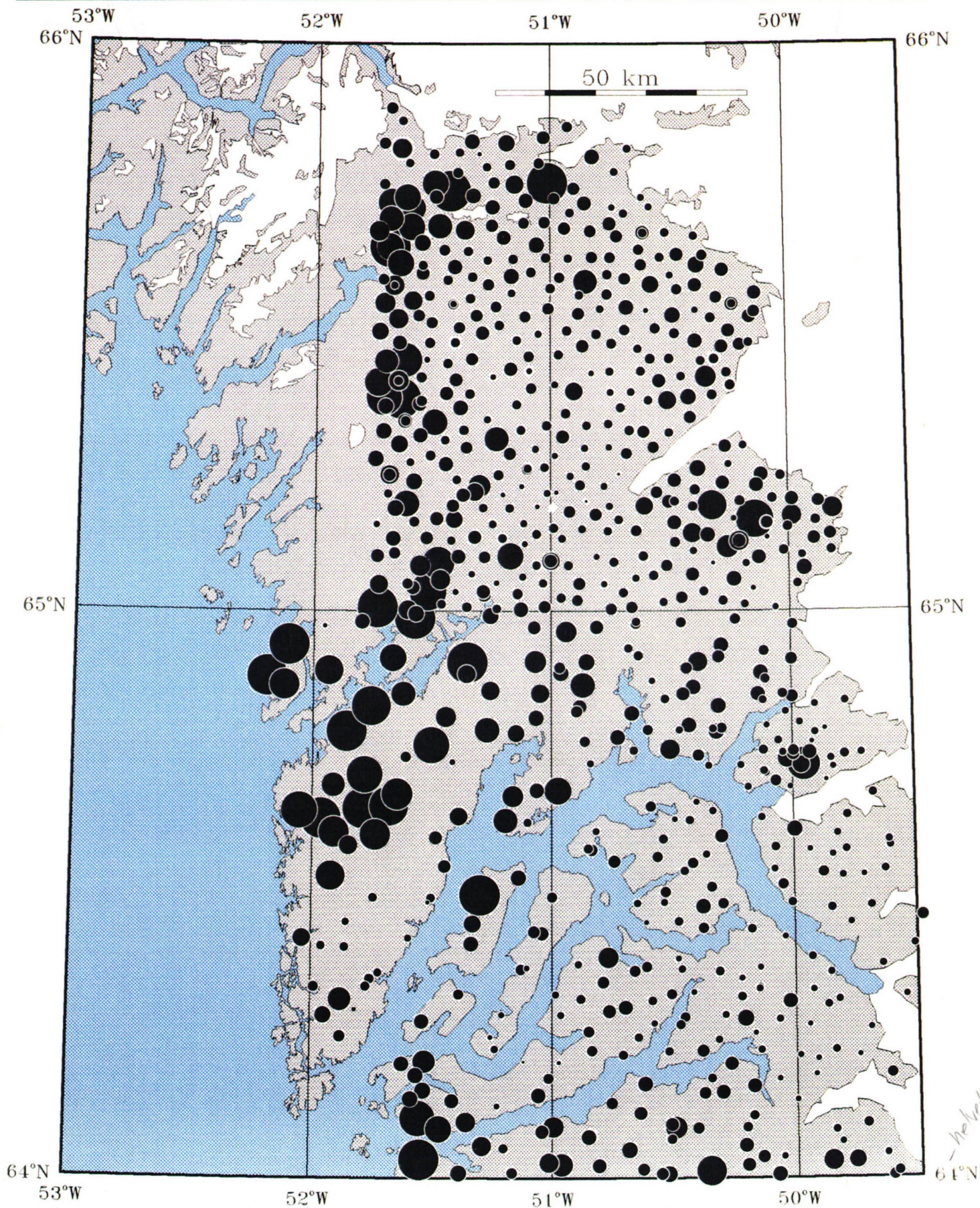
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GEOCHEMICAL MAP: V IN STREAM SEDIMENTS

90/1-217: Nuuk - Maniitsoq 01-DEC-90

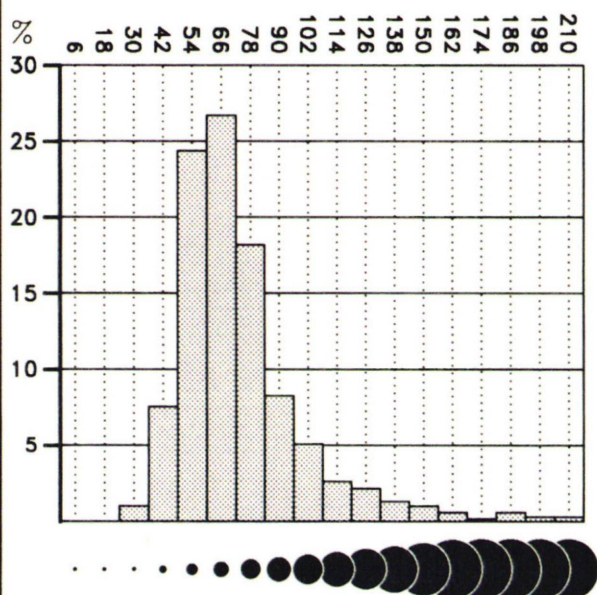


GEOCHEMICAL MAP: V IN STREAM SEDIMENT

Nuuk - Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



V ppm

Number of samples: 697
 Min. value: 25.00
 Max. value: 292.00
 Mean: 74.05
 Median: 67.00
 Variance: 902.90
 Std. Dev.: 30.05

Max. dot size corresponds to the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3-10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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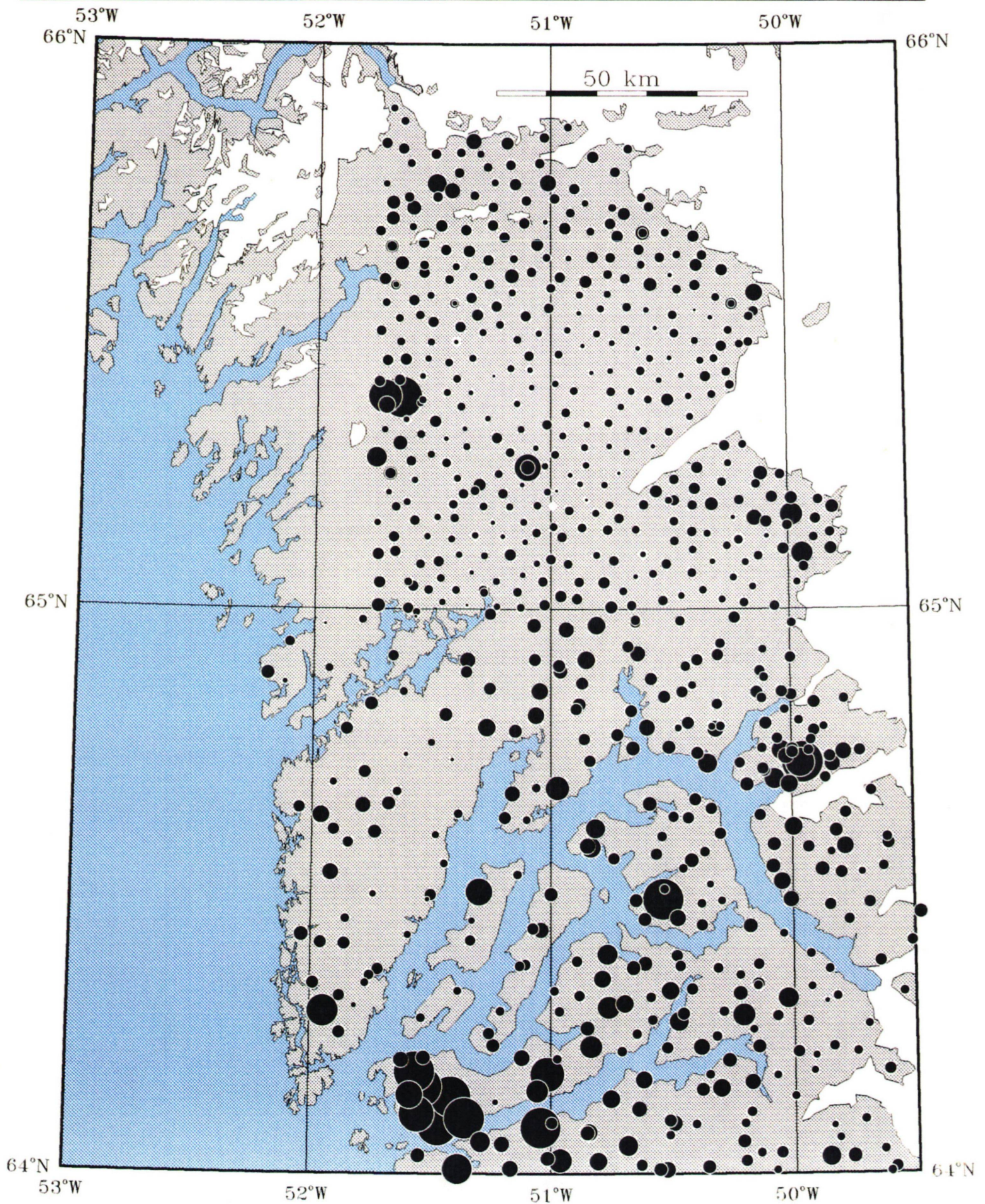
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GEOCHEMICAL MAP: Y IN STREAM SEDIMENTS

90/1-218: Nuuk - Maniitsoq 01-DEC-90

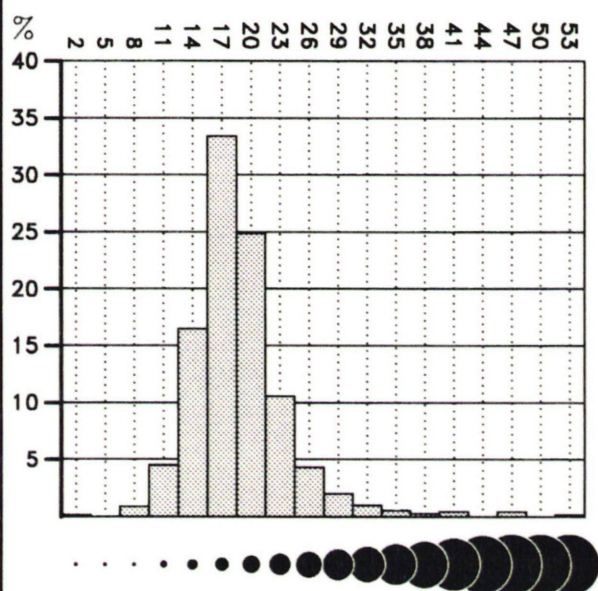


GEOCHEMICAL MAP: Y IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Y ppm

Number of samples: 697
Min. value: 0.00
Max. value: 69.00
Mean: 18.08
Median: 17.00
Variance: 39.41
Std. Dev.: 6.28

Max. dot size corresponds to
the 99th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs
using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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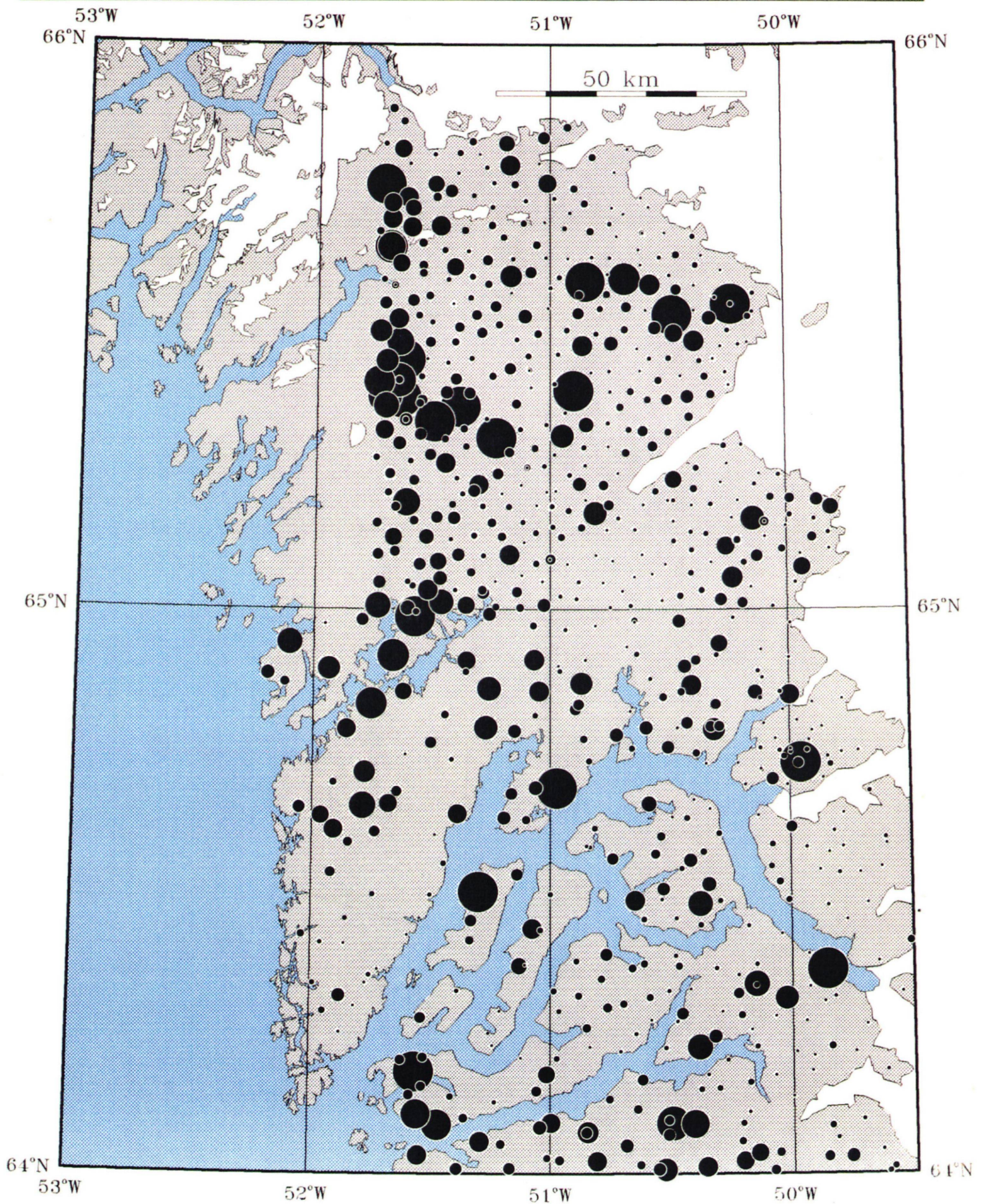
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GEOCHEMICAL MAP: Zn IN STREAM SEDIMENTS

90/1-219: Nuuk - Maniitsoq 01-DEC-90

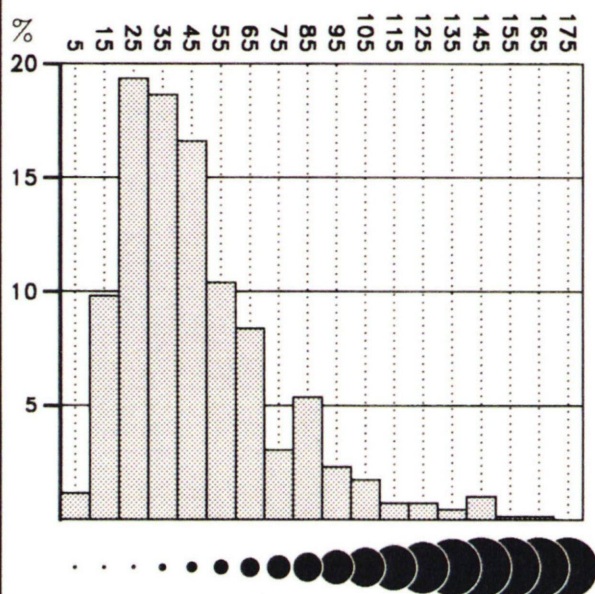


GEOCHEMICAL MAP: Zn IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Zn ppm

Number of samples: 696
 Min. value: 7.00
 Max. value: 516.36
 Mean: 47.64
 Median: 40.00
 Variance: 1159.84
 Std. Dev.: 34.06

Max. dot size corresponds to the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 X-ray fluorescence on glass discs using a multi-channel spectrometer
 Laboratory:
 Geological Survey of Greenland
 Analyst I. Sørensen

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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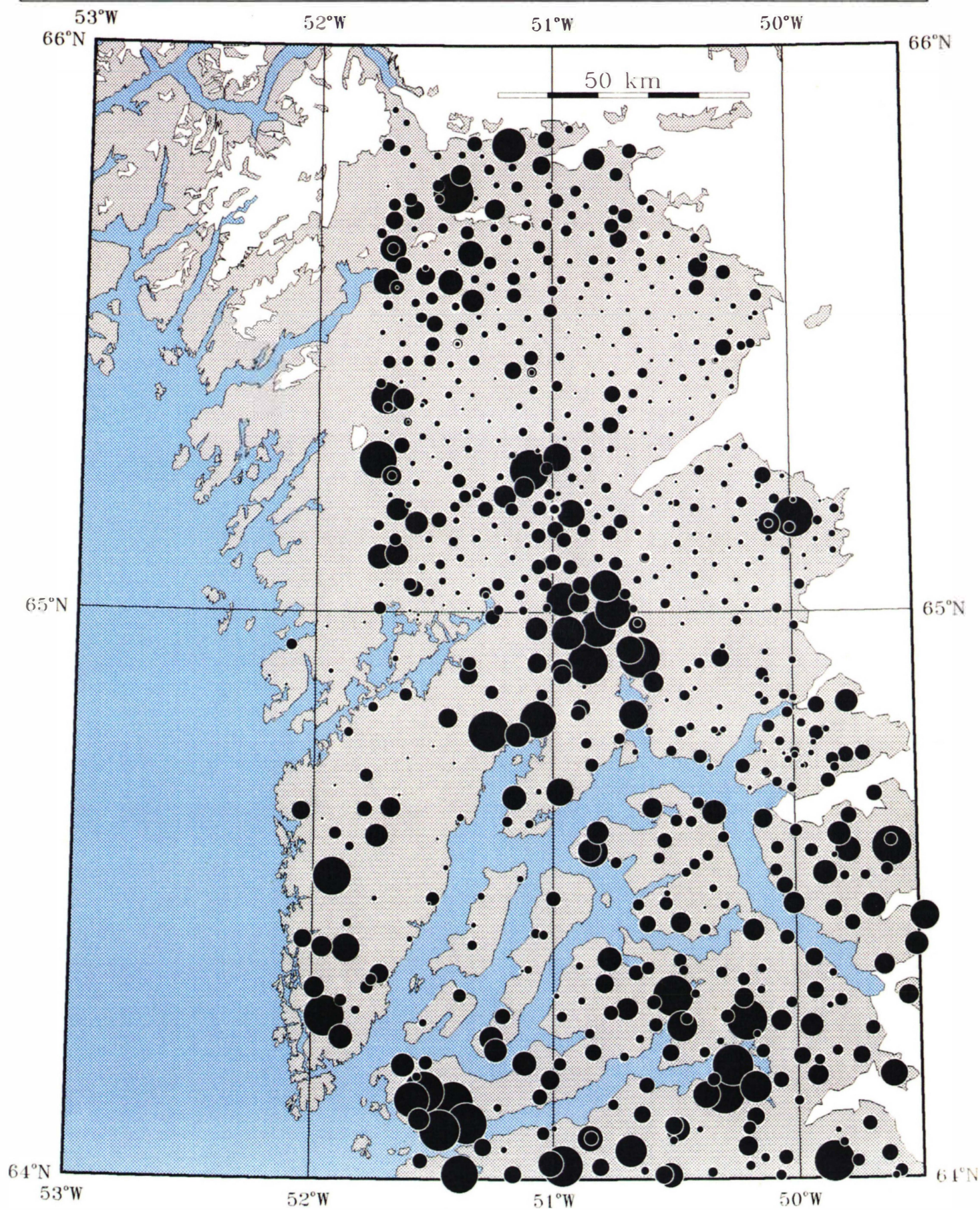
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GEOCHEMICAL MAP: Zr IN STREAM SEDIMENTS

90/1-220: Nuuk - Maniitsoq 01-DEC-90

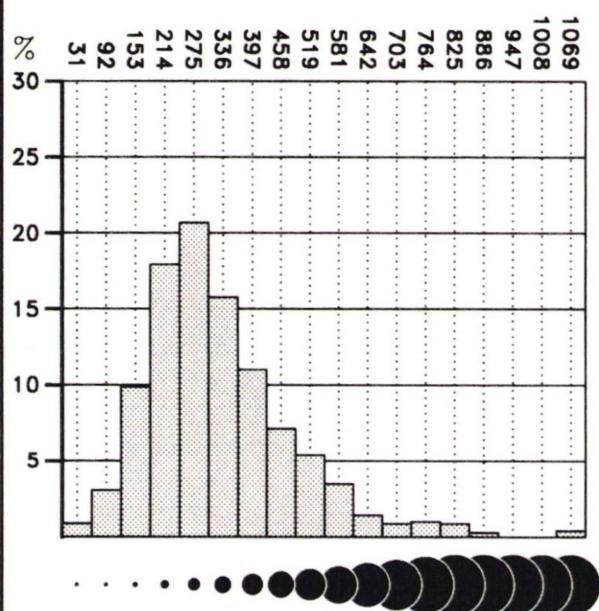


GEOCHEMICAL MAP: Zr IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Zr ppm

Number of samples: 698
Min. value: 21.00
Max. value: 2010.00
Mean: 340.26
Median: 296.80
Variance: 40021.54
Std. Dev.: 200.05

Max. dot size corresponds to
the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
X-ray fluorescence on glass discs
using a multi-channel spectrometer
Laboratory:
Geological Survey of Greenland
Analyst I. Sørensen

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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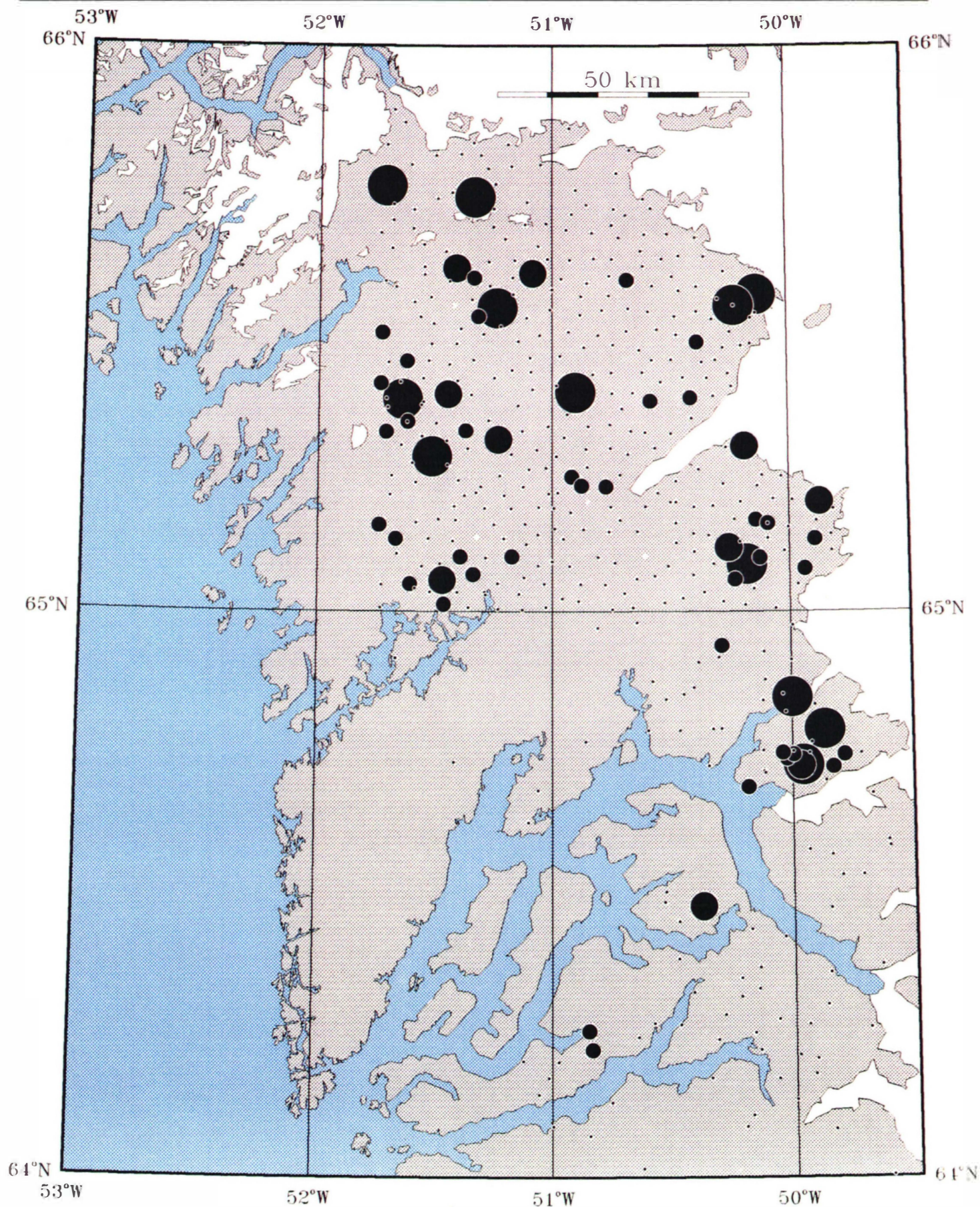
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GEOCHEMICAL MAP: As IN STREAM SEDIMENTS

90/1-221: Nuuk - Maniitsoq 01-DEC-90

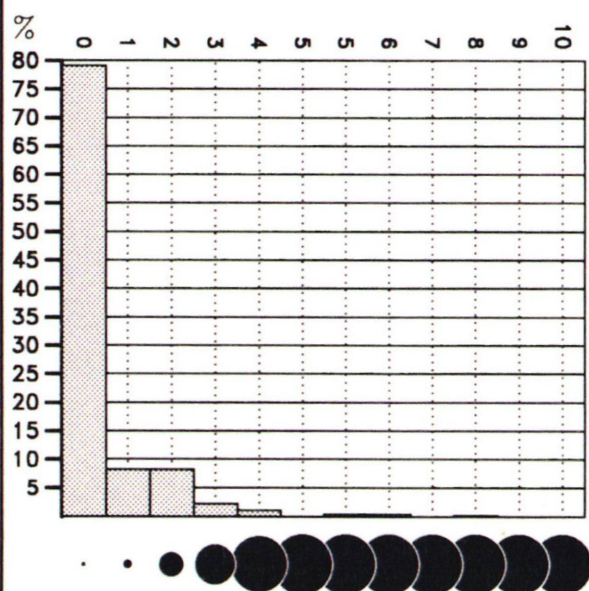


GEOCHEMICAL MAP: As IN STREAM SEDIMENT

Nuuk - Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



As ppm

Number of samples: 452
Min. value: 0.00
Max. value: 22.00
Mean: 0.49
Median: 0.00
Variance: 2.25
Std. Dev.: 1.50

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 1 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3-10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron
Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario
Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
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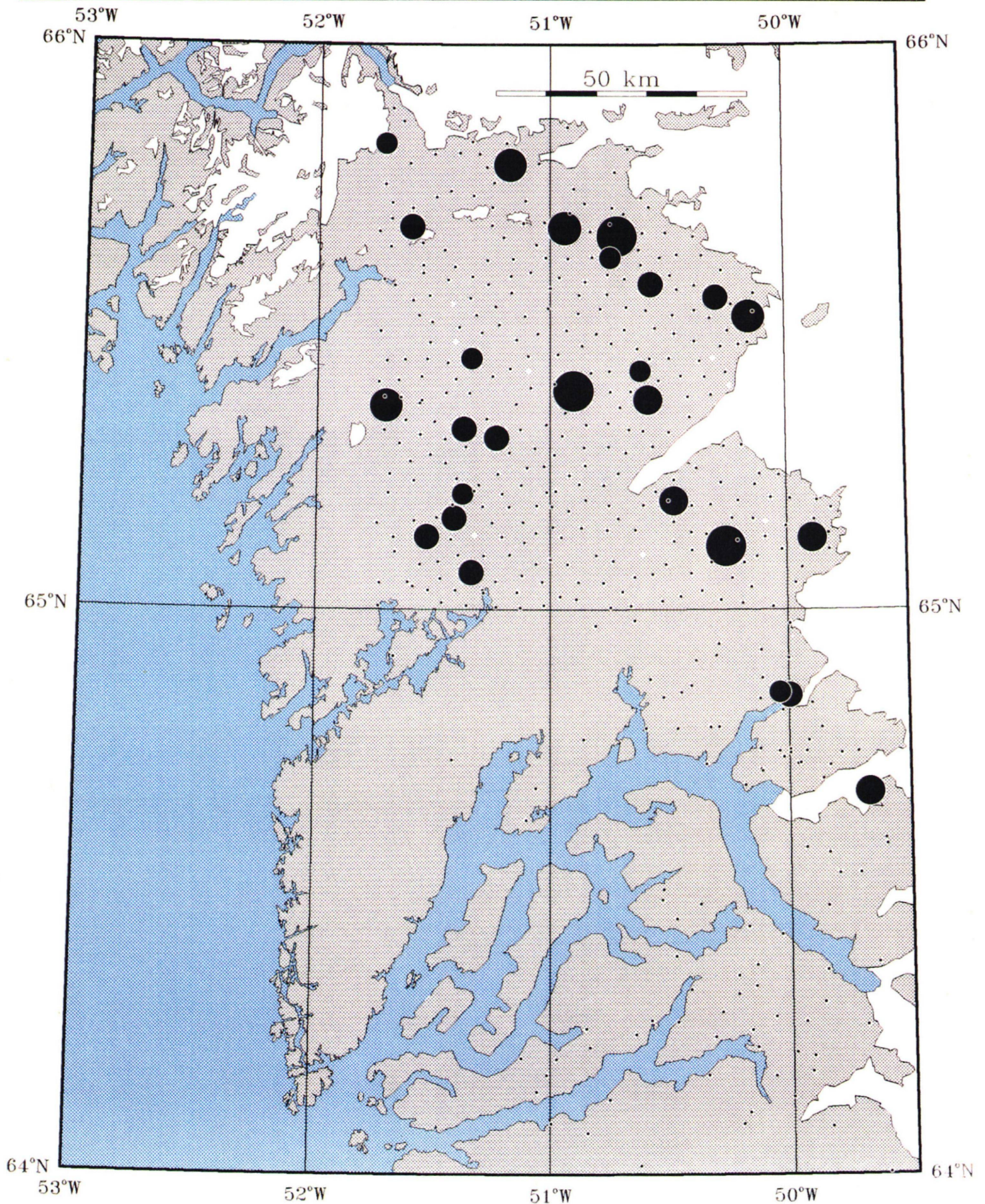
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GEOCHEMICAL MAP: Au IN STREAM SEDIMENTS

90/1-222: Nuuk - Maniitsoq 01-DEC-90



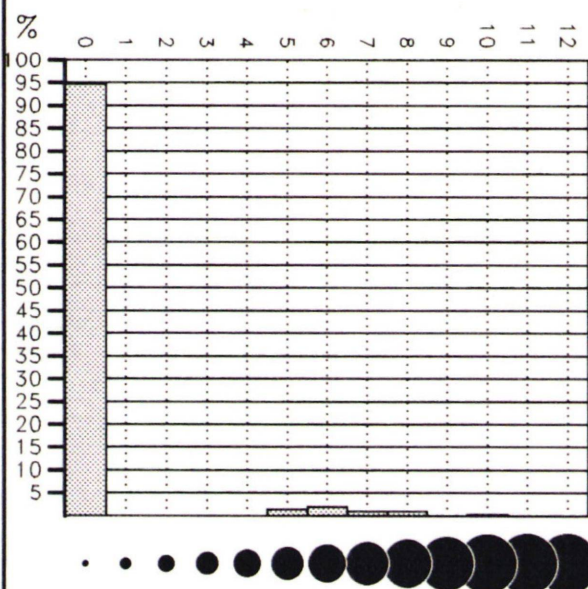
Thematic map 90/1-222

GEOCHEMICAL MAP: Au IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Au ppb

Number of samples: 452
Min. value: 0.00
Max. value: 23.00
Mean: 0.42
Median: 0.00
Variance: 3.59
Std. Dev.: 1.90

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 5 ppb.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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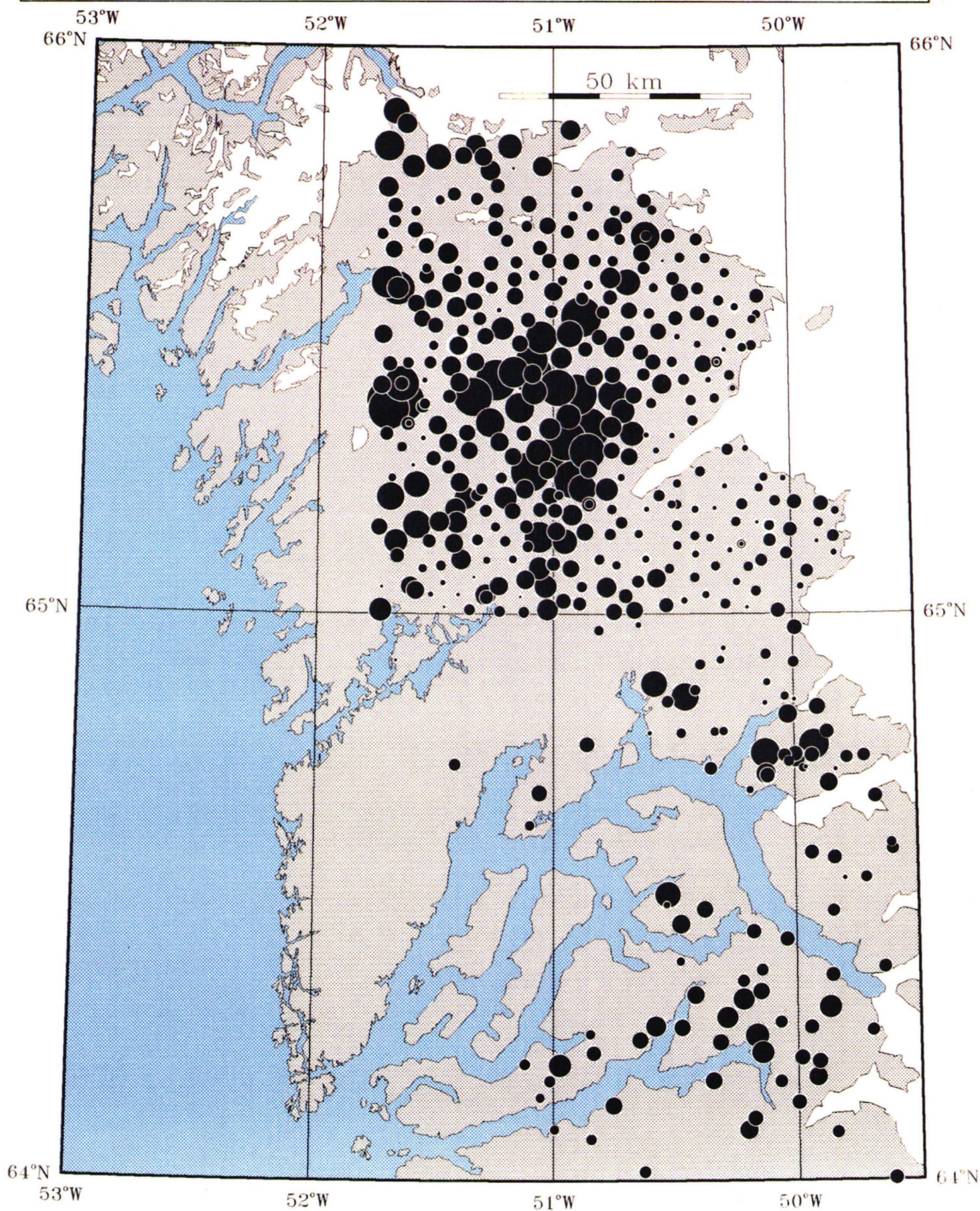
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GEOCHEMICAL MAP: Ba IN STREAM SEDIMENTS

90/1-223: Nuuk - Maniitsoq 01-DEC-90

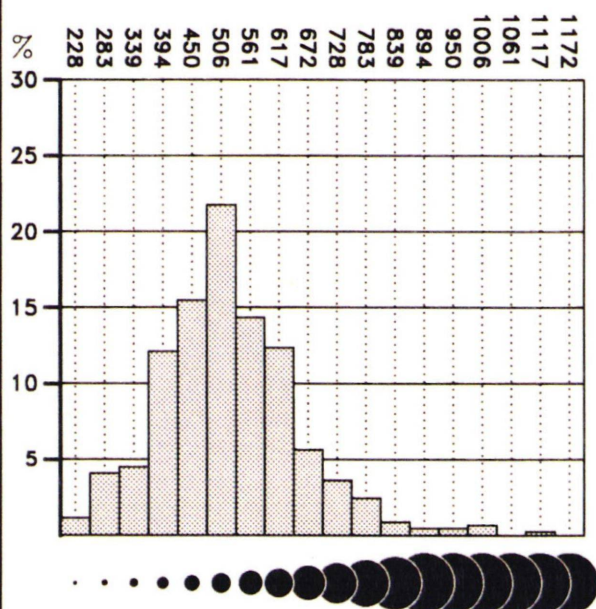


GEOCHEMICAL MAP: Ba IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Ba ppm

Number of samples: 452
 Min. value: 0.00
 Max. value: 2300.00
 Mean: 528.12
 Median: 510.00
 Variance: 28885.37
 Std. Dev.: 169.96

Max. dot size corresponds to the 98th percentile.

Analytical detection limit 100 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 Direct irradiation/Instrumental Neutron Activation
 Laboratory:
 Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

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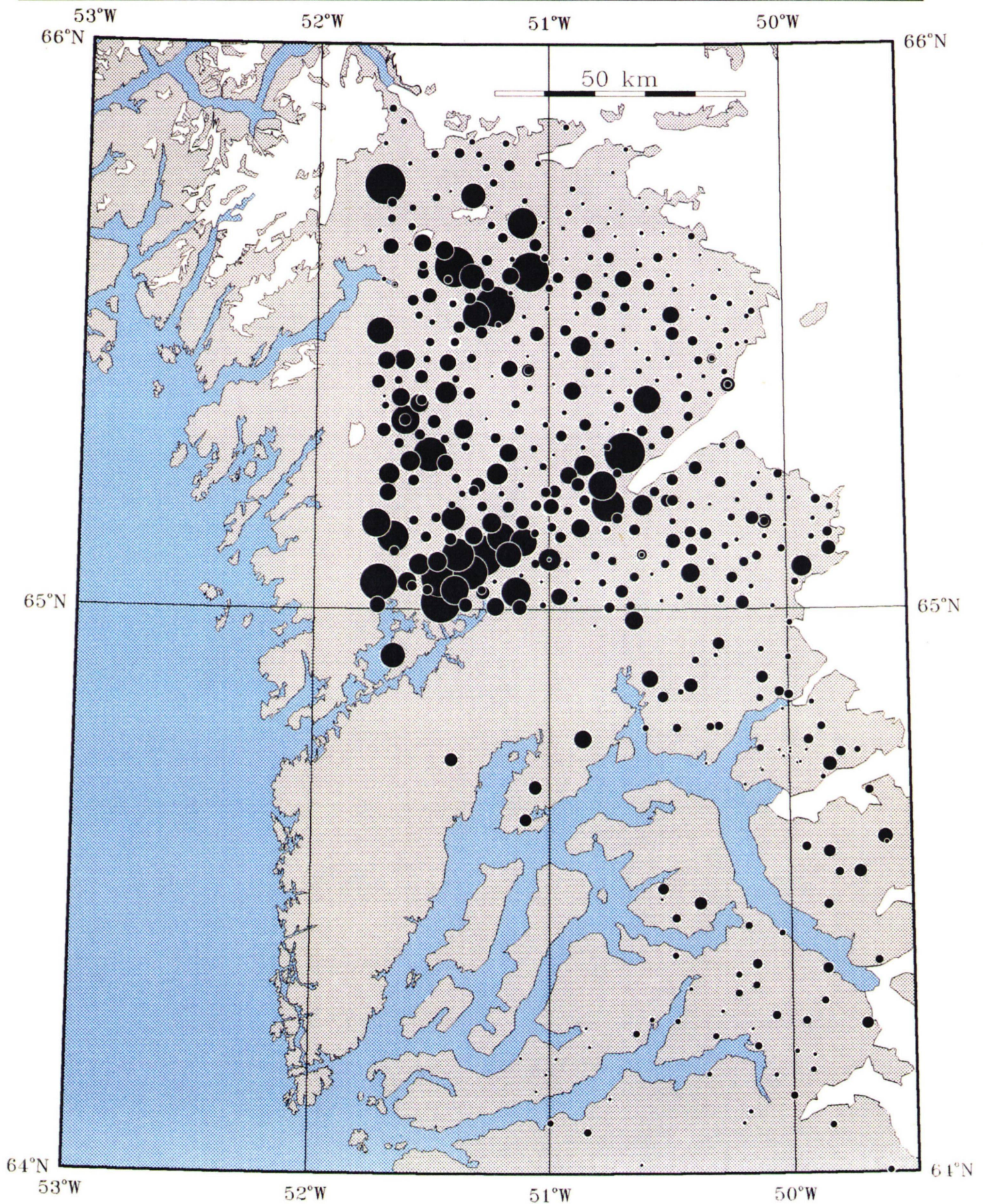
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GEOCHEMICAL MAP: Br IN STREAM SEDIMENTS

90/1-224: Nuuk - Maniitsoq 01-DEC-90

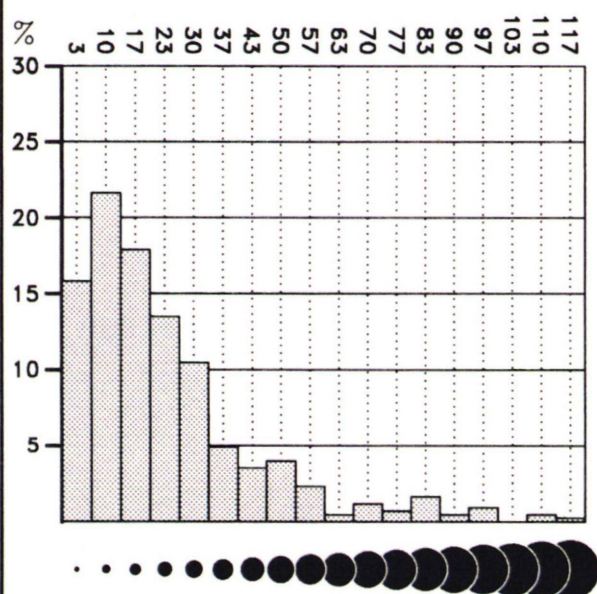


GEOCHEMICAL MAP: Br IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Br ppm

Number of samples: 452
 Min. value: -1.00
 Max. value: 168.00
 Mean: 24.39
 Median: 17.00
 Variance: 630.15
 Std. Dev.: 25.10

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 1 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 Direct irradiation/Instrumental Neutron Activation
 Laboratory:
 Bondar-Clegg & Company Ltd., Ontario
 Canada

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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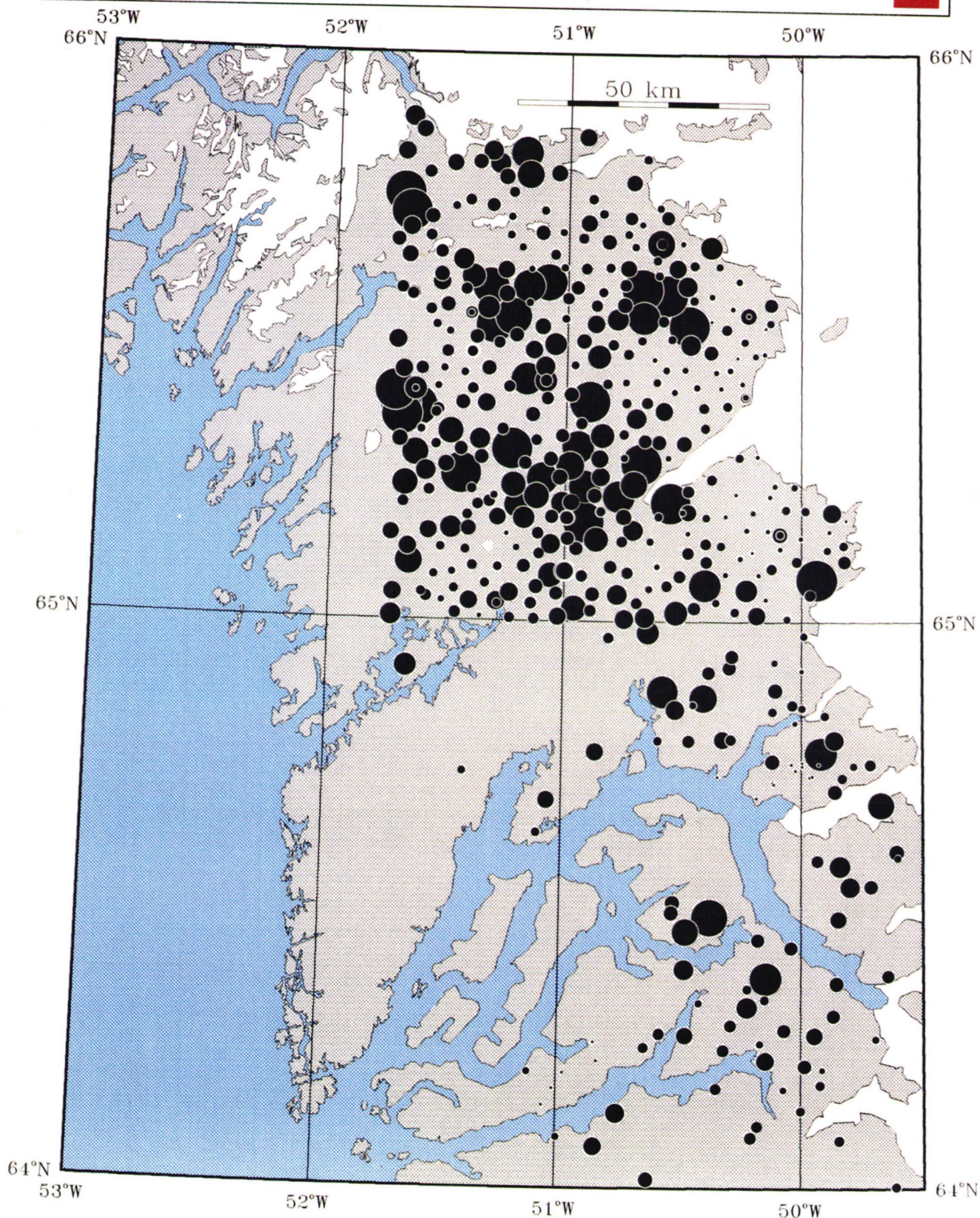
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GEOCHEMICAL MAP: Ce IN STREAM SEDIMENTS

90/1-225: Nuuk - Maniitsoq 01-DEC-90

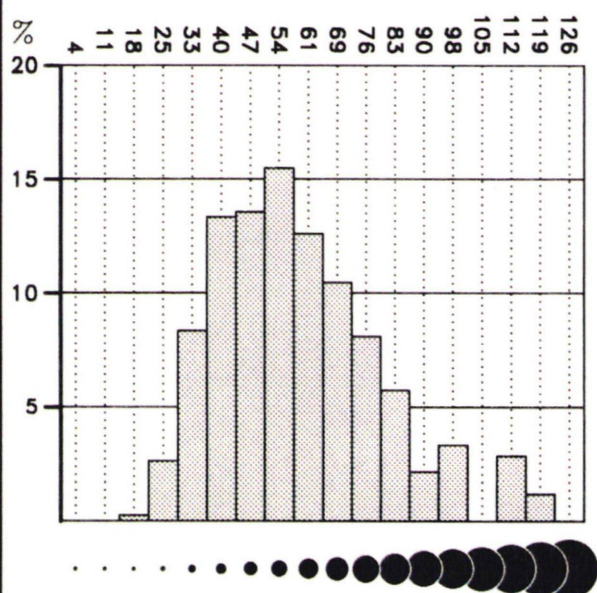


GEOCHEMICAL MAP: Ce IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Ce ppm

Number of samples: 452
 Min. value: -1.00
 Max. value: 990.00
 Mean: 63.14
 Median: 56.00
 Variance: 3434.81
 Std. Dev.: 58.61

Max. dot size corresponds to the 98th percentile.

Analytical detection limit 10 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 Direct irradiation/Instrumental Neutron Activation
 Laboratory:
 Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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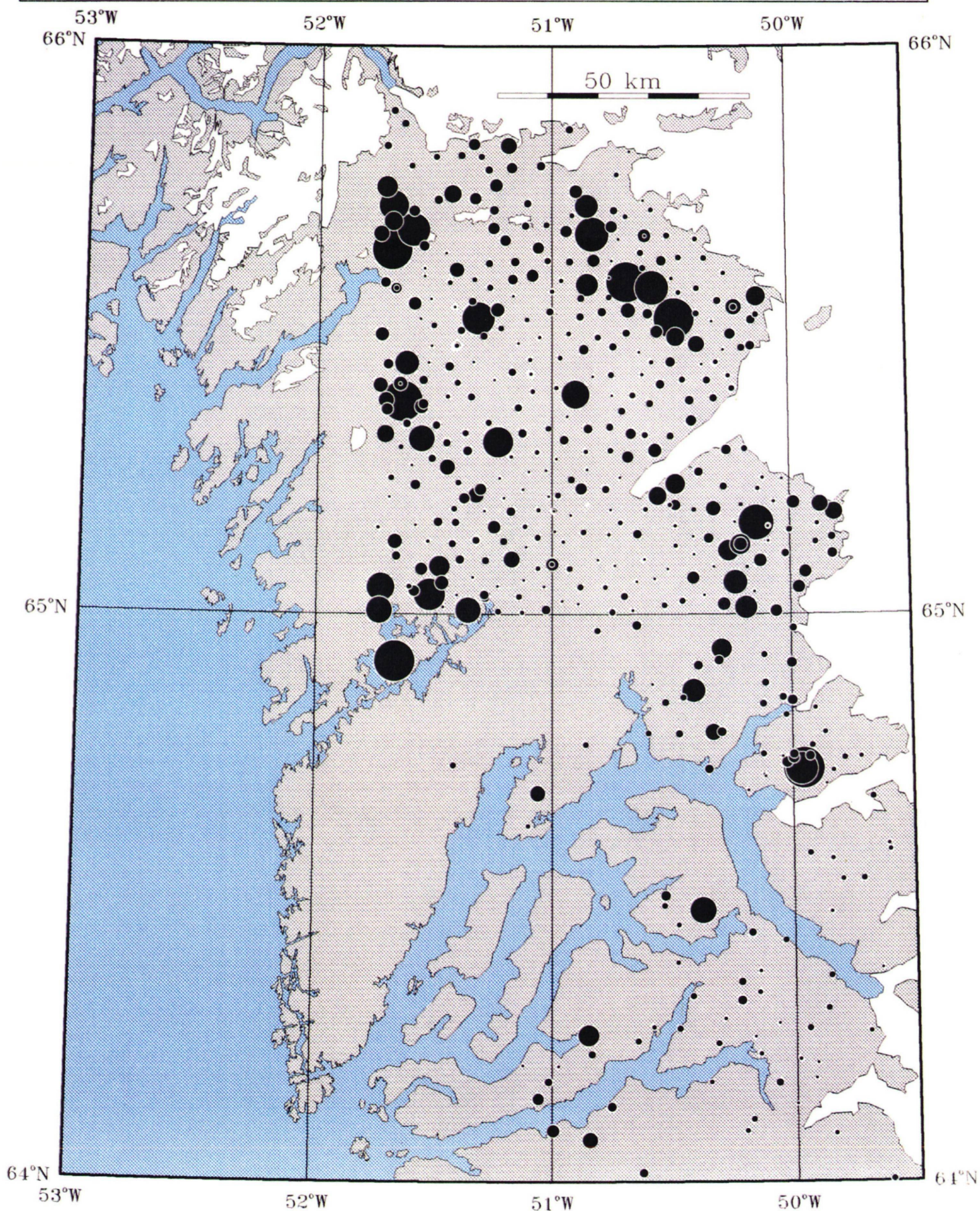
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GEOCHEMICAL MAP: Co IN STREAM SEDIMENTS

90/1-226: Nuuk - Maniitsoq 01-DEC-90

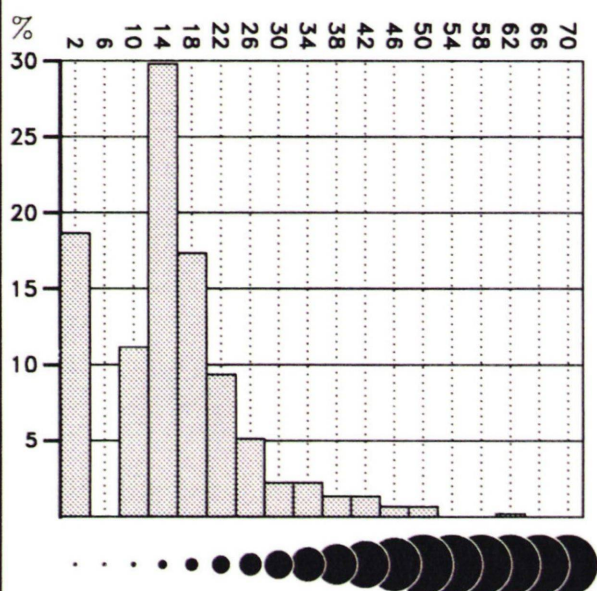


GEOCHEMICAL MAP: Co IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Co ppm

Number of samples: 452
Min. value: 0.00
Max. value: 96.00
Mean: 15.04
Median: 14.00
Variance: 125.52
Std. Dev.: 11.20

Max. dot size corresponds to the
99th percentile.

Analytical detection limit 10 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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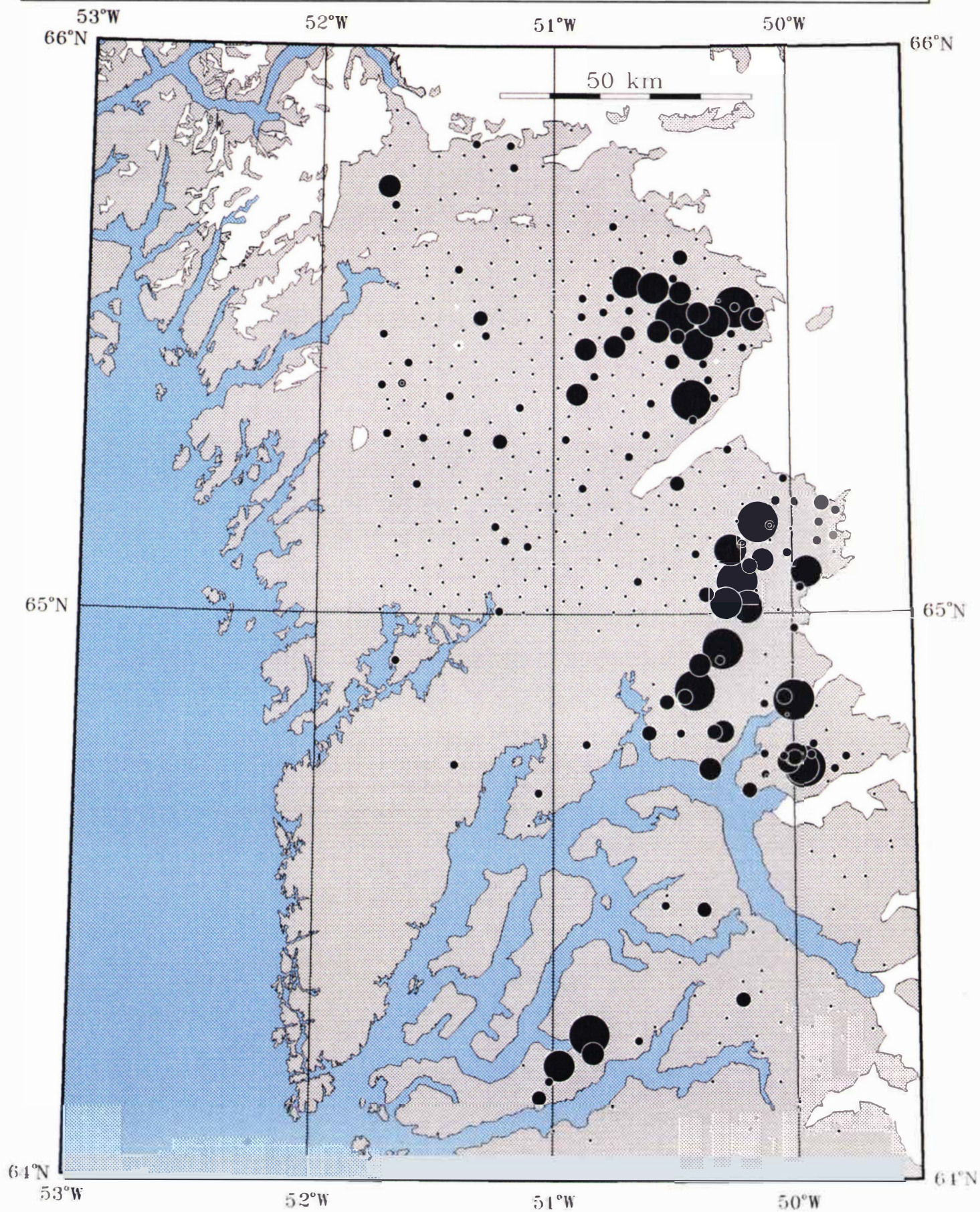
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GEOCHEMICAL MAP: Cs IN STREAM SEDIMENTS

90/1-227: Nuuk - Maniitsoq 01-DEC-90

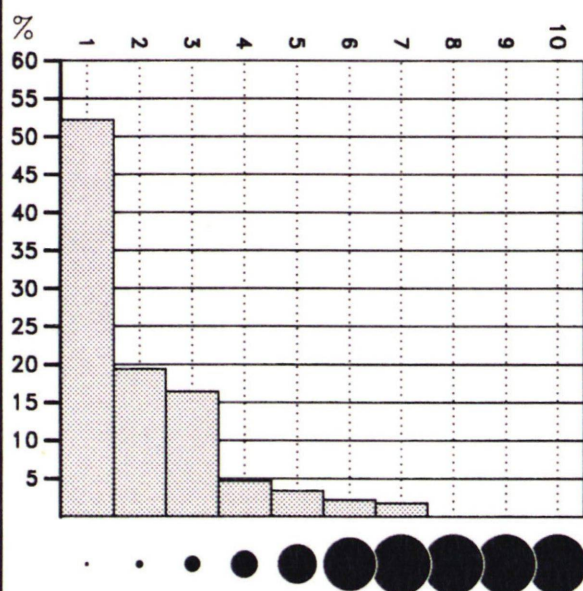


GEOCHEMICAL MAP: Cs IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Cs ppm

Number of samples: 452
Min. value: 0.00
Max. value: 19.00
Mean: 1.08
Median: 0.00
Variance: 3.00
Std. Dev.: 1.73

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 1 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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Geological Survey of Greenland

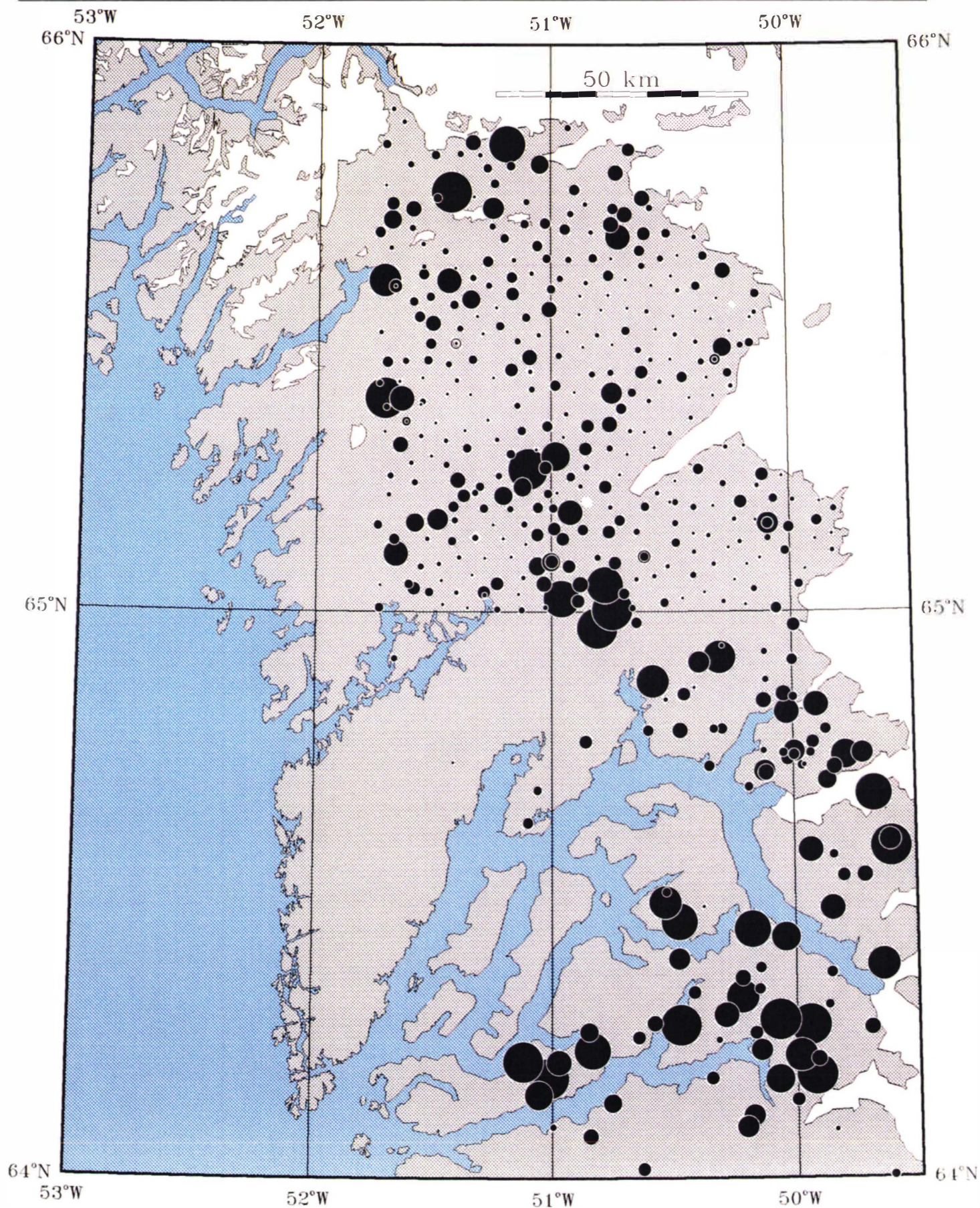
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GEOCHEMICAL MAP: Hf IN STREAM SEDIMENTS

90/1-228: Nuuk - Maniitsoq 01-DEC-90

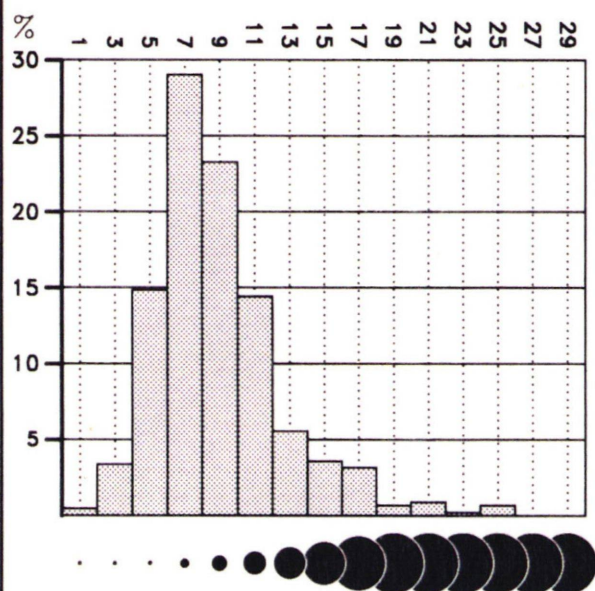


GEOCHEMICAL MAP: Hf IN STREAM SEDIMENT

Nuuk - Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Hf ppm

Number of samples: 452
Min. value: 0.00
Max. value: 48.00
Mean: 8.45
Median: 8.00
Variance: 16.90
Std. Dev.: 4.11

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 2 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected at stream bed or bank as composite of 3-10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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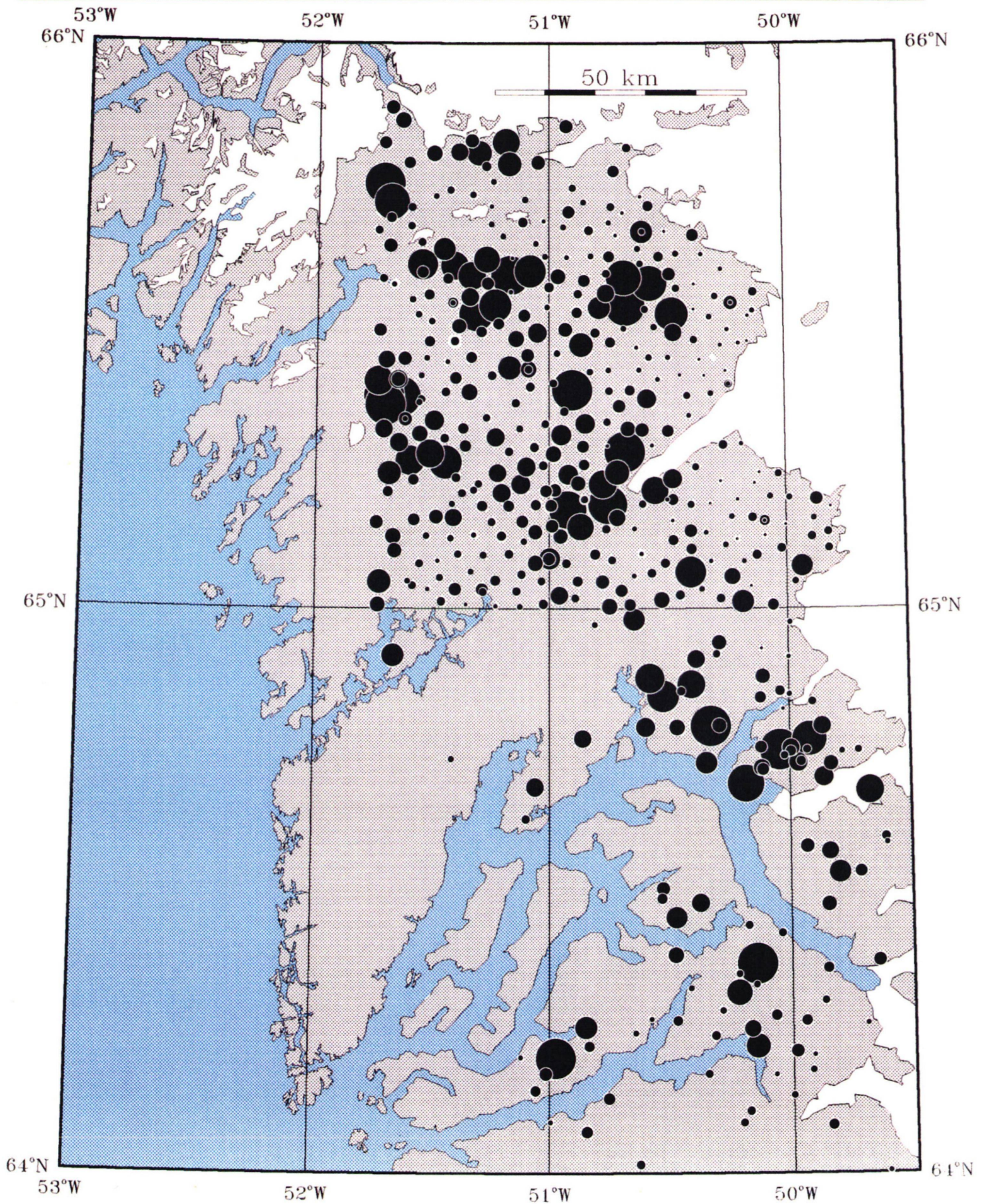
Geological Survey of Greenland
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GEOCHEMICAL MAP: La IN STREAM SEDIMENTS

90/1-229: Nuuk - Maniitsoq 01-DEC-90

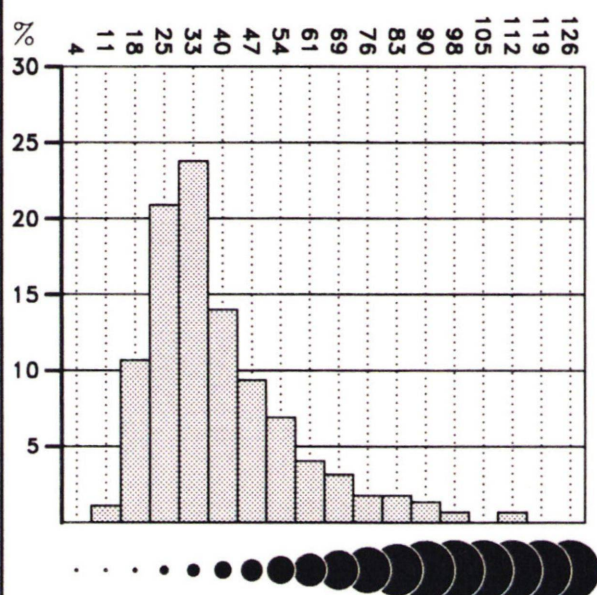


GEOCHEMICAL MAP: La IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



La ppm

Number of samples: 452
 Min. value: 13.00
 Max. value: 624.00
 Mean: 40.67
 Median: 34.00
 Variance: 1293.95
 Std. Dev.: 35.97

Max. dot size corresponds to the 98th percentile.

Analytical detection limit 5 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by the Geological Survey of Greenland in 1982 north of 65° N and in 1986 south of 65° N.

SURVEY SPECIFICATIONS

Sample density:
 north of 65° N average 1 per 15 km²
 south of 65° N average 1 per 20 km²
 Sample type:
 minerogenic stream sediment collected at stream bed or bank as composite of 3–10 subsamples
 Size fraction:
 <0.1 mm dry-sieved in laboratory
 Analysis:
 Direct irradiation/Instrumental Neutron Activation
 Laboratory:
 Bondar-Clegg & Company Ltd., Ontario Canada

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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Geological Survey of Greenland

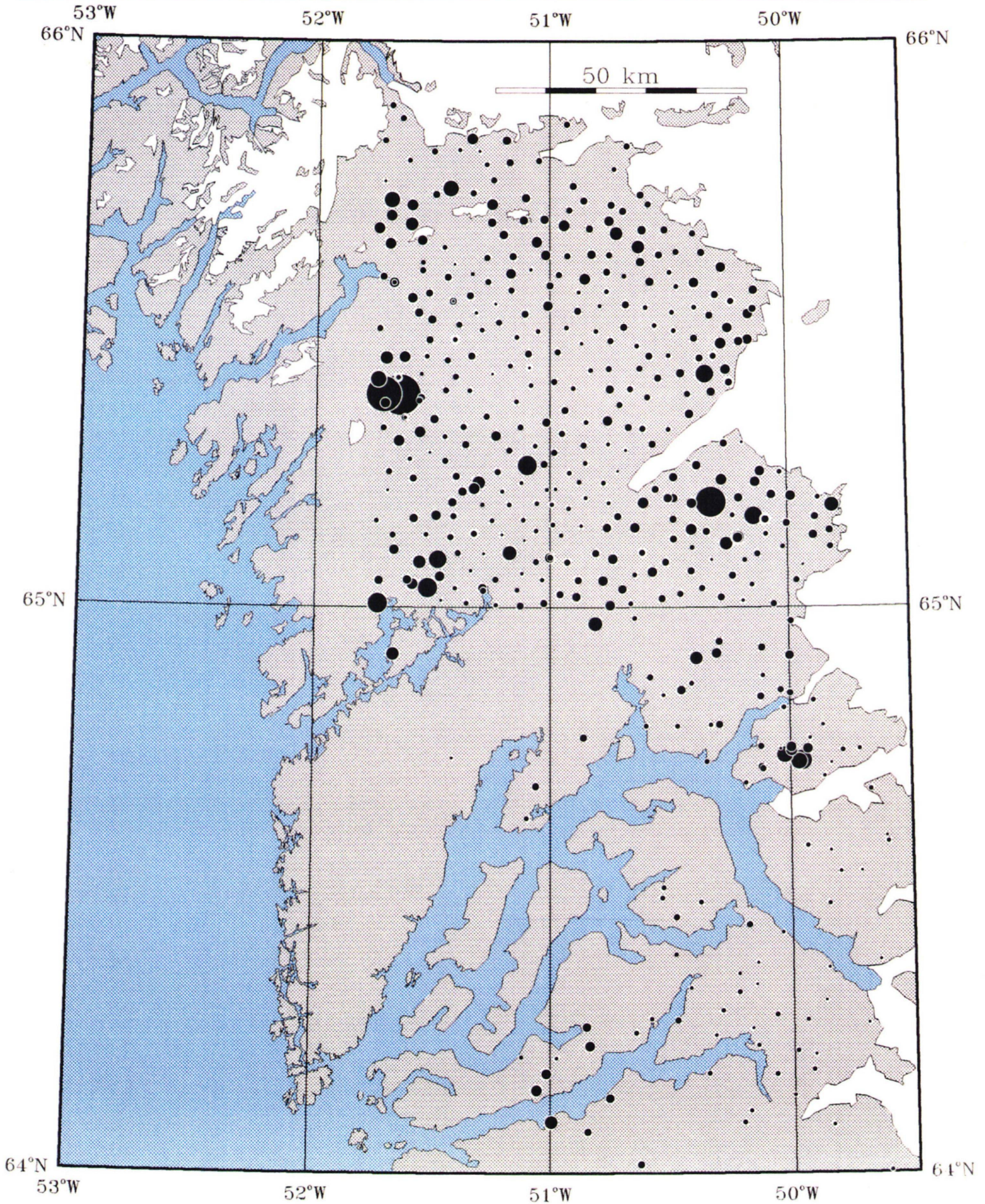
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GEOCHEMICAL MAP: Sc IN STREAM SEDIMENTS

90/1-230: Nuuk - Maniitsoq 01-DEC-90

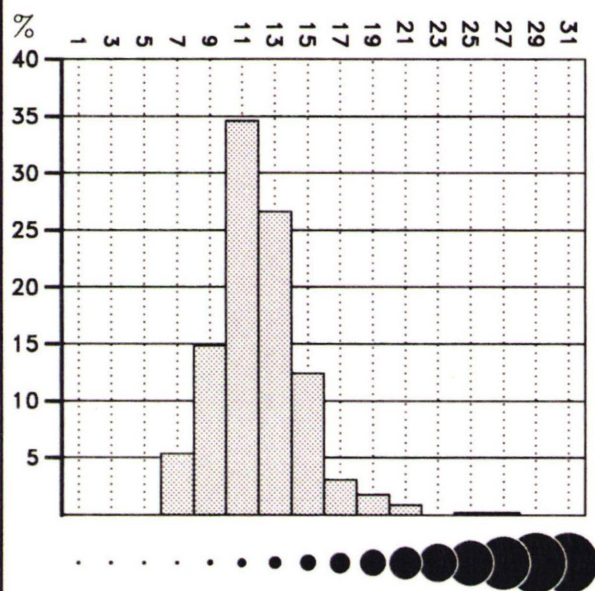


GEOCHEMICAL MAP: Sc IN STREAM SEDIMENT

Nuuk - Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Sc ppm

Number of samples: 452
Min. value: 6.30
Max. value: 38.00
Mean: 11.58
Median: 11.00
Variance: 8.42
Std. Dev.: 2.90

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 0.5 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3-10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron
Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario
Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
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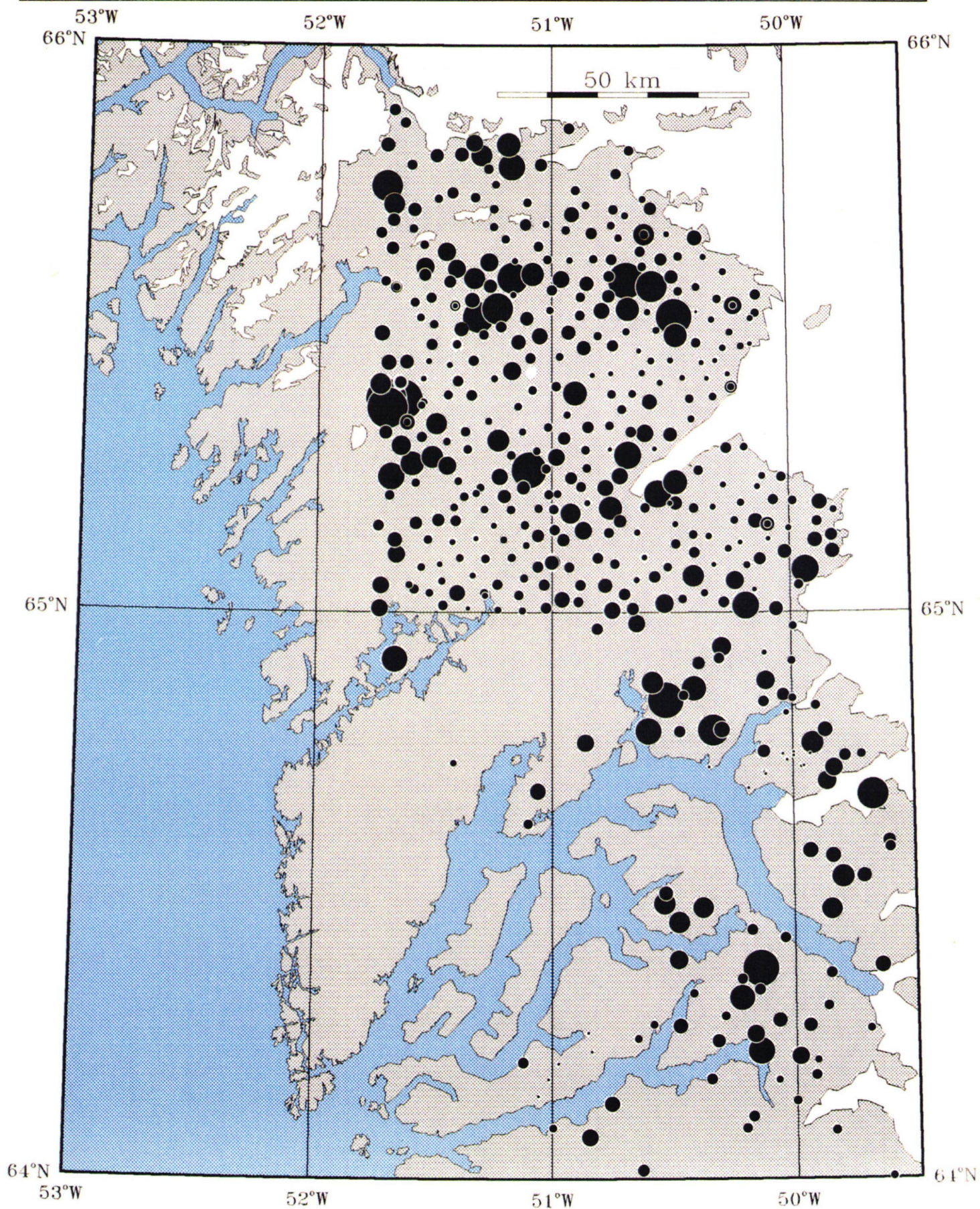
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GEOCHEMICAL MAP: Sm IN STREAM SEDIMENTS

90/1-231: Nuuk - Maniitsoq 01-DEC-90

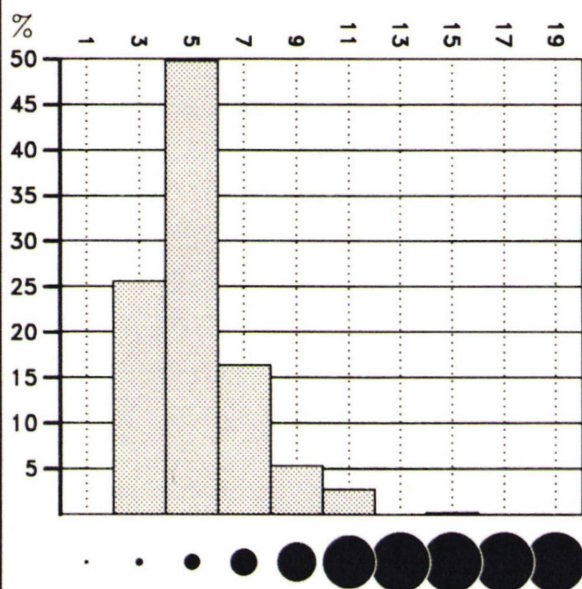


GEOCHEMICAL MAP: Sm IN STREAM SEDIMENT

Nuuk - Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Sm ppm

Number of samples: 452
Min. value: -1.00
Max. value: 71.60
Mean: 5.18
Median: 4.70
Variance: 17.05
Std. Dev.: 4.13

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 0.2 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3-10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron
Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario
Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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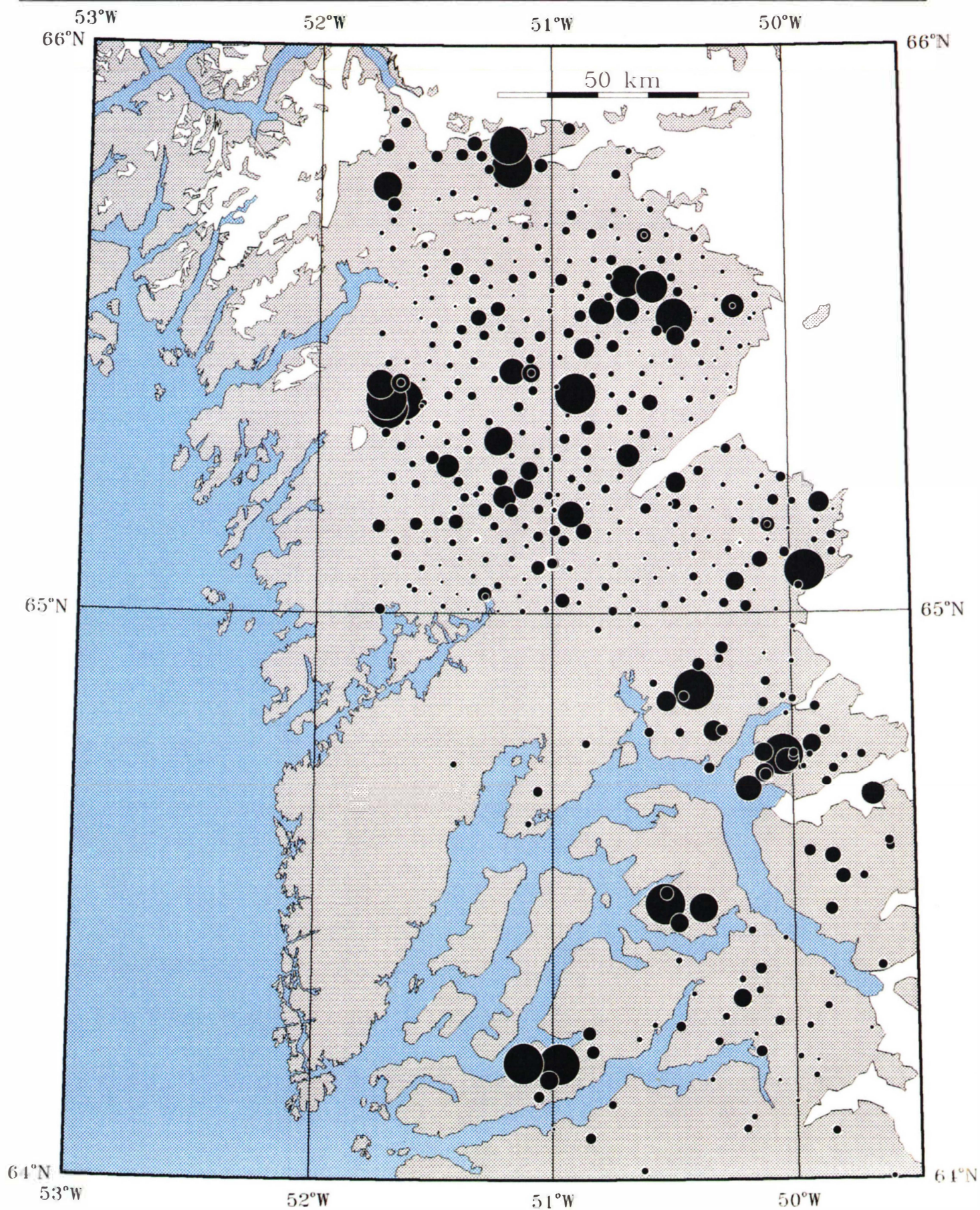
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GEOCHEMICAL MAP: Th IN STREAM SEDIMENTS

90/1-232: Nuuk - Maniitsoq 01-DEC-90

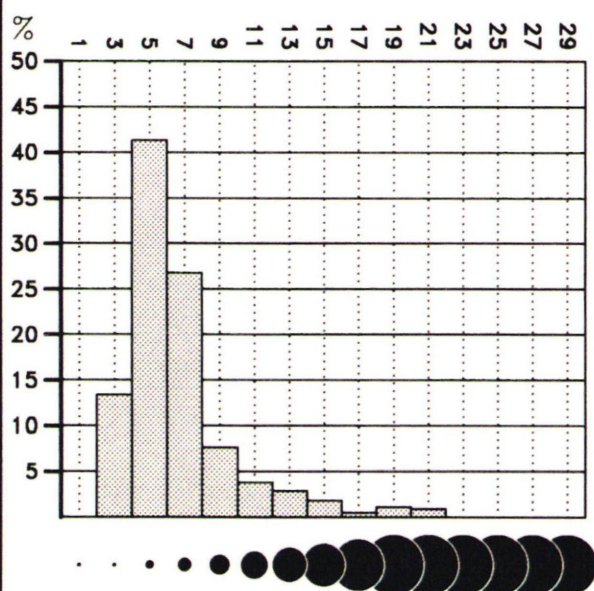


GEOCHEMICAL MAP: Th IN STREAM SEDIMENT

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Th ppm

Number of samples: 452
Min. value: 2.20
Max. value: 65.00
Mean: 6.84
Median: 5.70
Variance: 23.20
Std. Dev.: 4.82

Max. dot size corresponds to the
98th percentile.

Analytical detection limit 0.5 ppm.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
Direct irradiation/Instrumental Neutron
Activation
Laboratory:
Bondar-Clegg & Company Ltd., Ontario
Canada

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

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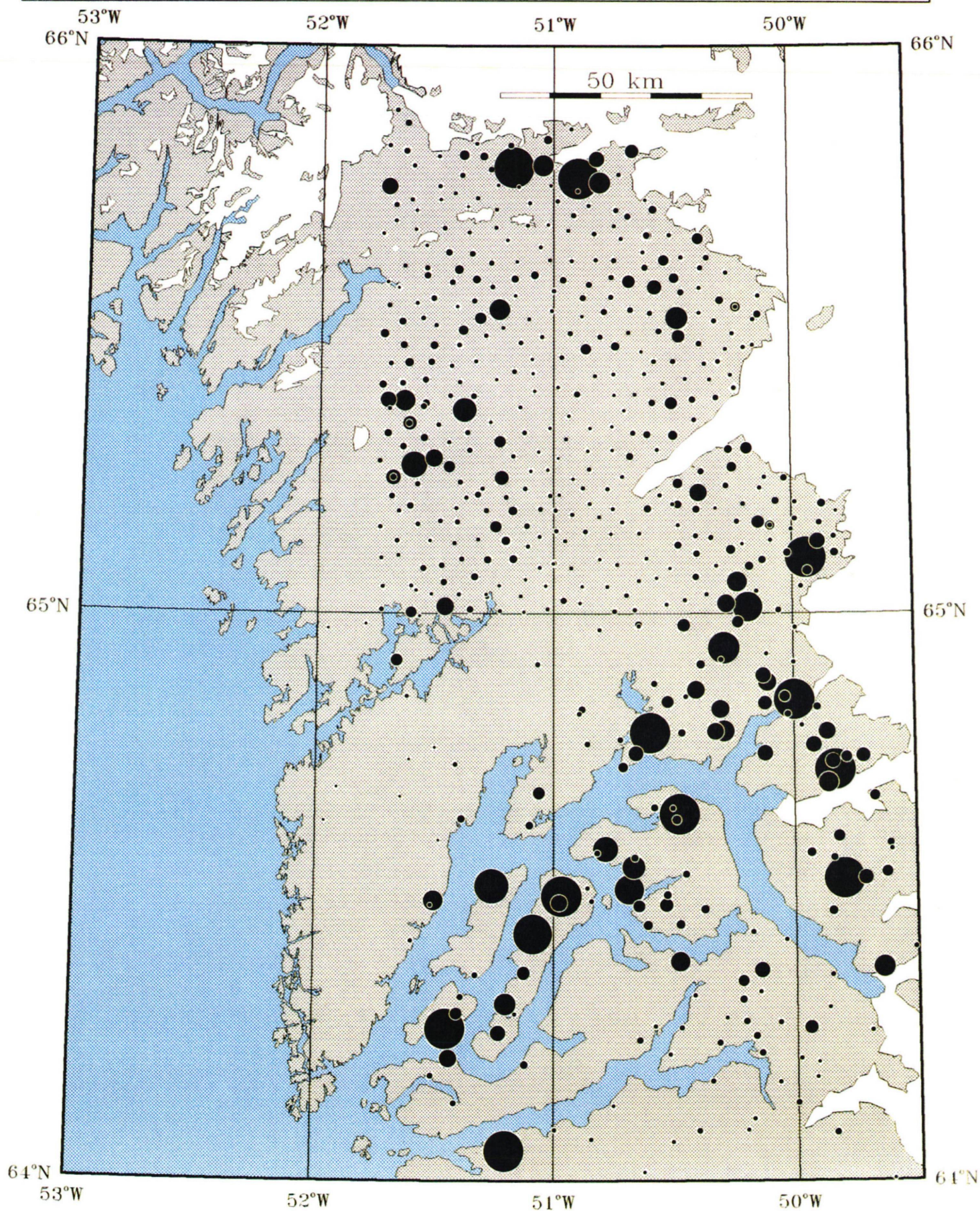
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GEOCHEMICAL MAP: U IN STREAM SEDIMENTS

90/1-233: Nuuk - Maniitsoq 01-DEC-90

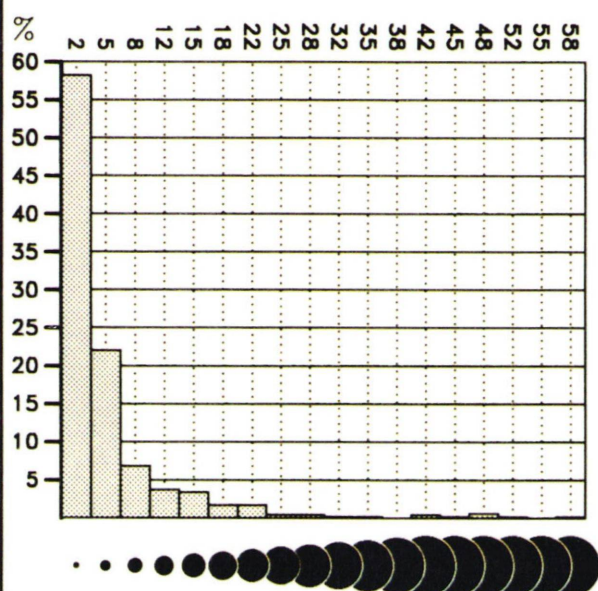


GEOCHEMICAL MAP: U IN STREAM SEDIMENTS

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



U ppm

Number of samples: 540
Min. value: 0.16
Max. value: 111.00
Mean: 5.91
Median: 2.75
Variance: 105.49
Std. Dev.: 10.27

Max. dot size corresponds to
the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
minerogenic stream sediment collected
at stream bed or bank as composite of
3–10 subsamples
Size fraction:
<0.1 mm dry-sieved in laboratory
Analysis:
delayed neutron counting
Laboratory:
Risø National Laboratory

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
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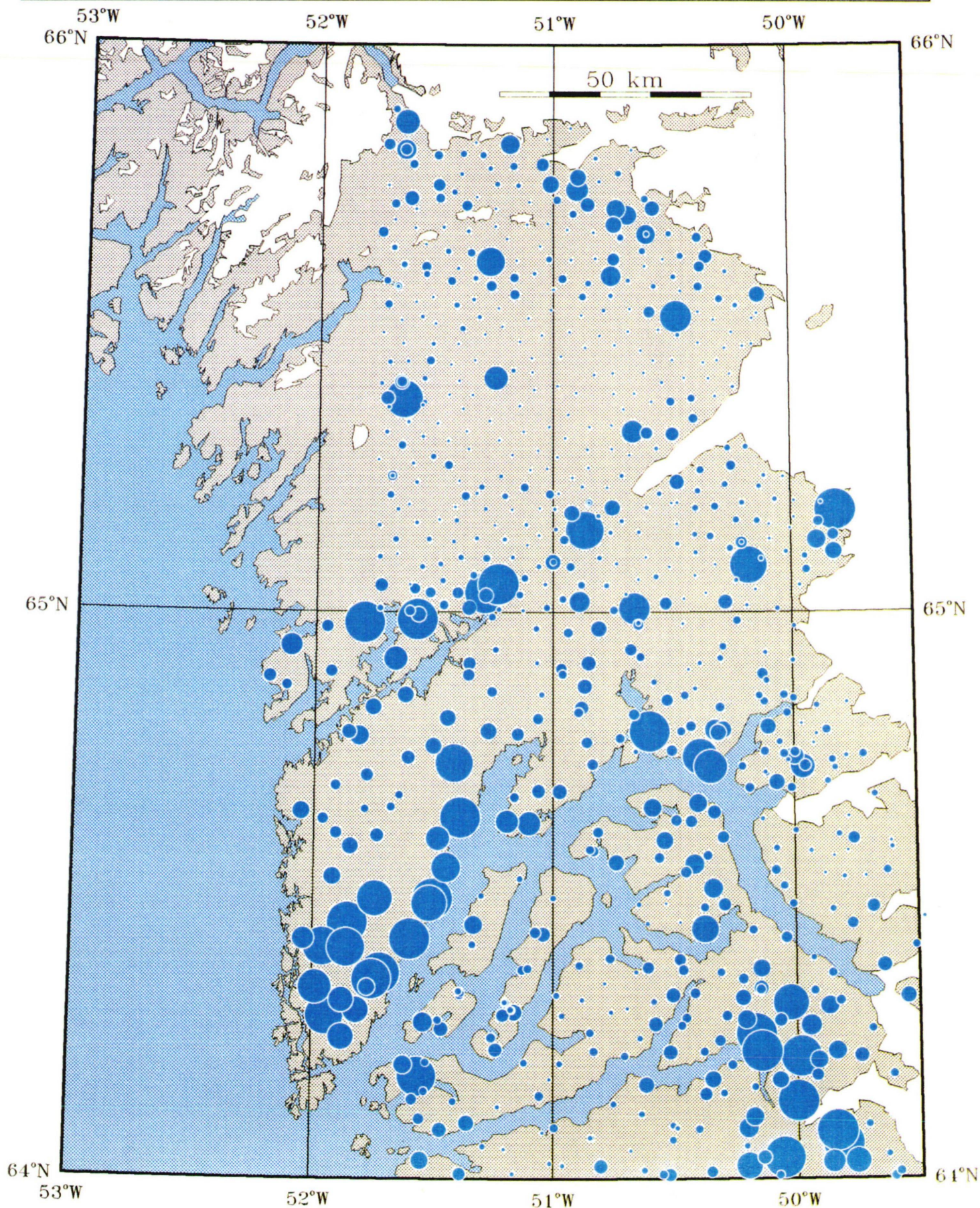
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GEOCHEMICAL MAP: CONDUCTIVITY OF STREAM WATER

90/1-234: Nuuk - Maniitsoq 01-DEC-90

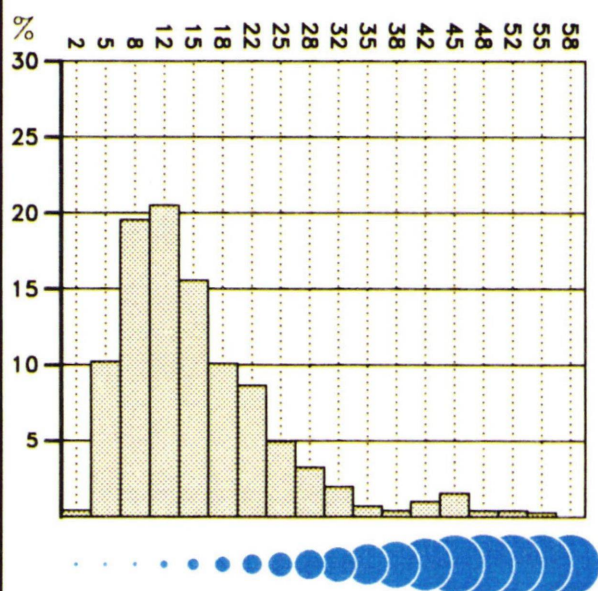


GEOCHEMICAL MAP: CONDUCTIVITY OF STREAM WATER

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



Conductivity μohm^{-1}

Number of samples: 713
Min. value: 2.30
Max. value: 289.00
Mean: 16.35
Median: 13.30
Variance: 225.81
Std. Dev.: 15.03

Max. dot size corresponds to
the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
Stream water collected in polyethylene
bottles
Sample preparation:
Settling of suspended matter
Analysis:
Temperature corrected measurement
by conductivity meter in field
laboratory

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
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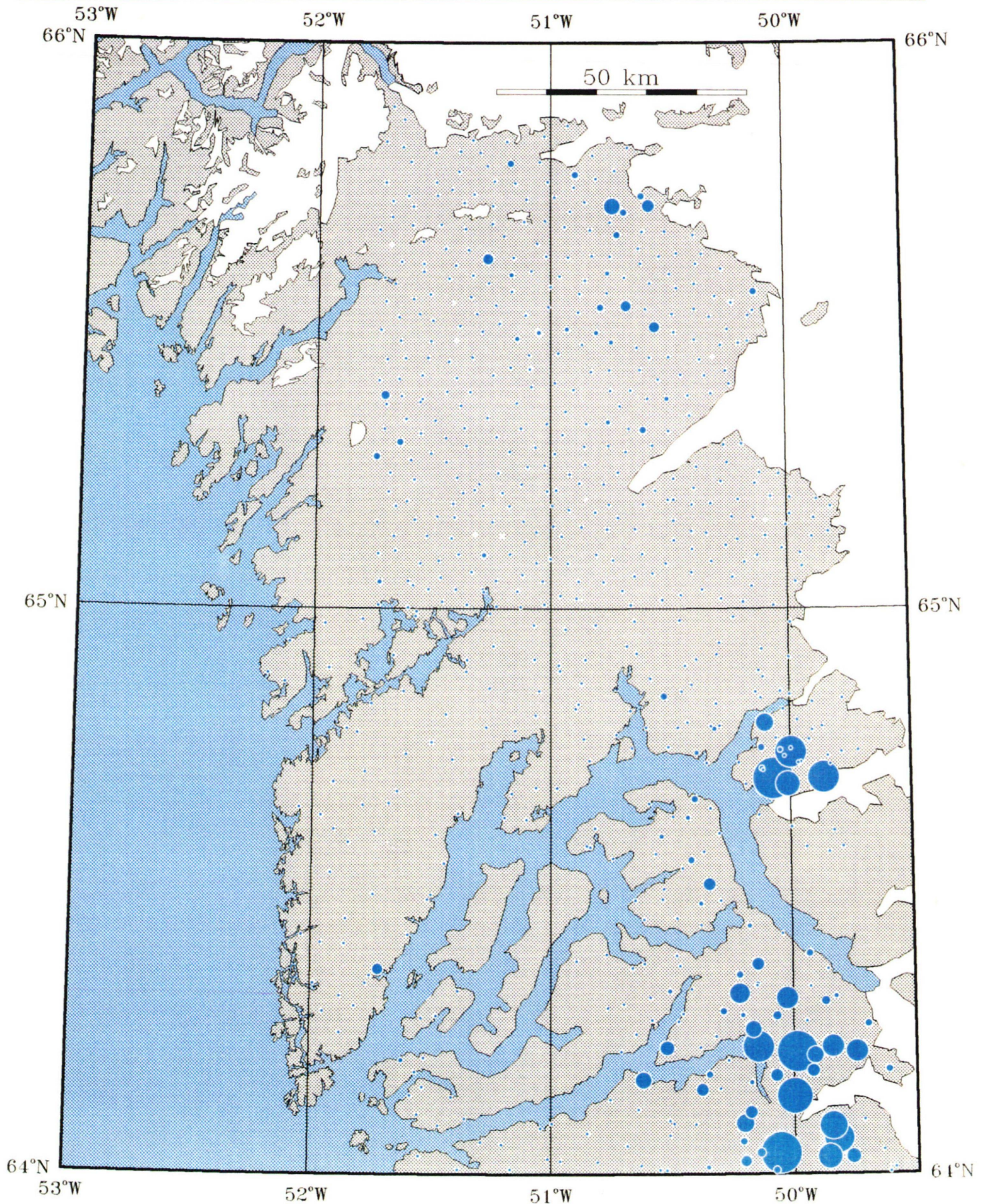
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GEOCHEMICAL MAP: F IN STREAM WATER

90/1-235: Nuuk - Maniitsoq 01-DEC-90

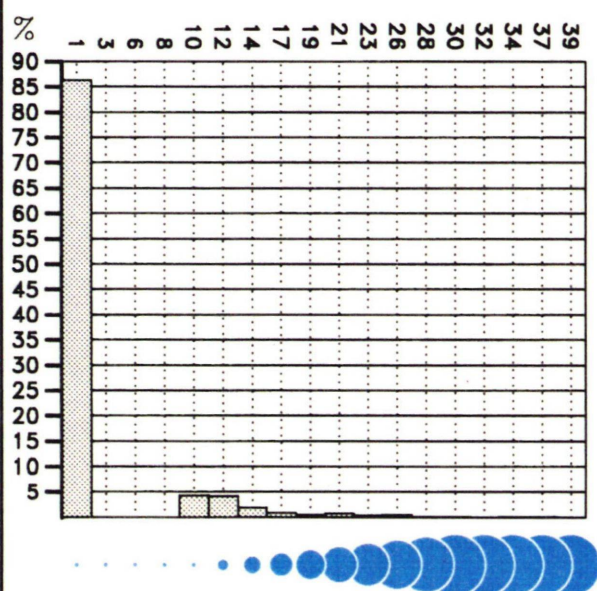


GEOCHEMICAL MAP: F IN STREAM WATER

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



F ppb

Number of samples: 657
Min. value: 0.00
Max. value: 37.00
Mean: 2.01
Median: 0.00
Variance: 29.42
Std. Dev.: 5.42

Max. dot size corresponds to
the 98th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
Stream water collected in polyethylene
bottles
Sample preparation:
Settling of suspended matter
Analysis:
Ion sensitive electrode measurement
in field laboratory

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
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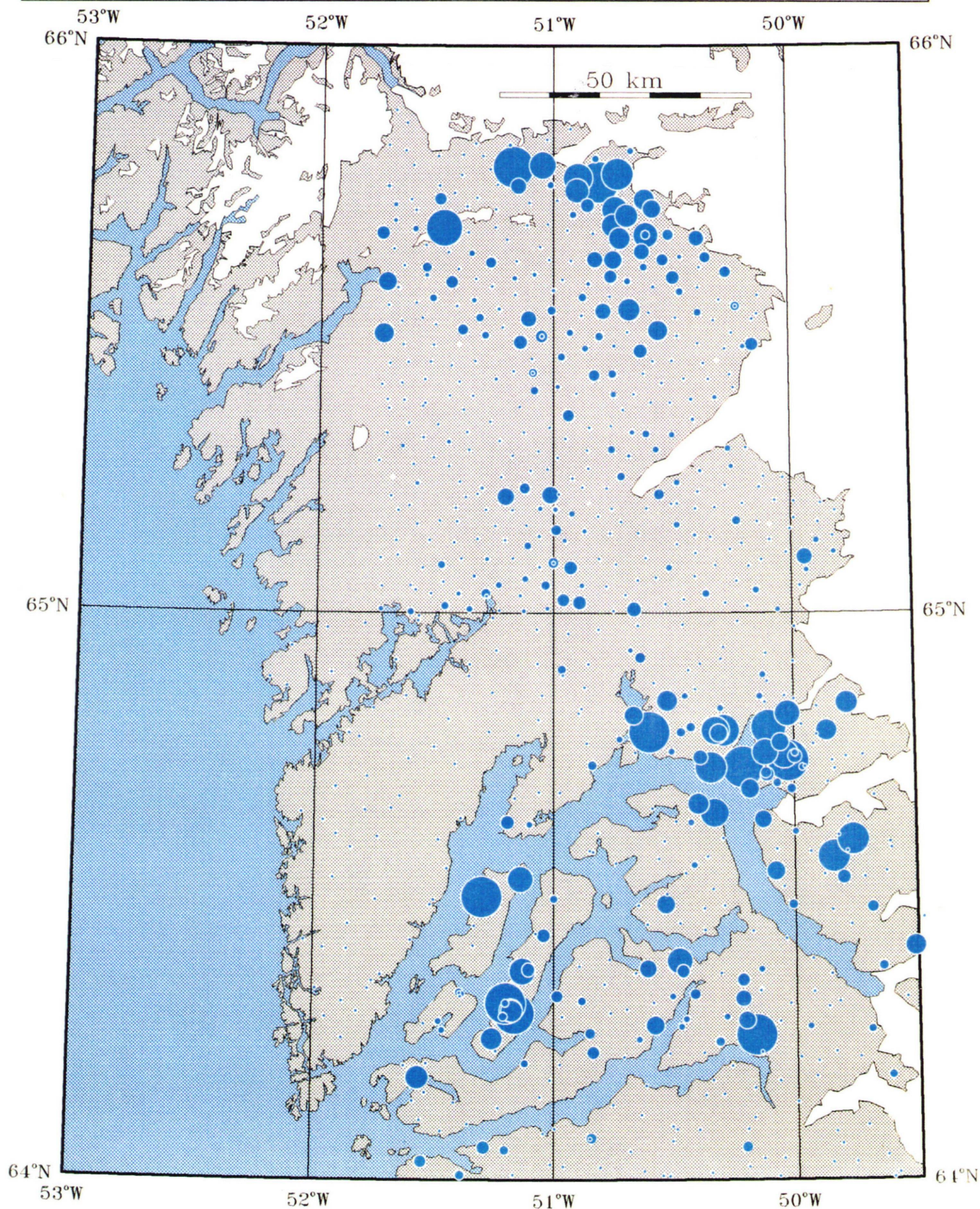
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GEOCHEMICAL MAP: U IN STREAM WATER

90/1-236: Nuuk - Maniitsoq 01-DEC-90

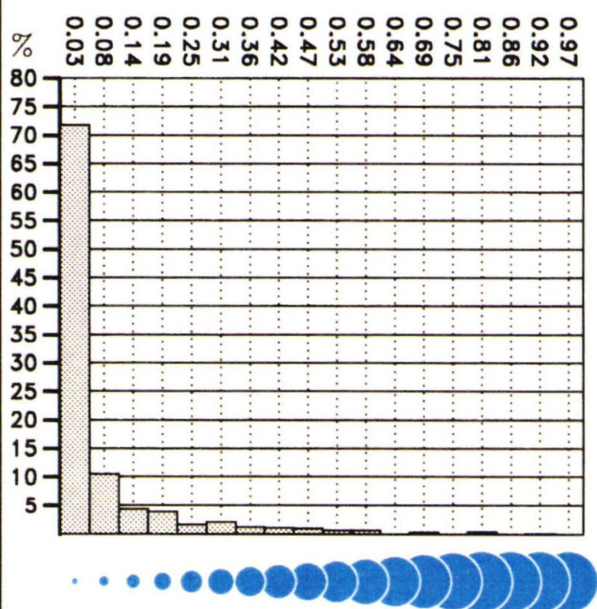


GEOCHEMICAL MAP: U IN STREAM WATER

Nuuk – Maniitsoq

Compiled by A. Steenfelt

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



U ppb

Number of samples: 713
Min. value: 0.00
Max. value: 1.99
Mean: 0.08
Median: 0.00
Variance: 0.04
Std. Dev.: 0.19

Max. dot size corresponds to
the 99th percentile.

DATA ACQUISITION

Regional drainage sampling carried out by
the Geological Survey of Greenland in 1982
north of 65° N and in 1986 south of
65° N.

SURVEY SPECIFICATIONS

Sample density:
north of 65° N average 1 per 15 km²
south of 65° N average 1 per 20 km²
Sample type:
Stream water collected in polyethylene
bottles
Sample preparation:
Settling of suspended matter, no addition
of chemicals
Analysis:
Laser induced scintillometry
Laboratory:
Geological Survey of Greenland

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized
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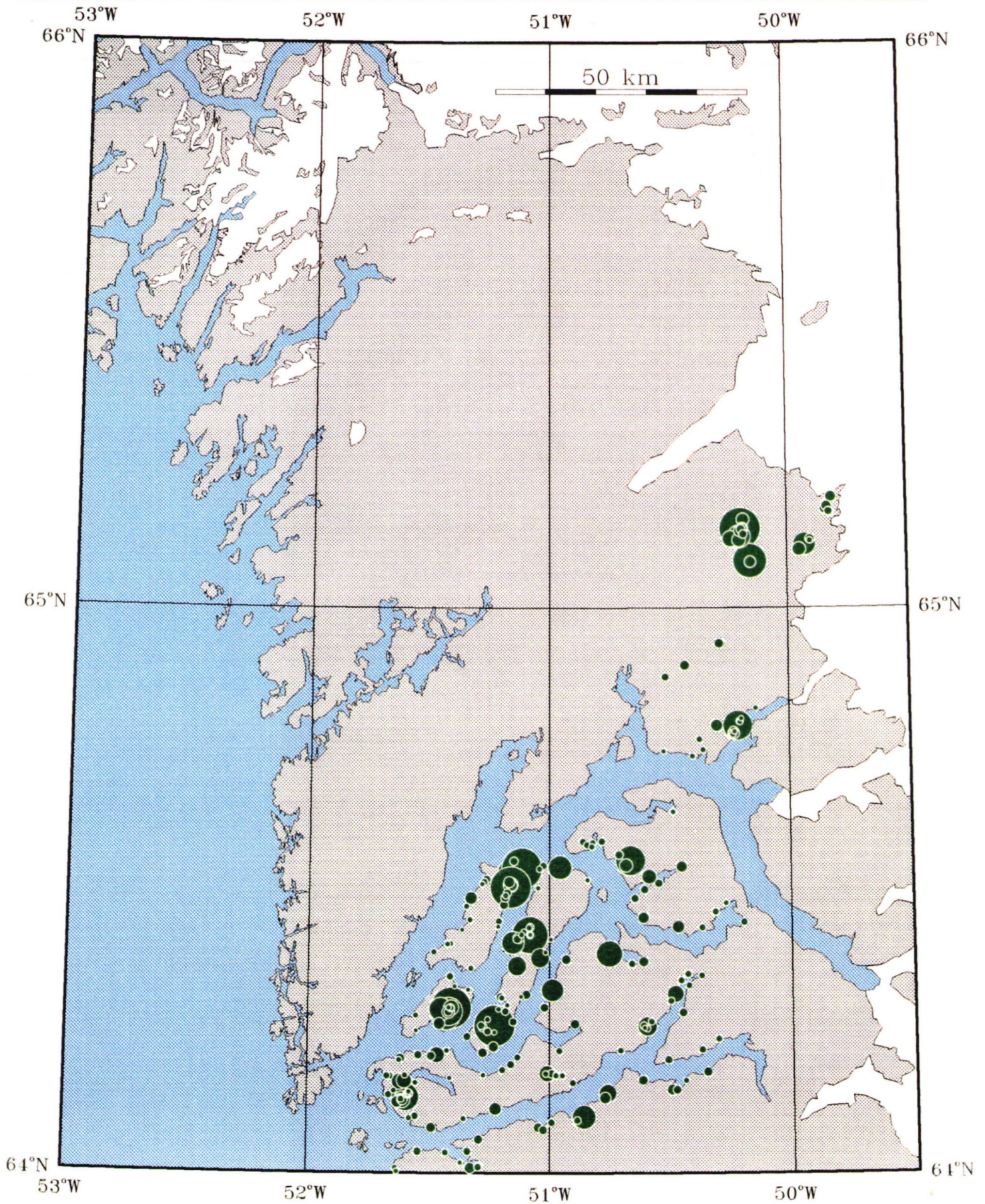
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PANNED HEAVY MINERAL CONCENTRATE: Cu

90/1-301: Nuuk - Maniitsoq 01-DEC-90



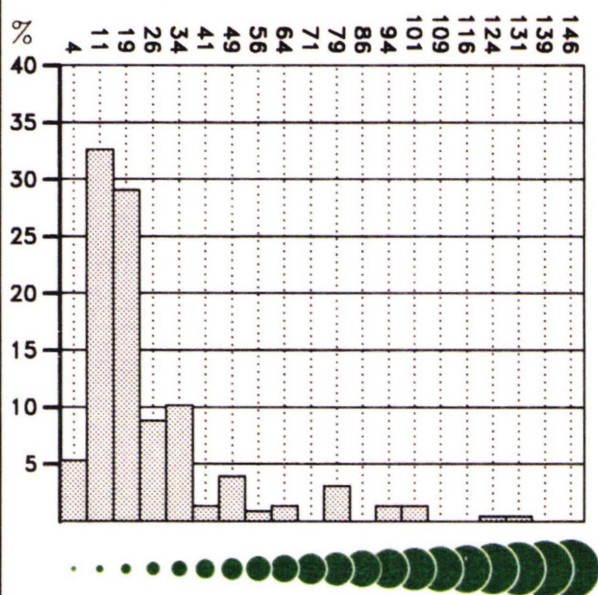
Thematic map 90/1-301

PANNED HEAVY MINERAL CONCENTRATE: Cu

Nuuk – Maniitsoq

Compiled by P.W.U. Appel

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Cu ppm

Number of samples: 233
Min. value: 6.00
Max. value: 560.00
Mean: 30.87
Median: 17.00
Variance: 2463.68
Std. Dev.: 49.64

DATA ACQUISITION

Sampling of heavy mineral concentrates from streams draining supracrustal sequences by the Geological Survey of Greenland 1982 – 1985.

SURVEY SPECIFICATIONS

Sample density:

Variable

Sample type:

Panned heavy mineral concentrate using <1 mm size fraction of c. 10 kg gravel and sand

Sample preparation:

Separation of heavy minerals using bromoform ($d = 2.82$)

Analysis:

Optical emission spectroscopy

Laboratory:

Petrologisk Institut, University of Copenhagen

Analyst: H. Bollingberg

Projection: Lambert conformal conic

Standard parallel: 66° 30'N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.

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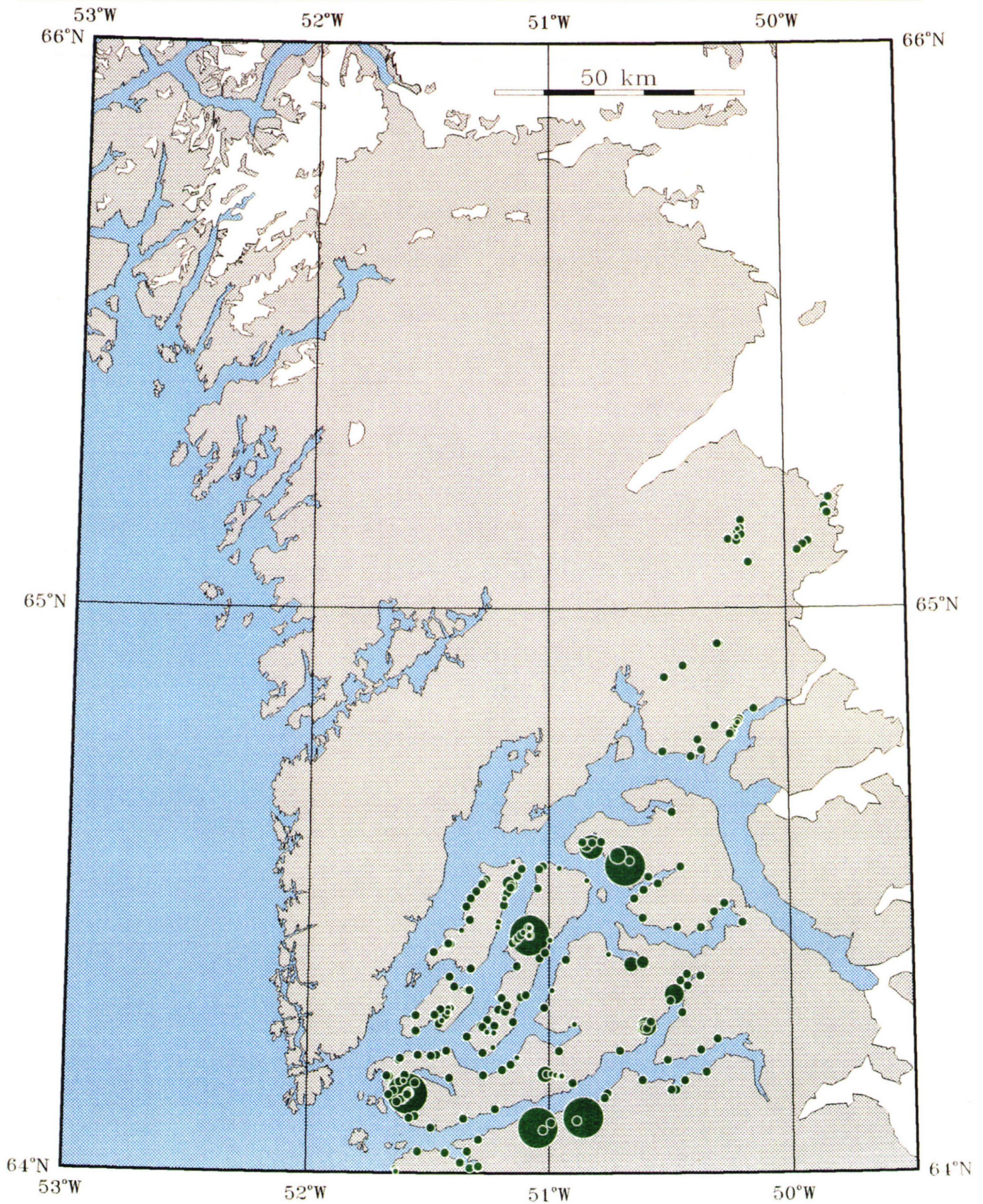
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PANNED HEAVY MINERAL CONCENTRATE: Mo

90/1-302: Nuuk - Maniitsoq 01-DEC-90

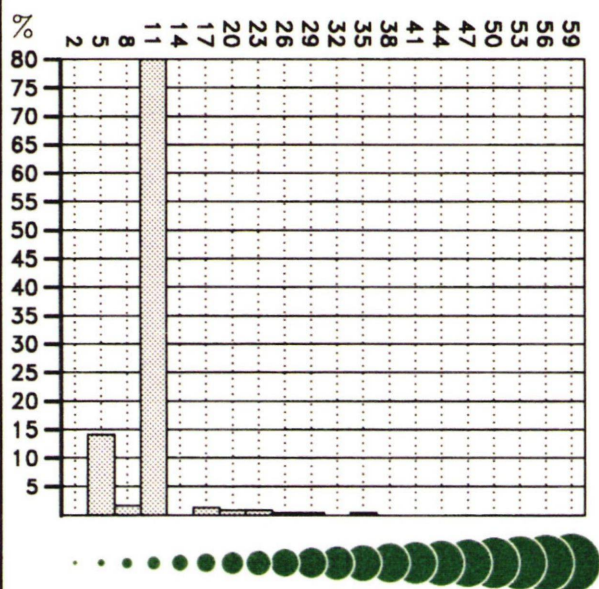


PANNED HEAVY MINERAL CONCENTRATE: Mo

Nuuk - Maniitsoq

Compiled by P.W.U. Appel

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Mo ppm

Number of samples: 240
Min. value: 5.00
Max. value: 500.00
Mean: 14.00
Median: 10.00
Variance: 1353.10
Std. Dev.: 36.78

DATA ACQUISITION

Sampling of heavy mineral concentrates from streams draining supracrustal sequences by the Geological Survey of Greenland 1982 - 1985.

SURVEY SPECIFICATIONS

Sample density:
Variable
Sample type:
Panned heavy mineral concentrate using <1 mm size fraction of c. 10 kg gravel and sand
Sample preparation:
Separation of heavy minerals using bromoform (d = 2.82)
Analysis:
Optical emission spectroscopy
Laboratory:
Petrologisk Institut, University of Copenhagen
Analyst: H. Bollingberg

Projection: Lambert conformal conic
Standard parallel: 66° 30'N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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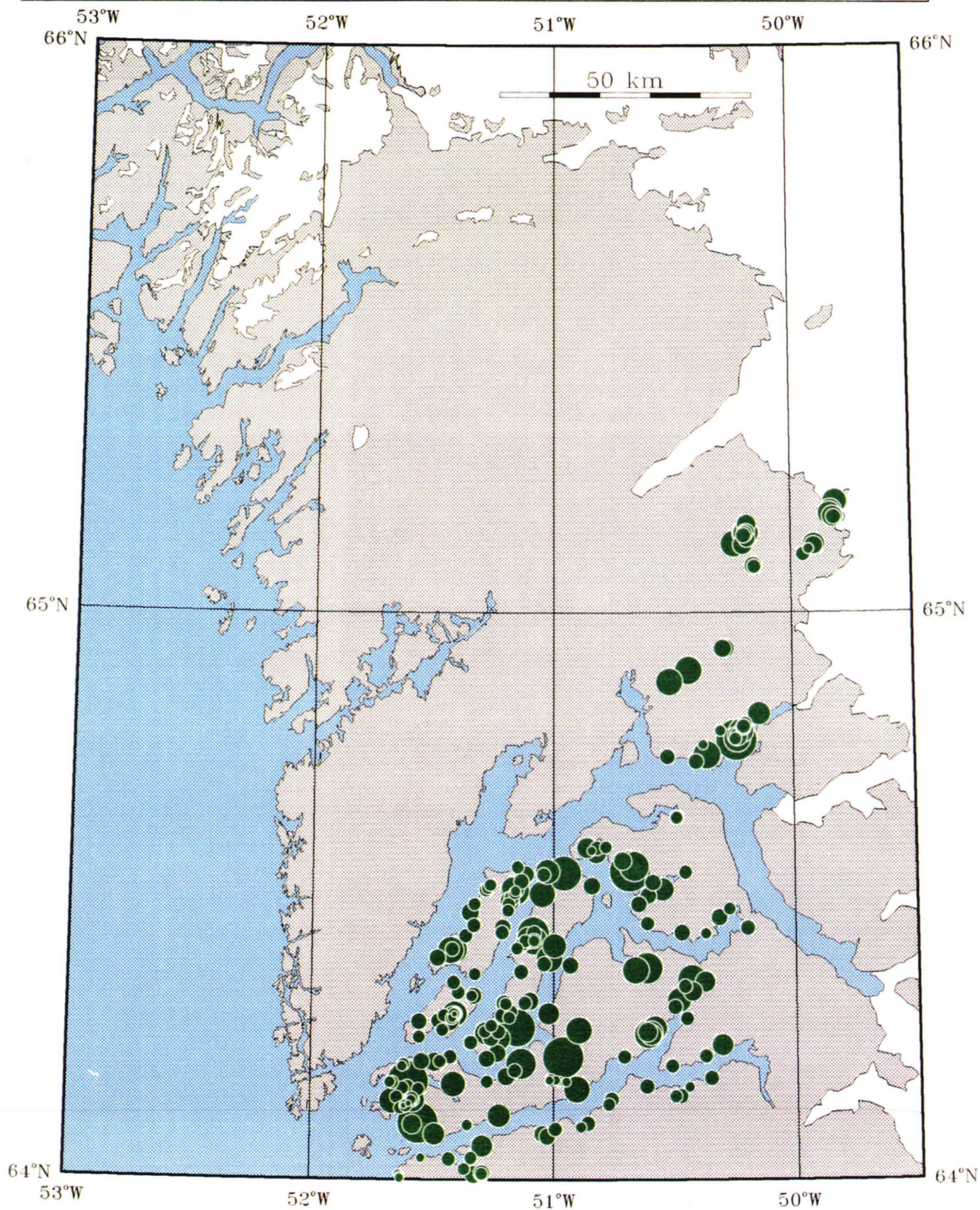
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PANNED HEAVY MINERAL CONCENTRATE: Pb

90/1-303: Nuuk - Maniitsoq 01-DEC-90



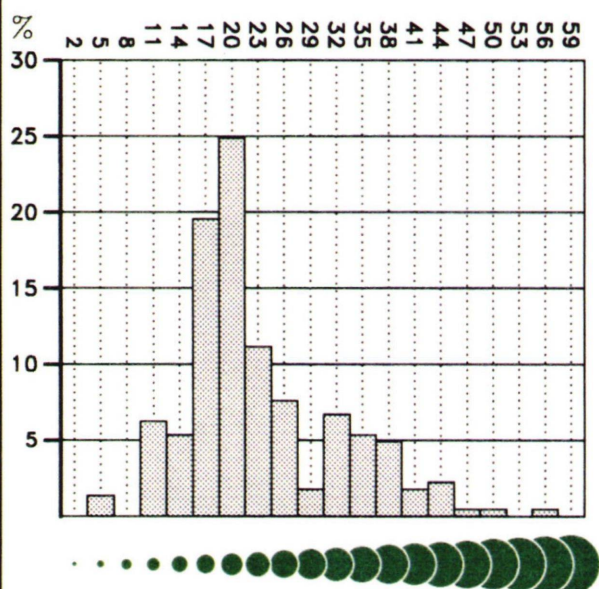
Thematic map 90/1-303

PANNED HEAVY MINERAL CONCENTRATE: Pb

Nuuk - Maniitsoq

Compiled by P.W.U. Appel

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Pb ppm

Number of samples: 230
Min. value: 5.00
Max. value: 98.00
Mean: 23.24
Median: 19.00
Variance: 167.61
Std. Dev.: 12.95

DATA ACQUISITION

Sampling of heavy mineral concentrates from streams draining supracrustal sequences by the Geological Survey of Greenland 1982 - 1985.

SURVEY SPECIFICATIONS

Sample density:

Variable

Sample type:

Panned heavy mineral concentrate using <1 mm size fraction of c. 10 kg gravel and sand

Sample preparation:

Separation of heavy minerals using bromoform ($d = 2.82$)

Analysis:

Optical emission spectroscopy

Laboratory:

Petrologisk Institut, University of Copenhagen

Analyst: H. Bollingberg

Projection: Lambert conformal conic

Standard parallel: 66° 30'N

Scale factor: 0.99700

Ellipsoid: Hayford

Datum: Qornoq

Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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Geological Survey of Greenland

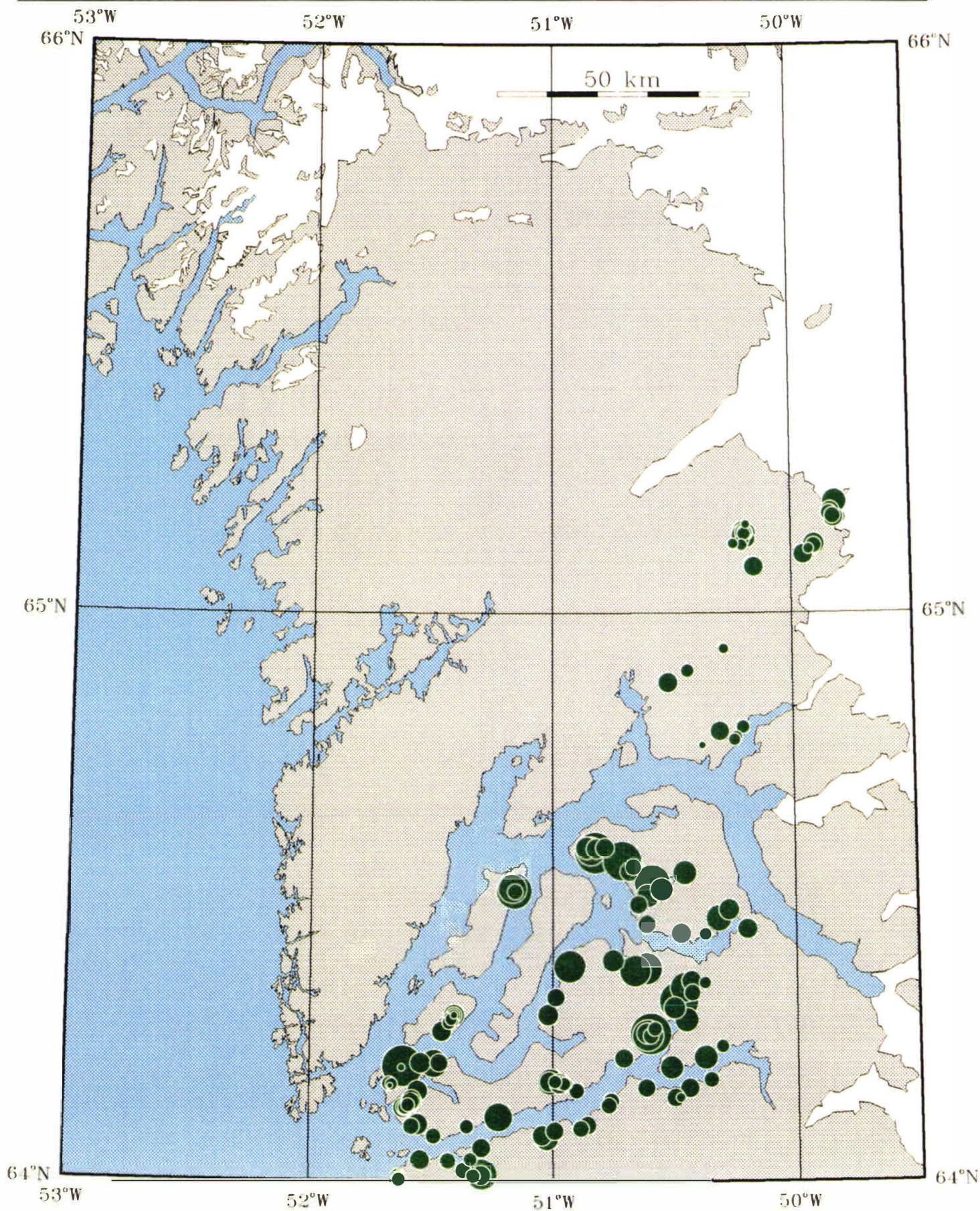
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PANNED HEAVY MINERAL CONCENTRATE: Sn

90/1-304: Nuuk - Maniitsoq 01-DEC-90

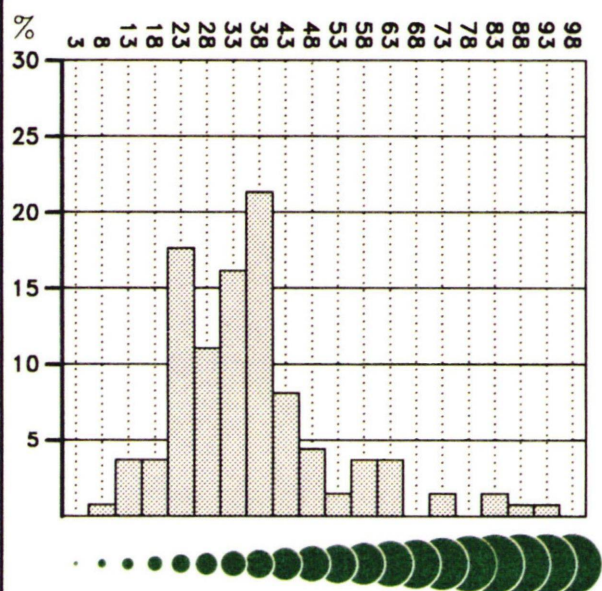


PANNED HEAVY MINERAL CONCENTRATE: SN

Nuuk - Maniitsoq

Compiled by P.W.U. Appel

FREQUENCY DISTRIBUTION AND
SYMBOL SIZE



Sn ppm

Number of samples: 137
 Min. value: 6.00
 Max. value: 115.00
 Mean: 35.60
 Median: 33.00
 Variance: 277.01
 Std. Dev.: 16.64

DATA ACQUISITION

Sampling of heavy mineral concentrates from streams draining supracrustal sequences by the Geological Survey of Greenland 1982 - 1985.

SURVEY SPECIFICATIONS

Sample density:
Variable
 Sample type:
Panned heavy mineral concentrate using <1 mm size fraction of c. 10 kg gravel and sand
 Sample preparation:
Separation of heavy minerals using bromoform ($d = 2.82$)
 Analysis:
Optical emission spectroscopy
 Laboratory:
Petrologisk Institut, University of Copenhagen
 Analyst: H. Bollingberg

Projection: Lambert conformal conic
 Standard parallel: 66° 30'N
 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
 Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
 Permission No: KMS A.200/87

Released: 01-DEC-90

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GRØNLANDS GEOLOGISKE UNDERSØGELSE

Geological Survey of Greenland

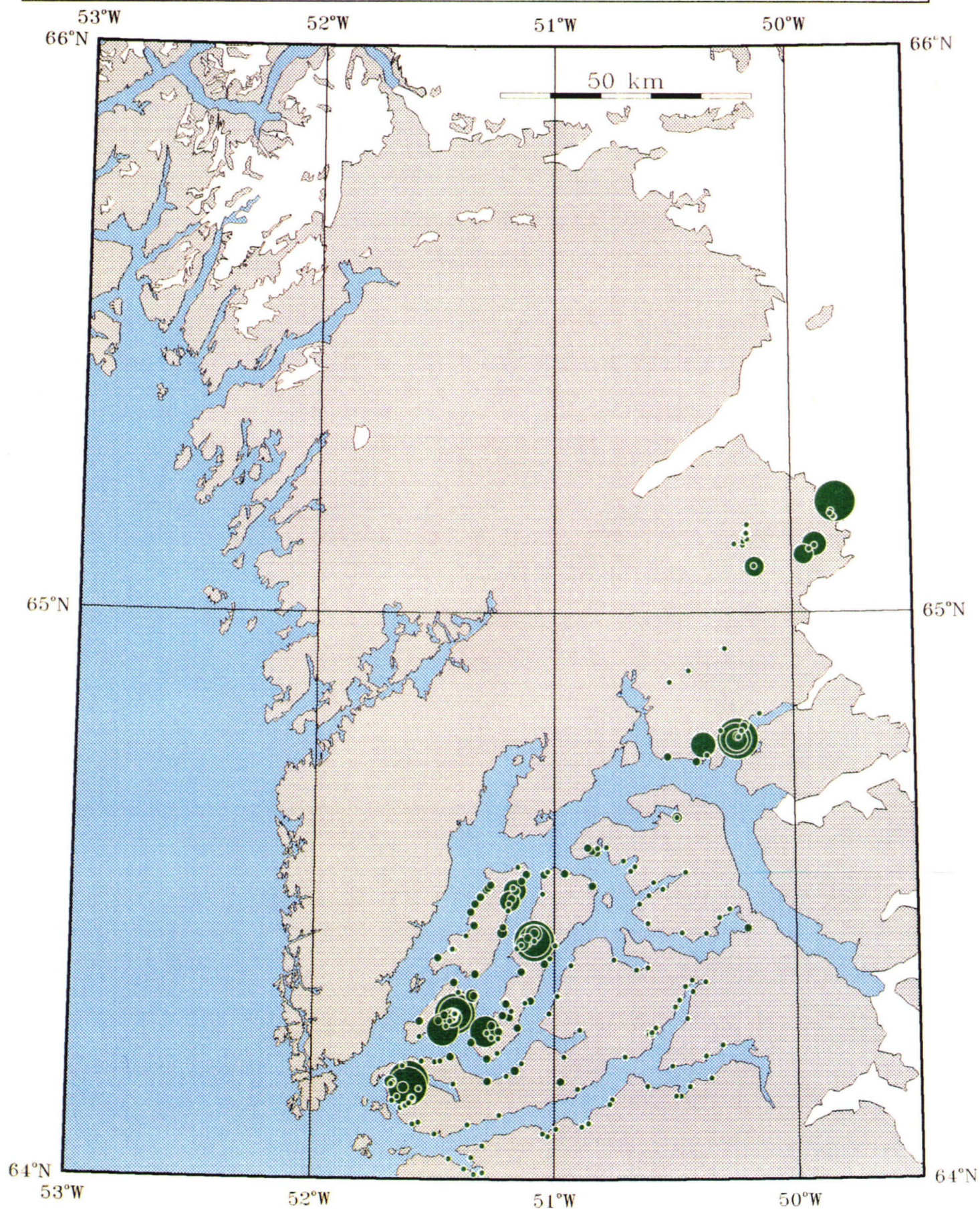
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PANNED HEAVY MINERAL CONCENTRATE: W

90/1-305: Nuuk - Maniitsoq 01-DEC-90



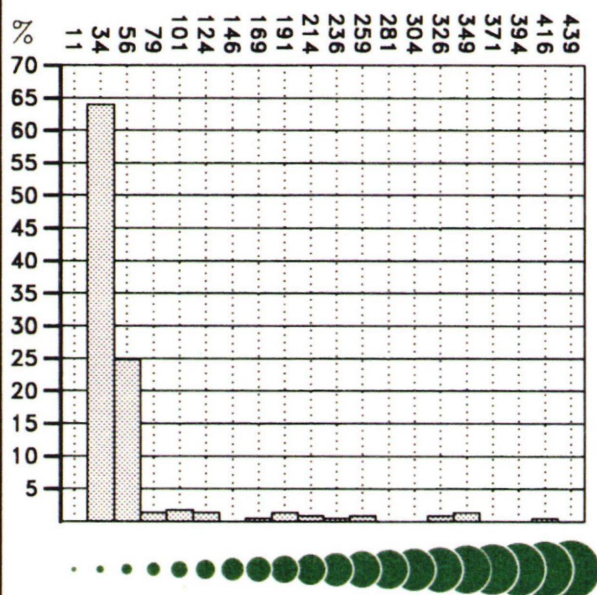
Thematic map 90/1-305

PANNED HEAVY MINERAL CONCENTRATE: W

Nuuk – Maniitsoq

Compiled by P.W.U. Appel

FREQUENCY DISTRIBUTION AND SYMBOL SIZE



W ppm

Number of samples: 227
Min. value: 30.00
Max. value: 900.00
Mean: 70.52
Median: 30.00
Variance: 13261.77
Std. Dev.: 115.16

DATA ACQUISITION

Sampling of heavy mineral concentrates from streams draining supracrustal sequences by the Geological Survey of Greenland 1982 – 1985.

SURVEY SPECIFICATIONS

Sample density:
Variable
Sample type:
Panned heavy mineral concentrate using <1 mm size fraction of c. 10 kg gravel and sand
Sample preparation:
Separation of heavy minerals using bromoform (d = 2.82)
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Optical emission spectroscopy
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Geological Survey of Greenland

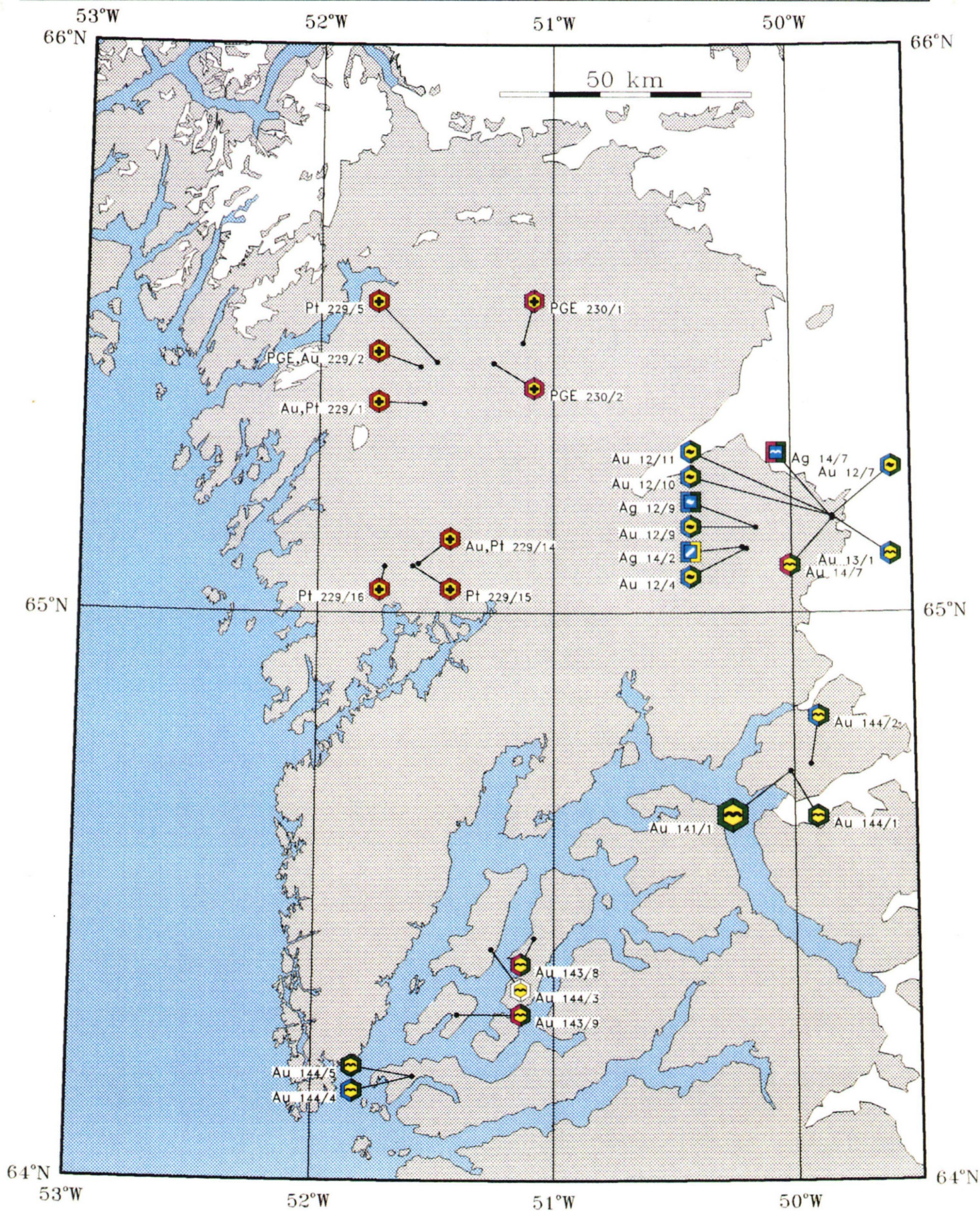
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MINERAL OCCURRENCES: Au and Platinum group elements

90/1-401: Nuuk - Maniitsoq 01-DEC-90



MINERAL OCCURRENCES: Au and Platinum group elements

Nuuk – Maniitsoq

Compiled by P.W.U. Appel and M. Lind

LEGEND

HOST ROCK		GENETIC ENVIRONMENT	
Metamorphic		Magmatic	
Volcanic		Volcanogenic	
Igneous		Igneous	
Sedimentary		Sedimentary	
Unknown		Syngenetic	
		Epigenetic	
		Hydrothermal	
		Unknown	

MORPHOLOGY

Stratiform	
Stratabound	
Lenticular	
Massive	
Disseminated	
Vein	
Pipe	
Stockwork	
Other	

RESOURCE

	Fe, V, Ti, Mn, Cr
	PGE, Au
	Mo, W, Sn, Hg, Sb, Bi
	Pb, Zn, Ag
	Gemstone, indust. mineral
	Cu, Ni, Co
	U, Th, Zr, Nb, REE

MINERALOGY

Sulphide	Native element	Gemstone	Silicate
			Phosphate Carbonate Indust. min.
Other	Oxide	Sulphate	

DATA SOURCE

The Greenland mineral occurrence database.

The data have been compiled from Survey reports, industry mineral assessment reports and published and unpublished research data.

All localities represent mineral occurrences observed on surface, in drill holes or mine workings.

SYMBOL SIZE

ECONOMIC IMPORTANCE



Mine
Prospect
Showing

EXAMPLE

Disseminated lead sulphide(s) of hydrothermal origin hosted by volcanic rock(s). More detailed information available from the Greenland mineral occurrence database, occurrence ID: 24/13. Underlining indicates the presence of several occurrence IDs on the same site.



Pb 24/13

Projection: Lambert conformal conic
Standard parallel: 66° 30' N
Scale factor: 0.99700
Ellipsoid: Hayford
Datum: Qornoq
Scale: 1:1 000 000

Ice margins and coast lines digitized from 1:250 000 topographic maps.
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GRØNLANDS GEOLOGISKE UNDERSØGELSE

Geological Survey of Greenland

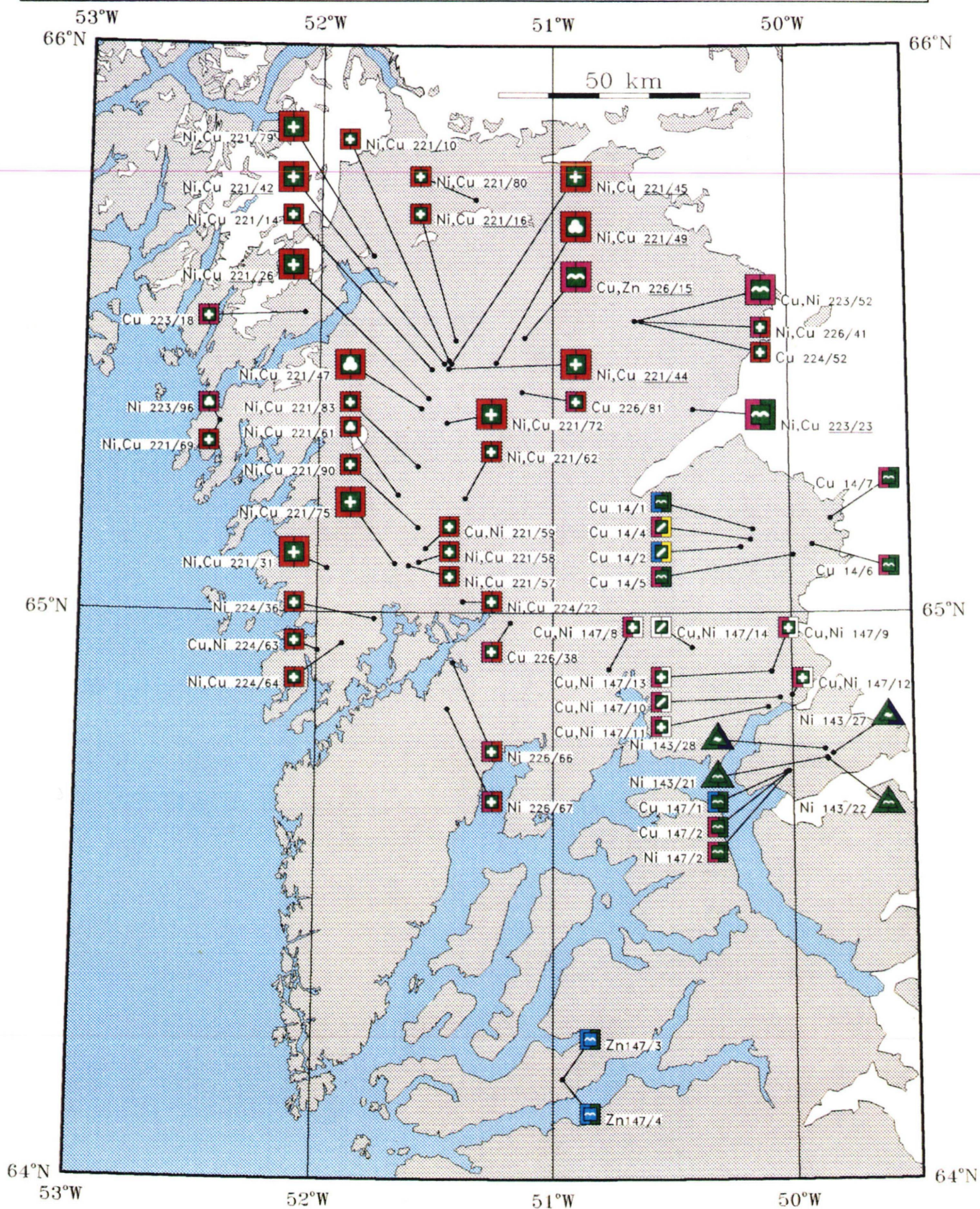
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MINERAL OCCURRENCES: Cu, Ni and Zn

90/1-402: Nuuk - Maniitsoq 01-DEC-90



MINERAL OCCURRENCES: Cu, Ni and Zn

Nuuk - Maniitsoq

Compiled by P.W.U. Appel and M. Lind

LEGEND

HOST ROCK		GENETIC ENVIRONMENT
Metamorphic		Magmatic
Volcanic		Volcanogenic
Igneous		Igneous
Sedimentary		Sedimentary
Unknown		Syngenetic
		Epigenetic
		Hydrothermal
		Unknown

MORPHOLOGY		RESOURCE
Stratiform		Fe, V, Ti, Mn, Cr
Stratabound		PGE, Au
Lenticular		Mo, W, Sn, Hg, Sb, Bi
Massive		Pb, Zn, Ag
Disseminated		Gemstone, indust. mineral
Vein		Cu, Ni, Co
Pipe		U, Th, Zr, Nb, REE
Stockwork		
Other		

MINERALOGY

Sulphide	Native element	Gemstone	Silicate
			Phosphate Carbonate Indust. min.
Other	Oxide	Sulphate	

DATA SOURCE

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SYMBOL SIZE

ECONOMIC IMPORTANCE



Mine

Prospect Showing

EXAMPLE

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Pb 24/13

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 Scale factor: 0.99700
 Ellipsoid: Hayford
 Datum: Qornoq
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Ice margins and coast lines digitized from 1:250 000 topographic maps.
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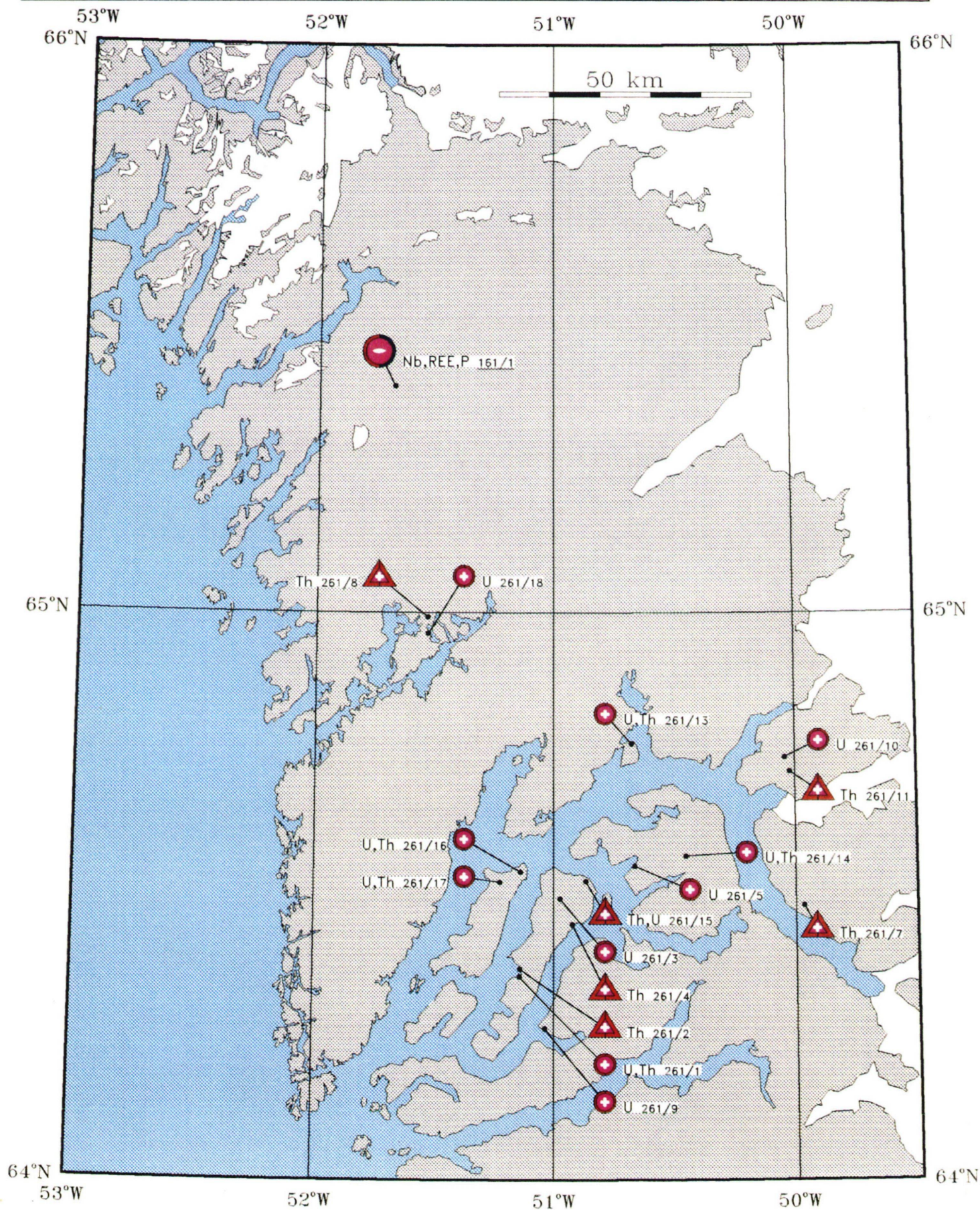
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MINERAL OCCURRENCES: U, Th, Nb and REE

90/1-403: Nuuk - Maniitsoq 01-DEC-90



Thematic map 90/1-403

MINERAL OCCURRENCES: U, Th, Nb and REE

Nuuk - Maniitsoq

Compiled by P.W.U. Appel and M. Lind

LEGEND

HOST ROCK

Metamorphic	
Volcanic	
Igneous	
Sedimentary	
Unknown	

GENETIC ENVIRONMENT

	Magmatic
	Volcanogenic
	Igneous
	Sedimentary
	Syngenetic
	Epigenetic
	Hydrothermal
	Unknown

MORPHOLOGY

Stratiform	
Stratabound	
Lenticular	
Massive	
Disseminated	
Vein	
Pipe	
Stockwork	
Other	

RESOURCE

	Fe, V, Ti, Mn, Cr
	PGE, Au
	Mo, W, Sn, Hg, Sb, Bi
	Pb, Zn, Ag
	Gemstone, indust. mineral
	Cu, Ni, Co
	U, Th, Zr, Nb, REE

MINERALOGY

Sulphide	Native element	Gemstone	Silicate
			Phosphate Carbonate Indust. min.
Other	Oxide	Sulphate	

DATA SOURCE

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SYMBOL SIZE

ECONOMIC IMPORTANCE



Mine
Prospect
Showing

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Pb 24/13

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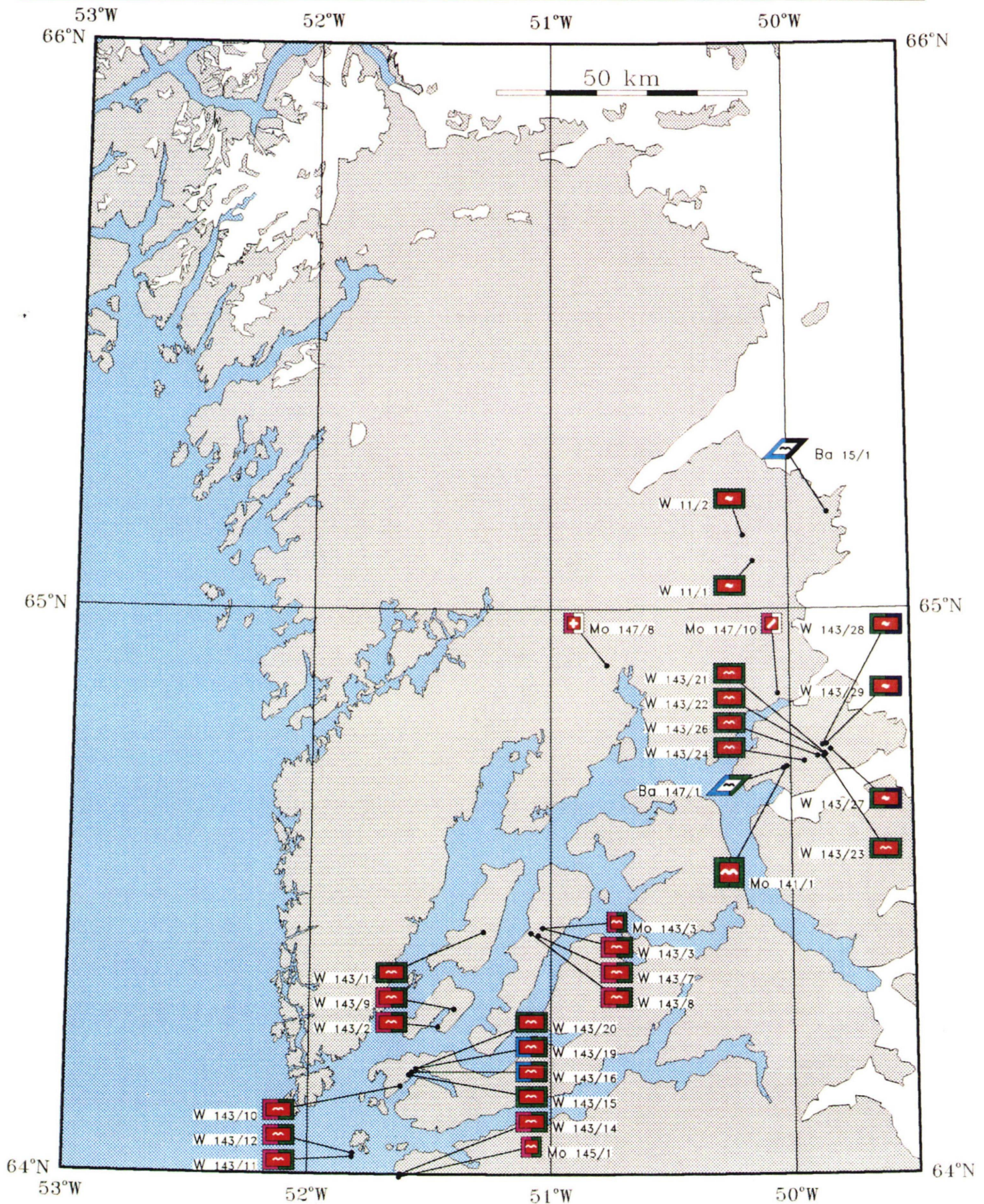
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MINERAL OCCURRENCES: W, Mo and Ba

90/1-404: Nuuk - Maniitsoq 01-DEC-90



MINERAL OCCURRENCES: W, Mo and Ba

Nuuk – Maniitsoq

Compiled by P.W.U. Appel and M. Lind

LEGEND

HOST ROCK		GENETIC ENVIRONMENT
Metamorphic		Magmatic
Volcanic		Volcanogenic
Igneous		Igneous
Sedimentary		Sedimentary
Unknown		Syngenetic
		Epigenetic
		Hydrothermal
		Unknown

MORPHOLOGY

Stratiform	
Stratabound	
Lenticular	
Massive	
Disseminated	
Vein	
Pipe	
Stockwork	
Other	

RESOURCE

	Fe, V, Ti, Mn, Cr
	PGE, Au
	Mo, W, Sn, Hg, Sb, Bi
	Pb, Zn, Ag
	Gemstone, indust. mineral
	Cu, Ni, Co
	U, Th, Zr, Nb, REE

MINERALOGY

Sulphide	Native element	Gemstone	Silicate
			Phosphate Carbonate Indust. min.
Other	Oxide	Sulphate	

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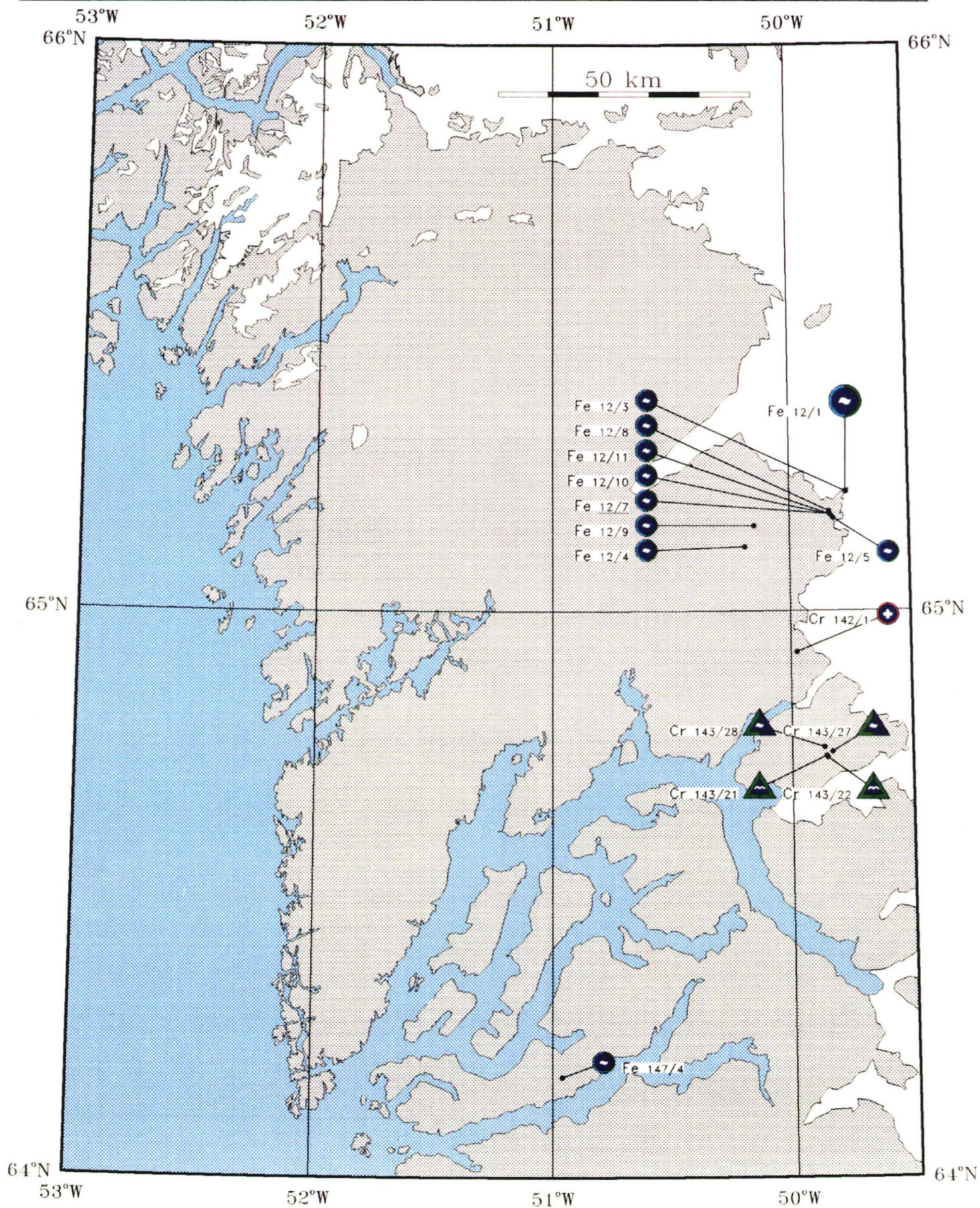
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MINERAL OCCURRENCES: Fe and Cr
90/1-405: Nuuk - Maniitsoq 01-DEC-90



MINERAL OCCURRENCES: Fe and Cr

Nuuk – Maniitsoq

Compiled by P.W.U. Appel and M. Lind

LEGEND

HOST ROCK

Metamorphic	
Volcanic	
Igneous	
Sedimentary	
Unknown	

GENETIC ENVIRONMENT

Magmatic
Volcanogenic
Igneous
Sedimentary
Syngenetic
Epigenetic
Hydrothermal
Unknown

MORPHOLOGY

Stratiform	
Stratabound	
Lenticular	
Massive	
Disseminated	
Vein	
Pipe	
Stockwork	
Other	

RESOURCE

Fe, V, Ti, Mn, Cr
PGE, Au
Mo, W, Sn, Hg, Sb, Bi
Pb, Zn, Ag
Gemstone, indust. mineral
Cu, Ni, Co
U, Th, Zr, Nb, REE

MINERALOGY

Sulphide	Native element	Gemstone	Silicate
Other	Oxide	Sulphate	Phosphate Carbonate Indust. min.

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GRØNLANDS GEOLOGISKE UNDERSØGELSE
Geological Survey of Greenland
Øster Voldgade 10, DK-1350 Copenhagen K
Denmark

Tel.: +45 33 11 88 66
Telefax: +45 33 93 53 52
Telex: 19066 ggutel dk