Inventory of Ocean Drifter Release and Recovery Data

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April 1982

Canadian Data Report of Hydrography and Ocean Sciences No. 2

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Canadian Data Report Of Hydrography and Ocean Sciences

These reports provide a medium for the documentation and dissemination of data in a form directly useable by the scientific and engineering communities.

Generally, the reports will contain raw and/or analyzed data but will not contain interpretations of the data. Such compilations will commonly have been prepared in support of work related to the programs and interests of the Ocean Science and Surveys (OSS) sector of the Department of Fisheries and Oceans.

Data Reports are produced regionally but are numbered and indexed nationally. Requests for individual reports will be fulfilled by the issuing establishment listed on the front cover and title page. Out of stock reports will be supplied for a fee by commercial agents.

Regional and headquarters establishments of Ocean Science and Surveys ceased publication of their various report series as of December 1981. A complete listing of these publications and the last number issued under each title are published in the *Canadian Journal of Fisheries and Aquatic Sciences*, Volume 38: Index to Publications 1981. The current series began with Report Number 1 in January 1982.

Rapport statistique canadien sur l'hydrographie et les sciences océaniques

Ces rapports servent de véhicule pour la compilation et la diffusion des données sous une forme directement utilisable par les scientifiques et les techniciens.

En général, les rapports contiennent des données brutes ou analysées mais ne fournissent pas d'interprétations des données. Ces compilations sont préparées le plus souvent à l'appui de travaux reliés aux programmes et intérêts du service des Sciences et Levés océaniques (SLO) du ministère des Pêches et des Océans.

Les rapports statistiques sont produits à l'échelon régional mais sont numérotés et placés dans l'index à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page de titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Les établissements des Sciences et Levés océaniques dans les régions et à l'administration centrale ont cessé de publier leurs diverses séries de rapports depuis décembre 1981. Vous trouverez dans l'index des publications du volume 38 du *Journal canadien des sciences halieutiques et aquatiques*, la liste de ces publications ainsi que le dernier numéro paru dans chaque catégorie. La nouvelle série a commencé avec la publication du Rapport n° 1 en janvier 1982.

Canadian Data Report of

Hydrography and Ocean Sciences 2

April 1982

INVENTORY OF OCEAN DRIFTER RELEASE AND RECOVERY DATA

by

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ABSTRACT

Bezanson, D. 1982. Inventory of Ocean Drifter Release and Recovery Data. Can. Data Rep. Hydrogr. and Ocean Science 2: 47 p.

The Bedford Institute of Oceanography has been oeprating an ocean drifter data clearing house since 1978, consisting of seabed drifters and surface drift cards. An inventory of all releases made between June 19, 1978 and December 31, 1980, and recoveries made within the same period are presented in chart format.

SOMMAIRE

Bezanson, D. 1982. Inventory of Ocean Drifter Release and Recovery Data. Can. Data Rep. Hydrogr. and Ocean Science 2: 47 p.

Depuis 1978, l'Institute d'Océanographie de Bedford conduit un programme de receuil de données obtenues des dérivants océaniques de fond et de surface. Un inventaire de tous les déploiements faits entre 19 juin, 1978 et 31 decembre, 1980, et de tous les recouvrements faits dans la même période, est presenté sous la forme de cartes cotiéres.

Introduction

The ocean drifter clearing house operated in Coastal Oceanography Bedford Institute of Oceanography, has been supplying surface and seabed drifters to a variety of agencies since 1978 and compiling the data from their development and recovery. The drifters and the clearing houses are described in the report "An Ocean Drifter Clearing House", BI-R-81-16 and the present report presents charts showing the amount and distribution of recoveries accumulated by 1980. Other drifter data sets are described in the above report and more information on interpretation of drifter data can be found there.

Drifter data consists of a release location and date, recovery location and date, and drifter type. The following charts show release and recovery positions as circles and arrowheads joined by straight lines, but do not give dates or elapsed times. A detailed estimation of drifter tracks requires this additional information, and this may be obtained from the clearing house by any interested agency. Where scale permits, the number of releases is shown in the circles. When more than one recovery has been made at one point, the number is printed near the arrowhead.

The failure of arrowheads to precisely contact the coastline has several causes. The coastline is computer generated and has a limited accuracy. Many river mouths and islands capable of trapping drifters are not shown on the coastline. Occasionally the information supplied by the finder lacks precision and a general area such as an island or a town is indicated by an arrowhead at the center. A few recoveries have been made at sea by fisherman. In general the following charts are a reasonable indication of the precision to which drifter data can be used.

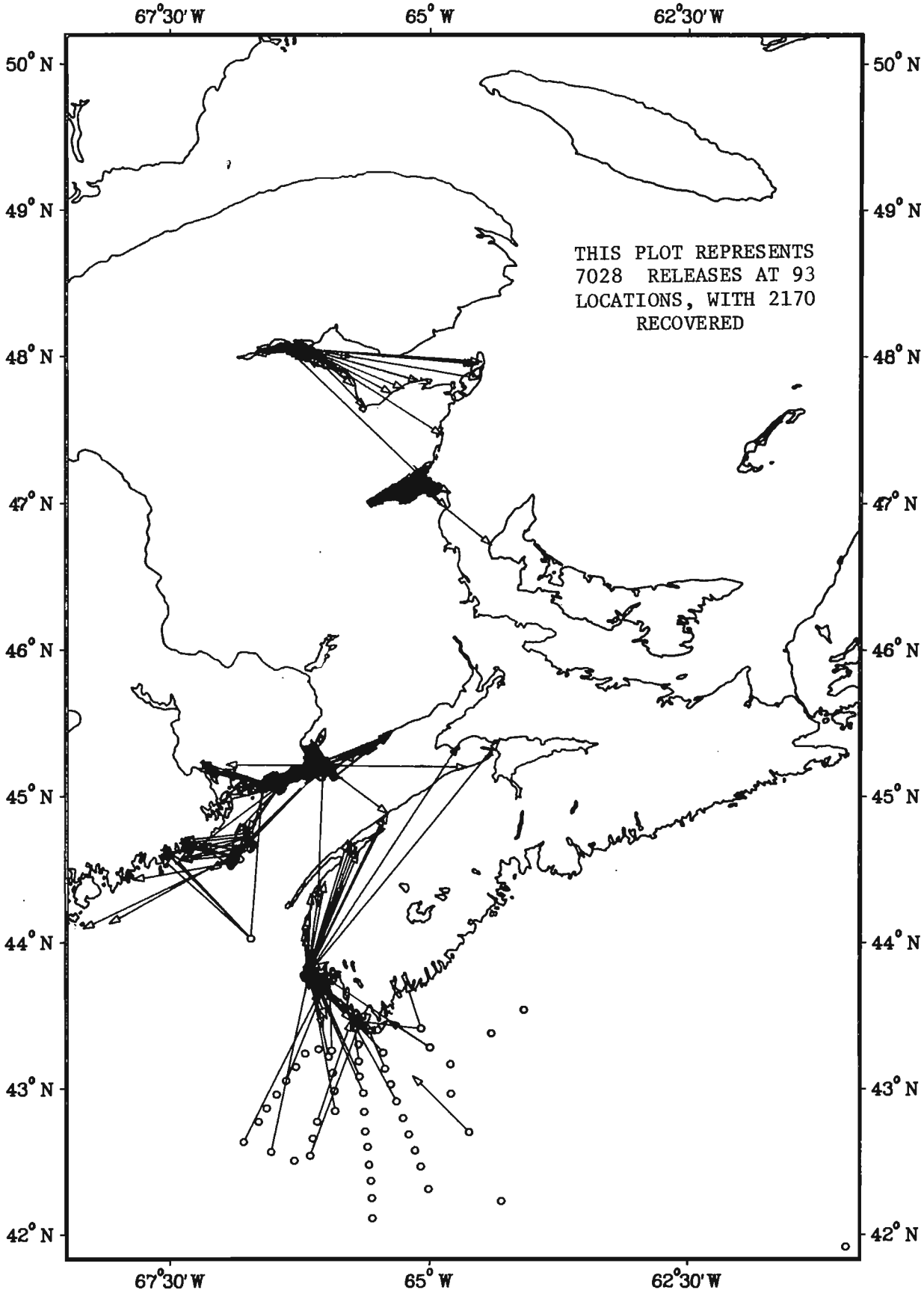
The diagrams show data spanning three years of operation. Rates of release and recovery through the three year period are given in the table below. Interested parties may obtain similar plots for intermediate time periods at any scale.

Additional plots of the data in a variety of formats, and the data itself, may be obtained by applying to the Ocean Drifter Project in Coastal Oceanography at the Bedford Institute.

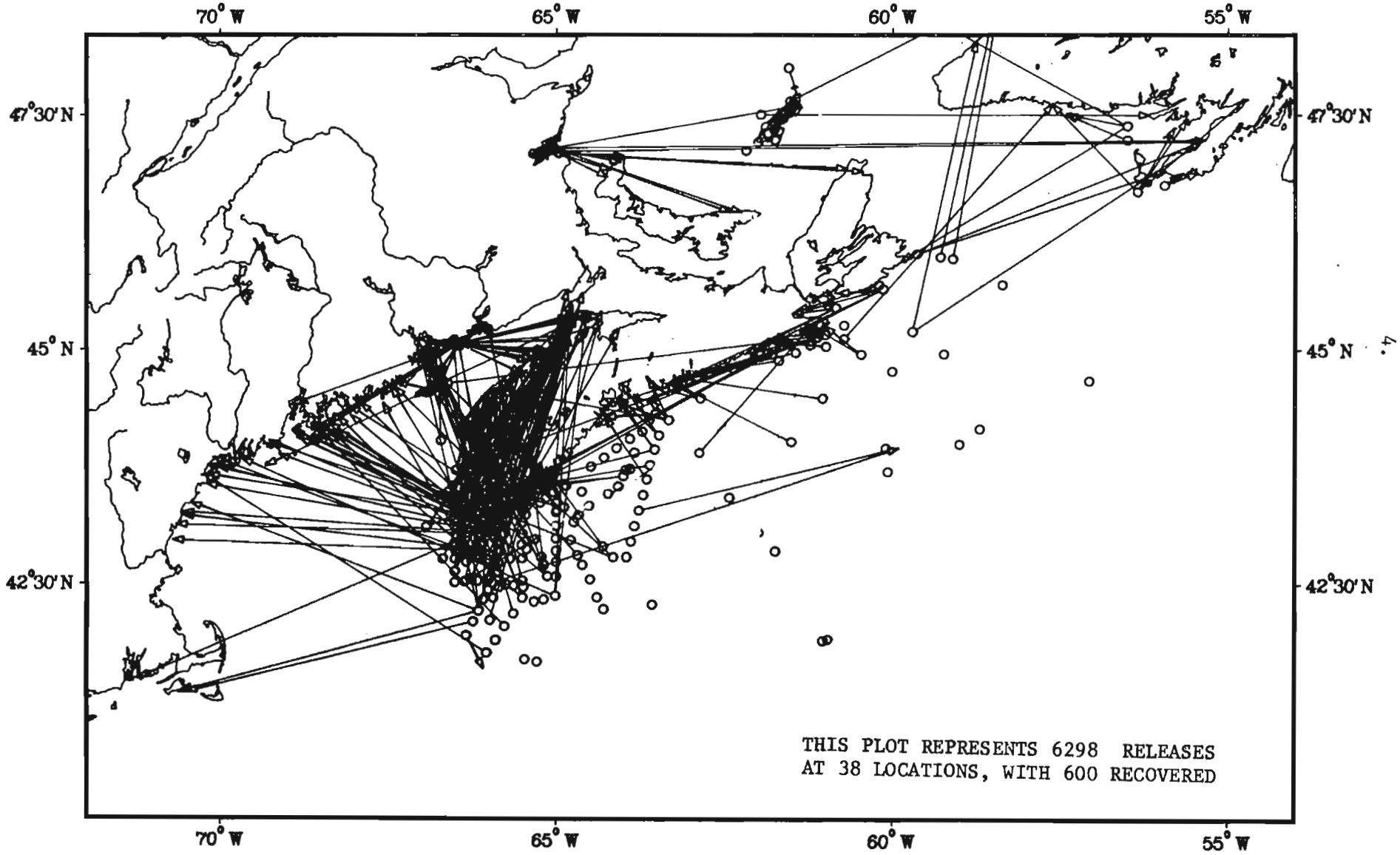
SEABED	1978		1979		1980	
DRIFTERS	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec
Releases	0	3162	461	2826	577	2
Recoveries	0	1389	79	608	54	1

SURFACE	1978		1979		1980	
DRIFTERS	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec
Releases	0	1742	3105	1060	149	242
Recoveries	0	119	272	173	13	23

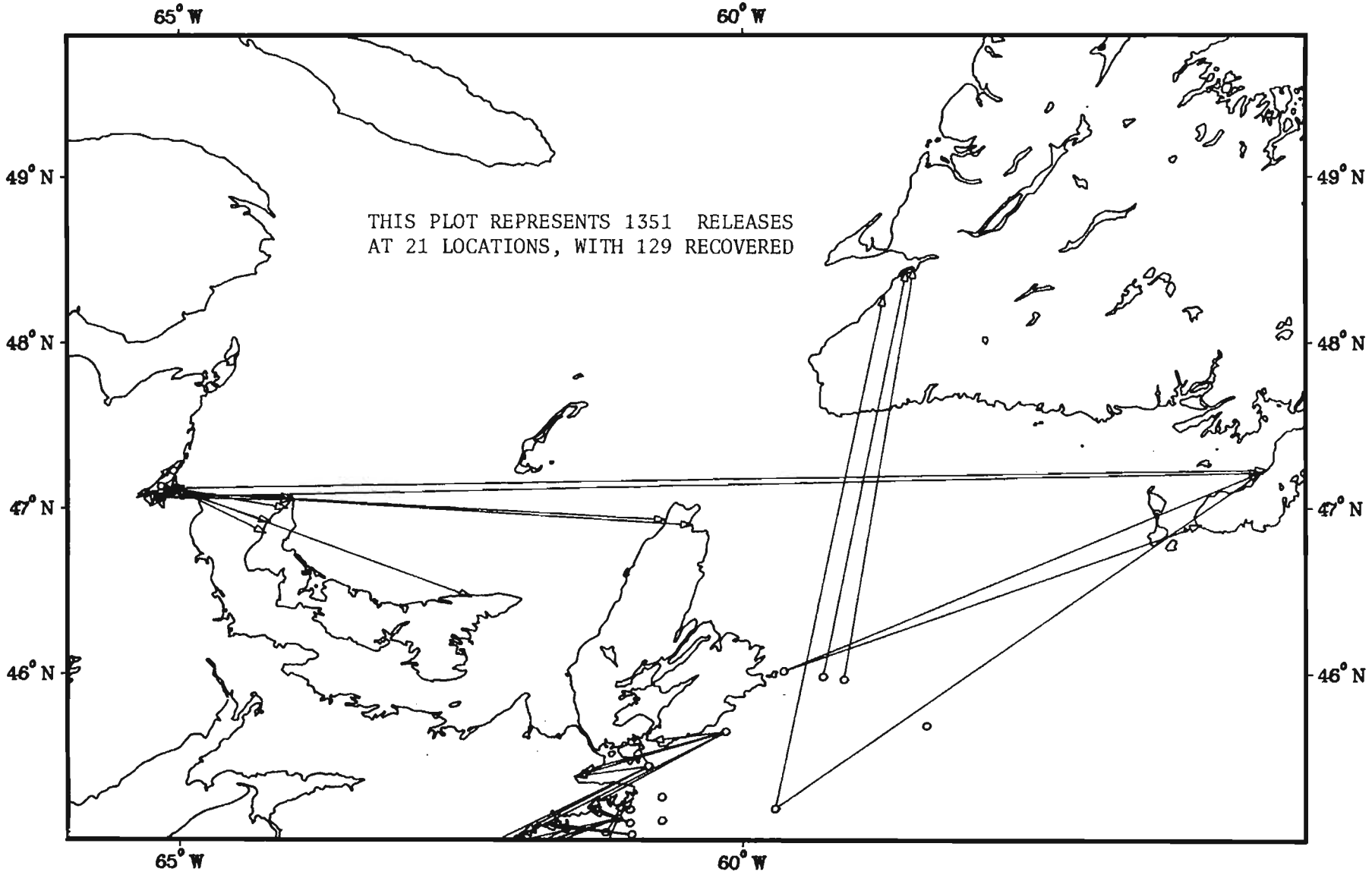
SEABED DRIFTERS IN THE MARITIMES



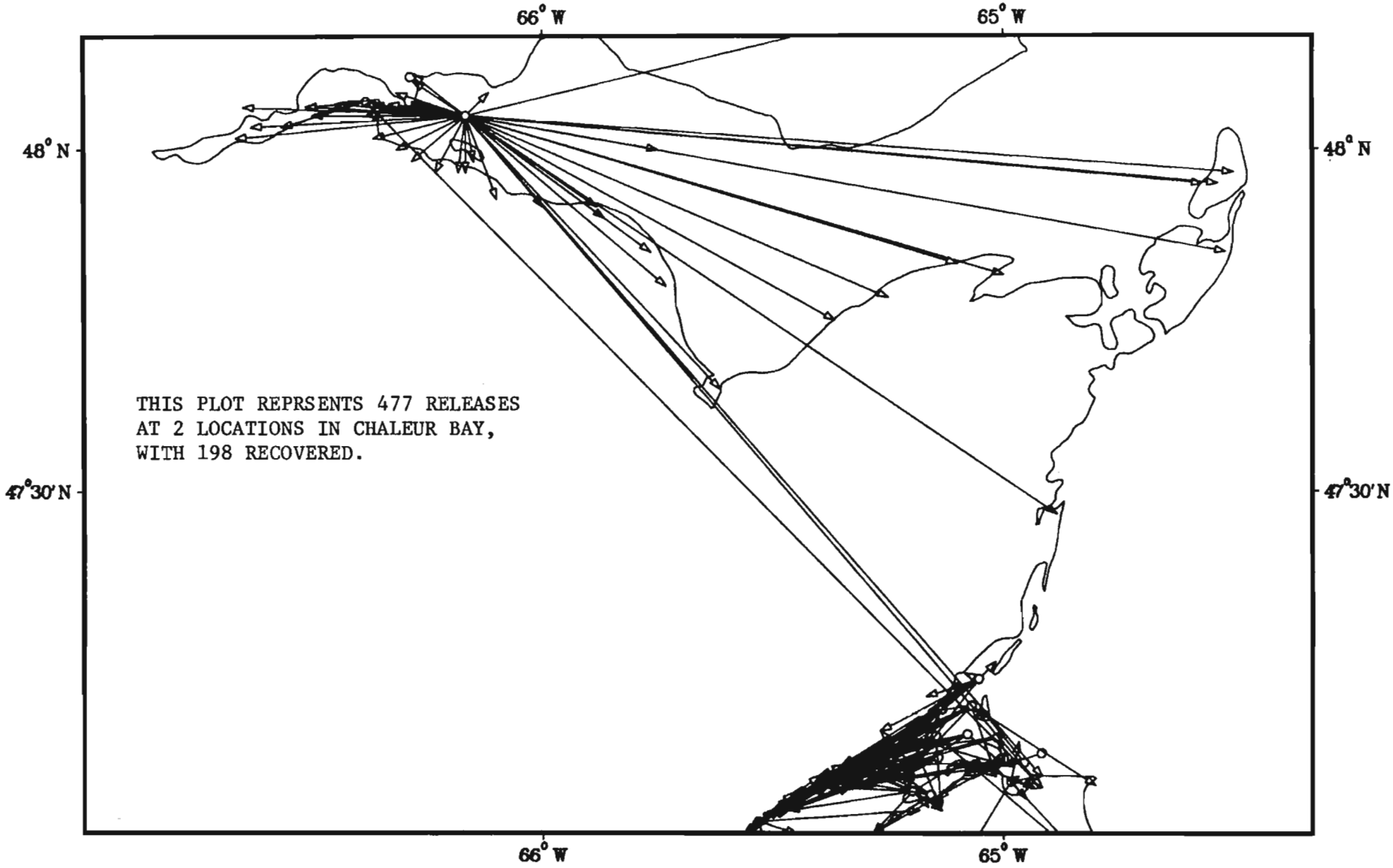
SURFACE DRIFTERS IN THE MARITIMES



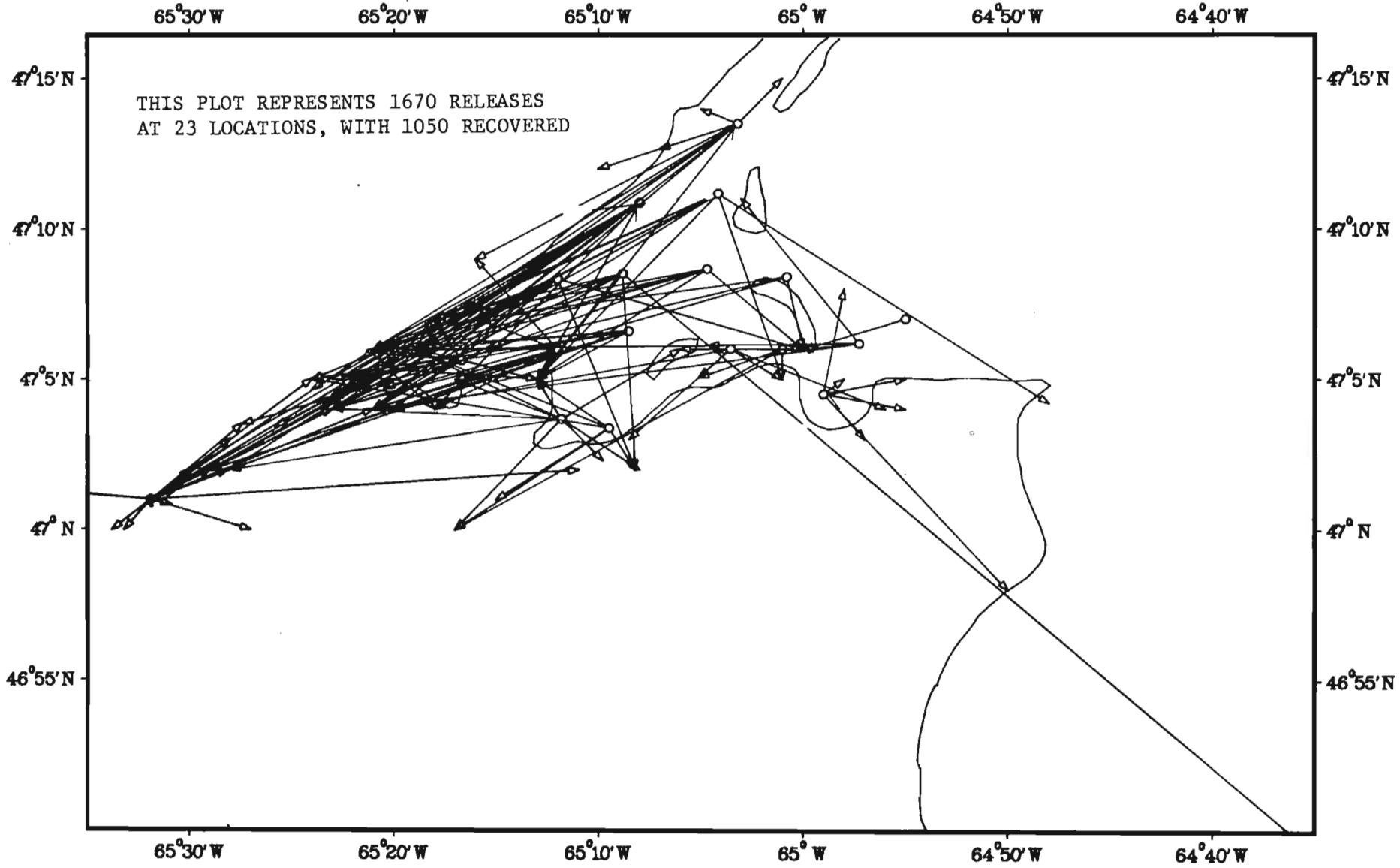
GULF OF ST. LAWRENCE – SURFACE DRIFT TRACKS



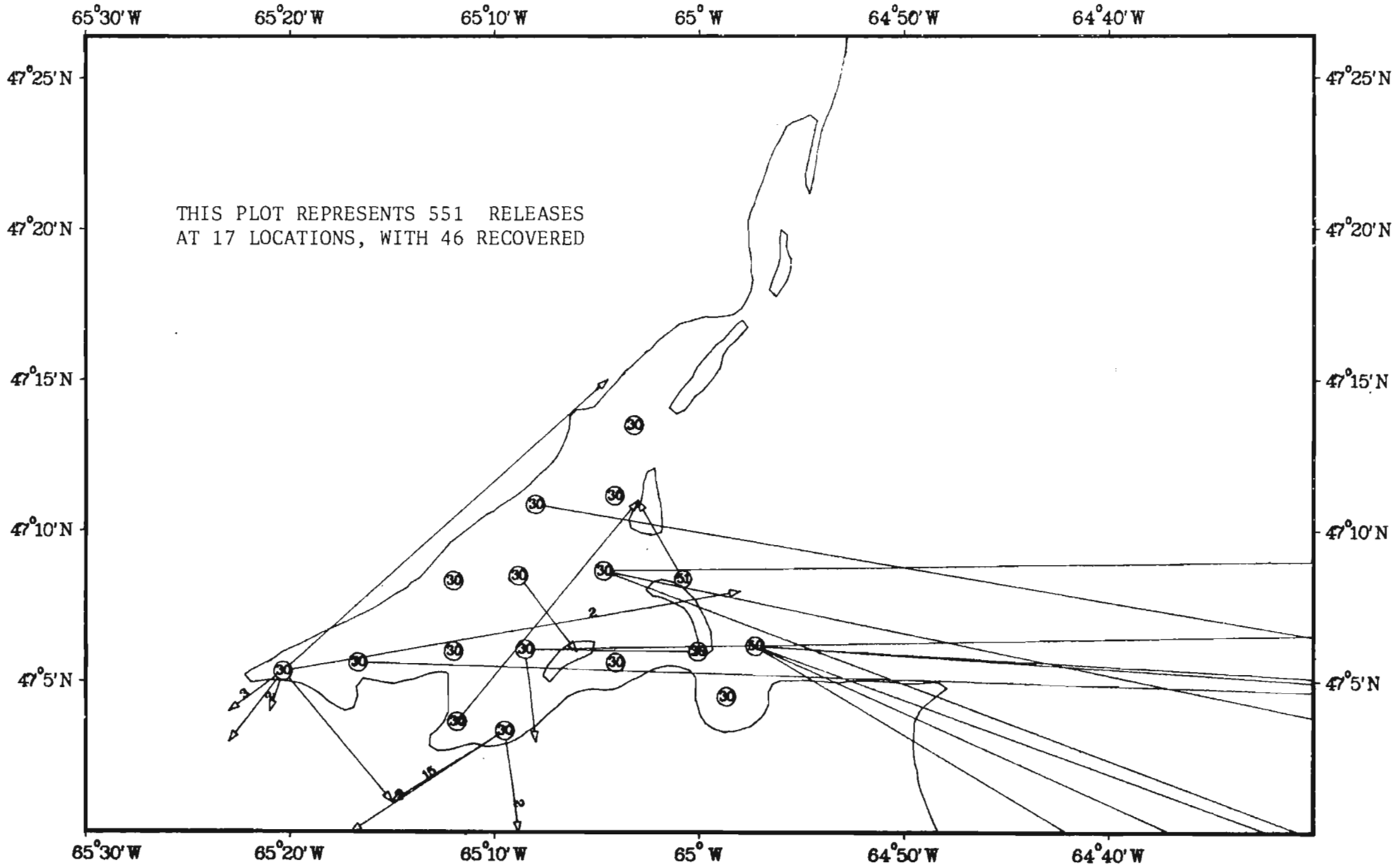
SEABED DRIFTERS IN CHALEUR BAY



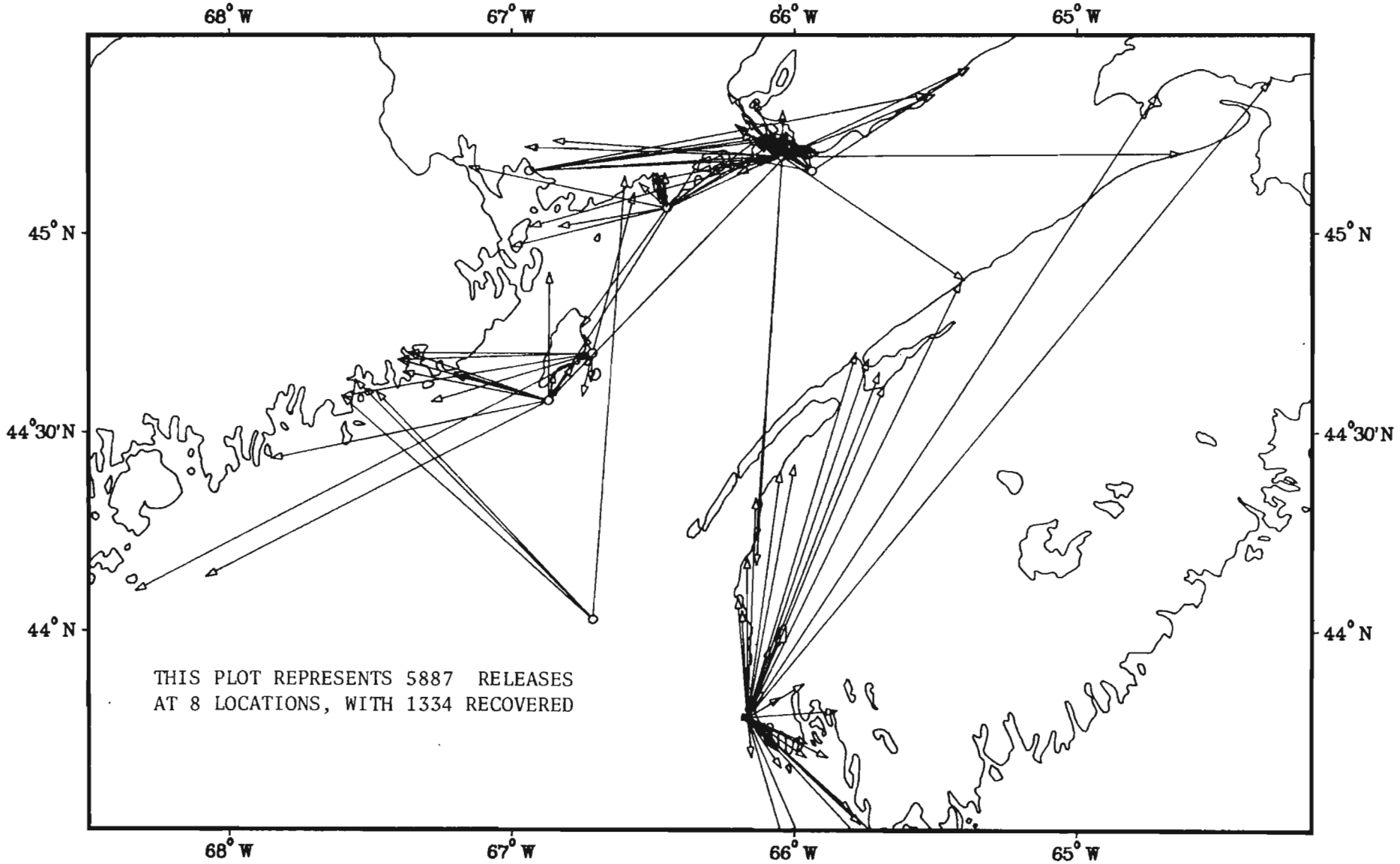
SEABED DRIFTERS IN MIRAMICHI BAY



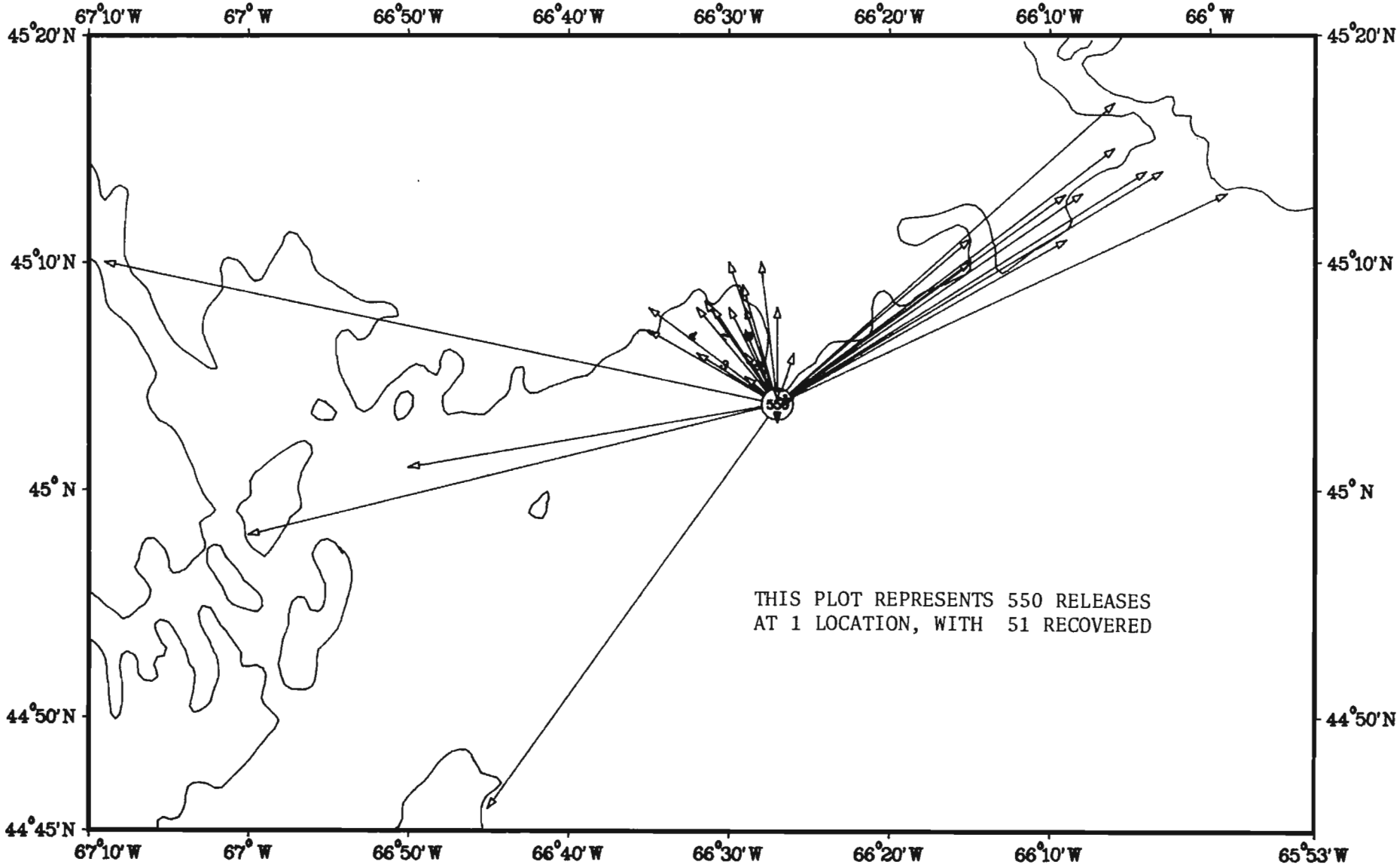
MIRAMICHI – SURFACE DRIFT TRACKS



BAY OF FUNDY – SEABED DRIFT TRACKS



POINT LEPREAU – SEABED DRIFT TRACKS



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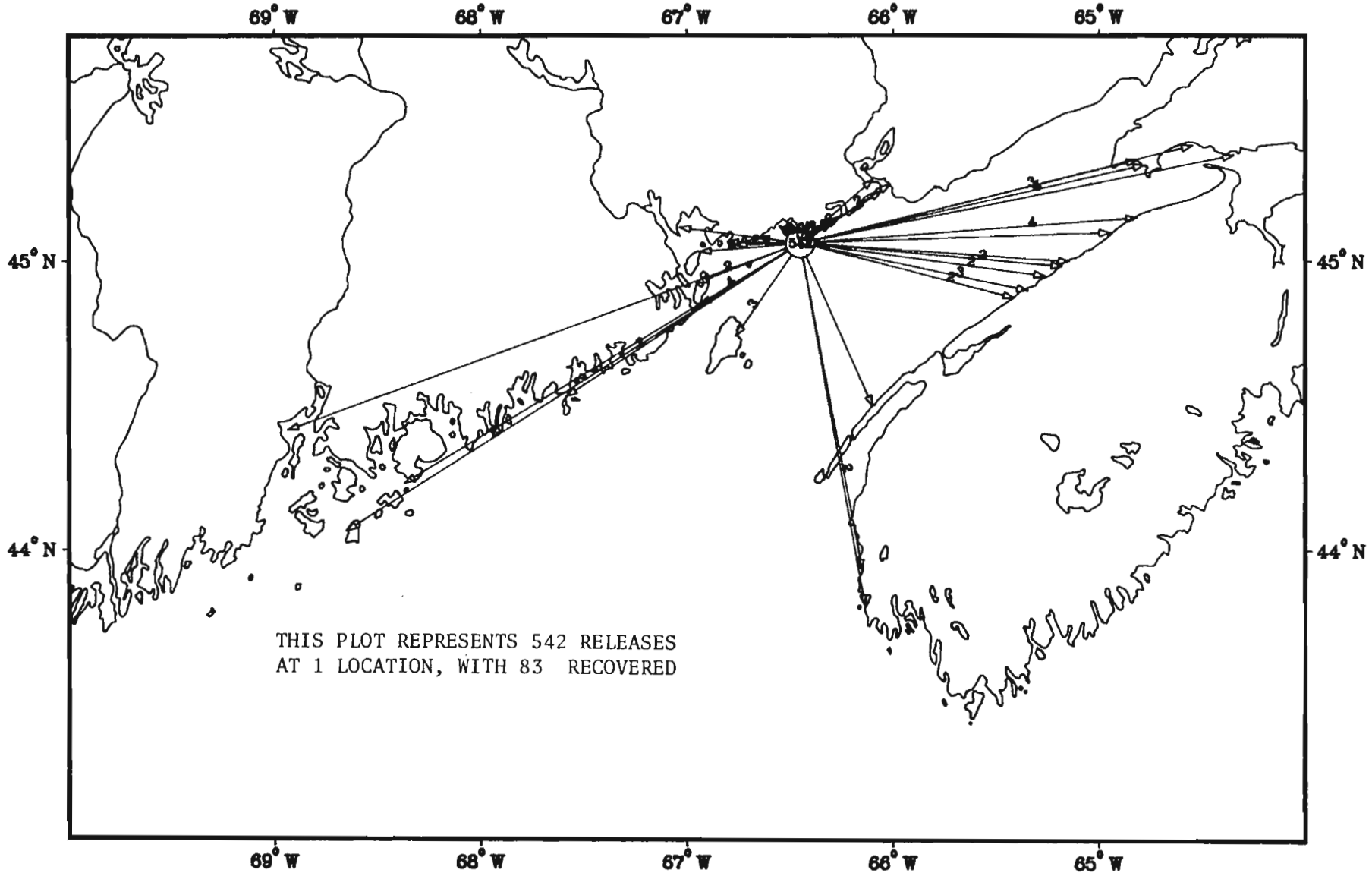

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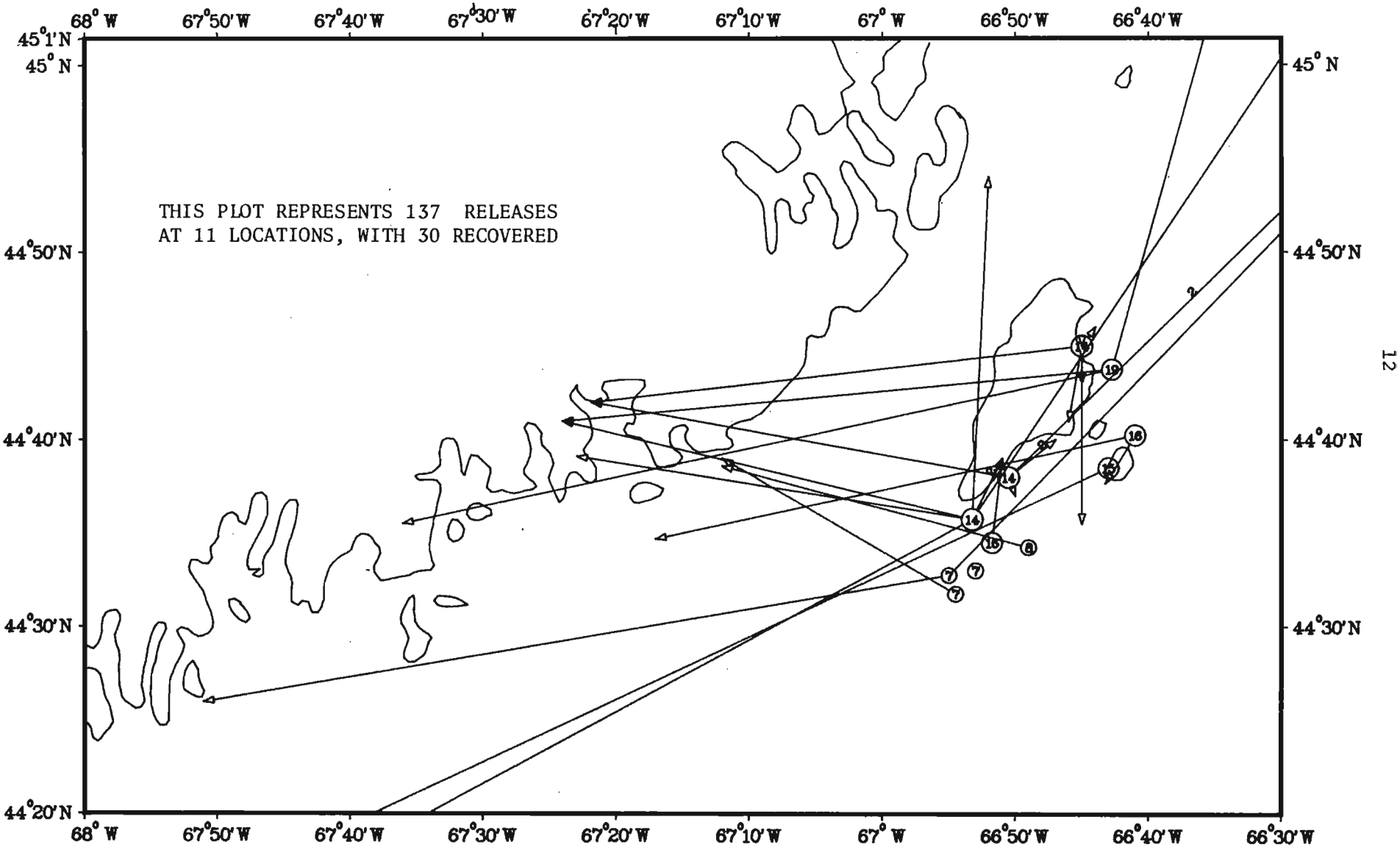

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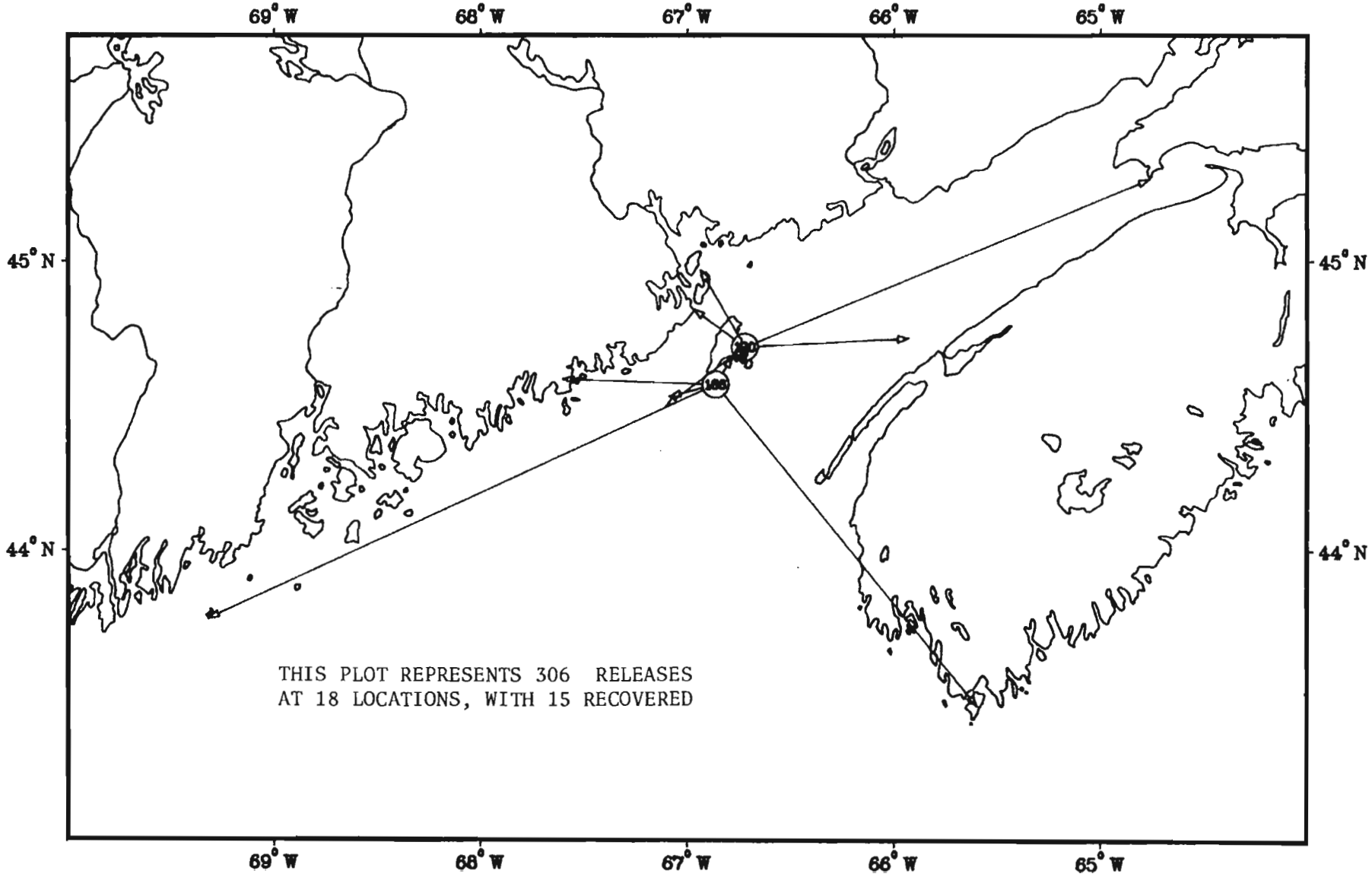
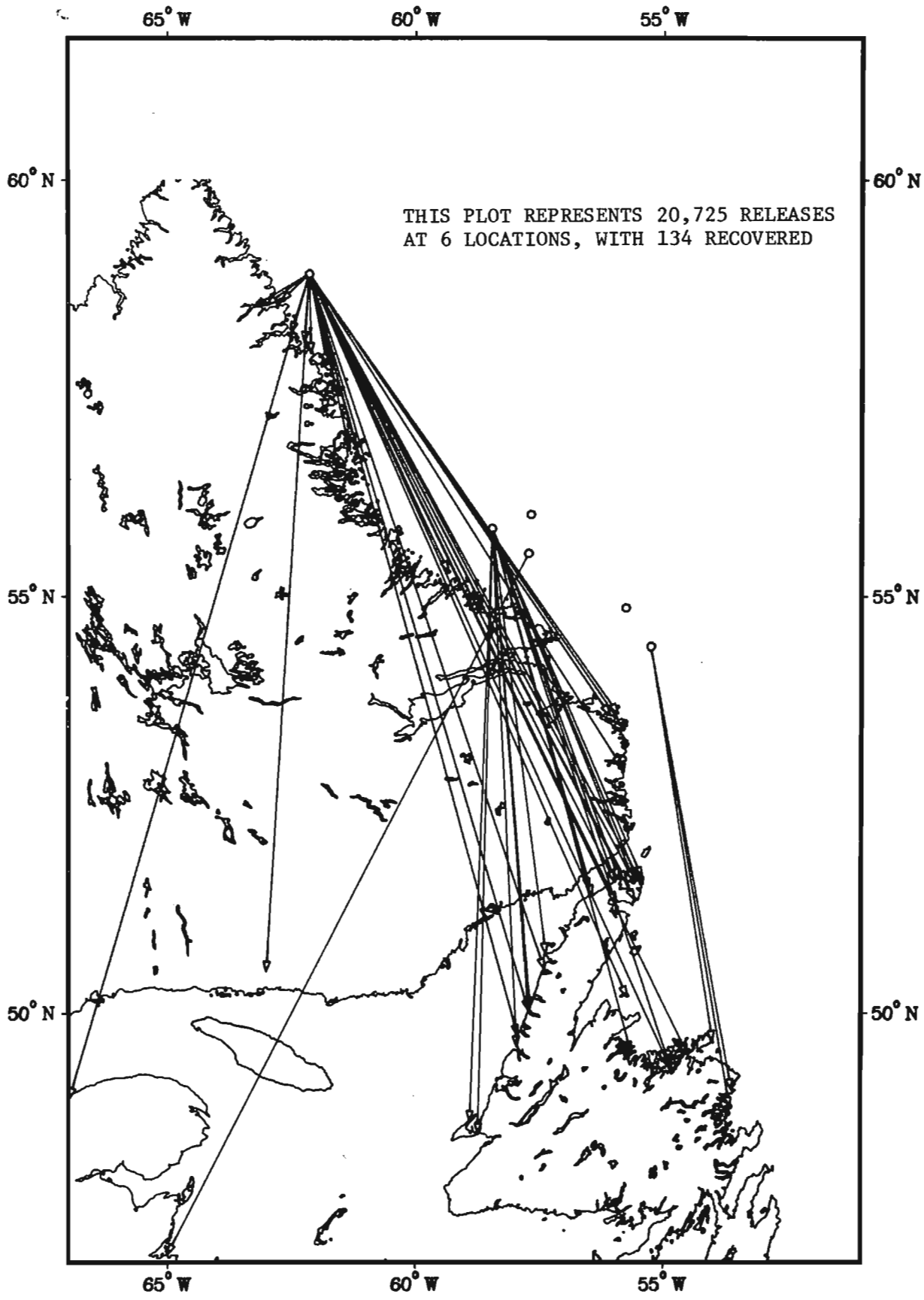
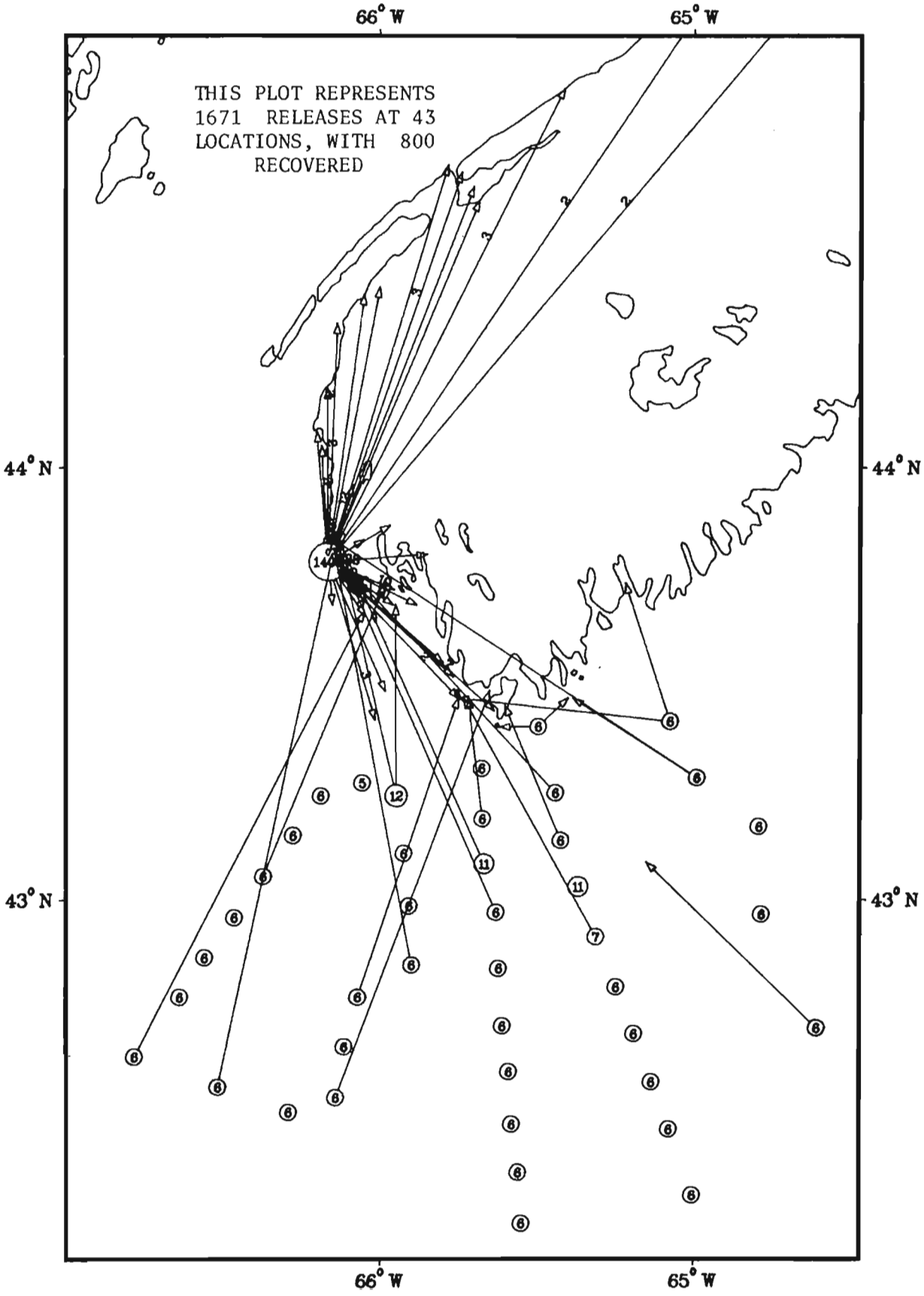


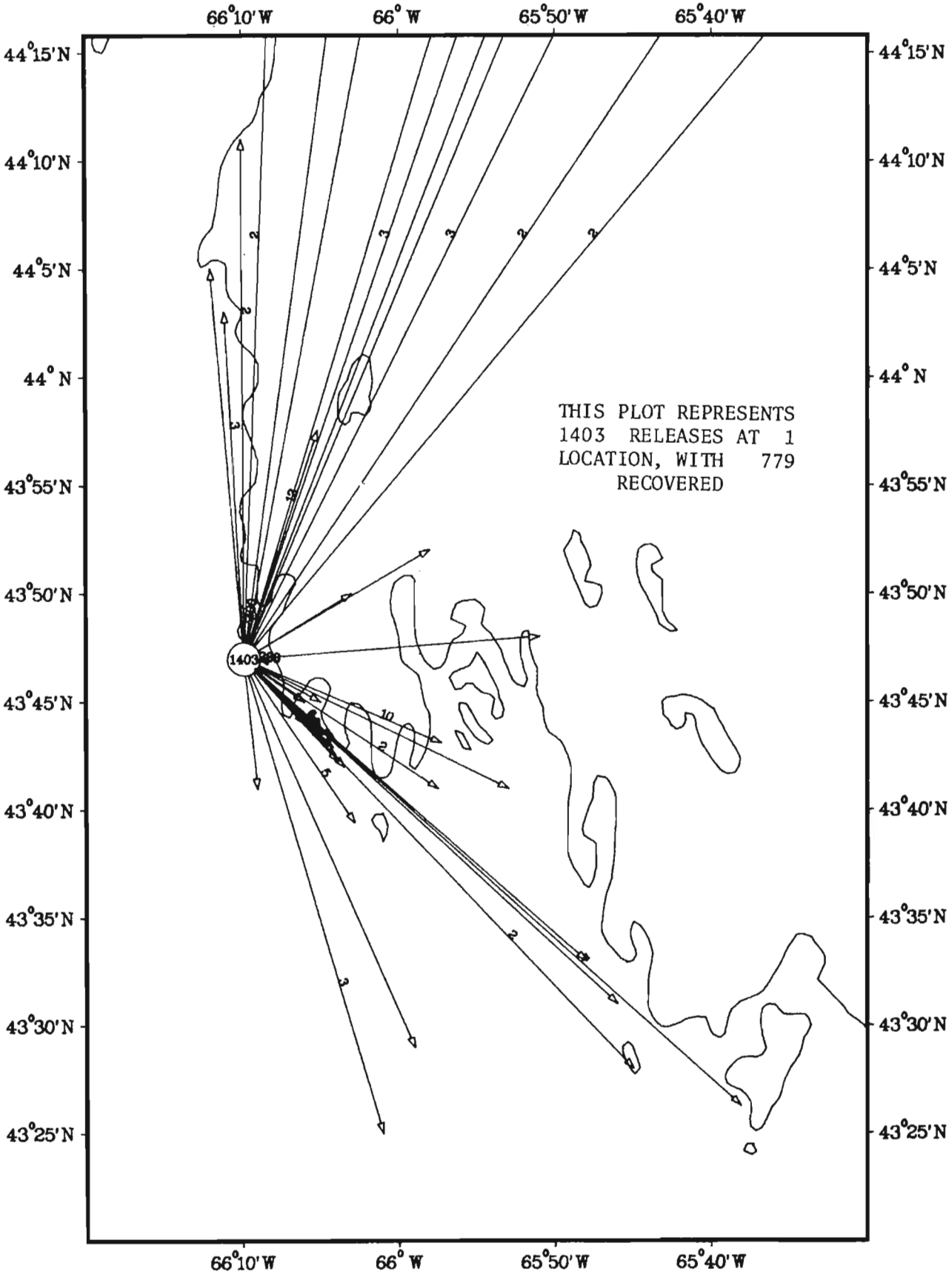
LABRADOR SURFACE DRIFTERS



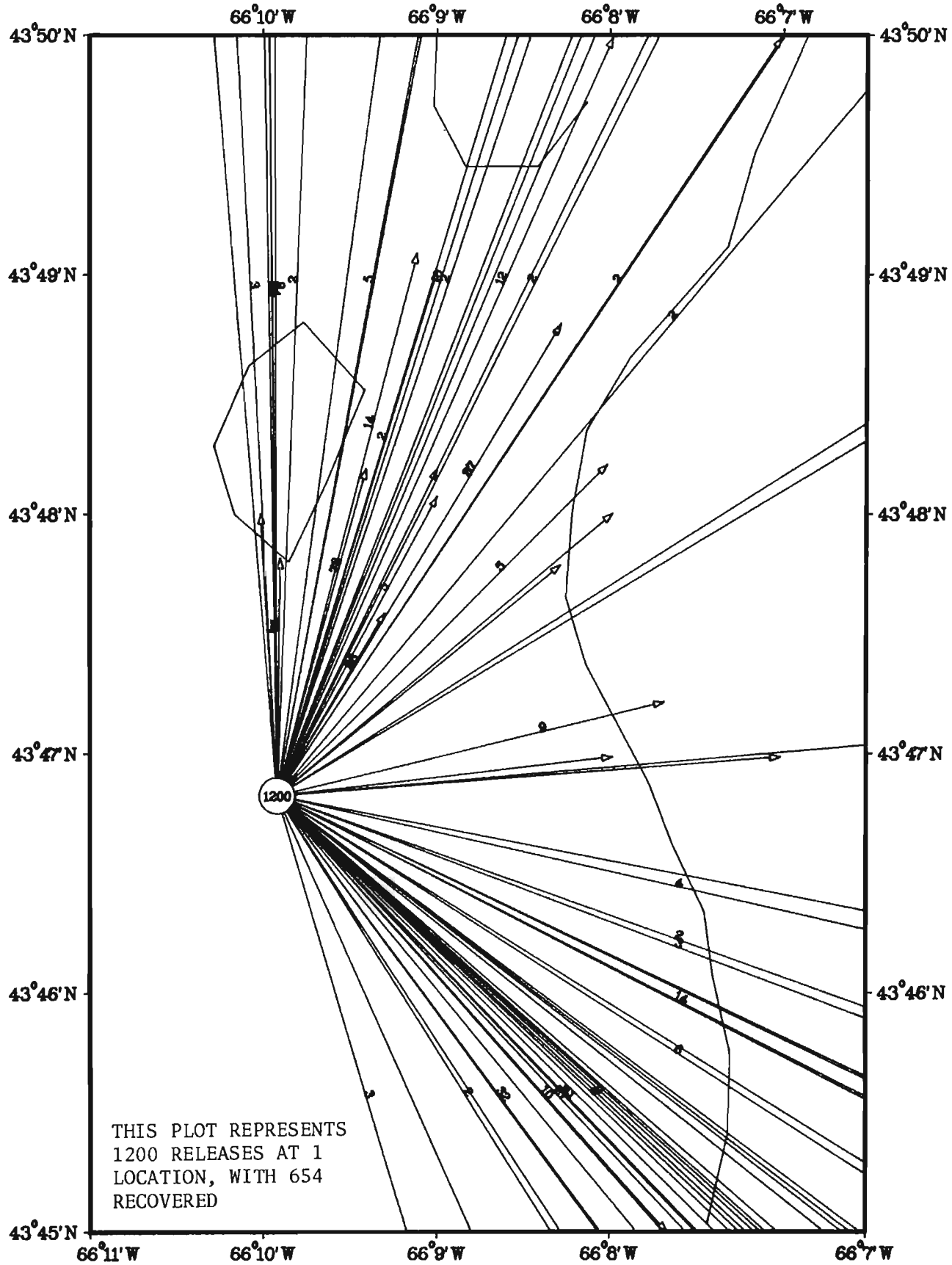
S.W. NOVA SCOTIA – SEABED DRIFT TRACKS



YARMOUTH N.S. – SEABED DRIFT TRACKS



CAT ROCK, YARMOUTH N.S. – SEABED DRIFT TRACKS



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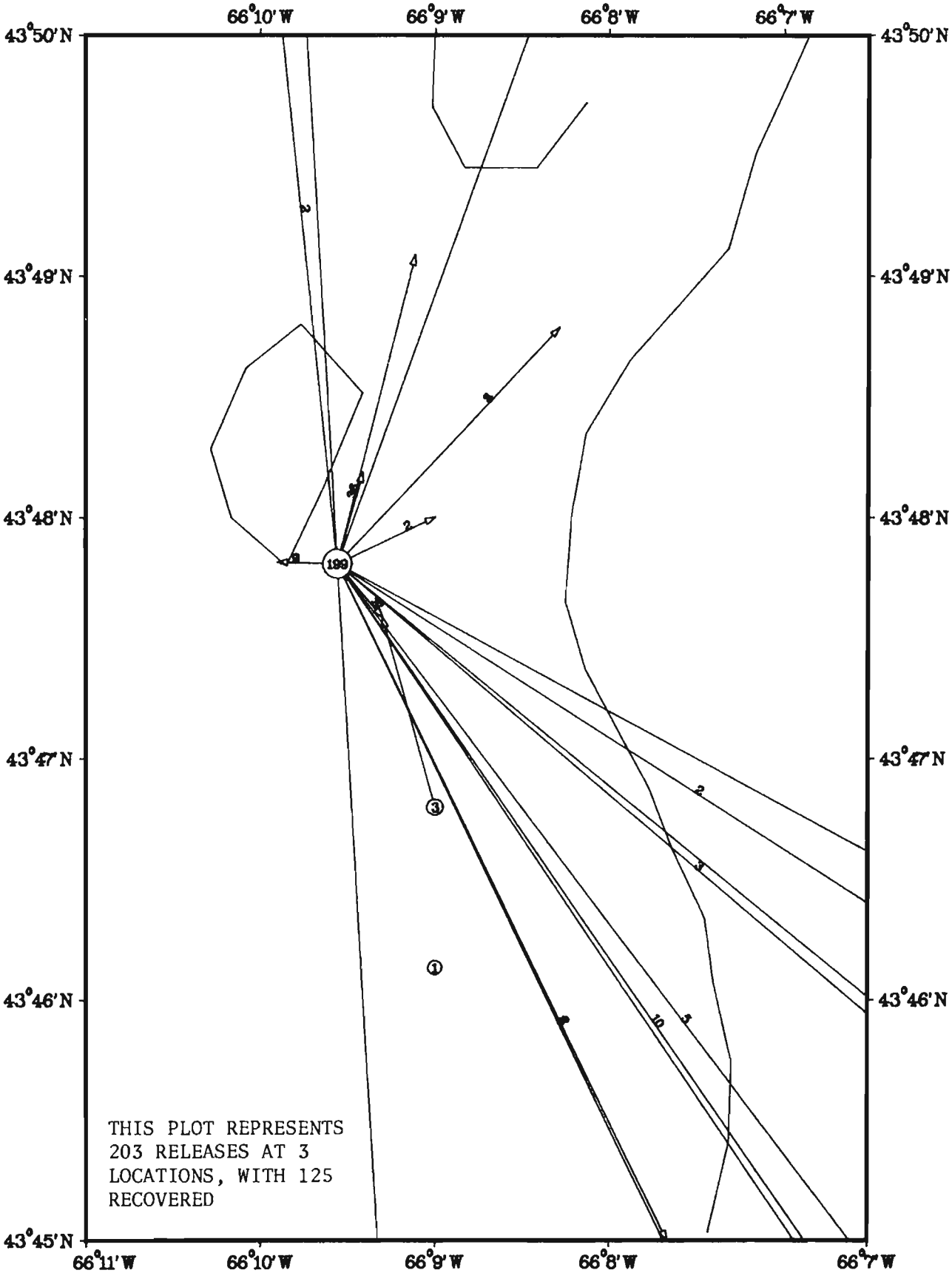
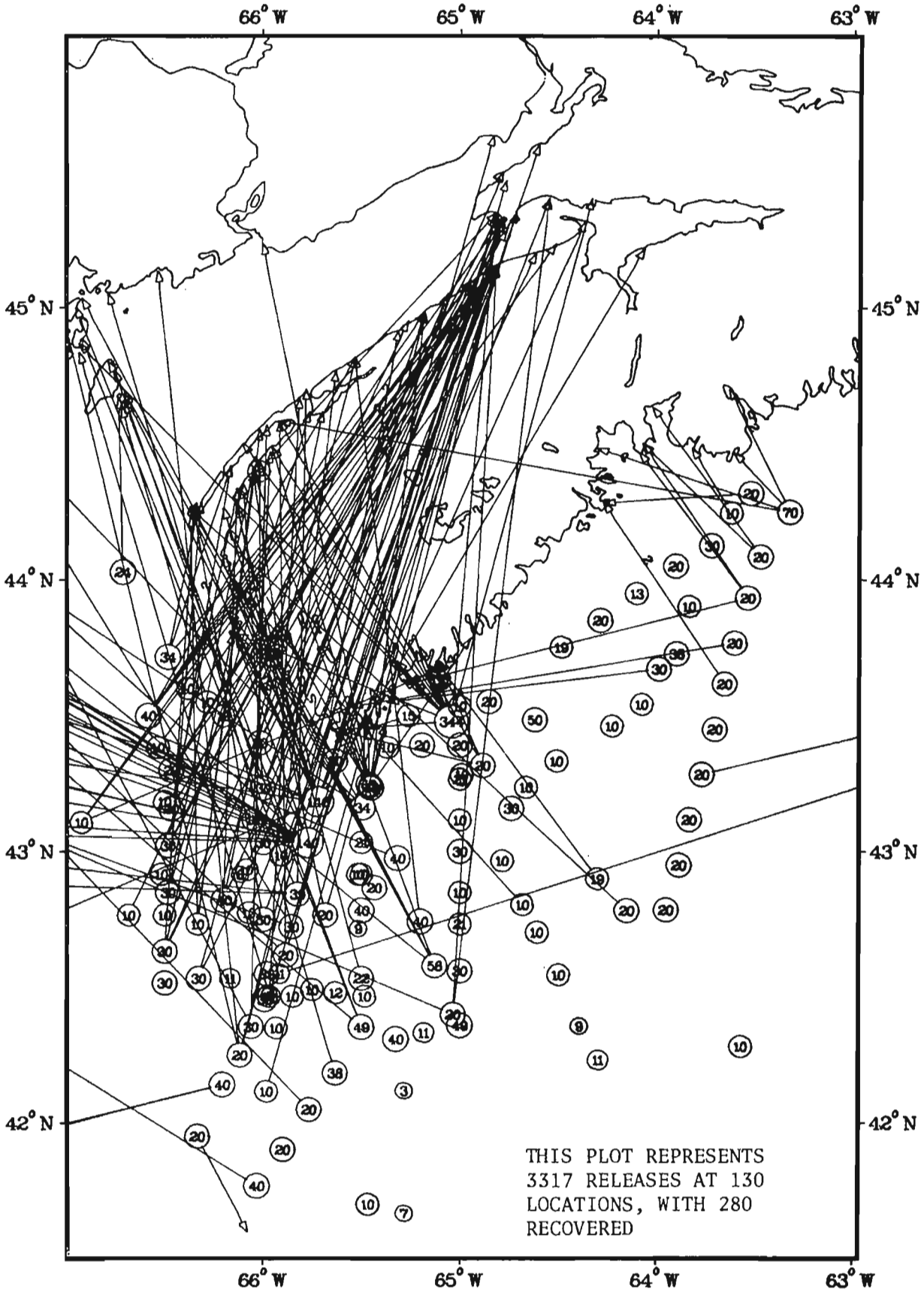


SOUTHWESTERN NOVA – SURFACE DRIFT TRACKS



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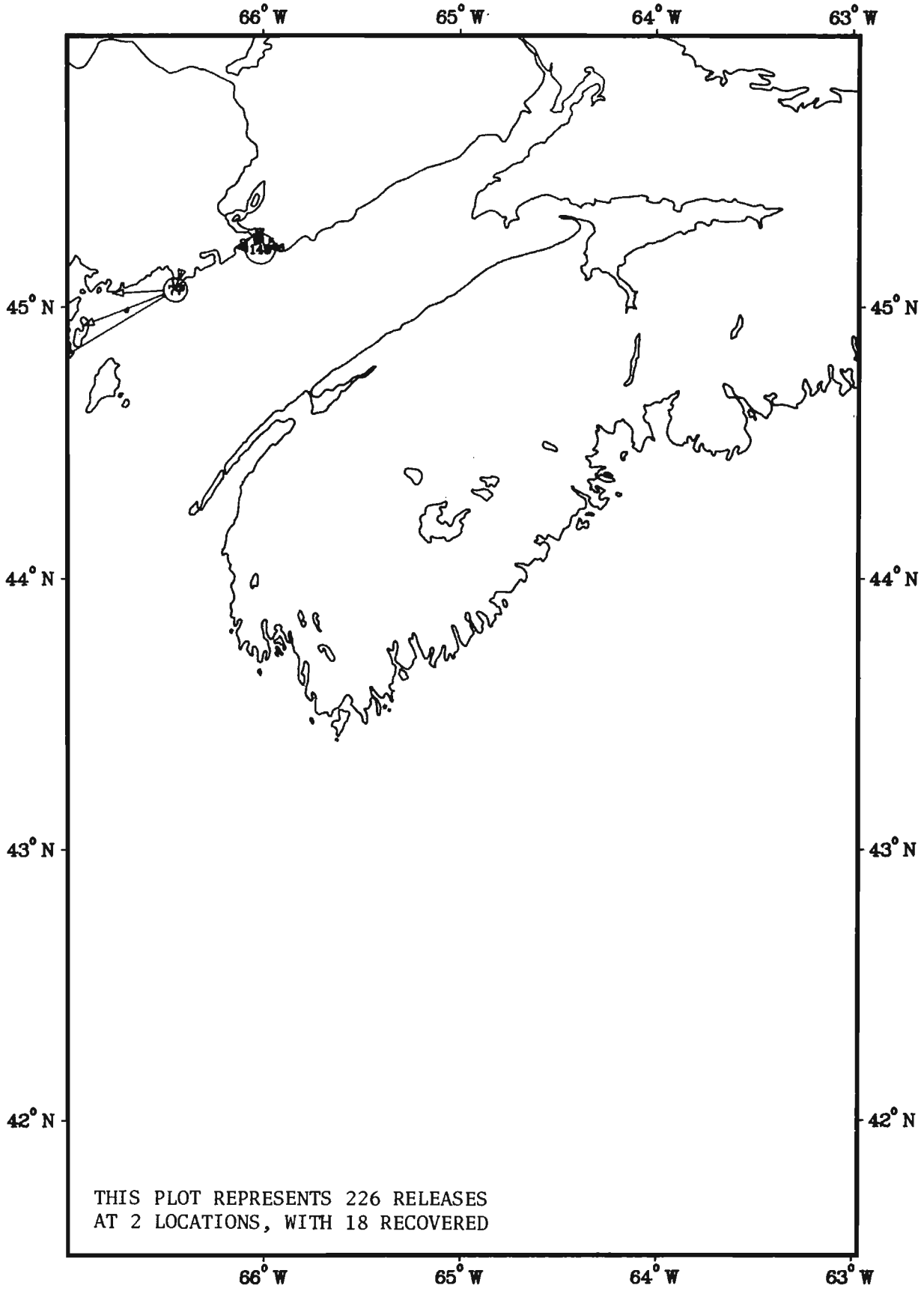

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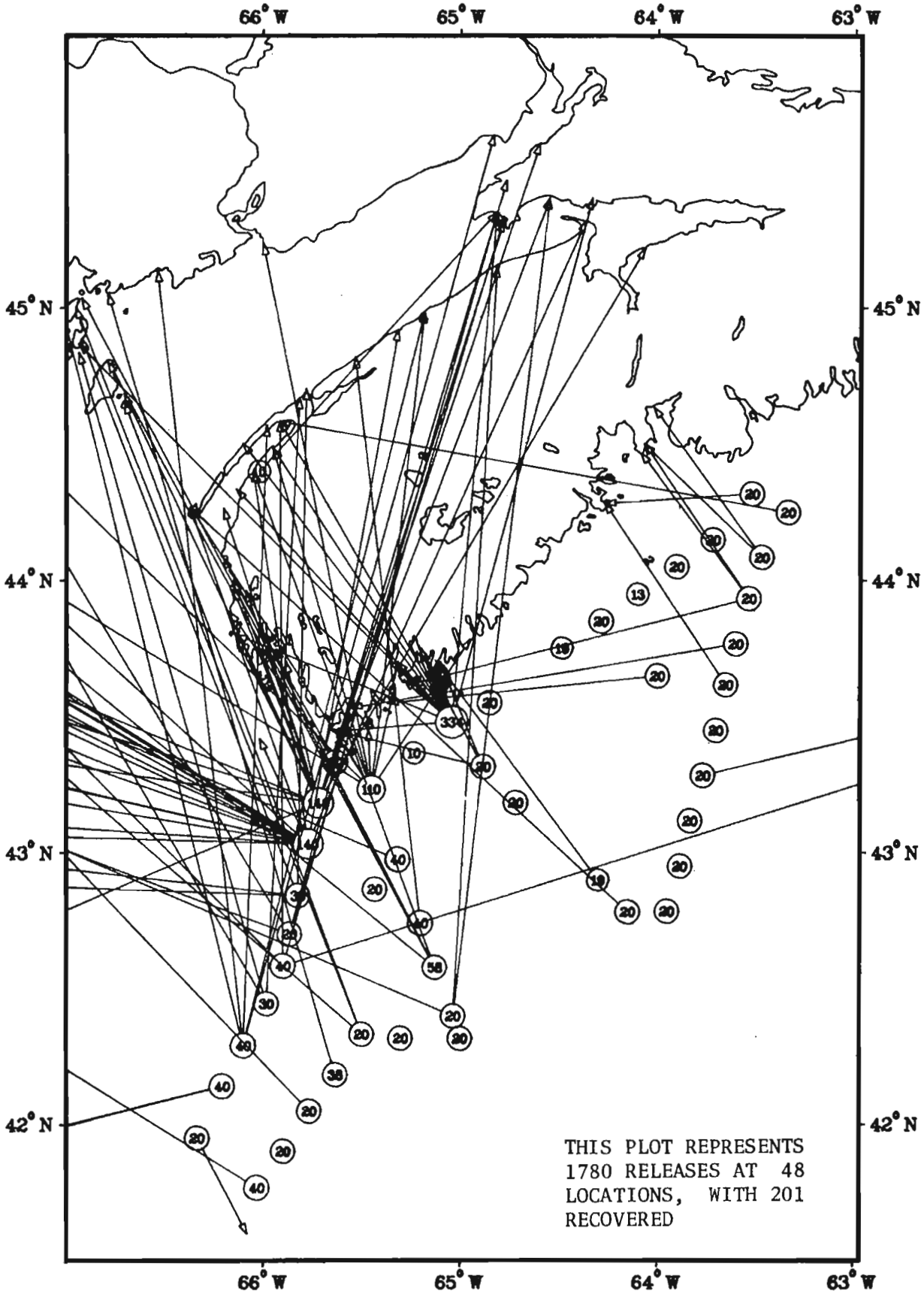

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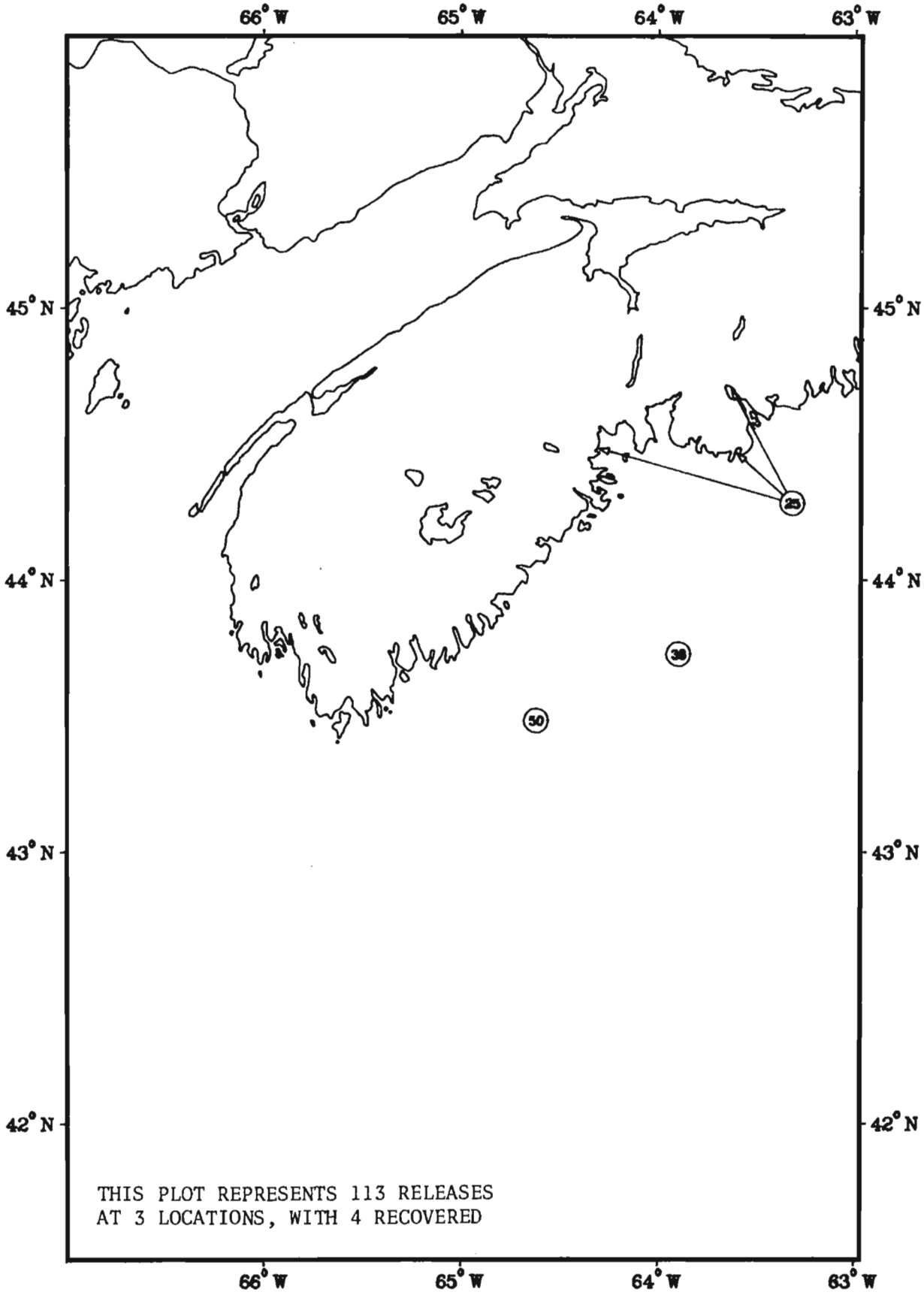

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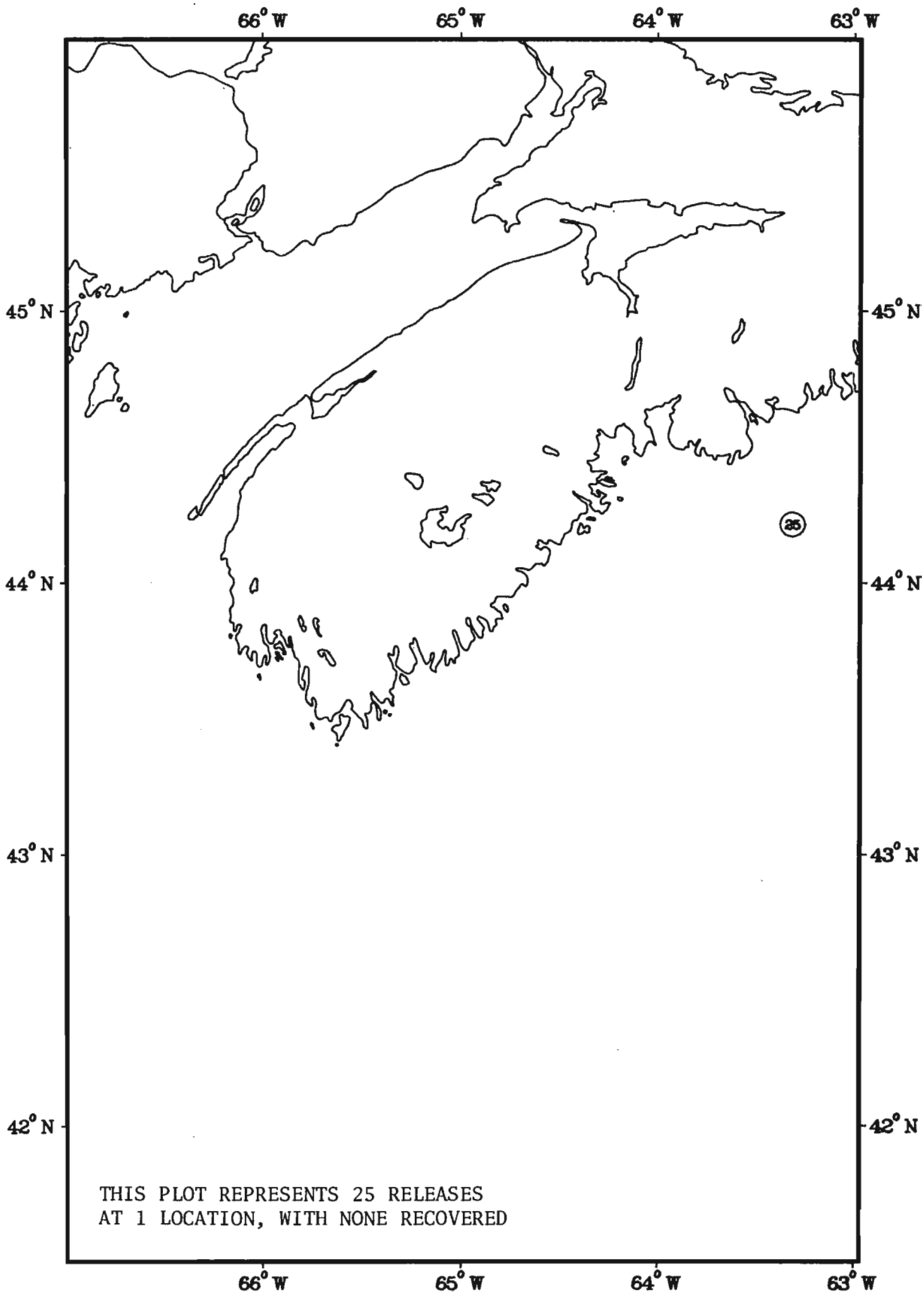

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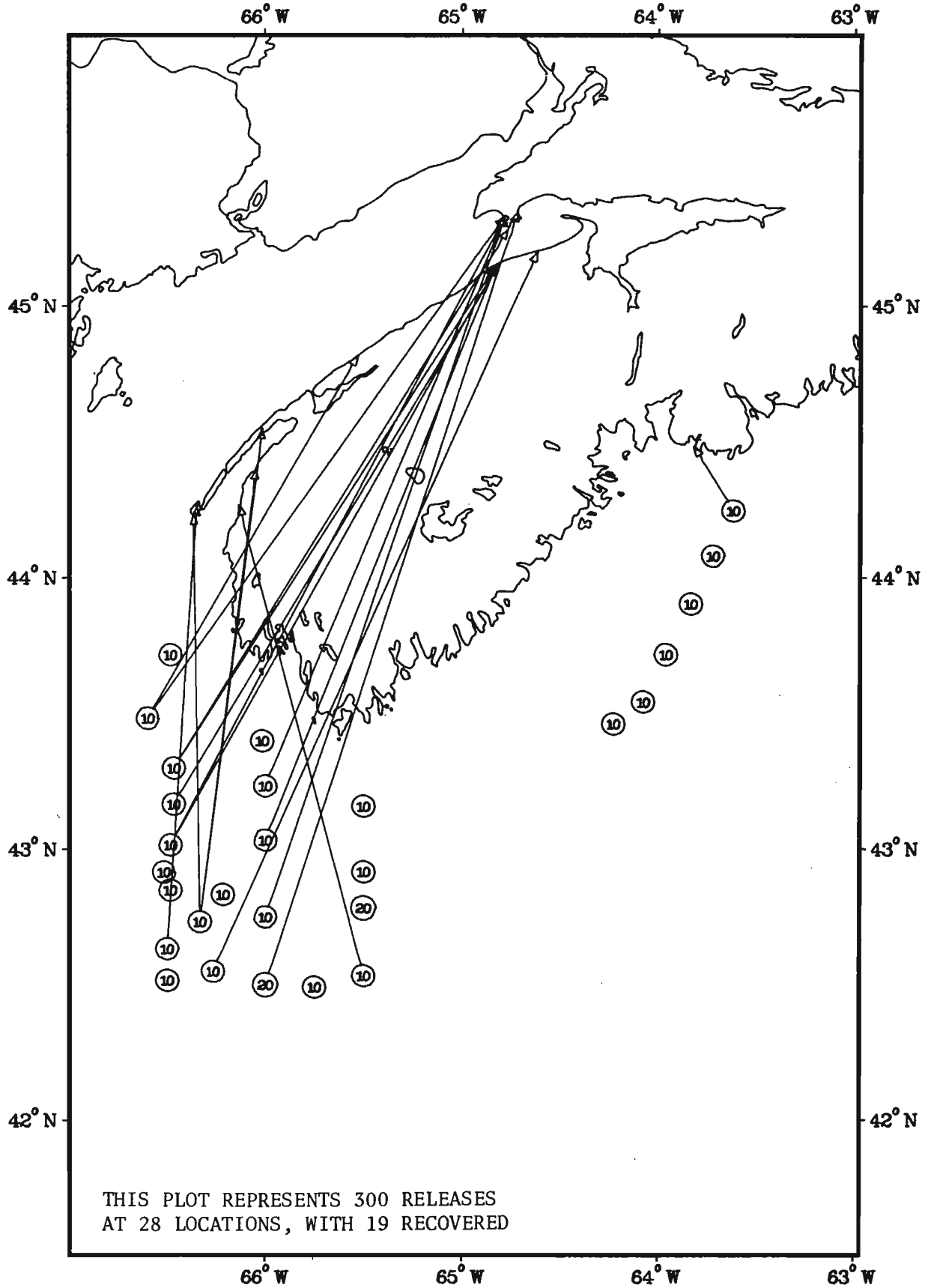

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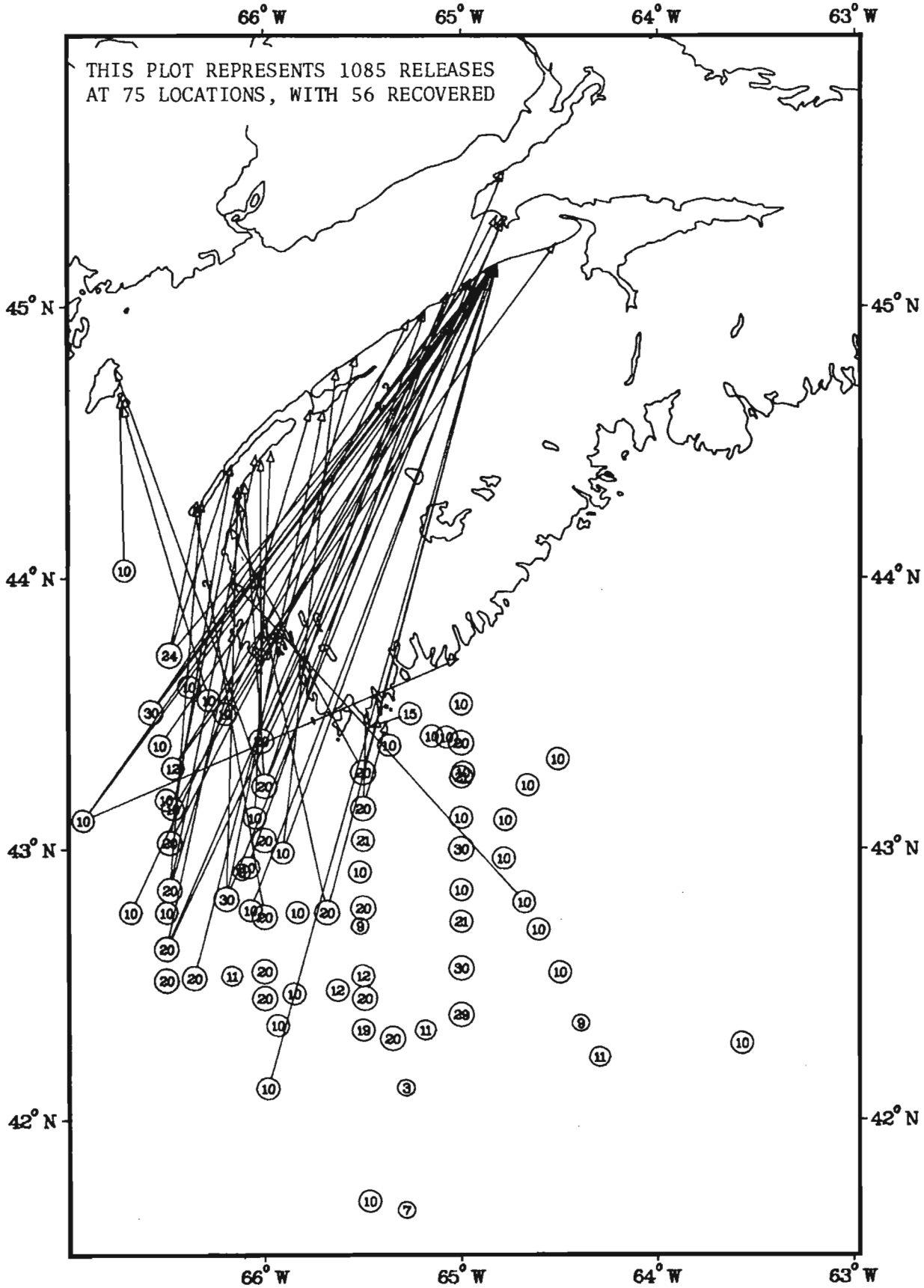

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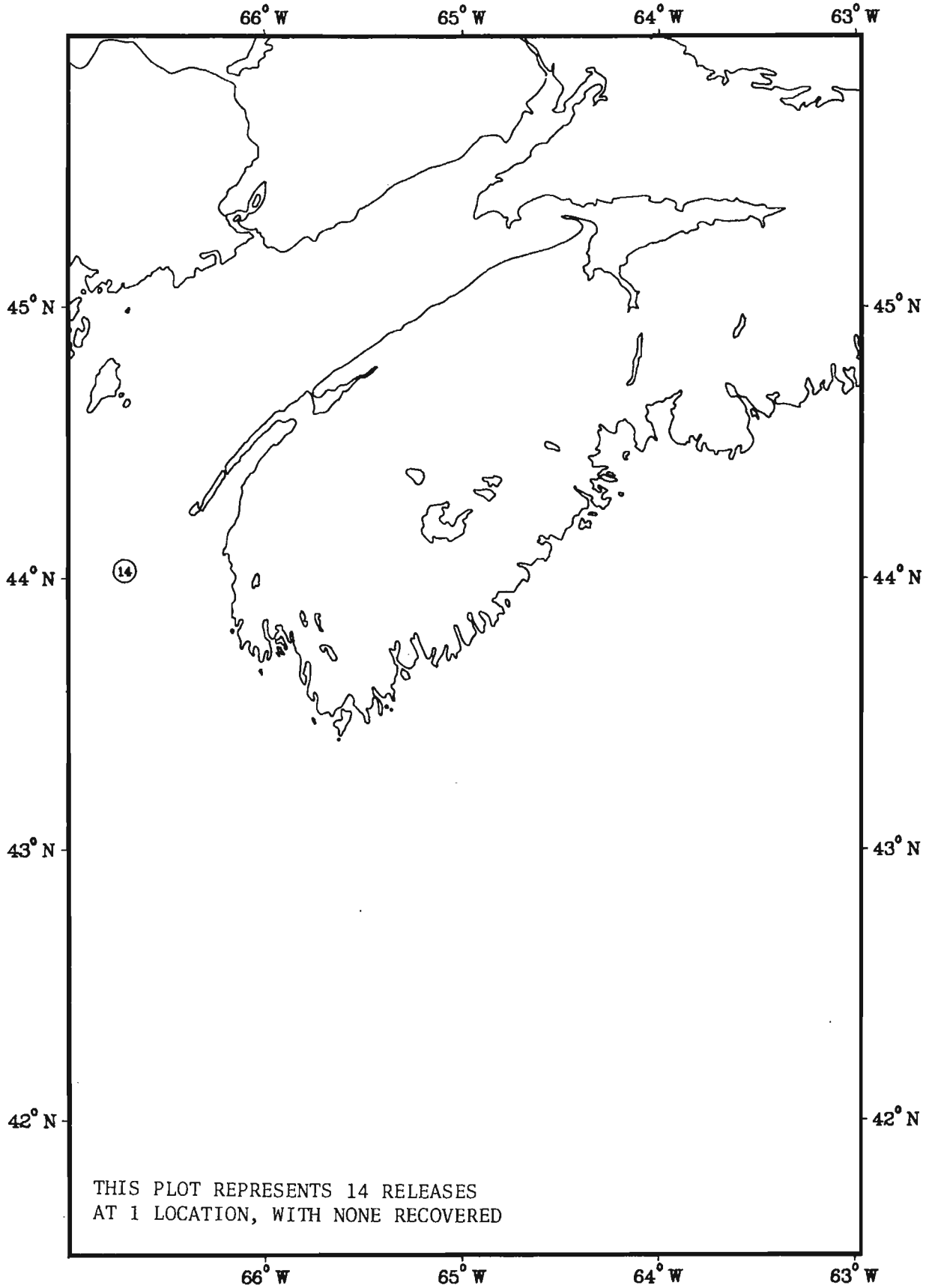
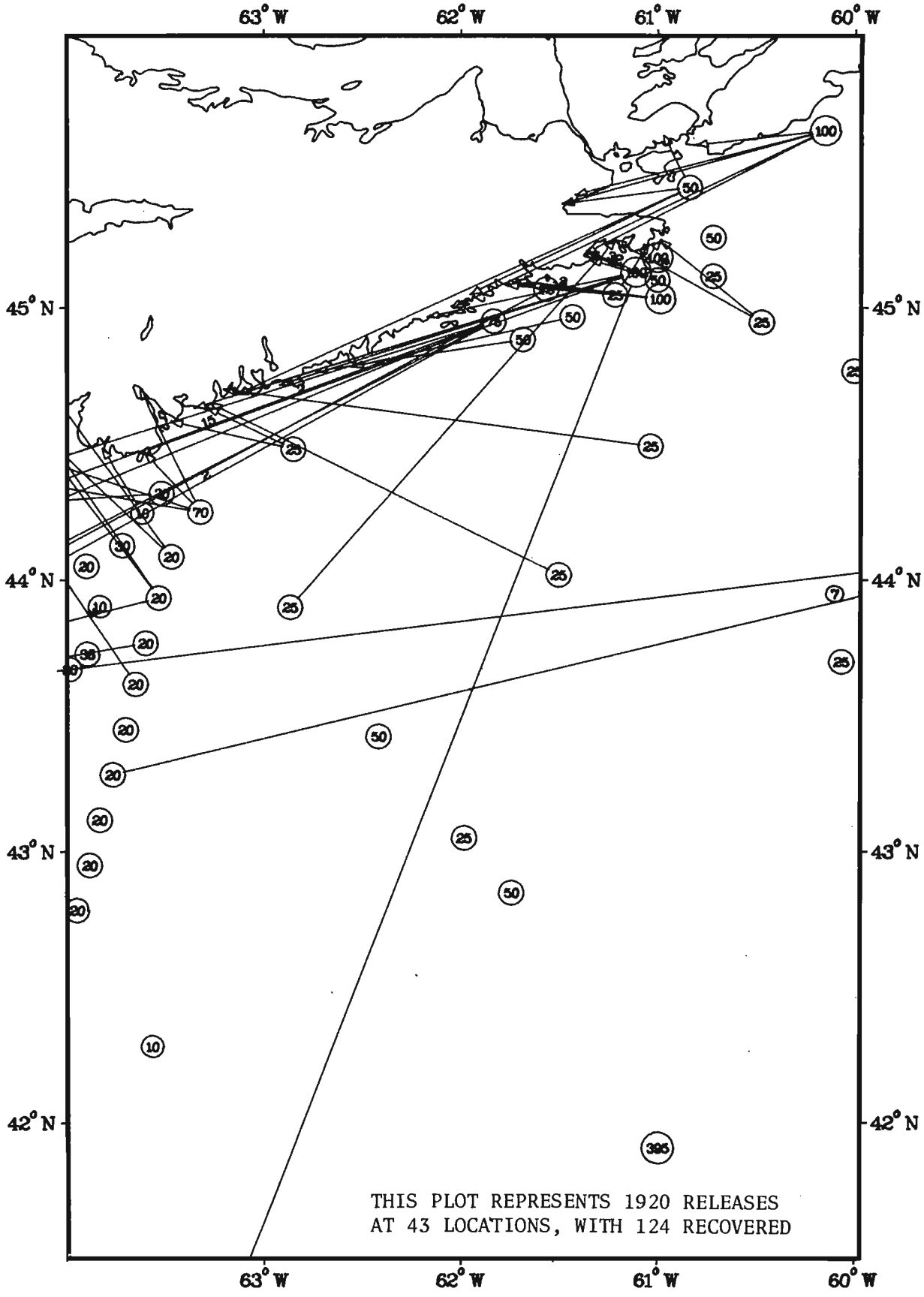


N.S. EASTERN SHORE — SURFACE DRIFT TRACKS



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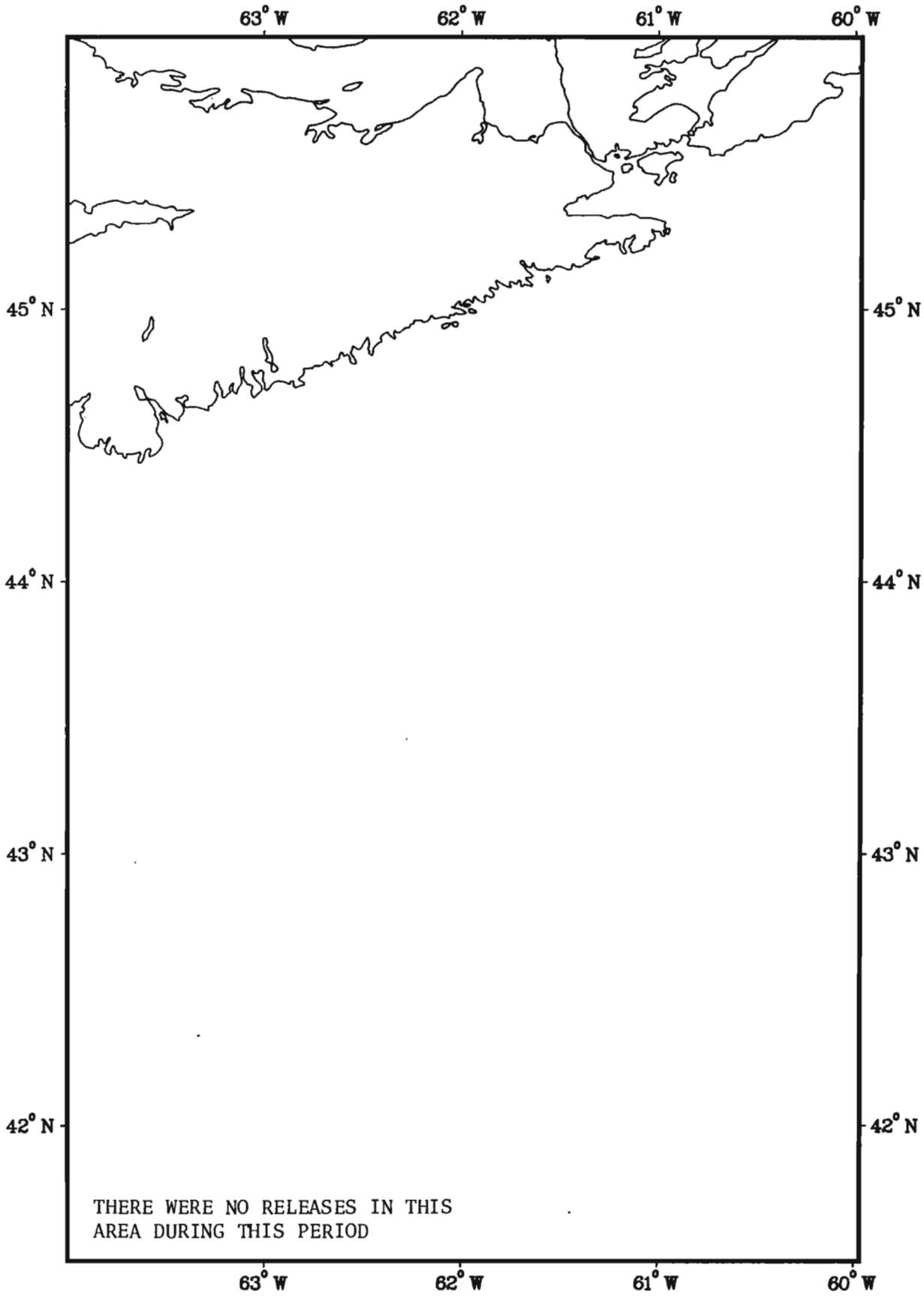

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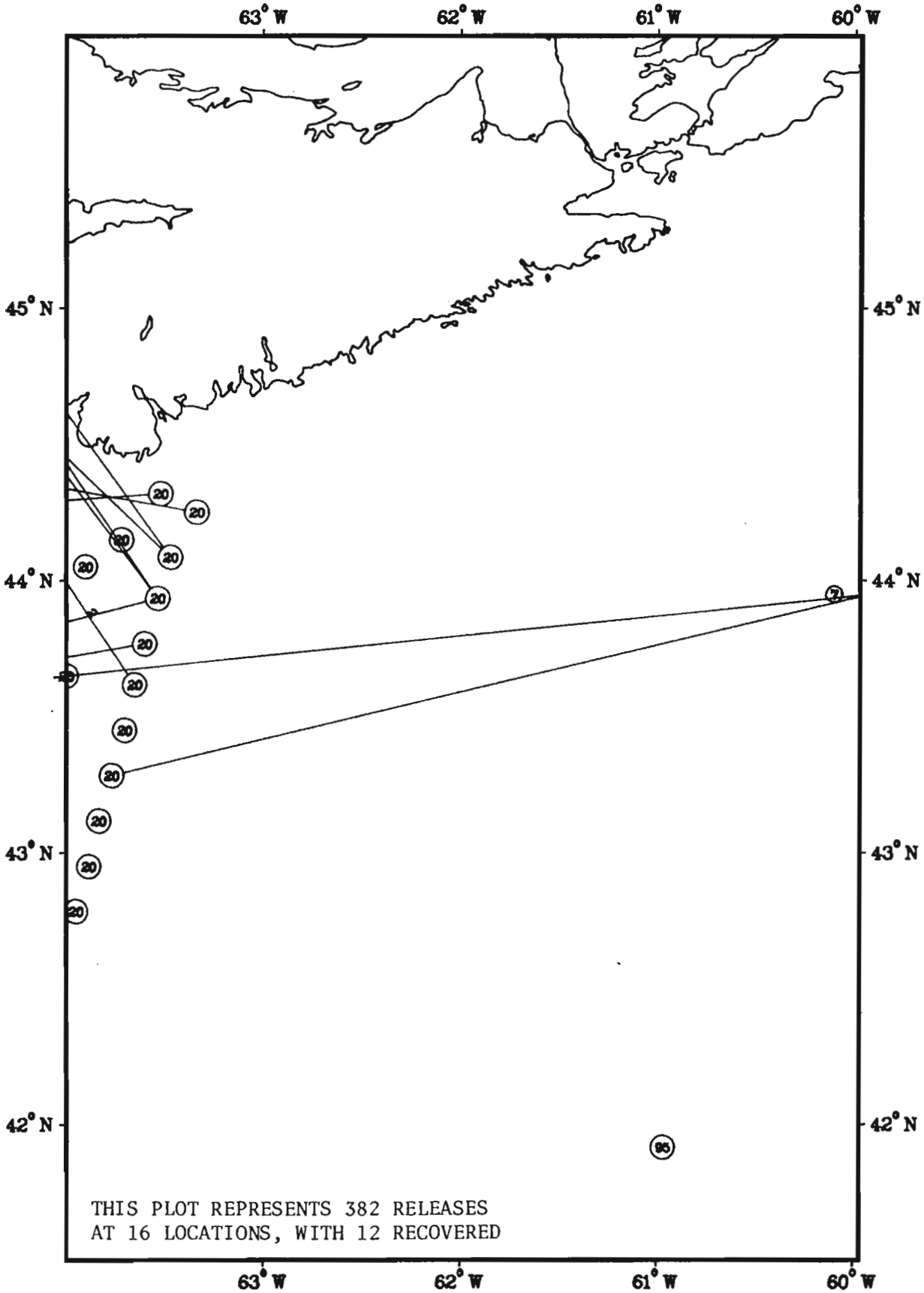

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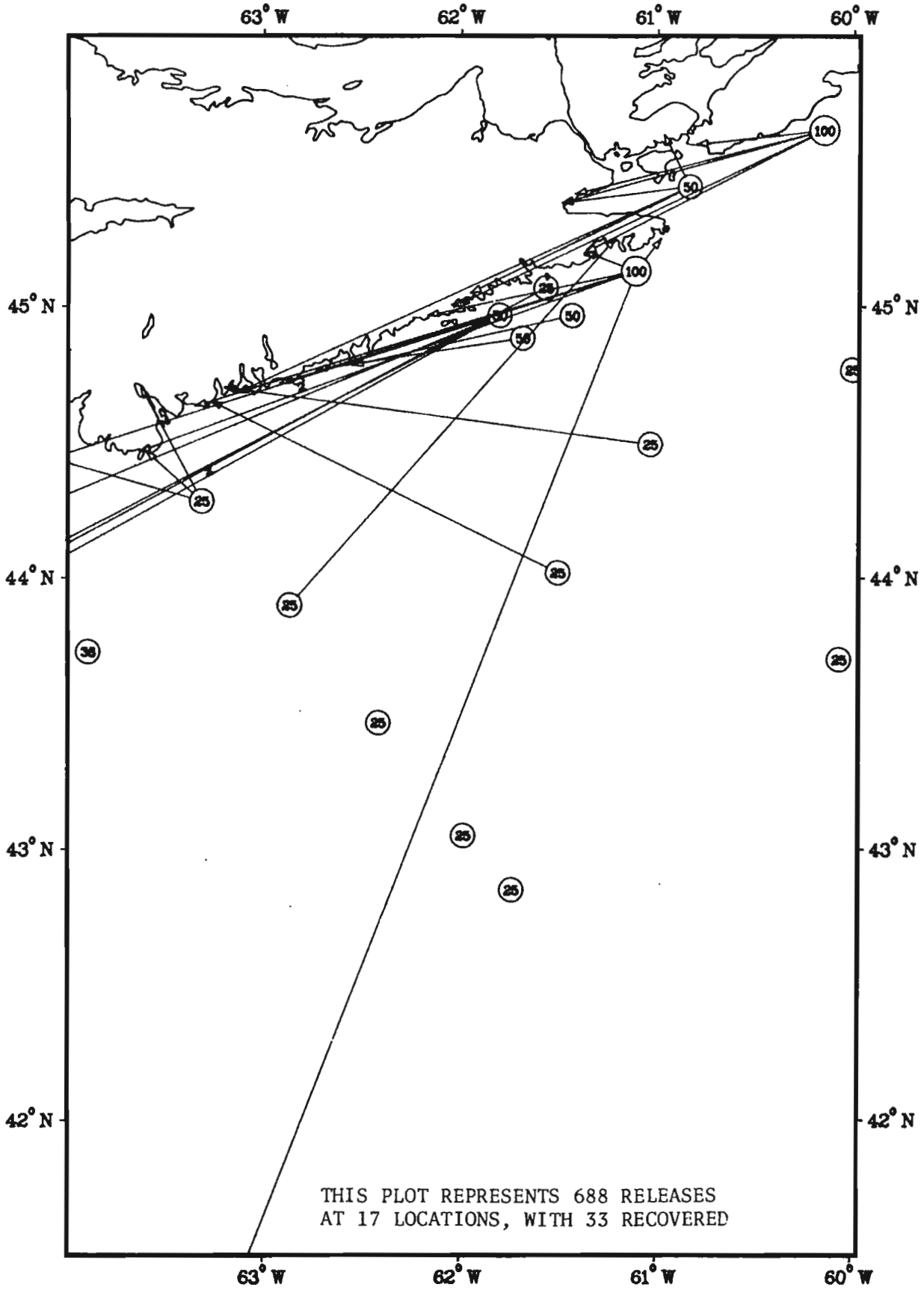

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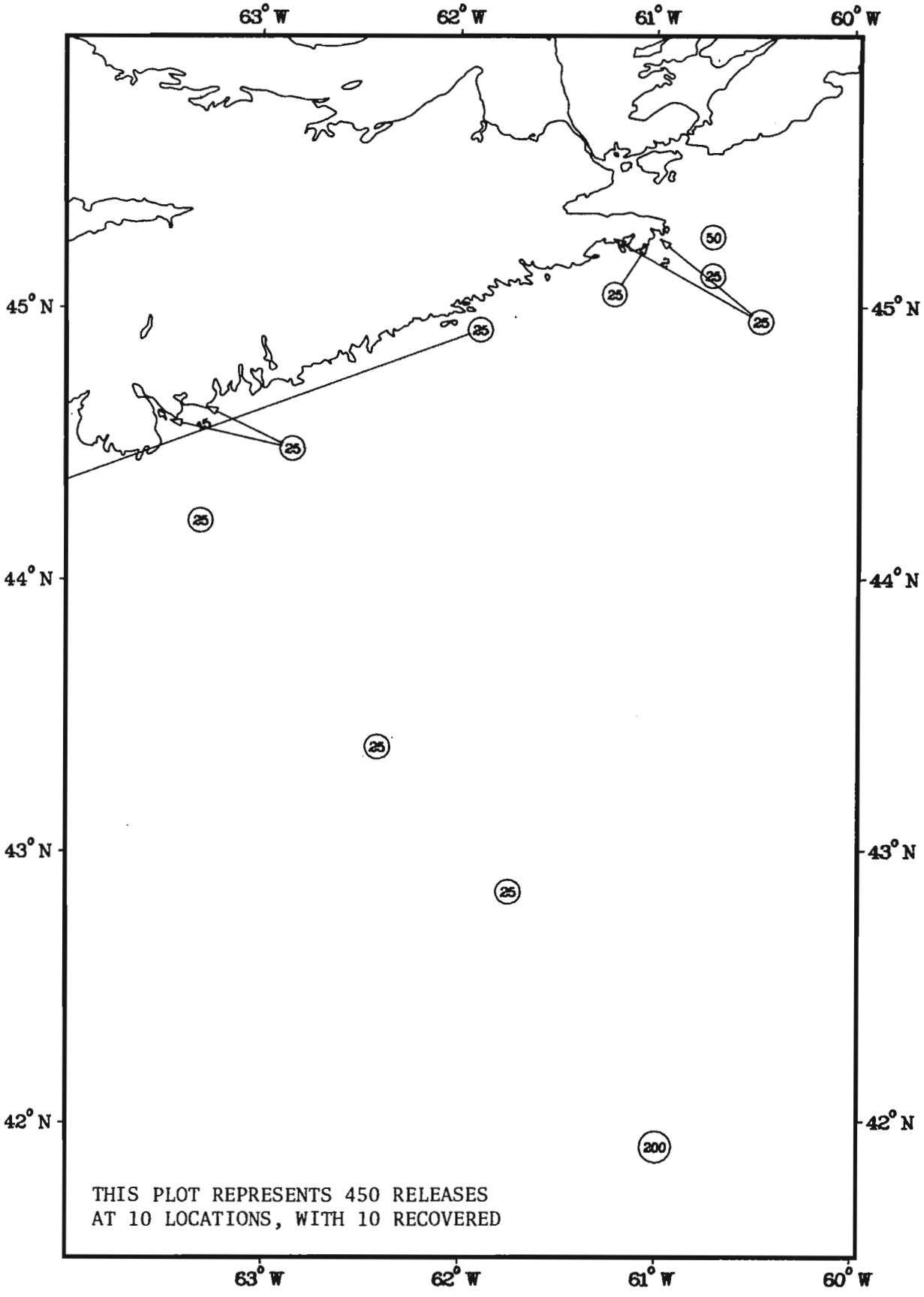

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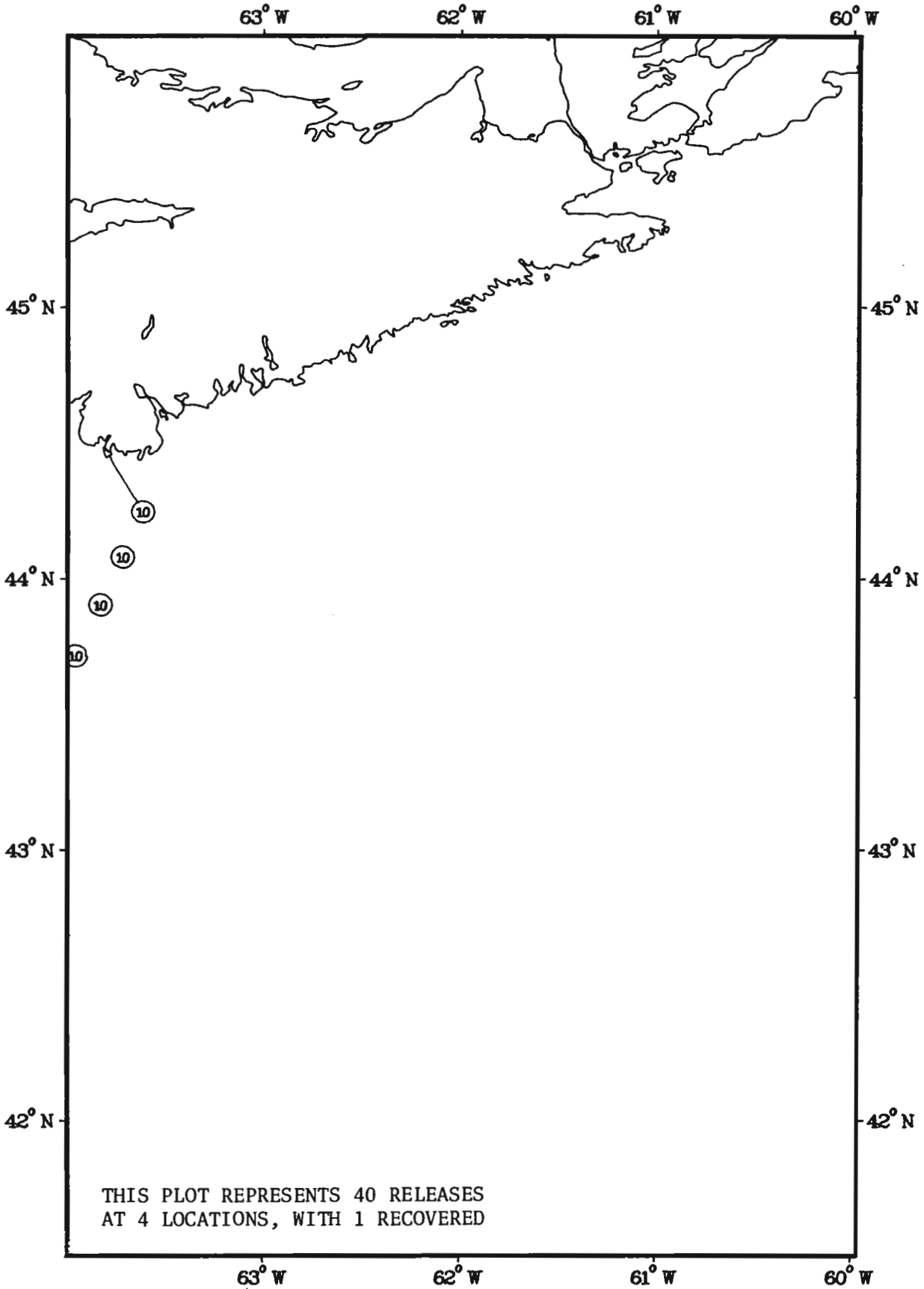

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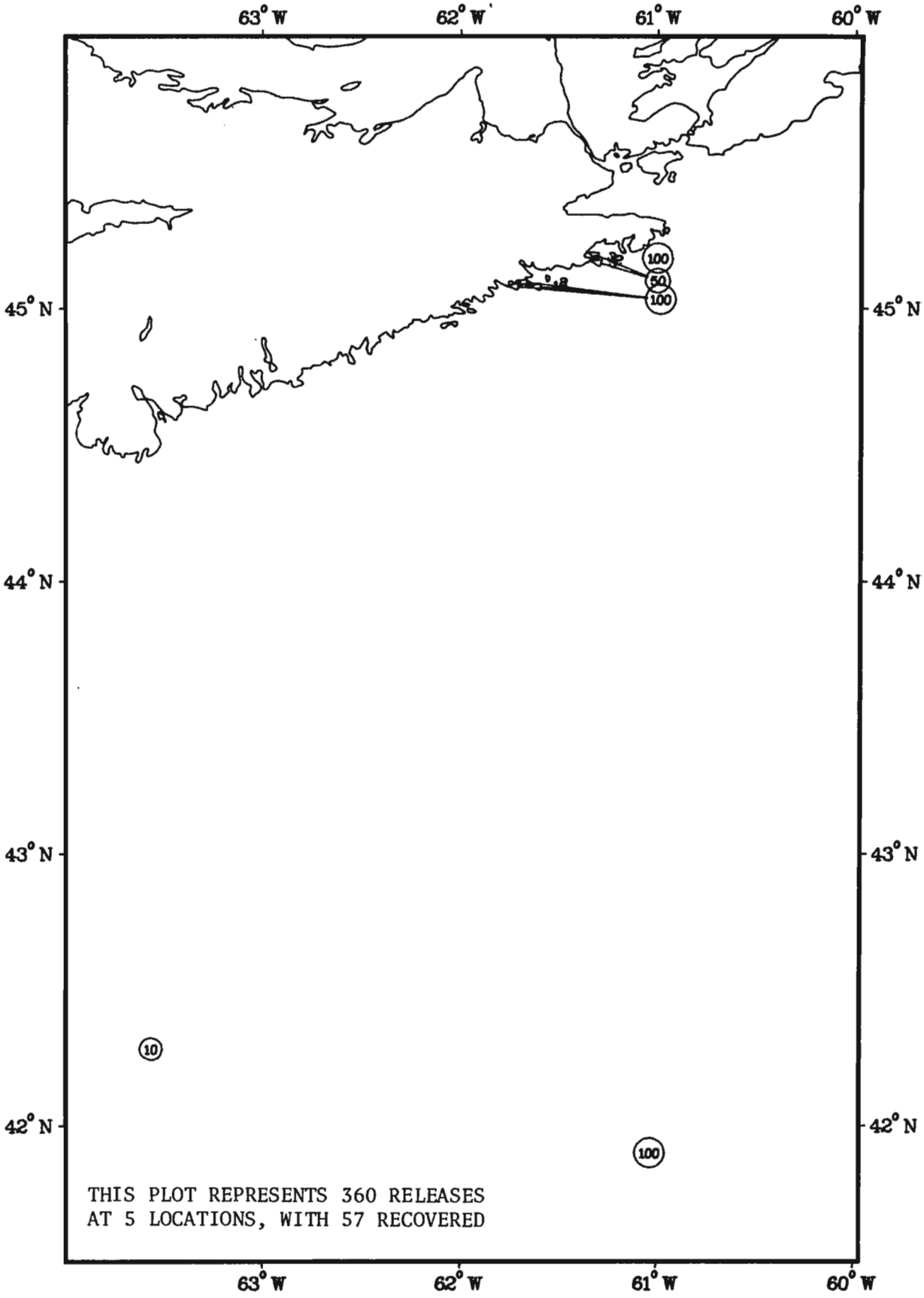

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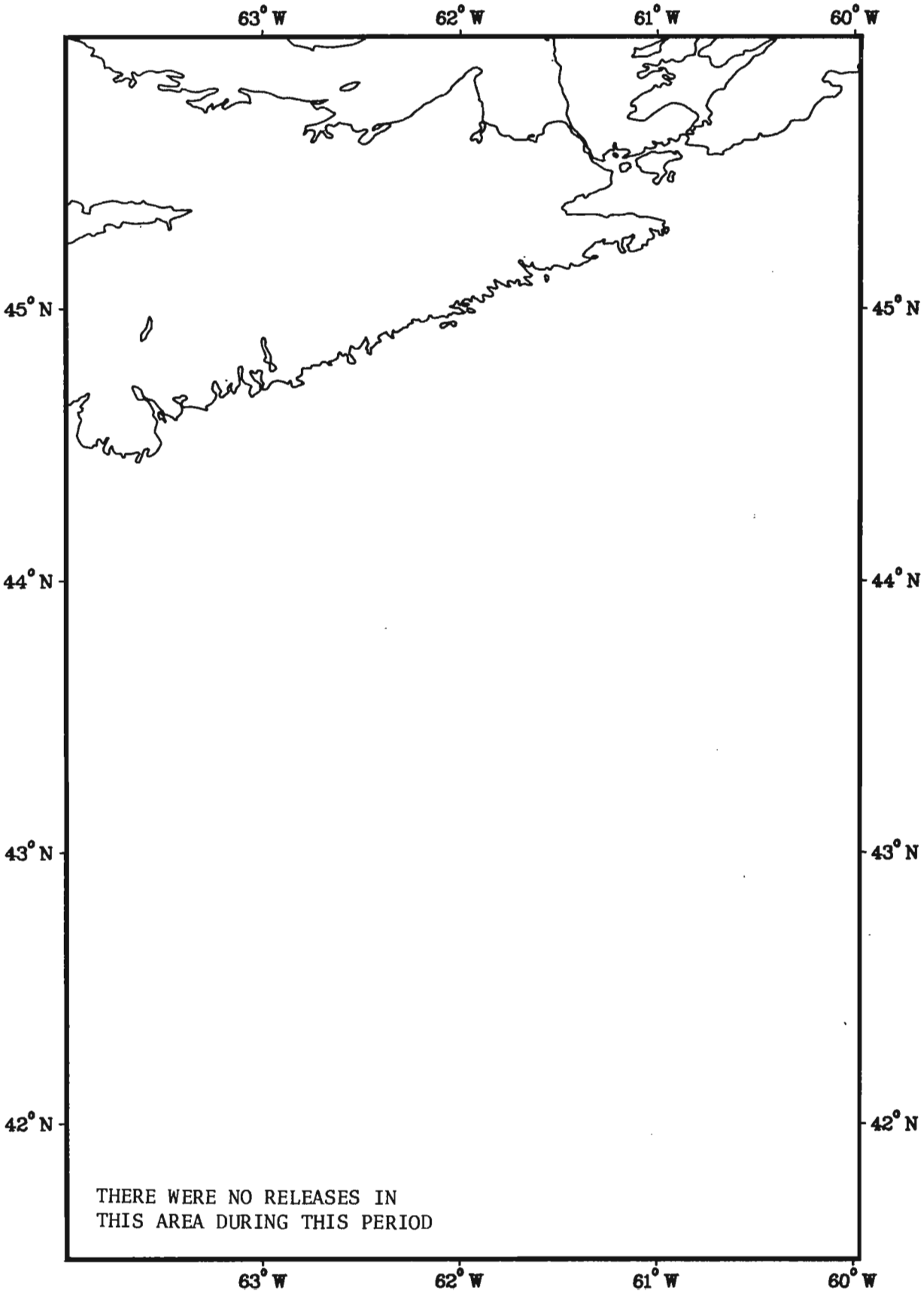
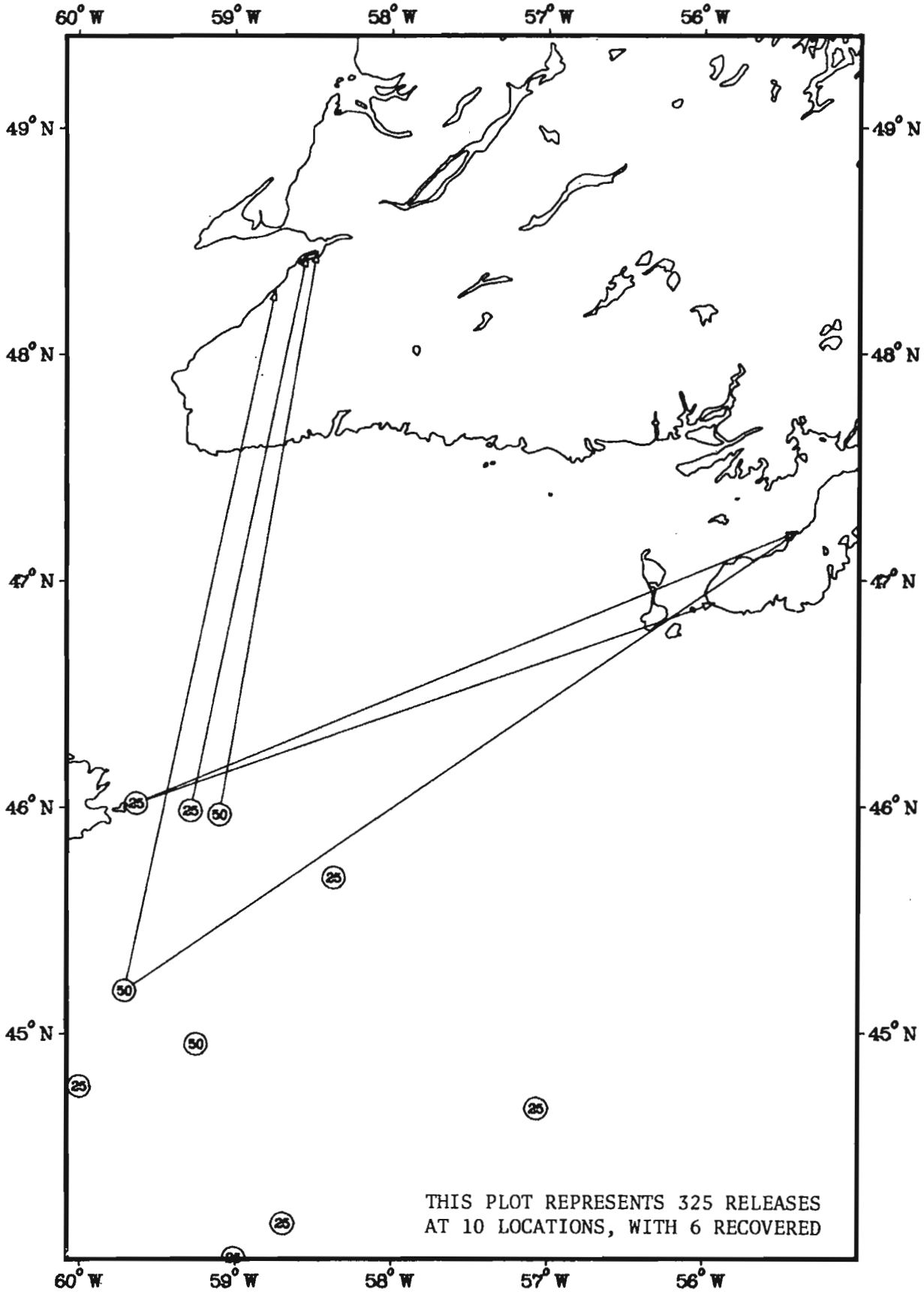
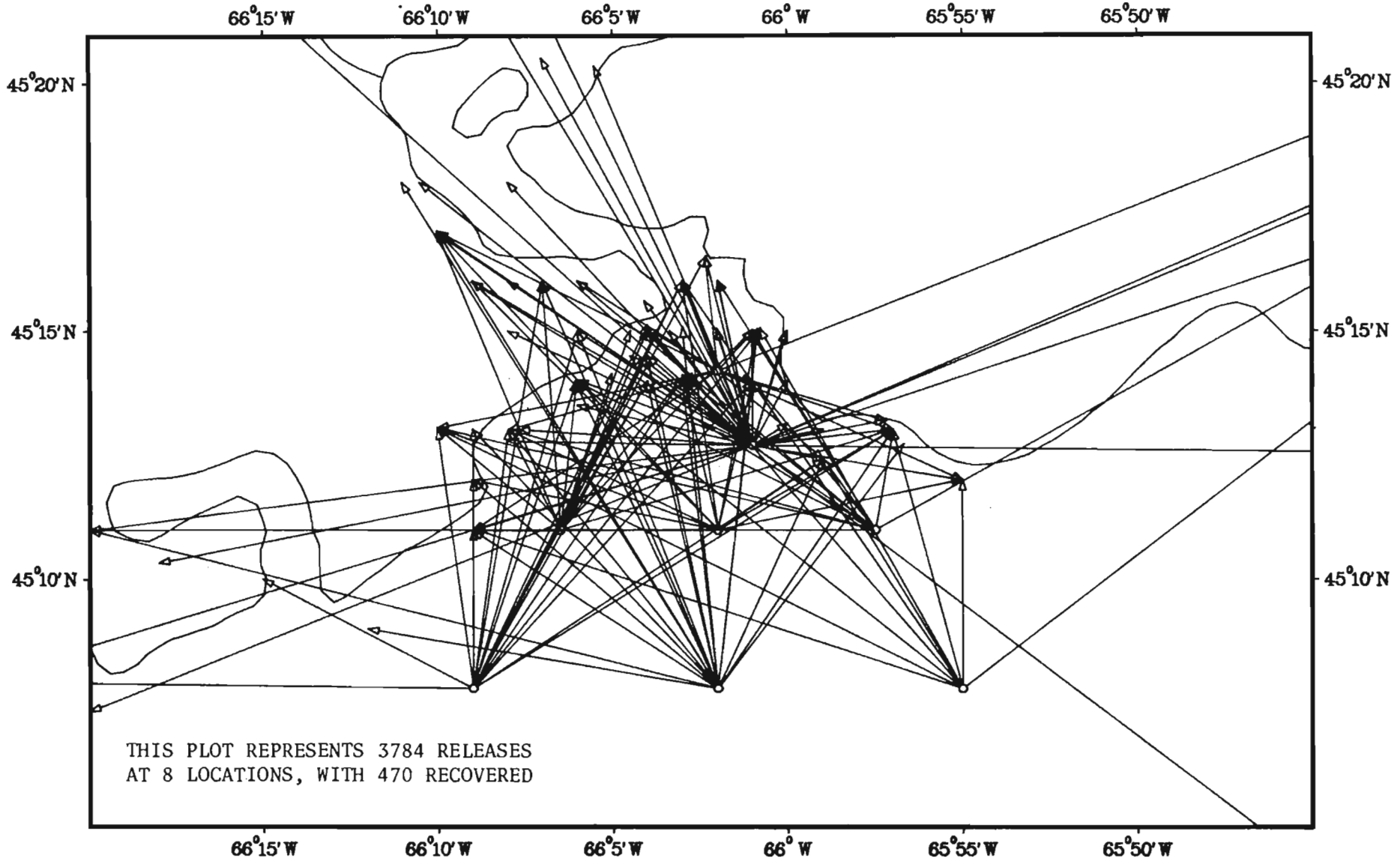


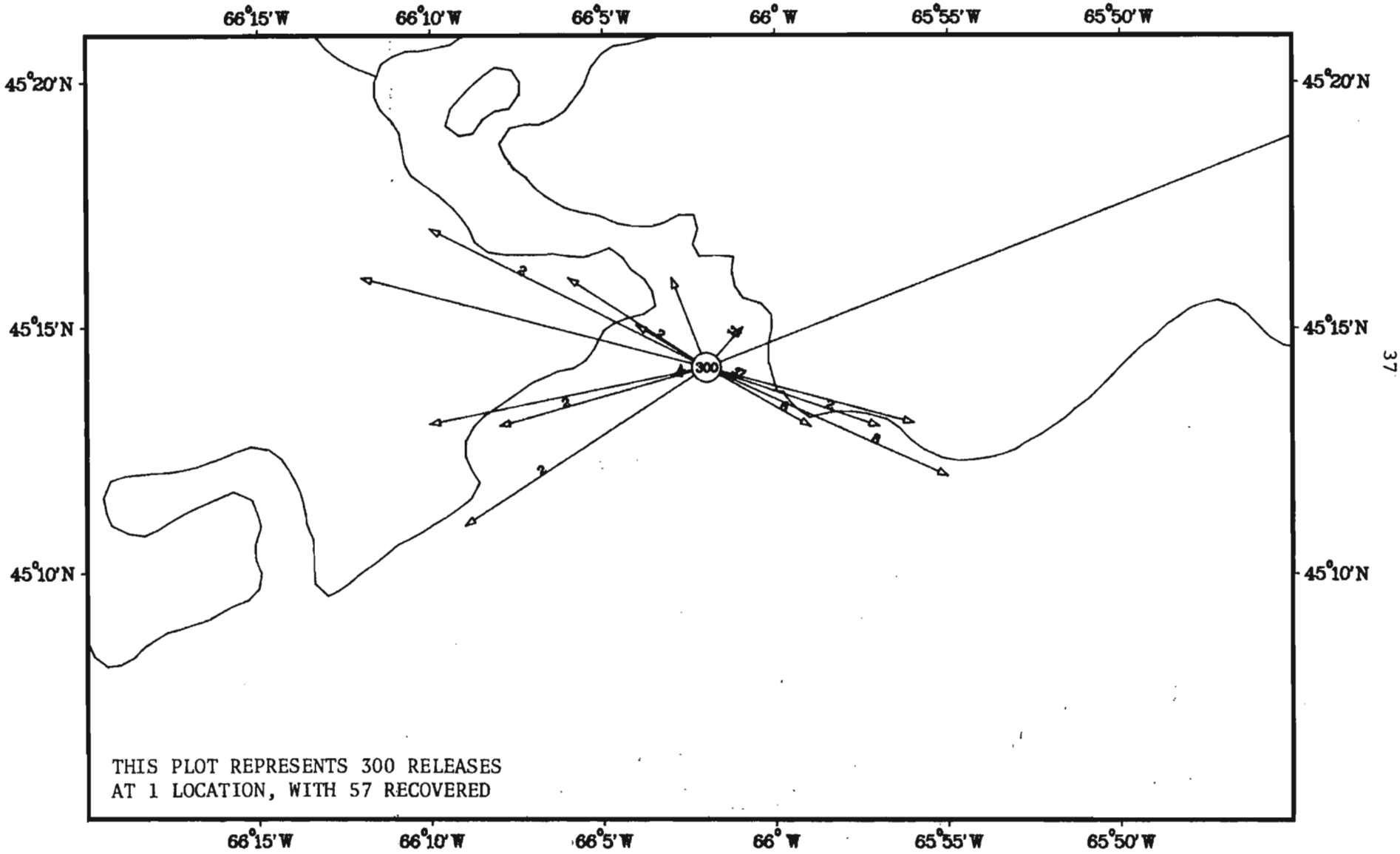
CABOT STRAIT – SURFACE DRIFT TRACKS



SAINT JOHN HARBOUR – SEABED DRIFT TRACKS



SEABED DRIFTERS AT INDIVIDUAL GRID SITES



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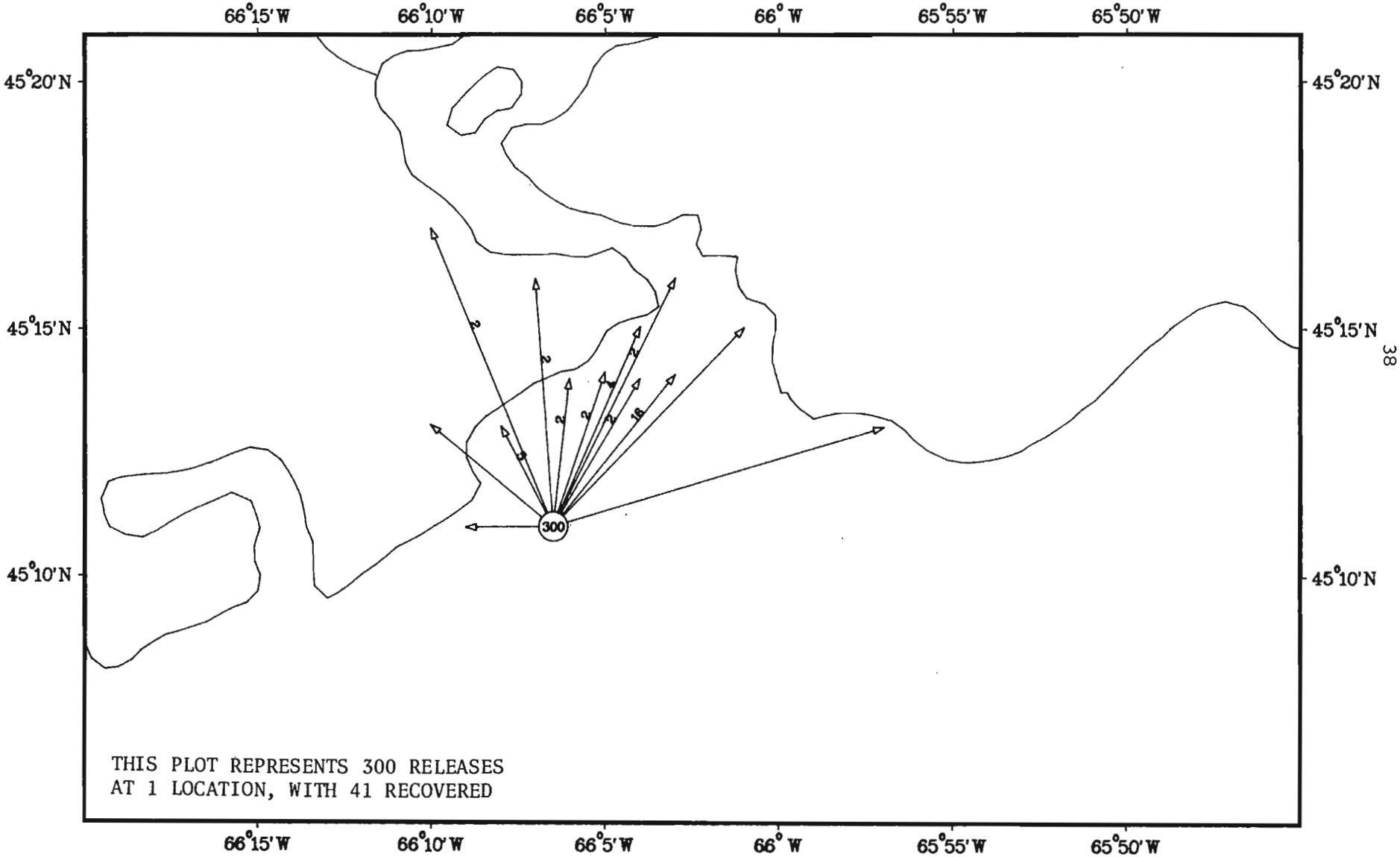

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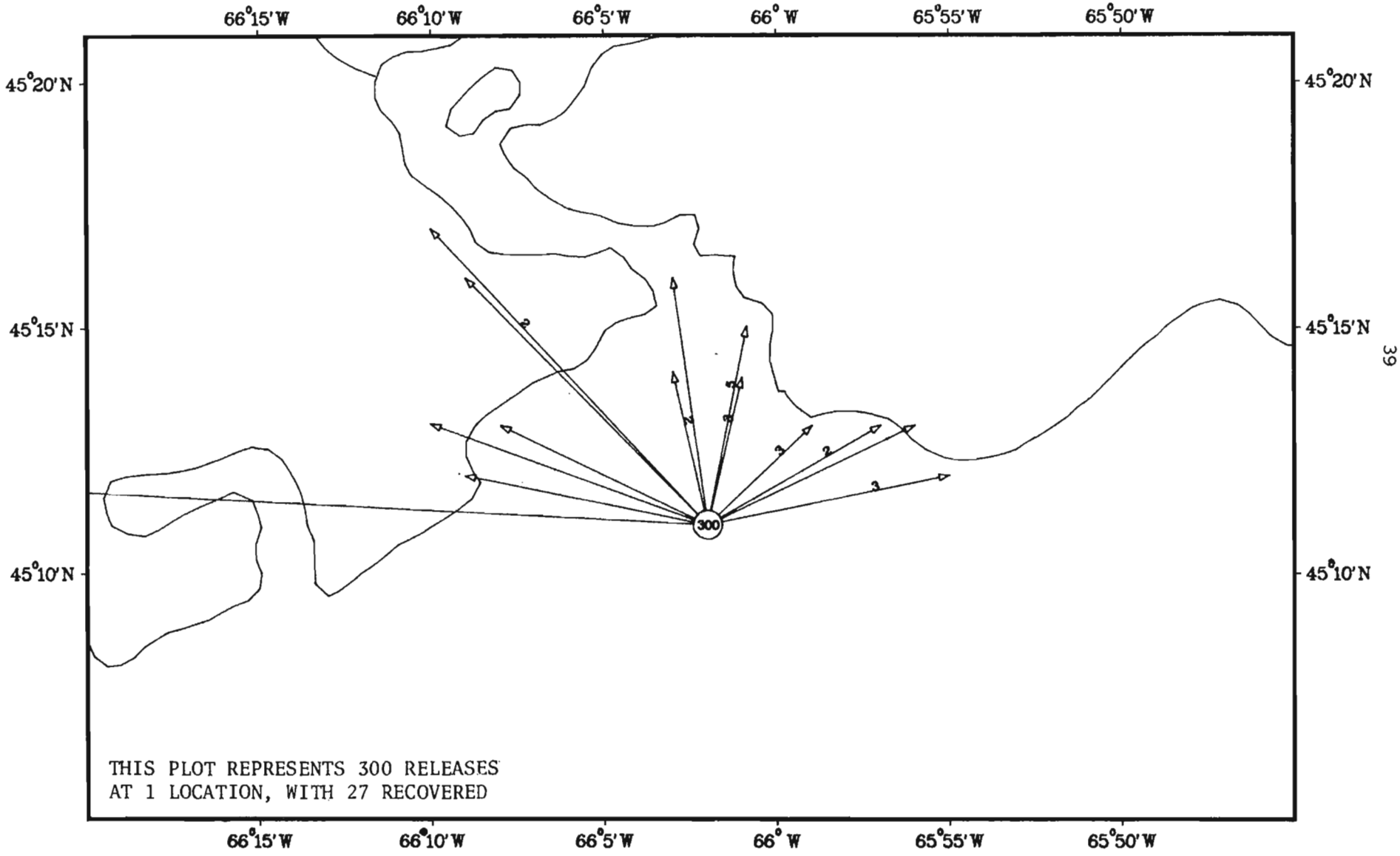

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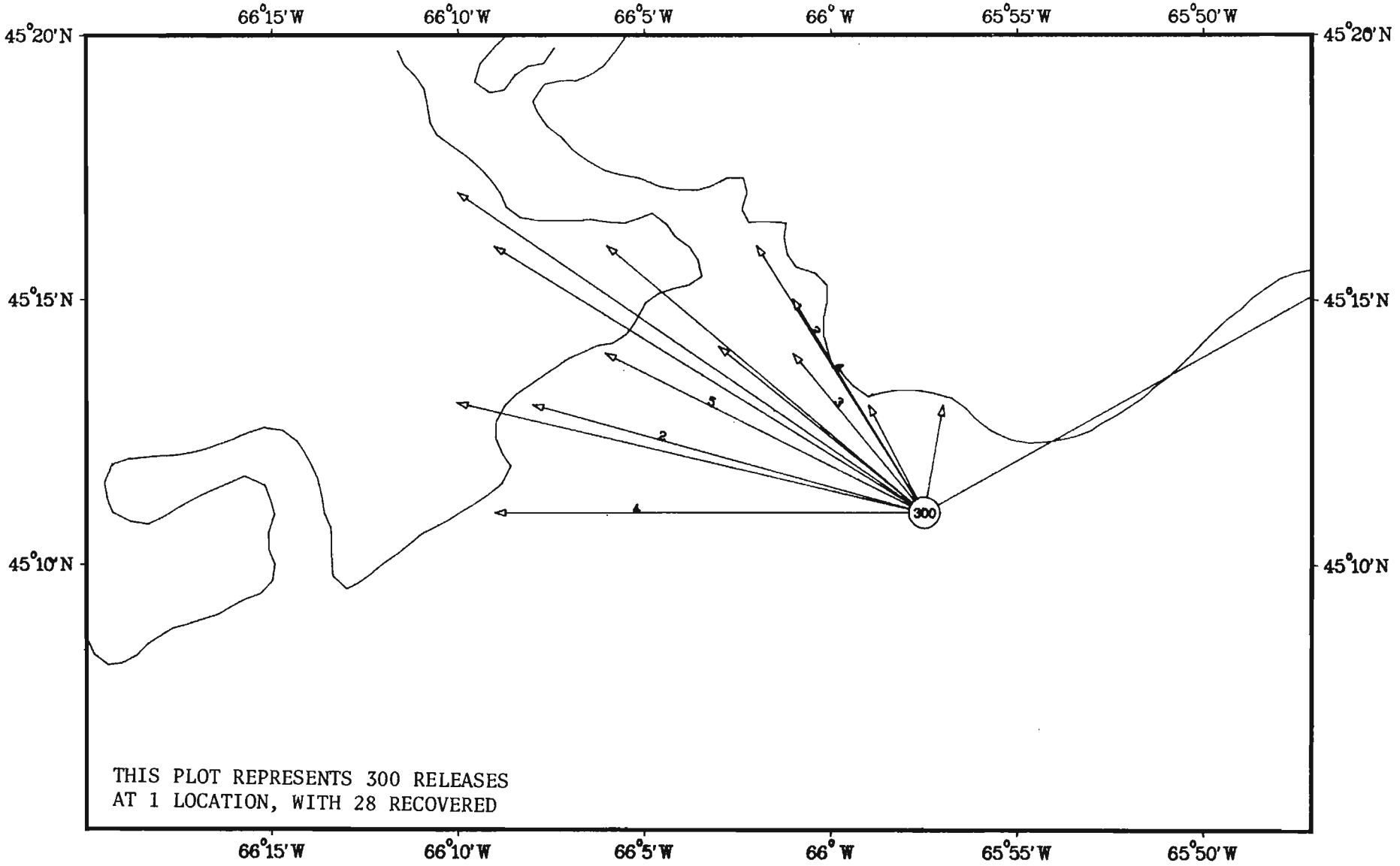

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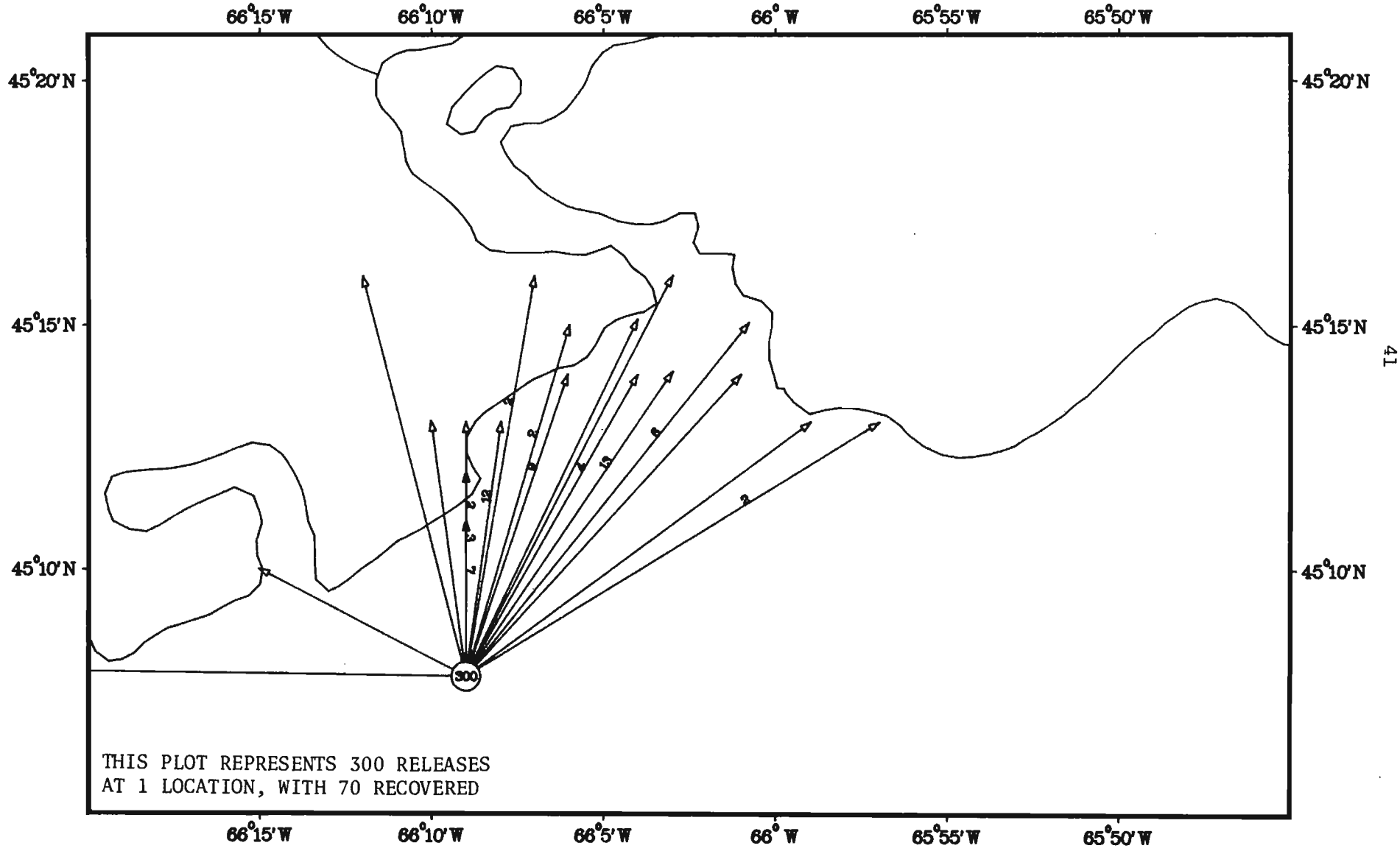

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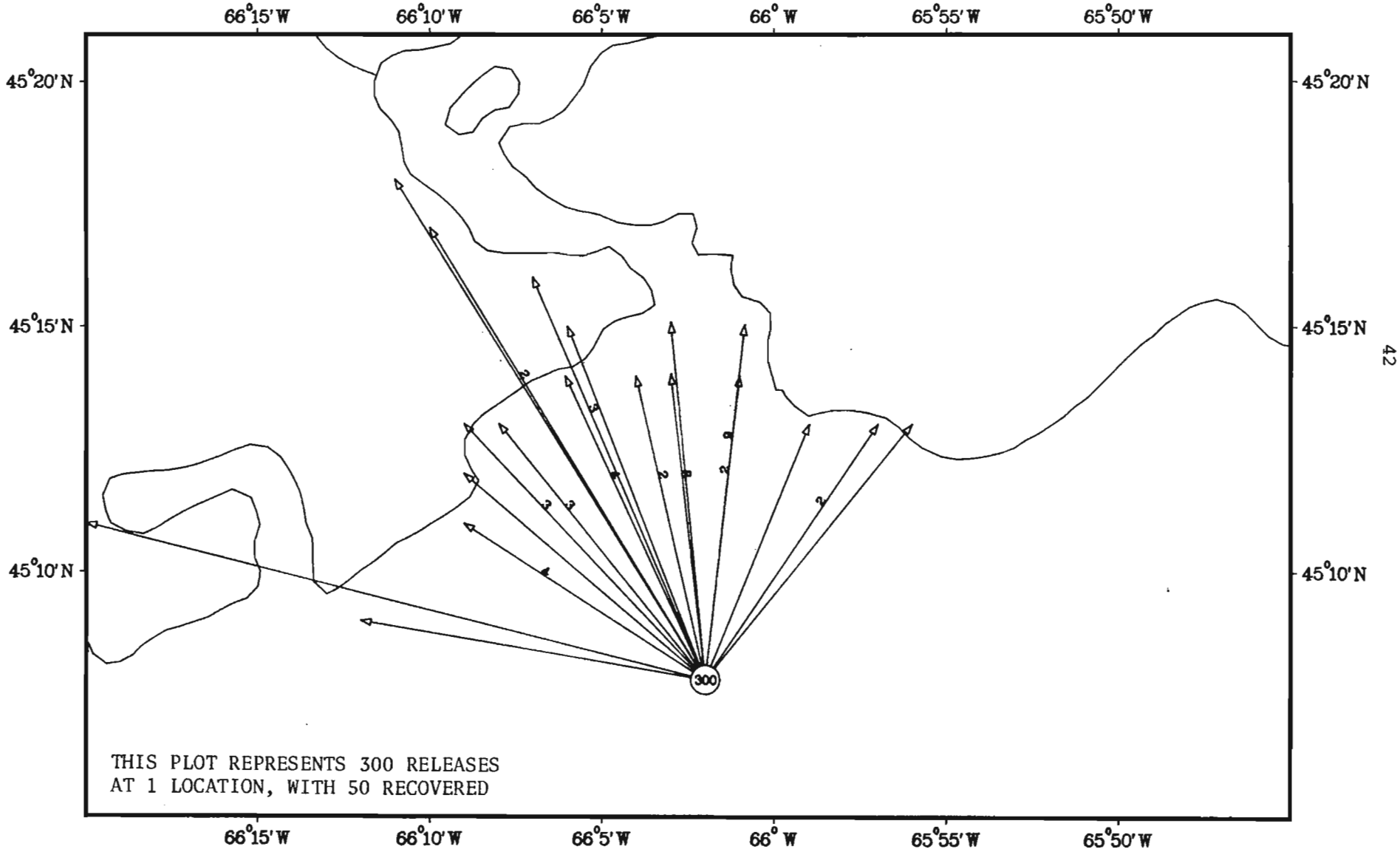
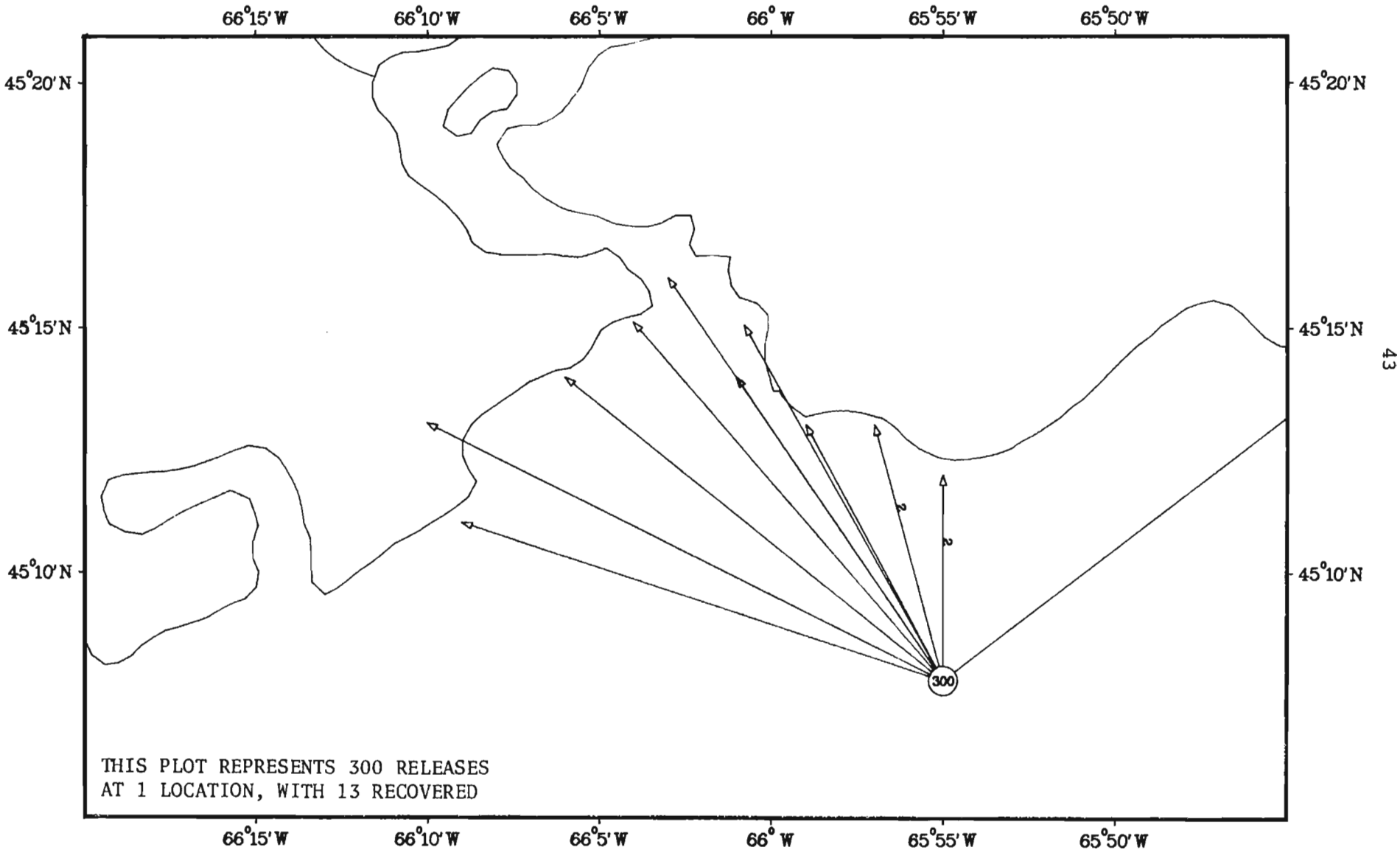
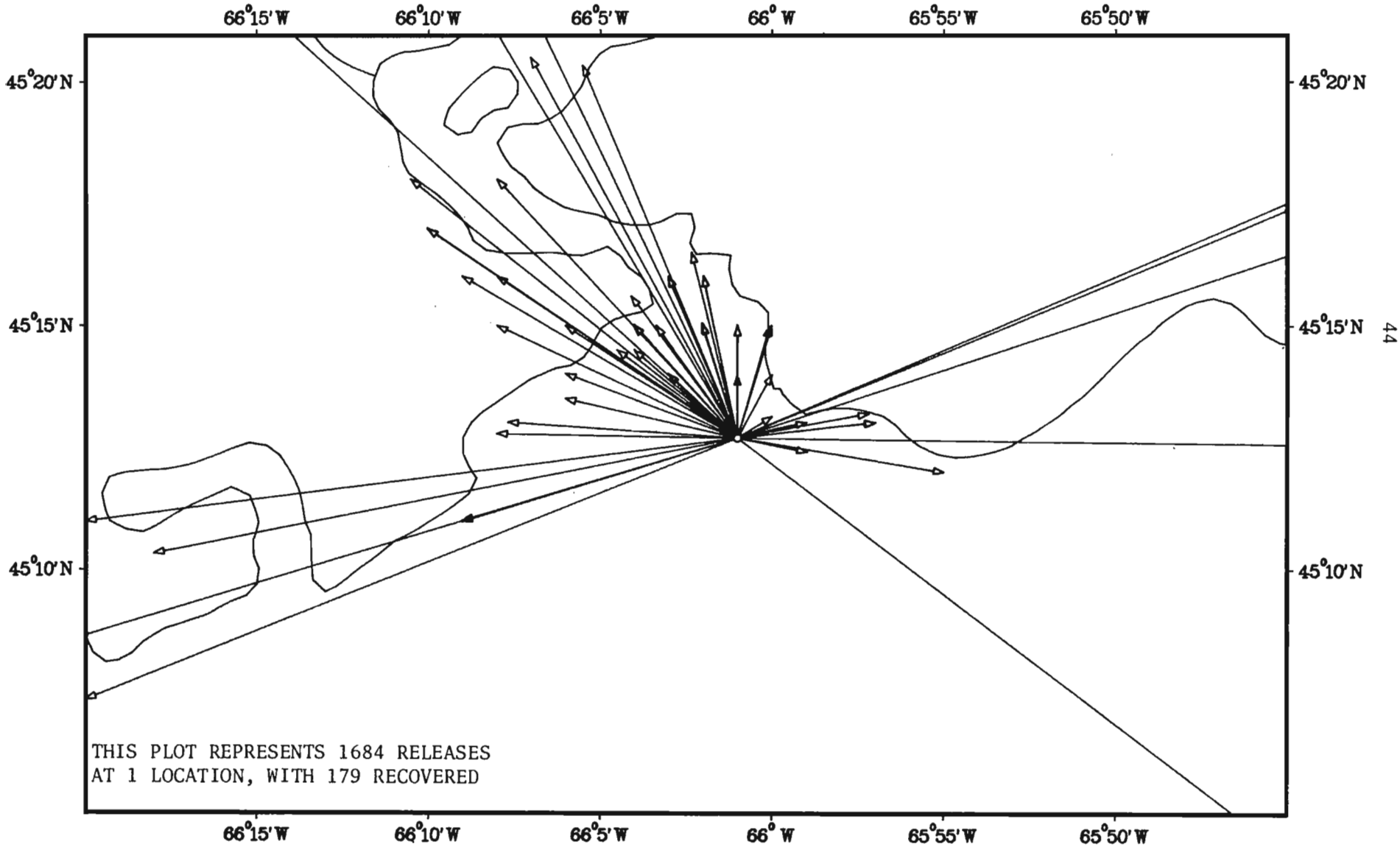


SEABED DRIFTERS AT INDIVIDUAL GRID SITES



SAINT JOHN DUMPSITE – SEABED DRIFT TRACKS



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Reference

Bezanson, D., and T. Deveau. 1981. An ocean drifter clearing house. Atlantic Oceanography Laboratory. Report Series BI-R-81-16. 45 pp.