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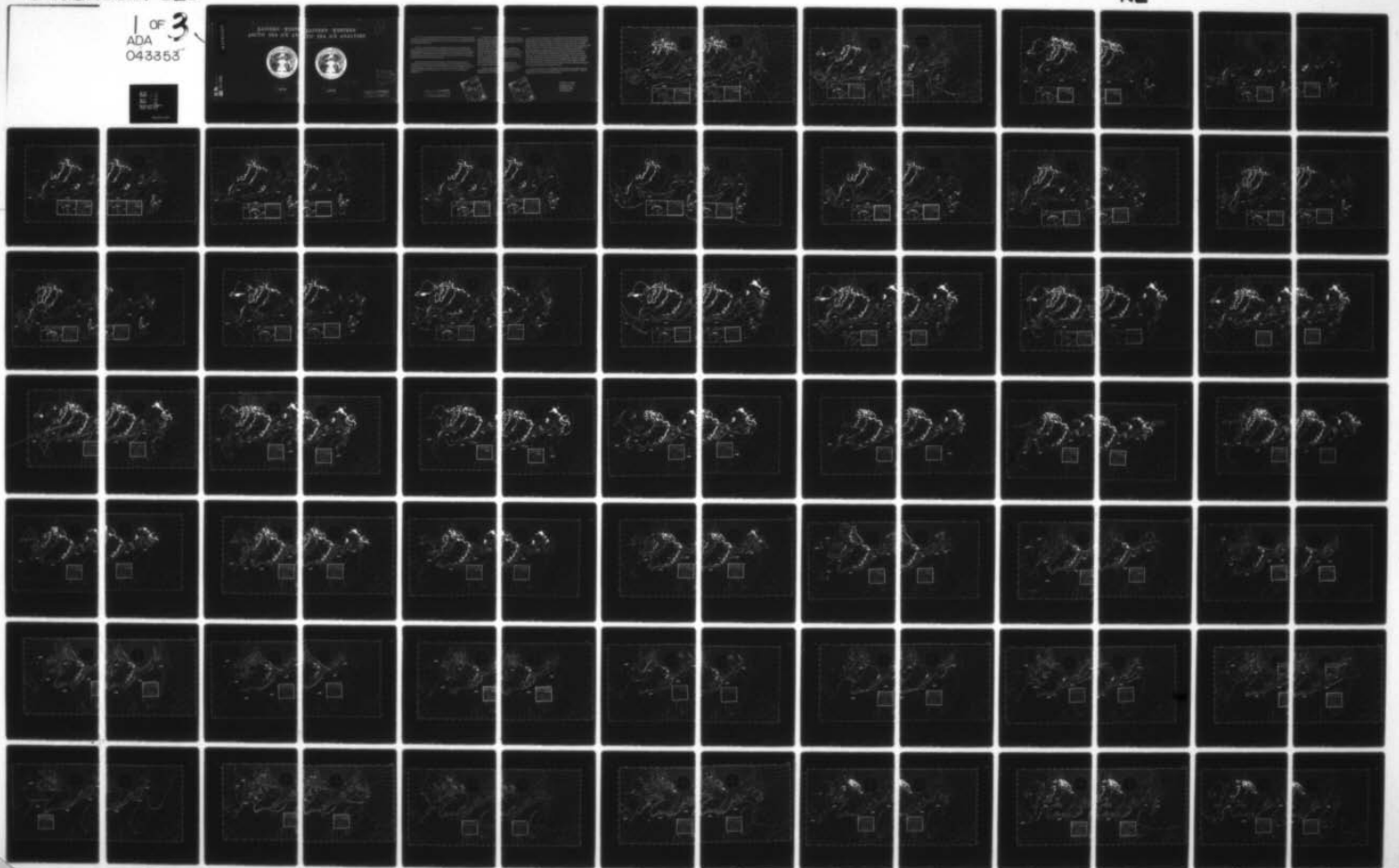
FLEET WEATHER FACILITY SUITLAND MD
EASTERN-WESTERN ARCTIC SEA ICE ANALYSES. (U)
1976

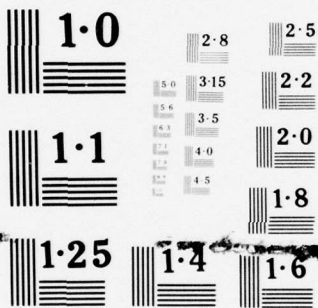
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1 OF 3
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NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART

AD A 043353

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EASTERN - WEST
ARCTIC SEA ICE AN



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EASTERN - WESTERN
ANTARCTIC SEA ICE ANALYSES.

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FOREWARD

The U.S. Navy has a long and colorful history of polar exploration and currently is an active participant in the growing national activity in the Arctic and Antarctic. The strategic importance and increased demand for the natural resources of these areas has resulted in a greater requirement for environmental information.

Until a few years ago, reliable sea ice information in the polar regions was based on a relatively few shore station and ship reports augmented by limited aerial reconnaissance data. These data were further restricted to the relatively small areas observed primarily during the ship operating season. The principal aim of this publication is to provide operators and researchers with historical weekly hemispheric analyses of sea ice conditions derived principally from satellite imagery supplemented by conventional observations.

The advent of high resolution satellite imagery combined with the ground truth of conventional observations has only recently provided description of the polar ice fields on a semi-synoptic scale. Since 1970, the Fleet Weather Facility at Suitland, Maryland has prepared operational analyses and forecasts of sea ice conditions in the Arctic and Antarctic for the Department of Defense and various other users. The results of these initial efforts are contained herein.

The charts were constructed from satellite imagery and conventional data rather than the current analysis was compared with available climatology, radiometer imagery, visual and infrared (NOAA) satellites and microwave radiometer data as the primary data sources. Limited data from the Meteorological Satellite Program were also utilized. The 19.35 GHz microwave radiometer on NIMBUS V provided an ice edge detection source during the polar night and during seasons with adequate light, visible and infrared with 1 KM resolution and the data from NOAA 2, 3, and 4 satellites were also used due to seasonally small water-ice areas.

The user of this publication is encouraged to contact the effort prepared for operational use regarding any aspect of the analysis.

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FOREWARD

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regions was based on a
erial reconnaissance data.
red primarily during the ship
operators and researchers
red principally from satellite

The charts were constructed by Navy ice analysts under operational time constraints from satellite imagery and conventional data. Reanalysis with late data was not normally attempted; rather the current analysis was prepared incorporating this to the extent possible. The analysis was compared with available climatology in an attempt to eliminate gross errors. Scanning radiometer imagery, visual and infrared, from the National Oceanic and Atmospheric Administration (NOAA) satellites and microwave radiometer data from the NIMBUS V research satellite were the primary data sources. Limited use of the Earth Resources LANDSAT and Defense Meteorological Satellite Program (DMSP) imagery as well as conventional observations were utilized. The 19.35 GHZ microwave radiometer with 25 kilometer (KM) resolution aboard NIMBUS V provided an ice edge and limited inner pack conditions. This was the basic data source during the polar night and over areas dominated by persistent cloud cover. During the seasons with adequate light, visual data from the Very High Resolution Radiometer (VHRR) with 1 KM resolution and the 4 KM resolution data from the Scanning Radiometer aboard NOAA 2, 3, and 4 satellites were utilized. Infrared radiometer data was of limited value primarily due to seasonally small water-ice temperature differences.

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The user of this publication is reminded that the information presented reflects an initial effort prepared for operational use and should temper his application accordingly. Comments regarding any aspect of the analysis effort are welcomed.

VINCENT W. ROPER
Commander, U. S. Navy
Commanding Officer
Fleet Weather Facility
Suitland, Maryland

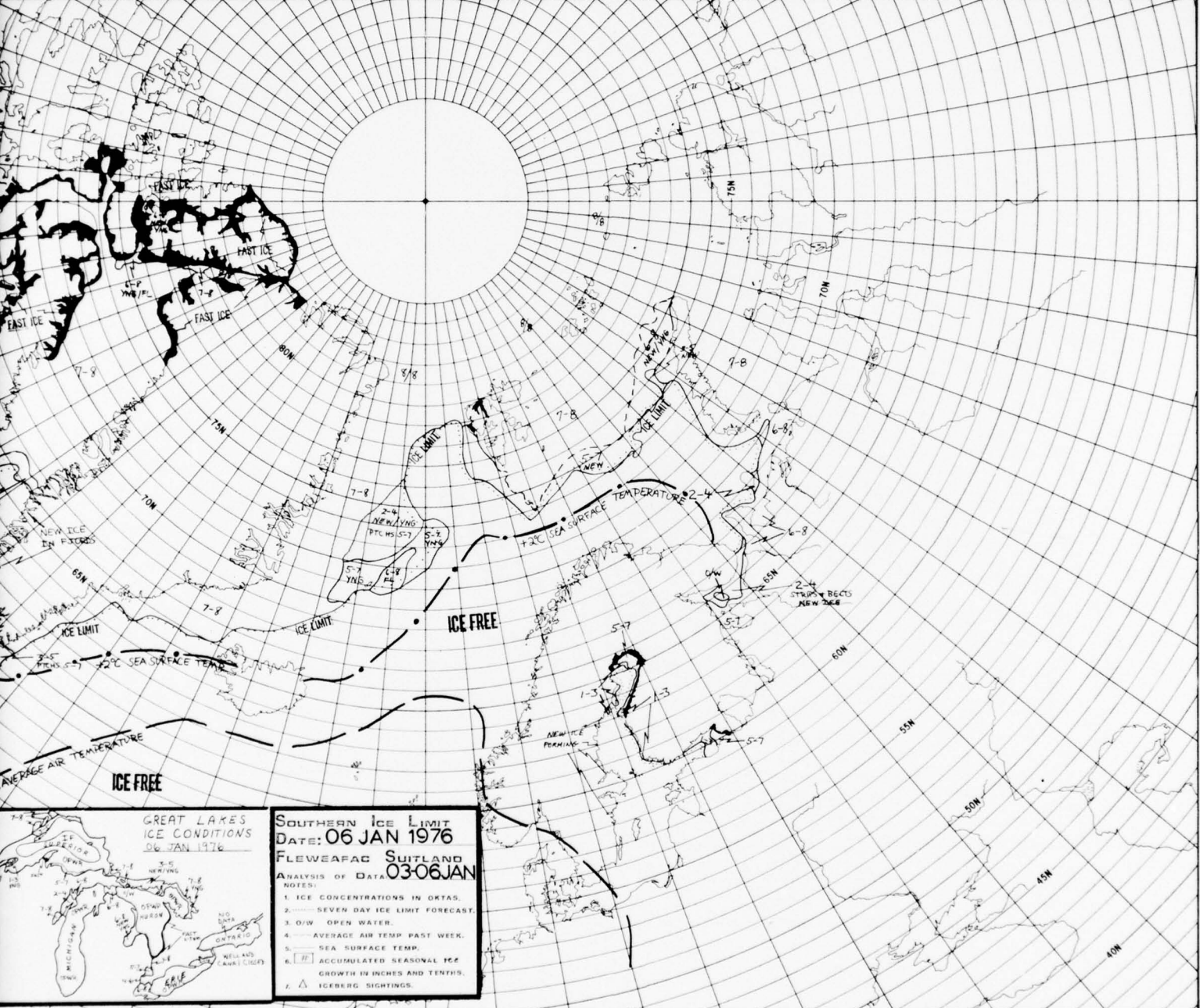
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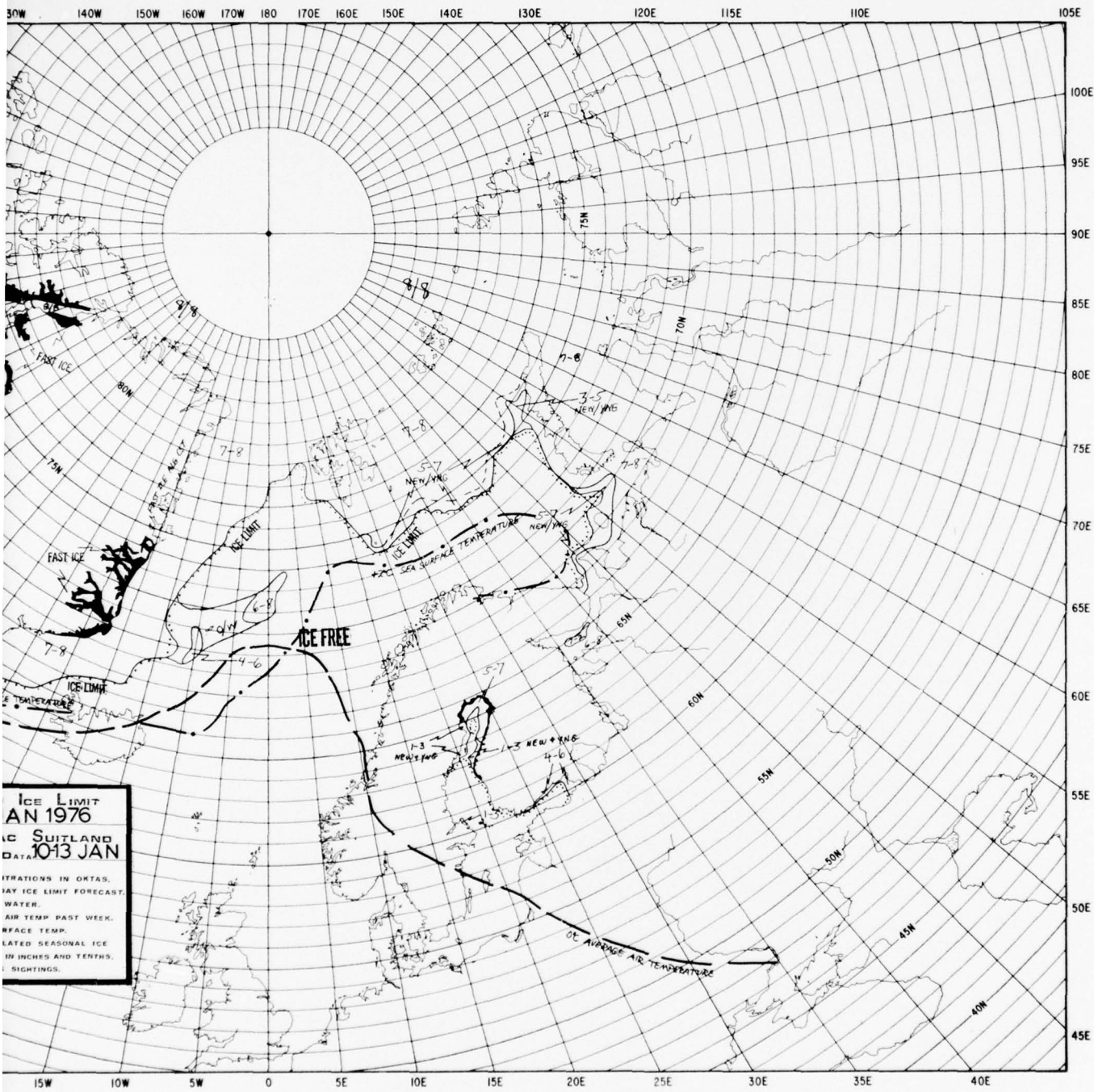


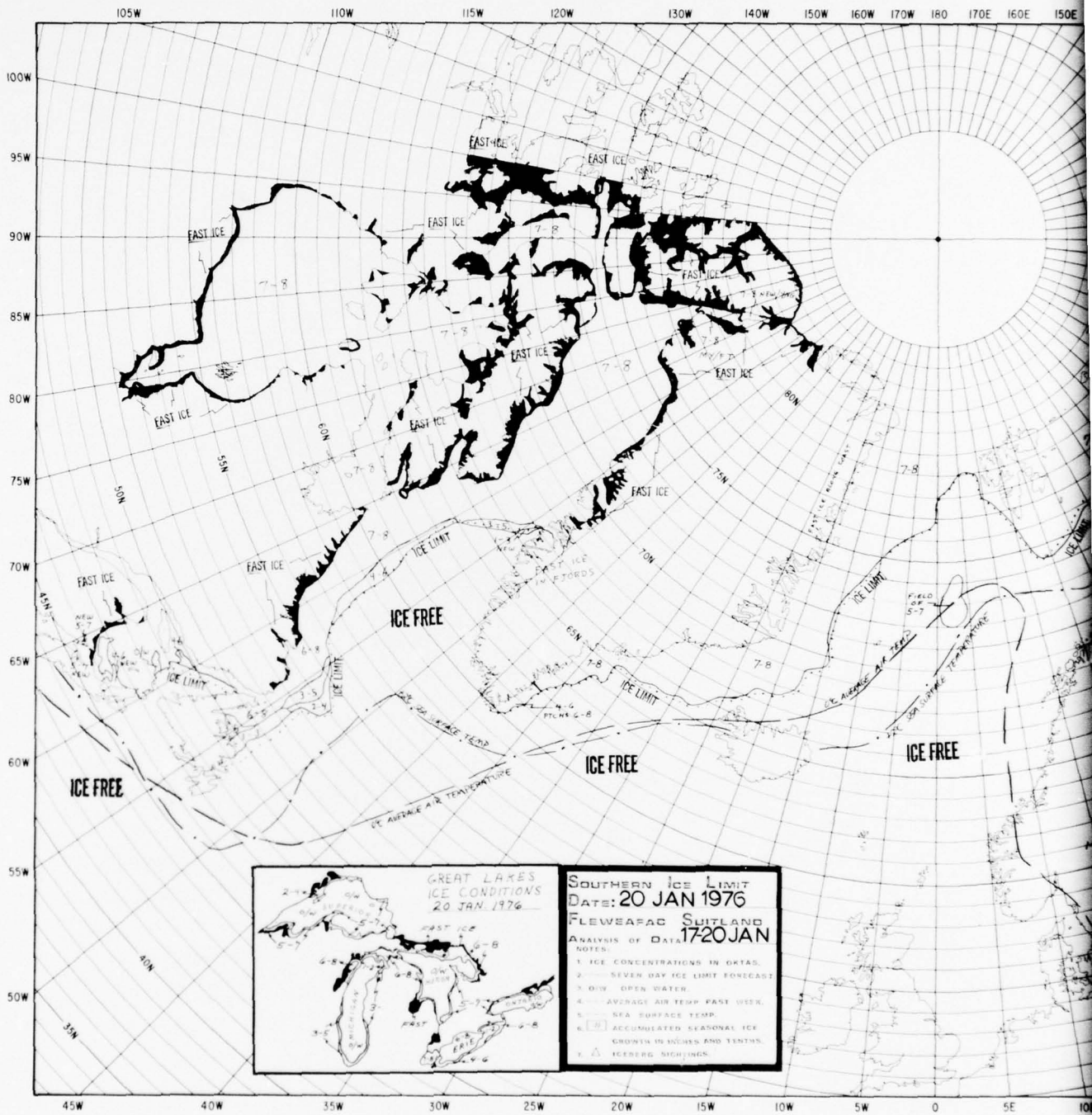
GREAT LAKES
ICE CONDITIONS
06 JAN 1976

Southern Ice Limit
DATE: 06 JAN 1976
FLEWEAFAC SUITLAND
03-06JAN
 ANALYSIS OF DATA
 NOTES:
 1. ICE CONCENTRATIONS IN ORTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

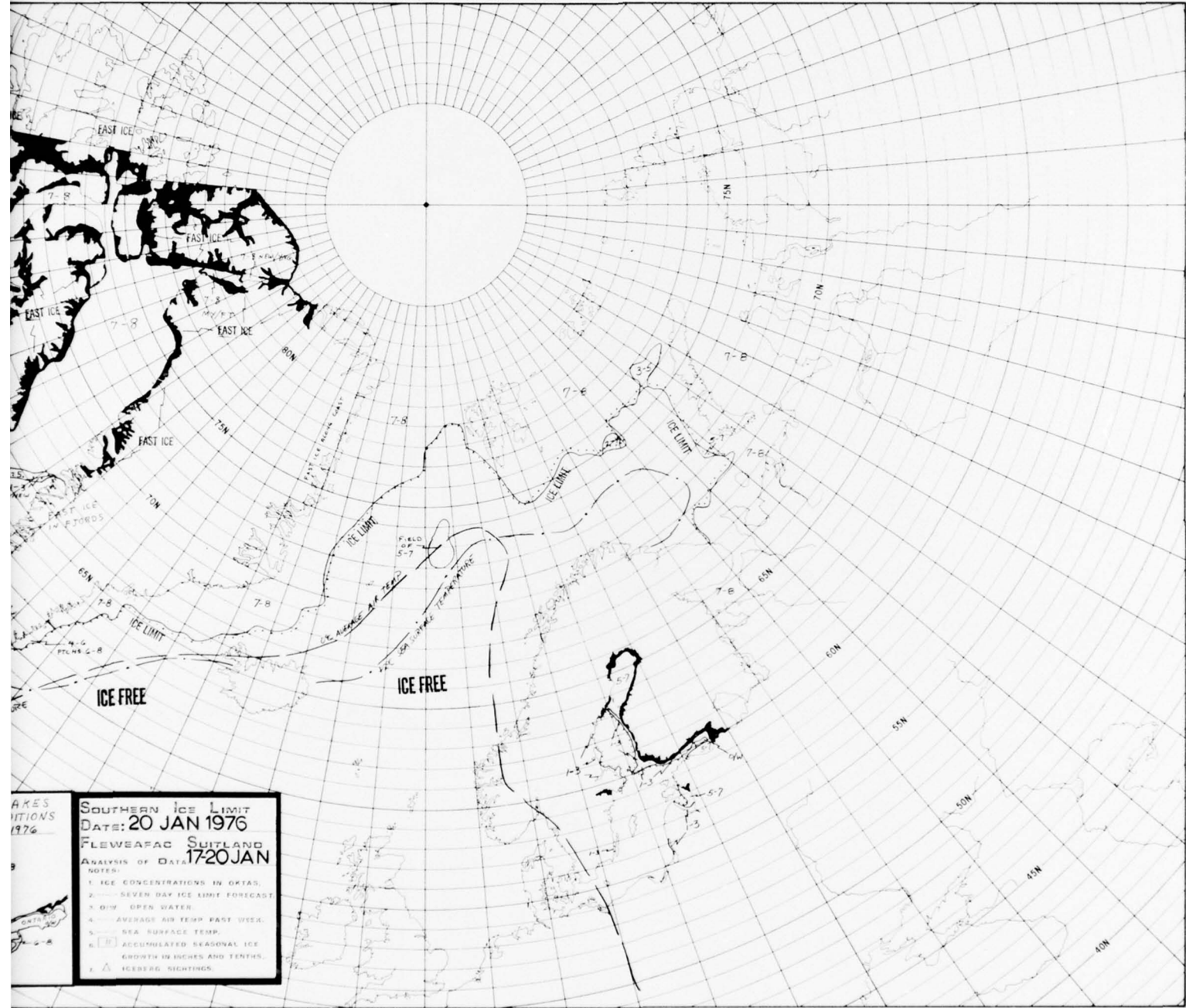
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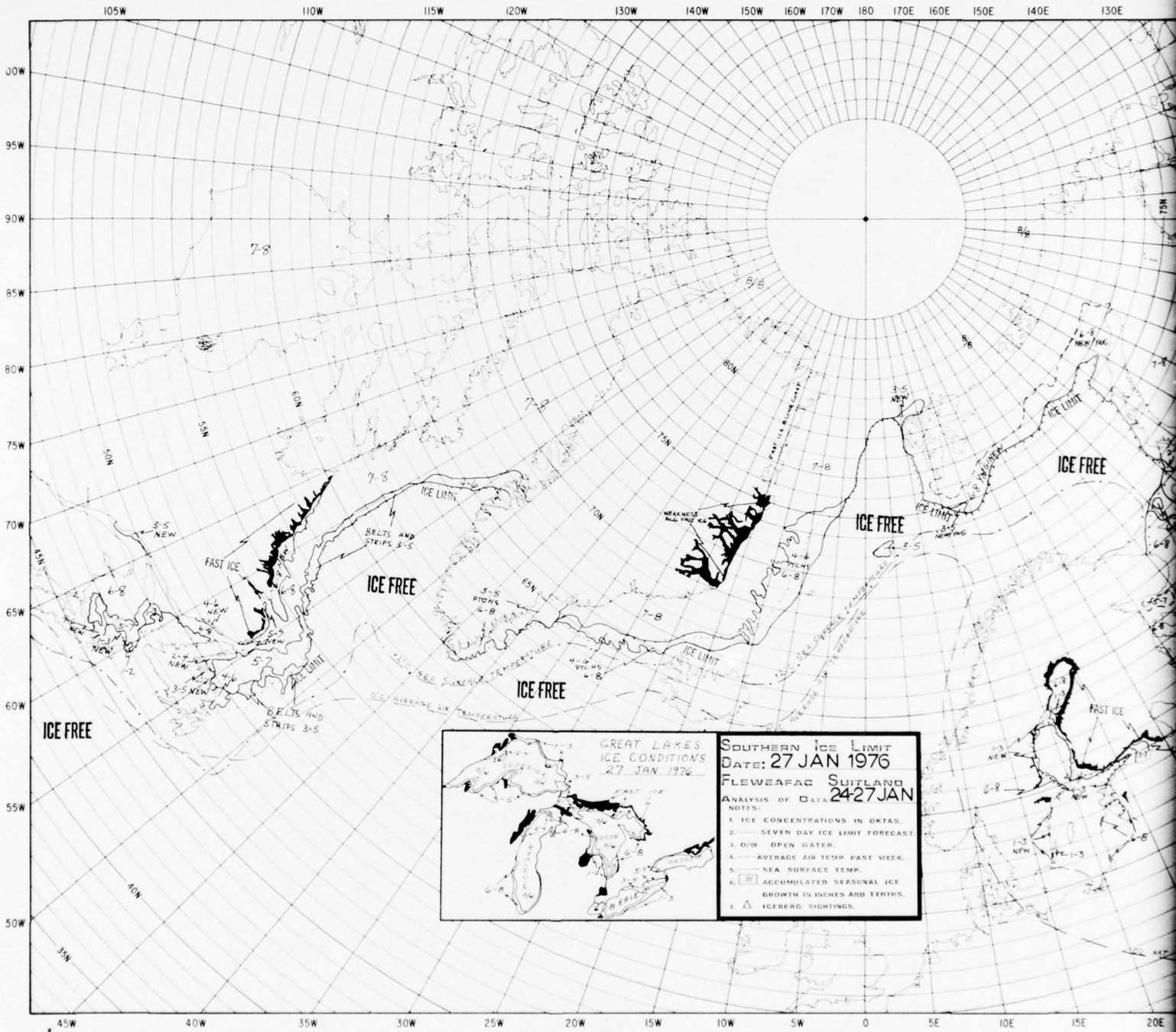
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SOUTHERN ICE LIMIT
 DATE: 20 JAN 1976
 FLEWEAFAC SUITLAND
 ANALYSIS OF DATA 17-20 JAN
 NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. --- SEVEN DAY ICE LIMIT FORECAST
 3. 01W OPEN WATER
 4. --- AVERAGE AIR TEMP EAST WIND
 5. --- SEA SURFACE TEMP.
 6. [] ACCUMULATED SEASONAL ICE
 GROWTH IN INCHES AND TENTHS.
 7. [] ICEBERG SIGHTINGS.

25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E



GREAT LAKES
ICE CONDITIONS
27 JAN 1976

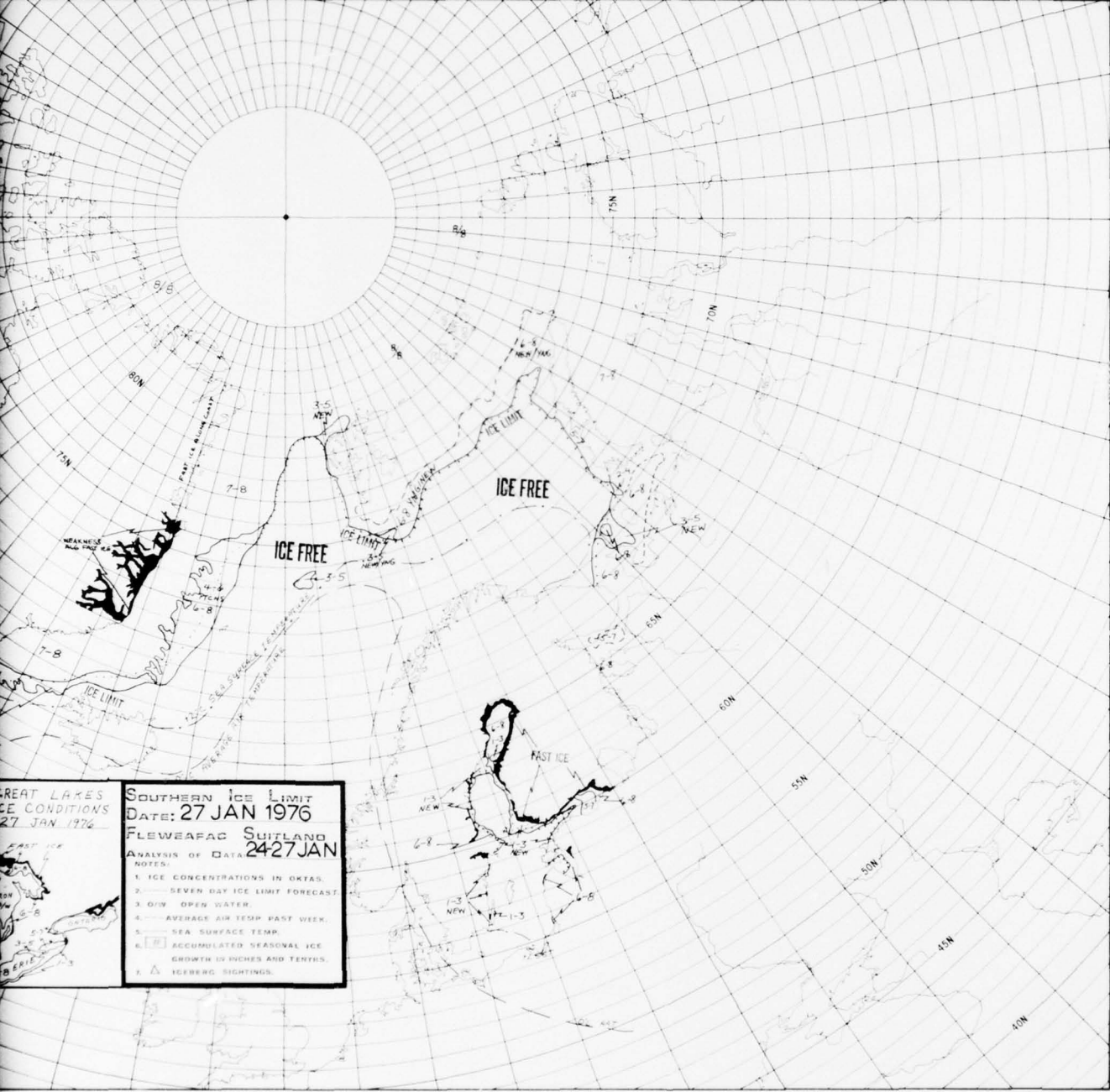
SOUTHERN ICE LIMIT
DATE: 27 JAN 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 24-27 JAN

NOTES:

1. ICE CONCENTRATIONS IN OBTAS.
2. — SEVEN DAY ICE LIMIT FORECAST
3. OW OPEN WATER
4. — AVERAGE AIR TEMP PAST WEEK.
5. — SEA SURFACE TEMP.
6. [#] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. △ ICEBERG SIGHTINGS.

130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 110E 105E

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**GREAT LAKES
ICE CONDITIONS
27 JAN 1976**

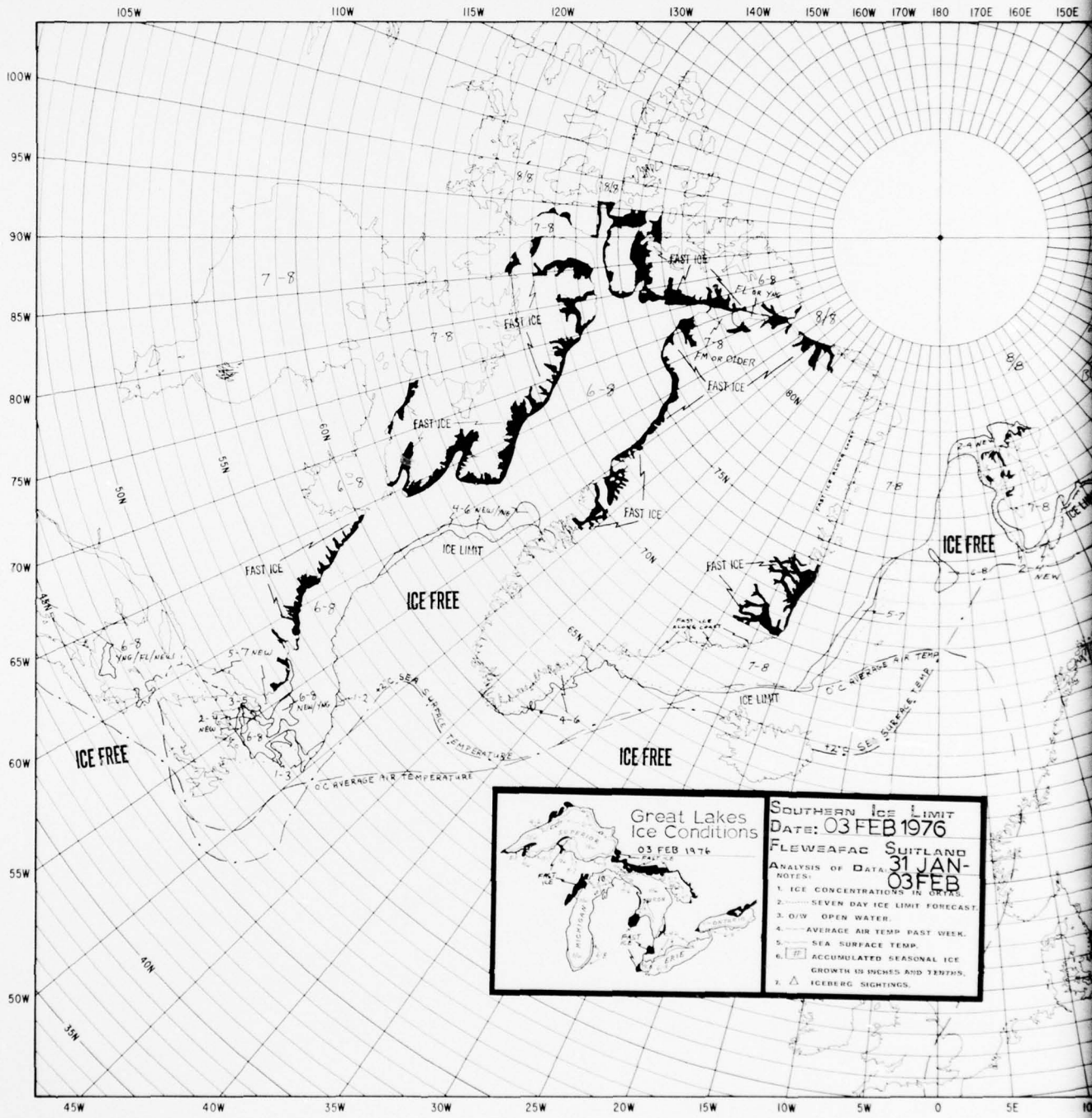
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DATE: 27 JAN 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 24-27 JAN**

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

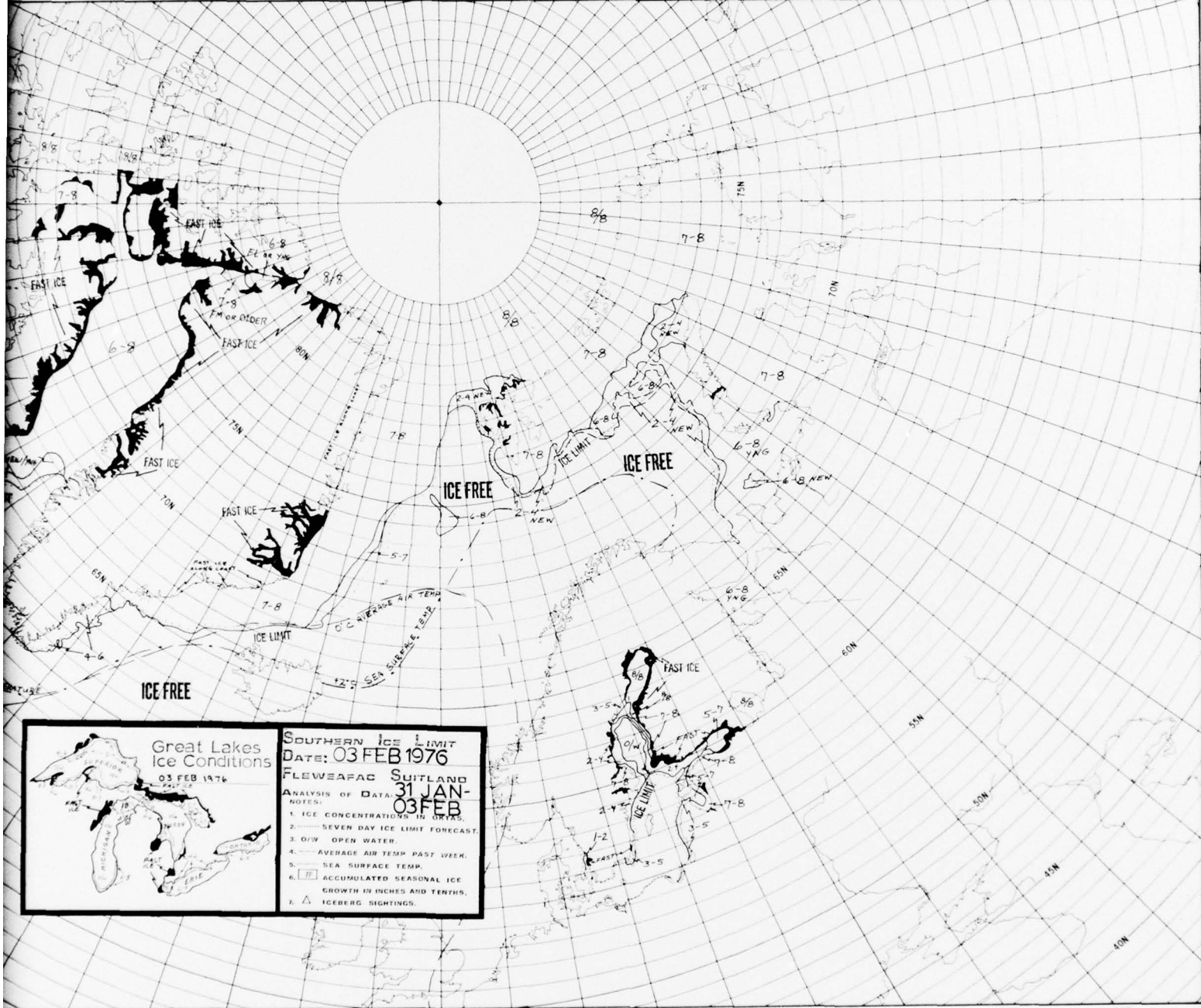
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Great Lakes Ice Conditions
03 FEB 1976

SOUTHERN ICE LIMIT
DATE: 03 FEB 1976

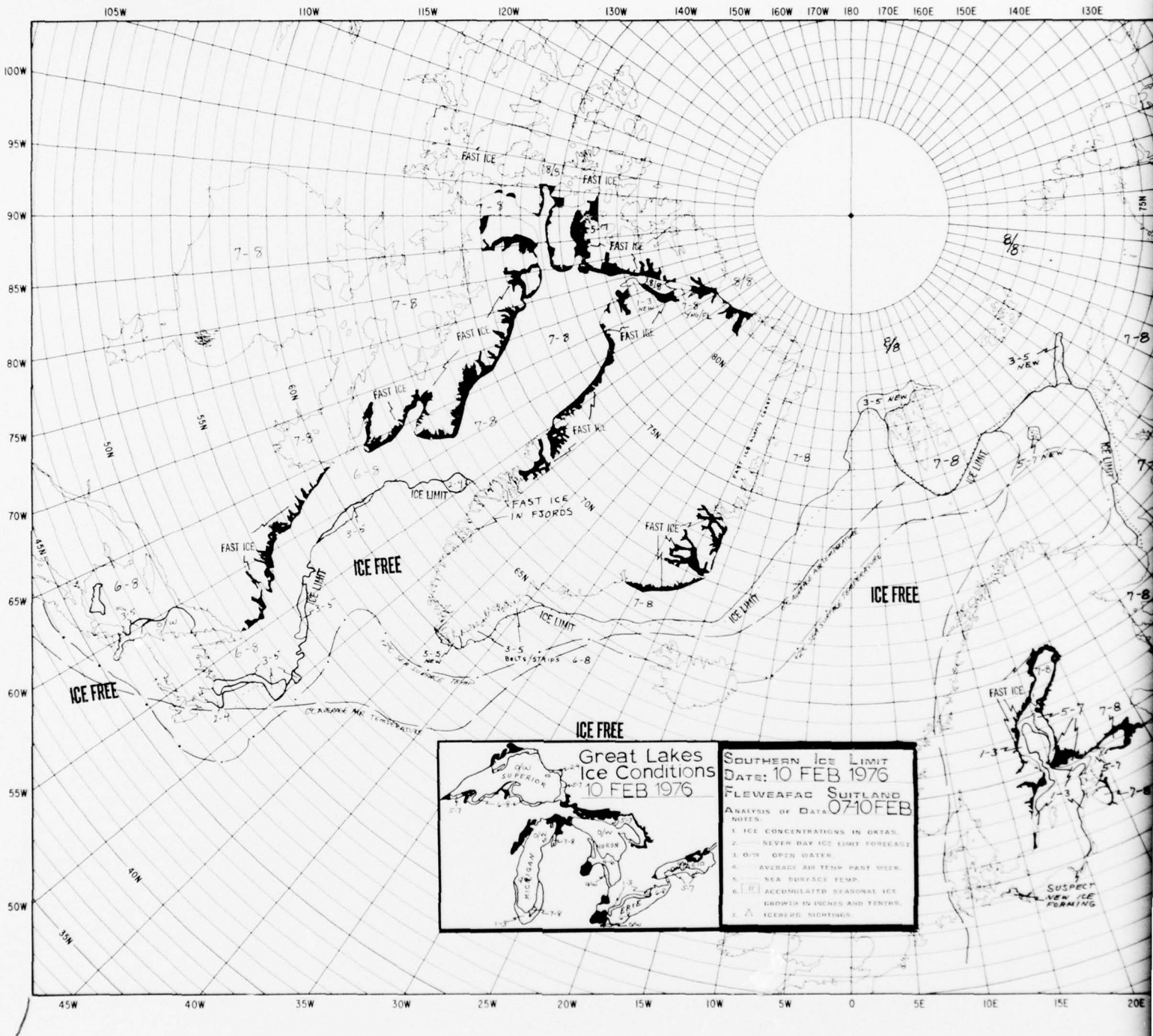
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 31 JAN - 03 FEB

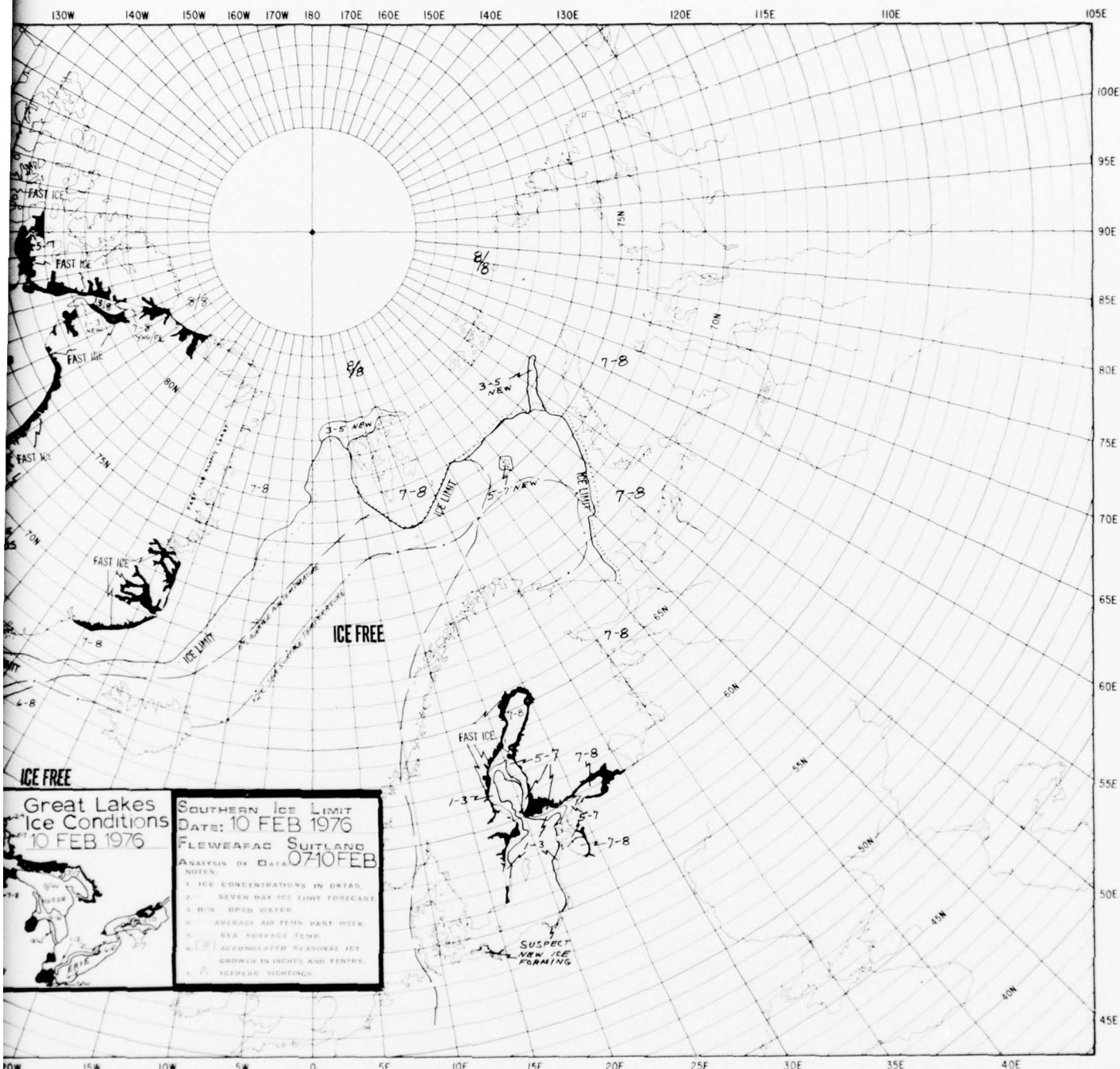
NOTES:

1. ICE CONCENTRATIONS IN DWTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

2





ICE FREE

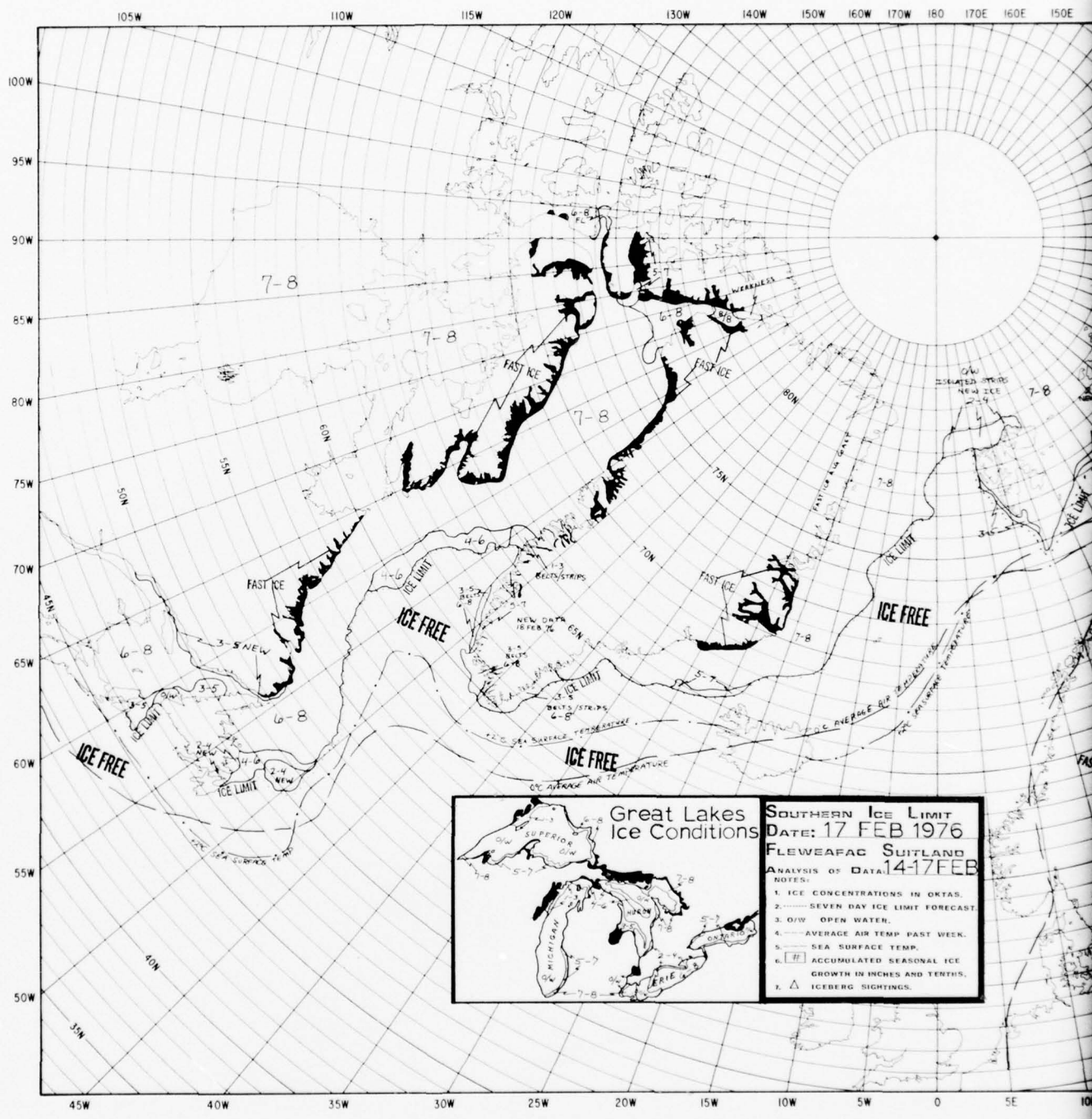
**Great Lakes
Ice Conditions
10 FEB 1976**

**Southern Ice Limit
DATE: 10 FEB 1976
FLEWBAFAC SUITLAND
0710 FEB**

ANALYSIS OF DATA

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. 0/10 OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWN IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.



Great Lakes Ice Conditions

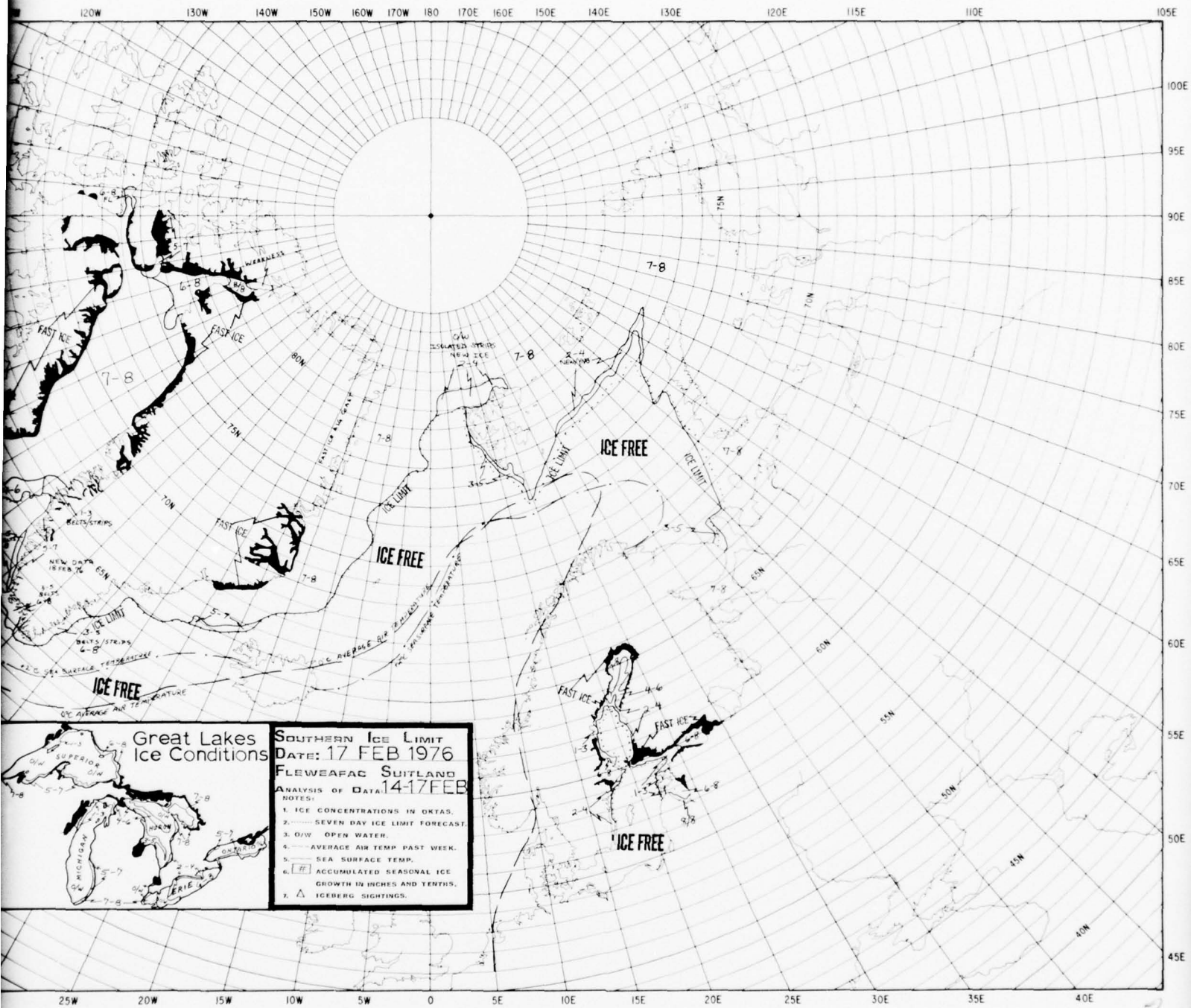
Southern Ice Limit
Date: 17 FEB 1976

FLEWEAFAC SUITLAND
14-17 FEB

ANALYSIS OF DATA:

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. [#] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. Δ ICEBERG SIGHTINGS.

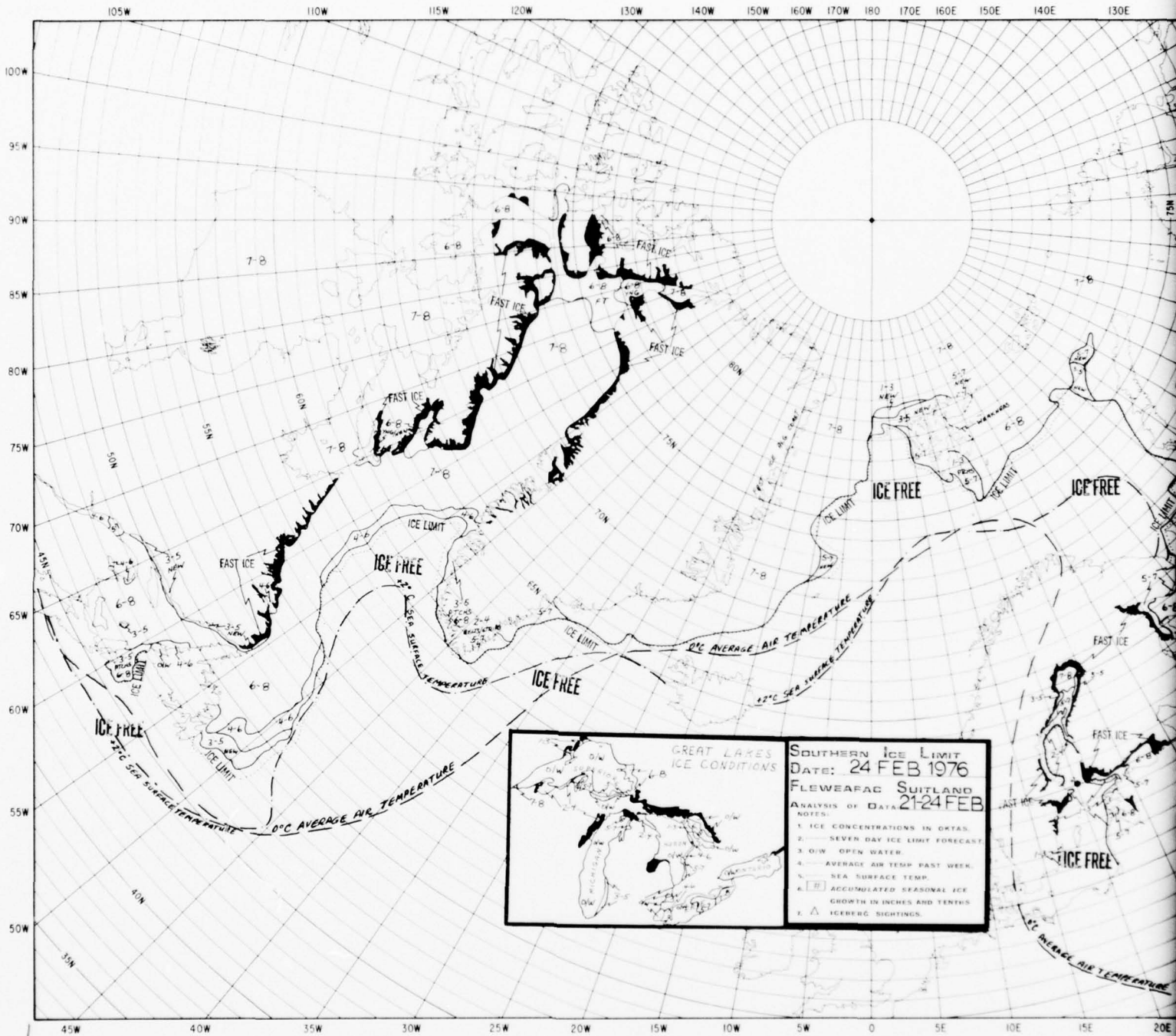


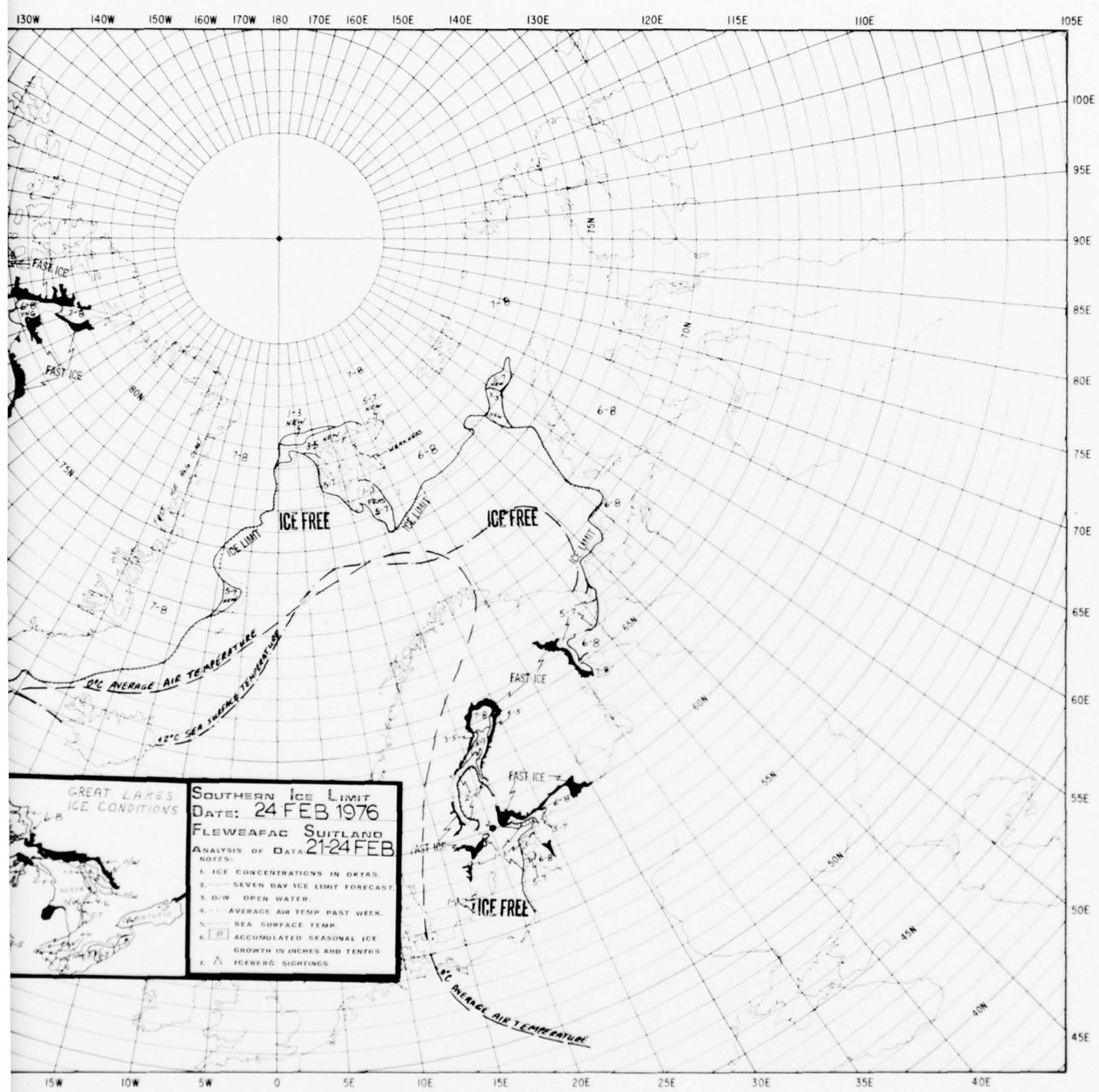
Great Lakes Ice Conditions



SOUTHERN ICE LIMIT
DATE: 17 FEB 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 14-17 FEB

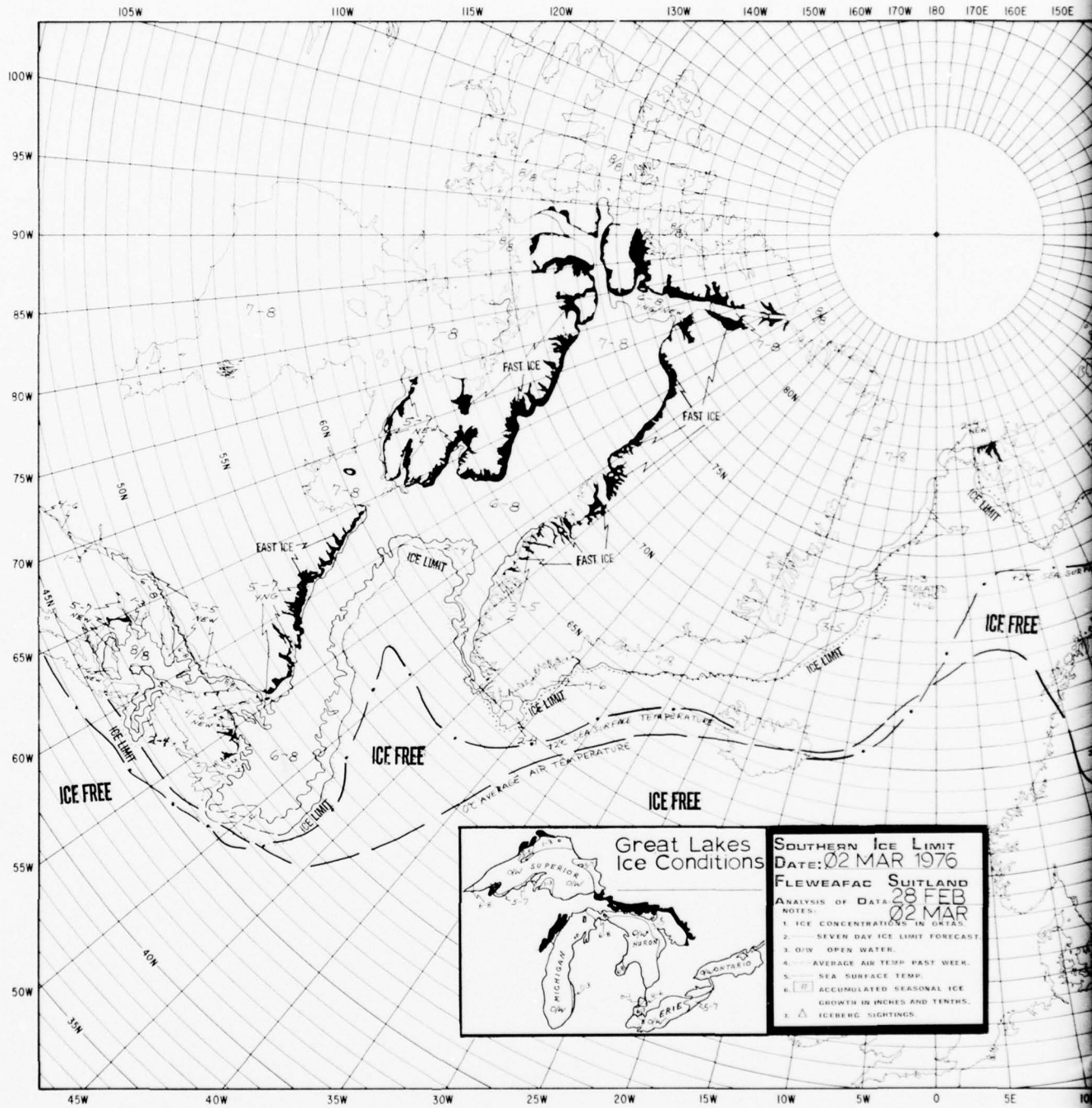
NOTES:
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 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. [Symbol] ICEBERG SIGHTINGS.

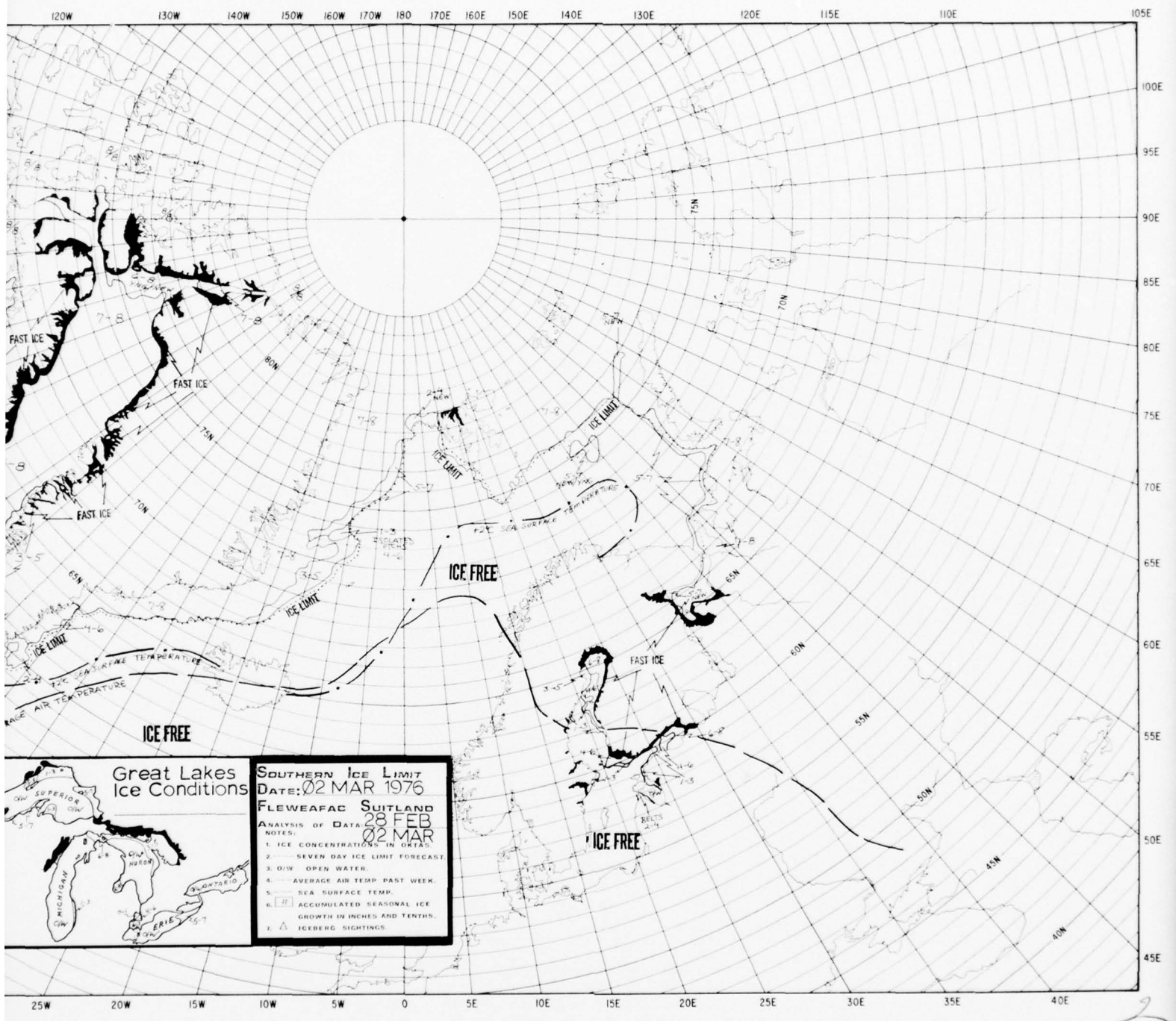


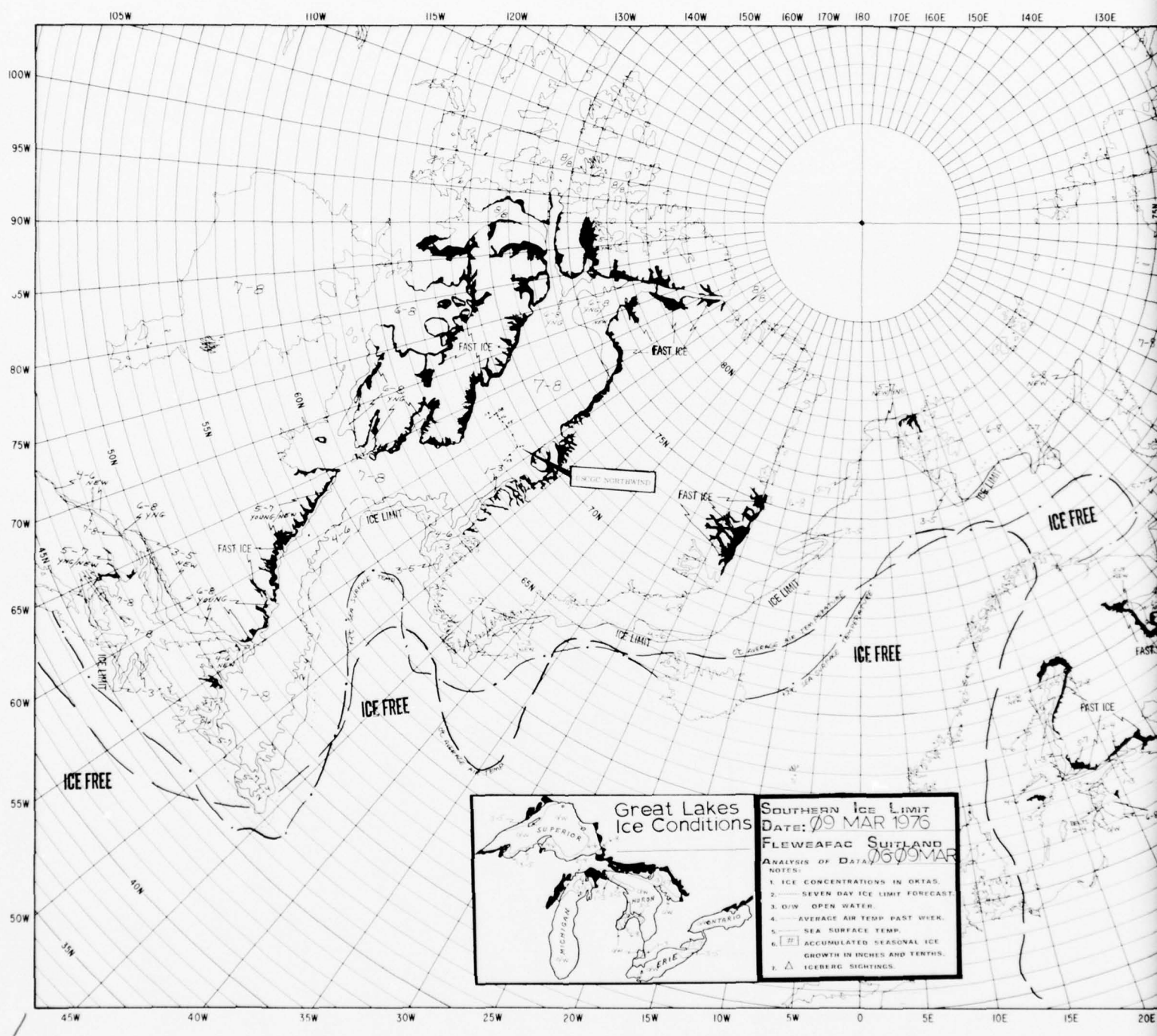


SOUTHERN ICE LIMIT
 DATE: 24 FEB 1976
FLEWEAFAC SUITLAND
 ANALYSIS OF DATA: 21-24 FEB
 NOTES:
 1. ICE CONCENTRATIONS IN OBTAS
 2. SEVEN DAY ICE LIMIT FORECAST
 3. O/W OPEN WATER
 4. AVERAGE AIR TEMP PAST WEEK
 5. SEA SURFACE TEMP
 6. ACCUMULATED SEASONAL ICE GROWTH IN HICHES AND TENTHS
 7. ICEBERG SIGHTINGS

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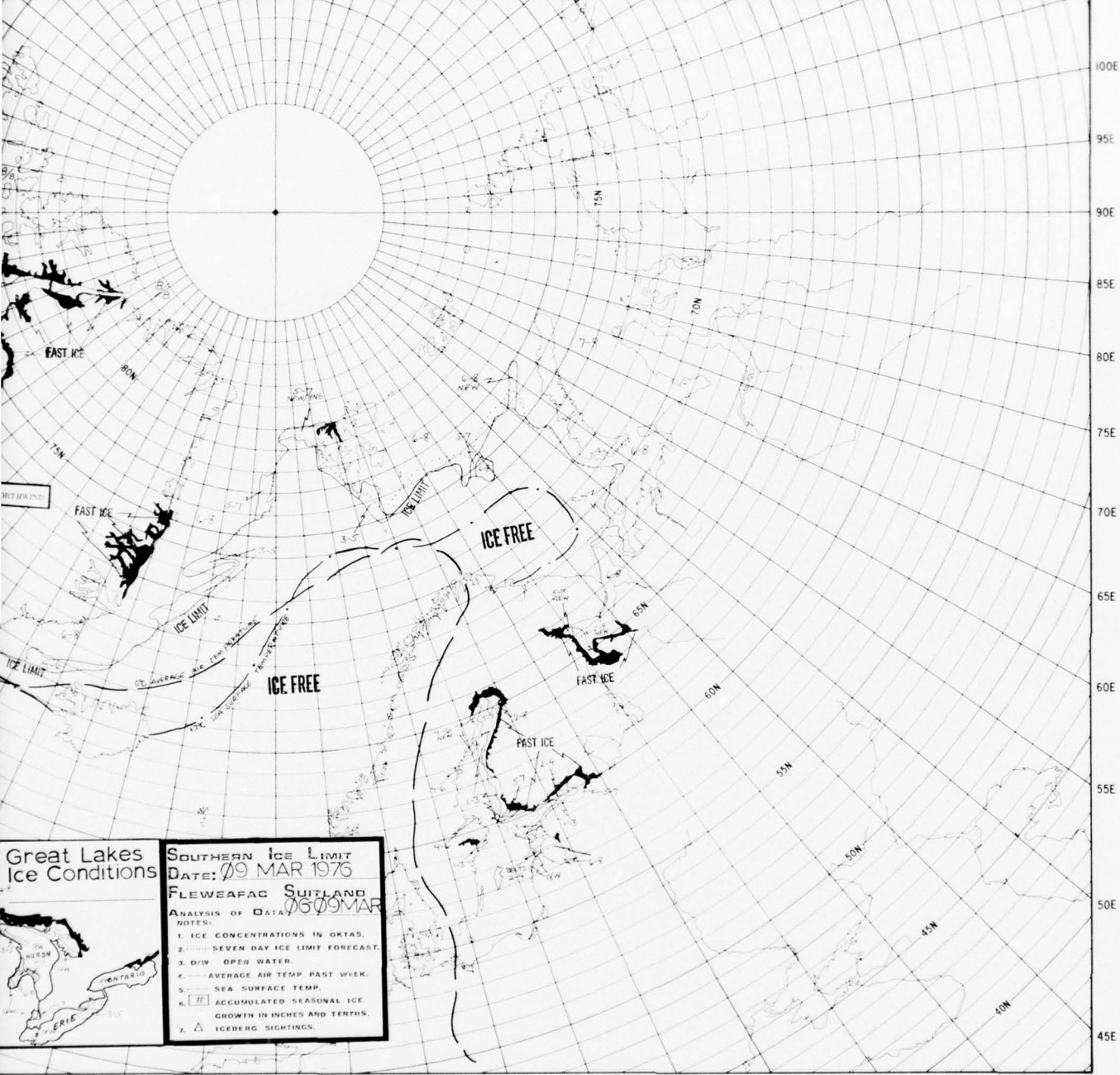
Great Lakes Ice Conditions

Southern Ice Limit
DATE: 09 MAR 1976

FLEWEAFAC SUTLAND
ANALYSIS OF DATA: 06/09 MAR

- NOTES:**
- 1. ICE CONCENTRATIONS IN OKTAS.
 - 2. SEVEN DAY ICE LIMIT FORECAST.
 - 3. O/W OPEN WATER.
 - 4. AVERAGE AIR TEMP PAST WEEK.
 - 5. SEA SURFACE TEMP.
 - 6. [#] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 - 7. Δ ICEBERG SIGHTINGS.

130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E



Great Lakes Ice Conditions

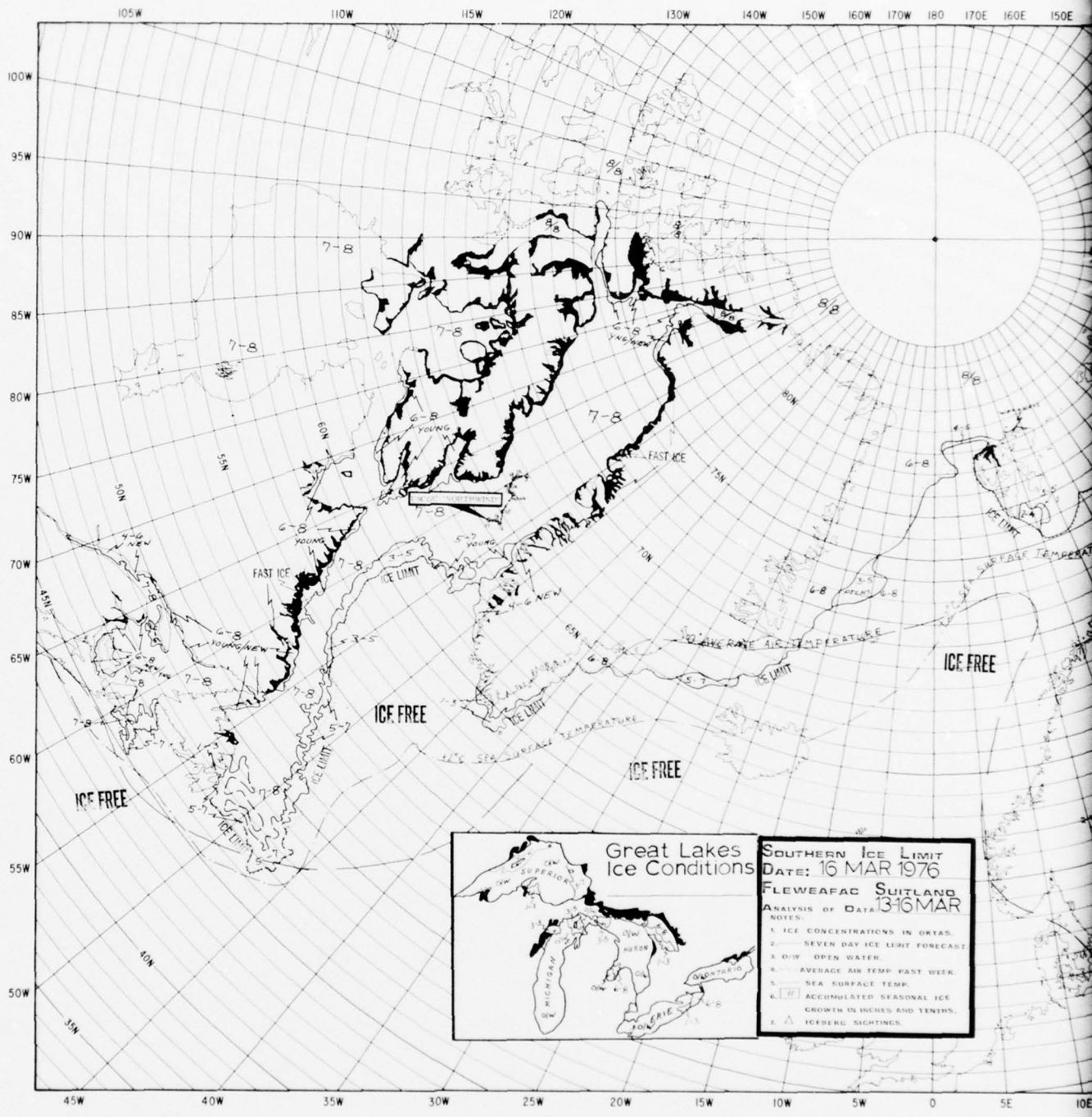
Southern Ice Limit
 DATE: 09 MAR 1976
 FLEWEAFAC SUITLAND
 ANALYSIS OF DATA 0609MAR

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

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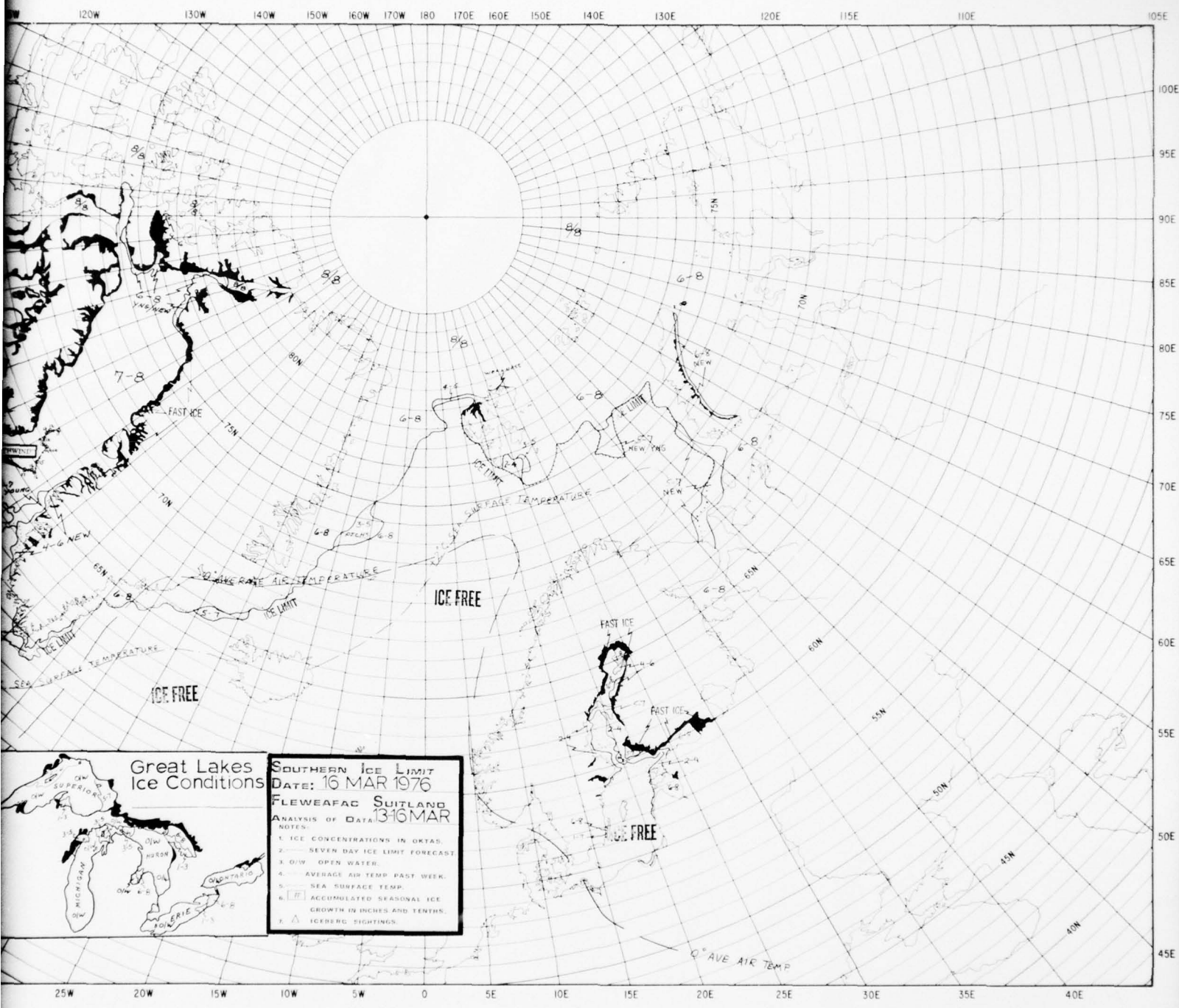
SOUTHERN ICE LIMIT
DATE: 16 MAR 1976
FLEWEAFAC SUITLAND
13-16 MAR

ANALYSIS OF DATA

NOTES:

1. ICE CONCENTRATIONS IN ORKAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O.W. OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

2



**Great Lakes
Ice Conditions**

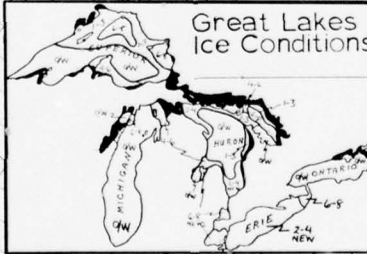
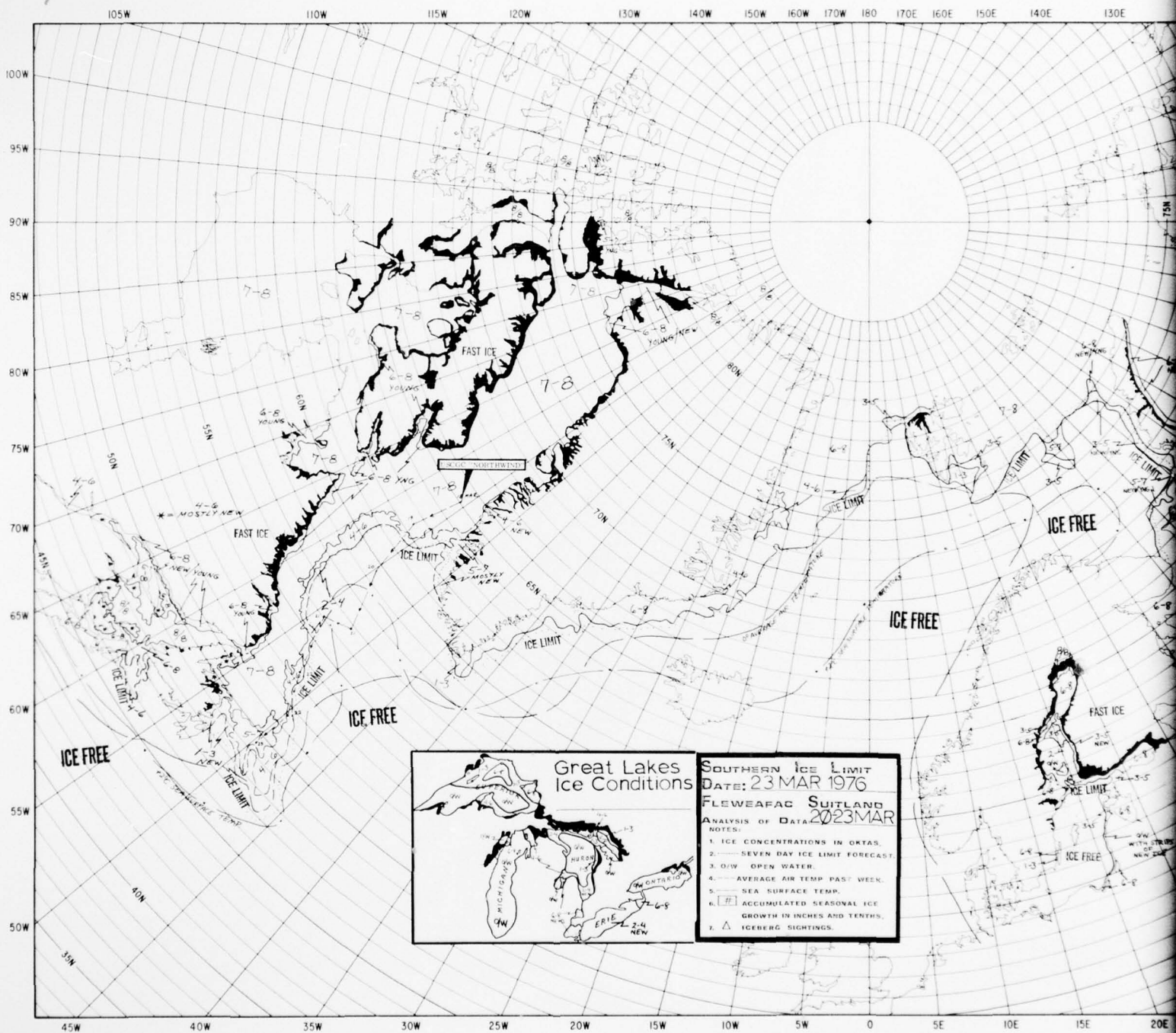
SOUTHERN ICE LIMIT
DATE: 16 MAR 1976
FLEWEAFAC SUITLAND
13-16 MAR

ANALYSIS OF DATA

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. OW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. [R] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. Δ ICEBERG SIGHTINGS.



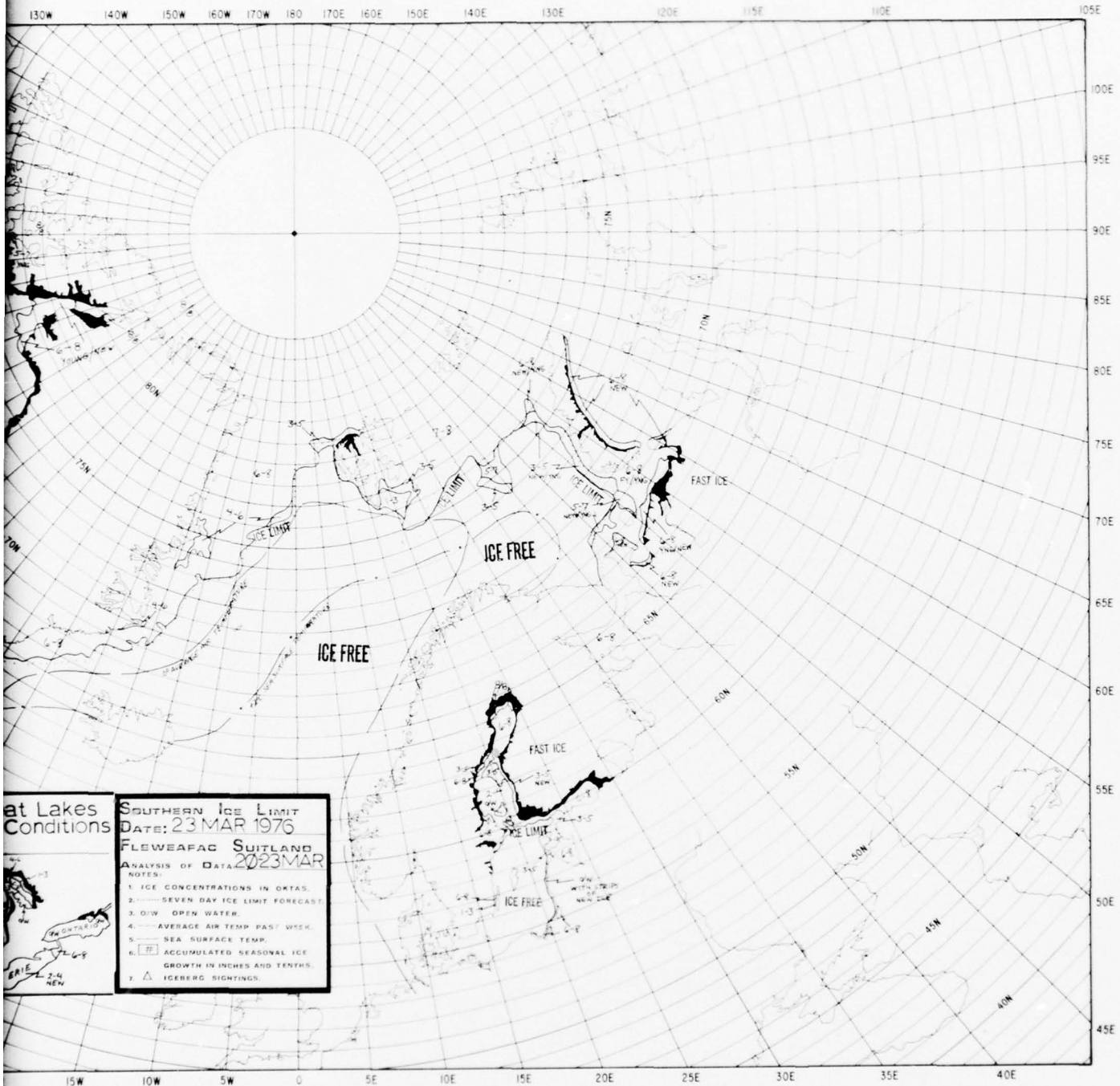


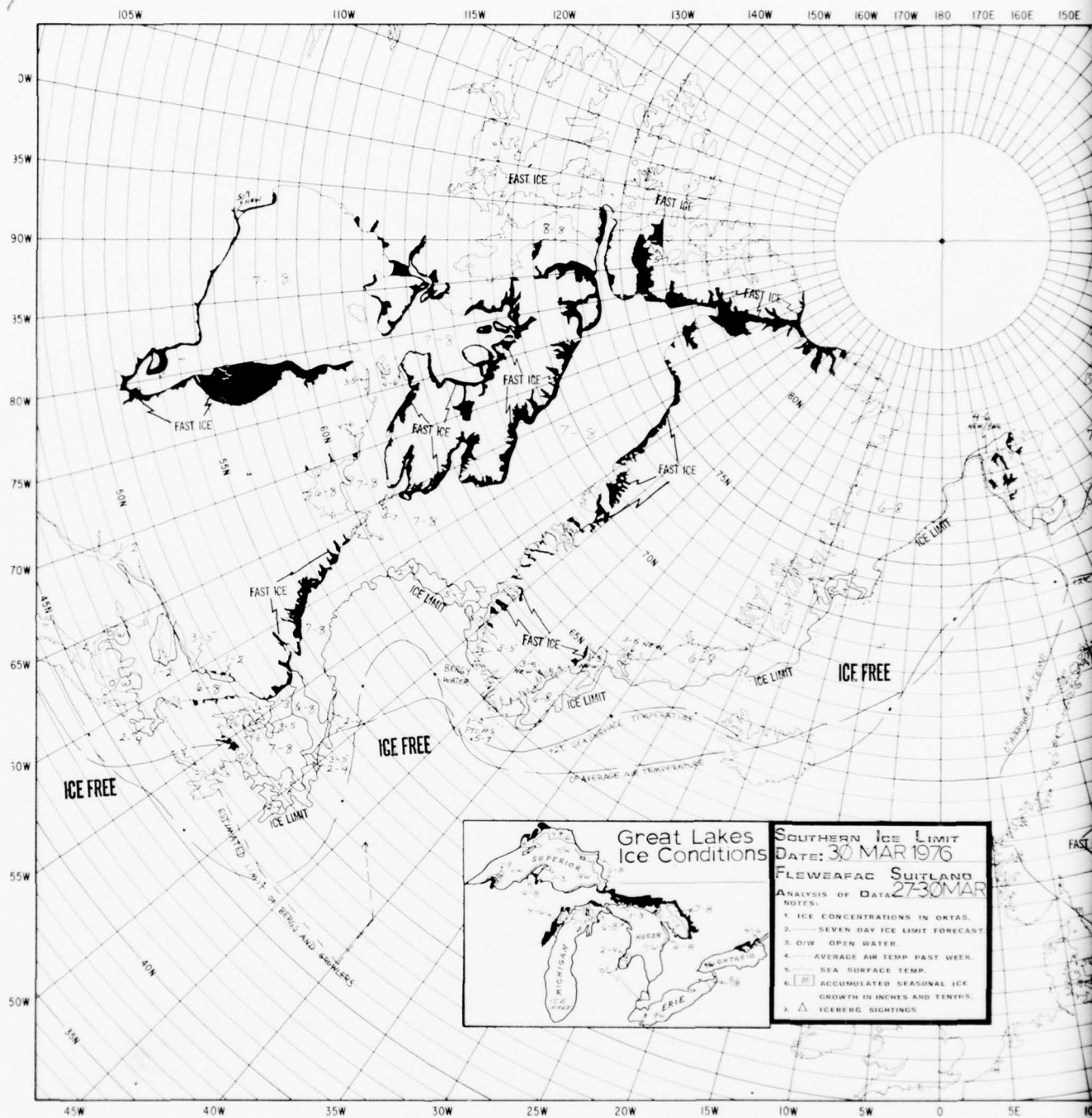
Great Lakes
Ice Conditions

Southern Ice Limit
DATE: 23 MAR 1976

FLEWEAFAC SUITLAND
2023MAR

- ANALYSIS OF DATA
- NOTES:
1. ICE CONCENTRATIONS IN ORTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. [Symbol] ICEBERG SIGHTINGS.



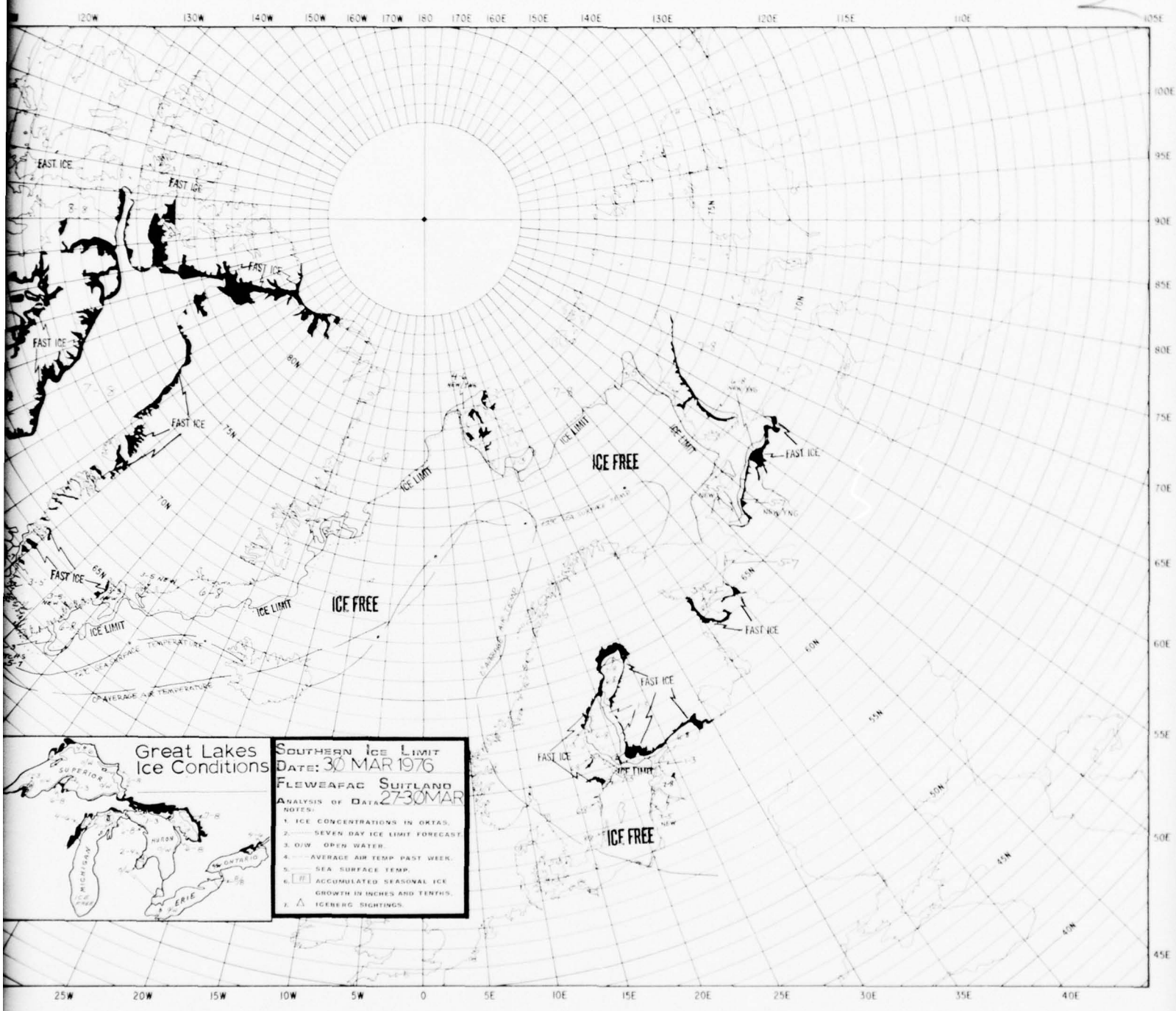


Great Lakes Ice Conditions

Southern Ice Limit
Date: 30 MAR 1976
FLEWEAFAC SUTLAND
ANALYSIS OF DATA 27-30 MAR

- NOTES:
1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.





Great Lakes
Ice Conditions

Southern Ice Limit
Date: 30 MAR 1976
FLEWEAFAC SUITLAND
Analysis of Data 27-30 MAR

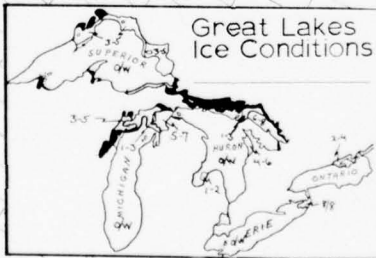
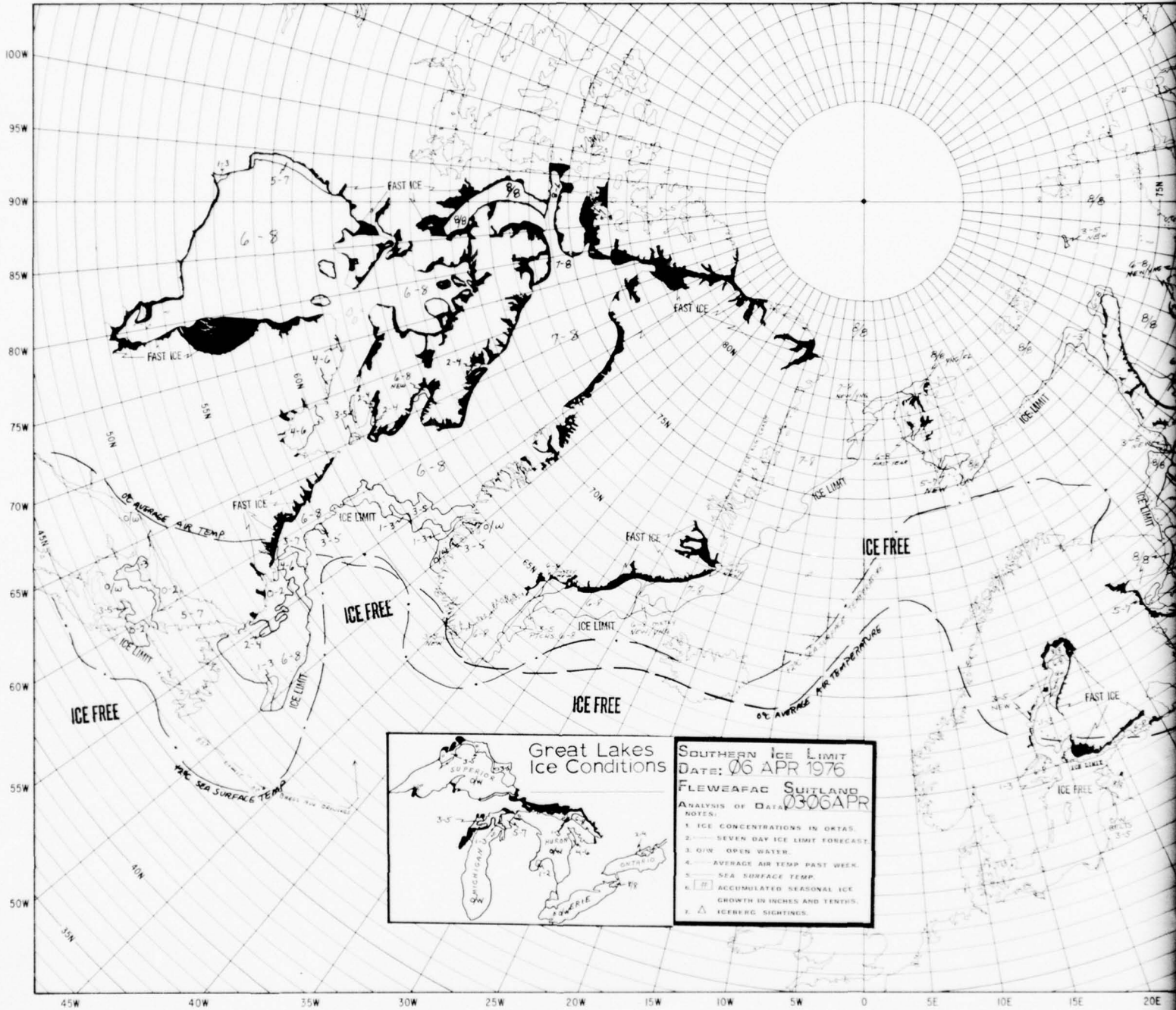
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2. SEVEN DAY ICE LIMIT FORECAST.
3. OIW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. [Symbol] ICEBERG SIGHTINGS.

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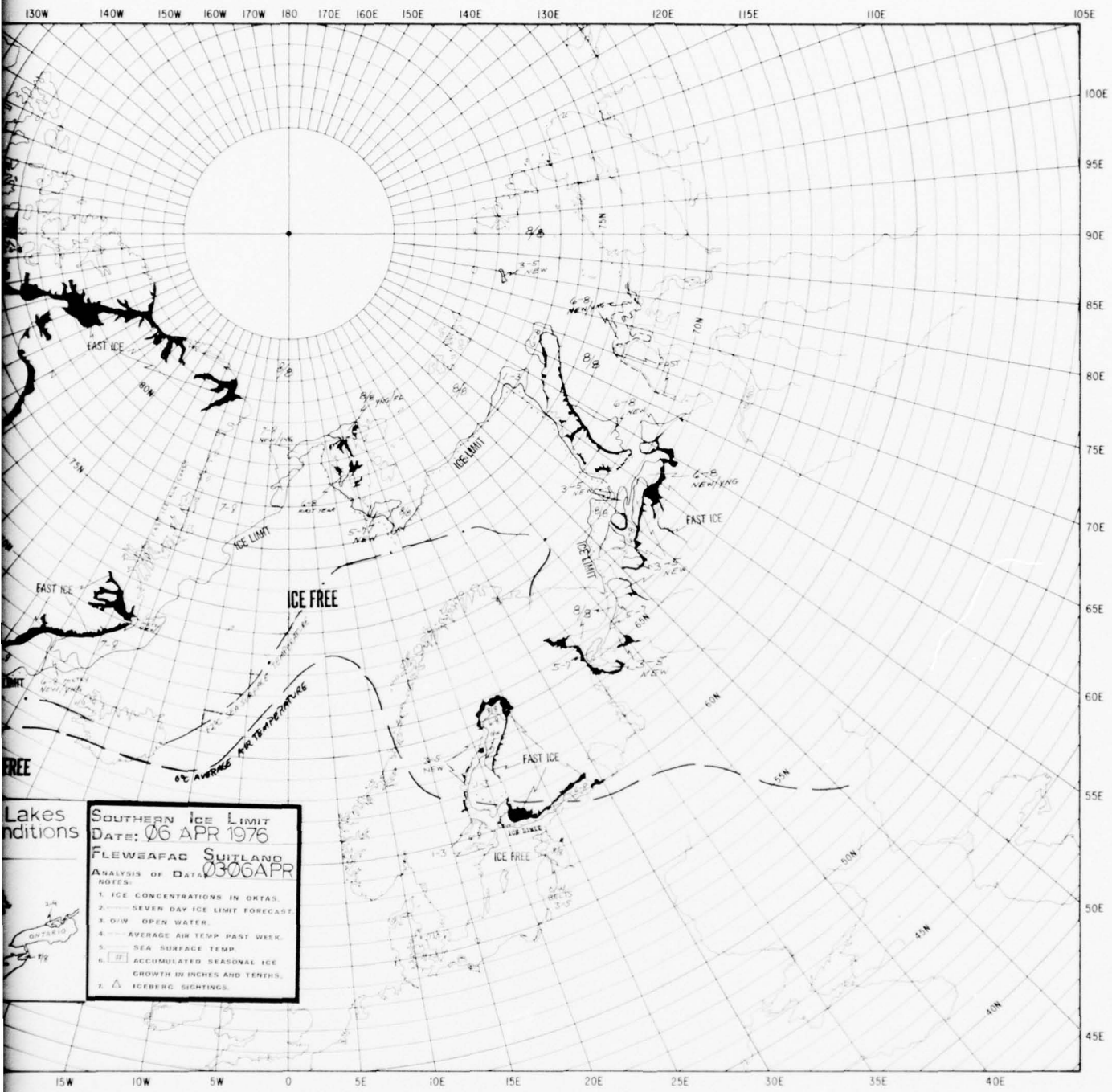
105W 110W 115W 120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E



SOUTHERN ICE LIMIT
DATE: 06 APR 1976
FLEWEAFAC SUTLAND
ANALYSIS OF DATA 0306APR

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. --- SEVEN DAY ICE LIMIT FORECAST
3. O/W OPEN WATER.
4. --- AVERAGE AIR TEMP PAST WEEK.
5. --- SEA SURFACE TEMP.
6. [shaded] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. Δ ICEBERG SIGHTINGS.



Lakes
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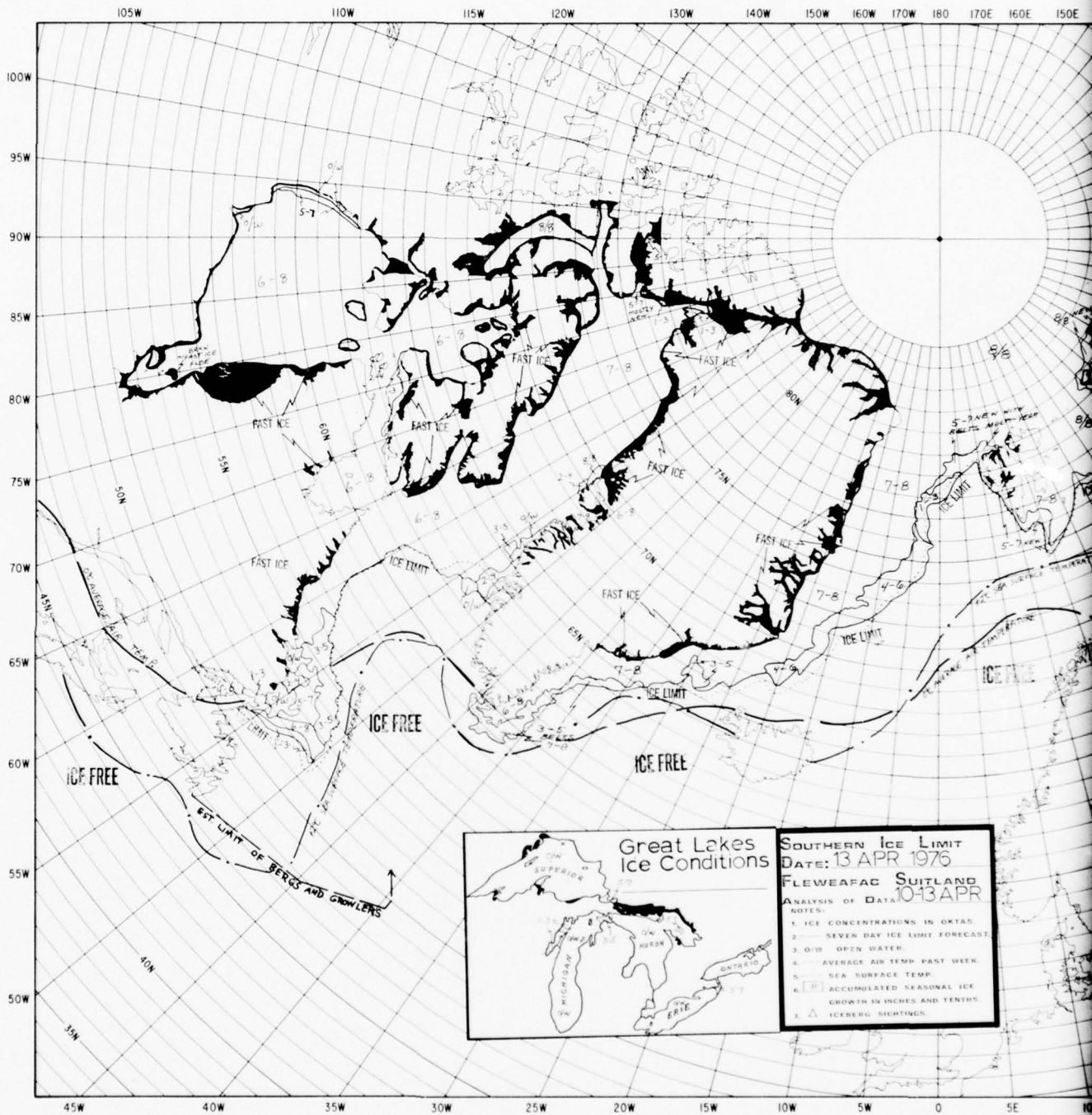
Southern Ice Limit
DATE: 06 APR 1976
FLEWEAFAC SUTLAND
0306APR

ANALYSIS OF DATA

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.





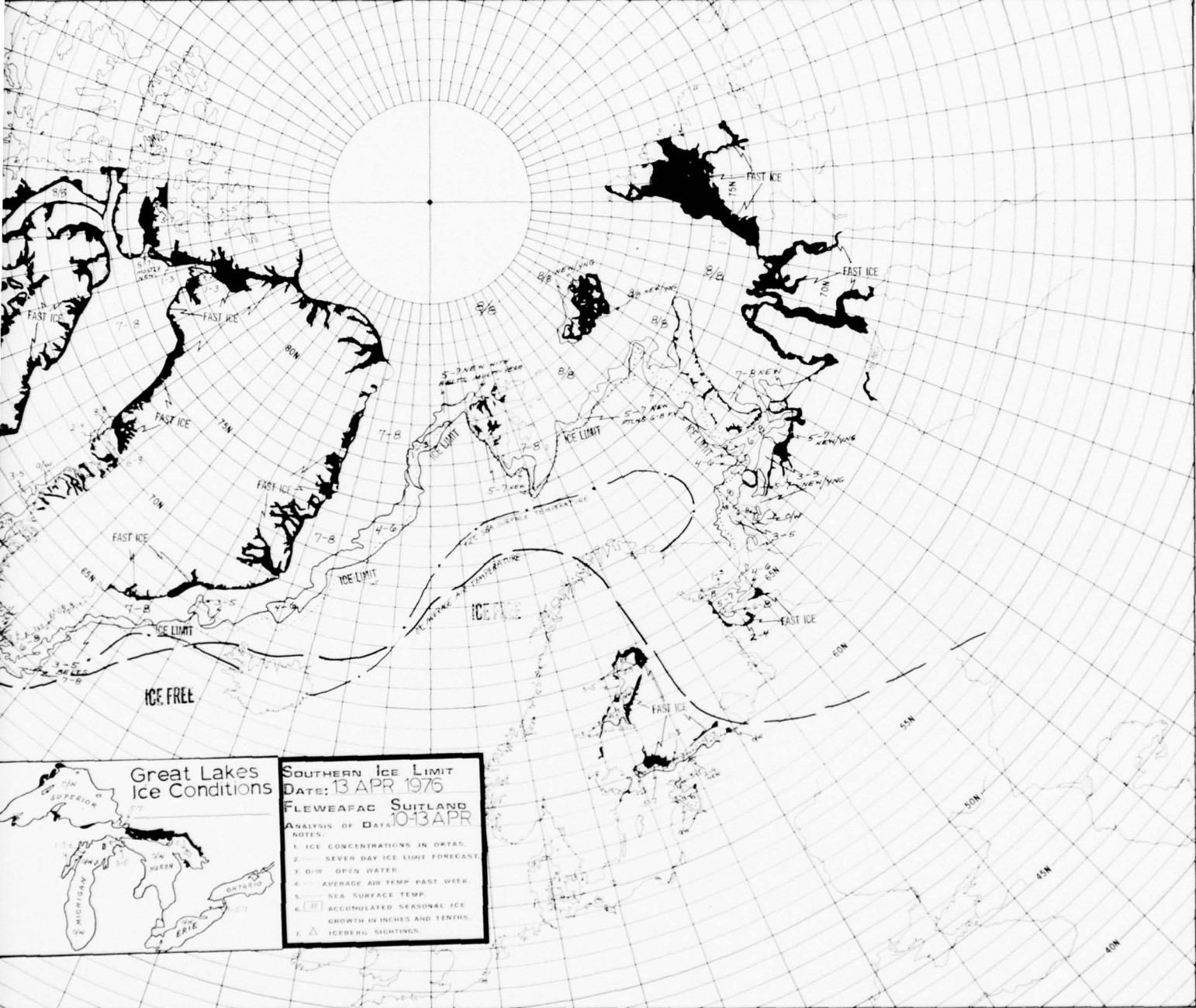
Great Lakes
Ice Conditions

Southern Ice Limit
Date: 13 APR 1976
FLEWEAFAC SUITLAND
10:13 APR

ANALYSIS OF DATA
NOTES:
1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. OIW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

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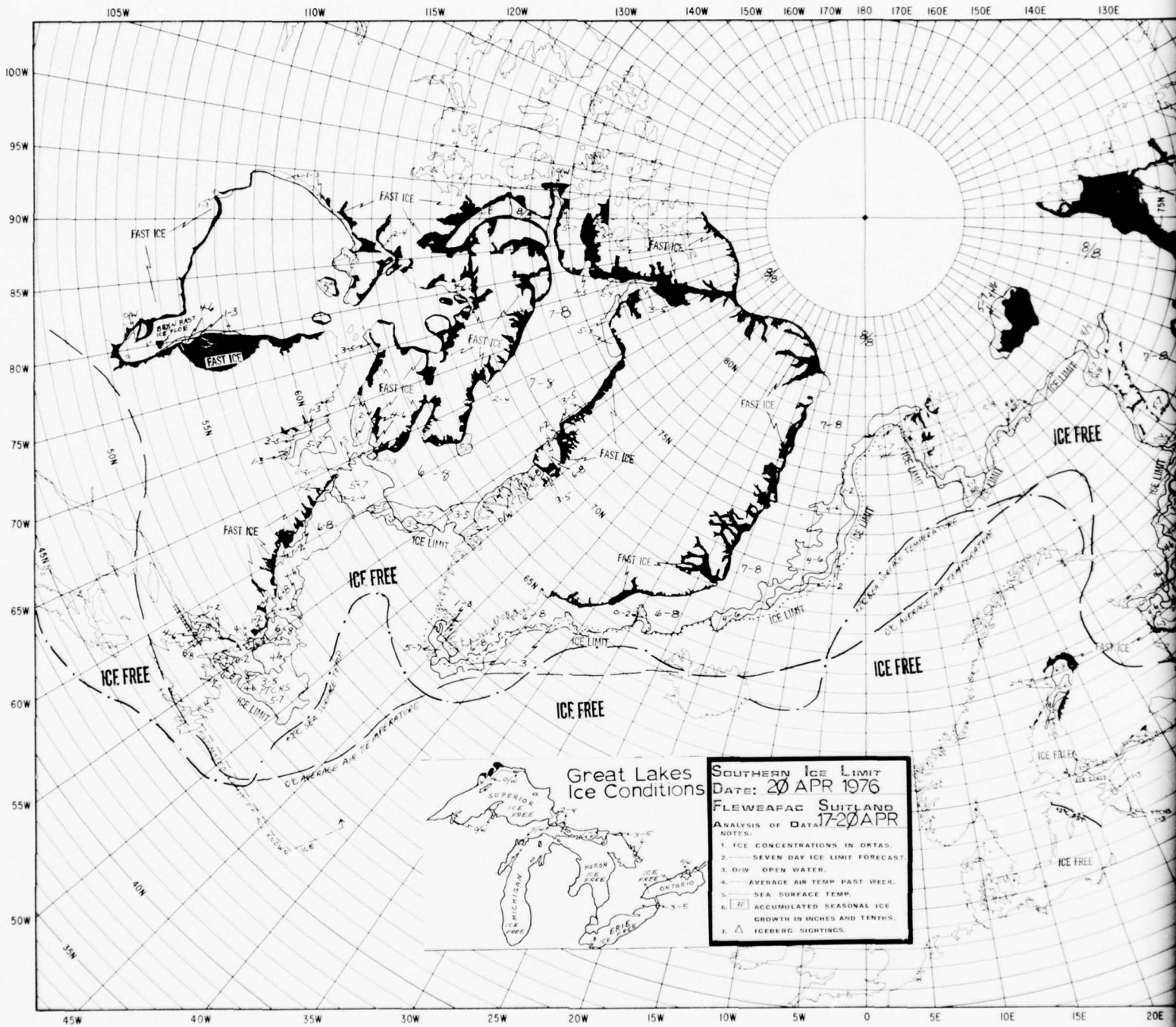


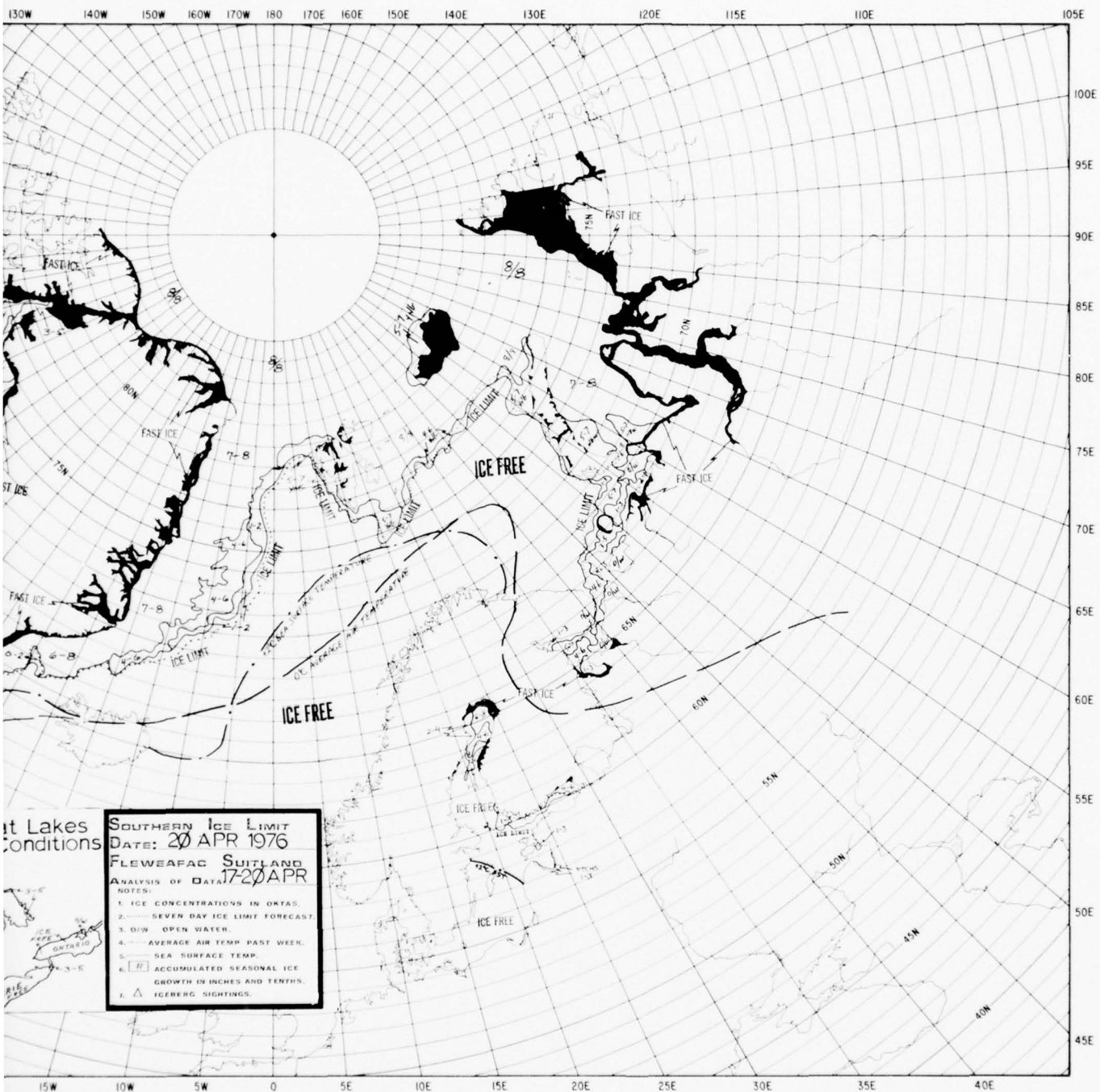
Southern Ice Limit
Date: 13 APR 1976
FLEWEAFAC SUITLAND
10-13 APR

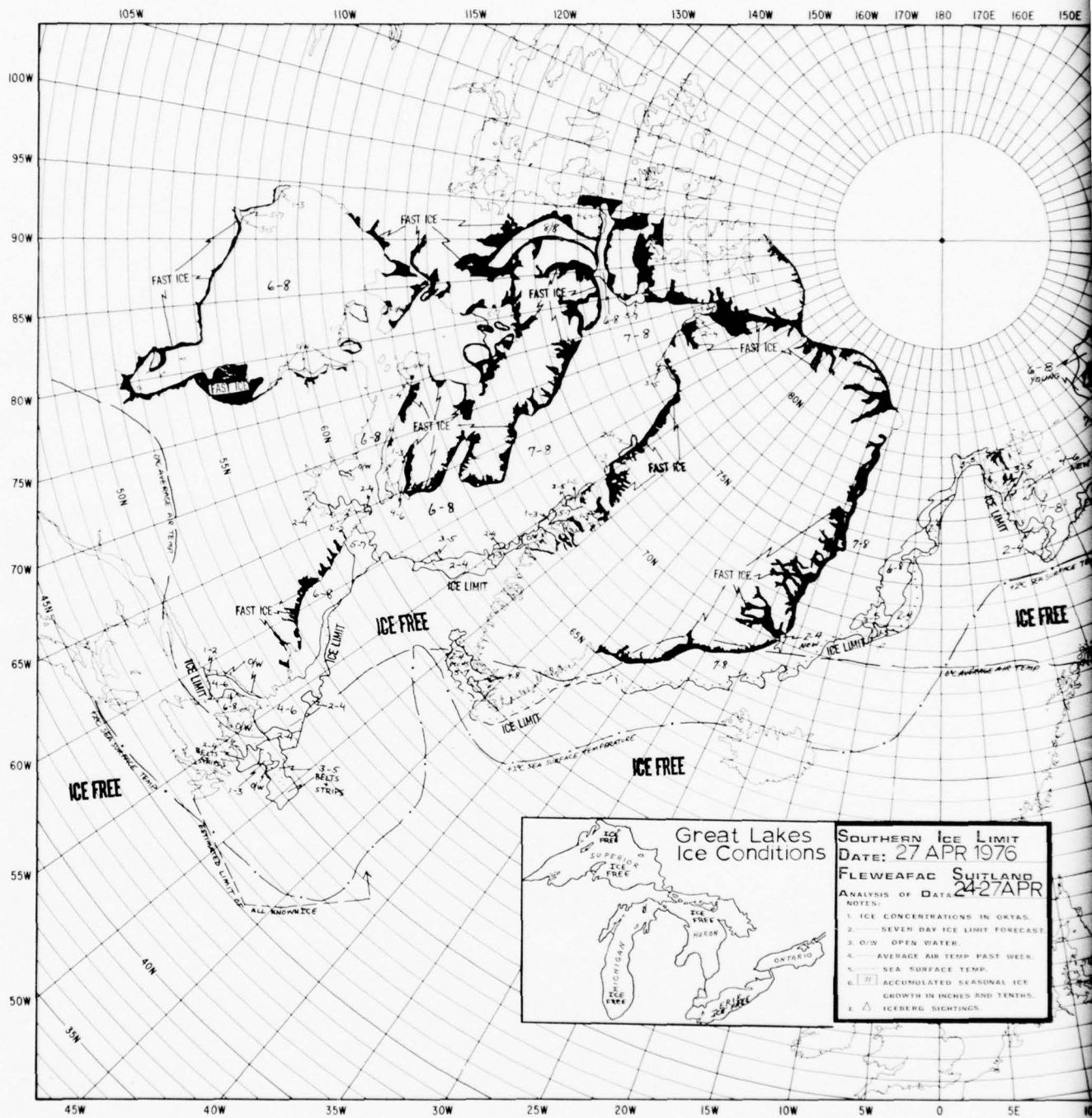
ANALYSIS OF DATA
NOTES:

1. ICE CONCENTRATIONS IN OKTAS
2. SEVEN DAY ICE LIMIT FORECAST
3. OW OPEN WATER
4. AVERAGE AIR TEMP PAST WEEK
5. SEA SURFACE TEMP.
6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS
7. [Symbol] ICEBERG SIGHTINGS

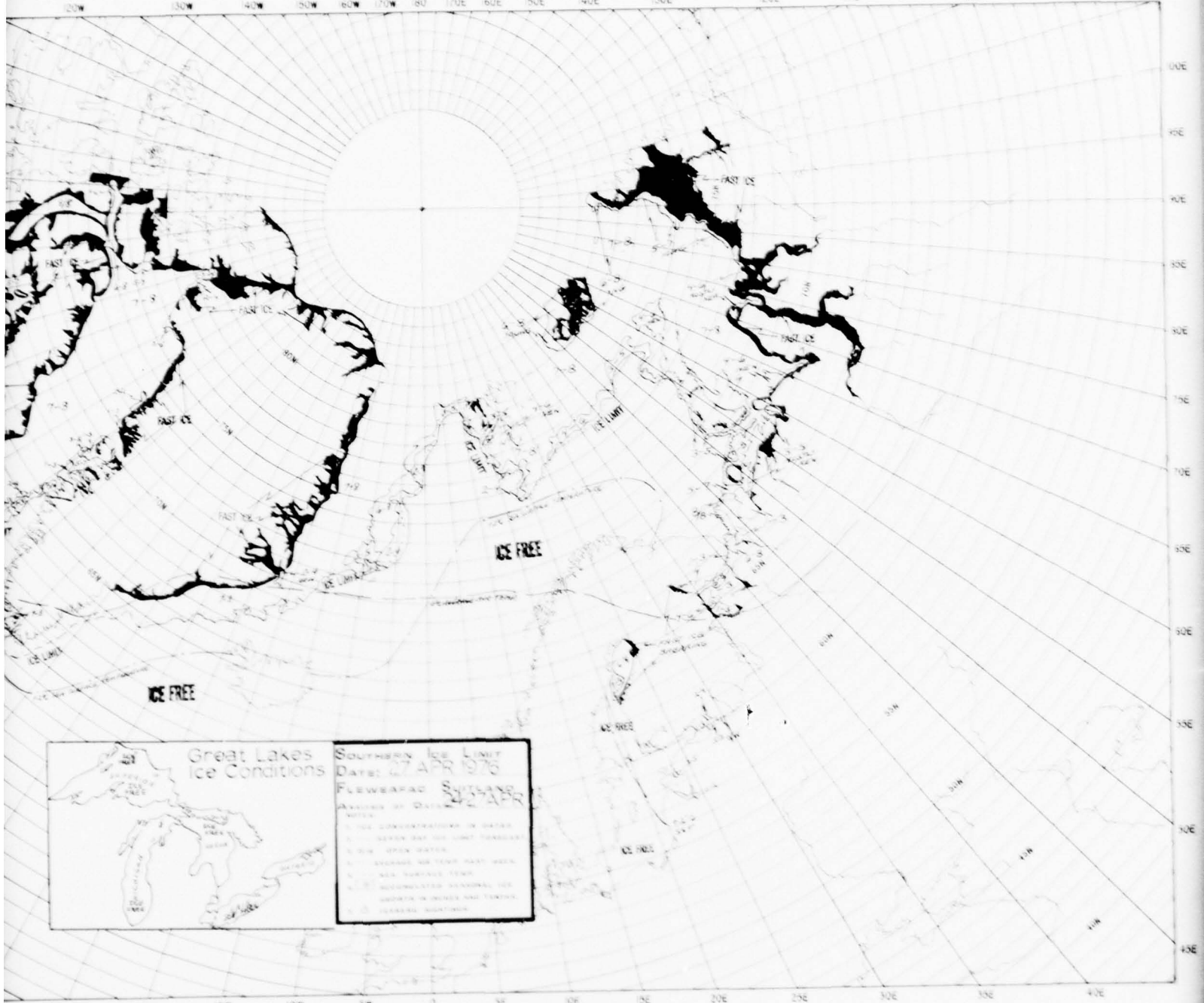
25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E







120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 110E 100E 090E



Great Lakes Ice Conditions

Southern Ice Limit Date: 27 APR 1976

FLEWELAND SUTLAND

ANALYSIS OF DATA: 2 APR

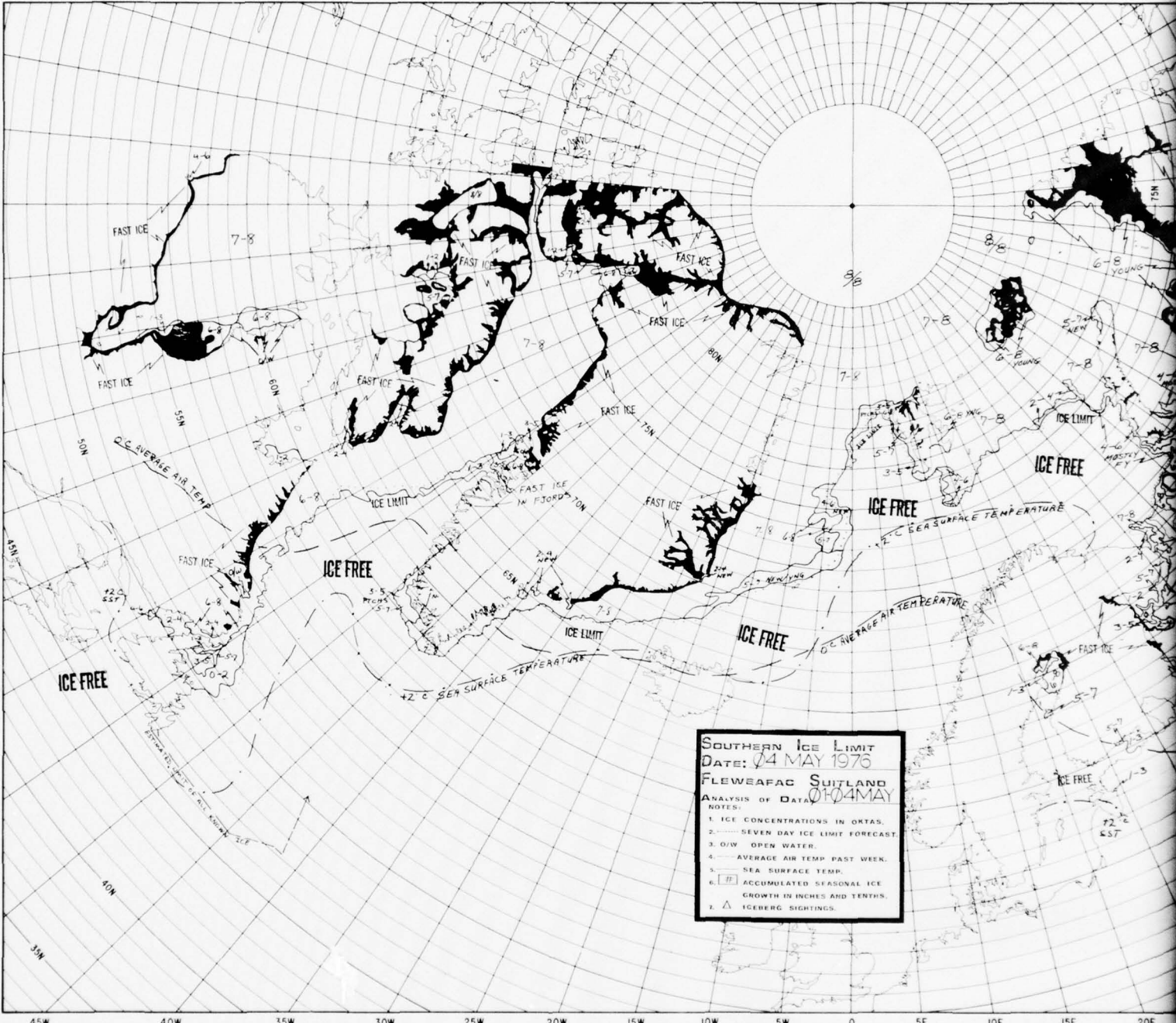
NOTES:

1. ICE CONCENTRATIONS IN WATER
2. SEVEN DAY ICE LIMIT FORECAST
3. ICE OPEN WATER
4. RECORDS FOR TEMP. AND WIND
5. ALL SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TEMPS. (SEASONS 1970-1975)

25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

105W 110W 115W 120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E

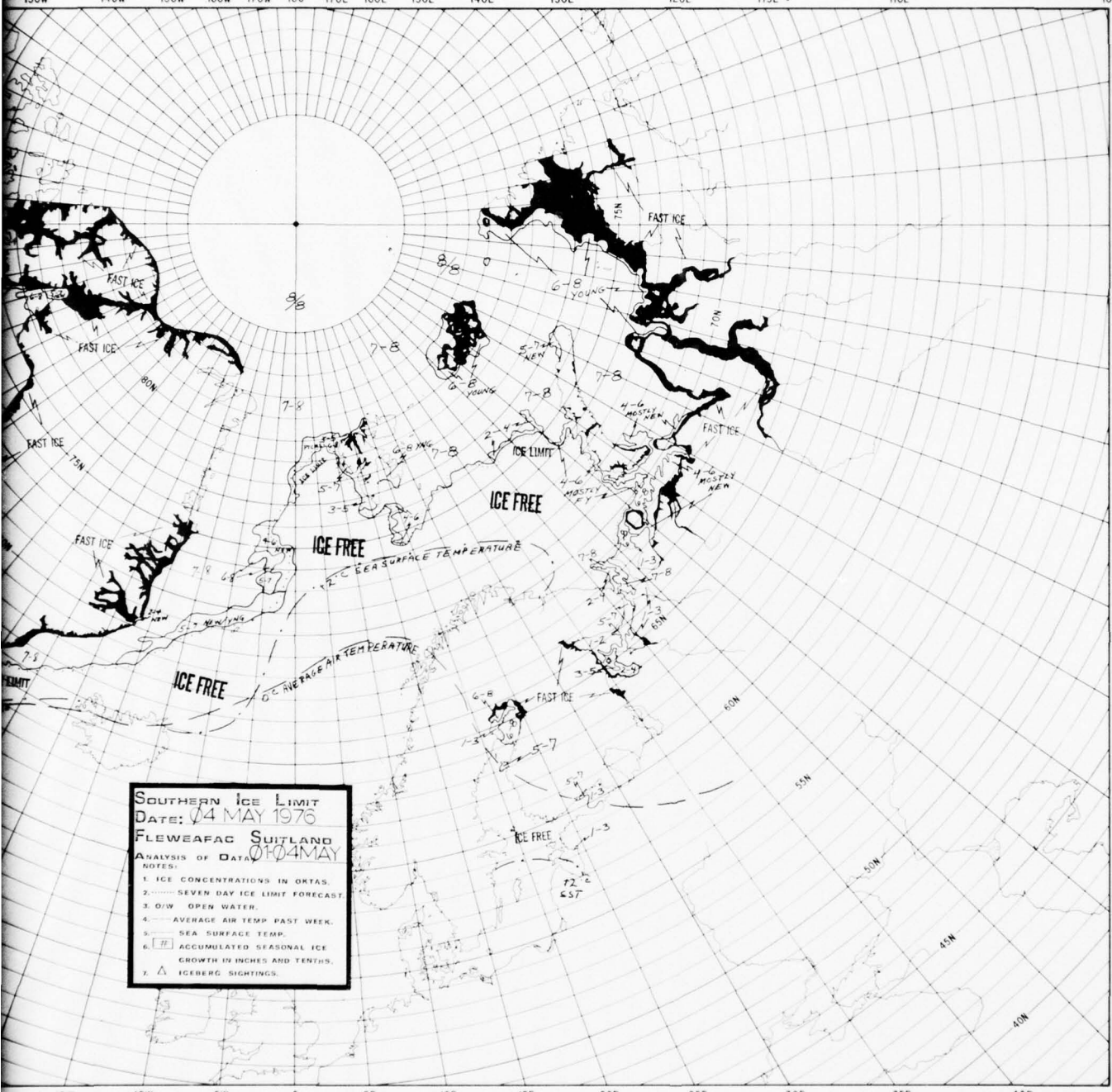
100W
95W
90W
85W
80W
75W
70W
65W
60W
55W
50W



SOUTHERN ICE LIMIT
DATE: 04 MAY 1976
FLEWEAFAC SUTLAND
ANALYSIS OF DATA 0104MAY
NOTES:
1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

100E
95E
90E
85E
80E
75E
70E
65E
60E
55E
50E
45E



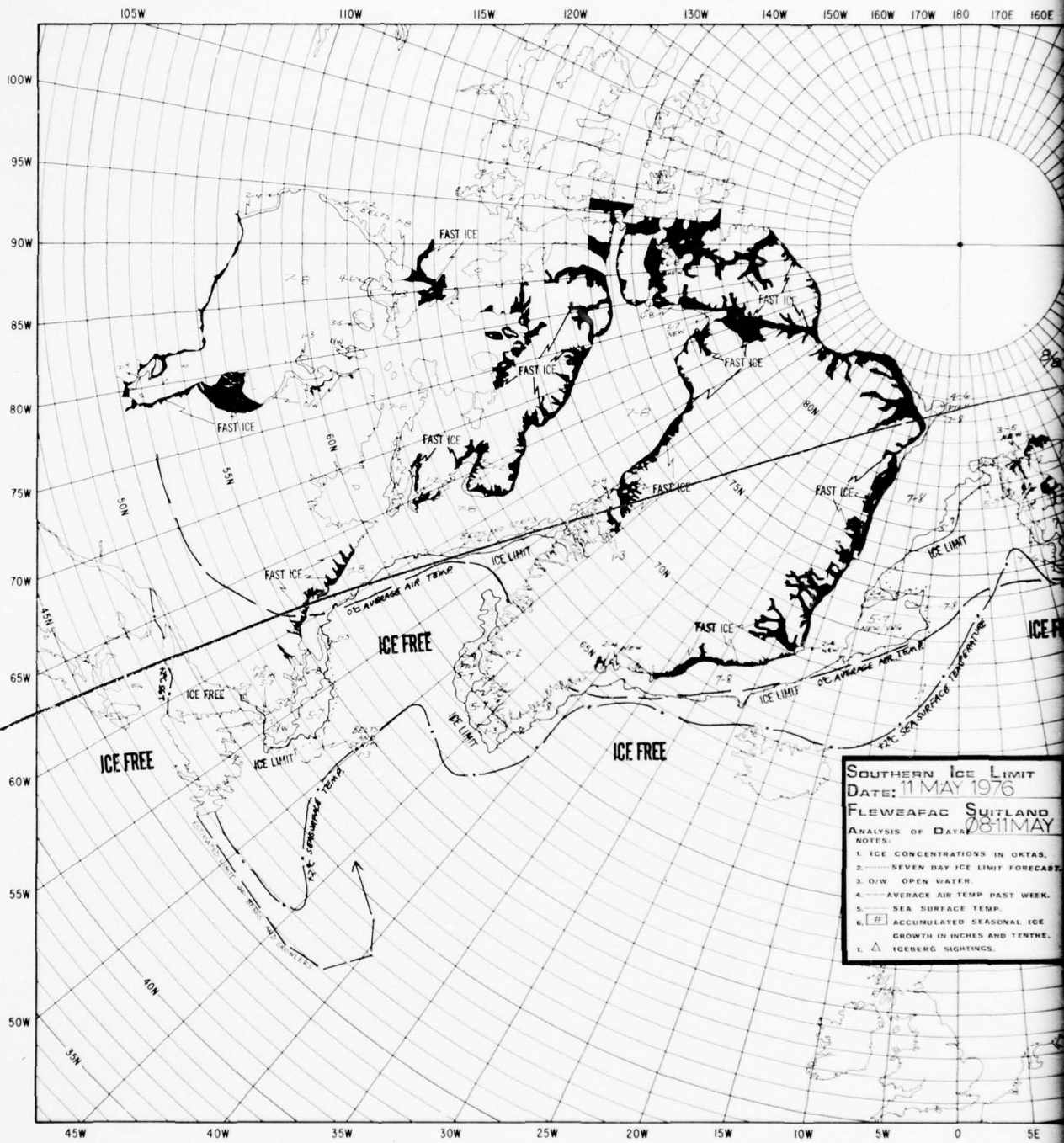
SOUTHERN ICE LIMIT
DATE: 04 MAY 1976
FLEWEAFAC SUITLAND
0104MAY

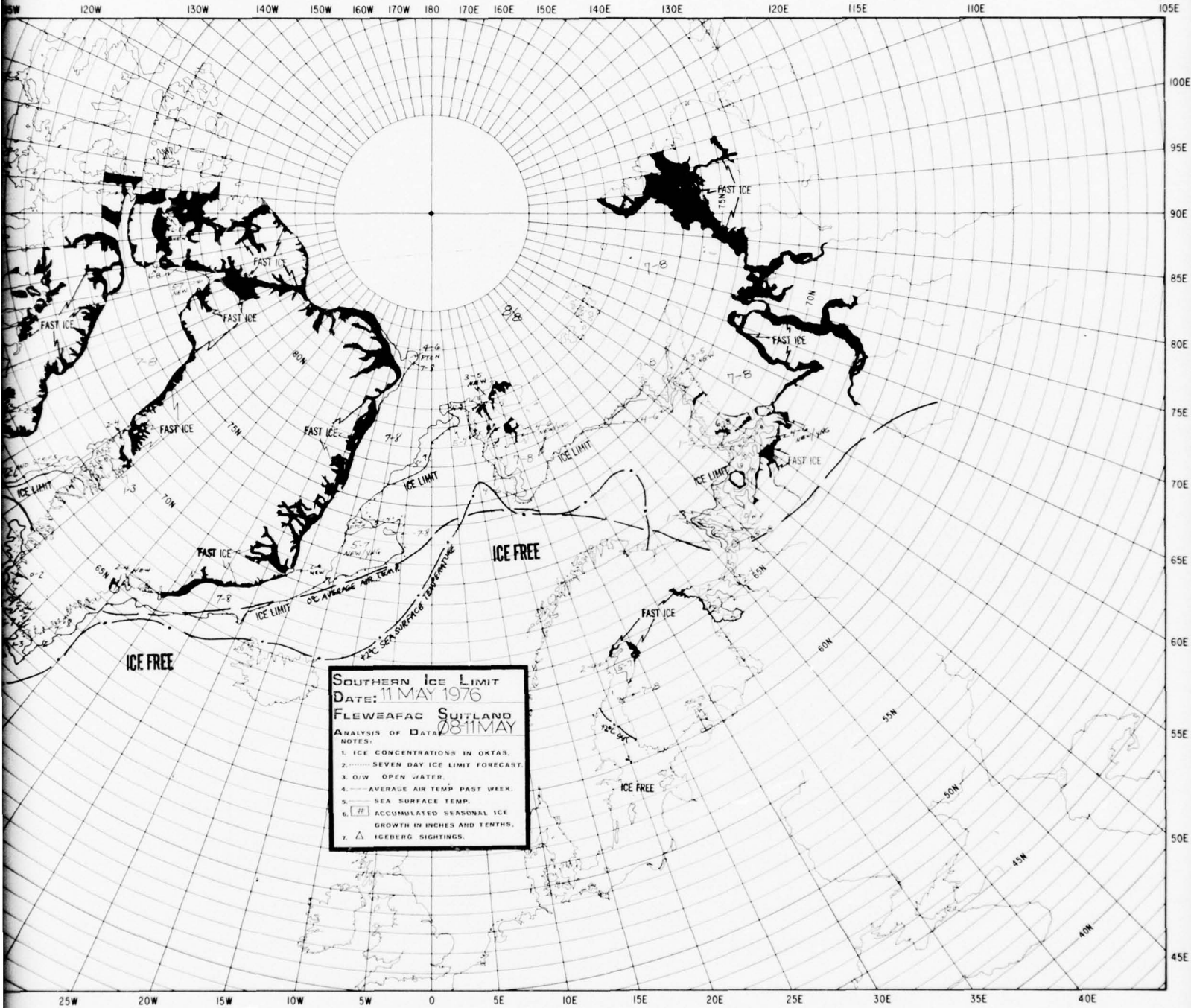
ANALYSIS OF DATA

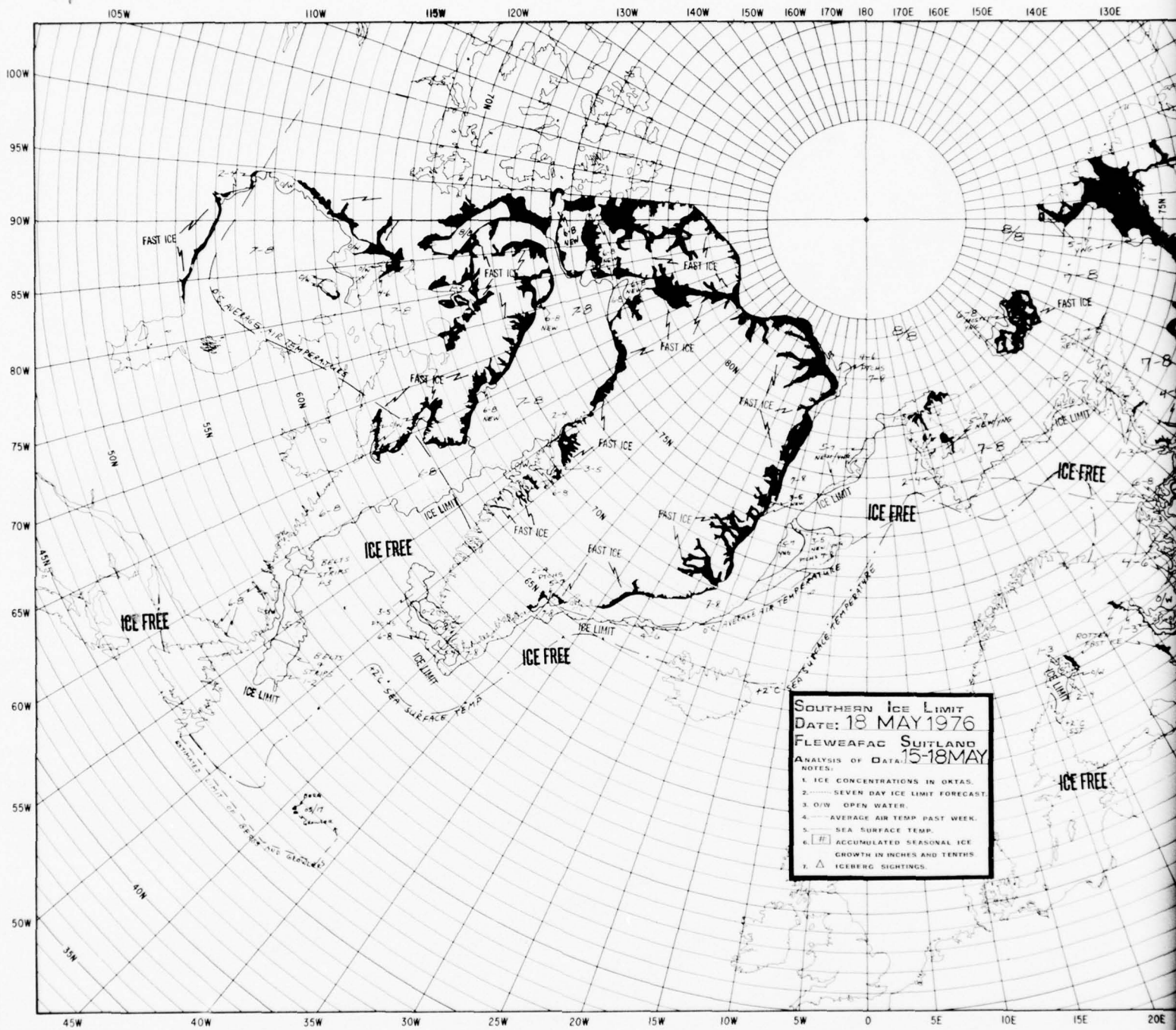
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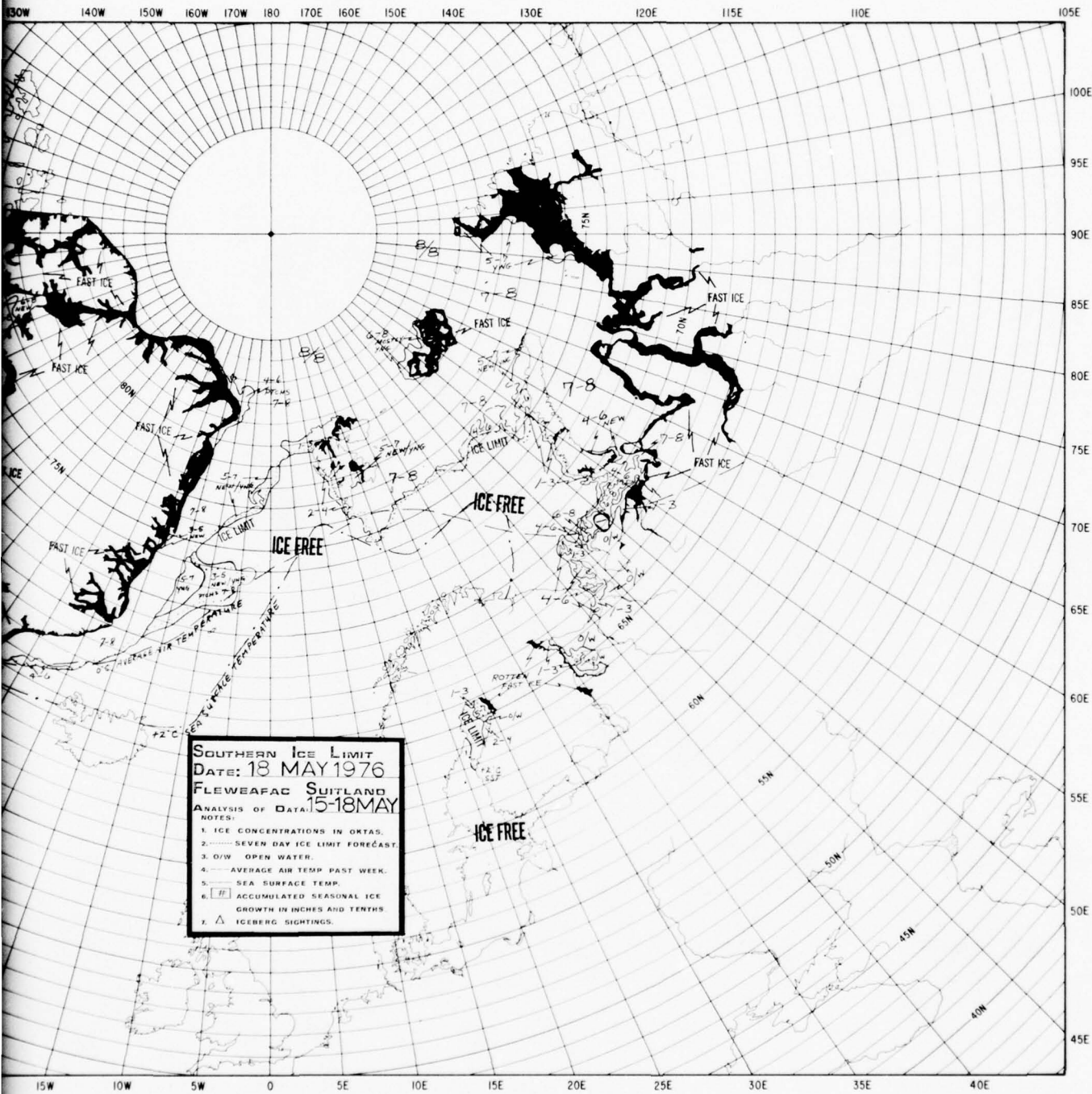
1. ICE CONCENTRATIONS IN ORTAS.
2. SEVEN DAY ICE LIMIT FORECAST
3. OW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E



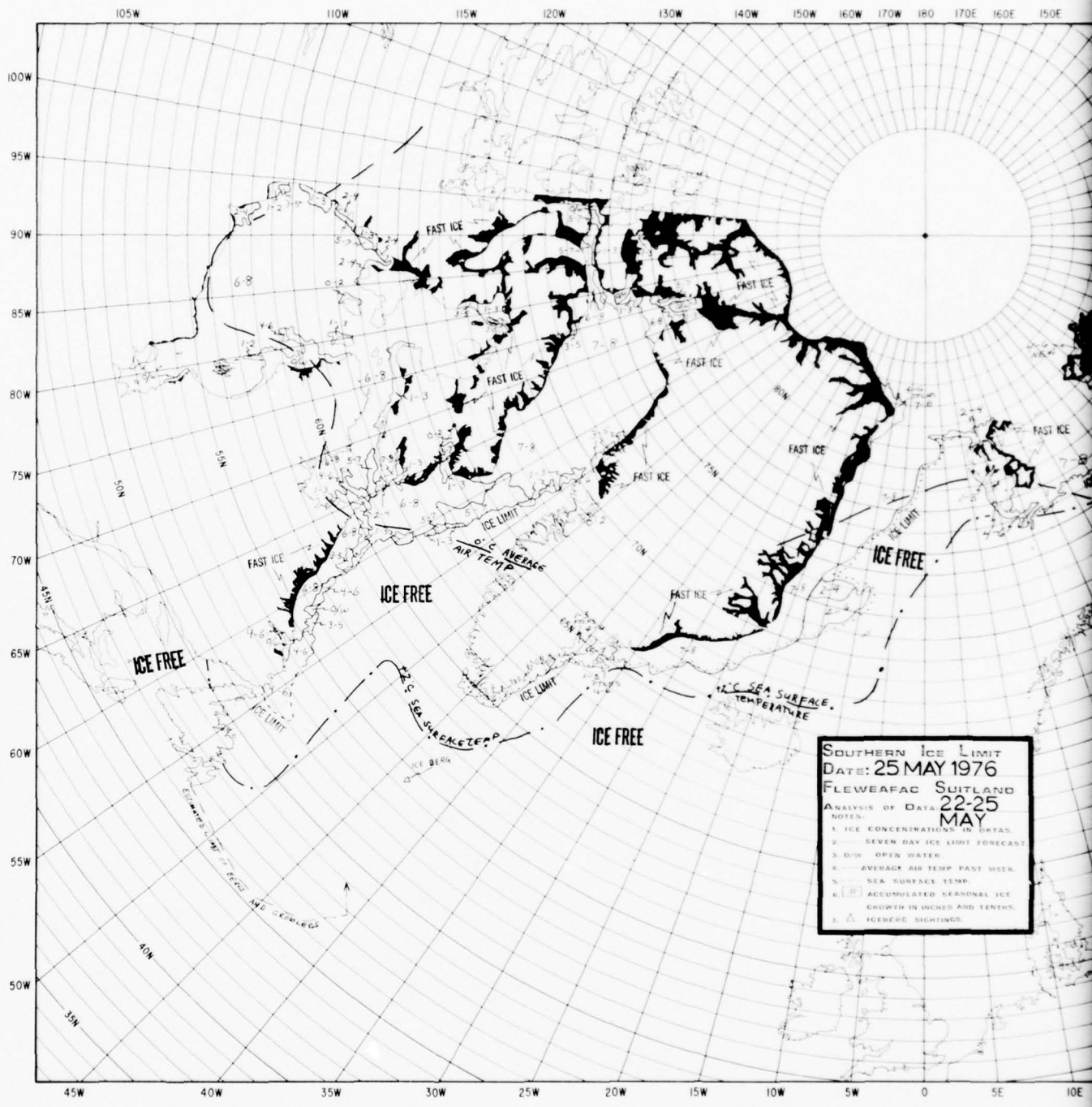






SOUTHERN ICE LIMIT
DATE: 18 MAY 1976
FLEWEAFAC SUTLAND
ANALYSIS OF DATA: 15-18 MAY

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

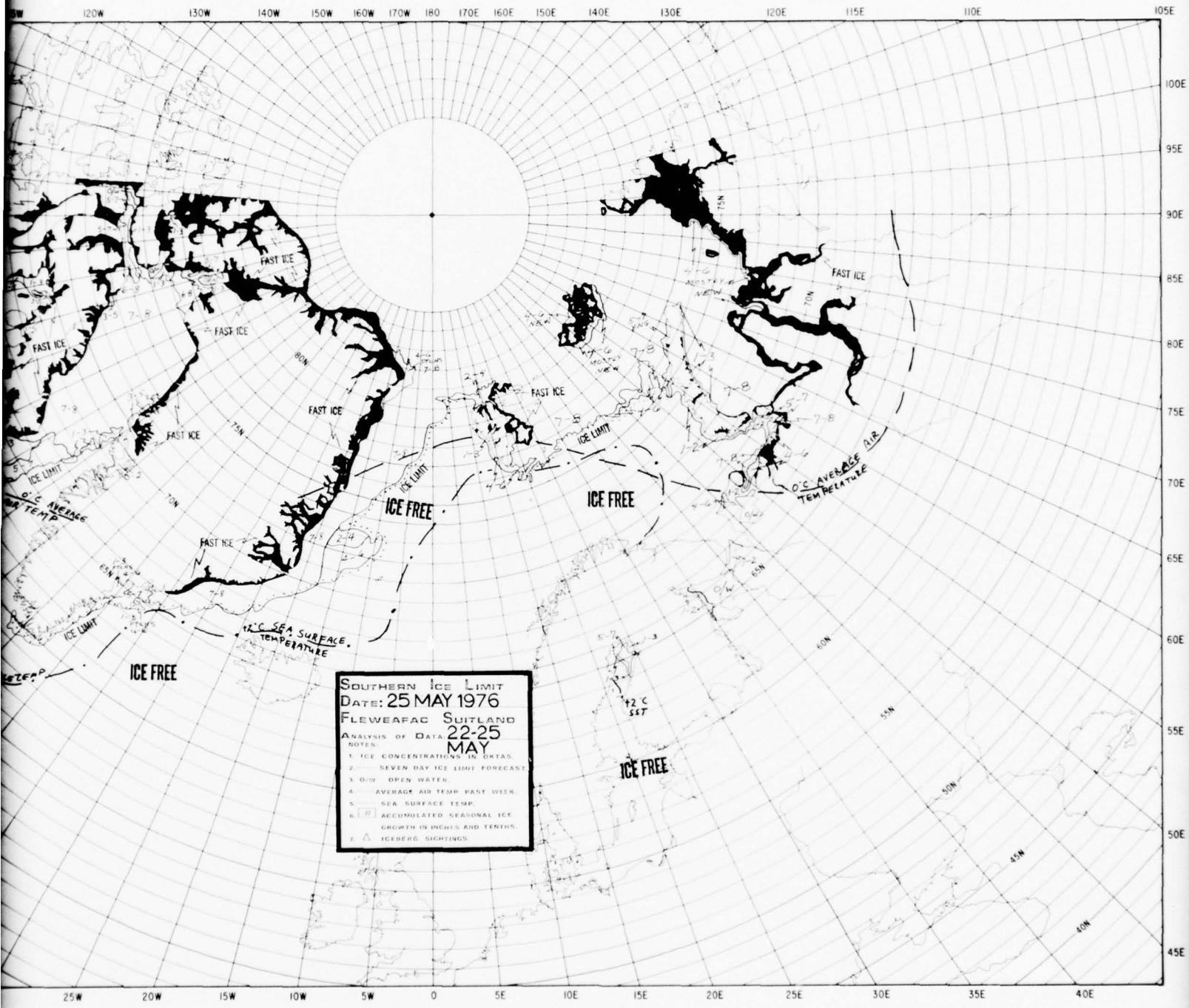


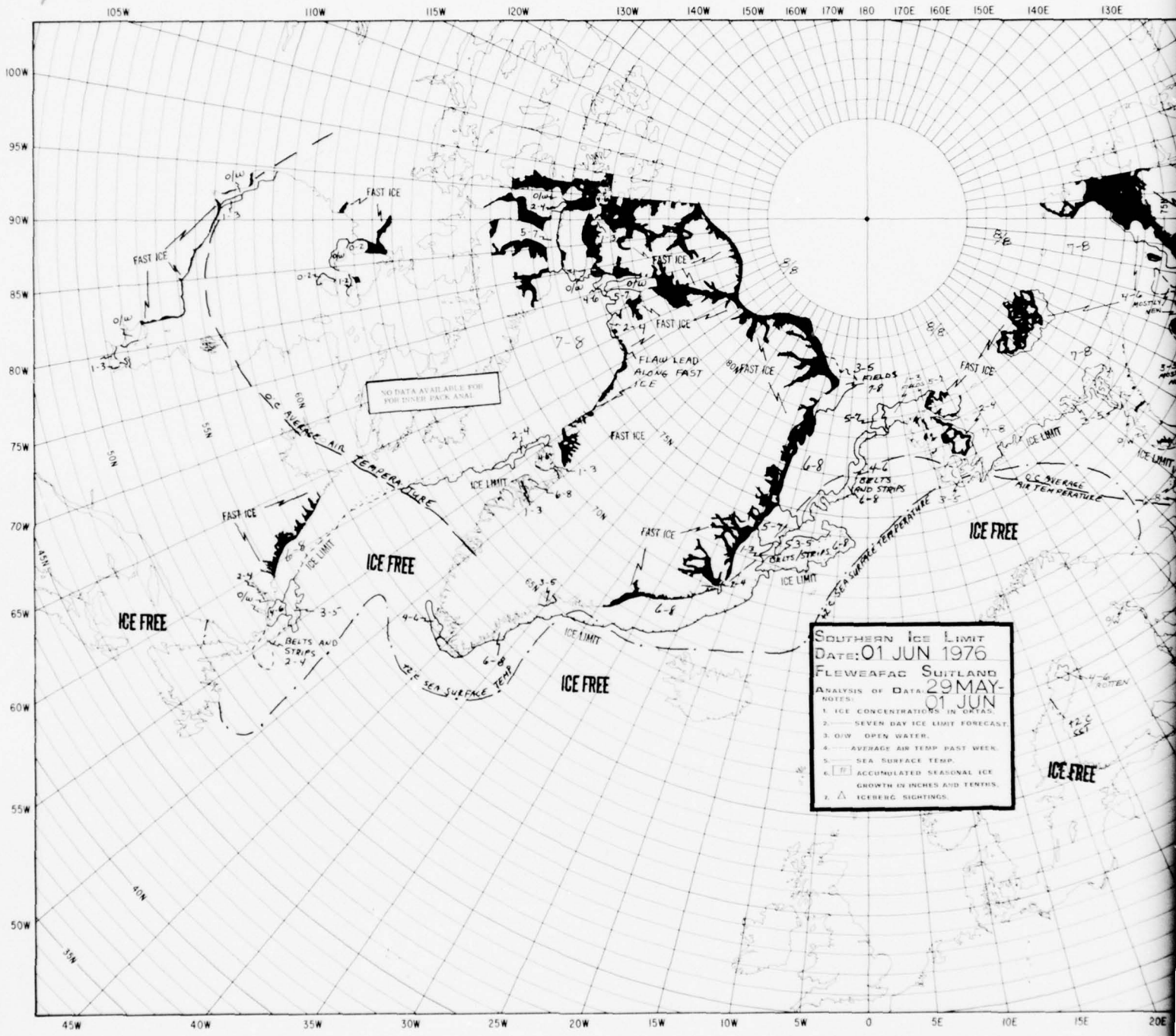
SOUTHERN ICE LIMIT
DATE: 25 MAY 1976
FLEWEAFAC SUITLAND
22-25
MAY

ANALYSIS OF DATA

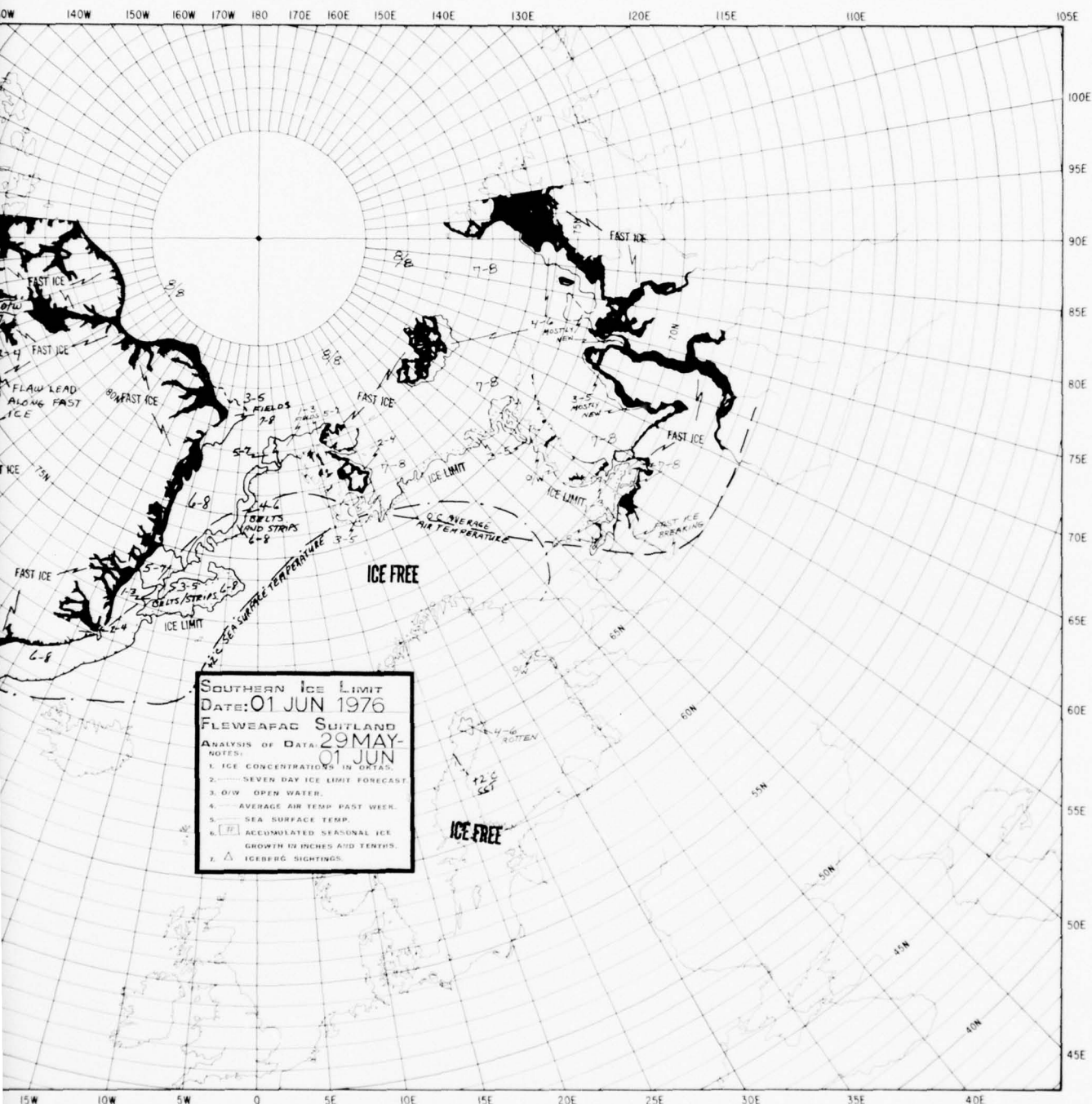
NOTES:

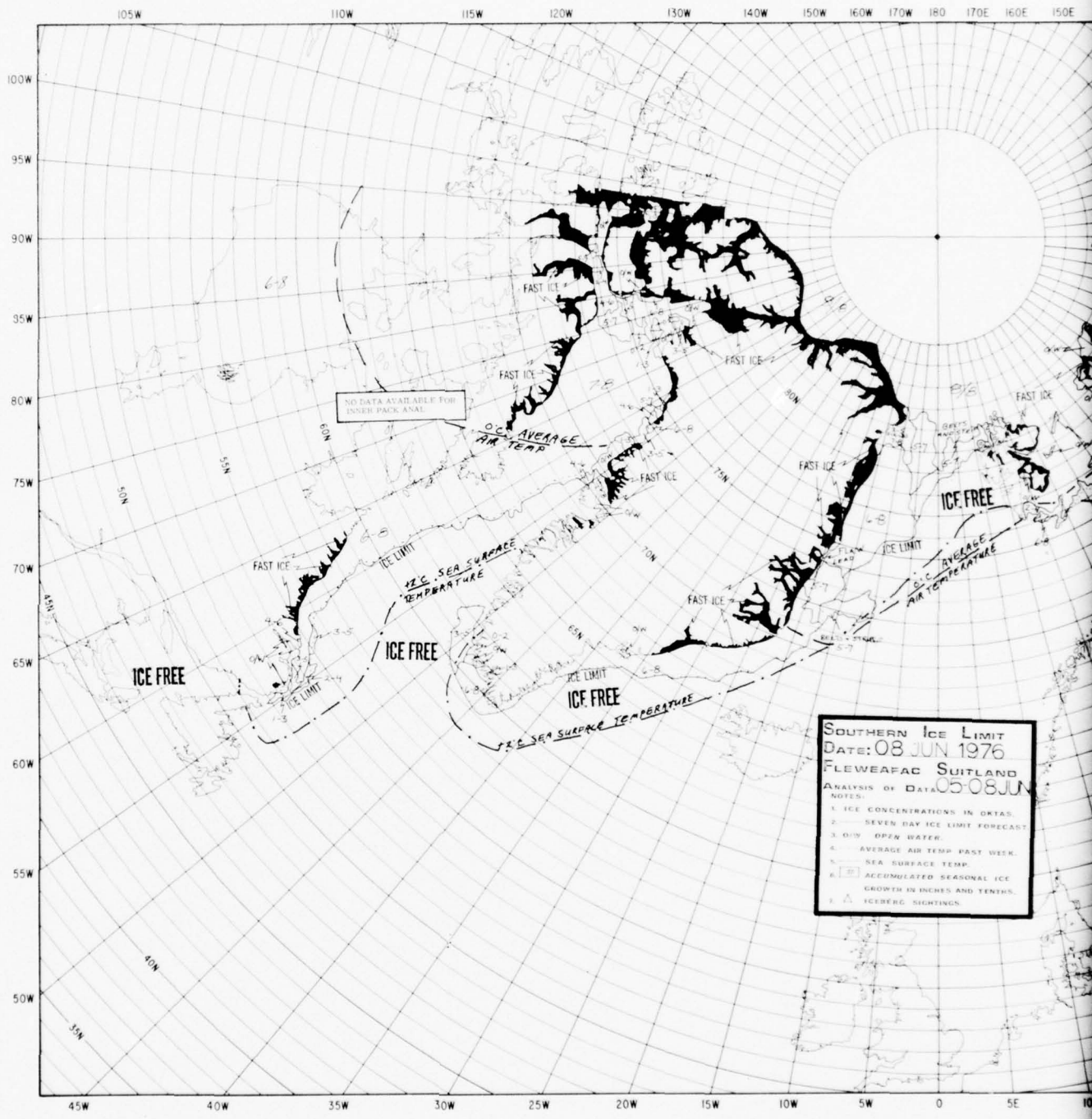
1. ICE CONCENTRATIONS IN DKTAS
2. SEVEN DAY ICE LIMIT FORECAST
3. OW OPEN WATER
4. AVERAGE AIR TEMP PAST WEEK
5. SEA SURFACE TEMP
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS
7. ICEBERG SIGHTINGS





2





NO DATA AVAILABLE FOR INNER PACK ANAL

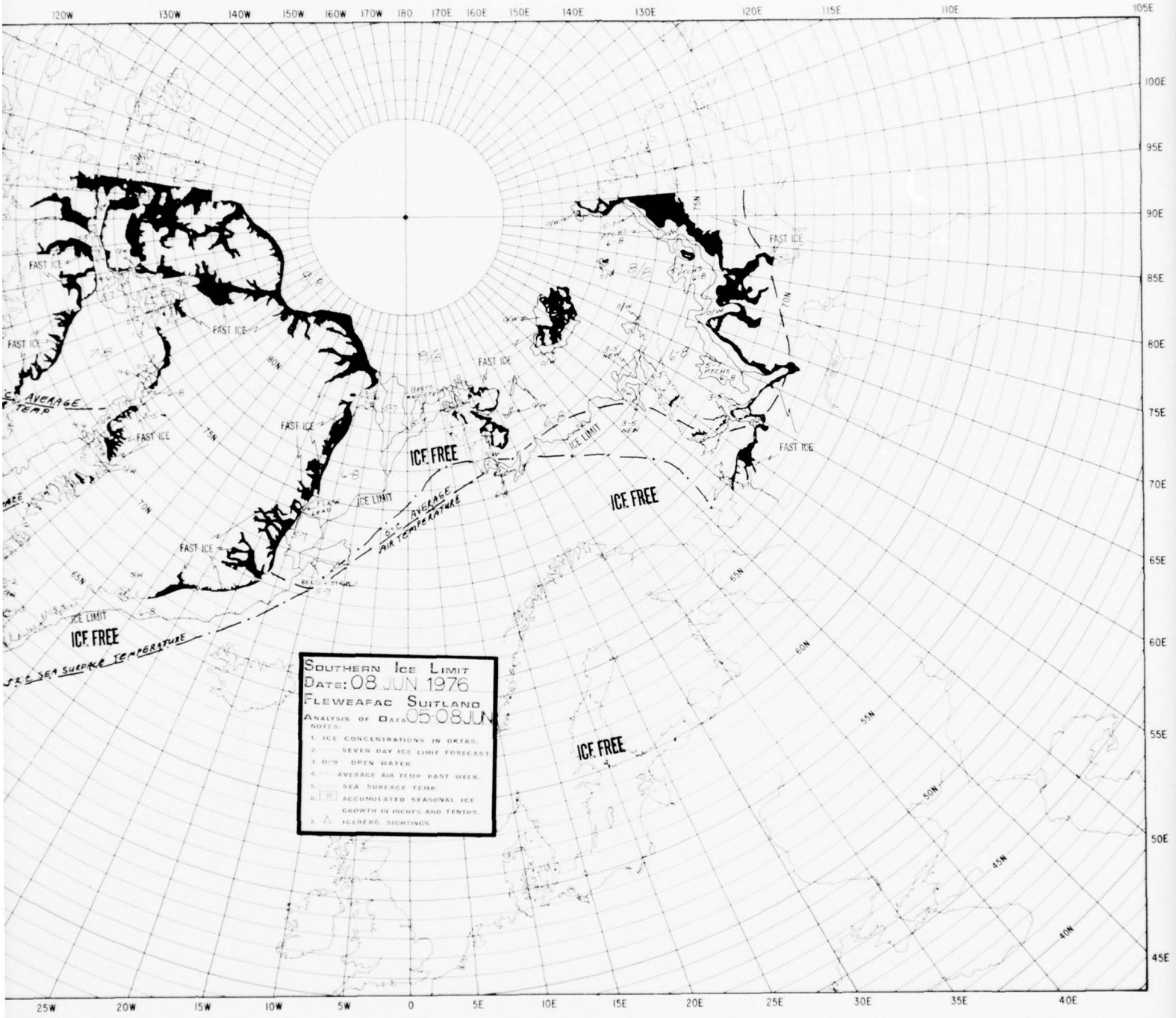
SOUTHERN ICE LIMIT
DATE: 08 JUN 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 05-08 JUN

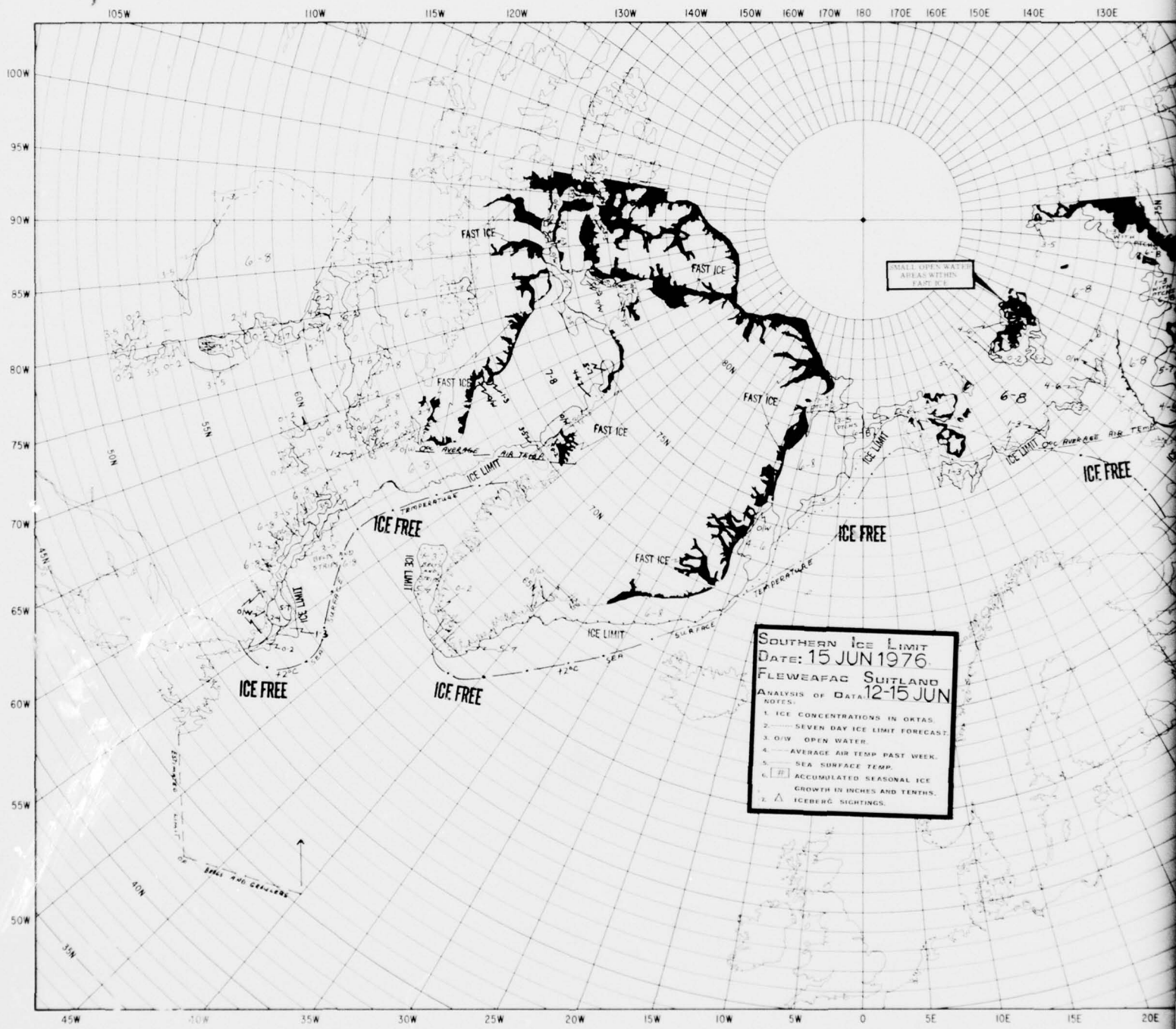
NOTES:
 1. ICE CONCENTRATIONS IN ORTS.
 2. SEVEN DAY ICE LIMIT FORECAST
 3. OW OPEN WATER
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. [Symbol] ICEBERG SIGHTINGS.

105W 110W 115W 120W 130W 140W 150W 160W 170W 180 170E 160E 150E

100W
95W
90W
85W
80W
75W
70W
65W
60W
55W
50W

45W 40W 35W 30W 25W 20W 15W 10W 5W 0 5E 10E

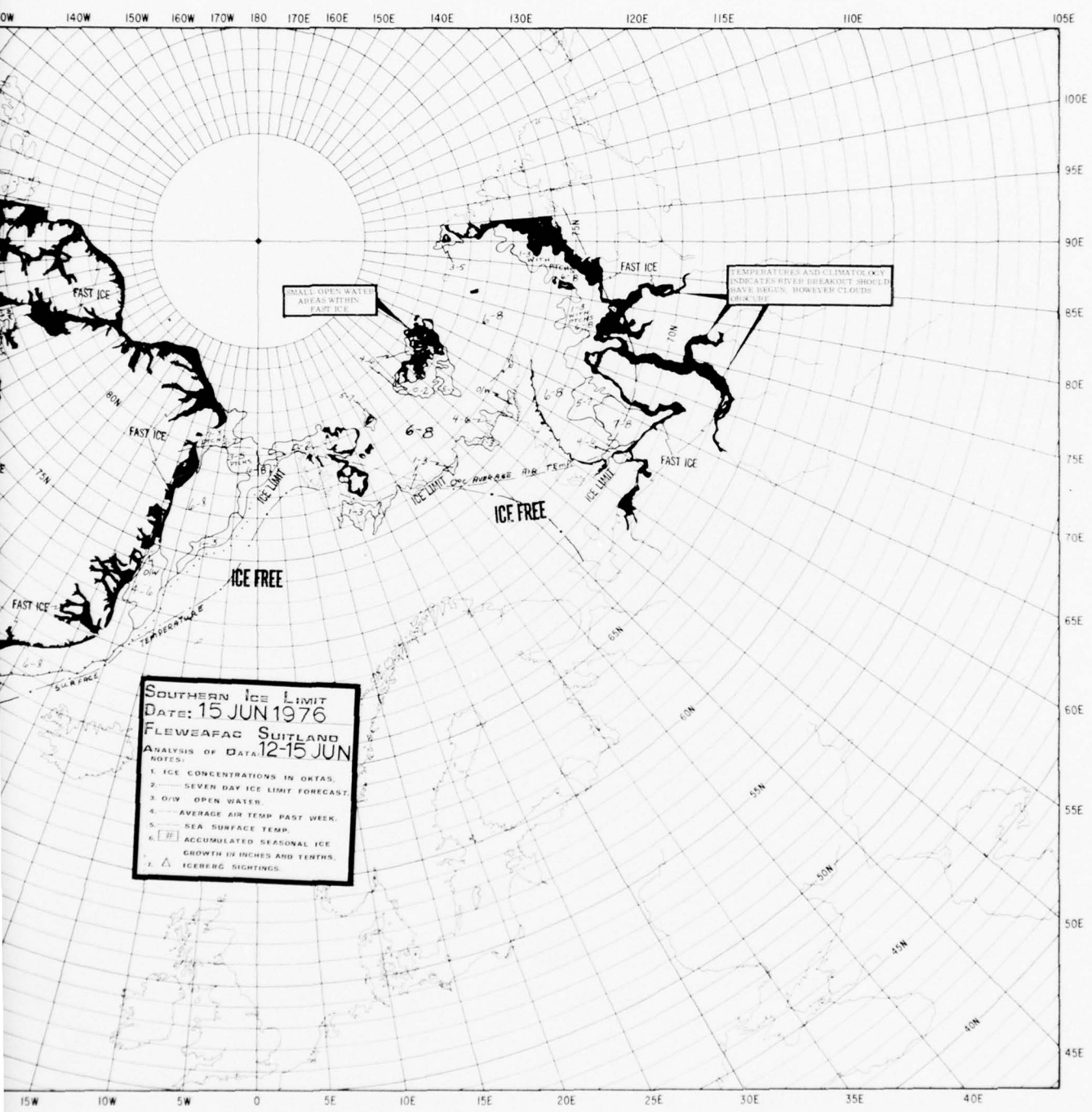




SMALL OPEN WATER AREAS WITHIN FAST ICE

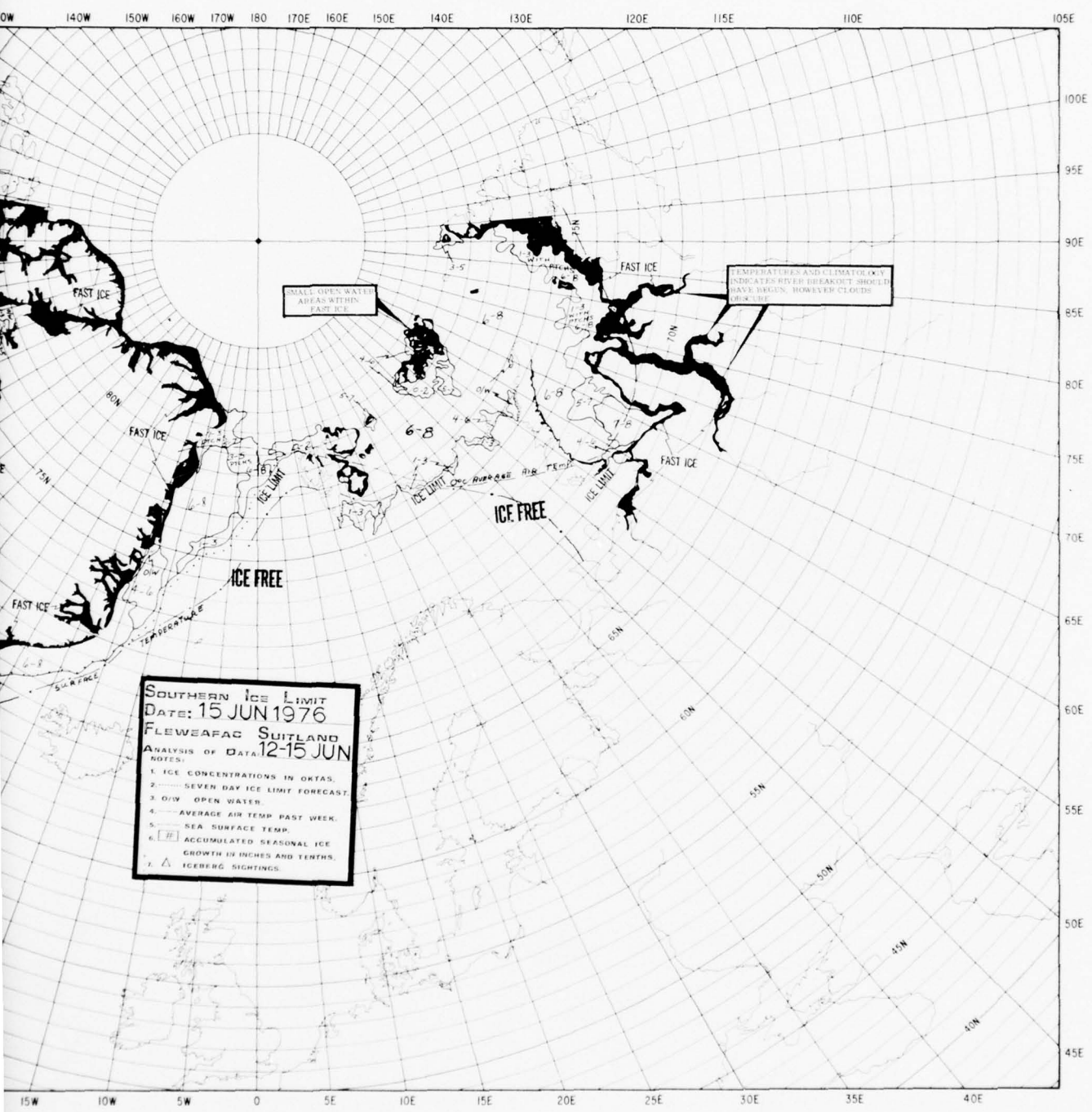
SOUTHERN ICE LIMIT
 DATE: 15 JUN 1976.
 FLEWEAFAC SUITLAND
 ANALYSIS OF DATA 12-15 JUN

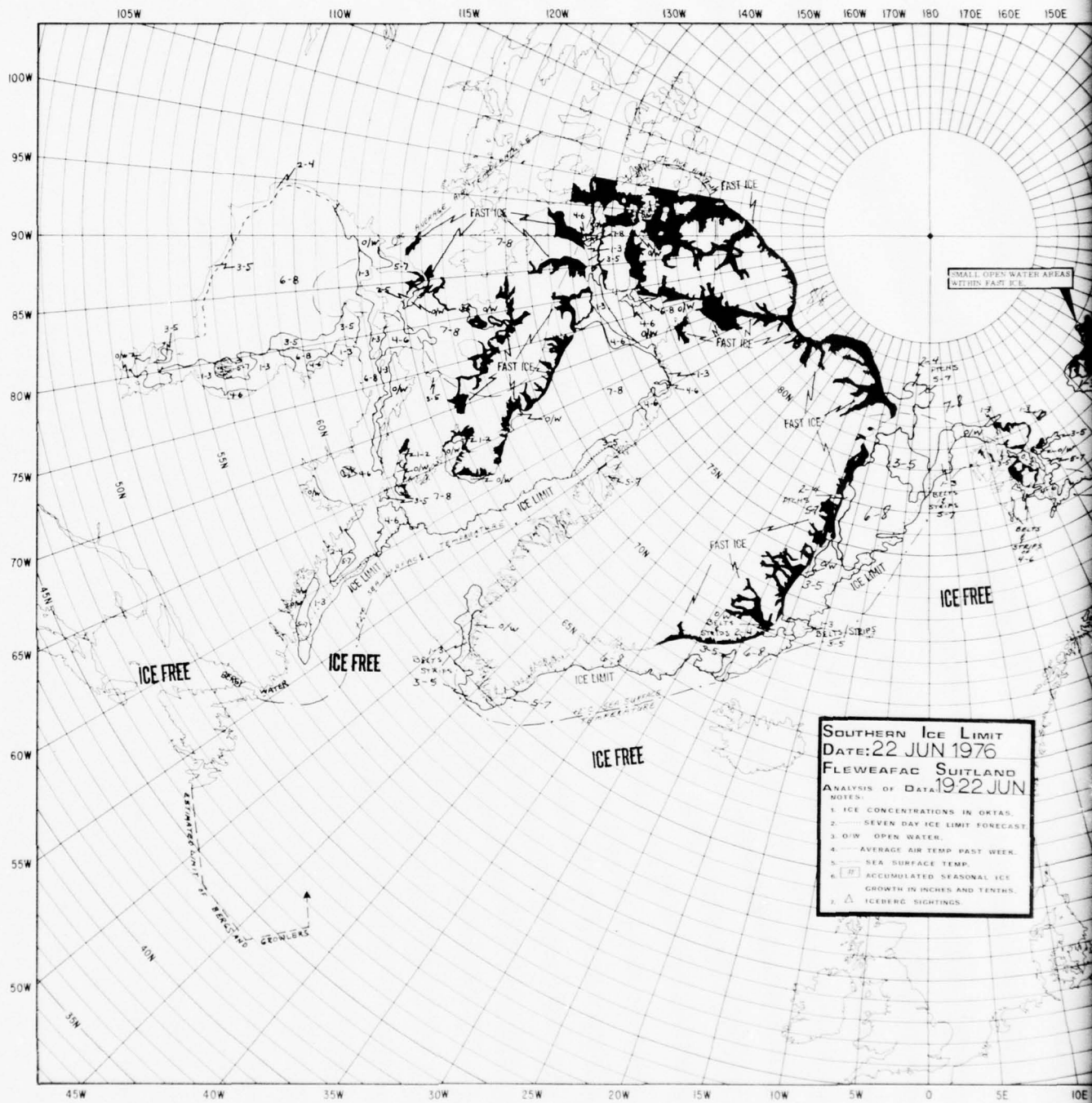
- 1. ICE CONCENTRATIONS IN ORTAS.
- 2. SEVEN DAY ICE LIMIT FORECAST.
- 3. O/W OPEN WATER.
- 4. AVERAGE AIR TEMP PAST WEEK.
- 5. SEA SURFACE TEMP.
- 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
- 7. ICEBERG SIGHTINGS.

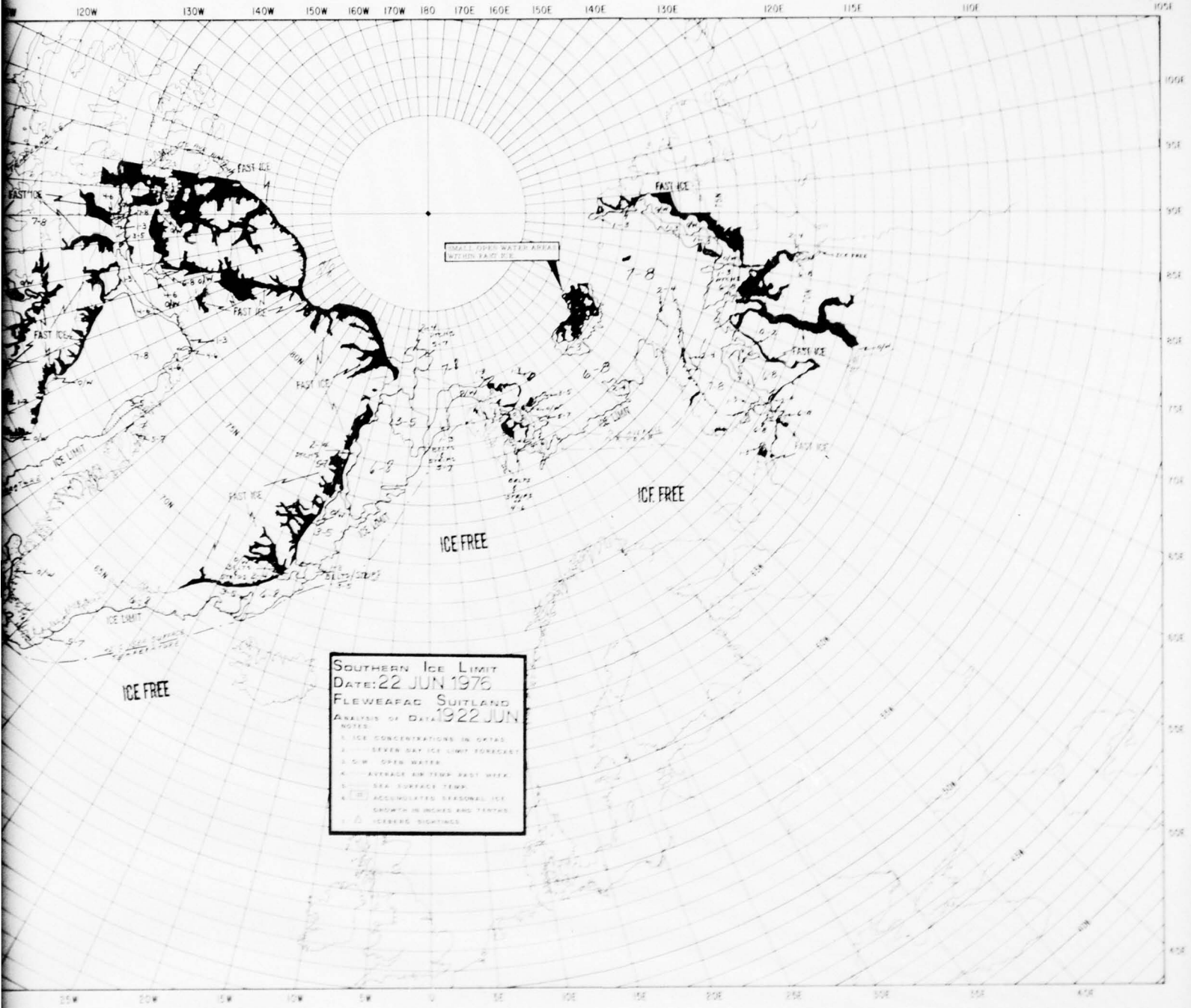


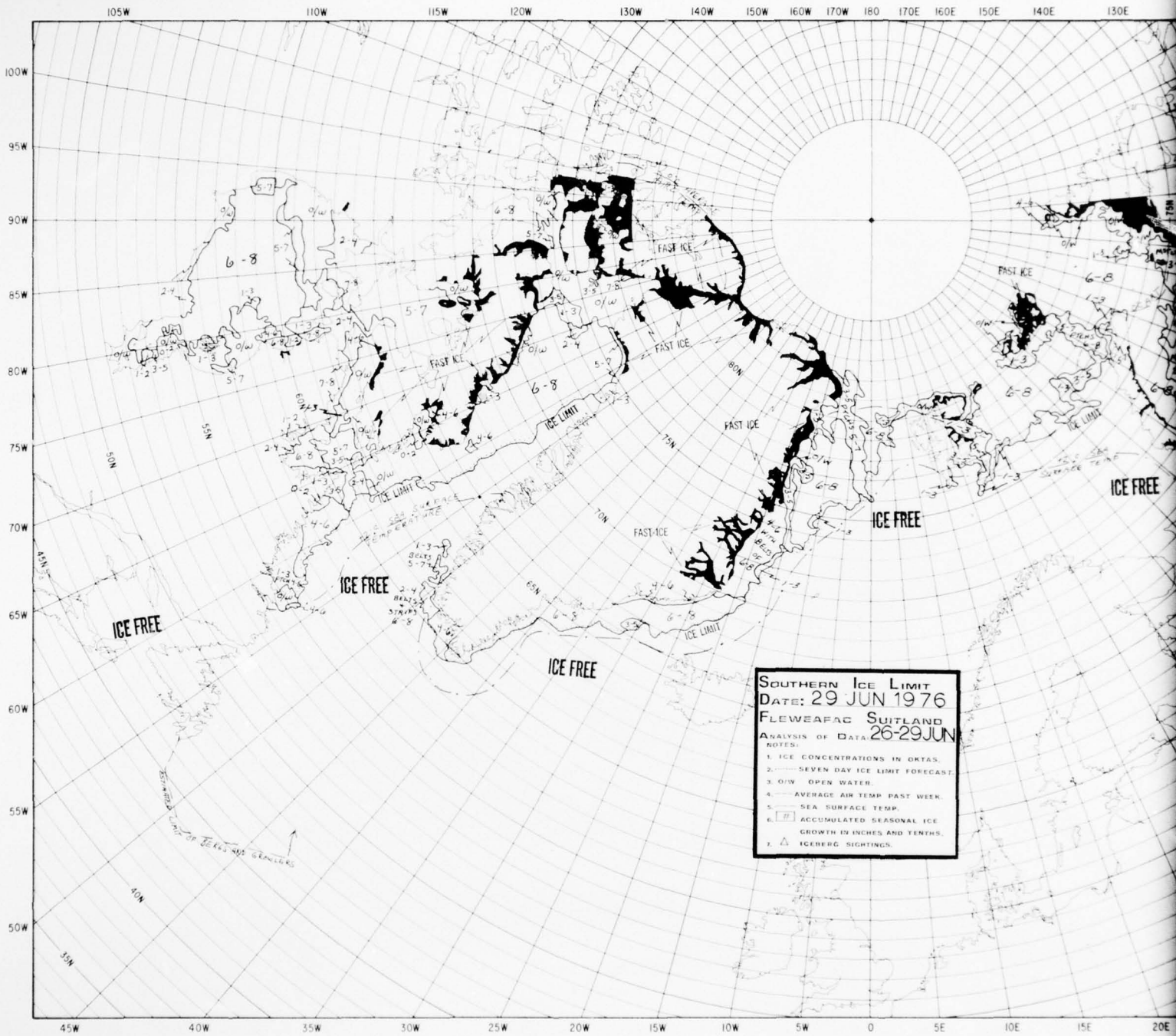
SMALL OPEN WATER AREAS WITHIN FAST ICE

TEMPERATURES AND CLIMATOLOGY INDICATES FURTHER BREAKOUT SHOULD HAVE BEGUN, HOWEVER CLOUDS PREVENT



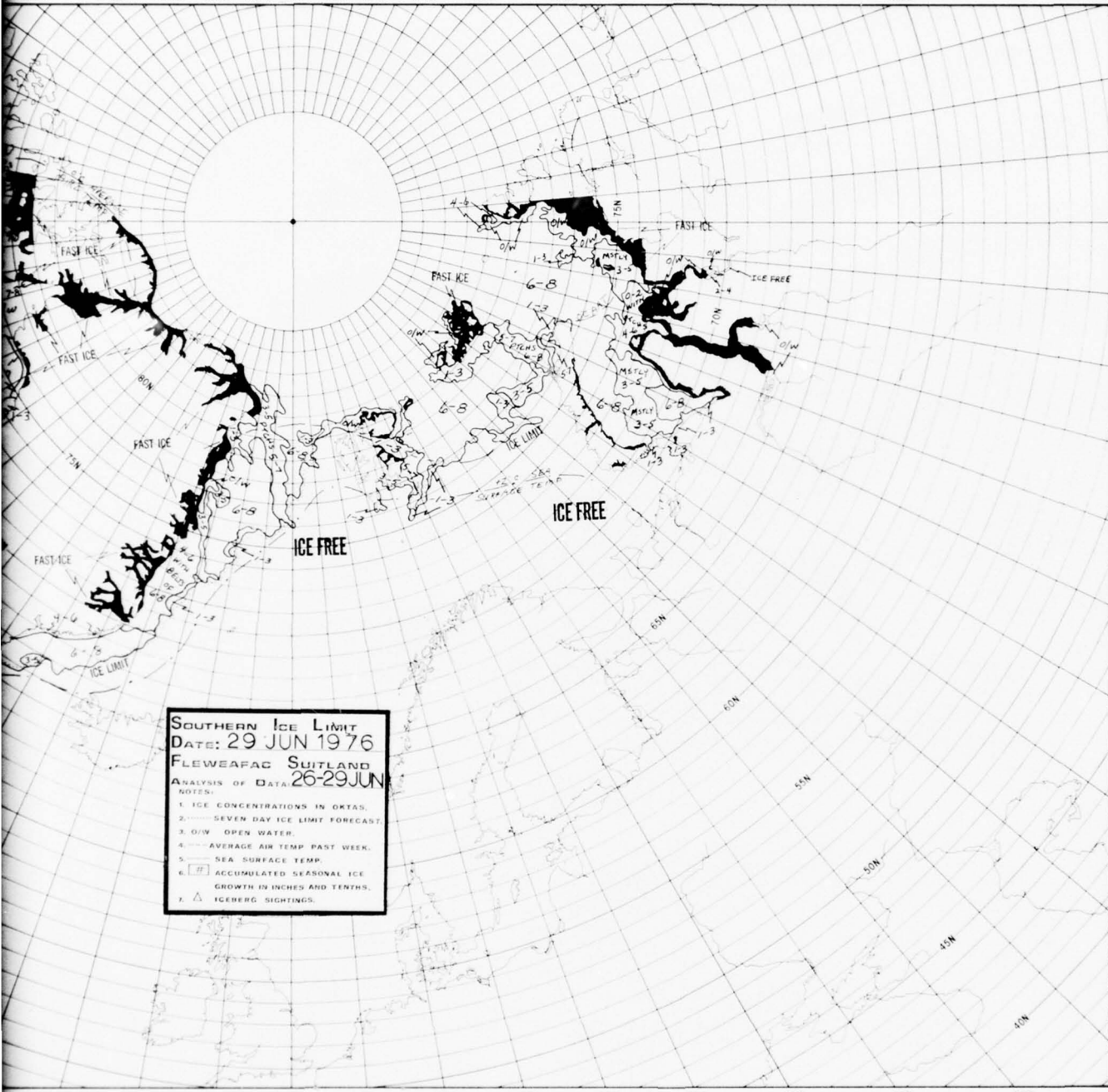






130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

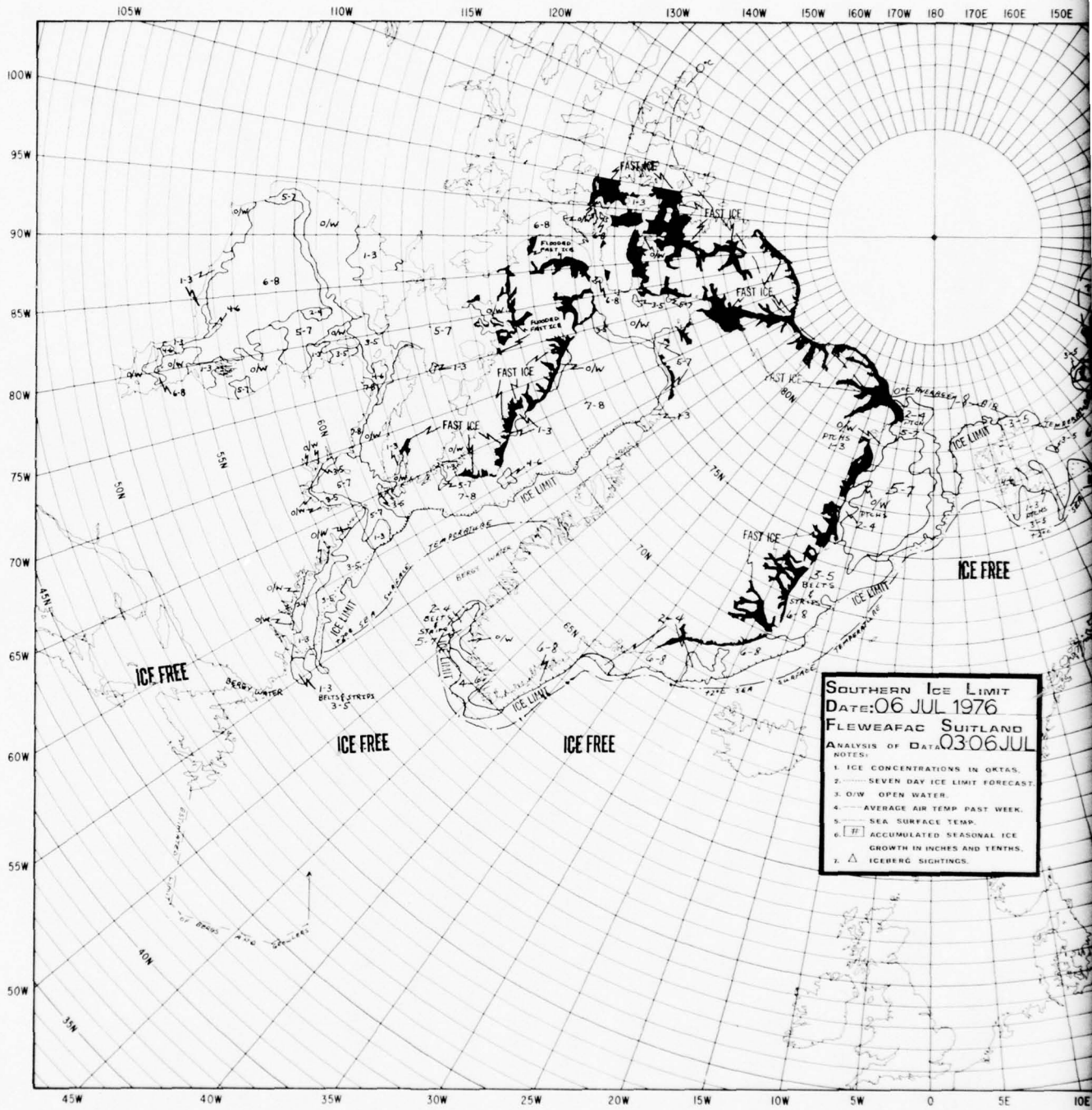
100E
95E
90E
85E
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65E
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Southern Ice Limit
DATE: 29 JUN 1976
FLEWEAFAC SUTLAND
ANALYSIS OF DATA: 26-29 JUN

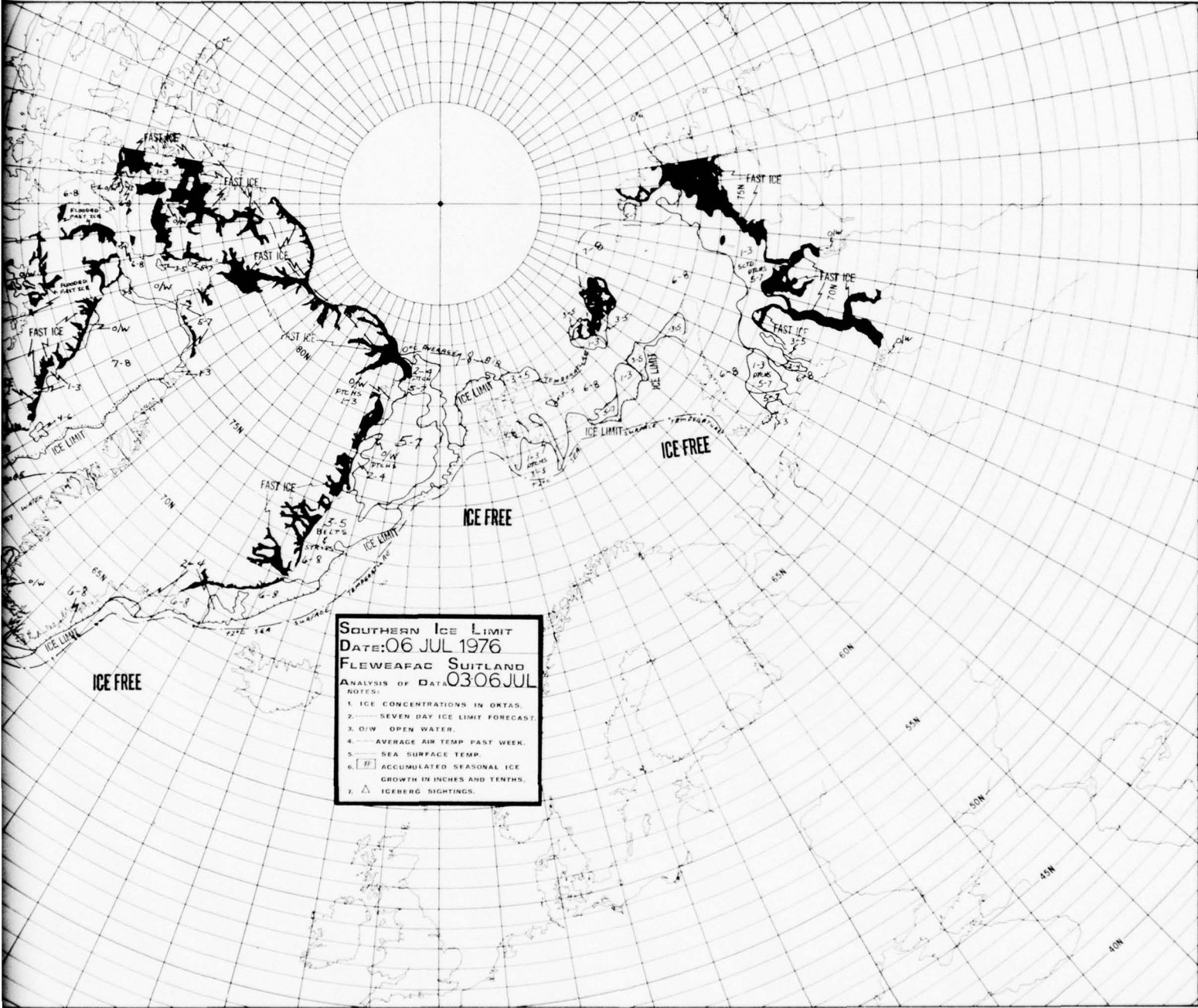
NOTES:
 1. ICE CONCENTRATIONS IN ORTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

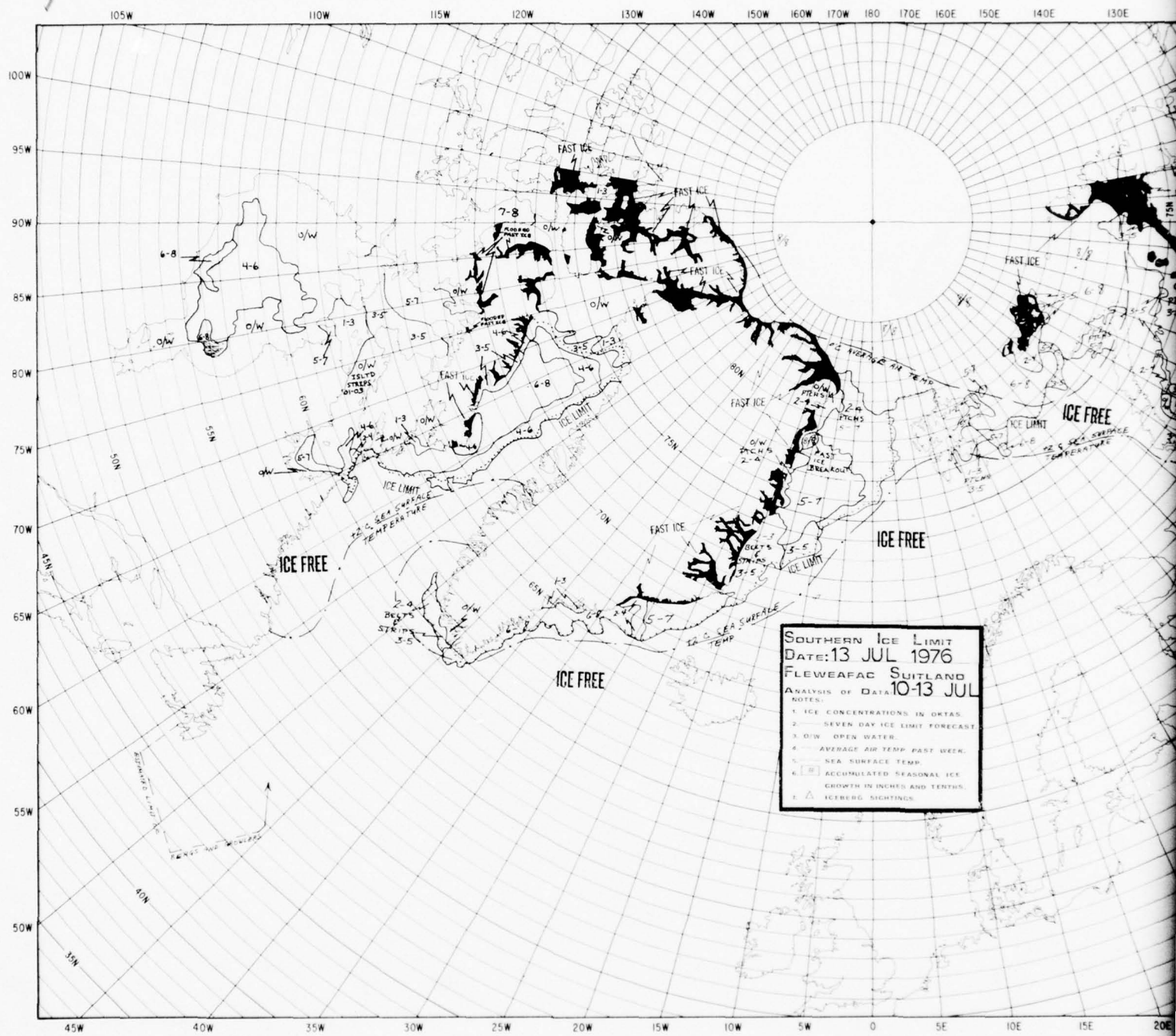


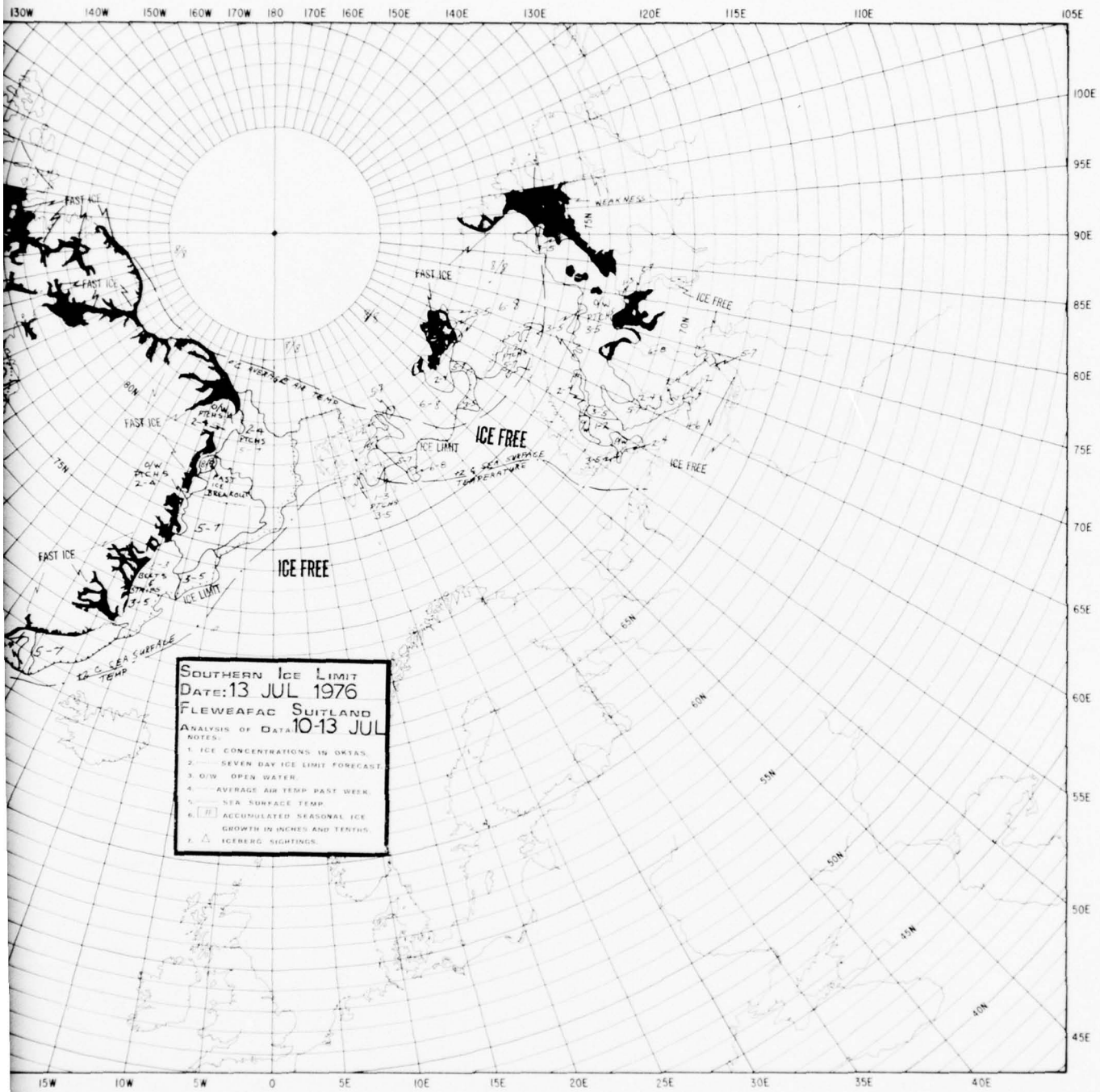
120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

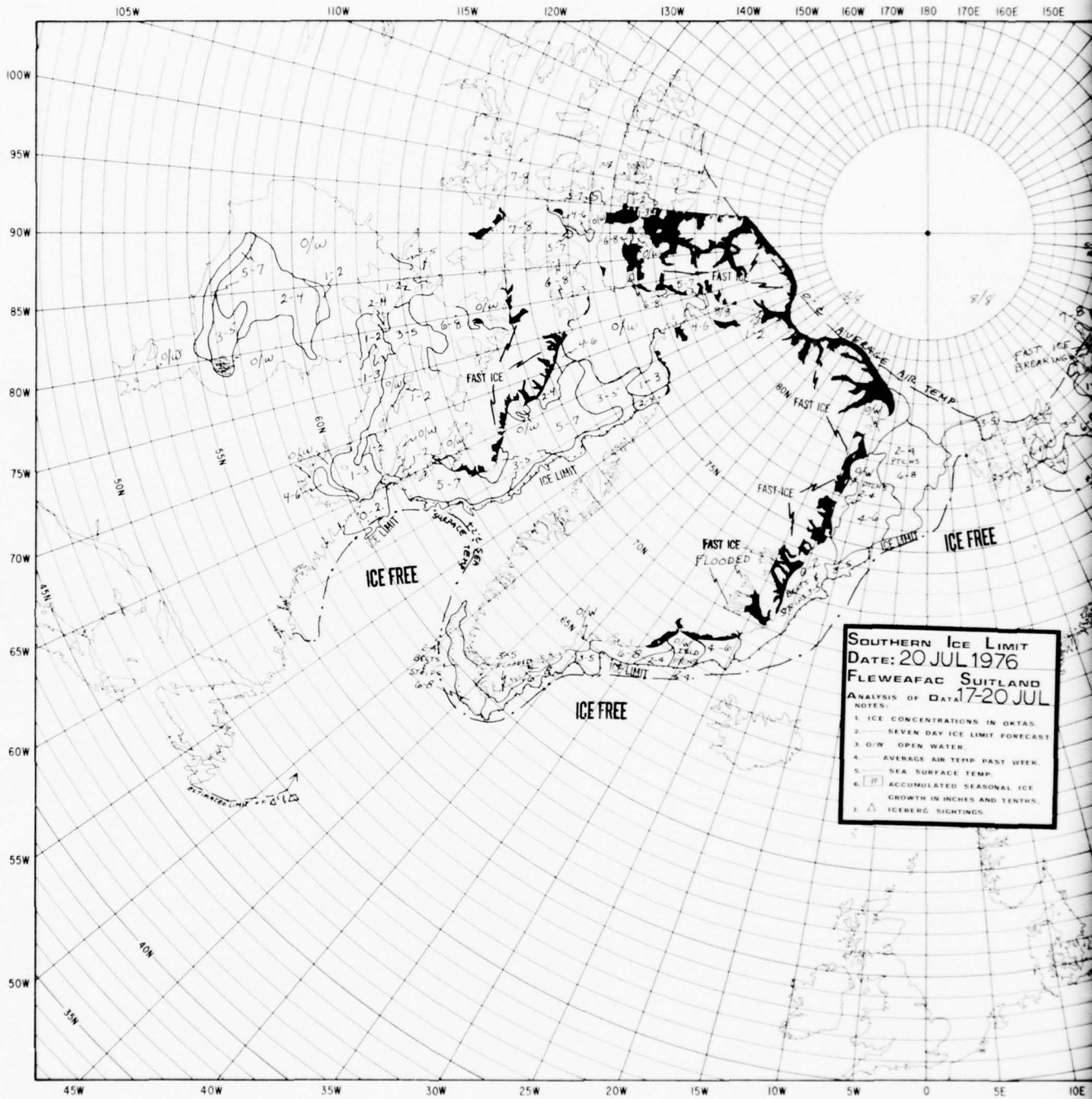
100E
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55E
50E
45E



25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

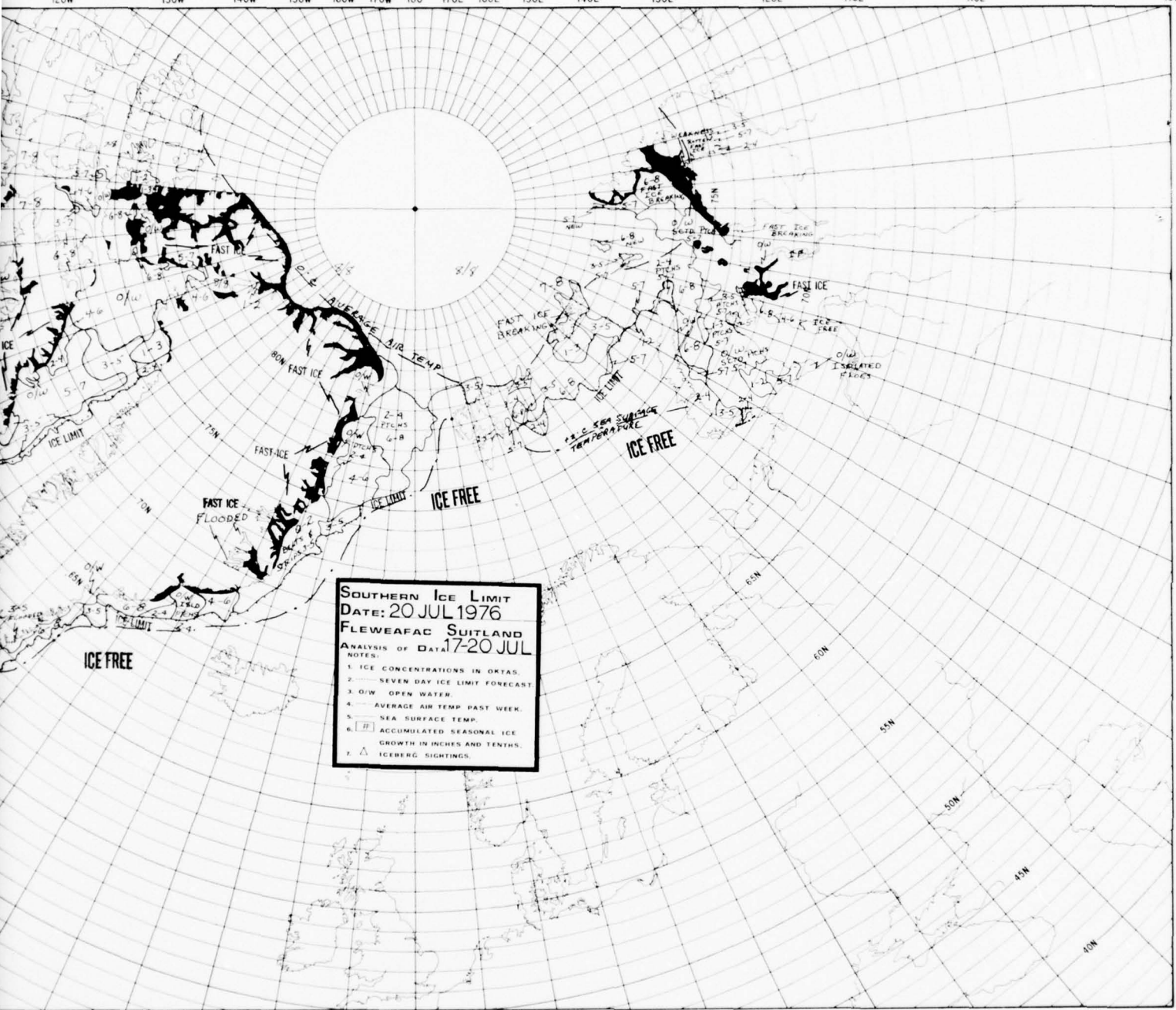






120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

100E
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80E
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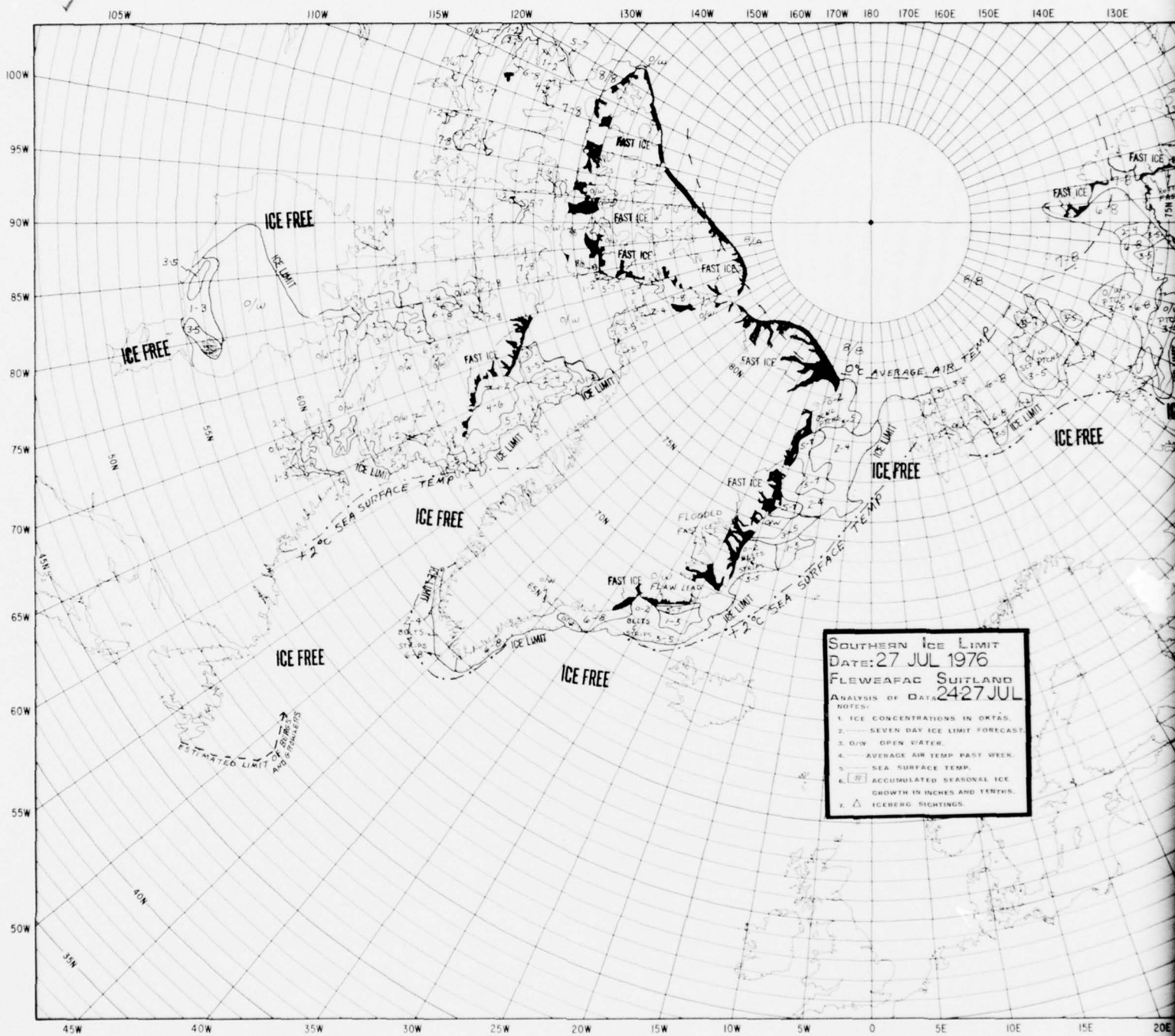


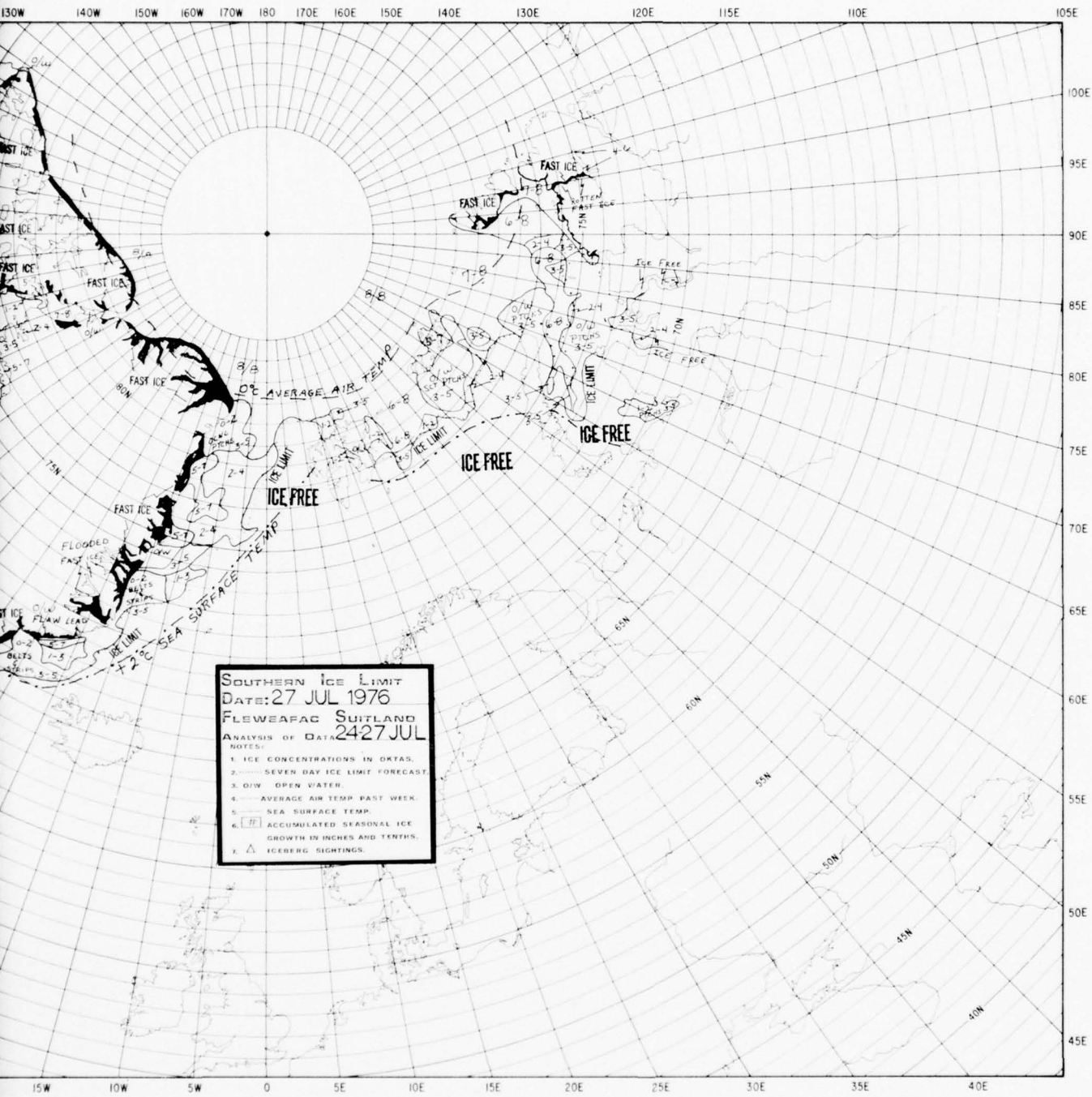
SOUTHERN ICE LIMIT
DATE: 20 JUL 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 17-20 JUL

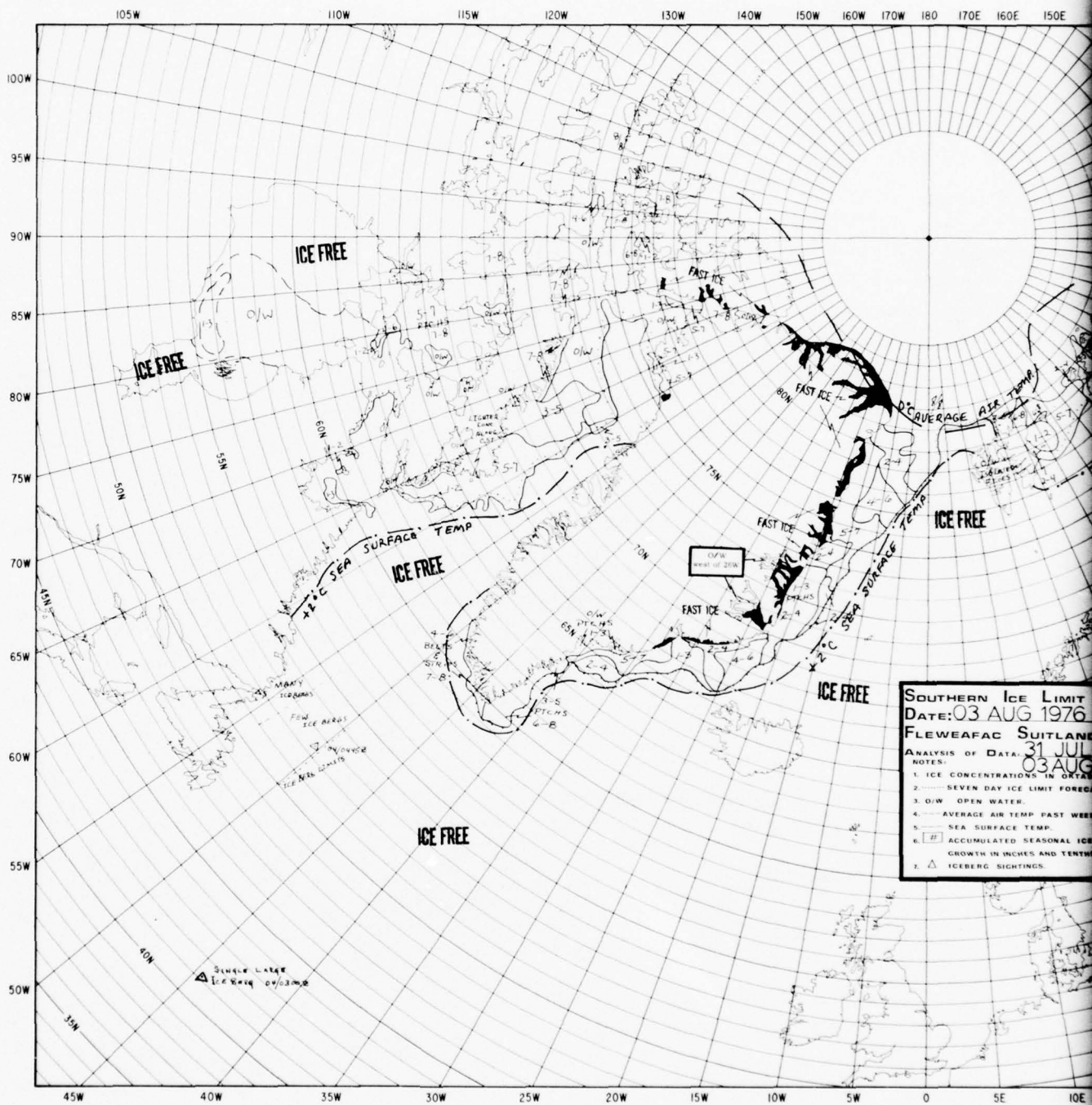
NOTES:

1. ICE CONCENTRATIONS IN ORKAS.
2. SEVEN DAY ICE LIMIT FORECAST
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. [] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. [] ICEBERG SIGHTINGS.

25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

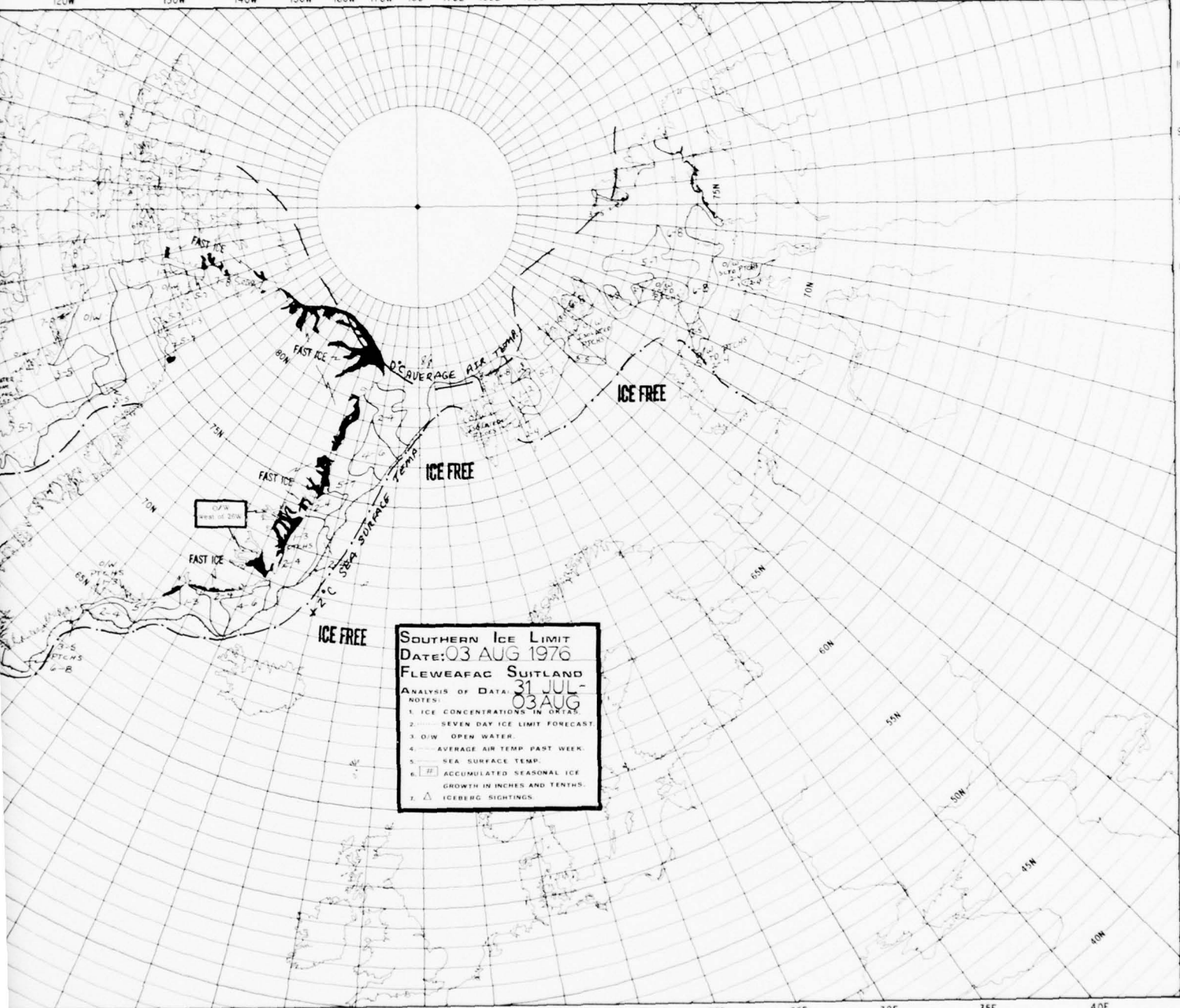




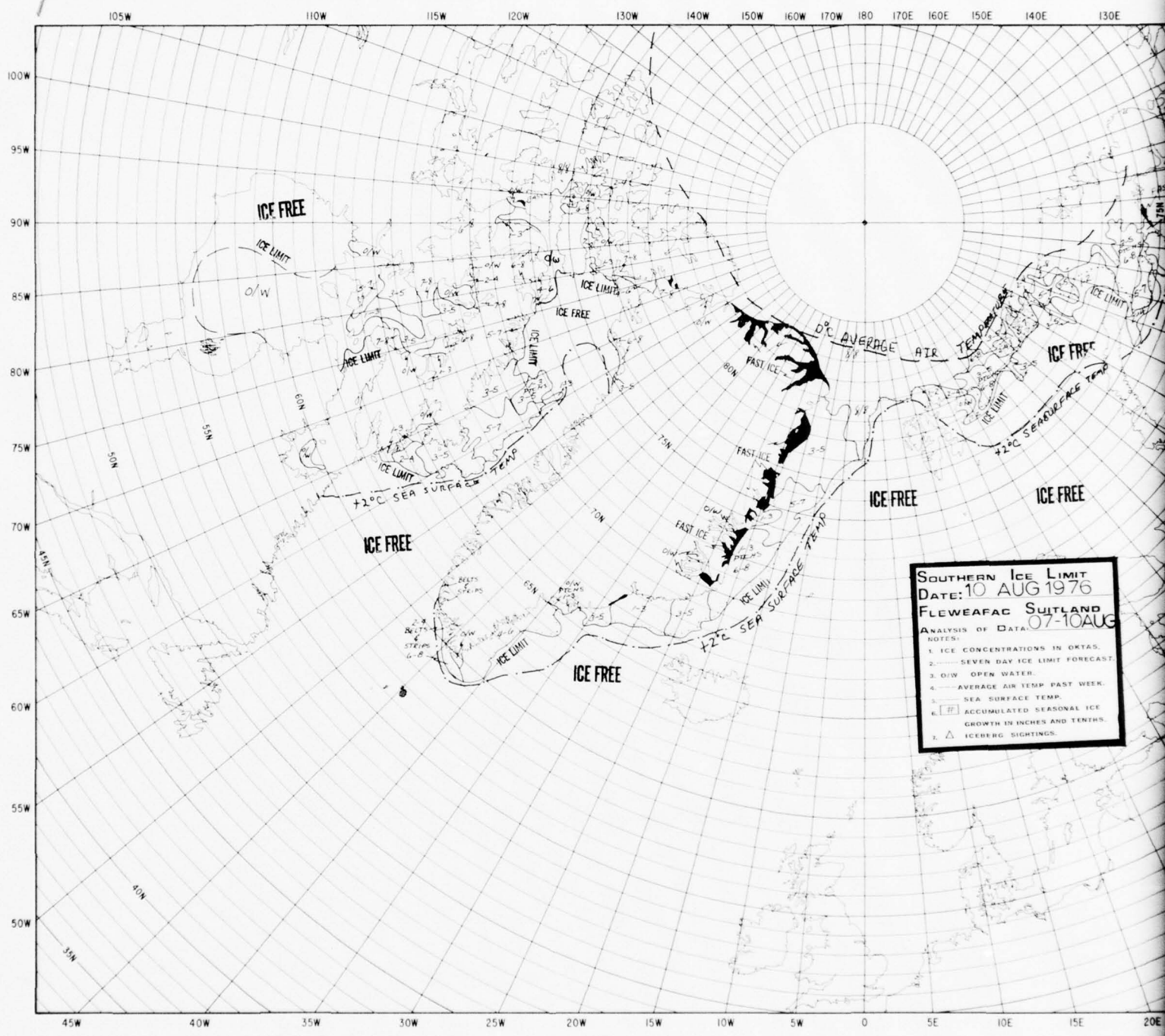


120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

100E
95E
90E
85E
80E
75E
70E
65E
60E
55E
50E
45E



25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

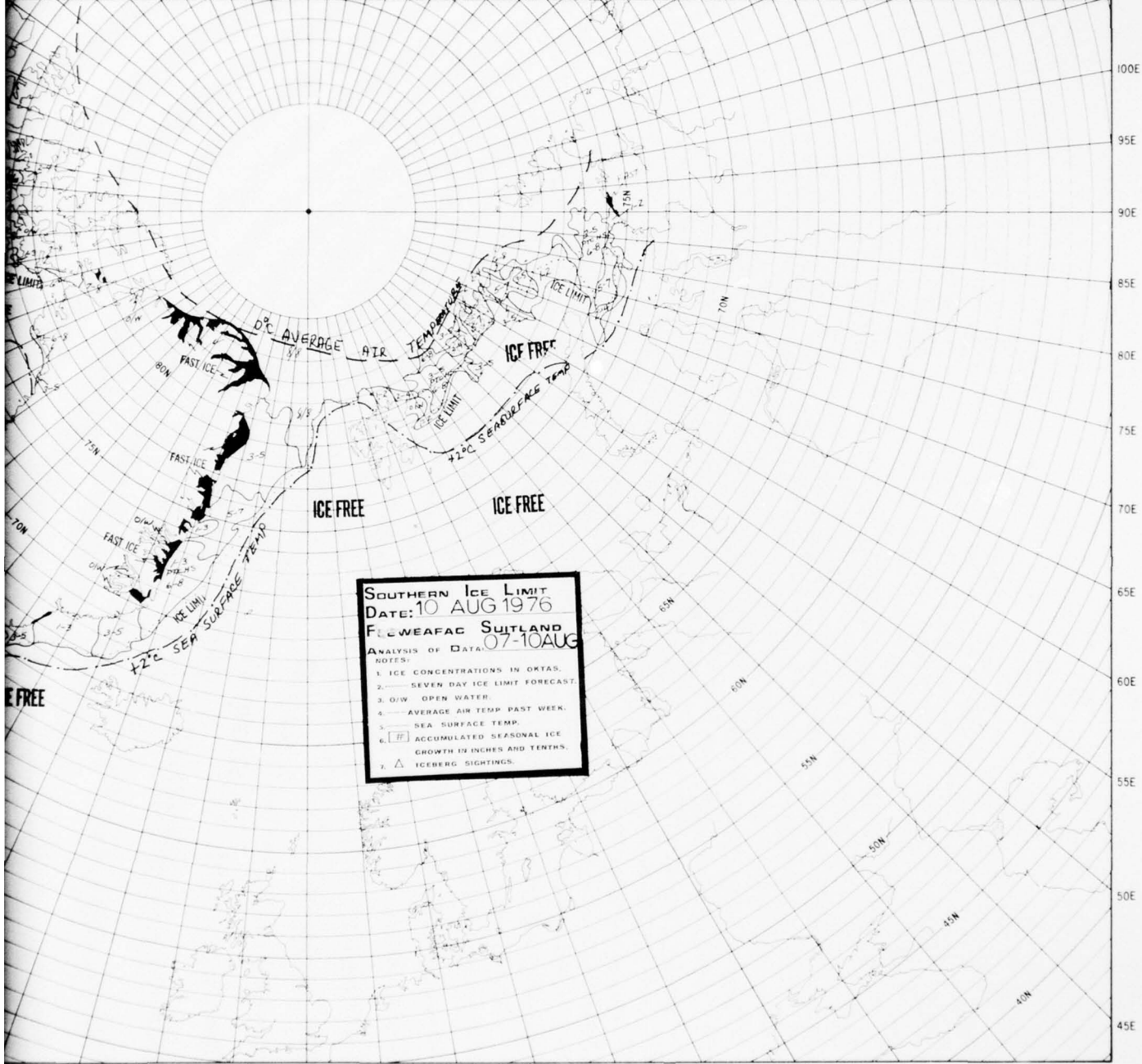


SOUTHERN ICE LIMIT
DATE: 10 AUG 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 07-10 AUG

NOTES:

1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. # ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. Δ ICEBERG SIGHTINGS.

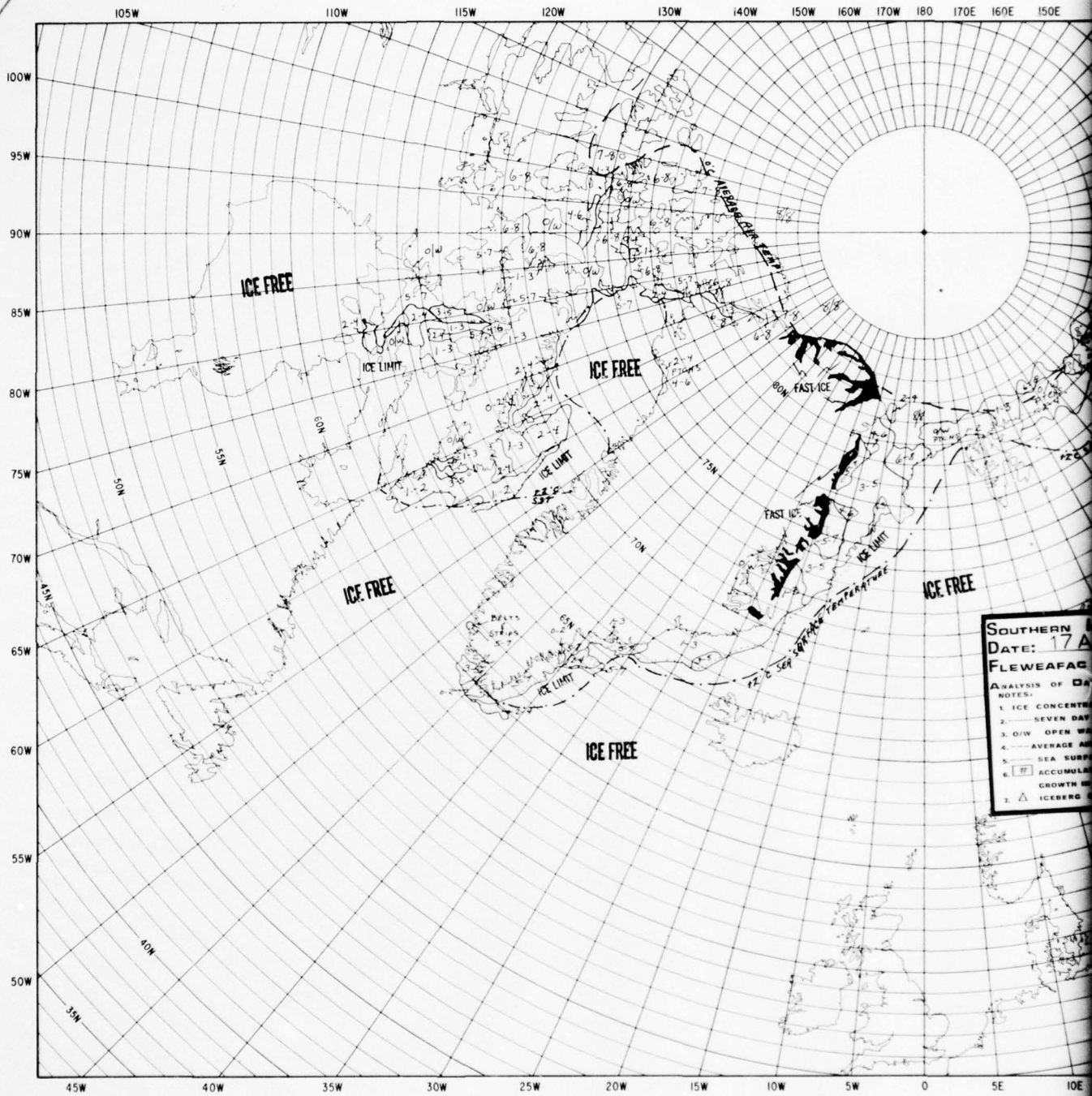
130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E



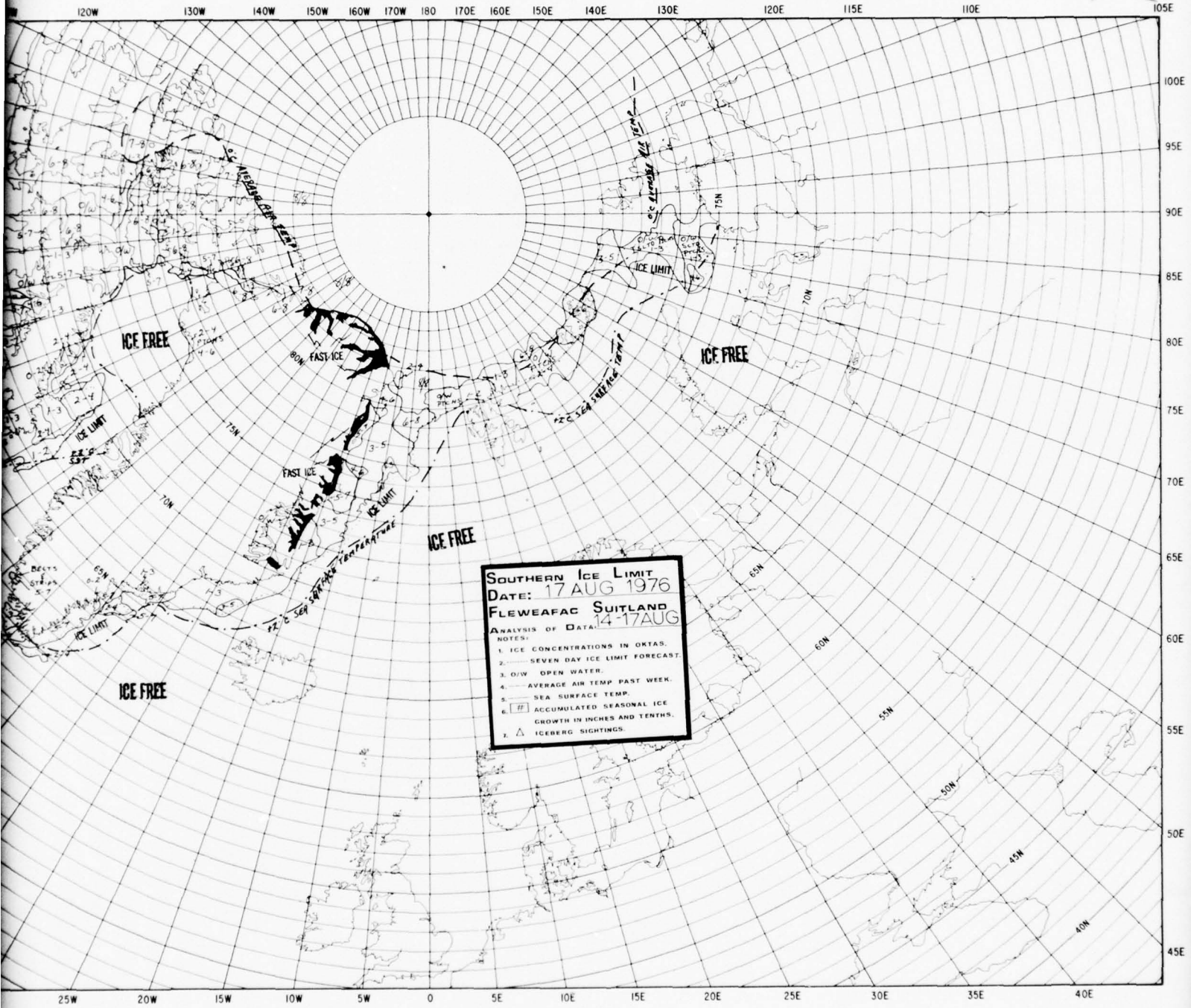
SOUTHERN ICE LIMIT
DATE: 10 AUG 1976
F. L. WEAFAC SUTLAND
ANALYSIS OF DATA: 07-10 AUG

NOTES:
 1. ICE CONCENTRATIONS IN ORFAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. Δ ICEBERG SIGHTINGS.

15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E



SOUTHERN OCEAN
DATE: 17 A
FLEWEAFAC
 ANALYSIS OF DATA
 NOTES:
 1. ICE CONCENTRATION
 2. SEVEN DAY
 3. OPEN WATER
 4. AVERAGE AIR
 5. SEA SURFACE
 6. ACCUMULATION
 GROWTH RATE
 7. ICEBERG

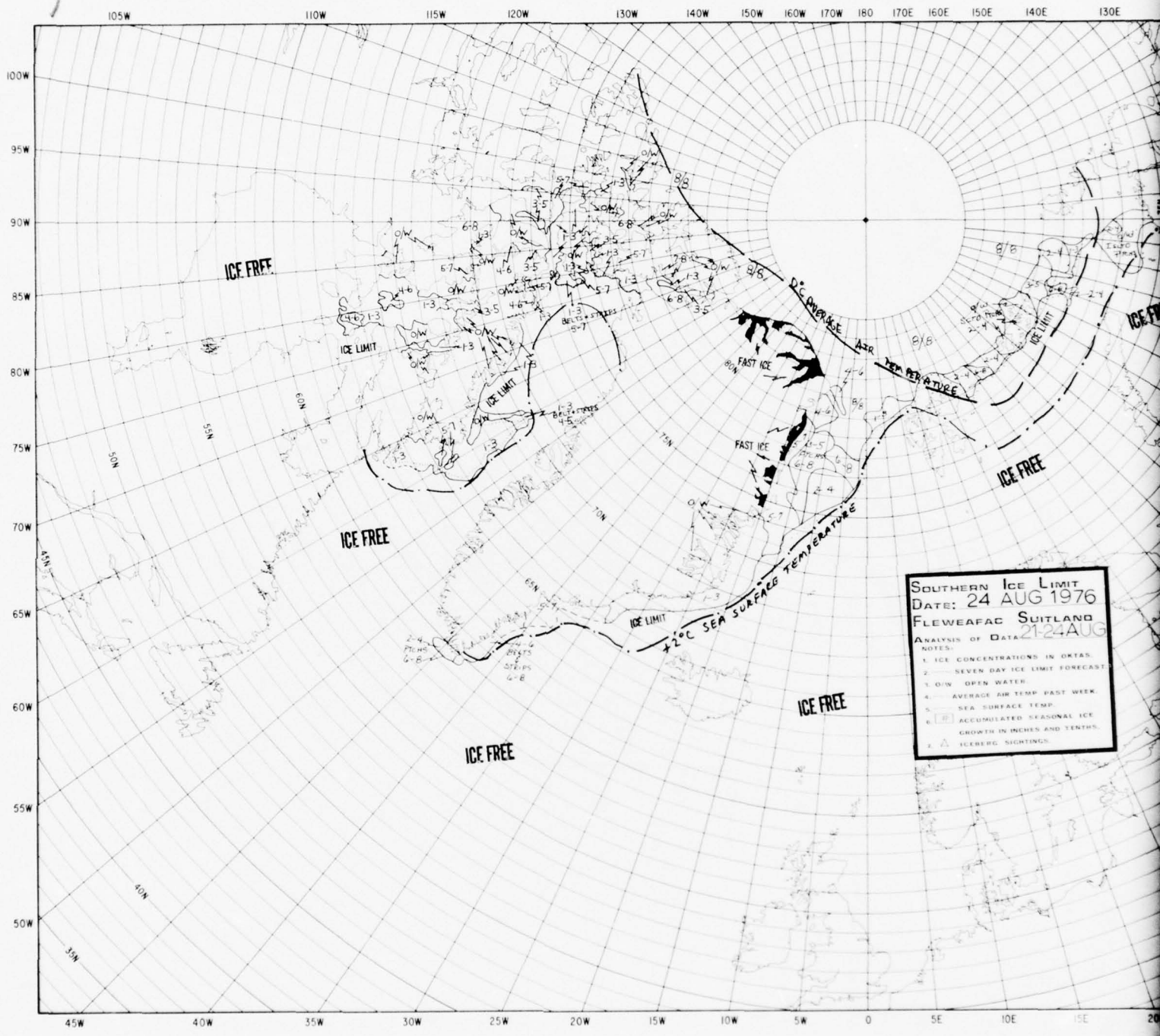


SOUTHERN ICE LIMIT
DATE: 17 AUG 1976
FLEWEAFAC SUITLAND
14-17 AUG

ANALYSIS OF DATA

NOTES:

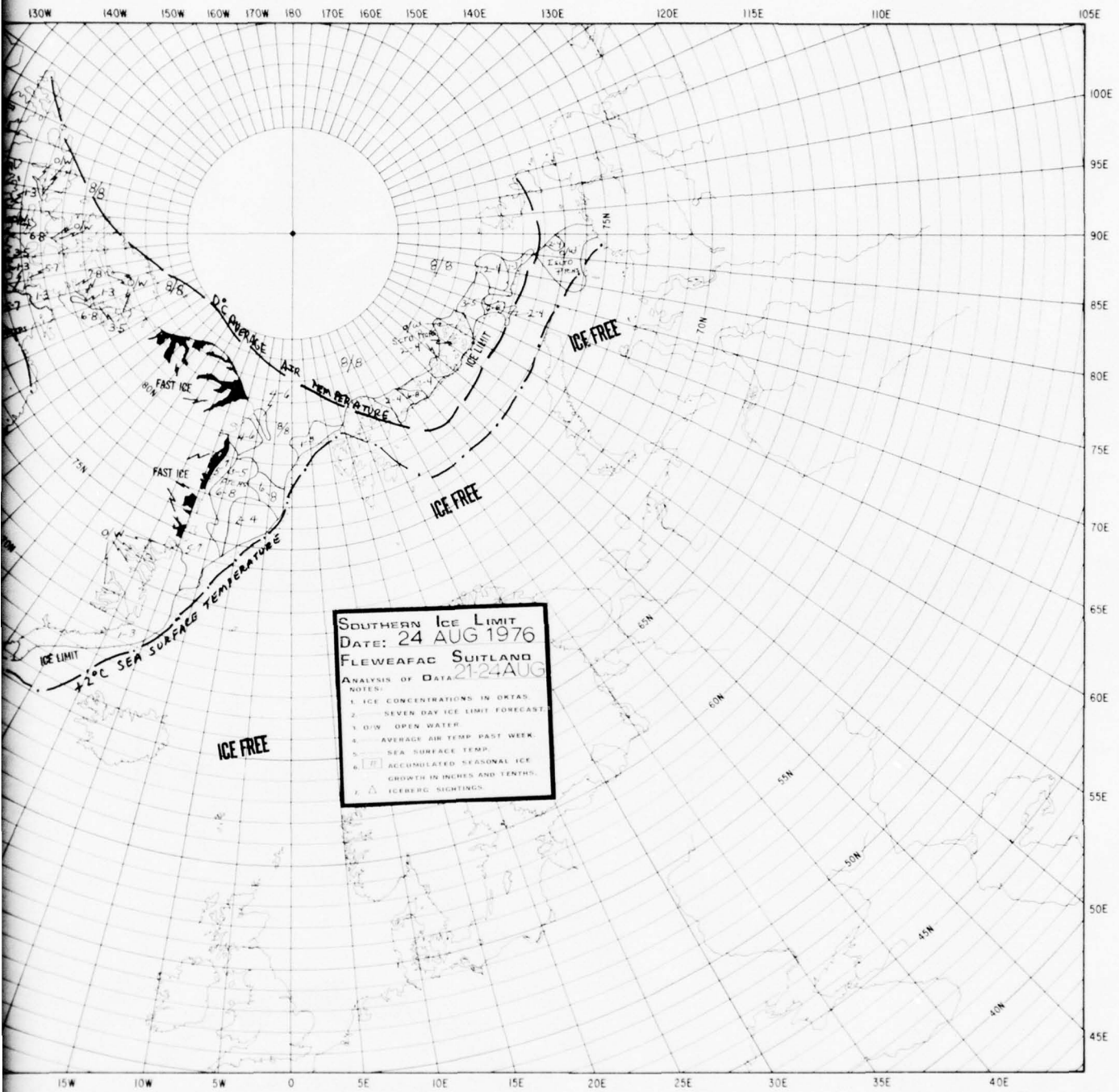
1. ICE CONCENTRATIONS IN ORTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. OIW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.



SOUTHERN ICE LIMIT
DATE: 24 AUG 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 21-24 AUG

NOTES:
 1. ICE CONCENTRATIONS IN ORTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

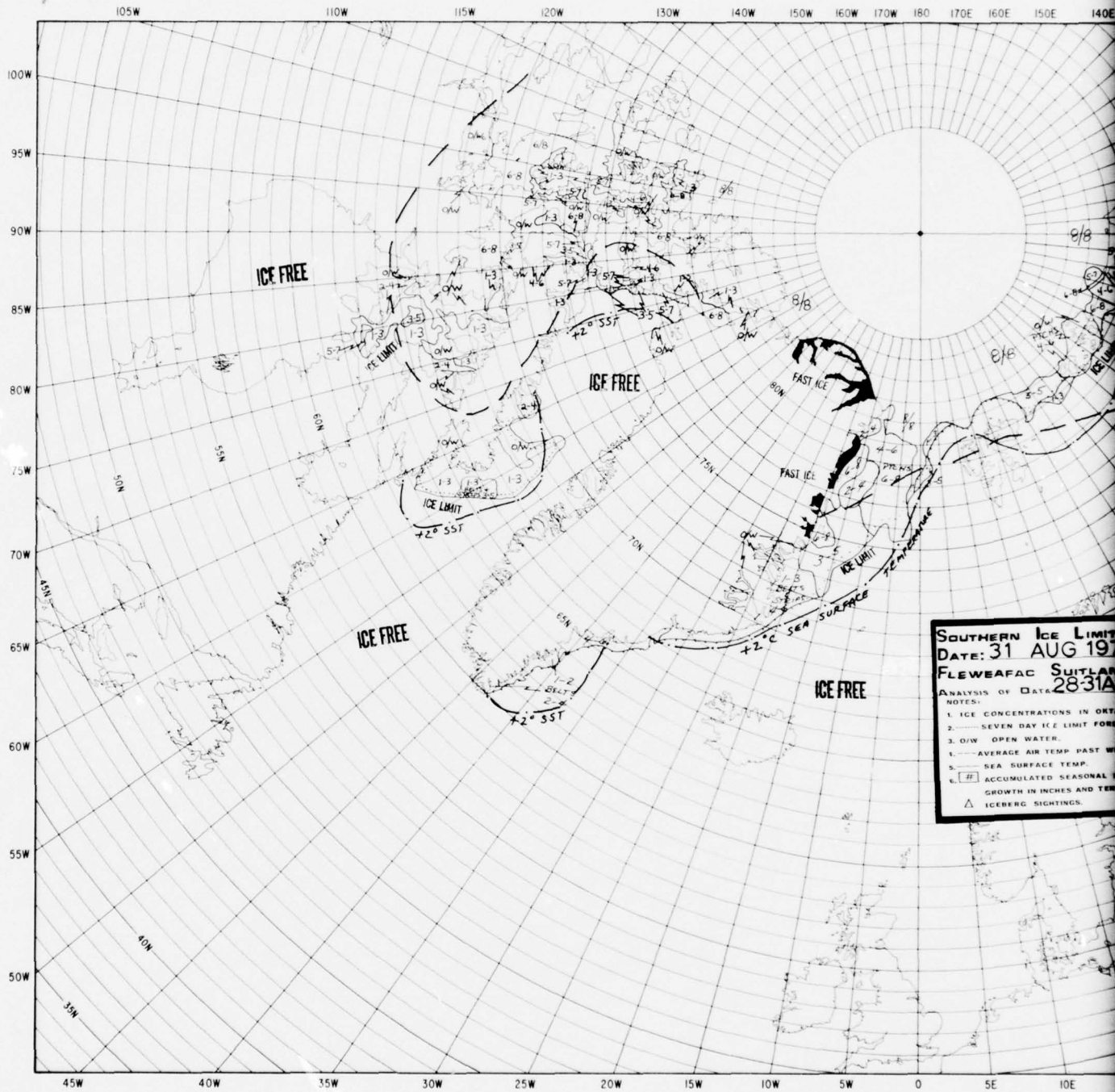
2



130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

100E
95E
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85E
80E
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70E
65E
60E
55E
50E
45E

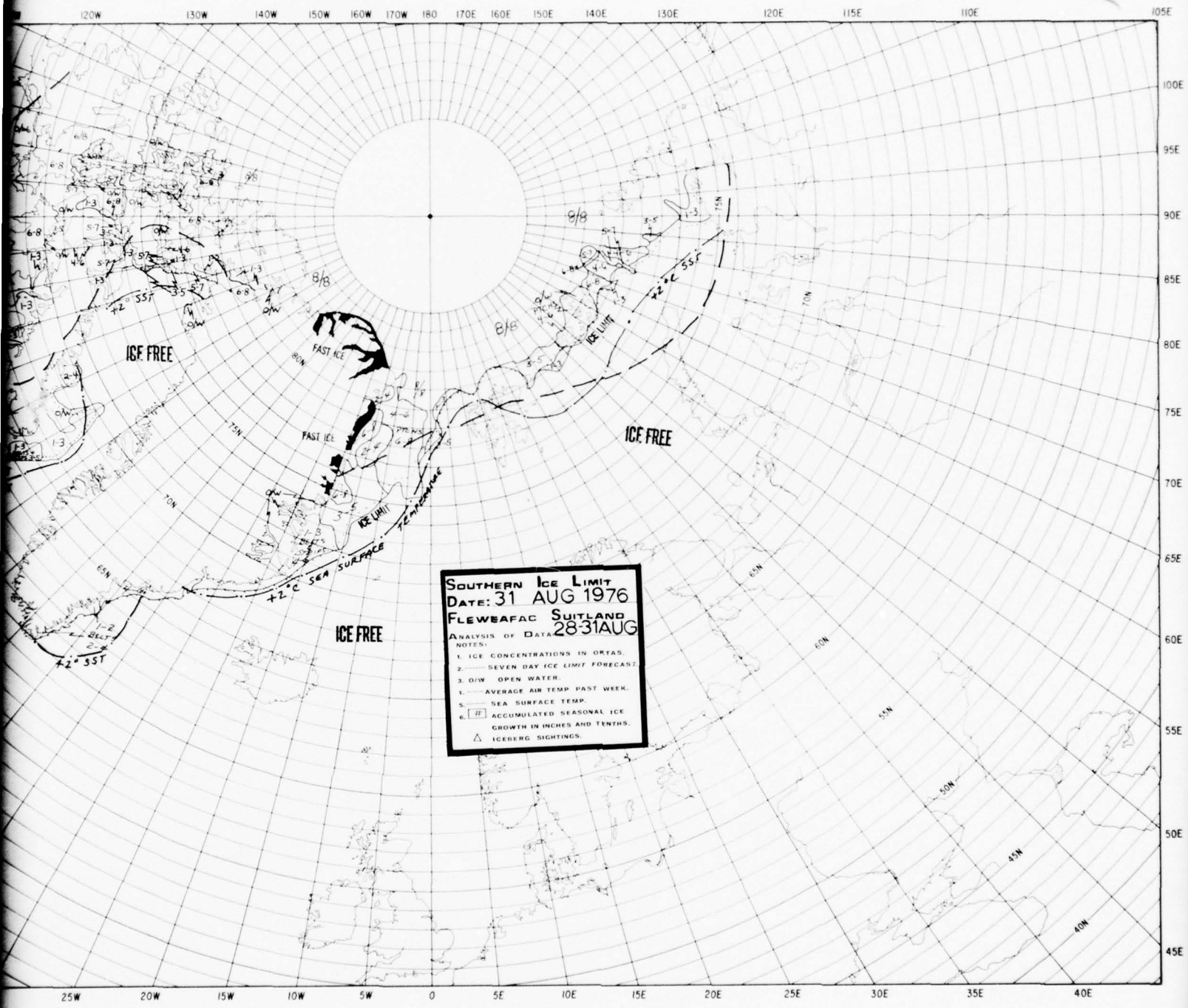
15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

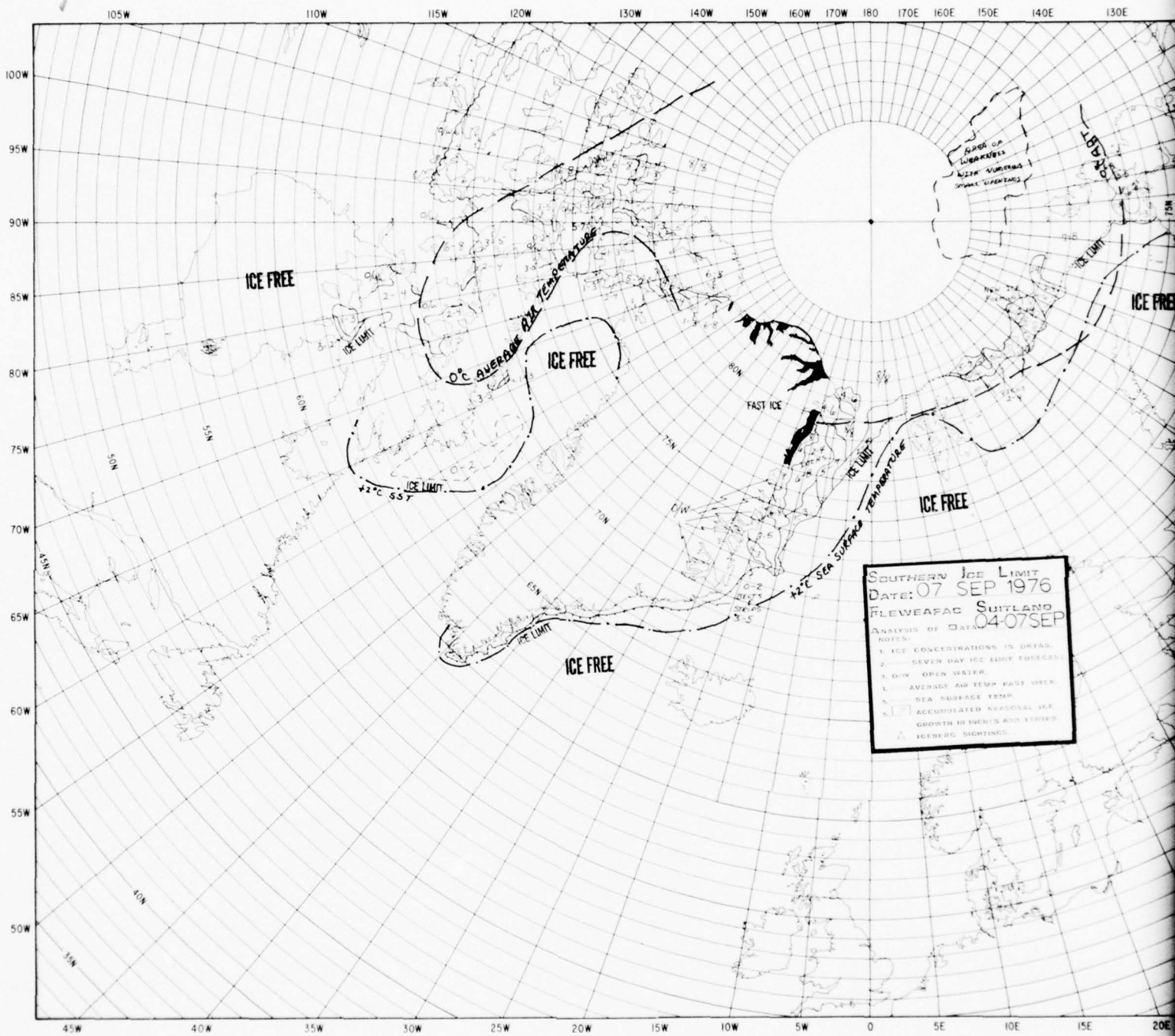


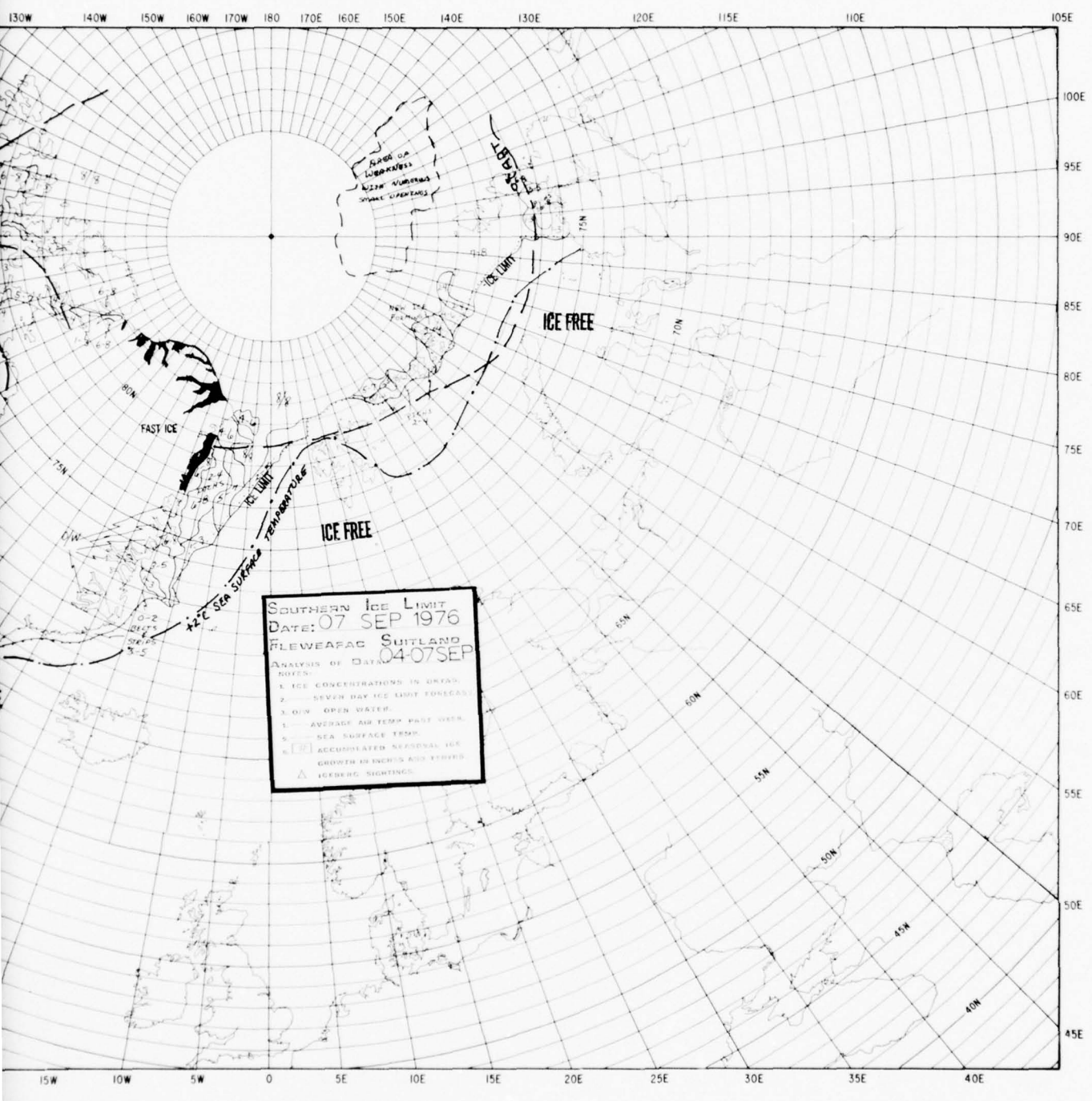
SOUTHERN ICE LIMIT
DATE: 31 AUG 1971
FLEWEAFAC SUITLAND
28-31A

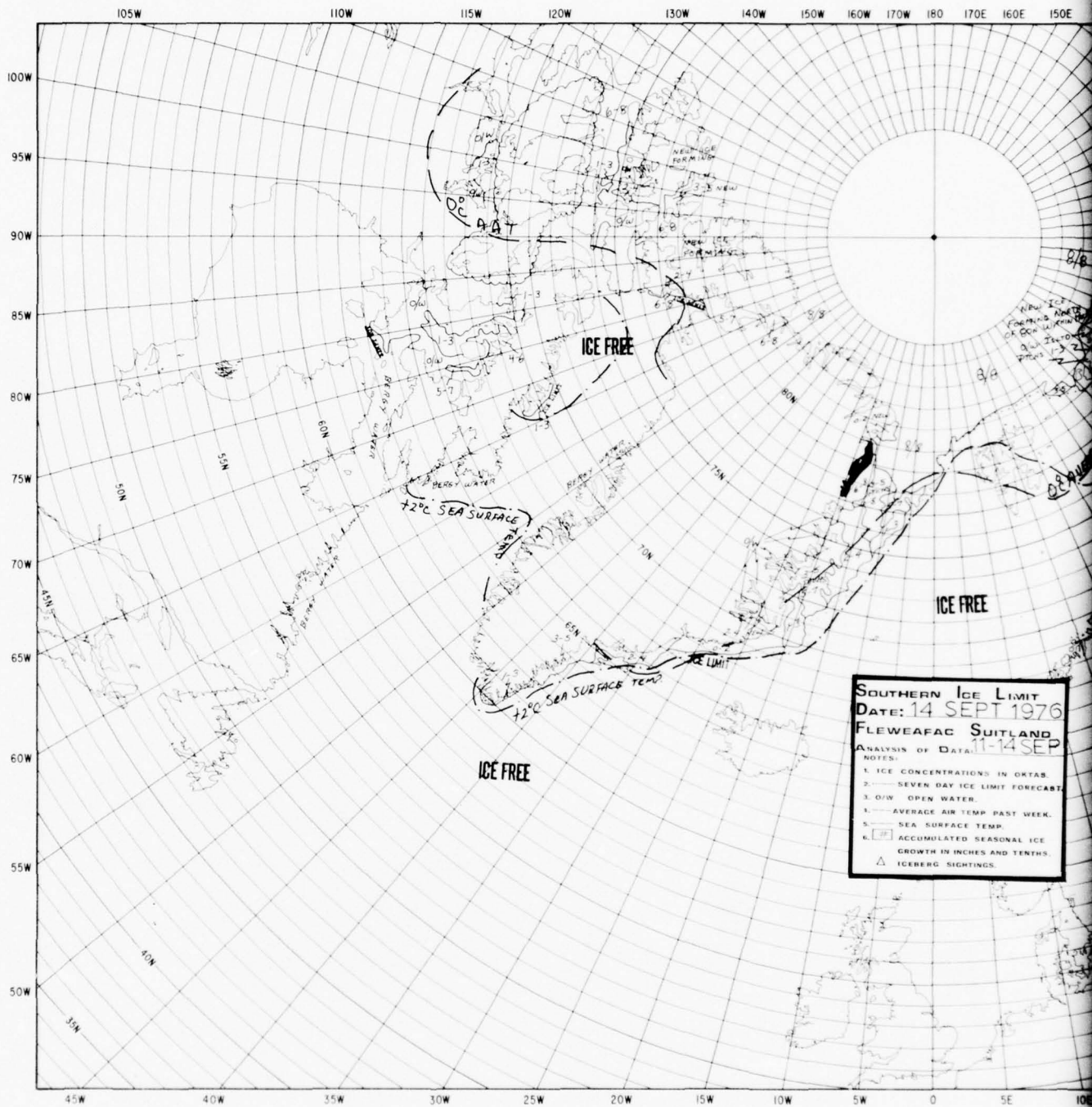
ANALYSIS OF DATA
 NOTES:
 1. ICE CONCENTRATIONS IN ORKA
 2. SEVEN DAY ICE LIMIT FORE
 3. O/W OPEN WATER
 4. AVERAGE AIR TEMP PAST WE
 5. SEA SURFACE TEMP.
 6. # ACCUMULATED SEASONAL
 GROWTH IN INCHES AND TEM
 △ ICEBERG SIGHTINGS.

2



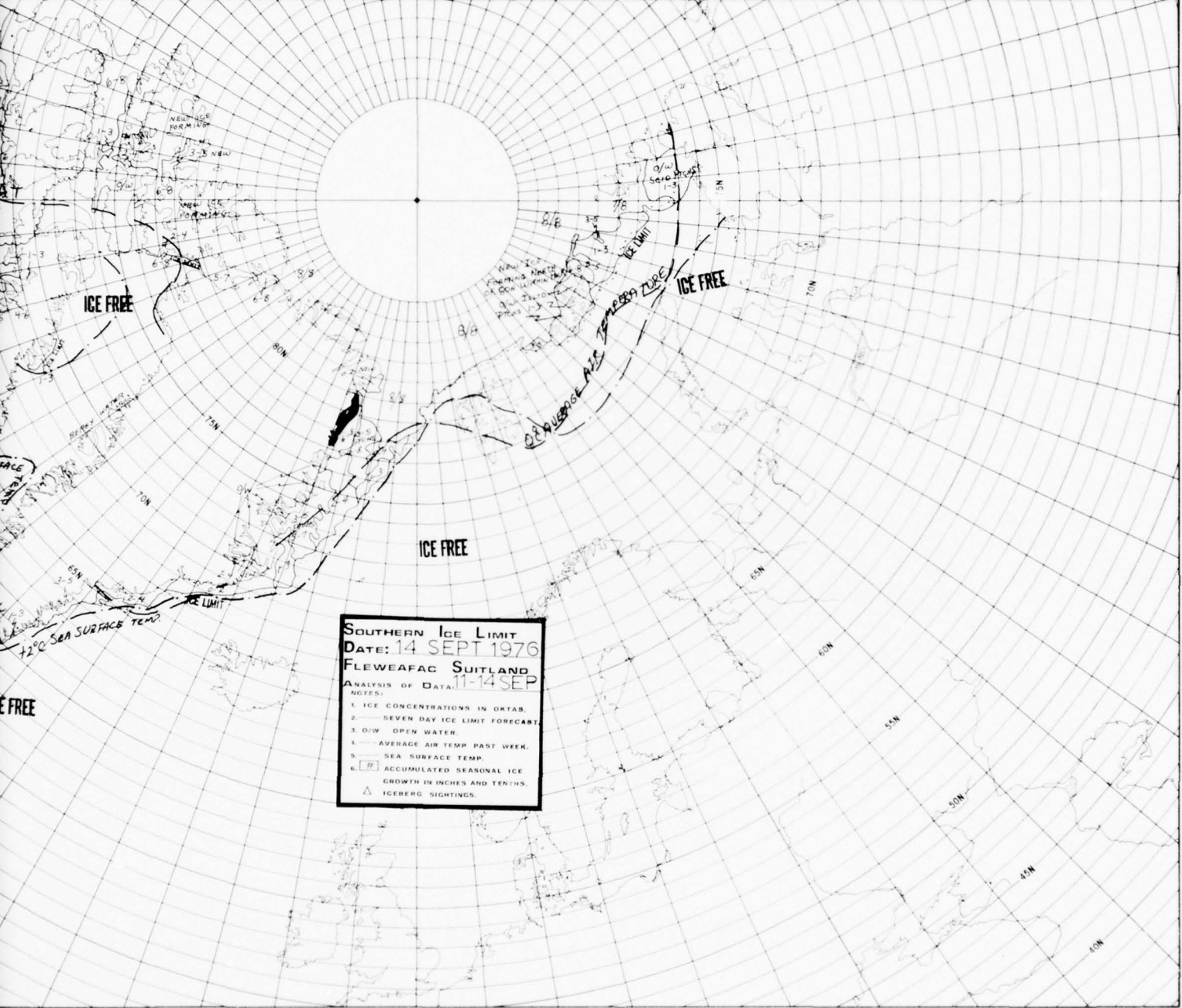






120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

100E
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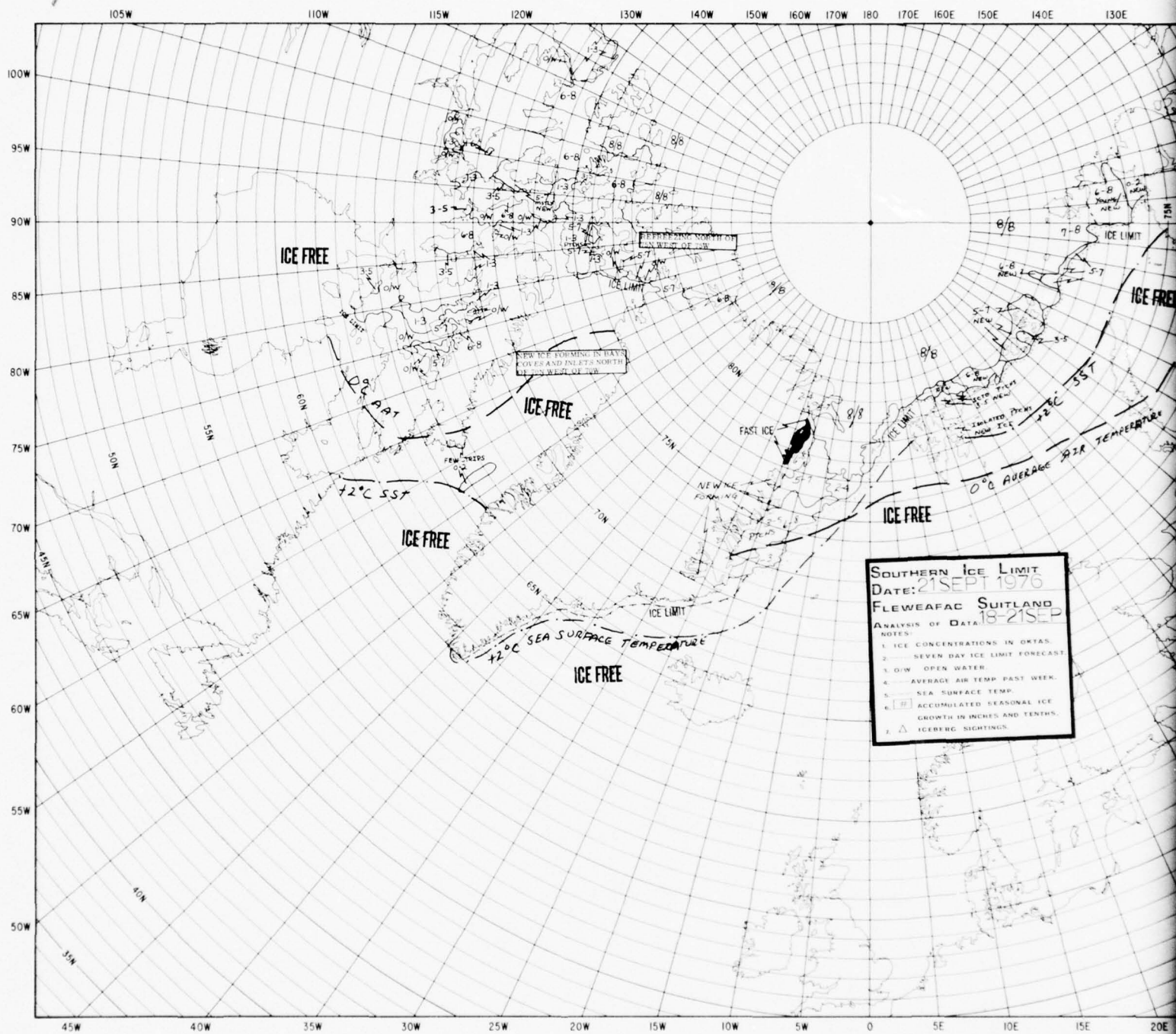
SOUTHERN ICE LIMIT
DATE: 14 SEPT 1976
FLEWEAFAC SUITLAND
11-14 SEP

ANALYSIS OF DATA:

NOTES:

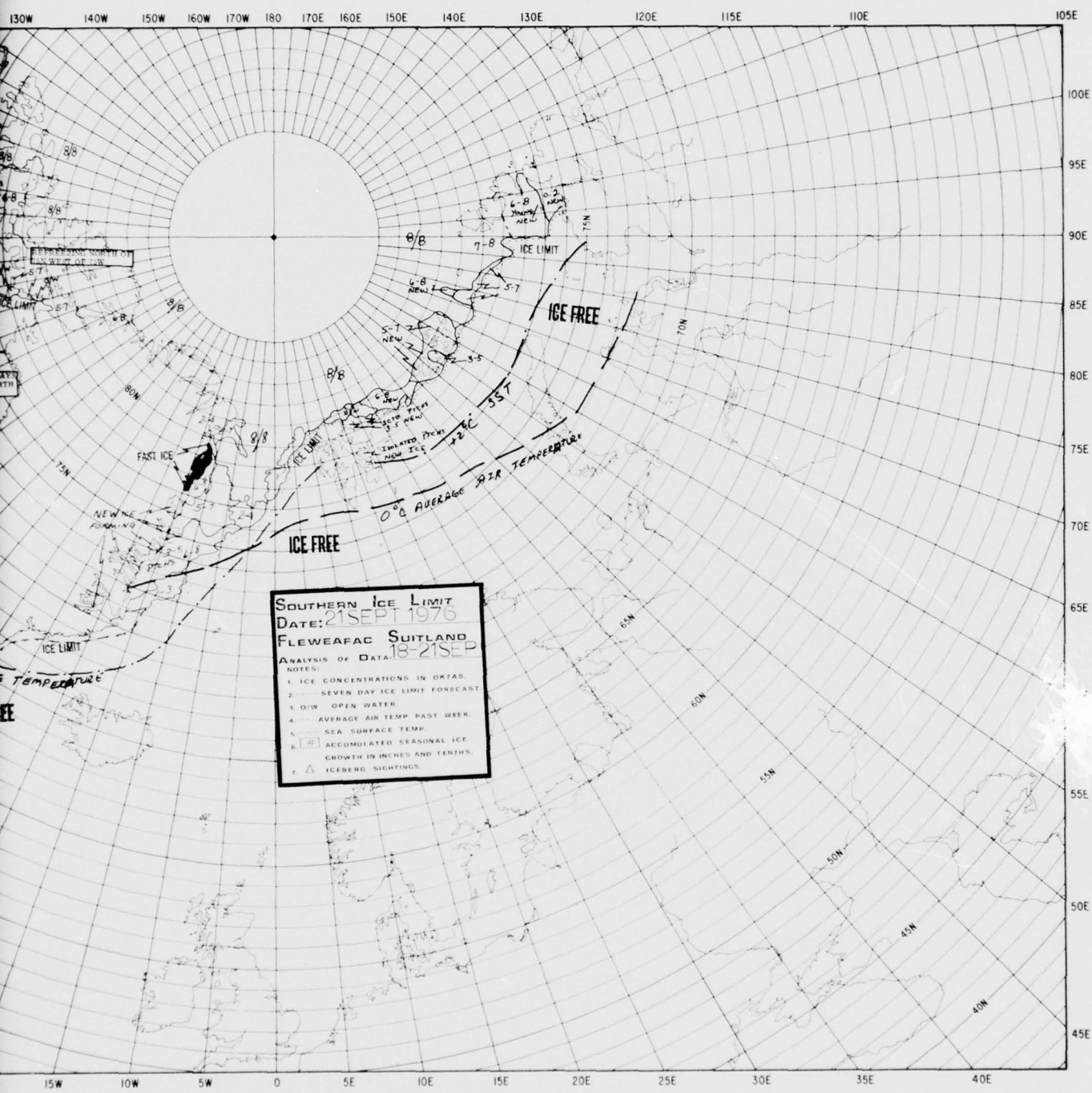
1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. OW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. [#] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.

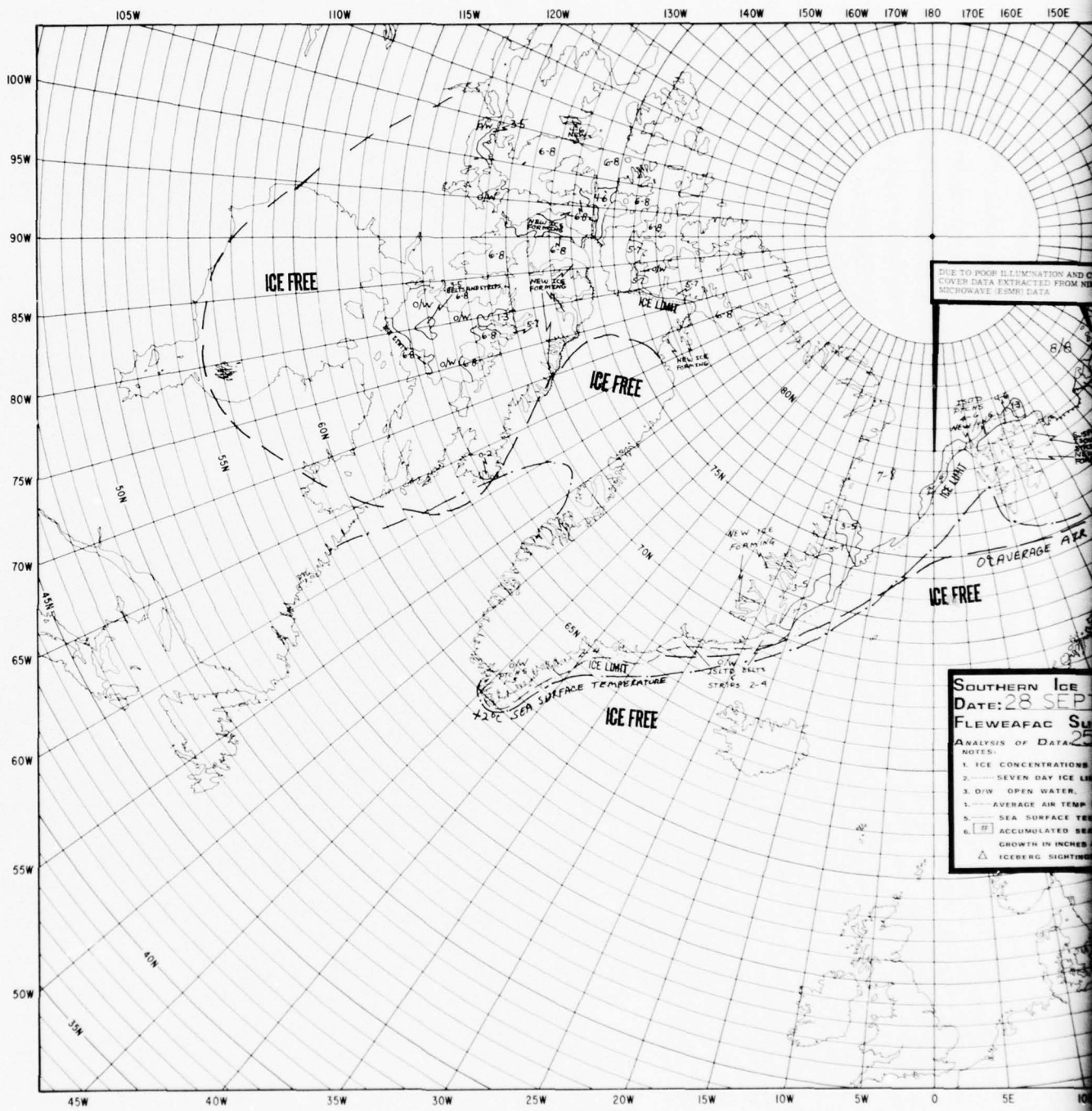
25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E



SOUTHERN ICE LIMIT
DATE: 21 SEPT 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 18-21 SEP
 NOTES:
 1. ICE CONCENTRATIONS IN ORKAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. # ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. Δ ICEBERG SIGHTINGS.

2





DUE TO POOR ILLUMINATION AND COVER DATA EXTRACTED FROM MICROWAVE (SMB) DATA



SOUTHERN ICE
DATE: 28 SEP
FLEWEAFAC SU
ANALYSIS OF DATA

NOTES:

- 1. ICE CONCENTRATIONS
- 2. SEVEN DAY ICE AGE
- 3. O/W OPEN WATER
- 4. AVERAGE AIR TEMP
- 5. SEA SURFACE TEMP
- 6. ACCUMULATED SEA SURFACE GROWTH IN INCHES
- △ ICEBERG SIGHTING

120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

105E

100E

95E

90E

85E

80E

75E

70E

65E

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55E

50E

45E

40E

35E

30E

25E

20E

15E

10E

5E

0

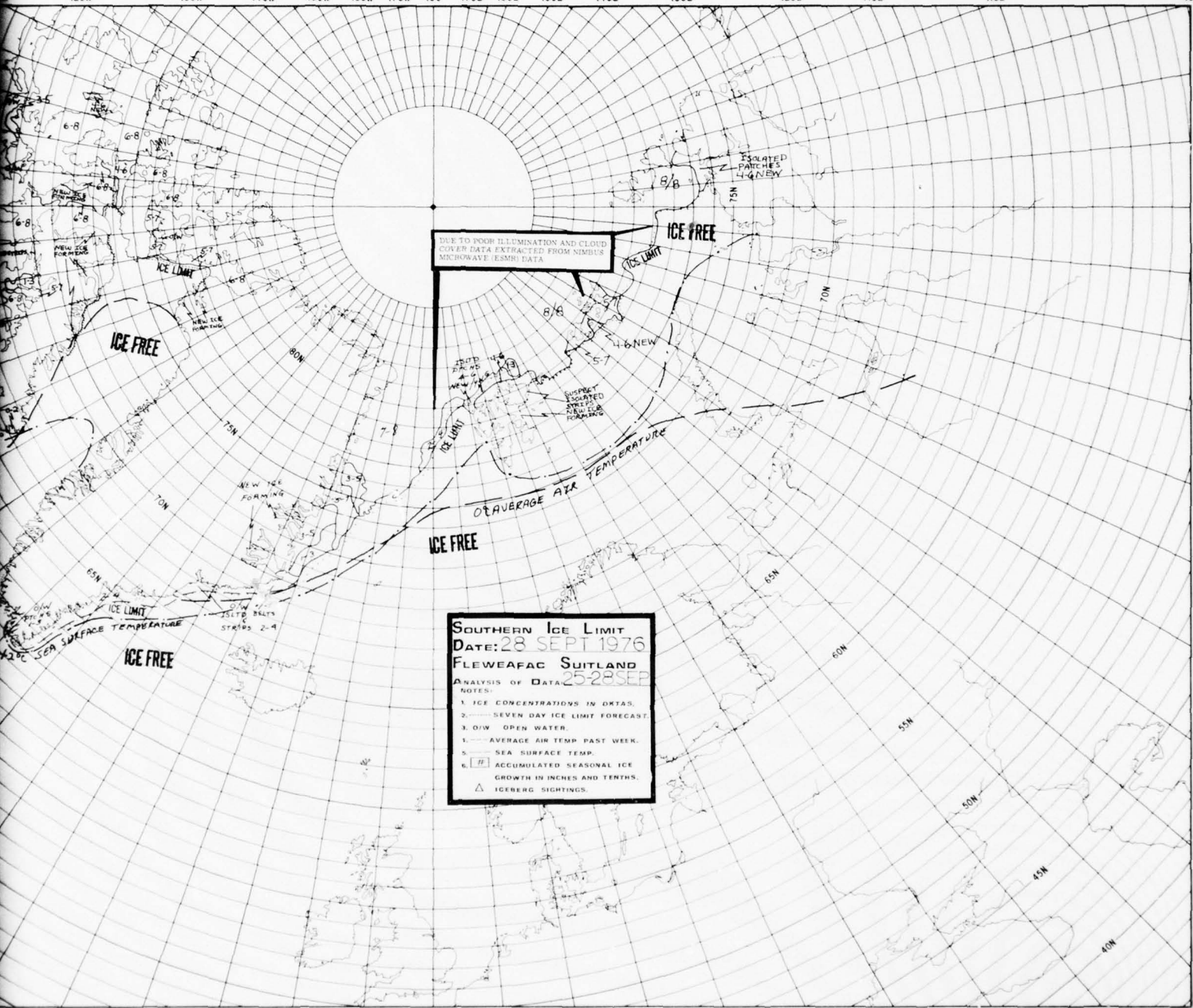
5W

10W

15W

20W

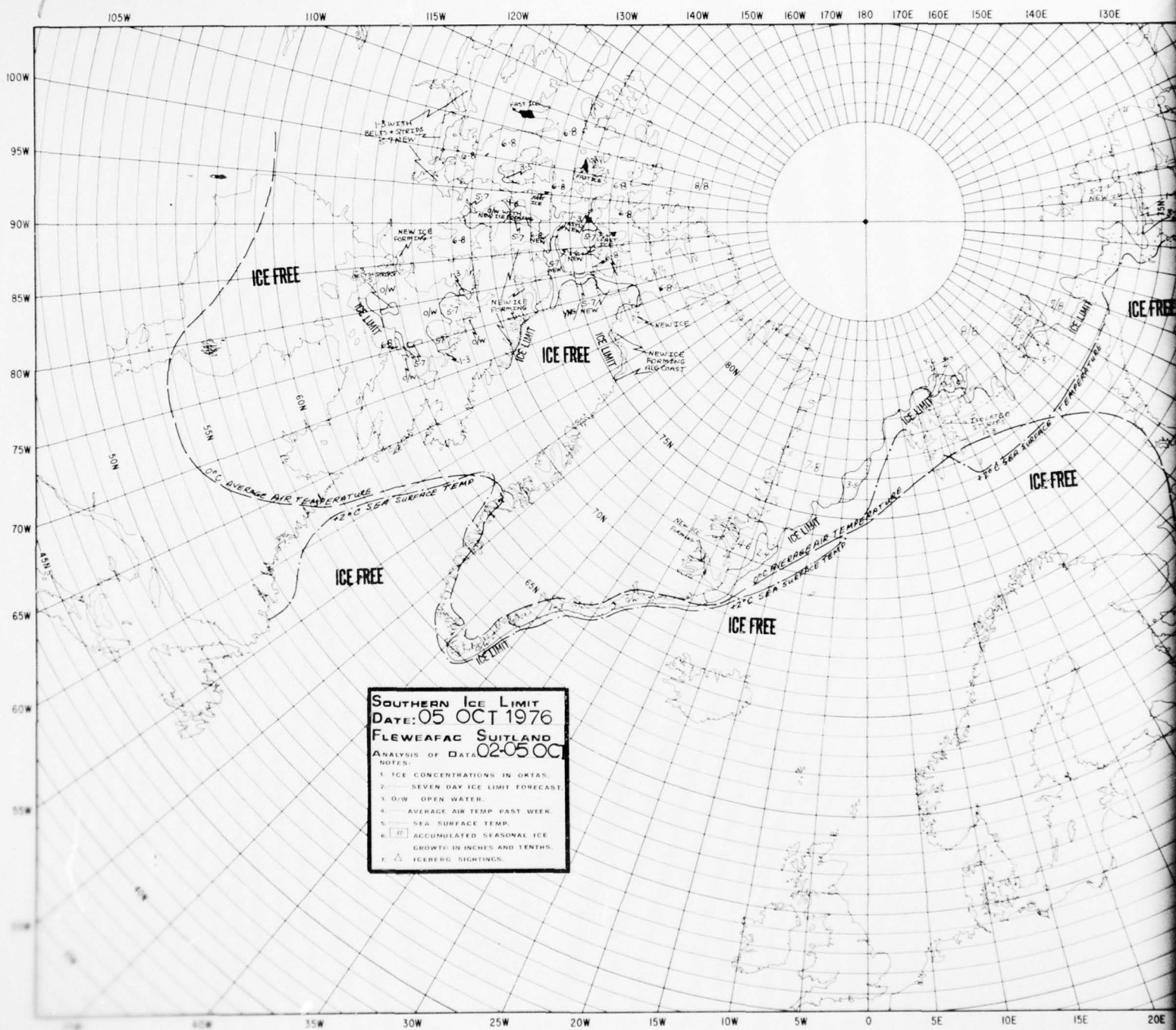
25W



DUE TO POOR ILLUMINATION AND CLOUD COVER DATA EXTRACTED FROM NIMBUS MICROWAVE ESSM DATA

SOUTHERN ICE LIMIT
DATE: 28 SEPT 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 25-28 SEP

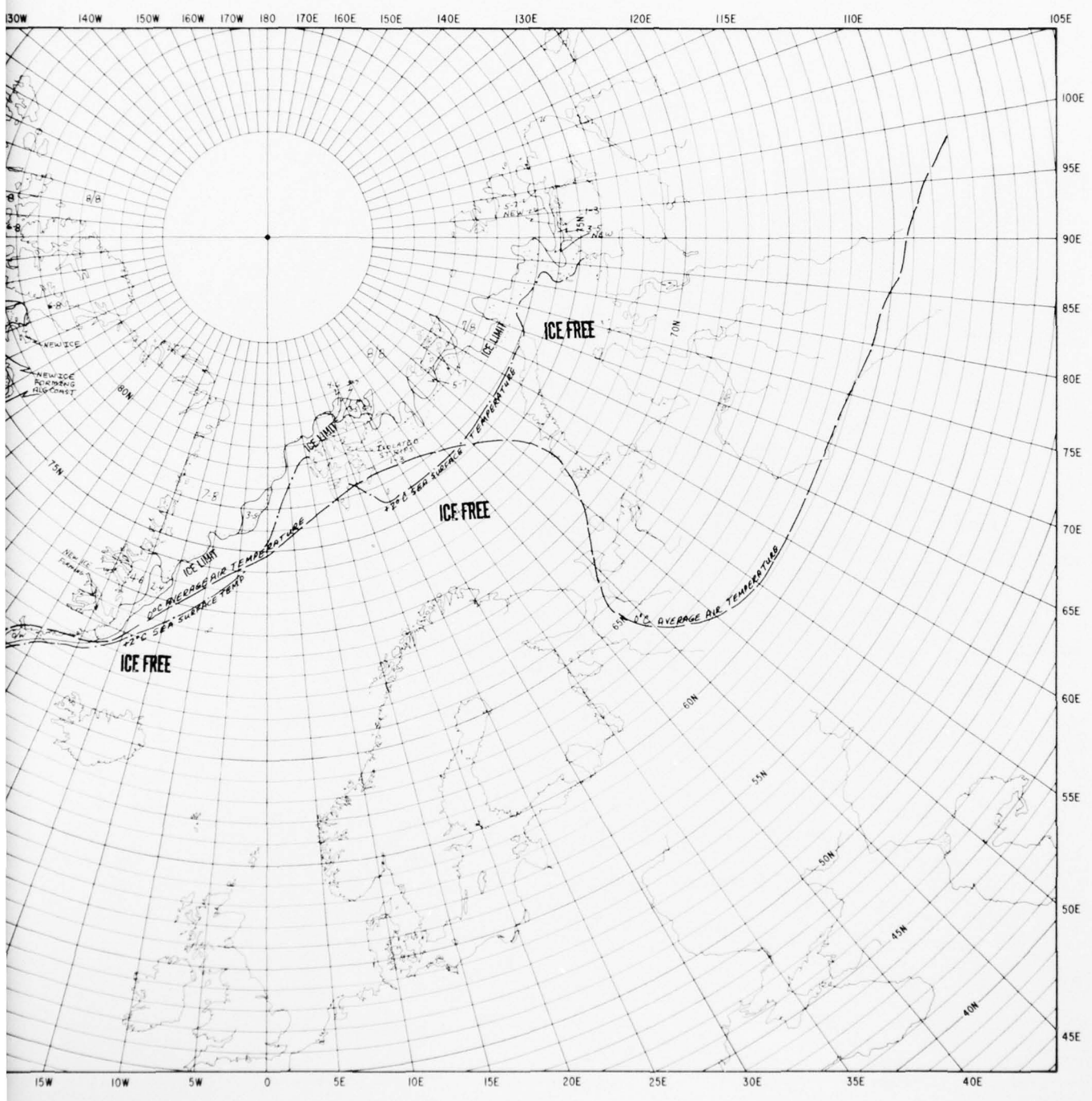
NOTES:
 1. ICE CONCENTRATIONS IN DKTS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OIW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 △ ICEBERG SIGHTINGS.

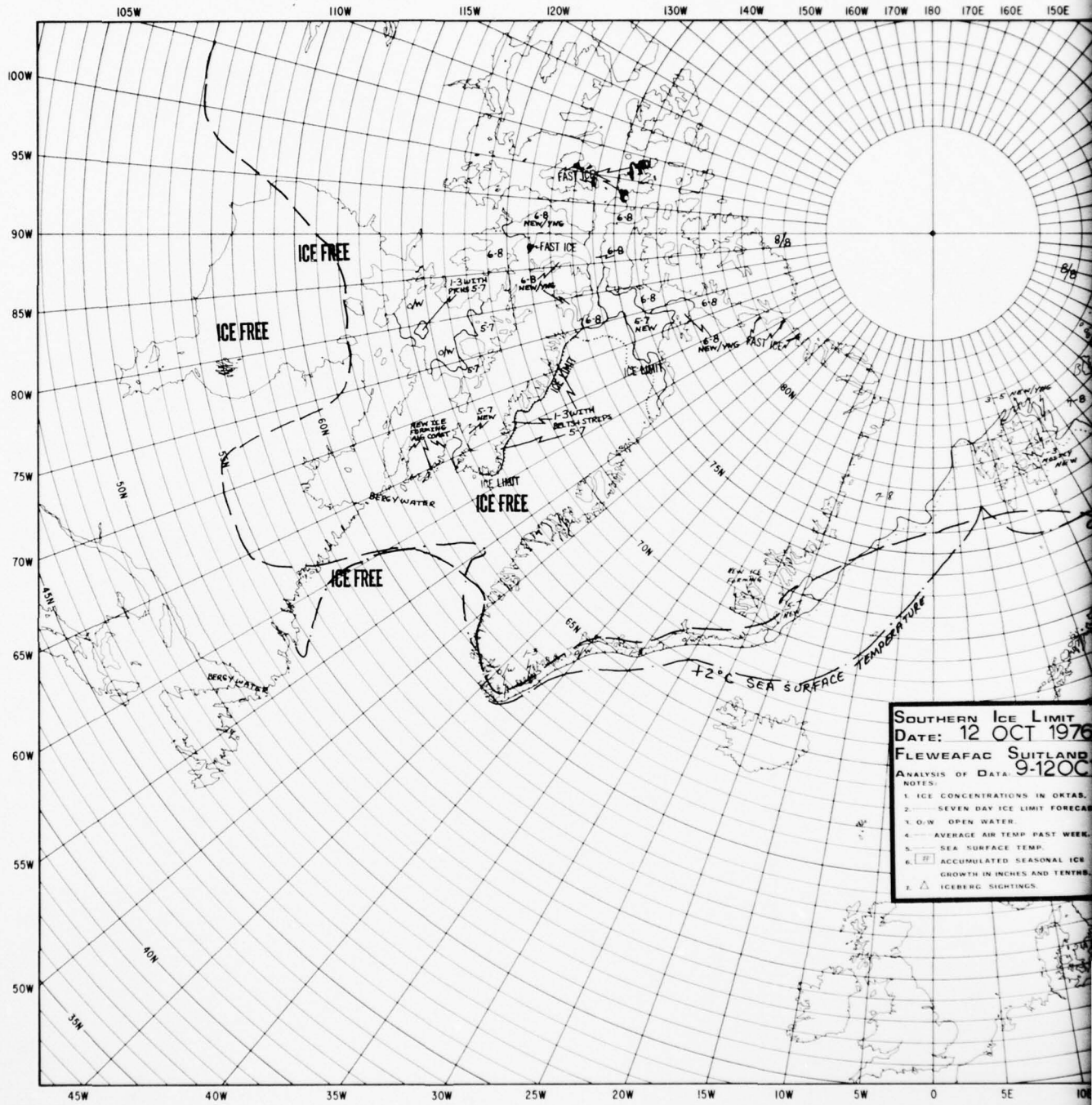


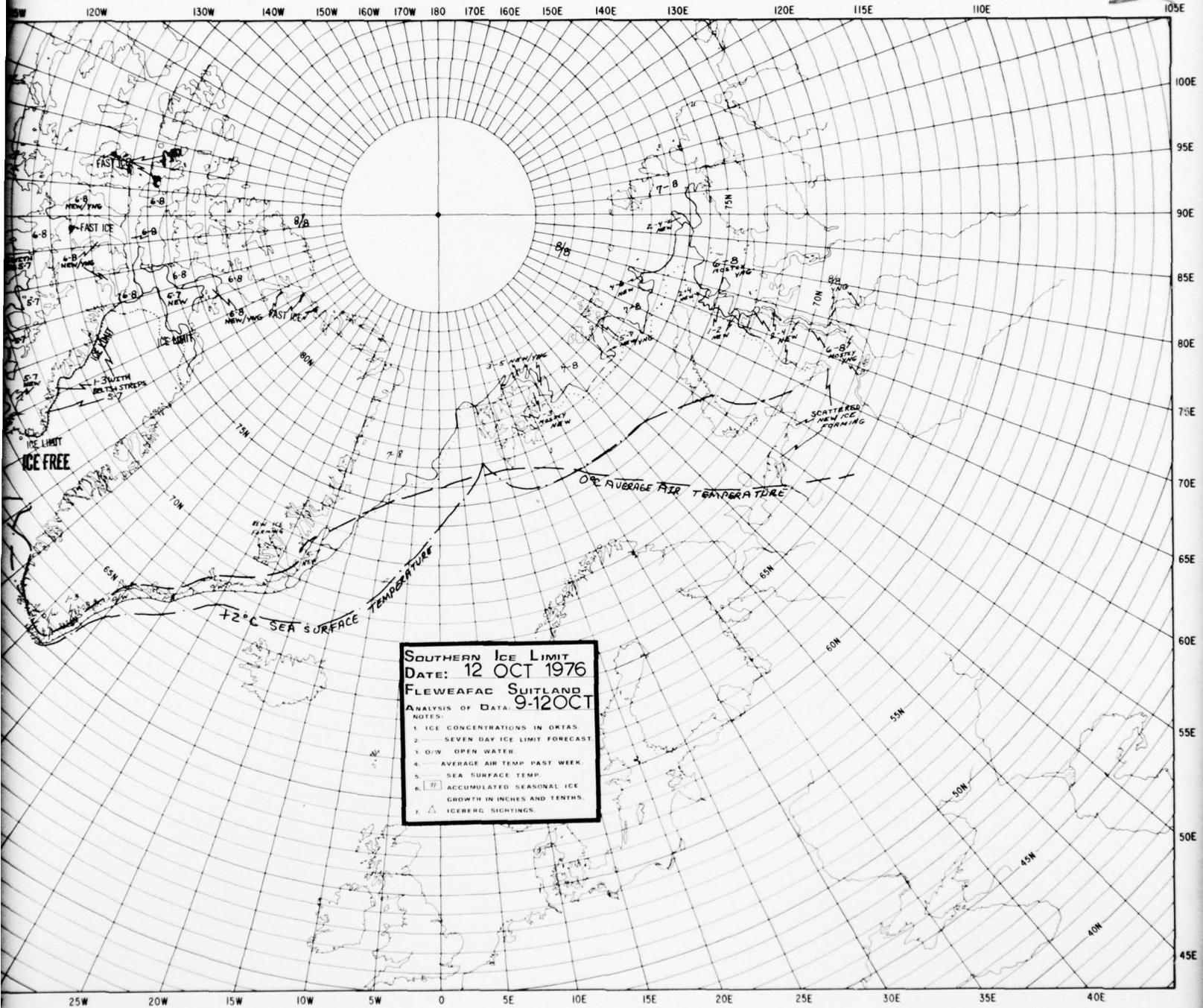
SOUTHERN ICE LIMIT
DATE: 05 OCT 1976
FLEWELAC SUITLAND
ANALYSIS OF DATA 02-05 OC

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

2

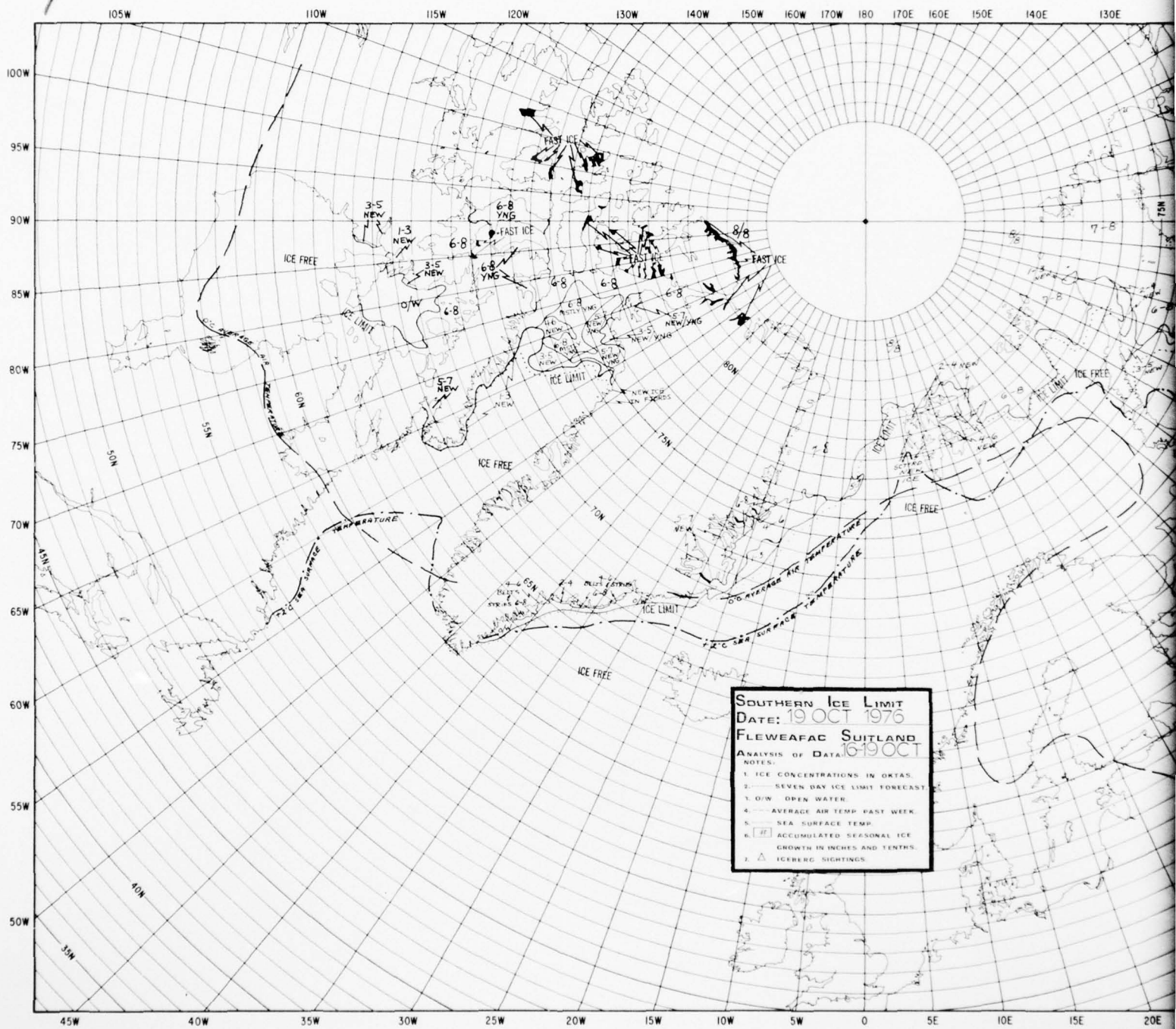






SOUTHERN ICE LIMIT
DATE: 12 OCT 1976
FLEWEAFAC SUITLAND
9-12 OCT

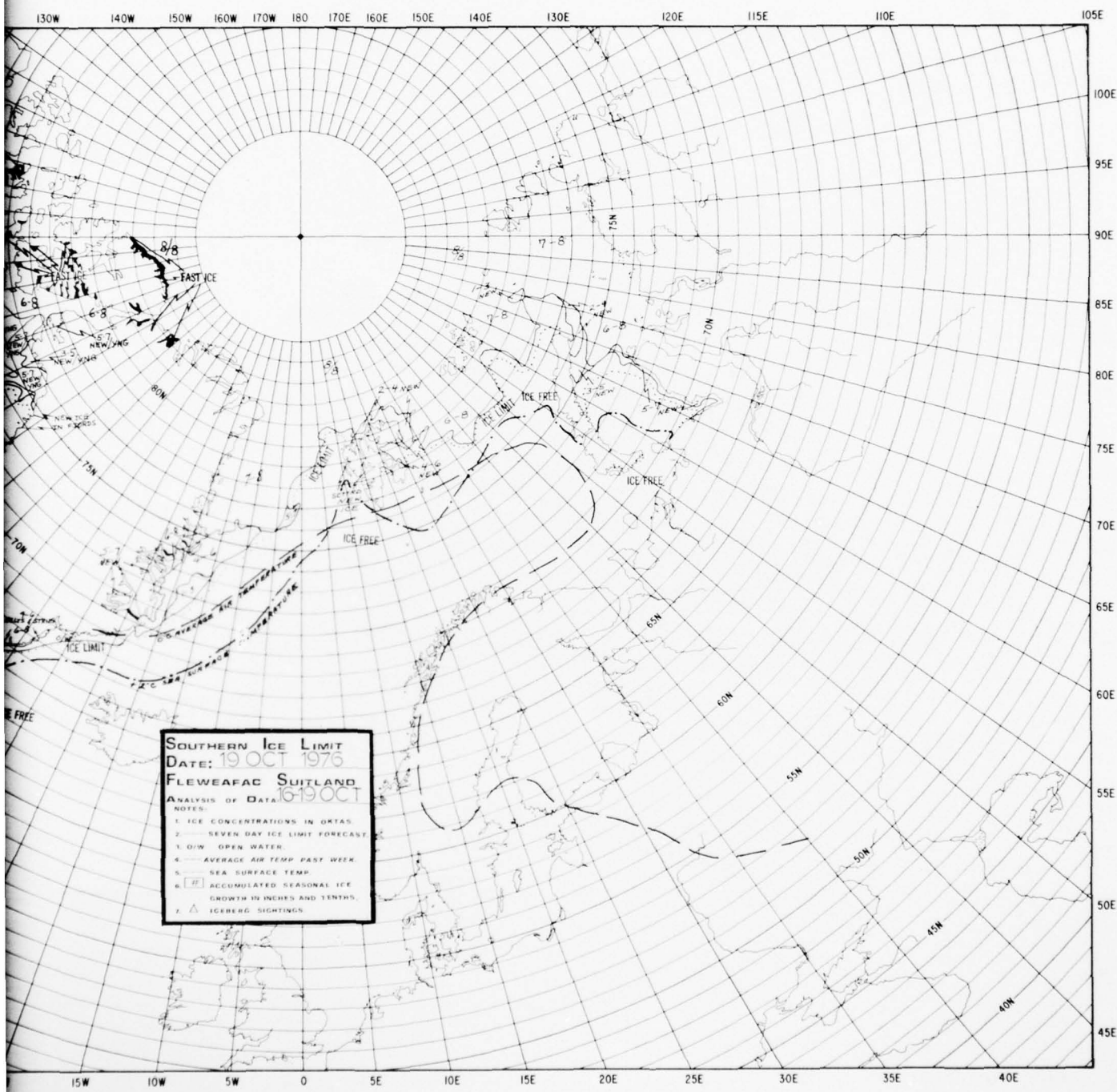
ANALYSIS OF DATA:
 NOTES:
 1. ICE CONCENTRATIONS IN ORTAS
 2. SEVEN DAY ICE LIMIT FORECAST
 3. O/W OPEN WATER
 4. AVERAGE AIR TEMP PAST WEEK
 5. SEA SURFACE TEMP.
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS
 7. [Symbol] ICEBERG SIGHTINGS

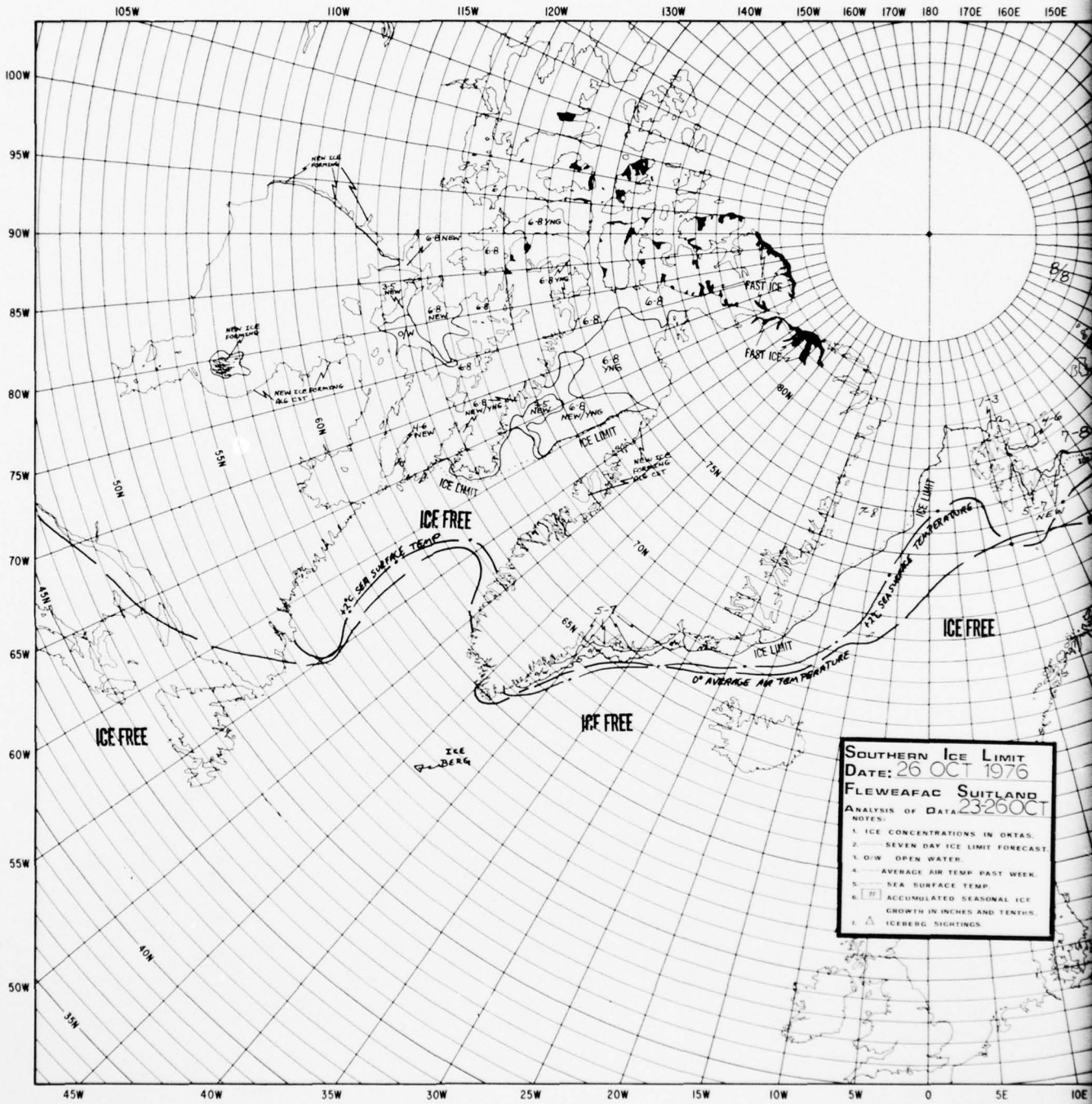


SOUTHERN ICE LIMIT
DATE: 19 OCT 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 16-19 OCT

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. [Symbol] ICEBERG SIGHTINGS.

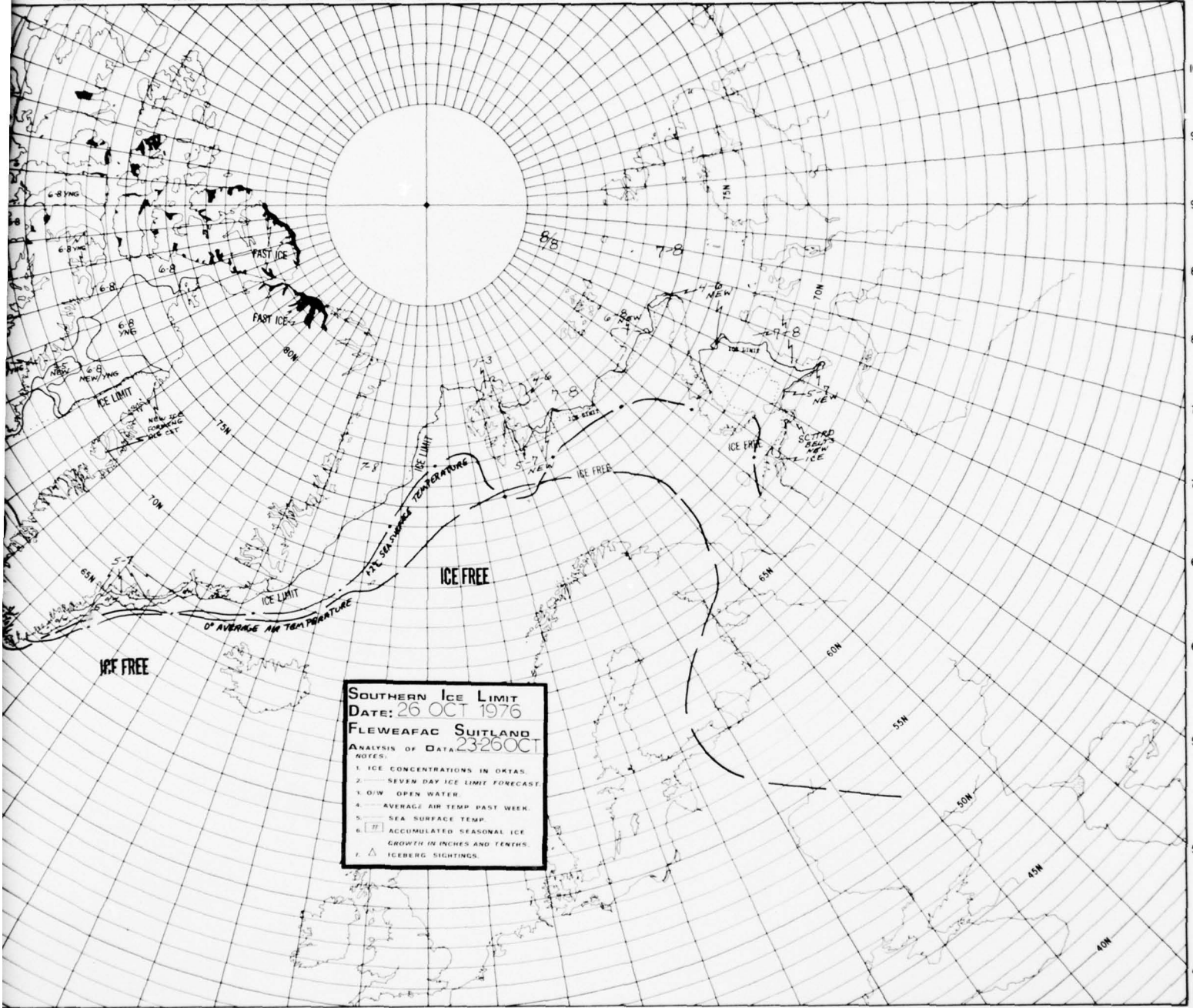
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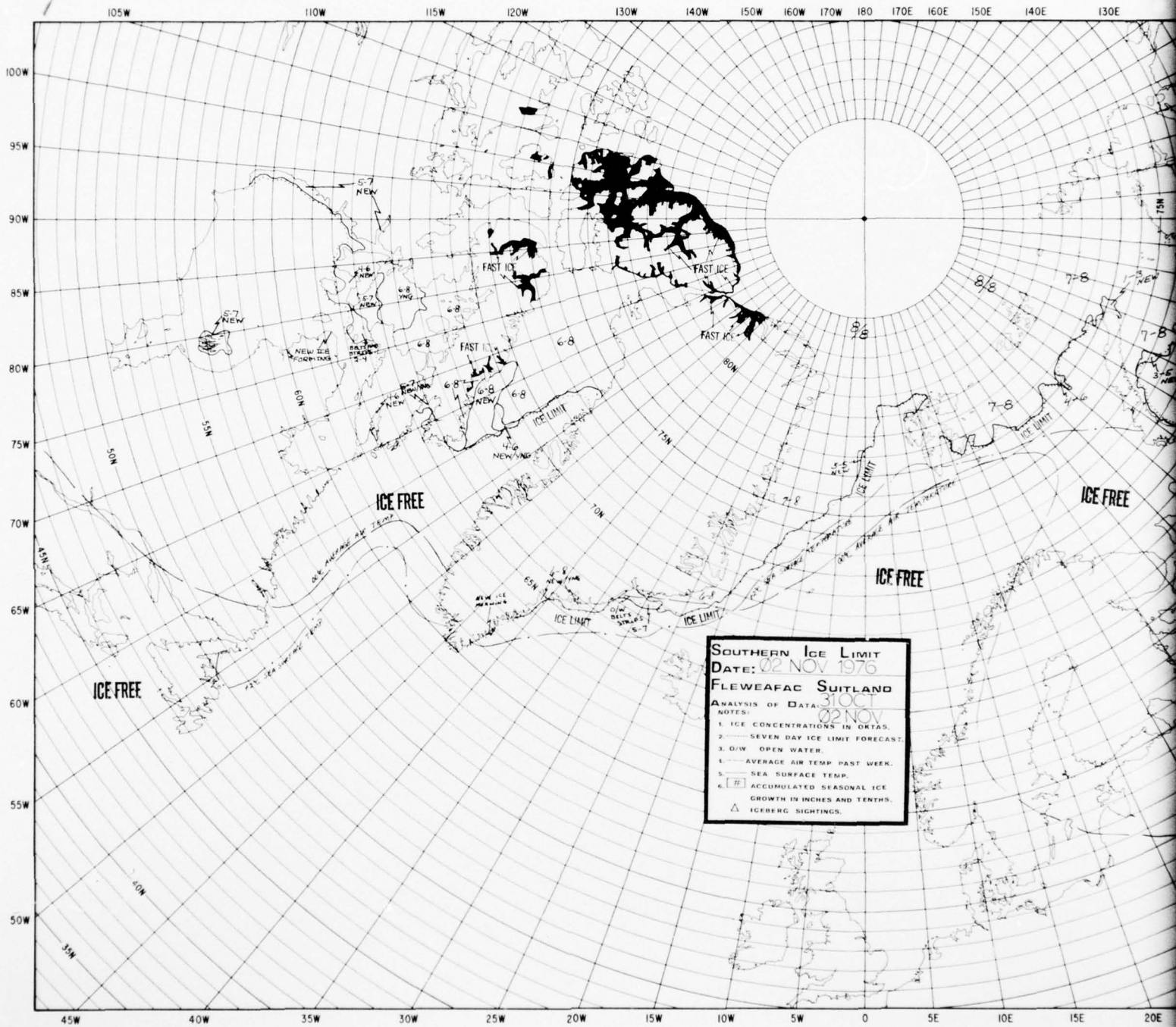


120W 130W 140W 150W 160W 170W 180 170E 160E 150E 140E 130E 120E 115E 110E 105E

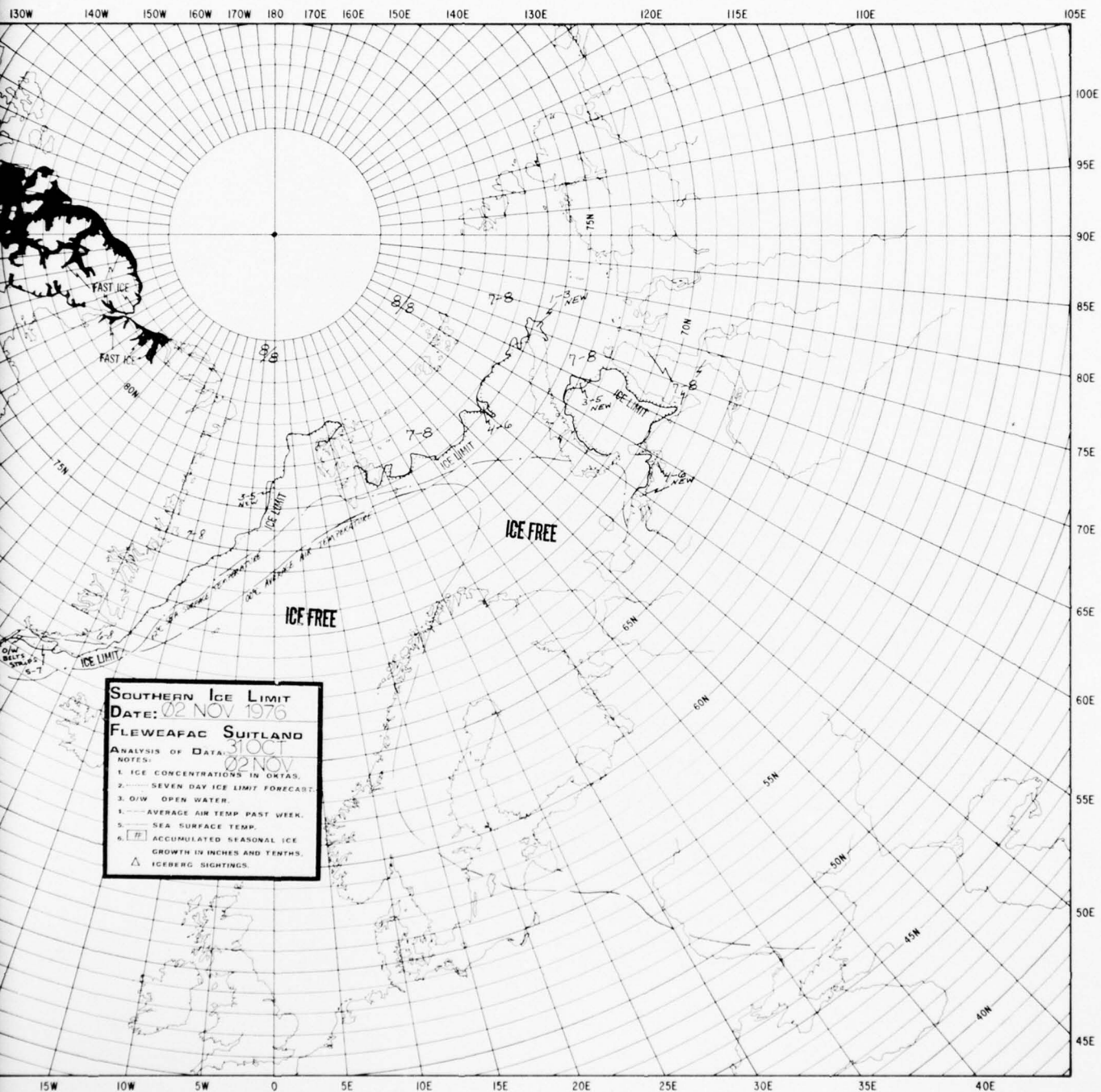
100E
95E
90E
85E
80E
75E
70E
65E
60E
55E
50E
45E

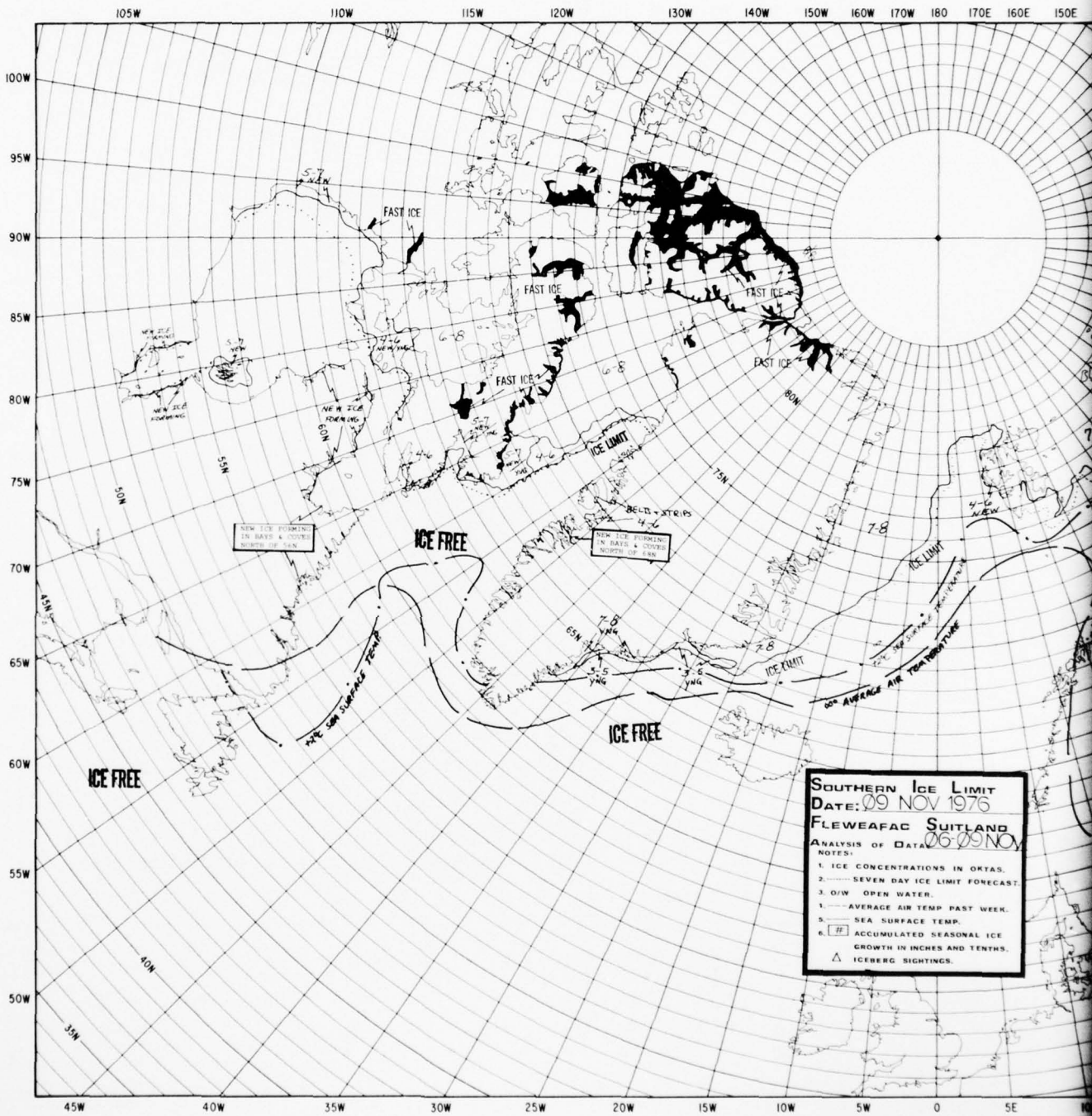


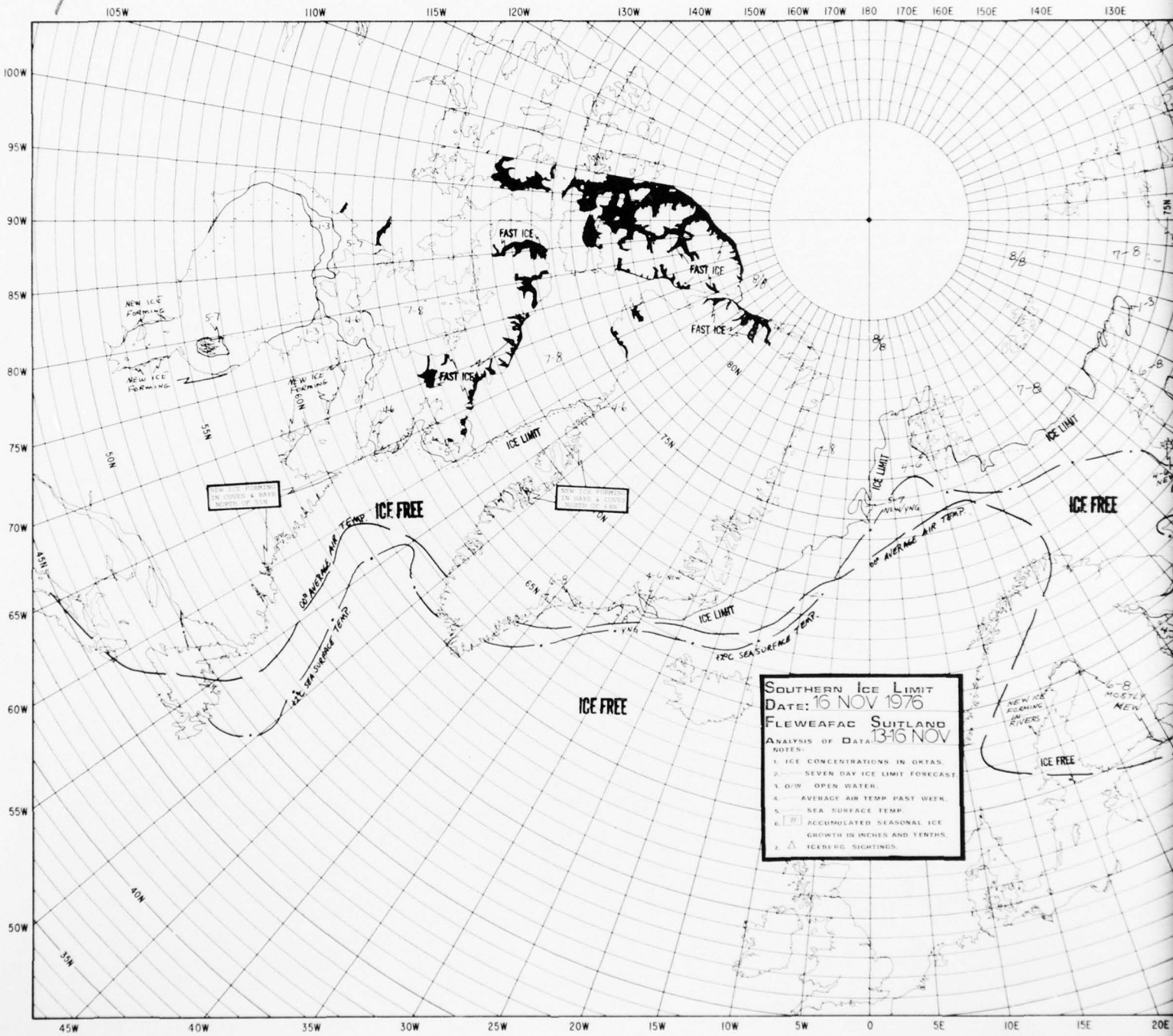
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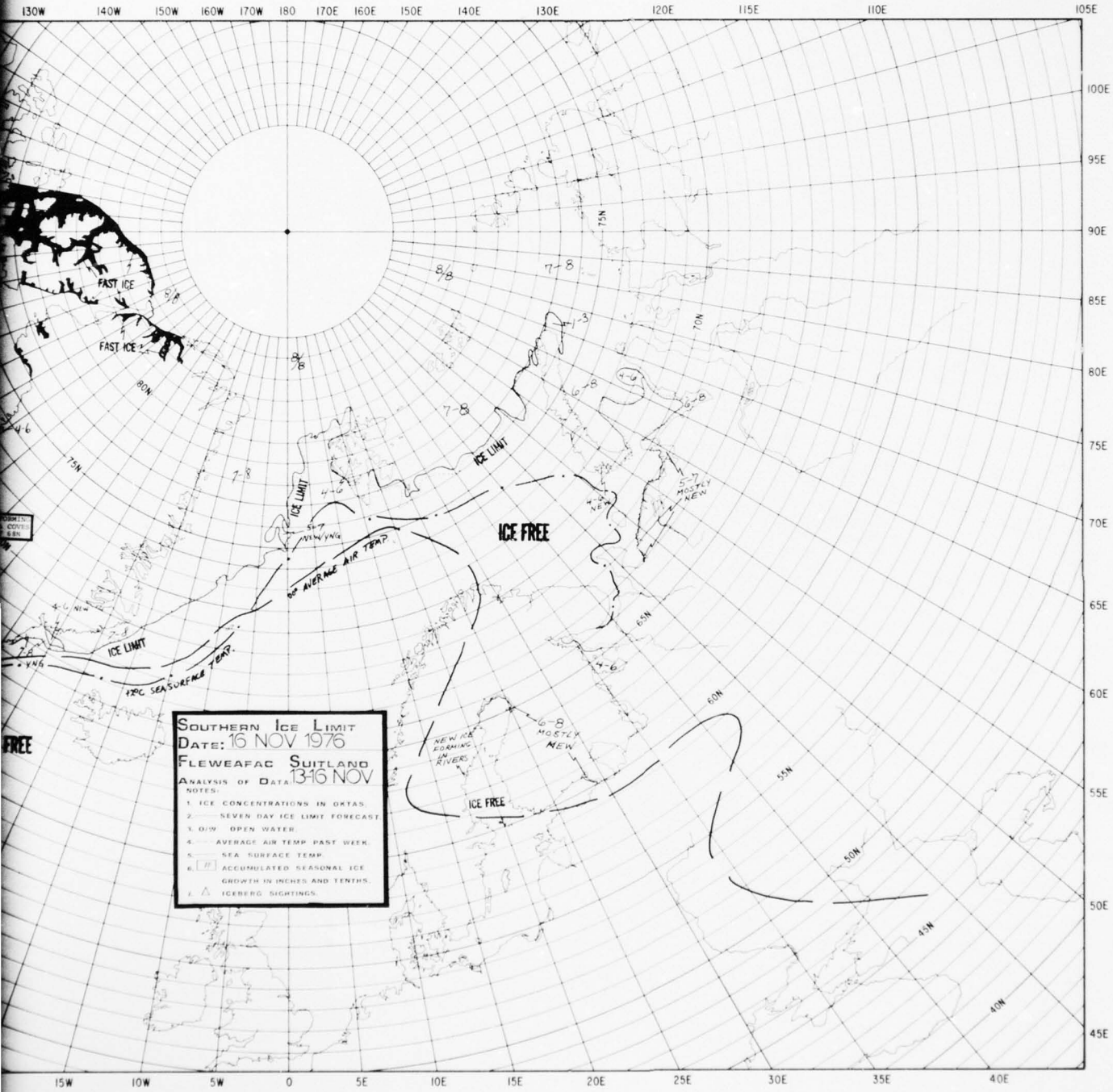


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Southern Ice Limit
Date: 16 NOV 1976
FLEWEAFAC SUITLAND
13-16 NOV

ANALYSIS OF DATA
 NOTES:
 1. ICE CONCENTRATIONS IN ORTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. [Symbol] ICEBERG SIGHTINGS.

AD-A043 353

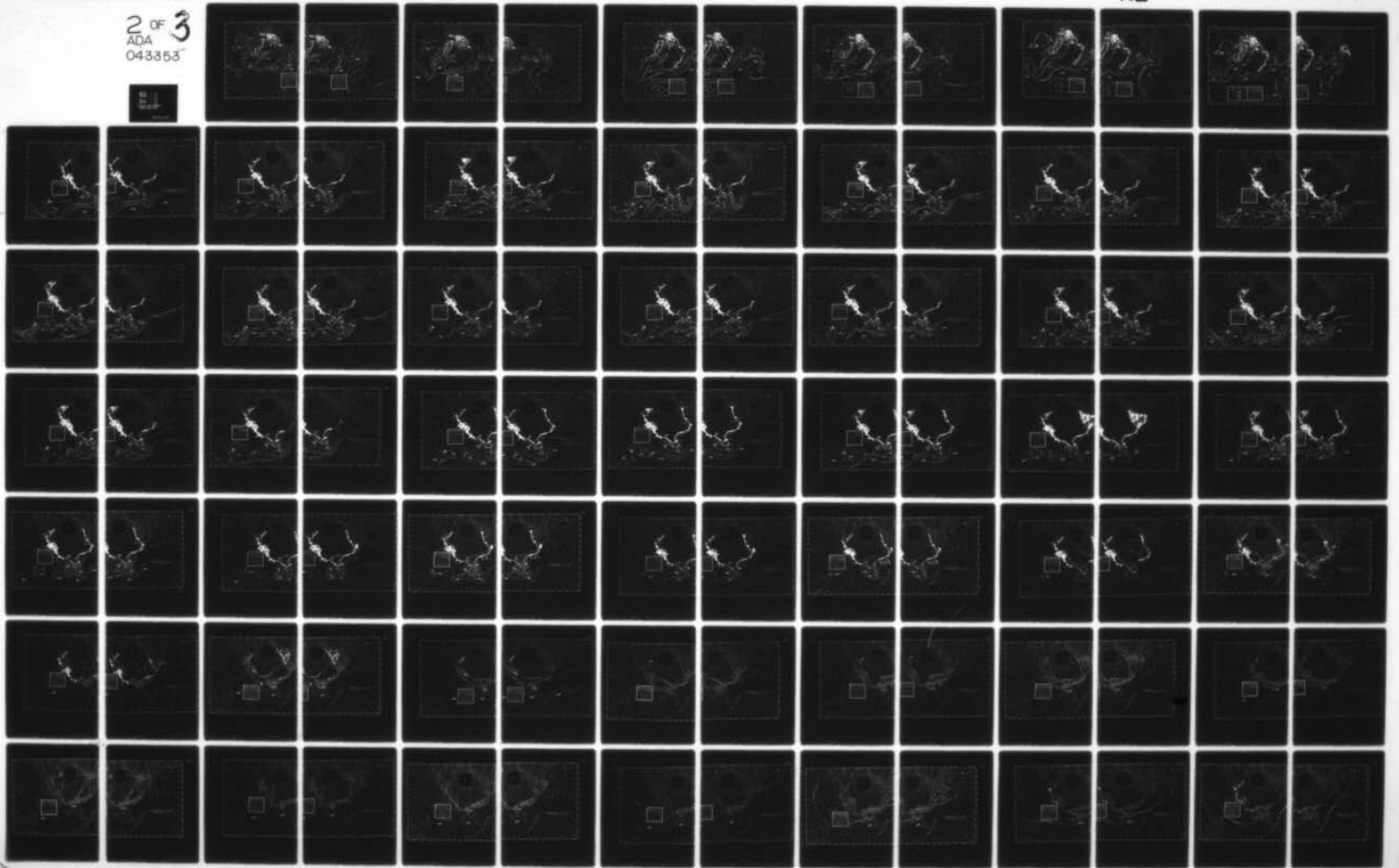
FLEET WEATHER FACILITY SUITLAND MD
EASTERN-WESTERN ARCTIC SEA ICE ANALYSES. (U)
1976

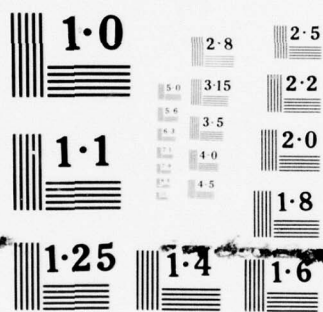
F/G 8/12

UNCLASSIFIED

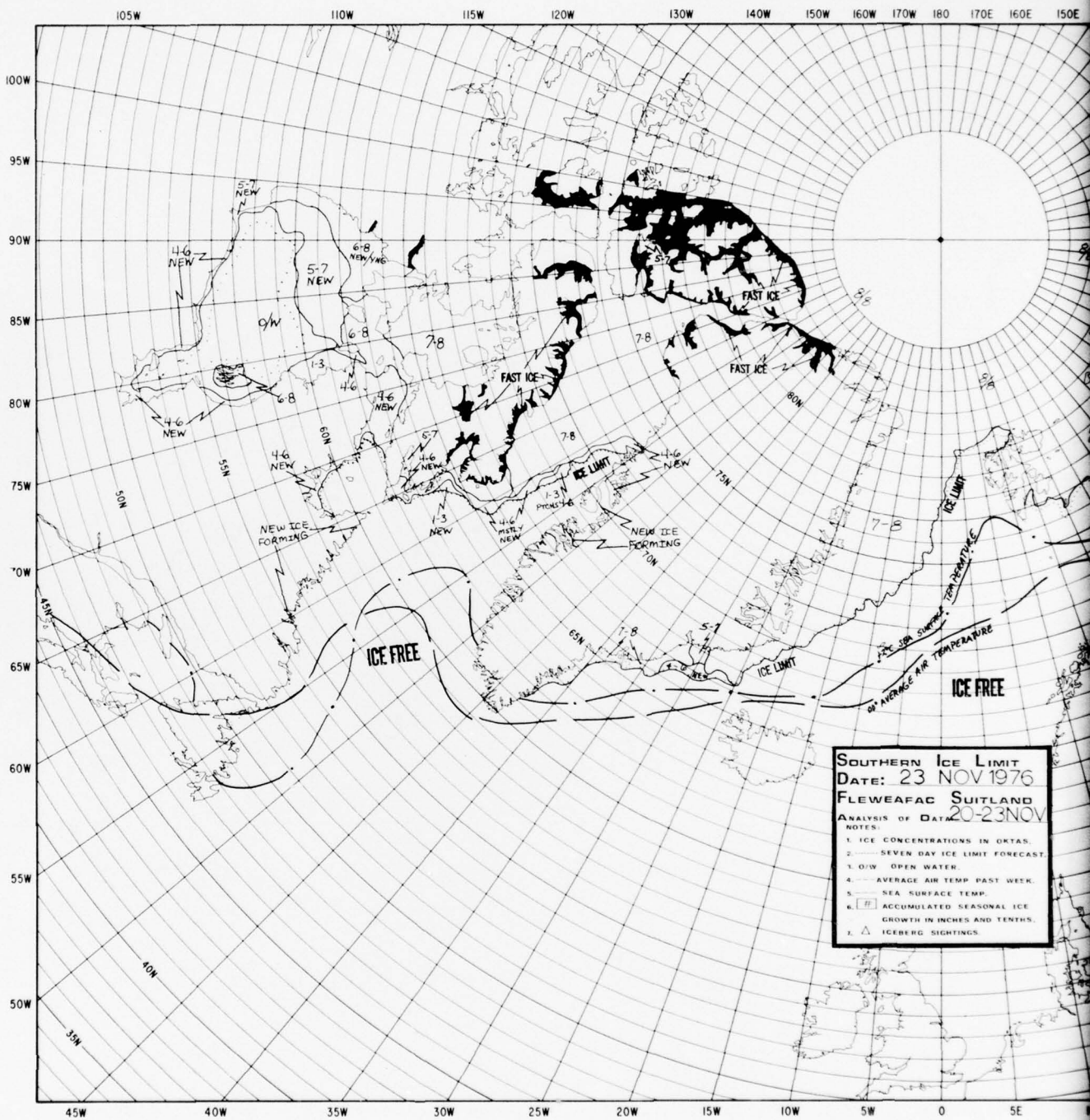
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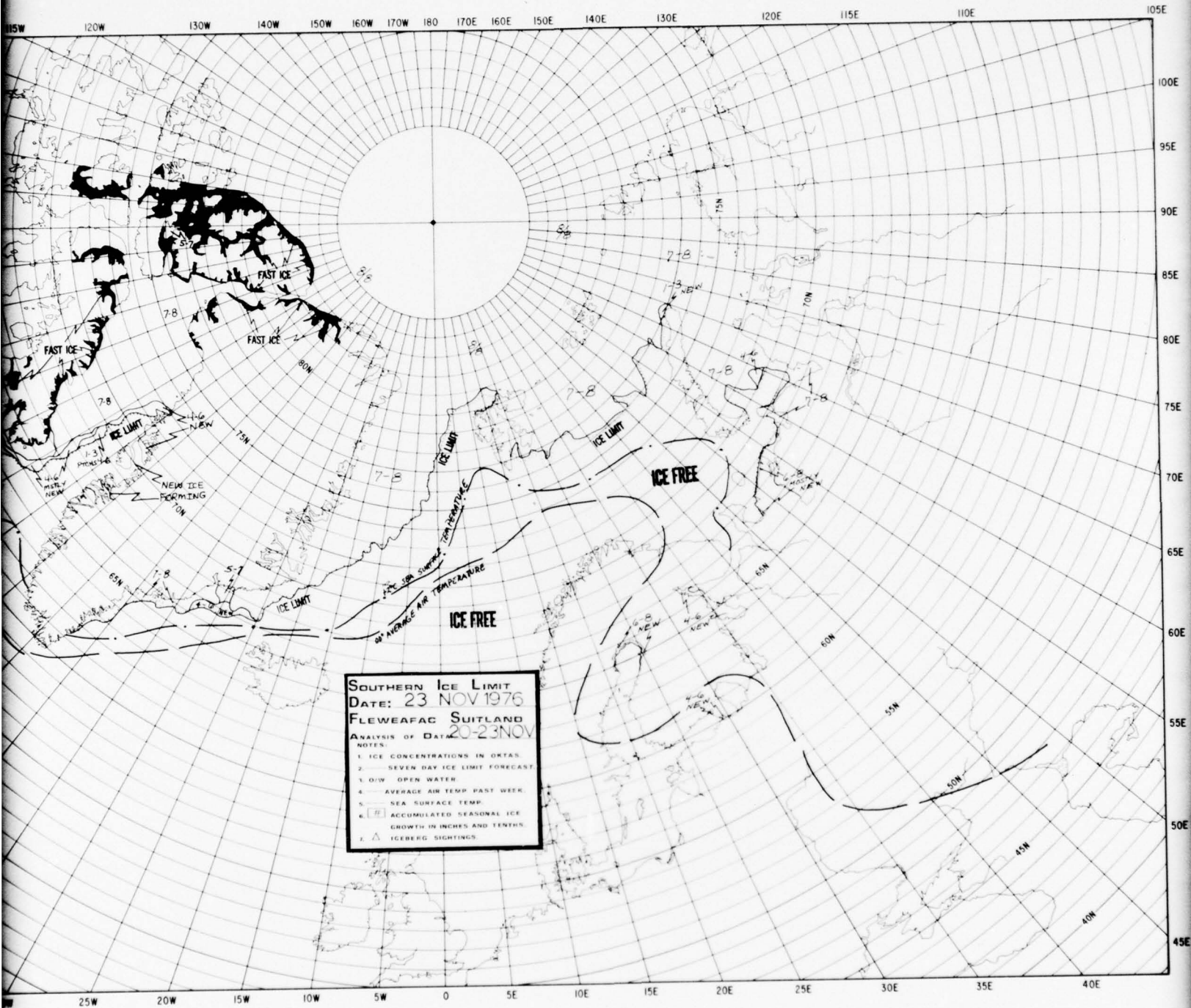
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ADA
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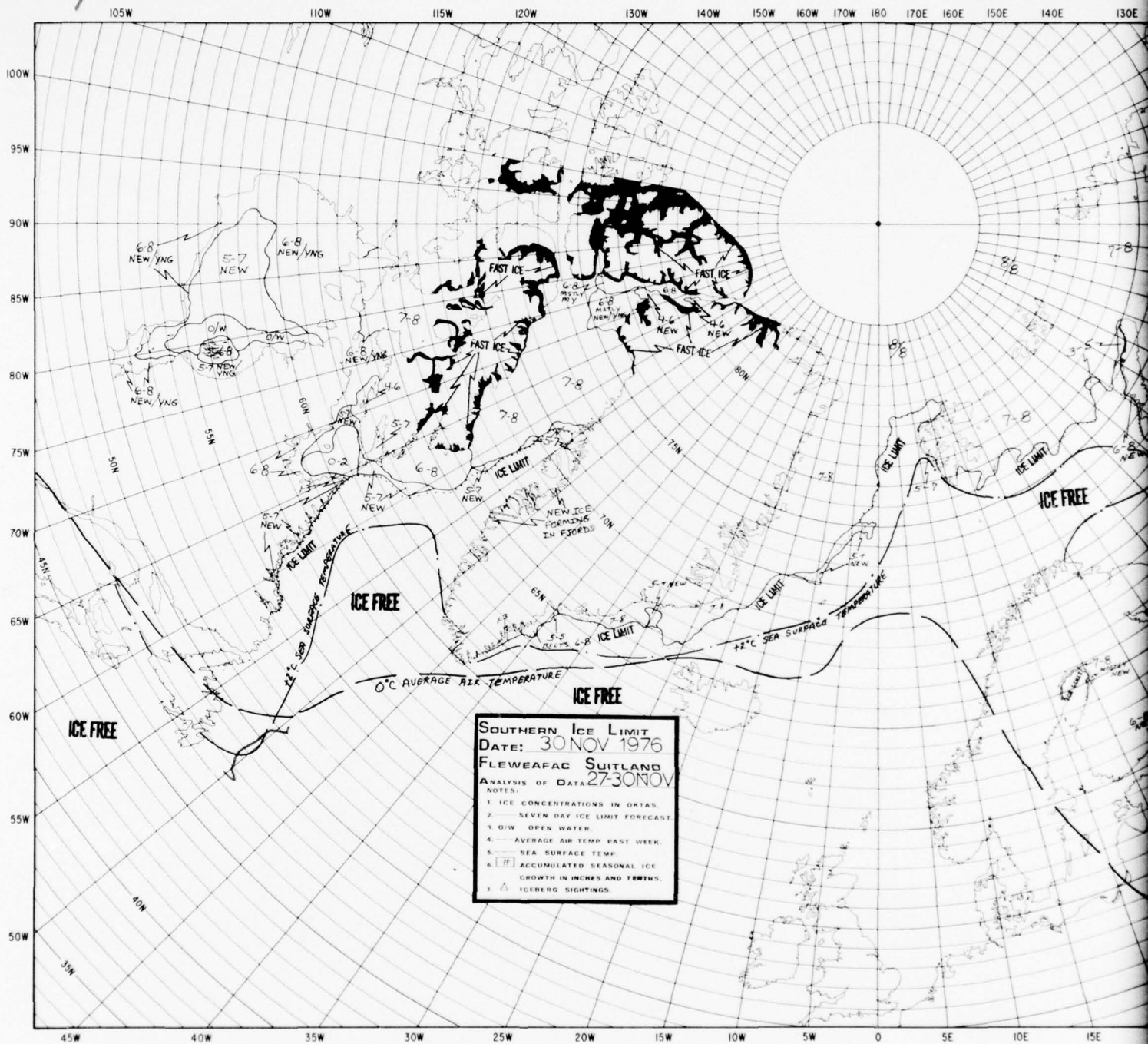


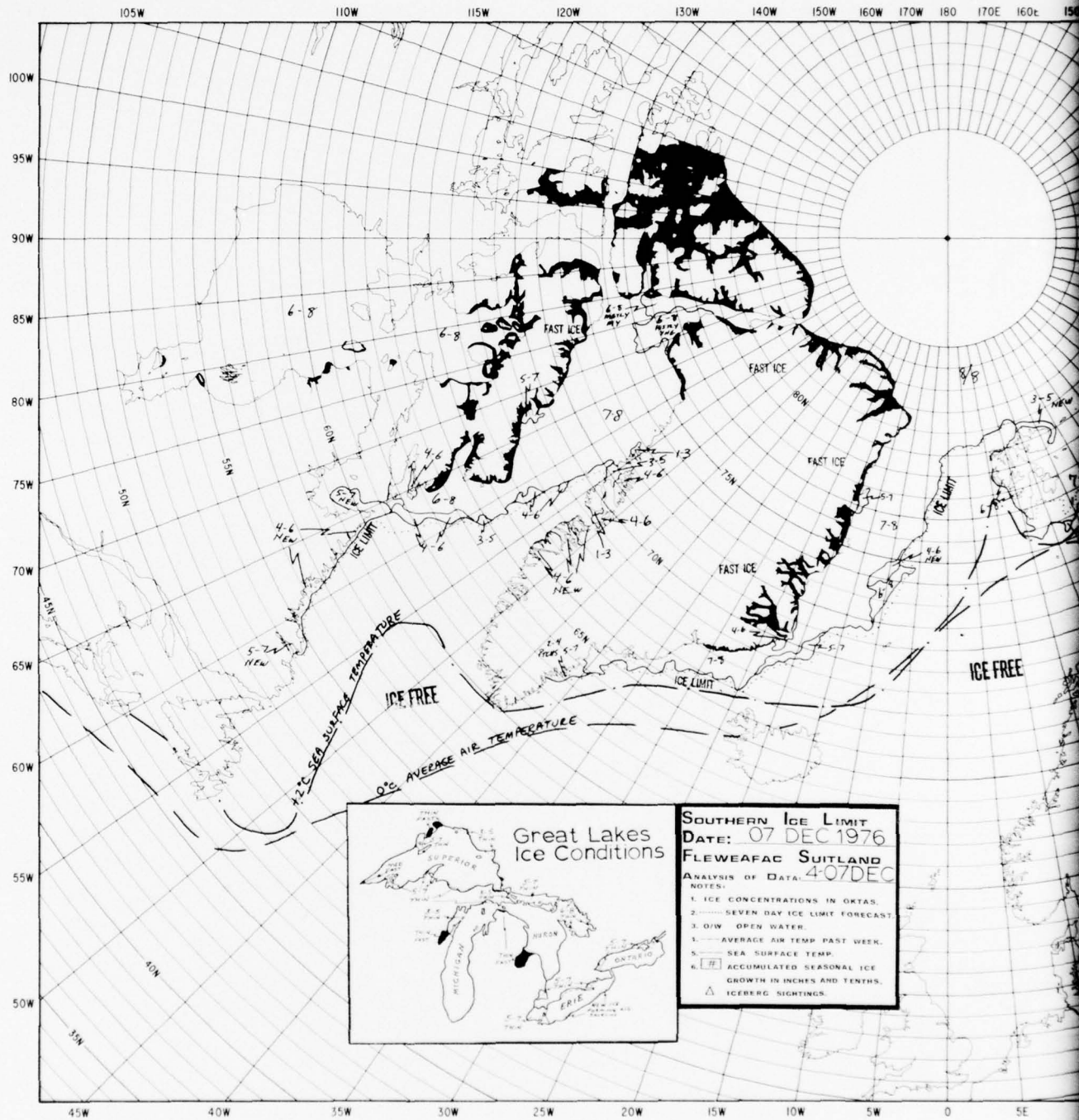


NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART



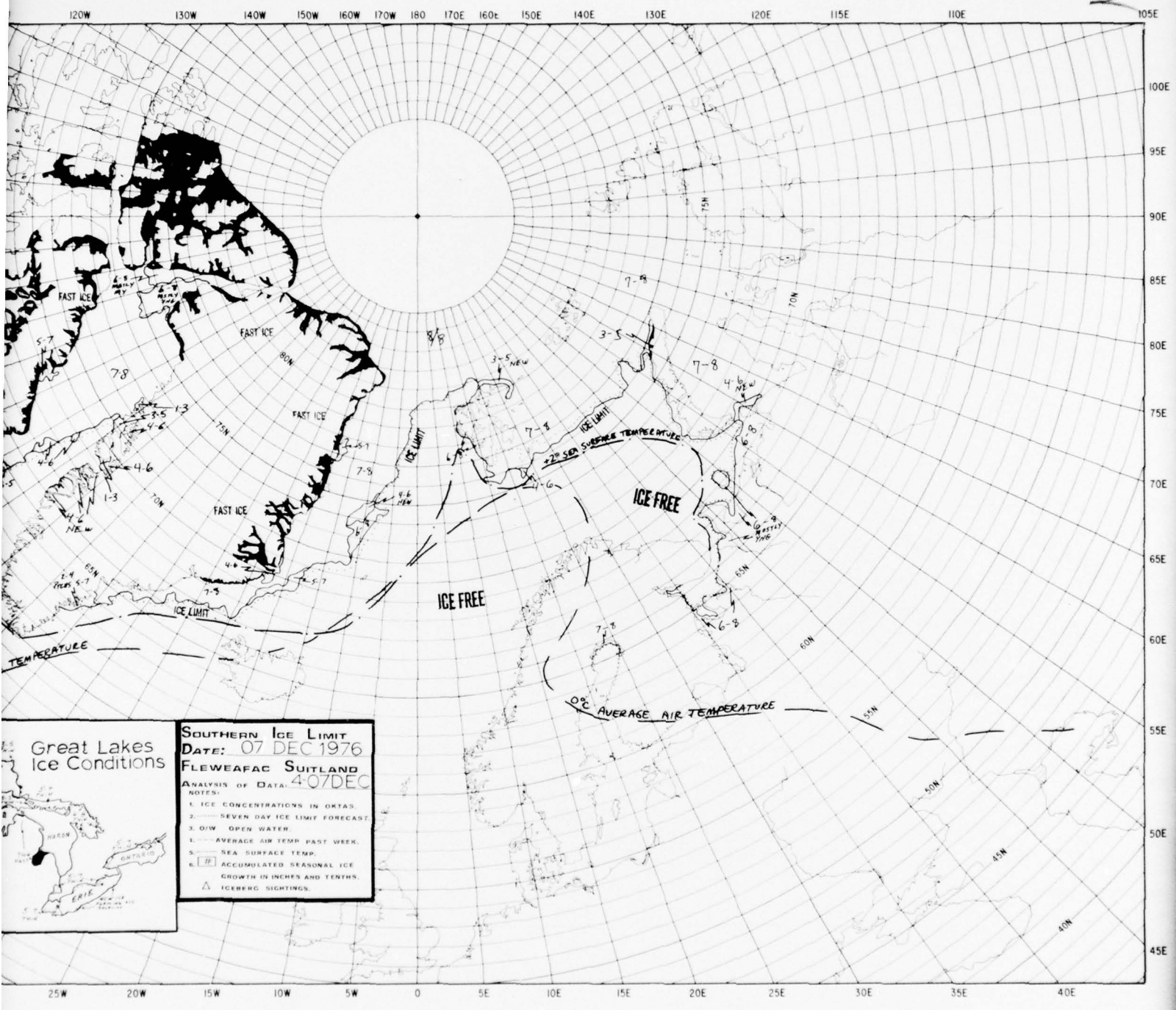






Southern Ice Limit
DATE: 07 DEC 1976
FLEWAFAC SUITLAND
 ANALYSIS OF DATA: 4-07DEC

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [H] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 △ ICEBERG SIGHTINGS.

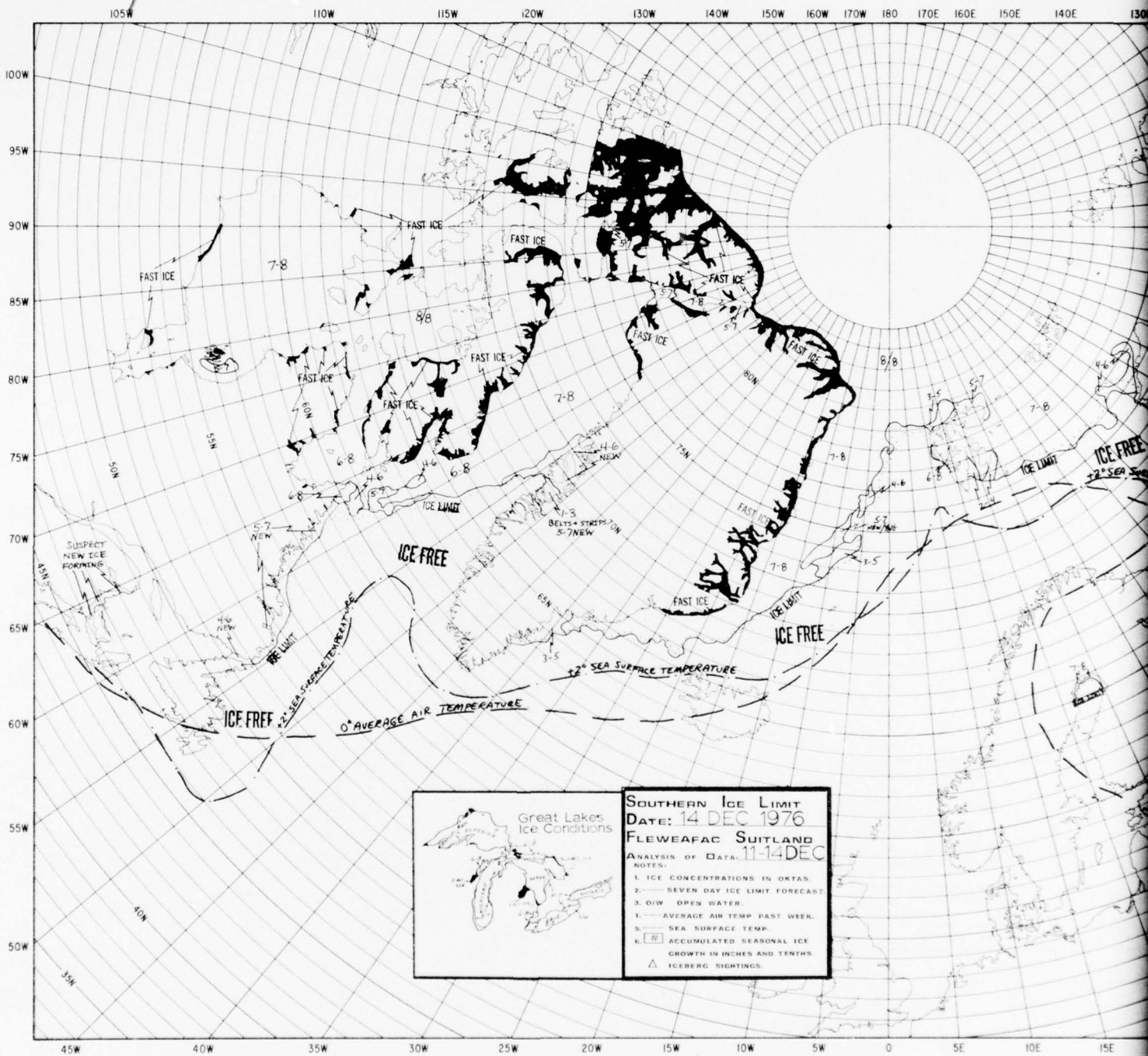


Great Lakes
Ice Conditions

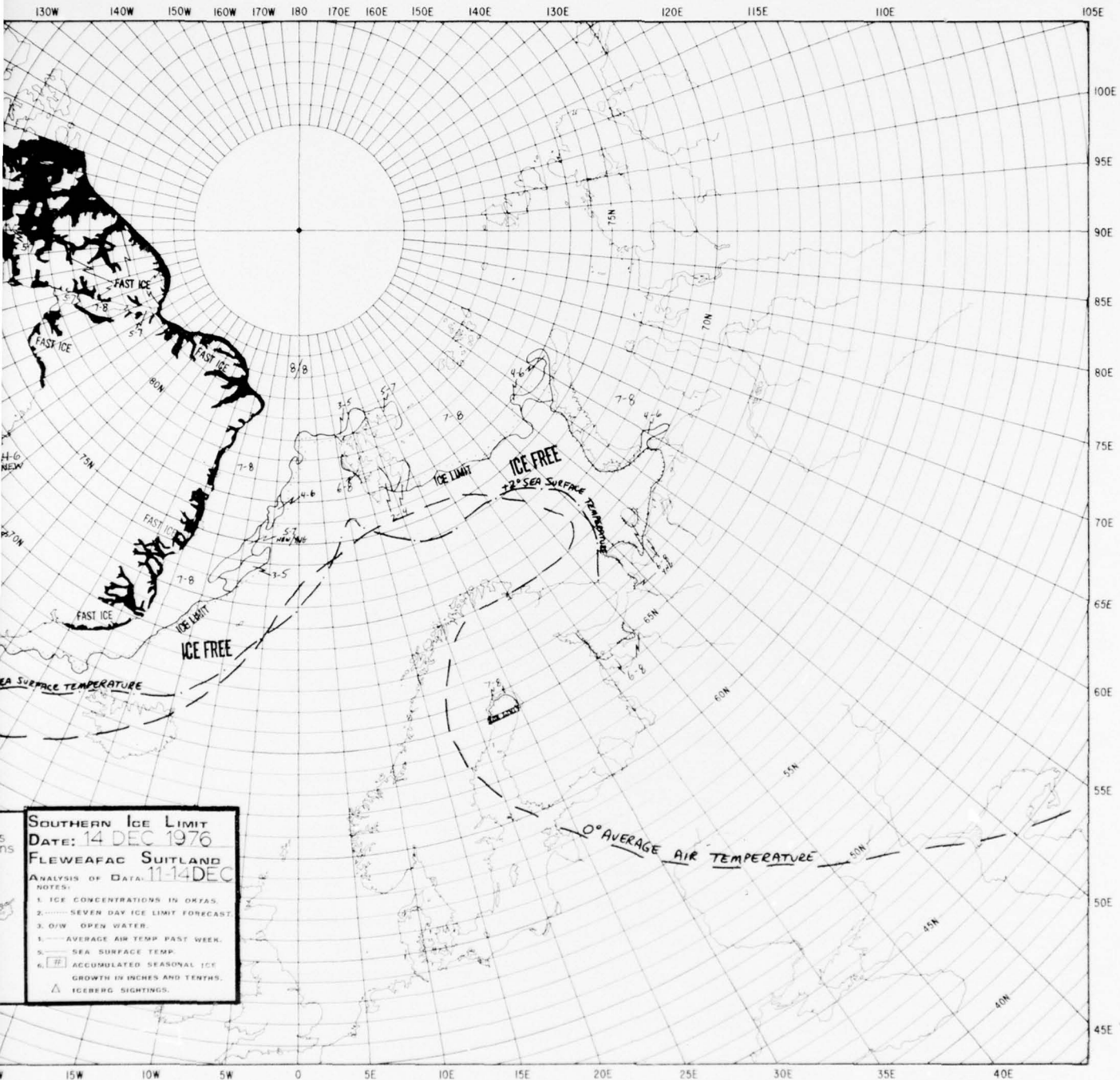
Southern Ice Limit
DATE: 07 DEC 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 4-07DEC

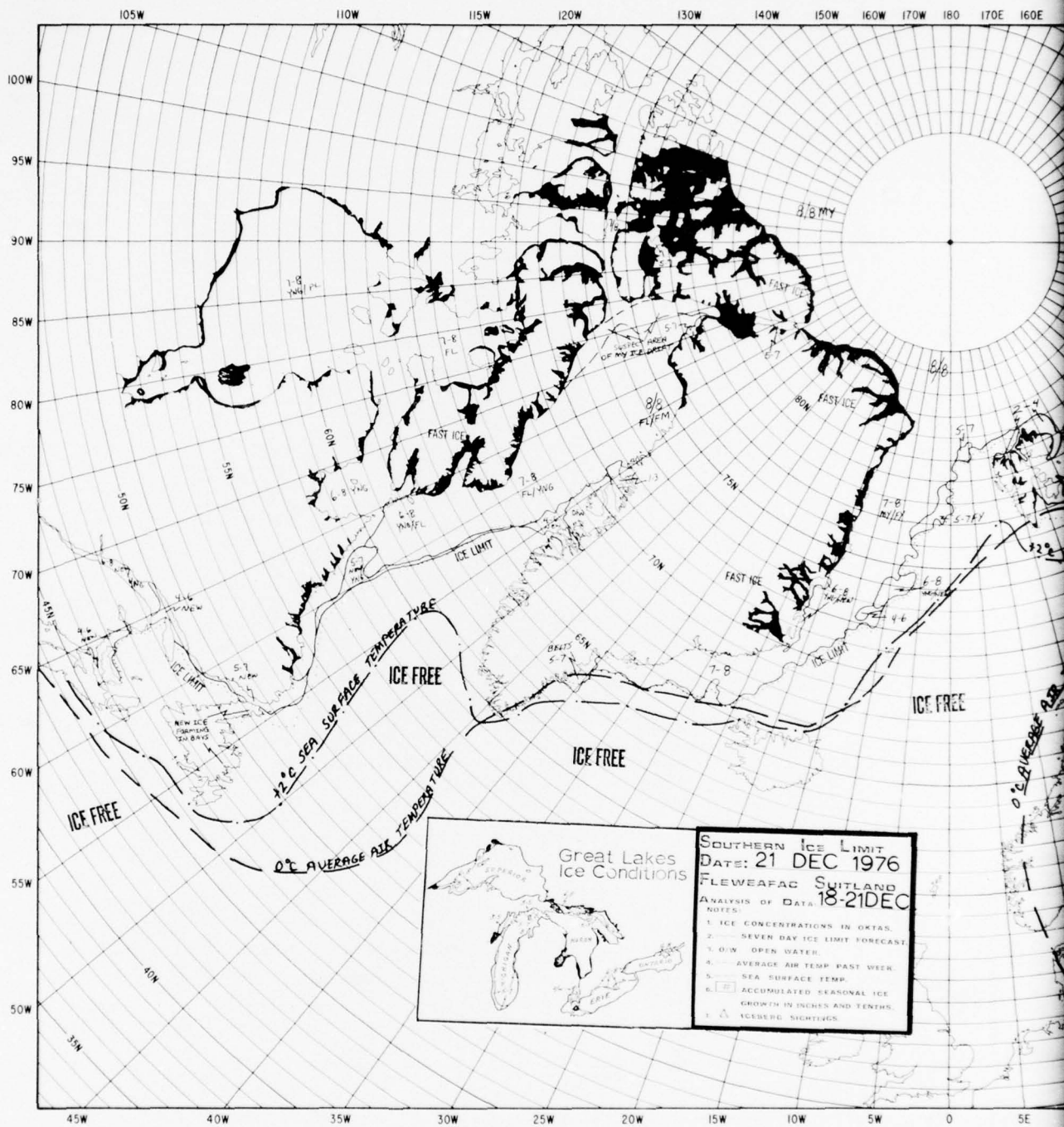
NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. OIW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 Δ ICEBERG SIGHTINGS.

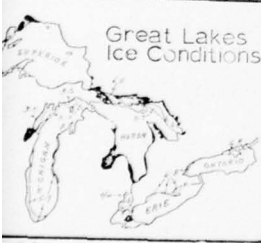
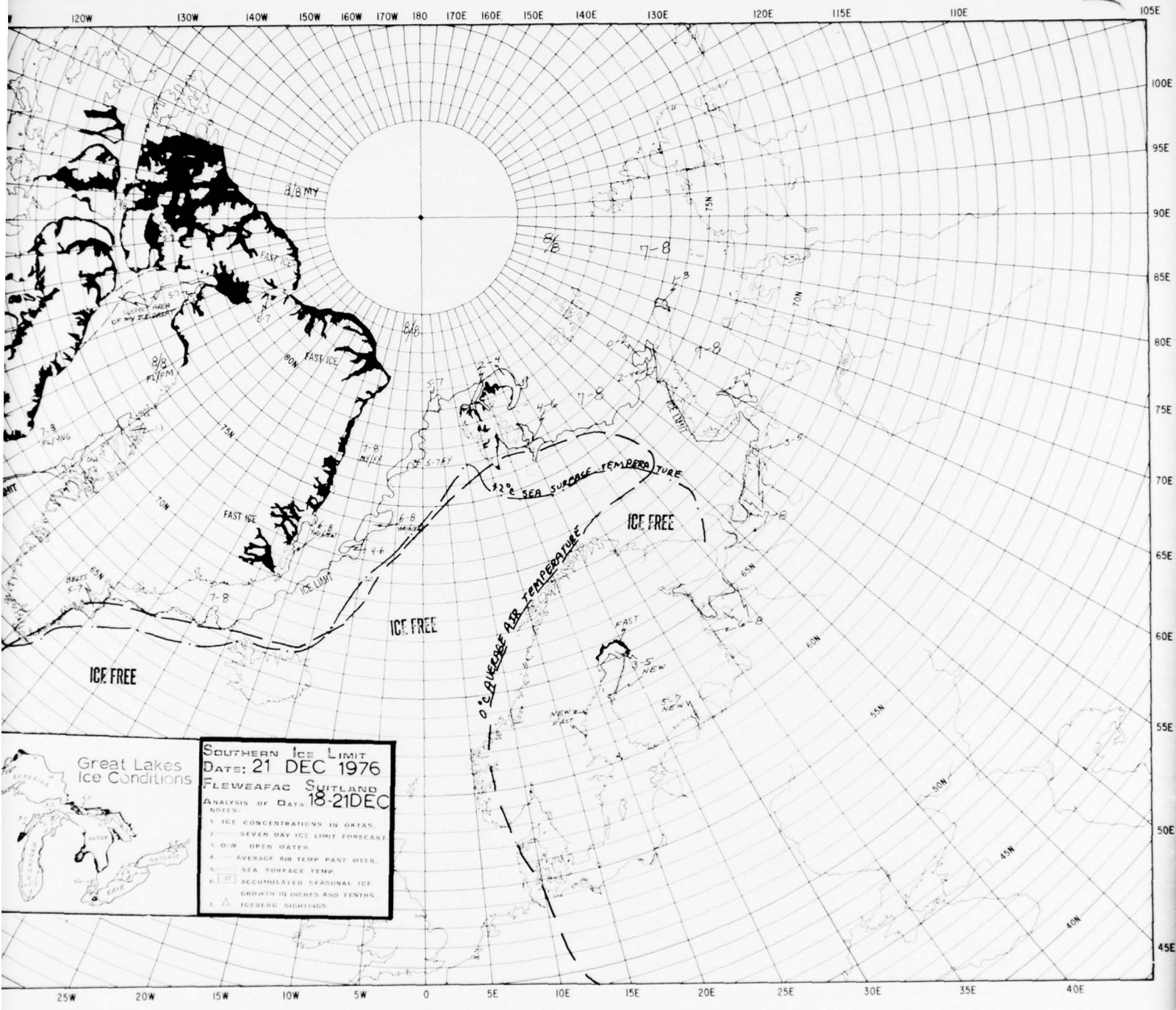




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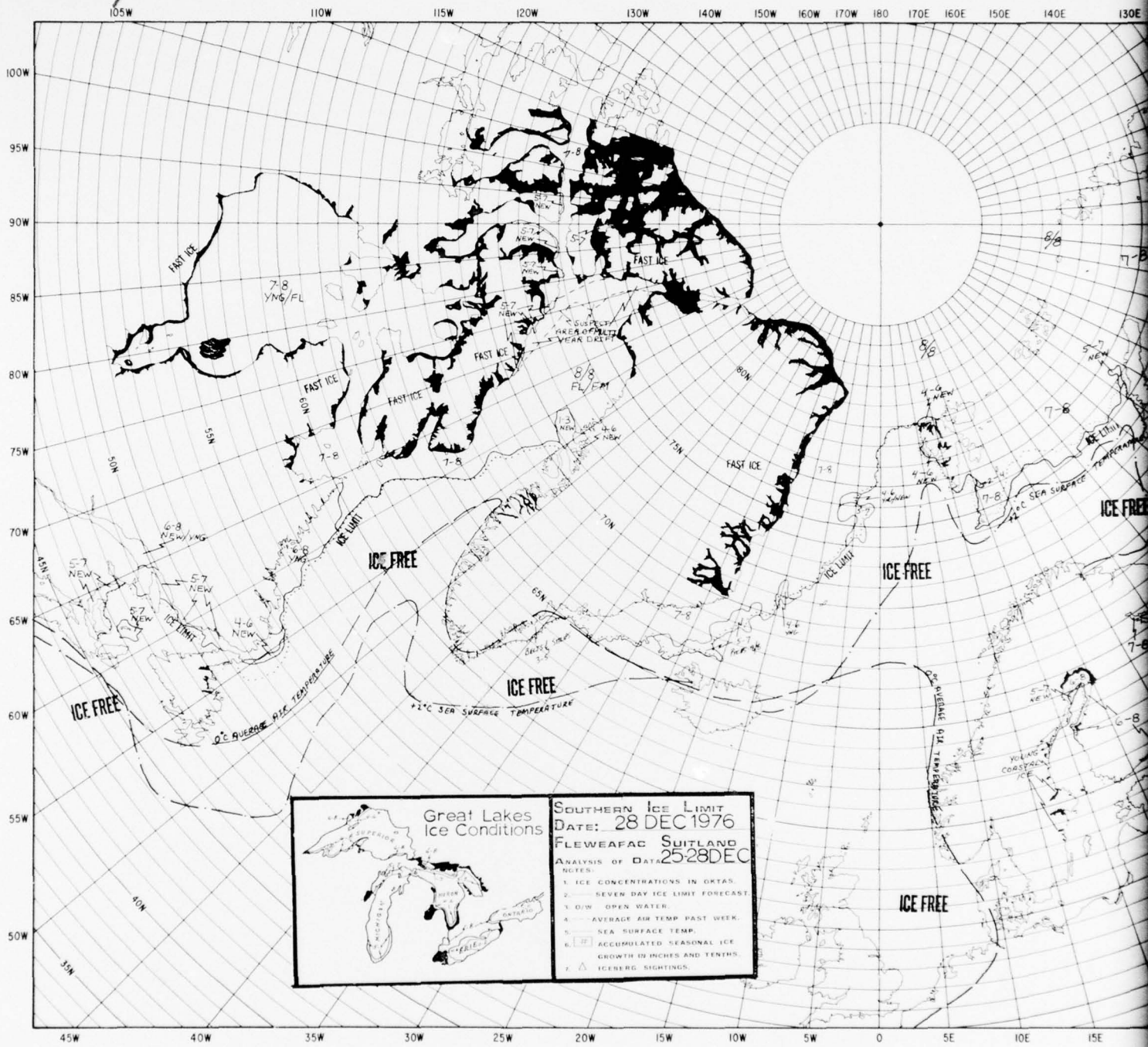


SOUTHERN ICE LIMIT
DATE: 21 DEC 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 18-21 DEC

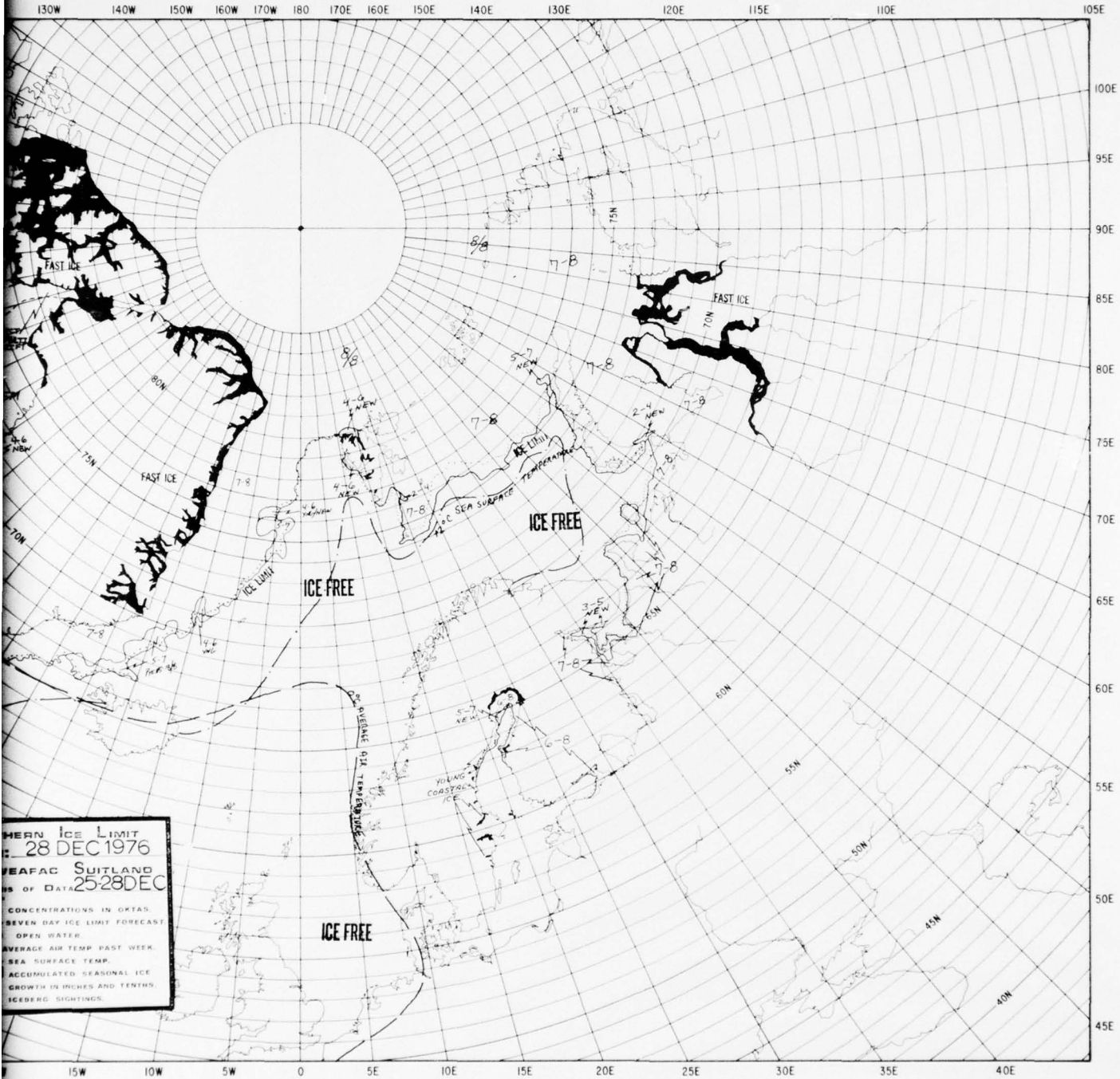
NOTES:
 1. ICE CONCENTRATIONS IN OBTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. 0/0W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

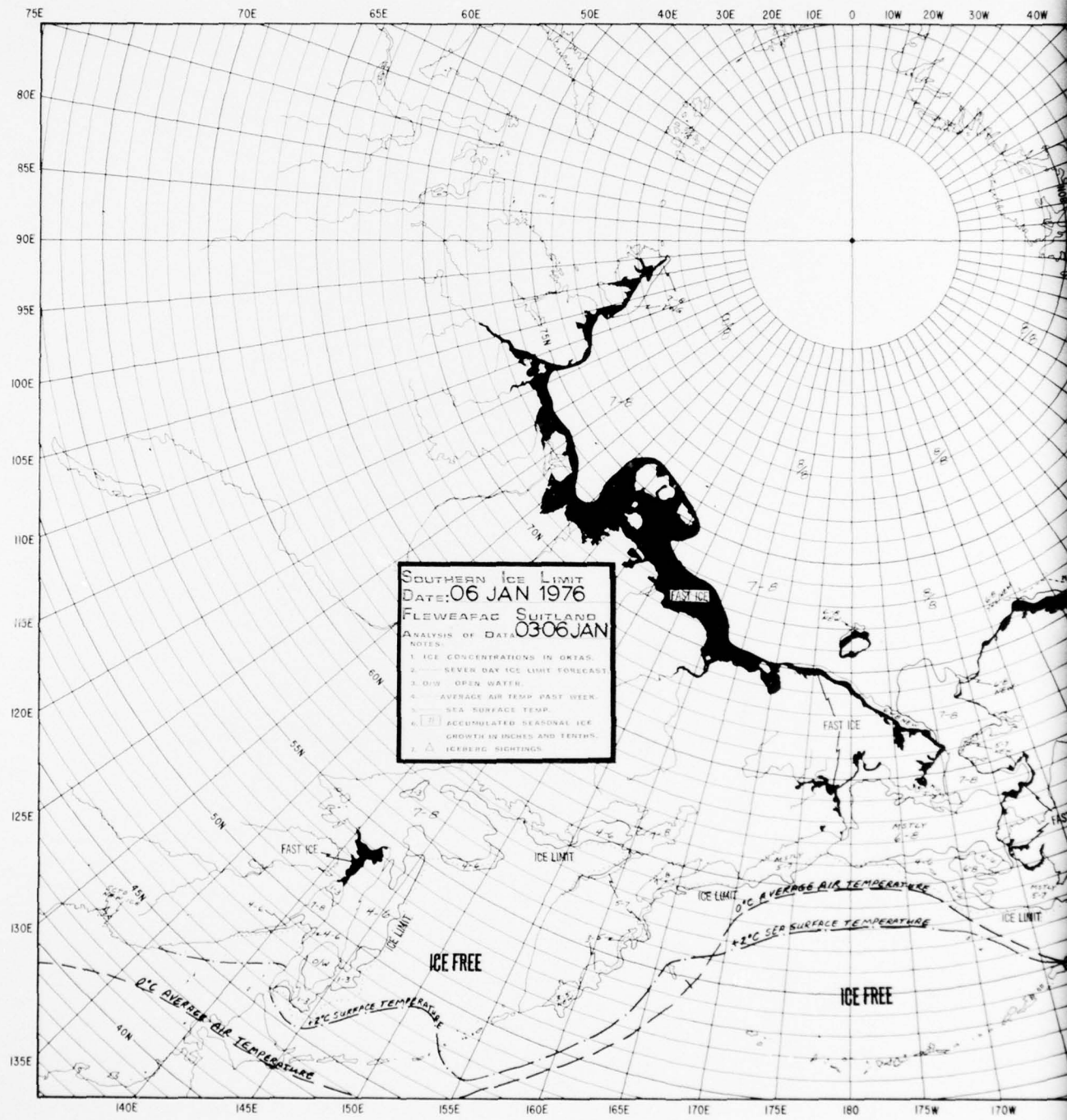
25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

105E
100E
95E
90E
85E
80E
75E
70E
65E
60E
55E
50E
45E

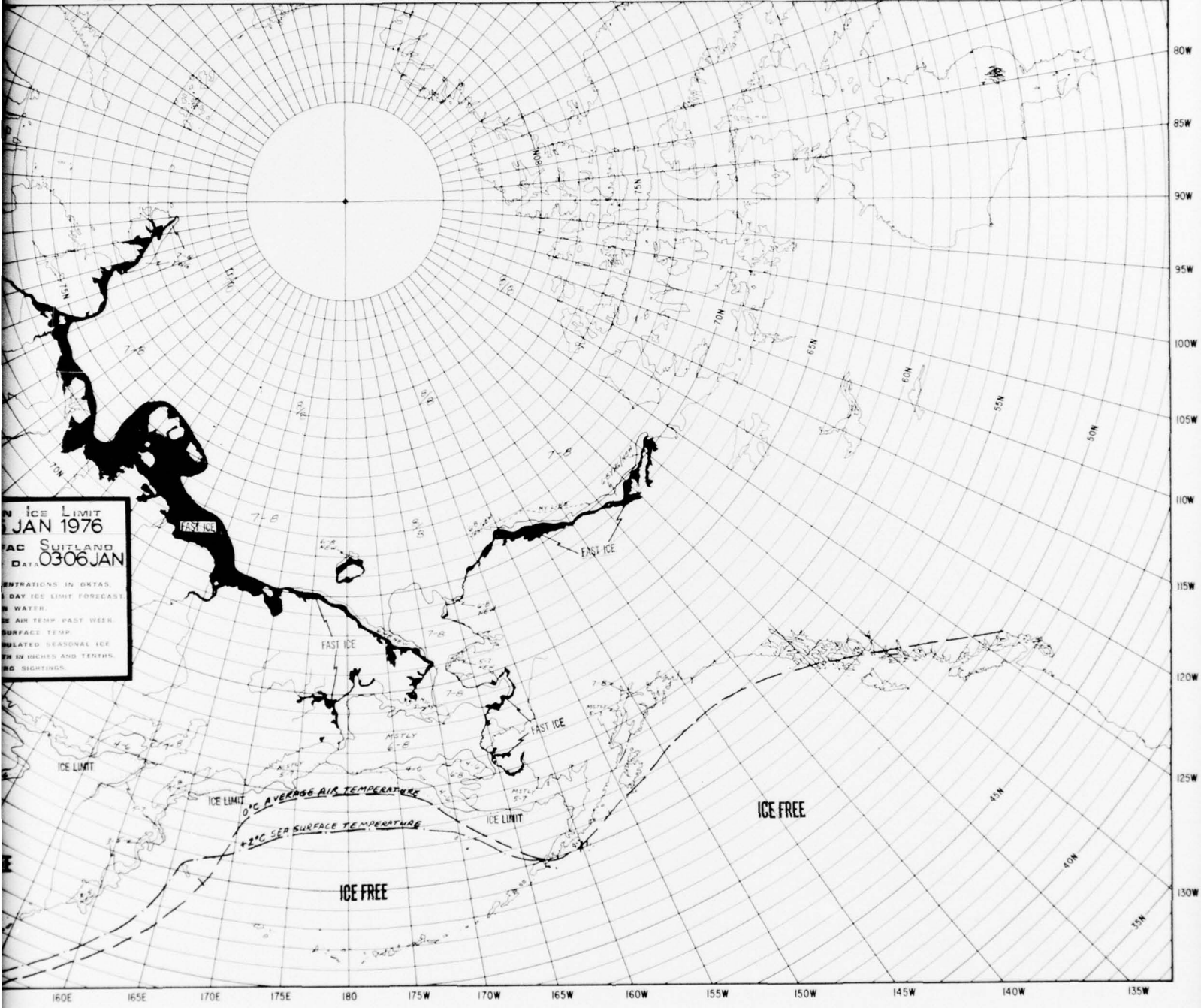


	Great Lakes Ice Conditions
	Southern Ice Limit Date: 28 DEC 1976
	FLEWEAFAC SUITLAND Analysis of Data: 25-28 DEC
NOTES:	
1. ICE CONCENTRATIONS IN ORTAS.	
2. SEVEN DAY ICE LIMIT FORECAST.	
3. 01W OPEN WATER.	
4. AVERAGE AIR TEMP PAST WEEK.	
5. SEA SURFACE TEMP.	
6. [] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.	
7. [] ICESBERG SIGHTINGS.	



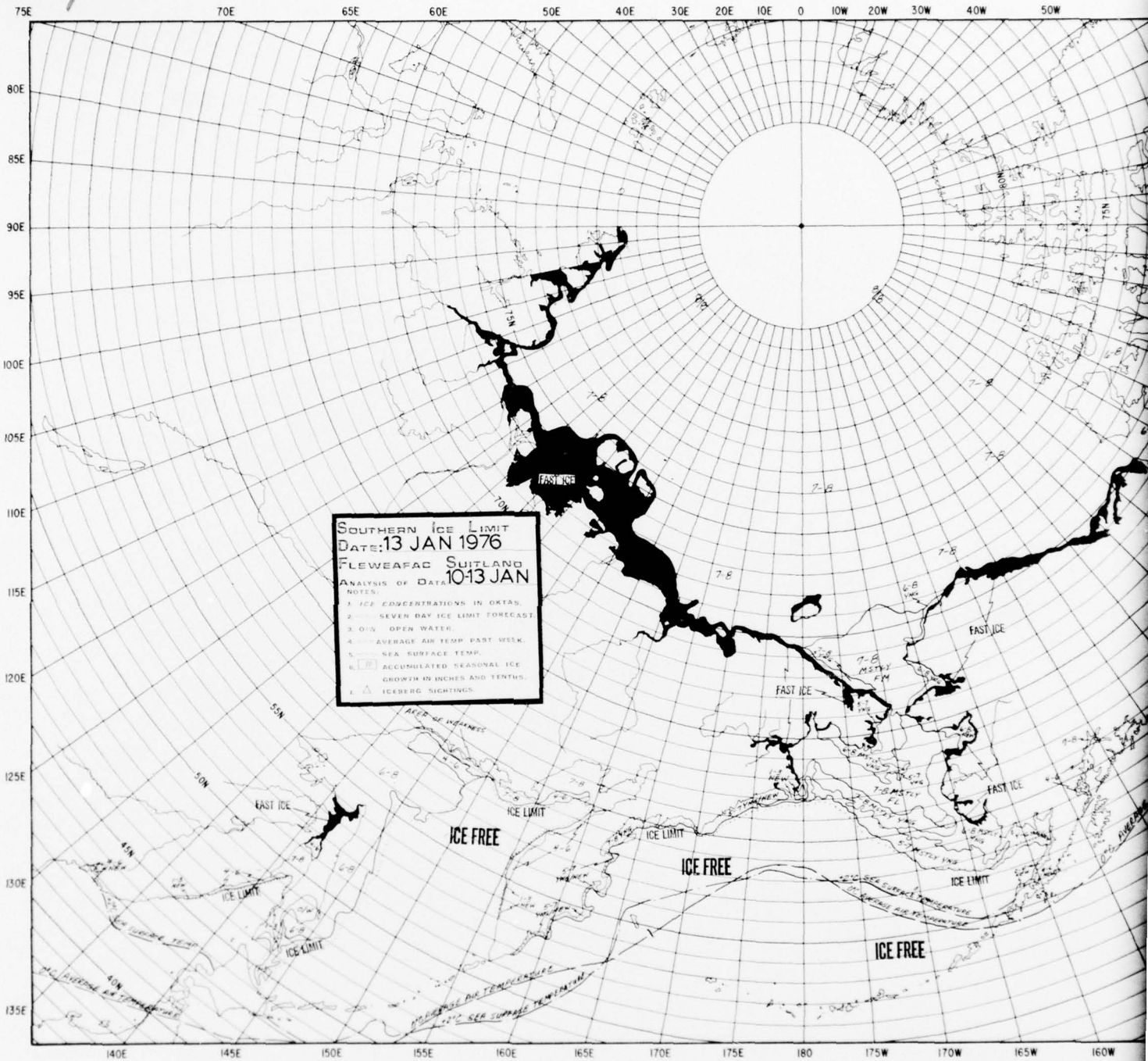


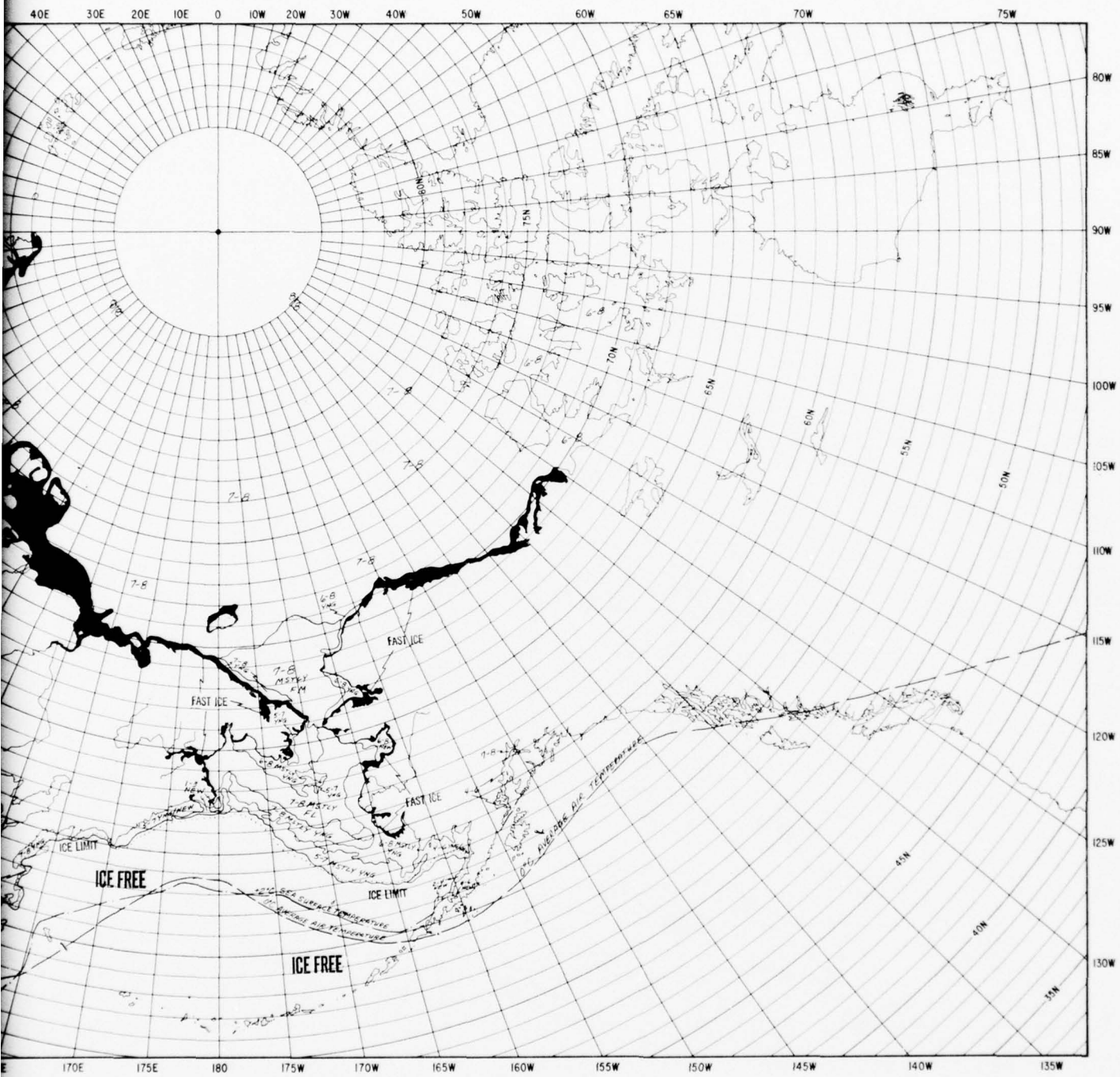
50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

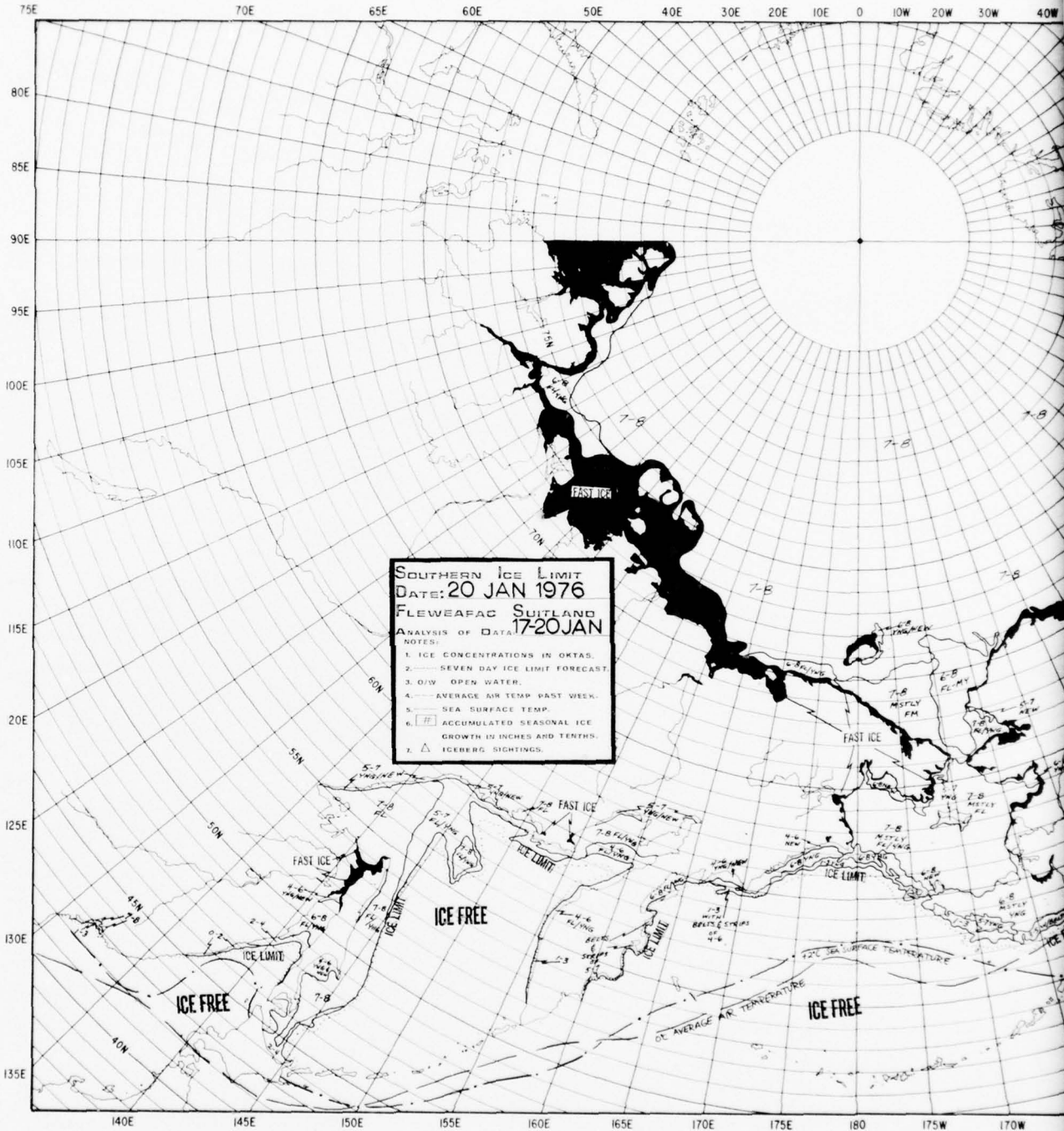


160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W

80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W

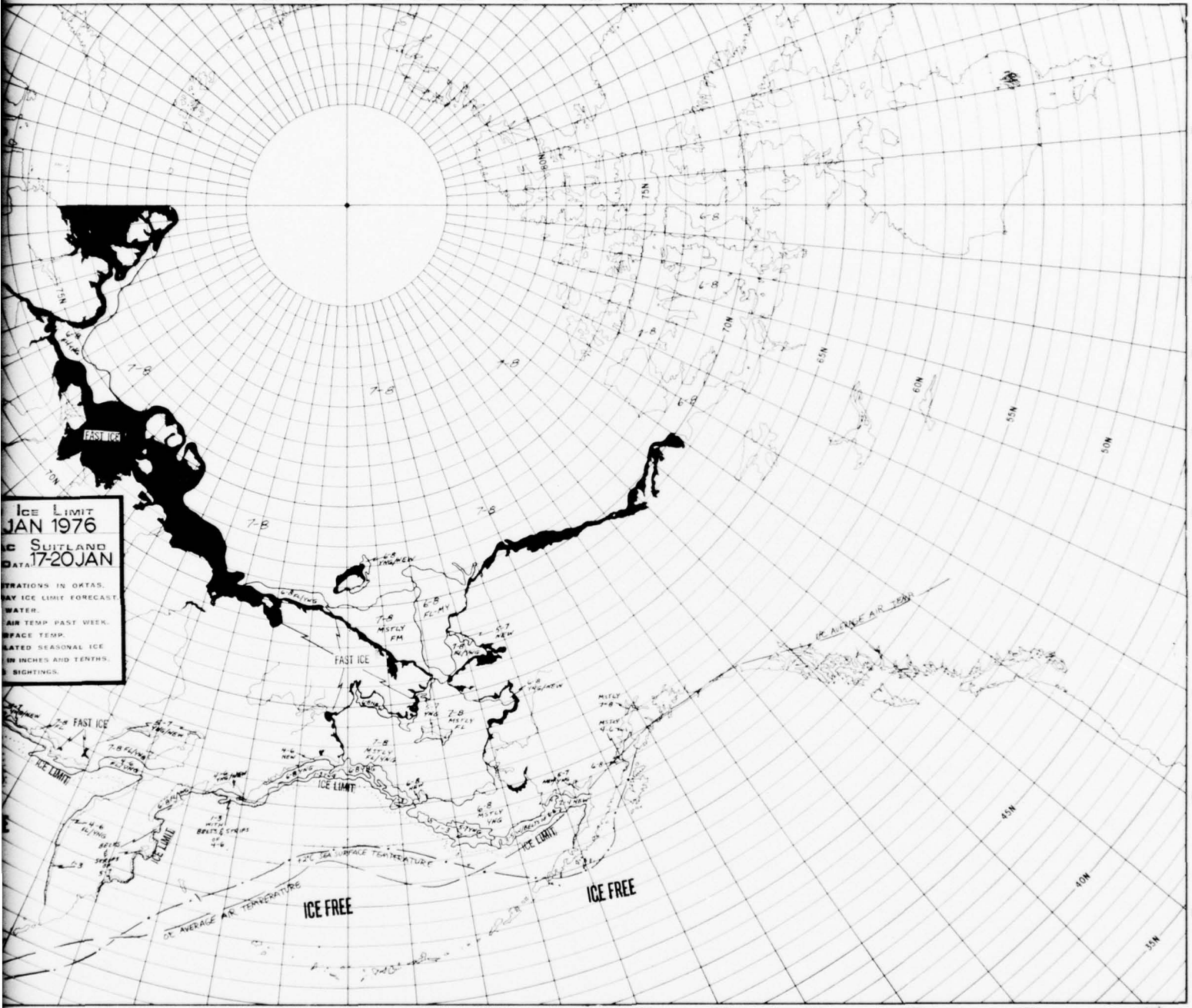






50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

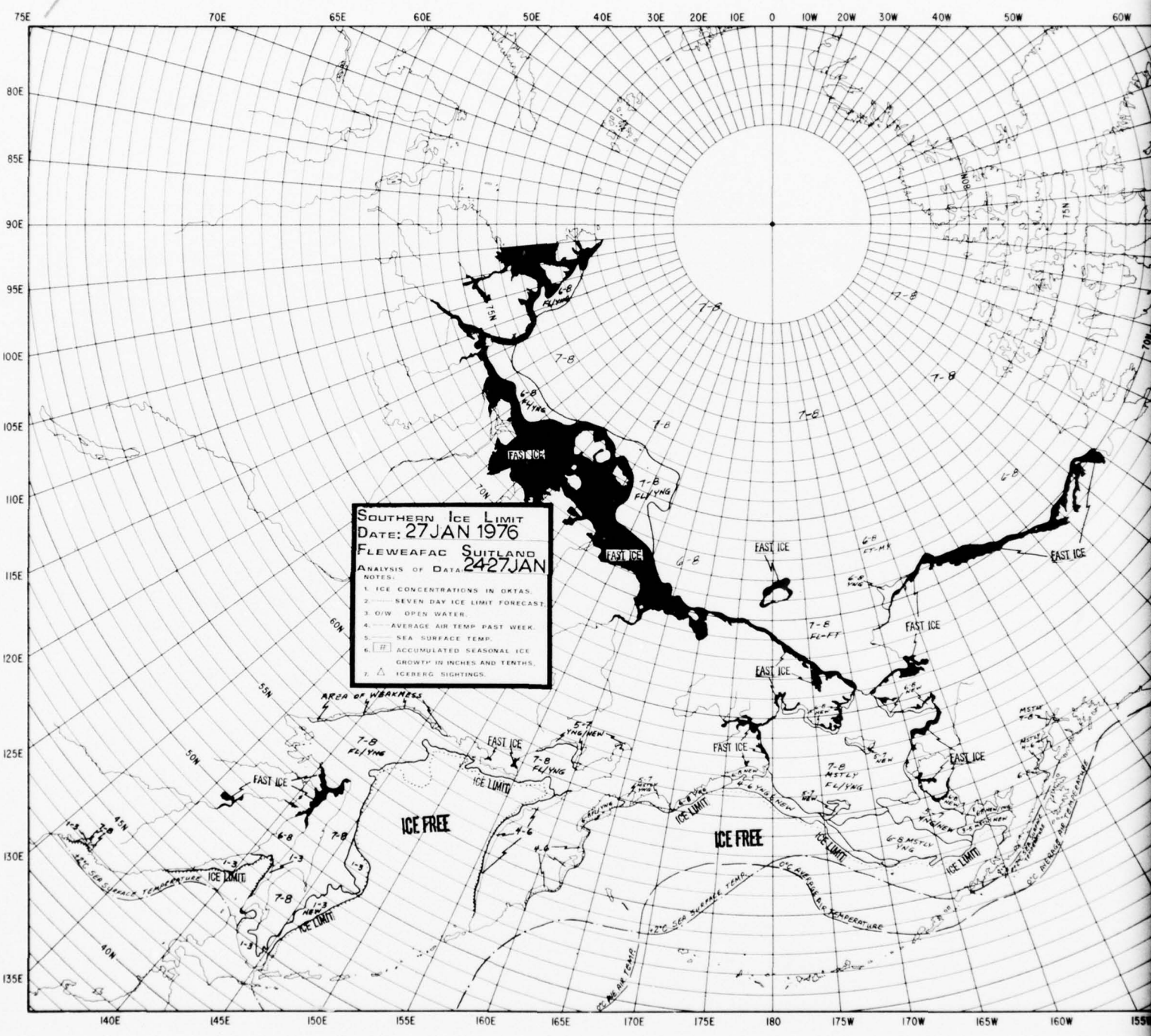
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W
135W

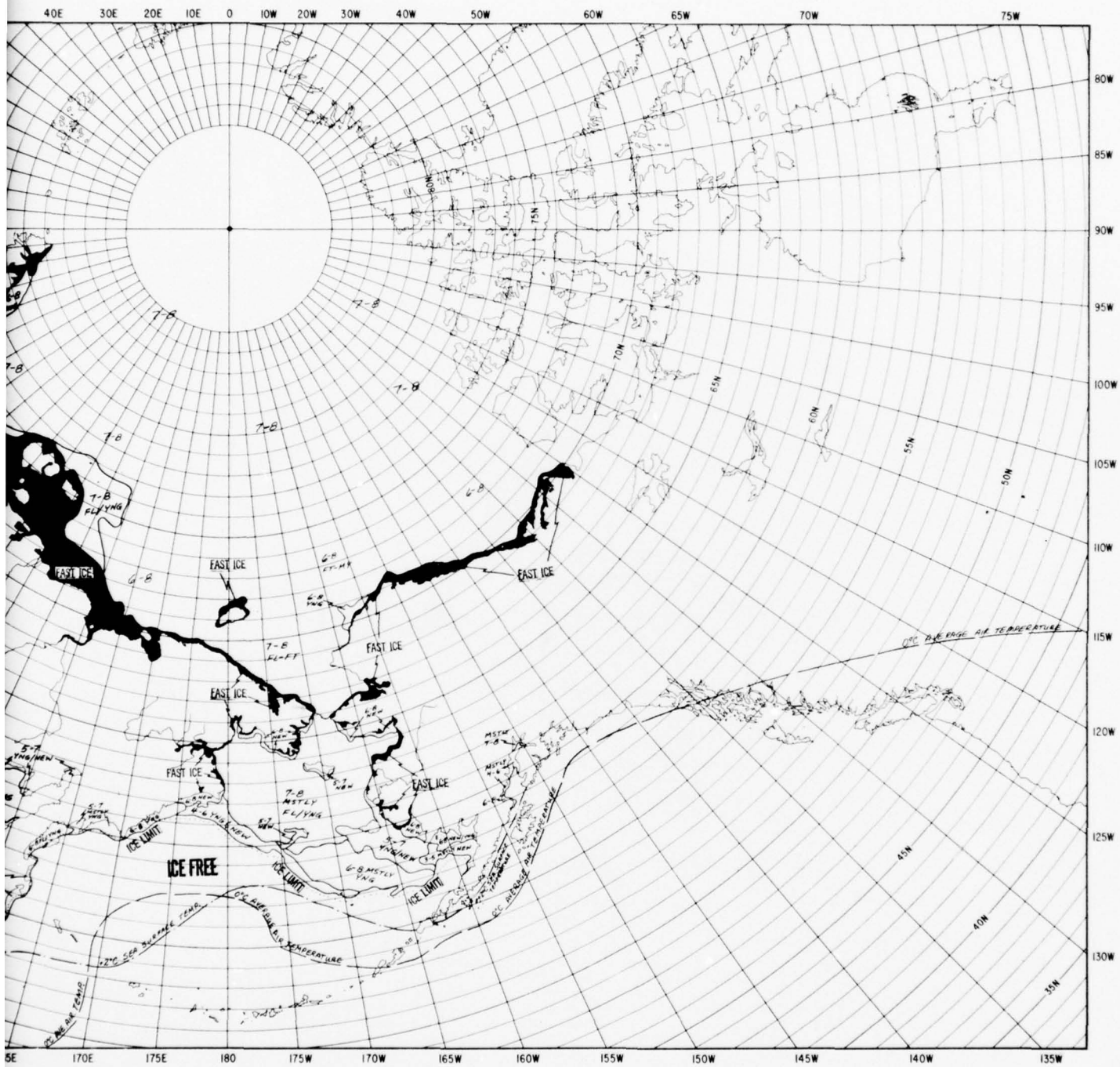


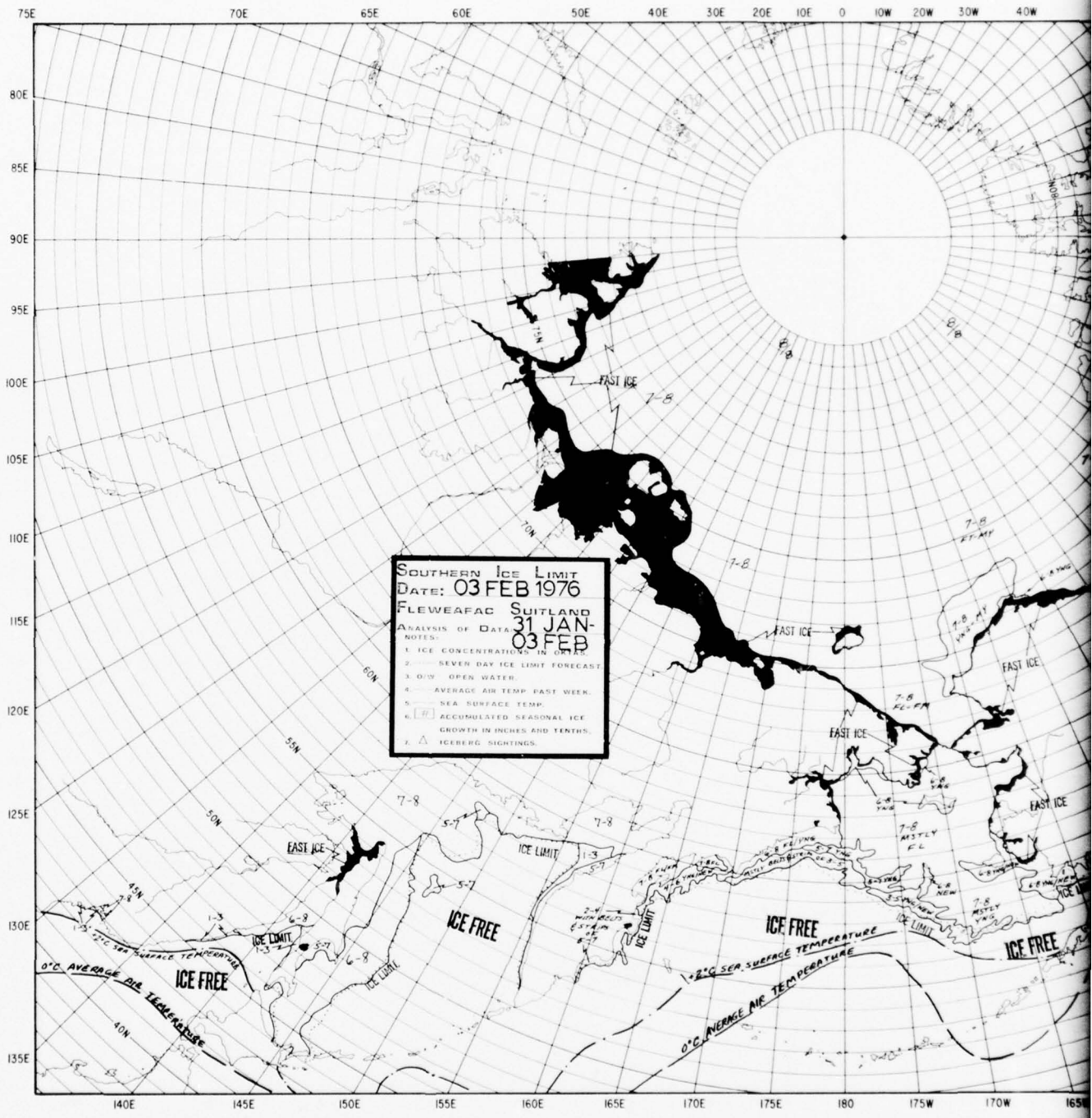
ICE LIMIT
JAN 1976
ANTARCTIC
DATA 17-20 JAN

OBSERVATIONS IN OKTAS.
 DAILY ICE LIMIT FORECAST
 WATER.
 AIR TEMP PAST WEEK.
 SURFACE TEMP.
 LATEST SEASONAL ICE
 THICKNESS IN INCHES AND TENTHS.
 SHIP SIGHTINGS.

160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W



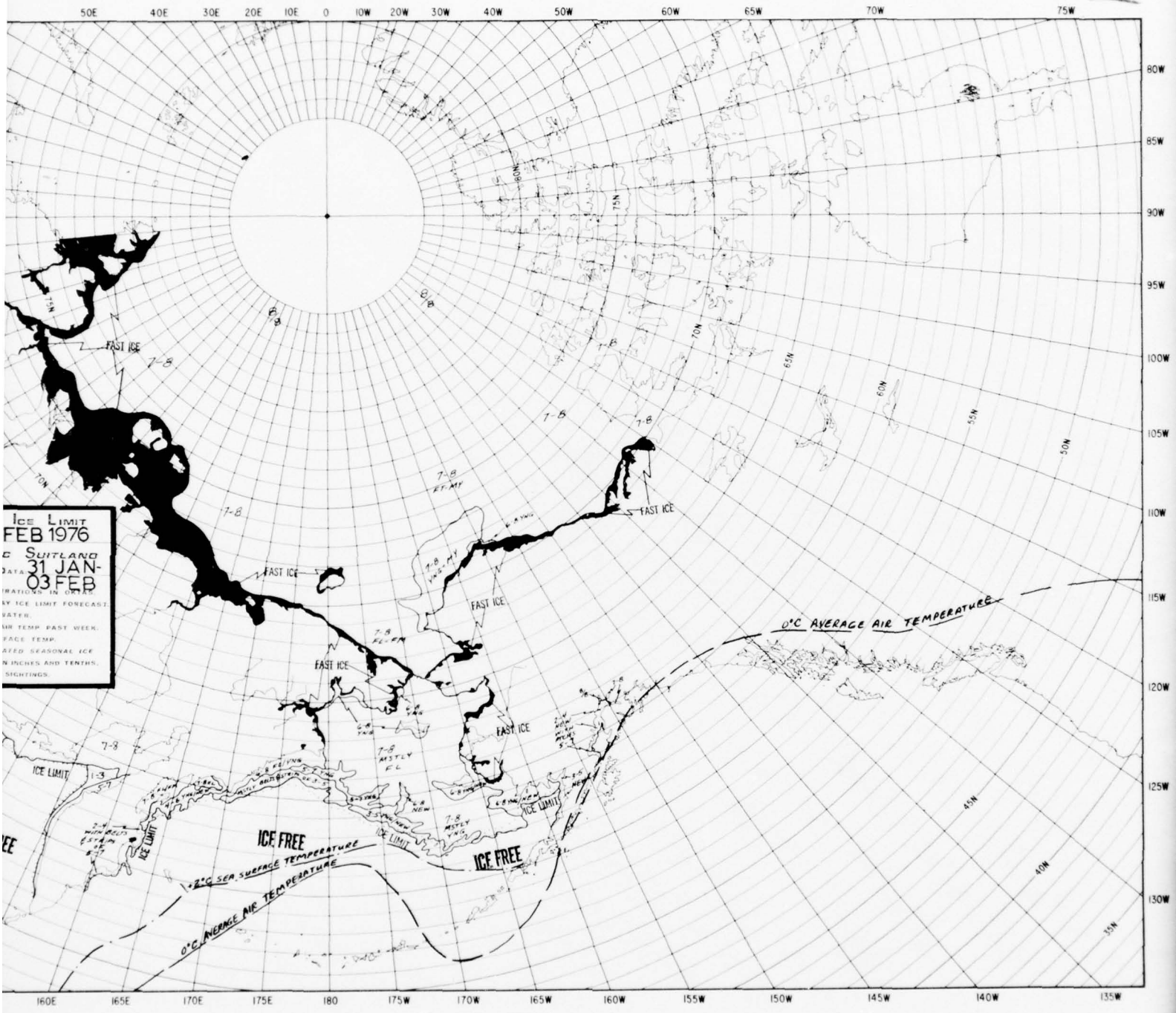


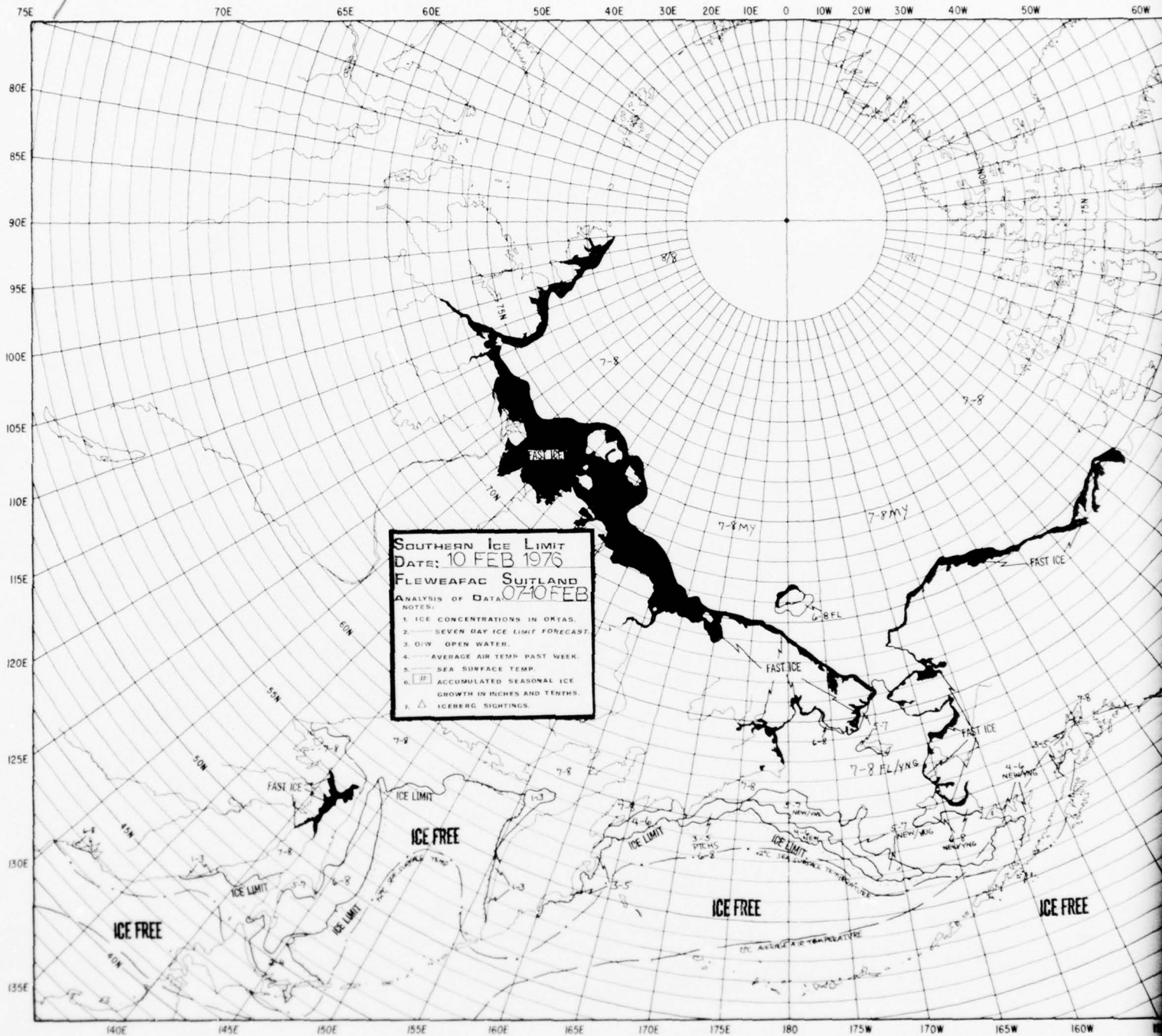


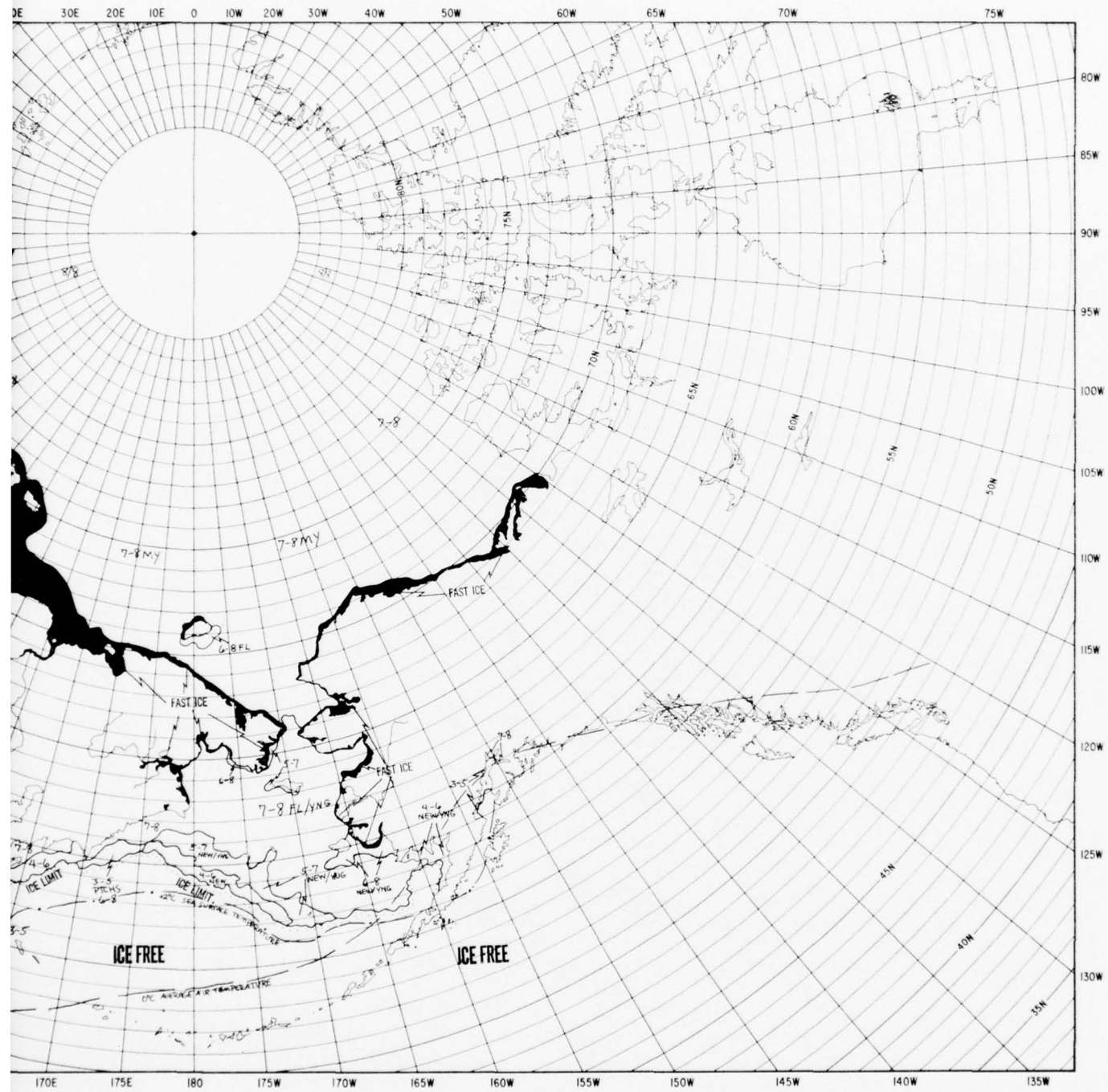
75E
80E
85E
90E
95E
100E
105E
110E
115E
120E
125E
130E
135E

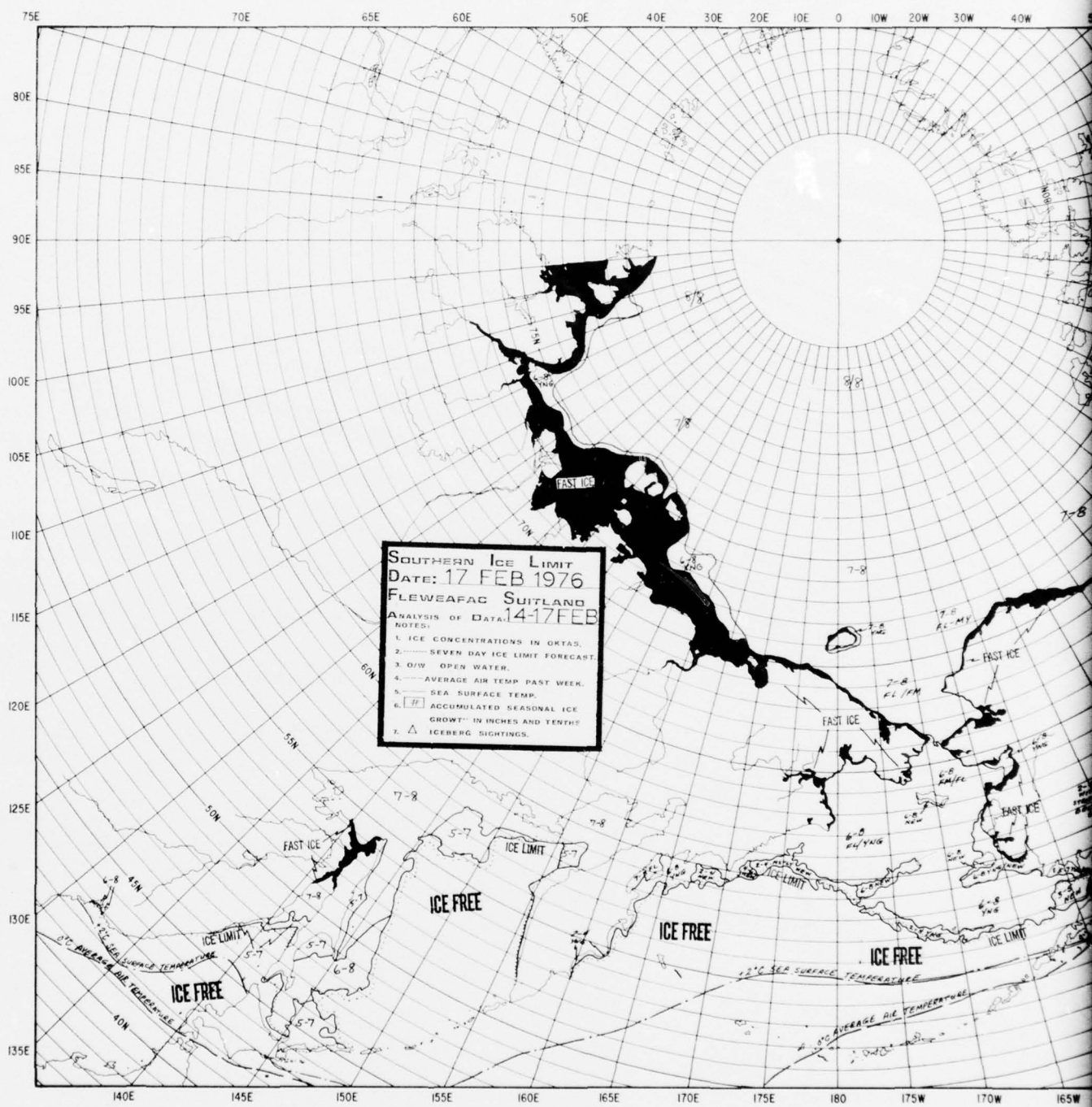
70E 65E 60E 50E 40E 30E 20E 10E 0 10W 20W 30W 40W

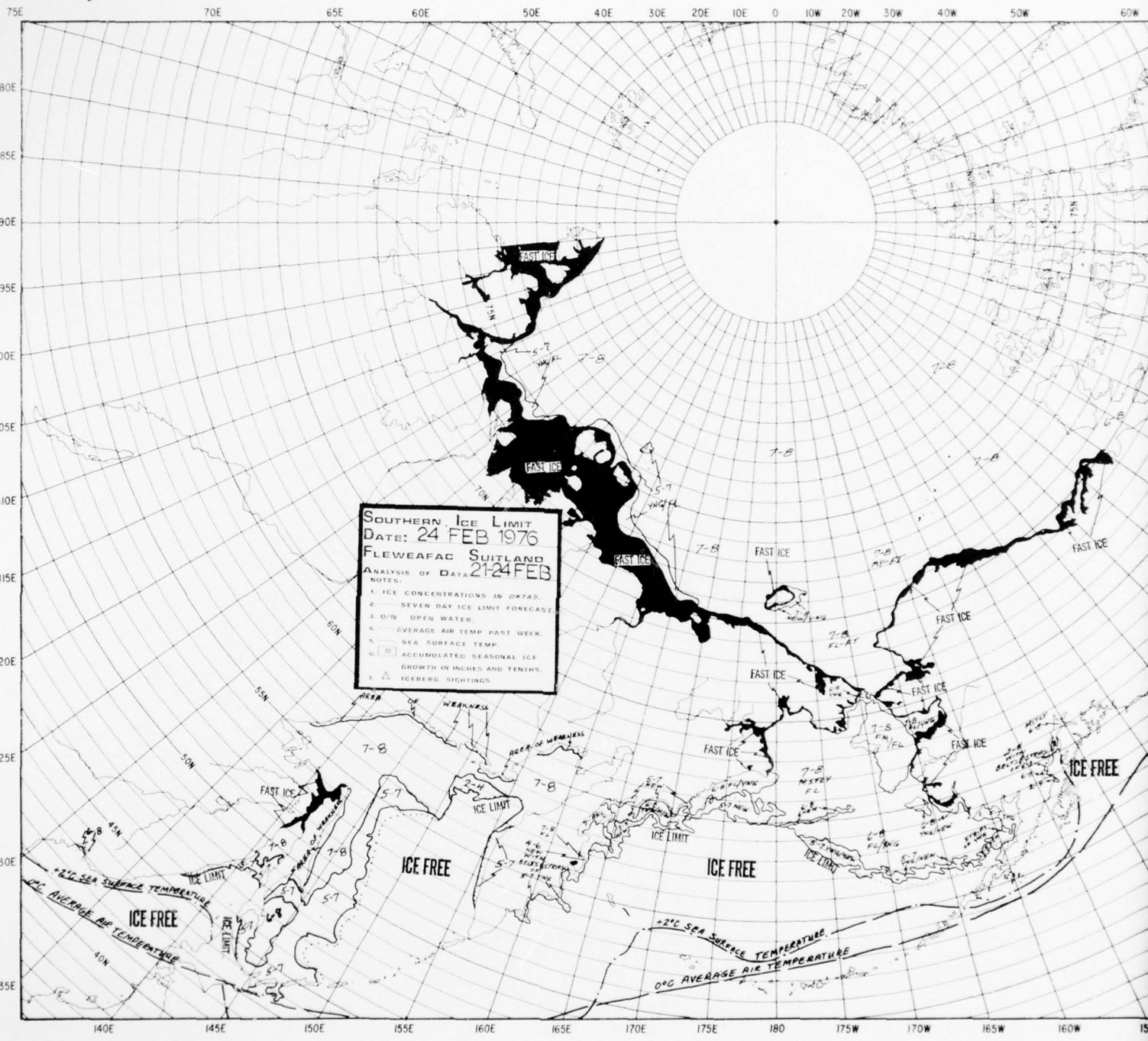
140E 145E 150E 155E 160E 165E 170E 175E 180 175W 170W 165W

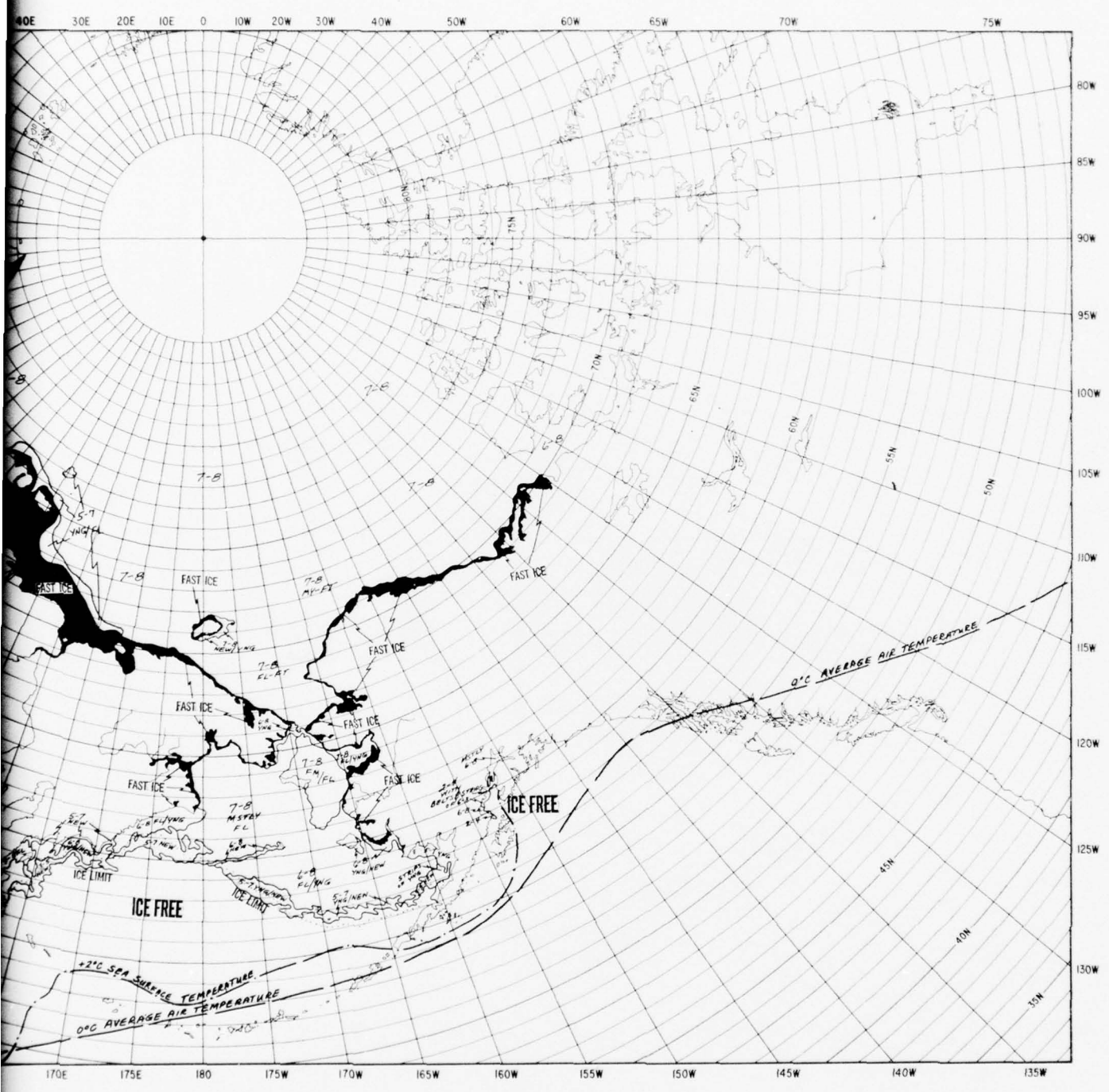


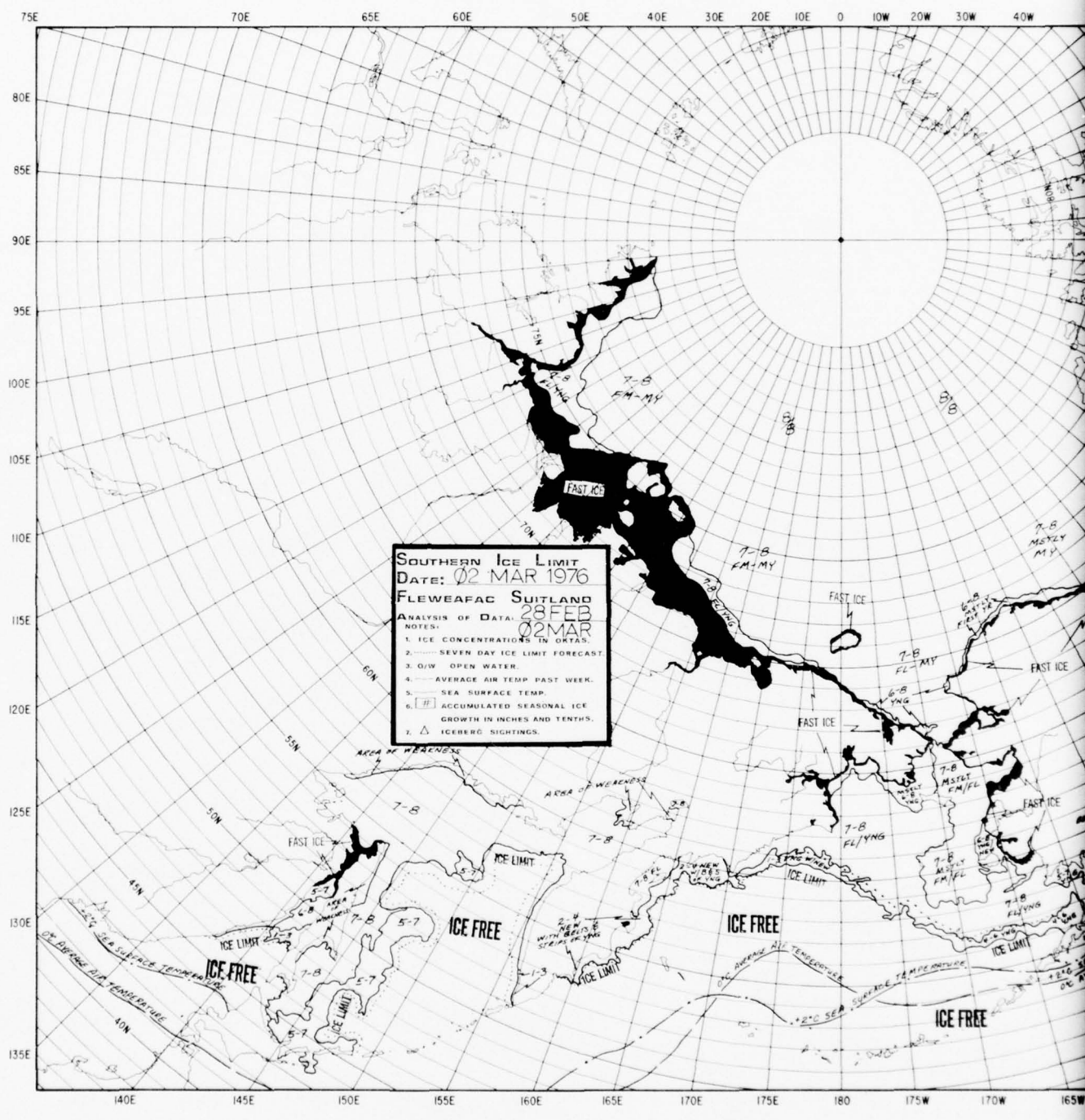




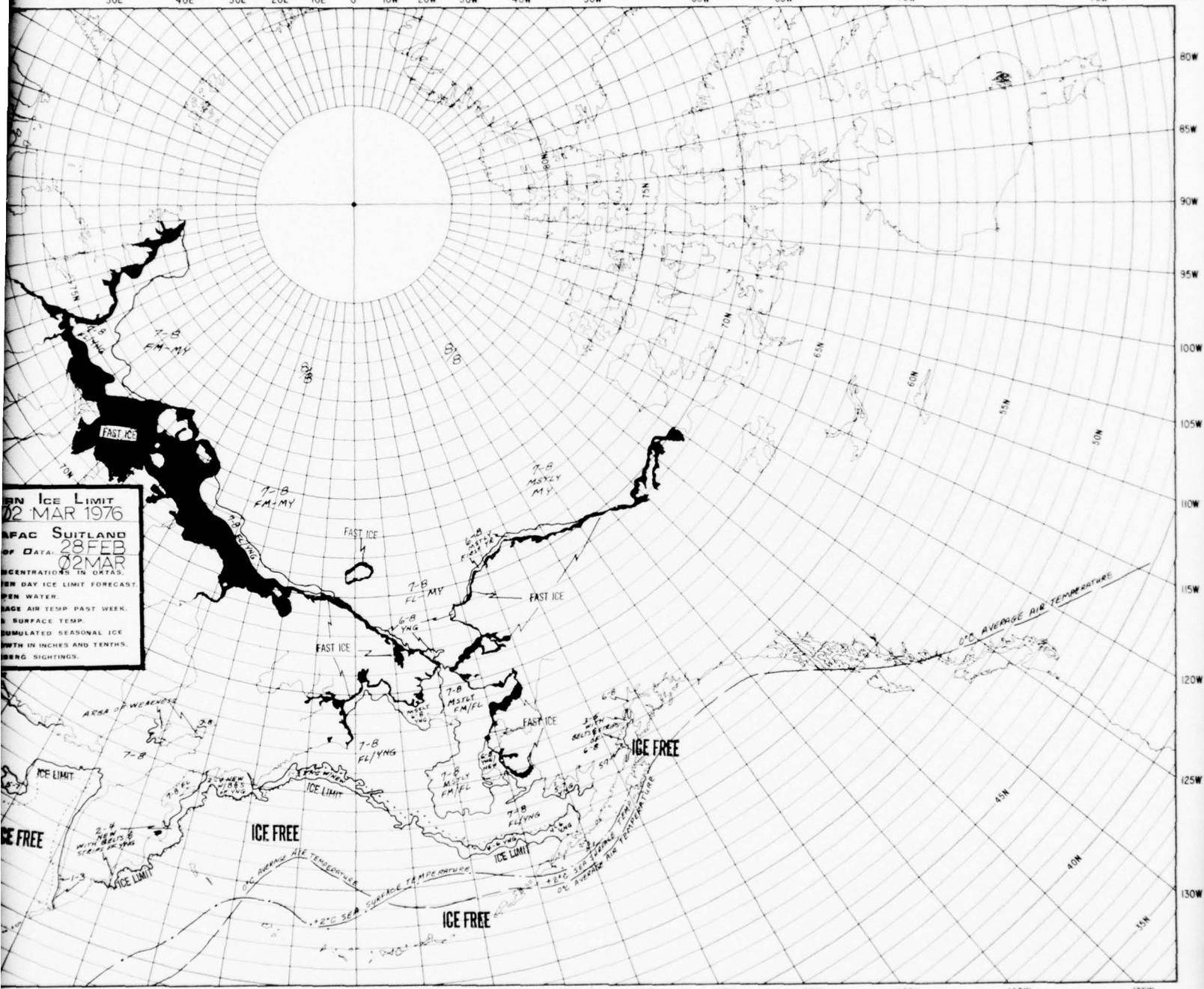




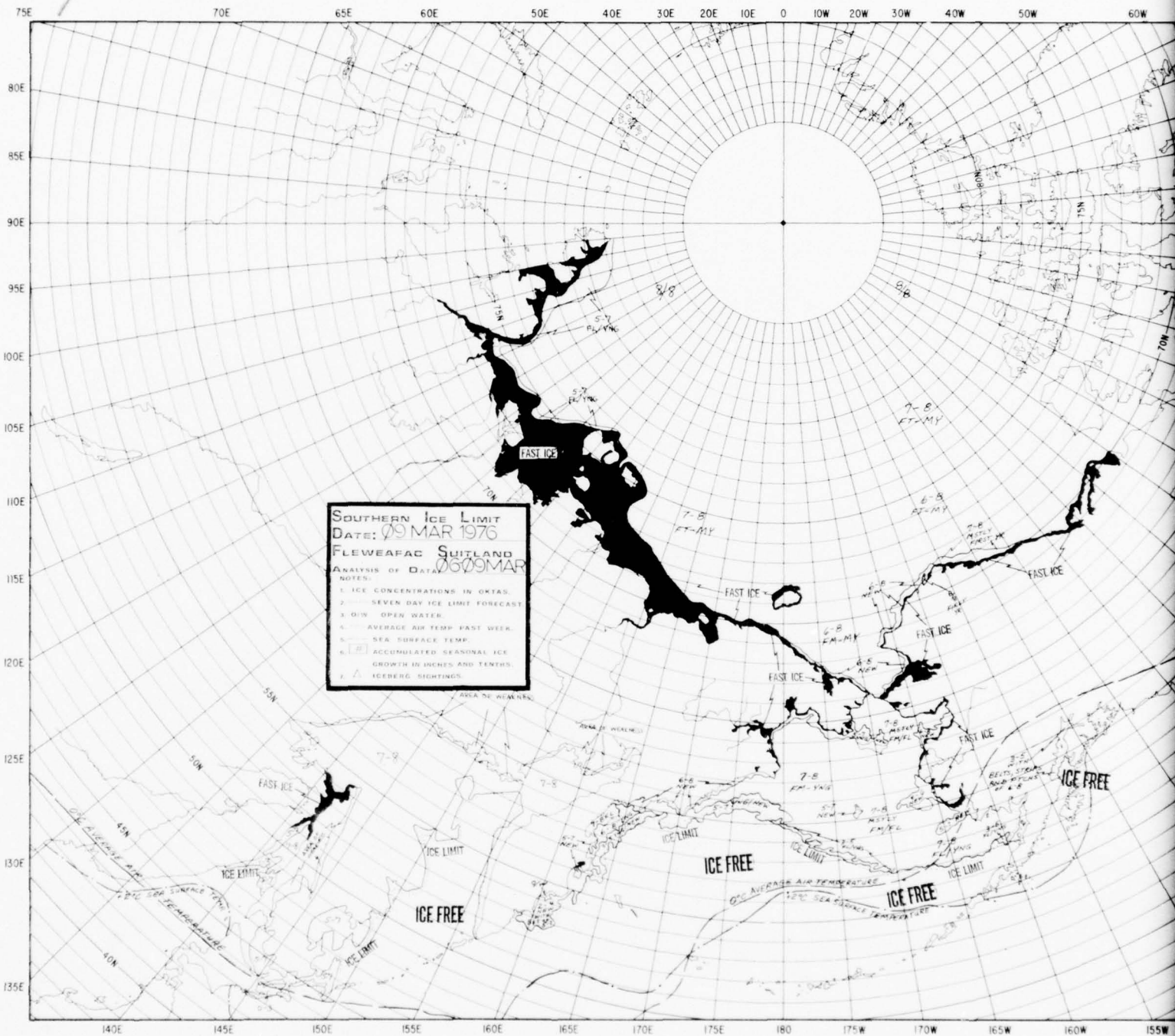




50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W



ICE LIMIT
02 MAR 1976
SUITLAND
28 FEB
02 MAR
 OF DATA:
 CONCENTRATIONS IN OBTAS.
 EN DAY ICE LIMIT FORECAST
 EN WATER
 AGE AIR TEMP PAST WEEK.
 S SURFACE TEMP.
 CUMULATED SEASONAL ICE
 TH IN INCHES AND TENTHS.
 BERG SIGHTINGS.



SOUTHERN ICE LIMIT
DATE: 09 MAR 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 0609MAR

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST
 3. OW OPEN WATER
 4. AVERAGE AIR TEMP. PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

ICE FREE

ICE FREE

ICE FREE

ICE FREE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

ICE LIMIT

ICE LIMIT

ICE LIMIT

ICE LIMIT

140E

145E

150E

155E

160E

165E

170E

175E

180

175W

170W

165W

160W

155W

75E

70E

65E

60E

50E

40E

30E

20E

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50W

60W

80E

85E

90E

95E

100E

105E

110E

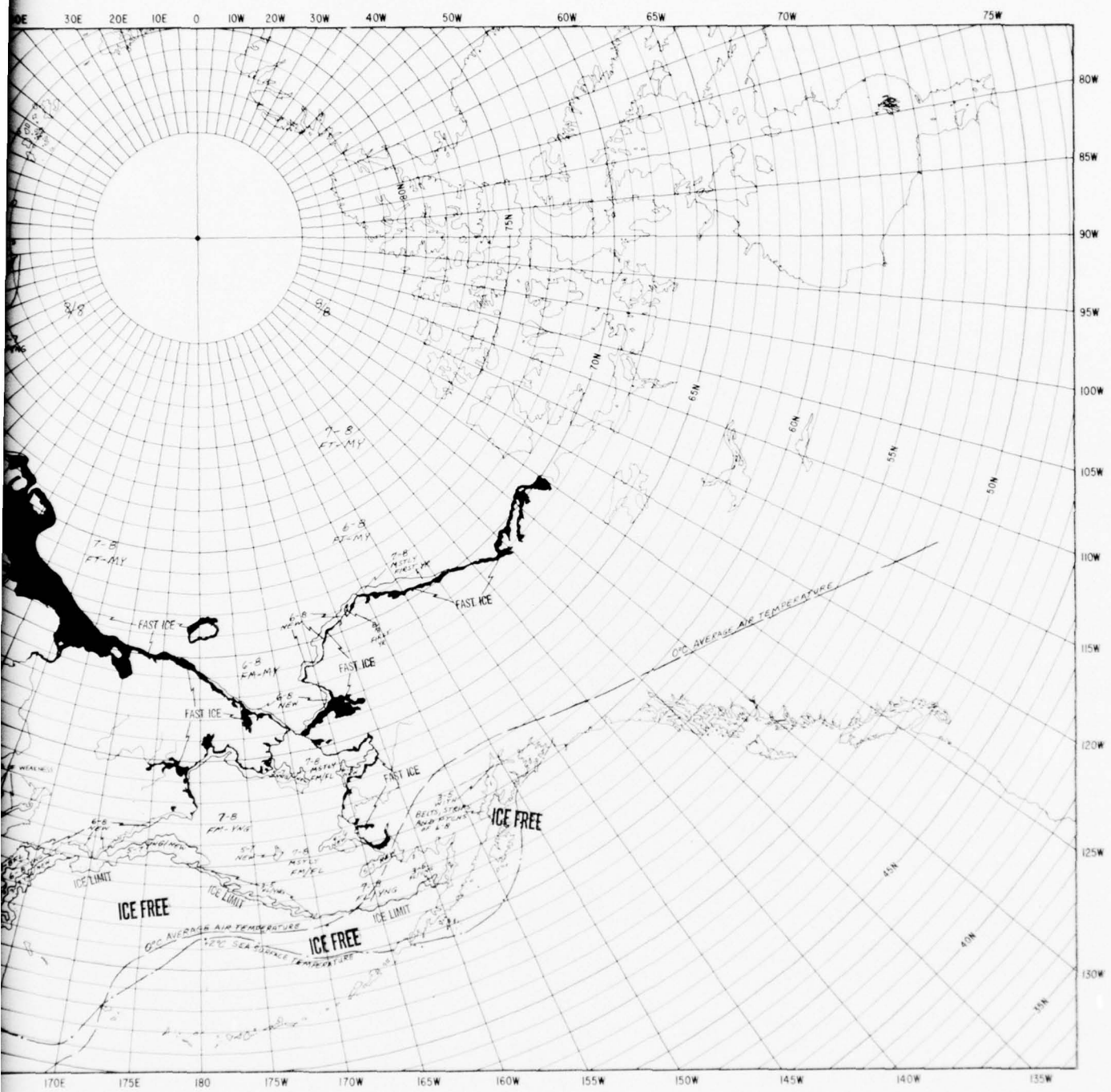
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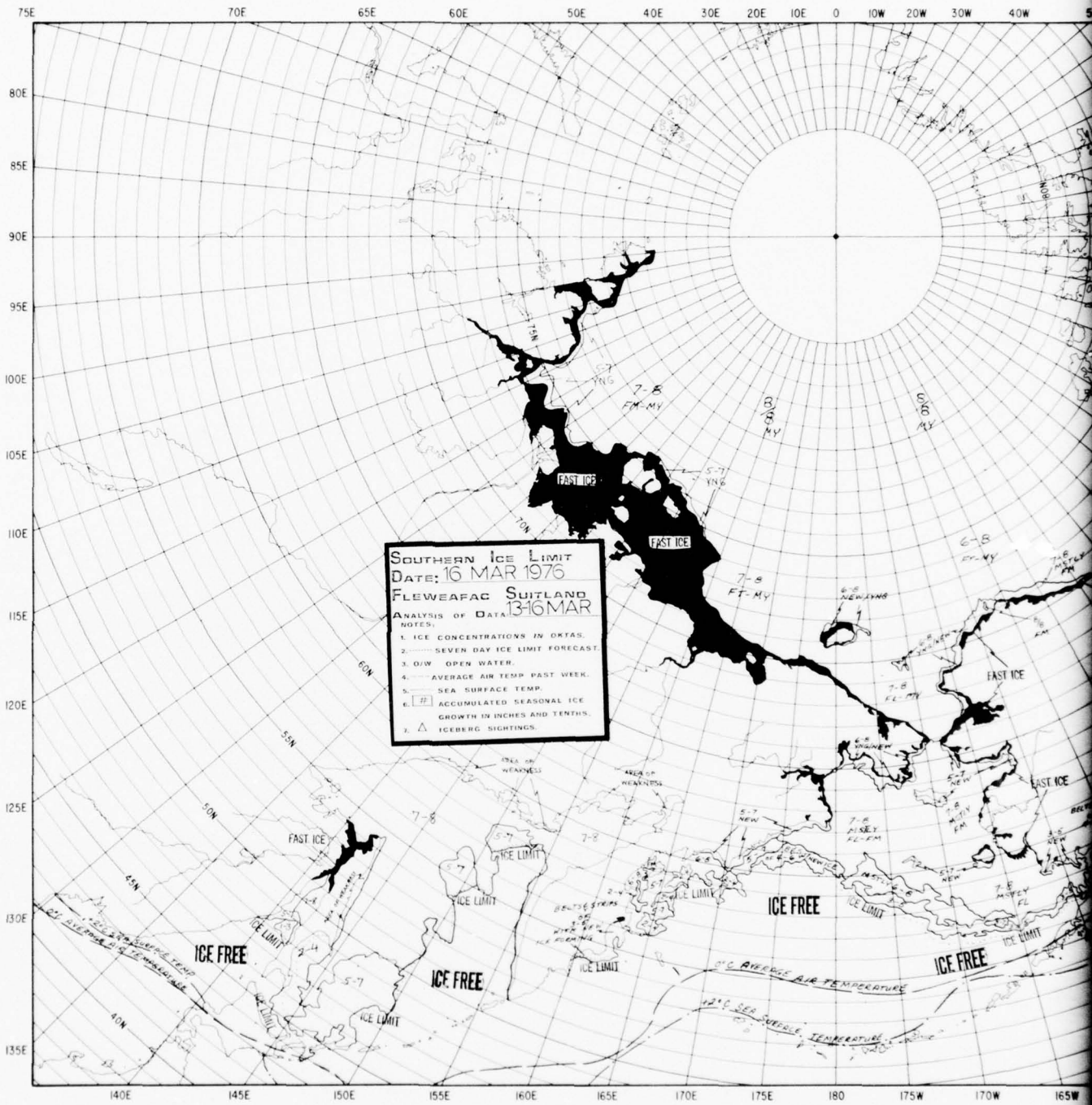
120E

125E

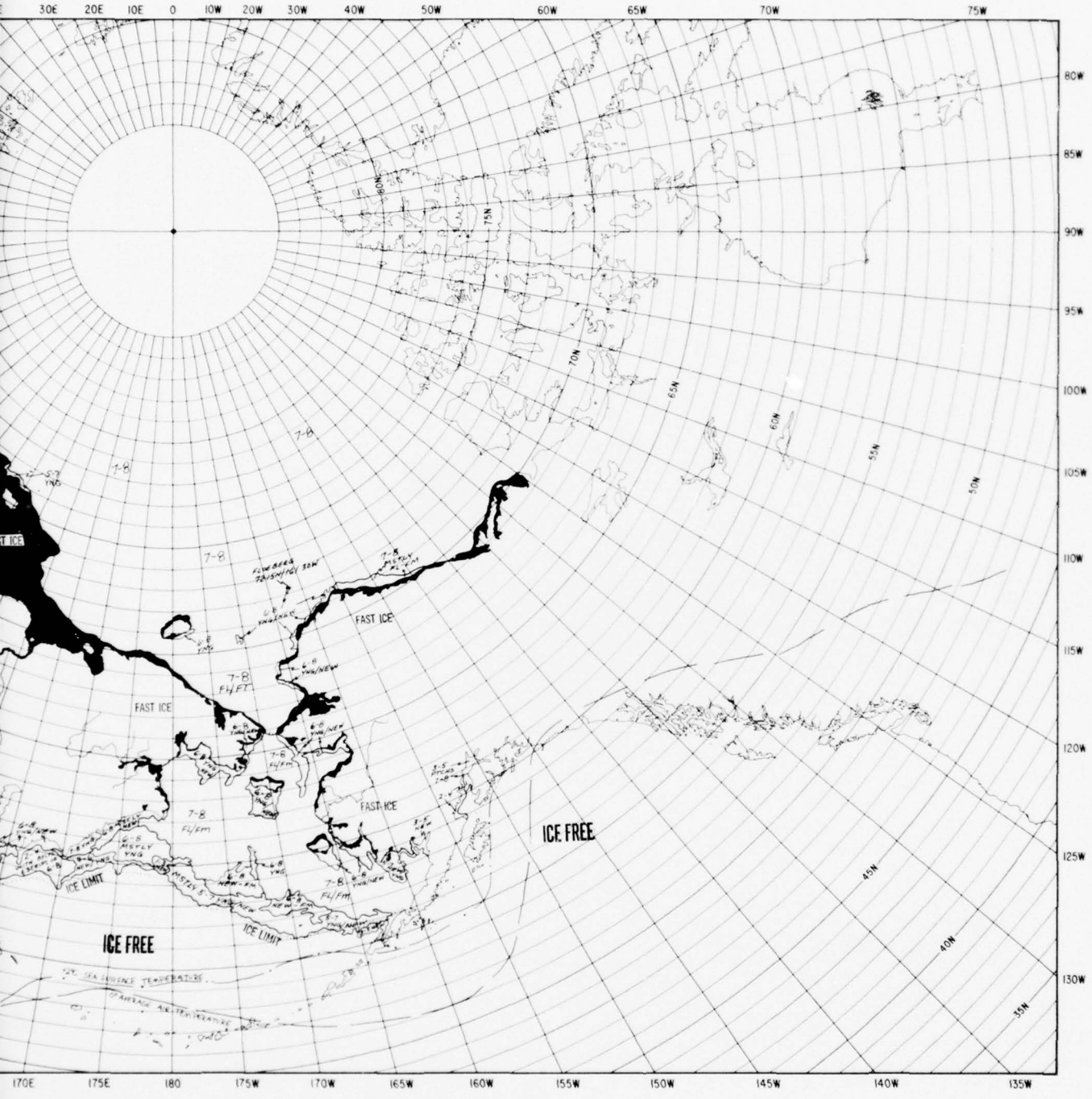
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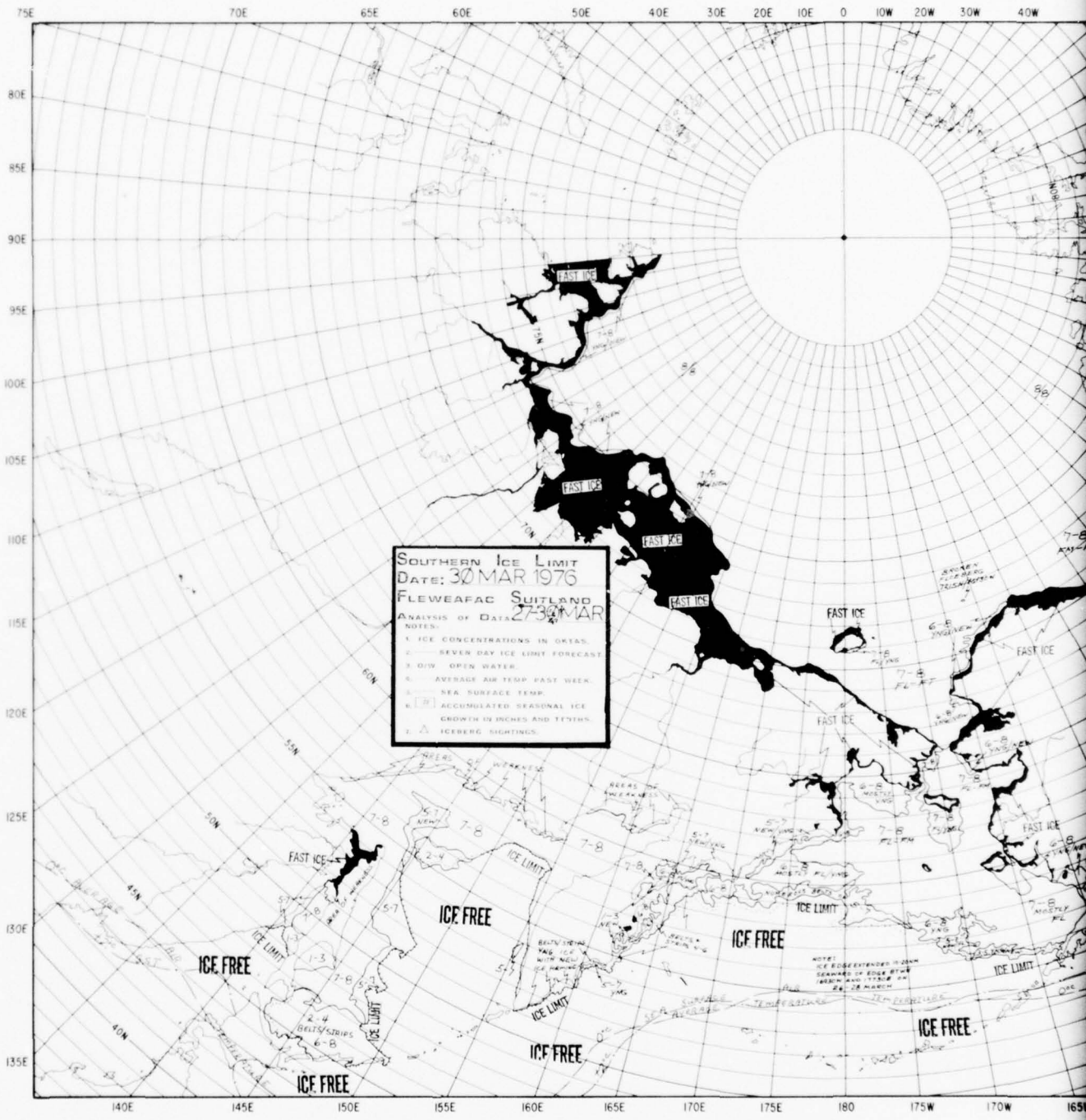
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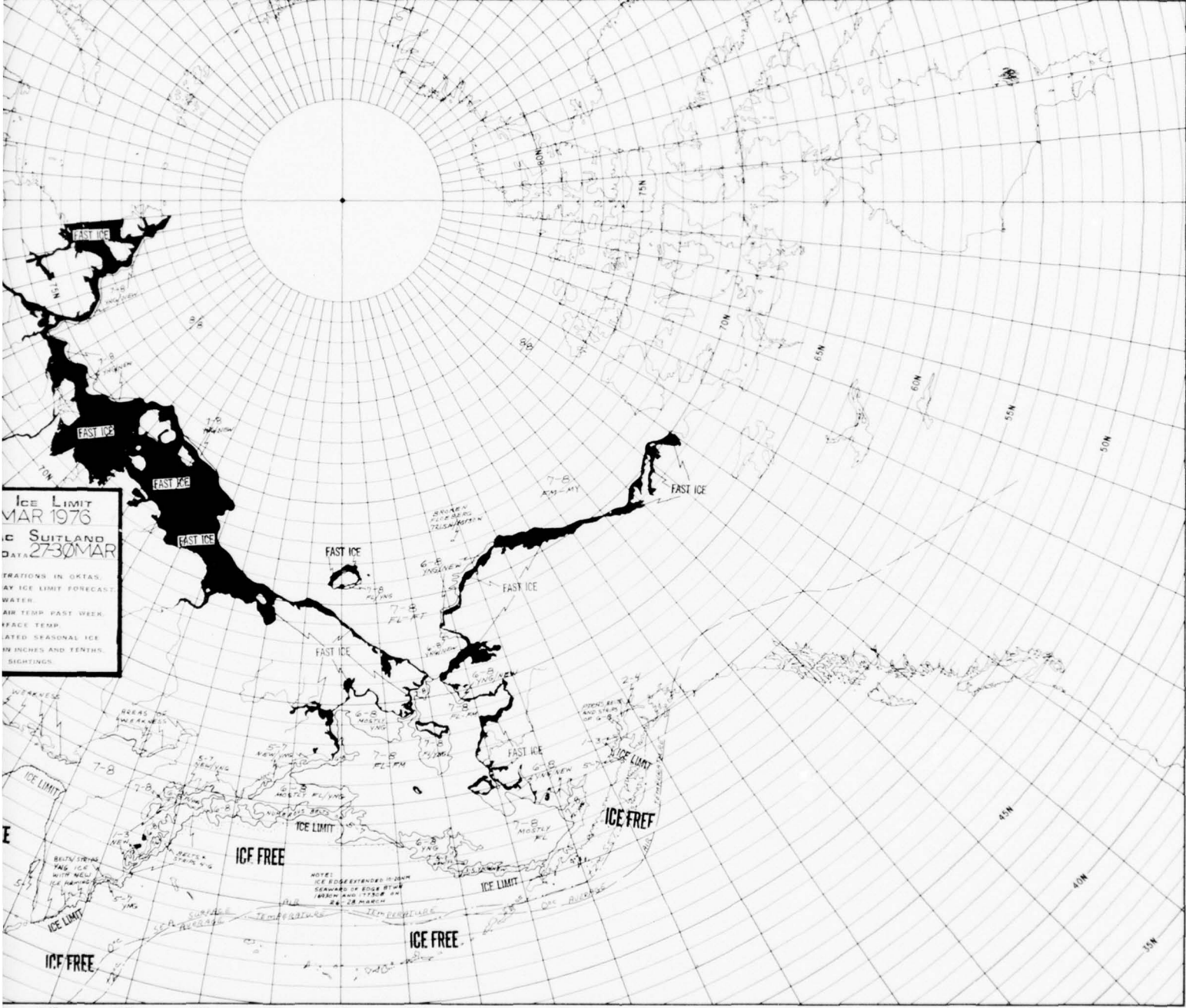
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50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

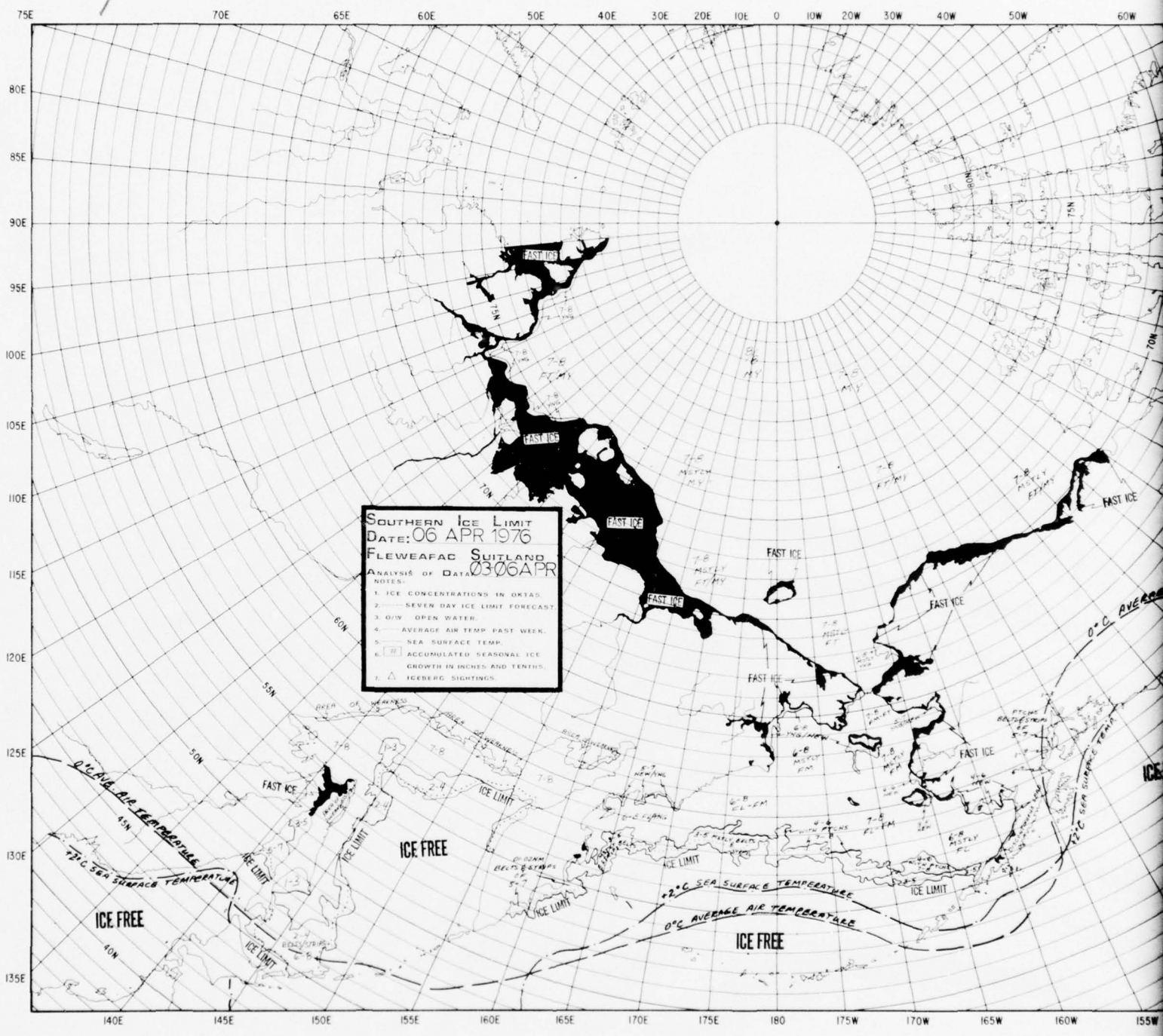
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W

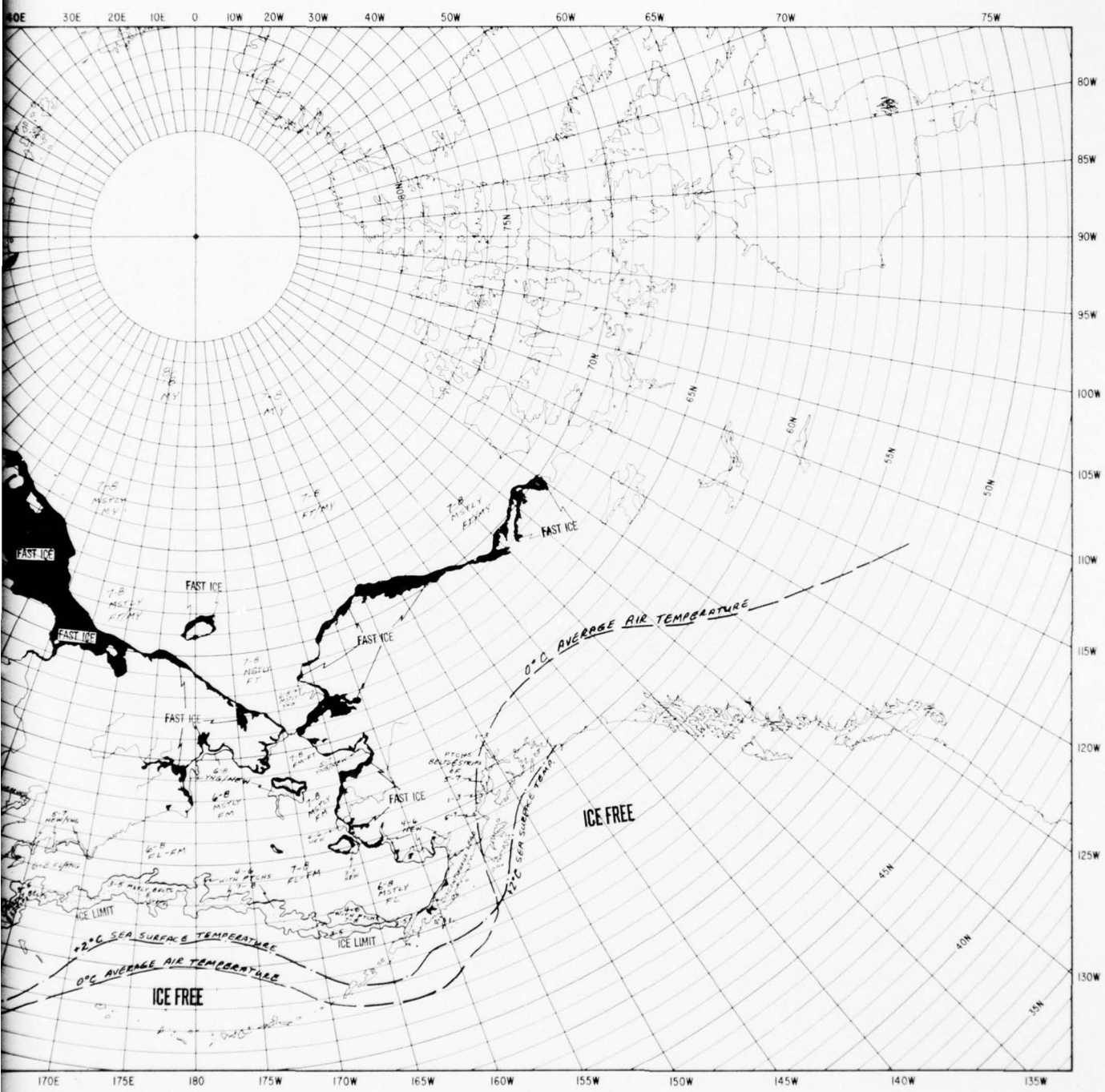


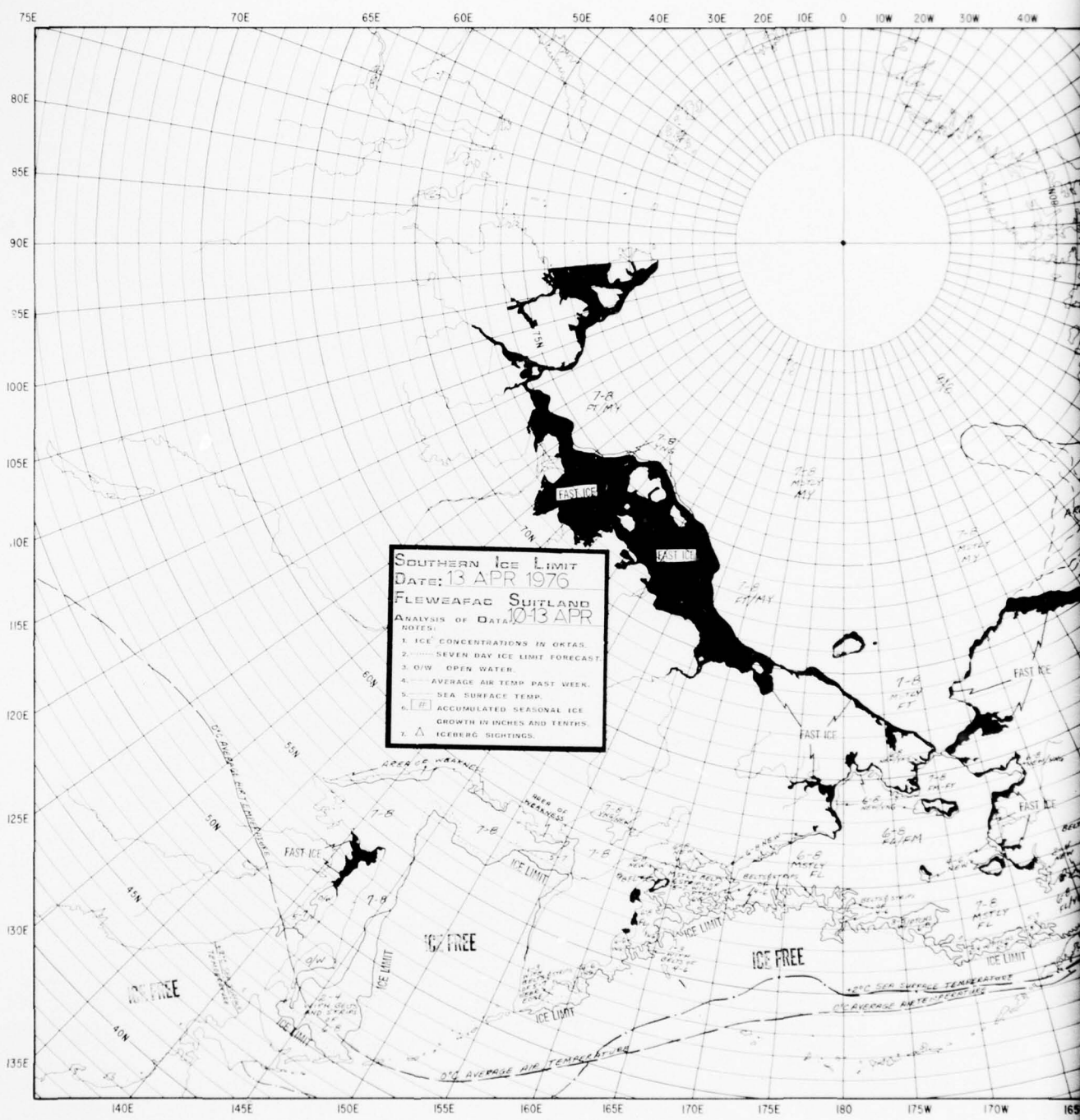
ICE LIMIT
MAR 1976
ANTARCTIC PENINSULA
DATA 27-30 MAR

OBSERVATIONS IN ORKNEY
 1. DAILY ICE LIMIT FORECAST
 2. WATER
 3. AIR TEMP PAST WEEK
 4. ICE FACE TEMP
 5. DATED SEASONAL ICE
 6. IN INCHES AND TENTHS
 7. SIGHTINGS

NOTE:
 ICE EDGE EXTENDED 10-20 NM
 SEAWARD OF EDGE BTWN
 180W AND 175W ON
 28-29 MARCH



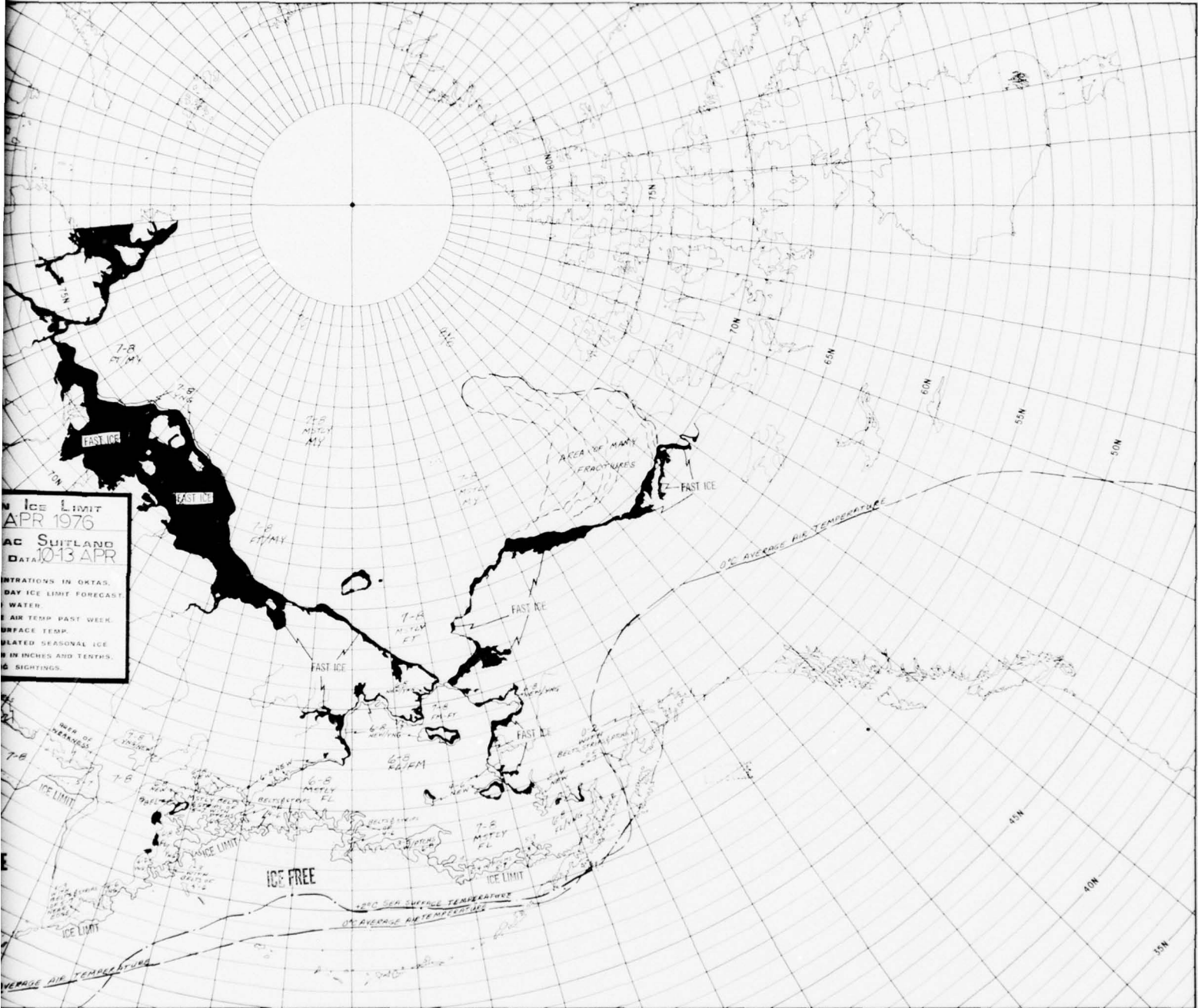




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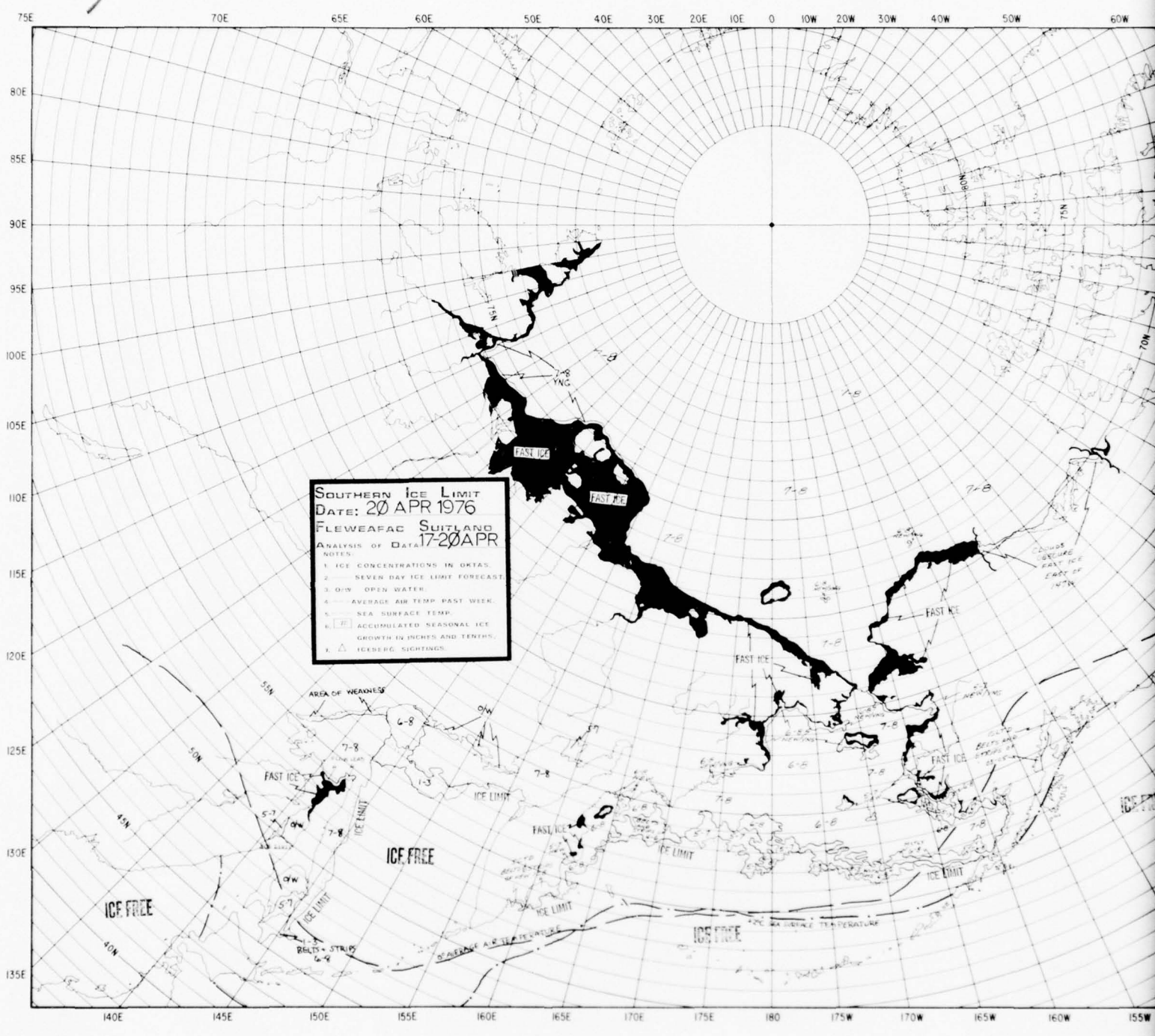
50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

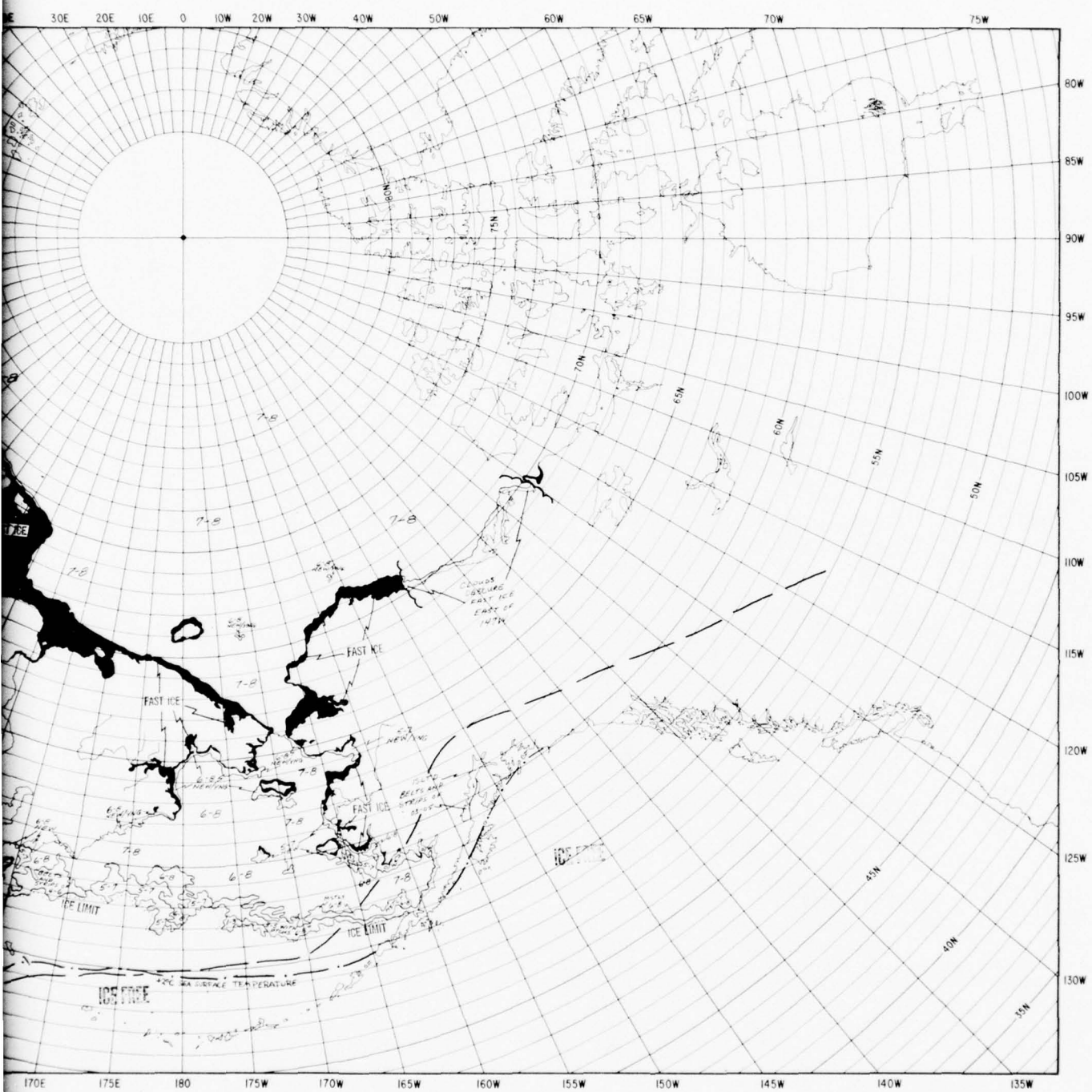
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W

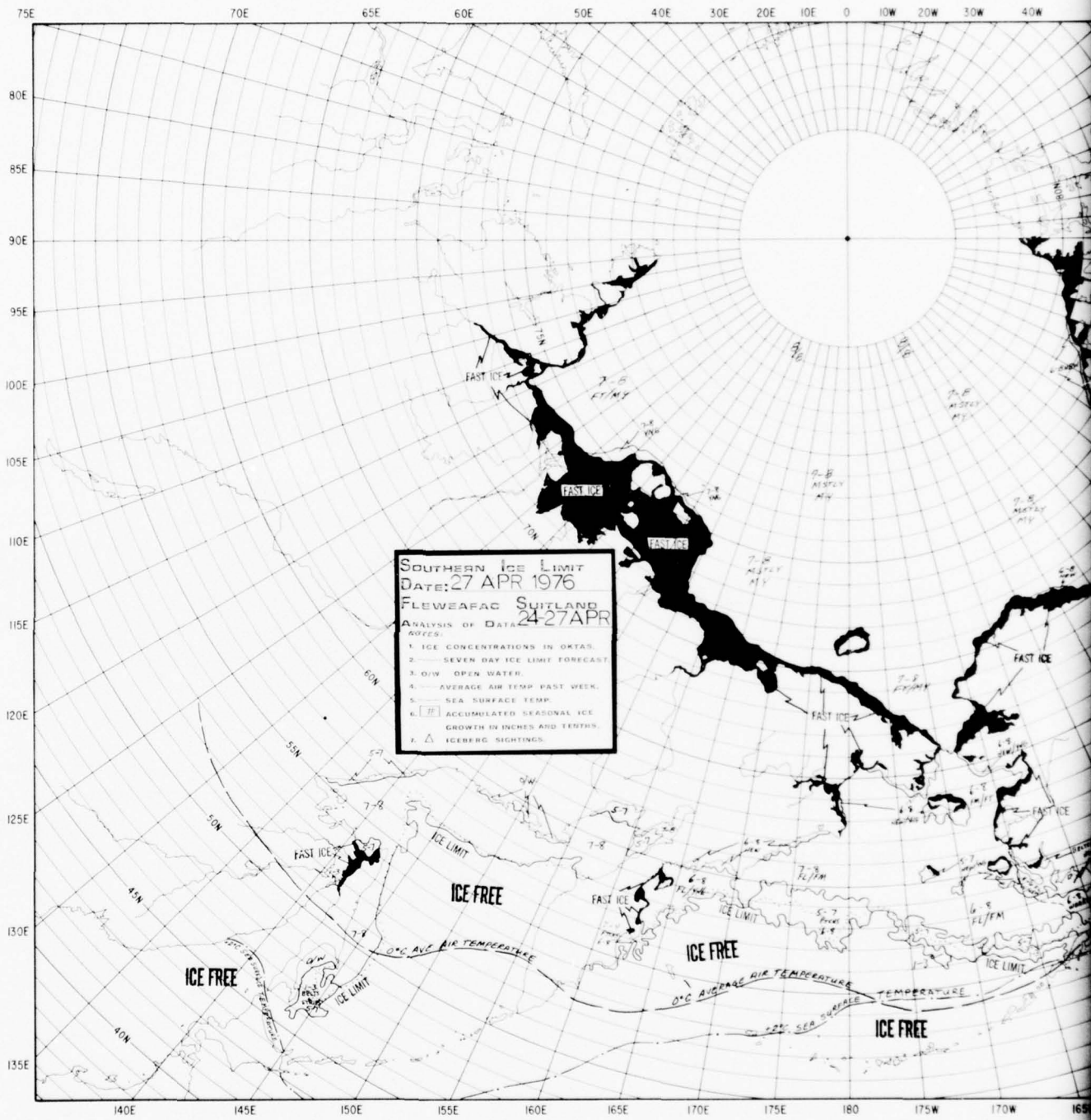


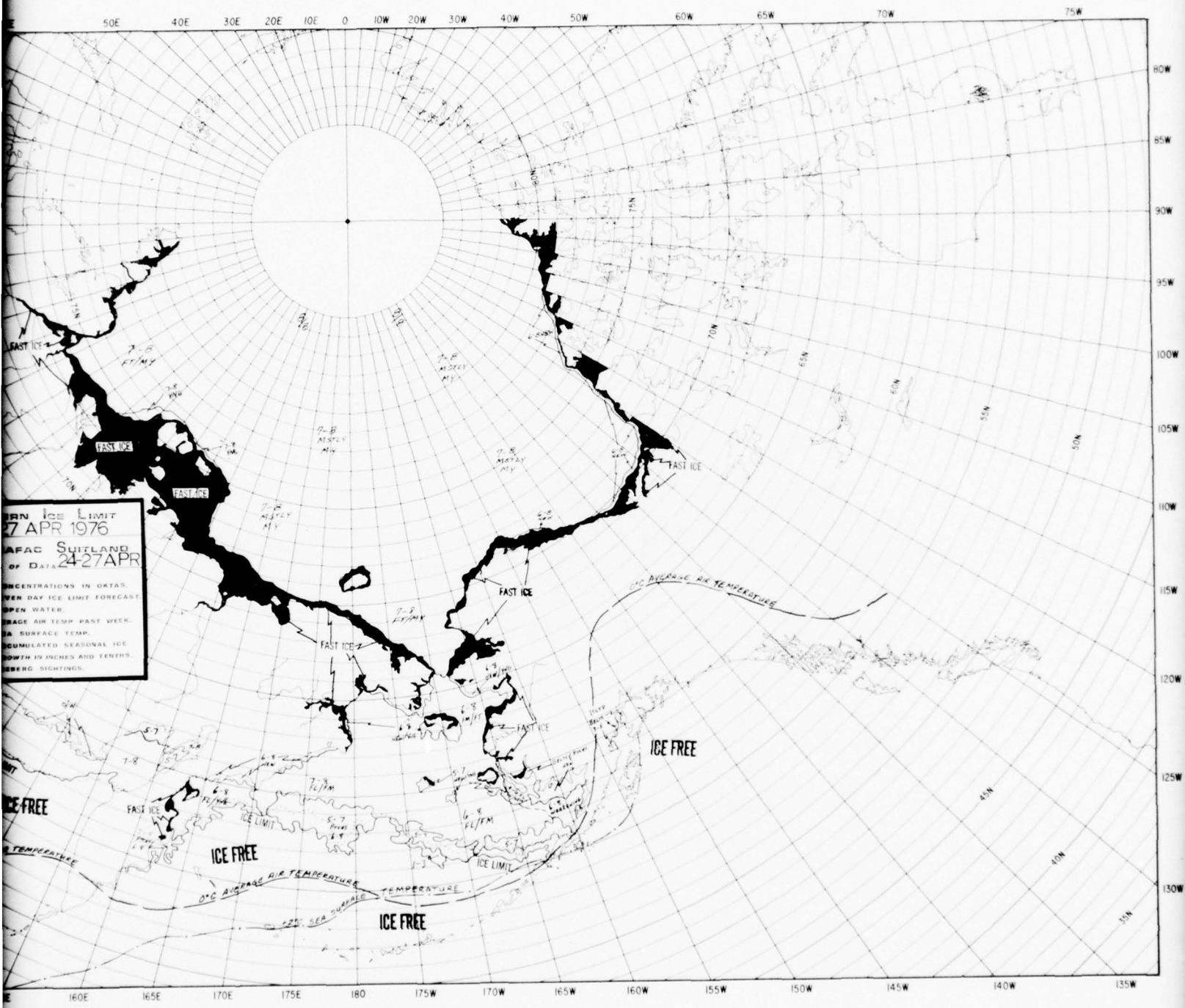
ICE LIMIT
APR 1976
AC SUITLAND
DATA 10-13 APR
 INTRATIONS IN OKTAS.
 DAY ICE LIMIT FORECAST
 WATER.
 AIR TEMP PAST WEEK.
 SURFACE TEMP.
 PLATED SEASONAL ICE
 IN INCHES AND TENTHS.
 SIGHTINGS.

160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W



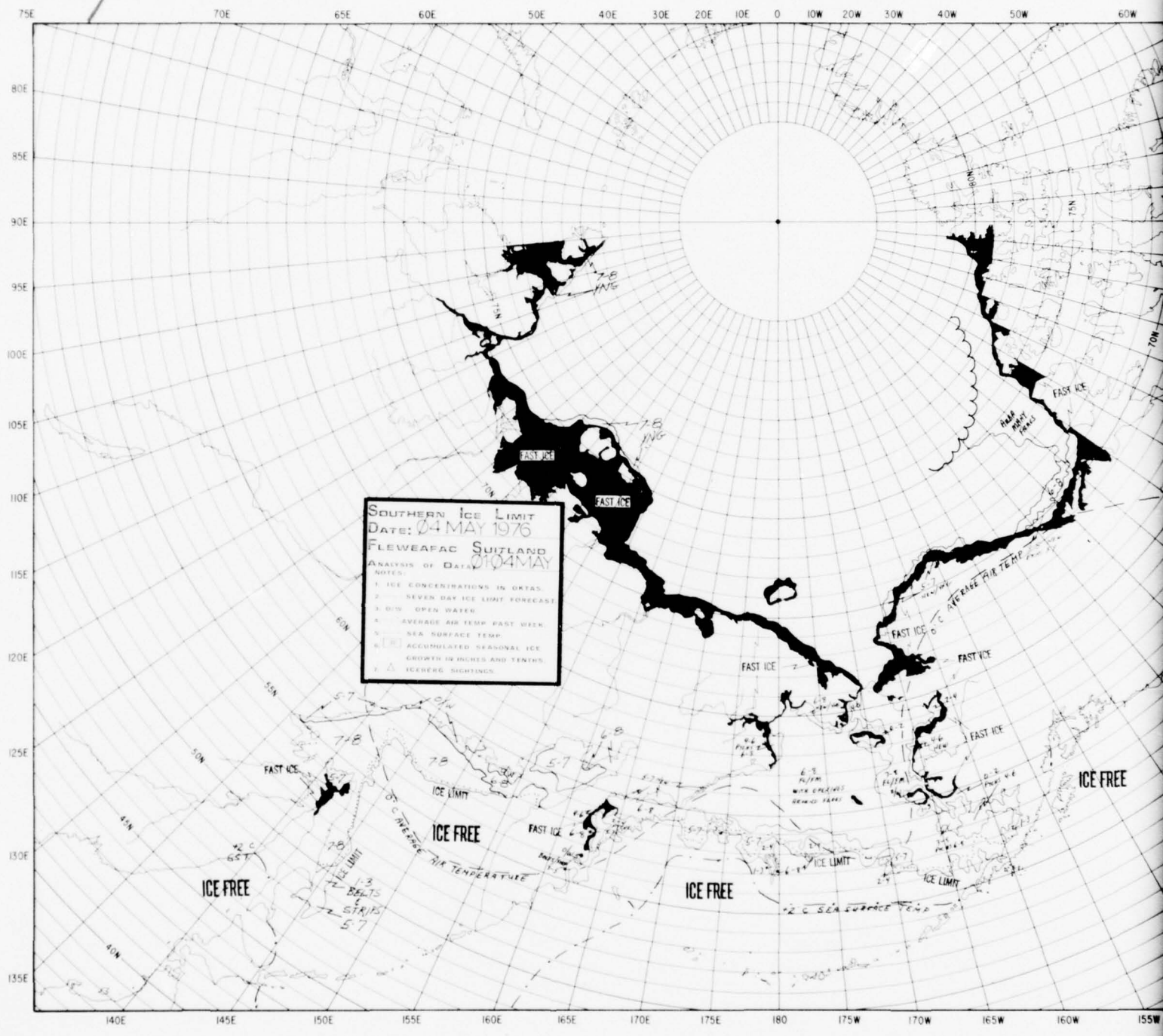


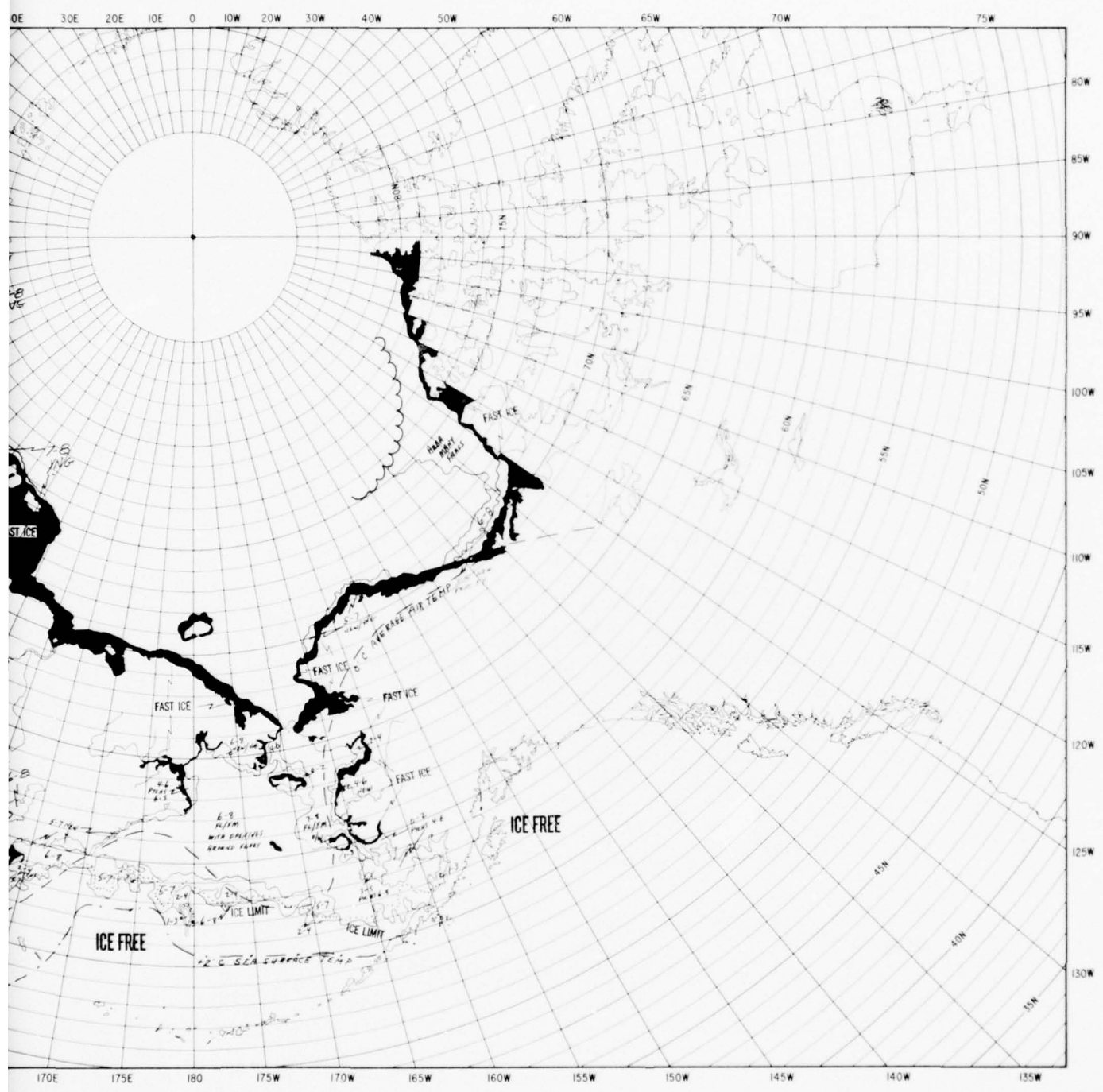


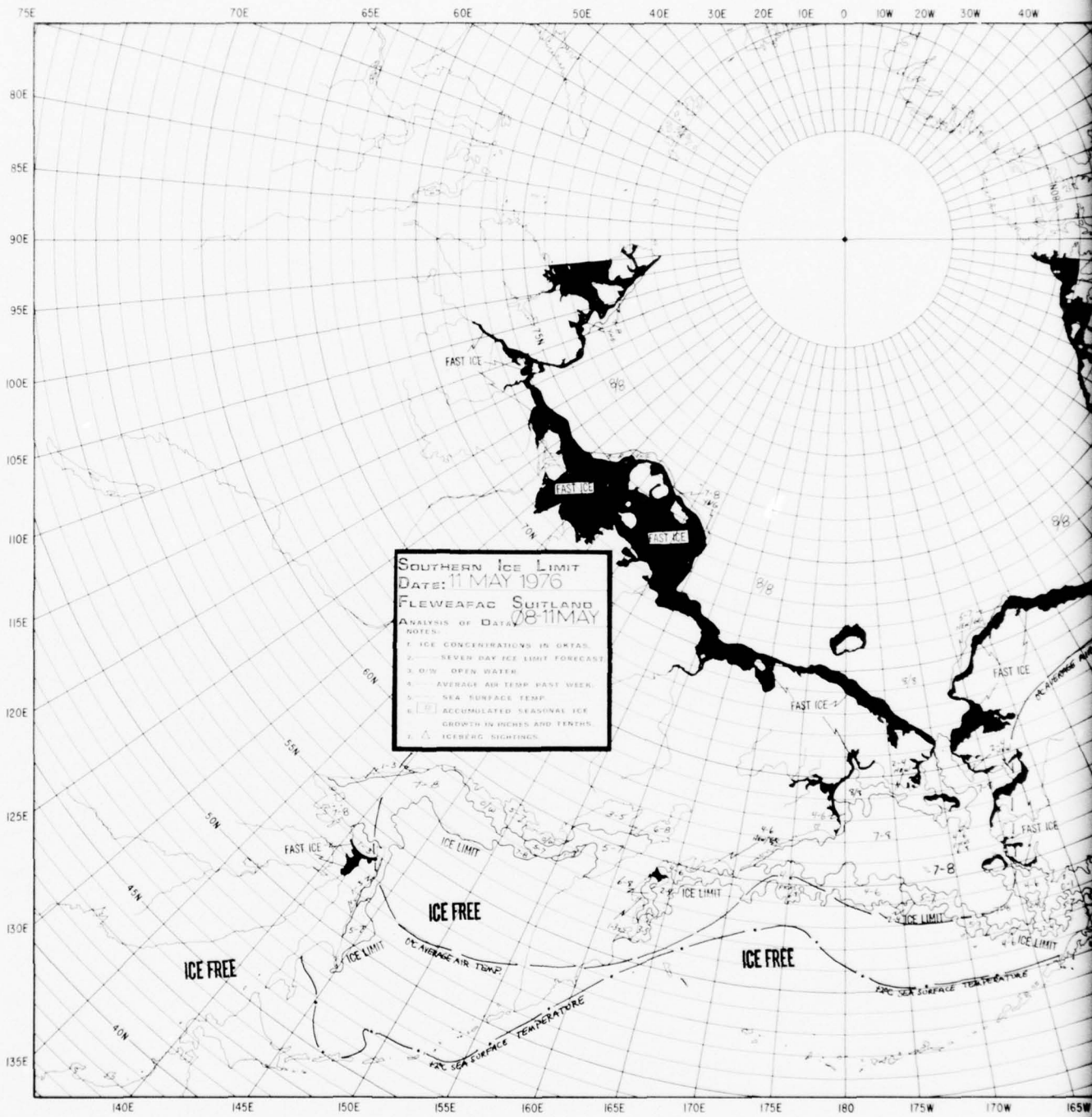


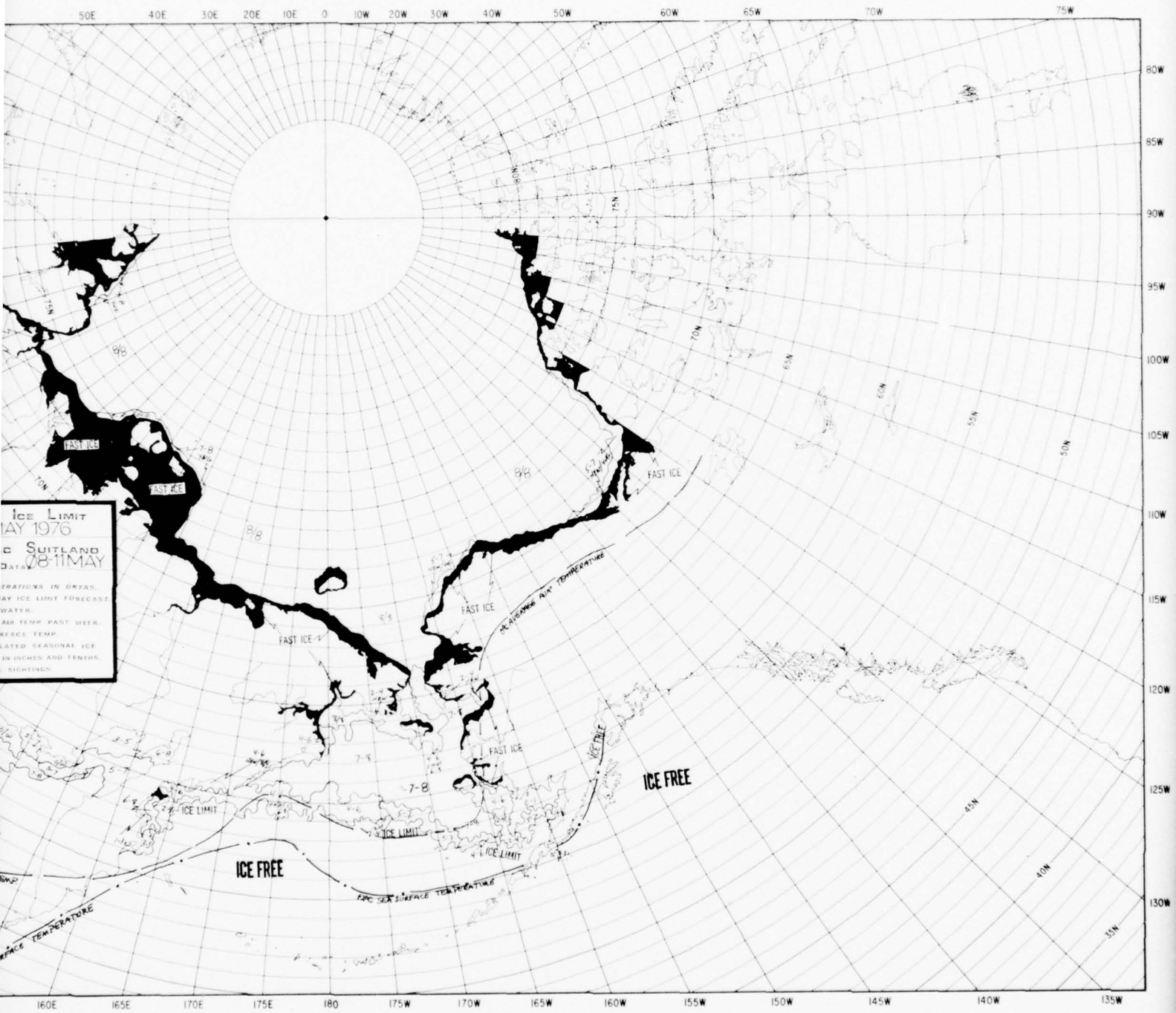
ICE LIMIT
7 APR 1976
AFAC SWITLAND
24-27 APR

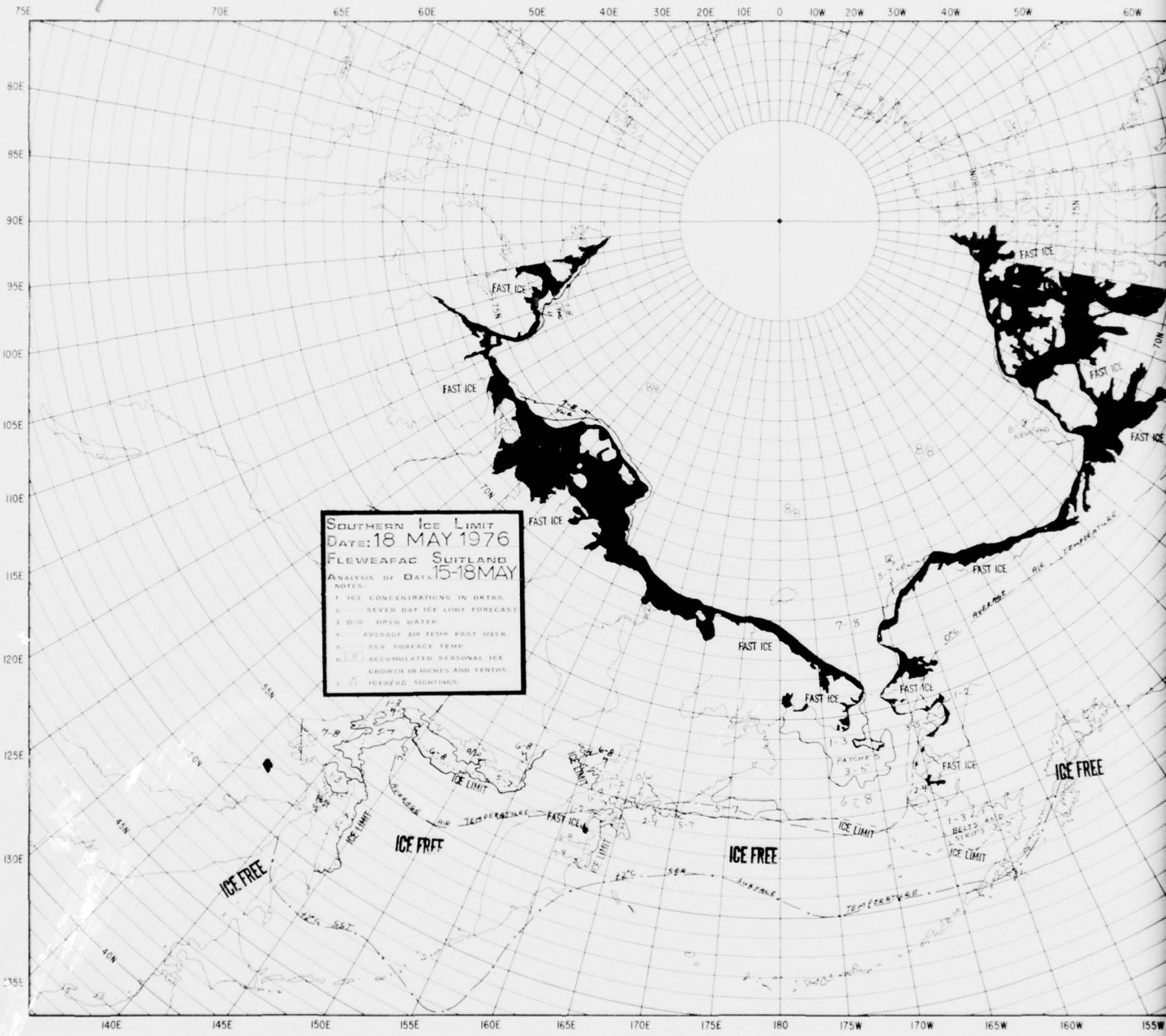
CONCENTRATIONS IN OCTAS.
 OPEN DAY ICE LIMIT FORECAST.
 OPEN WATER.
 SURFACE AIR TEMP PAST WEEK.
 SEA SURFACE TEMP.
 ACCUMULATED SEASONAL ICE
 GROWTH IN INCHES AND TENTHS.
 BERG SIGHTINGS.





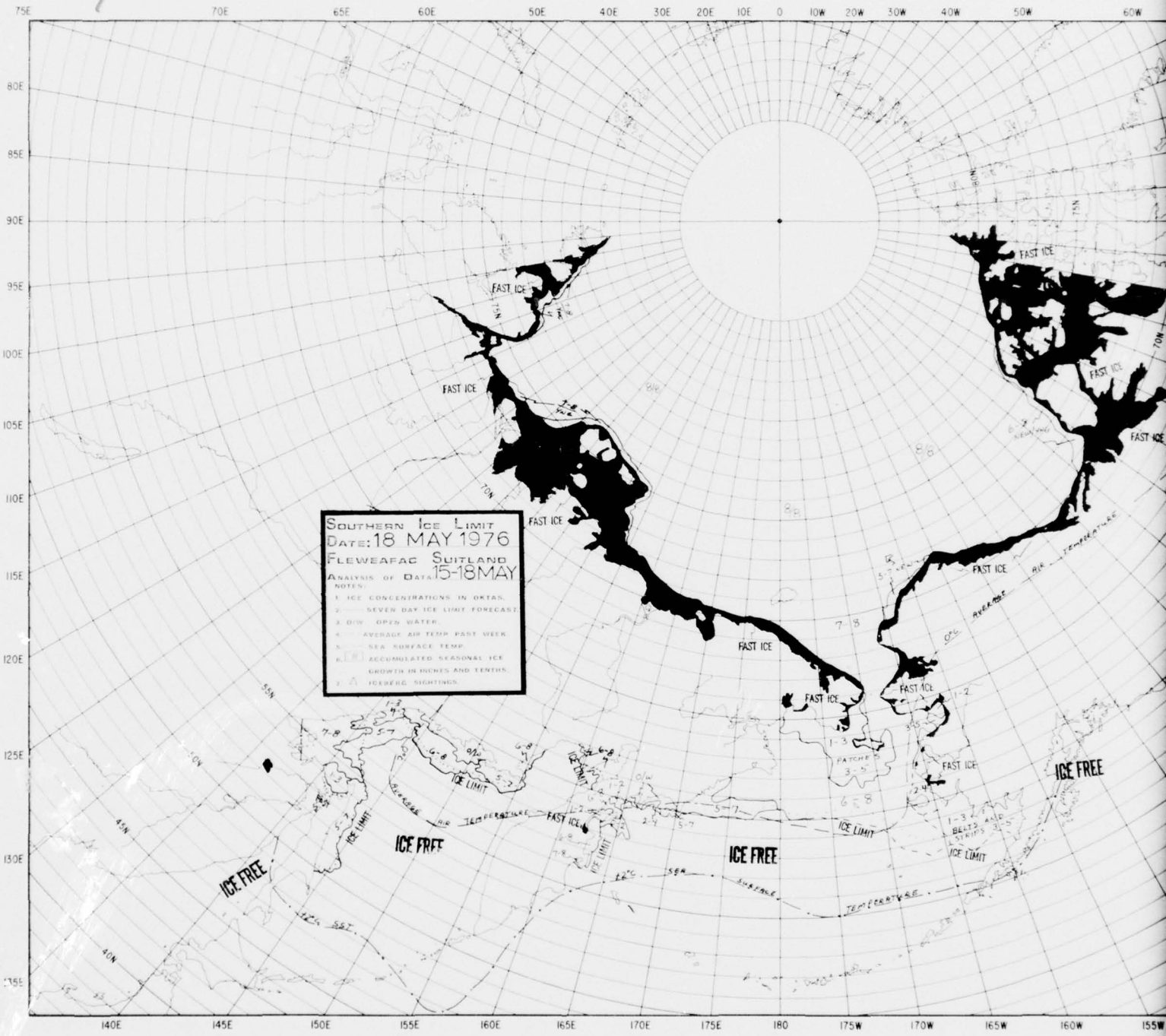


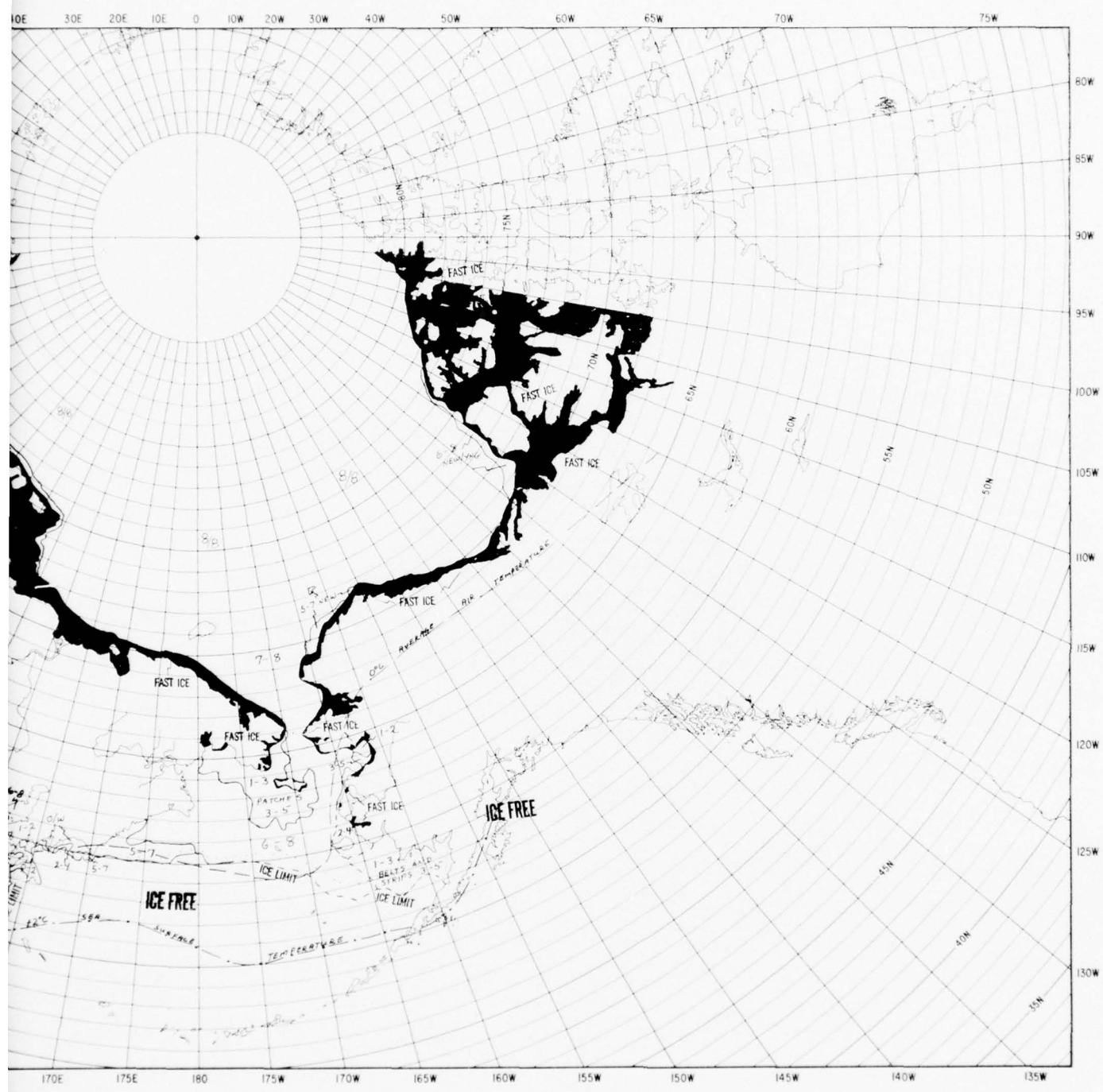


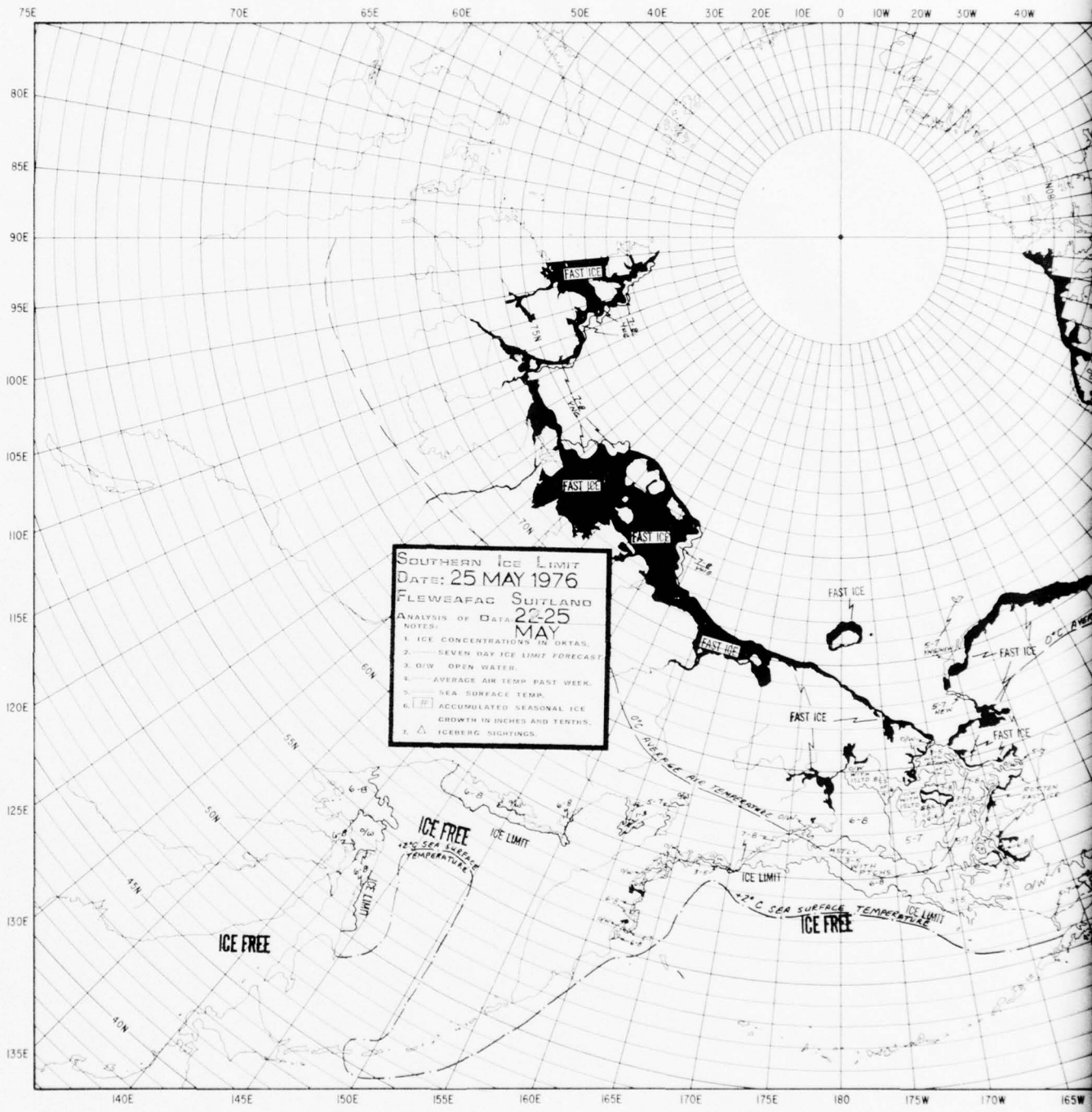


SOUTHERN ICE LIMIT
DATE: 18 MAY 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 15-18 MAY

NOTES:
 1. ICE CONCENTRATIONS IN ORKAS.
 2. SEVEN DAY ICE LIMIT FORECAST
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWN IN HOURS AND TENTHS.
 7. ICEBERG SIGHTINGS.

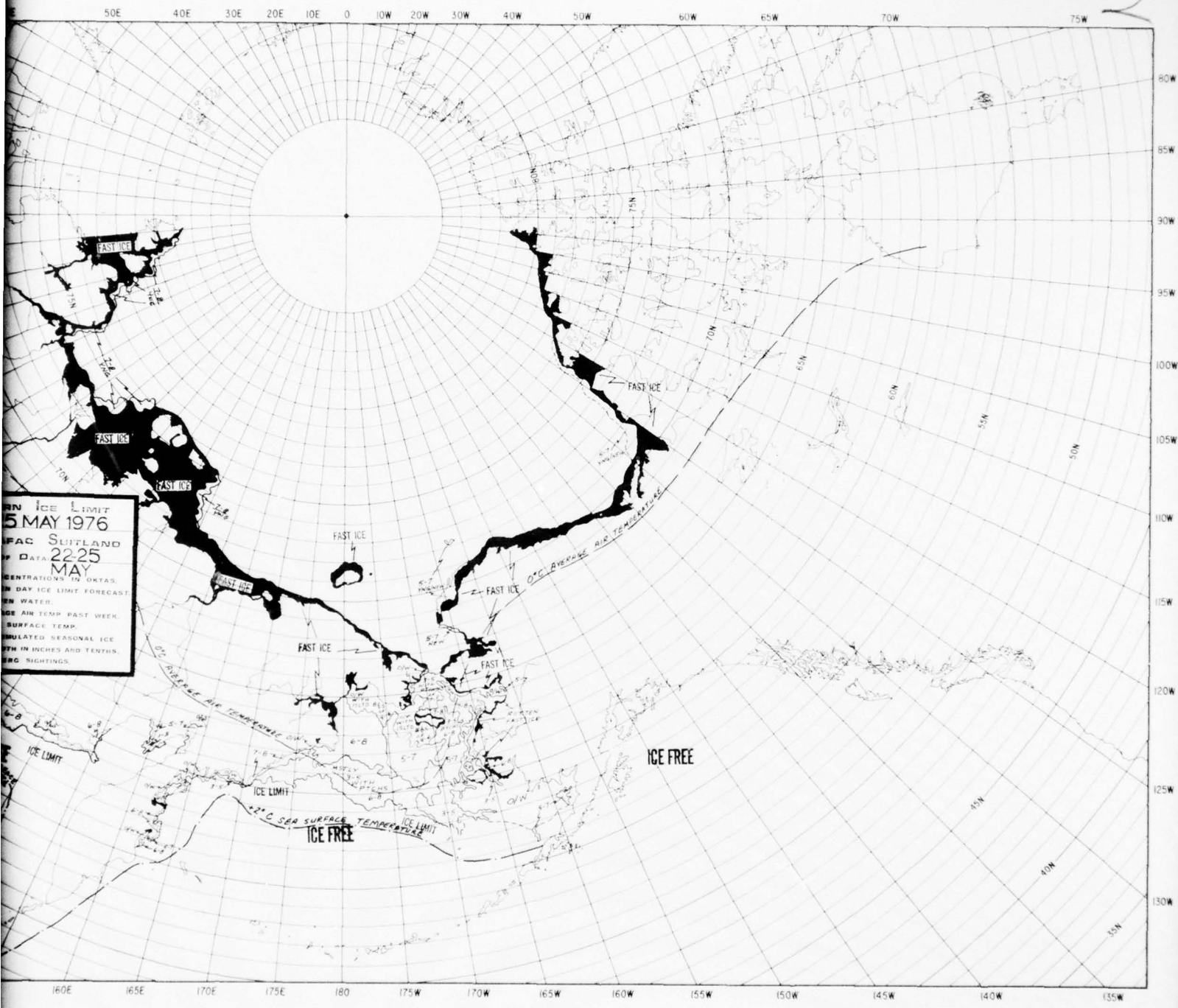




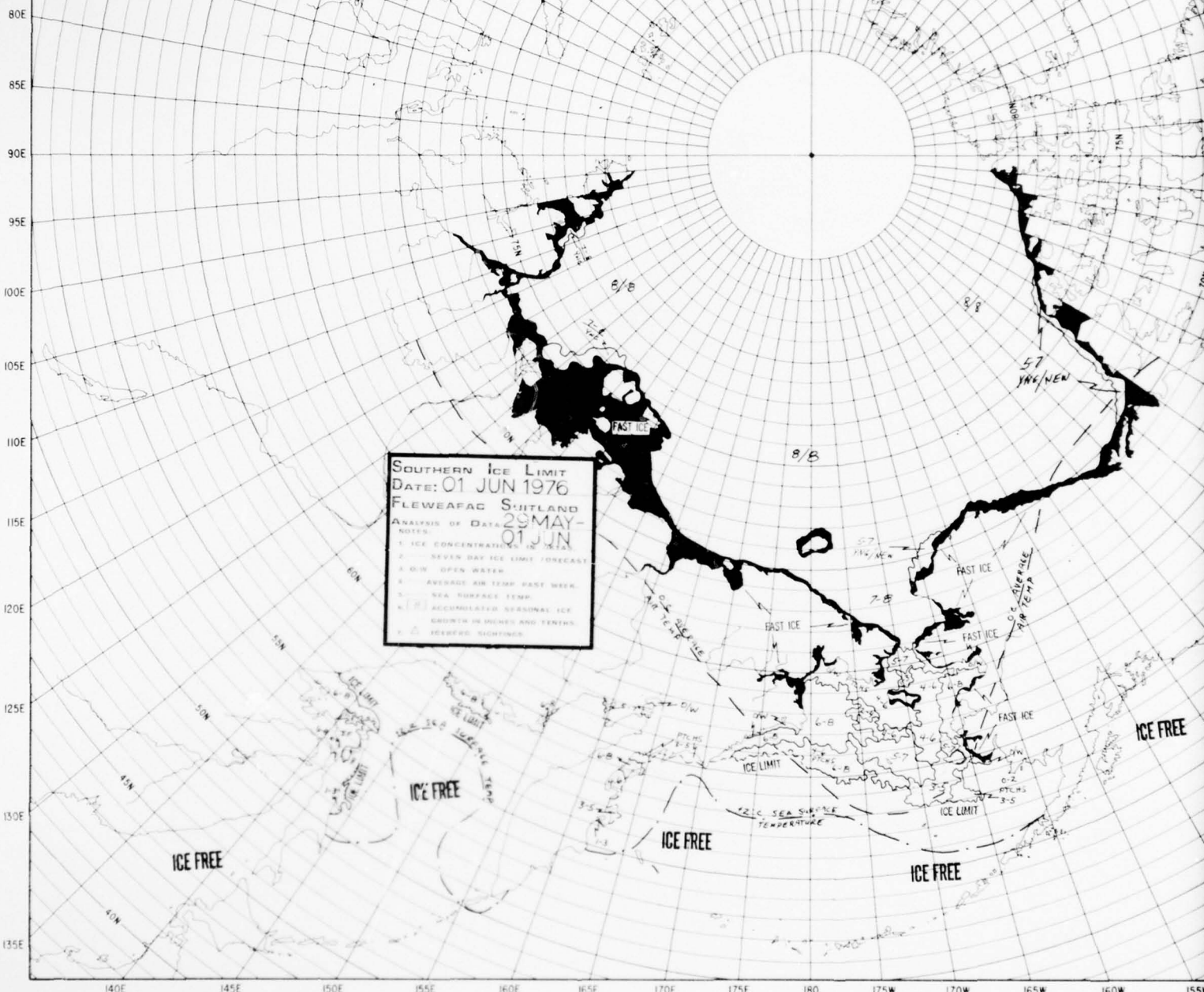


SOUTHERN ICE LIMIT
DATE: 25 MAY 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 22-25 MAY

NOTES:
1. ICE CONCENTRATIONS IN OKTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. O/W OPEN WATER.
4. AVERAGE AIR TEMP FAST WEEK.
5. SEA SURFACE TEMP.
6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. ICEBERG SIGHTINGS.



75E 70E 65E 60E 50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W



Southern Ice Limit
DATE: 01 JUN 1976
FLEWEAFAC SUTLAND
ANALYSIS OF DATA 29 MAY - 01 JUN

NOTES
 1. ICE CONCENTRATION IN %
 2. SEVEN DAY ICE LIMIT FORECAST
 3. O/W OPEN WATER
 4. AVERAGE AIR TEMP PAST WEEK
 5. SEA SURFACE TEMP
 6. [Symbol] ACCUMULATED SEASONAL ICE GROWTH IN METERS AND TENTHS
 7. [Symbol] ICEBERG SIGHTINGS

ICE FREE

ICE FREE

ICE FREE

ICE FREE

ICE FREE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

6/B

8/B

8/B

57 YNG/NEW

57 YNG/NEW

7/B

FAST ICE

ICE LIMIT

ICE LIMIT

ICE LIMIT

ICE LIMIT

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

SEA SURFACE TEMPERATURE

140E

145E

150E

155E

160E

165E

170E

175E

180

175W

170W

165W

160W

155W

135E

130E

125E

120E

115E

110E

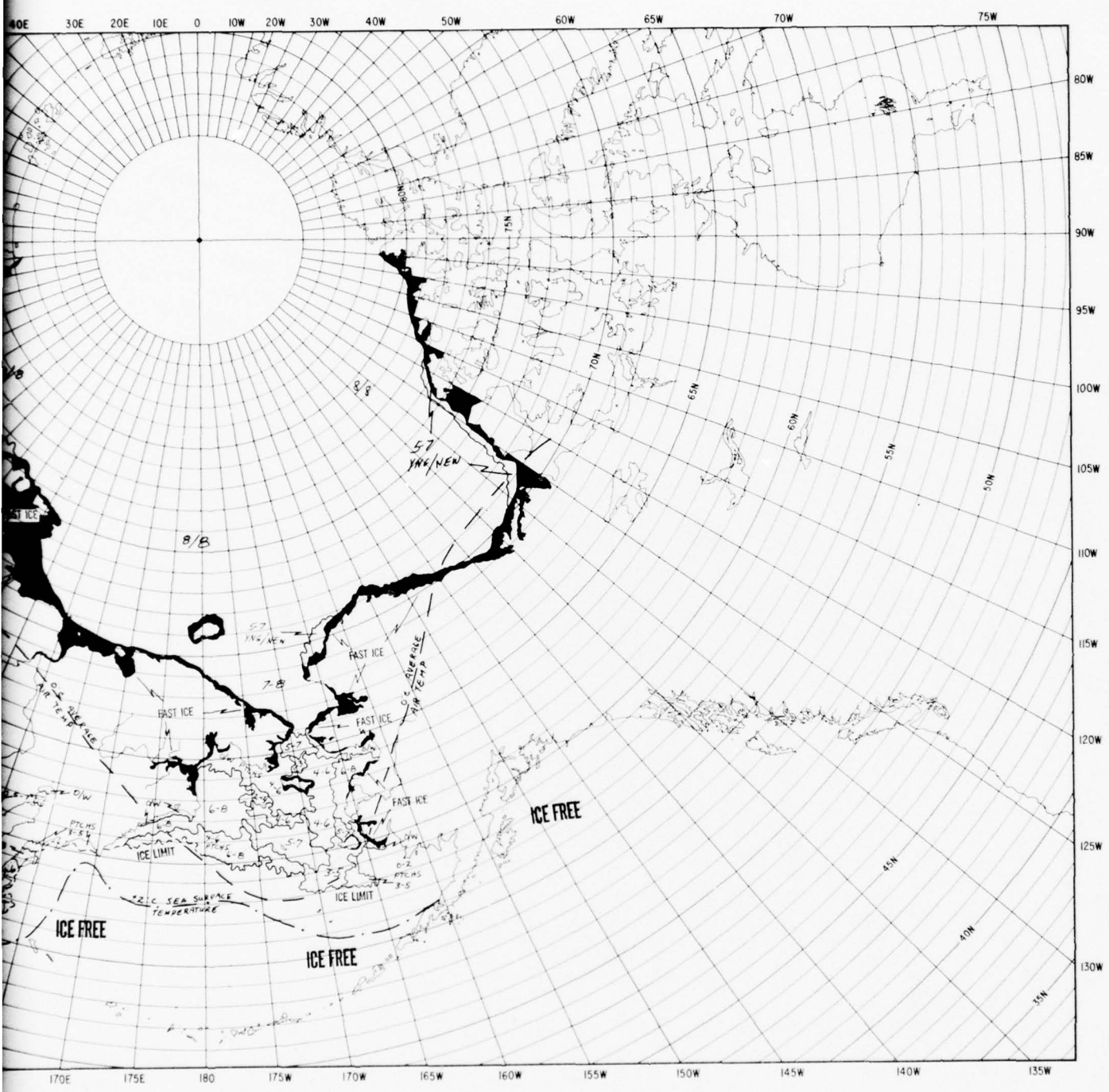
105E

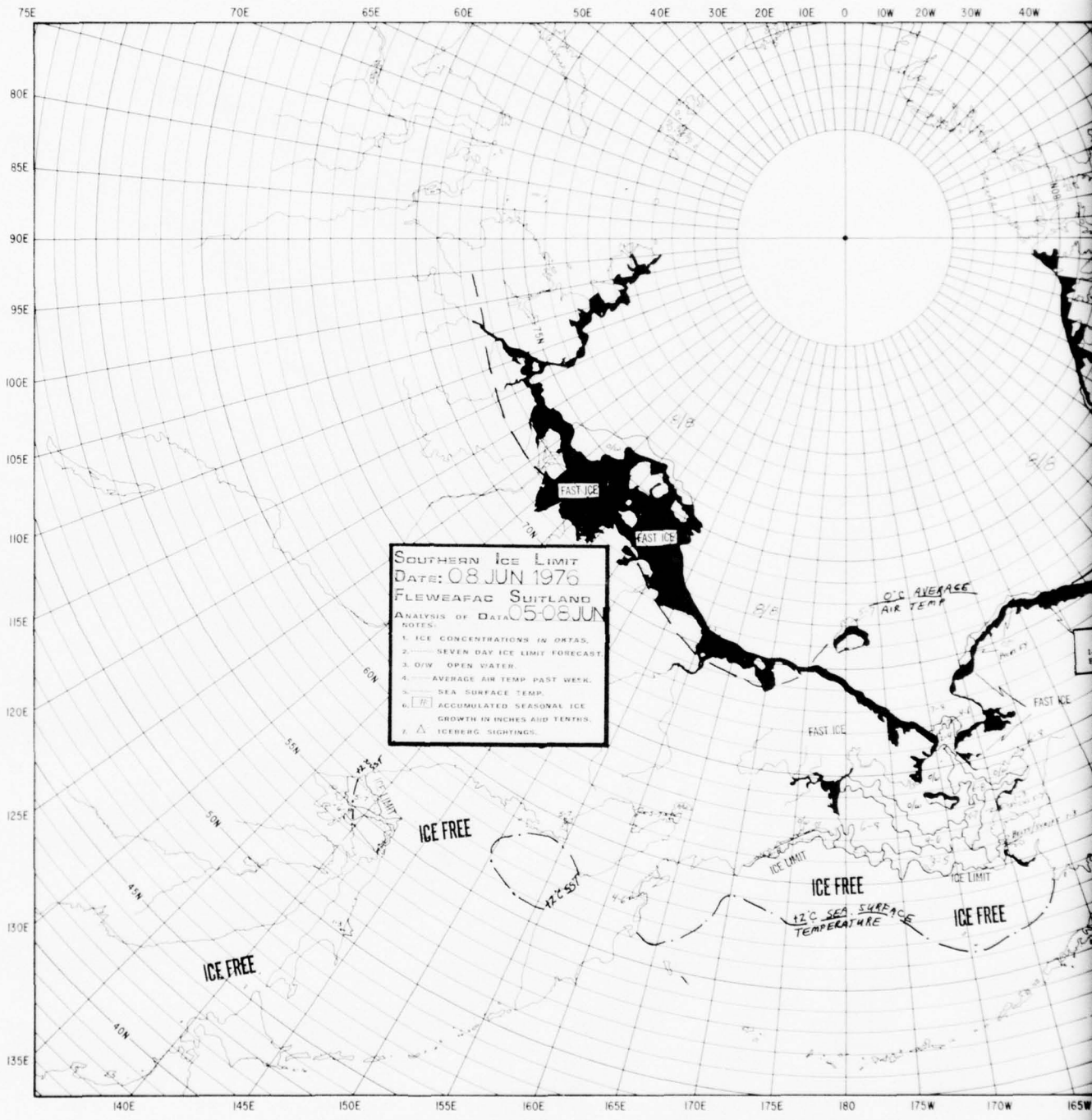
100E

95E

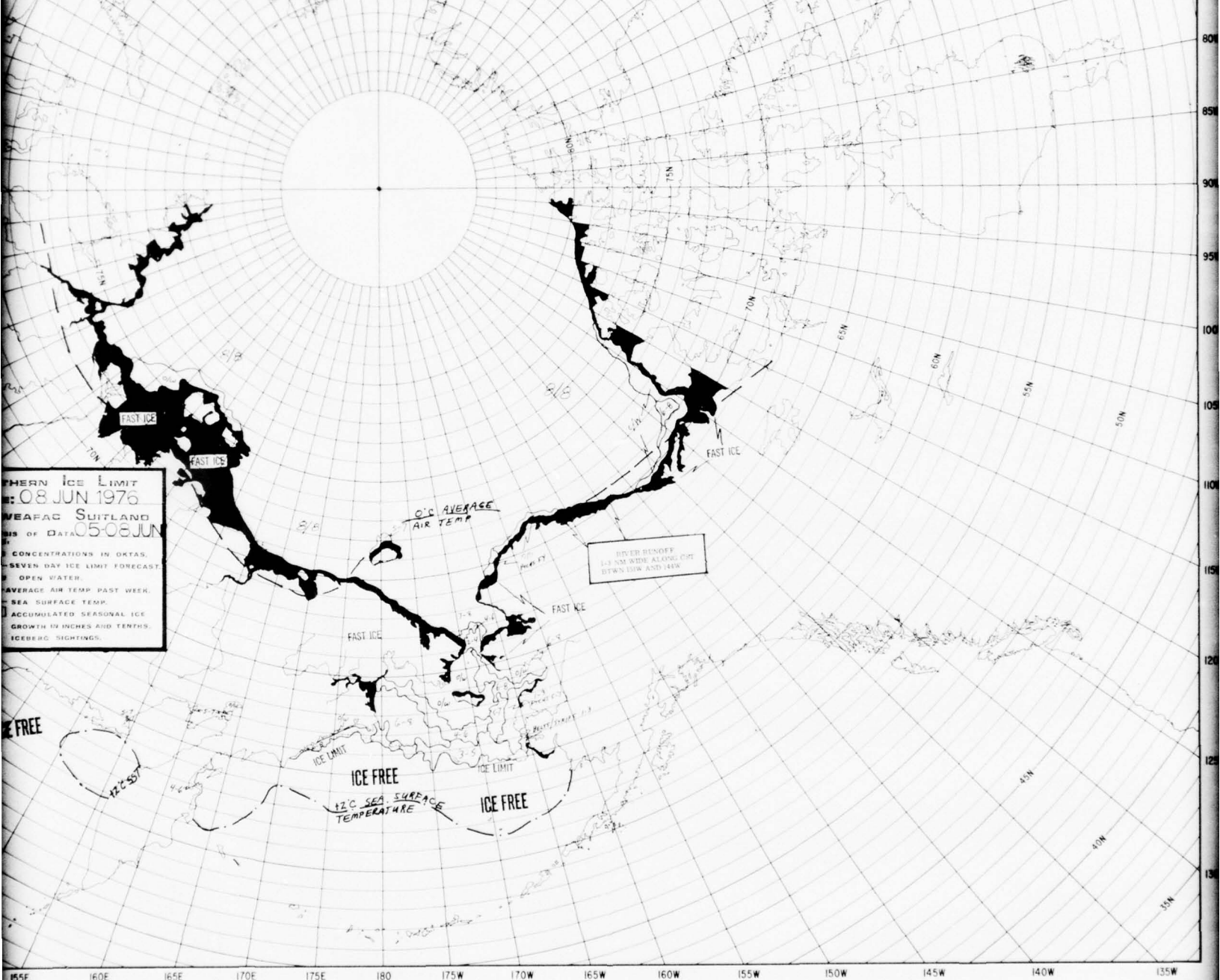
90E

80E





60E 50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W



SOUTHERN ICE LIMIT:
08 JUN 1976
WEAFAC SOUTLAND
ISLANDS OF DATA: 05-08 JUN

- CONCENTRATIONS IN OKTAS.
 - SEVEN DAY ICE LIMIT FORECAST.
 - OPEN WATER.
 - AVERAGE AIR TEMP PAST WEEK.
 - SEA SURFACE TEMP.
 - ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 - ICEBERG SIGHTINGS.

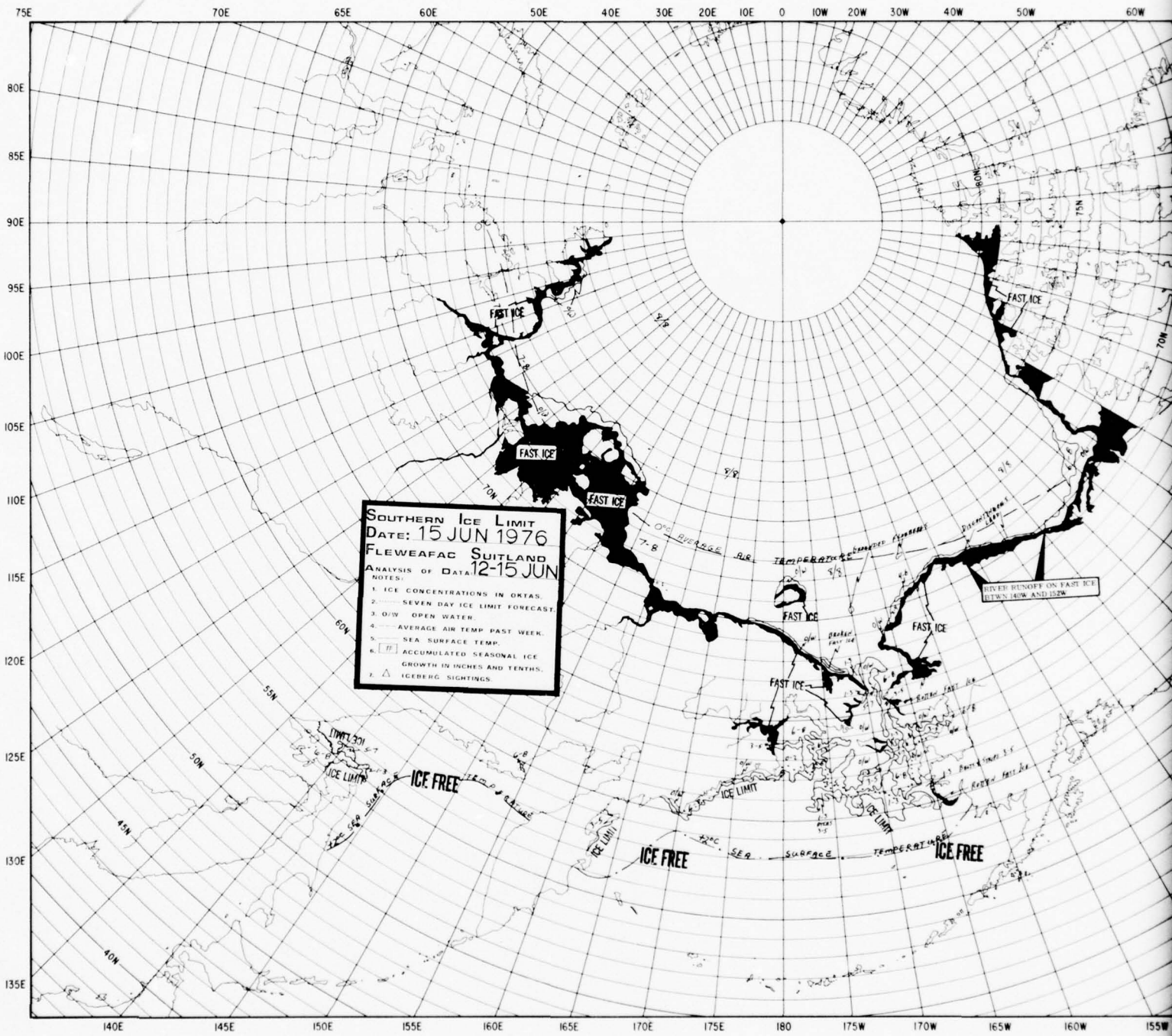
ICEBERG SIGHTING
 1-3 KM WIDE ALONG COAST
 BETWEEN 140W AND 145W

ICE FREE
 12°C SEA SURFACE TEMPERATURE

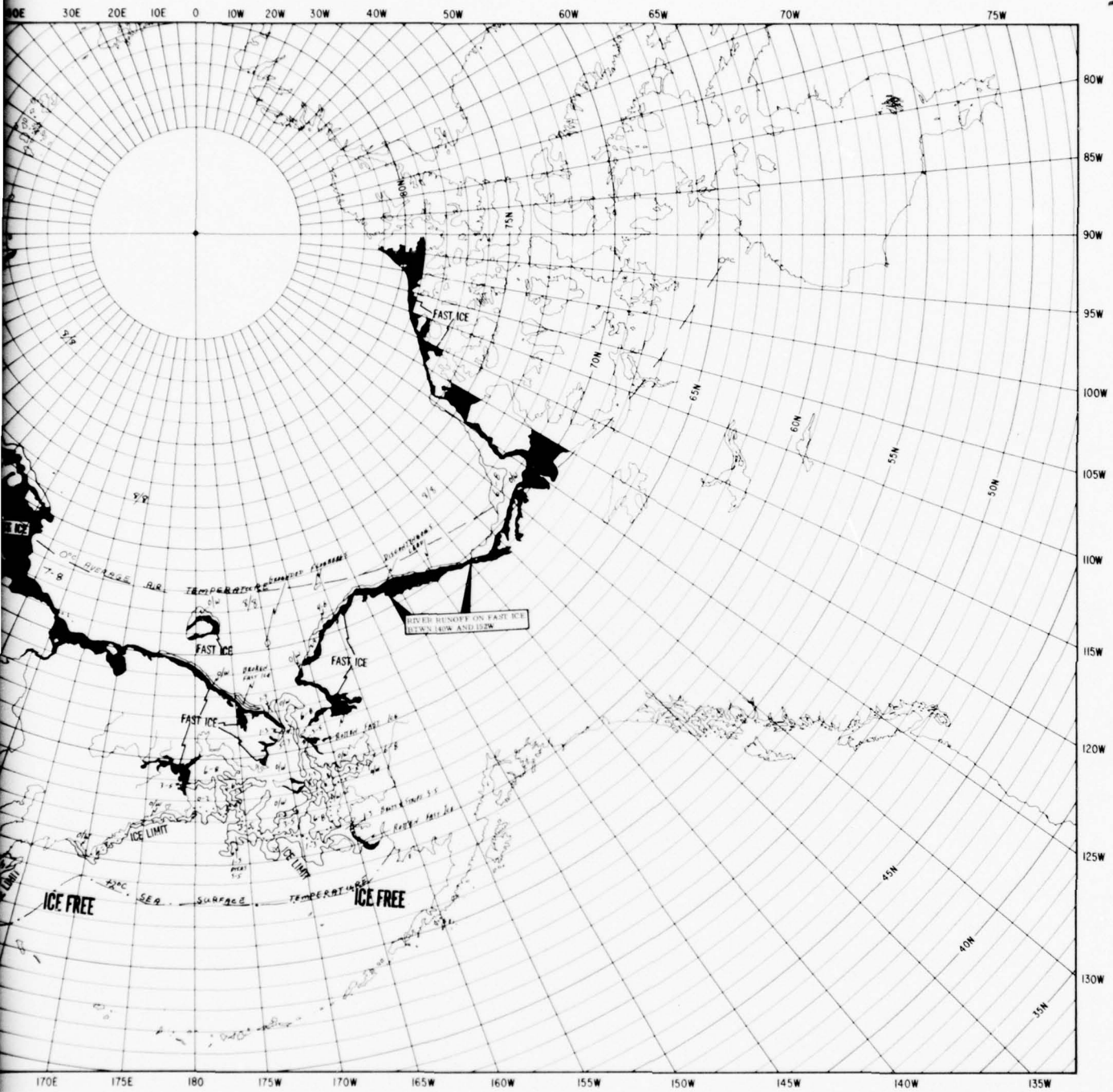
0°C AVERAGE AIR TEMP

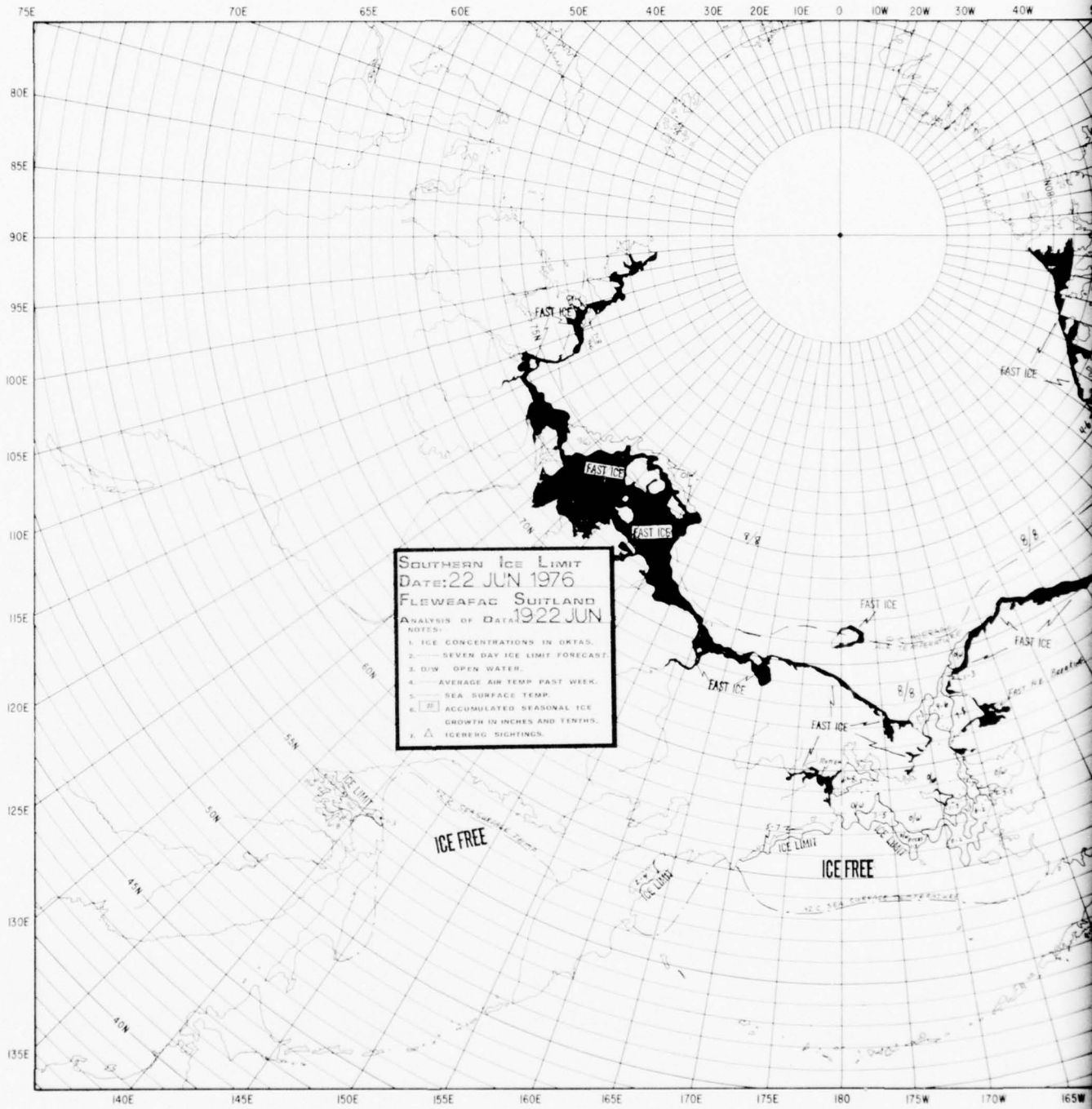
ICE FREE

155E 160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W



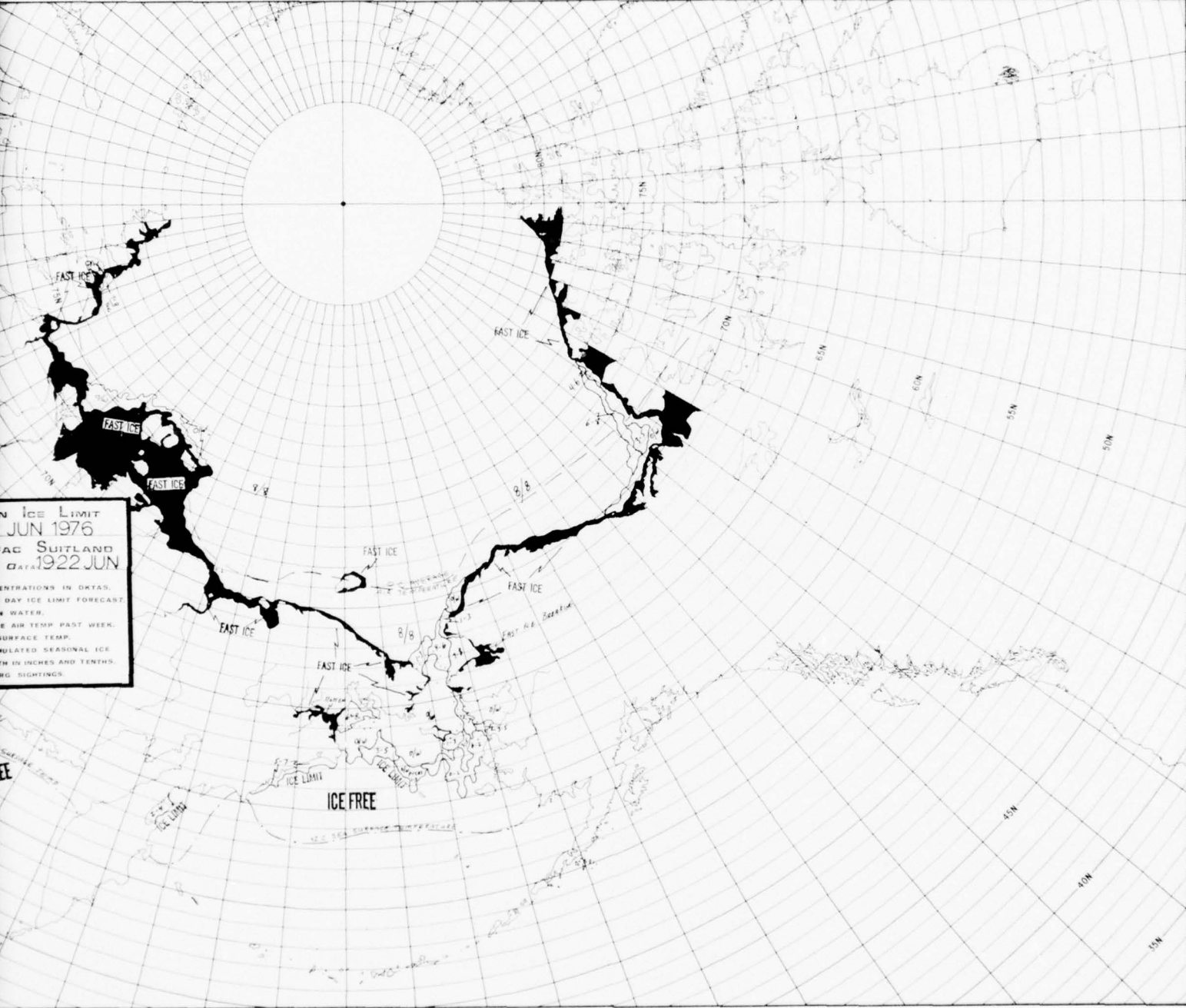
BIRED RUNOFF ON FAST ICE
 BETWEEN 140W AND 152W





50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

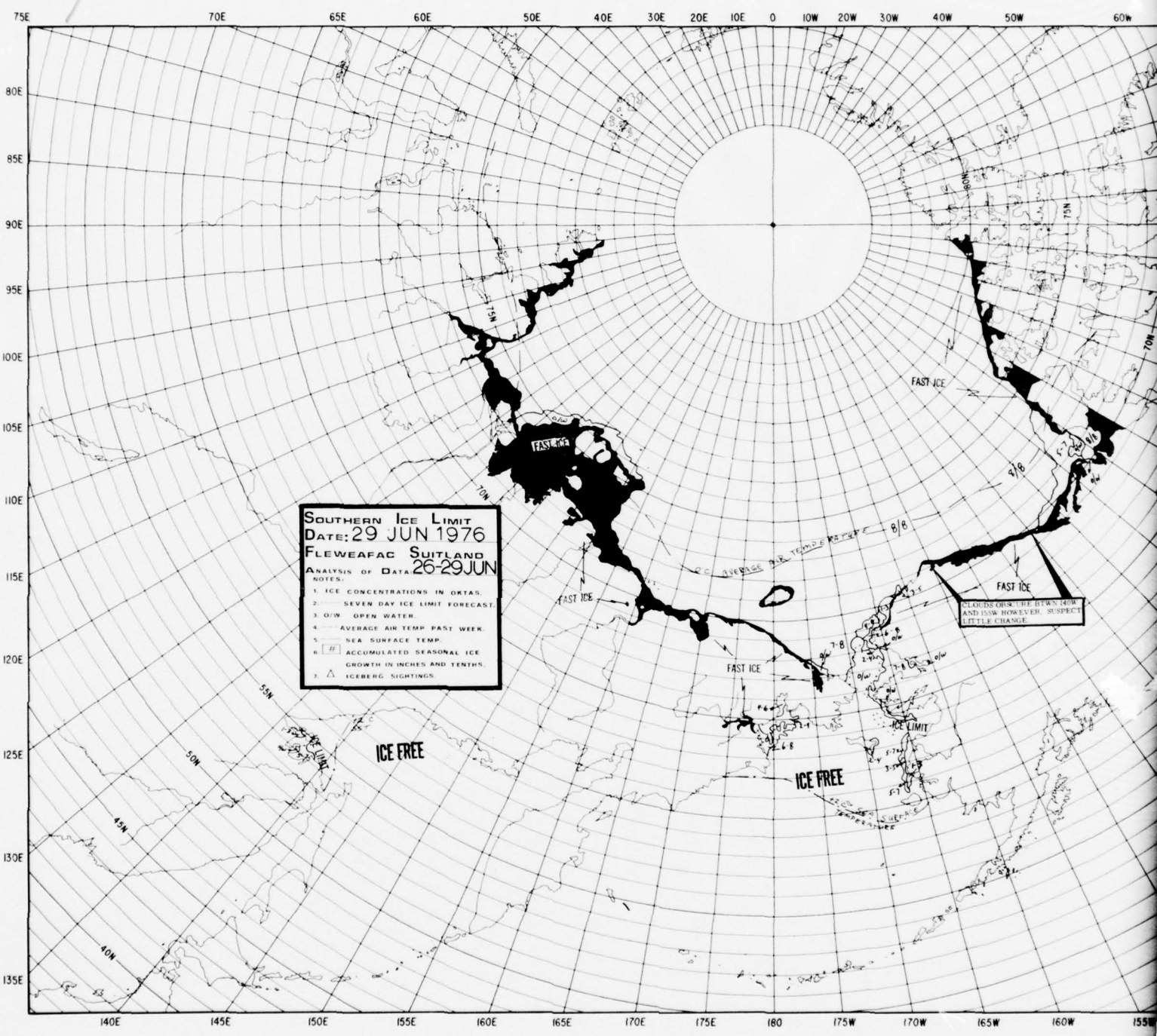
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W



ICE LIMIT
JUN 1976
PAC SUITLAND
DATA 19 22 JUN

CONCENTRATIONS IN DKTS.
DAY ICE LIMIT FORECAST
IN WATER.
DE AIR TEMP PAST WEEK.
SURFACE TEMP.
MULATED SEASONAL ICE
THM IN INCHES AND TENTHS.
IRG SIGHTINGS.

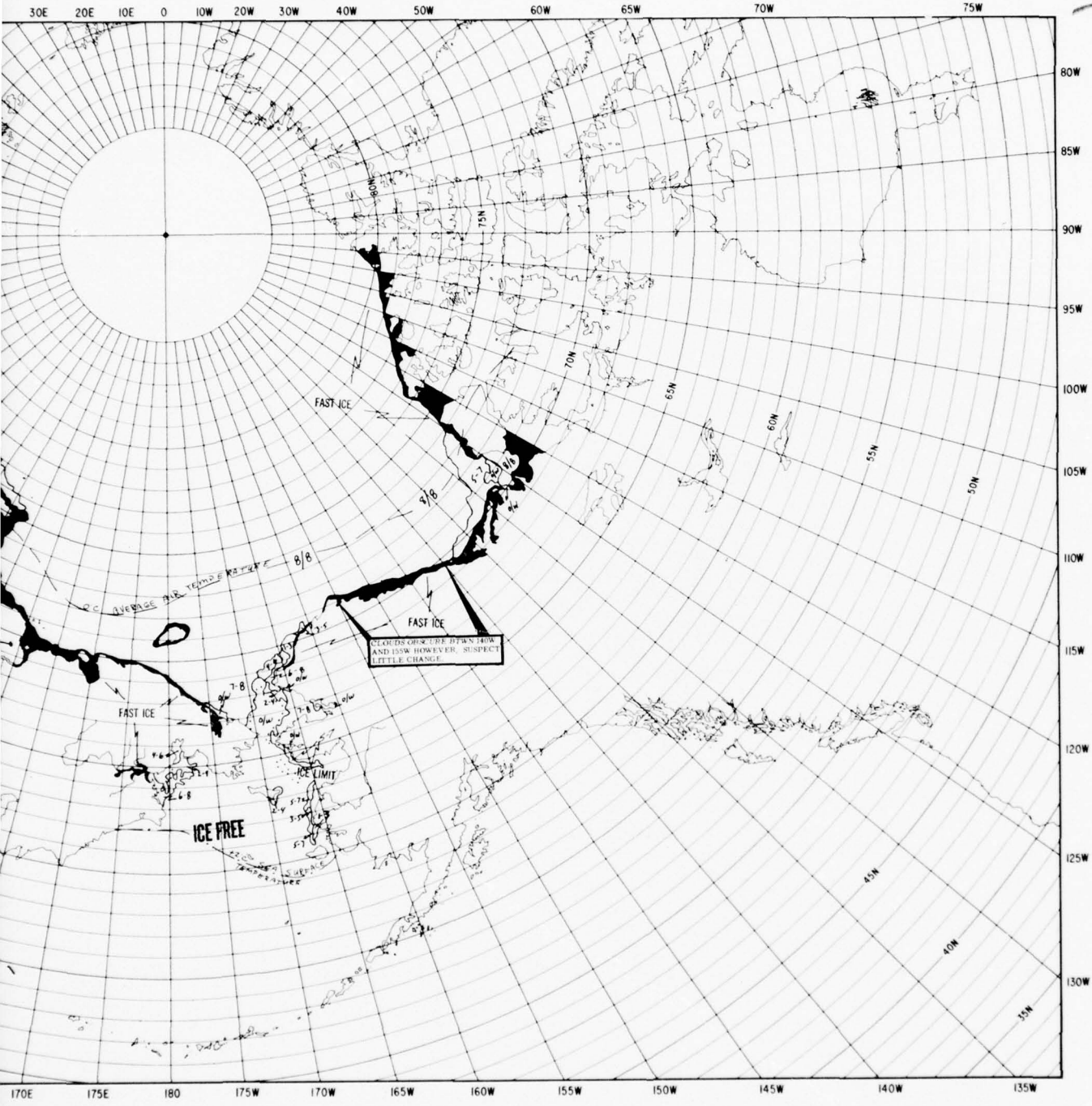
160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W



SOUTHERN ICE LIMIT
DATE: 29 JUN 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 26-29 JUN
 NOTES:
 1. ICE CONCENTRATIONS IN ORKAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [H] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. Δ ICEBERG SIGHTINGS.

CLOUDS OBS. LTE BTWN 140W AND 150W HOWEVER, SUSPECT LITTLE CHANGE.

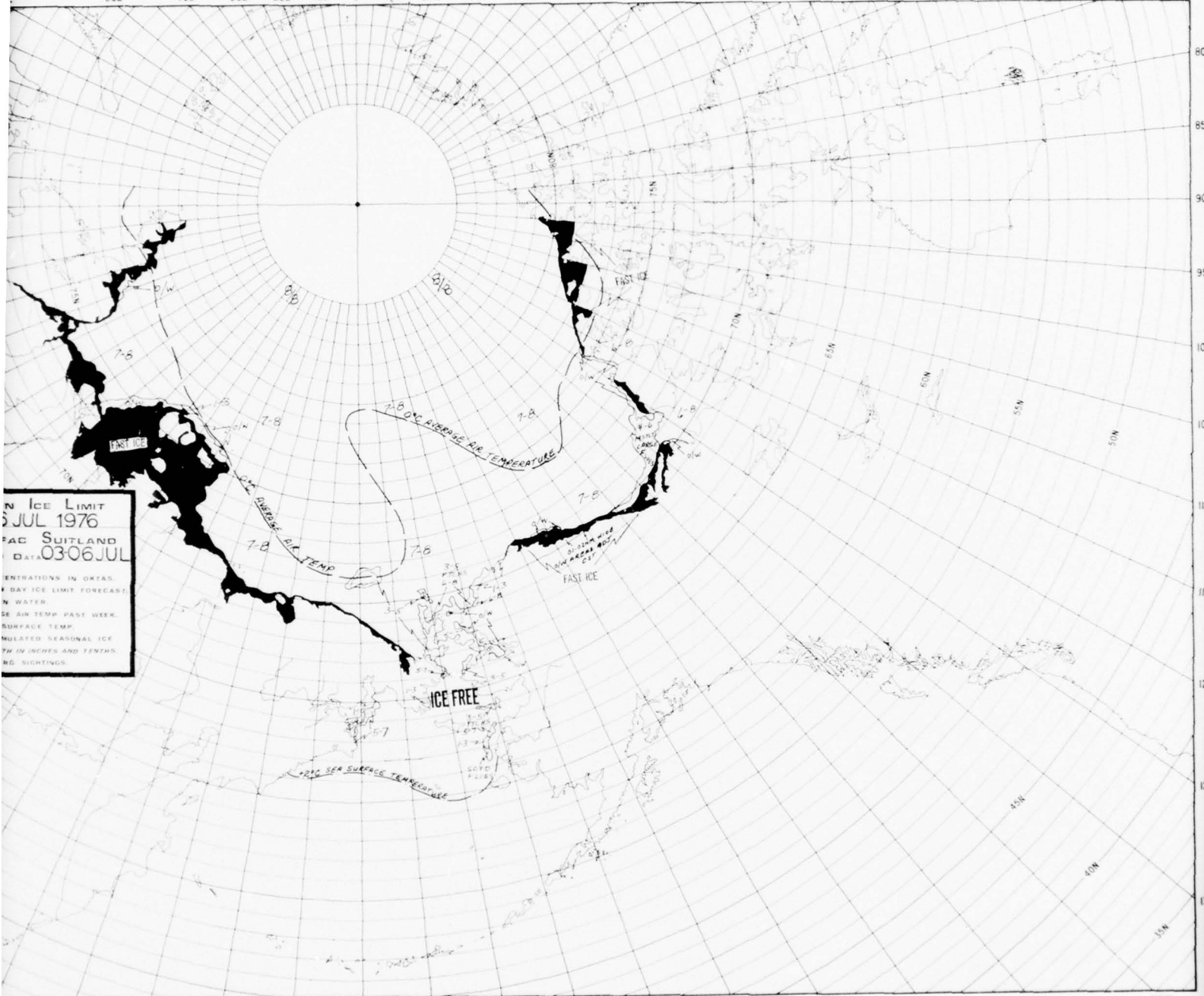
2



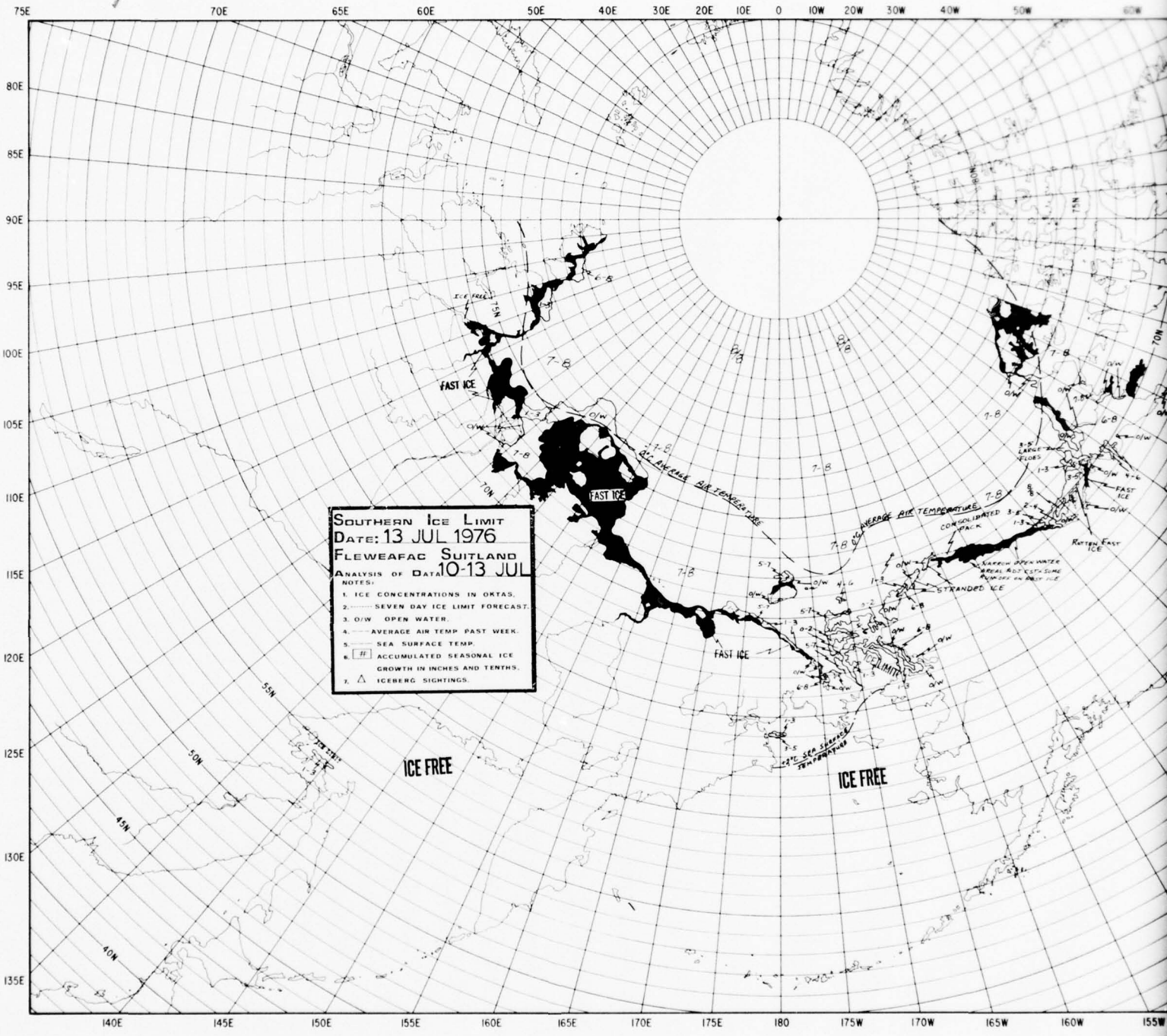
2

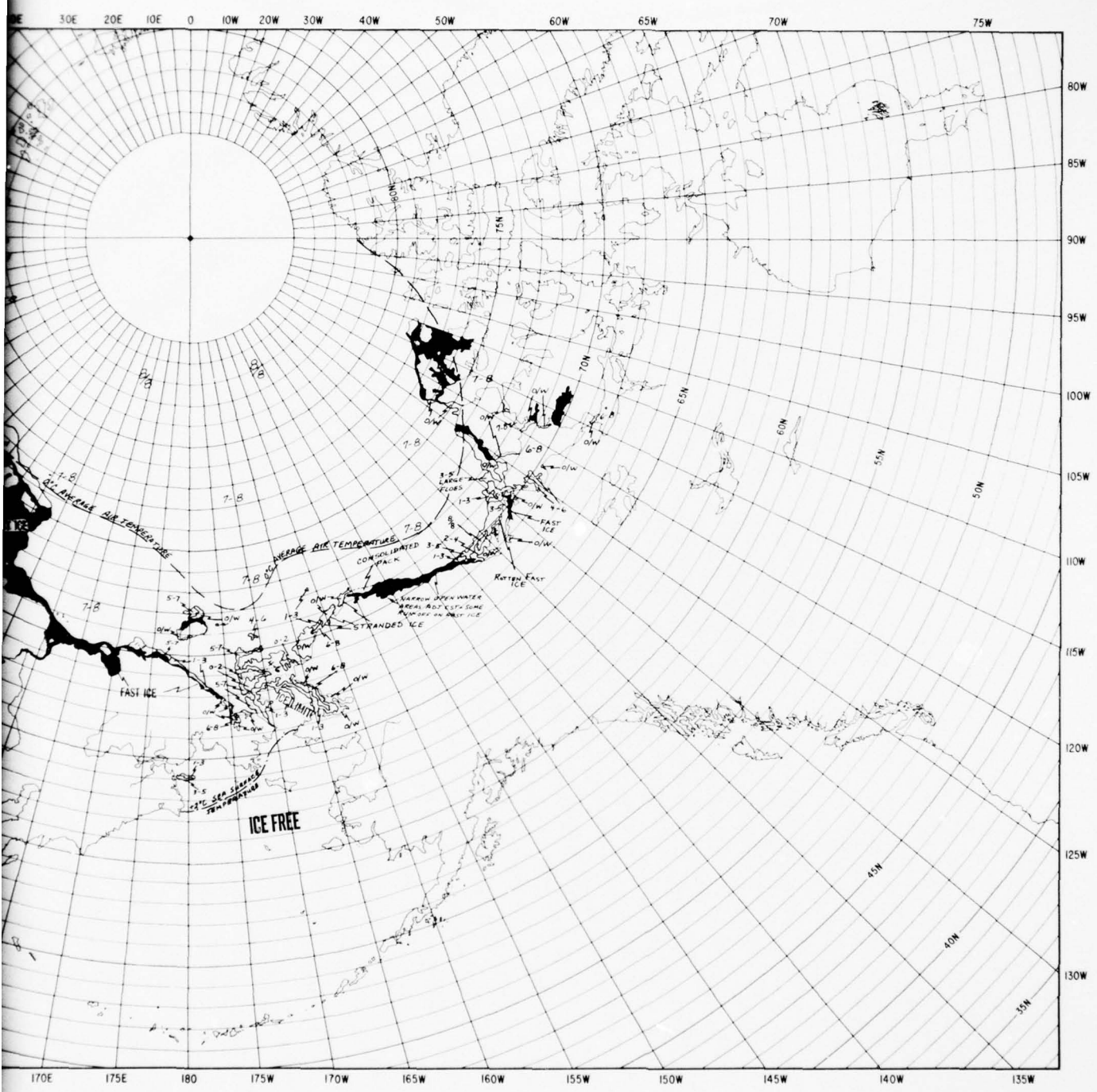
50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

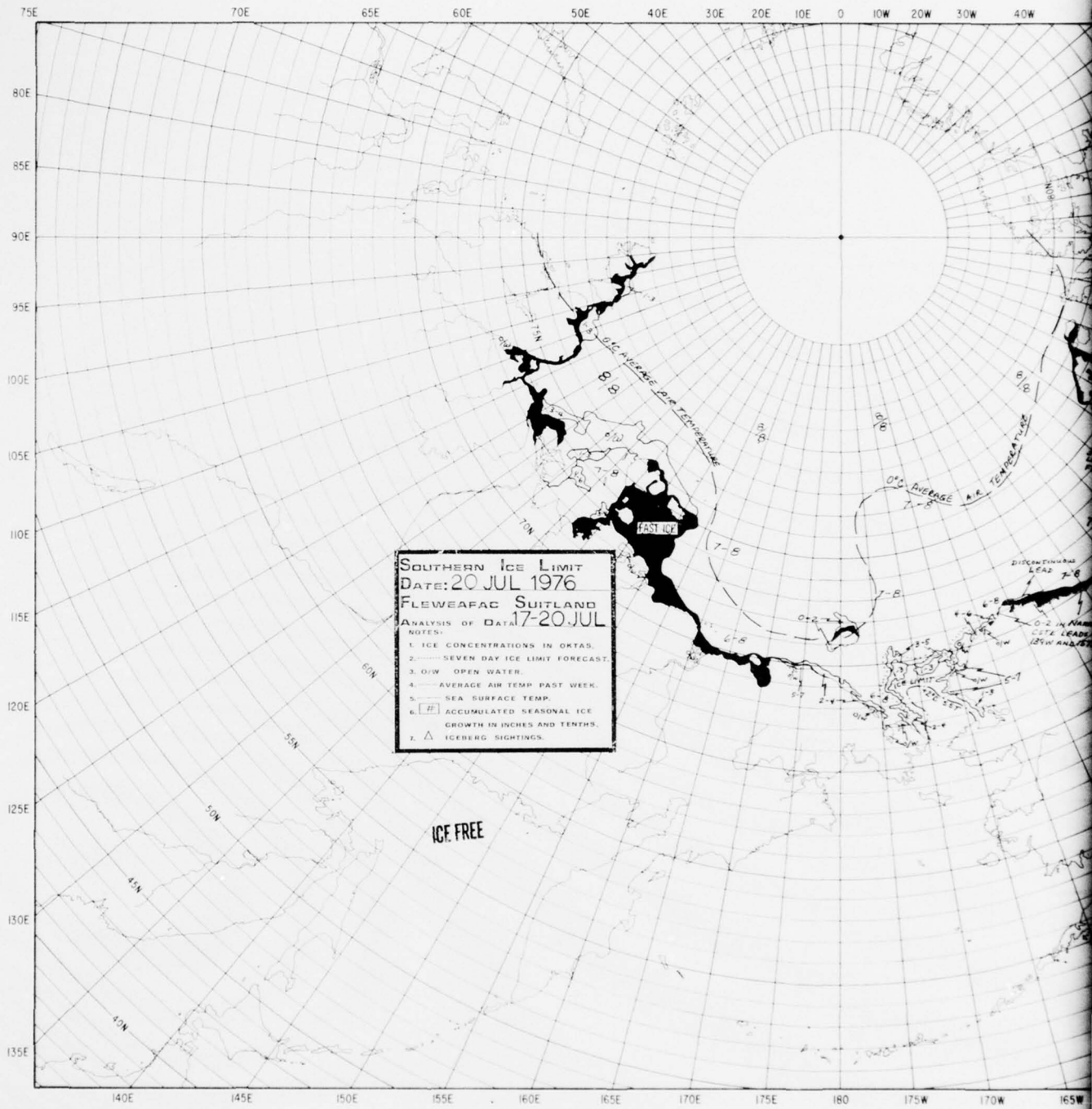
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W

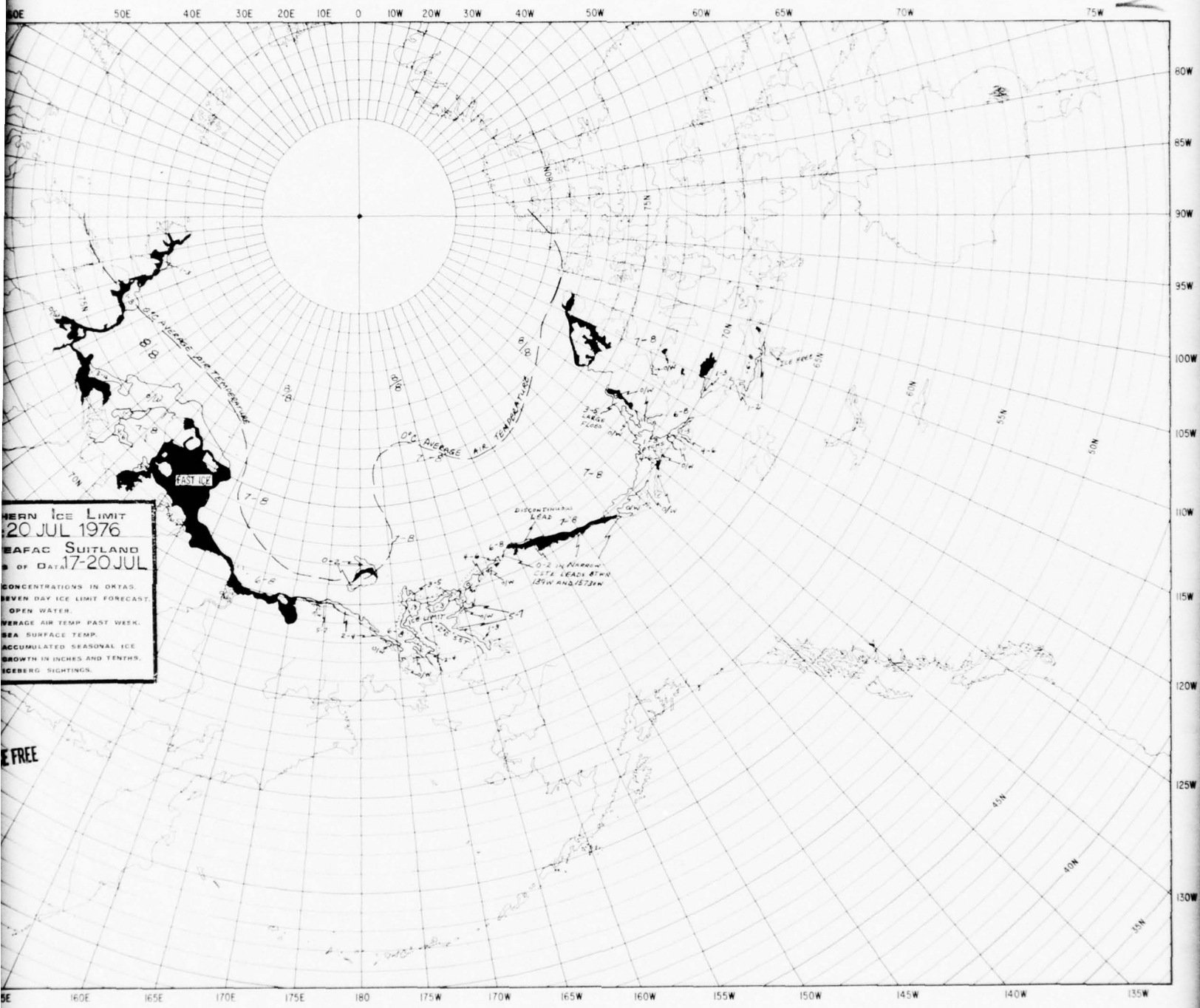


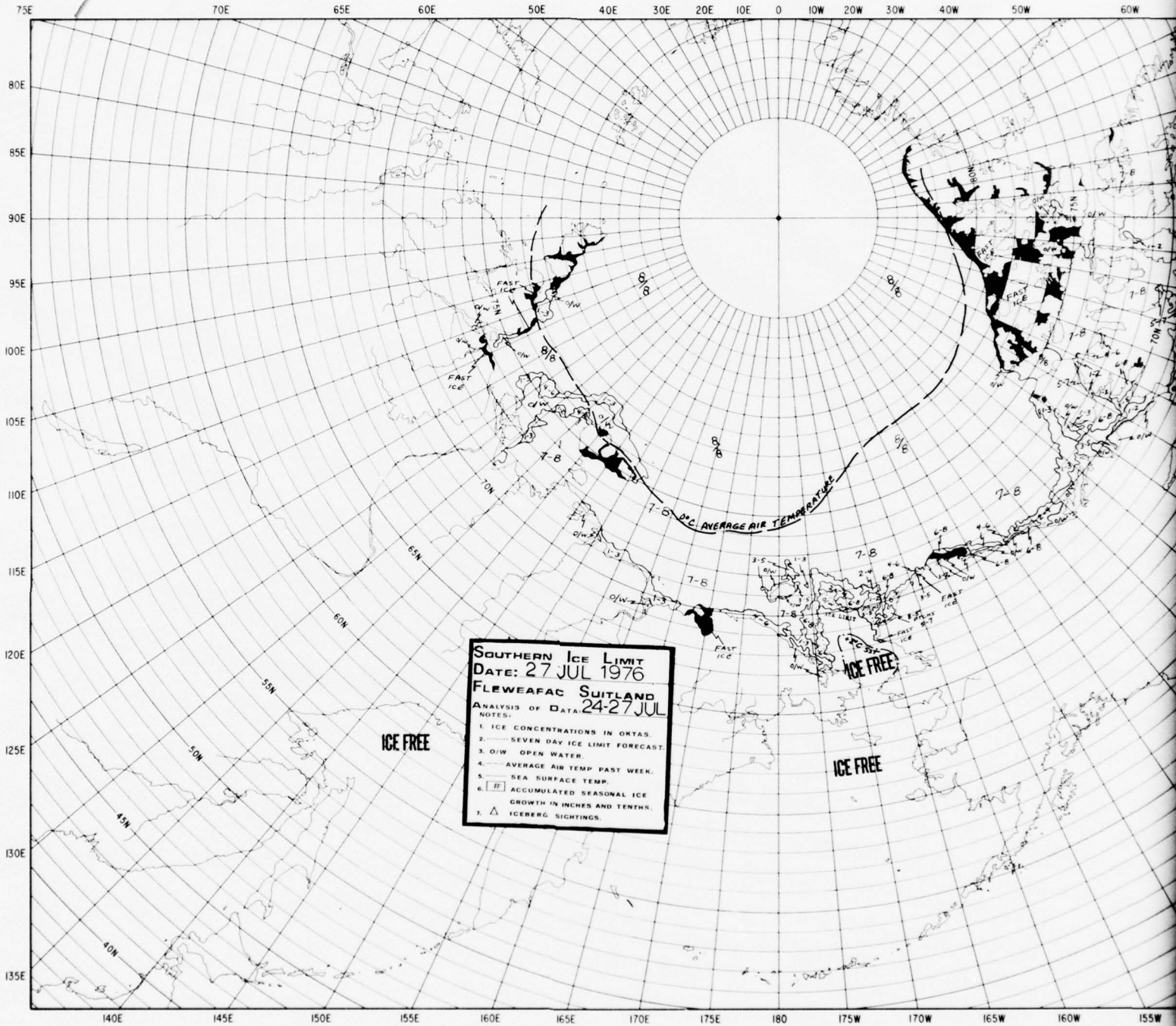
160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W

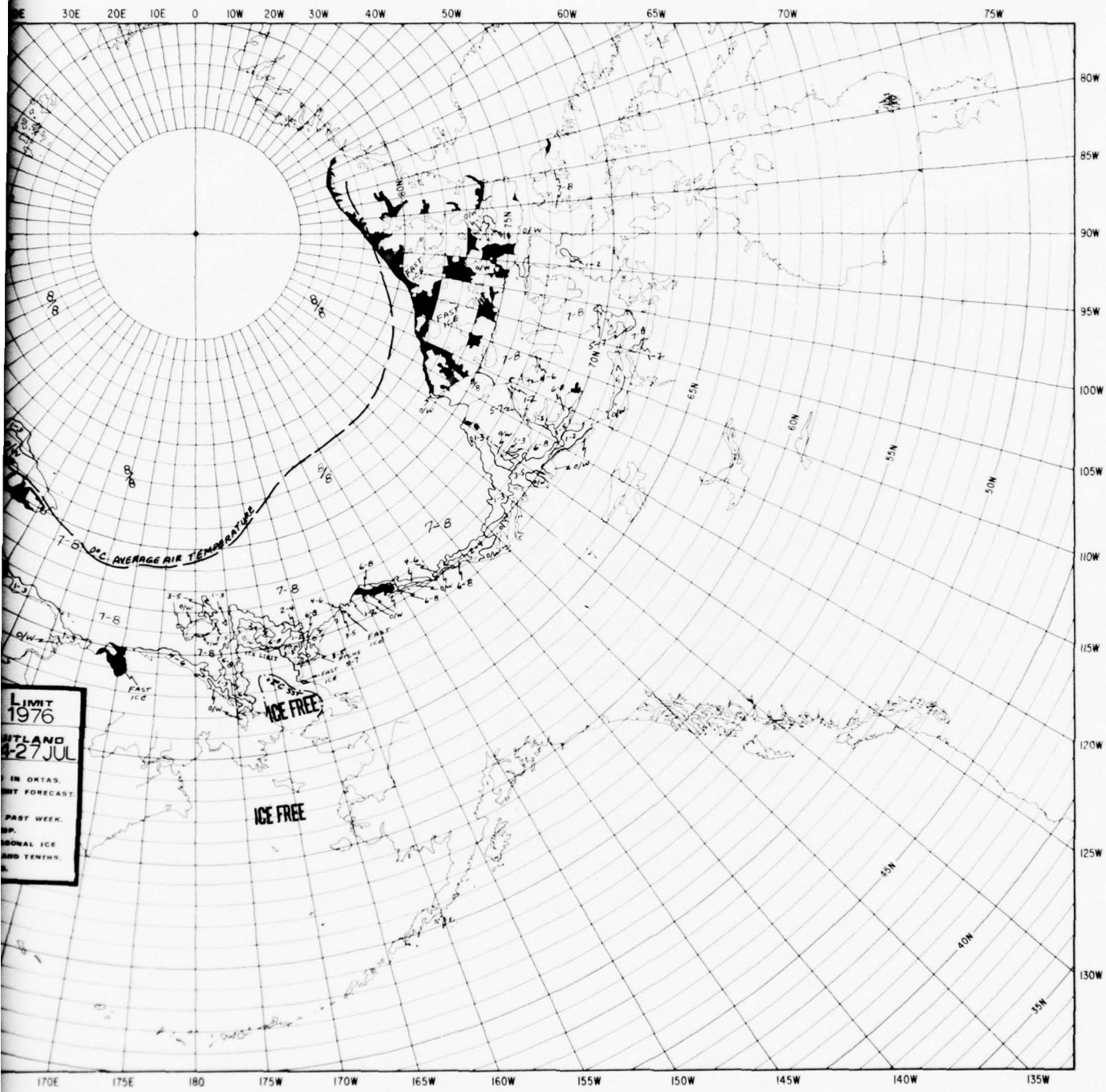






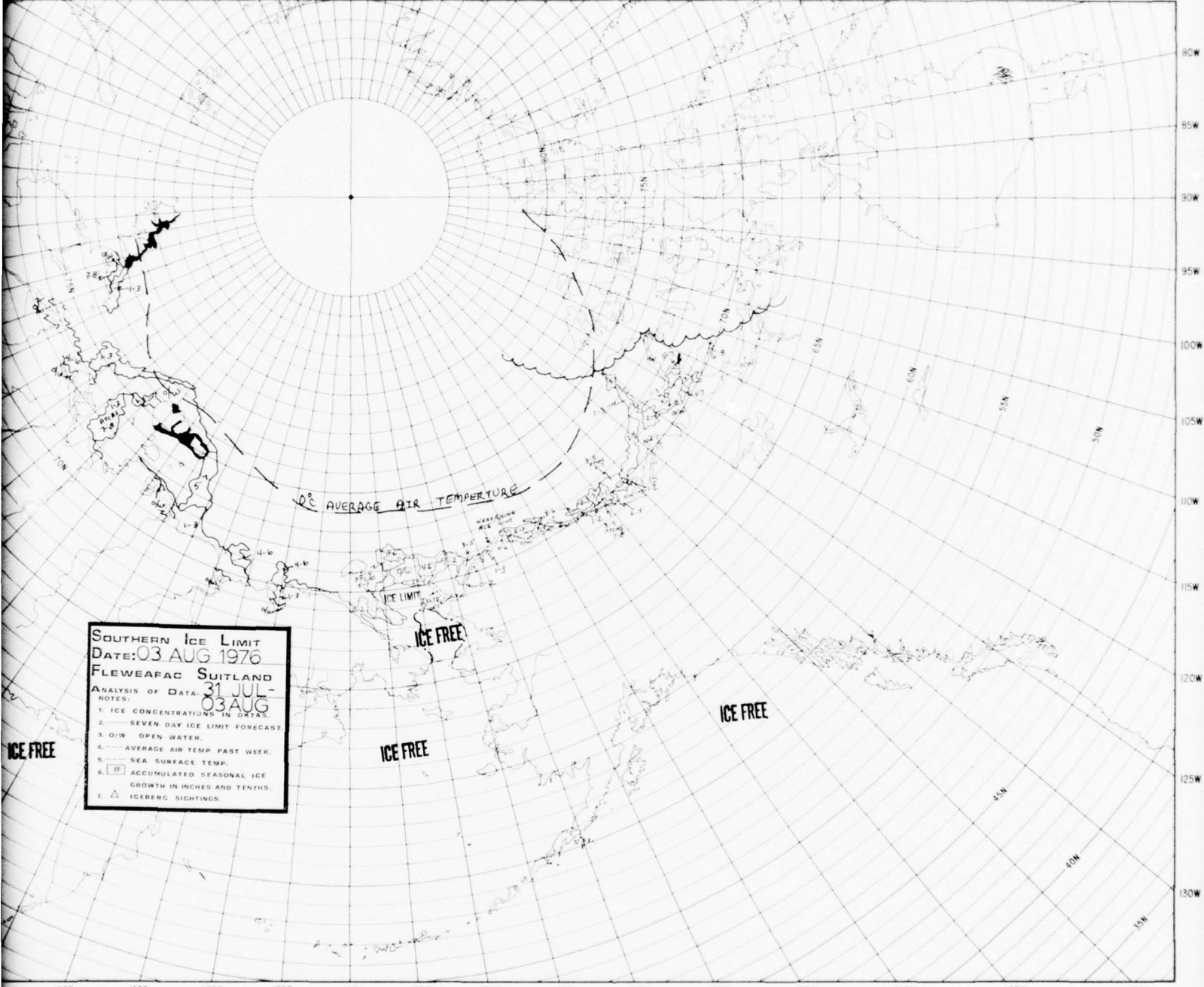






2

50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W



SOUTHERN ICE LIMIT
DATE: 03 AUG 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 31 JUL - 03 AUG
NOTES:
 1. ICE CONCENTRATIONS IN OBTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. D/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. ICEBERG SIGHTINGS.

ICE FREE

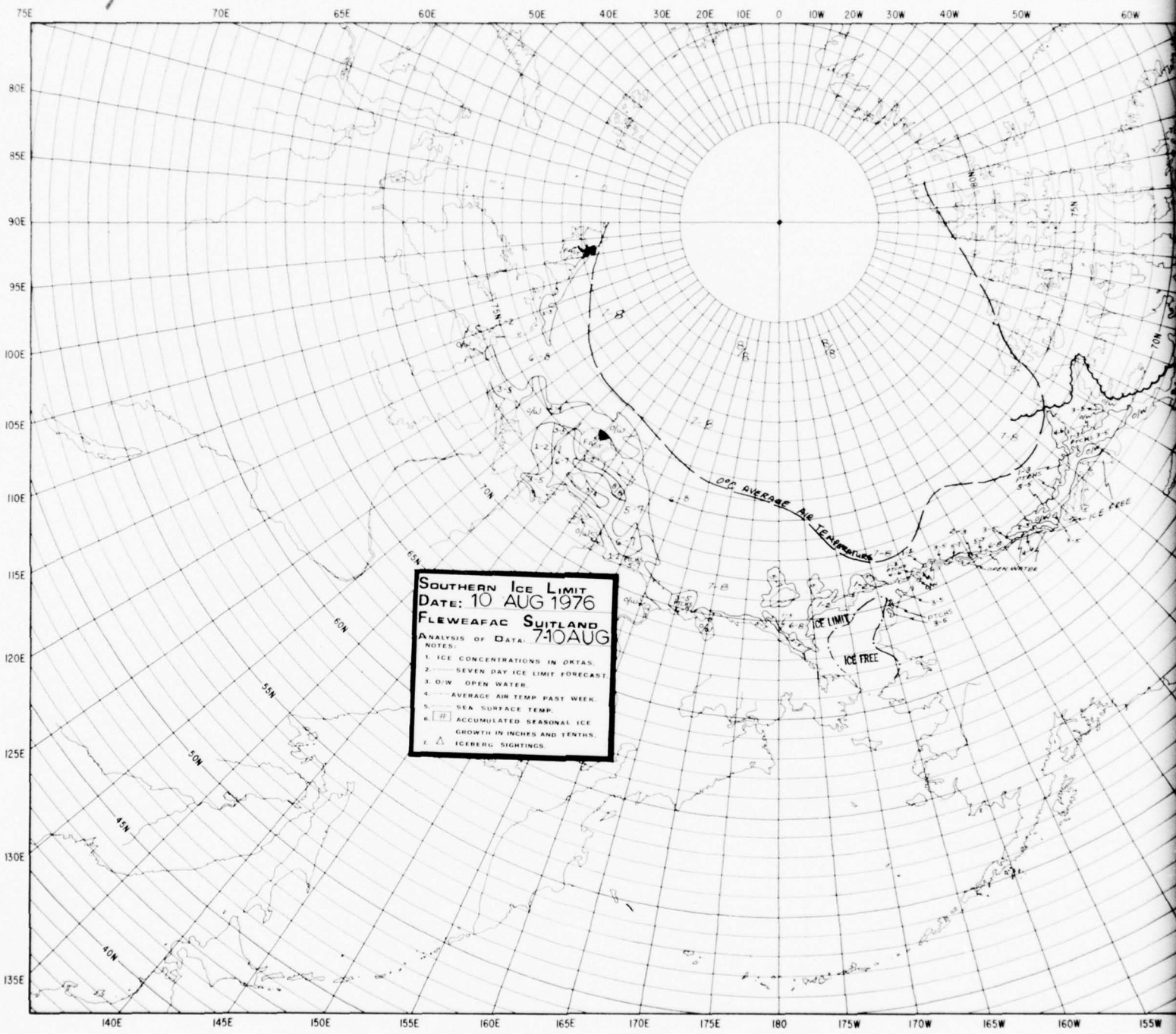
ICE FREE

ICE FREE

ICE FREE

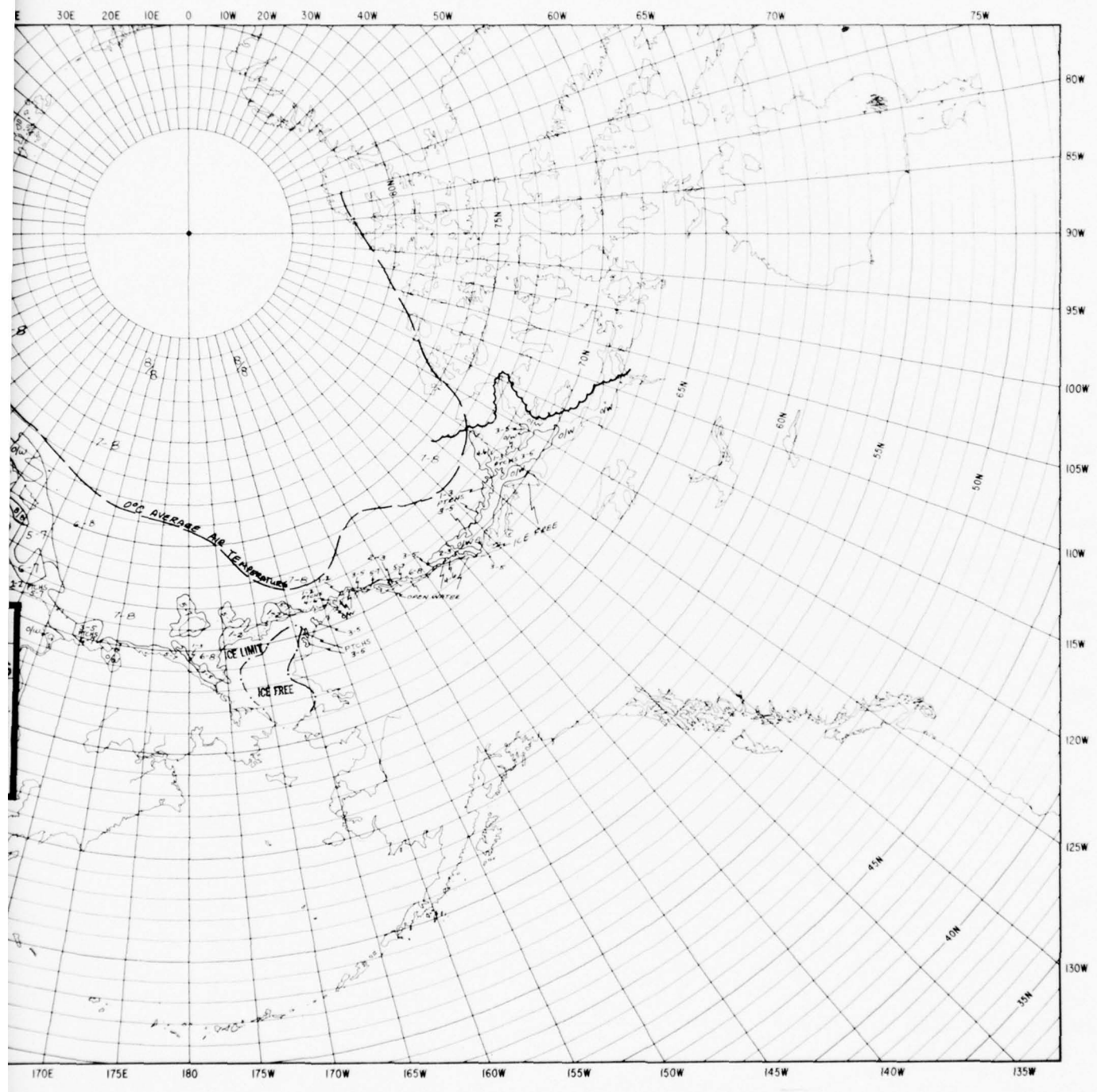
160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W

80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W



SOUTHERN ICE LIMIT
DATE: 10 AUG 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA: 7-10 AUG
 NOTES:
 1. ICE CONCENTRATIONS IN ORTAS.
 2. SEVEN DAY ICE LIMIT FORECAST
 3. OW OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. [#] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. [Δ] ICEBERG SIGHTINGS.

000 AVERAGE AIR TEMPERATURE
 ICE LIMIT
 ICE FREE



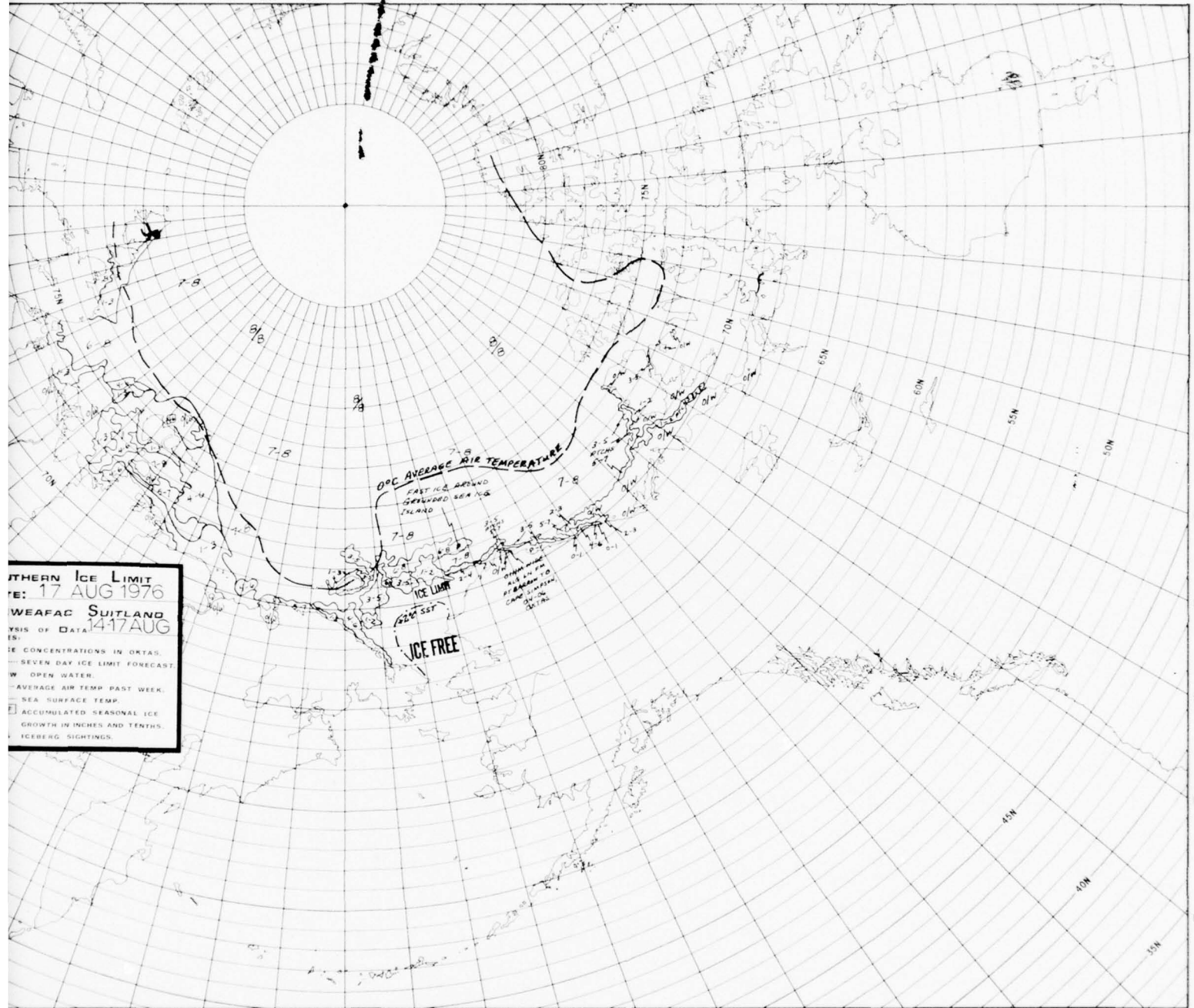
50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

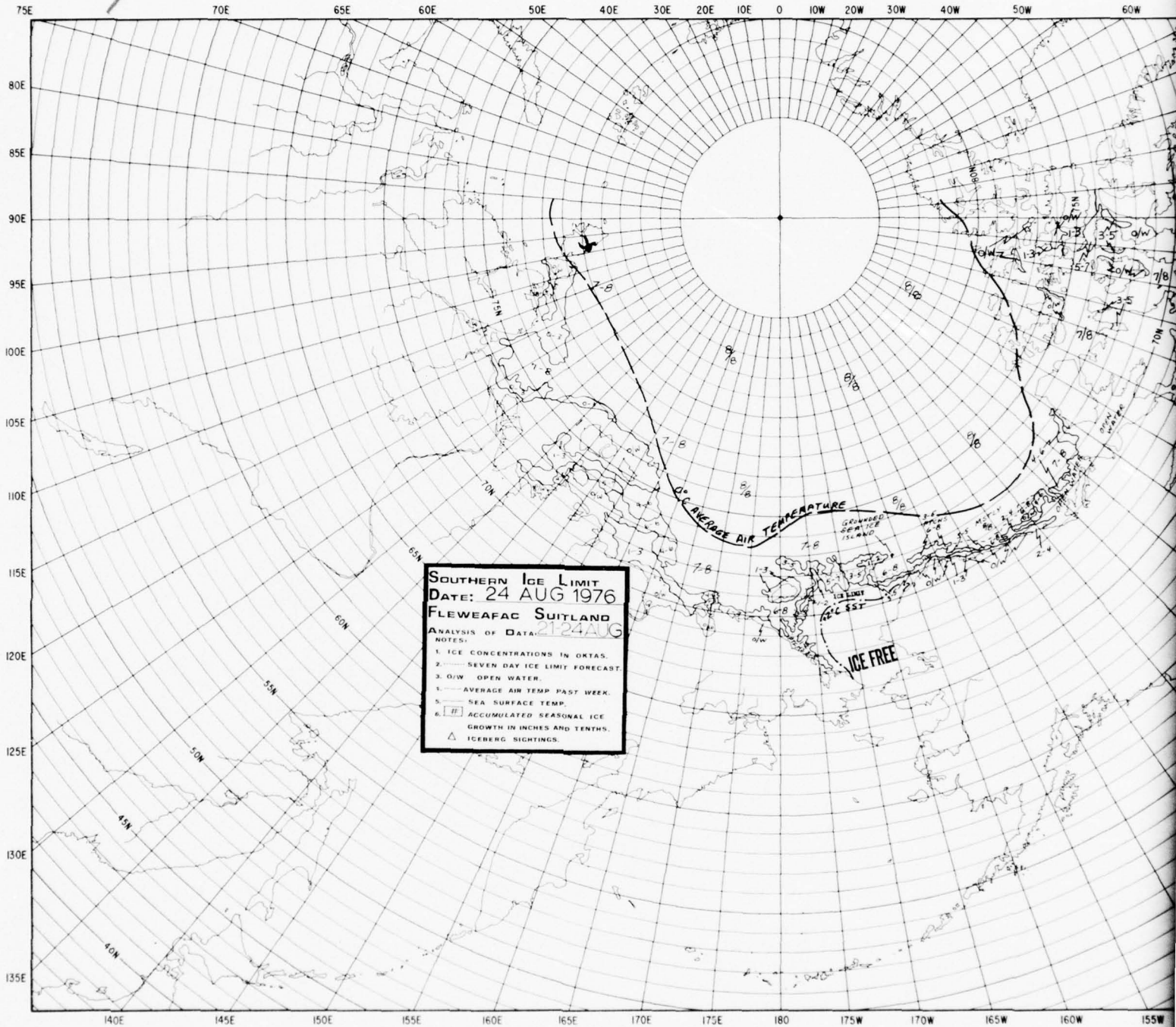
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W

160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W

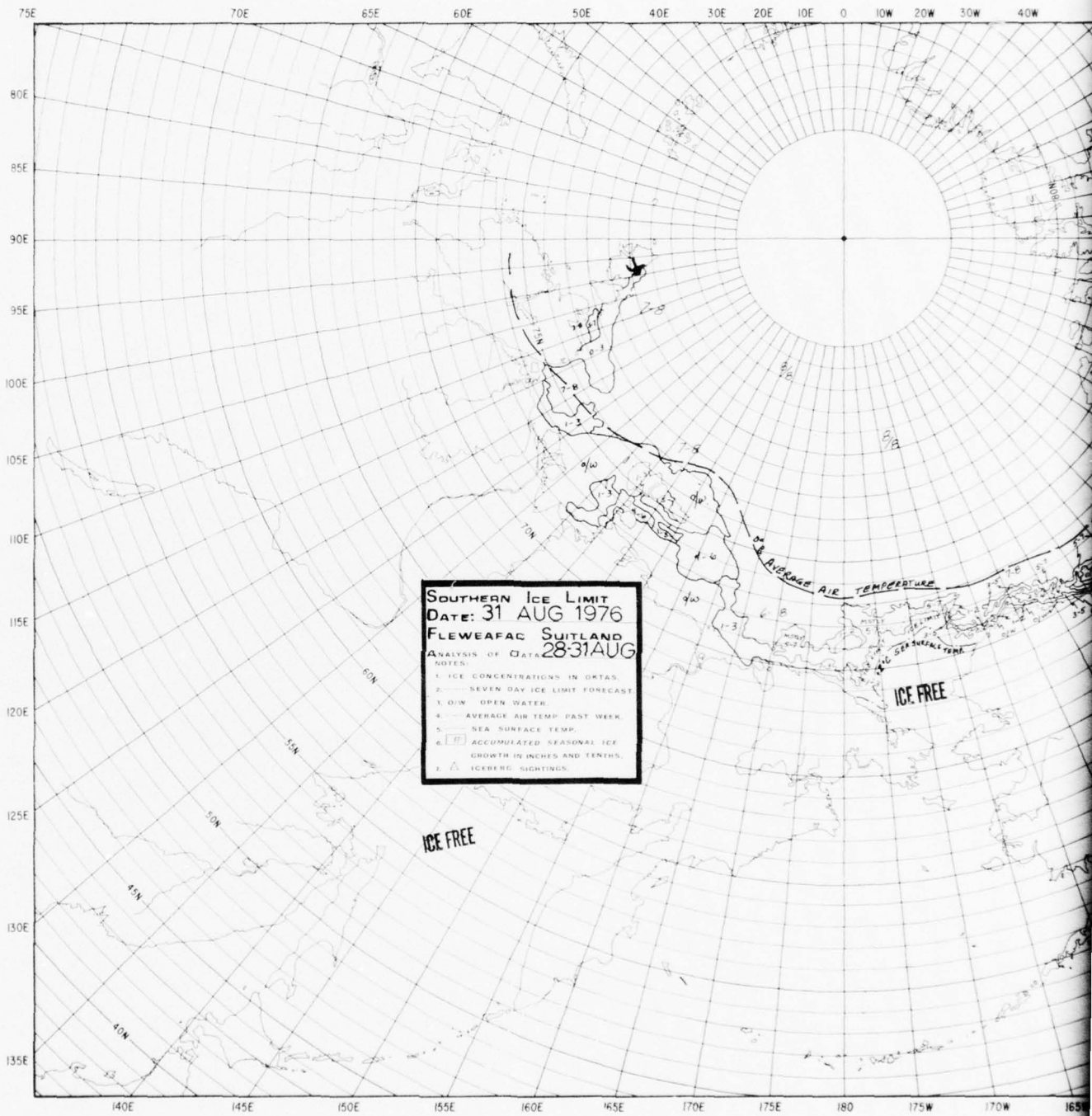
NORTHERN ICE LIMIT
DATE: 17 AUG 1976
WEAFAC SUITLAND
14-17 AUG

ANALYSIS OF DATA
 (S) SEA ICE CONCENTRATIONS IN ORKTAS.
 (F) SEVEN DAY ICE LIMIT FORECAST.
 (O) OPEN WATER.
 (A) AVERAGE AIR TEMP PAST WEEK.
 (S) SEA SURFACE TEMP.
 (I) ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 (B) ICEBERG SIGHTINGS.



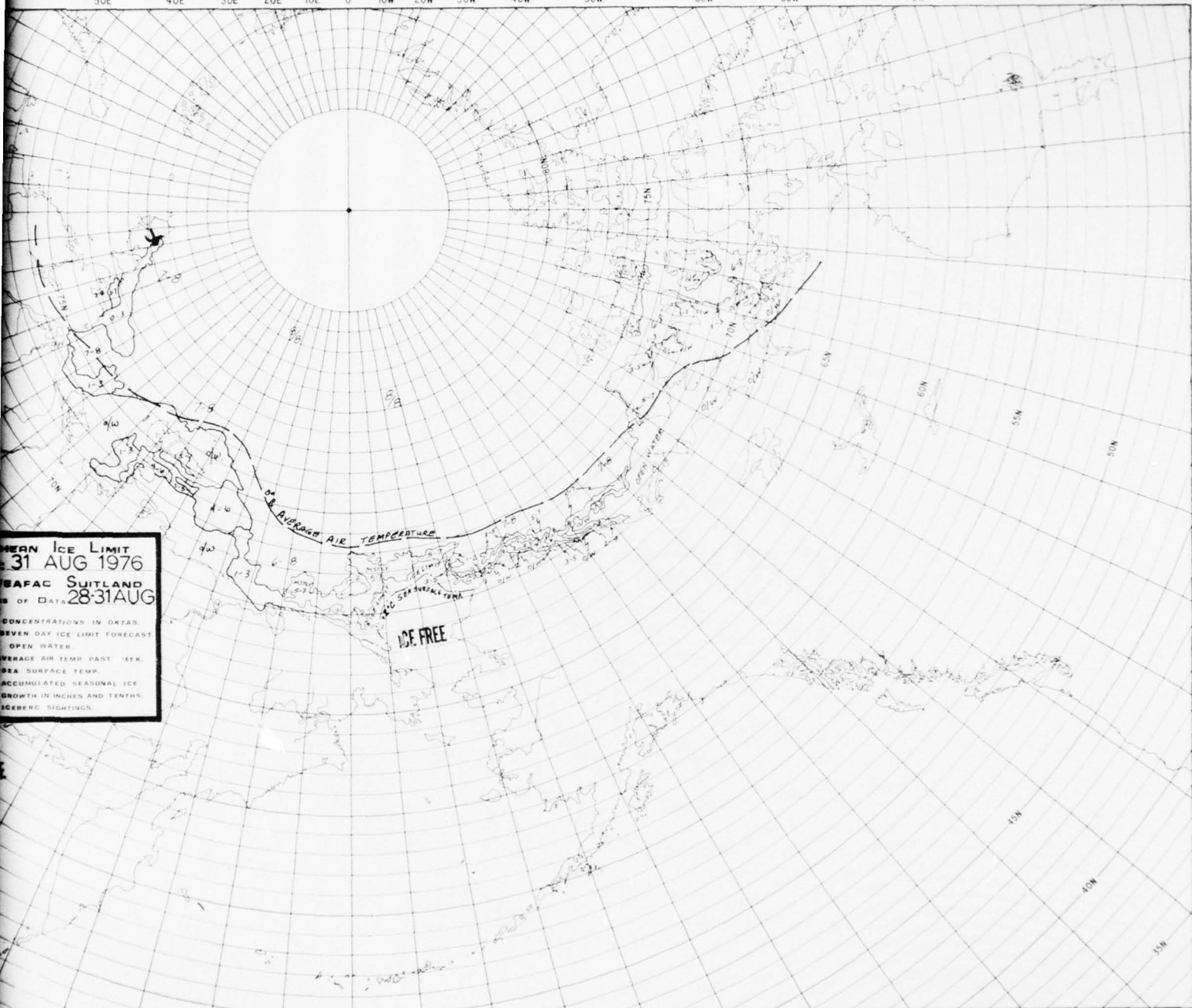


SOUTHERN ICE LIMIT
DATE: 24 AUG 1976
FLEWEAFAC SUITLAND
 ANALYSIS OF DATA: 21-24 AUG
 NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 △ ICEBERG SIGHTINGS.



50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

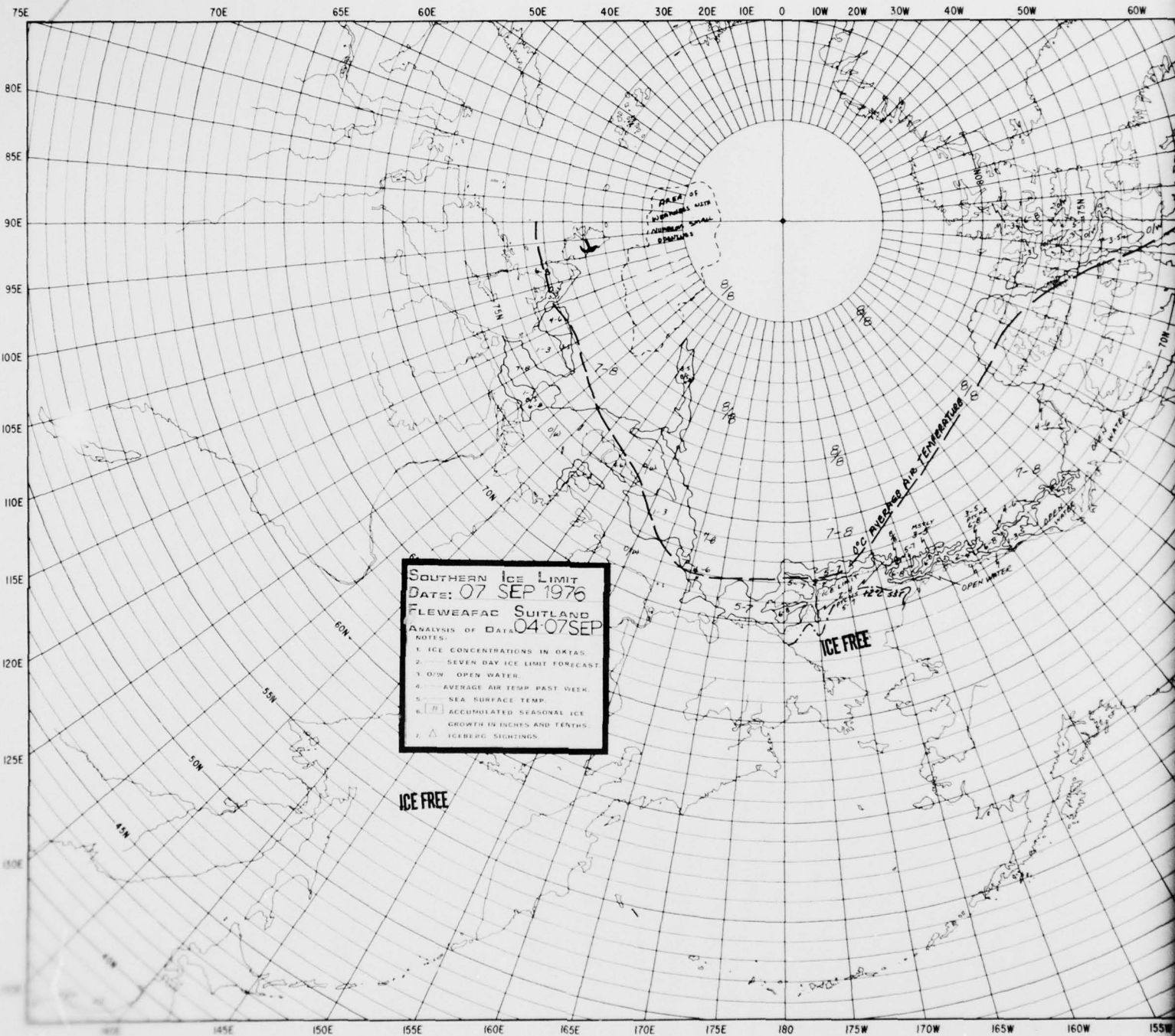
80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W



MEAN ICE LIMIT
31 AUG 1976
NAFAC SVALBARD
PERIOD OF DATA 28-31 AUG

CONCENTRATIONS IN DXTAS.
SEVEN DAY ICE LIMIT FORECAST.
OPEN WATER.
MEAN AIR TEMP PAST 12K.
SEA SURFACE TEMP.
ACCUMULATED SEASONAL ICE
GROWTH IN INCHES AND TENTHS.
ICEBERG SIGHTINGS.

160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W

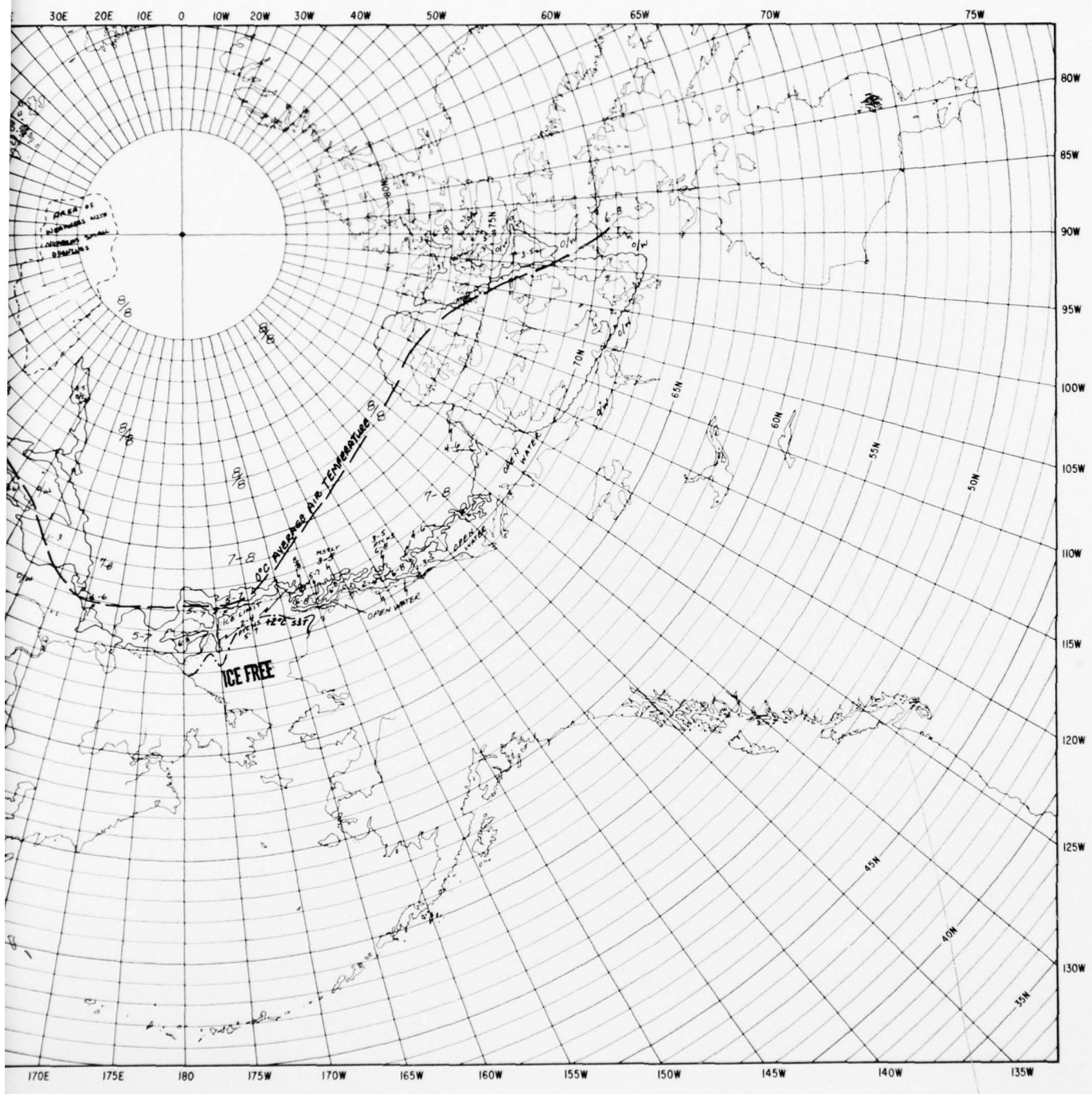


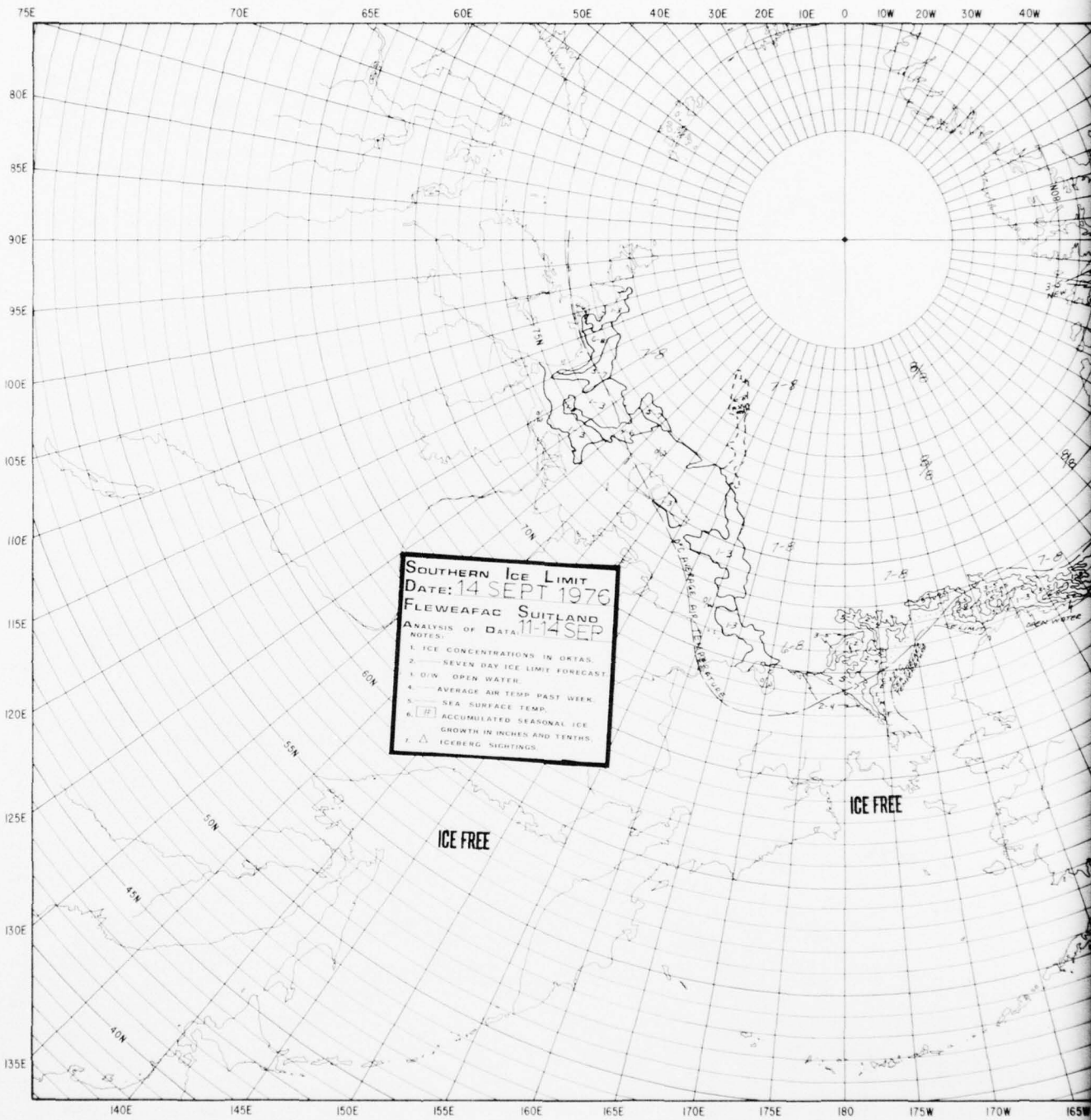
SOUTHERN ICE LIMIT
 DATE: 07 SEP 1976
 FLEWEAFAC SUITLAND 04 07 SEP

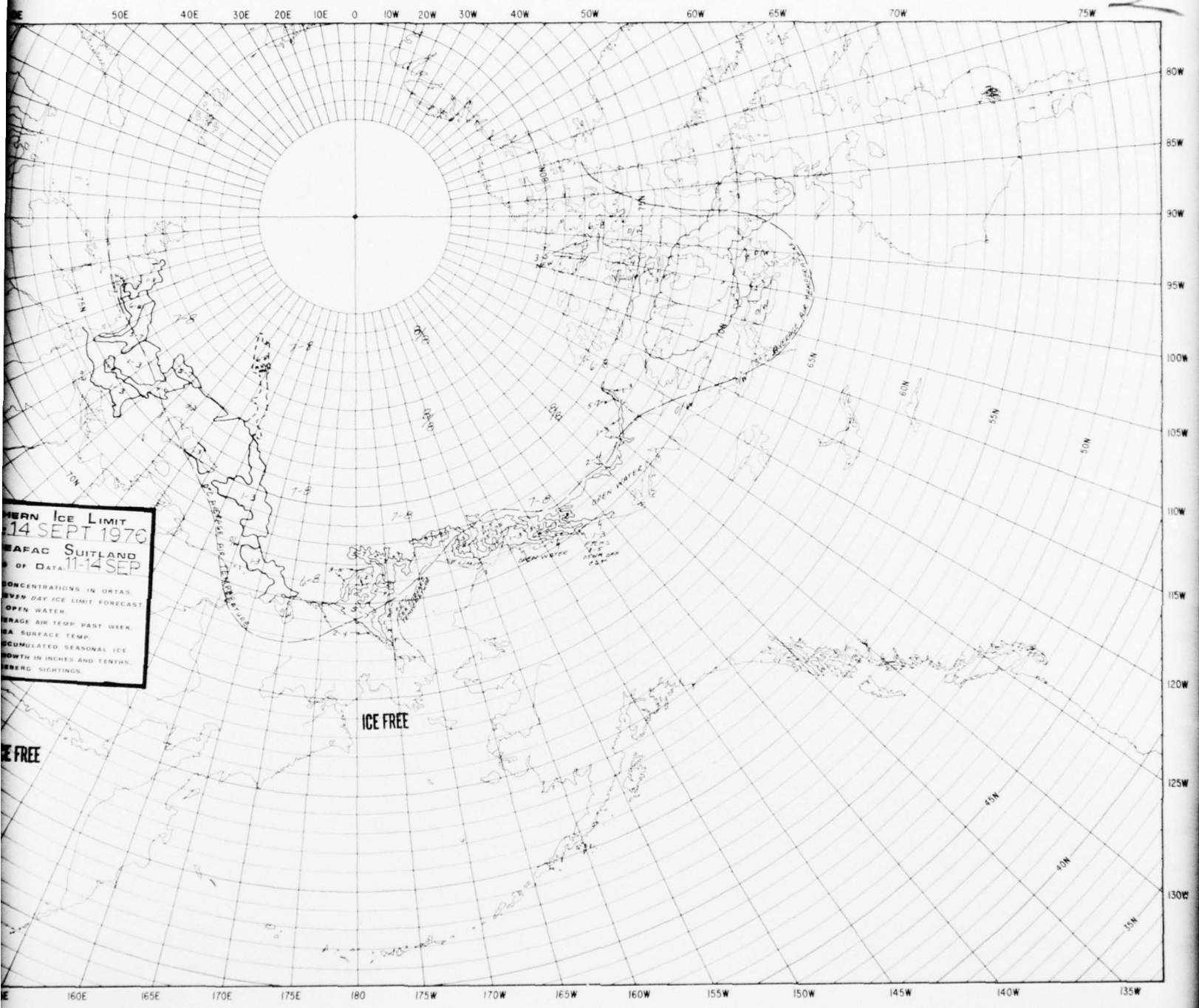
ANALYSIS OF DATA
 NOTES:

1. ICE CONCENTRATIONS IN OCTAS.
2. SEVEN DAY ICE LIMIT FORECAST.
3. OW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. [] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
7. Δ ICEBERG SIGHTINGS.

2



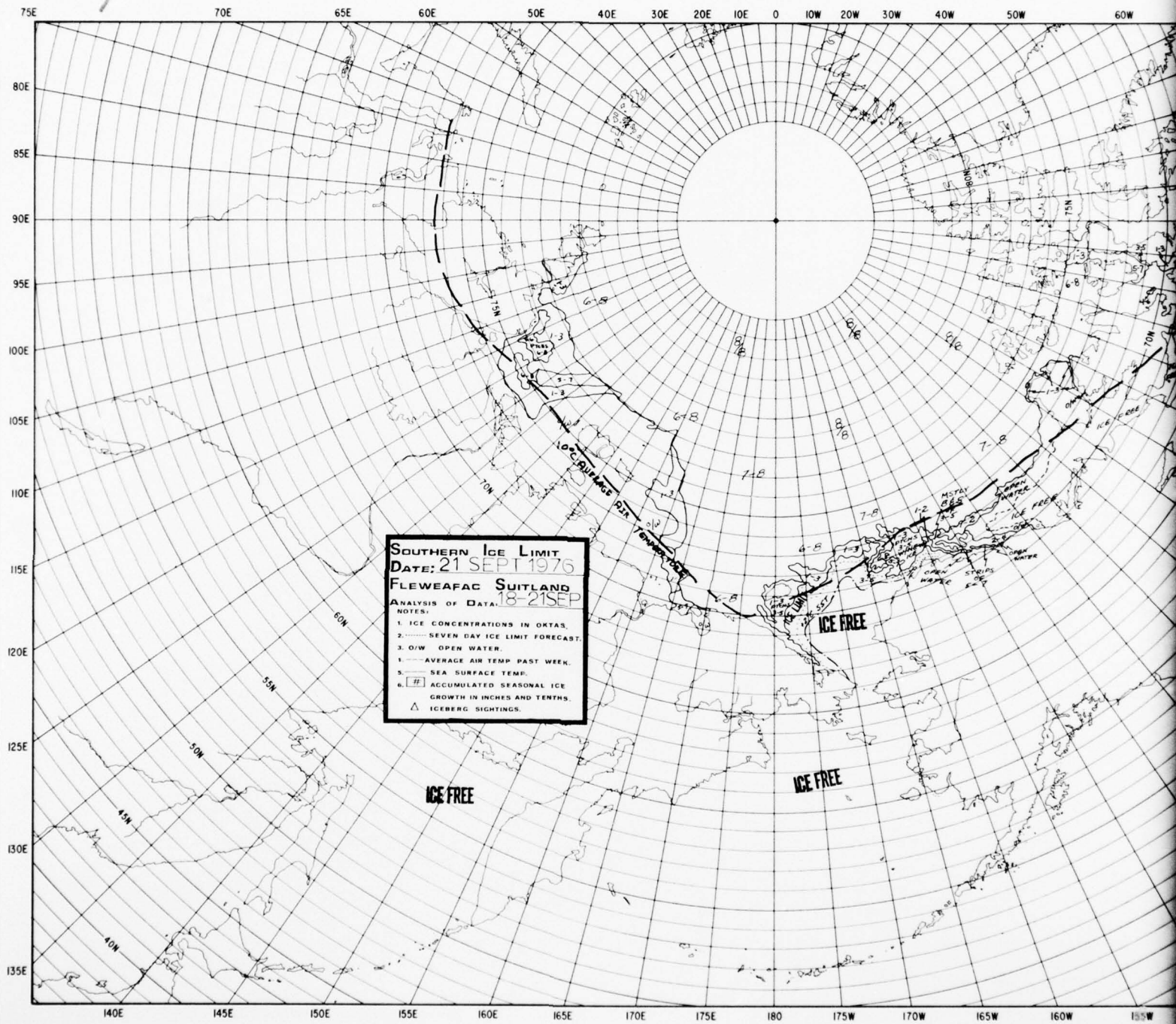




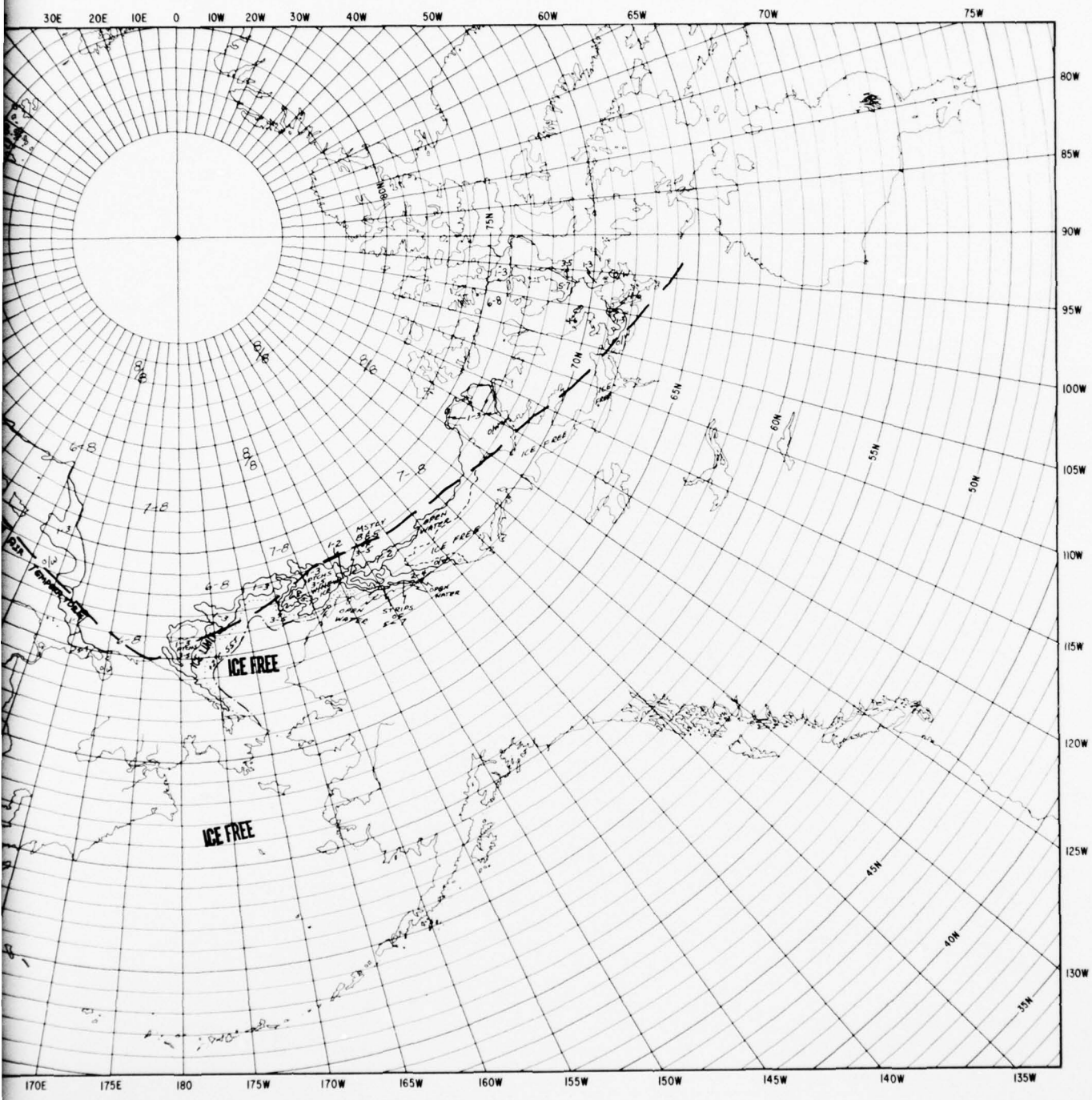
NORTHERN ICE LIMIT
14 SEPT 1970
RAFAC SUITLAND
11-14 SEP
DATA
CONCENTRATIONS IN ORTAS
7-DAY ICE LIMIT FORECAST
OPEN WATER
AVERAGE AIR TEMP PAST WEEK
SEA SURFACE TEMP
ACCUMULATED SEASONAL ICE
GROWTH IN INCHES AND TENTHS
ICEBERG SIGHTINGS

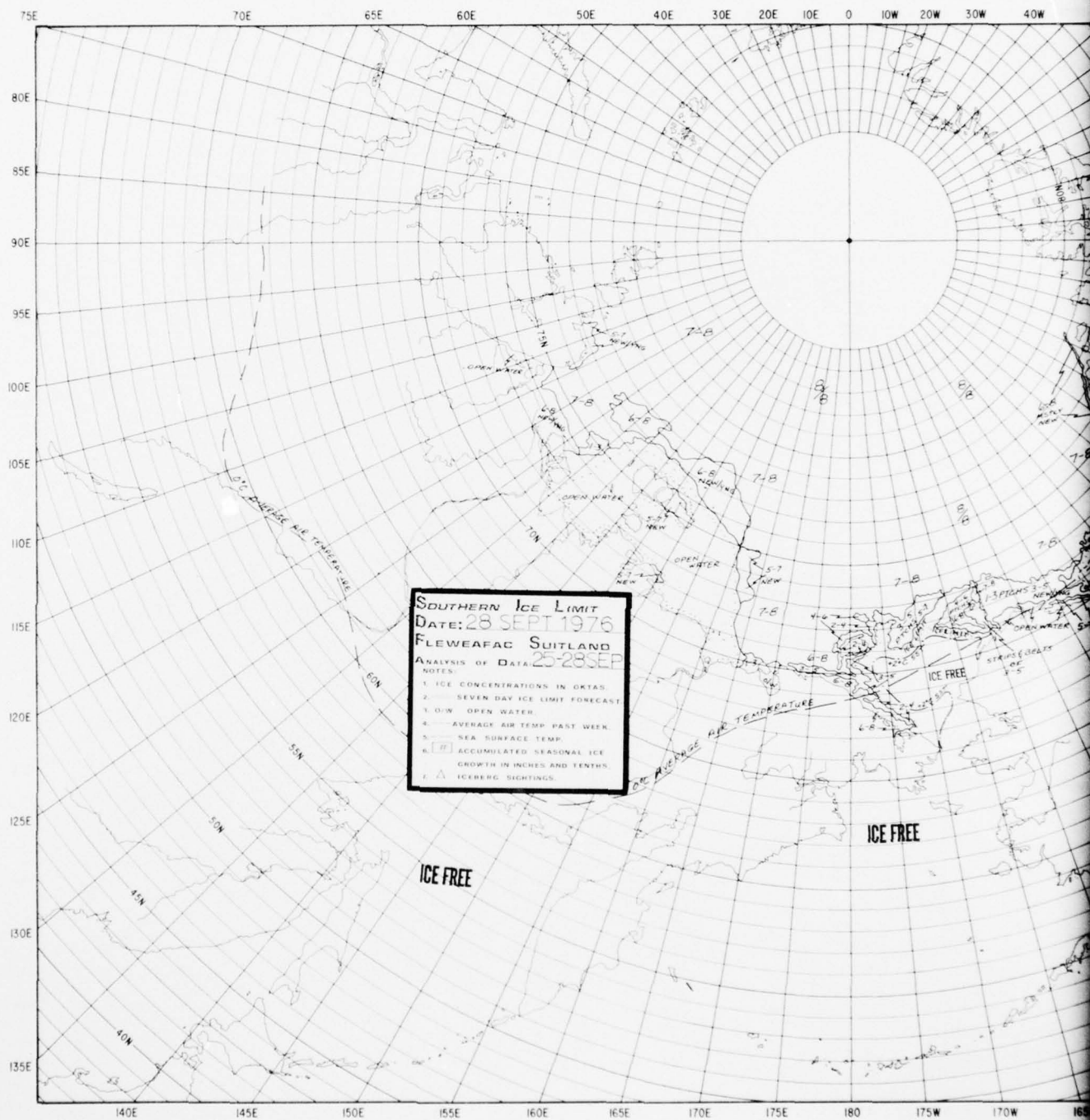
ICE FREE

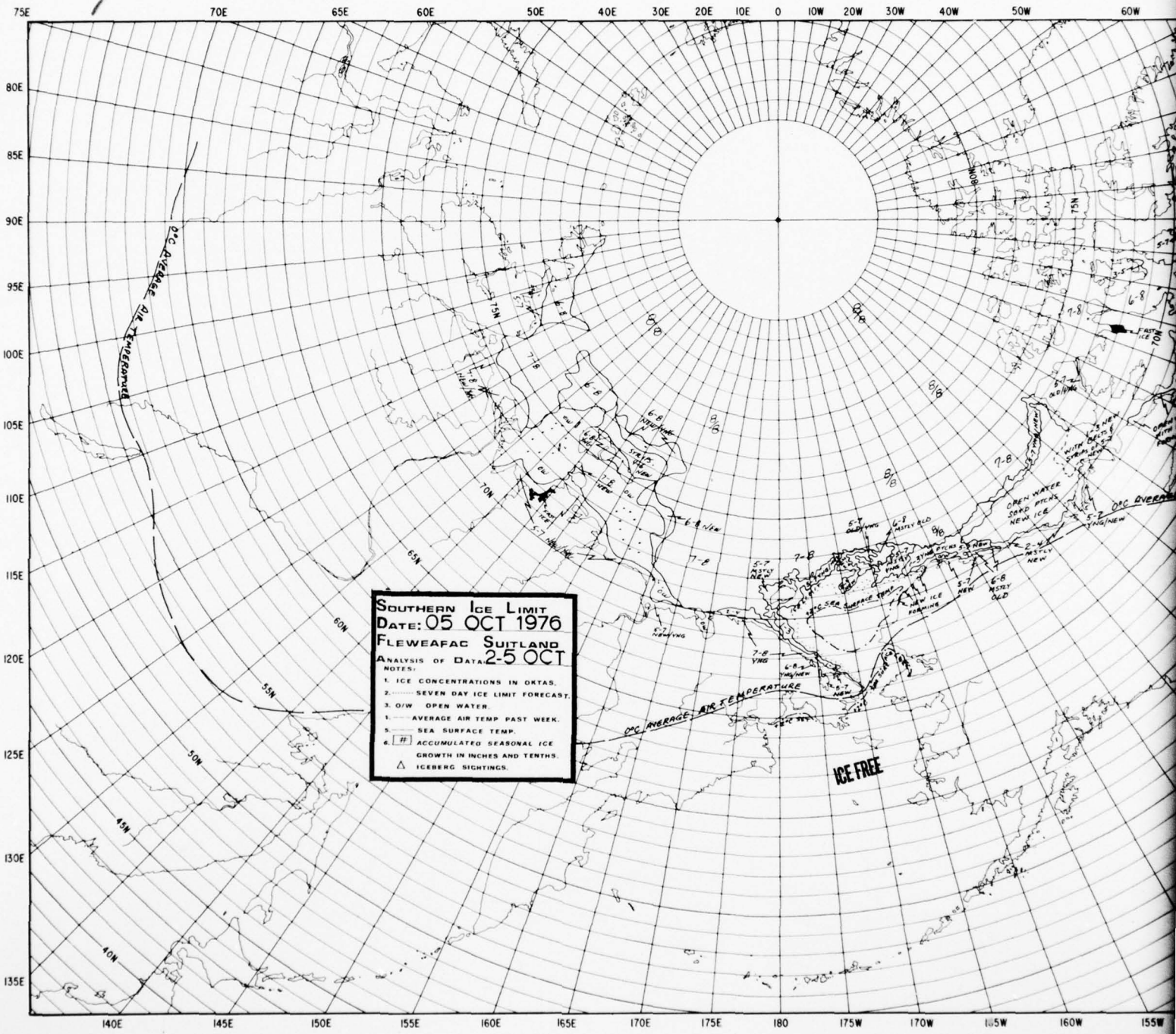
ICE FREE



2







SOUTHERN ICE LIMIT
DATE: 05 OCT 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 2-5 OCT

NOTES:
 1. ICE CONCENTRATIONS IN OKTAS.
 2. SEVEN DAY ICE LIMIT FORECAST.
 3. O/W OPEN WATER.
 4. AVERAGE AIR TEMP PAST WEEK.
 5. SEA SURFACE TEMP.
 6. # ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 △ ICEBERG SIGHTINGS.

ICE FREE

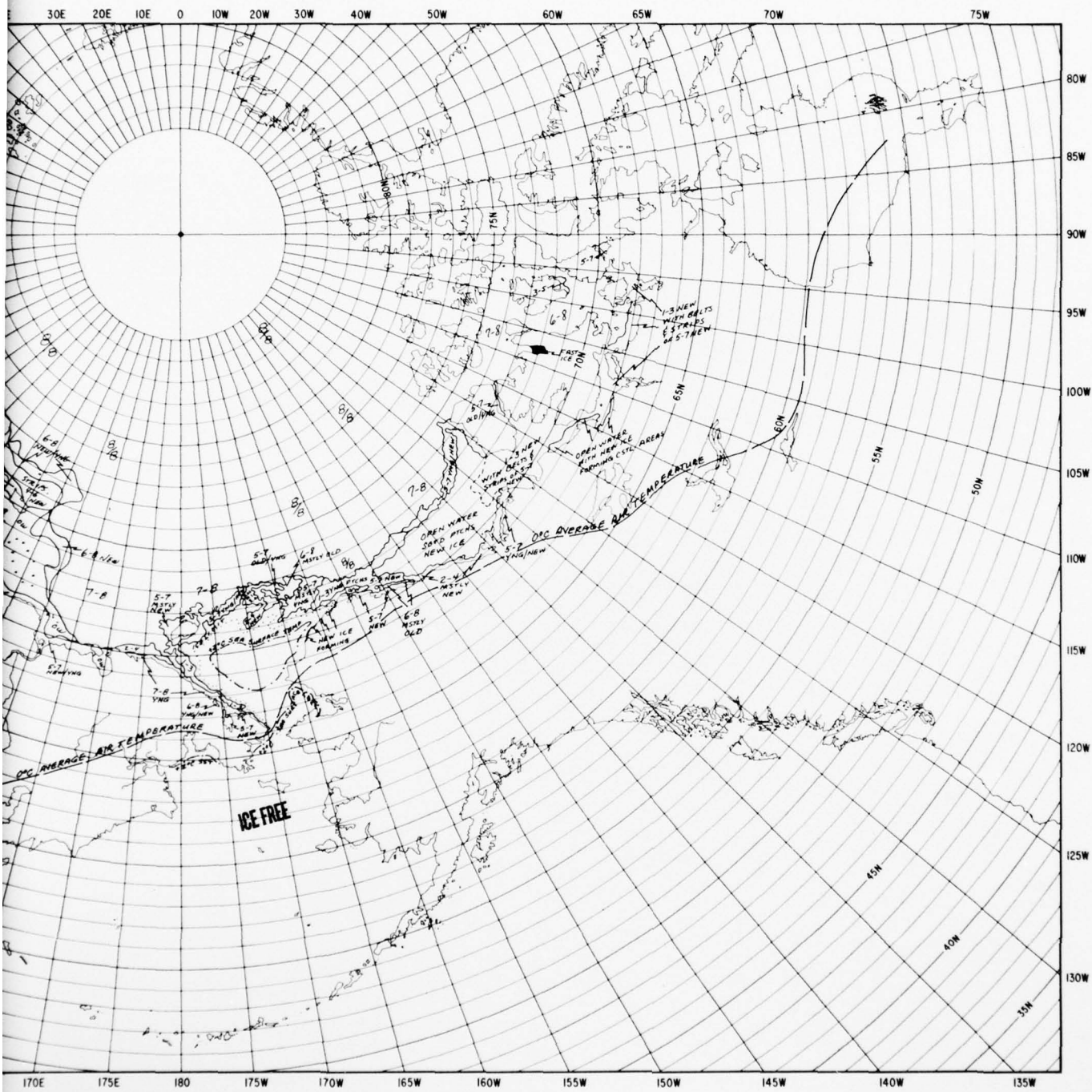
DPC AVERAGE AIR TEMPERATURE

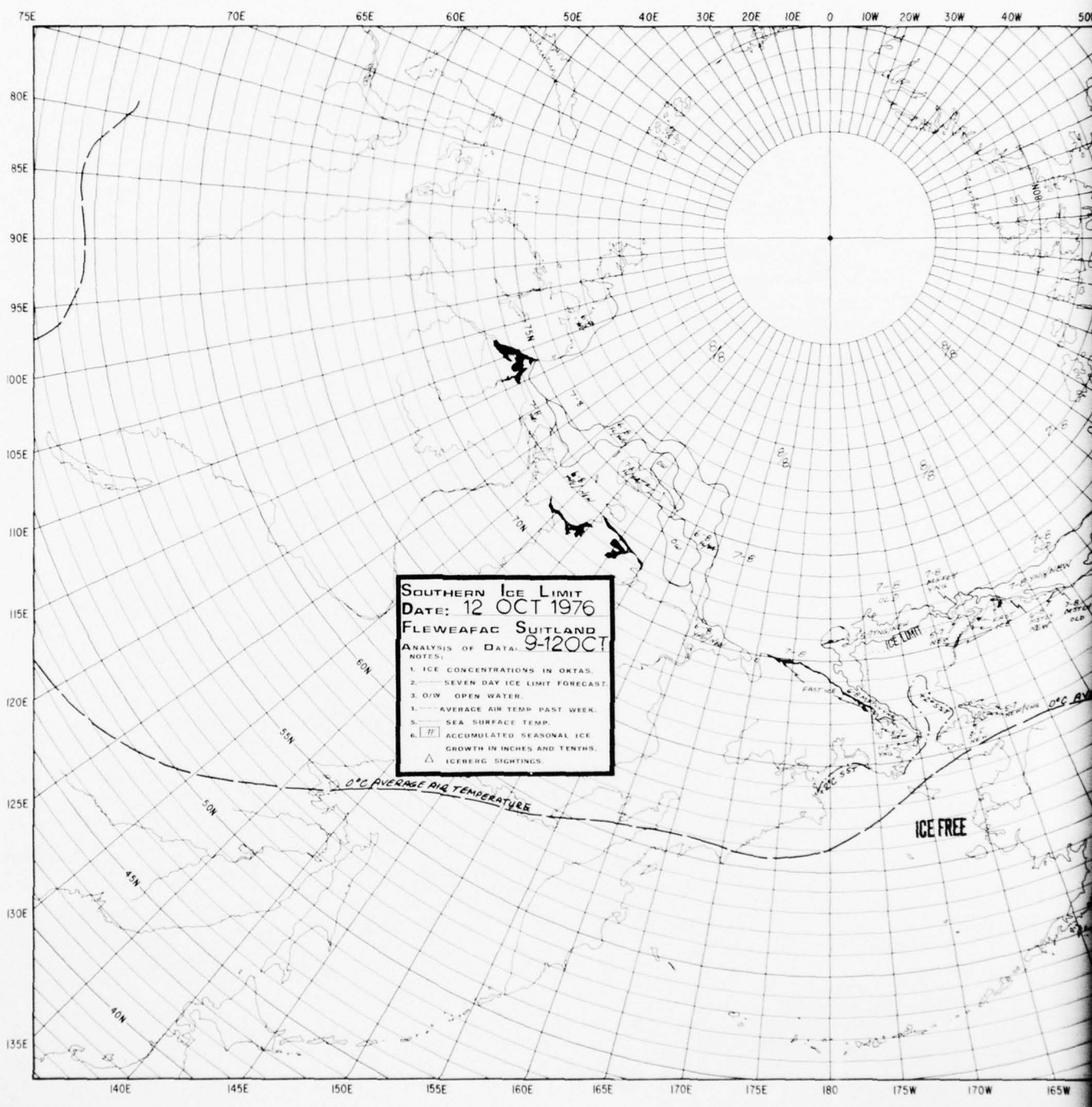
DPC AVERAGE AIR TEMPERATURE

OPEN WATER
 SAND ICE
 NEW ICE

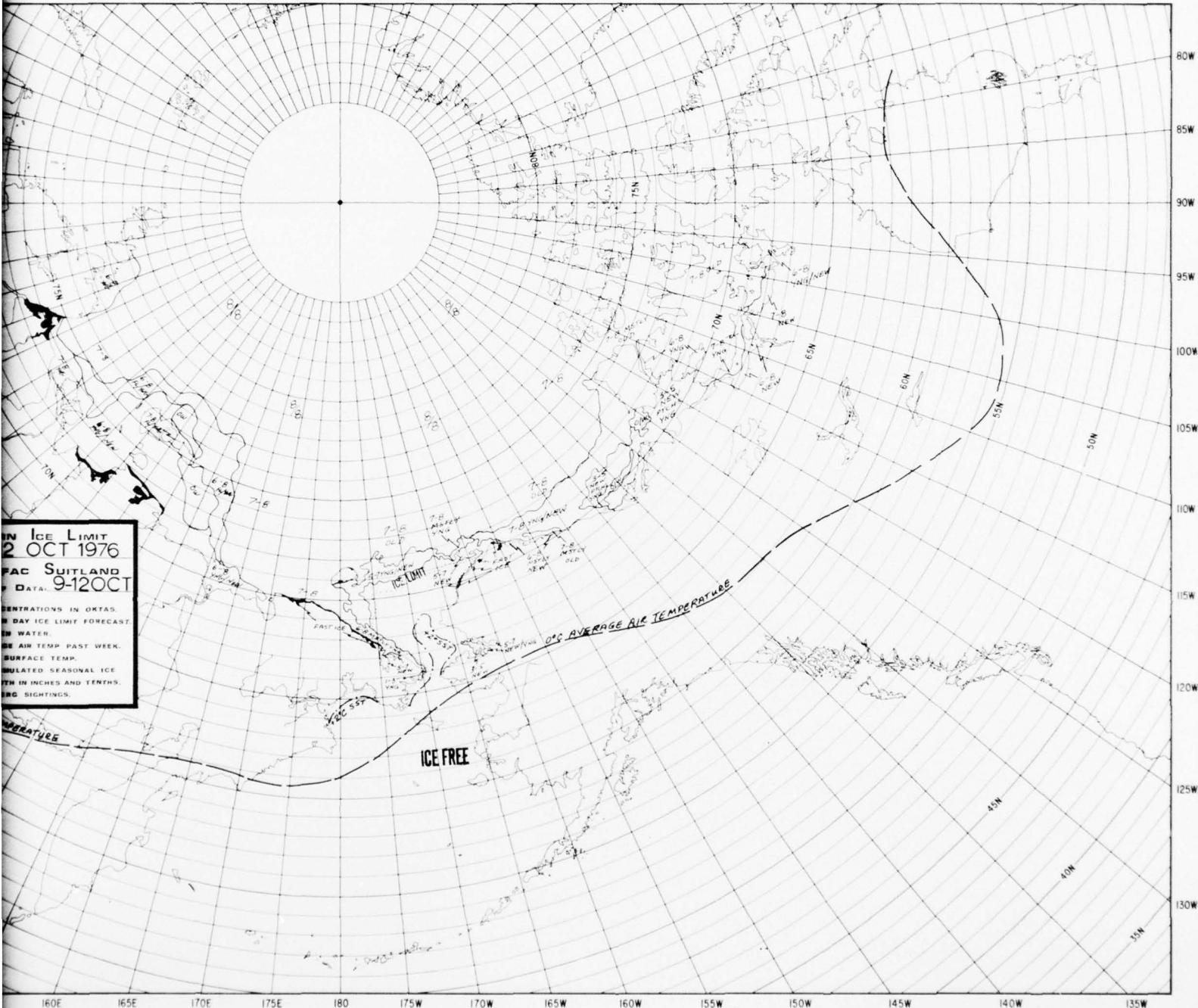
DPC OVER

2



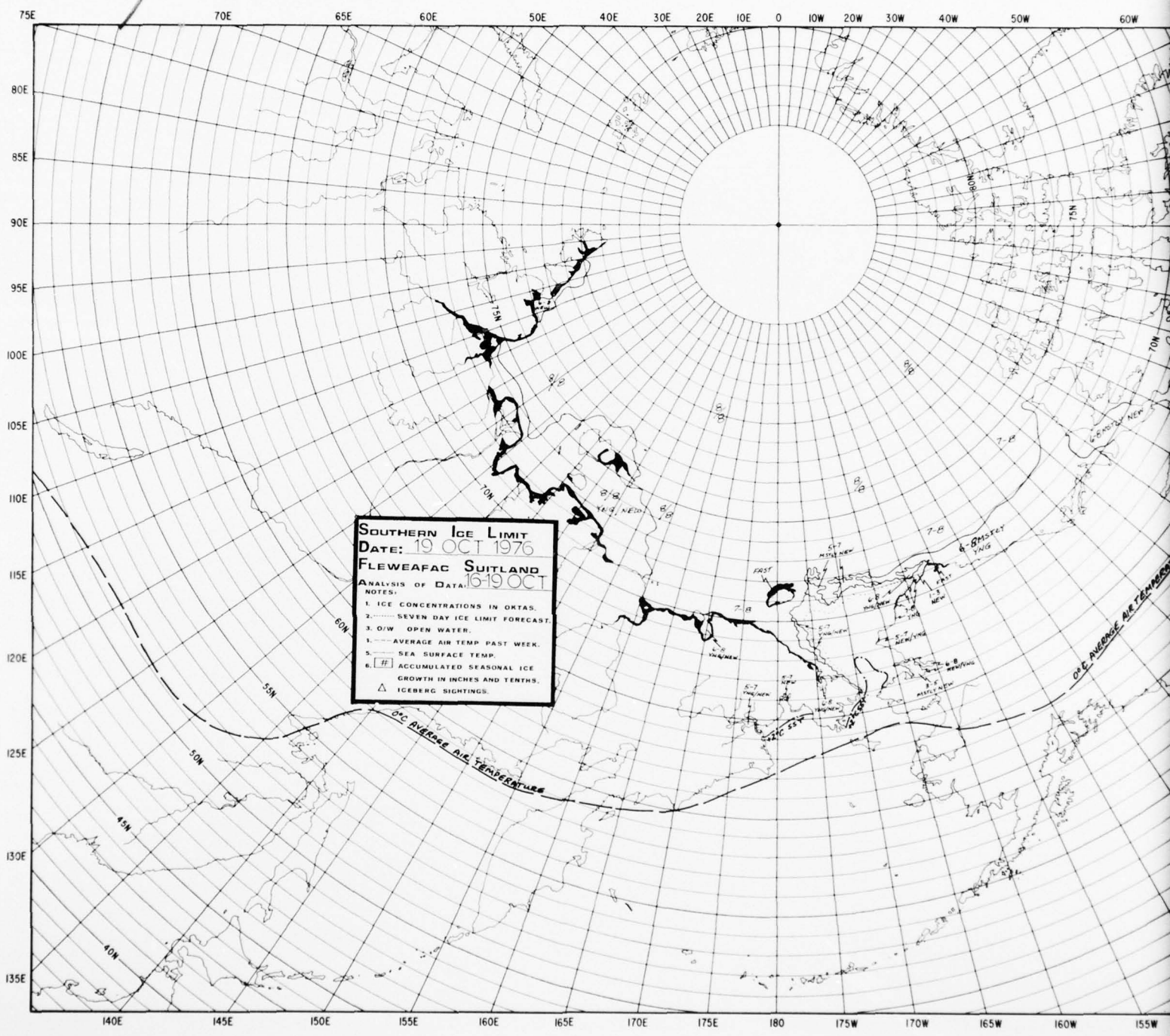


50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W



160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W

80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W

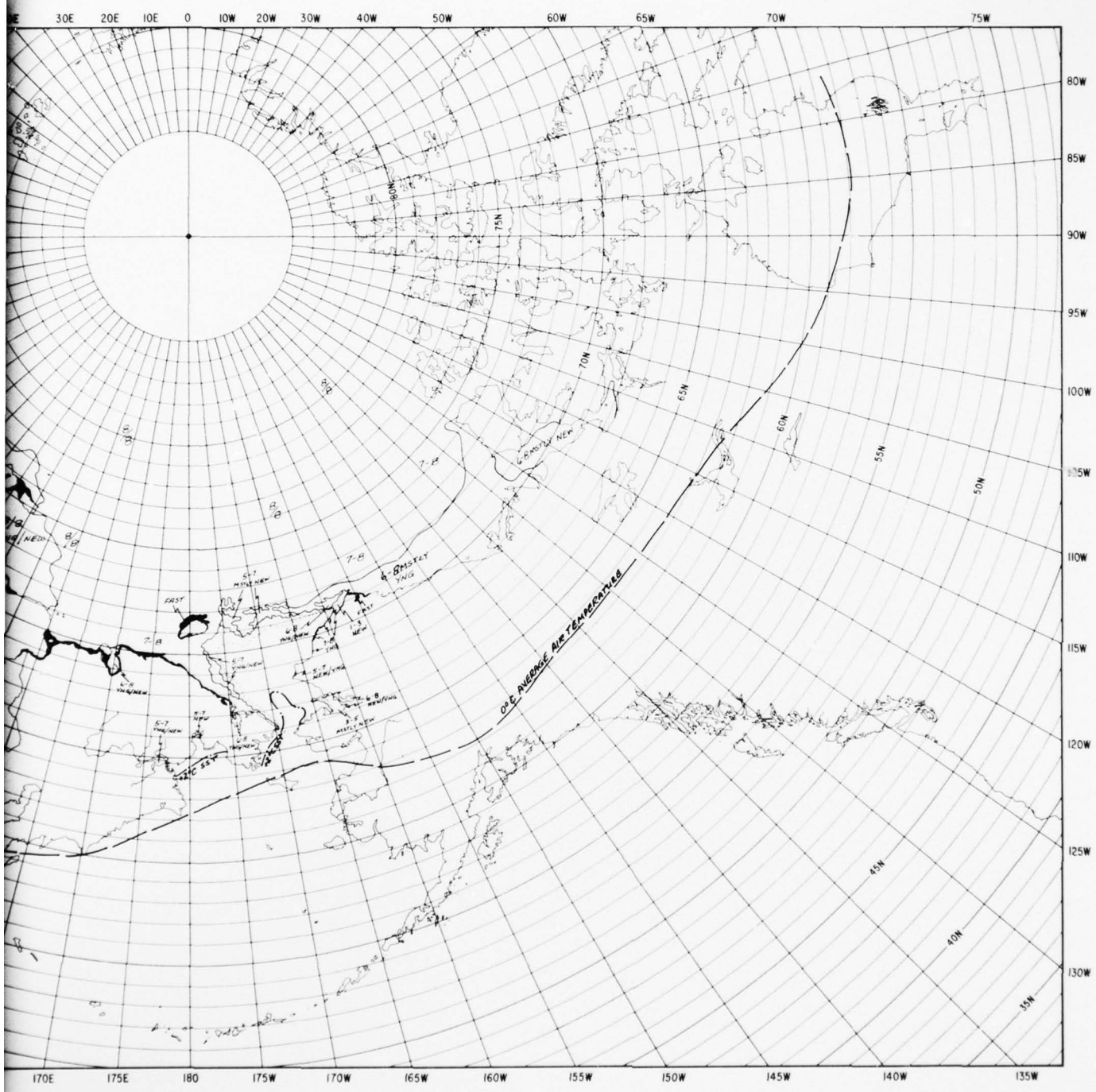


SOUTHERN ICE LIMIT
DATE: 19 OCT 1976
FLEWEAFAC SUITLAND
ANALYSIS OF DATA 16-19 OCT

NOTES:

1. ICE CONCENTRATIONS IN ORKAS.
2. SEVEN DAY ICE LIMIT FORECAST
3. OW OPEN WATER.
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. # ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
- △ ICEBERG SIGHTINGS.

2



AD-A043 353

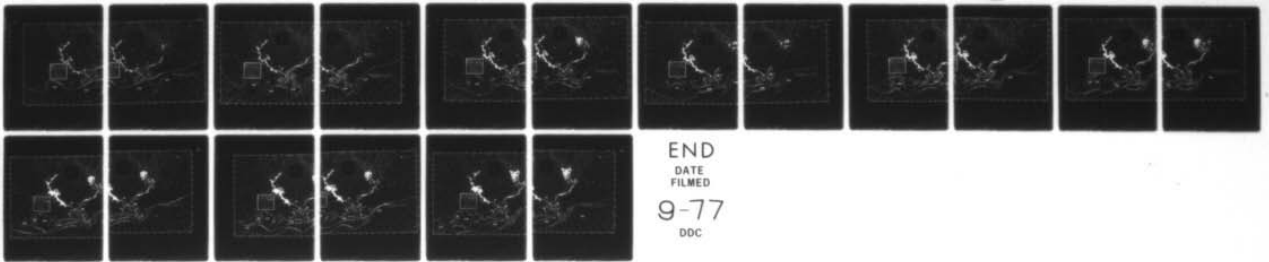
FLEET WEATHER FACILITY SUITLAND MD
EASTERN-WESTERN ARCTIC SEA ICE ANALYSES. (U)
1976

F/G 8/12

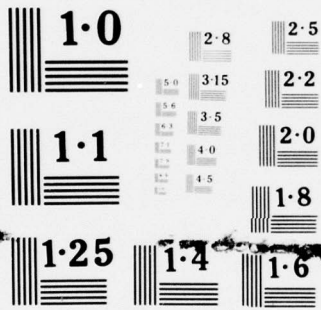
UNCLASSIFIED

NL

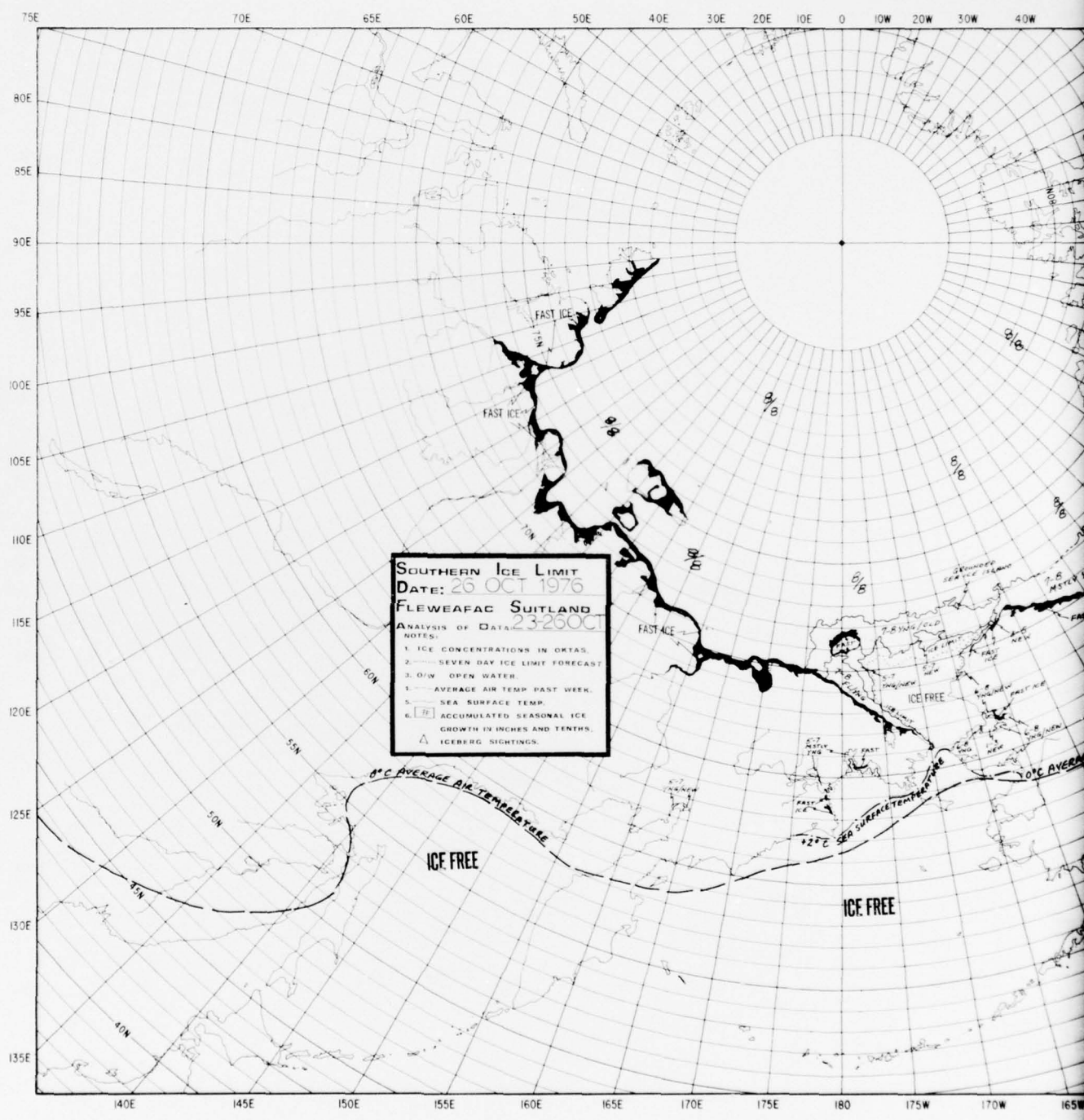
3 OF 3
ADA
043353



END
DATE
FILMED
9-77
DDC



NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART



SOUTHERN ICE LIMIT
DATE: 26 OCT 1976
FLEWEAFAC SUITLAND
23-260C

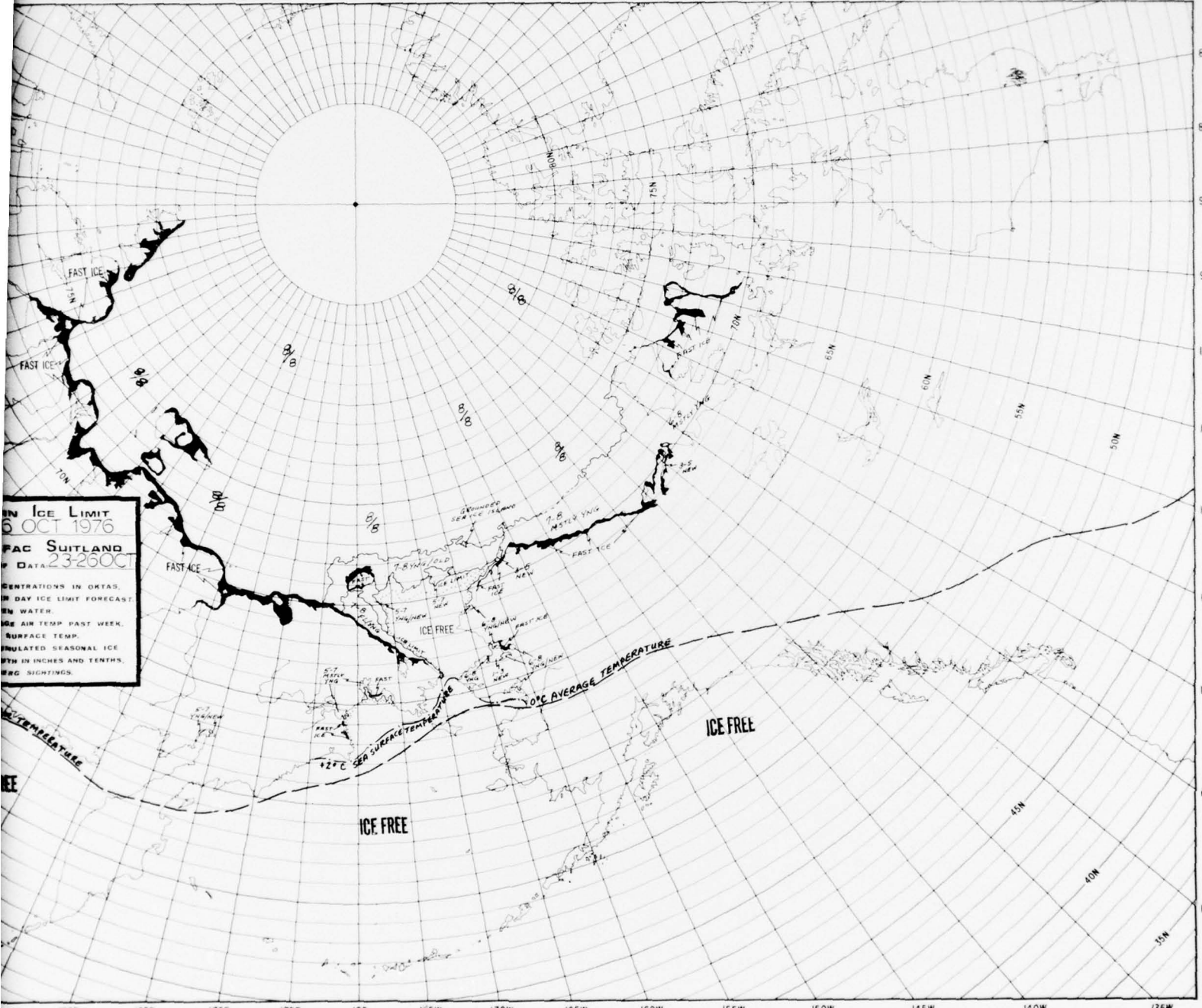
ANALYSIS OF DATA

NOTES:

1. ICE CONCENTRATIONS IN ORTAS.
2. SEVEN DAY ICE LIMIT FORECAST
3. O/W OPEN WATER
4. AVERAGE AIR TEMP PAST WEEK.
5. SEA SURFACE TEMP.
6. 72 ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
- △ ICEBERG SIGHTINGS.

50E 40E 30E 20E 10E 0 10W 20W 30W 40W 50W 60W 65W 70W 75W

80W
85W
90W
95W
100W
105W
110W
115W
120W
125W
130W



IN Ice Limit
6 OCT 1976
FAC SUTLAND
DATA 23-26 OCT

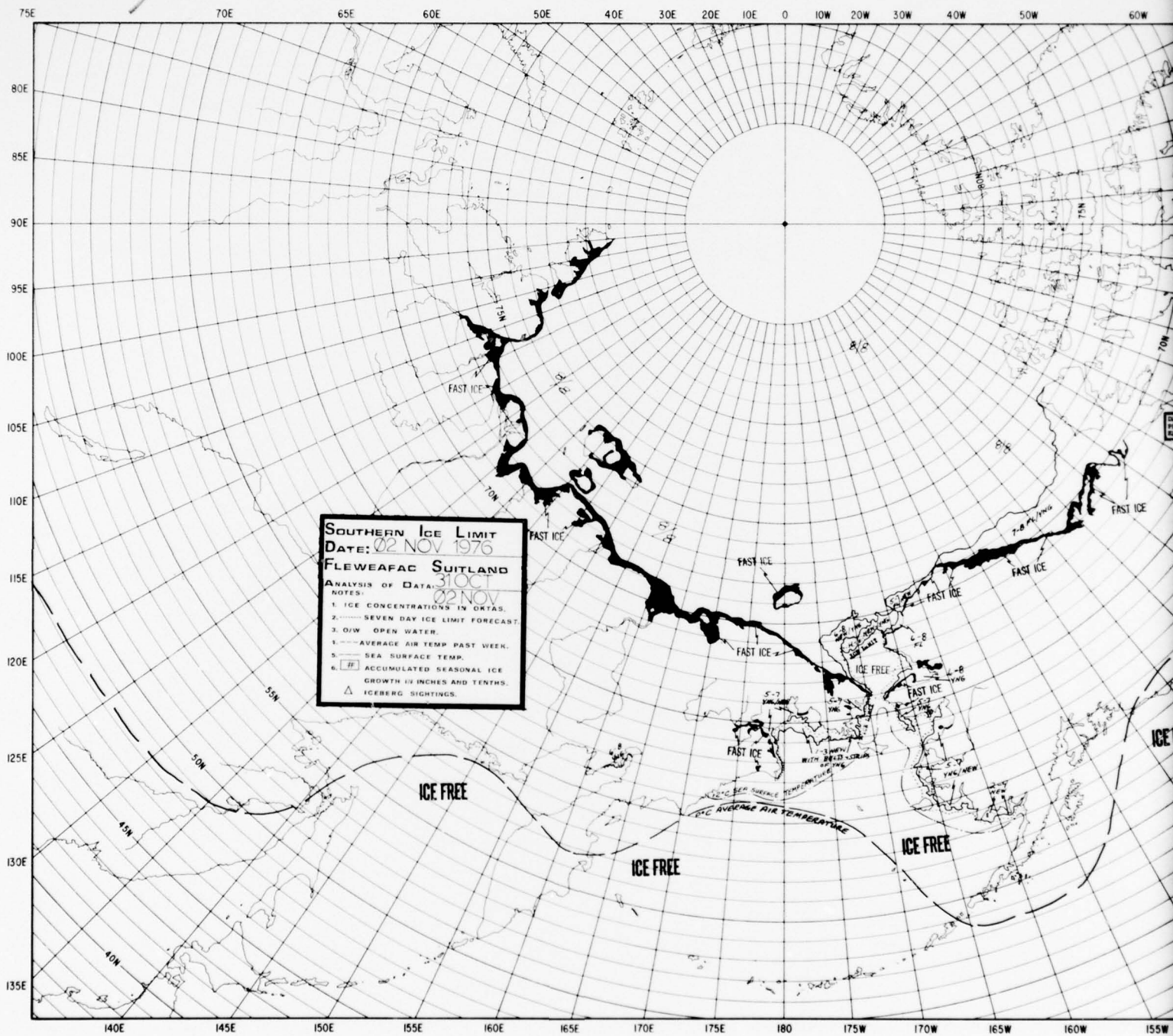
CONCENTRATIONS IN ORTAS.
 IN DAY ICE LIMIT FORECAST.
 IN WATER.
 ICE AIR TEMP PAST WEEK.
 SURFACE TEMP.
 INSULATED SEASONAL ICE
 BTH IN INCHES AND TENTHS.
 ERG SIGHTINGS.

ICE

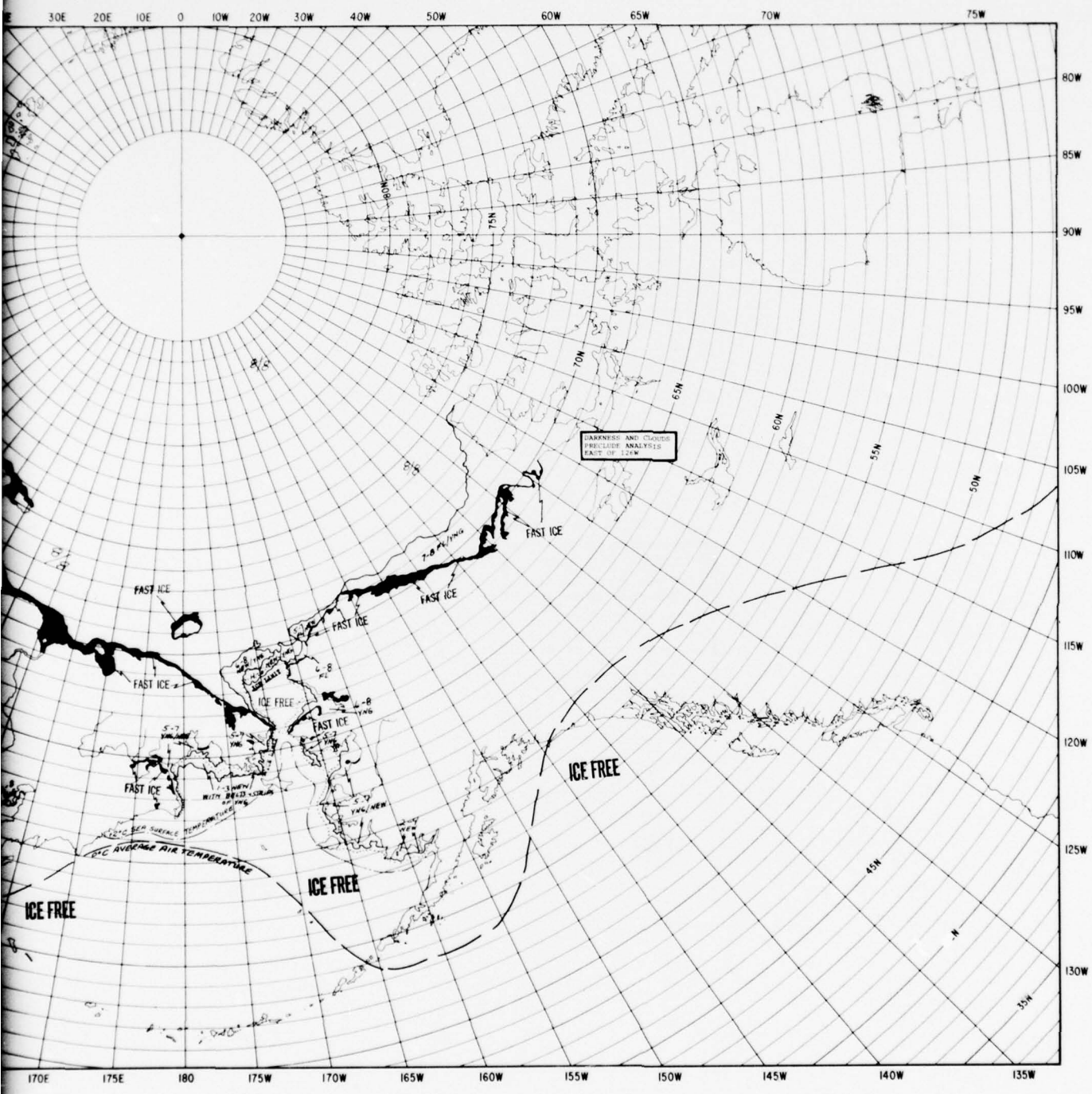
ICE FREE

ICE FREE

160E 165E 170E 175E 180 175W 170W 165W 160W 155W 150W 145W 140W 135W



2



DARKNESS AND CHASER
FREELIER ANALYSIS
EAST OF 120W

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

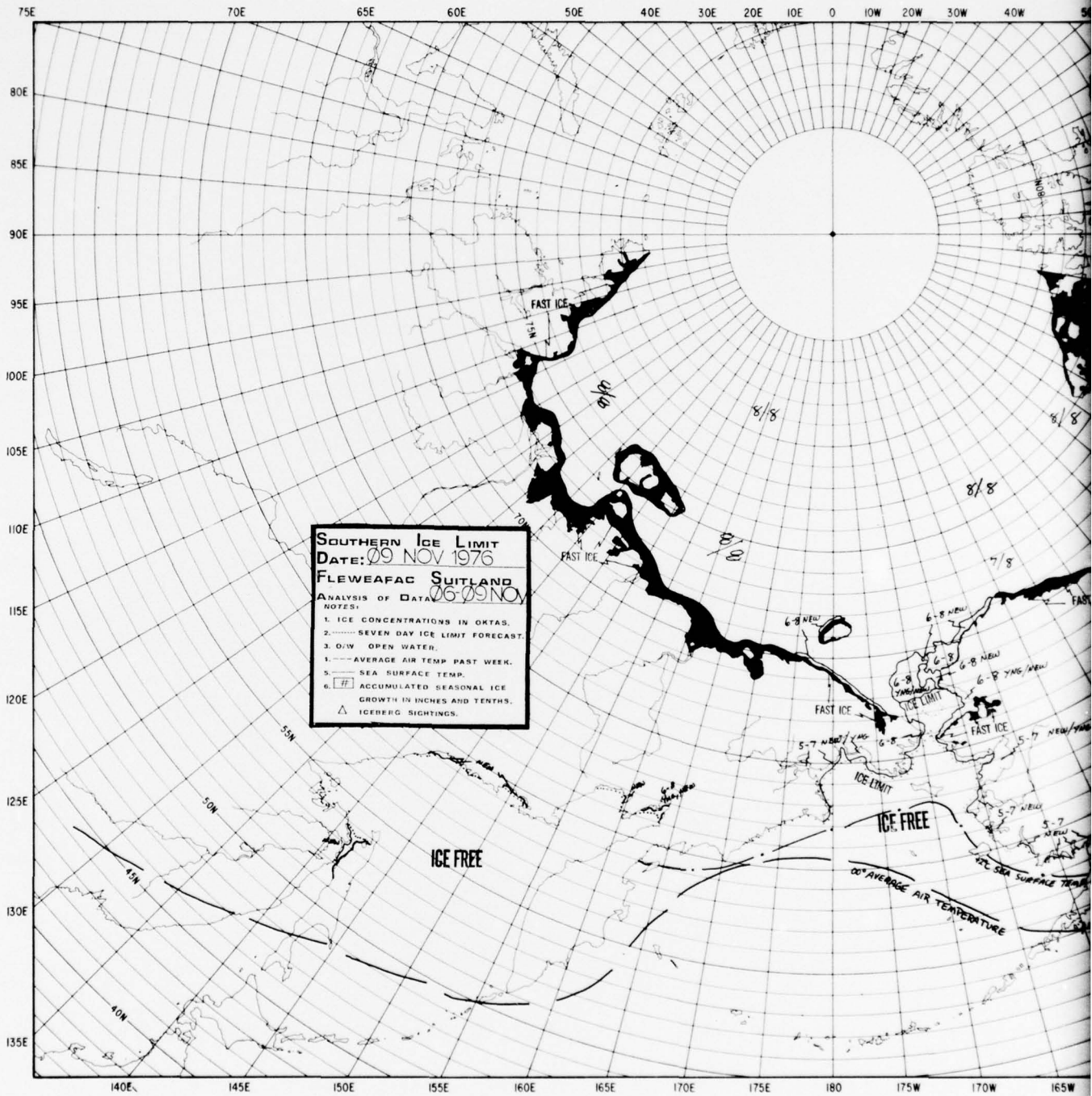
ICE FREE

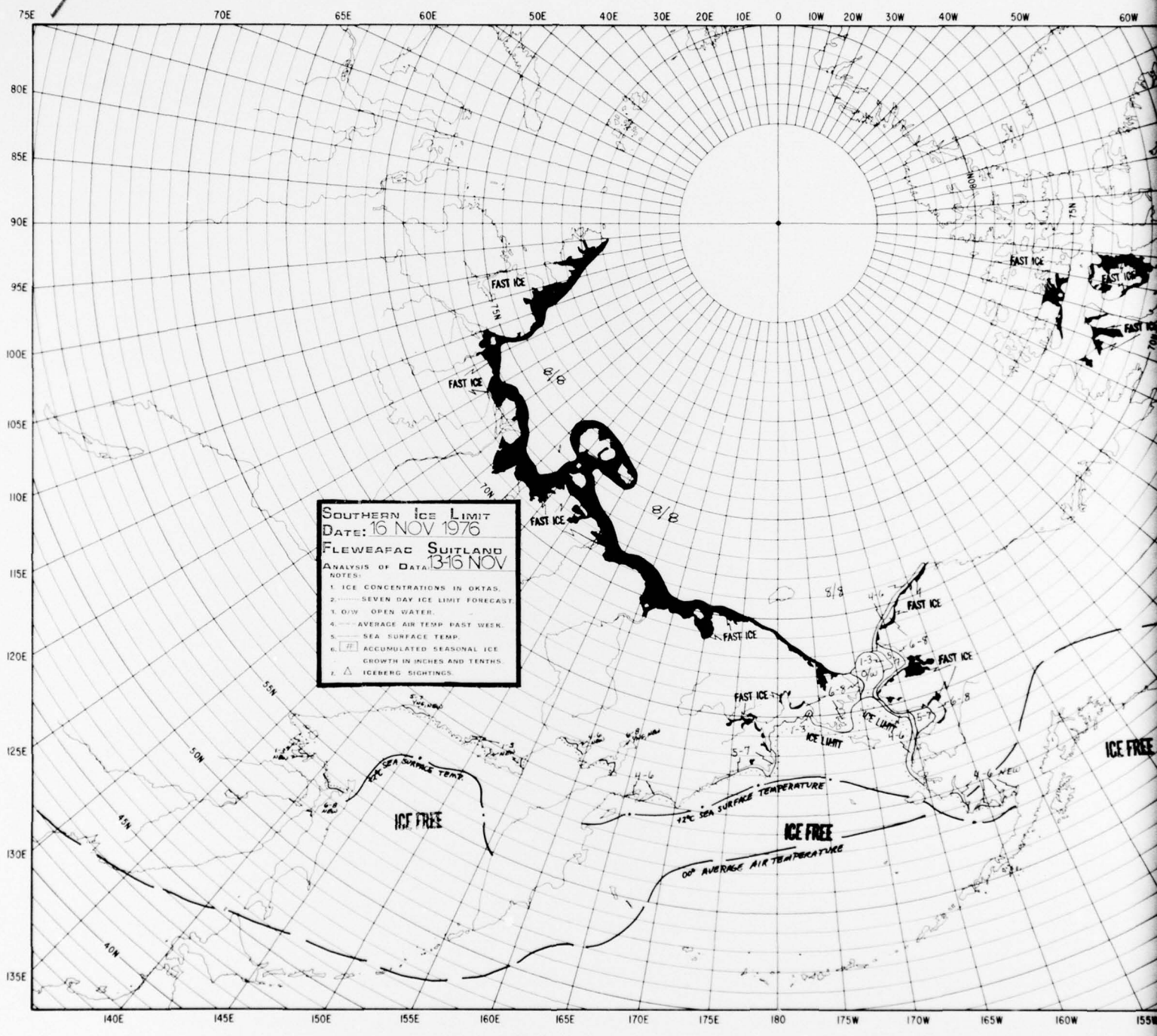
ICE FREE

ICE FREE

SEA SURFACE TEMPERATURE
WITH BRASS STATION
YAC, NEW

10°C AVERAGE AIR TEMPERATURE





FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

FAST ICE

ICE FREE

ICE FREE

ICE FREE

00° AVERAGE AIR TEMPERATURE

12°C SEA SURFACE TEMPERATURE

12°C SEA SURFACE TEMP

ICE LIMIT

ICE LIMIT

ICE LIMIT

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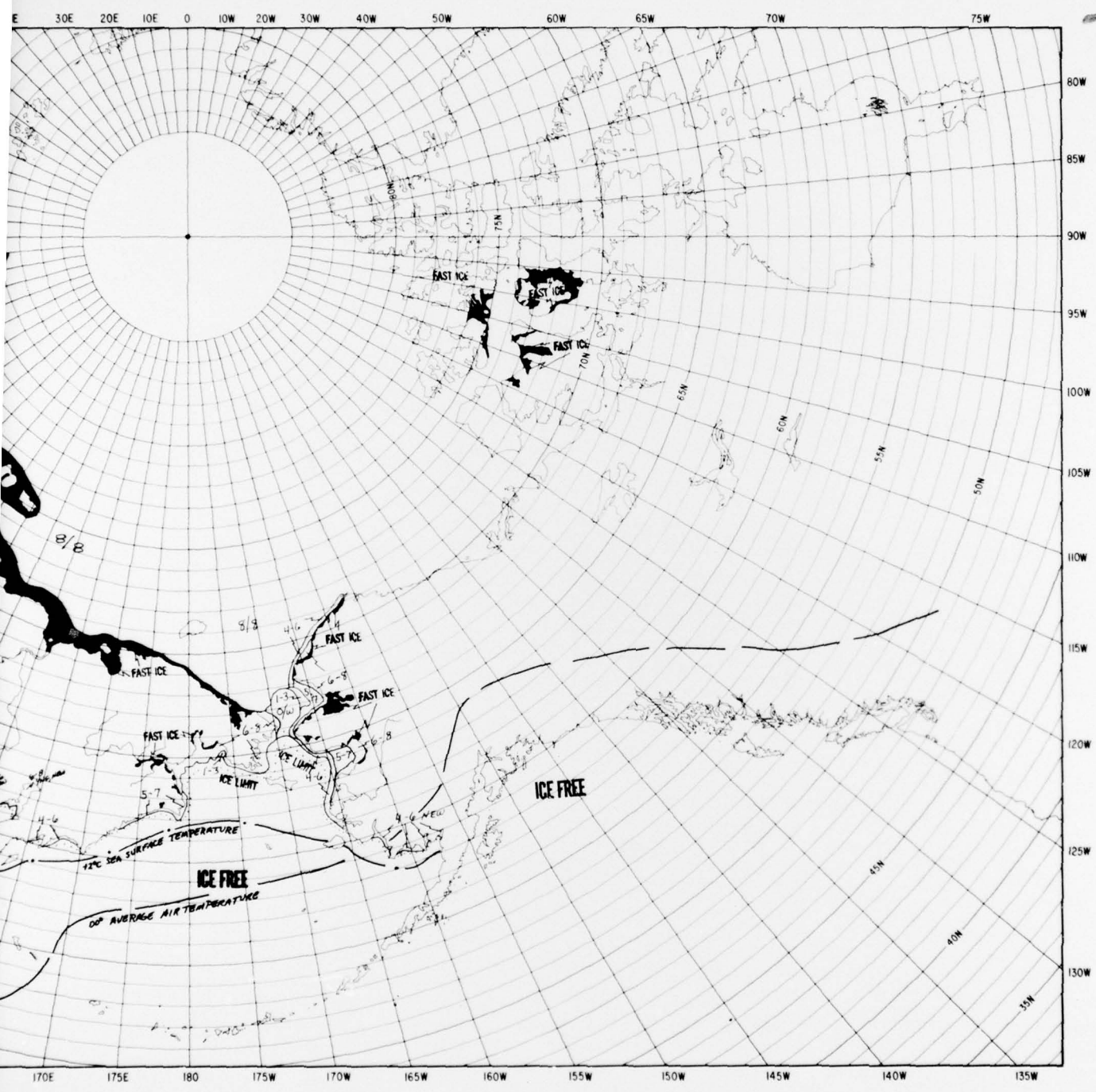
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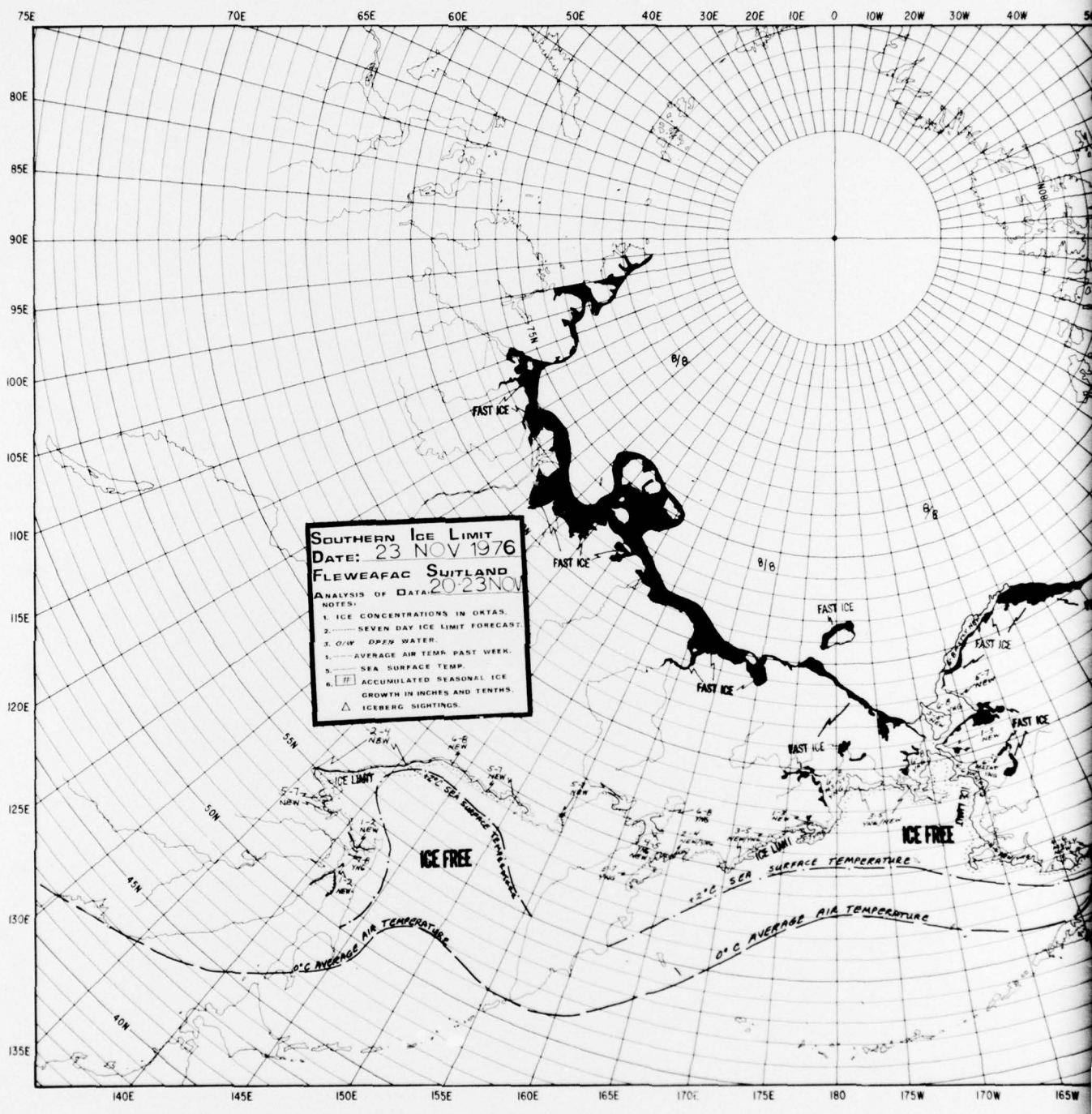
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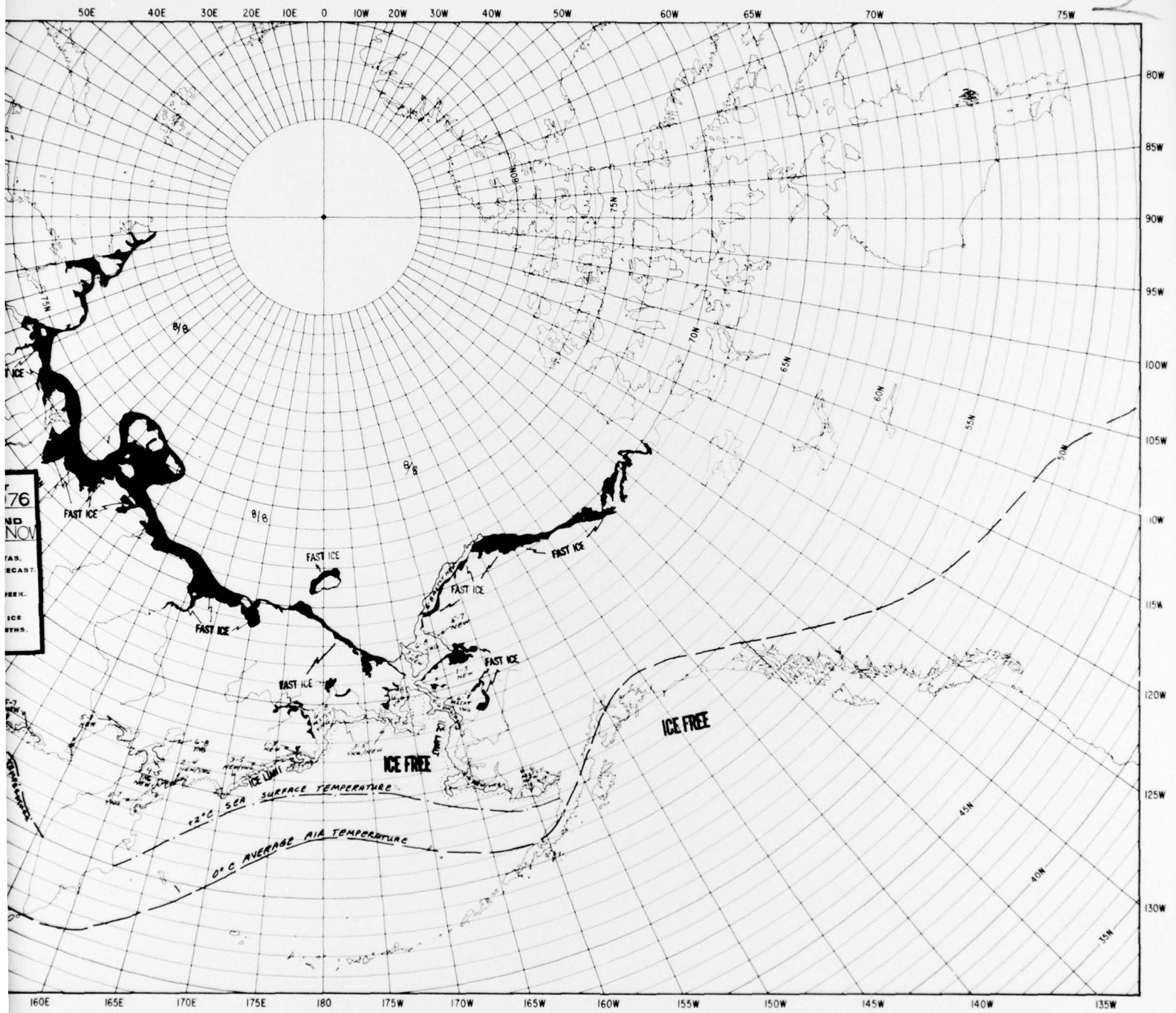
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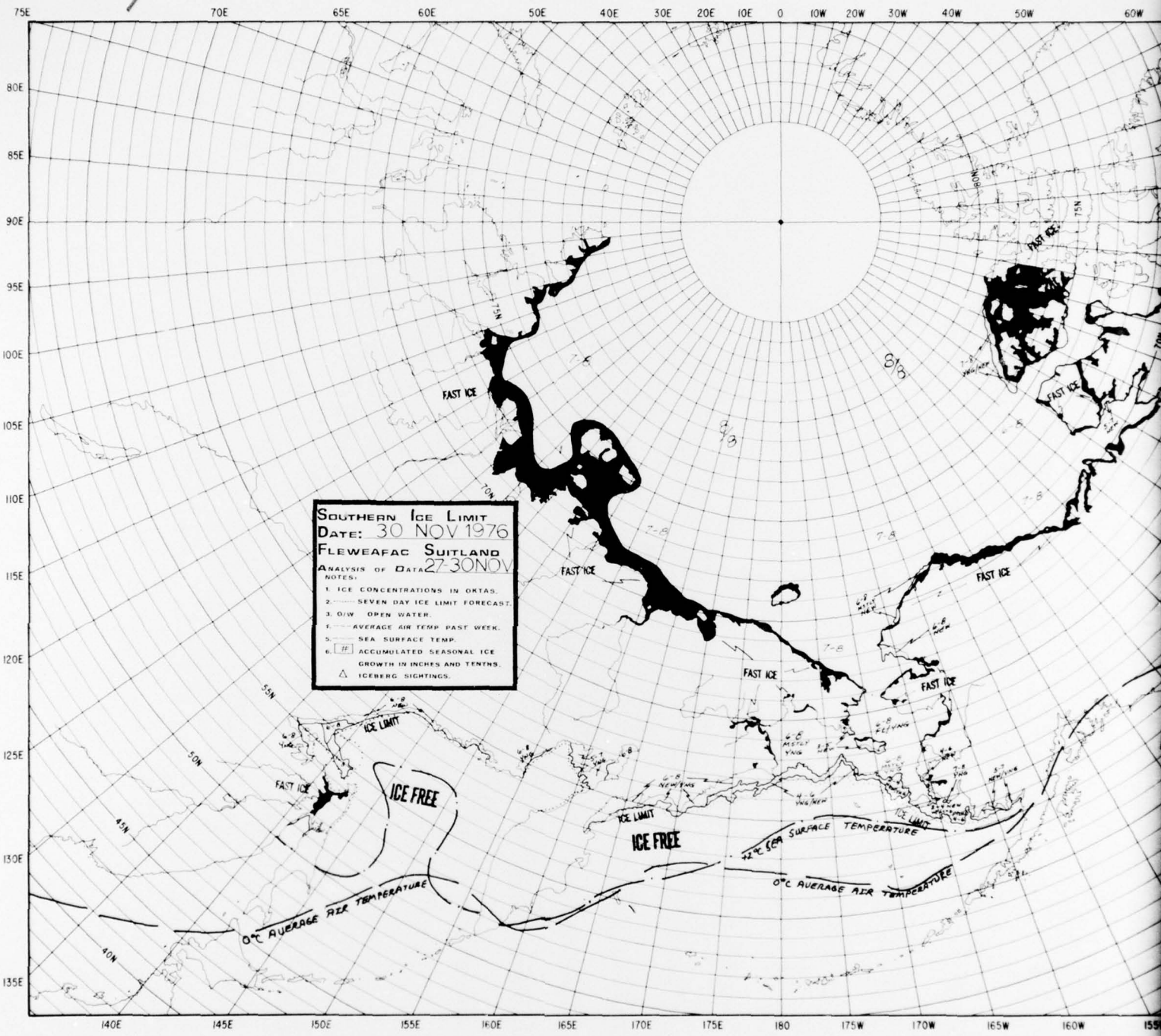
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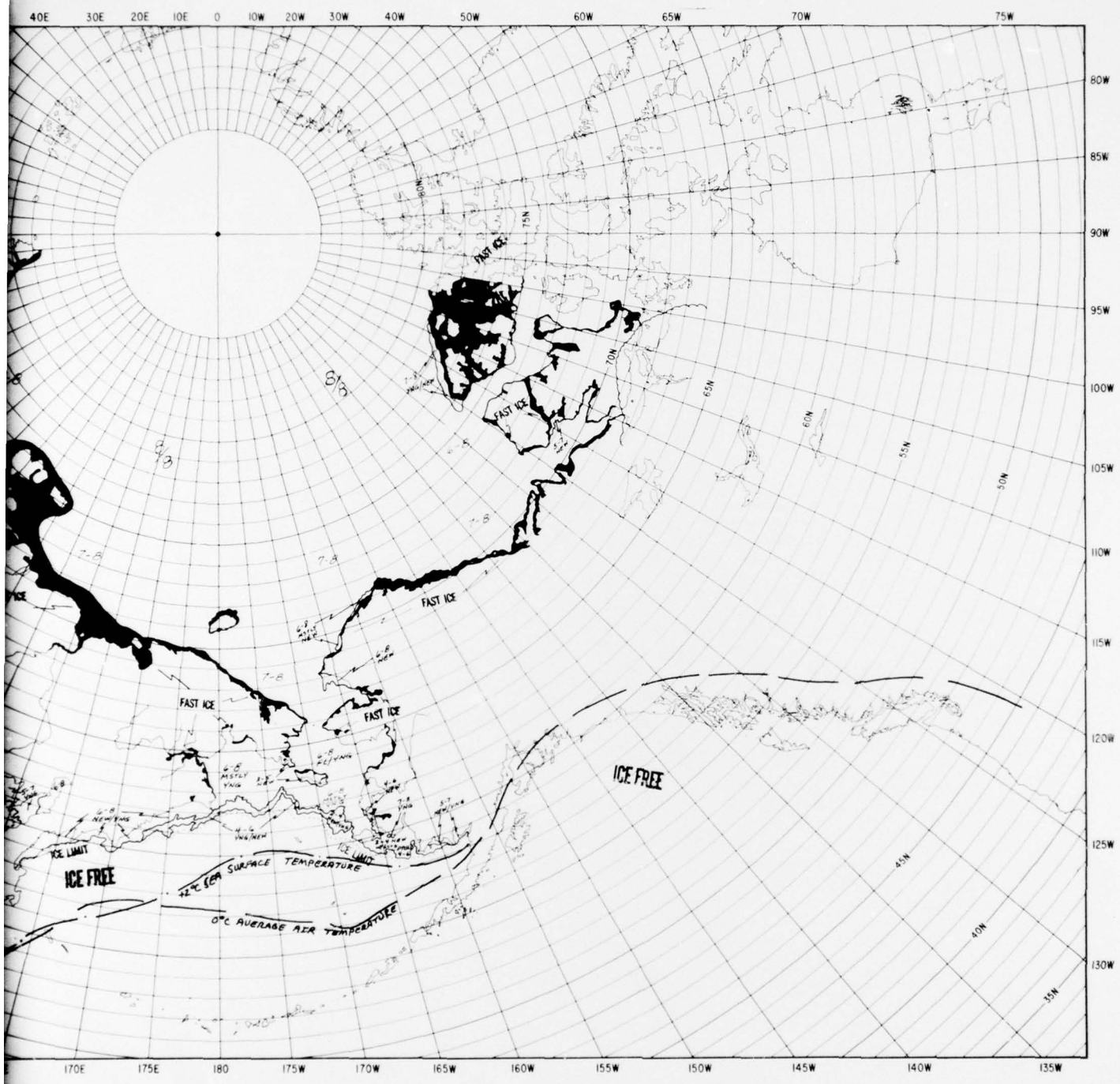
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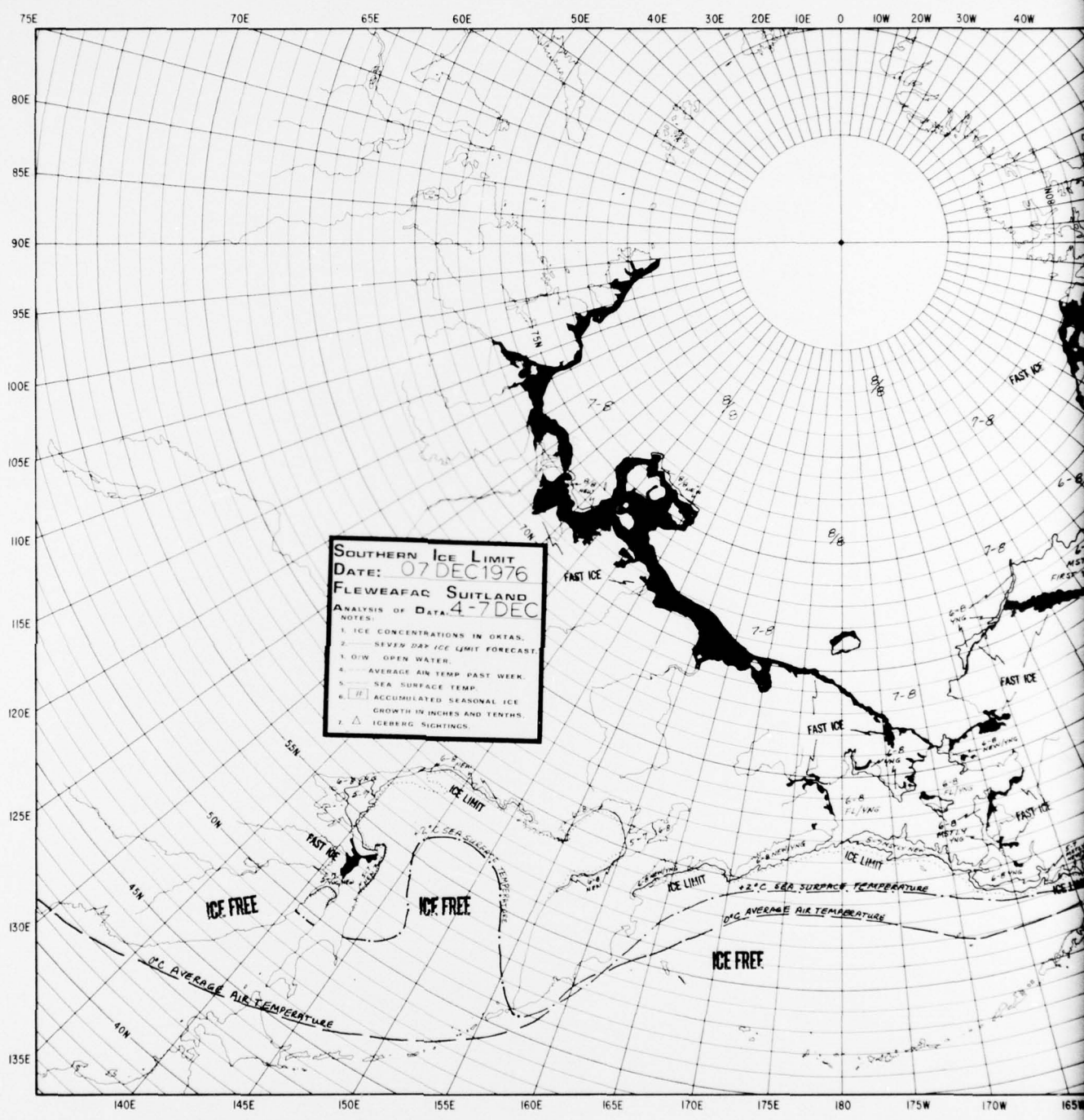


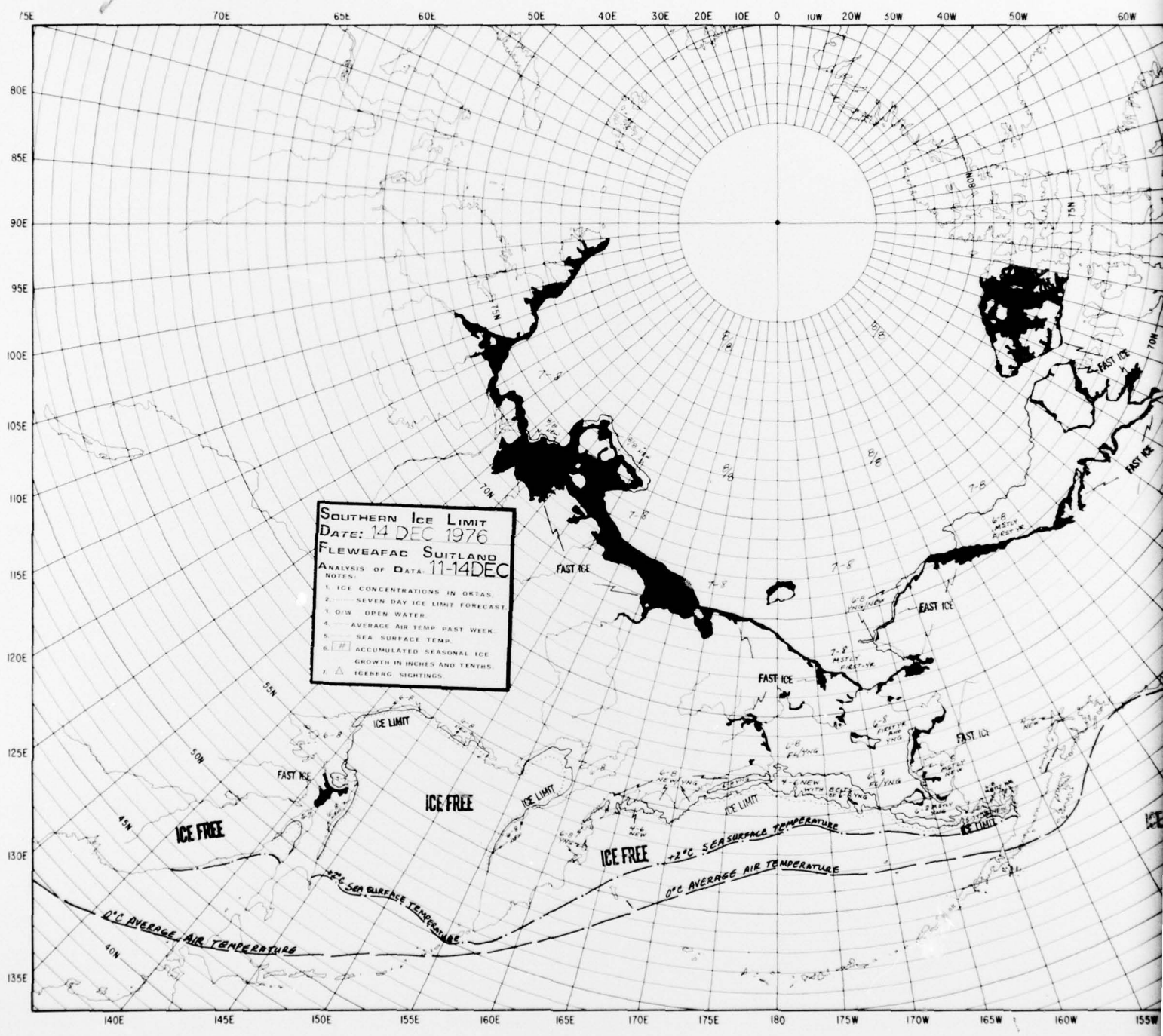












SOUTHERN ICE LIMIT
DATE: 14 DEC 1976
FLEWEAFAC SUITLAND
11-14 DEC
 ANALYSIS OF DATA
 NOTES:
 1. ICE CONCENTRATIONS IN OKTAS
 2. SEVEN DAY ICE LIMIT FORECAST
 3. O/W OPEN WATER
 4. AVERAGE AIR TEMP PAST WEEK
 5. SEA SURFACE TEMP.
 6. ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS
 7. ICEBERG SIGHTINGS

ICE FREE

ICE FREE

ICE FREE

+2°C SEA SURFACE TEMPERATURE
 0°C AVERAGE AIR TEMPERATURE

0°C AVERAGE AIR TEMPERATURE

0°C SEA SURFACE TEMPERATURE

ICE LIMIT

ICE LIMIT

ICE LIMIT

ICE LIMIT

FAST ICE

FAST ICE

FAST ICE

FAST ICE

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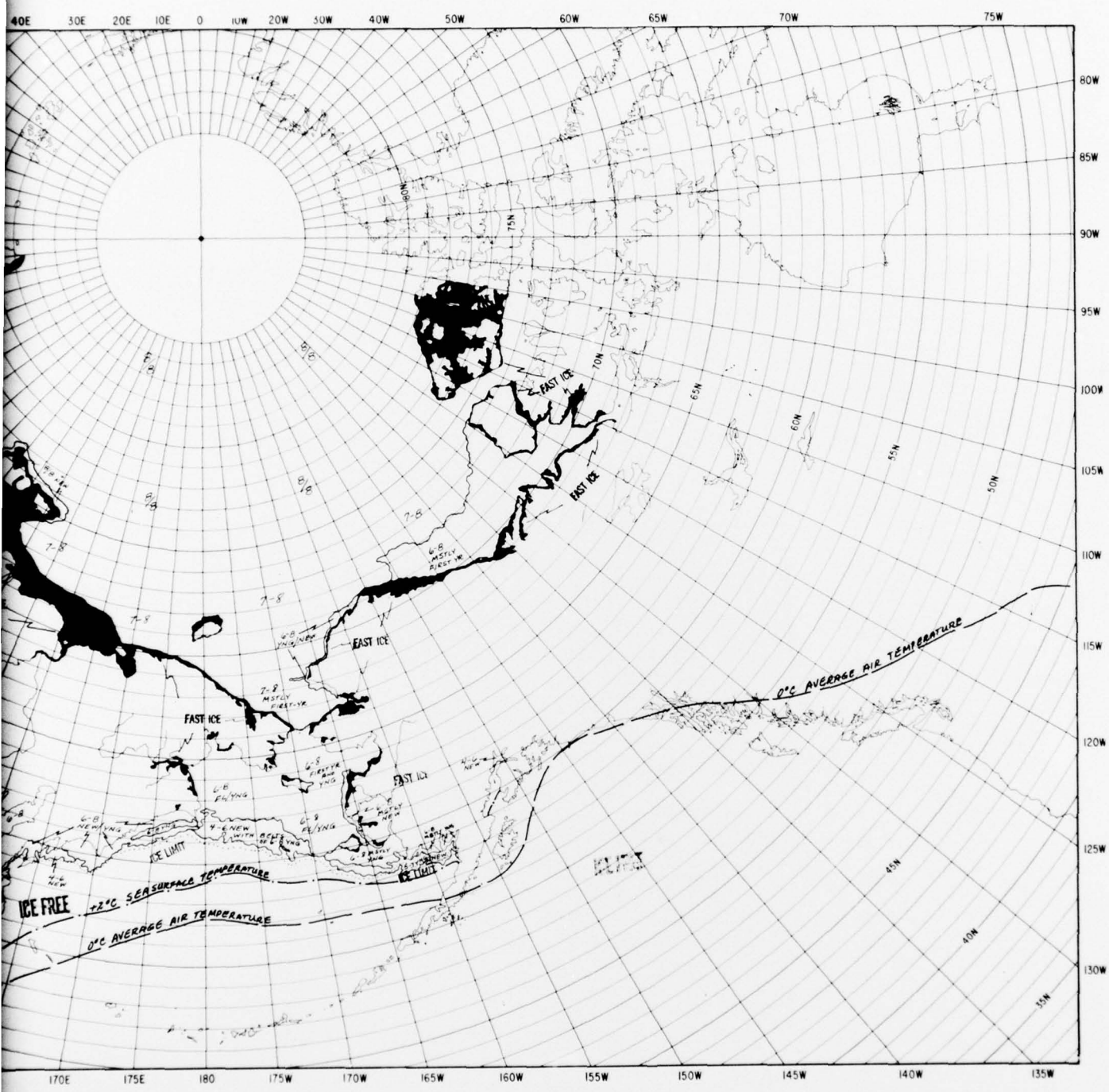
FAST ICE

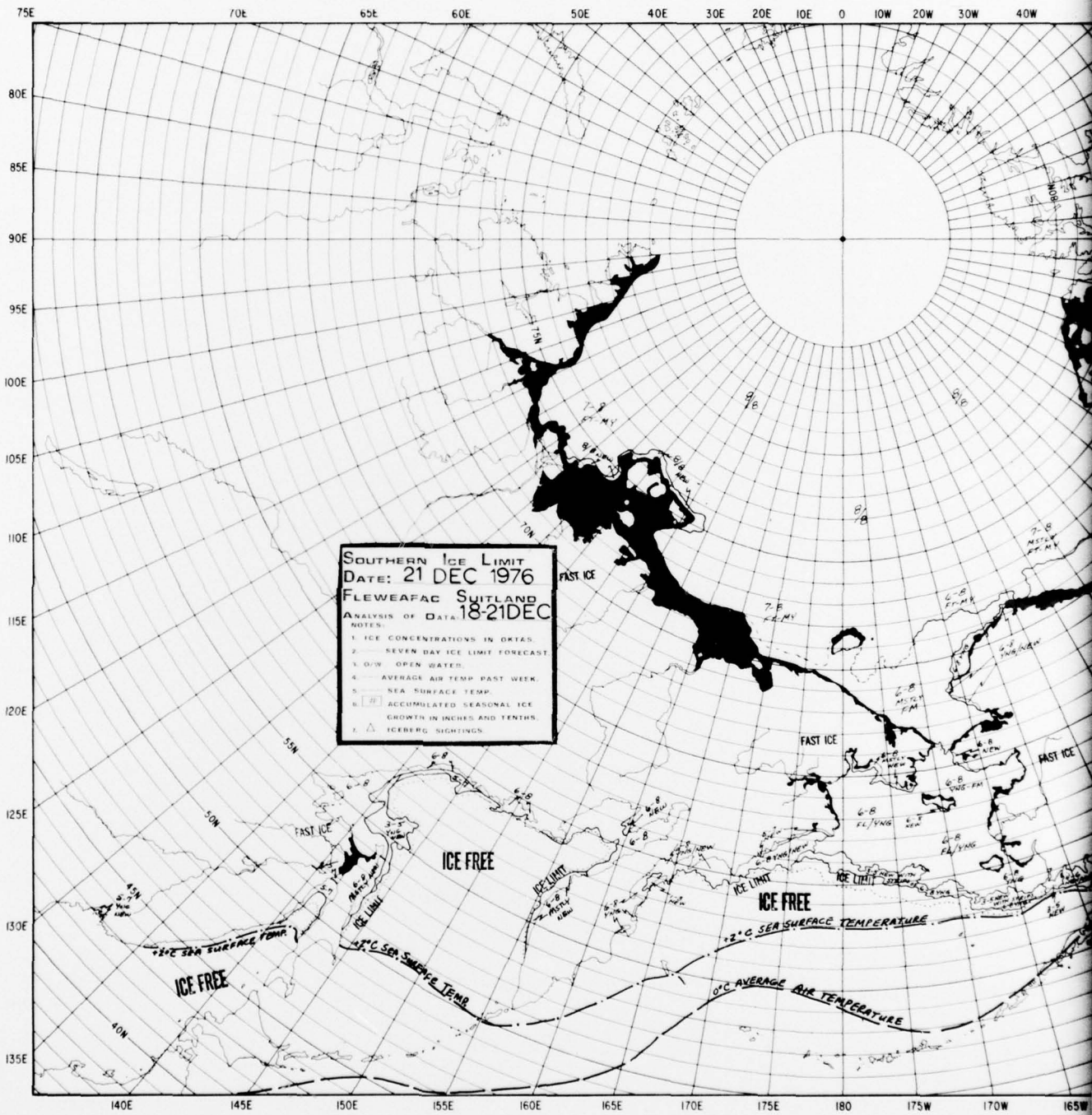
FAST ICE

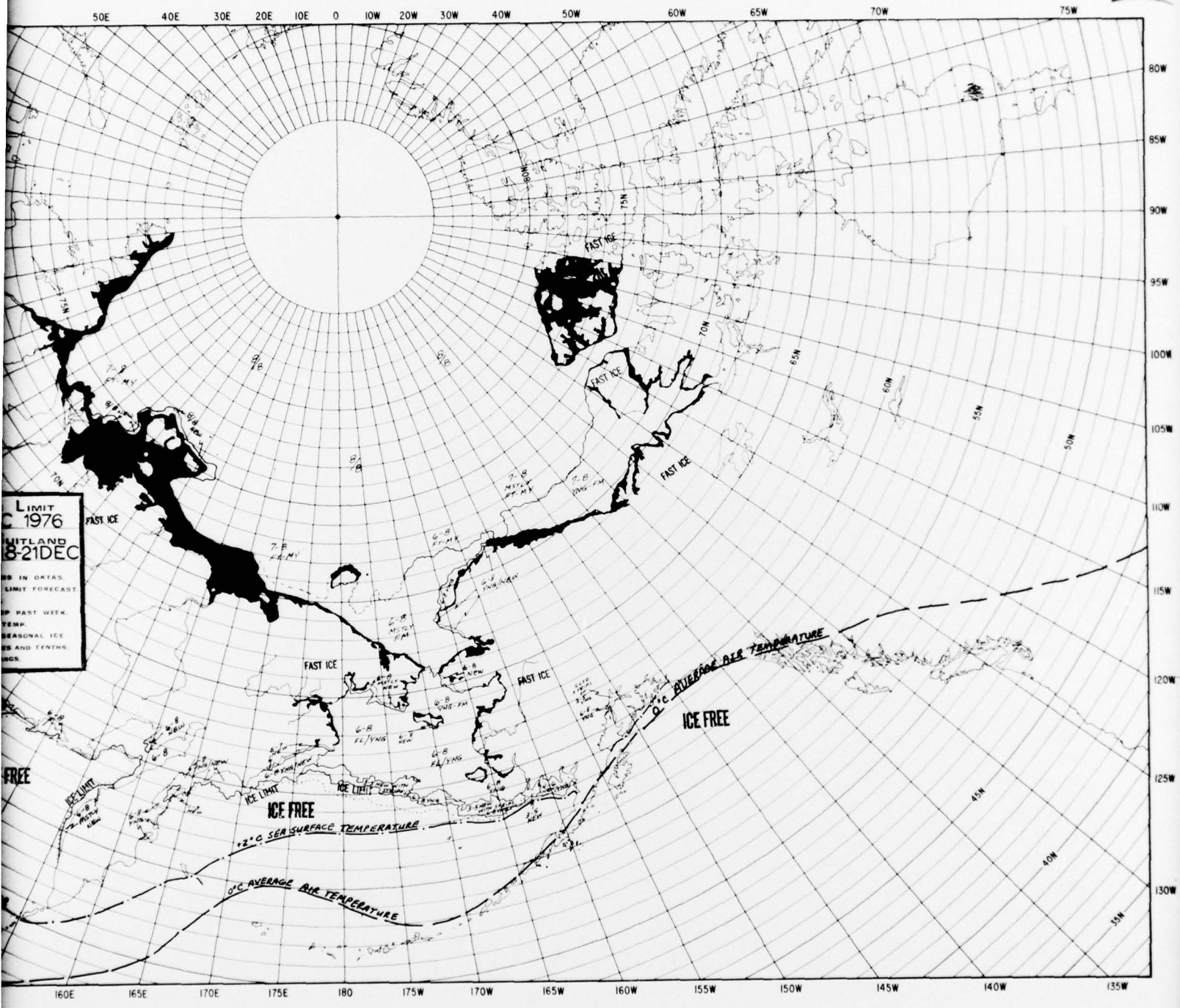
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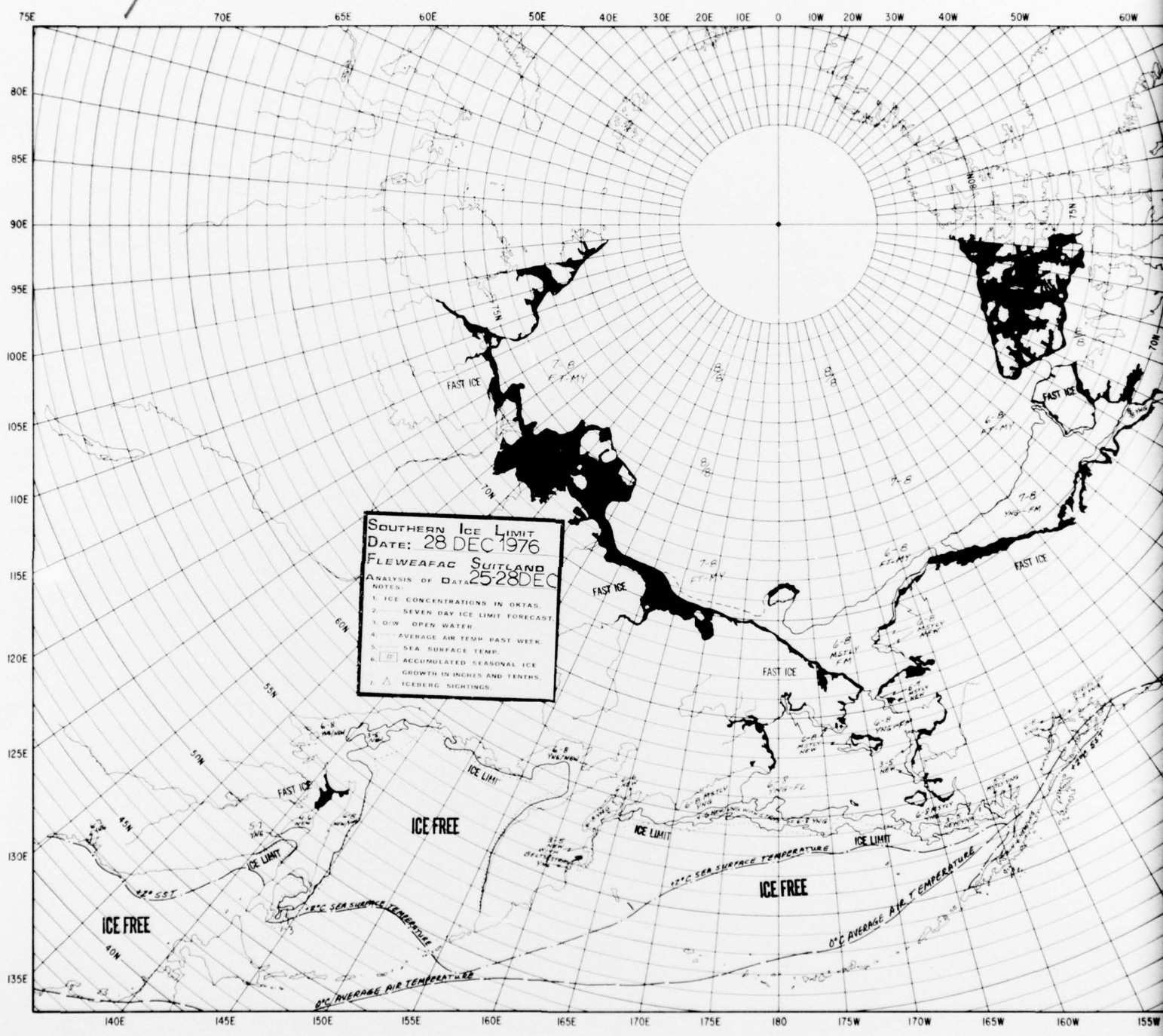
FAST ICE

FAST ICE









Southern Ice Limit
Date: 28 DEC 1976
FLEWEAFAC SUITLAND
25-28 DEC
 ANALYSIS OF DATA

NOTES:
 1. ICE CONCENTRATIONS IN ORTAS.
 2. --- SEVEN DAY ICE LIMIT FORECAST.
 3. ○ W OPEN WATER.
 4. ···· AVERAGE AIR TEMP. PAST WEEK.
 5. --- SEA SURFACE TEMP.
 6. [] ACCUMULATED SEASONAL ICE GROWTH IN INCHES AND TENTHS.
 7. △ ICEBERG SIGHTINGS.

ICE FREE

ICE FREE

ICE FREE

ICE LIMIT

ICE LIMIT

ICE LIMIT

10°C SEA SURFACE TEMPERATURE

0°C AVERAGE AIR TEMPERATURE

10°C SEA SURFACE TEMPERATURE

0°C AVERAGE AIR TEMPERATURE

ICE LIMIT

ICE LIMIT

ICE LIMIT

10°C SEA SURFACE TEMPERATURE

0°C AVERAGE AIR TEMPERATURE

10°C SEA SURFACE TEMPERATURE

0°C AVERAGE AIR TEMPERATURE

