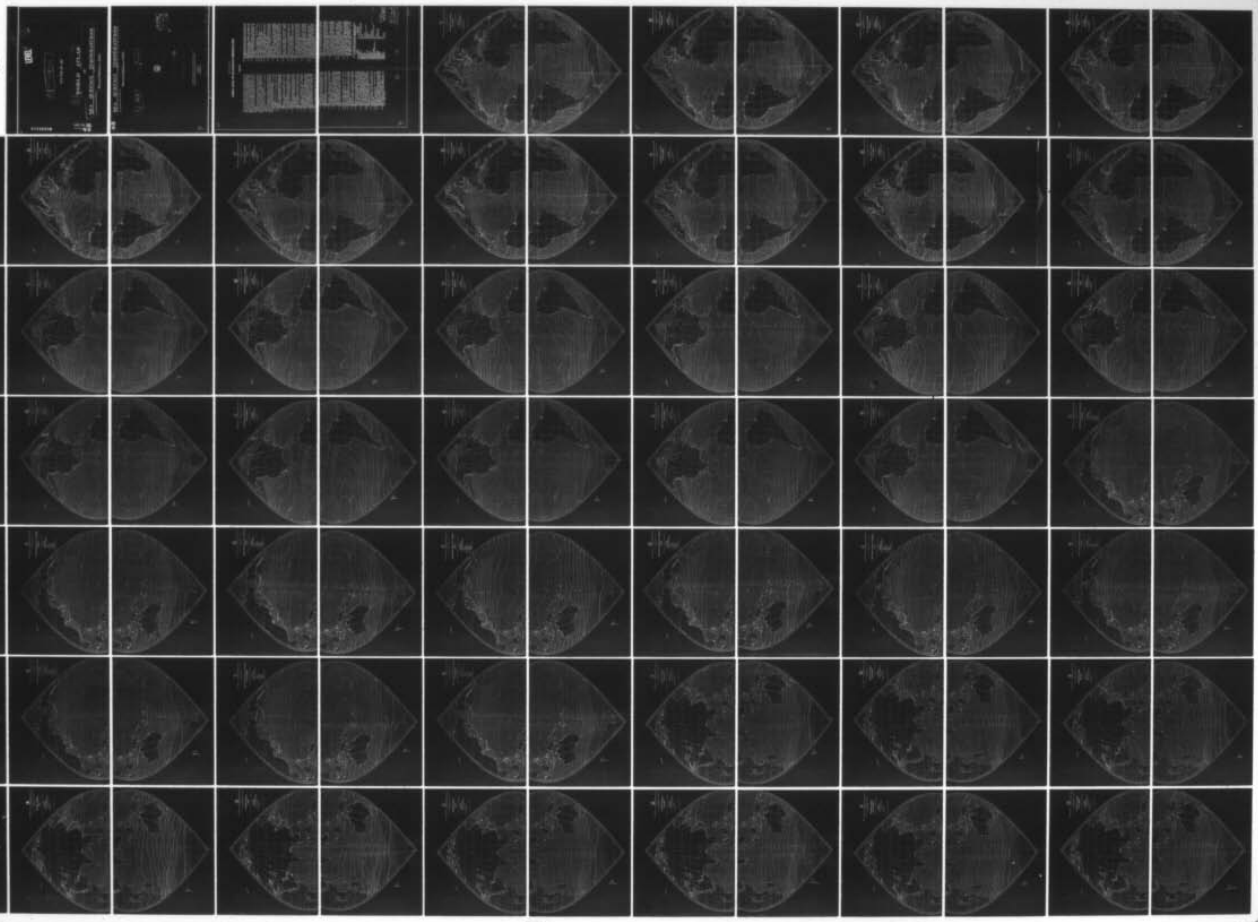
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WORLD ATLAS OF SEA SURFACE TEMPERATURES

PREFACE

This world atlas of sea surface temperatures was prepared by the Scripps Institution of Oceanography, La Jolla, Calif., from all sea surface temperature information collected by the U.S. Naval Oceanographic Office, together with all available data from other sources, with special reference to regions of few observations. It is believed that this compilation represents the most accurate pattern of sea surface temperatures of the world yet prepared.

Isotherms are shown for intervals of 5°F. except that in regions of small horizontal temperature gradients 2.5° isotherms have been entered. A closer spacing of these lines would have caused overcrowding and given a false idea of the reliability of the patterns.

Information on ice limits is also shown whenever possible.

In the preparation of this atlas, besides utilizing the millions of correlated individual observations from the files of the U.S. Naval Oceanographic Office, information was also obtained from the following sources:

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KEY TO REFERENCES USED IN PREPARING WORLD ATLAS OF SEA SURFACE TEMPERATURES

REGION	REFERENCE
Antarctic Ocean	3, 4, 11, 12, 19, 22
Arctic Ocean	1, 2, 7, 9, 13, 15, 18, 34
Atlantic Ocean	3, 7, 9, 13, 15, 24, 26, 38
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Baltic Sea	10
Bering Sea	5, 30, 40
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Persian Gulf	29
Peru coast	14
Red Sea	41
South Pacific	5, 11, 12
White Sea	1, 2, 7, 13

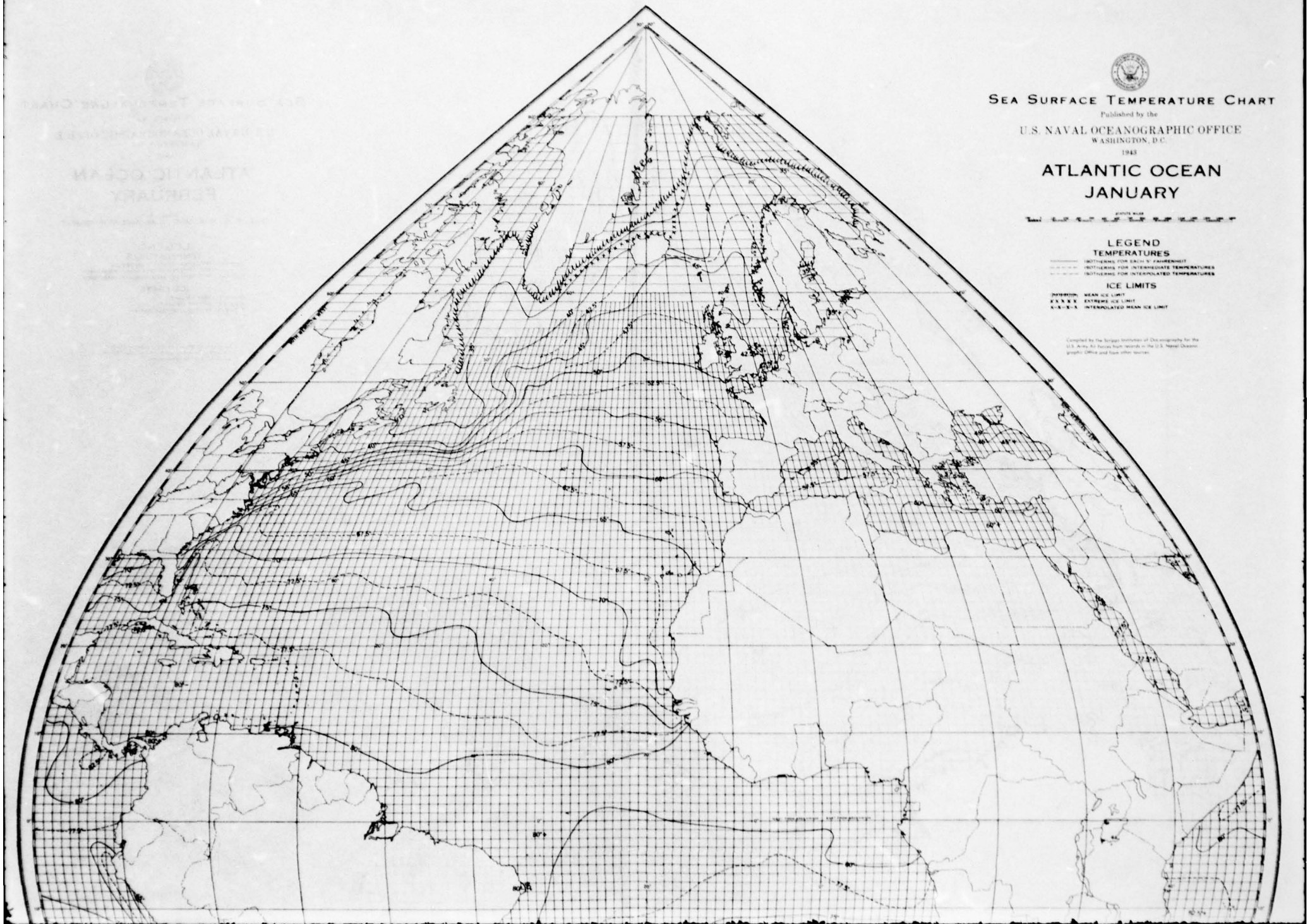
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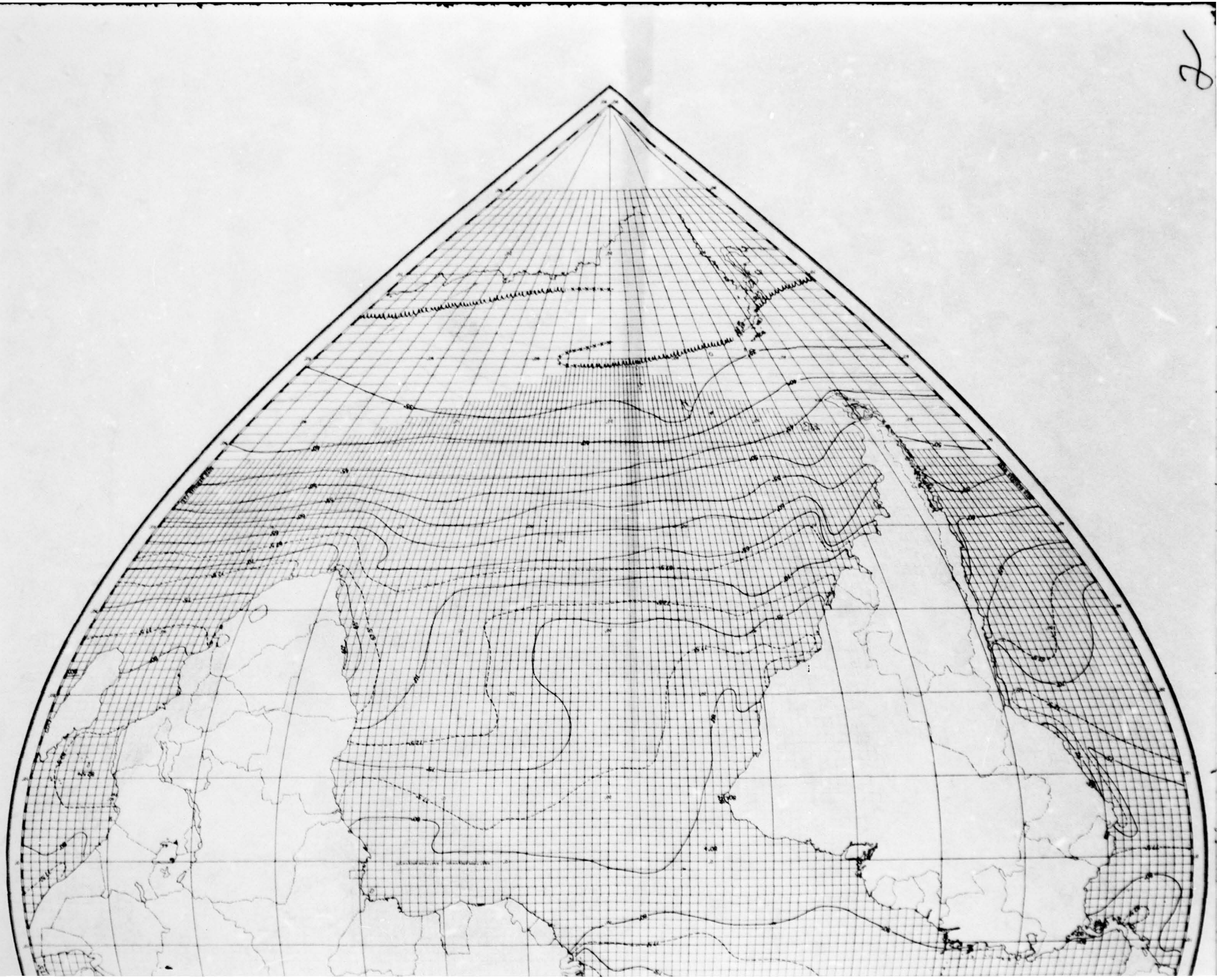
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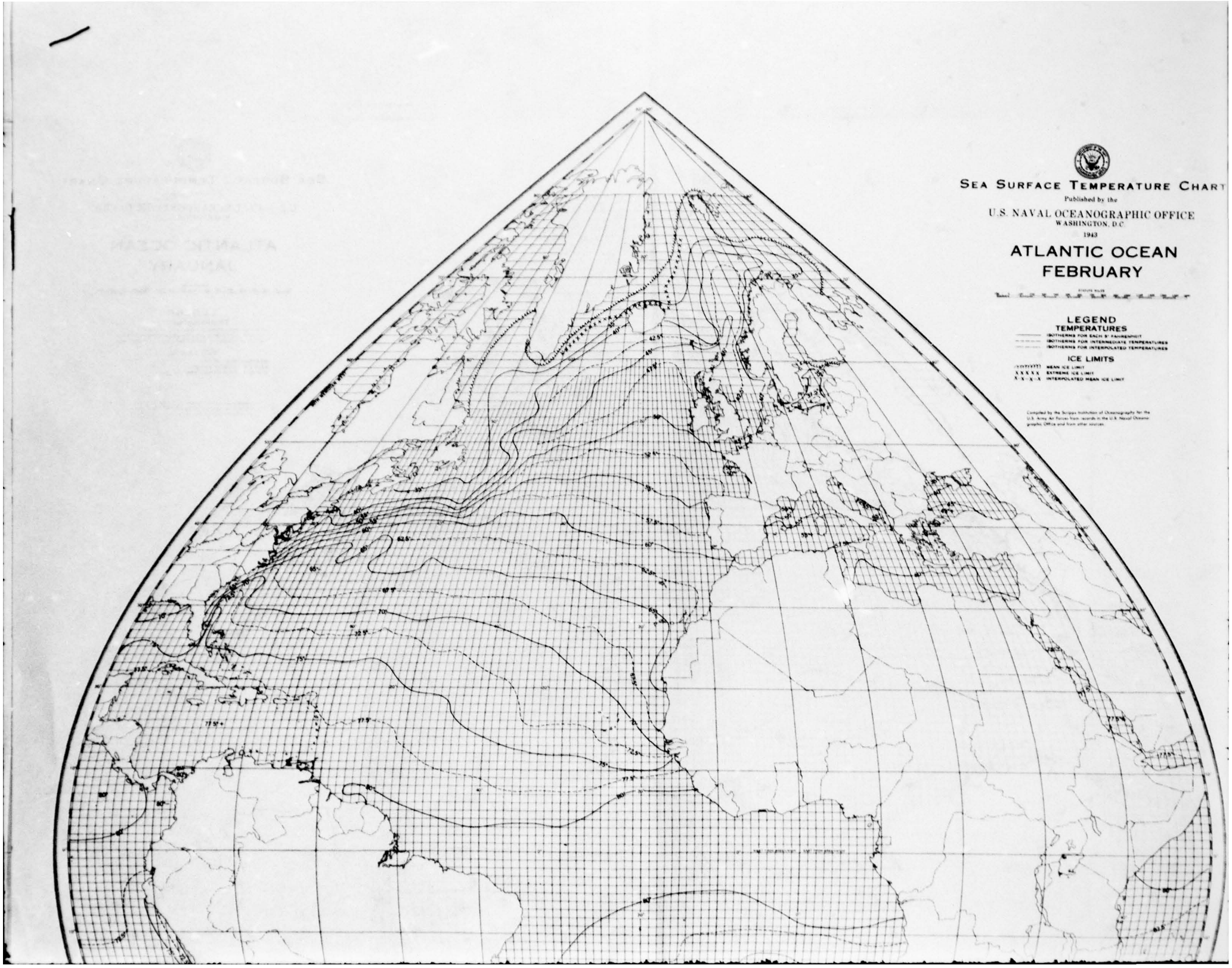
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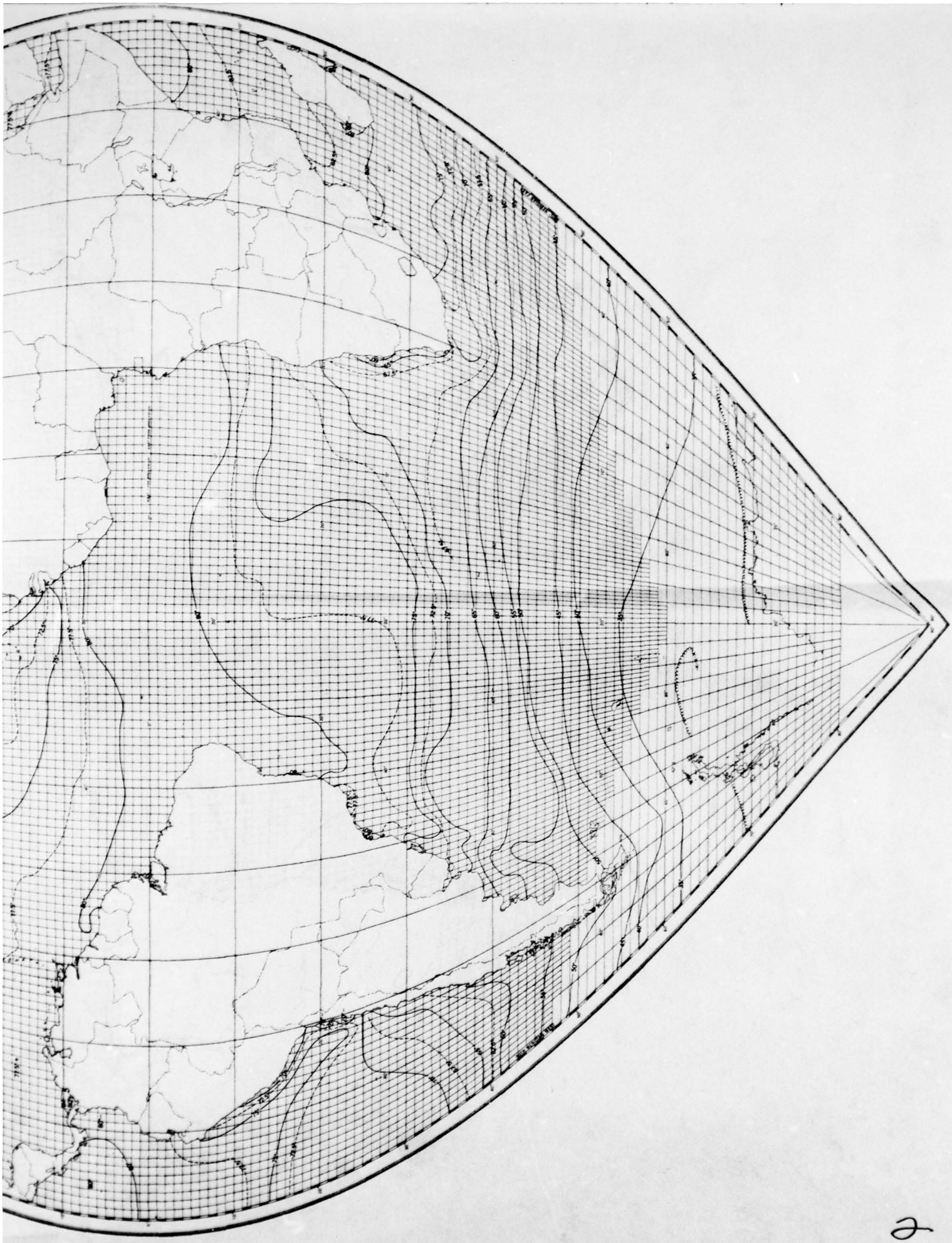
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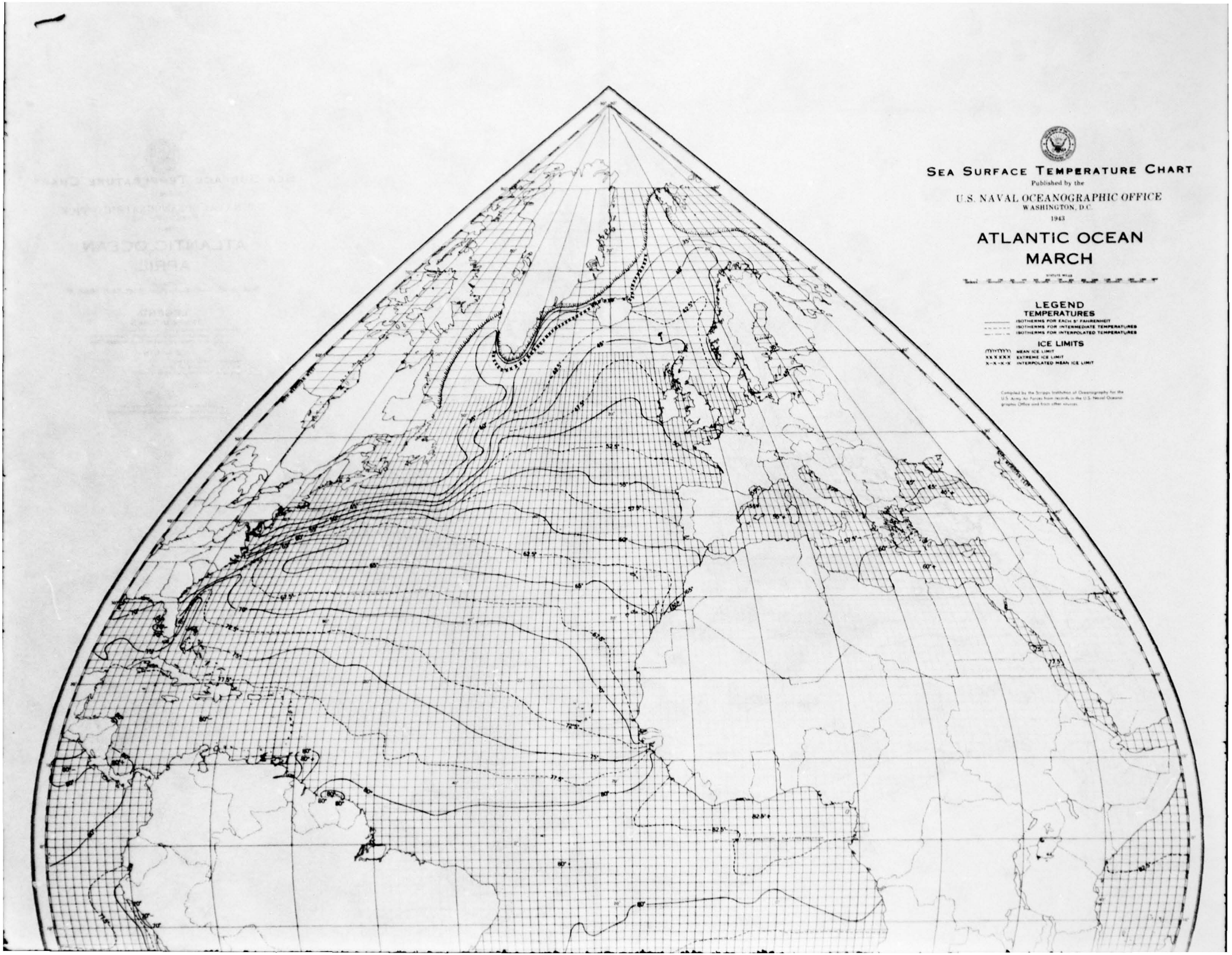
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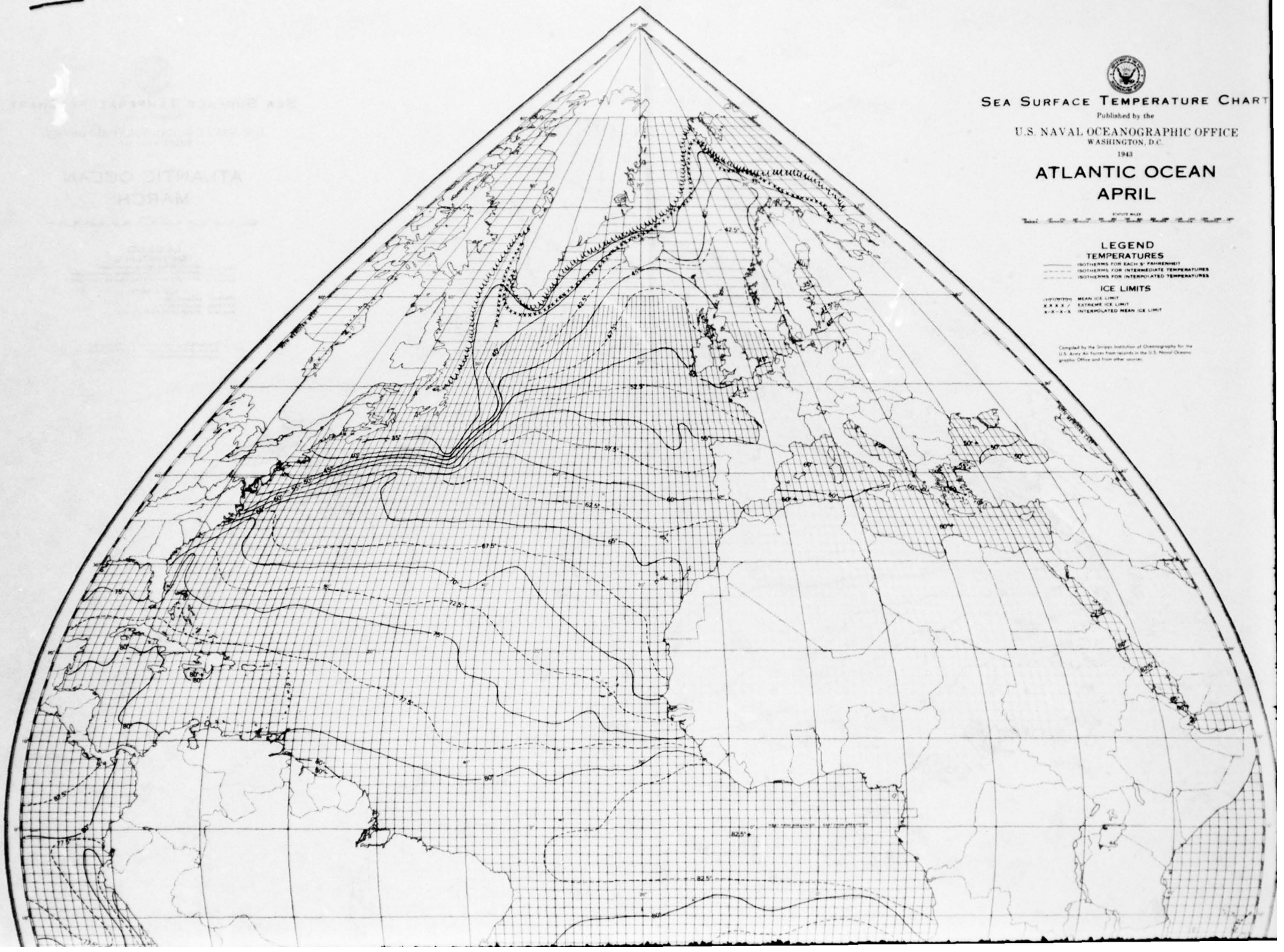

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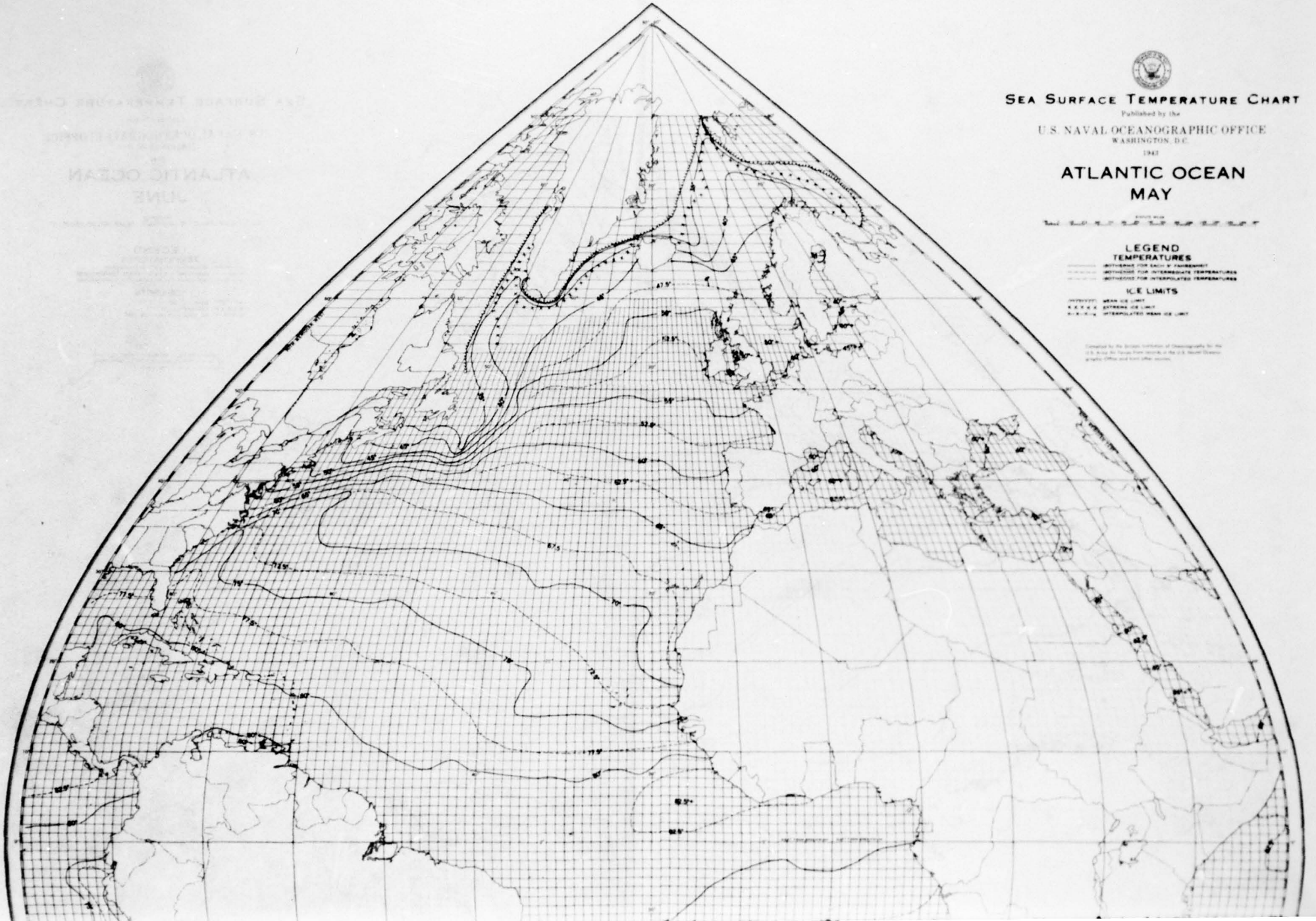
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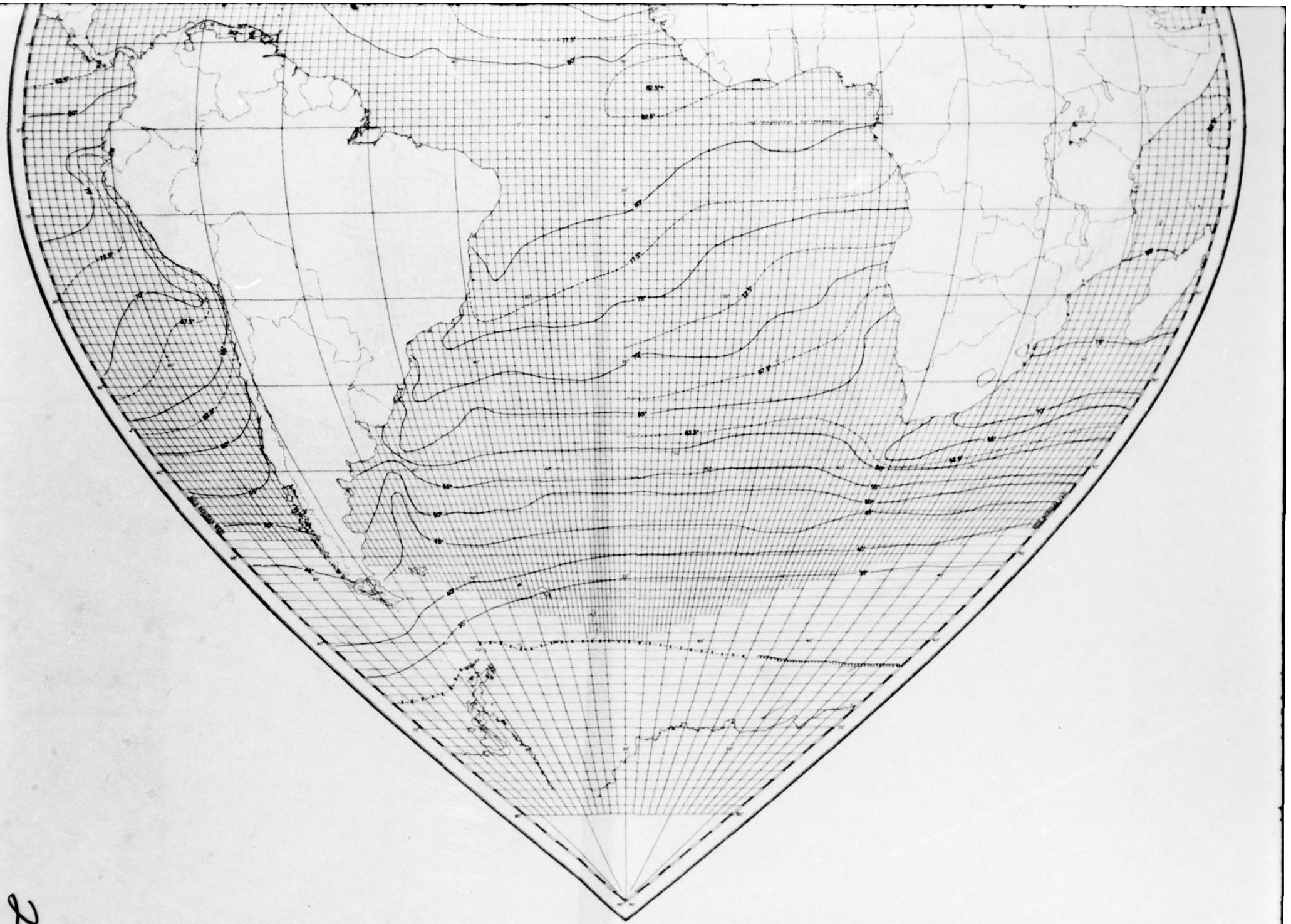
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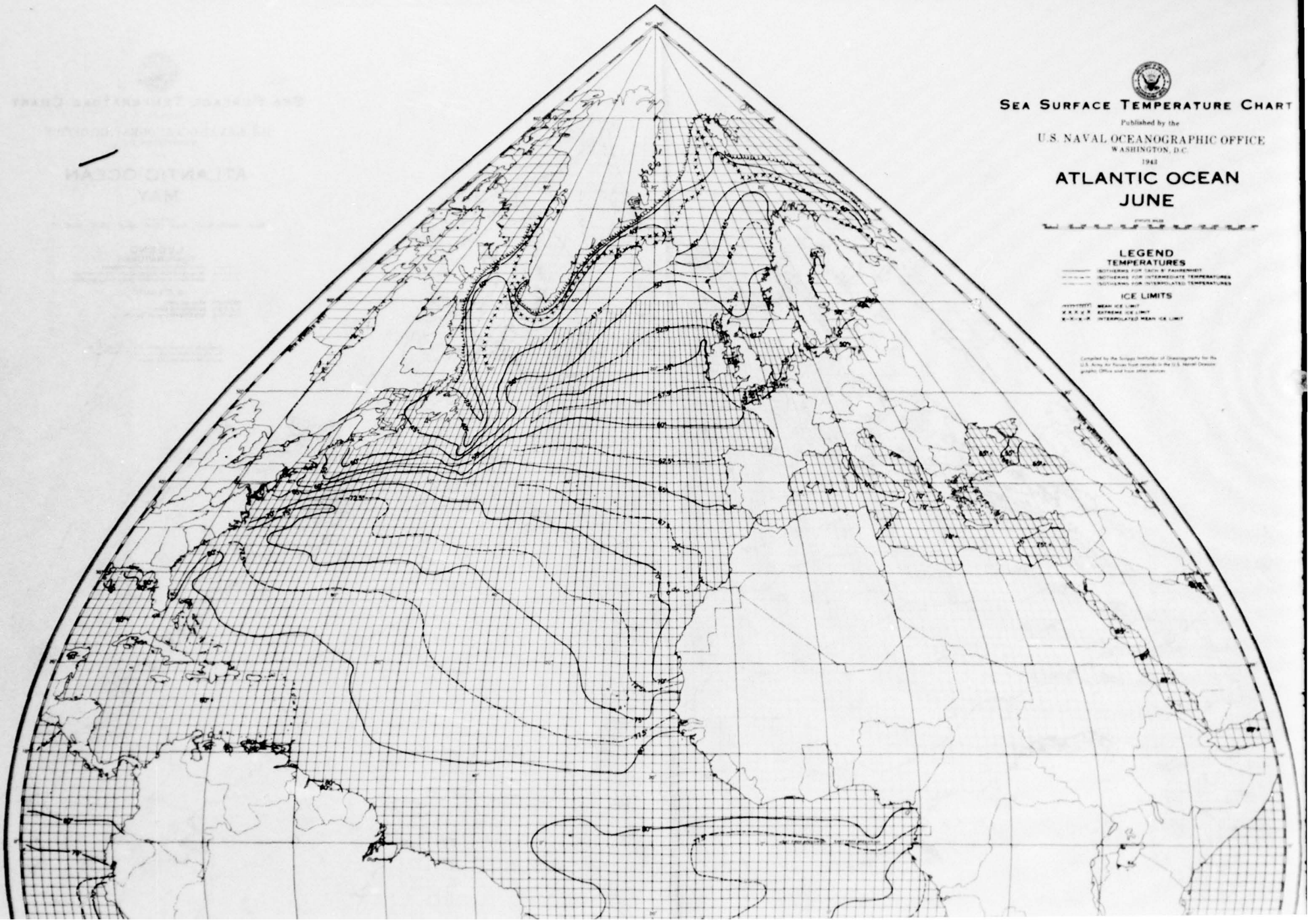
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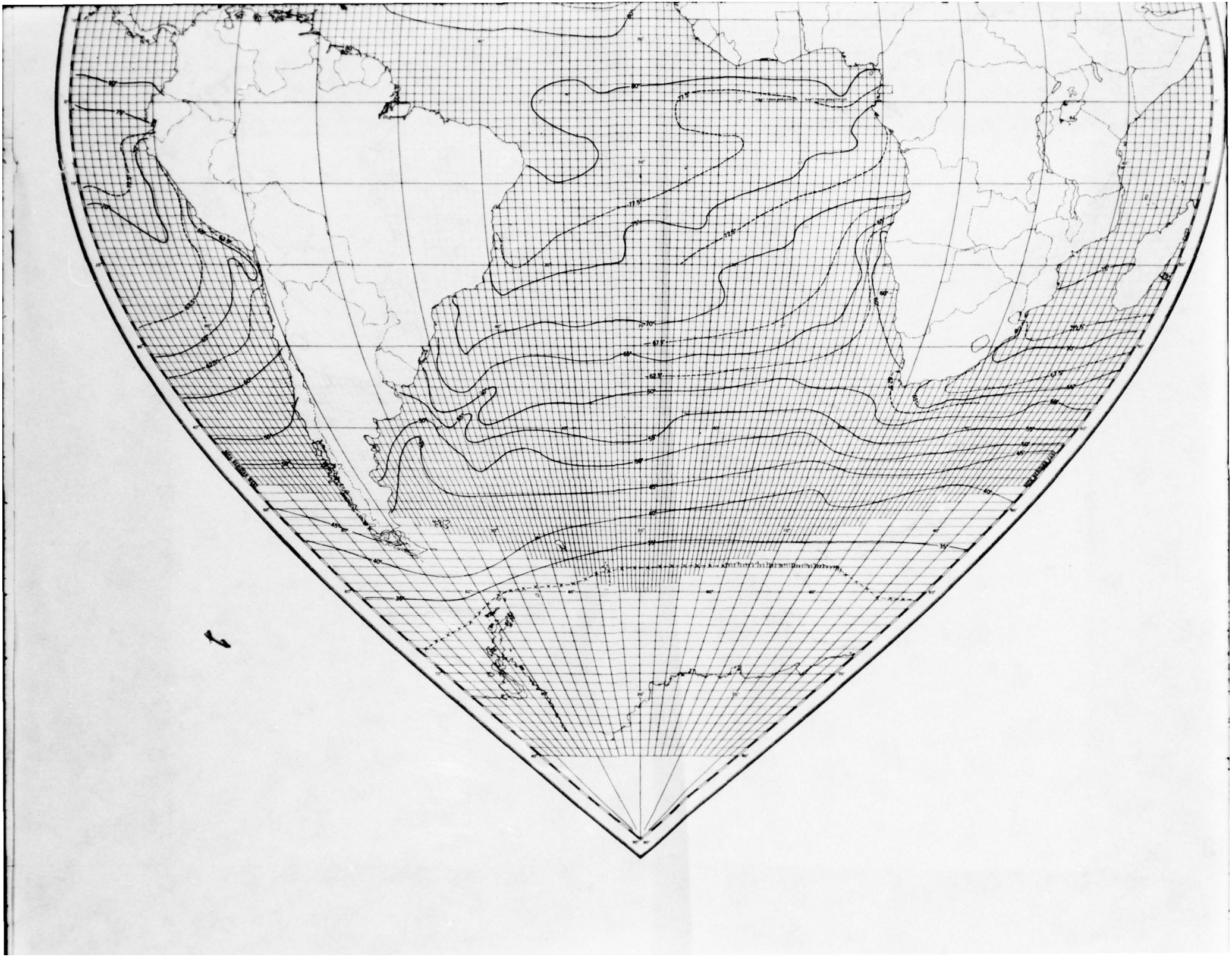
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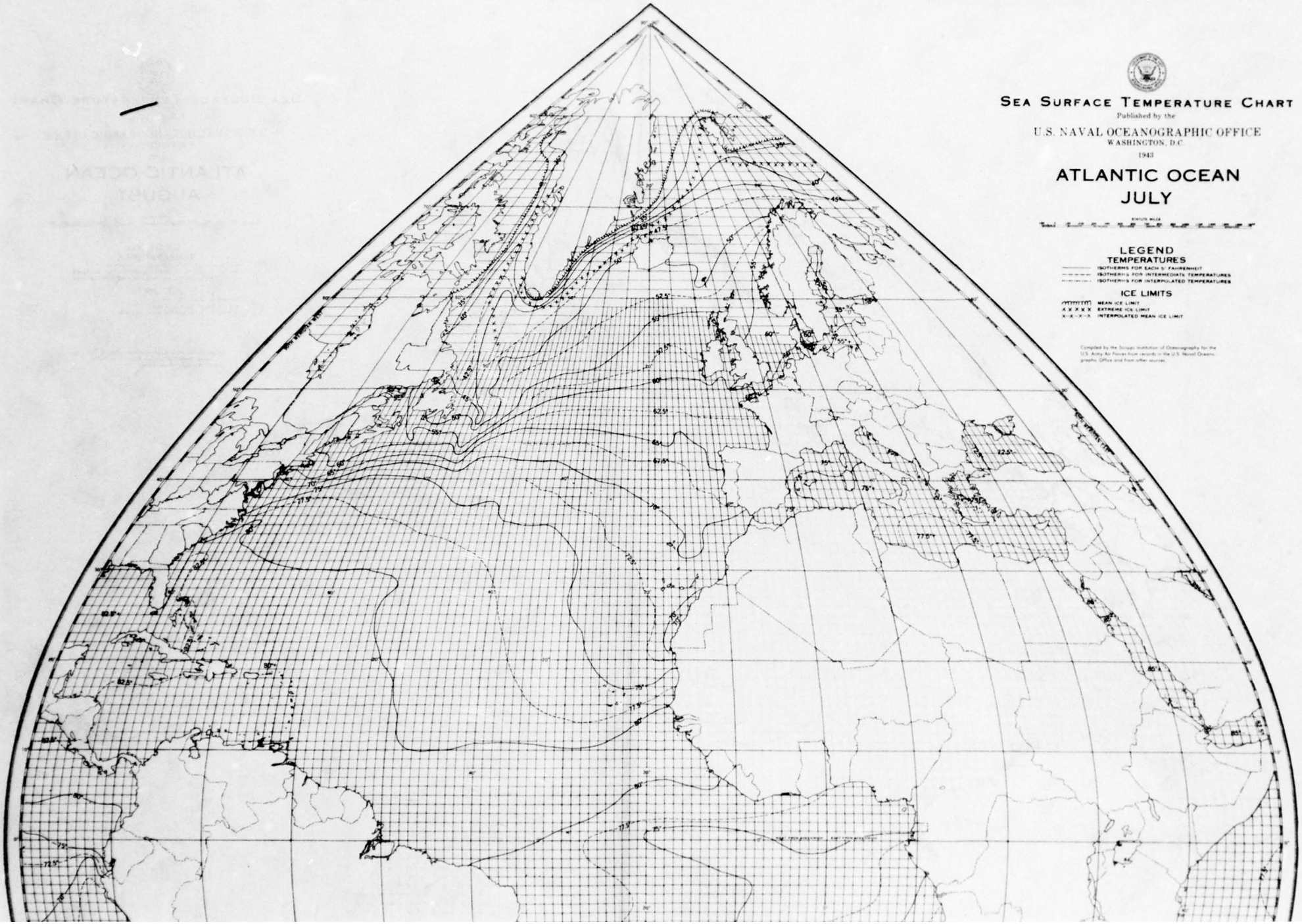
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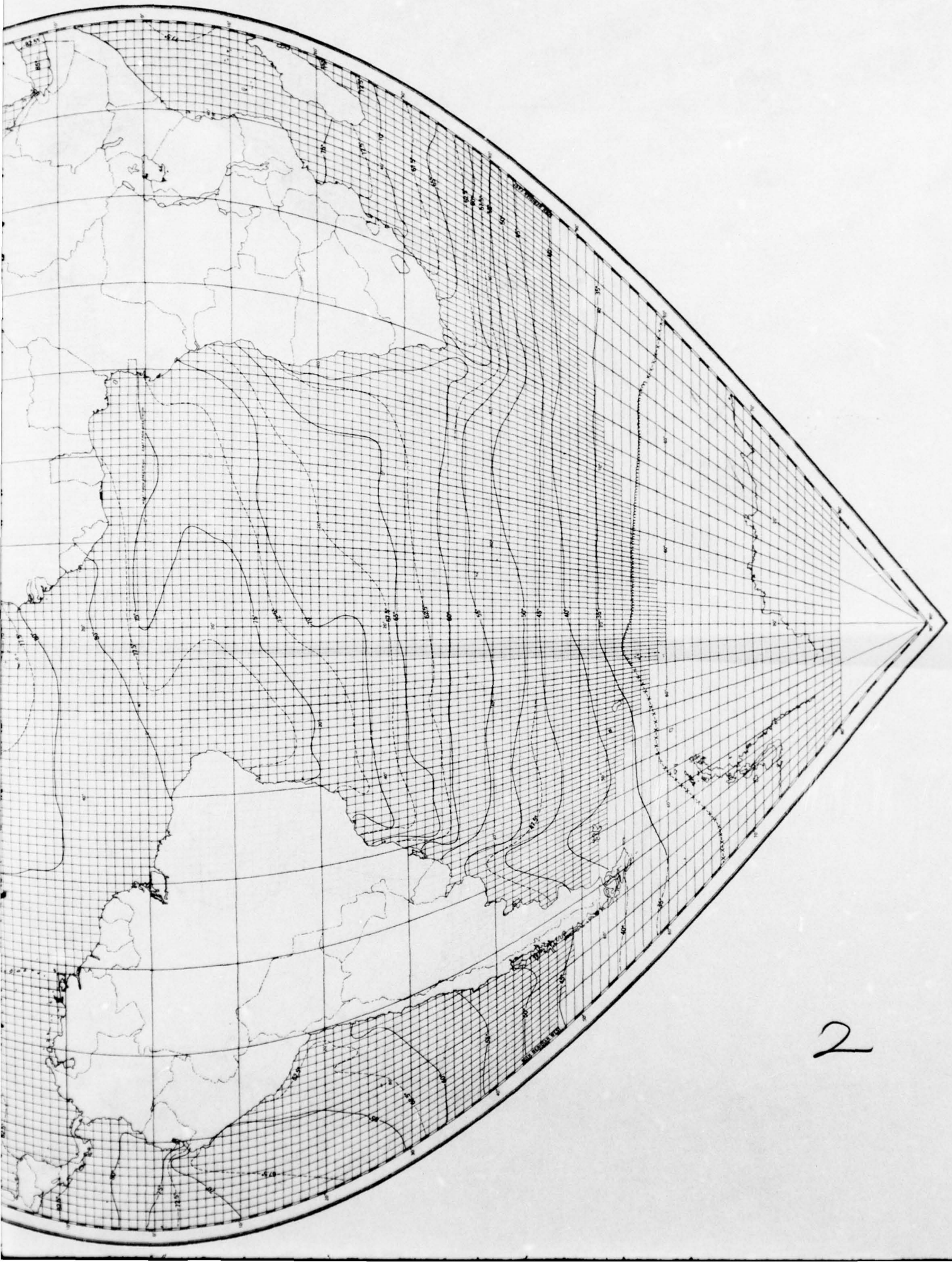
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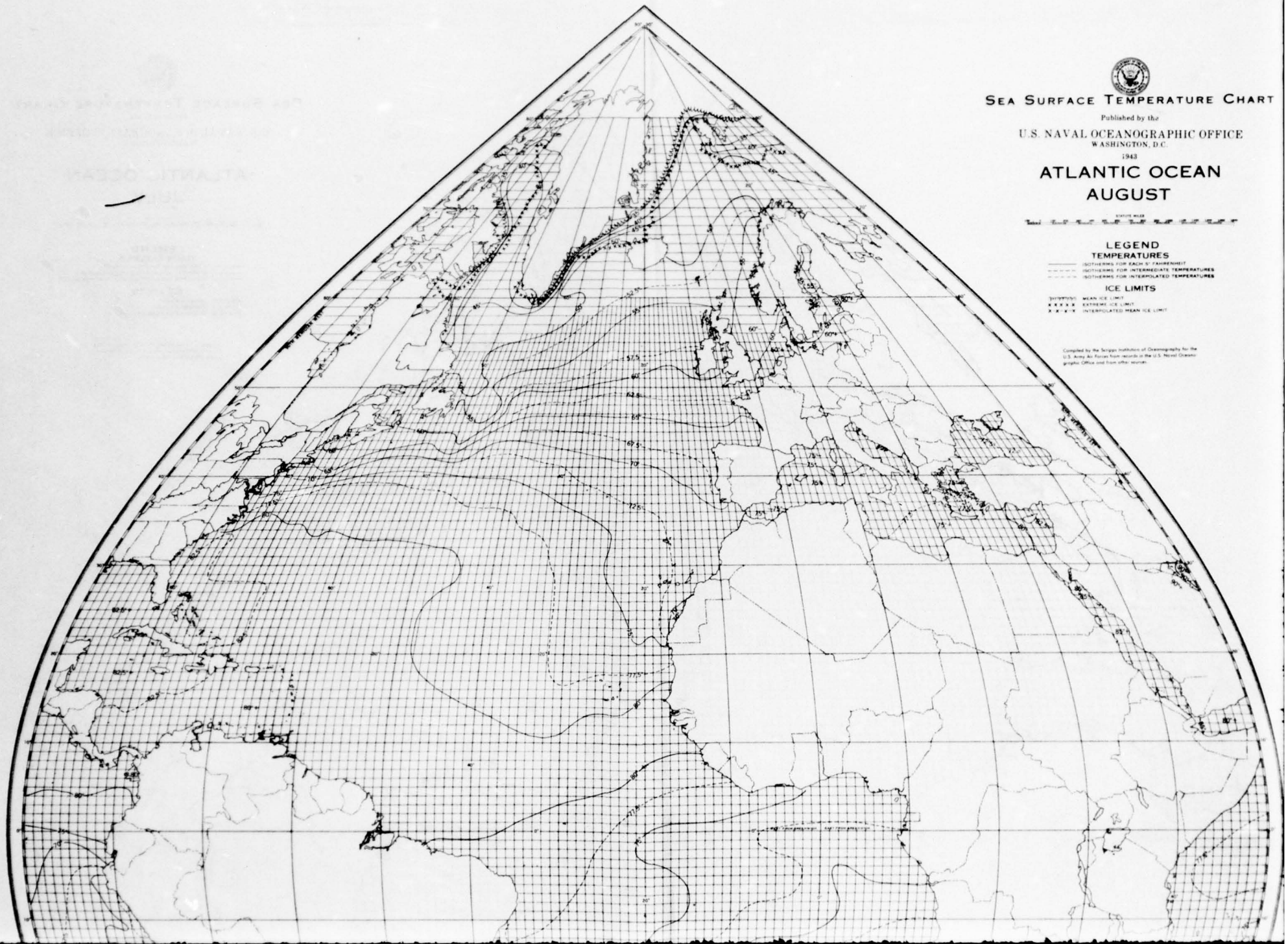
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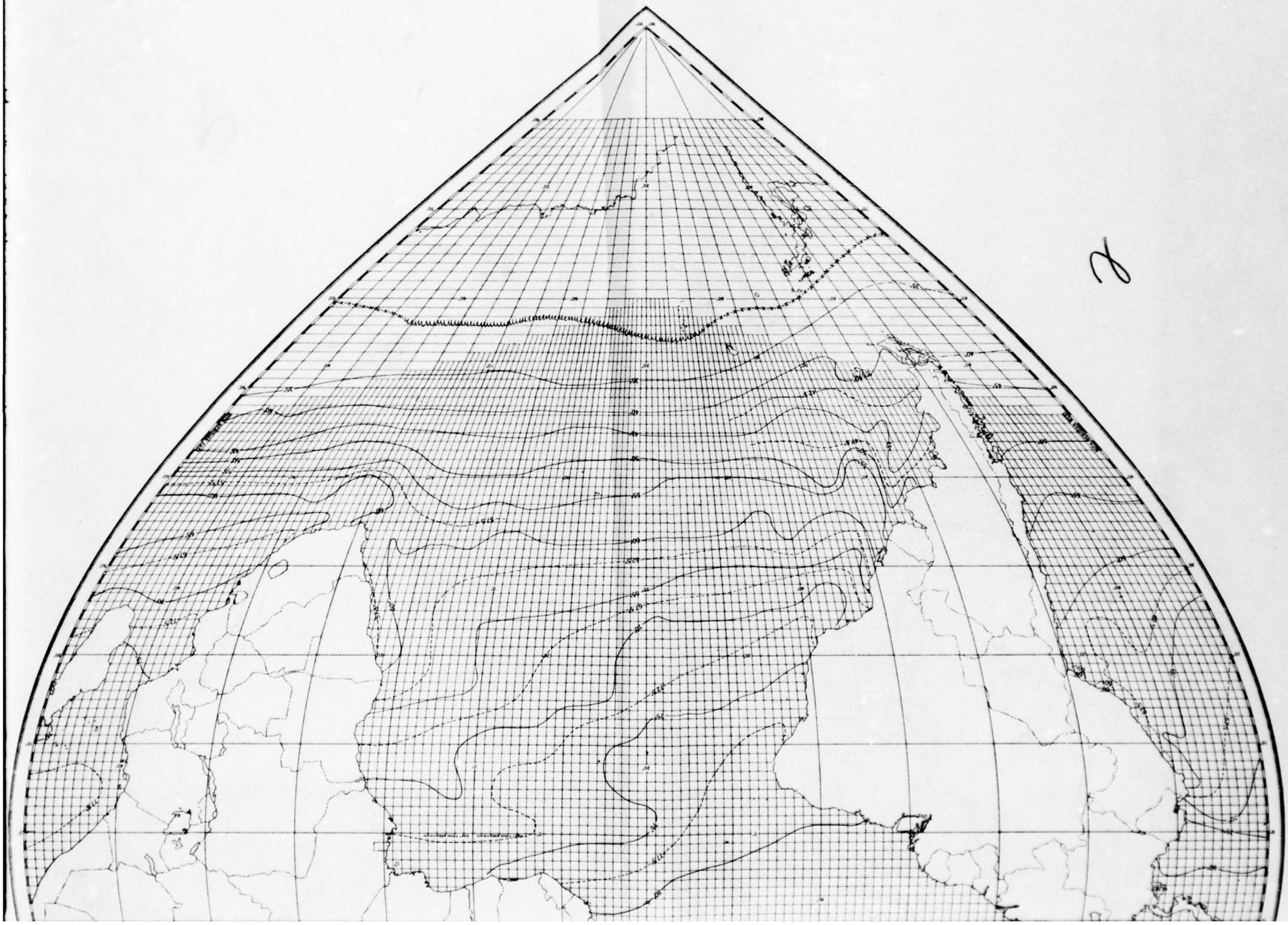
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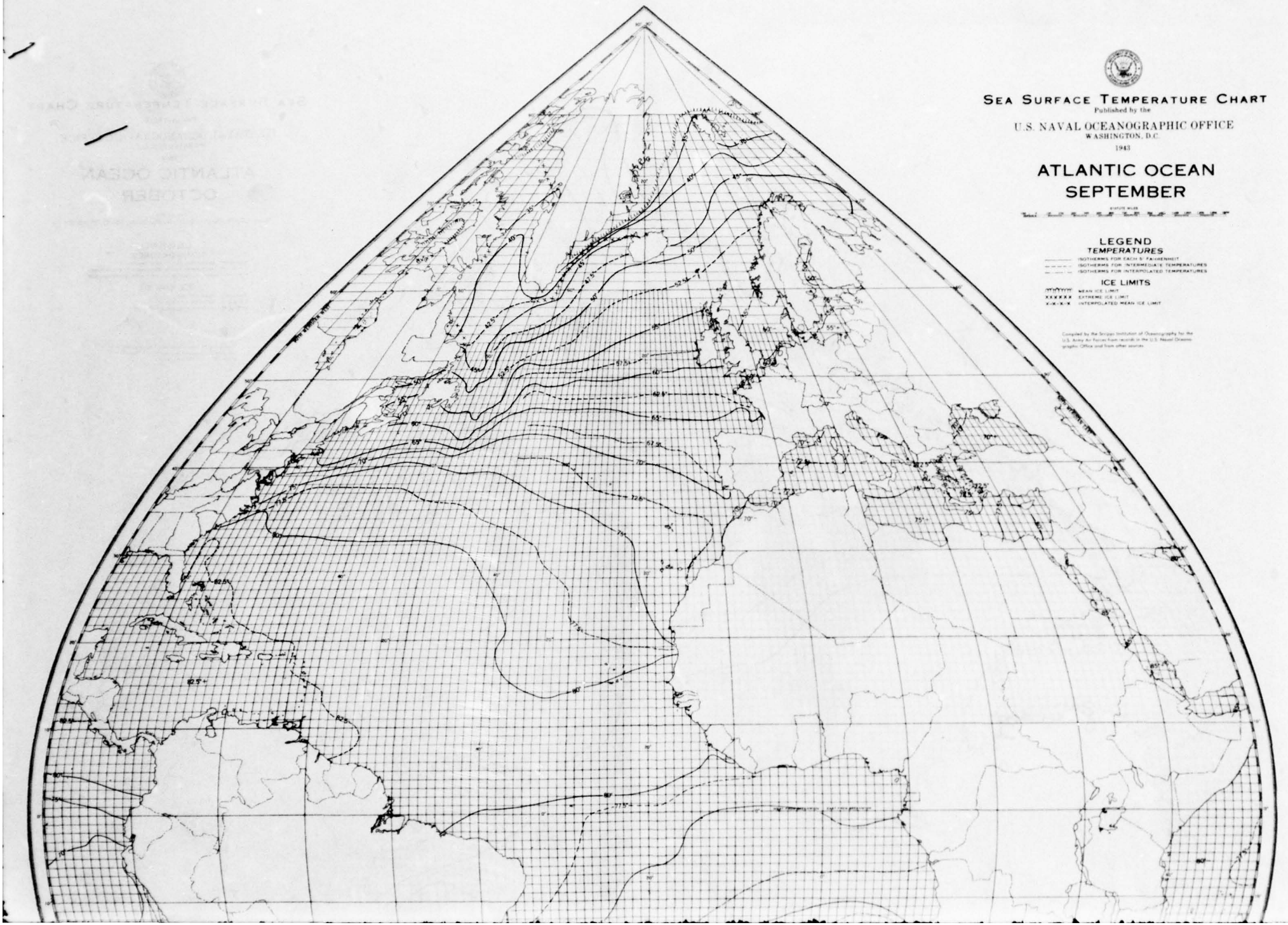
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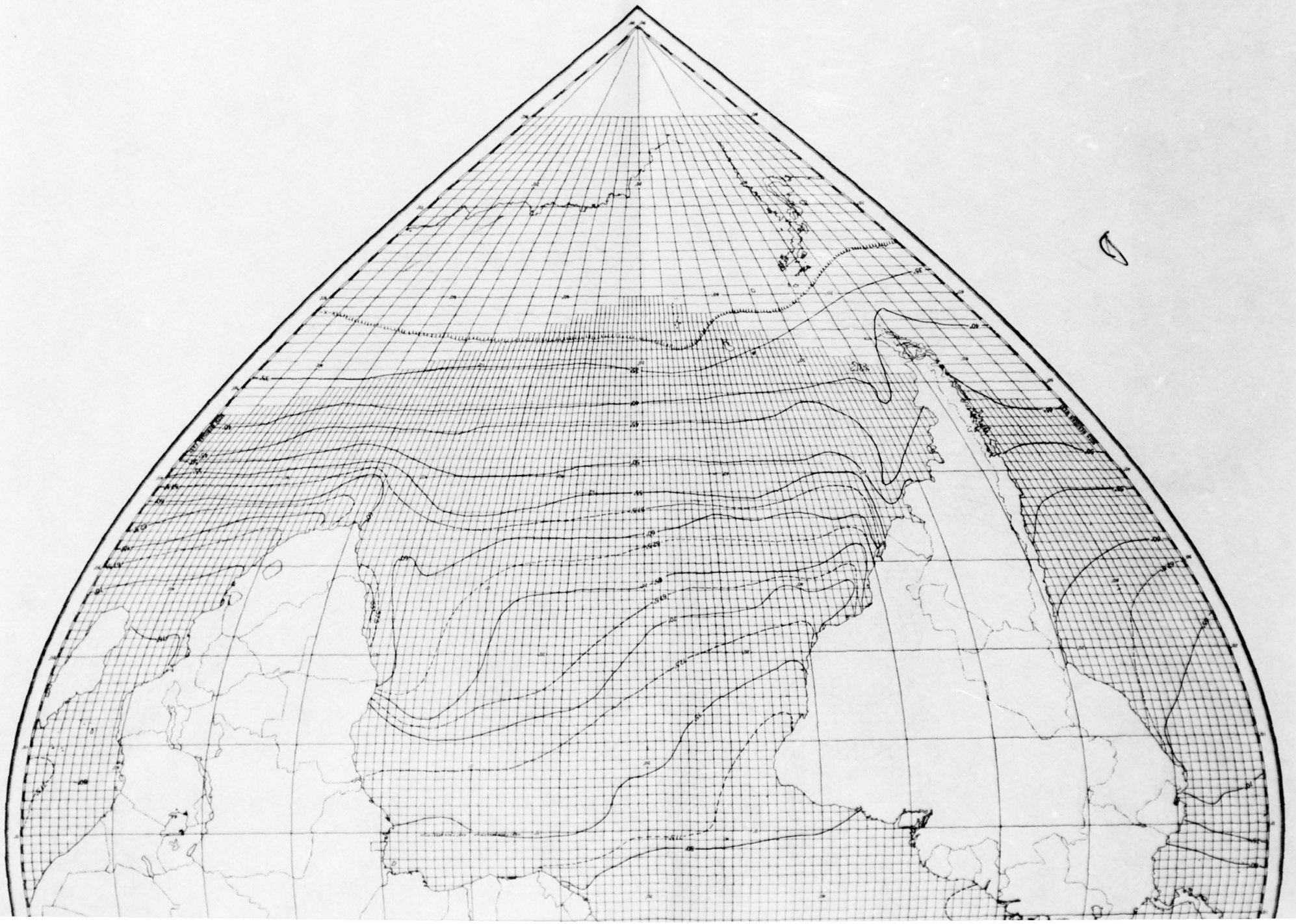
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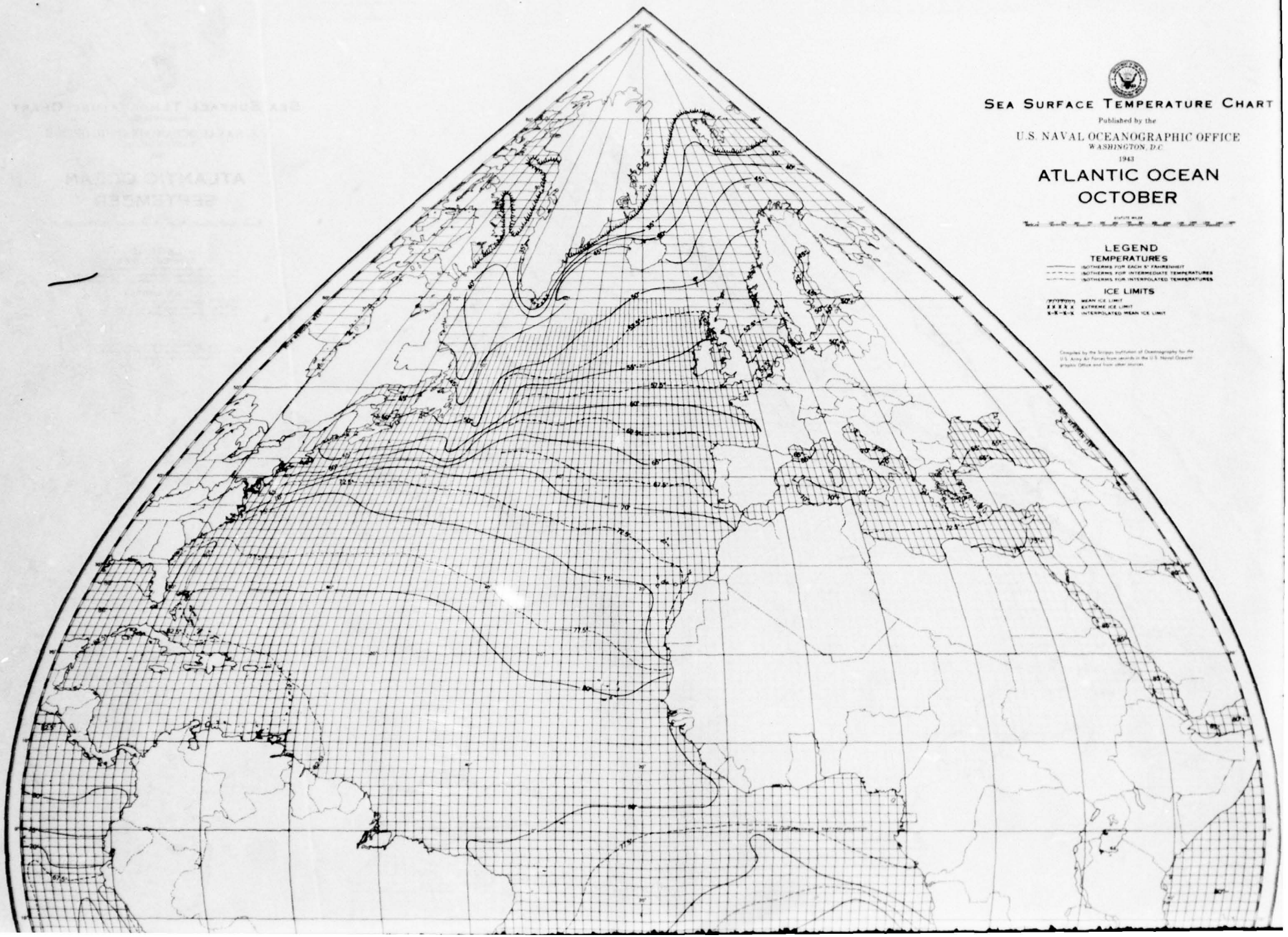
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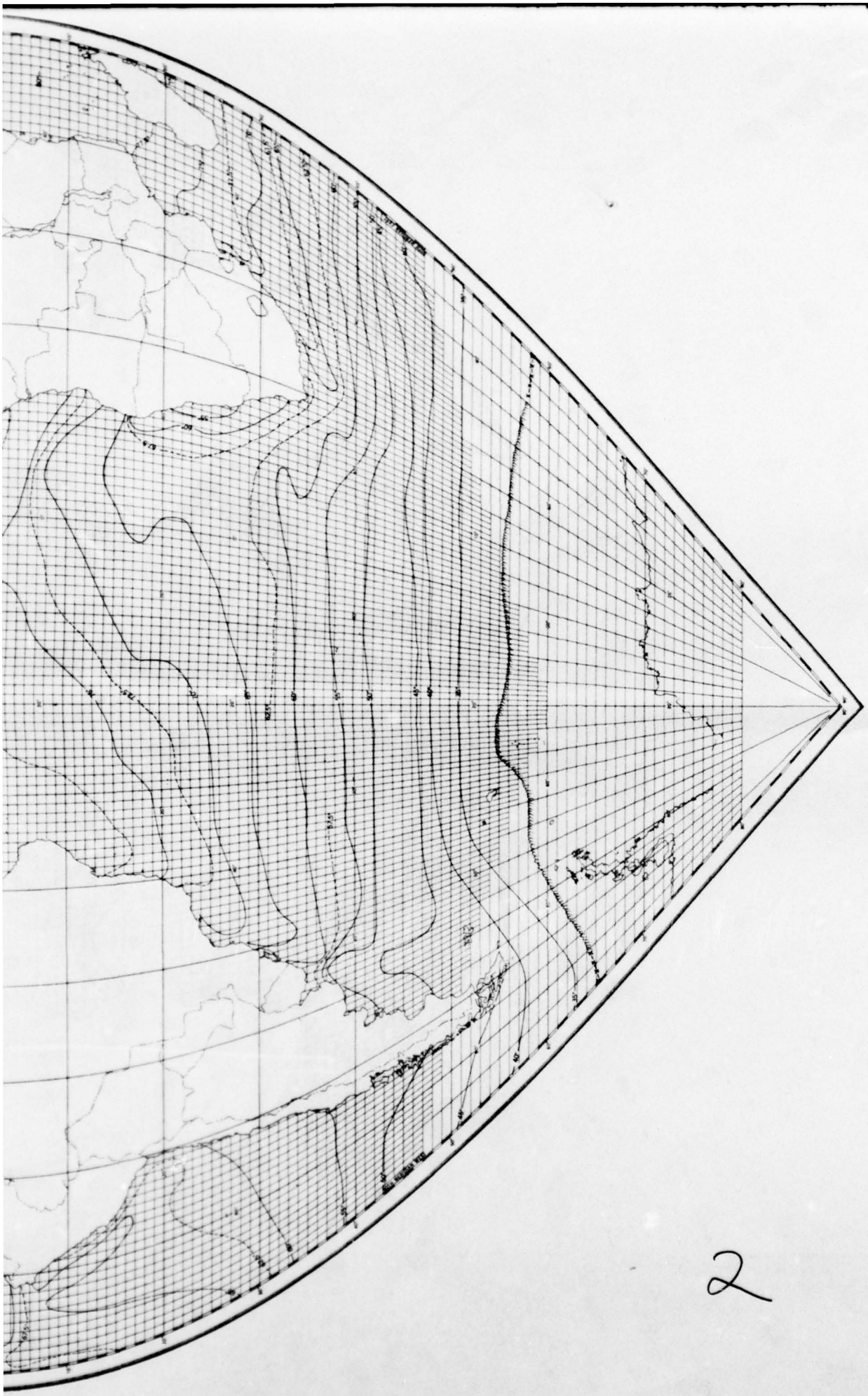
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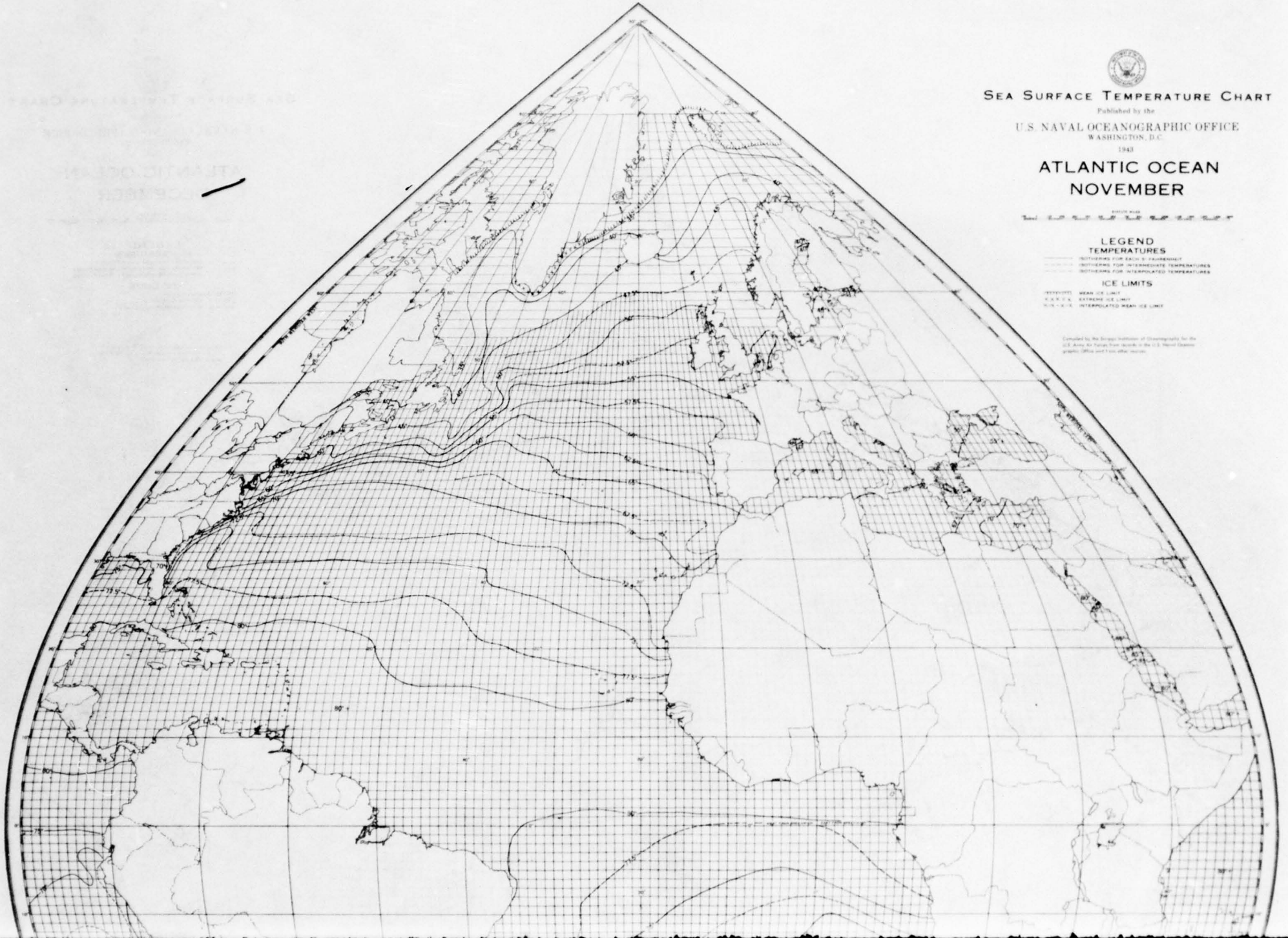
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ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

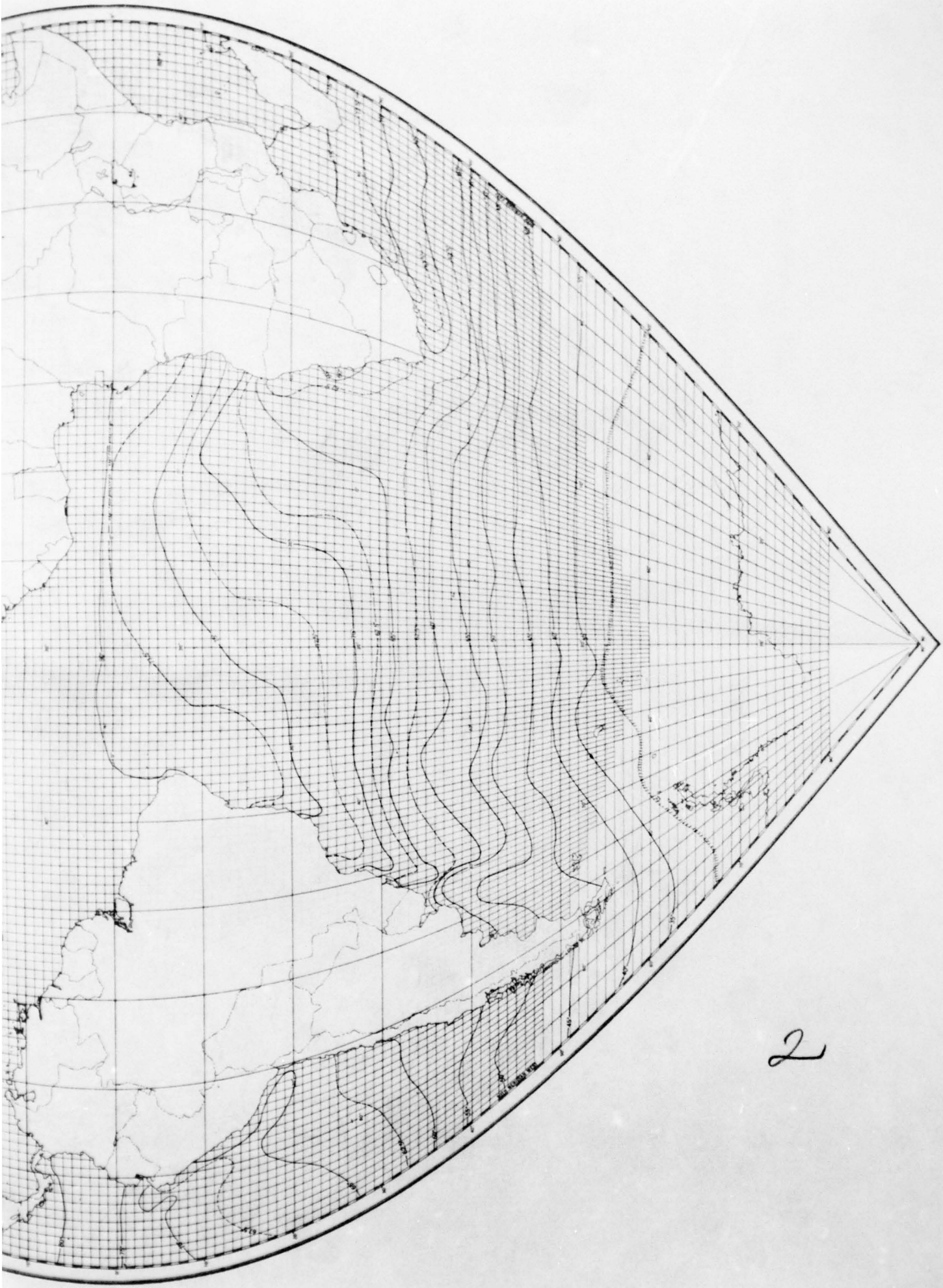
ICE LIMITS

MEAN ICE LIMIT

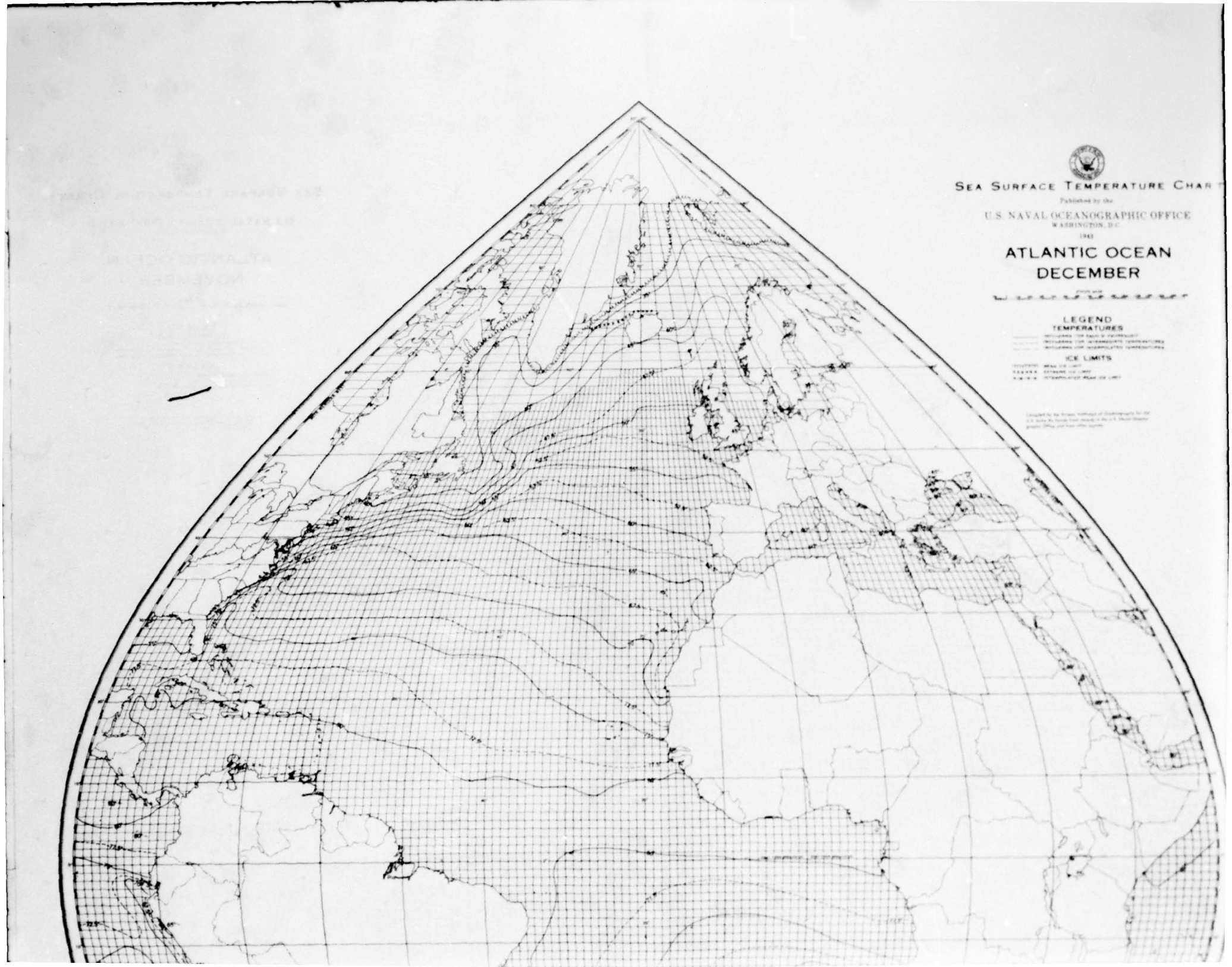
EXTREME ICE LIMIT

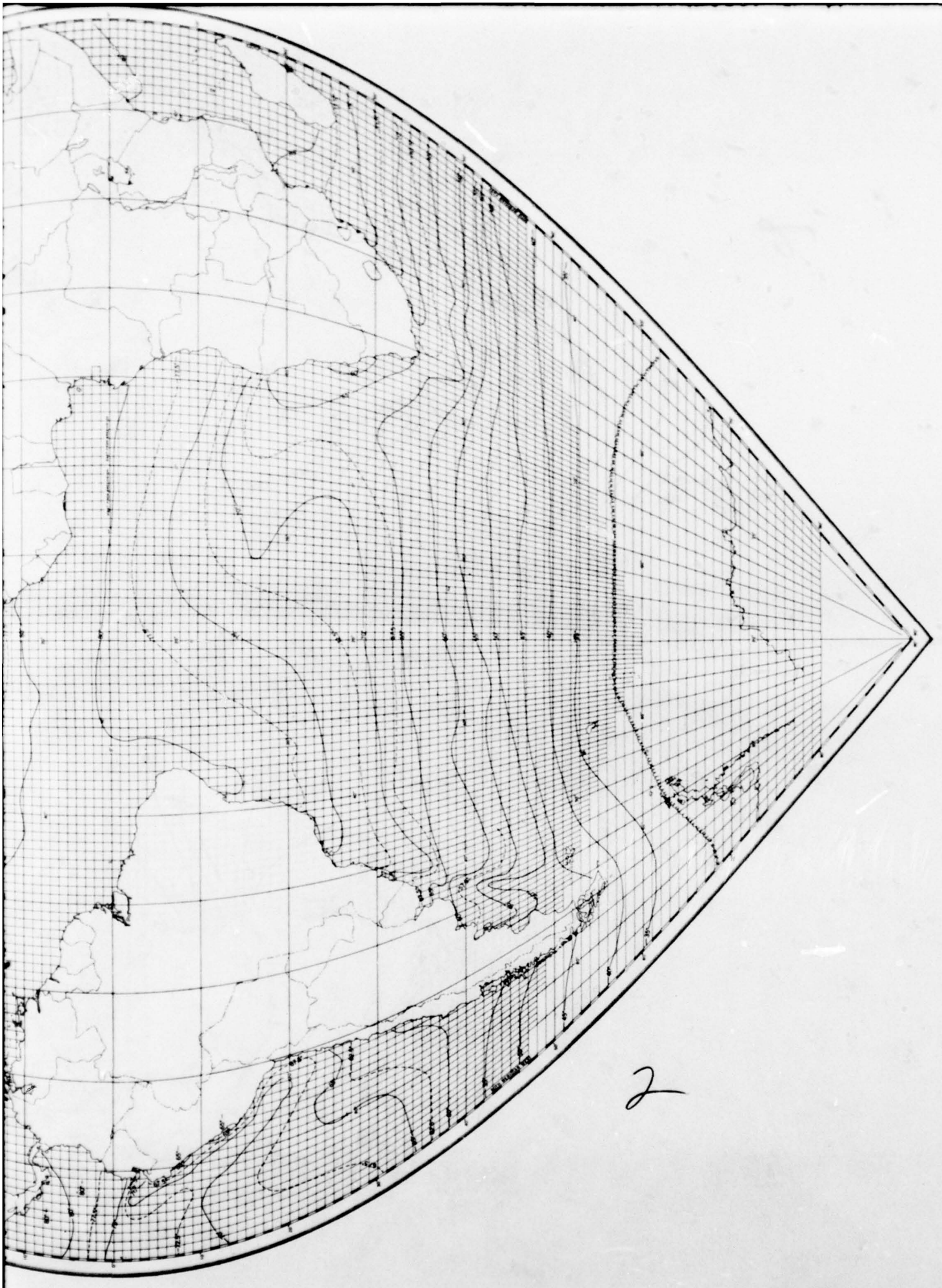
INTERPOLATED MEAN ICE LIMIT

Compiled by the Scripps Institution of Oceanography for the U.S. Army Air Forces from records in the U.S. Naval Oceanographic Office and from other sources.

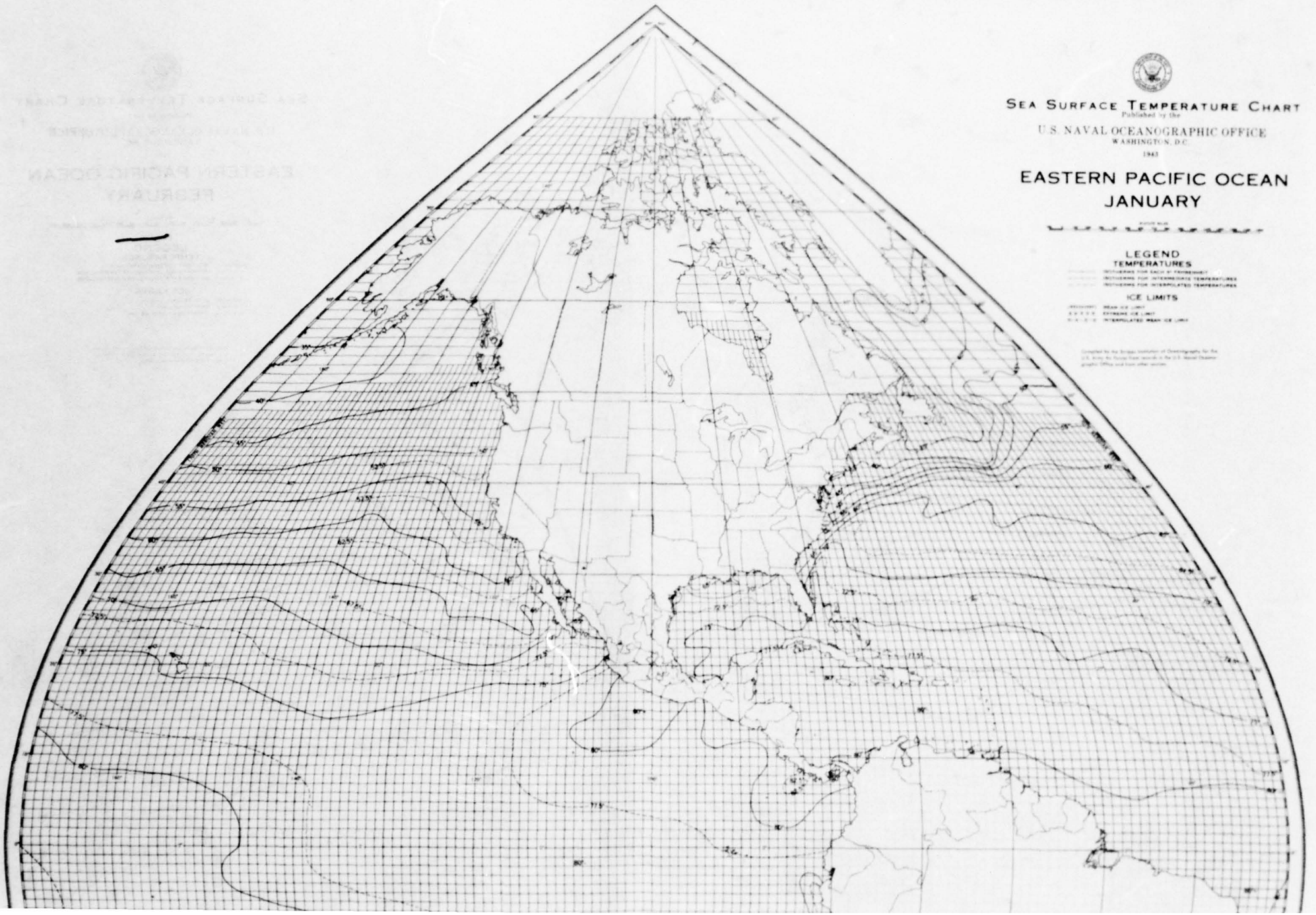


2


SEA SURFACE TEMPERATURE CHART
Published by the
U.S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D.C.
1943
ATLANTIC OCEAN
DECEMBER
LEGEND
TEMPERATURES
ICE LIMITS



2



SEA SURFACE TEMPERATURE CHART

Published by the

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WASHINGTON, D.C.

1943

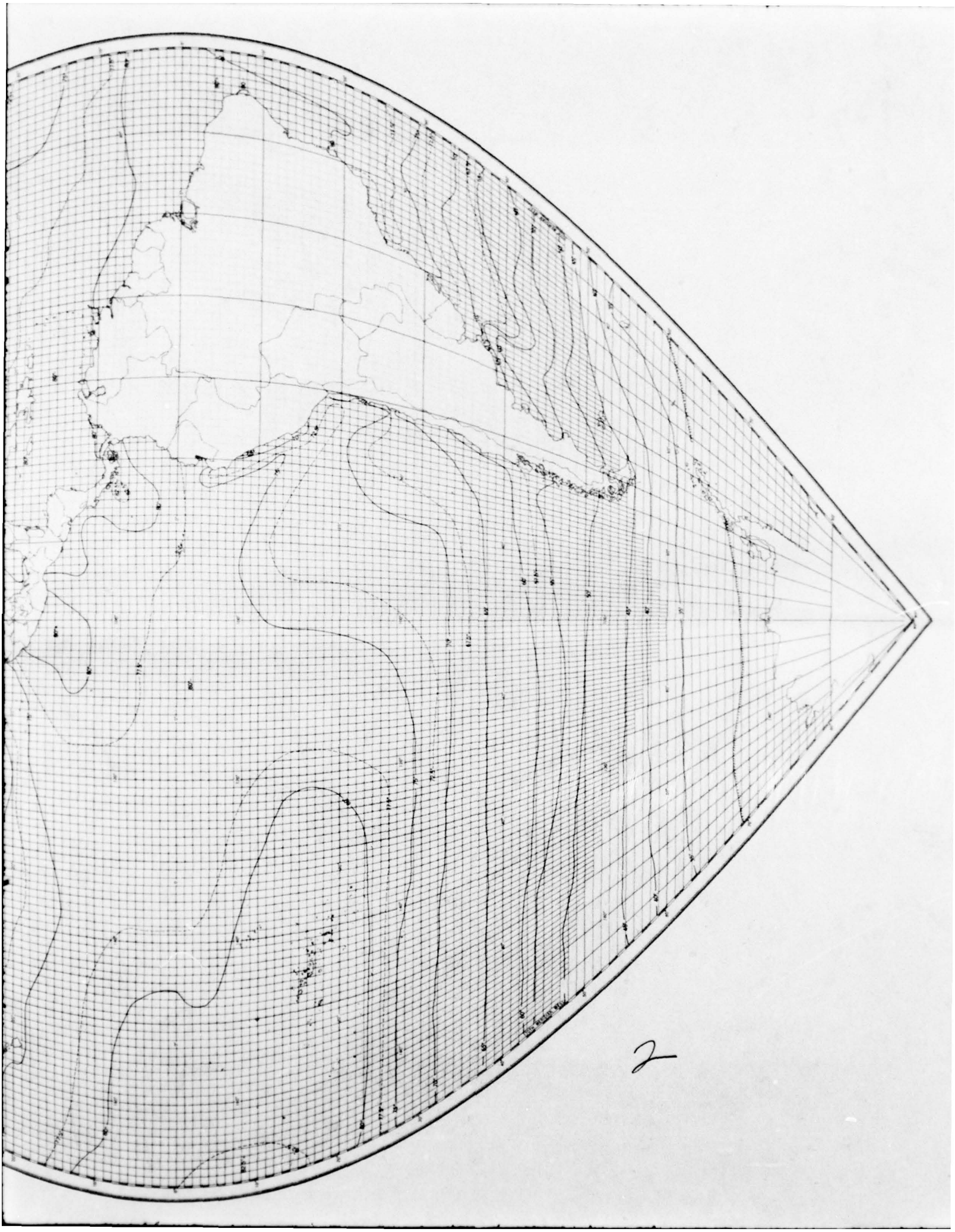
EASTERN PACIFIC OCEAN
JANUARY

LEGEND

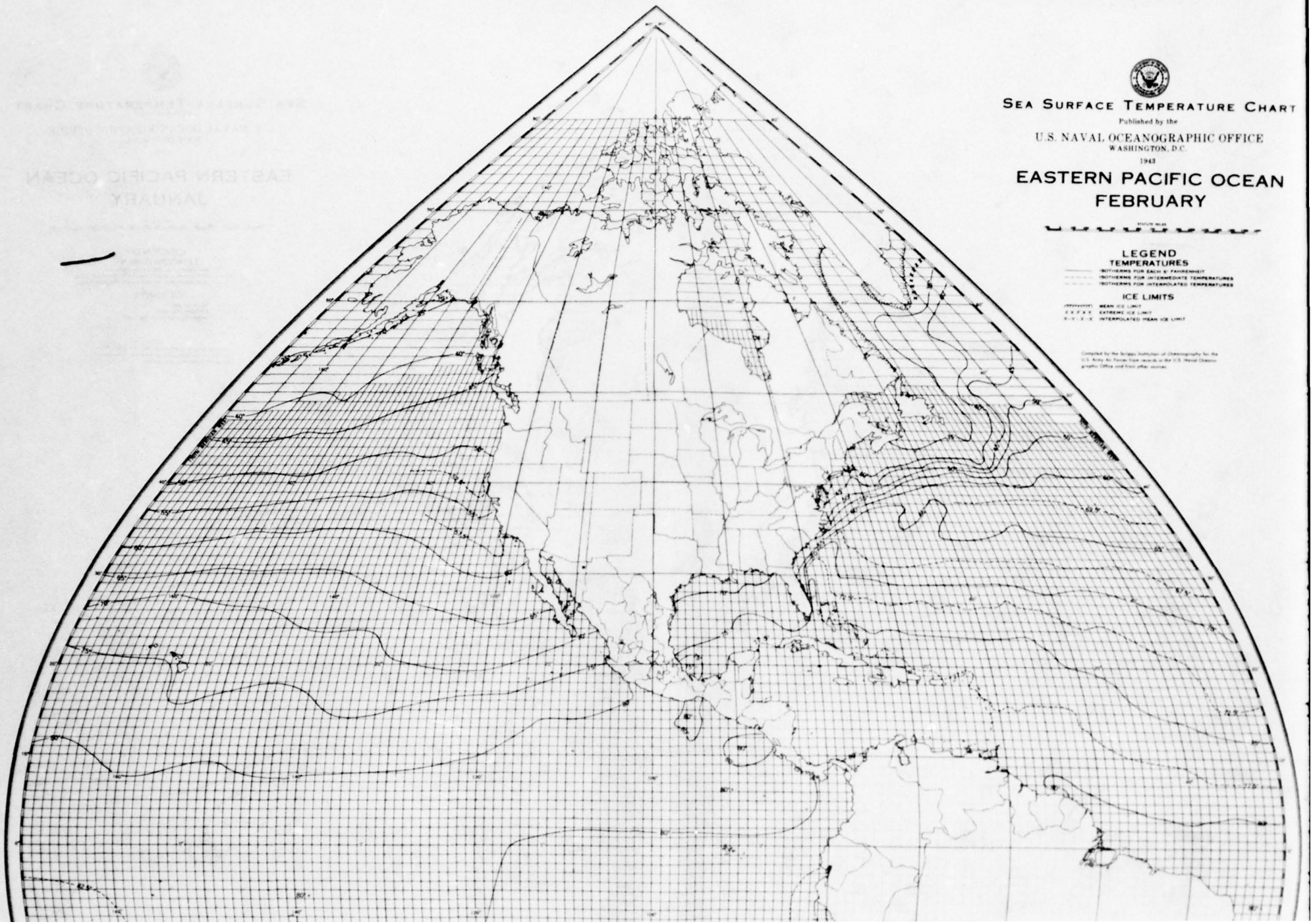
TEMPERATURES

ICE LIMITS

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SEA SURFACE TEMPERATURE CHART

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WASHINGTON, D.C.

1943

EASTERN PACIFIC OCEAN
FEBRUARY

STATUTE MILES

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

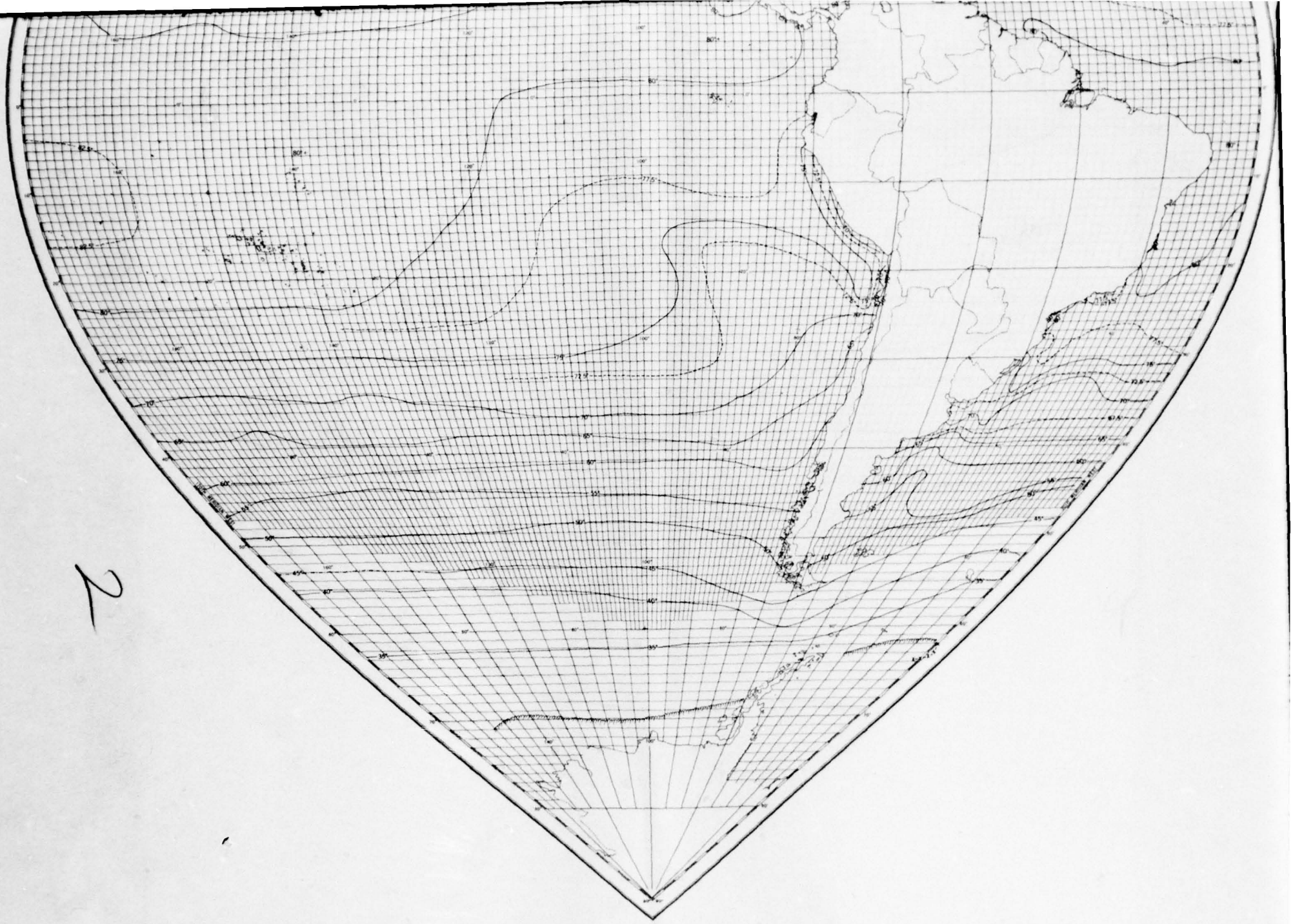
ICE LIMITS

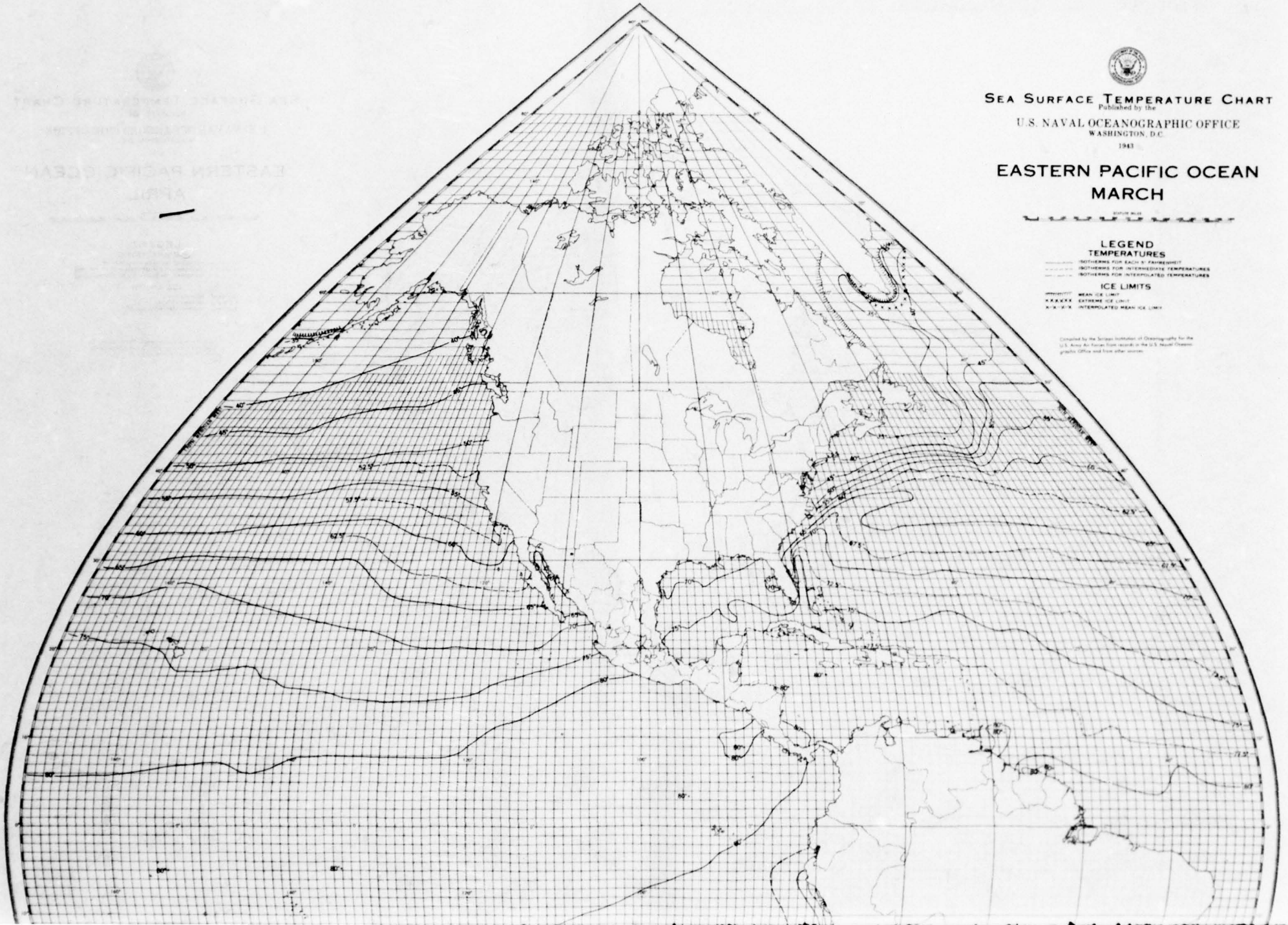
MEAN ICE LIMIT

EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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SEA SURFACE TEMPERATURE CHART

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1943

EASTERN PACIFIC OCEAN

MARCH

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

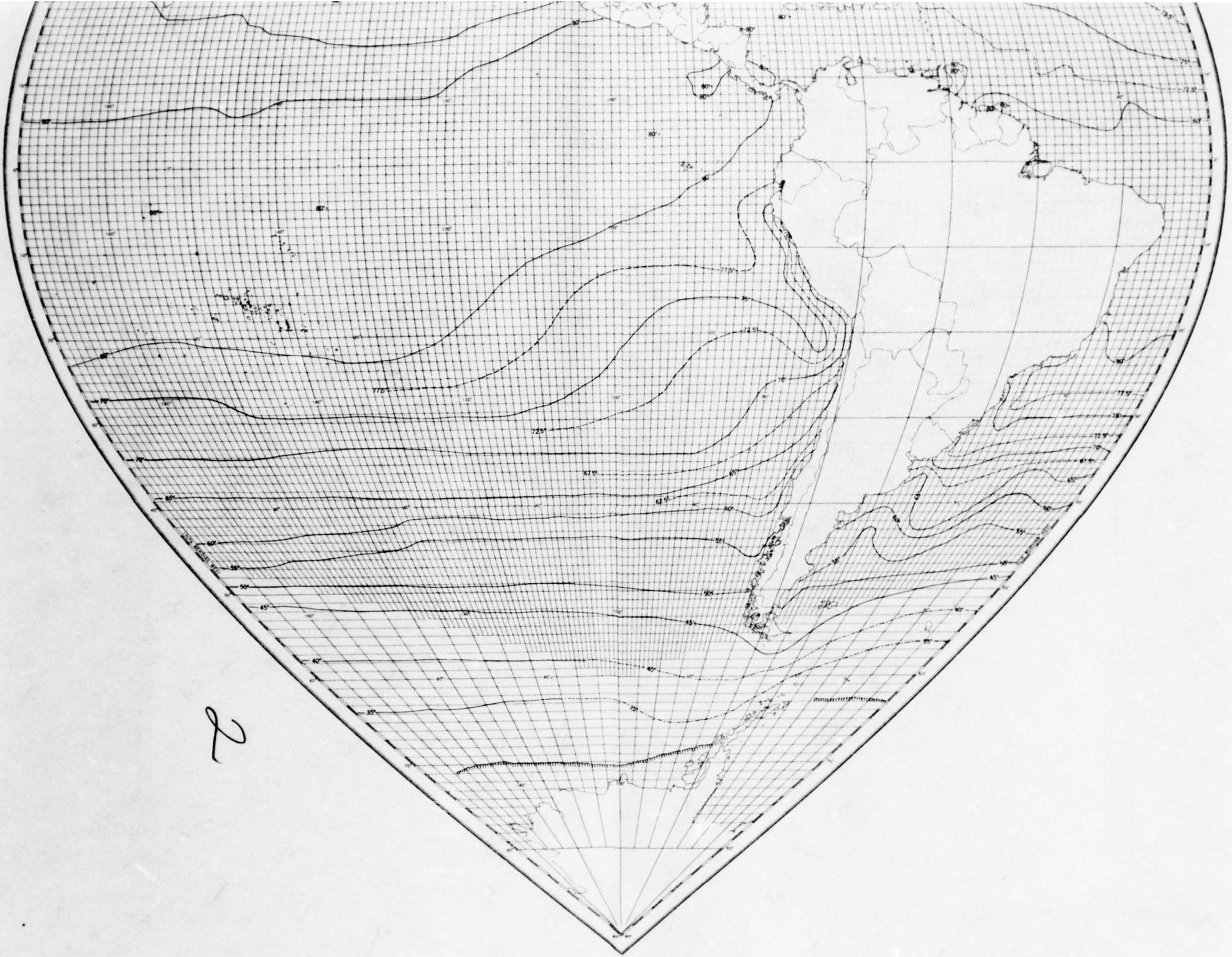
ICE LIMITS

MEAN ICE LIMIT

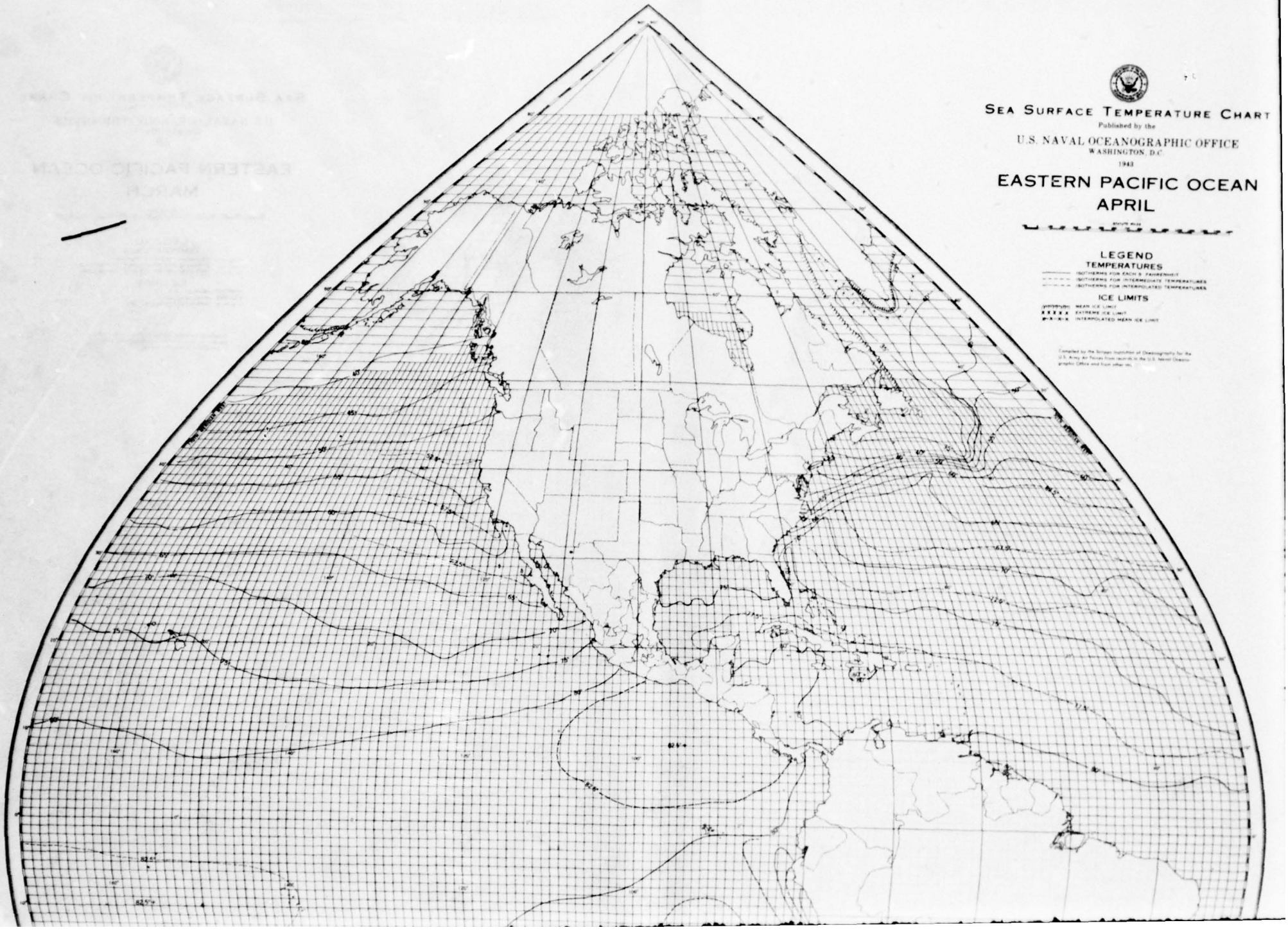
EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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SEA SURFACE TEMPERATURE CHART

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WASHINGTON, D.C.

1943

EASTERN PACIFIC OCEAN

APRIL

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5 FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

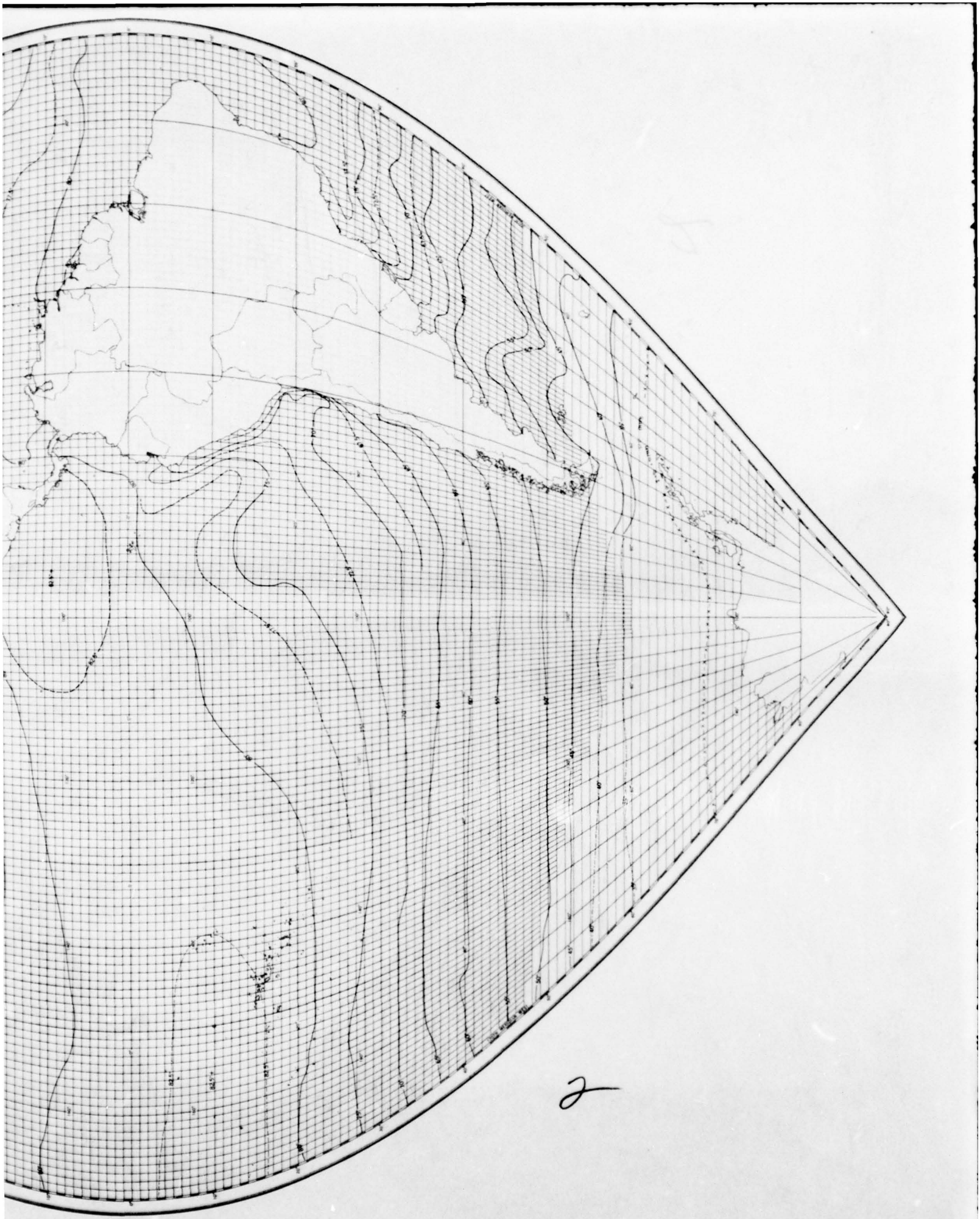
ICE LIMITS

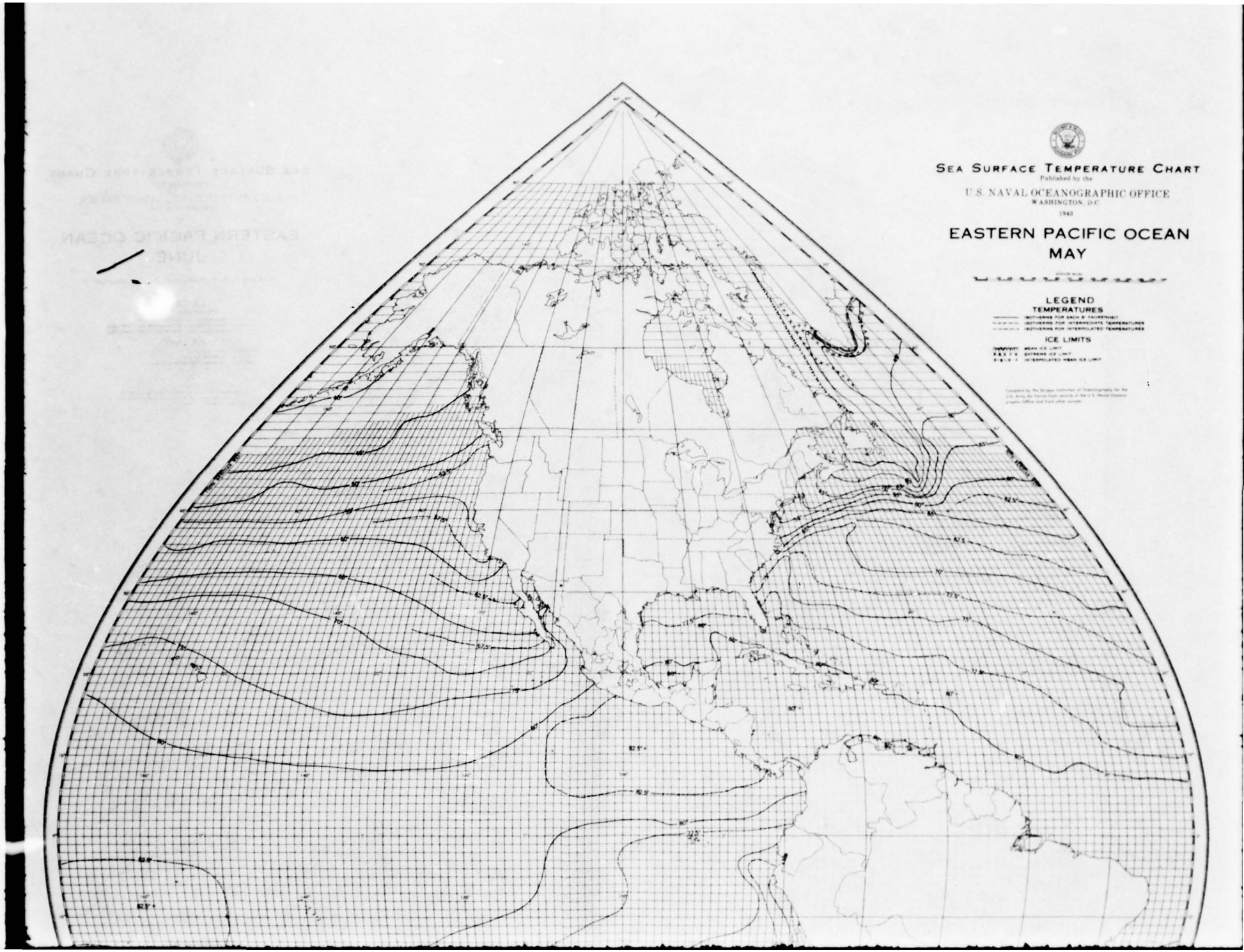
MEAN ICE LIMIT

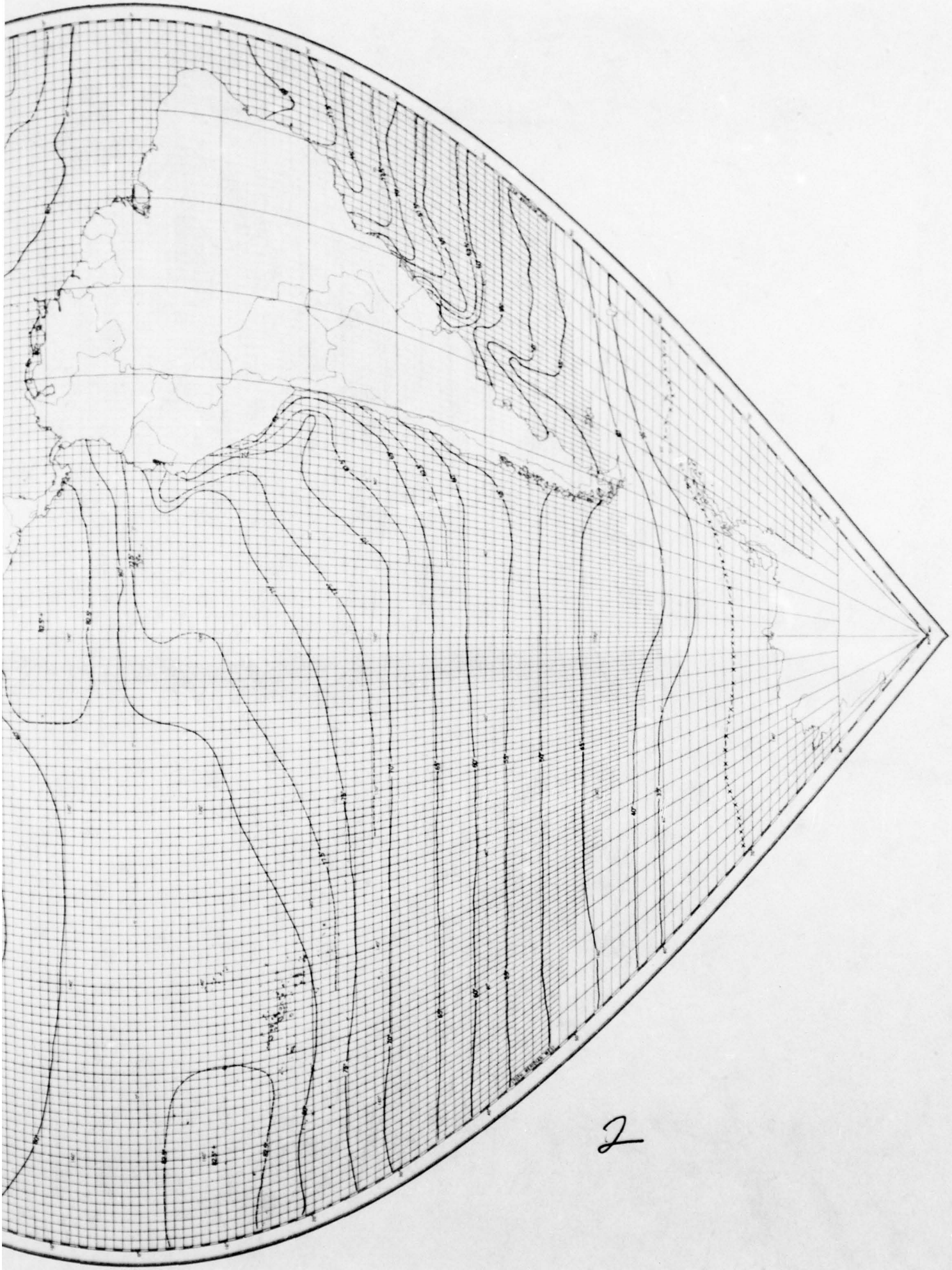
EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

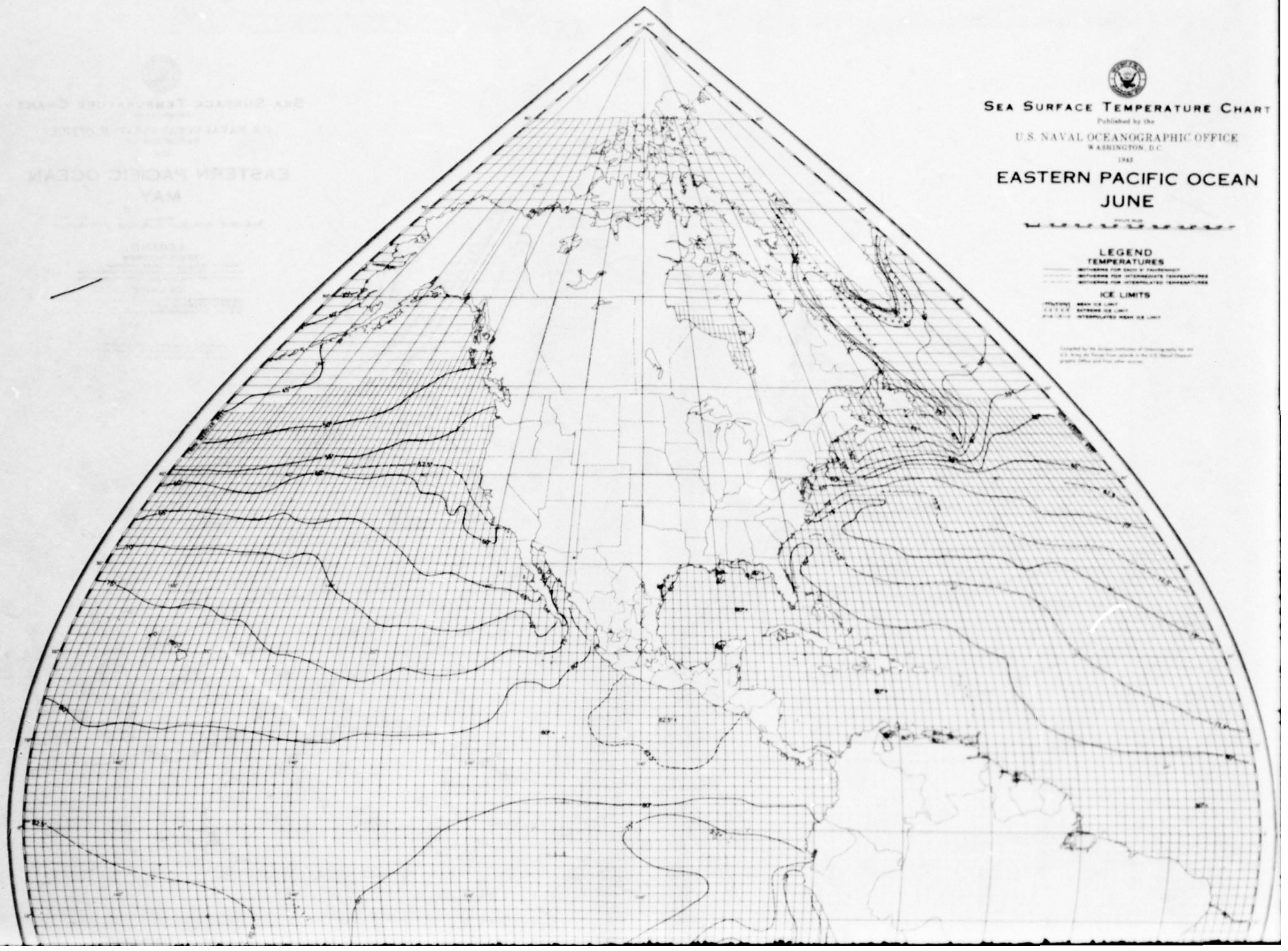
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SEA SURFACE TEMPERATURE CHART
Published by the
U.S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D.C.
1943
EASTERN PACIFIC OCEAN
MAY
LEGEND
TEMPERATURES
ISOTHERMS FOR EACH 5° FAHRENHEIT
ISOTHERMS FOR INTERMEDIATE TEMPERATURES
ISOTHERMS FOR INTERPOLATED TEMPERATURES
ICE LIMITS
MEAN ICE LIMIT
EXTREME ICE LIMIT
INTERPOLATED MEAN ICE LIMIT



2



SEA SURFACE TEMPERATURE CHART

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1943

EASTERN PACIFIC OCEAN

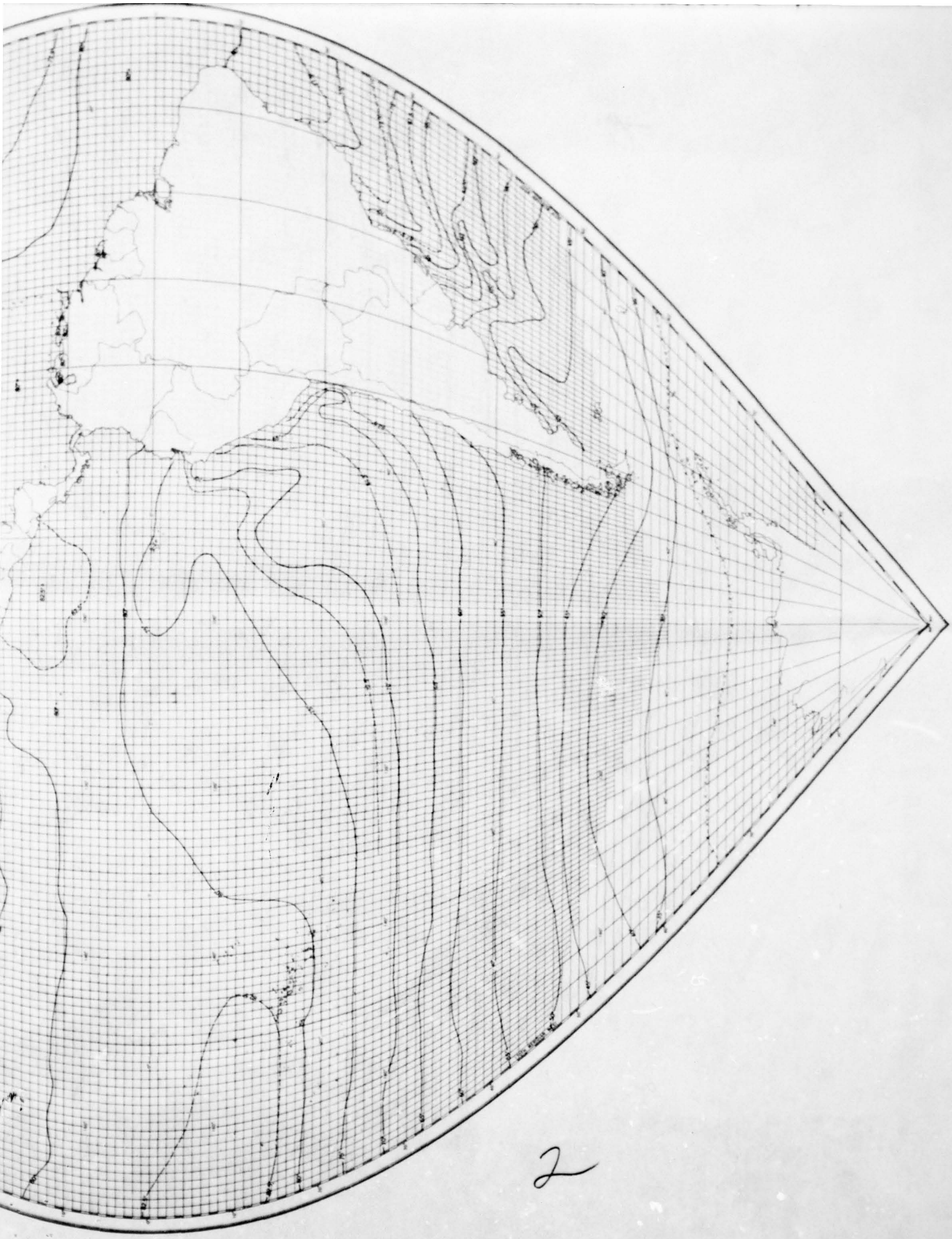
JUNE

LEGEND

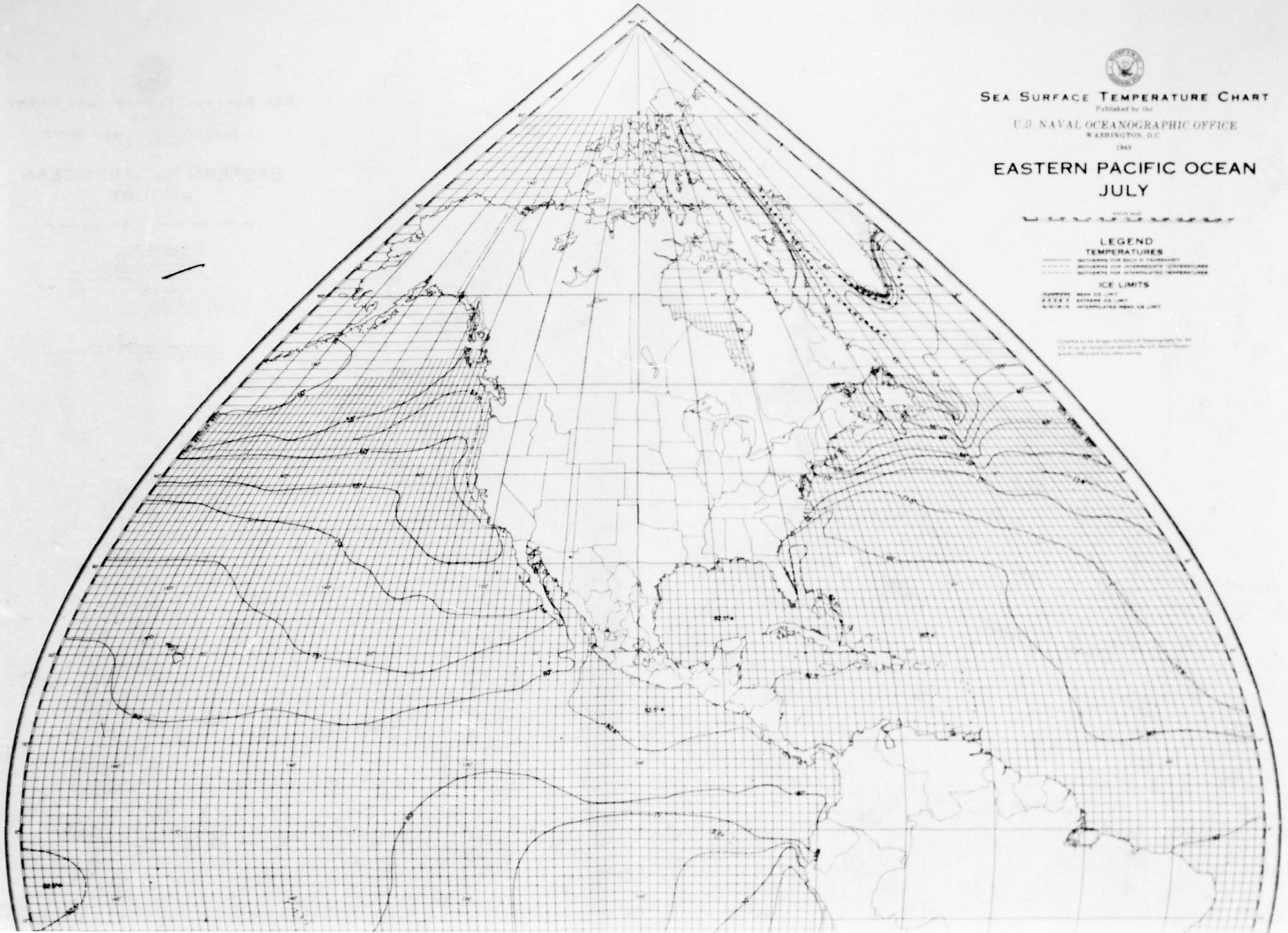
TEMPERATURES

ICE LIMITS

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SEA SURFACE TEMPERATURE CHART

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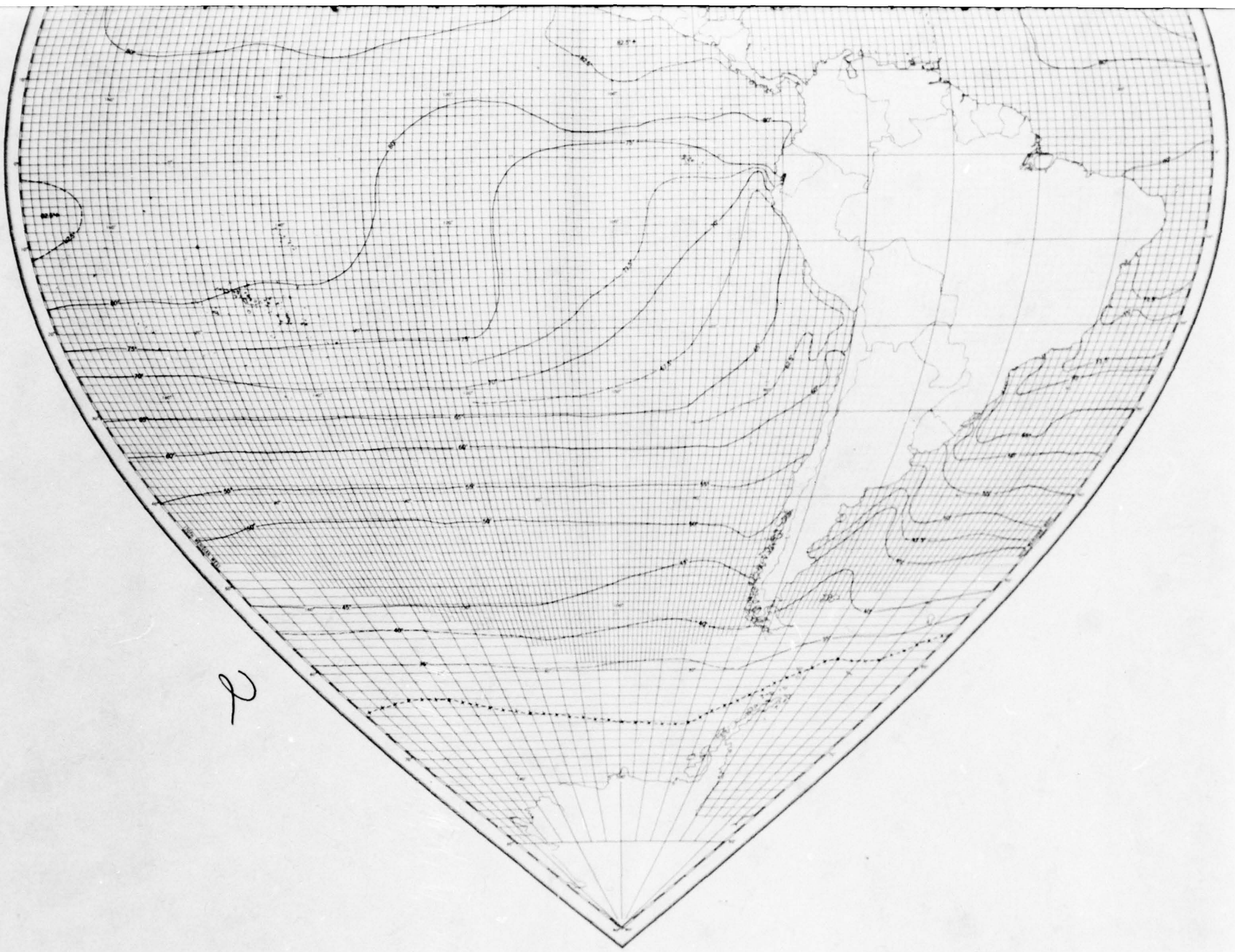
1943

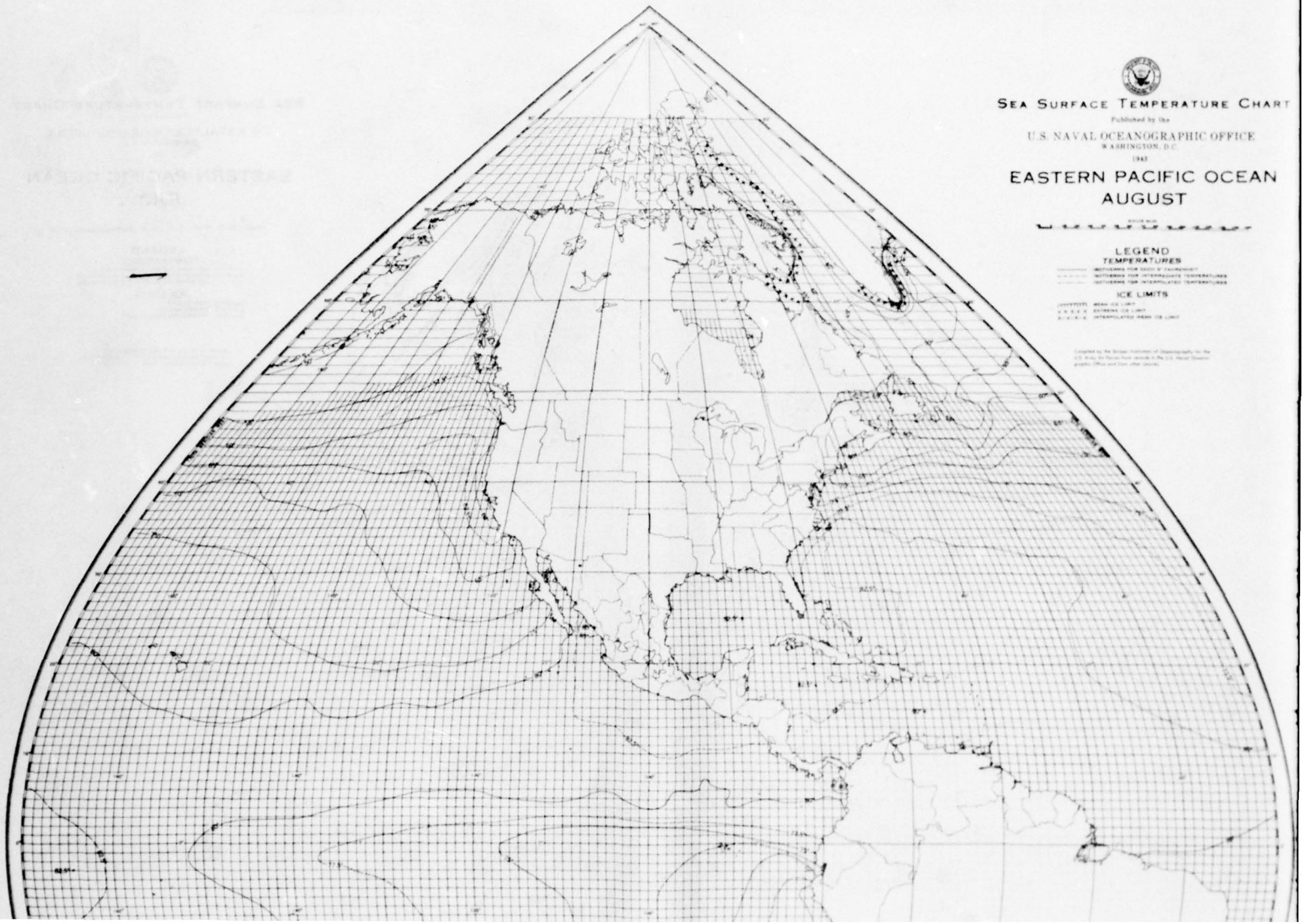
EASTERN PACIFIC OCEAN
JULY

LEGEND

TEMPERATURES

ICE LIMITS





SEA SURFACE TEMPERATURE CHART

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1943

EASTERN PACIFIC OCEAN

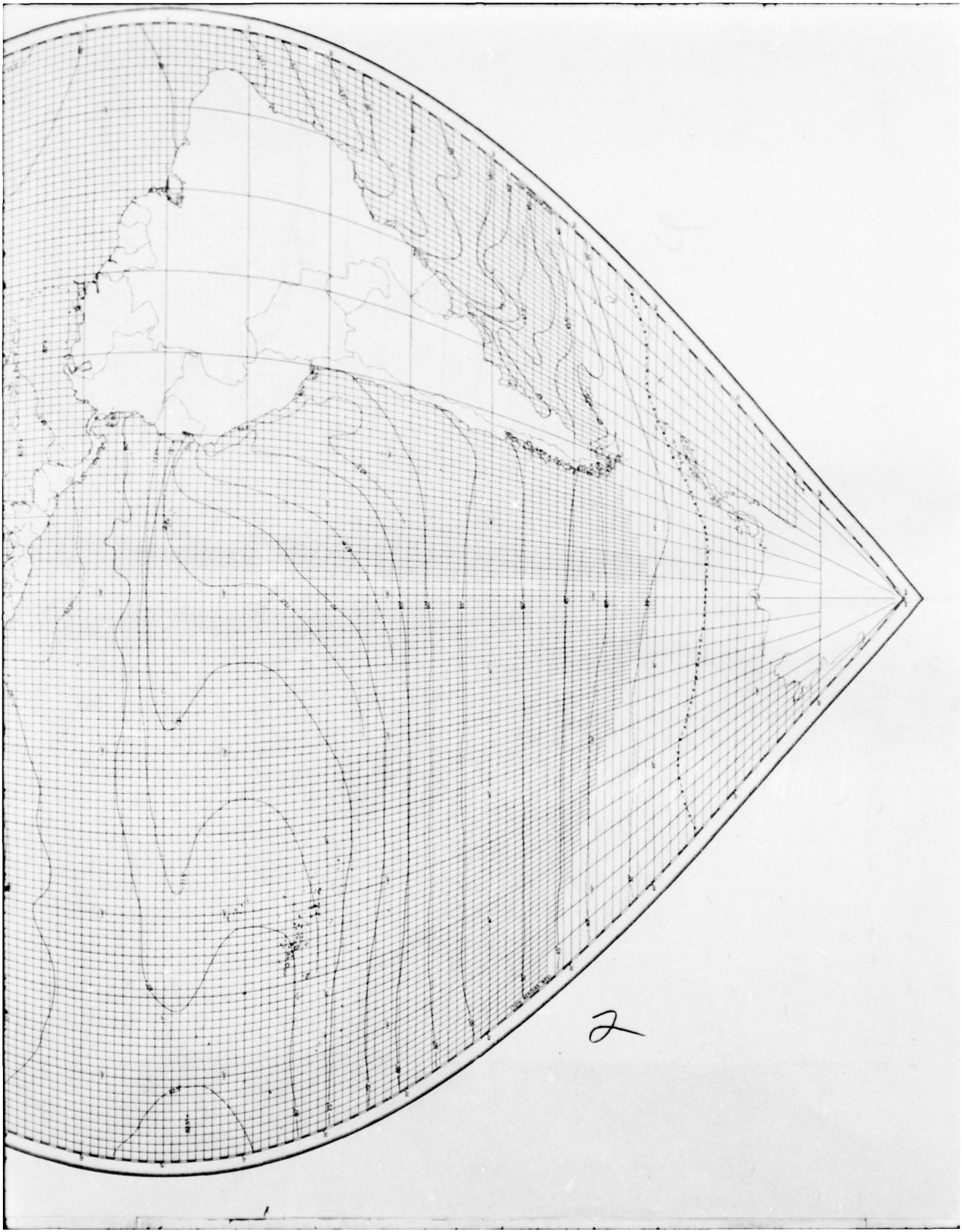
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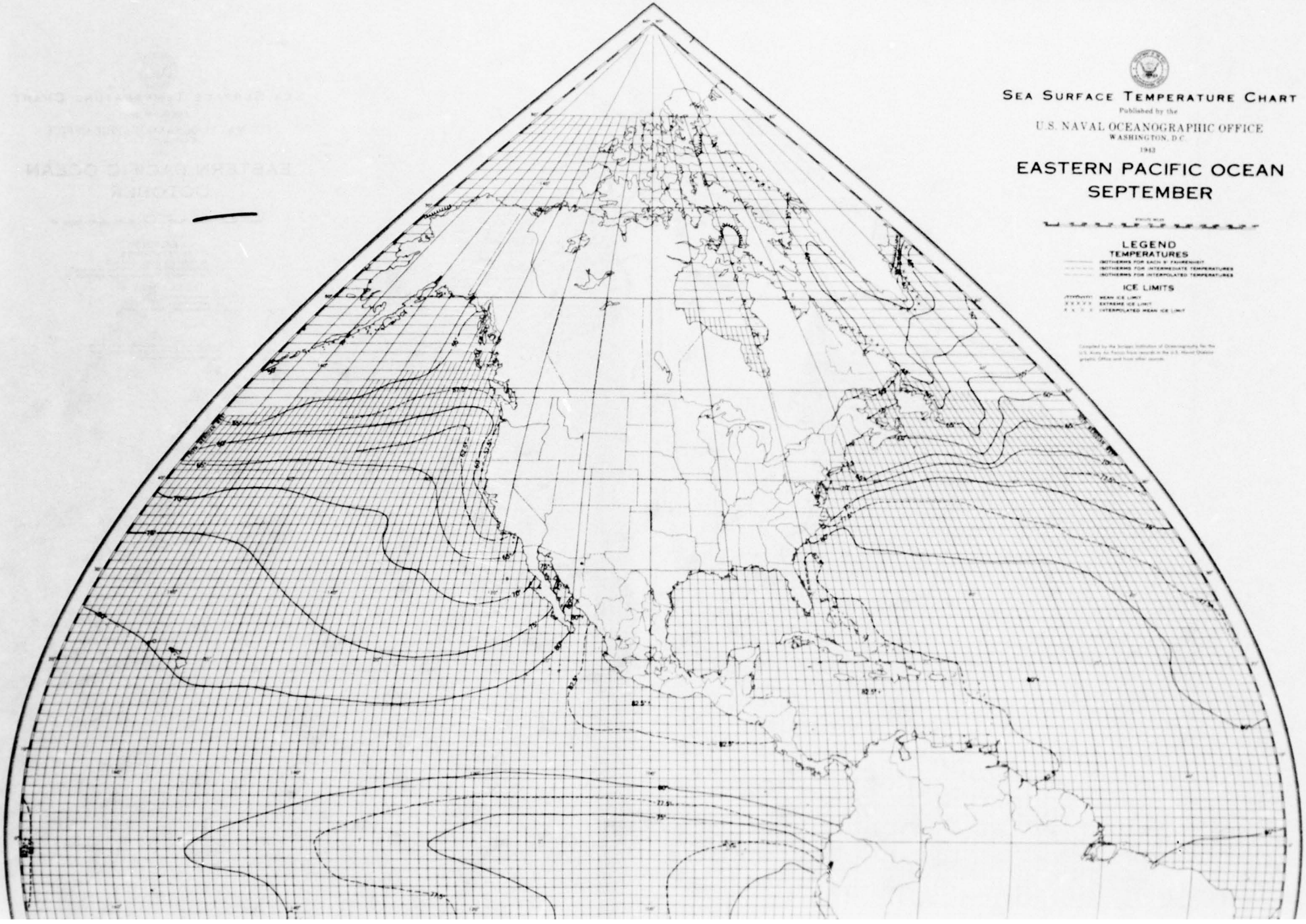
LEGEND

TEMPERATURES

ICE LIMITS

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SEA SURFACE TEMPERATURE CHART

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1943

EASTERN PACIFIC OCEAN
SEPTEMBER

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

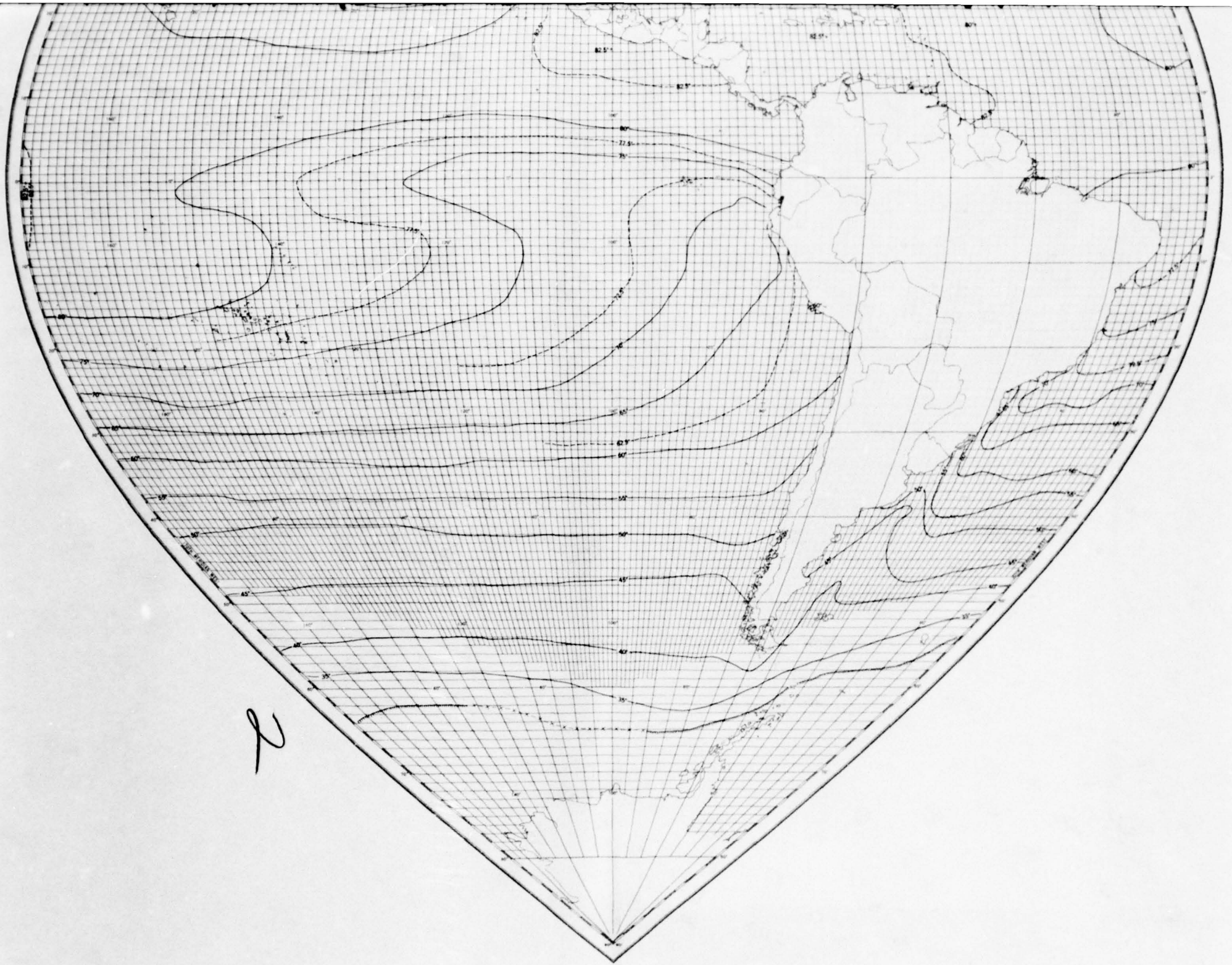
ICE LIMITS

MEAN ICE LIMIT

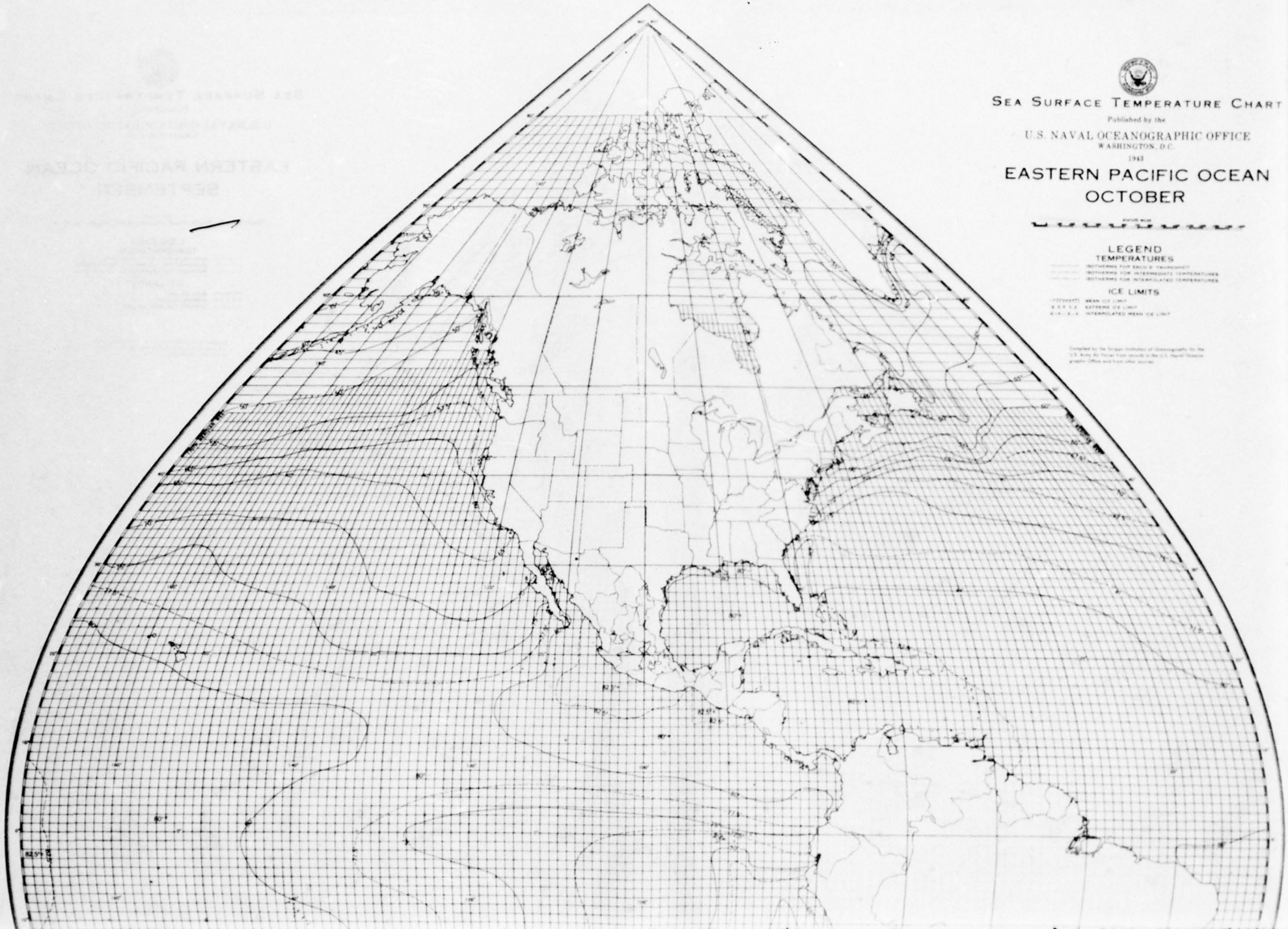
EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

Compiled by the Scripps Institution of Oceanography for the U.S. Army Air Forces from records in the U.S. Hydrographic Office and from other sources.


82.5°
80°
77.5°
75°
72.5°
70°
67.5°
65°
62.5°
60°
57.5°
55°
52.5°
50°
47.5°
45°
42.5°
40°
37.5°
35°
32.5°

2



SEA SURFACE TEMPERATURE CHART

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WASHINGTON, D.C.

1943

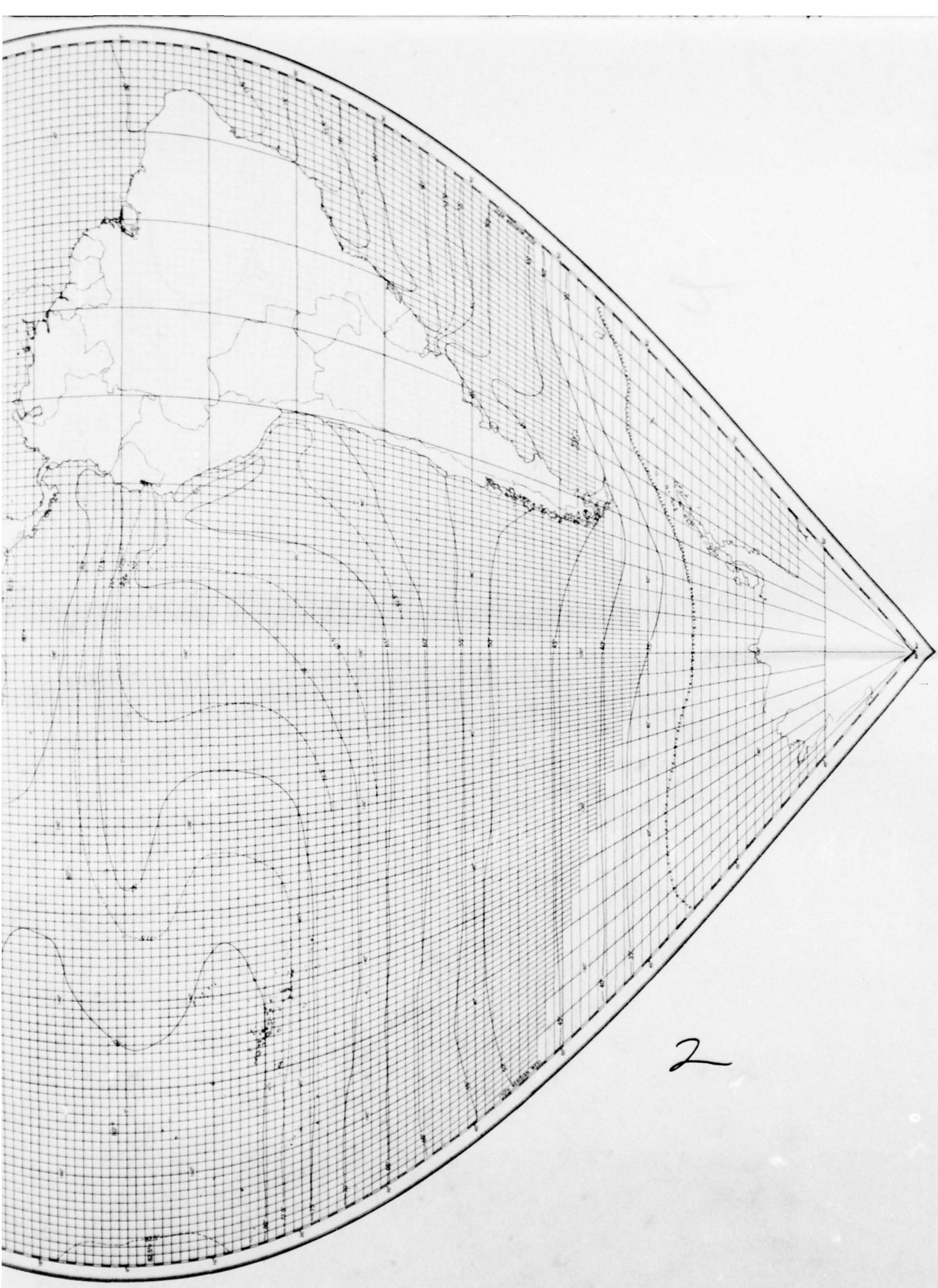
EASTERN PACIFIC OCEAN
OCTOBER

LEGEND

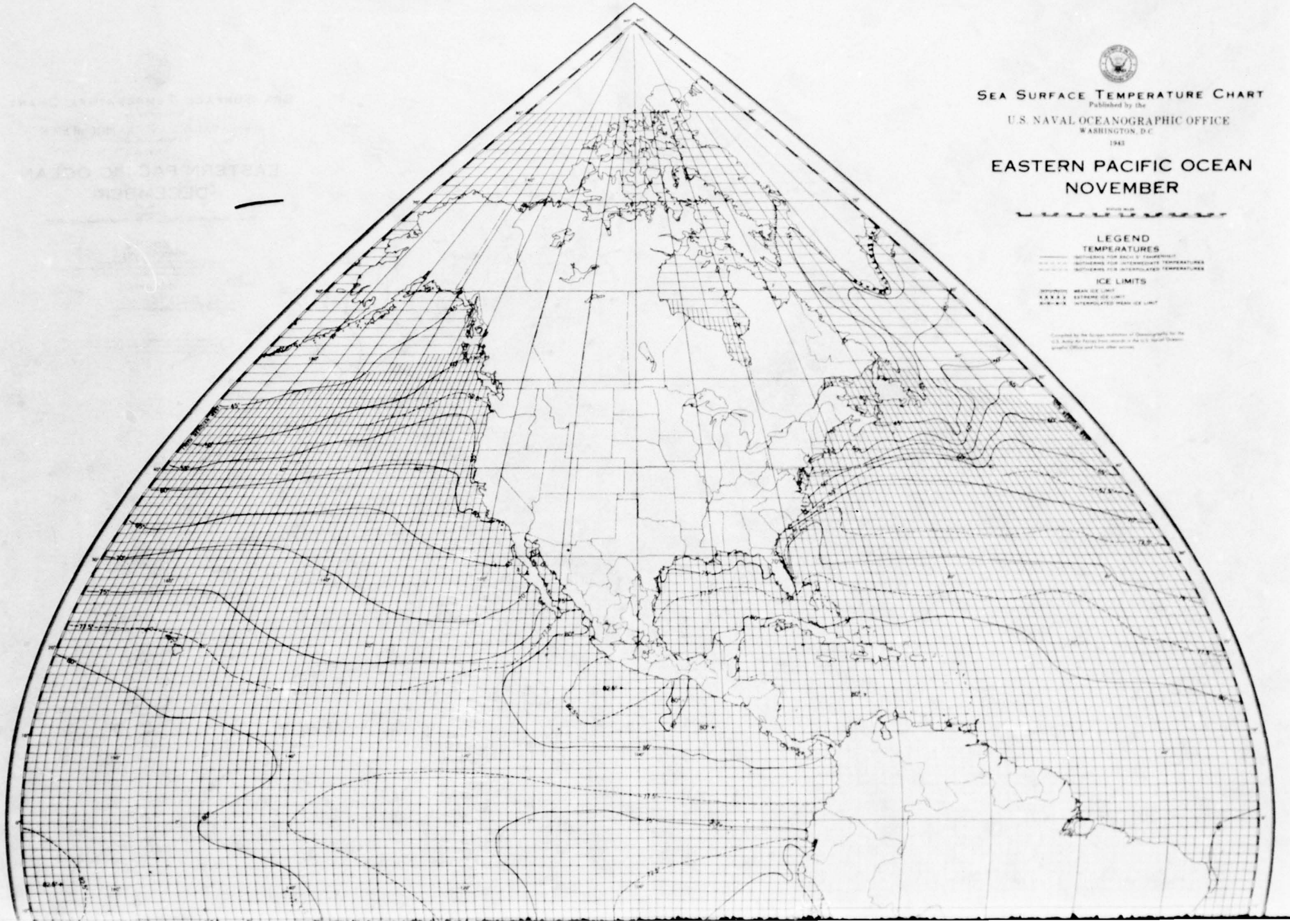
TEMPERATURES

ICE LIMITS

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SEA SURFACE TEMPERATURE CHART

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EASTERN PACIFIC OCEAN
NOVEMBER

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

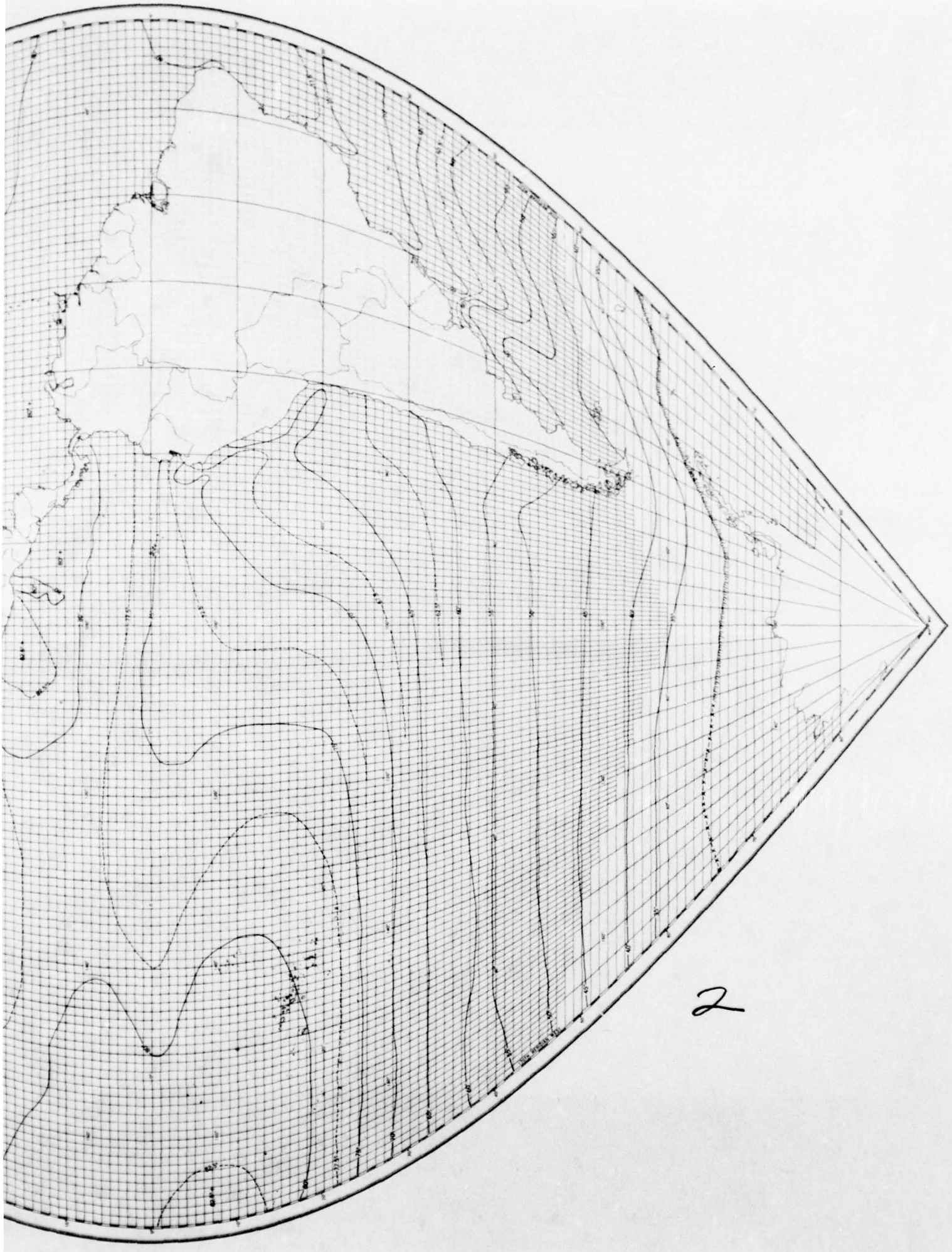
ICE LIMITS

MEAN ICE LIMIT

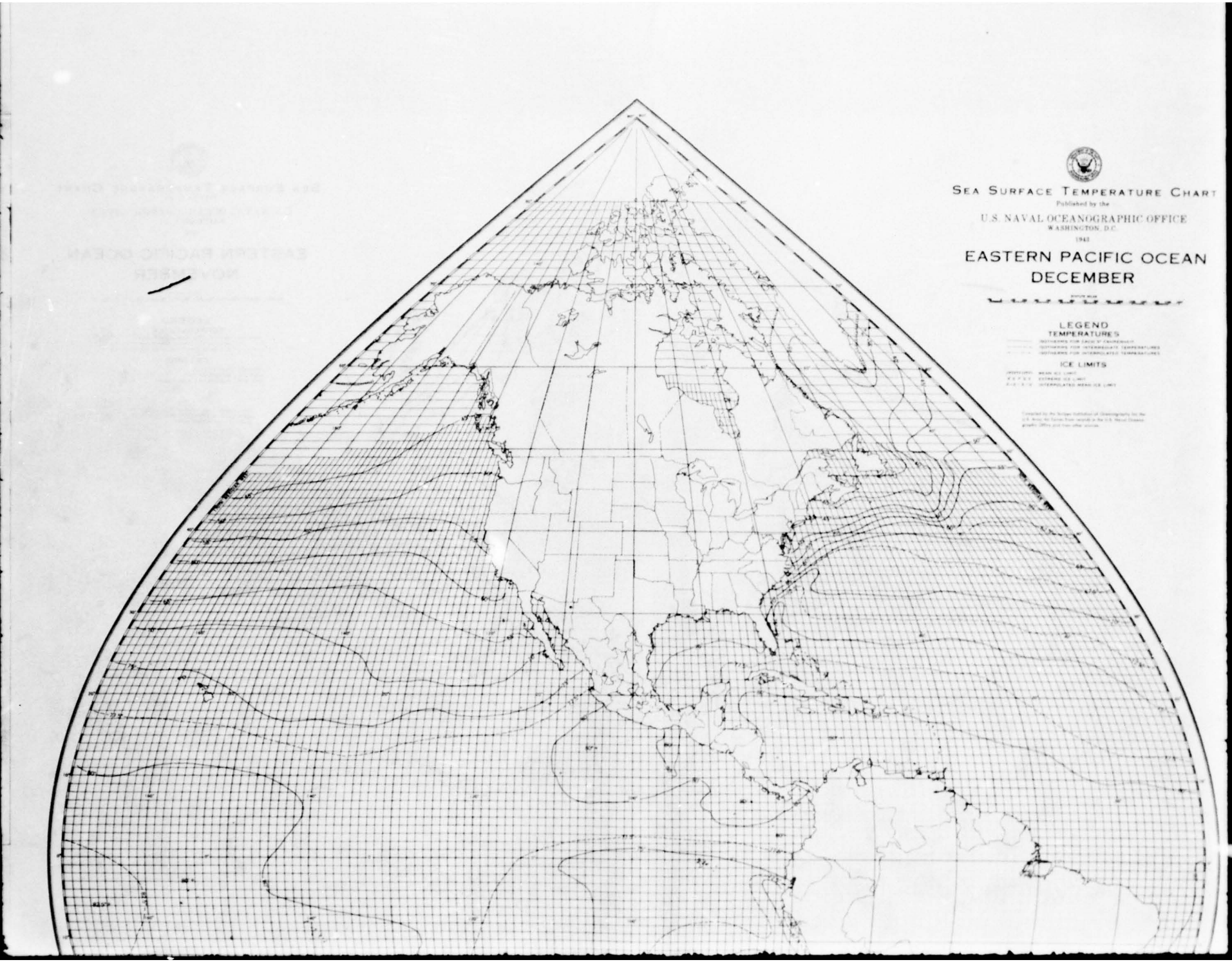
EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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2



SEA SURFACE TEMPERATURE CHART

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WASHINGTON, D.C.

1961

EASTERN PACIFIC OCEAN

DECEMBER

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

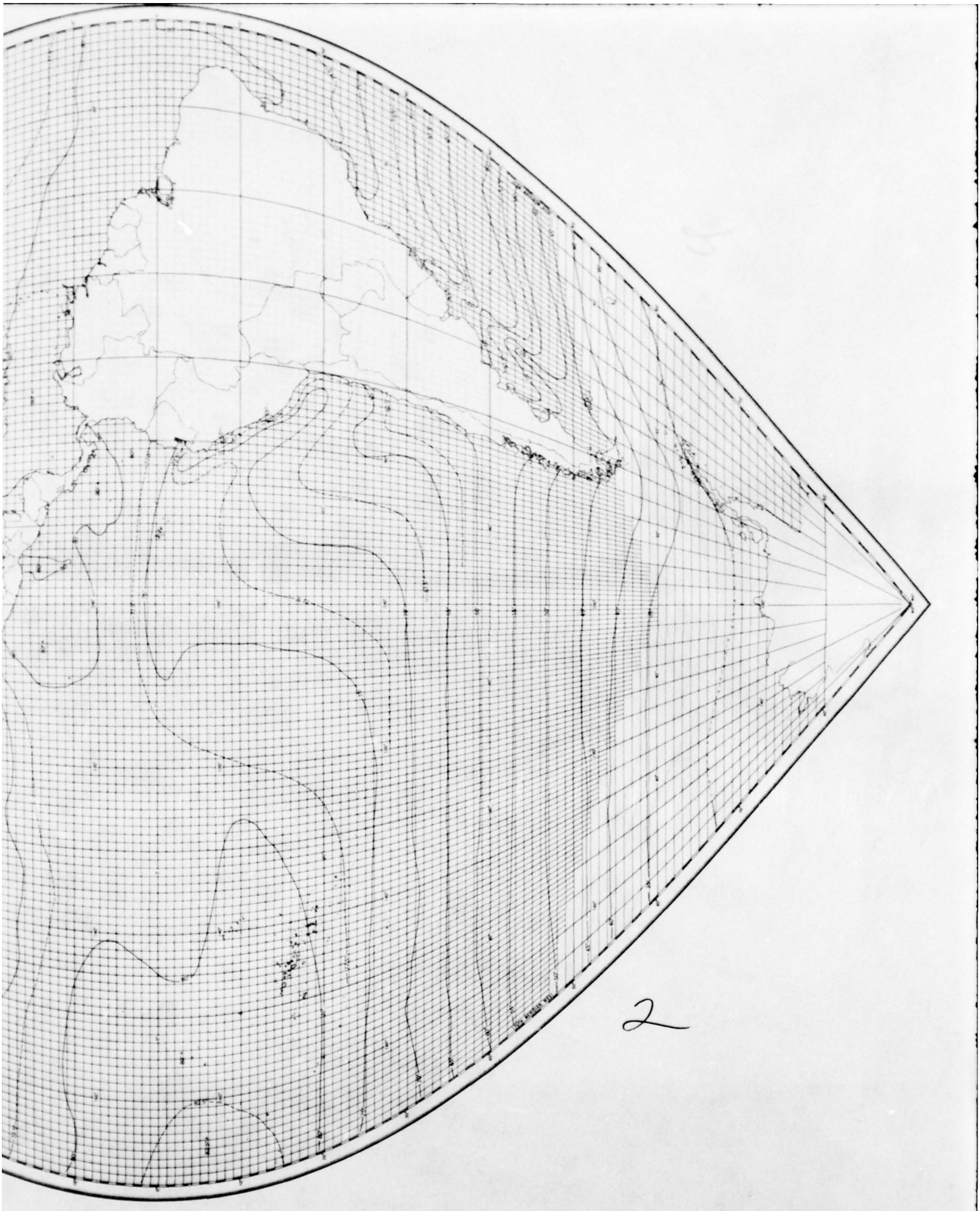
ICE LIMITS

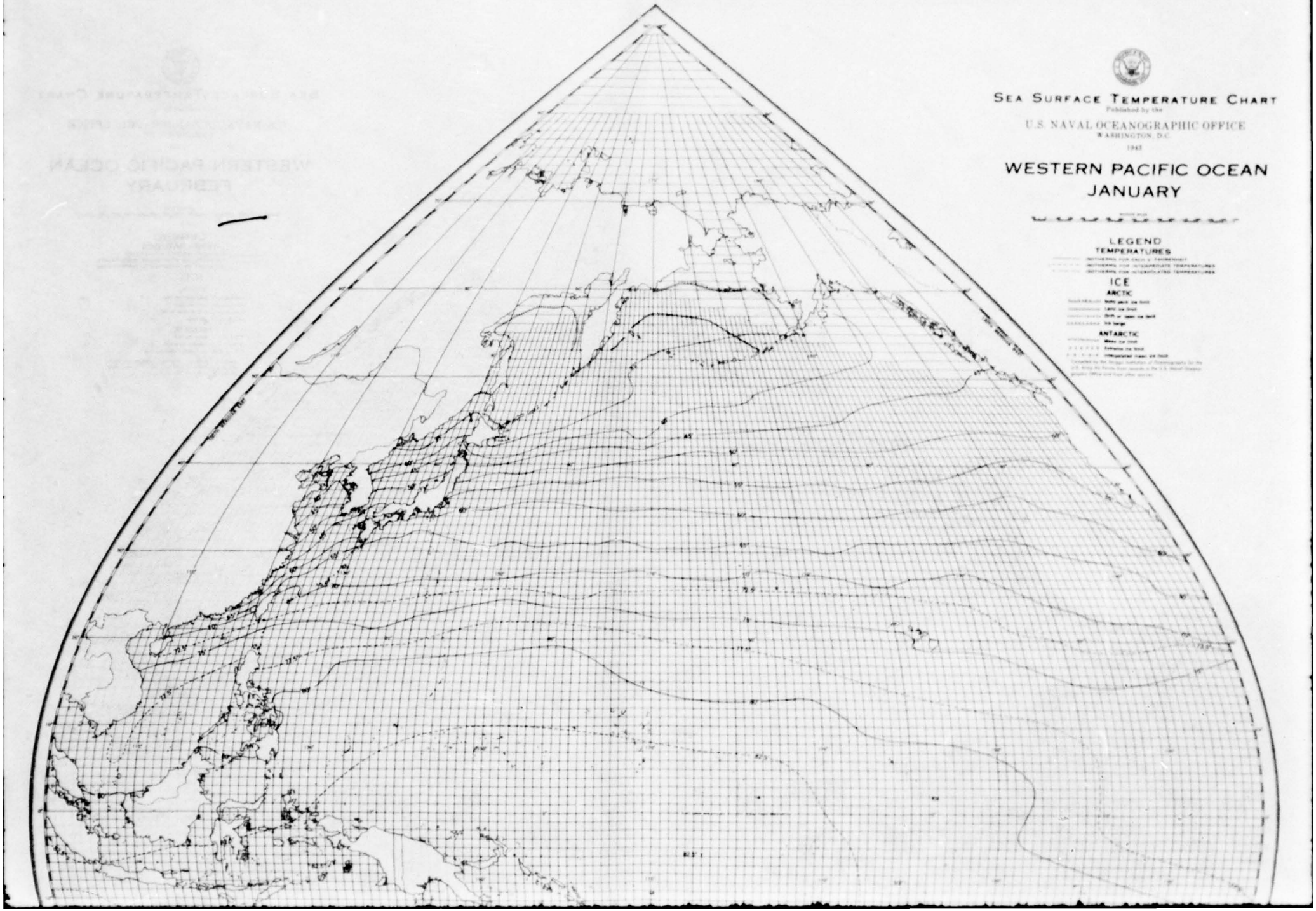
MEAN ICE LIMIT

EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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WASHINGTON, D.C.

1943

WESTERN PACIFIC OCEAN
JANUARY

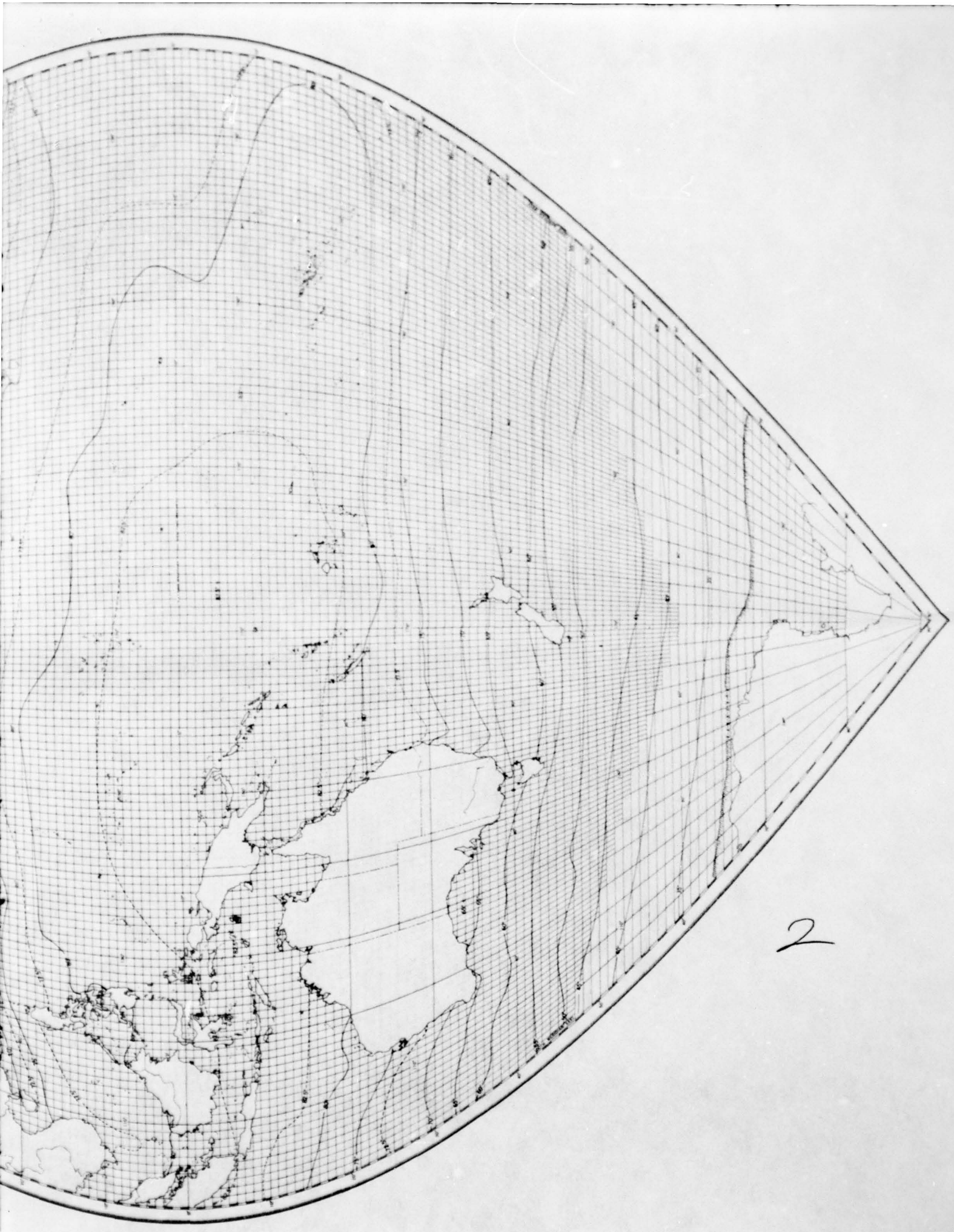
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TEMPERATURES

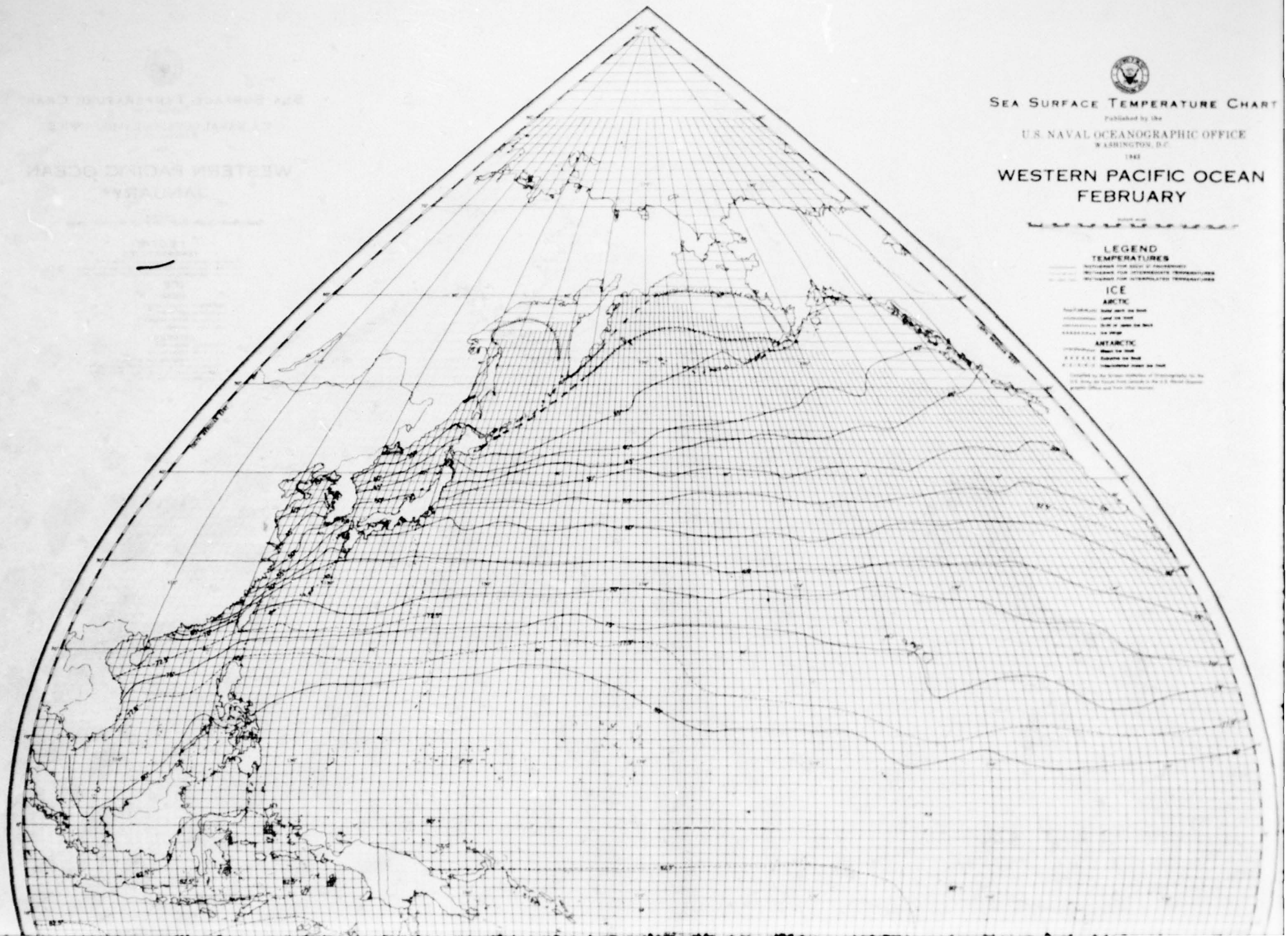
ICE

ARCTIC

ANTARCTIC



2



SEA SURFACE TEMPERATURE CHART

Published by the

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1943

WESTERN PACIFIC OCEAN
FEBRUARY

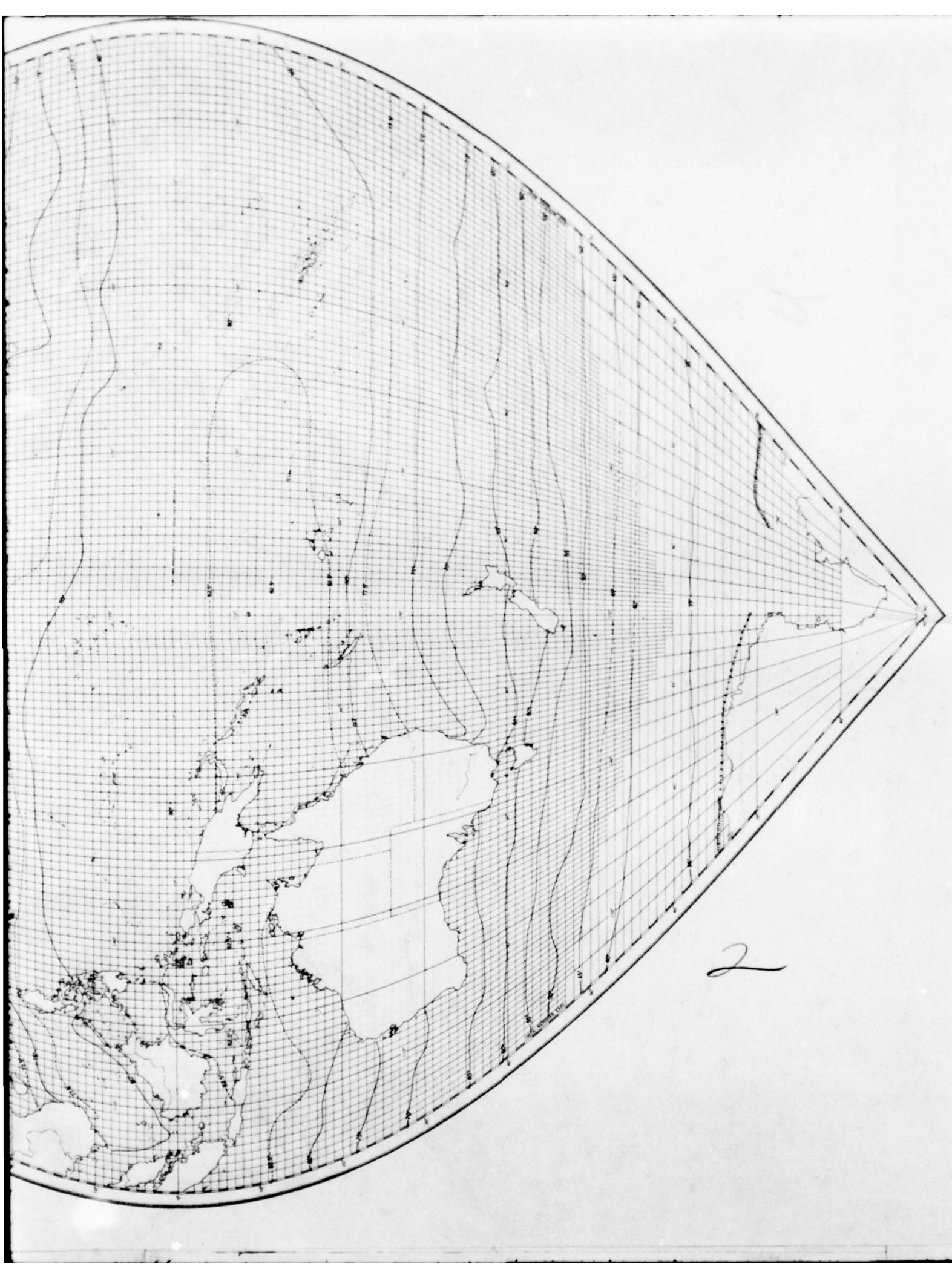
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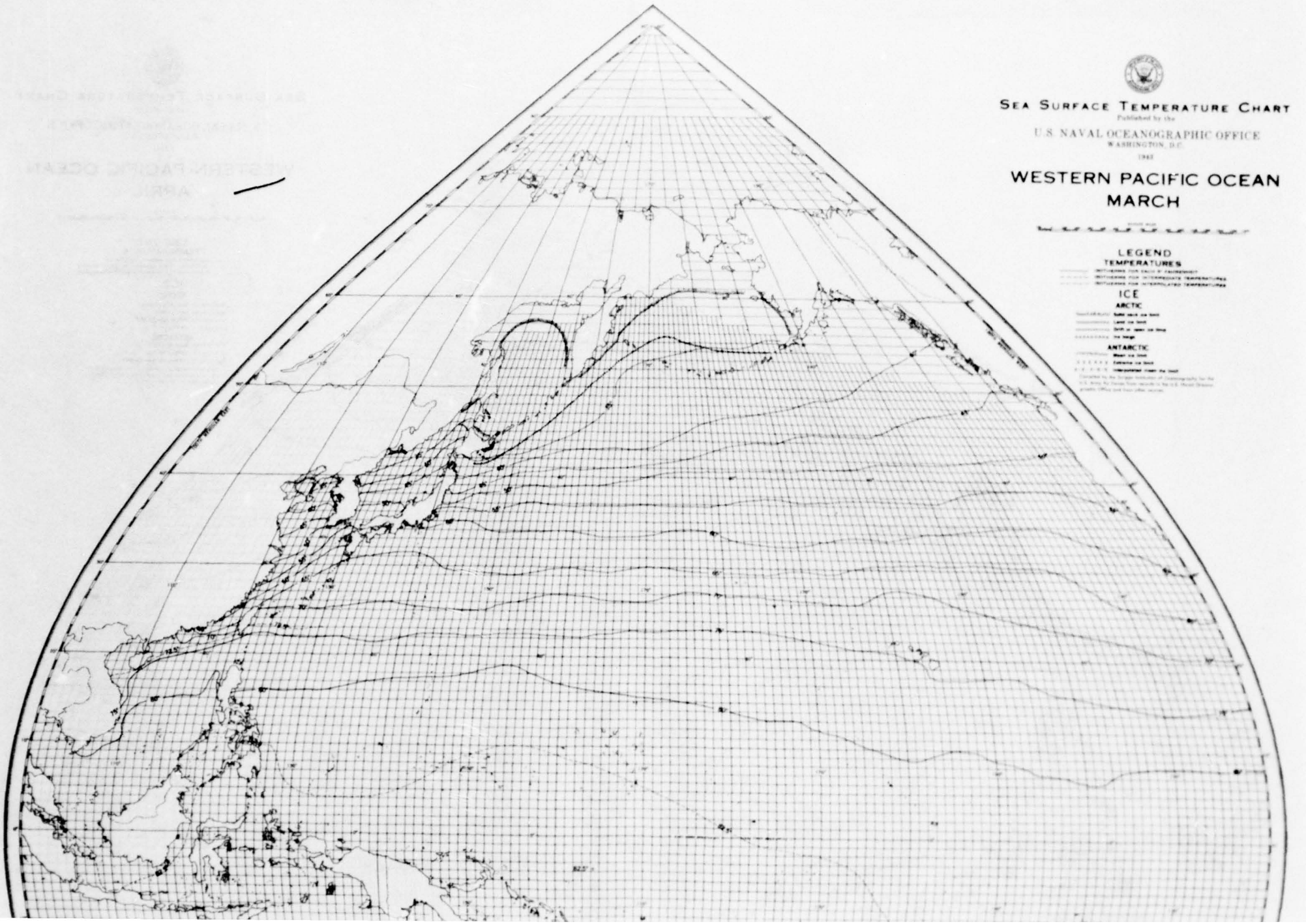
TEMPERATURES

ICE

ARCTIC

ANTARCTIC





SEA SURFACE TEMPERATURE CHART

Published by the

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WASHINGTON, D.C.

1943

WESTERN PACIFIC OCEAN

MARCH

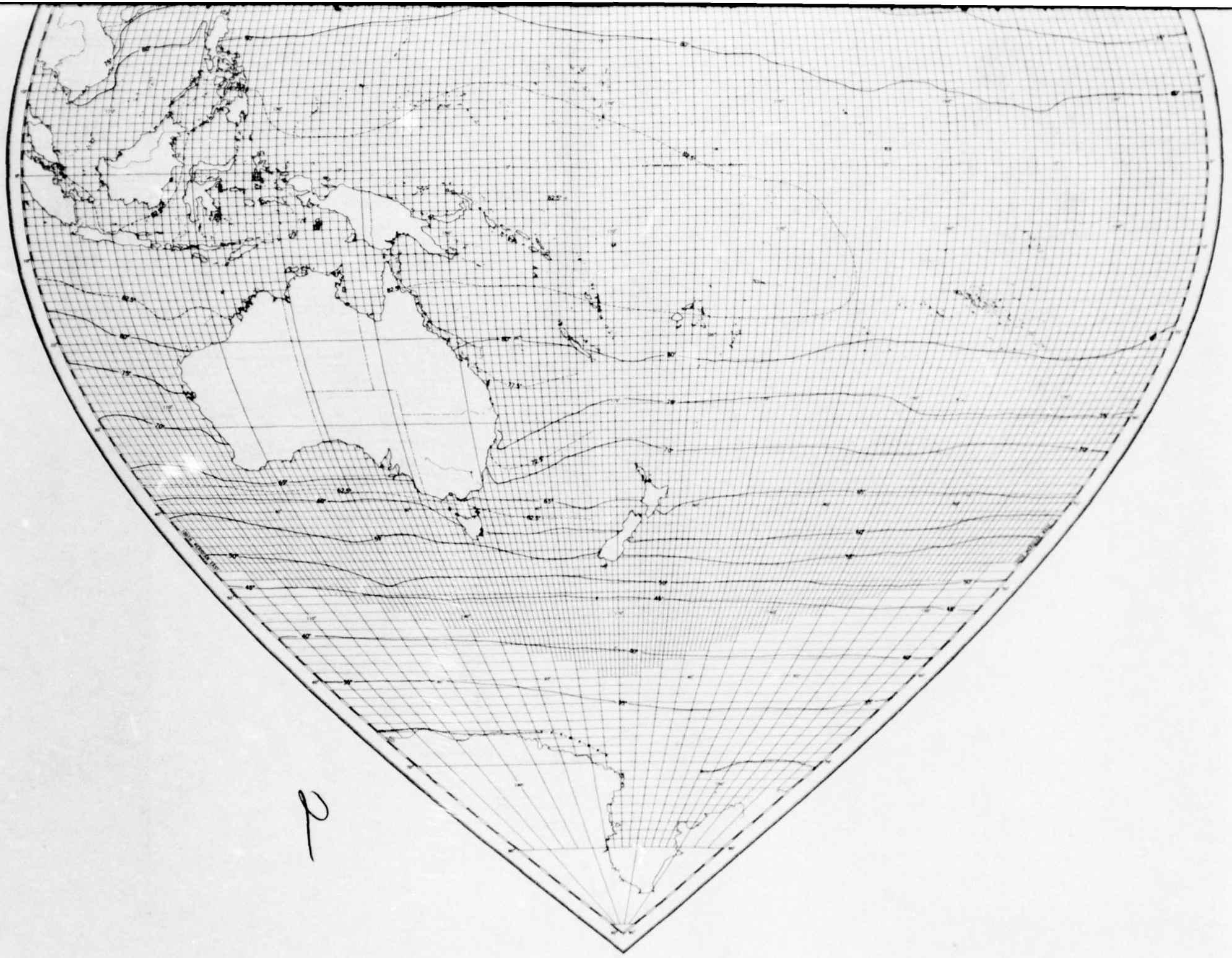
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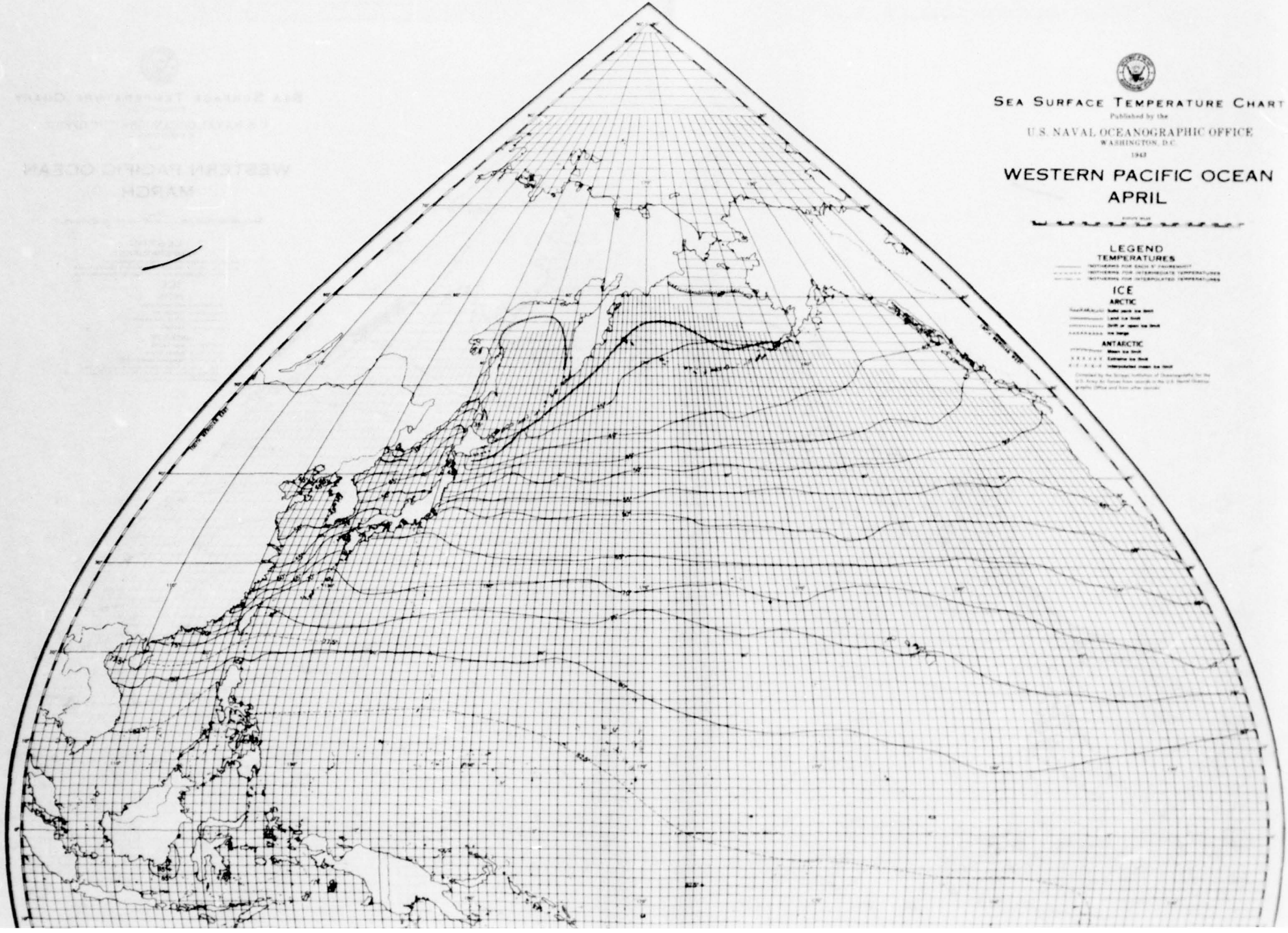
TEMPERATURES

ICE

ARCTIC

ANTARCTIC





SEA SURFACE TEMPERATURE CHART

Published by the

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1943

WESTERN PACIFIC OCEAN

APRIL

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

ICE

ARCTIC

Solid pack ice limit

Land ice limit

Drift or open ice limit

Ice tongs

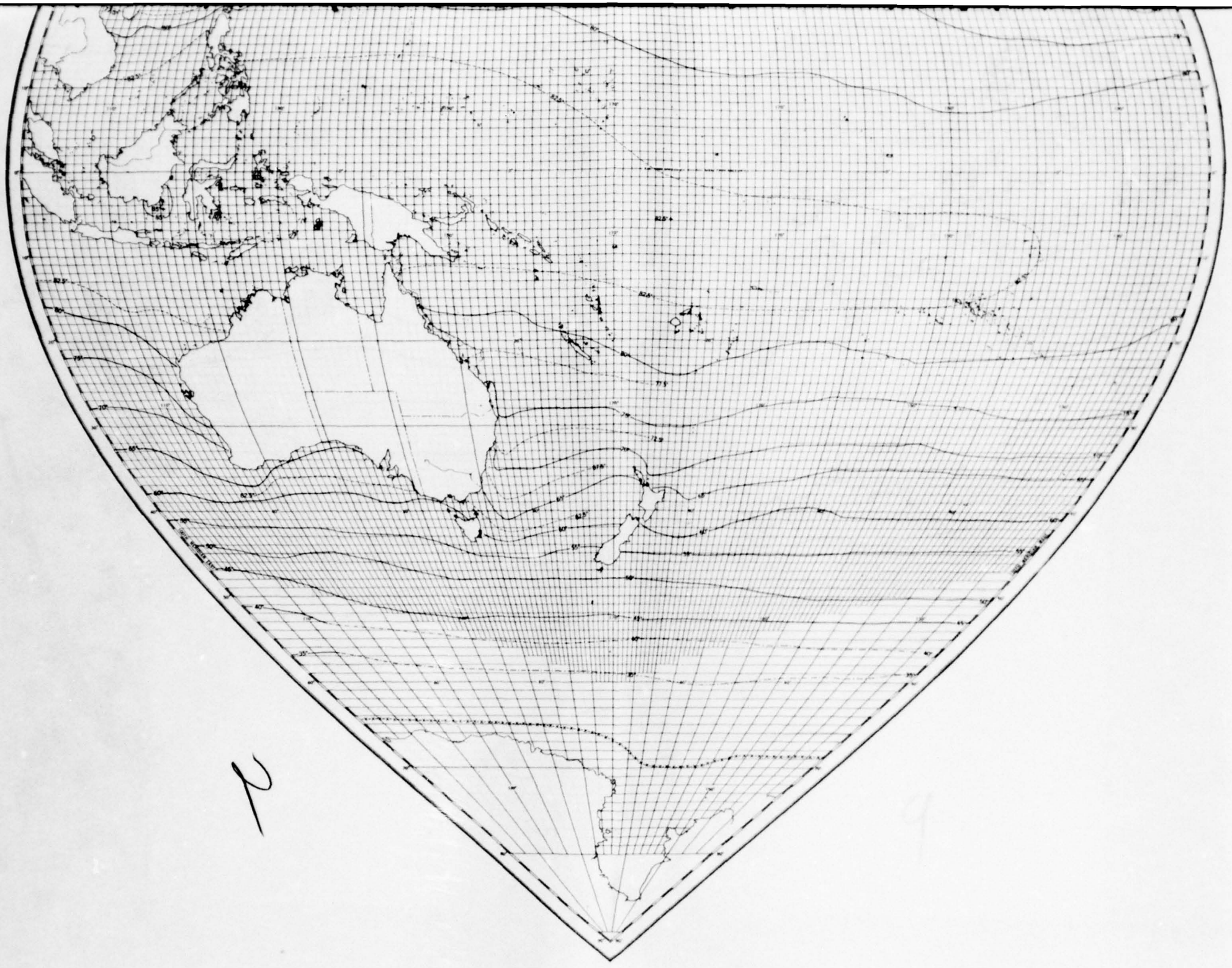
ANTARCTIC

Mean ice limit

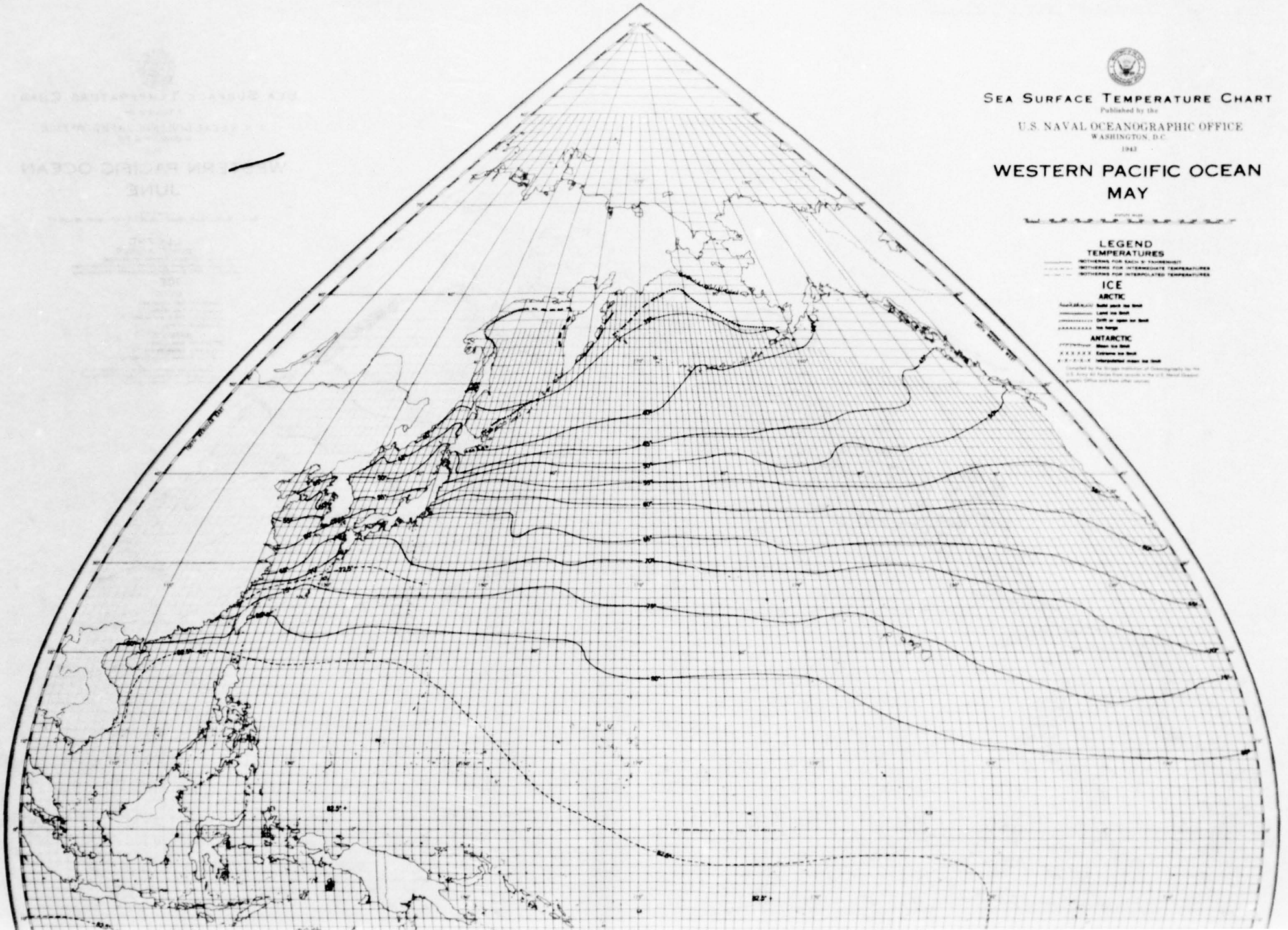
Extreme ice limit

Intermediate mean ice limit

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SEA SURFACE TEMPERATURE CHART

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1943

WESTERN PACIFIC OCEAN

MAY

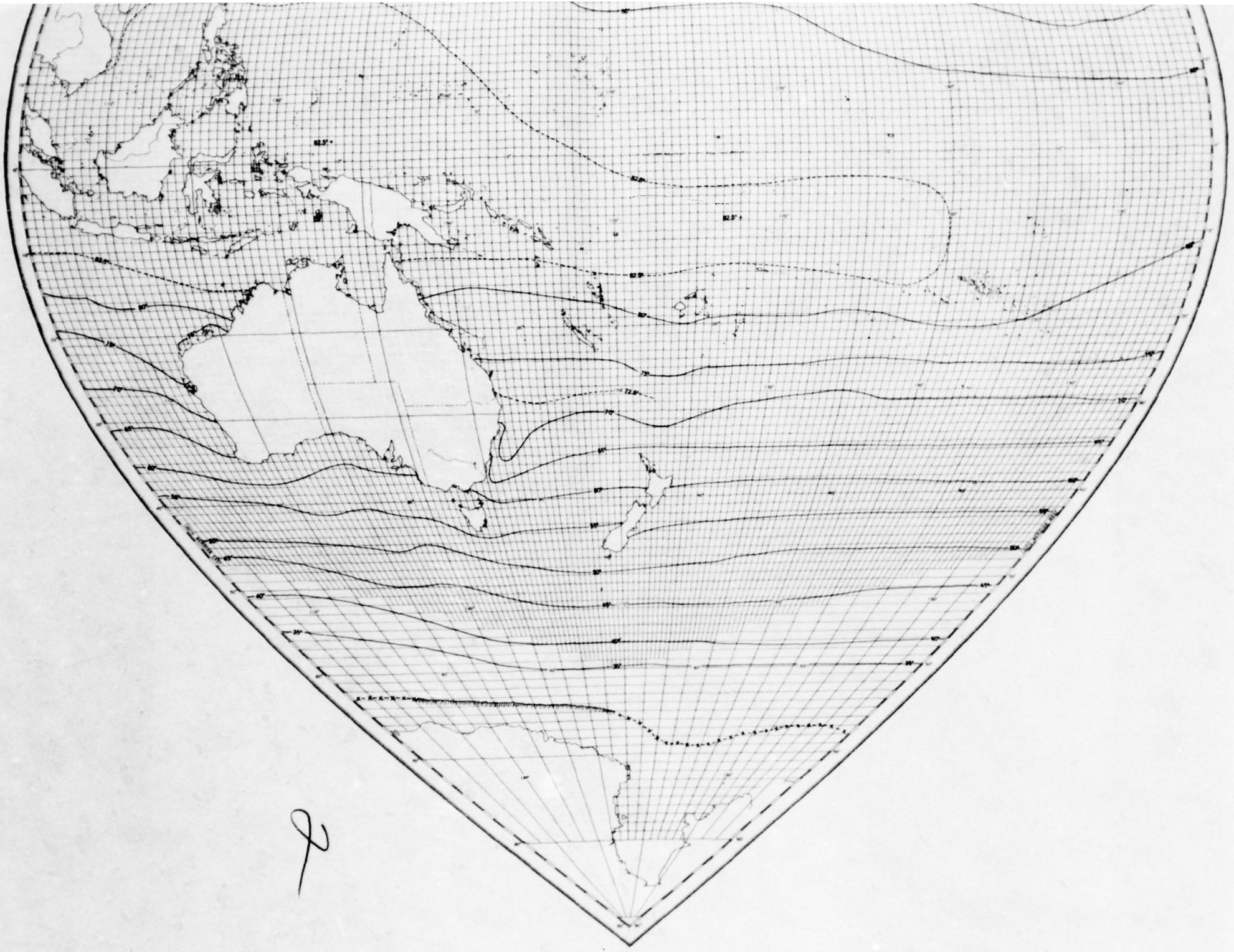
LEGEND

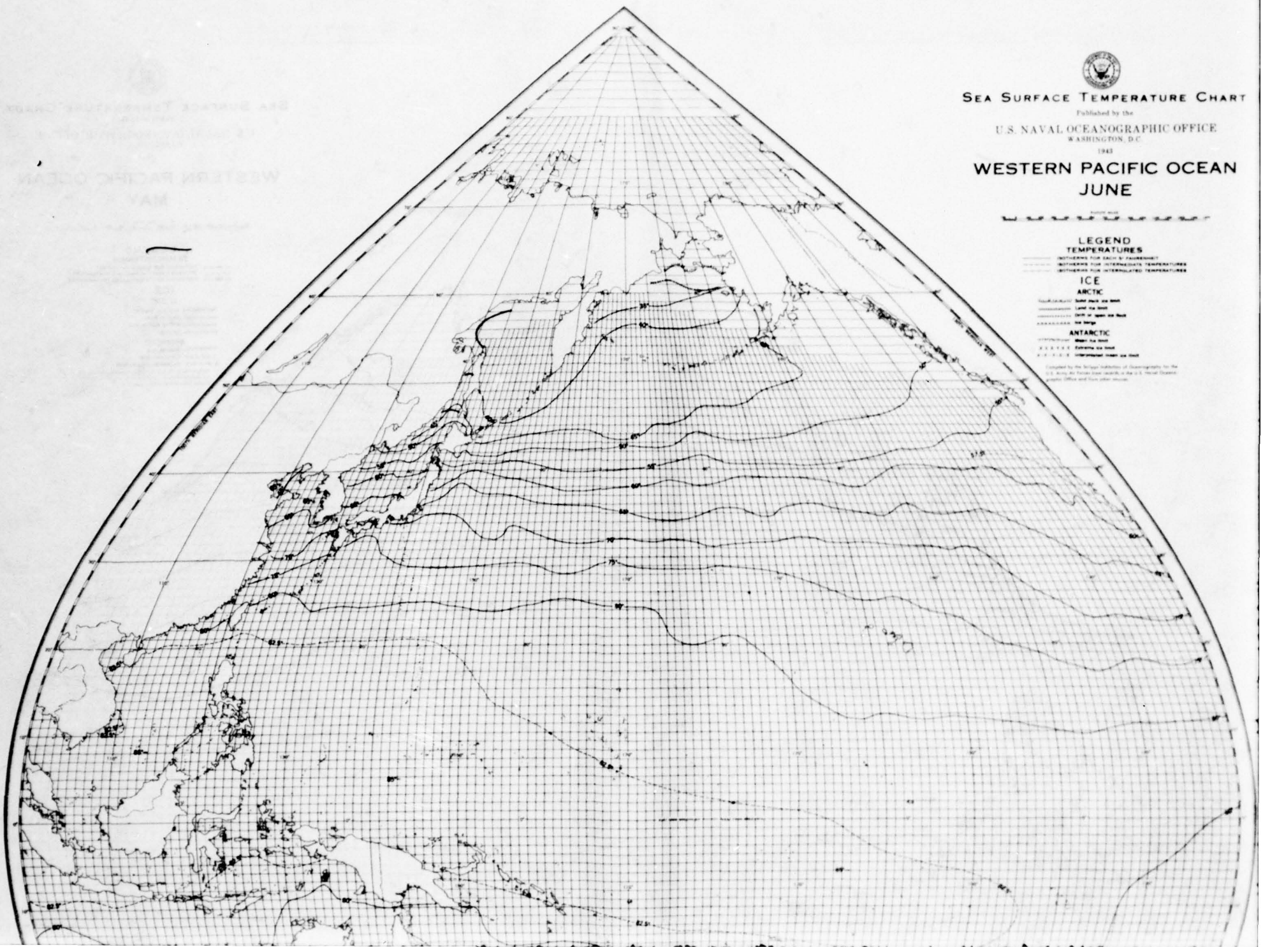
TEMPERATURES

ICE

ARCTIC

ANTARCTIC





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1943

WESTERN PACIFIC OCEAN
JUNE

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ICE

ARCTIC

Solid pack ice limit

Land fast ice limit

Drift or open ice field

Ice bergs

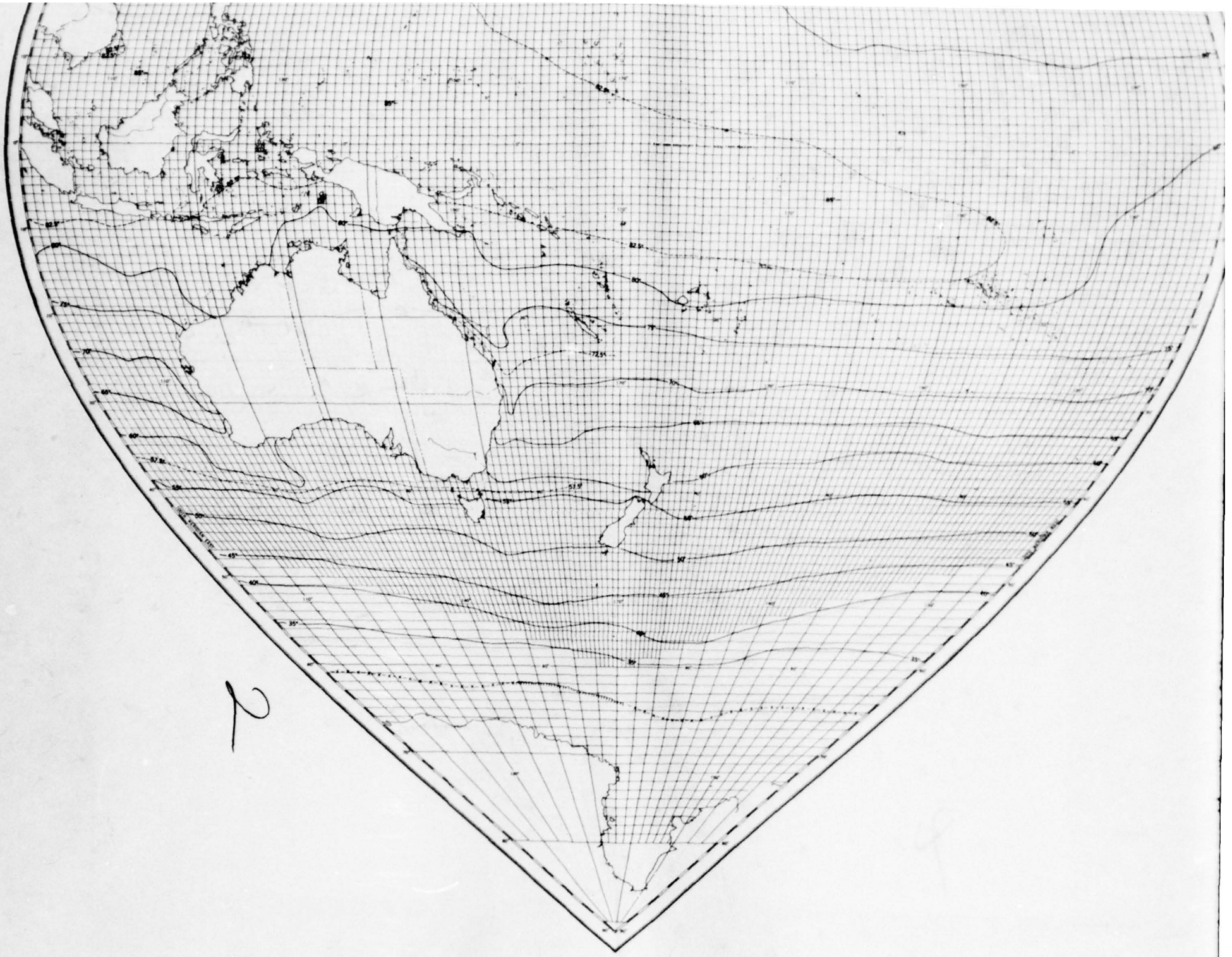
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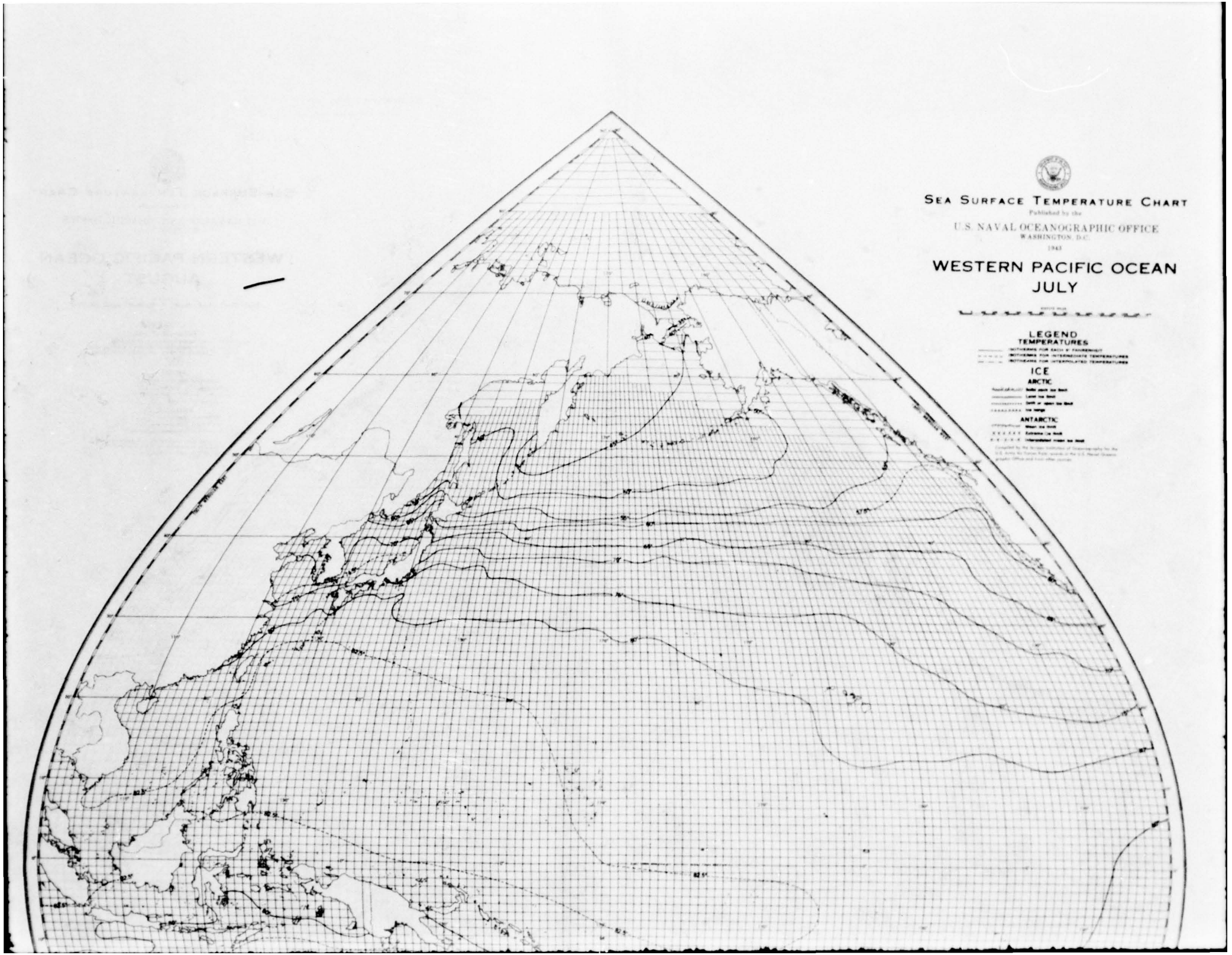
Pack ice limit

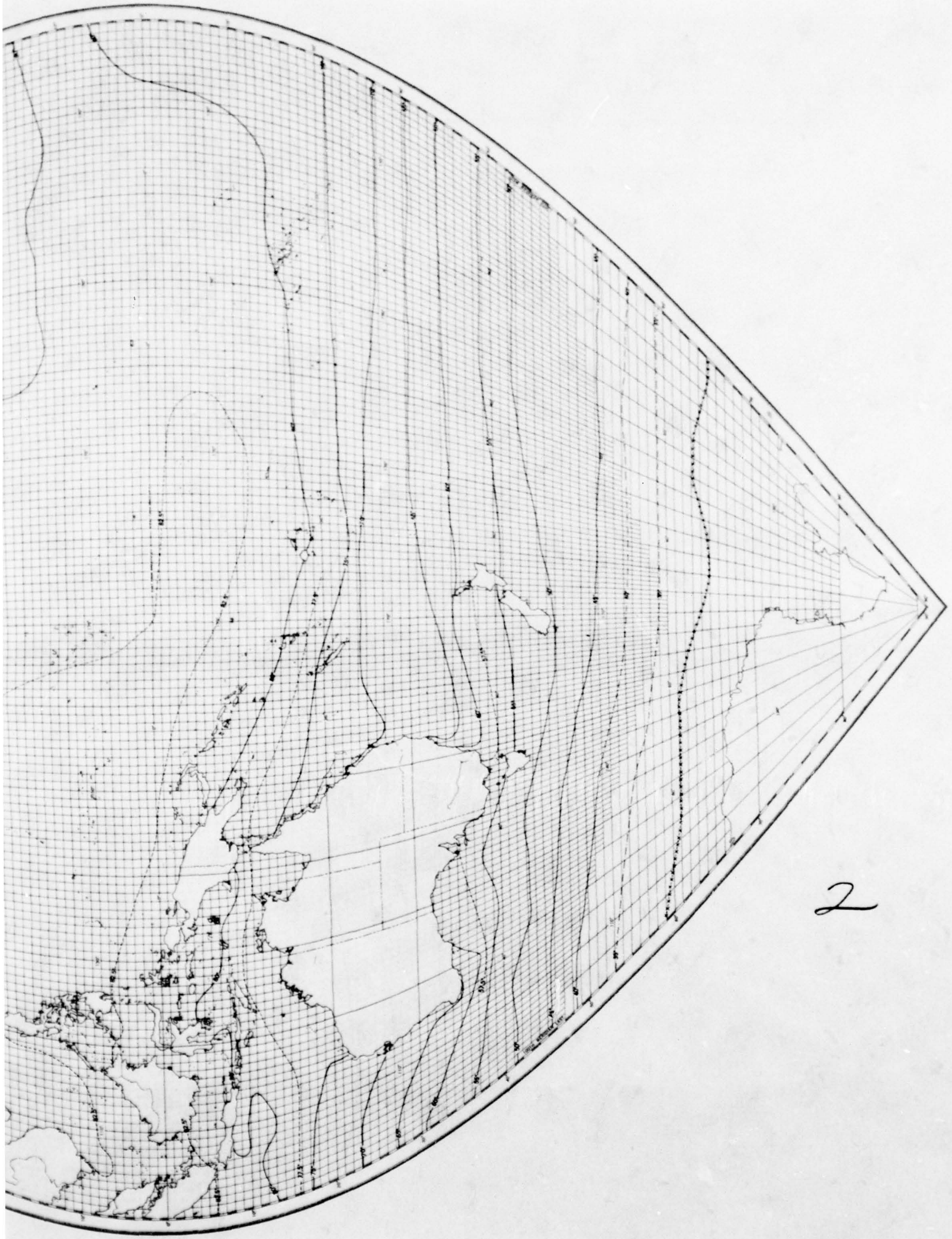
Extreme ice limit

Intermittent ice limit

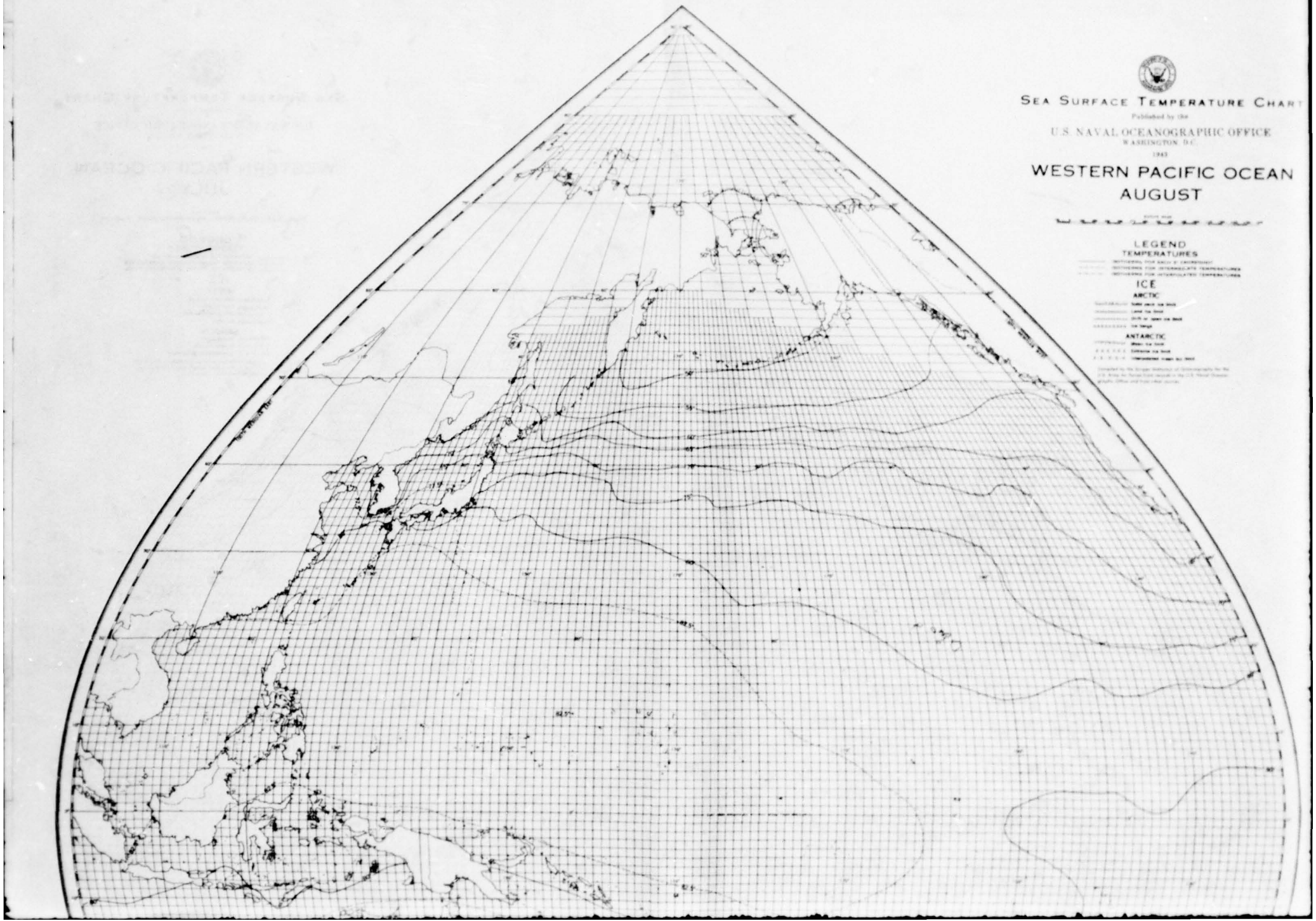
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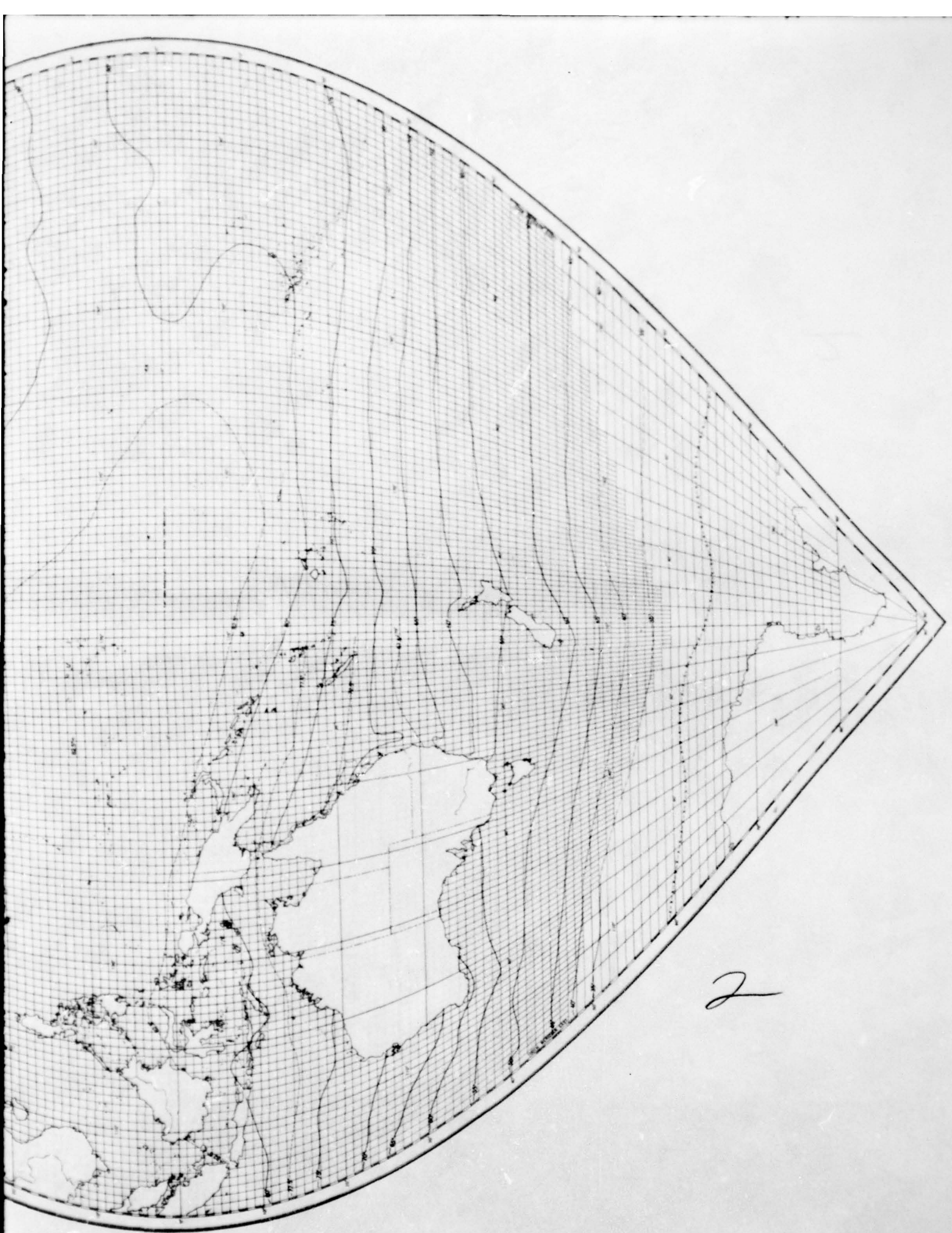


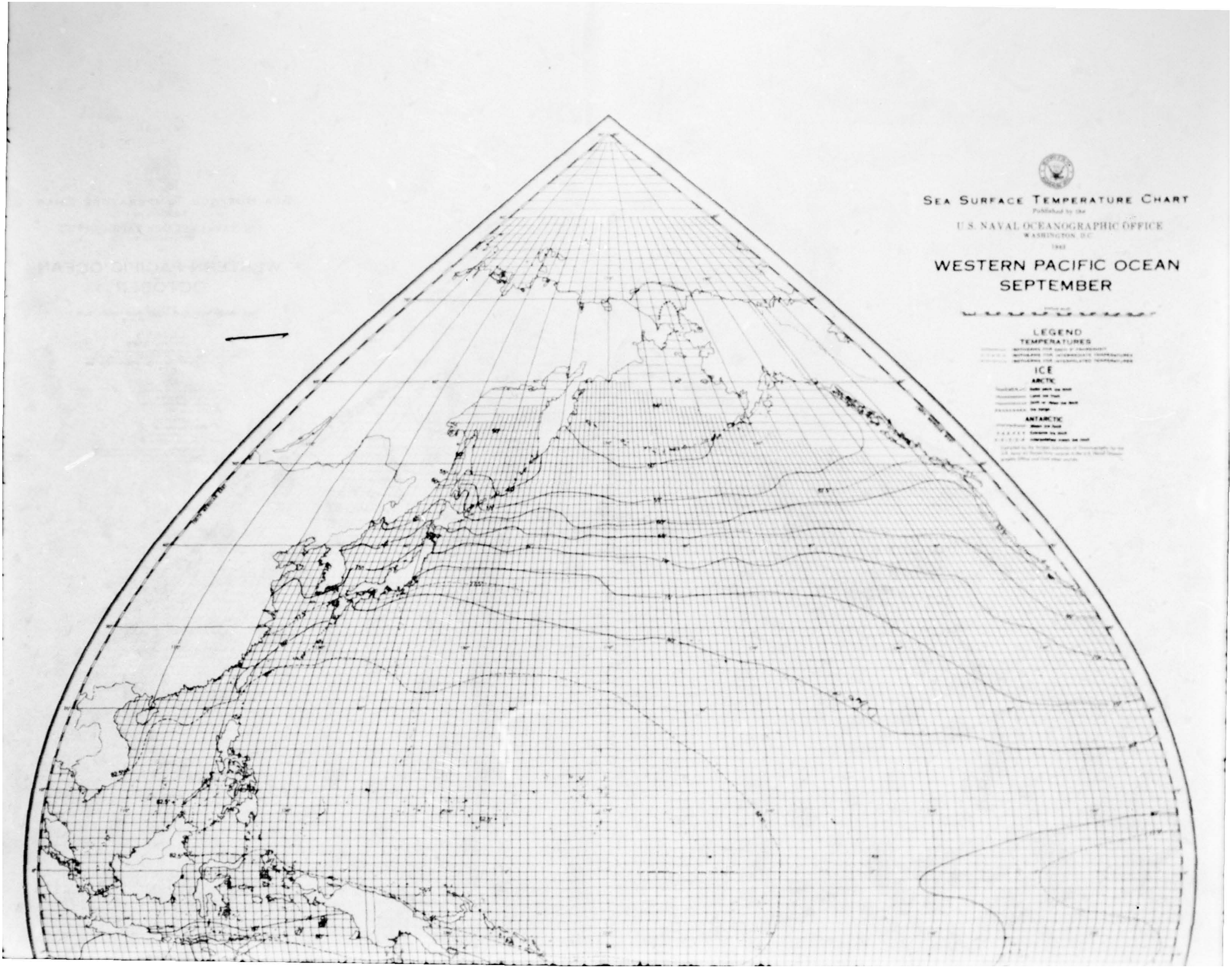

SEA SURFACE TEMPERATURE CHART
Published by the
U.S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D.C.
1943
WESTERN PACIFIC OCEAN
JULY
LEGEND
TEMPERATURES
ICE
ARCTIC
ANTARCTIC

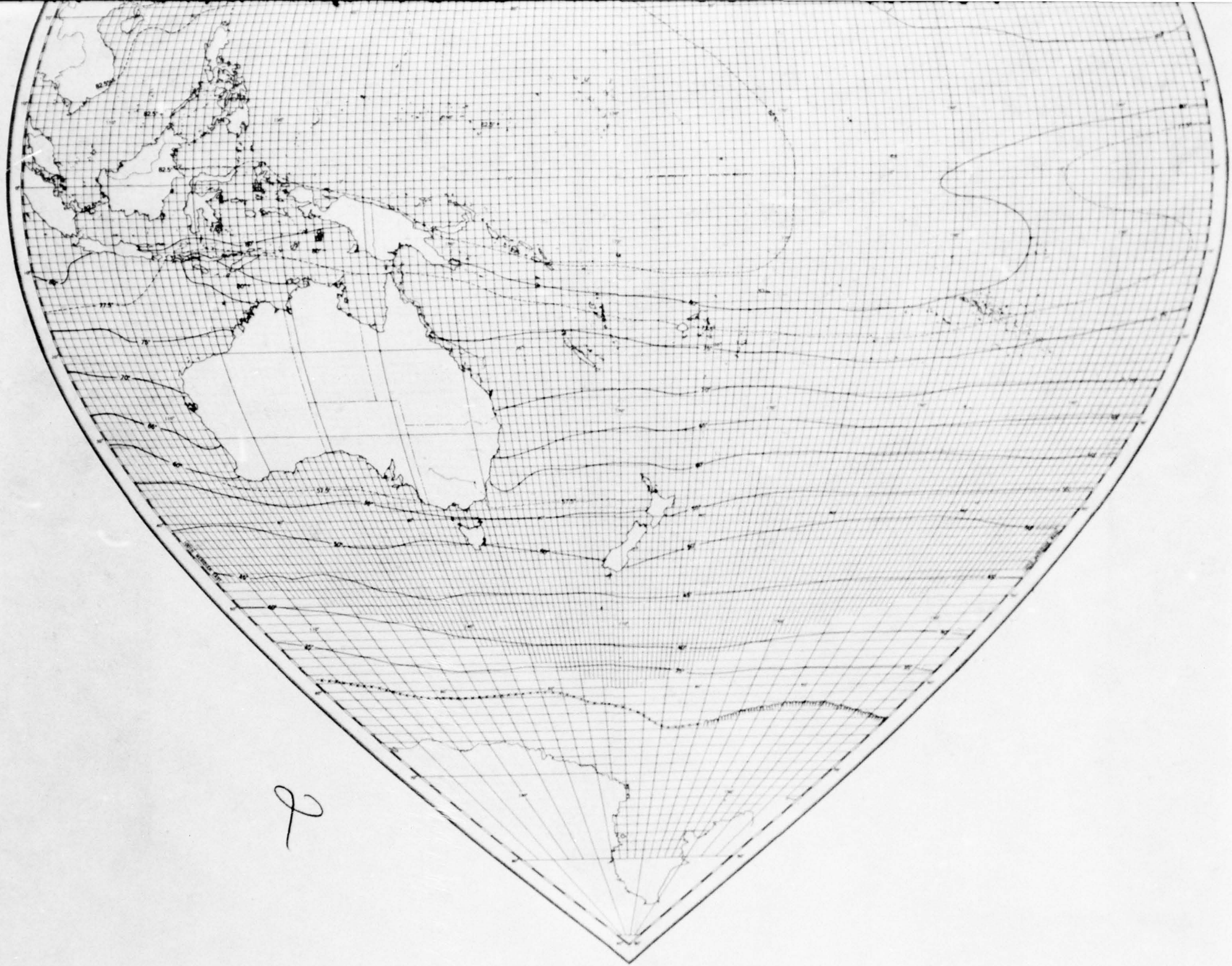


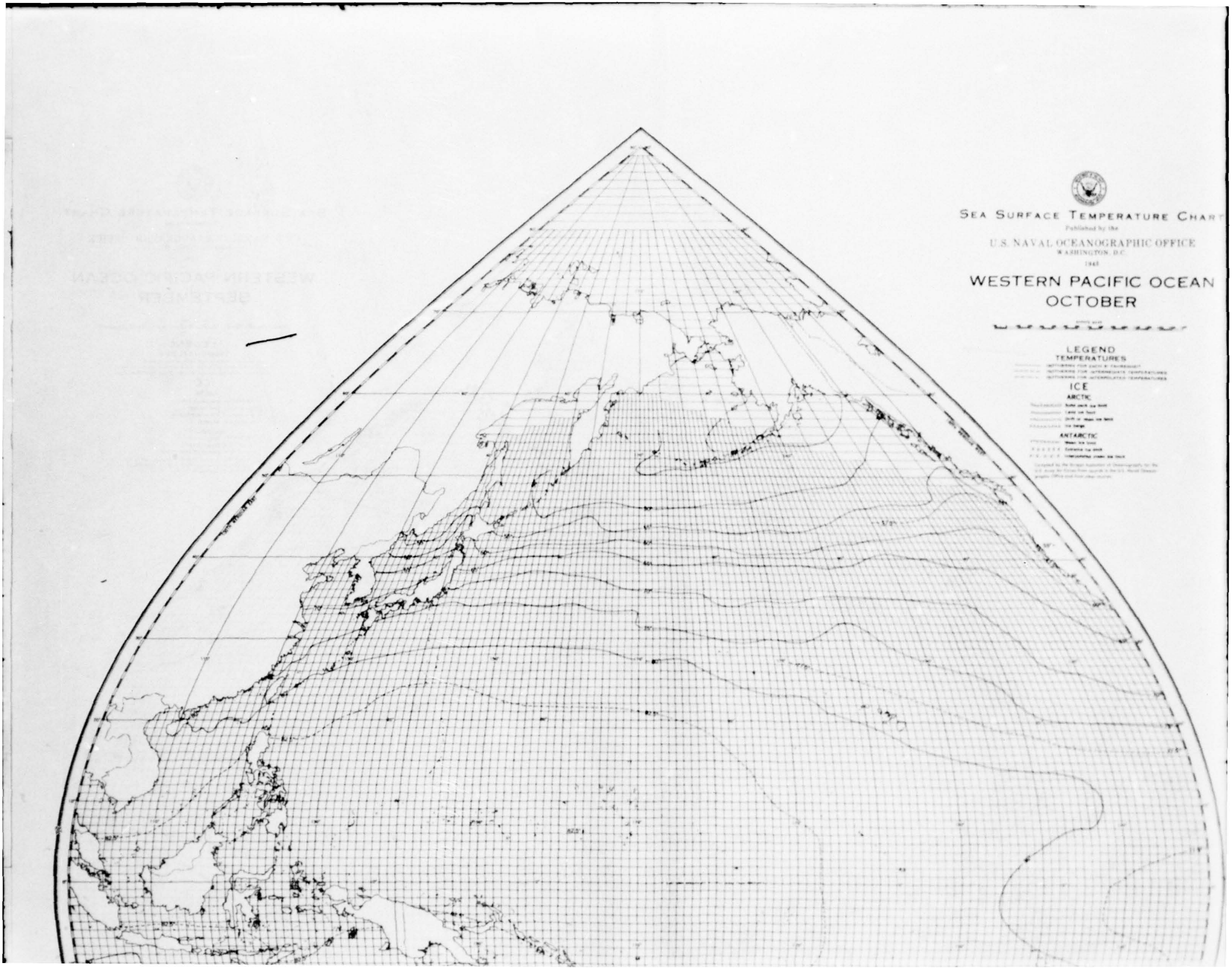
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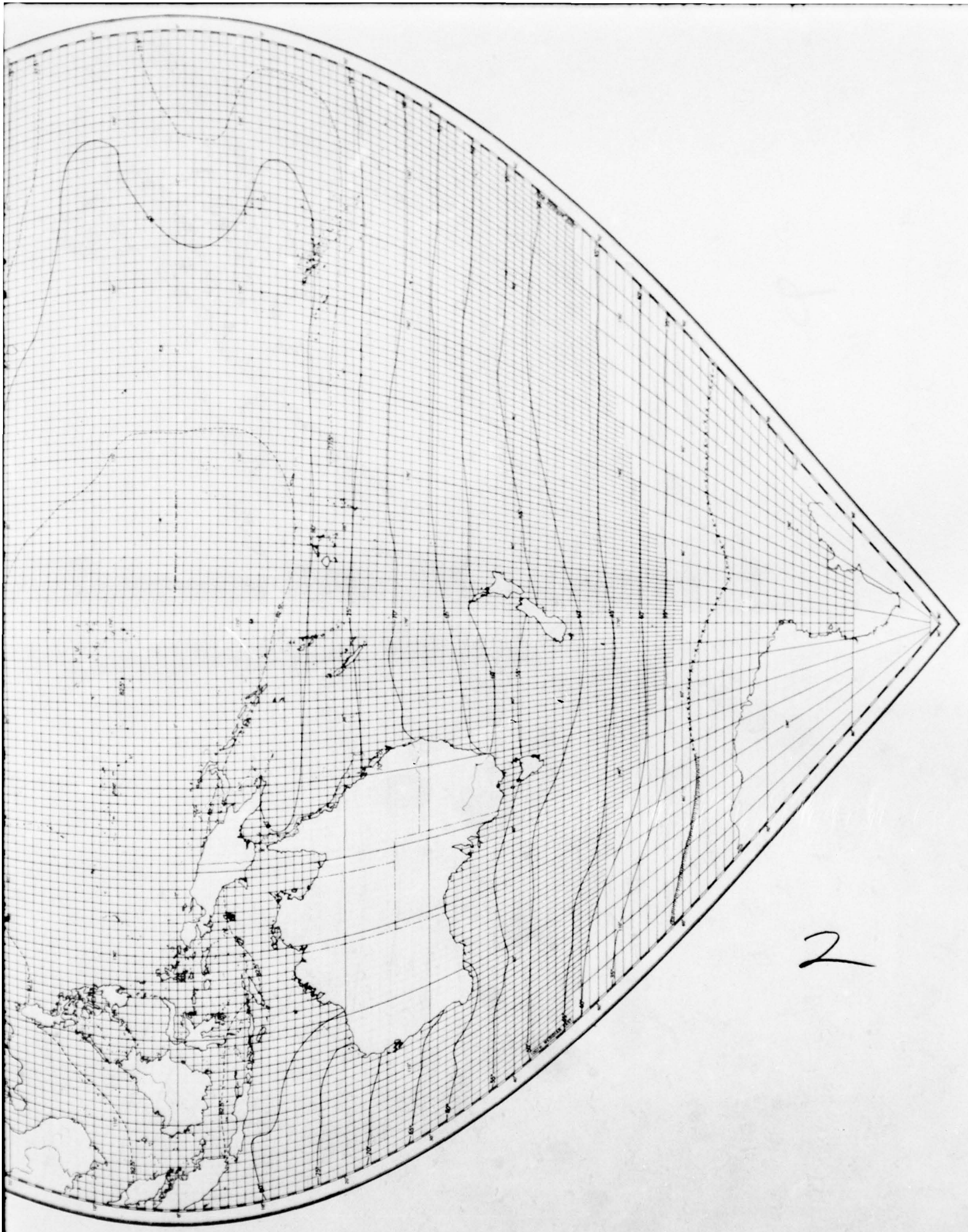

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U.S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D.C.
1943
WESTERN PACIFIC OCEAN
AUGUST
LEGEND
TEMPERATURES
ICE
ARCTIC
ANTARCTIC



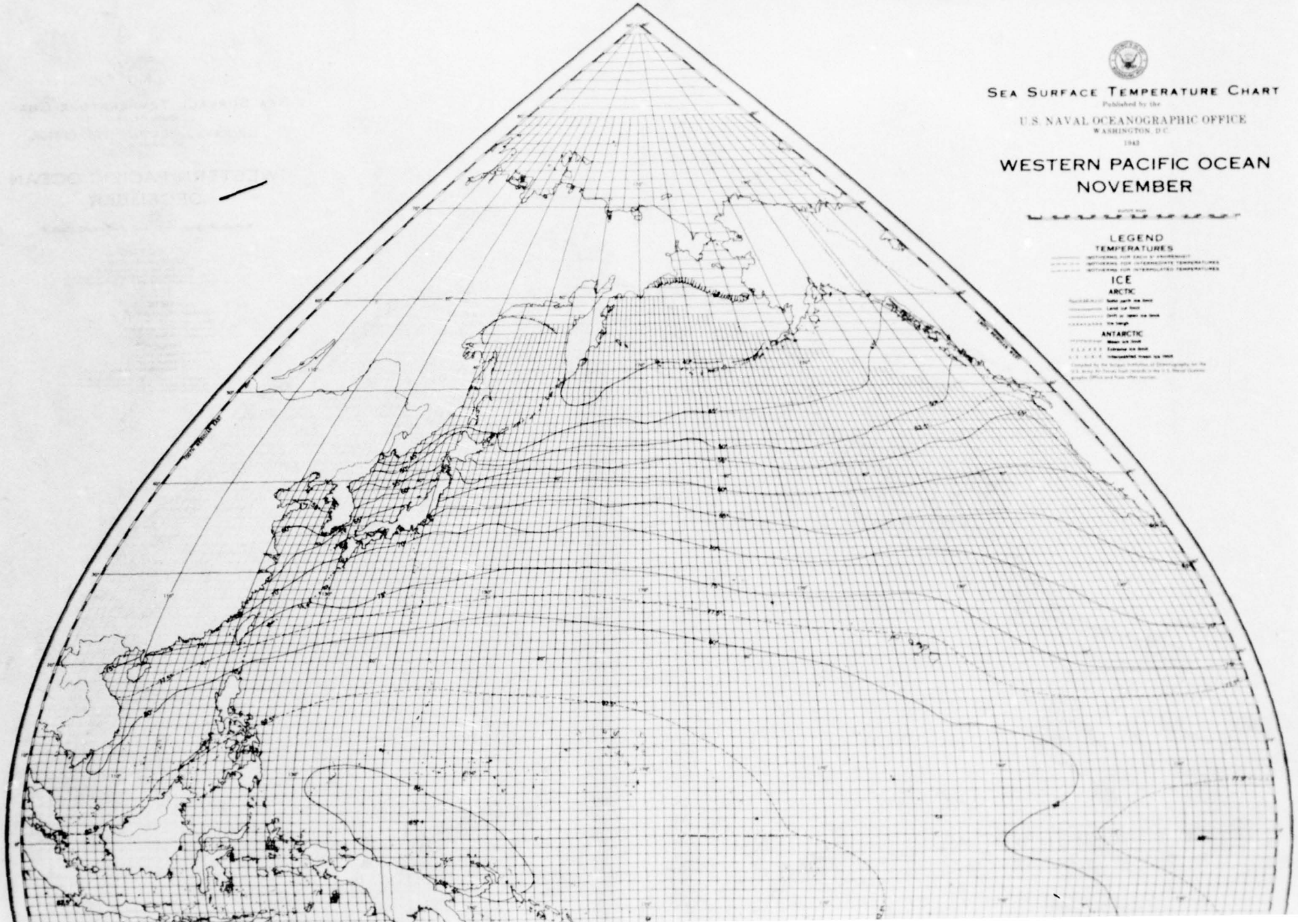

SEA SURFACE TEMPERATURE CHART
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U.S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D.C.
1963
WESTERN PACIFIC OCEAN
SEPTEMBER
LEGEND
TEMPERATURES
ICE
ARCTIC
ANTARCTIC




SEA SURFACE TEMPERATURE CHART
Published by the
U.S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D.C.
1945
WESTERN PACIFIC OCEAN
OCTOBER
LEGEND
TEMPERATURES
ICE
ARCTIC
ANTARCTIC



2



SEA SURFACE TEMPERATURE CHART

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1943

WESTERN PACIFIC OCEAN
NOVEMBER

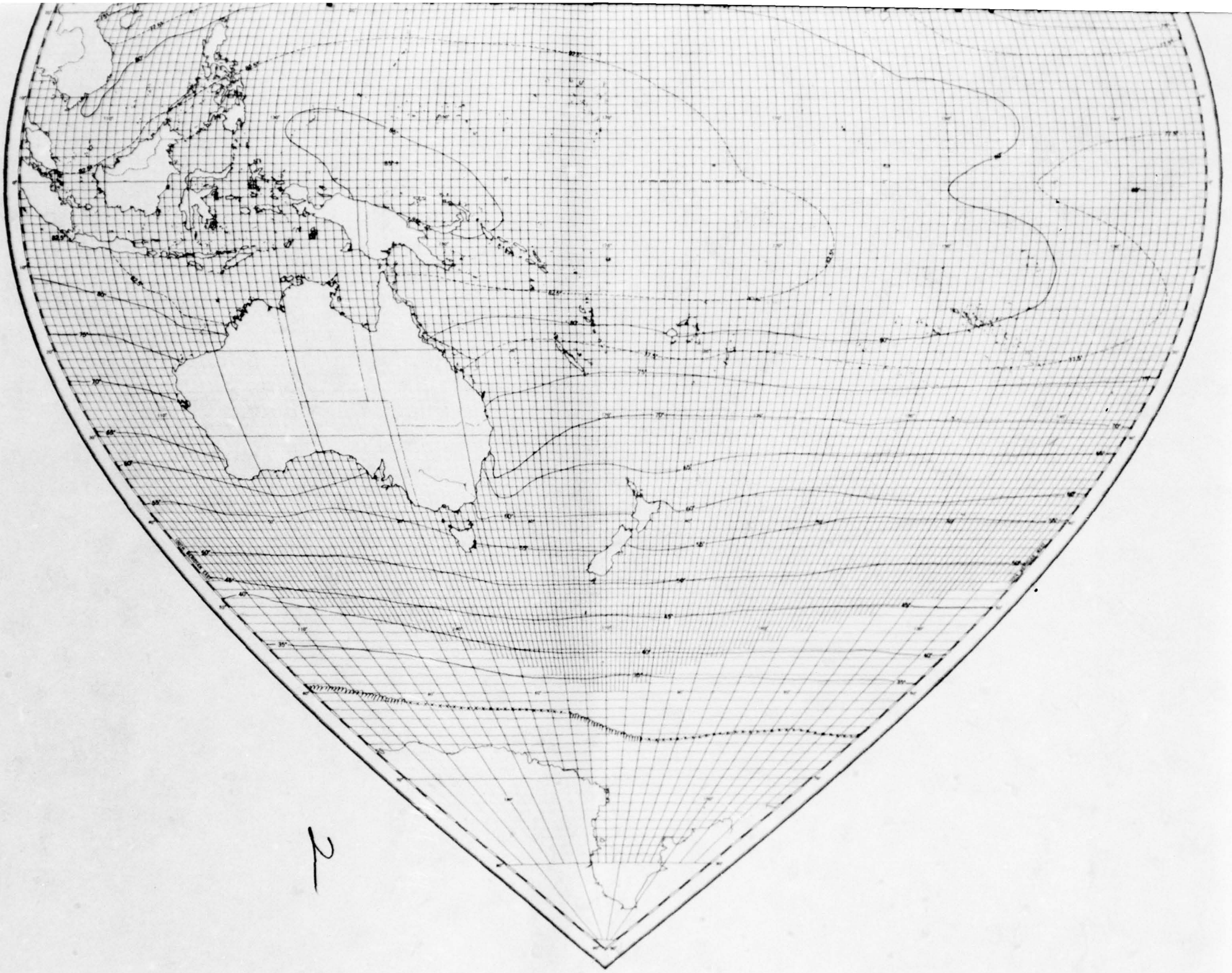
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TEMPERATURES

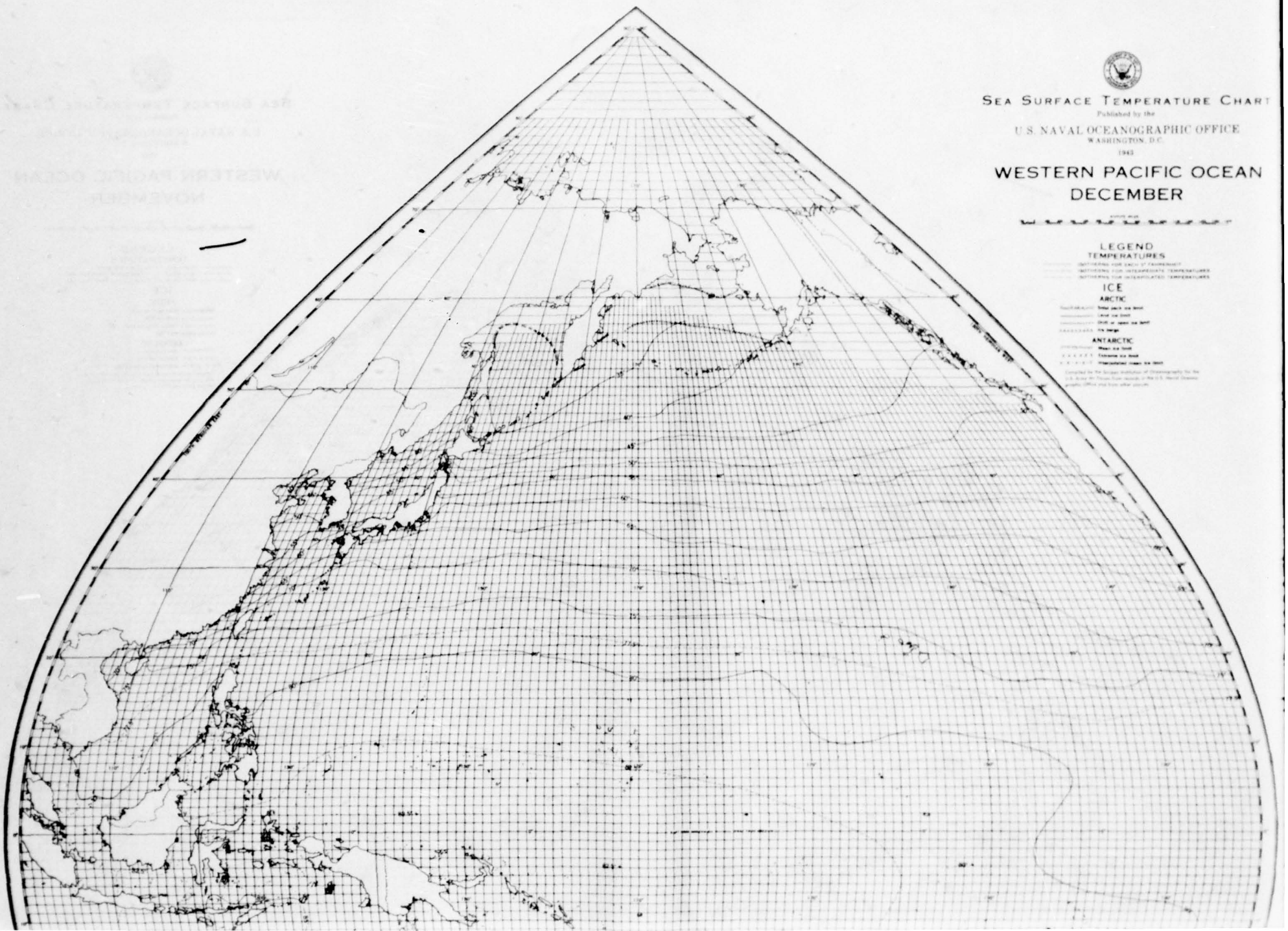
ICE

ARCTIC

ANTARCTIC



2



SEA SURFACE TEMPERATURE CHART

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WASHINGTON, D.C.

1943

WESTERN PACIFIC OCEAN
DECEMBER

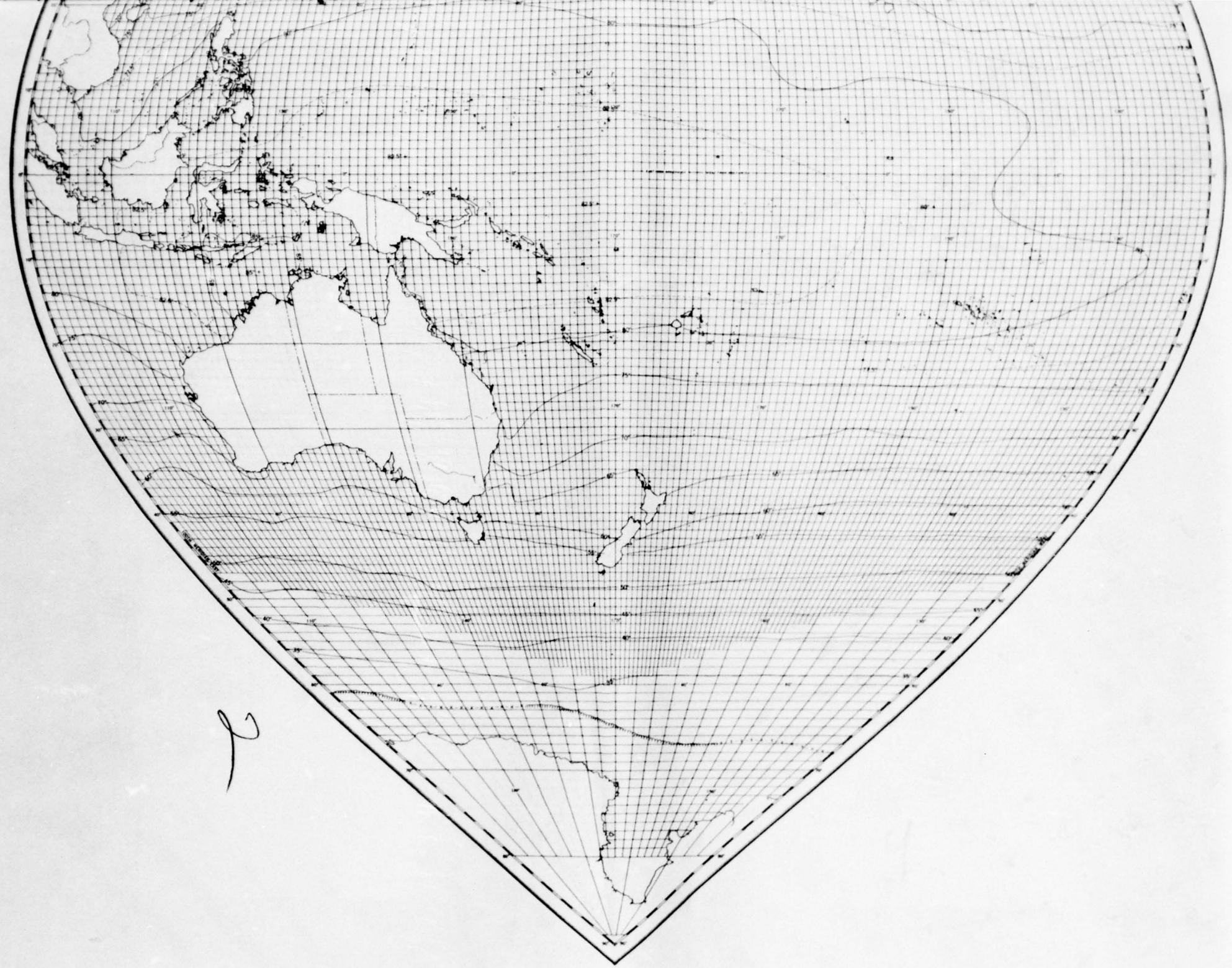
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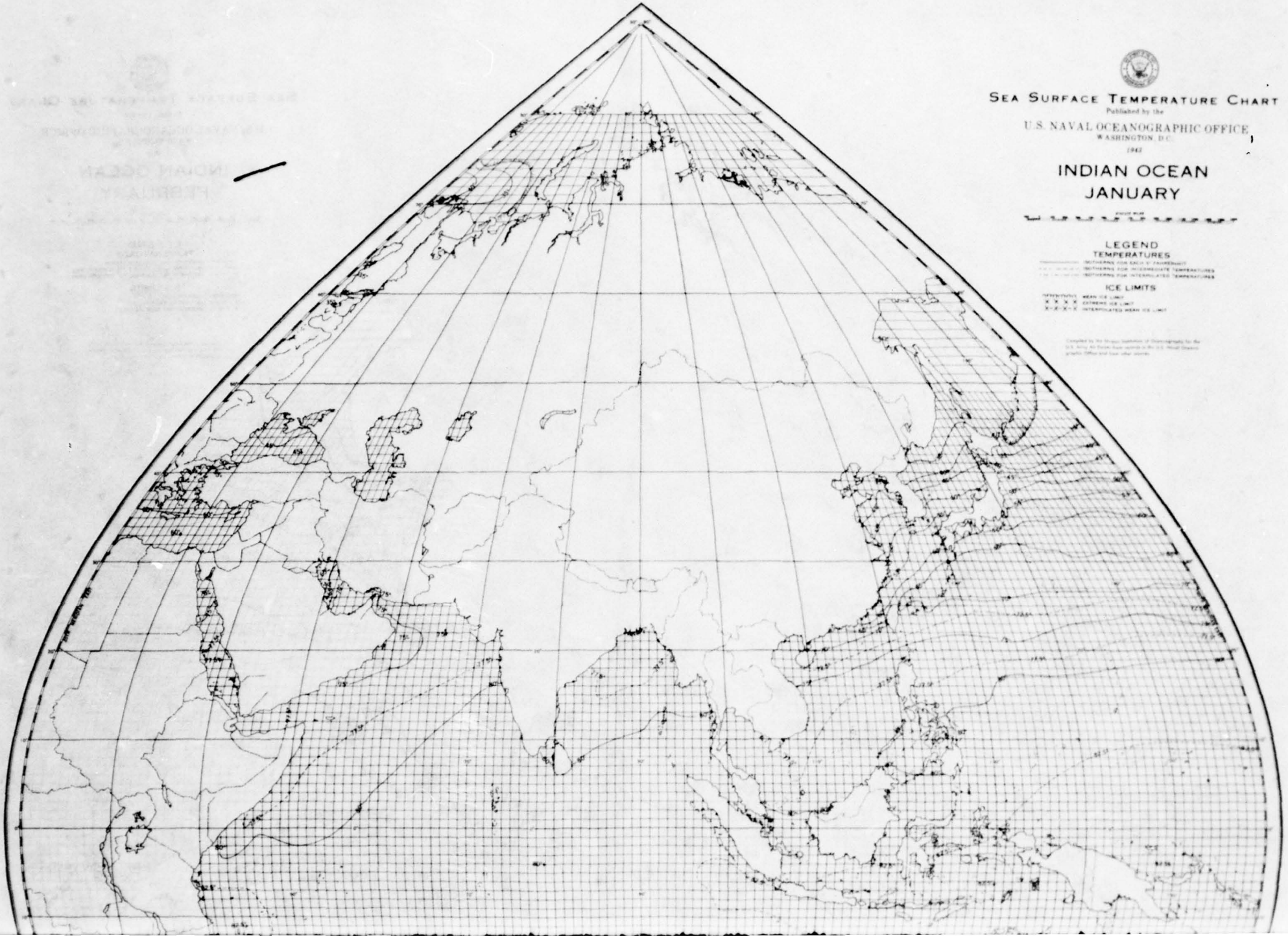
TEMPERATURES

ICE

ARCTIC

ANTARCTIC





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1943

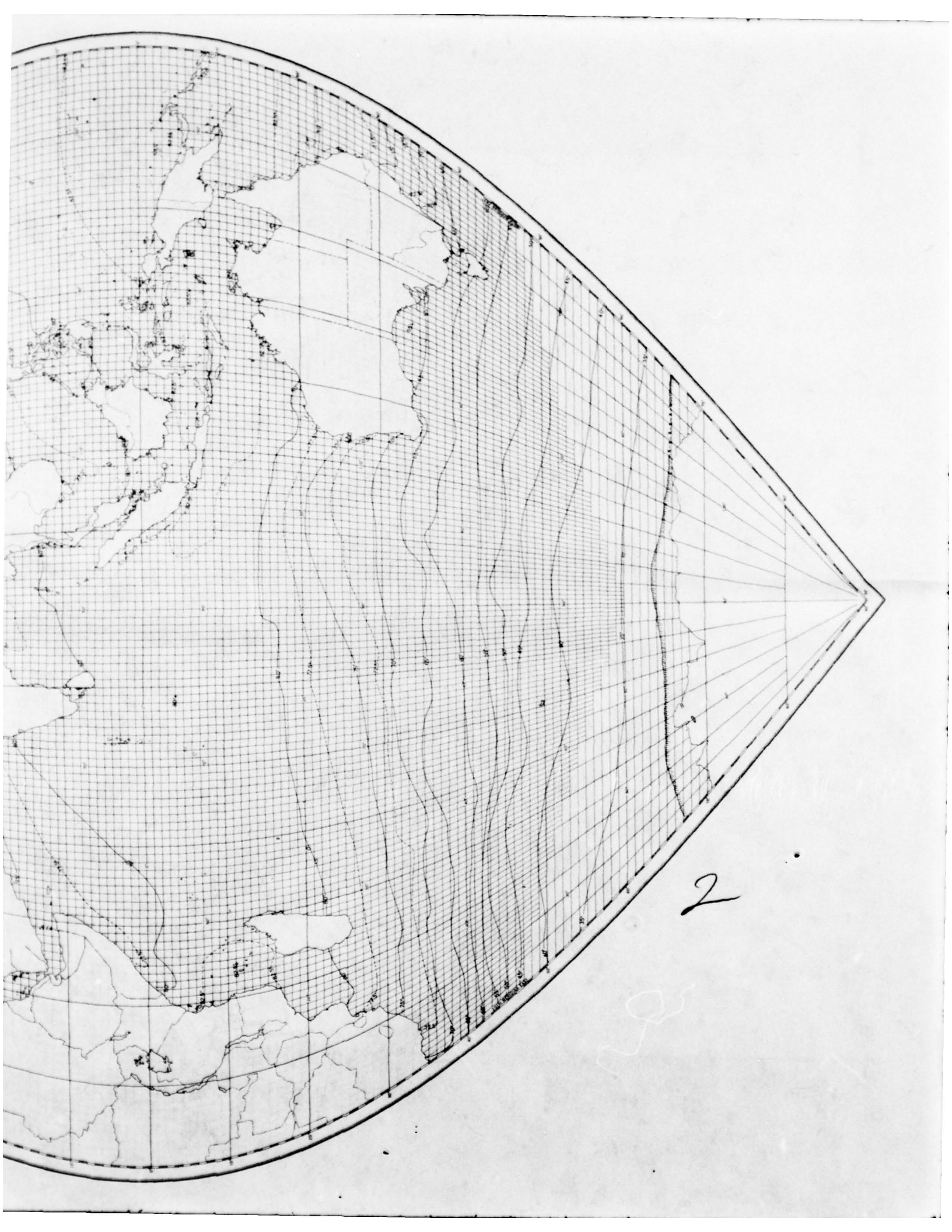
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JANUARY

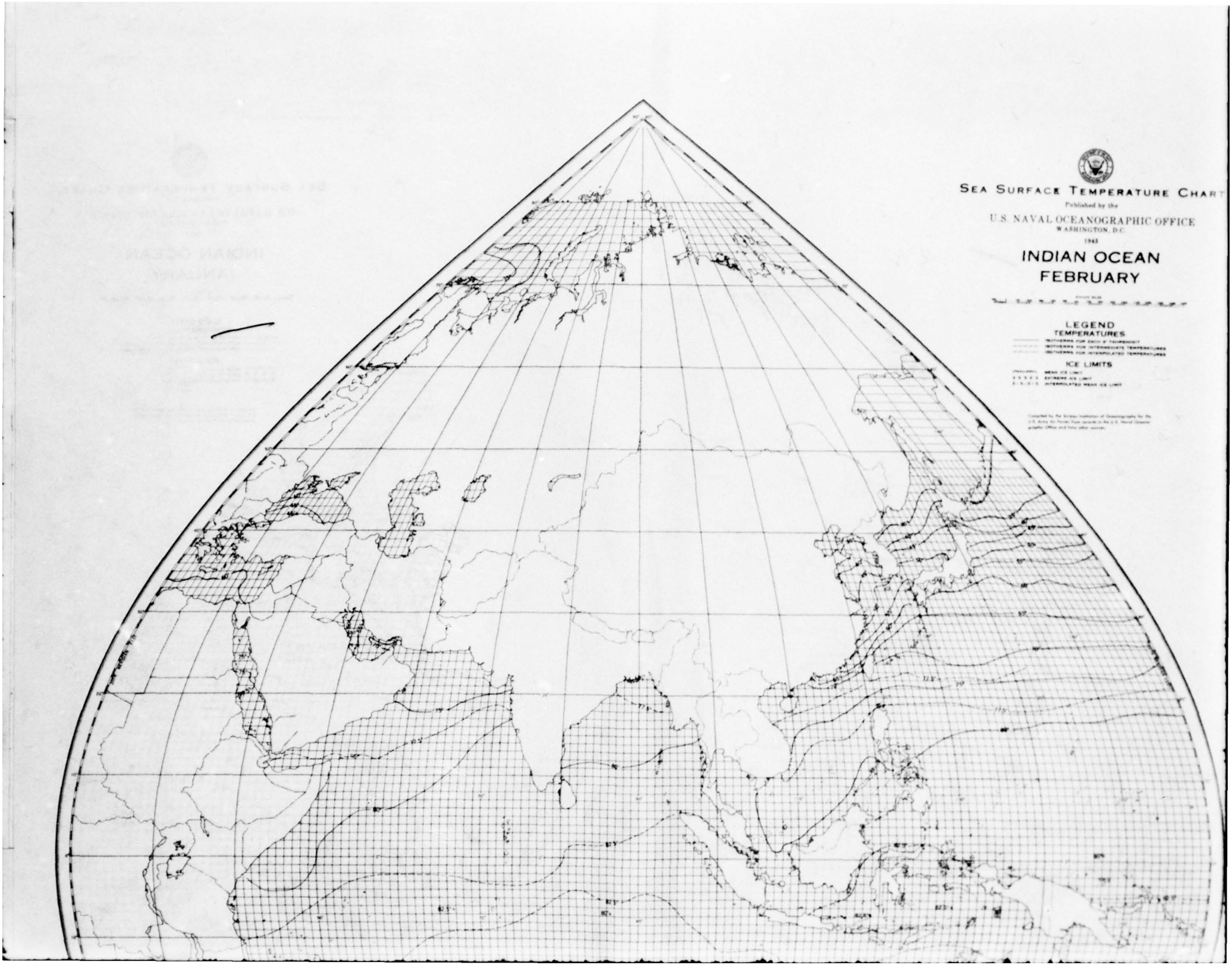
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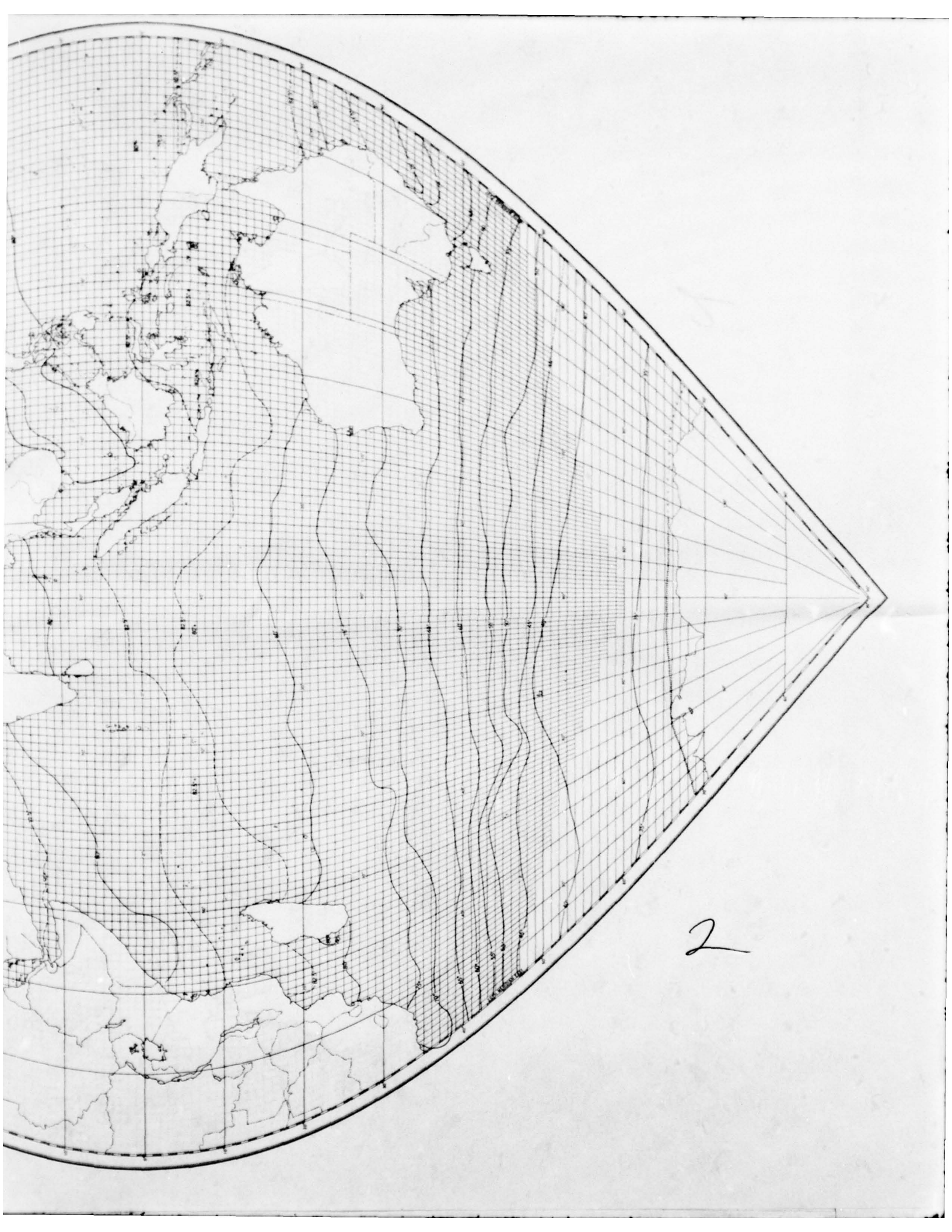
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ICE LIMITS

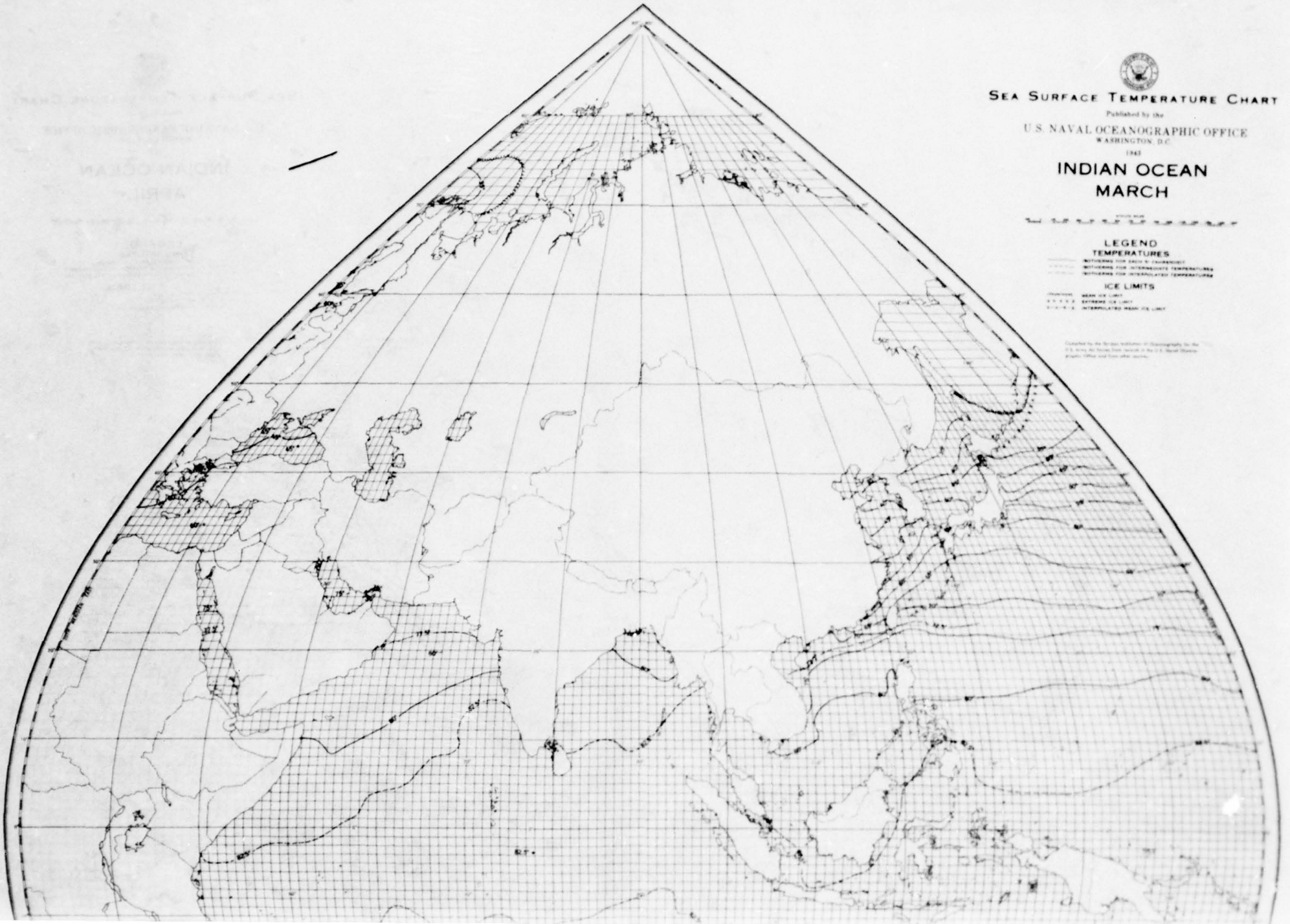
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1943
INDIAN OCEAN
FEBRUARY
LEGEND
TEMPERATURES
ICE LIMITS



2



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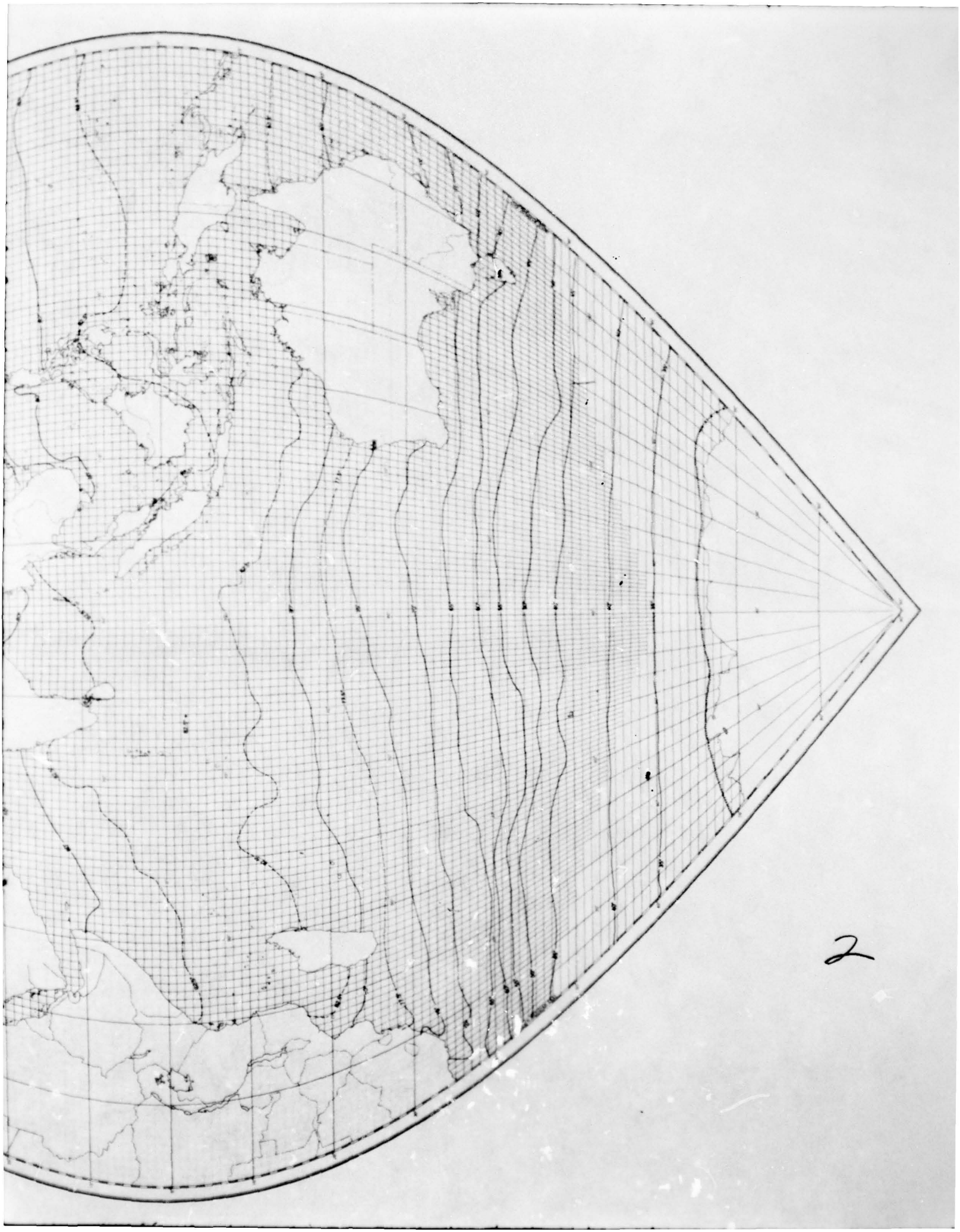
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MARCH

LEGEND

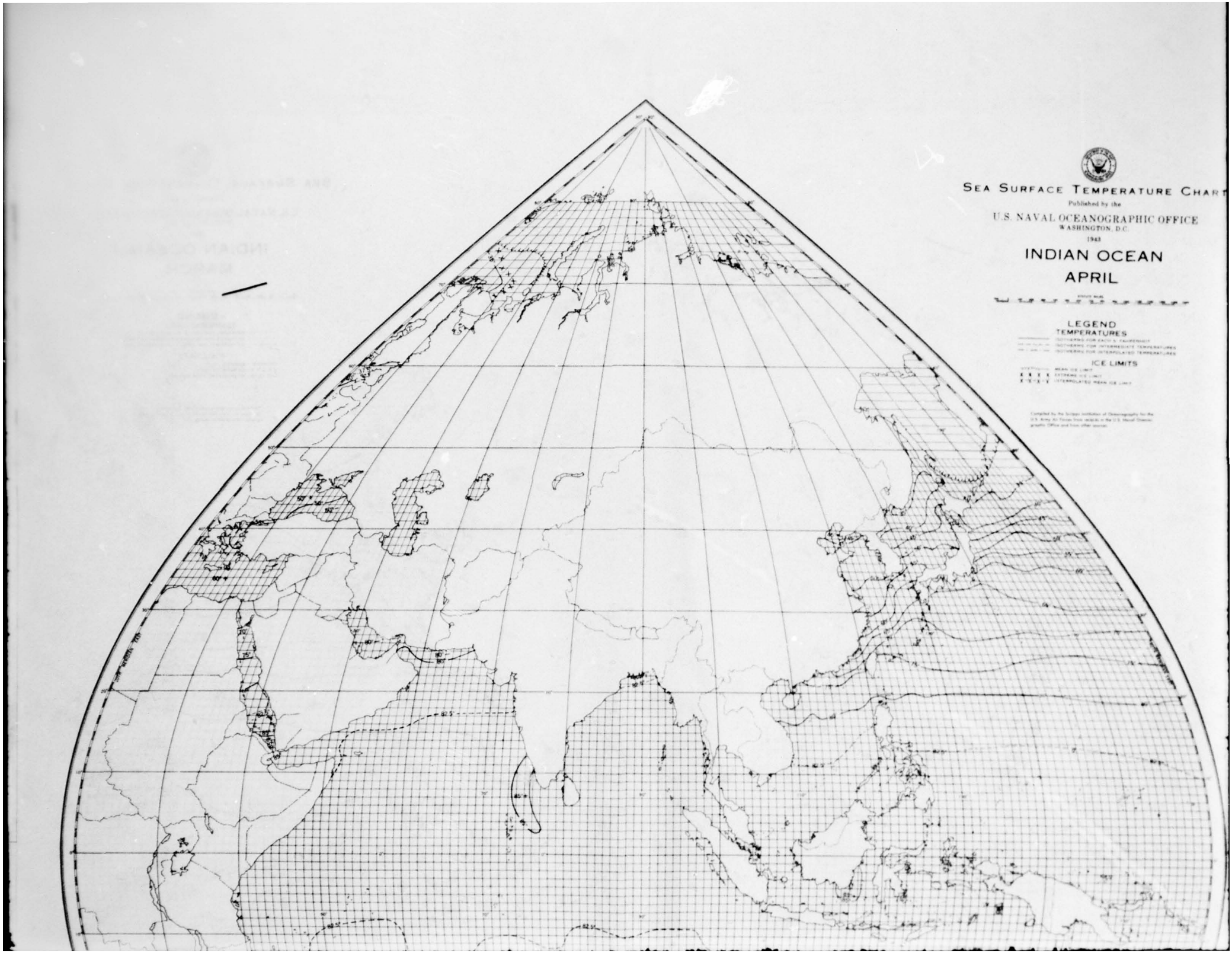
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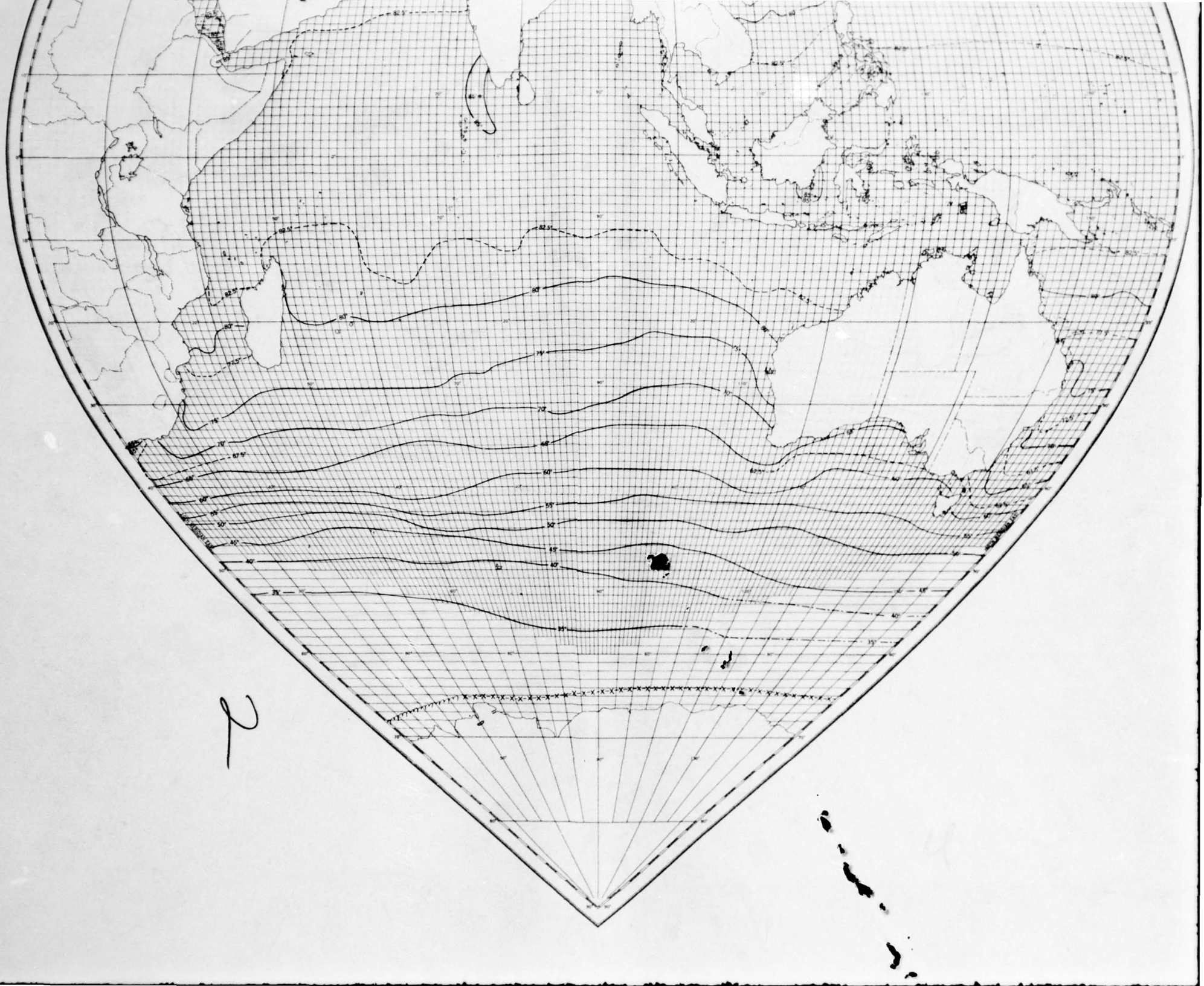
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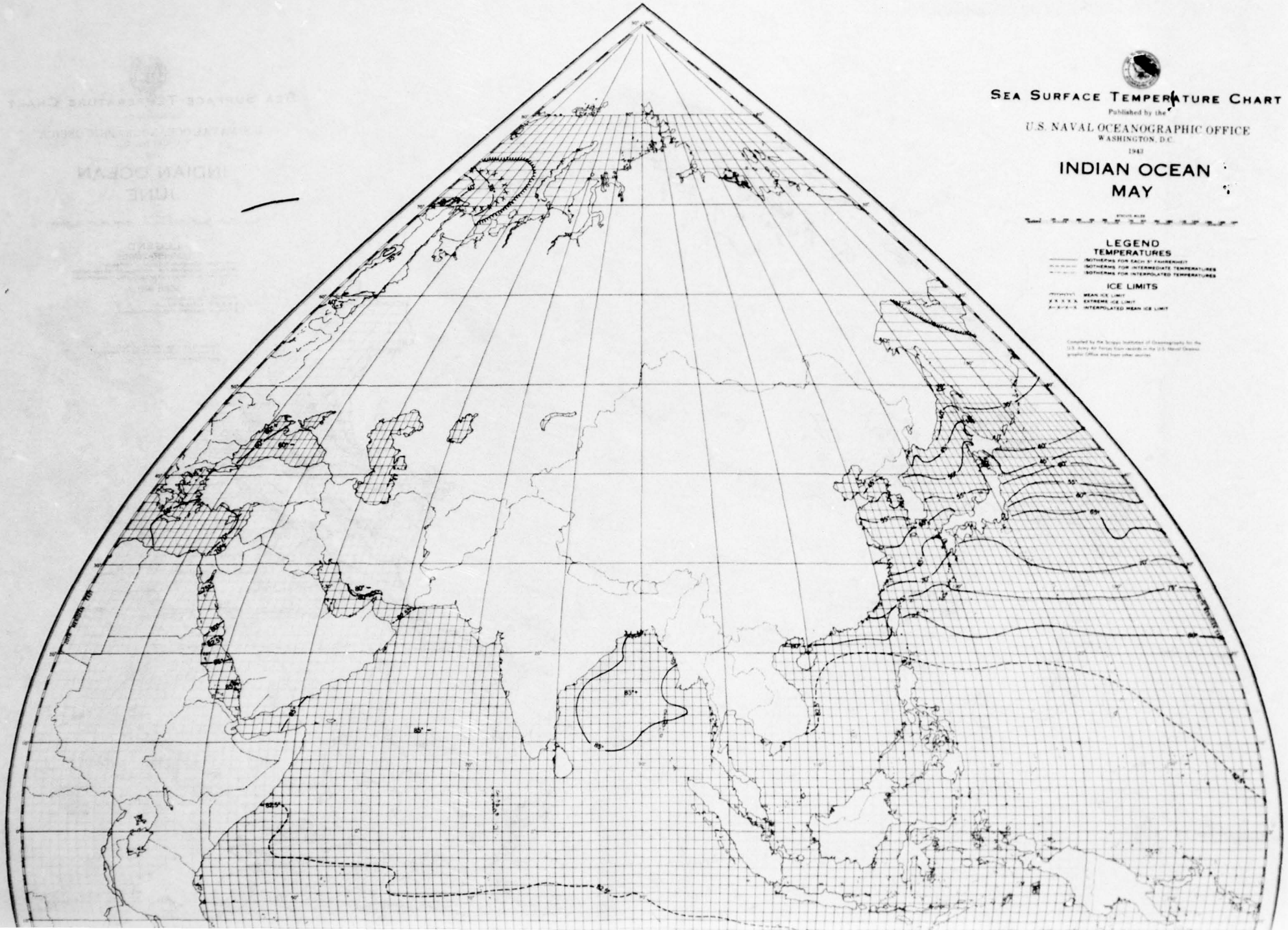
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2


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1943
INDIAN OCEAN
APRIL
LEGEND
TEMPERATURES
ICE LIMITS


82.5°
80°
77.5°
75°
70°
67.5°
65°
60°
55°
50°
45°
40°
35°



SEA SURFACE TEMPERATURE CHART

Published by the

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WASHINGTON, D.C.

1943

INDIAN OCEAN
MAY

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

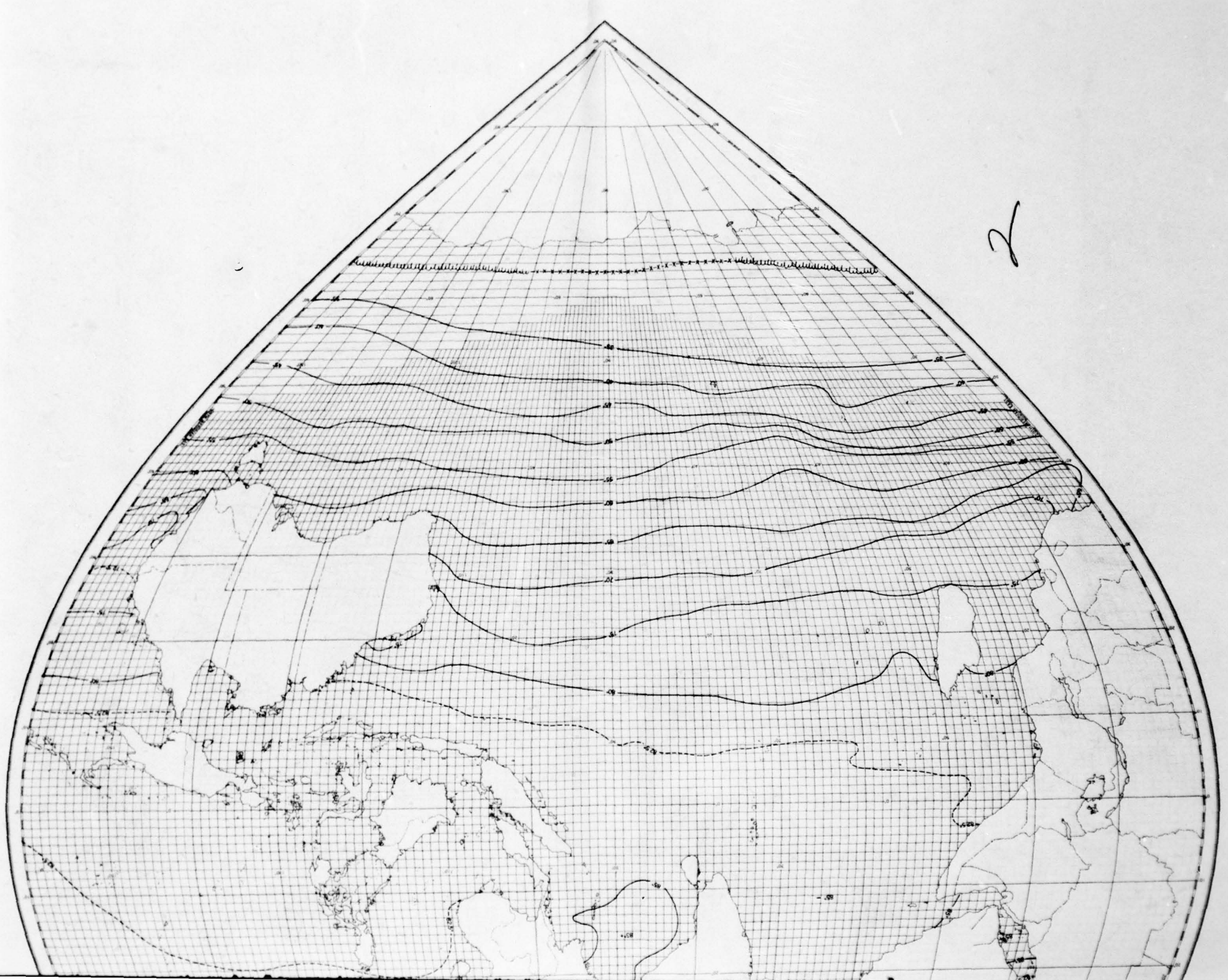
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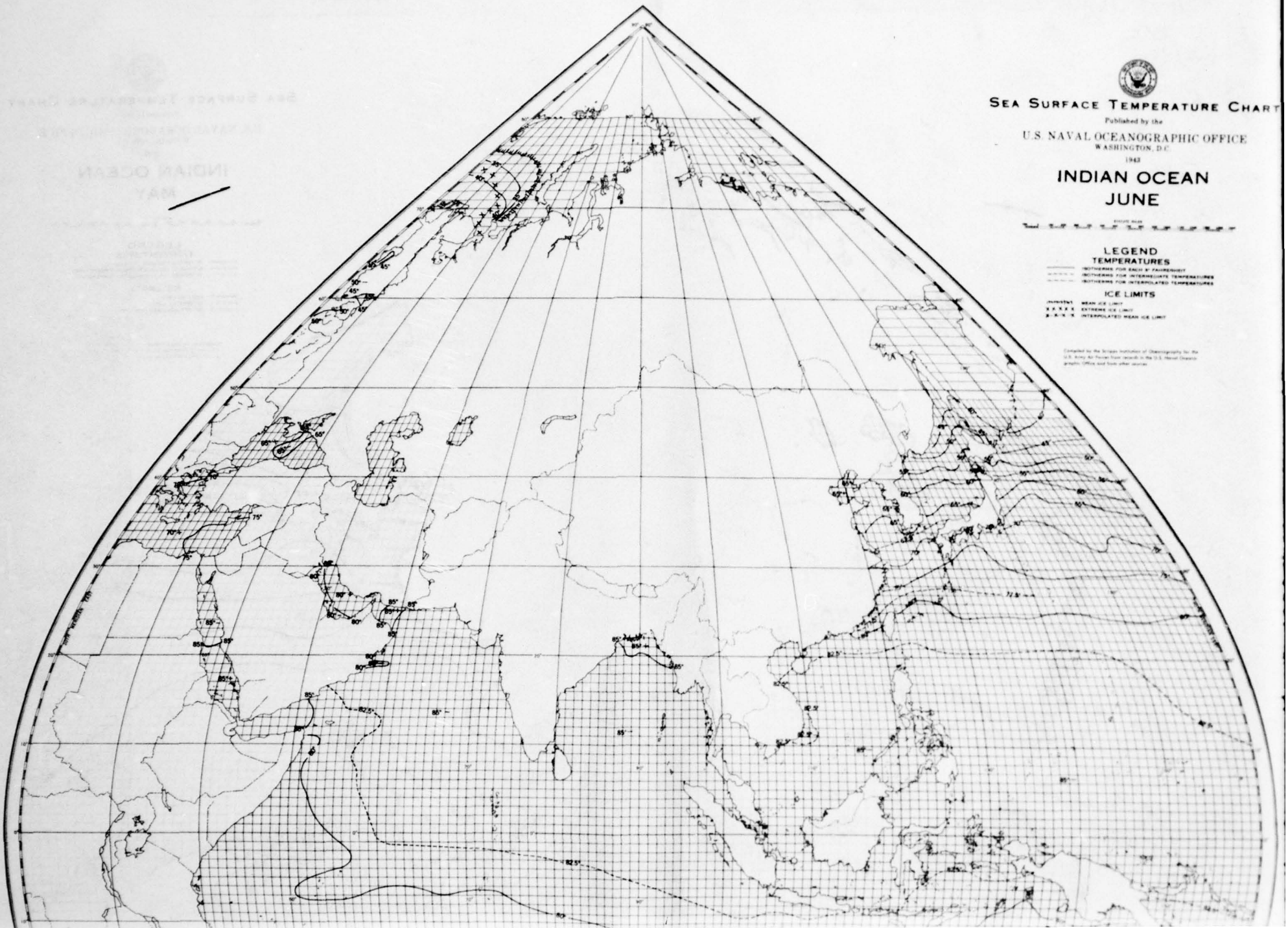
MEAN ICE LIMIT

EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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INDIAN OCEAN

JUNE

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

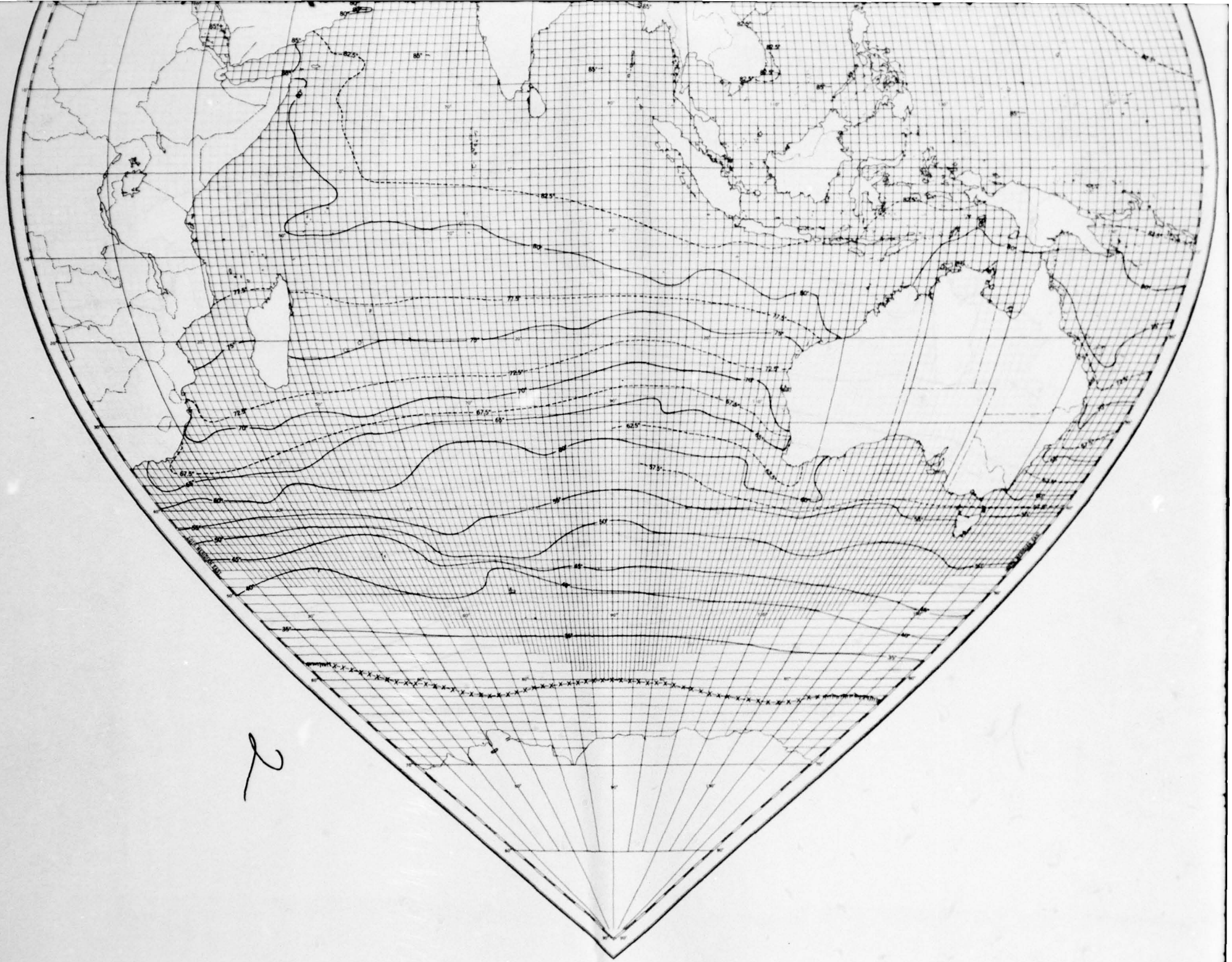
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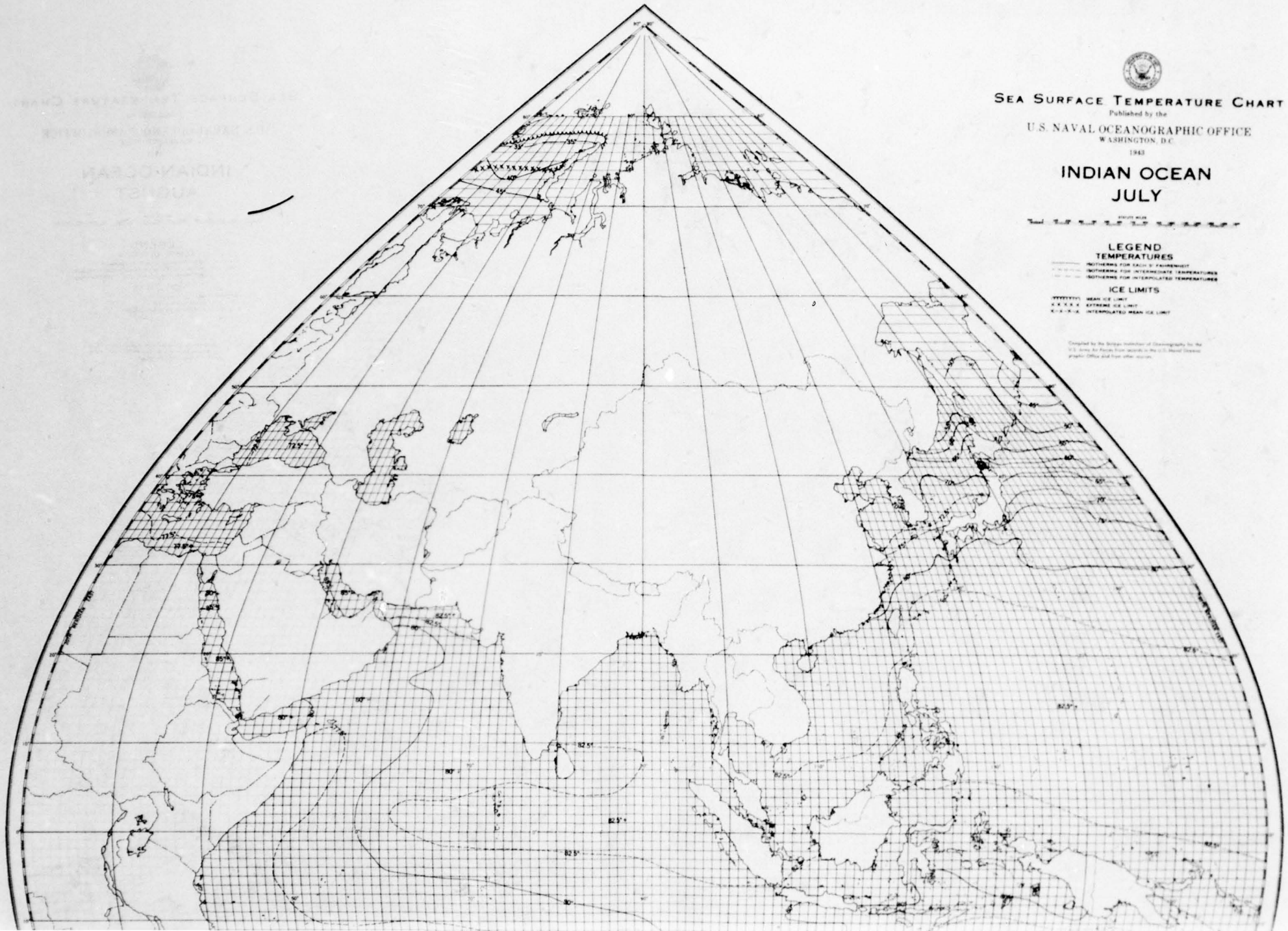
MEAN ICE LIMIT

EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

Compiled by the Scripps Institution of Oceanography for the U.S. Army Air Forces from records in the U.S. Naval Oceanographic Office and from other sources.


82.5°
80°
77.5°
75°
72.5°
70°
67.5°
65°
62.5°
60°
57.5°
50°
45°
40°
35°



SEA SURFACE TEMPERATURE CHART

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INDIAN OCEAN

JULY

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

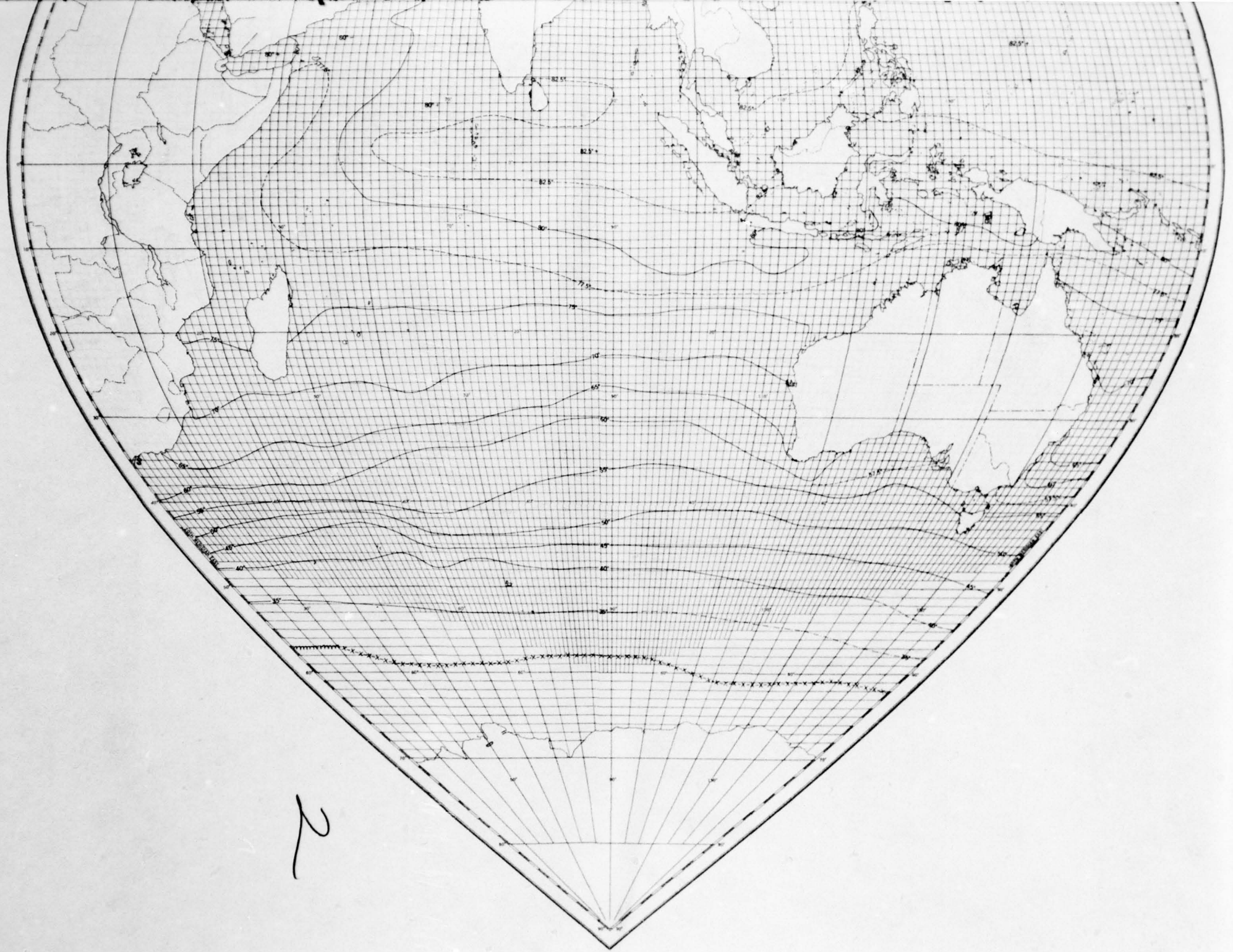
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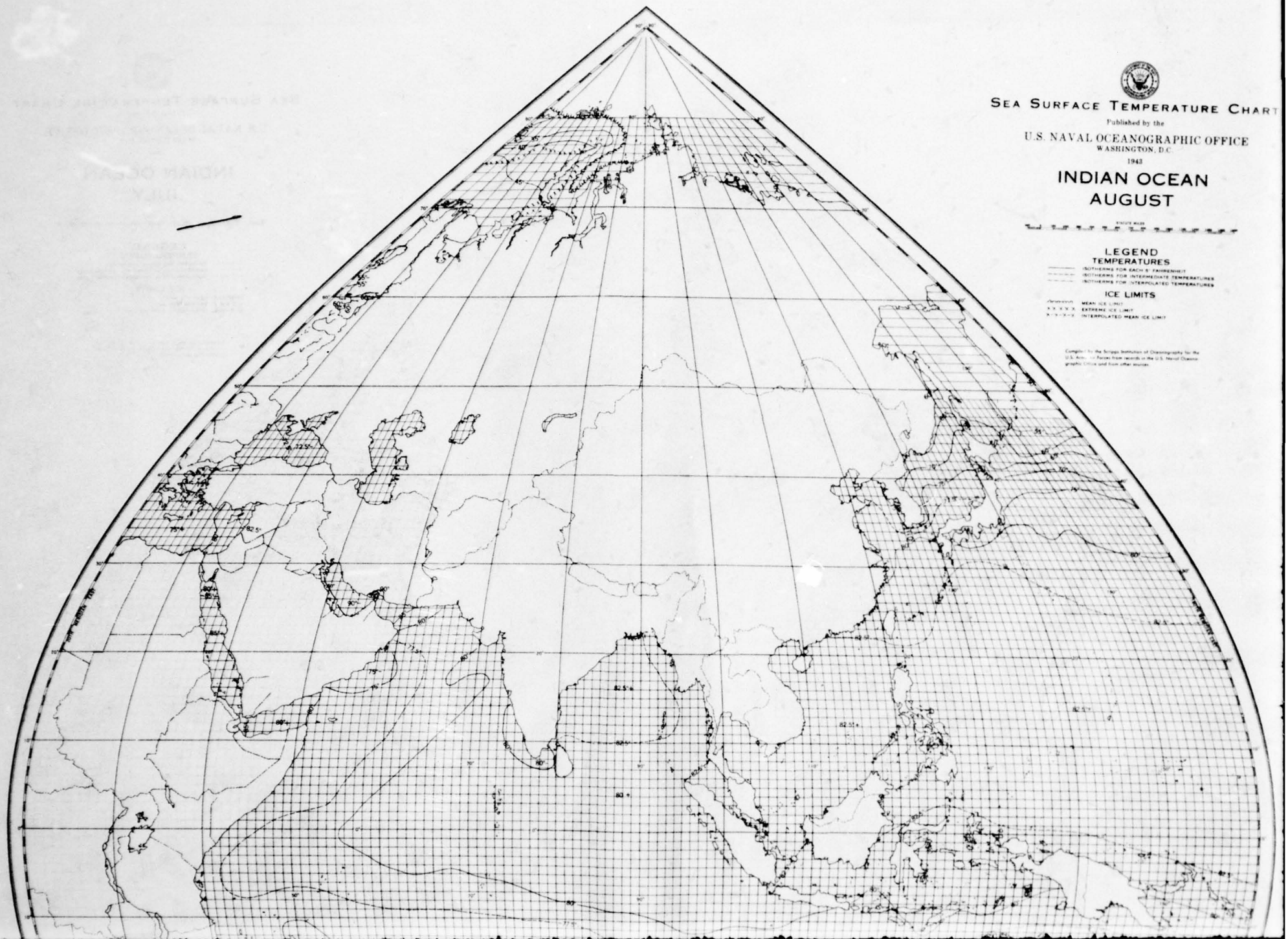
MEAN ICE LIMIT

EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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SEA SURFACE TEMPERATURE CHART

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1943

INDIAN OCEAN
AUGUST

STATUTE MILES

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

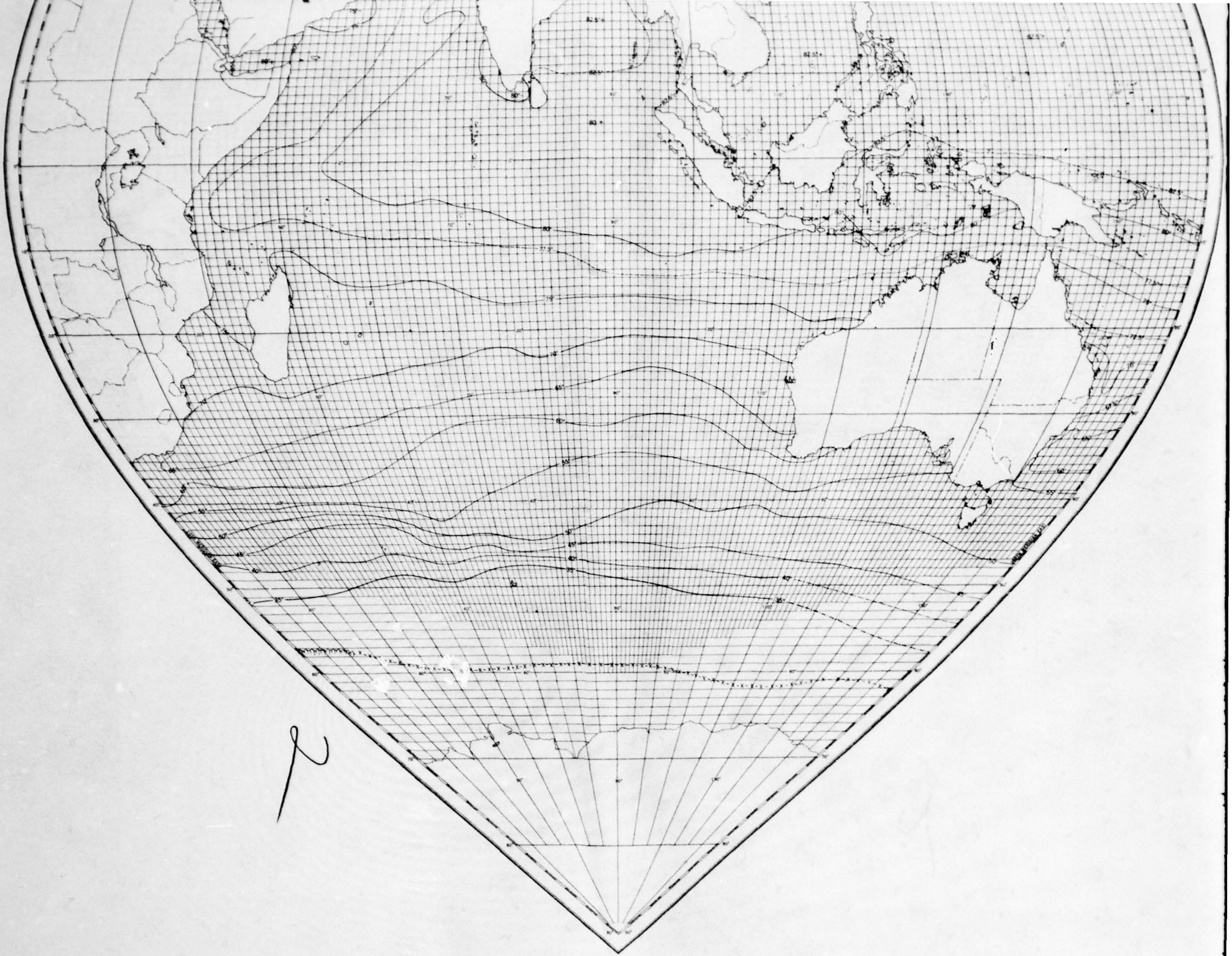
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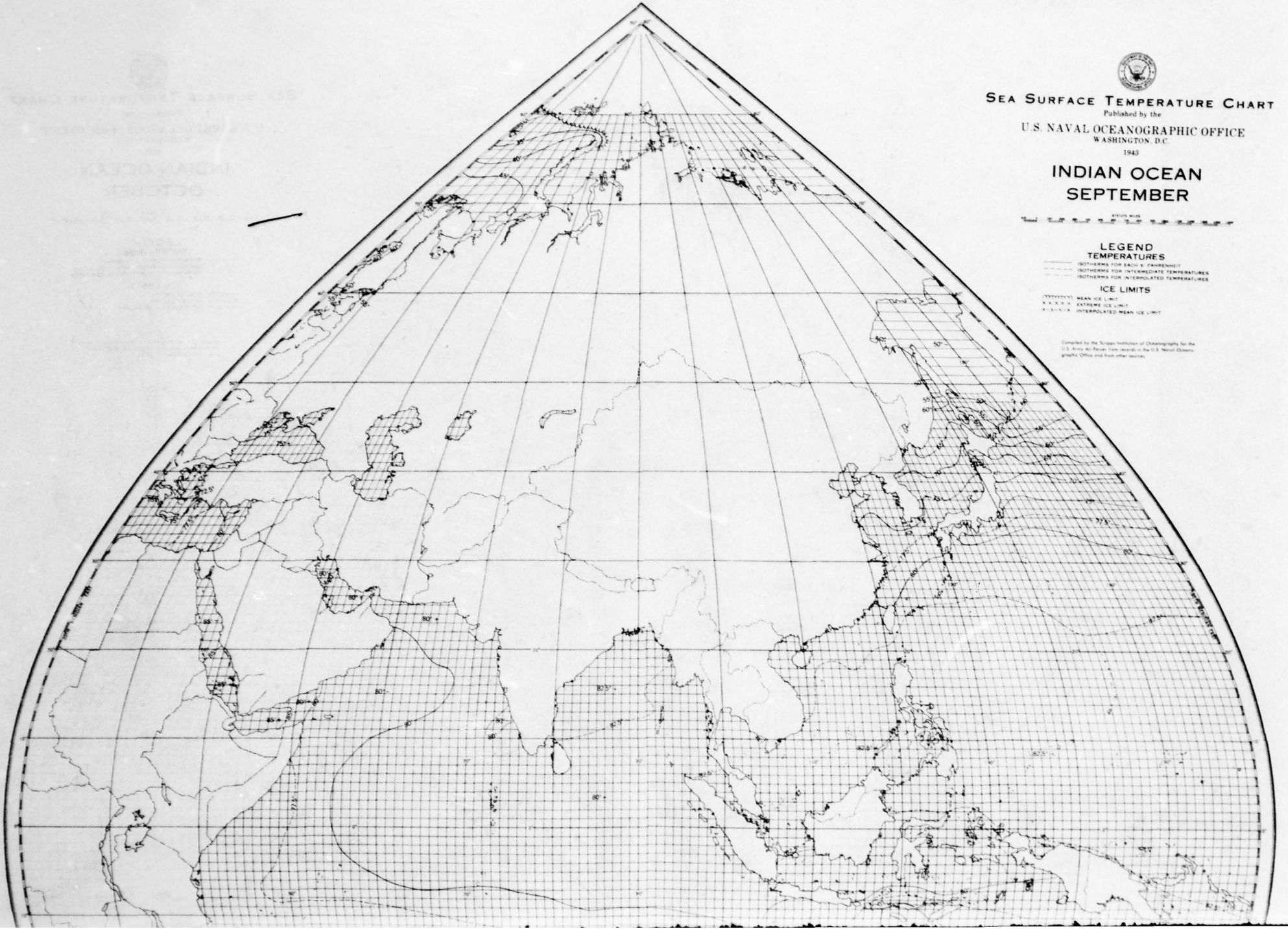
MEAN ICE LIMIT

EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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1943

INDIAN OCEAN
SEPTEMBER

STATUTE MILES

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

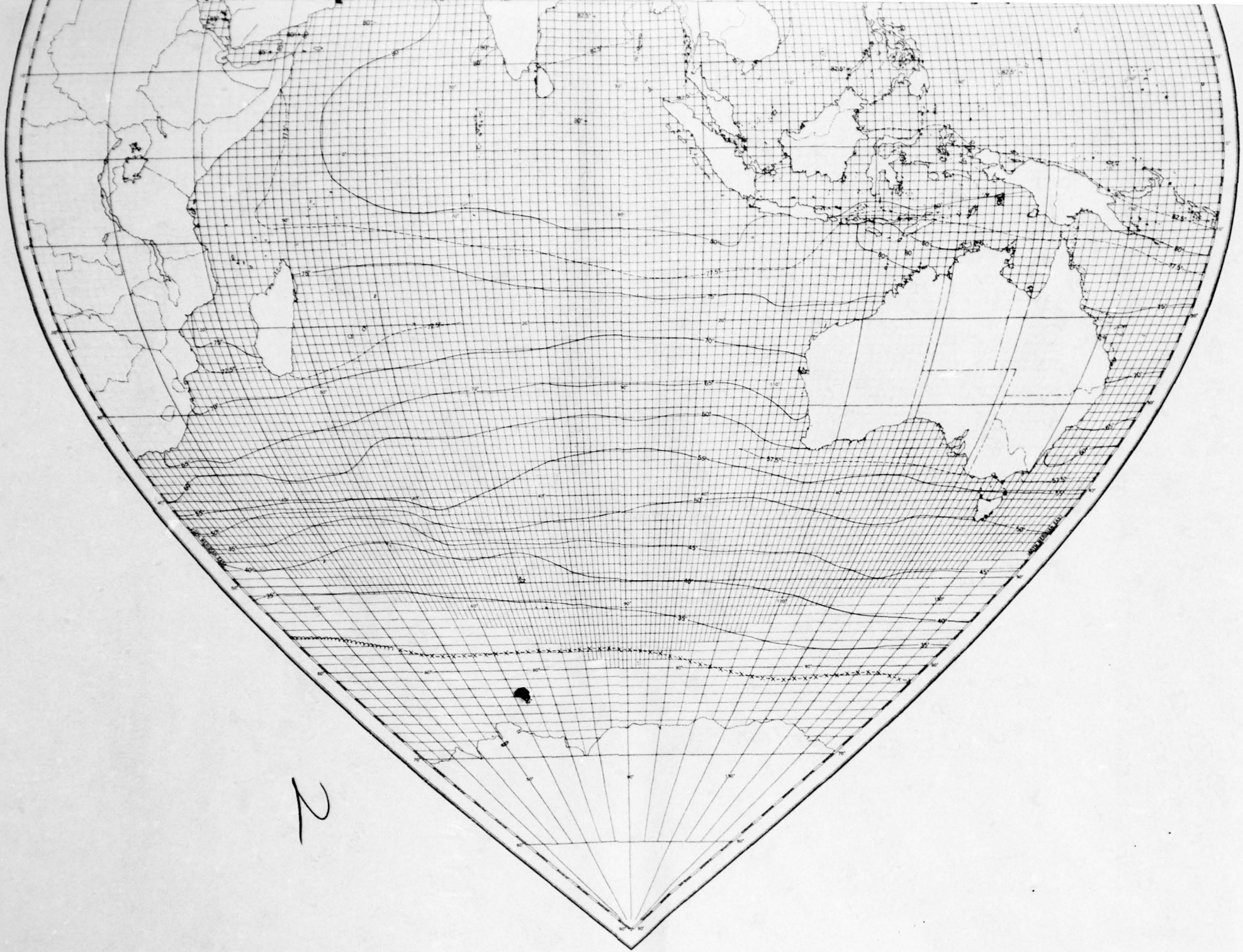
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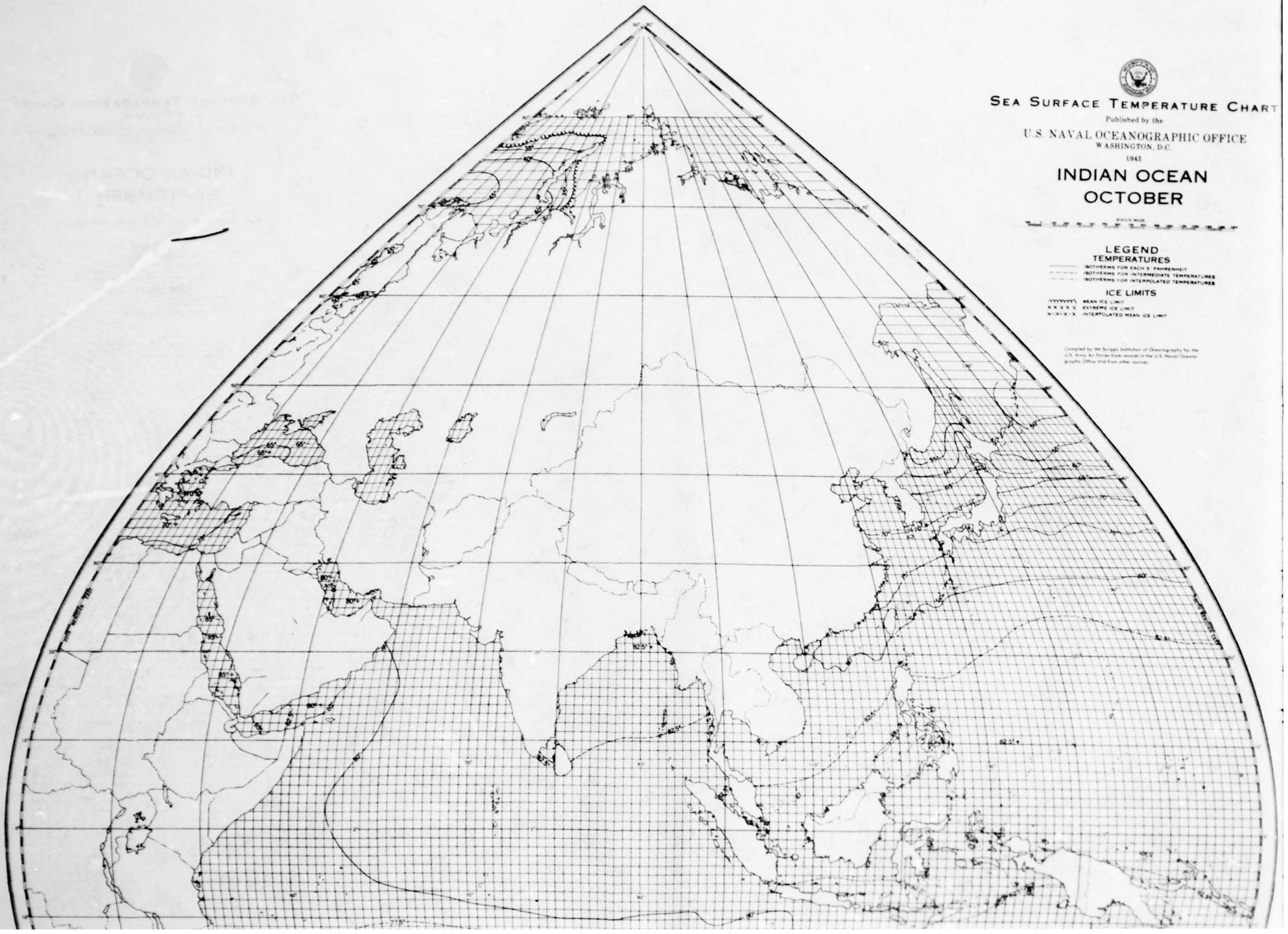
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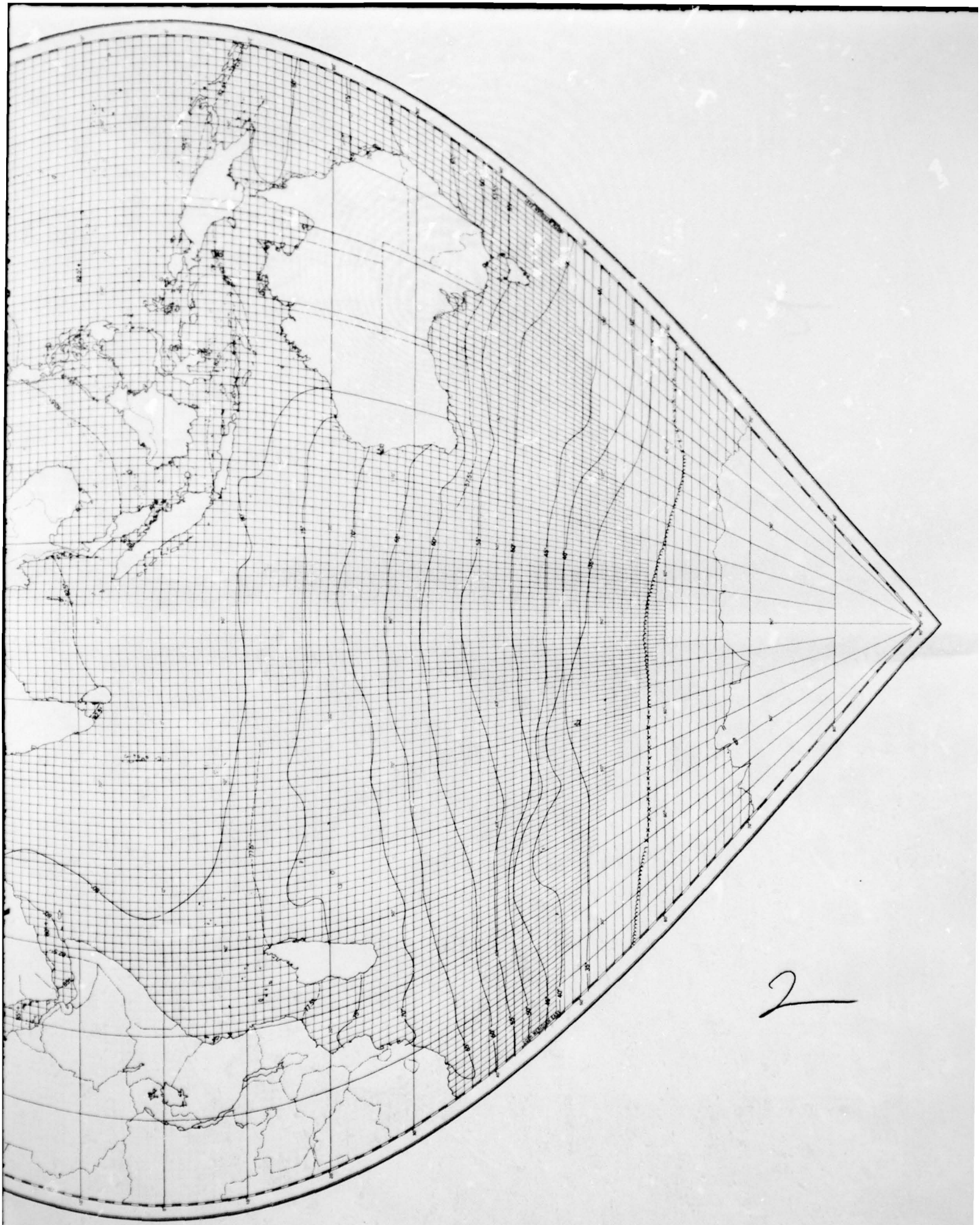
EXTREME ICE LIMIT

INTERPOLATED MEAN ICE LIMIT

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SEA SURFACE TEMPERATURE CHART
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WASHINGTON, D.C.
1943
INDIAN OCEAN
OCTOBER
STATUTE MILES
LEGEND
TEMPERATURES
ISOTHERMS FOR EACH 5° FAHRENHEIT
ISOTHERMS FOR INTERMEDIATE TEMPERATURES
ISOTHERMS FOR INTERPOLATED TEMPERATURES
ICE LIMITS
MEAN ICE LIMIT
EXTREME ICE LIMIT
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Compiled by the Scripps Institution of Oceanography for the U.S. Army Air Forces from records in the U.S. Naval Oceanographic Office and from other sources.

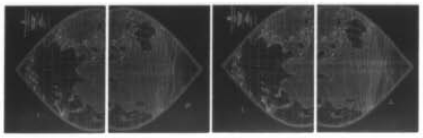


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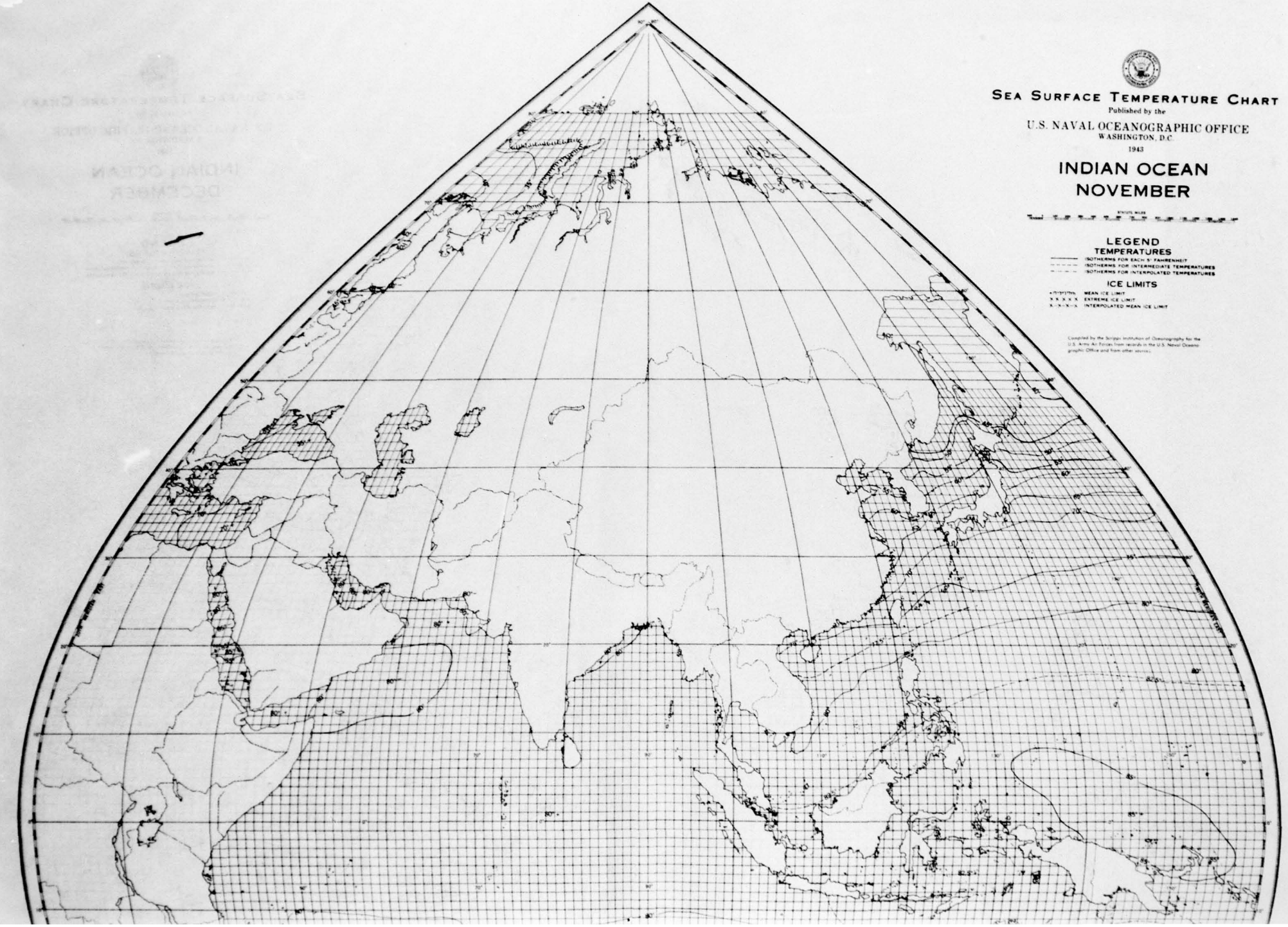
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WORLD ATLAS OF SEA SURFACE TEMPERATURES, SECOND EDITION-1944.(U)
1973

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2 OF 2
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1943

INDIAN OCEAN
NOVEMBER

STATUTE MILES

LEGEND

TEMPERATURES

ISOTHERMS FOR EACH 5° FAHRENHEIT

ISOTHERMS FOR INTERMEDIATE TEMPERATURES

ISOTHERMS FOR INTERPOLATED TEMPERATURES

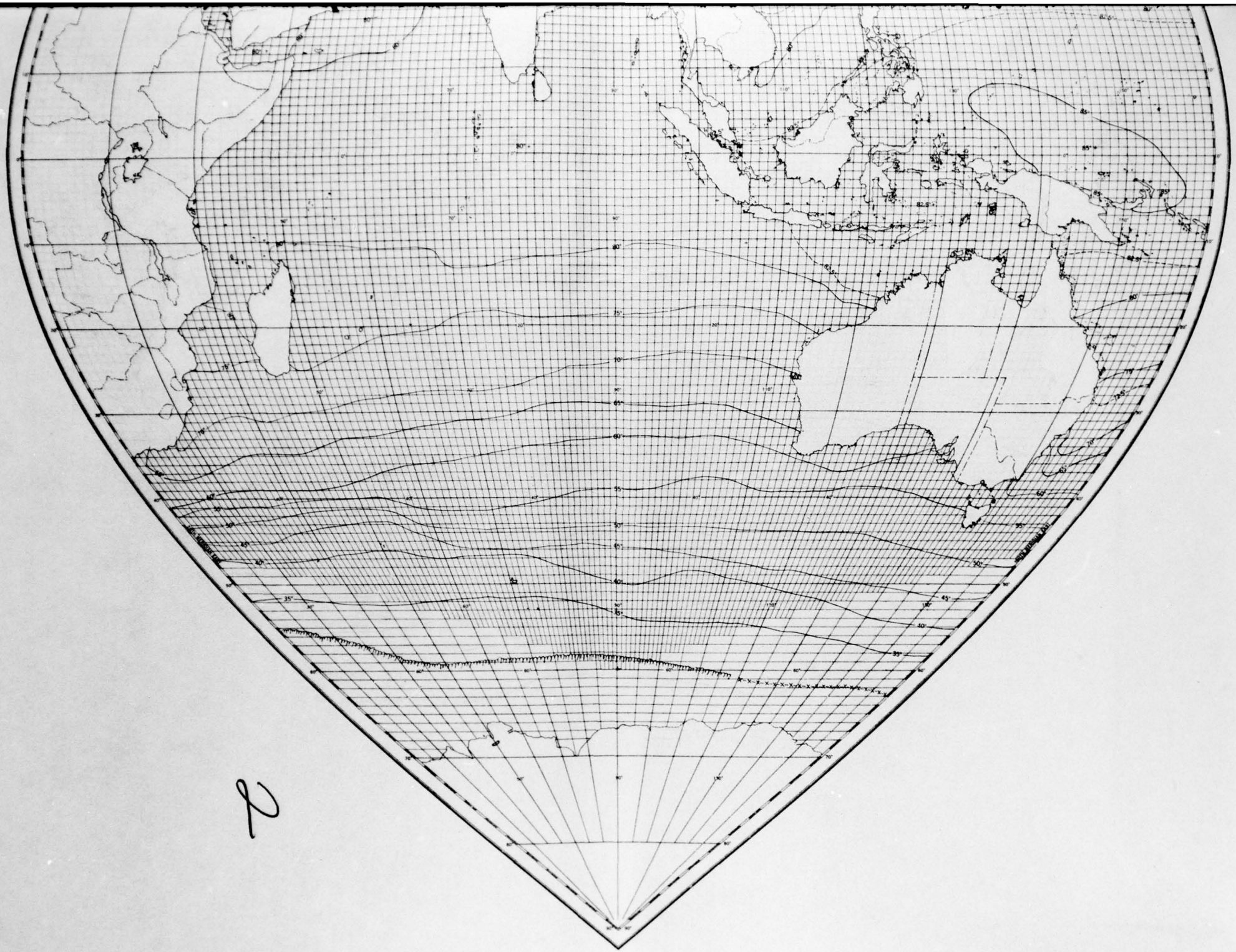
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MEAN ICE LIMIT

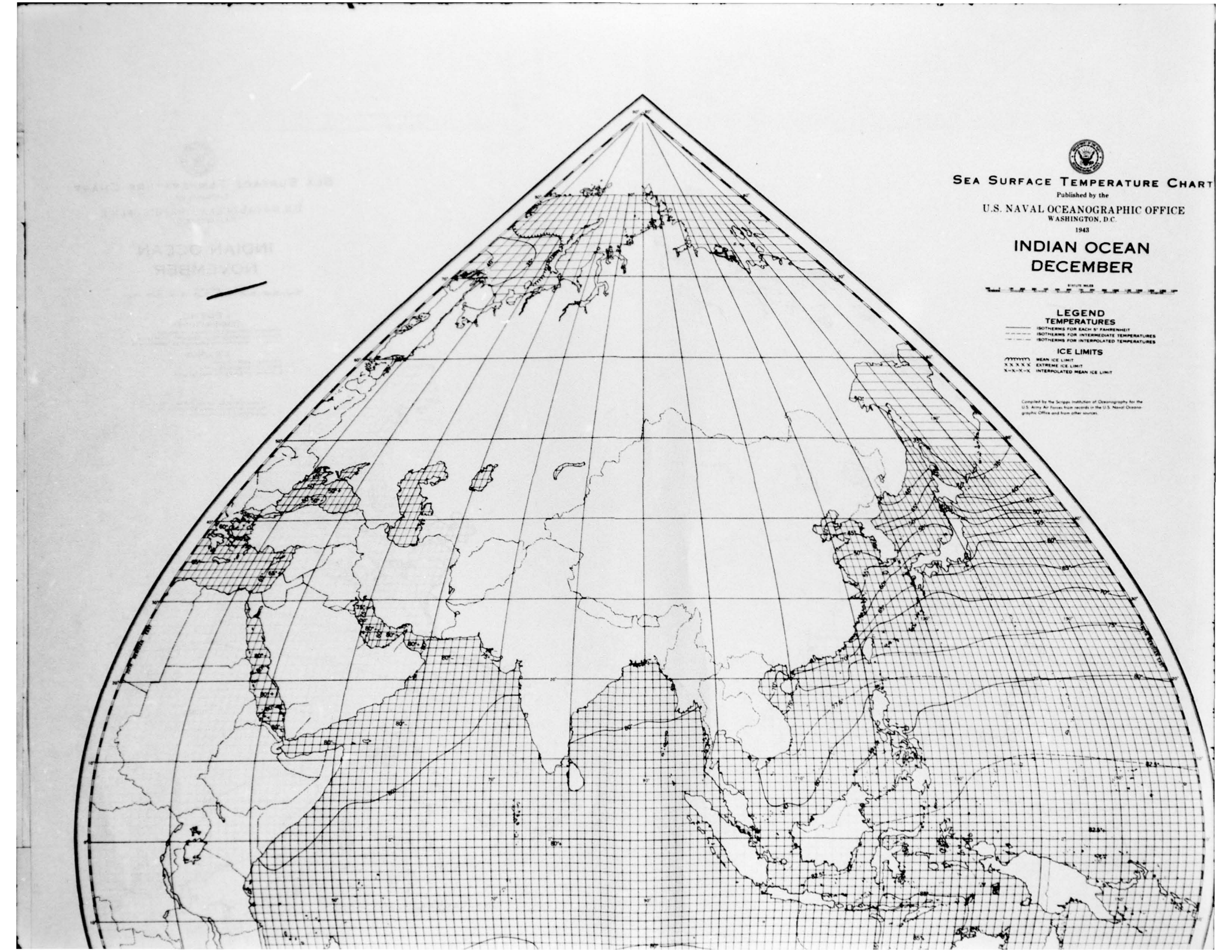
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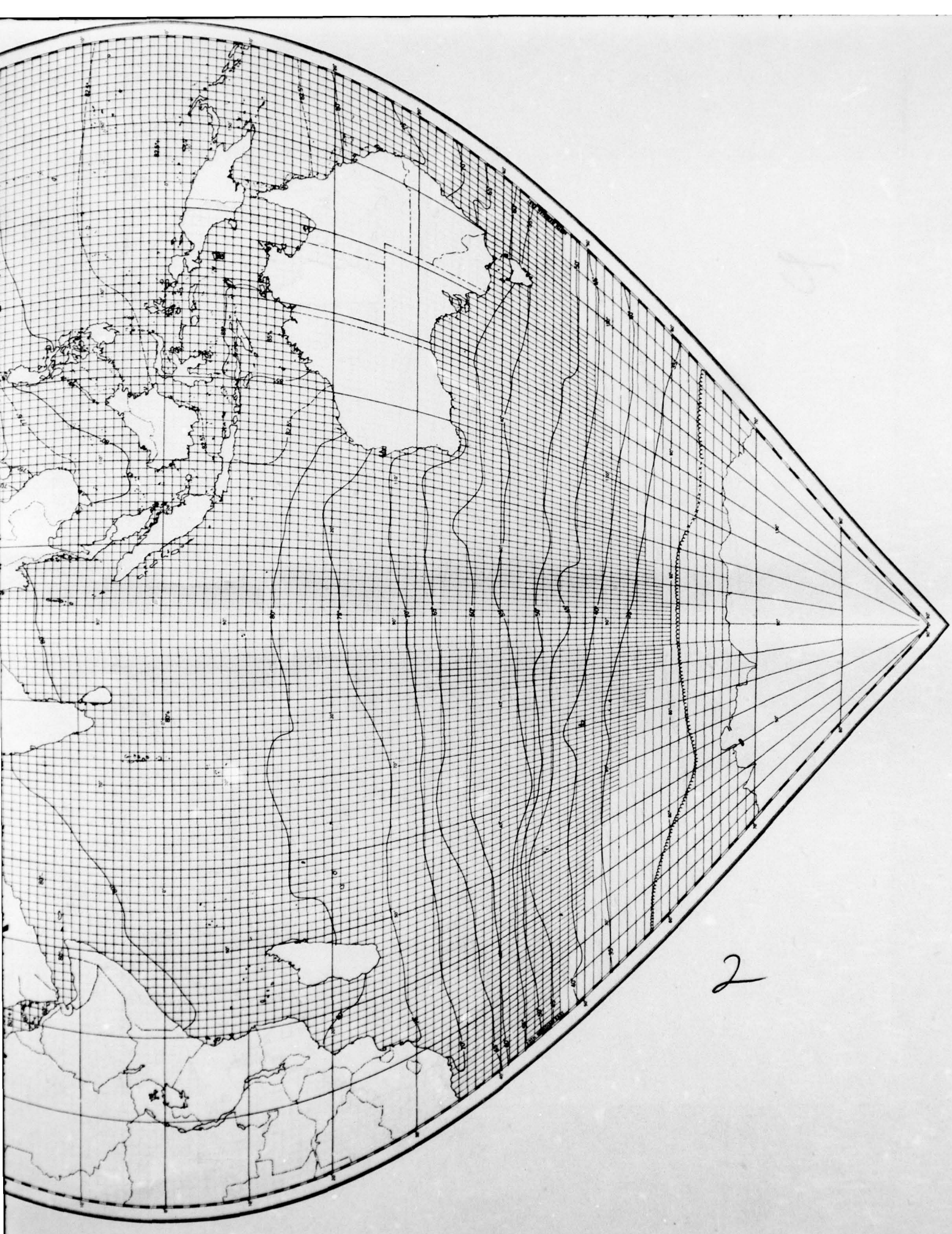
INTERPOLATED MEAN ICE LIMIT

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2


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WASHINGTON, D.C.
1943
INDIAN OCEAN
DECEMBER
STATUTE MILES
LEGEND
TEMPERATURES
ISOTHERMS FOR EACH 5° FAHRENHEIT
ISOTHERMS FOR INTERMEDIATE TEMPERATURES
ISOTHERMS FOR INTERPOLATED TEMPERATURES
ICE LIMITS
MEAN ICE LIMIT
EXTREME ICE LIMIT
INTERPOLATED MEAN ICE LIMIT
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2