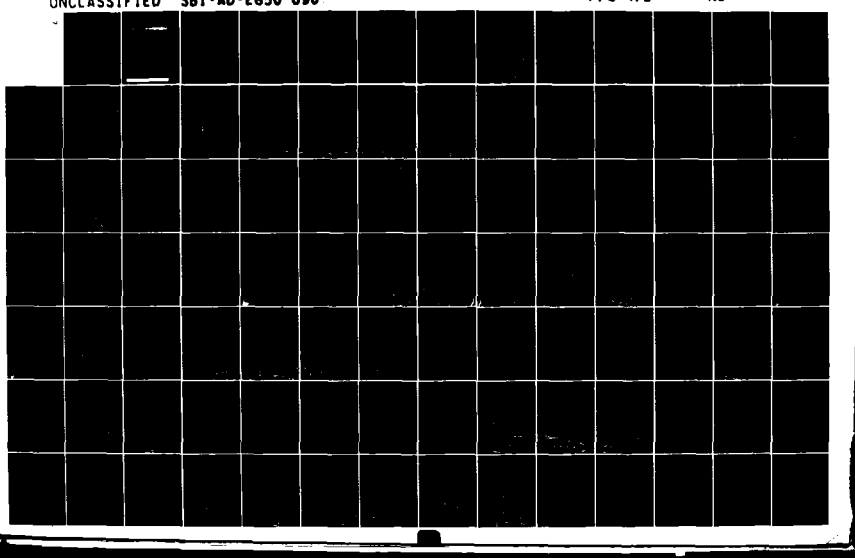
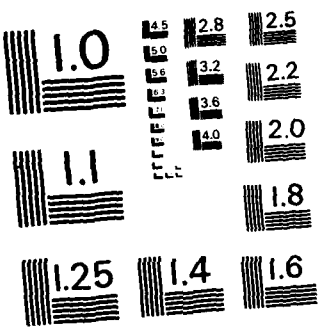
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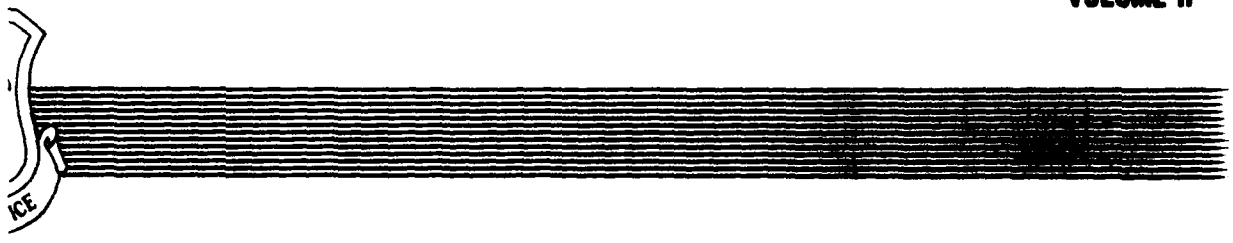





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

AD-A141 484

AWS/TR-83/002
VOLUME II



# MEAN UPPER TROPOSPHERIC FLOW OVER THE GLOBAL TROPICS

BY

James C. Sadler,
University of Hawaii

and

Thomas C. Wann, Major, USAF
Headquarters AWS

## JANUARY 1984

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AIR WEATHER SERVICE (MAC)
Scott AFB, Illinois 62225

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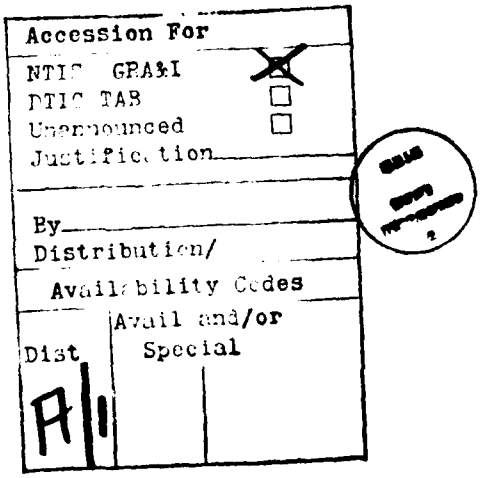
This technical publication has been reviewed and is approved for publication.

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19. ABSTRACT (Continue on reverse if necessary and identify by block number)

Upper air climatology over the tropics is a powerful forecast tool. This technical report consists of mean monthly 200- and 300-mb wind charts for the global tropics. Volume I is a brief discussion on how the charts were developed, the significant climatological features, and their use. Volume II contains the maps. In day-to-day use the forecaster must identify the location of key synoptic features and adjust the forecast to these features. This requires an understanding of these features, their persistence, and their relative effect on sensible weather.

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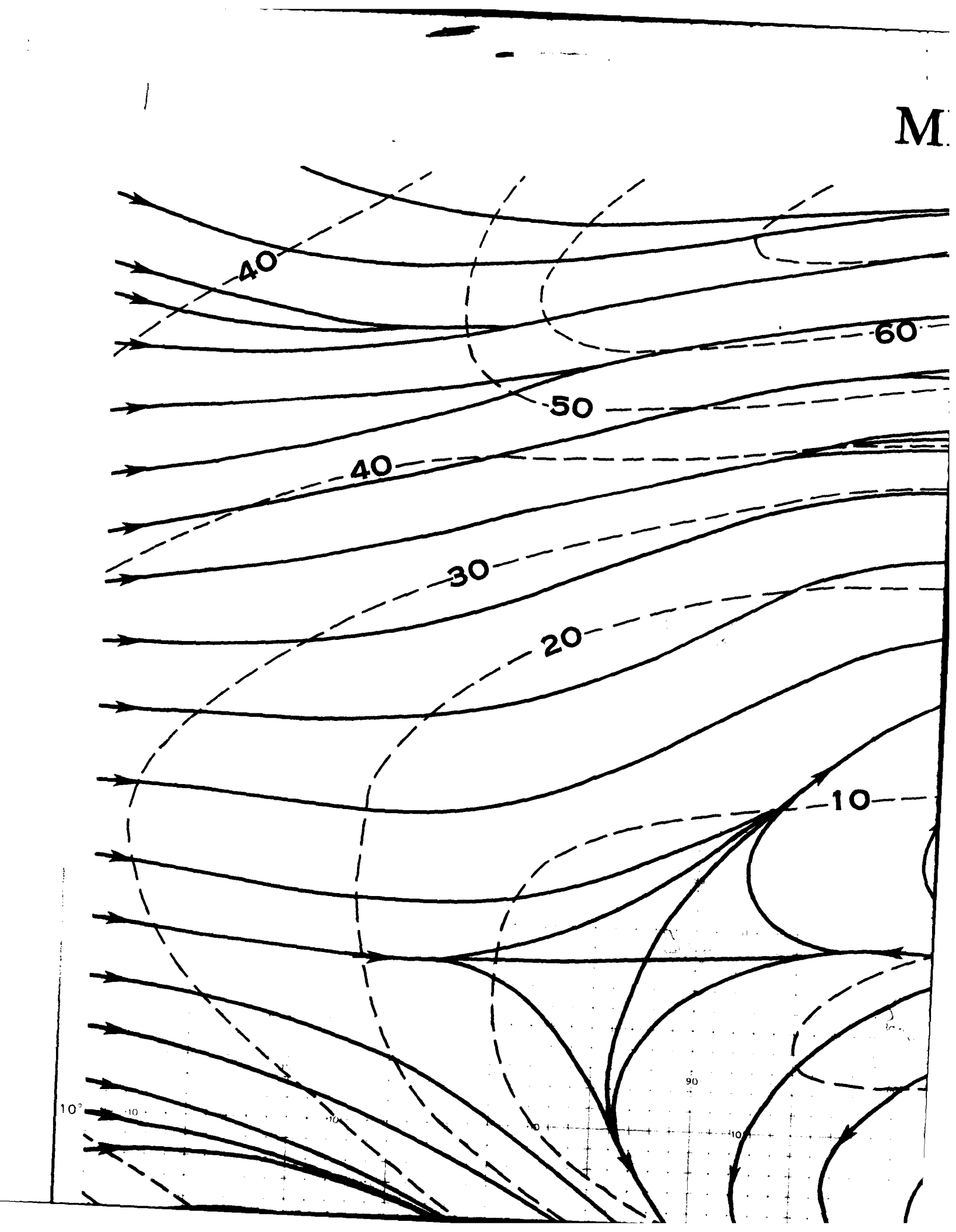
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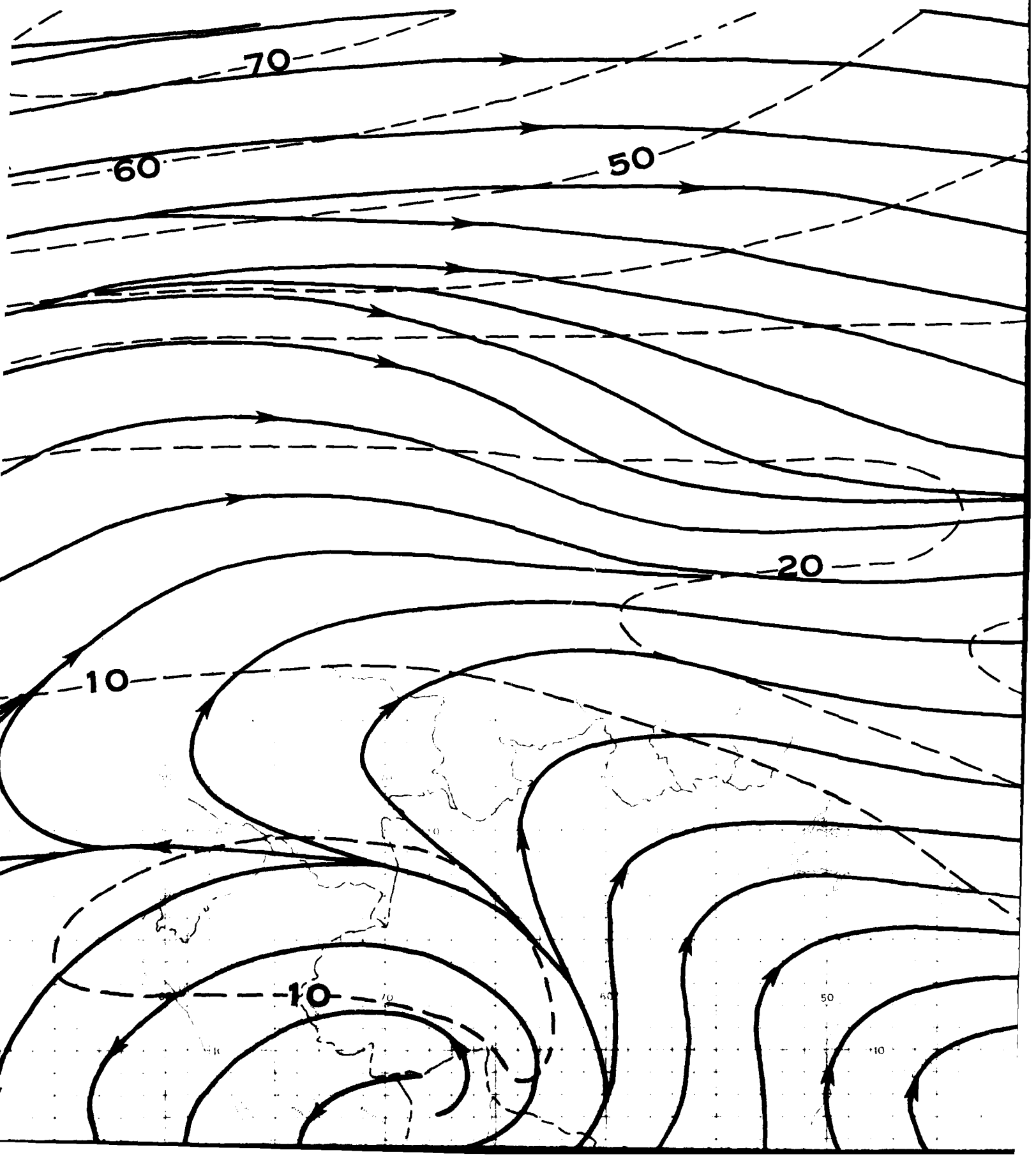

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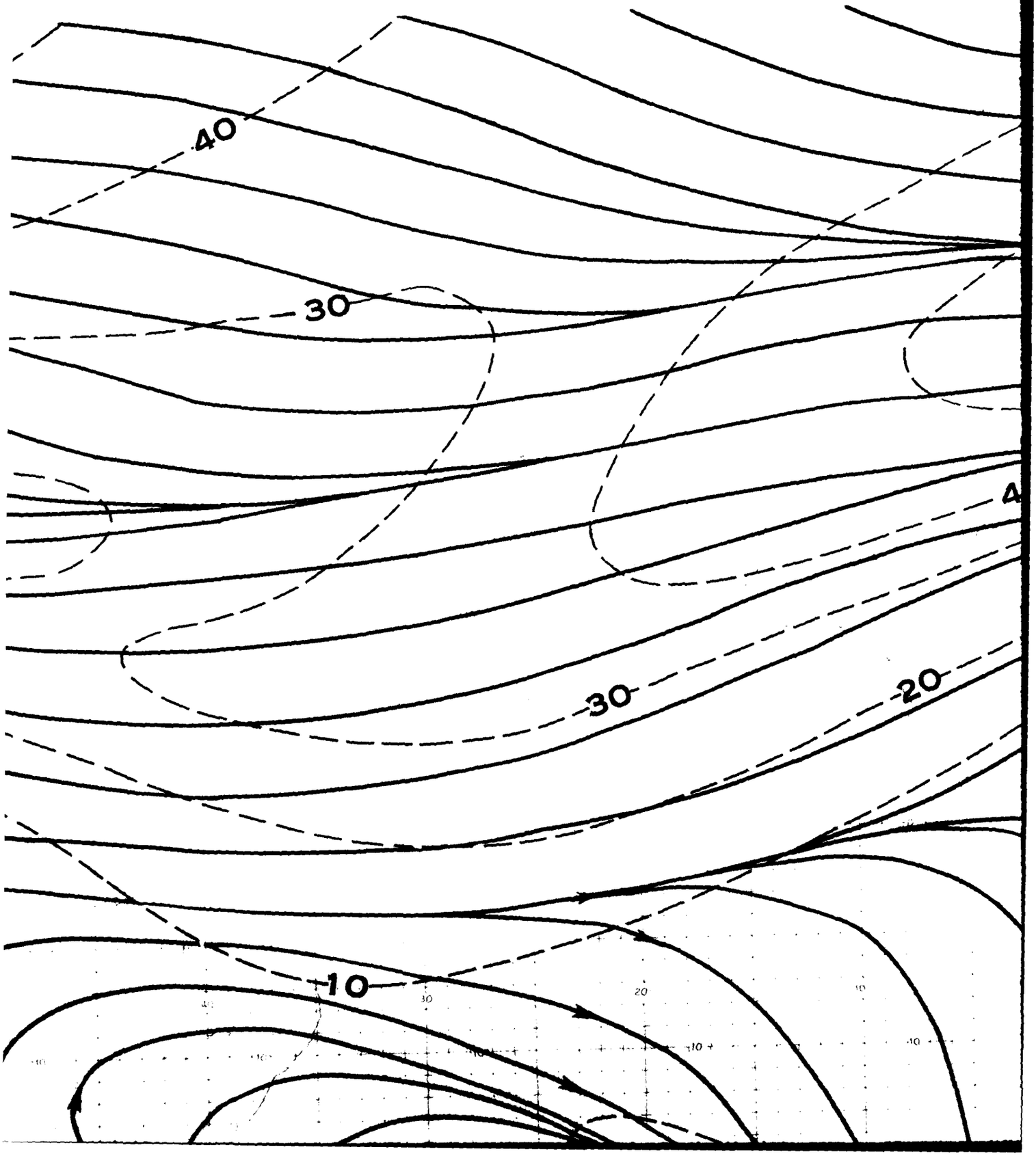
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| Commander, NAVOCEANCOM, NSTL Station Code N311, Bay St. Louis MS 39259 | 50 |


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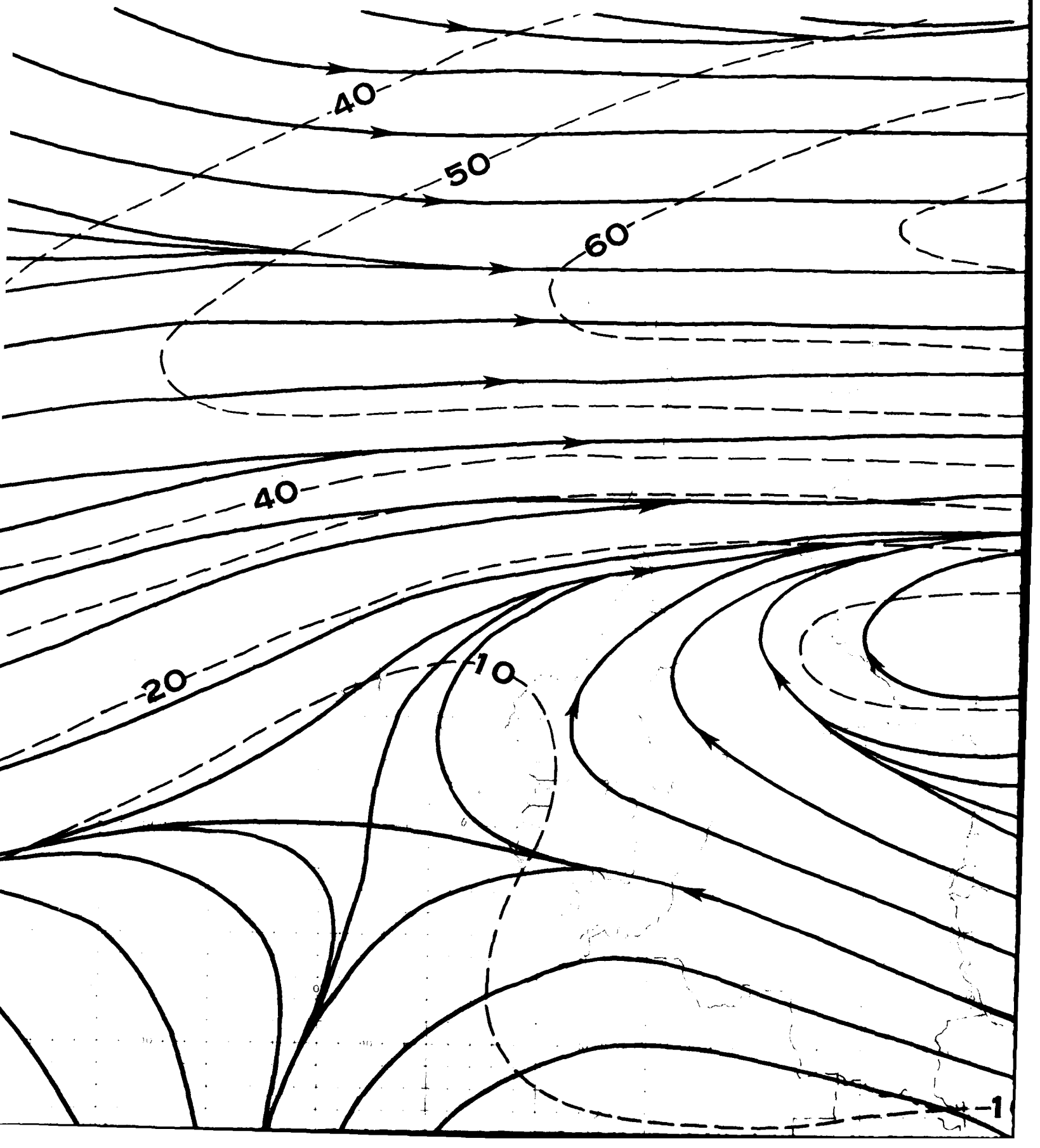
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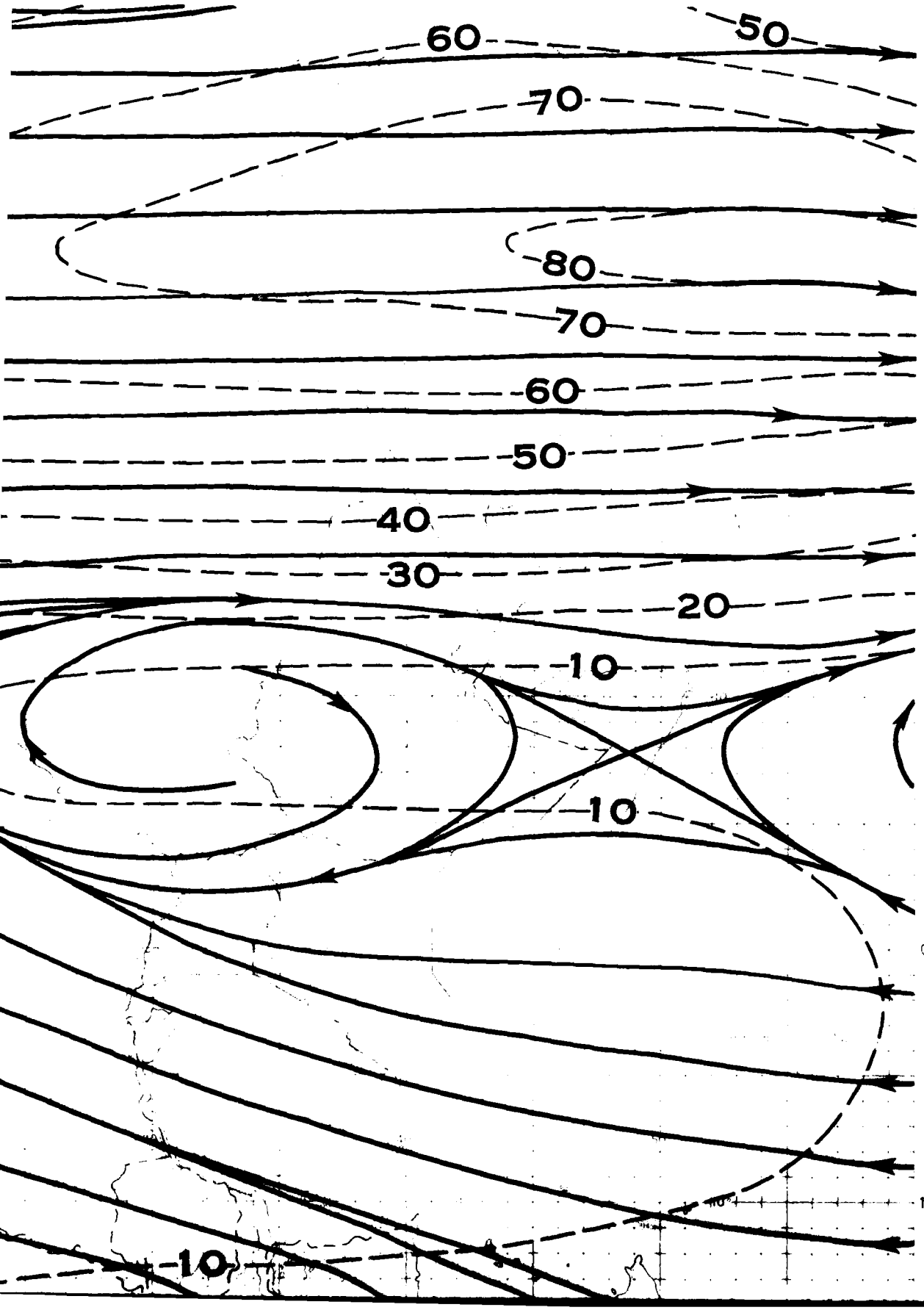


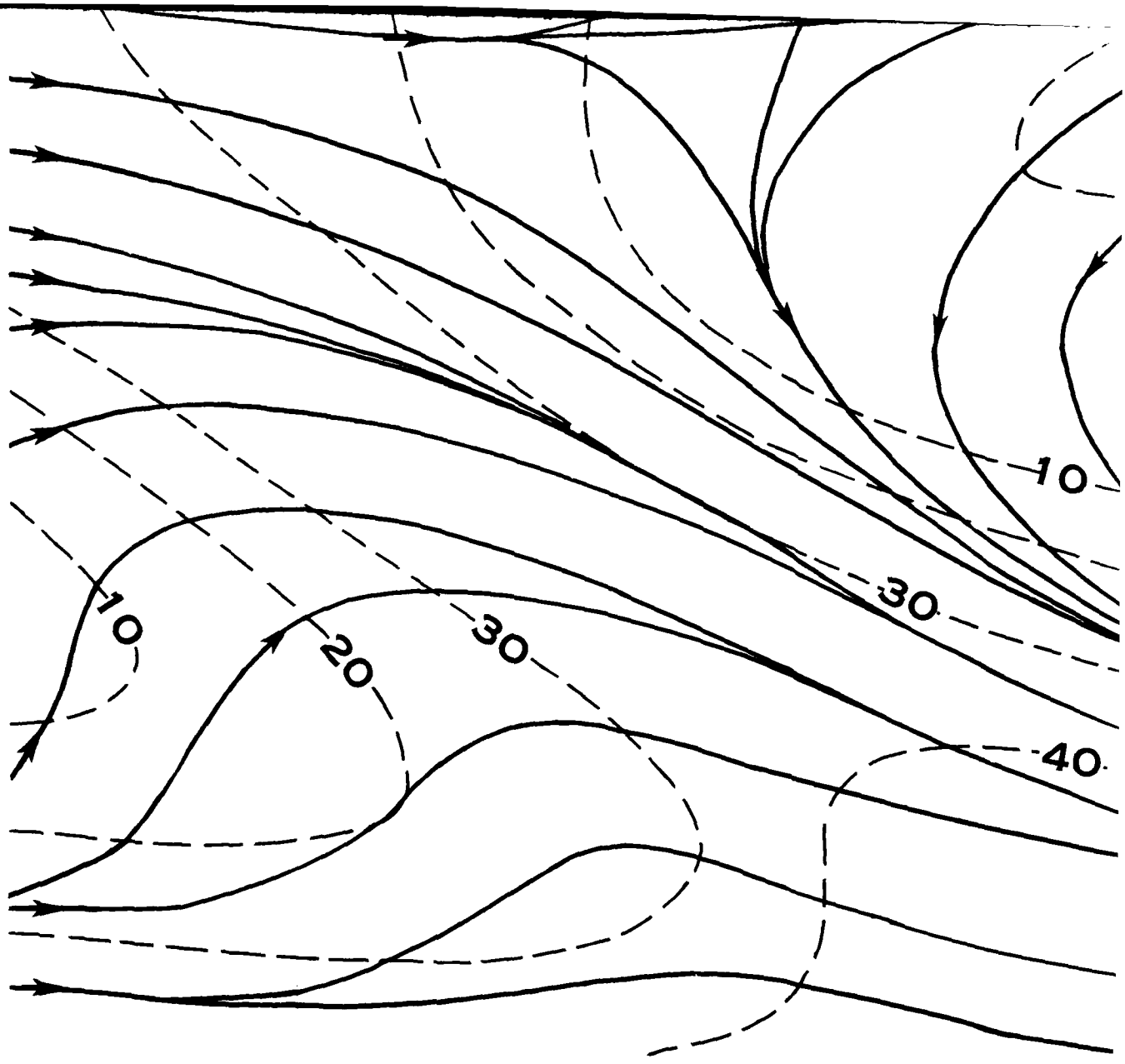
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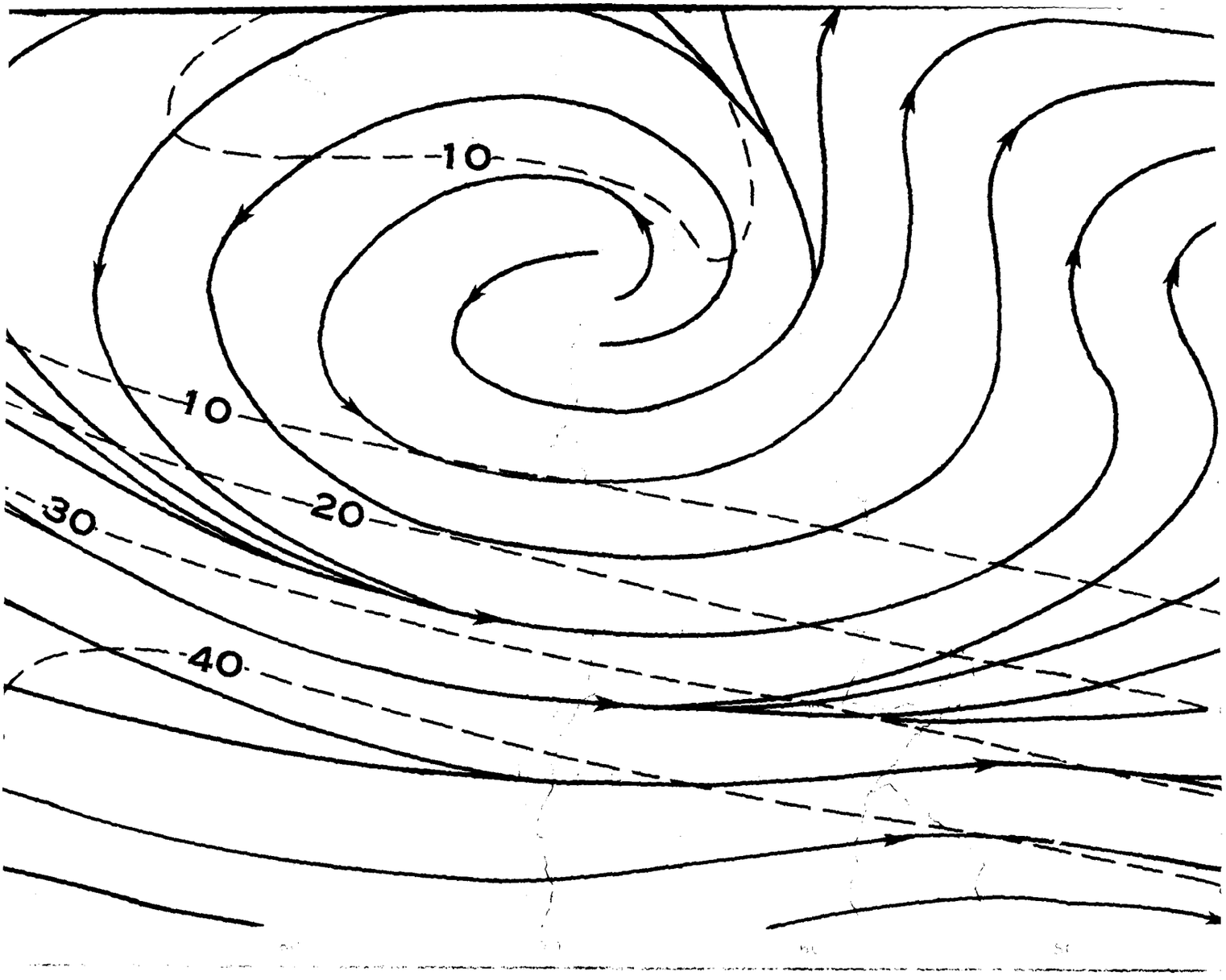
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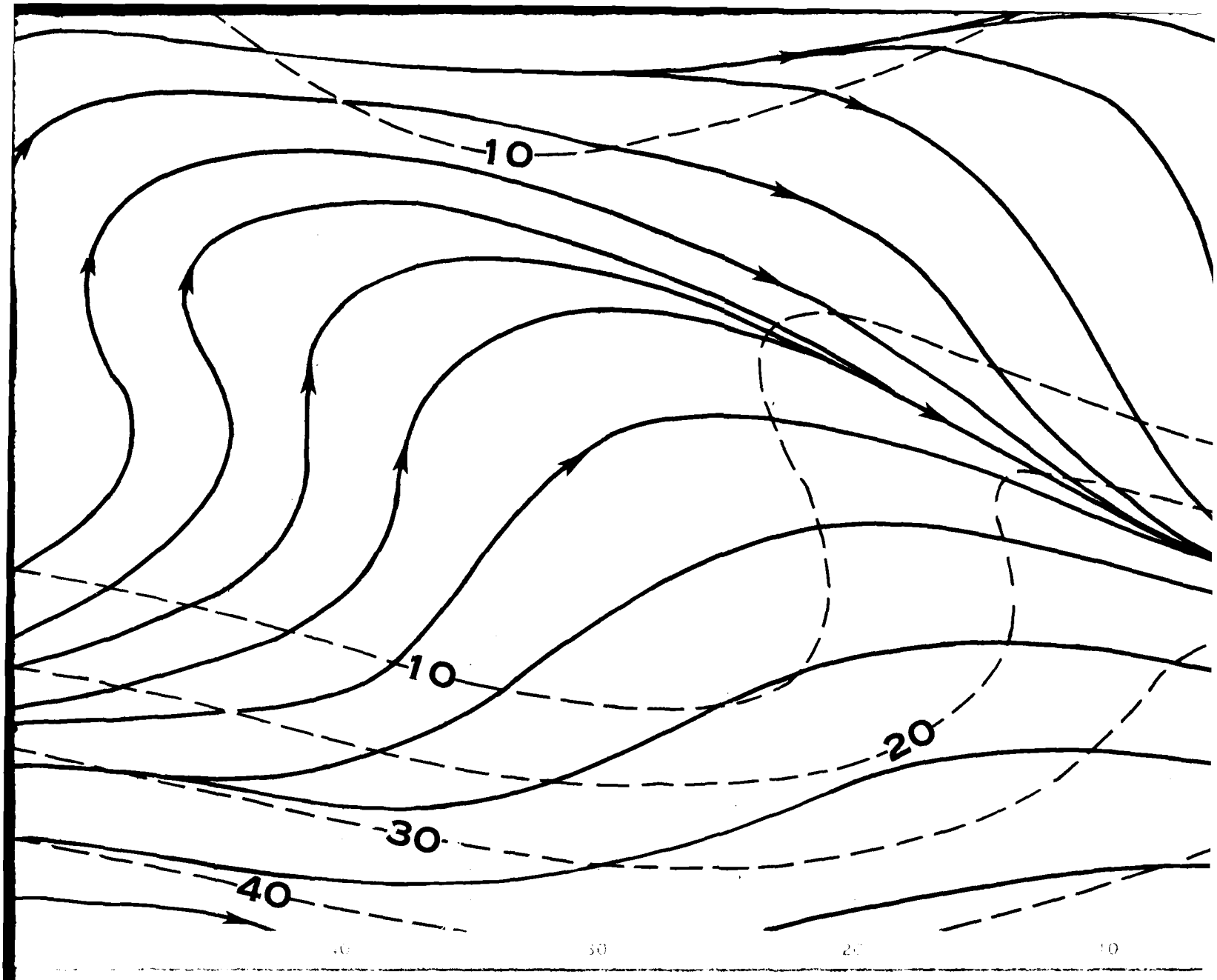


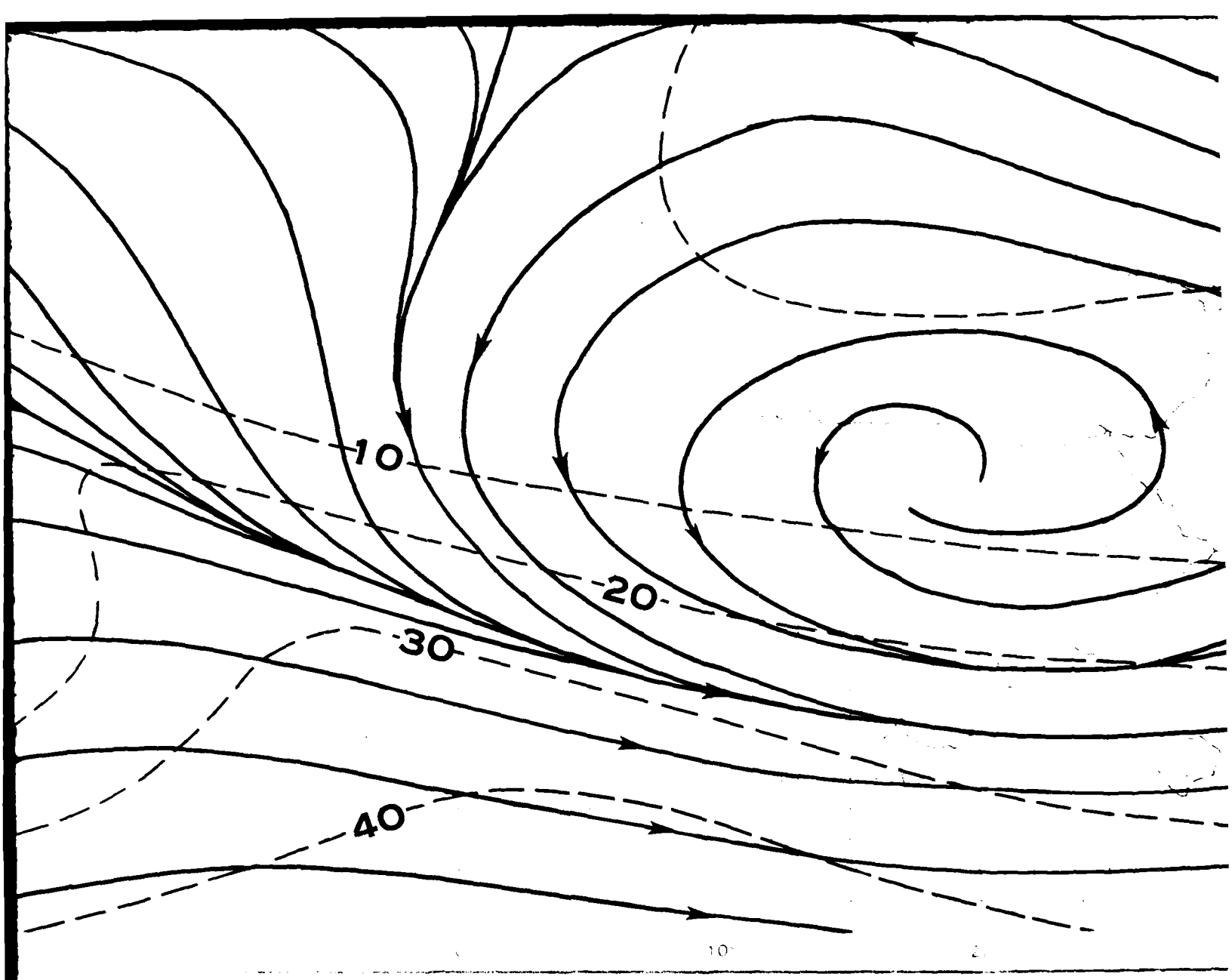

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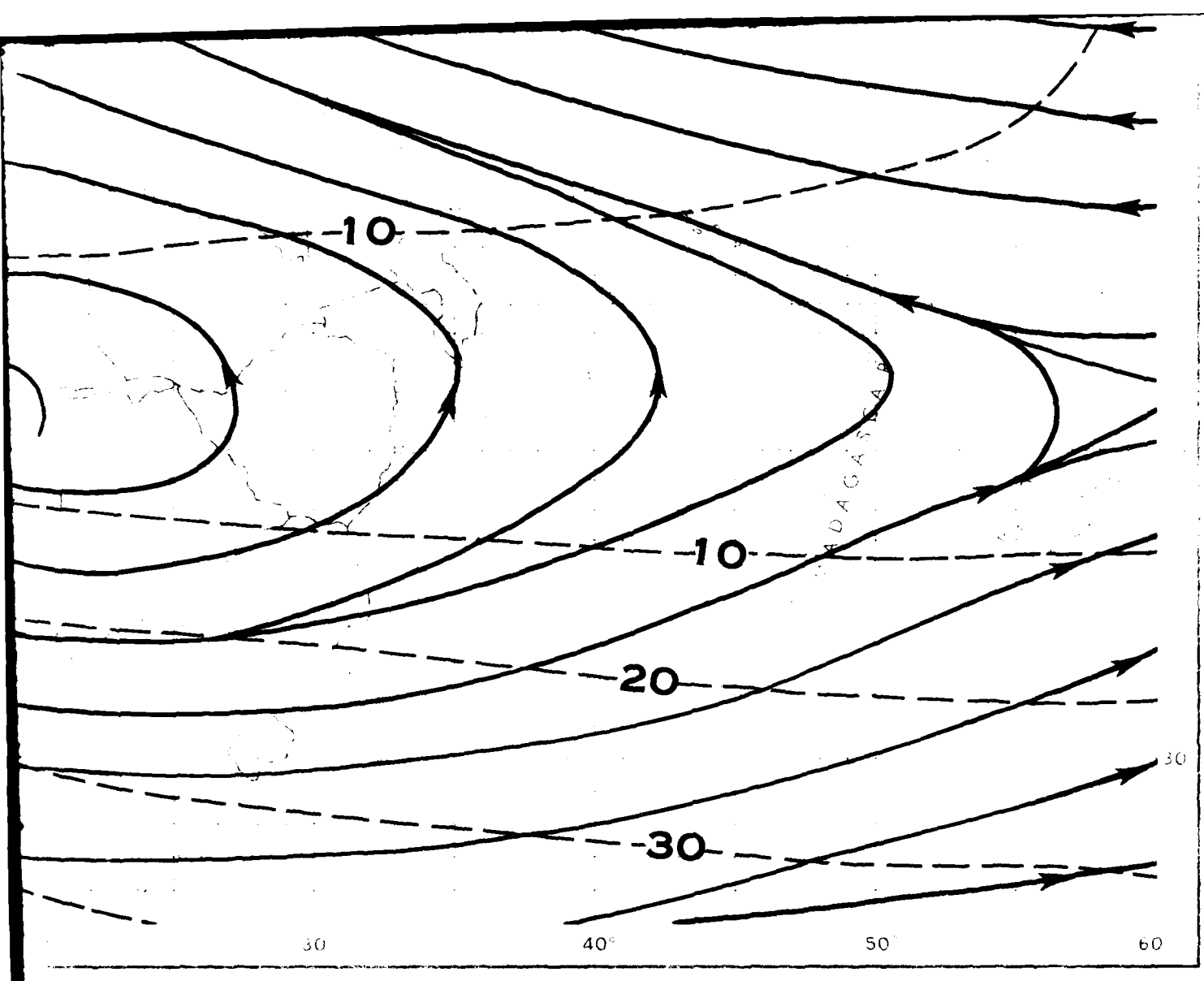



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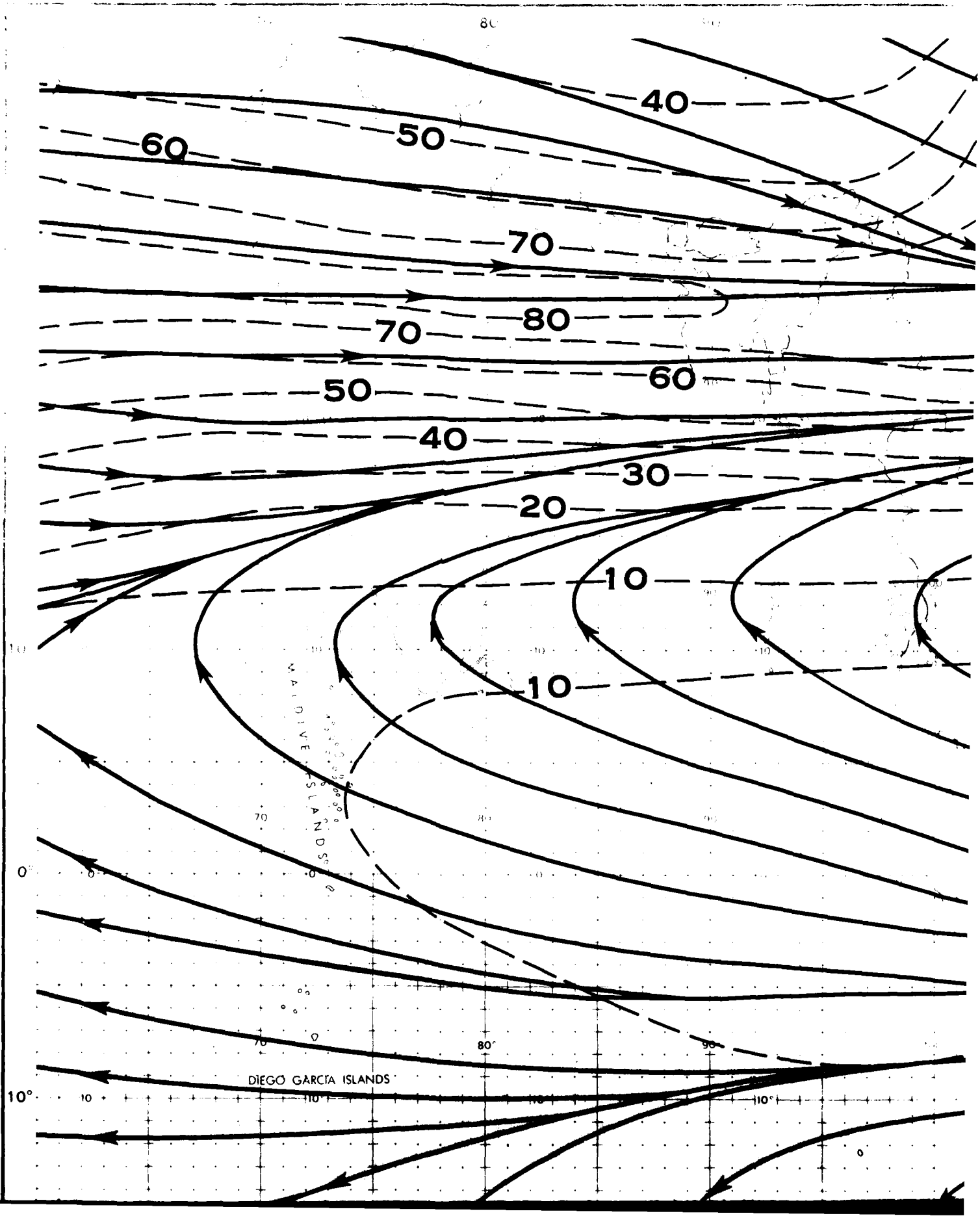

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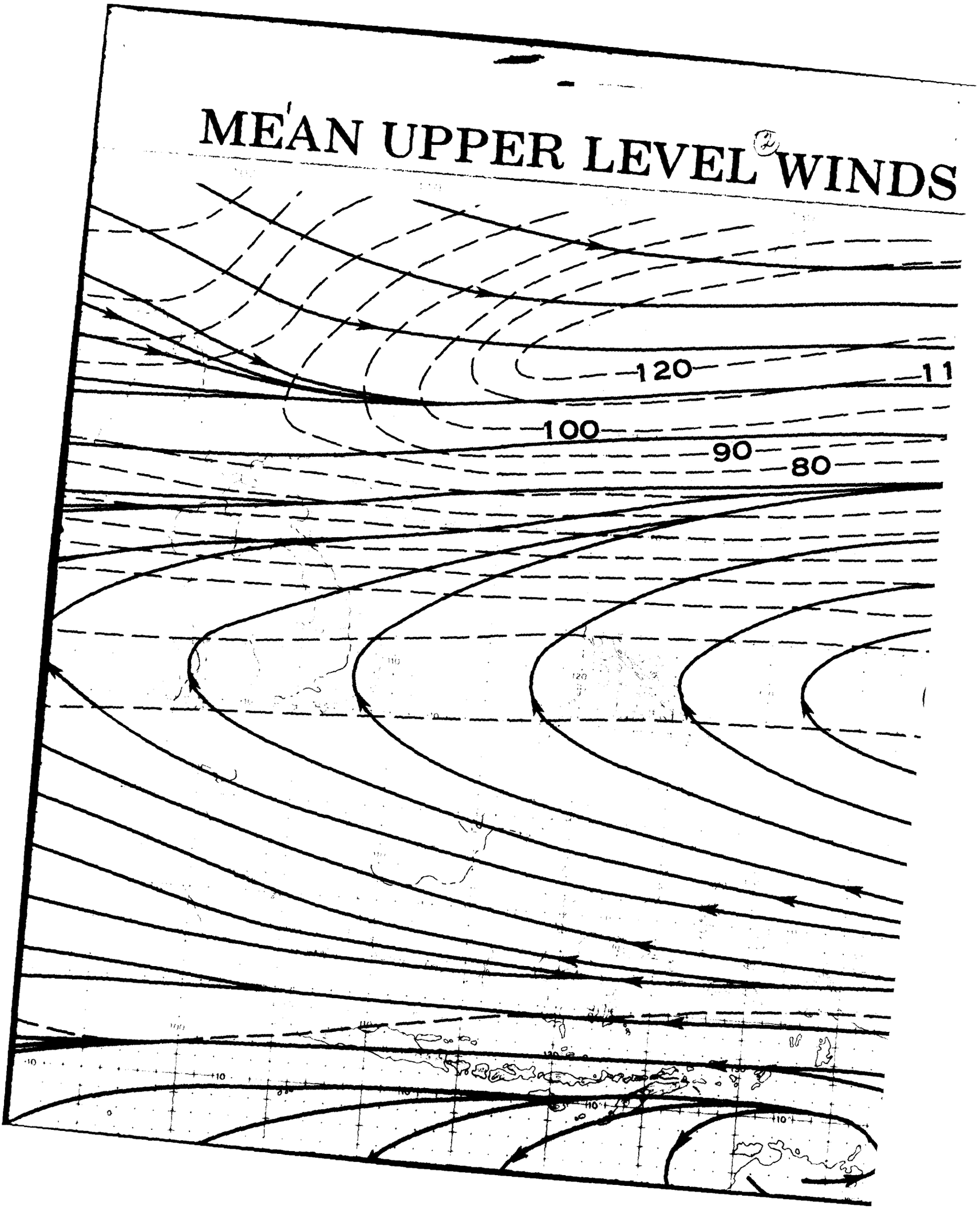

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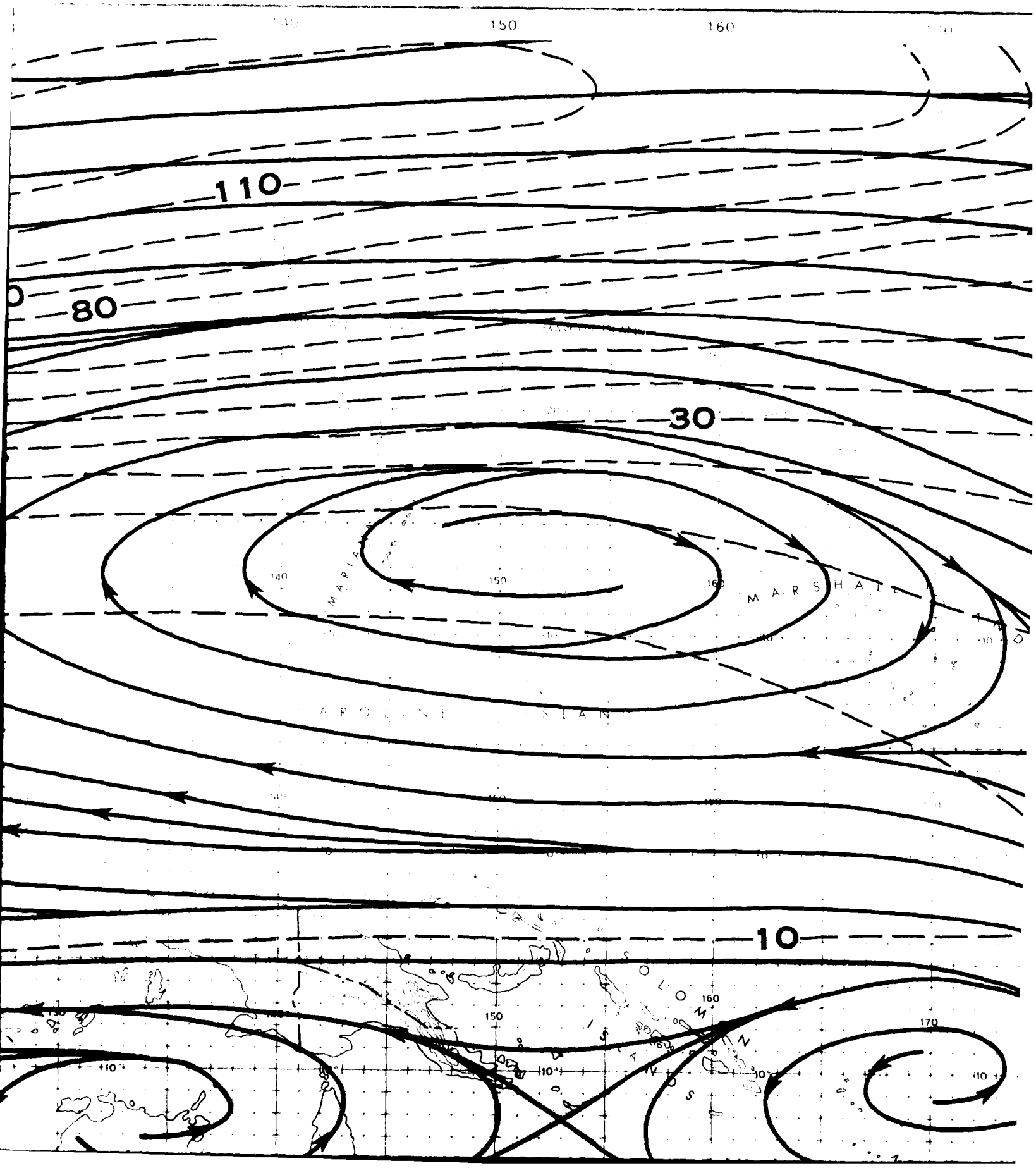

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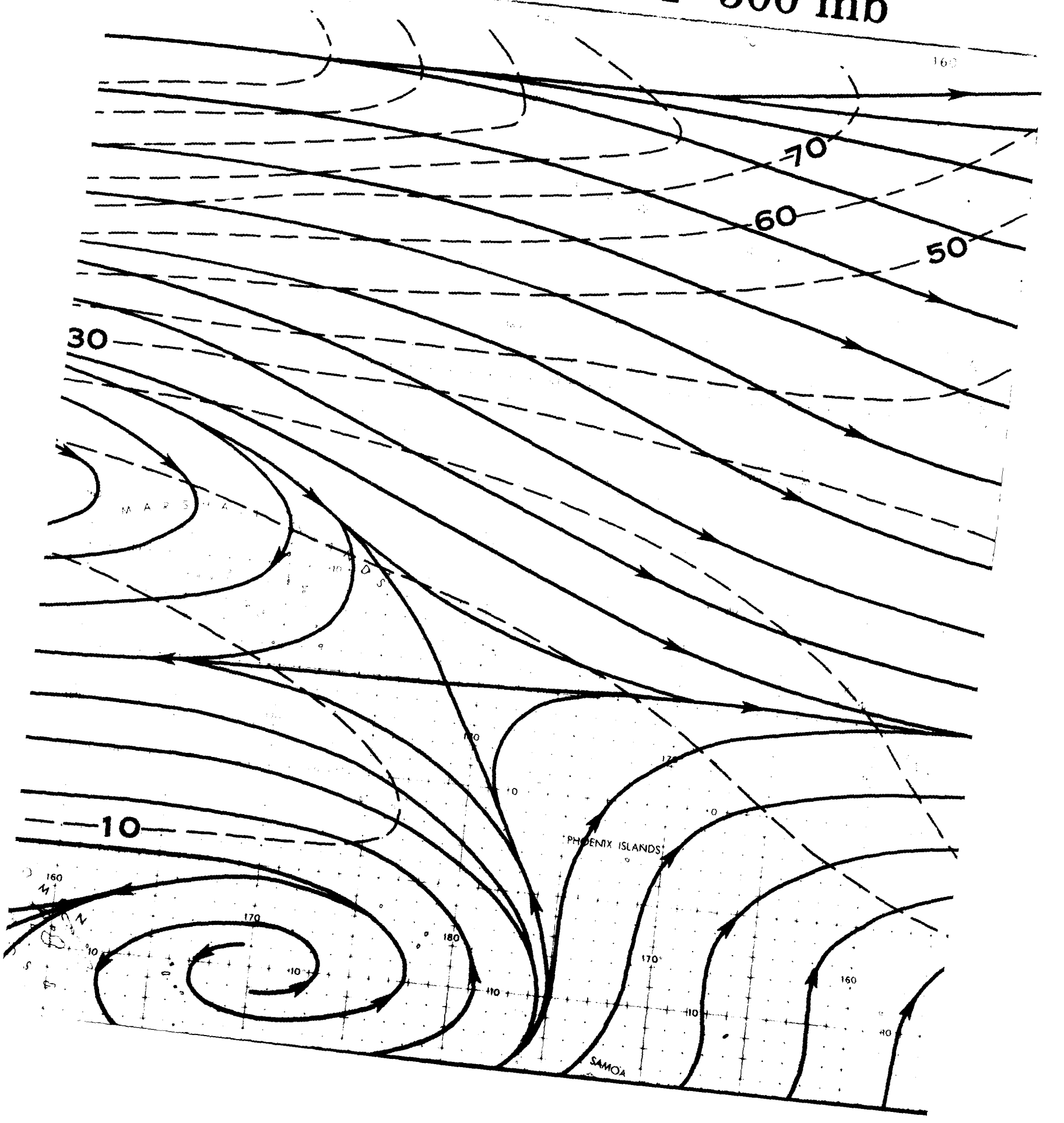

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MALDIVE ISLANDS
DIEGO GARCIA ISLANDS
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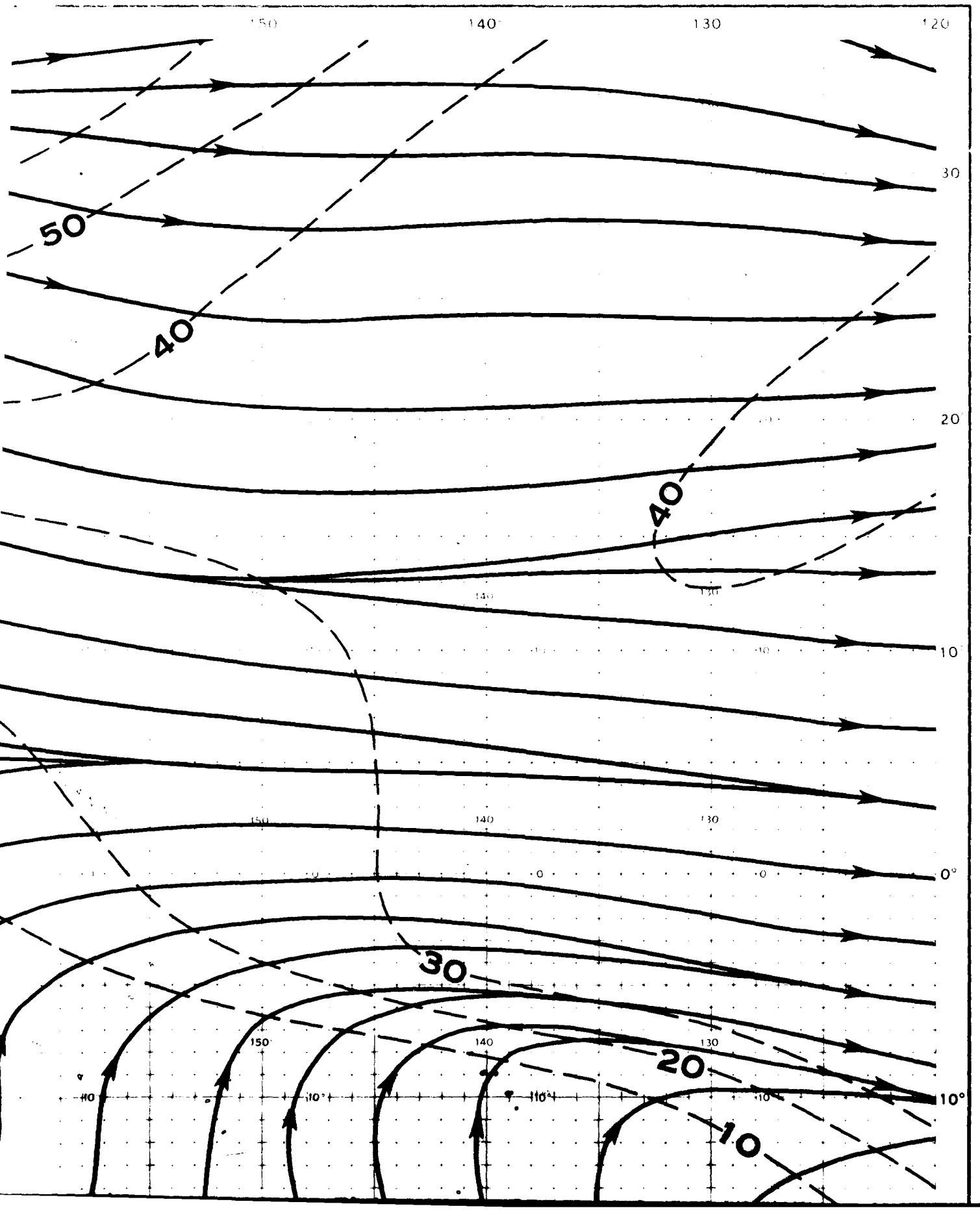

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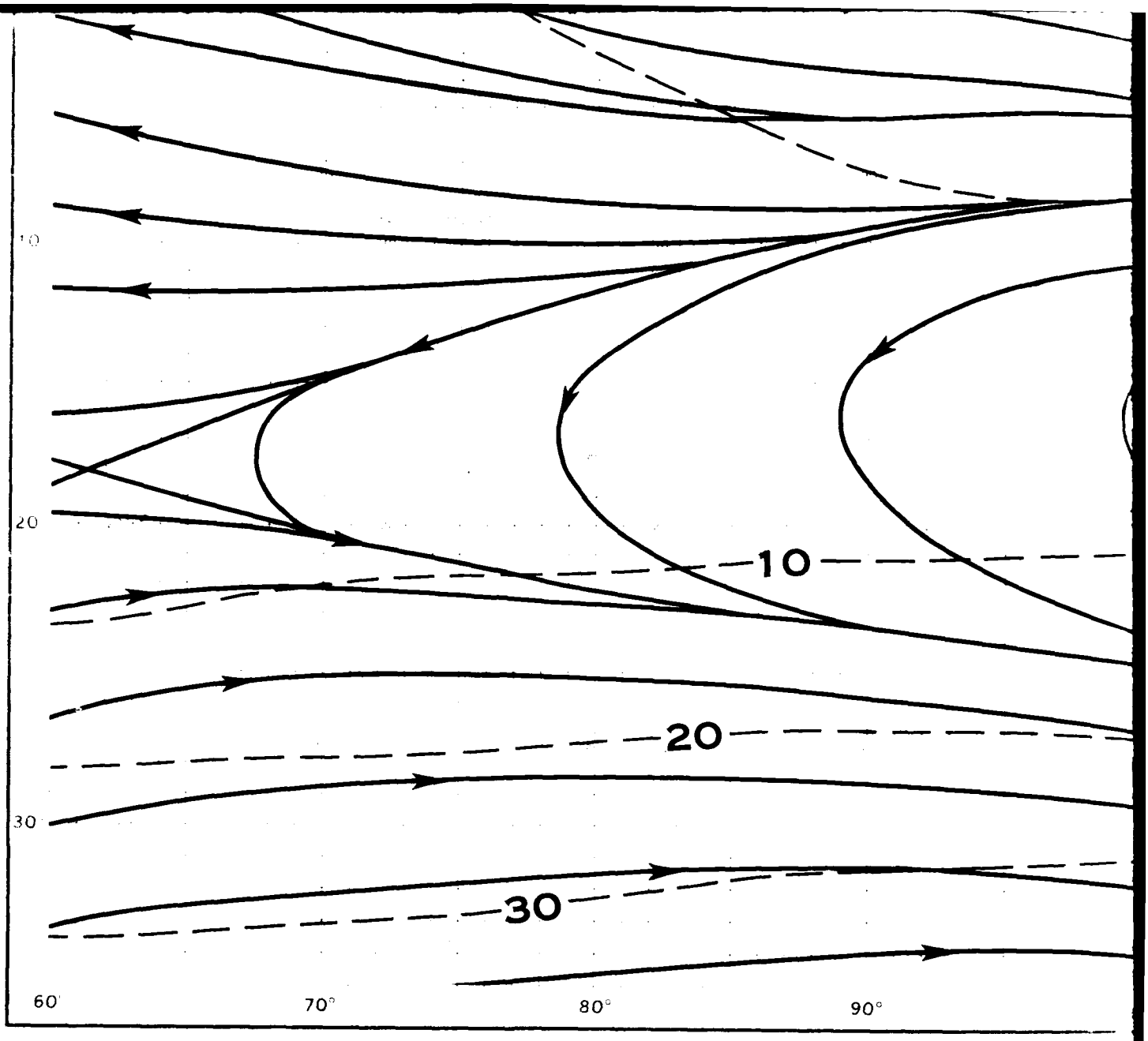
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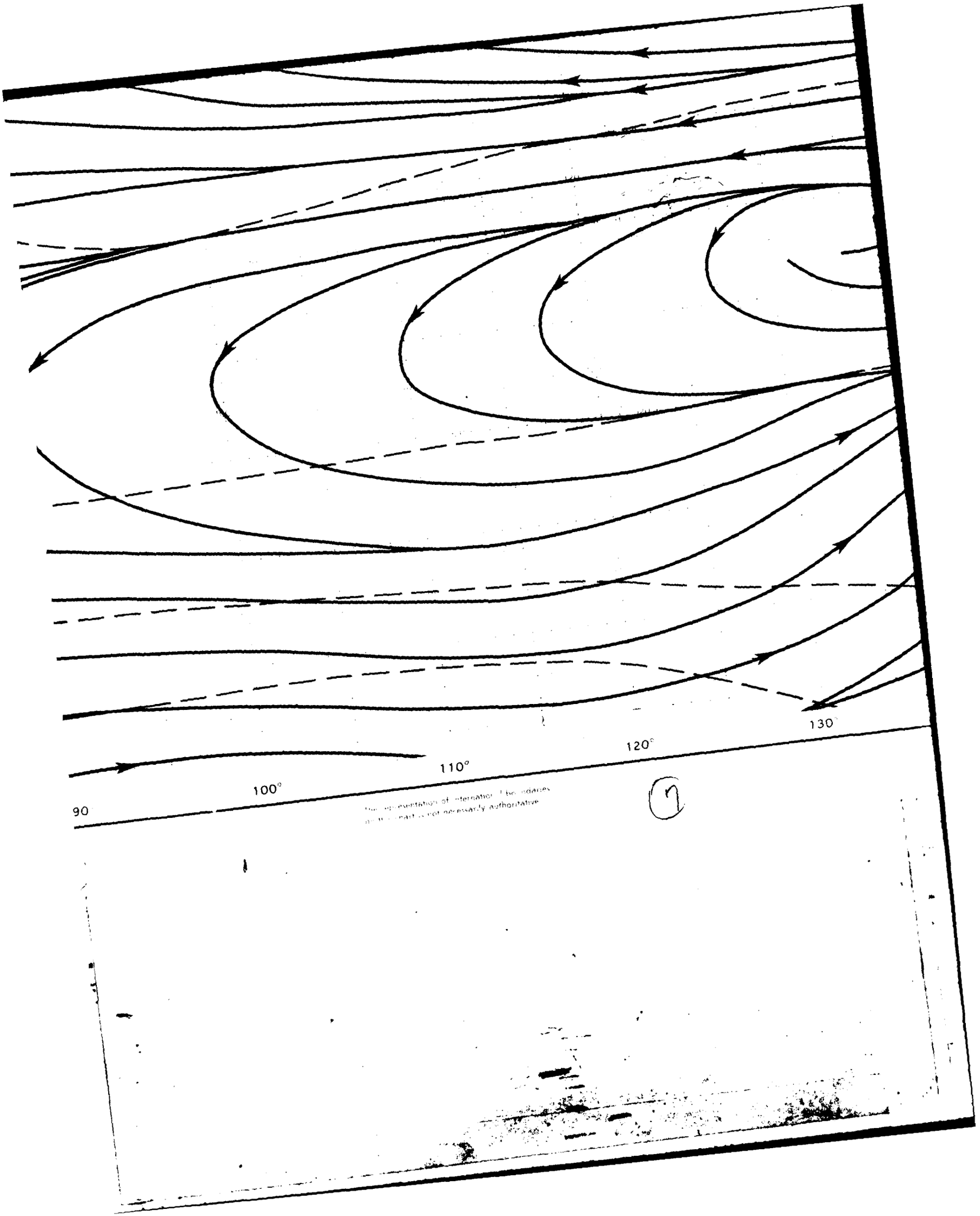

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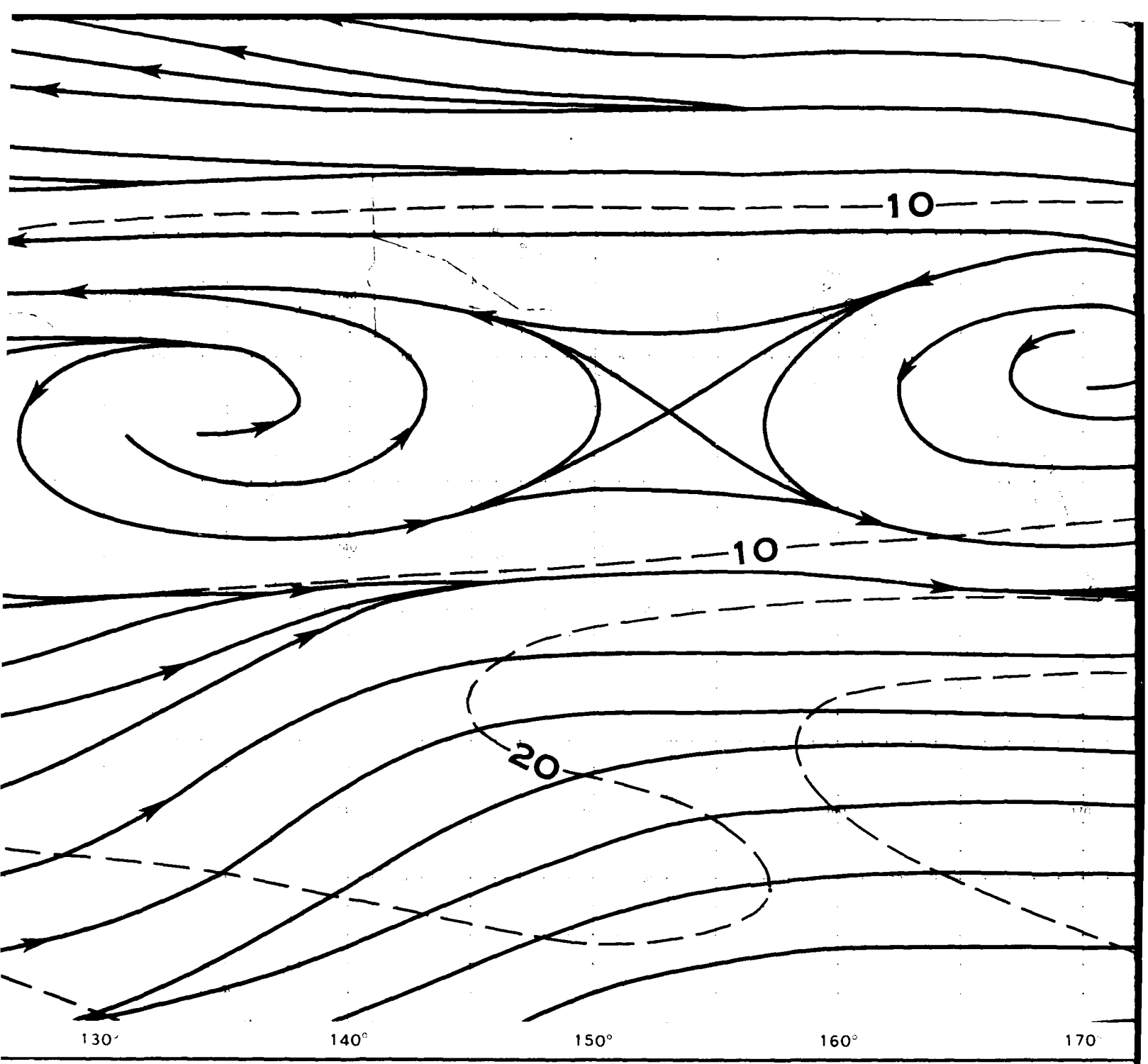



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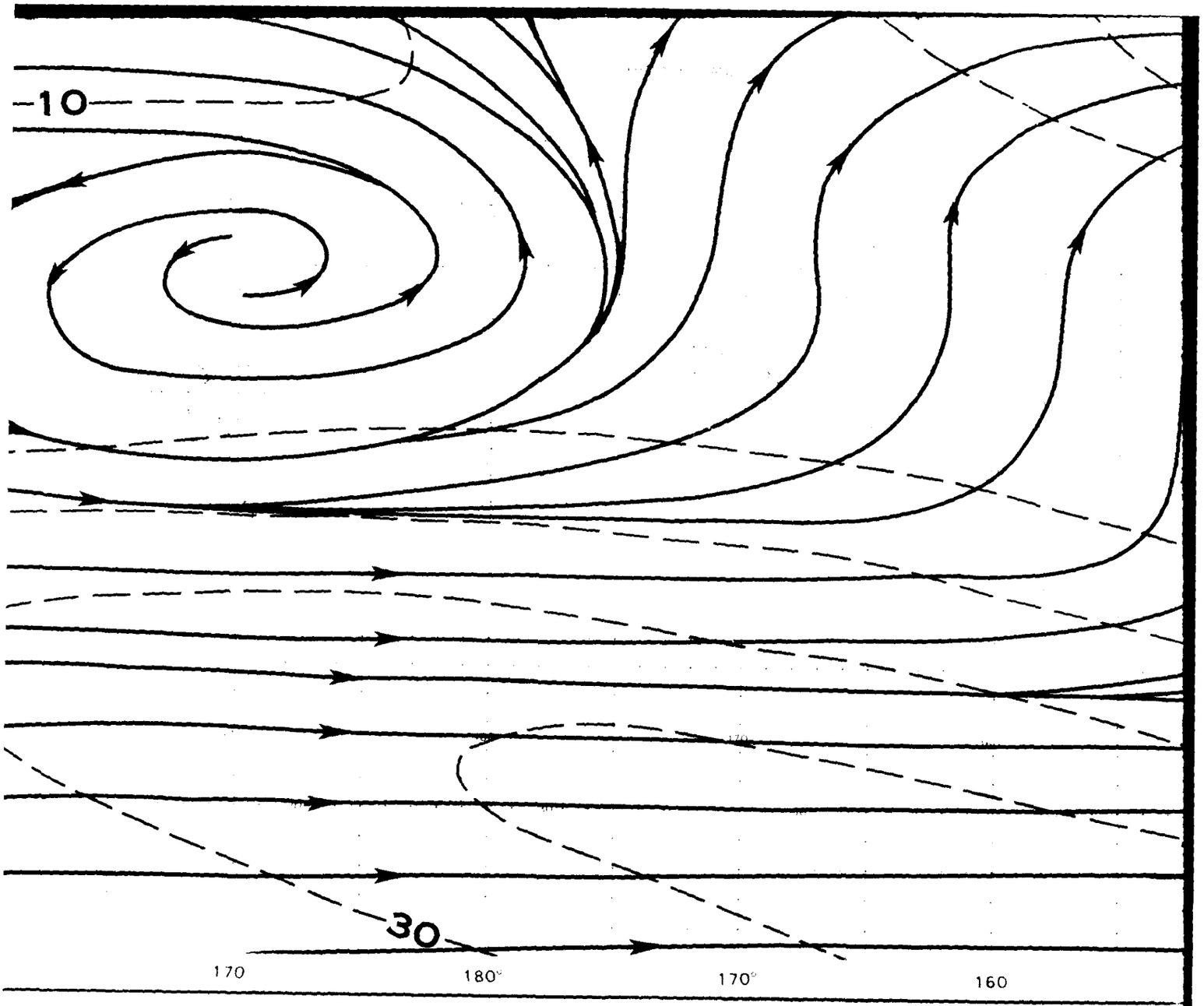
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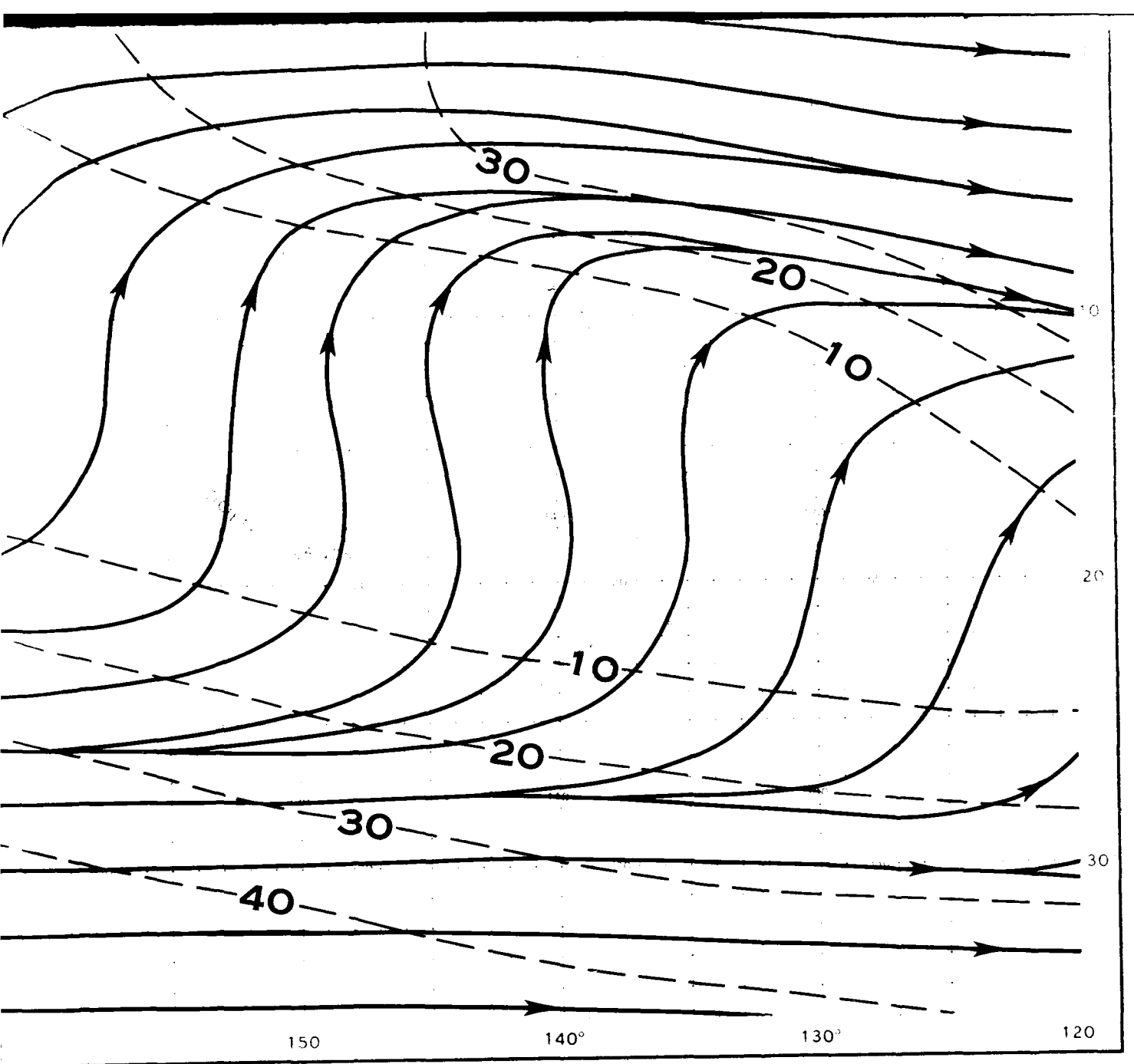



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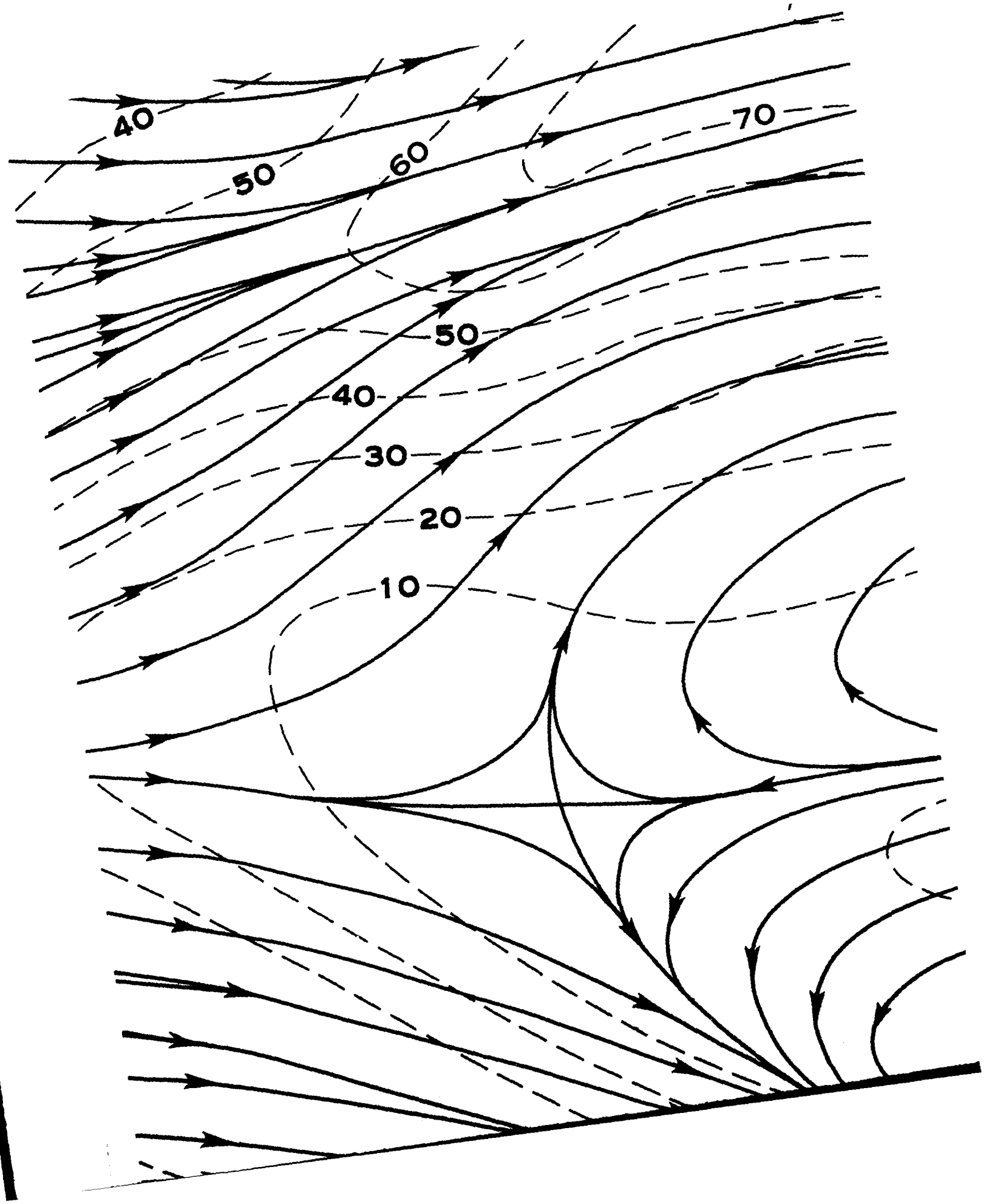



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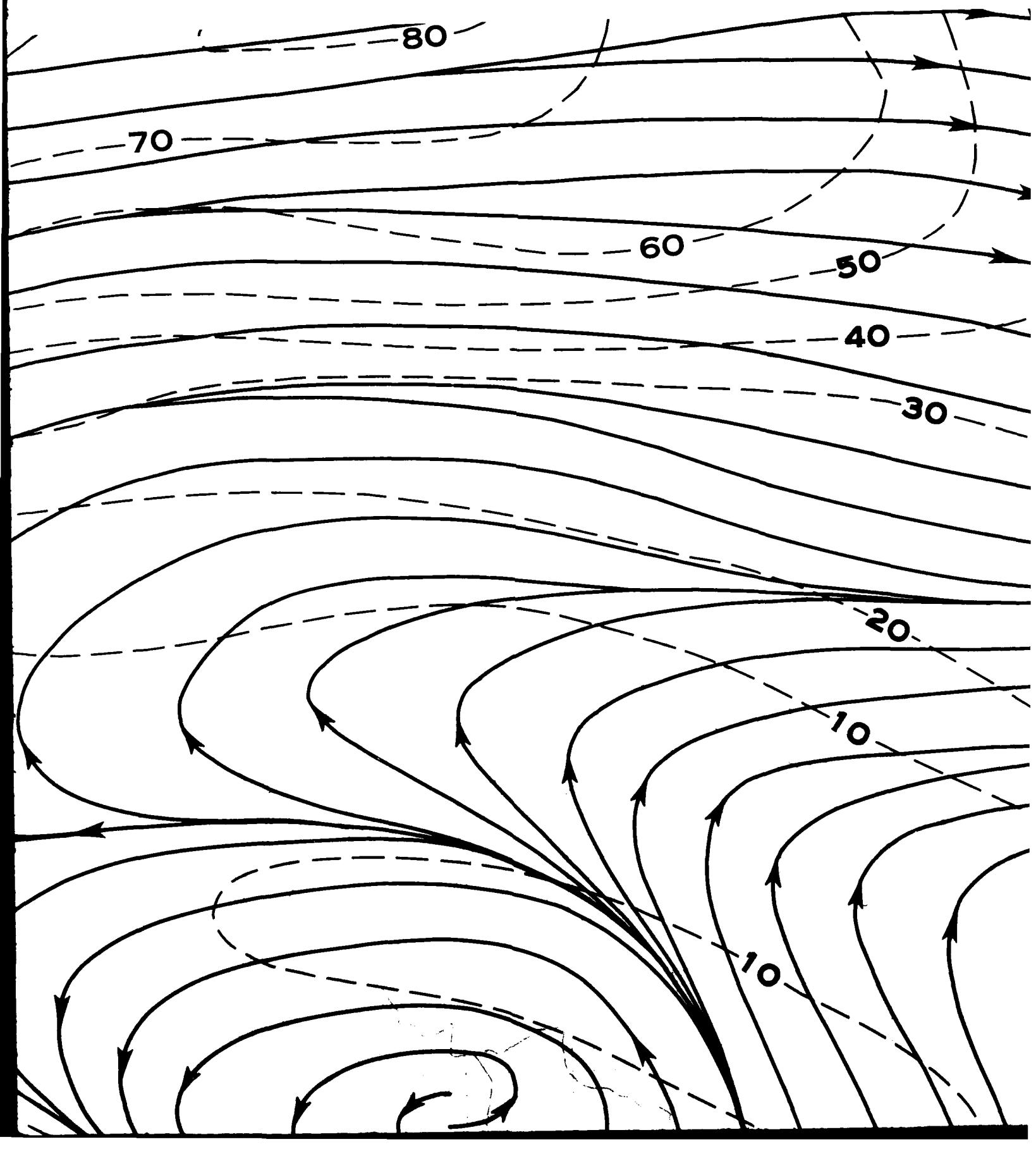


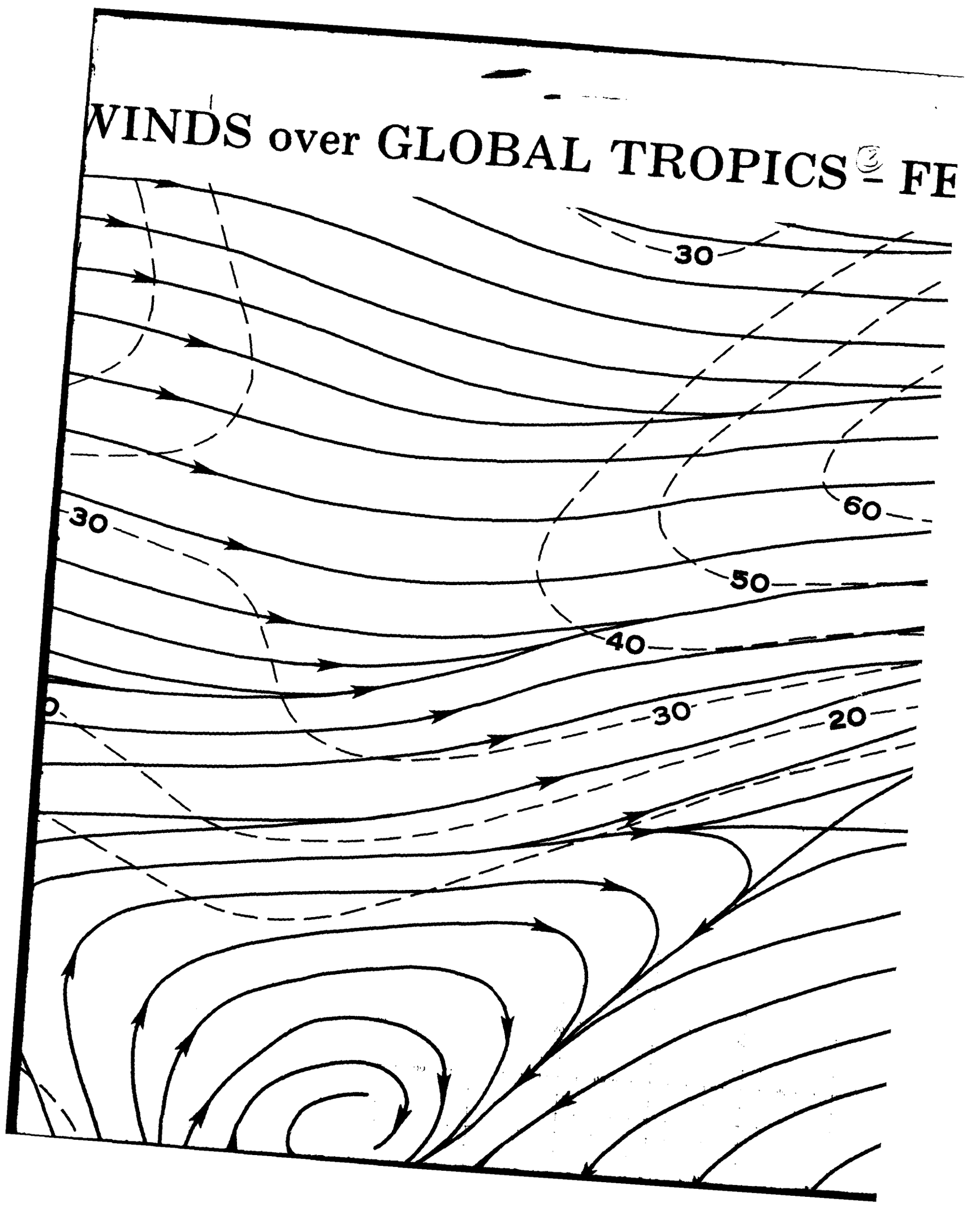

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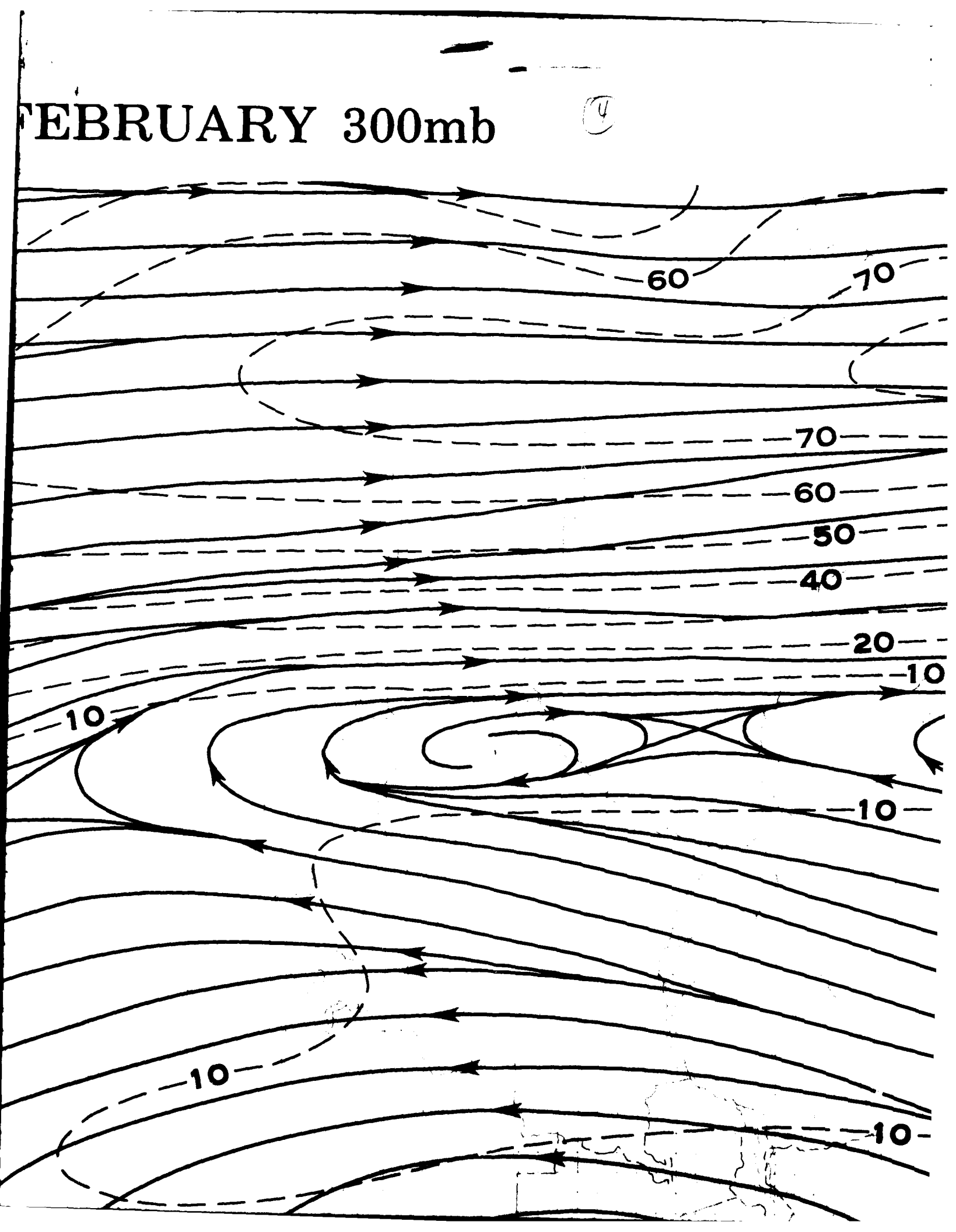


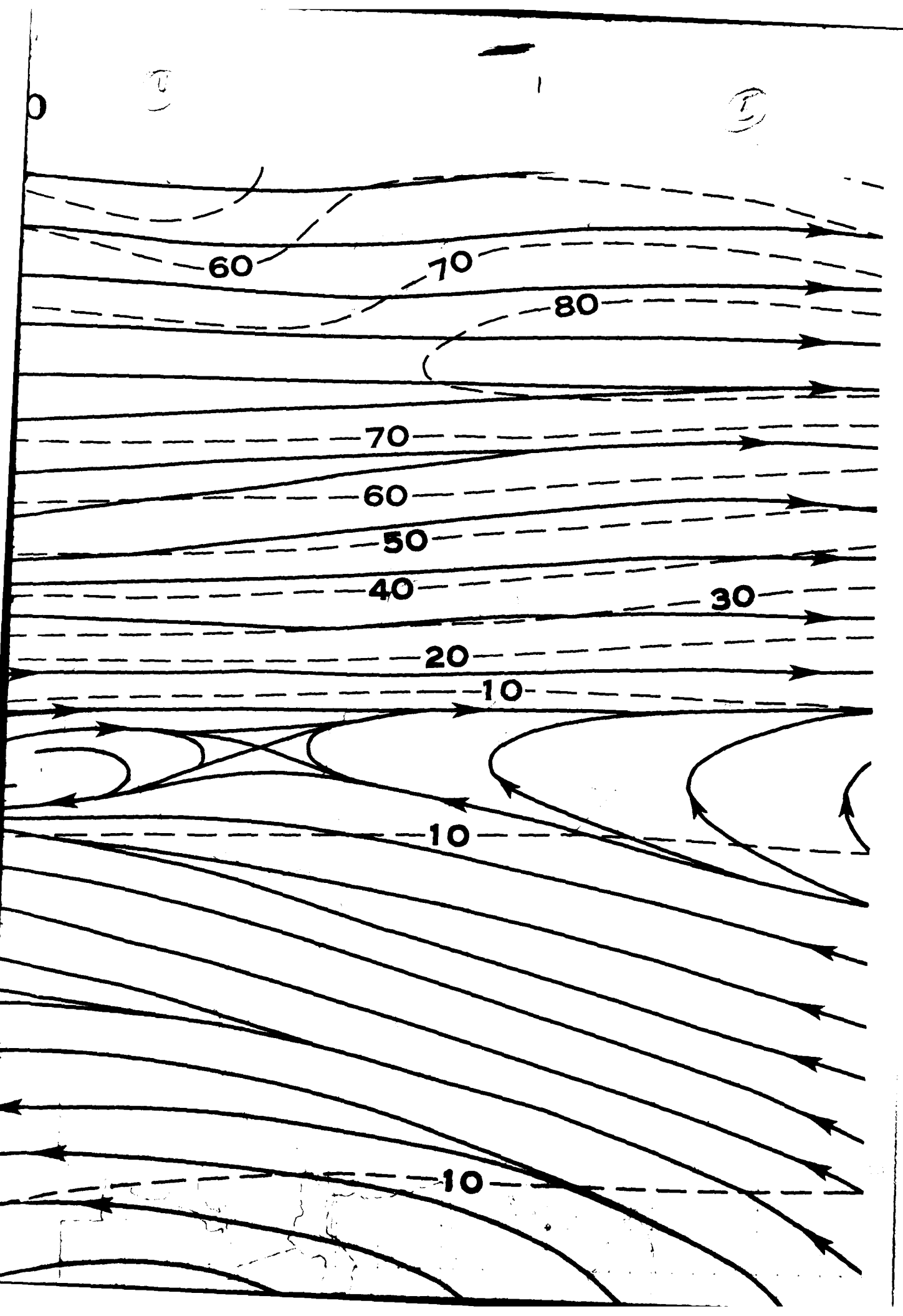
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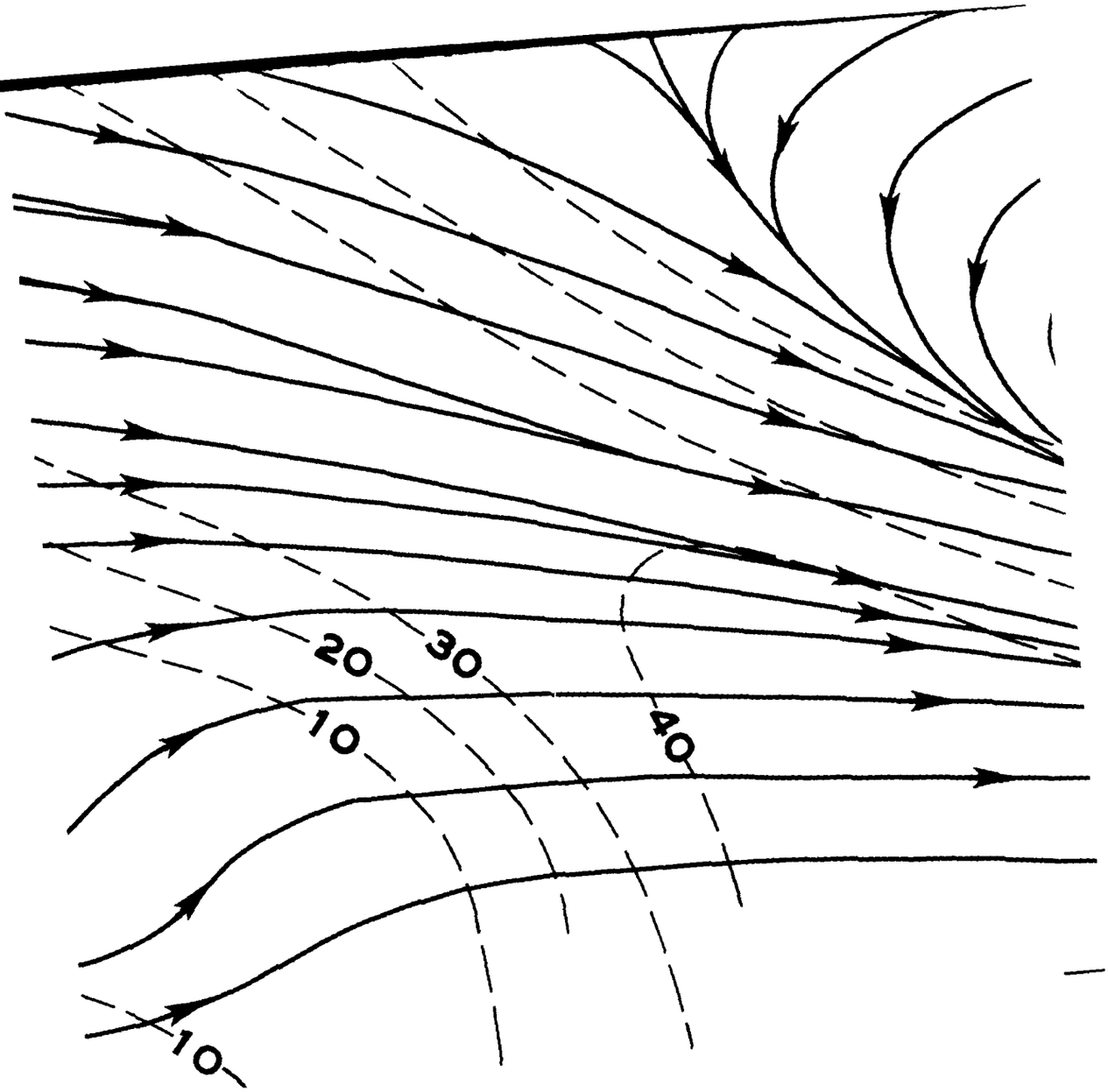



WINDS over GLOBAL TROPICS - FE
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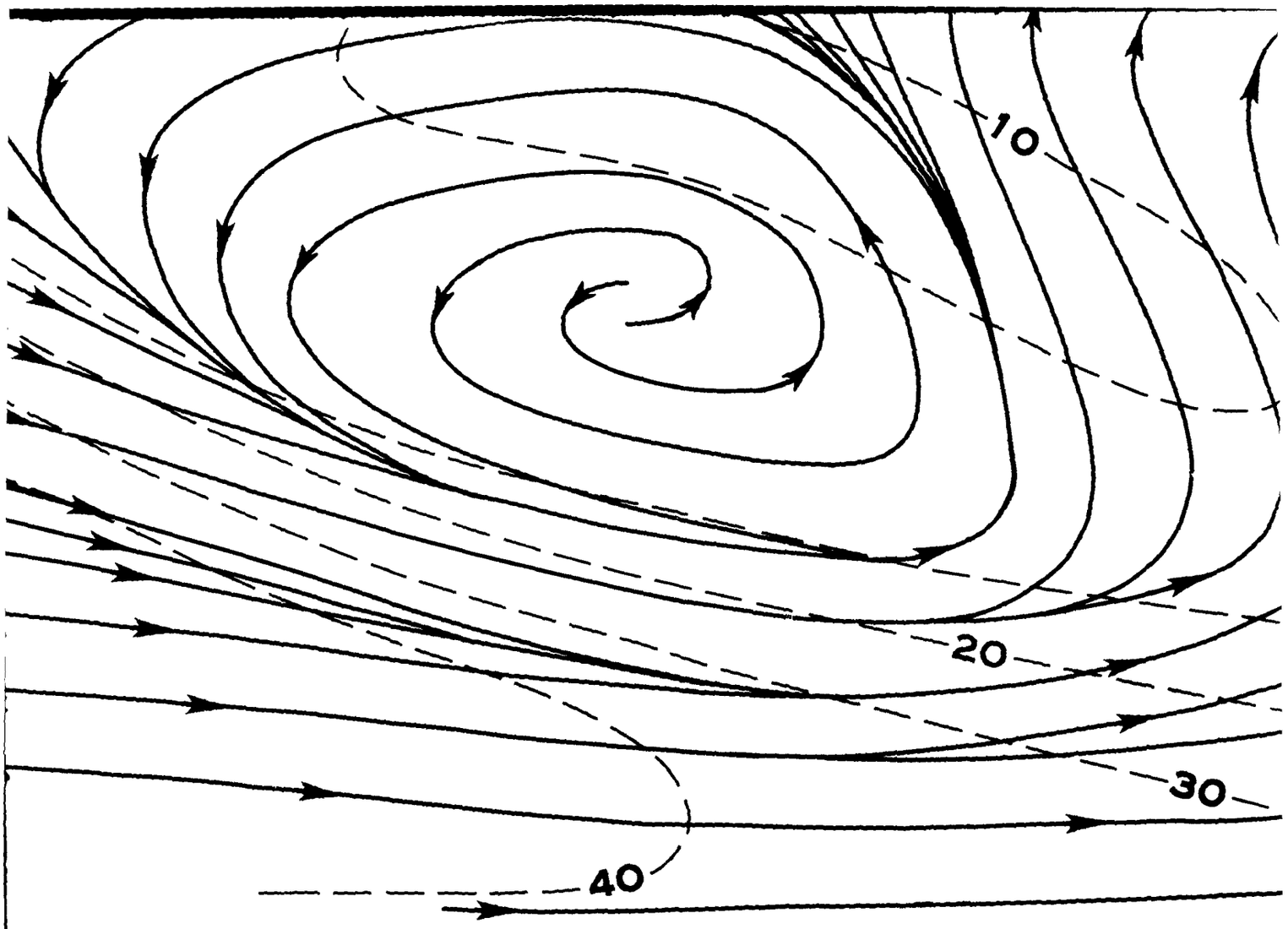
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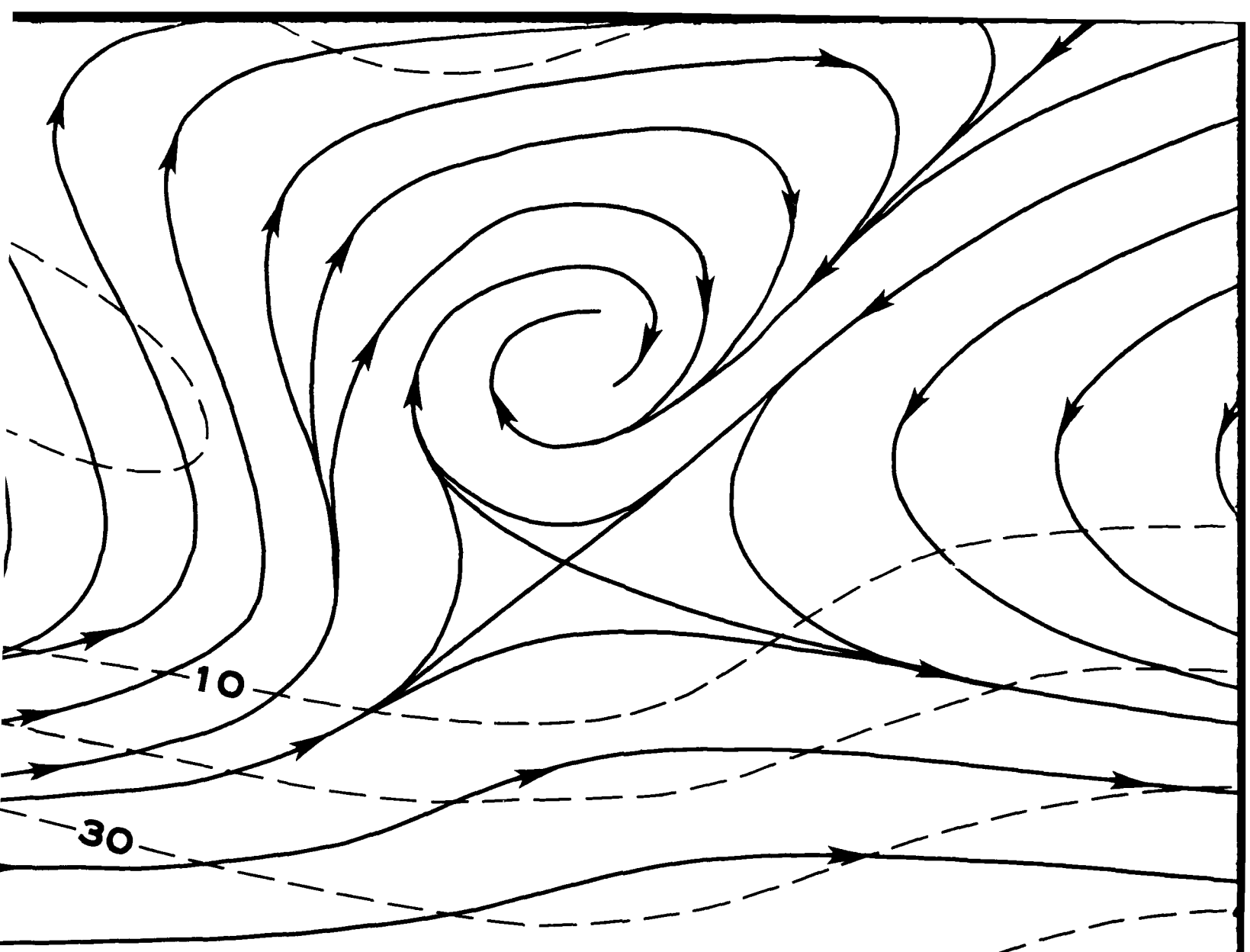


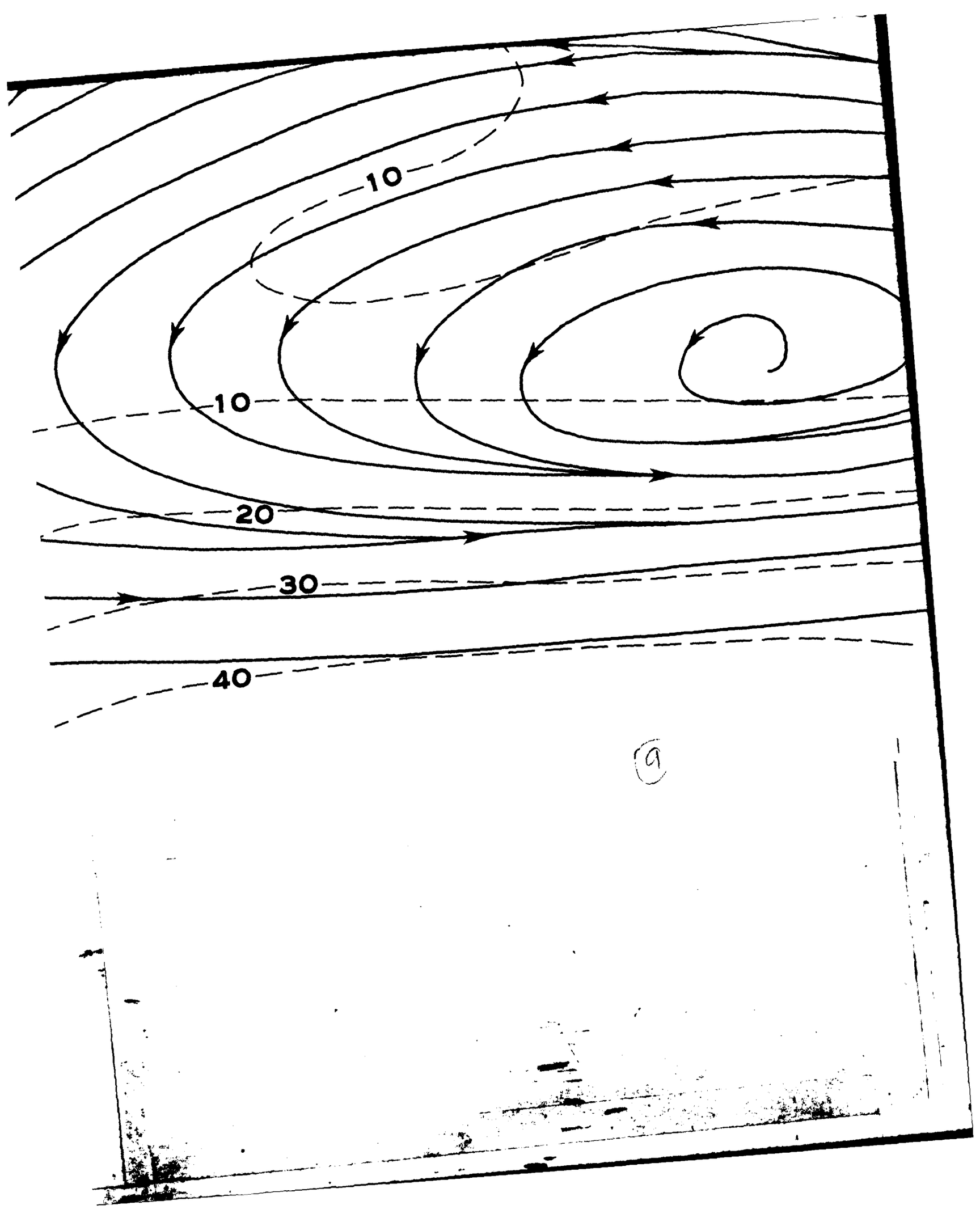

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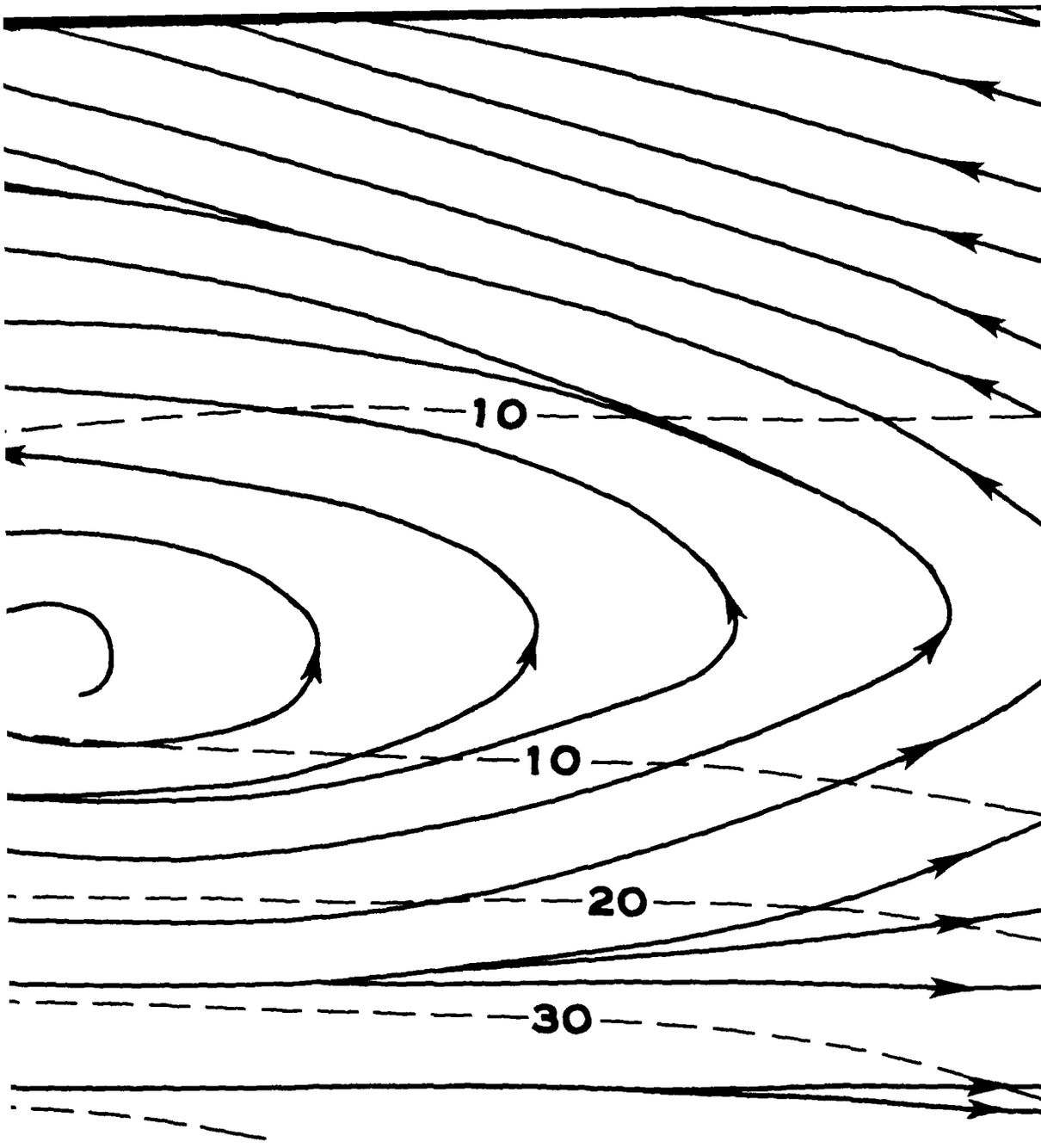



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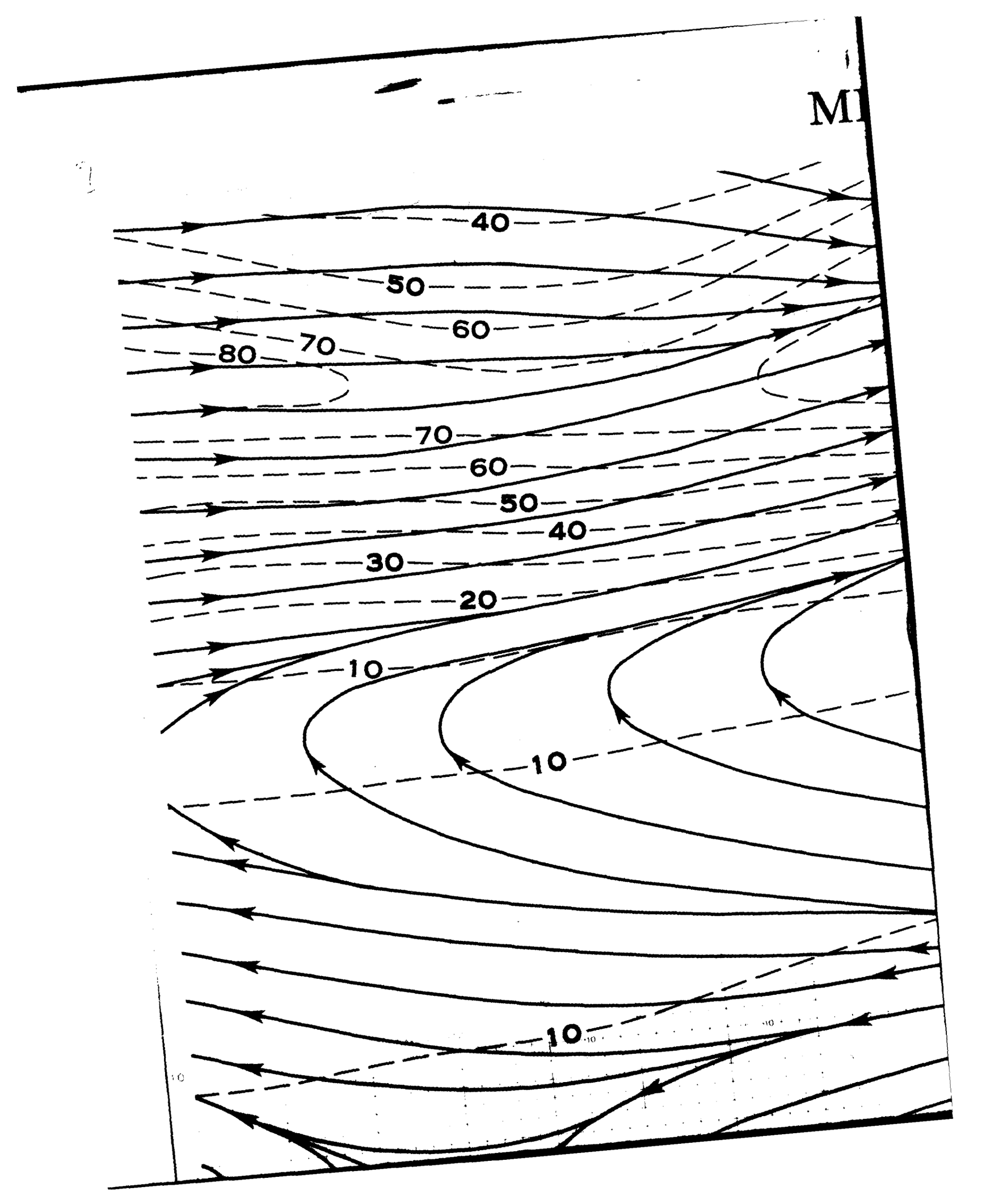

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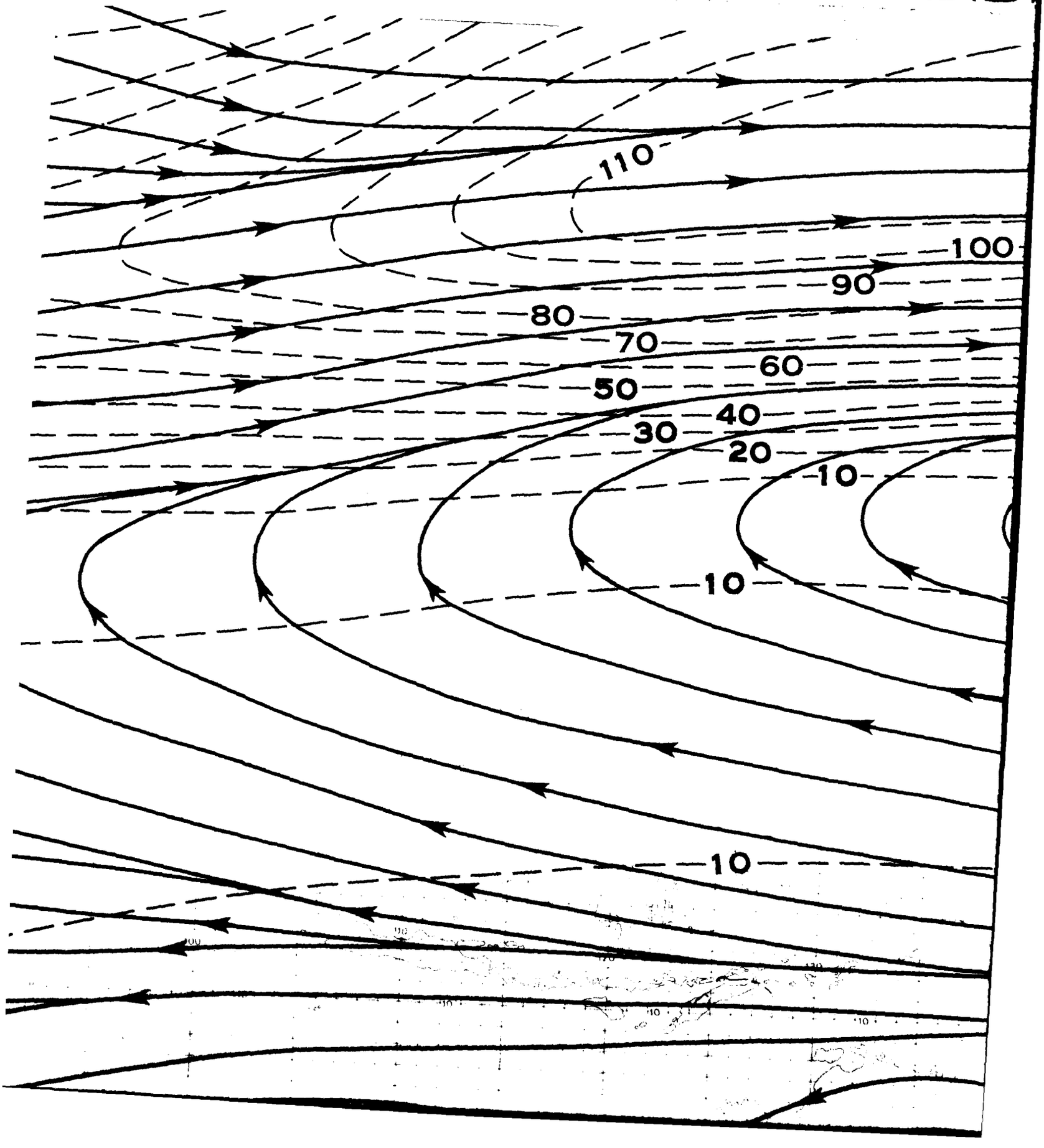



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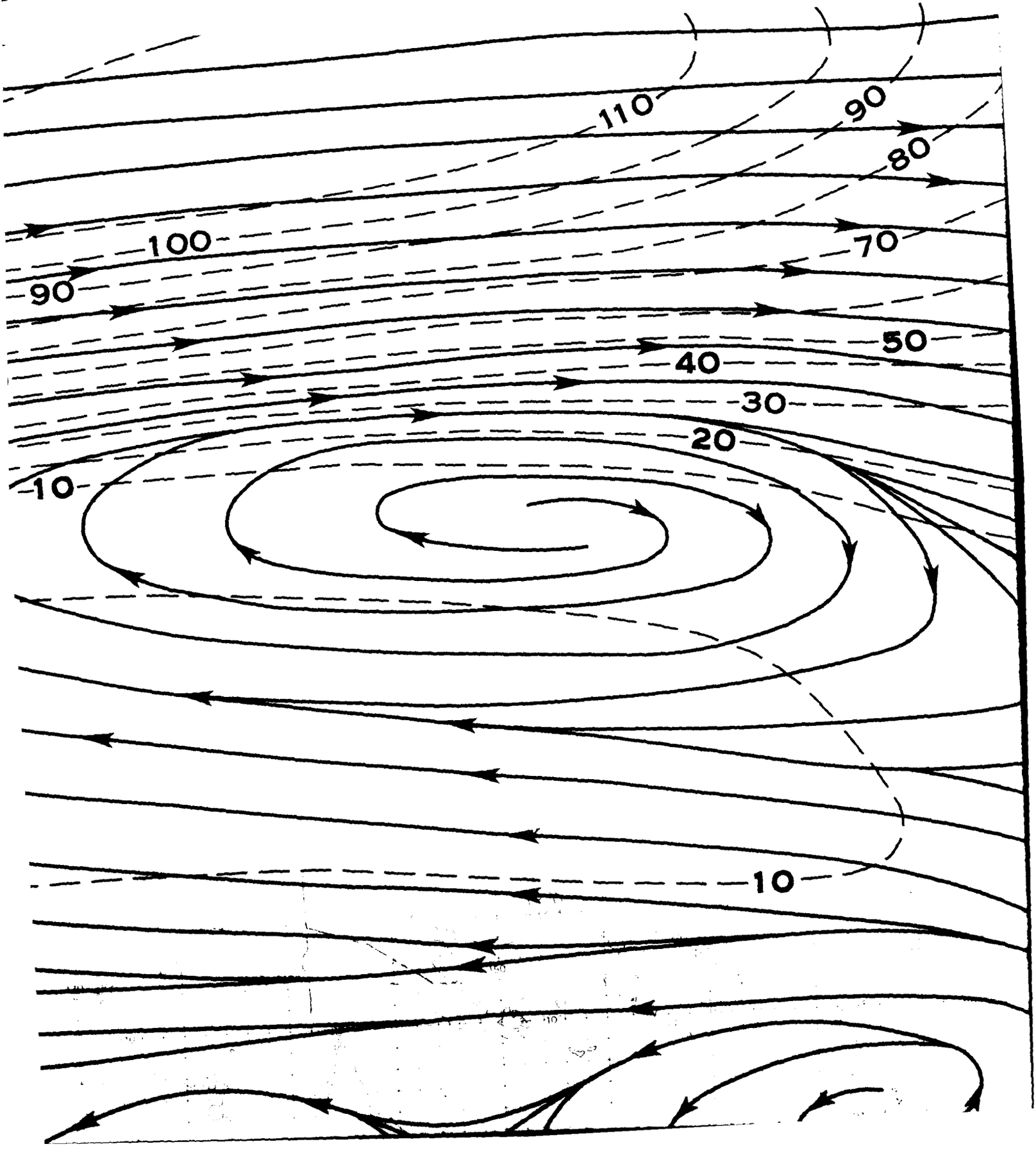
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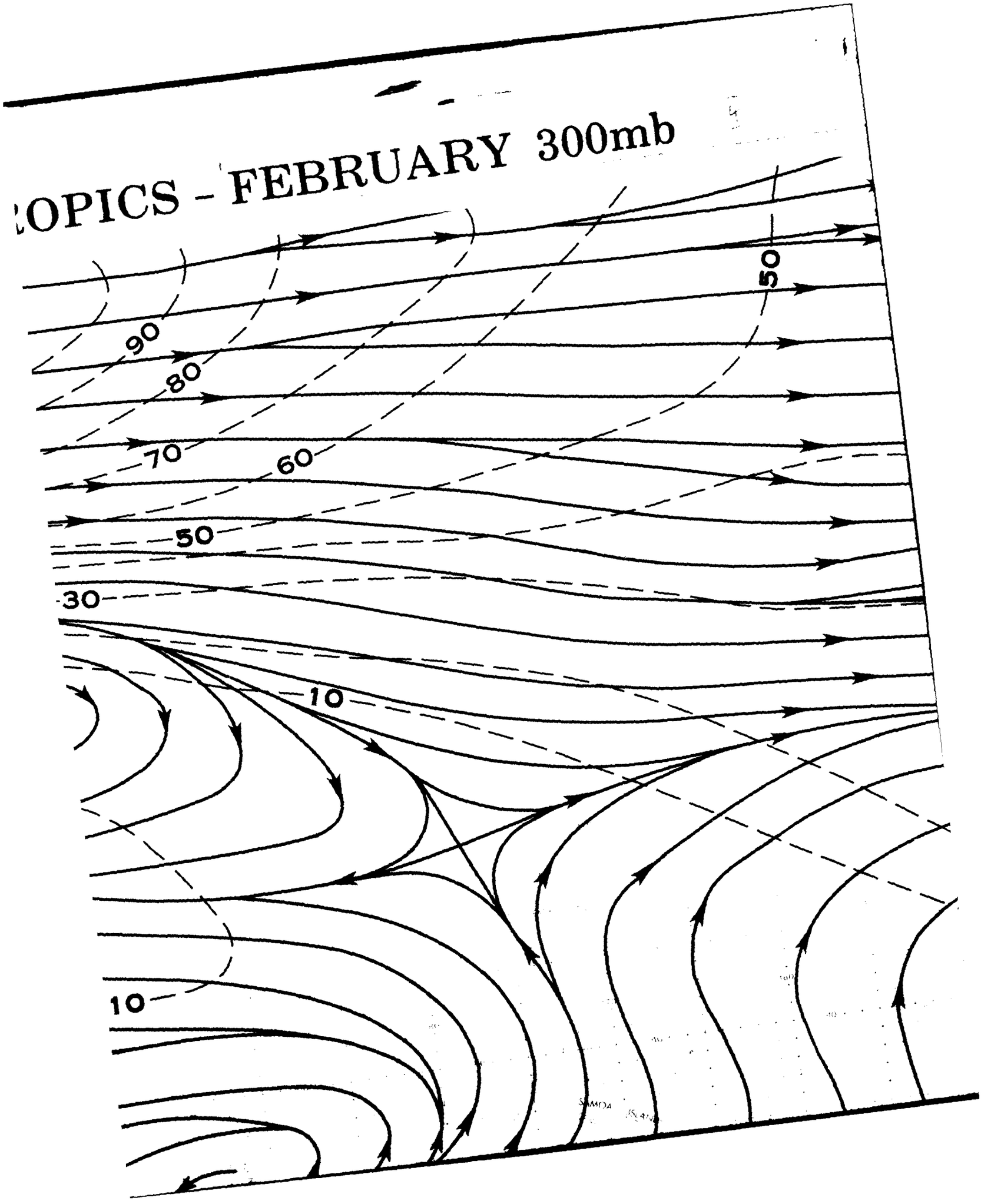

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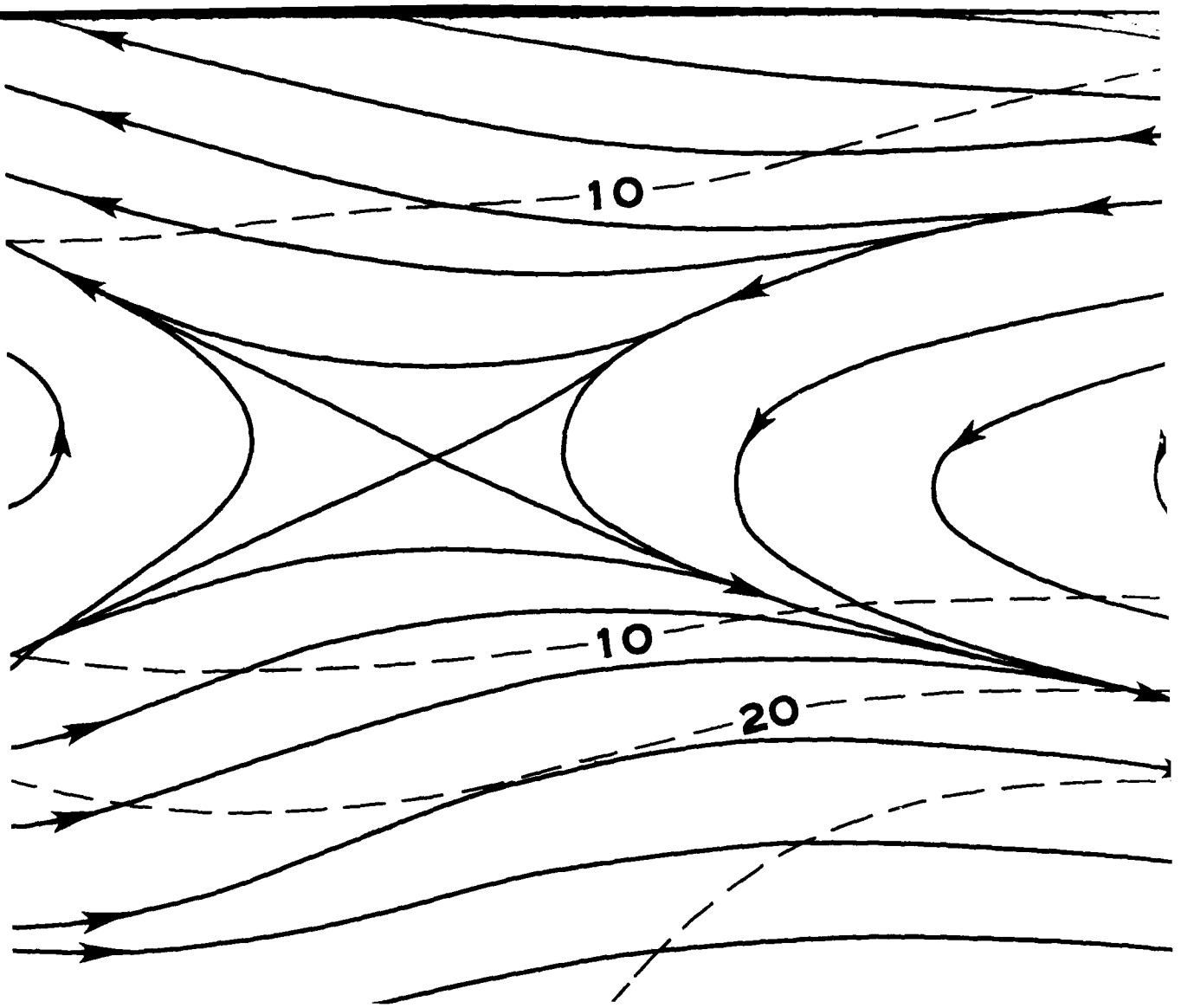


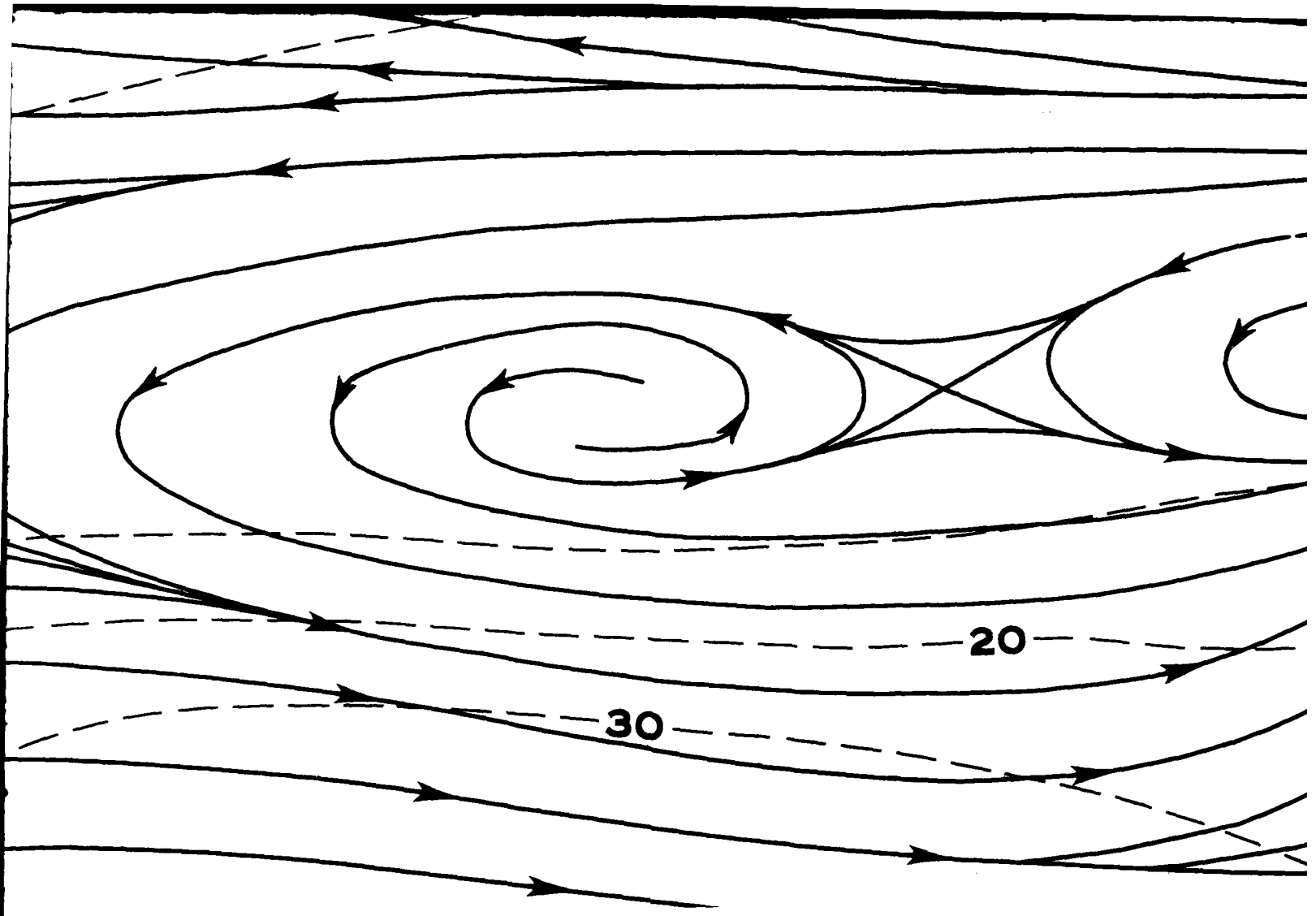
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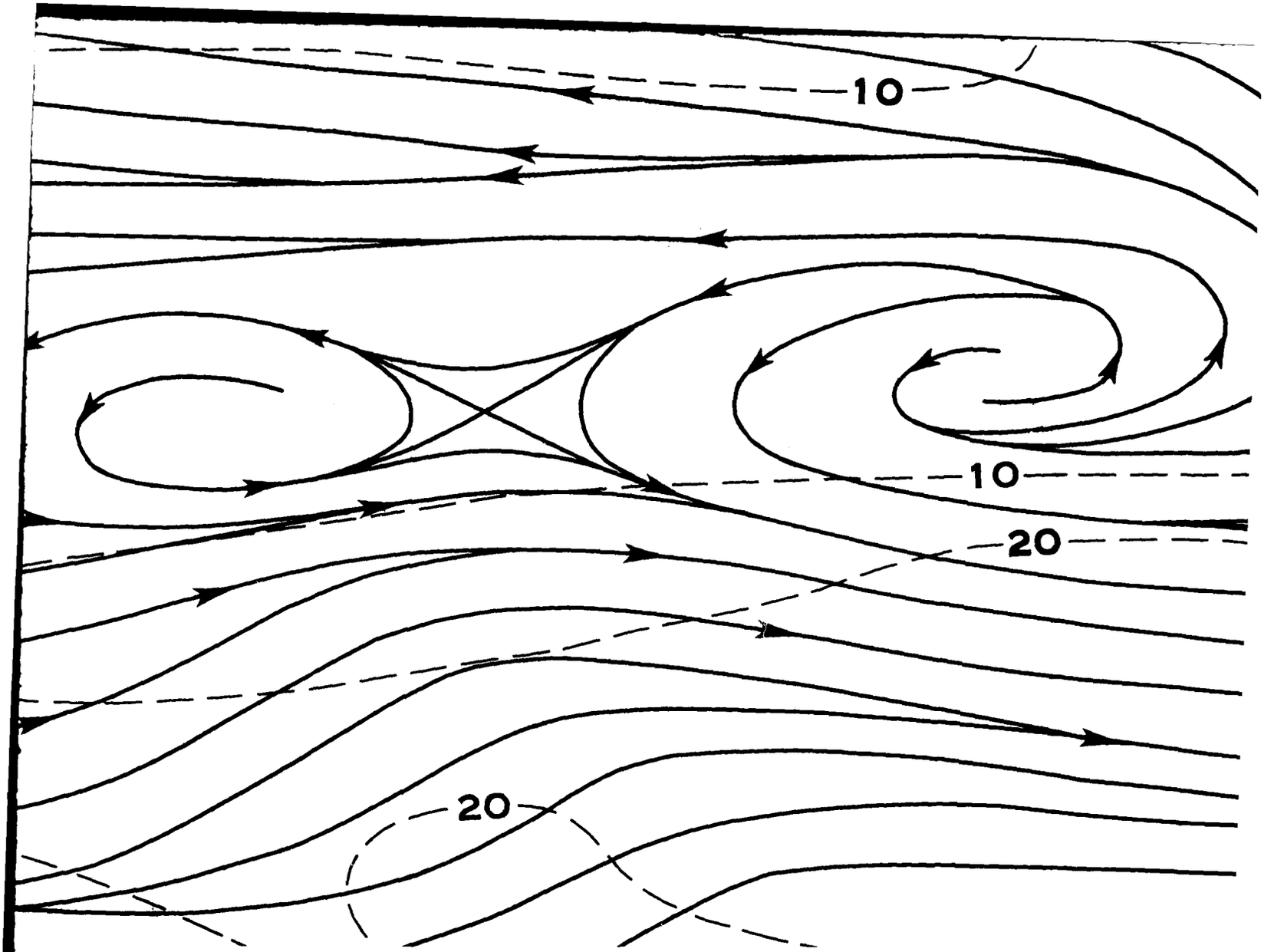



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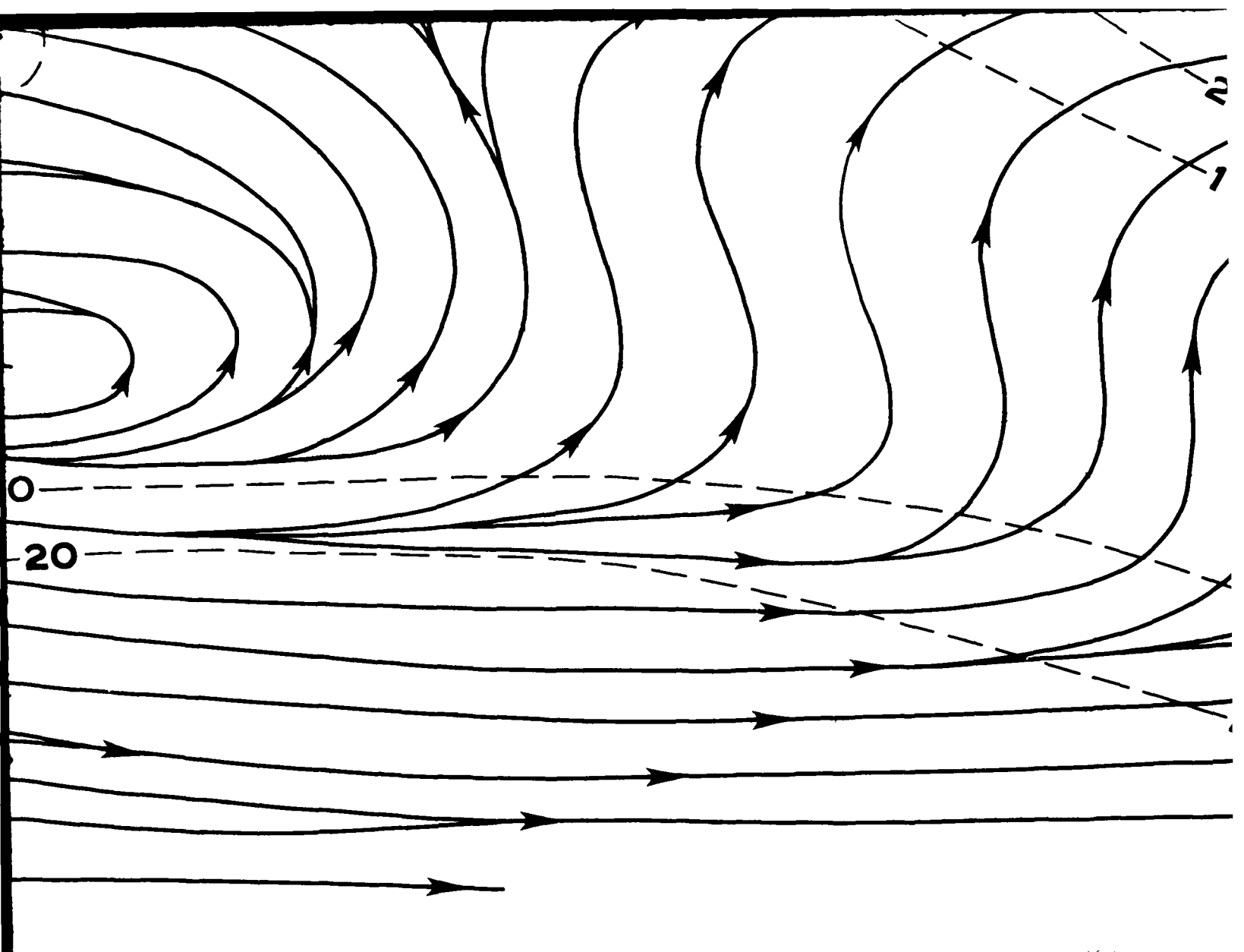
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20
10
10°

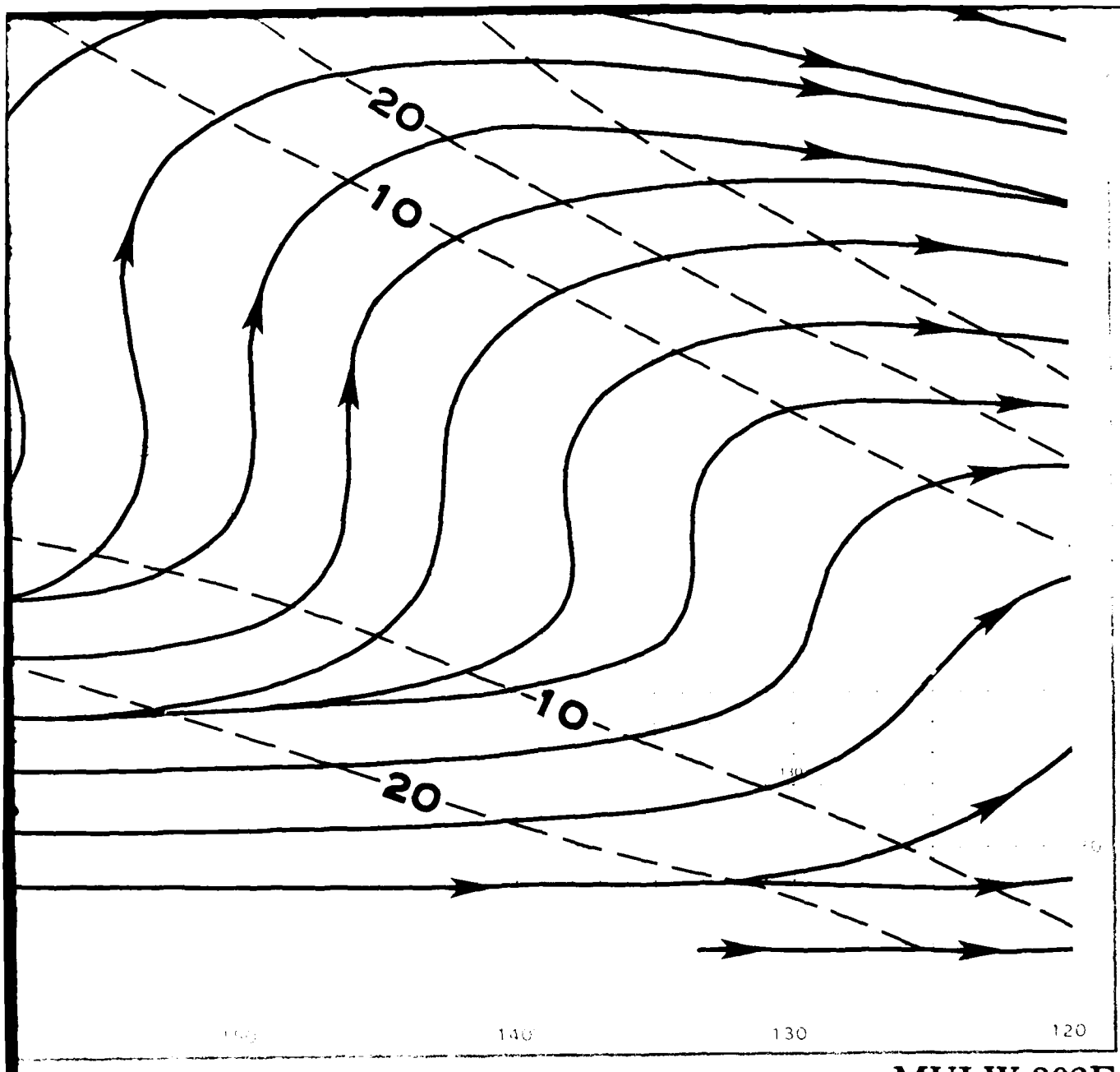

10
10
20


20
30



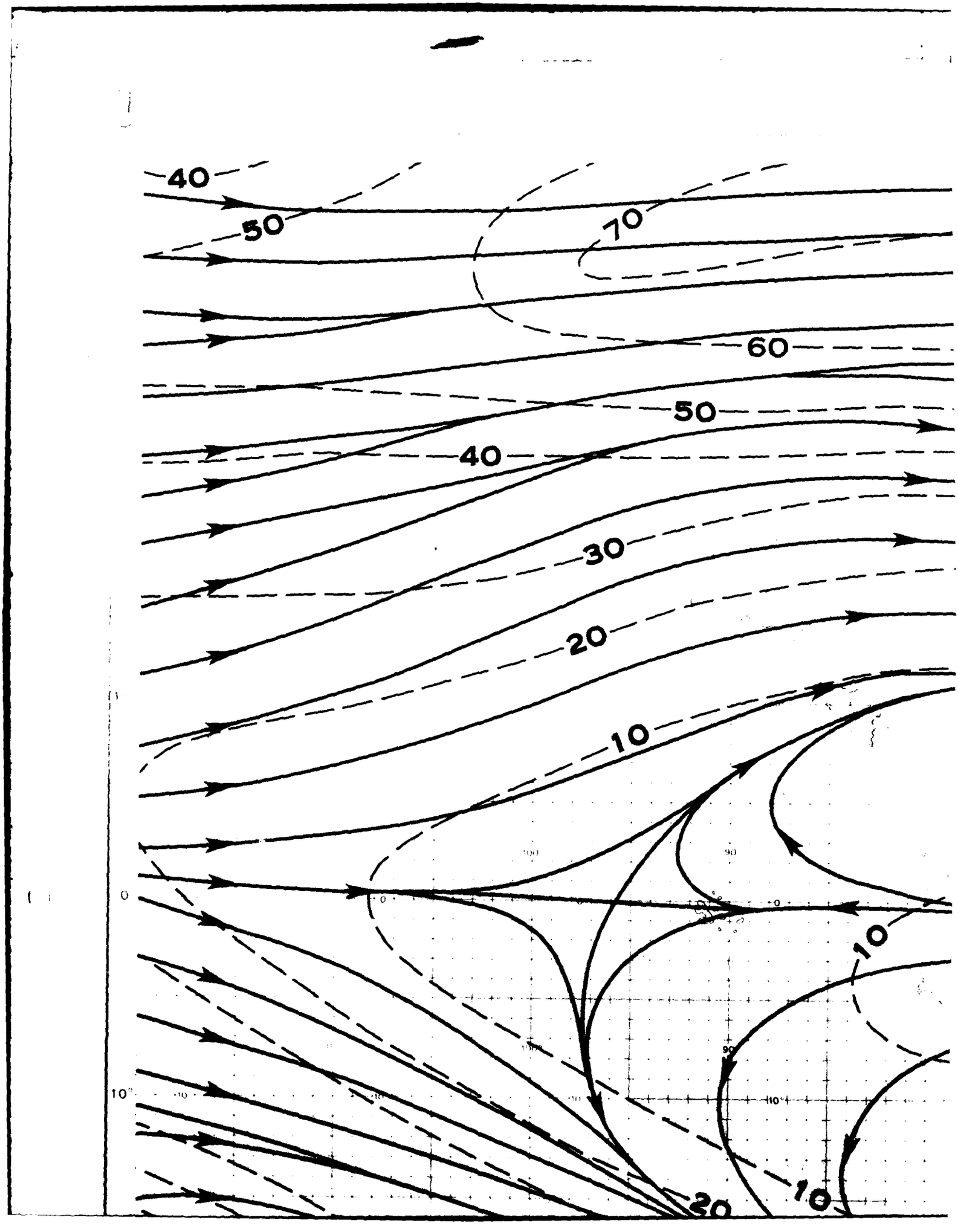

(8)


2
1
0
20

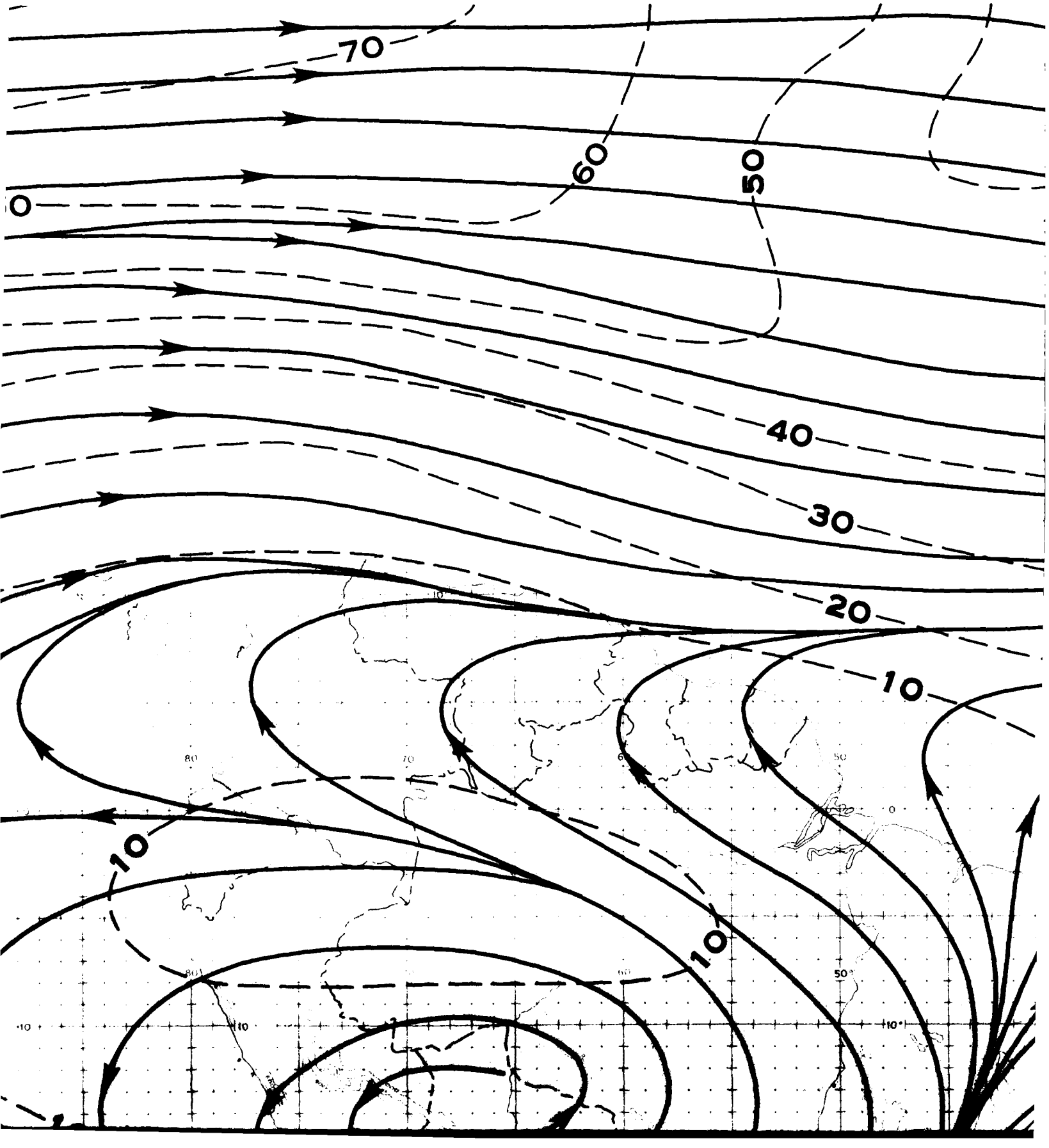



MULW-302E

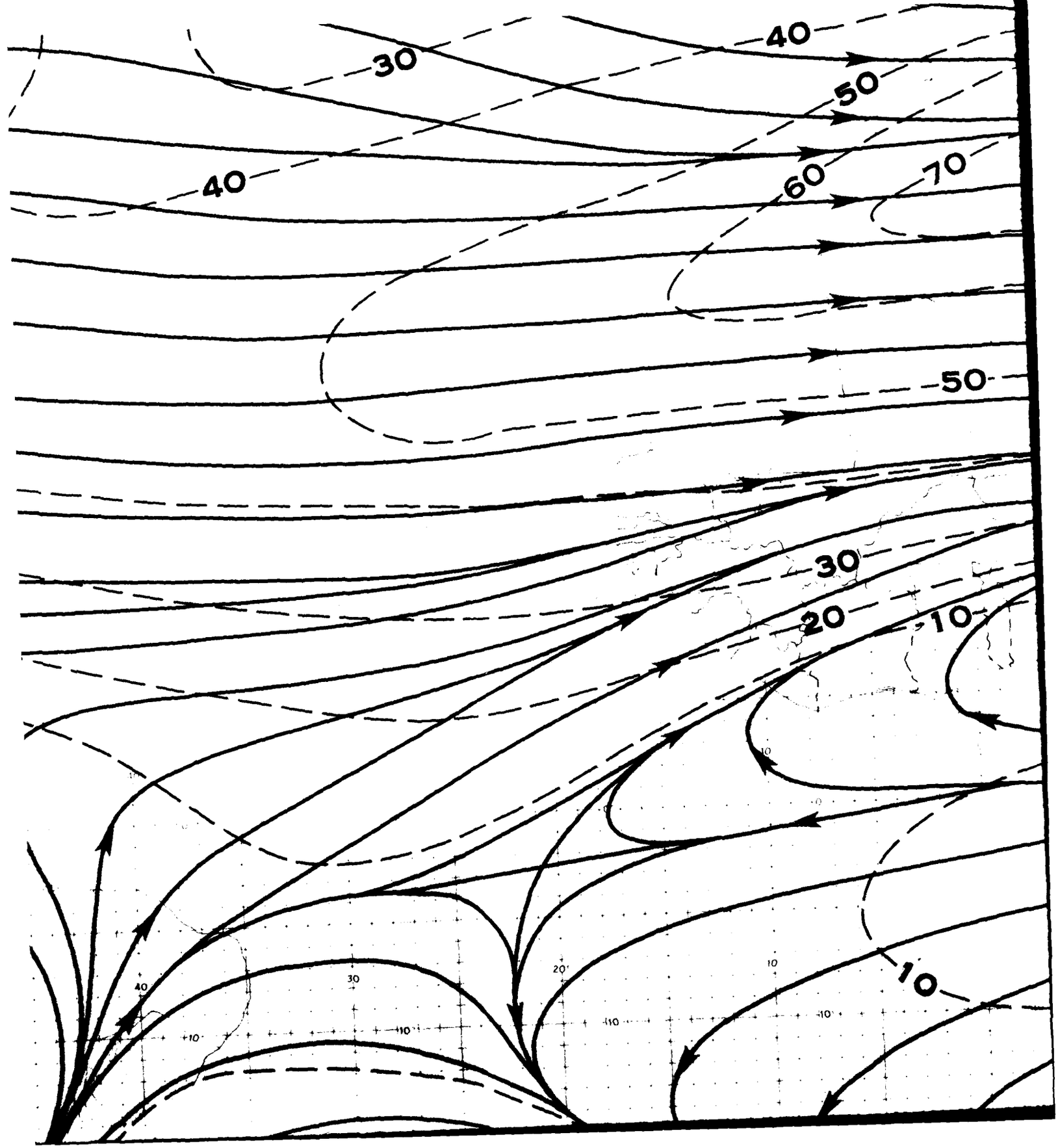
(10)


40
50
70
60
50
40
30
20
10
10
20
10
0
10°

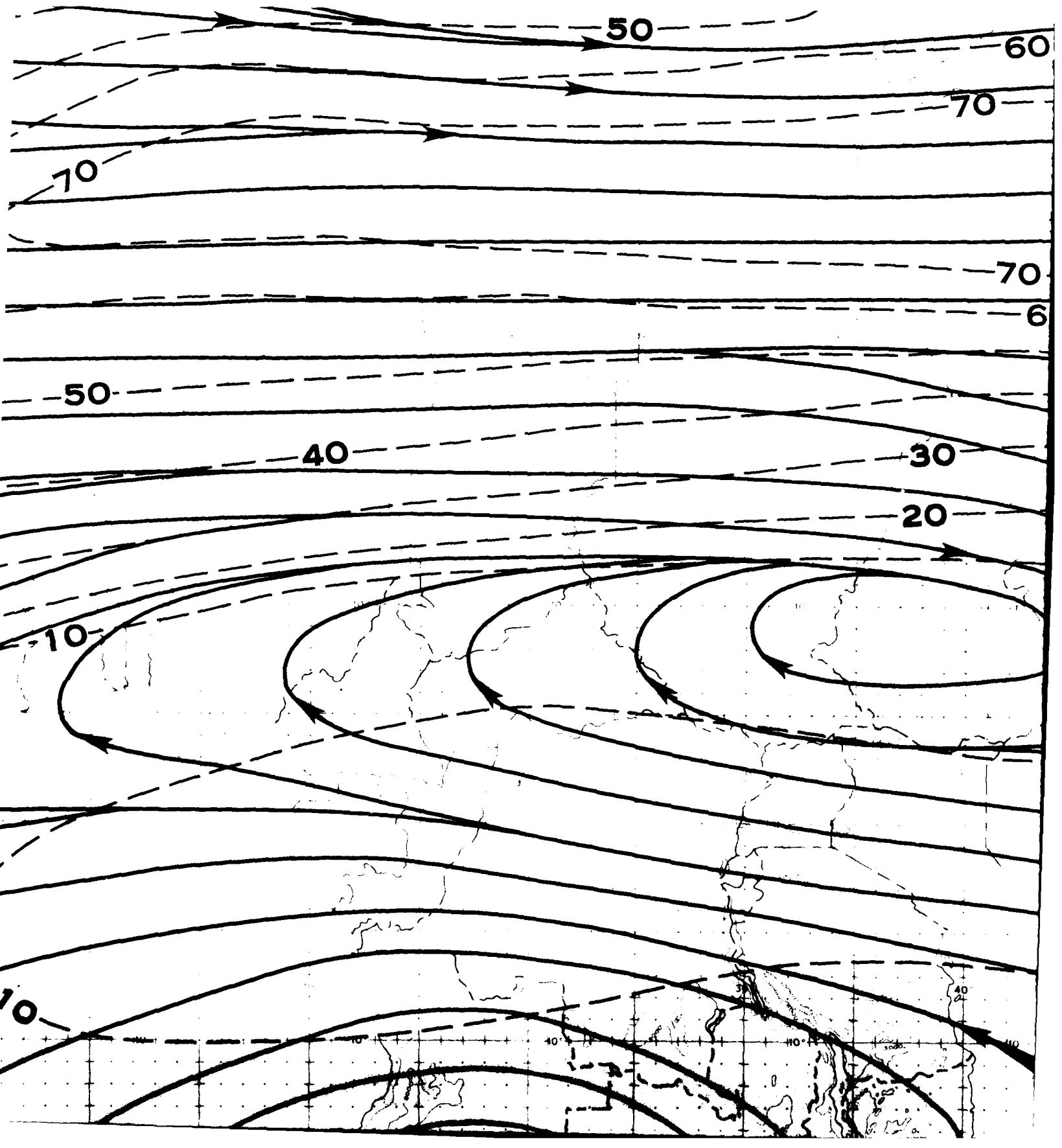
# MEAN UPPER LEVEL WIN

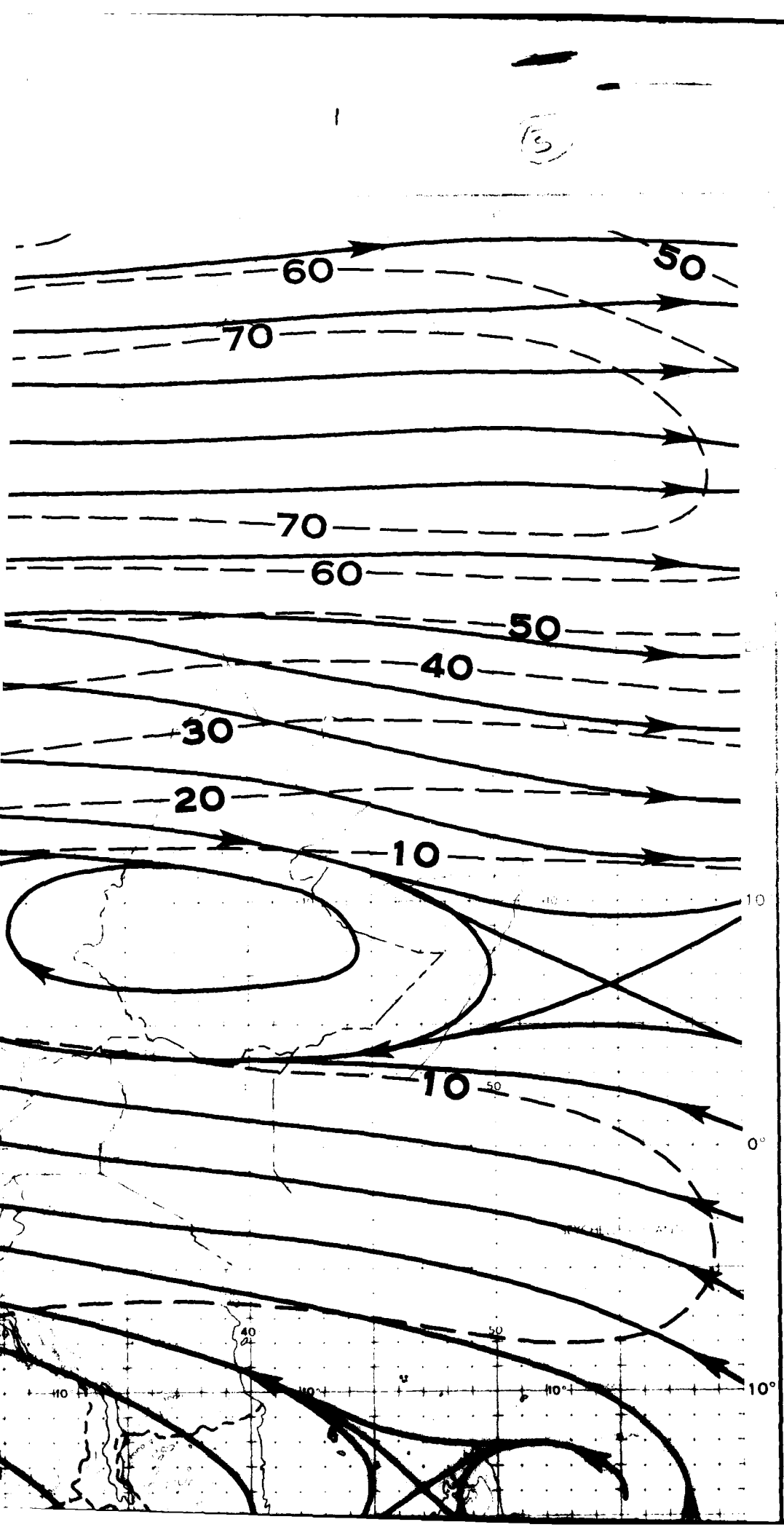


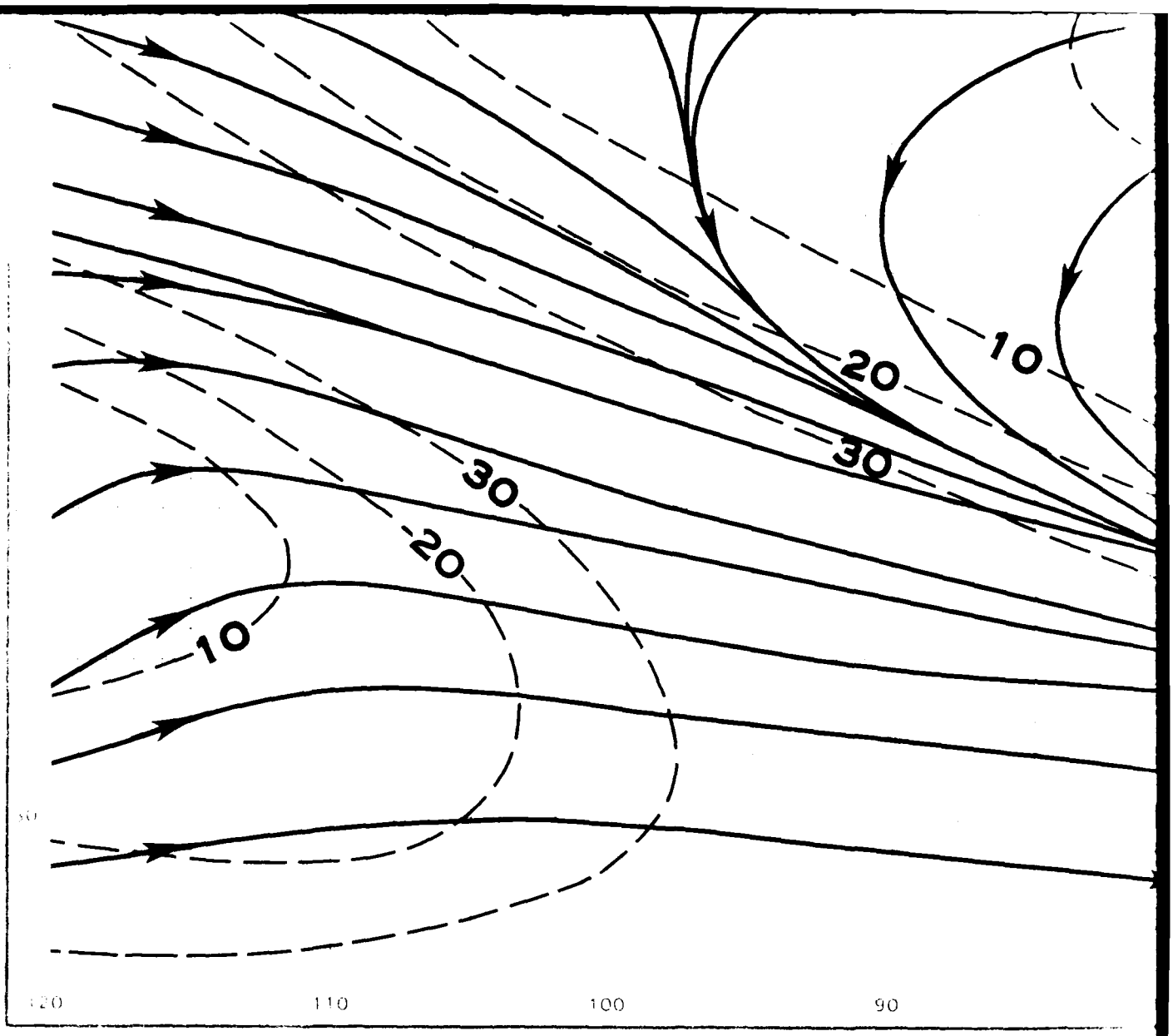
# INDS over GLOBAL TROPICS - MA

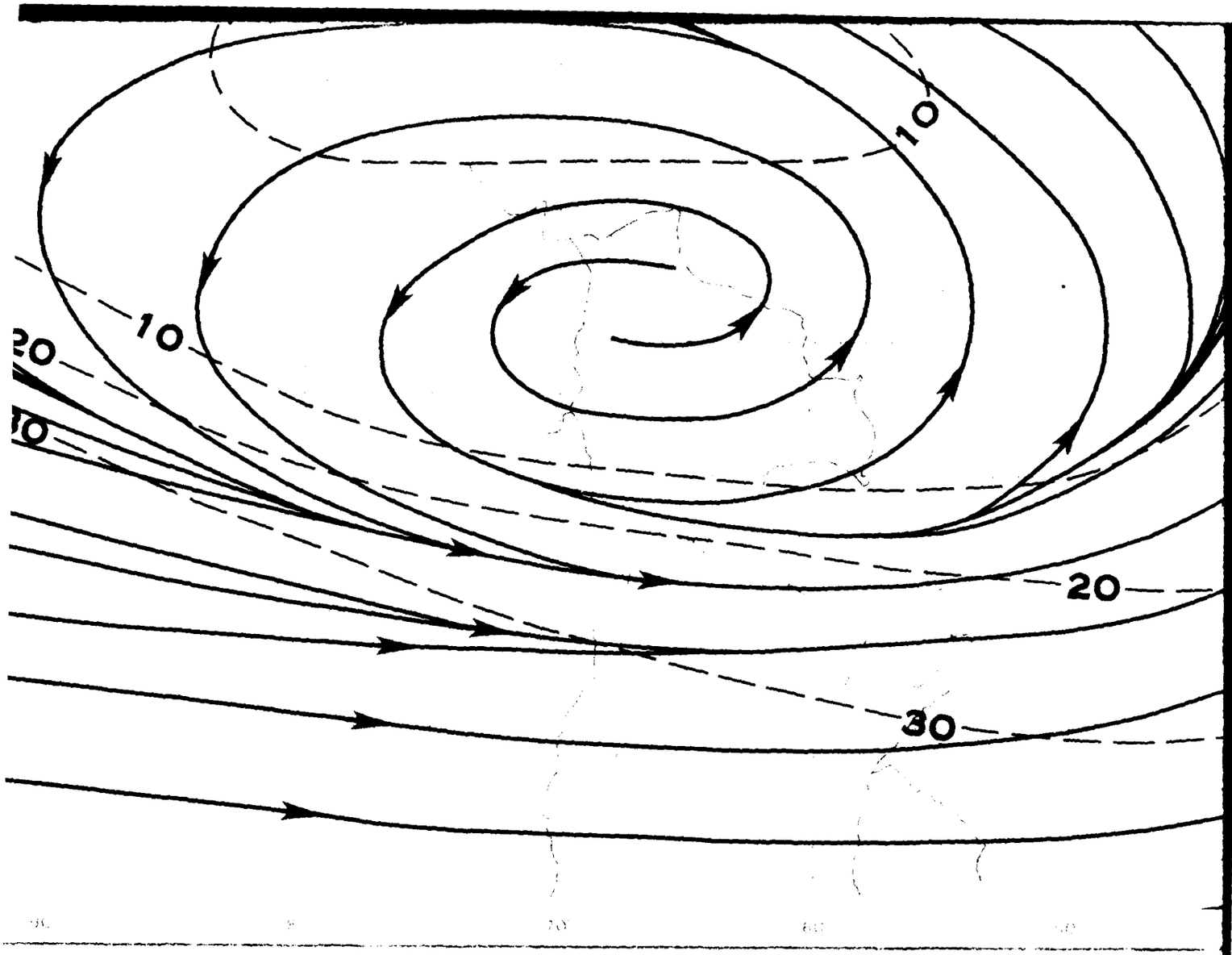


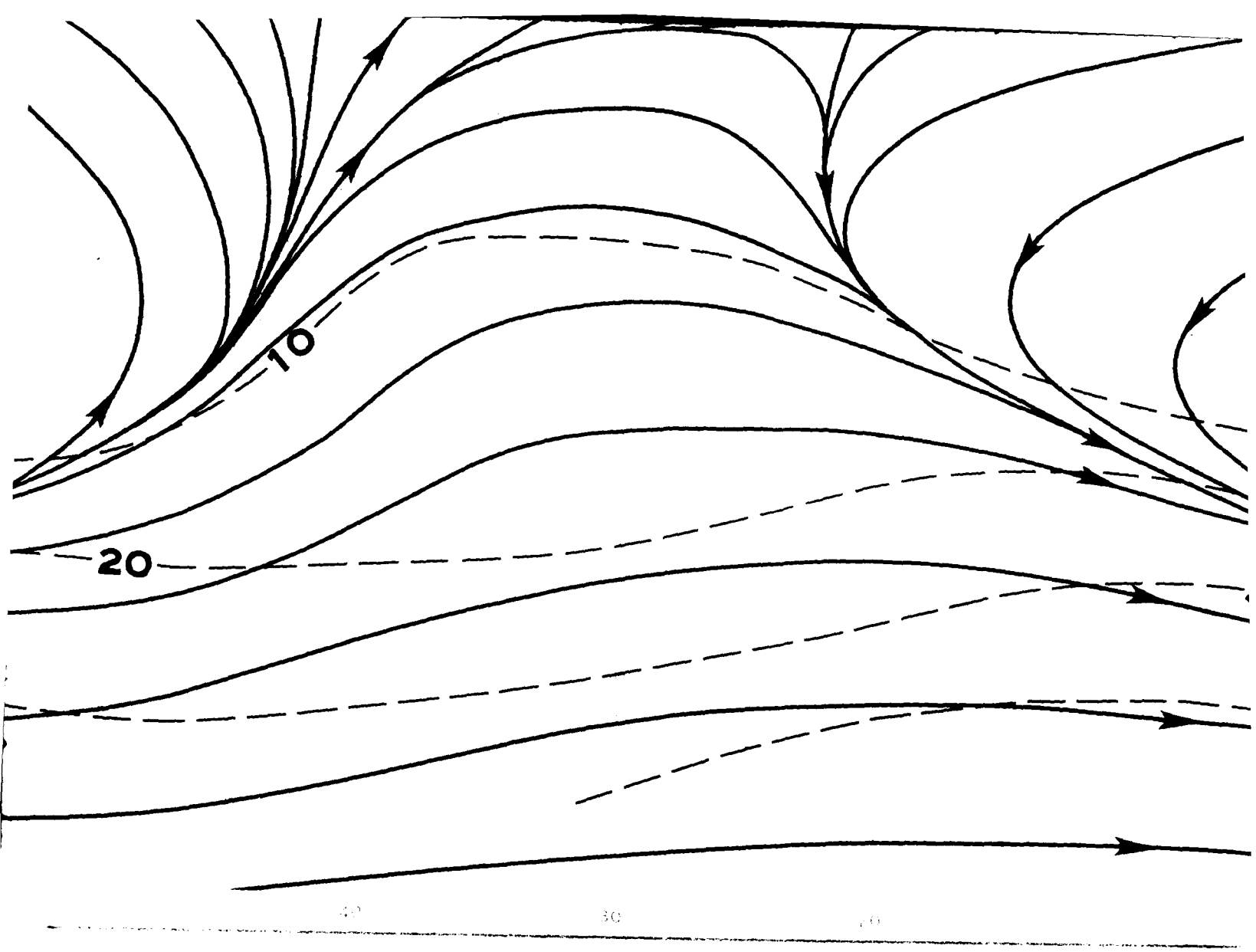
# - MARCH 300mb

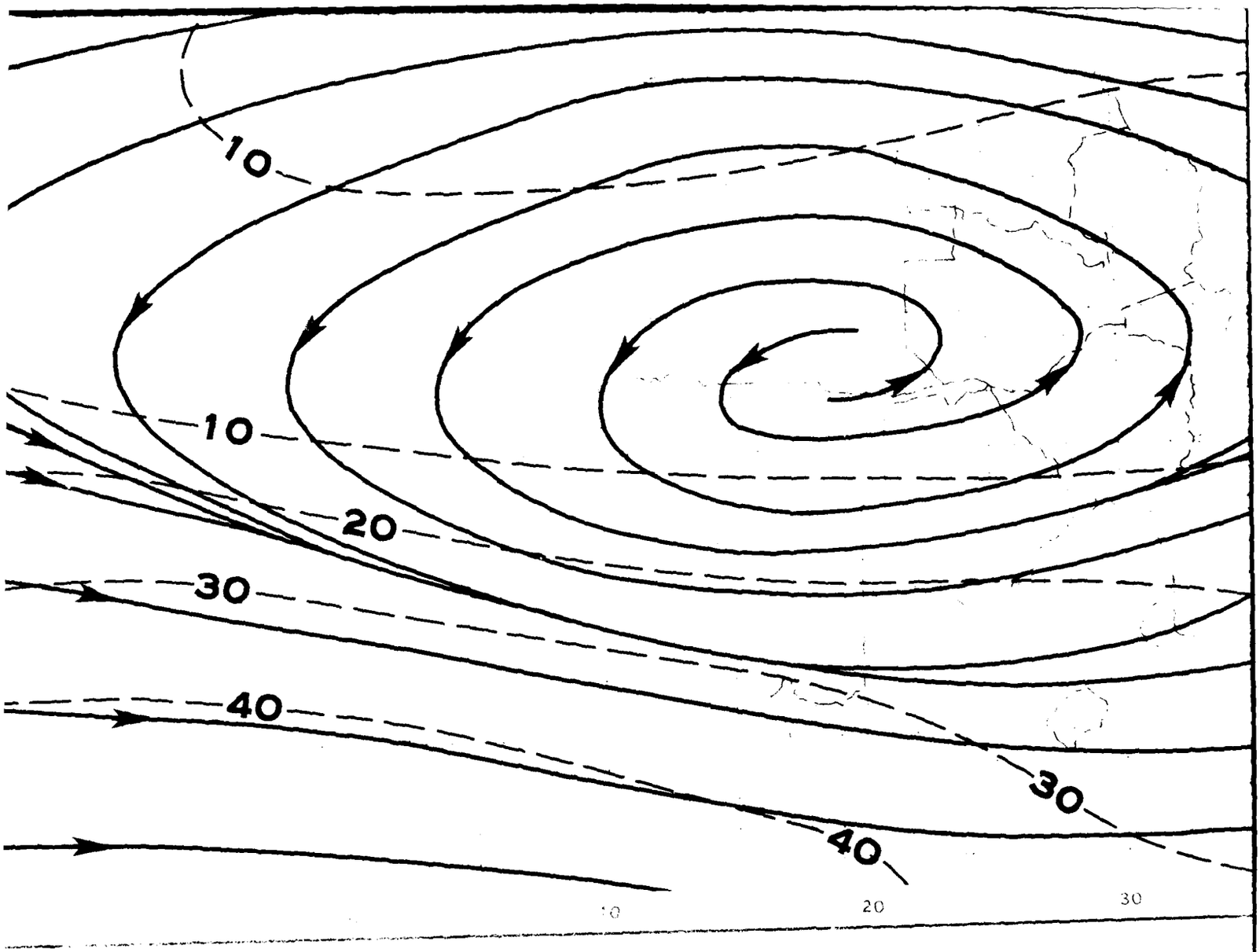



60
50
70
70
60
50
40
30
20
10
10
10
0°
10°
110
110
110°
40
50

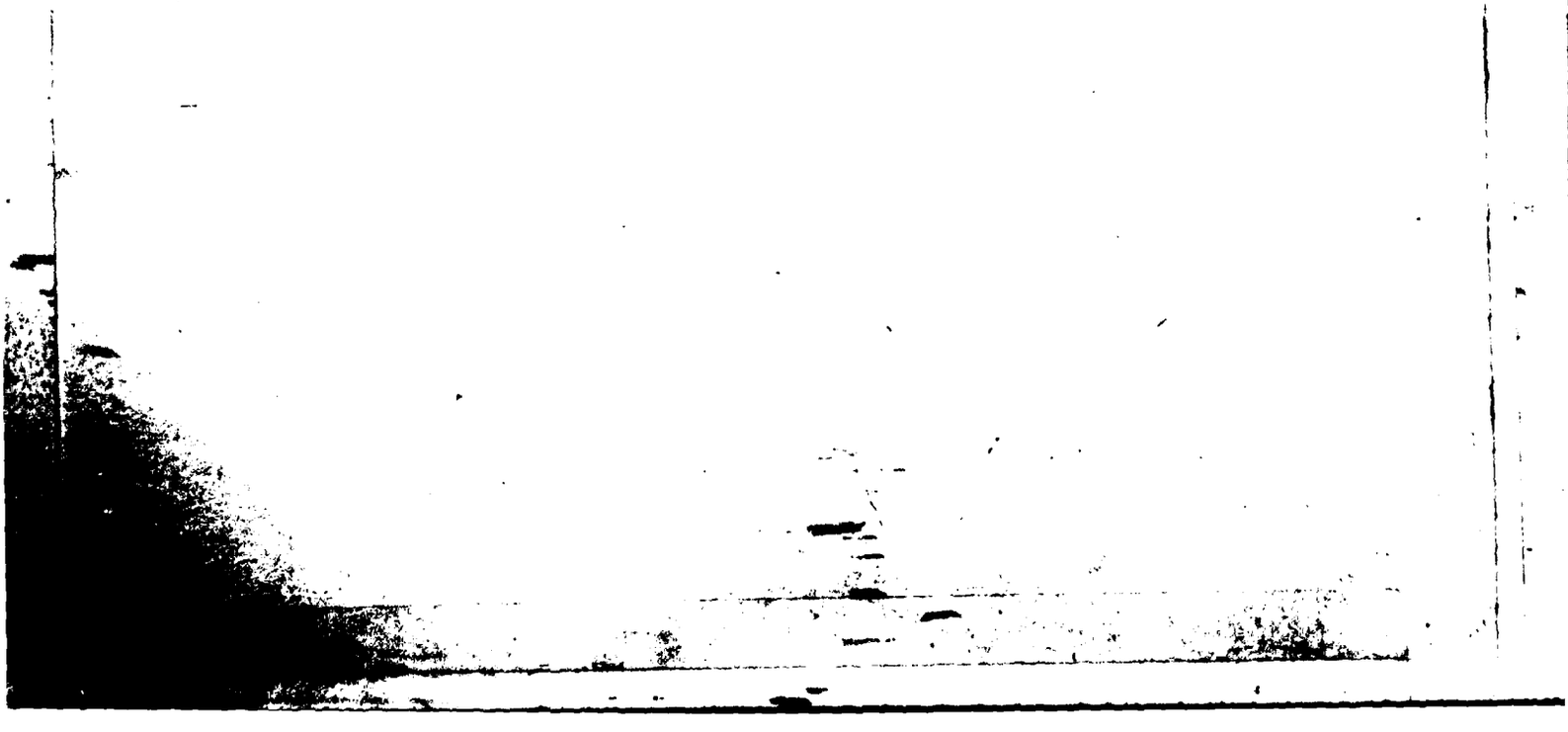

10
20
30
30
20
10
120
110
100
90

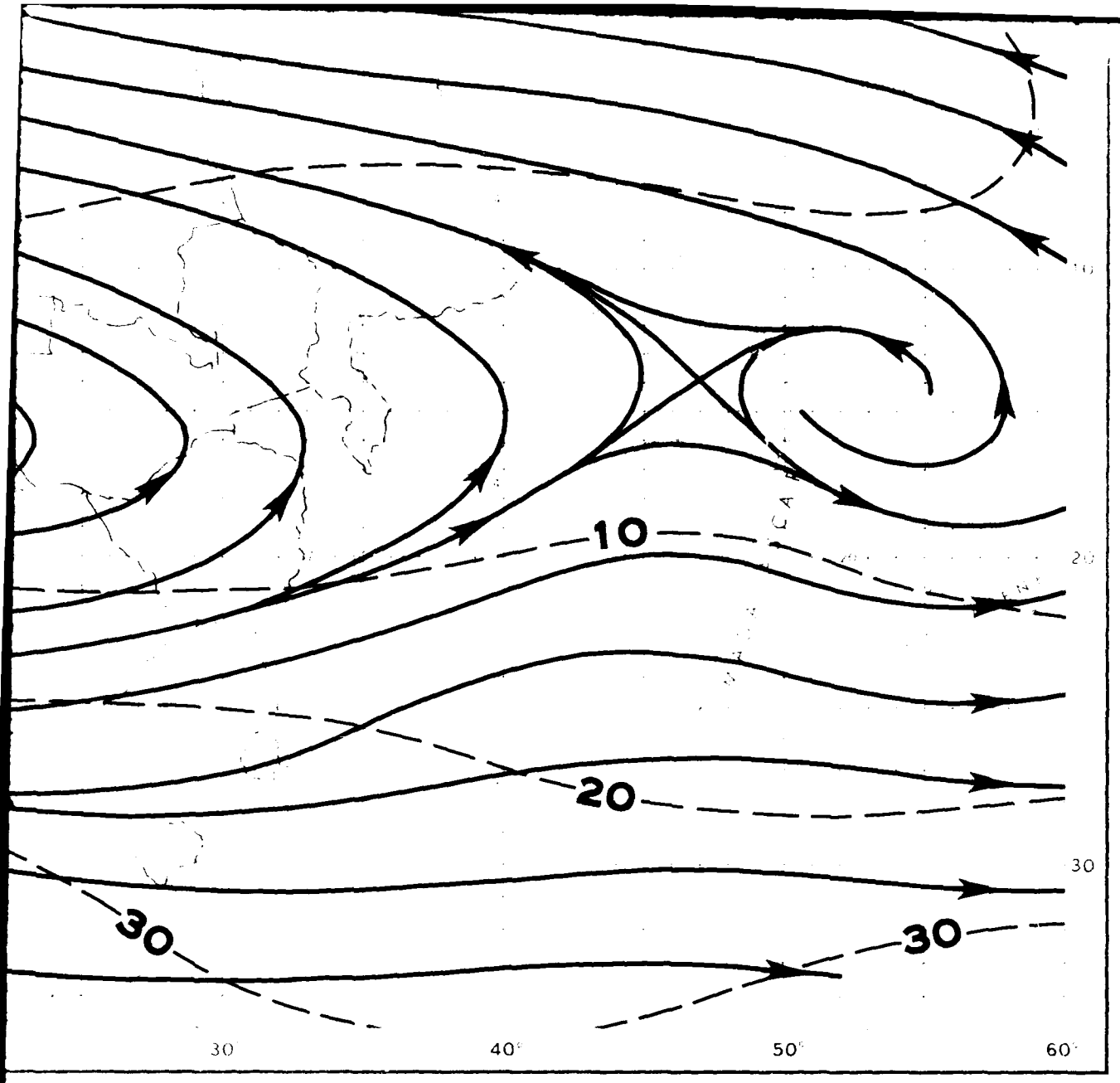

10
10
20
10
20
30


10
20



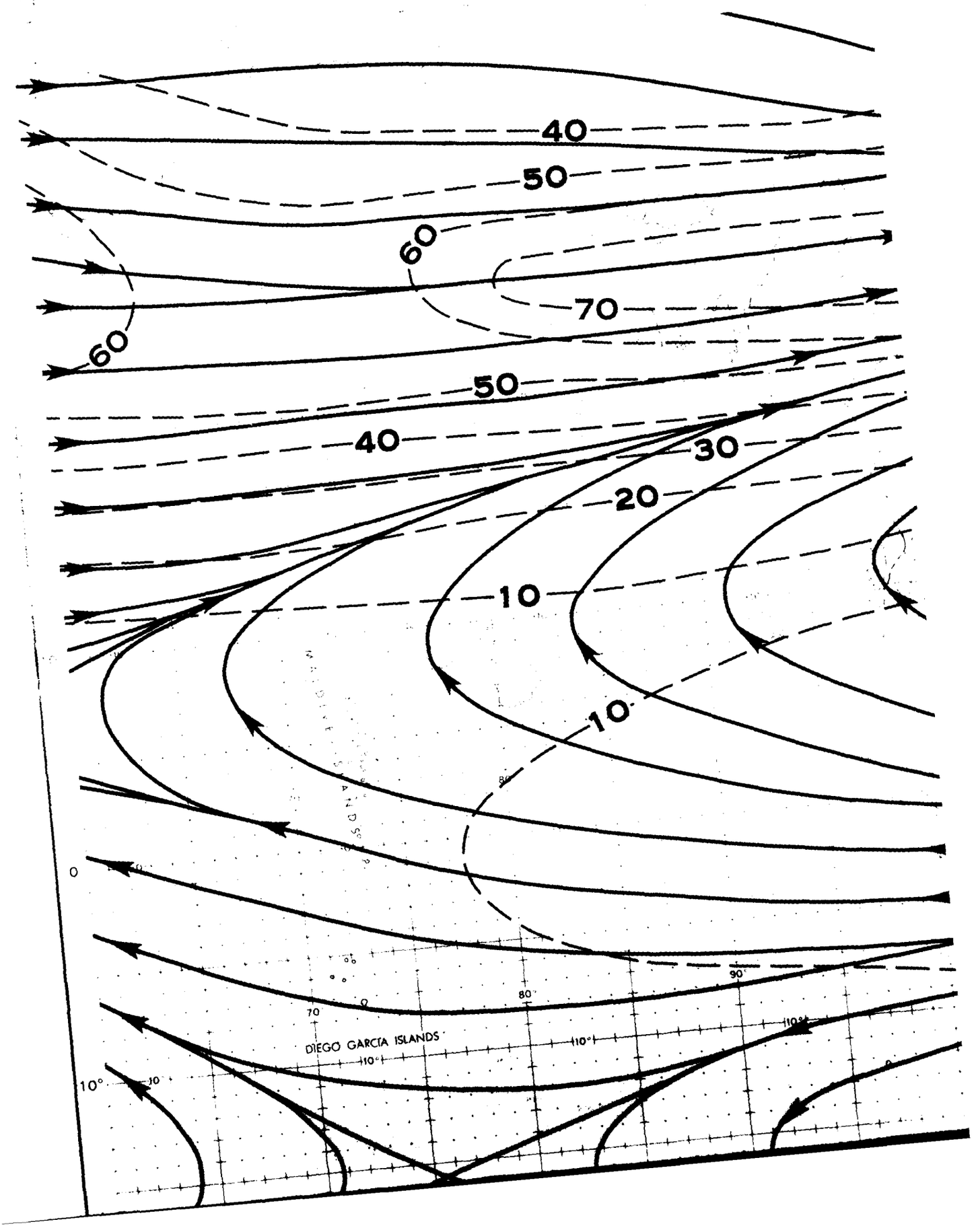

(a)



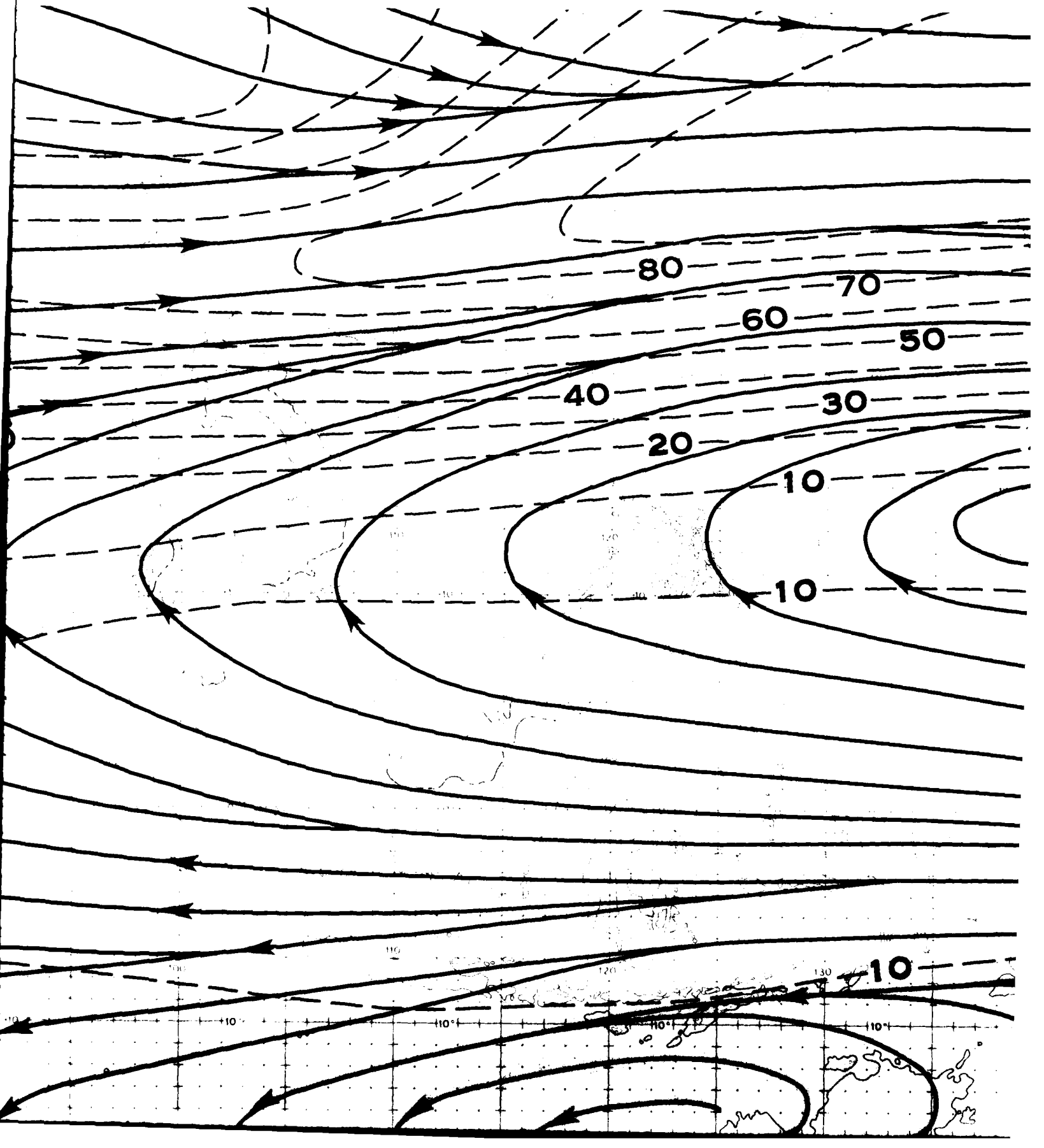



MULW-303W

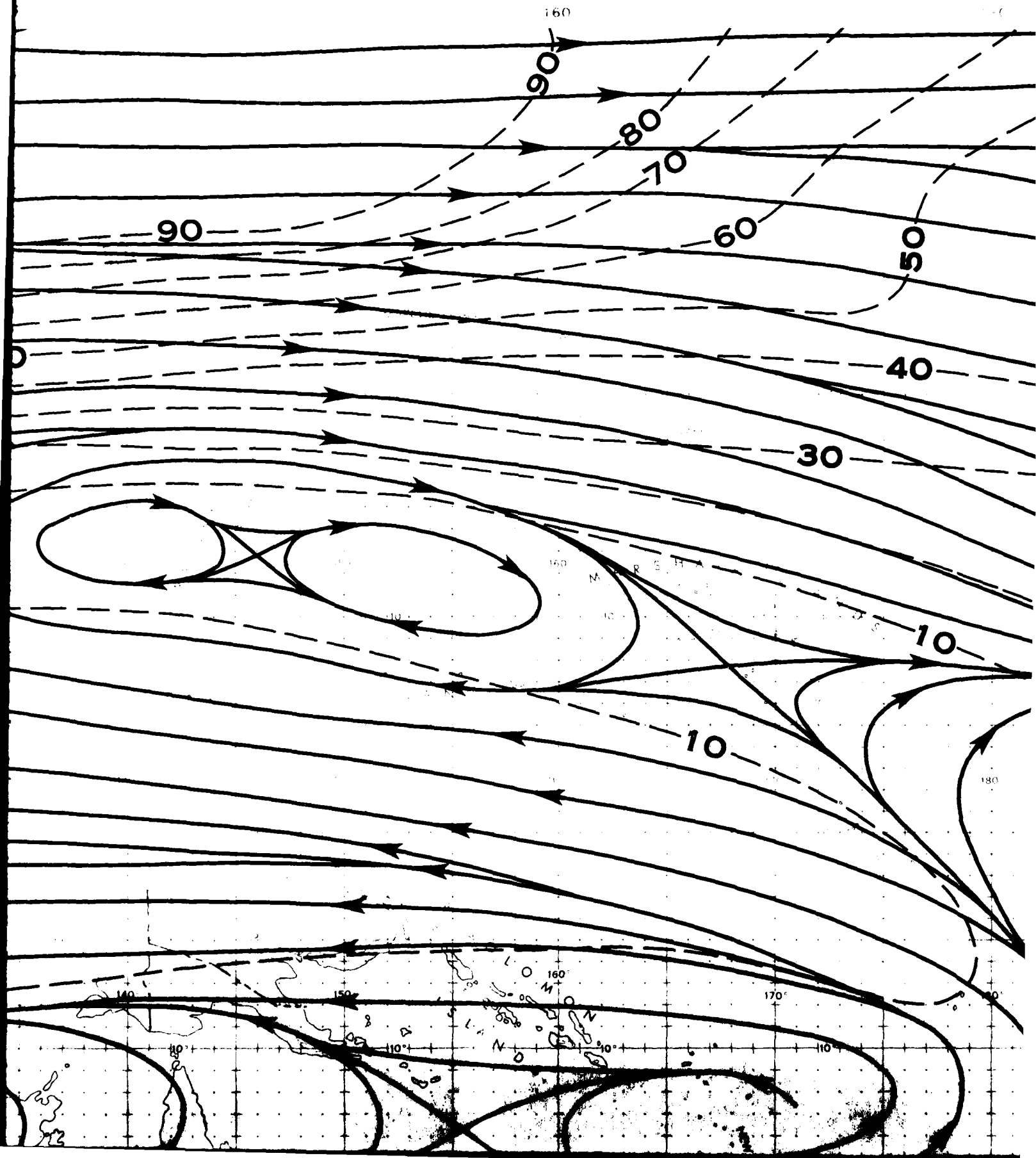
(10)


40
50
60
70
60
50
40
30
20
10
10
0
DIEGO GARCIA ISLANDS
10°
70
80
90
110°

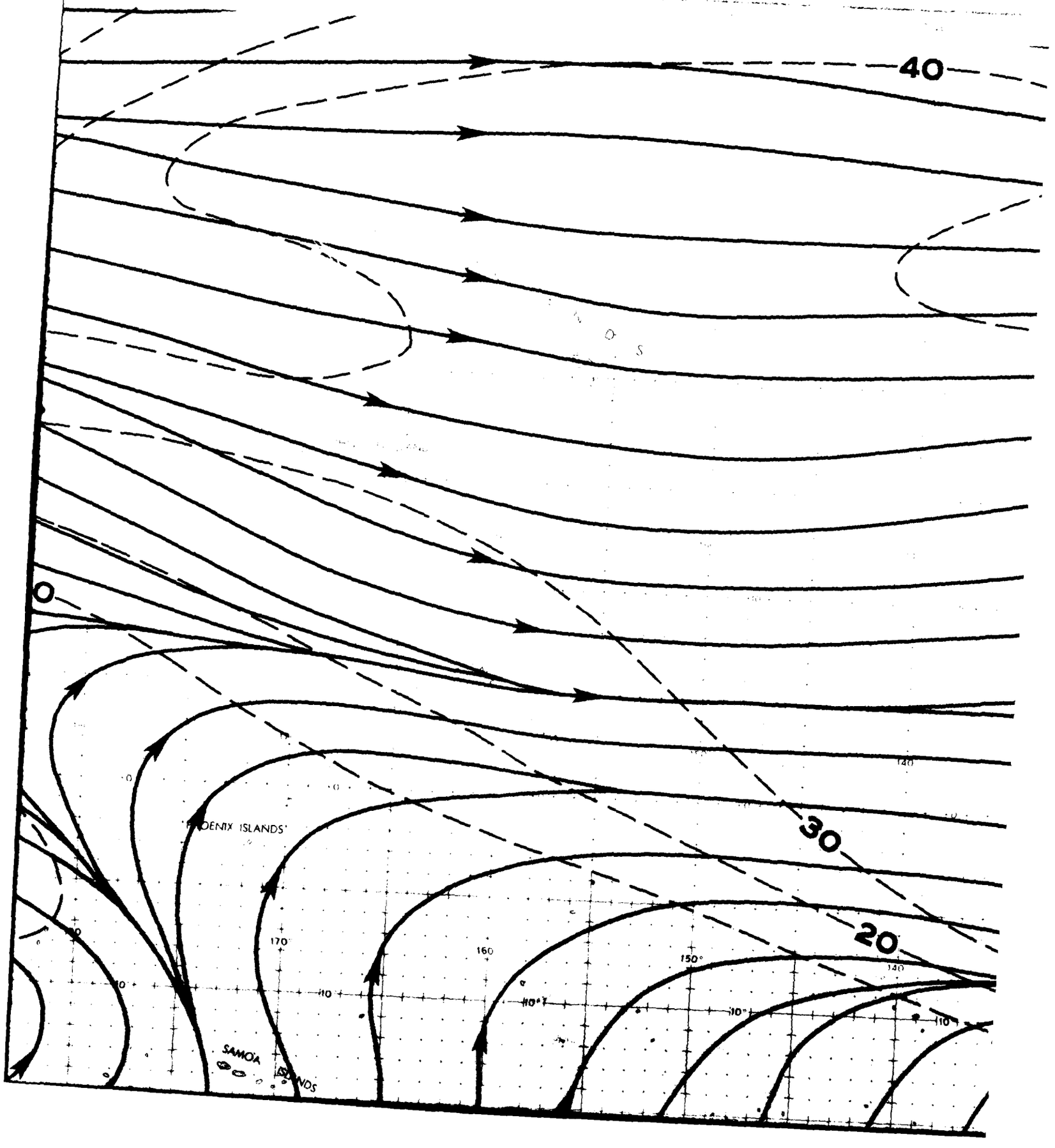
# MEAN UPPER LEVEL WIN

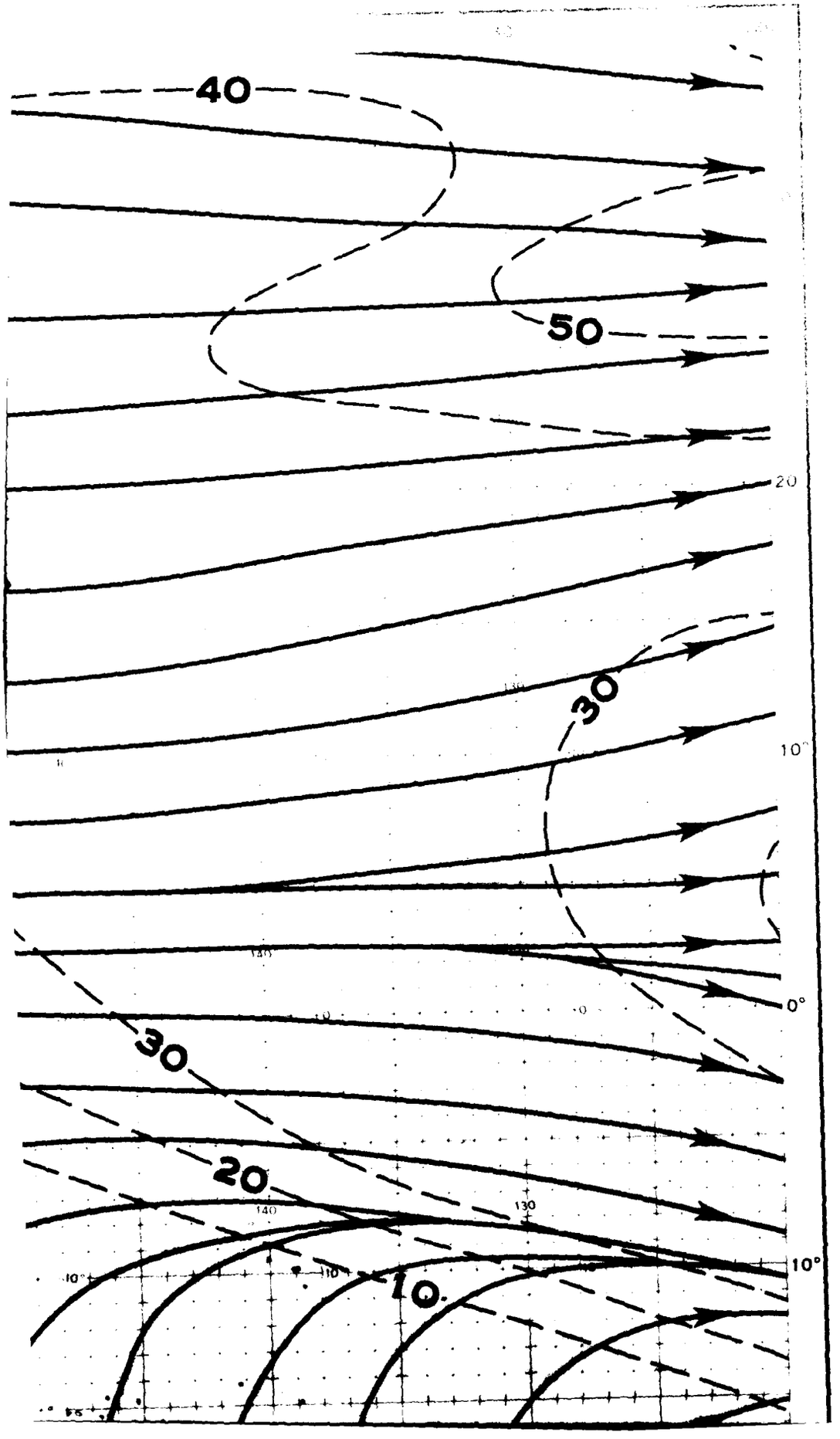

80
70
60
50
40
30
20
10
10
10

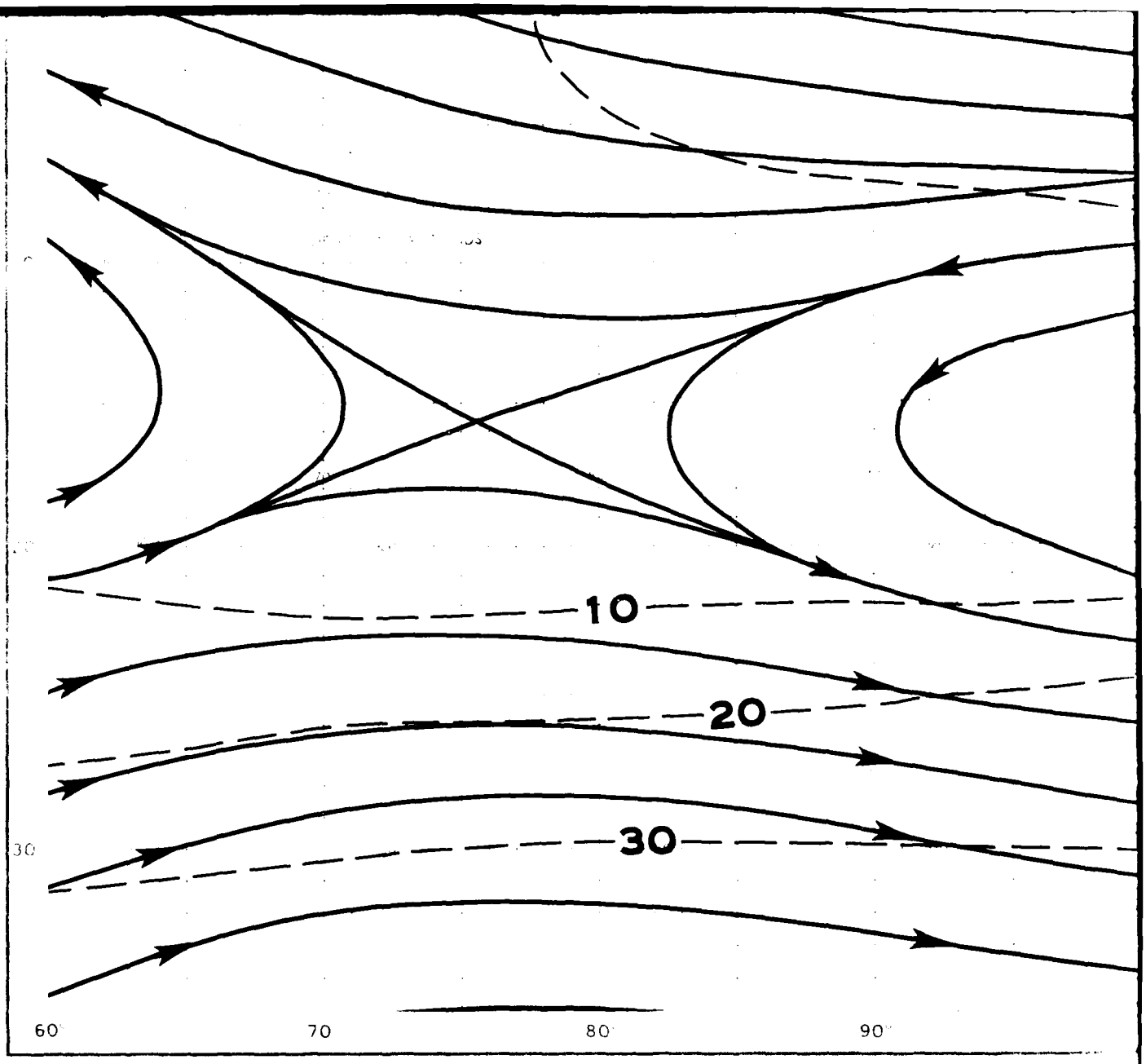
# INDS over GLOBAL TROPICS – MA



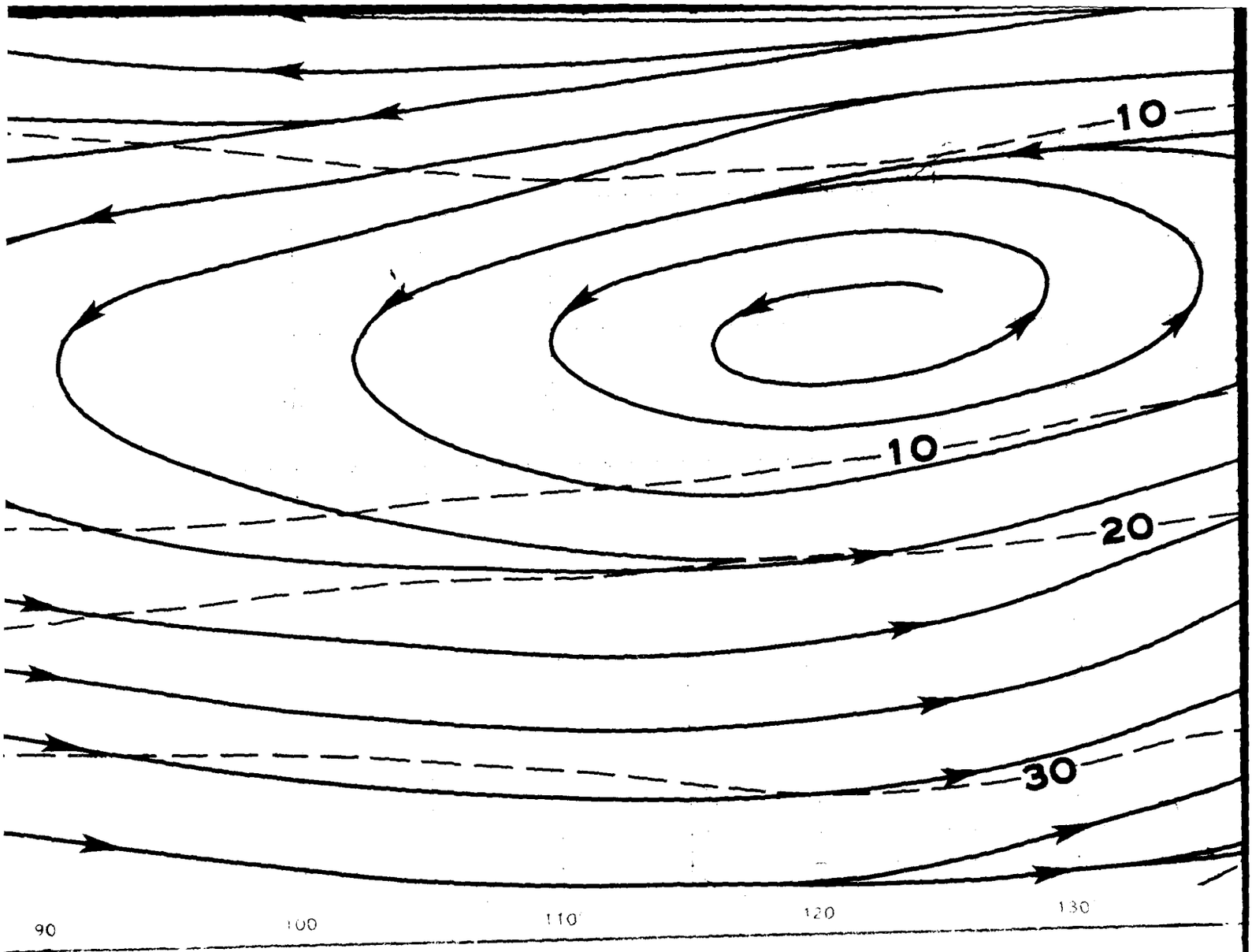
# MARCH 300mb



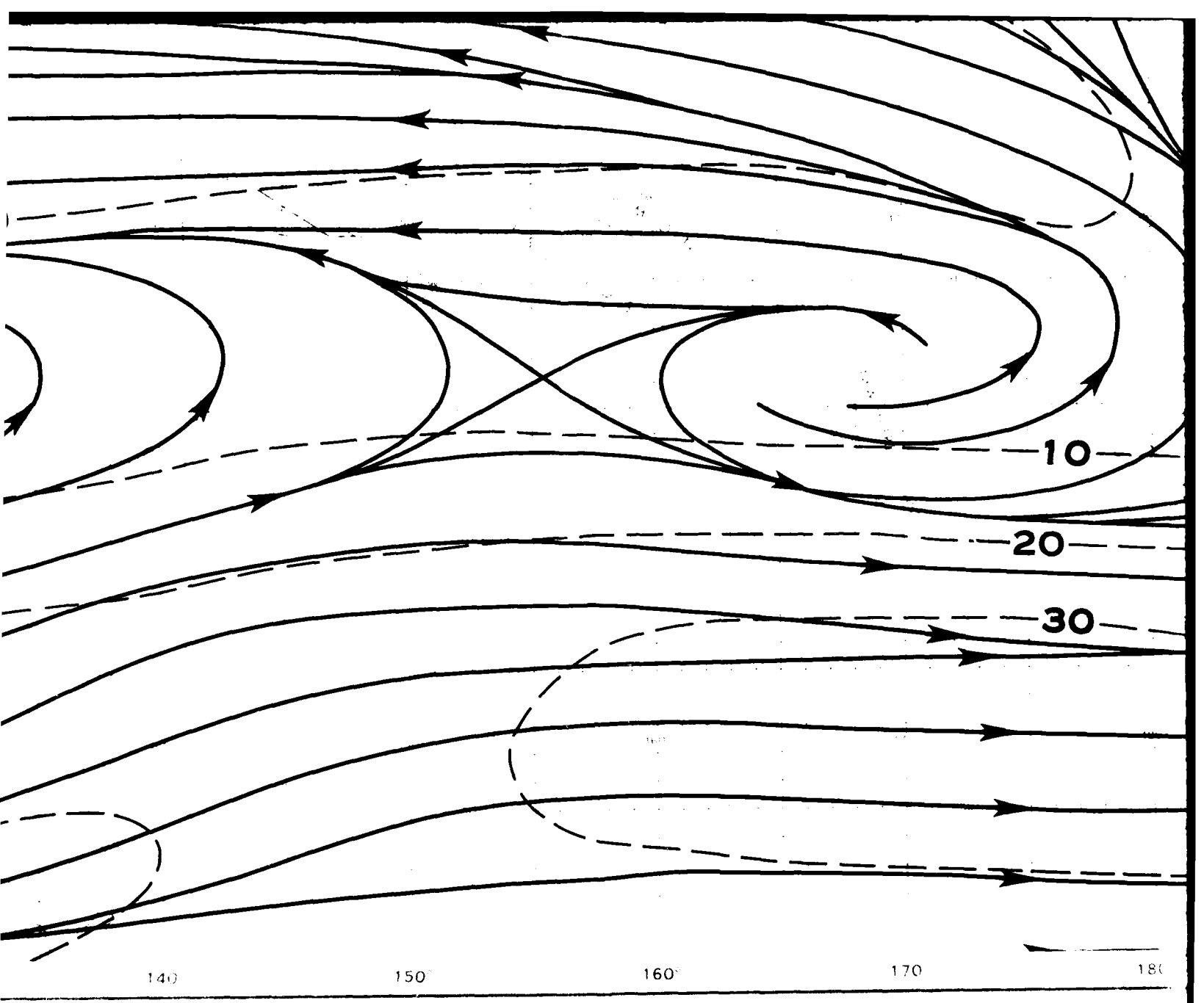

40
50
30
30
20
10
20°
10°
0°
10°
140
130
110

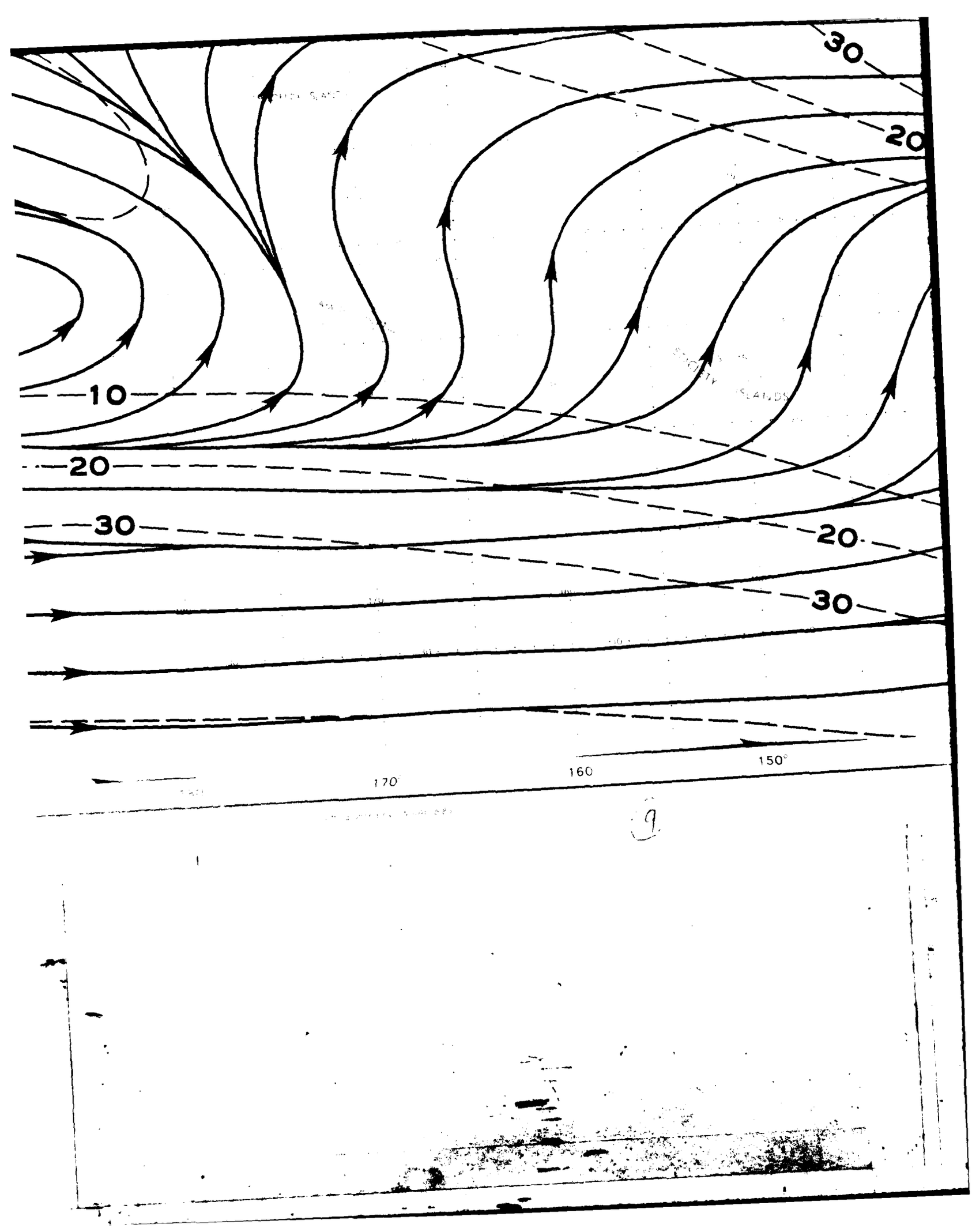


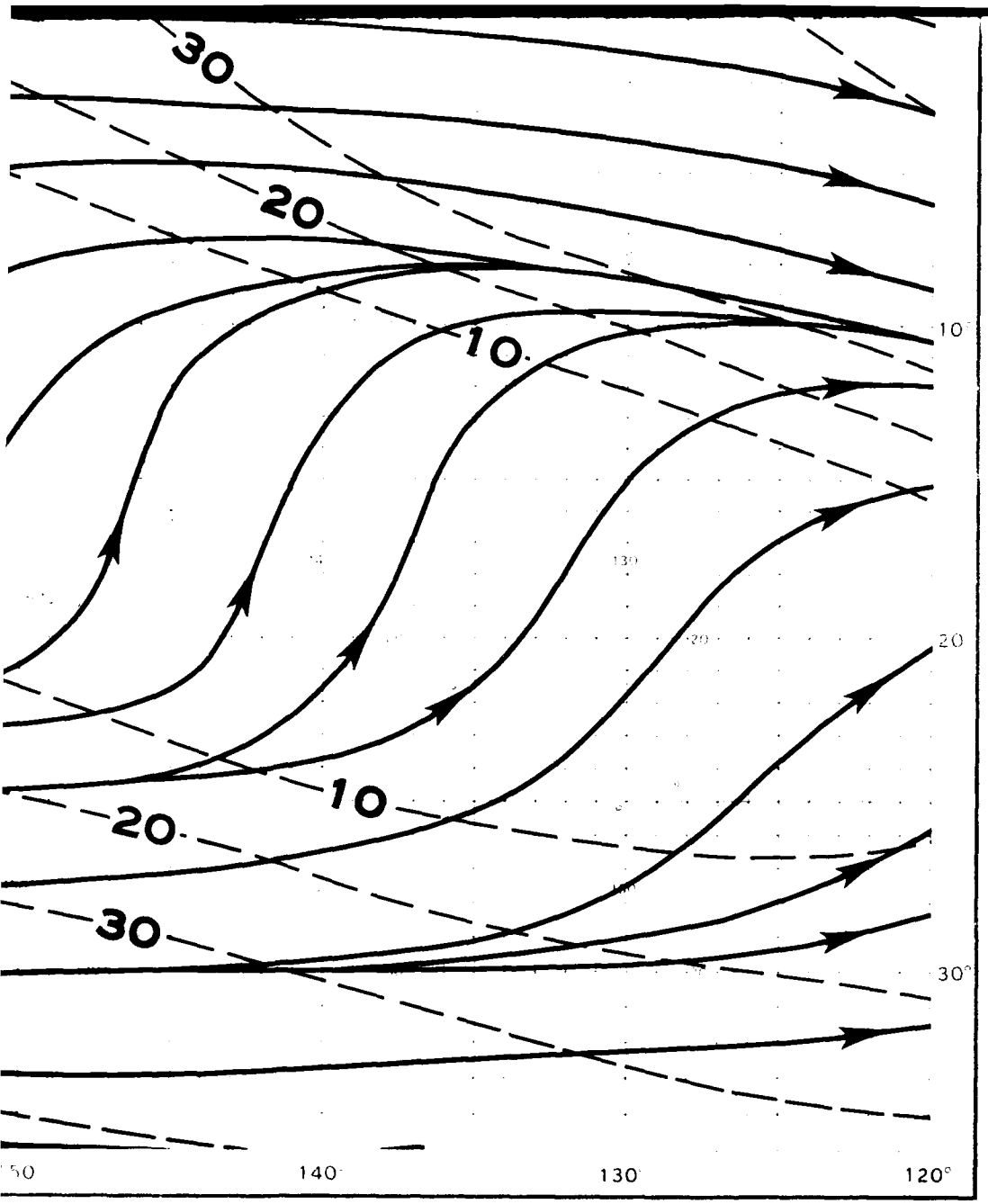

(b)



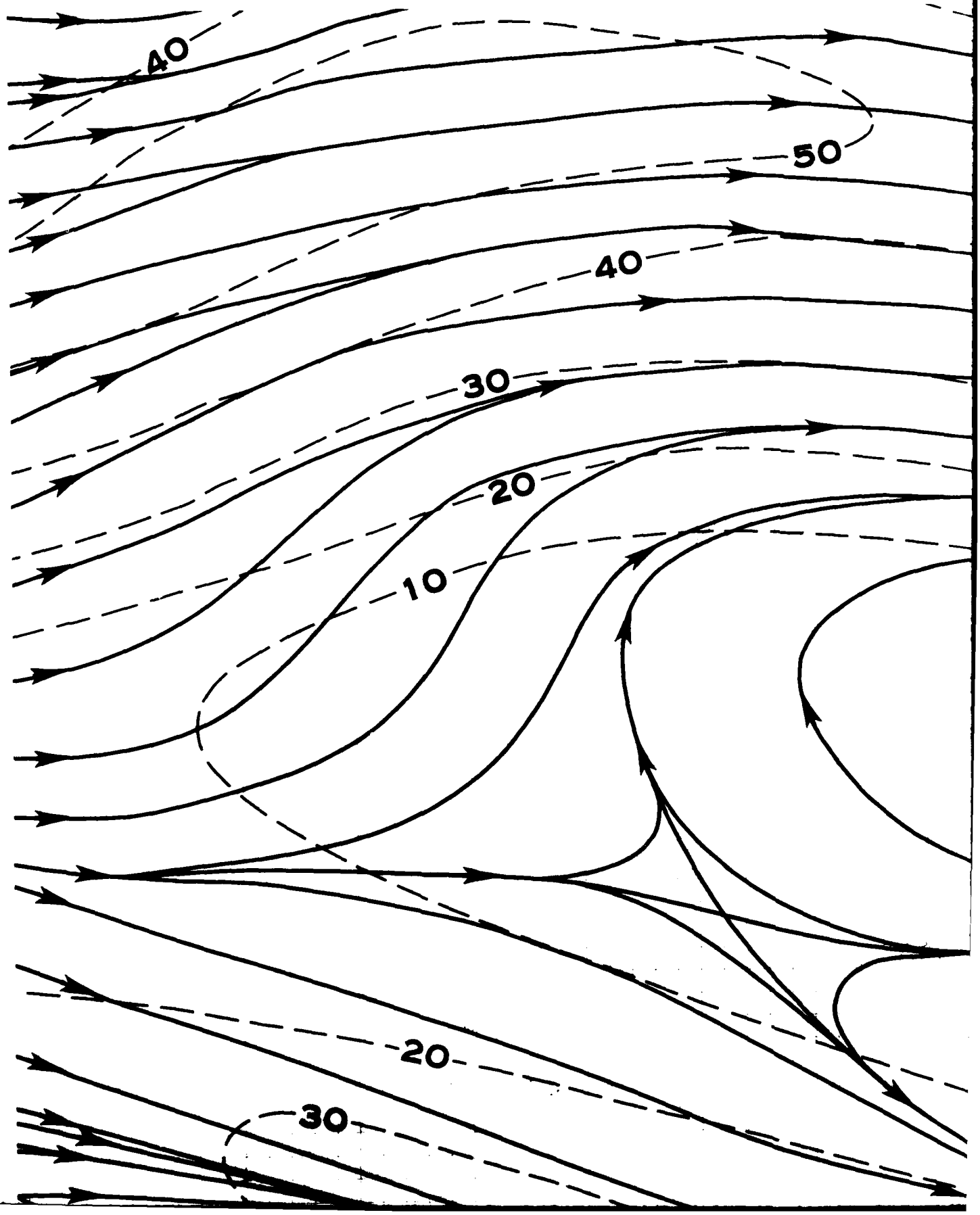

(7)


10
20
30
140
150
160
170
180

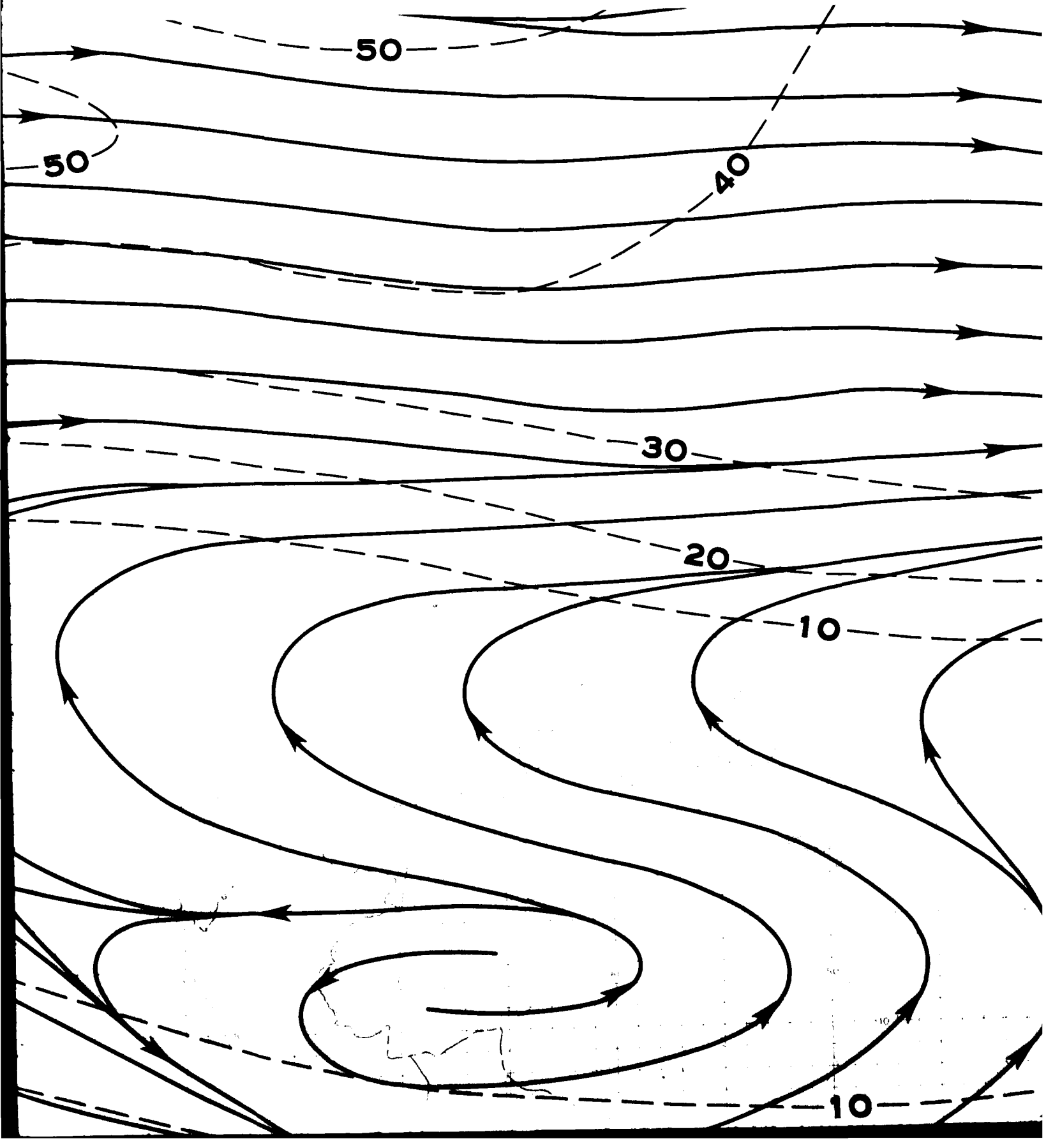

30
20
10
20
30
20
30
150°
160
170



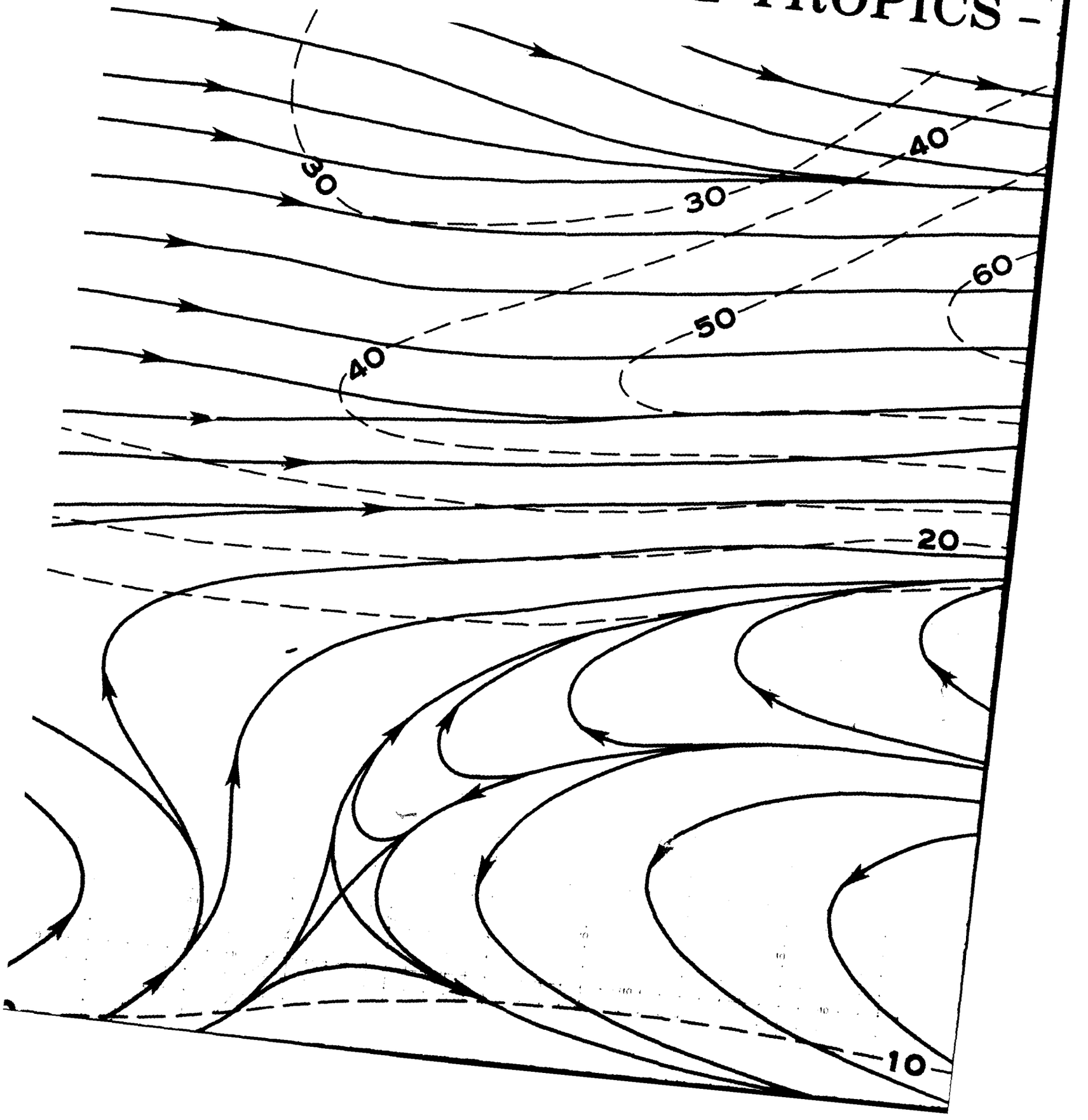

**MULW-303E**


40
50
40
30
20
10
20
30

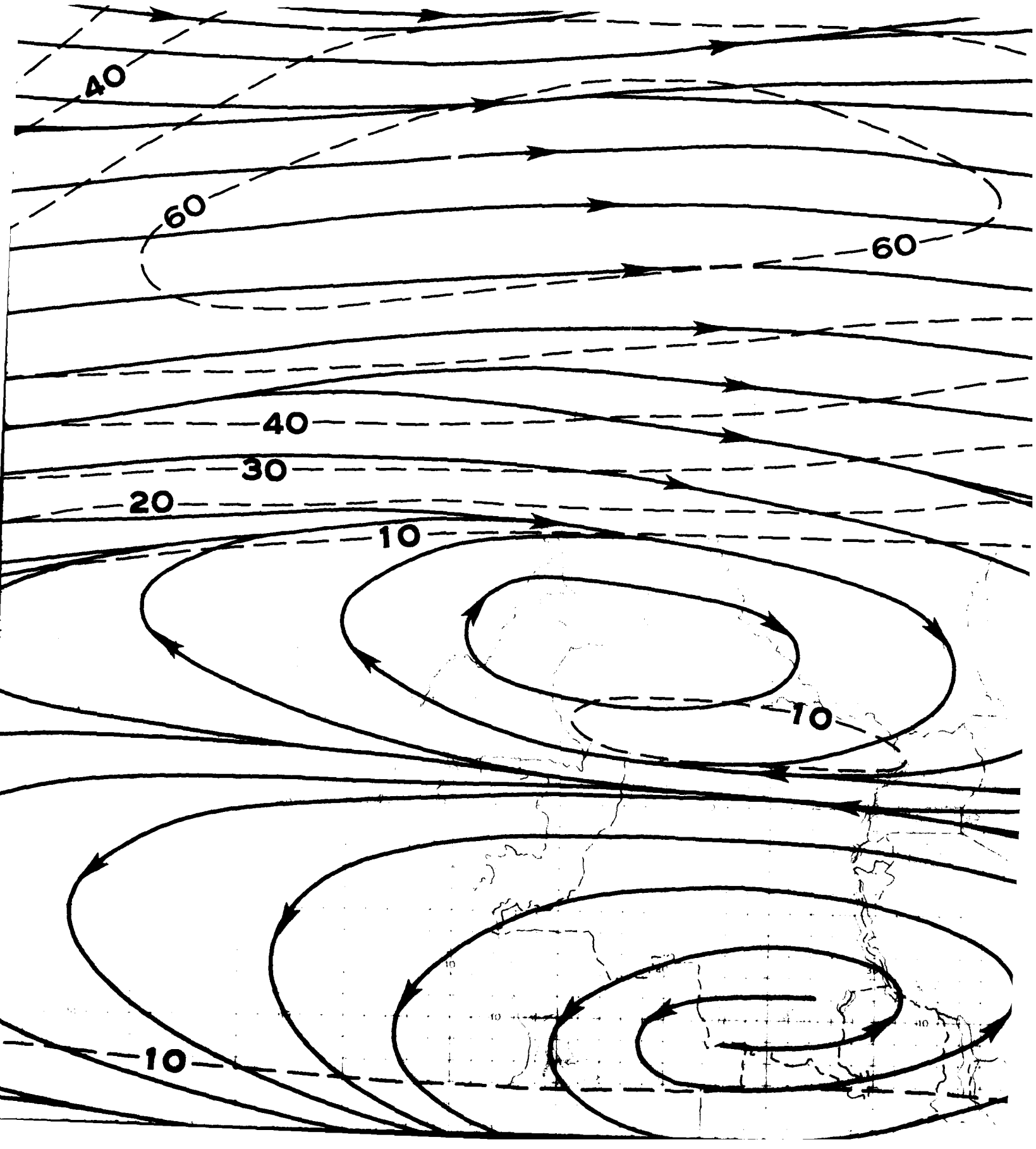
# MEAN UPPER LEVEL WIN

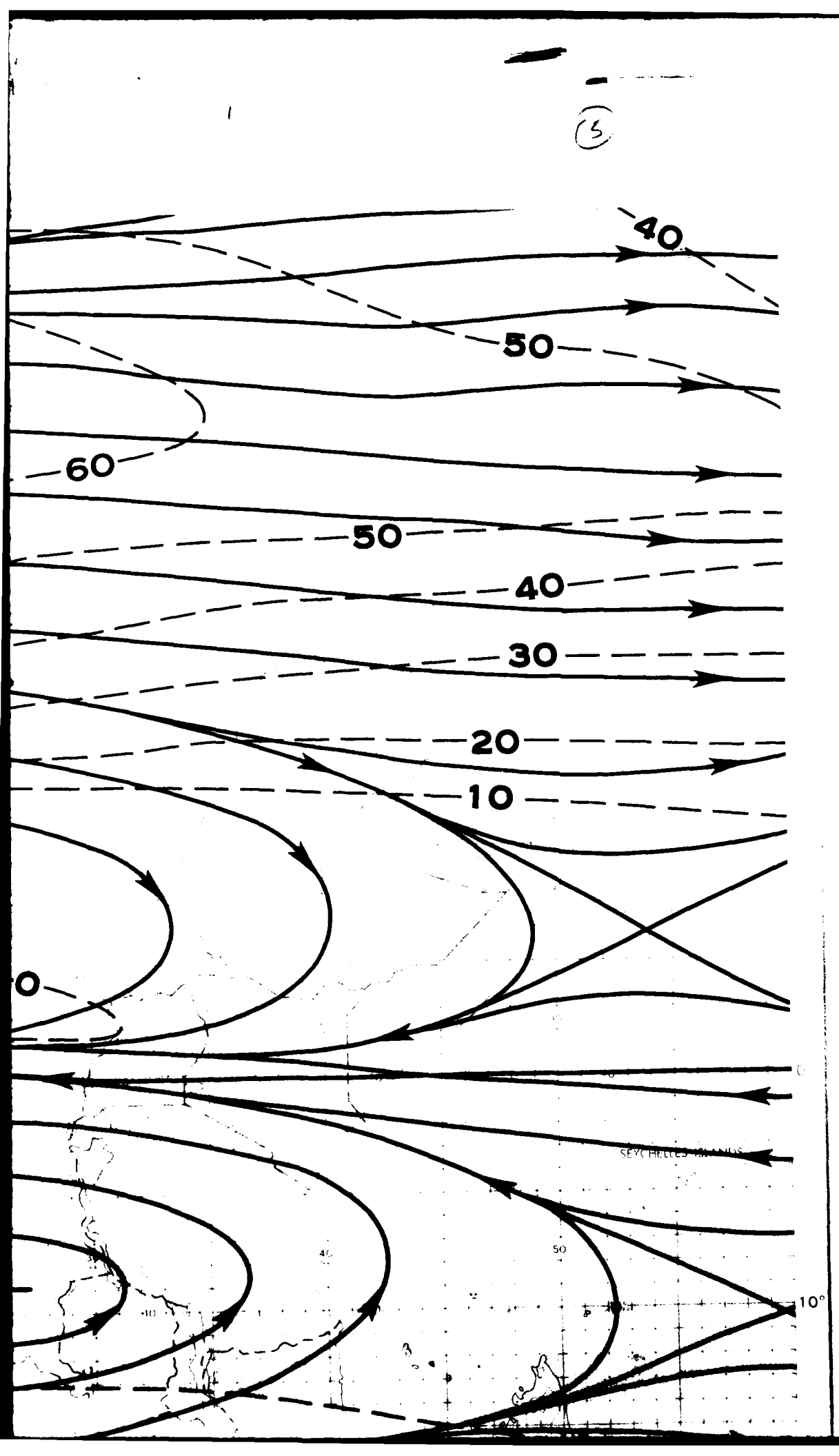


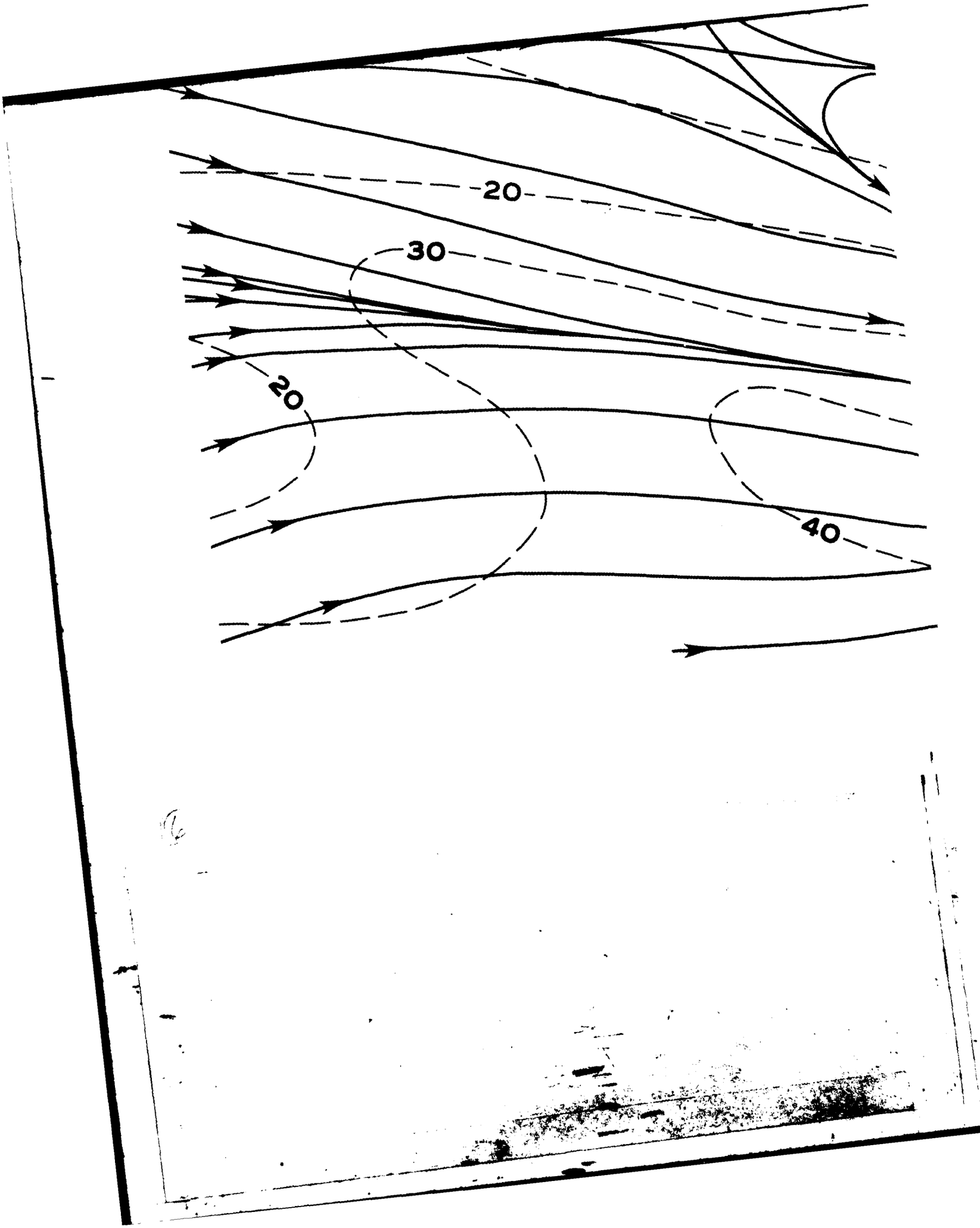
# WINDS over GLOBAL TROPICS

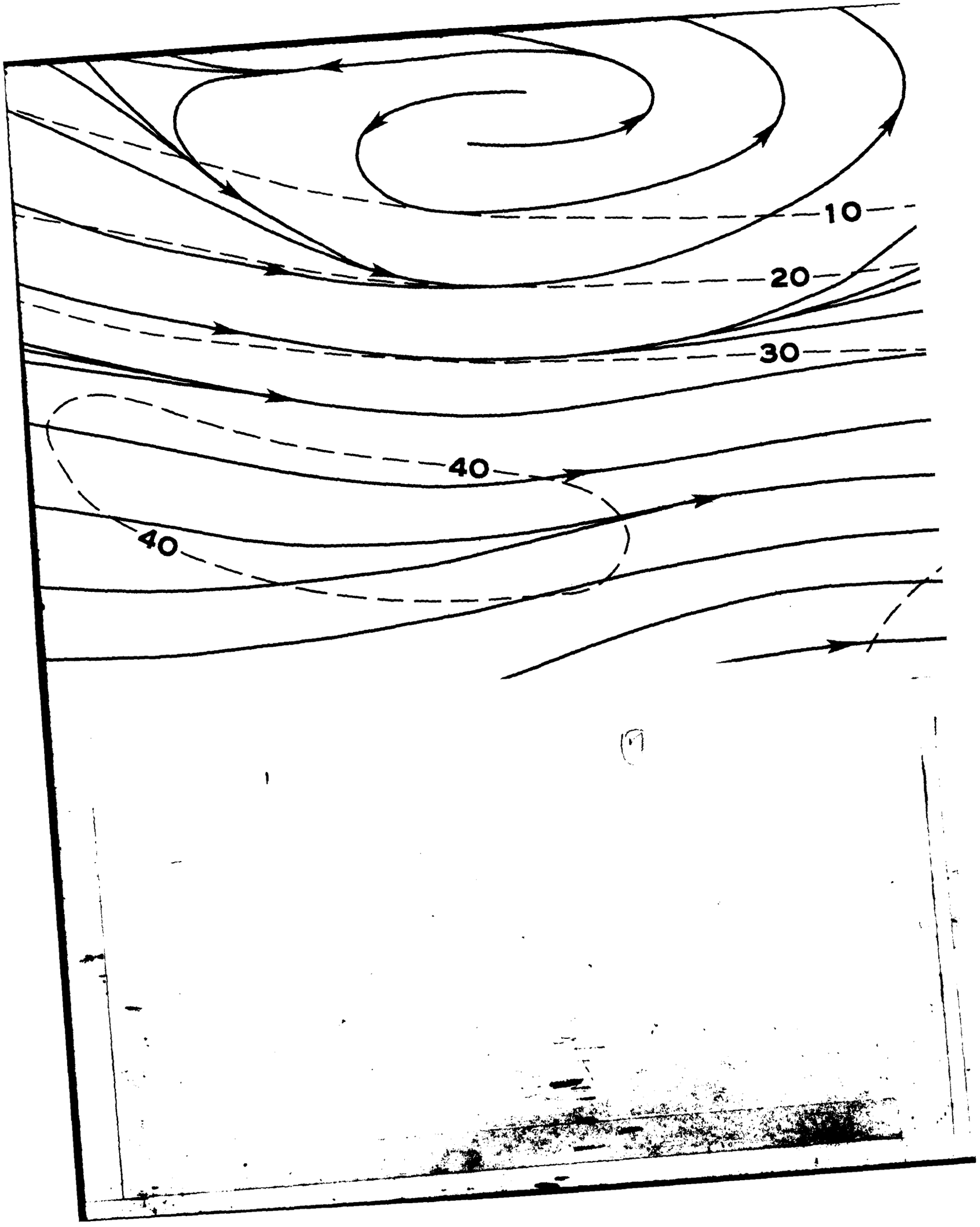


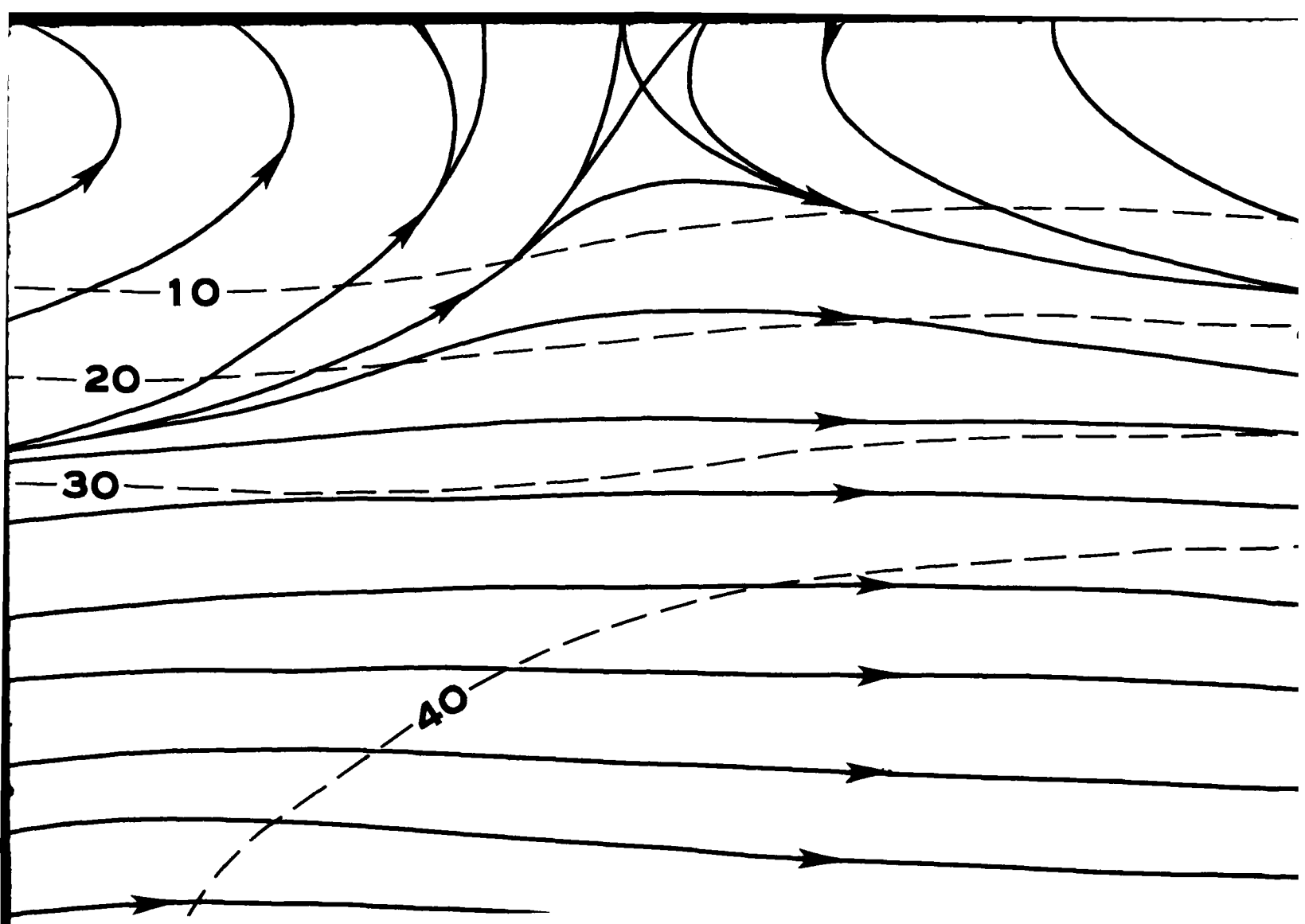
# PICS - APRIL 300mb

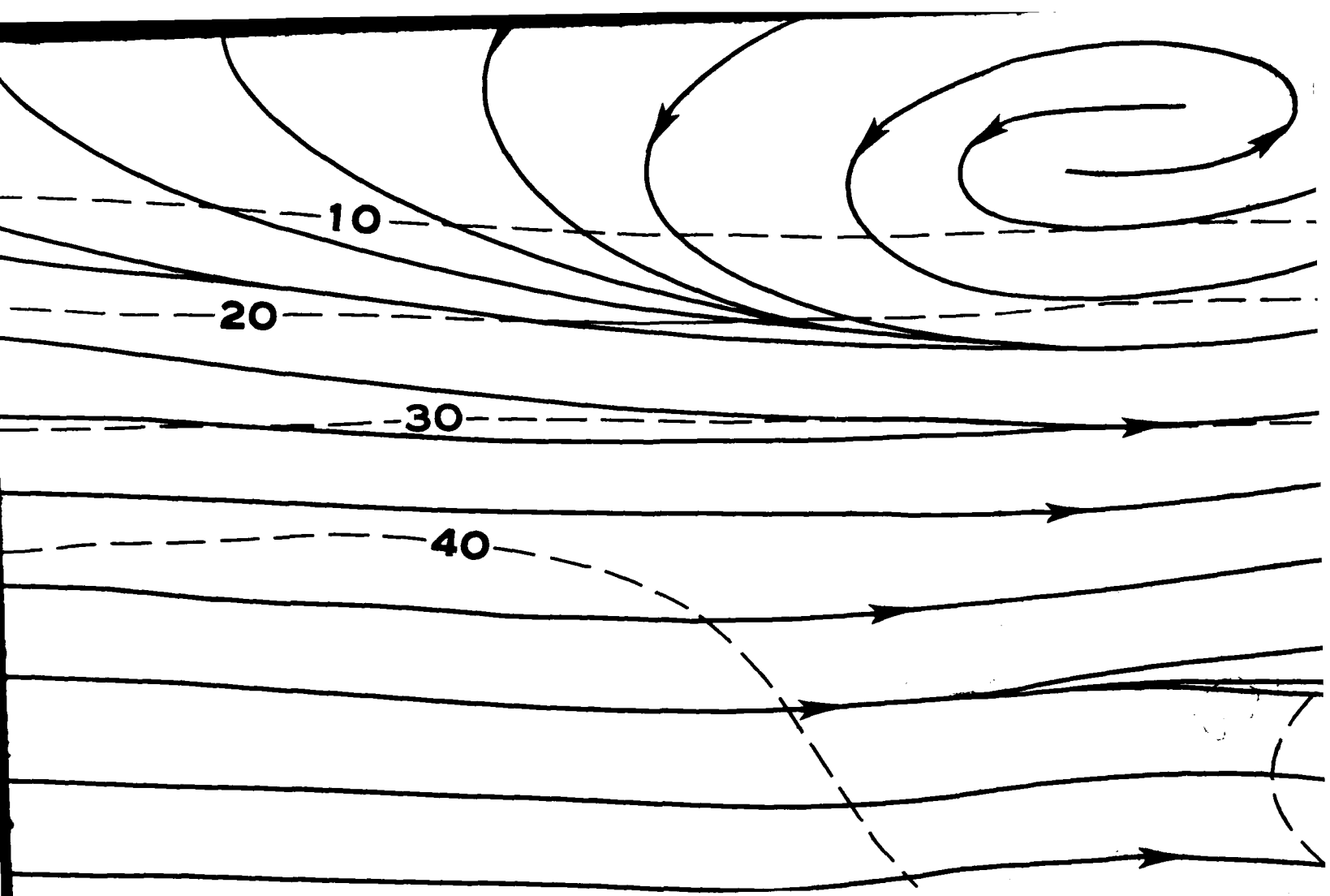


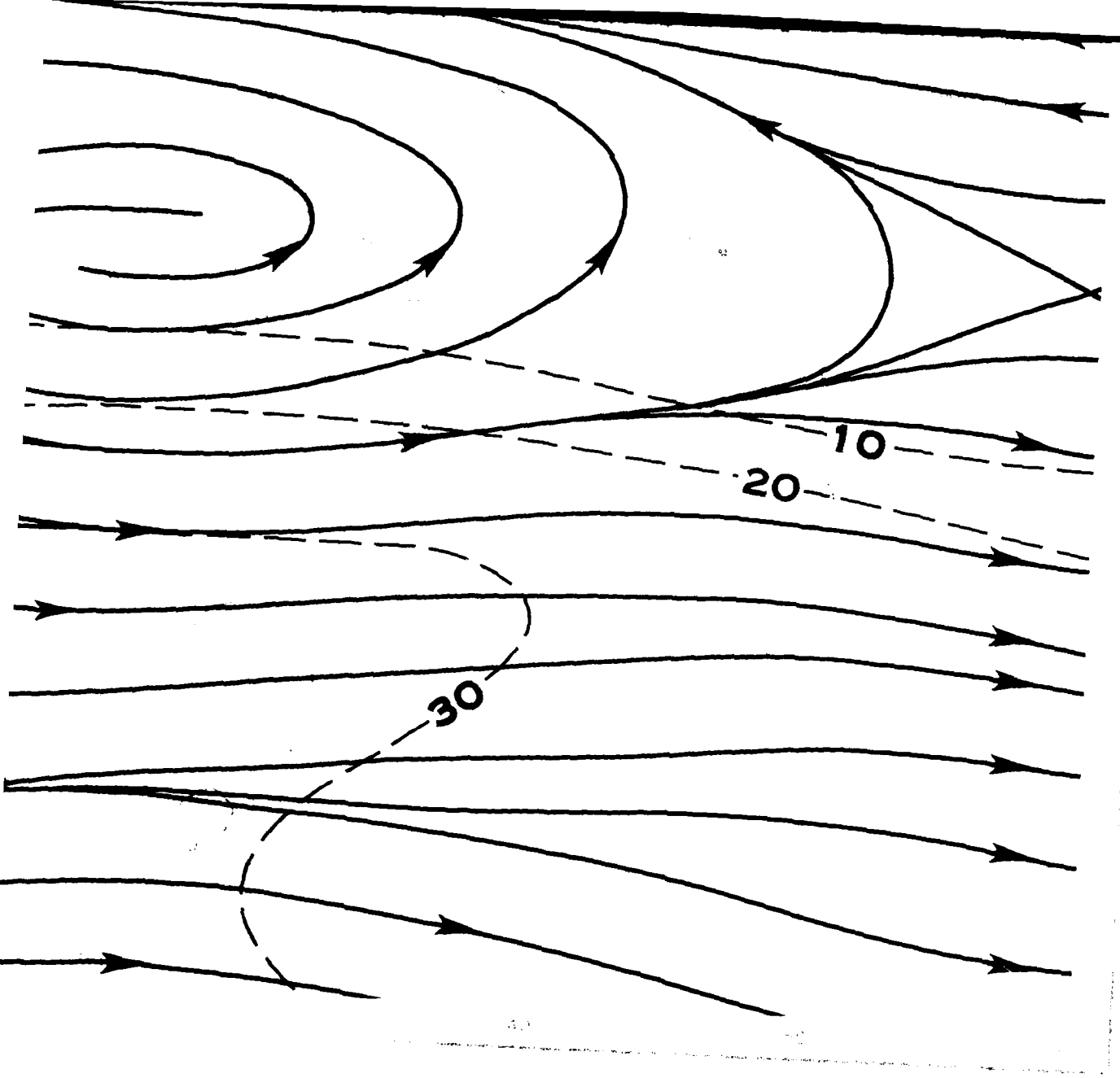

40
50
60
50
40
30
20
10
0
SEYCHELLES ISLANDS
40
50
10°


20
30
20
40

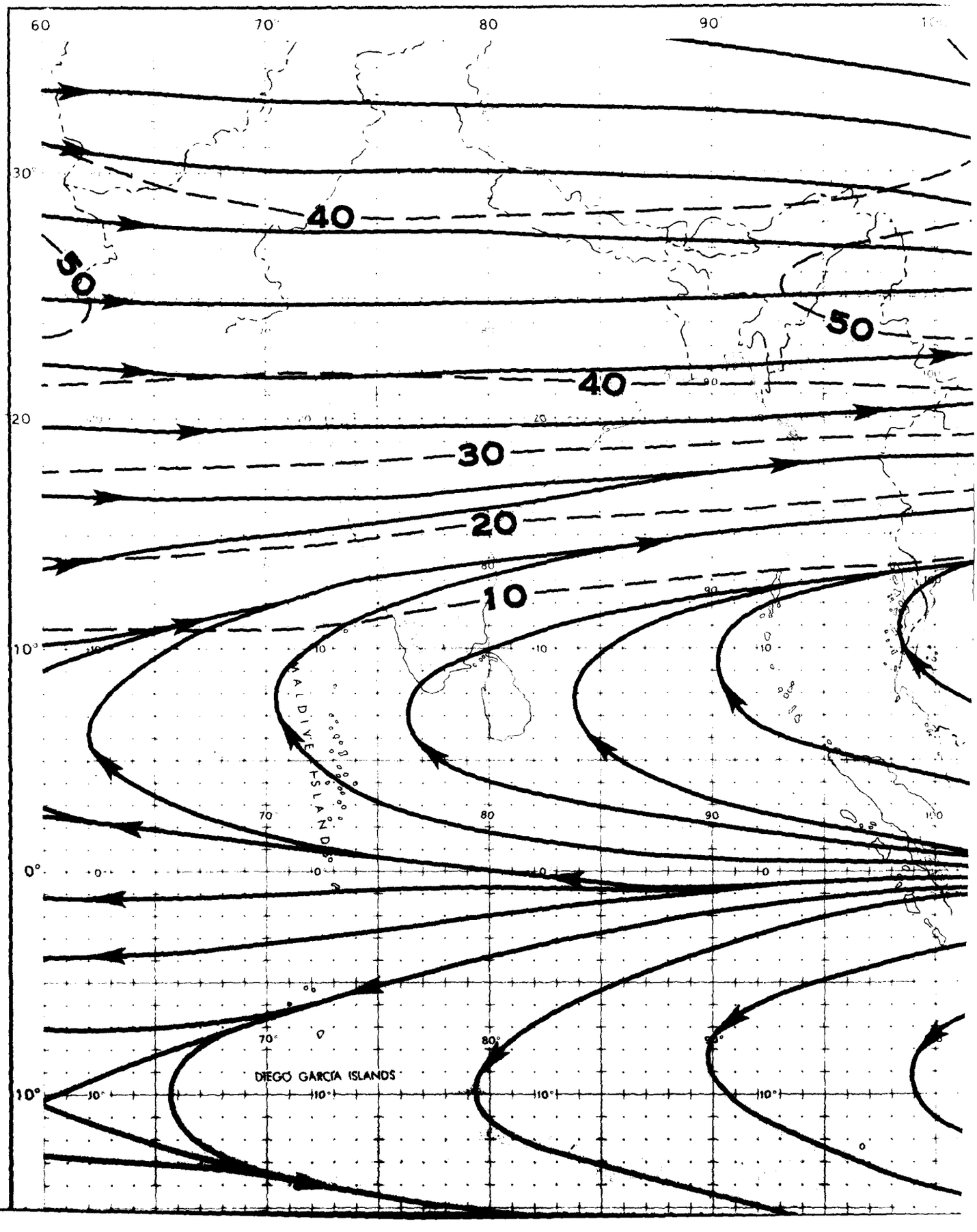

10
20
30
40
40


10
20
30
40

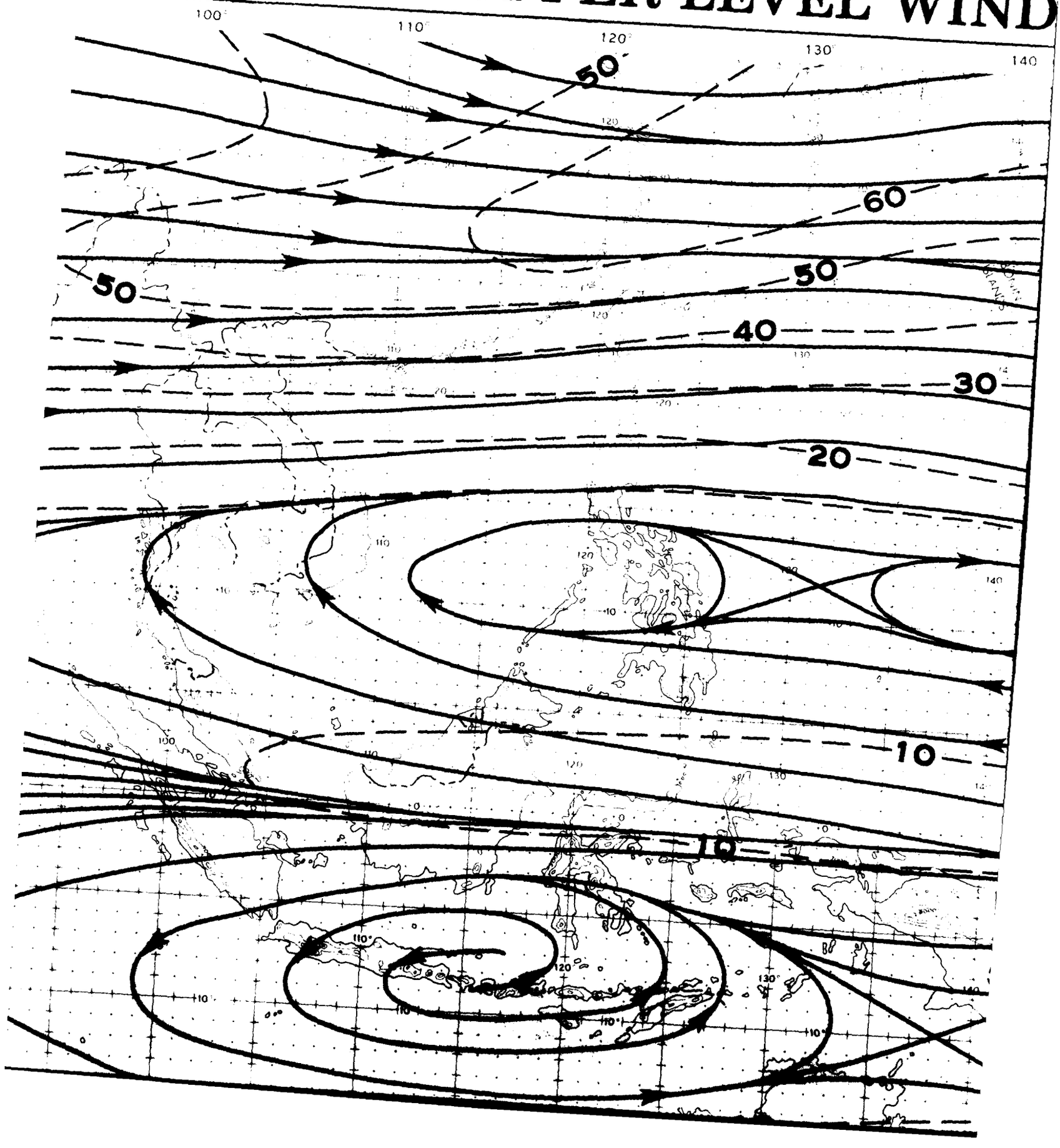

10
20
30
40



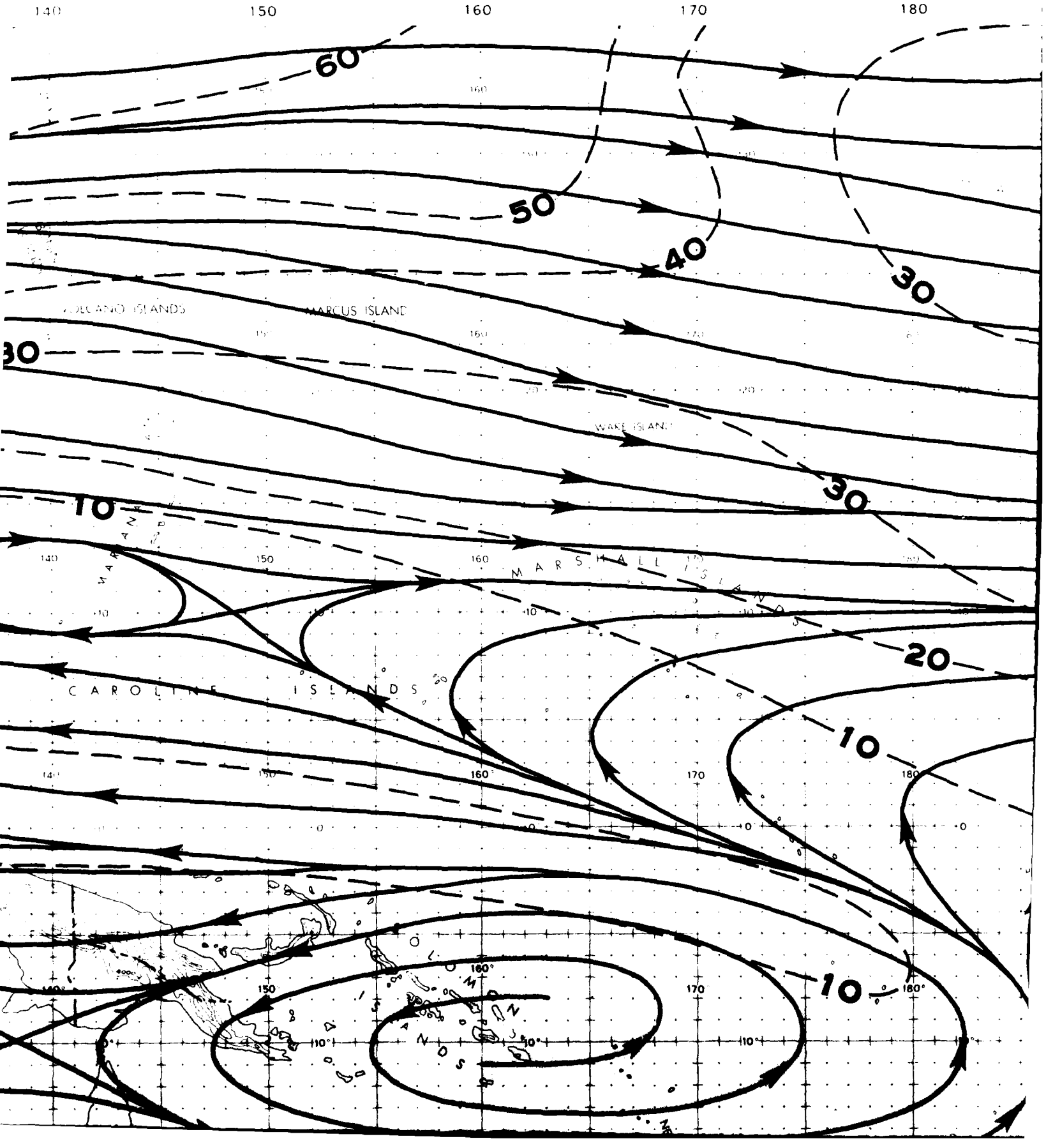

MULW-304W


60
70
80
90
30°
20
10°
0°
10°
40
50
50
40
30
20
10
MALDIVE ISLANDS
DIEGO GARCIA ISLANDS

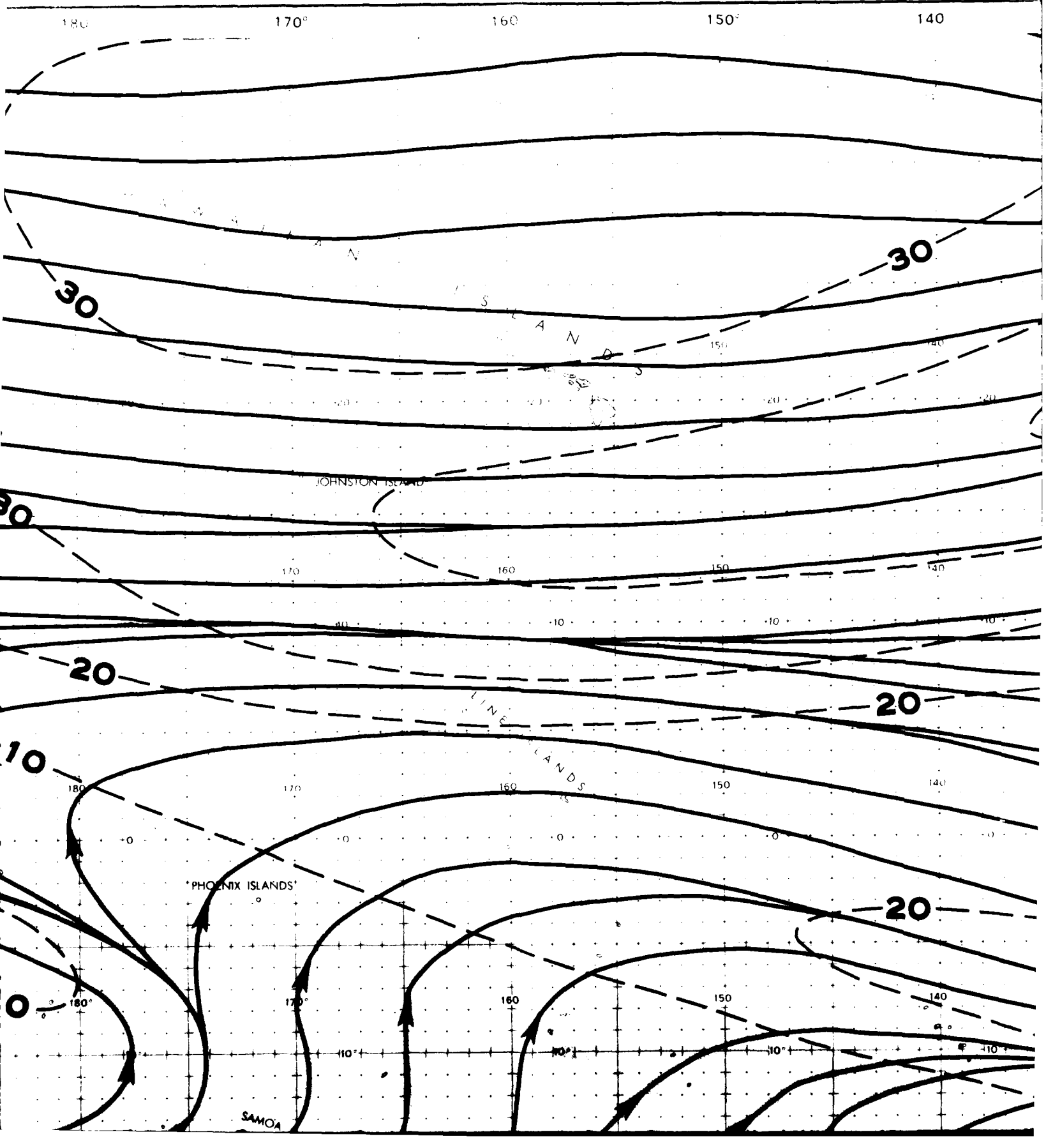
# MEAN UPPER LEVEL WIND

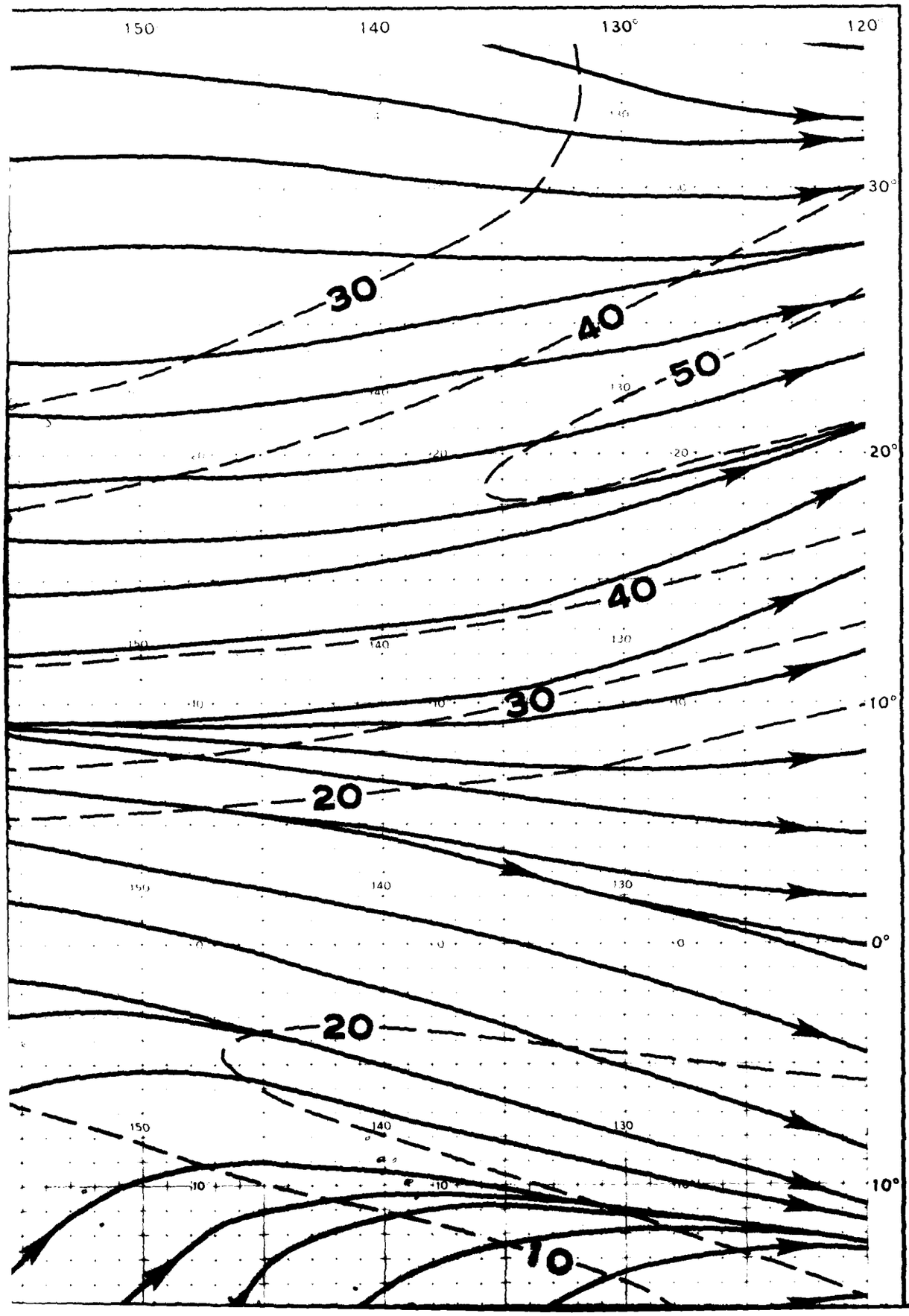


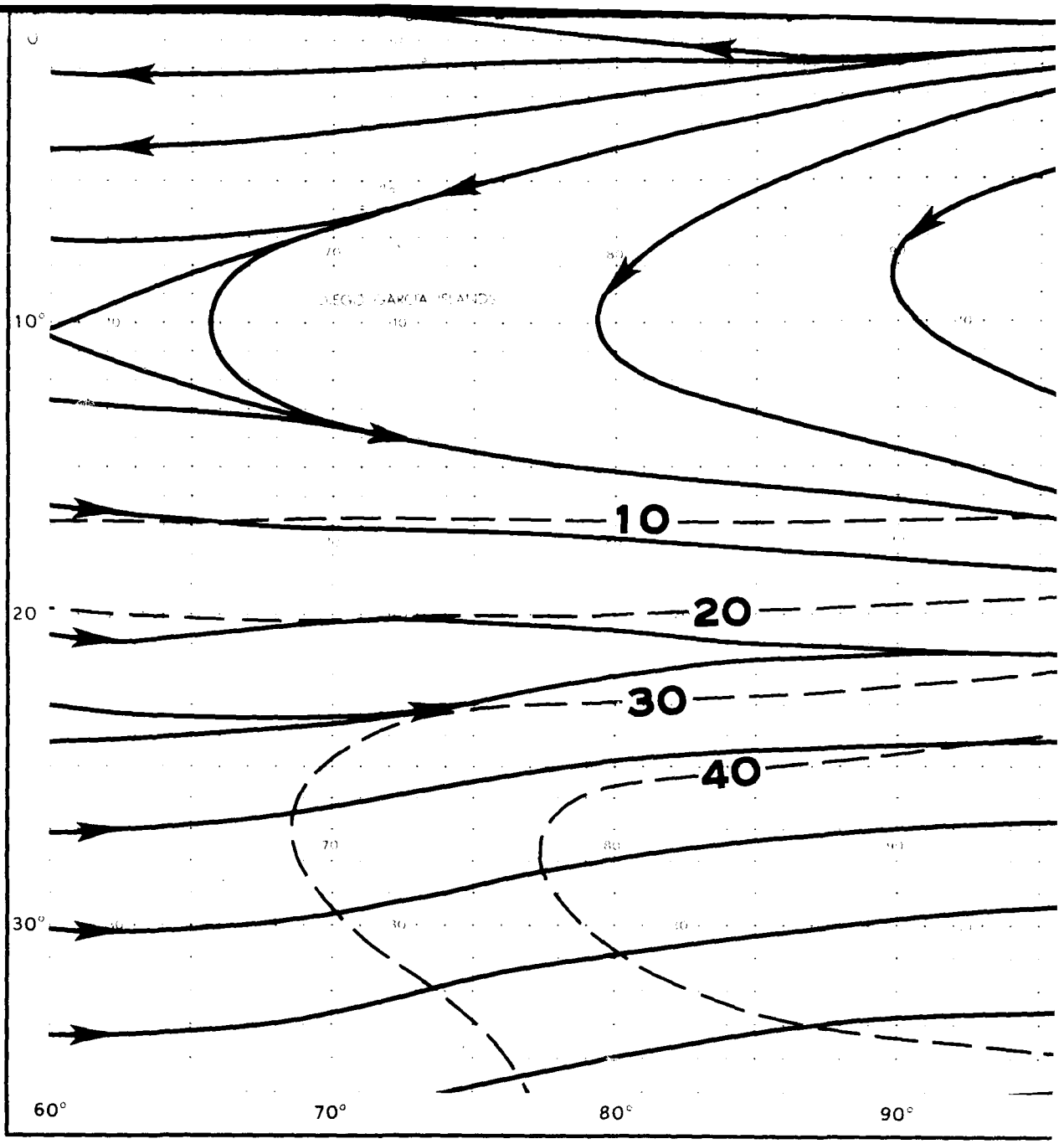
# NDS over GLOBAL TROPICS – APRI



# - APRIL 300mb

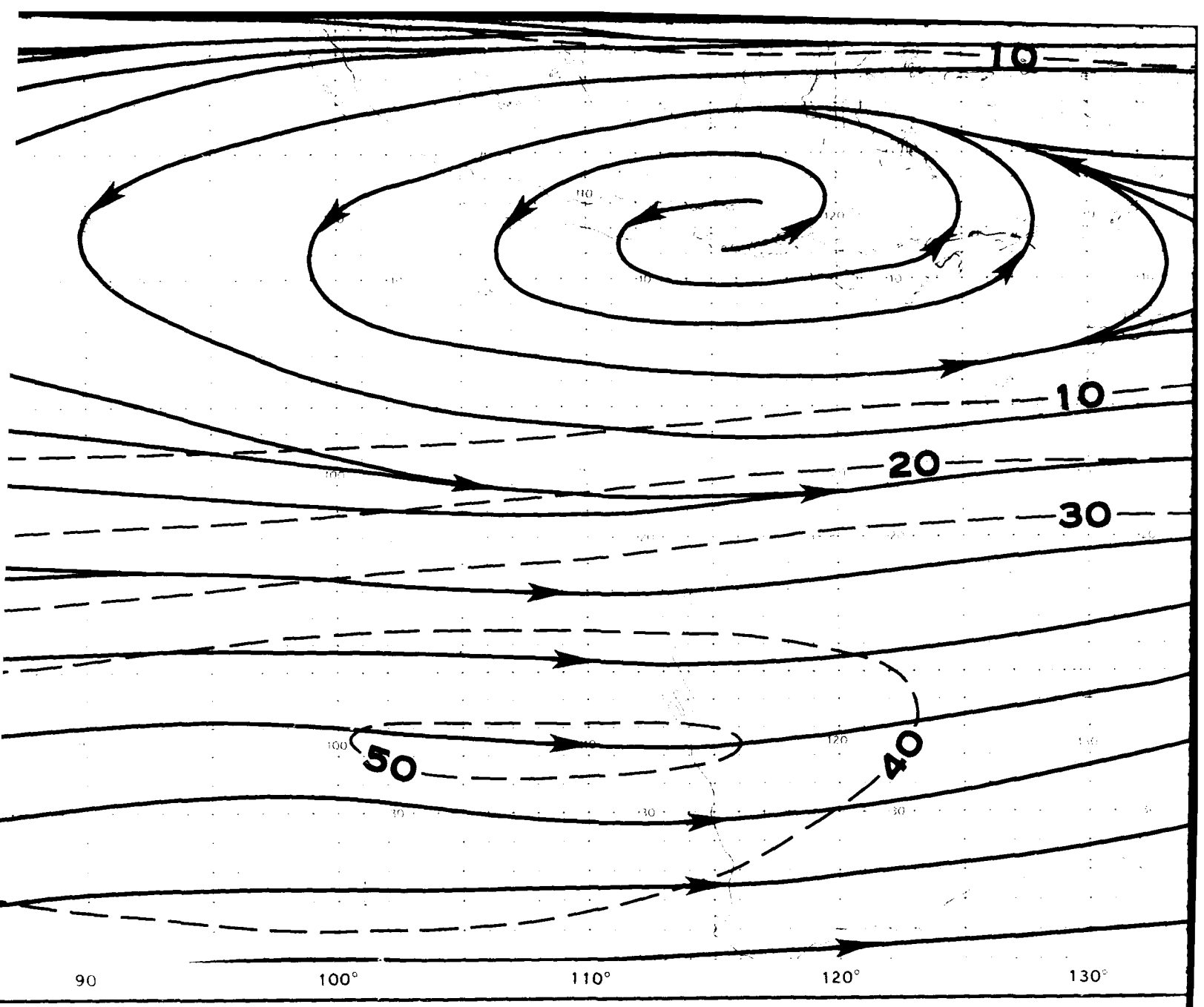

180
170°
160
150°
140
30
30
JOHNSTON ISLAND
20
20
20
PHOENIX ISLANDS
SAMOA


150
140
130°
120
30°
20°
10°
0°
30
40
50
40
30
20
20
10

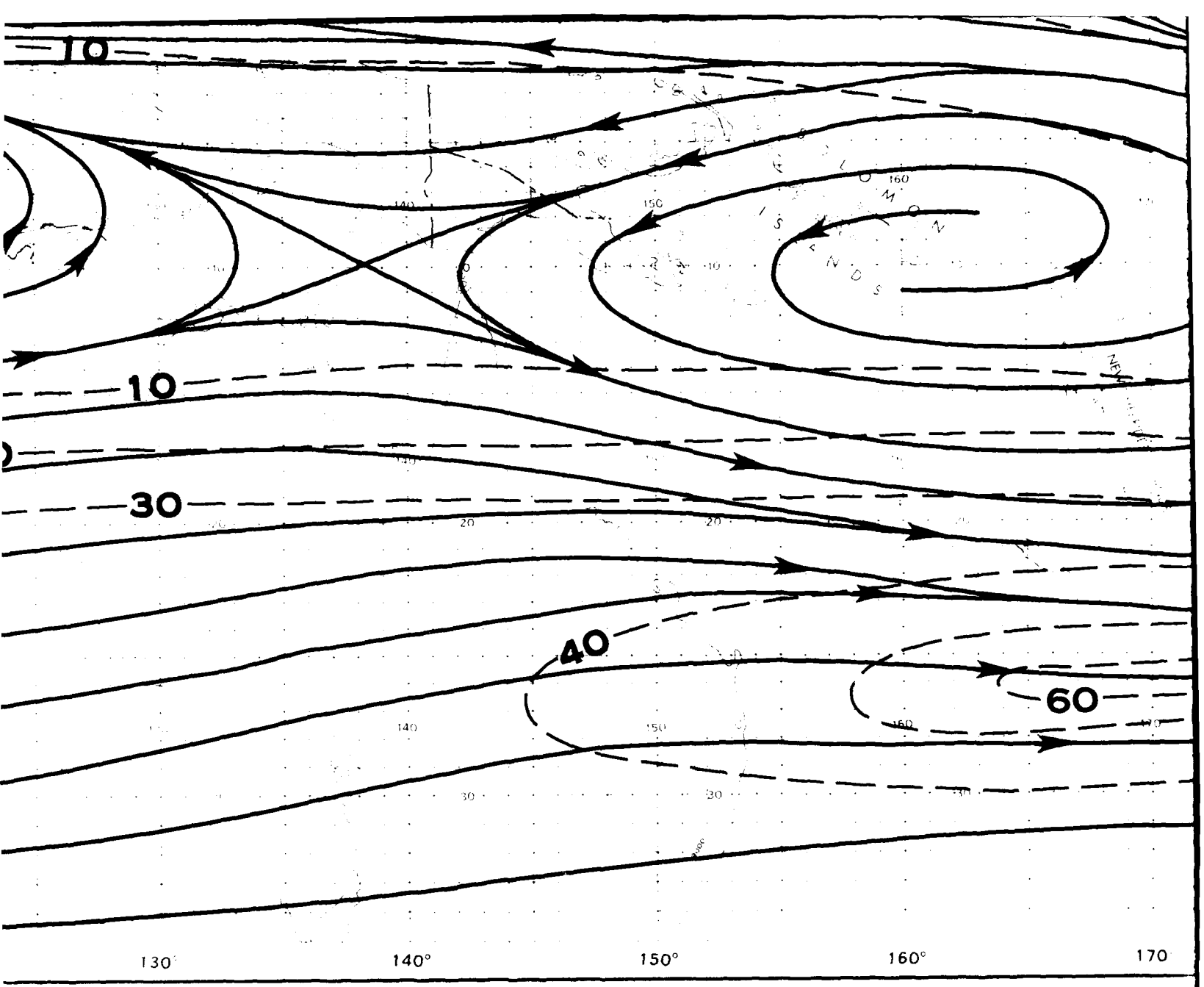



PUBLISHED BY THE DEFENSE MAPPING AGENCY AEROSPACE CENTER
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EDITION 1 JANUARY 1983

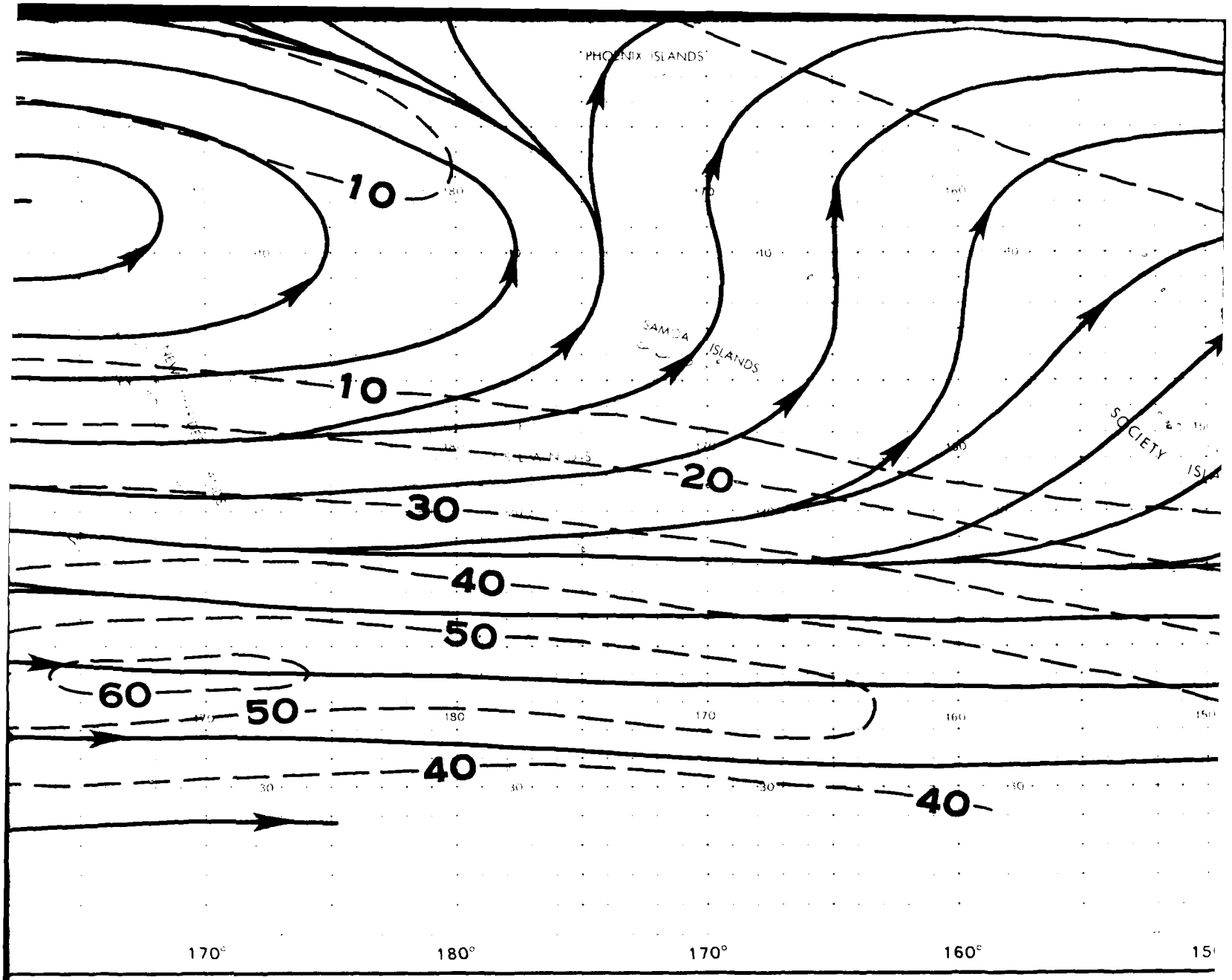
ANALYZED MEAN DATA
PROVIDED BY JAMES C. SADLER
UNIVERSITY OF HAWAII




The representation of international boundaries on this chart is not necessarily authoritative

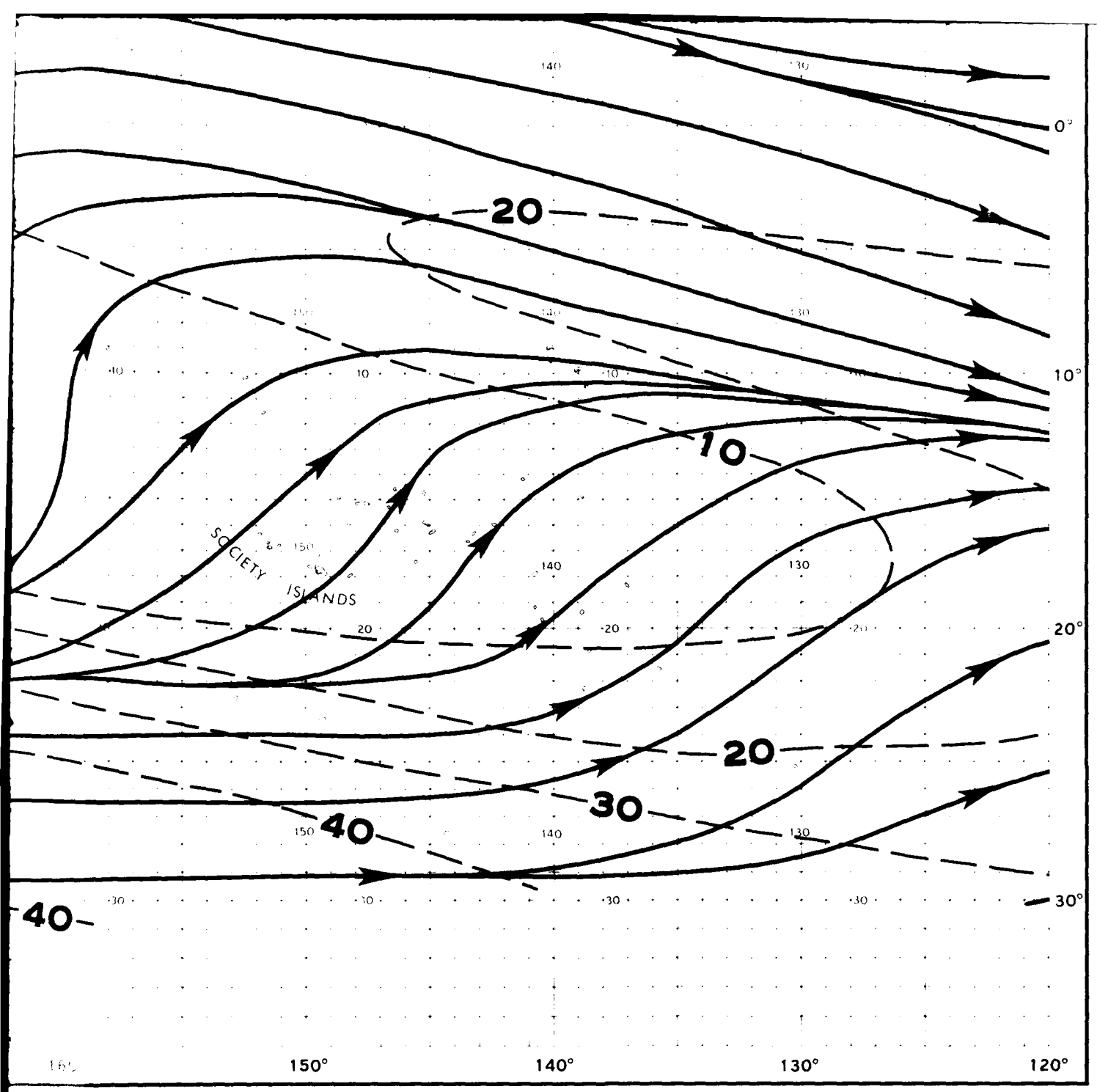



MERCATOR PROJECTION
SCALE 1:20,000,000
TRUE AT 22° 30'N AND 22° 30'S

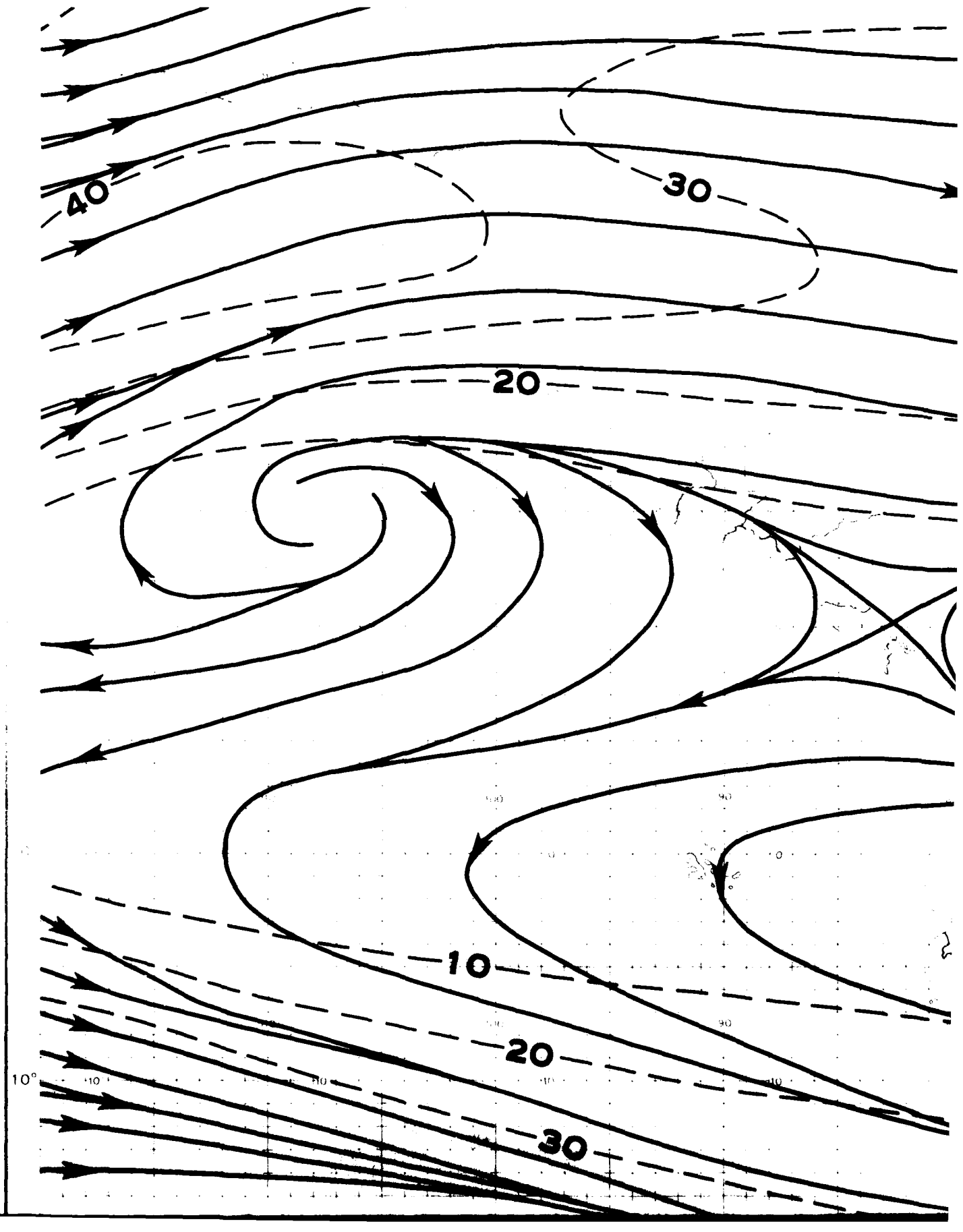



Lithographed by DMAAC 6 83

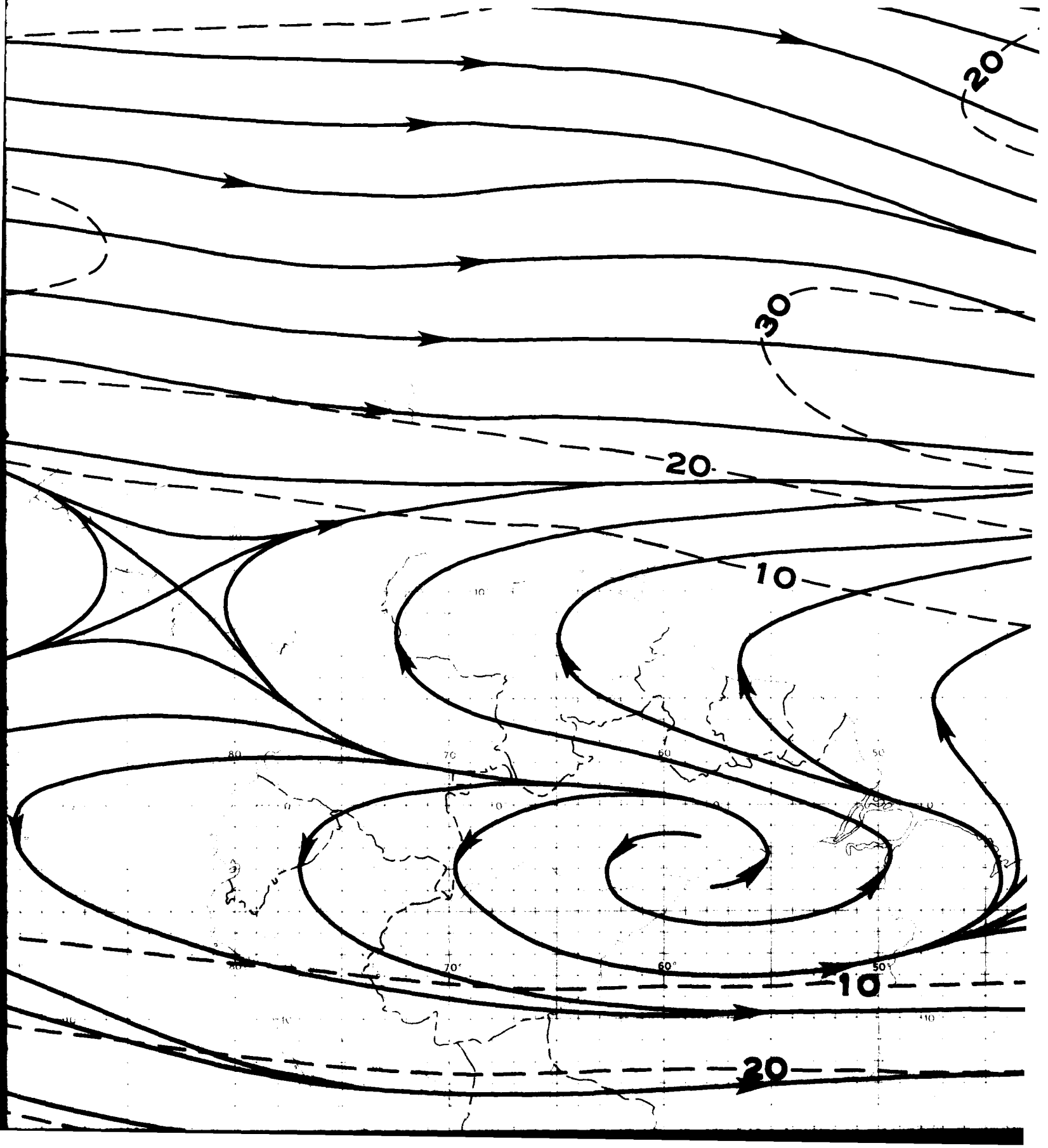
9



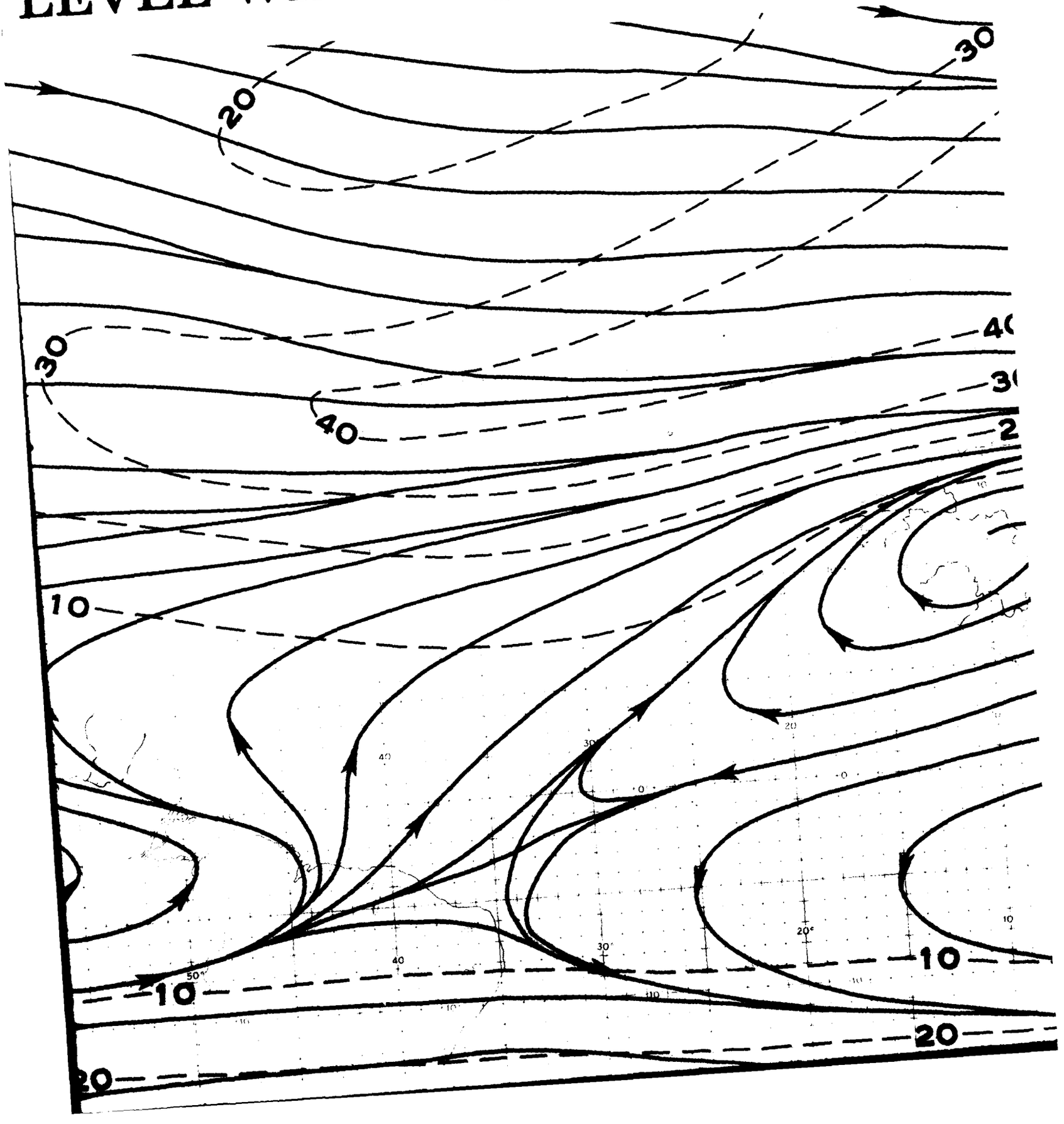

**MULW-304E**


40
30
20
10
20
30
10°

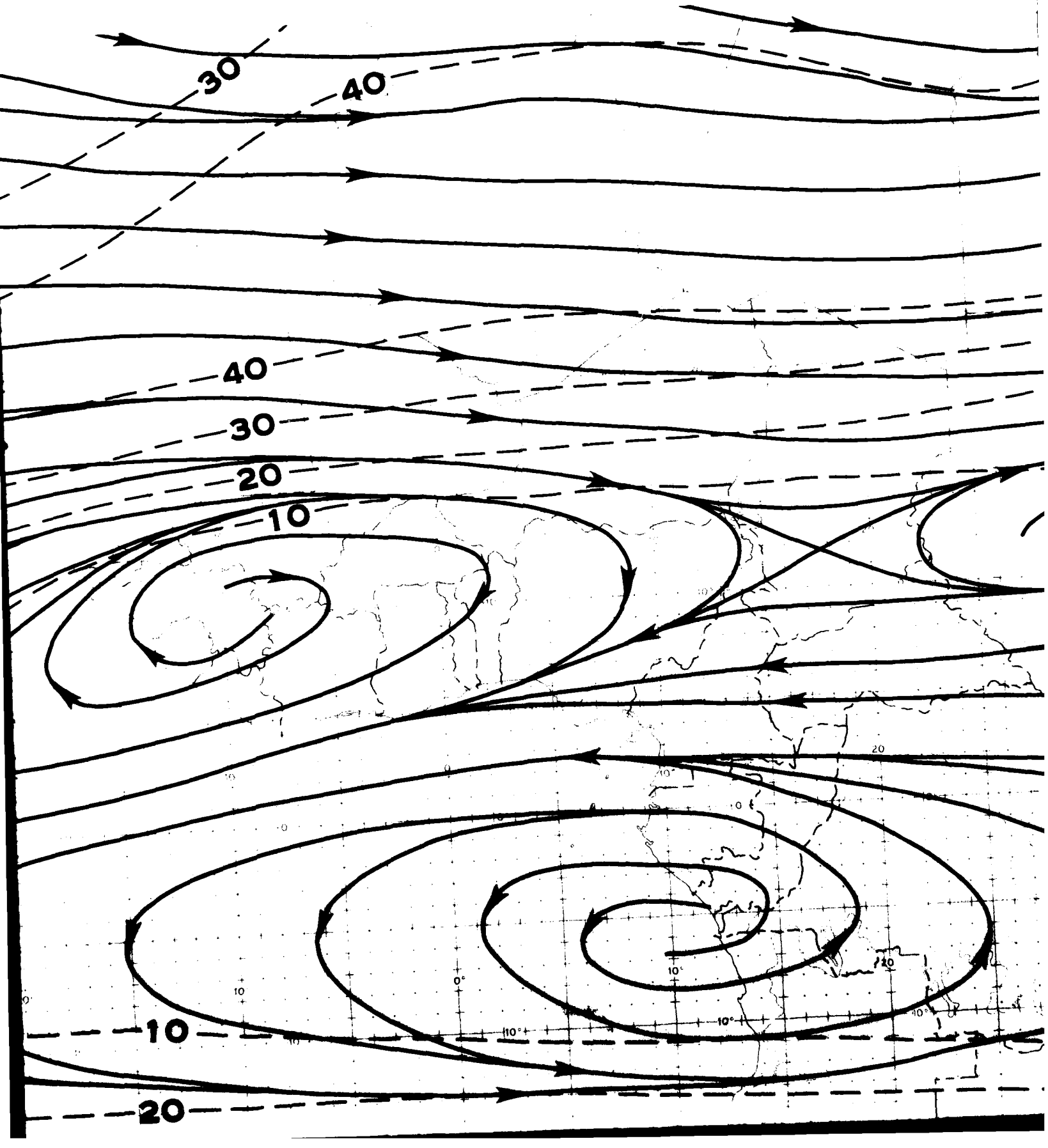
# MEAN UPPER LEVEL W



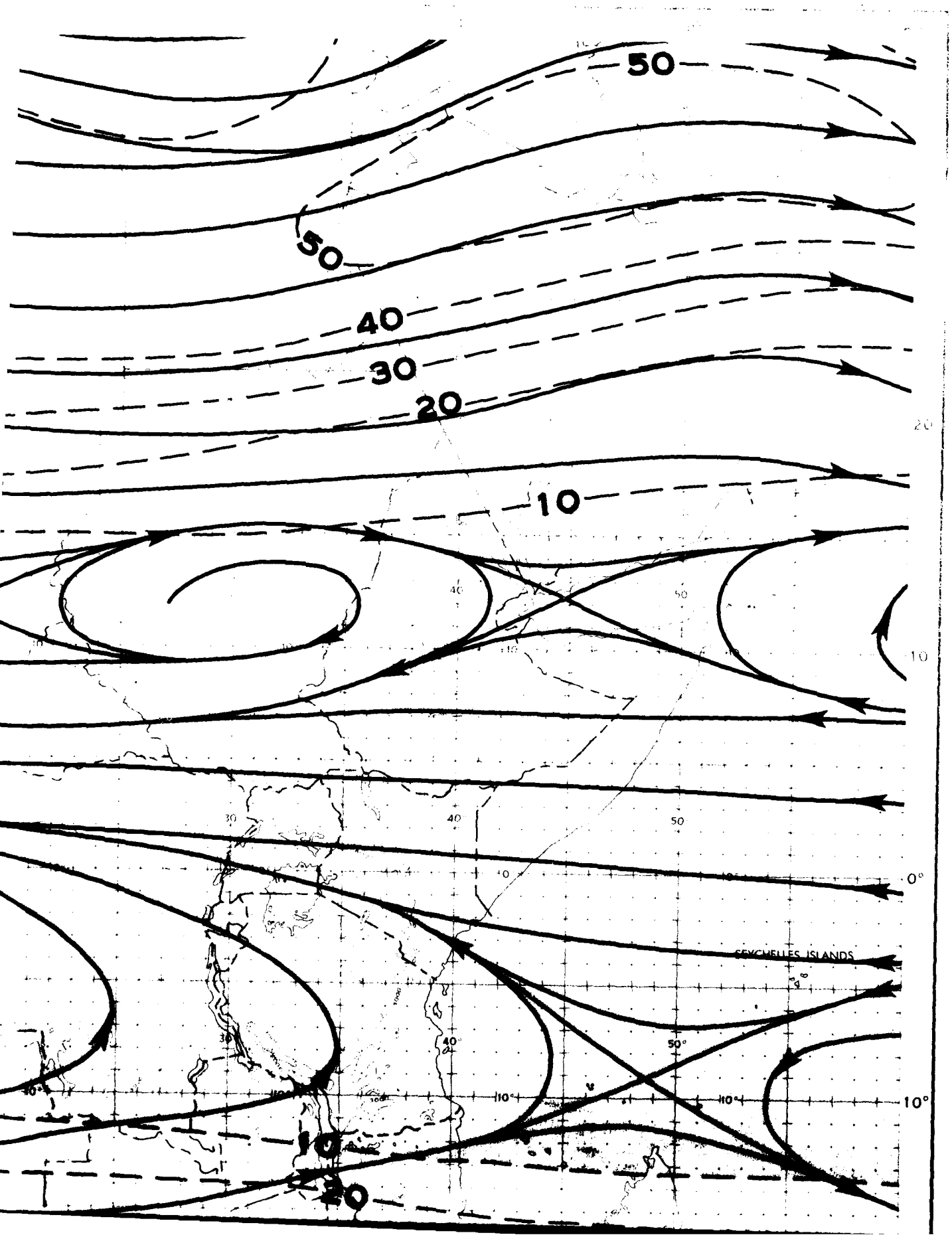
# LEVEL WINDS over GLOBAL TROI

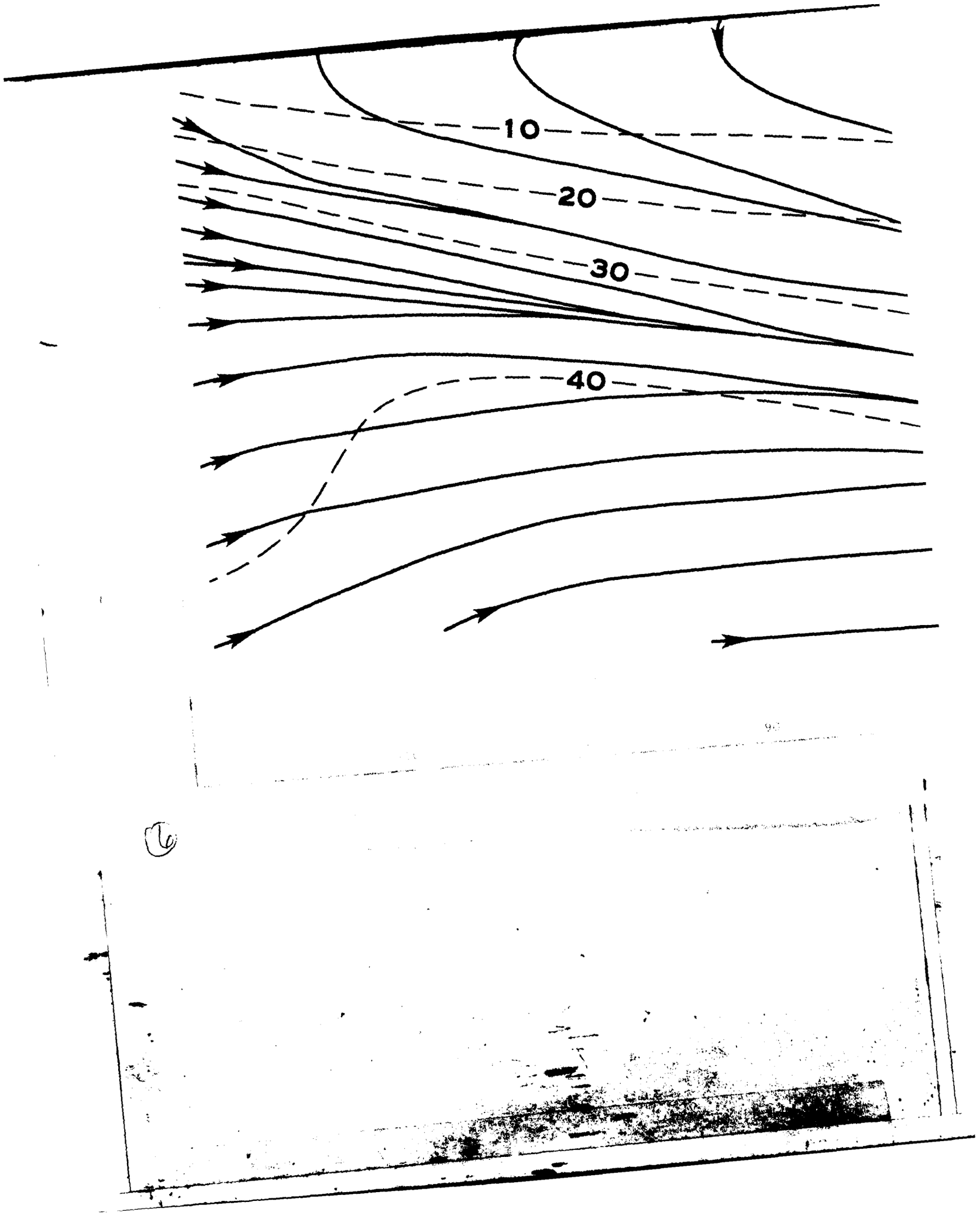


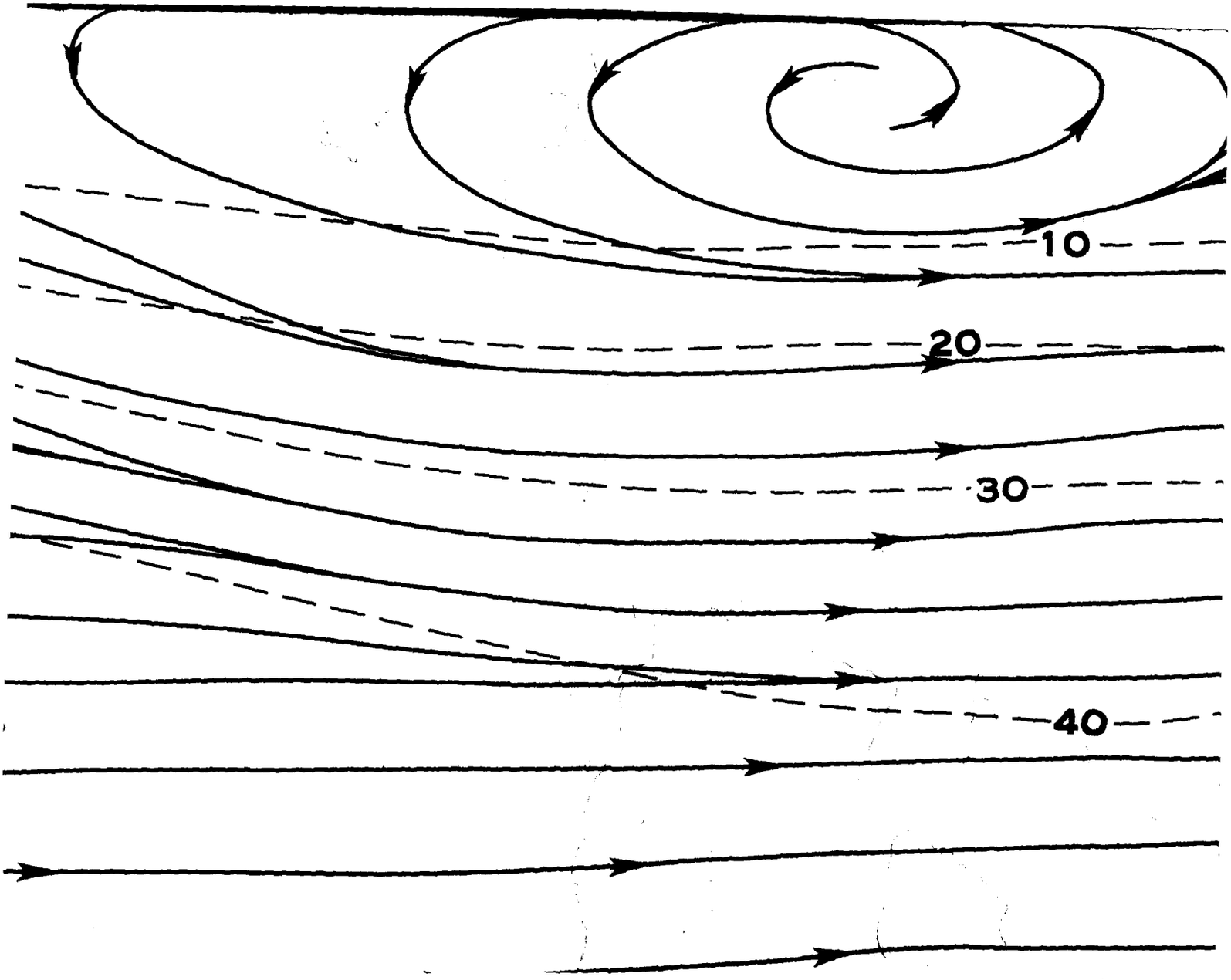
# AL TROPICS - MAY 300mb (4)

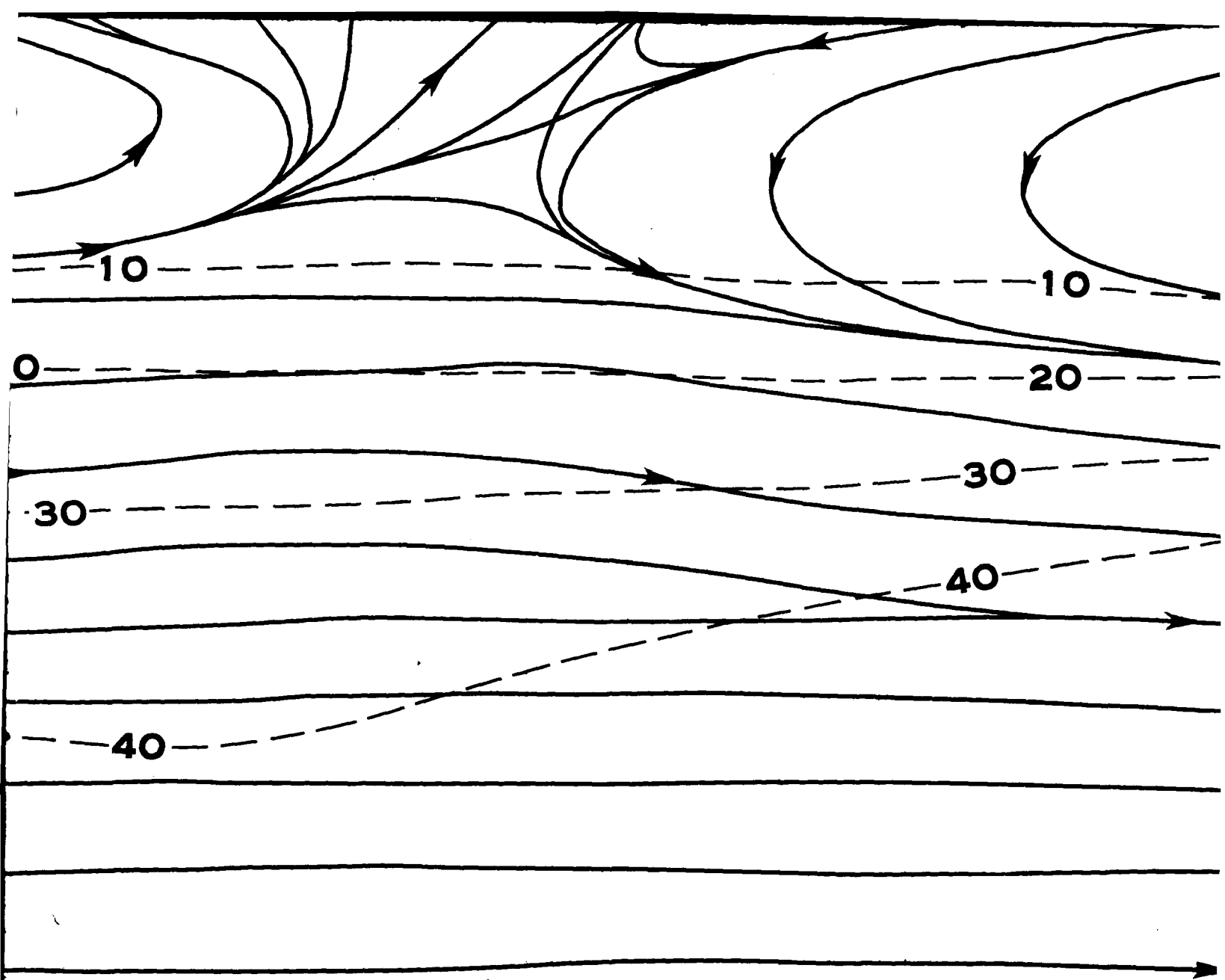


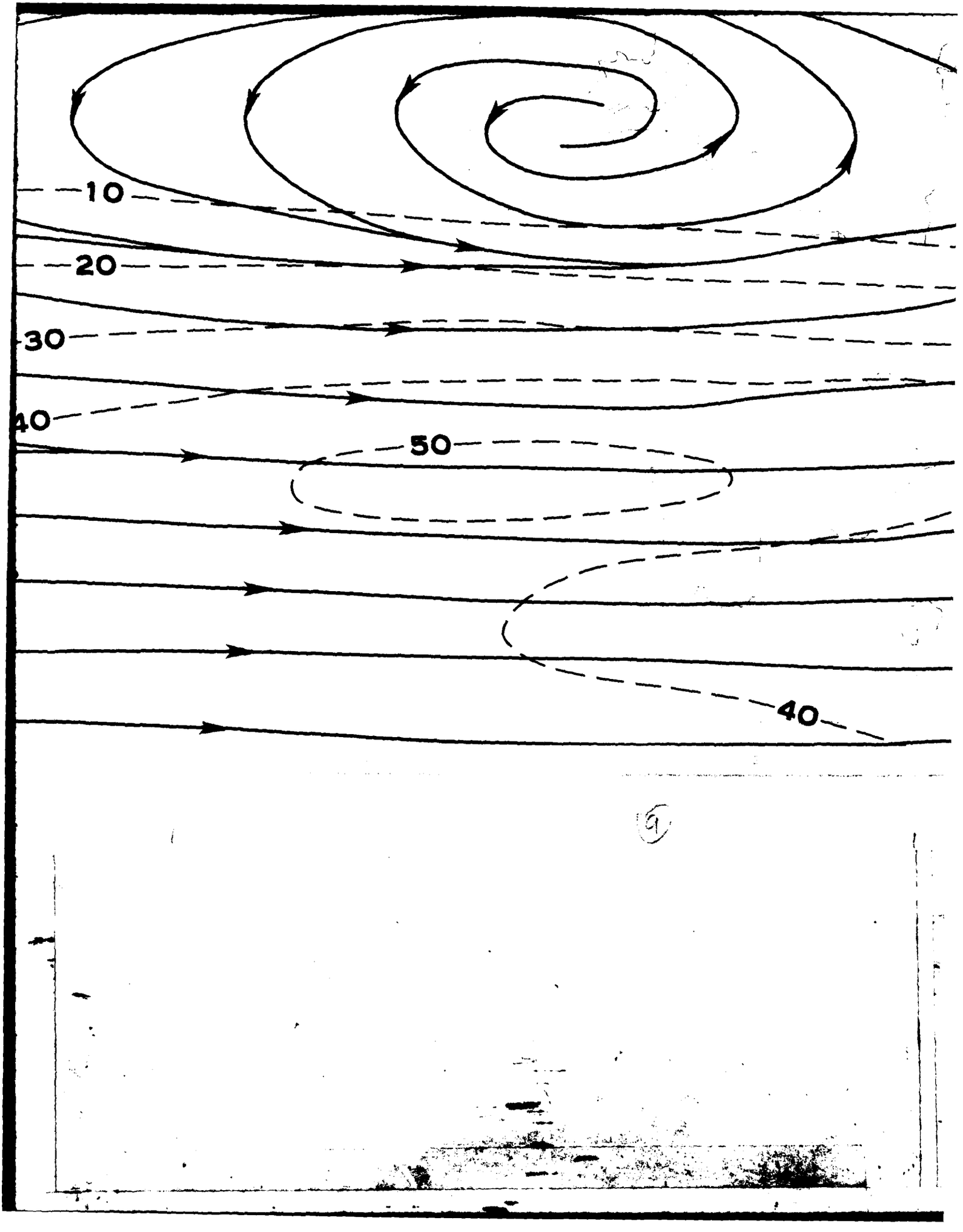
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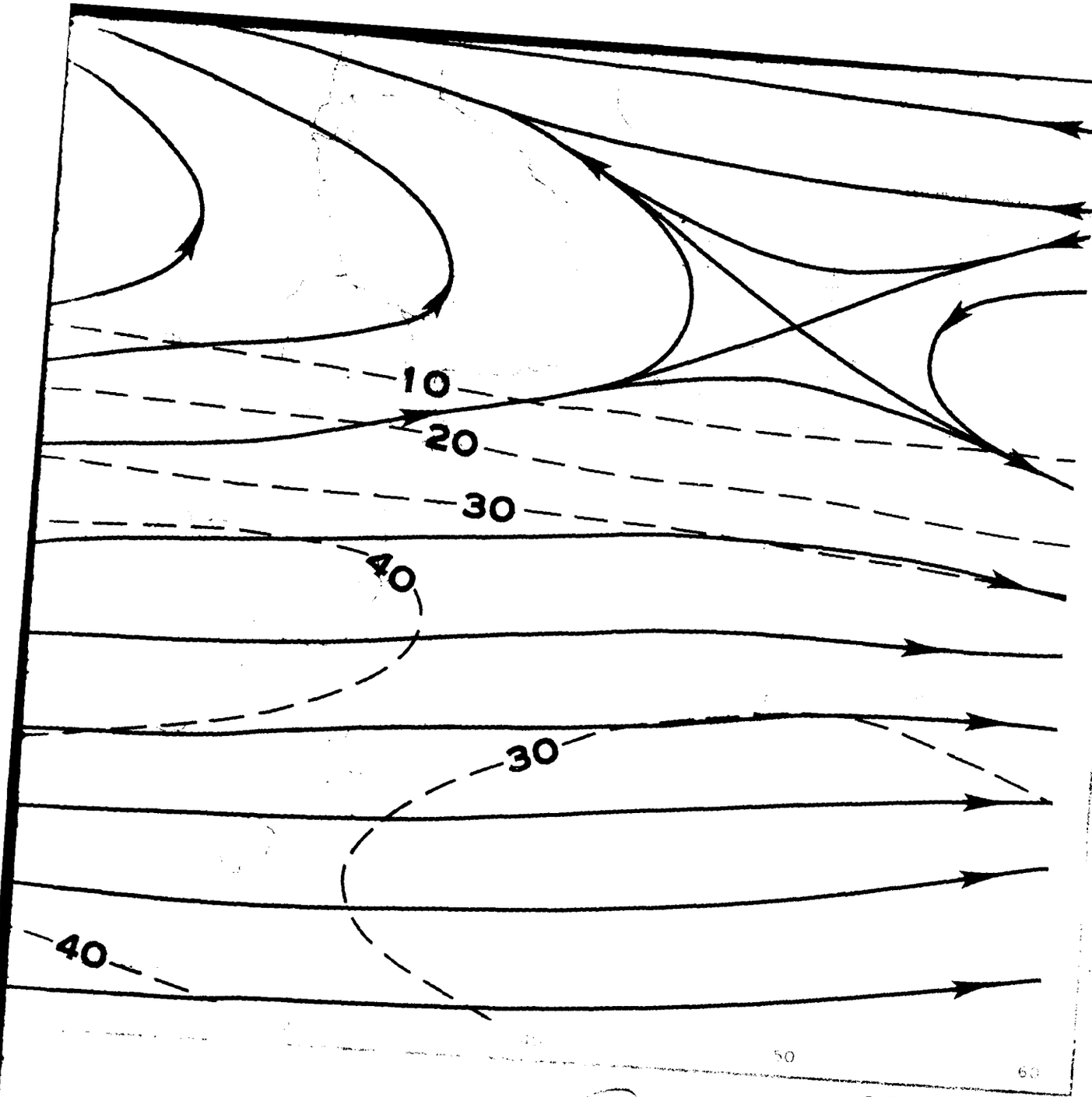



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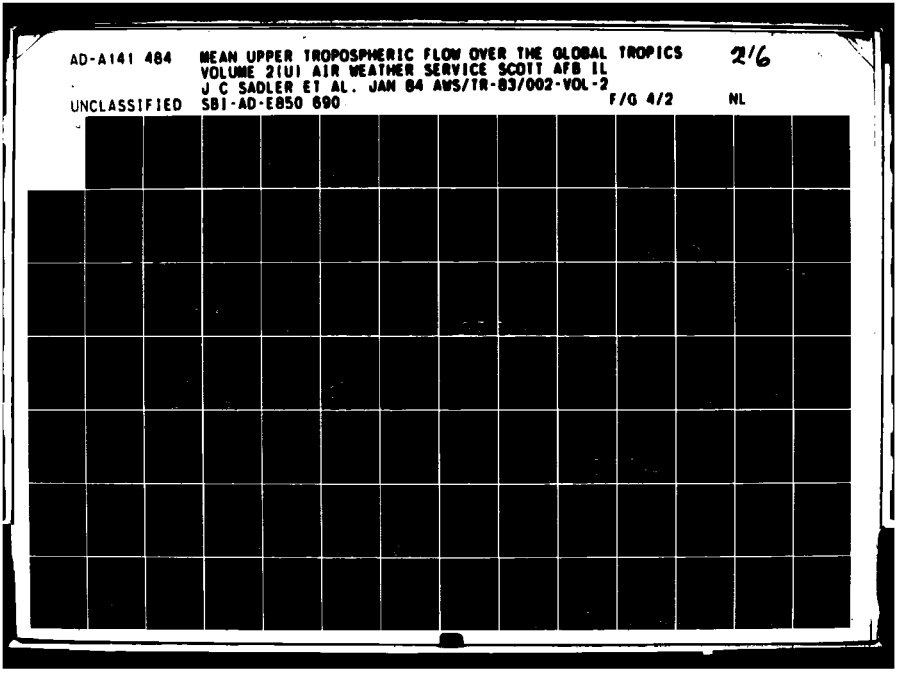


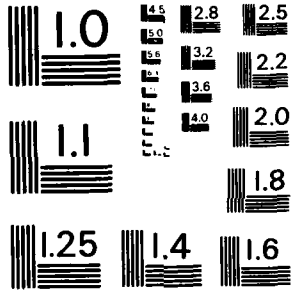

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MULW-305W

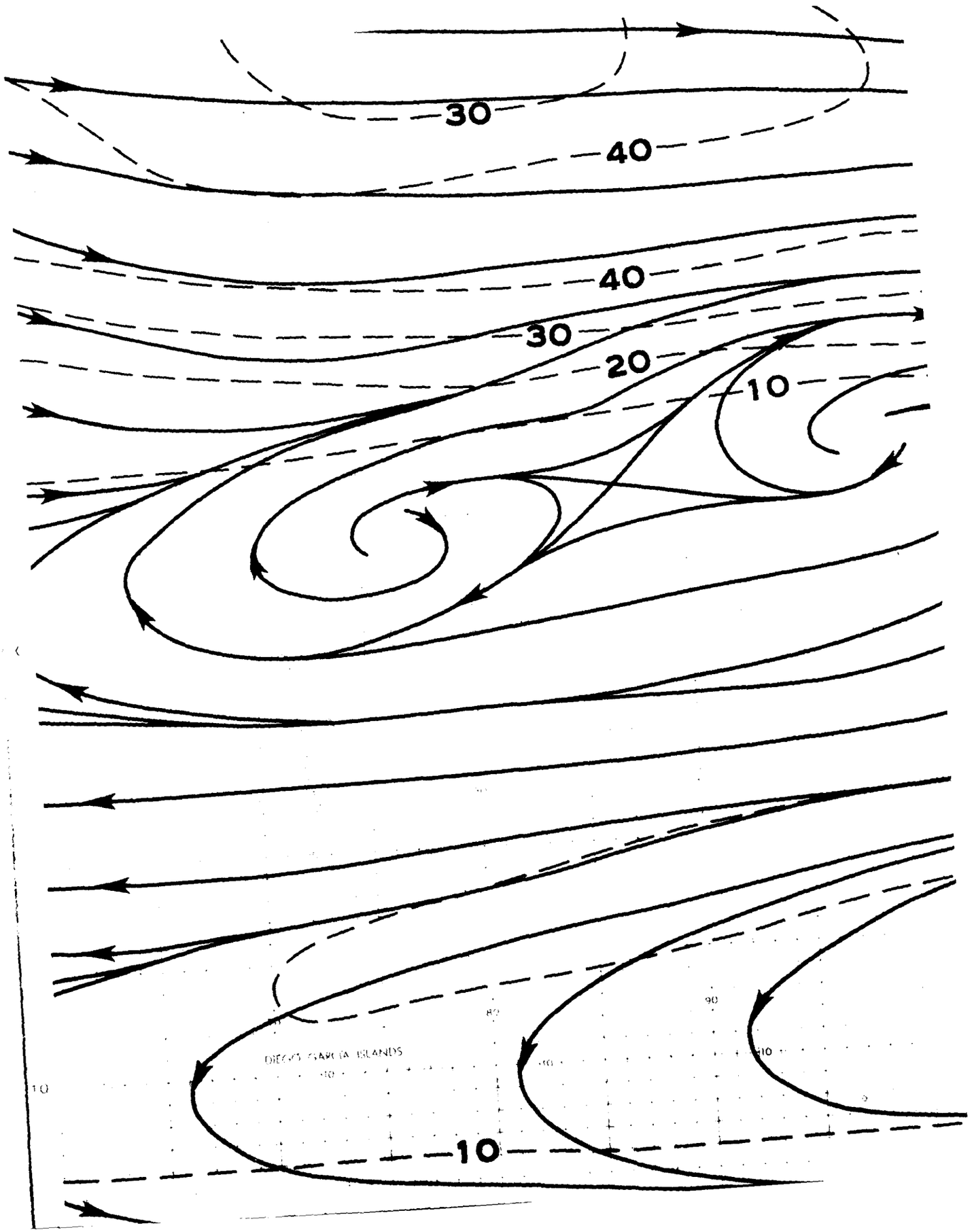
AD-A141 484 MEAN UPPER TROPOSPHERIC FLOW OVER THE GLOBAL TROPICS VOLUME 2(U) AIR WEATHER SERVICE SCOTT AFB IL J C SADLER ET AL. JAN 84 AWS/TR-83/002-VOL-2 2/6

UNCLASSIFIED SBI-AD-E850 690 F/G 4/2 NL

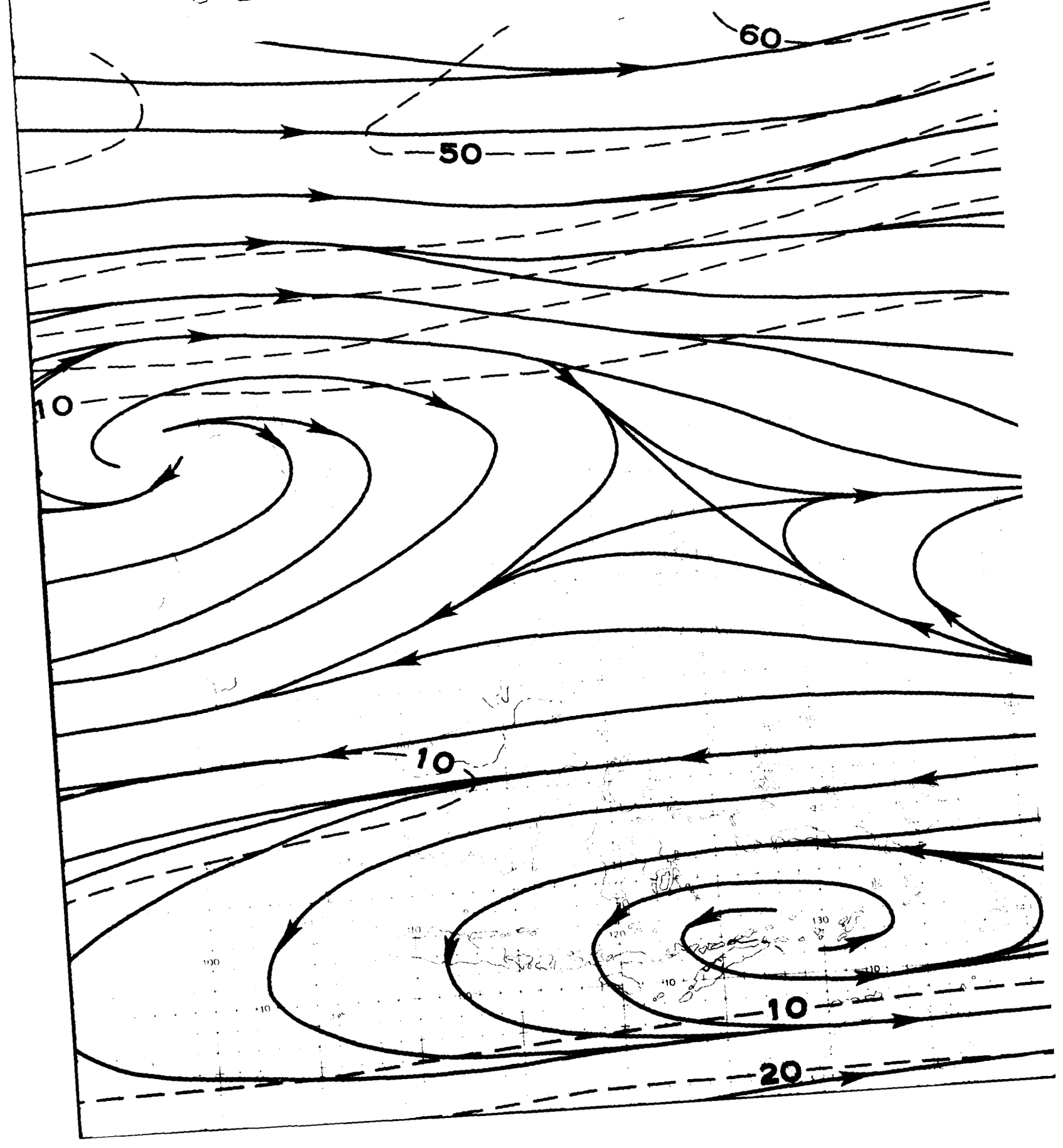




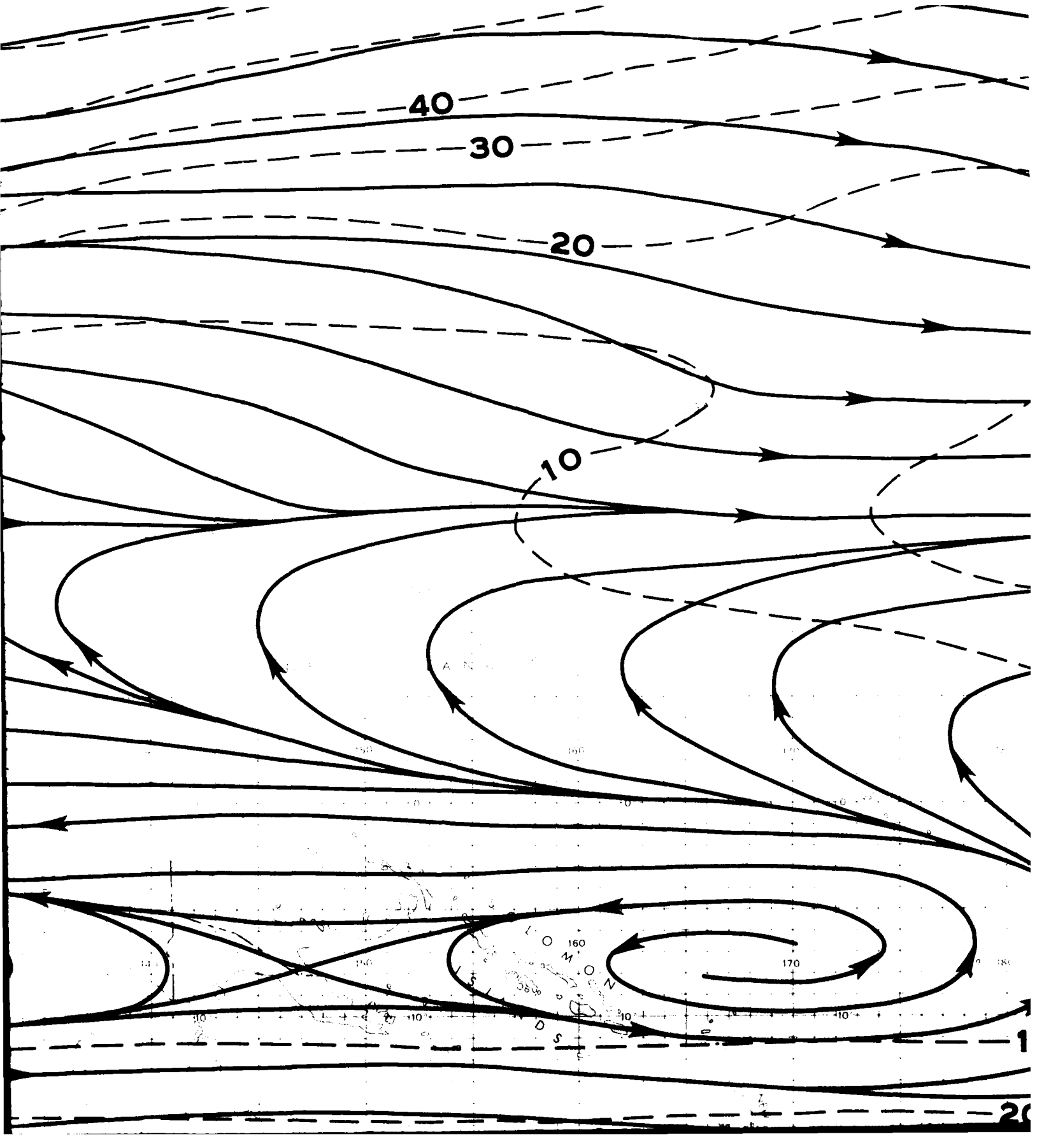

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A


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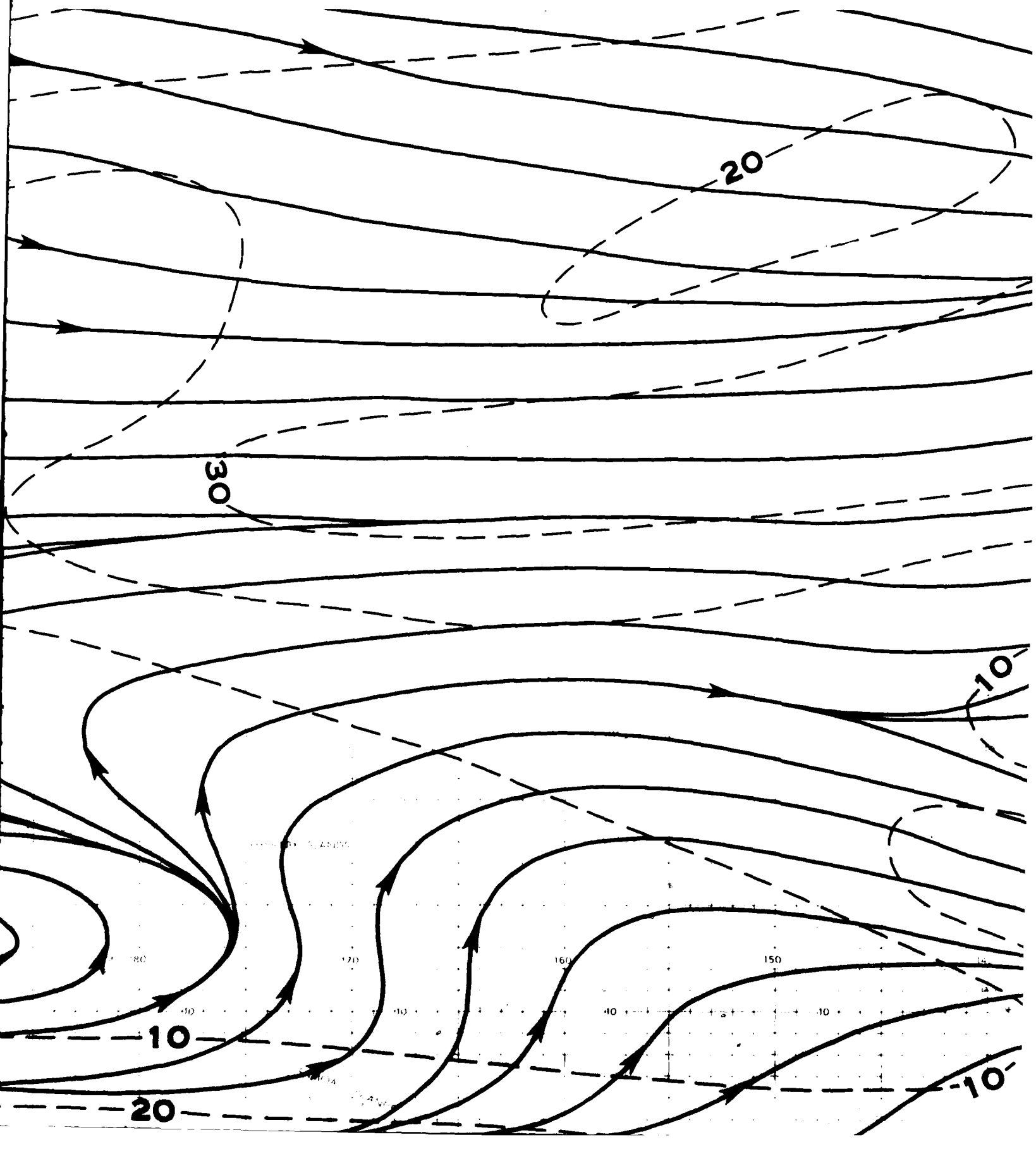
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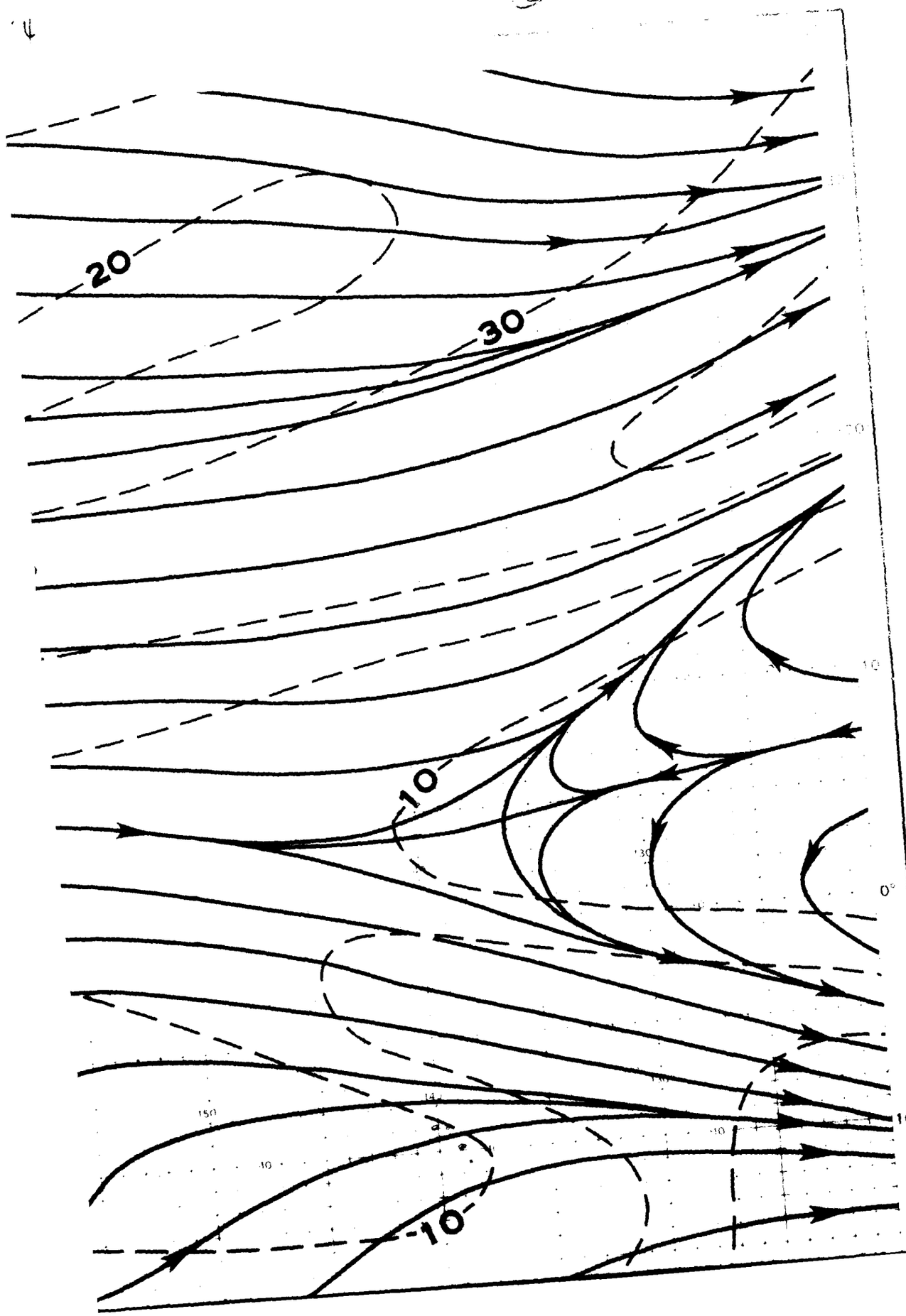


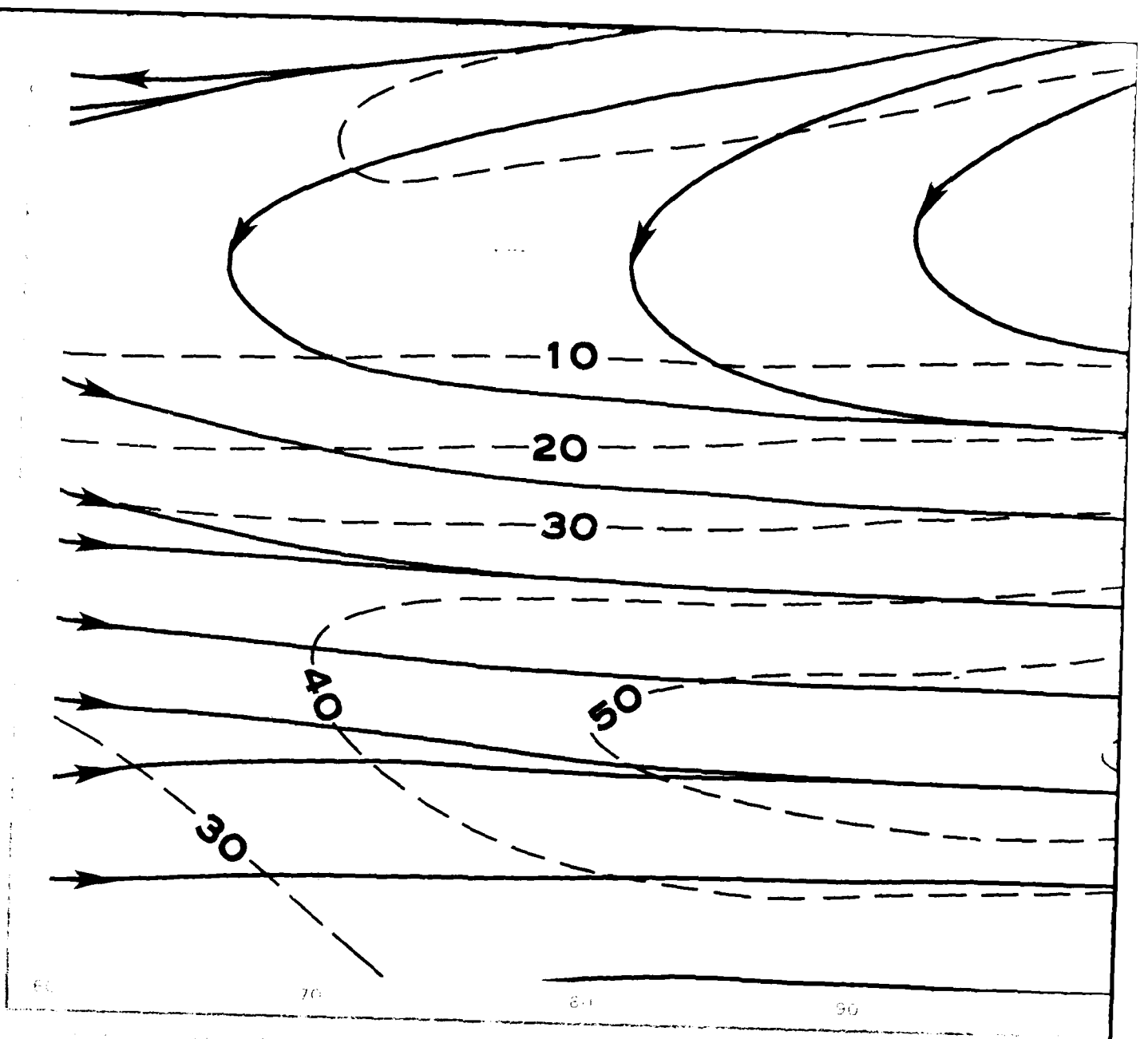
# L WINDS over GLOBAL TROPICS - N

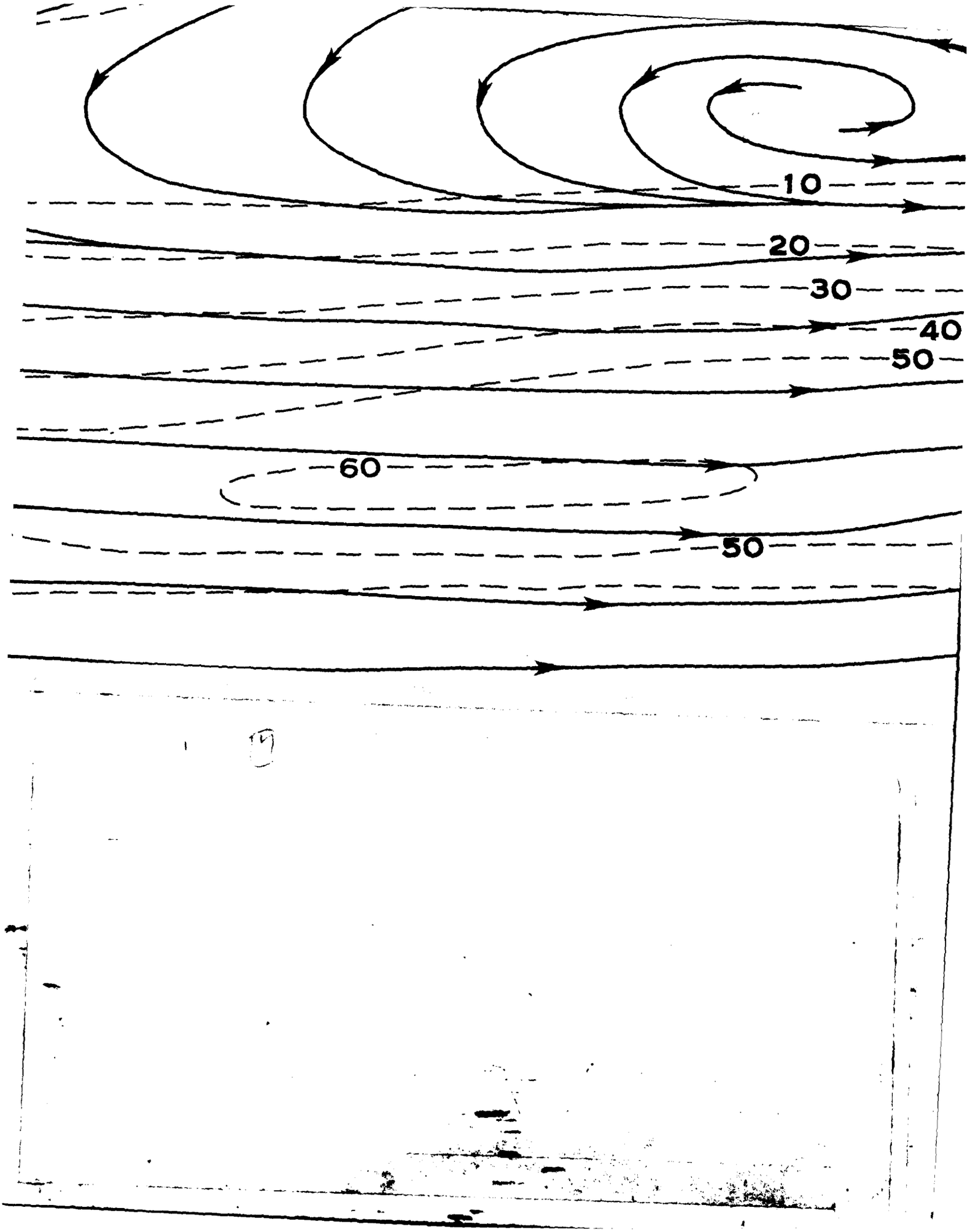


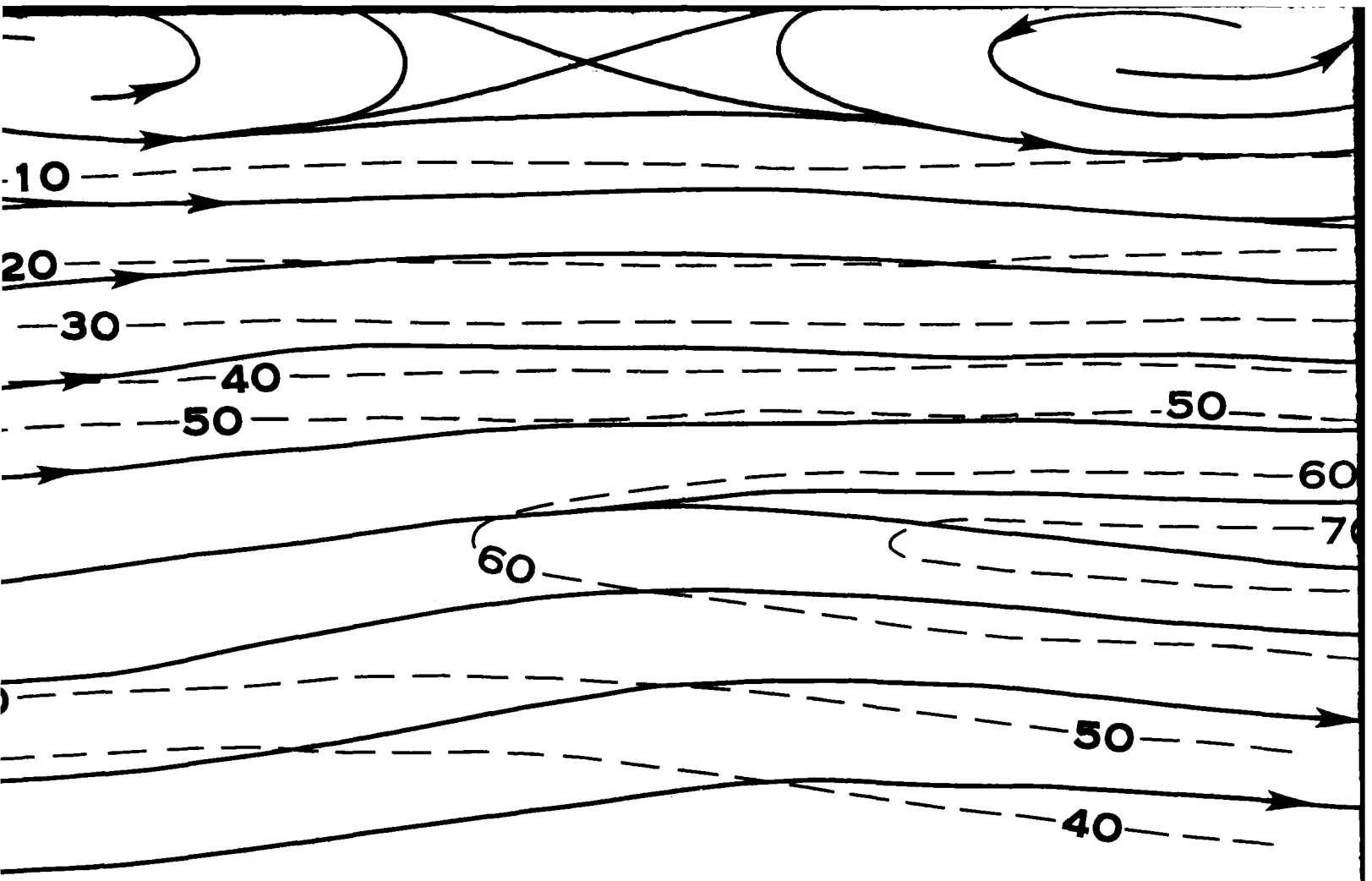
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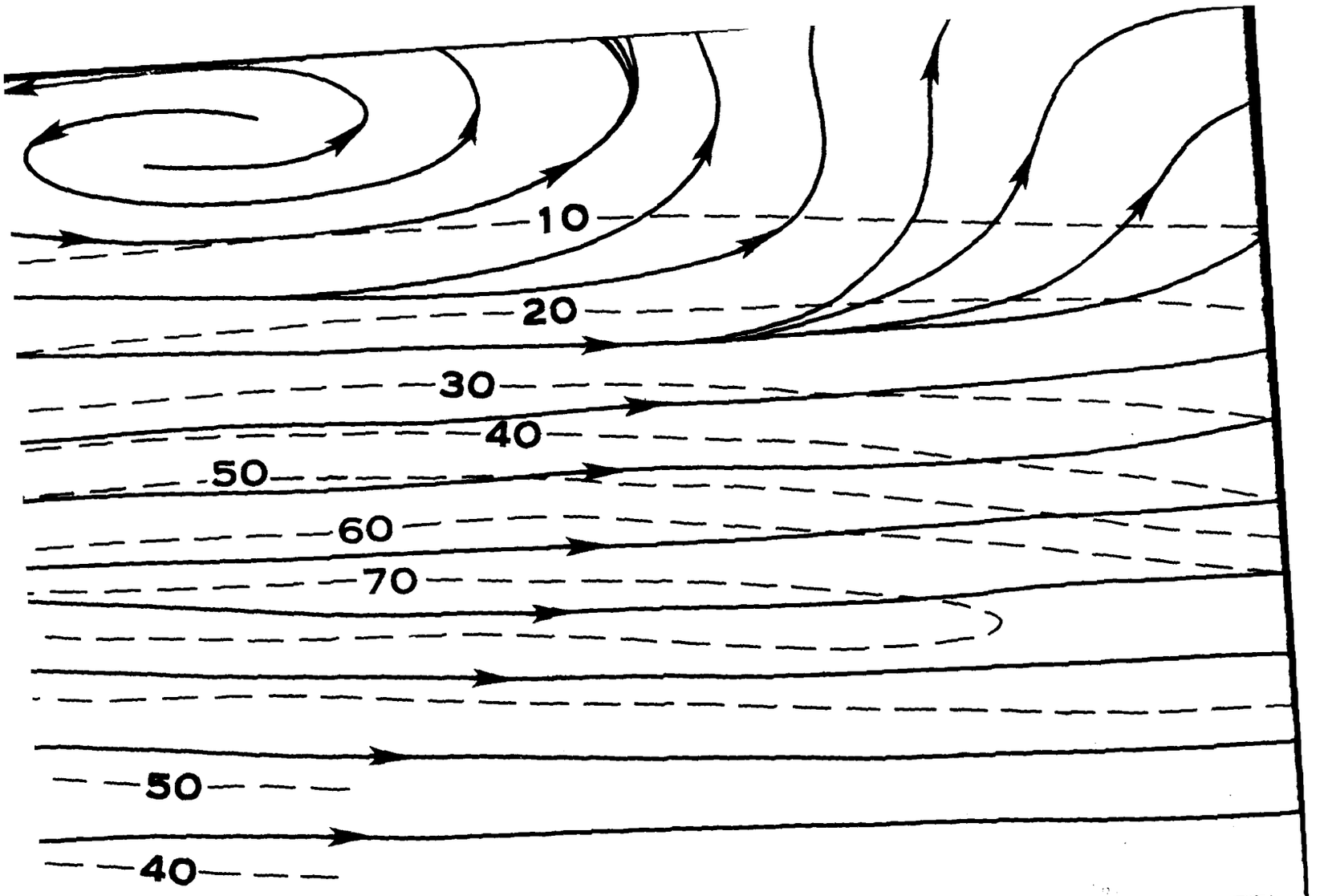


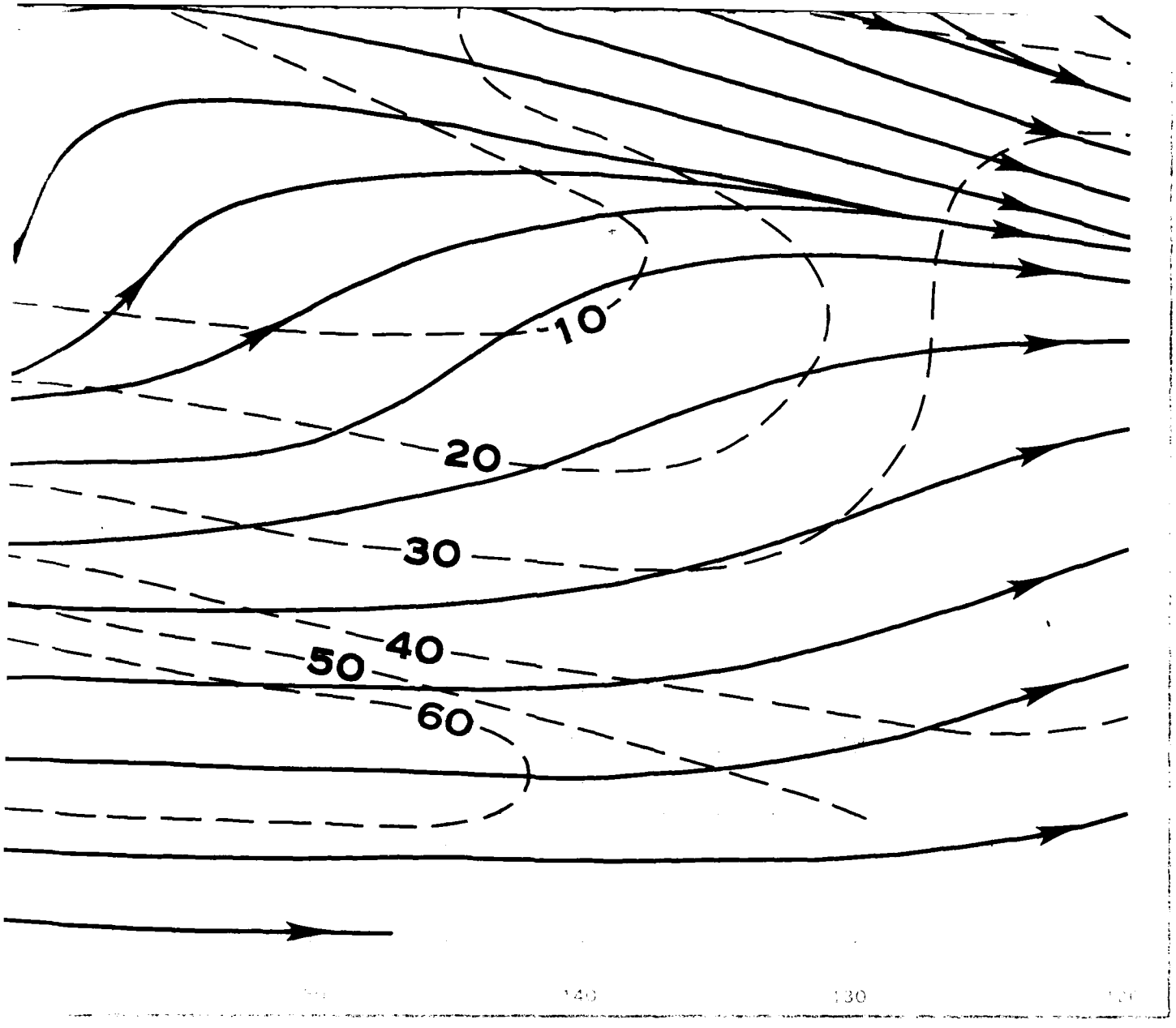

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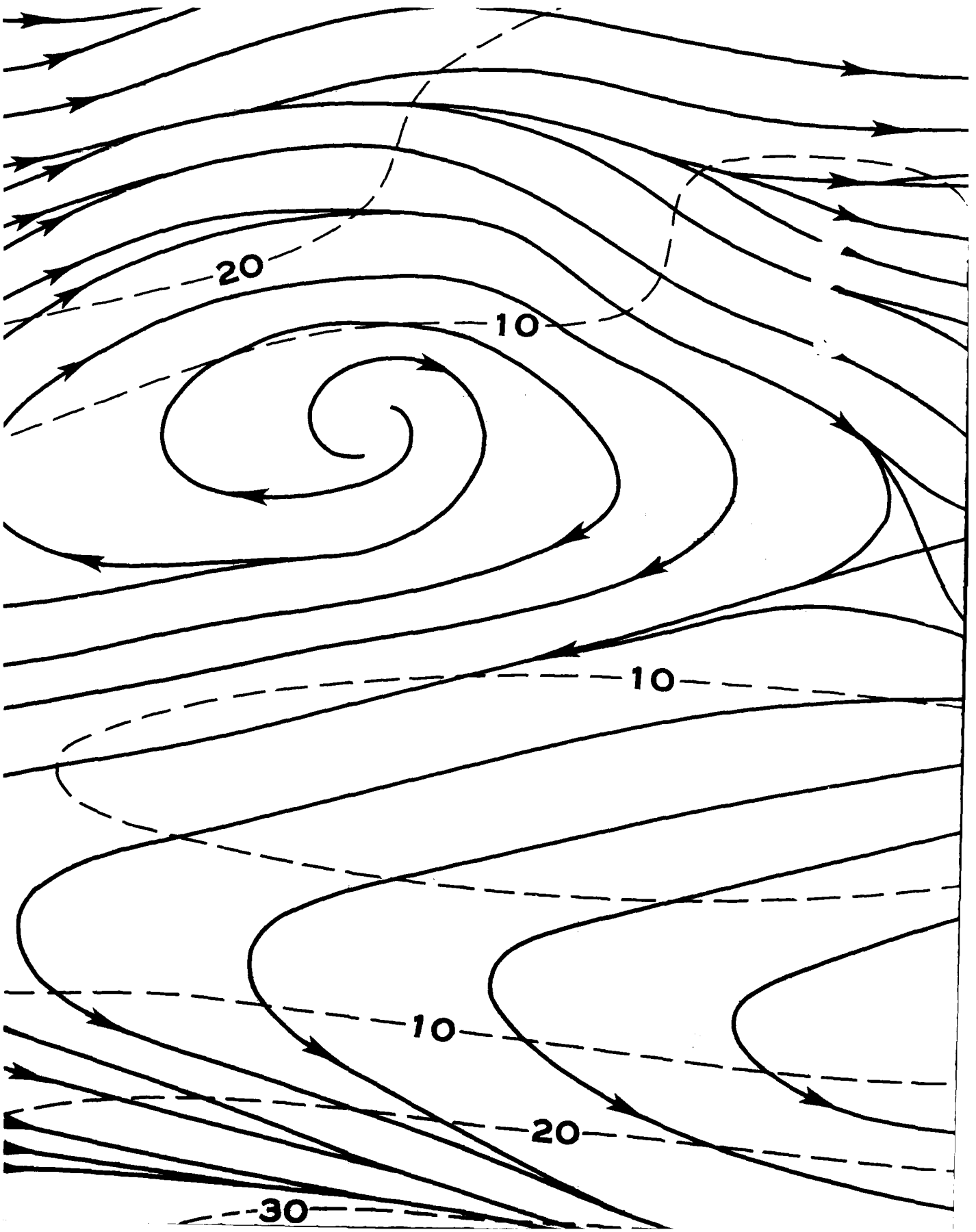

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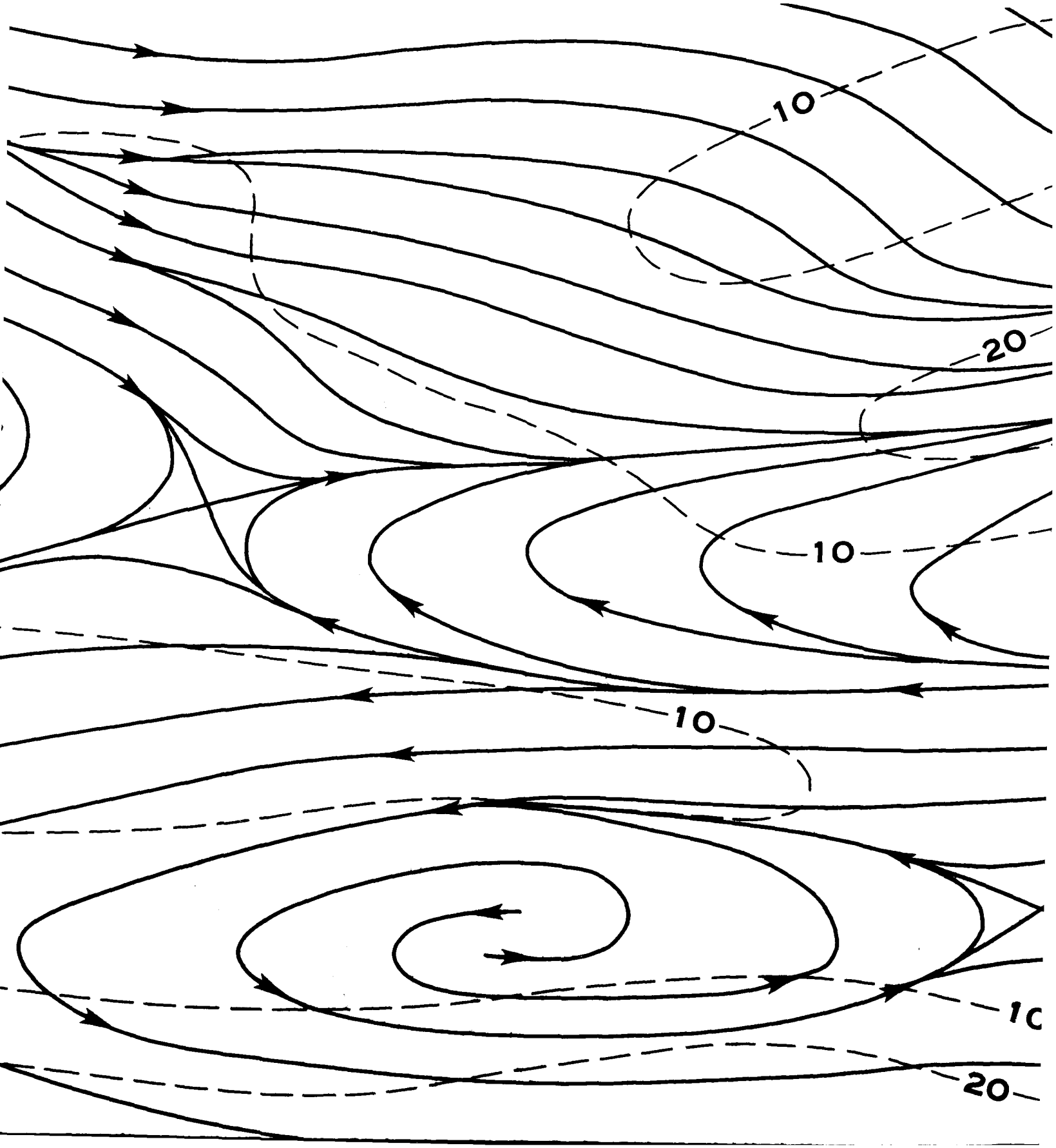

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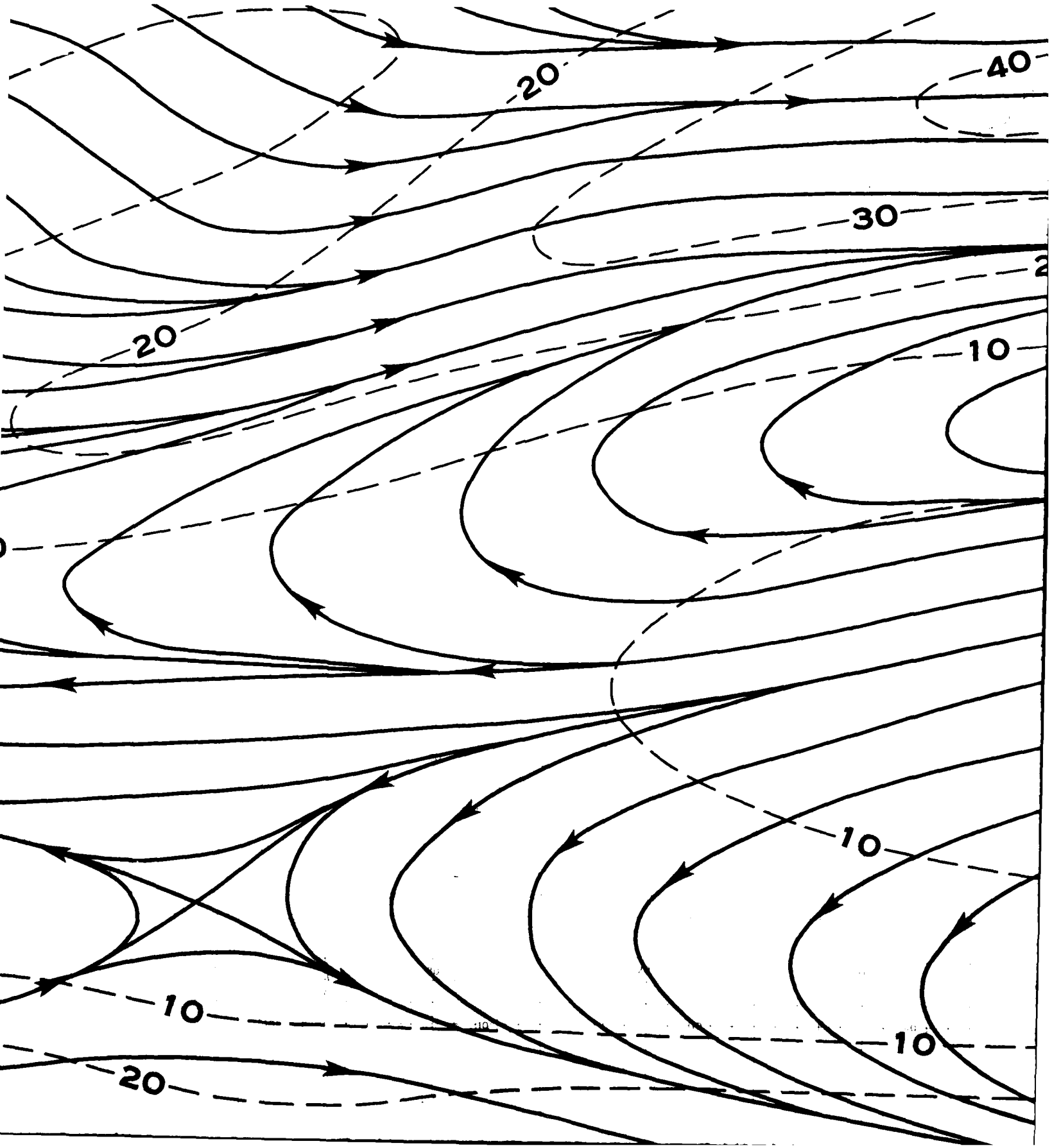

MULW-305E


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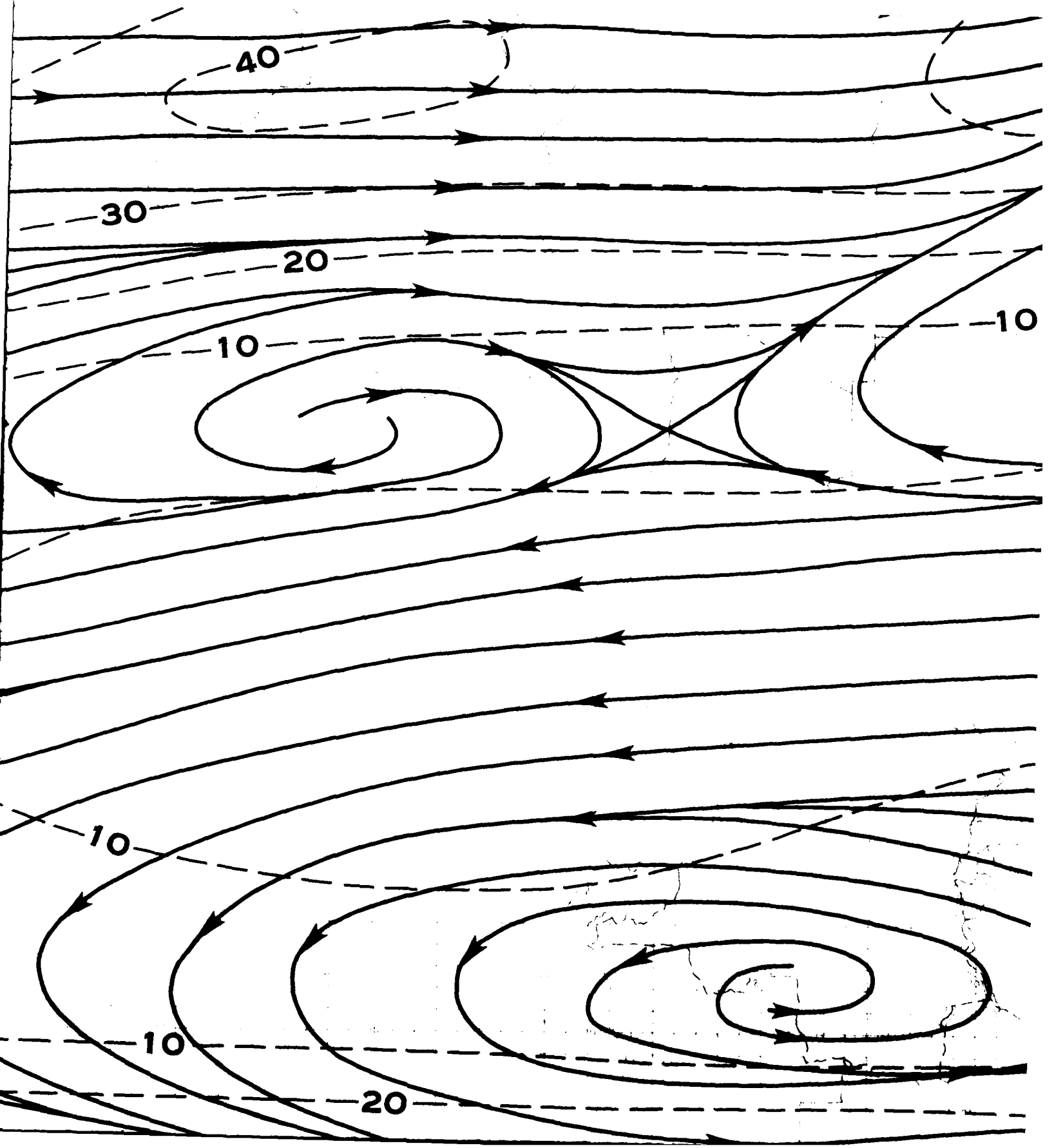
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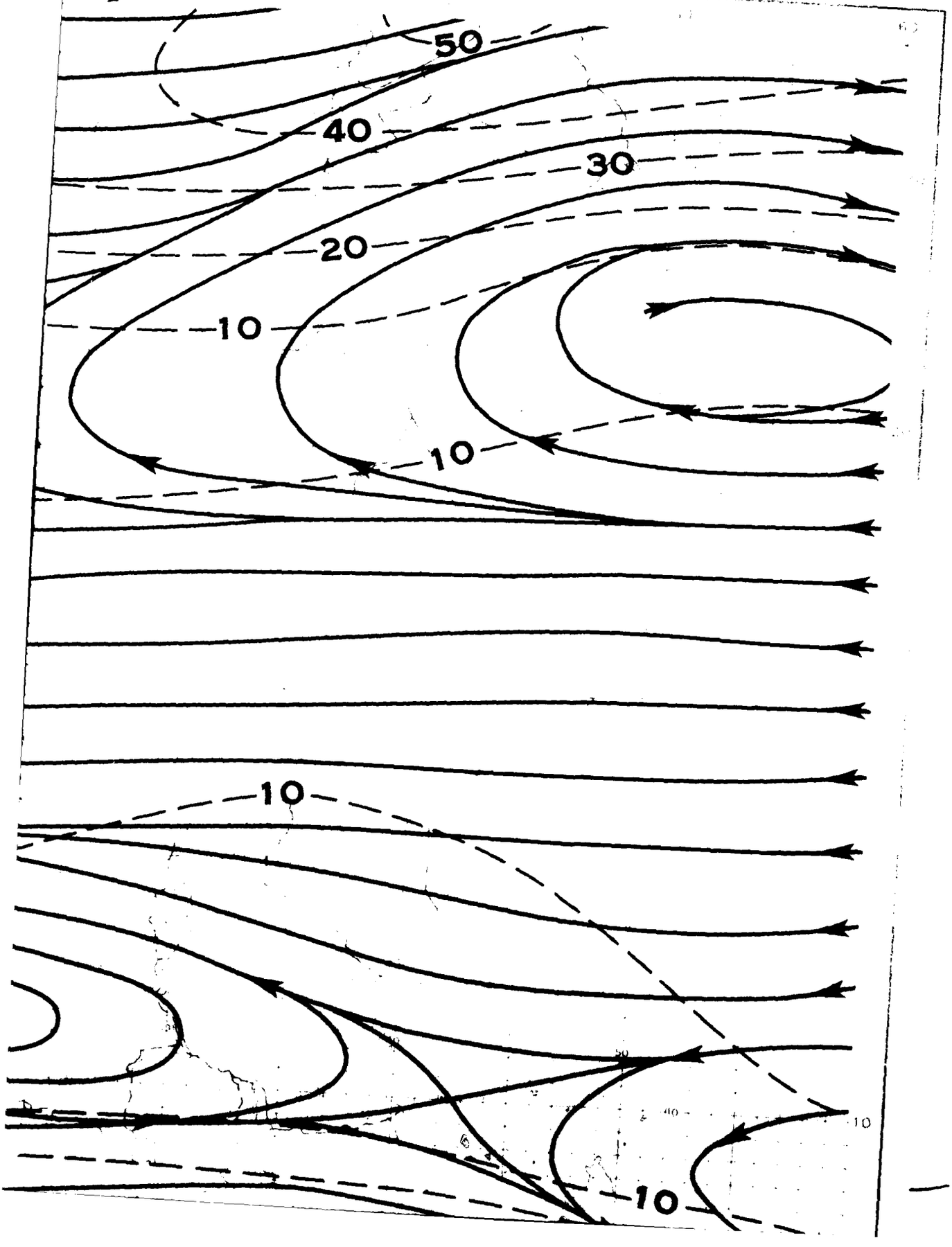


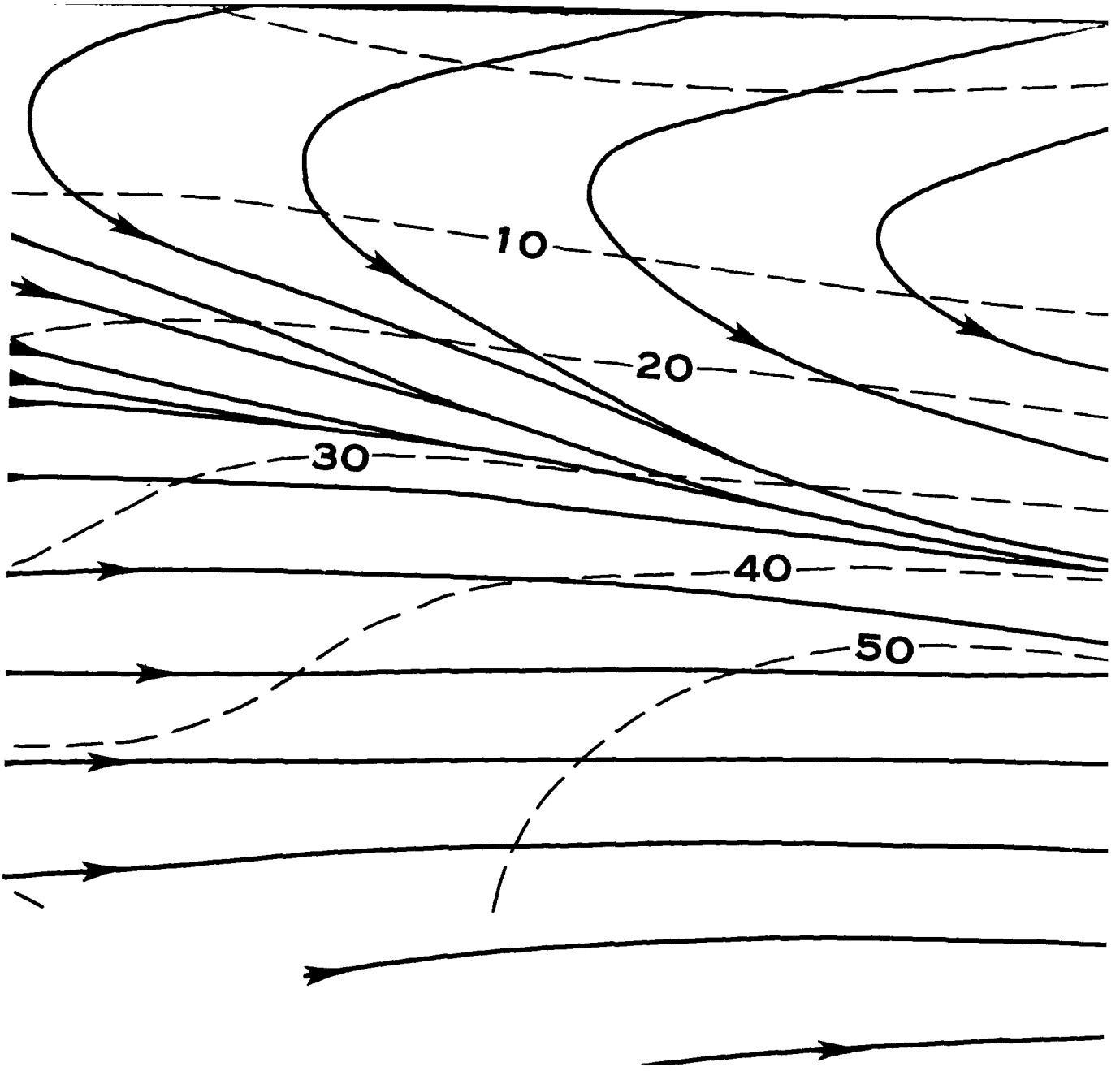
# EL WINDS over GLOBAL TROPICS

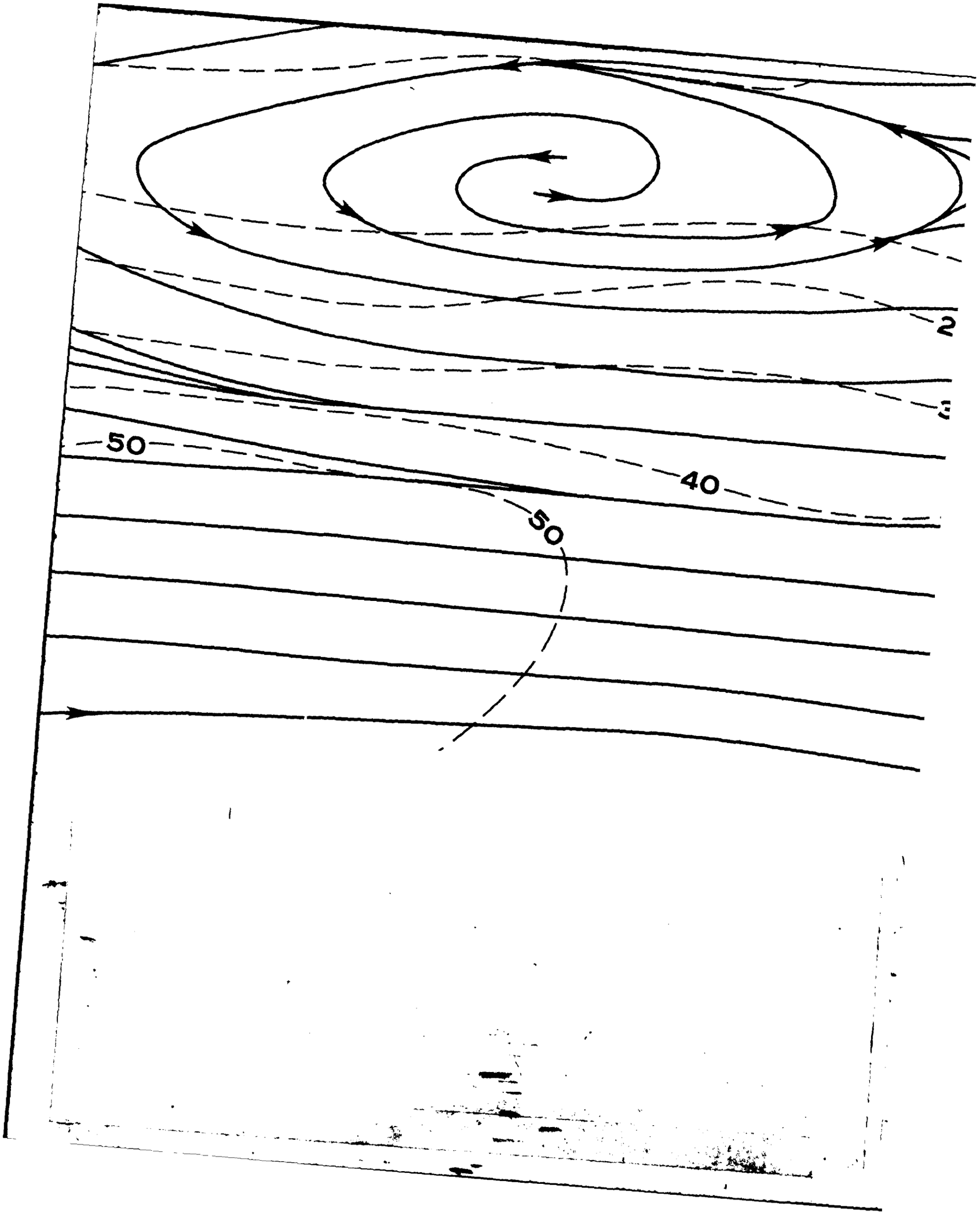


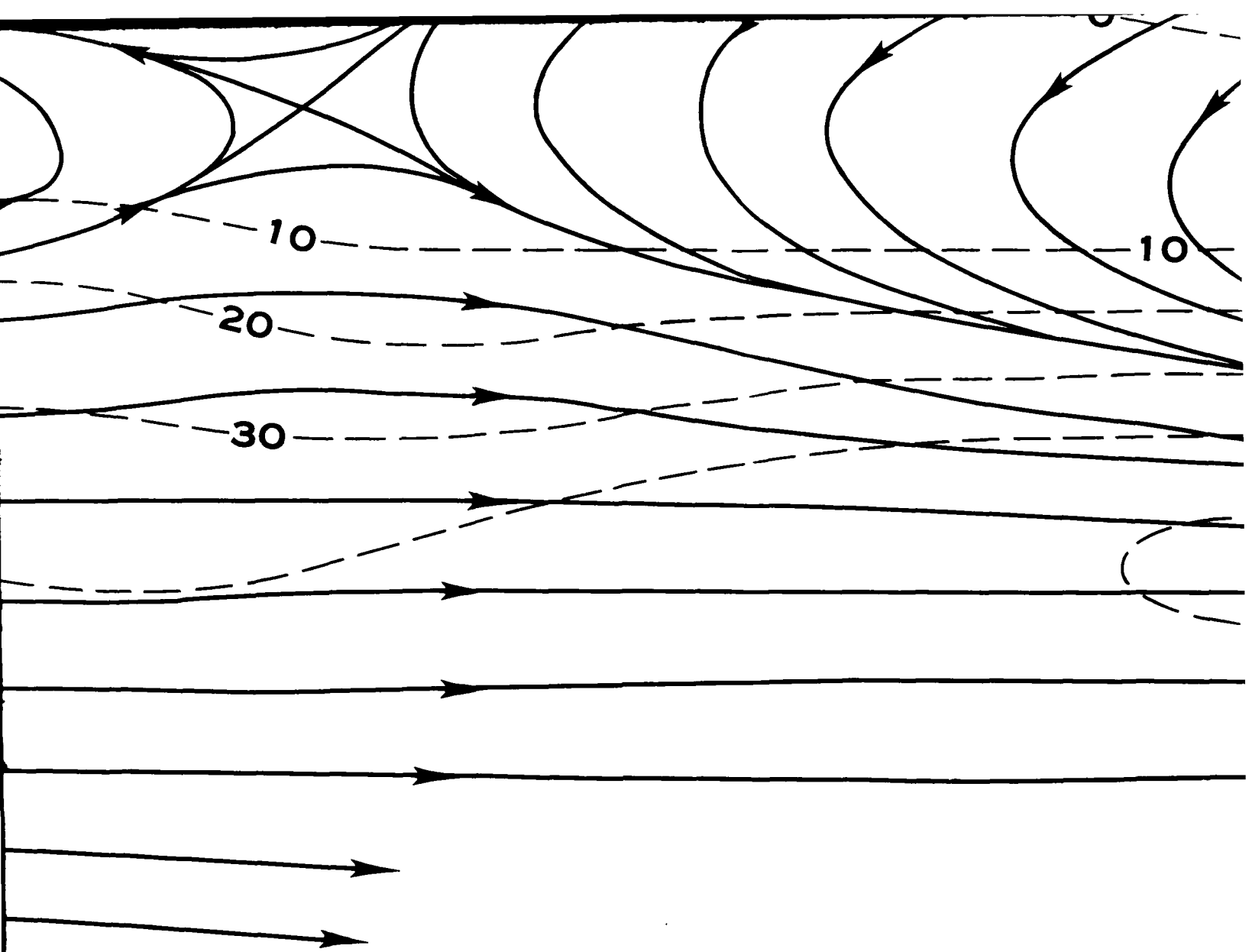
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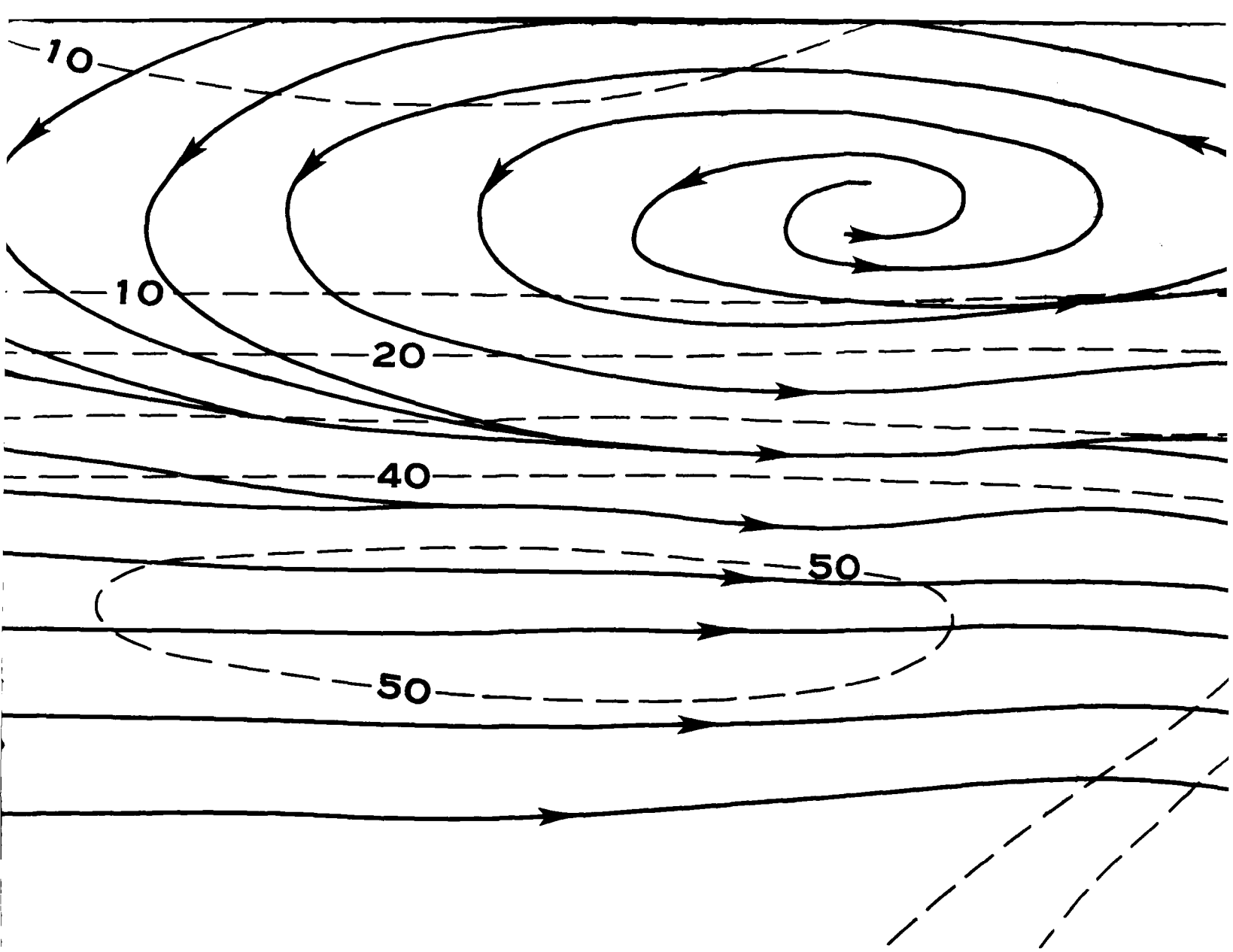


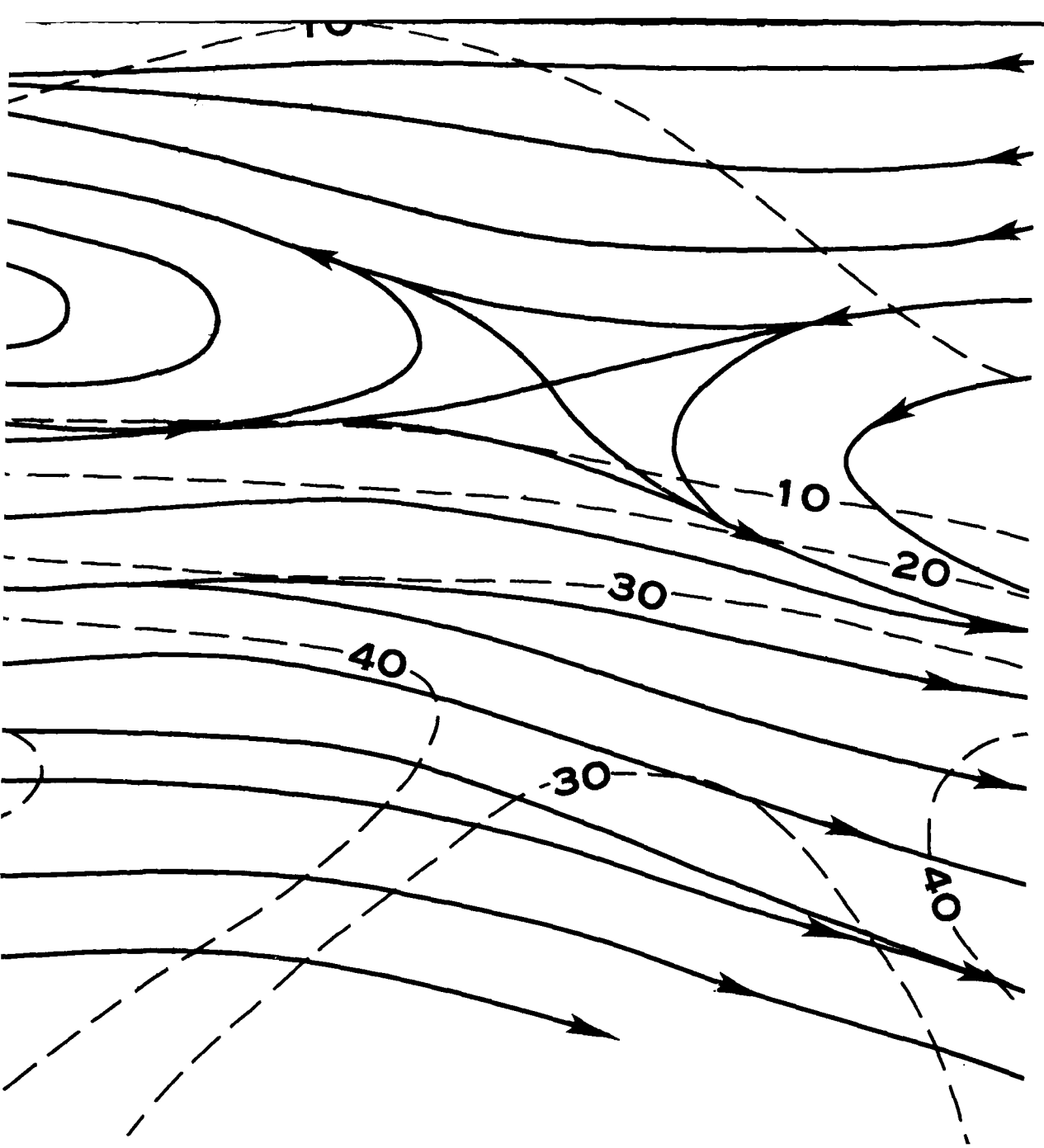

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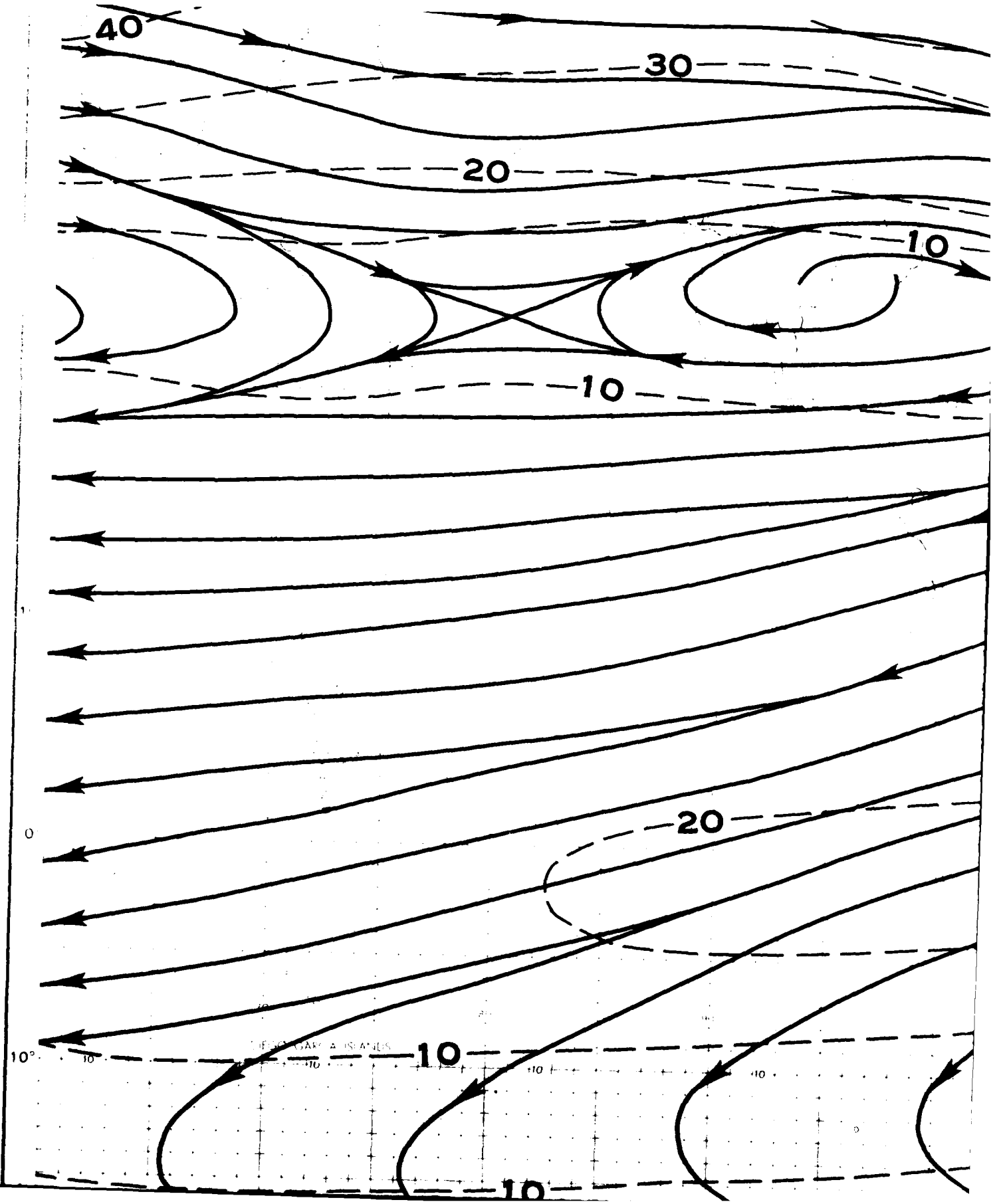

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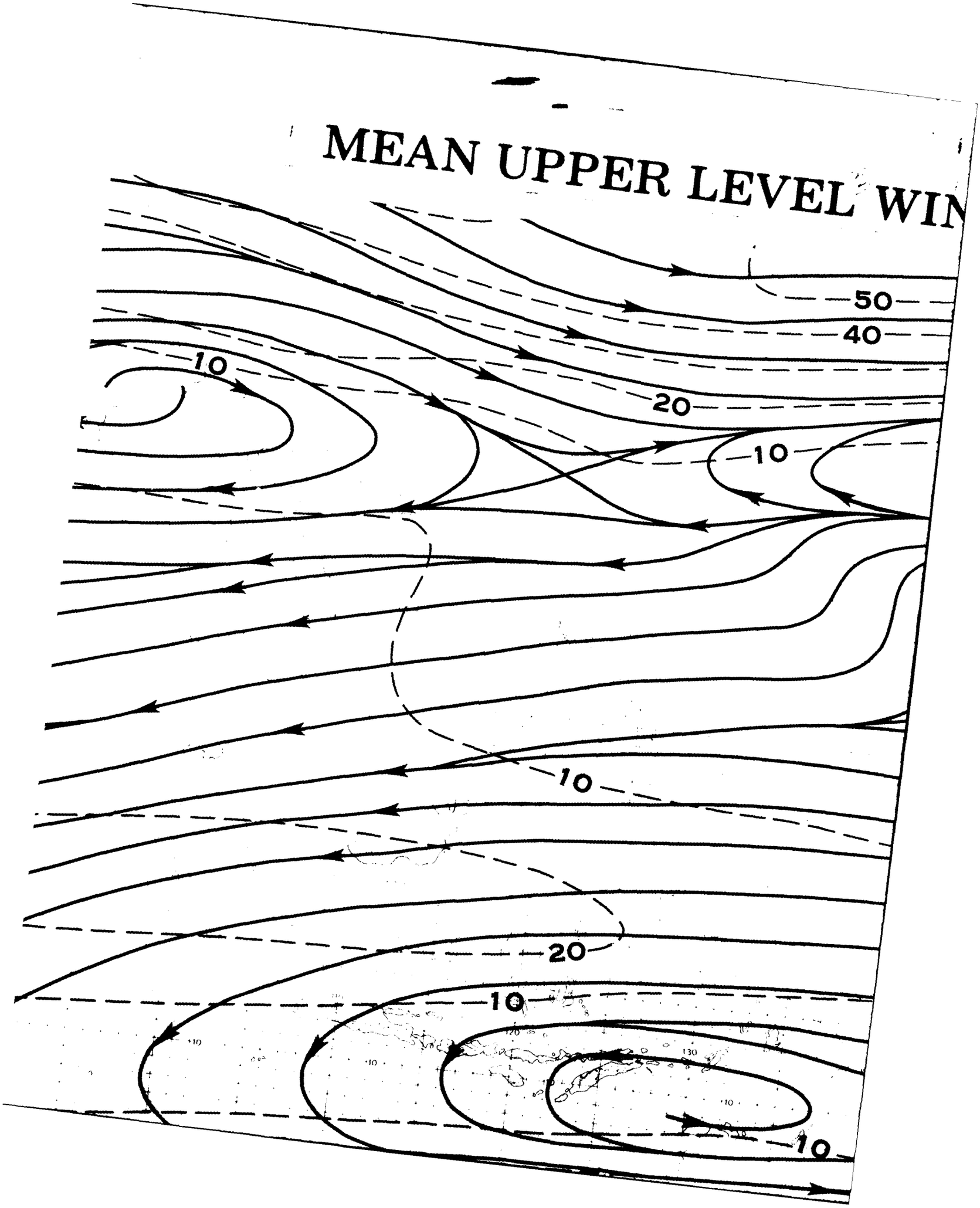

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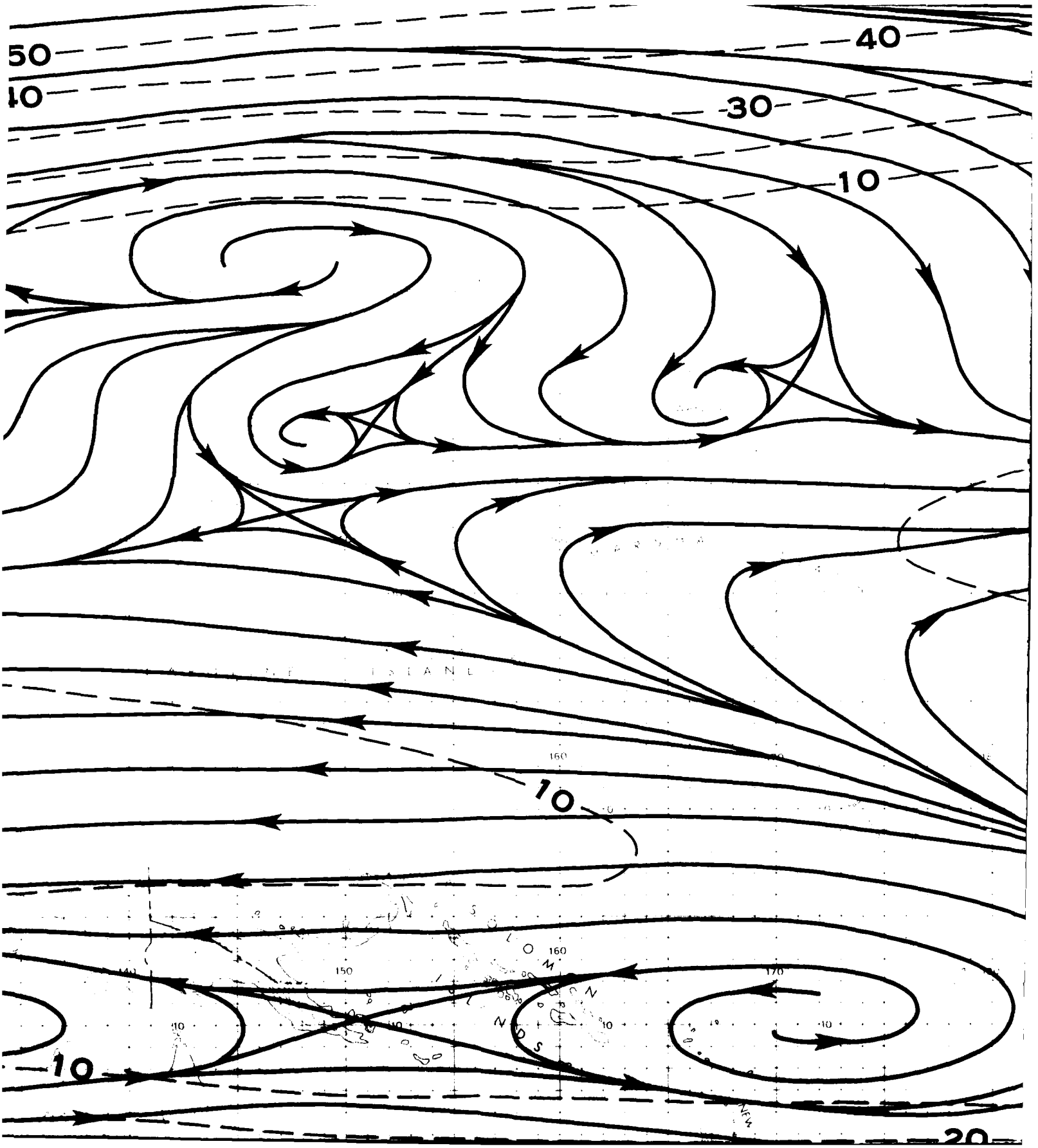



MULW-306W

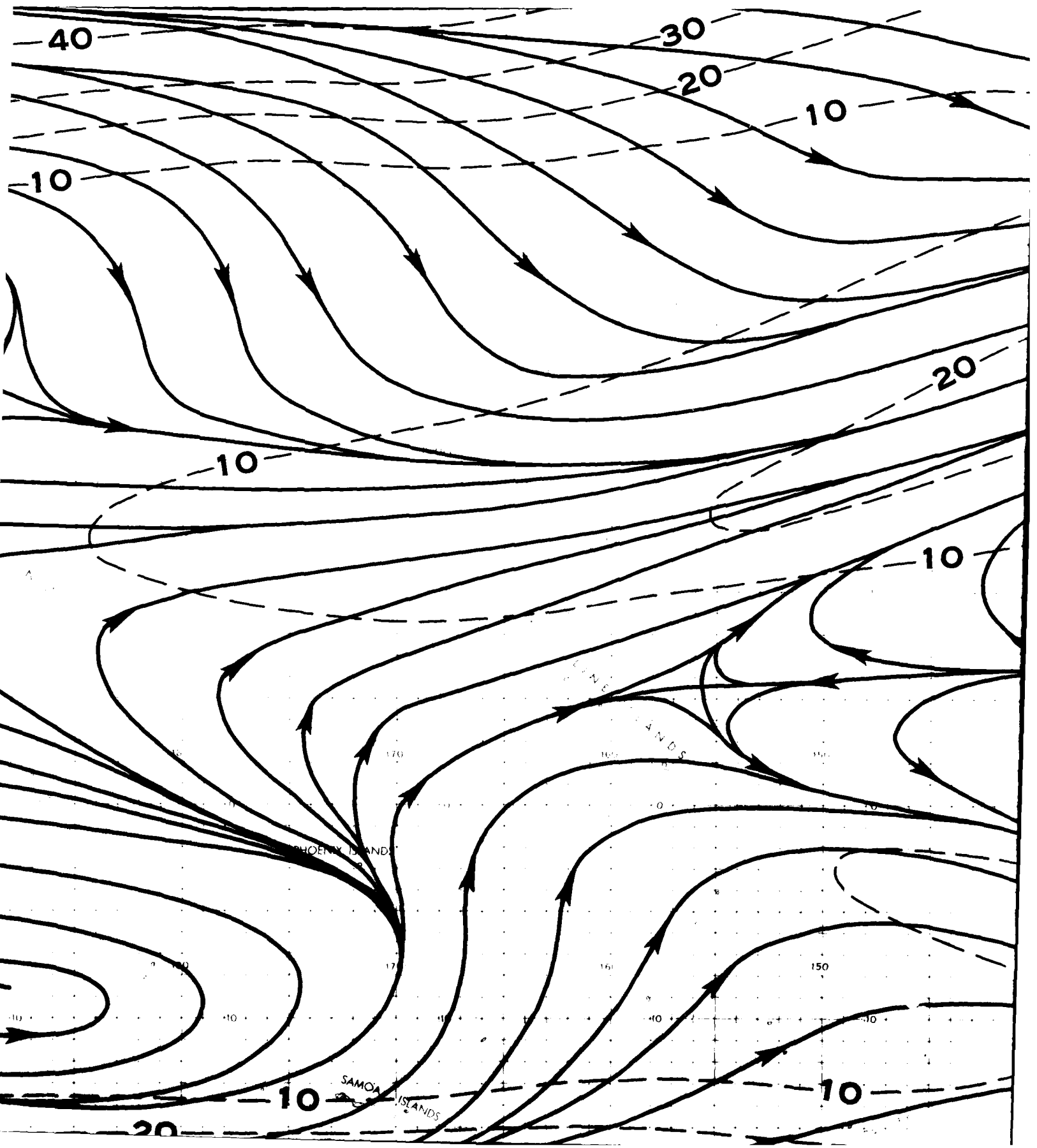

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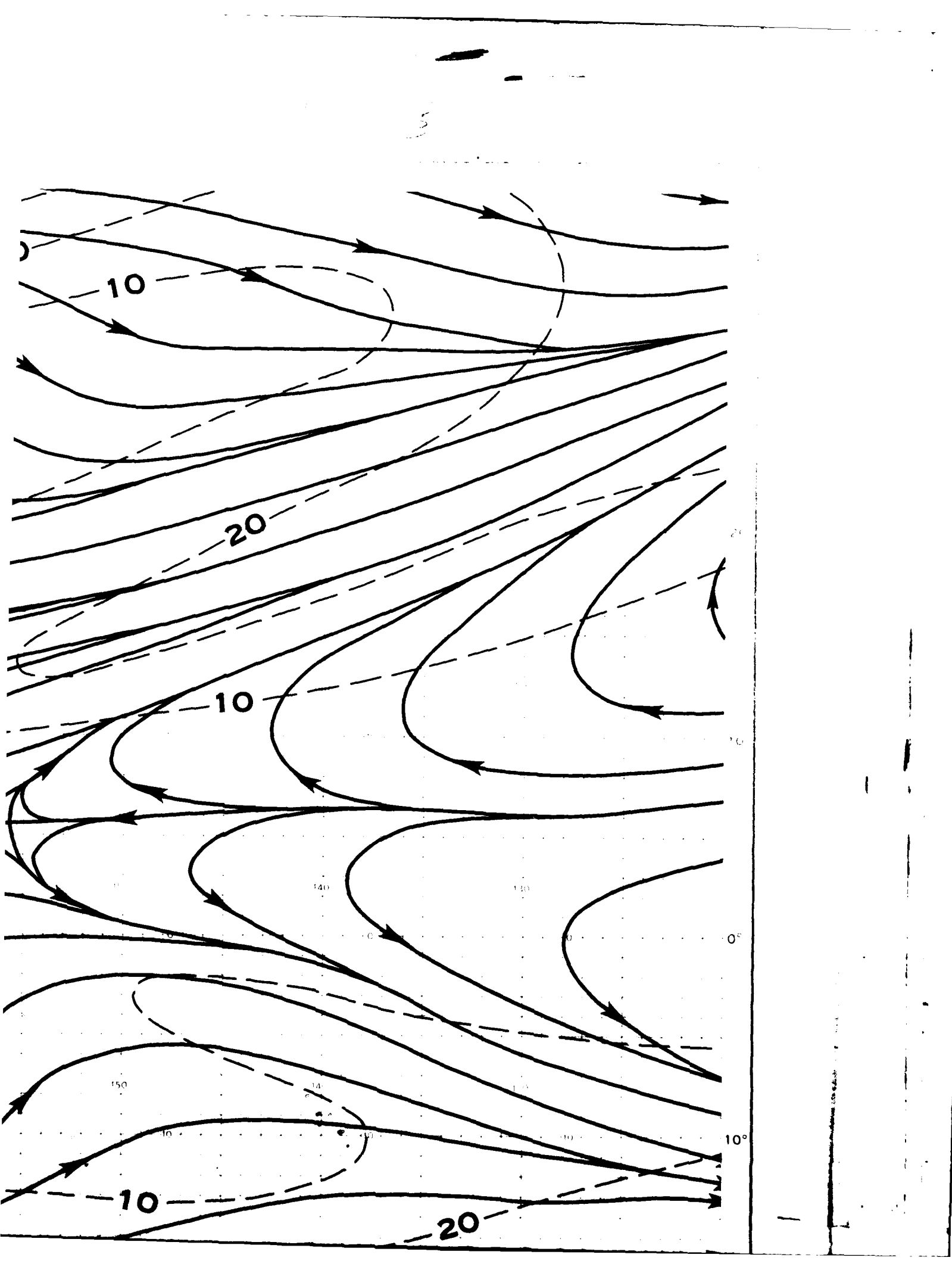

MEAN UPPER LEVEL WIN
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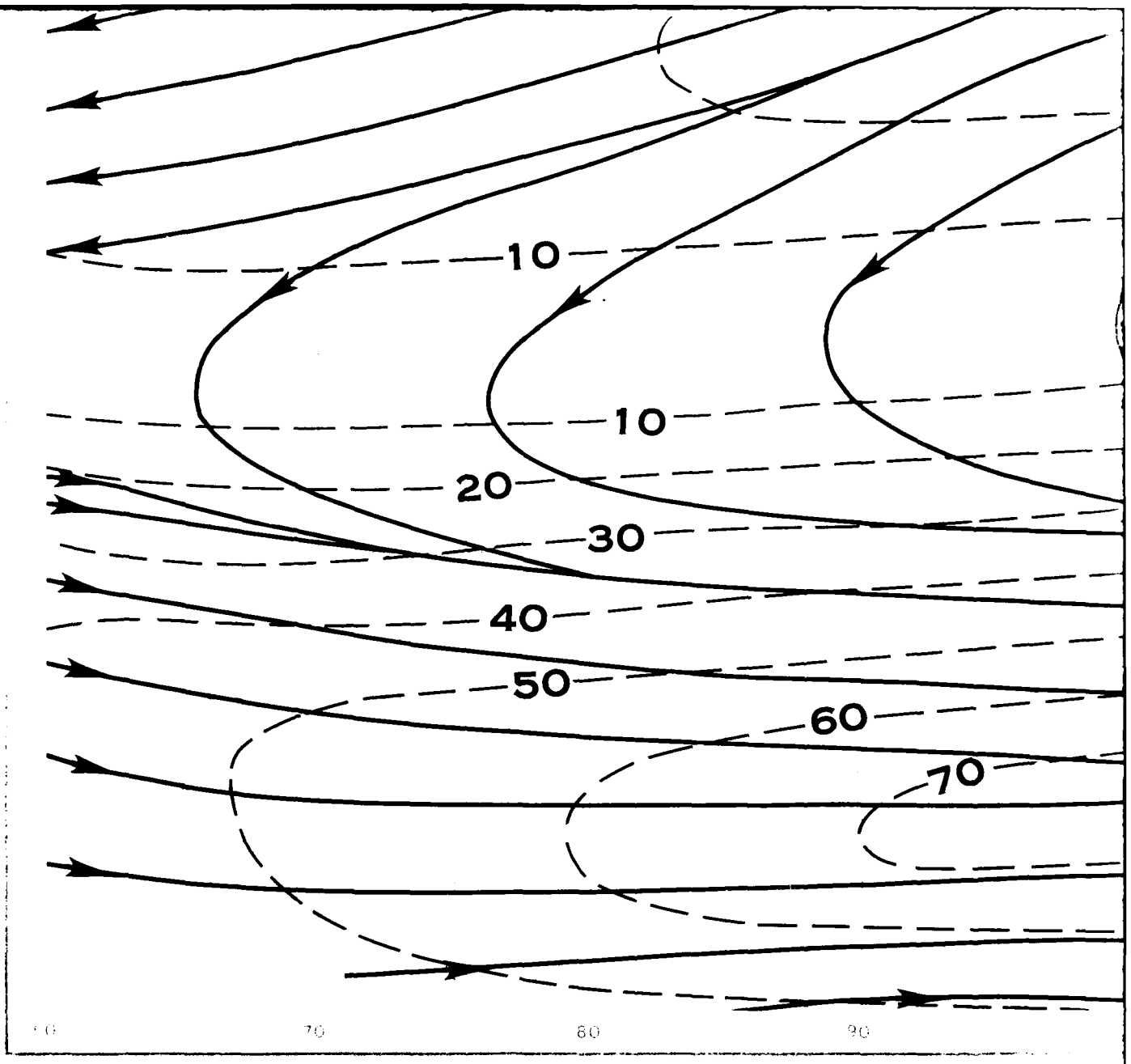
# WINDS over GLOBAL TROPICS - JU

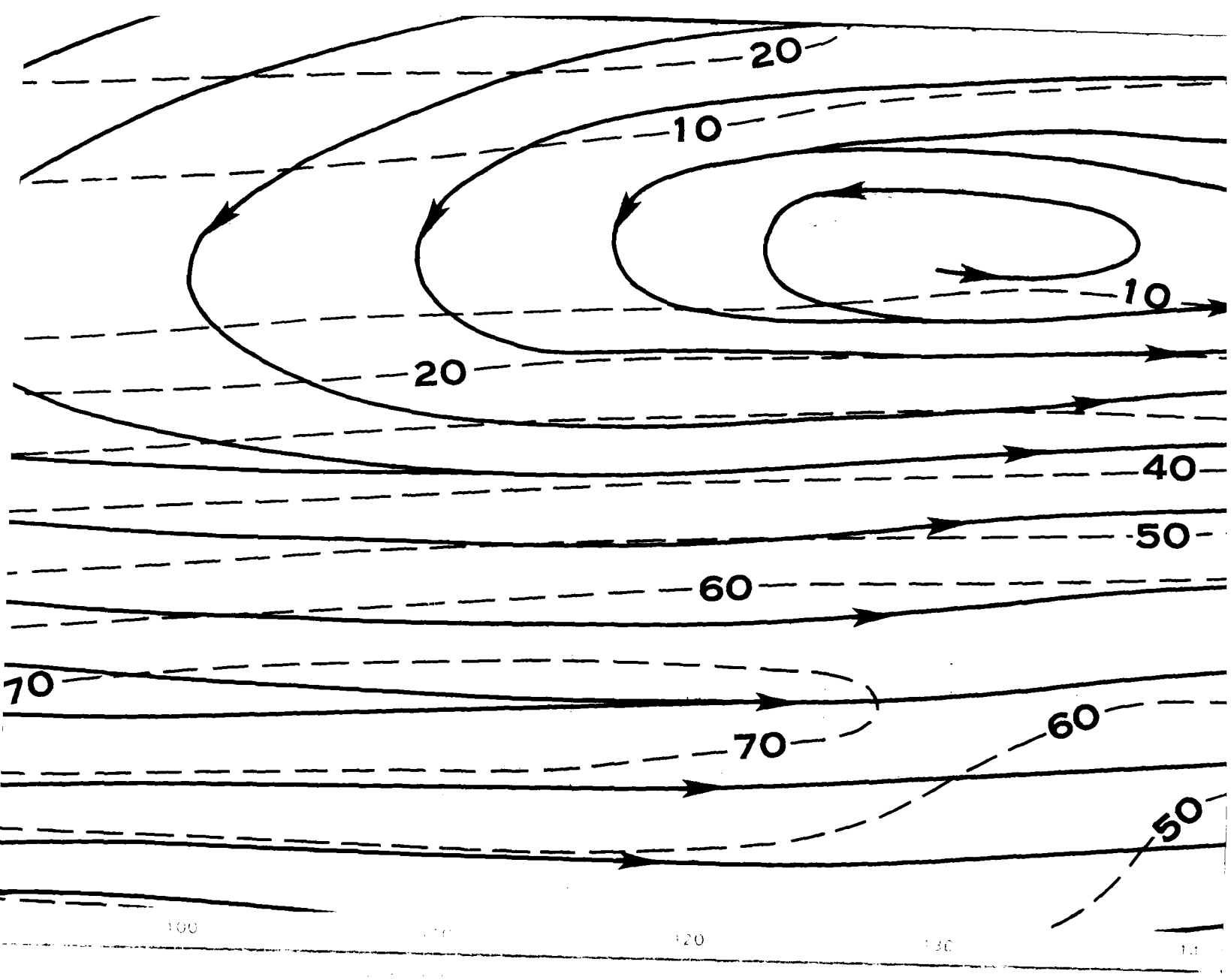


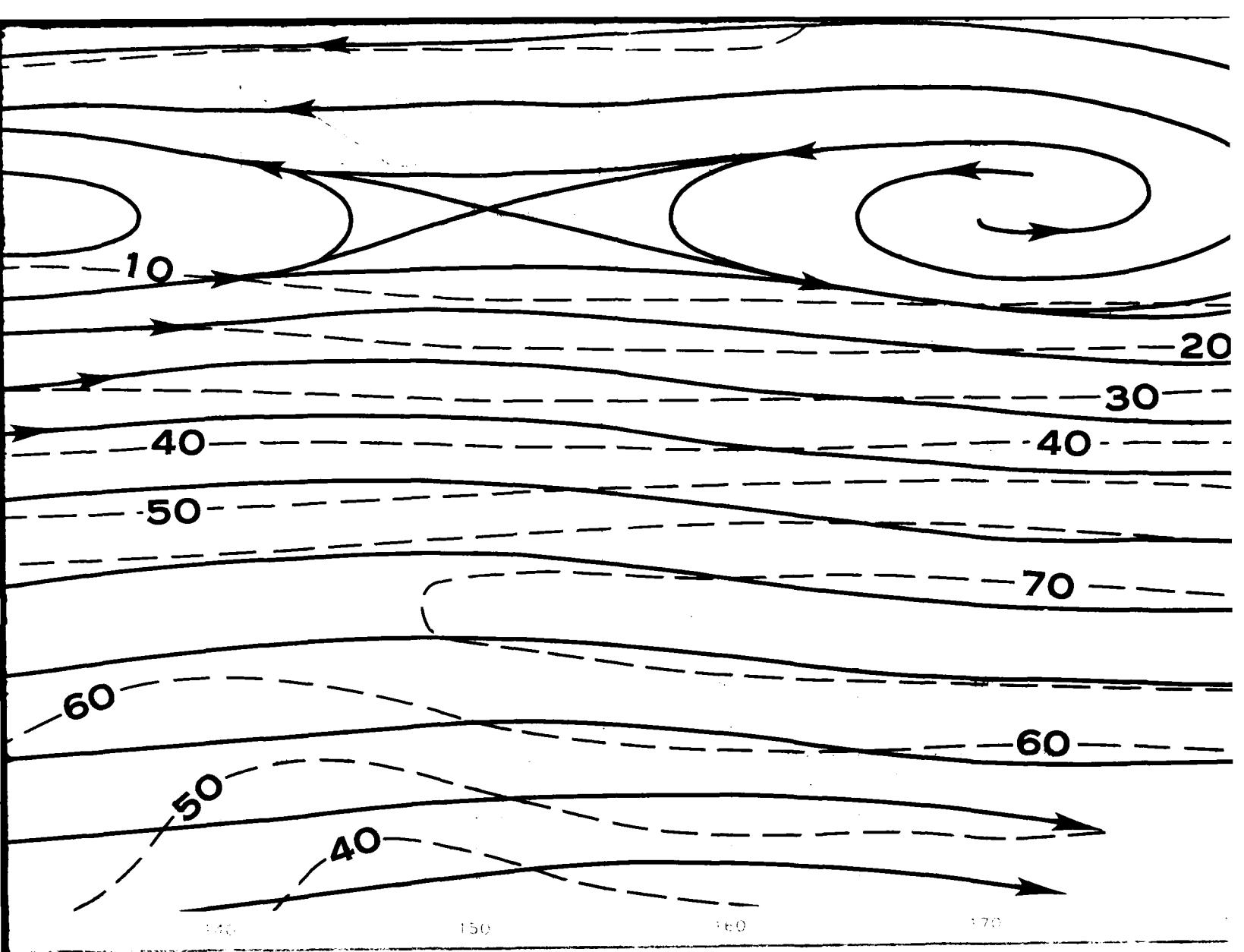
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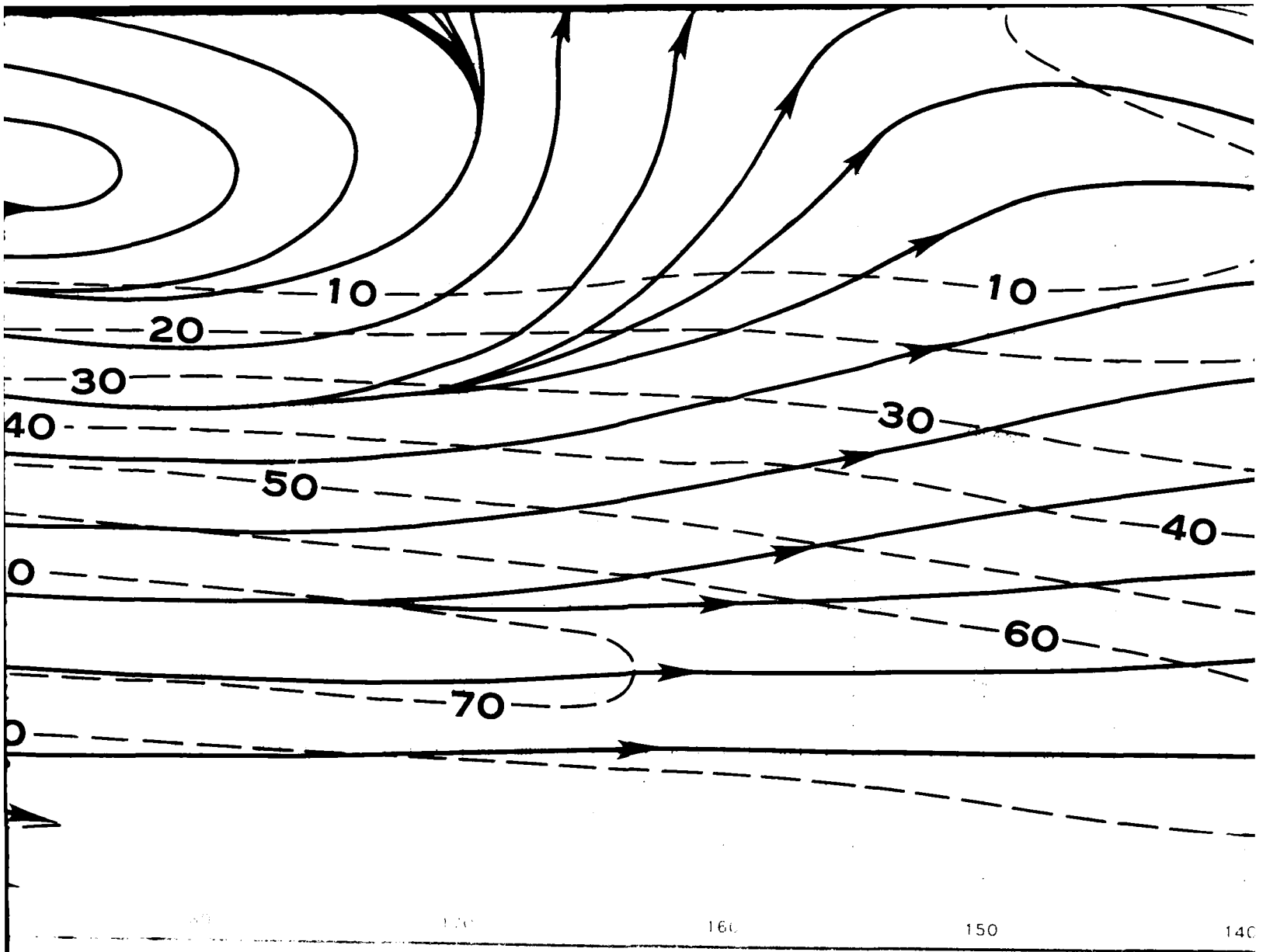



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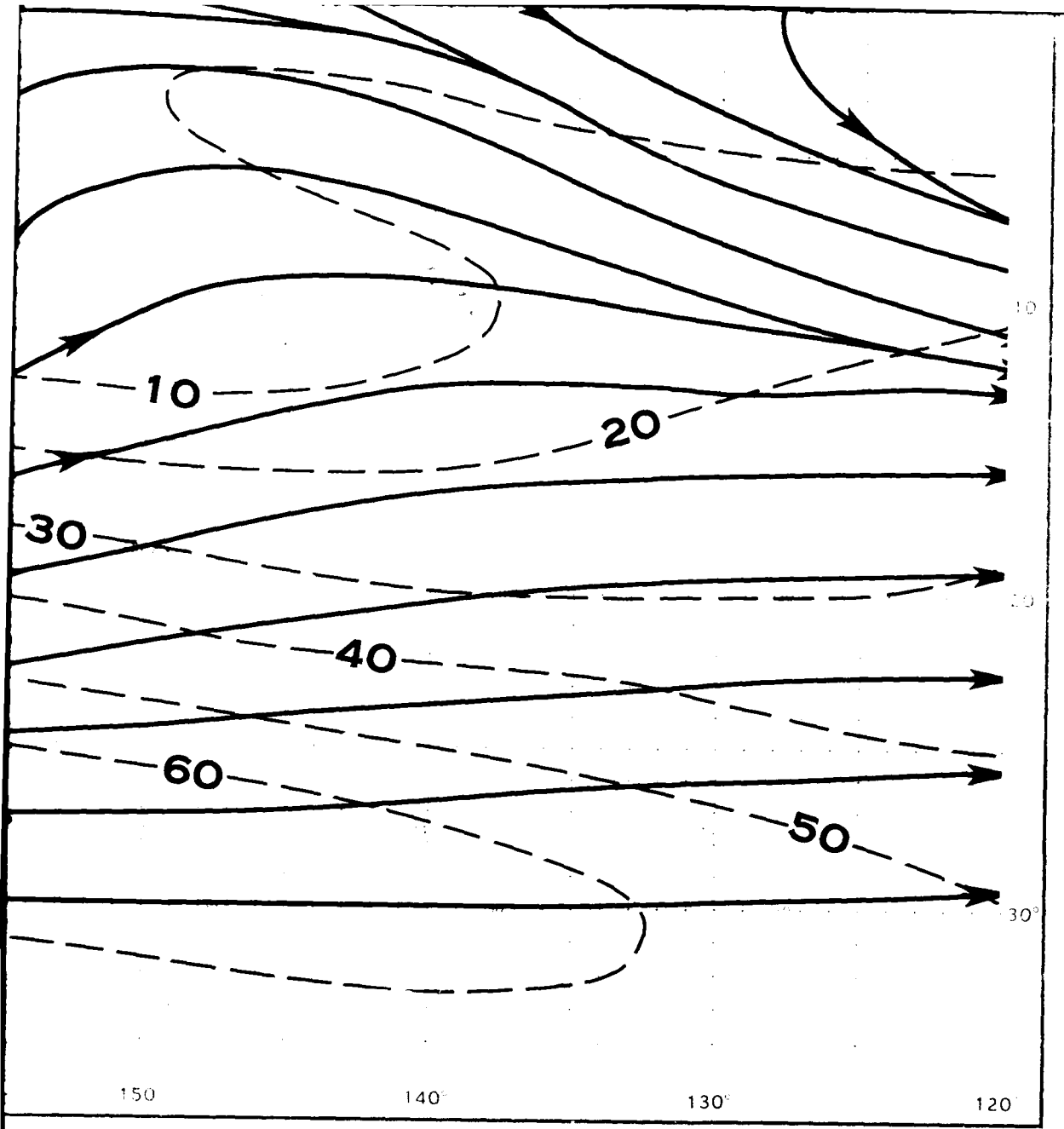

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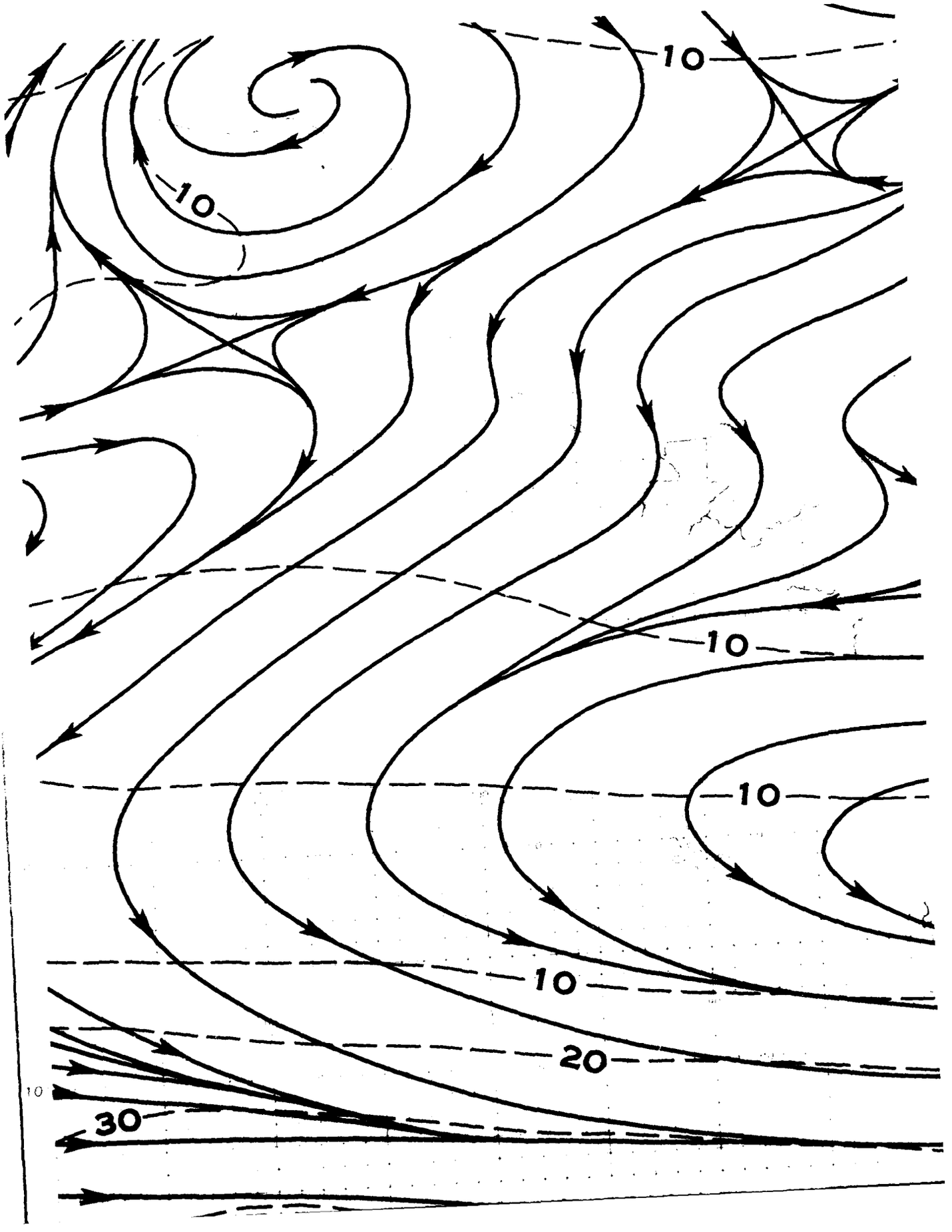

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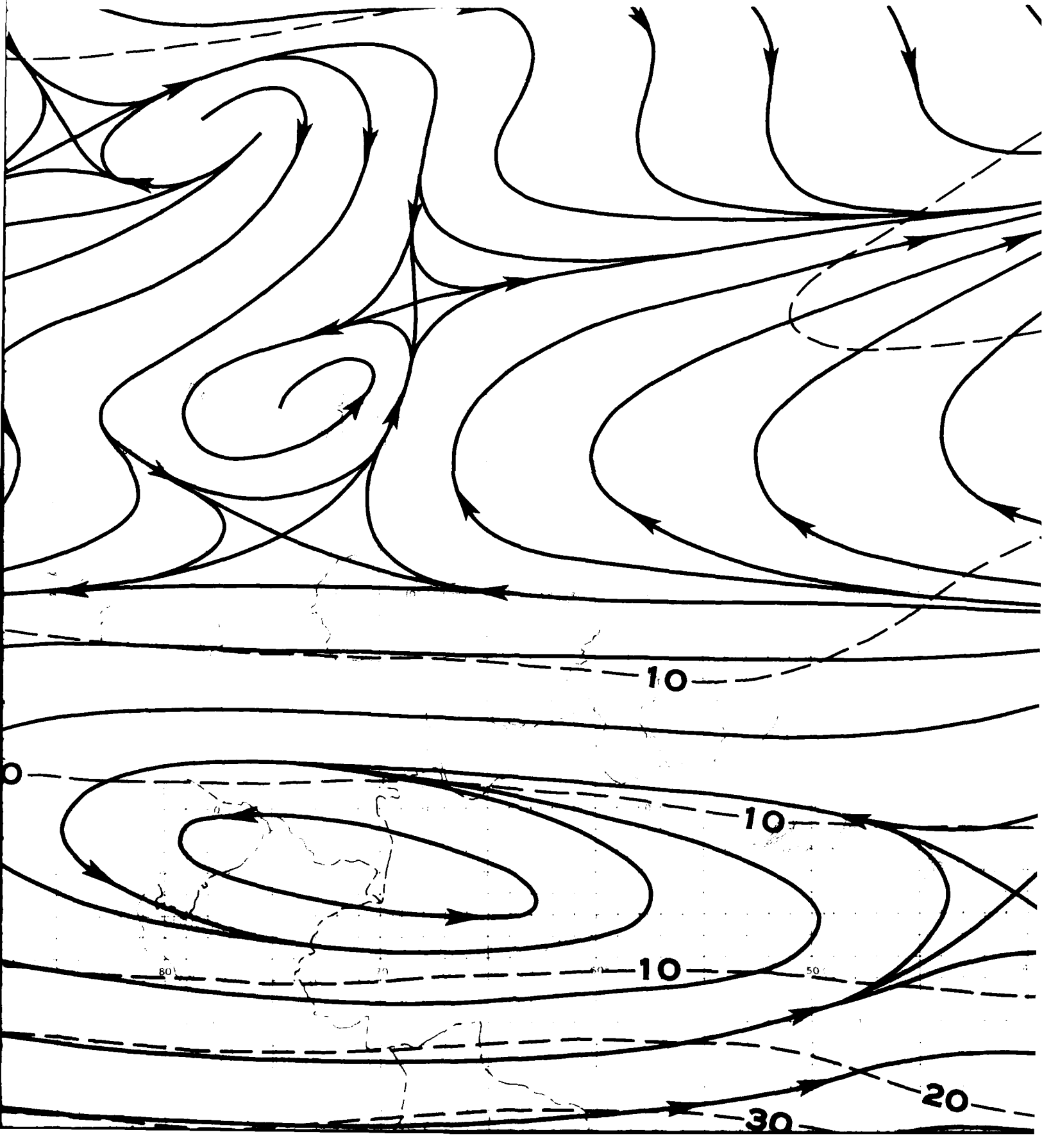

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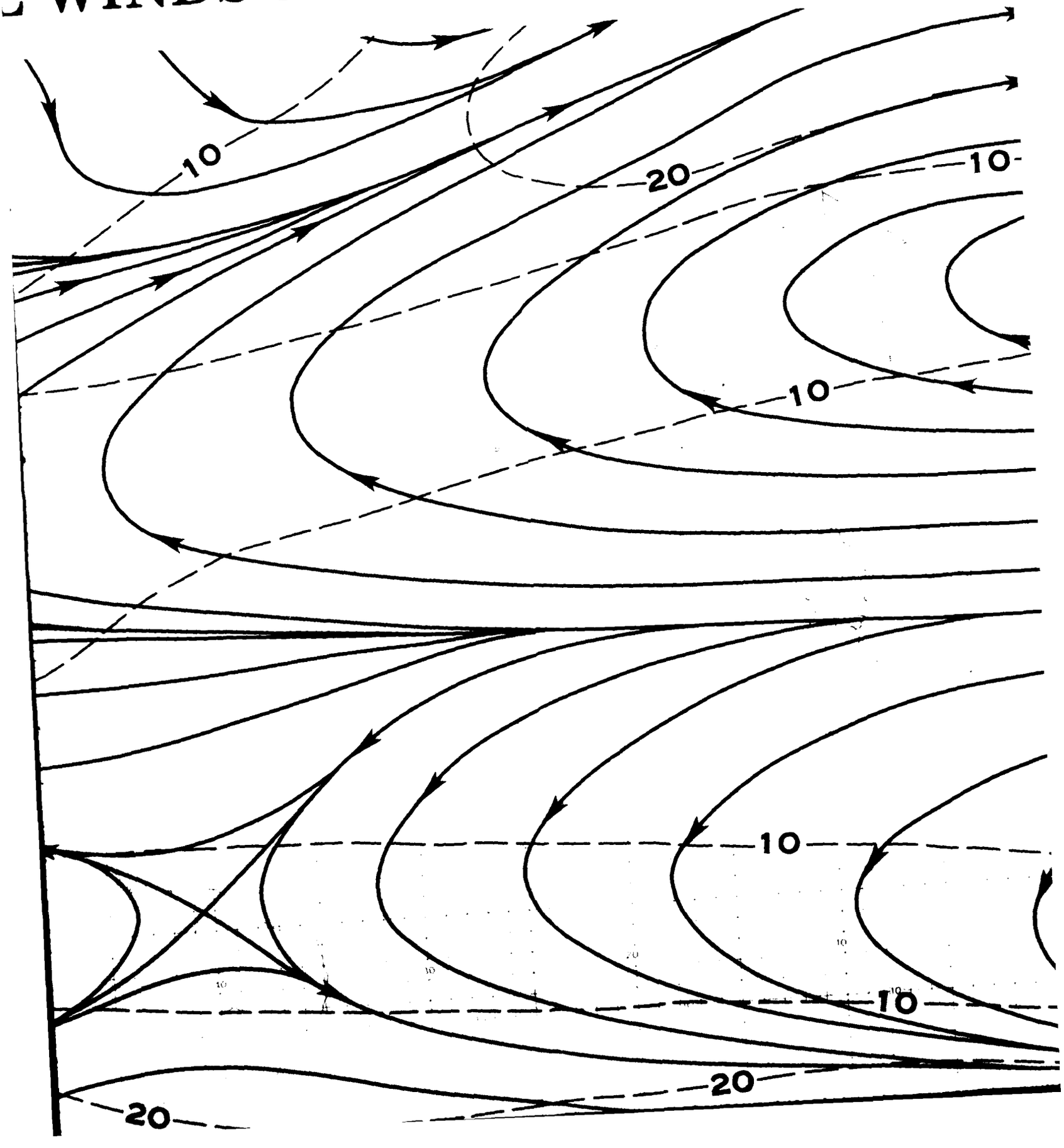

MULW-306E


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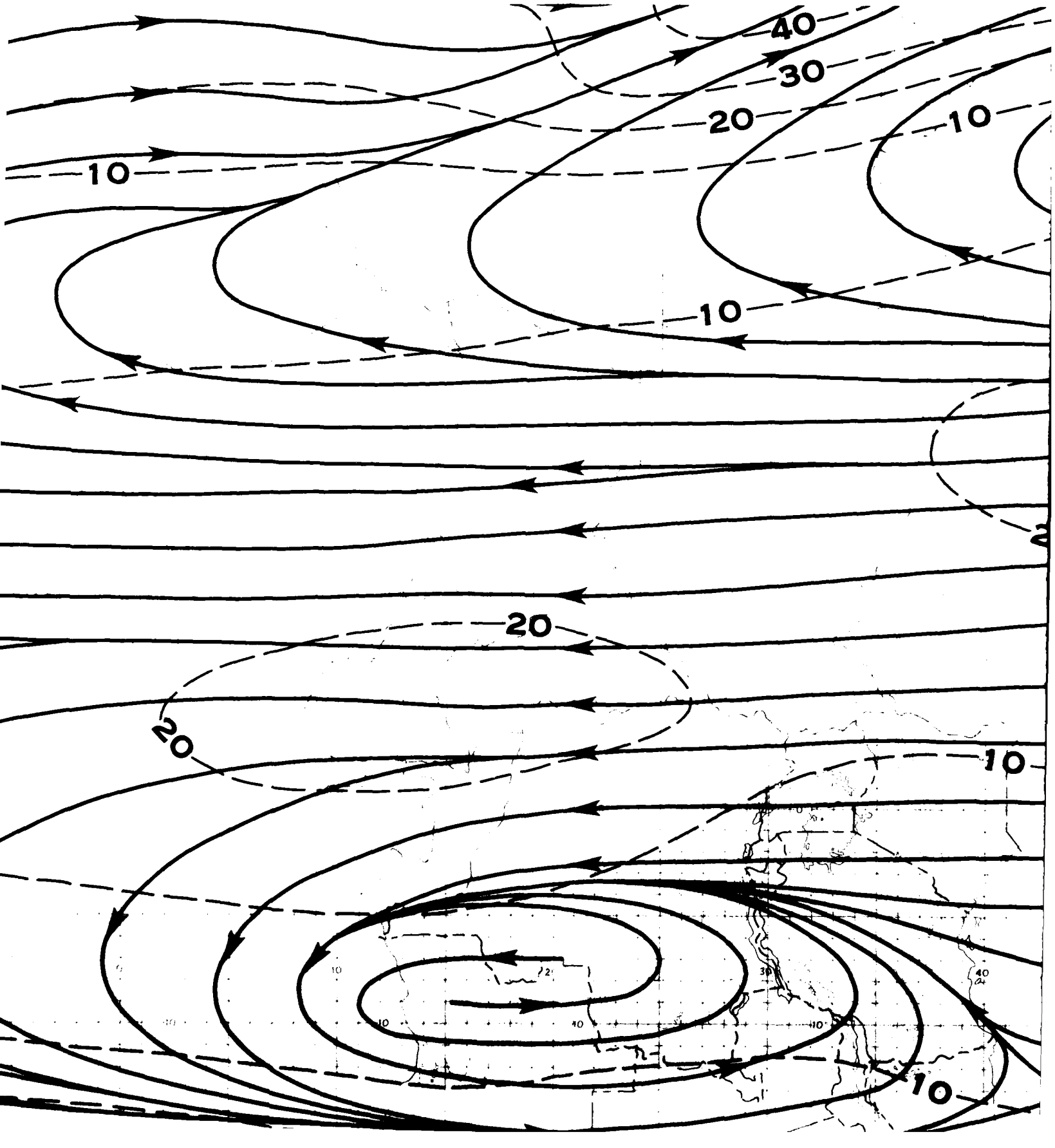
# MEAN UPPER LEVEL WIN

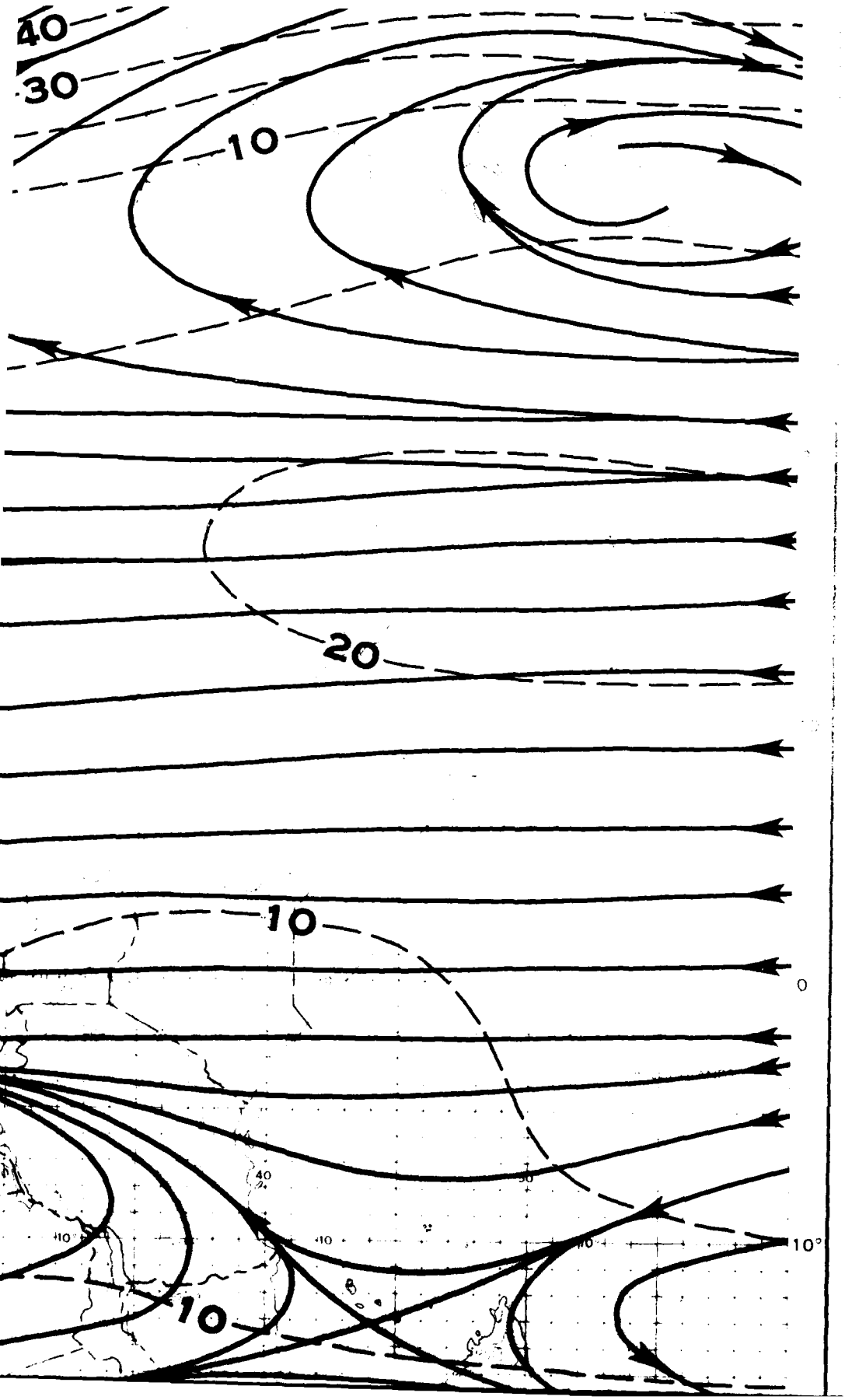


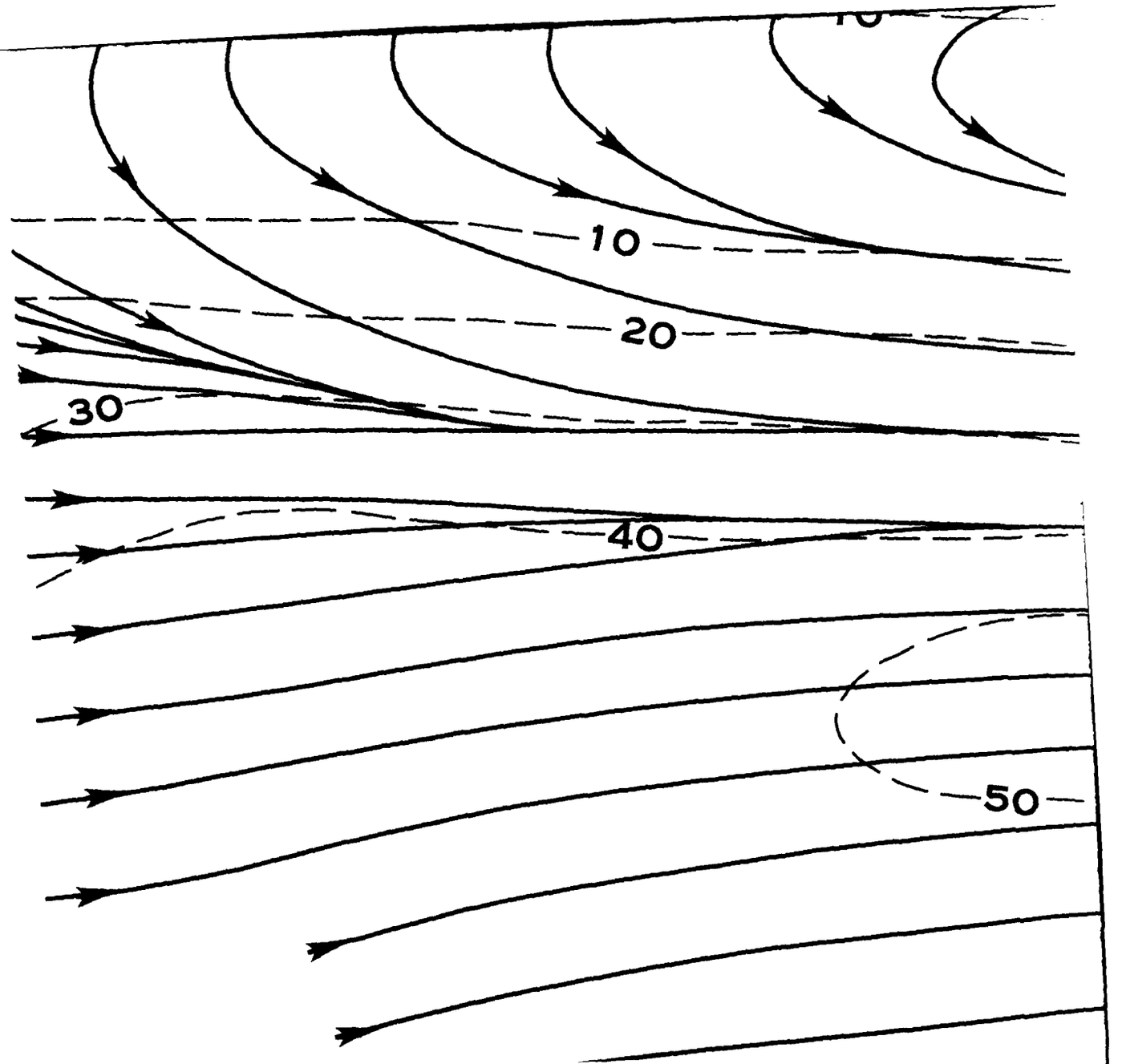
# WINDS over GLOBAL TROPICS - J

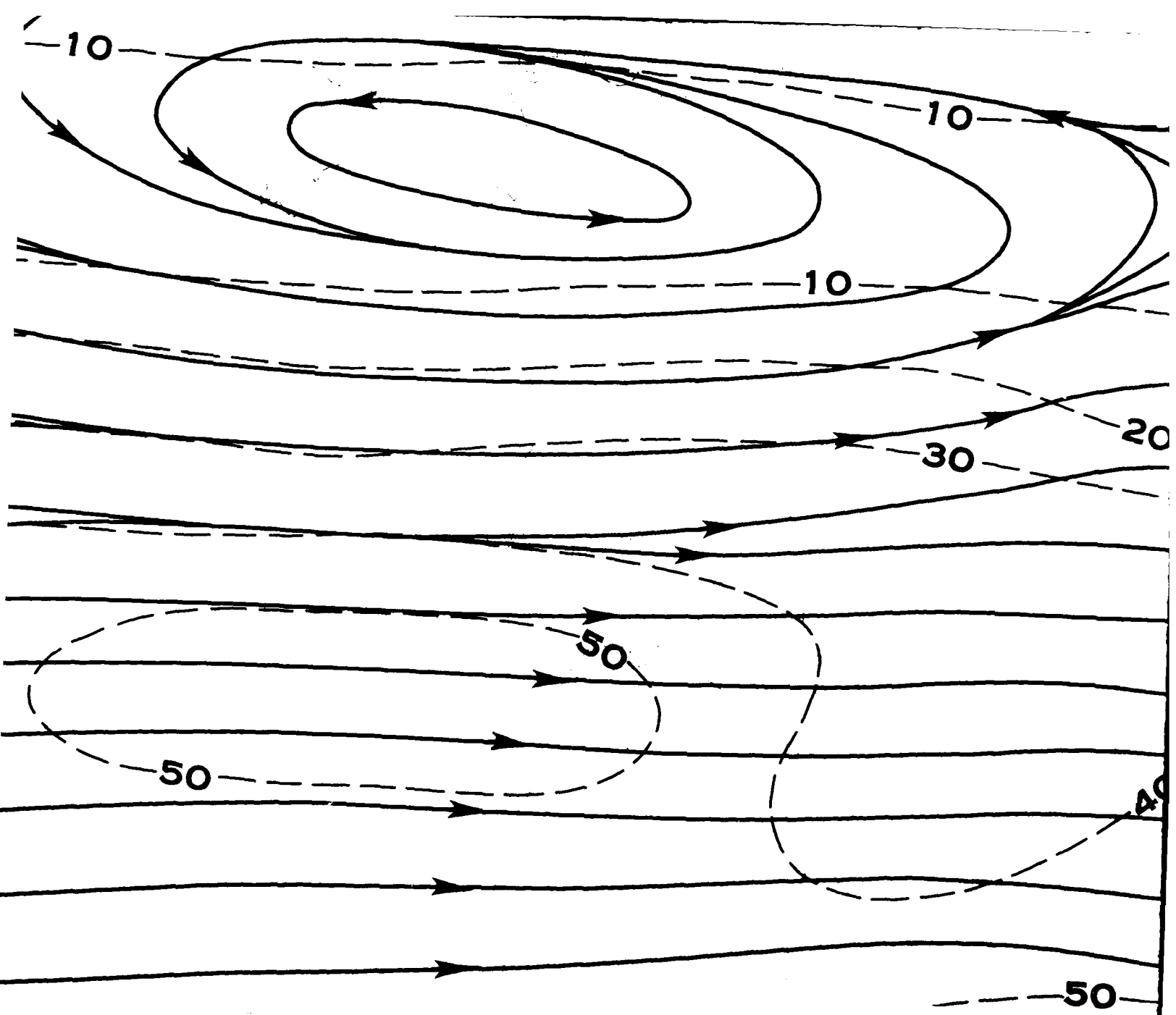


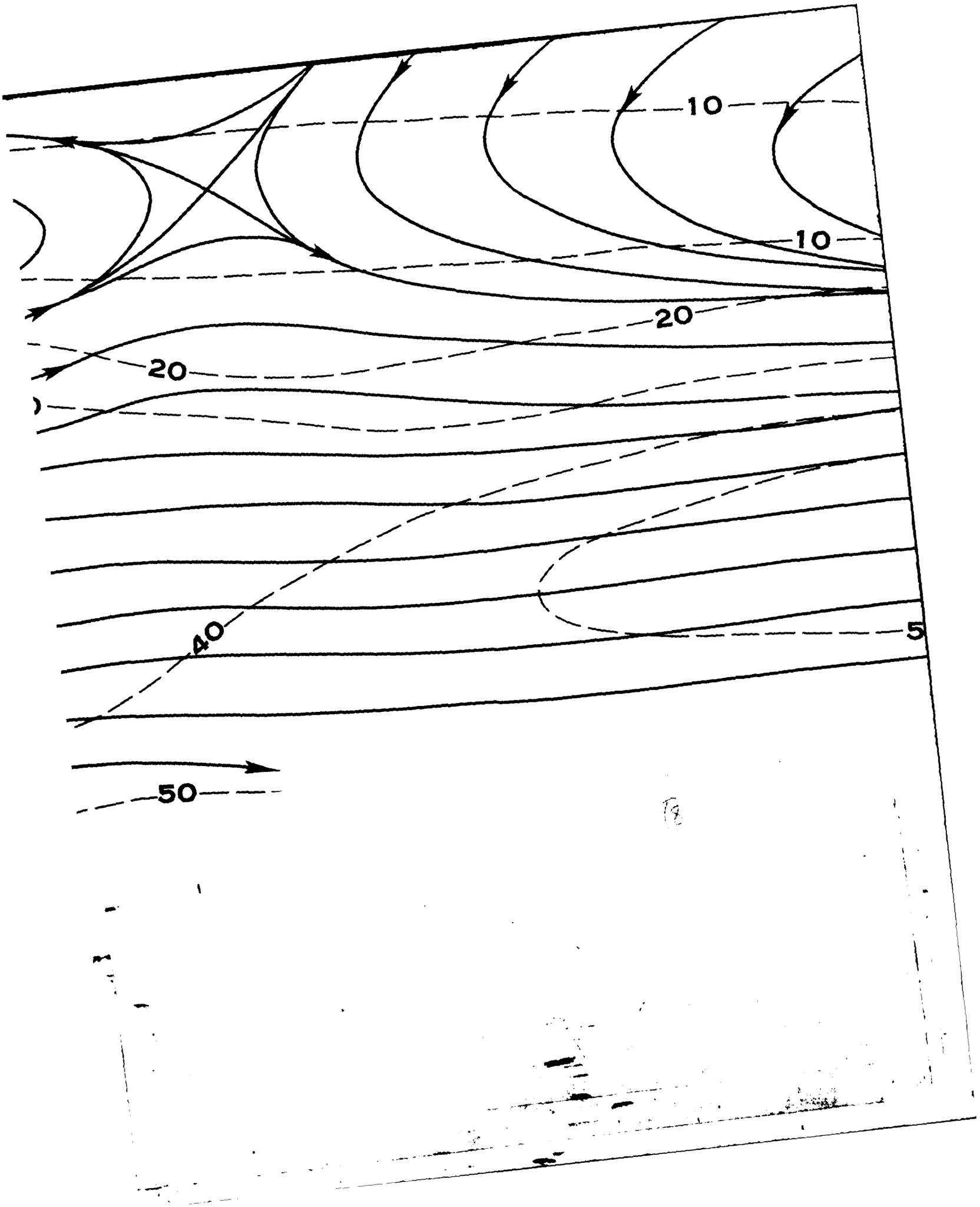
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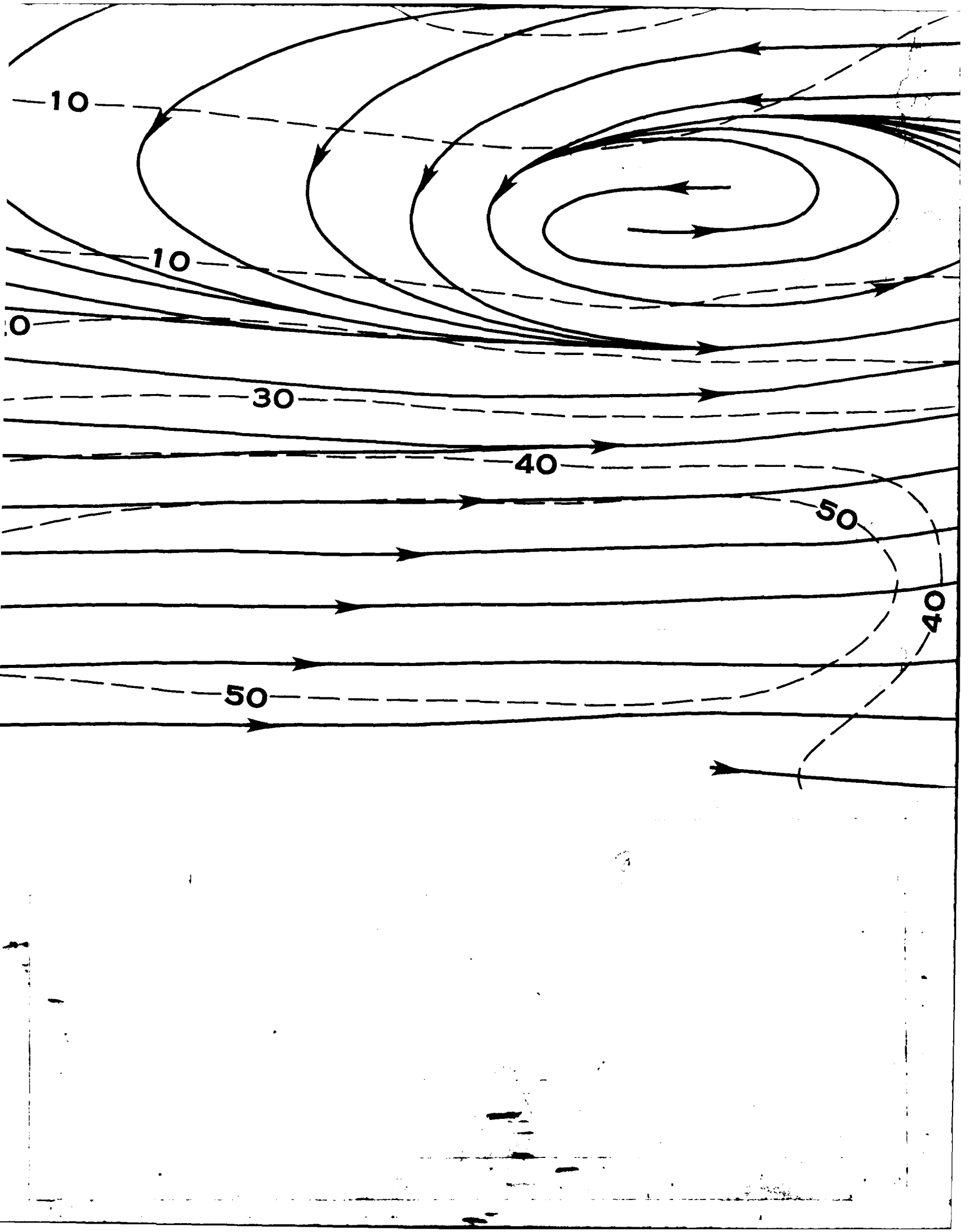

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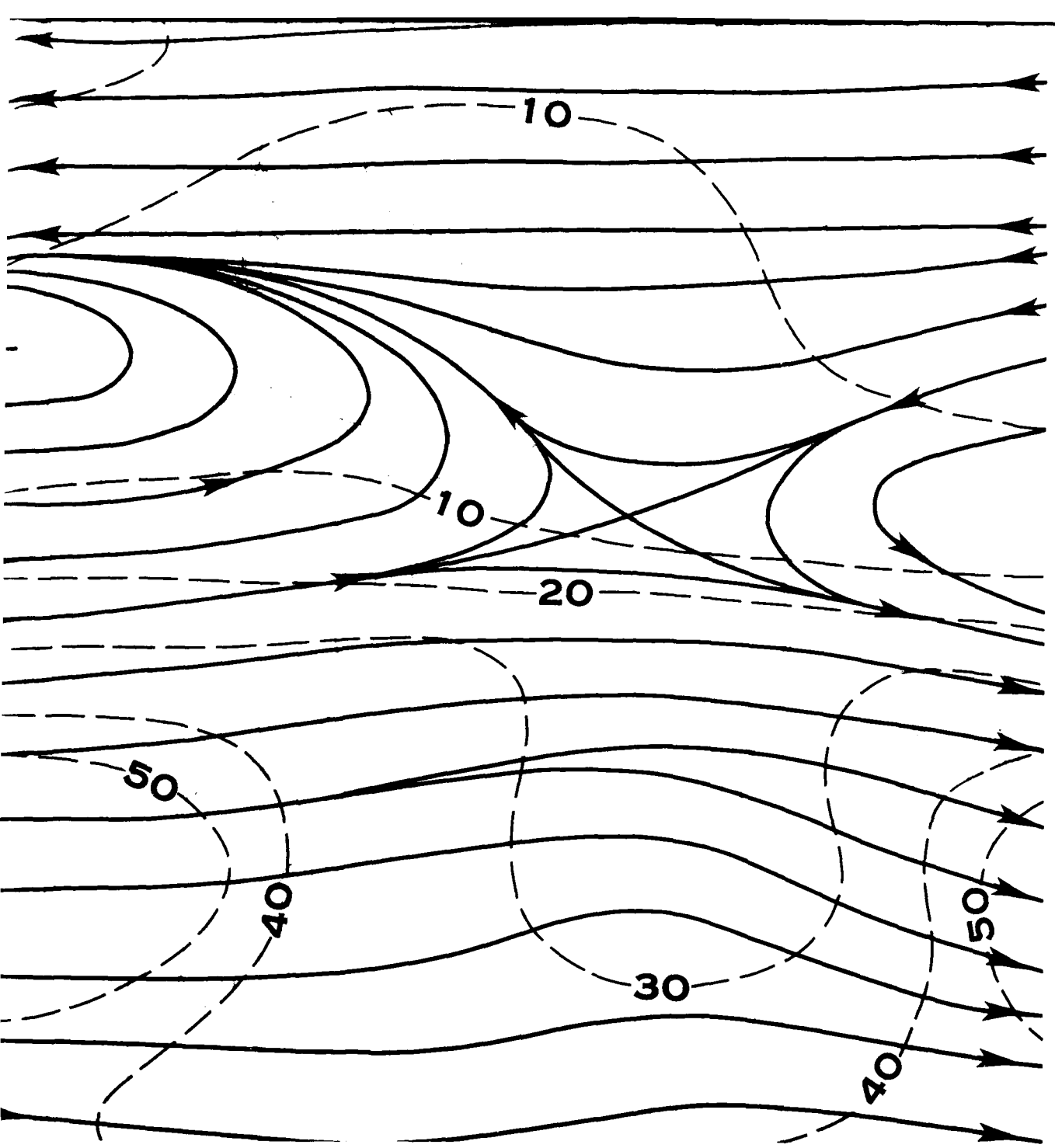

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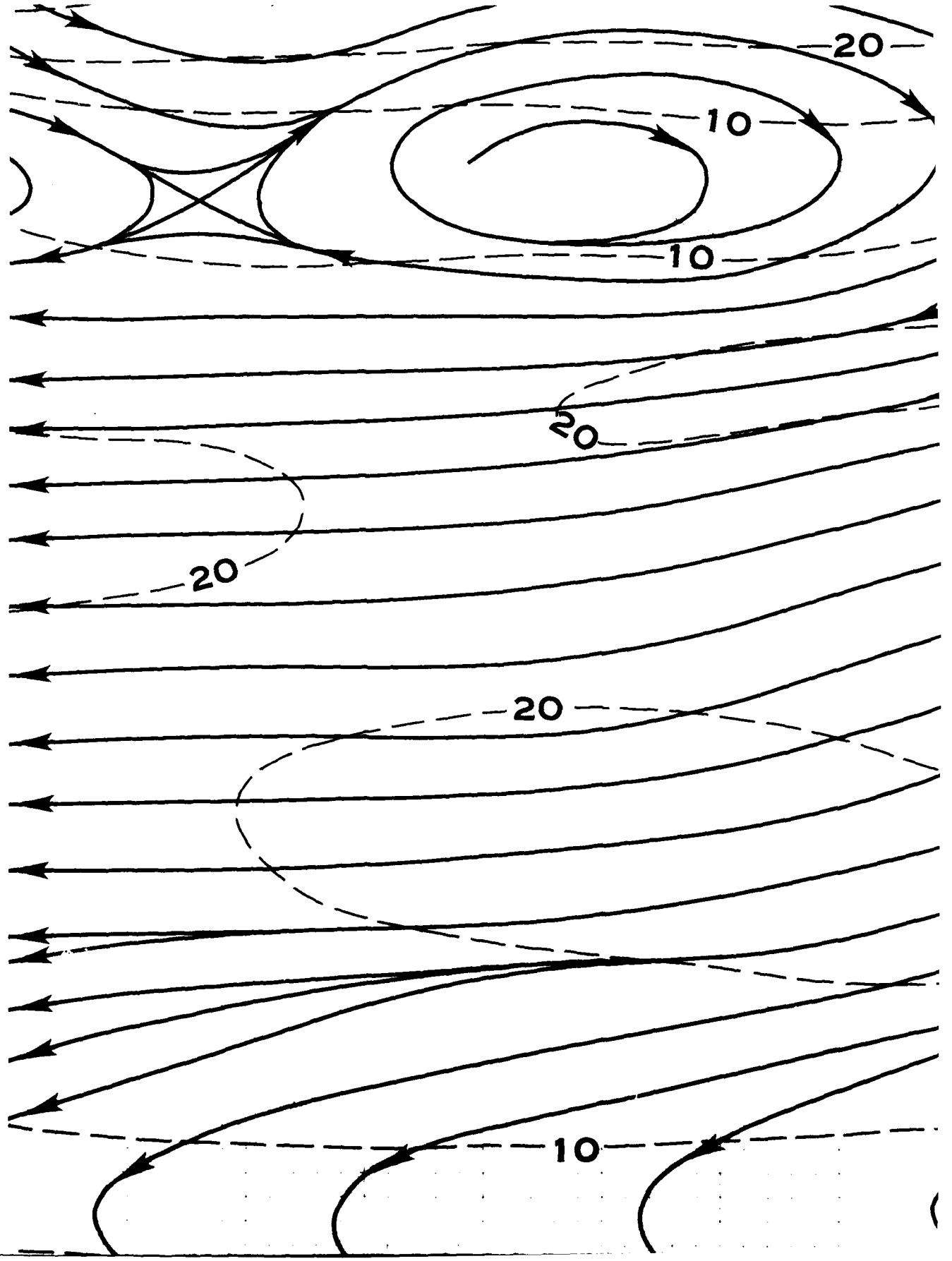

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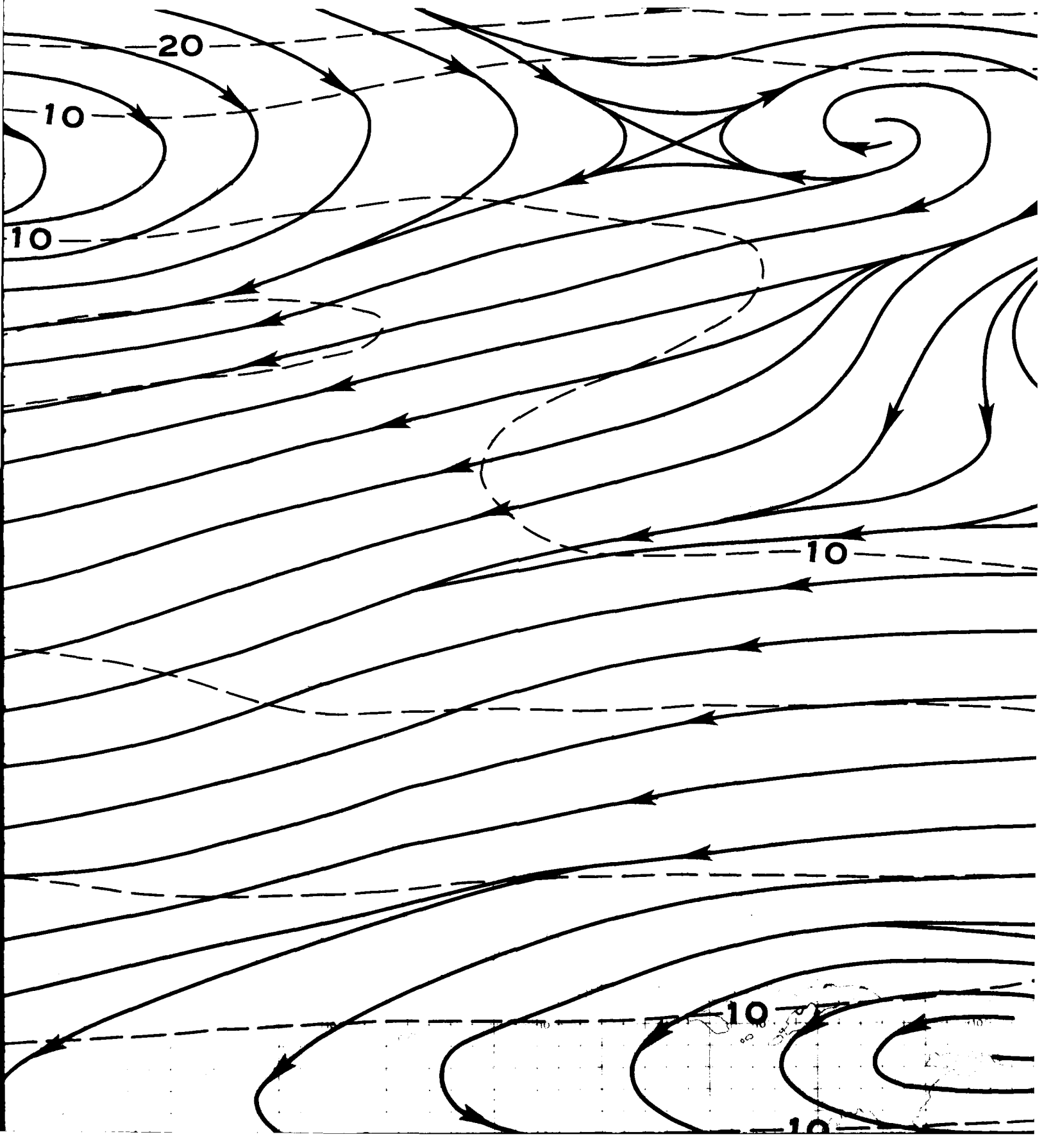

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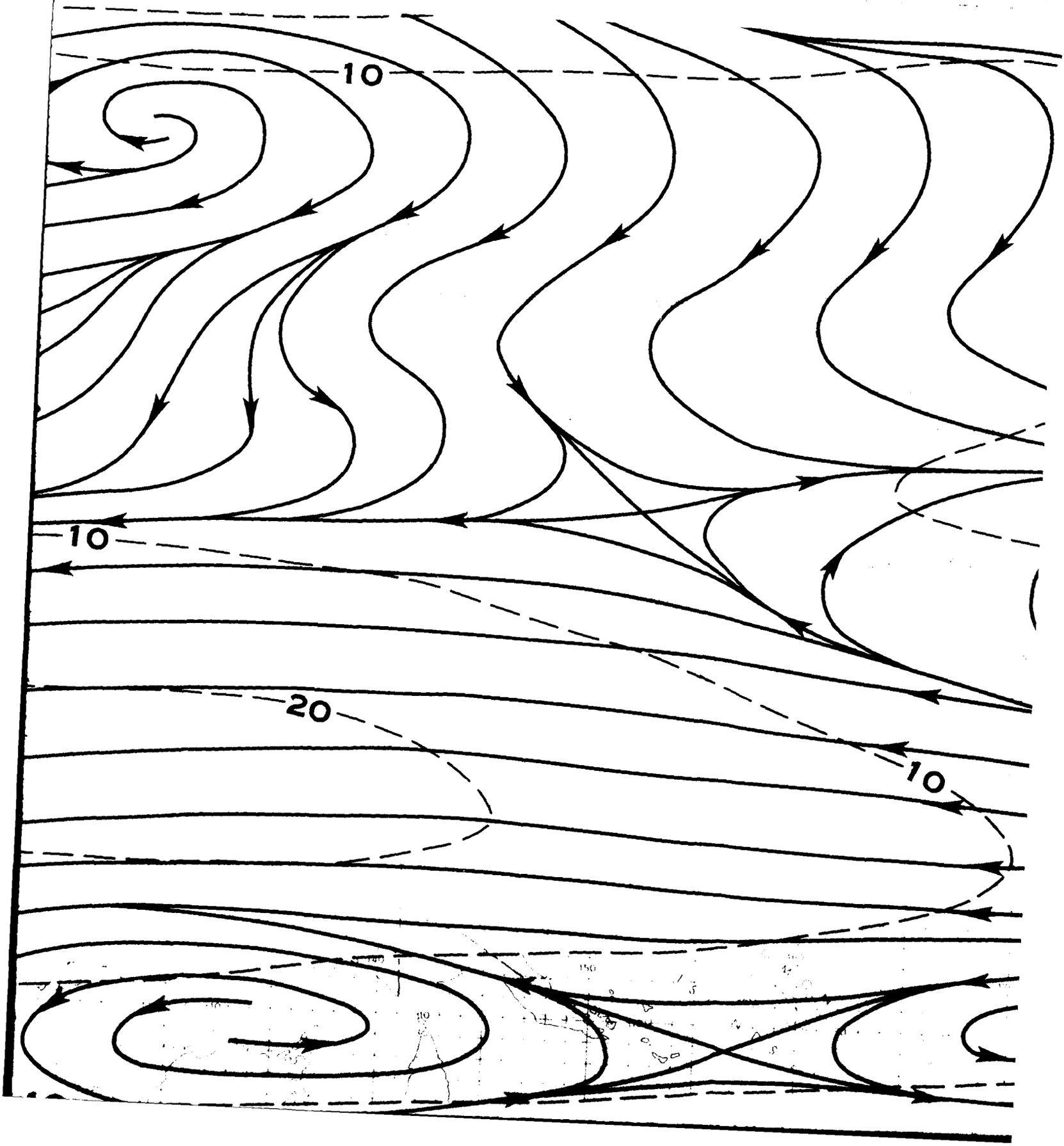

MULW-307W


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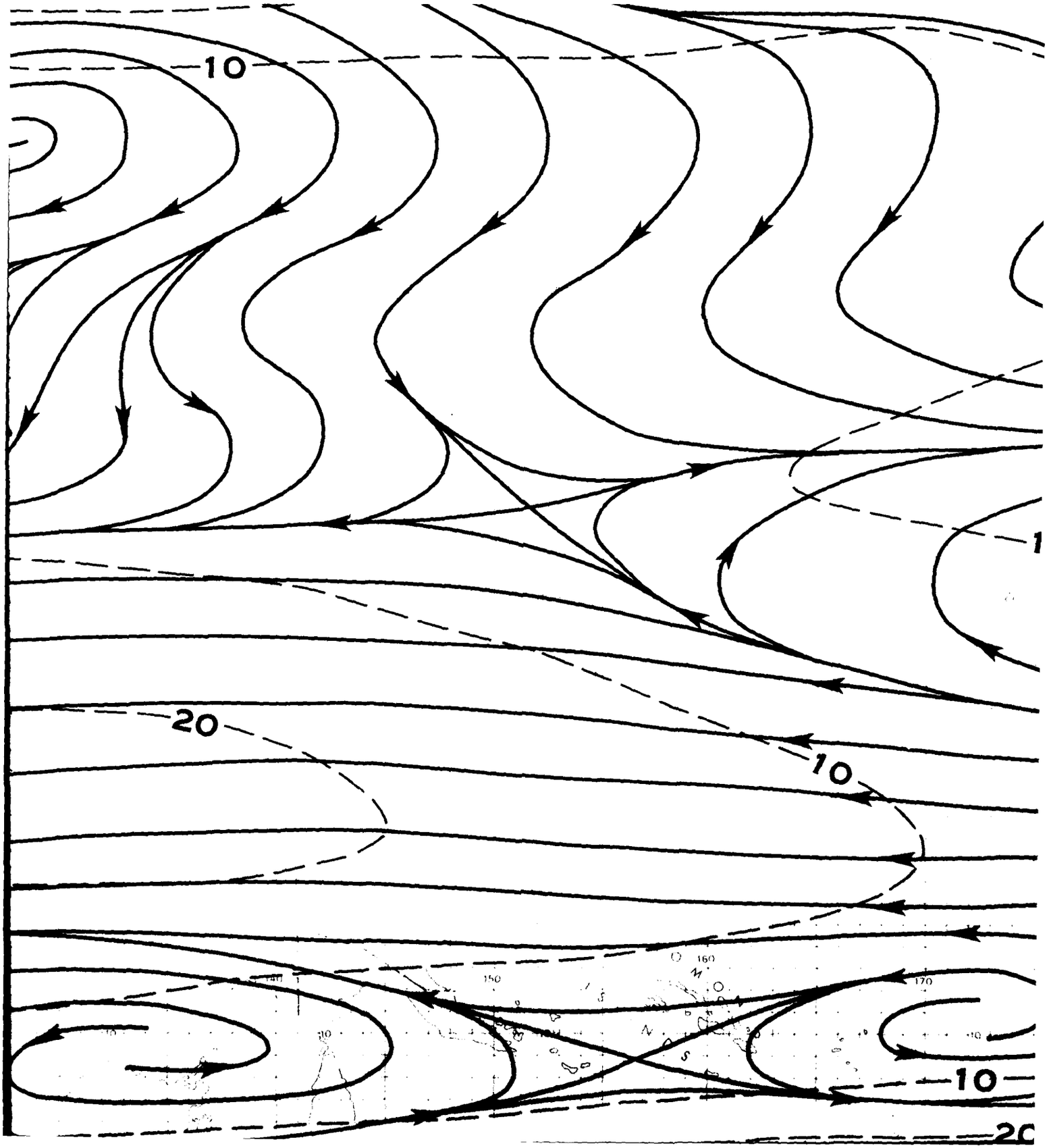
# MEAN UPPER LEVEL



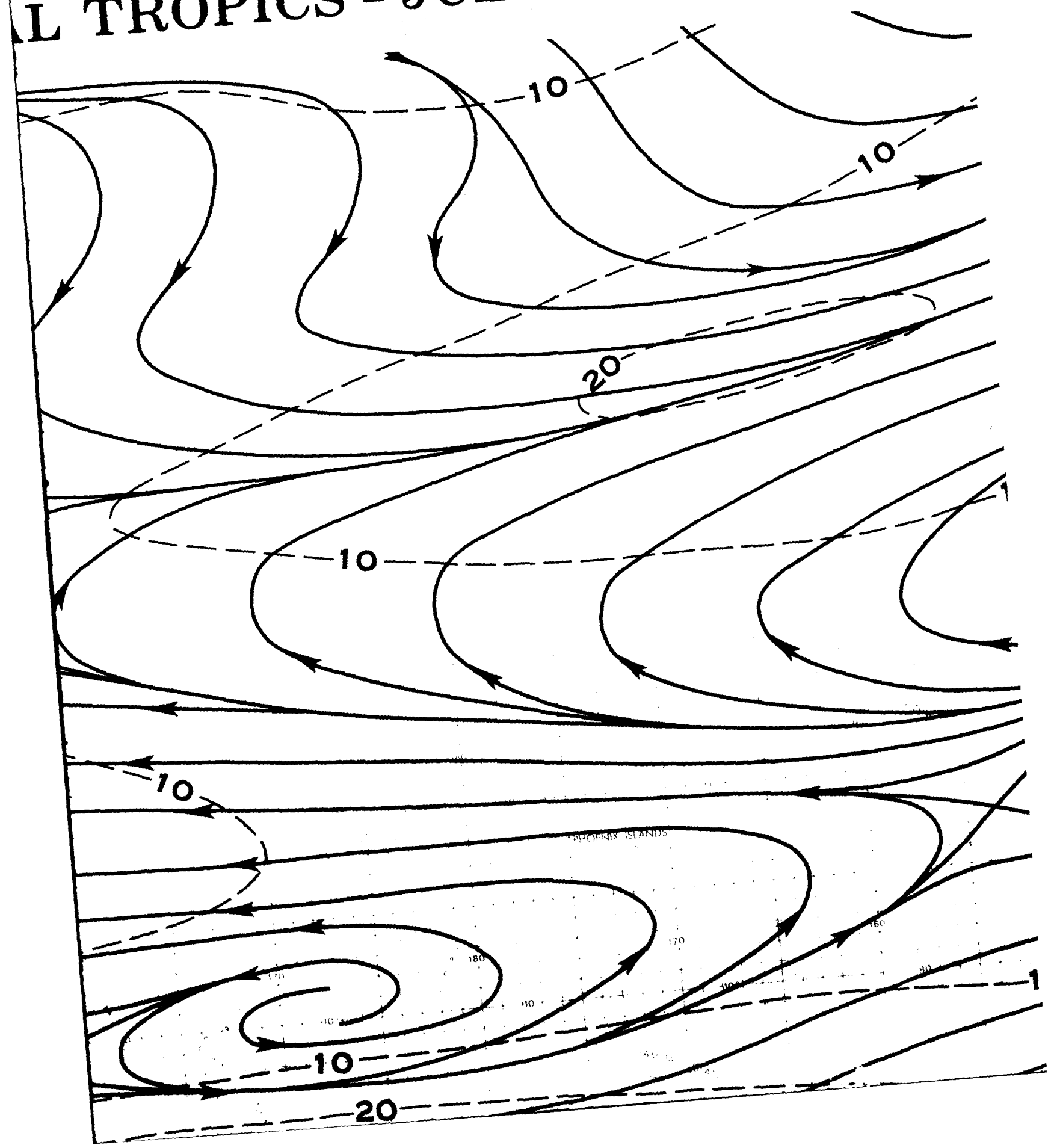
# R LEVEL WINDS over GLOBAL TRO

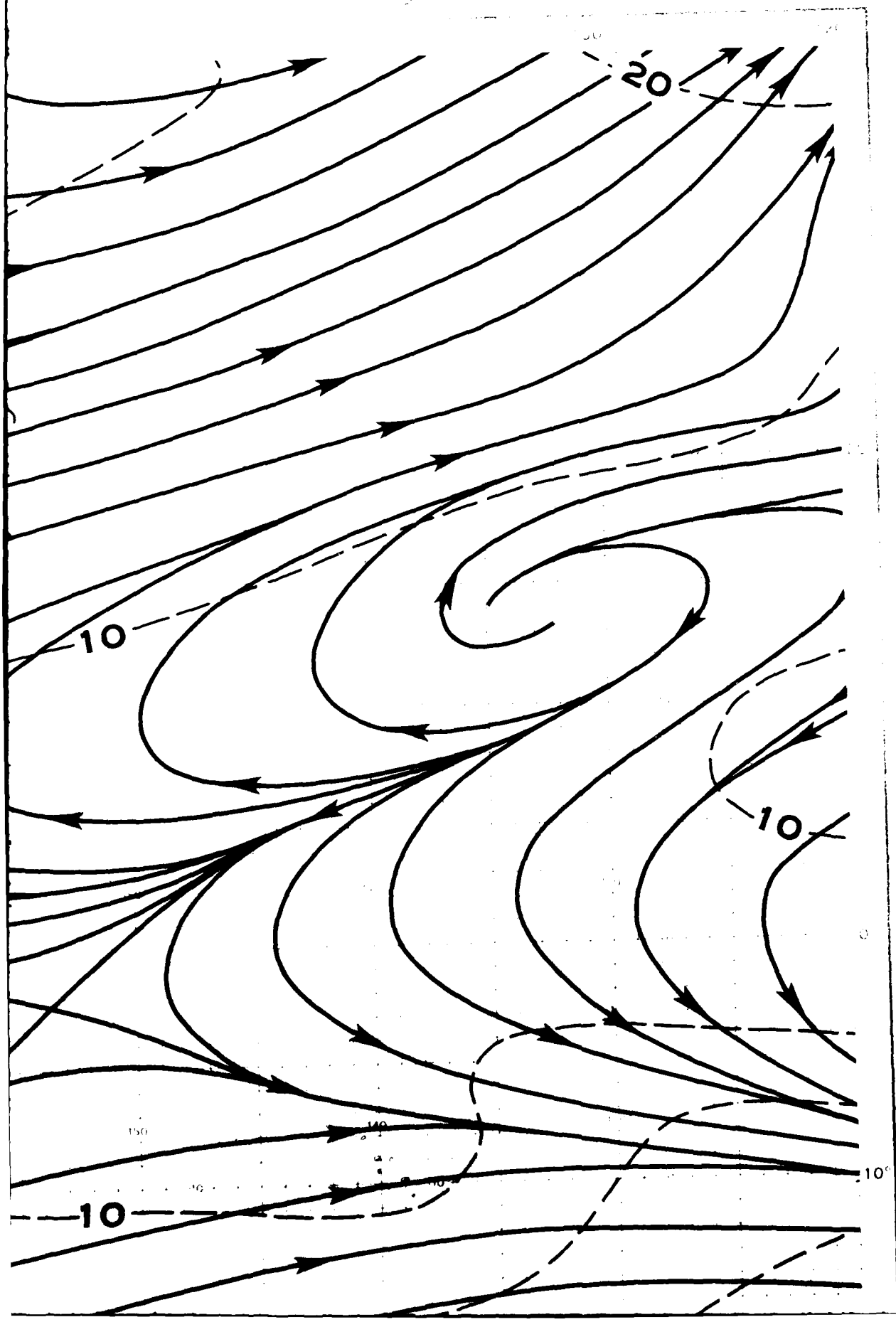


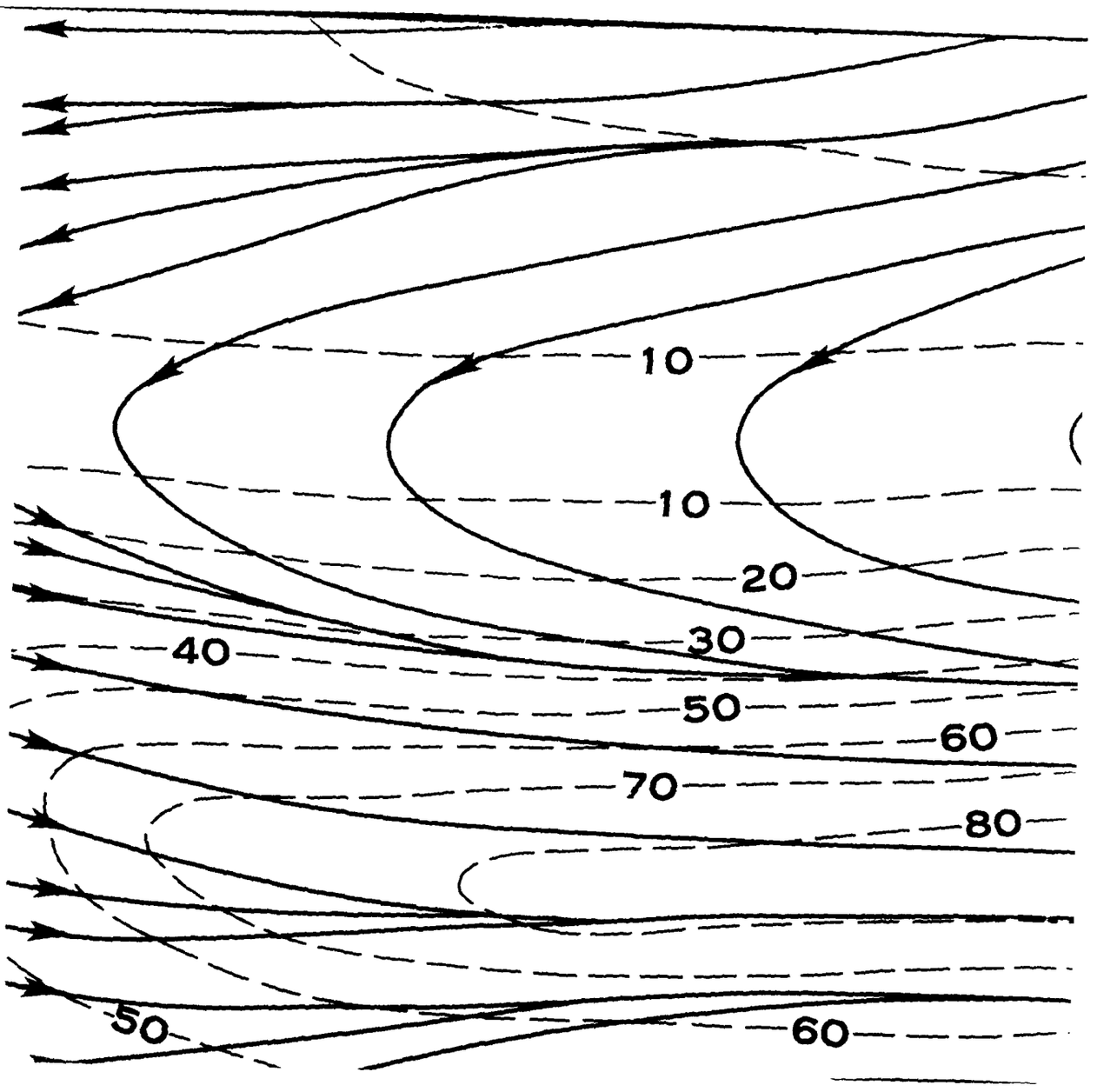
# :VEL WINDS over GLOBAL TROPIC

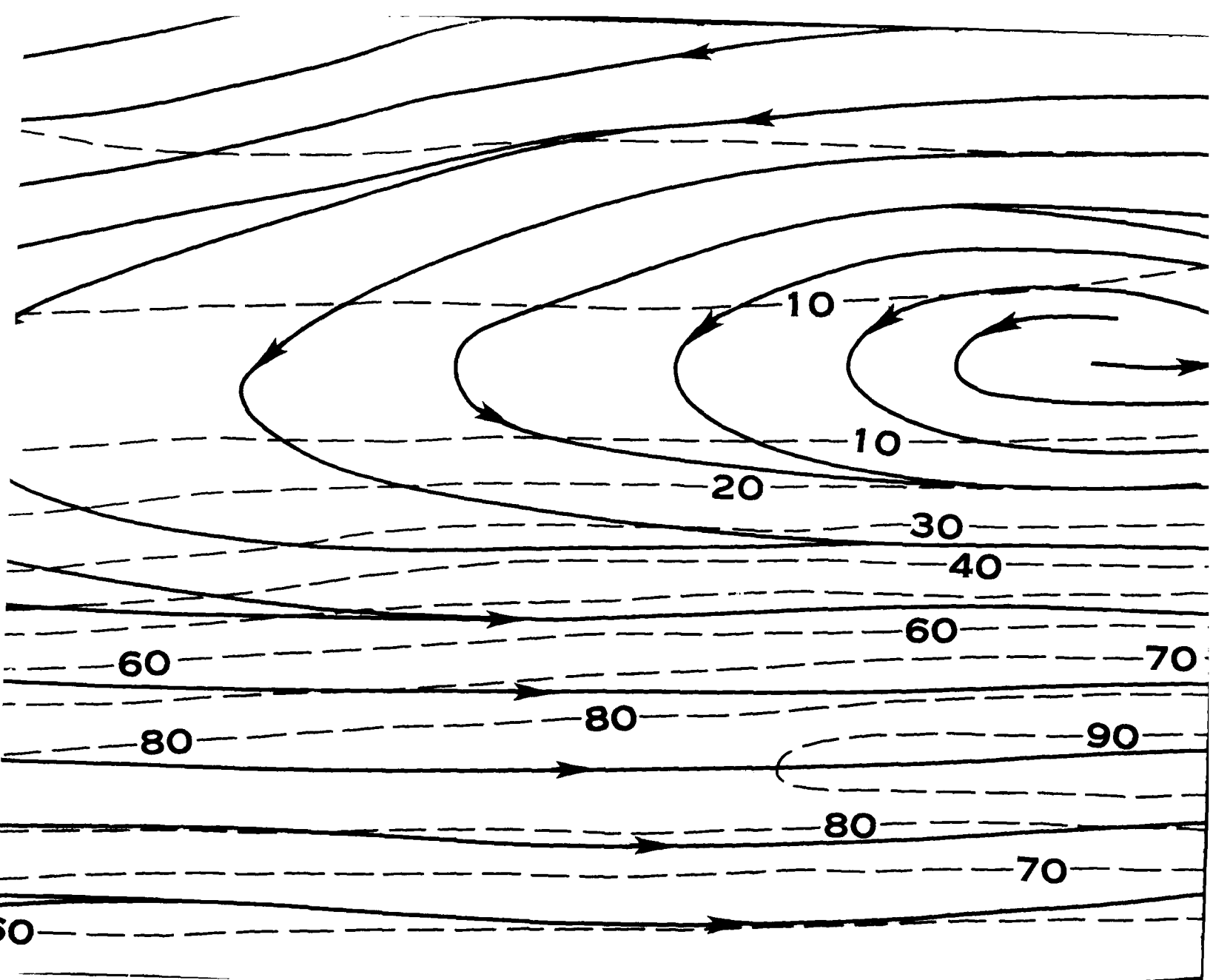


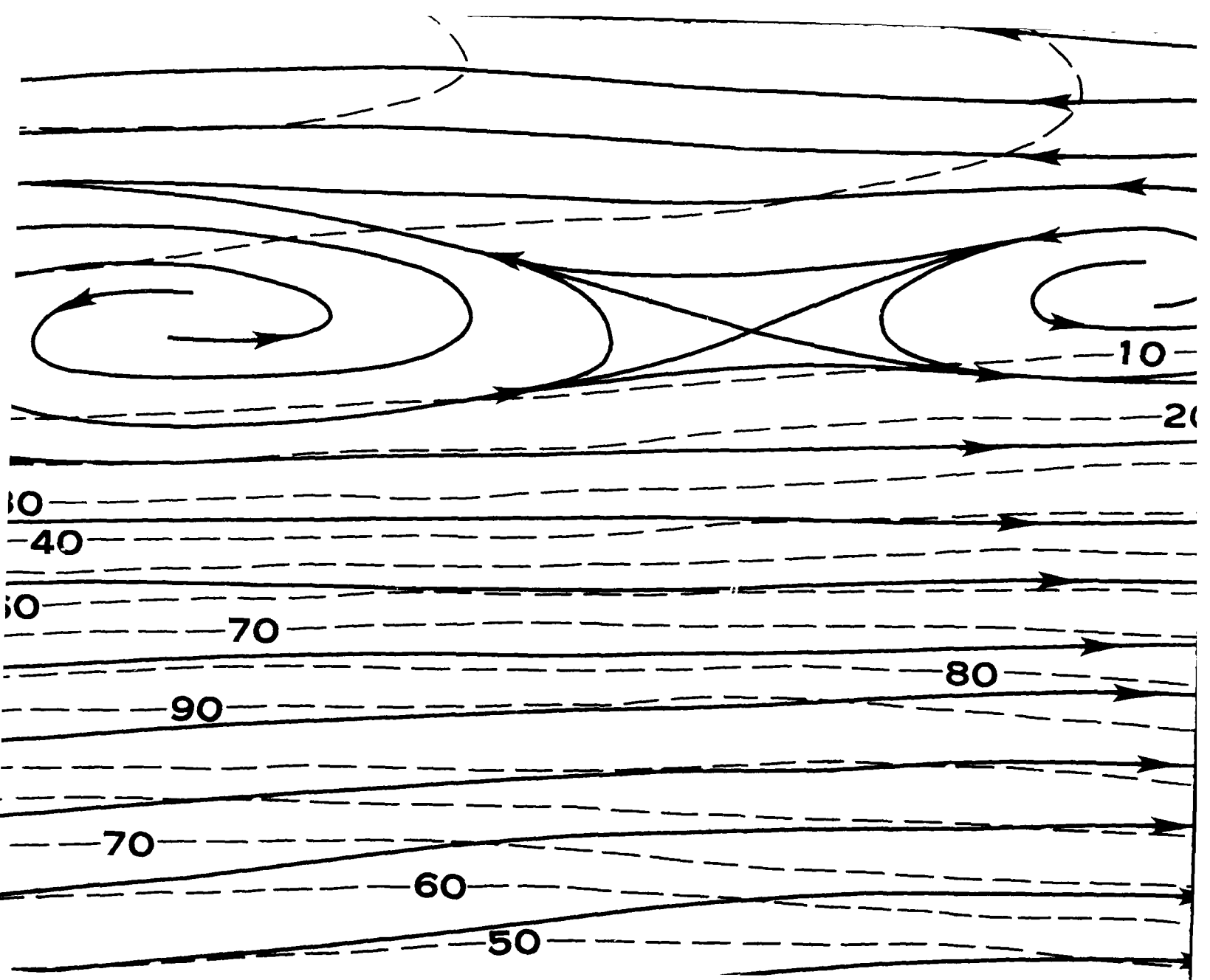
# L TROPICS - JULY 300mb

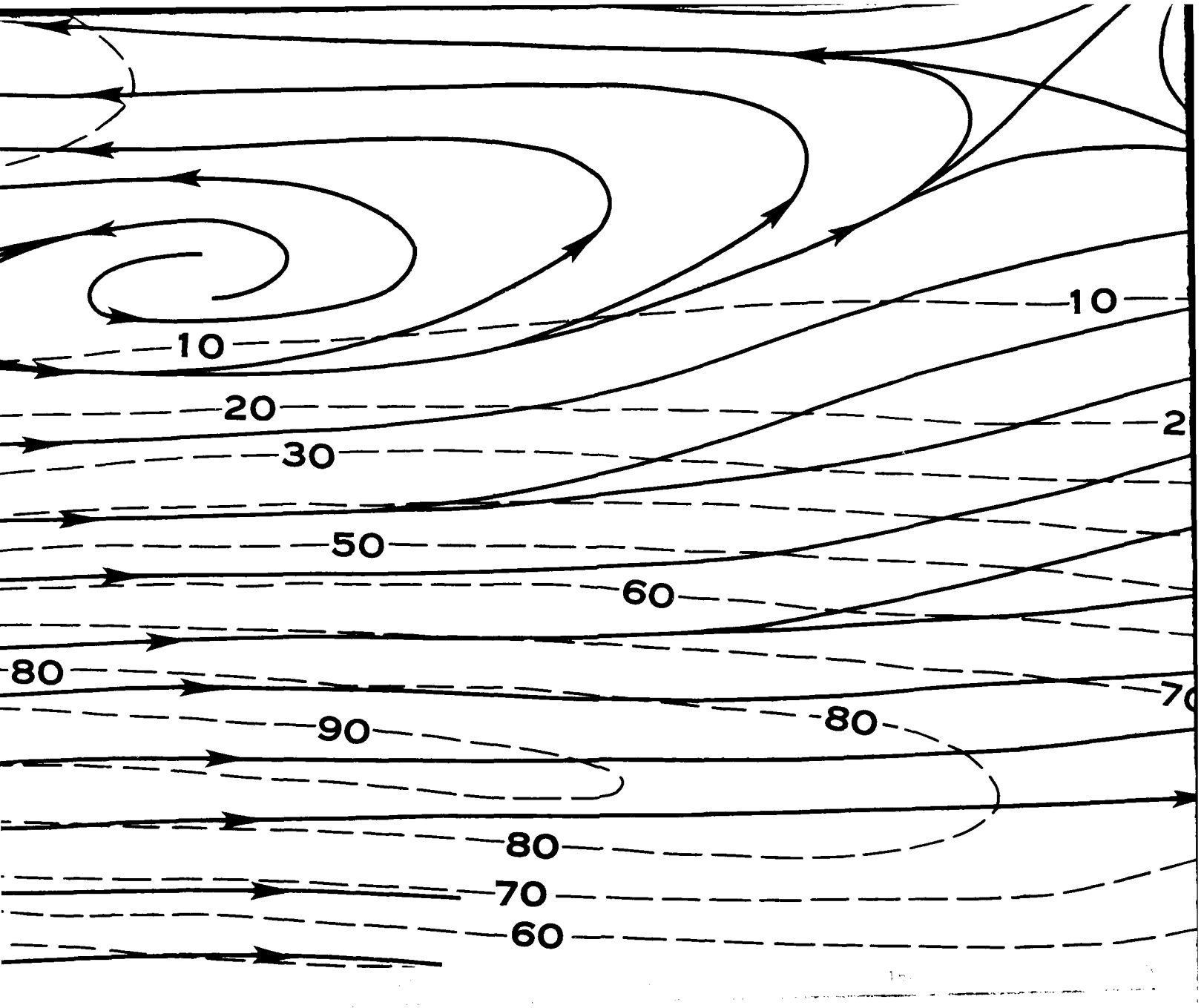


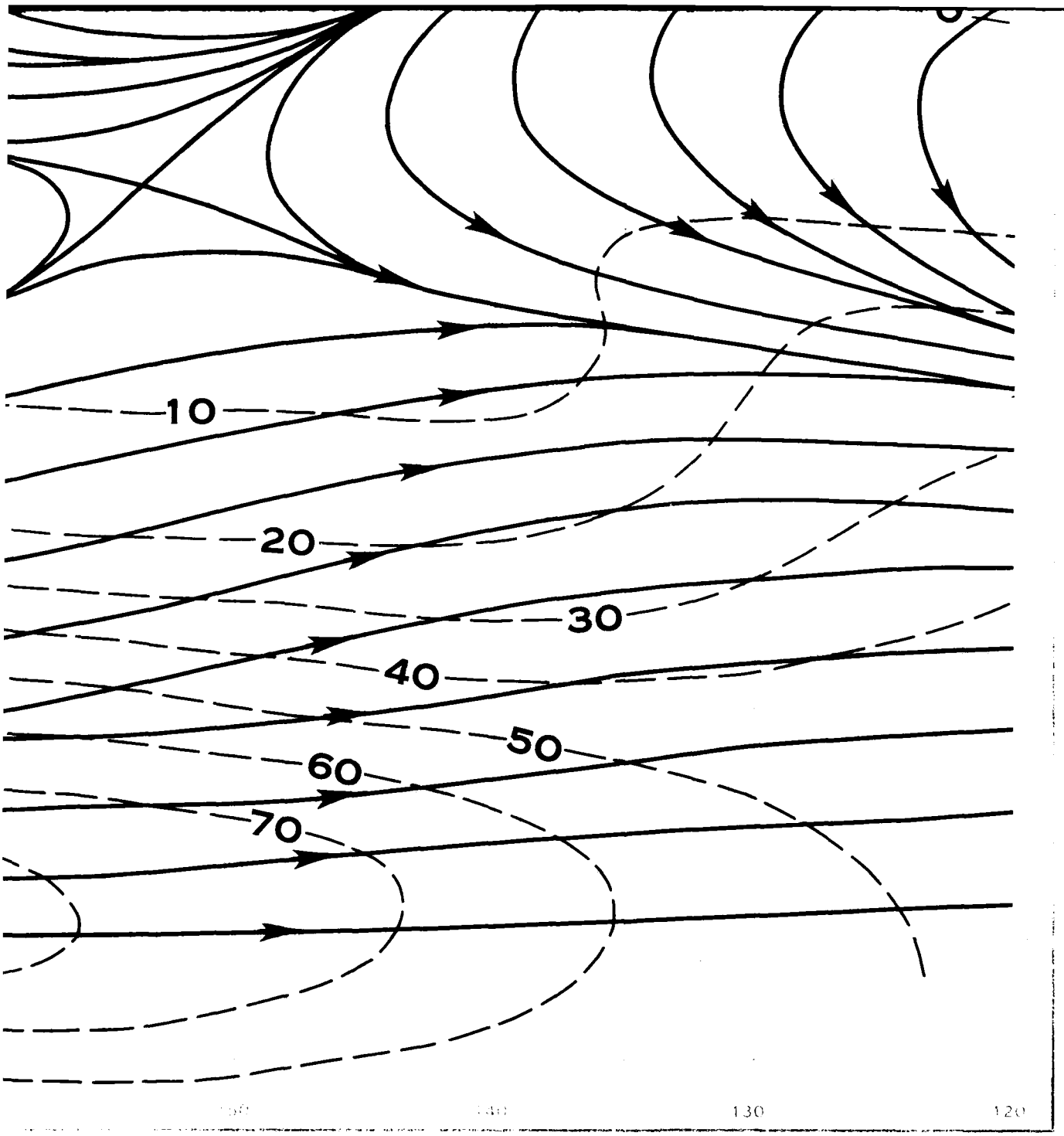

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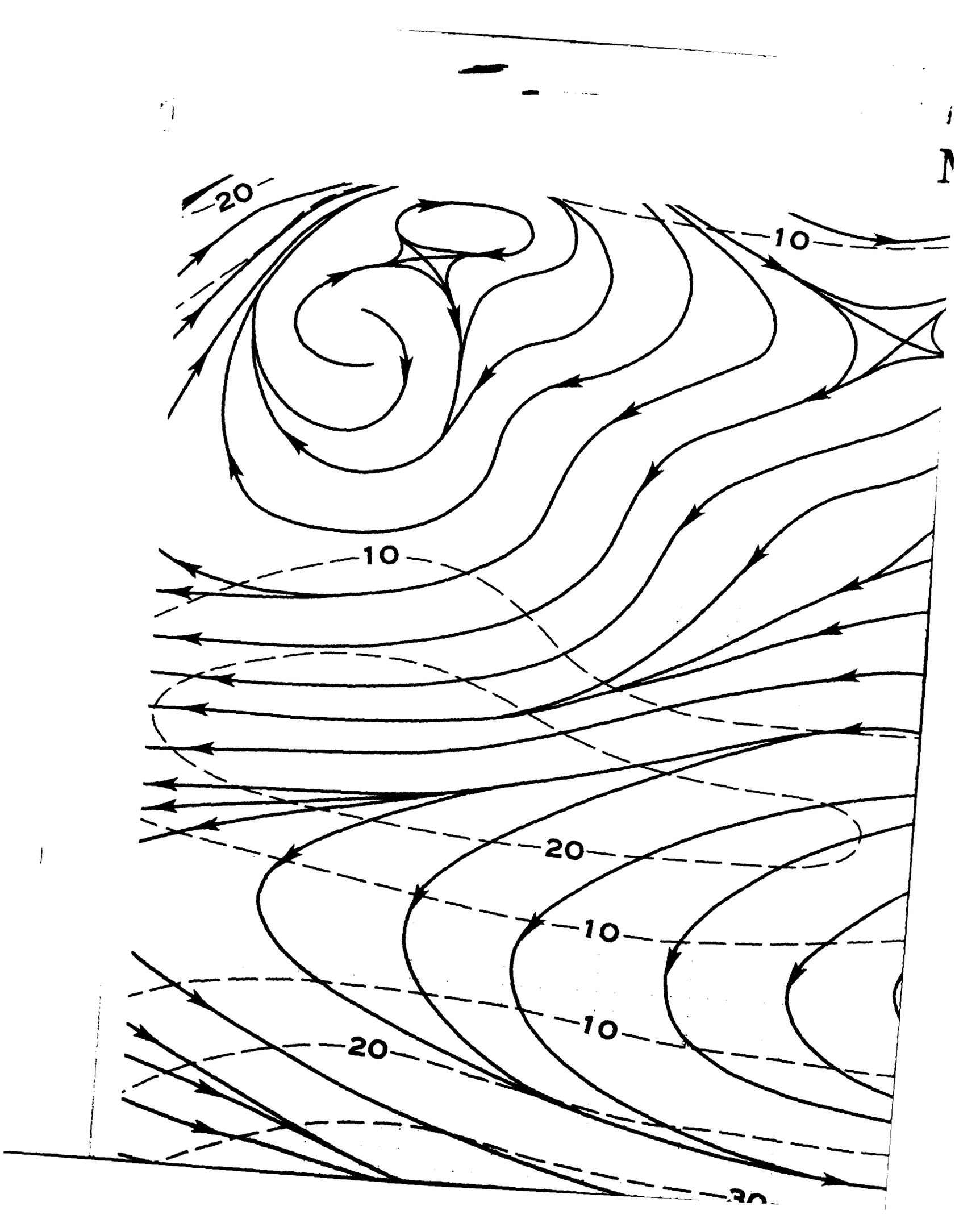

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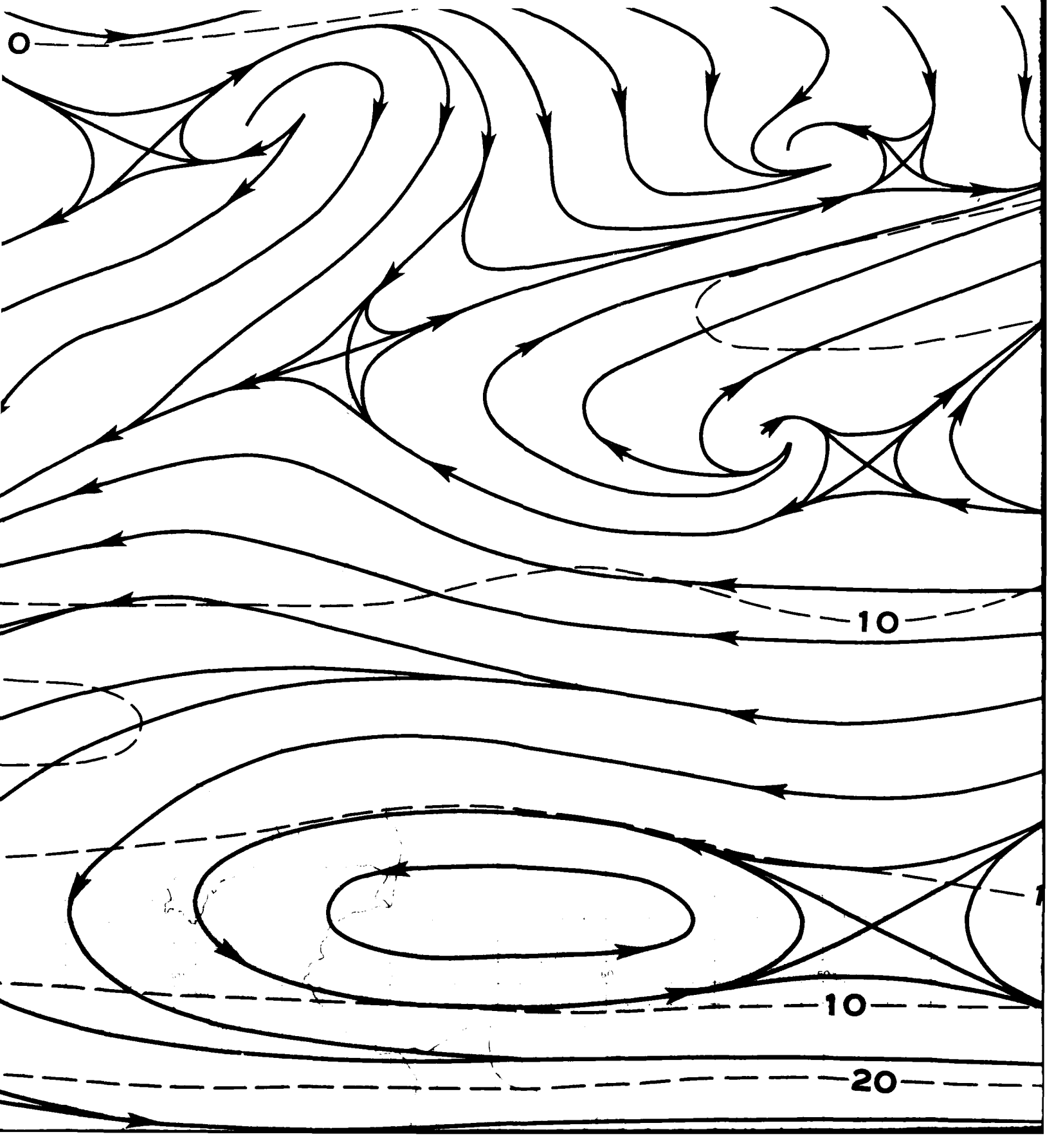



MULW-307E

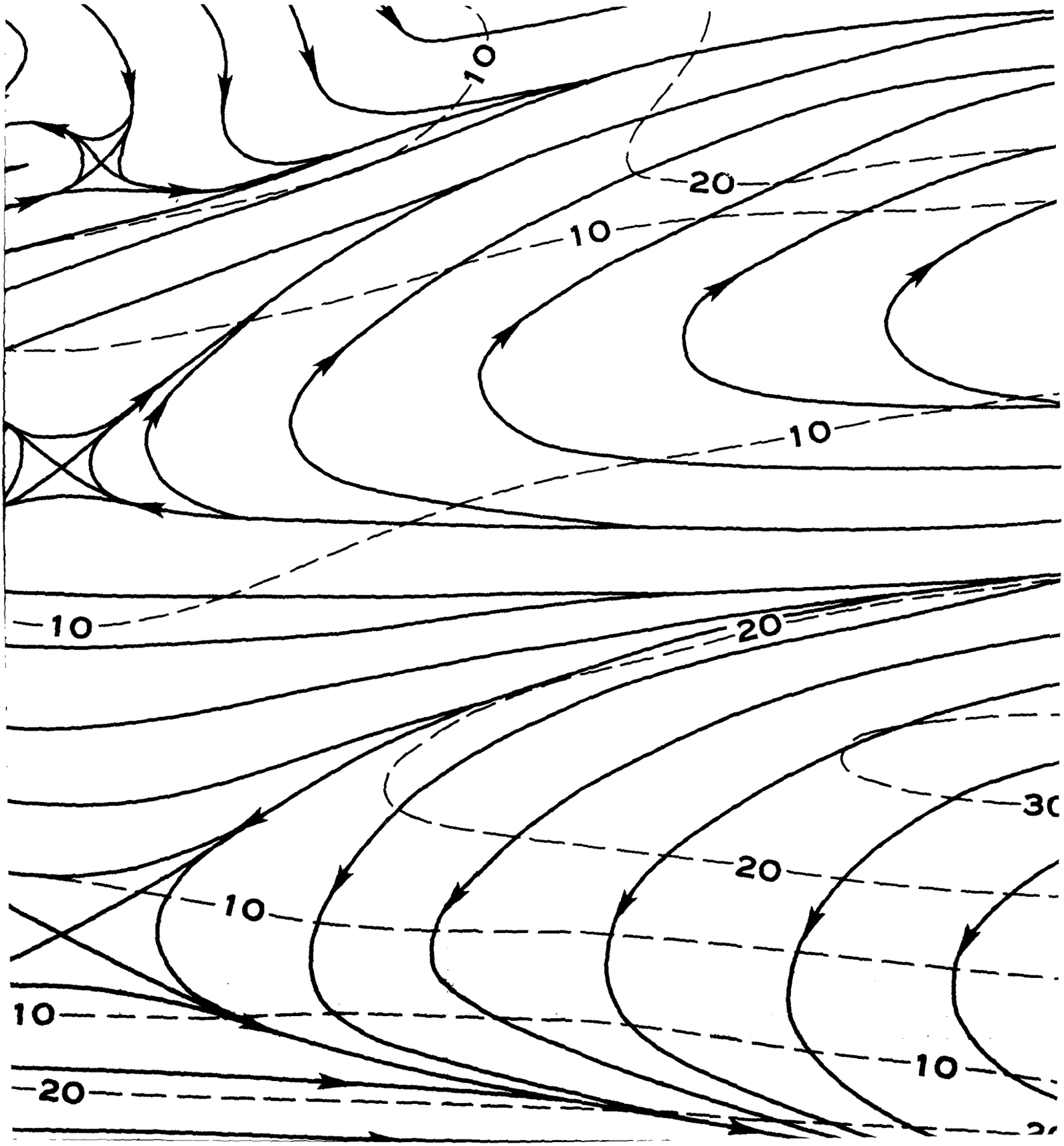
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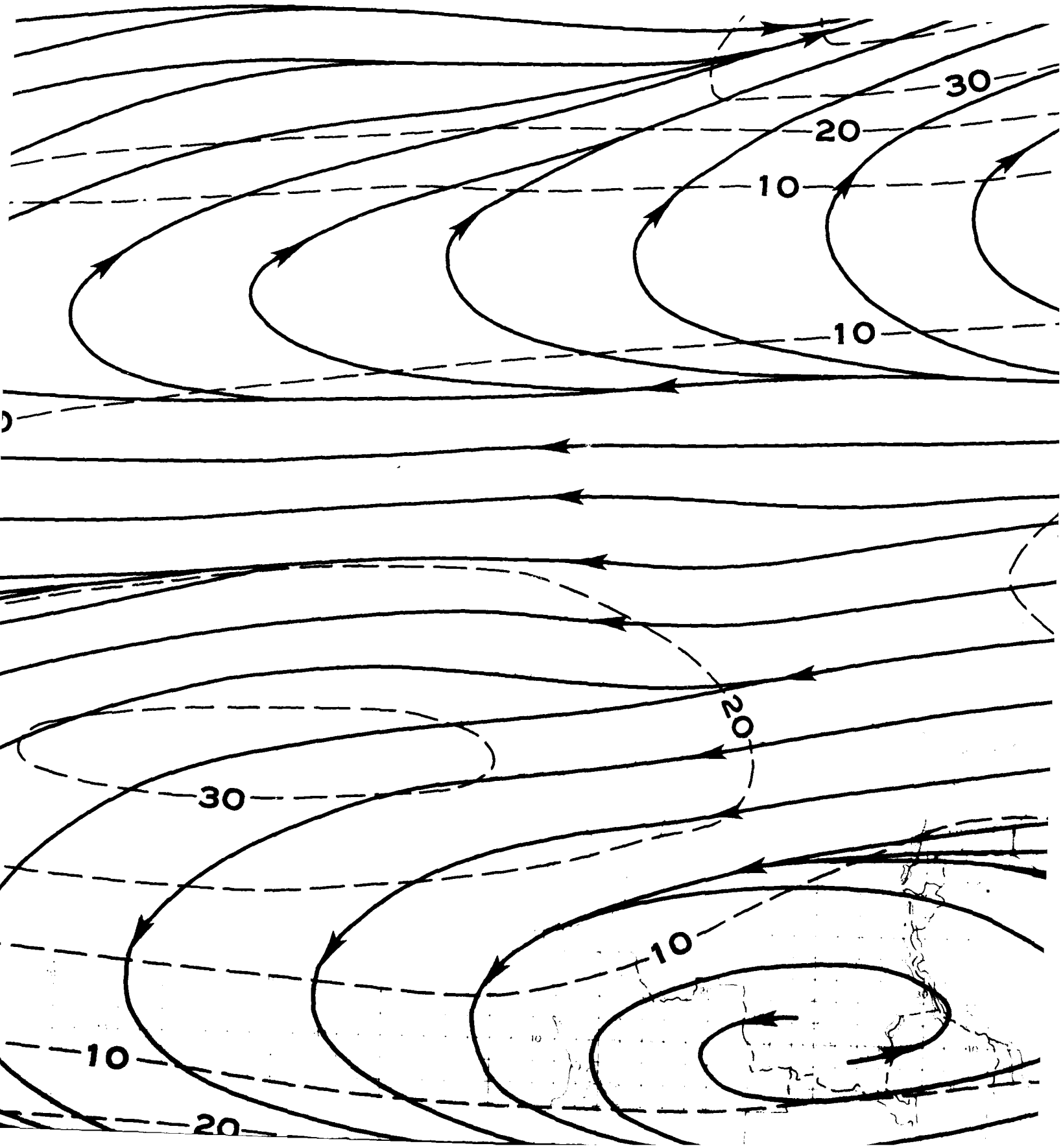
# MEAN UPPER LEVEL WINDS

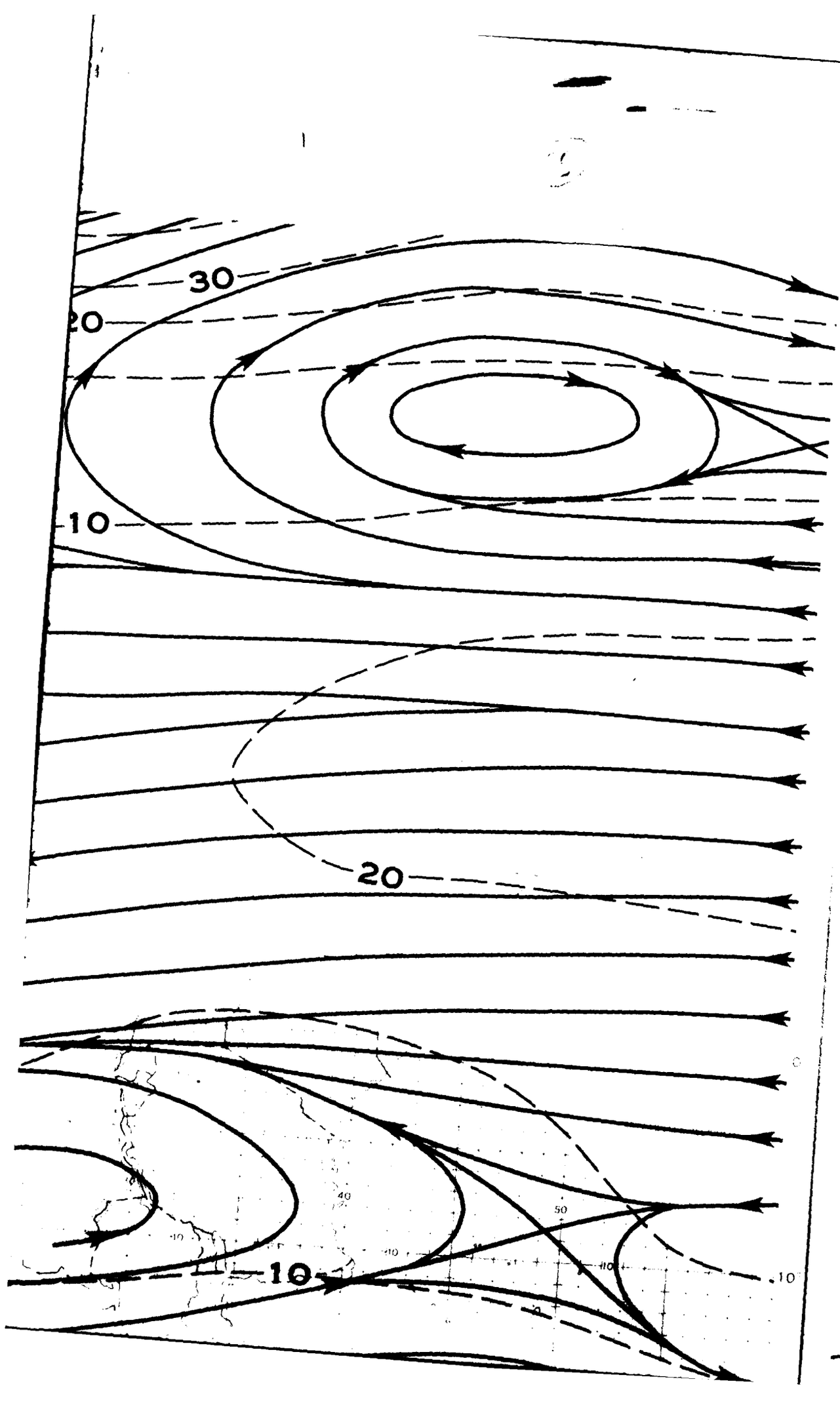


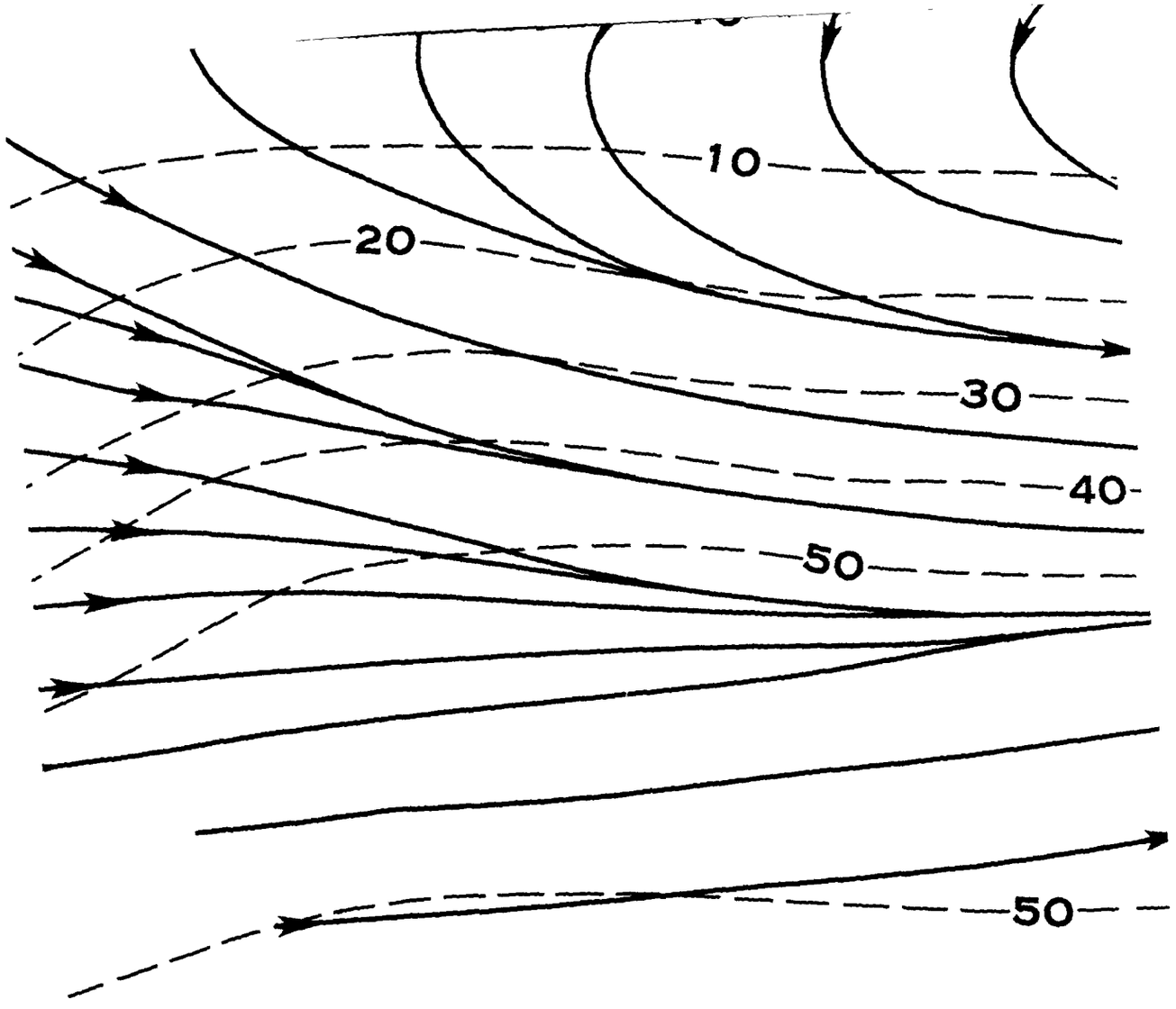
# WINDS over GLOBAL TROPICS - A



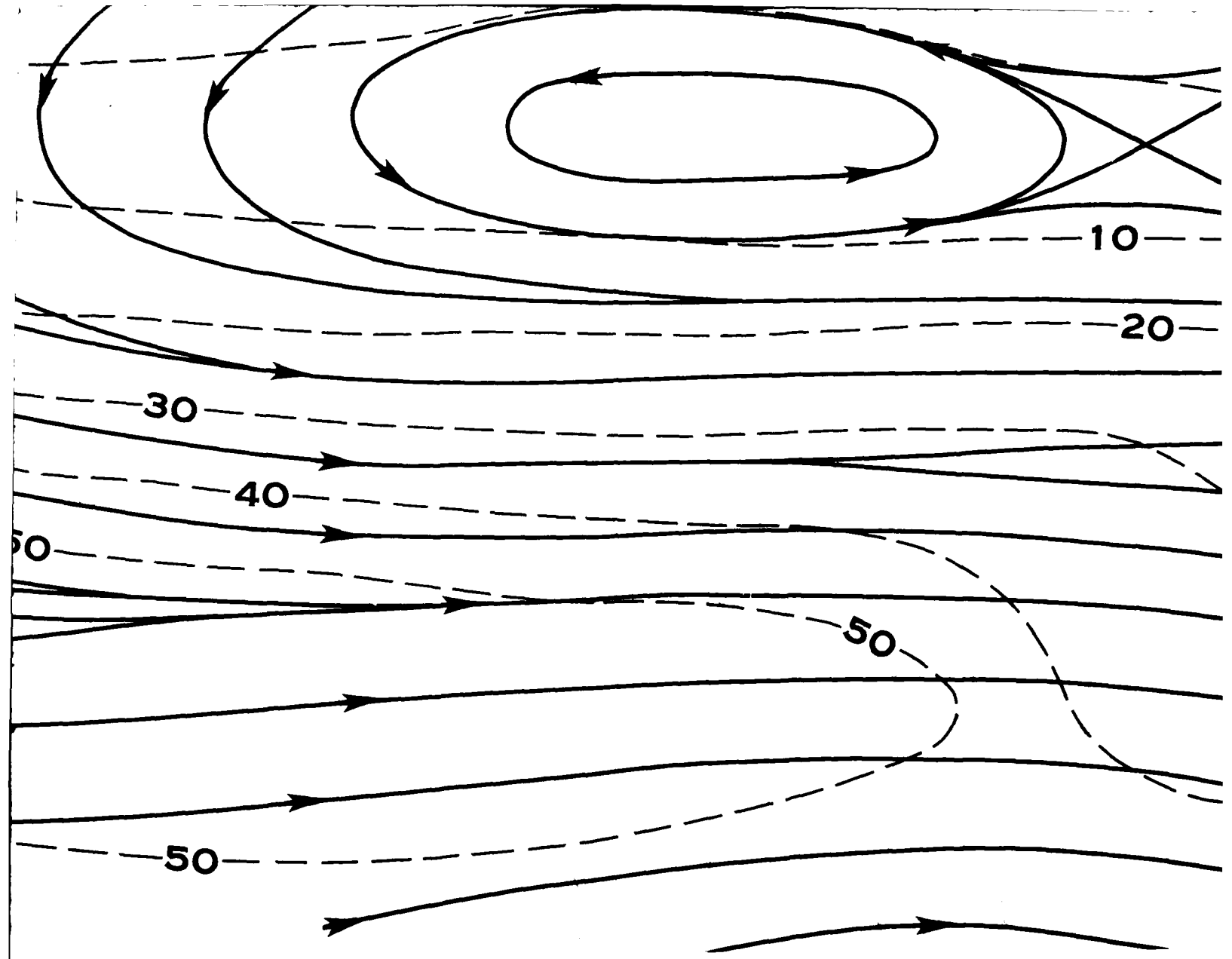
# PICS - AUGUST 300mb

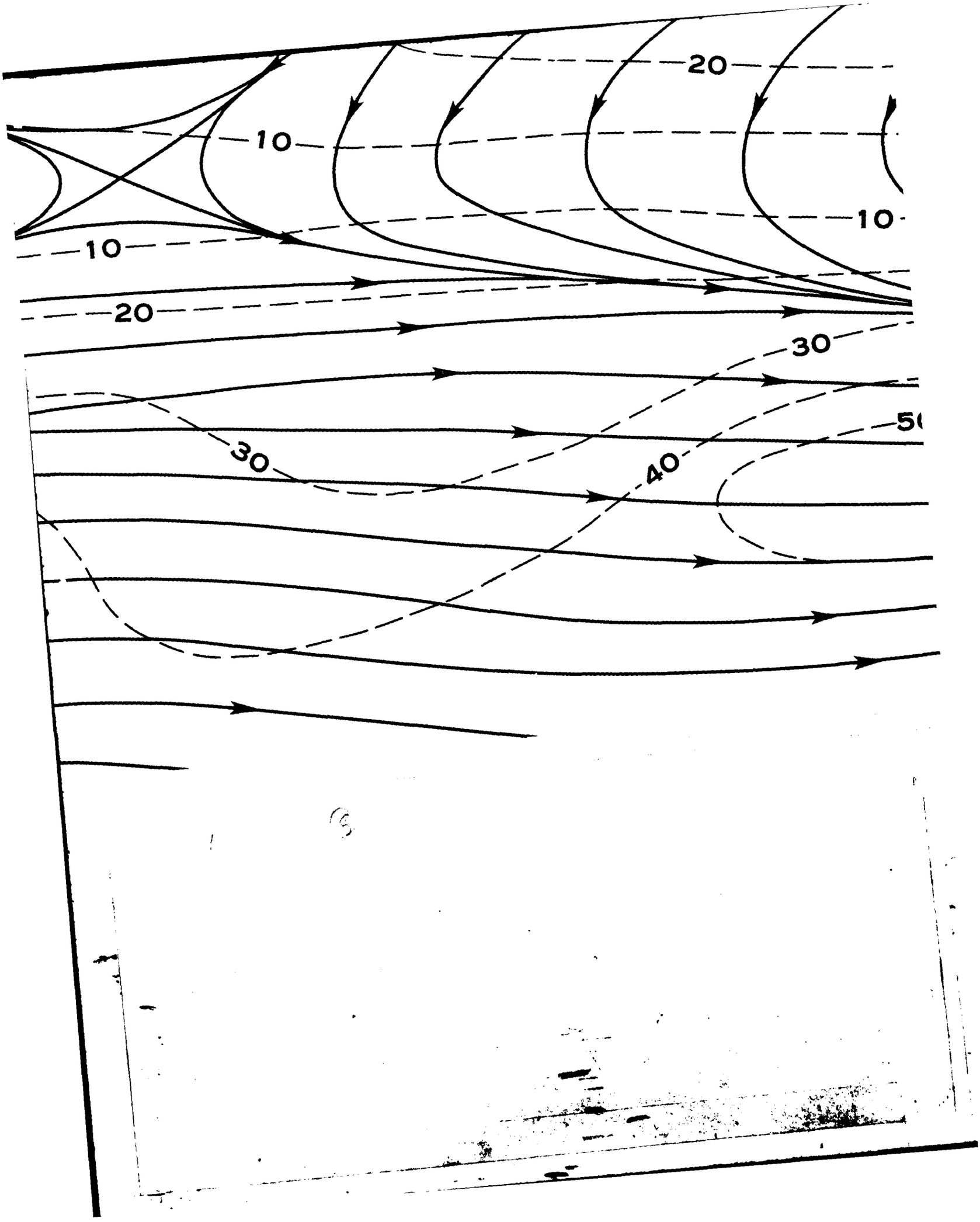


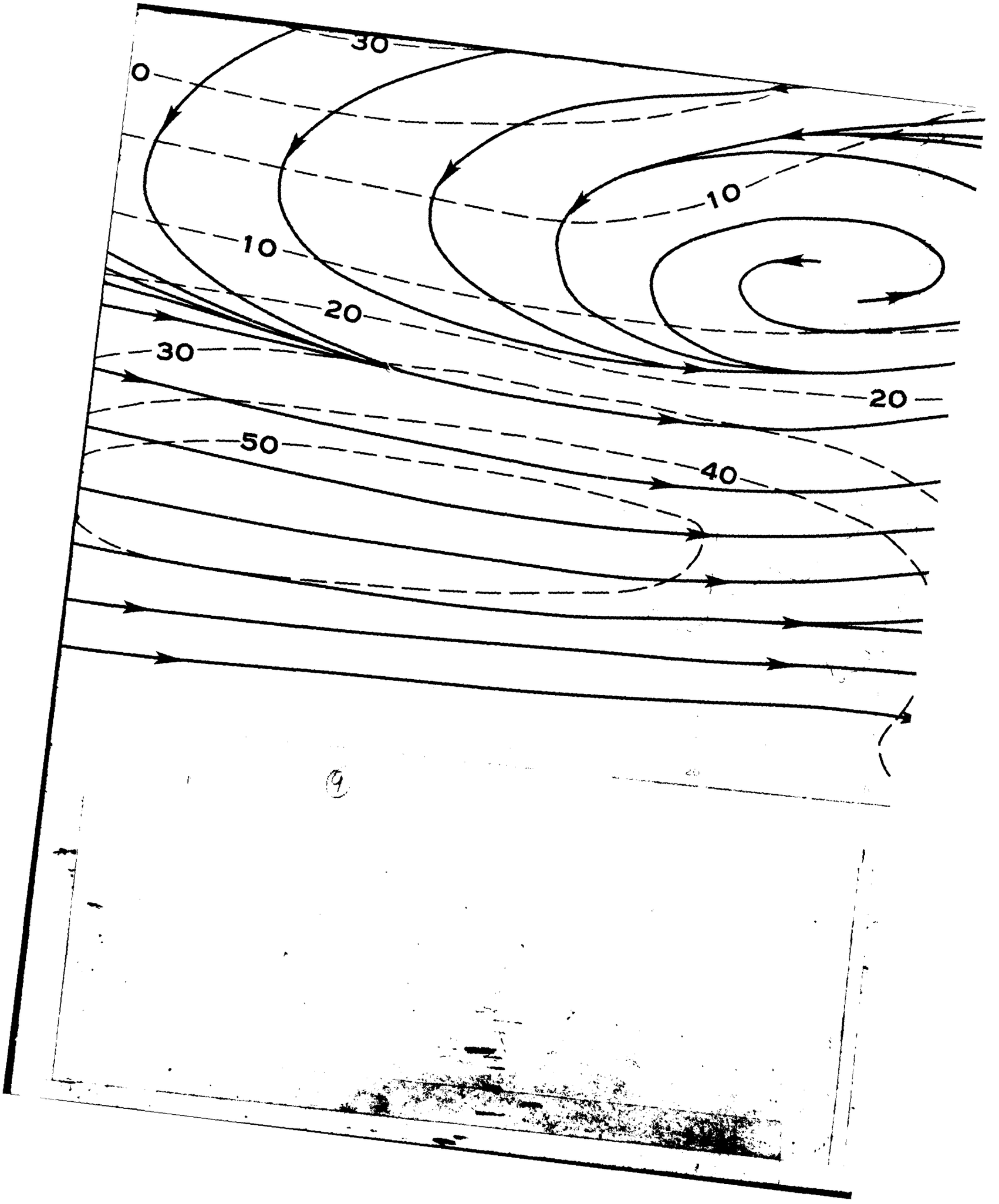

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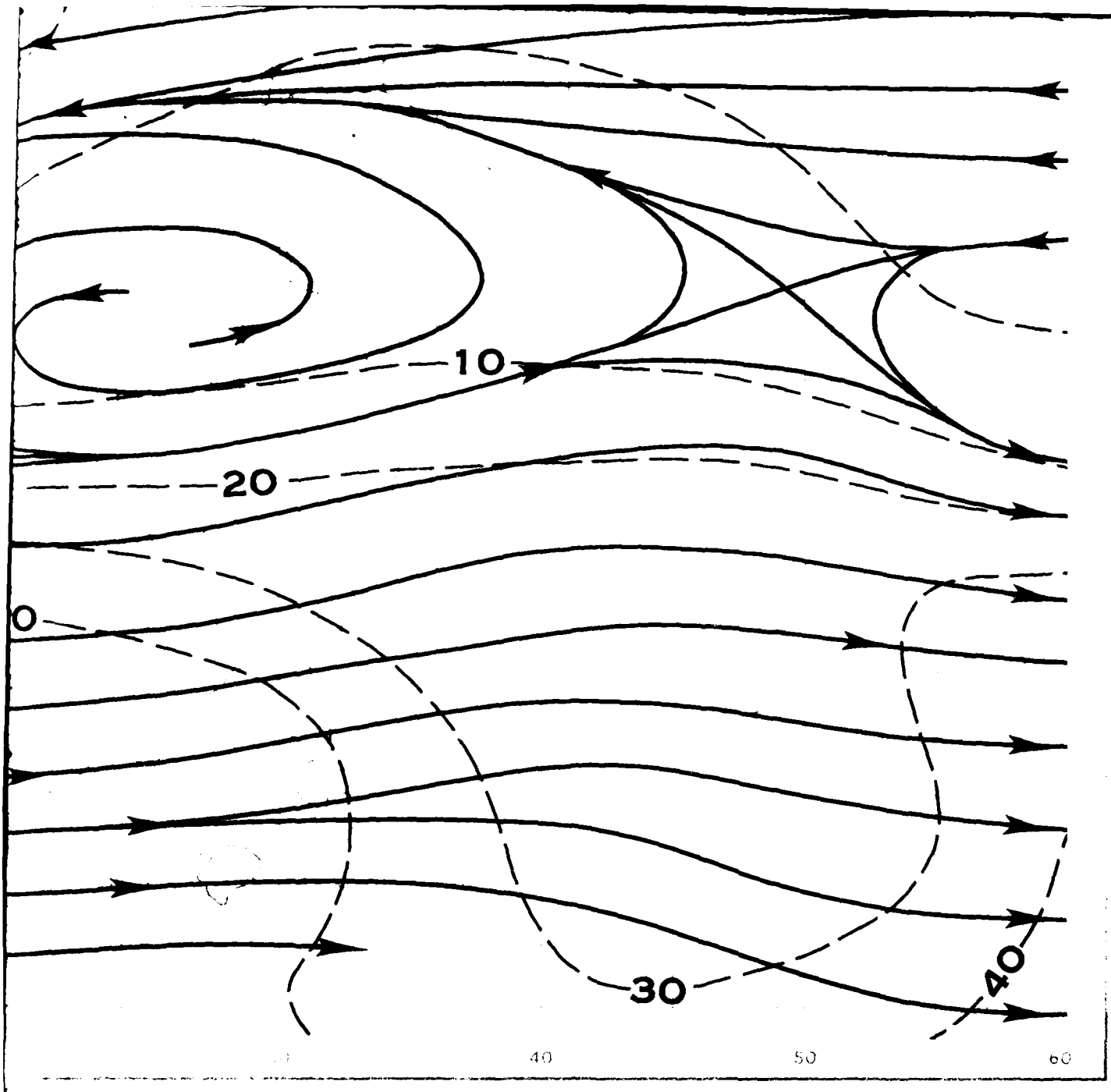



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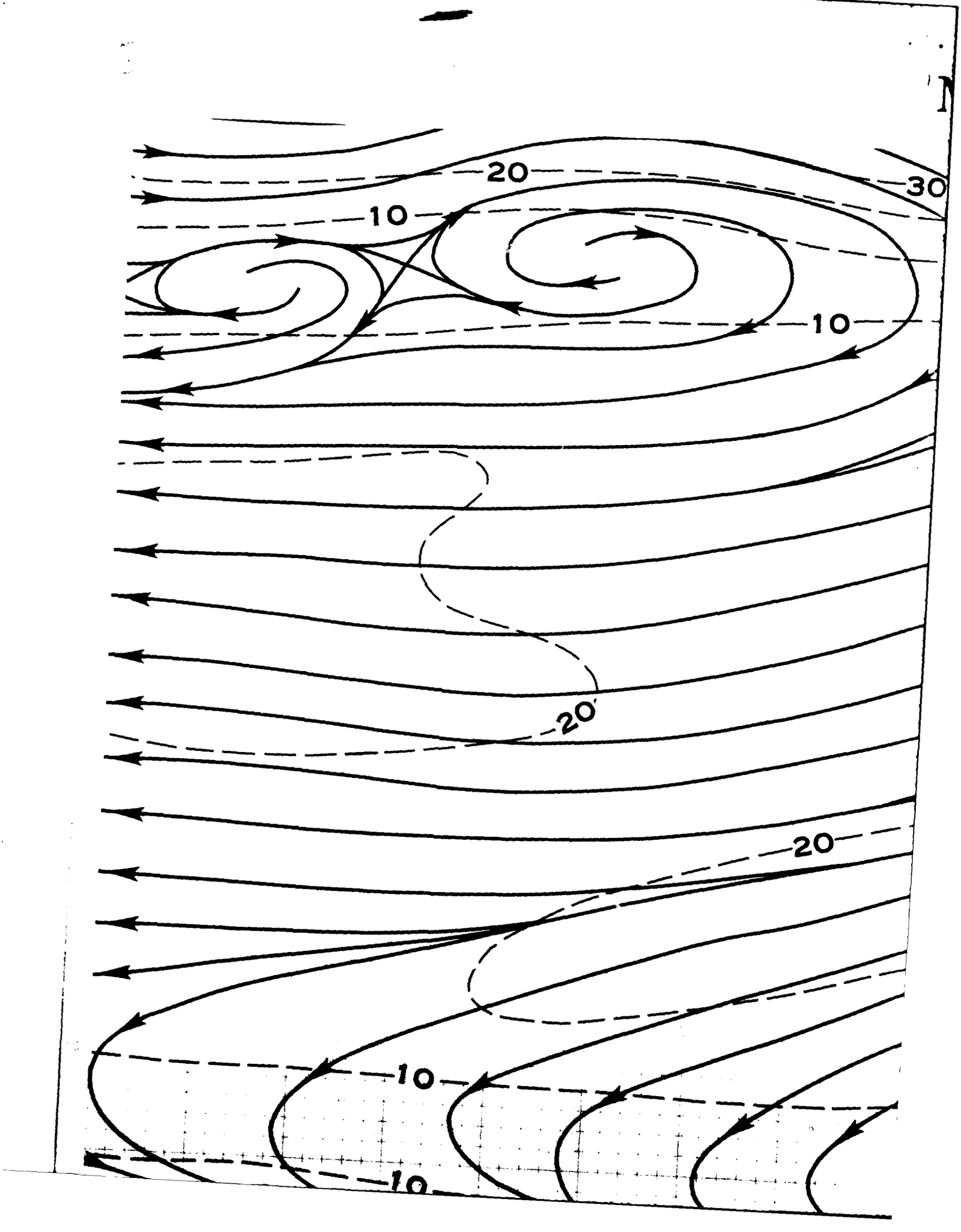

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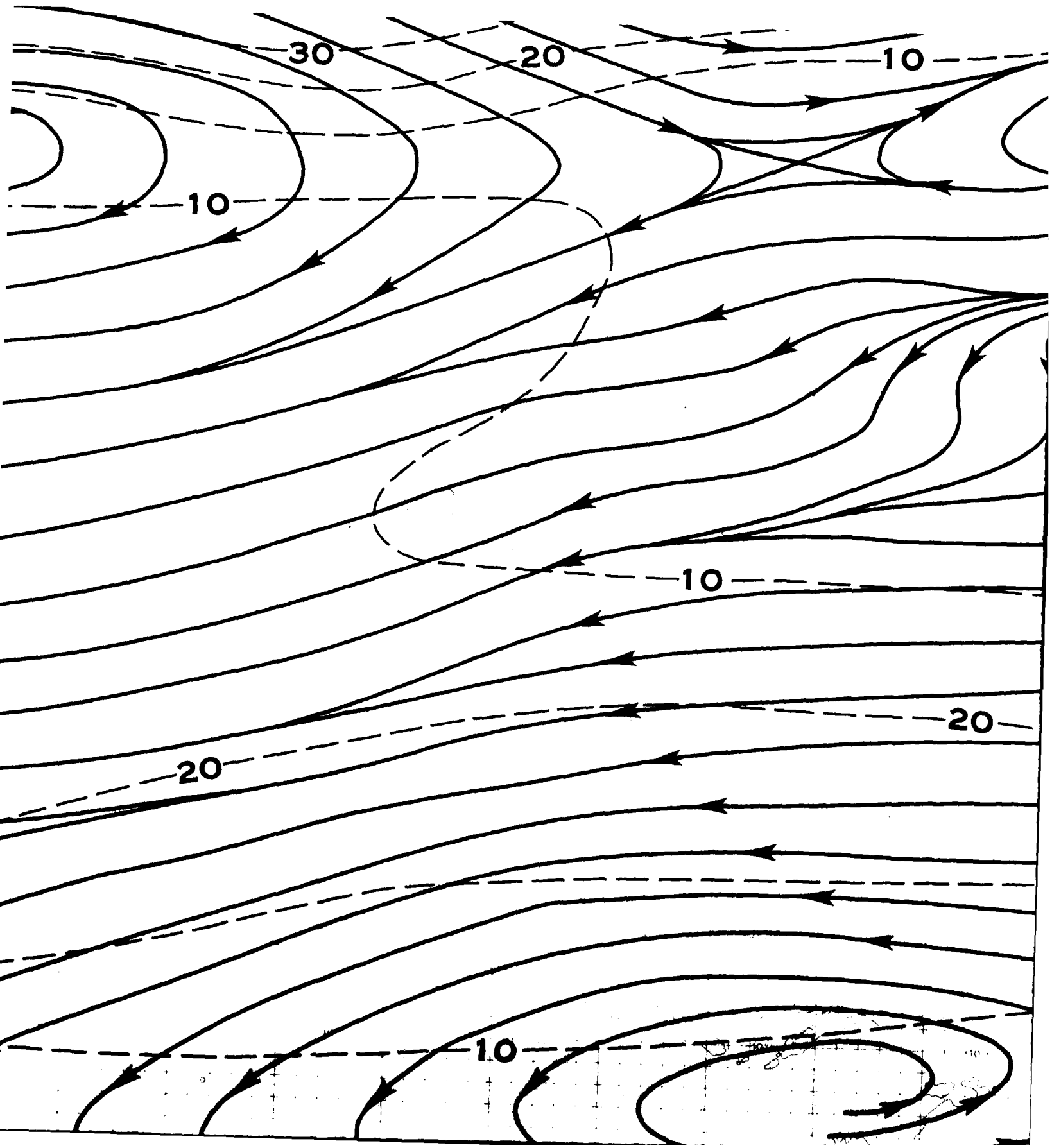



MULW-308W

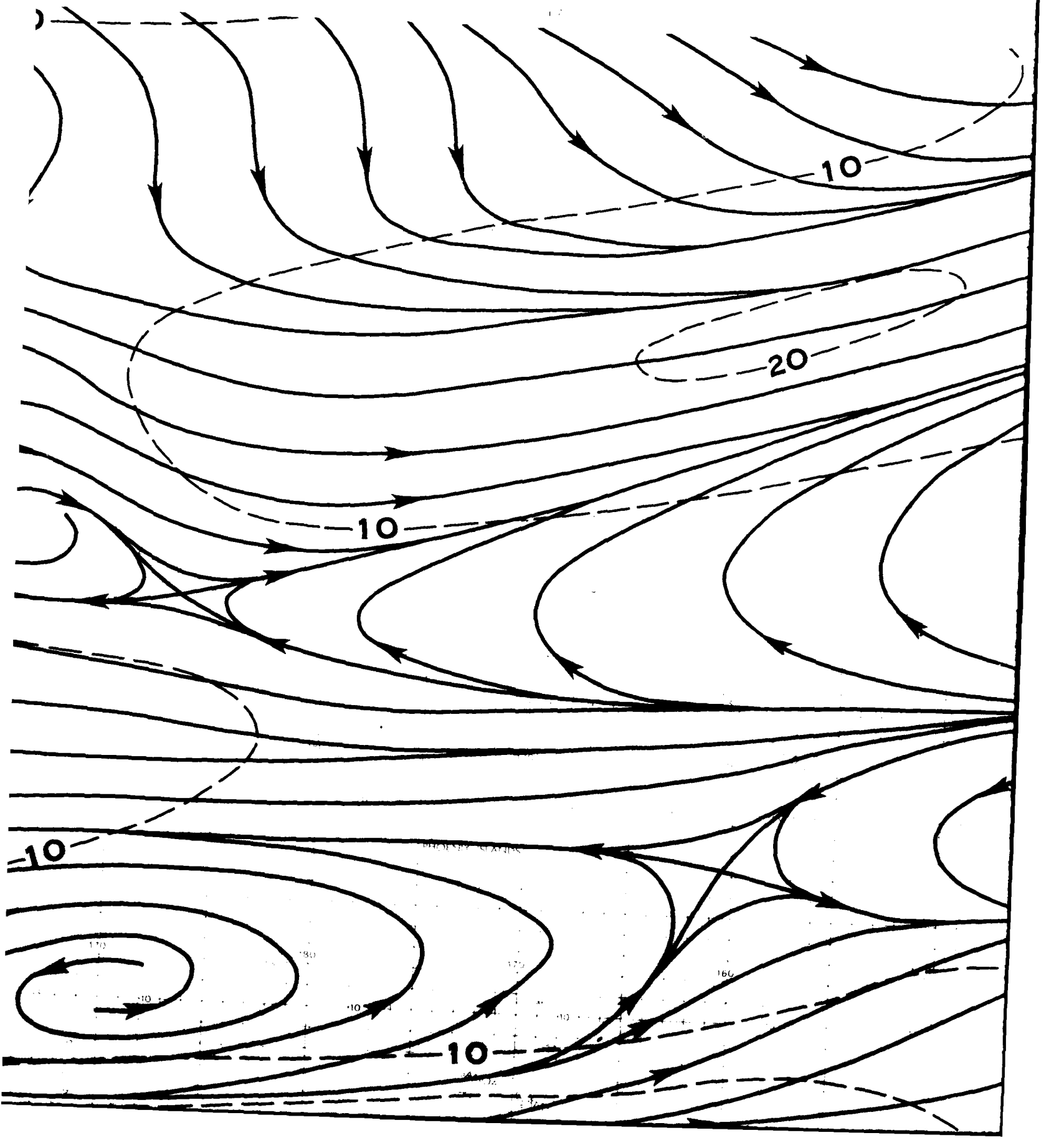
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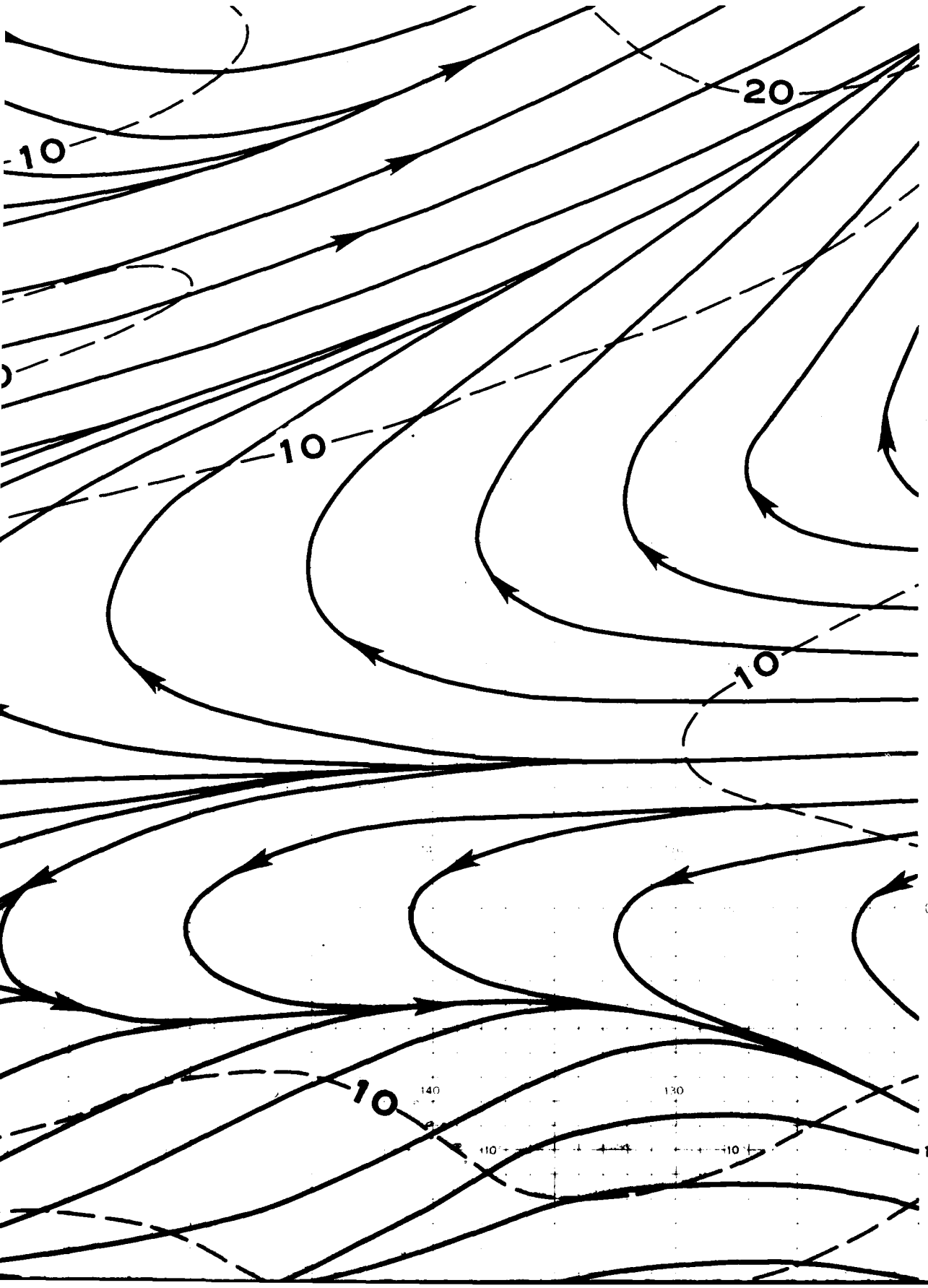

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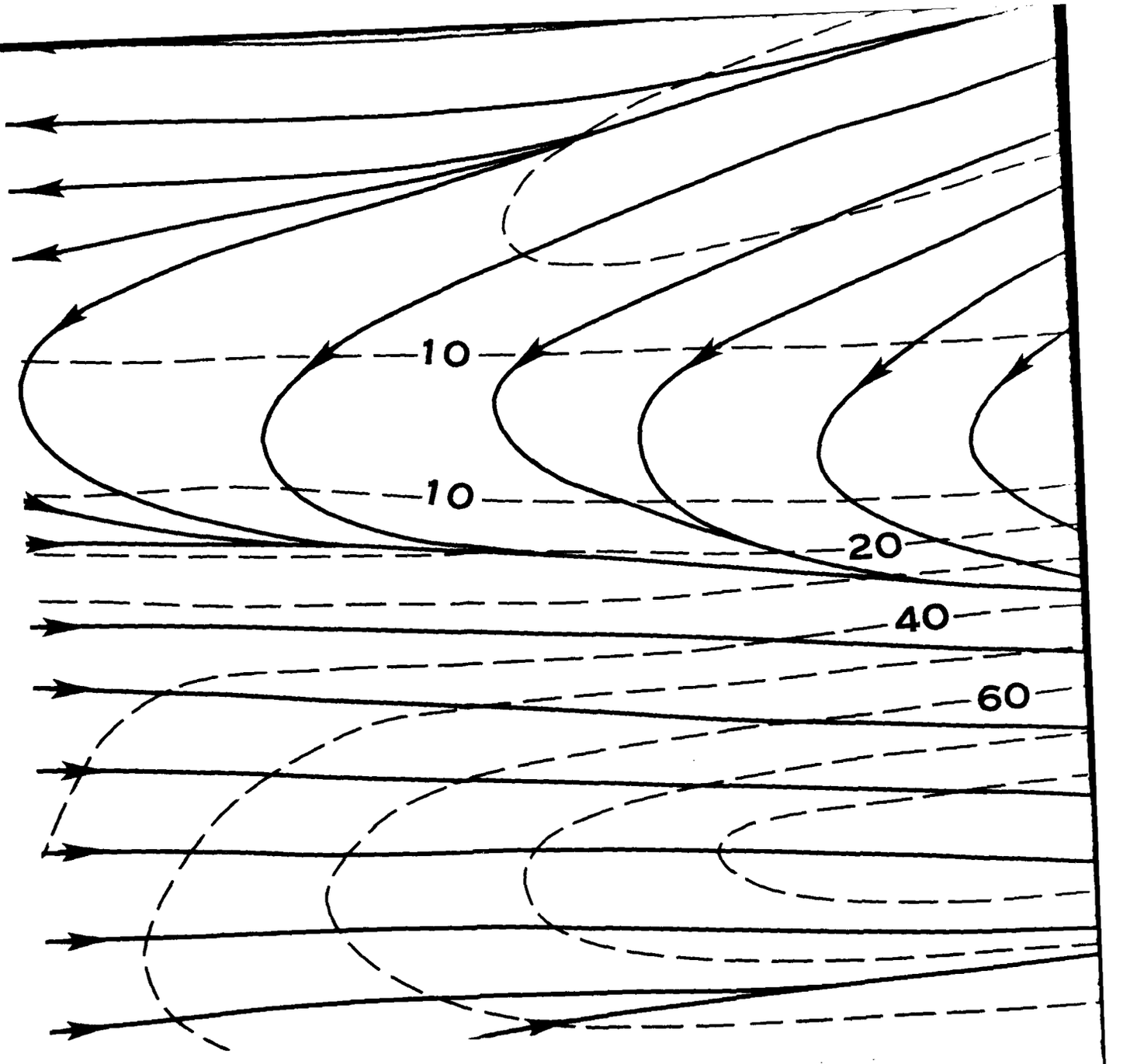
# MEAN UPPER LEVEL W

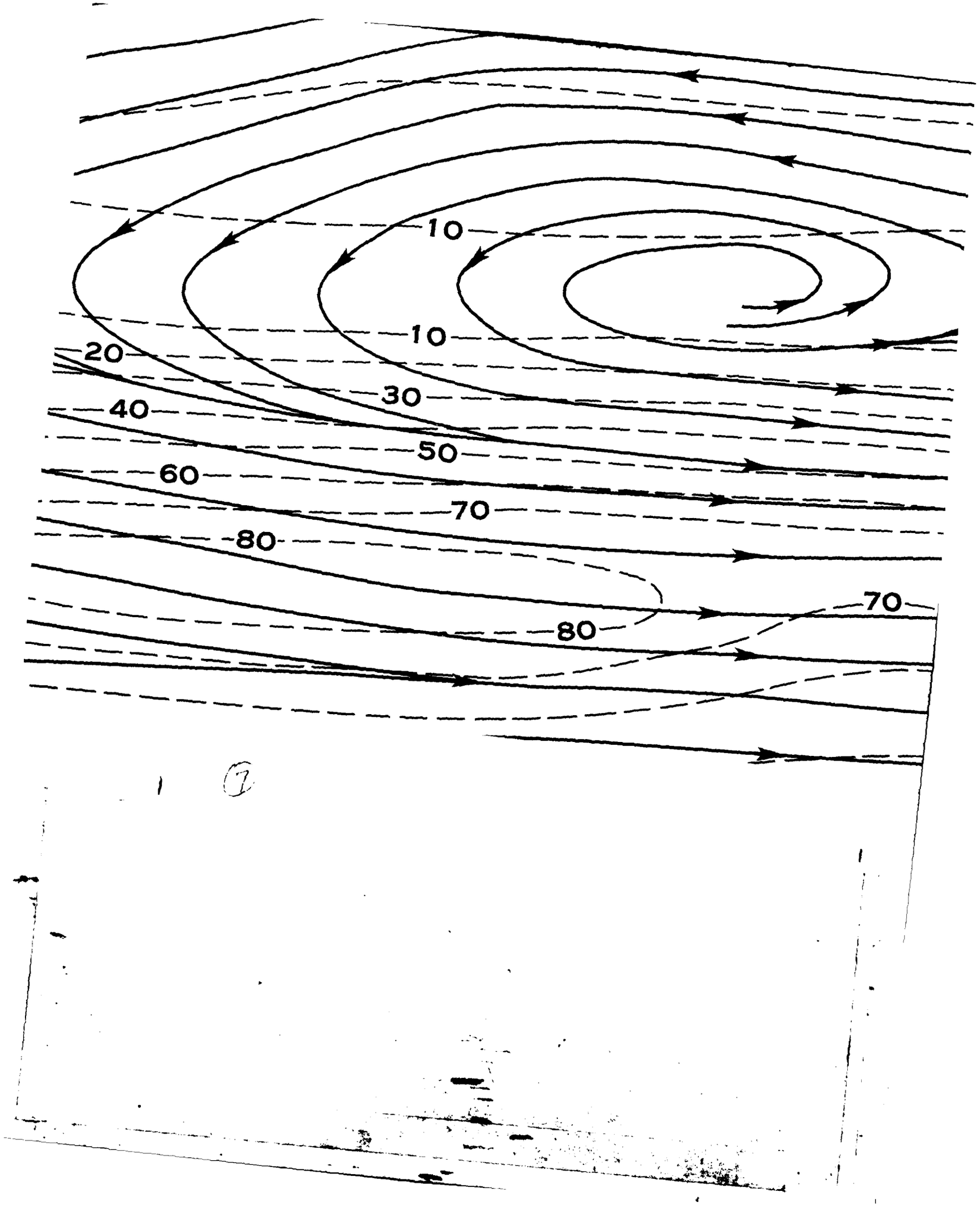


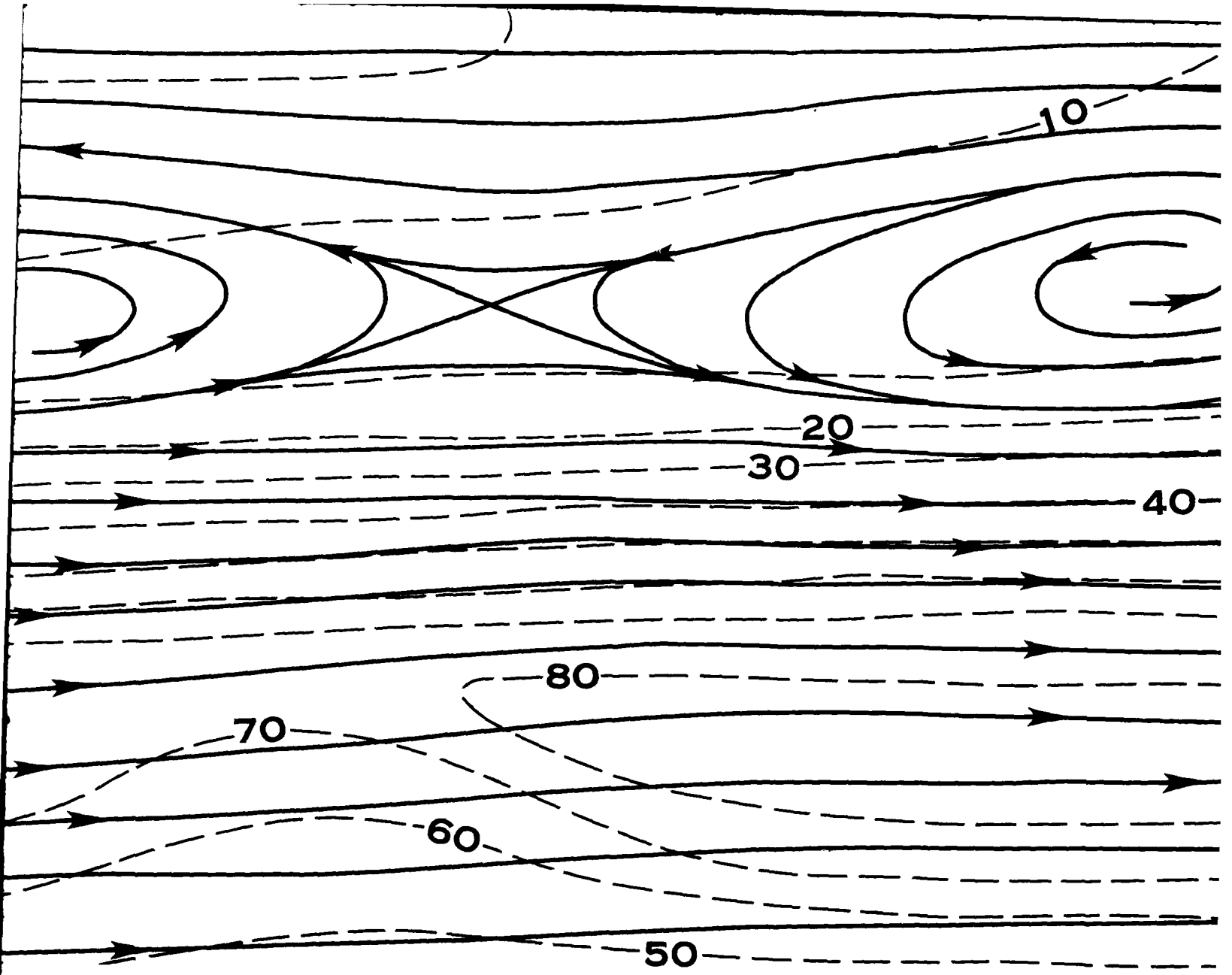
# OPICS - AUGUST 300mb

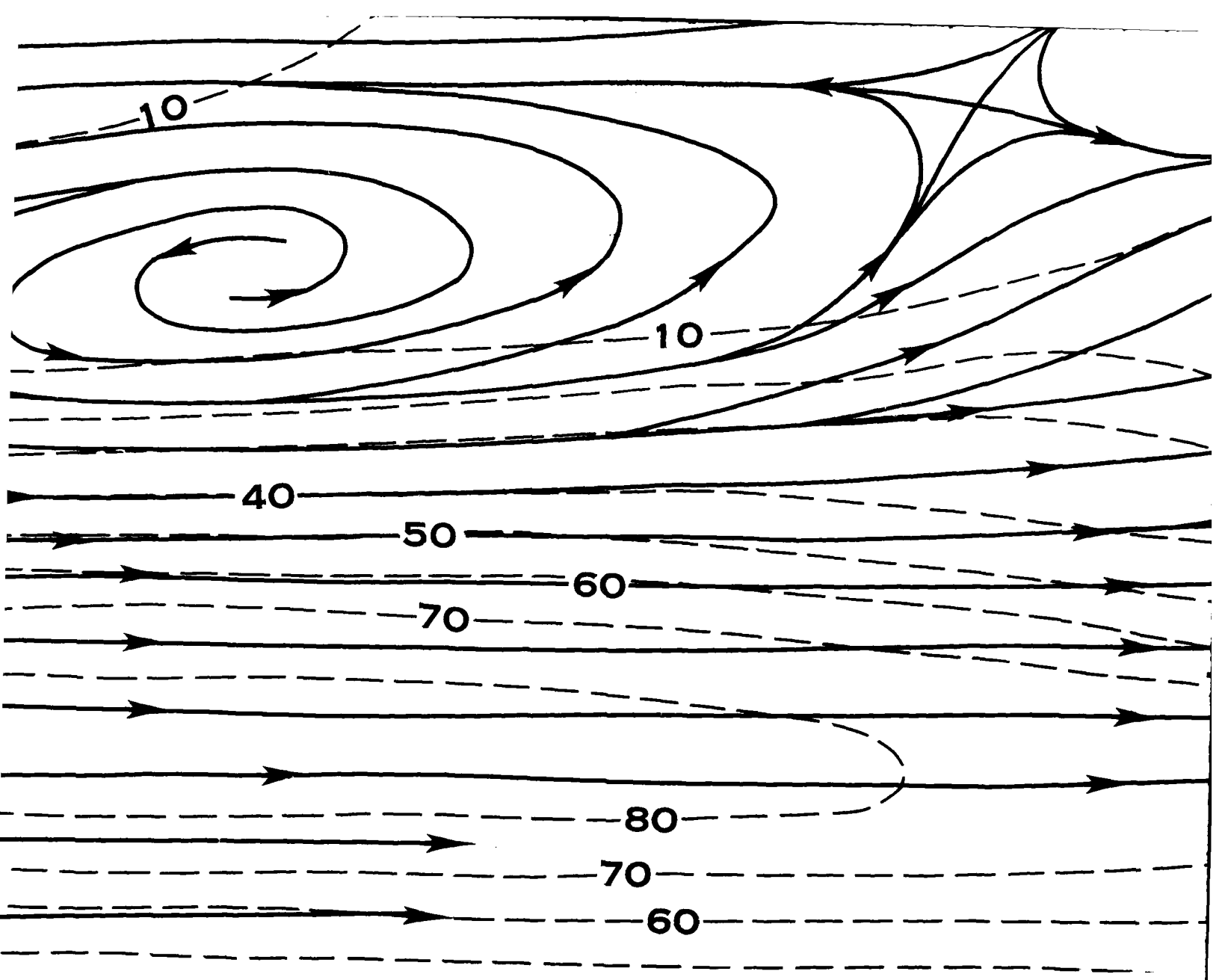



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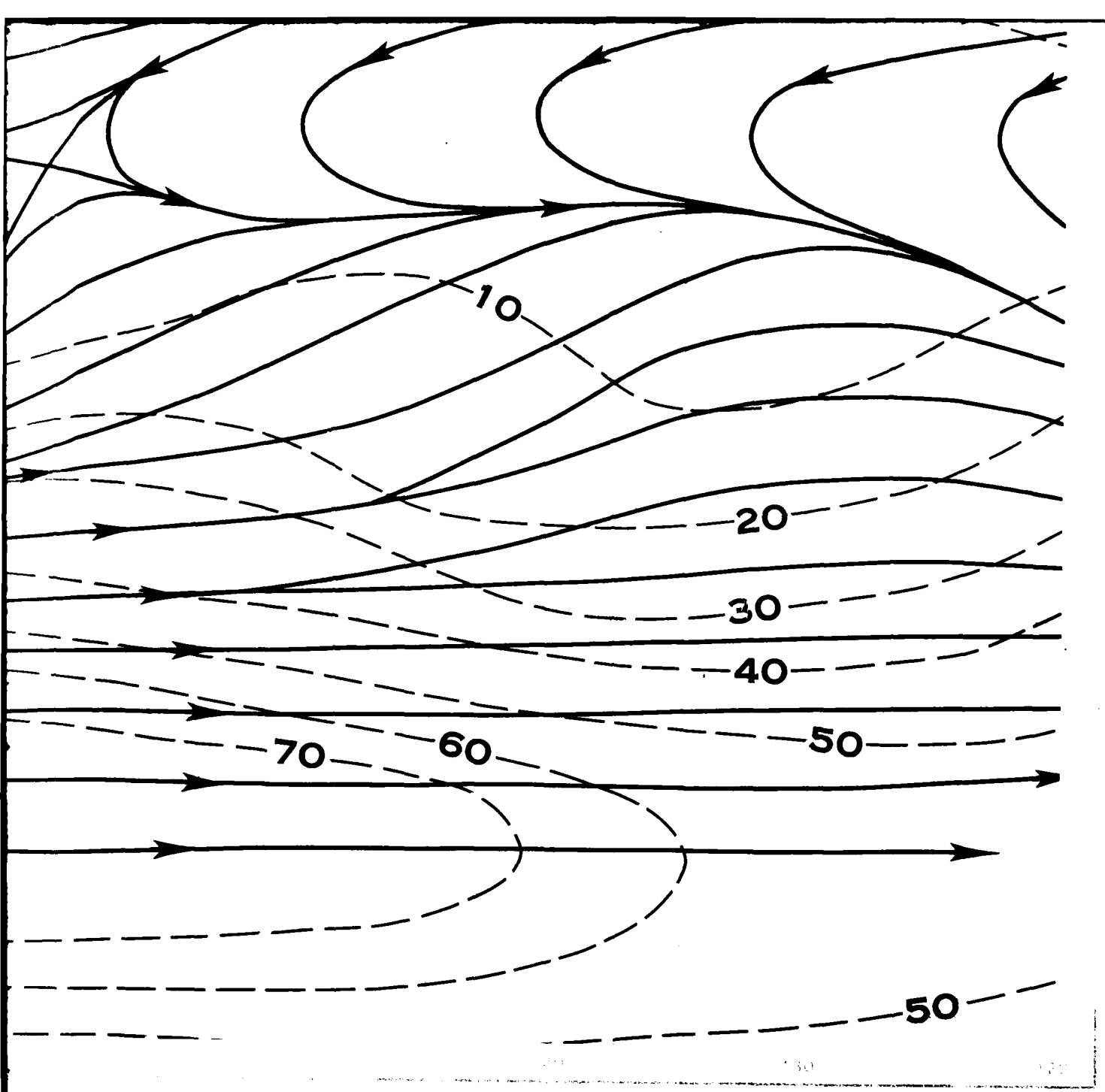

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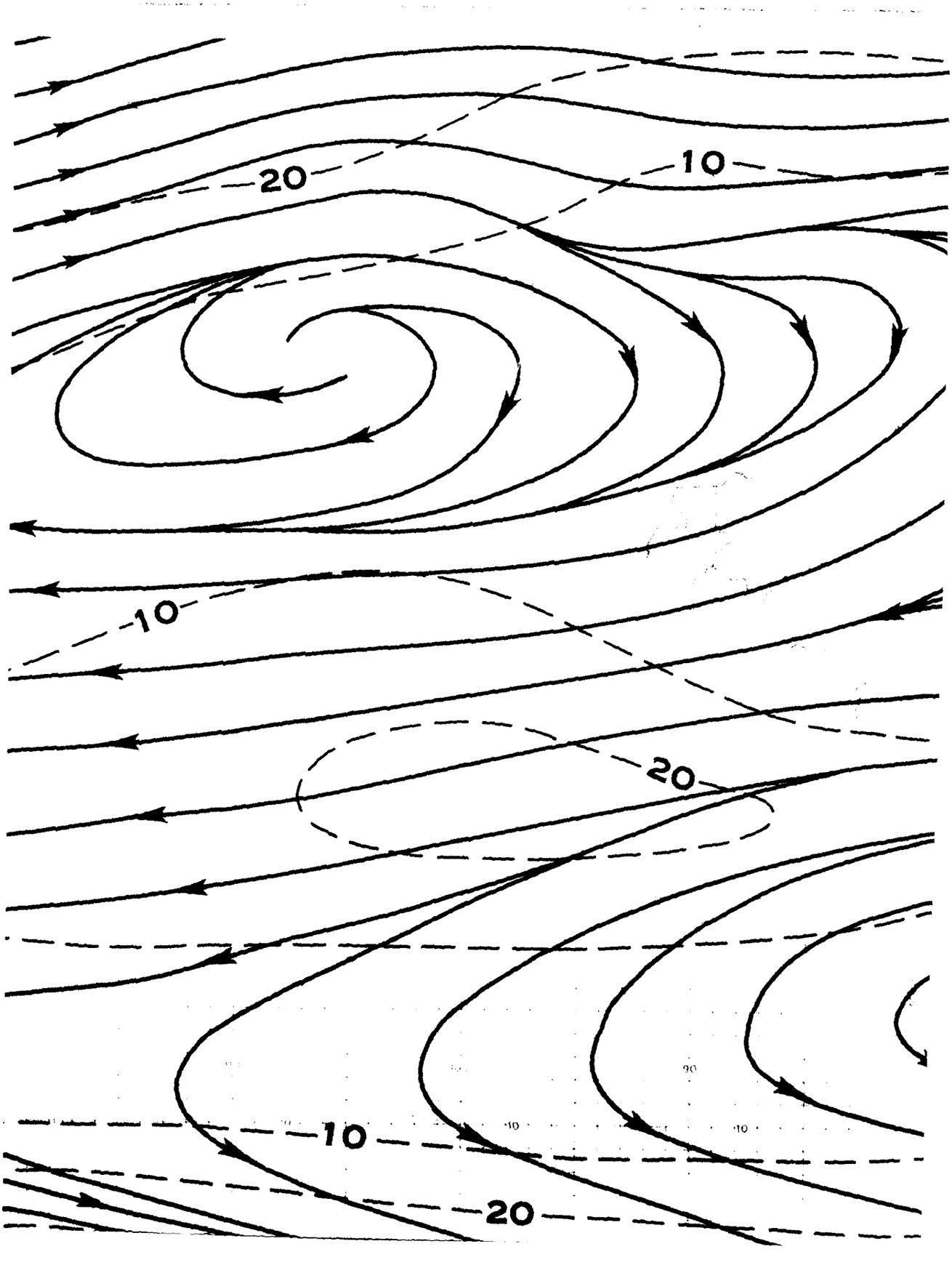



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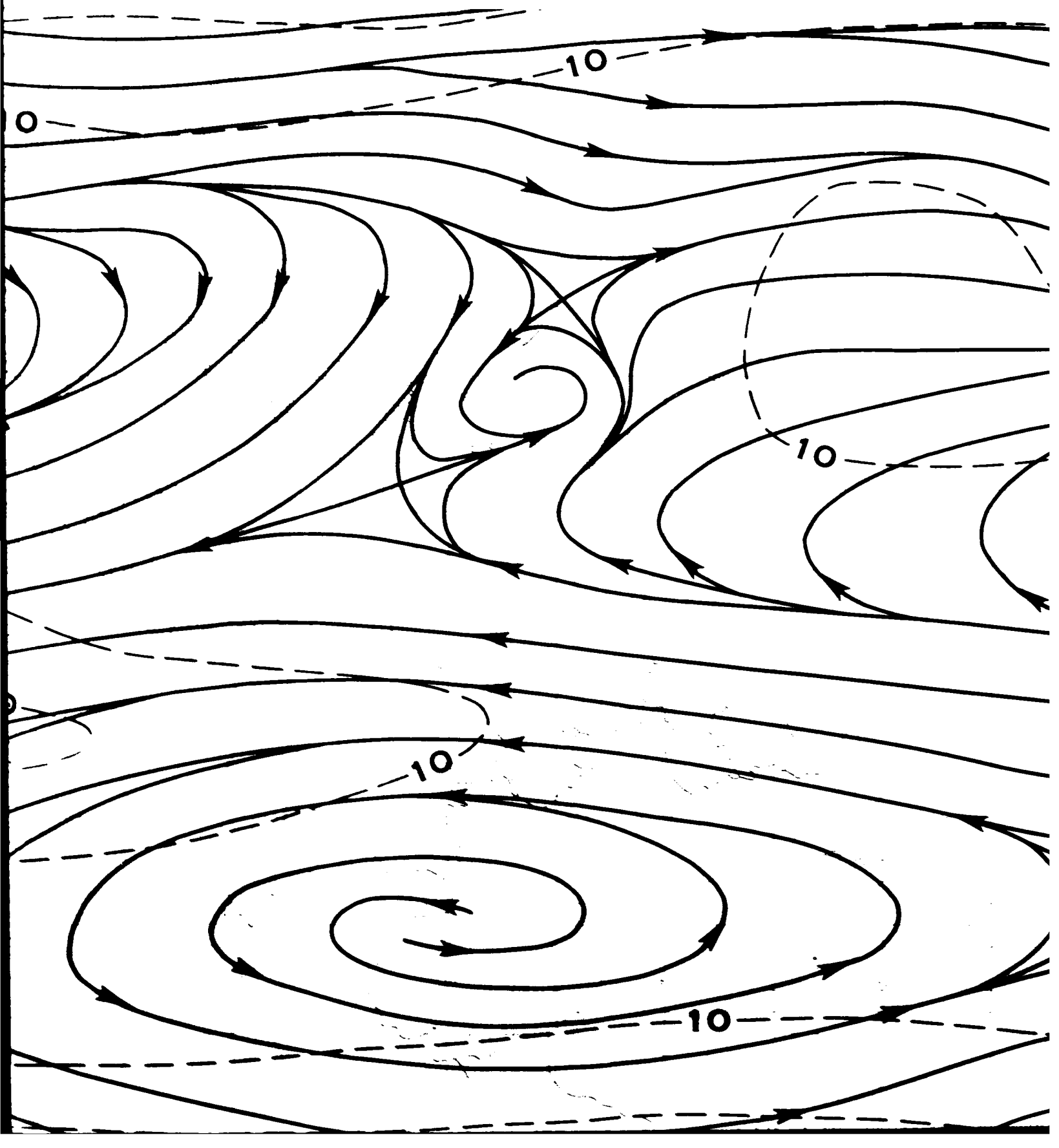



MULW-308E

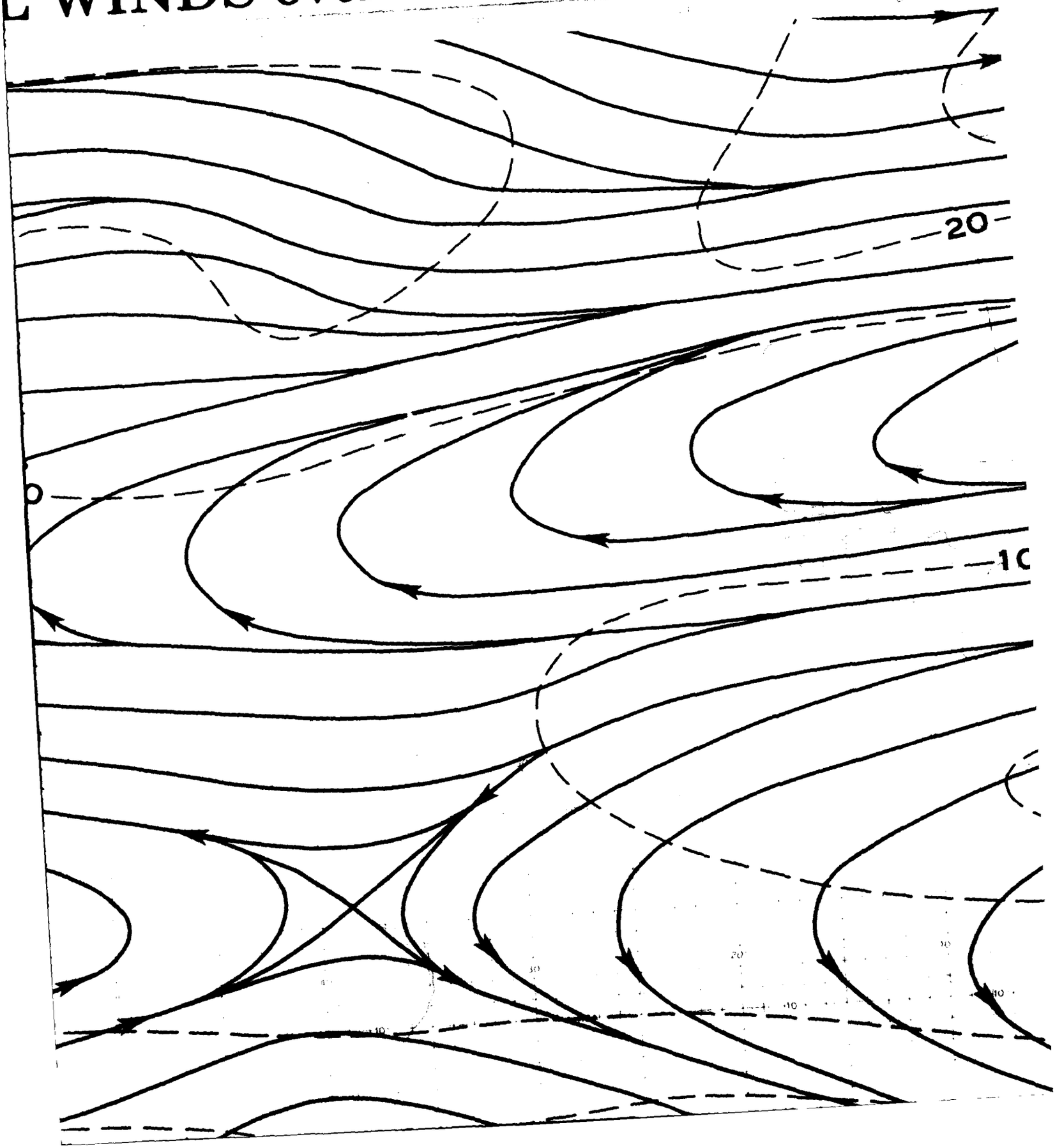
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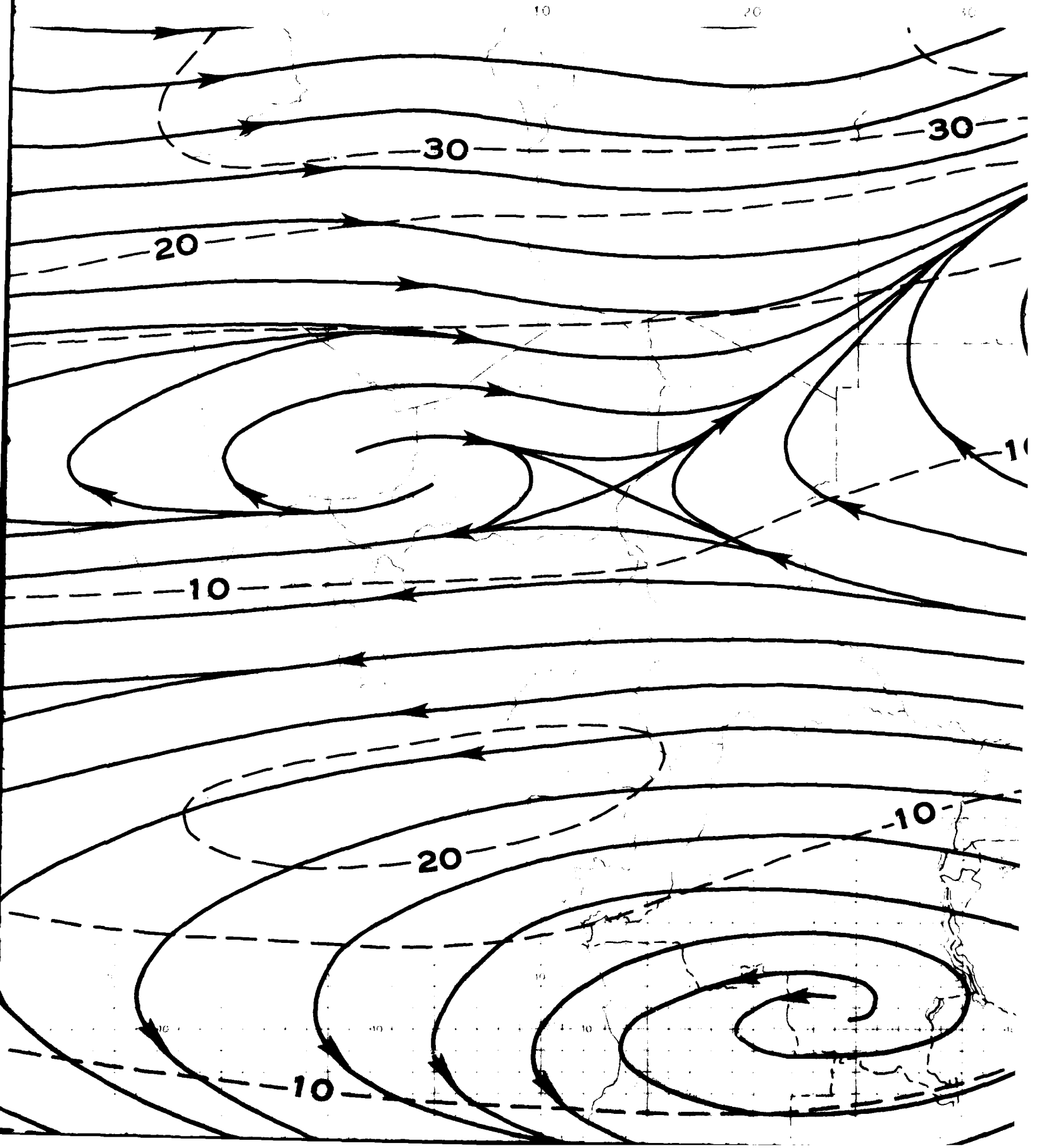
# MEAN UPPER LEVEL WIND

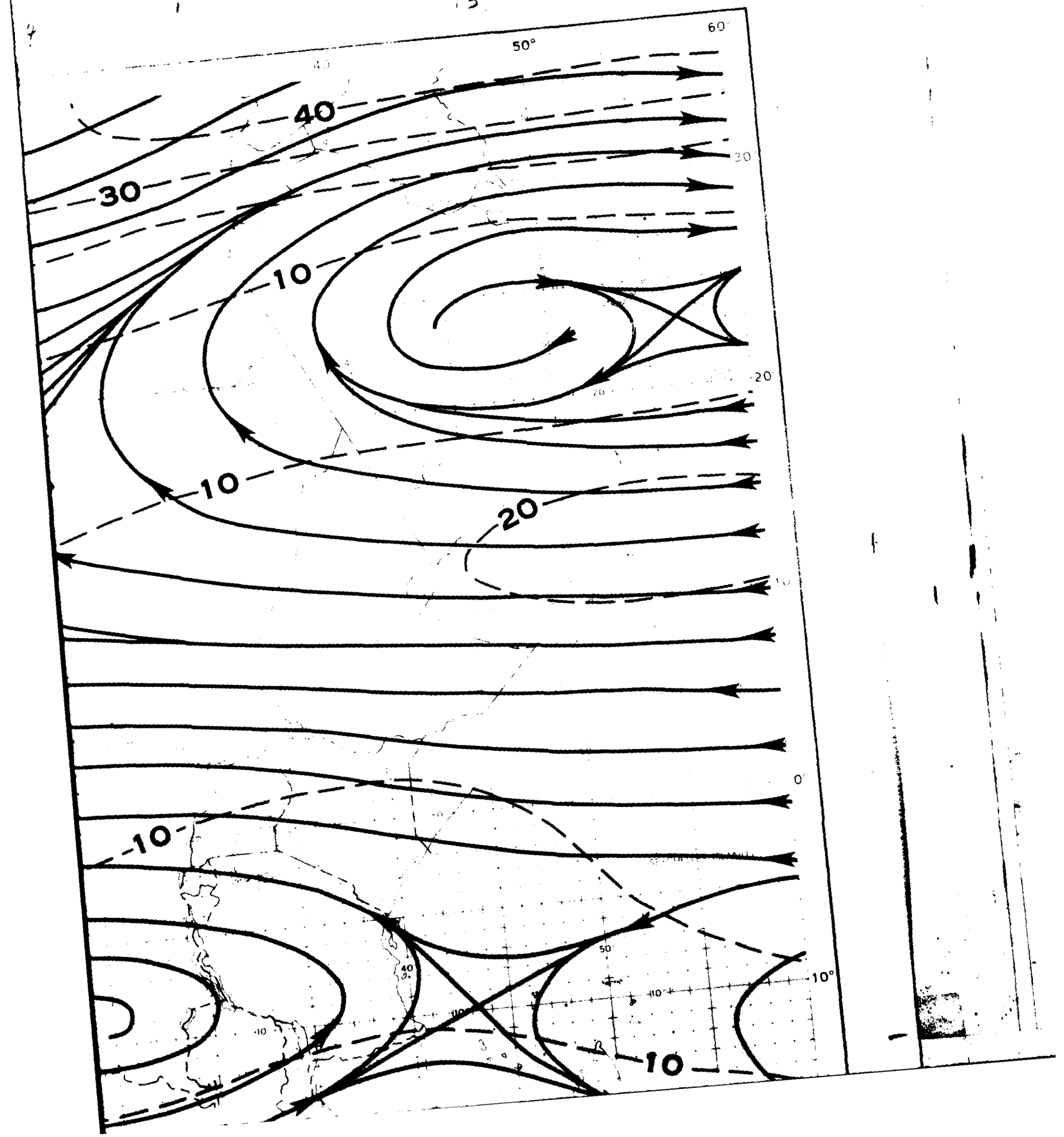


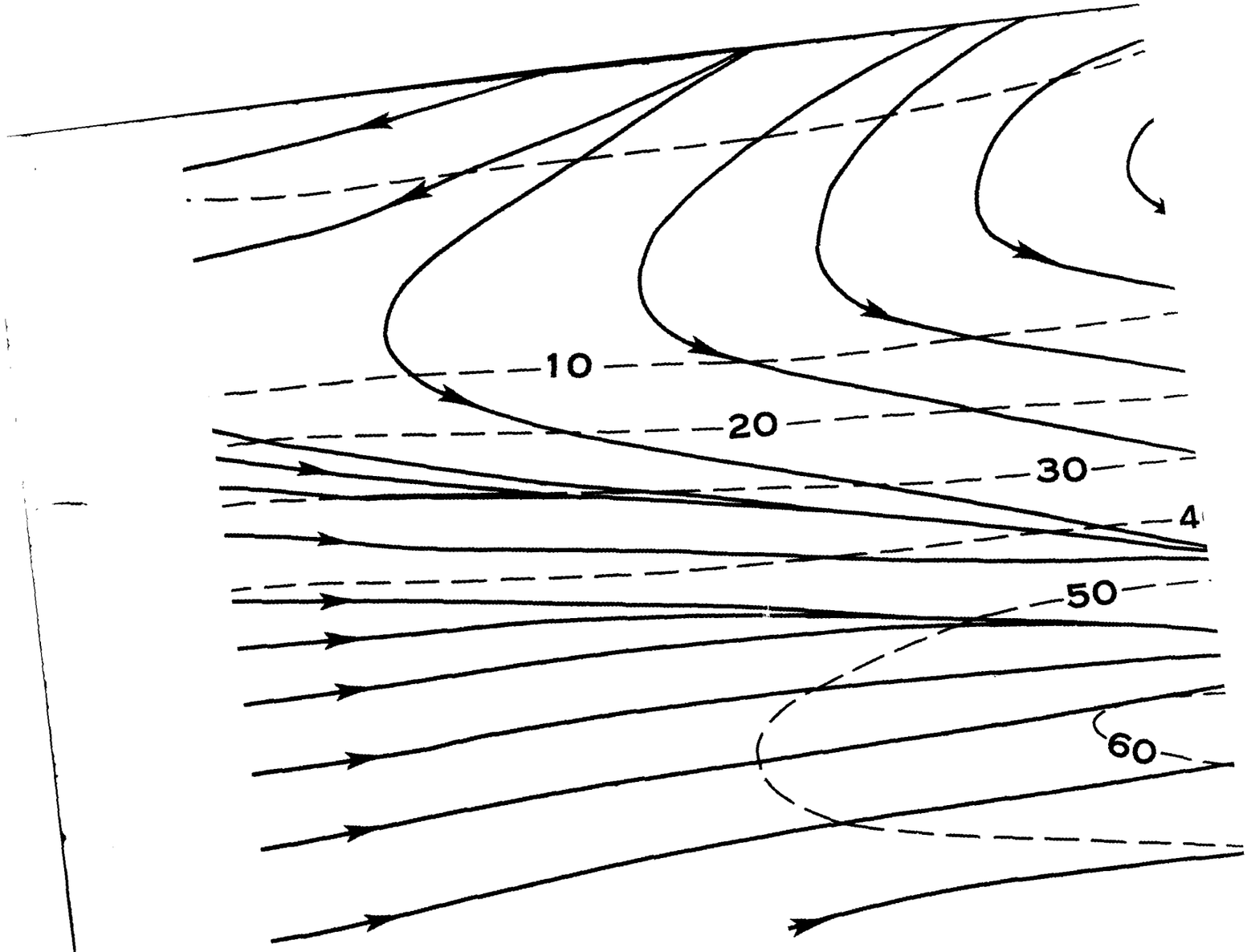
# L WINDS over GLOBAL TROPICS –



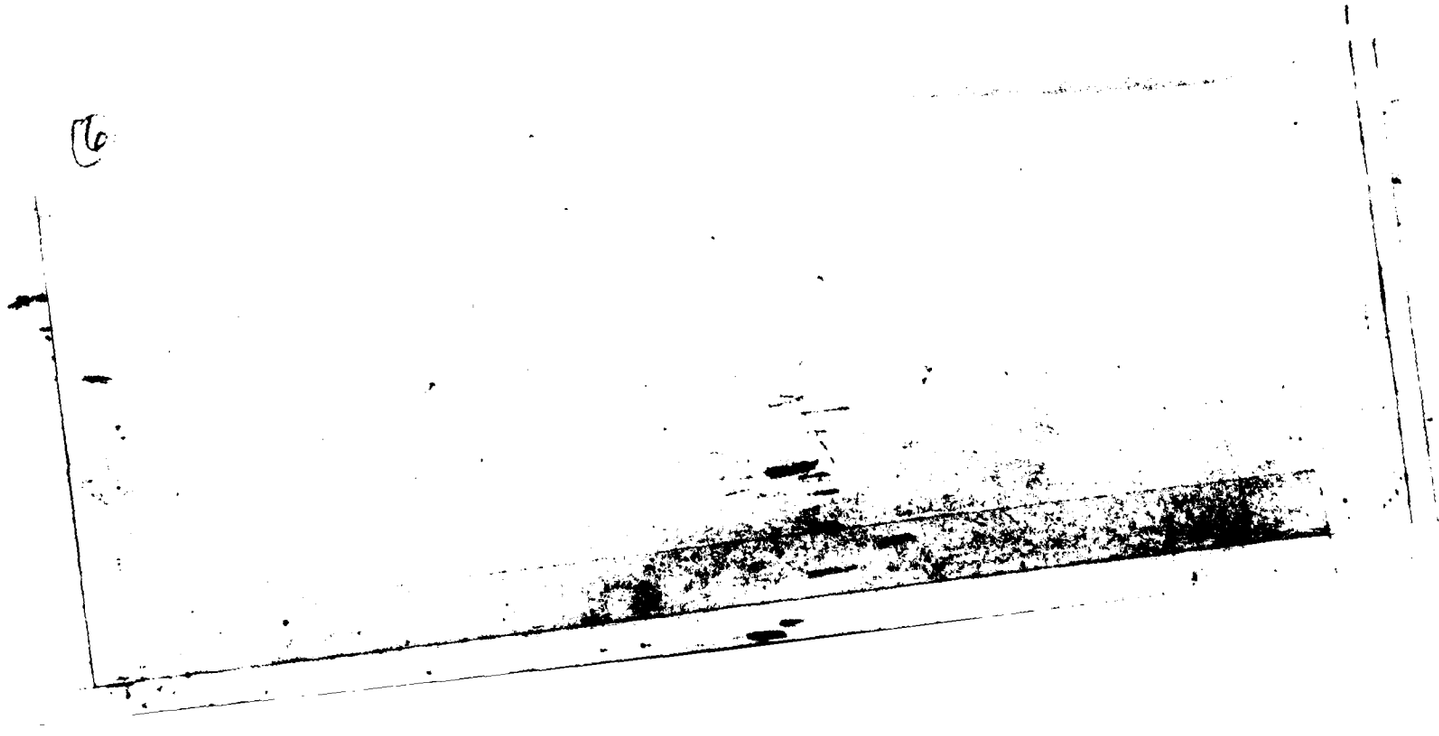
# PICS - SEPTEMBER 300 mb

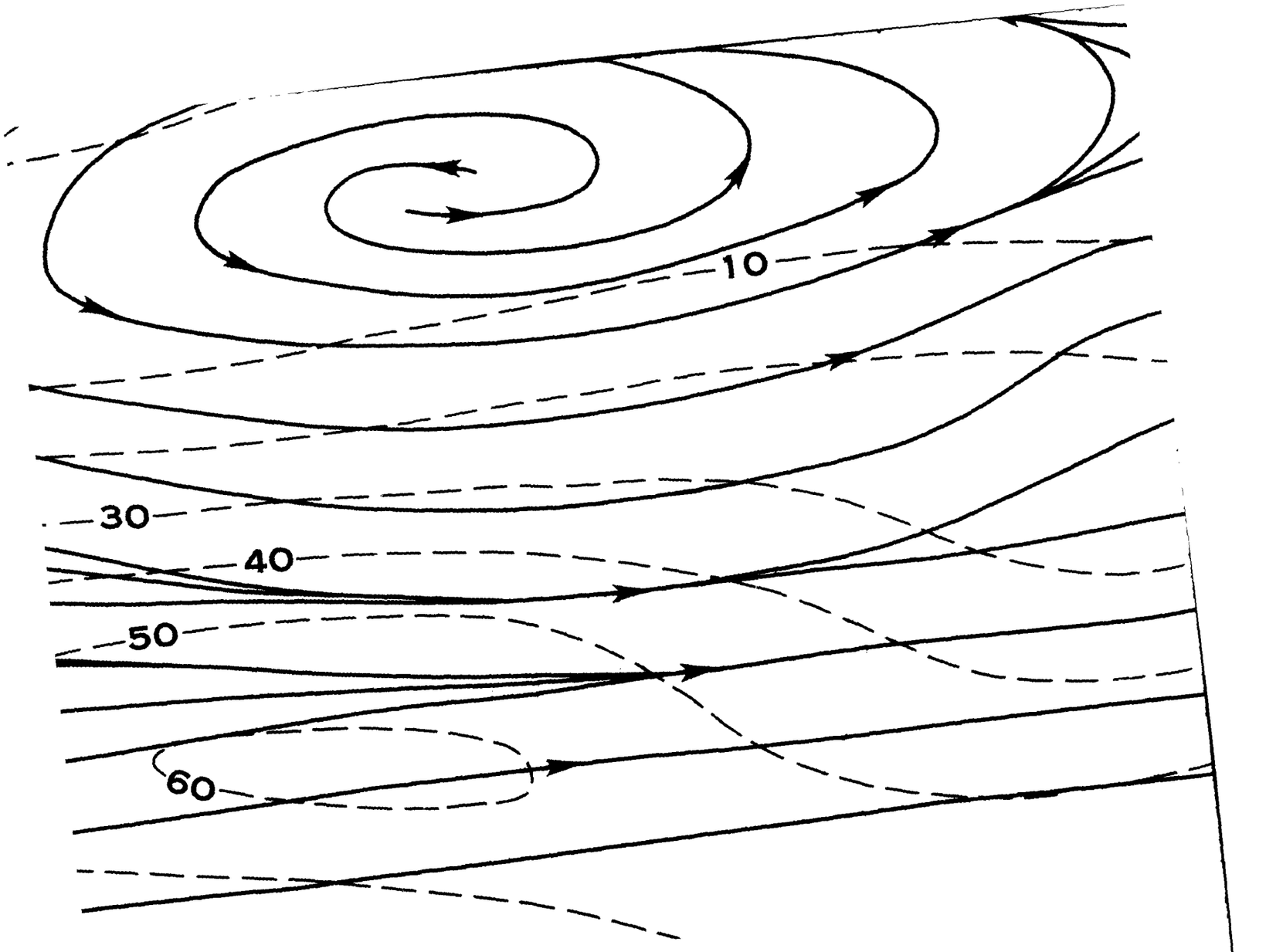



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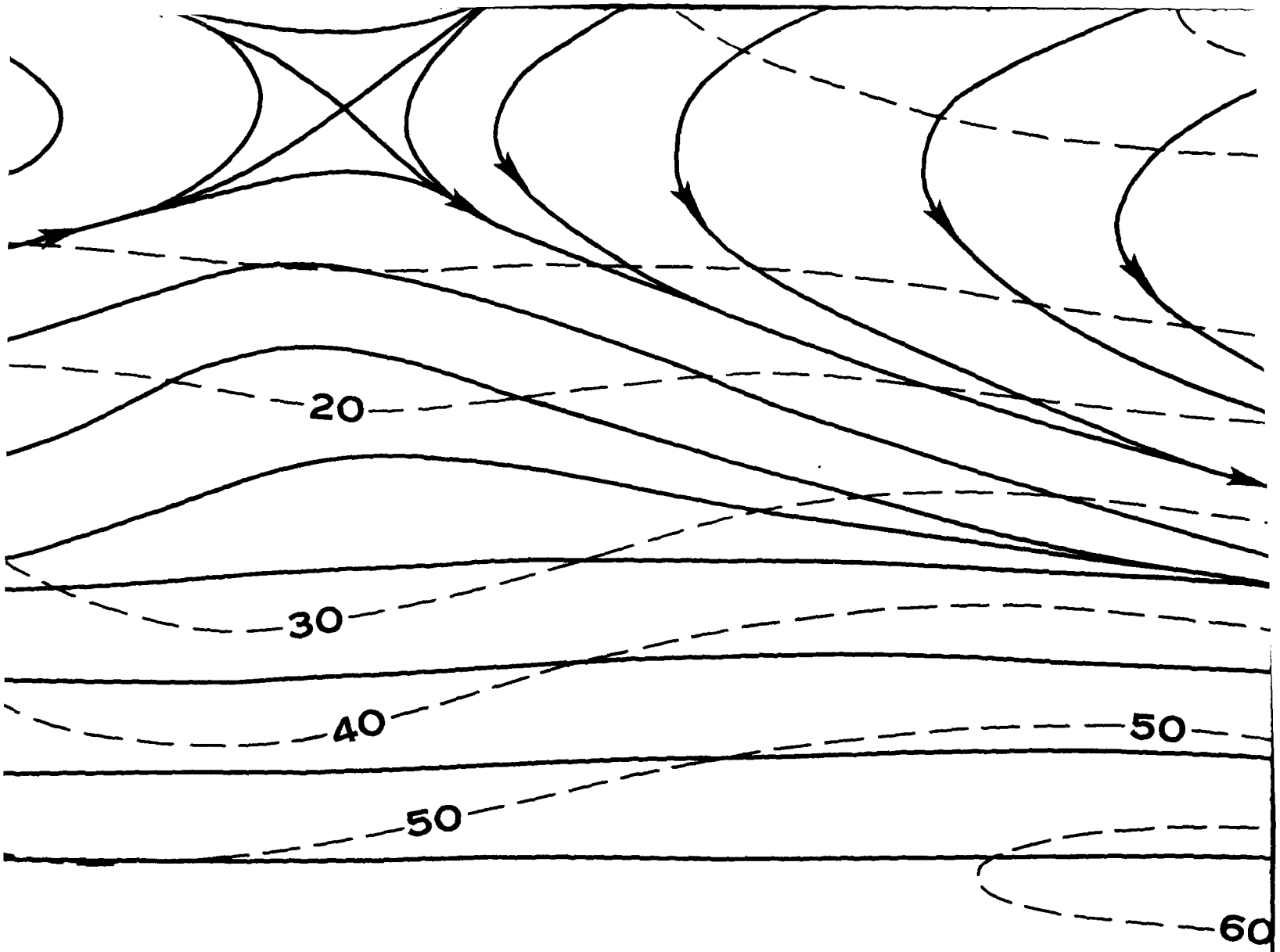


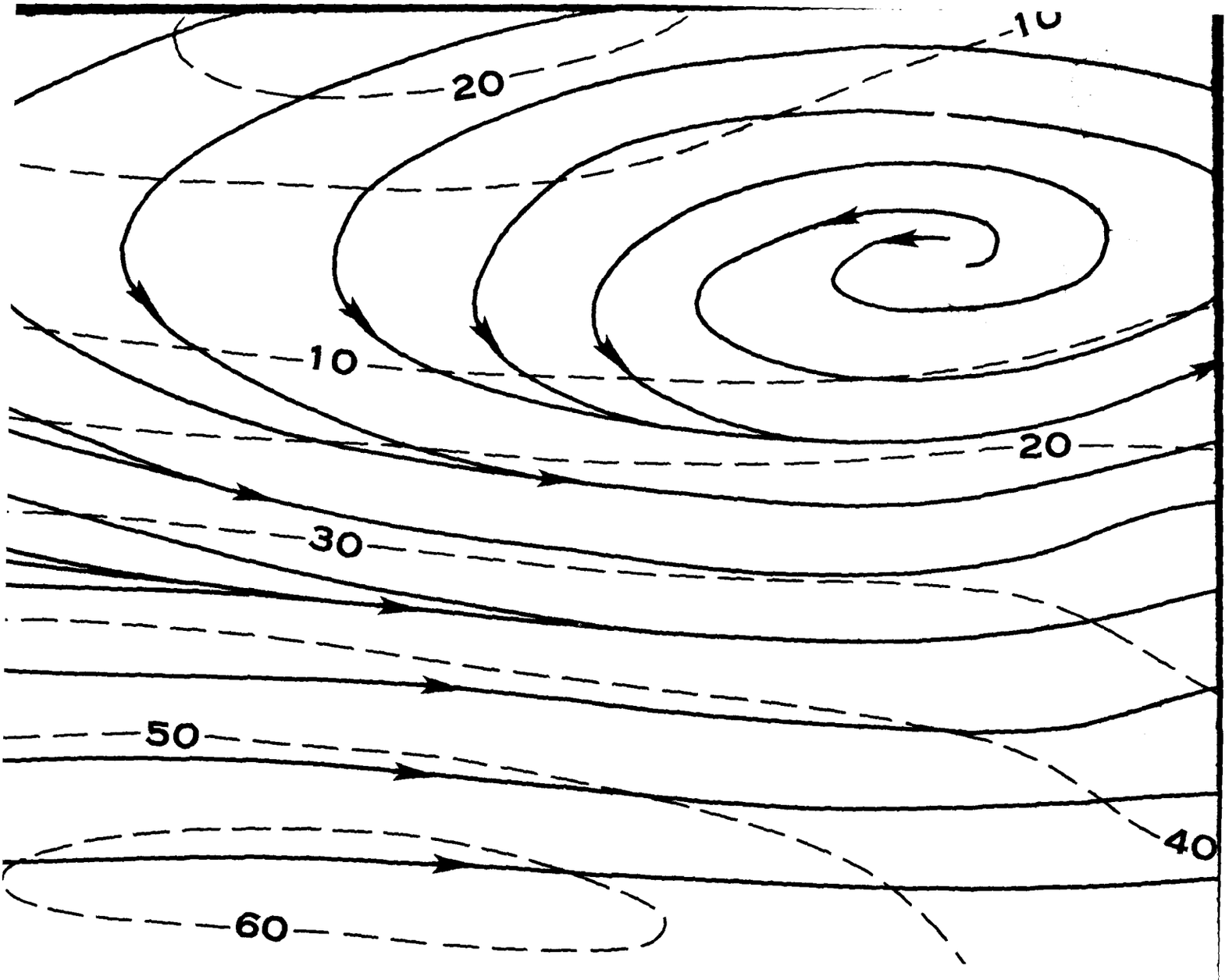

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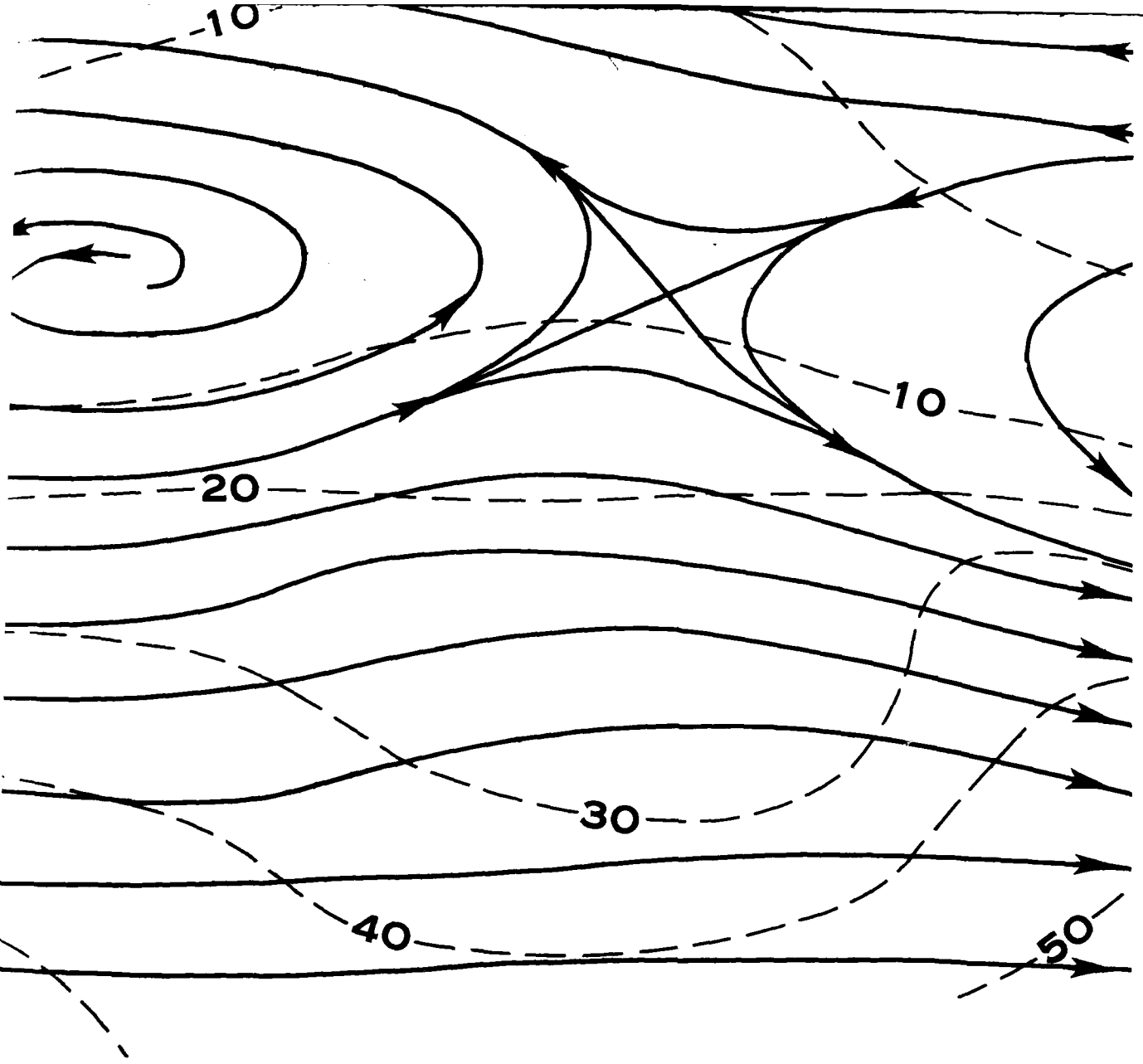




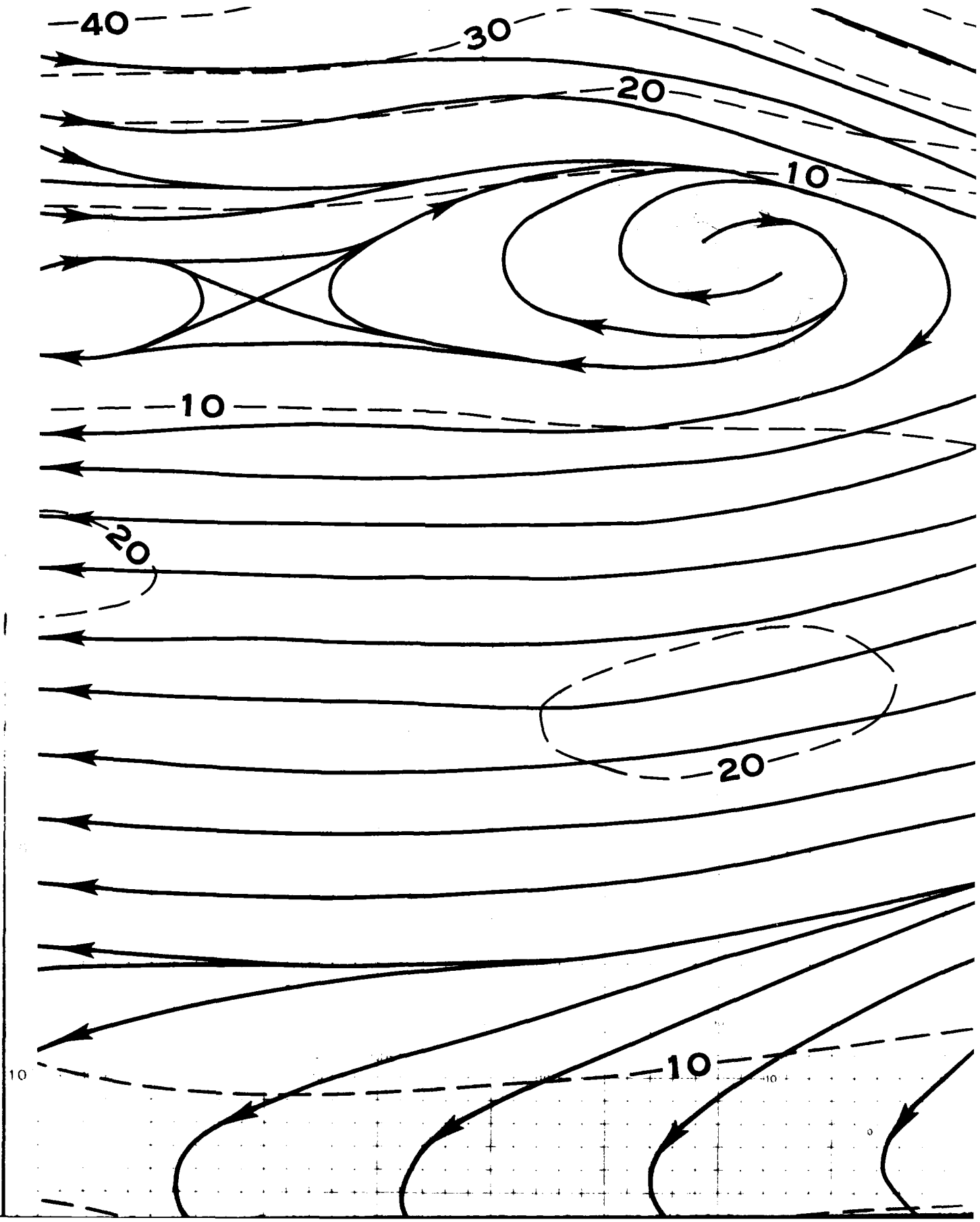

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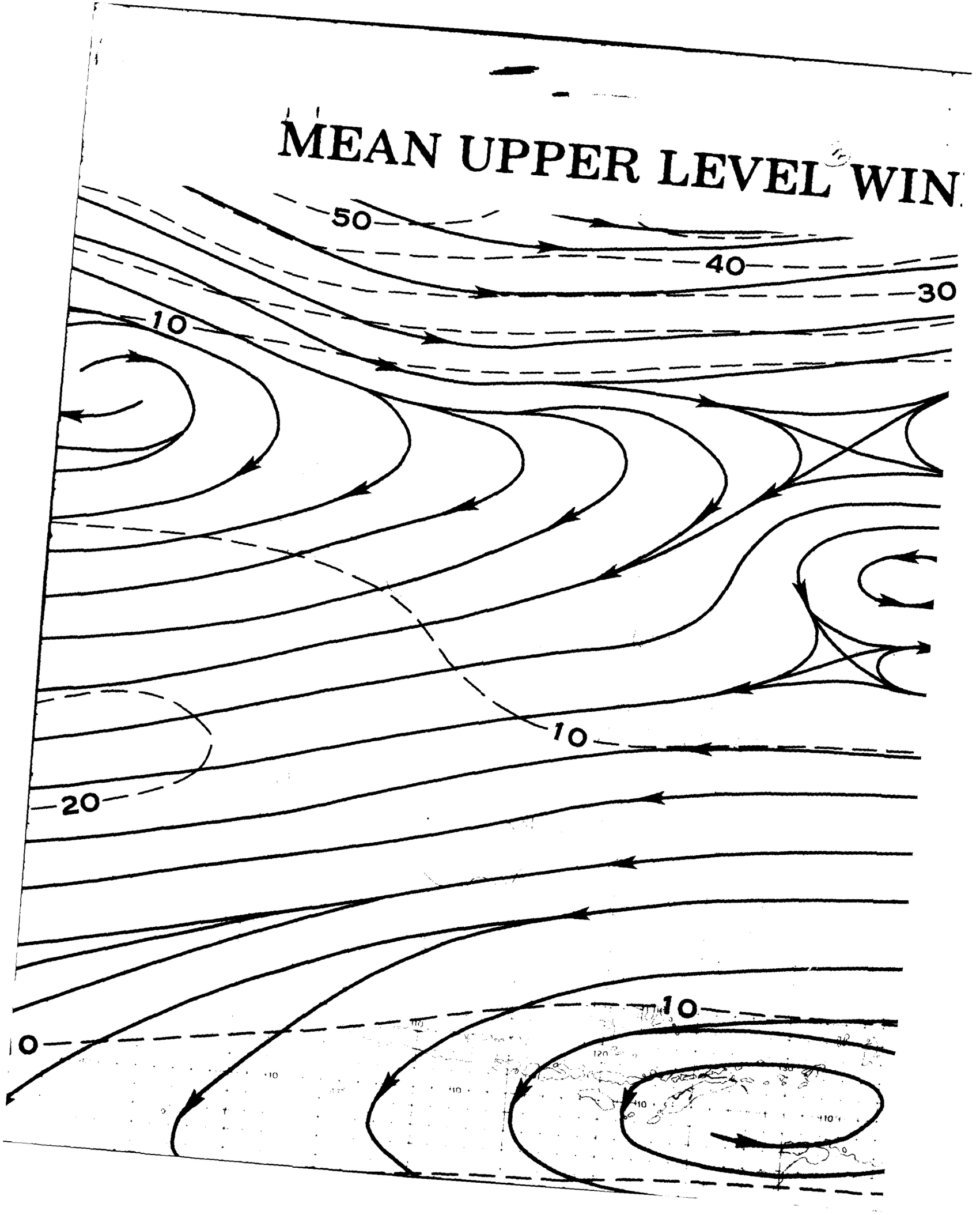

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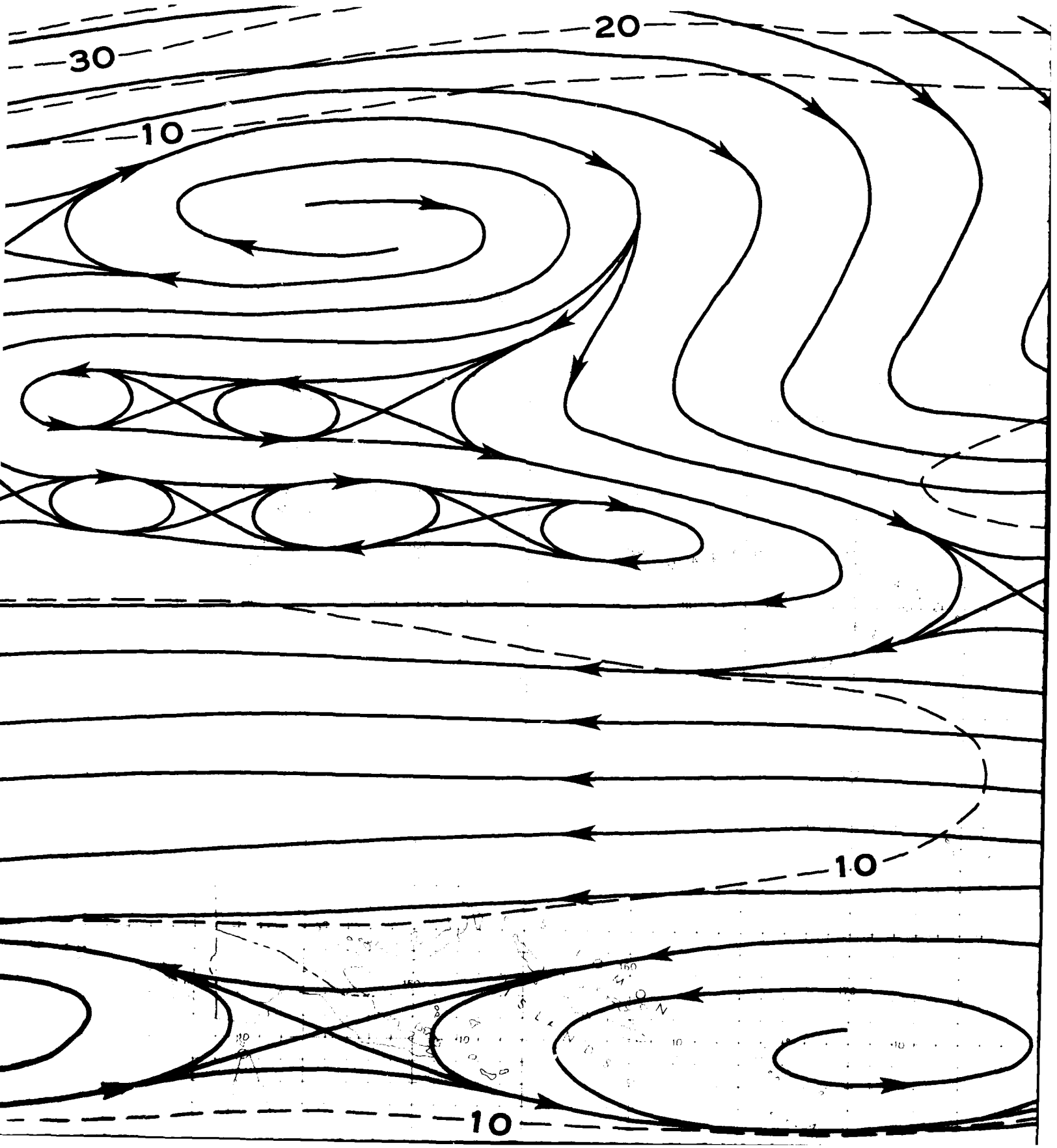



MULW-309W

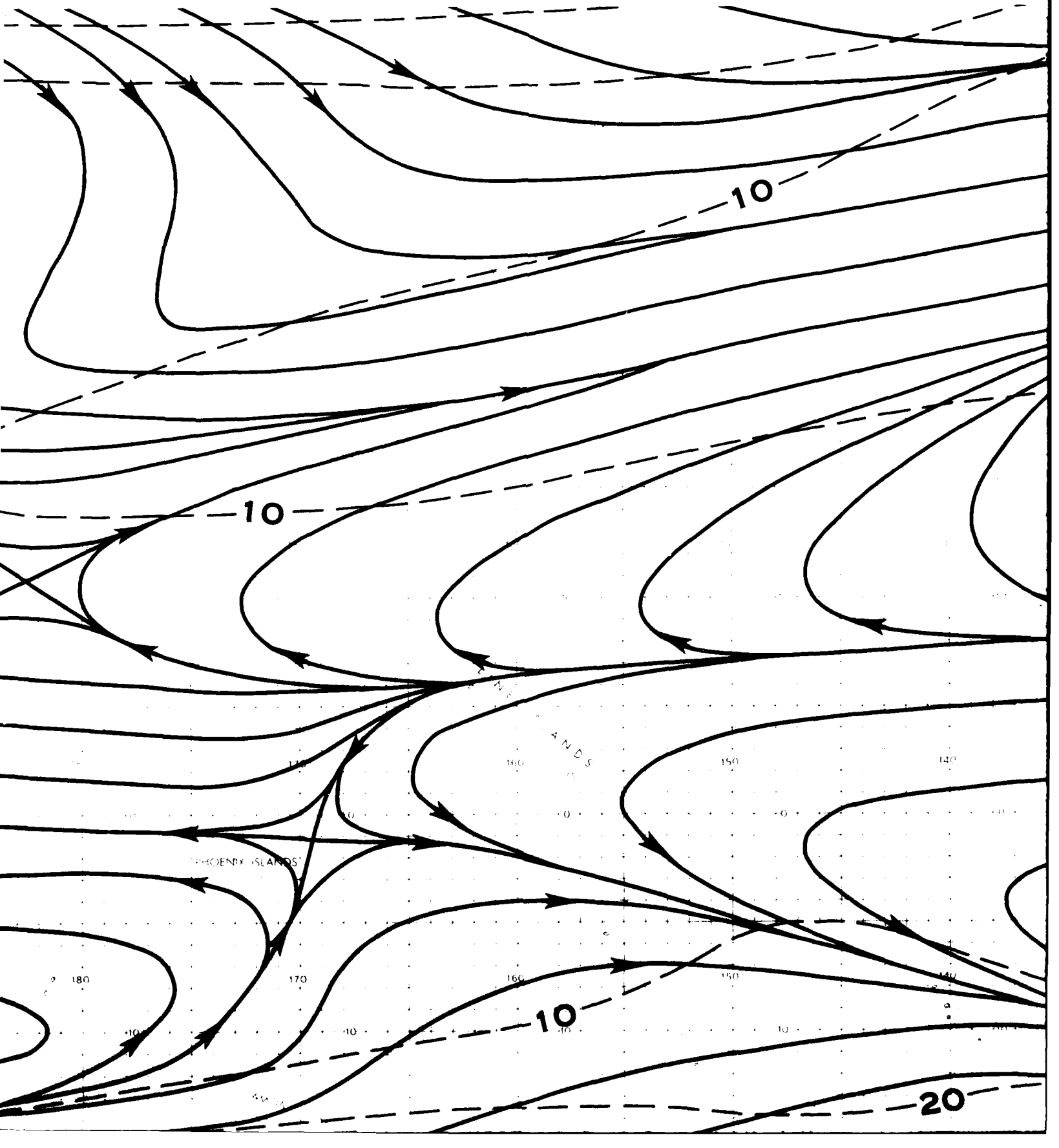

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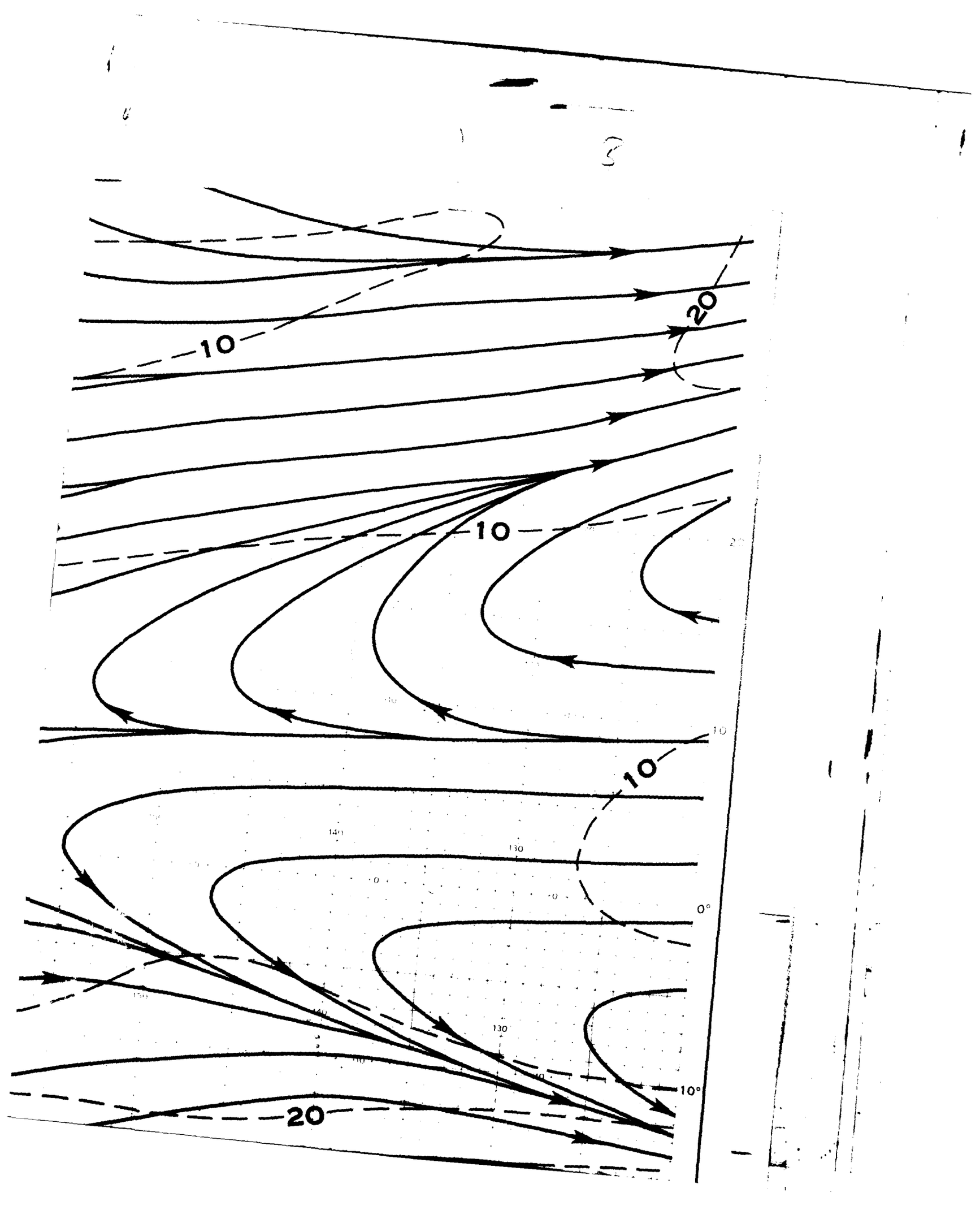

MEAN UPPER LEVEL WIN
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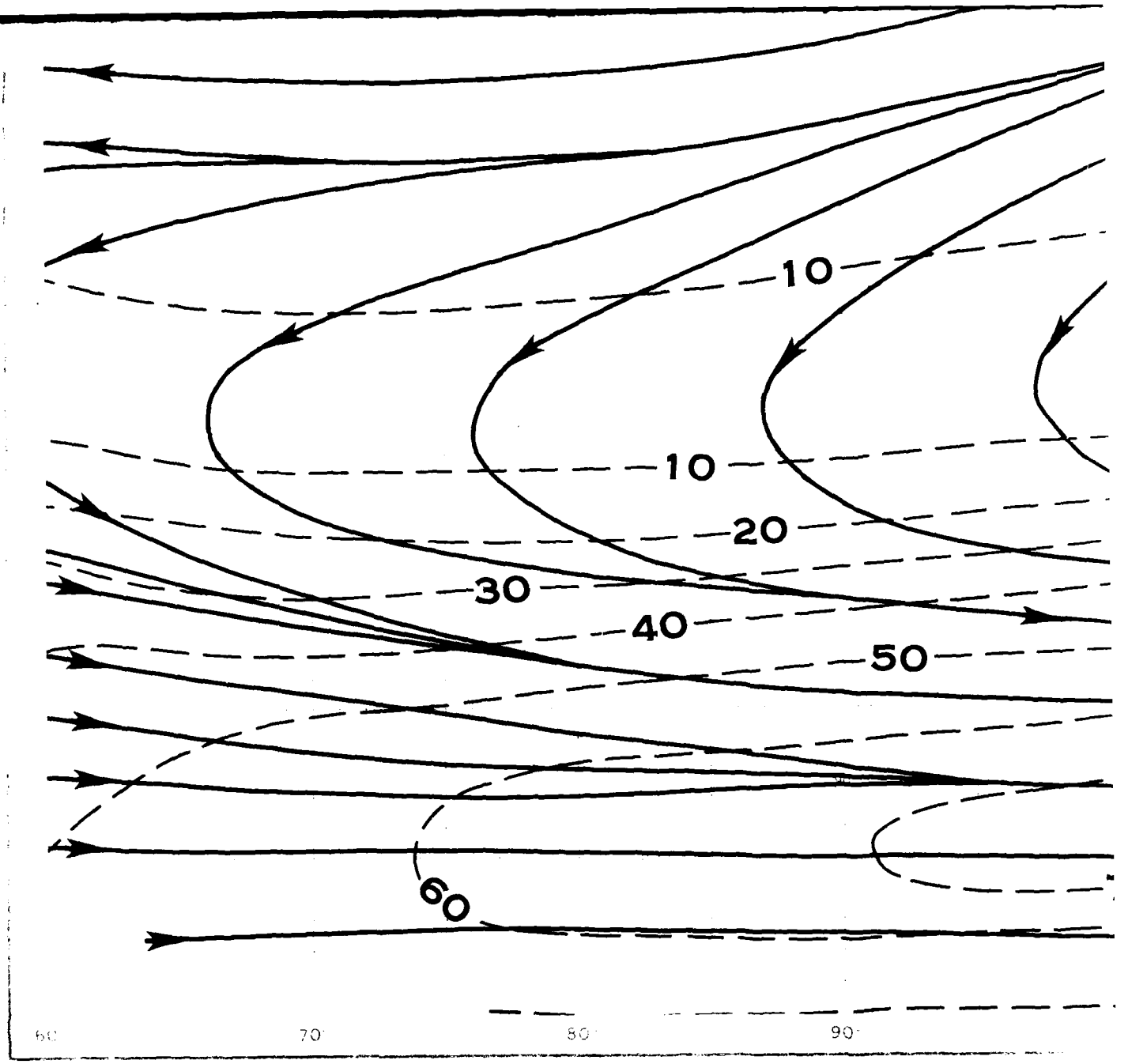
# VINDS over GLOBAL TROPICS - SE

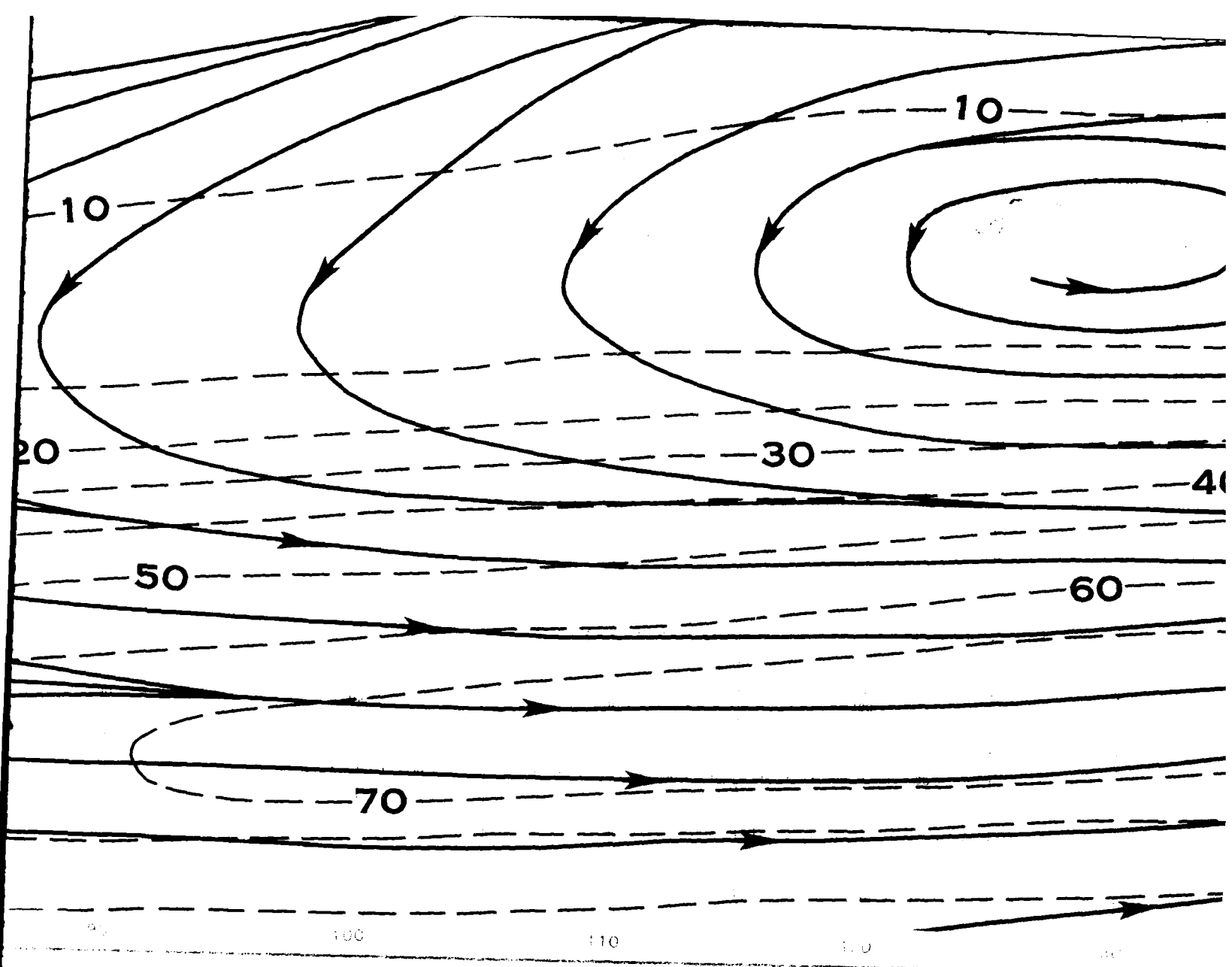


# EPTEMBER 300mb

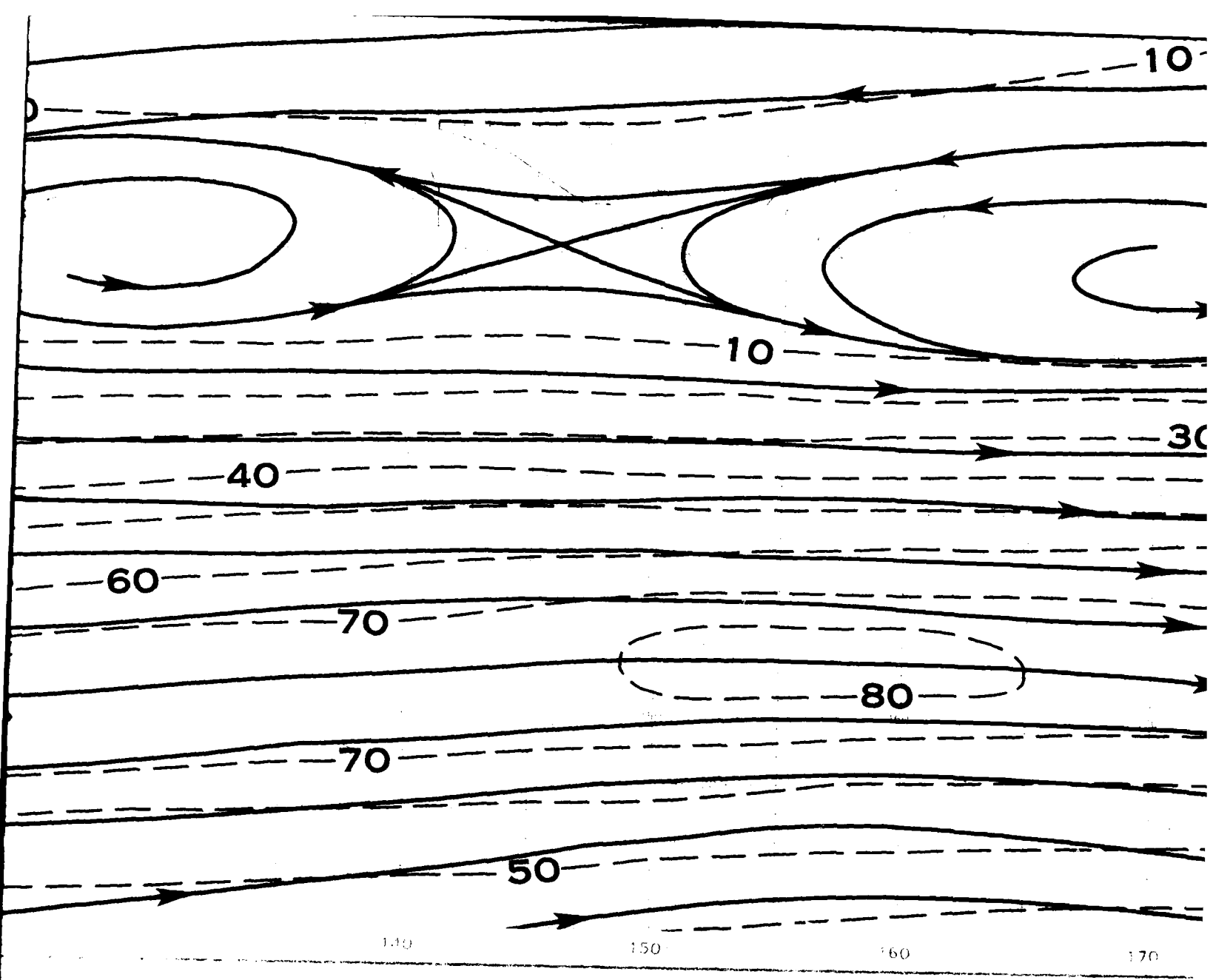


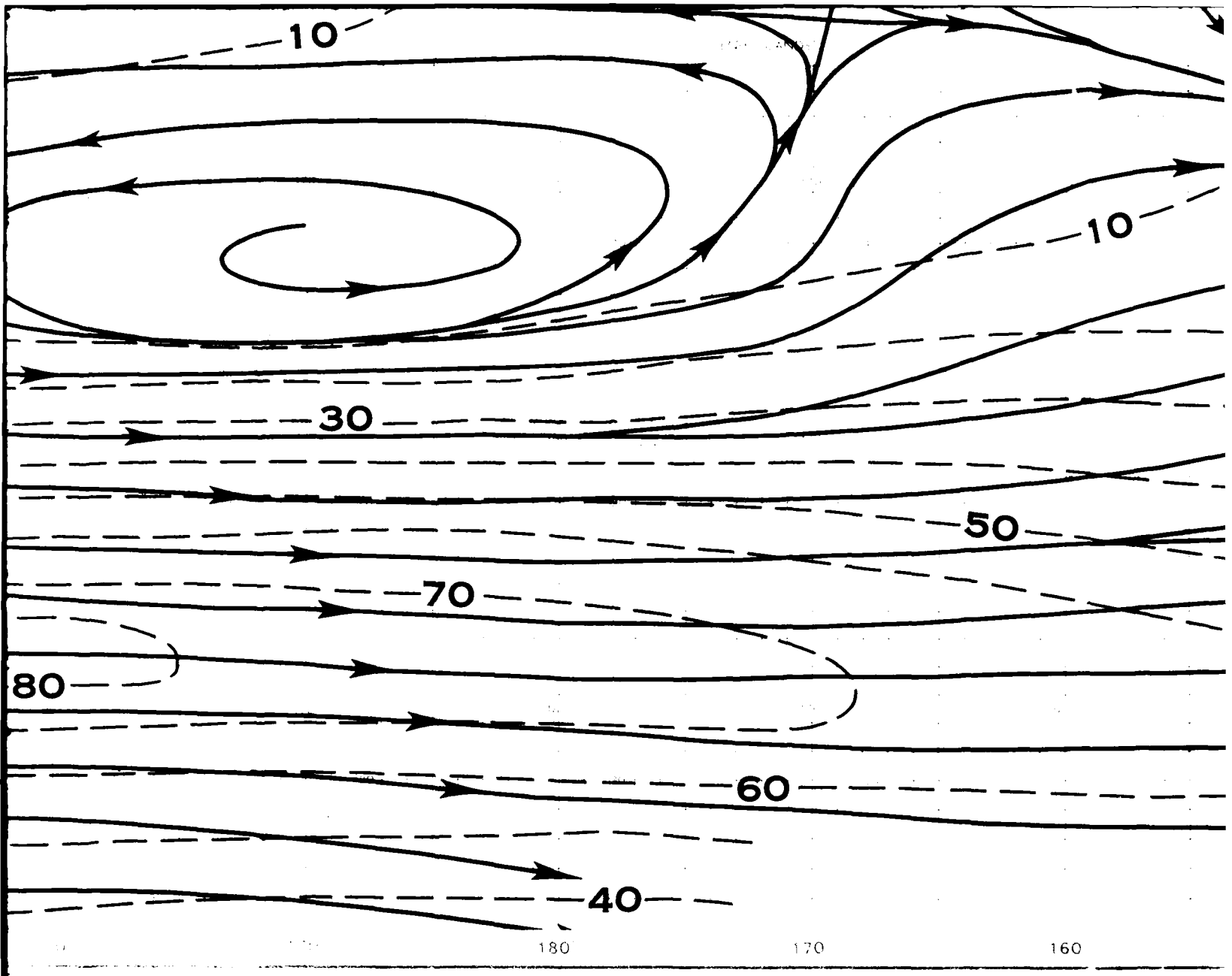

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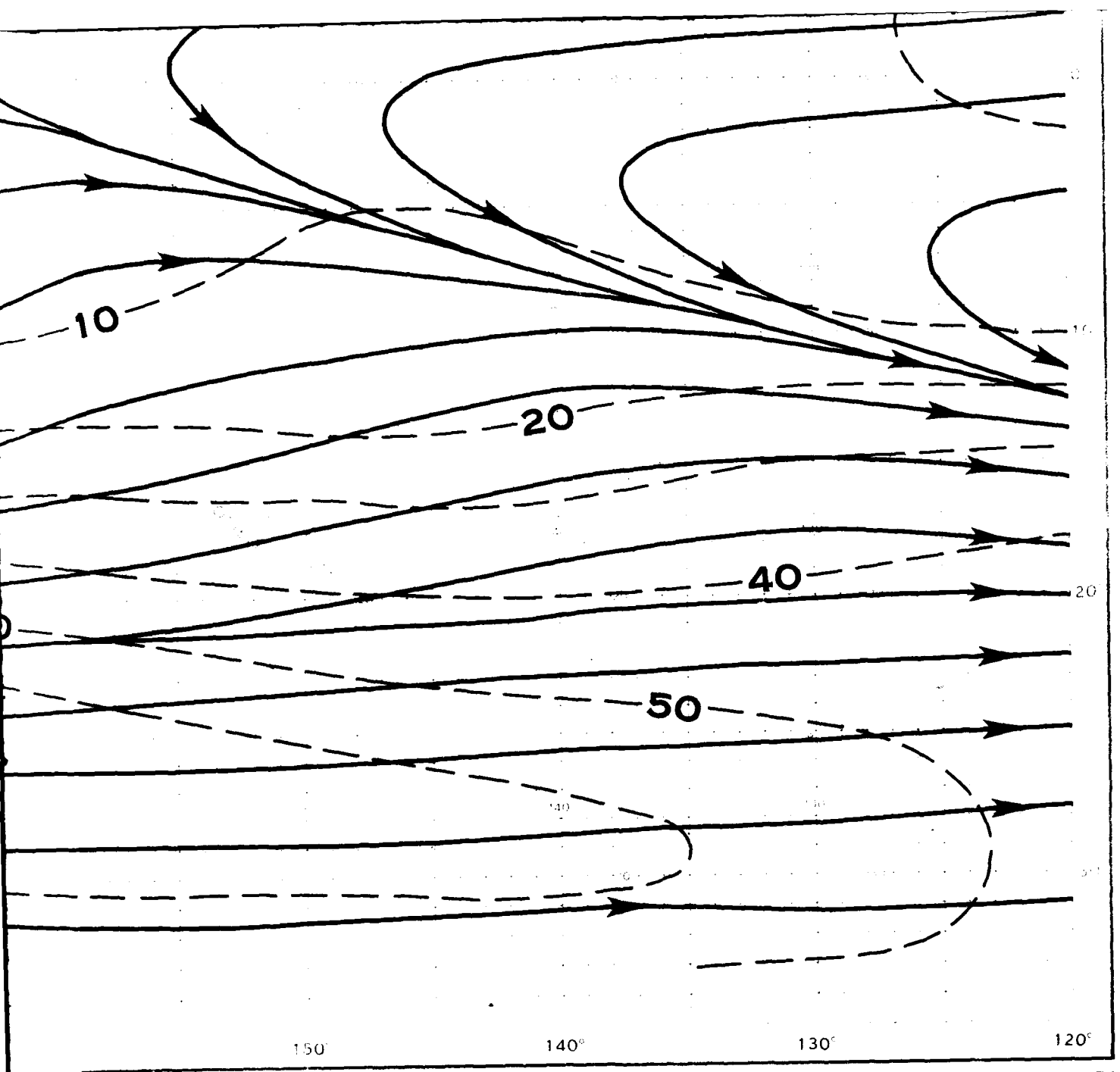



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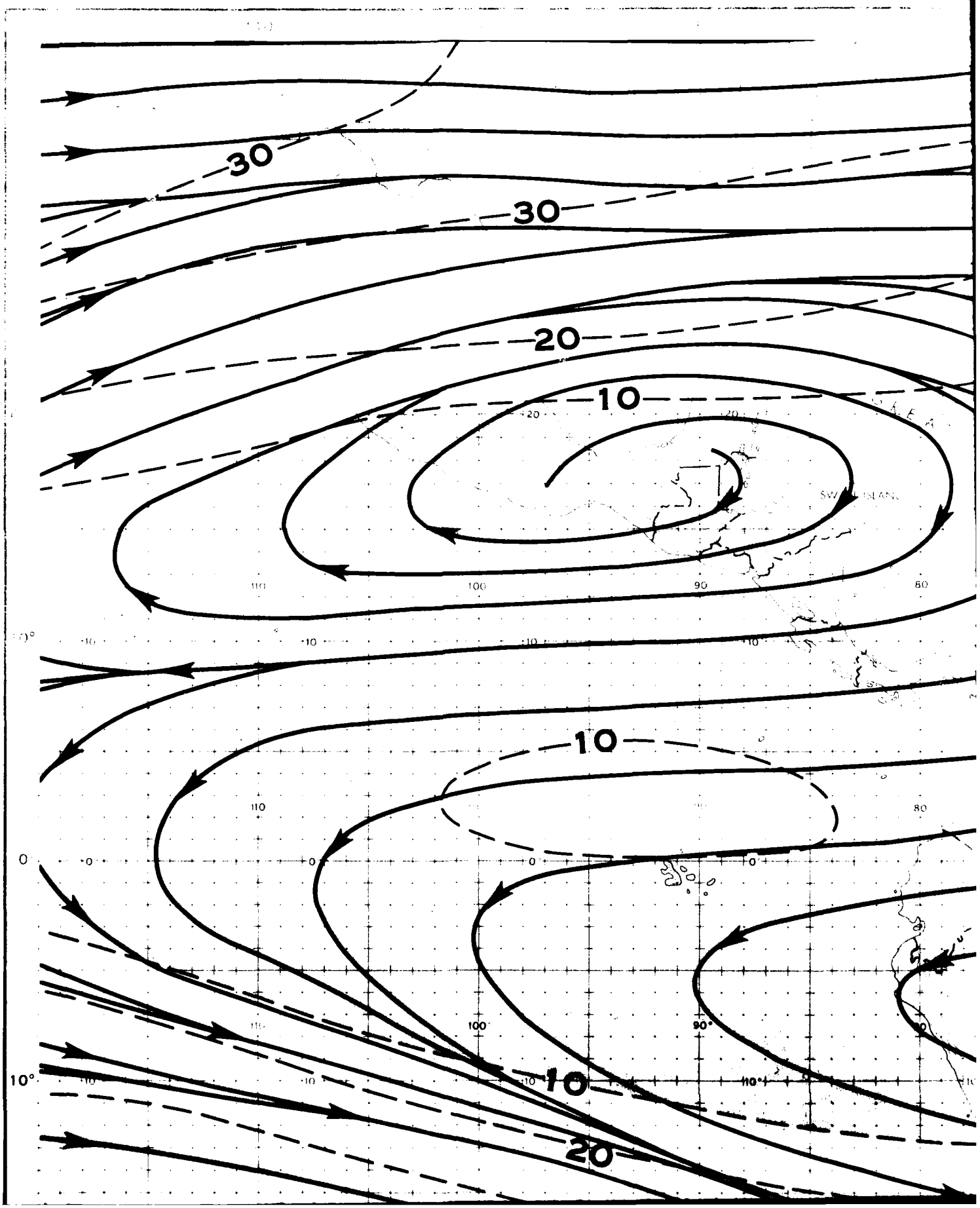



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MULW-309E

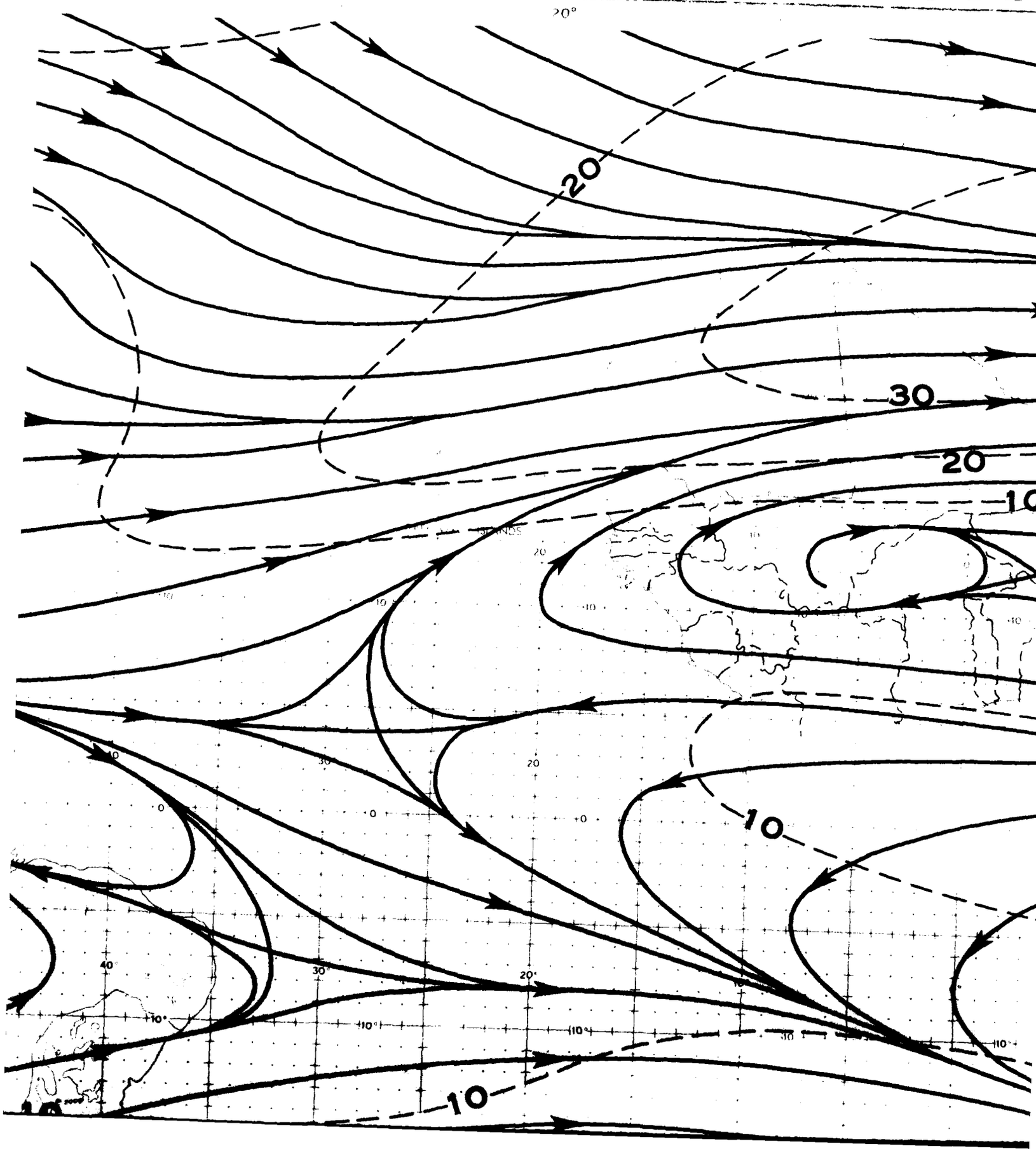
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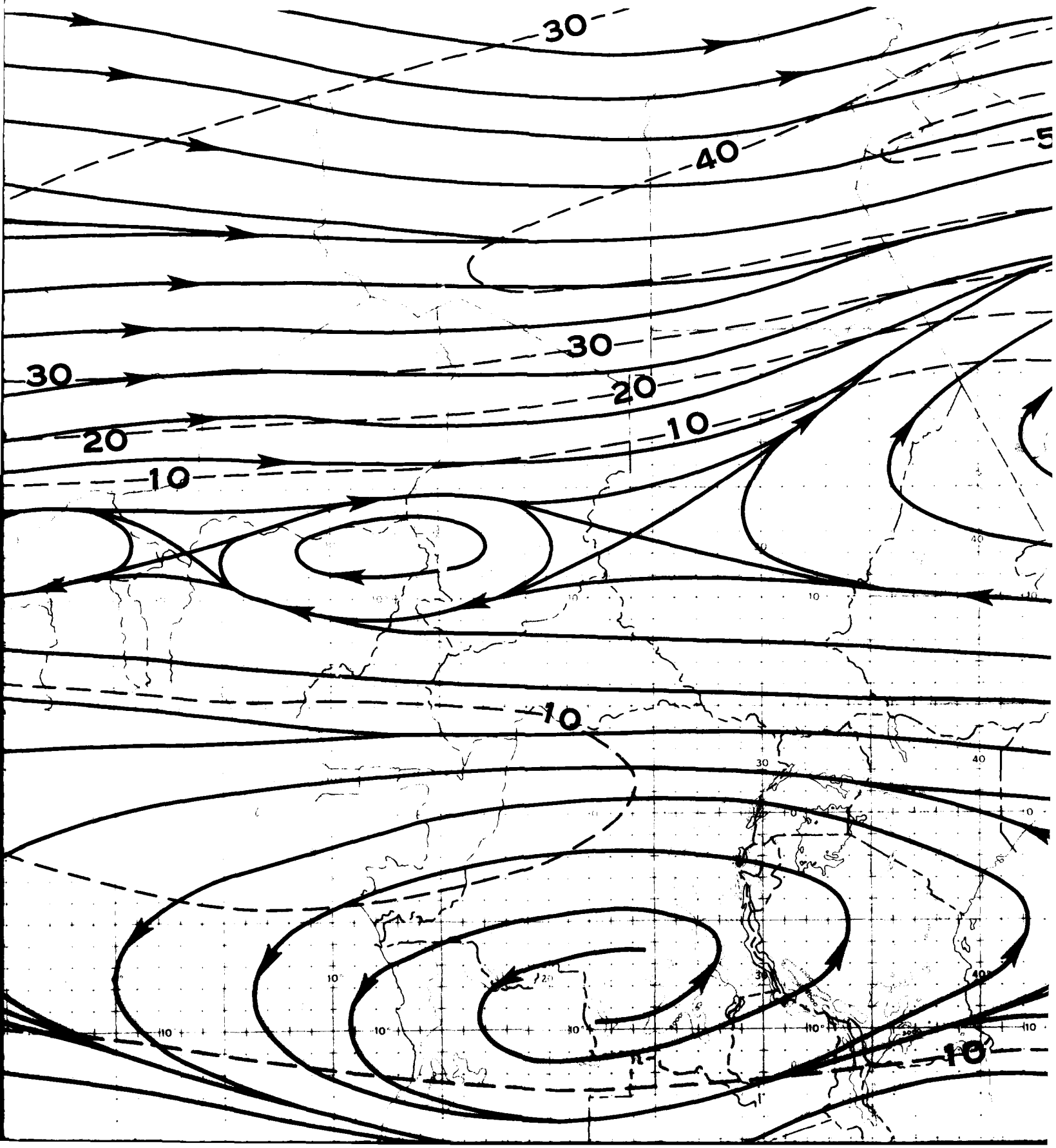
# MEAN UPPER LEVEL WIN

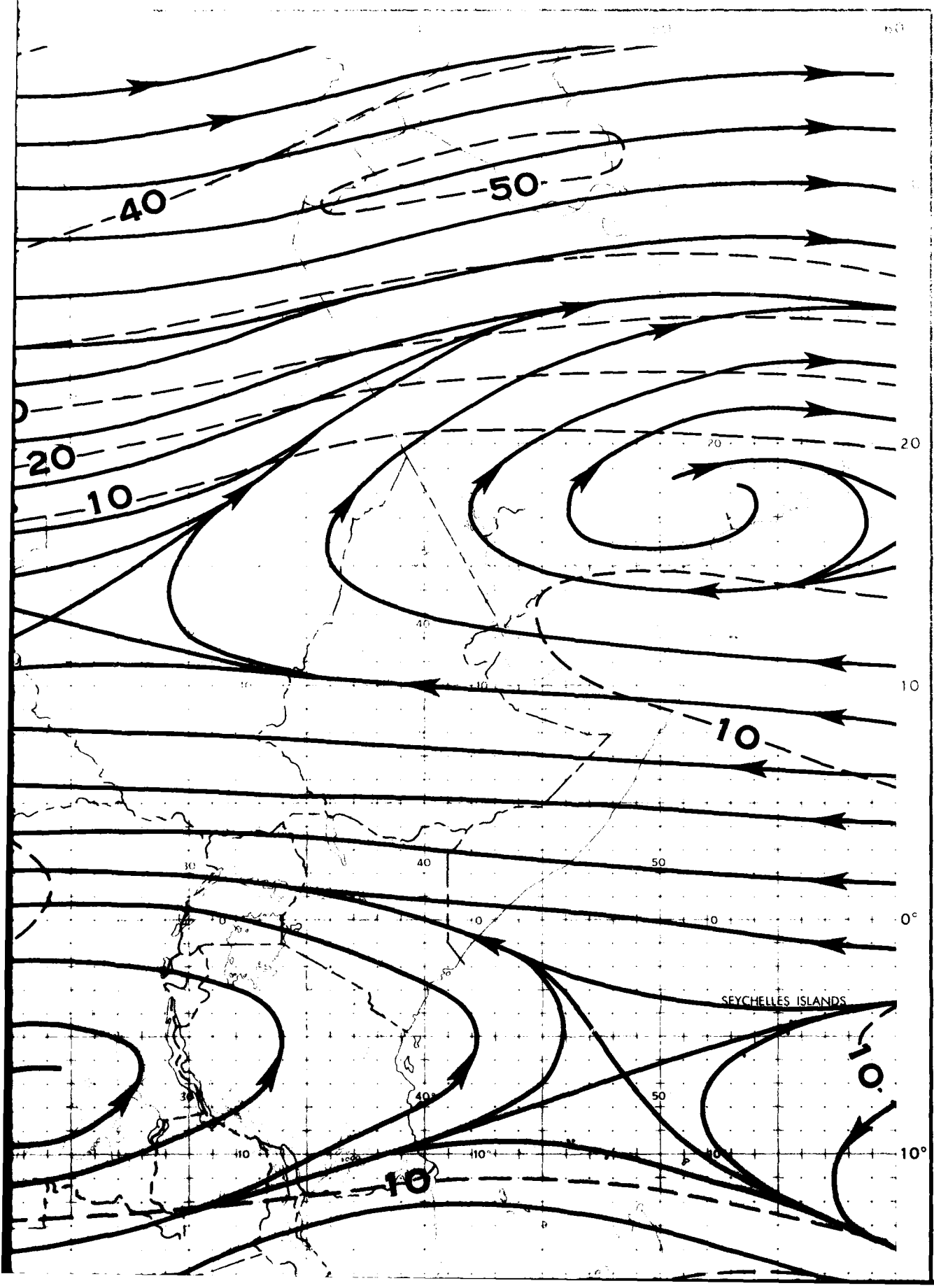


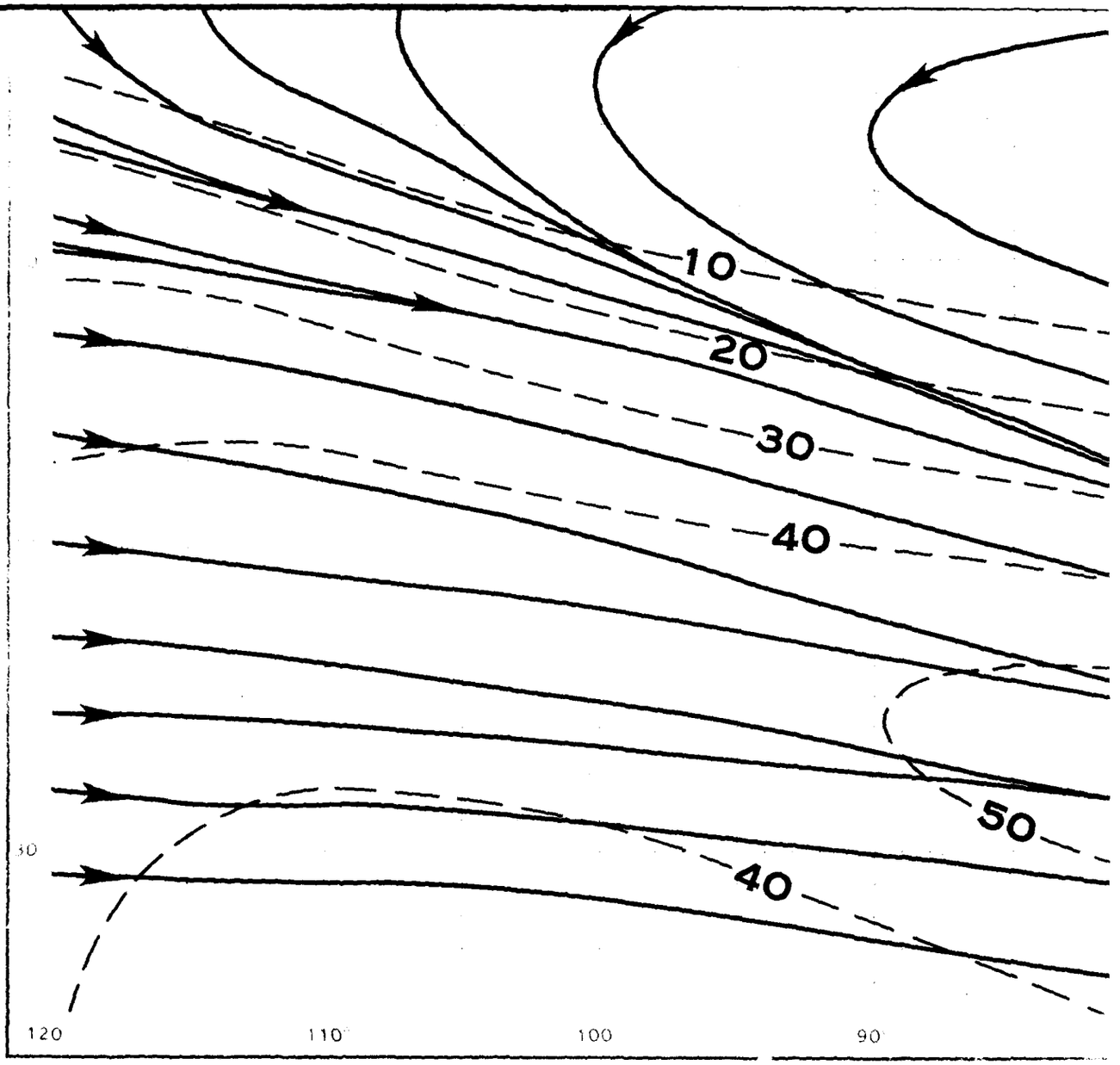
# NDS over GLOBAL TROPICS - OCTO



# OCTOBER 300mb

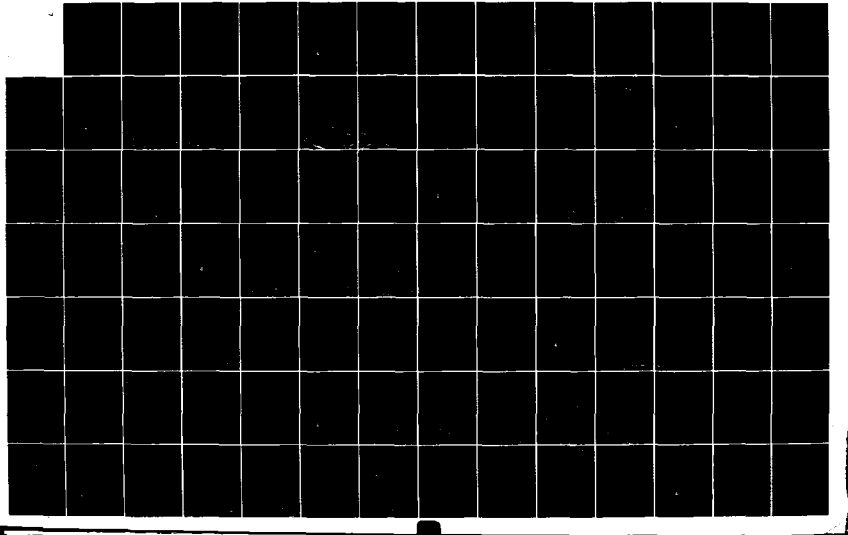


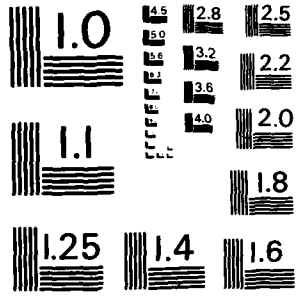

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SEYCHELLES ISLANDS


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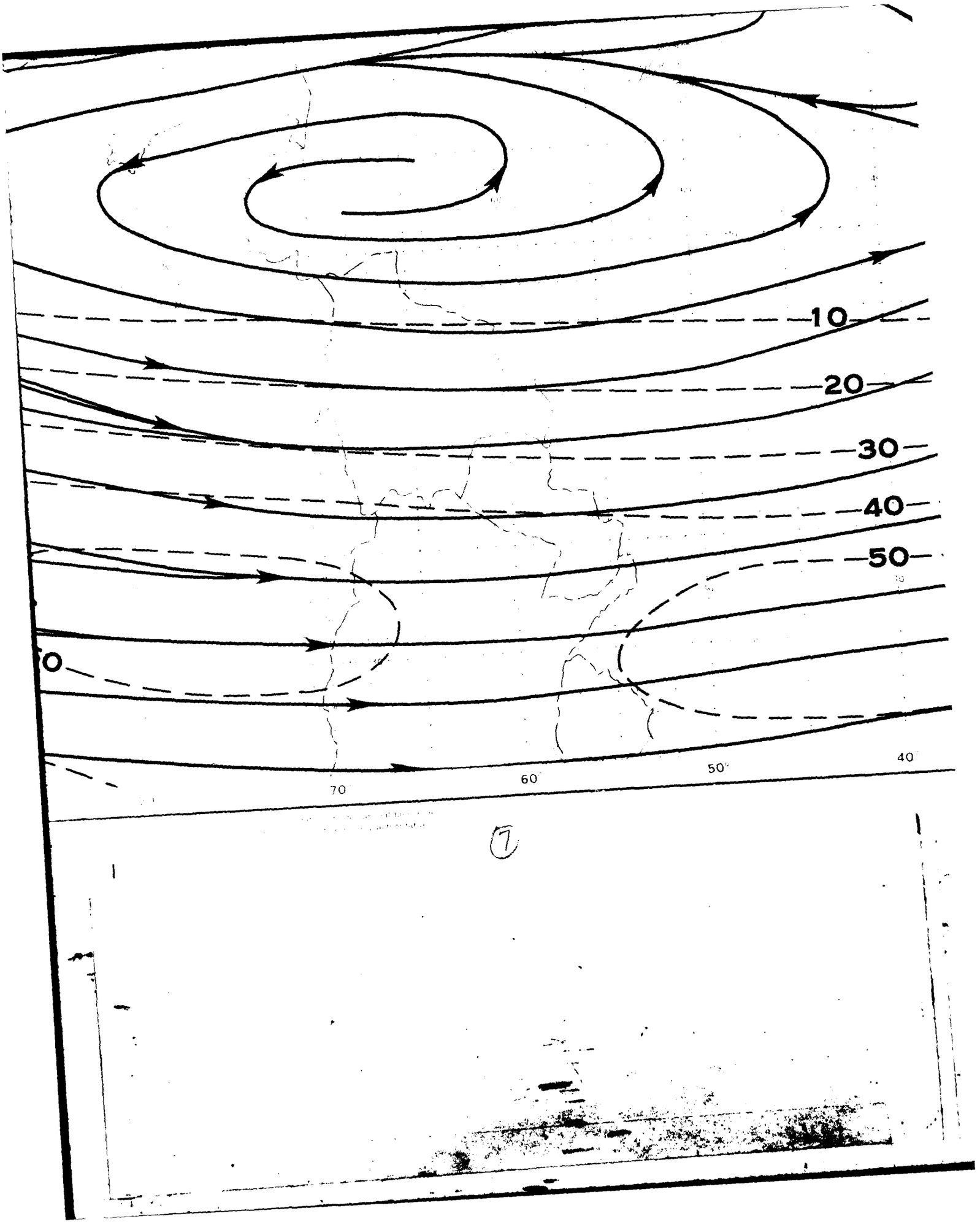
AD-A141 484 MEAN UPPER TROPOSPHERIC FLOW OVER THE GLOBAL TROPICS VOLUME 2(U) AIR WEATHER SERVICE SCOTT AFB IL J C SADLER ET AL. JAN 84 AWS/TR-83/002-VOL-2 3/6

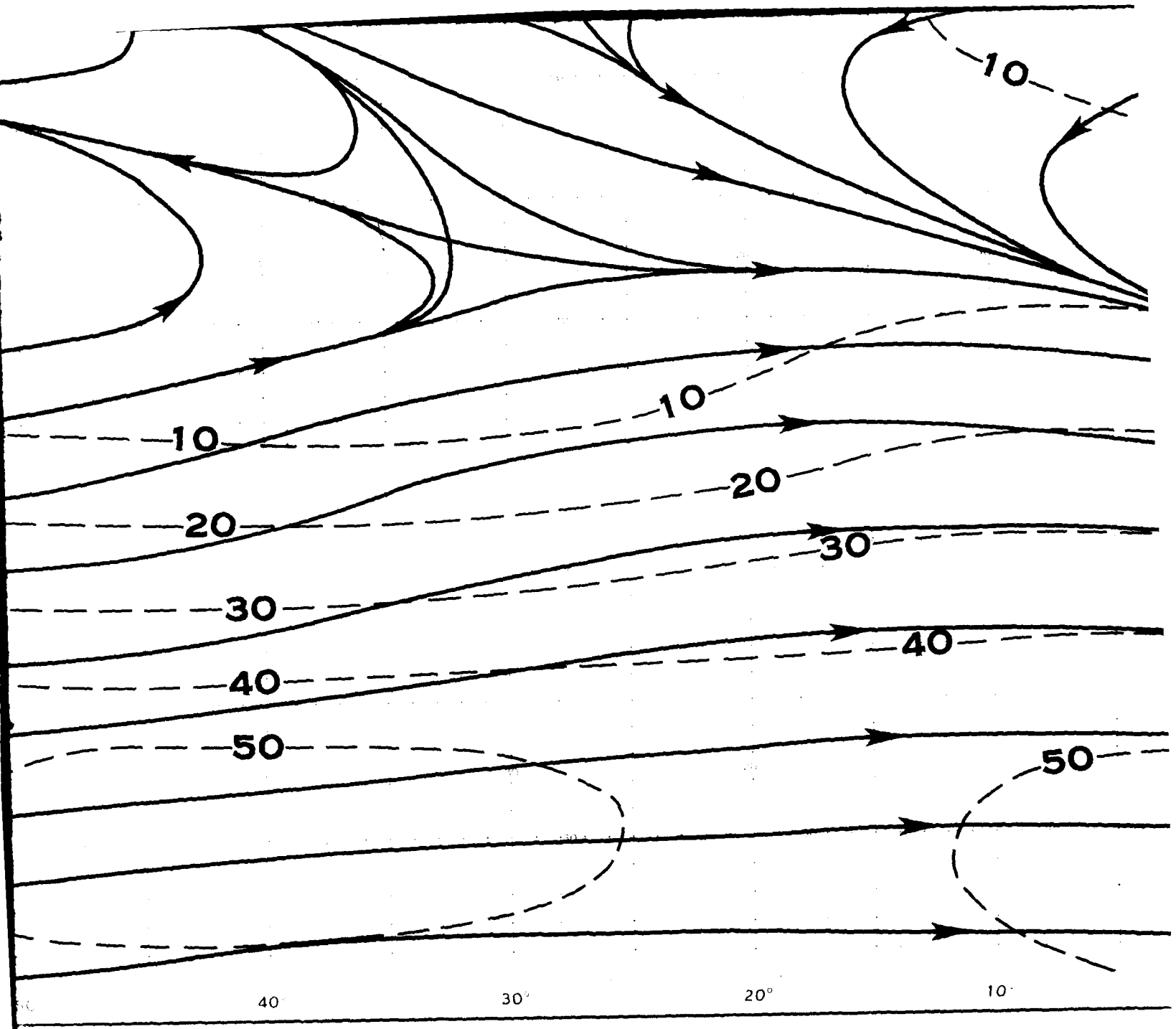
UNCLASSIFIED SBI-AD-E850 090 F/G 4/2 NL





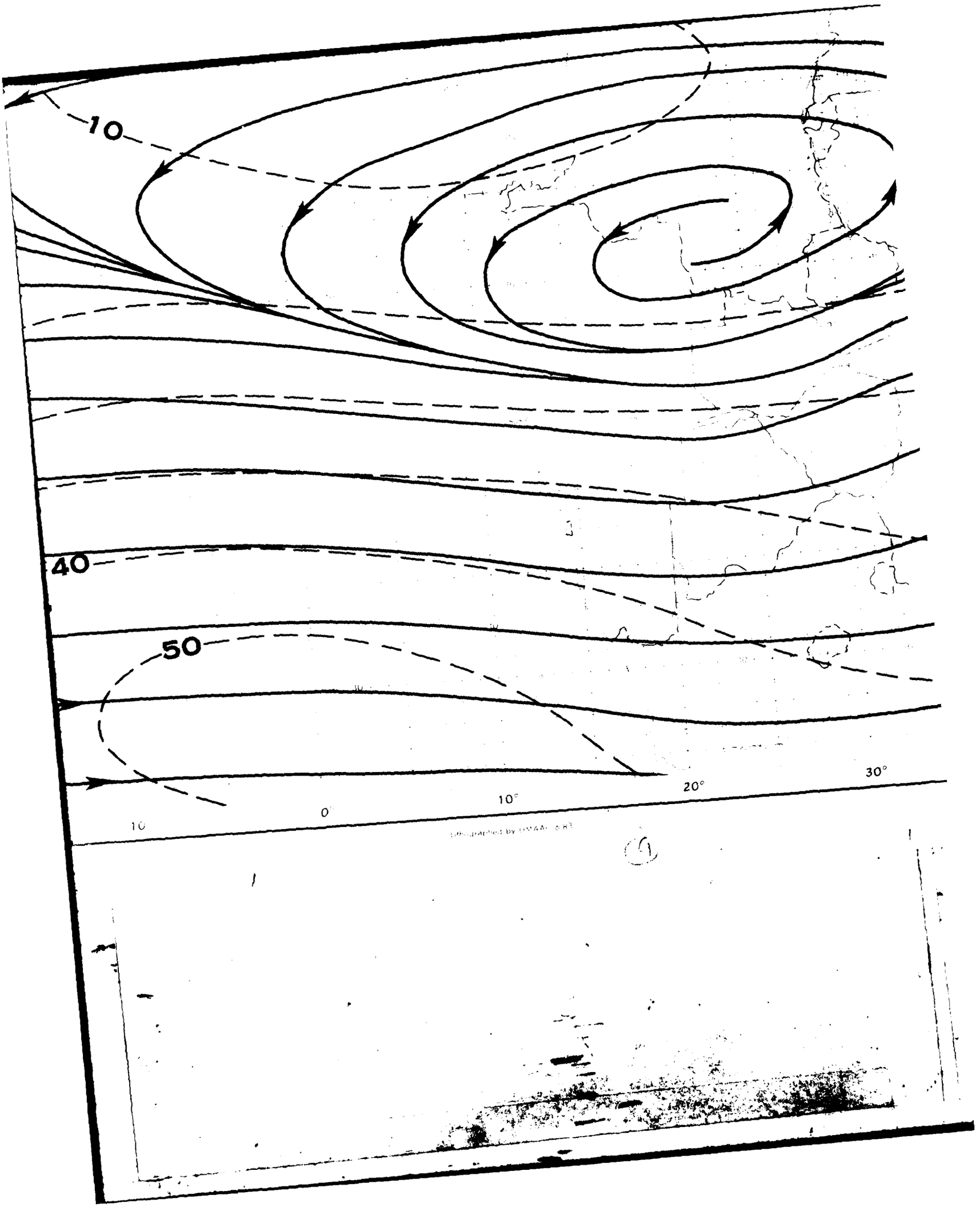

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

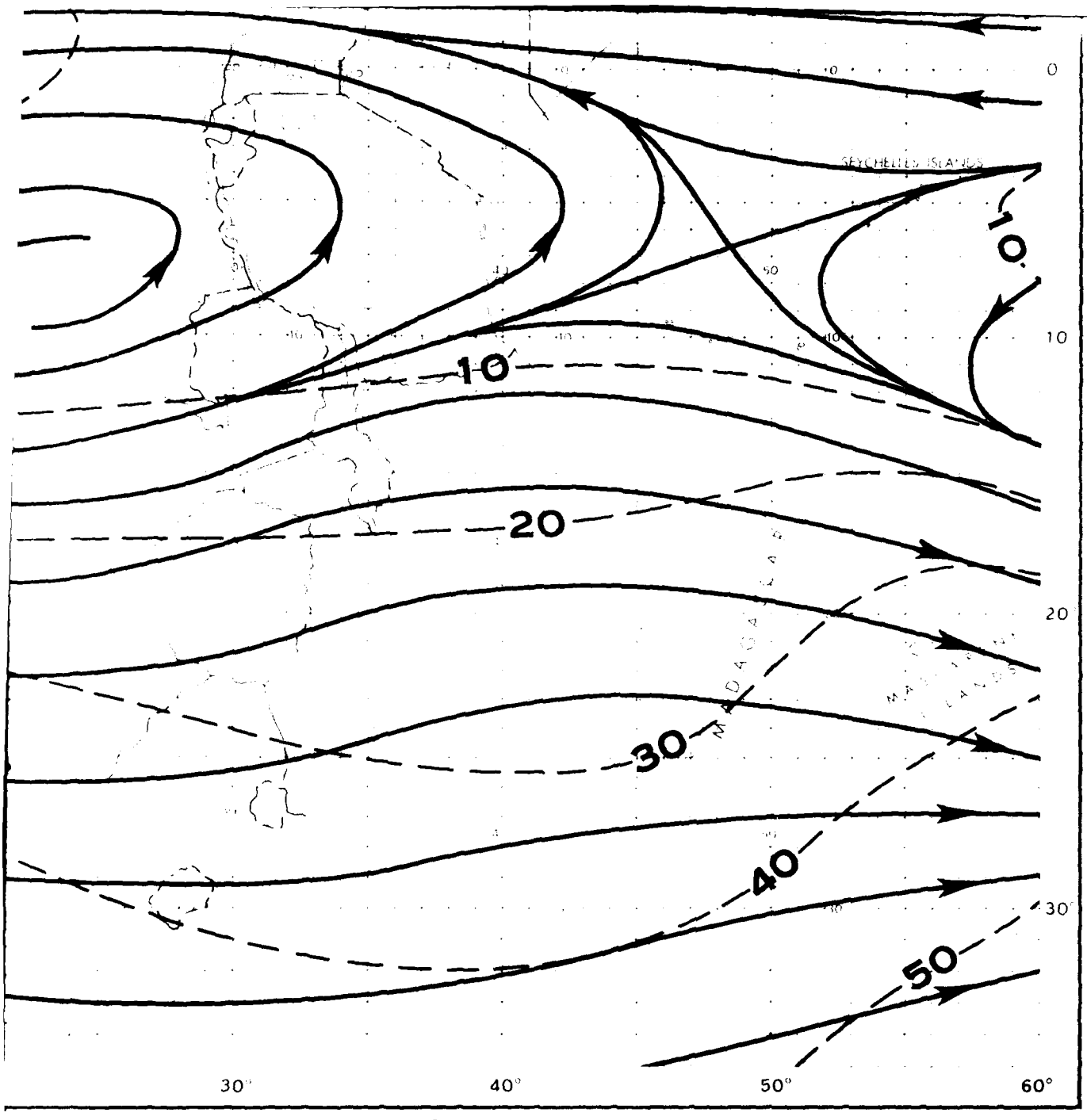

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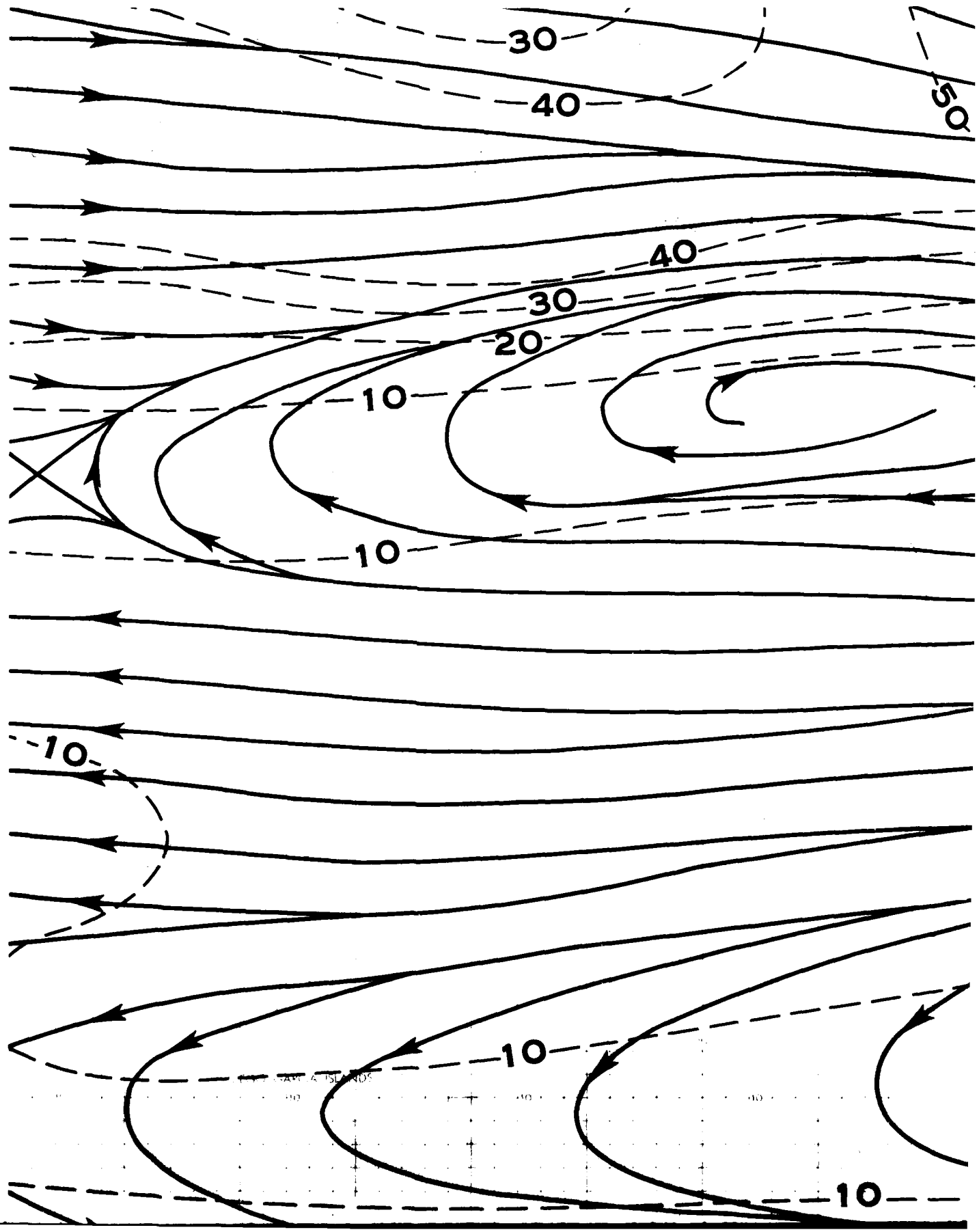

MERCATOR PROJECTION
SCALE 1:20,000,000
TRUE AT 22° 30' N AND 22° 30' S

(8)

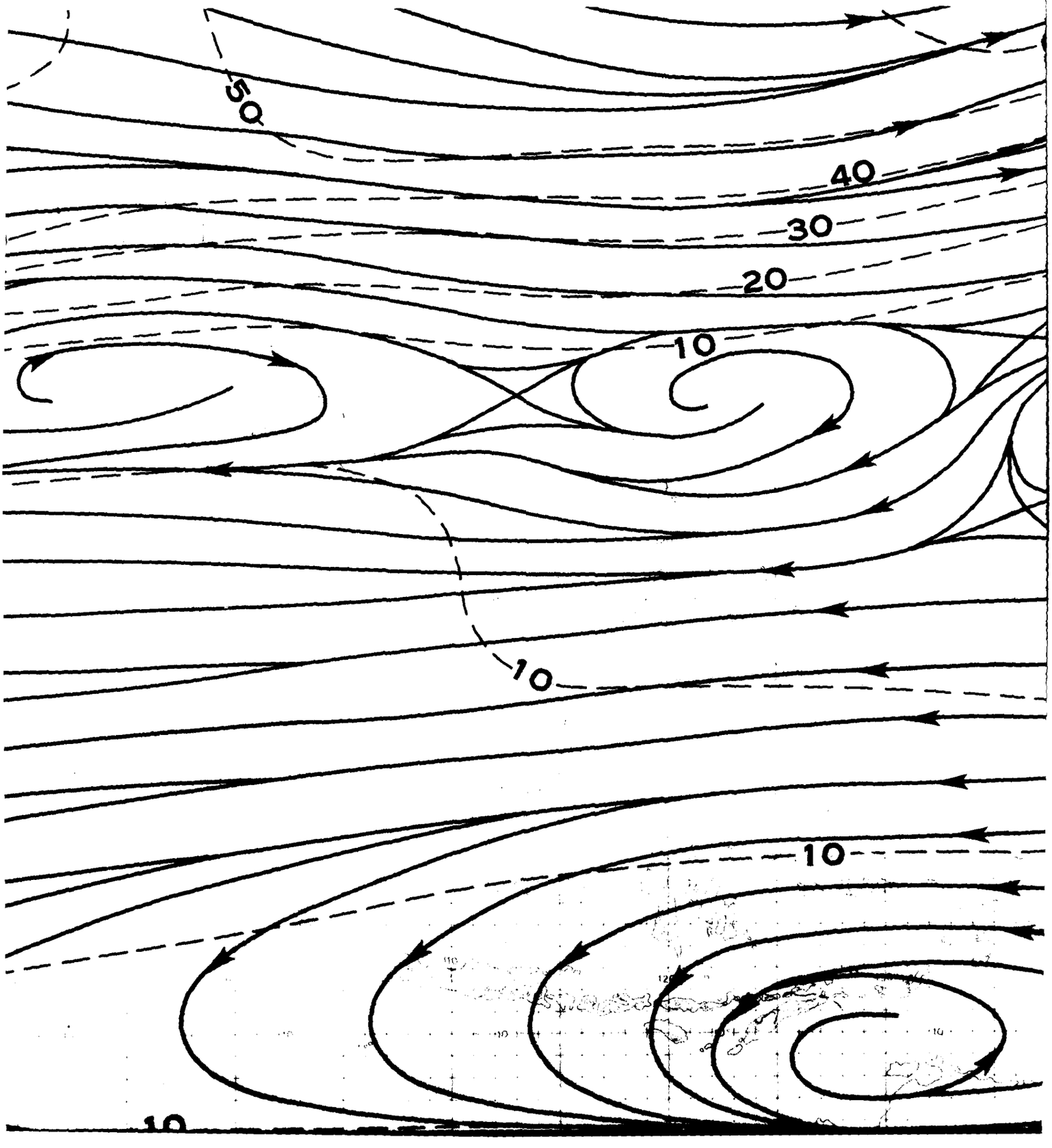

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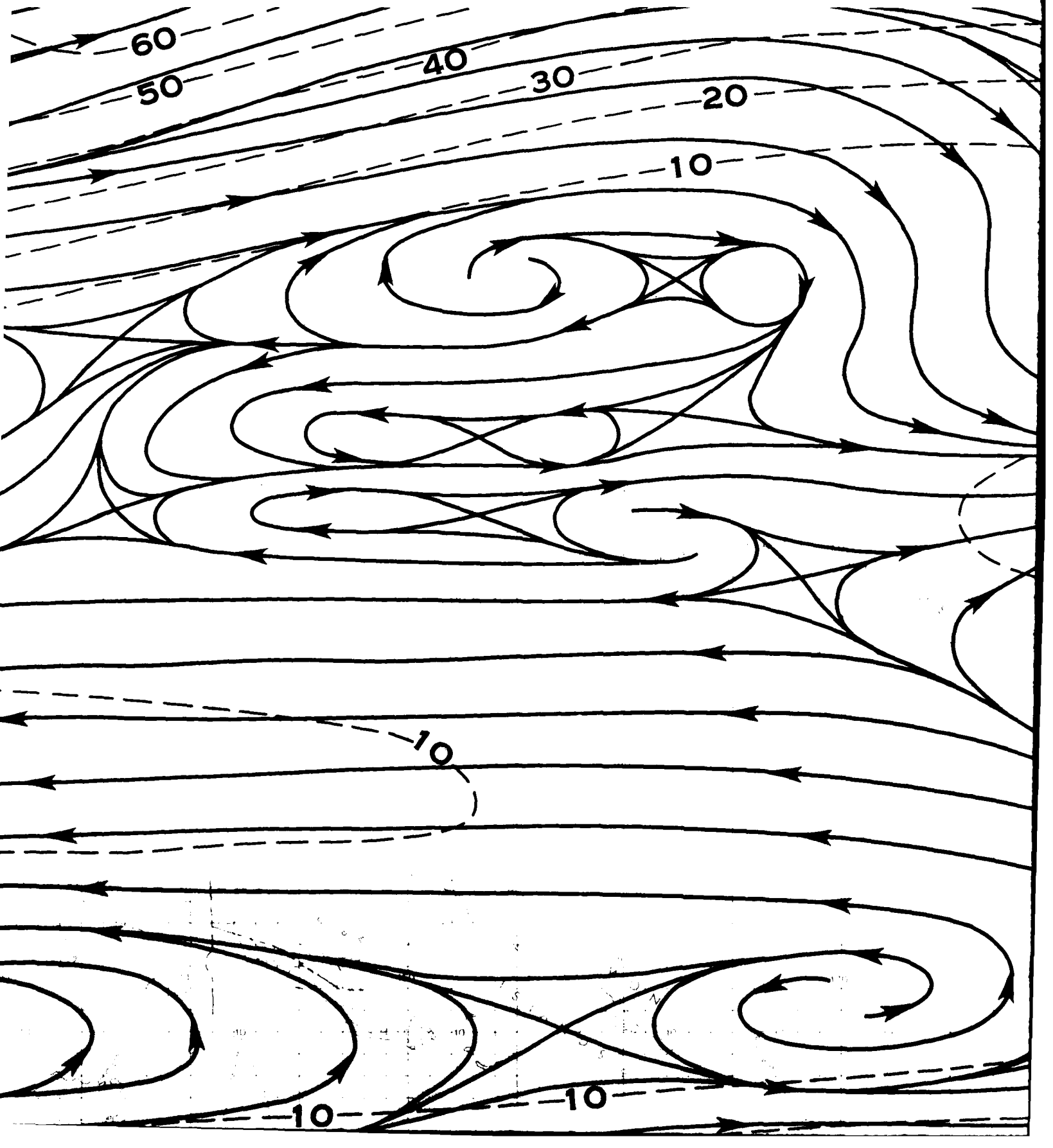

**MULW-310W**


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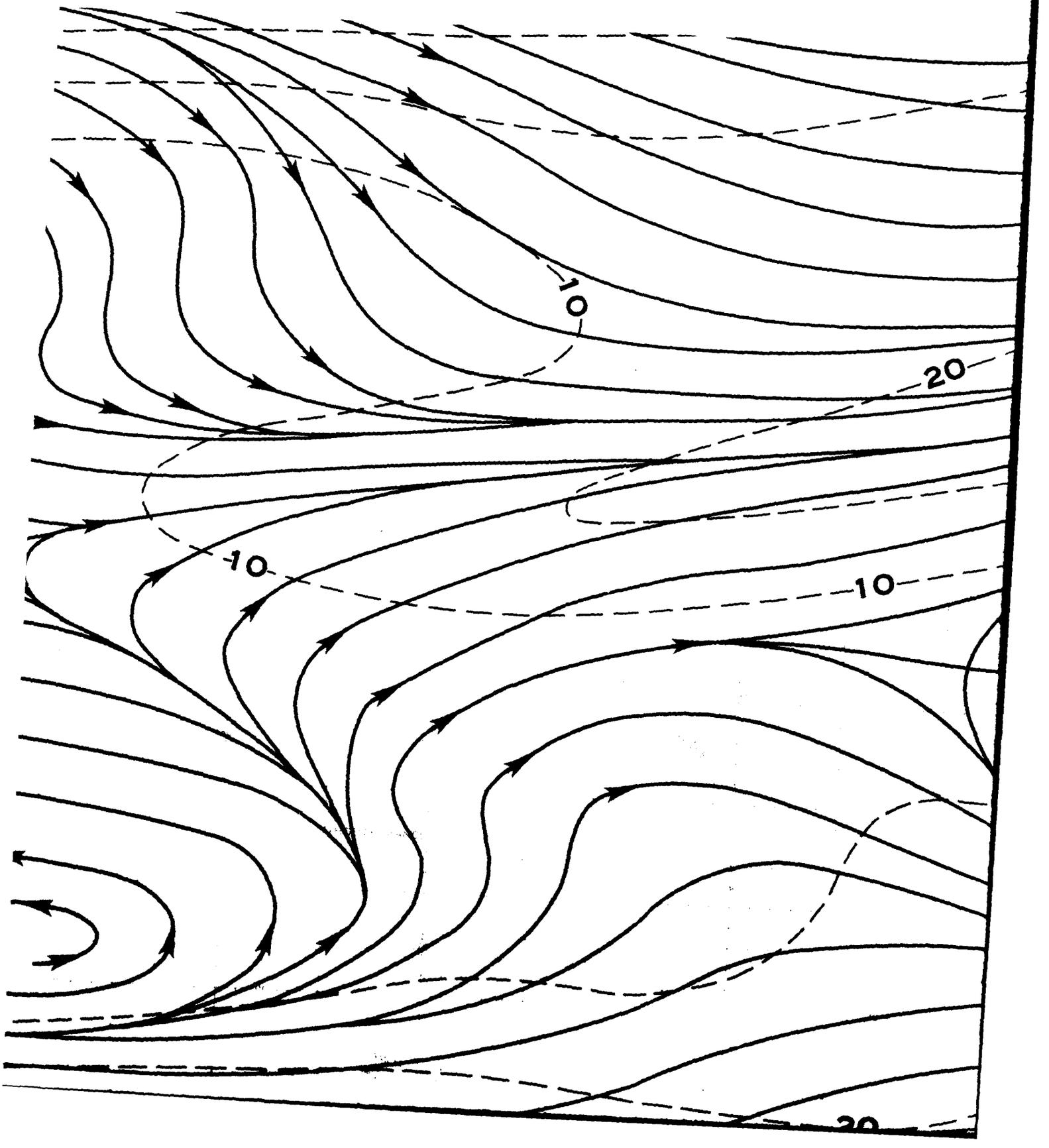
# MEAN UPPER LEVEL (2) WIN

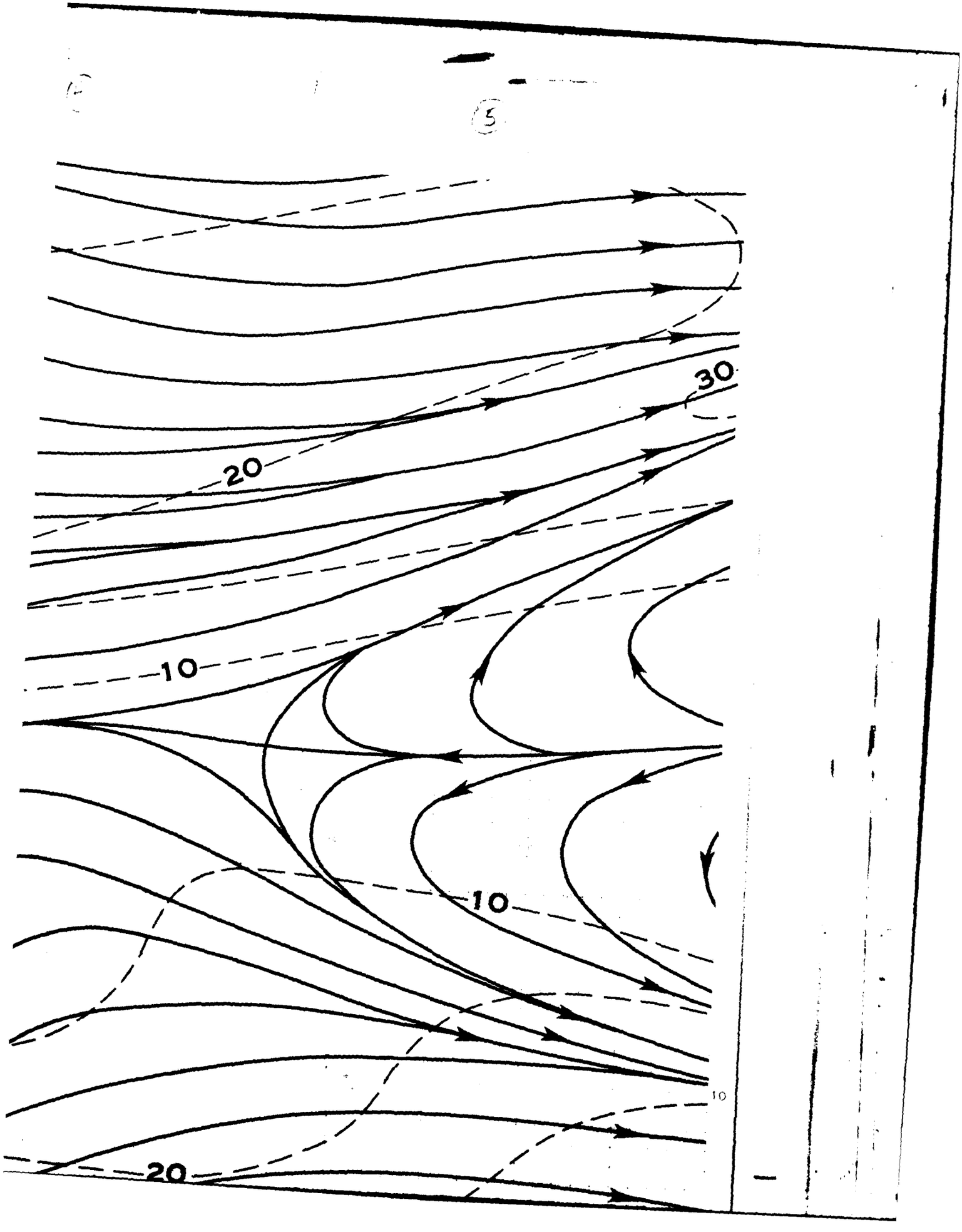


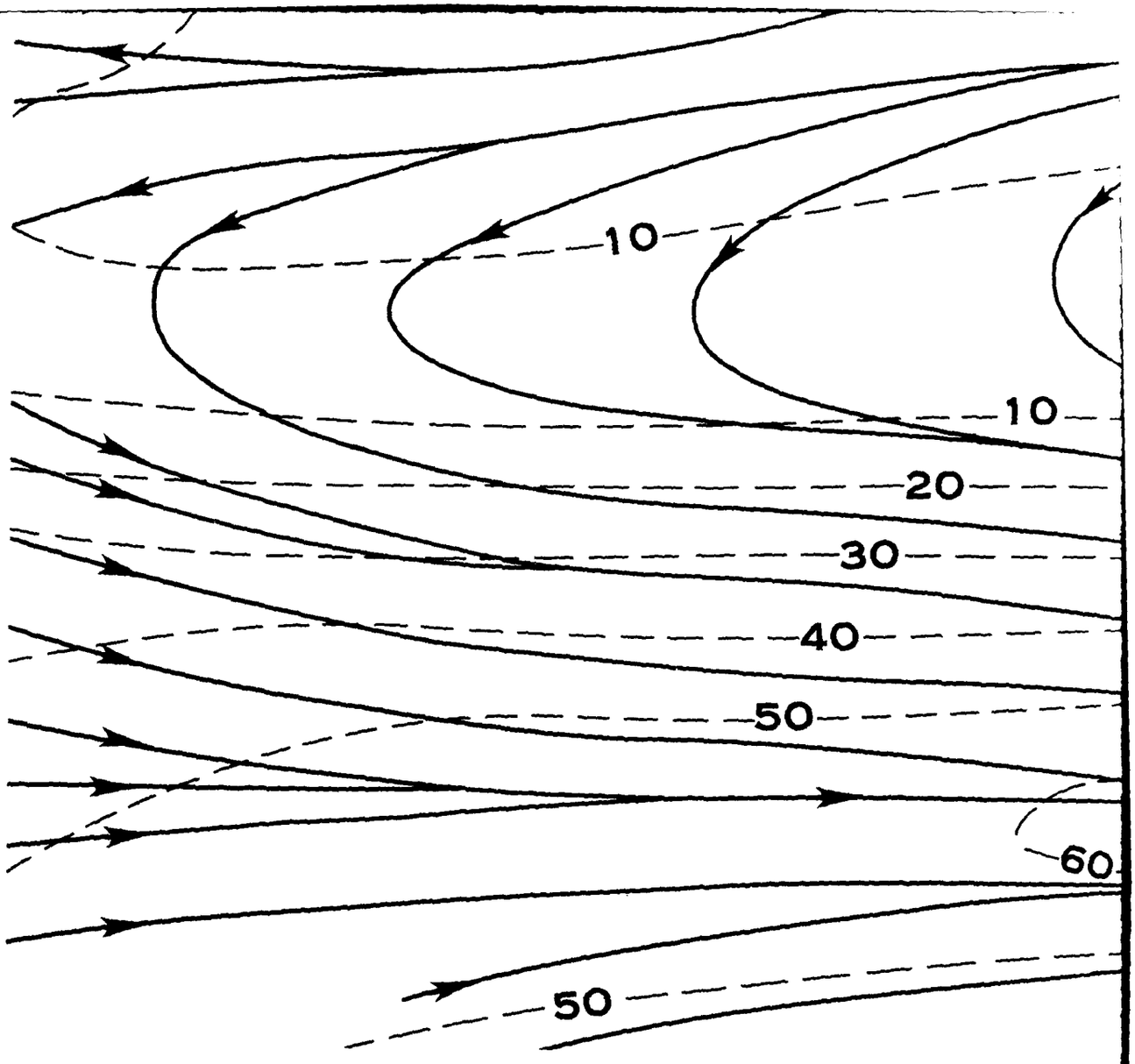
# WINDS over GLOBAL TROPICS - O



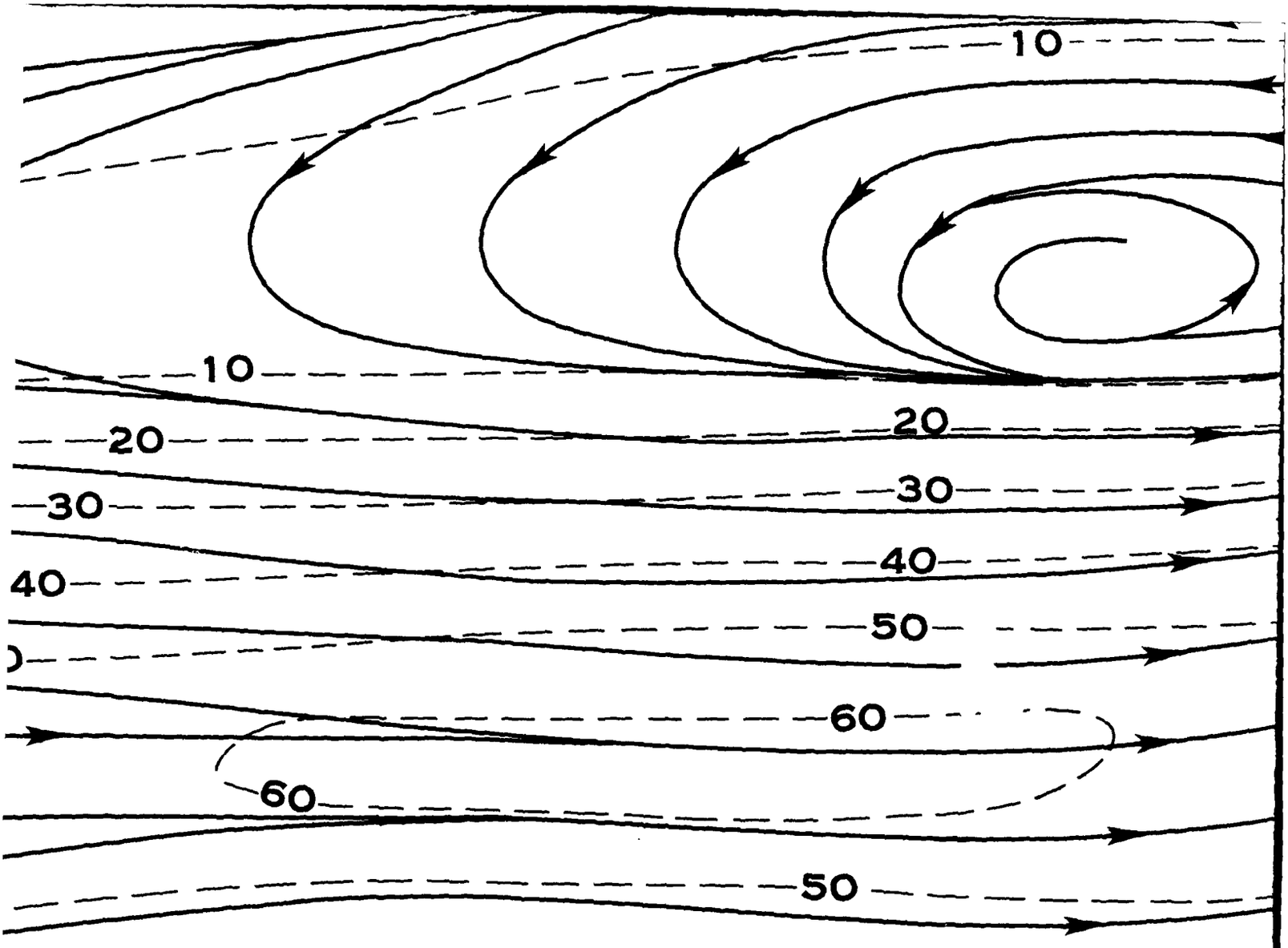
# CS - OCTOBER 300mb

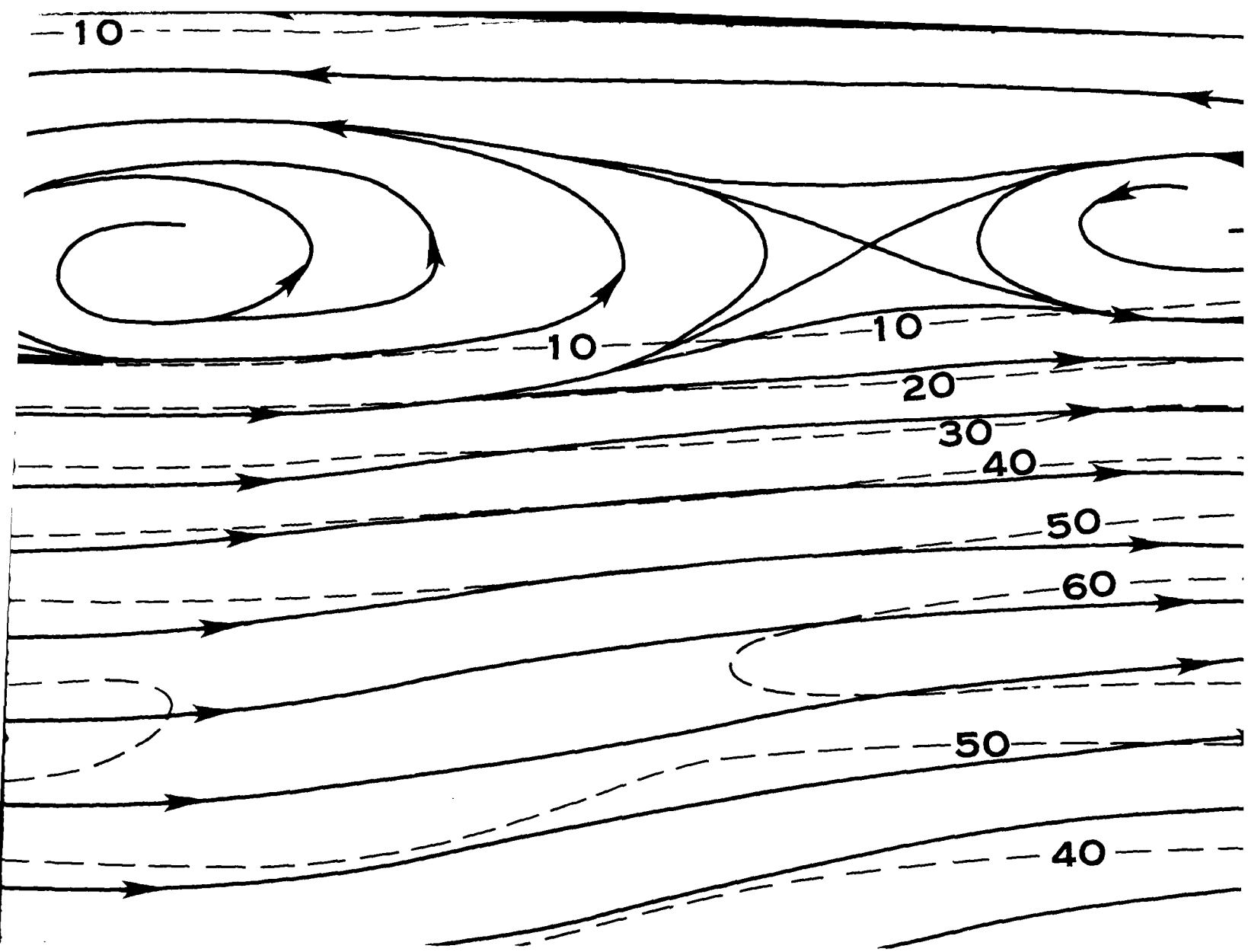


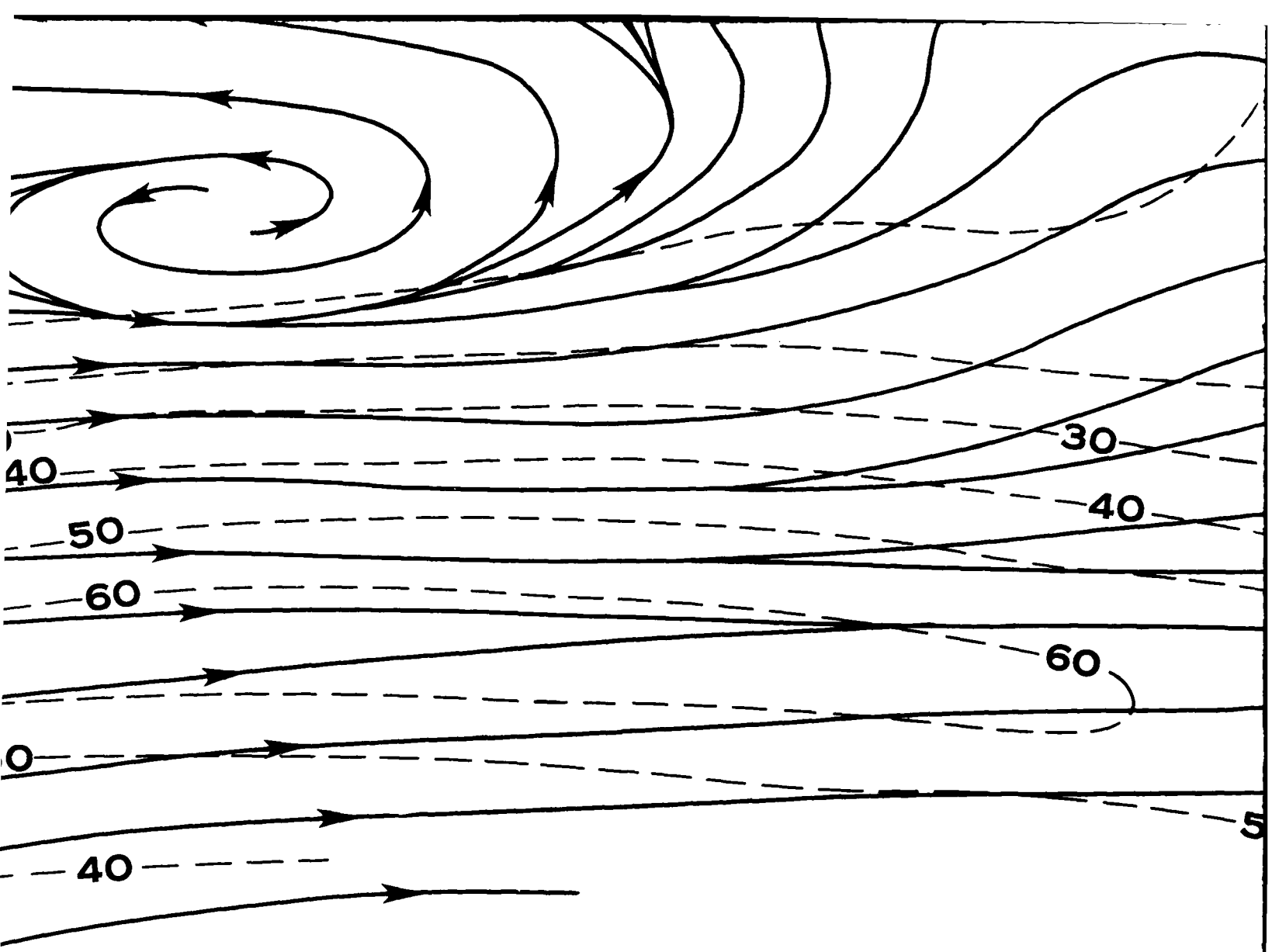

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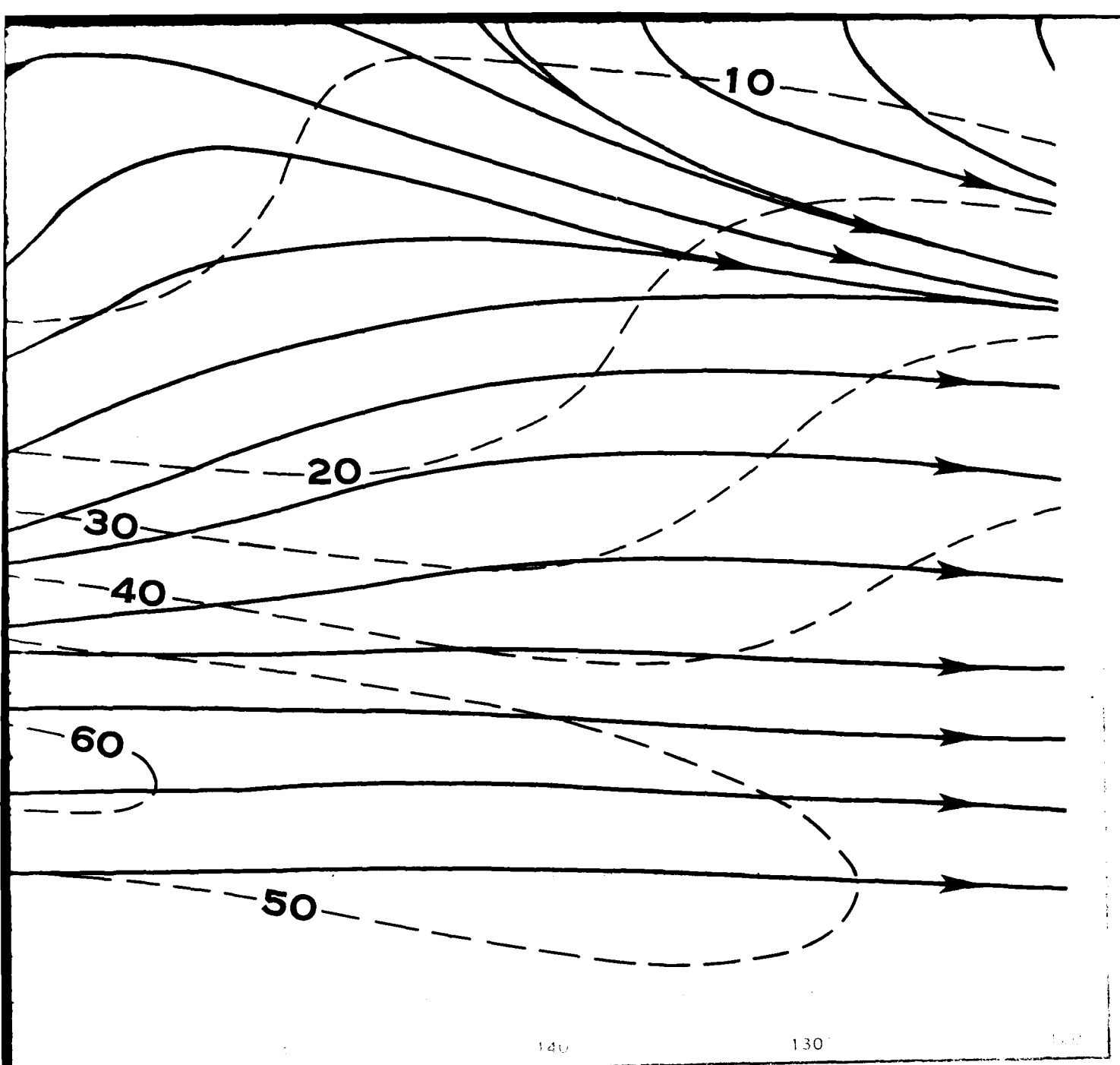



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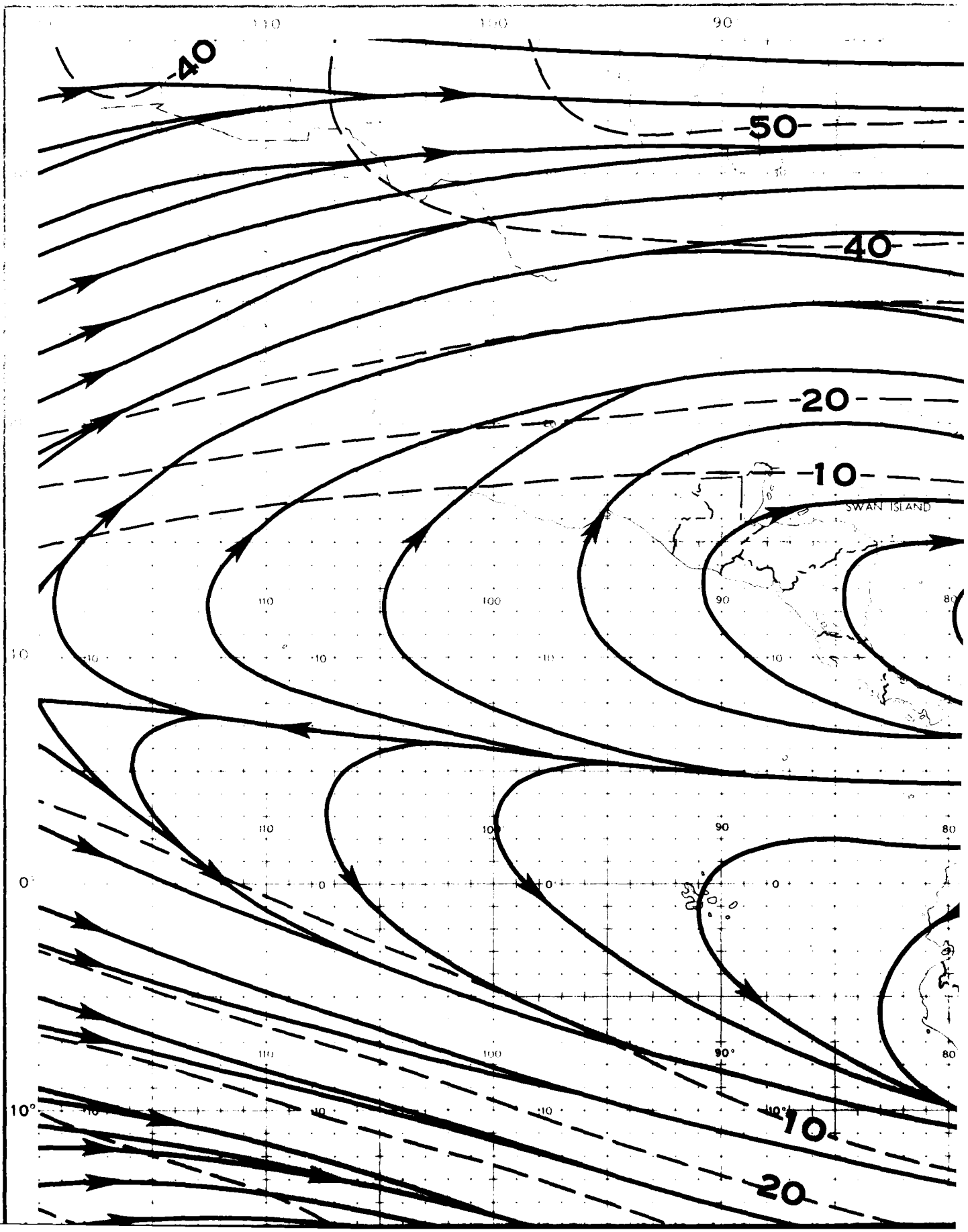

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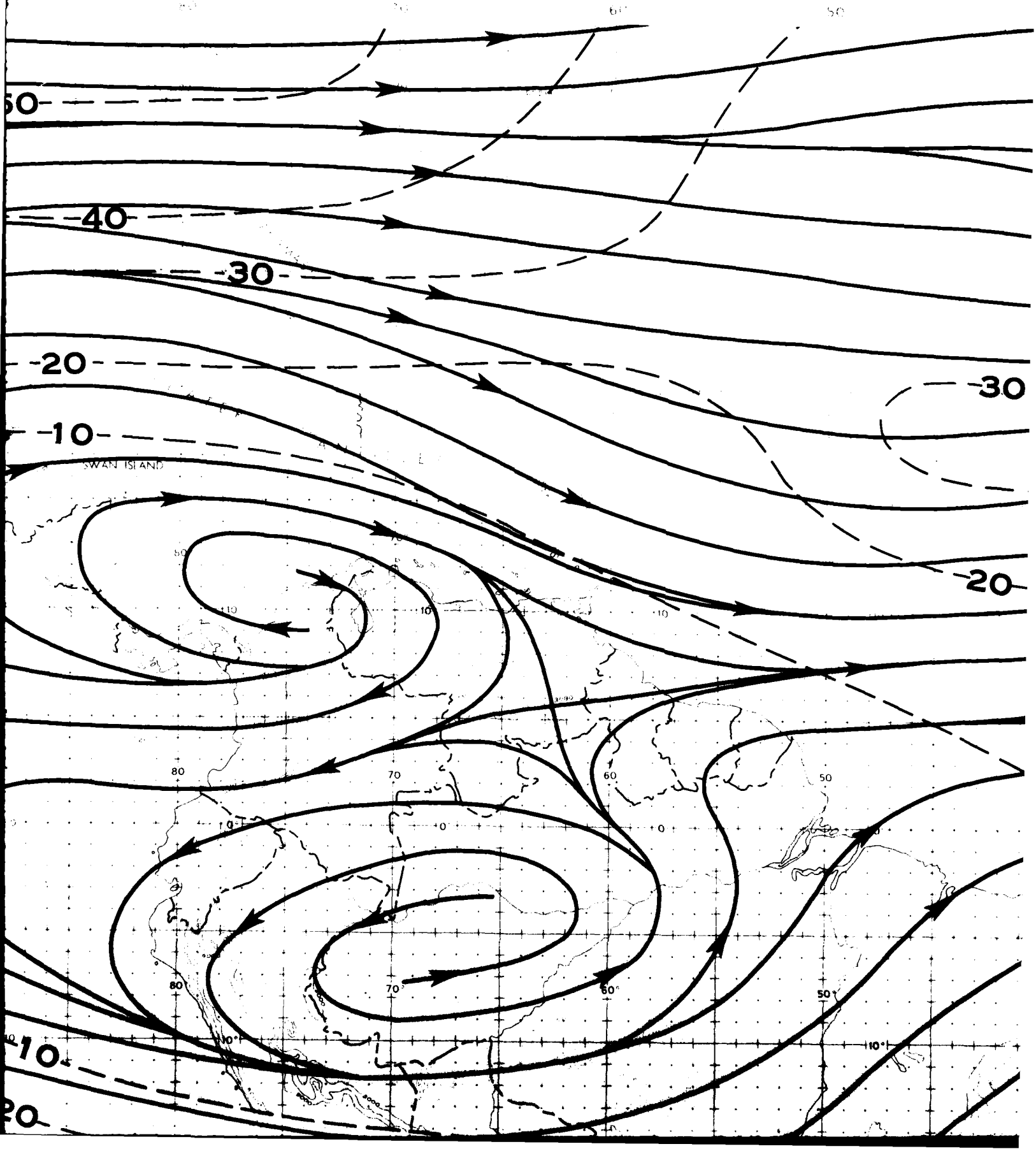


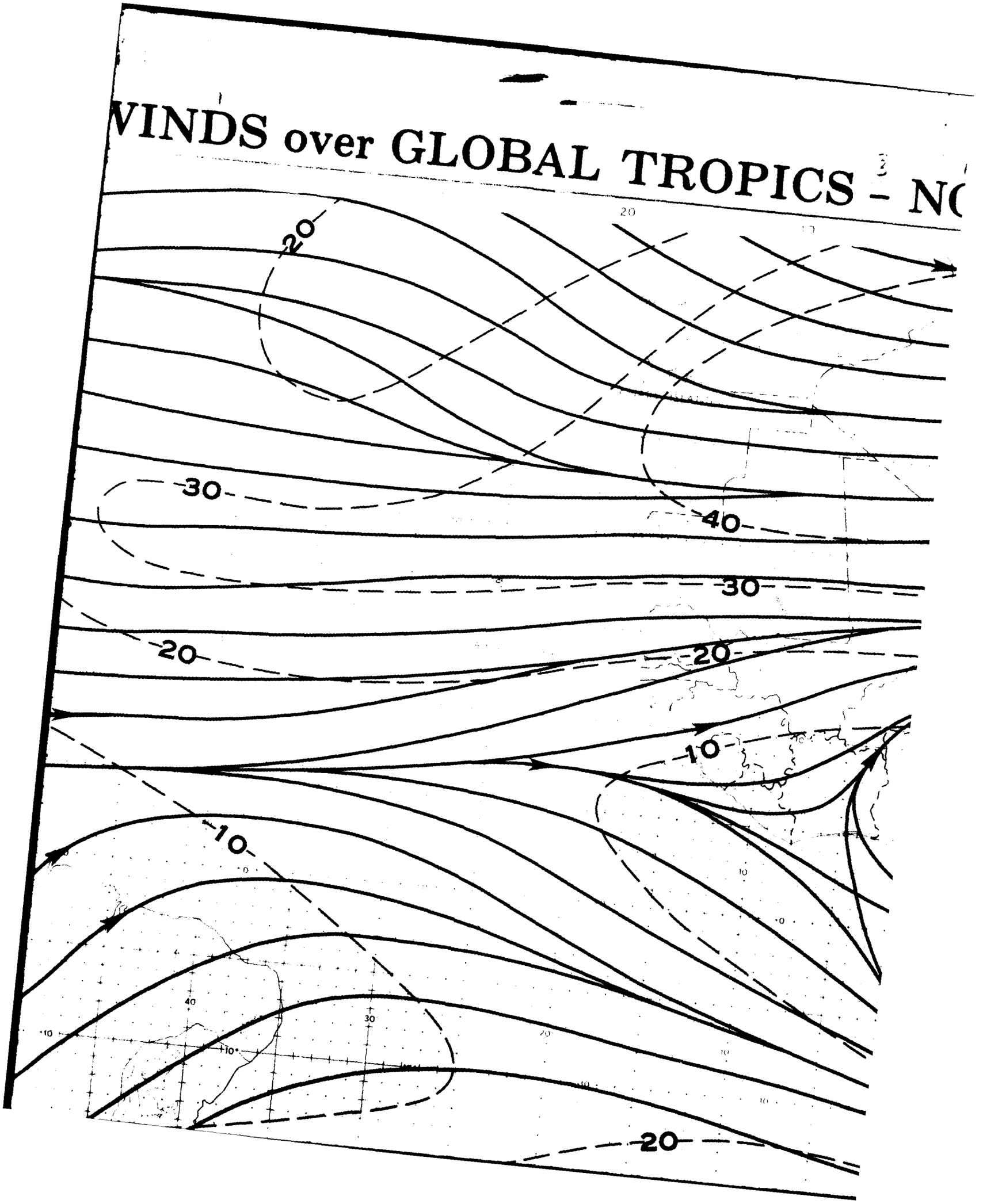

MULW-310E

# M

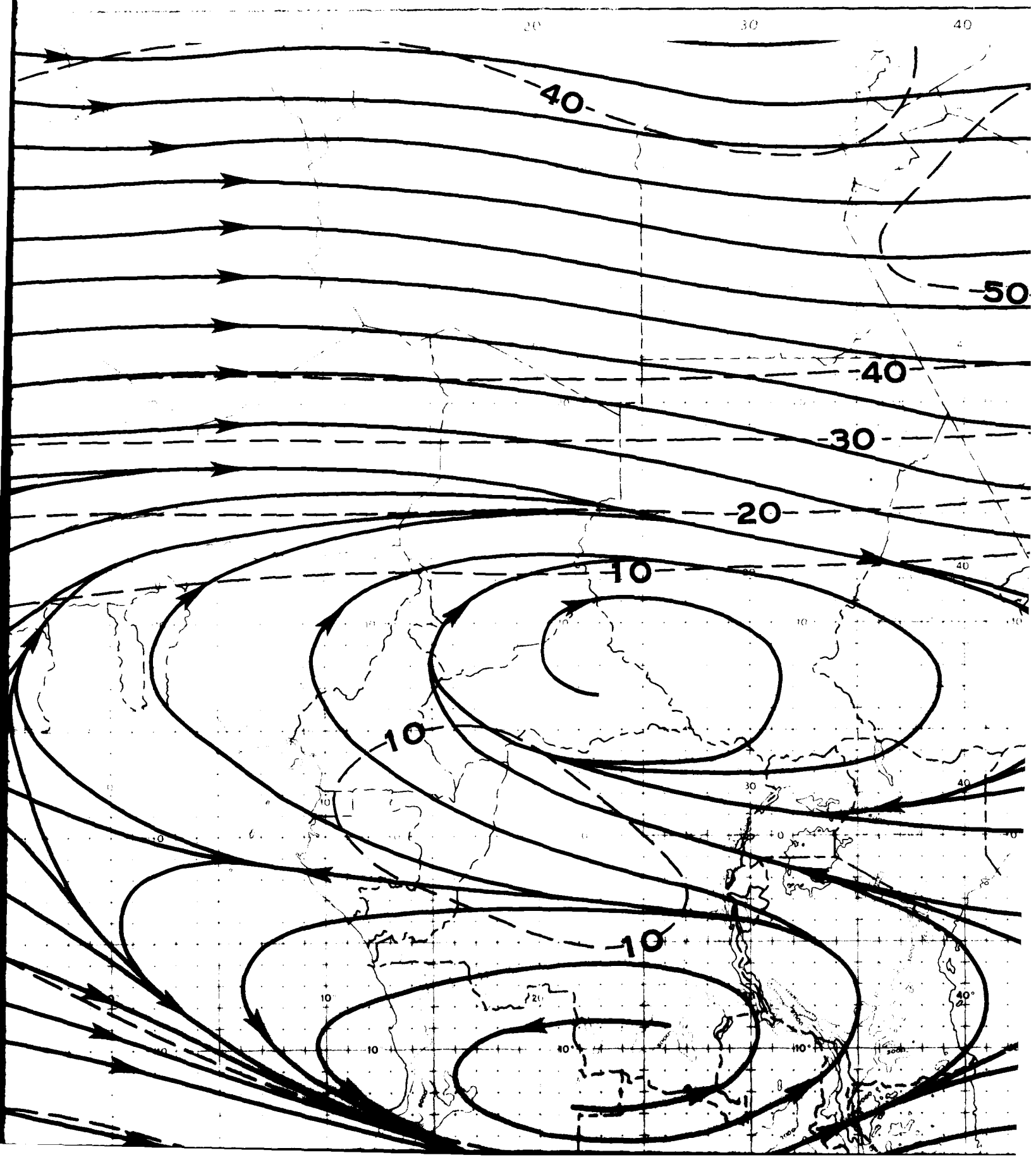


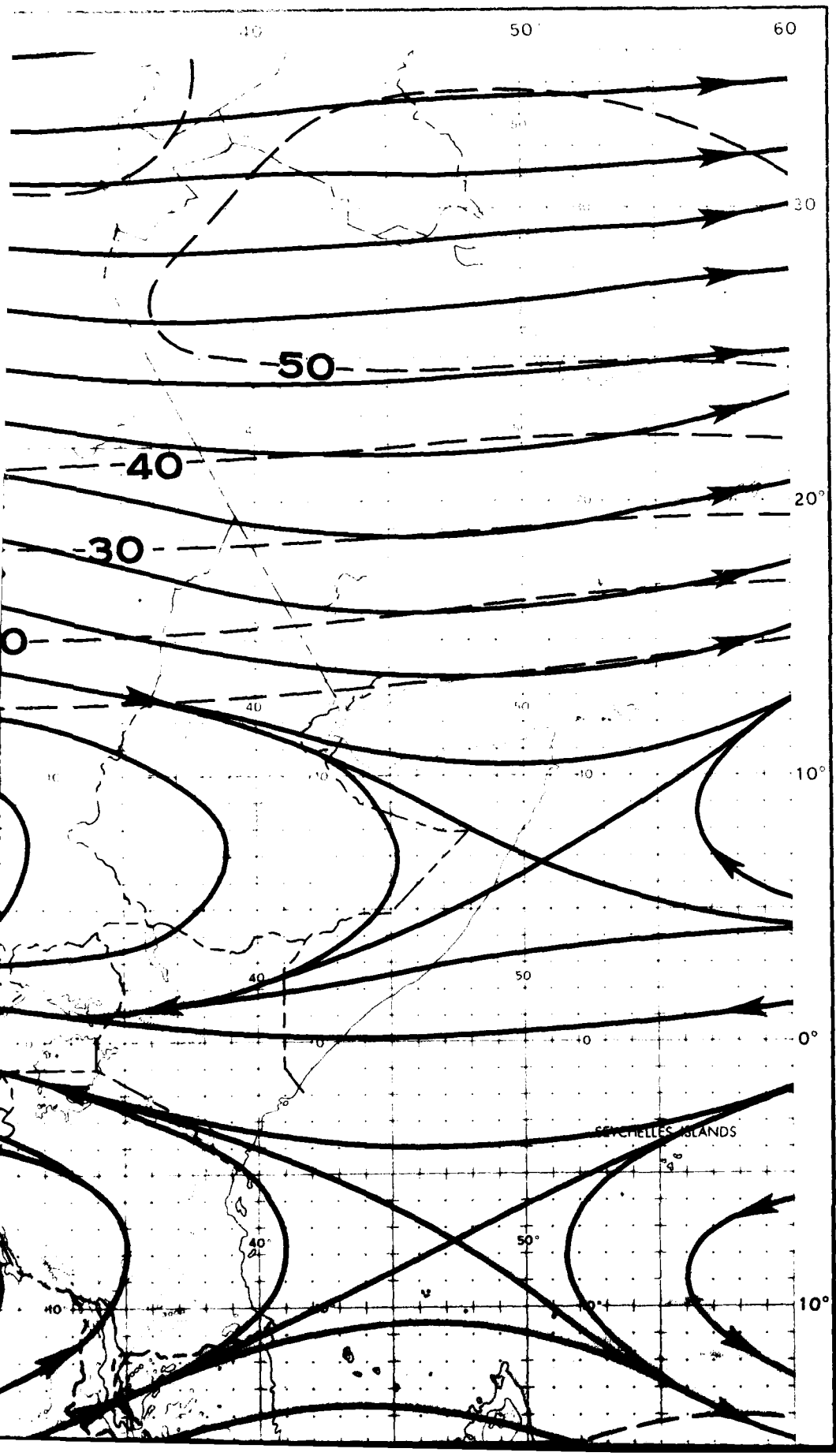
# MEAN UPPER LEVEL (2) WINDS

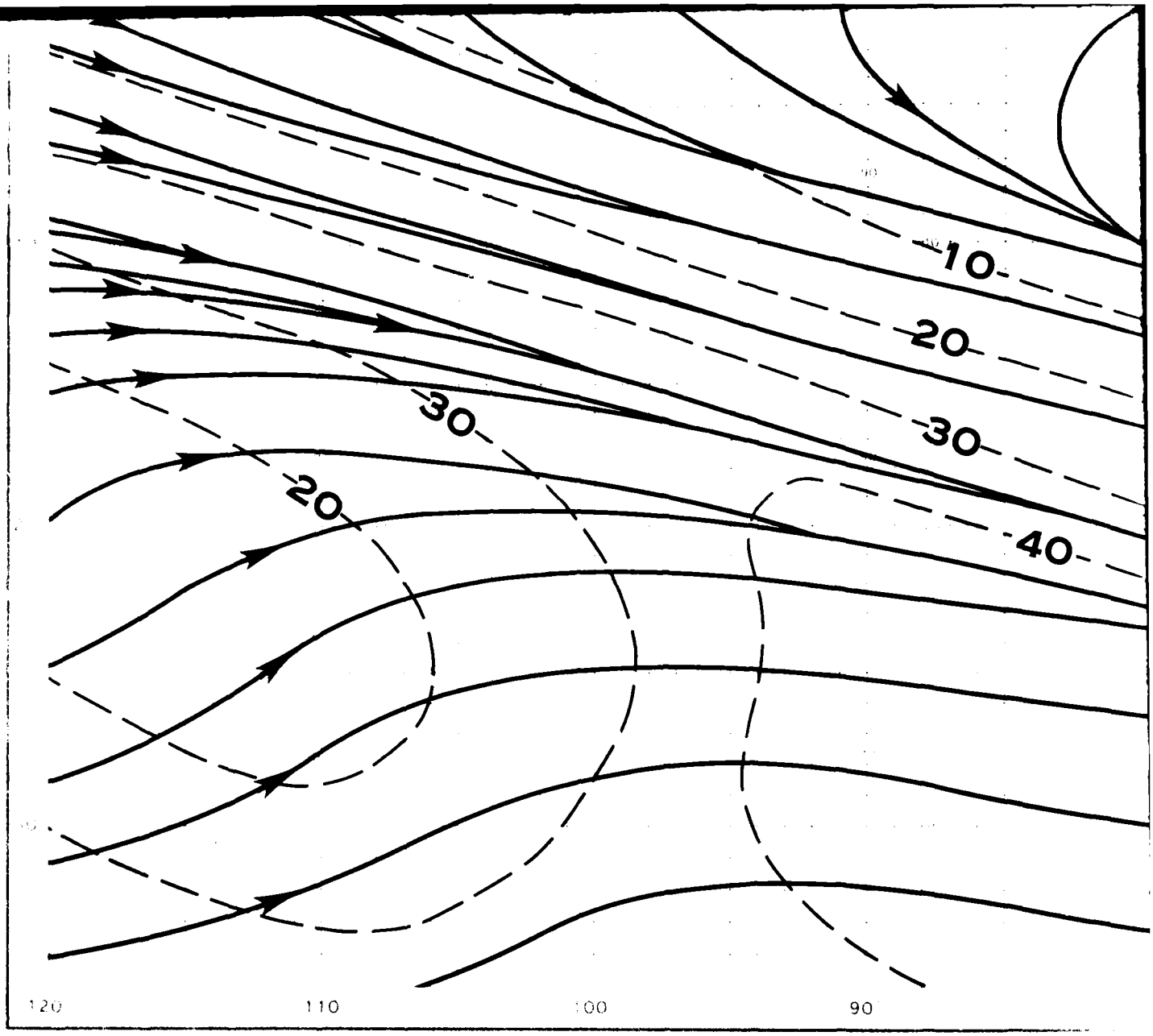


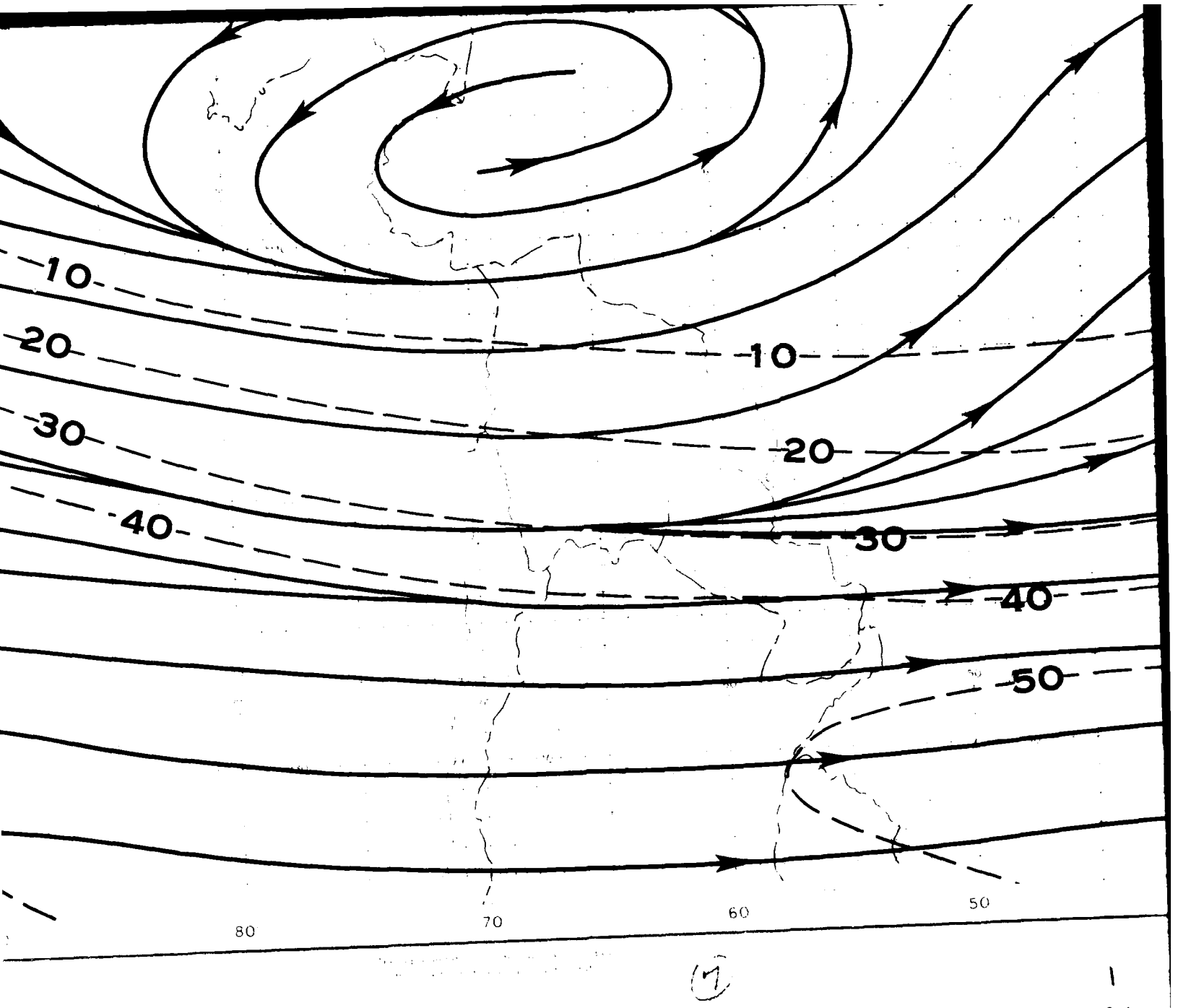

WINDS over GLOBAL TROPICS – NO
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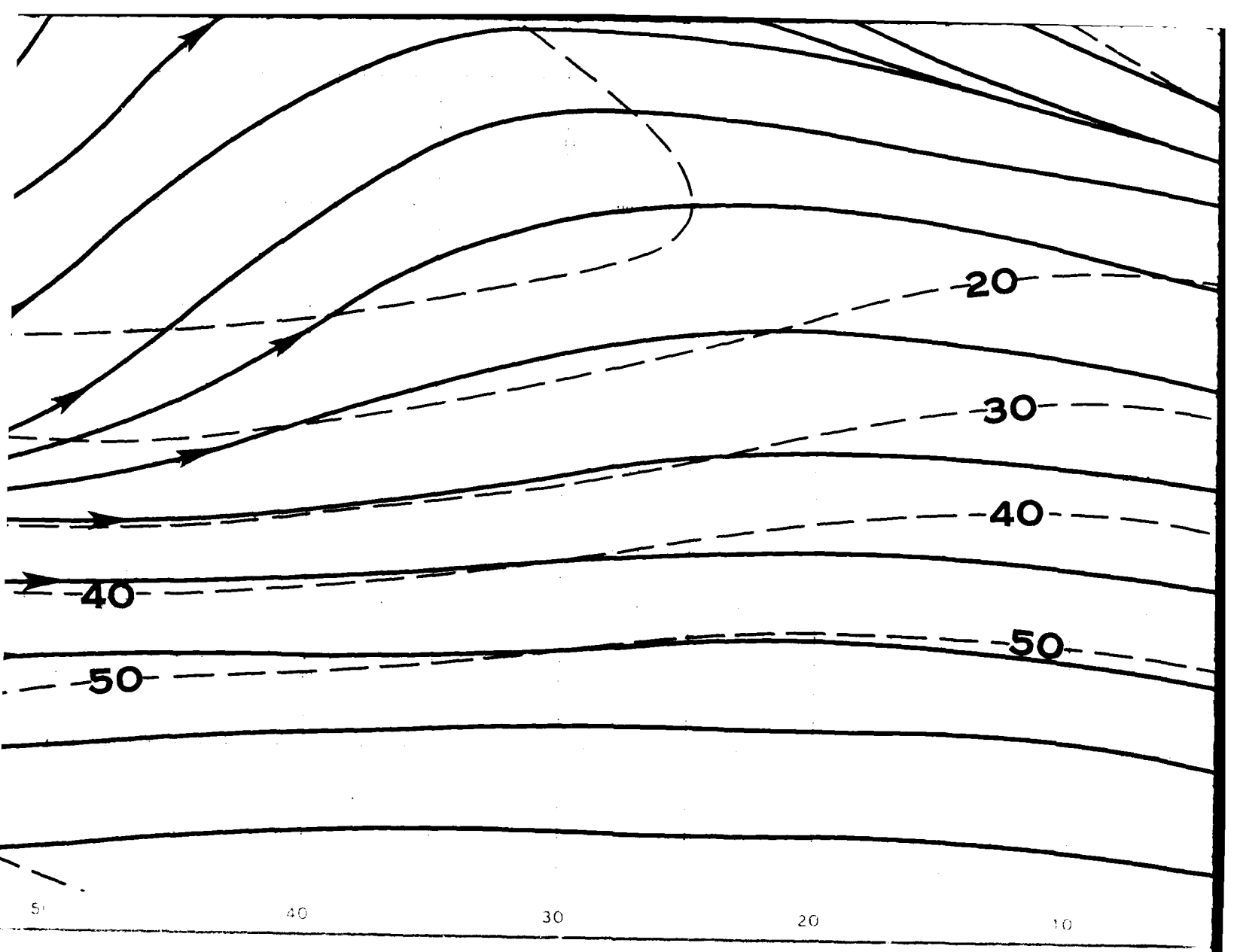
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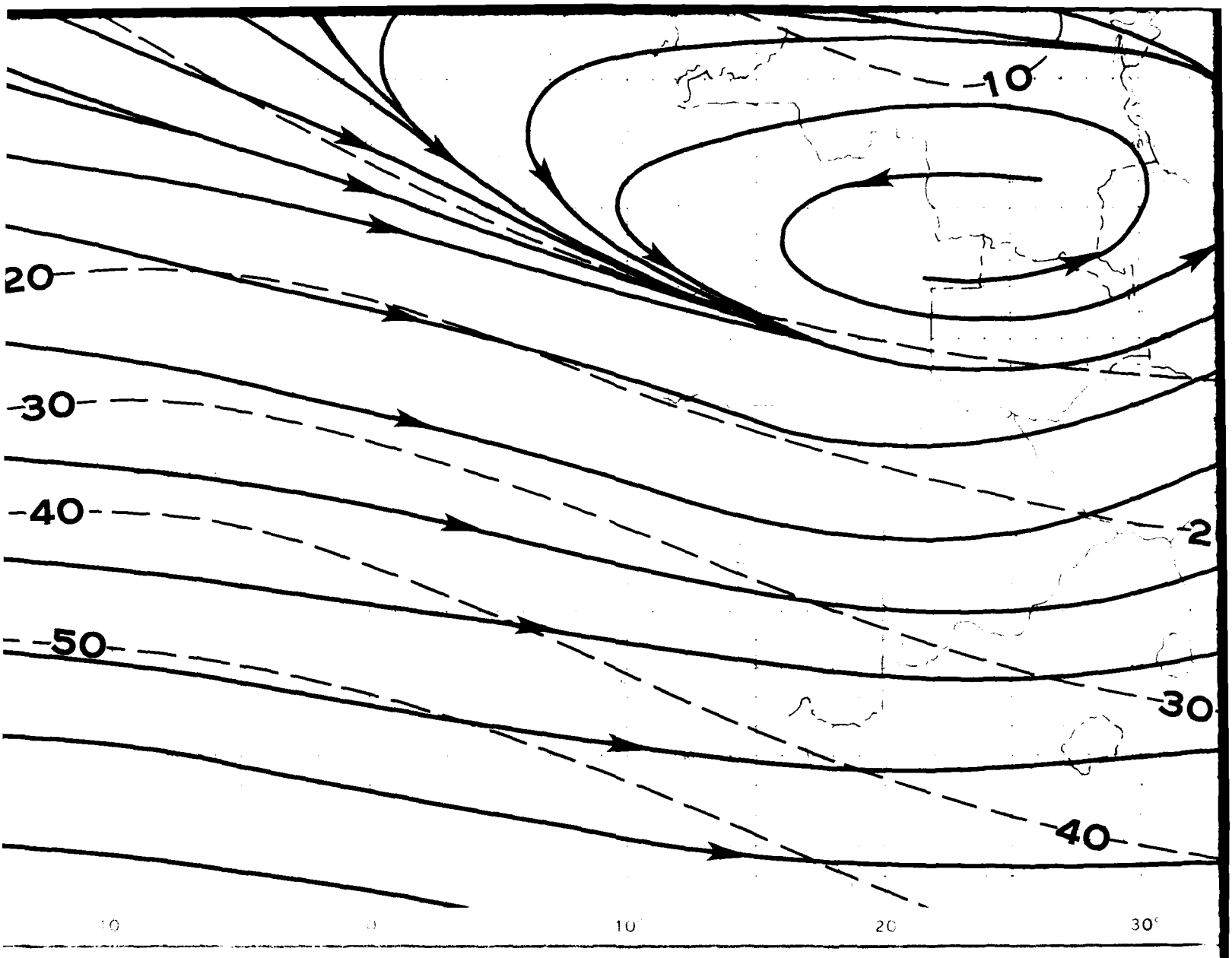


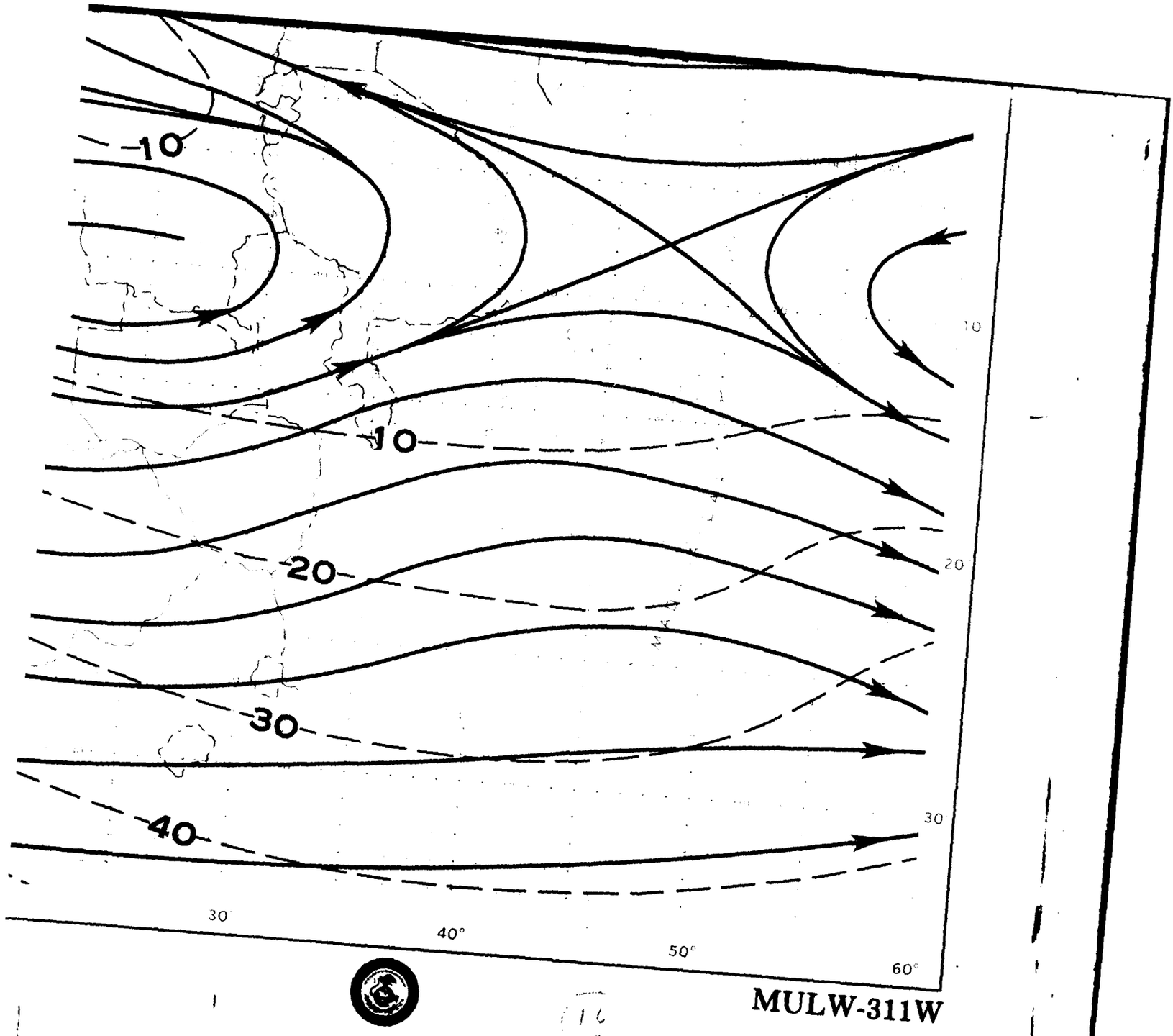

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SEYCHELLES ISLANDS
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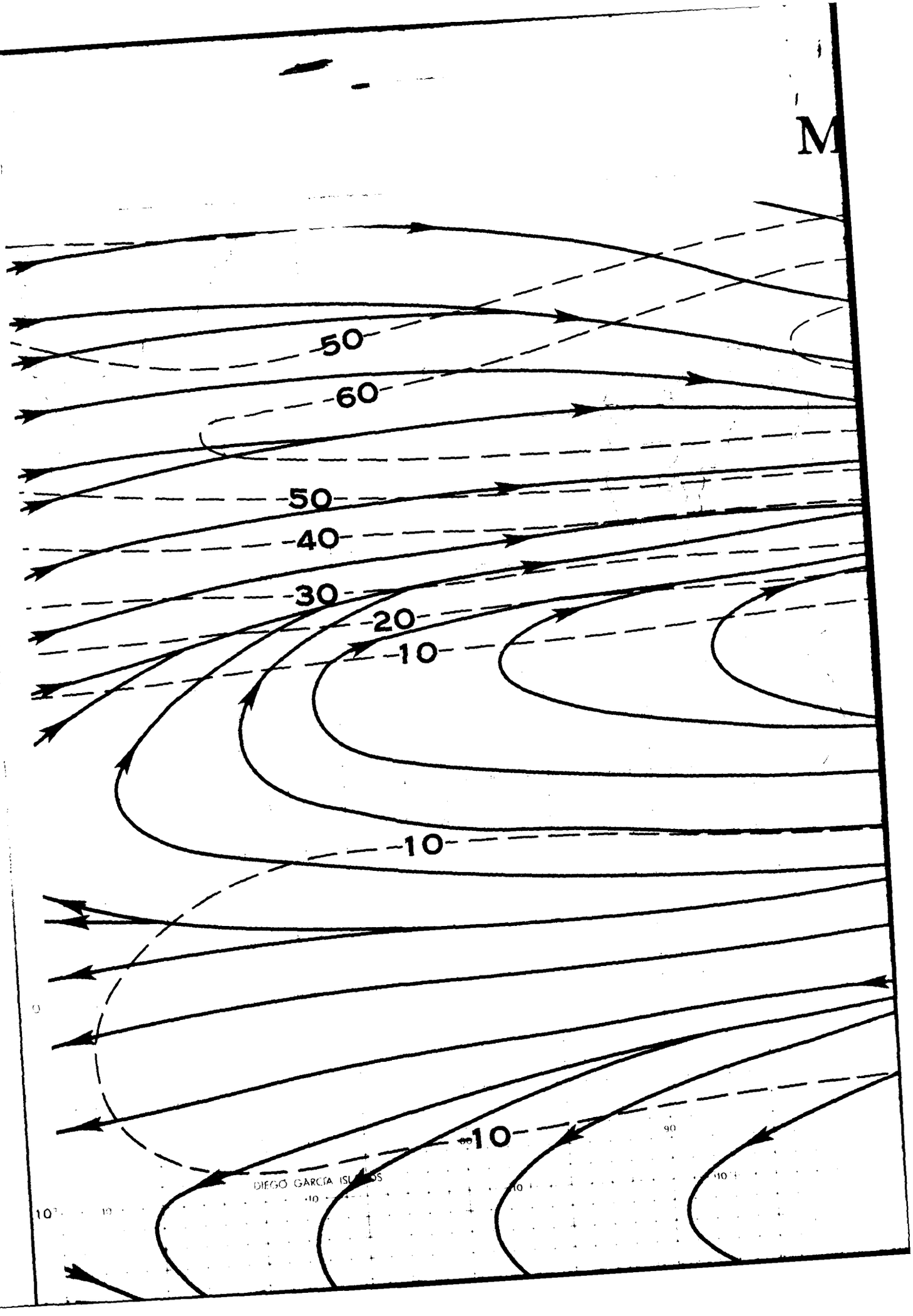

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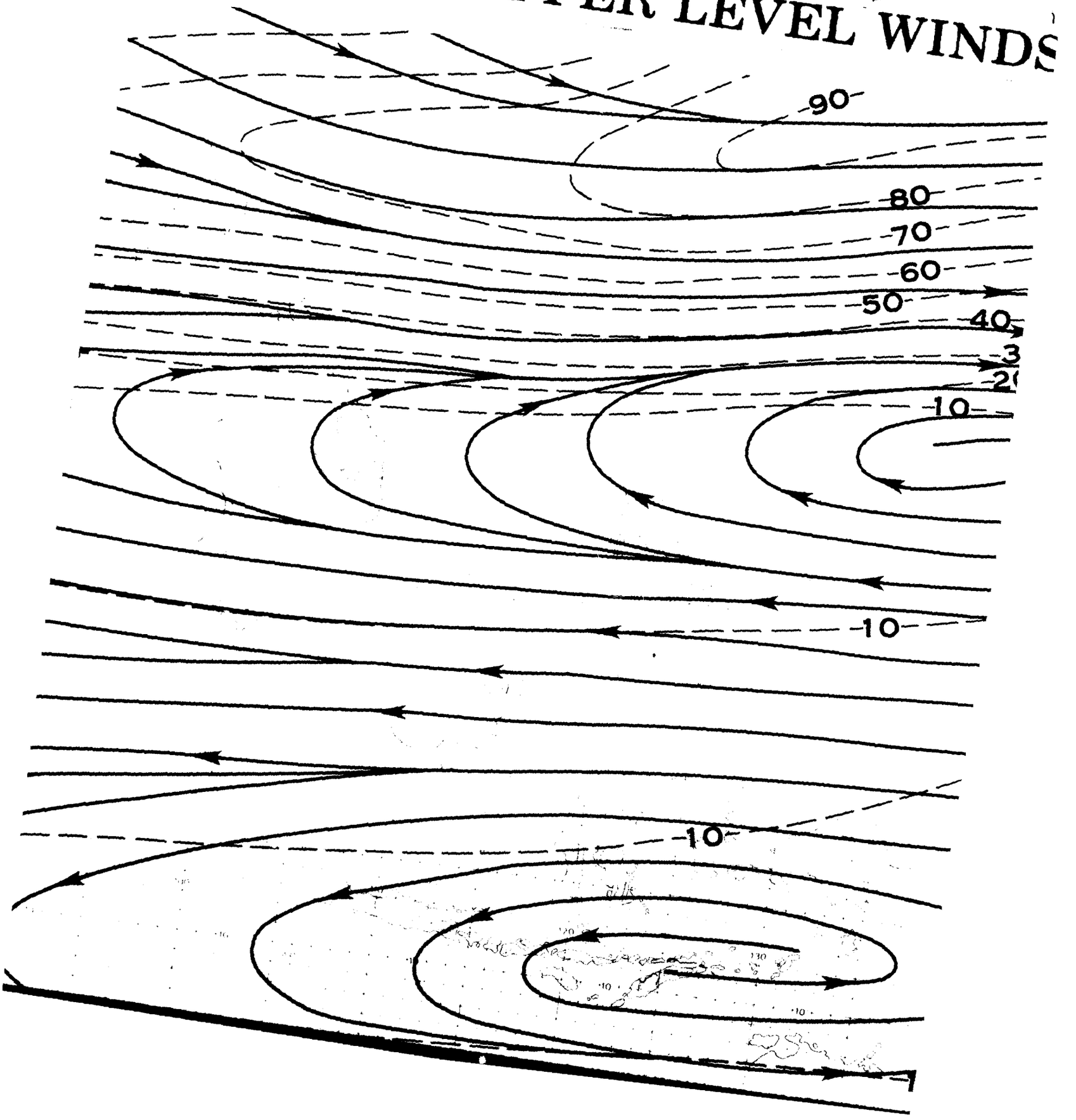

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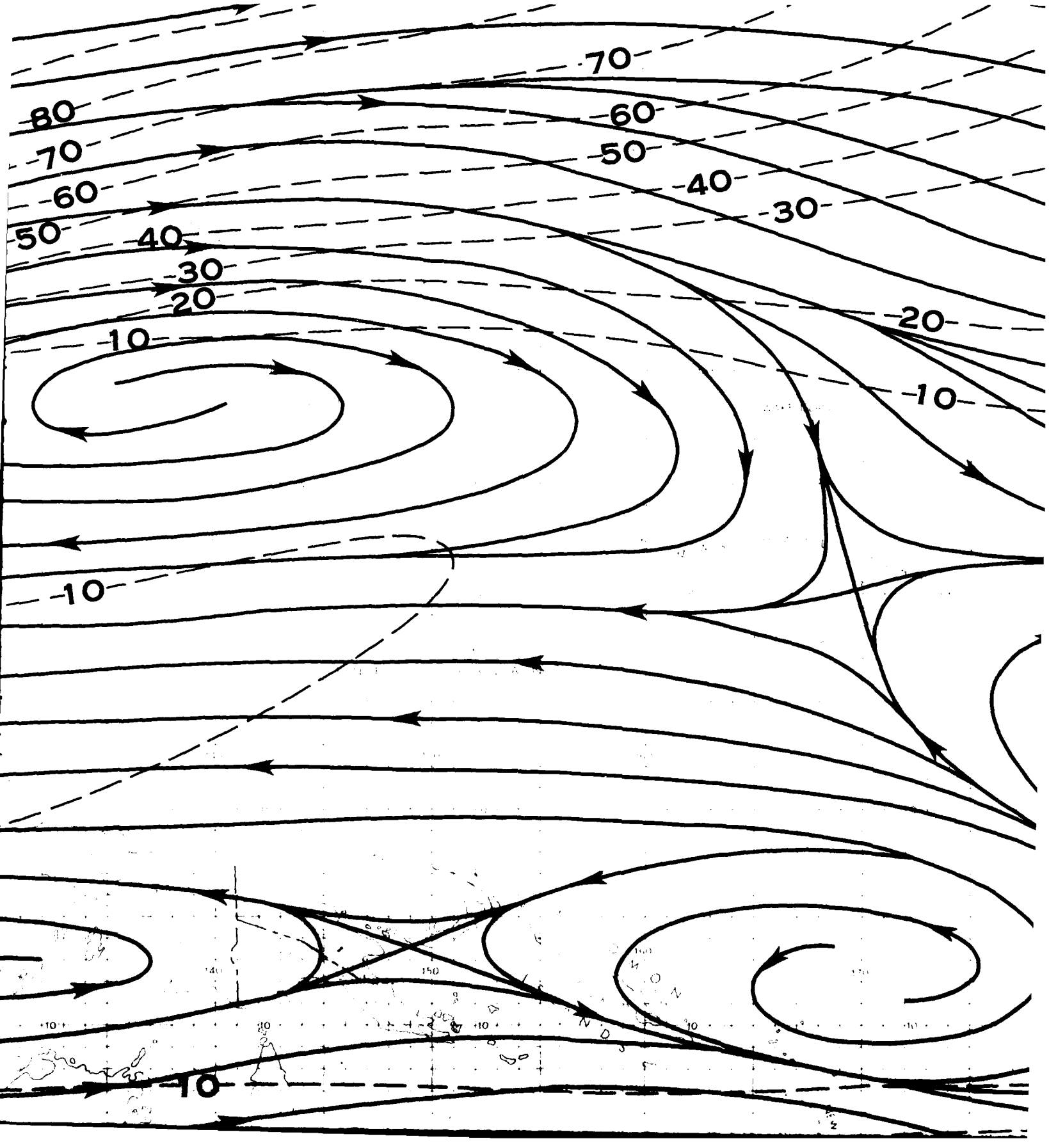

MULW-311W


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DIEGO GARCIA ISLANDS

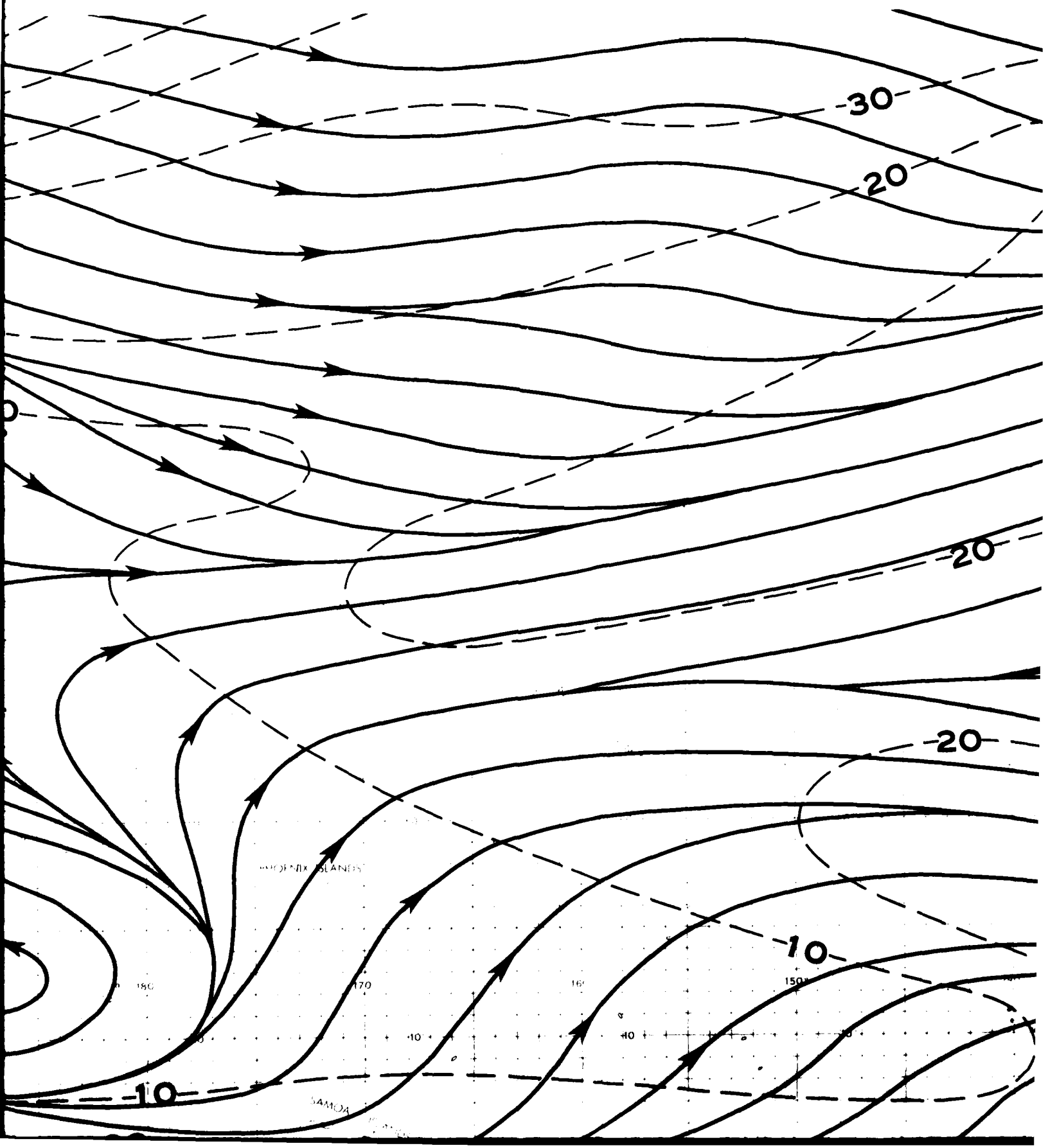
# MEAN UPPER LEVEL WINDS

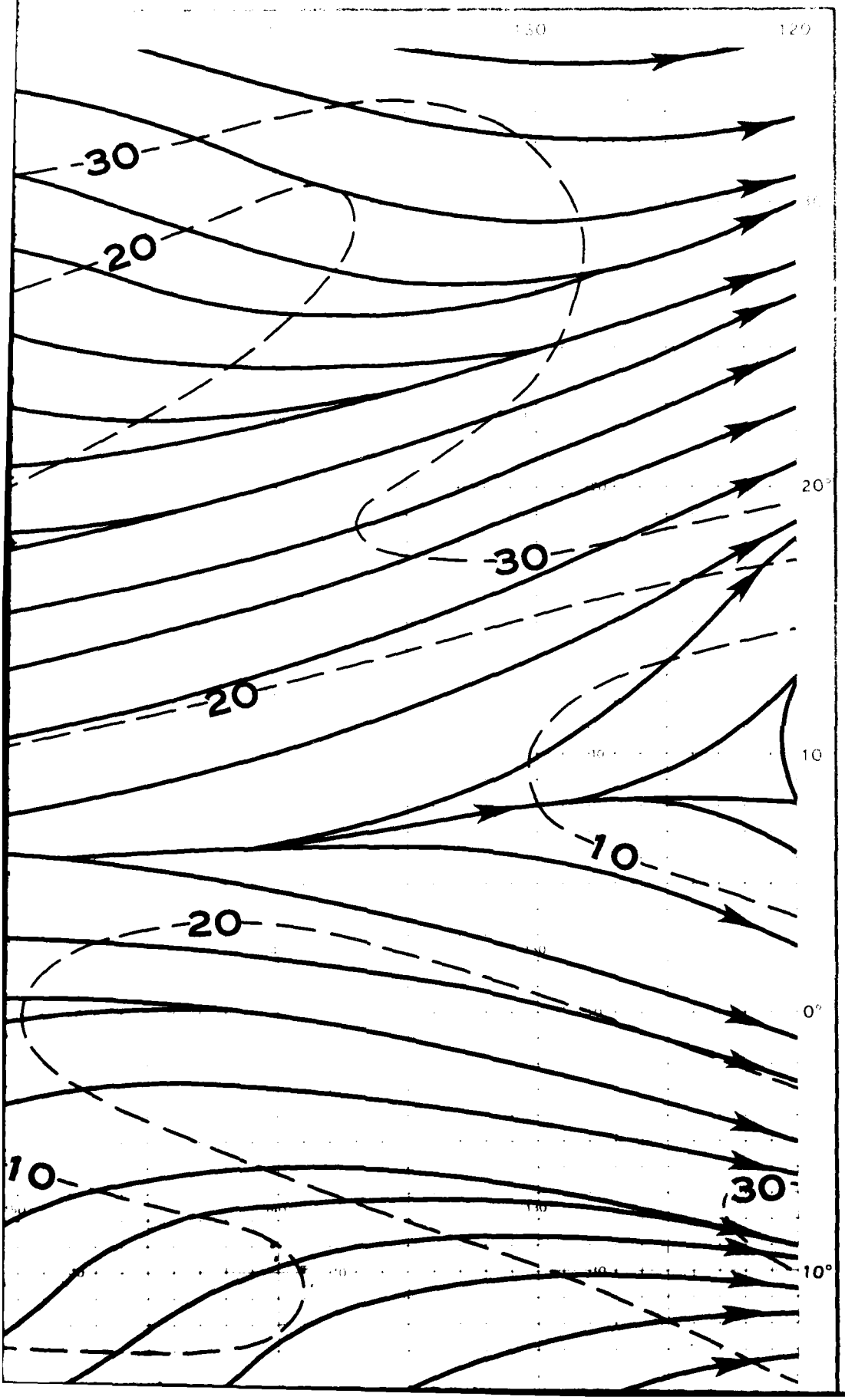


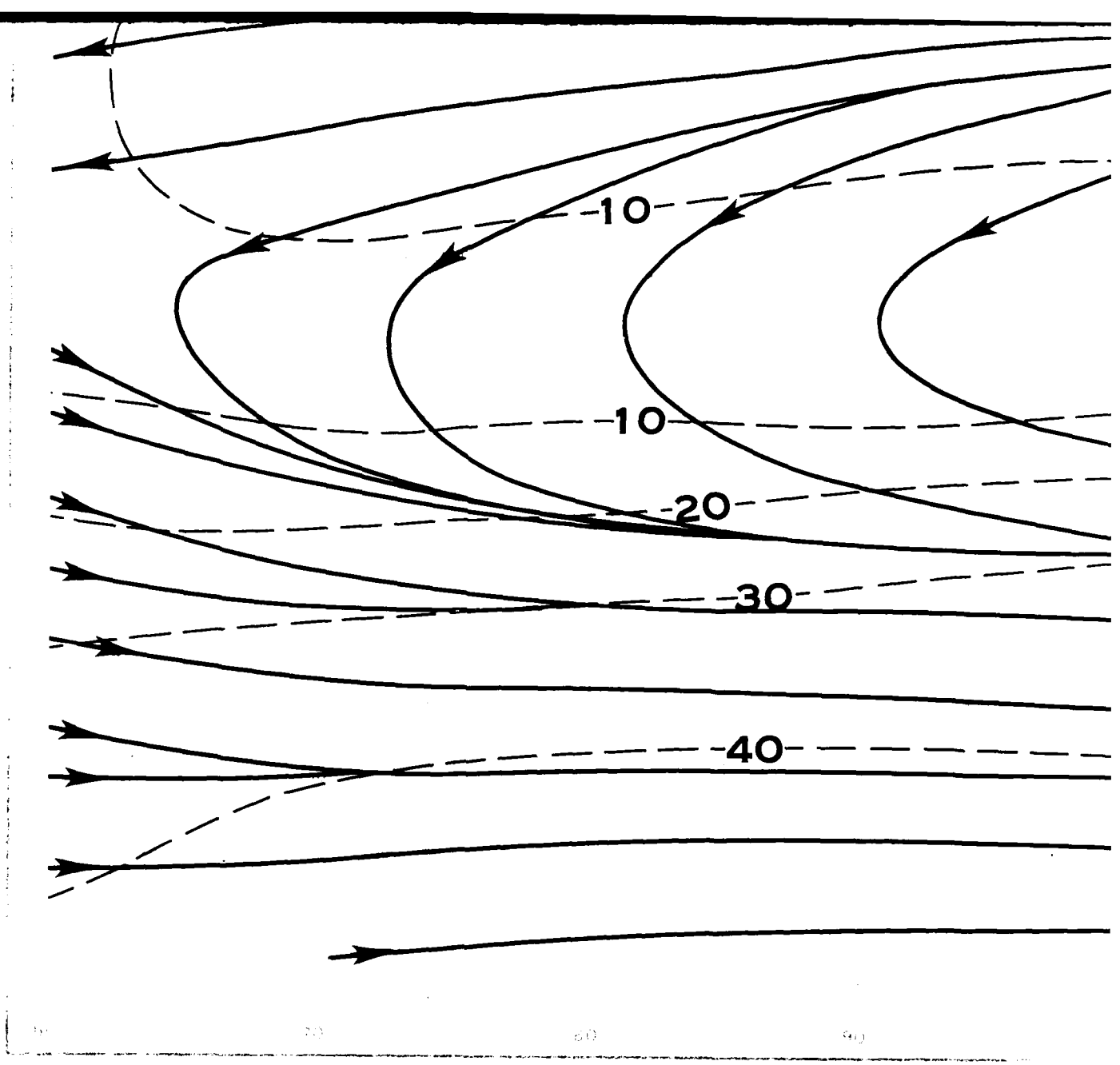
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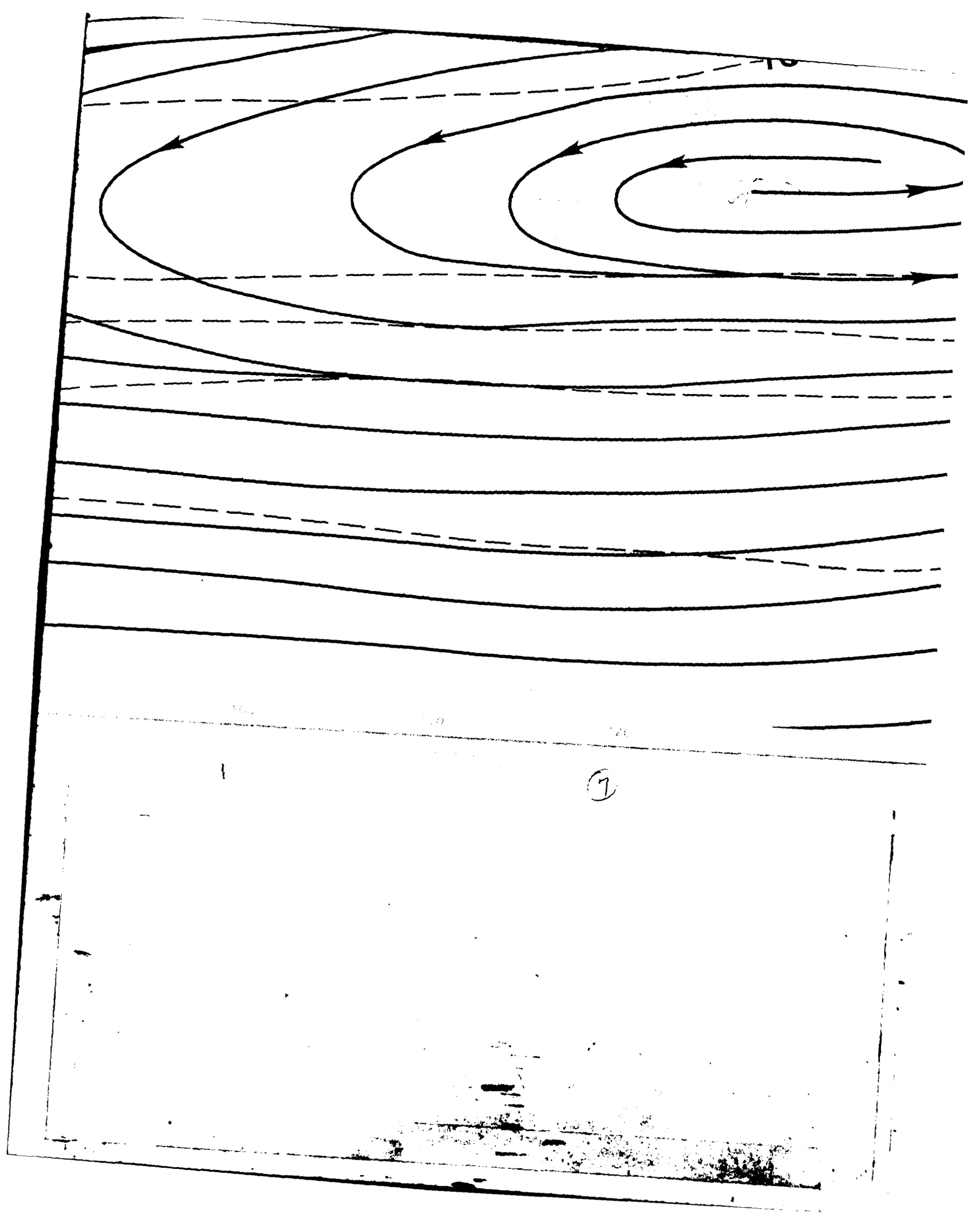


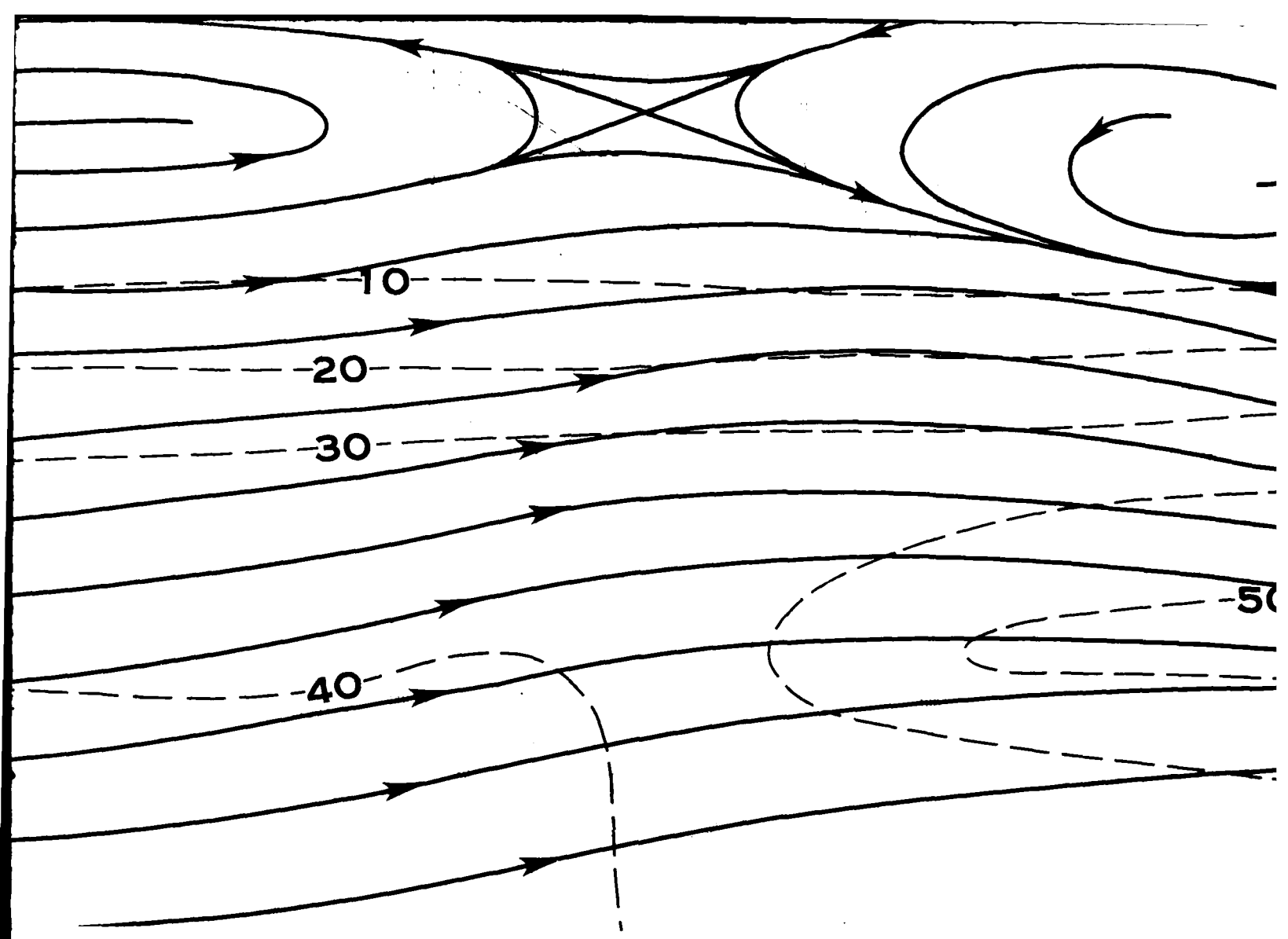
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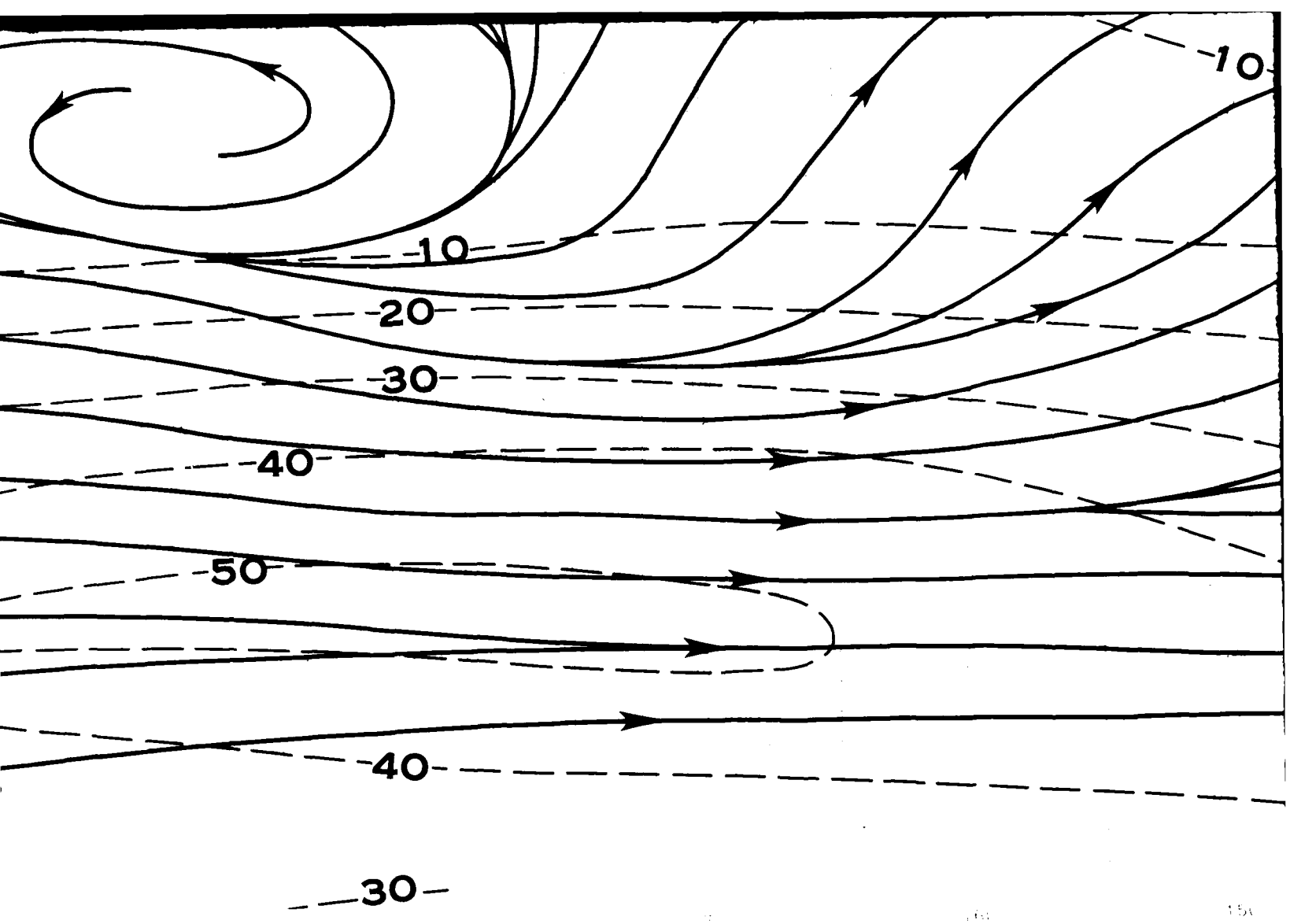


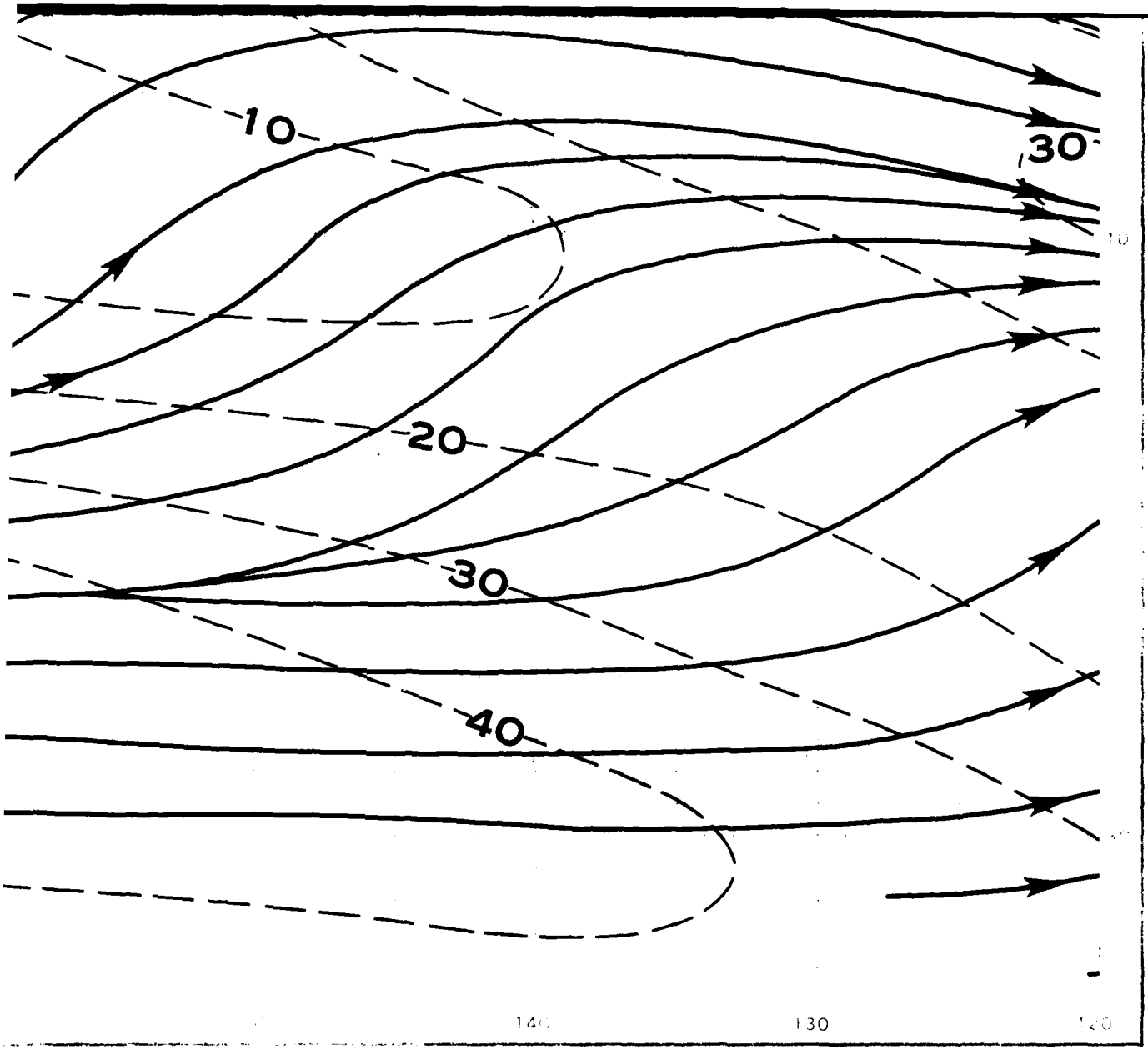

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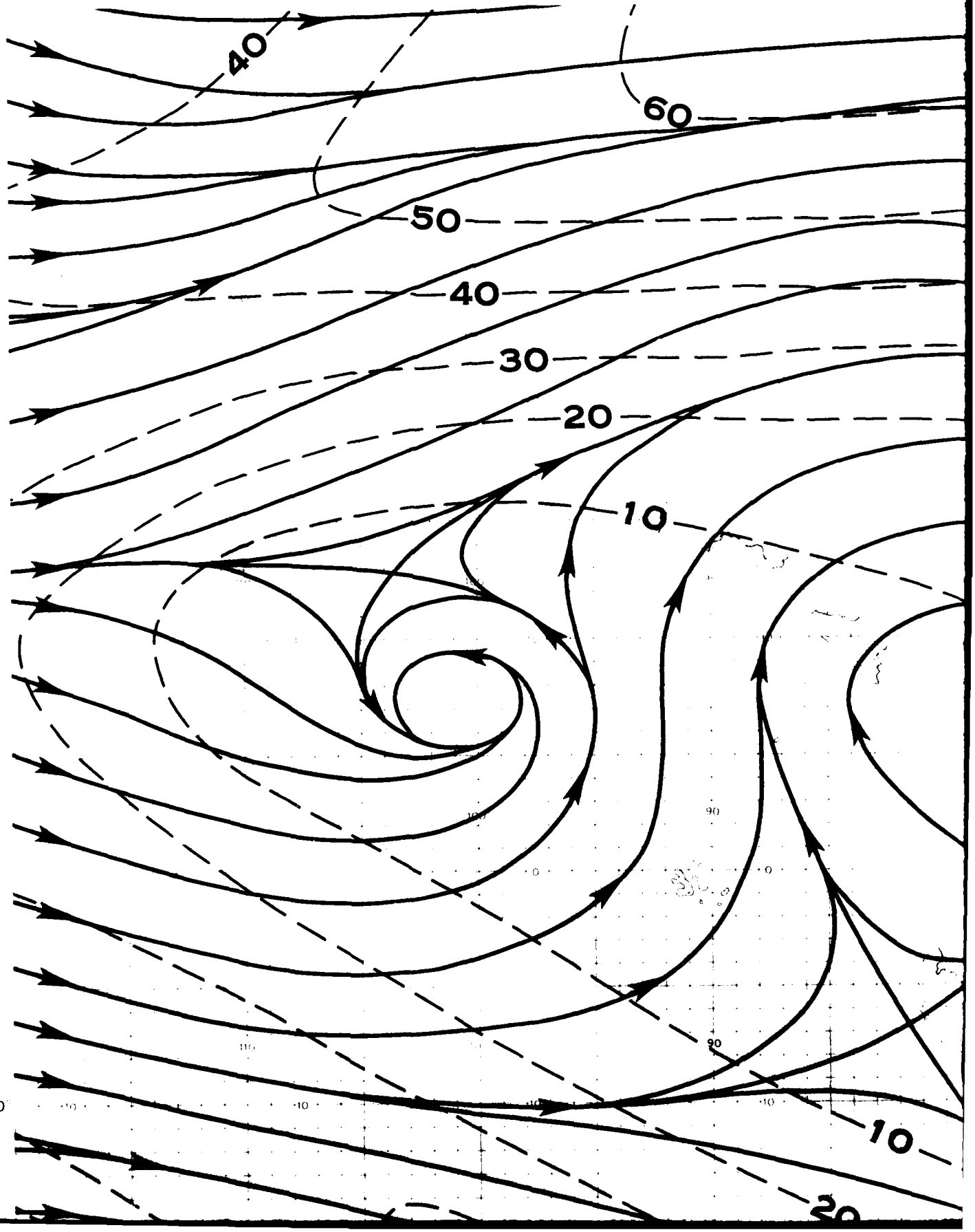



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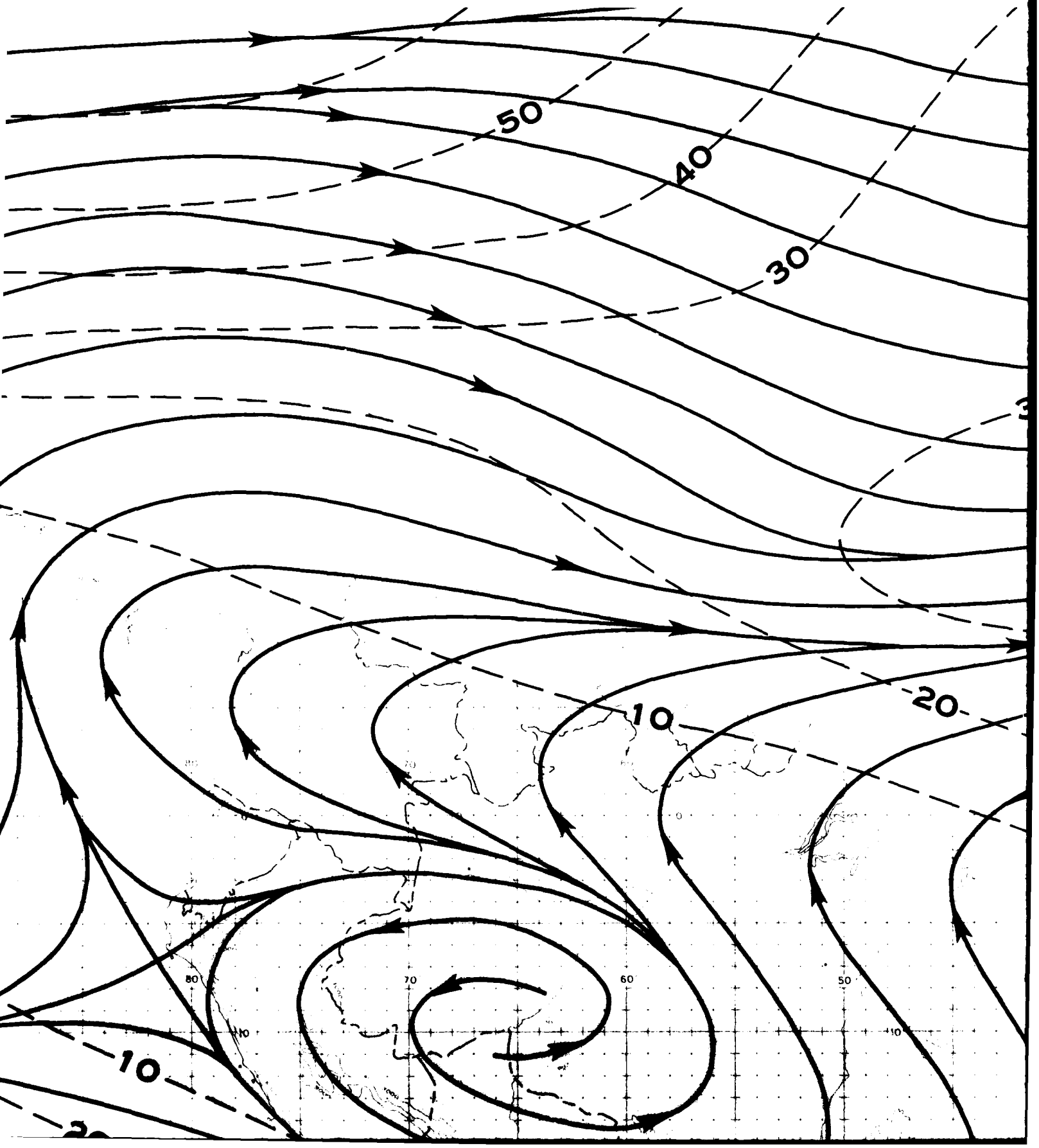

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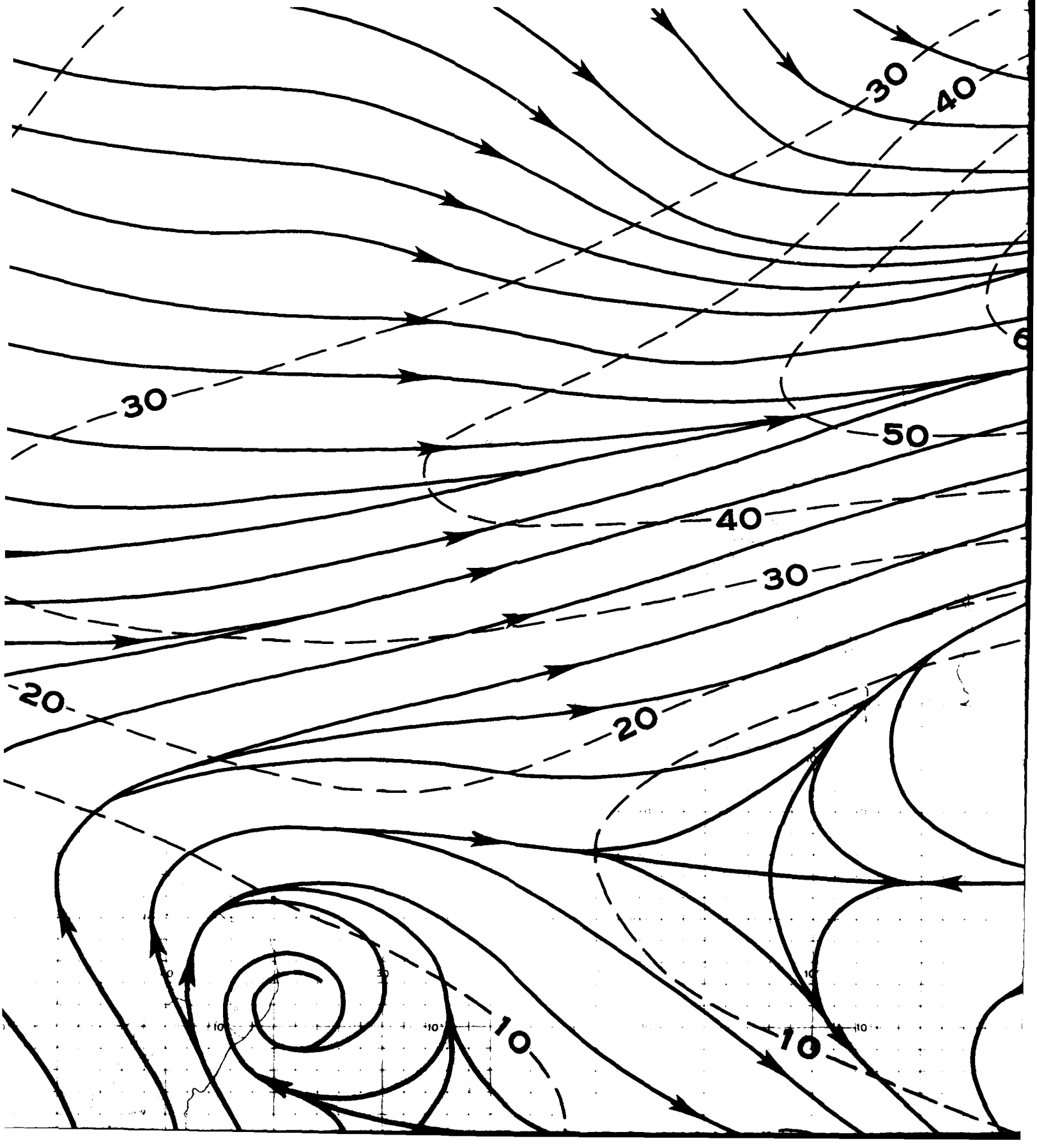

**MULW-311E**


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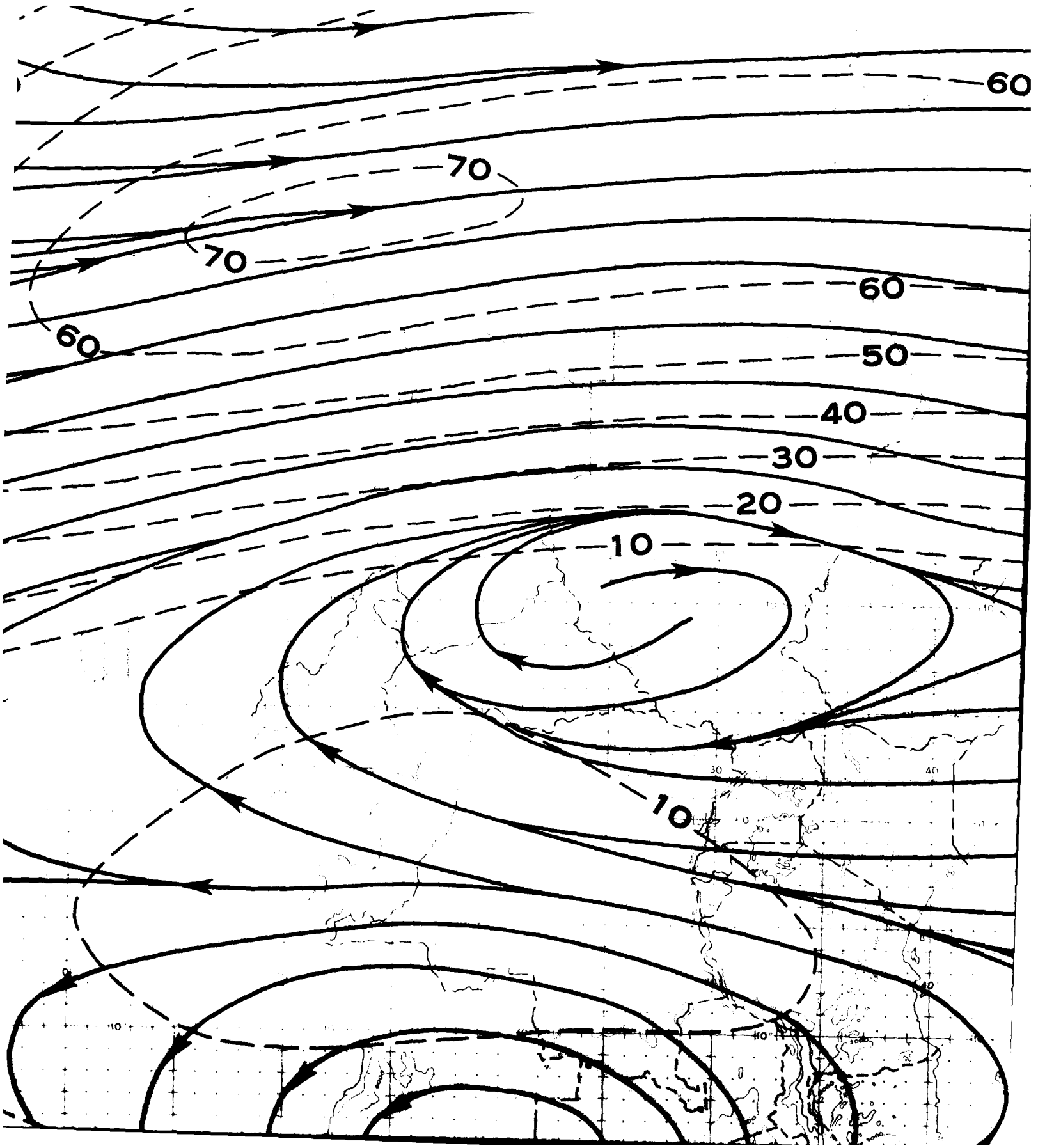
# MEAN UPPER LEVEL WIND

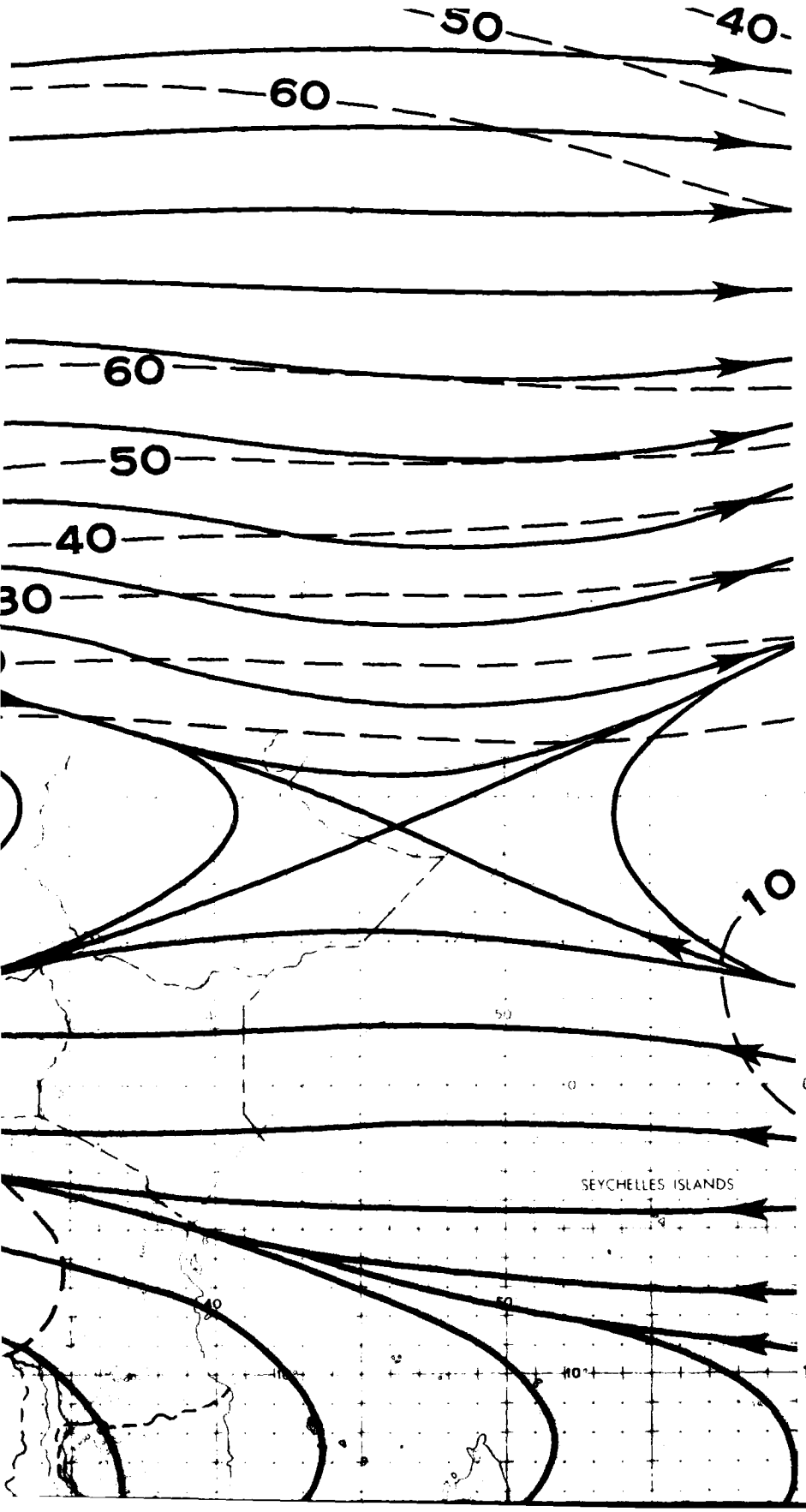


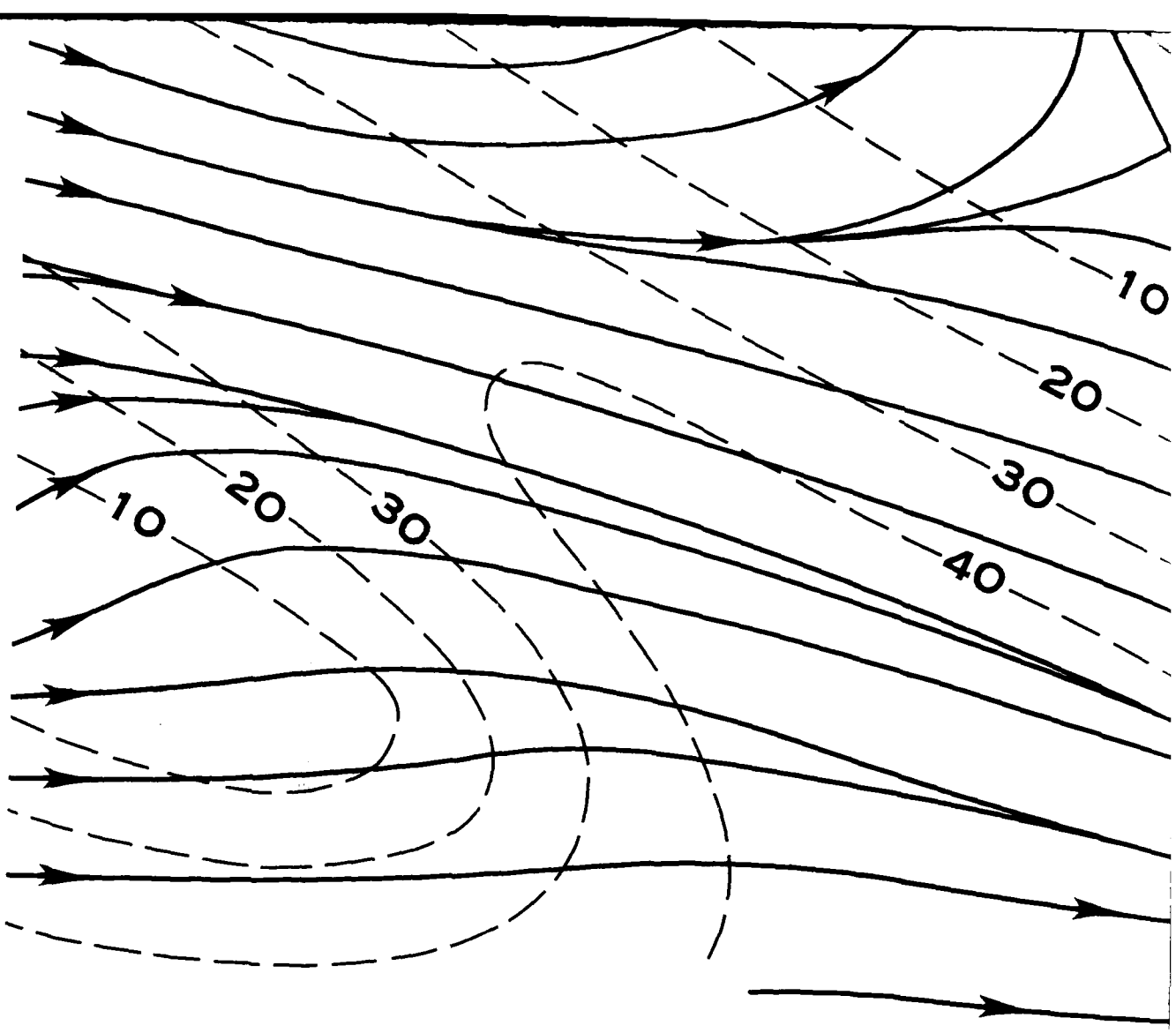
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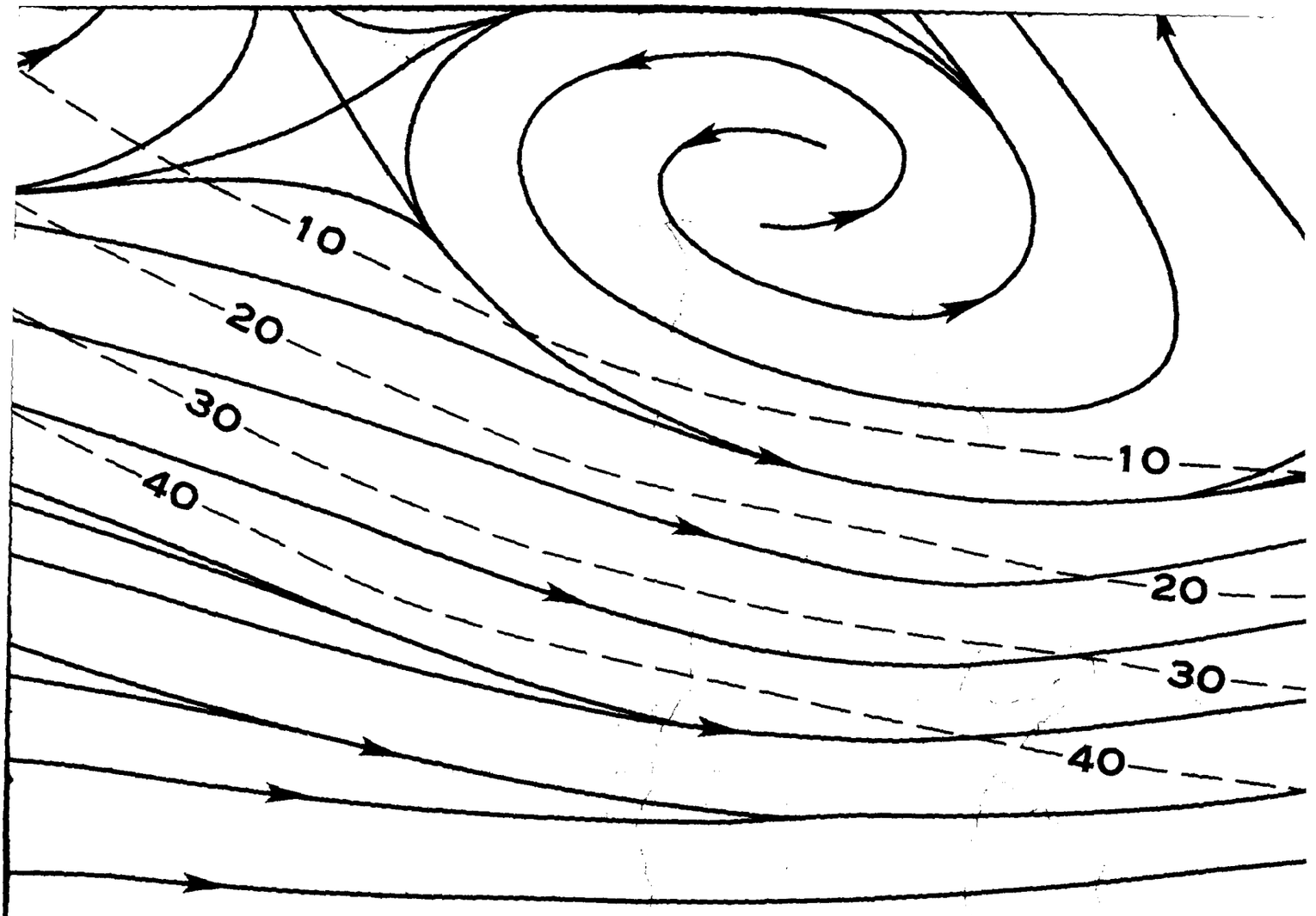


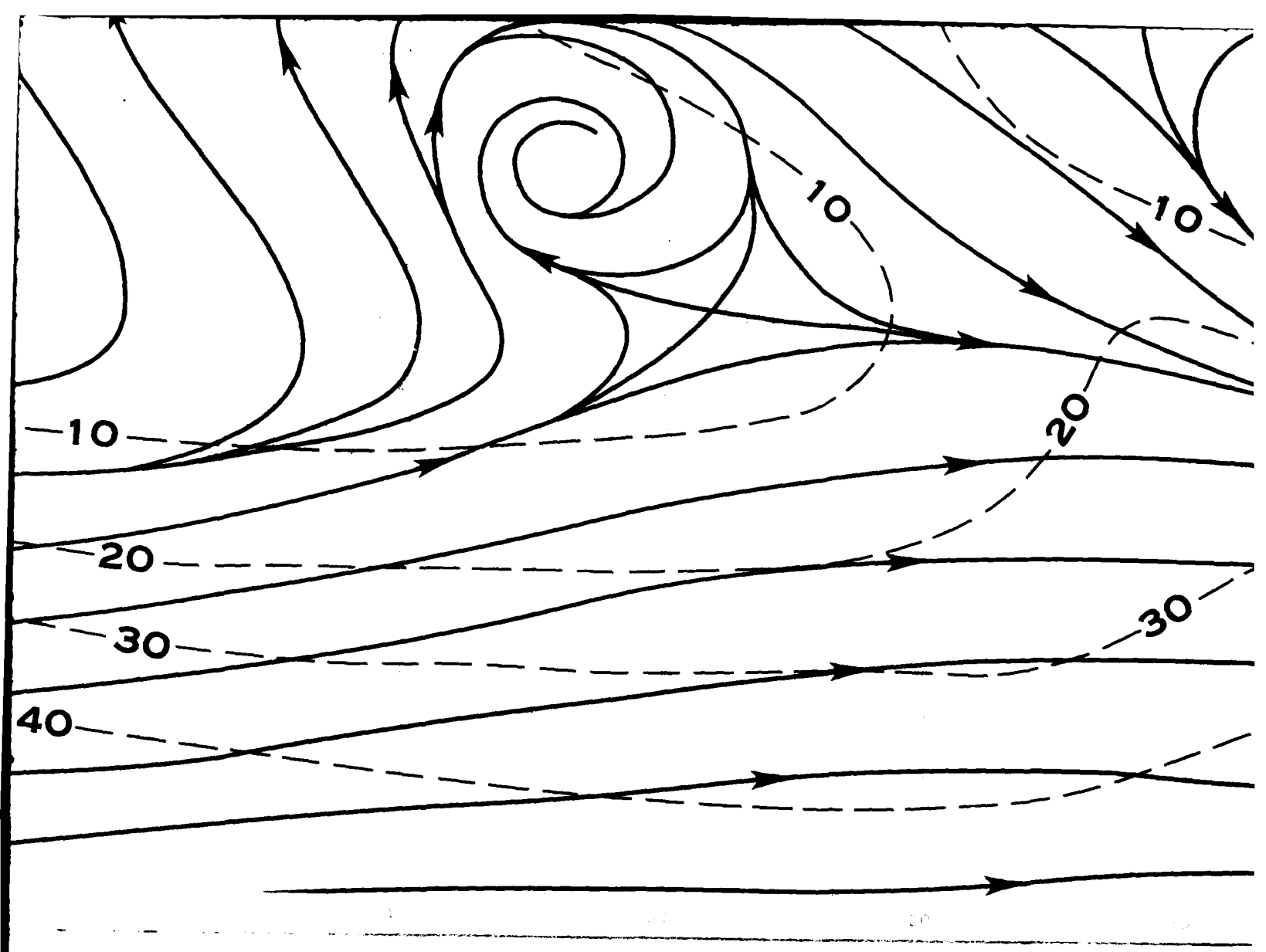
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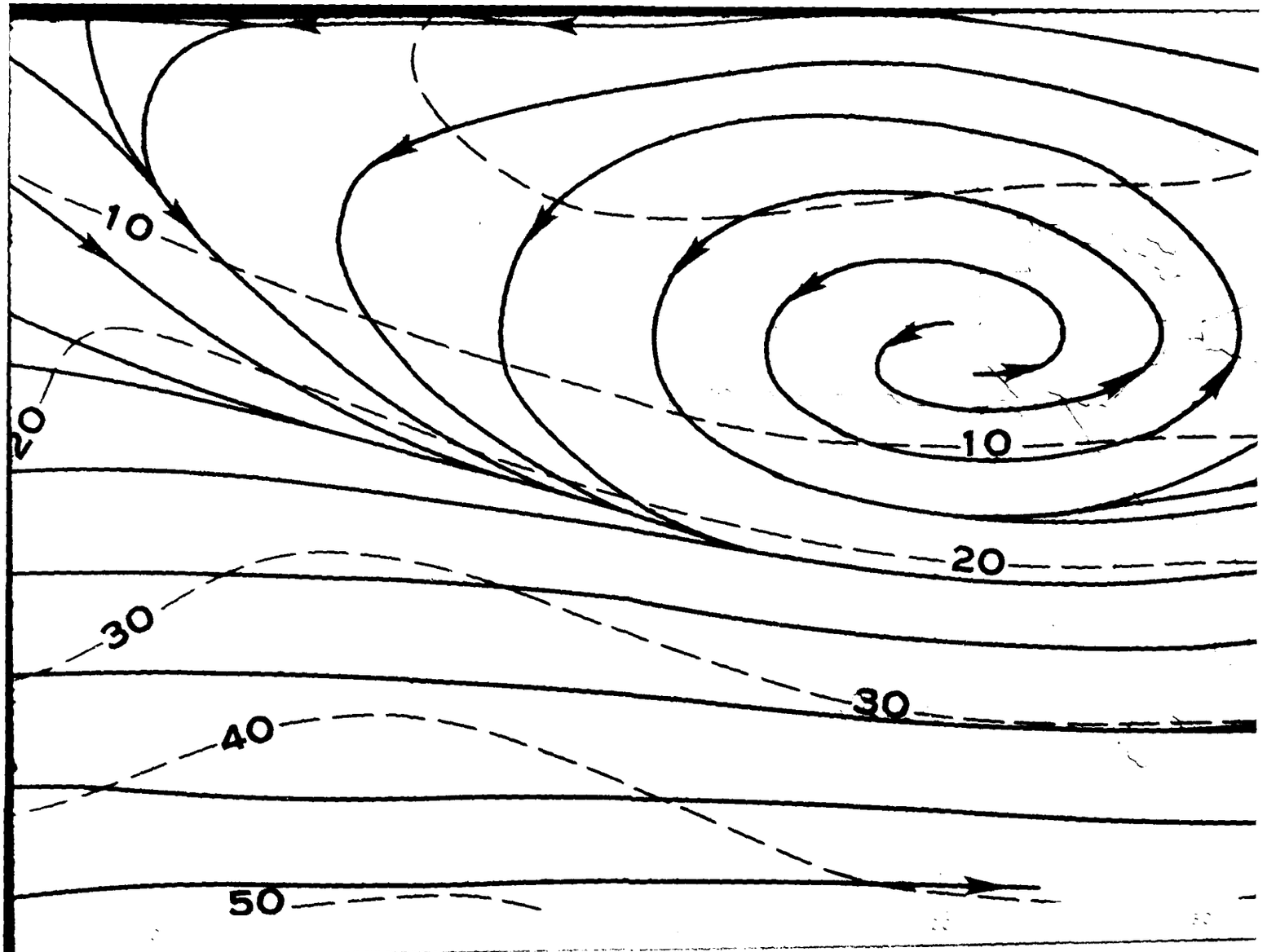



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SEYCHELLES ISLANDS
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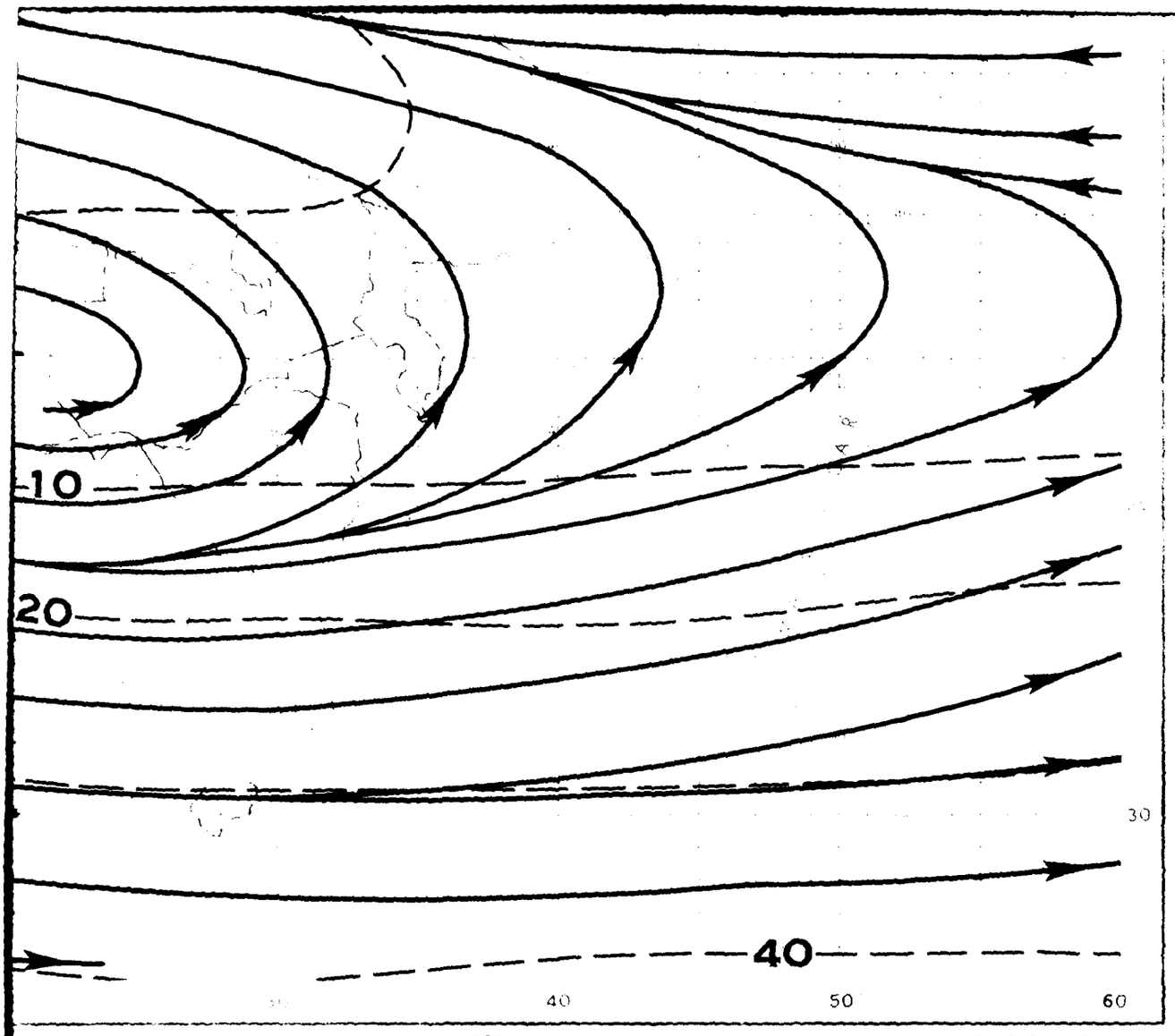

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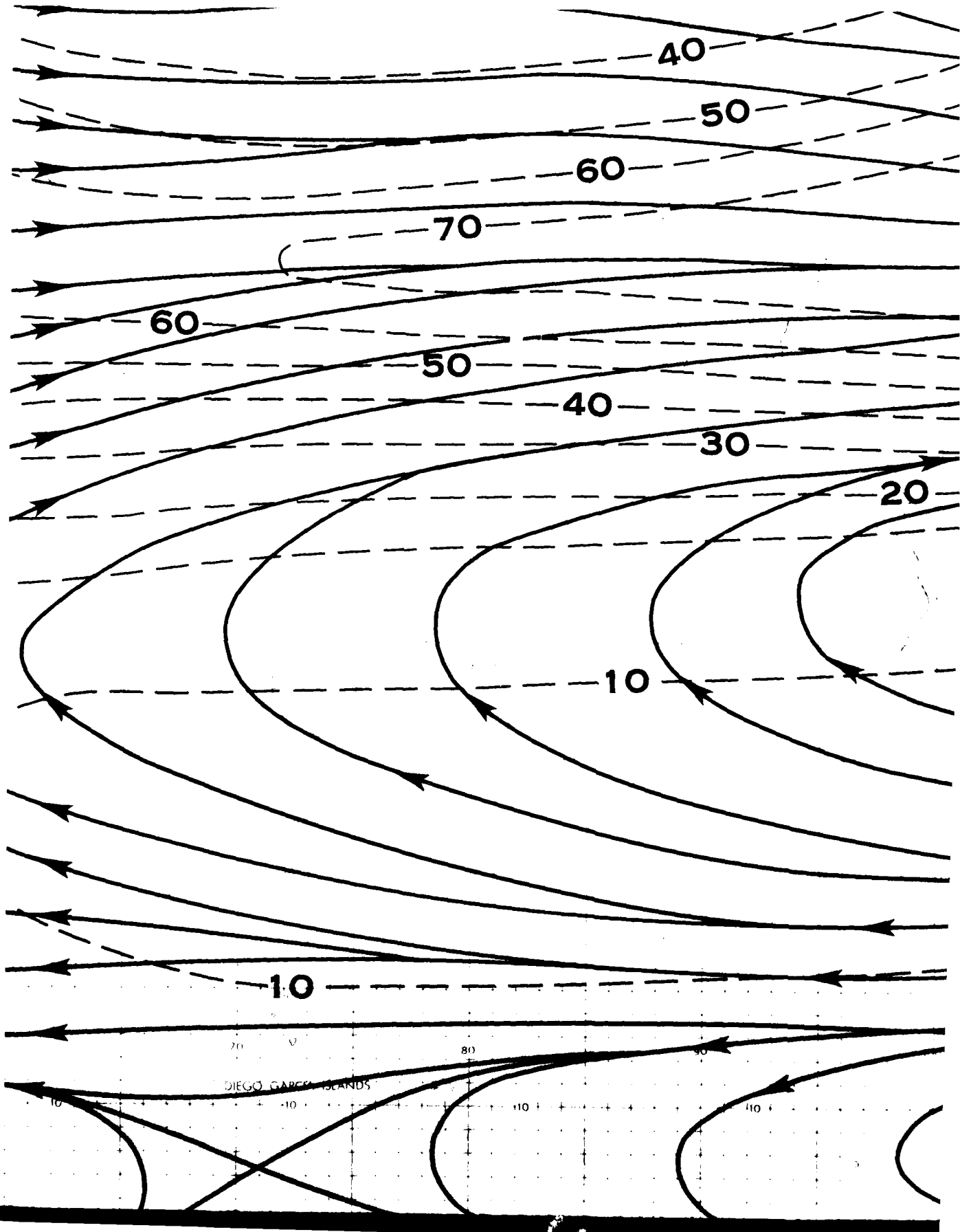

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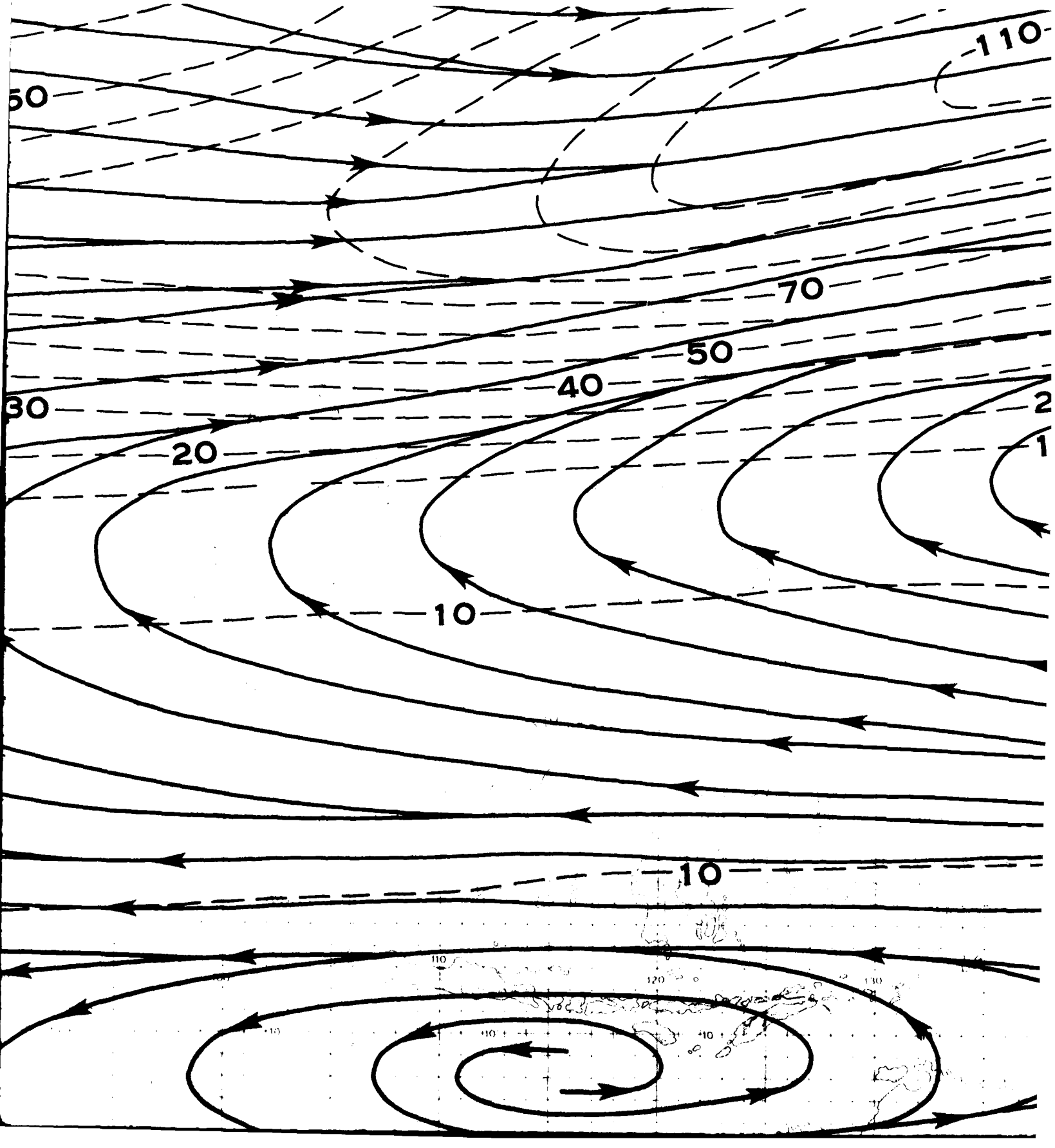

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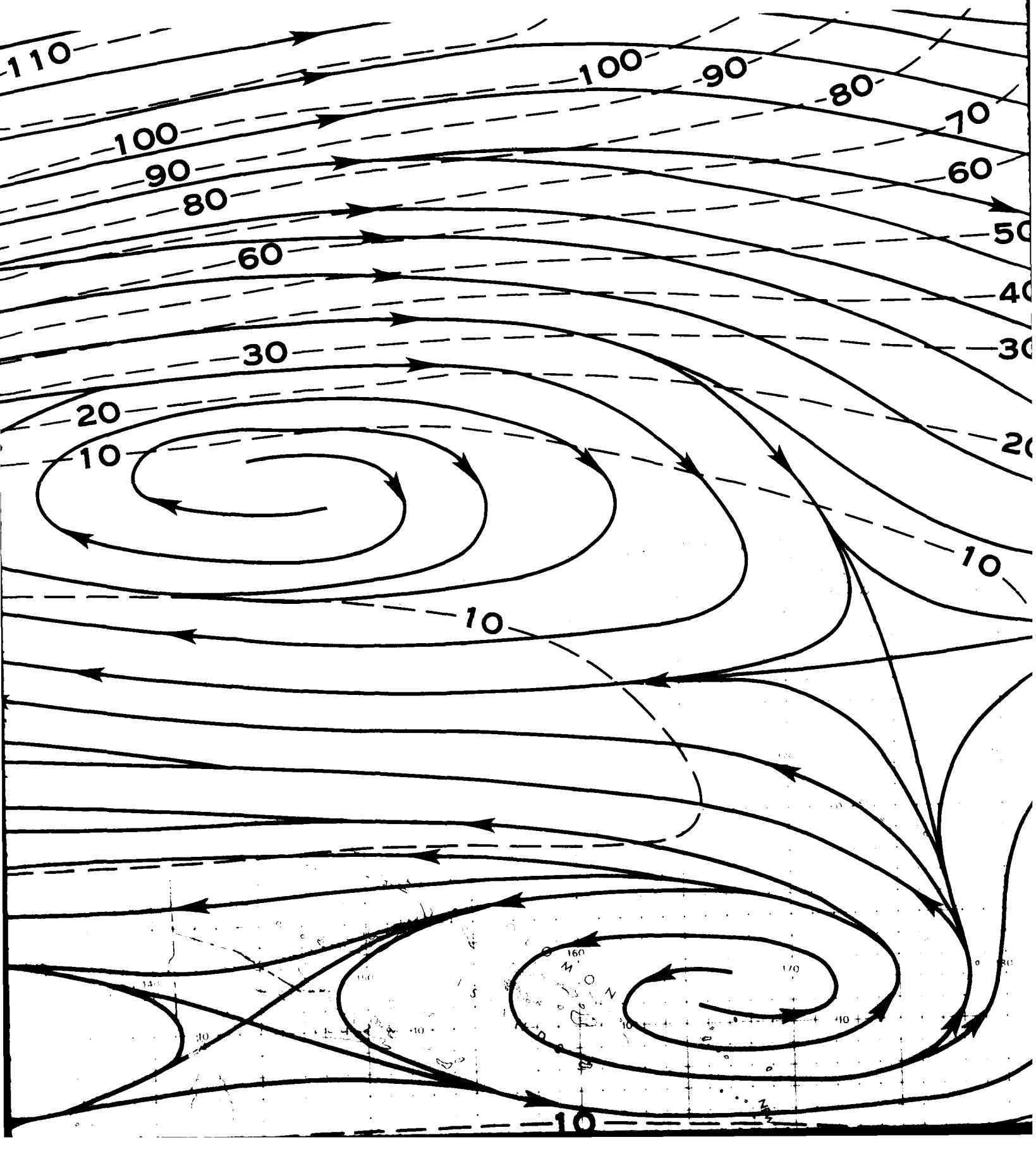

MULW-312W


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DIEGO GARCIA ISLANDS

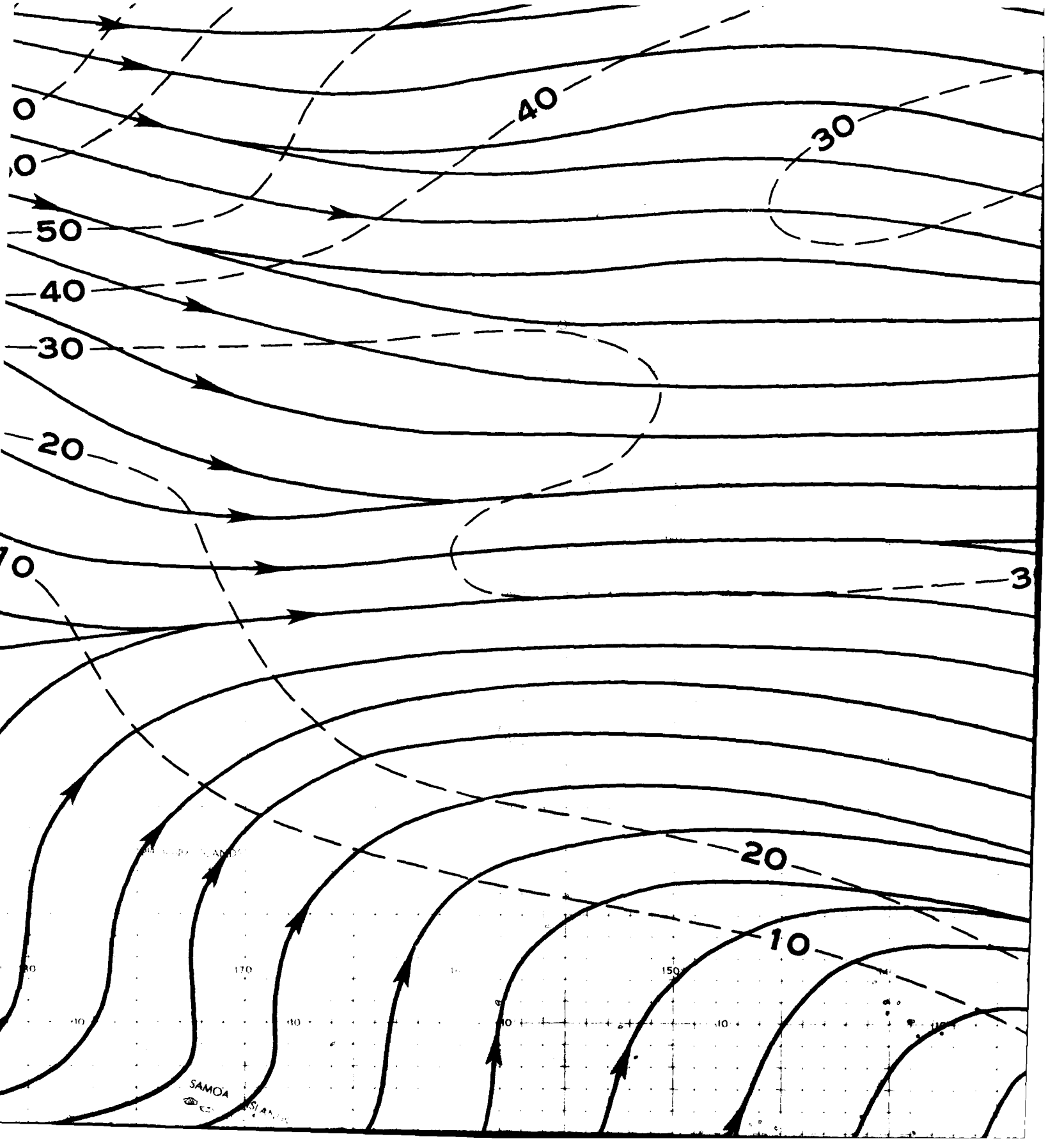
# MEAN UPPER LEVEL WIND

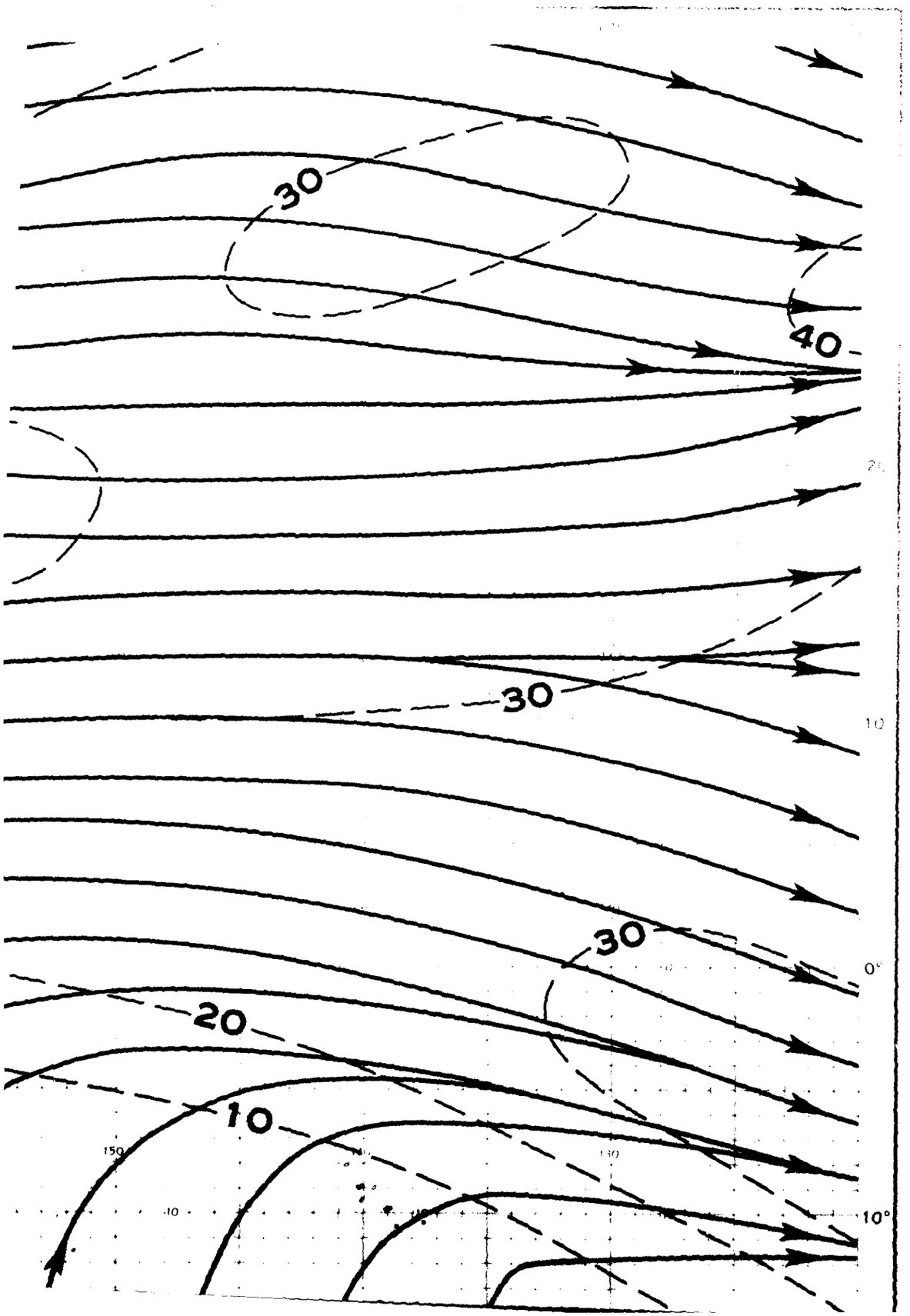


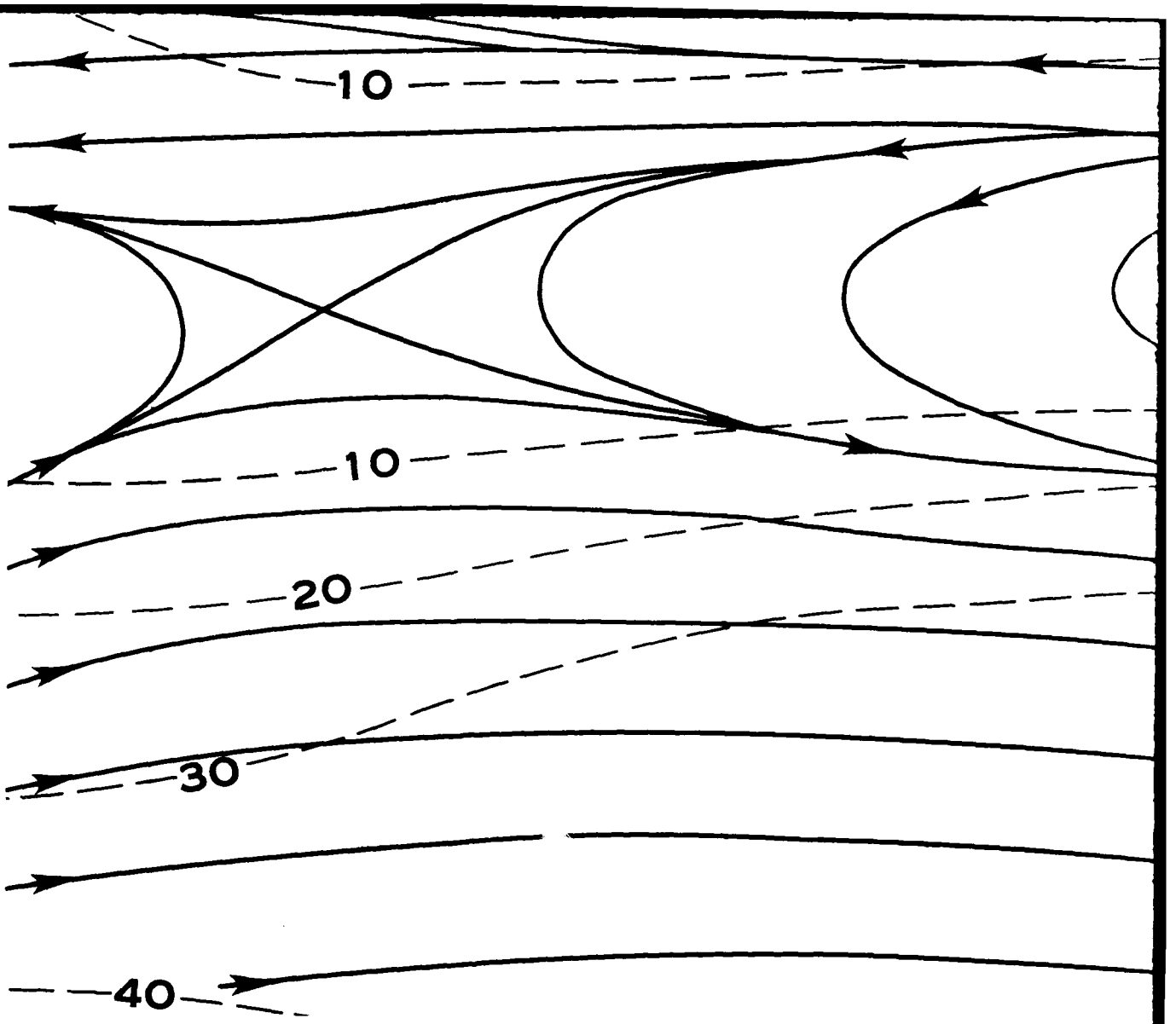
# NDS over GLOBAL TROPICS - DEC

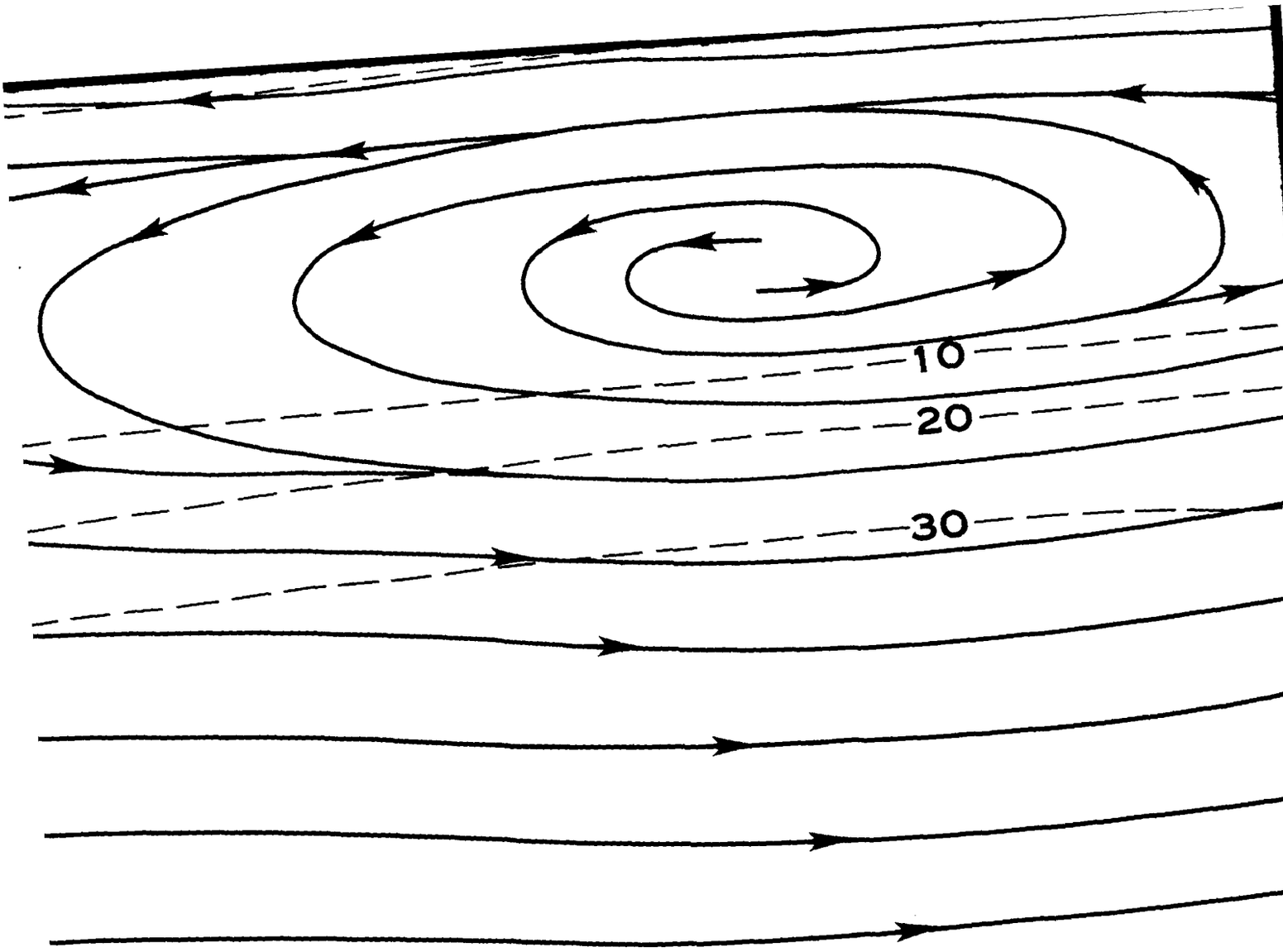


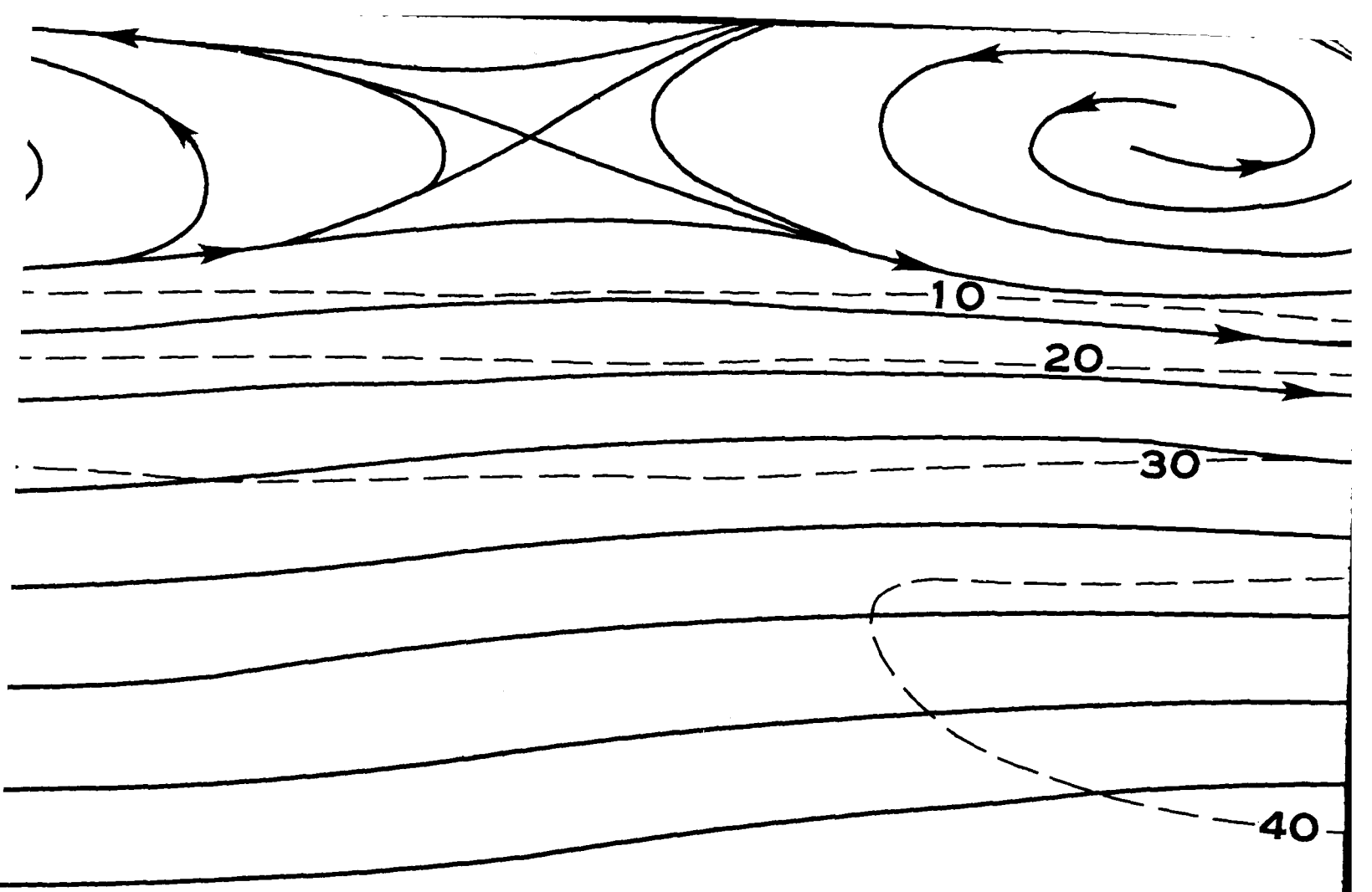
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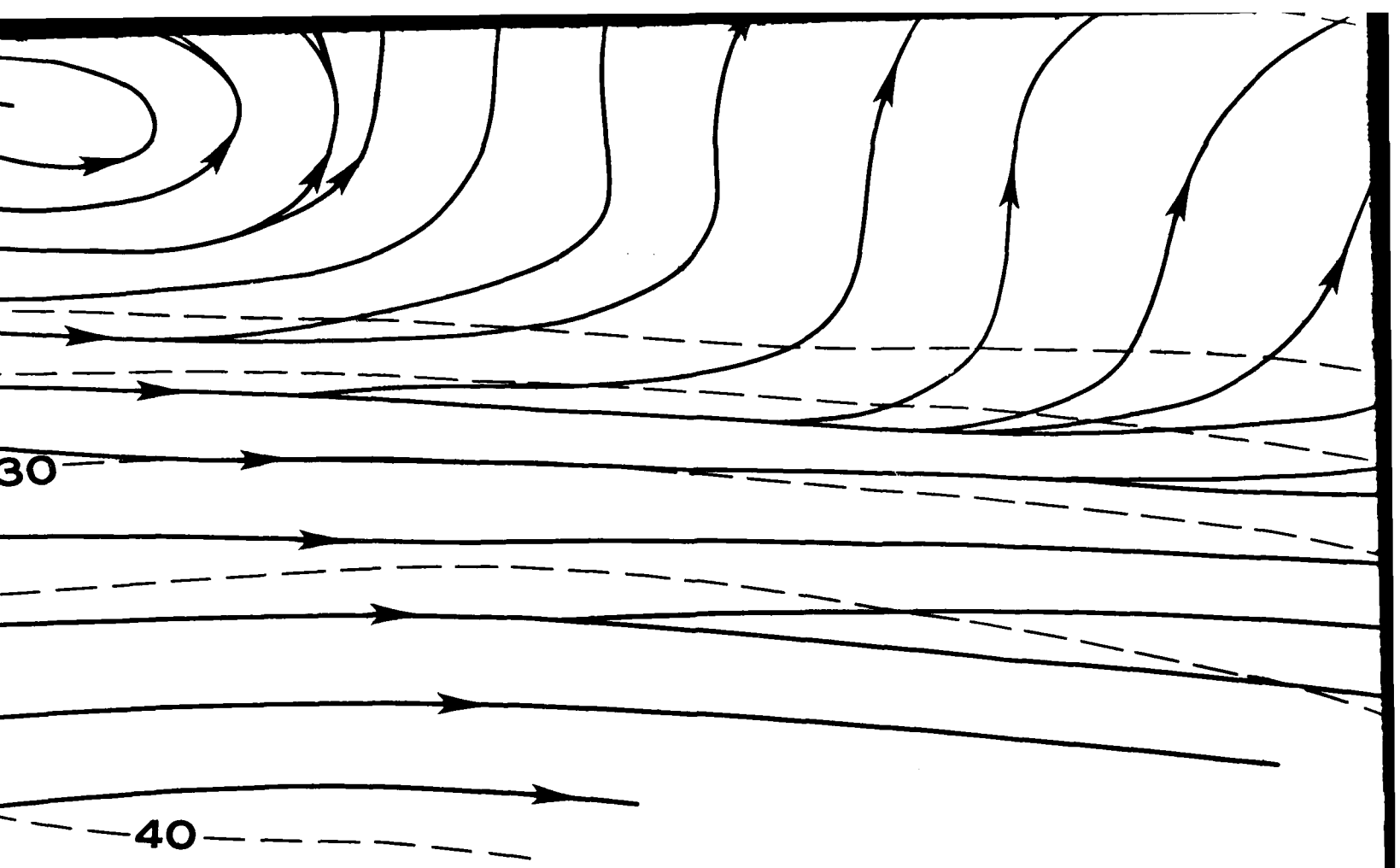


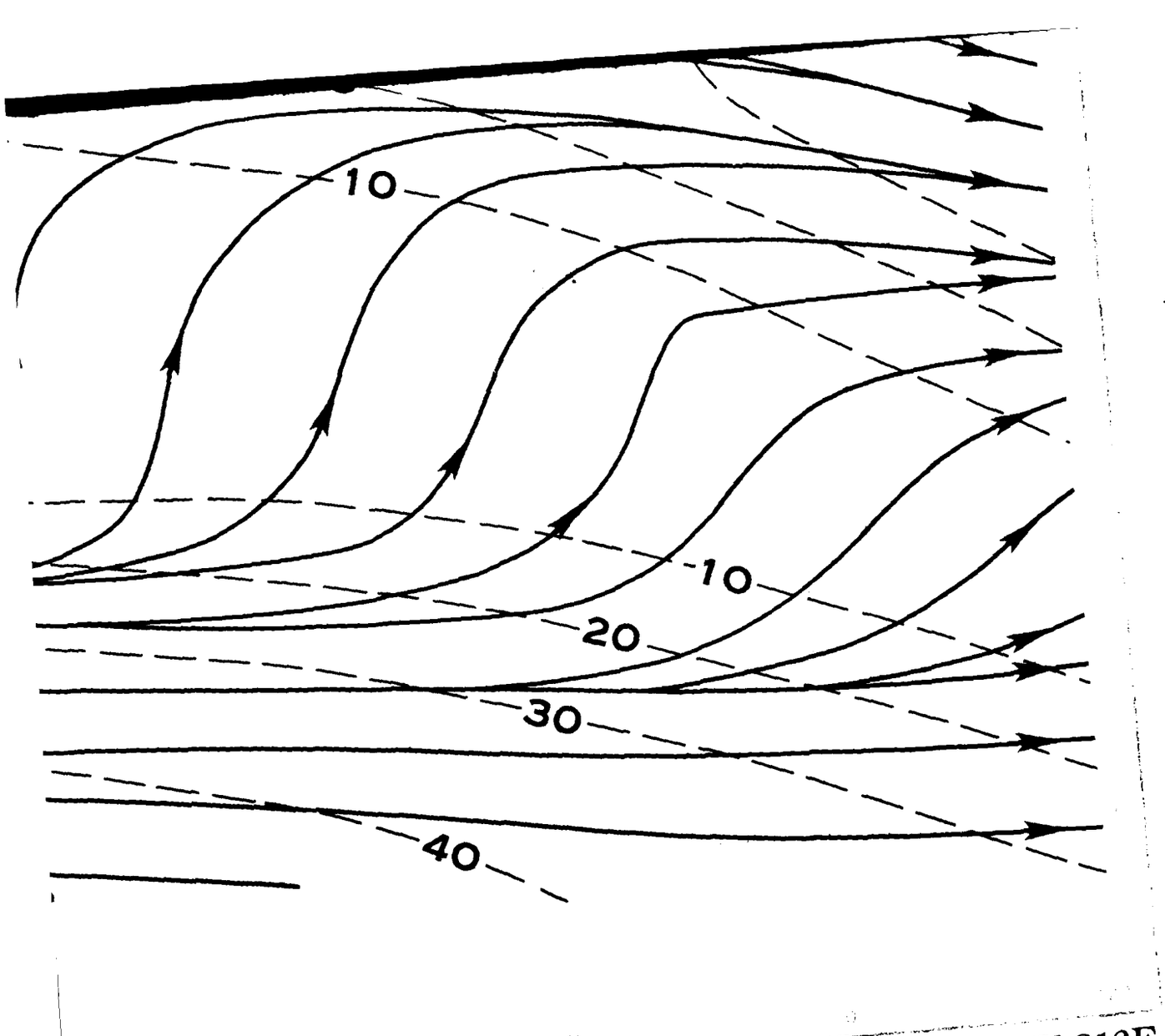

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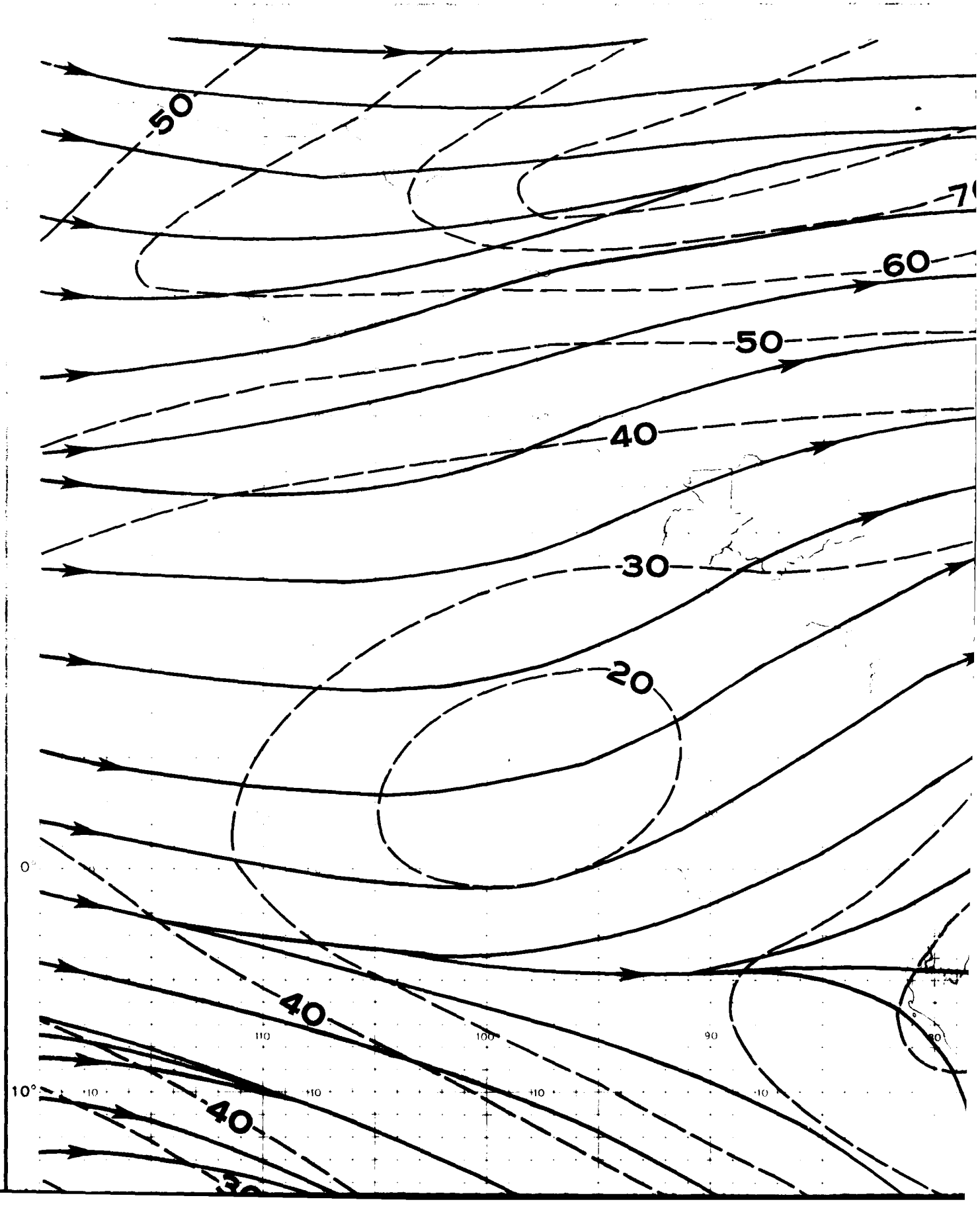

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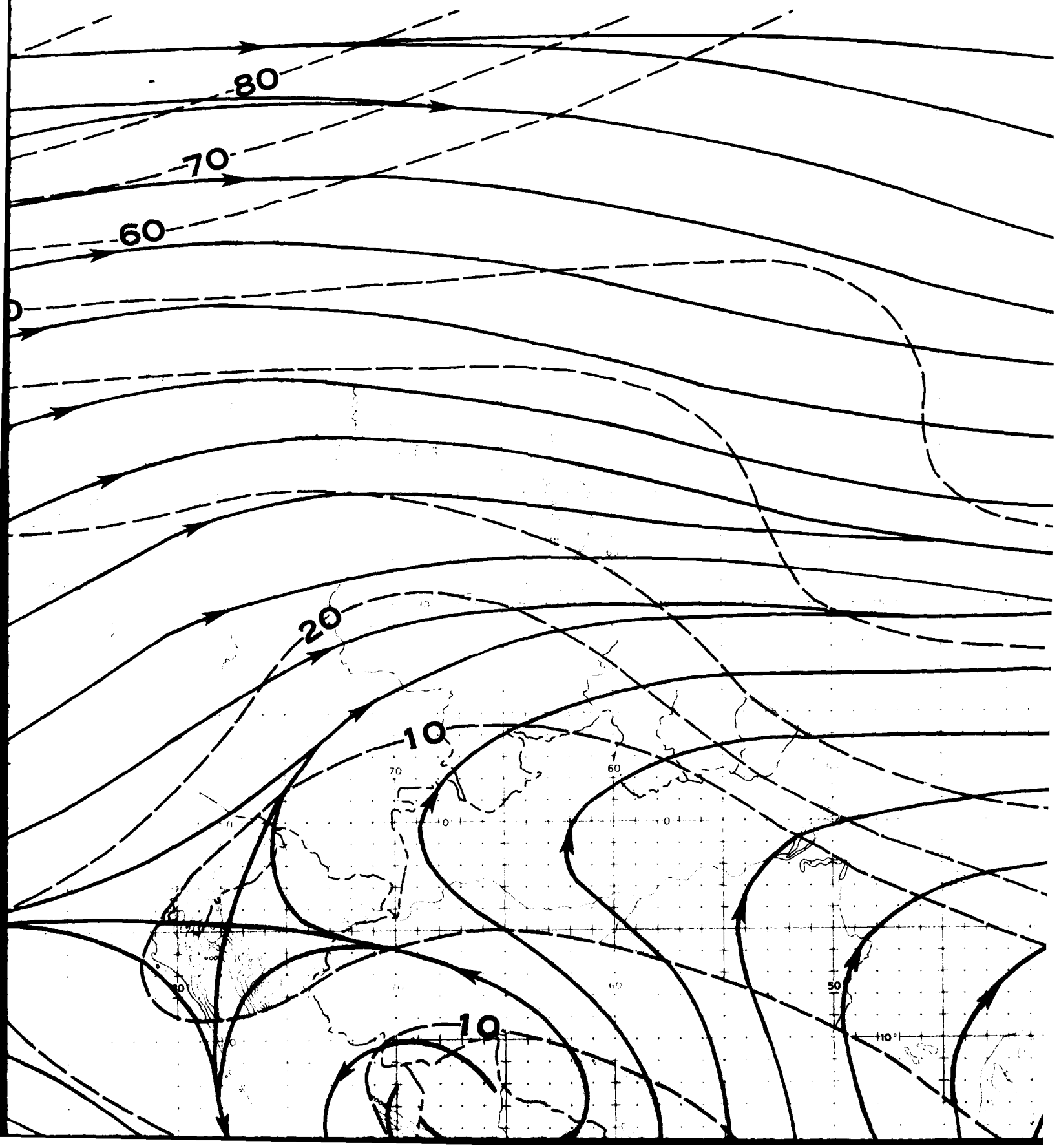



MULW-312E

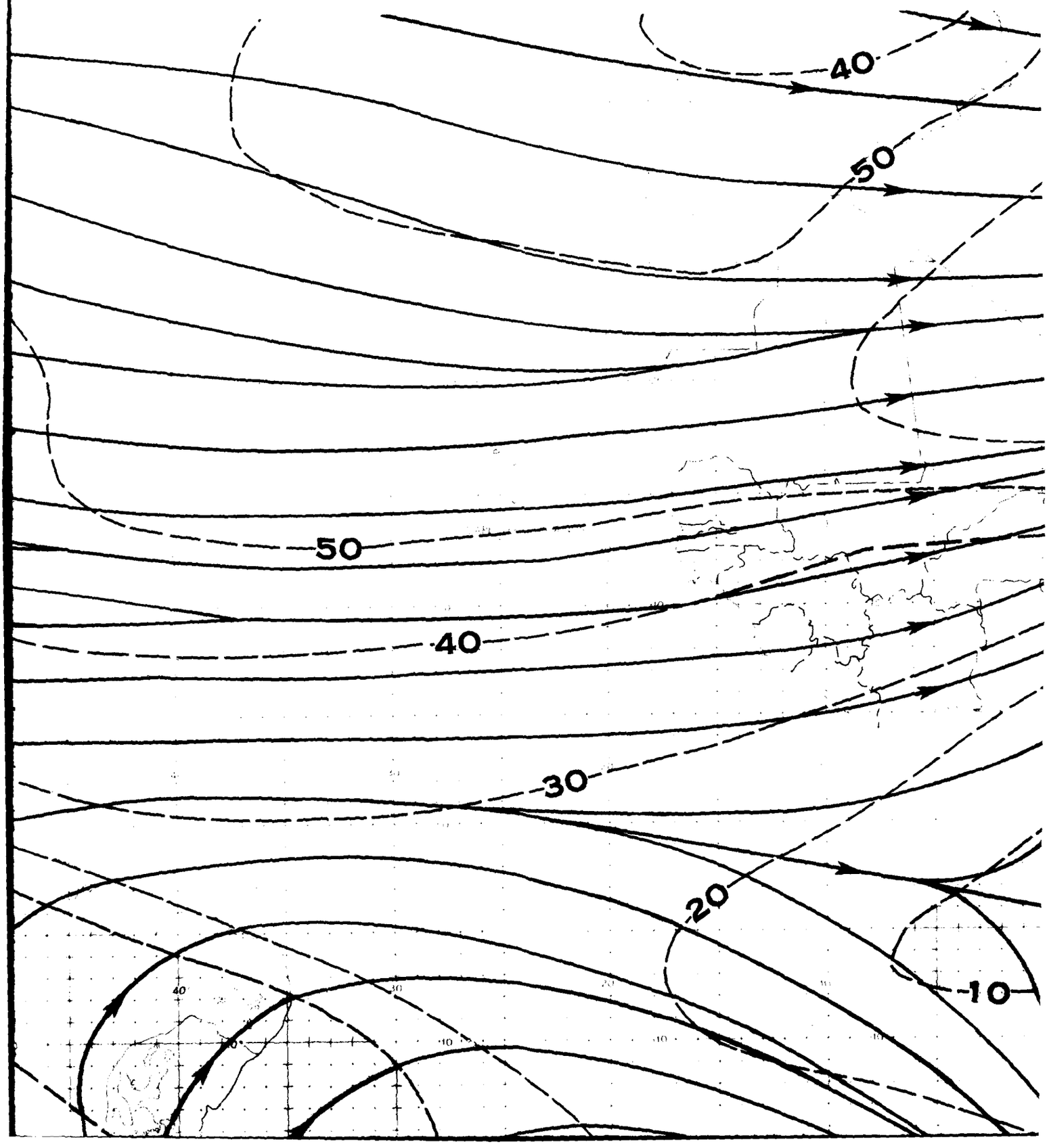
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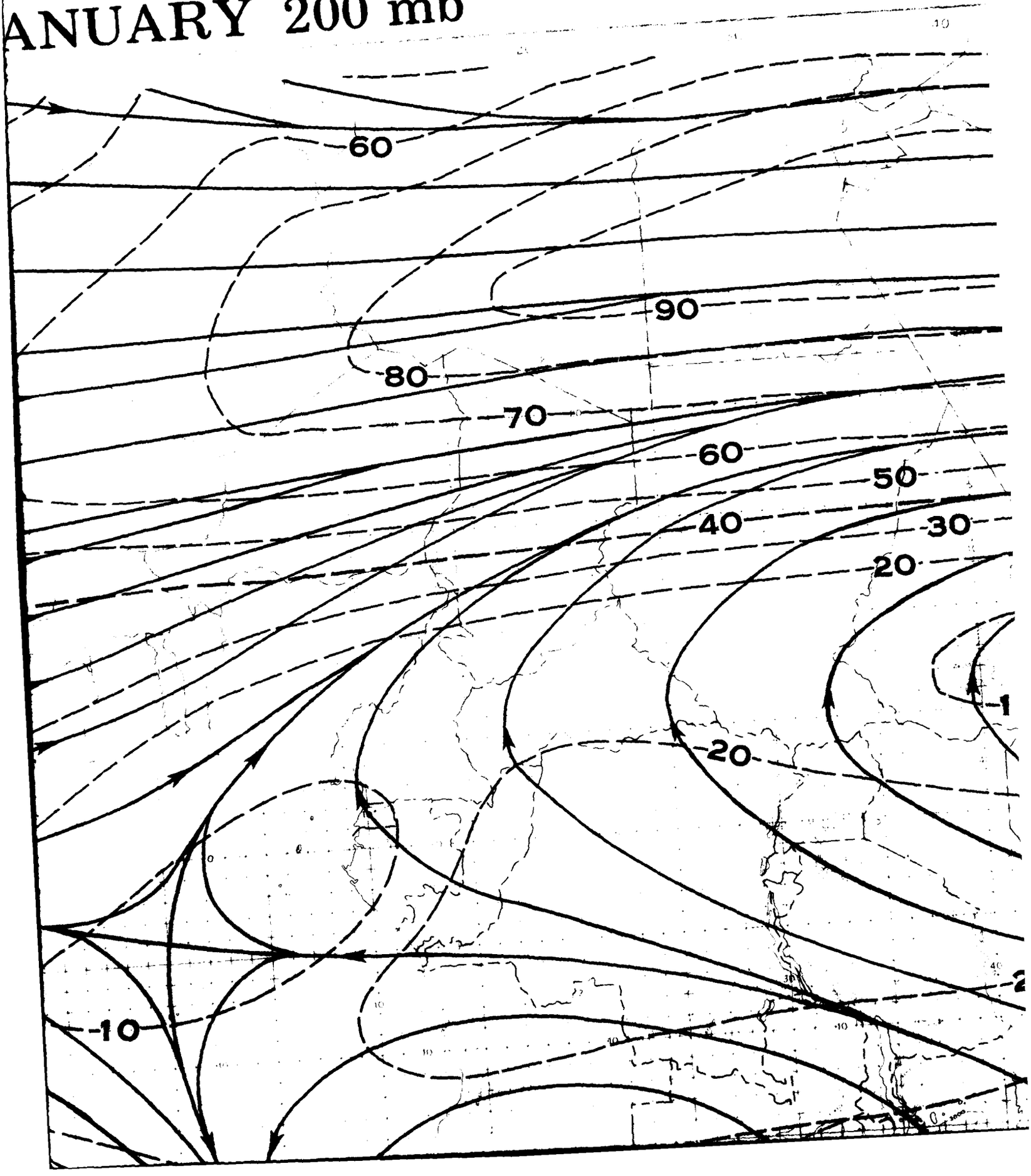
# MEAN UPPER LEVEL WINDS o

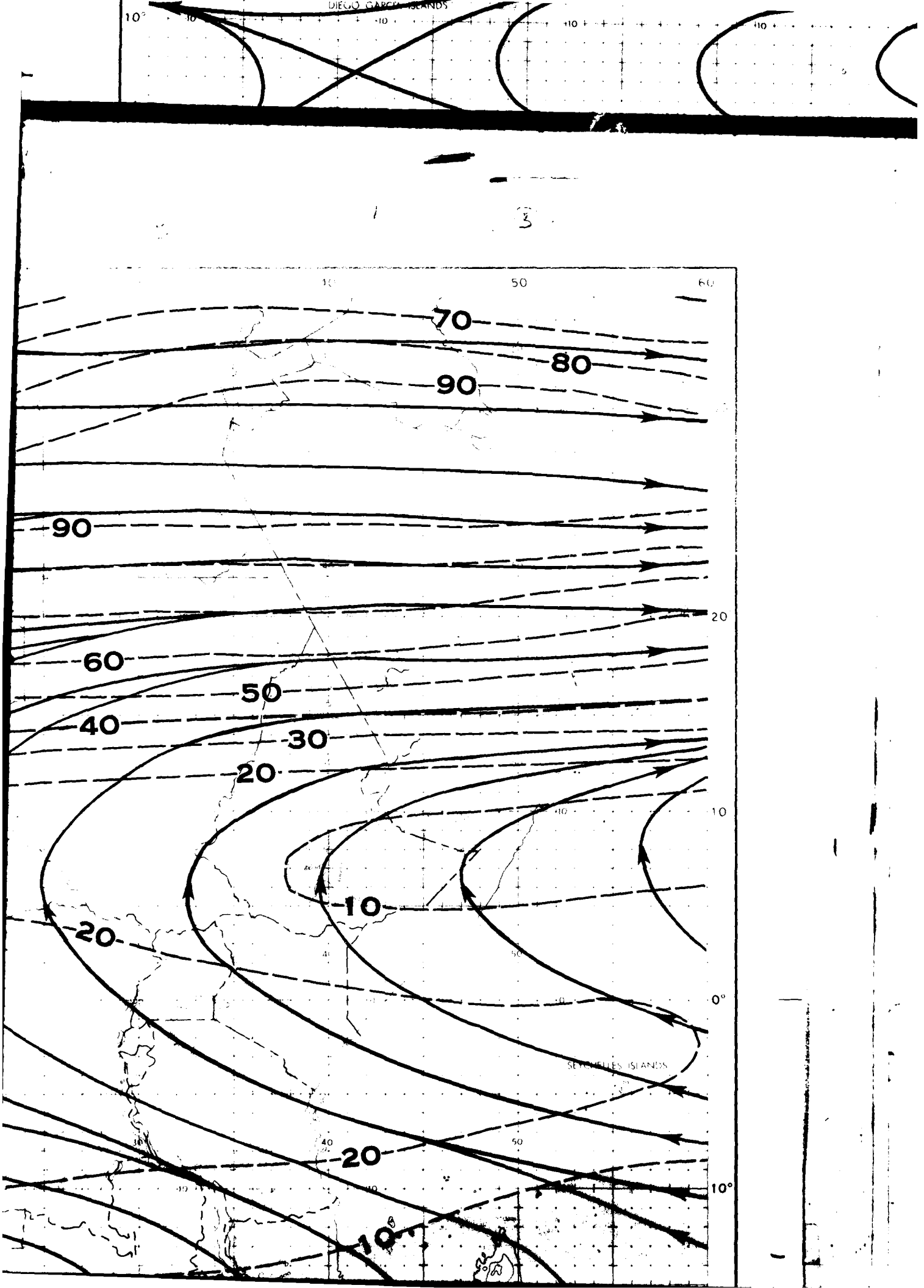


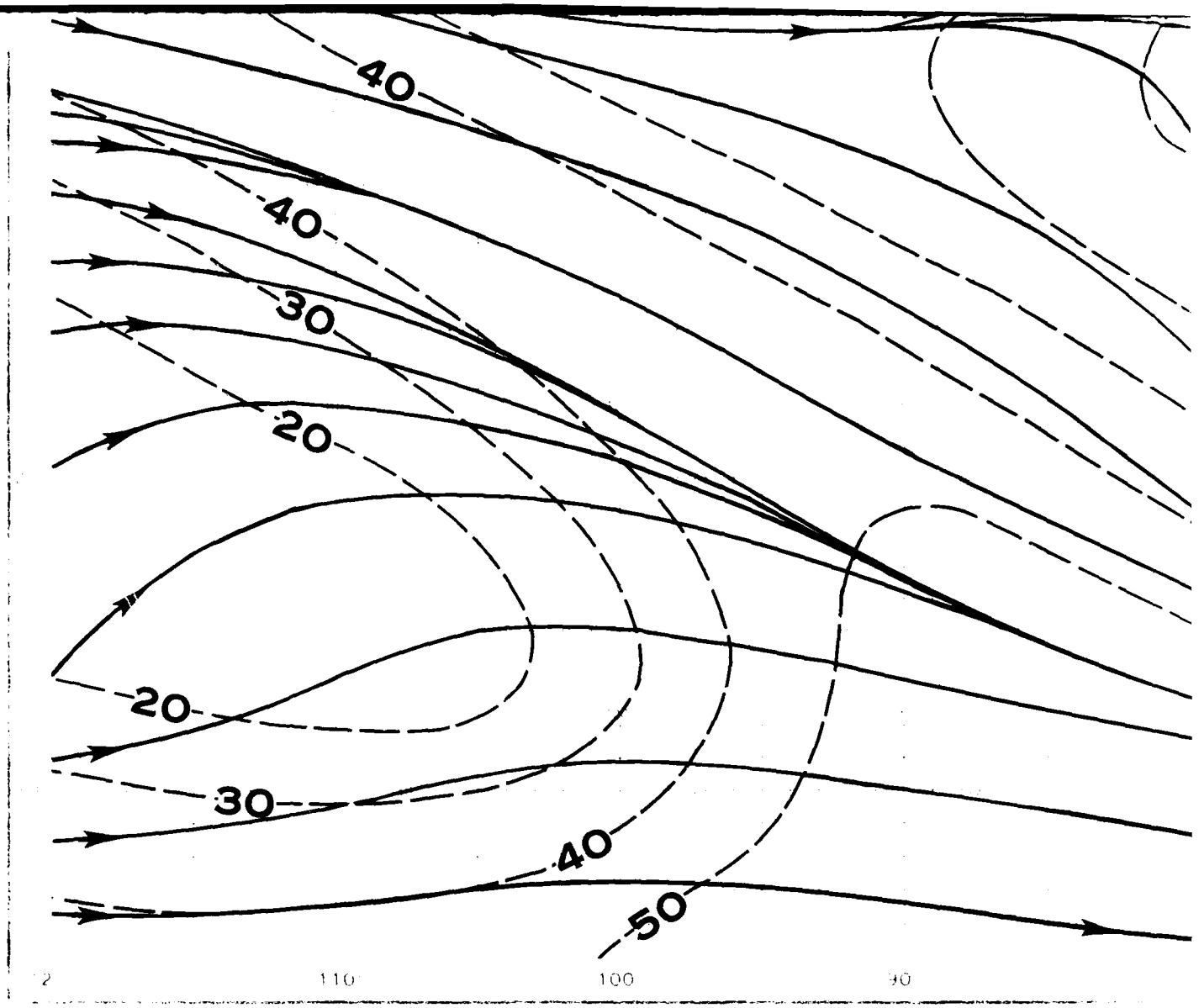
# NDS over GLOBAL TROPICS – JANU

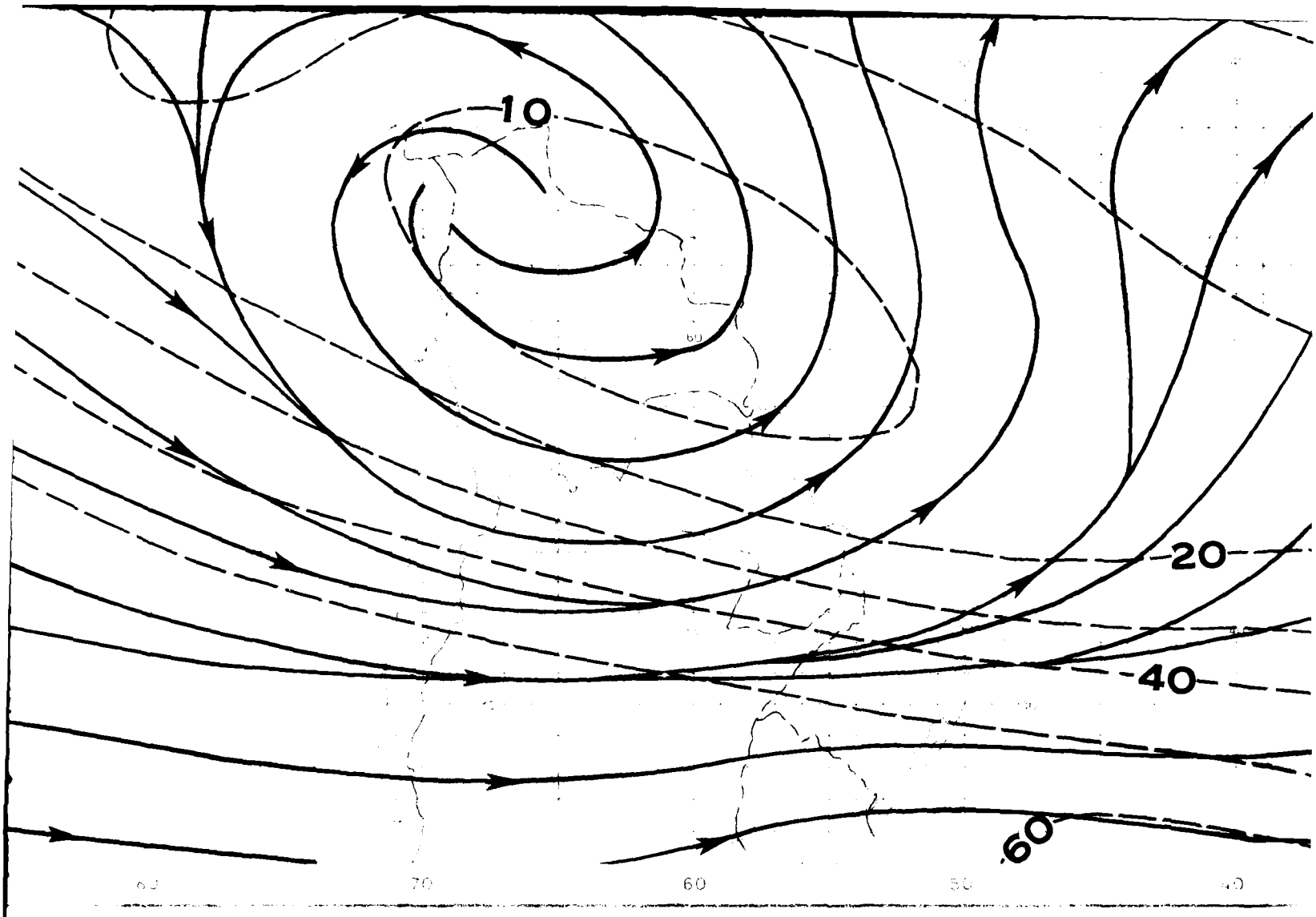


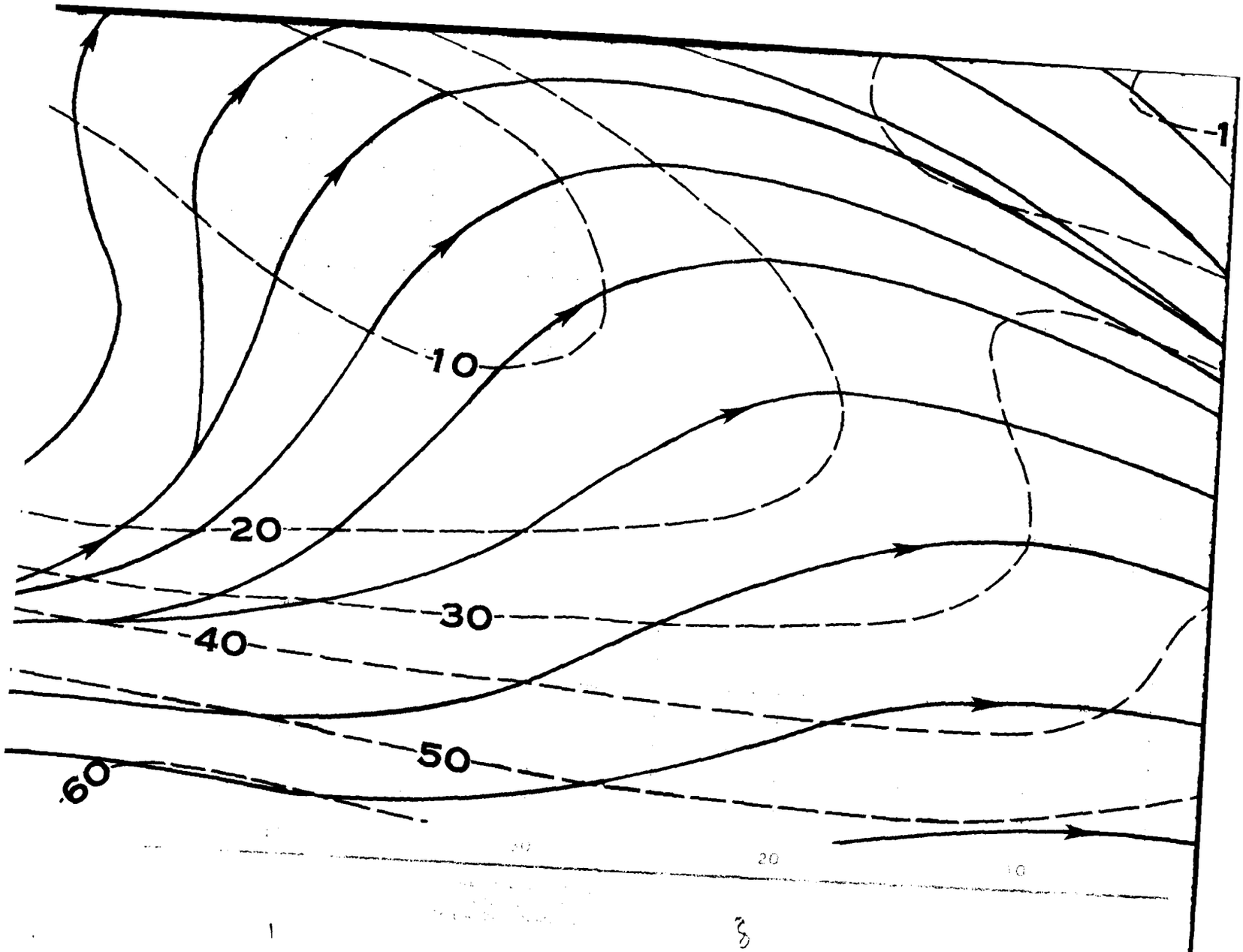
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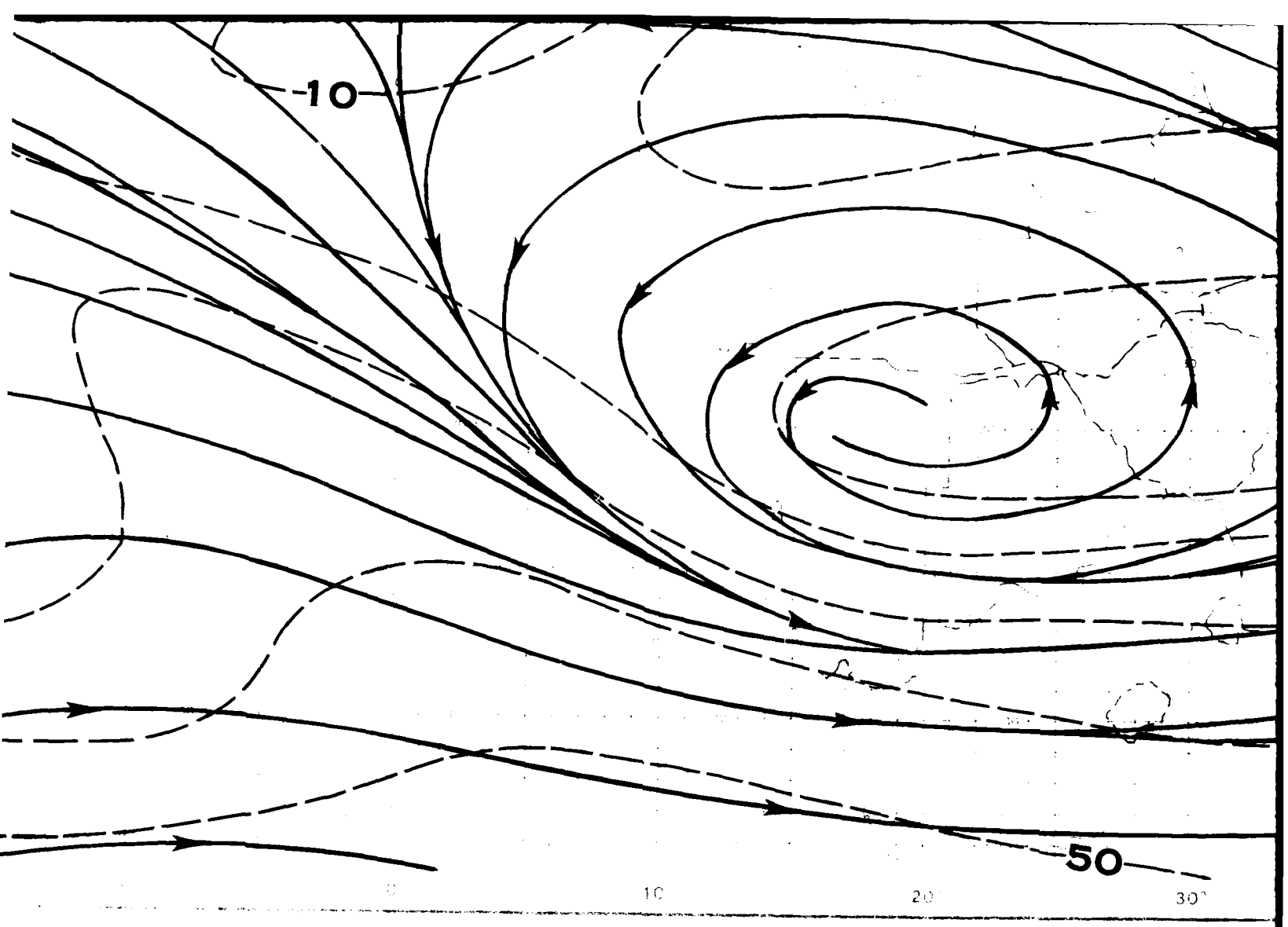


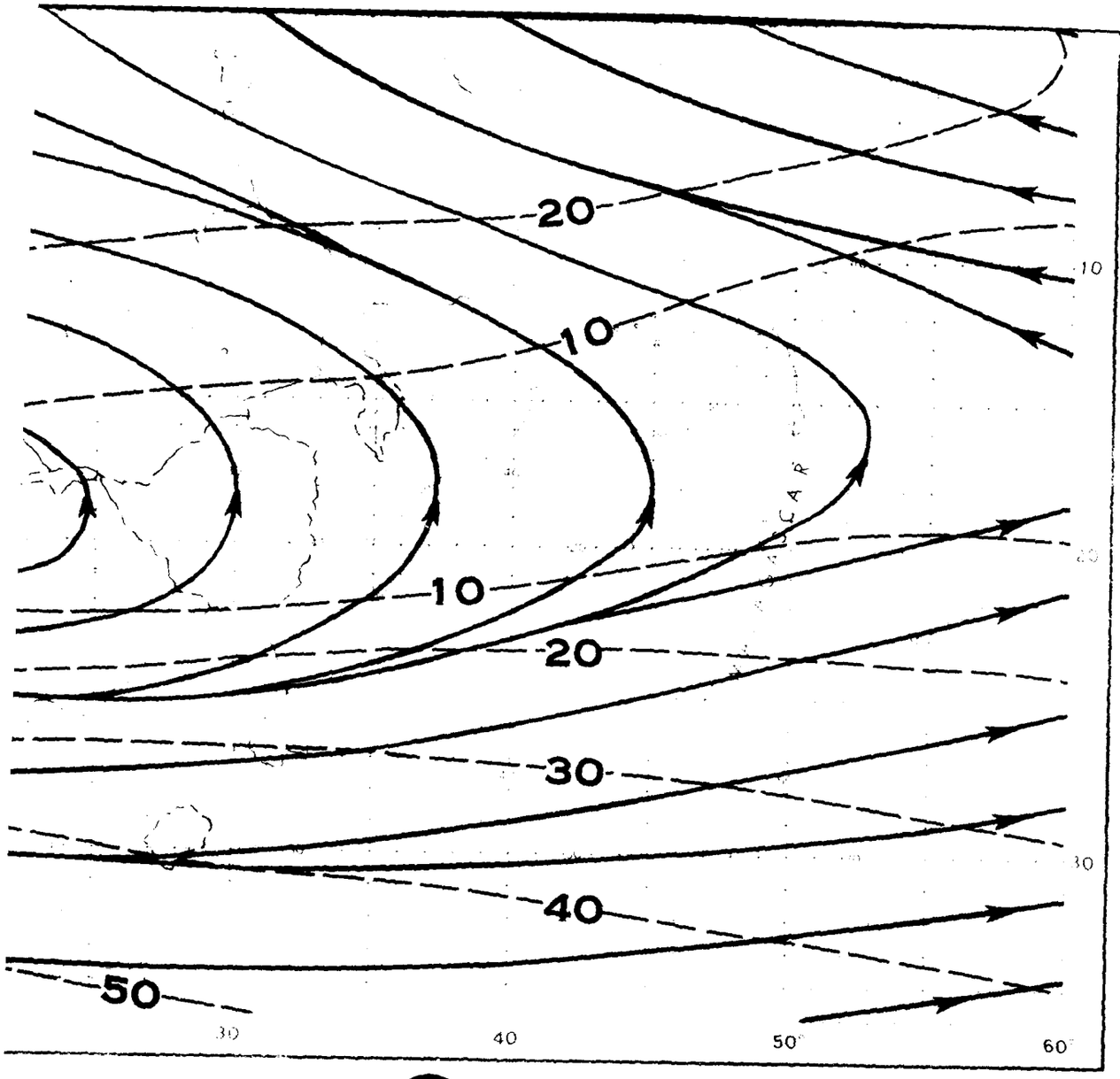

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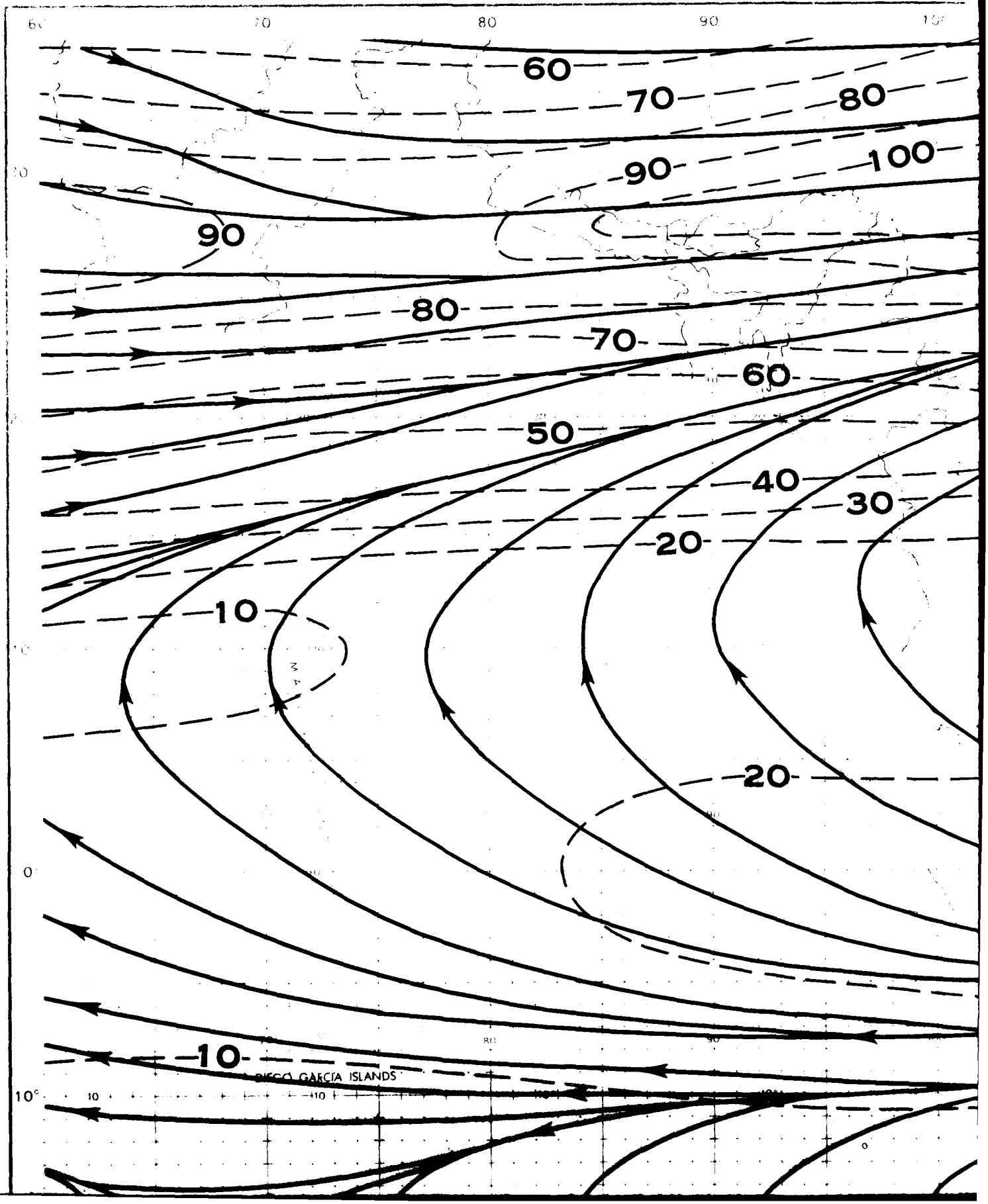

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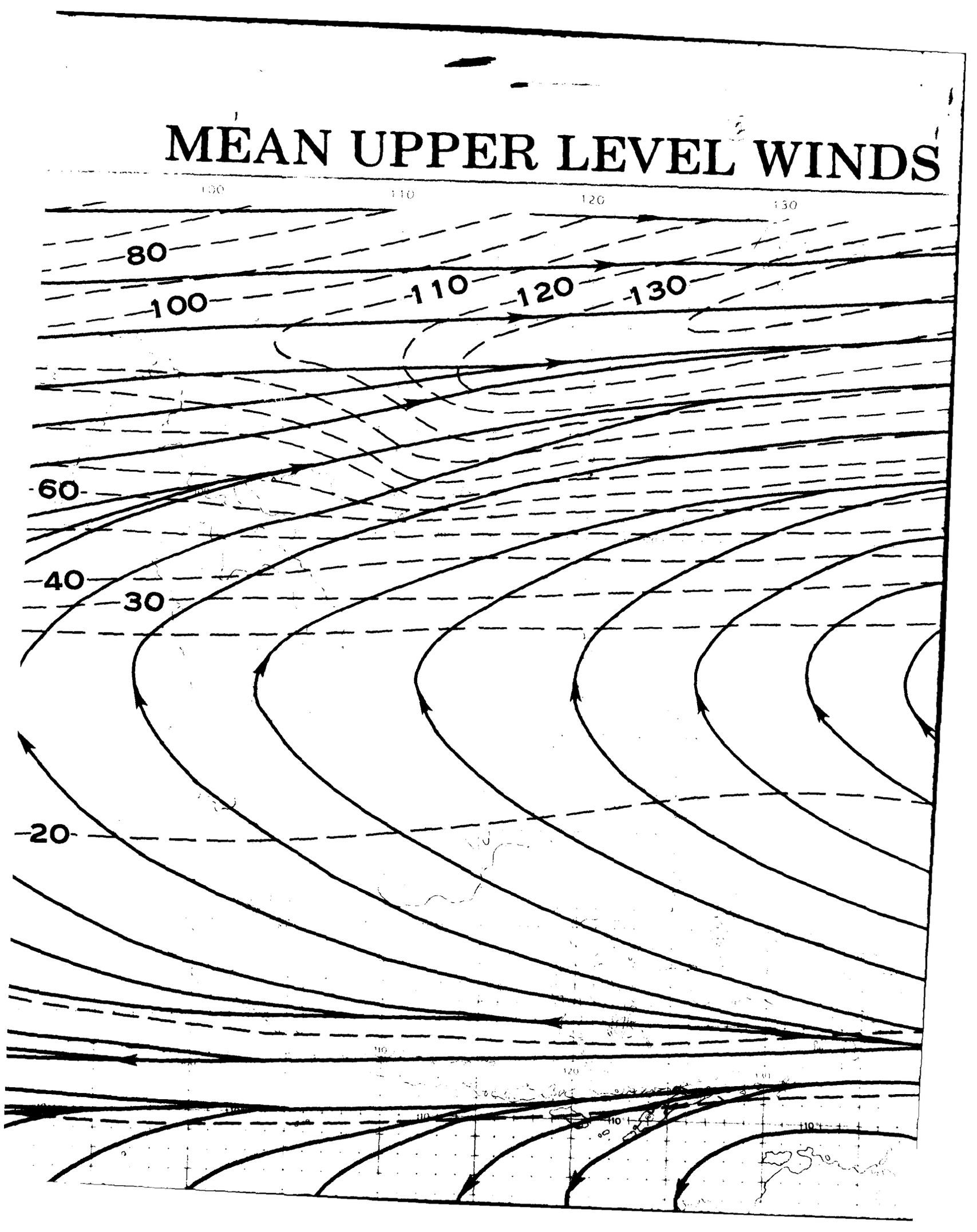



MULW-201W

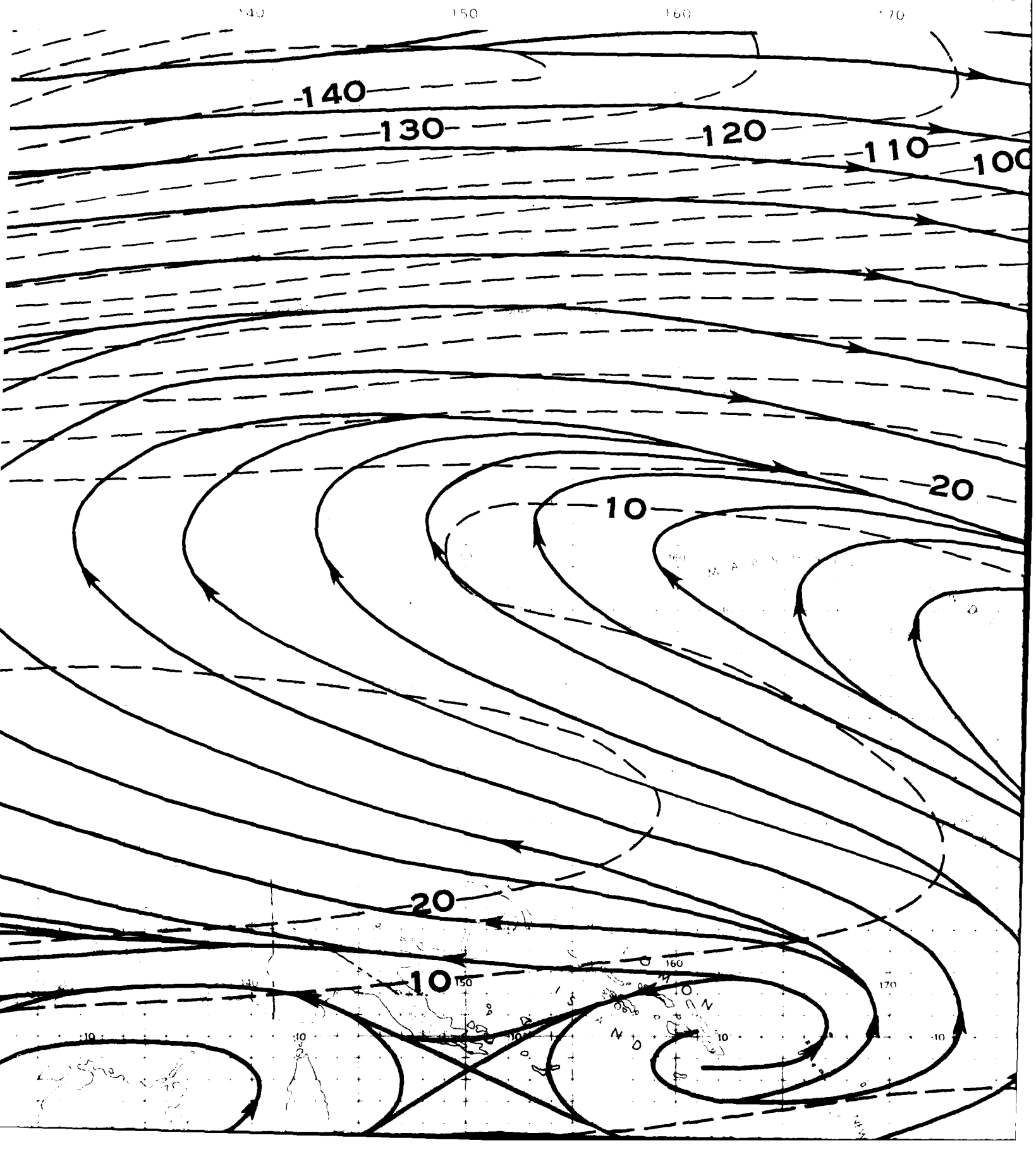
# ME


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DIEGO GARCIA ISLANDS
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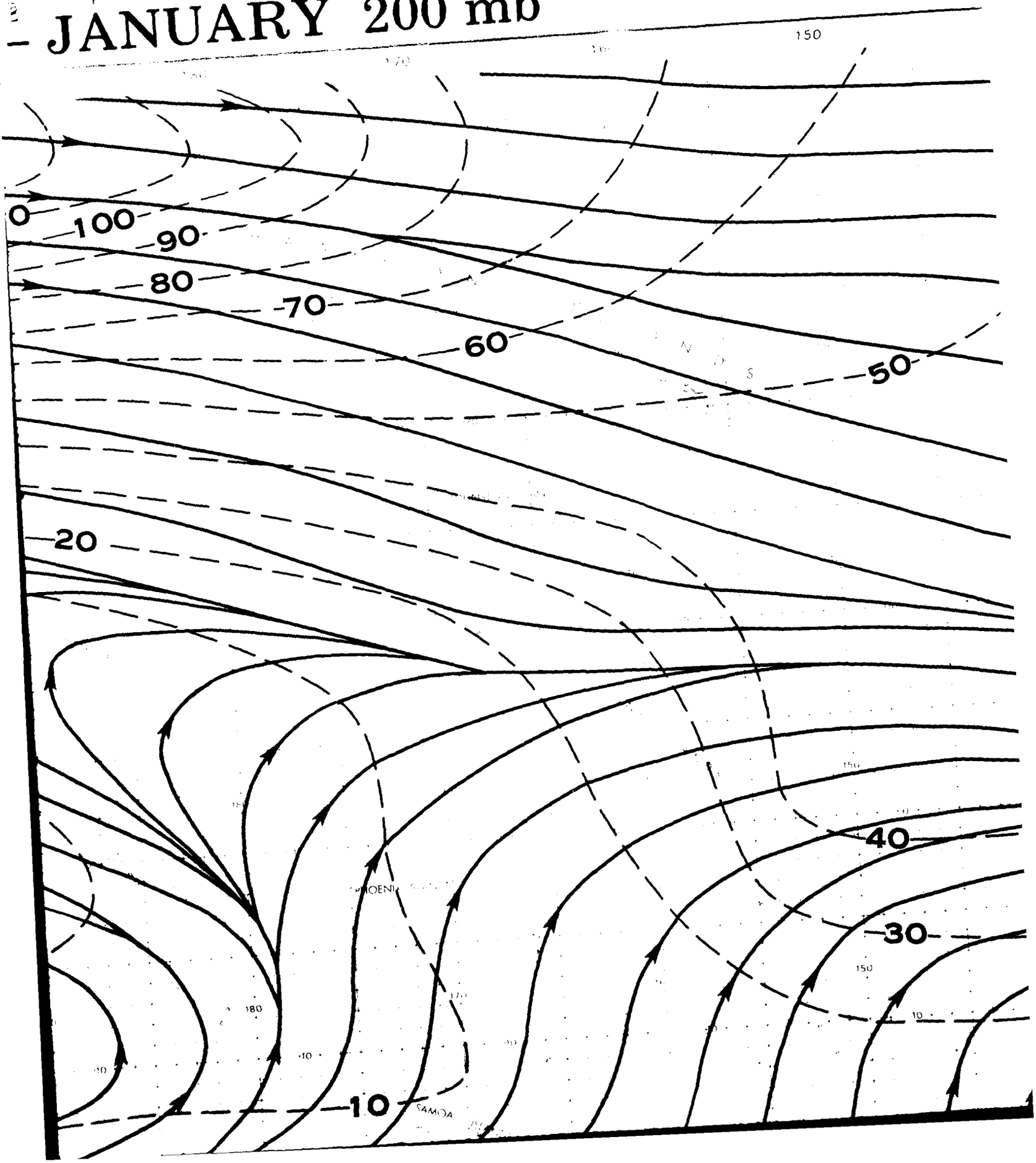
# MEAN UPPER LEVEL WINDS

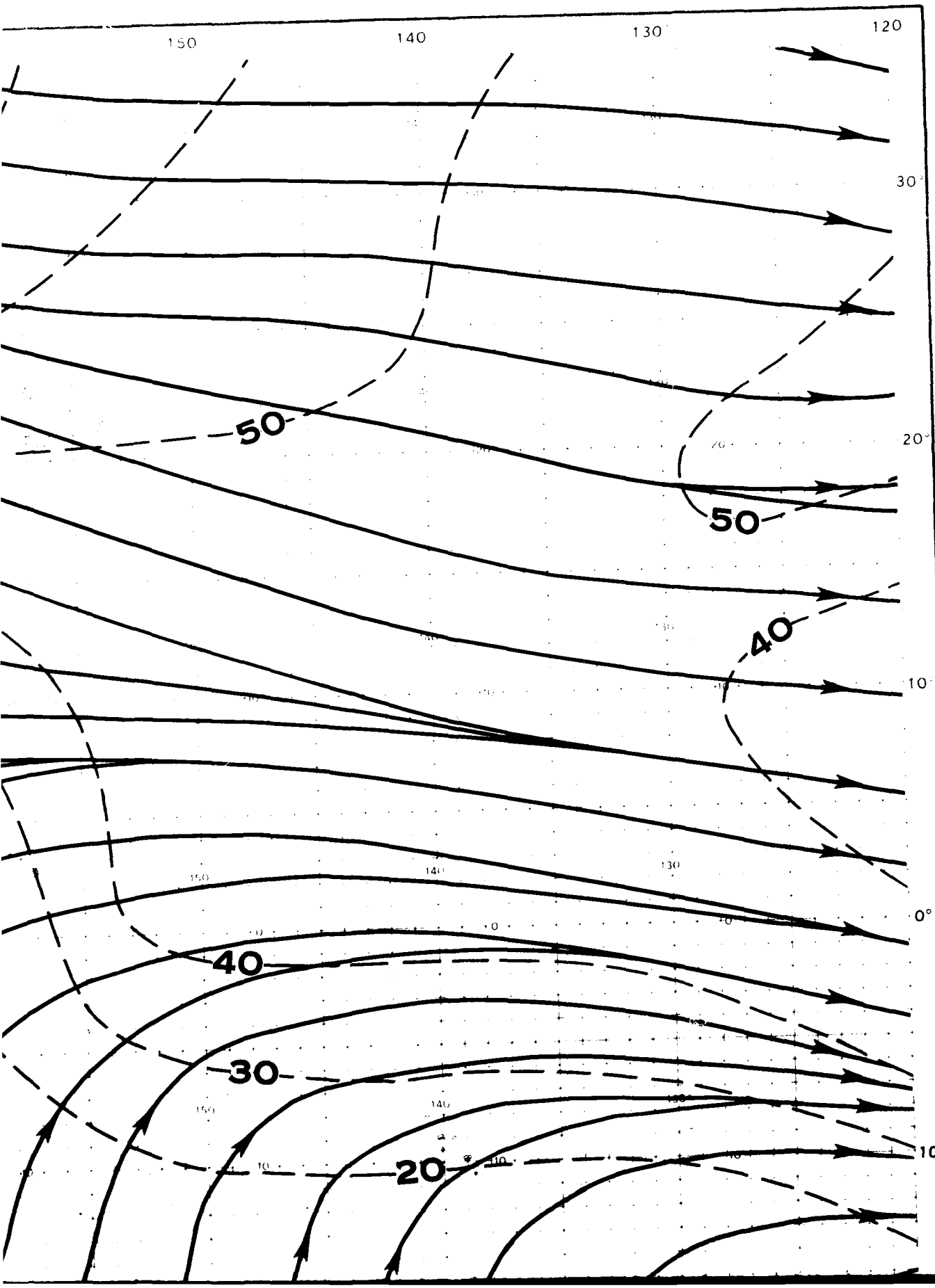


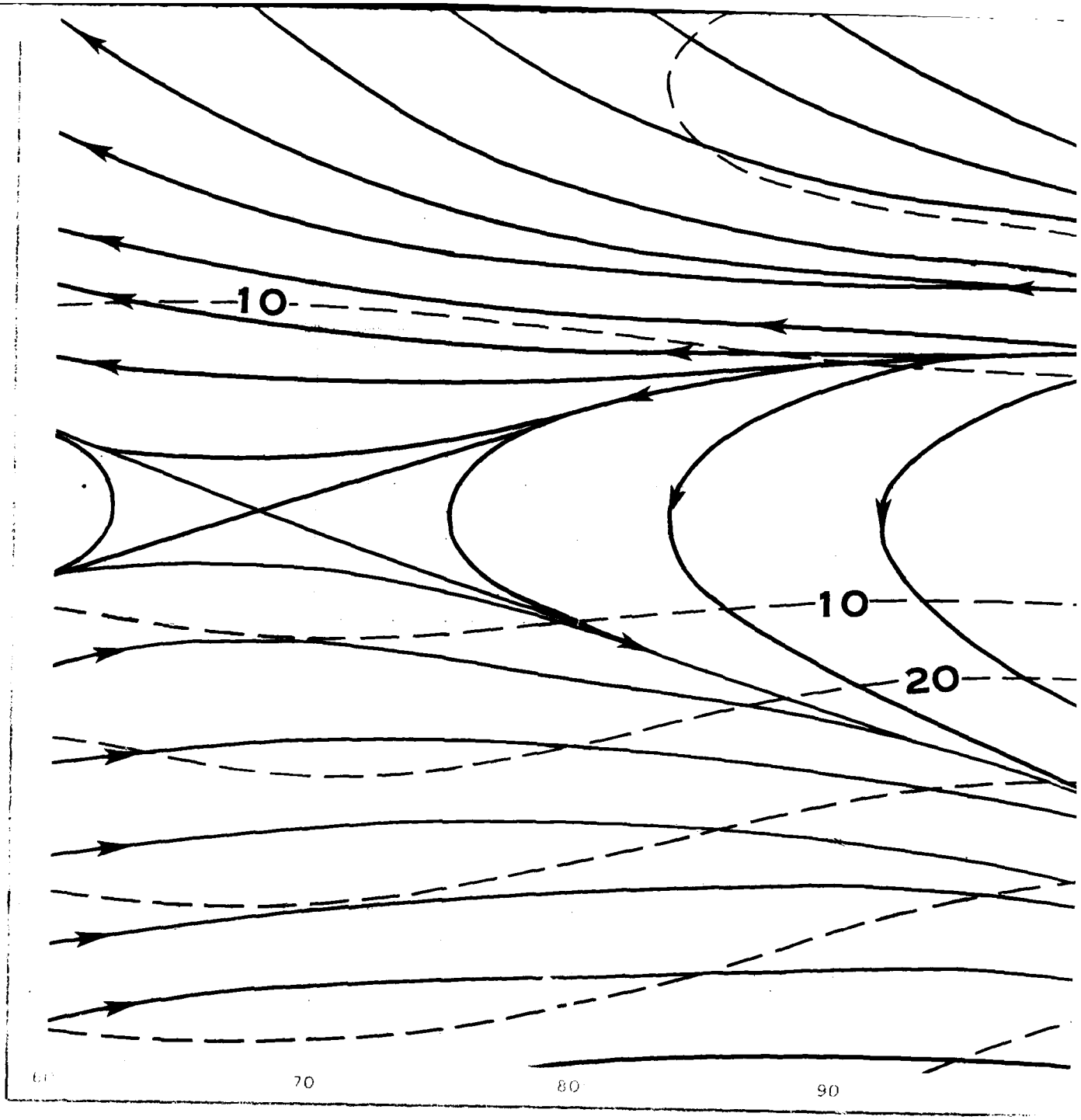
# WINDS over GLOBAL TROPICS – JA

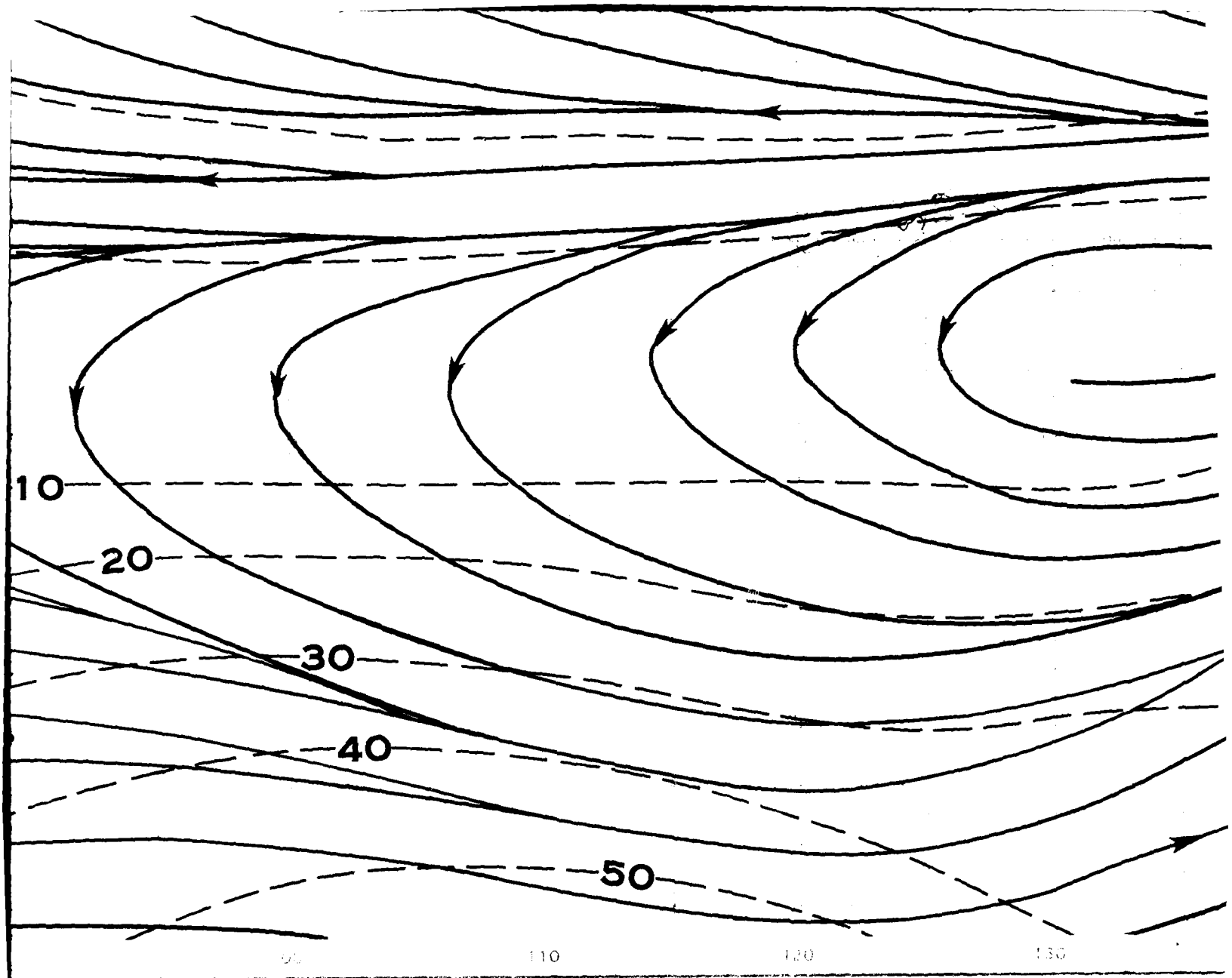


# JANUARY 200 mb

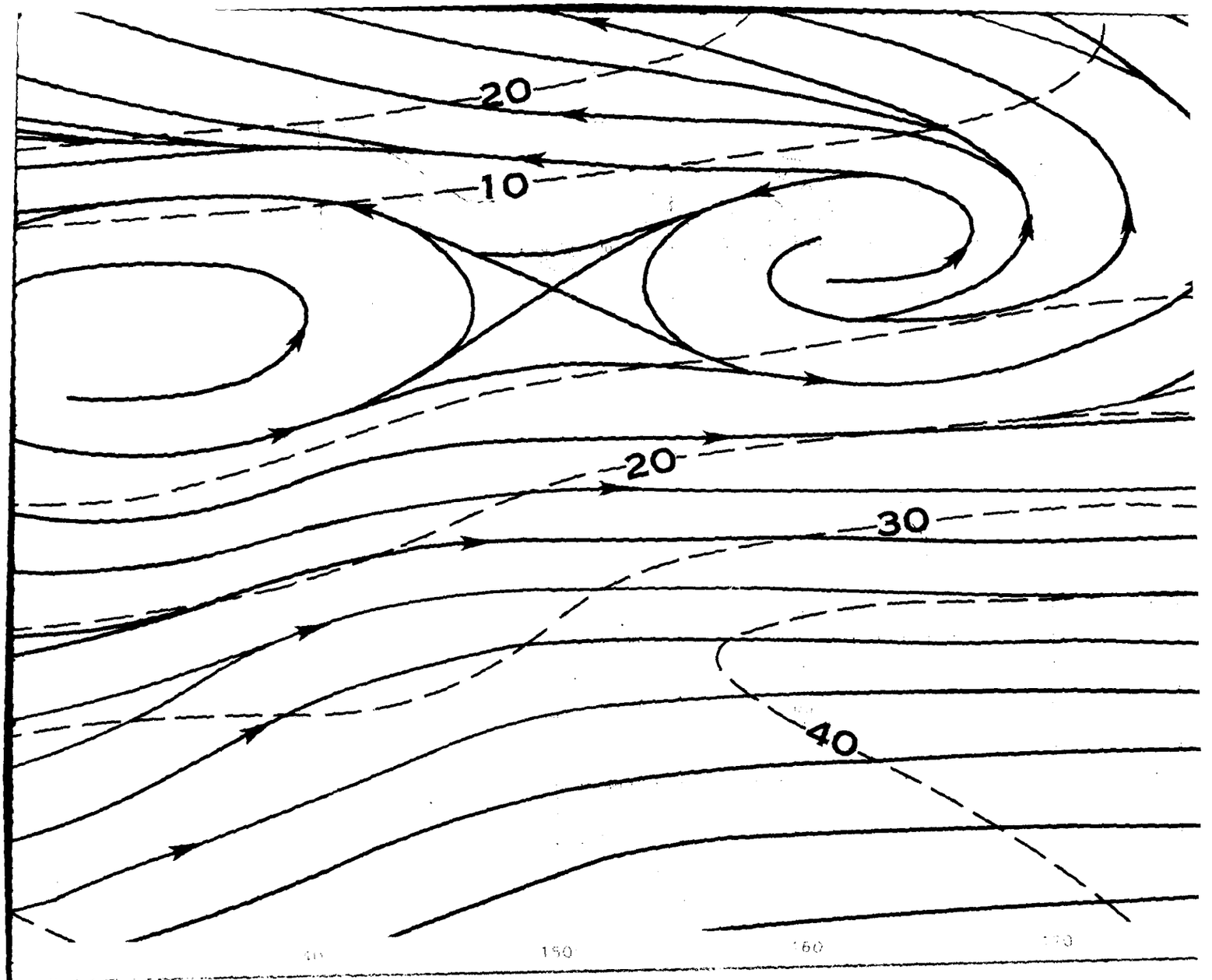



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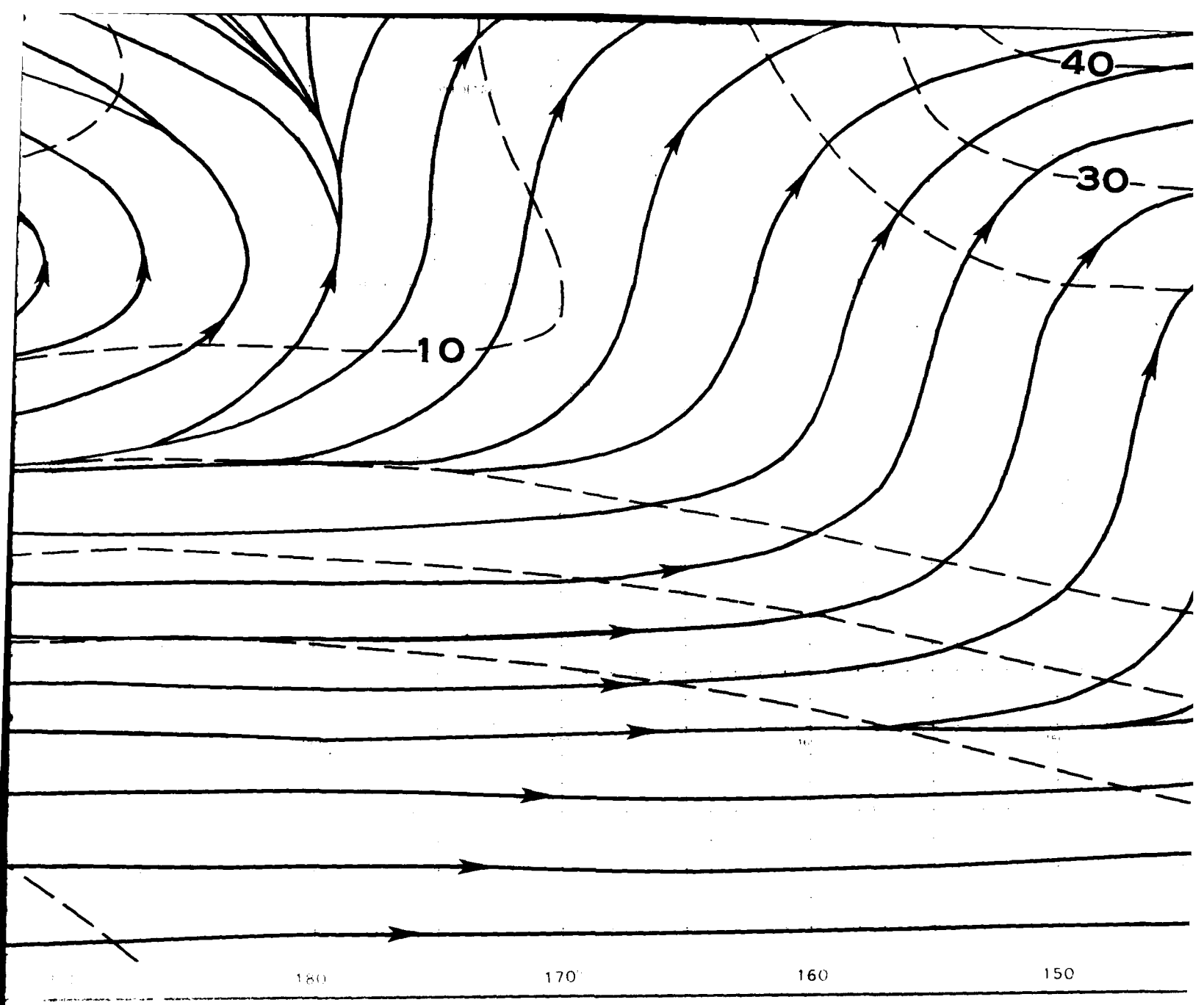

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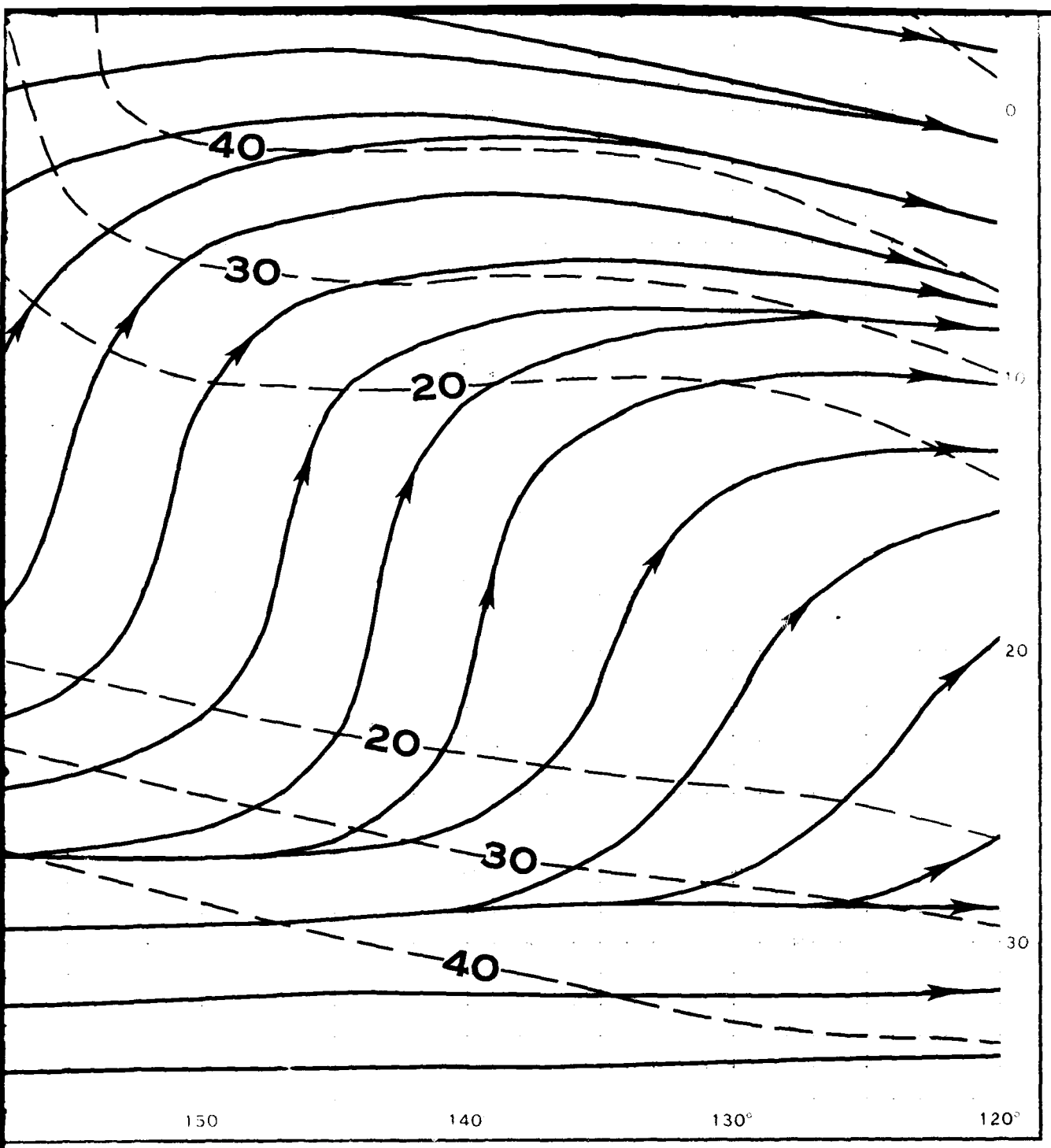



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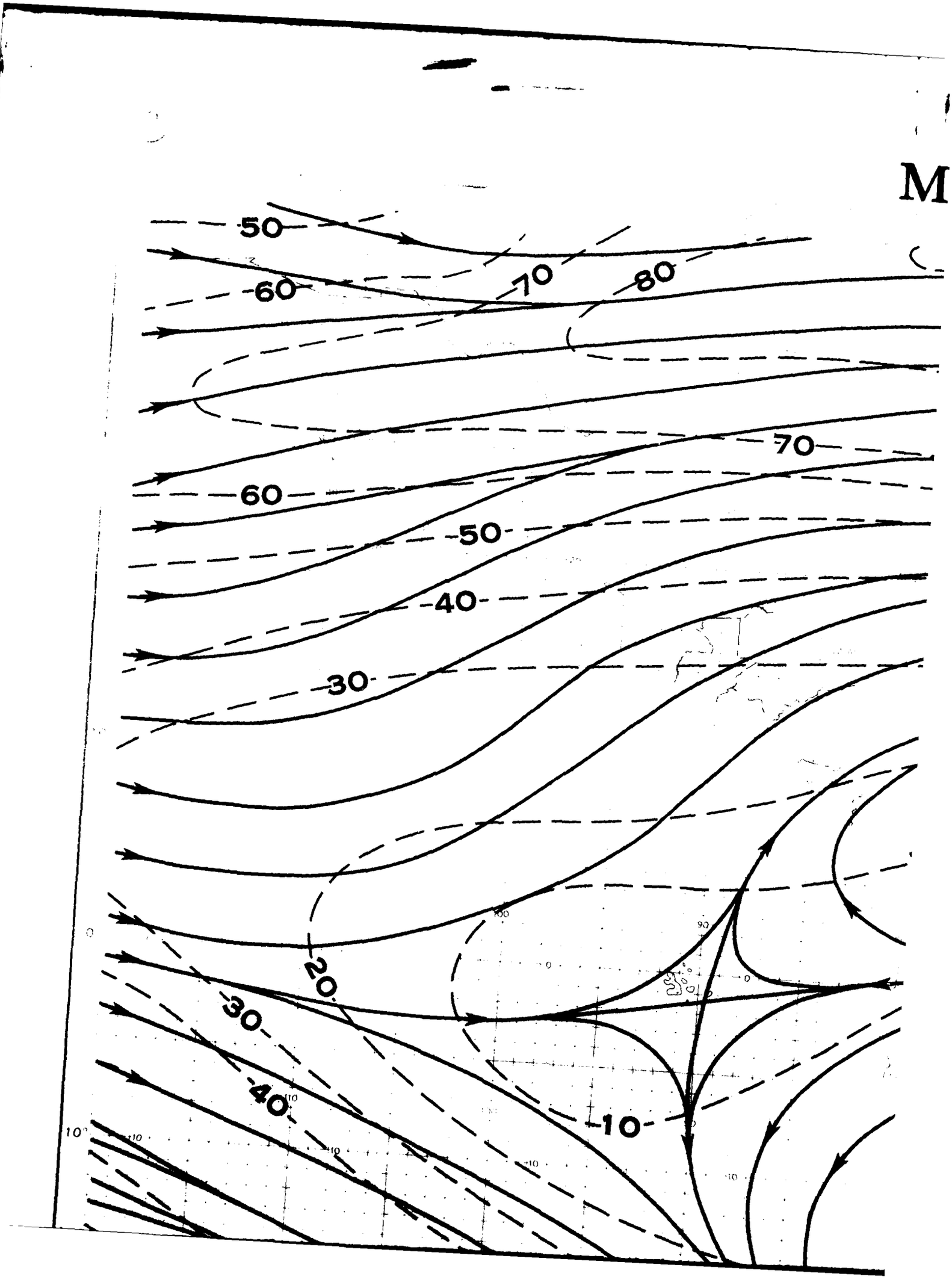



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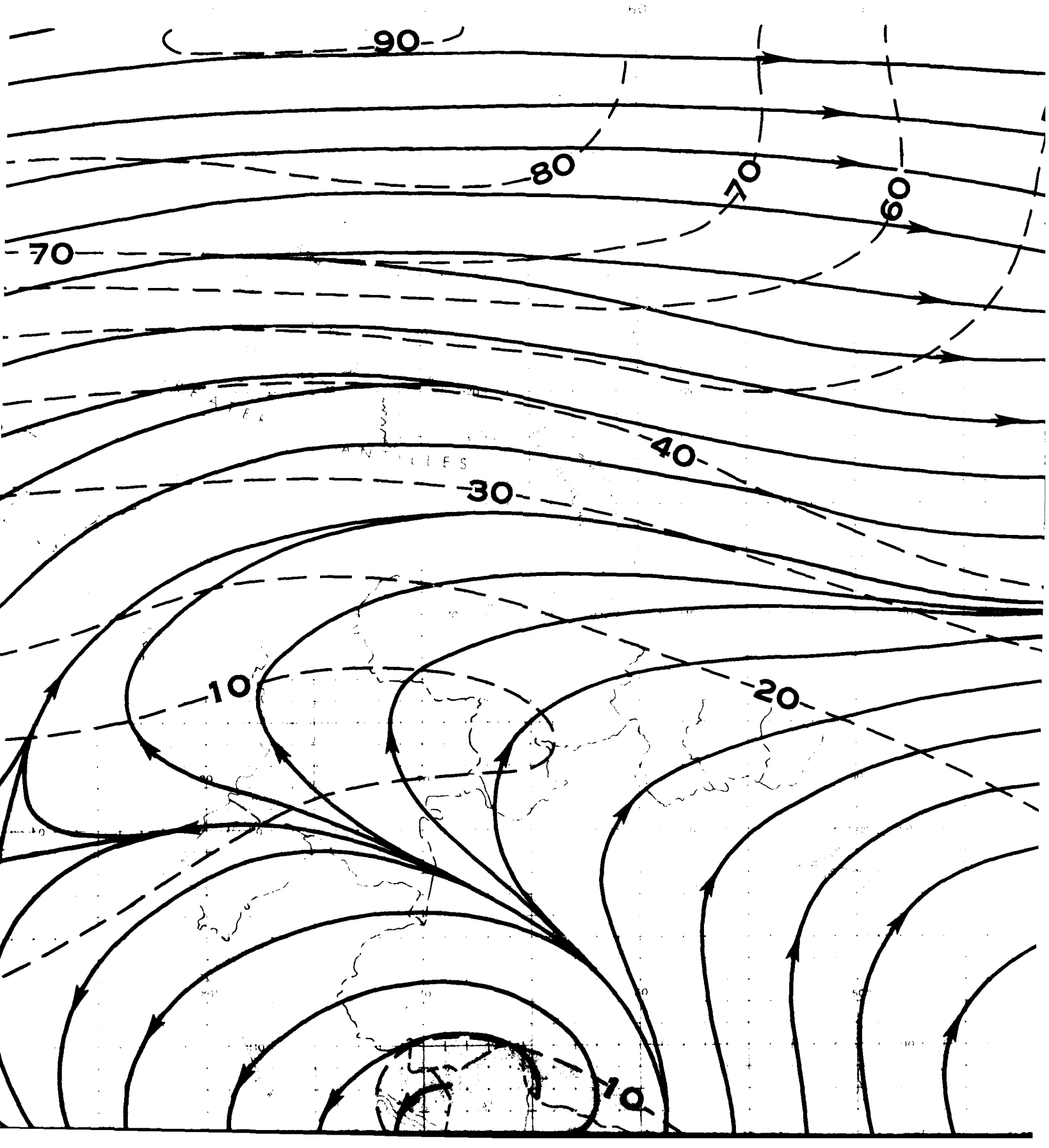

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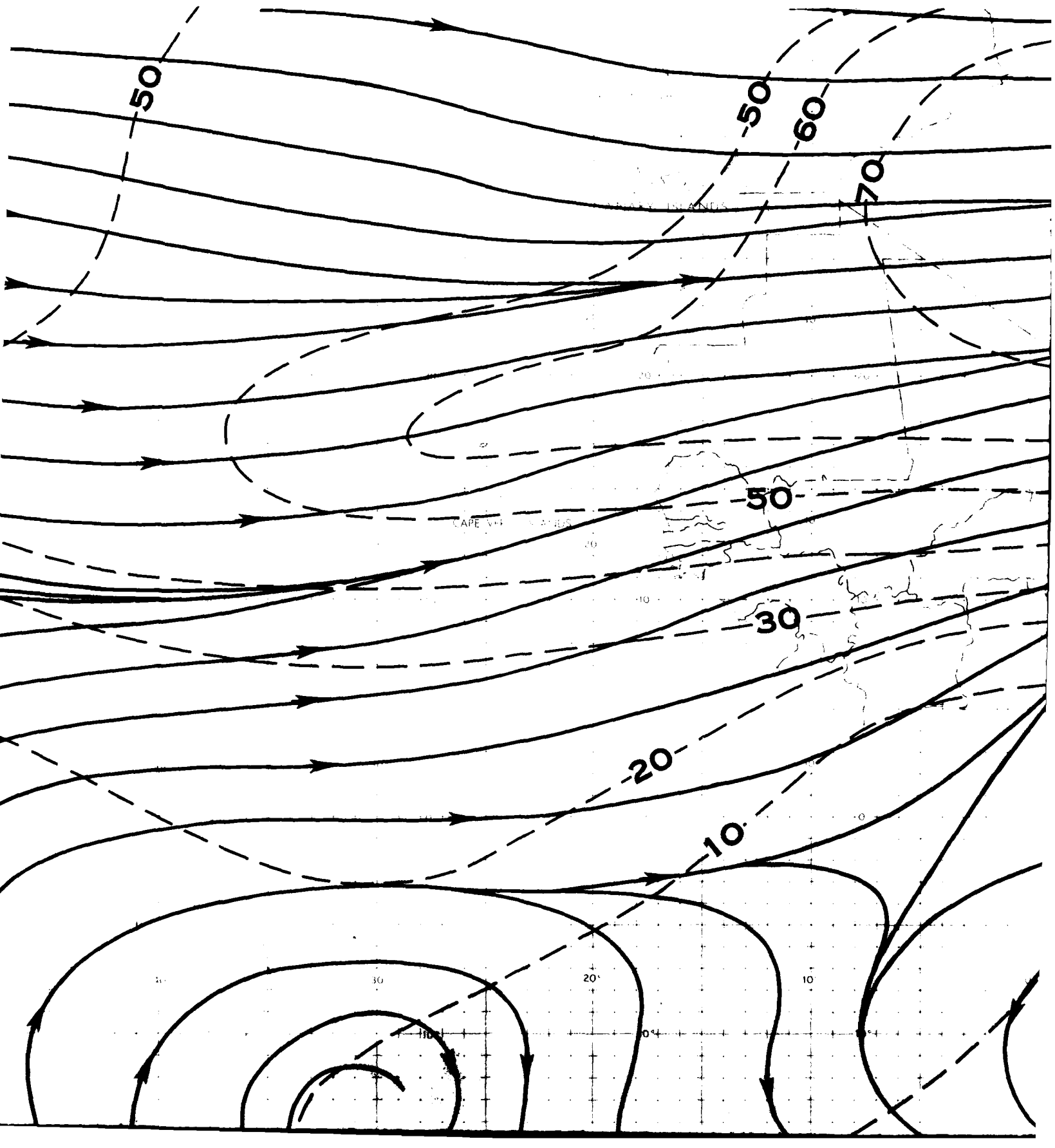

MULW-201E


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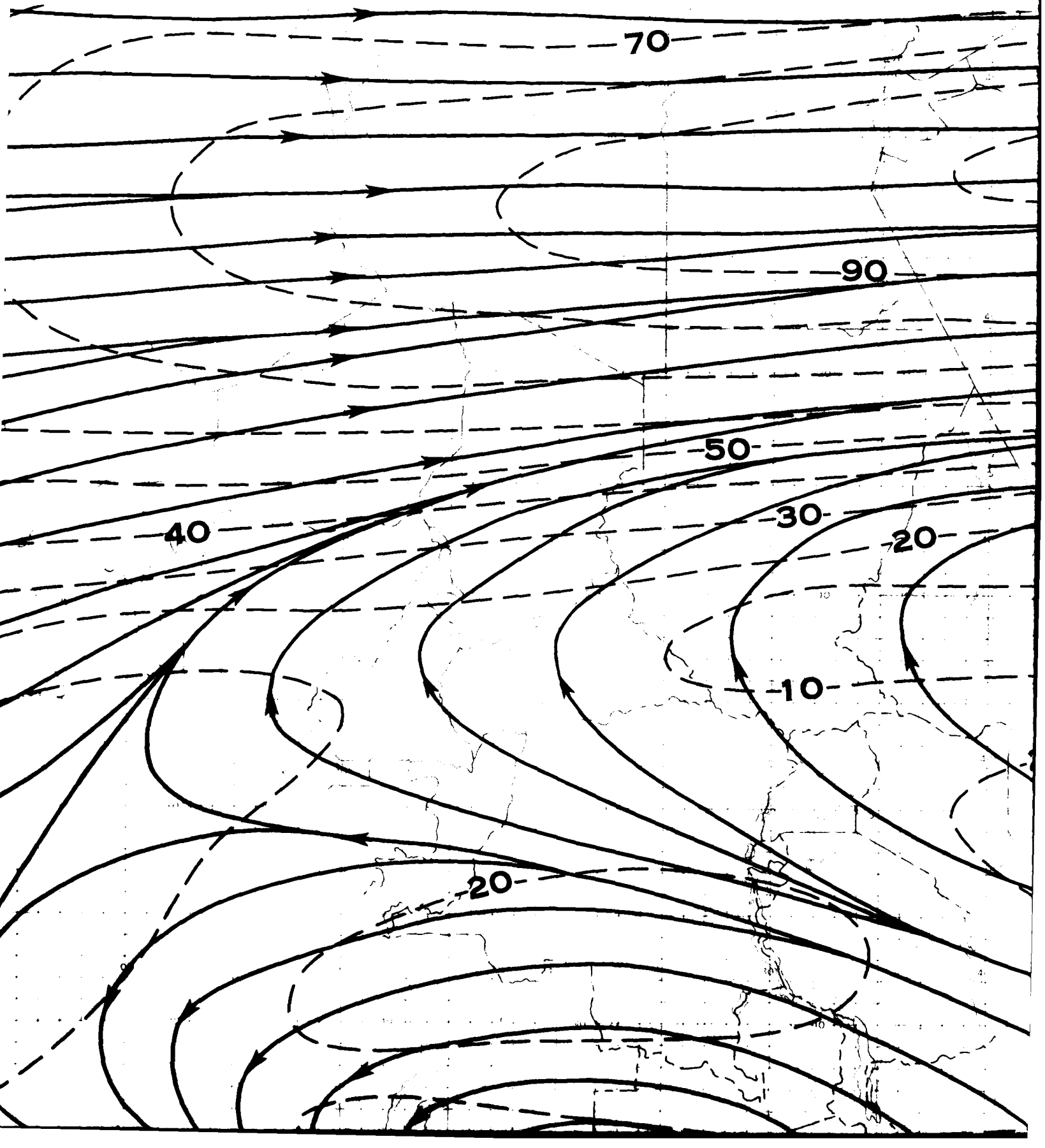
# MEAN UPPER LEVEL WINDS

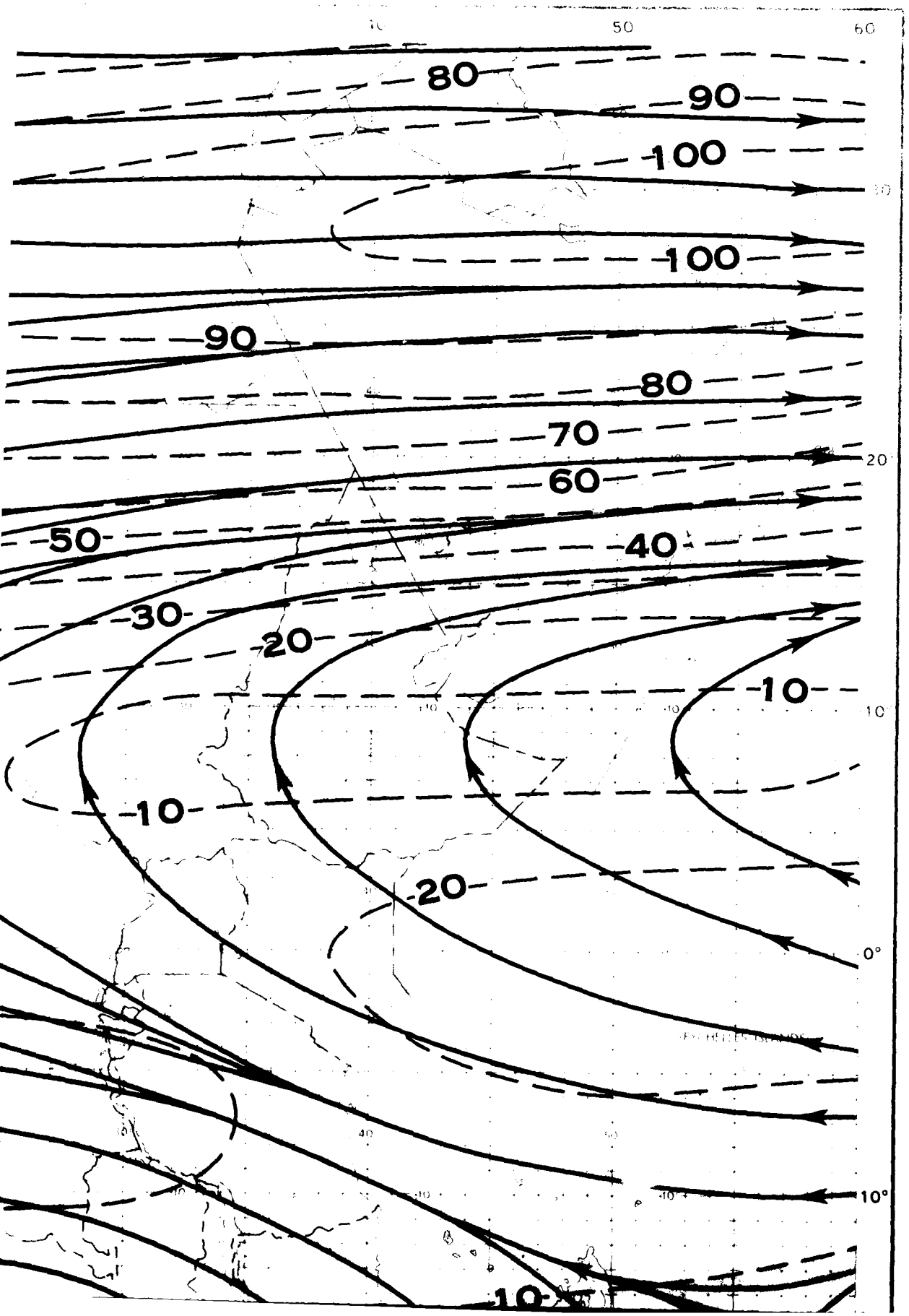


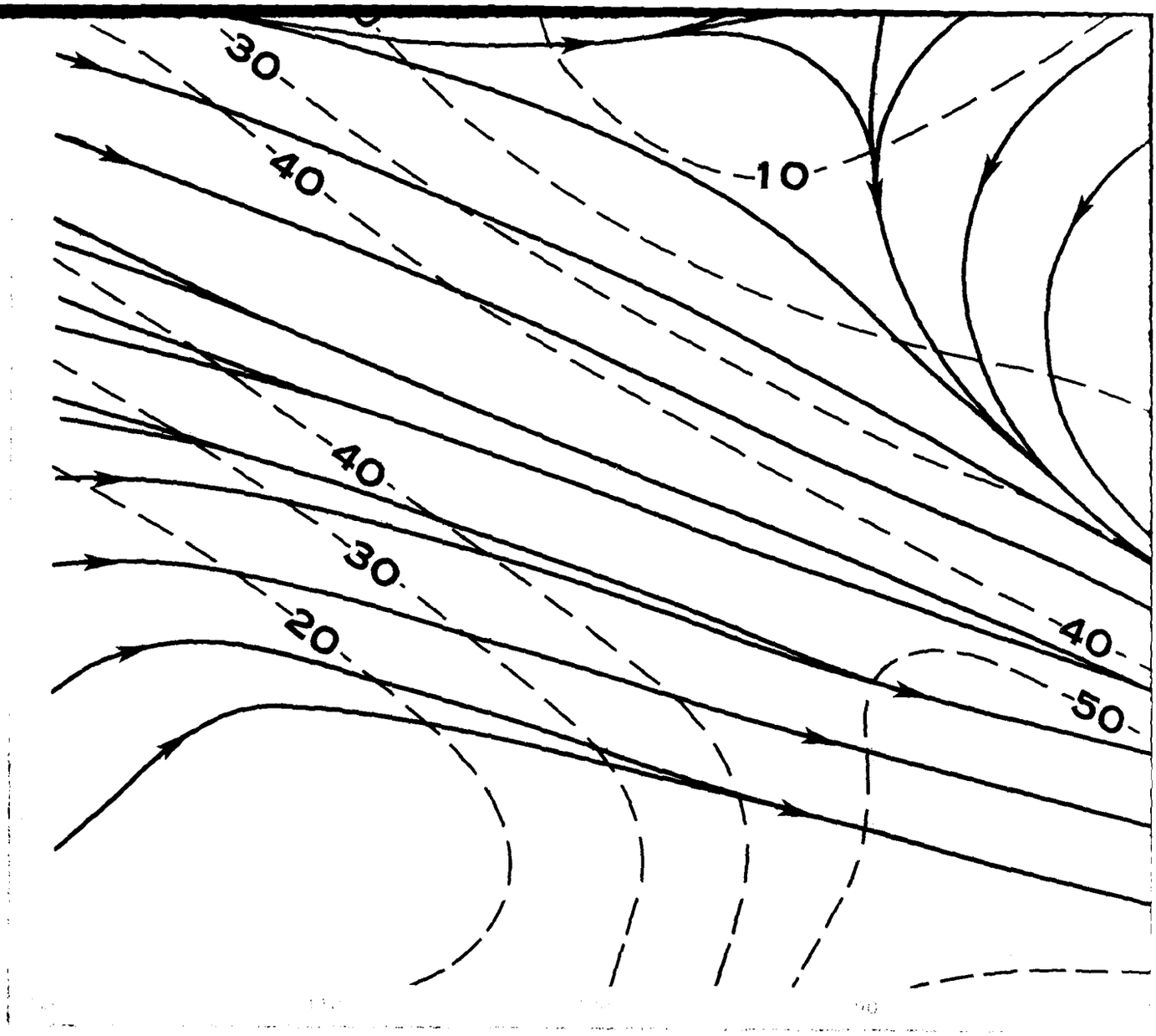
# NDS over GLOBAL TROPICS – FEBR



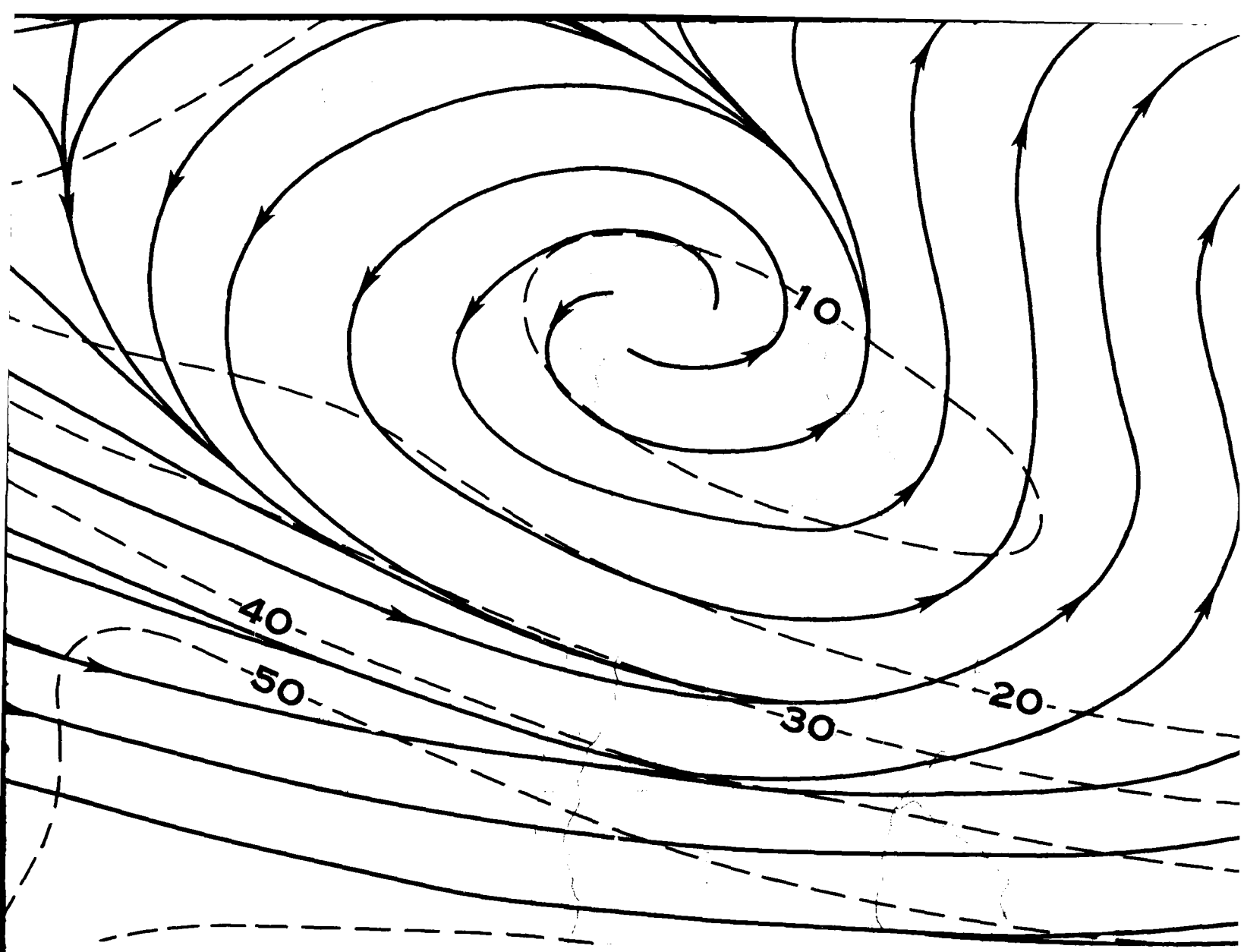
# EBRUARY 200 mb



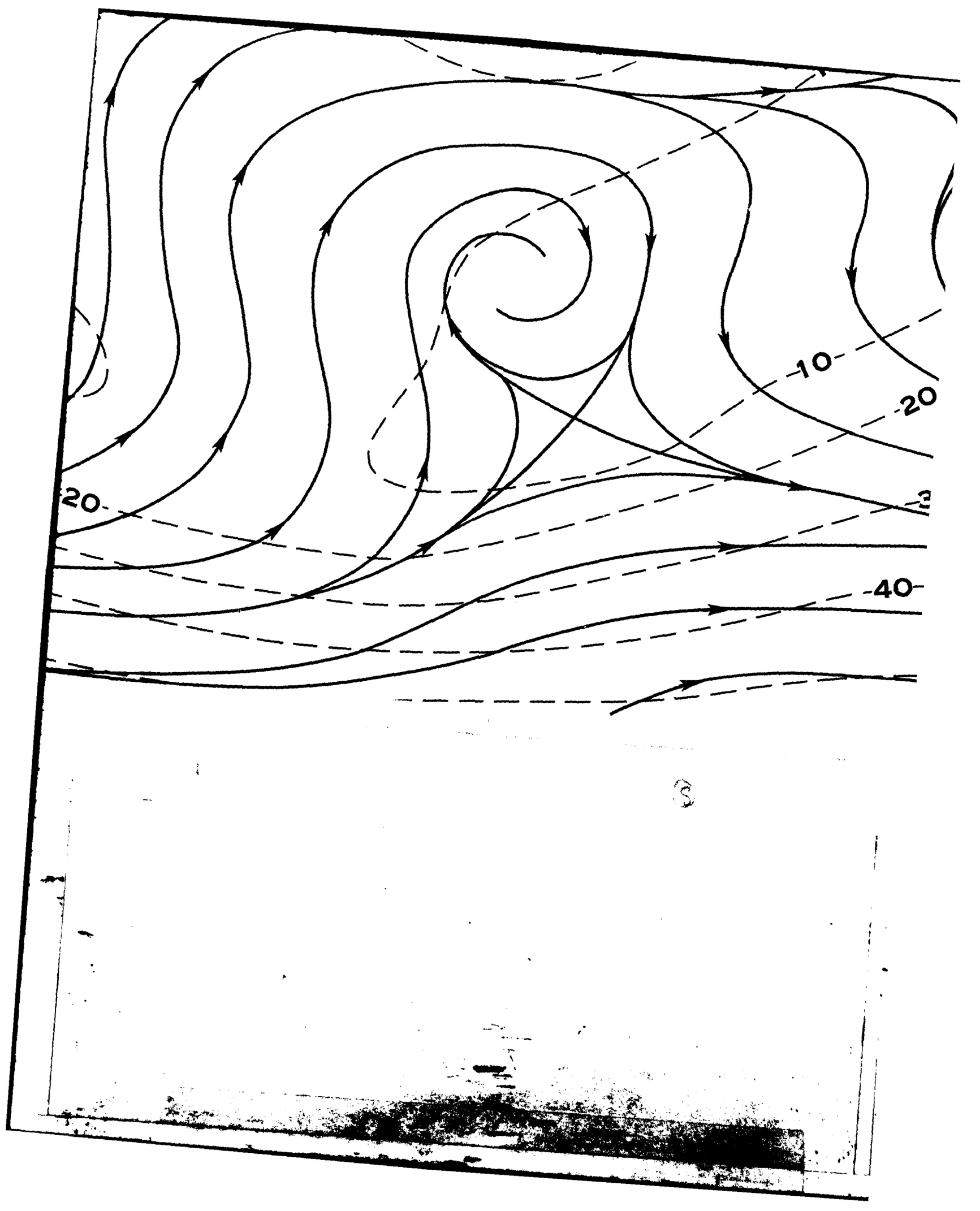

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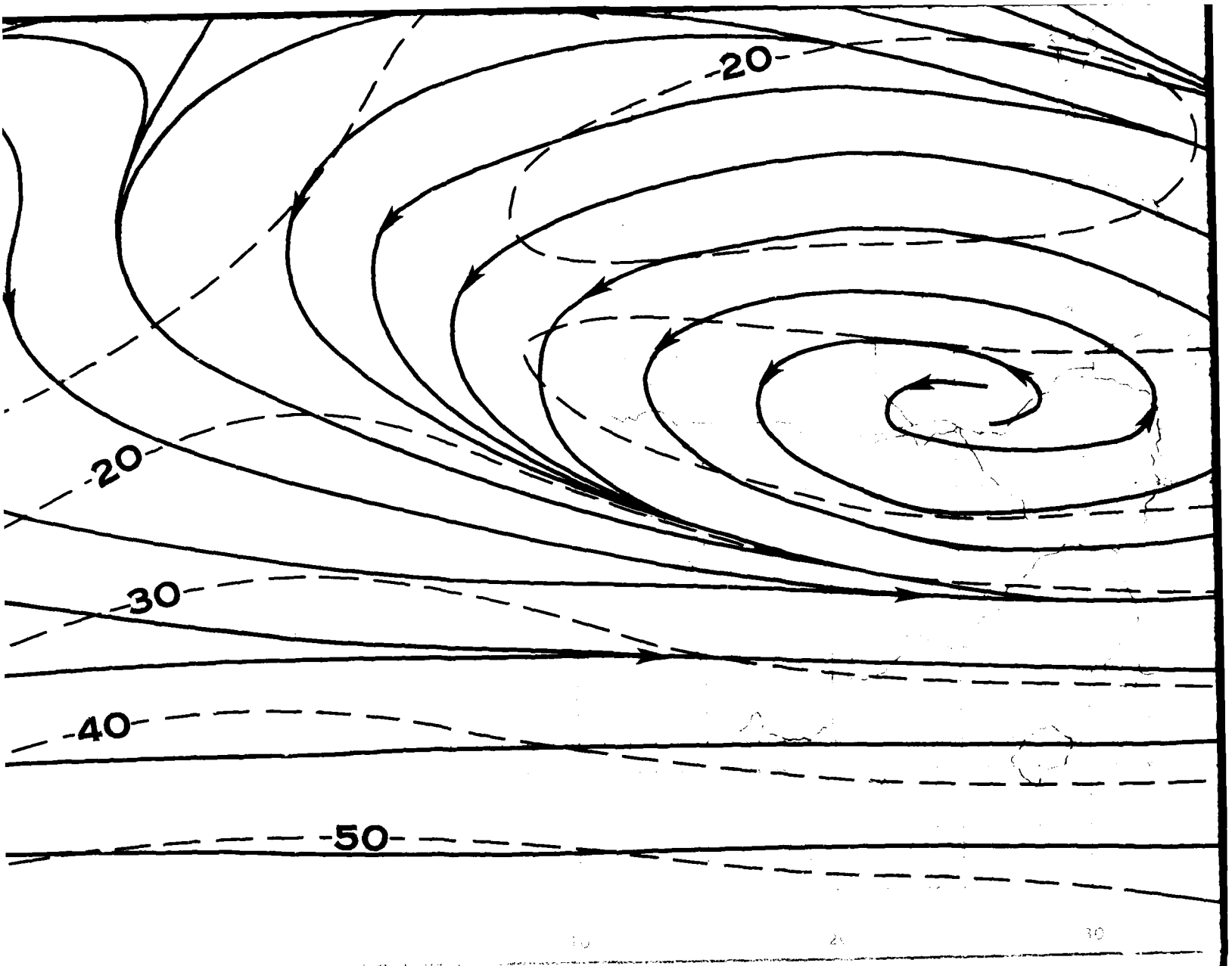


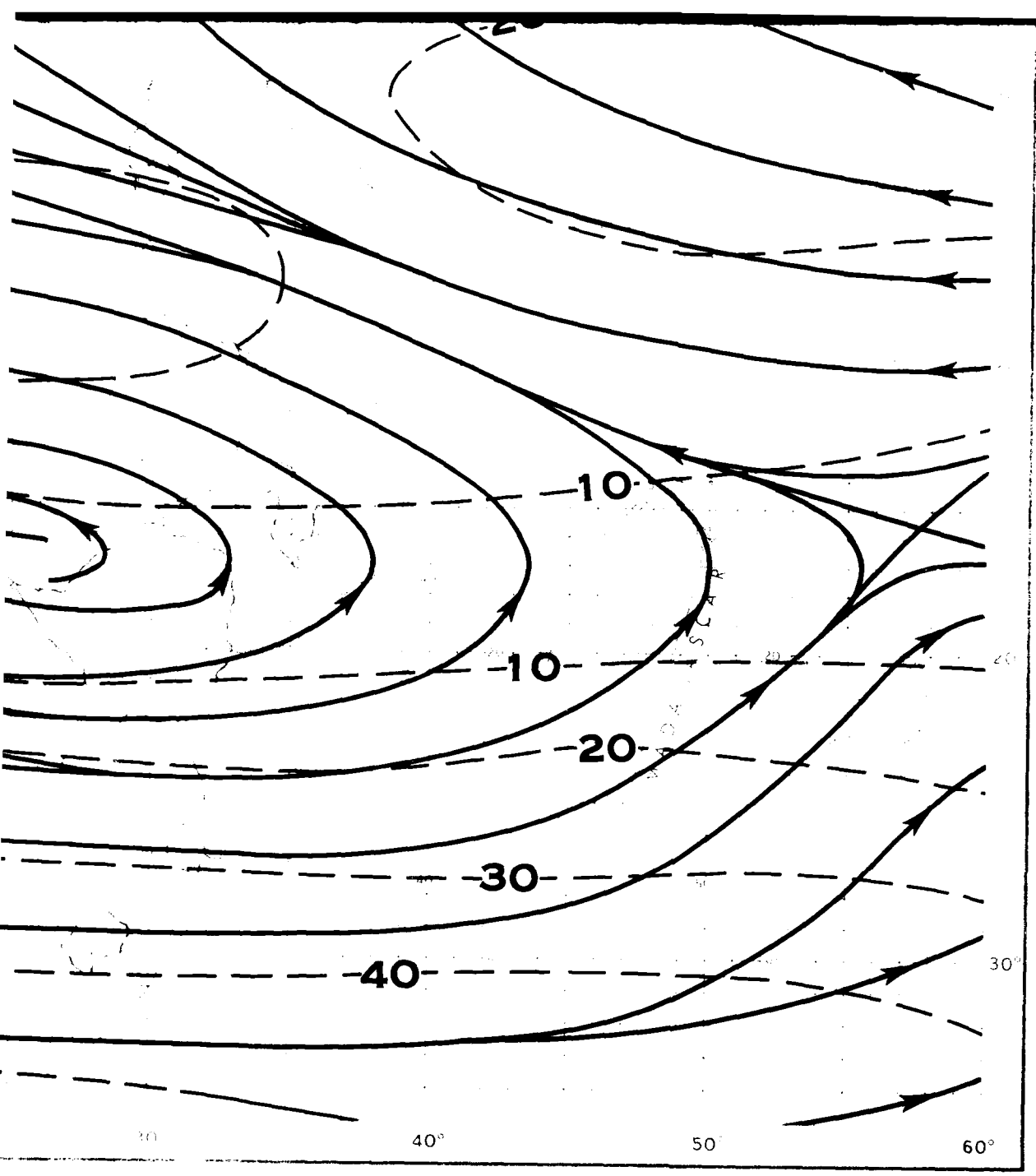

(b)




(7)

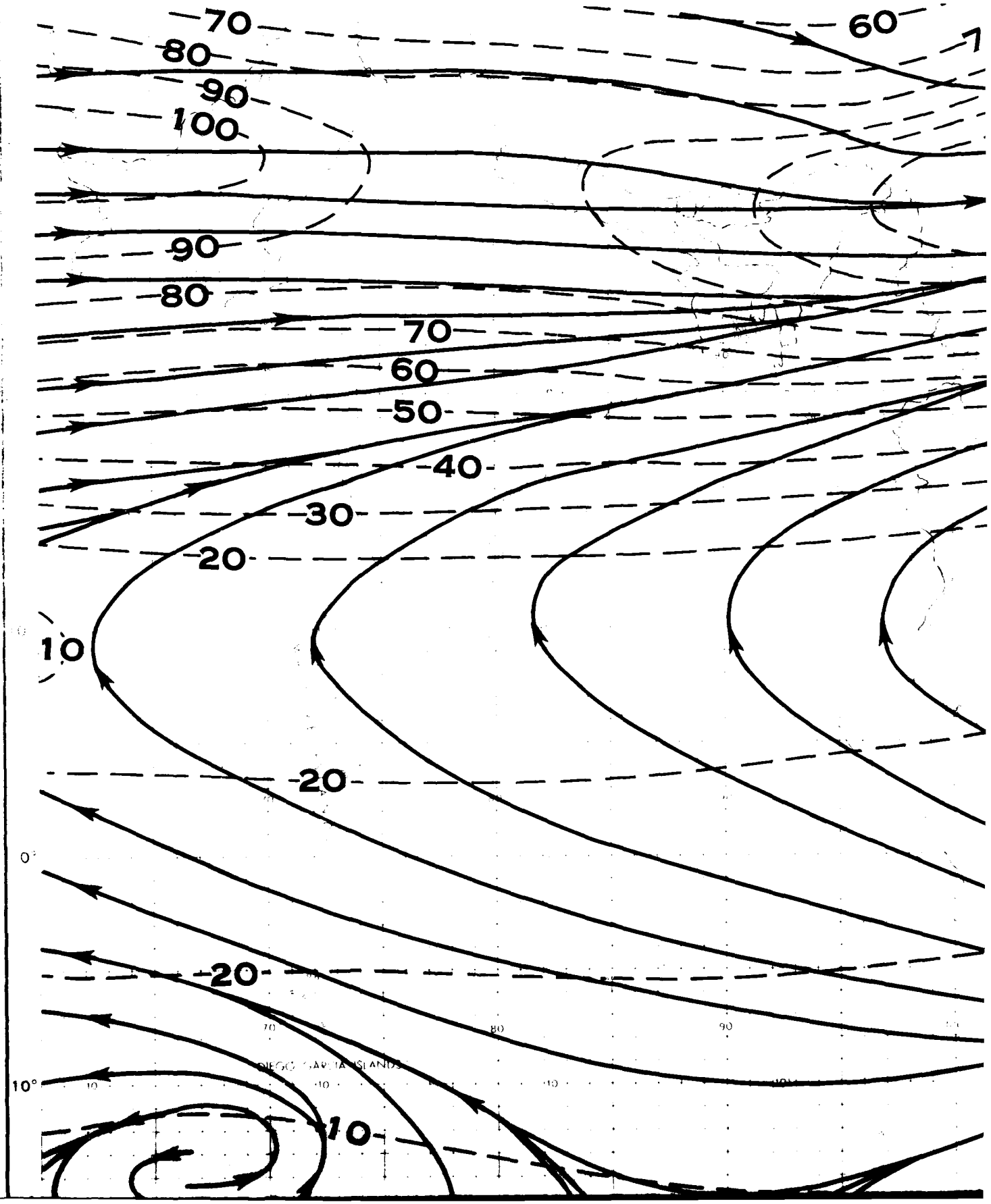

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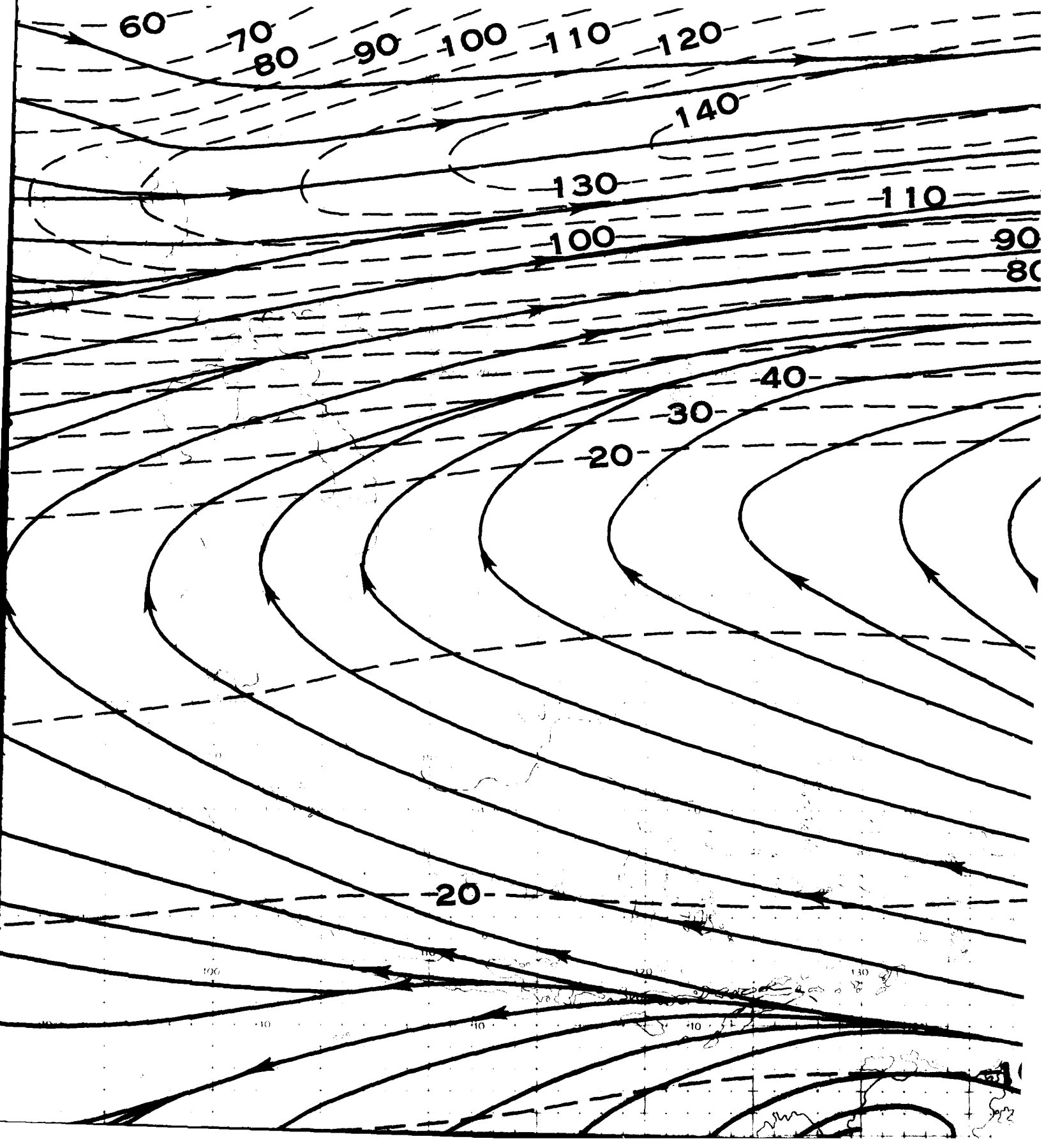



MULW-202W

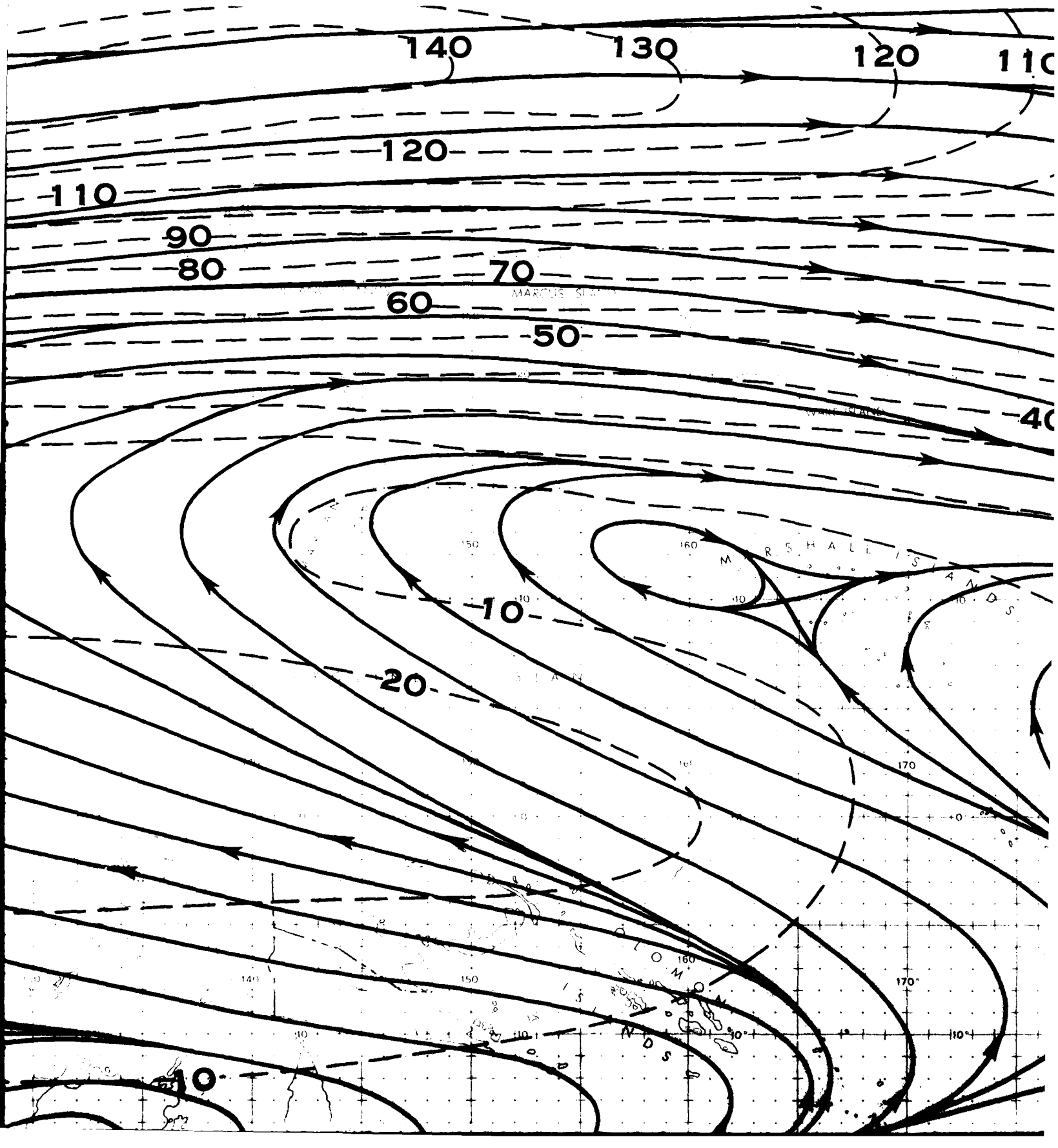
# ME



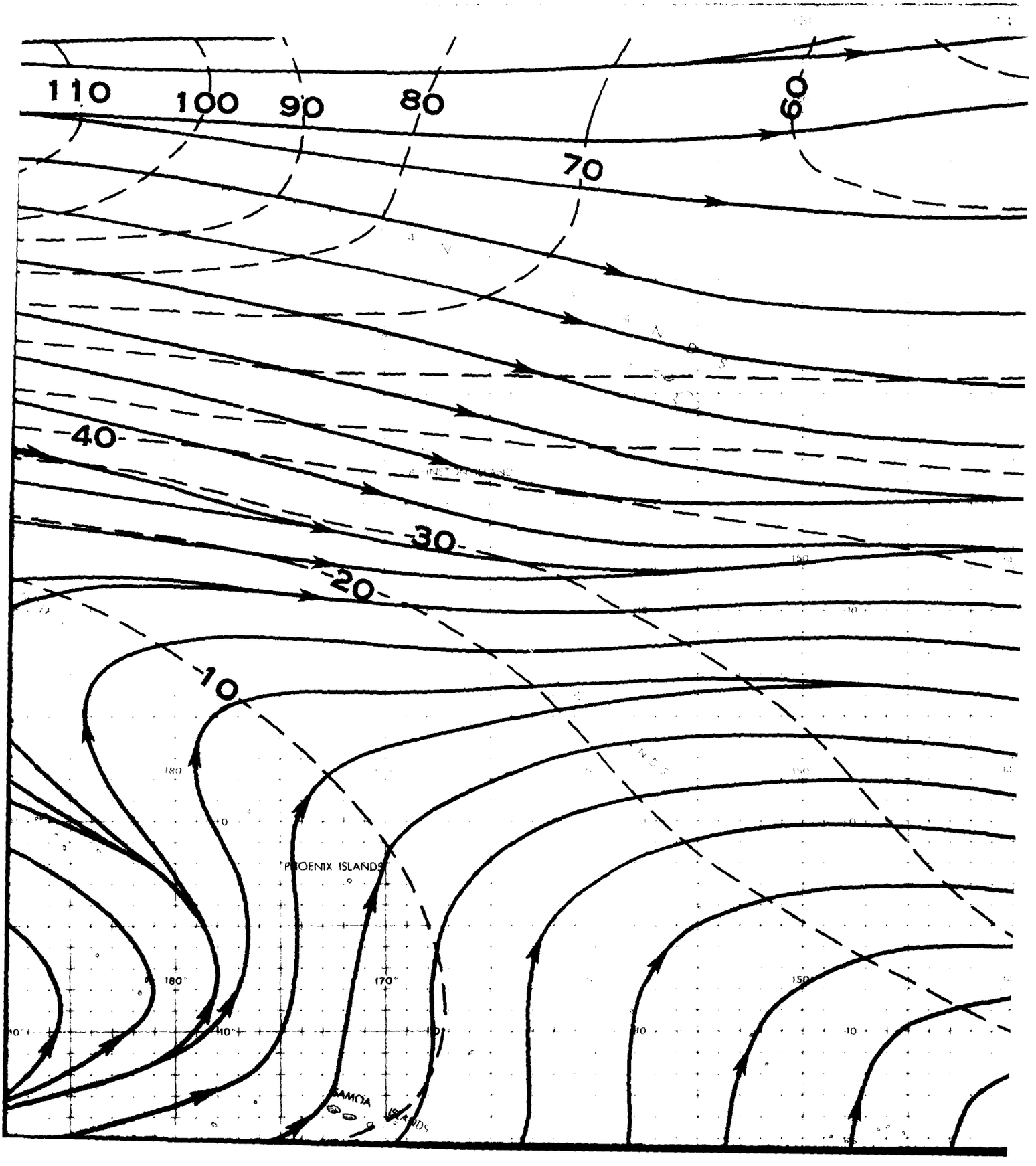
# MEAN UPPER LEVEL WINDS

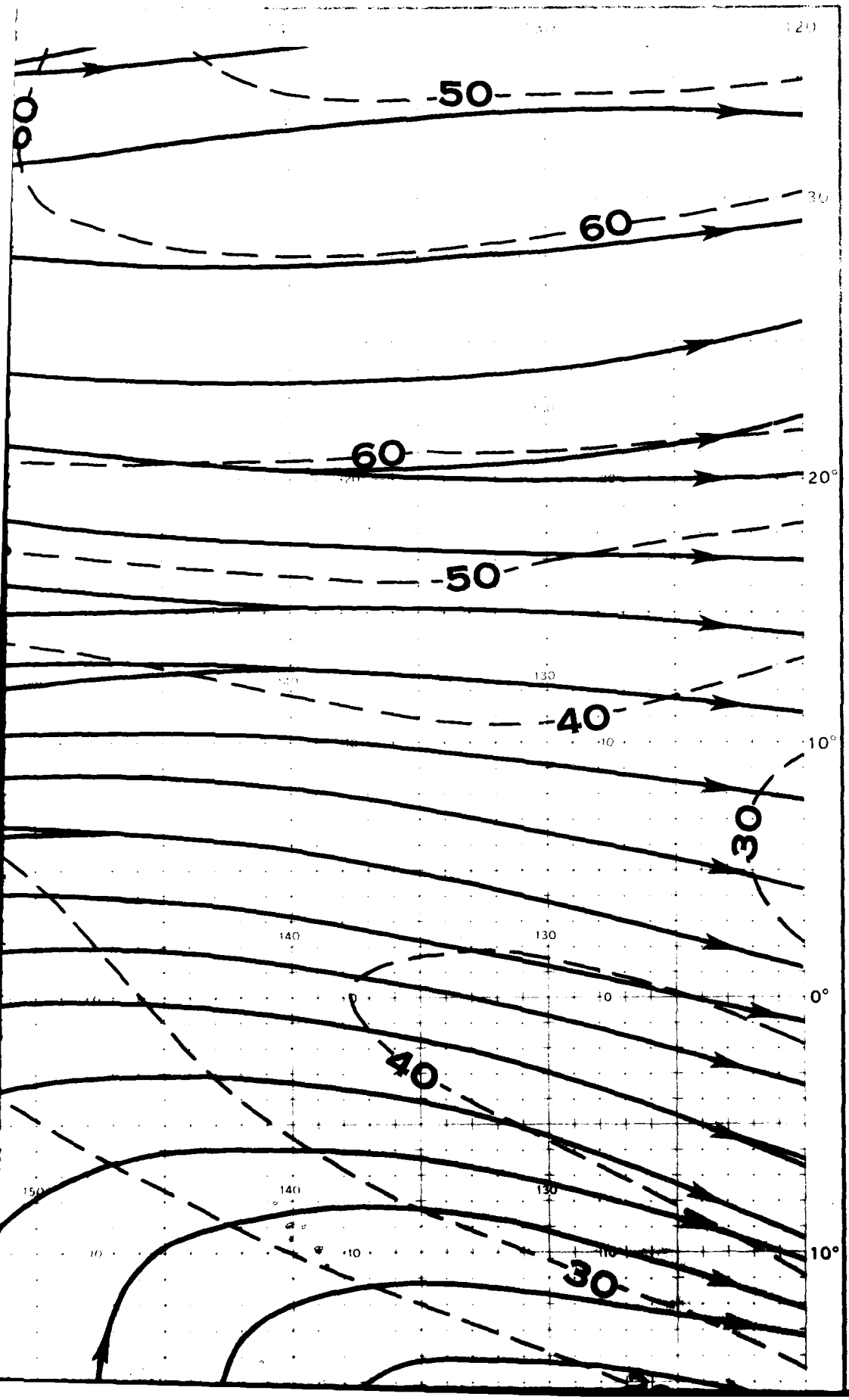


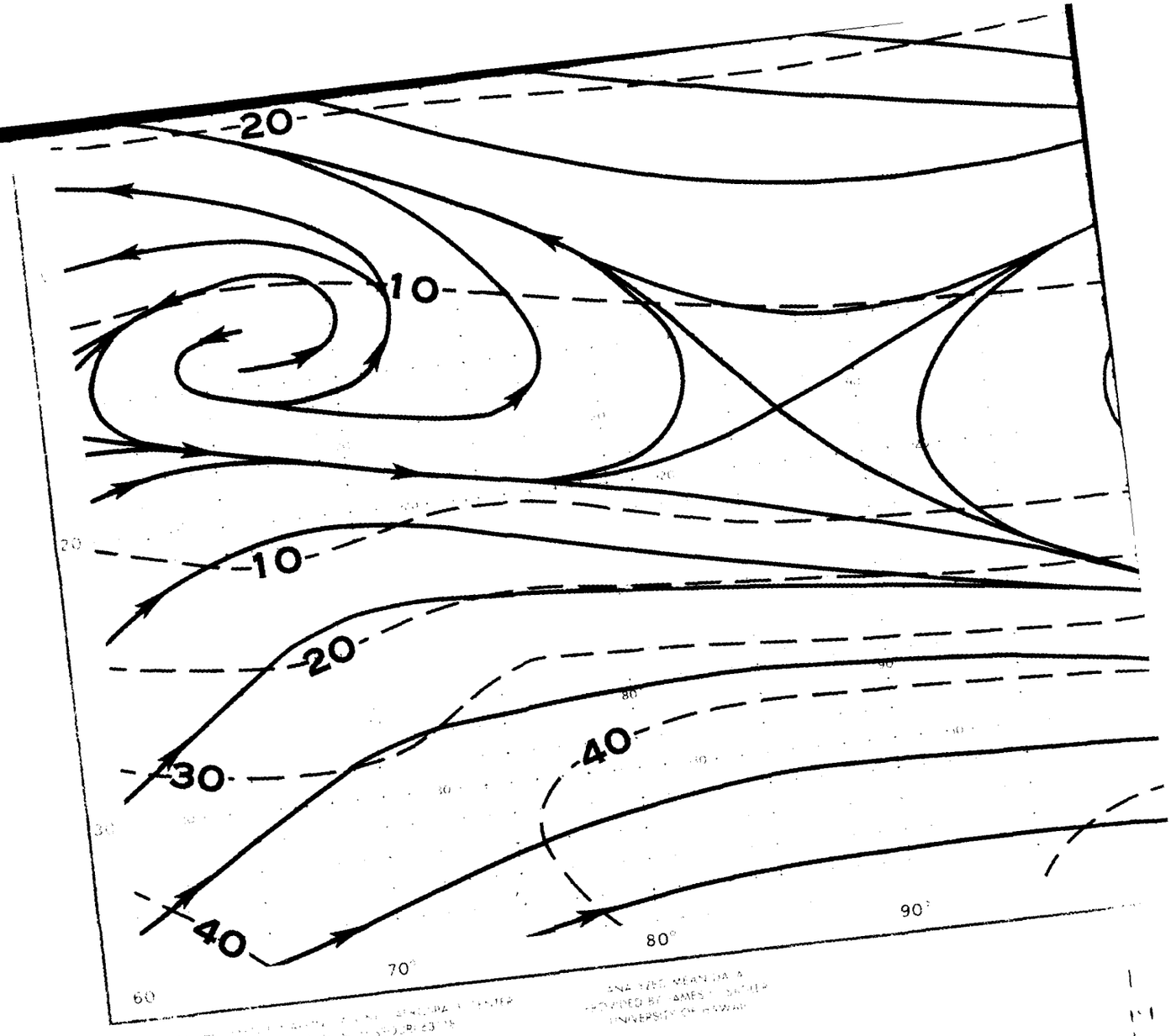
# WINDS over GLOBAL TROPICS – FE

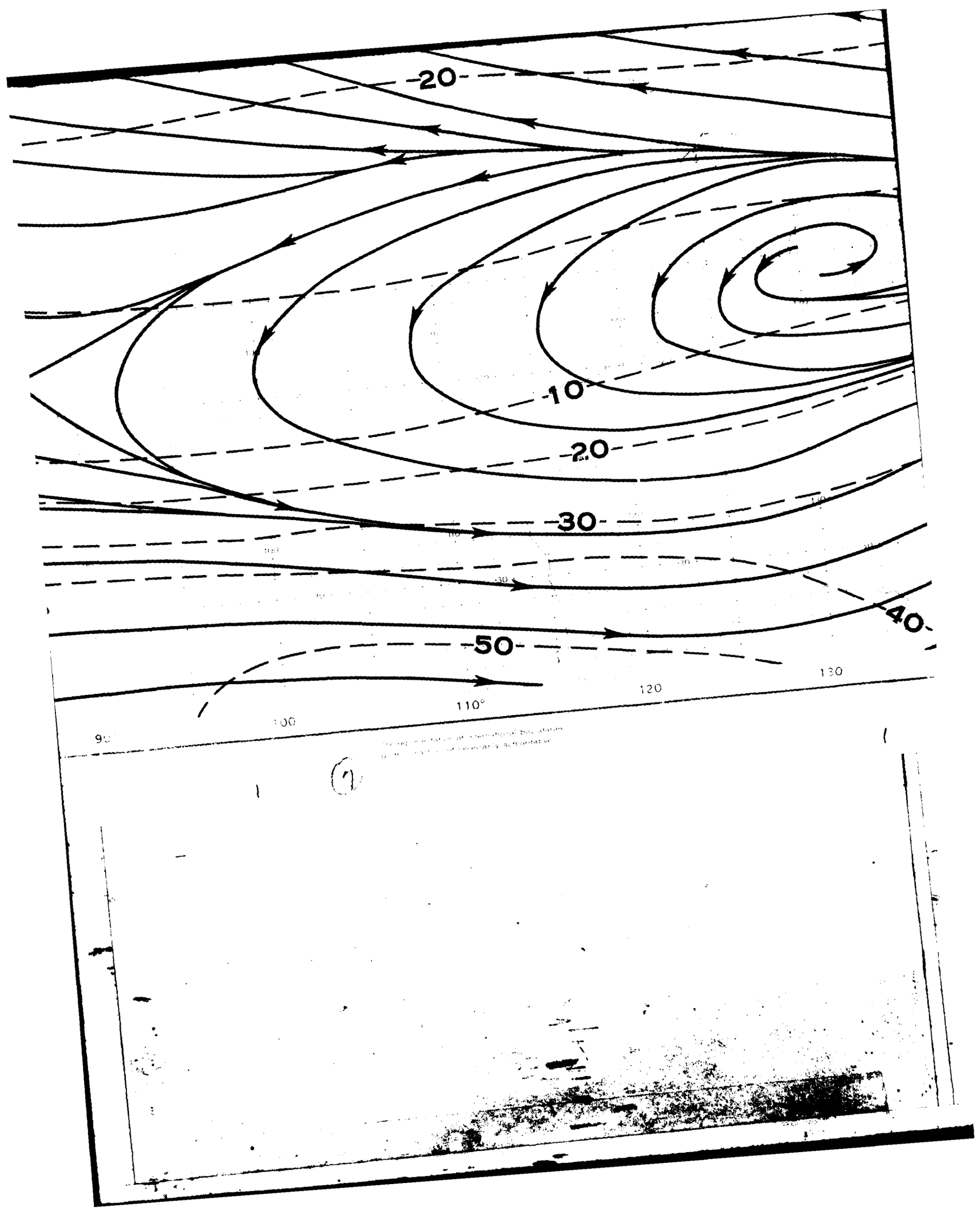


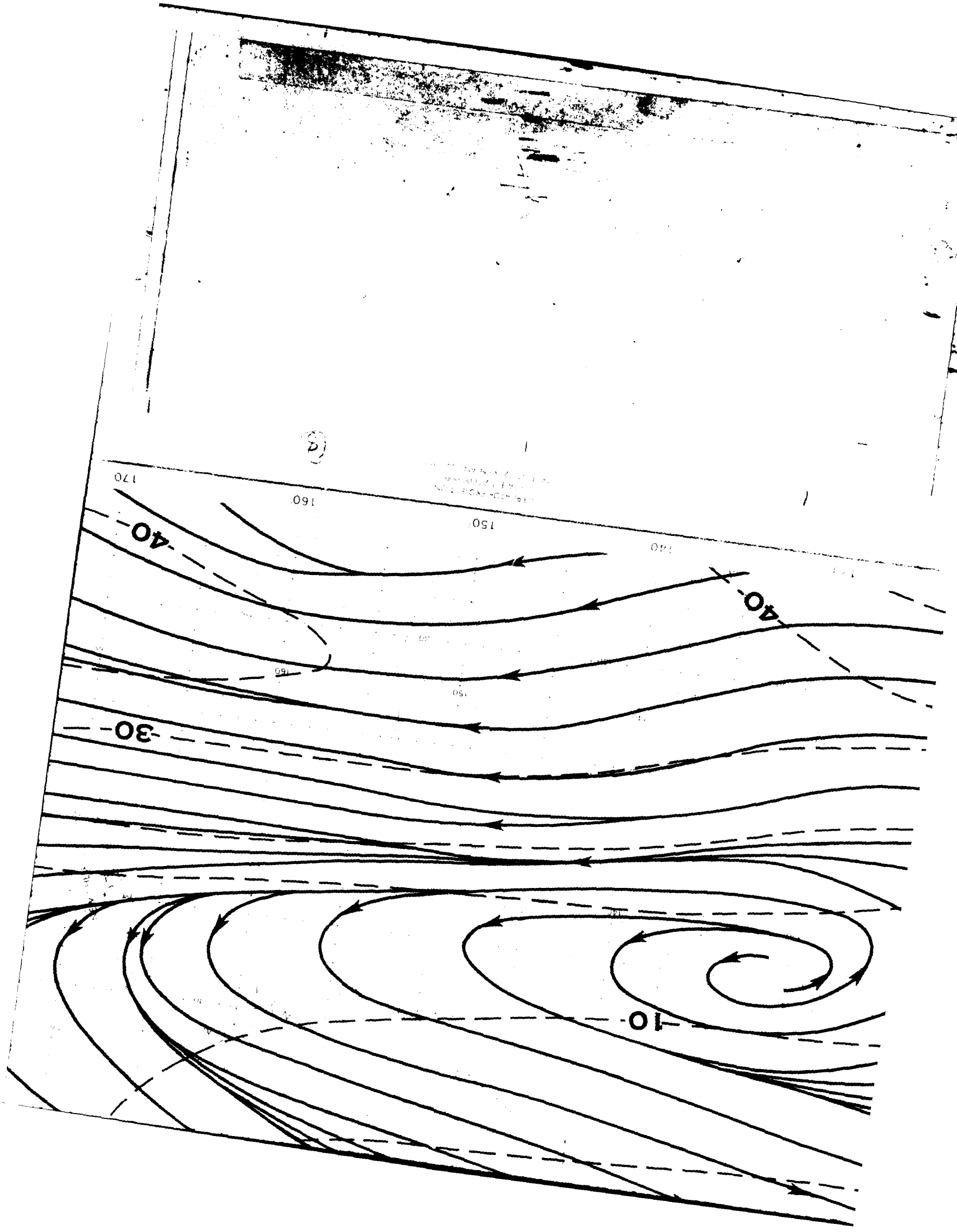
# FEBRUARY 200 mb

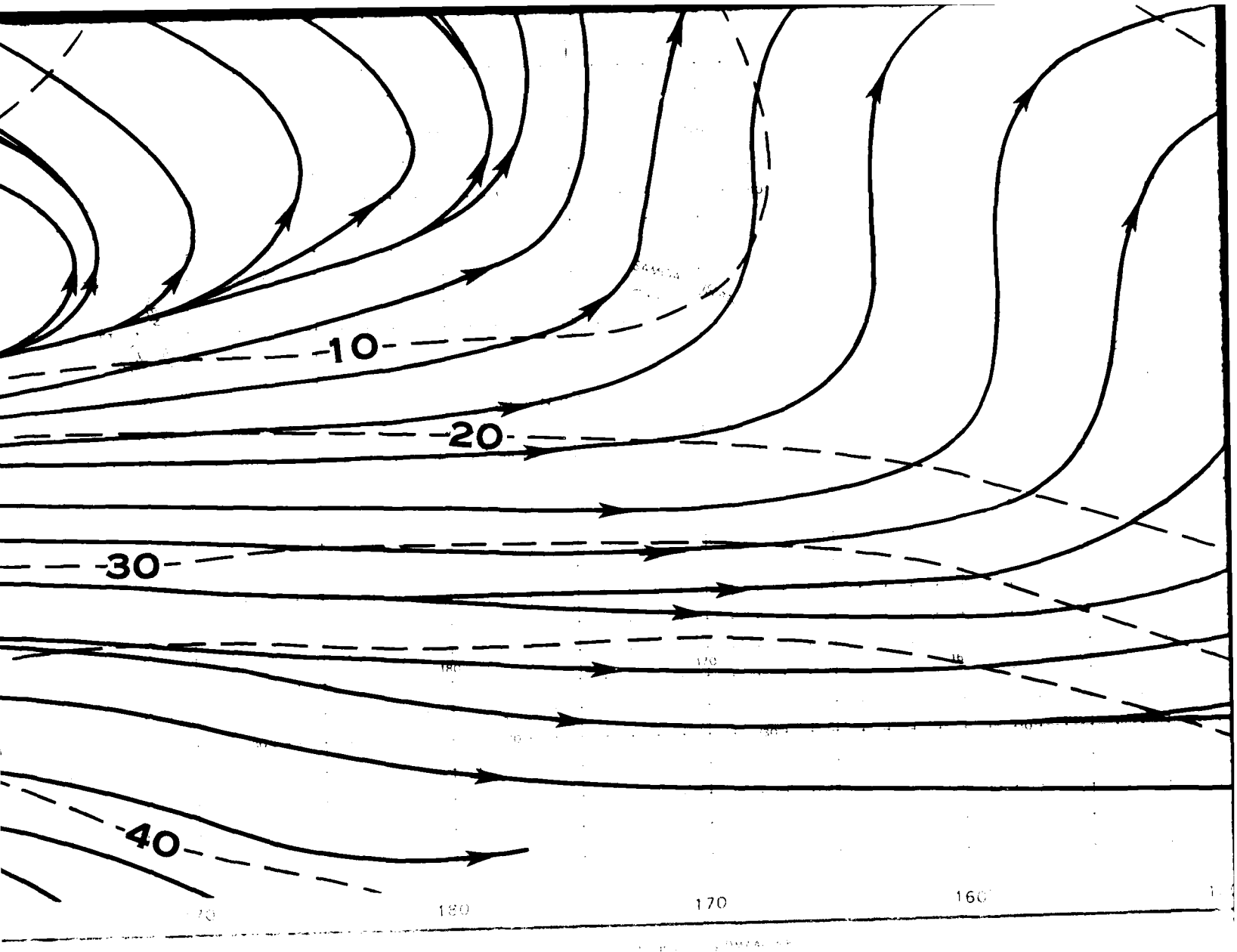



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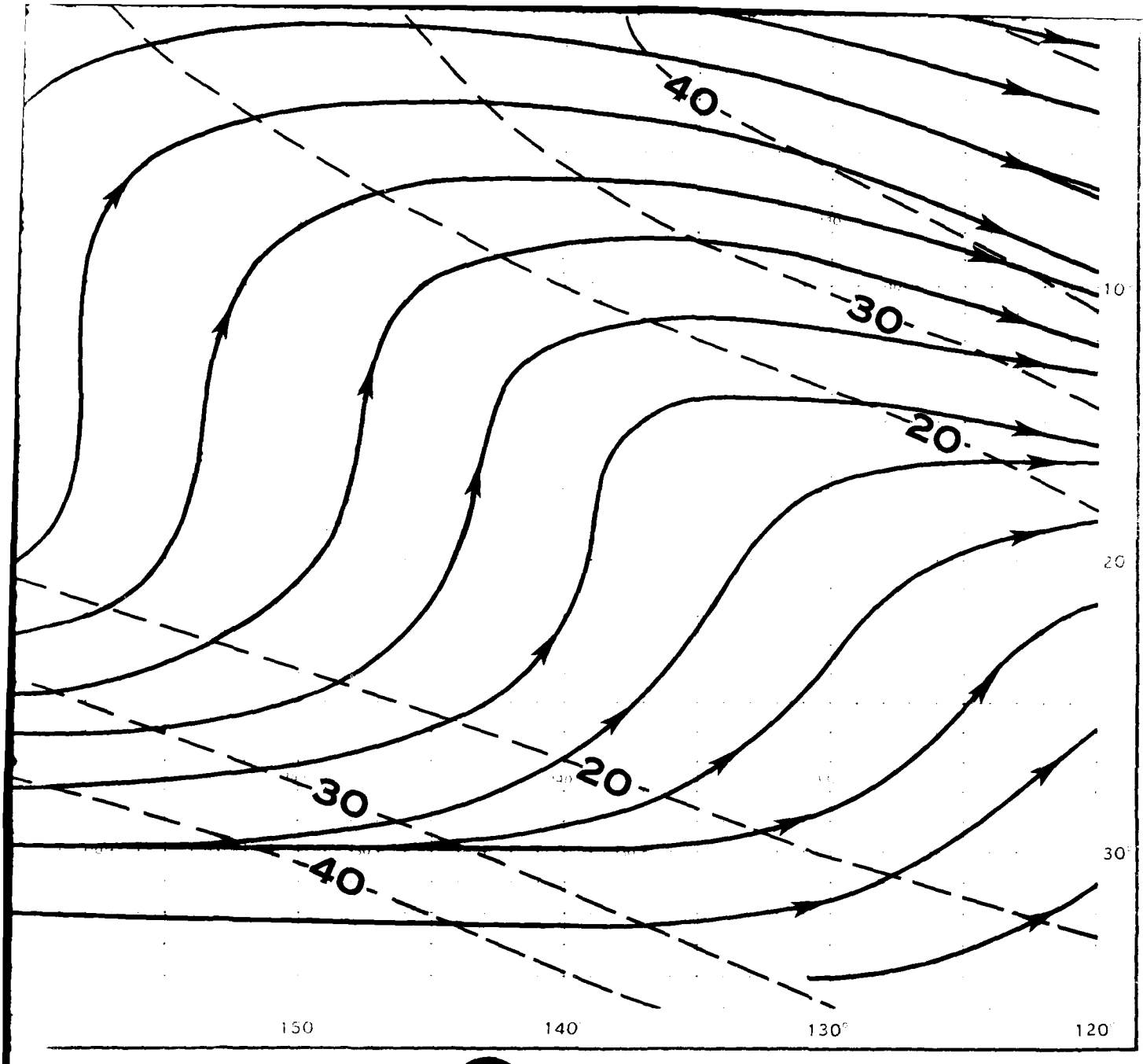

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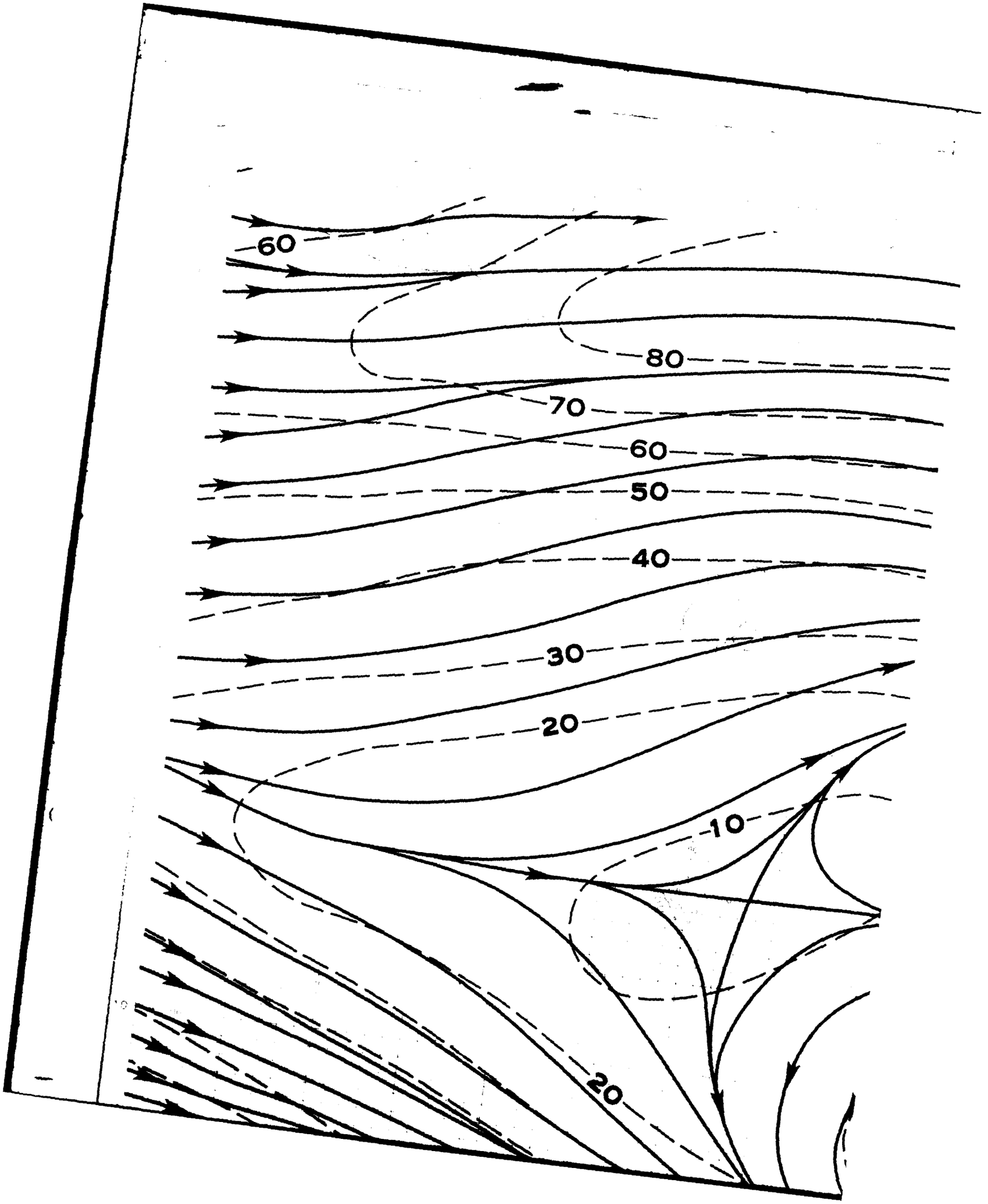

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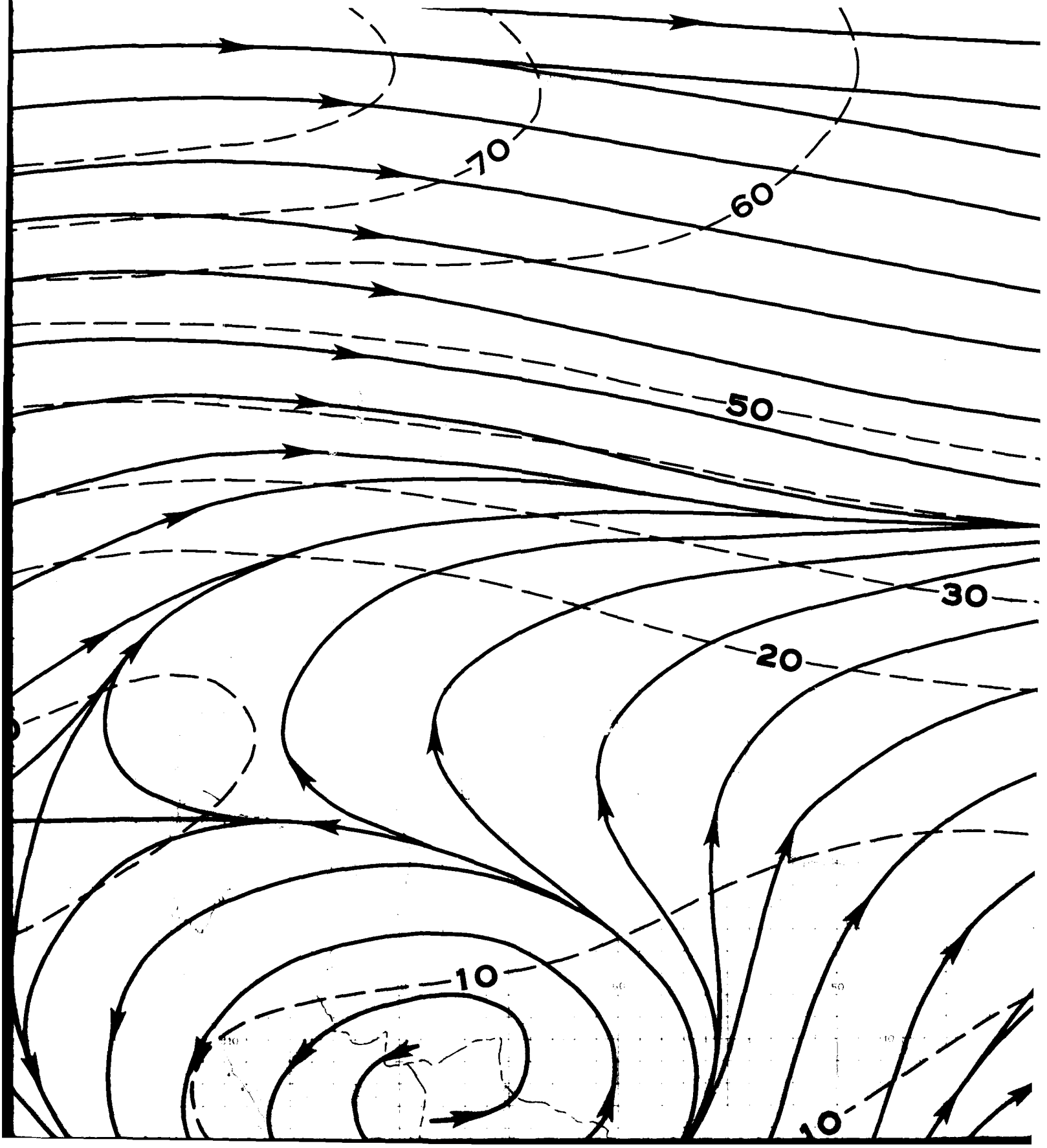

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MULW-202E

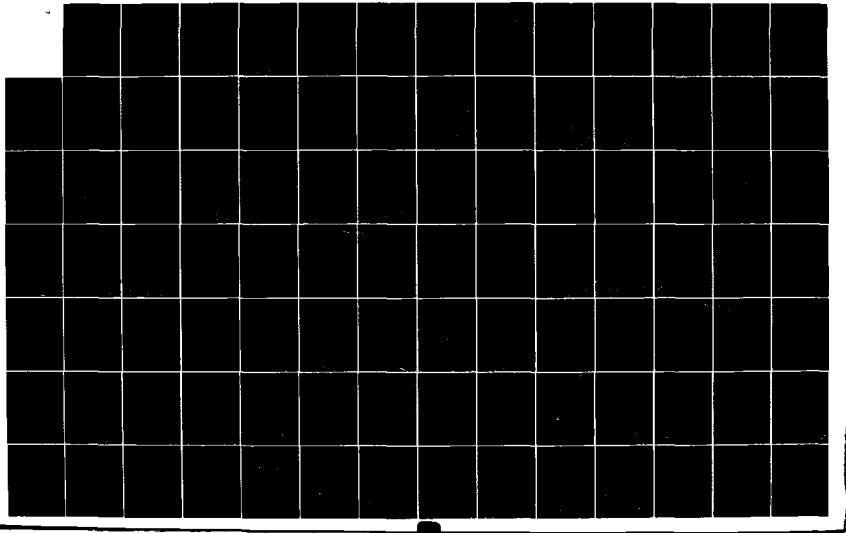

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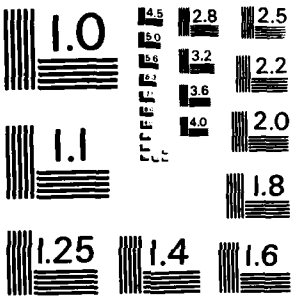
# MEAN UPPER LEVEL WIN



AD-A141 484 MEAN UPPER TROPOSPHERIC FLOW OVER THE GLOBAL TROPICS VOLUME 2(U) AIR WEATHER SERVICE SCOTT AFB IL J C SADLER ET AL. JAN 84 AWS/TR-83/002-VOL-2 4/6

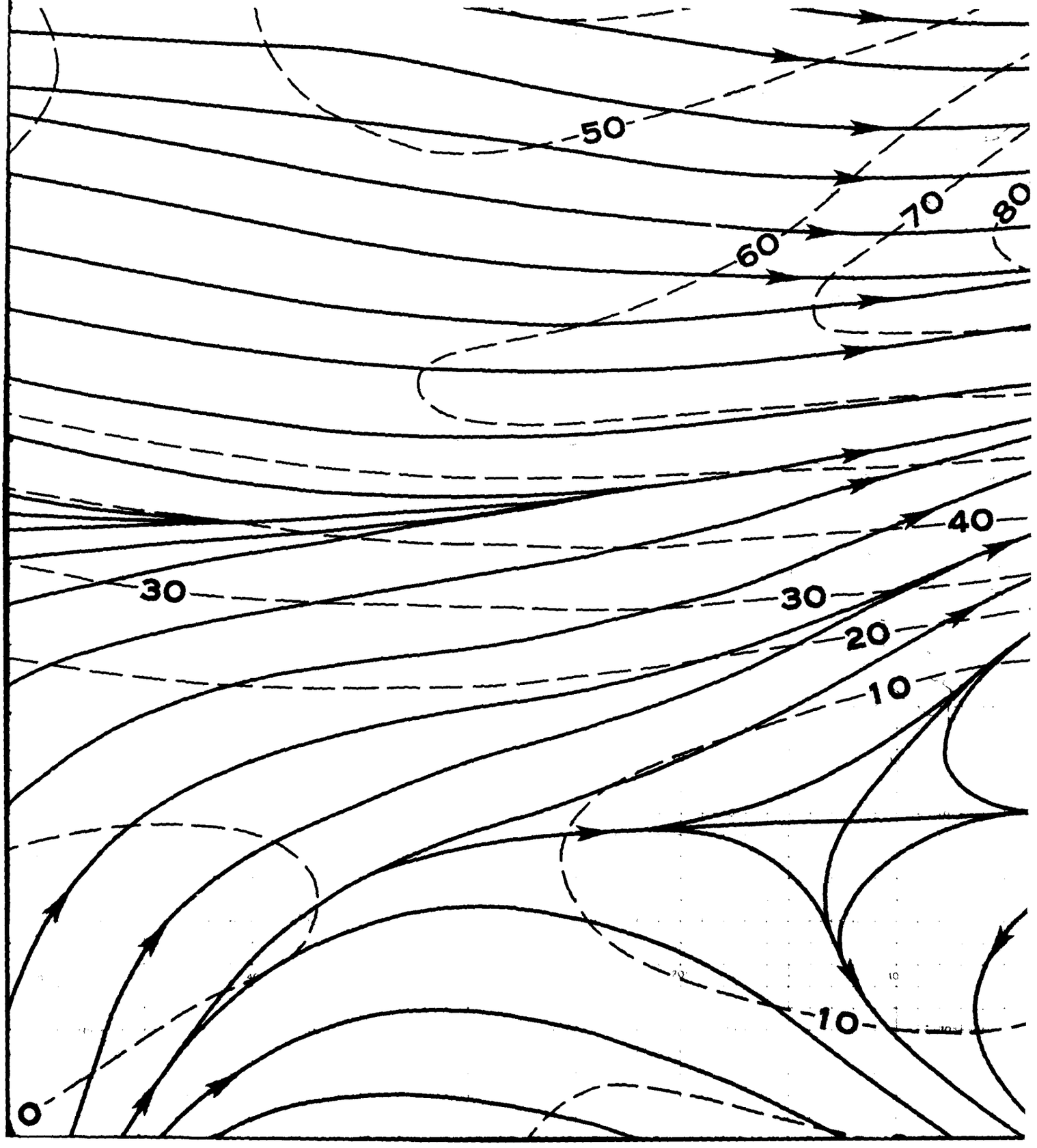
UNCLASSIFIED SBI-AD-E850 890 F/G 4/2 NL

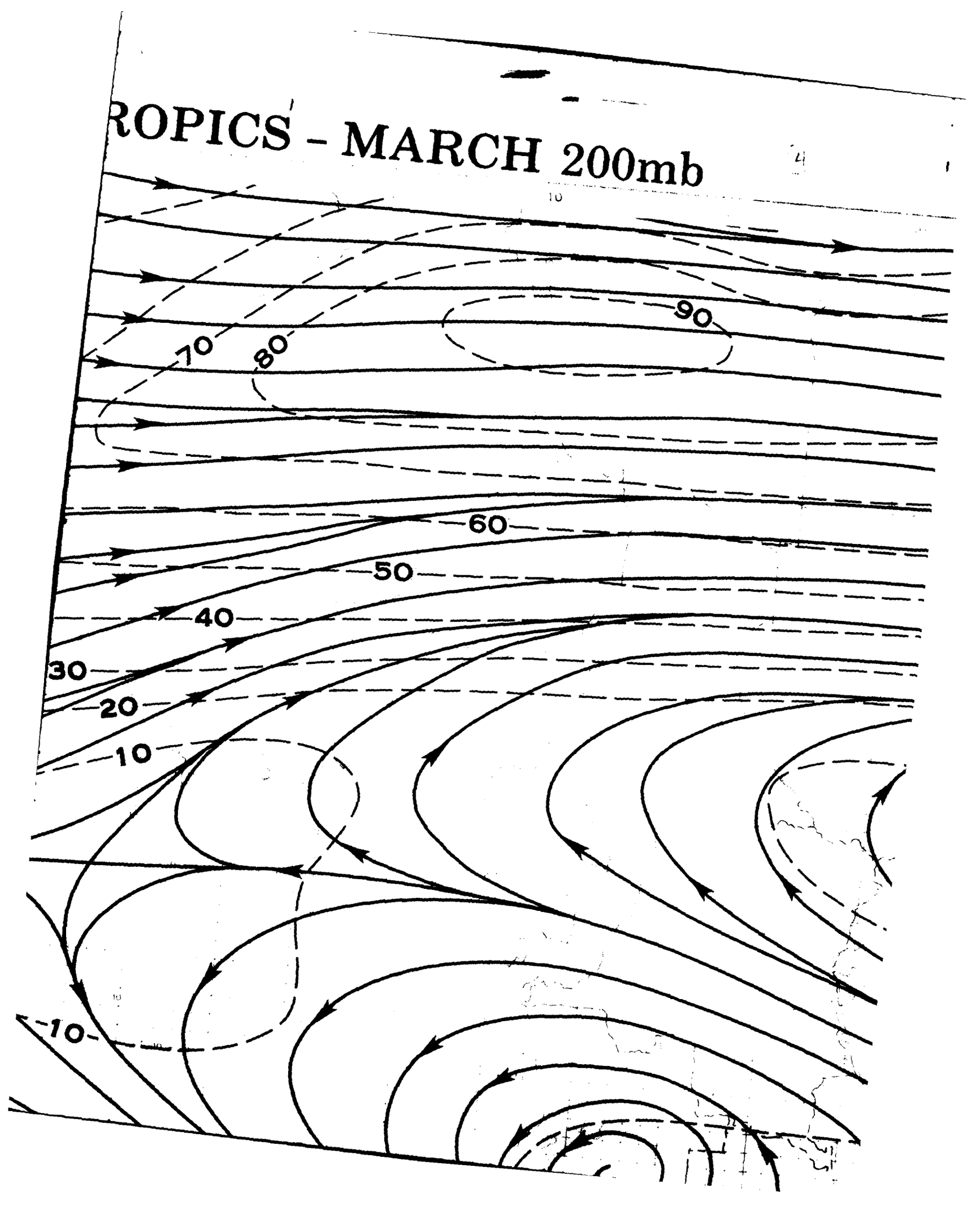


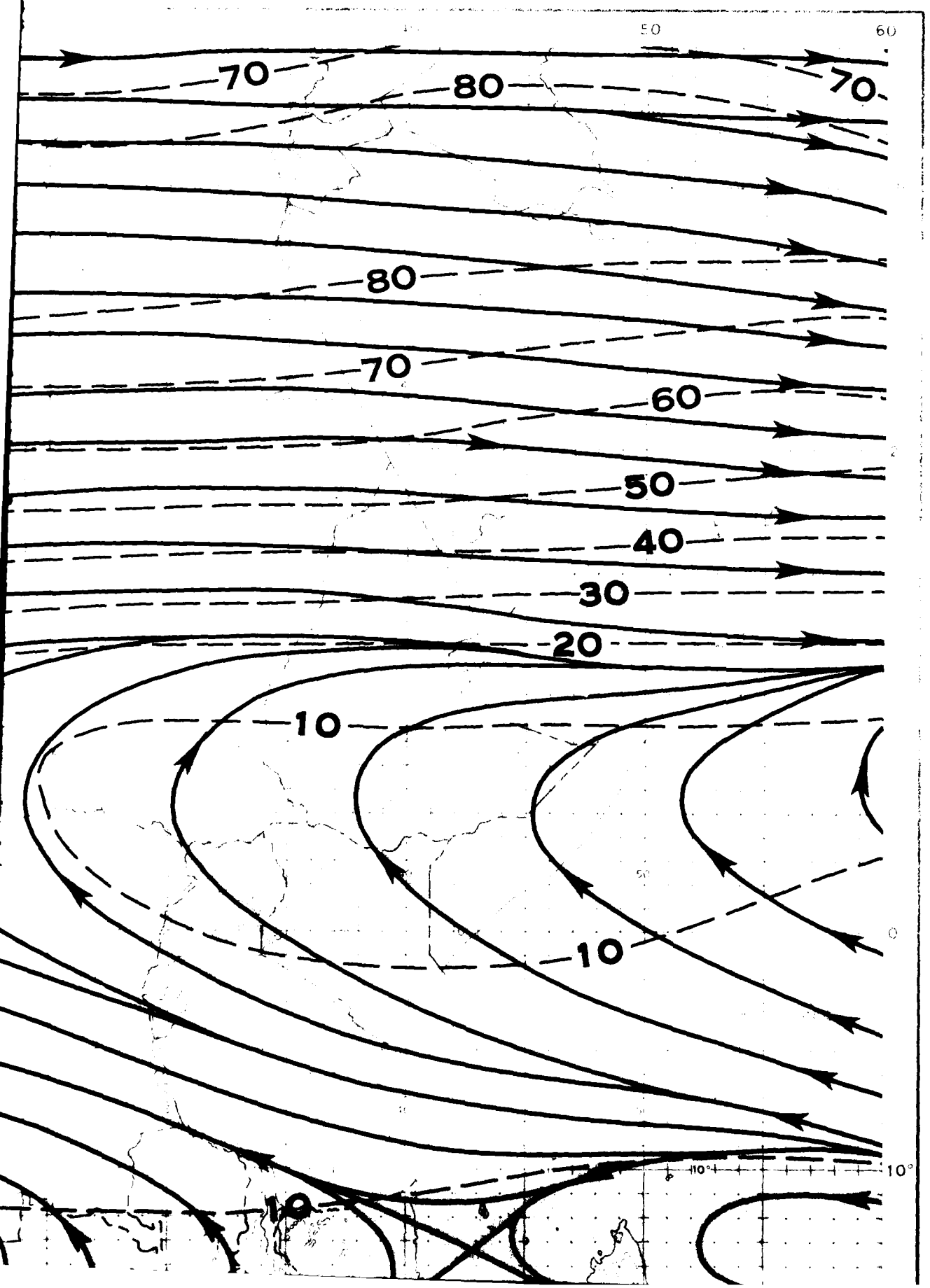


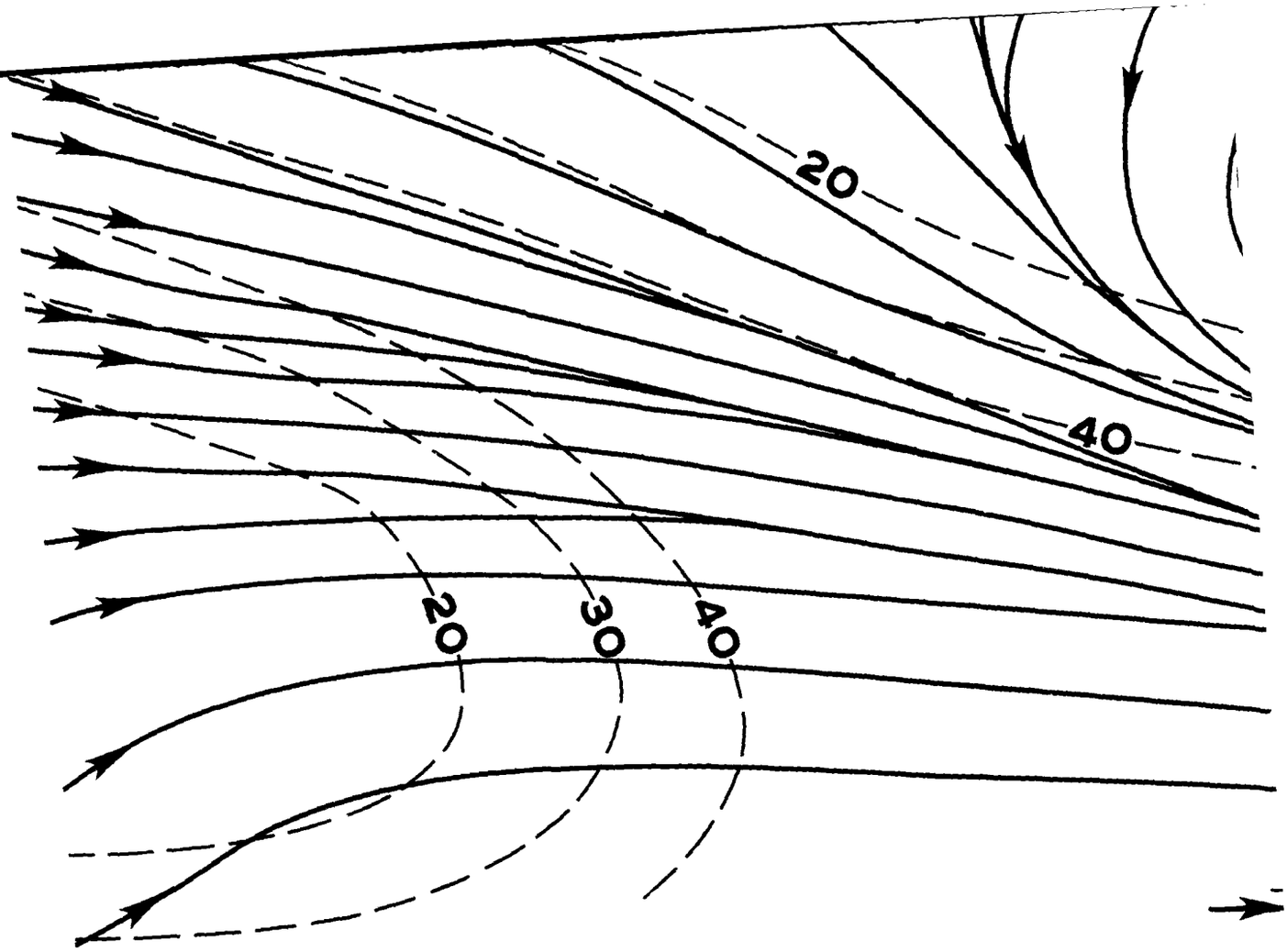

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

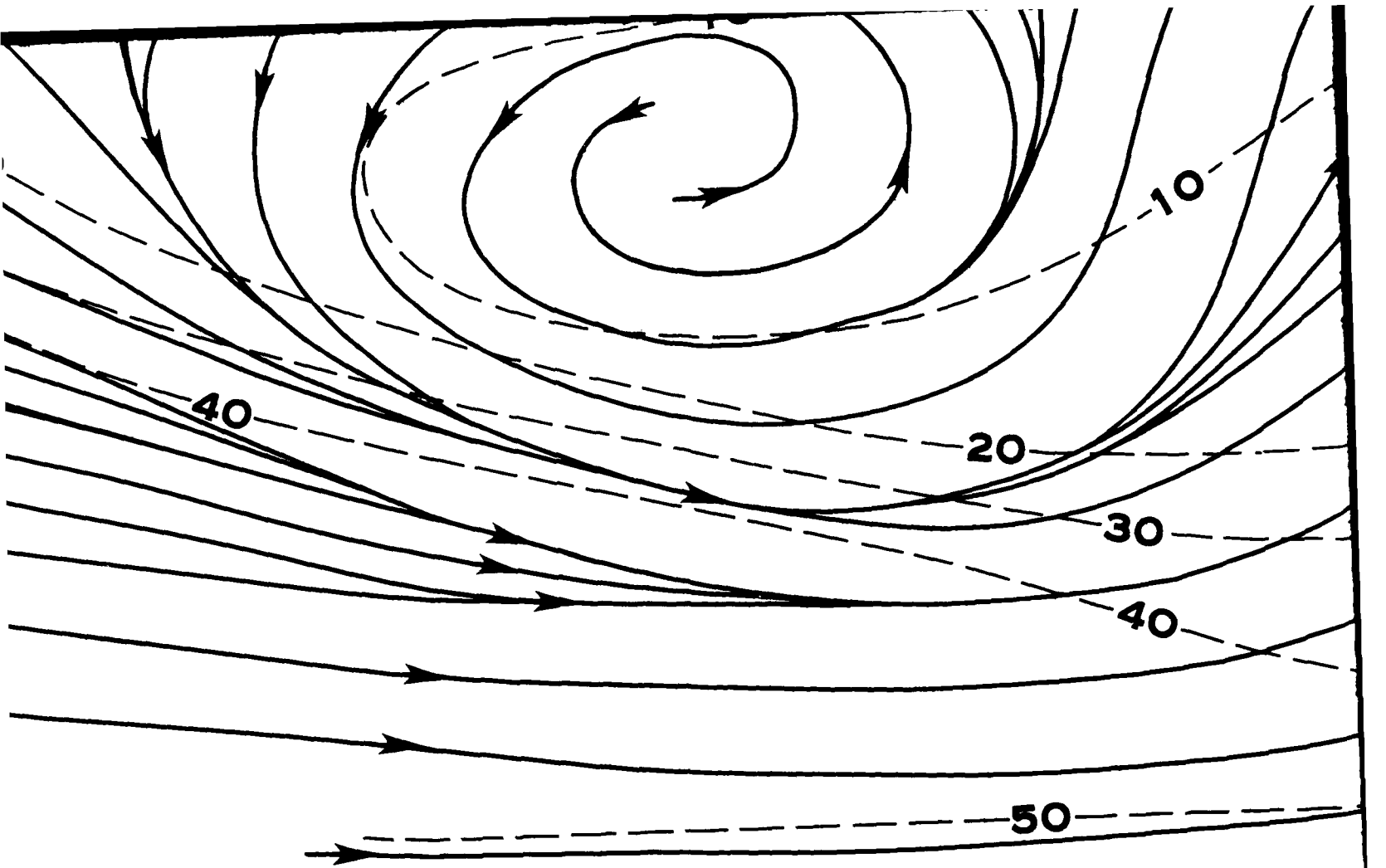
# EL WINDS over GLOBAL TROPICS

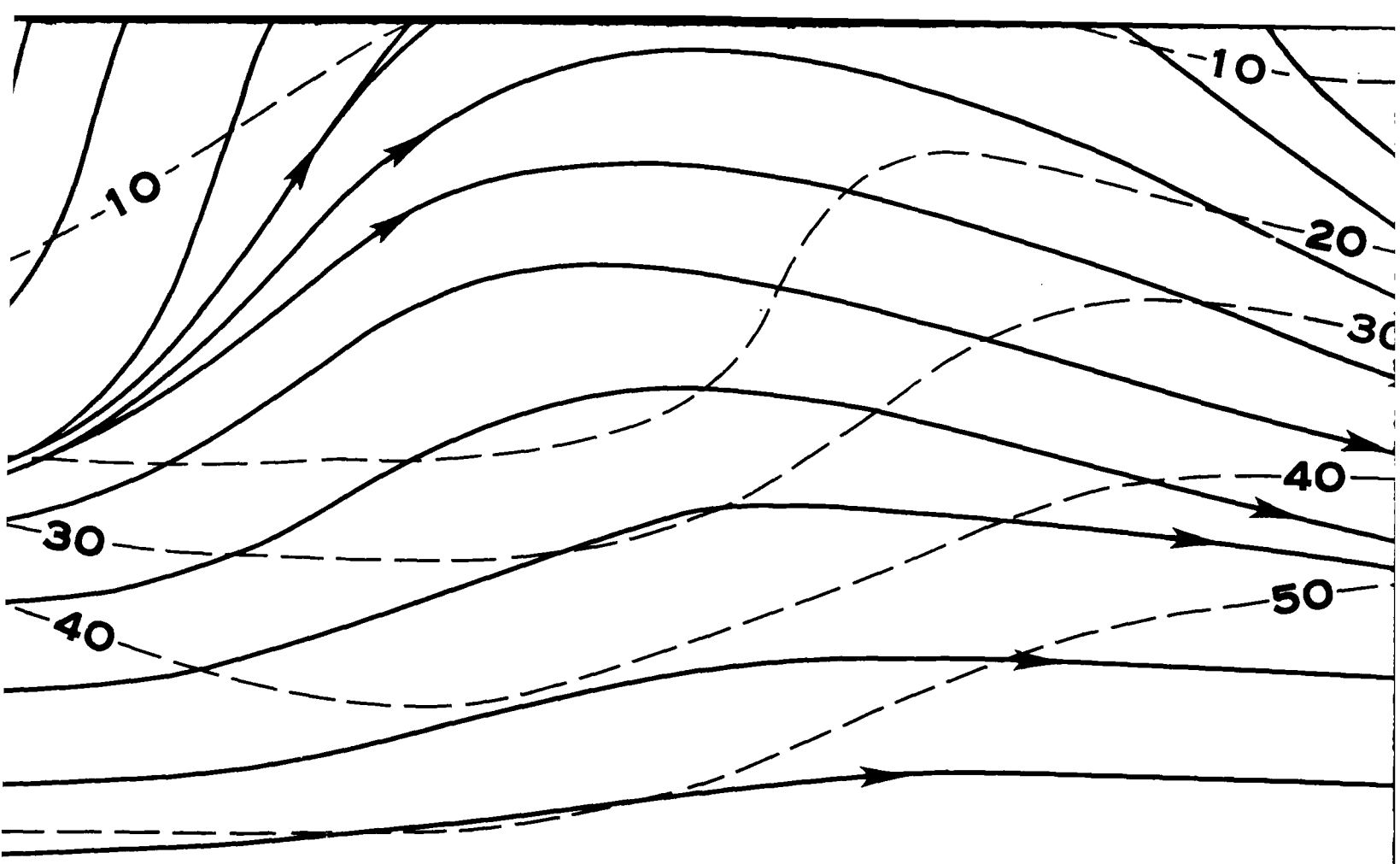


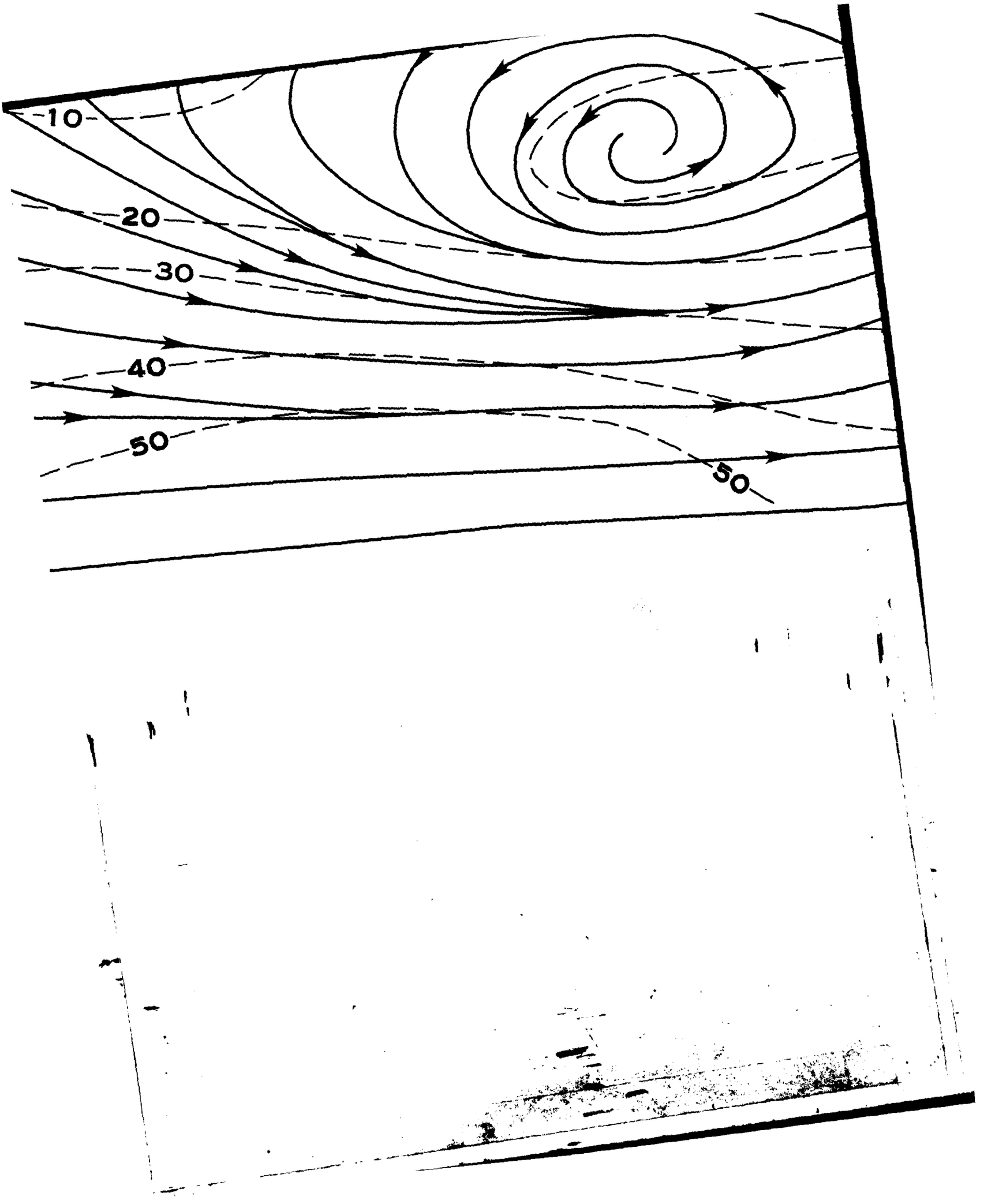

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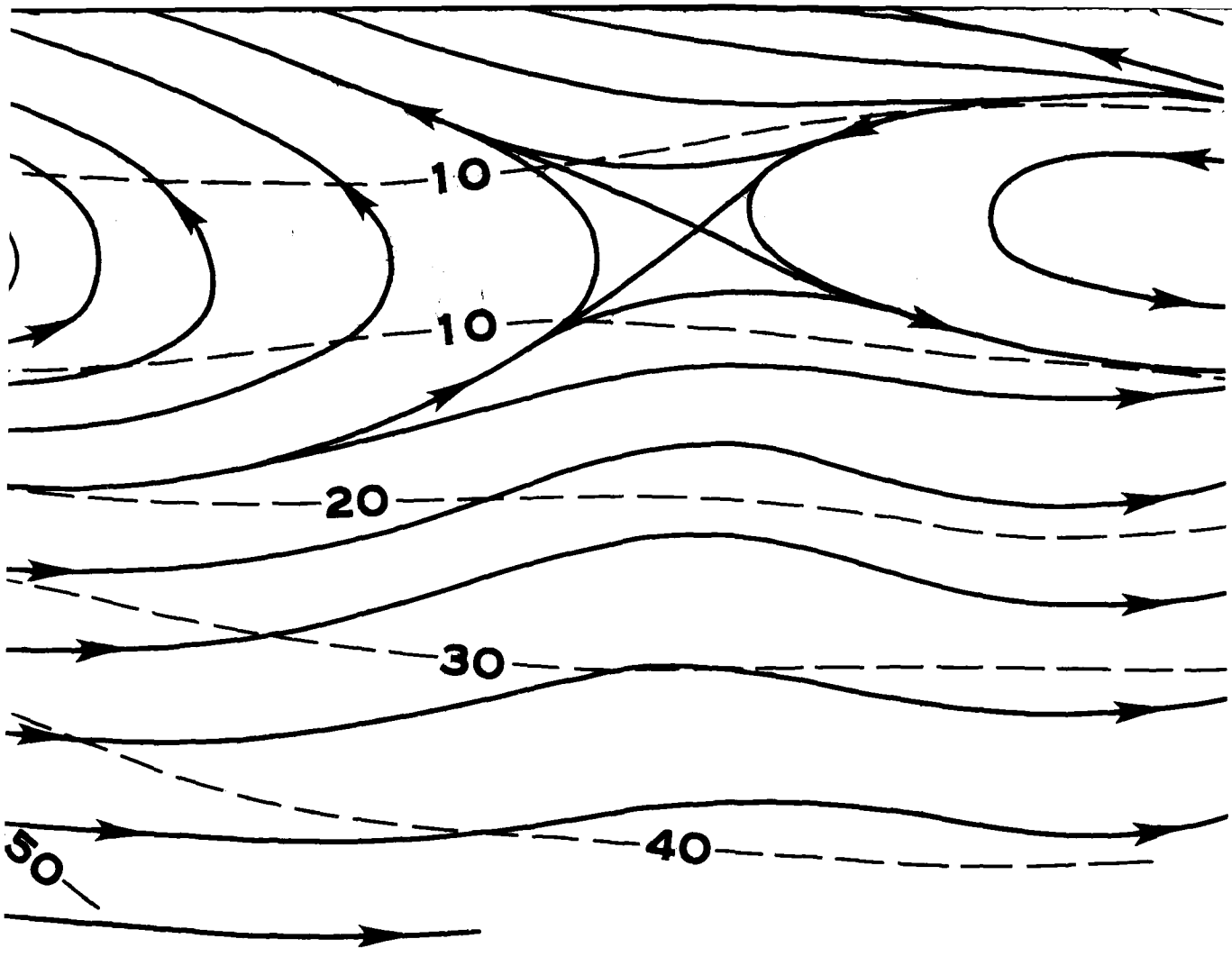

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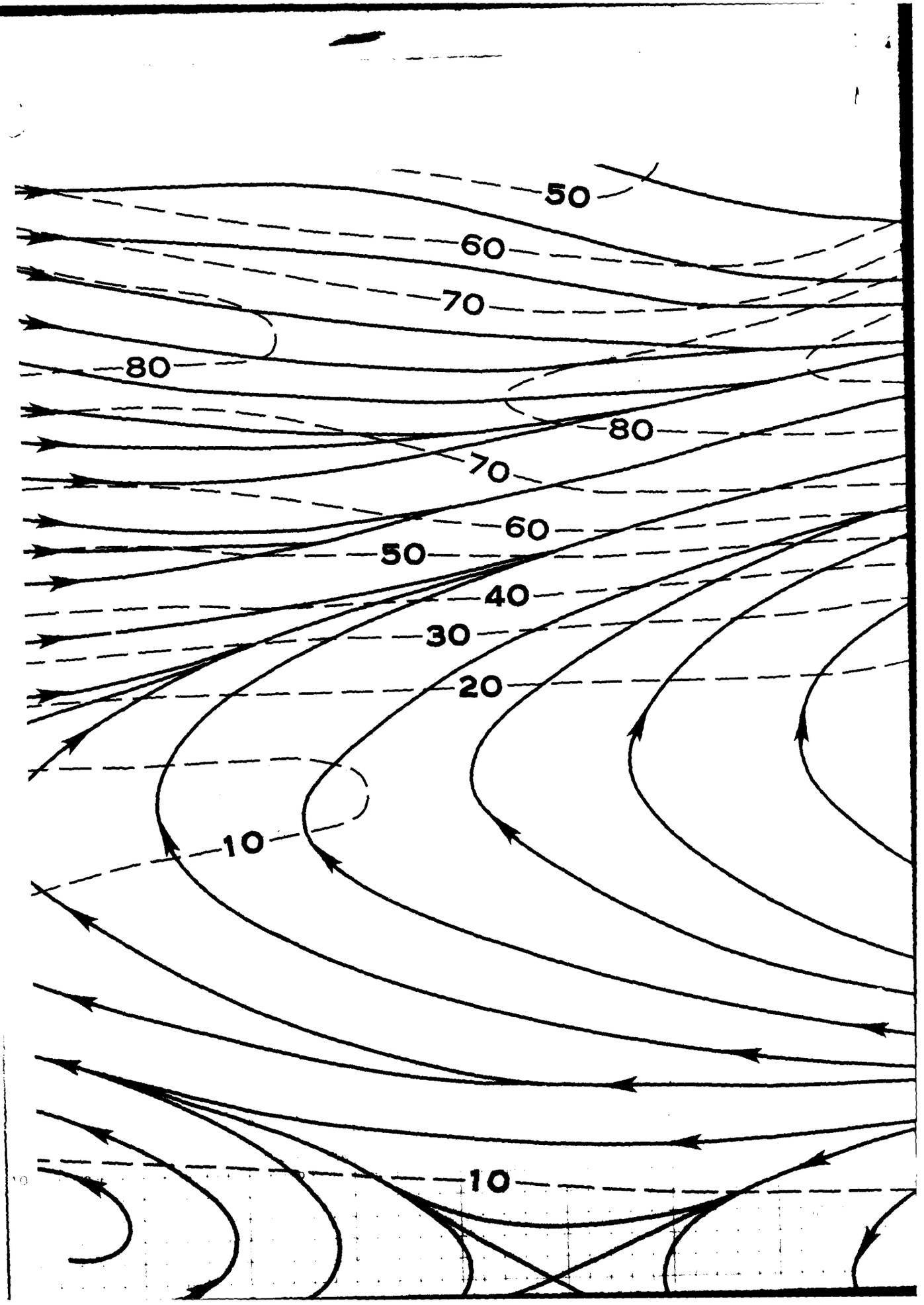

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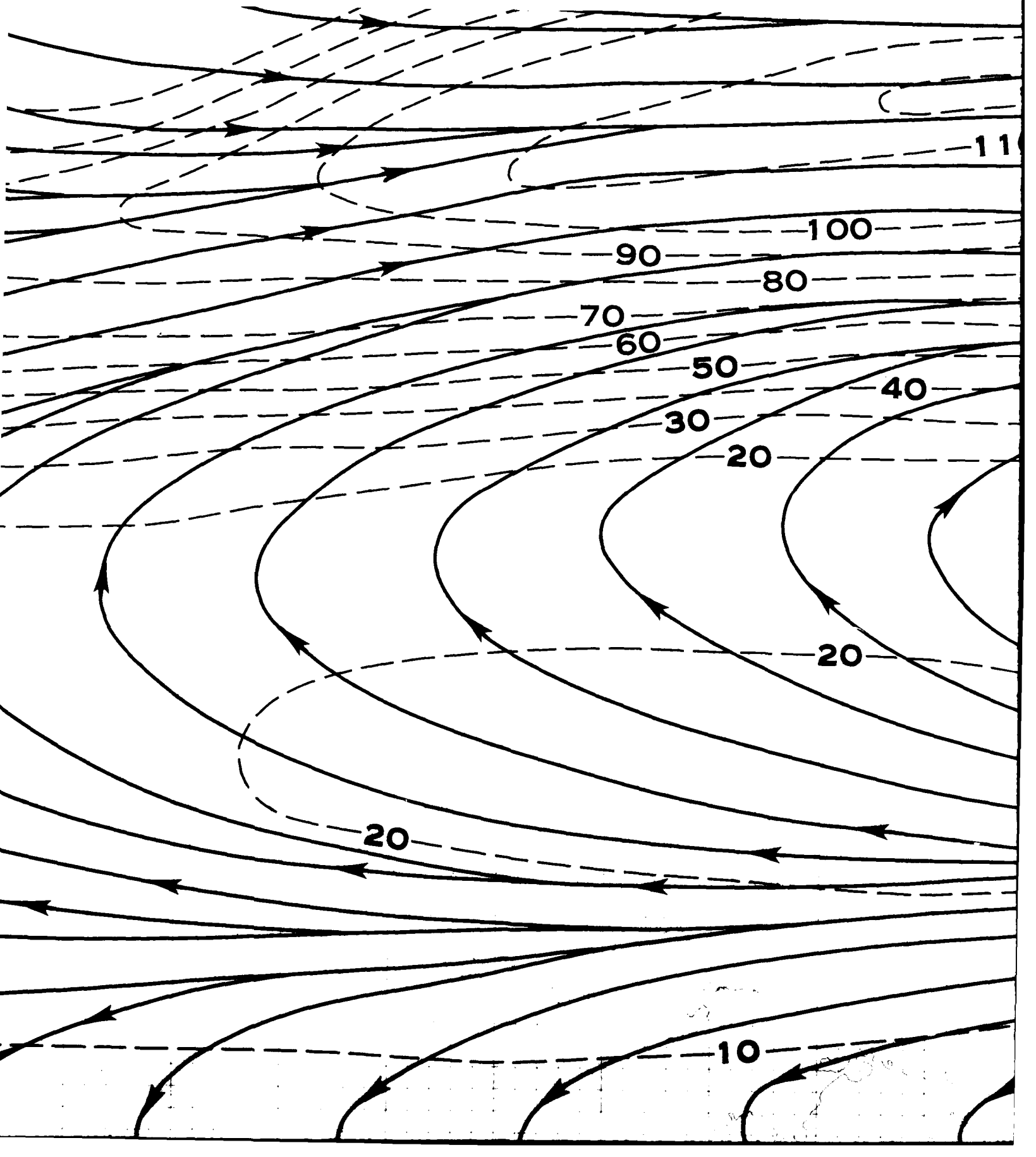

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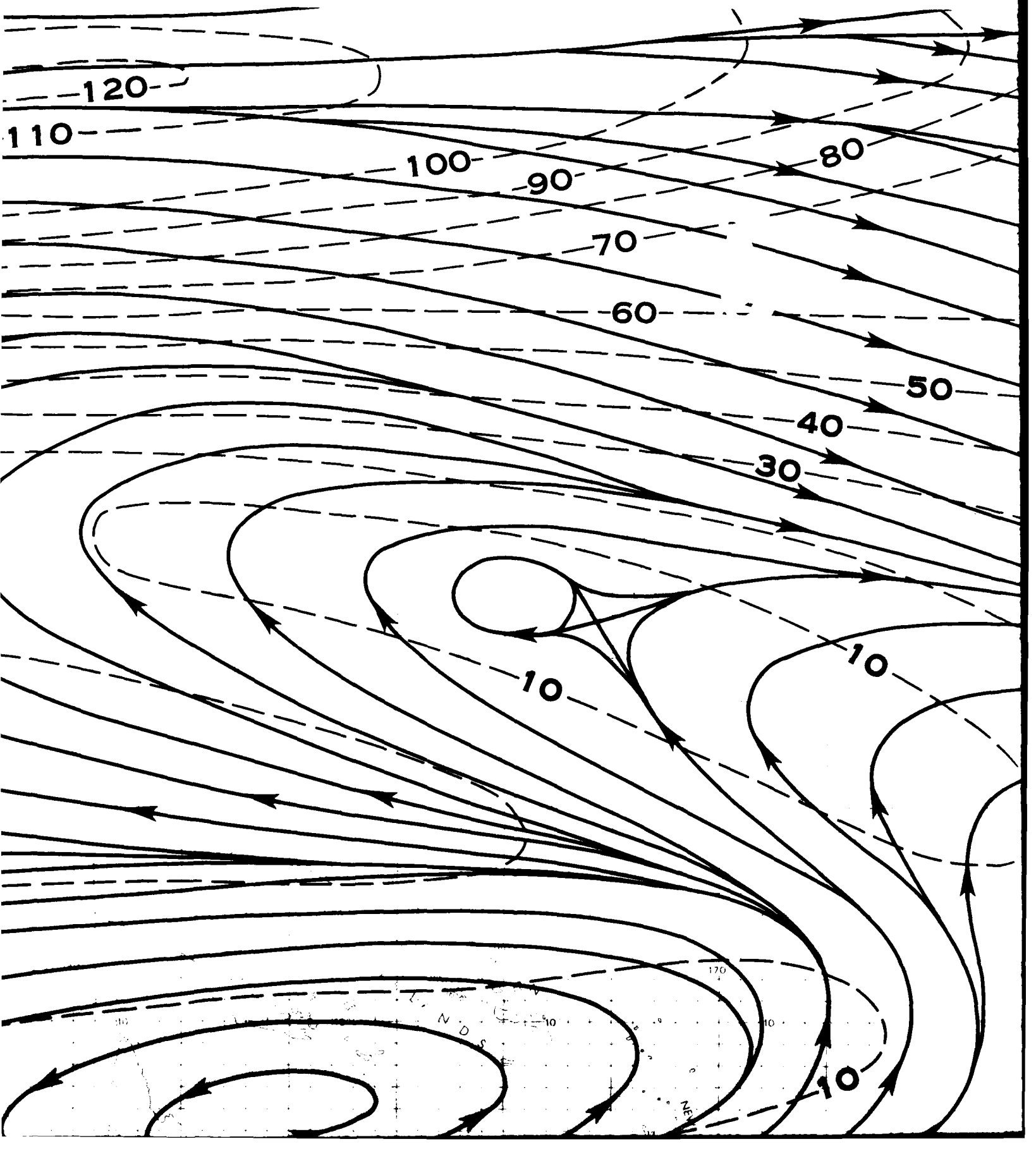

MULW-203W


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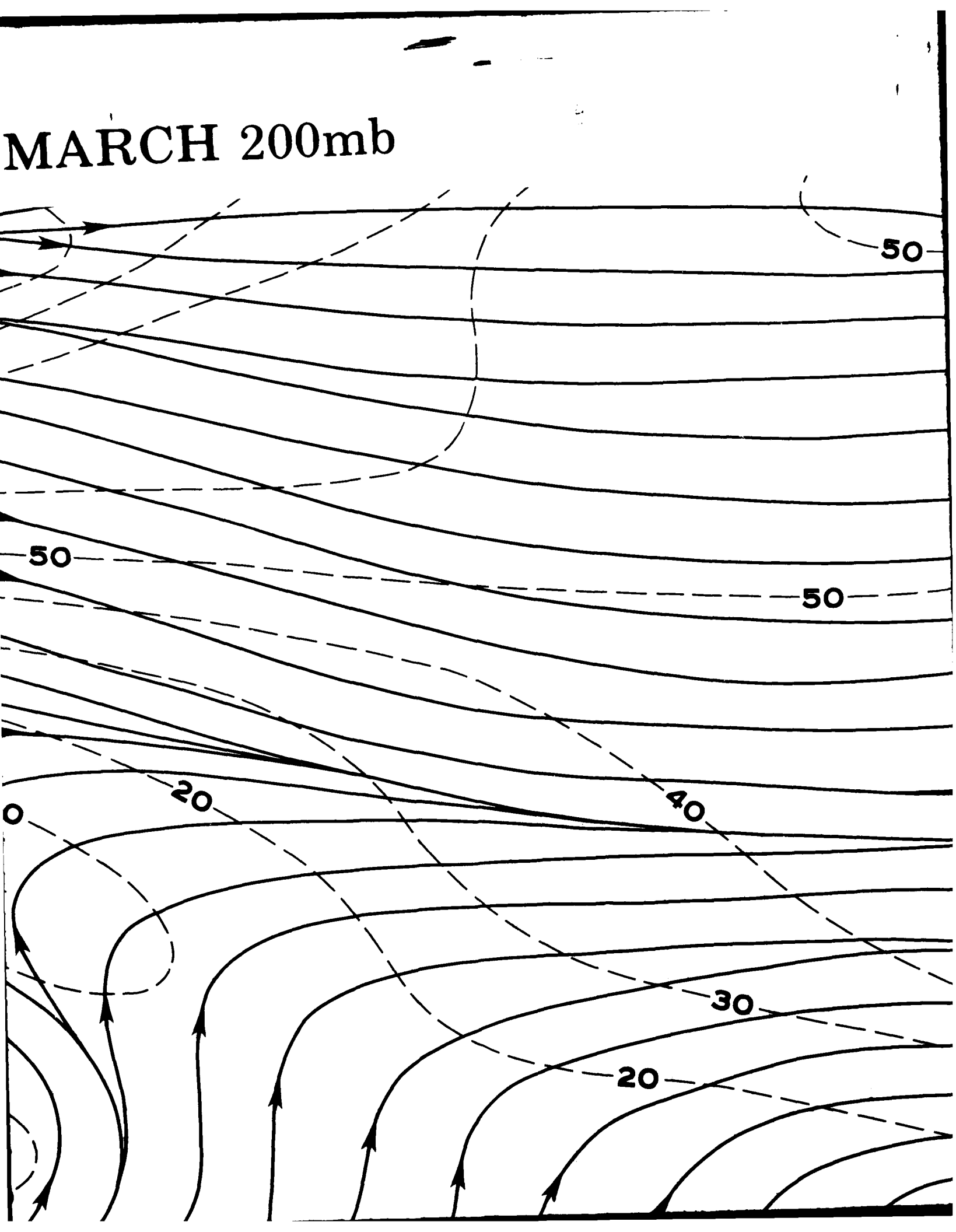
# MEAN UPPER LEVEL WIN

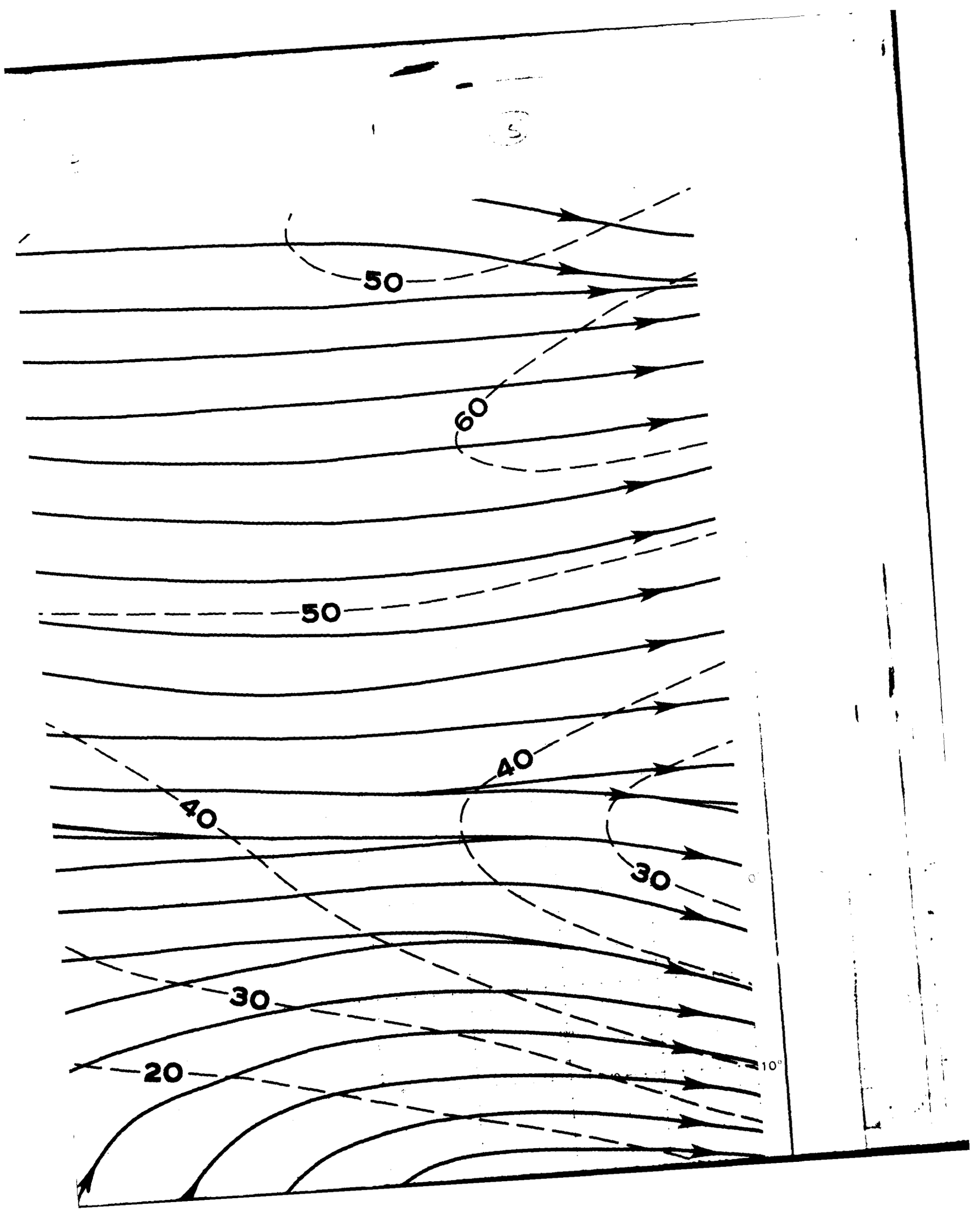


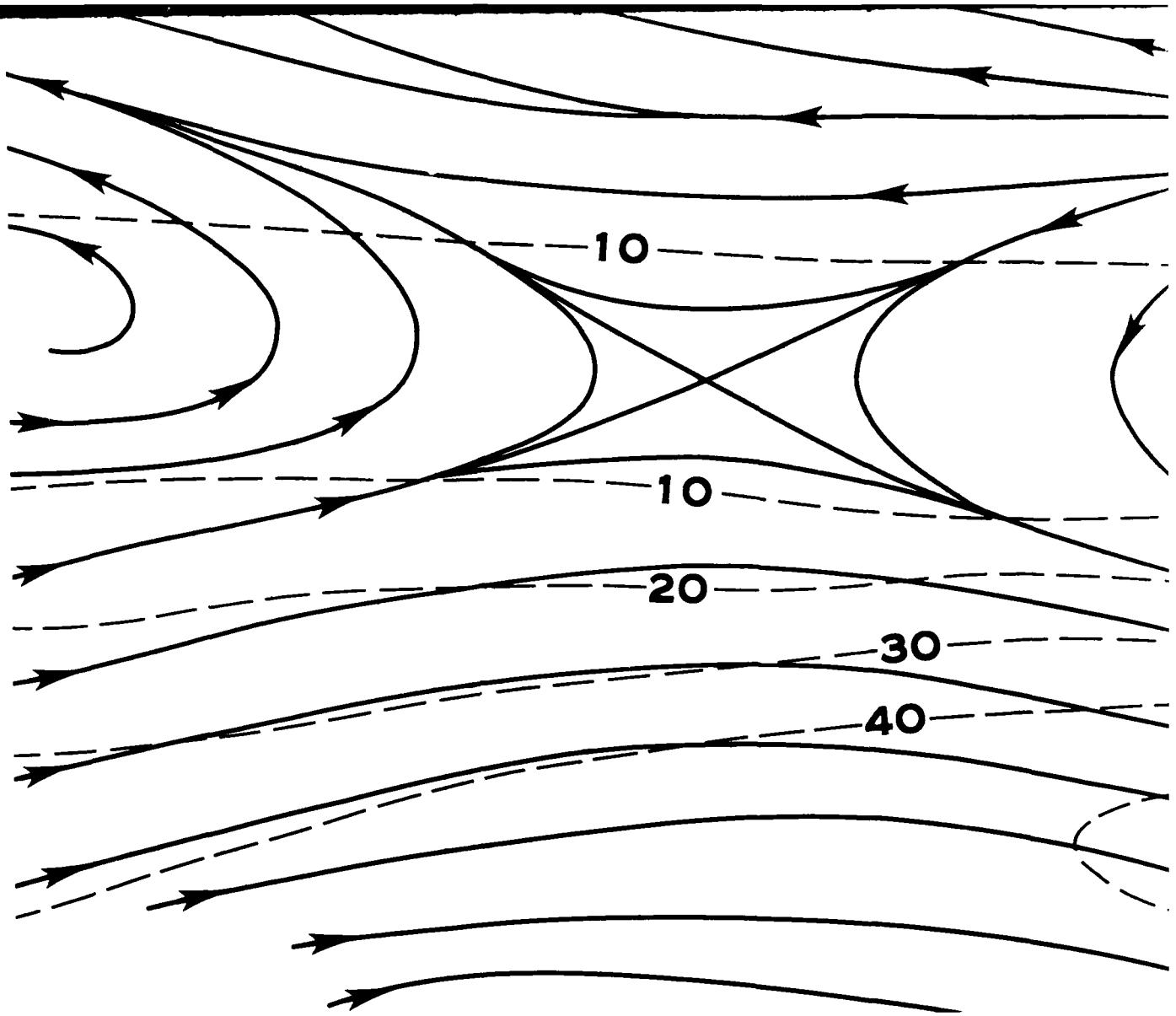
# NDS over GLOBAL TROPICS - MA

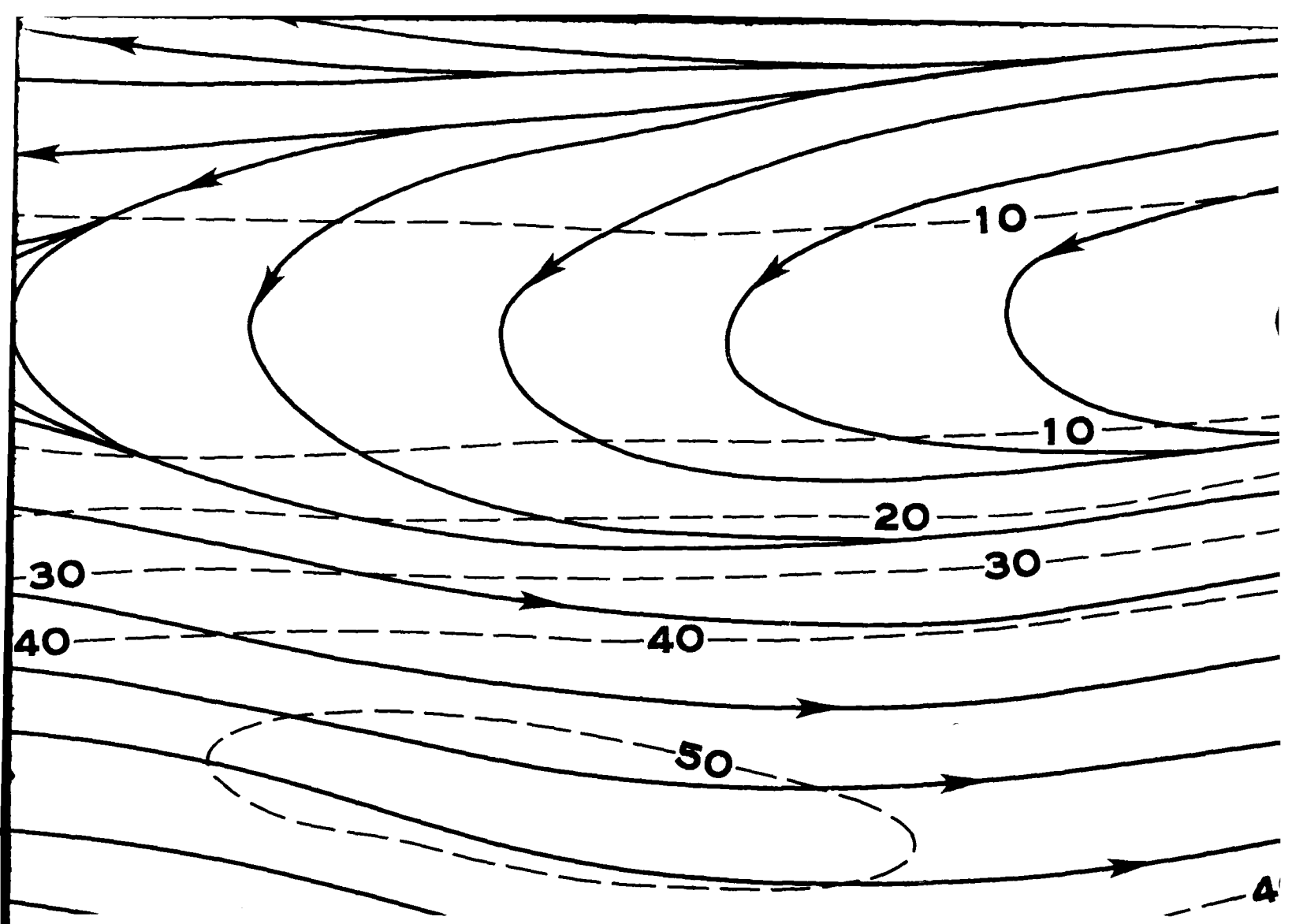


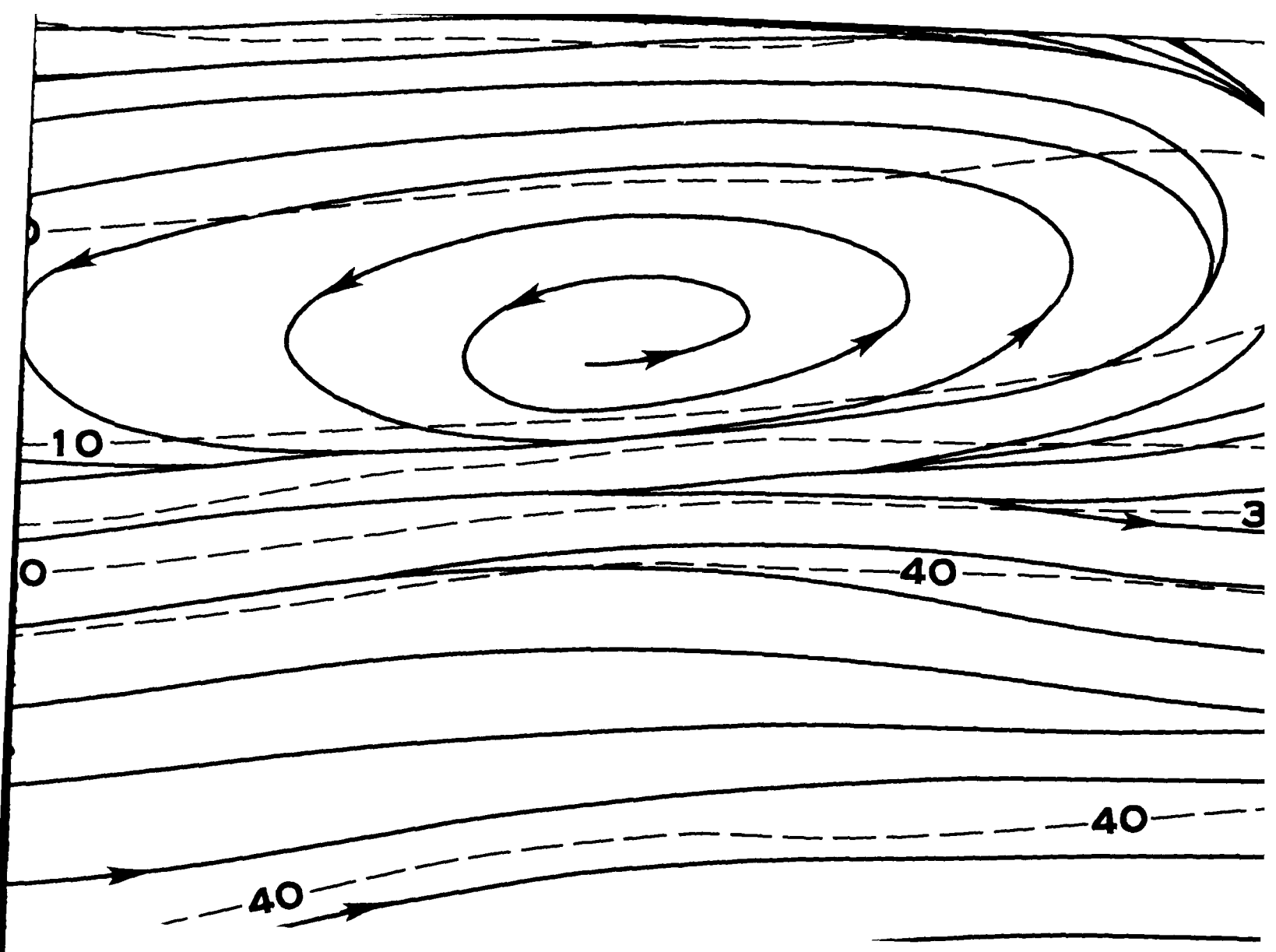
# MARCH 200mb

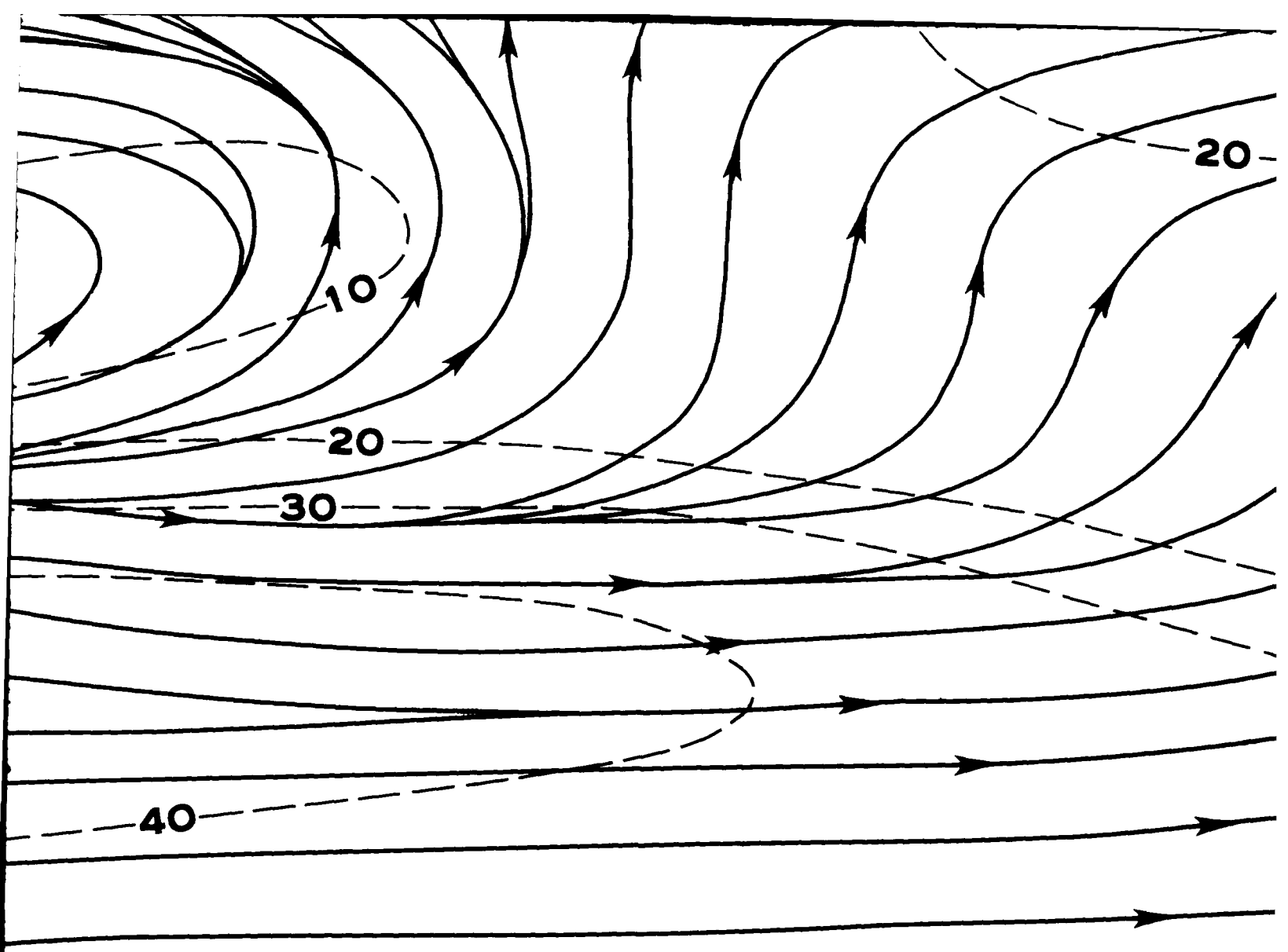


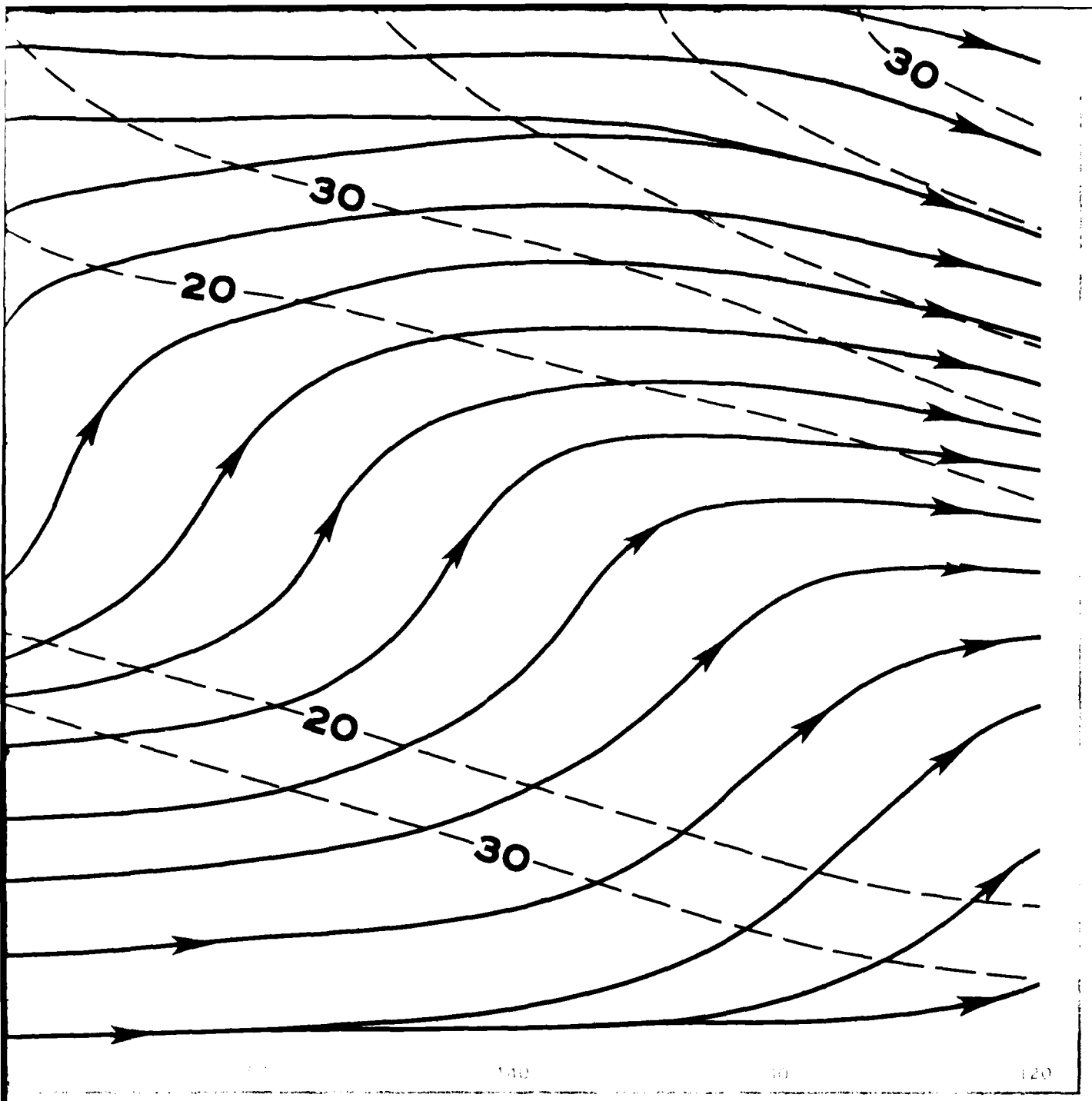

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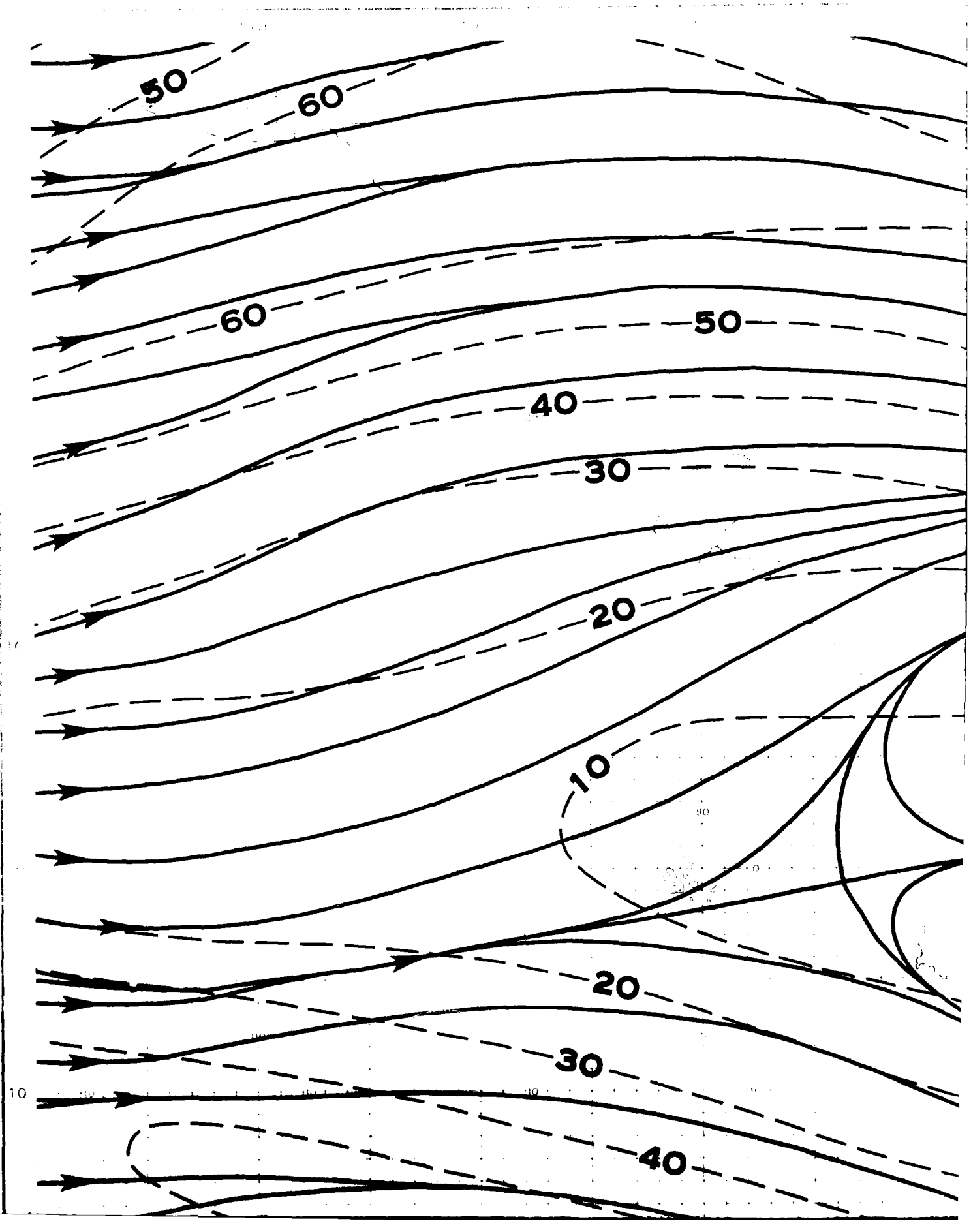

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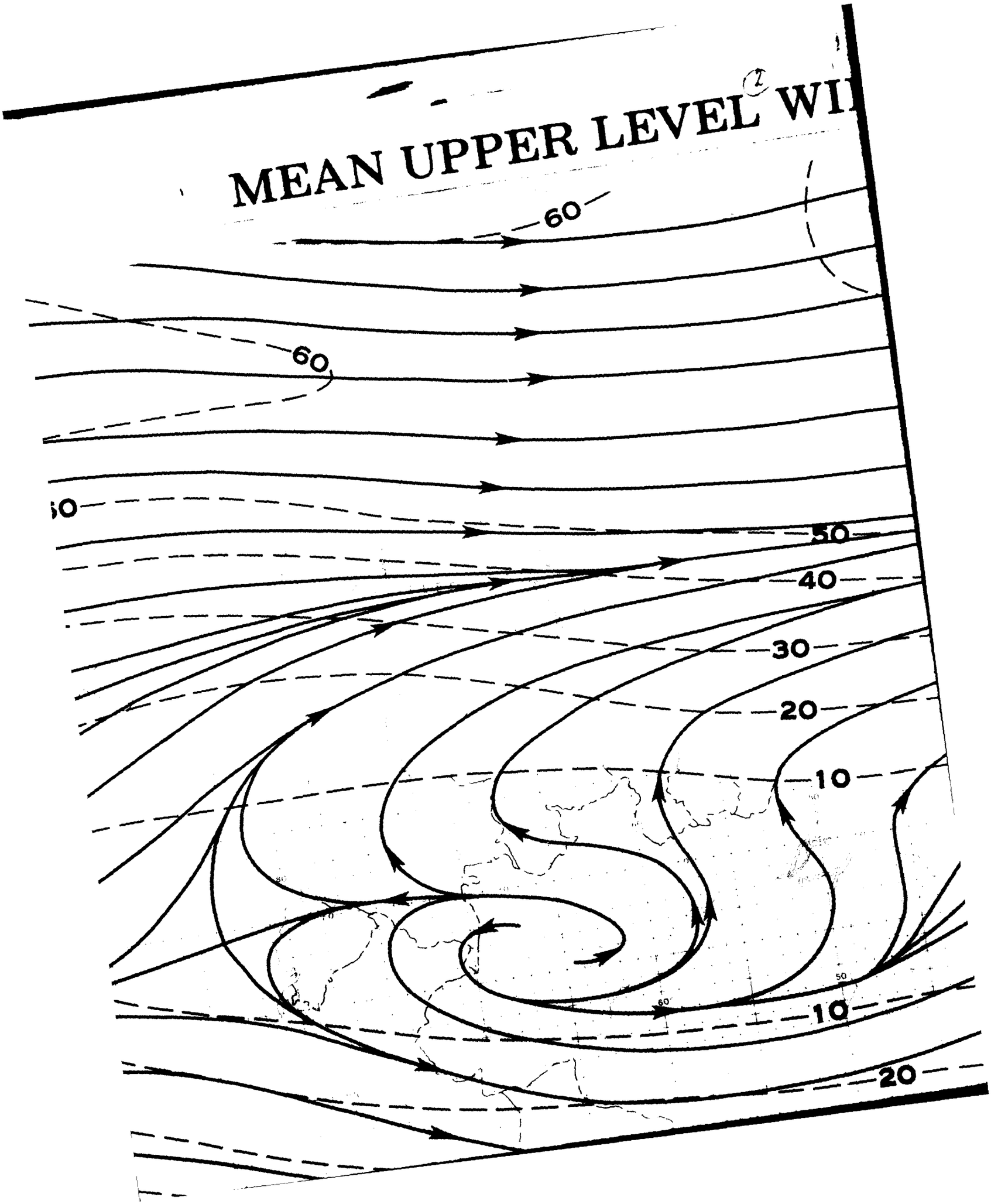

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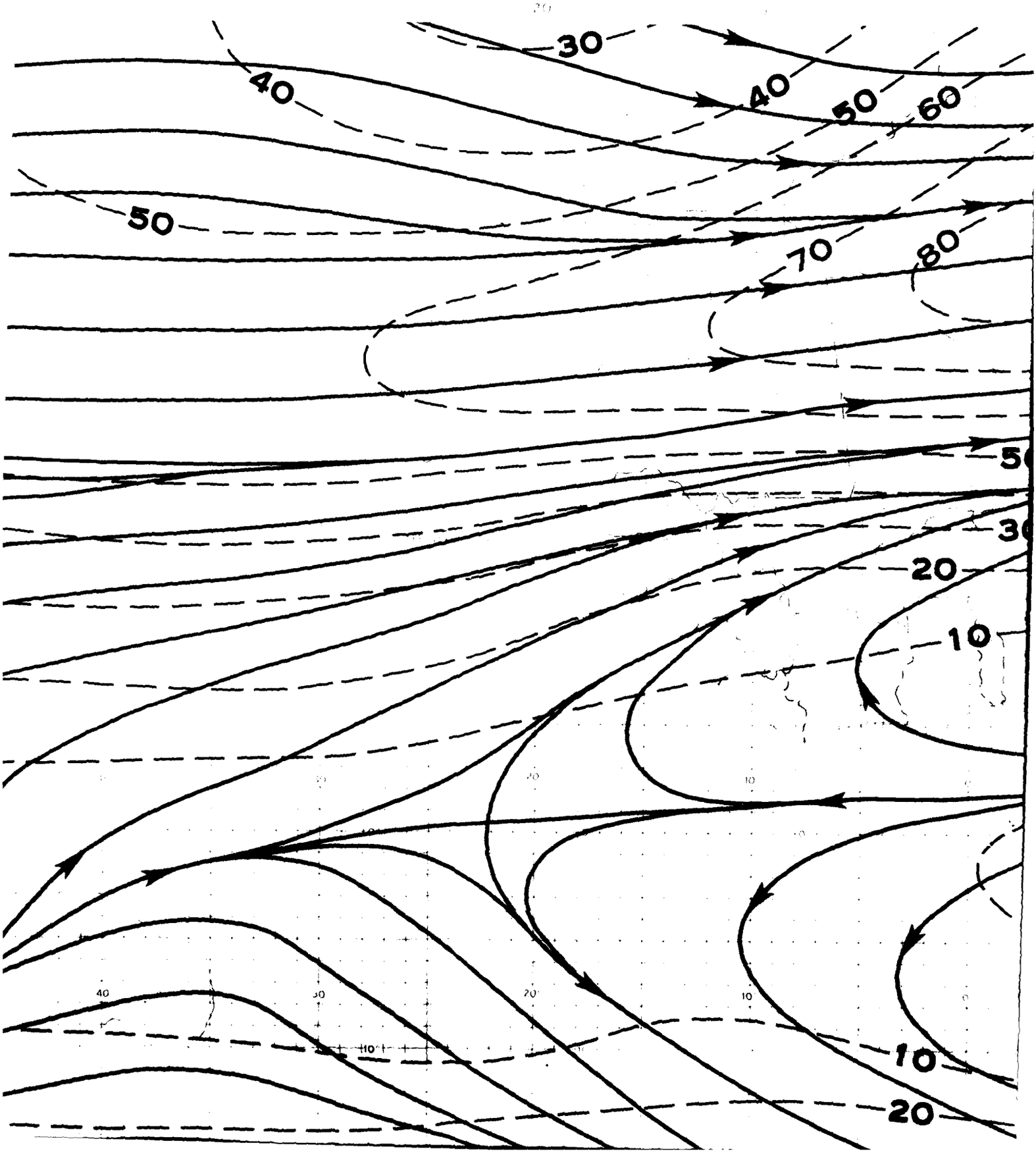



MULW-203E

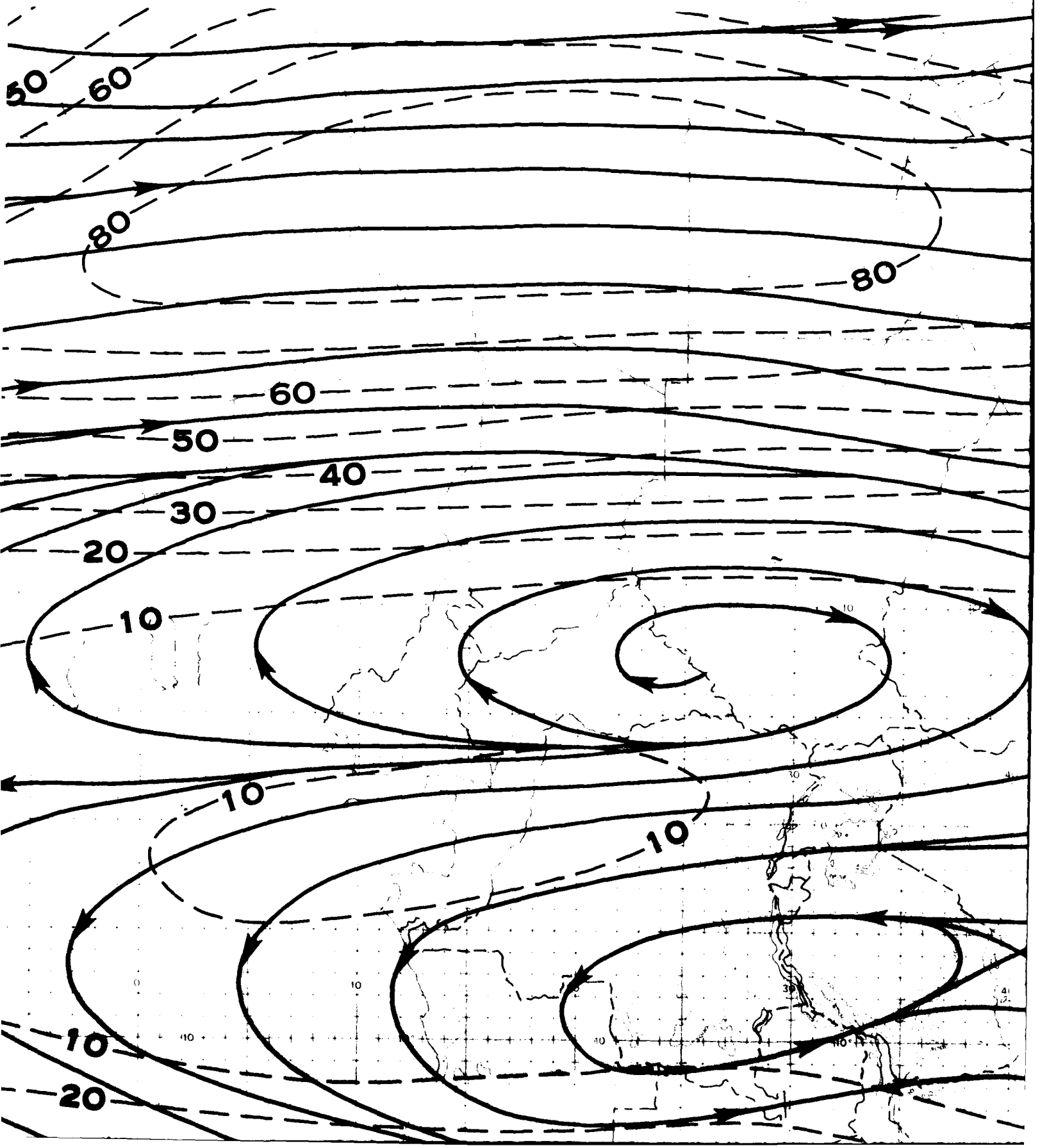

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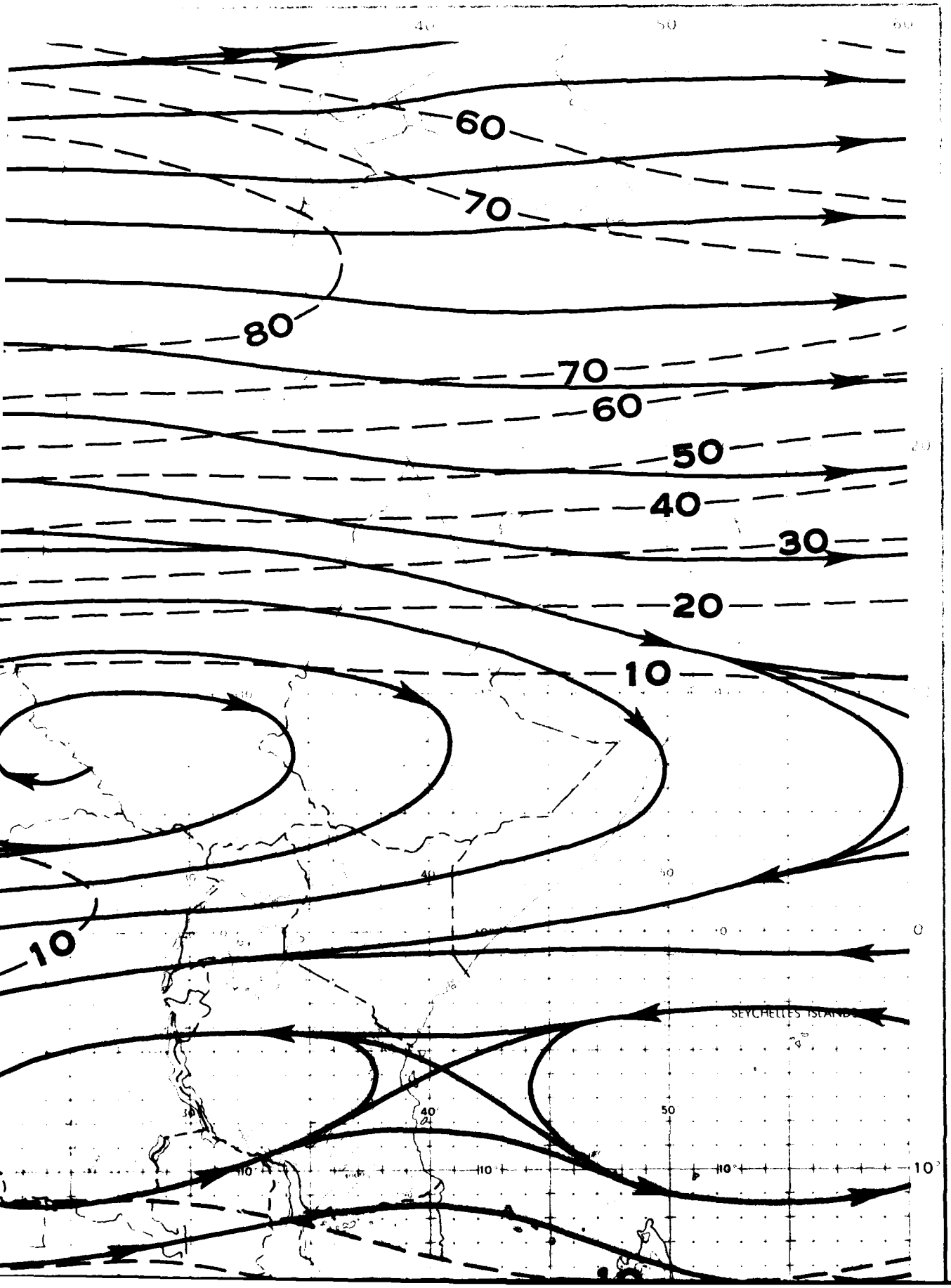

MEAN UPPER LEVEL WI
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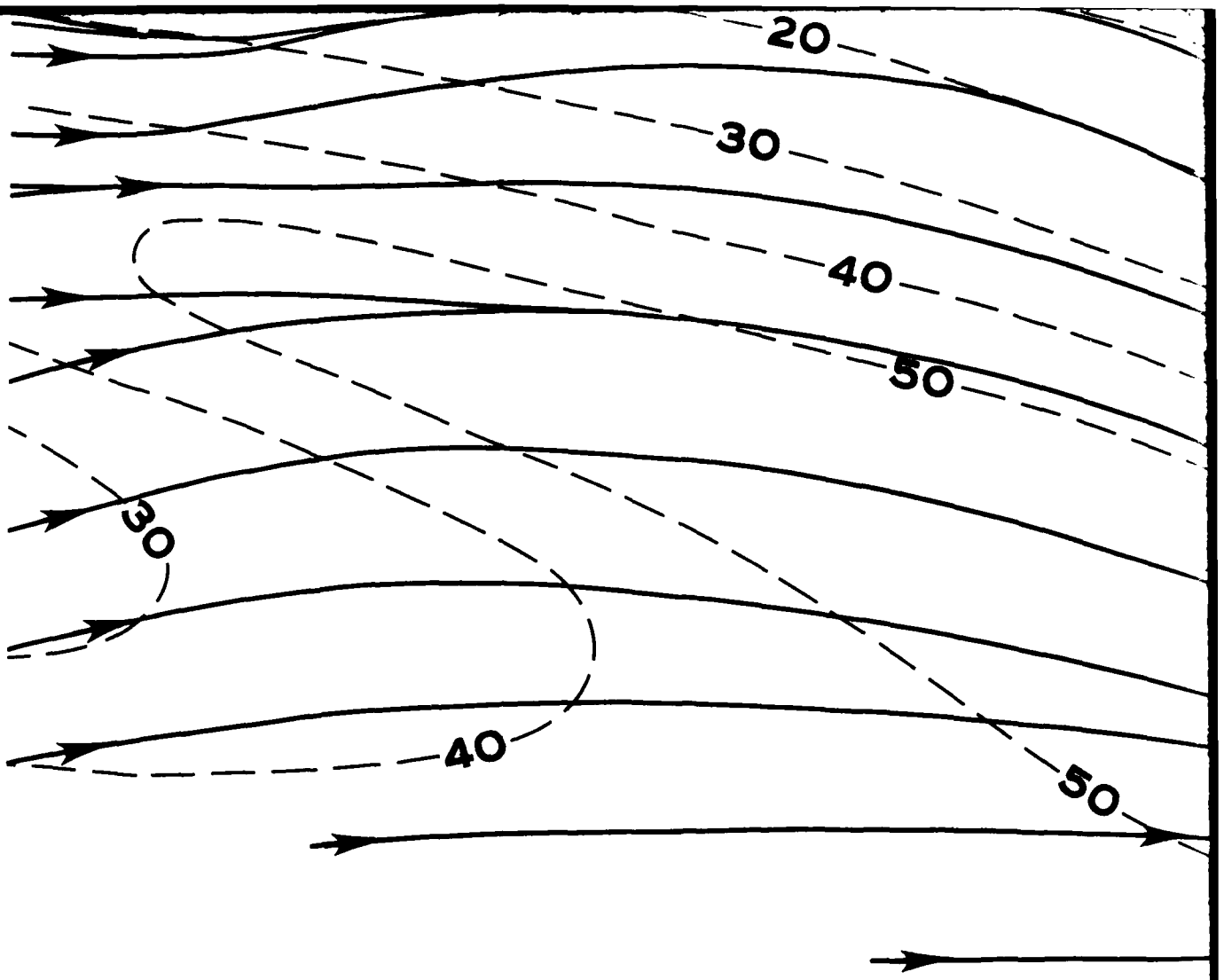
# 'INDS over GLOBAL TROPICS - AP

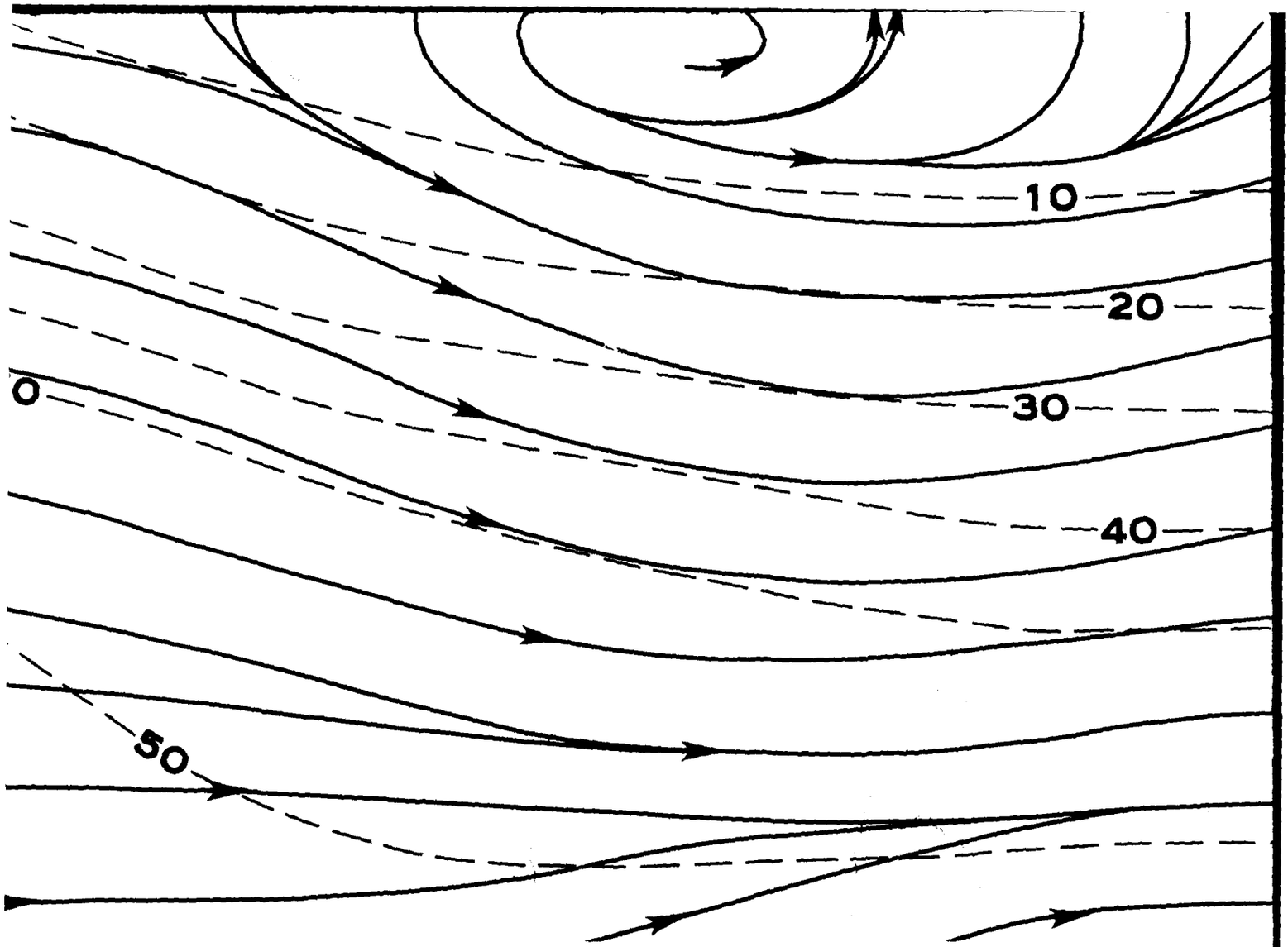


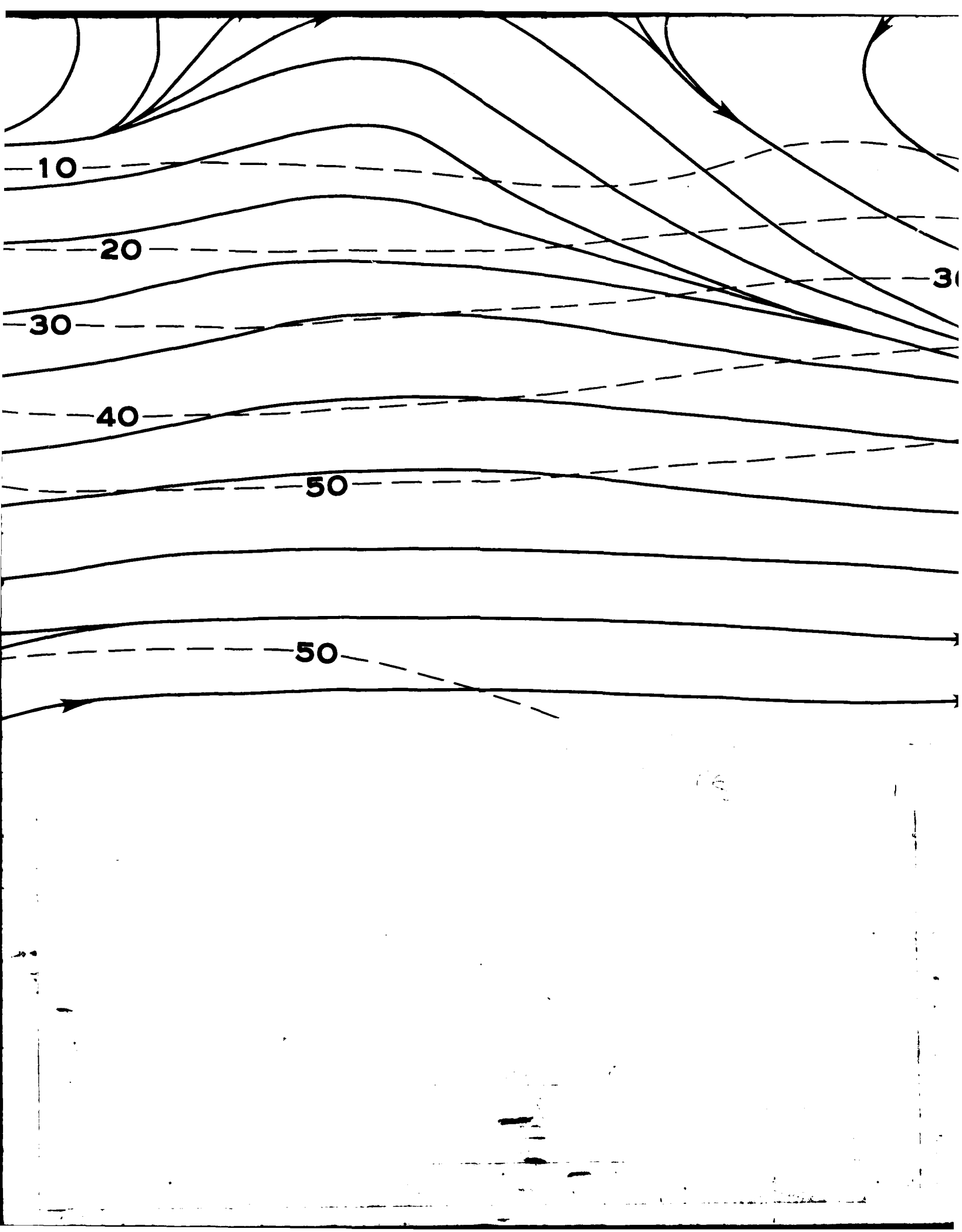
# CS - APRIL 200mb

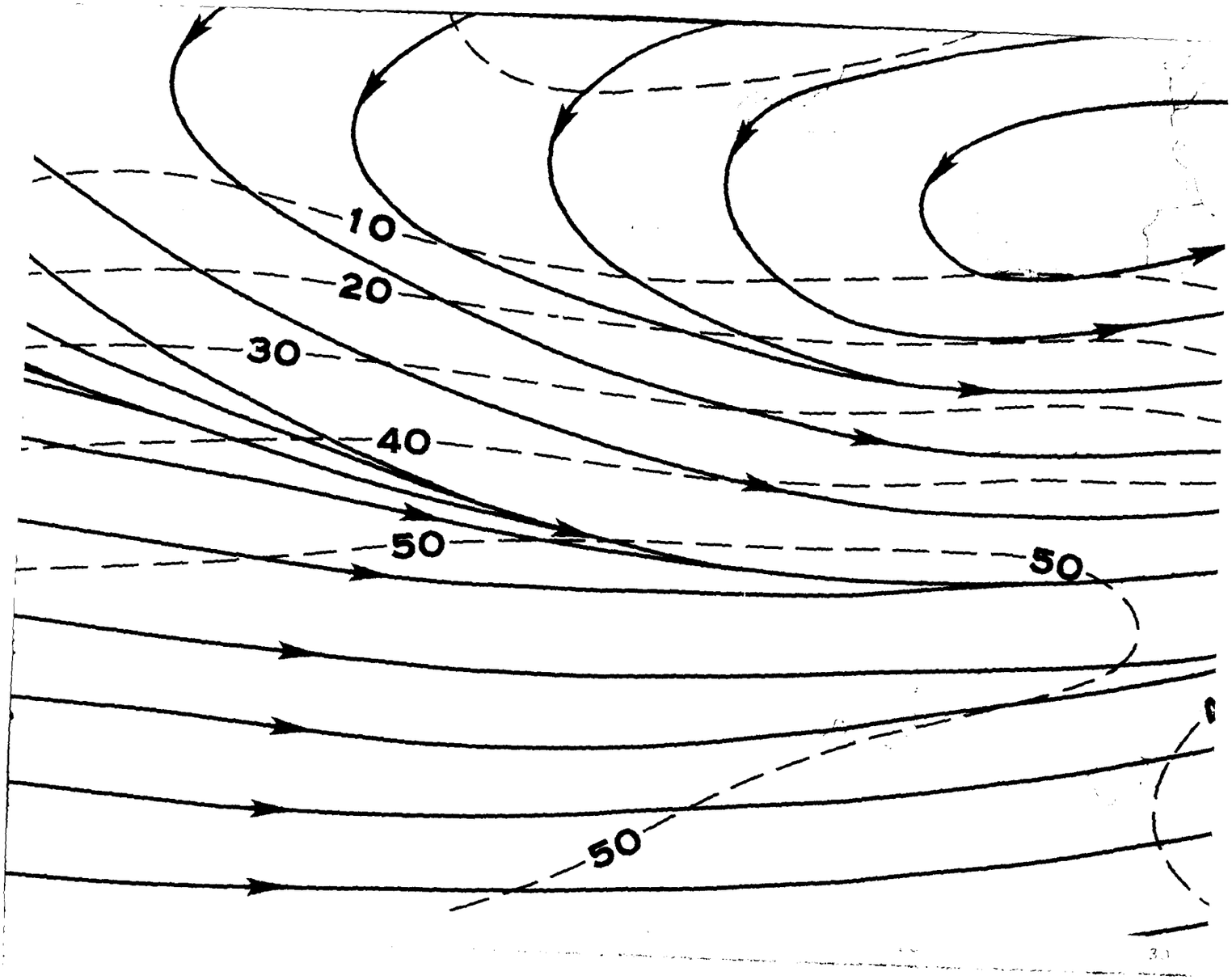


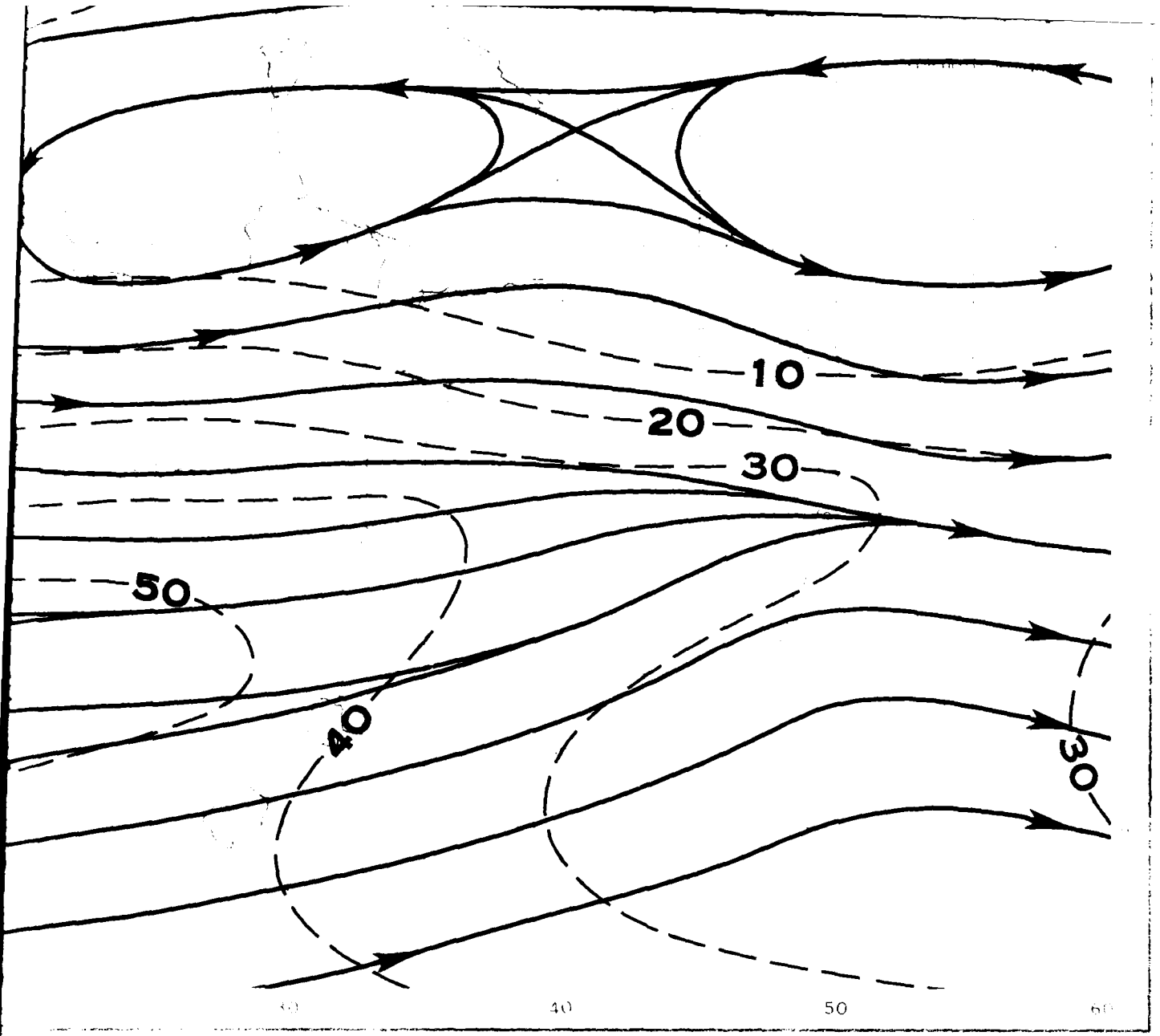

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SEYCHELLES ISLANDS
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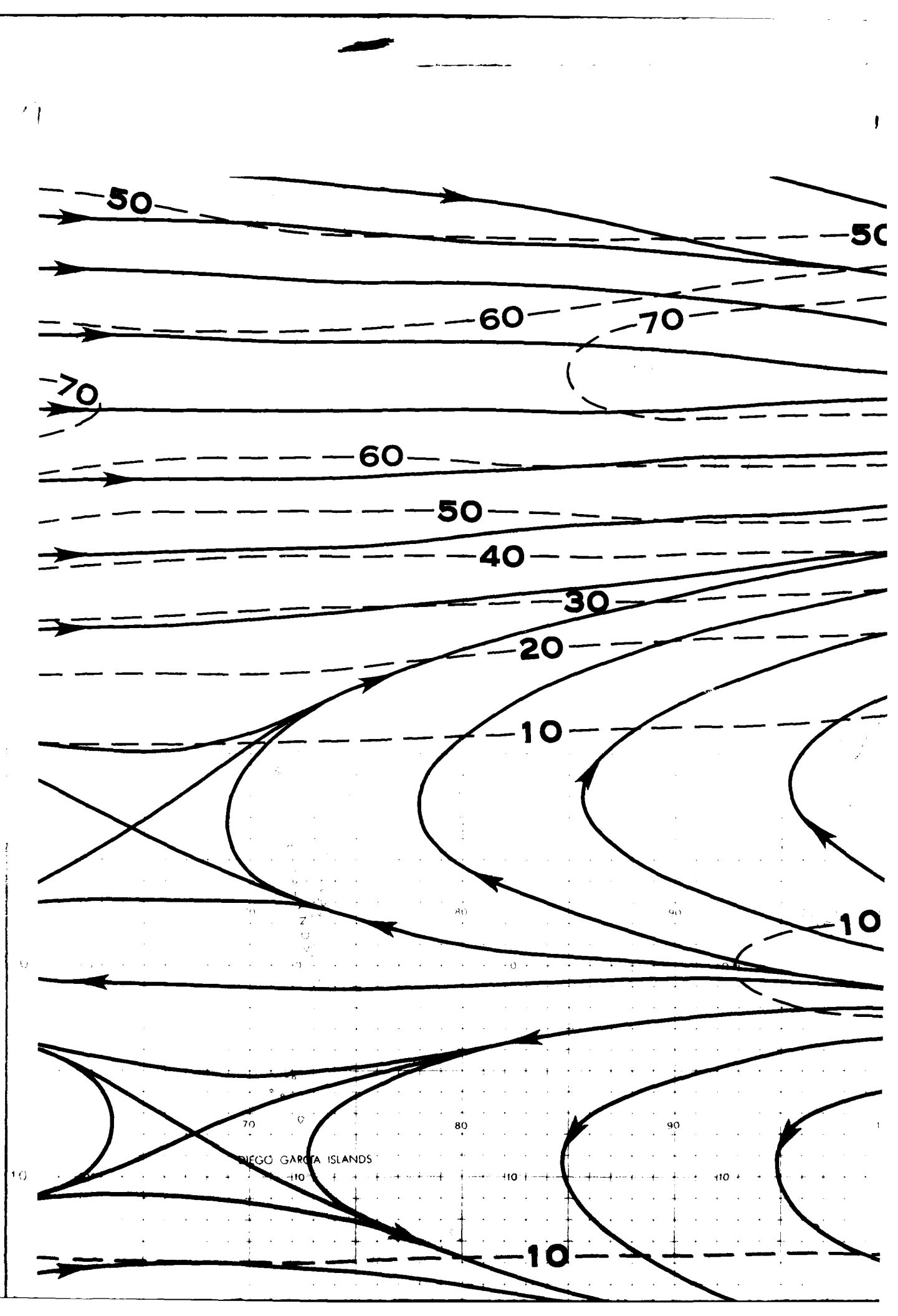

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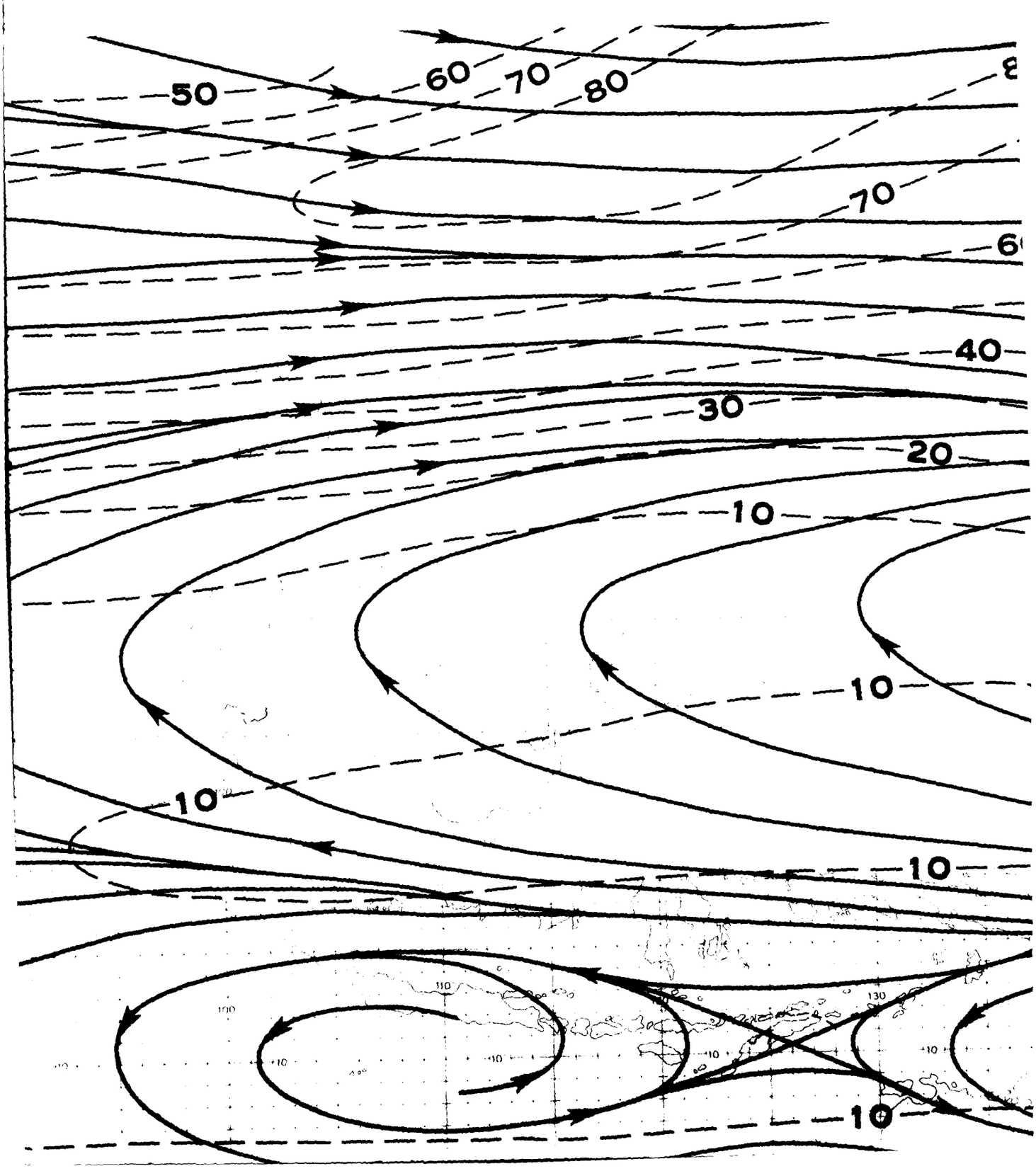

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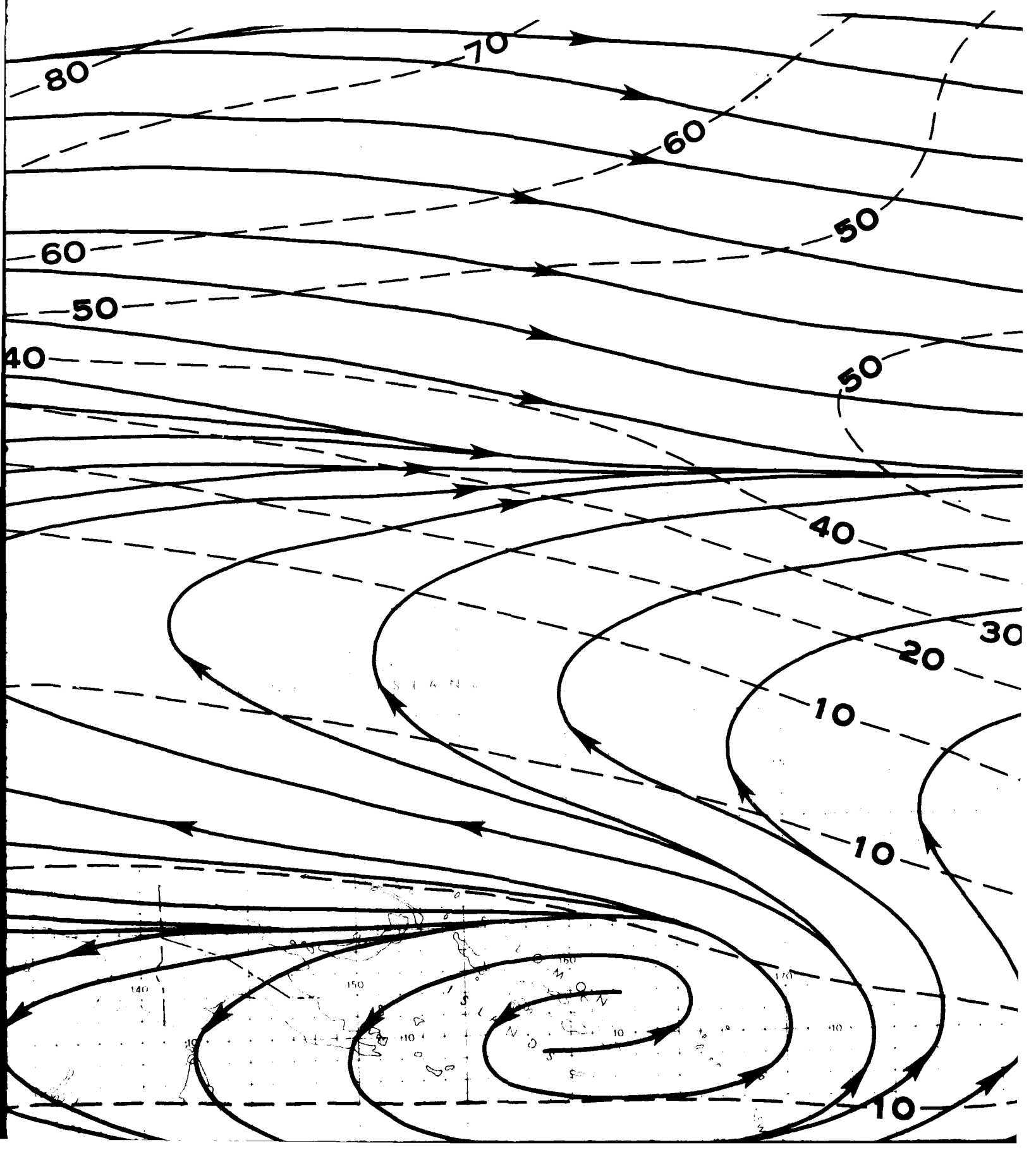

MULW-204W


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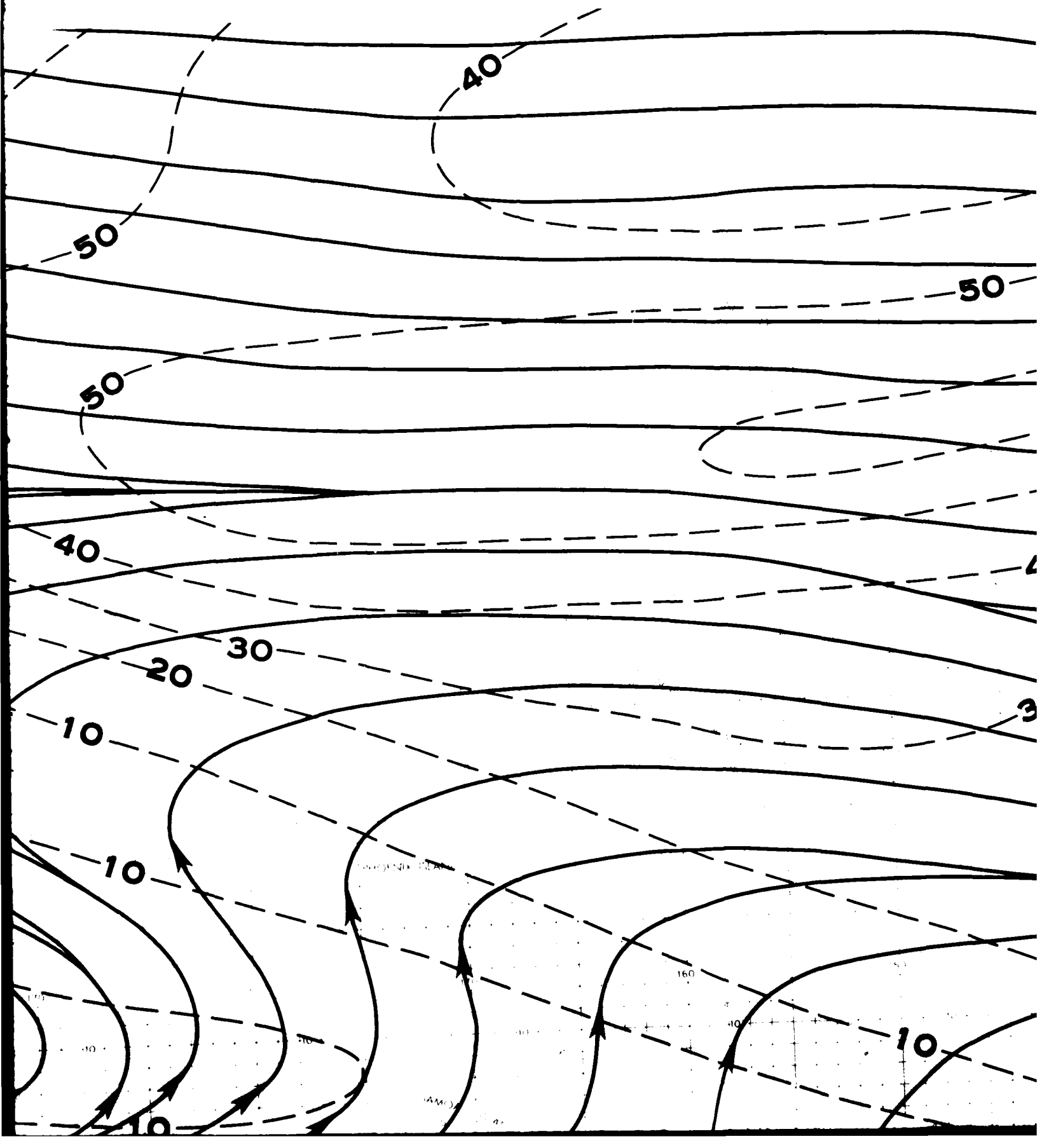
# MEAN UPPER LEVEL WI

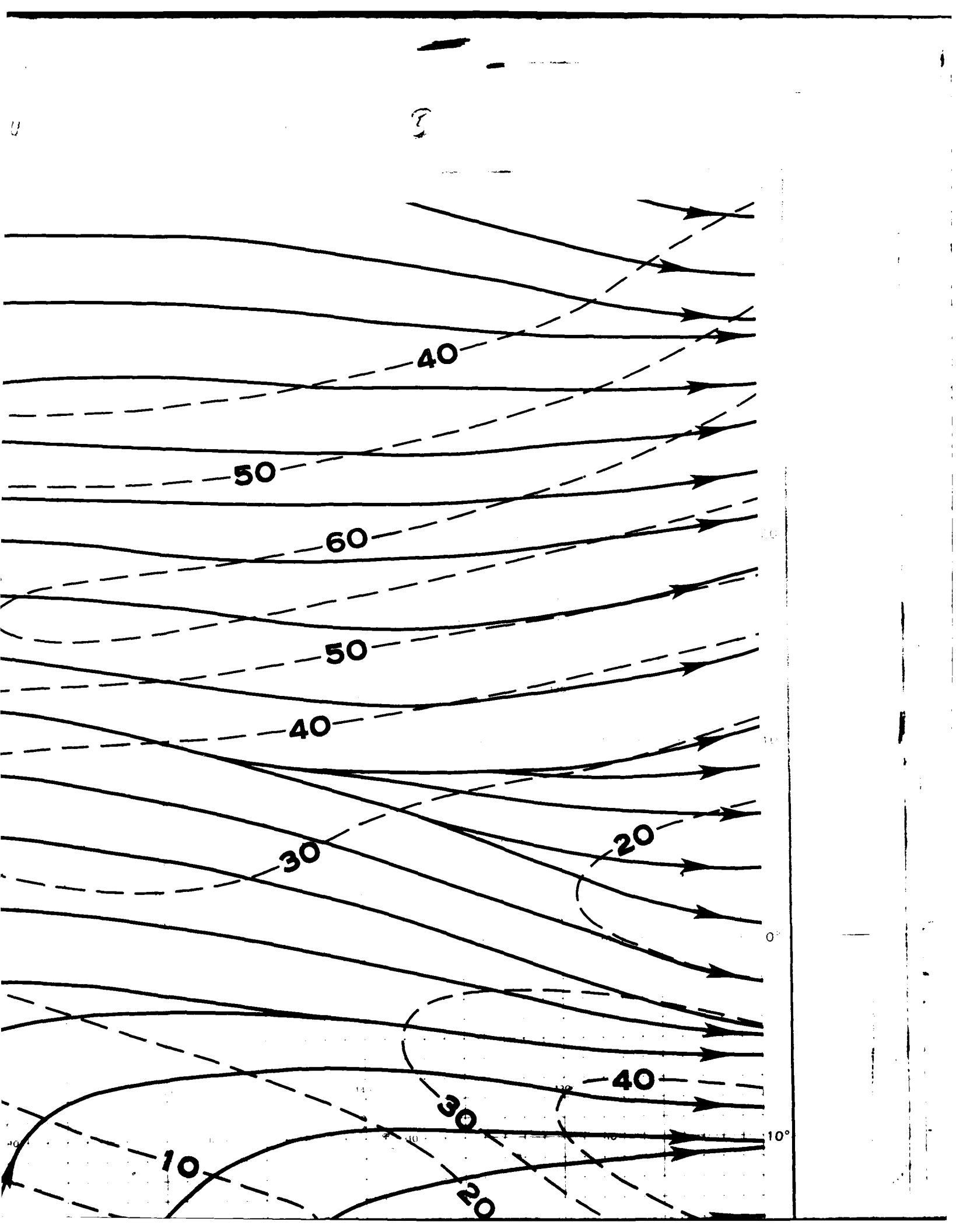


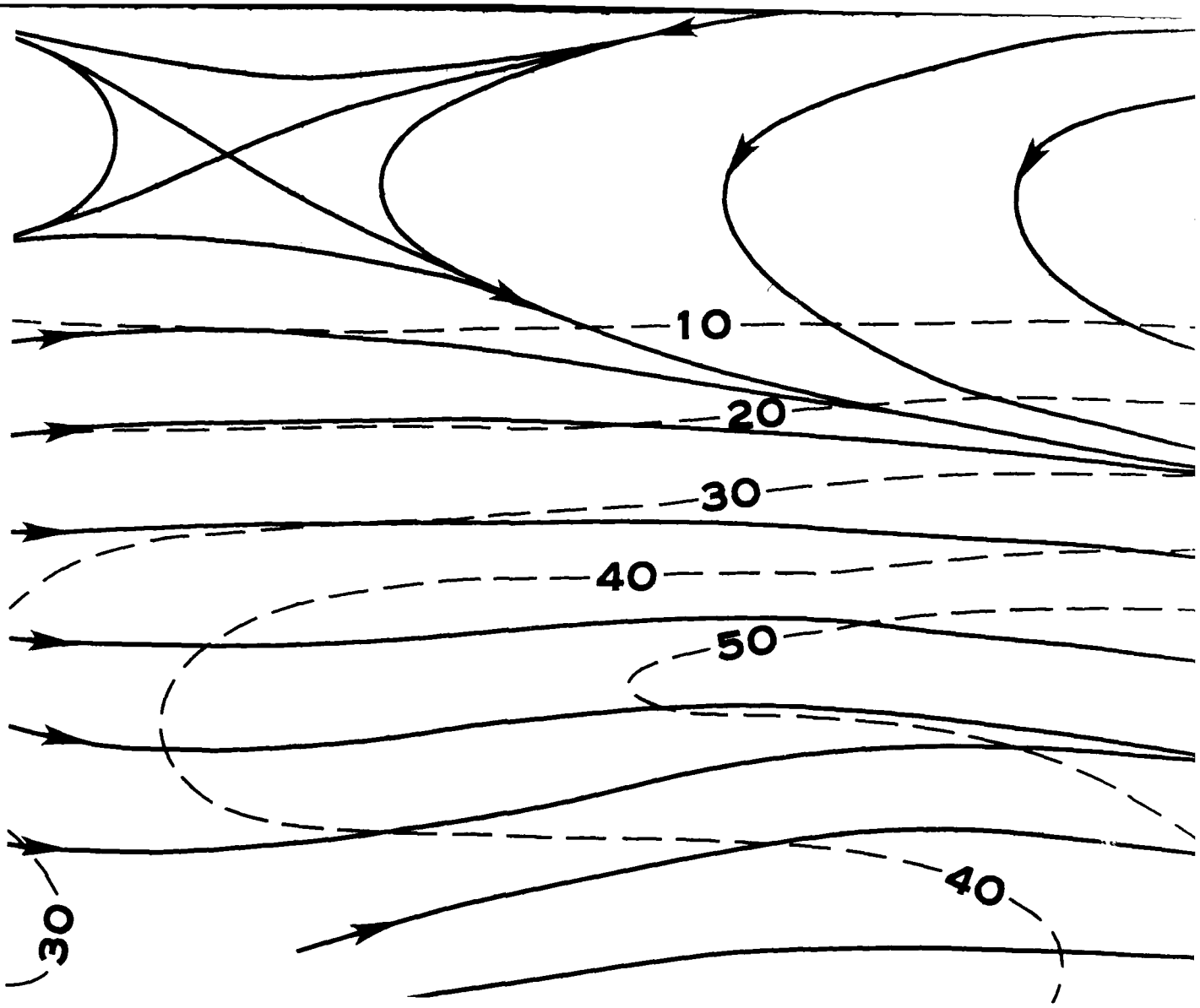
# WINDS over GLOBAL TROPICS – AI

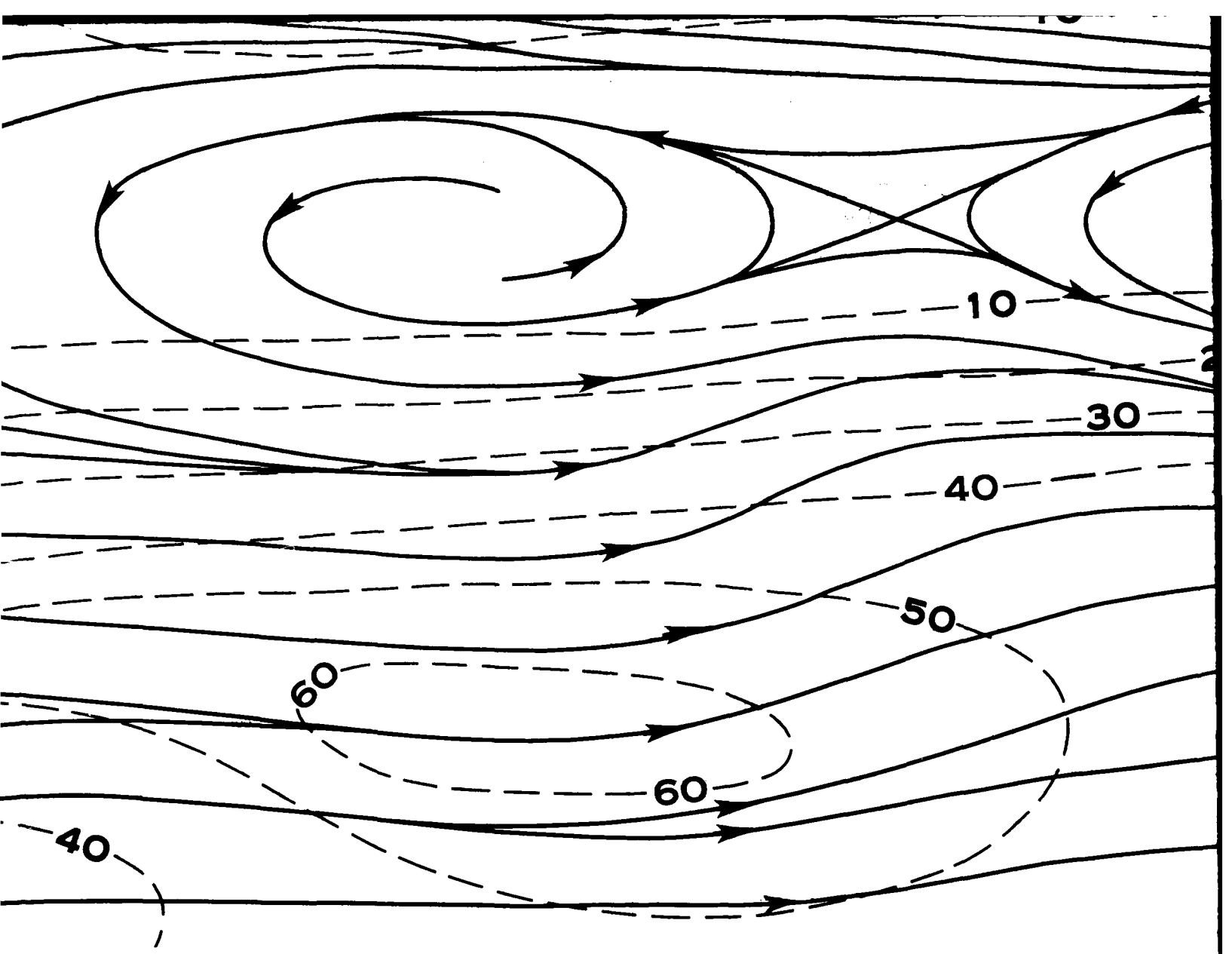


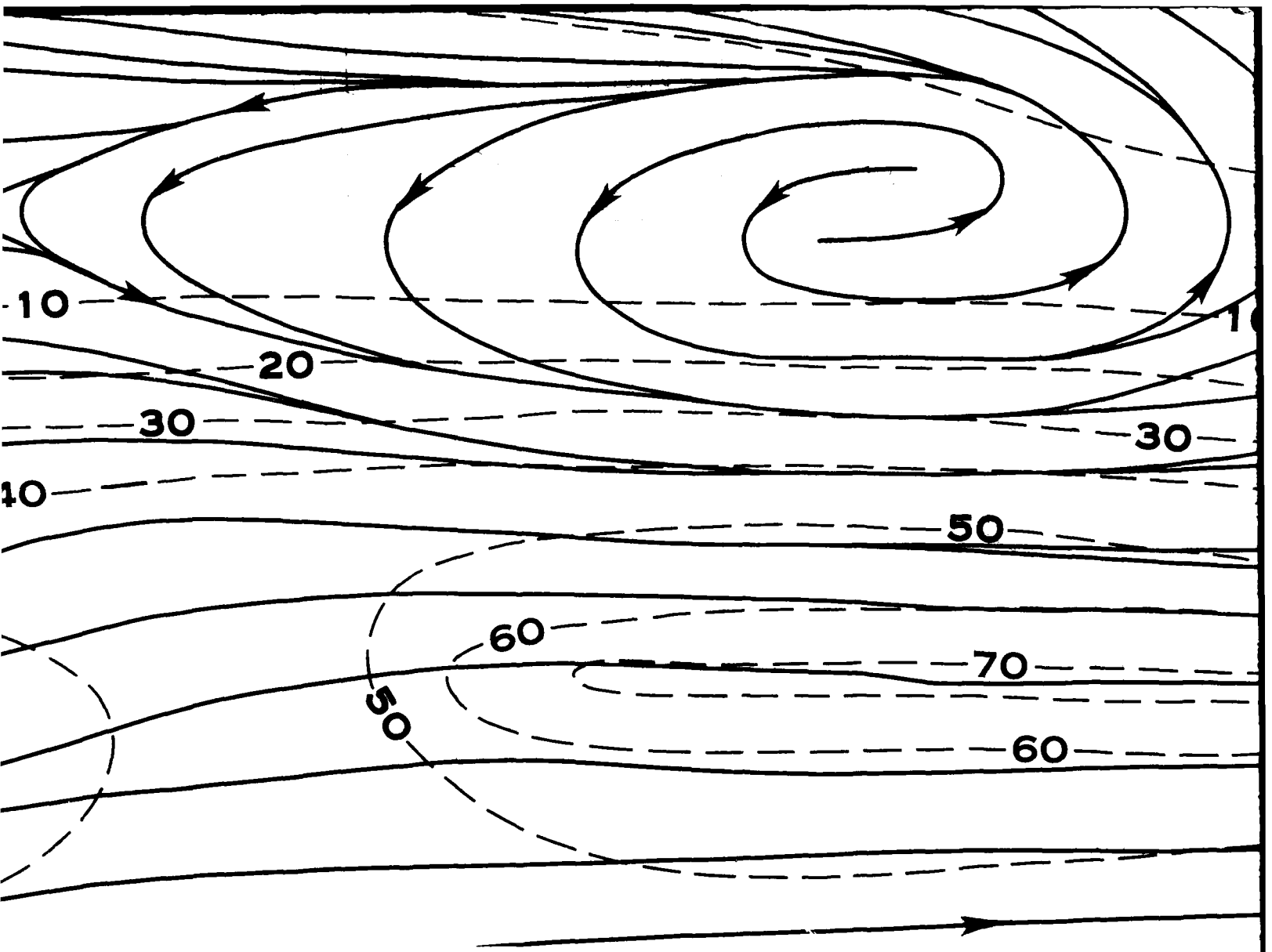
# PICS - APRIL 200mb

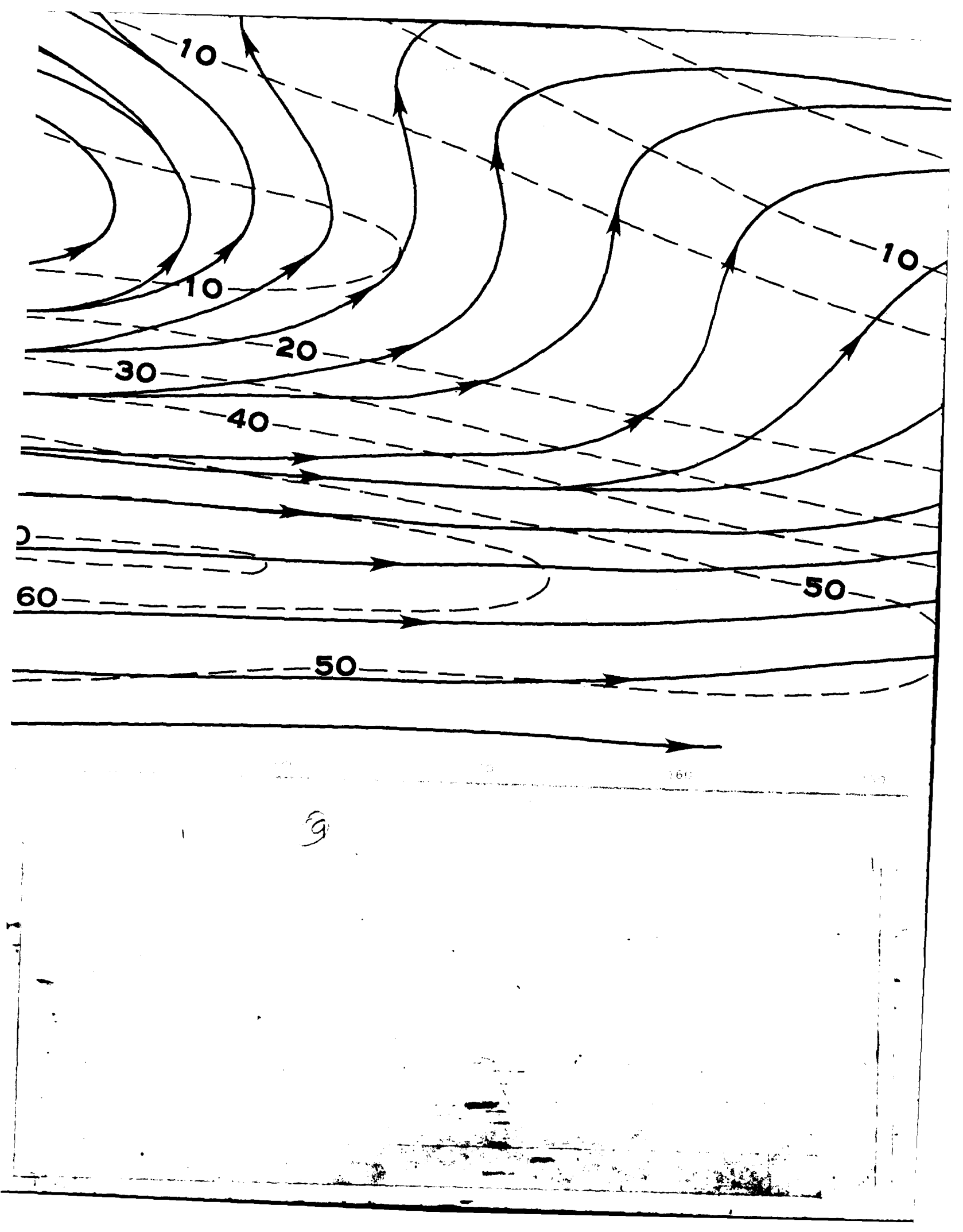


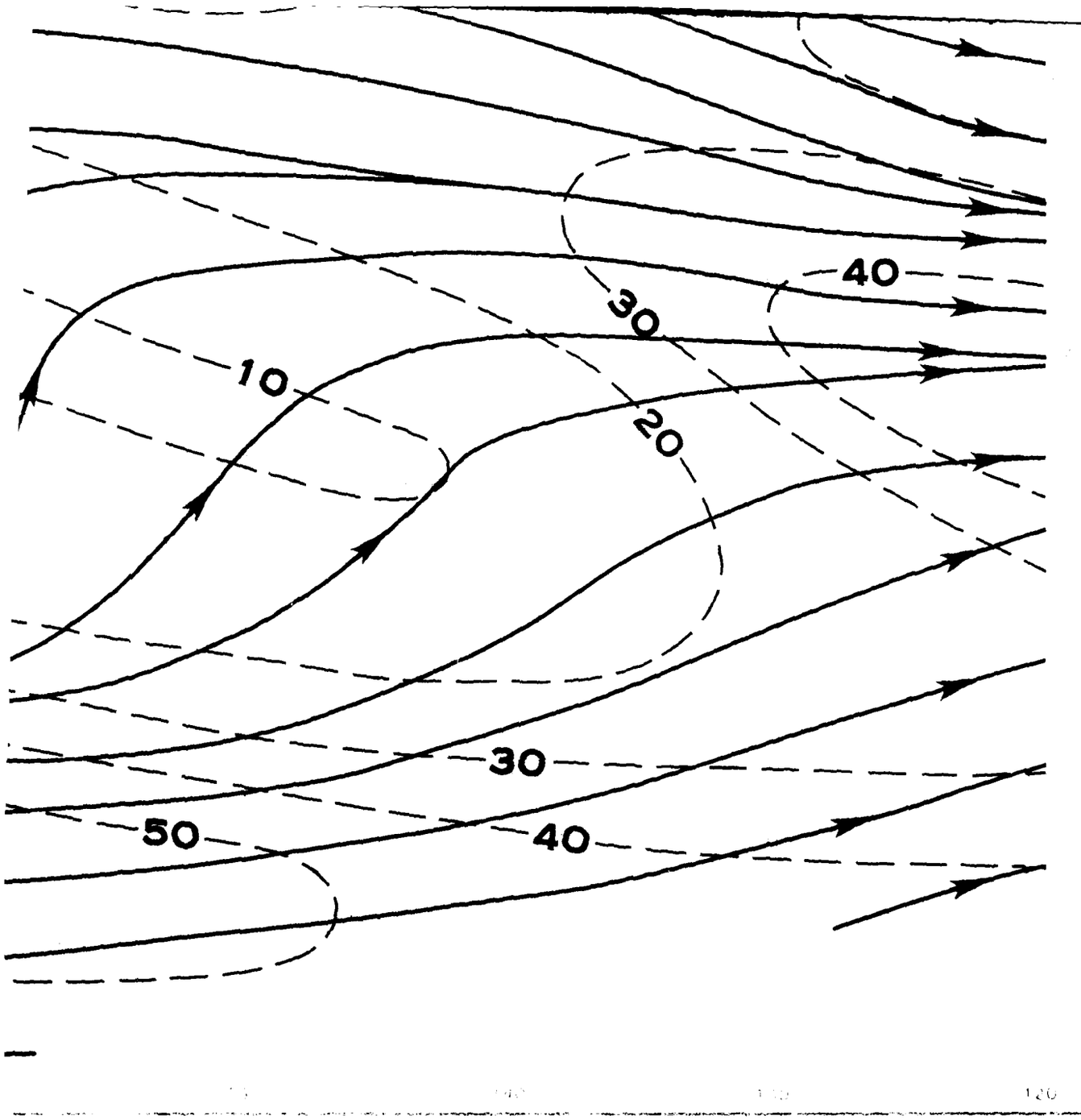

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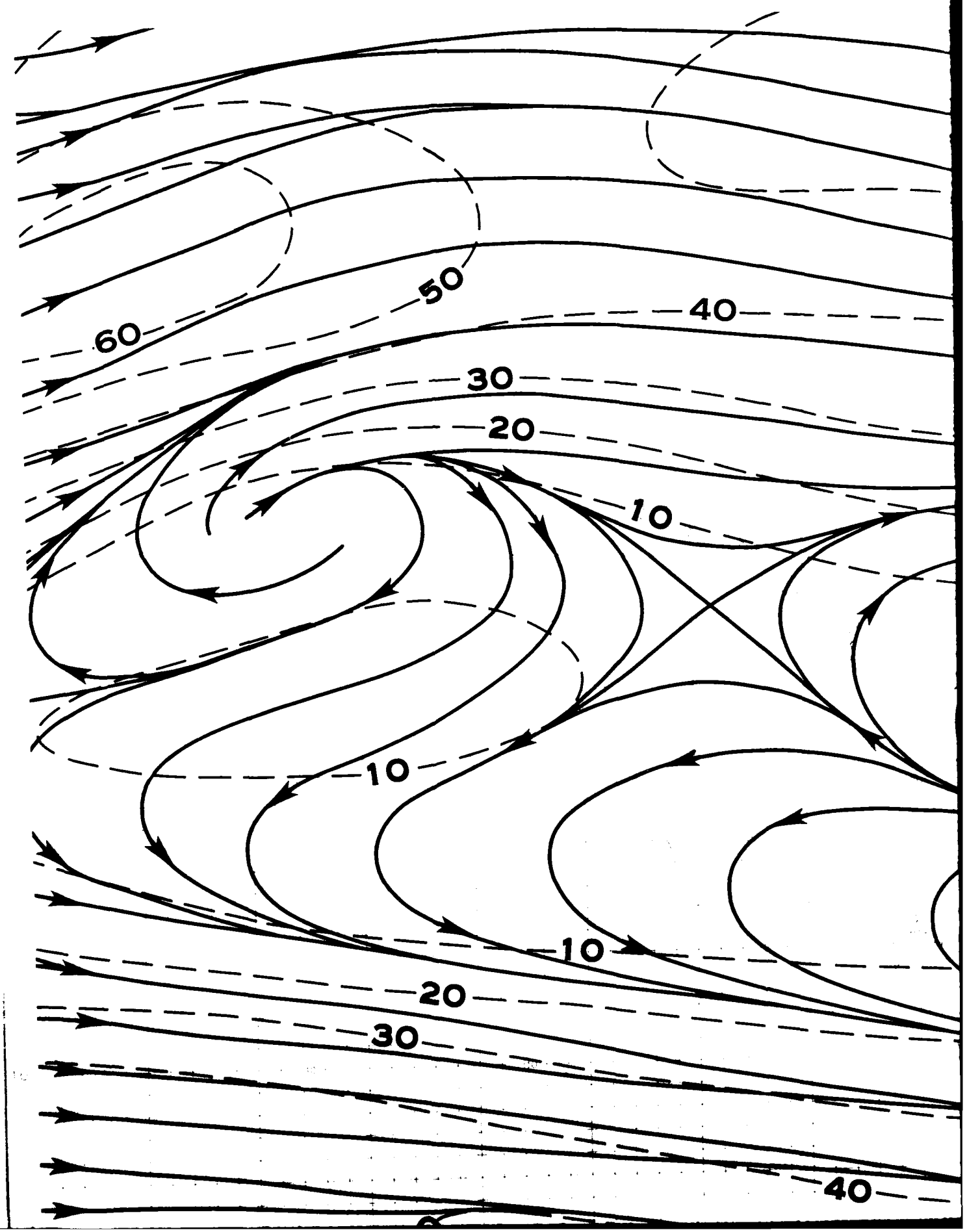

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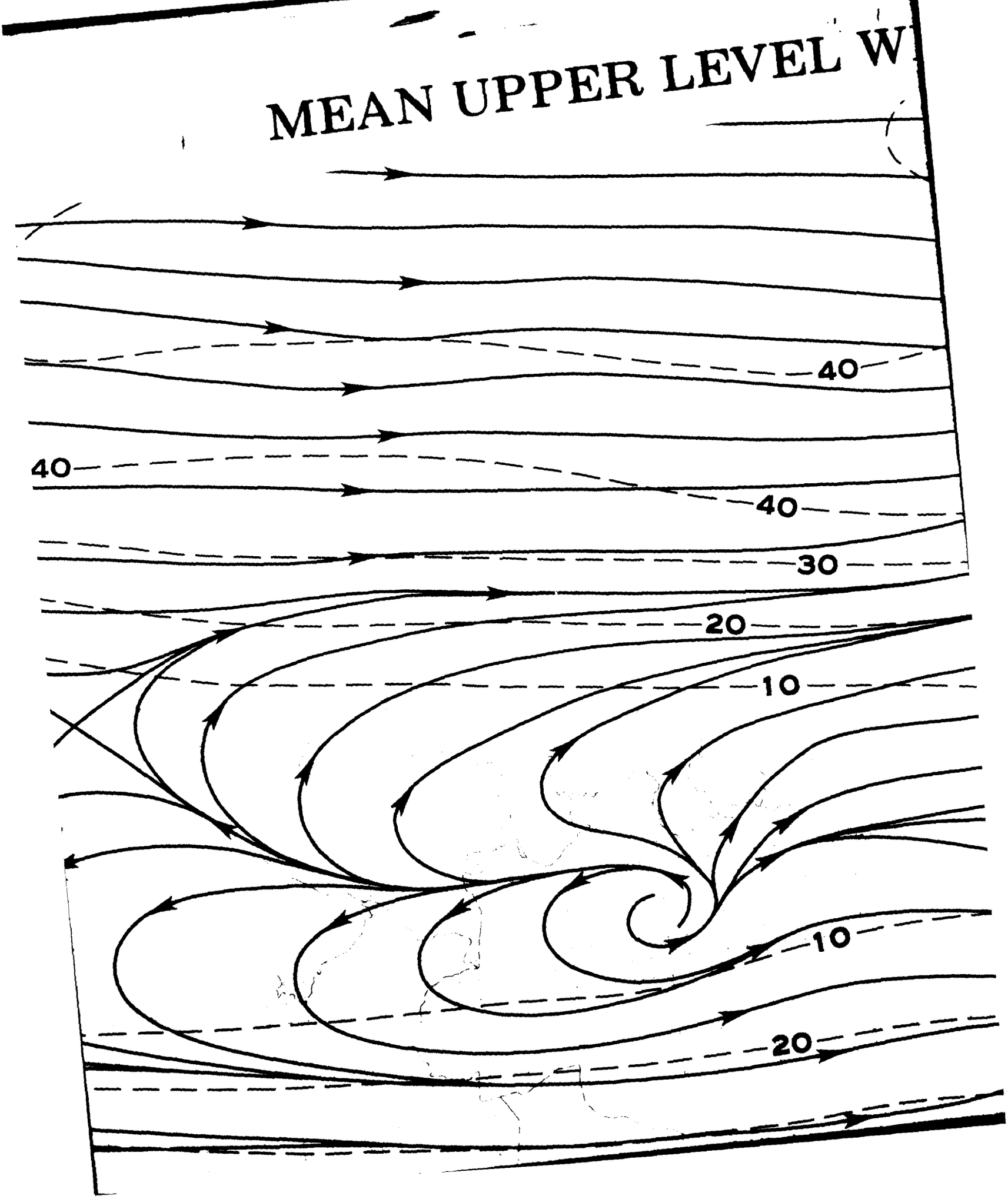

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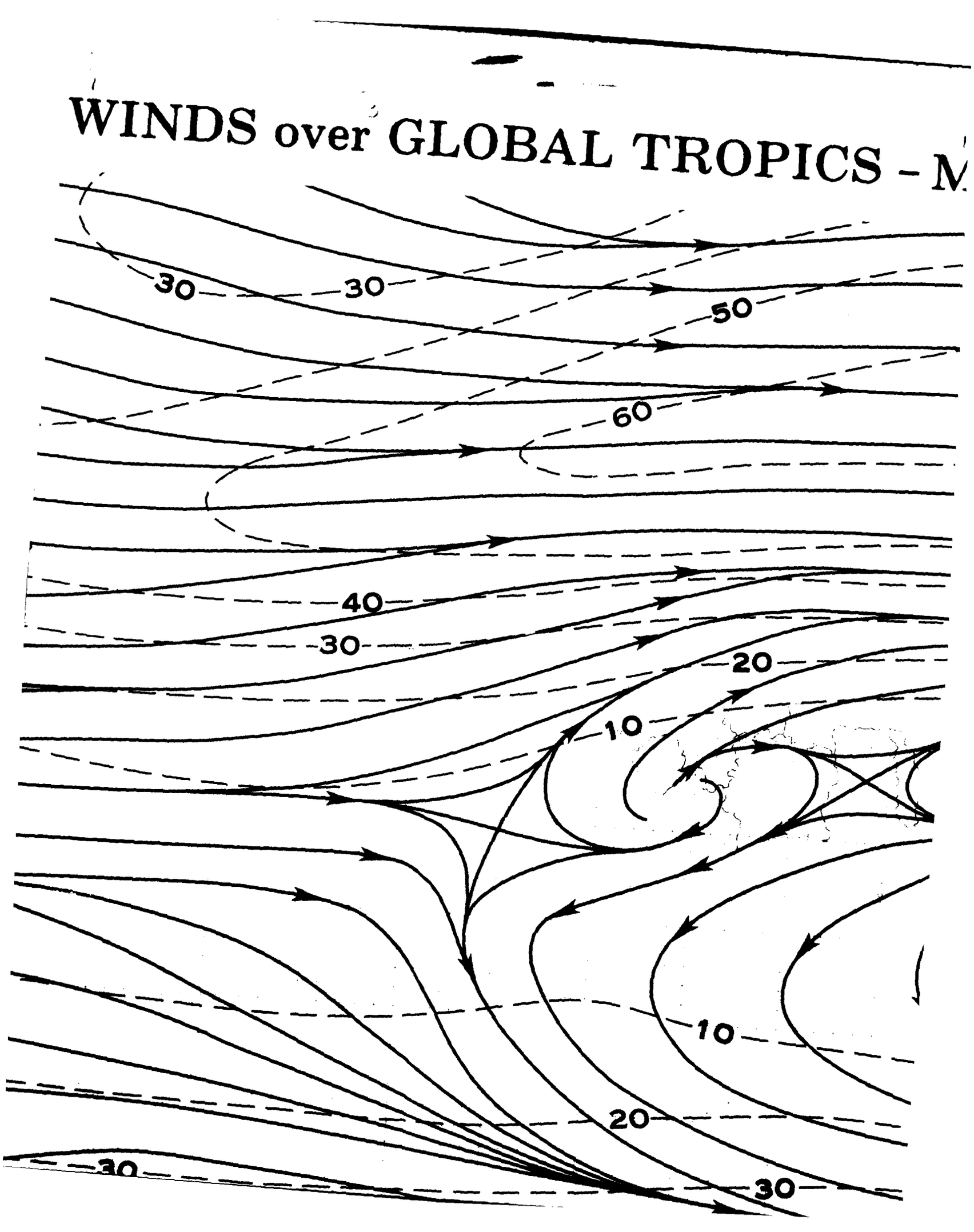

MULW-204E


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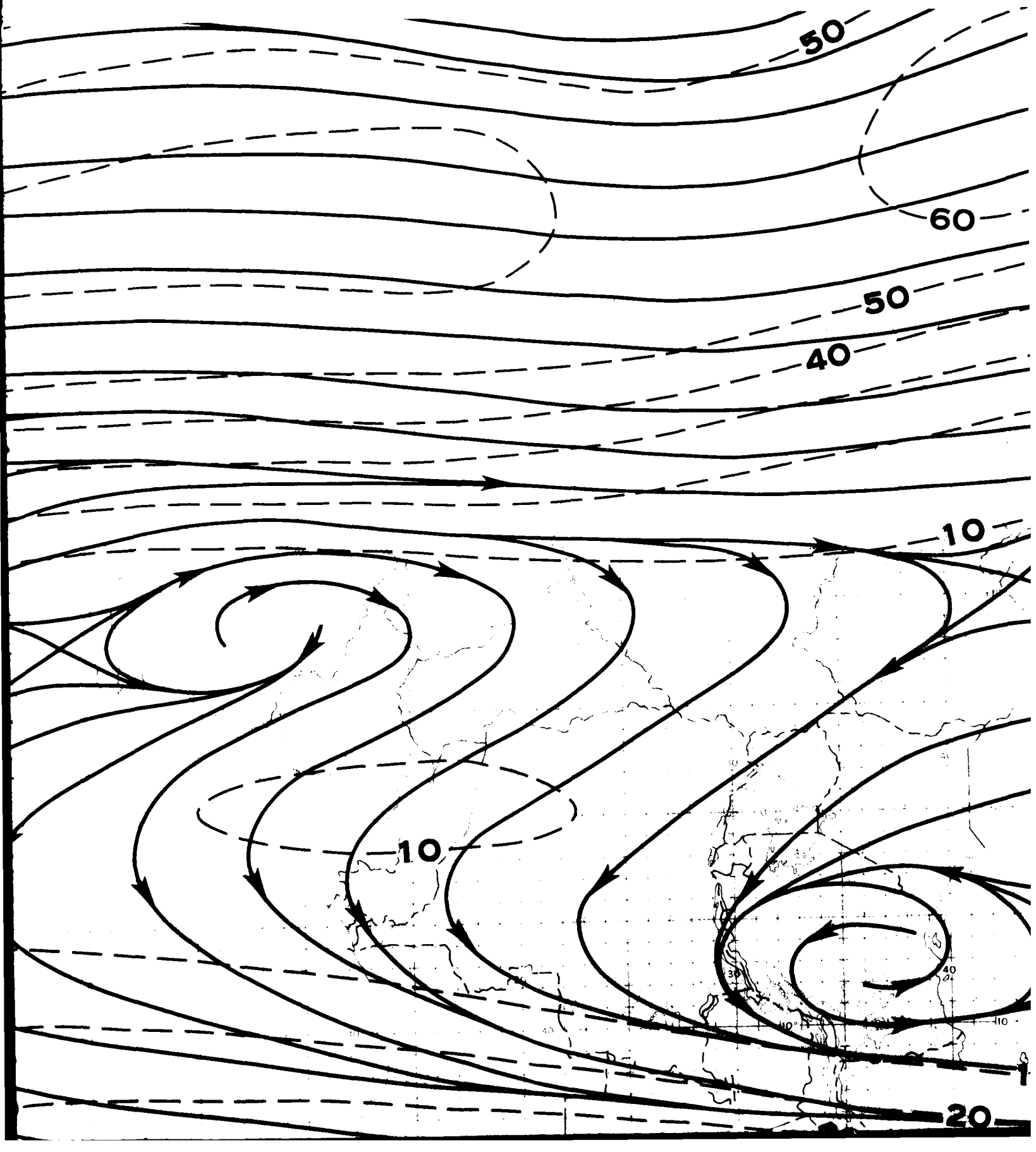
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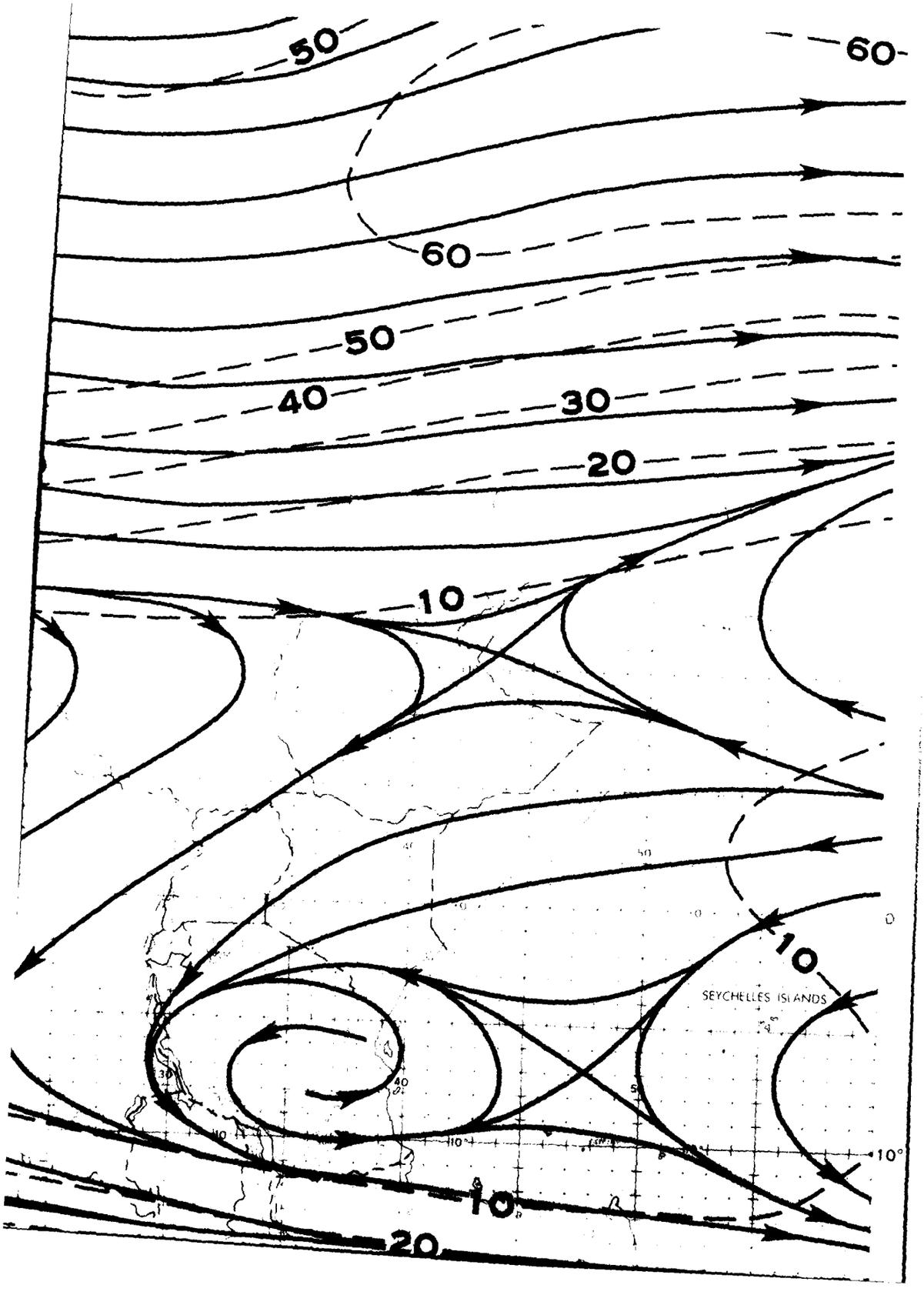


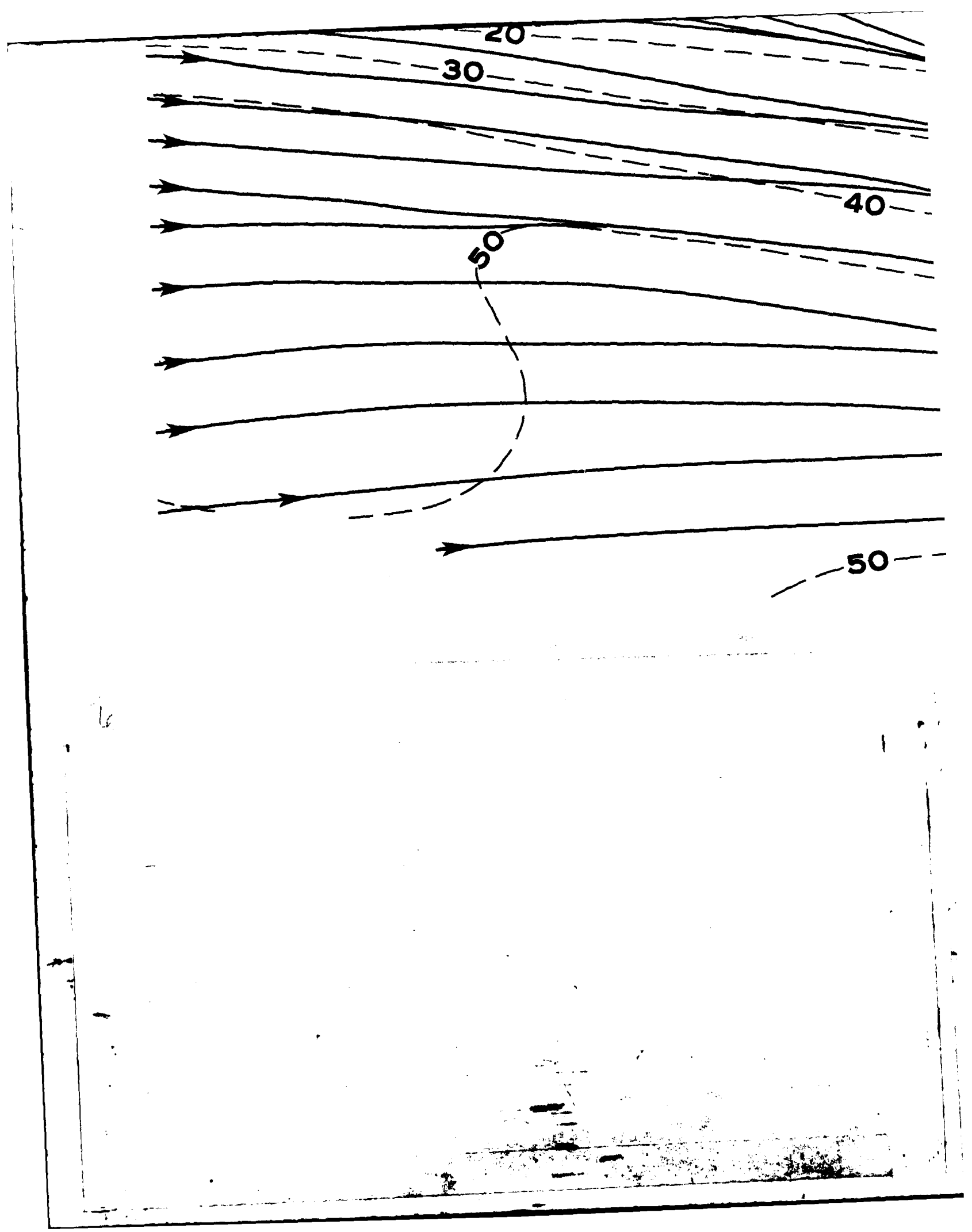
# WINDS over GLOBAL TROPICS - M

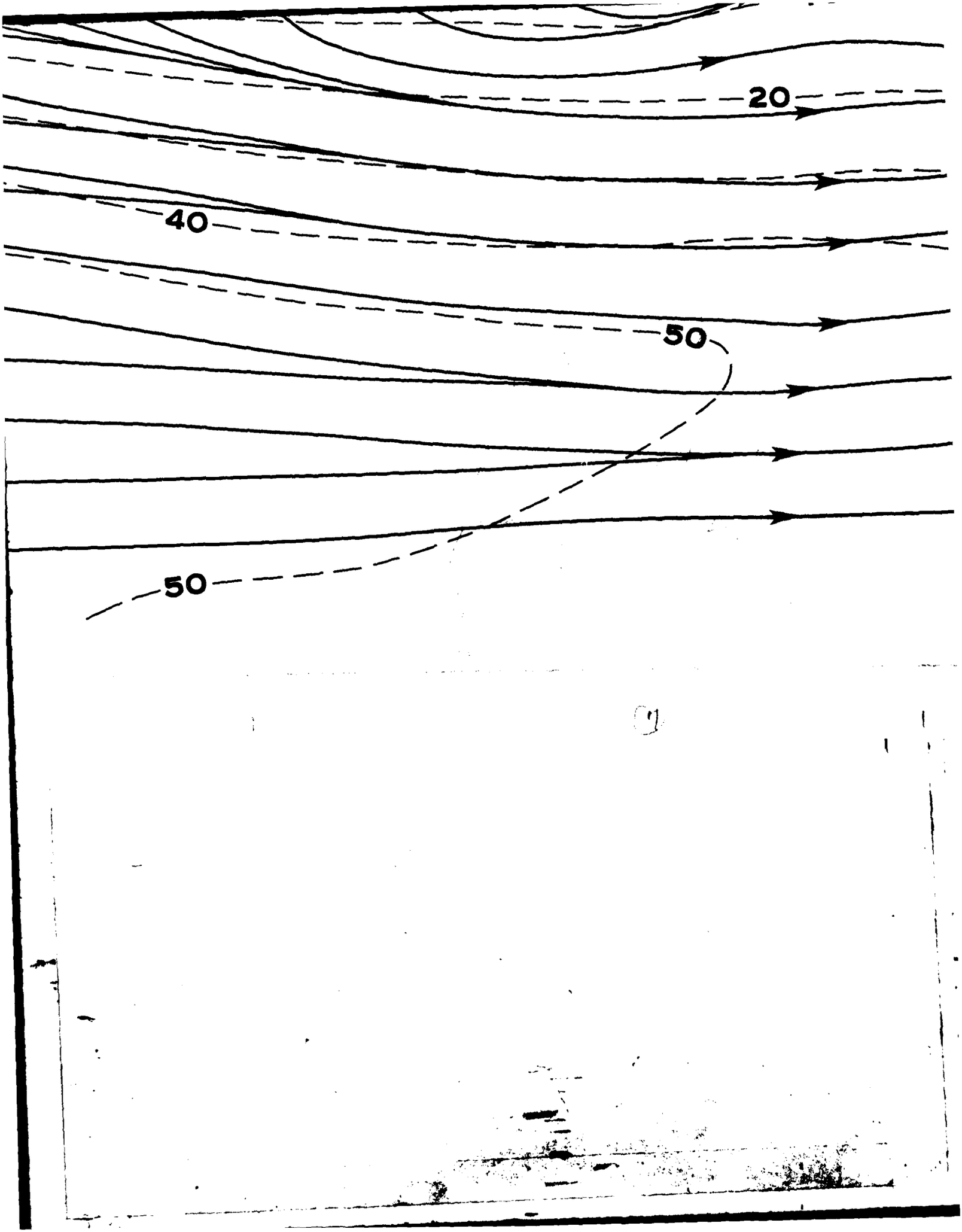


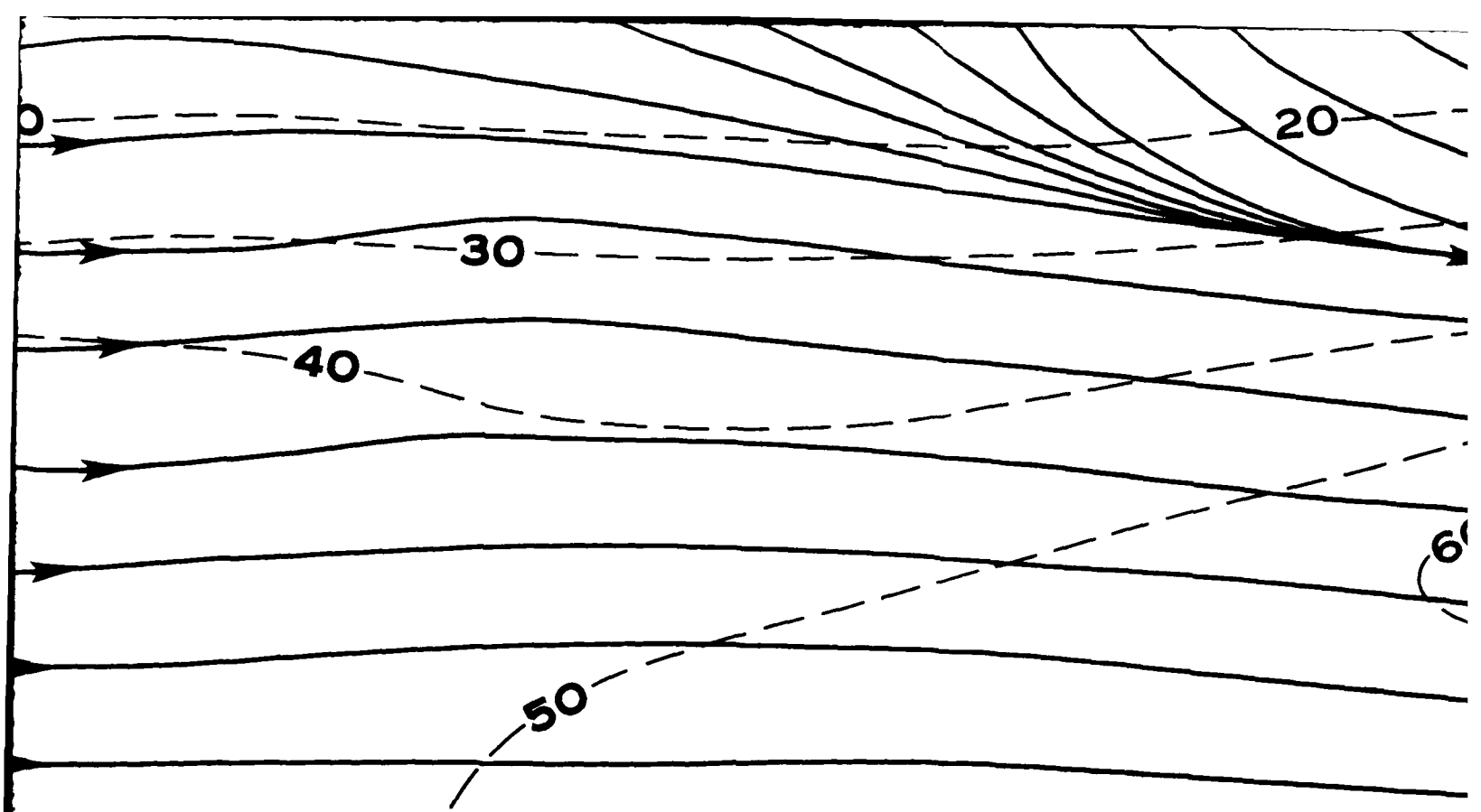
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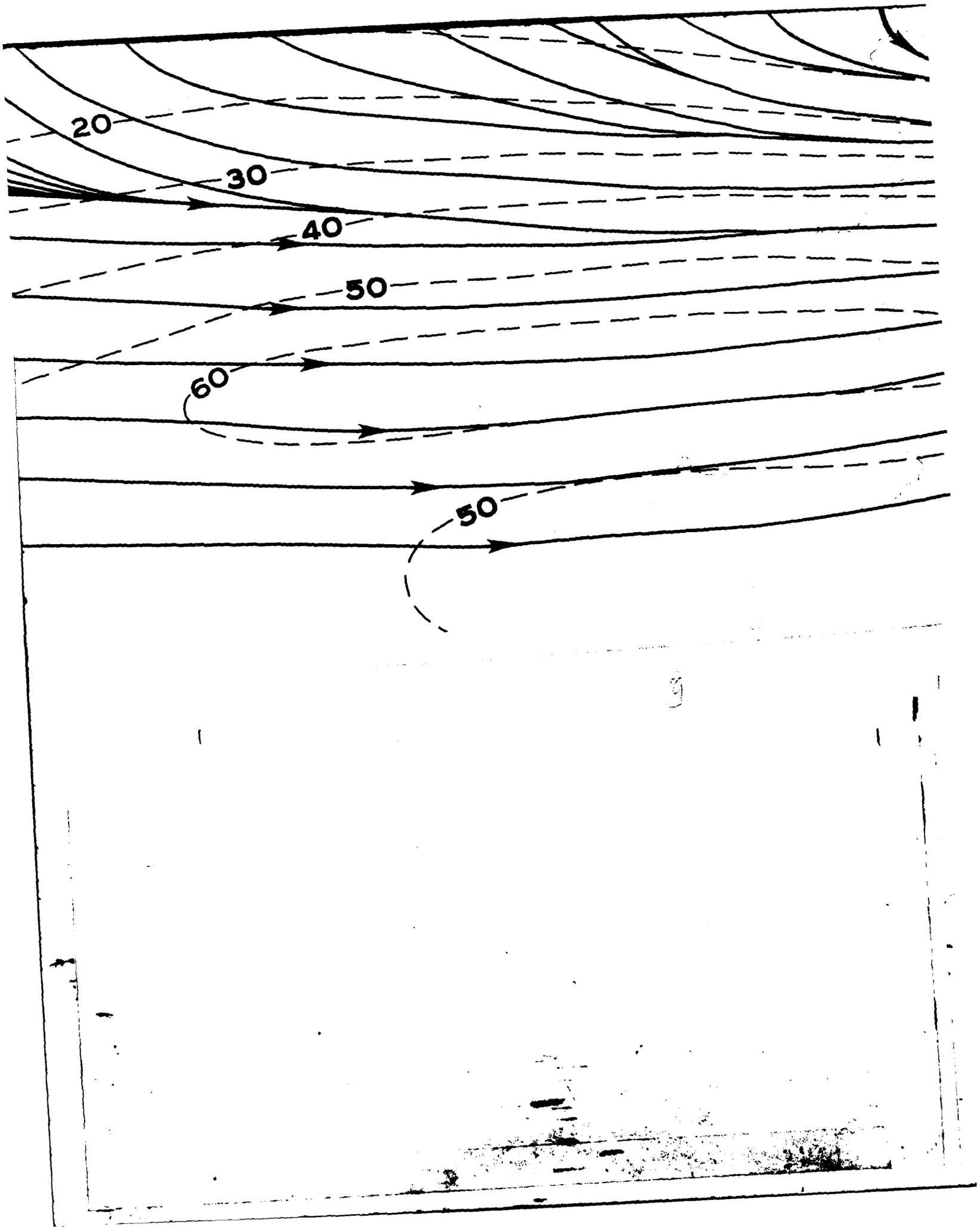


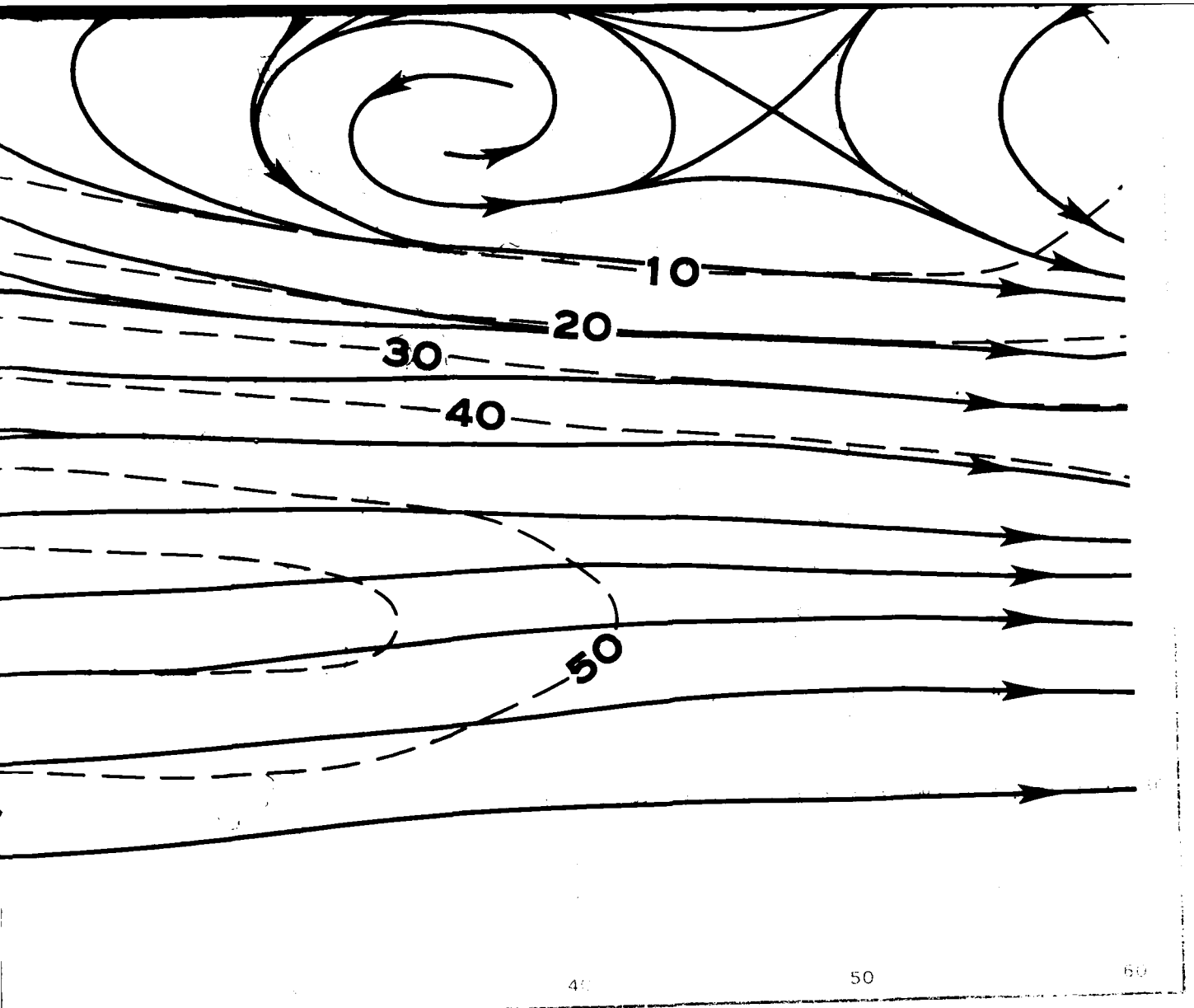

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SEYCHELLES ISLANDS
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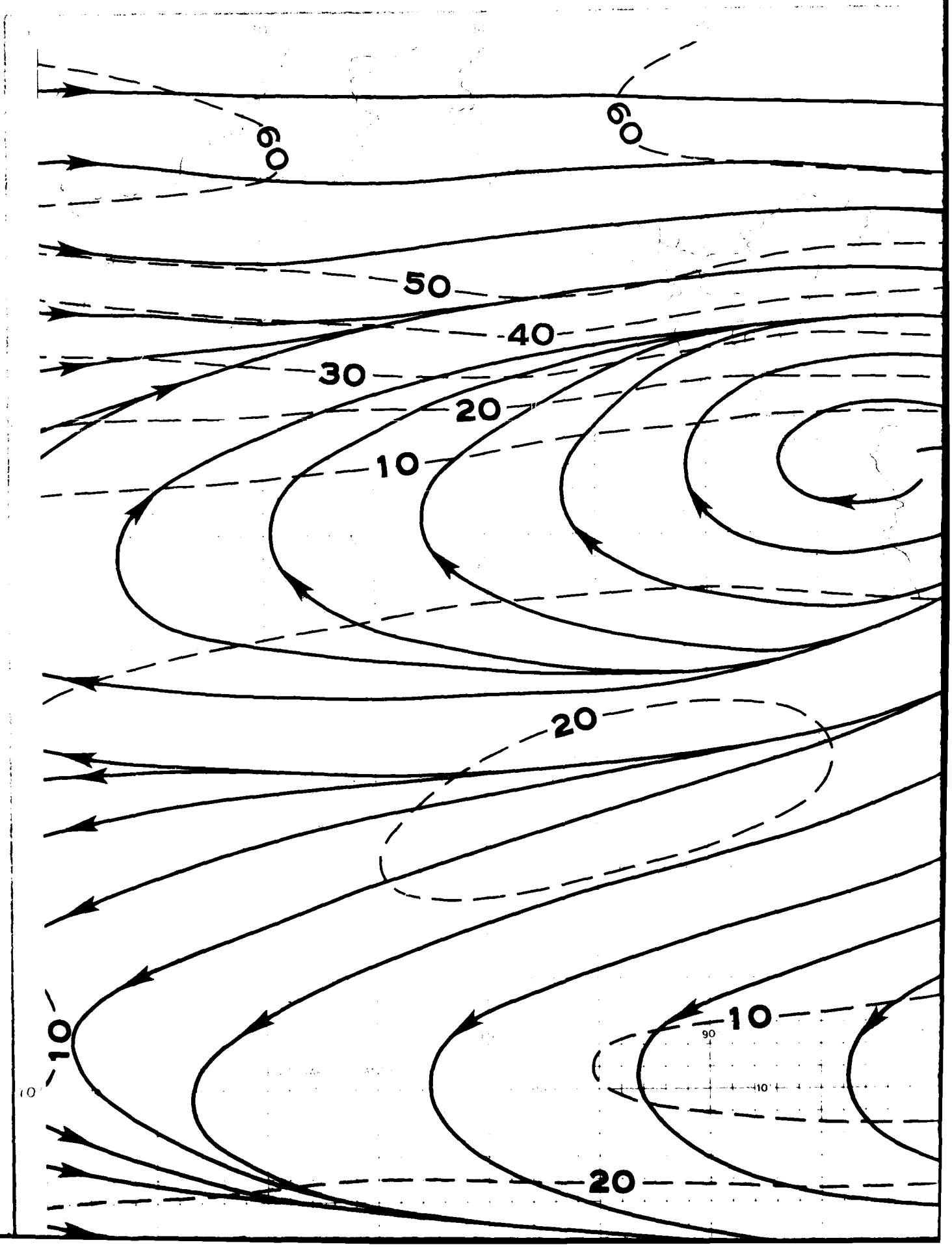

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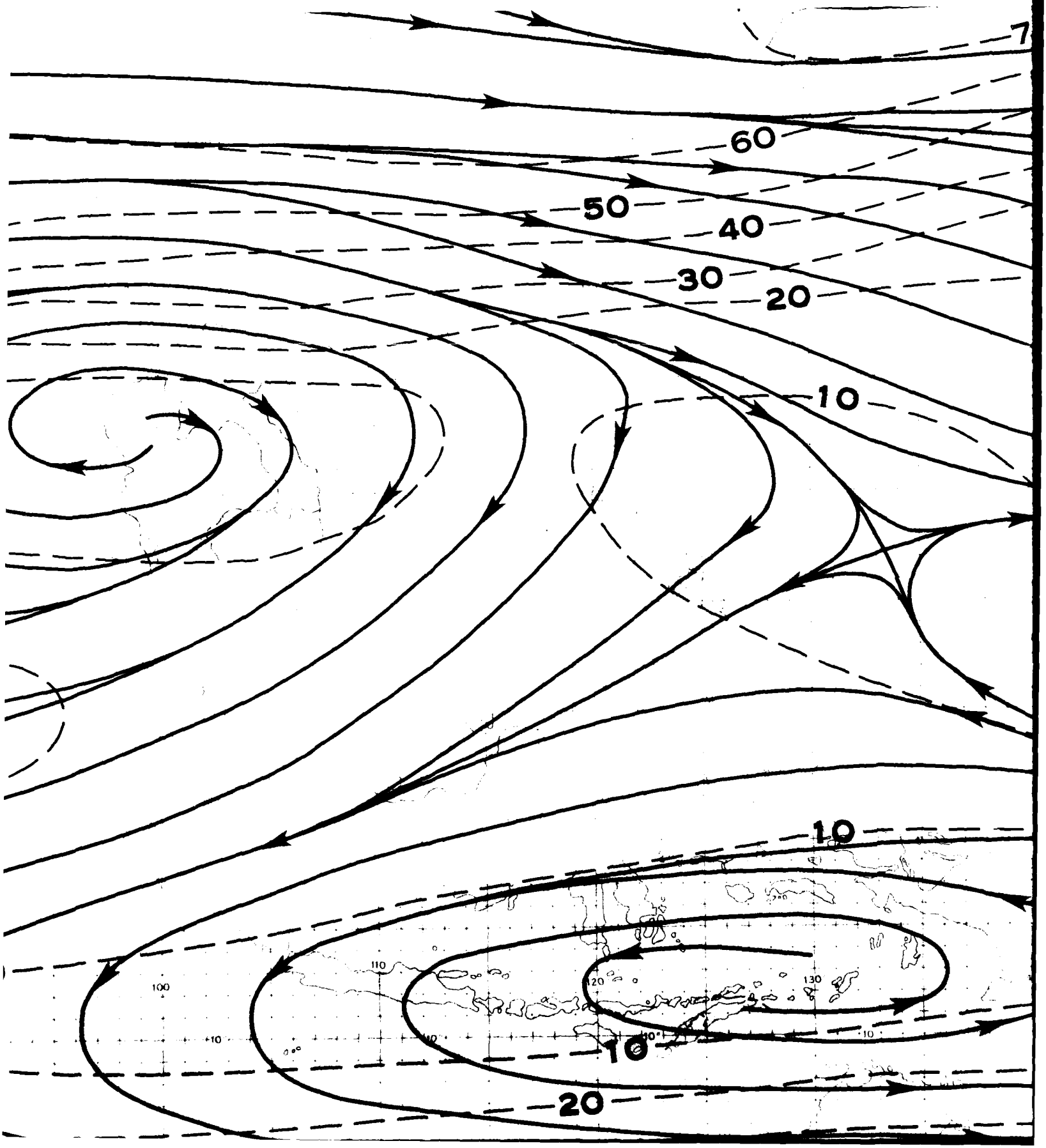

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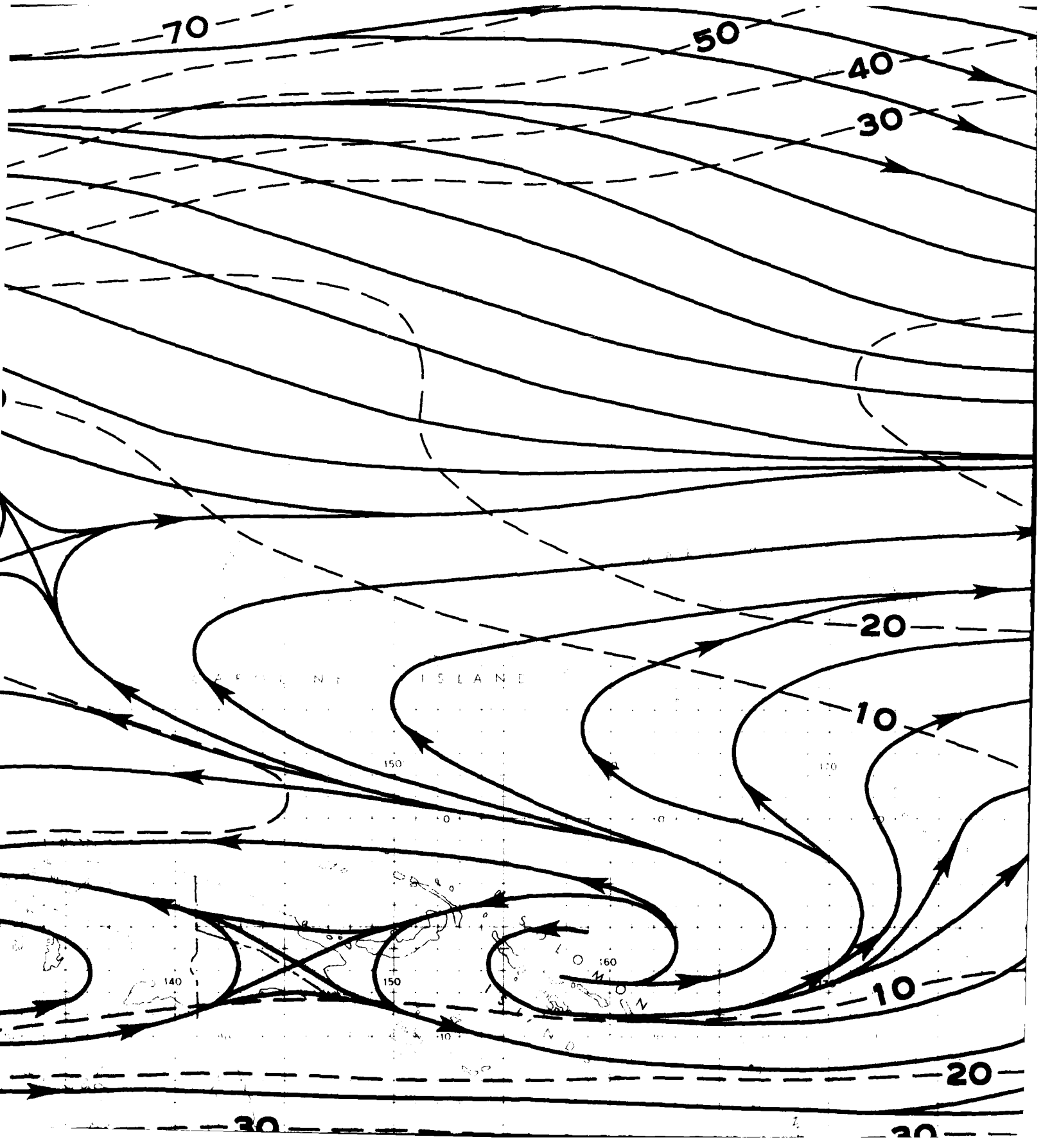

MULW-205W


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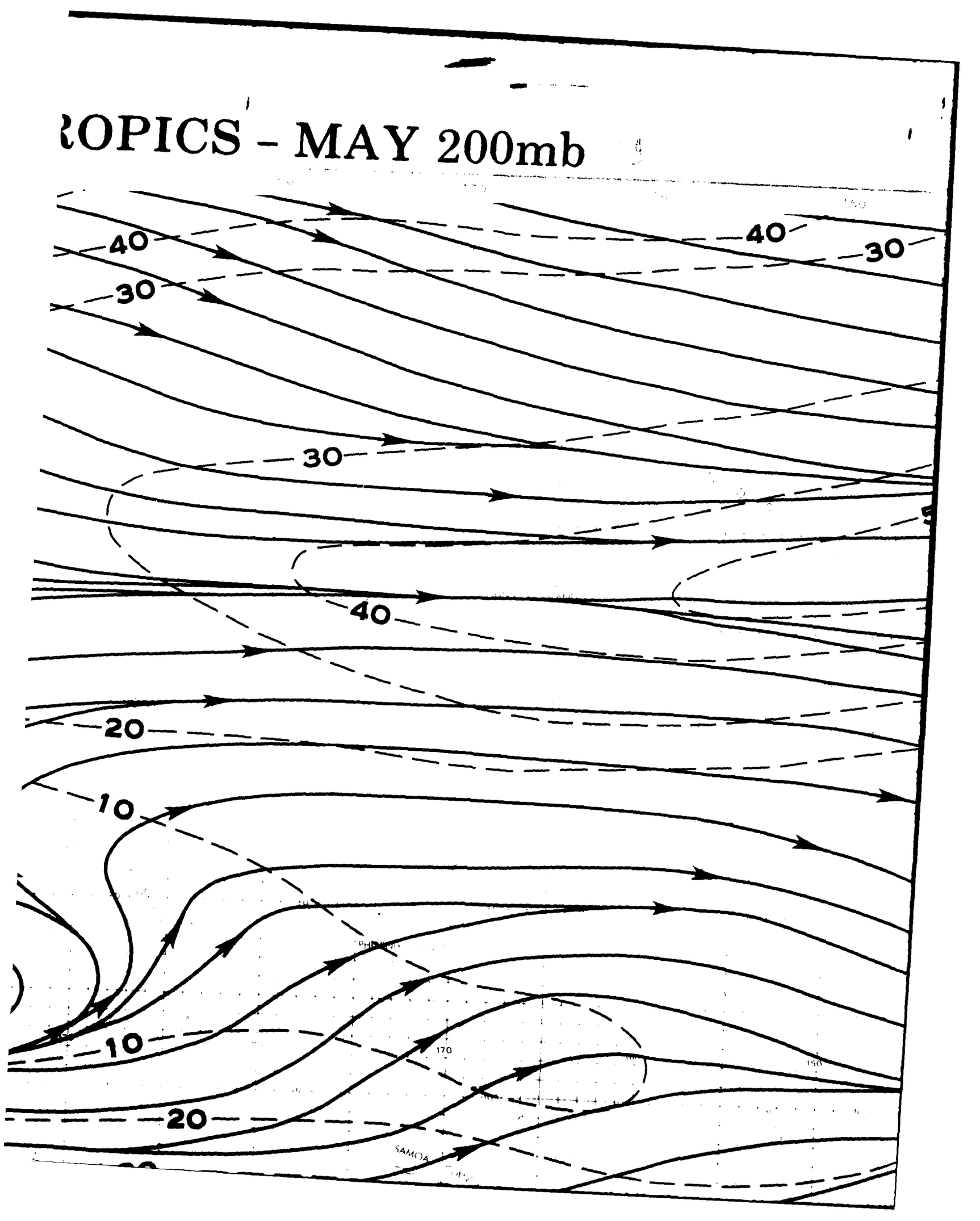
# MEAN UPPER LEVEL WIN

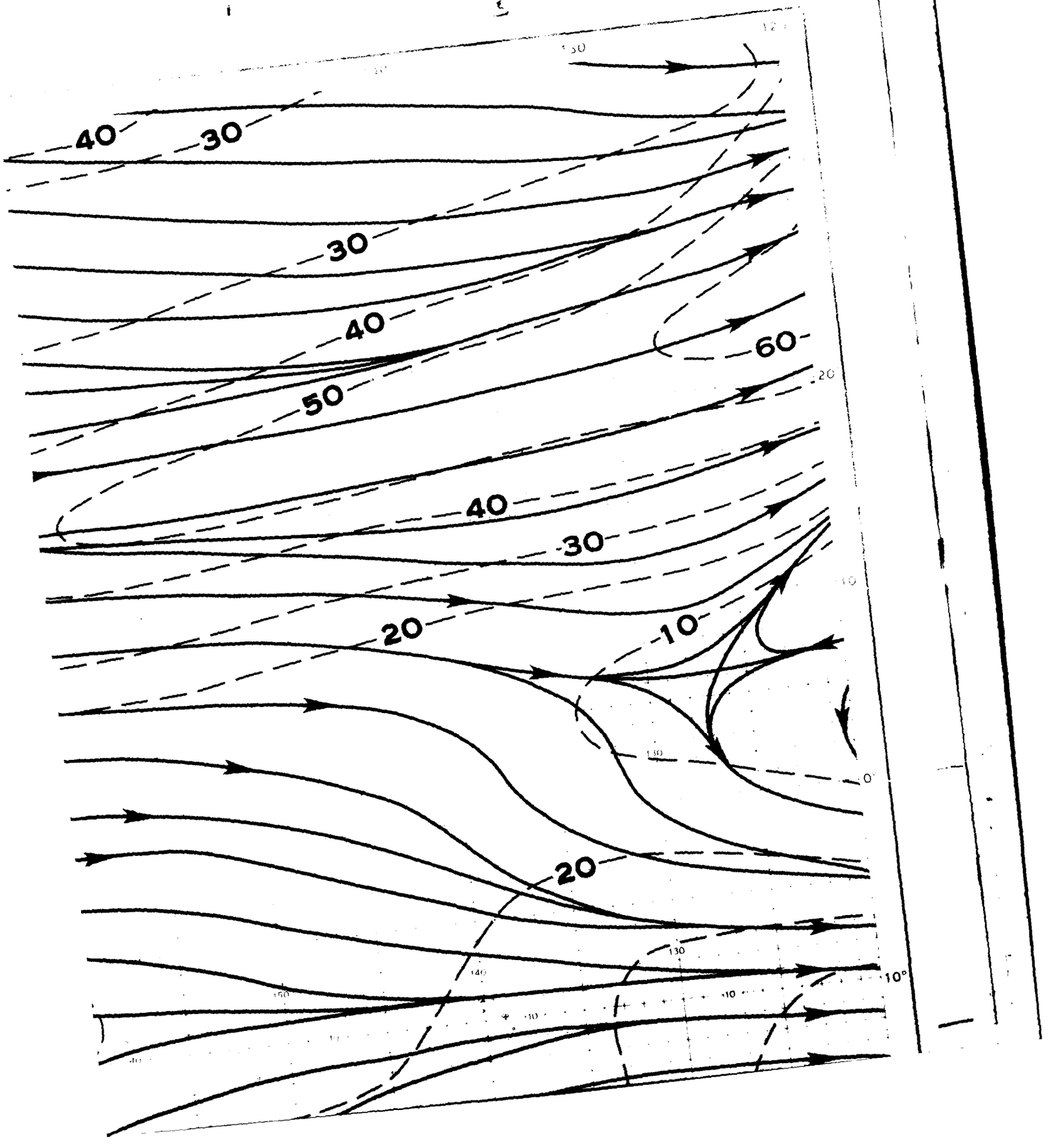


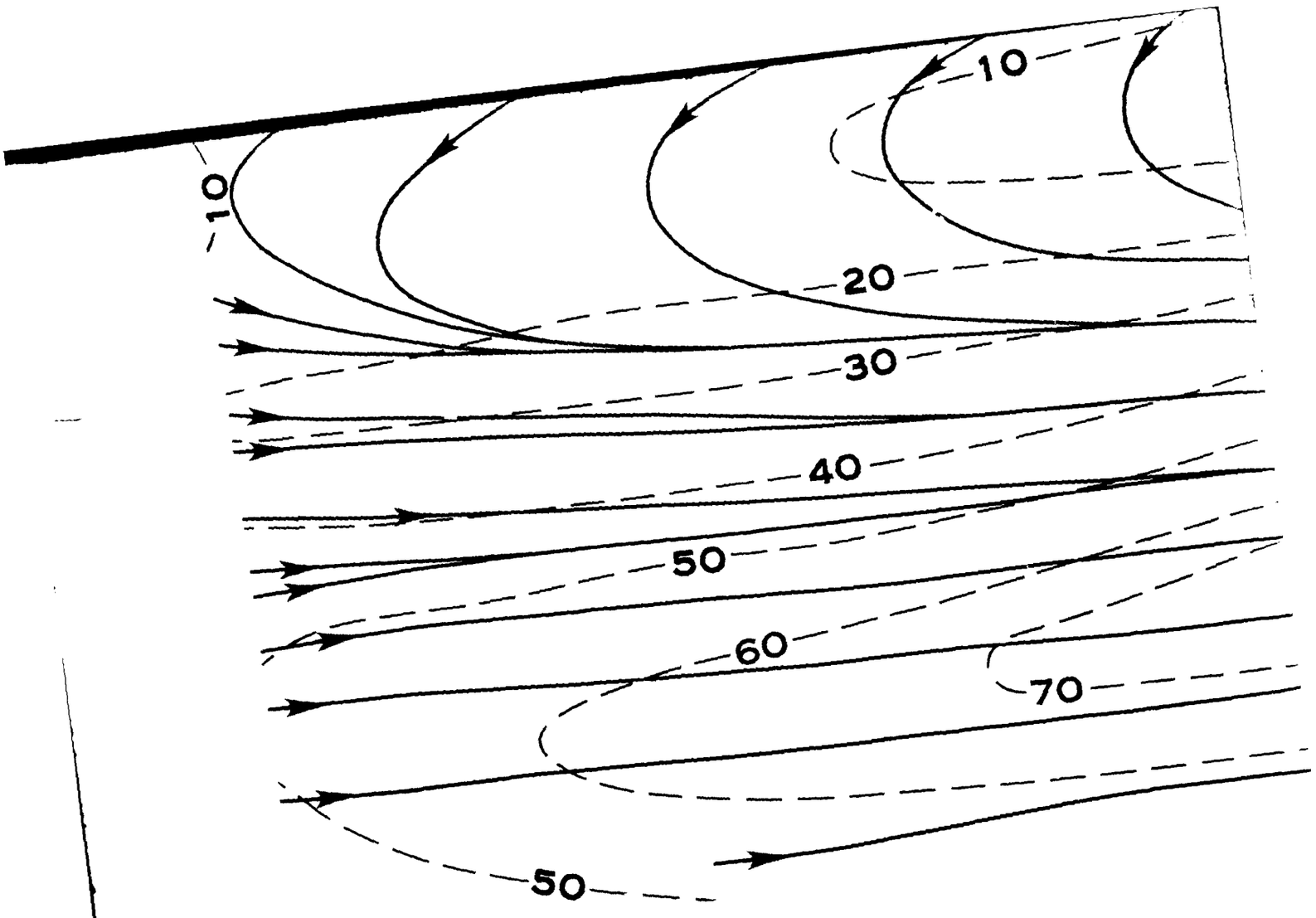
# L WINDS over GLOBAL TROPICS –

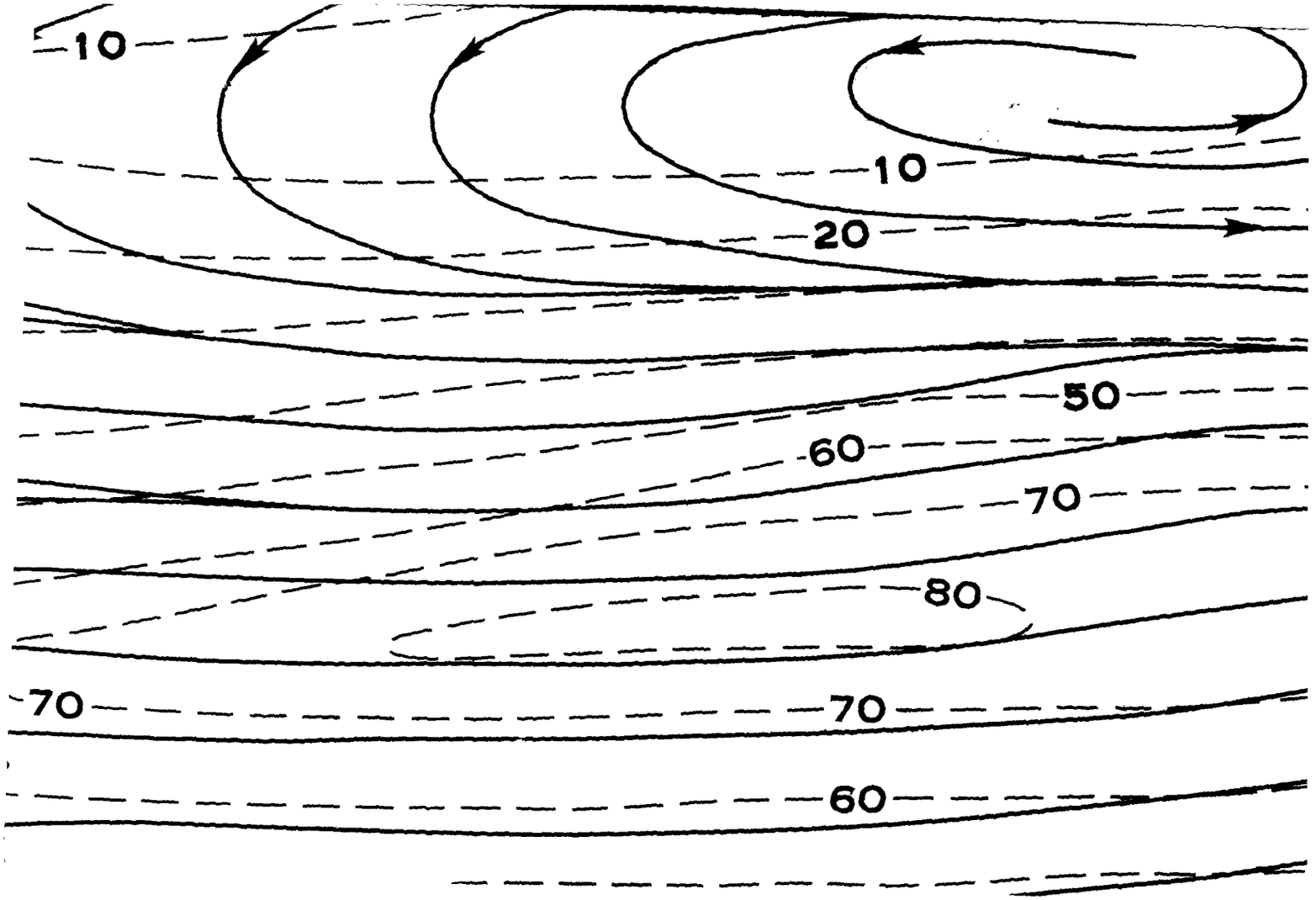


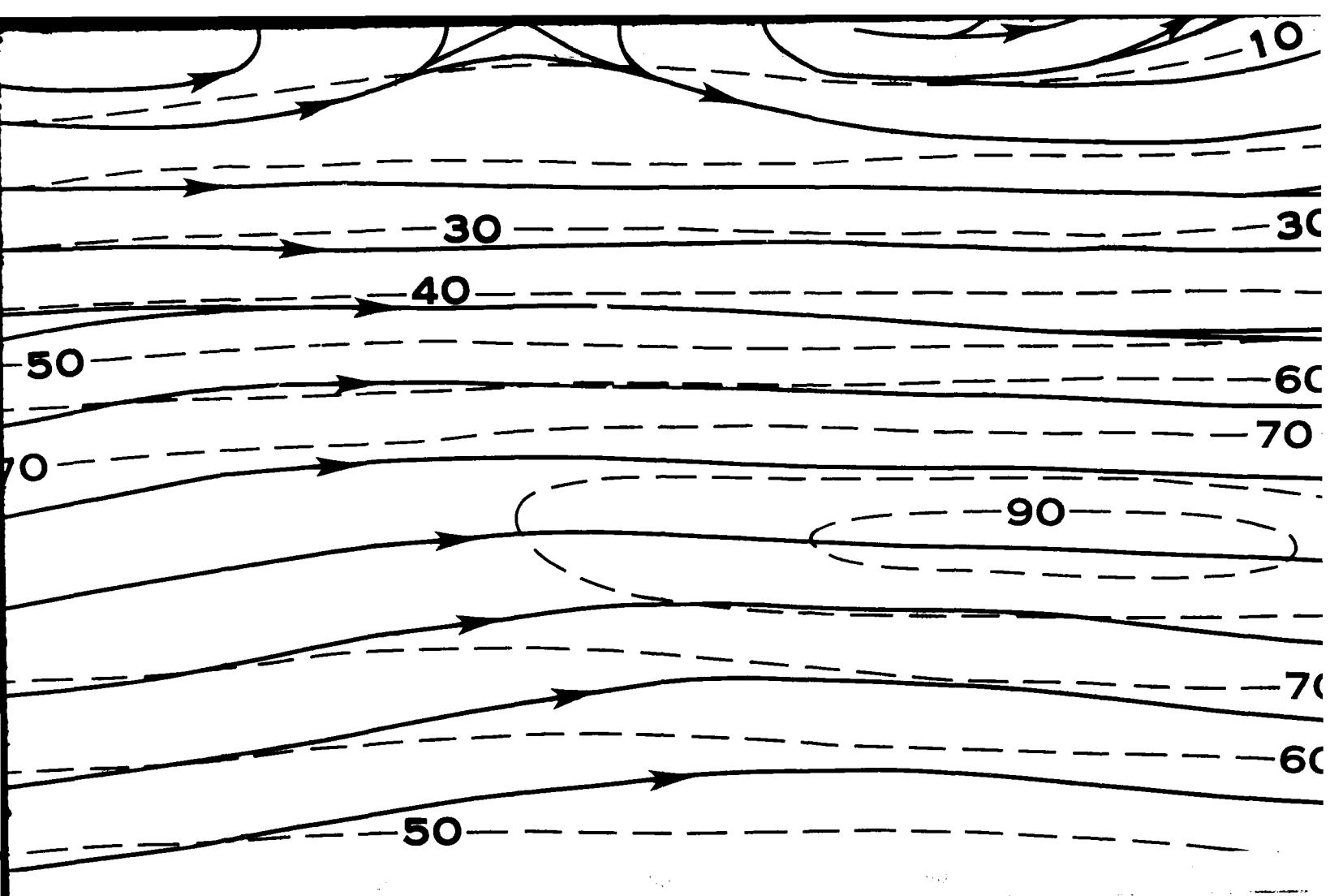
# ROPICS - MAY 200mb

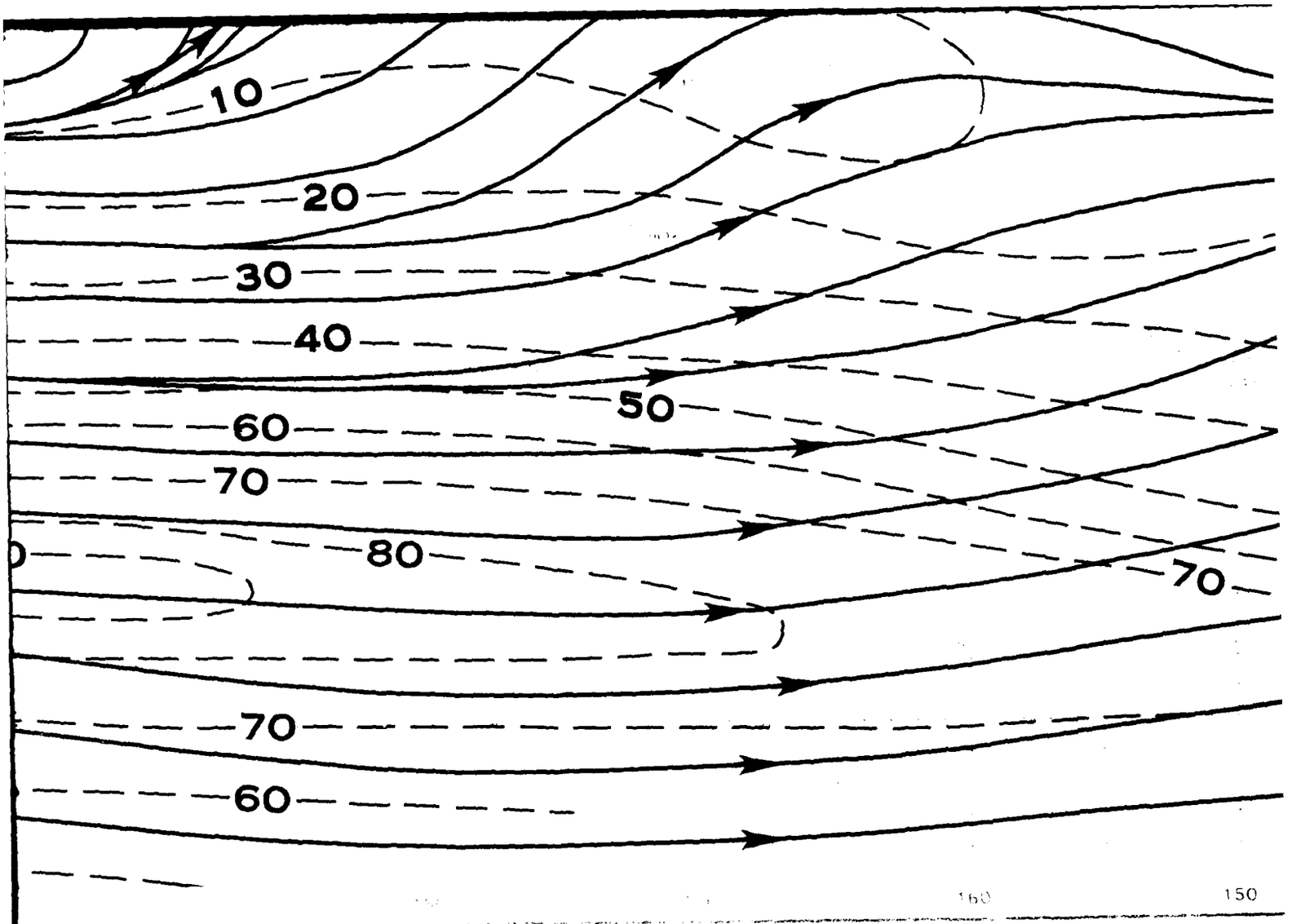


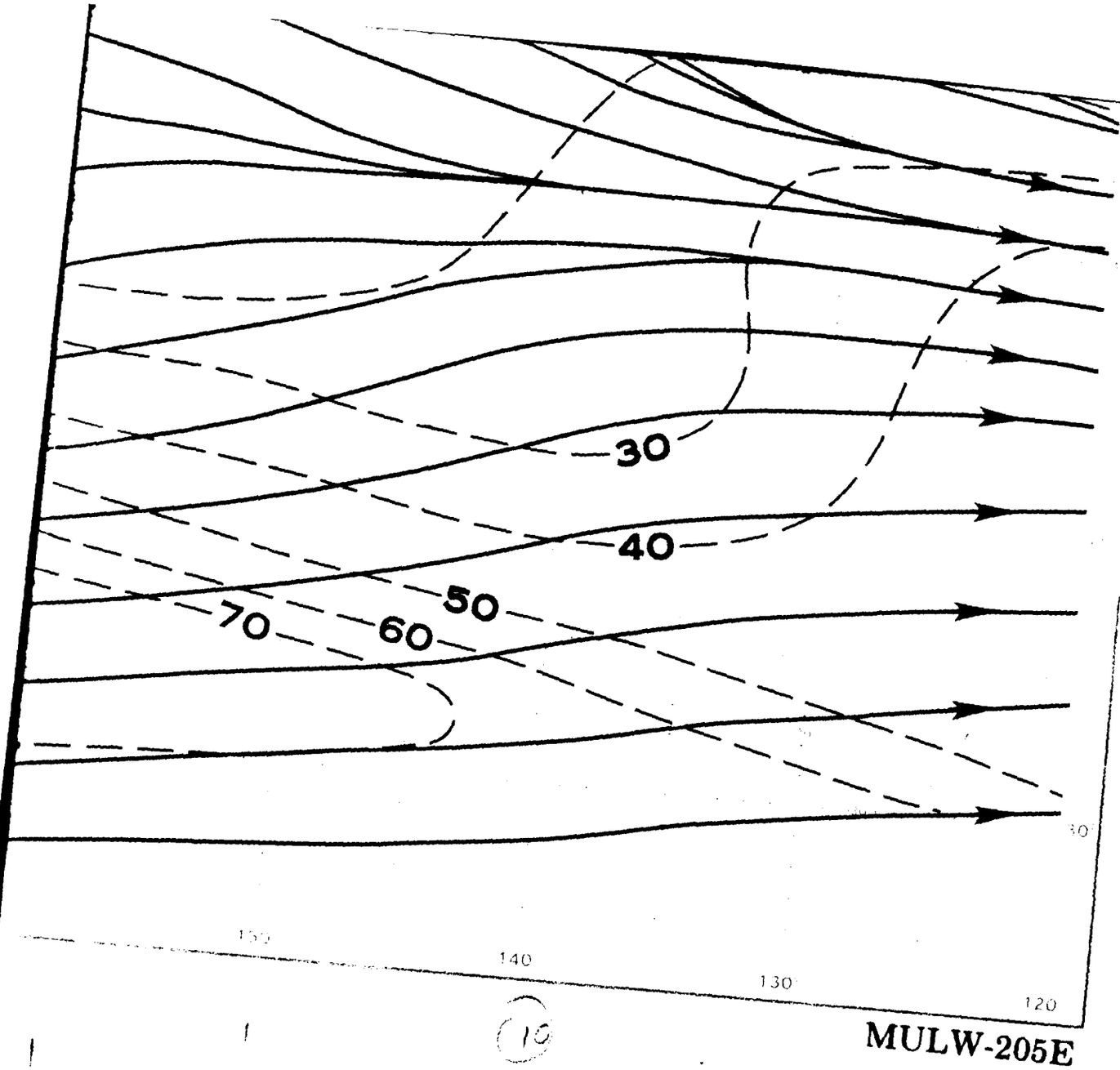

40
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10
20
10°


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60
70
50

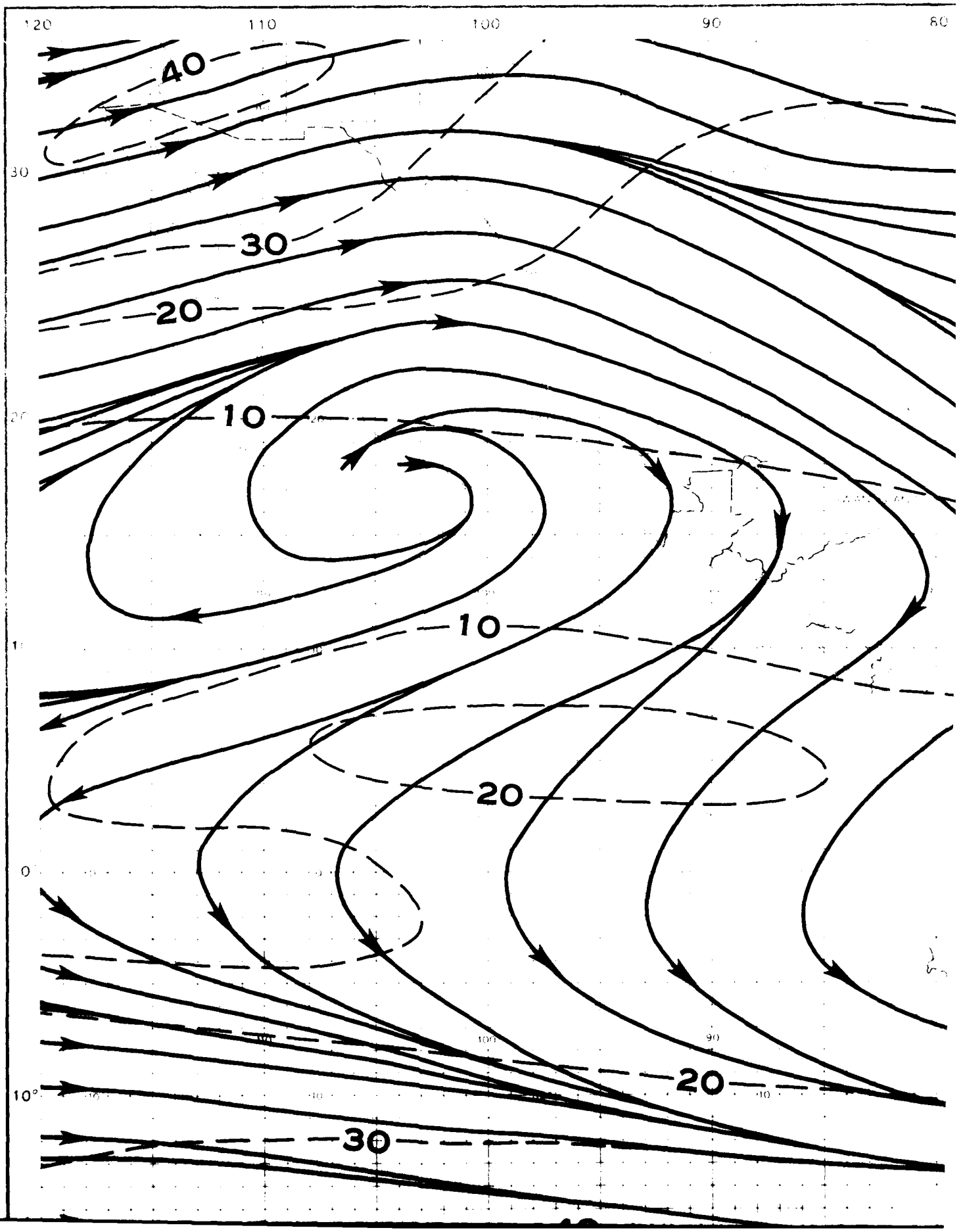

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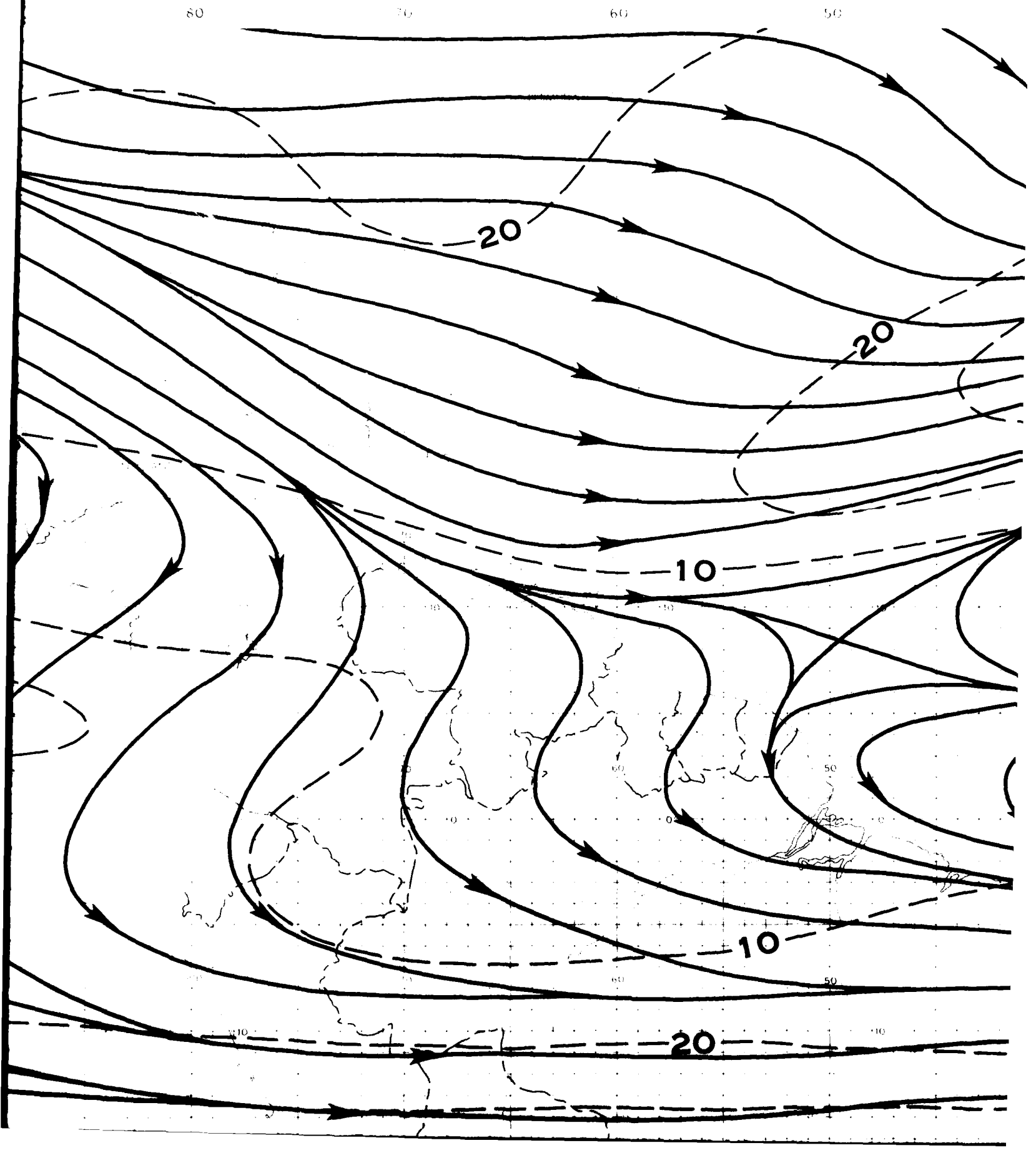

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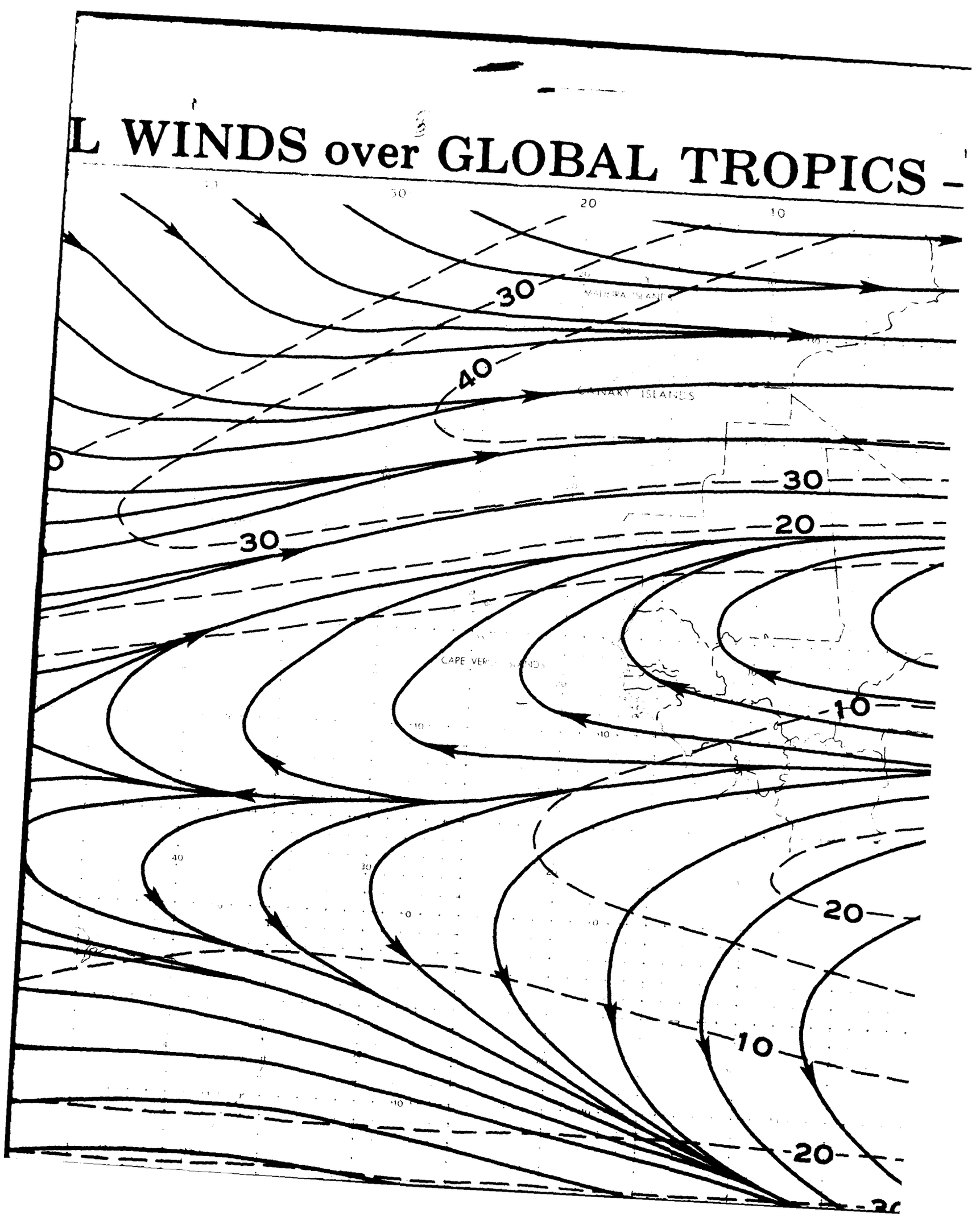



MULW-205E

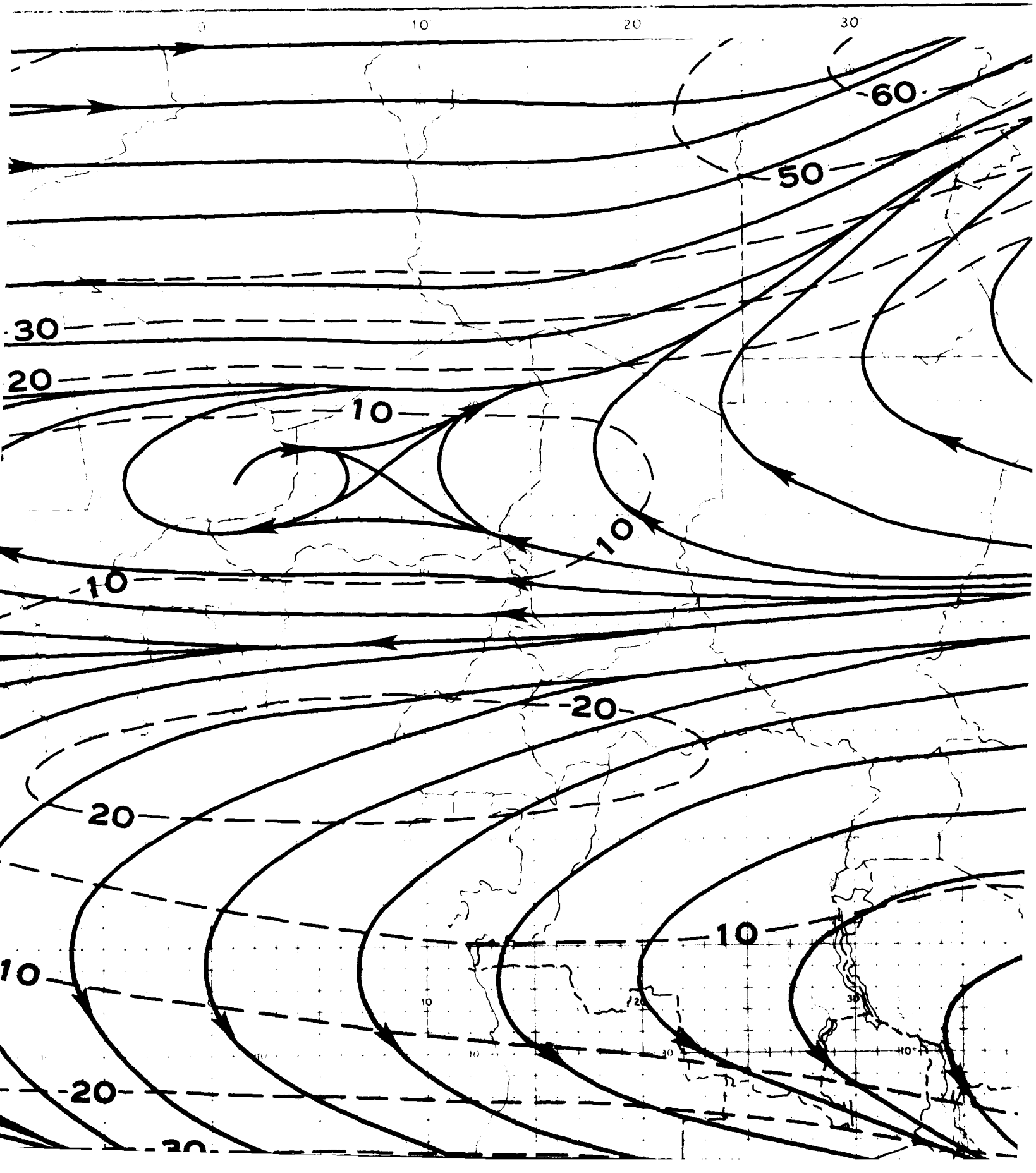

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80
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20
10
10
20
0
10°
20
30

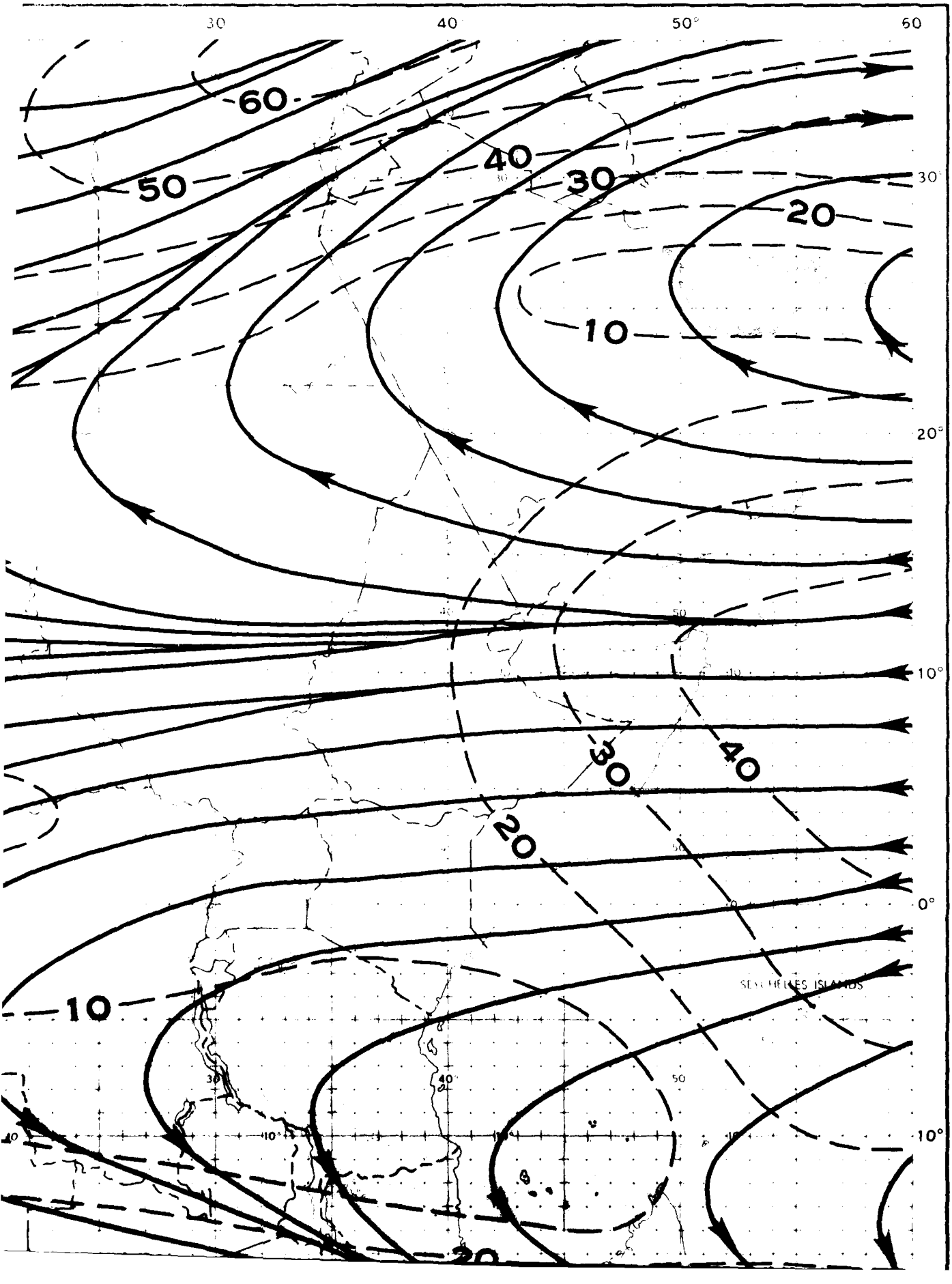
# MEAN UPPER LEVEL WI

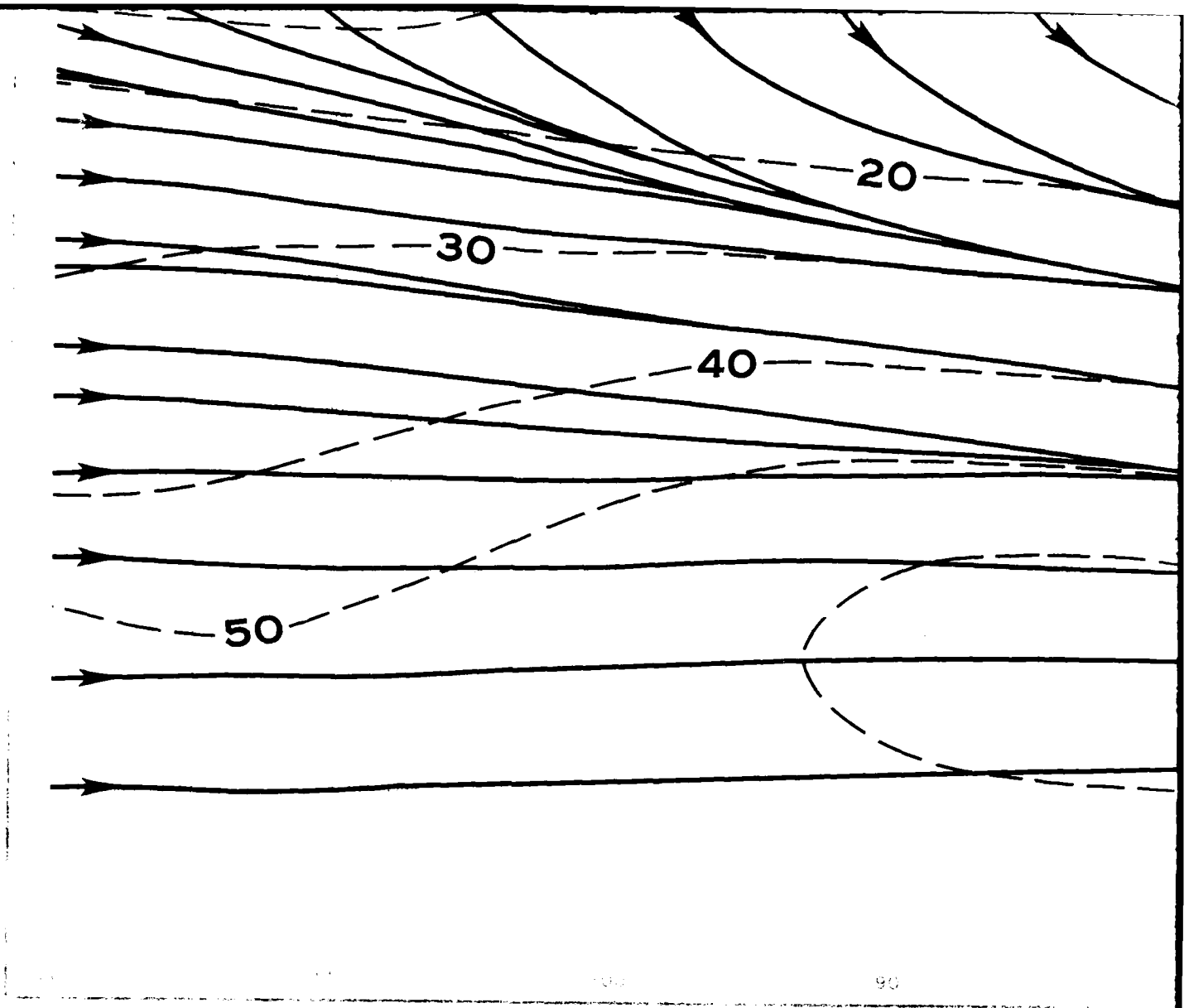


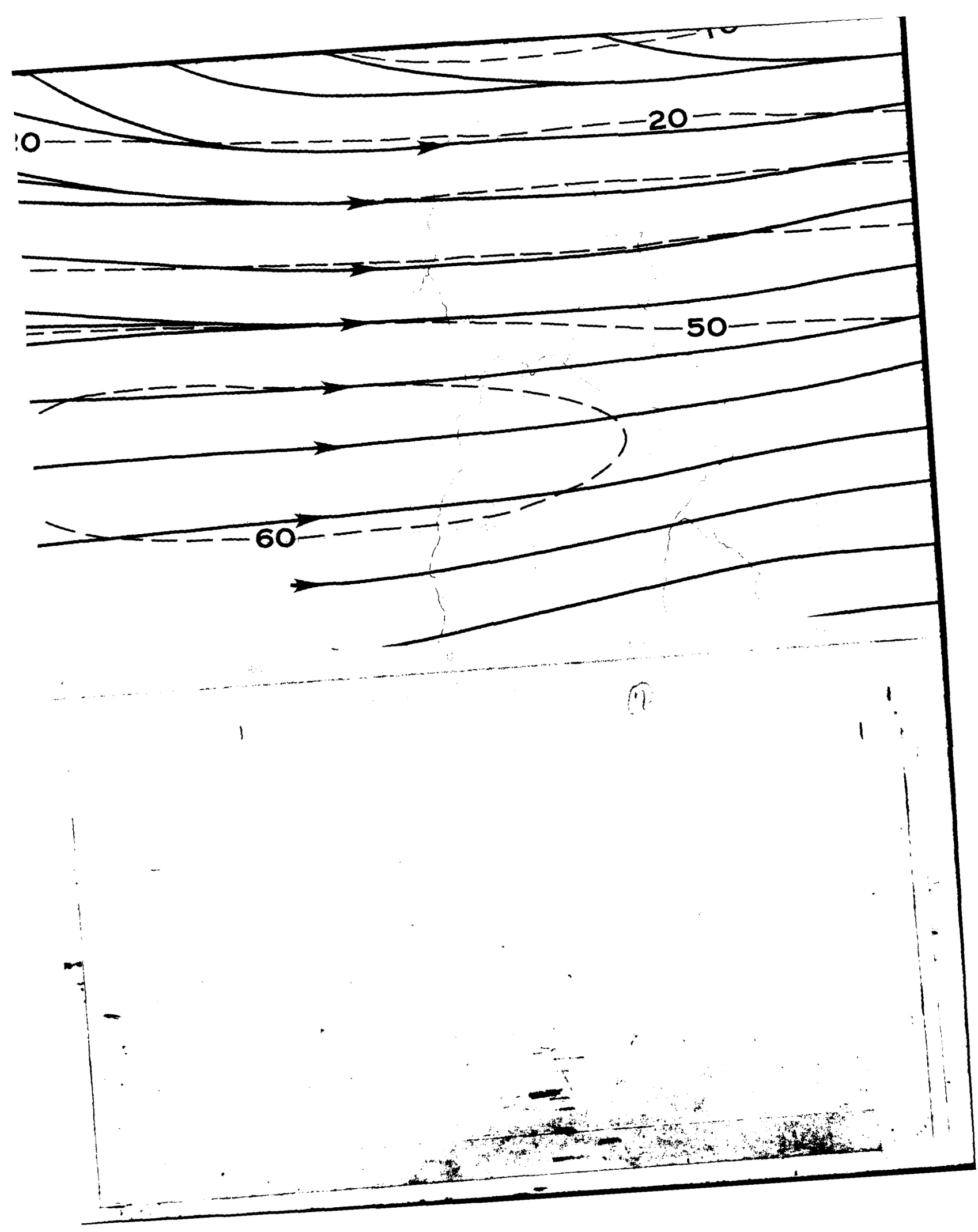

L WINDS over GLOBAL TROPICS -
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10
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30
40
CANARY ISLANDS
CAPE VERDE ISLANDS

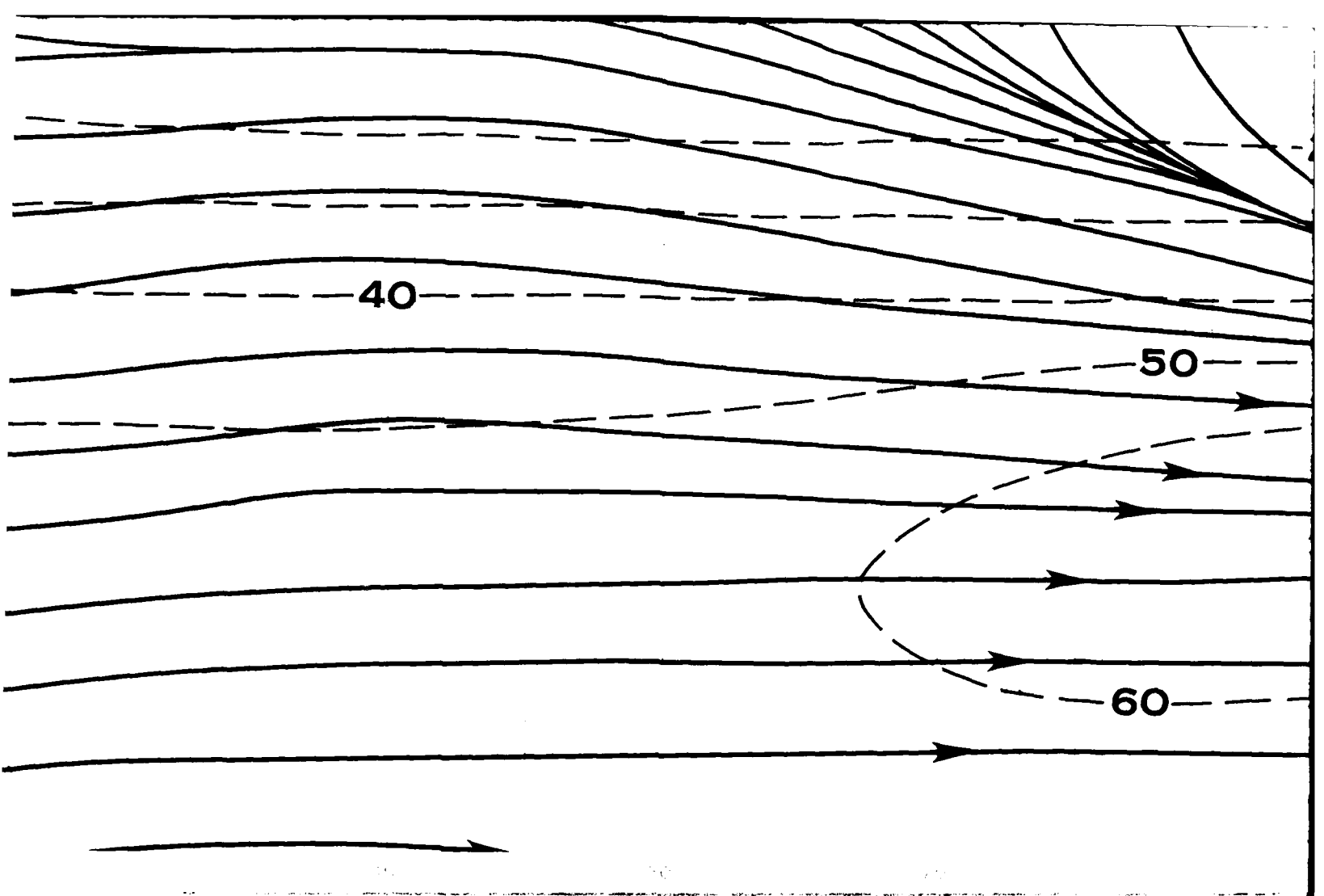
# PICS - JUNE 200mb

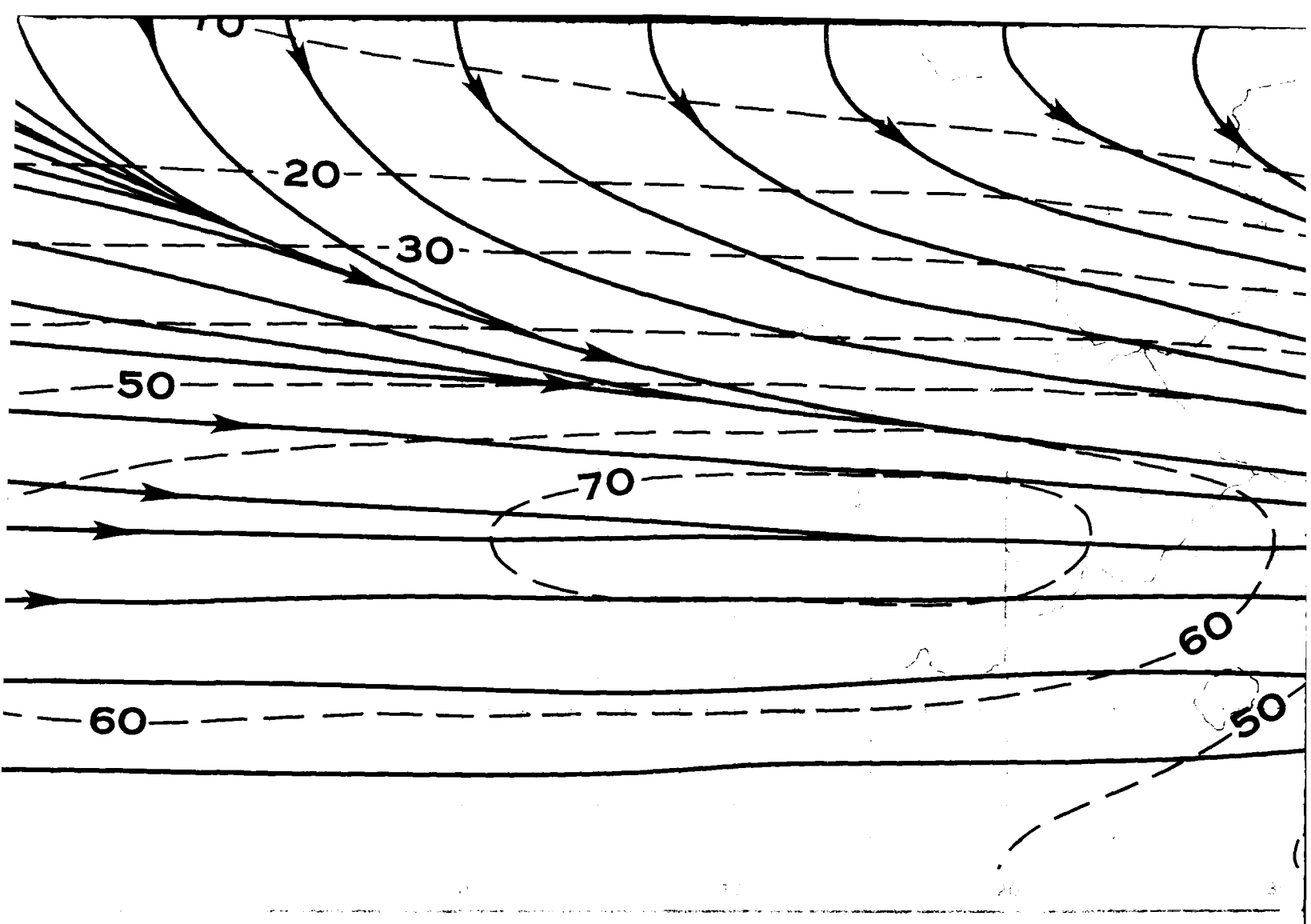


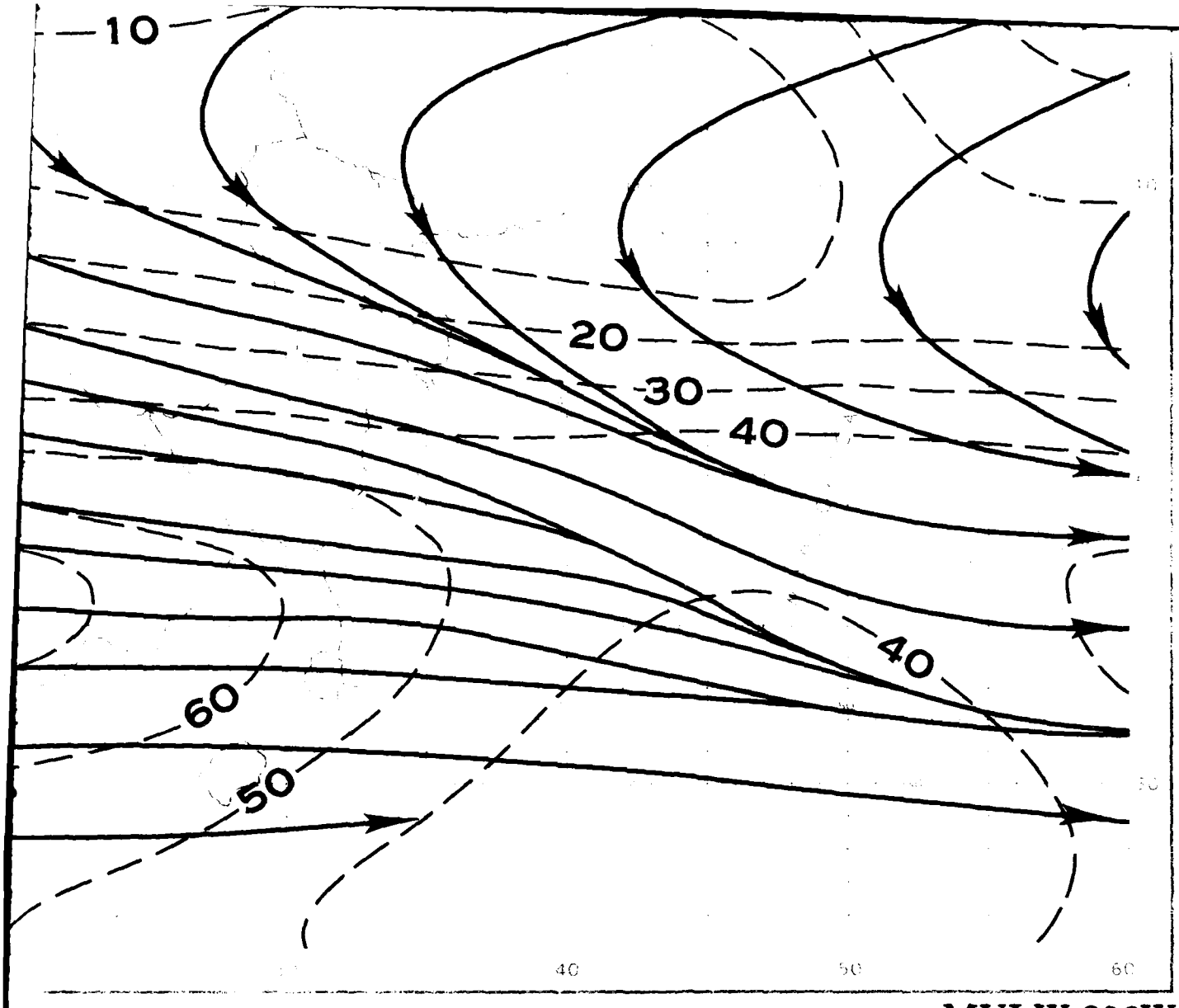

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40
50°
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50
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20
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30°
20°
10°
0°
10
30
40
20
SEYCHELLES ISLANDS
10°


20
30
40
50

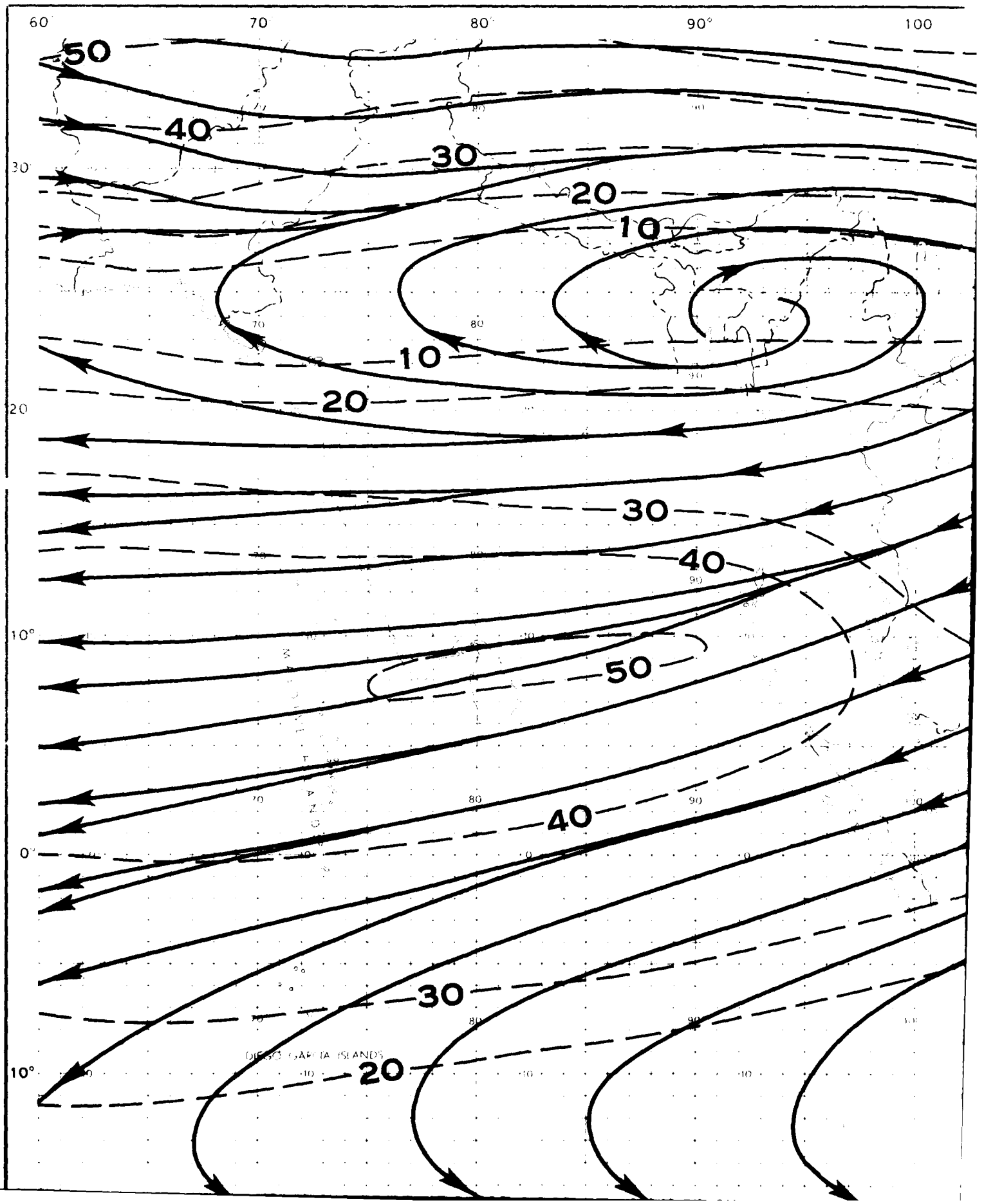

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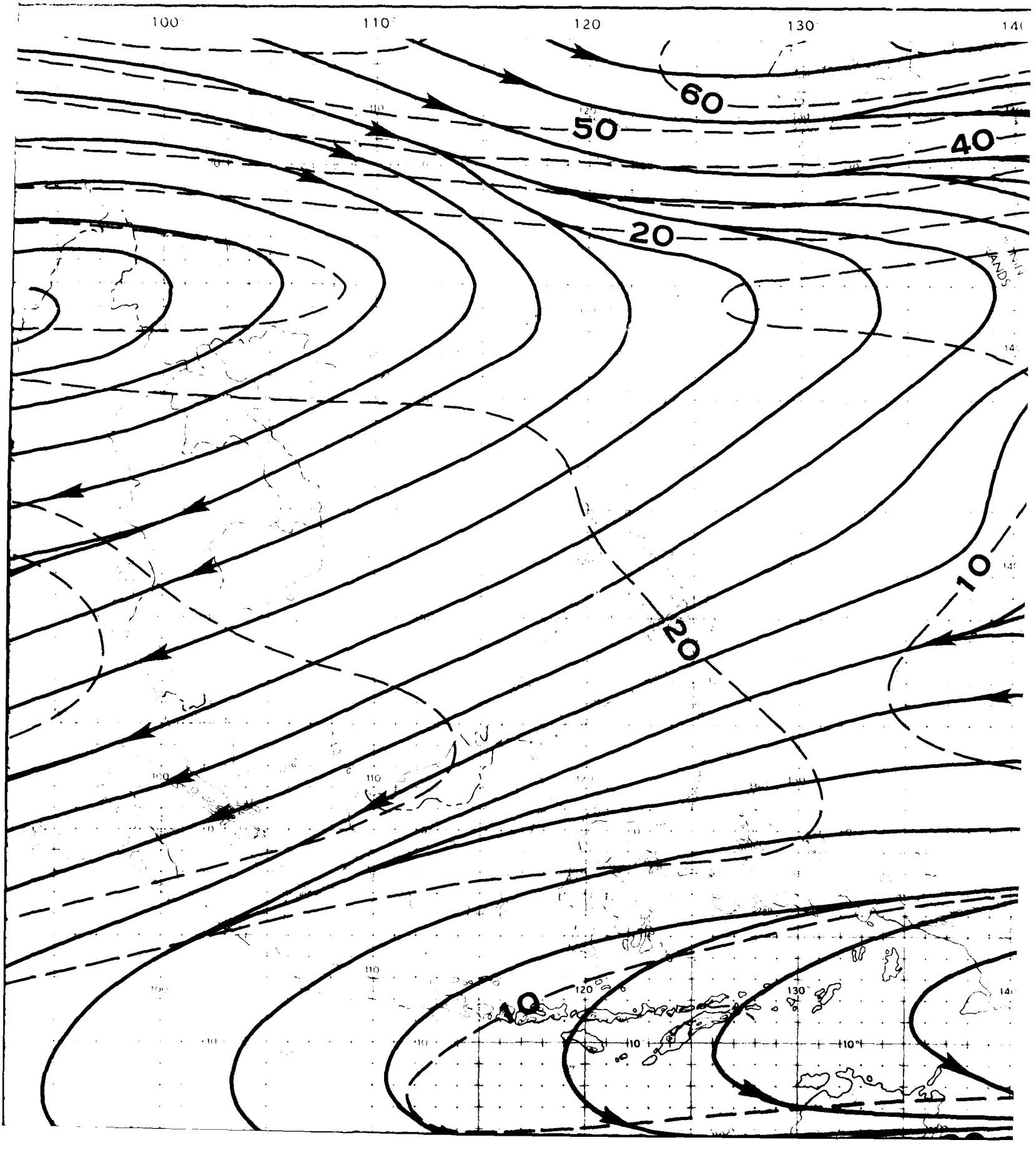

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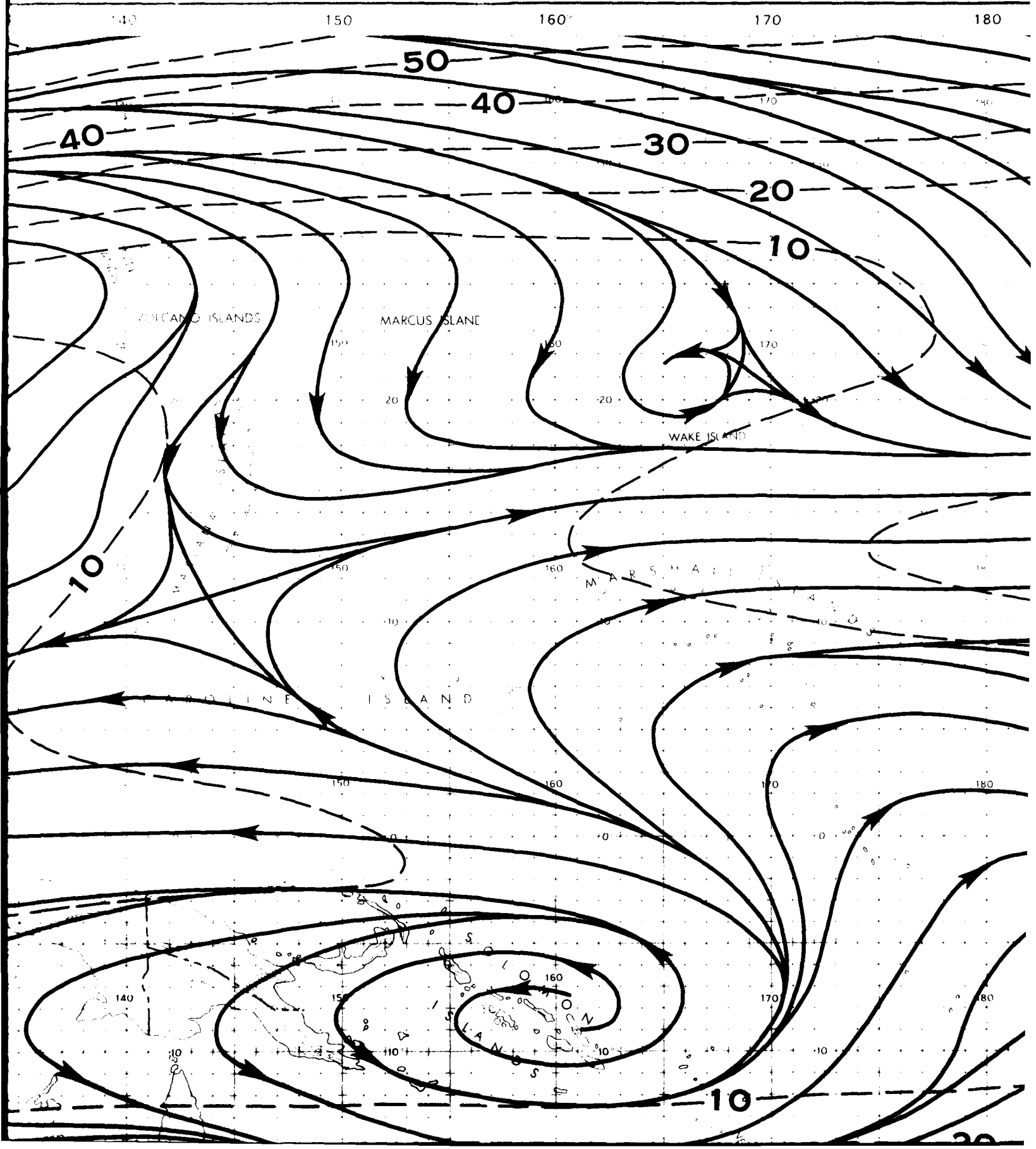

MULW-206W


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90°
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10°
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20
DIEGO GARCIA ISLANDS

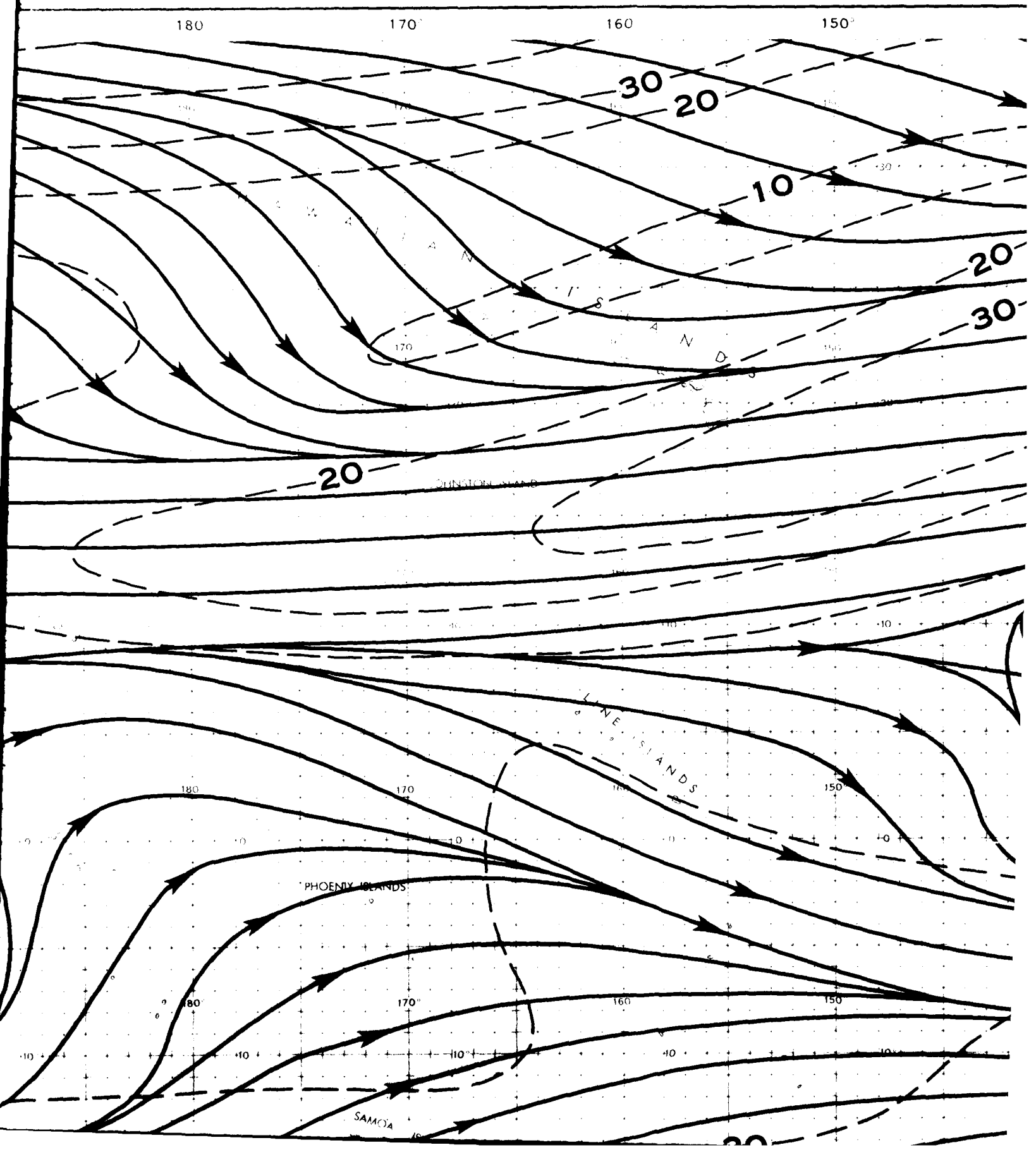
# MEAN UPPER LEVEL WIN

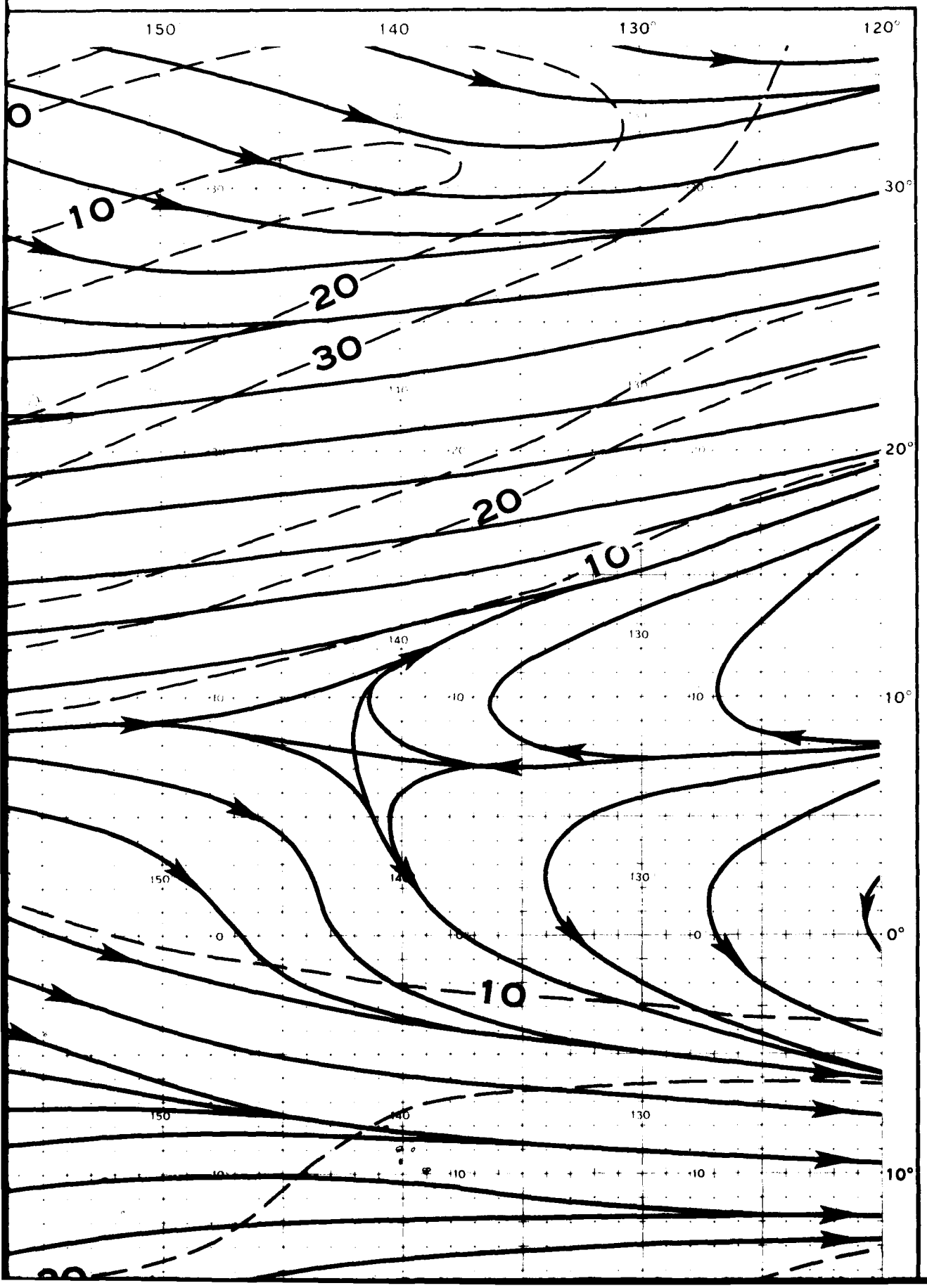


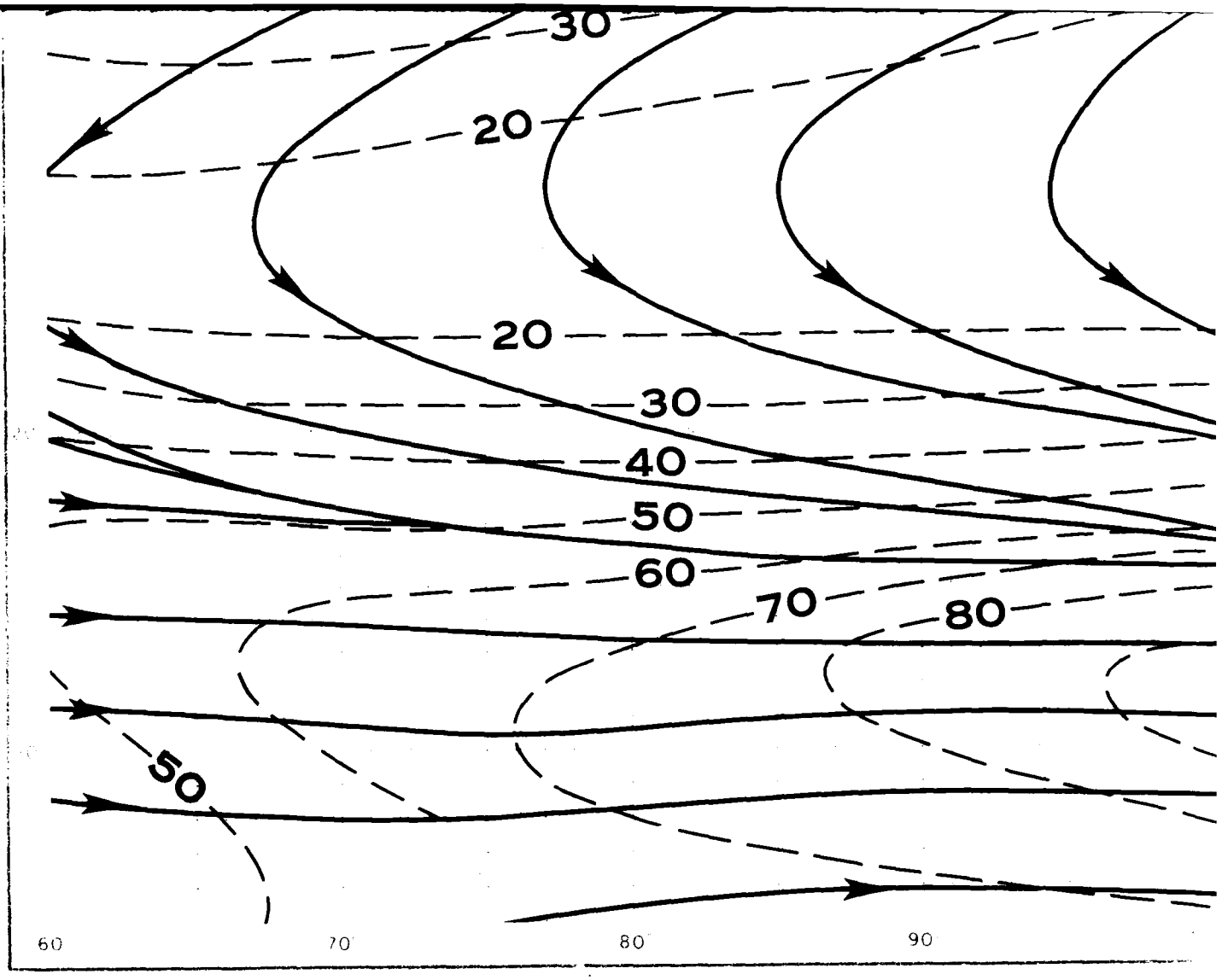
# WINDS over GLOBAL TROPICS – JU



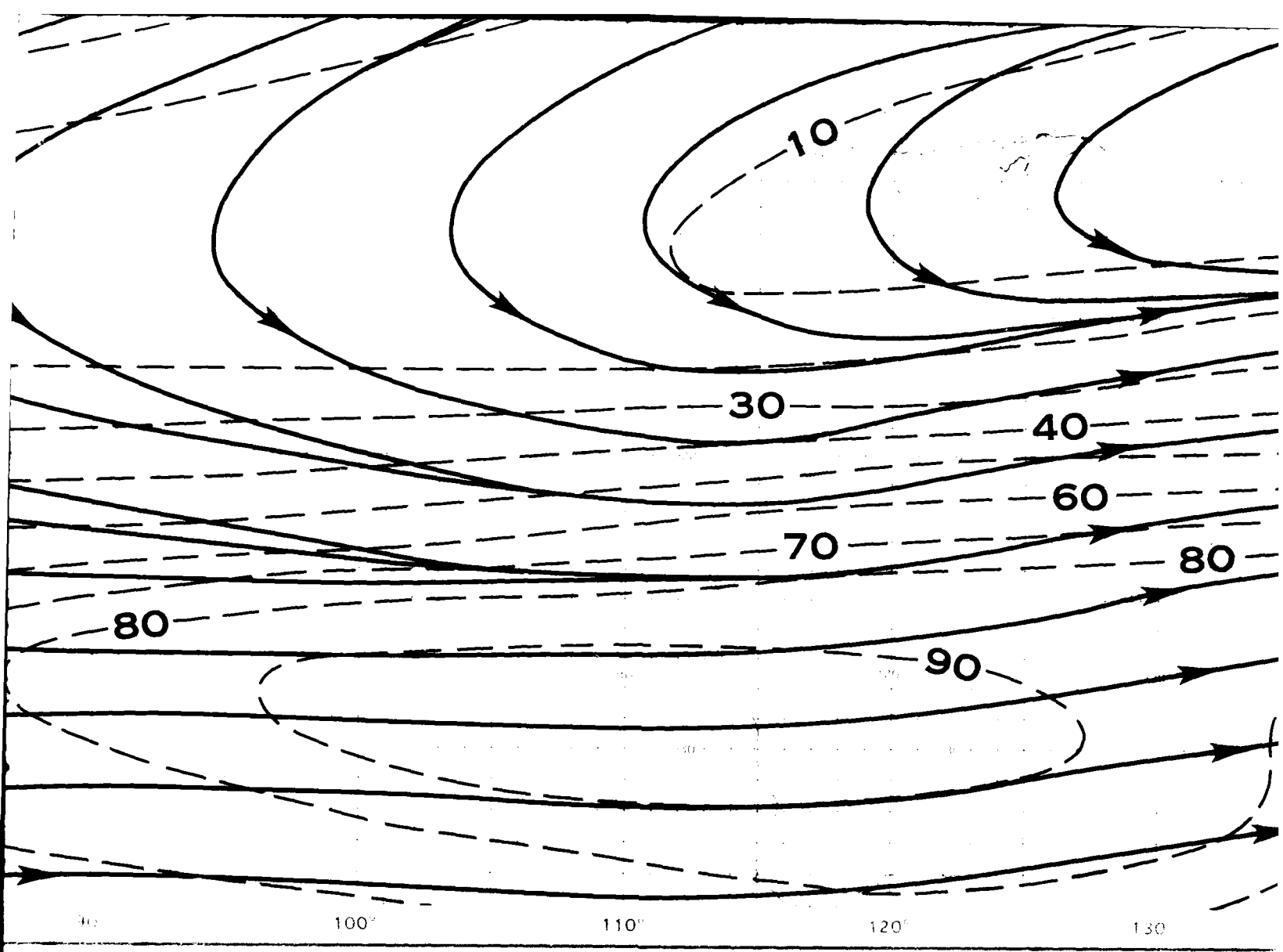
# ICS - JUNE 200mb

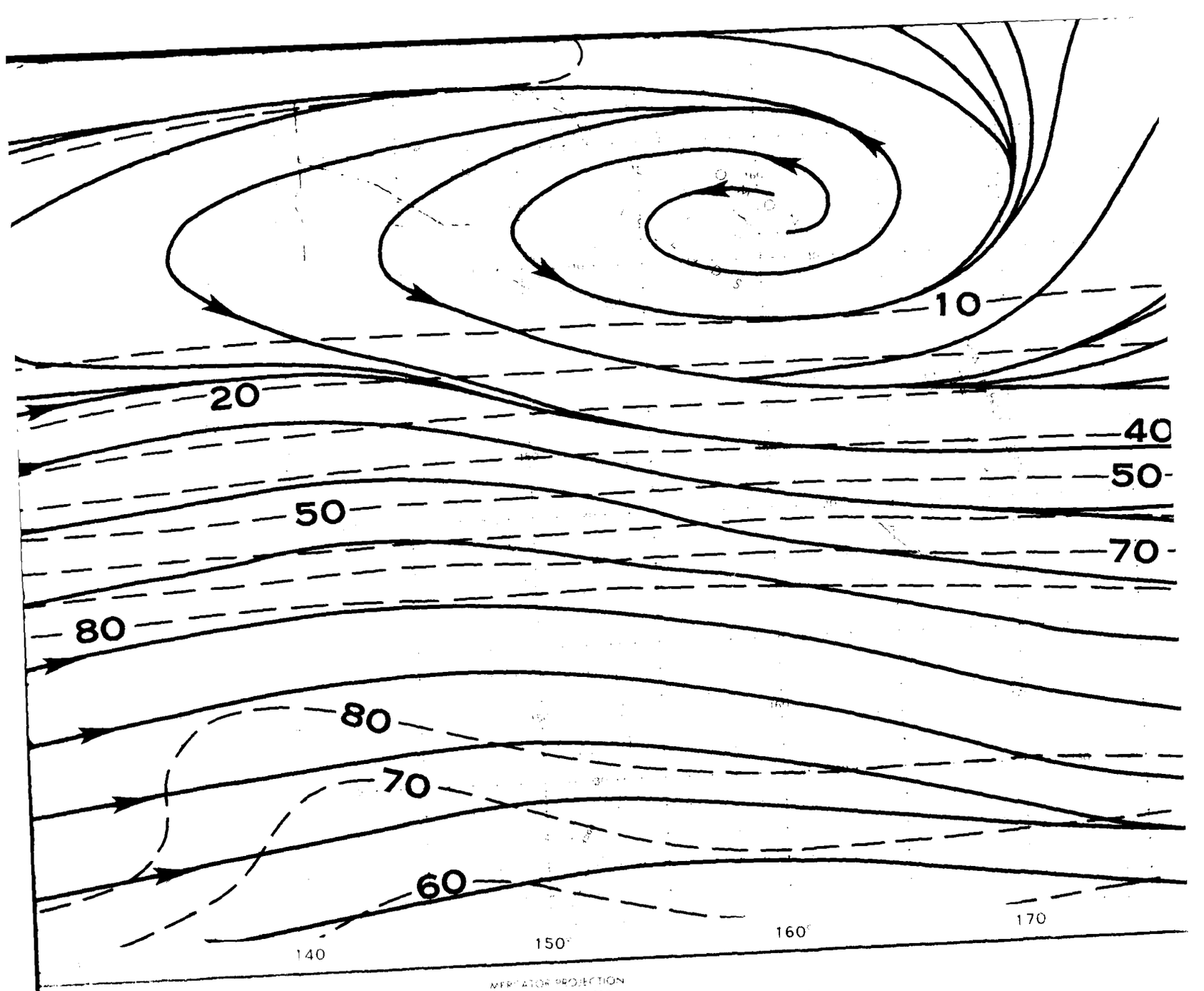



150
140
130°
120°
30°
20°
10°
0°
10°
0
10
20
30
20
10
10

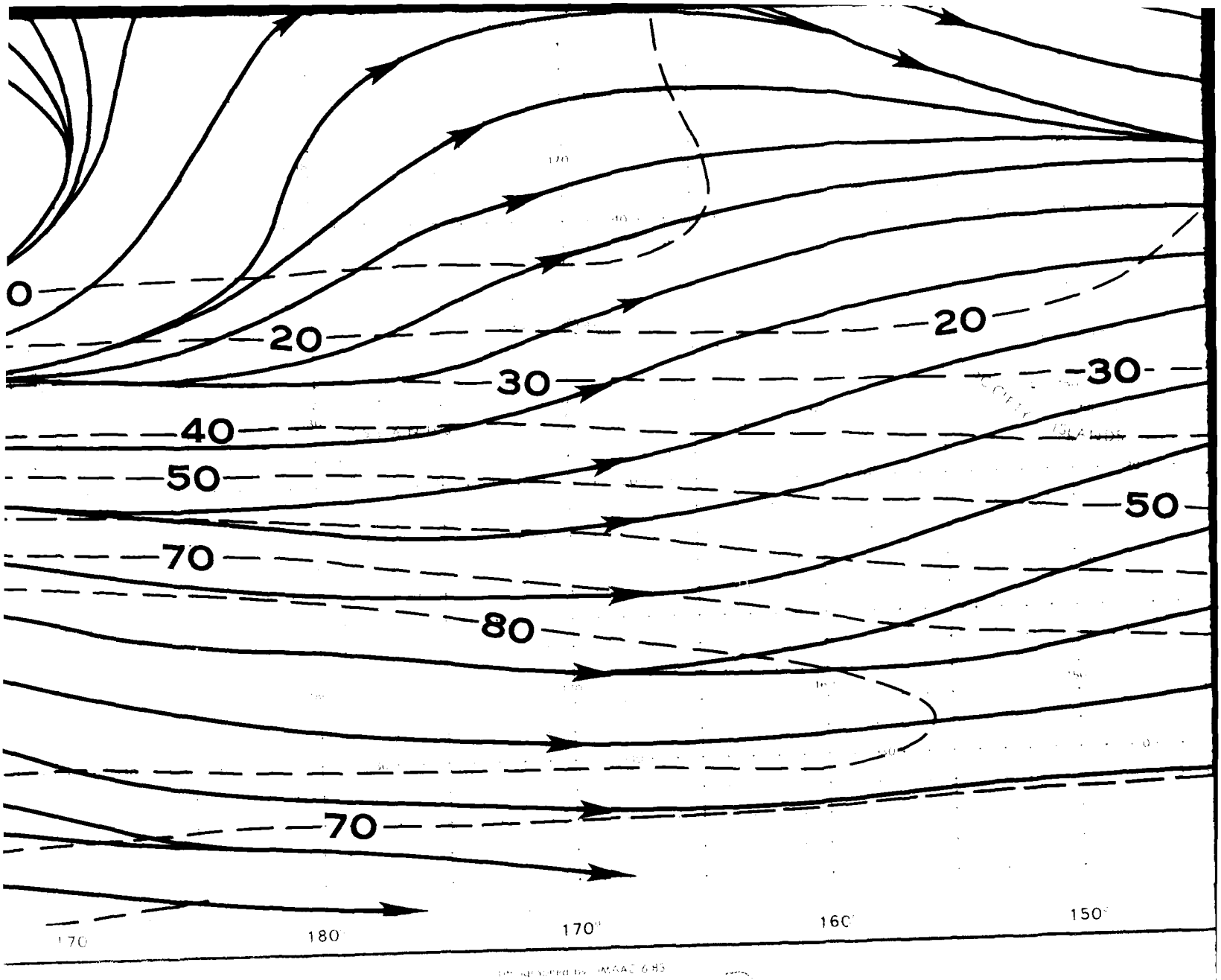



7b

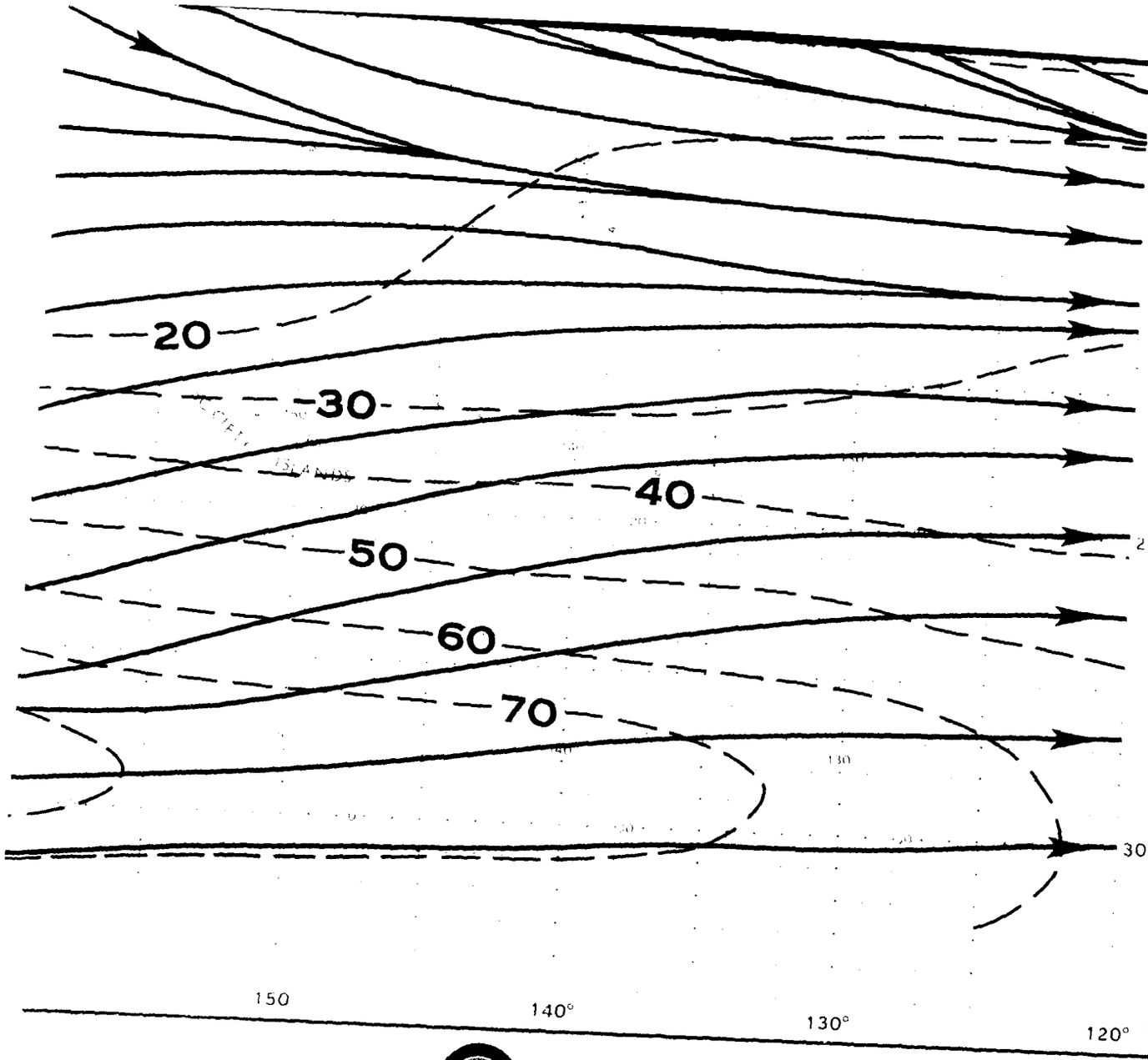

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100°
110°
120°
130




MERCATOR PROJECTION
SCALE 1:20,000,000
STD. PAR. 27° 30' N AND 27° 30' S

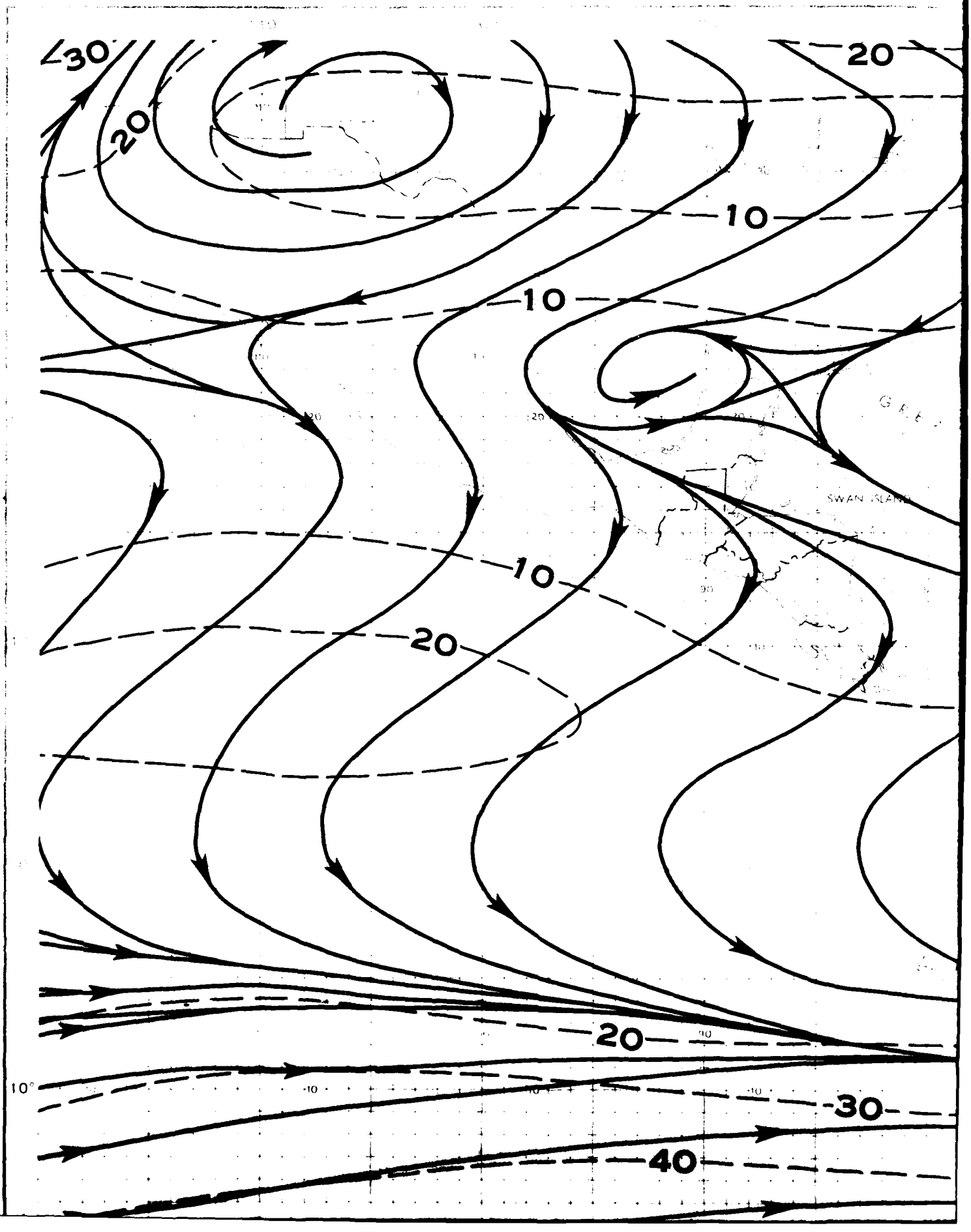



9

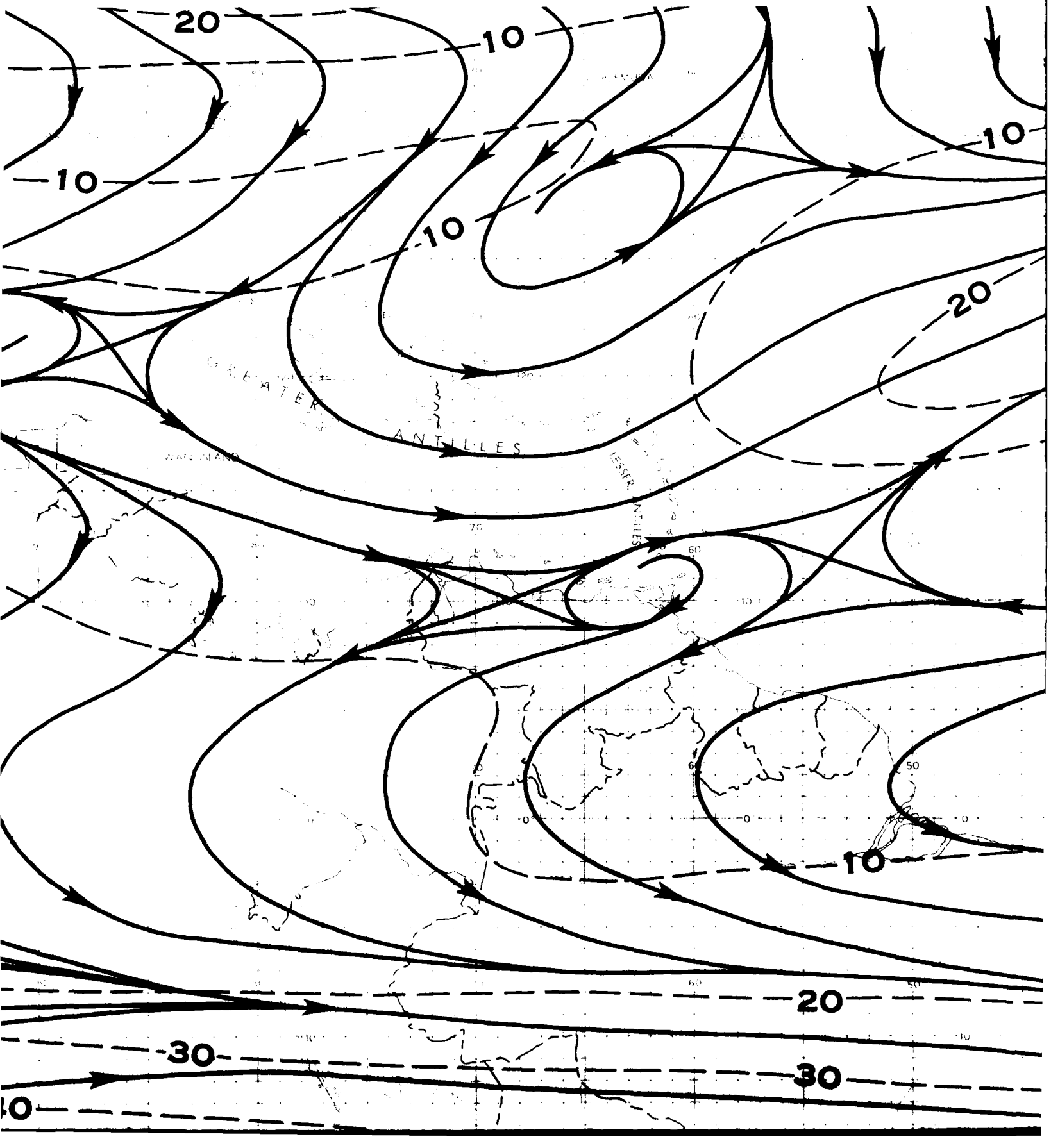



MULW-206E

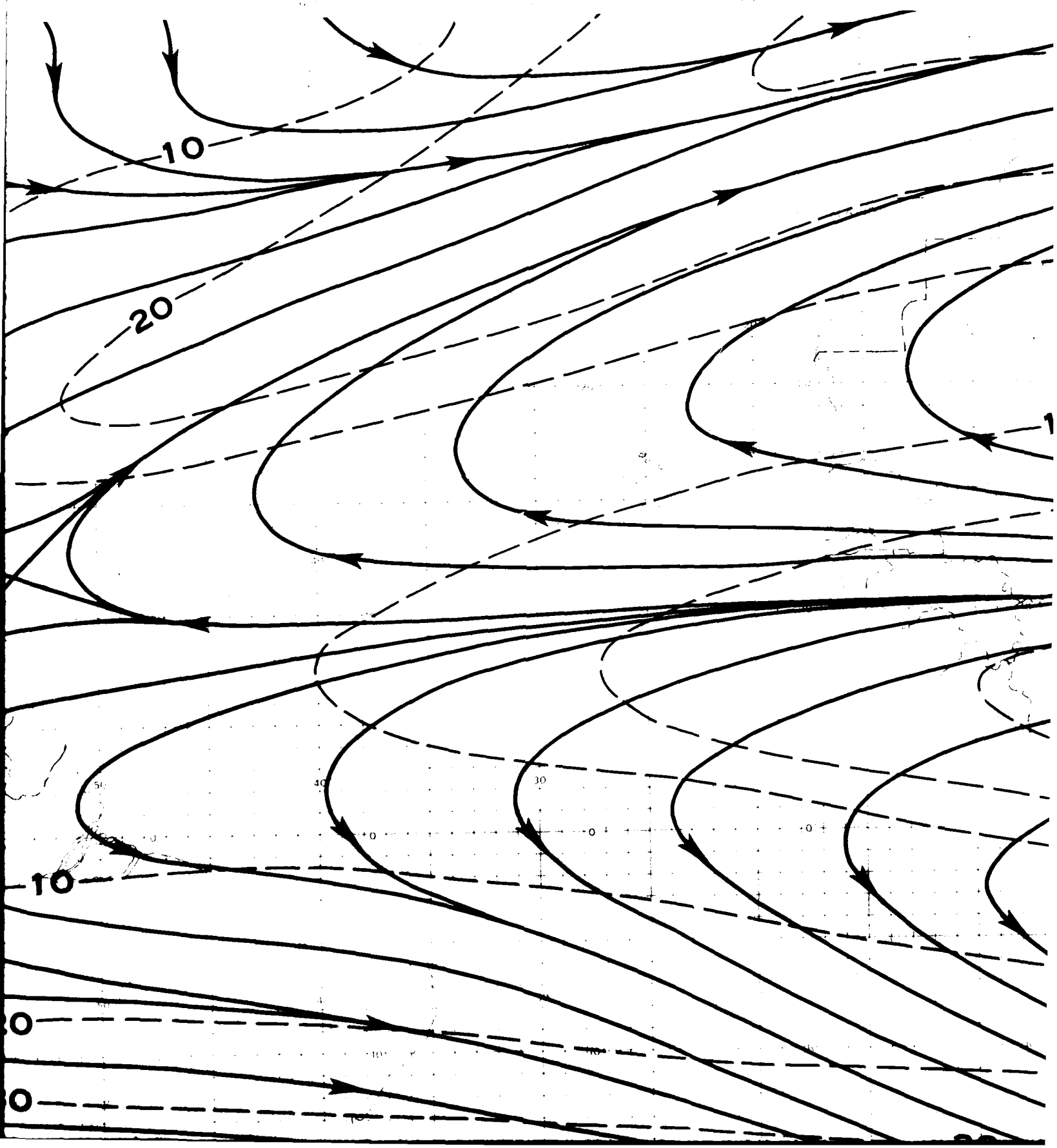
(10)


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40
10°
SWAN ISLAND

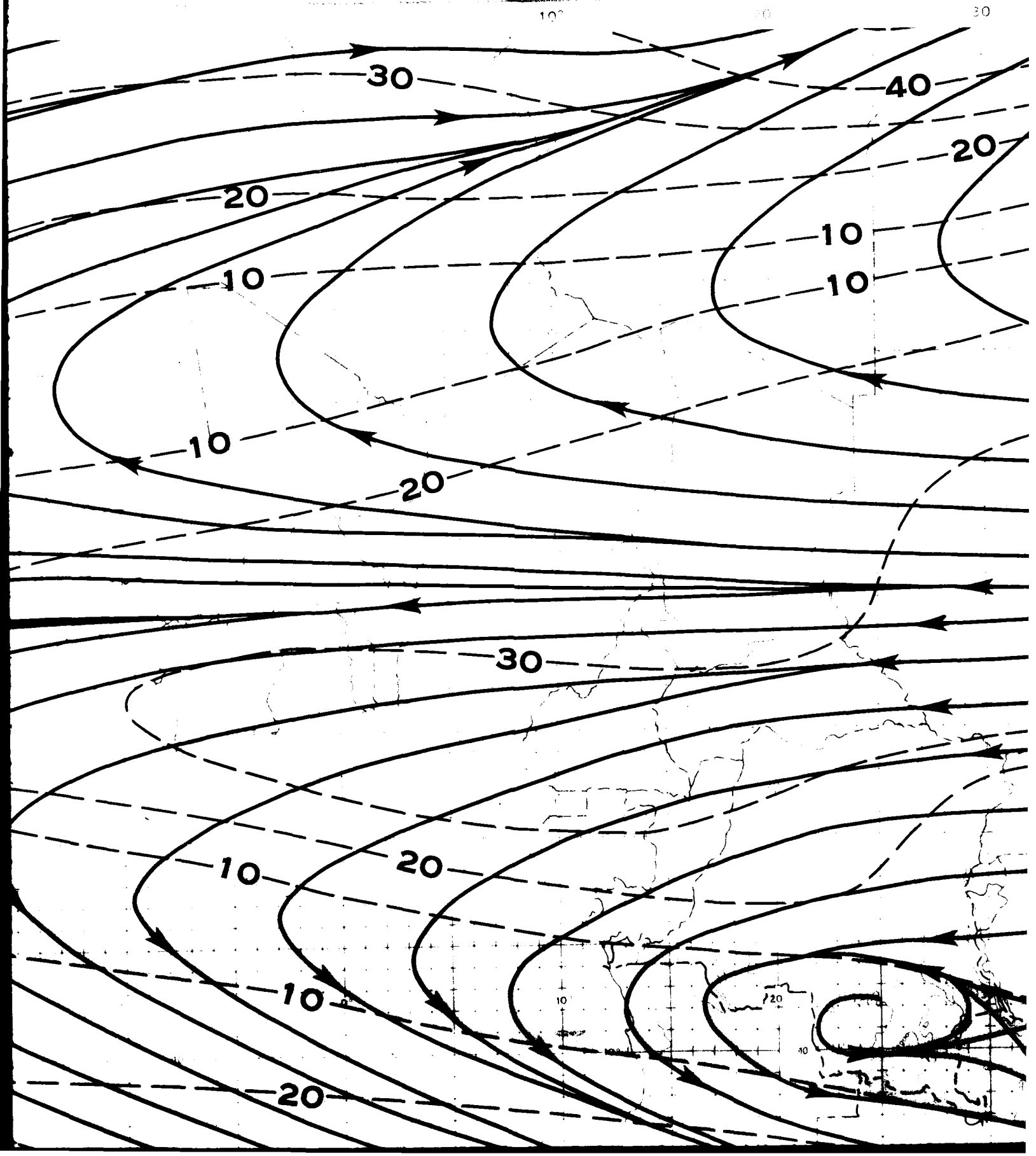
# MEAN UPPER LEVEL W

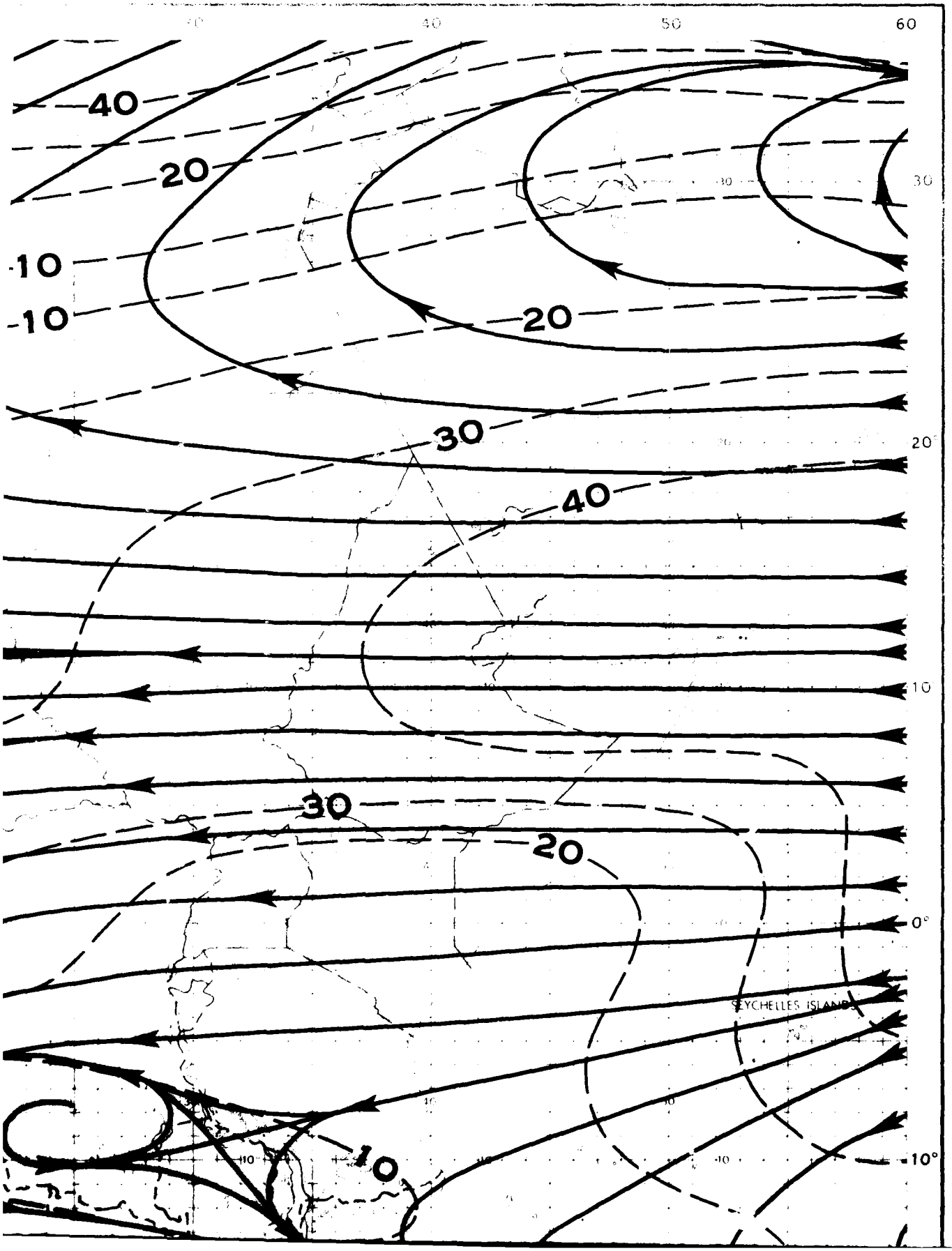


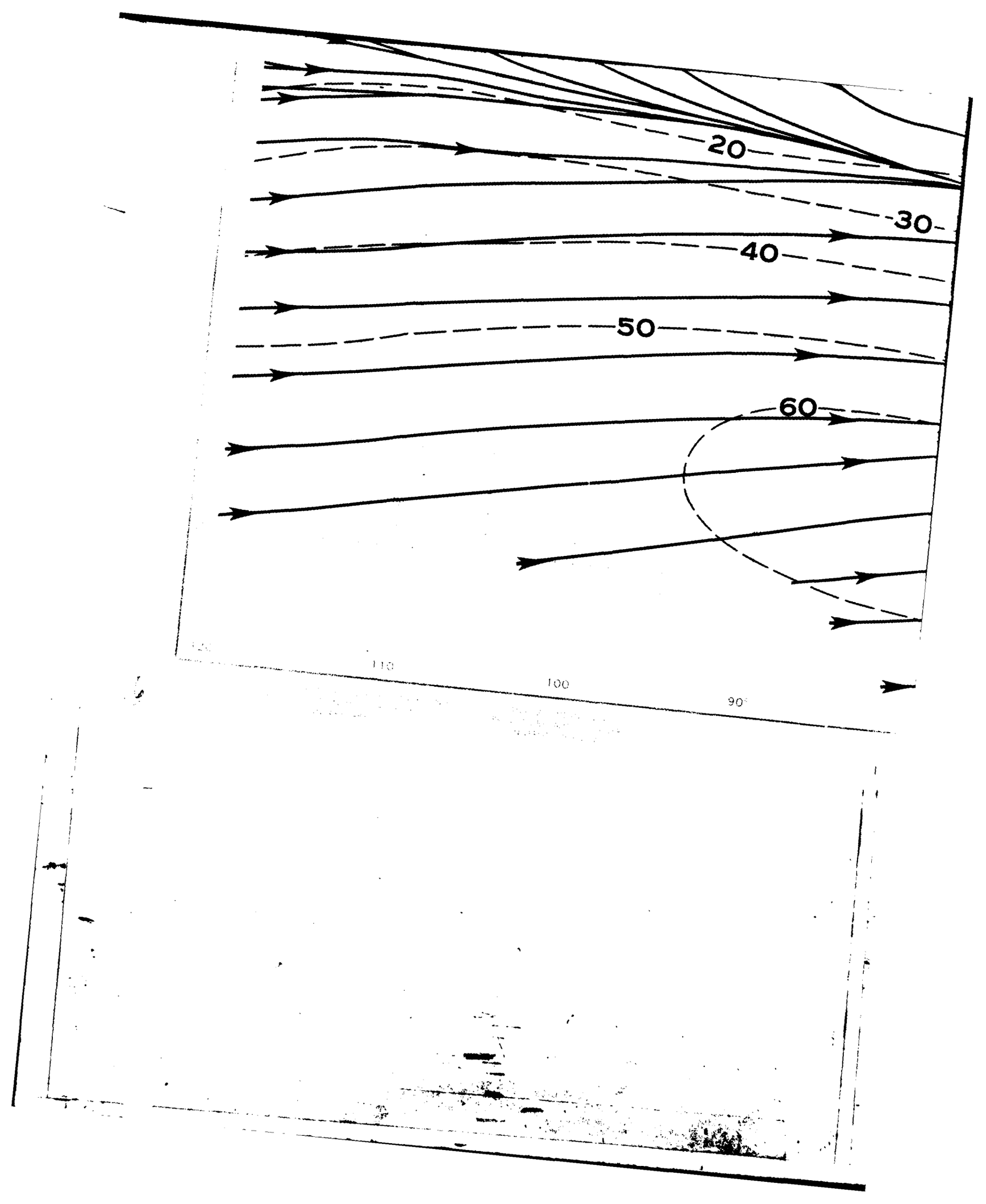
# EVEL WINDS over GLOBAL TROPI

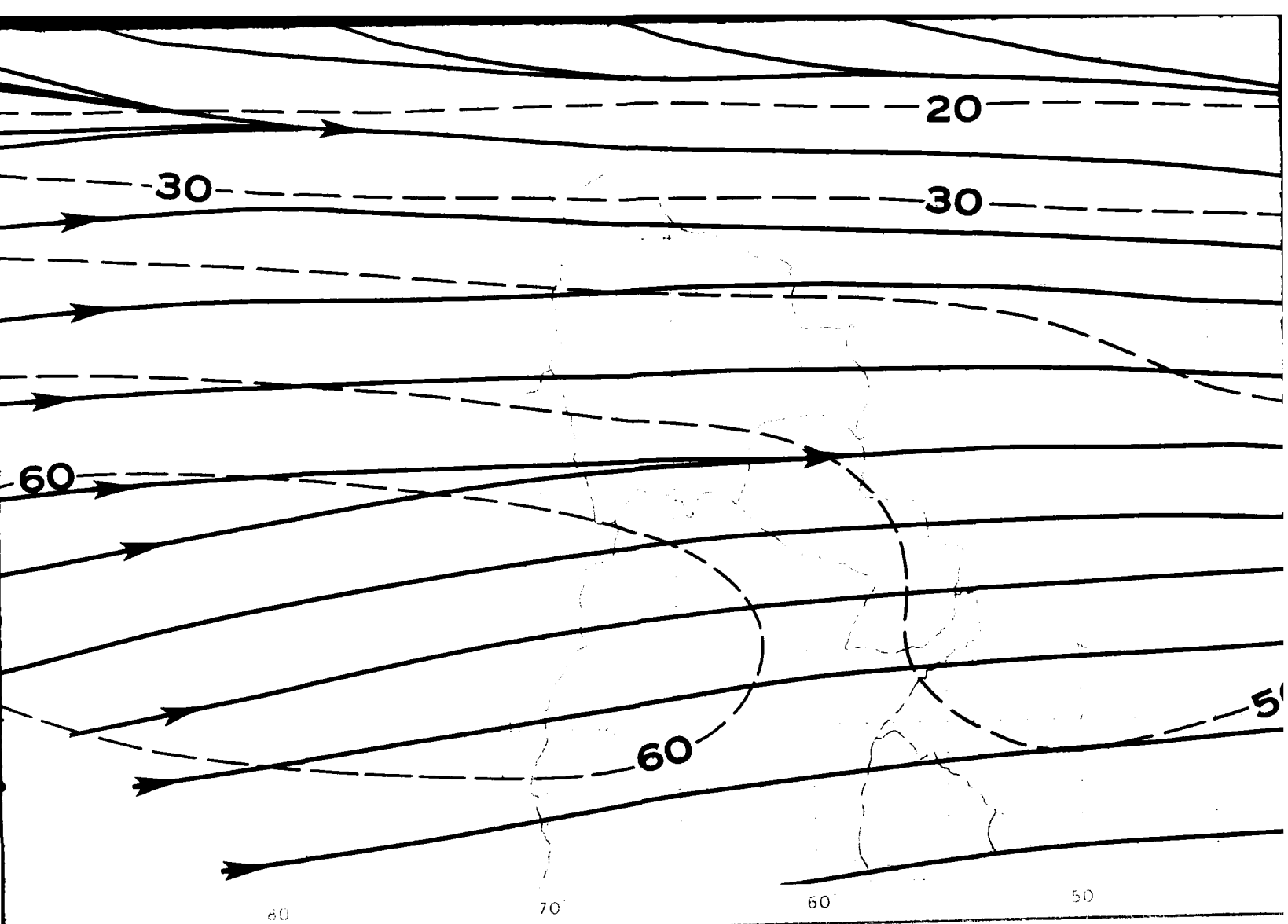


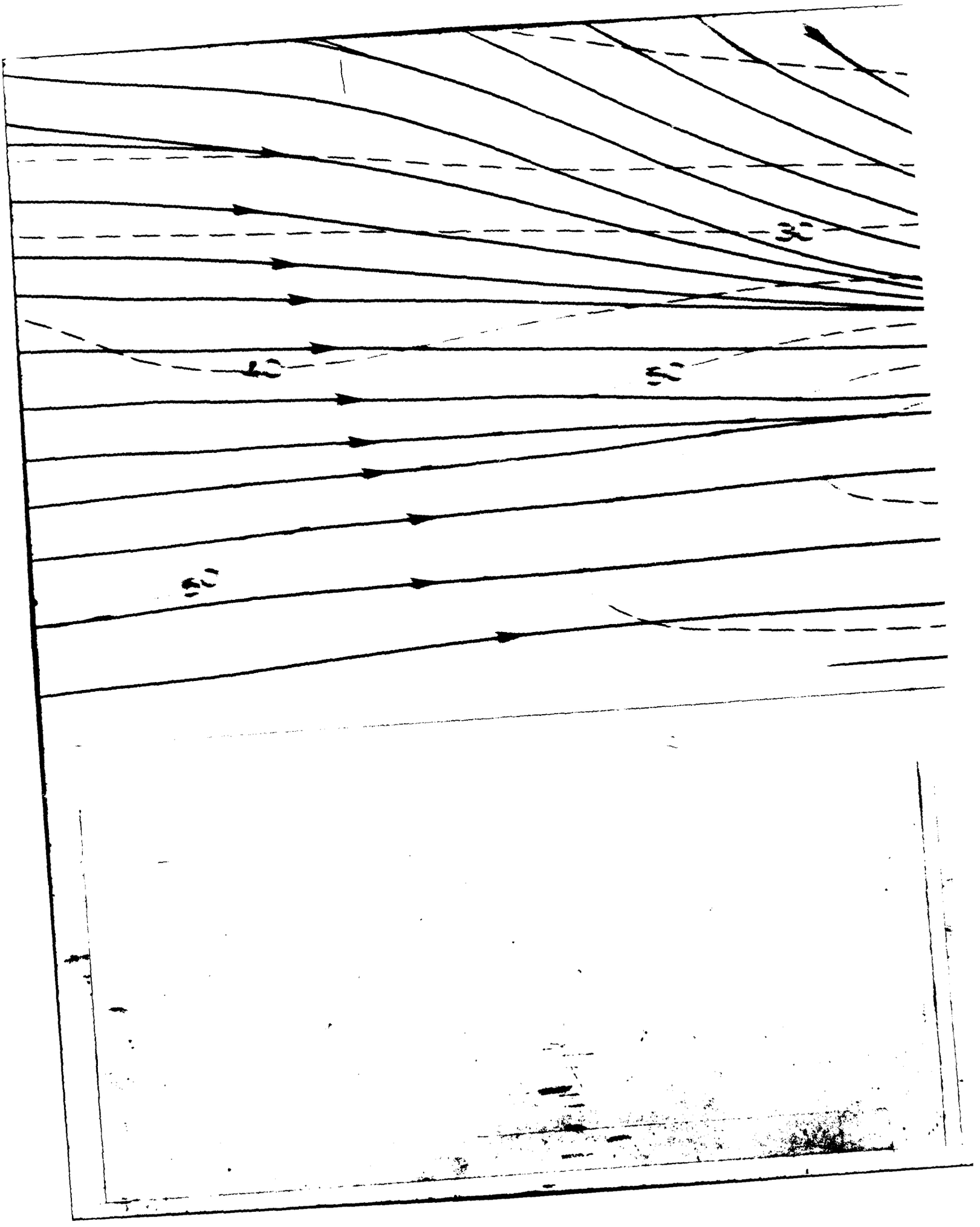
# TROPICS - JULY 200mb

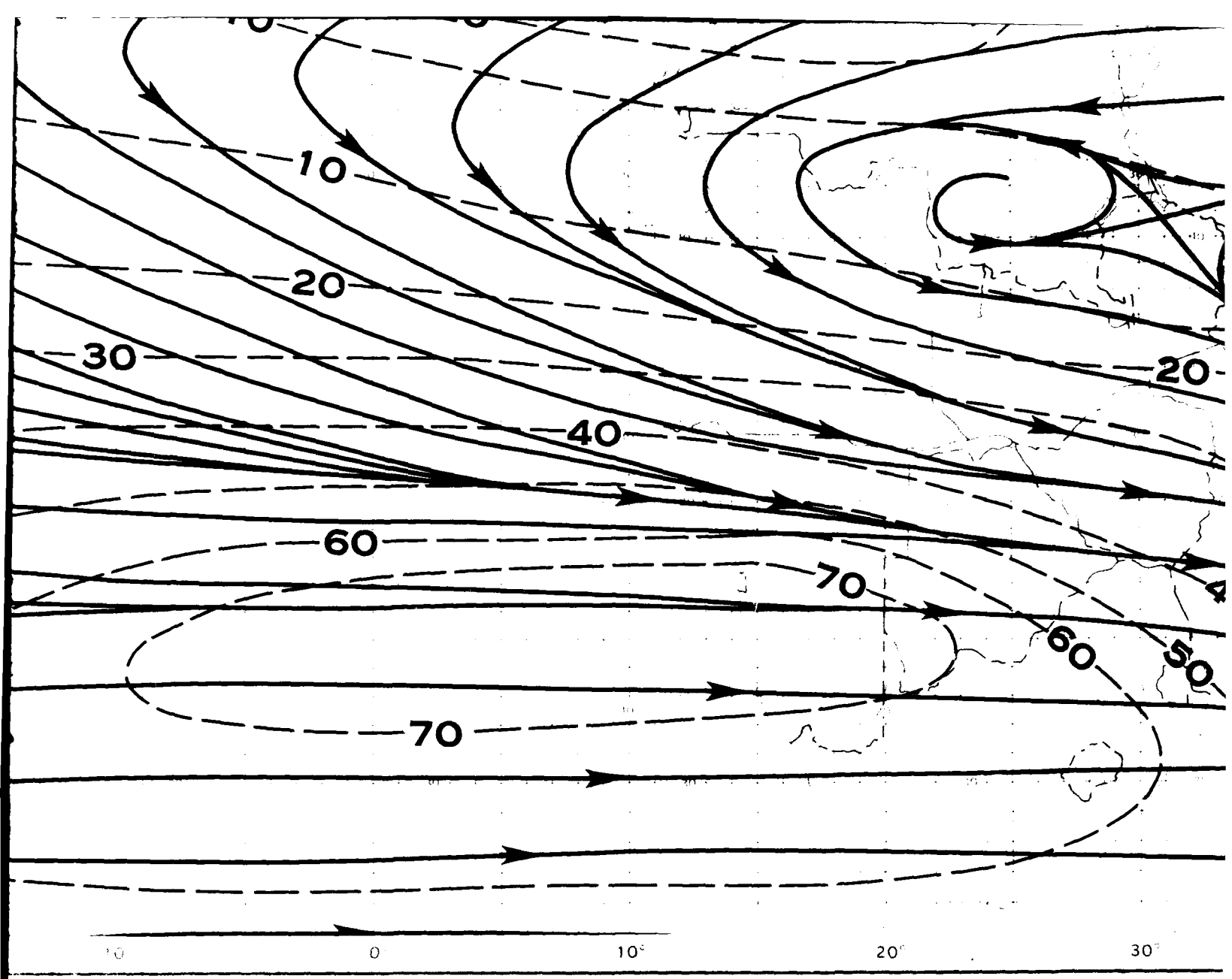


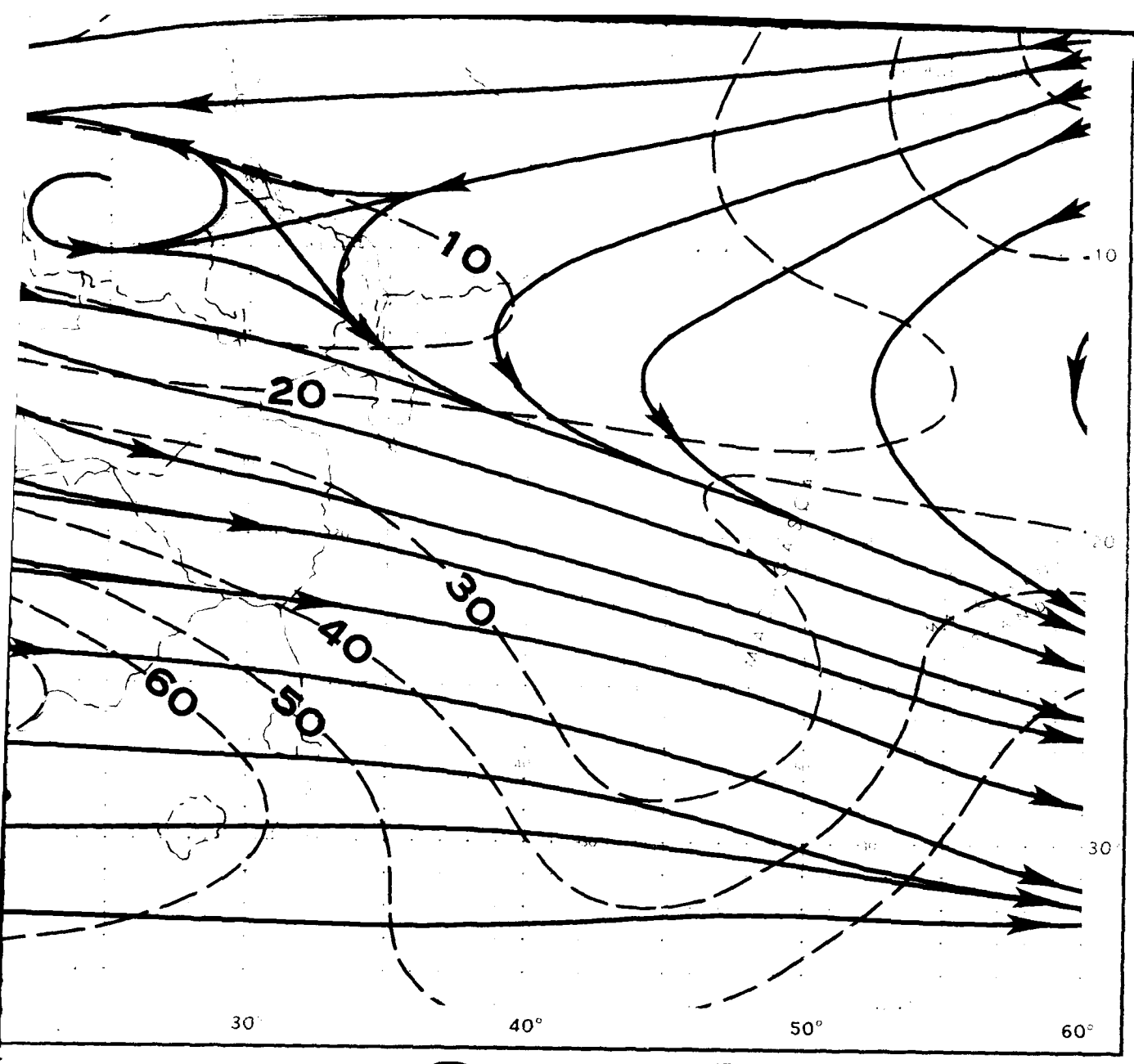

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-10
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0°
SEYCHELLES ISLANDS
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-10°


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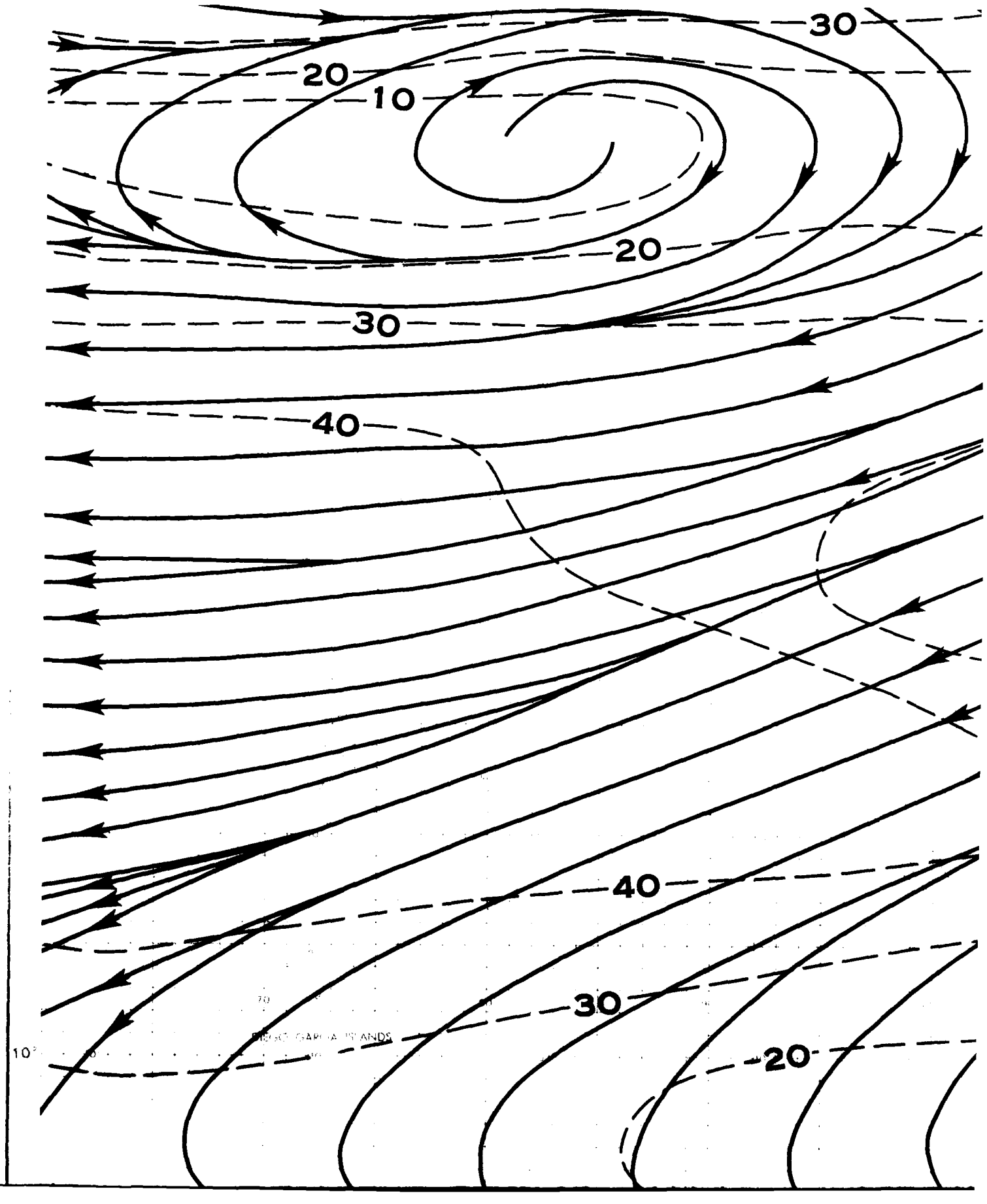

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10°
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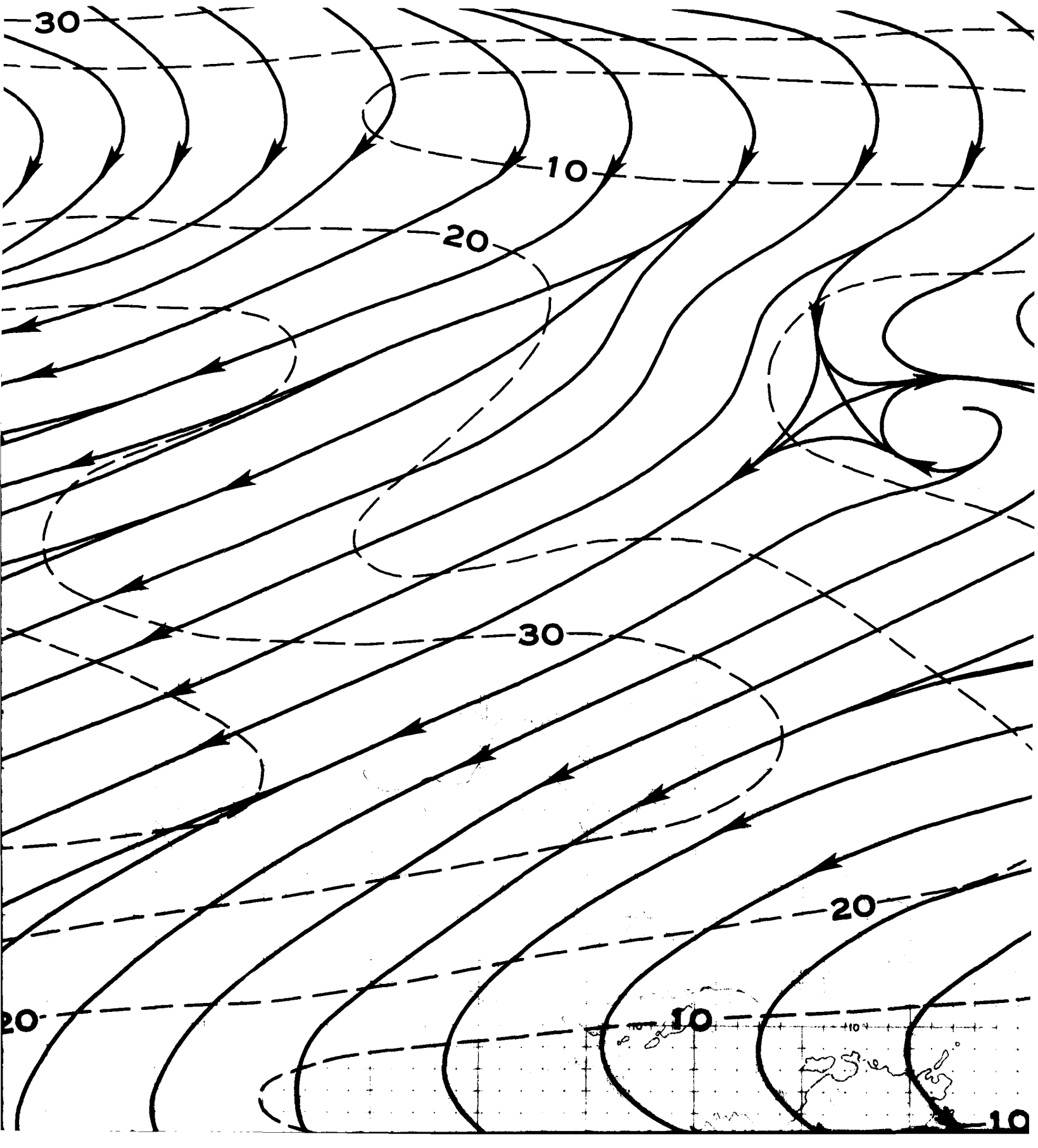



MULW-207W

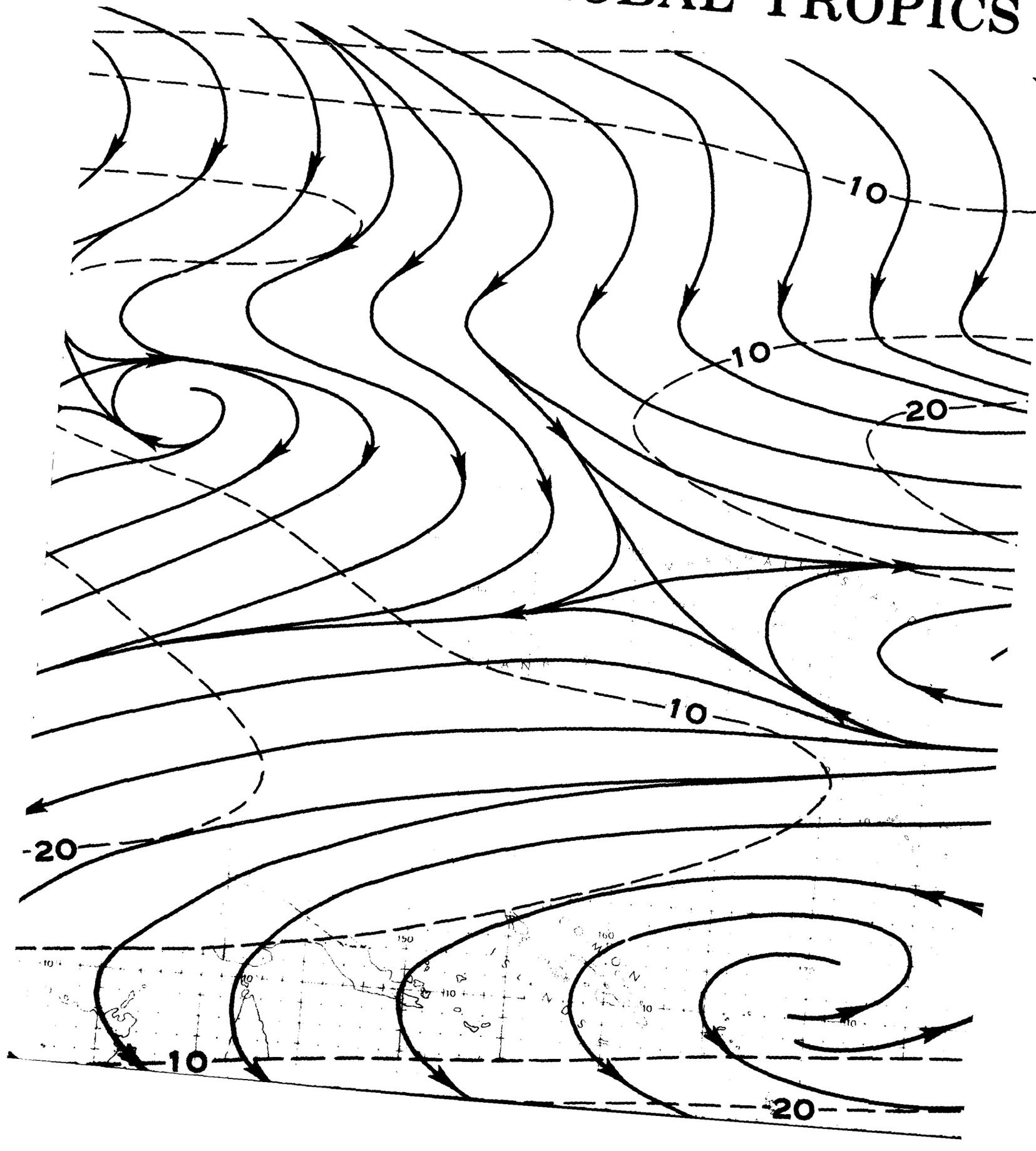
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DIEGO GARCIA ISLANDS

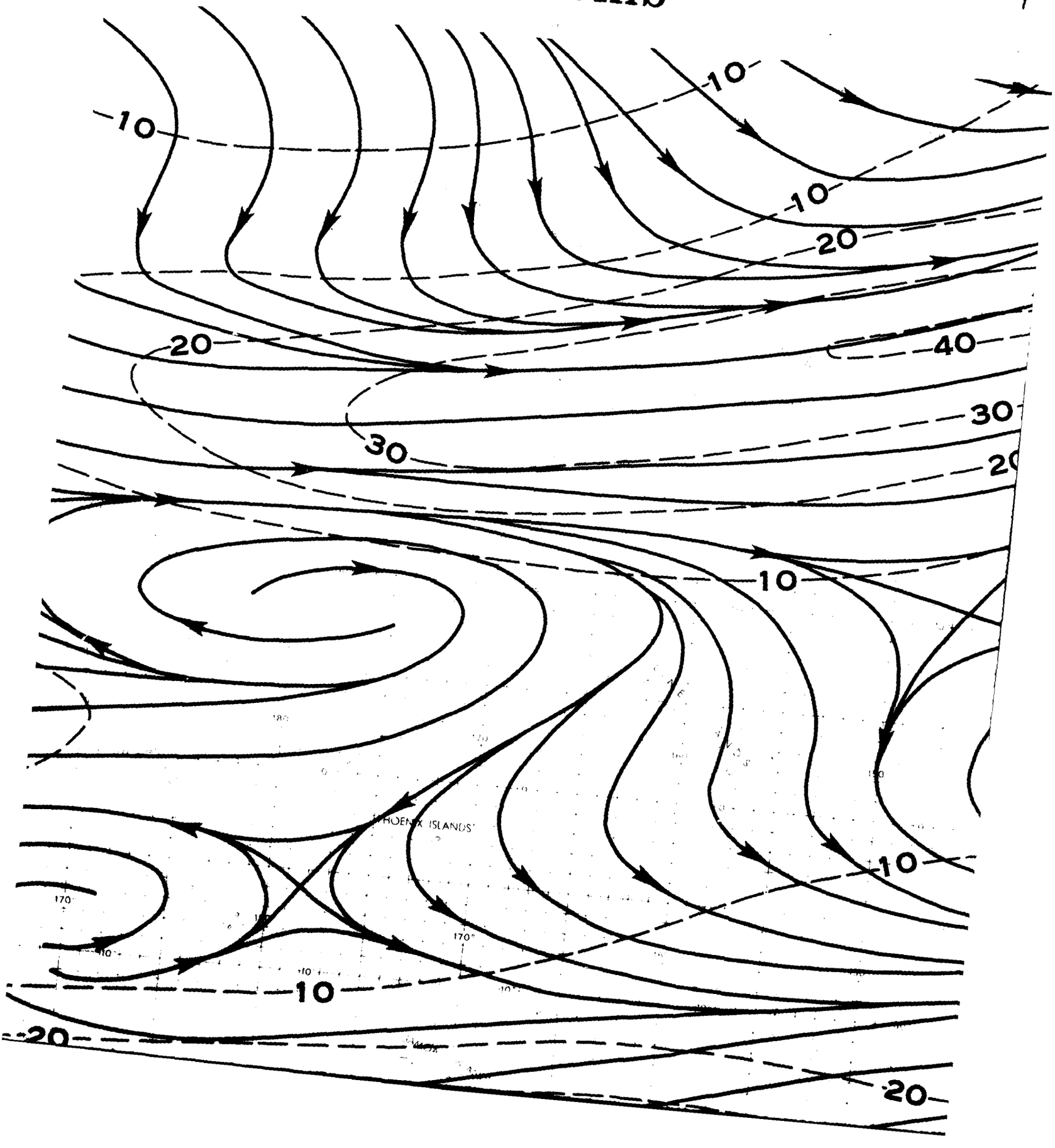
# MEAN UPPER LEVEL WIN

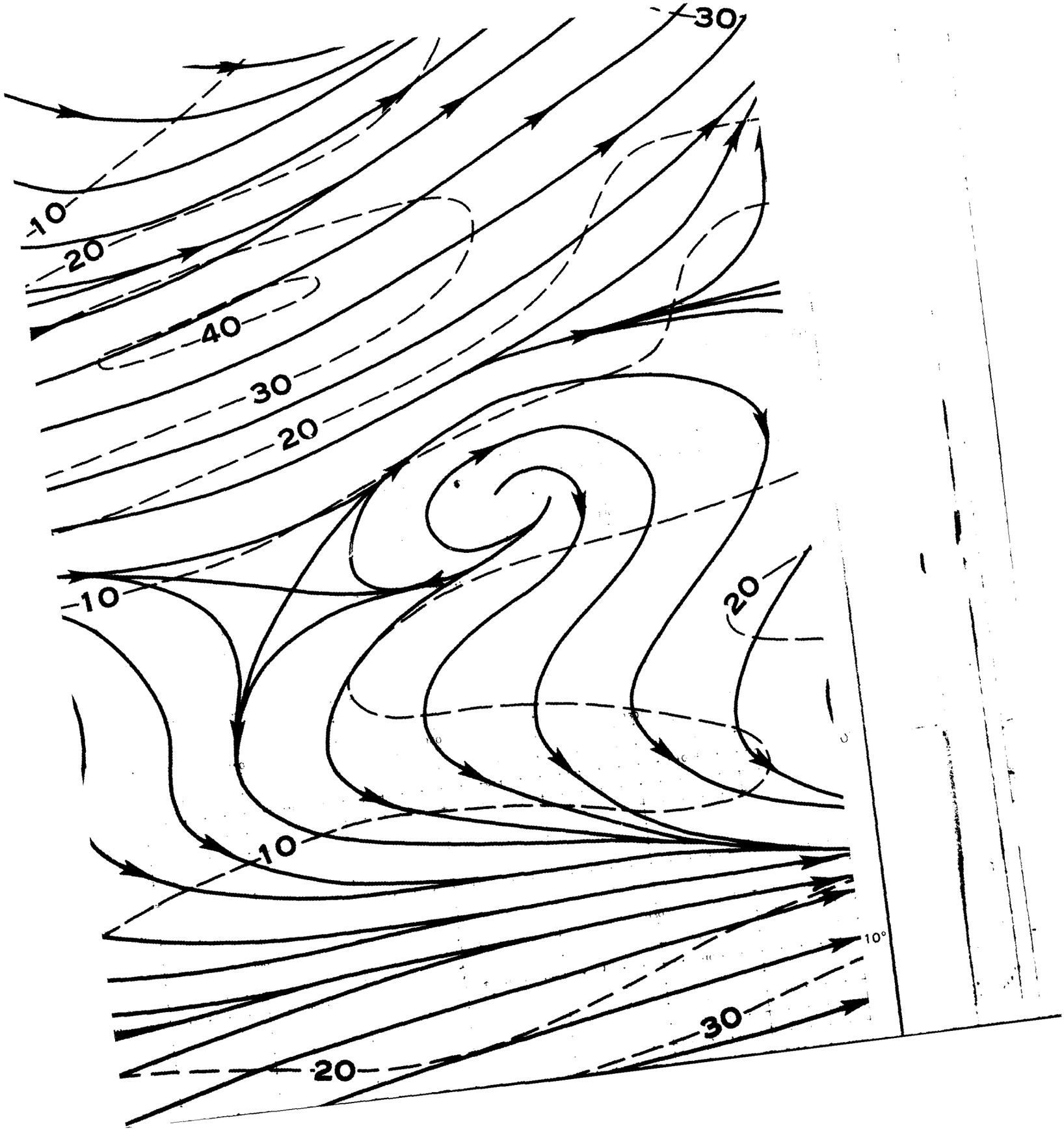


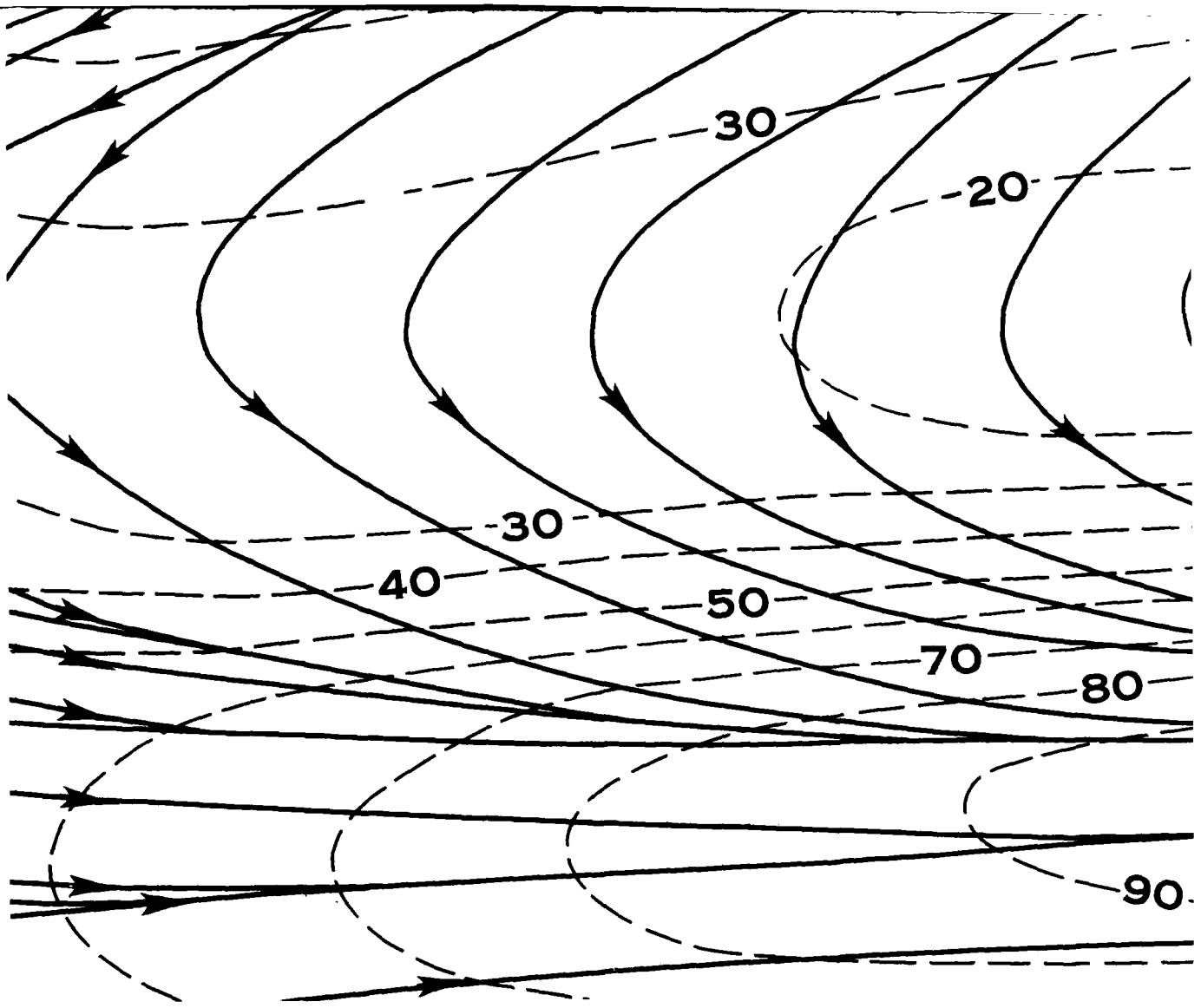
# L WINDS over GLOBAL TROPICS

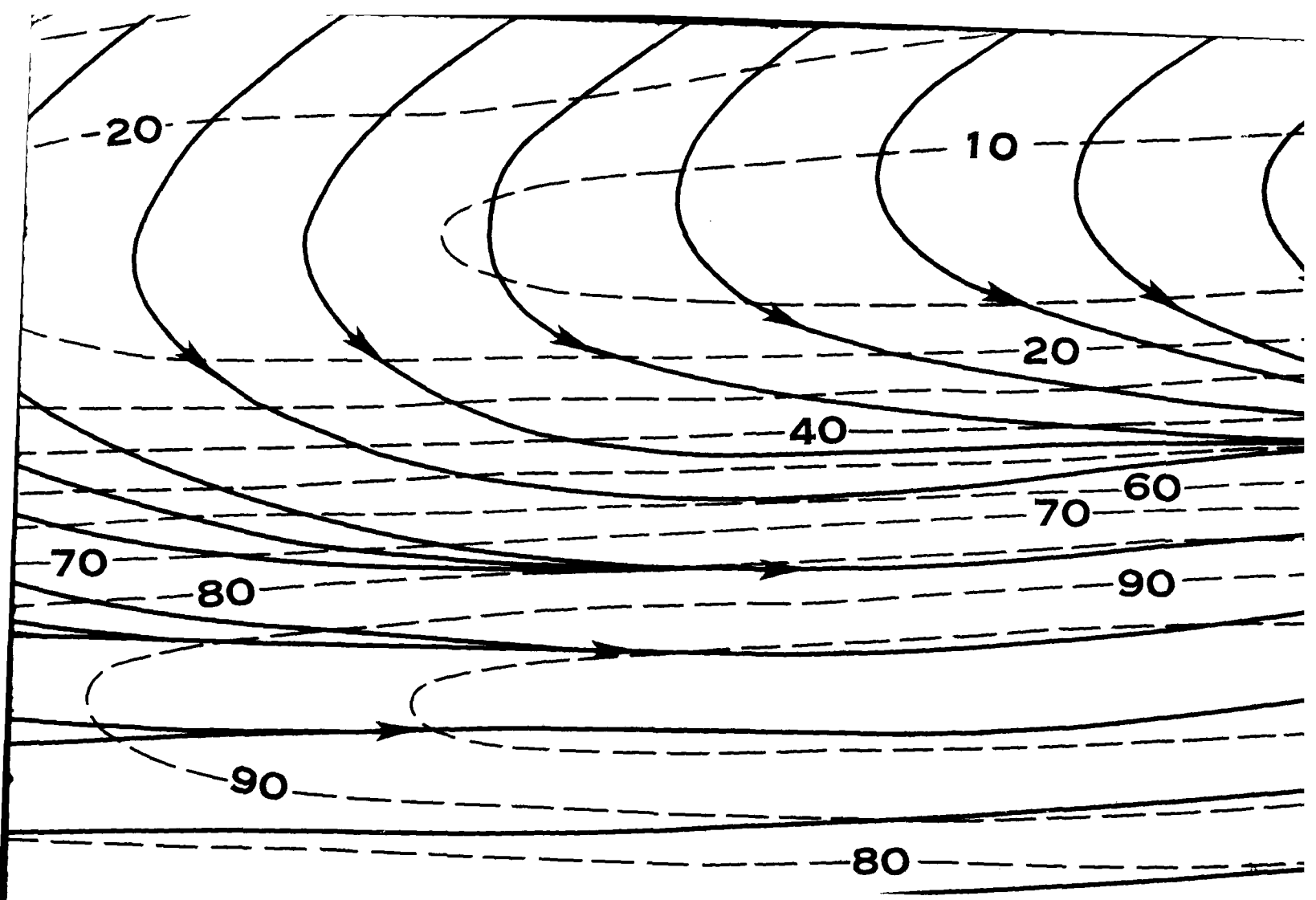


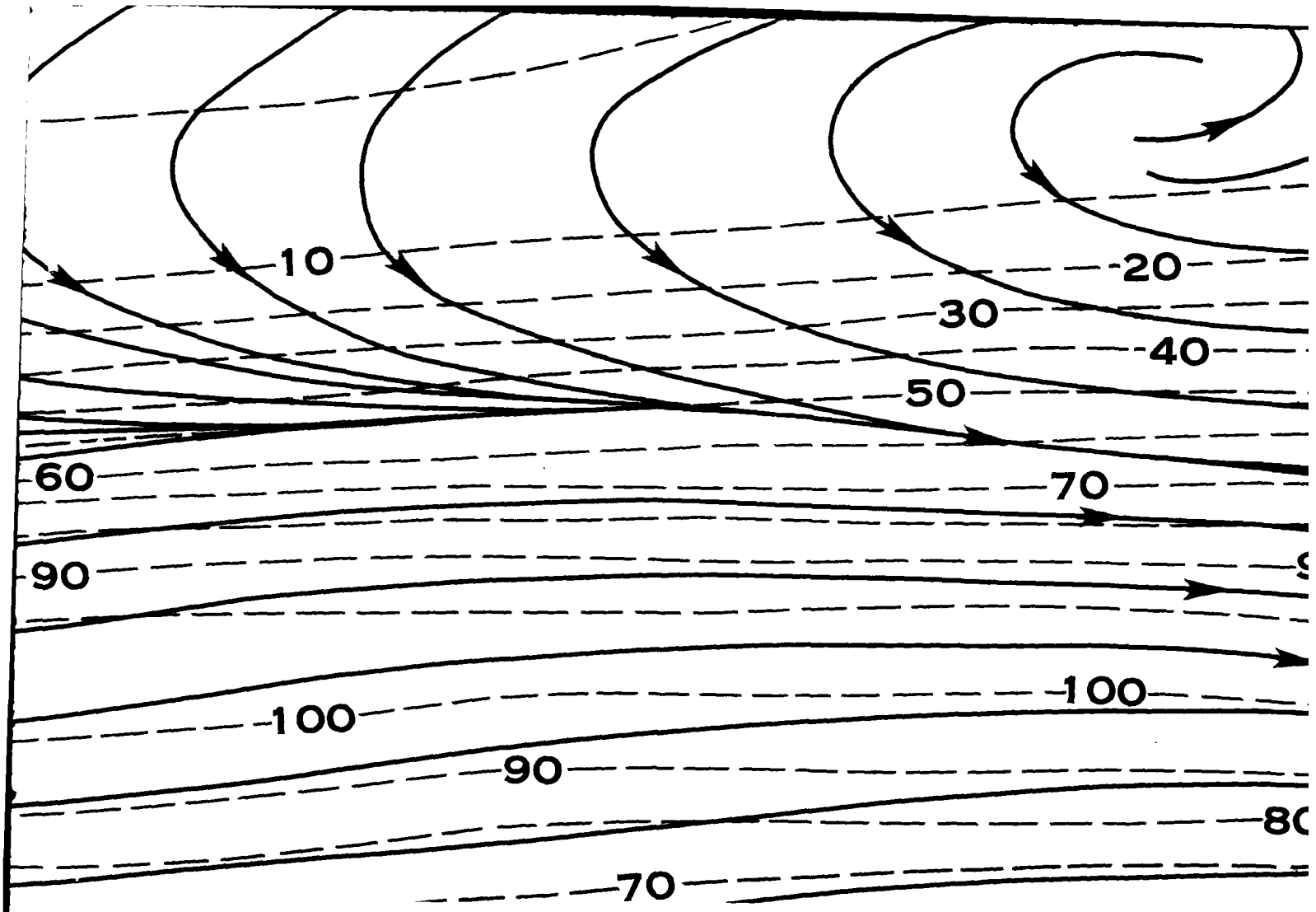
# OPICS - JULY 200mb




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10°

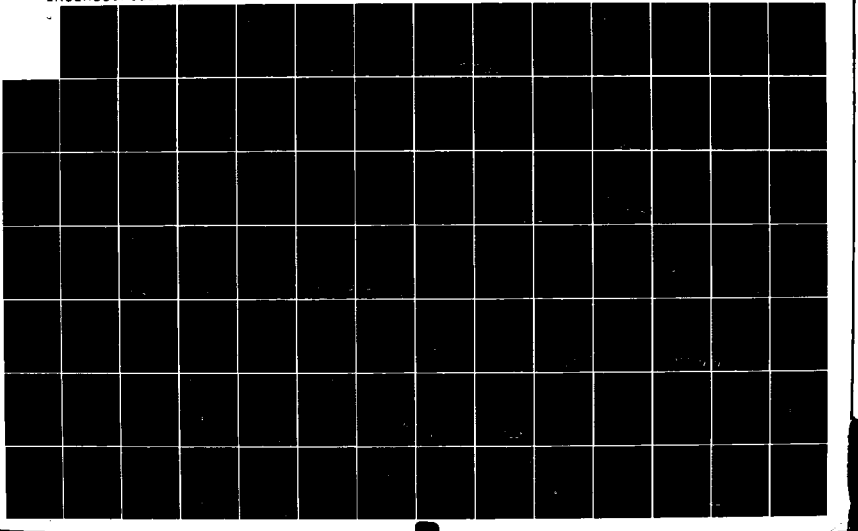

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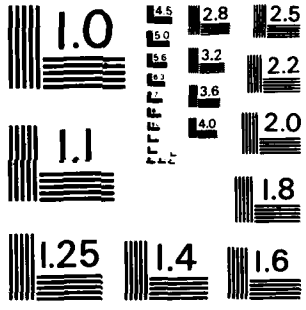

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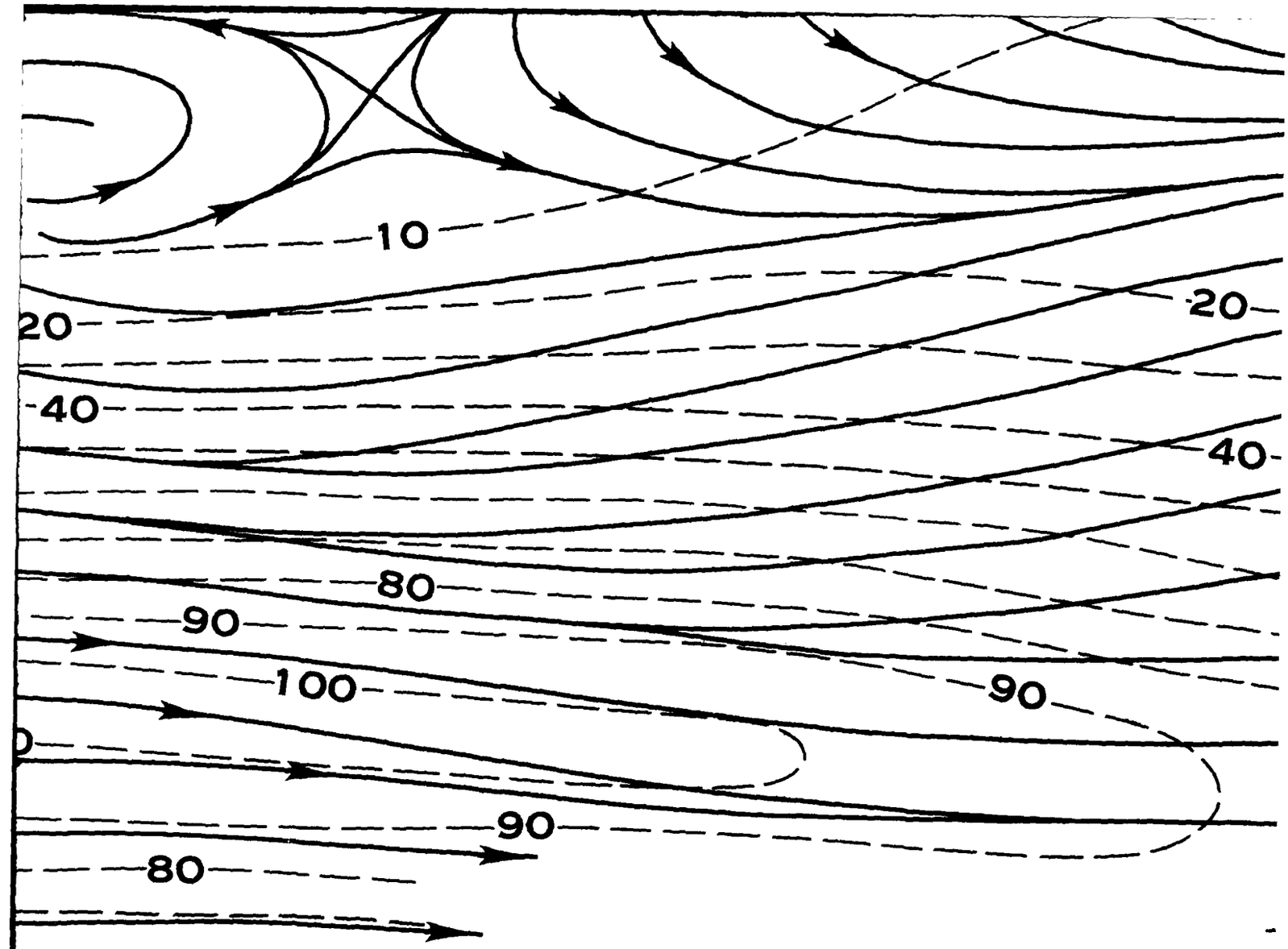
AD-A141 484 MEAN UPPER TROPOSPHERIC FLOW OVER THE GLOBAL TROPICS VOLUME 2(U) AIR WEATHER SERVICE SCOTT AFB IL J C SADLER ET AL. JAN 84 AWS/TR-83/002-VOL-2 5/6

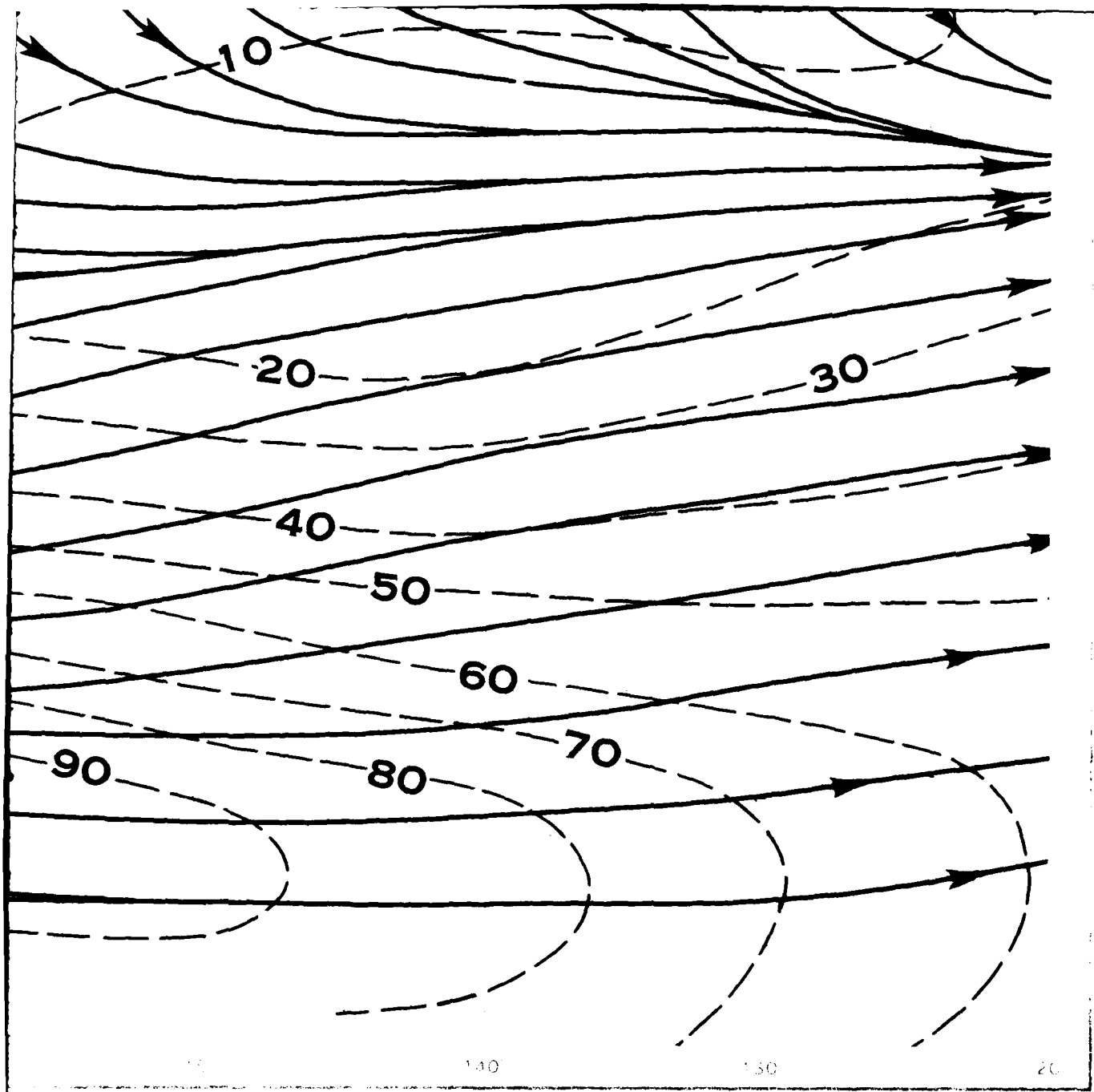
UNCLASSIFIED SBI-AD-E850 690 F/G 4/2 NL





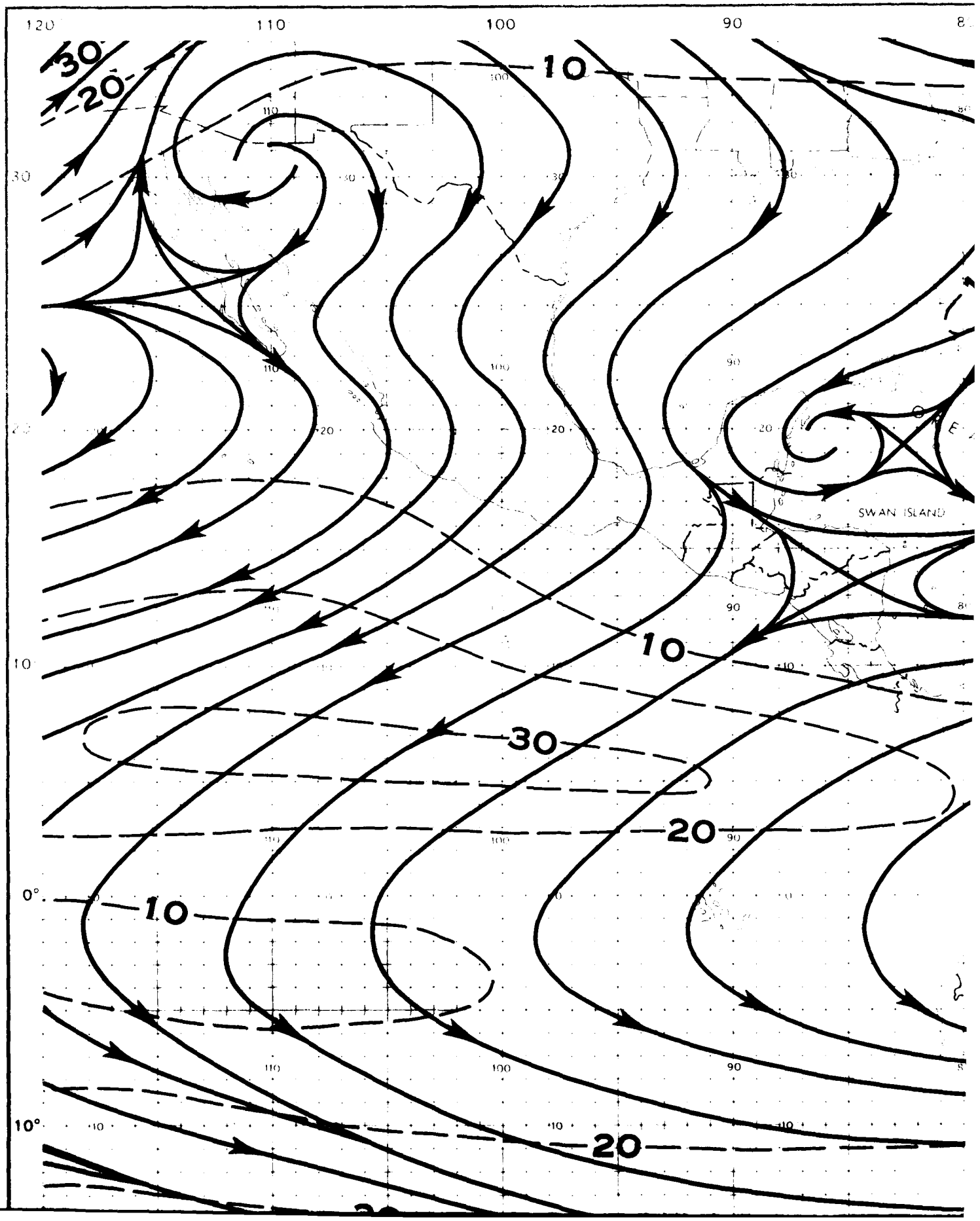

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A


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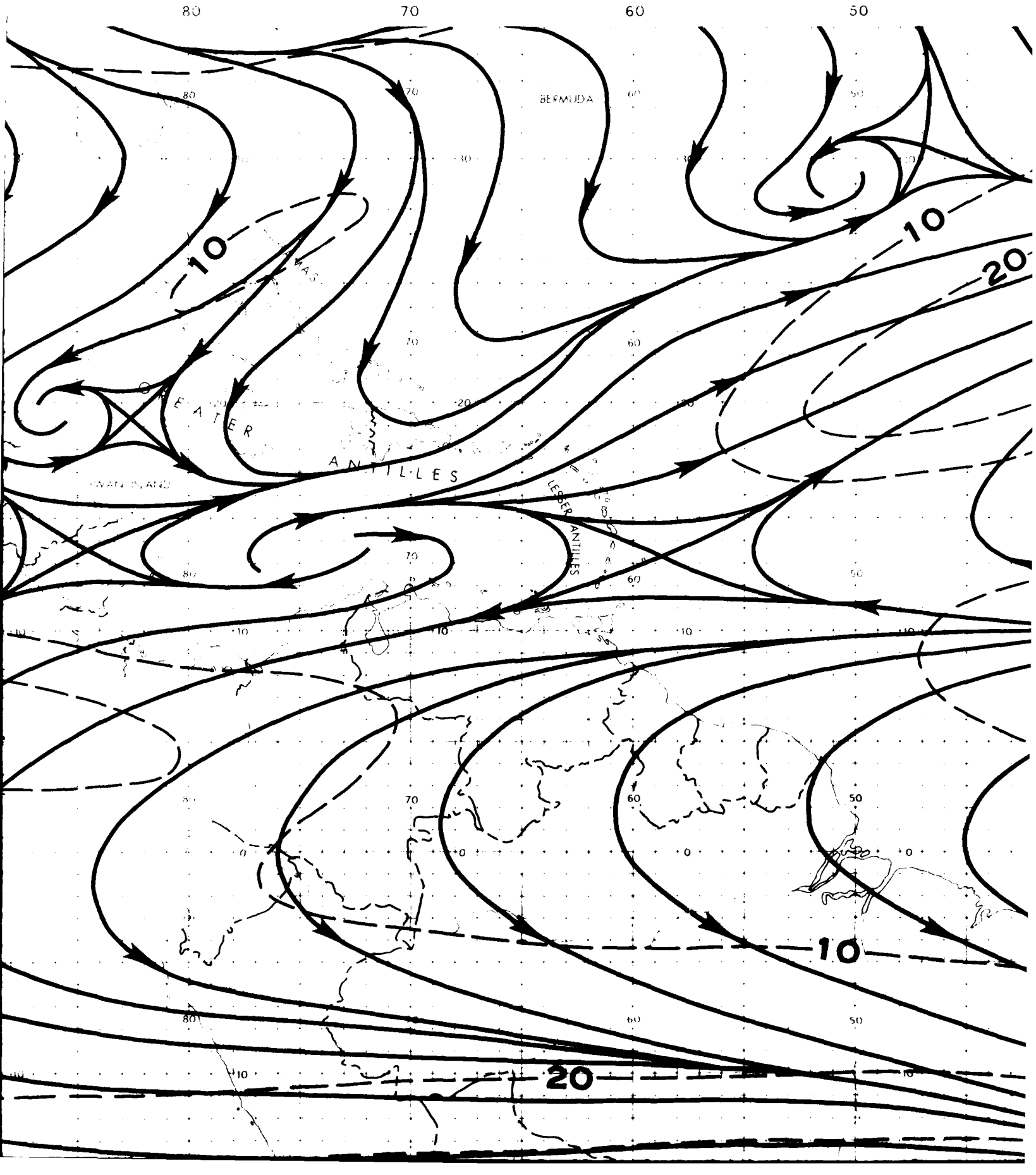



MULW-207E

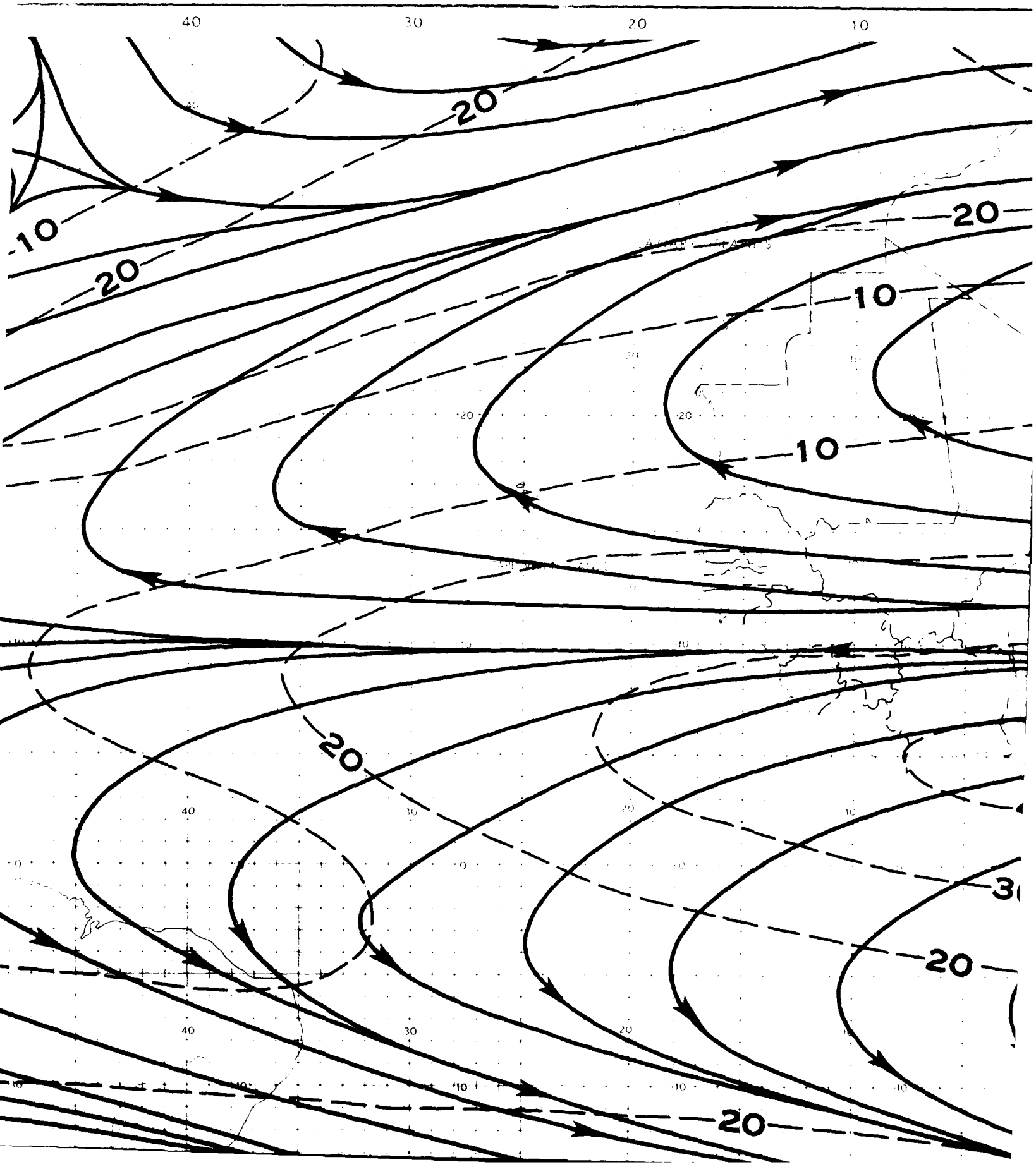
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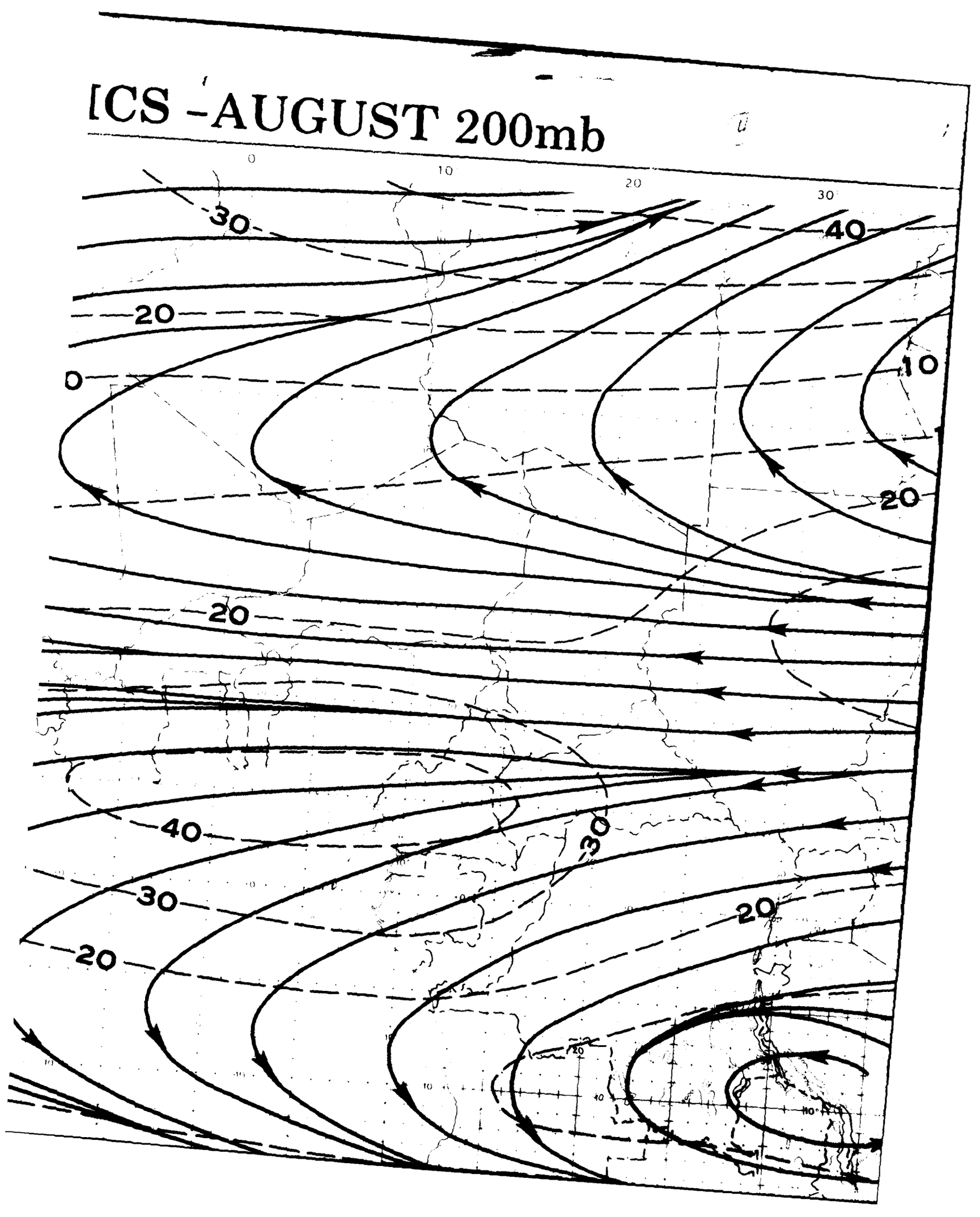

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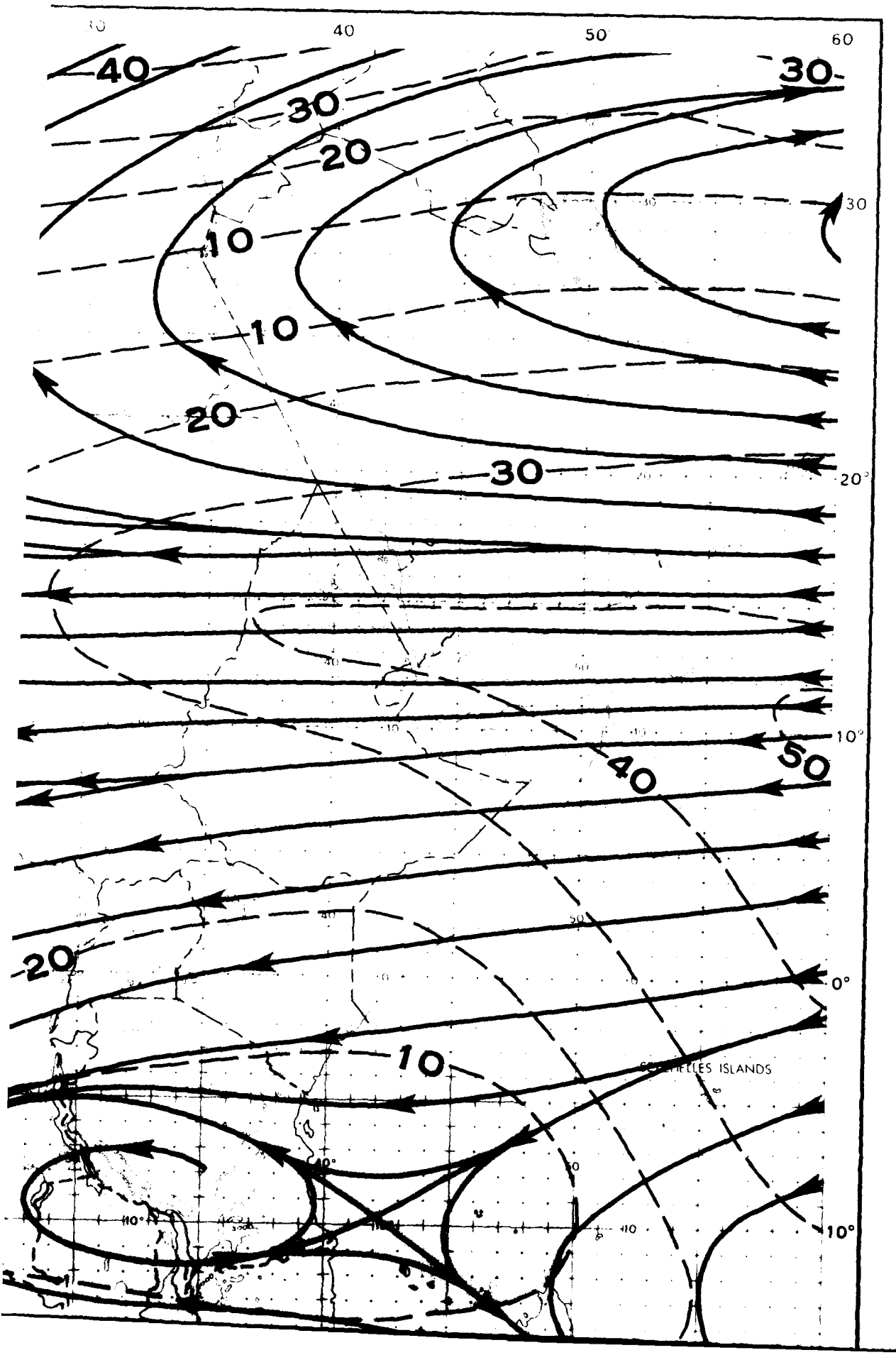
# MEAN UPPER LEVEL WI

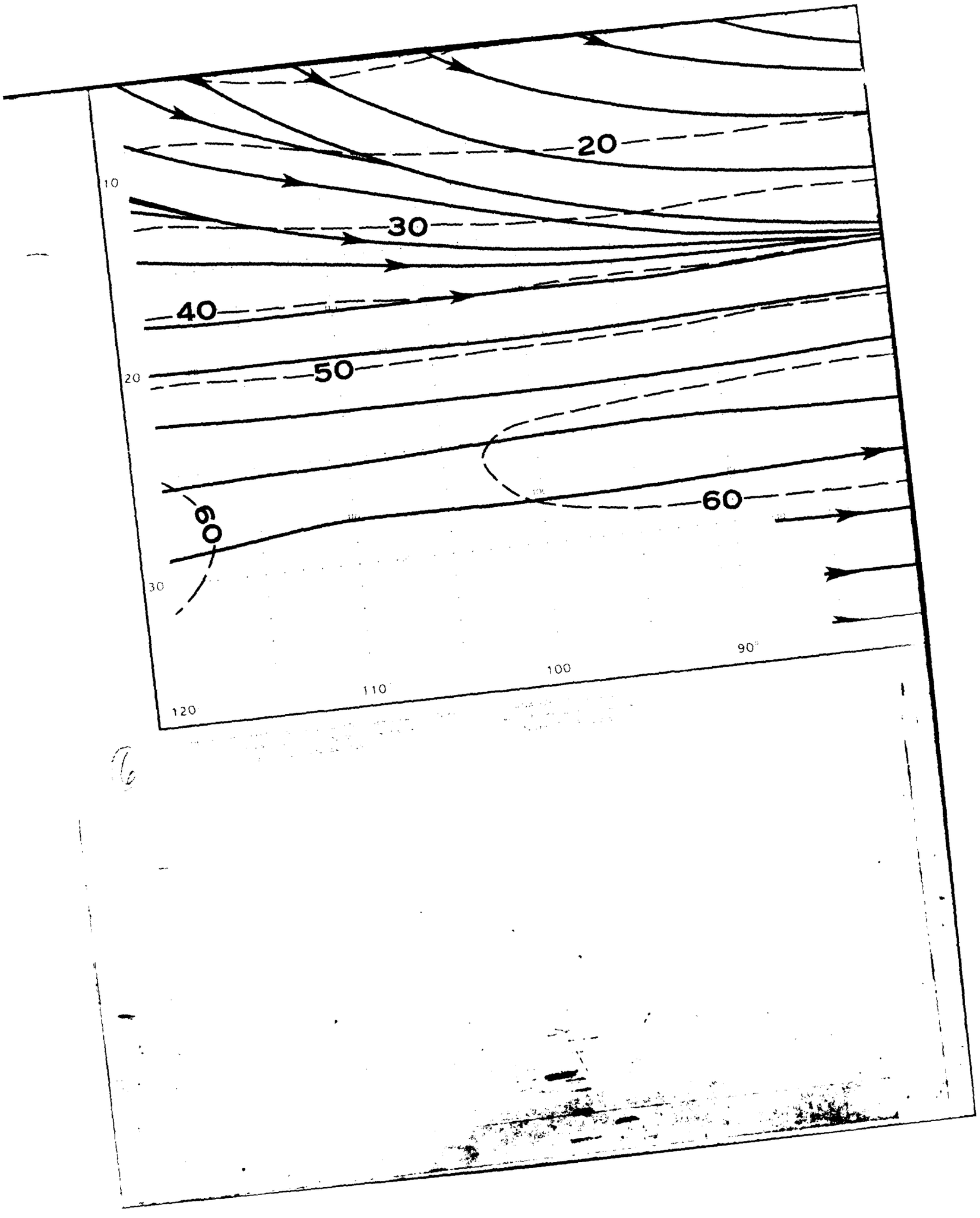


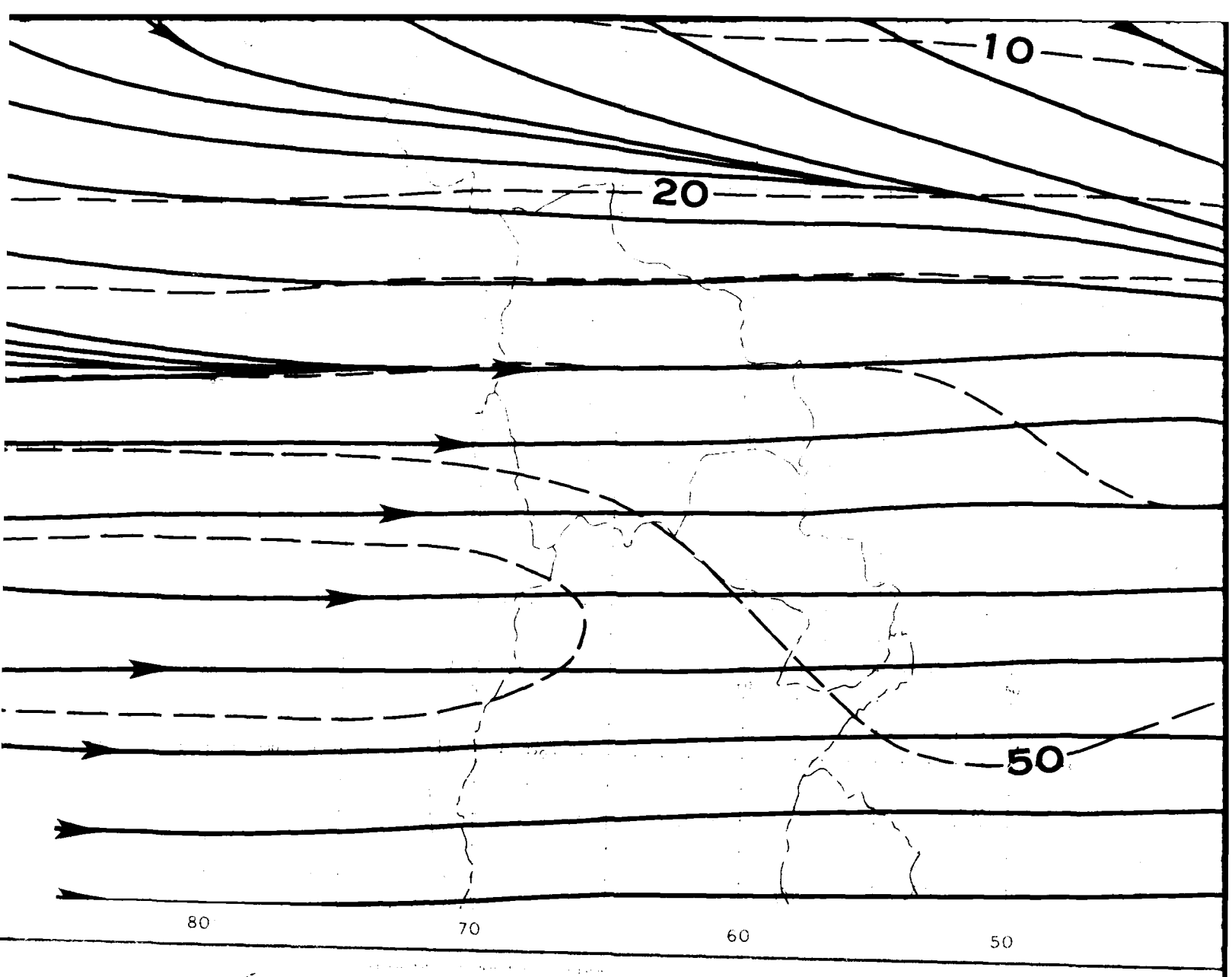
# WINDS over GLOBAL TROPICS –

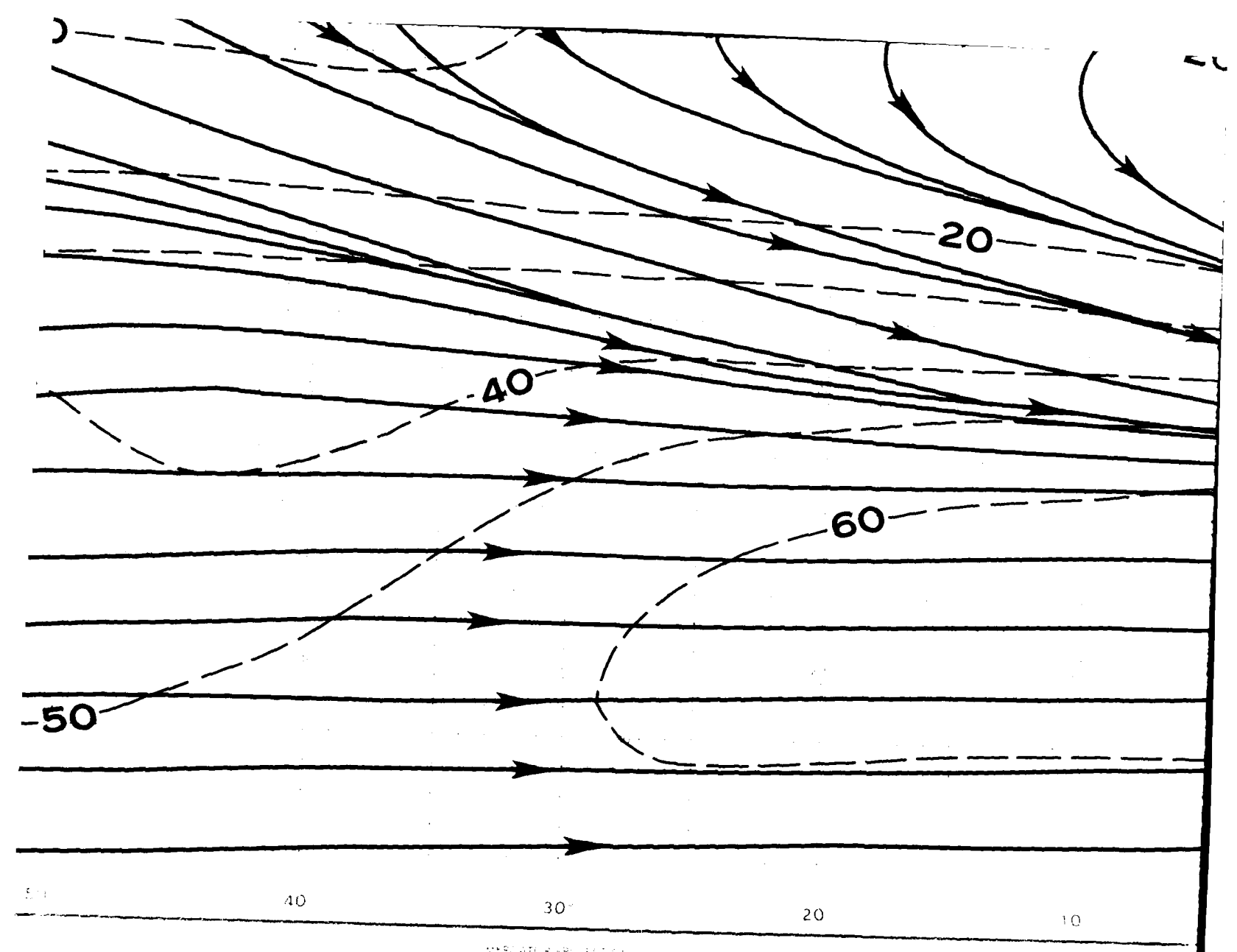

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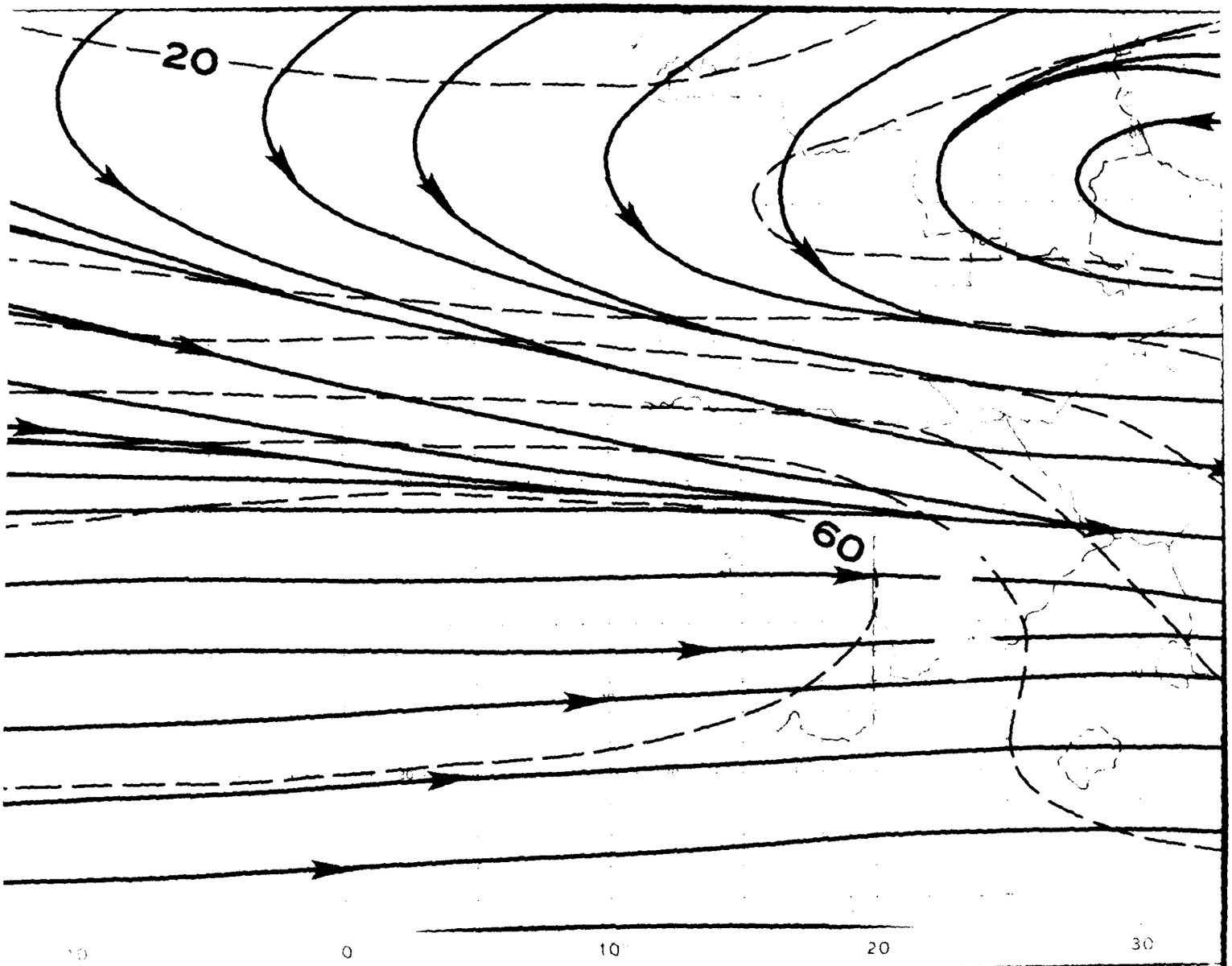

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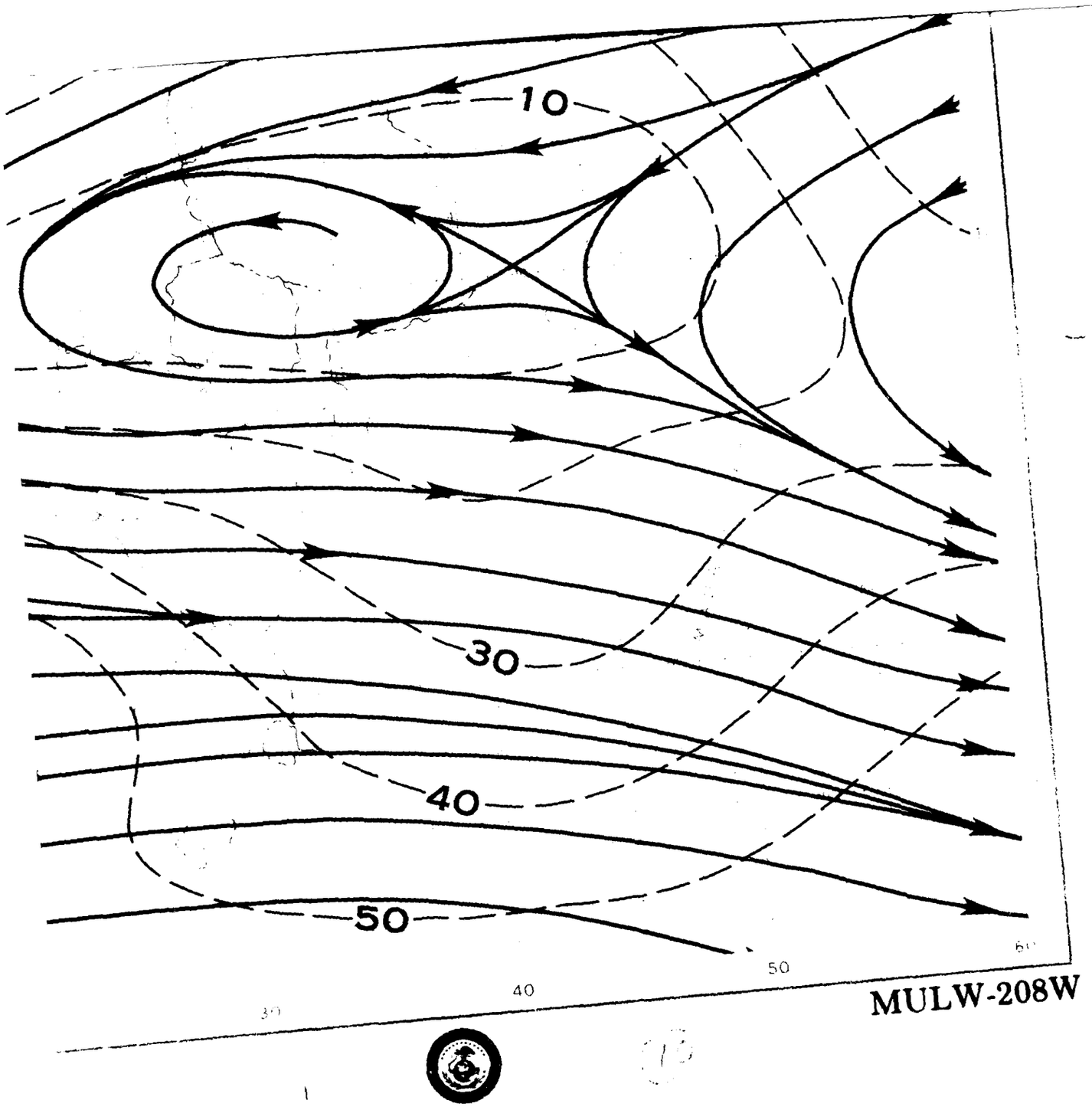

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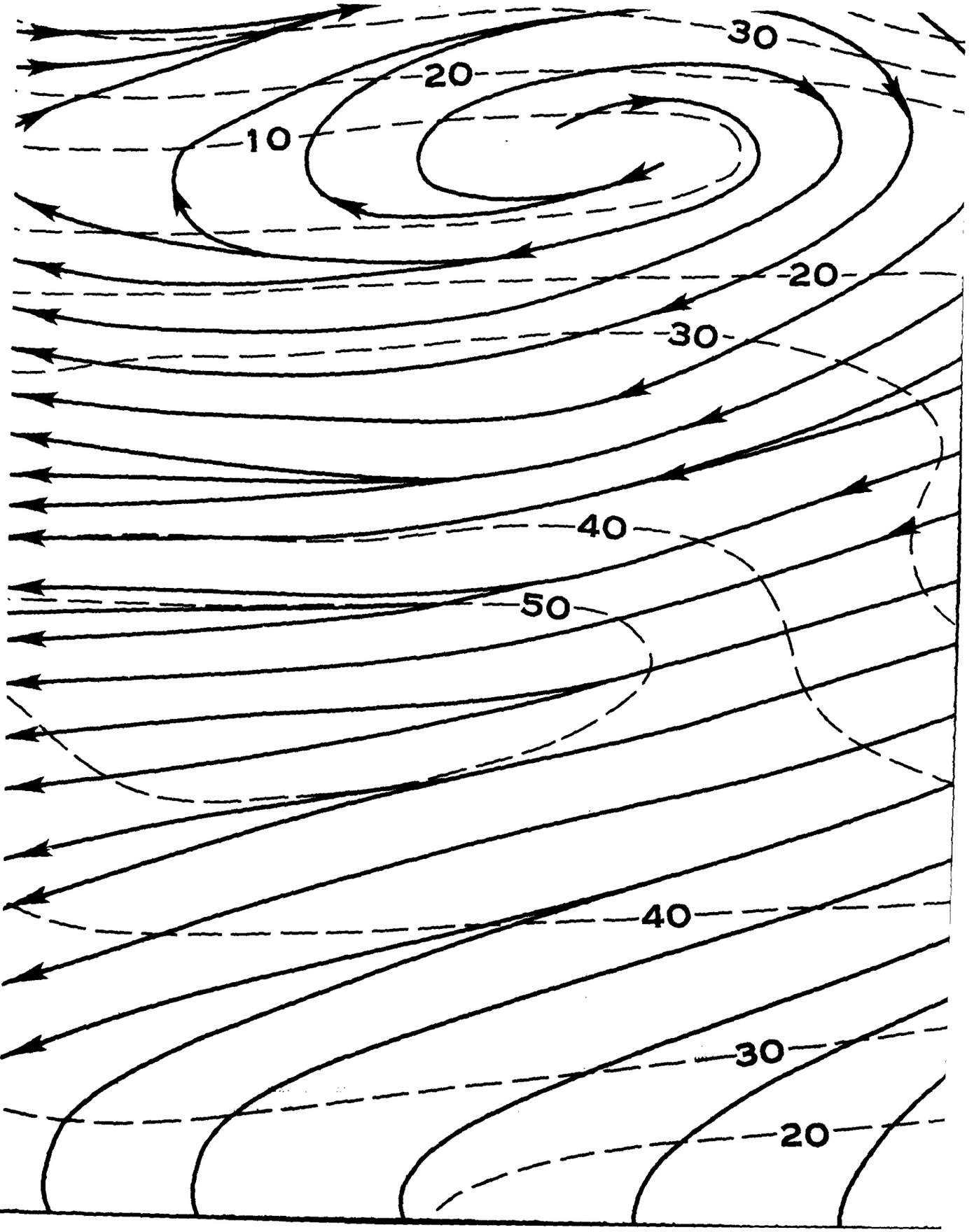

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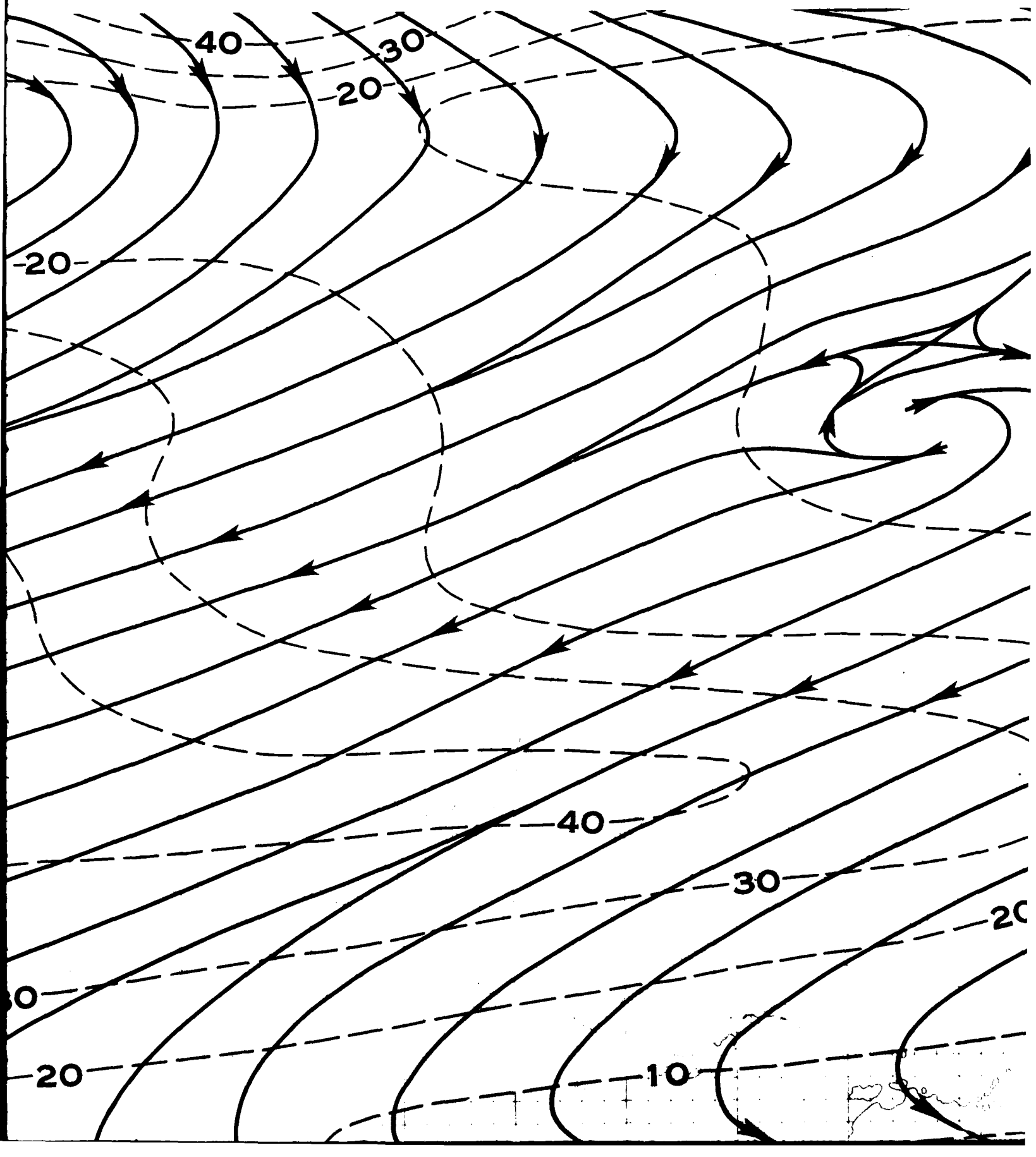

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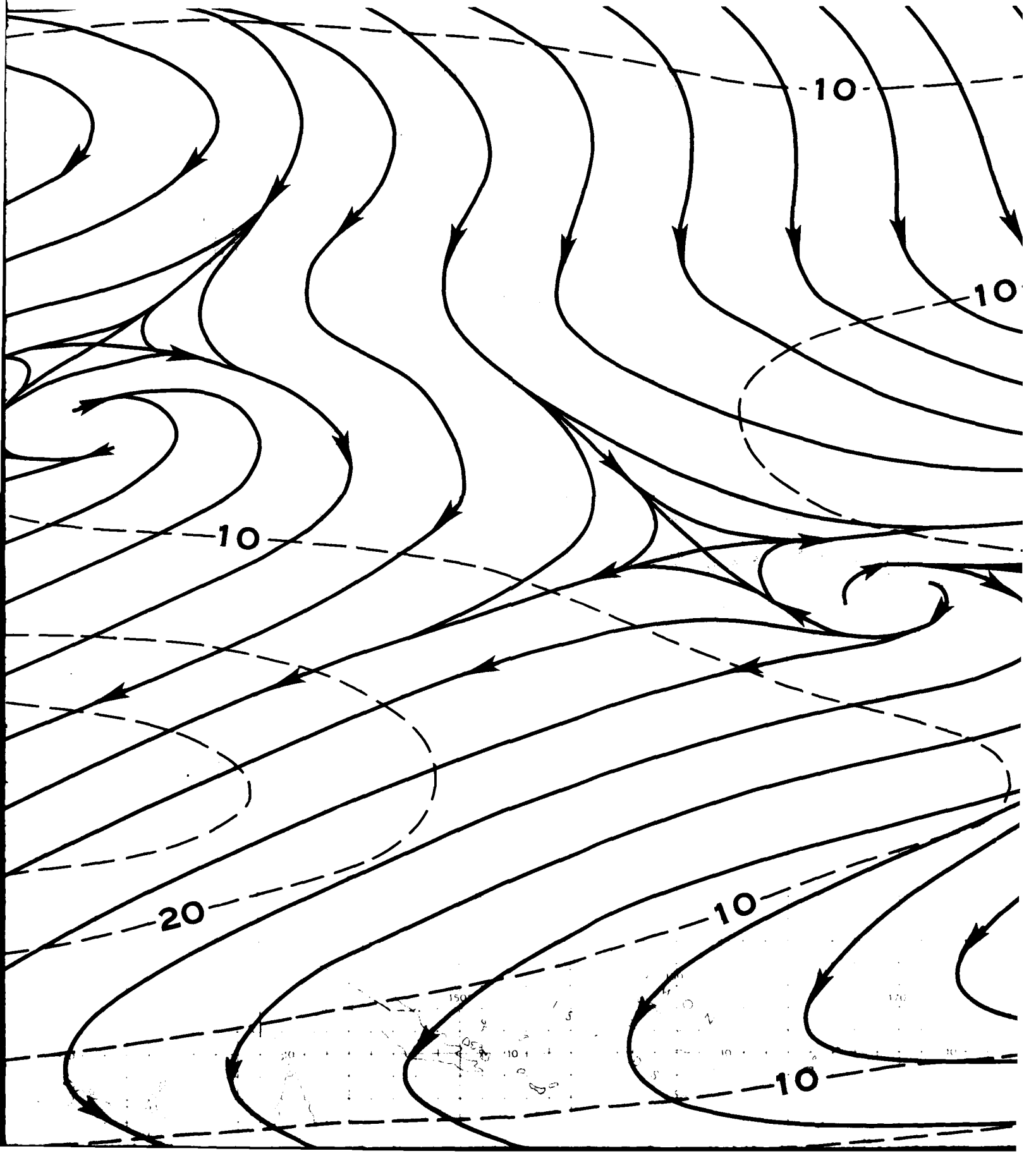

MULW-208W


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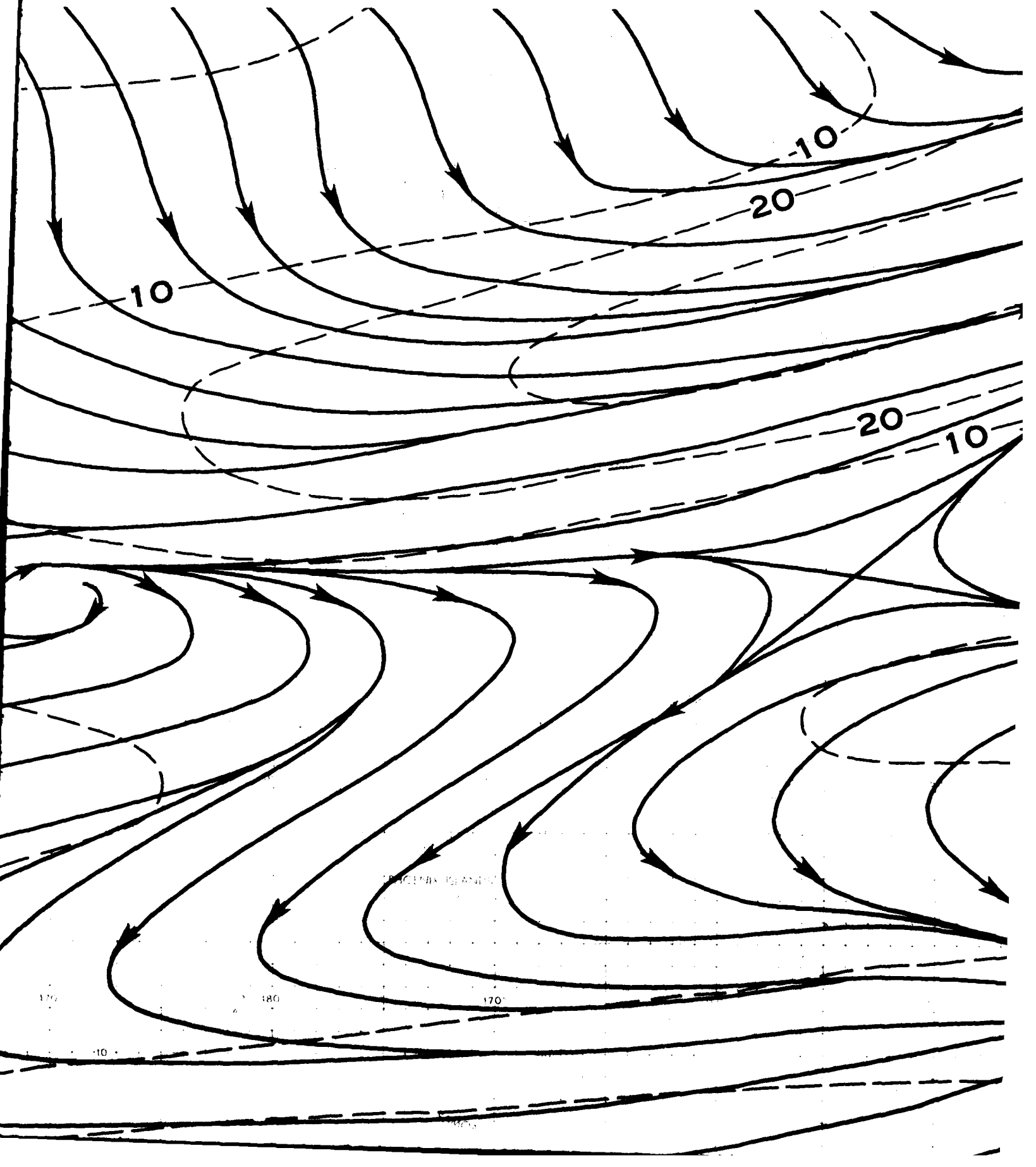
# MEAN UPPER LEVEL WIN

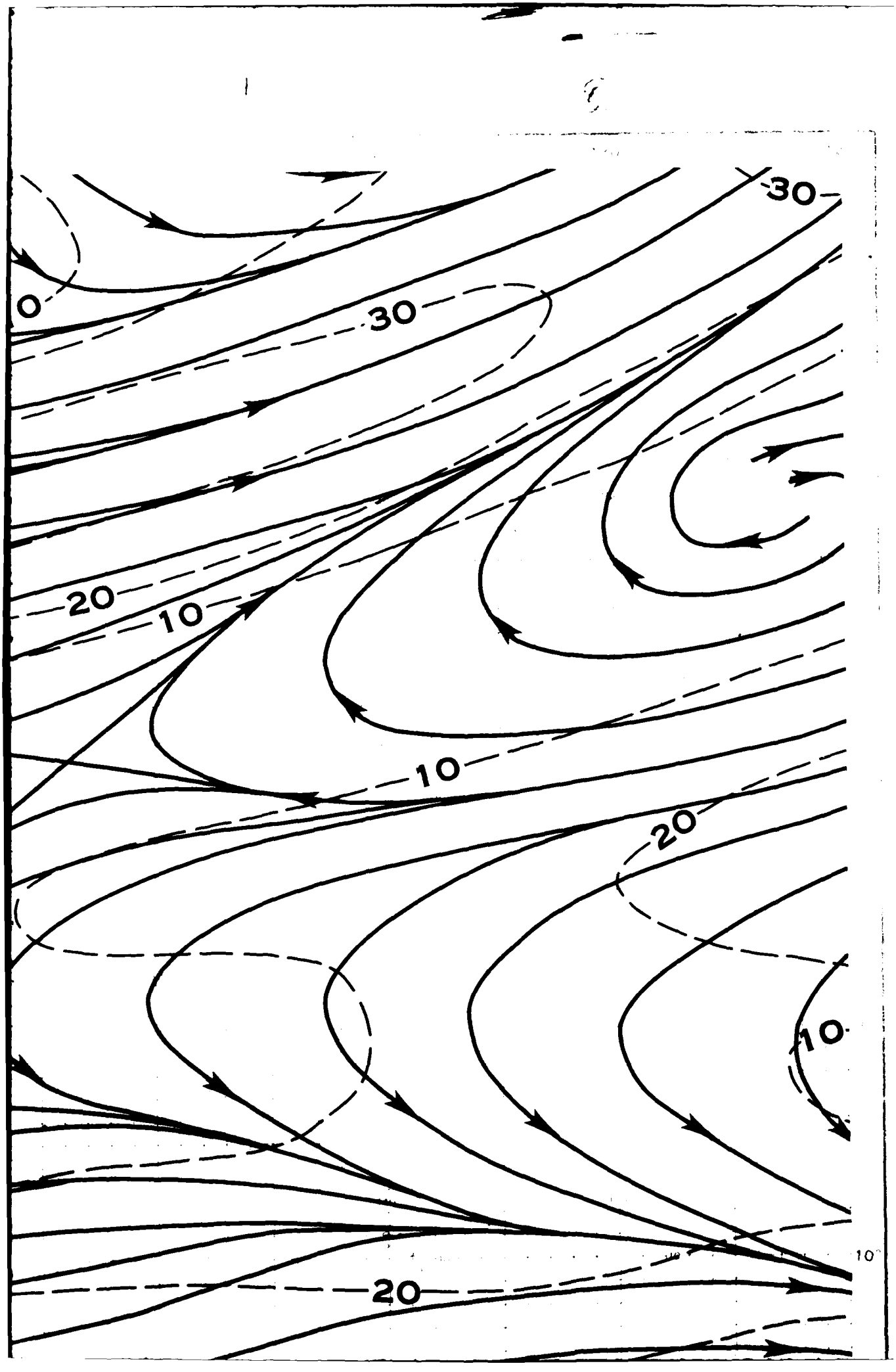


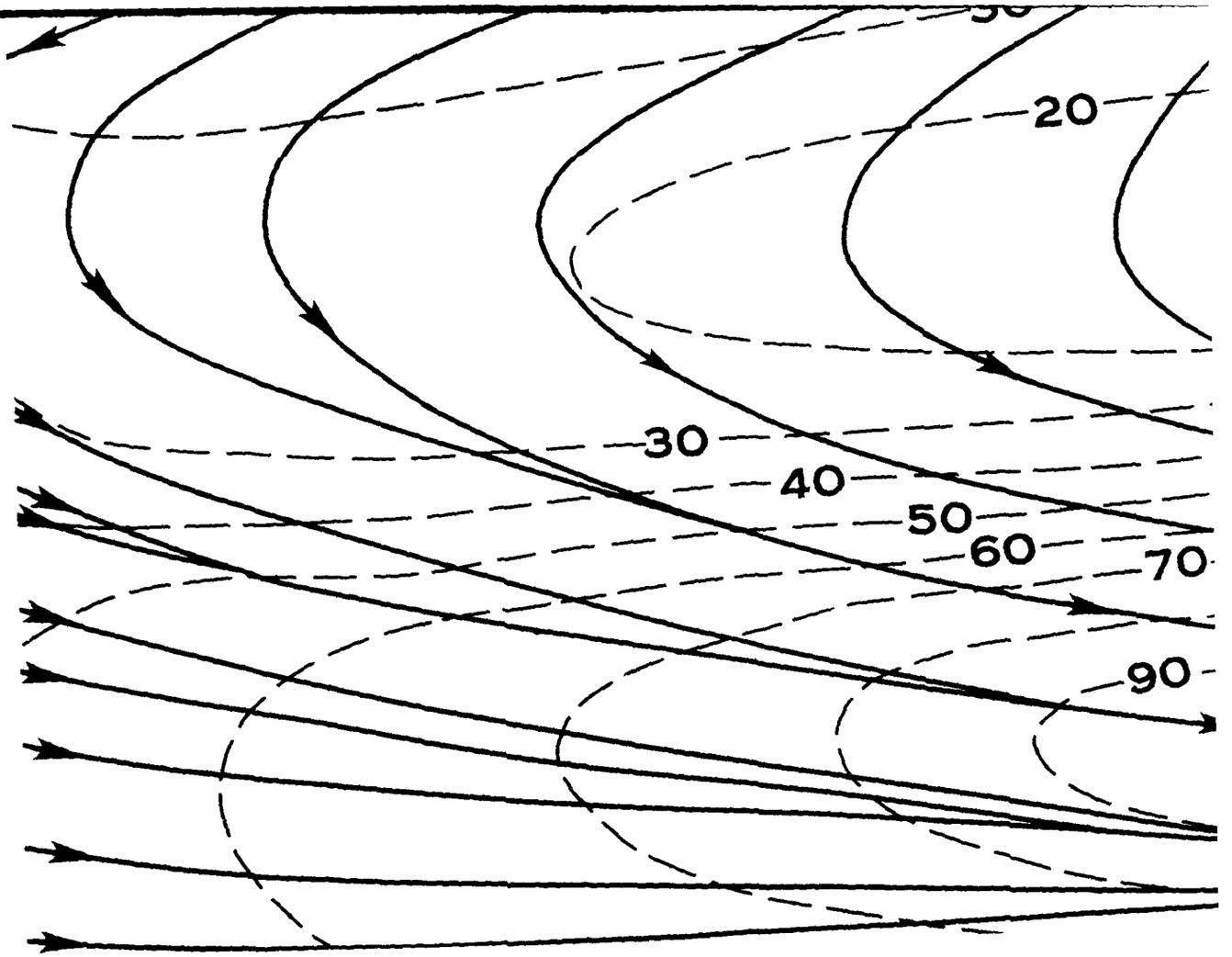
# L WINDS over GLOBAL TROPICS

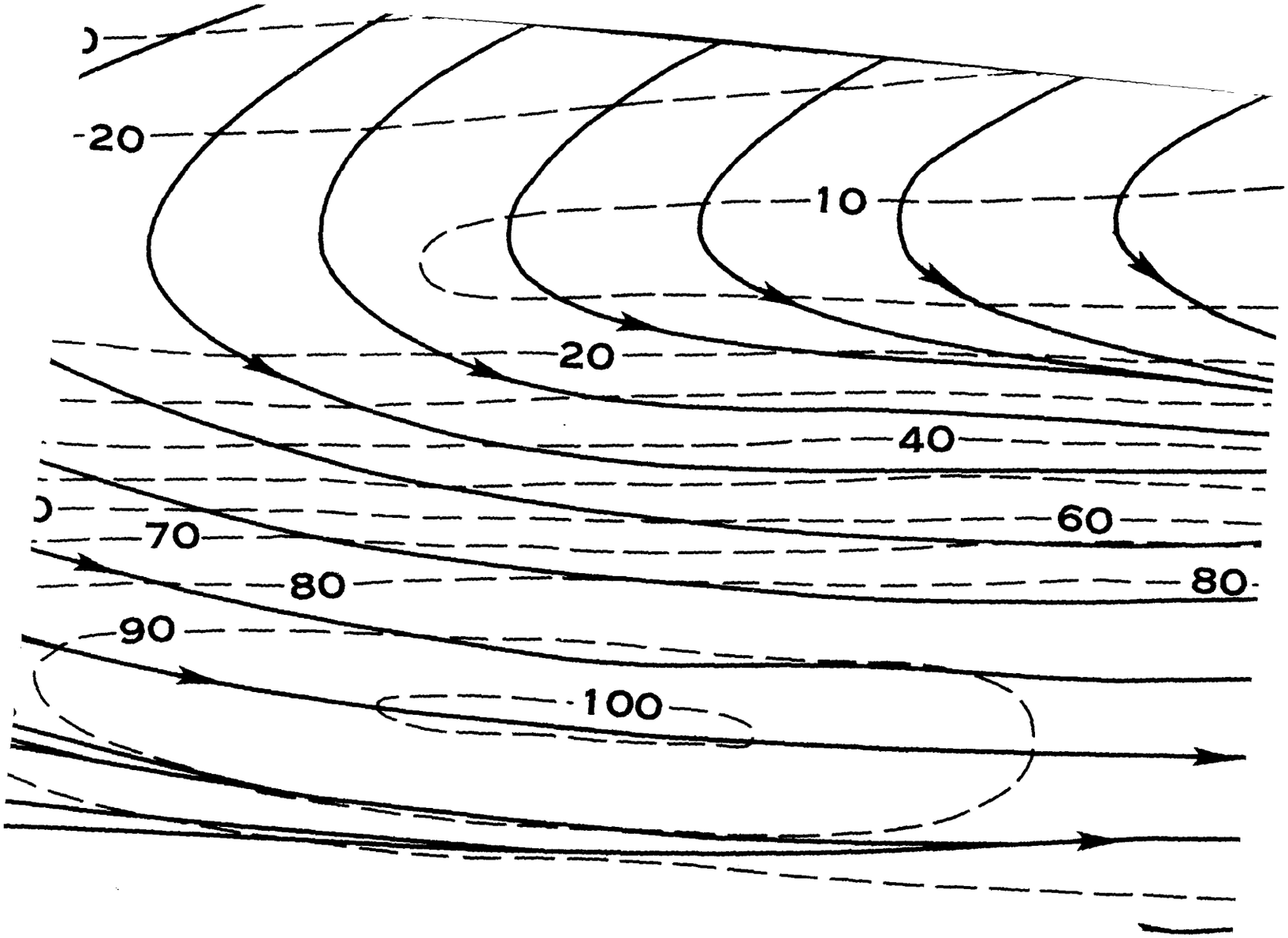


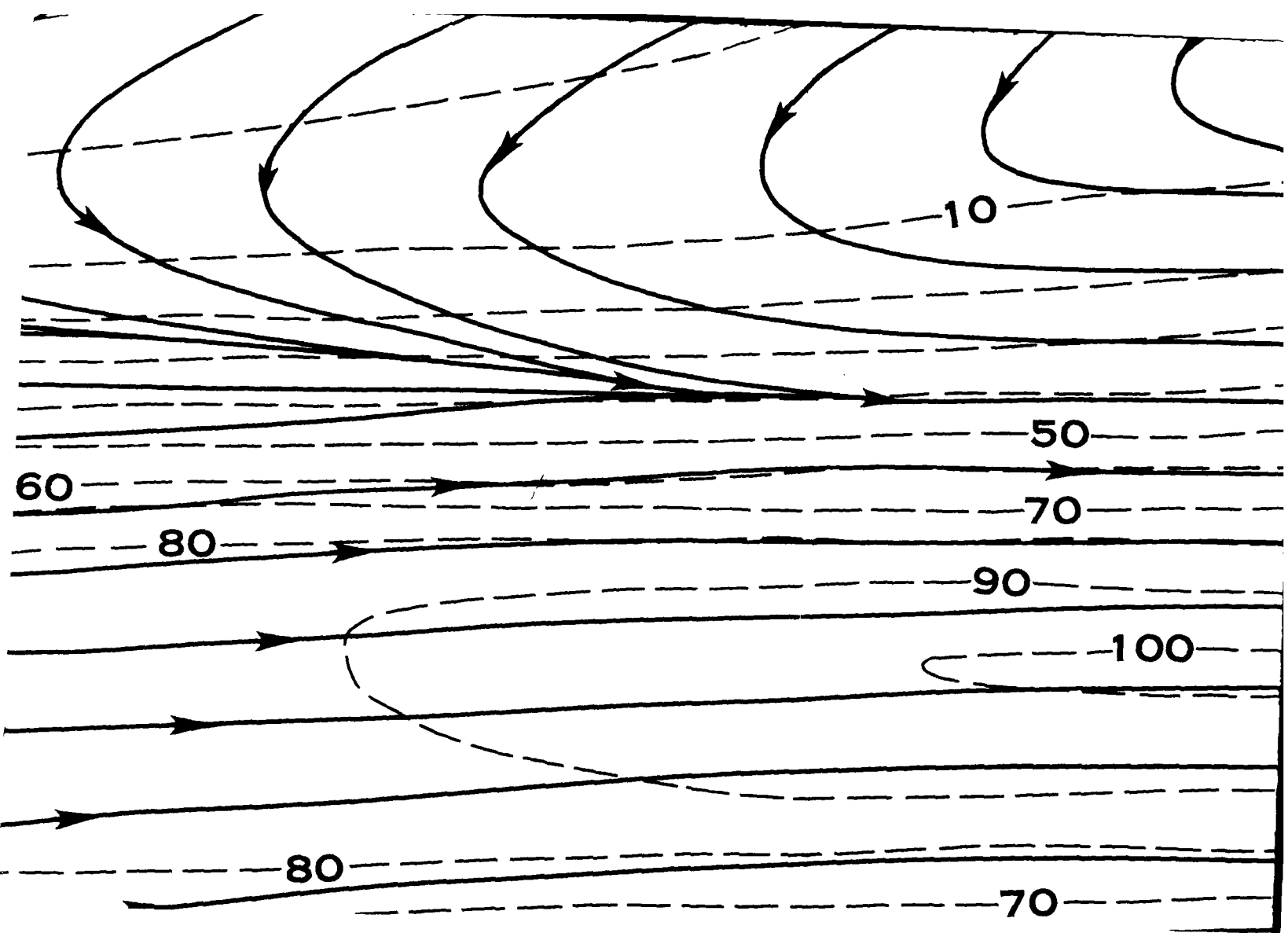
# PICS - AUGUST 200mb

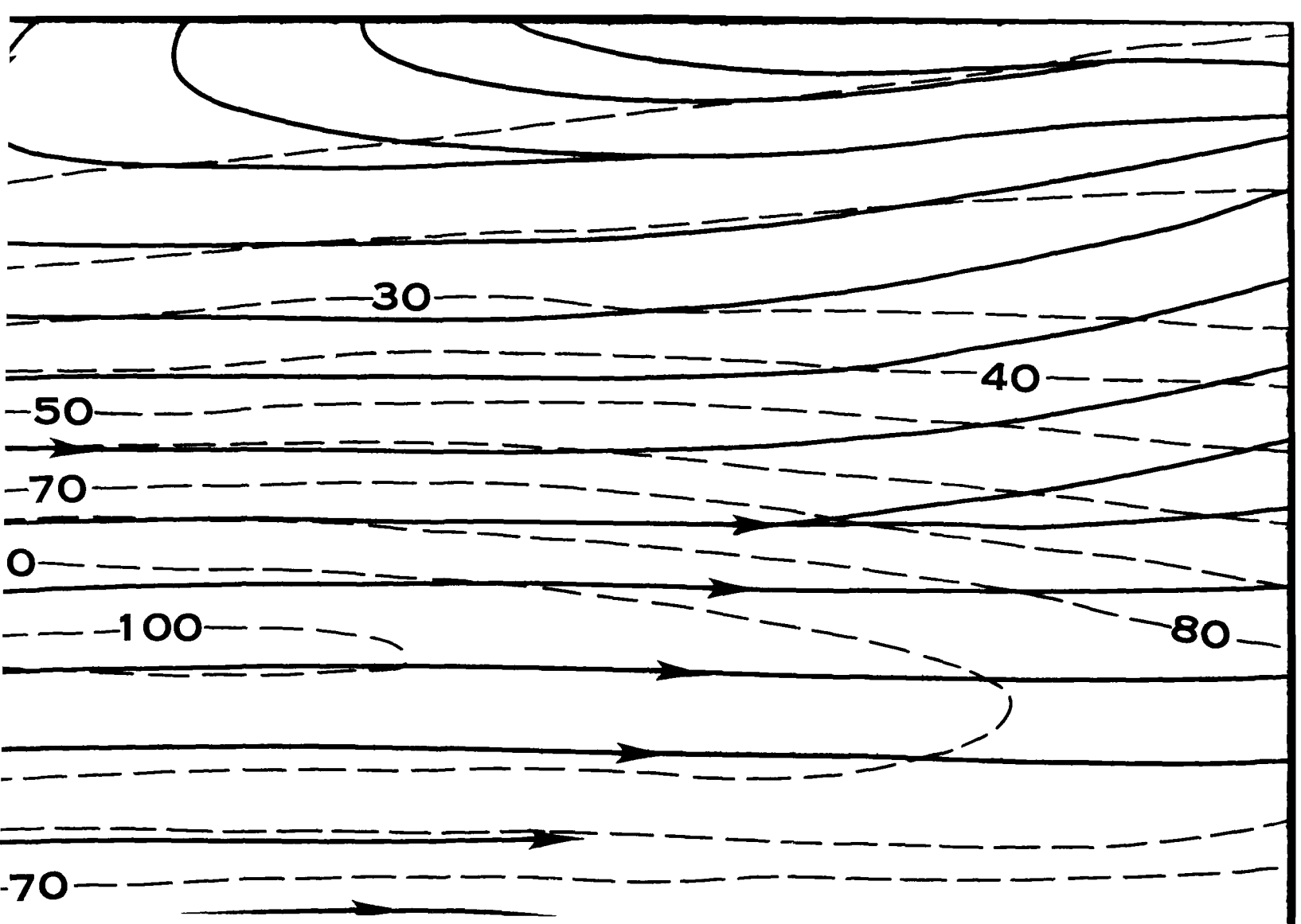



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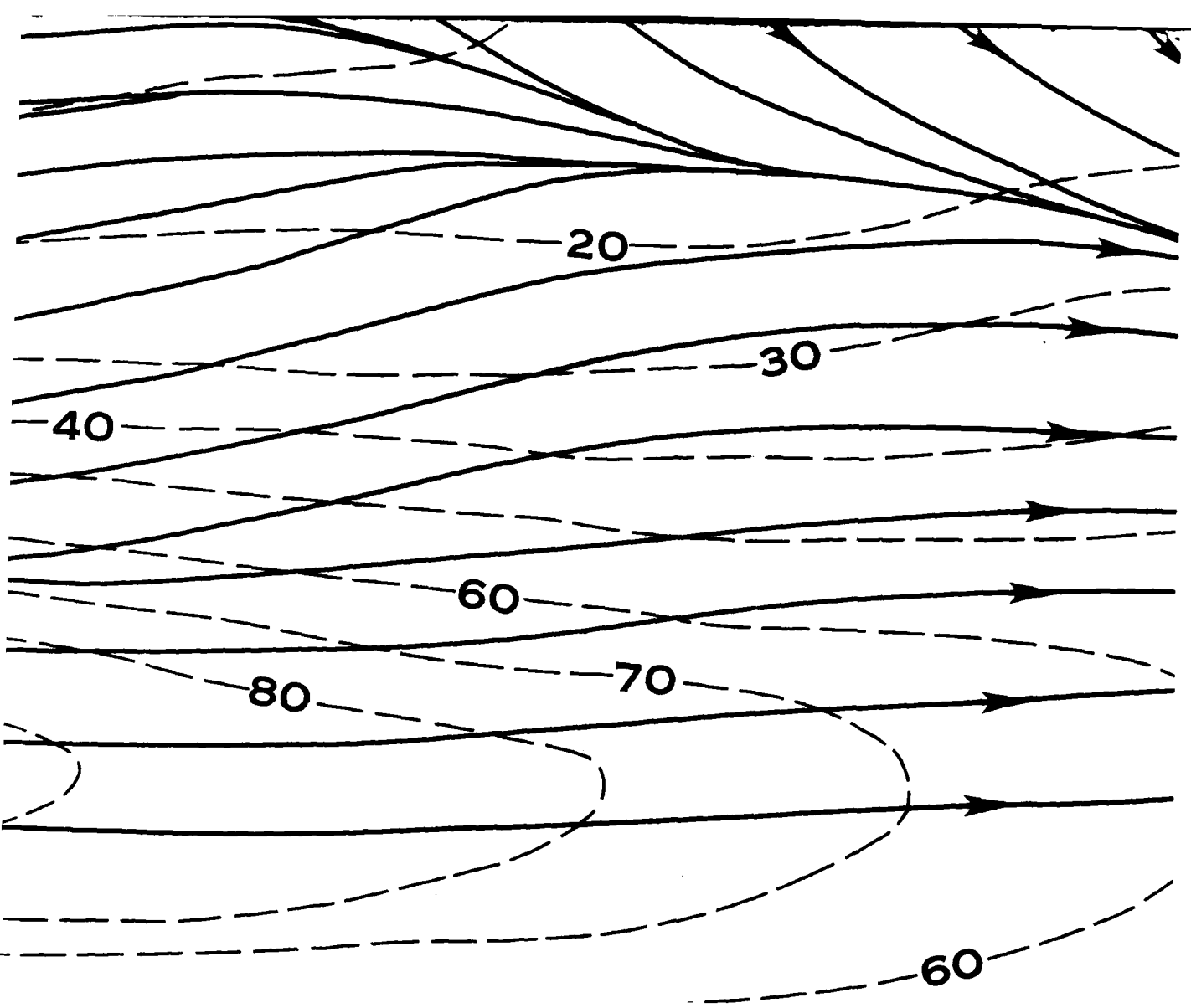

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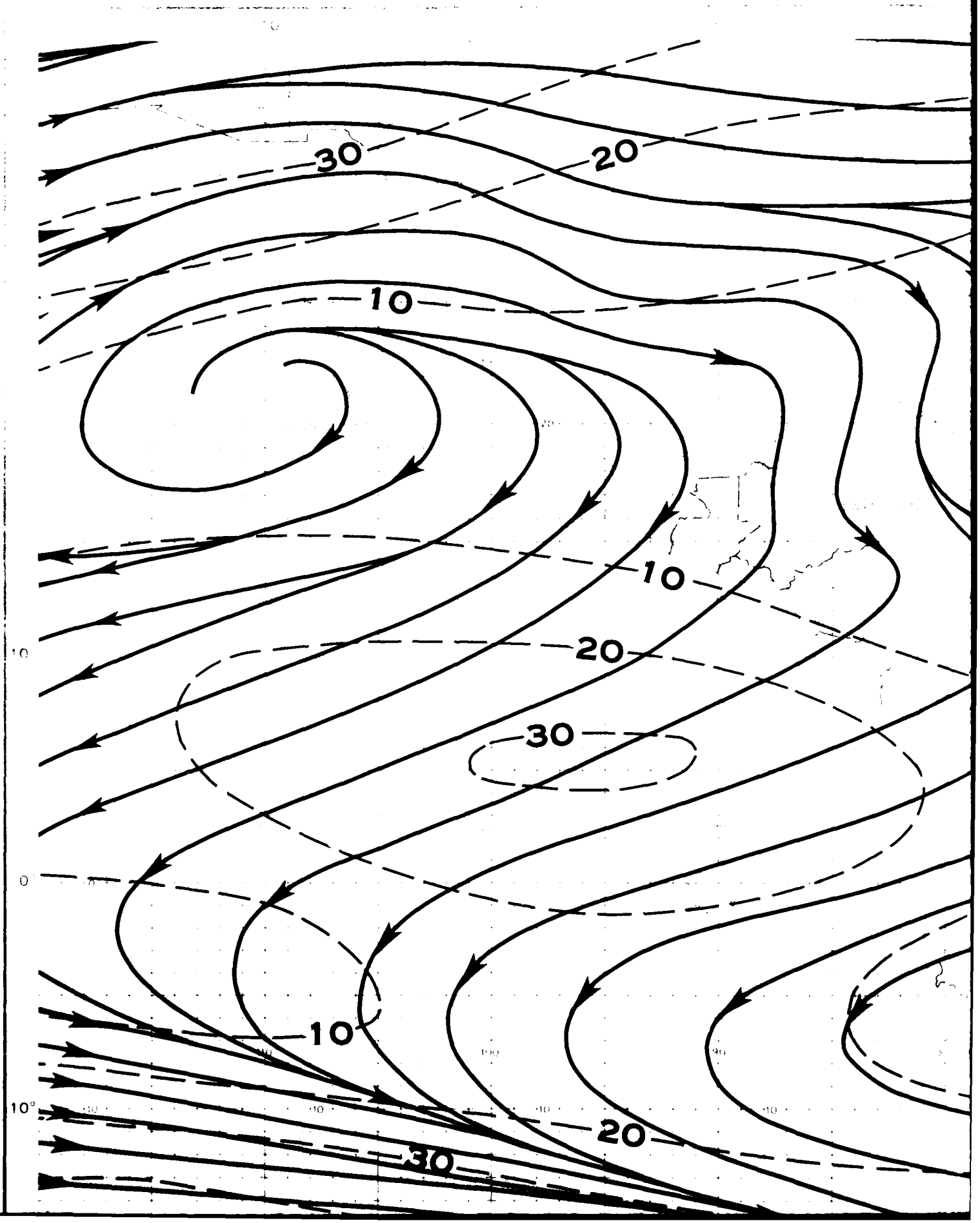



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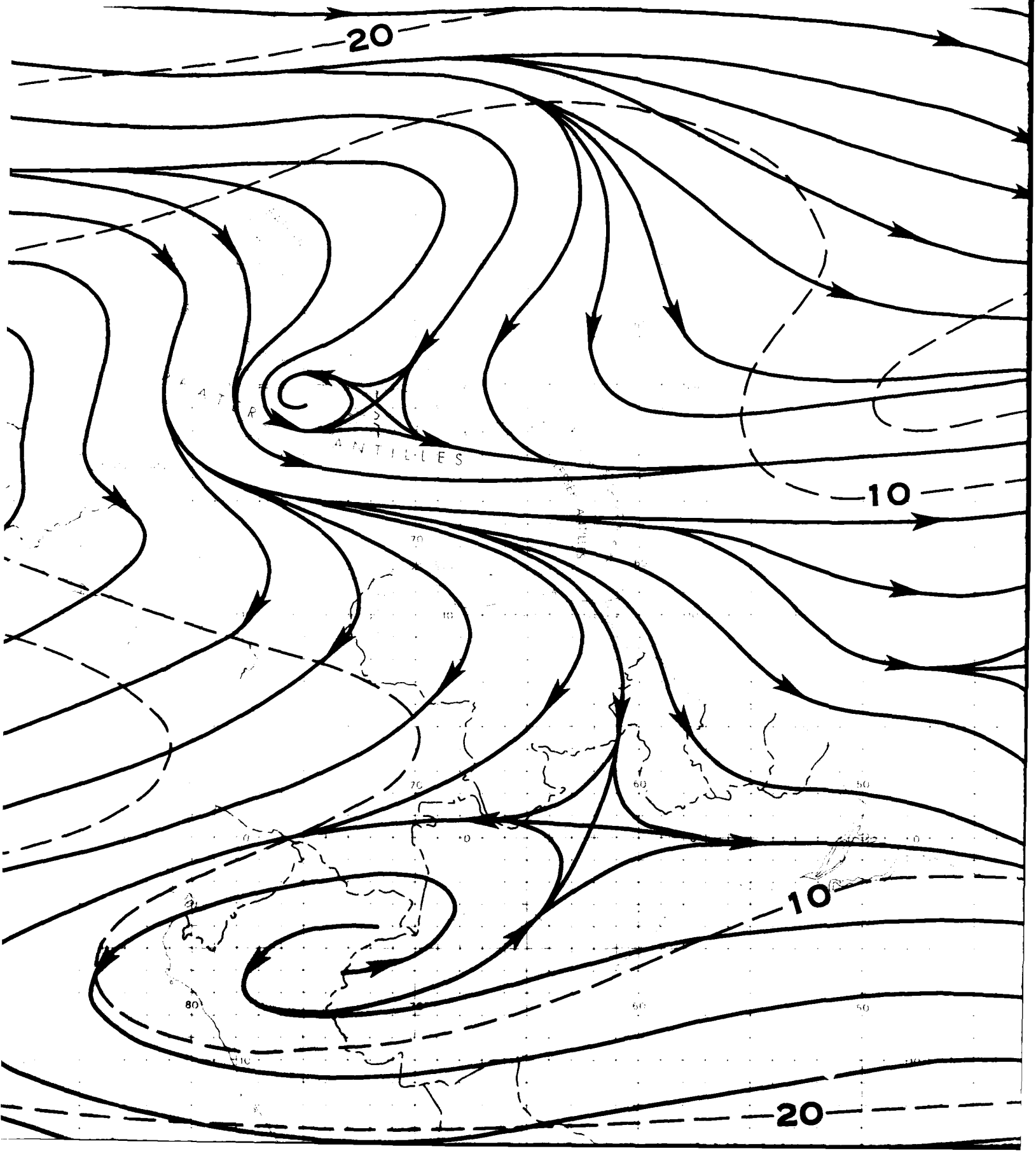



MULW-208E

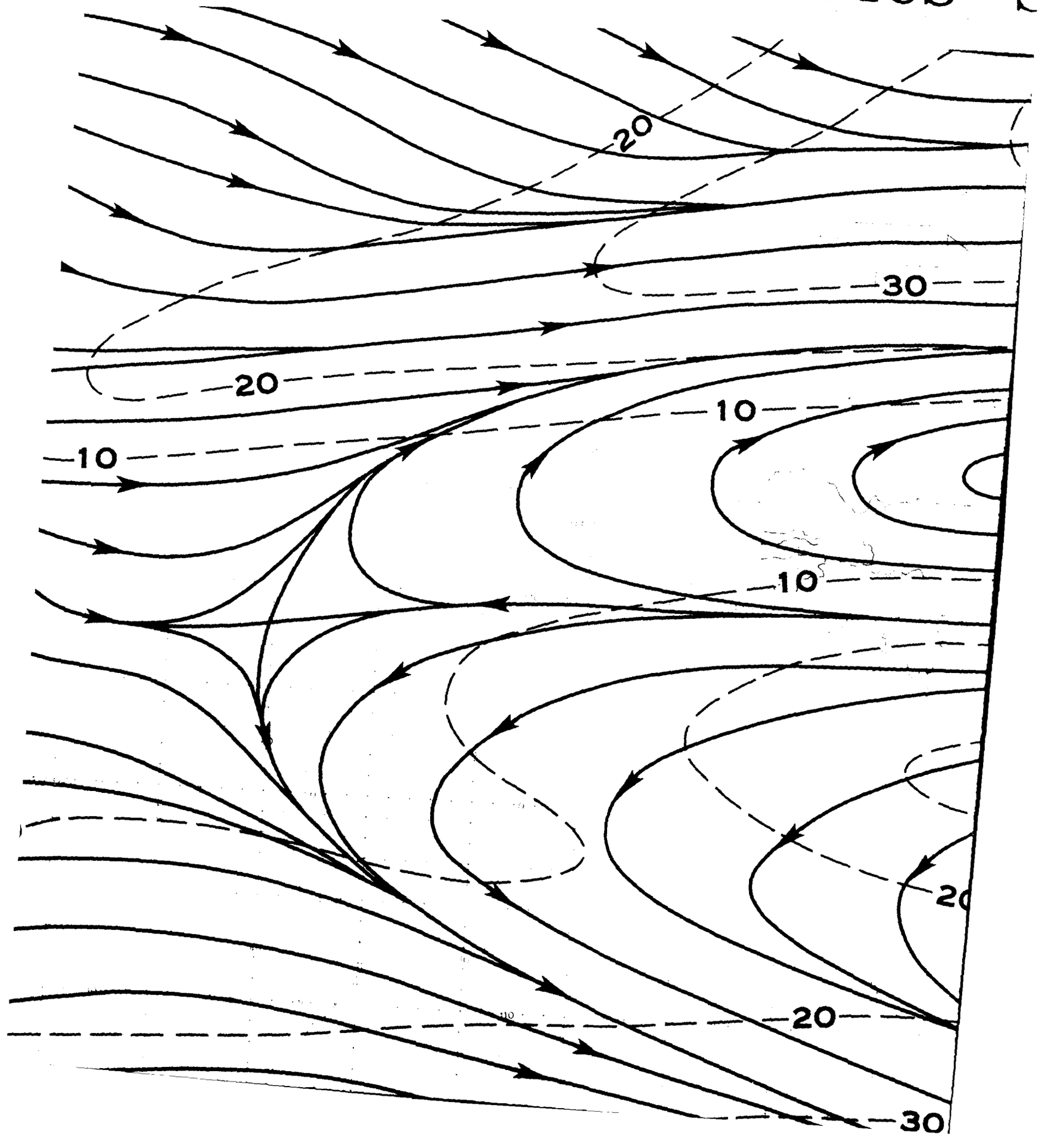
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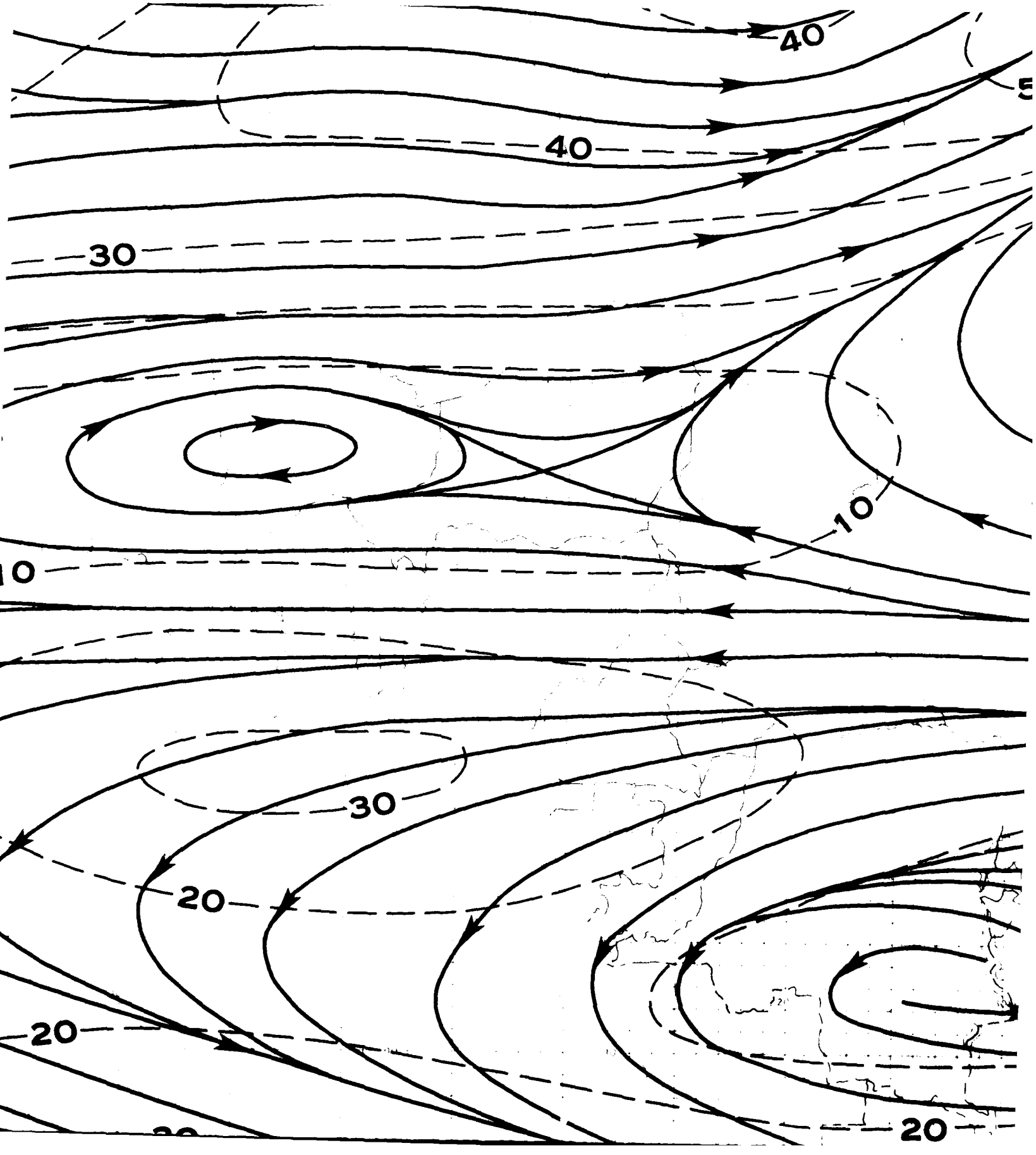
# MEAN UPPER LEVEL WINDS

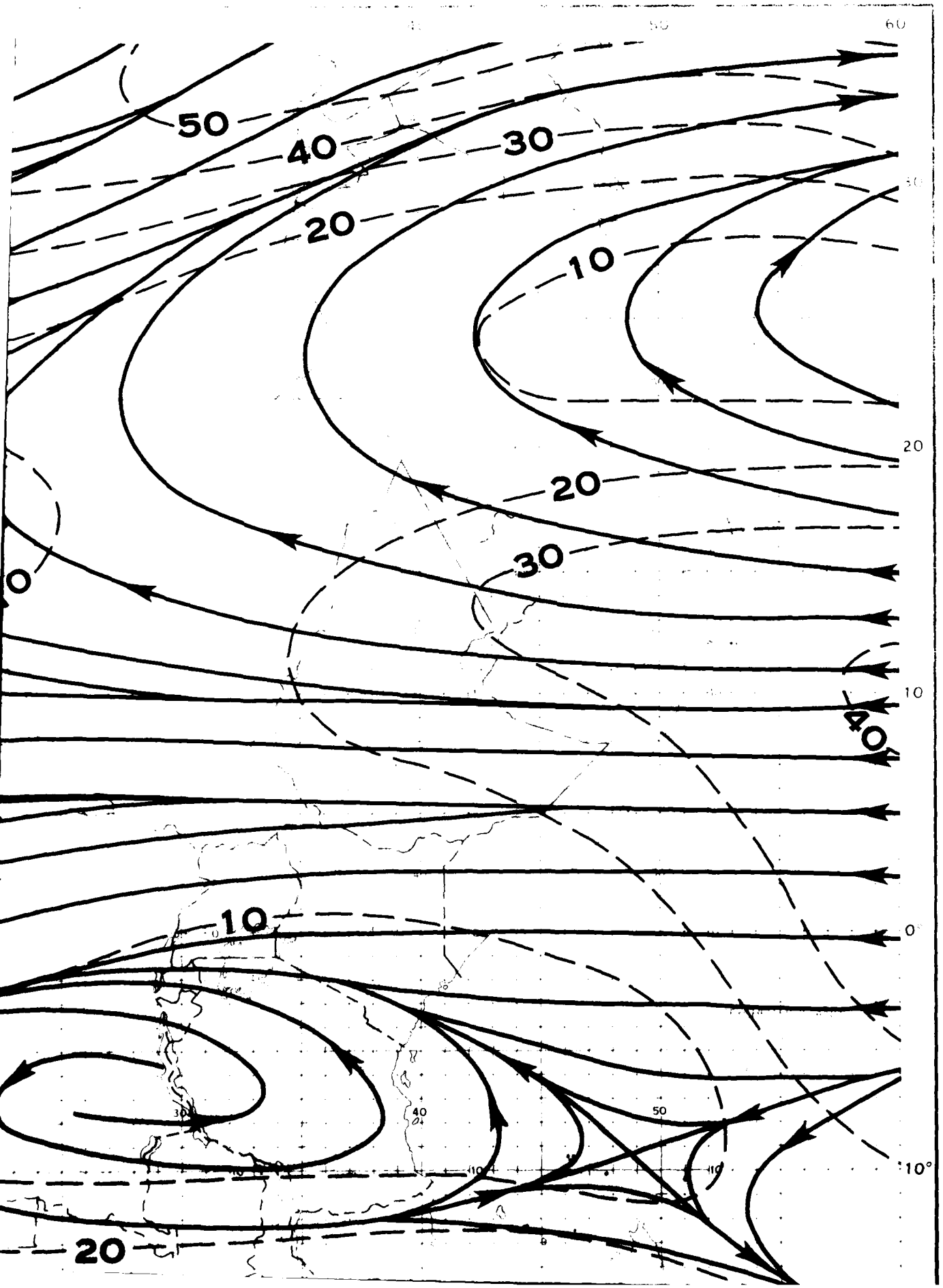


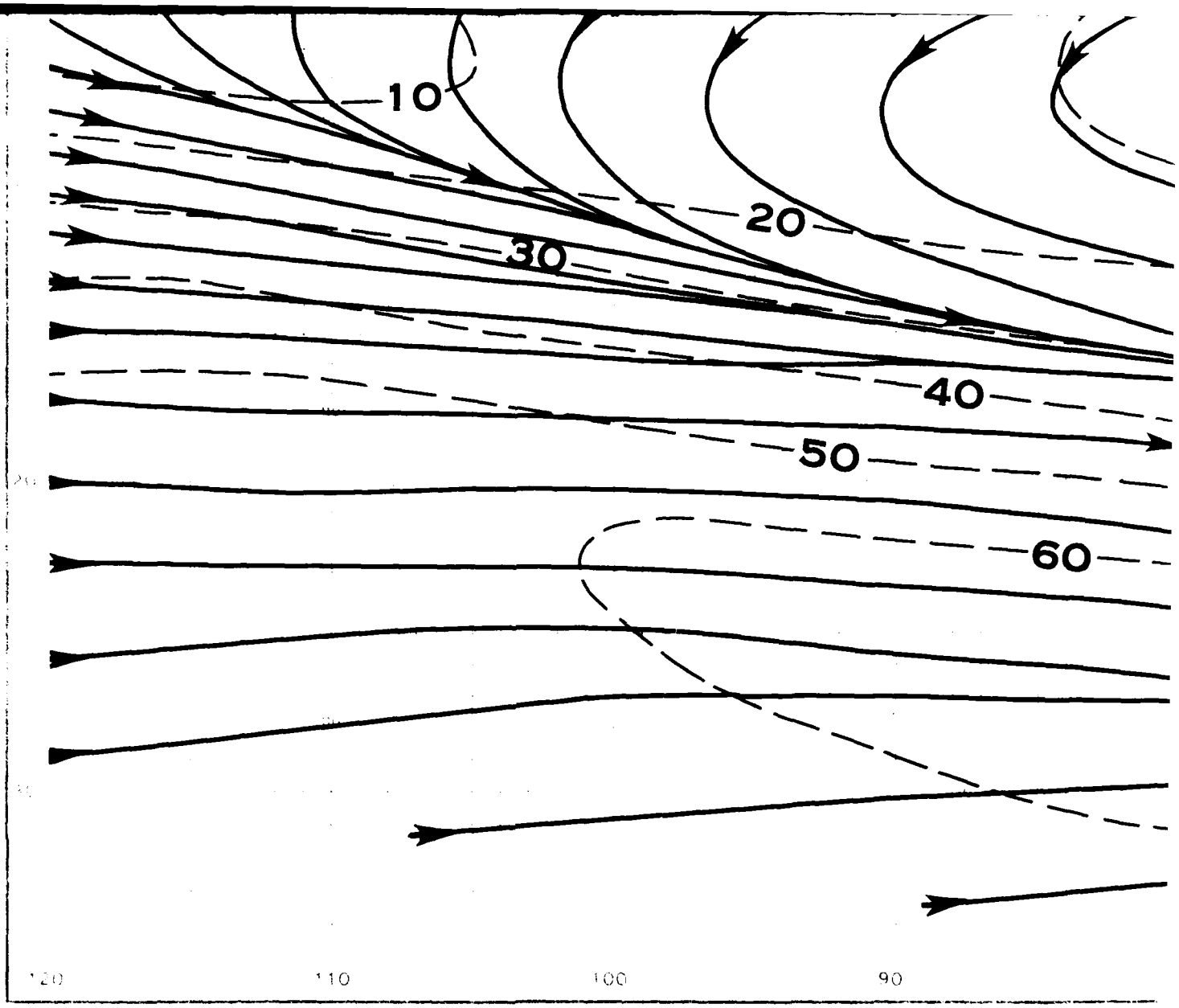
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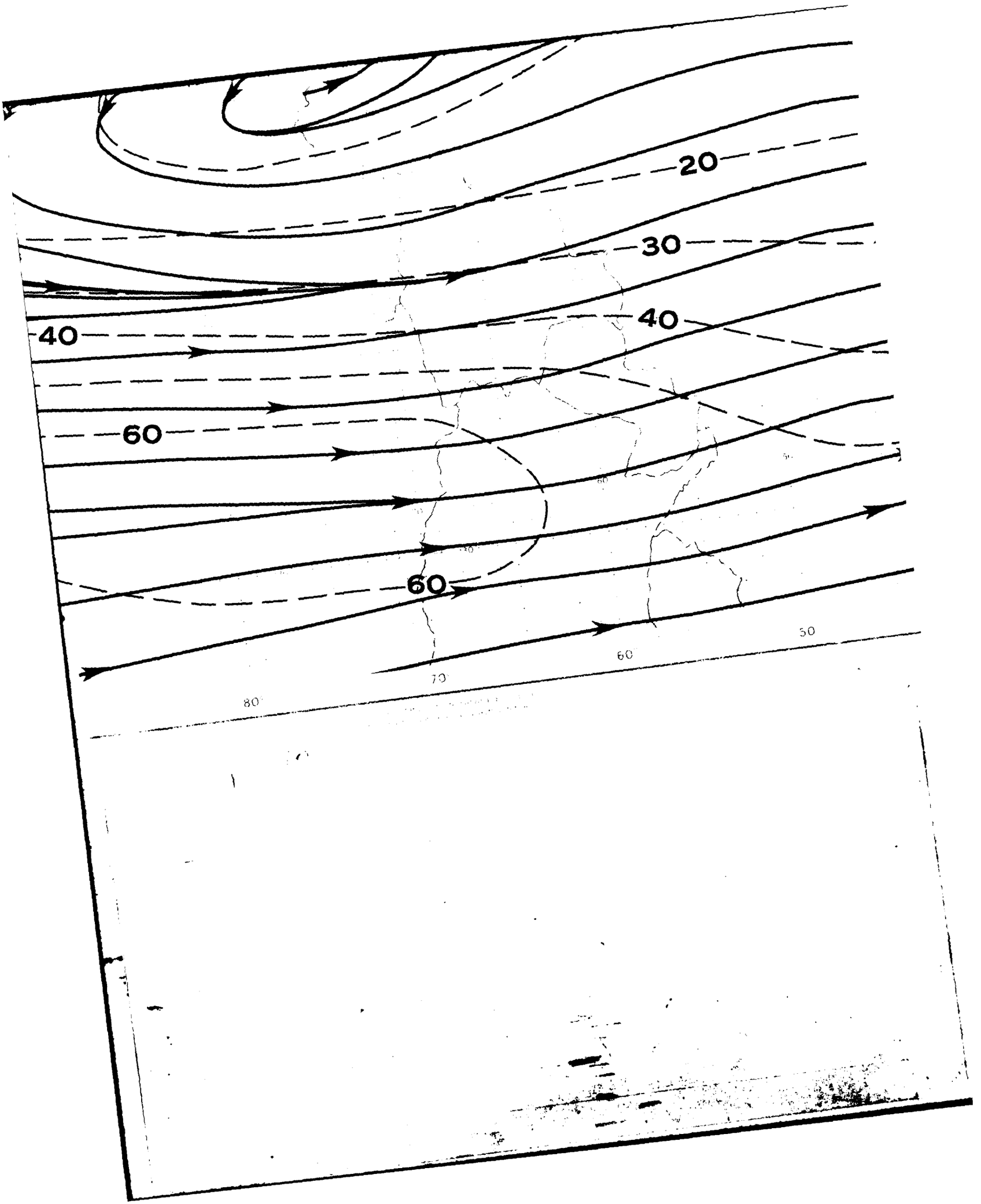


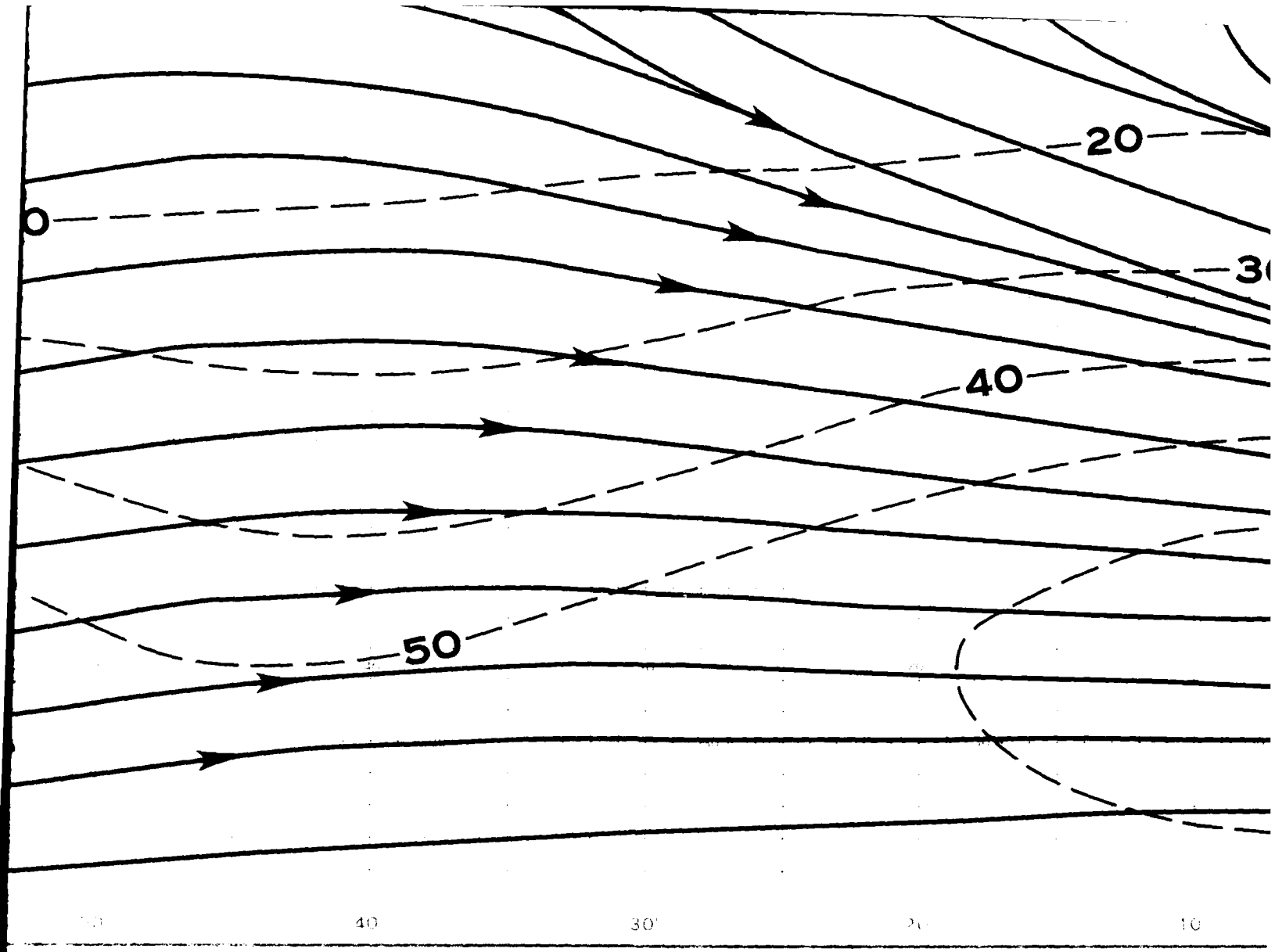
# PICS - SEPTEMBER 200mb

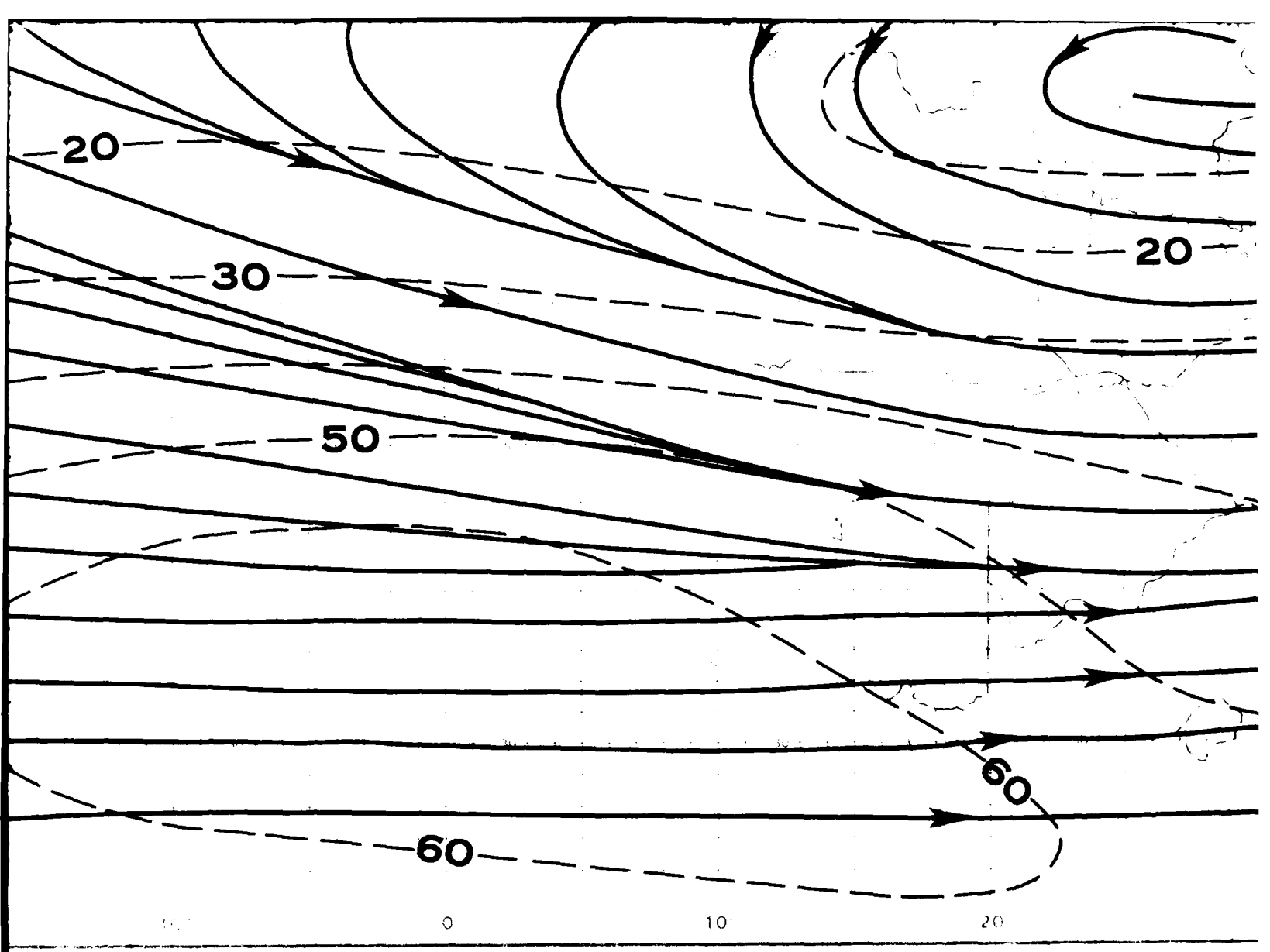


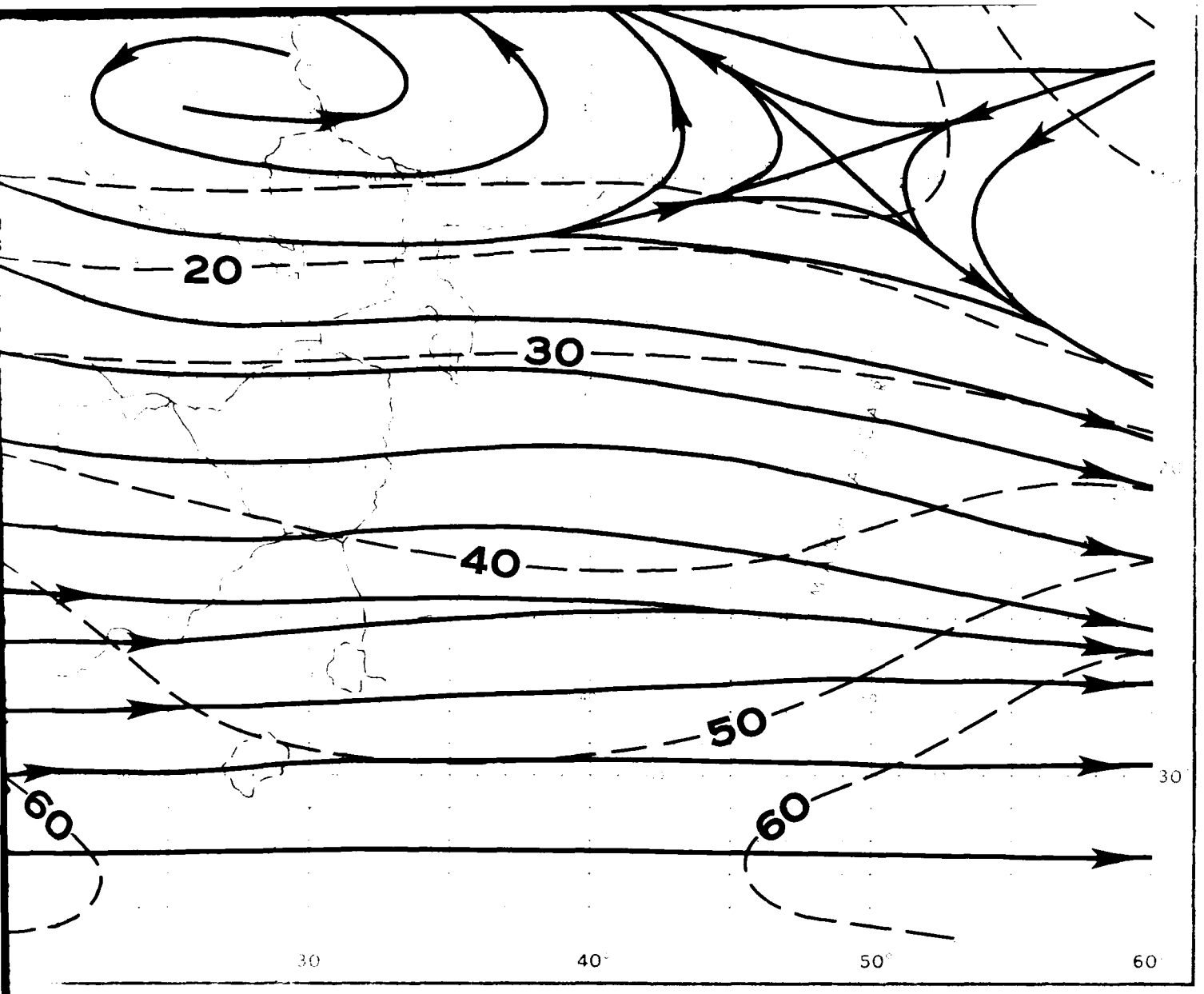

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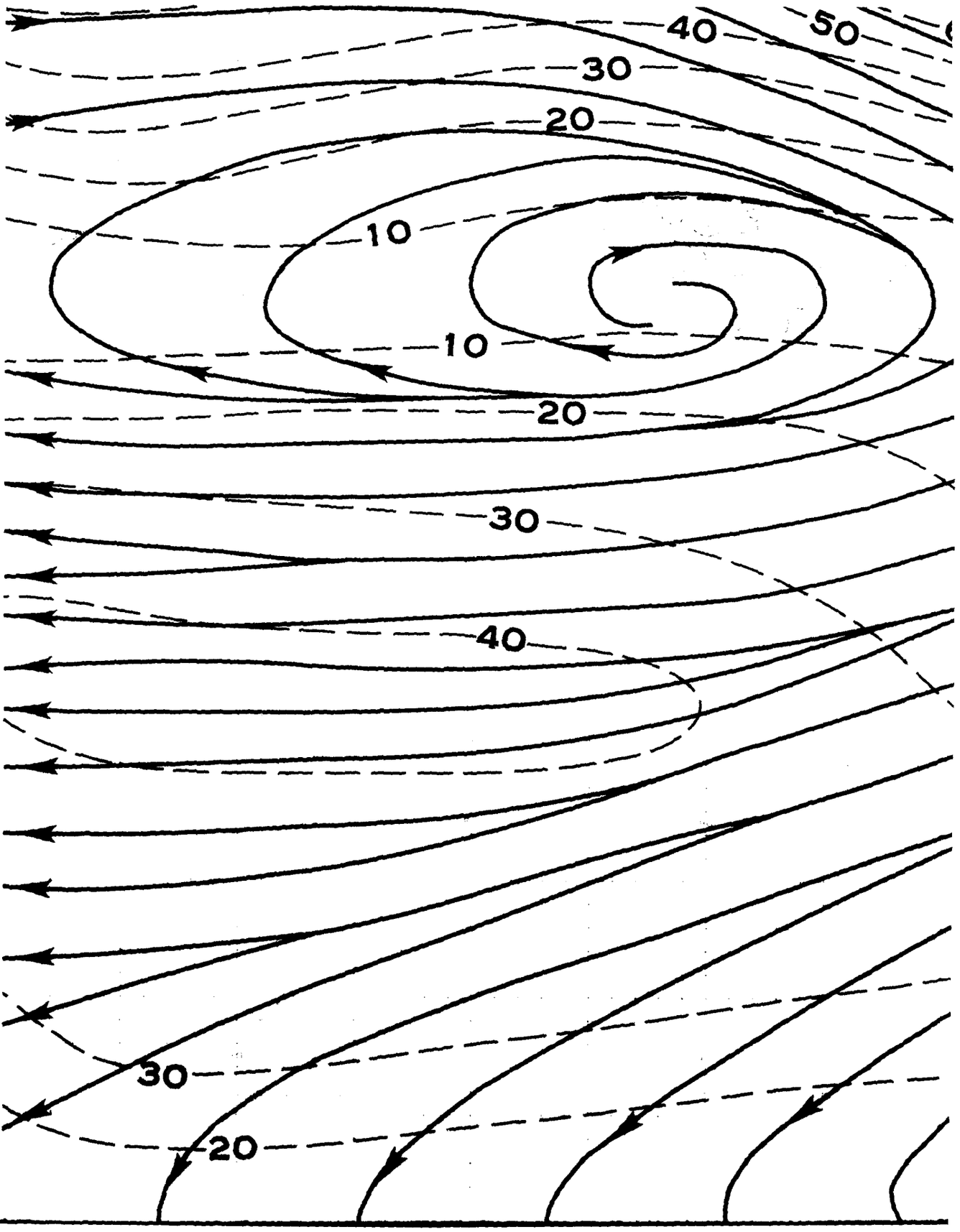

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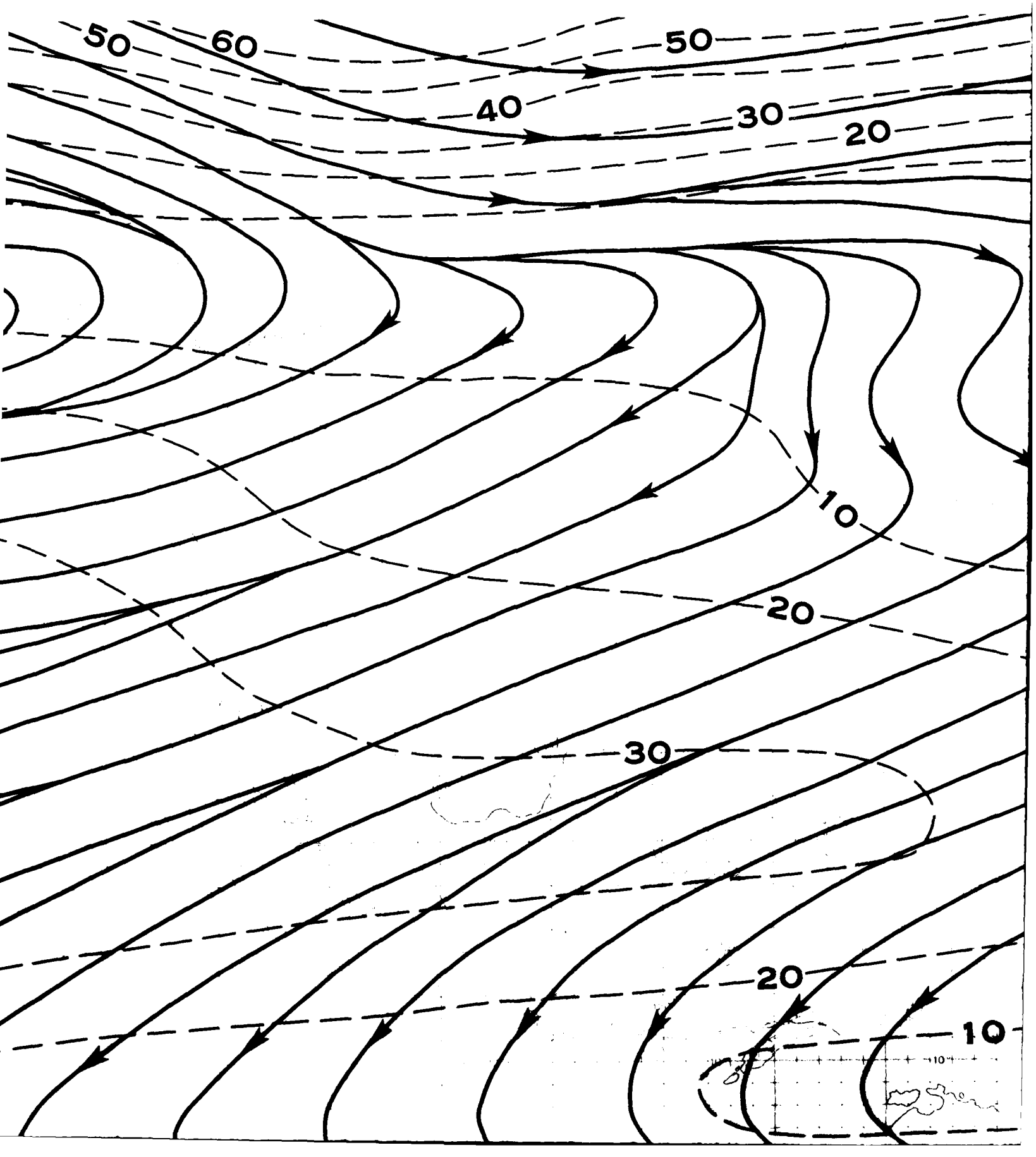



MULW-209W

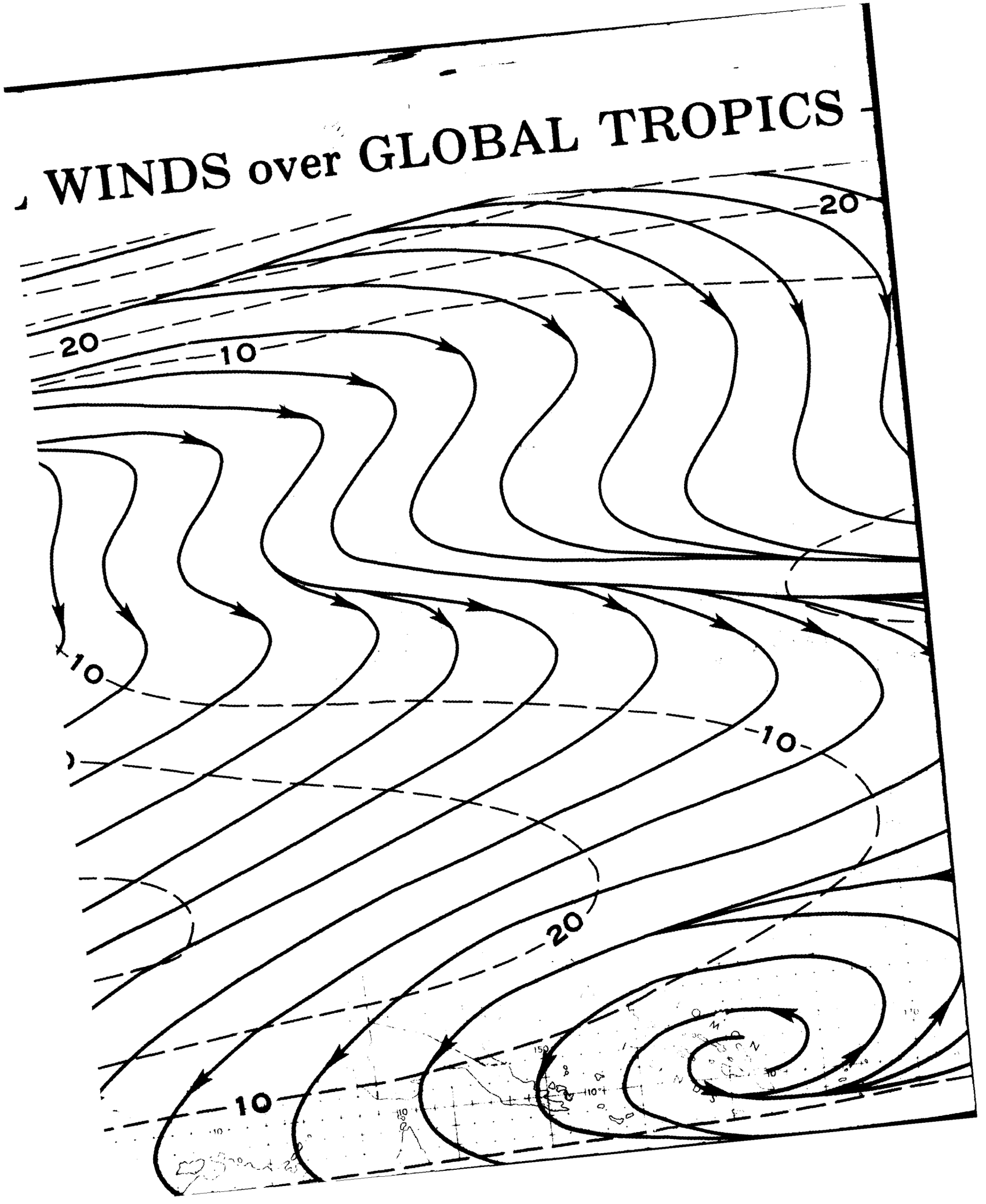
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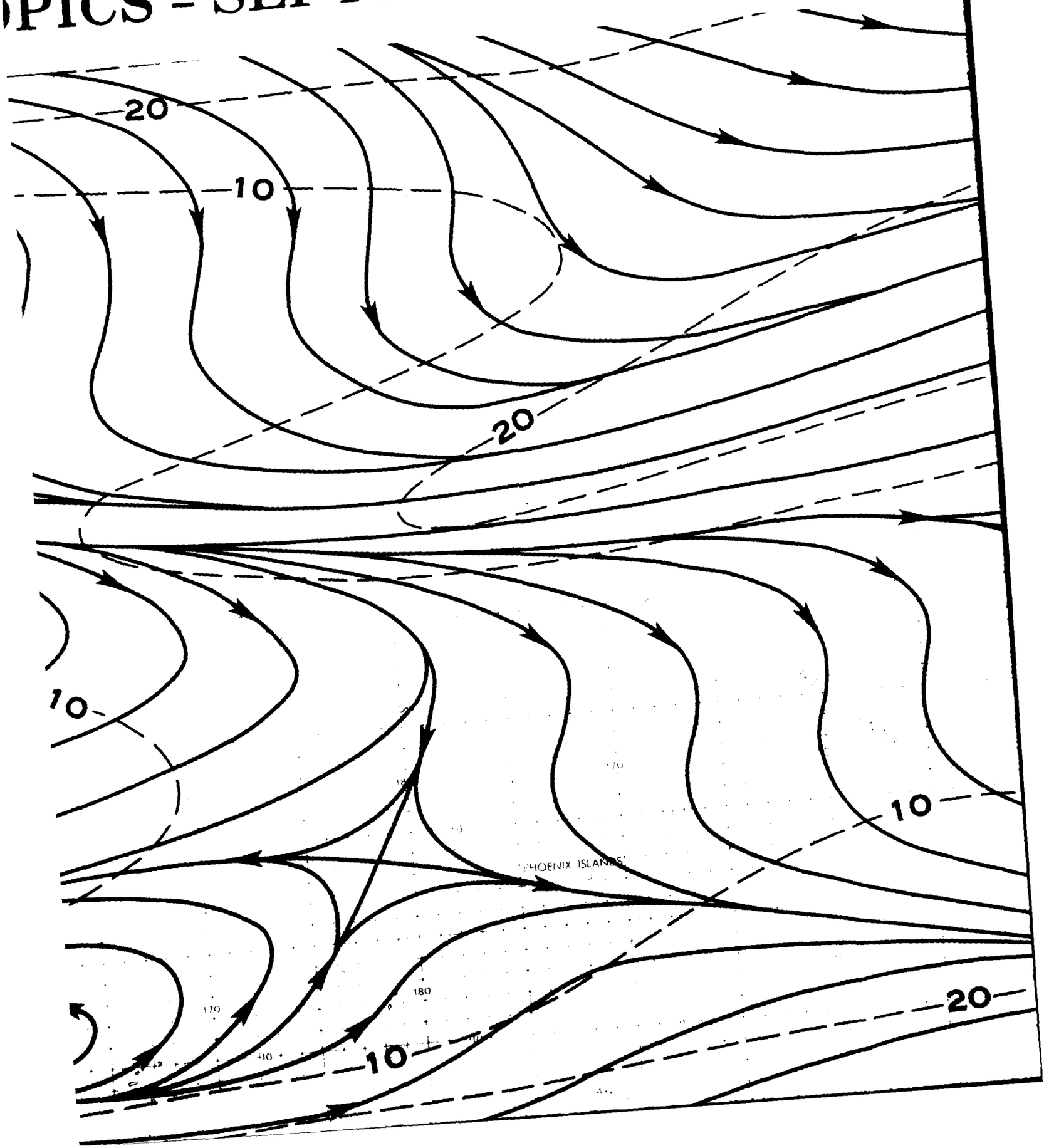
# MEAN UPPER LEVEL WIND

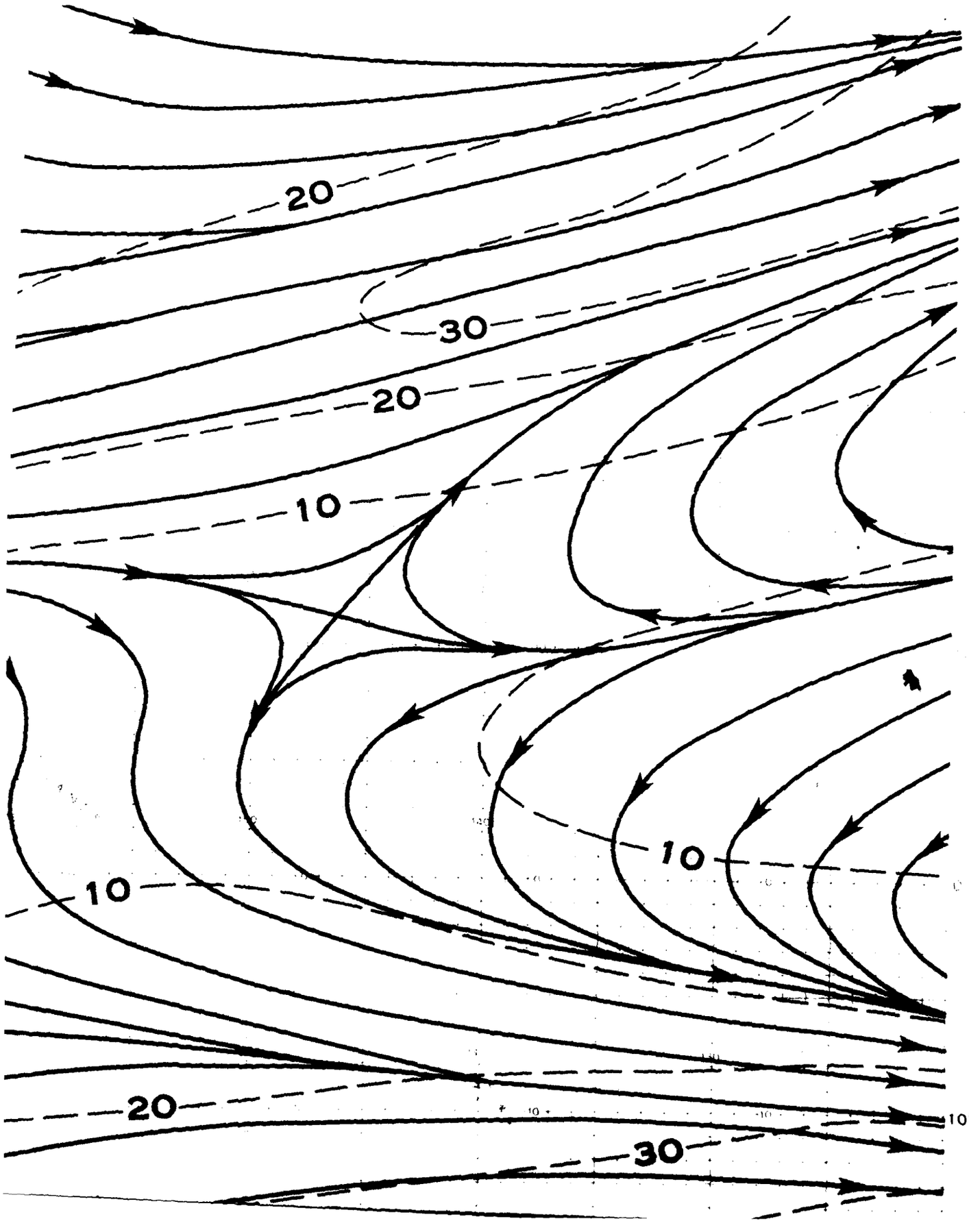


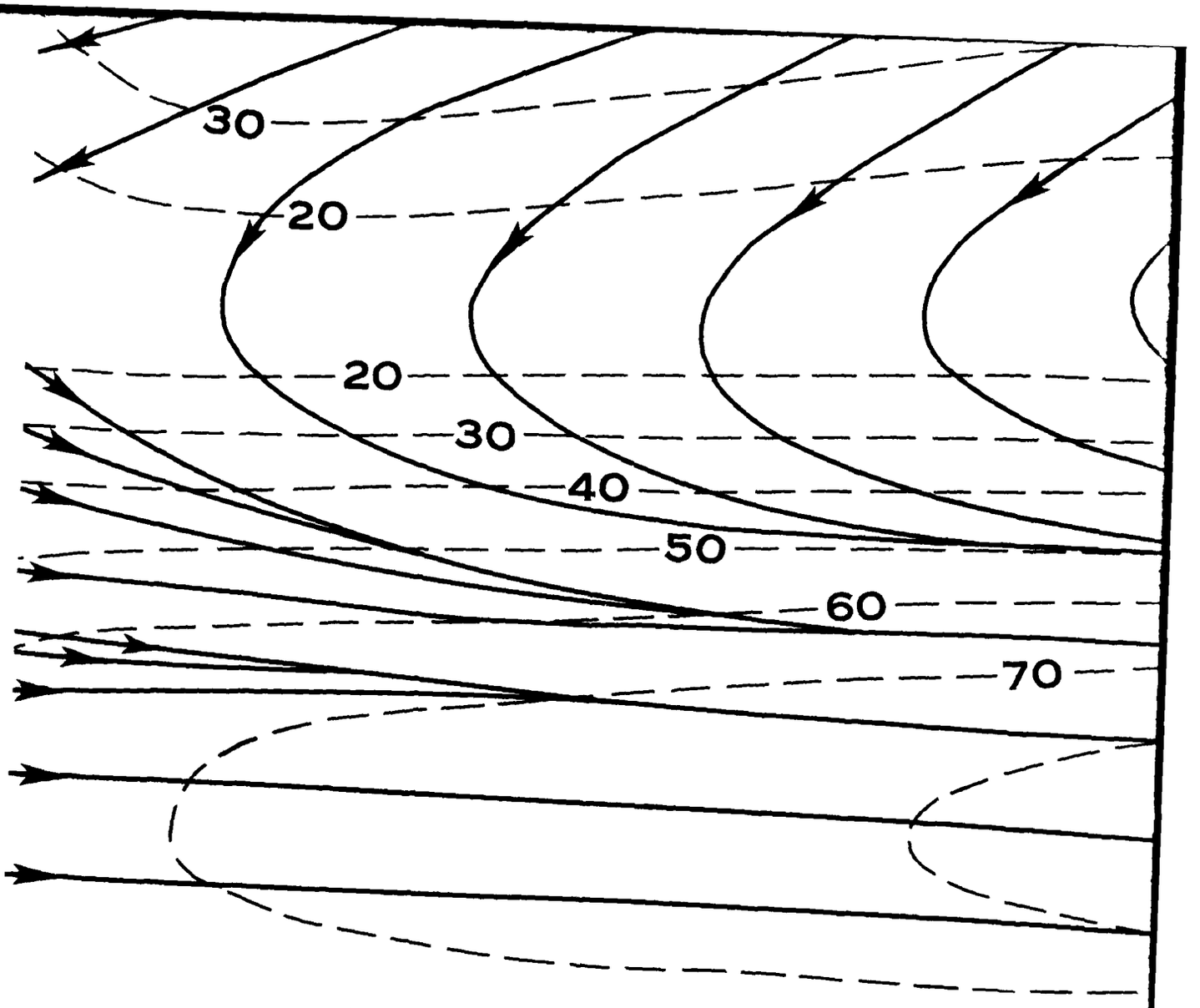
# WINDS over GLOBAL TROPICS

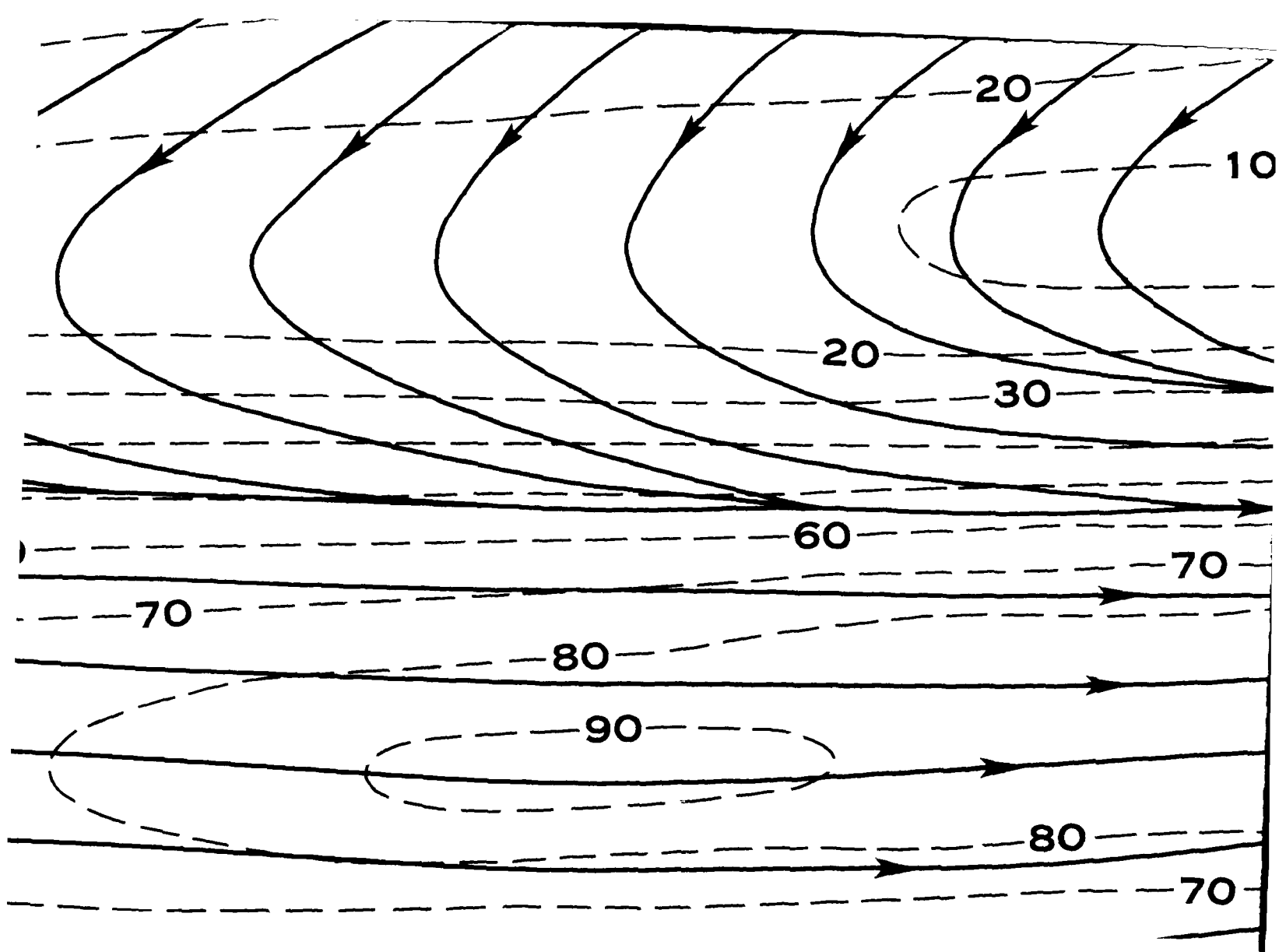


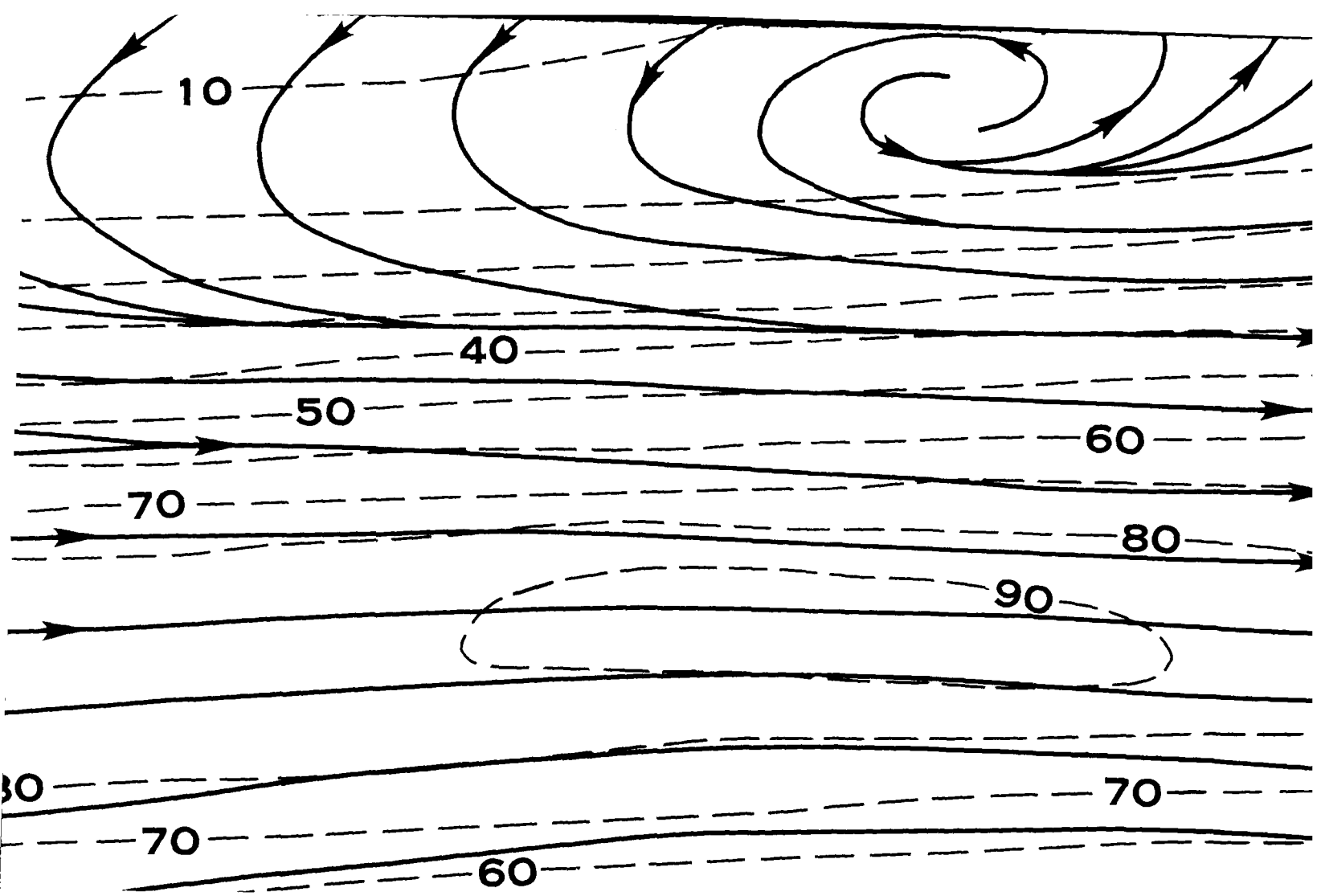
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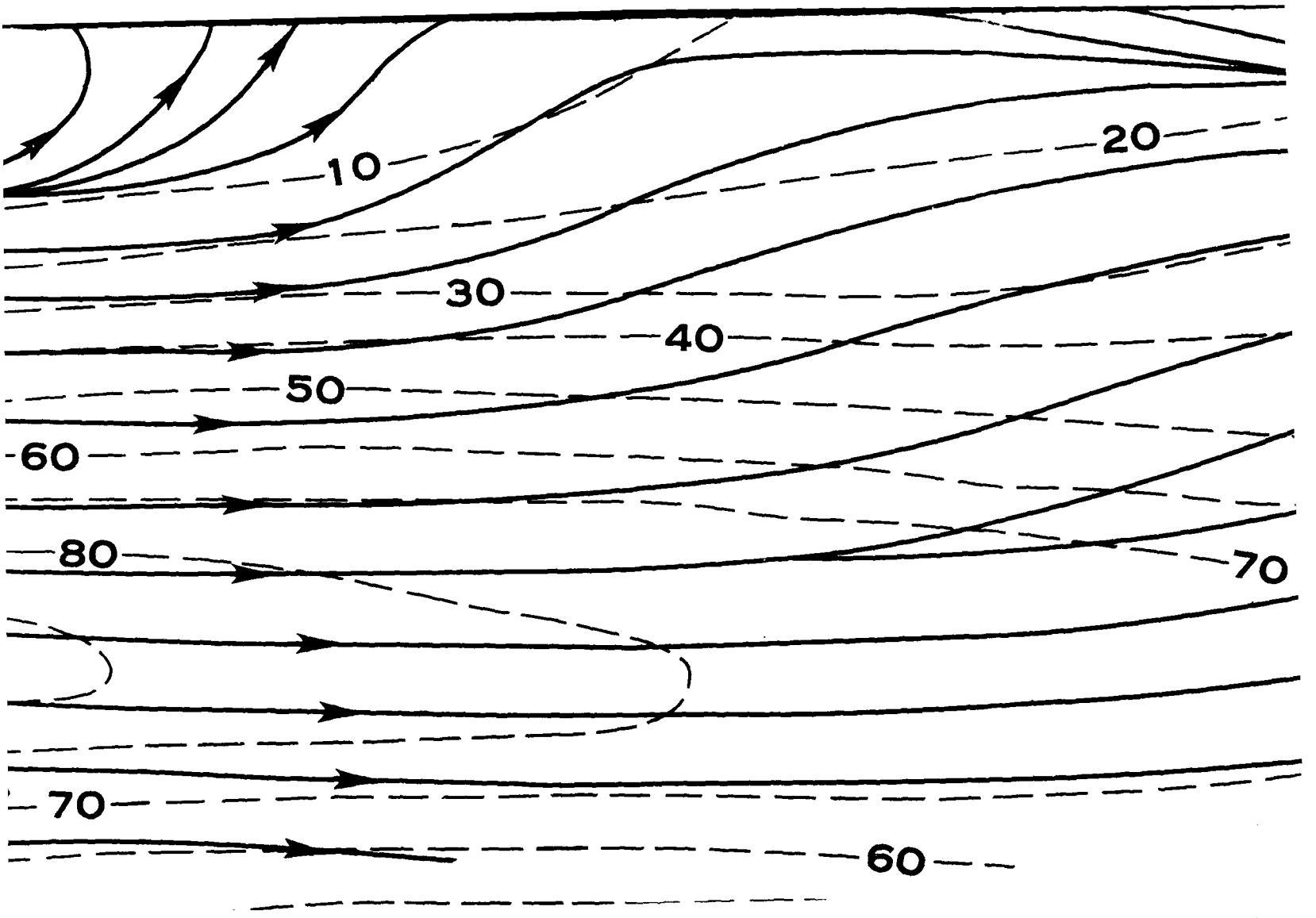


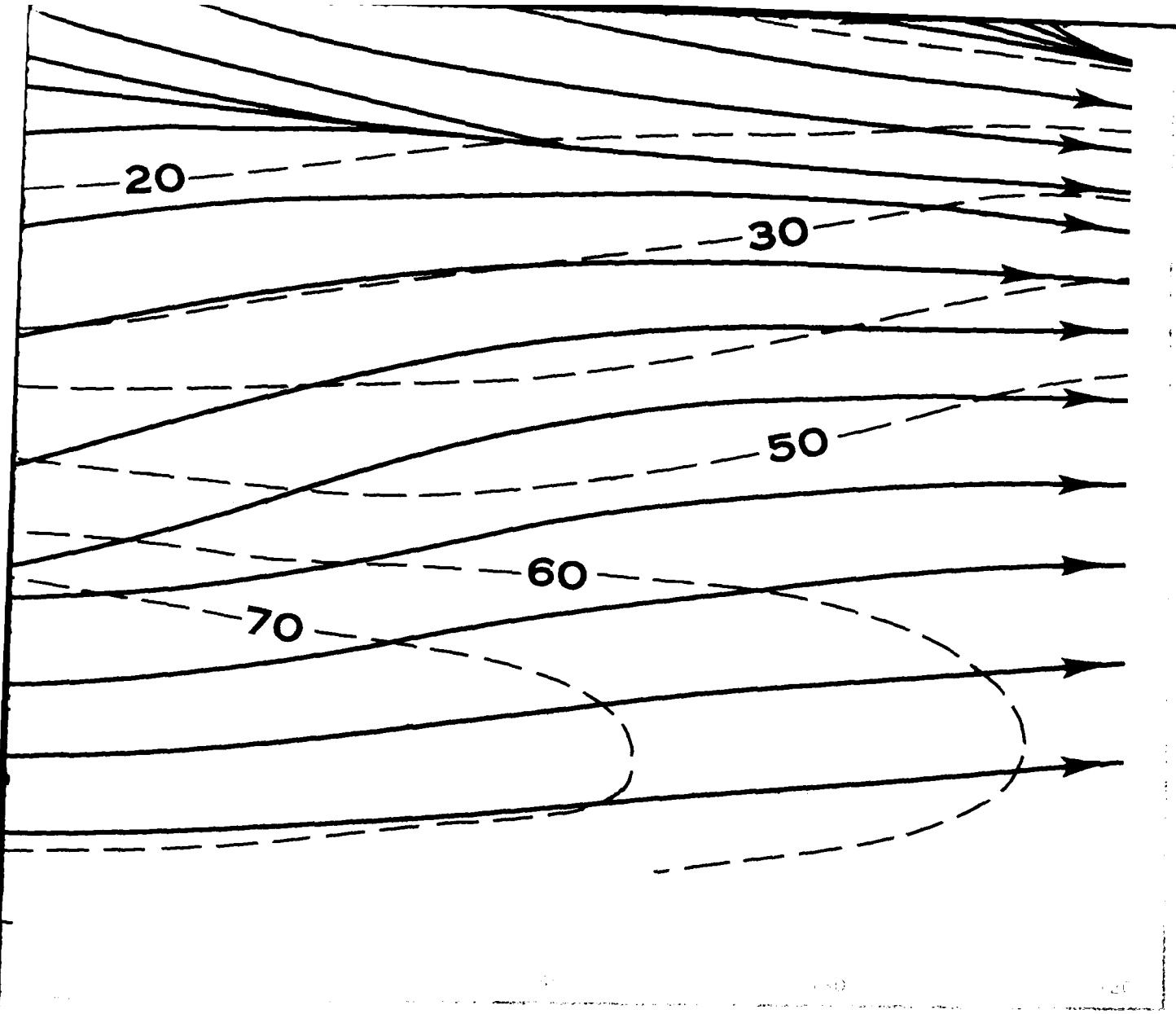

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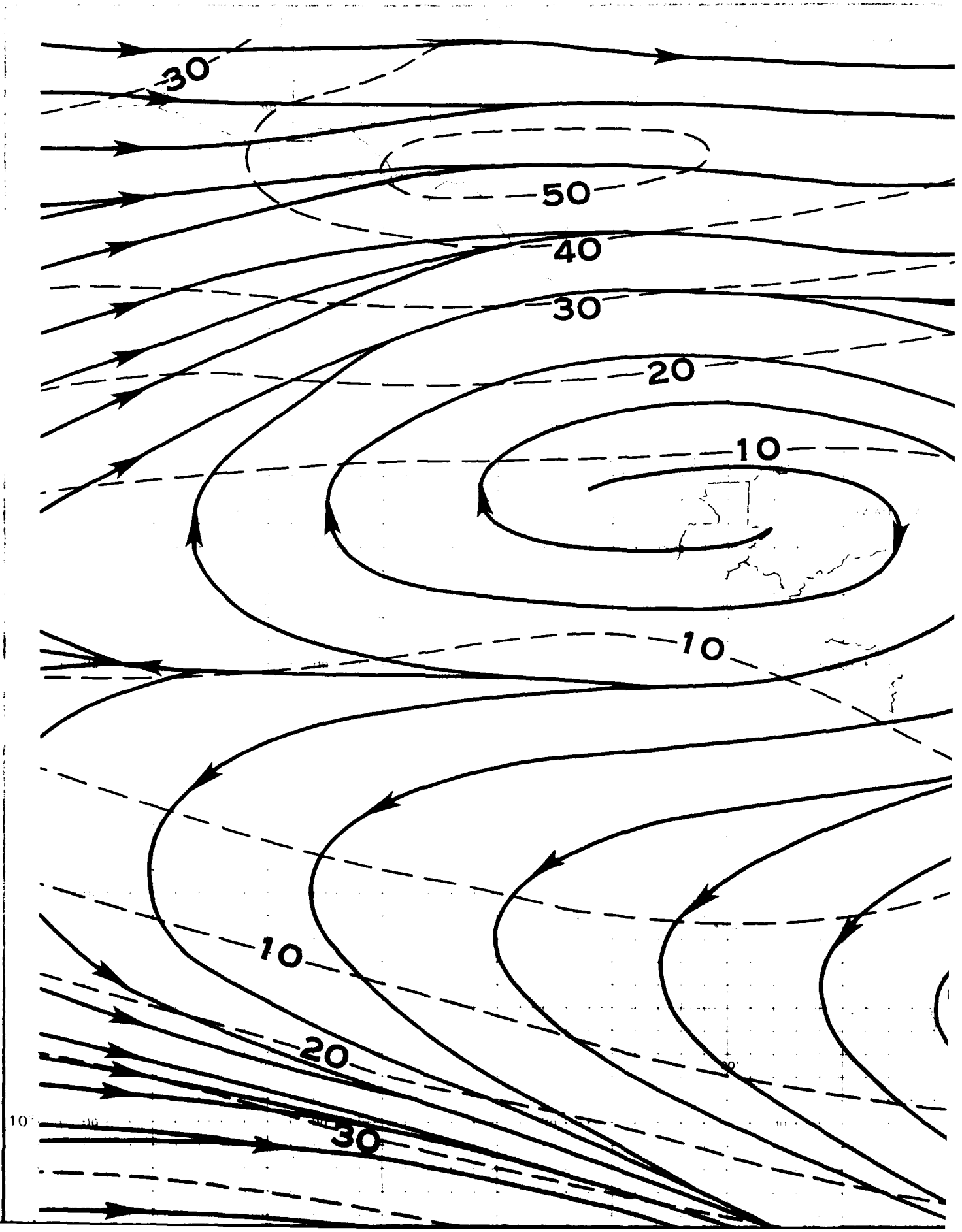

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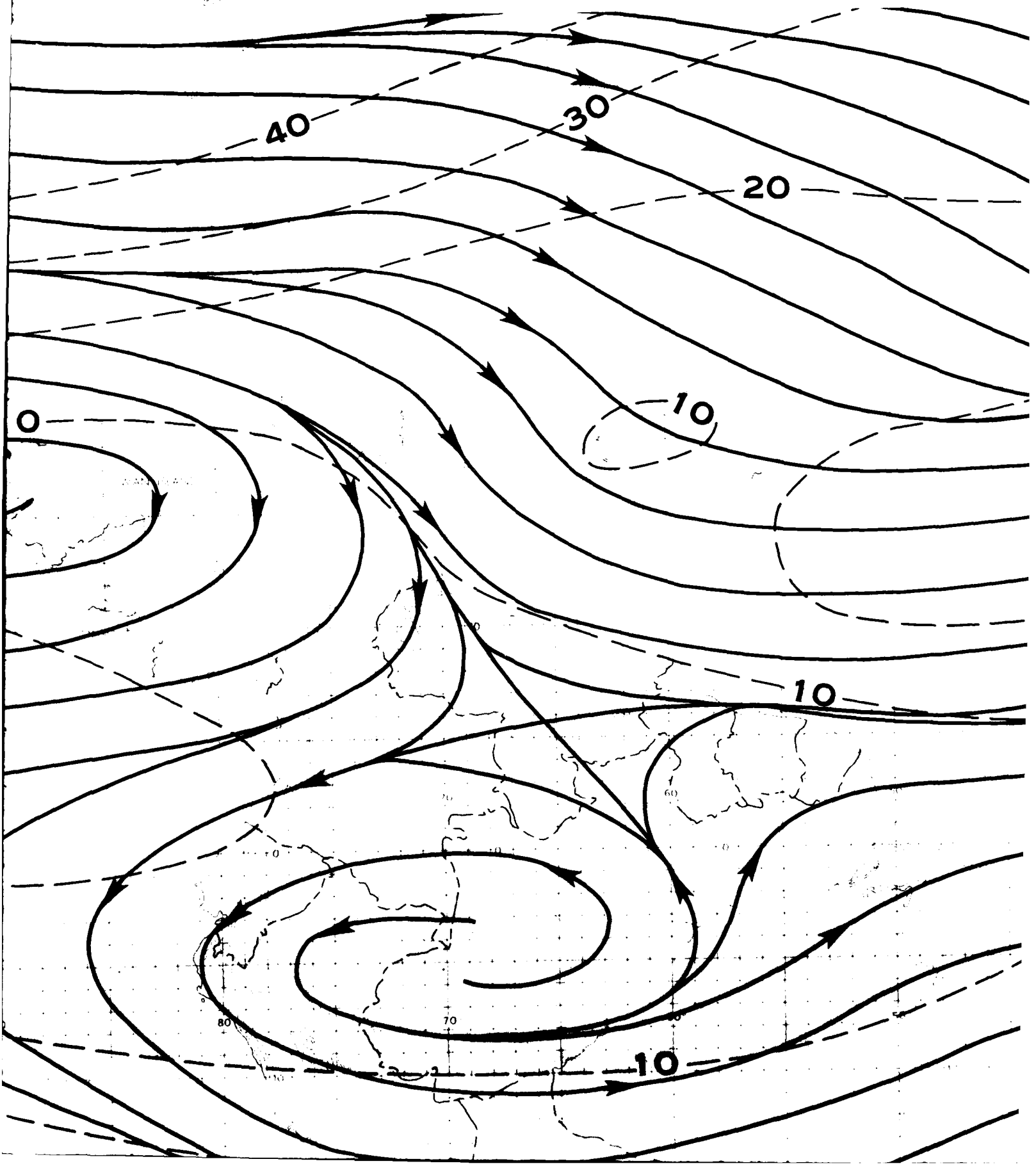

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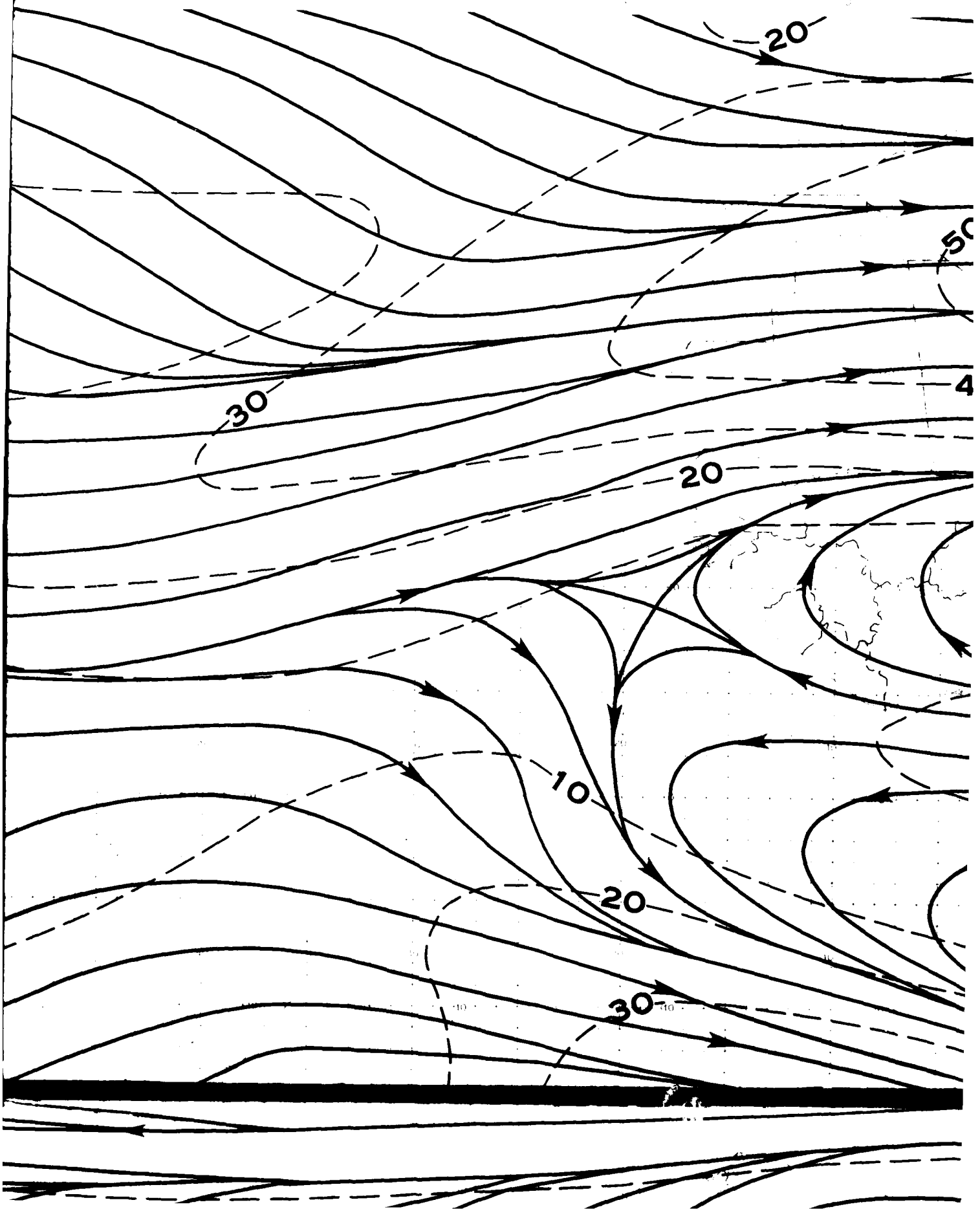

MULW-209E


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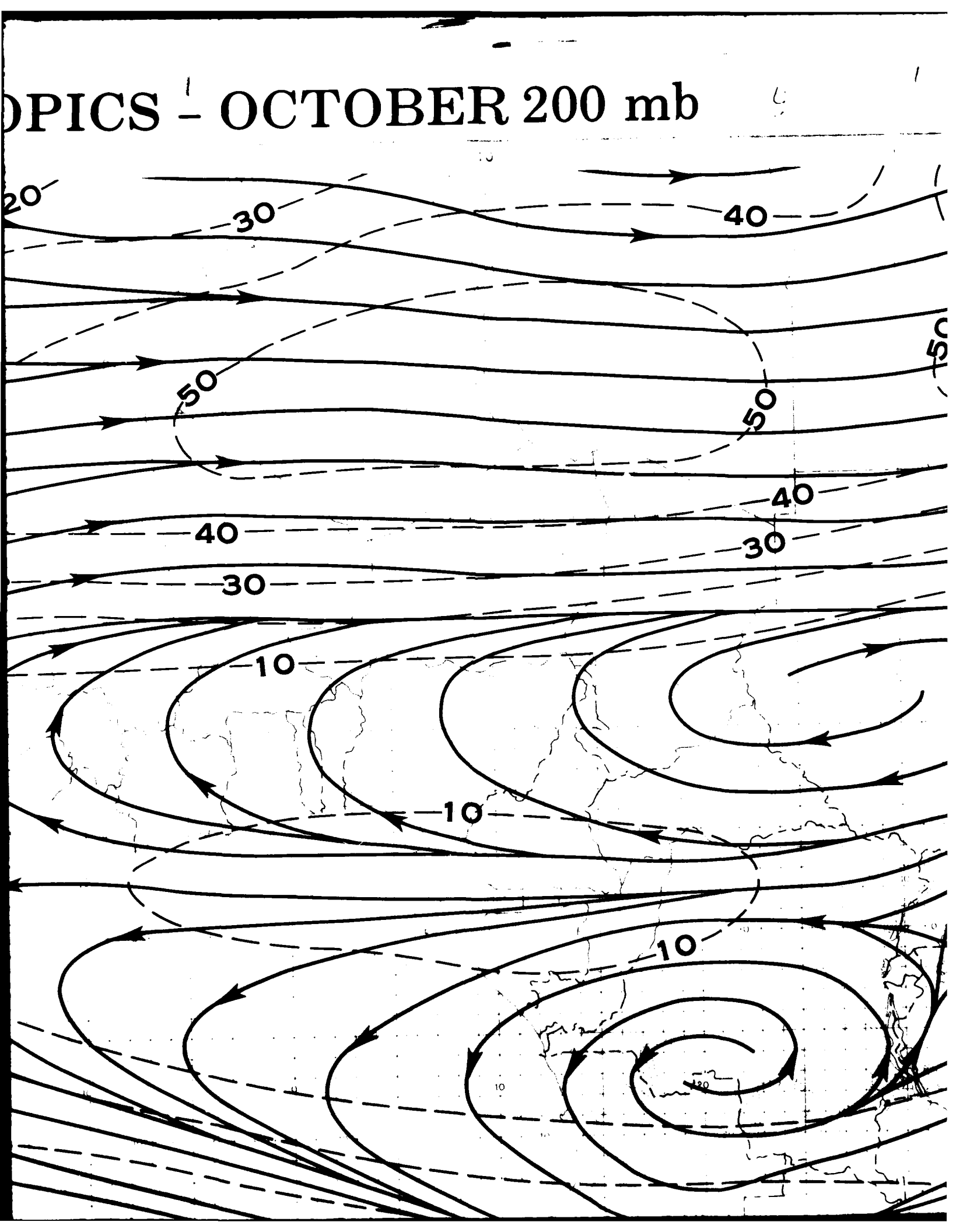
# MEAN UPPER LEVEL WI

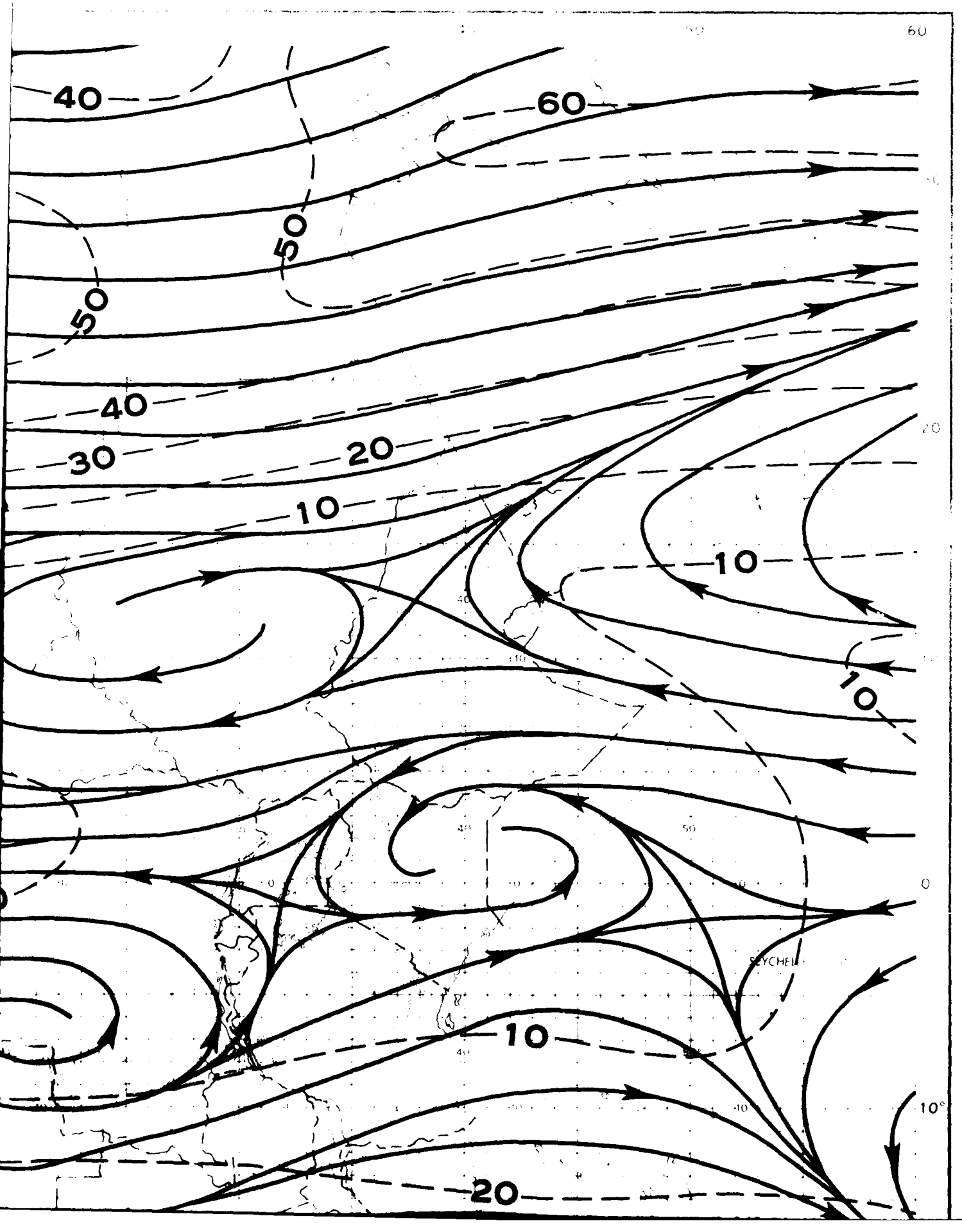


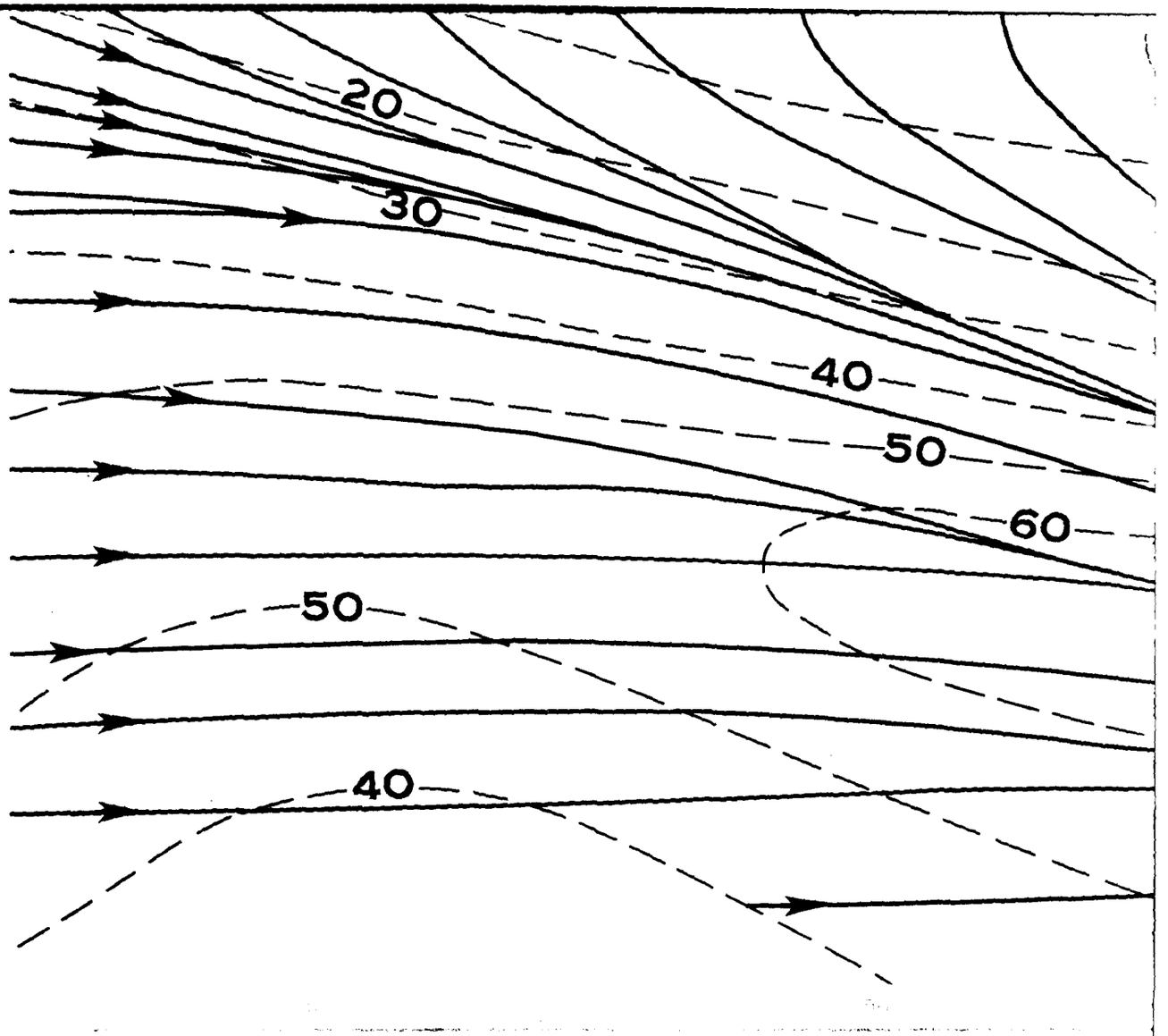
# WINDS over GLOBAL TROPICS

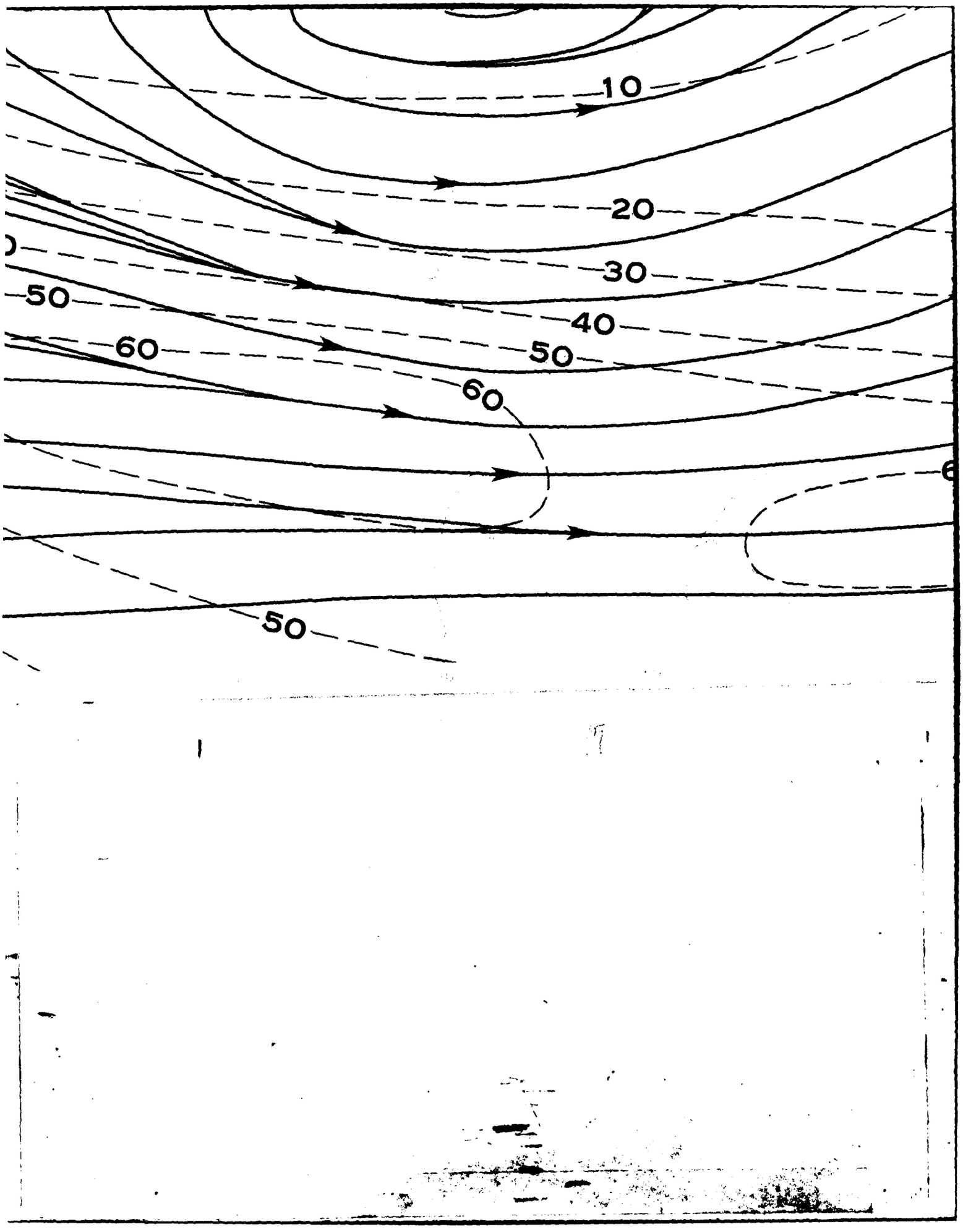


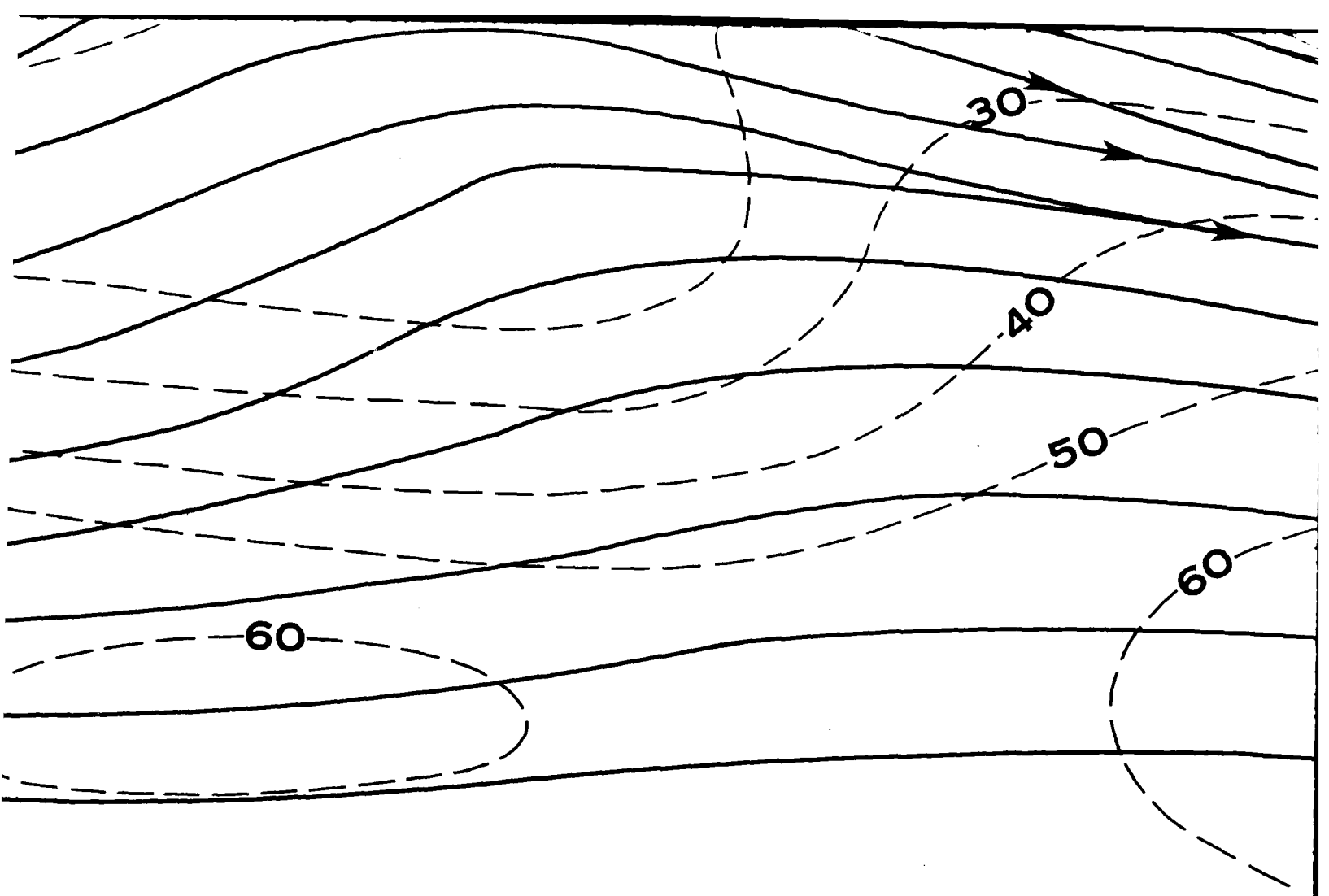
# OPICS – OCTOBER 200 mb

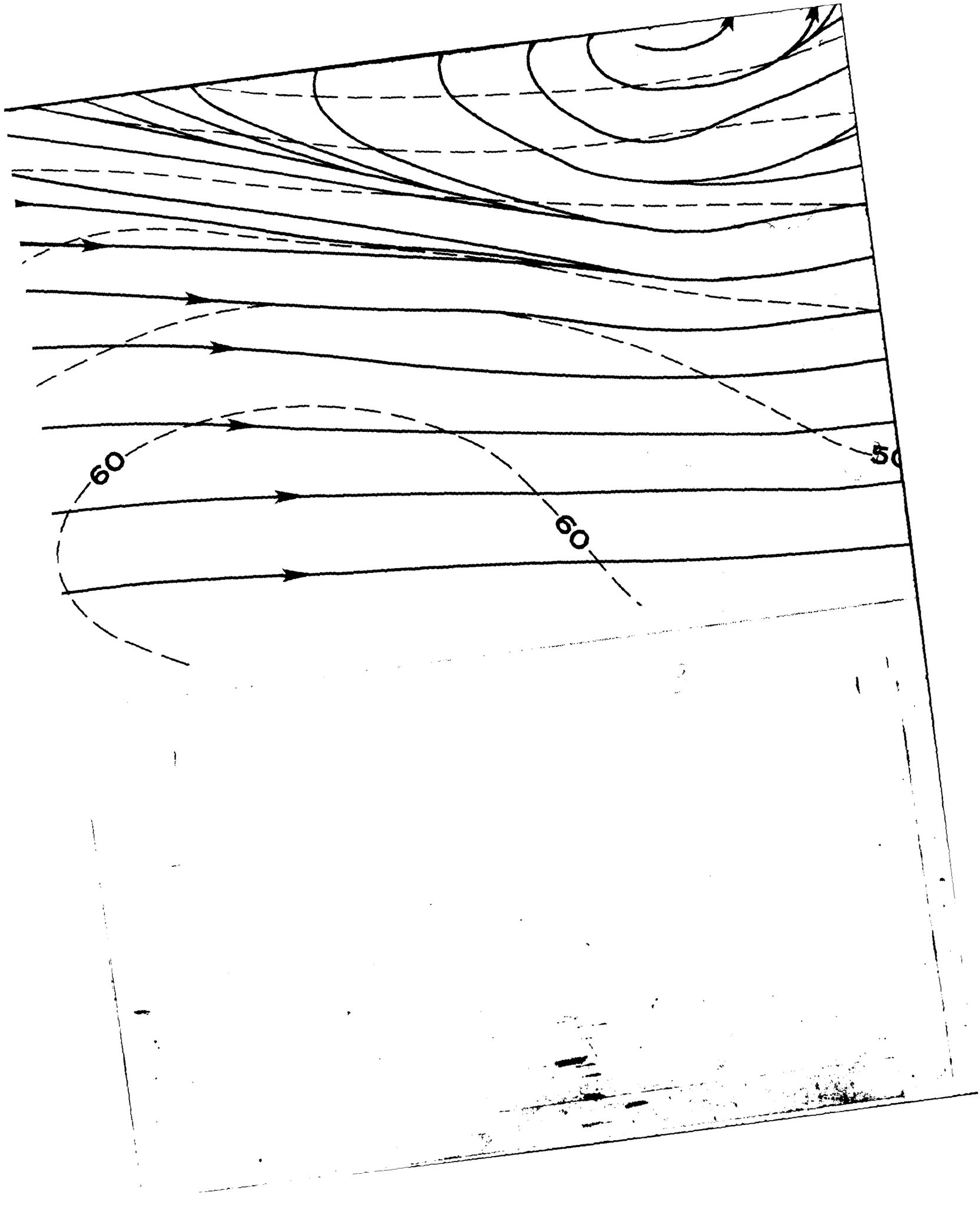


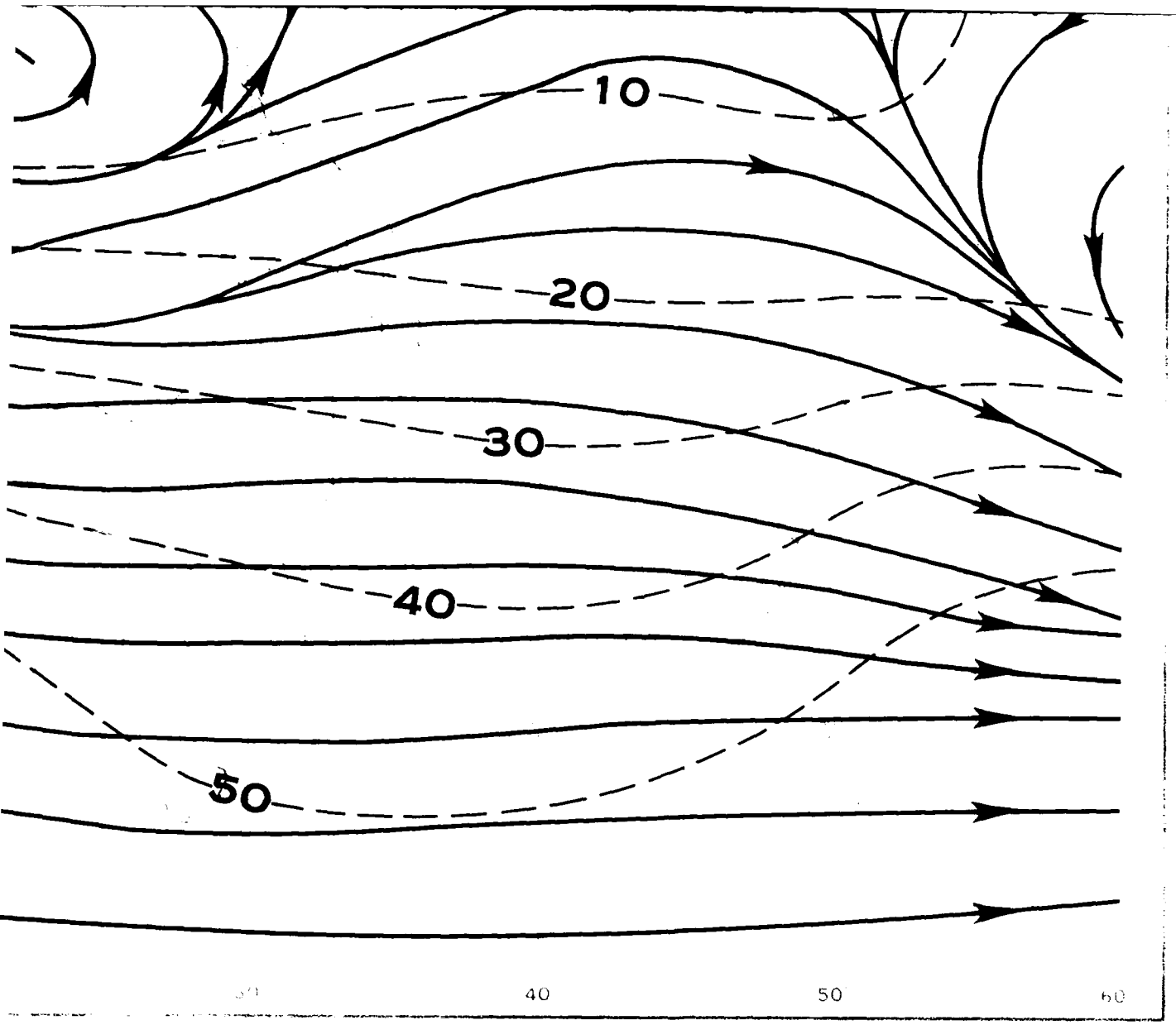

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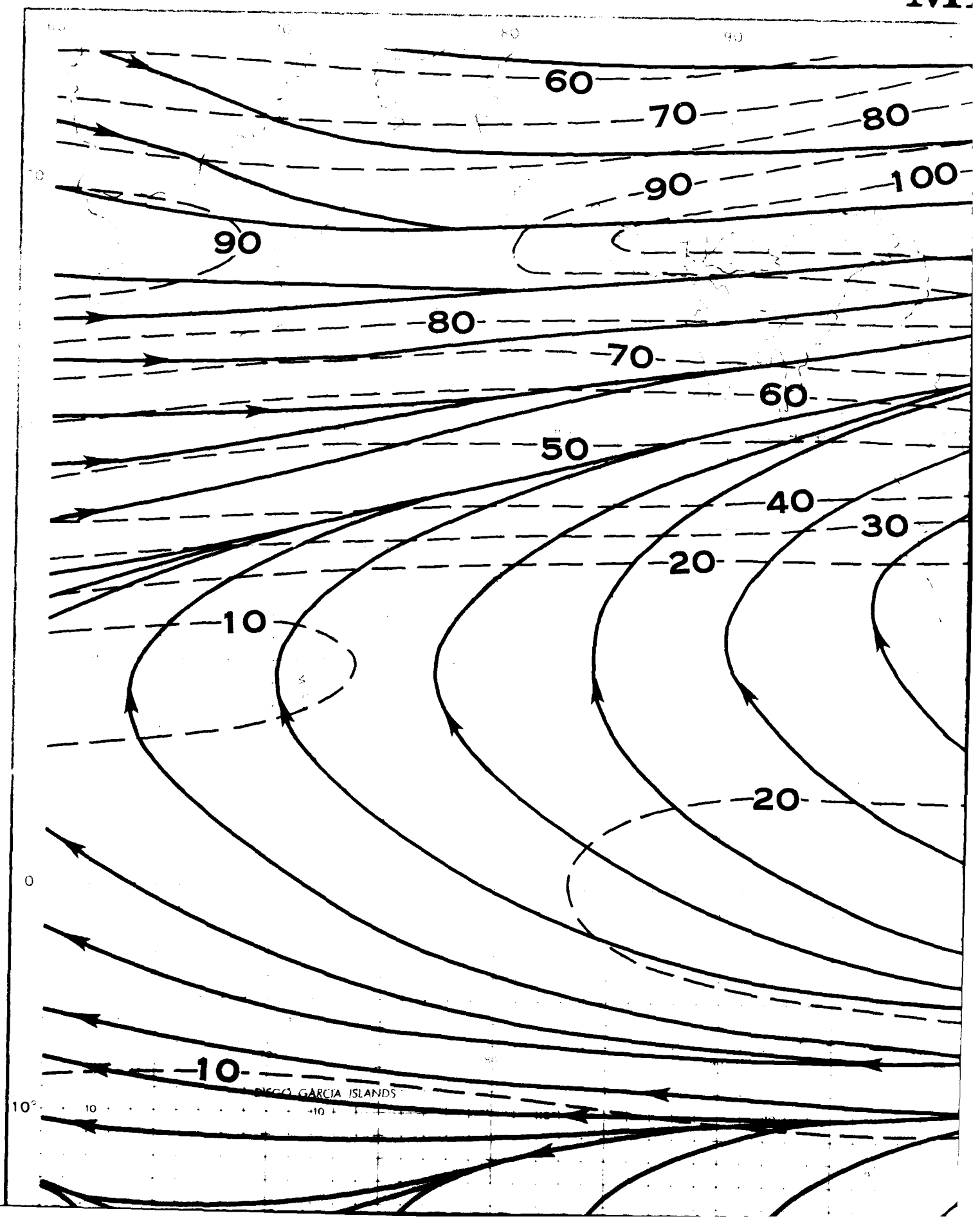

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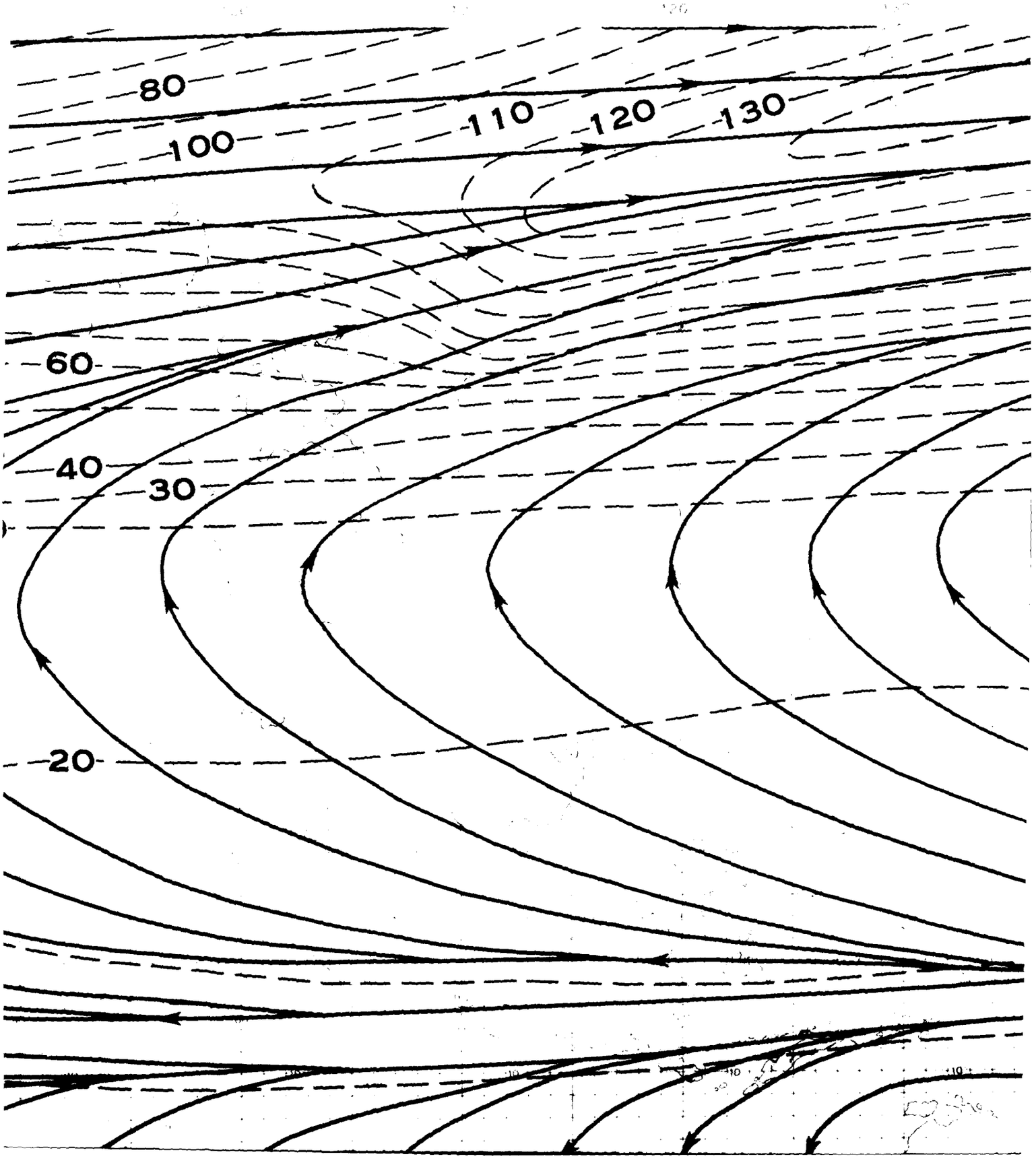

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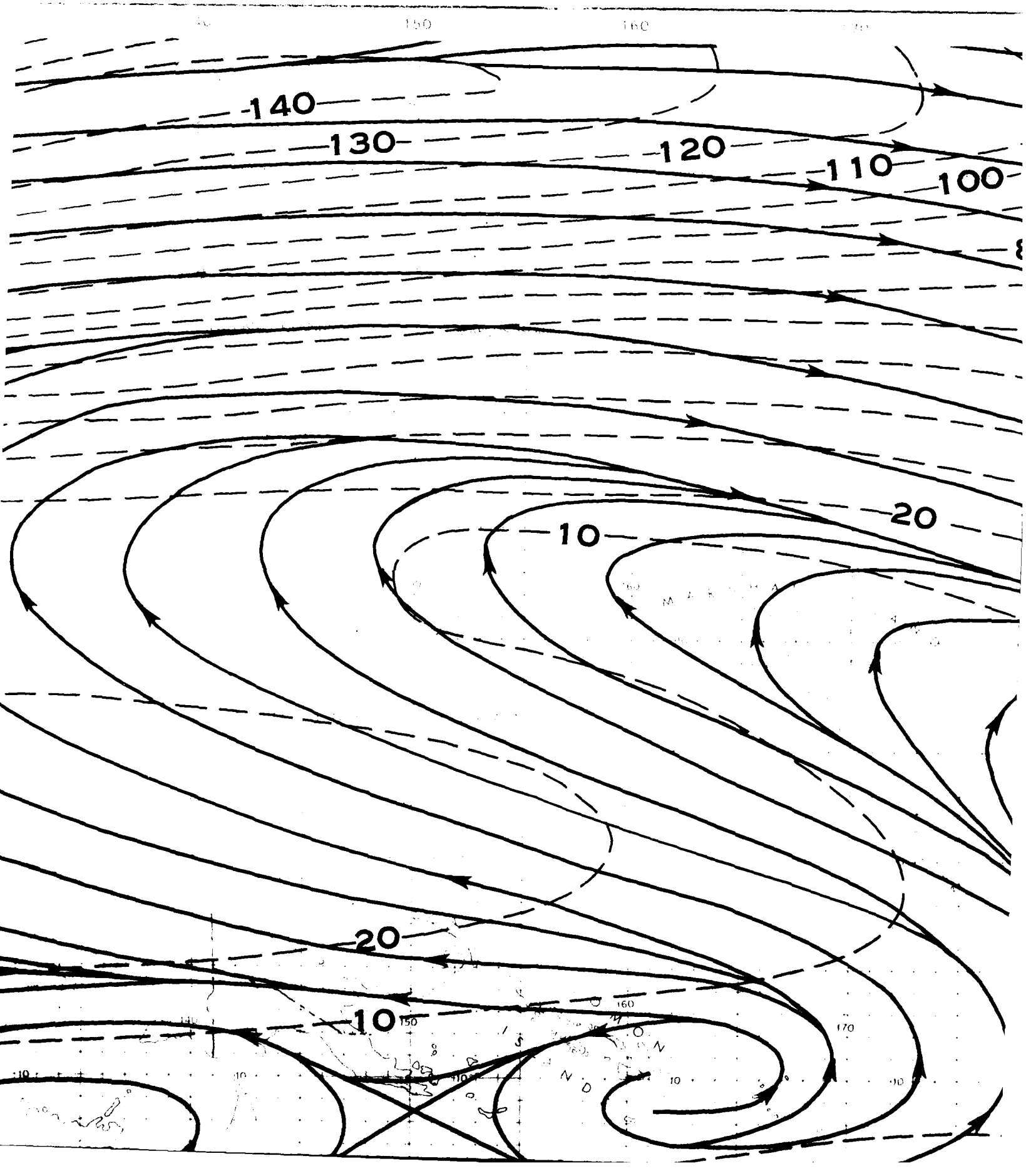

MULW-210W

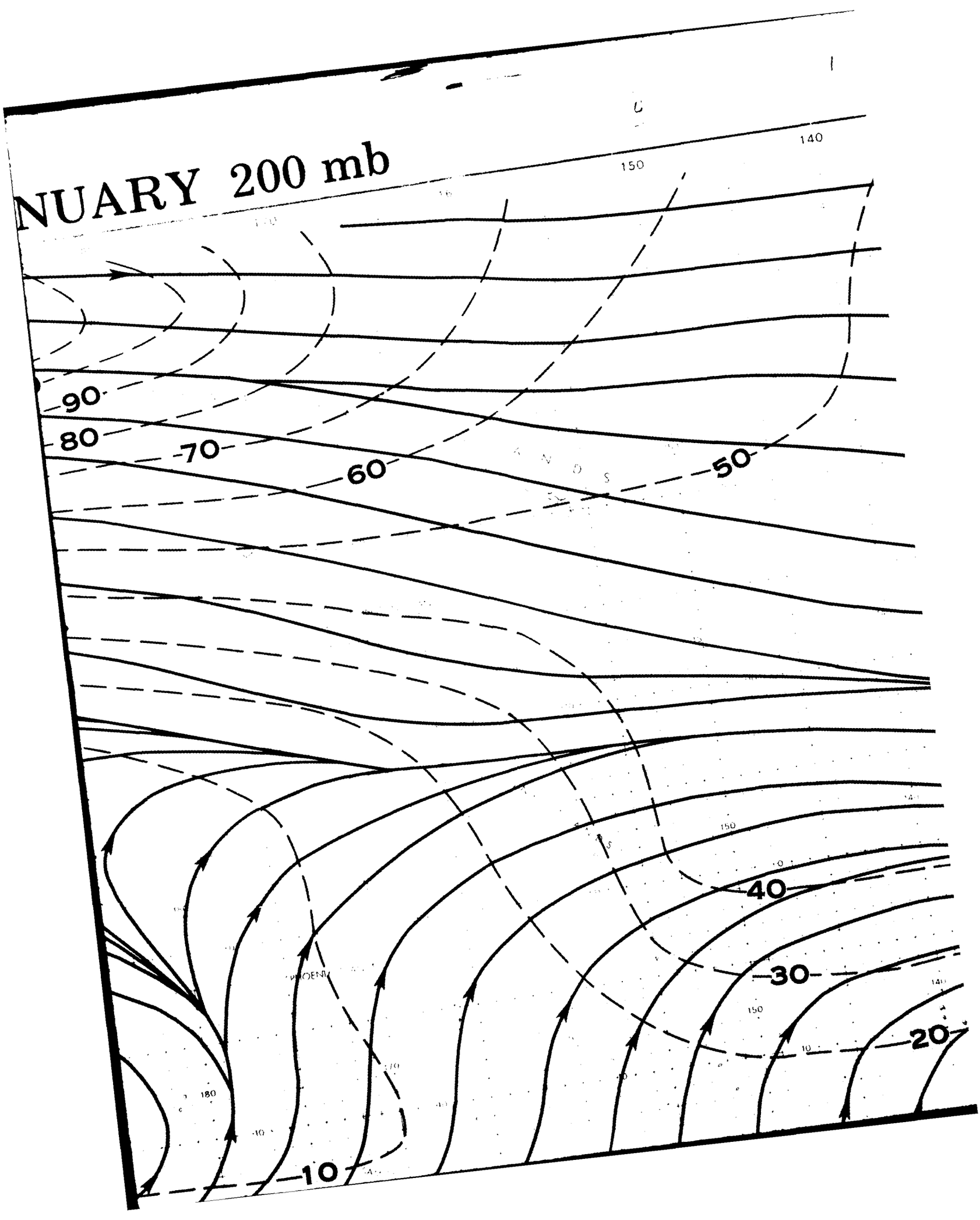

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DIEGO GARCIA ISLANDS

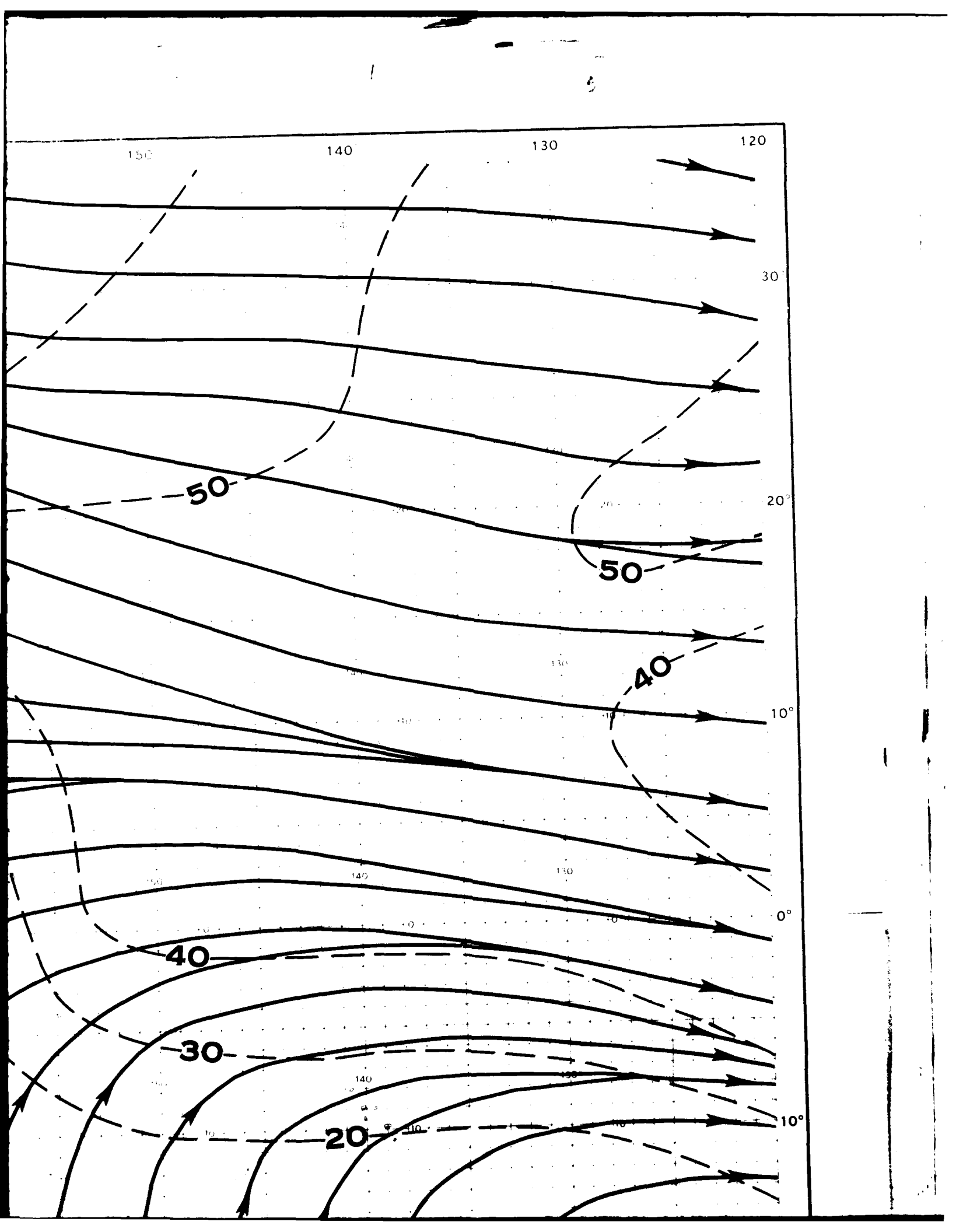
# MEAN UPPER LEVEL WIND

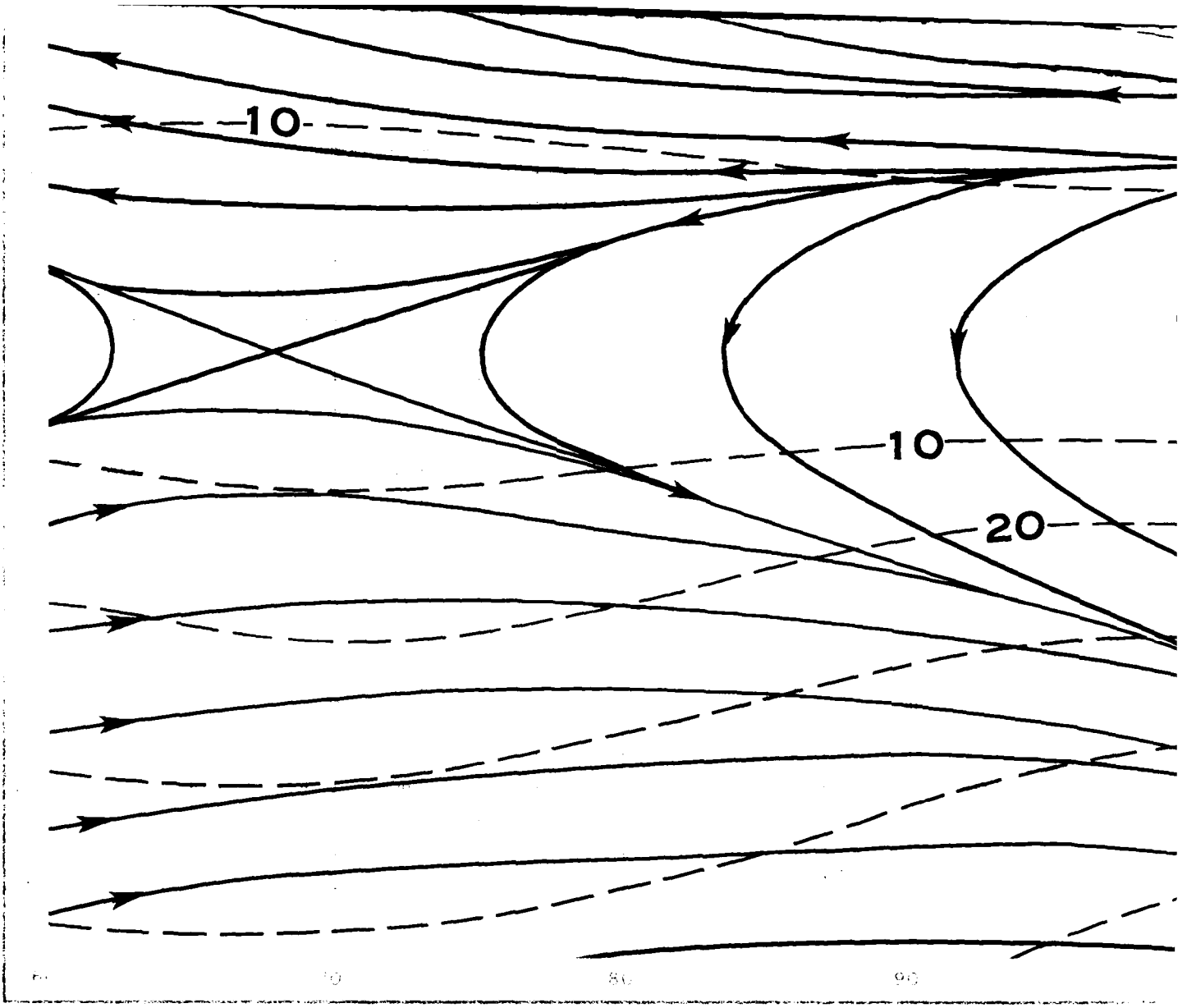


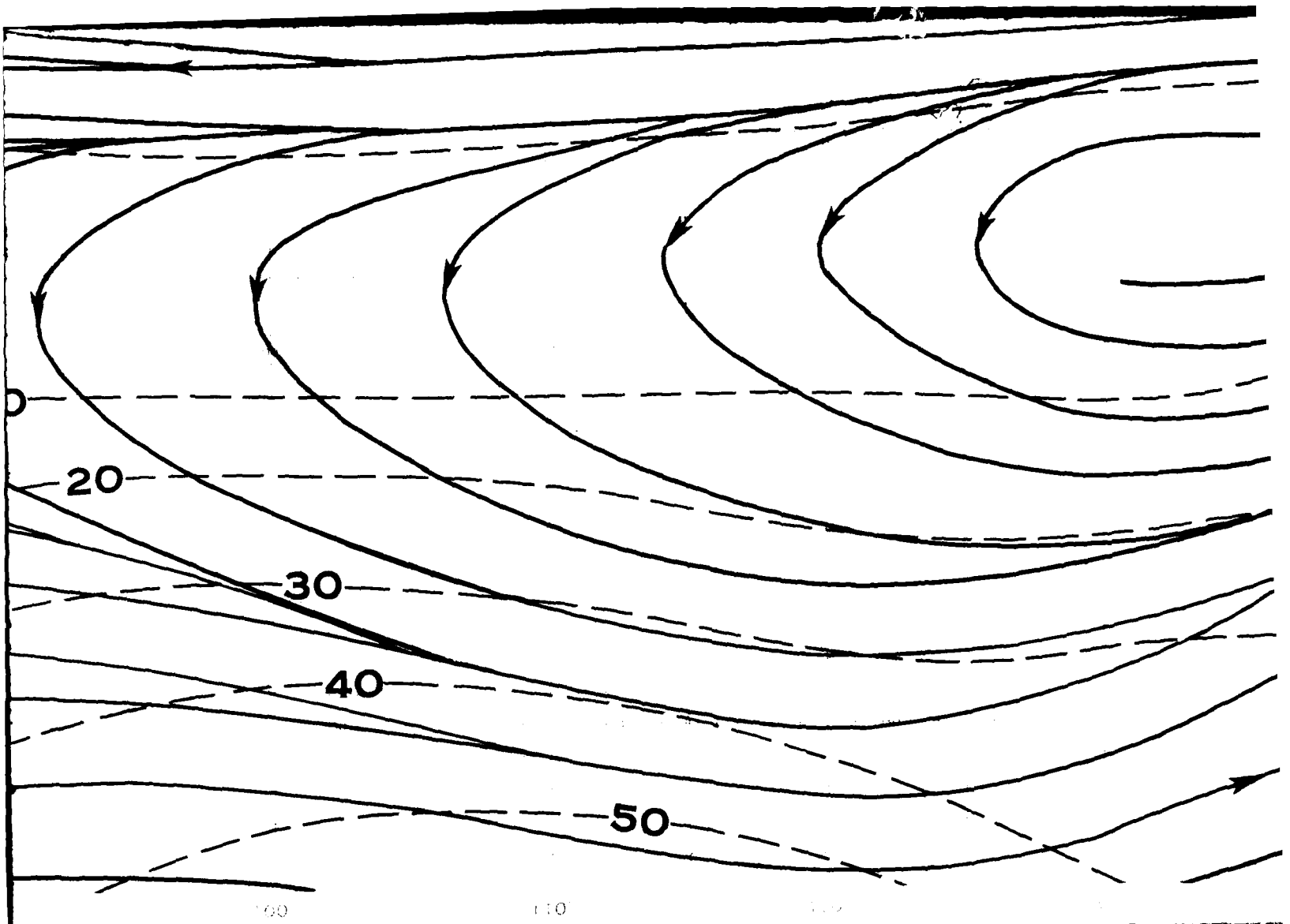
# NDS over GLOBAL TROPICS – JA

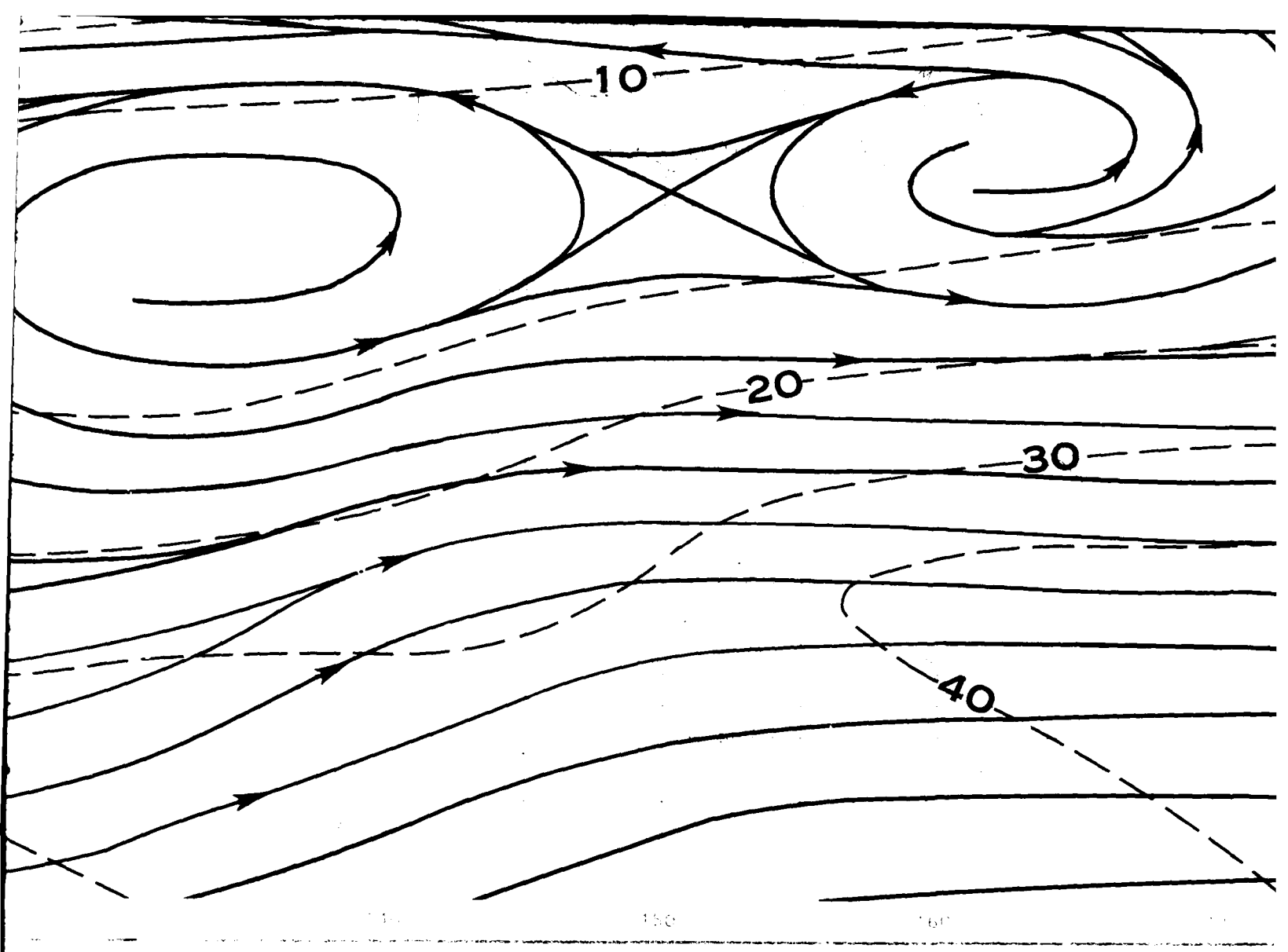


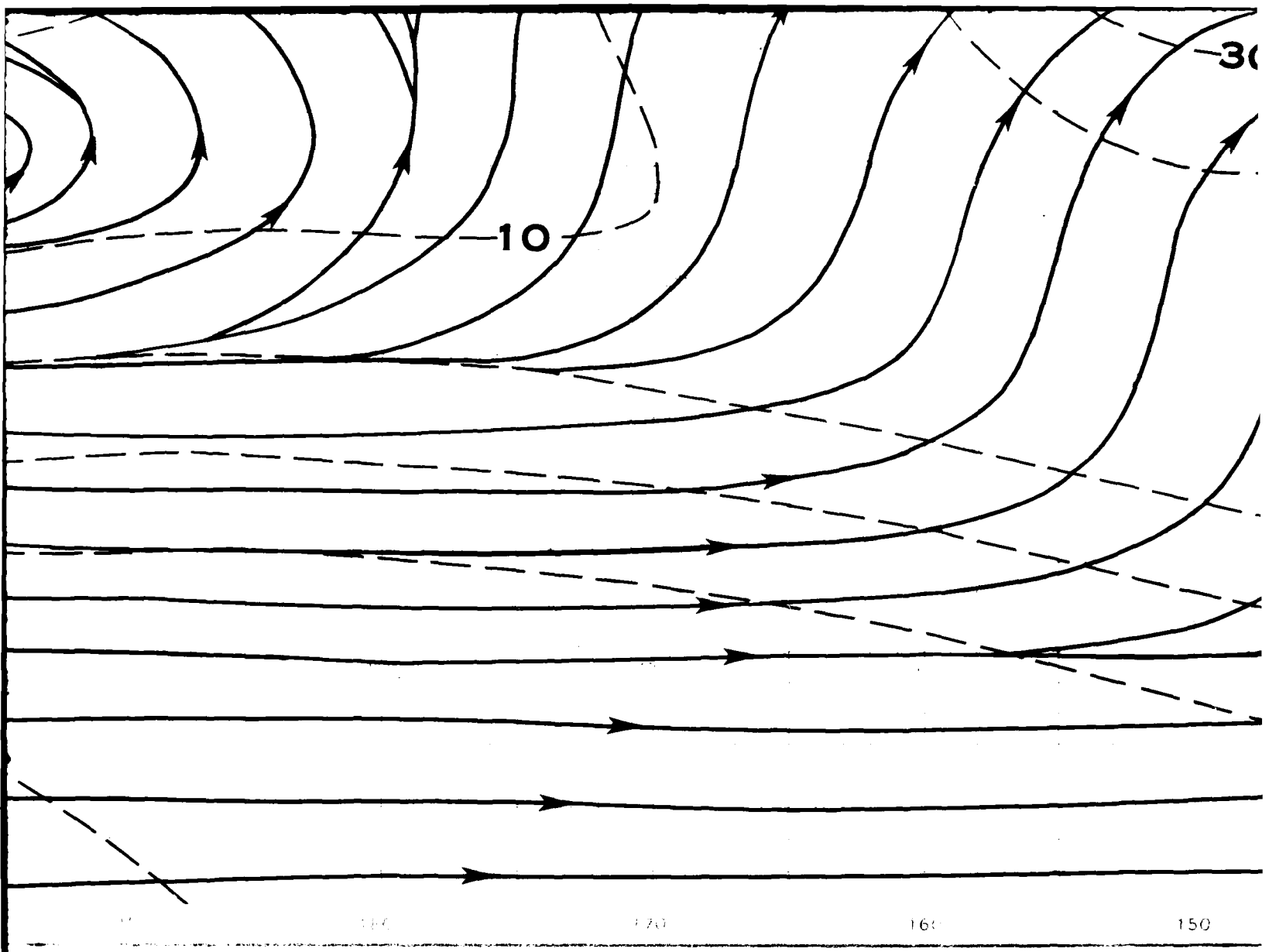

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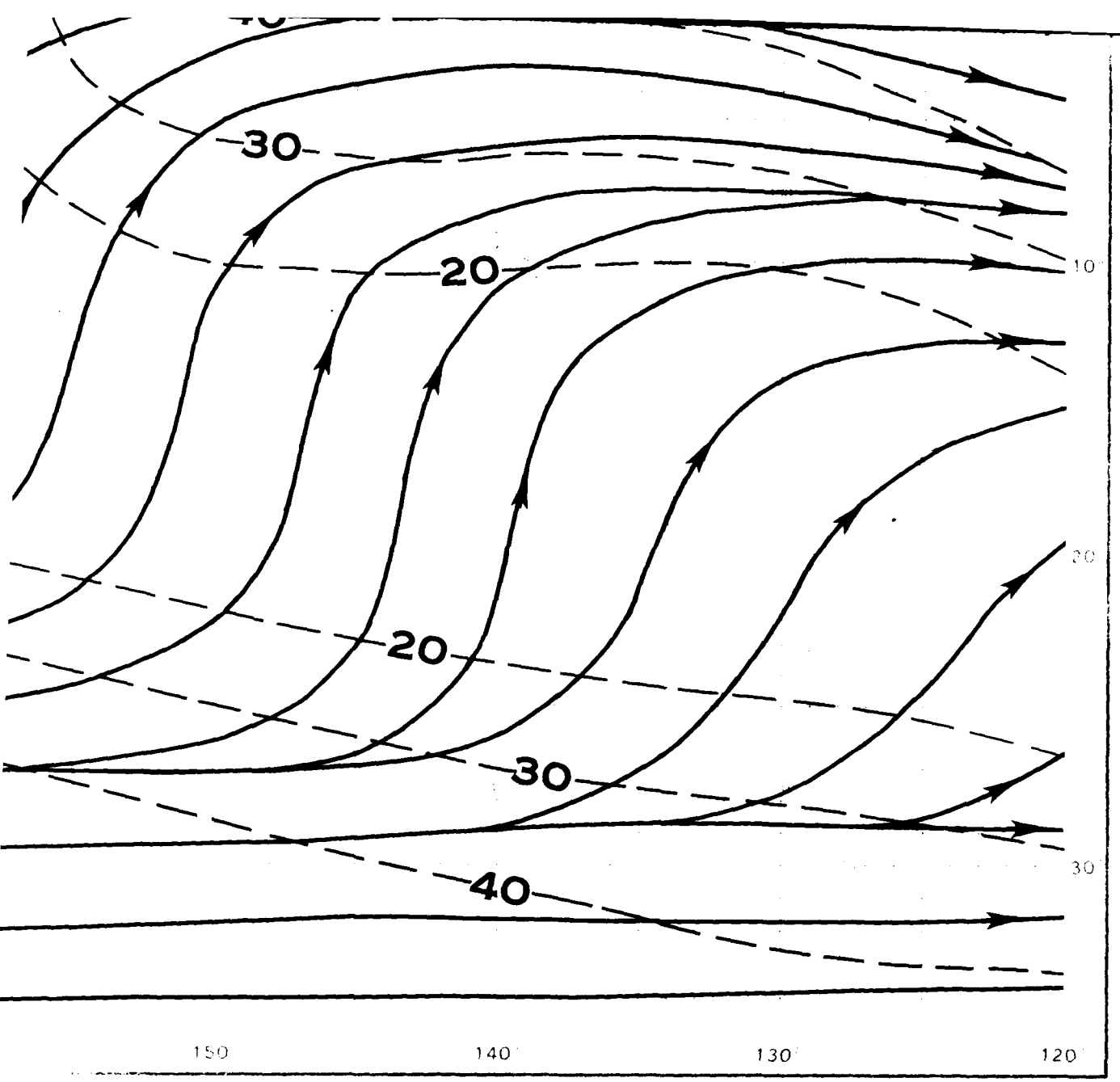

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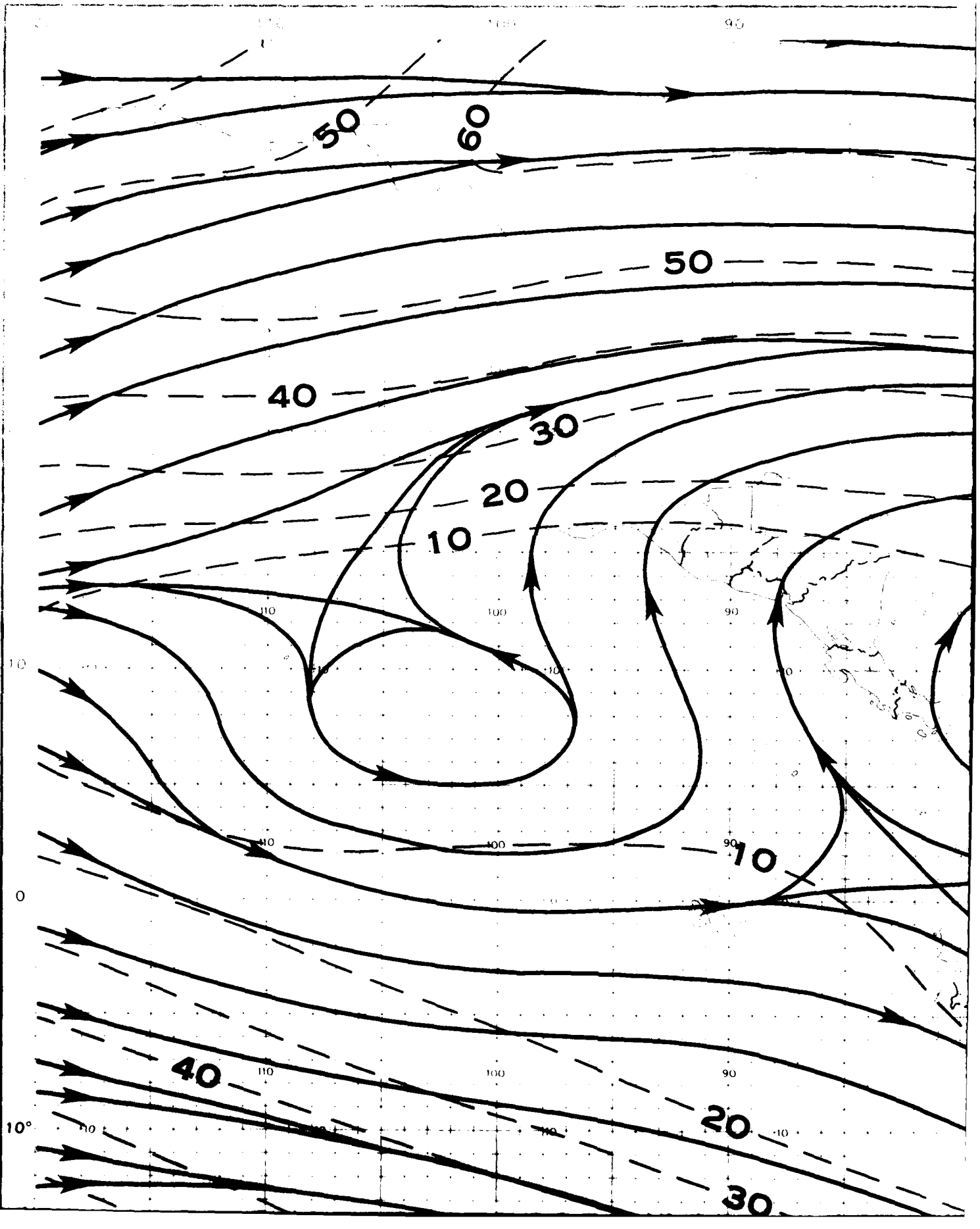

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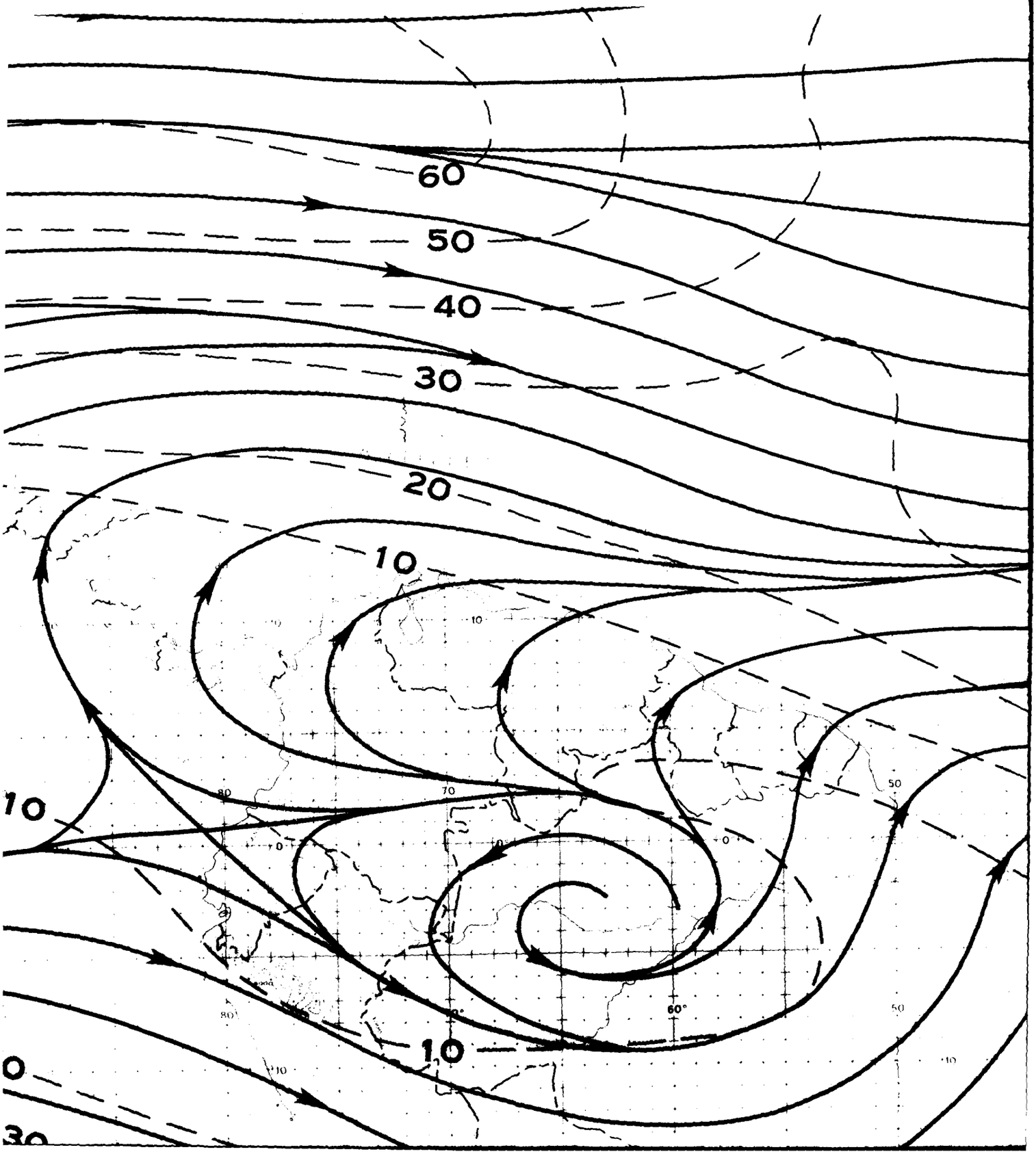

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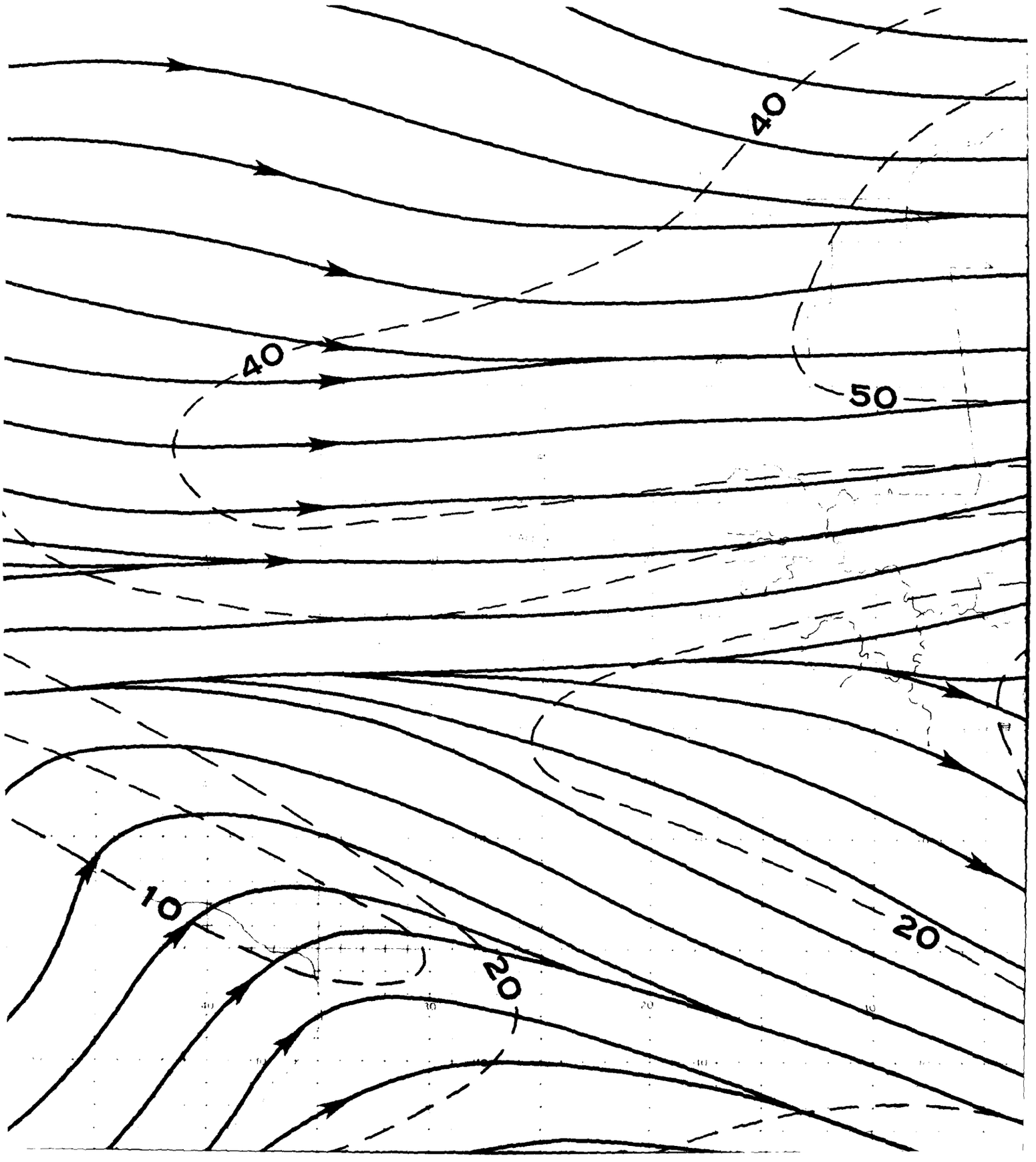

MULW-201E


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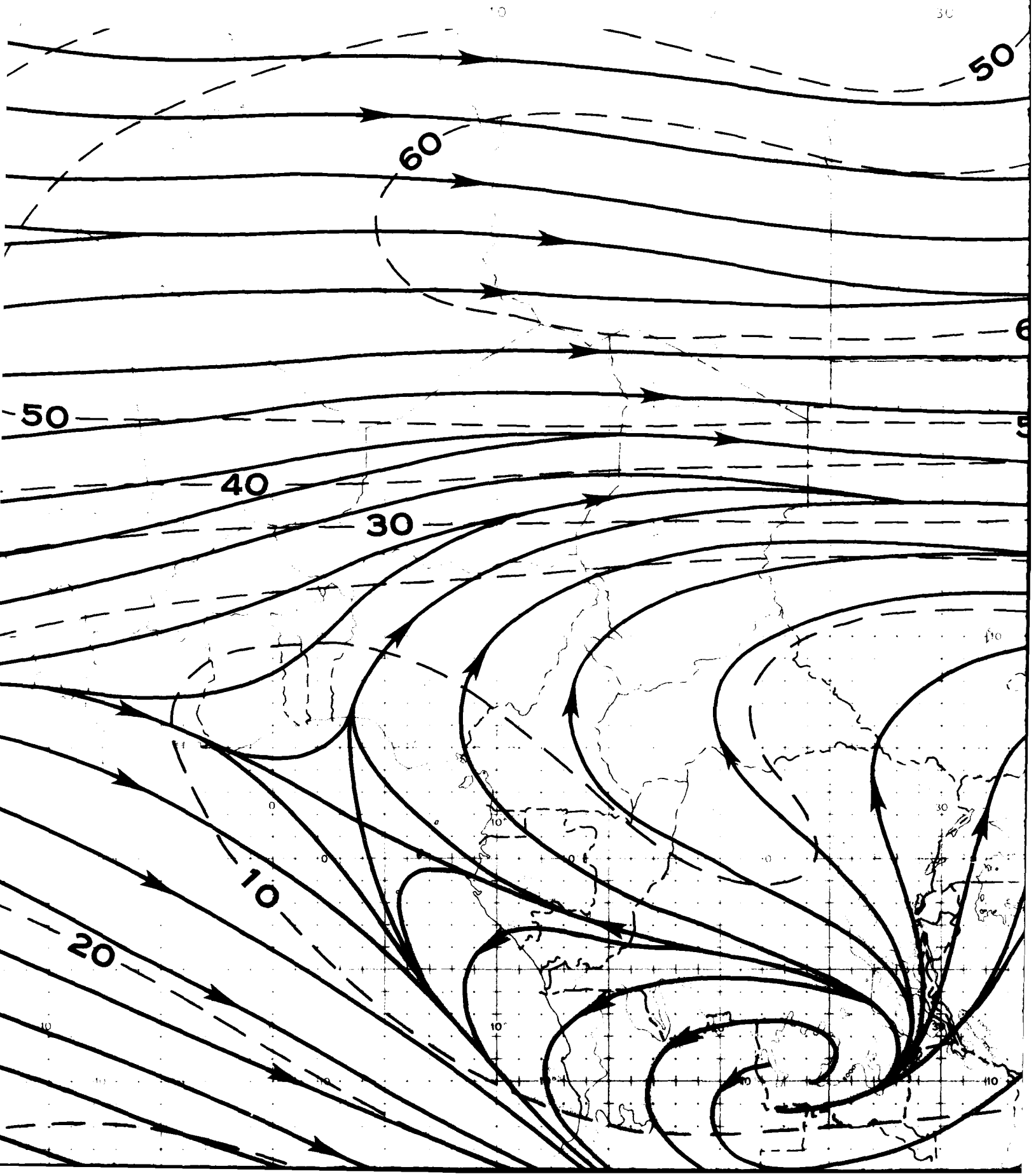
# MEAN UPPER LEVEL WIN

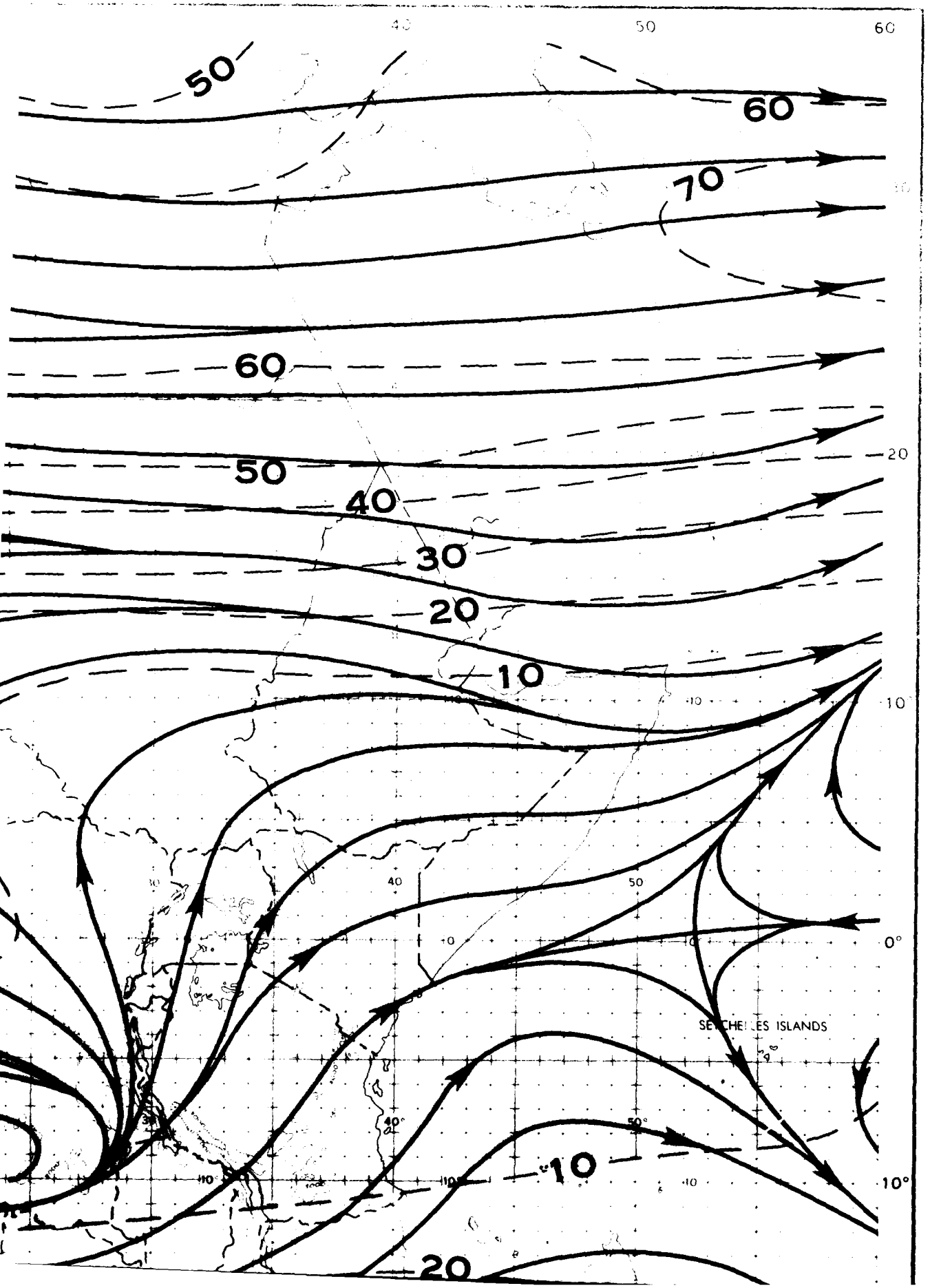


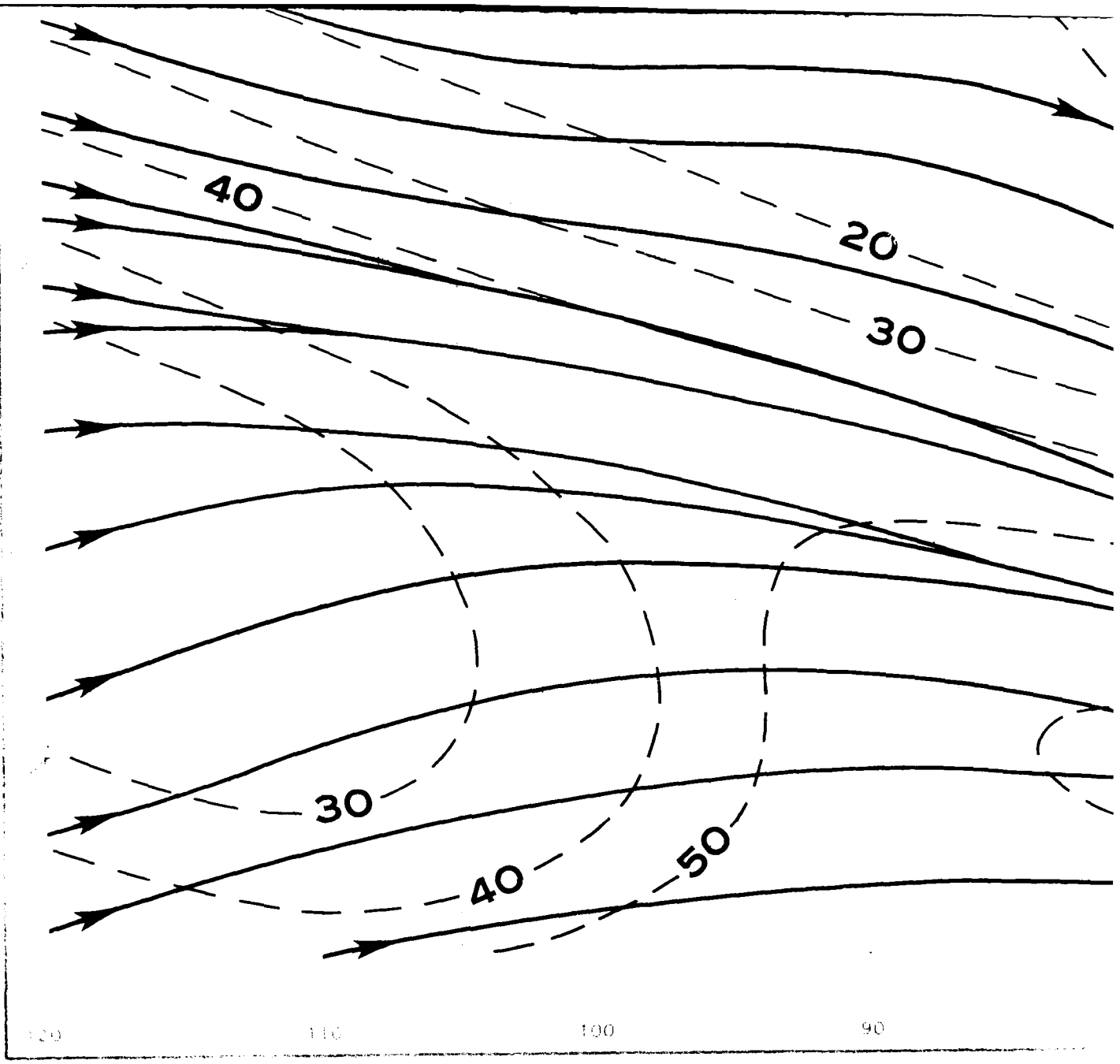
# VINDS over GLOBAL TROPICS - N

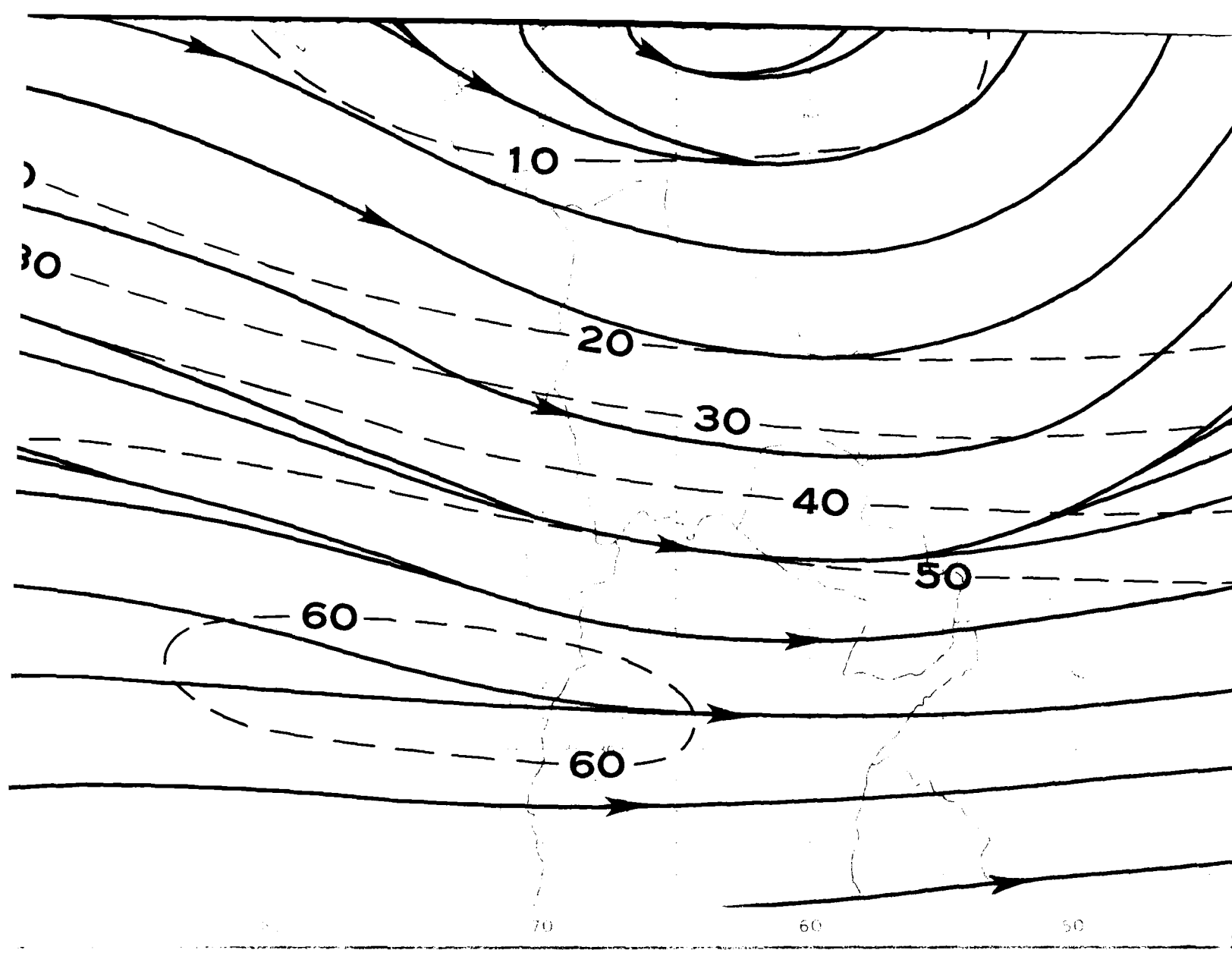


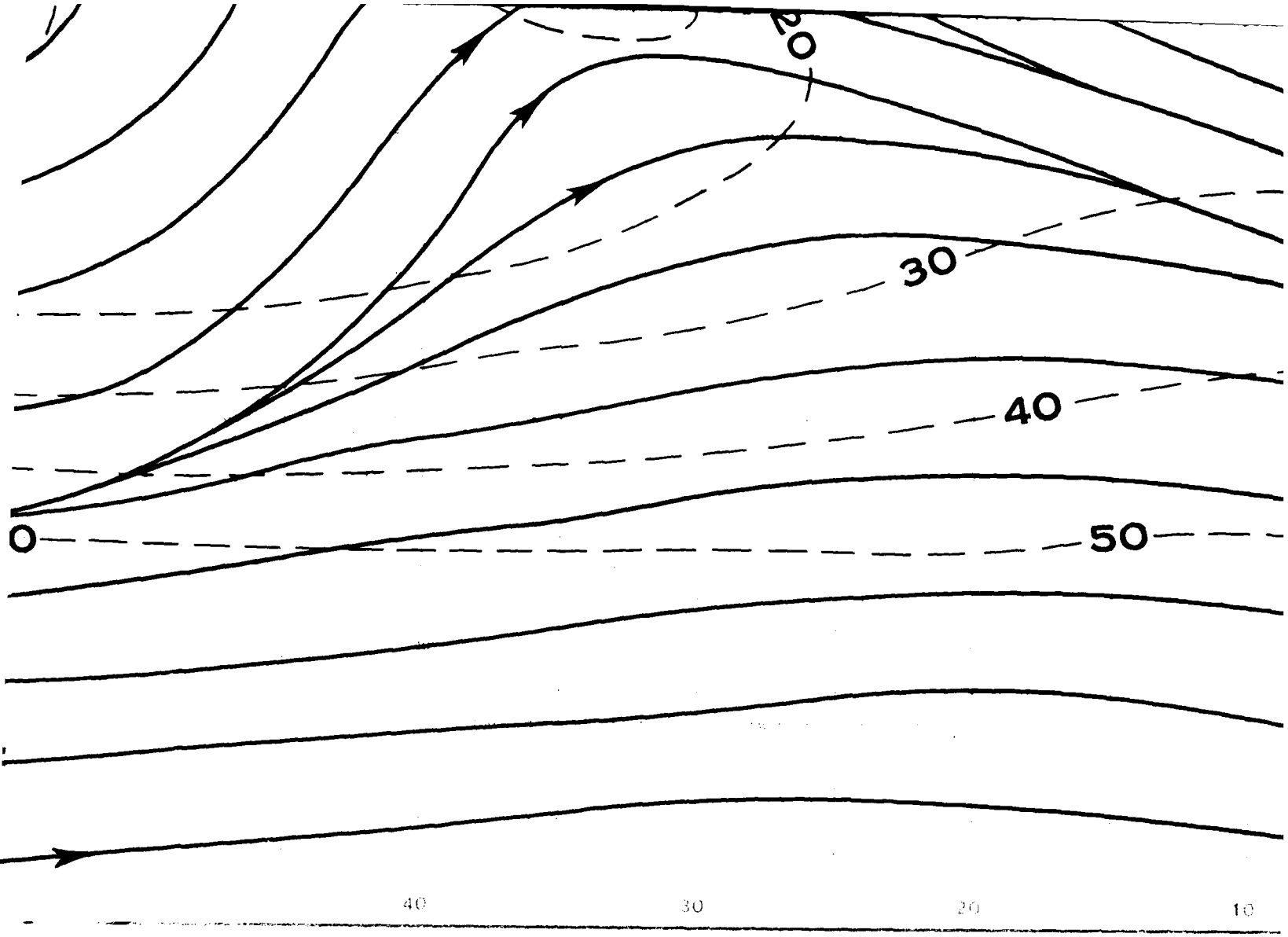
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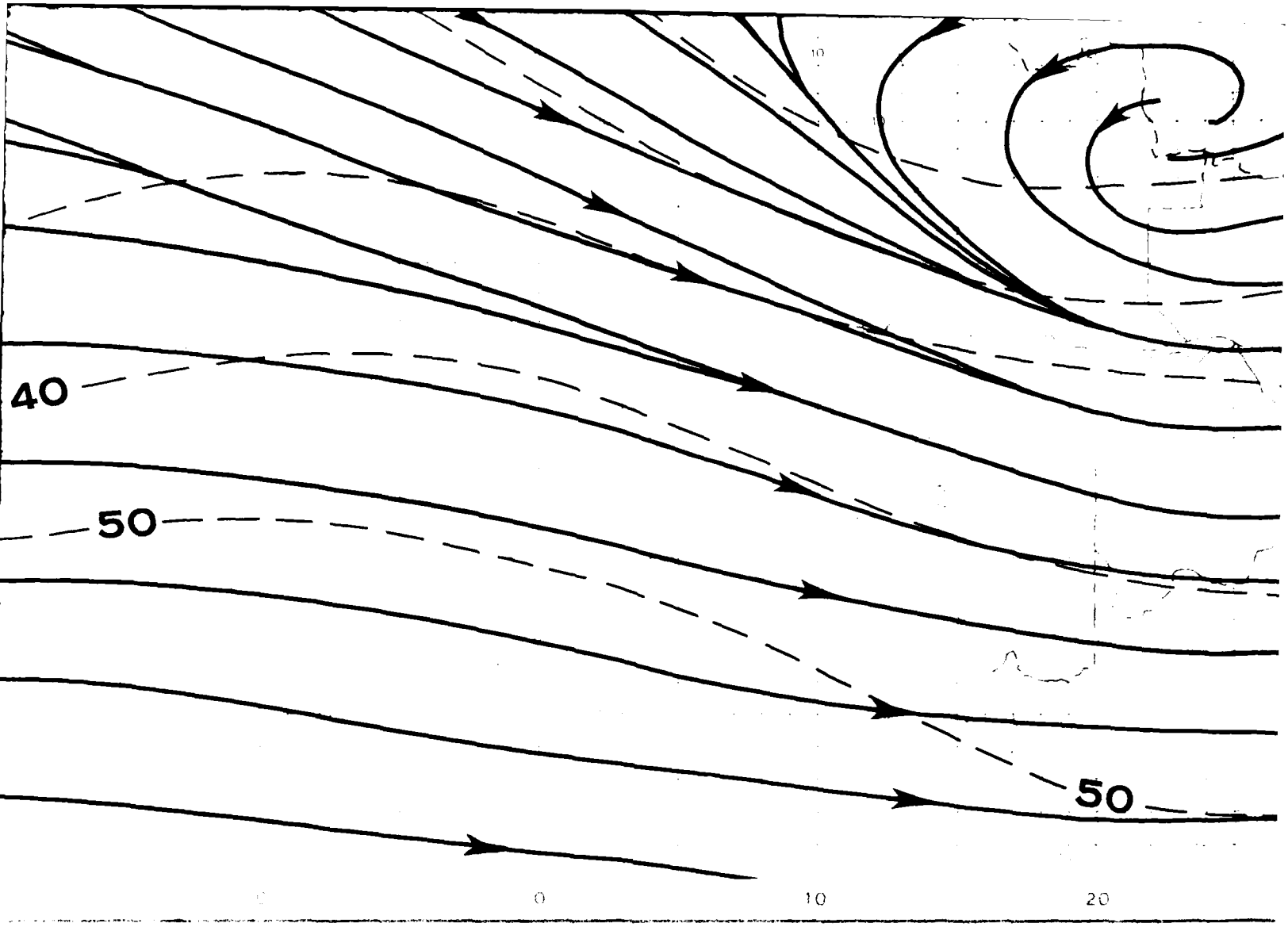


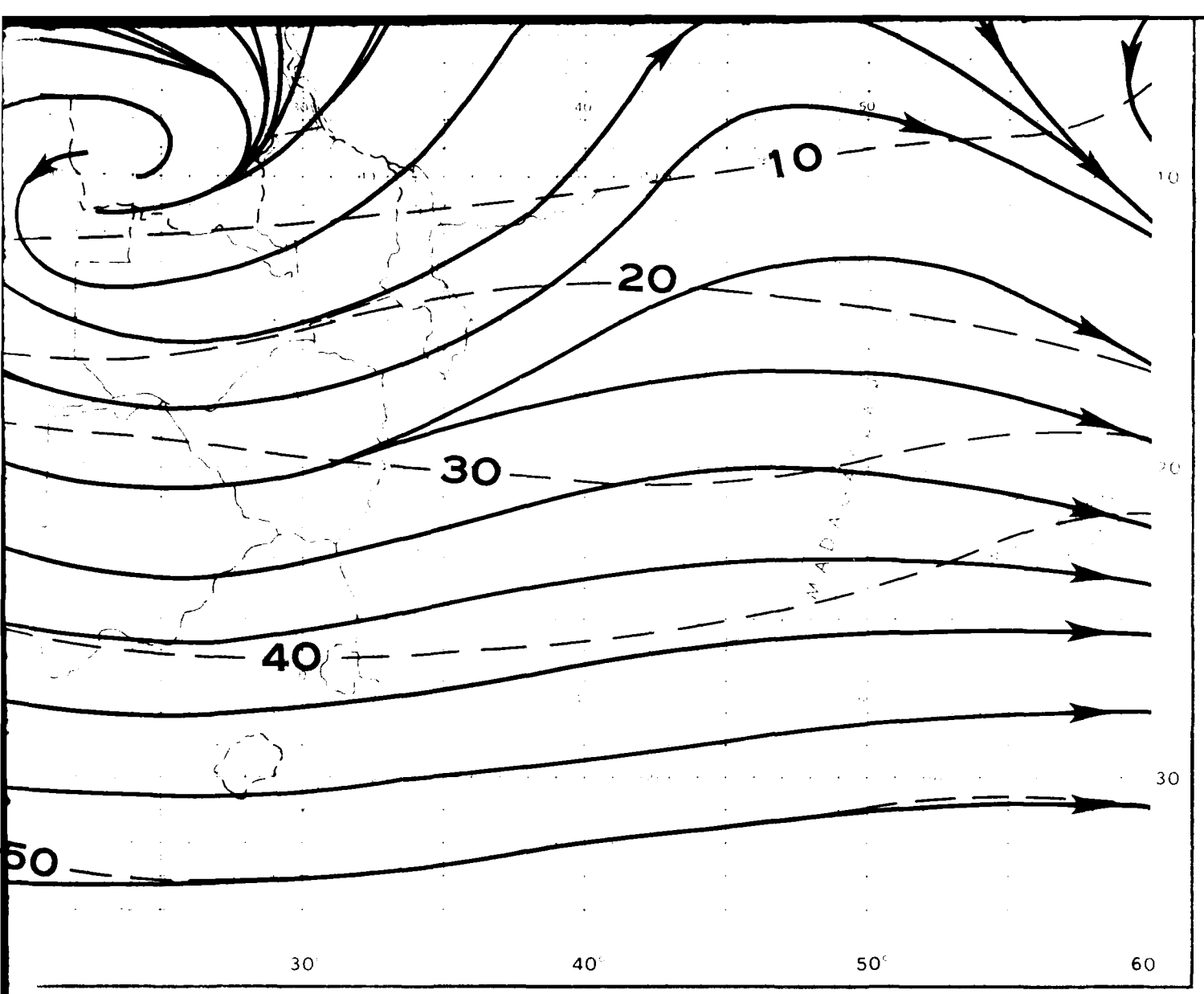

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SEYCHELLES ISLANDS
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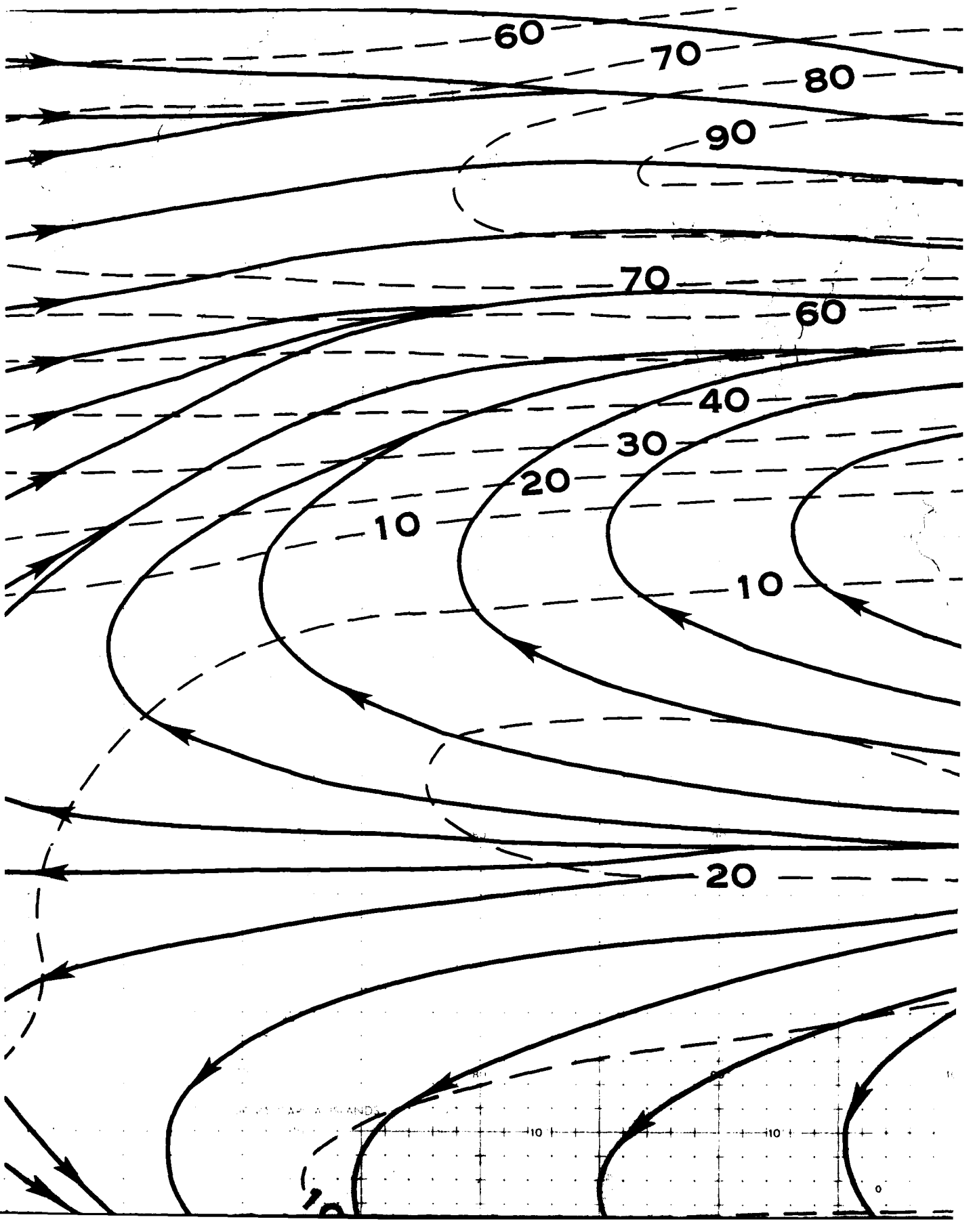

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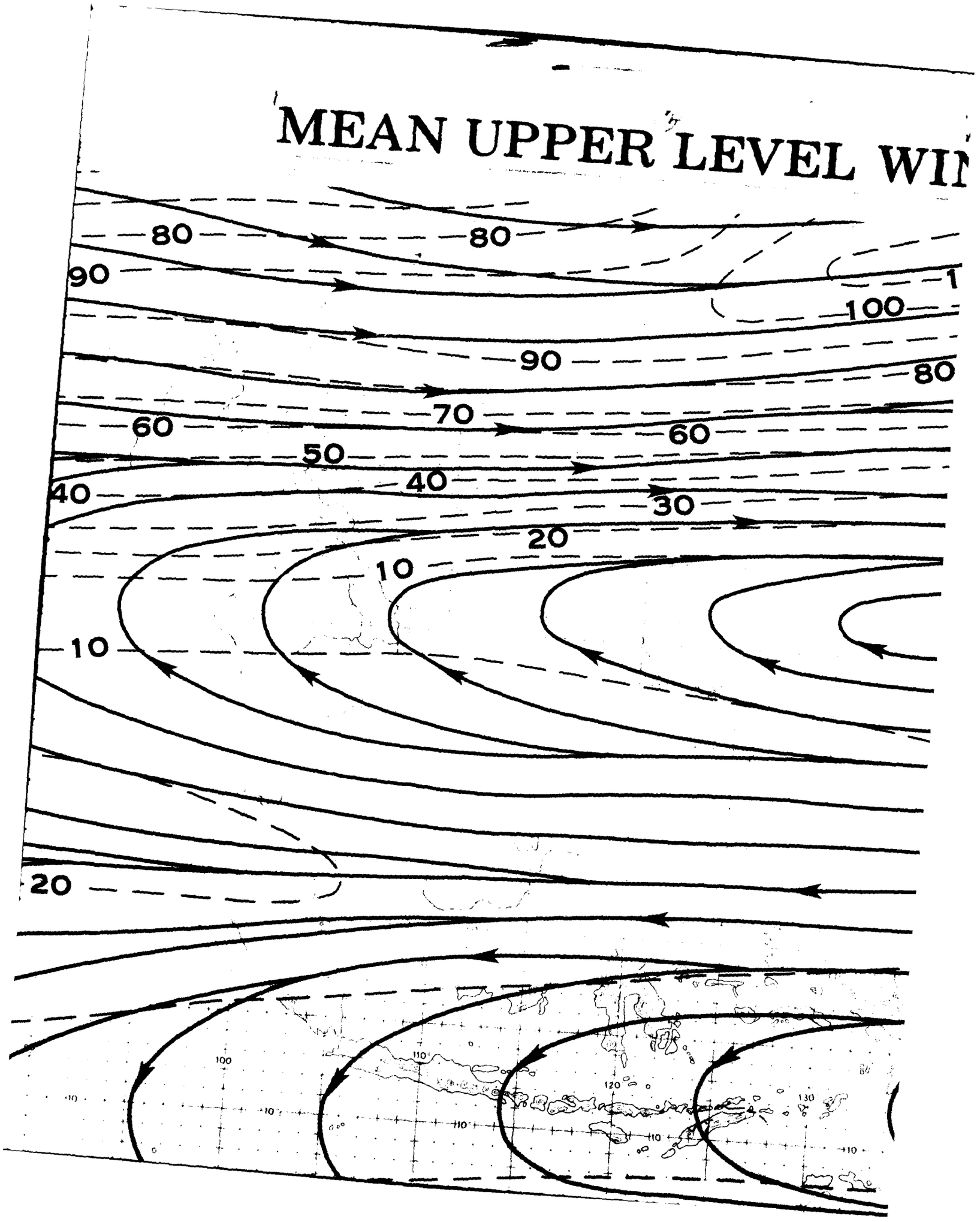

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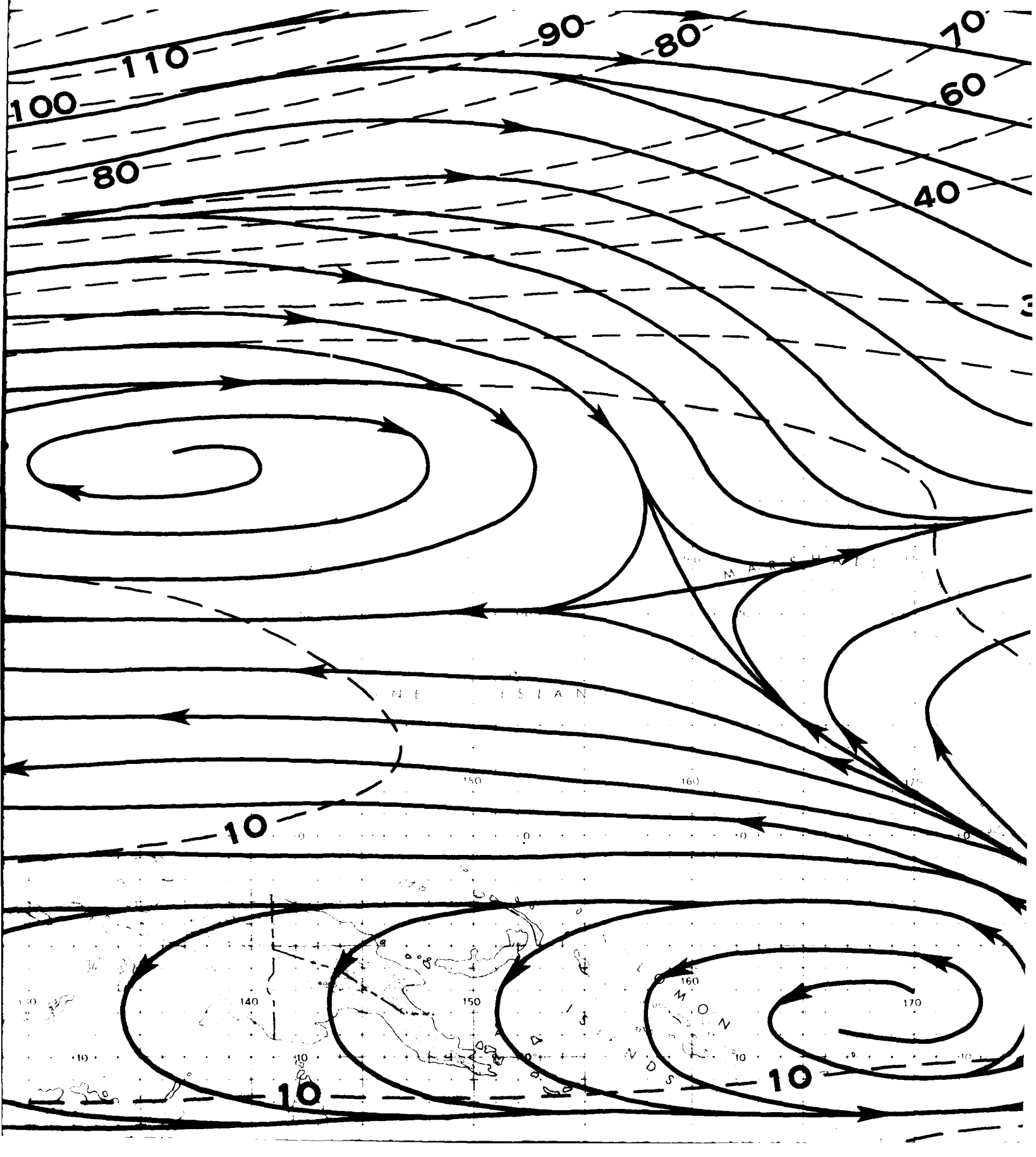



MULW-211W

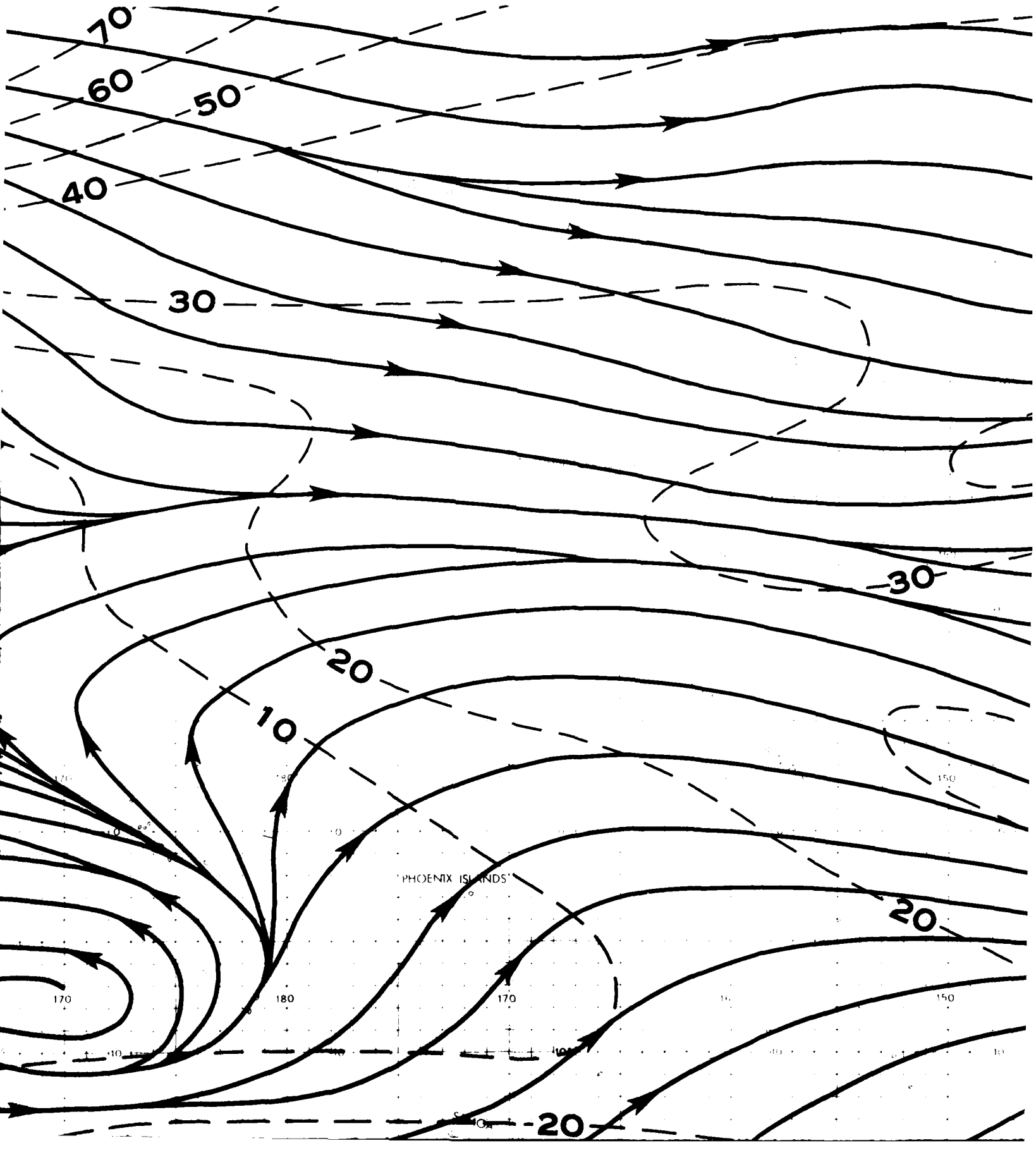

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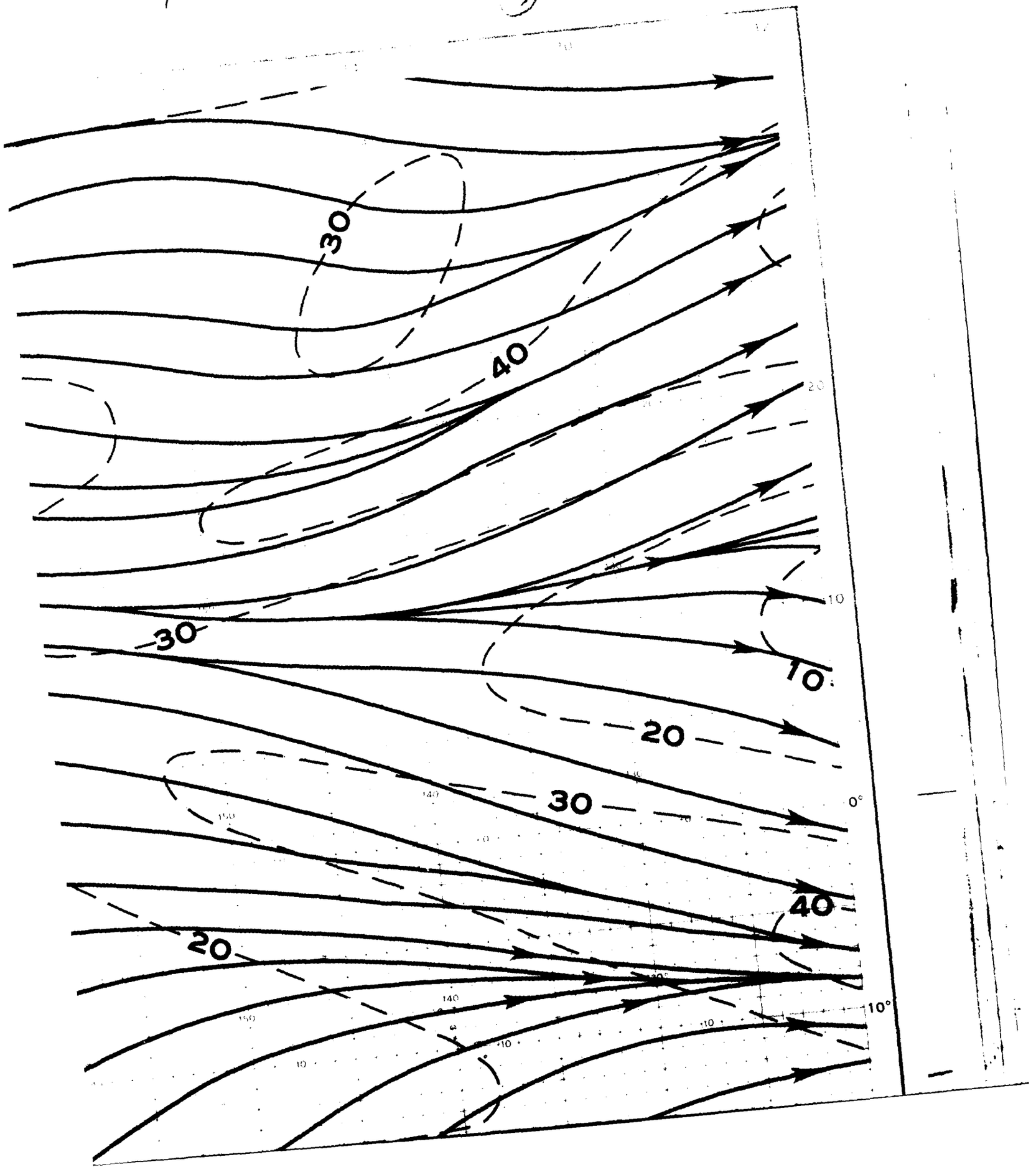

MEAN UPPER LEVEL WI
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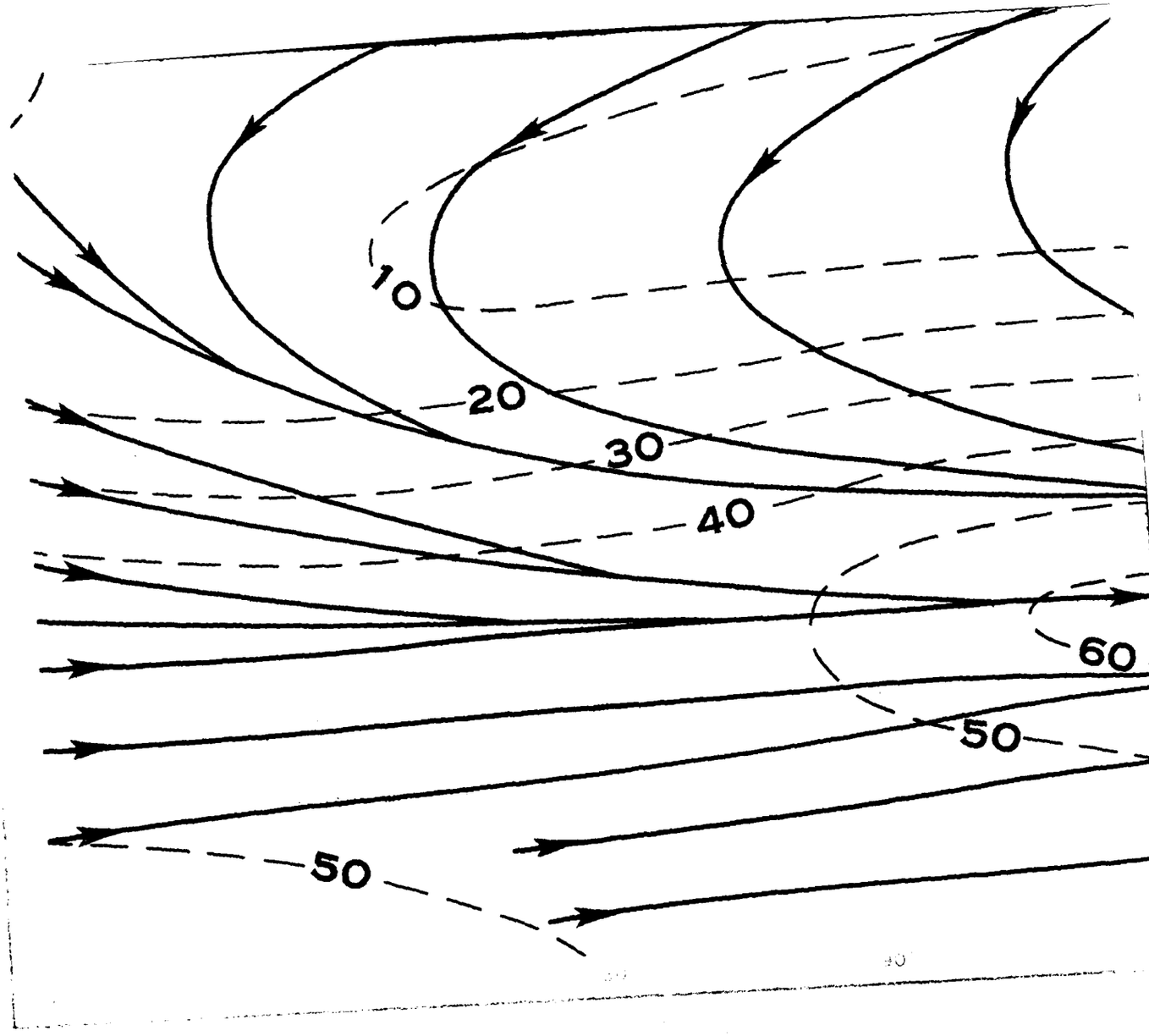
# WINDS over GLOBAL TROPICS –



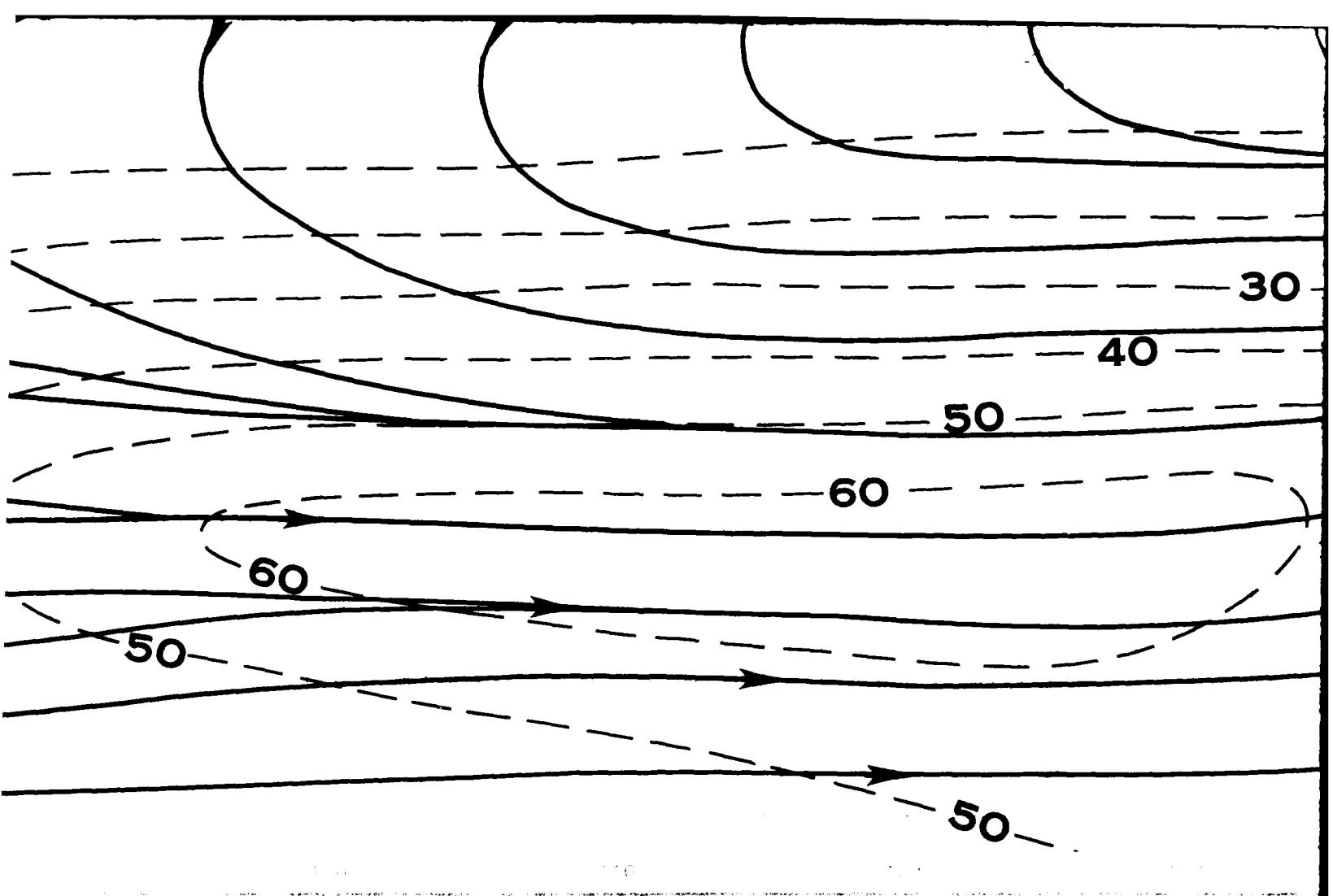
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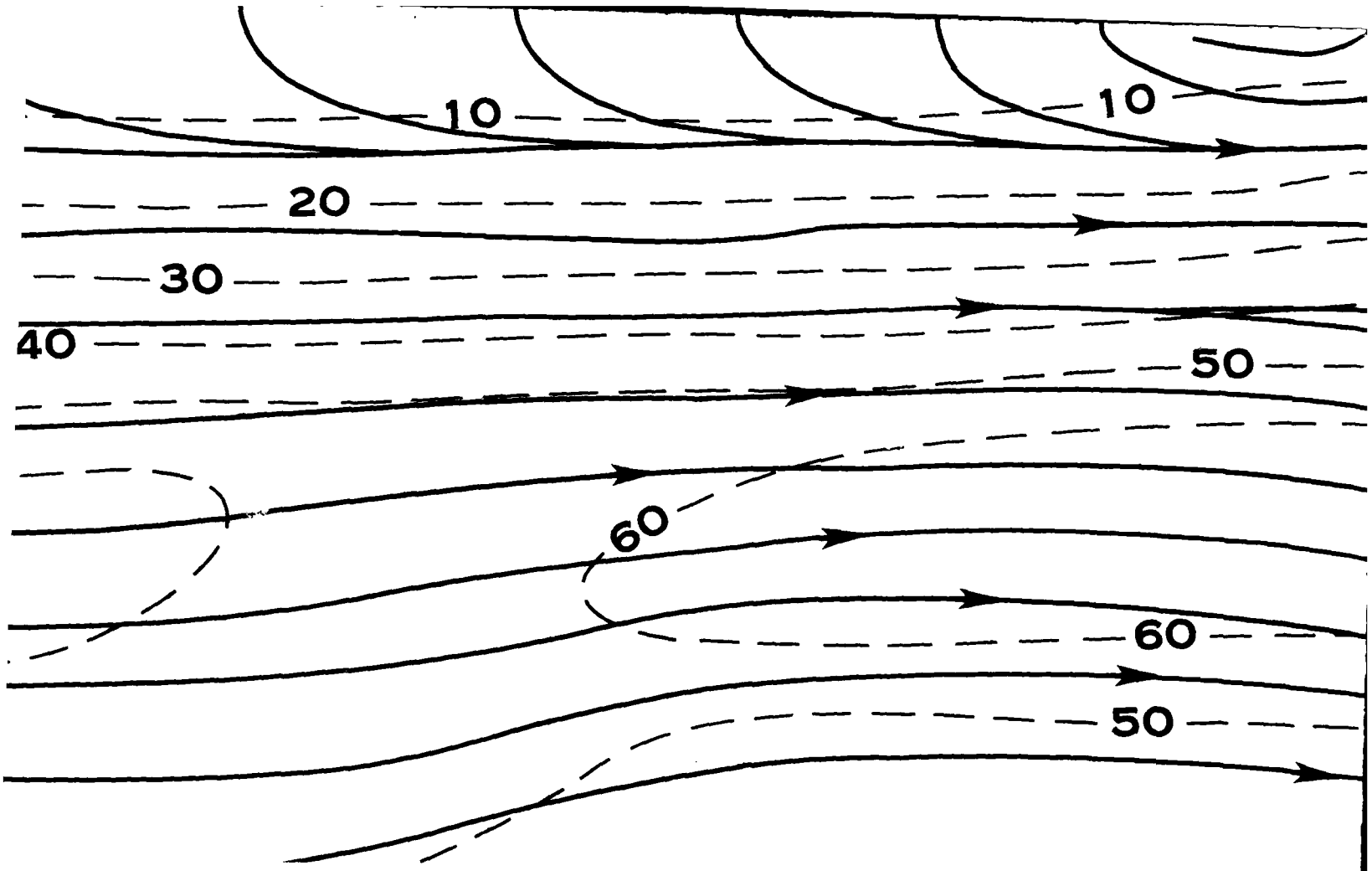


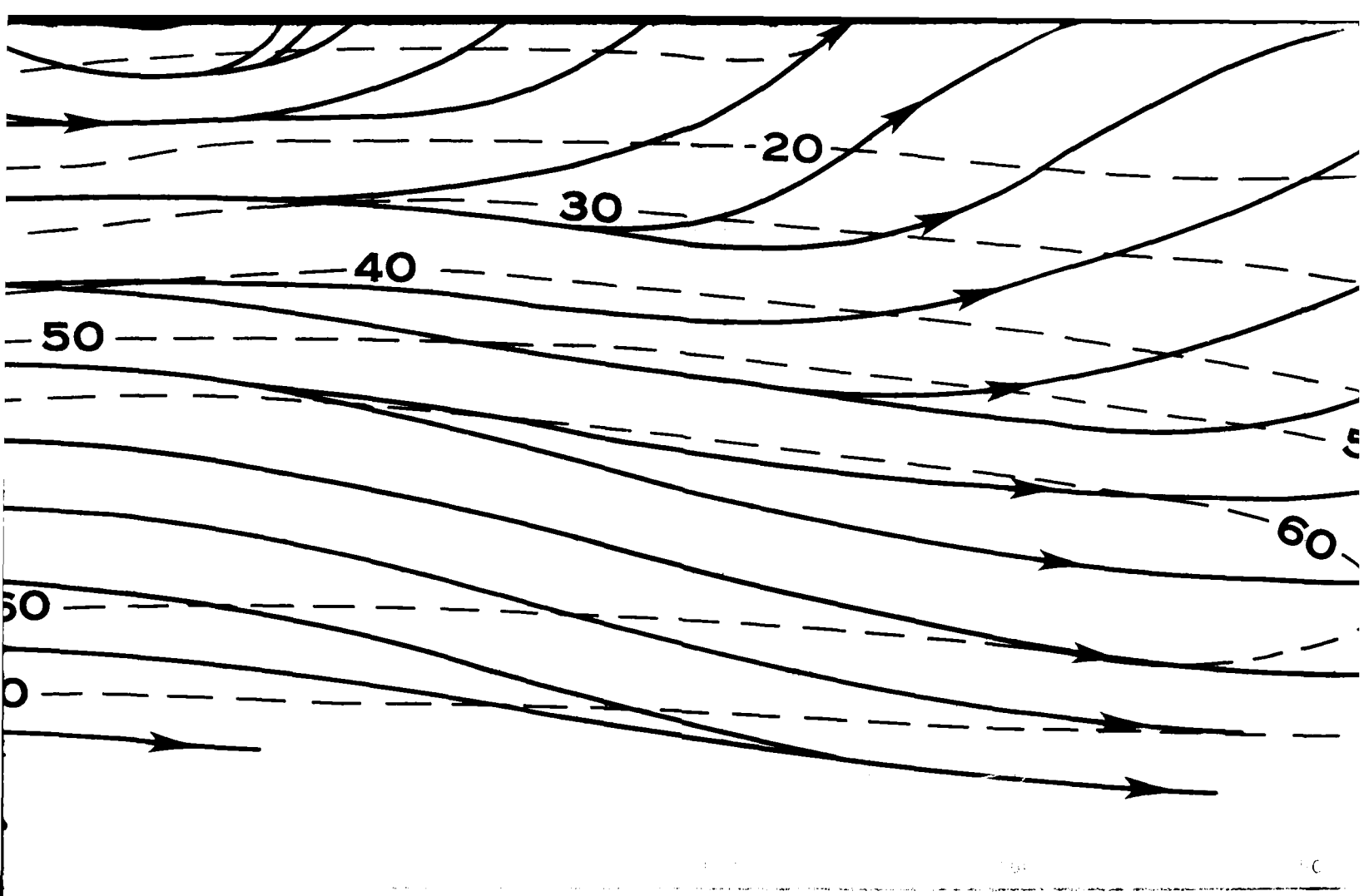

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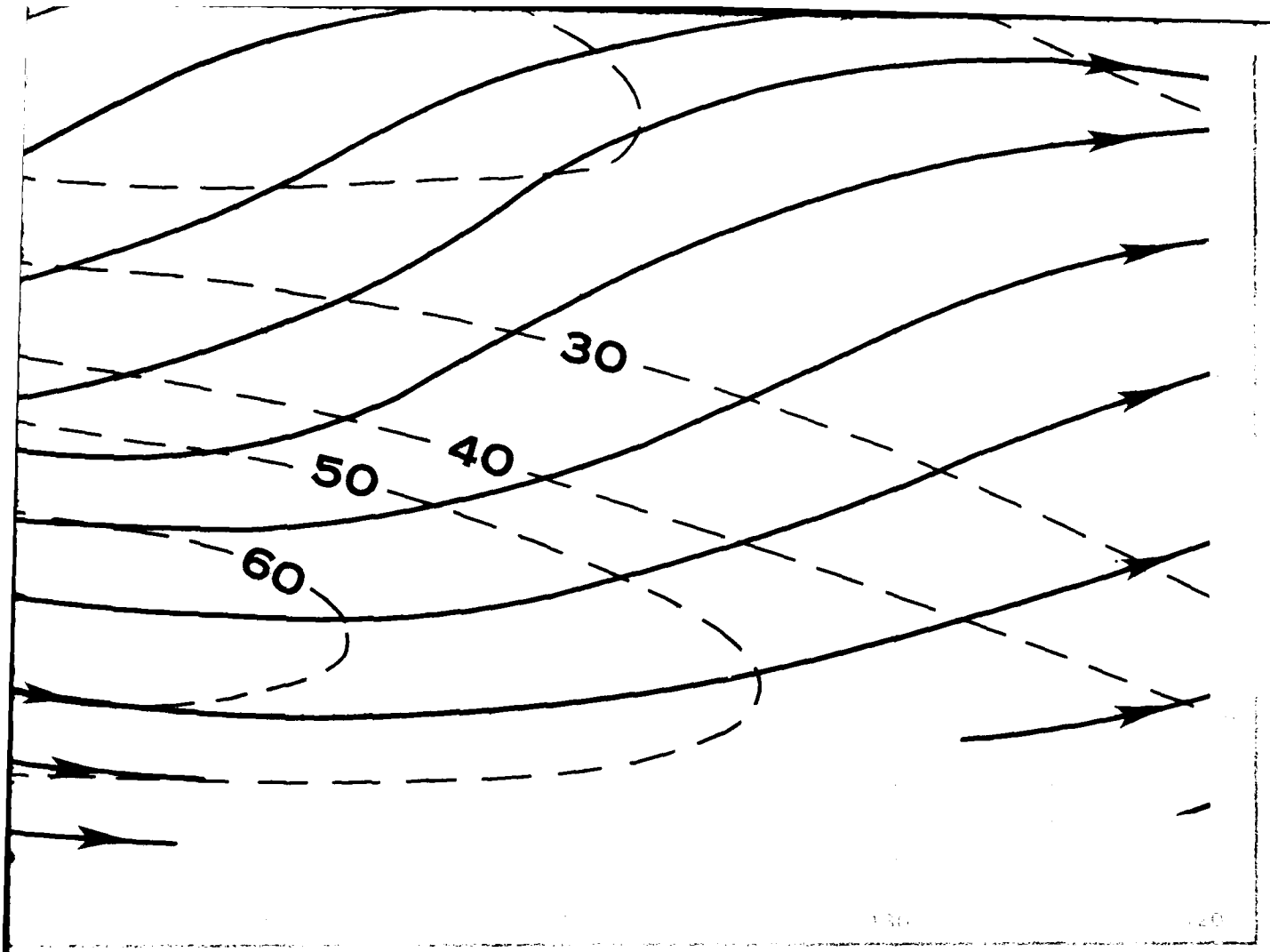



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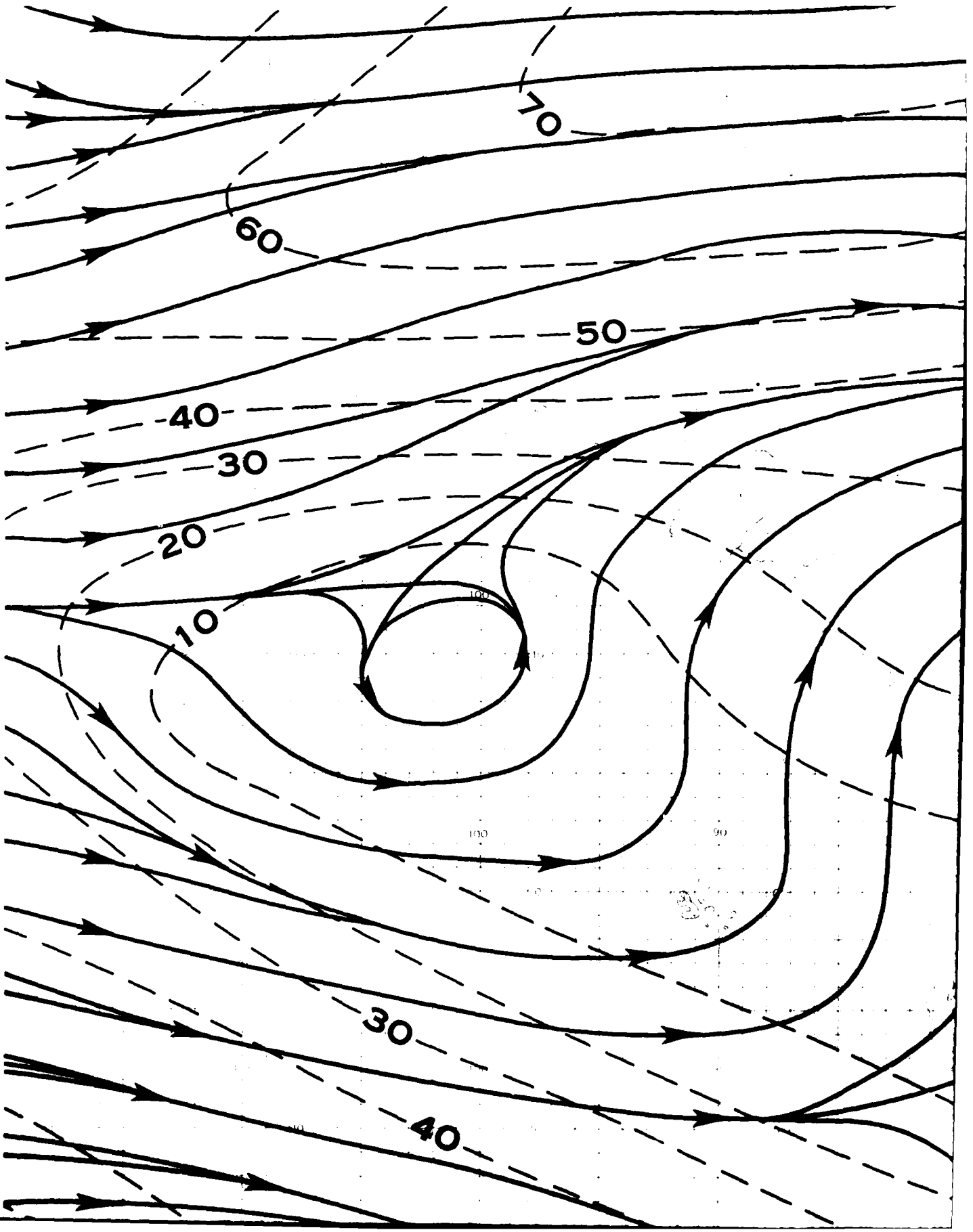

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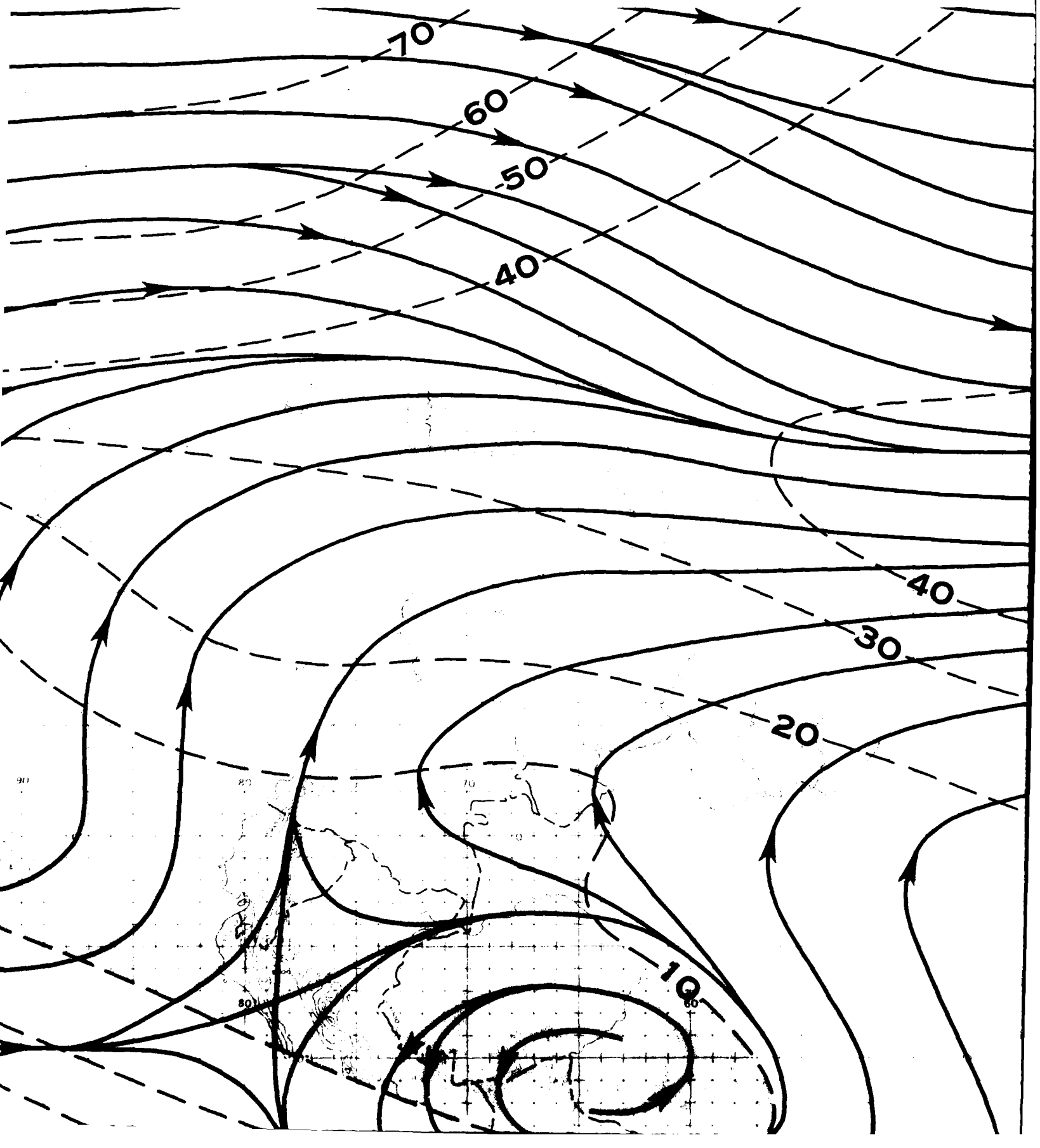

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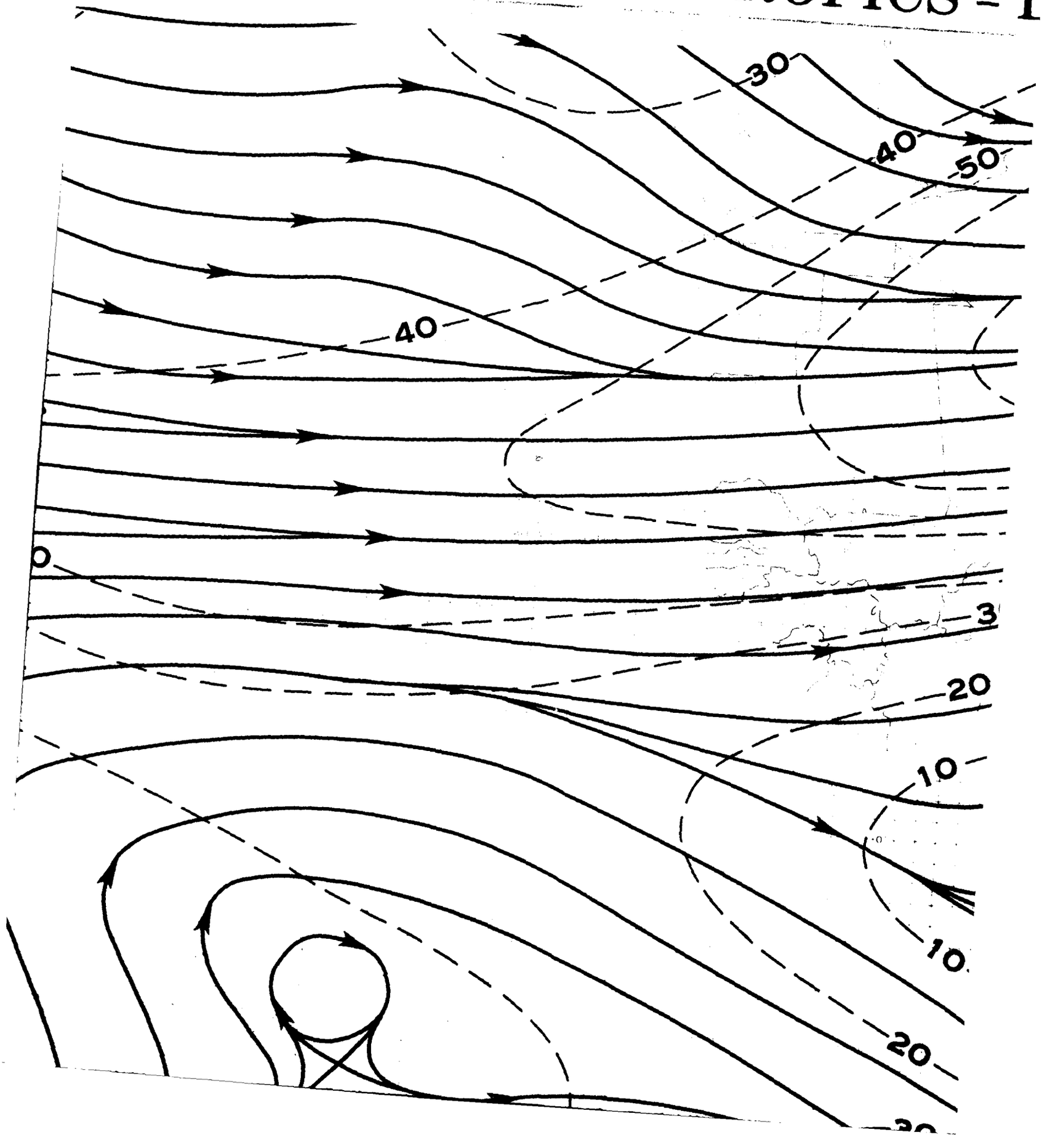

MULW-211E

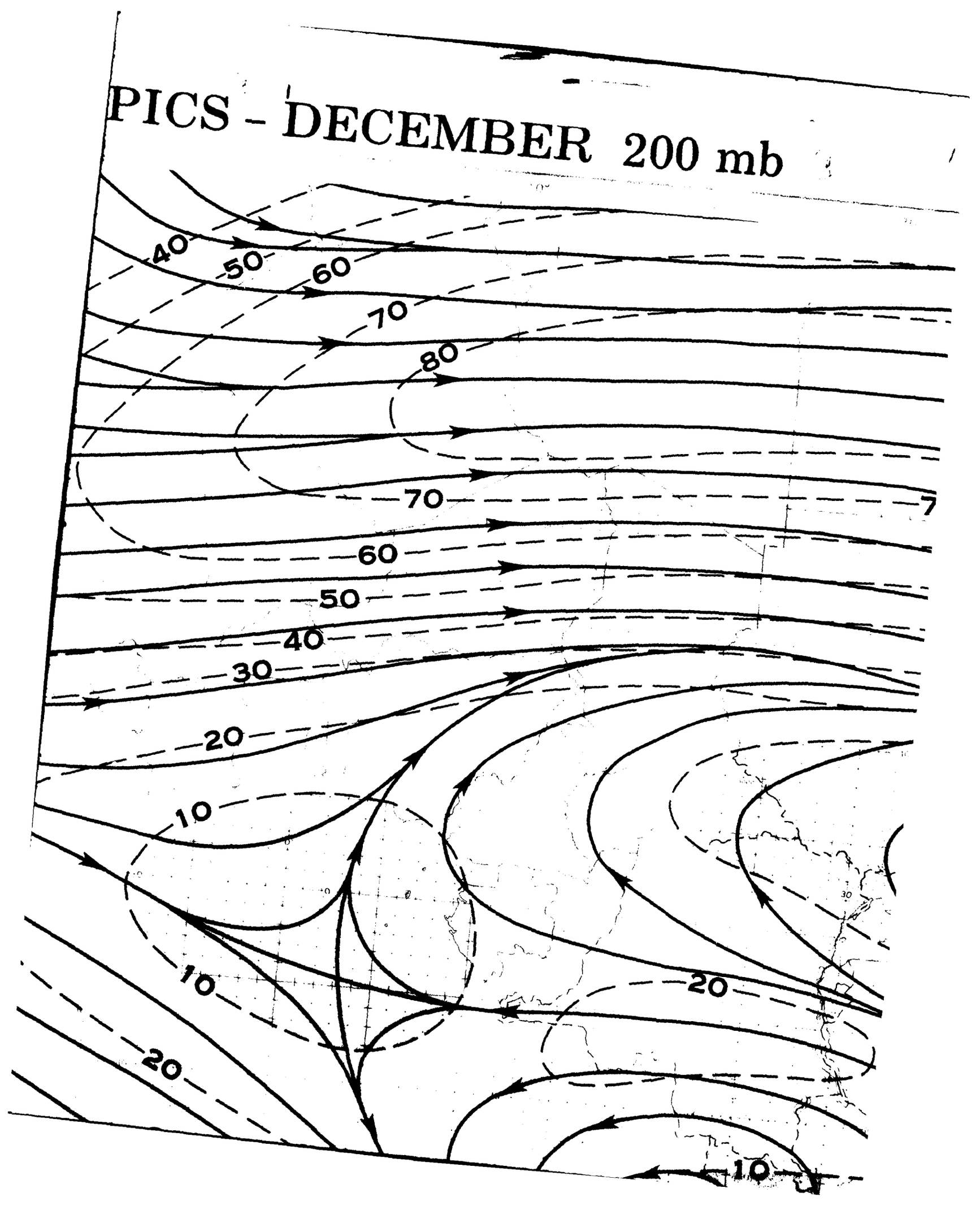

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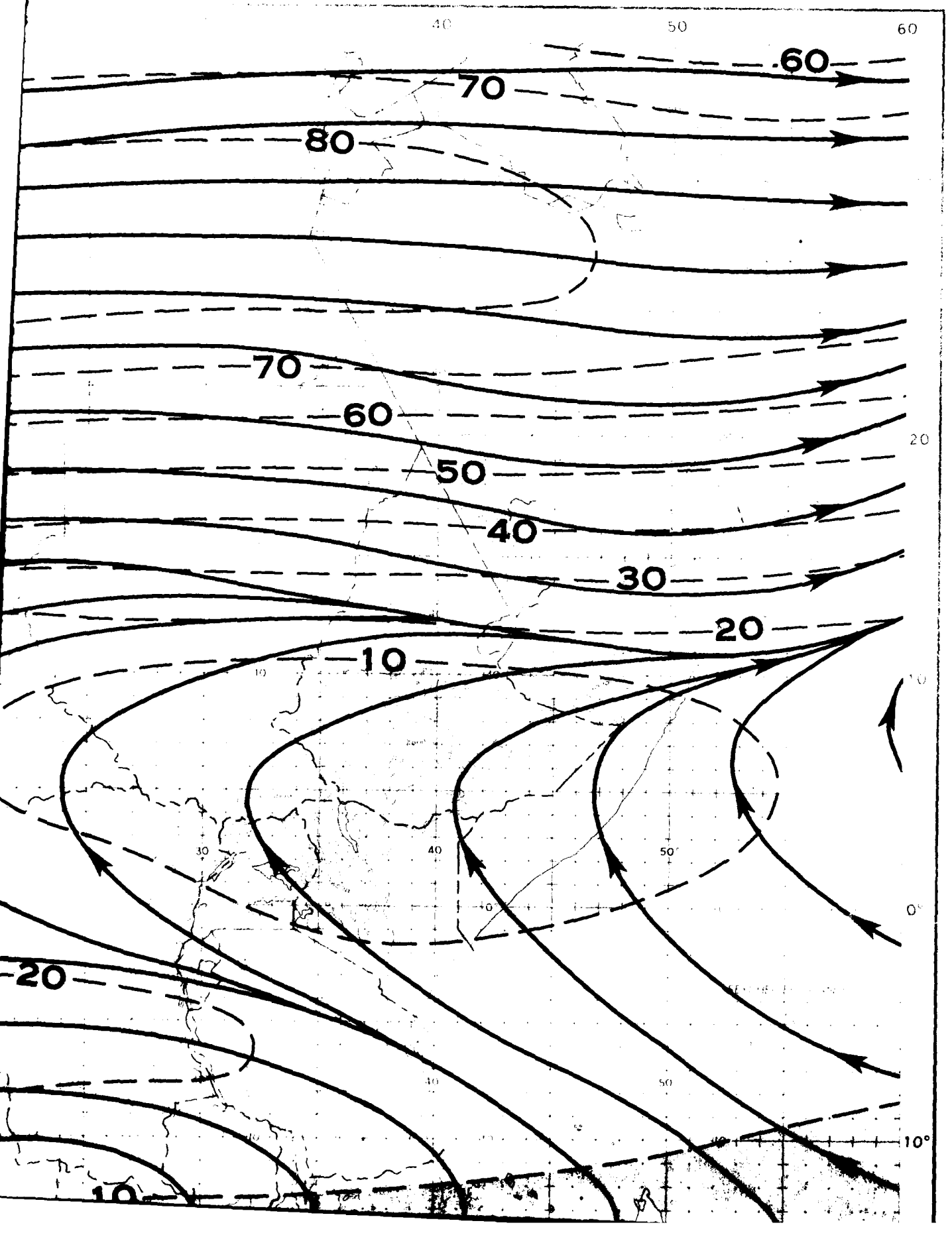
# MEAN UPPER LEVEL WI

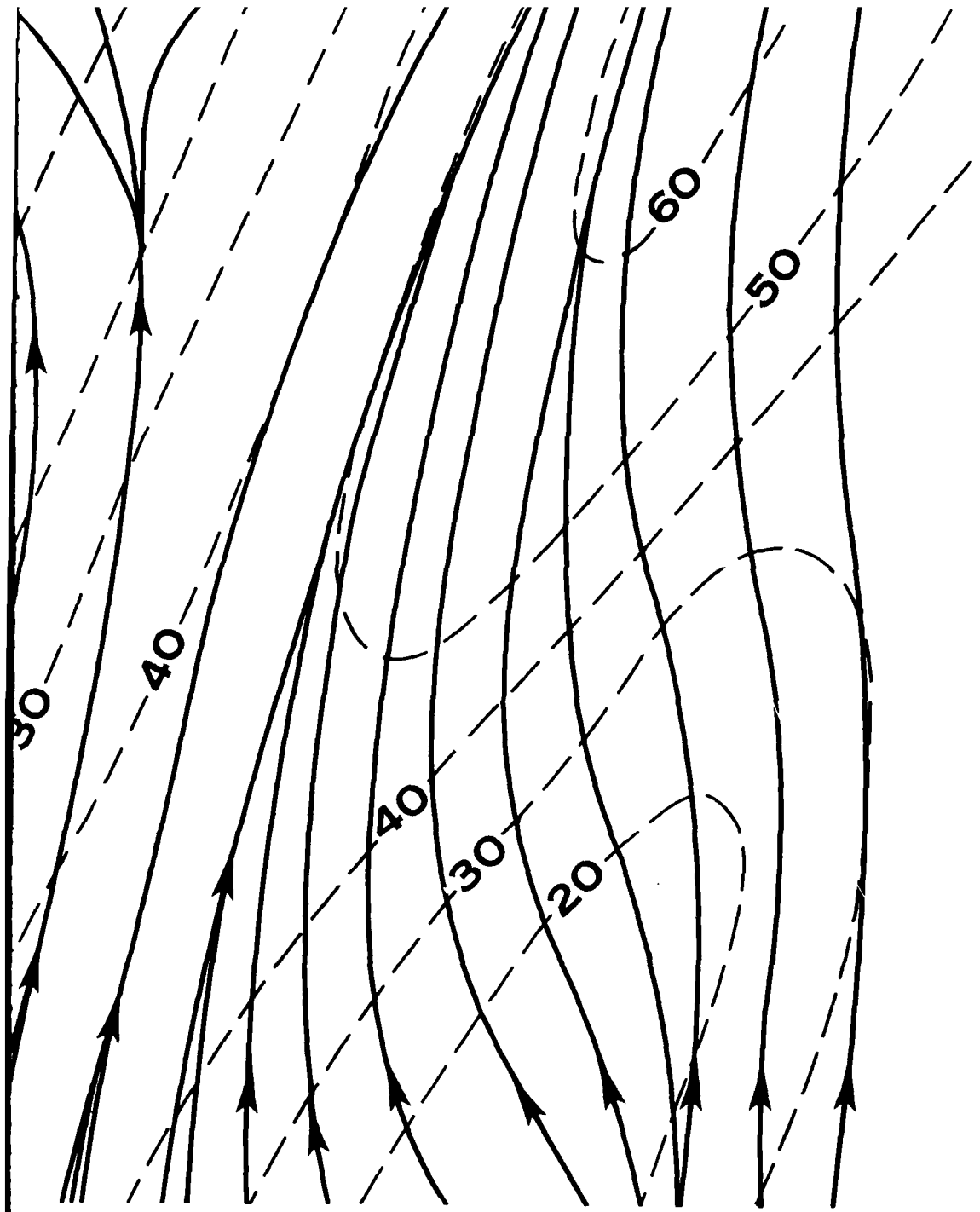


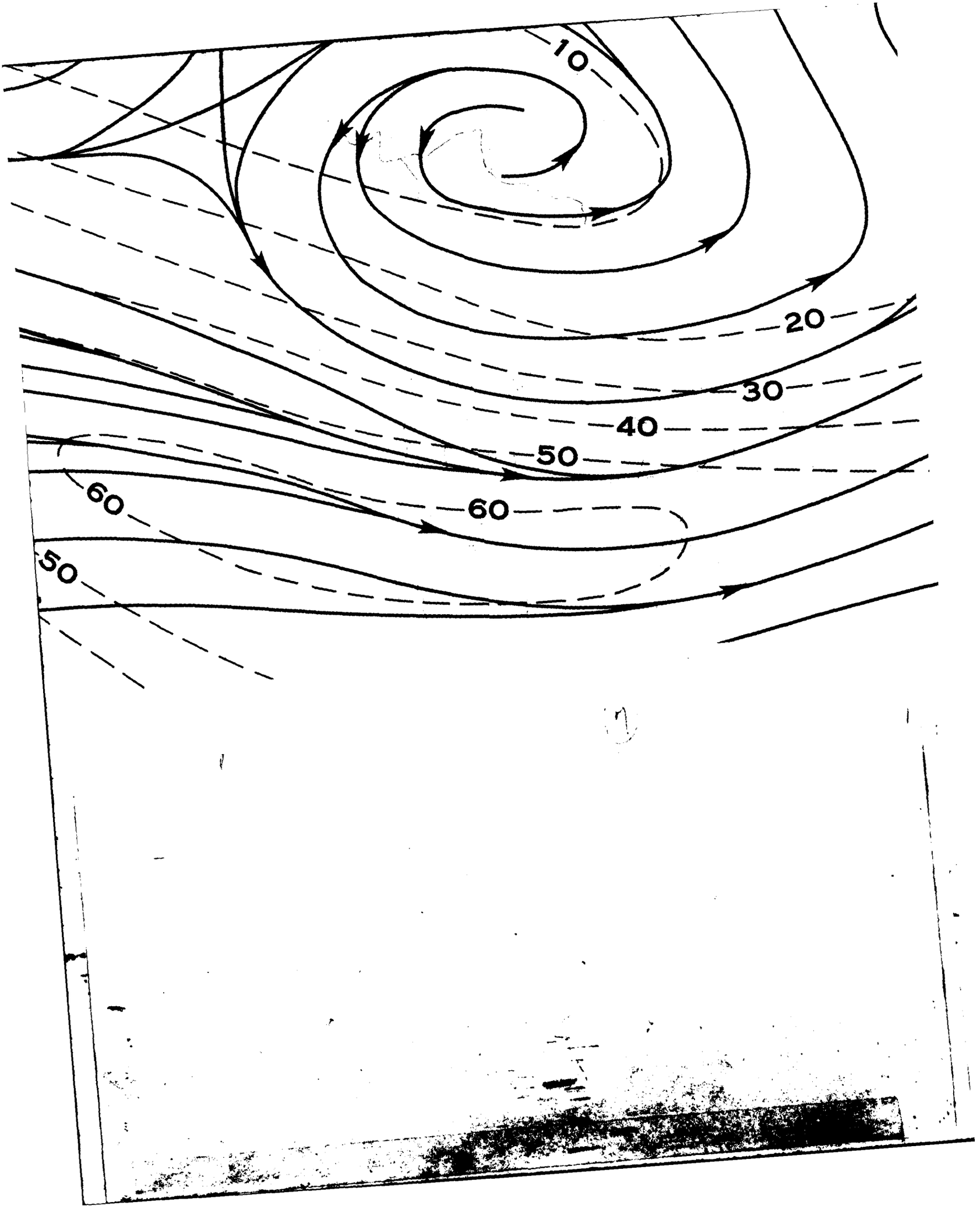
# WINDS over GLOBAL TROPICS - I

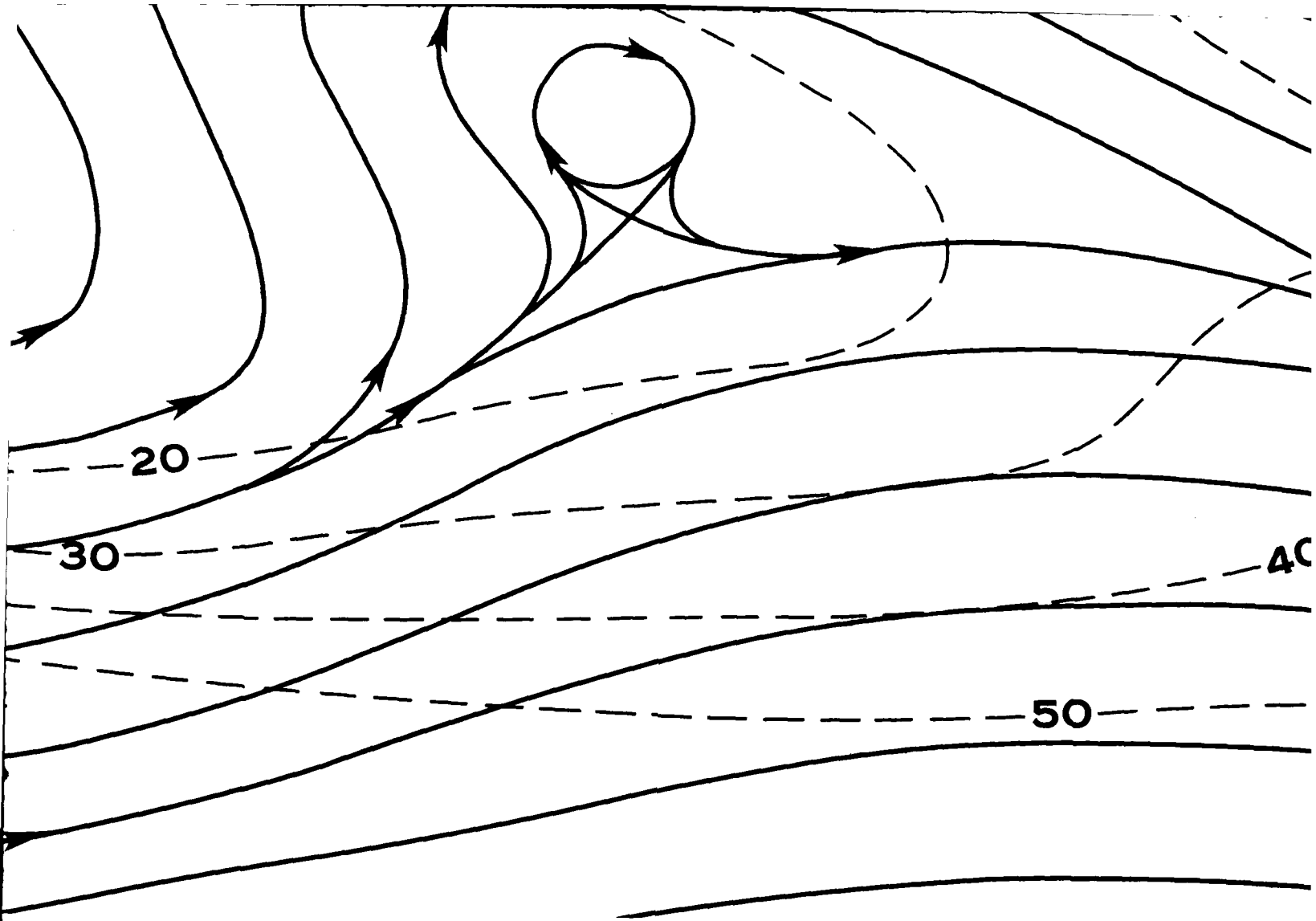


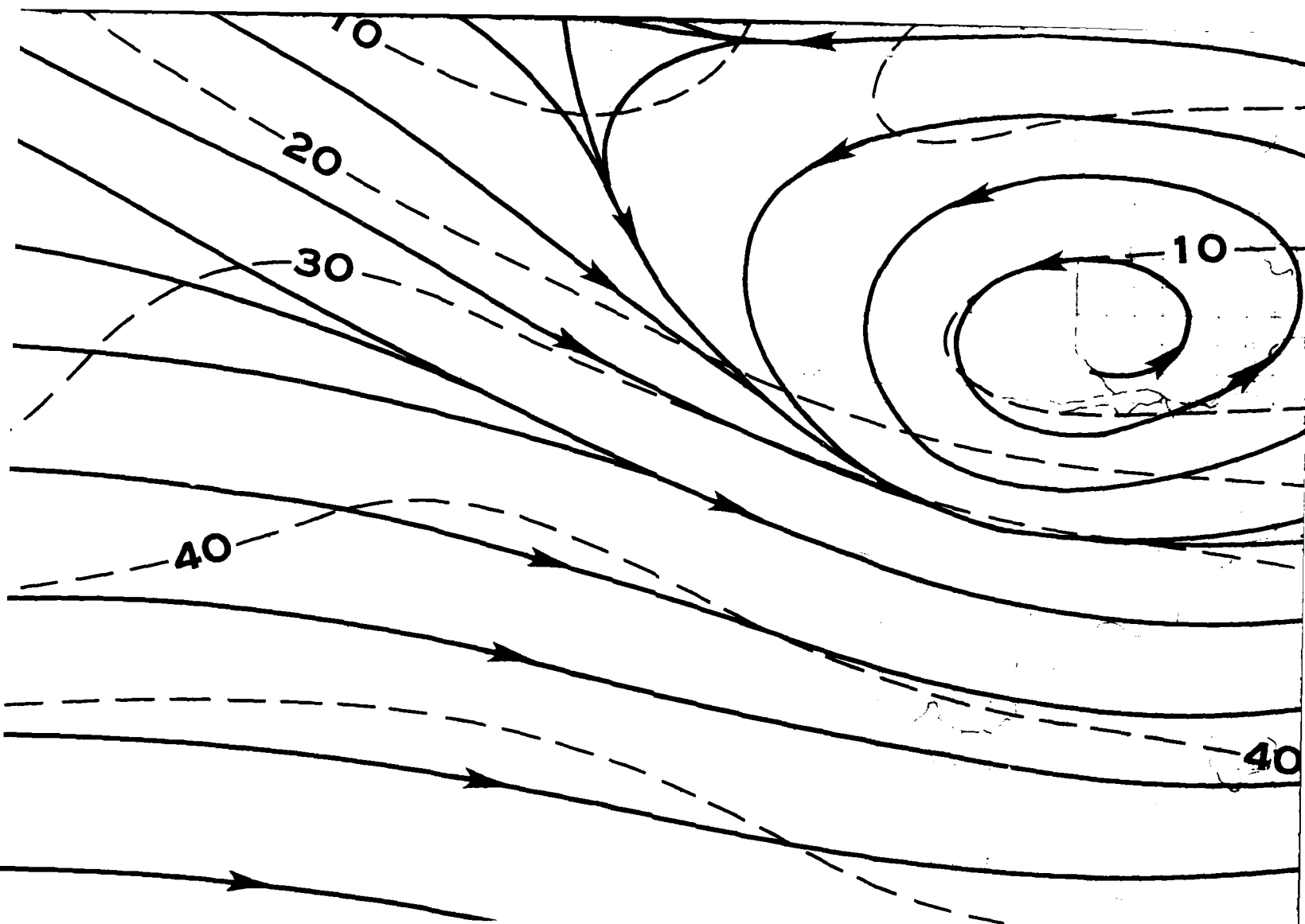

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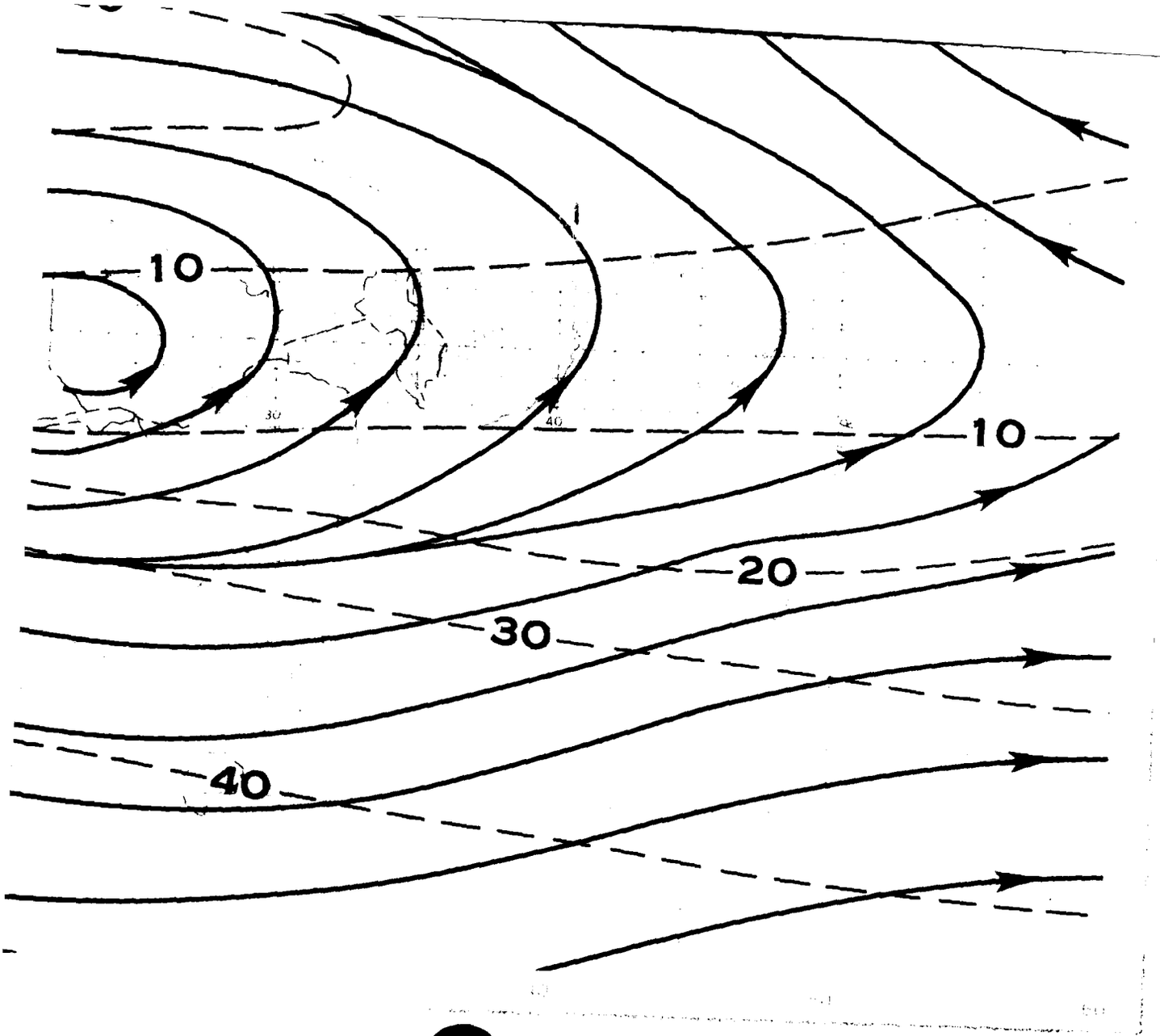

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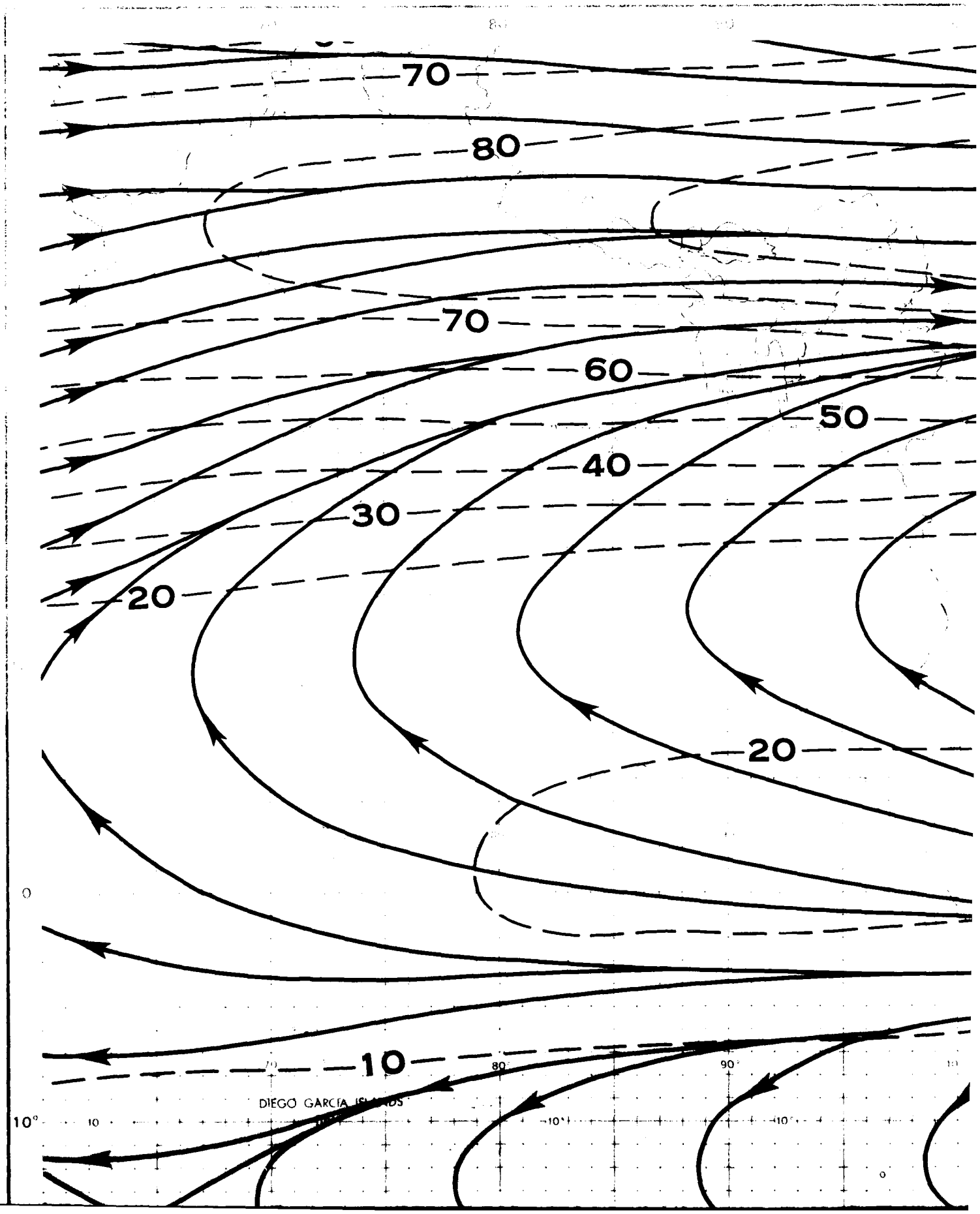

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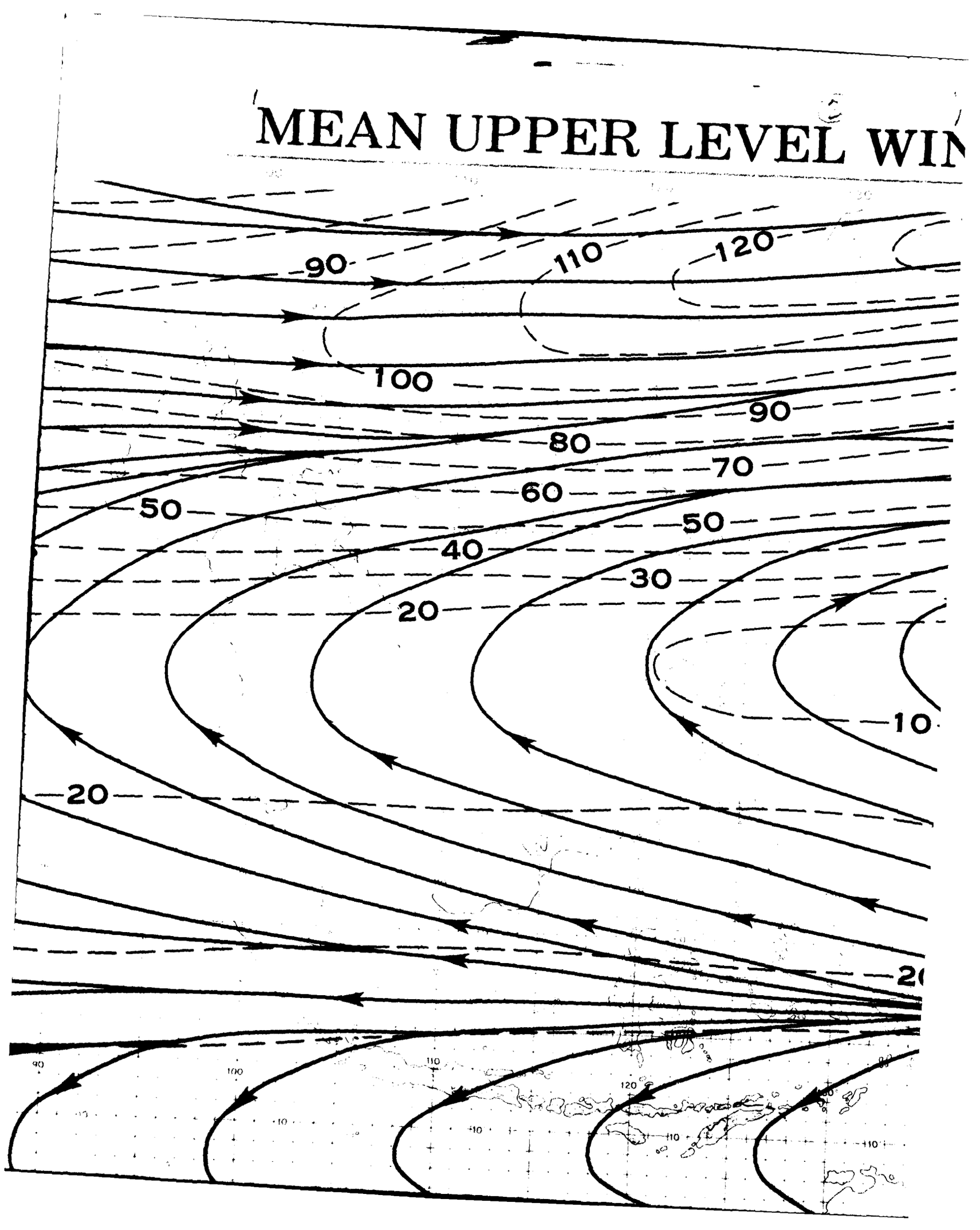

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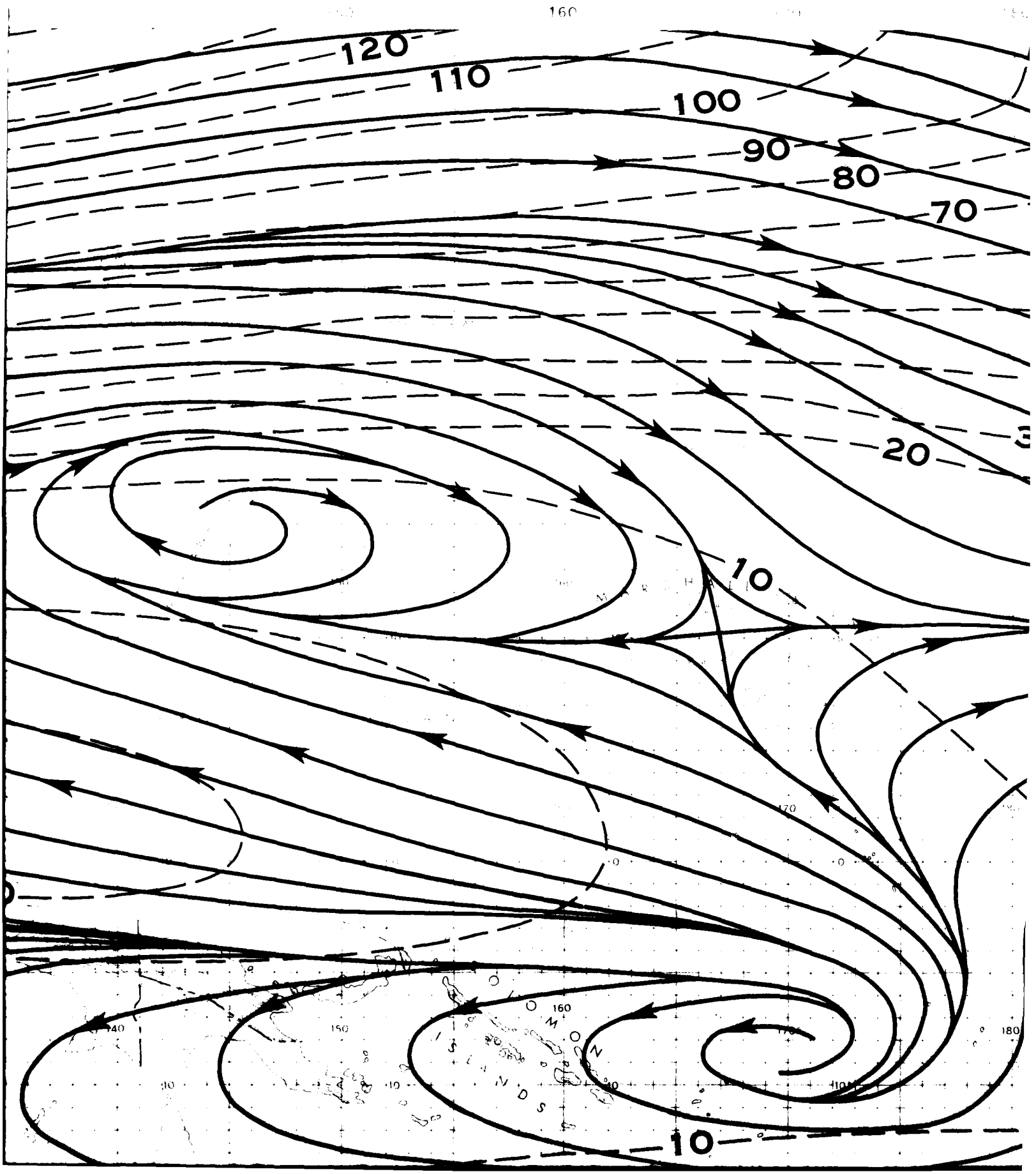

MULW-212W


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DIEGO GARCIA ISLANDS

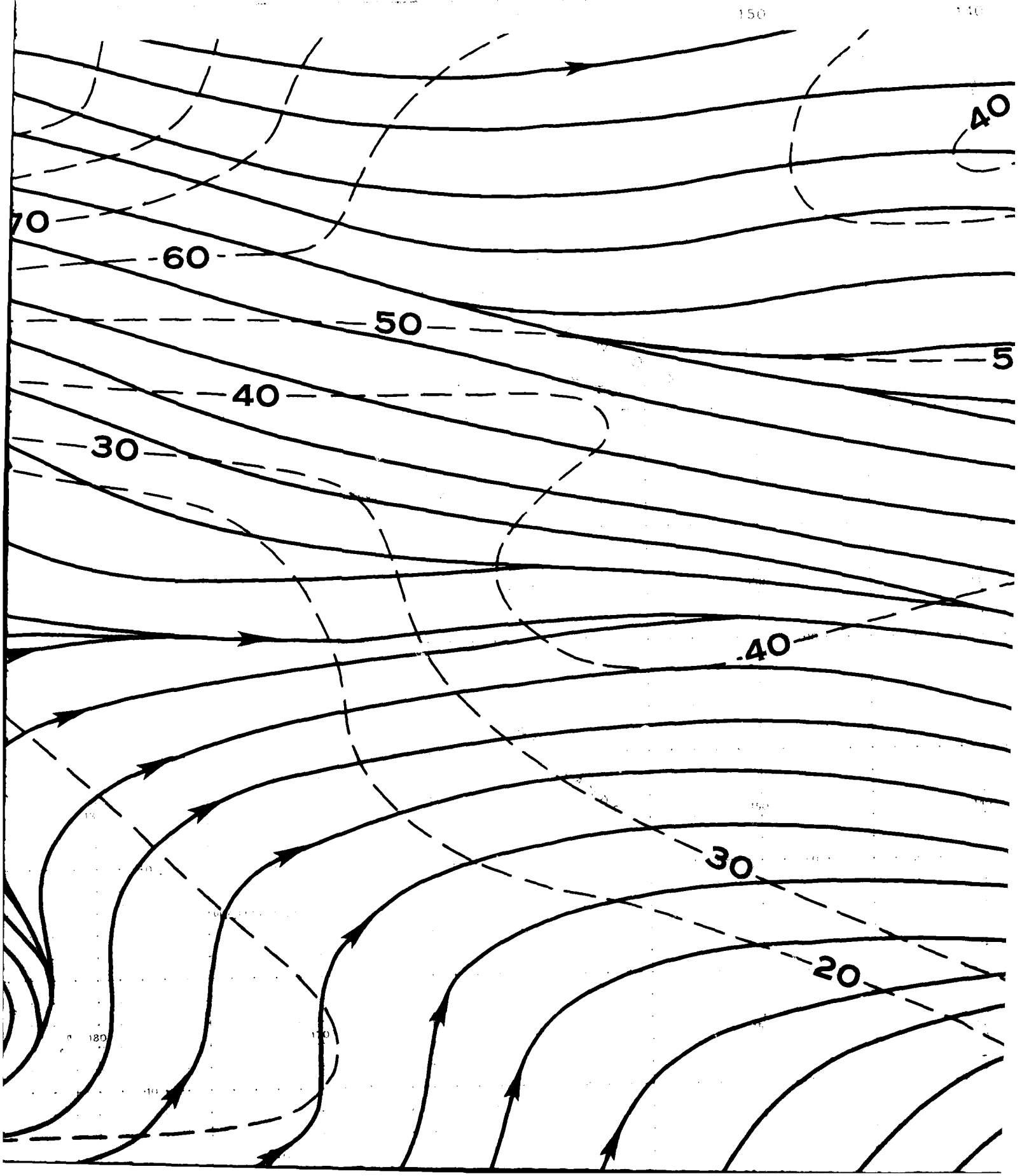
# MEAN UPPER LEVEL WIN



# NDS over GLOBAL TROPICS – DEC



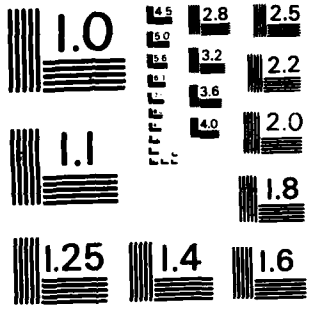
# ECEMBER 200 mb



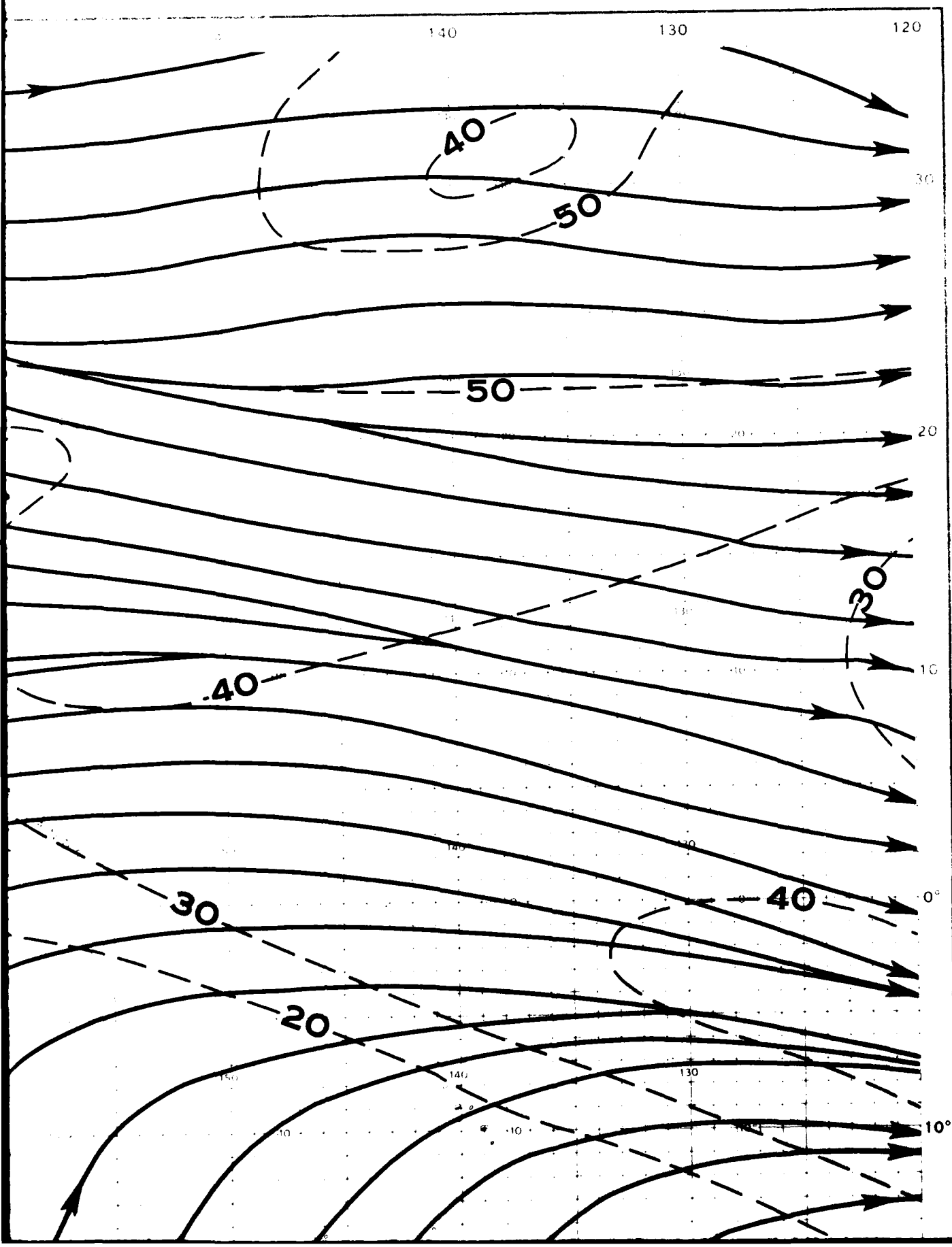
AD-A141 484 MEAN UPPER TROPOSPHERIC FLOW OVER THE GLOBAL TROPICS VOLUME 2(U) AIR WEATHER SERVICE SCOTT AFB IL J C SADLER ET AL. JAN 84 AWS/TR-83/002-VOL-2 6/6

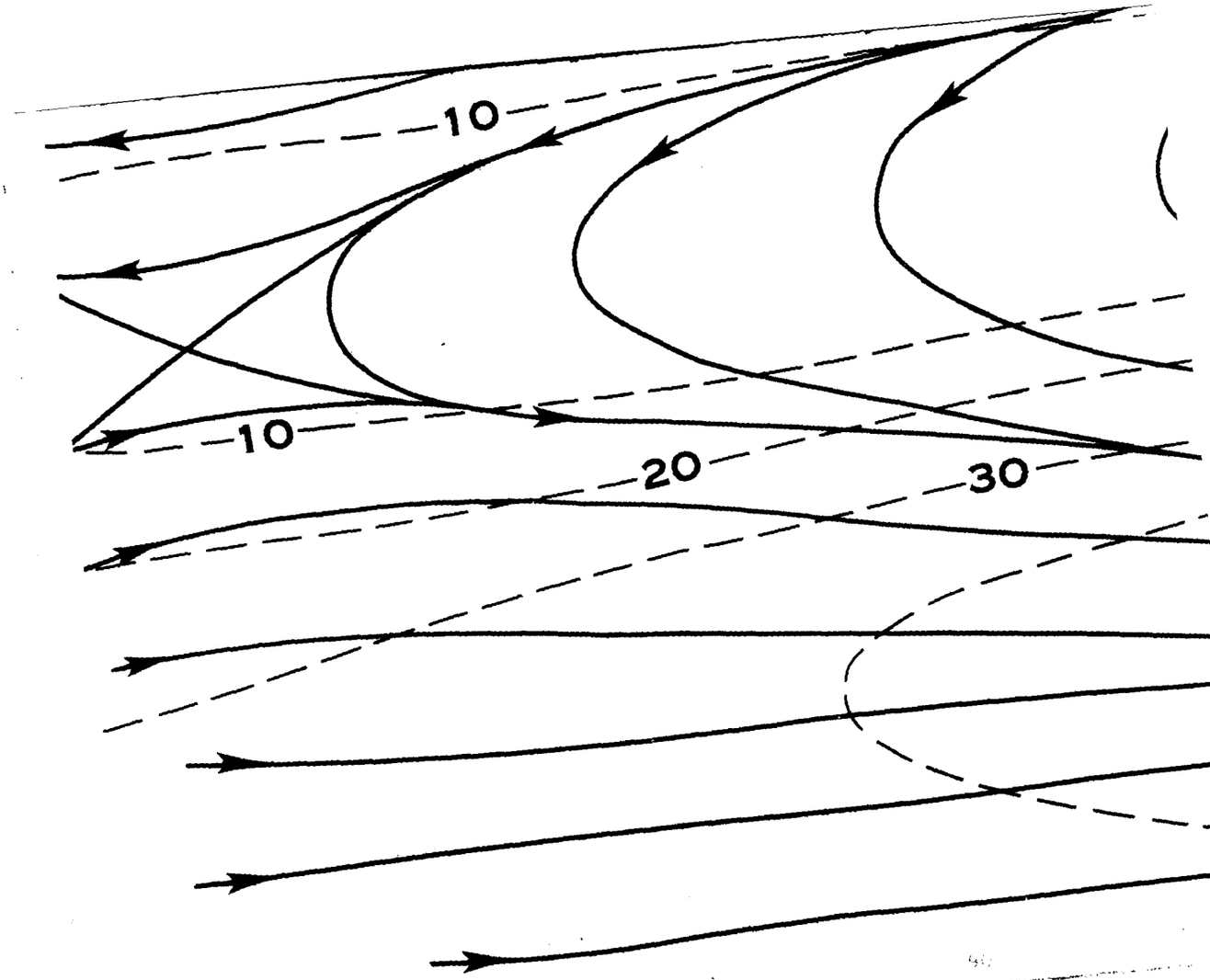
UNCLASSIFIED SBI-AD-E850 690 F/G 4/2 NL

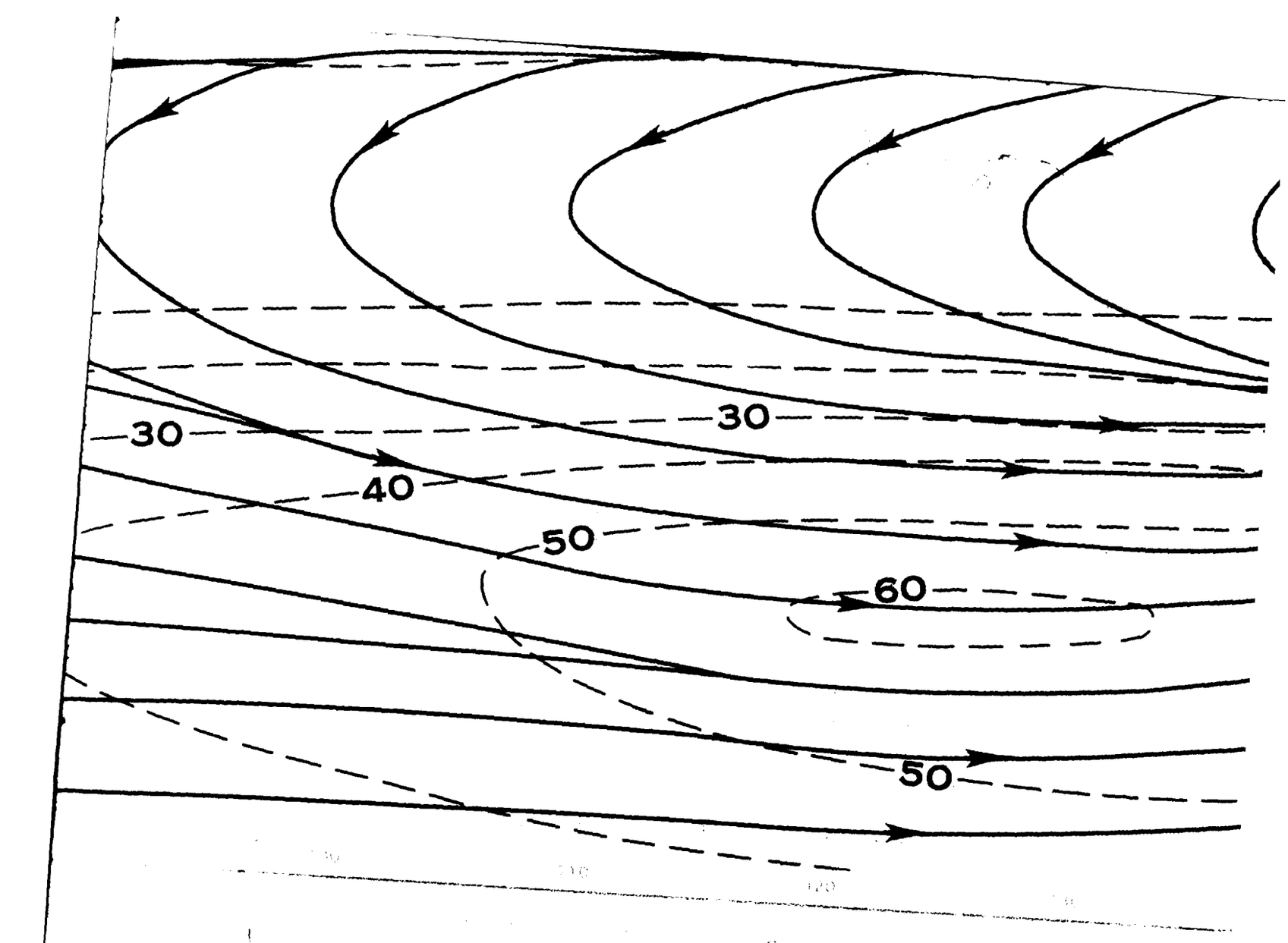




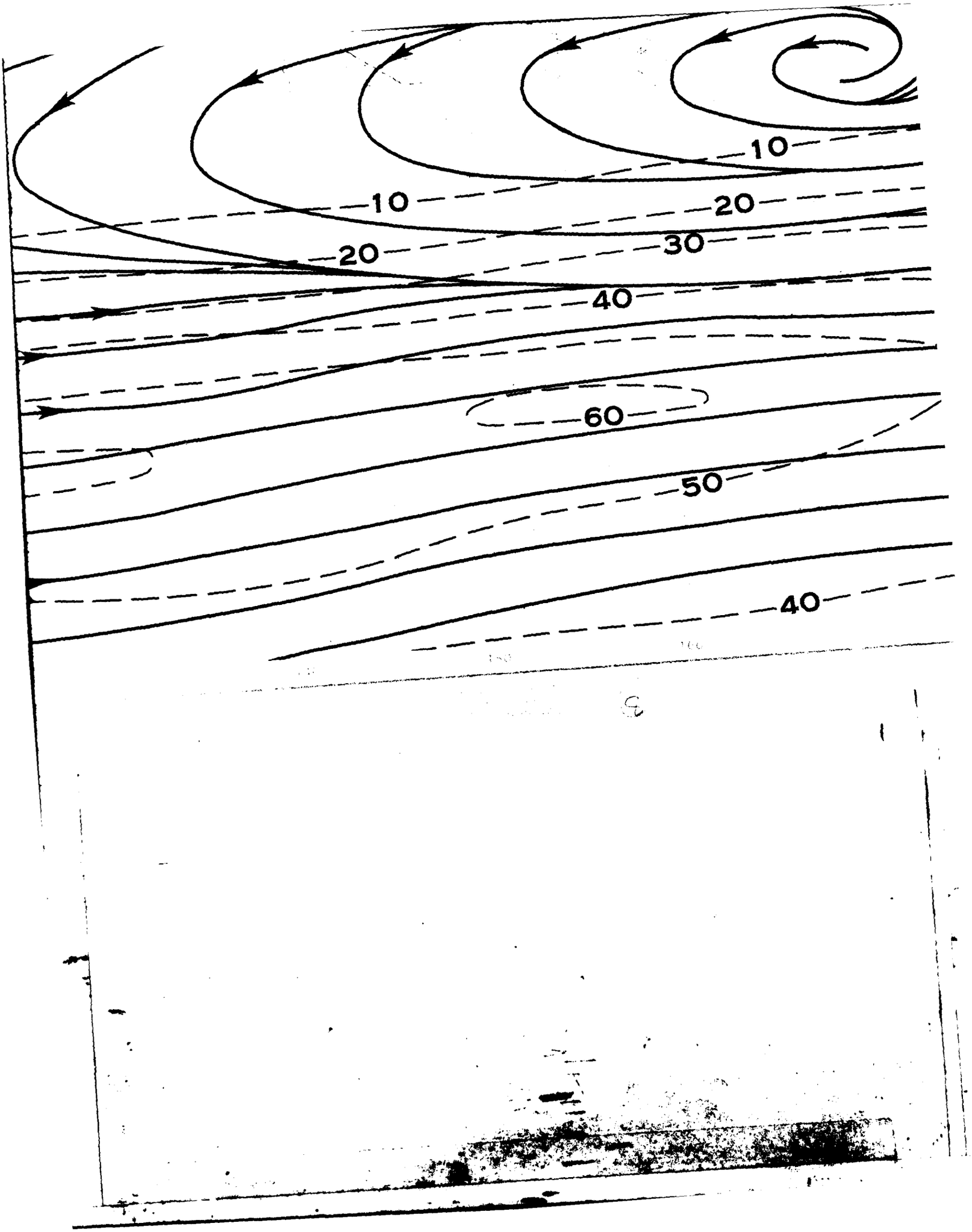

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

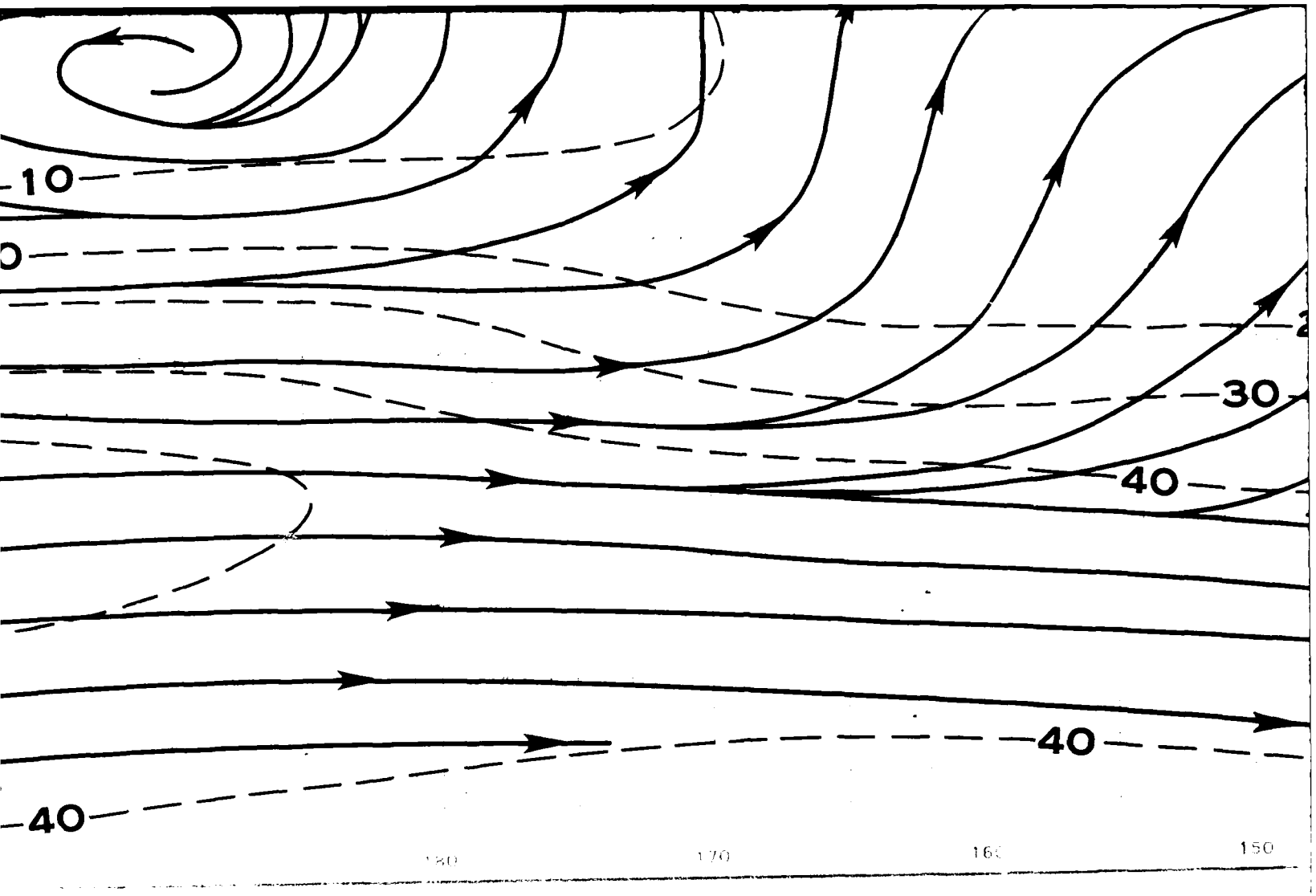

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130
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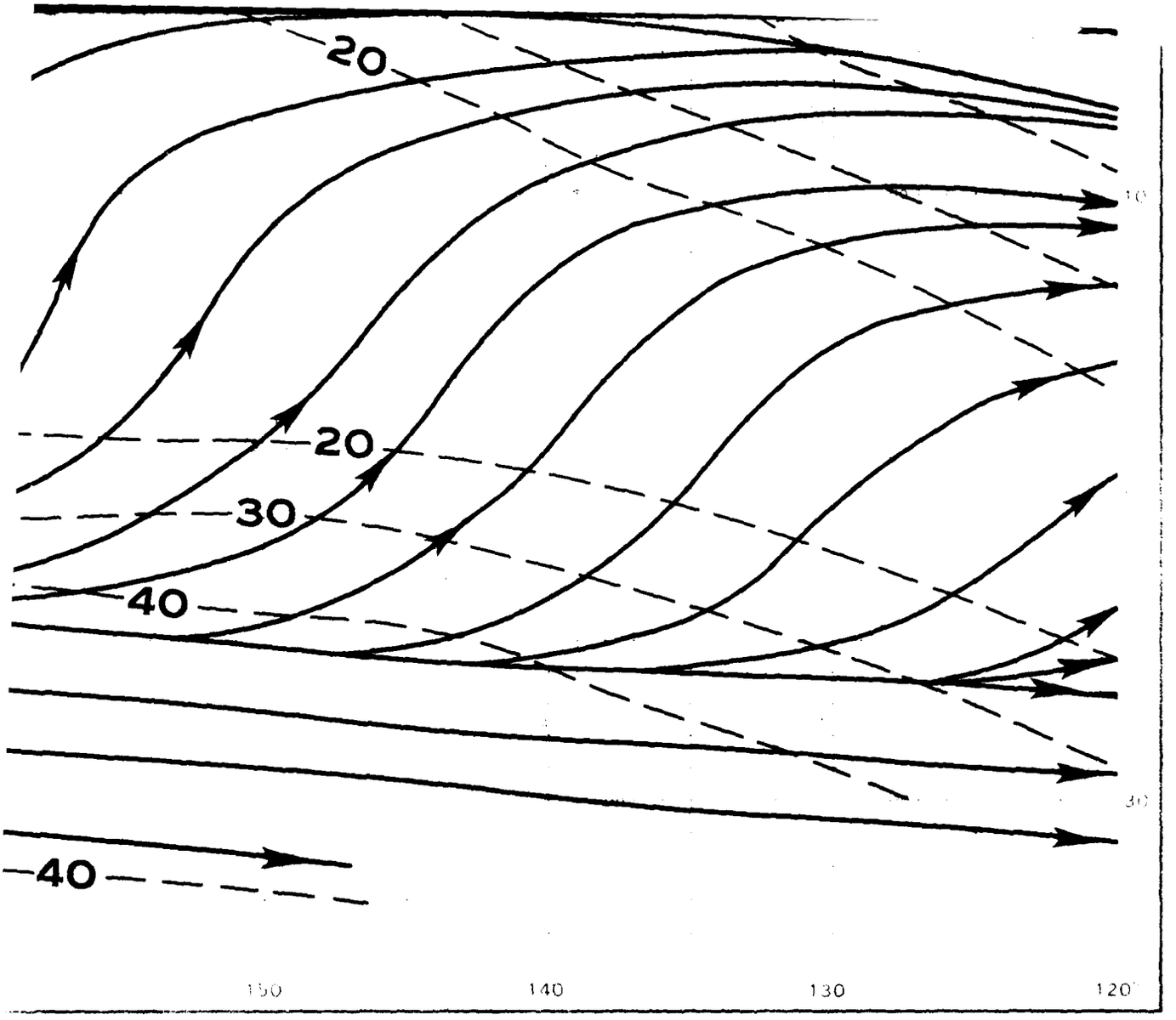

10
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(7)


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180
170
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150




MULW-212E

END

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