

DTIC FILE COPY

2
USAFETAC/PR-88/003

AD-A203 961



UPPER-WIND CLIMATOLOGY

FOR
CONUS

by

MSgt Susan Reyes-Sauter

NOVEMBER 1988



21 FEB 1989

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

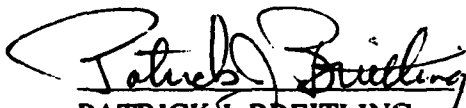
89 2 1 028

USAF
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

Scott Air Force Base, Illinois, 62225-5438

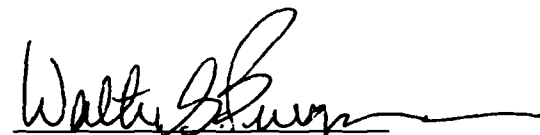
REVIEW AND APPROVAL STATEMENT

USAFETAC/PR-88/003, *Upper-Wind Climatology for CONUS*, November 1988, has been reviewed and is approved for public release. There is no objection to unlimited distribution of this document to the public at large, or by the Defense Technical Information Center (DTIC) to the National Technical Information Service (NTIS).



PATRICK J. BREITLING
Chief Scientist

FOR THE COMMANDER



WALTER S. BURGMANN
Scientific and Technical Information
Program Manager

REPORT DOCUMENTATION PAGE

- 1a. Report Security Classification: UNCLASSIFIED
3. Distribution/Availability of Report: Approved for public release; distribution is unlimited.
4. Performing Organization Report Number: USAFETAC/PR-88/003
- 6a. Name of Performing Organization: USAF Environmental Technical Applications Center (USAFETAC)
- 6b. Office Symbol: USAFETAC/ECS
- 6c. Address: Scott AFB, IL 62225-5438
11. Title: Upper-Wind Climatology for CONUS (Unclassified)
- 13a. Type of Report: Project Report
14. Date of Report: November 1988
15. Page Count: 115
17. COSATI Codes: Field--04, Group--02
18. Subject Terms: CLIMATOLOGY, WEATHER, WIND, UPPER AIR, UPPER WINDS. UNITED STATES
19. Abstract: Report consists of 12 sets (one set for each month) of CONUS maps with upper-wind speed/direction plots at every 5 degrees of latitude and longitude. Winds are plotted at nine levels, starting at 5,000 feet MSL and ending at 45,000 feet MSL. Database used was the Air Force Global Weather Central's SADS (Summarized Analysis Data Set), period of record 1977-1982.
20. Distribution/Availability of Abstract: Same as report.
21. Abstract Security Classification: UNCLASSIFIED
- 22a. Name of Responsible Individual: MSgt Susan Reyes-Sauter
- 22b. Telephone: 618 256-3543 A576-3543 22c. Office Symbol: USAFETAC/ECS

PREFACE

This report documents work done on Project Number 805-22 for the Centralized Army Aviation Scheduling Office (CAASO) through Det 2, 5WS, Ft Belvoir, VA. It consists of 12 sets (one for each month) of CONUS maps with upper wind speed/direction plots at every 5 degrees of latitude and longitude. Winds are plotted at nine levels, starting at 5,000 feet MSL and ending at 45,000 feet MSL.* Standard wind barbs are used, with speeds in knots. The database used was the Air Force Global Weather Central's SADS (Summarized Analysis Data Set), with period of record 1977-1982.

The program used was USAFETAC's ECSDSPA, written by Airman Scott Pfender and quality-controlled by MSgt Susan Reyes-Sauter. ECSDSPA is a cataloged USAFETAC program that interpolates SADS data. The hard copy computer printouts that provided the data for each point plotted are on file with USAFETAC/LDE.

Maps were plotted by MSgt Reyes-Sauter, TSgt Michael Kinney, SSgt Heidi Tryon, and SSgt Jerry Farley. Maps were quality-controlled by TSgt Kinney and SSgt Farley.

*The original data was in feet AGL; it was converted to MSL using the following table, in which row values are degrees of north latitude and columnar values are degrees of west longitude.

<u>50° north</u>	<u>45° north</u>	<u>40° north</u>	<u>35° north</u>
125 = 0	125 = 0	125 = 0	125 = 0
120 = 2,000	120 = 3,000	120 = 4,500	120 = 1,500
115 = 4,000	115 = 7,500	115 = 6,000	115 = 2,500
110 = 2,500	110 = 7,000	110 = 5,500	110 = 6,000
105 = 2,000	105 = 3,500	105 = 5,500	105 = 5,500
100 = 1,500	100 = 2,000	100 = 2,500	100 = 2,000
95 = 1,500	95 = 1,000	95 = 1,000	95 = 1,000
90 = 1,500	90 = 1,000	90 = 500	90 = 500
85 = 500	85 = 1,000	85 = 1,000	85 = 500
80 = 1,000	80 = 500	80 = 1,000	80 = 500
75 = 1,500	75 = 500	75 = 0	75 = 0
70 = 2,000	70 = 1,000	70 = 0	
	65 = 0		

CONTENTS

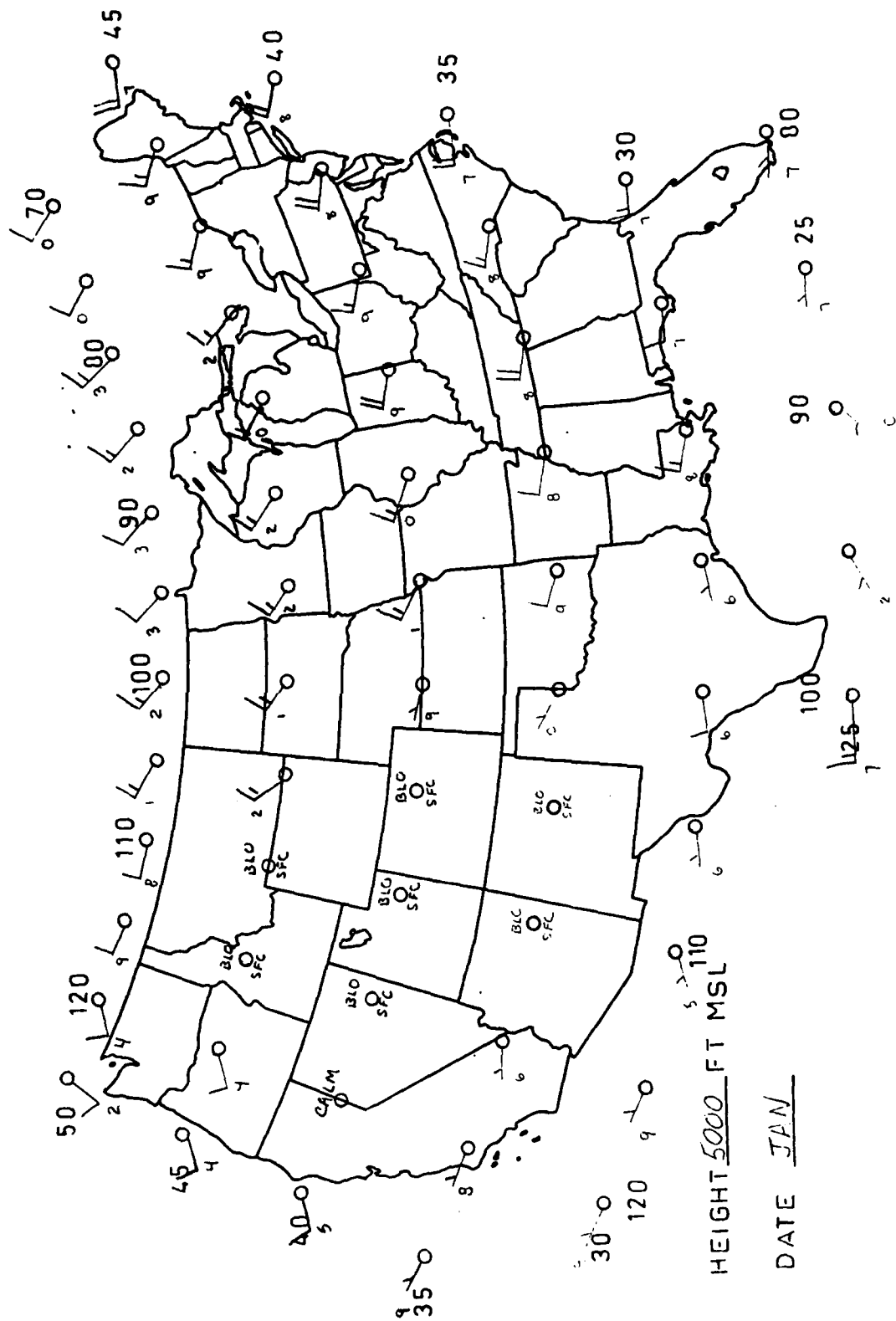
	Page
CONUS UPPER-WIND PLOTS--JANUARY	1
CONUS UPPER-WIND PLOTS--FEBRUARY	10
CONUS UPPER-WIND PLOTS--MARCH	19
CONUS UPPER-WIND PLOTS--APRIL.....	28
CONUS UPPER-WIND PLOTS--MAY	37
CONUS UPPER-WIND PLOTS--JUNE	46
CONUS UPPER-WIND PLOTS--JULY	55
CONUS UPPER-WIND PLOTS--AUGUST.....	64
CONUS UPPER-WIND PLOTS--SEPTEMBER	73
CONUS UPPER-WIND PLOTS--OCTOBER	82
CONUS UPPER-WIND PLOTS--NOVEMBER.....	91
CONUS UPPER-WIND PLOTS--DECEMBER	100

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By _____	
Distribution/	
Availability Codes	
and/or	
Special	

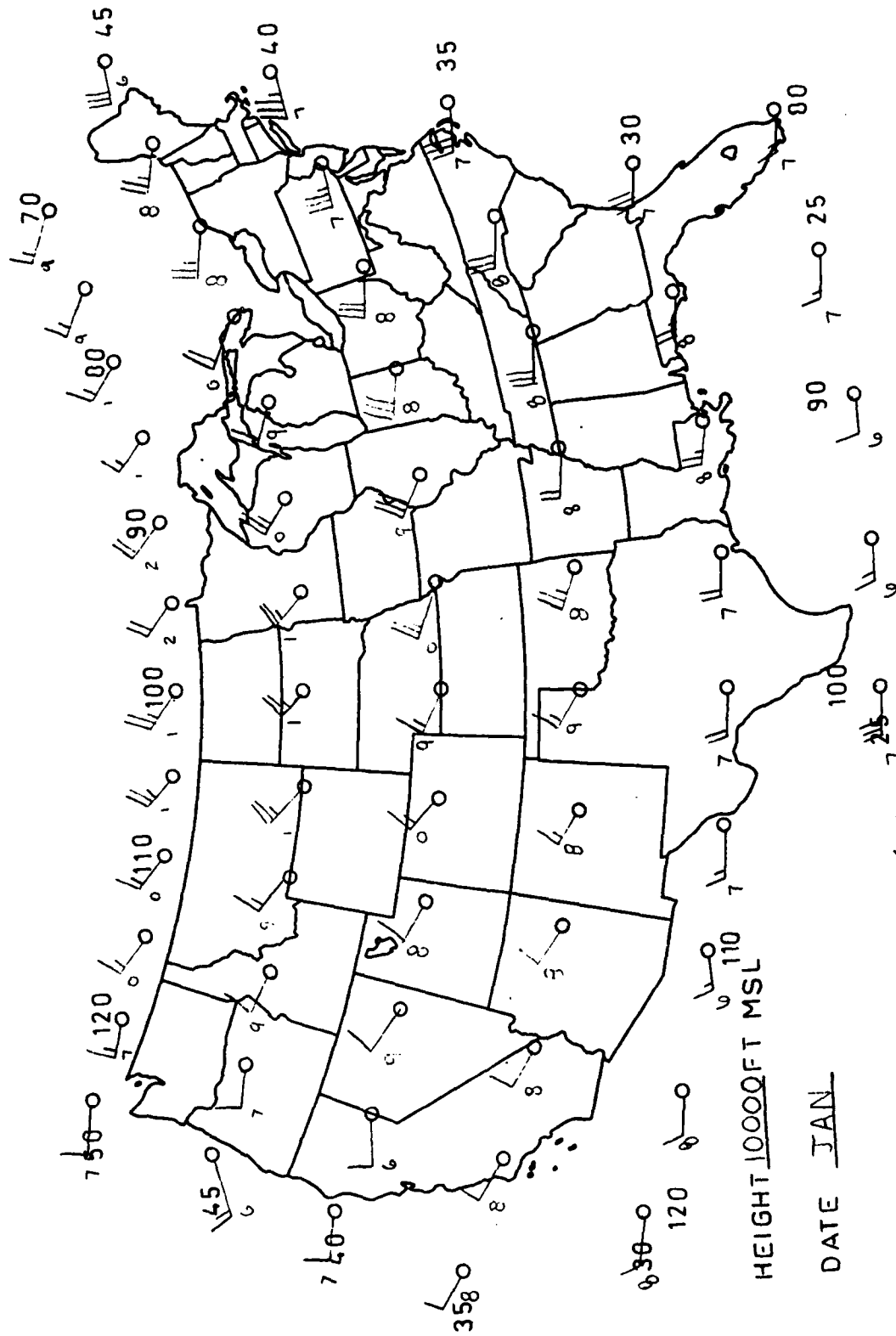
A-1



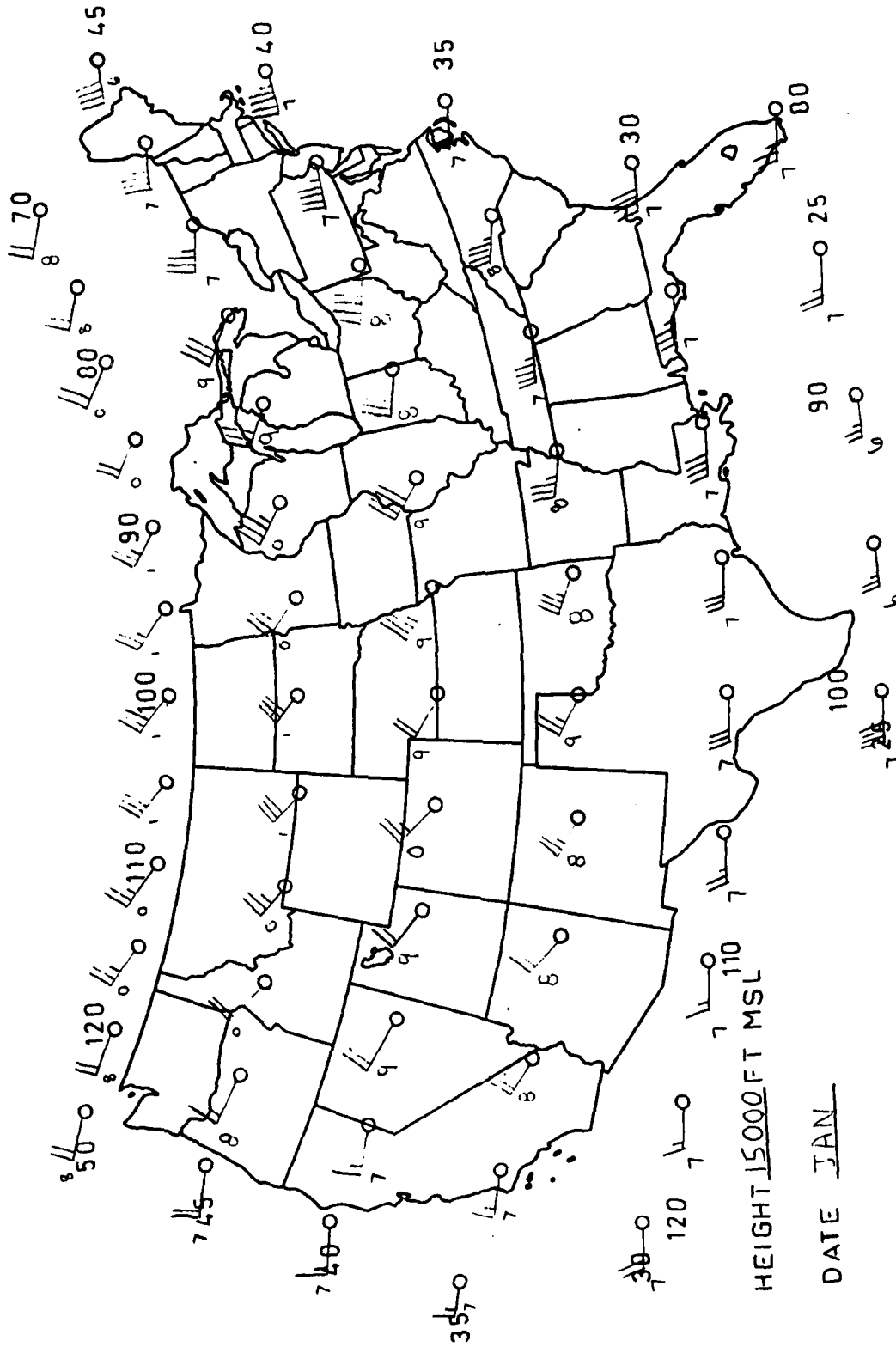
JANUARY, 5,000 FEET MSL



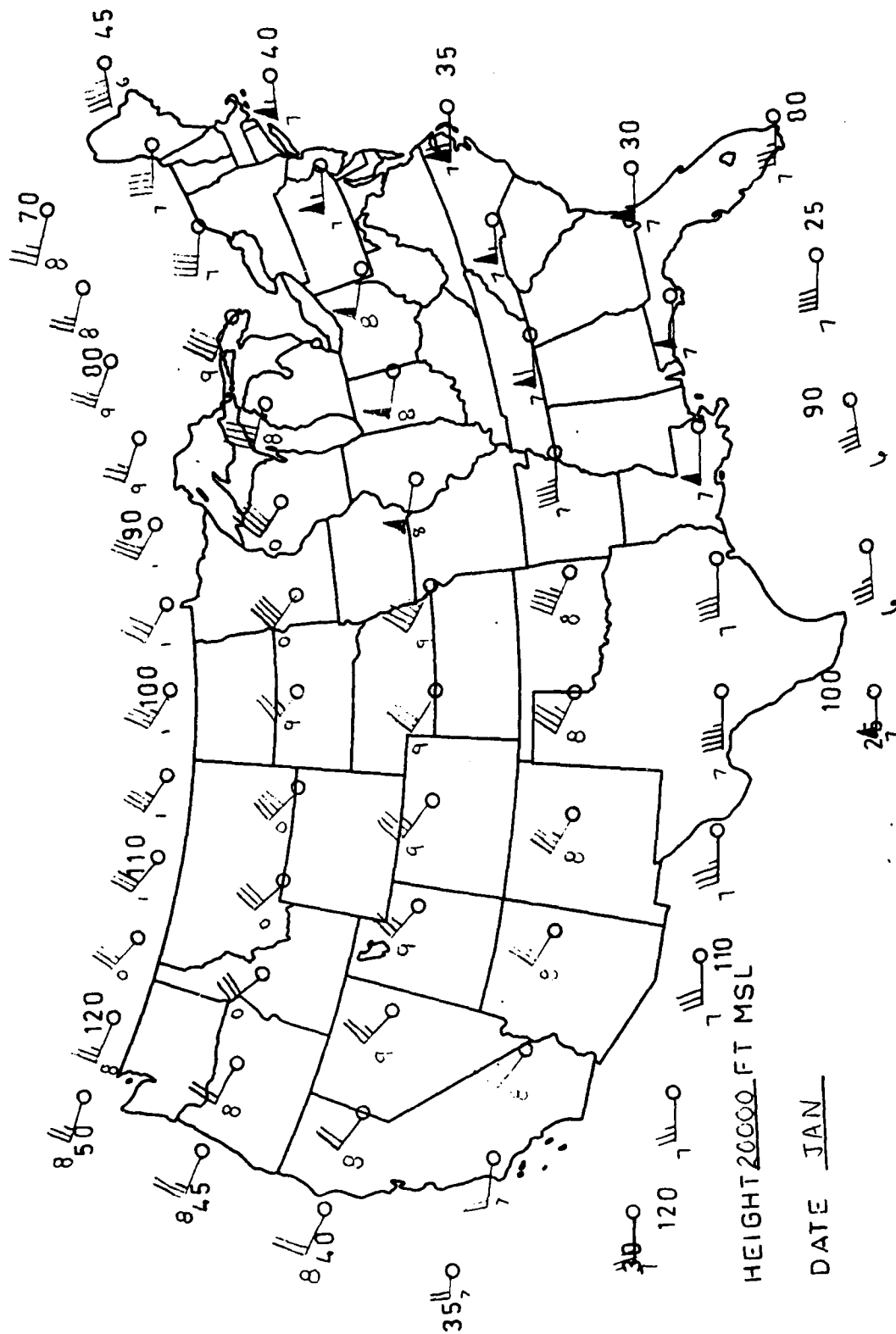
JANUARY, 10,000 FEET MSL



JANUARY, 15,000 FEET MSL



JANUARY, 20,000 FEET MSL



HEIGHT 2500 FT MSL

DATE JAN

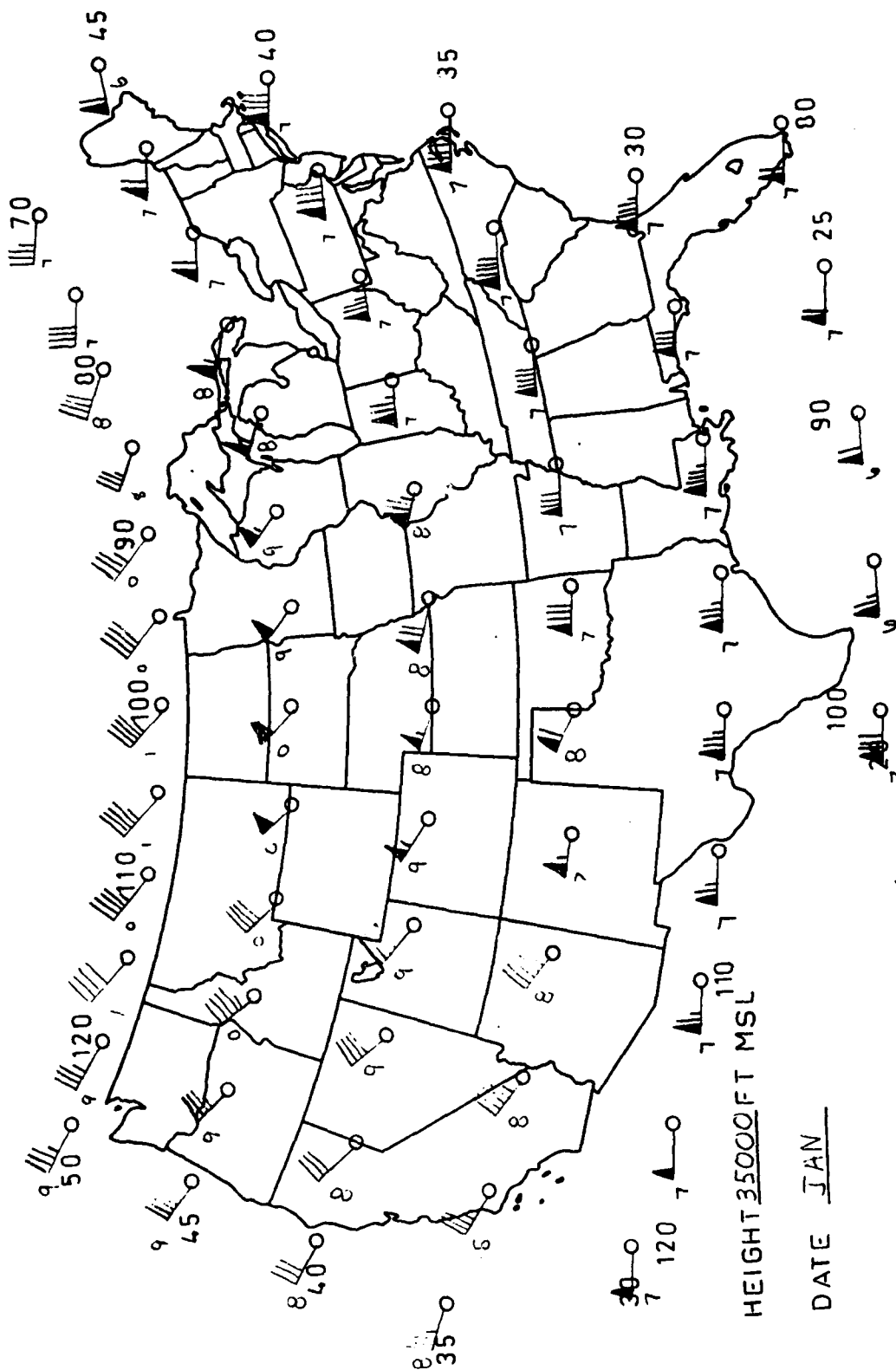
HEIGHT 25000 FT MSL

DATE TAN

HEIGHT 30000 FT MSL

DATE JAN

JANUARY, 35,000 FEET MSL



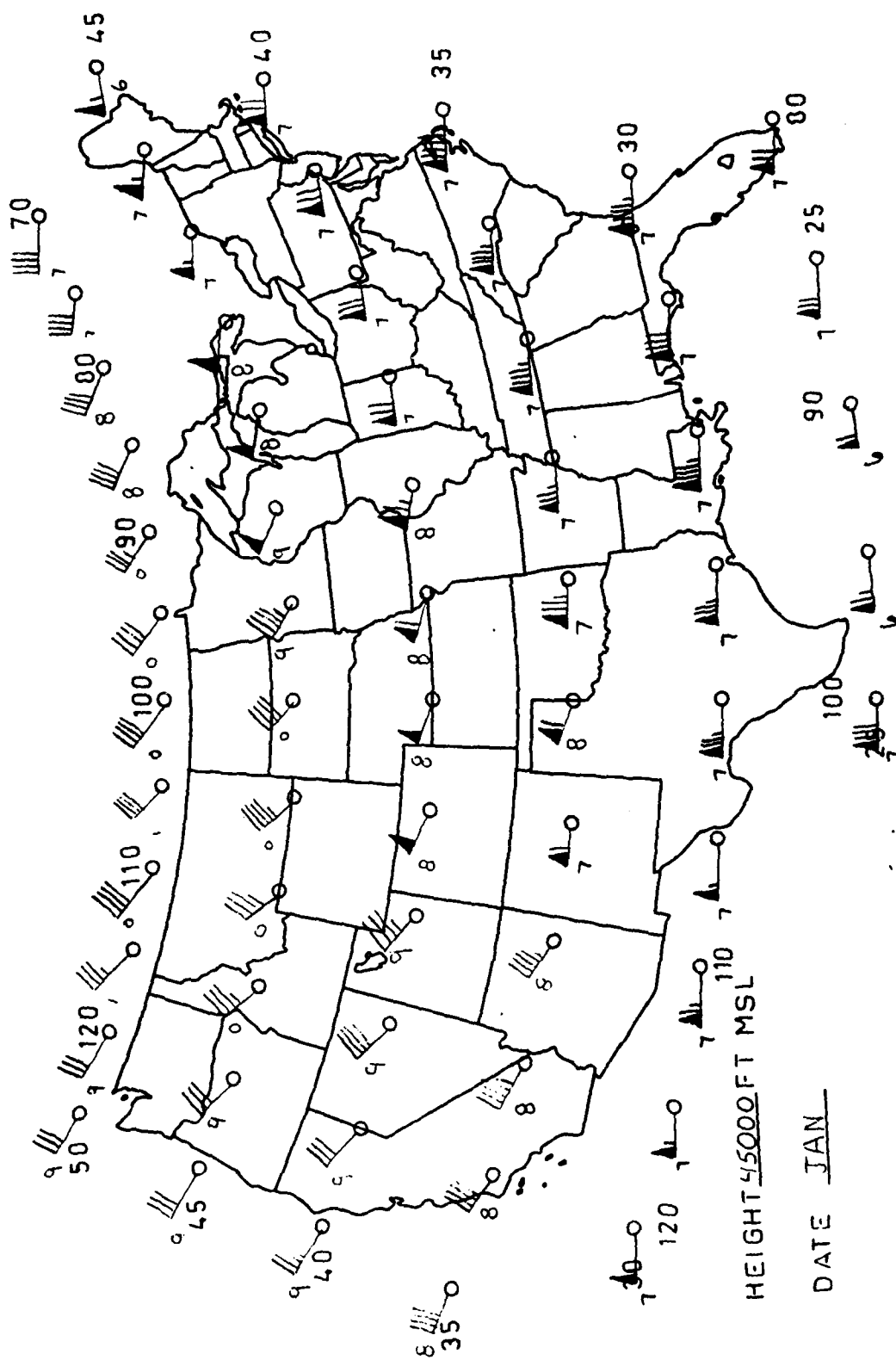
HEIGHT 40000 FT MSL

DATE JAN

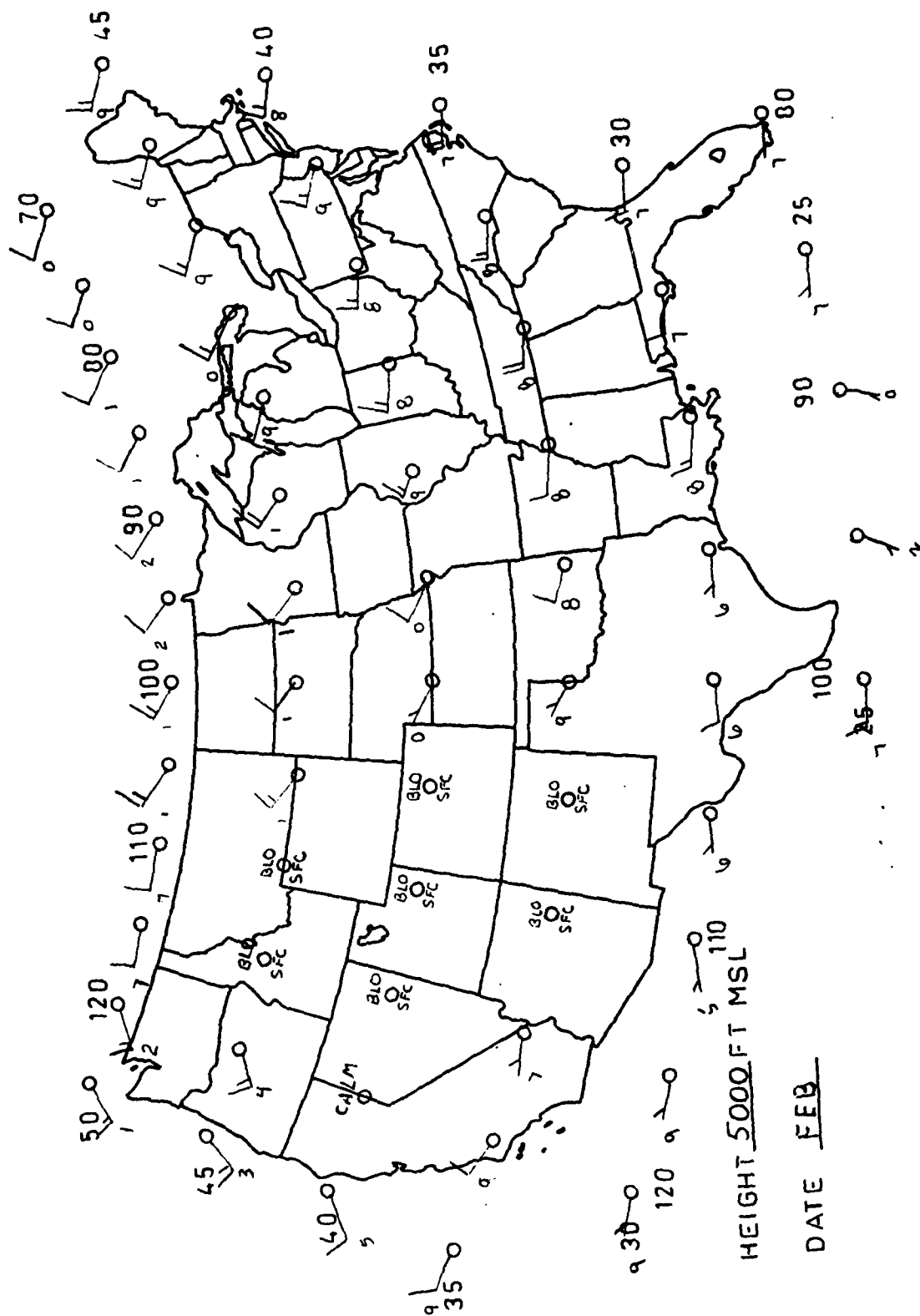
HEIGHT 40000 FT MSL

DATE JAN

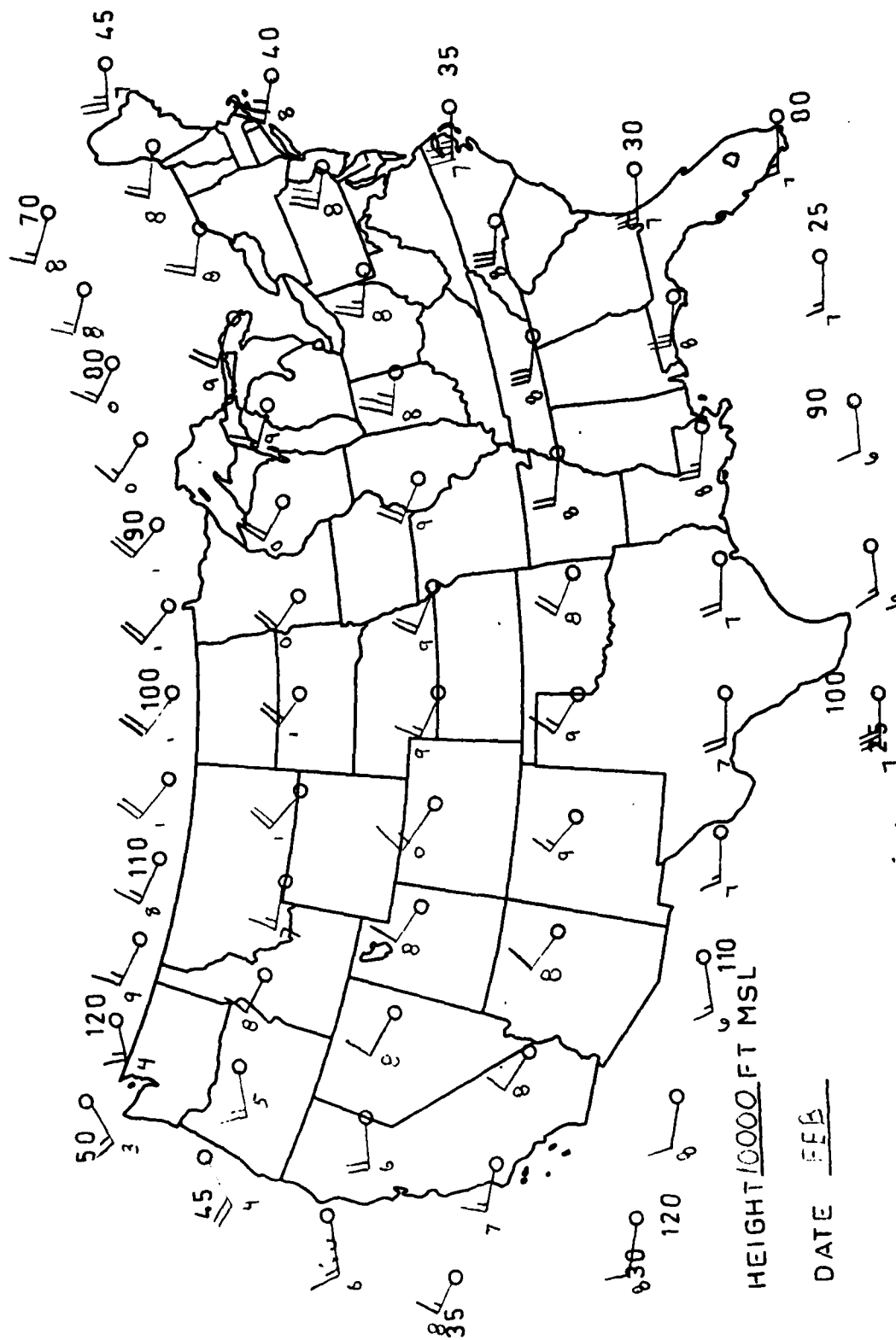
JANUARY, 45,000 FEET MSL



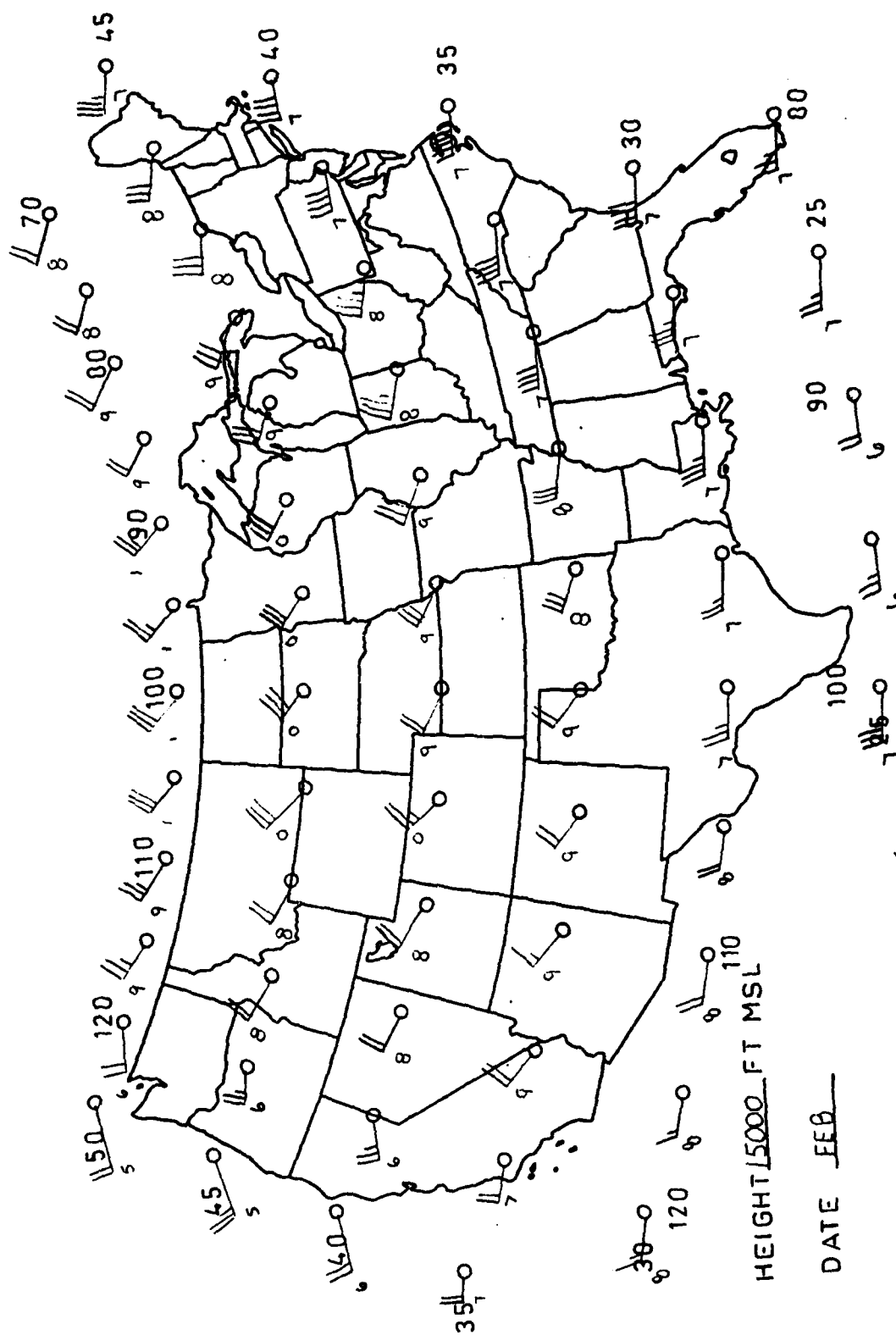
FEBRUARY, 5,000 FEET MSL



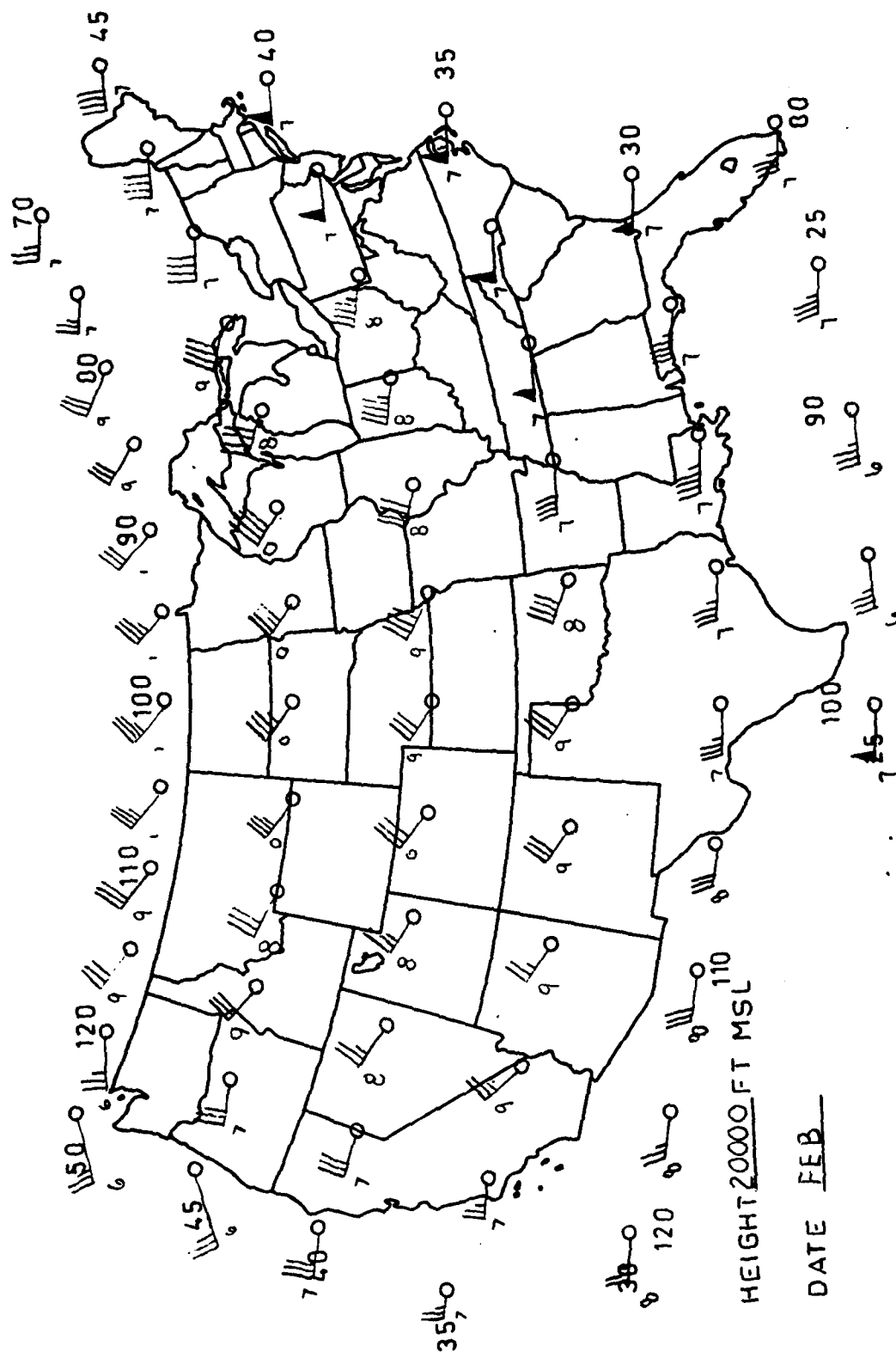
FEBRUARY, 10,000 FEET MSL



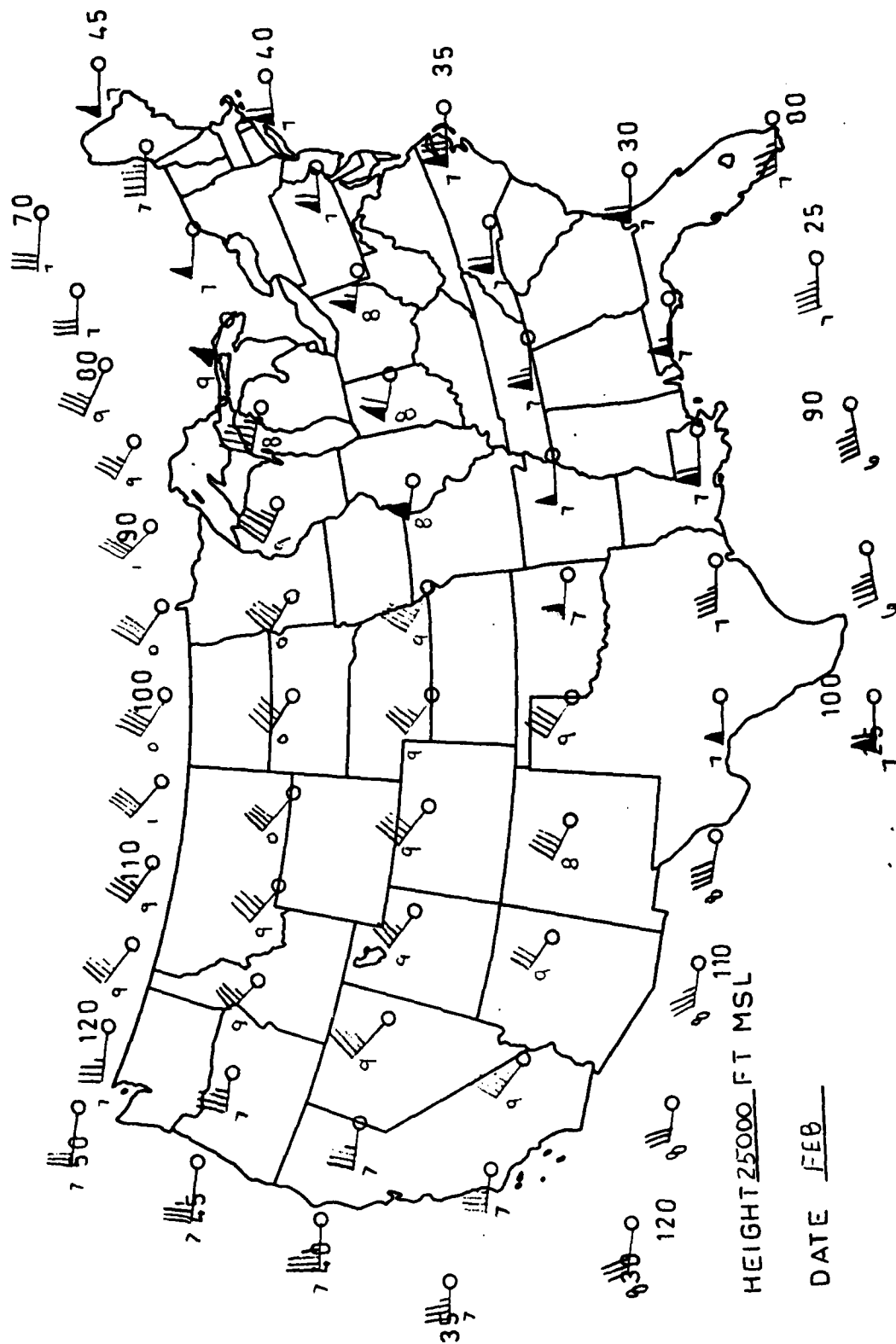
FEBRUARY, 15,000 FEET MSL



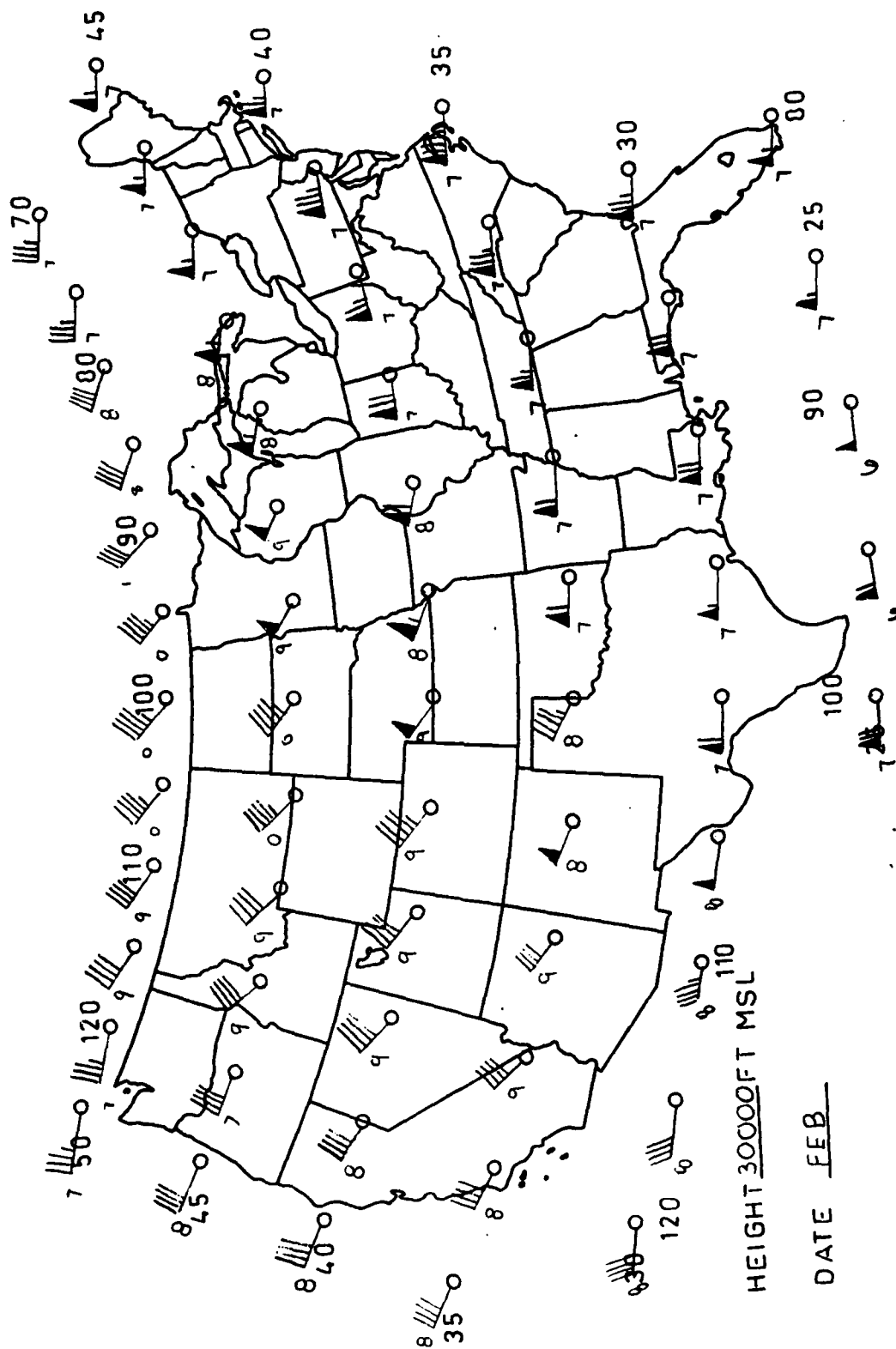
FEBRUARY, 20,000 FEET MSL



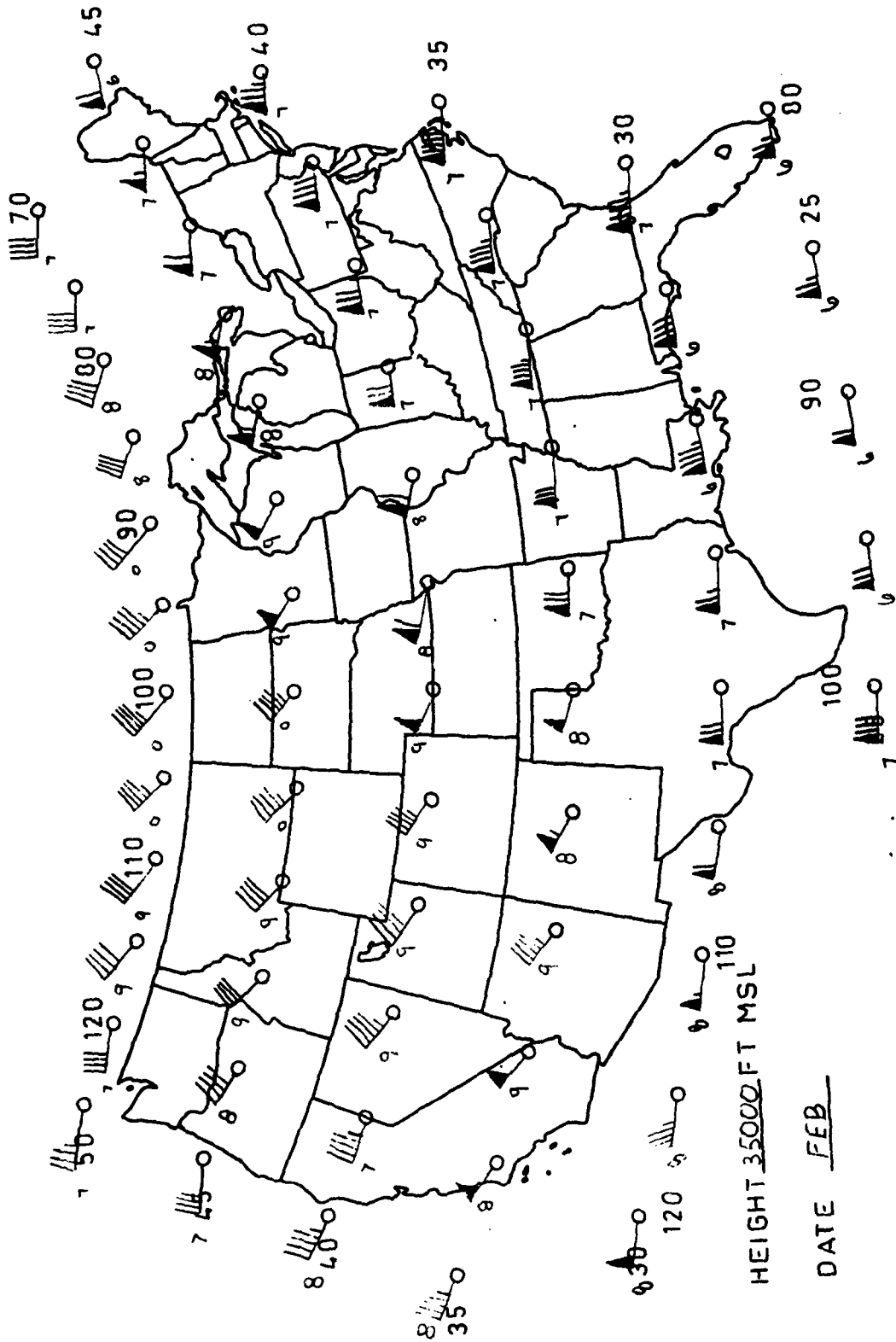
FEBRUARY, 25,000 FEET MSL



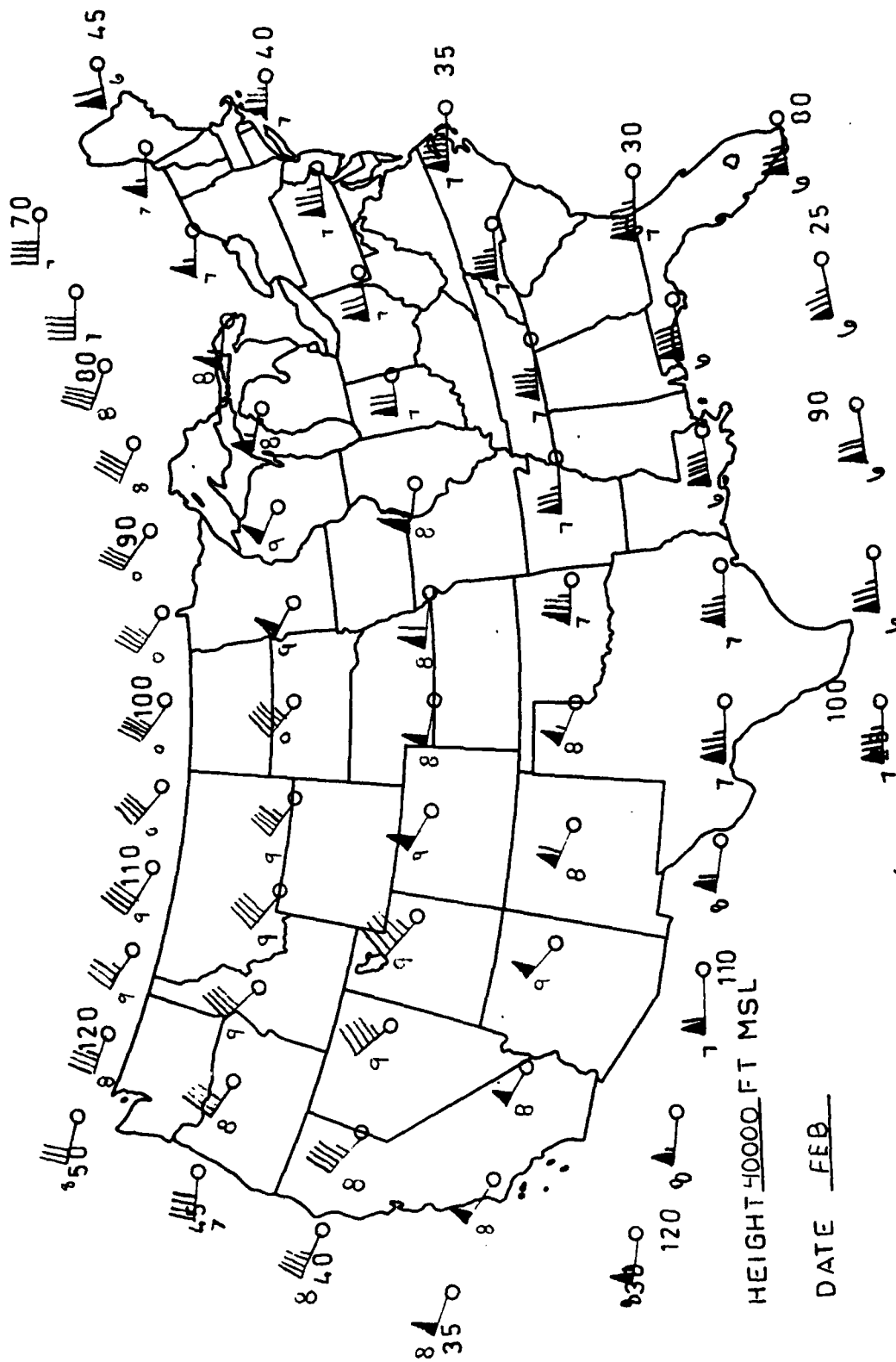
FEBRUARY, 30,000 FEET MSL



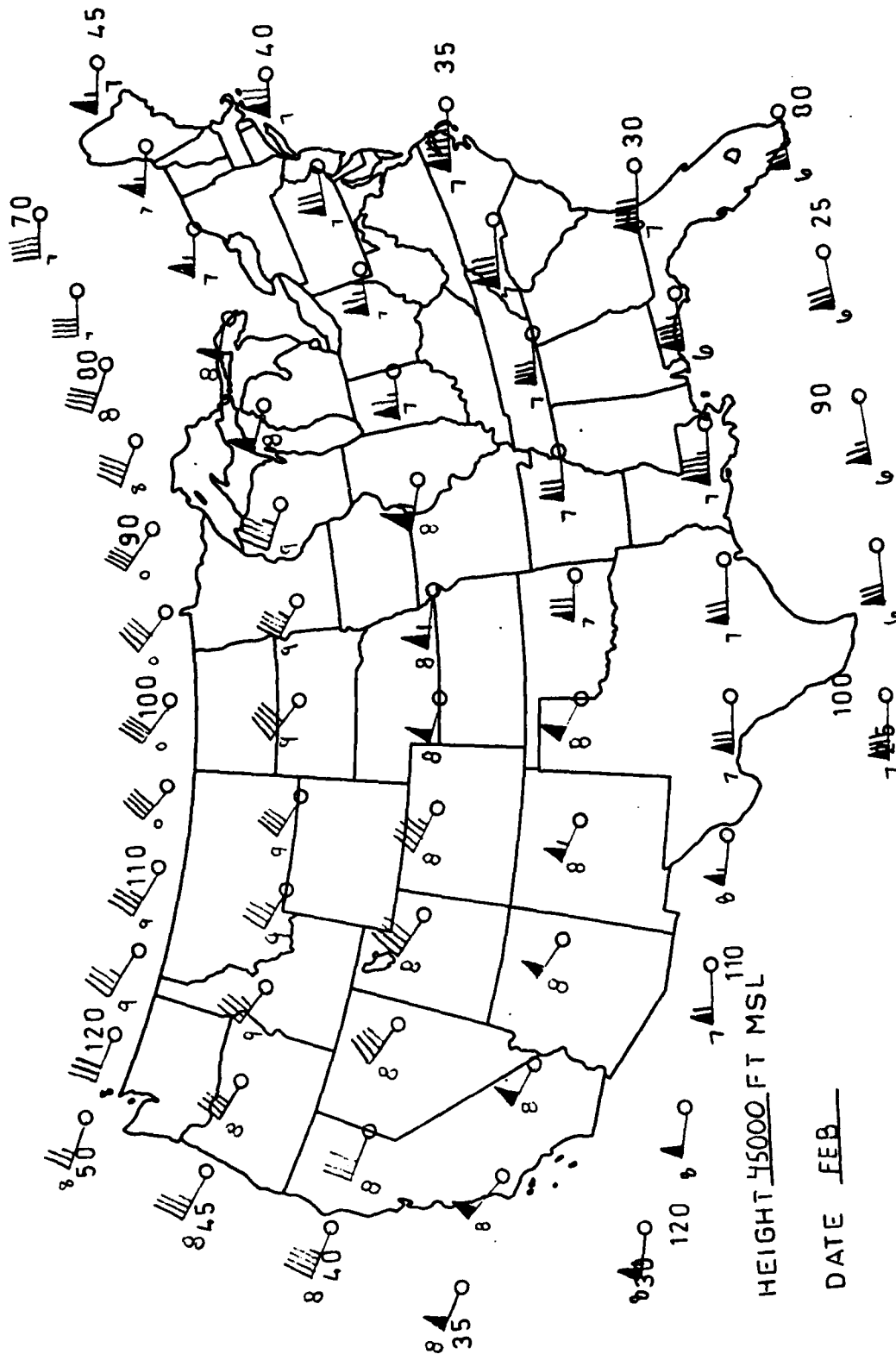
FEBRUARY, 35,000 FEET MSL



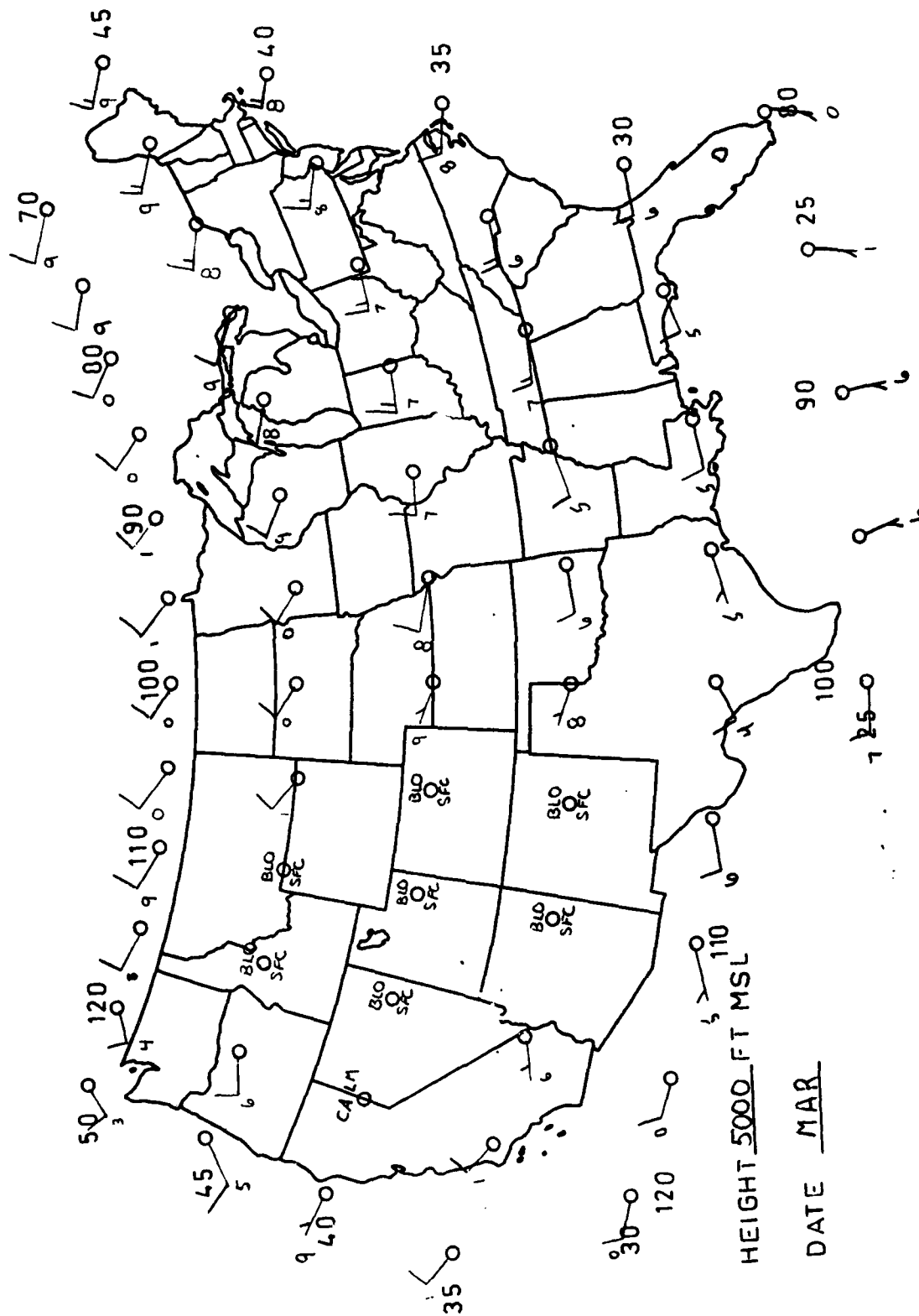
FEBRUARY, 40,000 FEET MSL



FEBRUARY, 45,000 FEET MSL



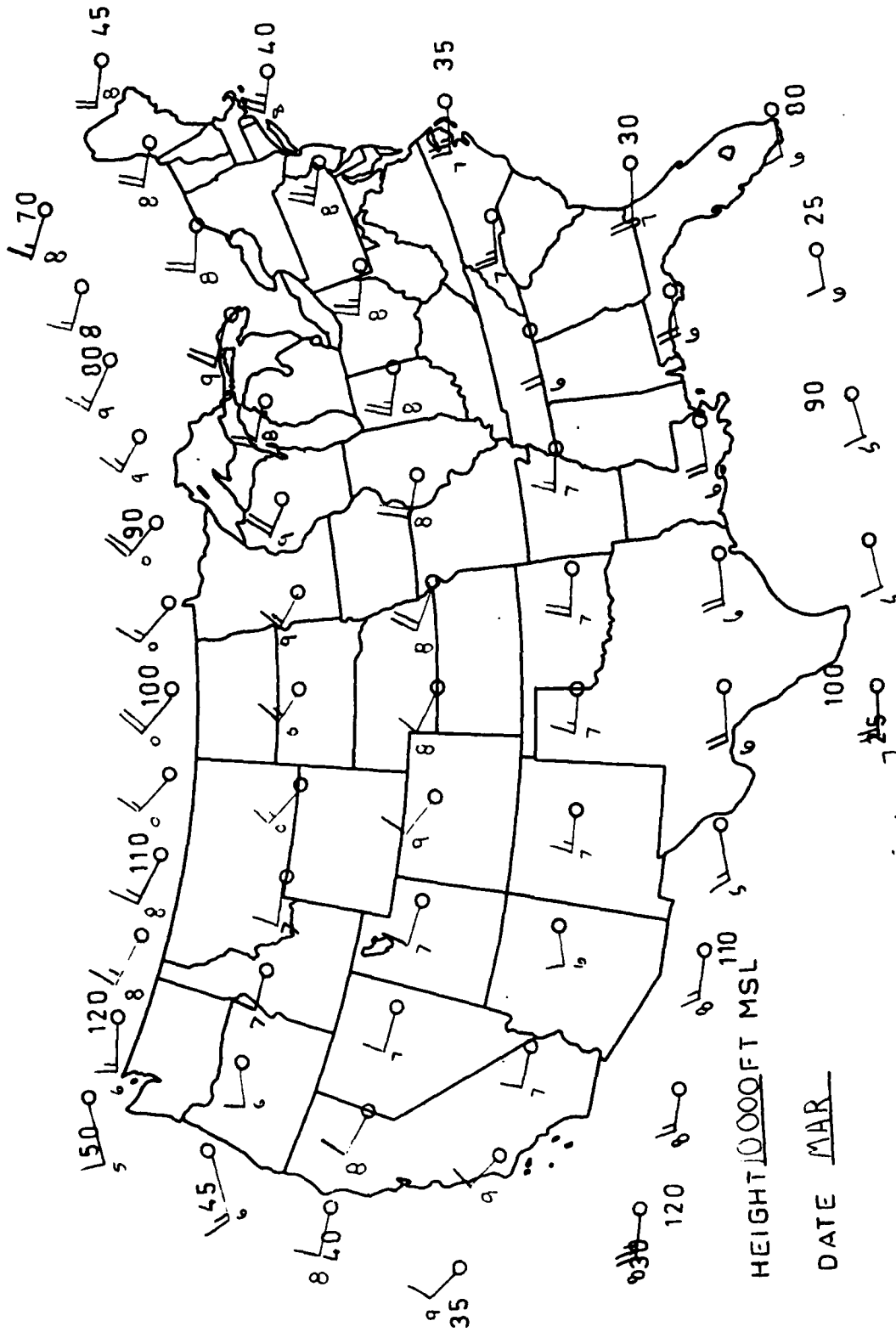
MARCH, 5,000 FEET MSL



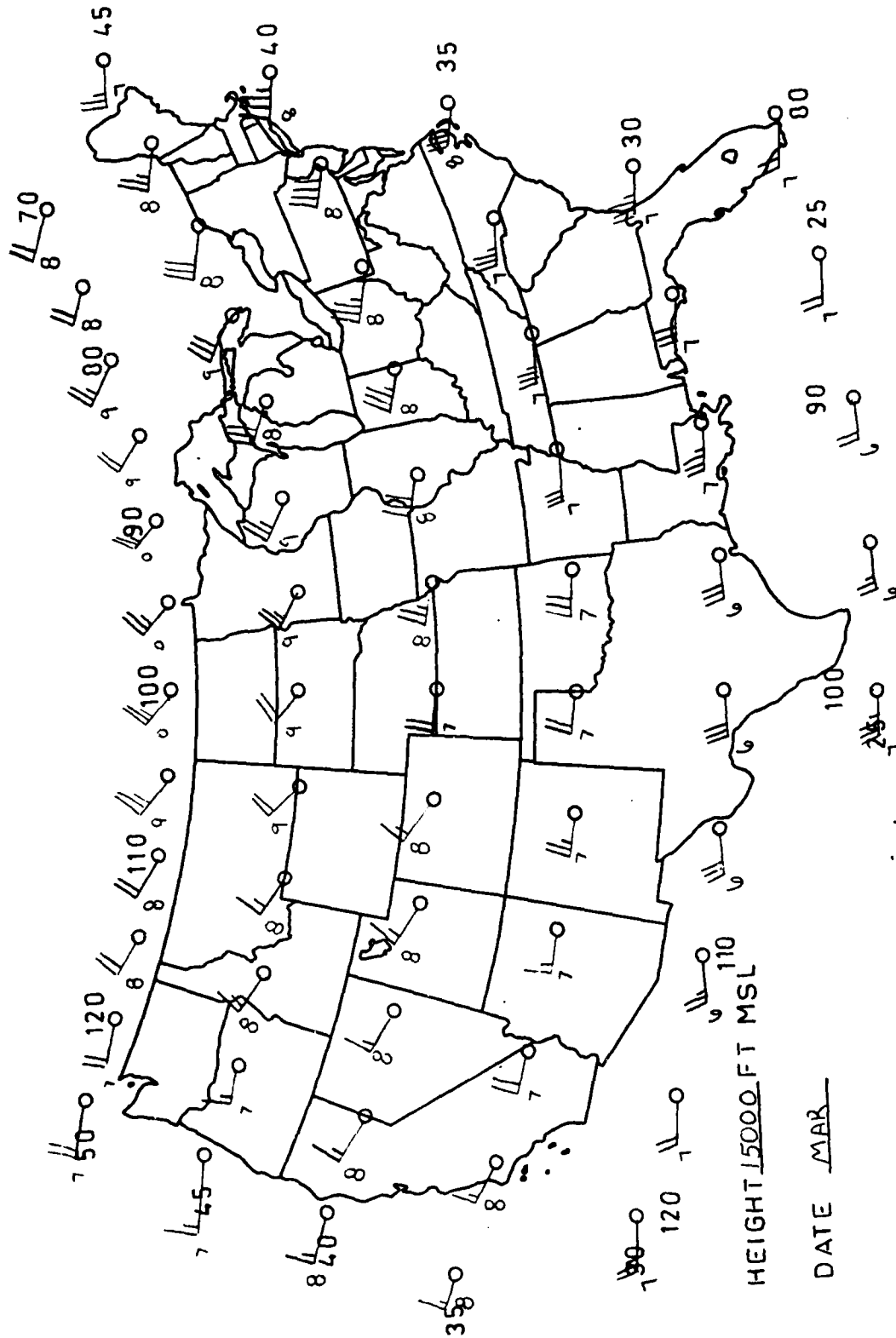
HEIGHT 5000 FT MSL

DATE MAR

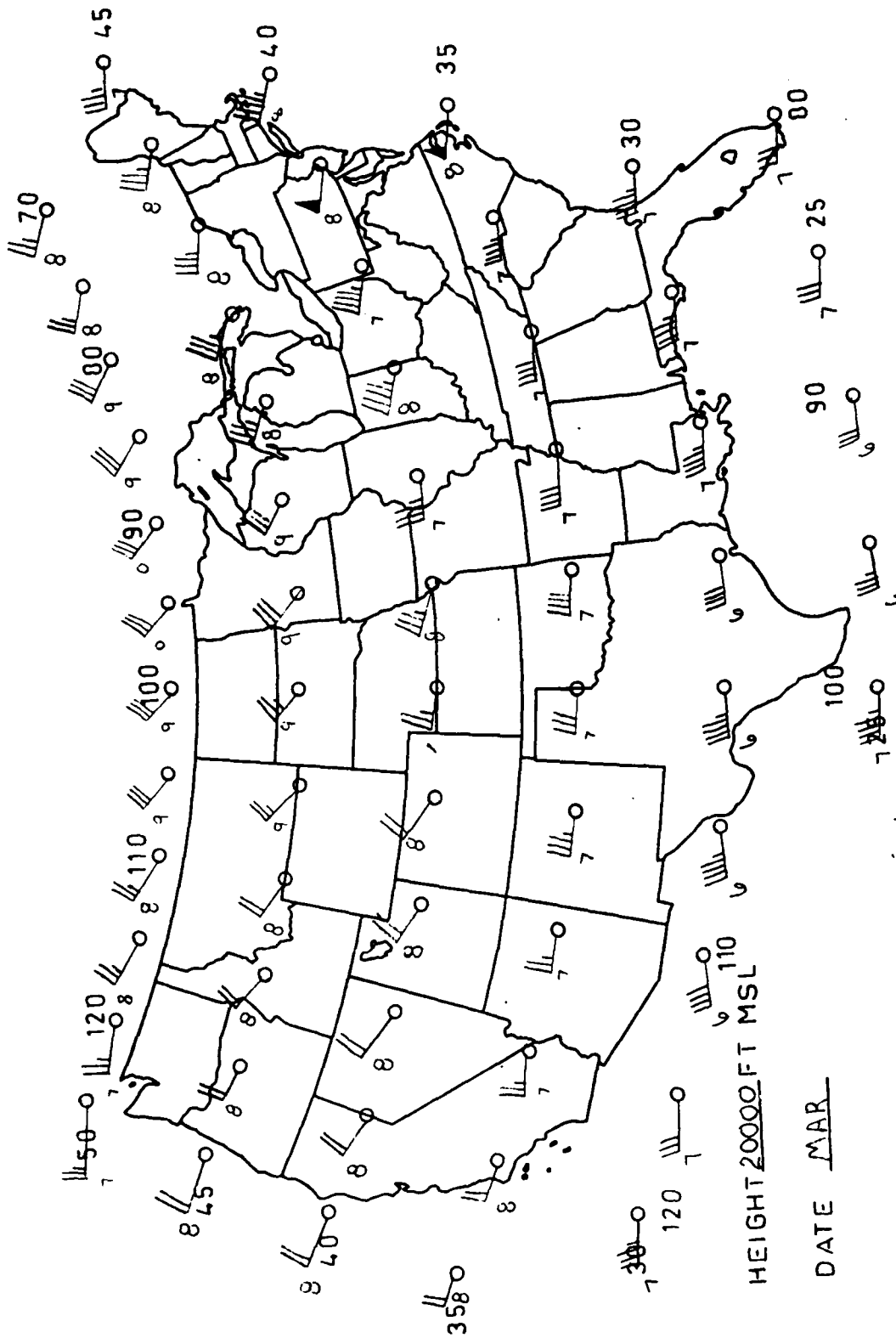
MARCH, 10,000 FEET MSL



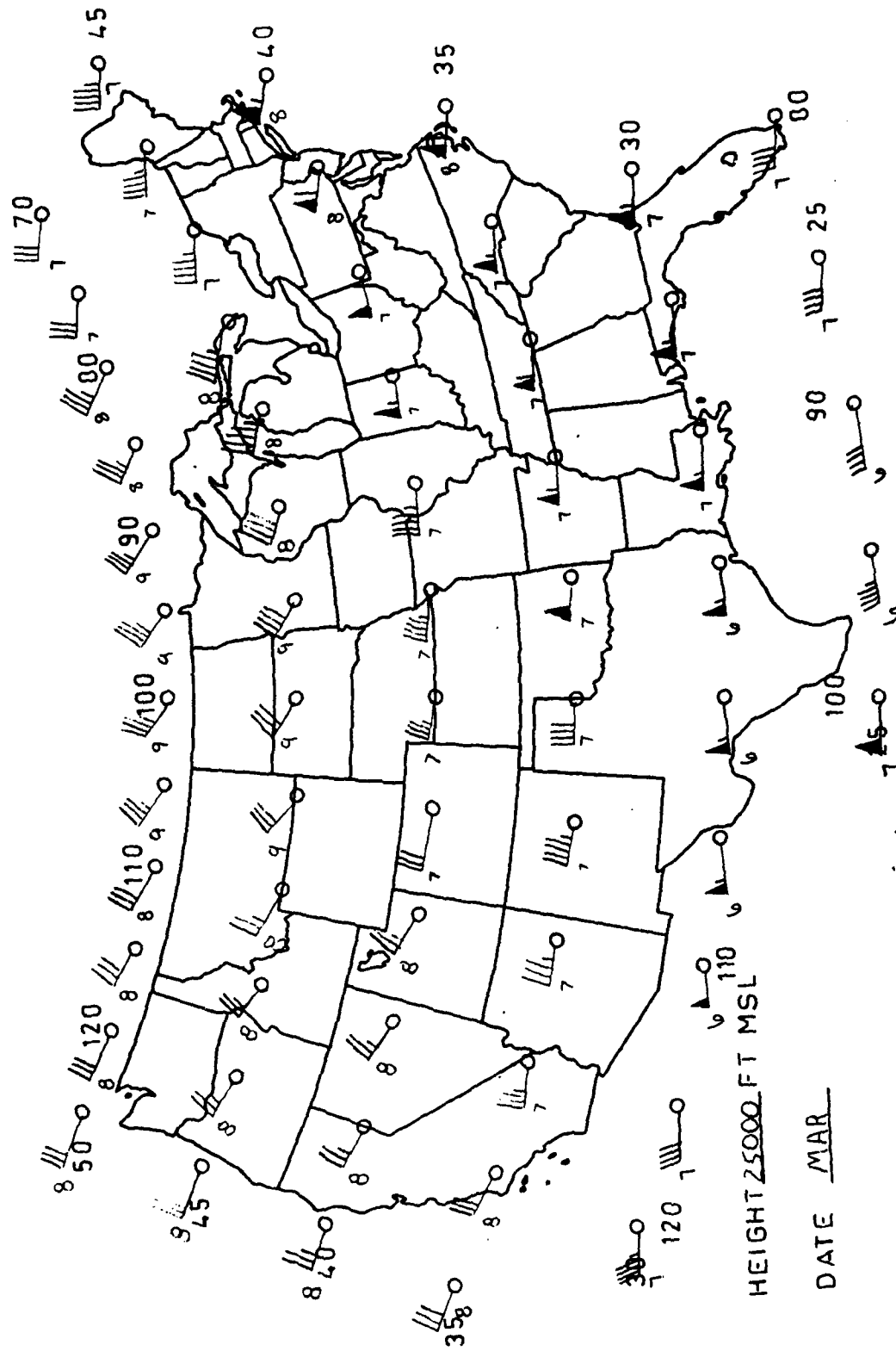
MARCH, 15,000 FEET MSL



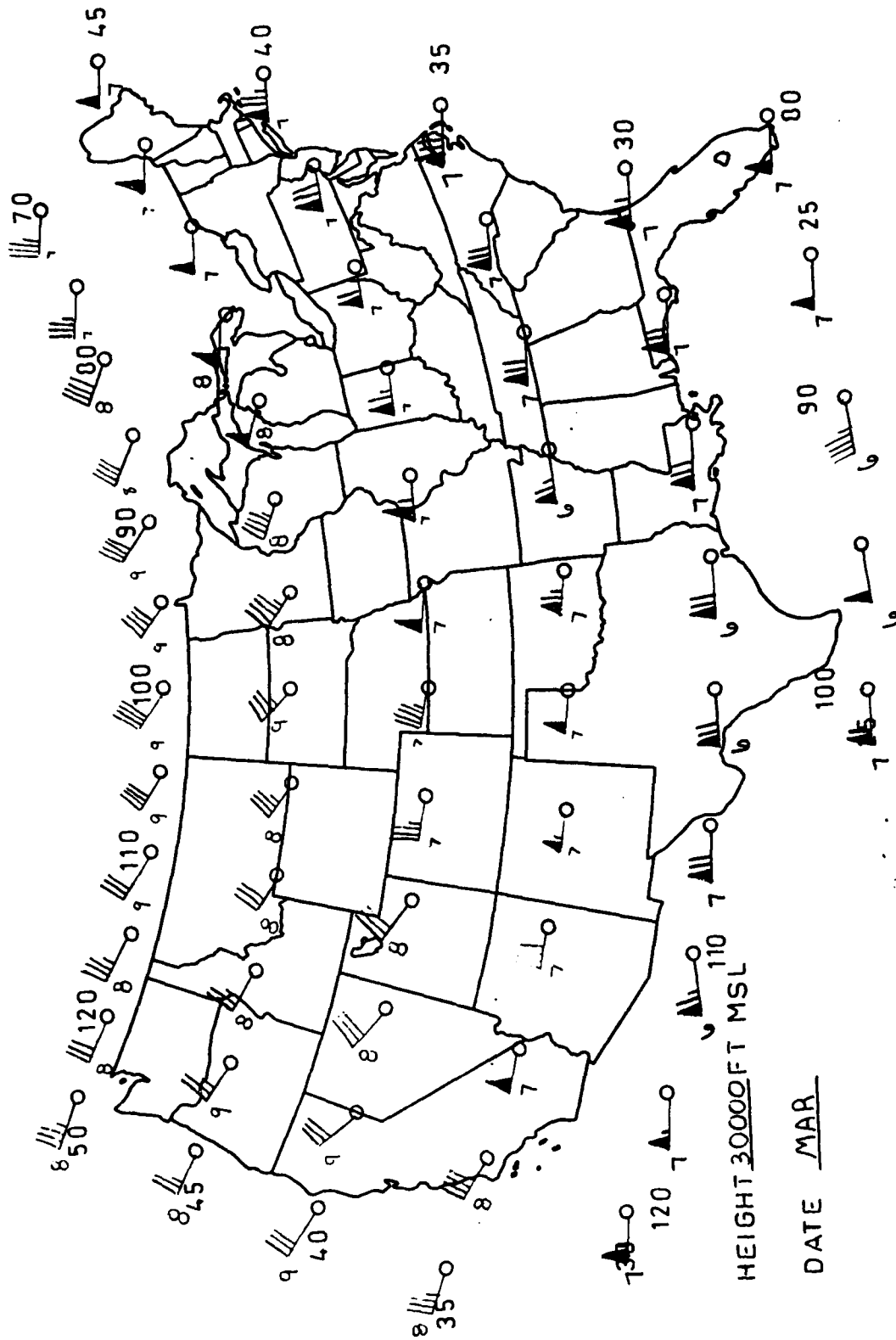
MARCH, 20,000 FEET MSL



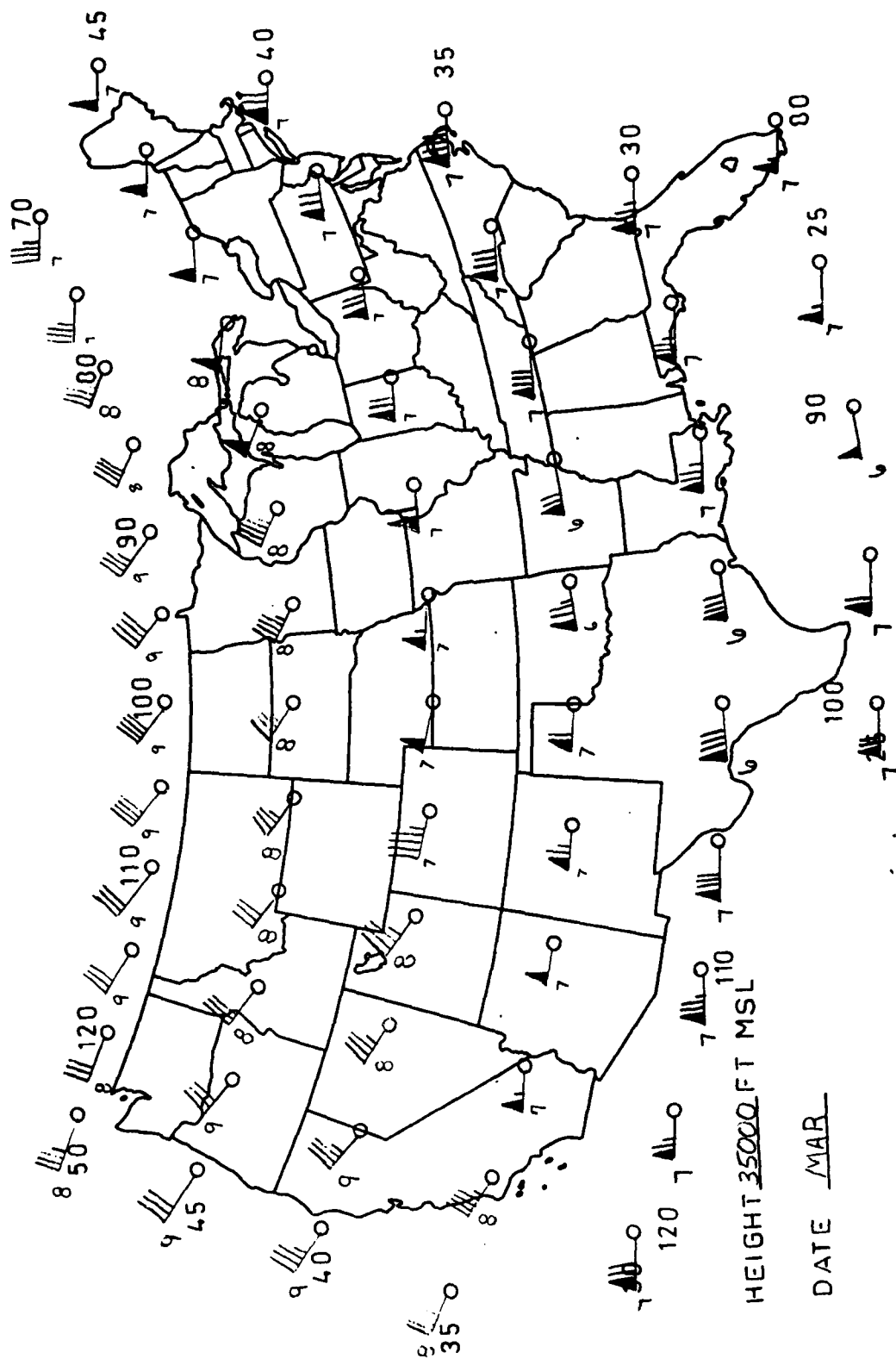
MARCH, 25,000 FEET MSL



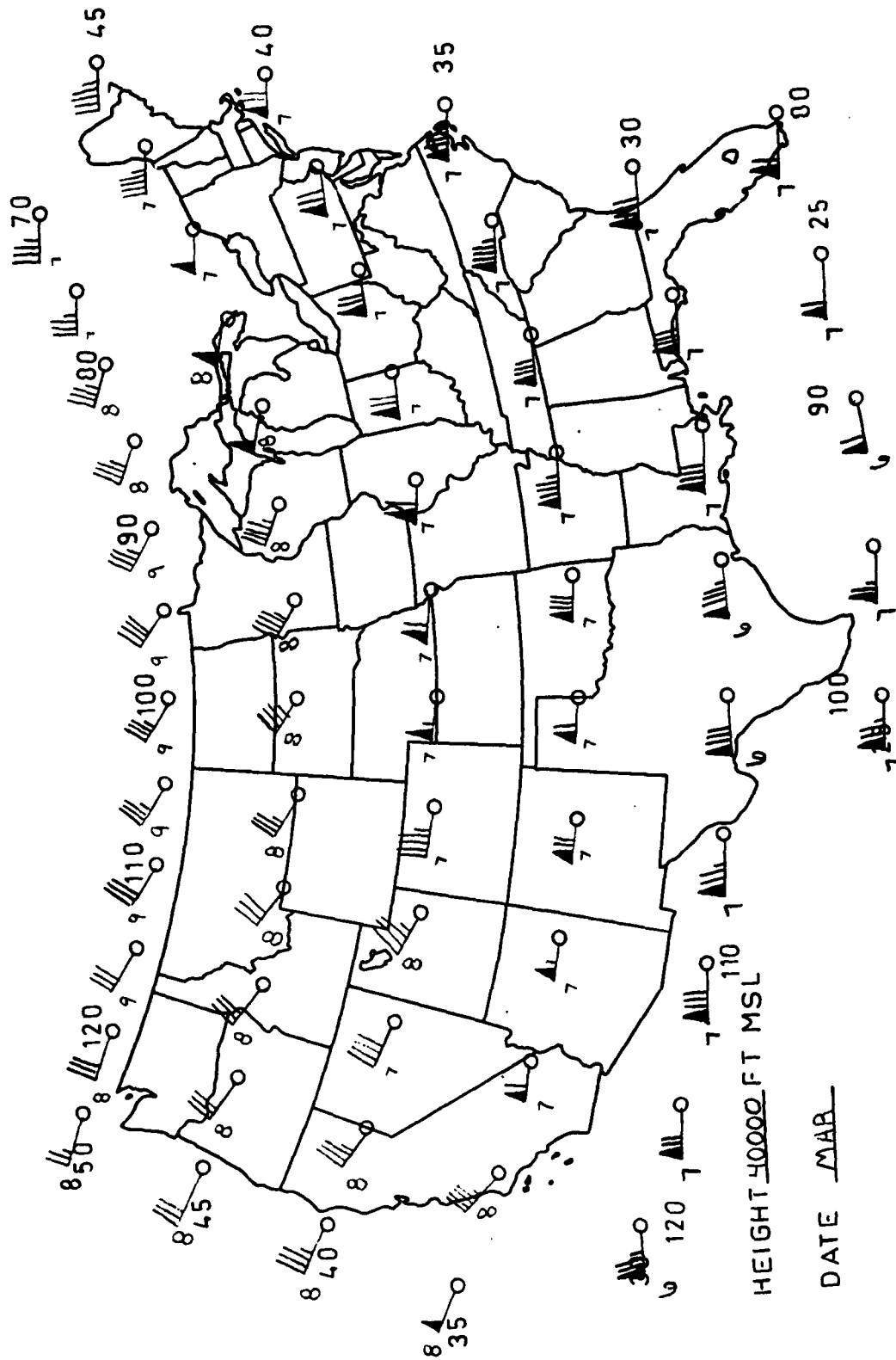
MARCH, 30,000 FEET MSL



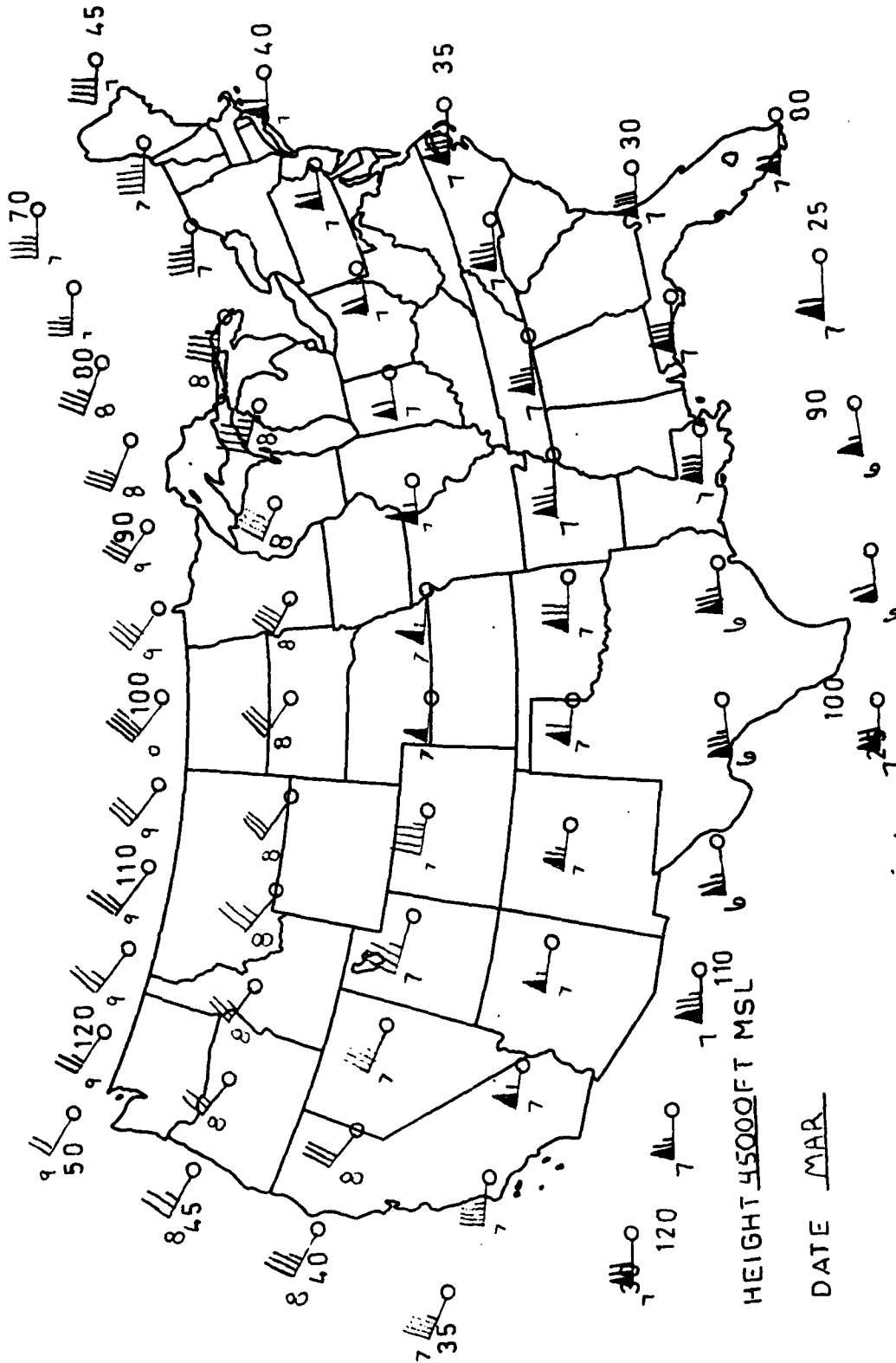
-25-



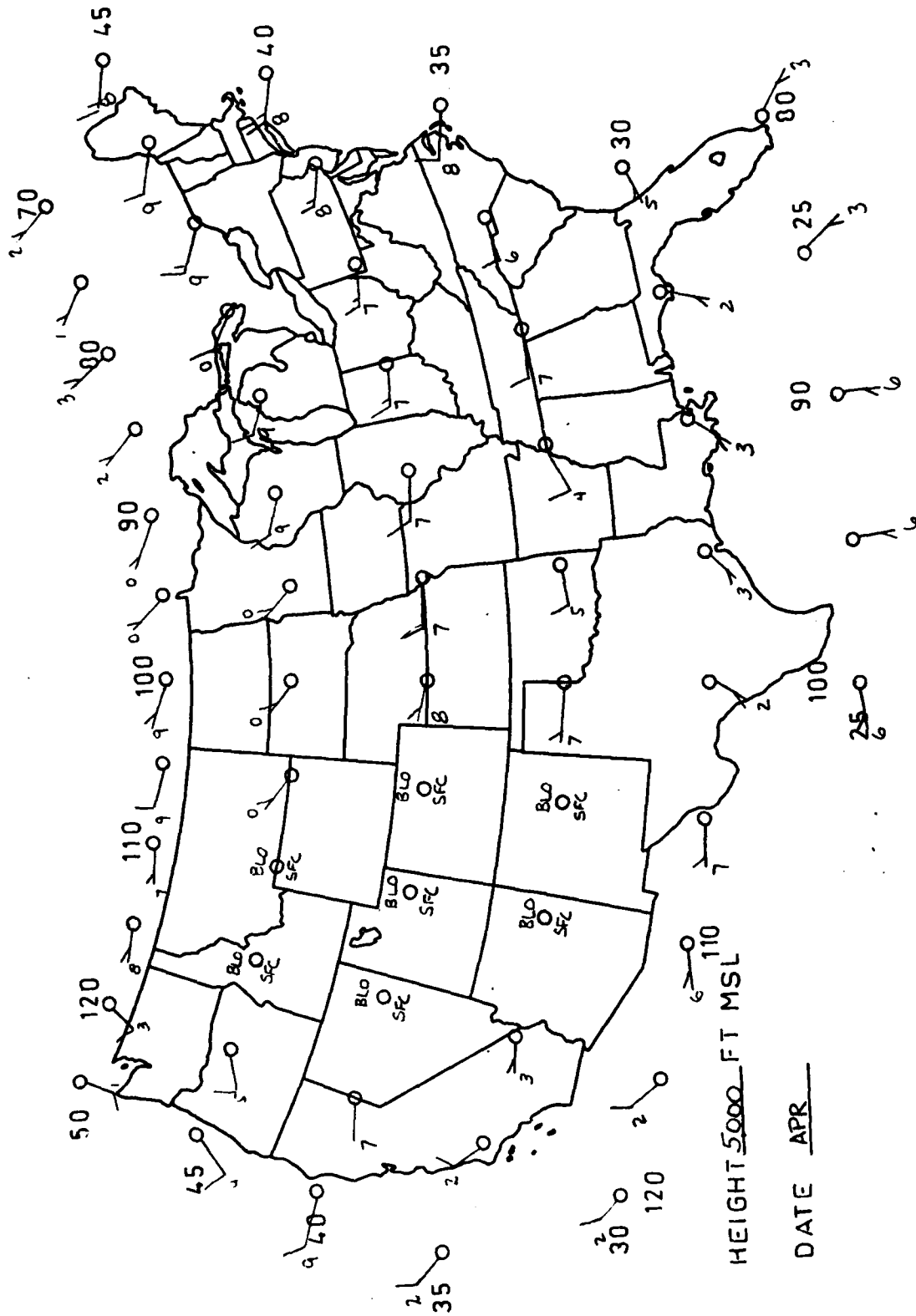
MARCH, 40,000 FEET NSL



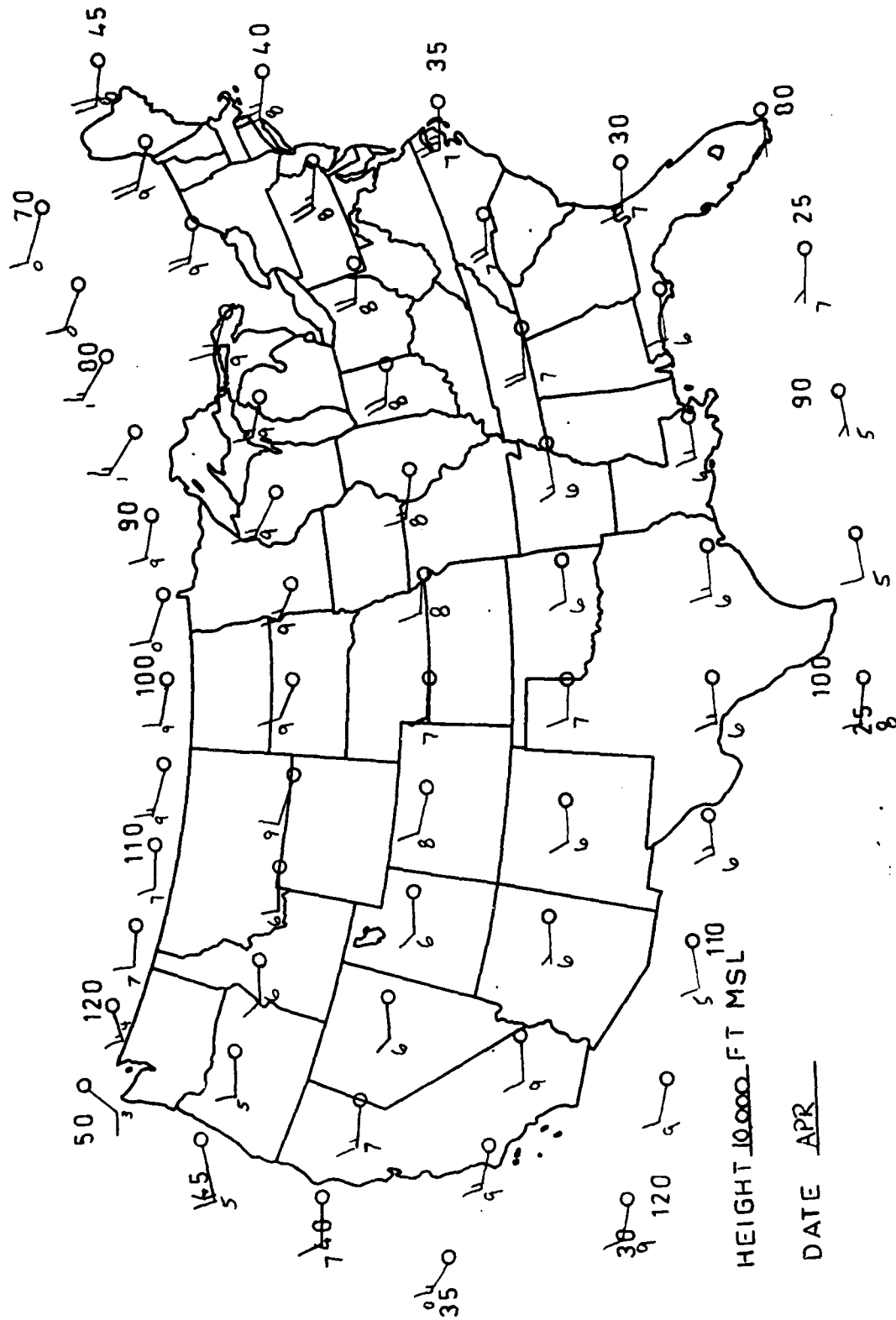
MARCH, 45,000 FEET MSL



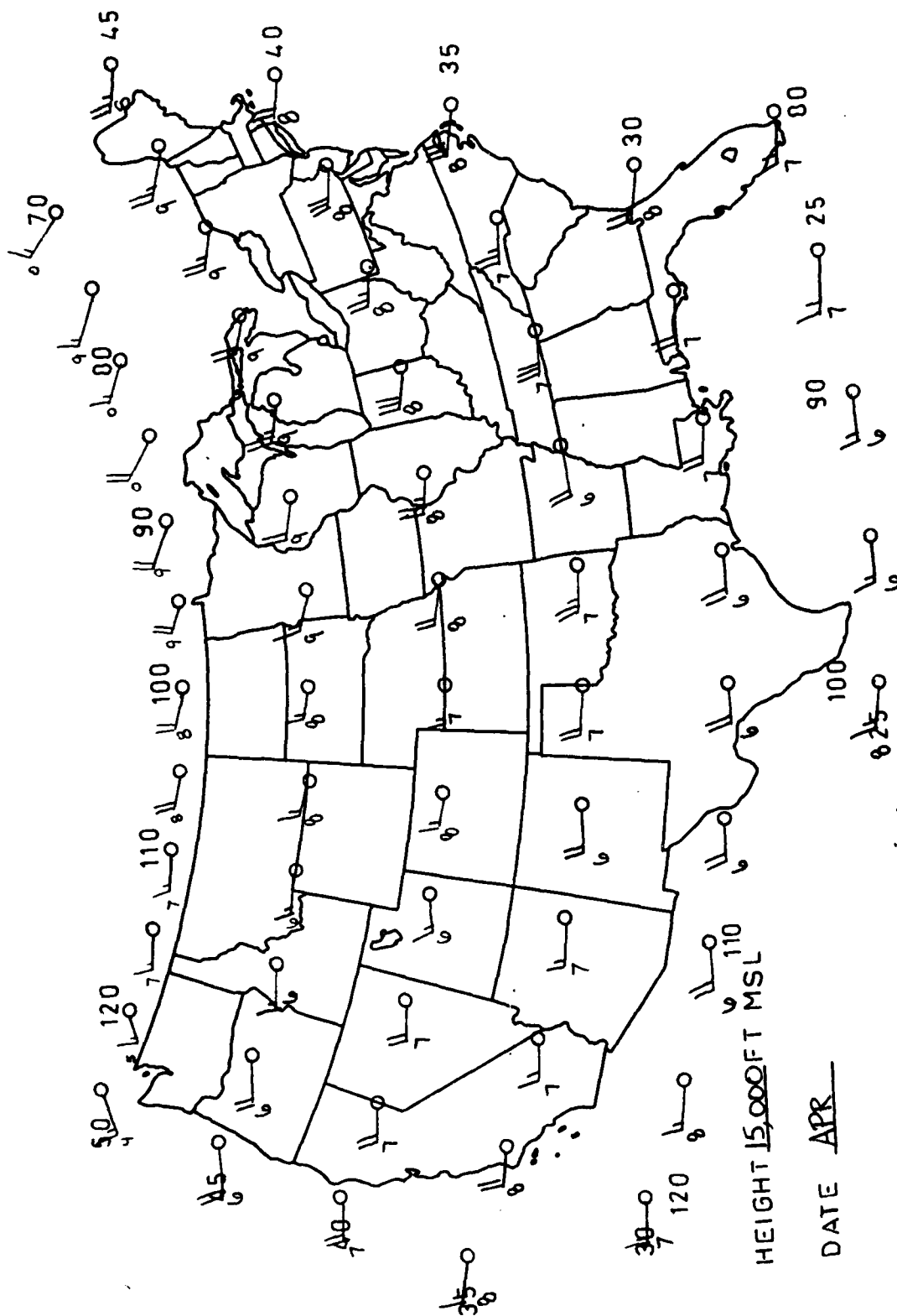
APRIL, 5,000 FEET MSL



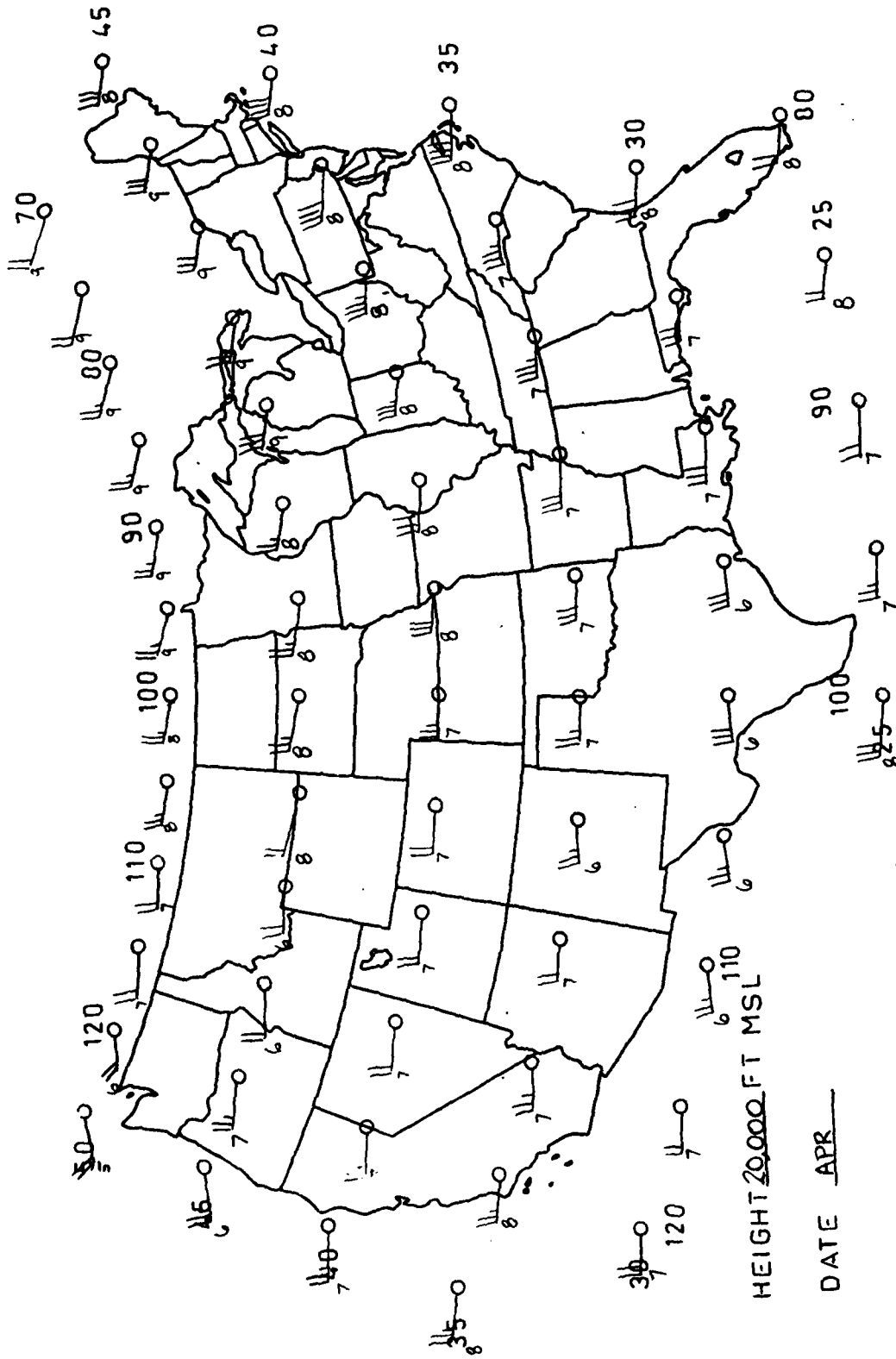
APRIL, 10,000 FEET MSL



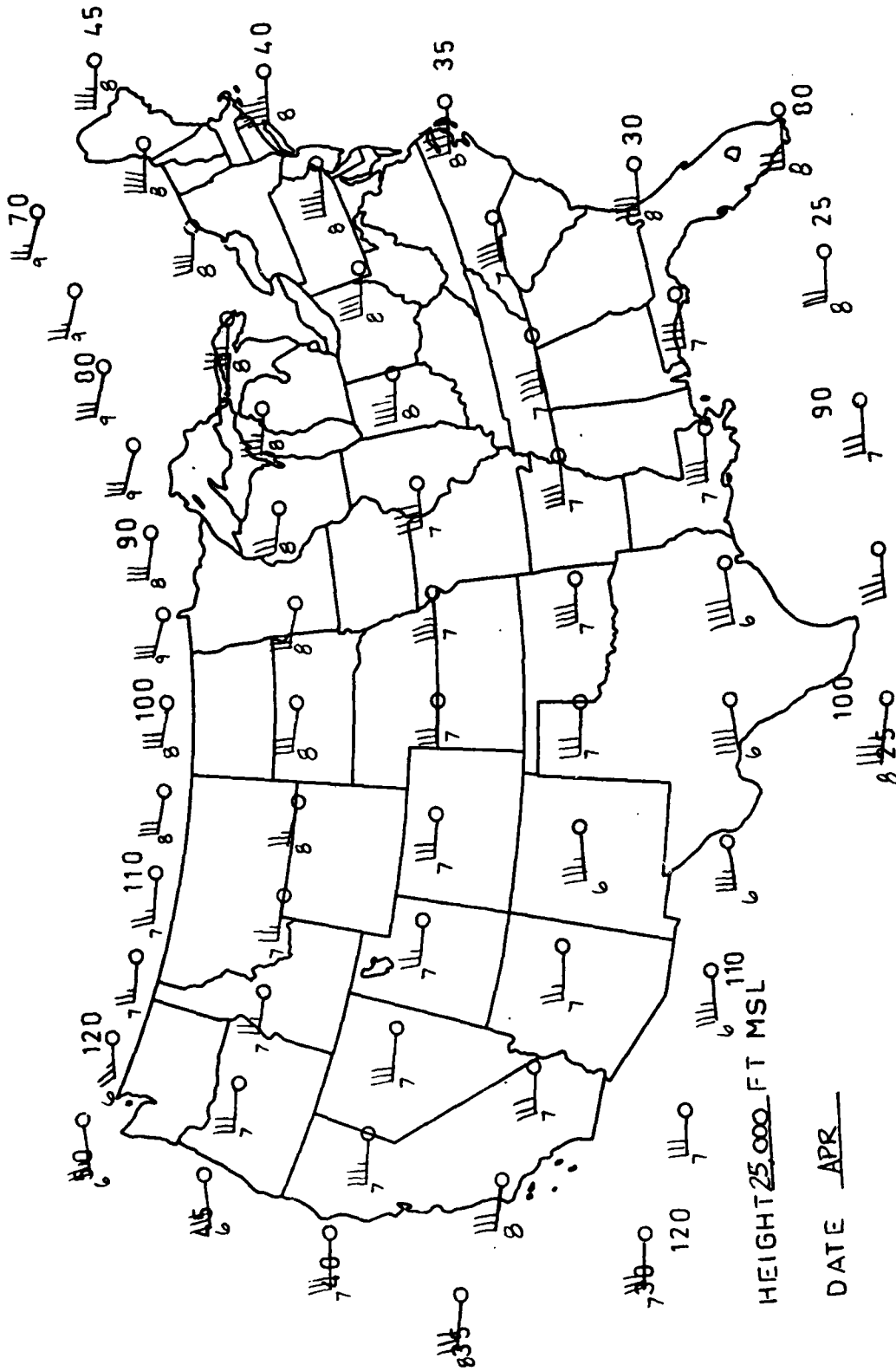
APRIL, 15,000 FEET MSL



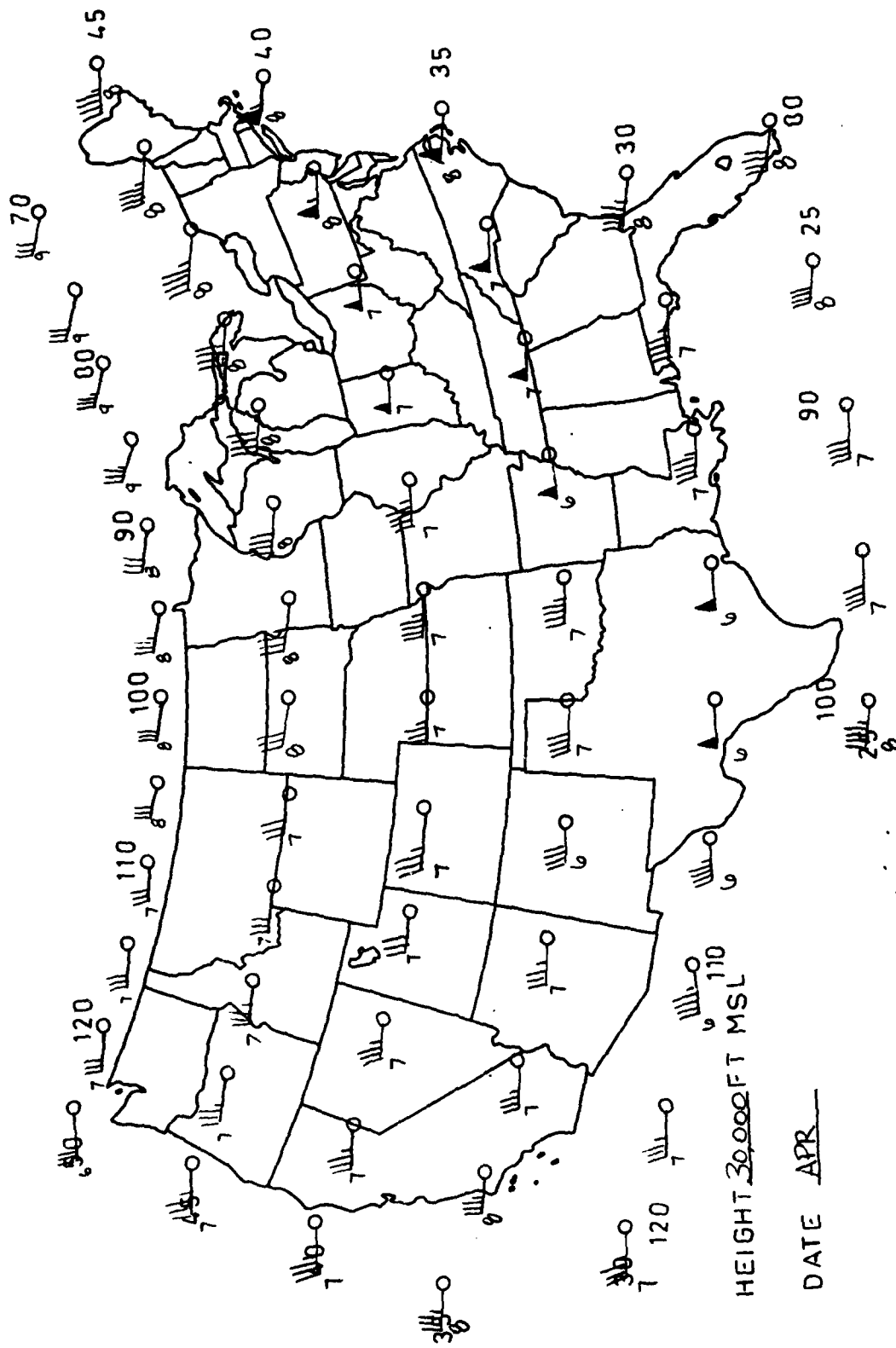
APRIL, 20,000 FEET MSL



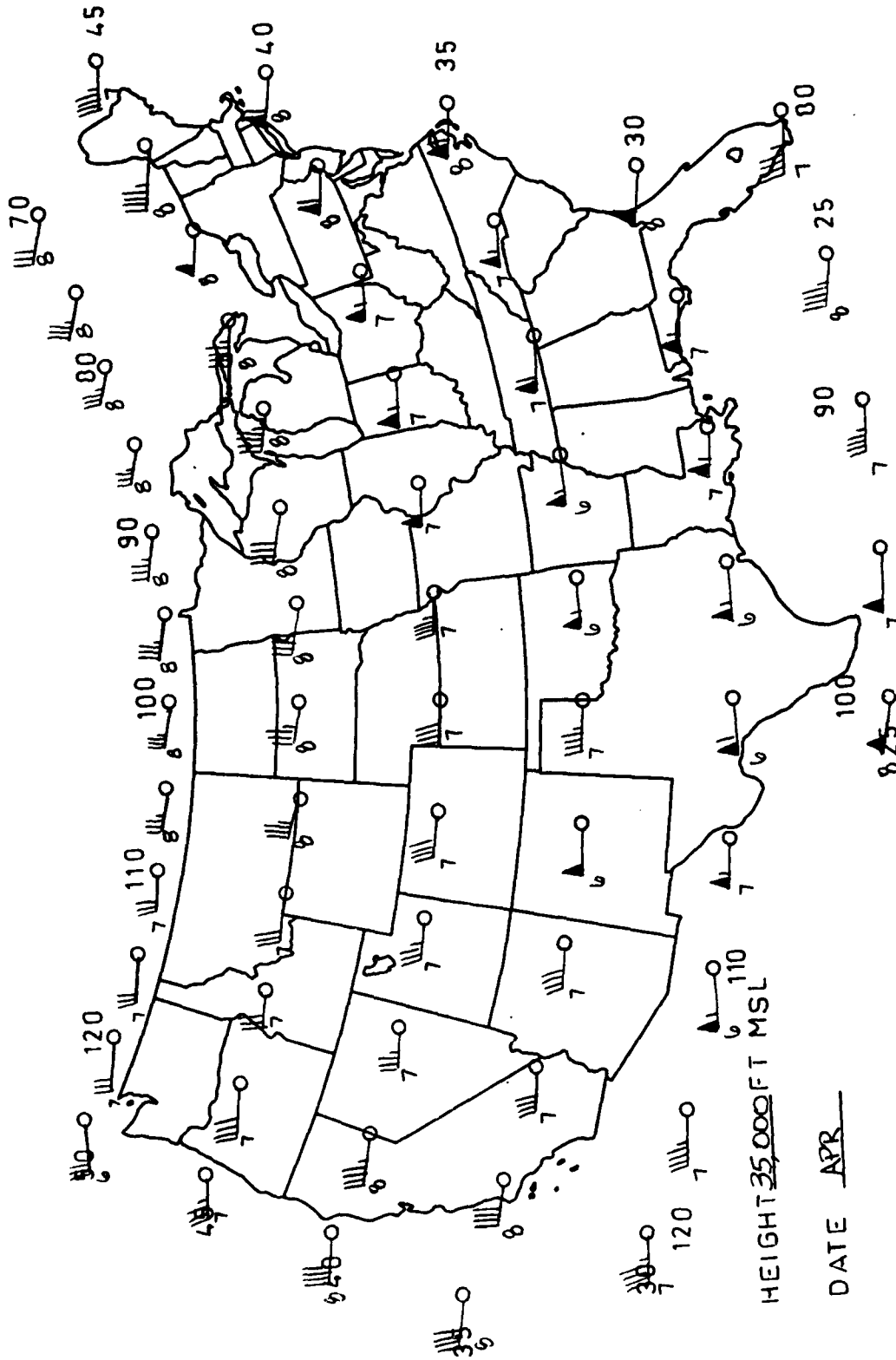
APRIL, 25,000 FEET MSL



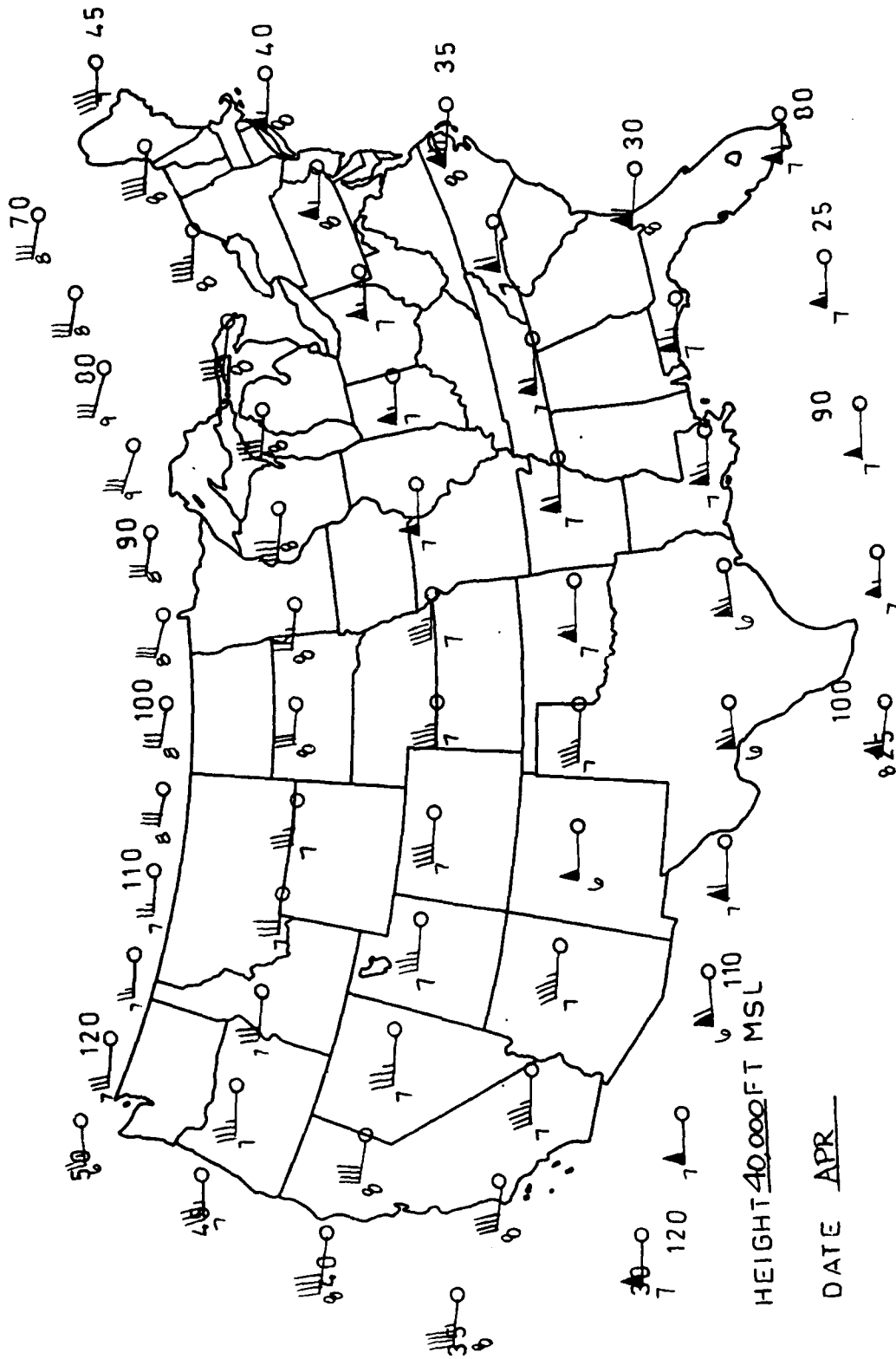
APRIL, 30,000 FEET MSL



APRIL, 35,000 FEET MSL



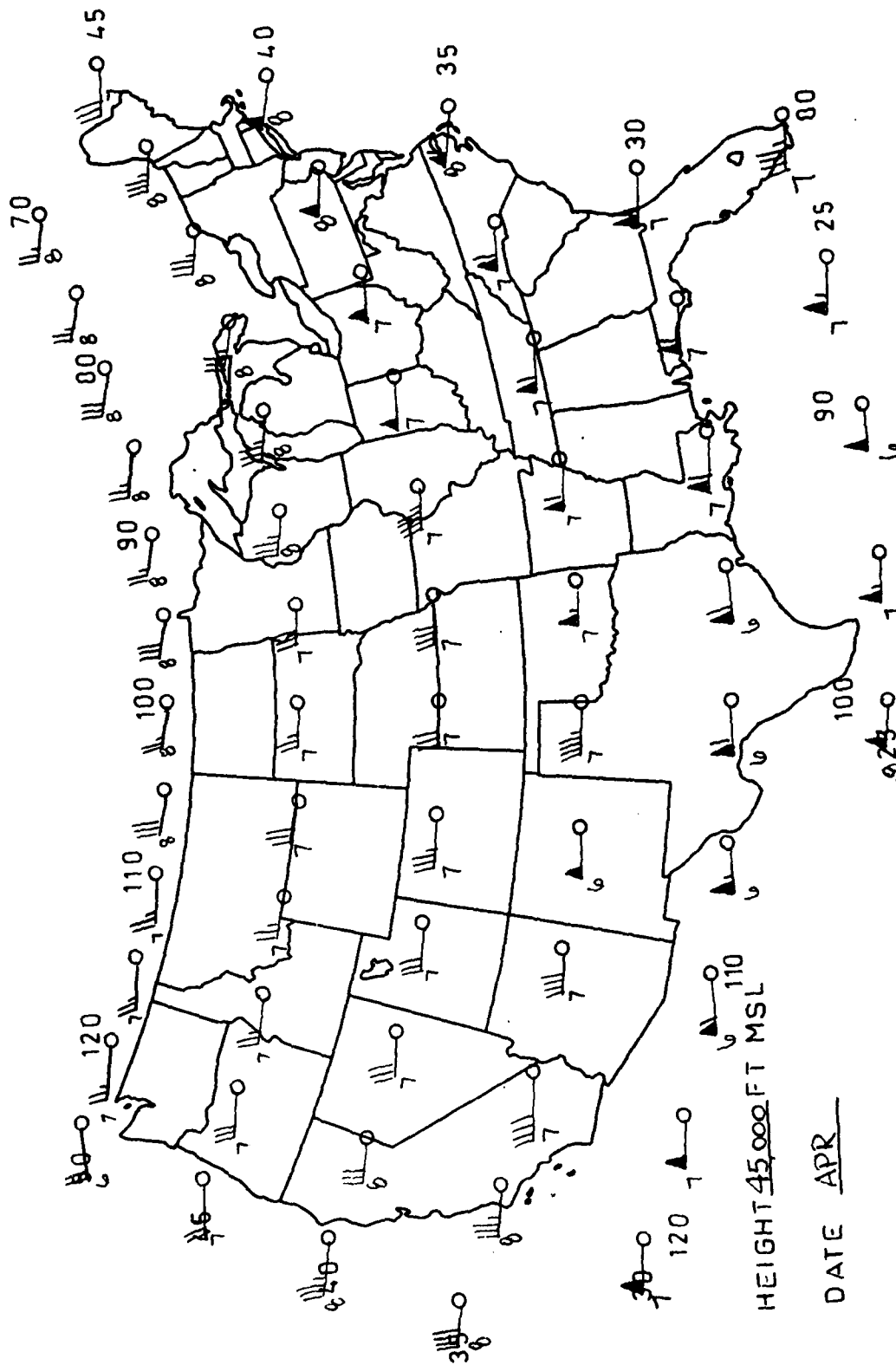
APRIL, 40,000 FEET MSL



HEIGHT 40,000 FT MSL

DATE APR

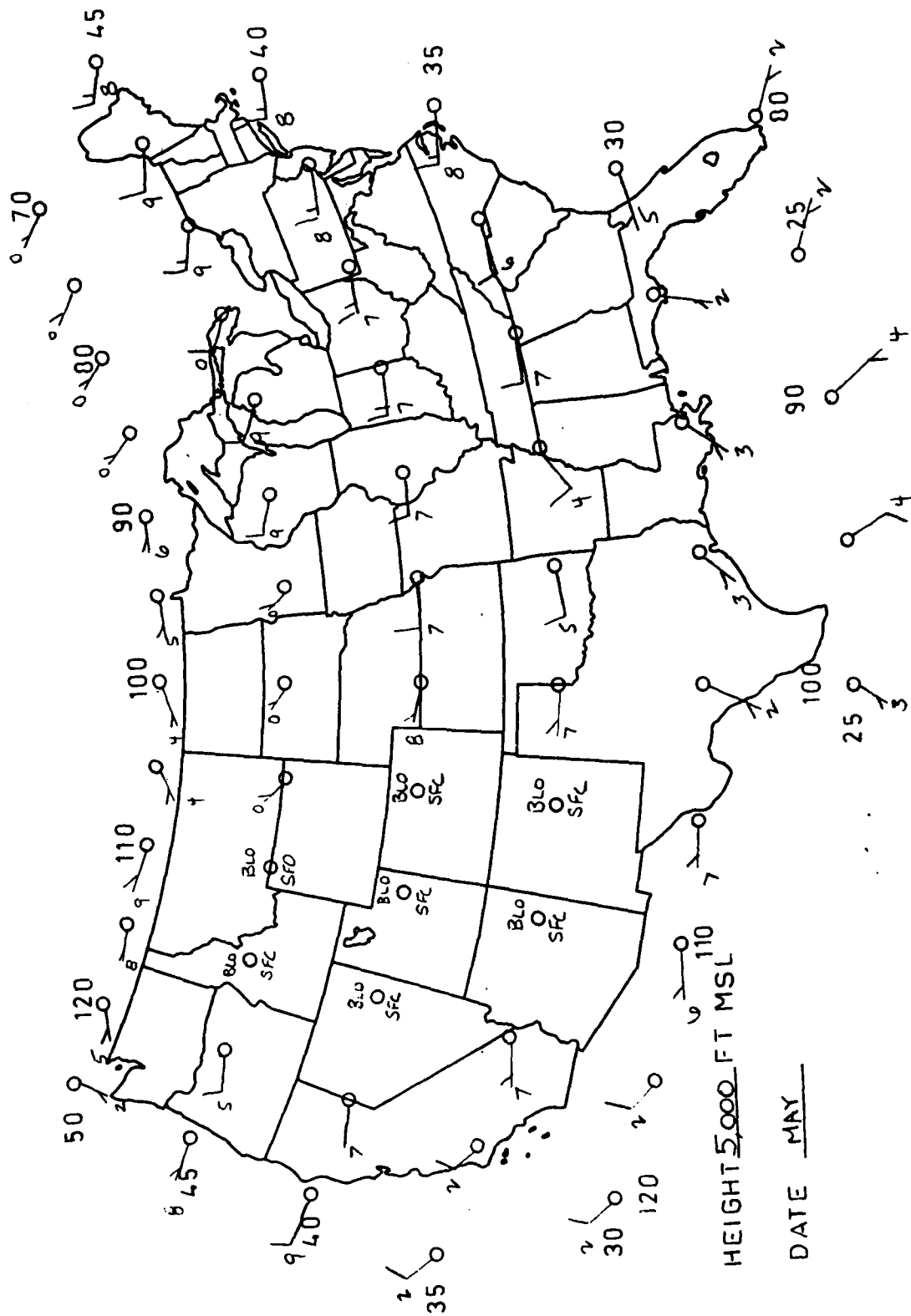
APRIL, 45,000 FEET MSL



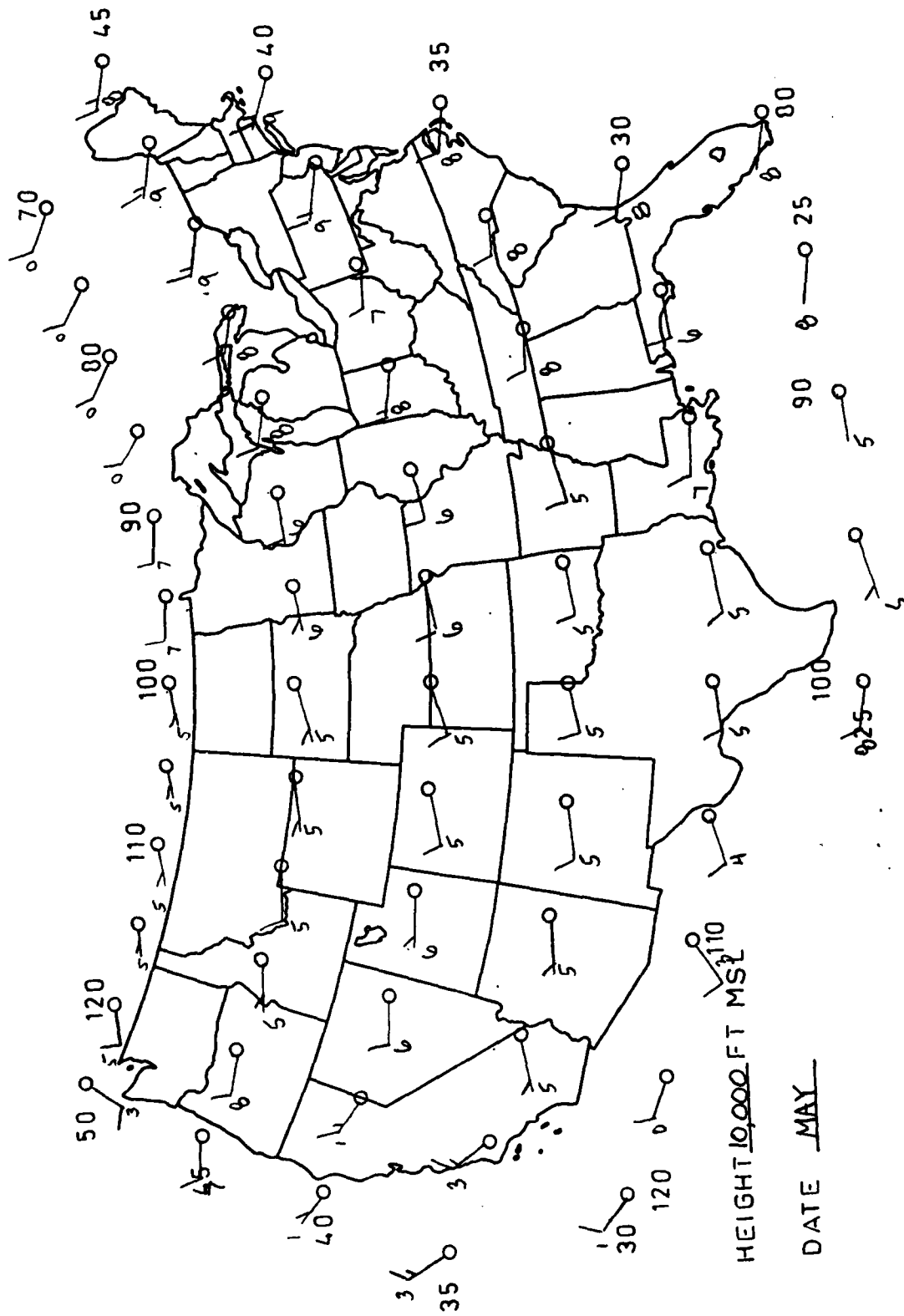
HEIGHT 45,000 FT MSL

DATE APR

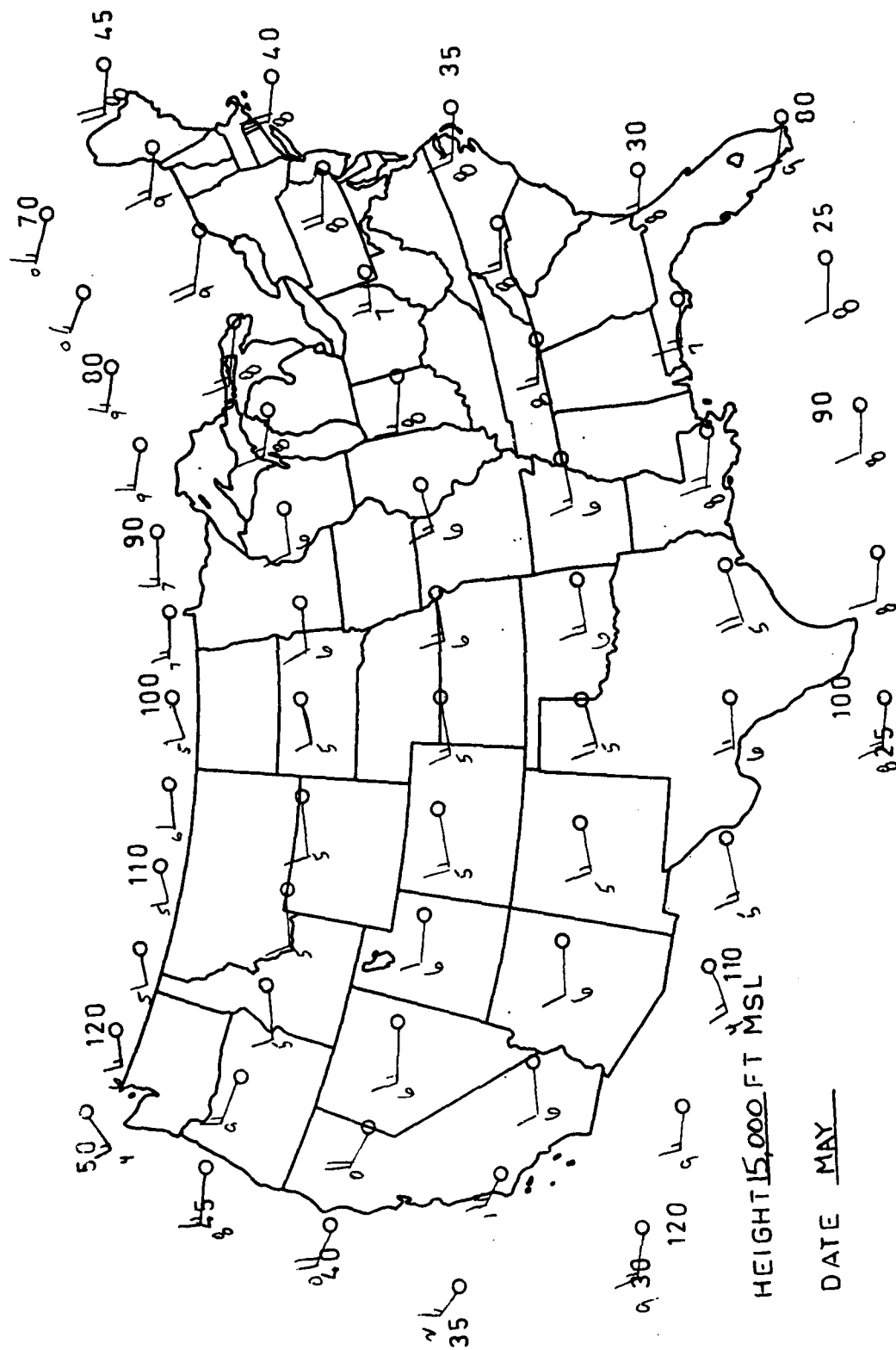
MAY, 5,000 FEET MSL



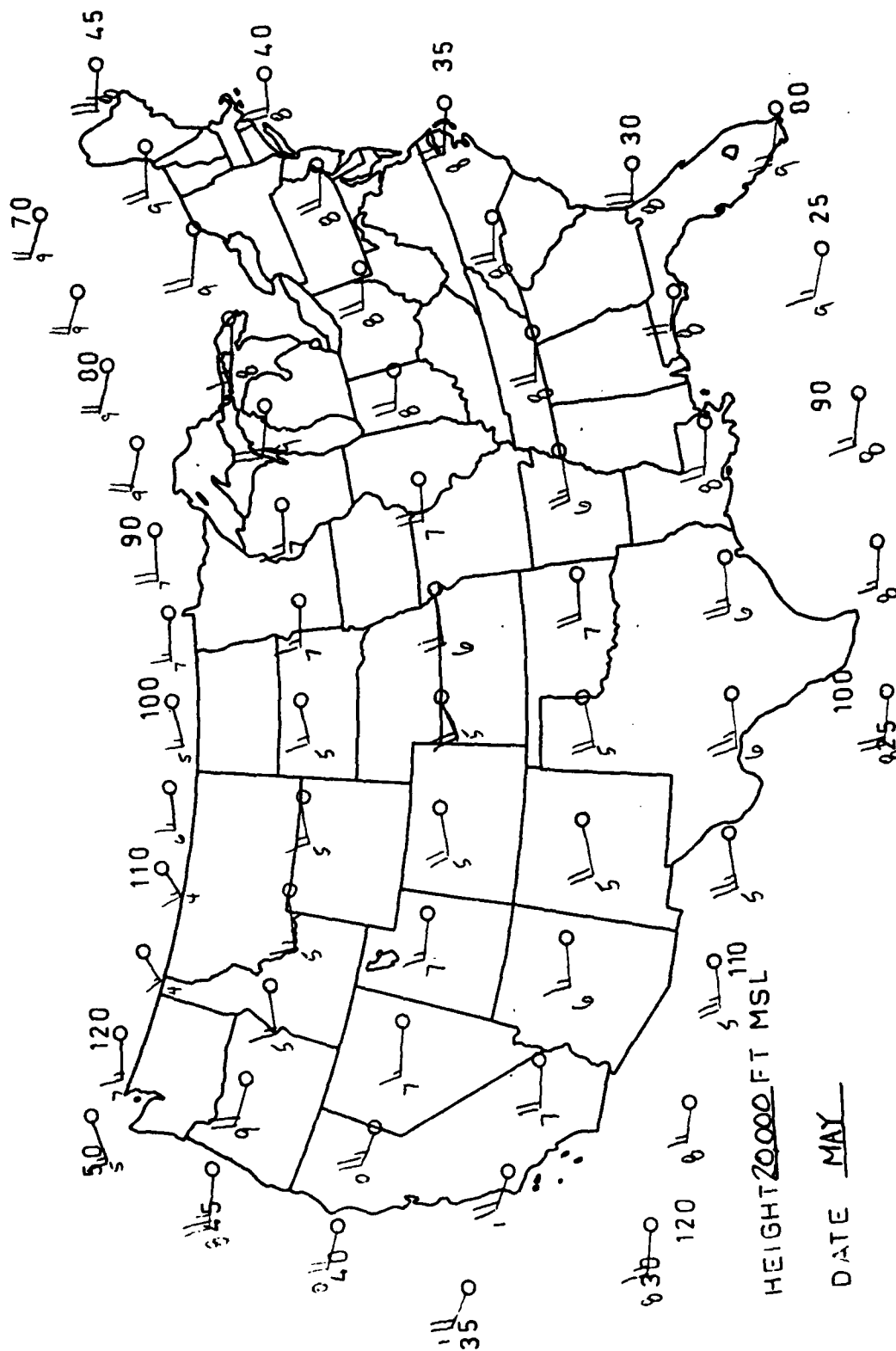
MAY, 10,000 FEET MSL



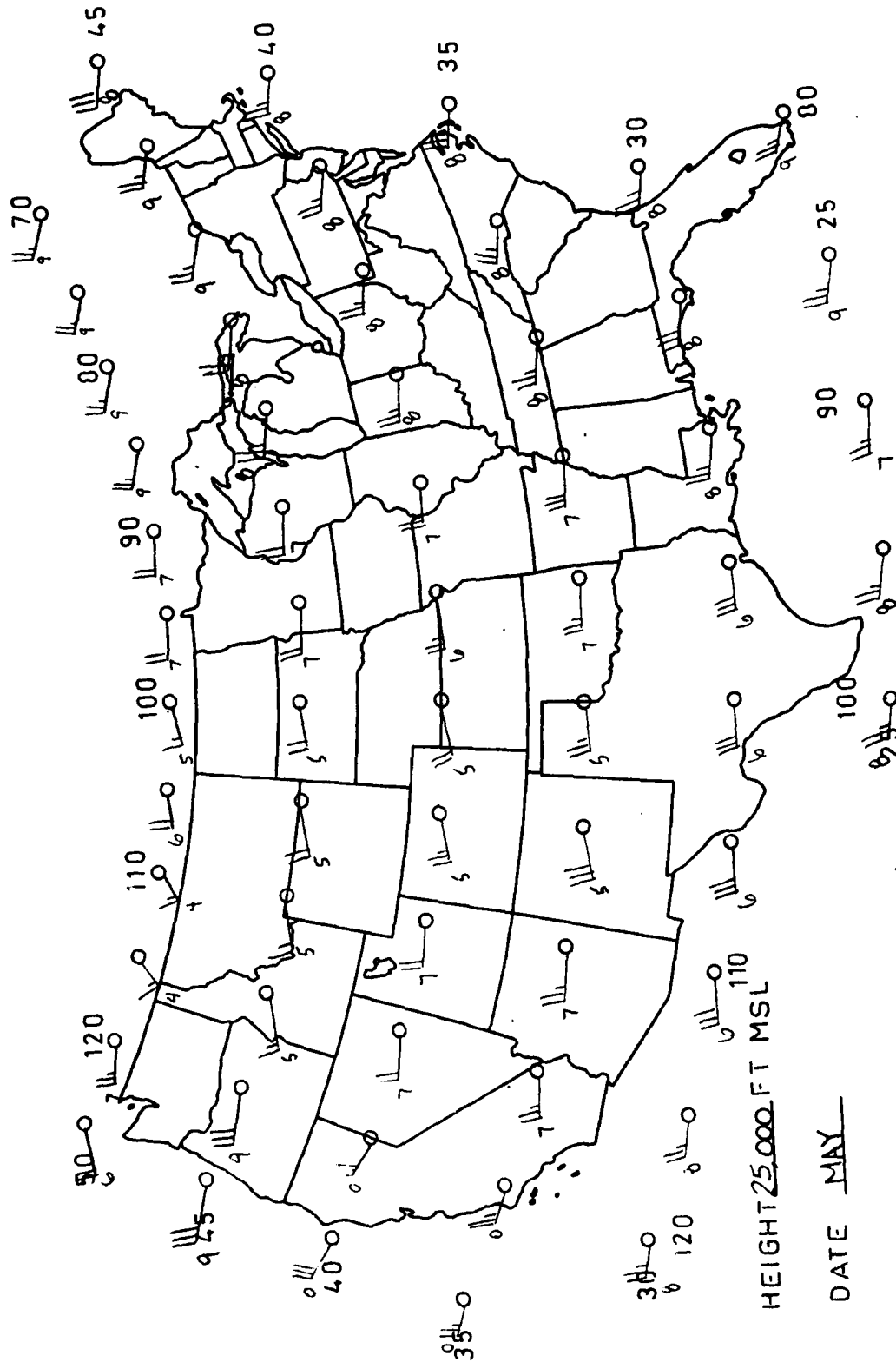
MAY, 15,000 FEET MSL



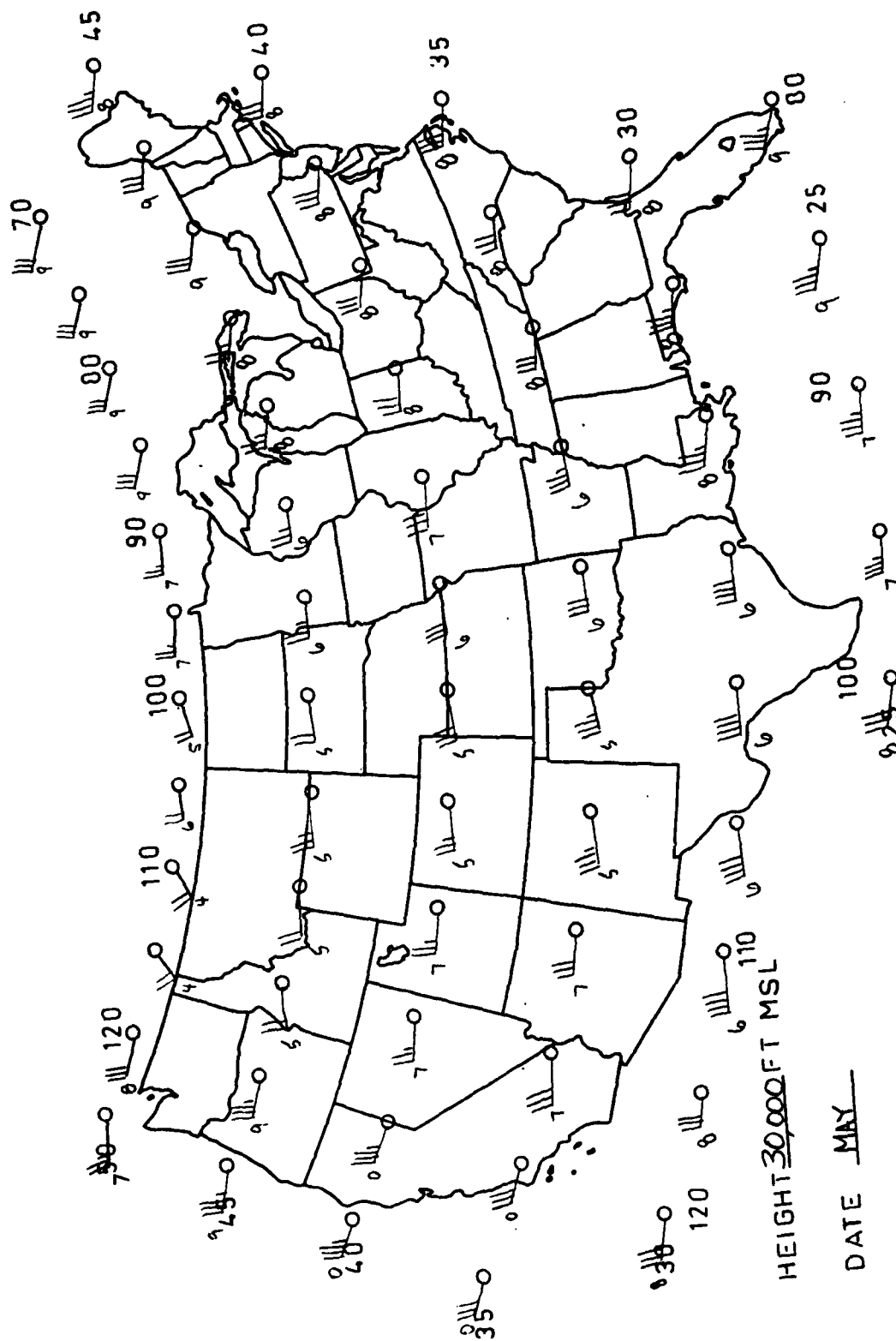
MAY, 20,000 FEET MSL



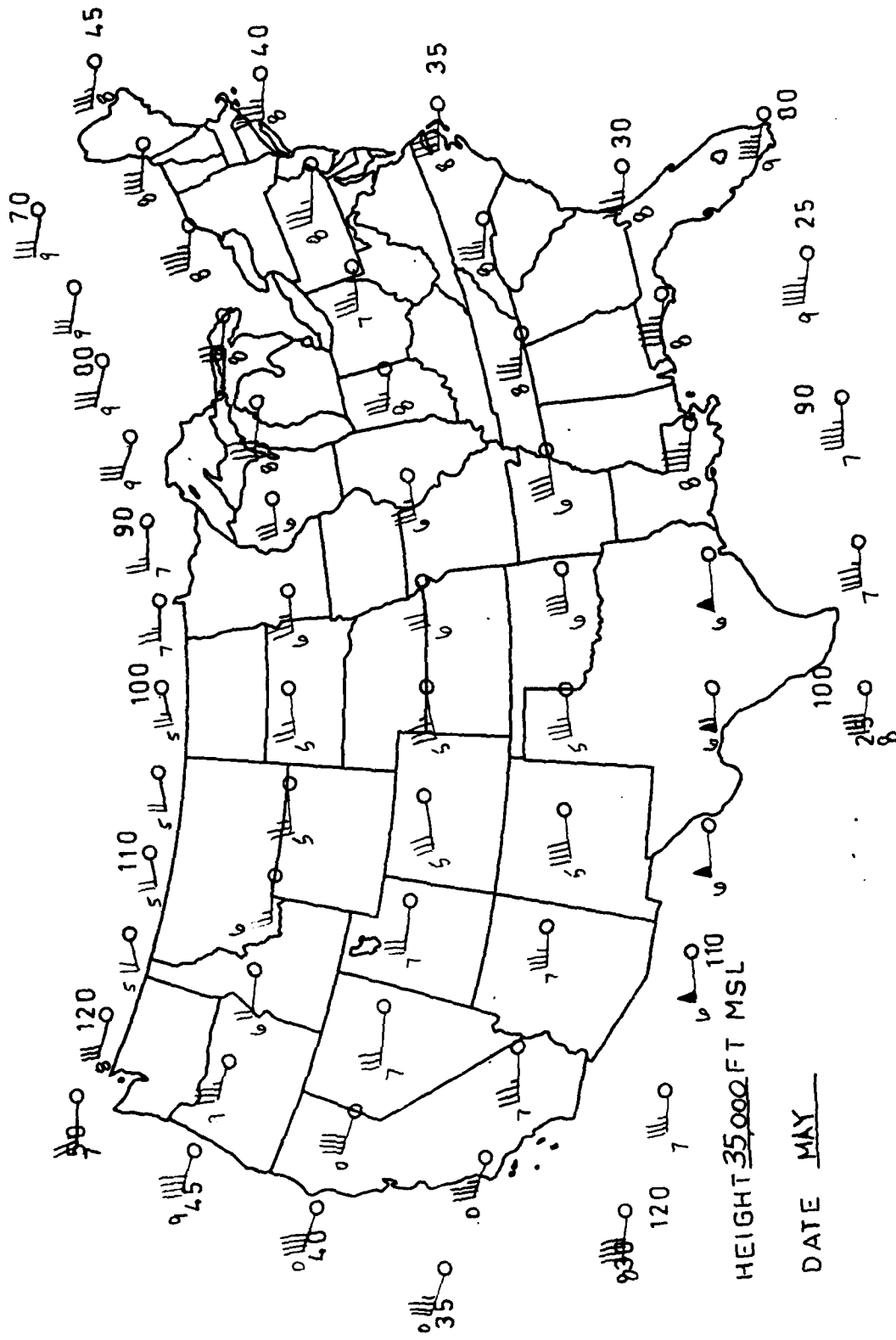
MAY, 25,000 FEET MSL



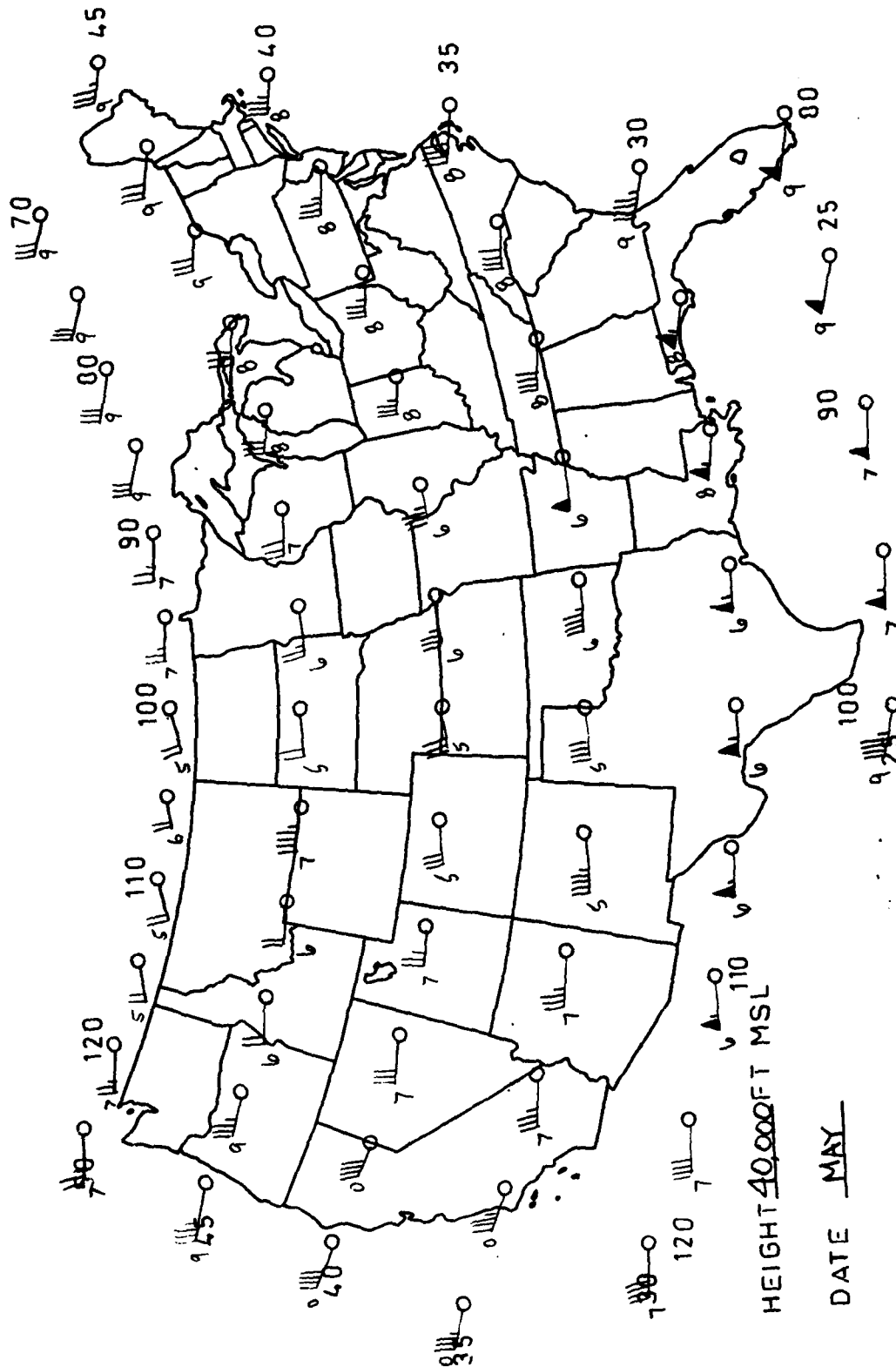
MAY, 30,000 FEET MSL



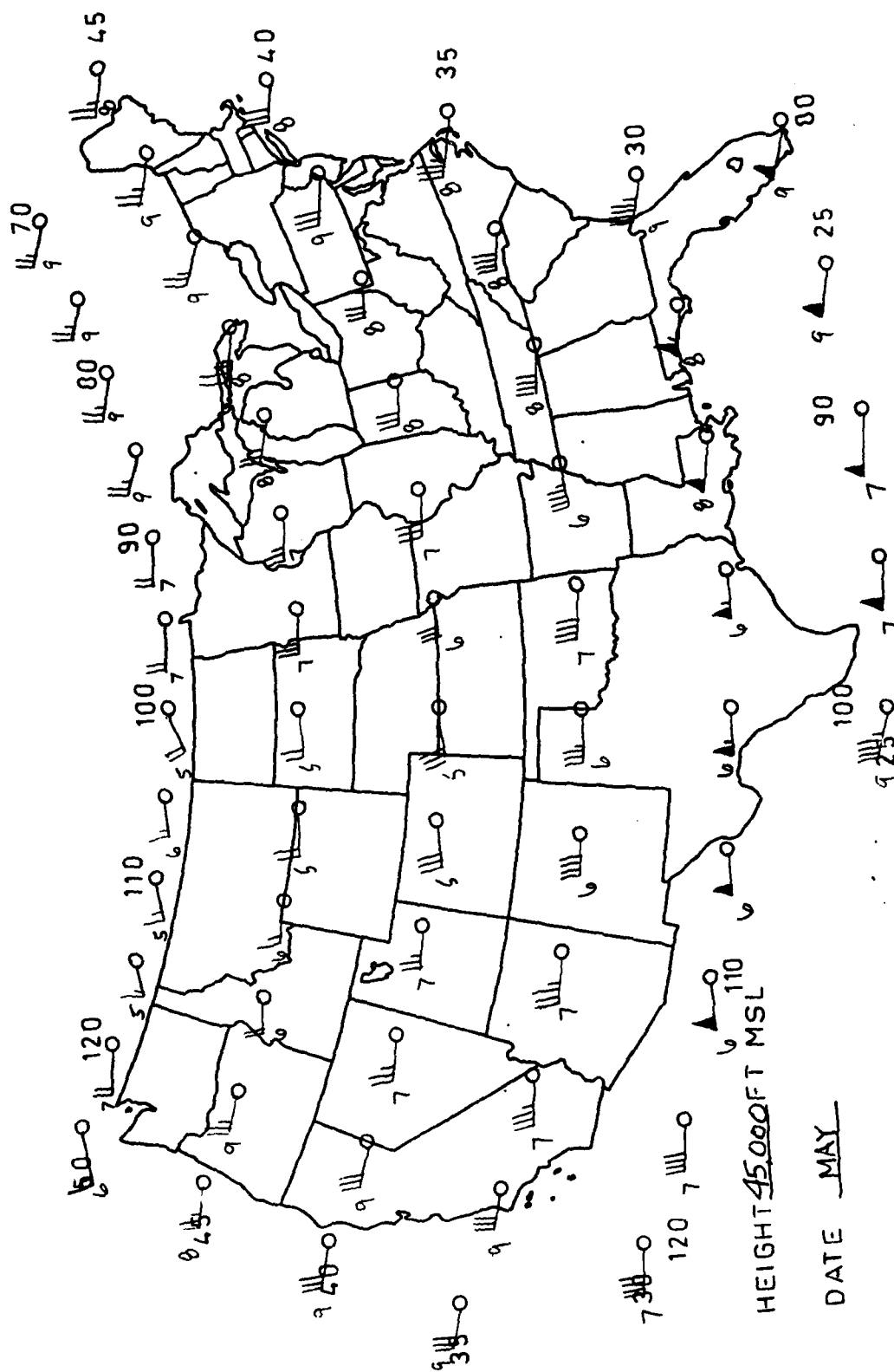
MAY, 35,000 FEET MSL



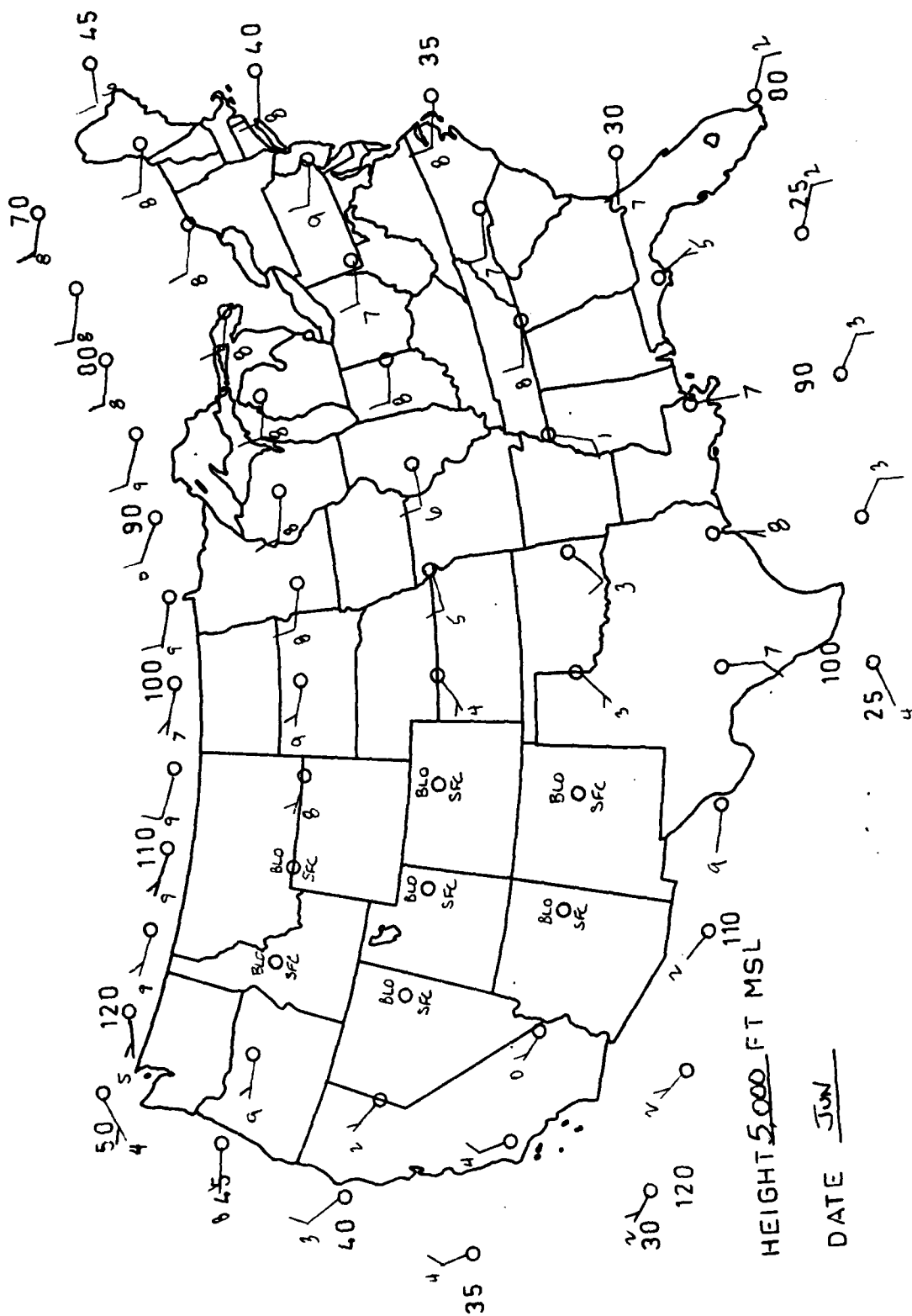
MAY, 40,000 FEET MSL



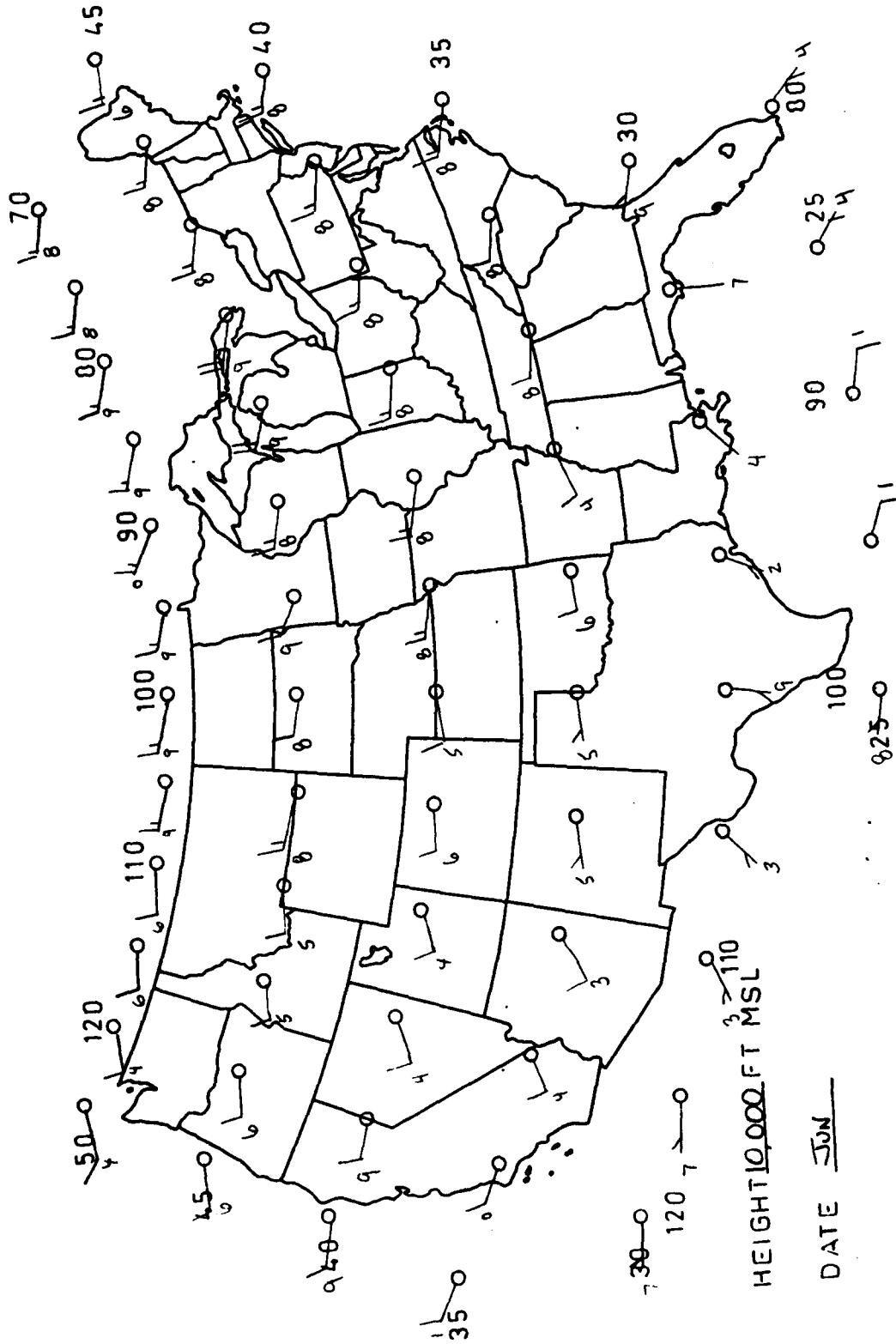
MAY, 45,000 FEET MSL



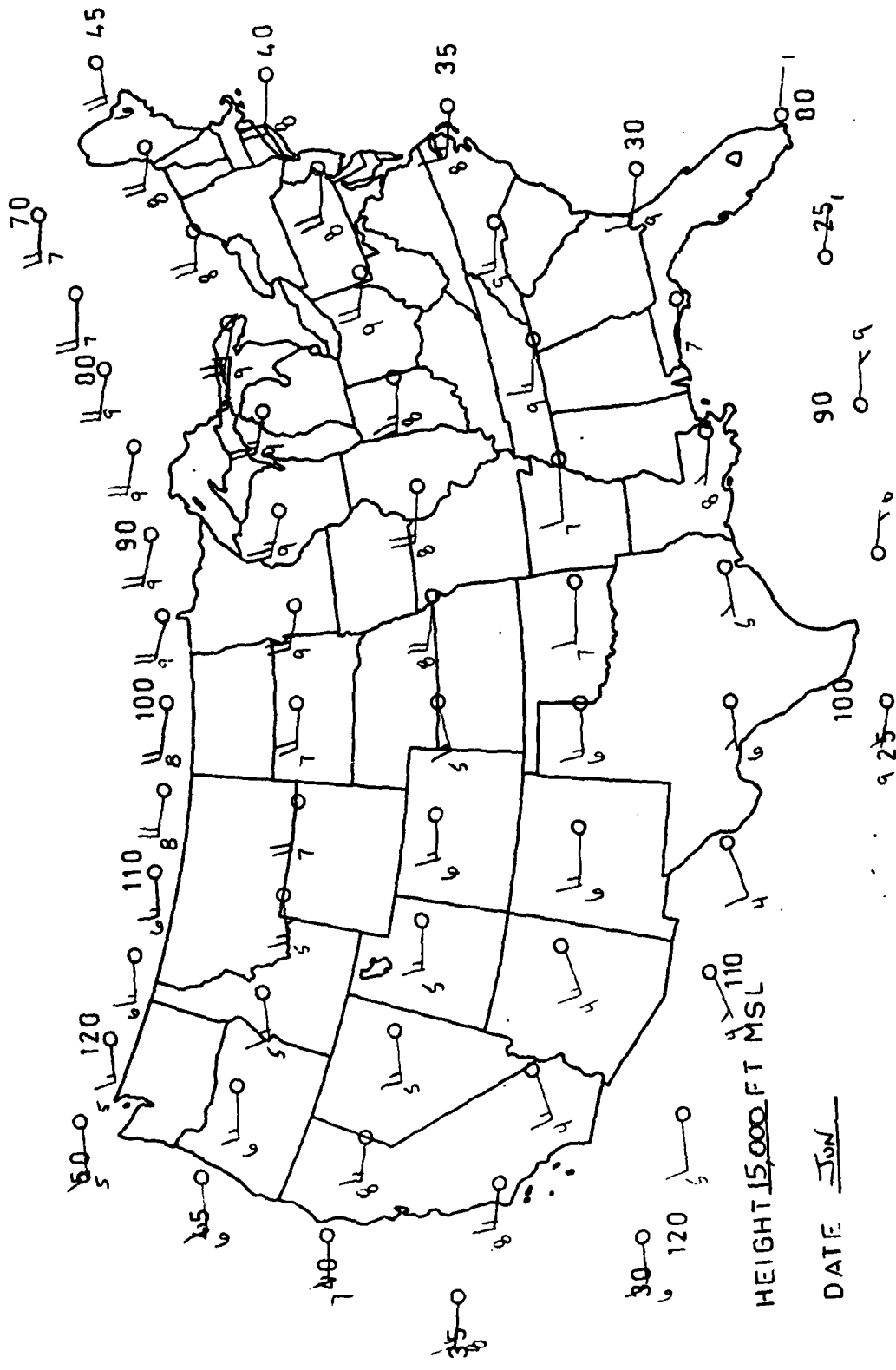
JUNE, 5,000 FEET MSL



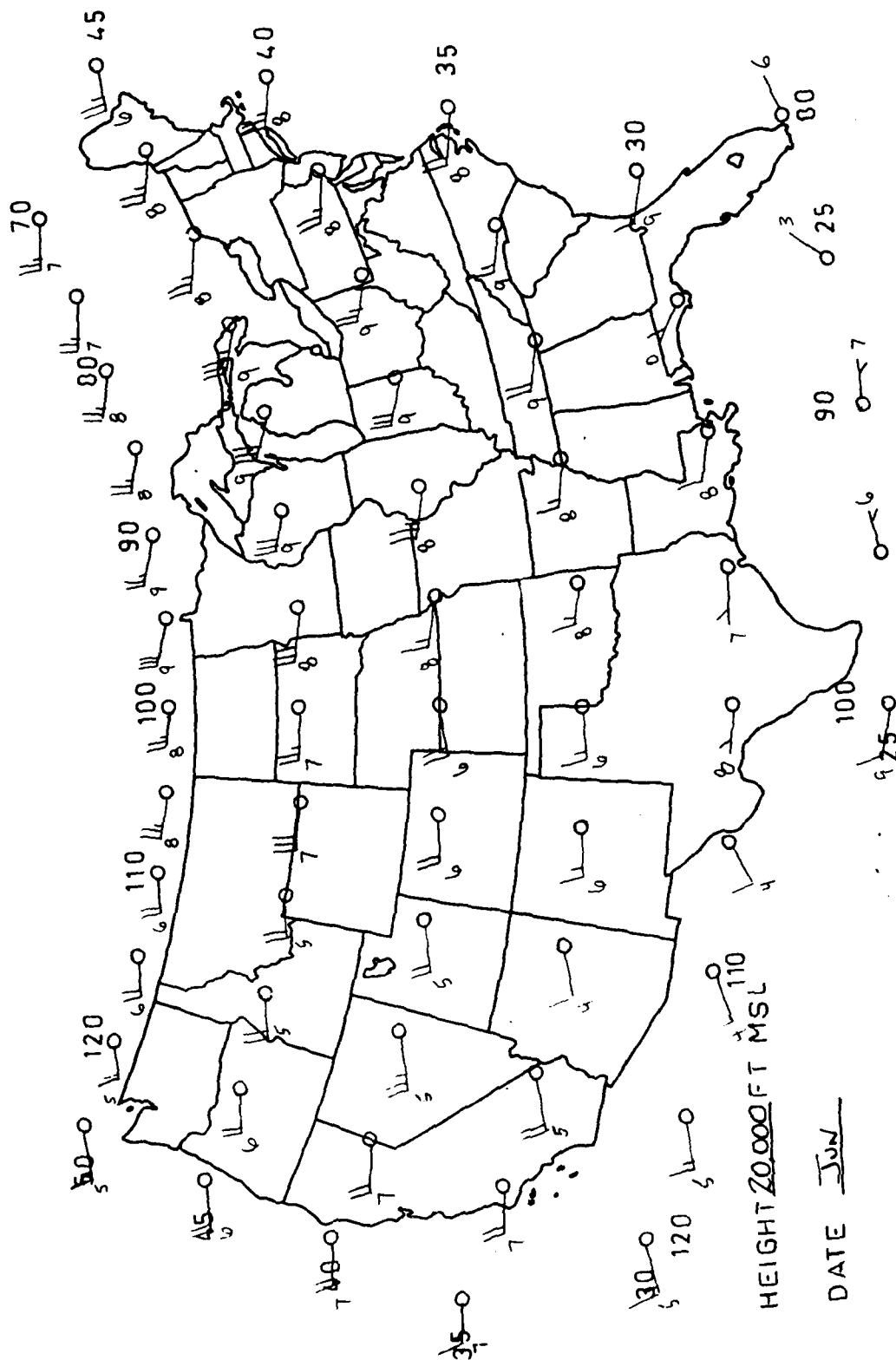
JUNE, 10,000 FEET MSL



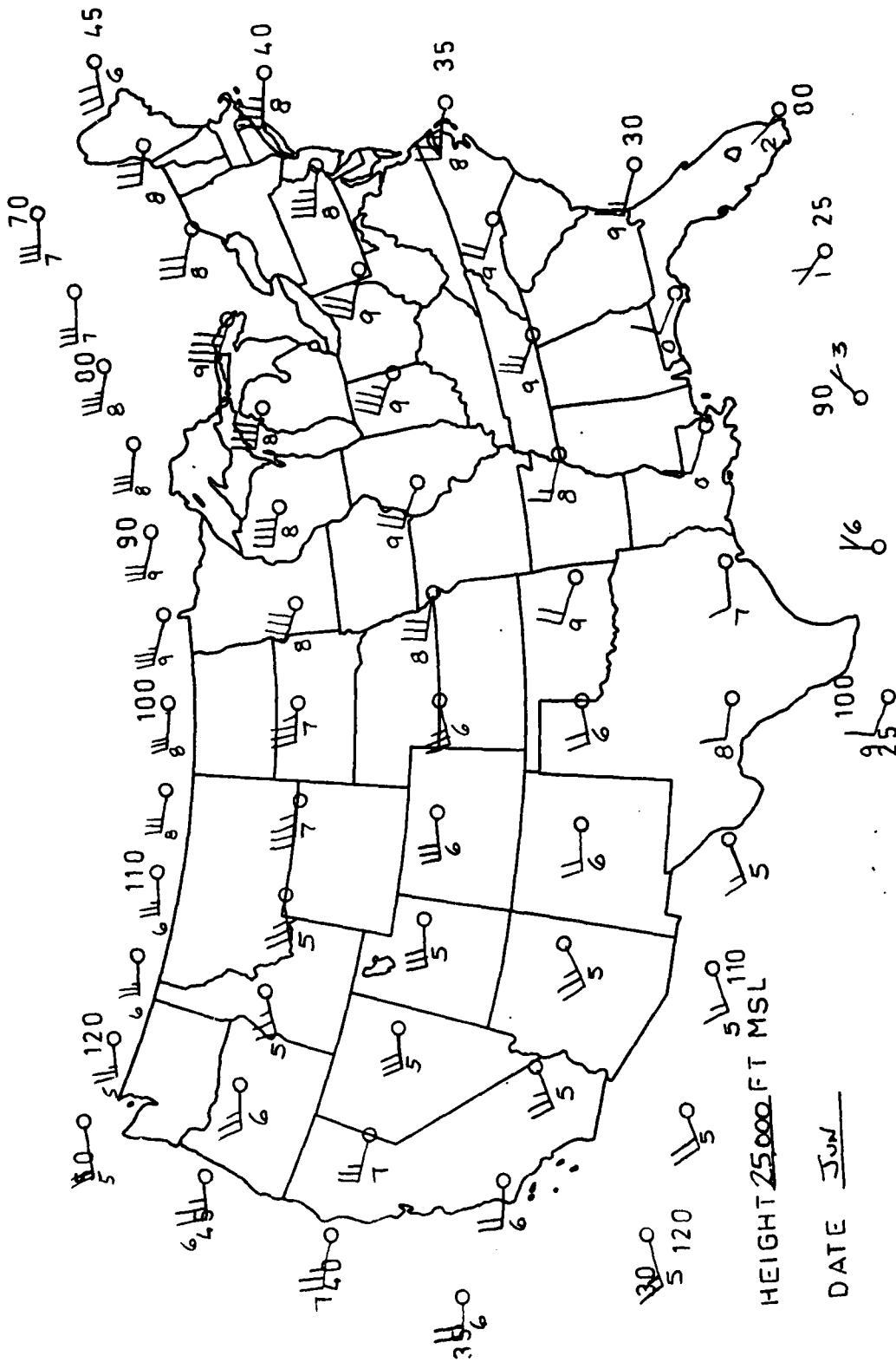
JUNE, 15,000 FEET MSL



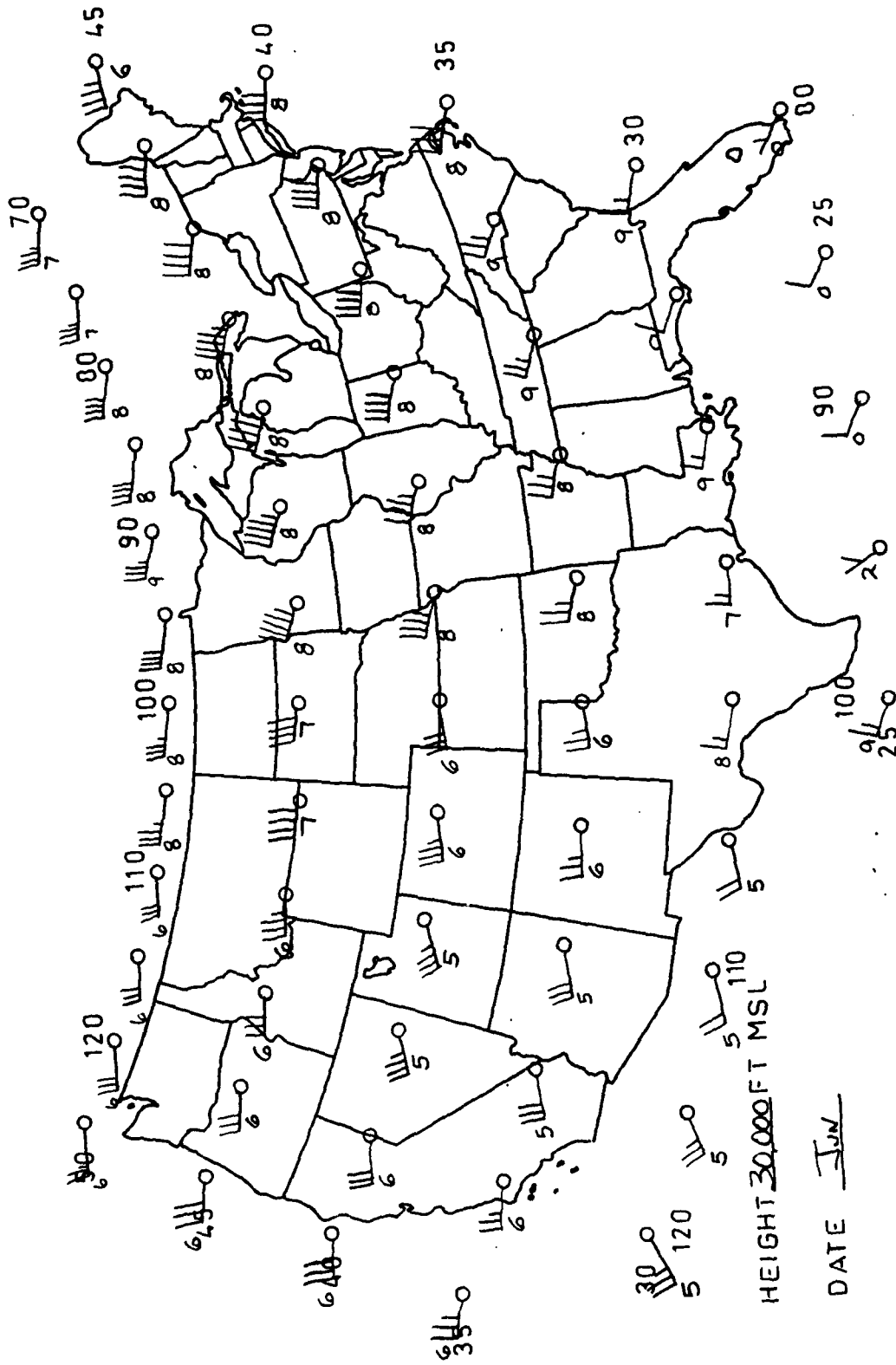
JUNE, 20,000 FEET MSL



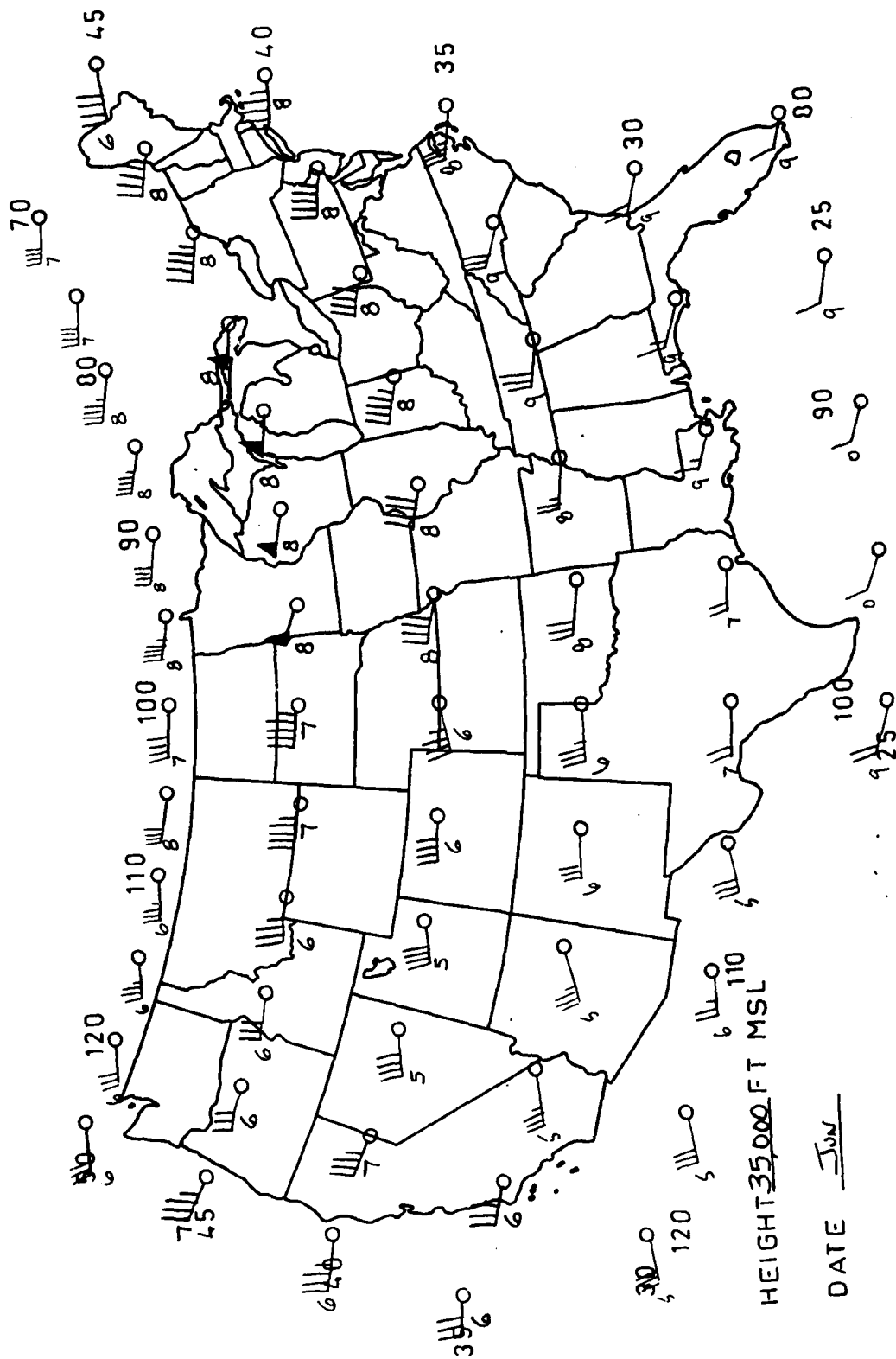
JUNE, 25,000 FEET MSL



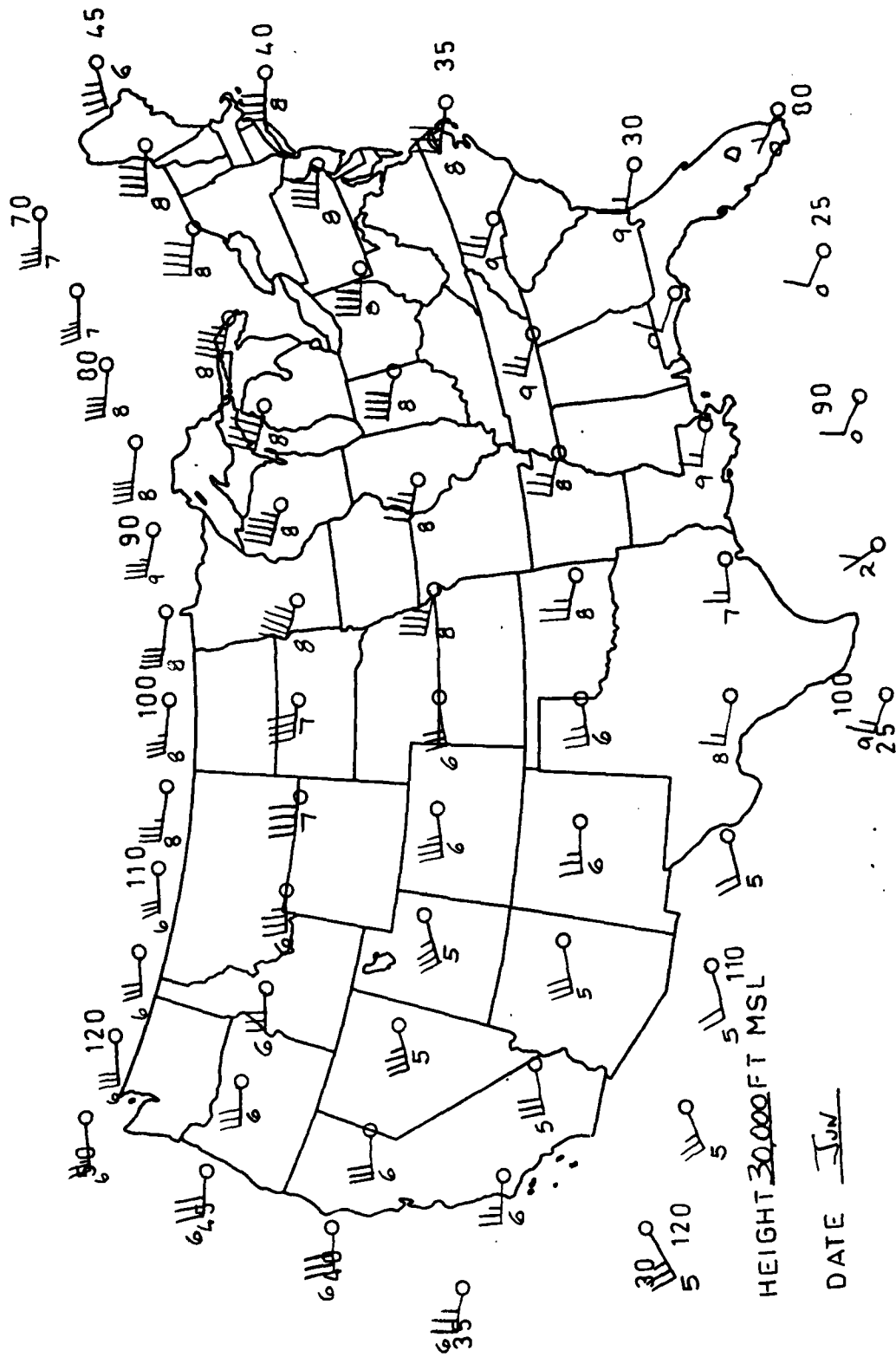
JUNE, 30,000 FEET MSL



JUNE, 35,000 FEET MSL



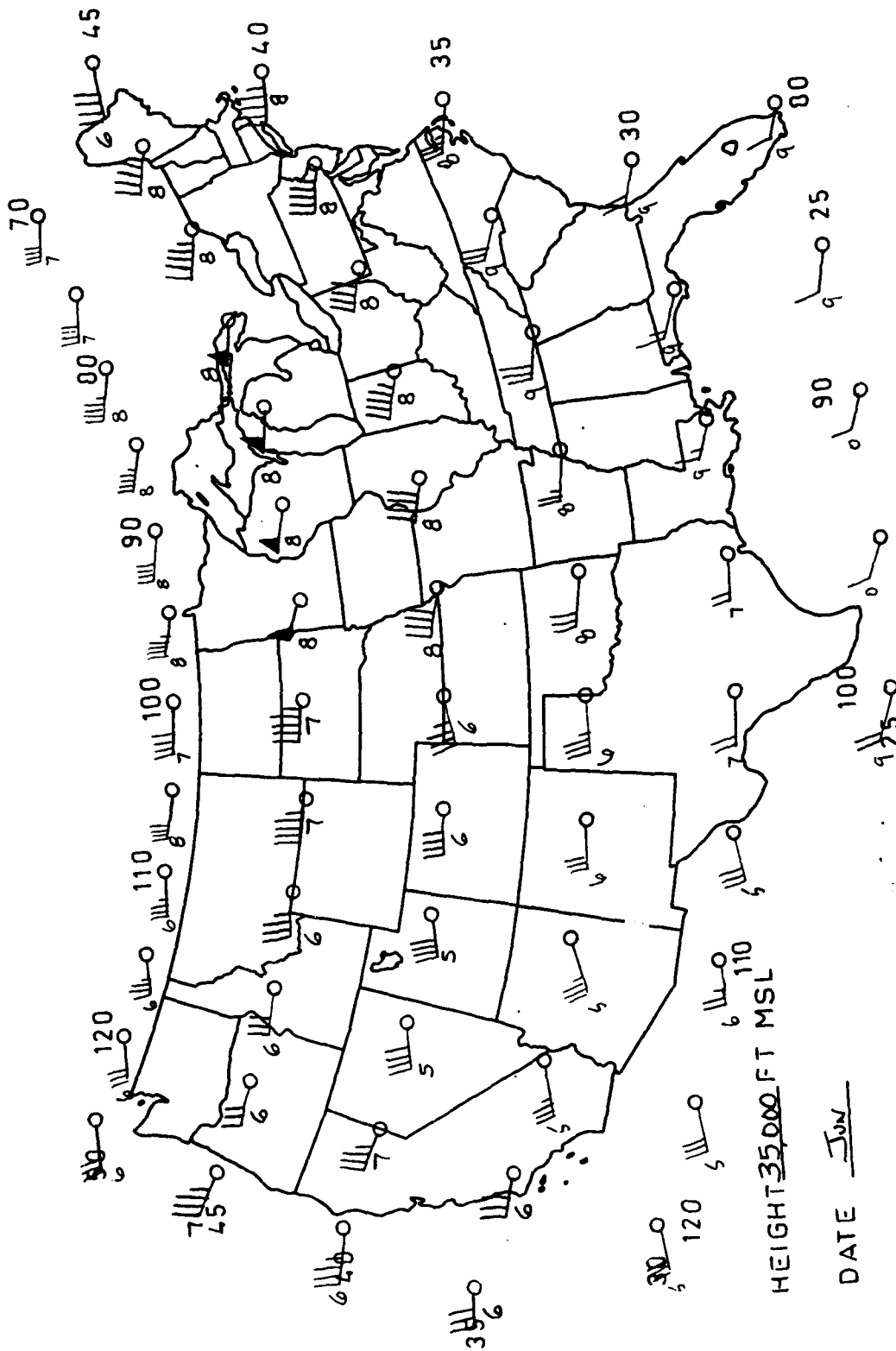
JUNE, 30,000 FEET MSL



HEIGHT 30,000 FT MSL

DATE JUN

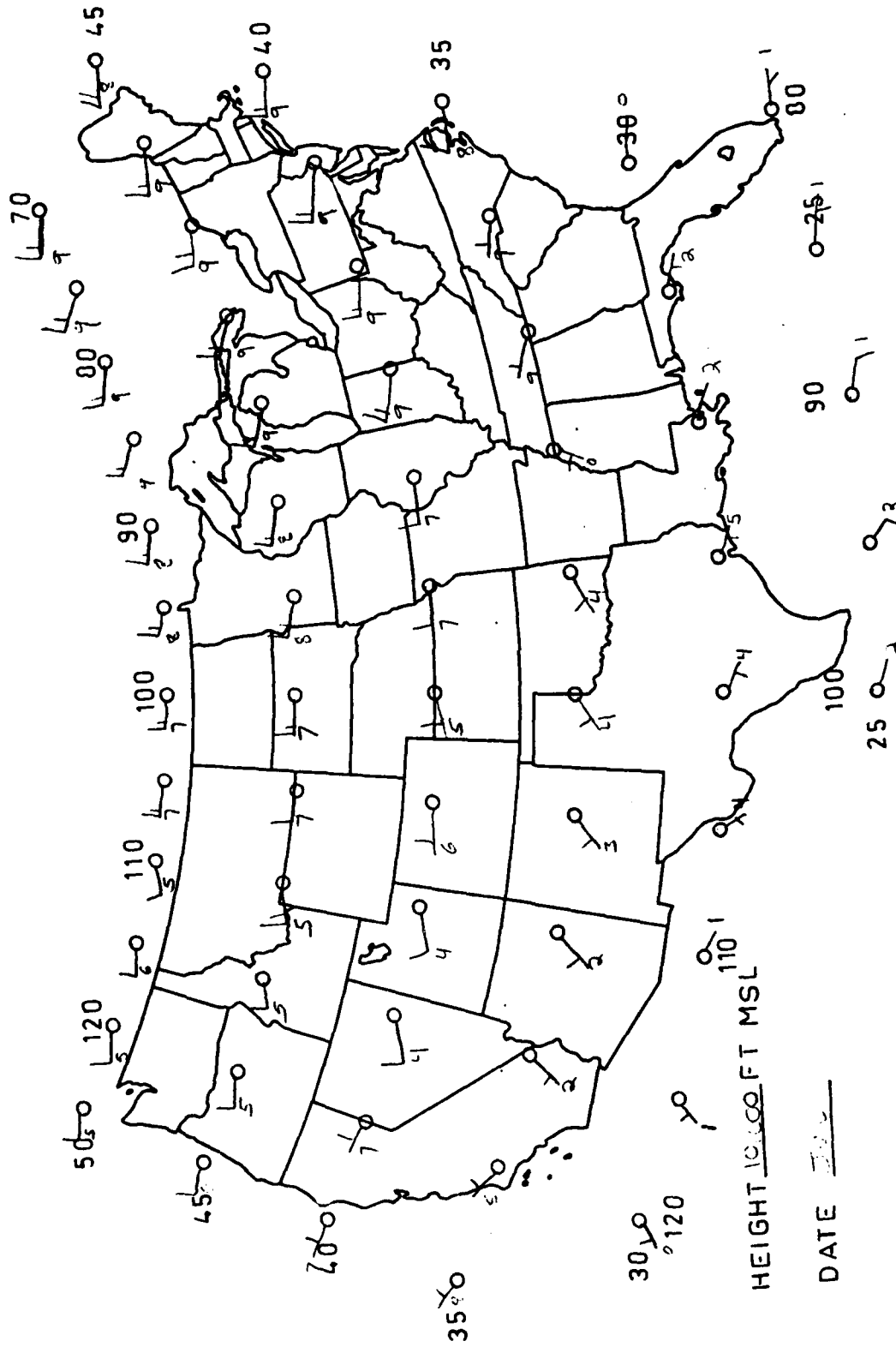
JUNE, 35,000 FEET MSL



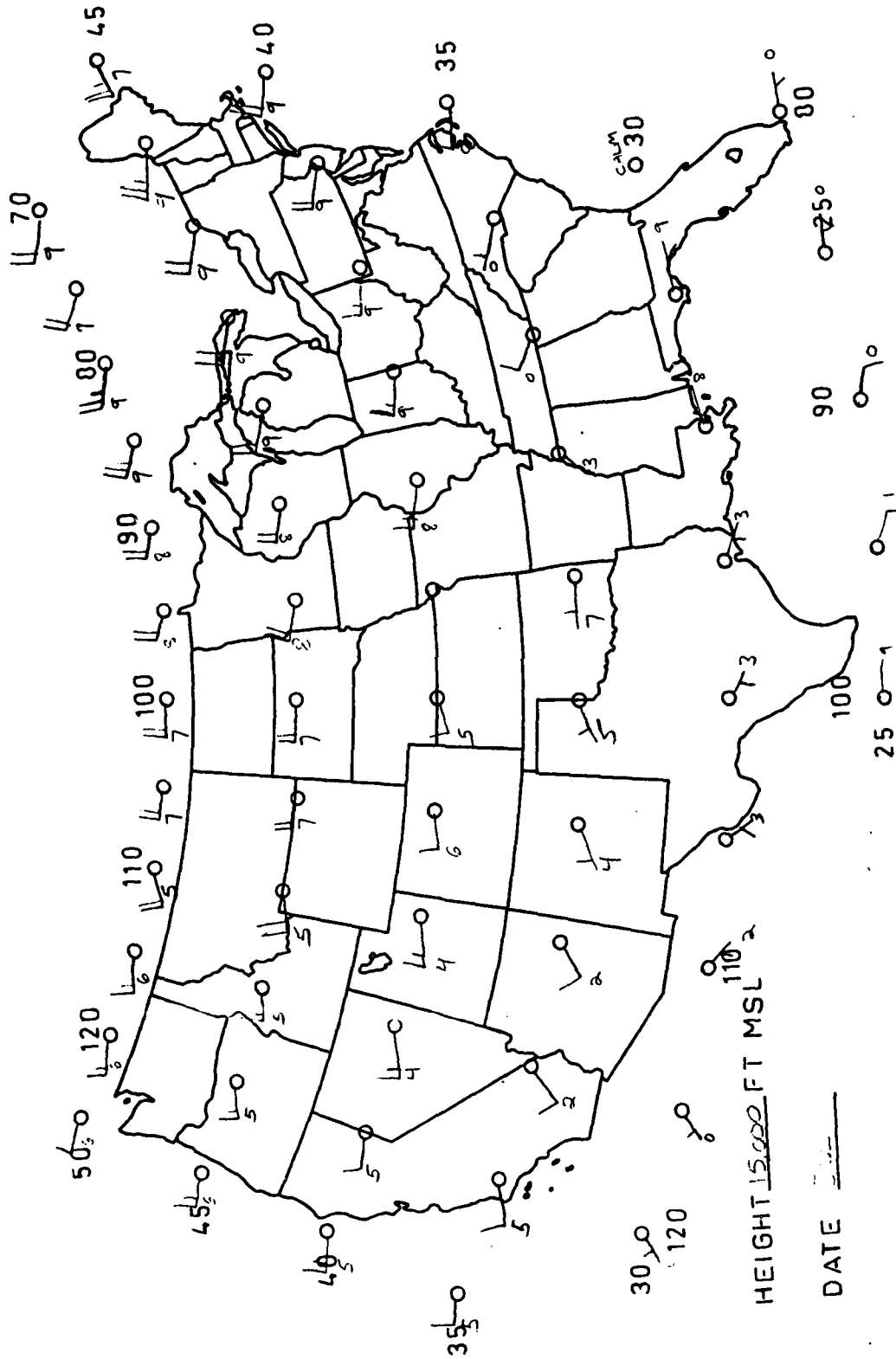
HEIGHT 300 FT MSL

DATE 11-1-58

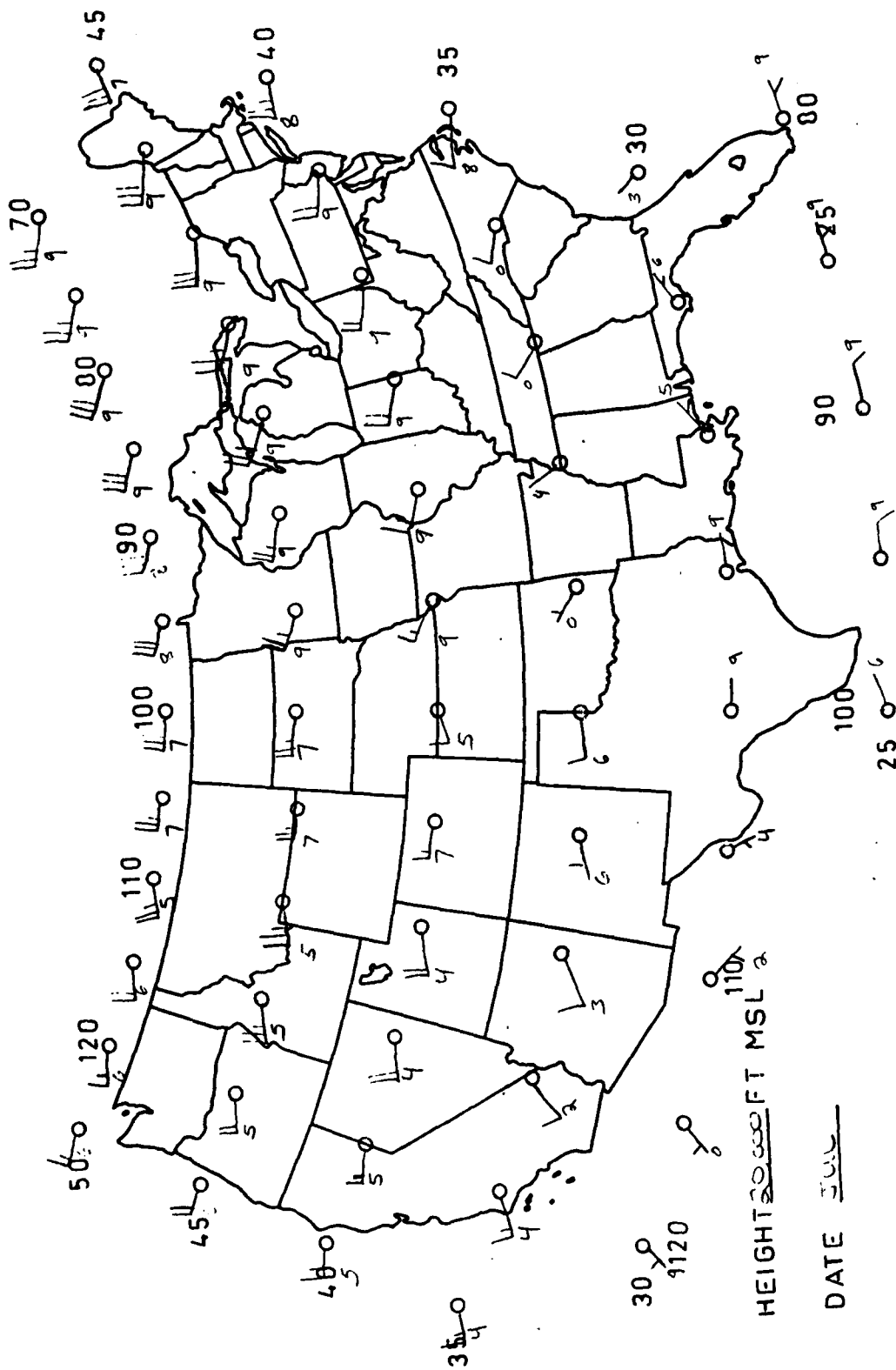
JULY, 10,000 FEET MSL



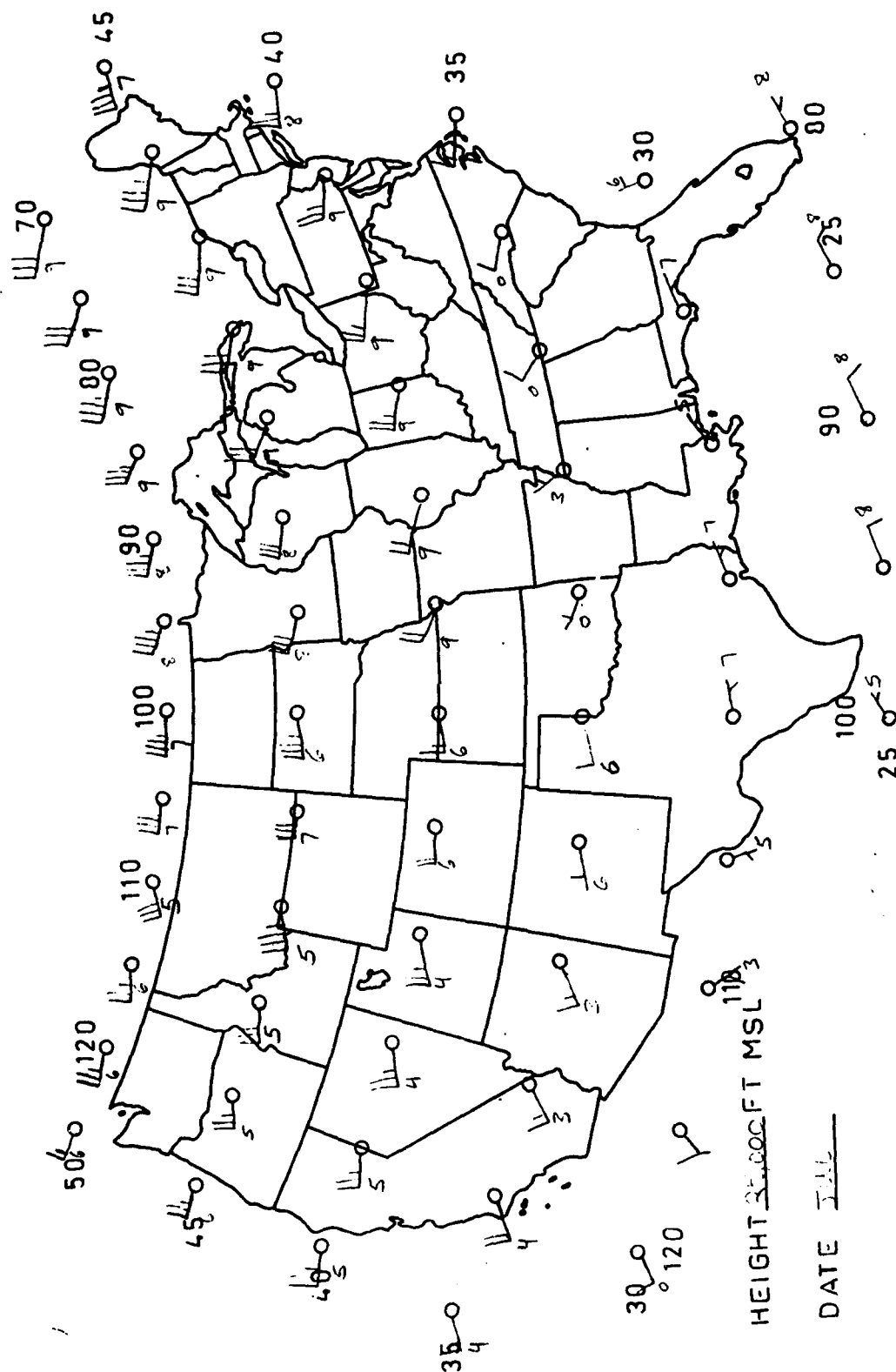
JULY, 15,000 FEET MSL



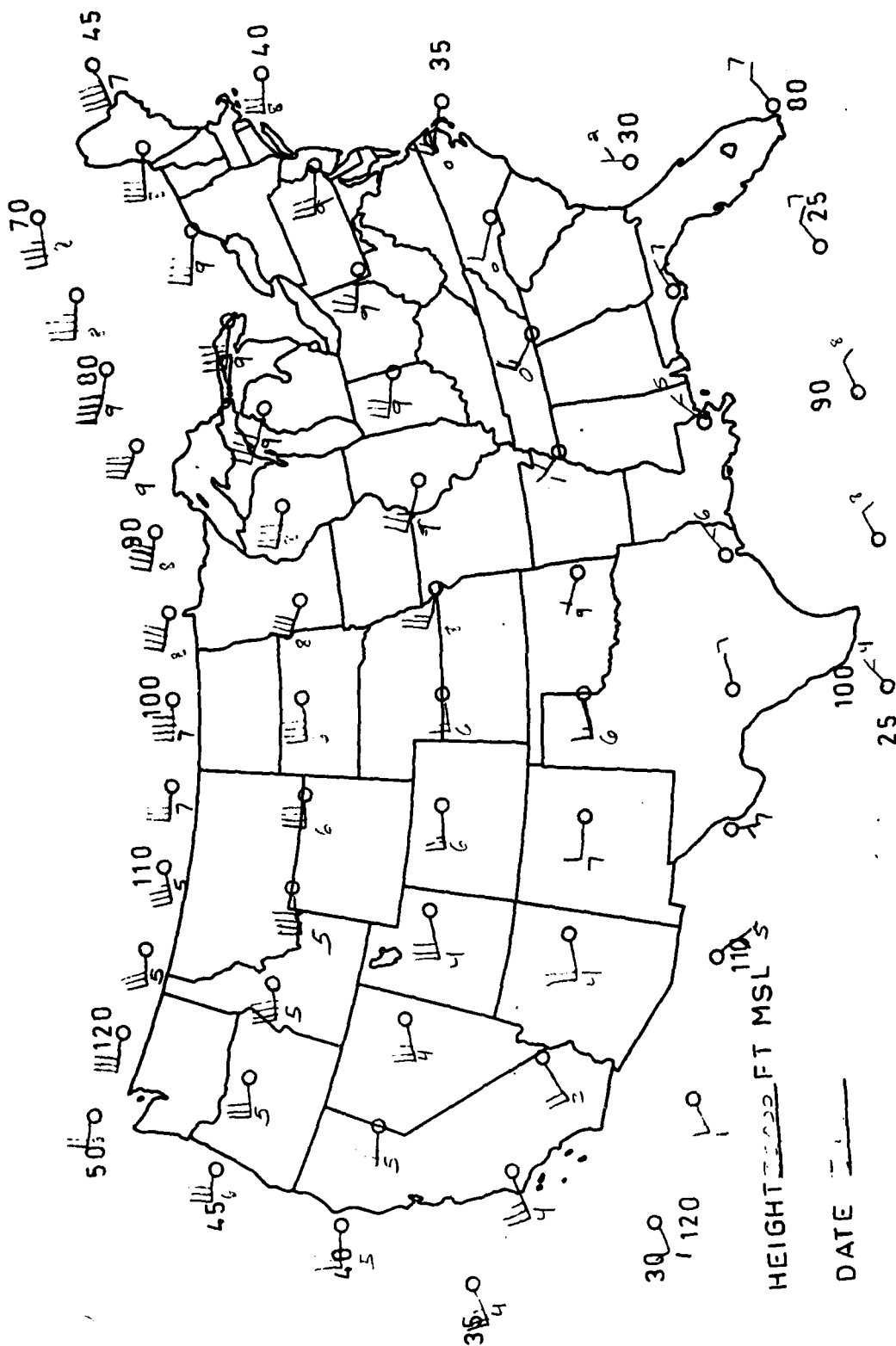
JULY, 20,000 FEET MSL



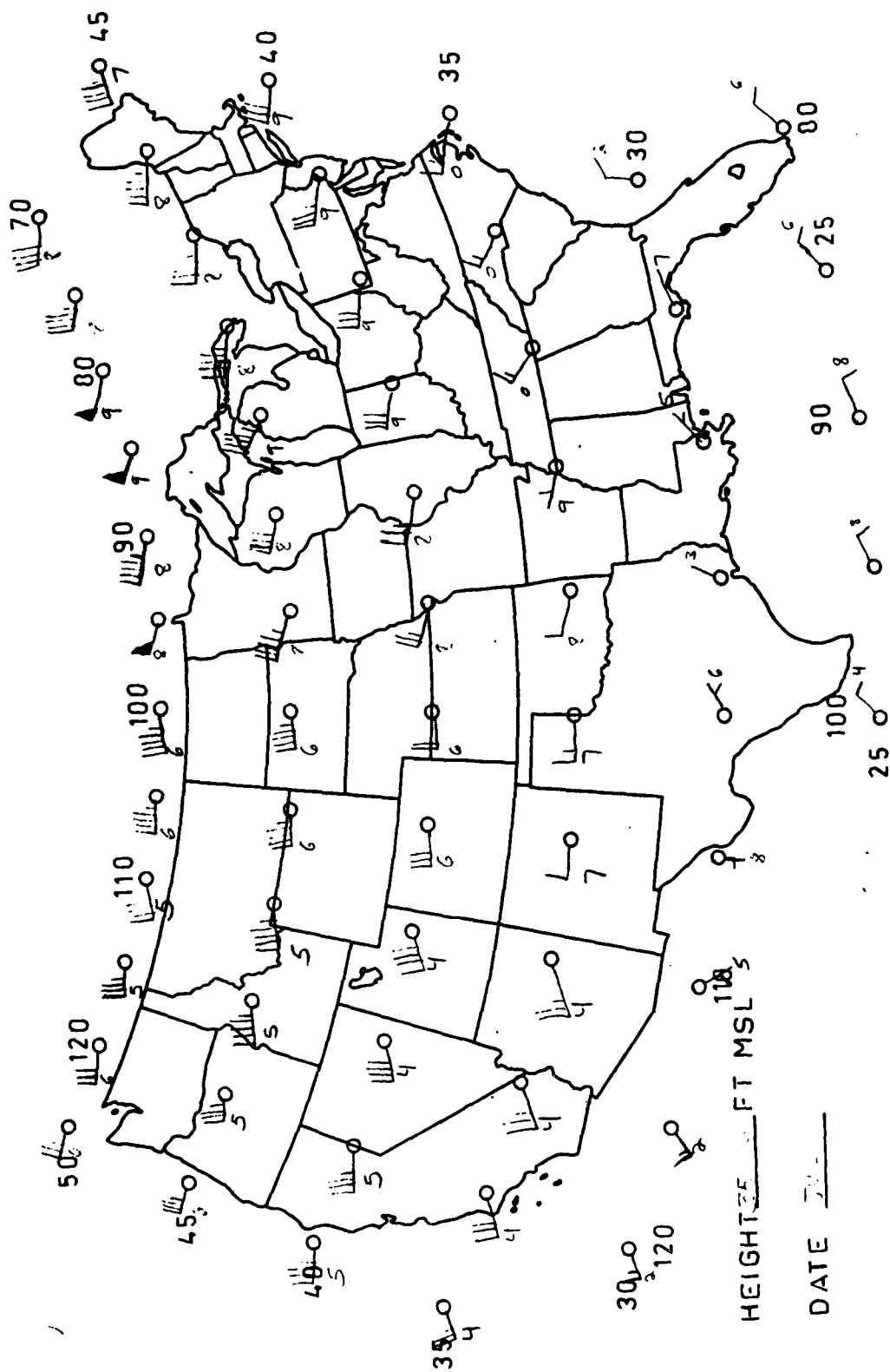
JULY, 25,000 FEET MSL



JULY, 30,000 FEET MSL



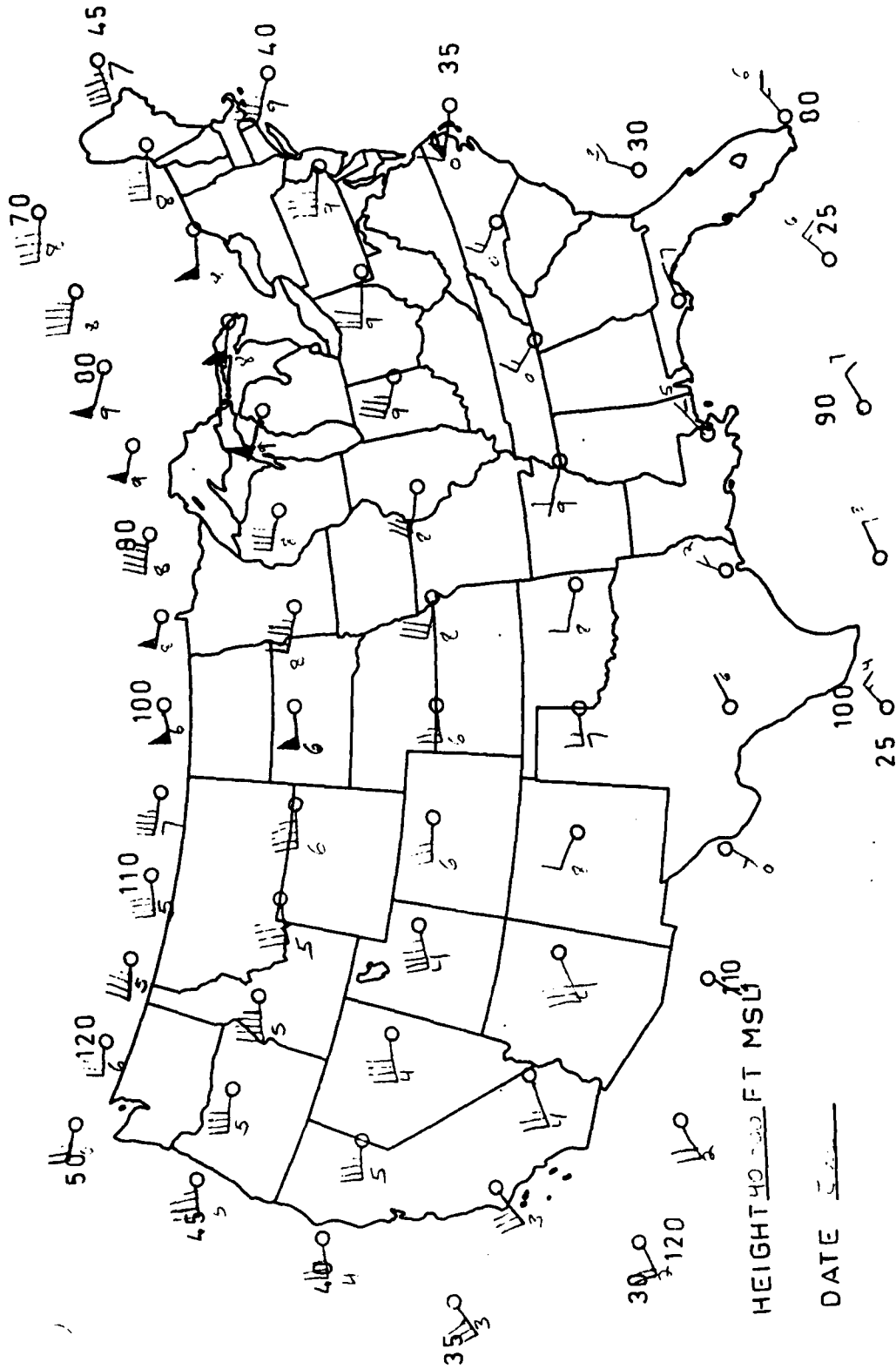
JULY, 35,000 FEET MSL



HEIGHT 35,000 FT MSL

DATE 7-75

JULY, 40,000 FEET MSL



HEIGHT 40,000 FT MSL

DATE _____

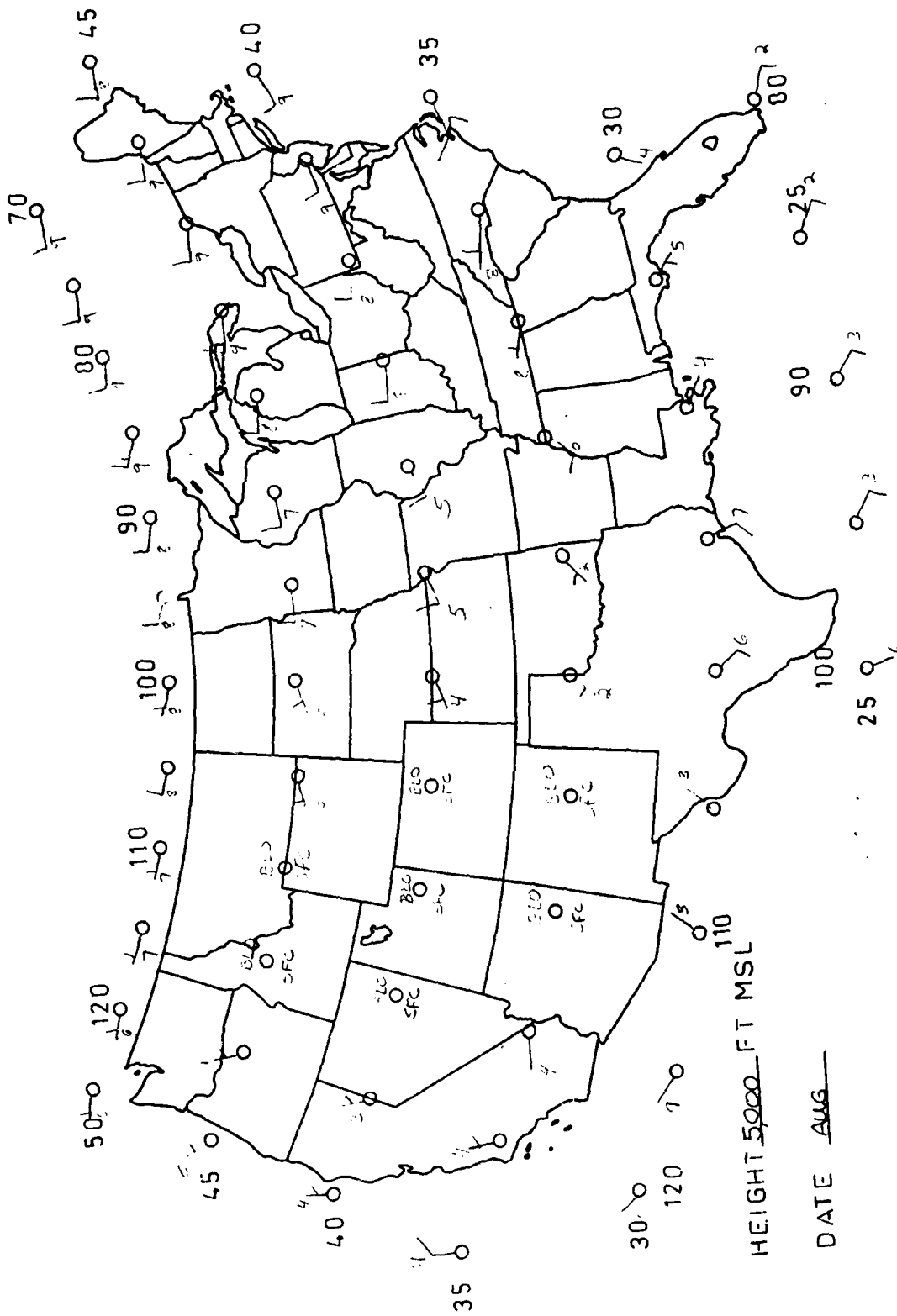
HEIGHT 4500 FT MSL

DATE

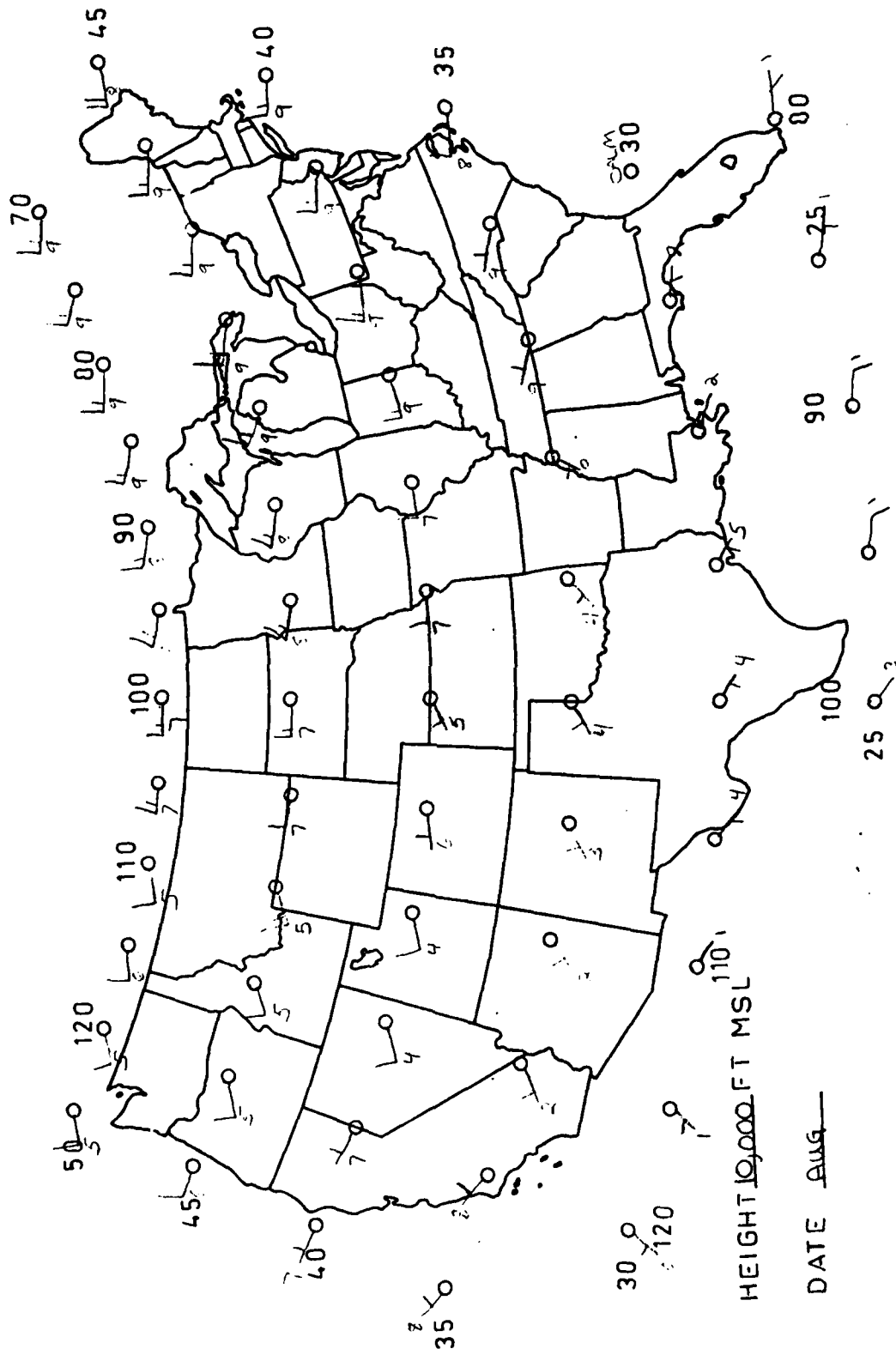
HEIGHT 4500 FT MSL

DATE 11-11-54

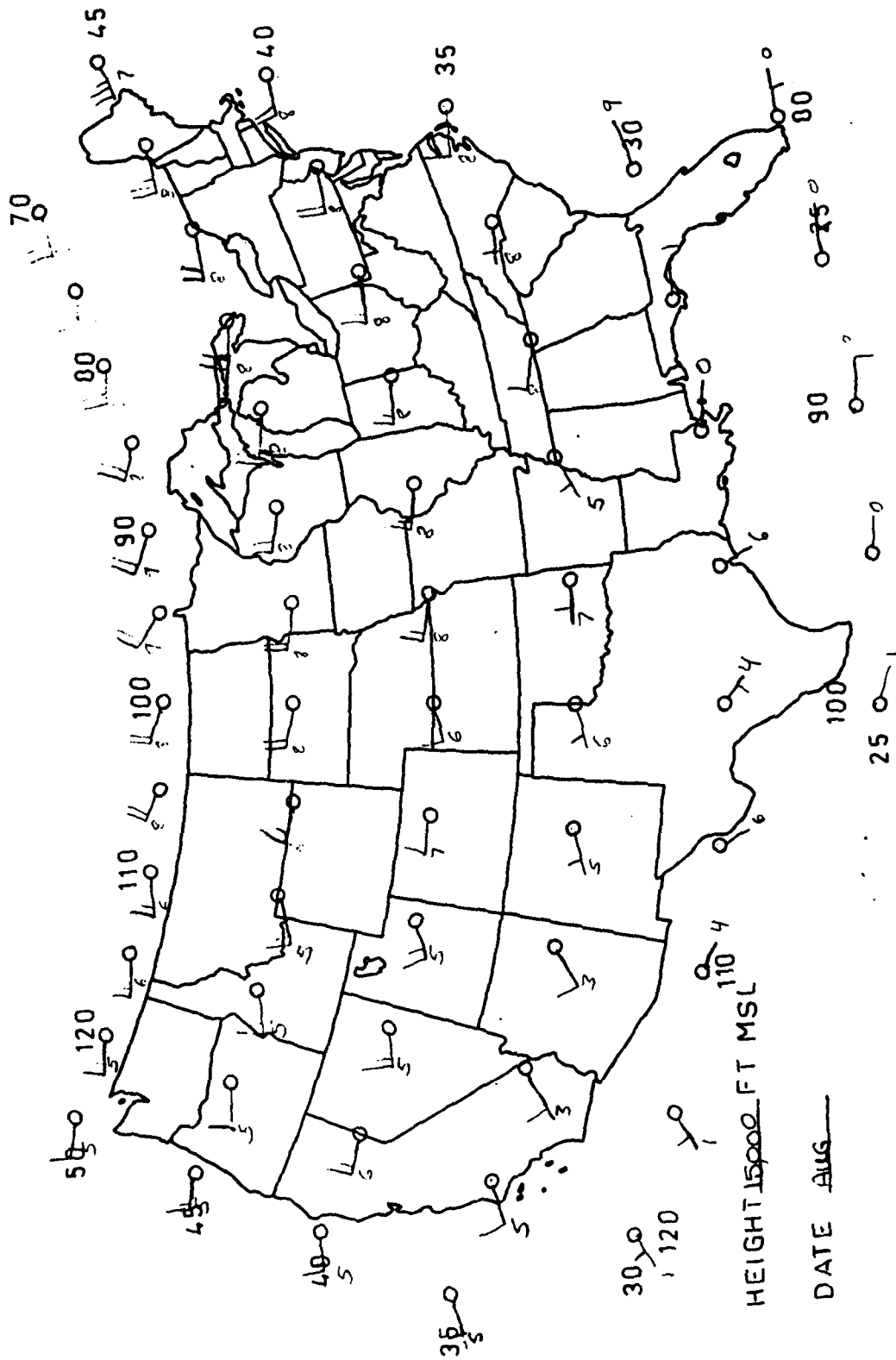
AUGUST, 5,000 FEET MSL



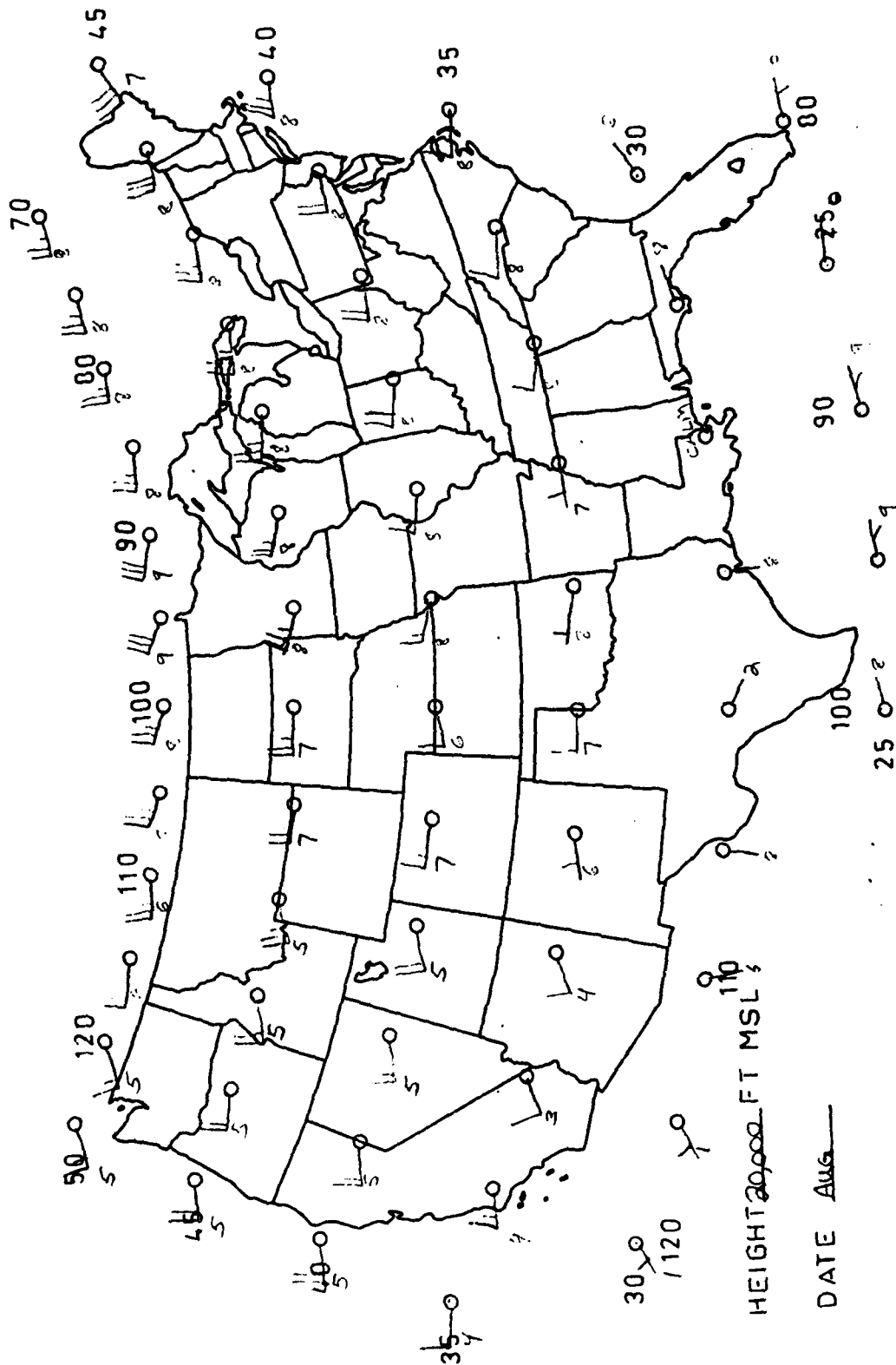
AUGUST, 10,000 FEET MSL



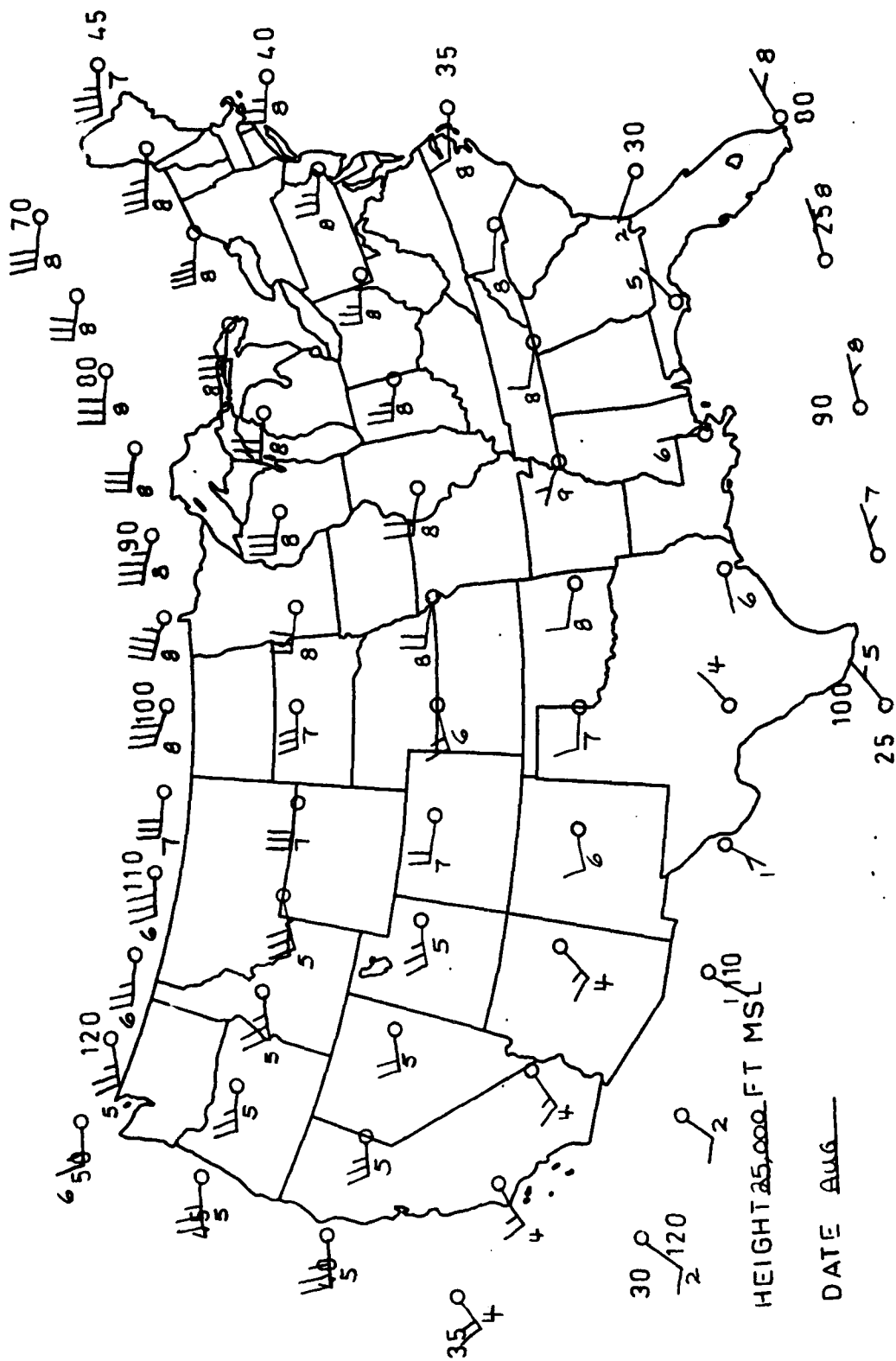
AUGUST, 15,000 FEET MSL



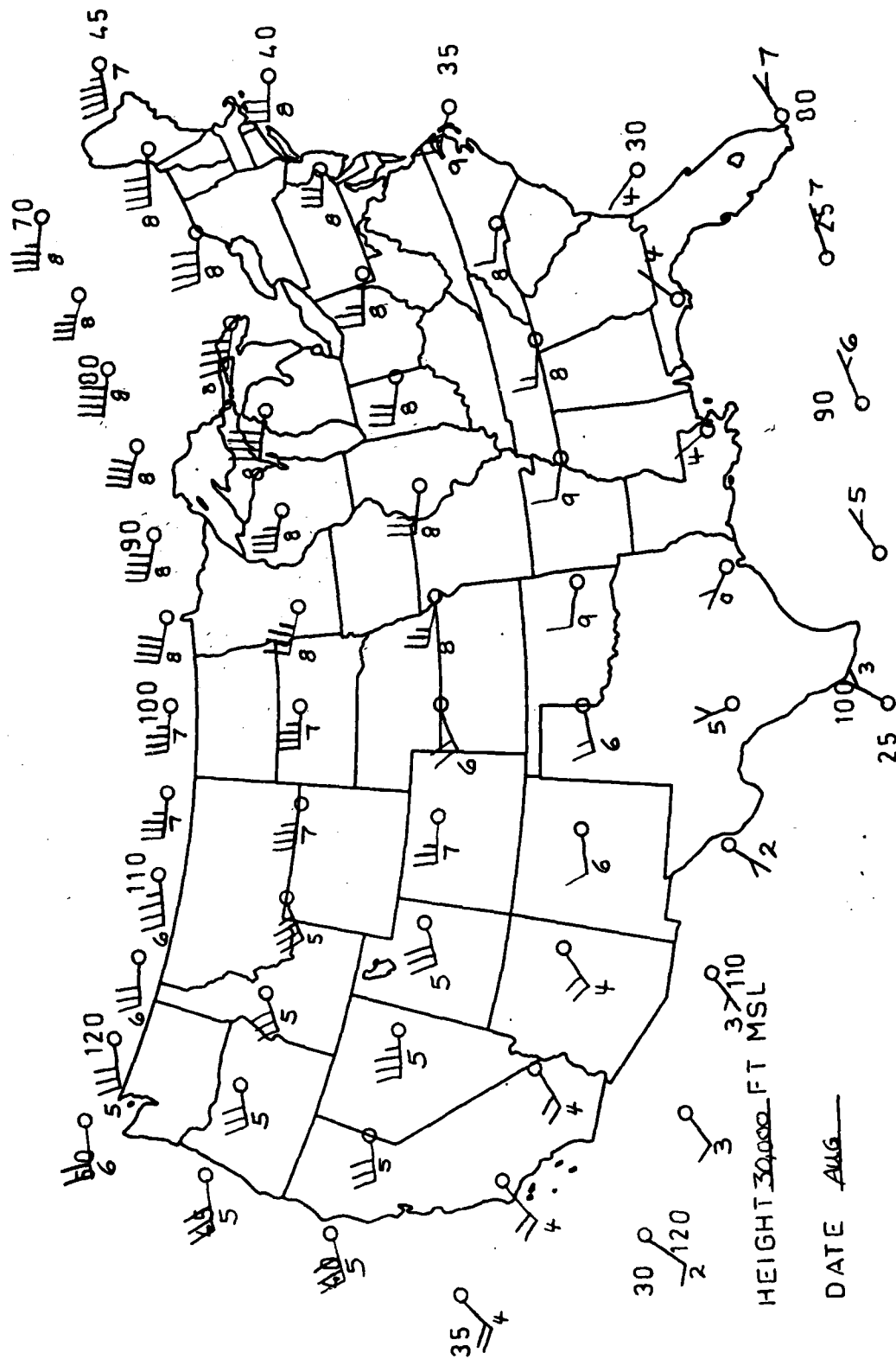
AUGUST, 20,000 FEET MSL



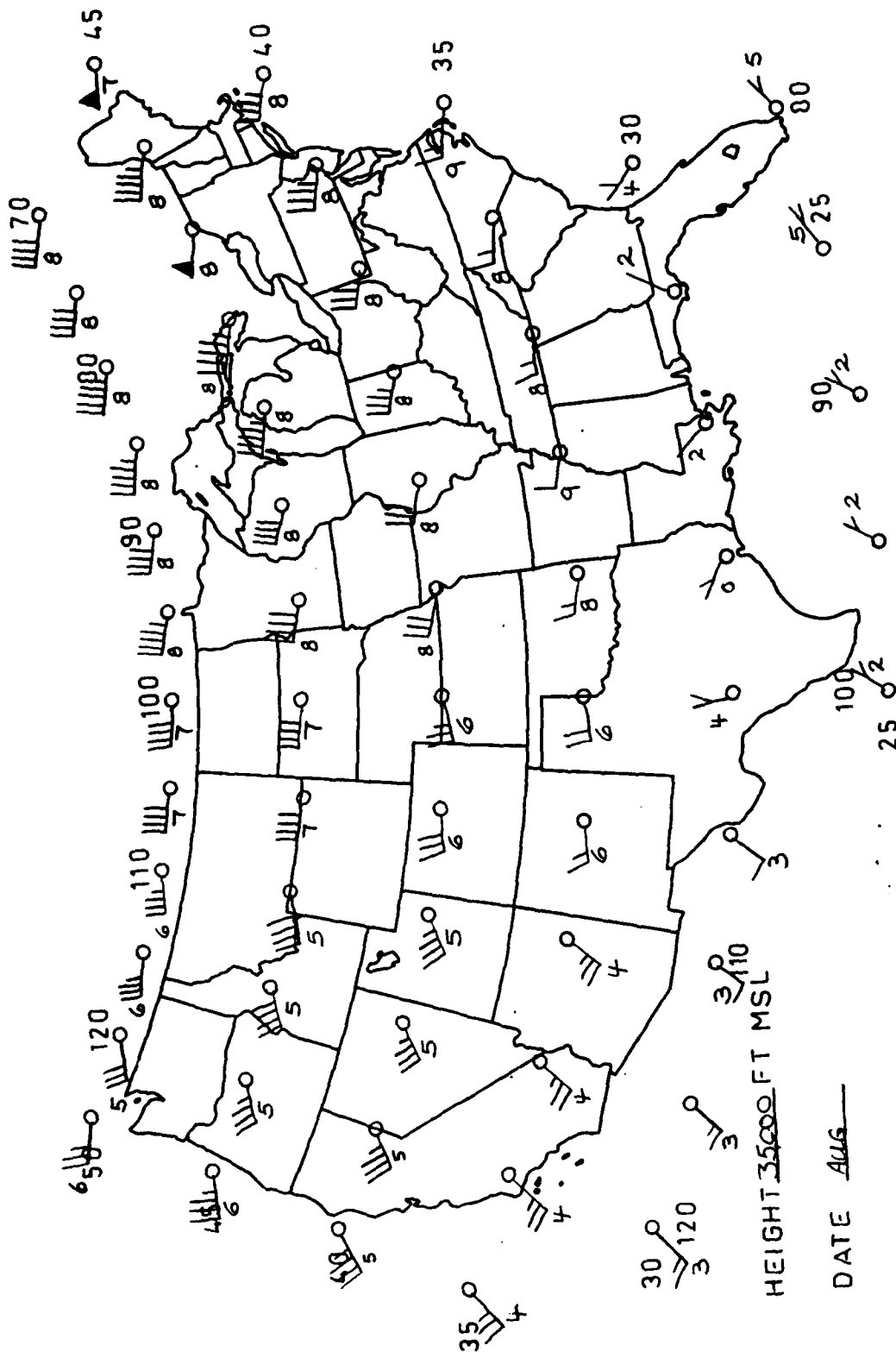
AUGUST, 25,000 FEET MSL



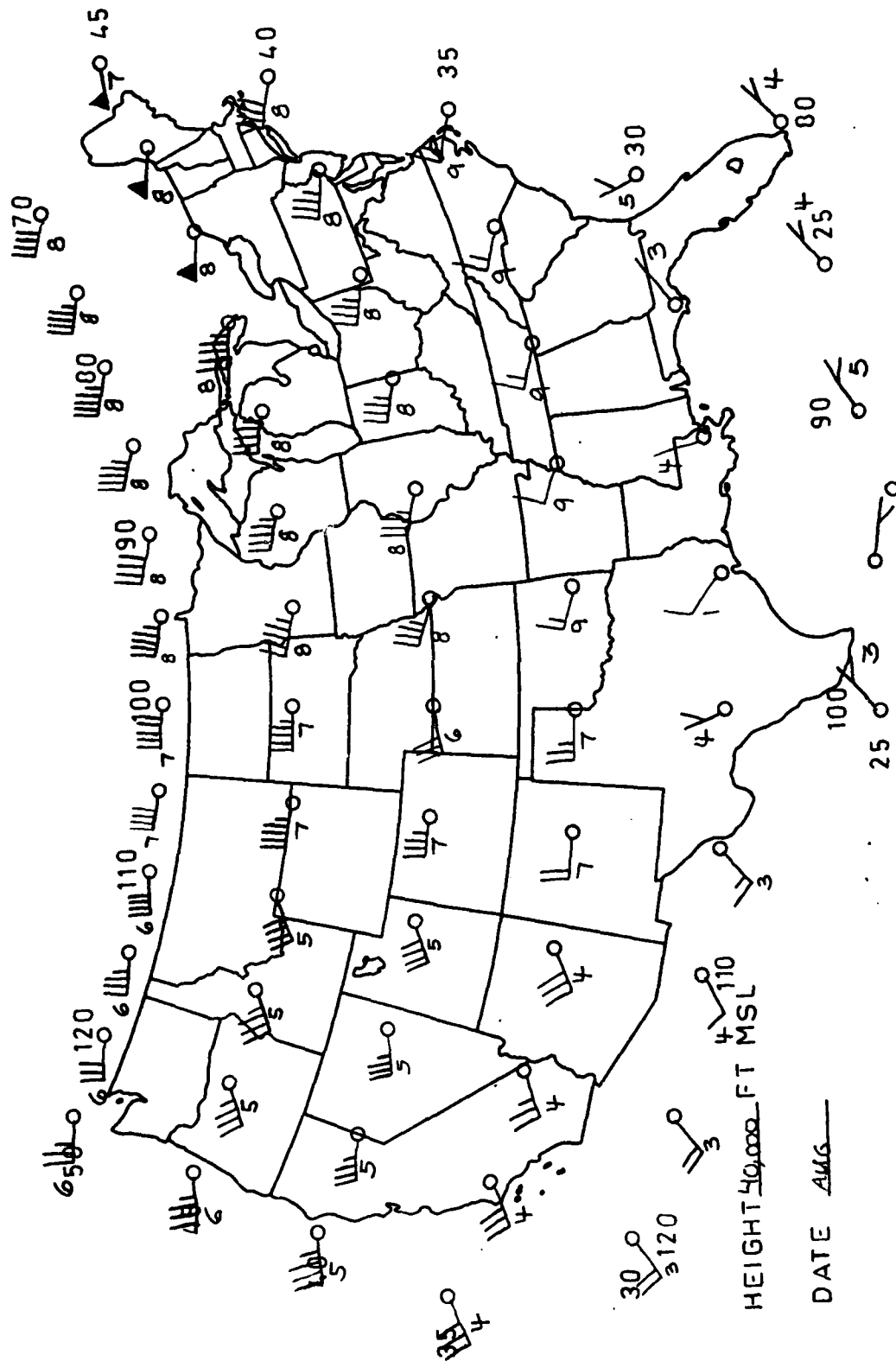
AUGUST, 30,000 FEET MSL



AUGUST, 35,000 FEET MSL



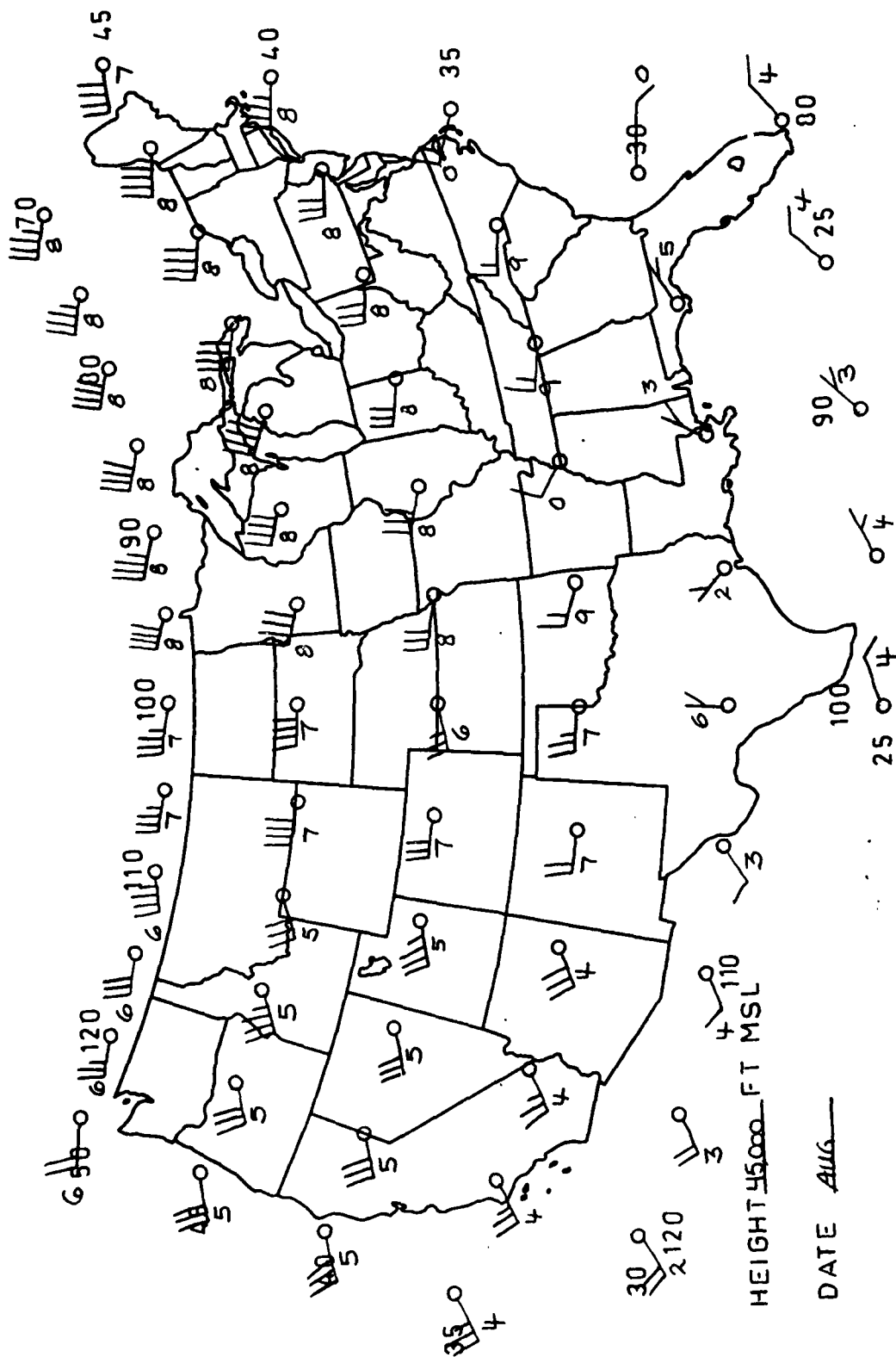
AUGUST, 40,000 FEET MSL



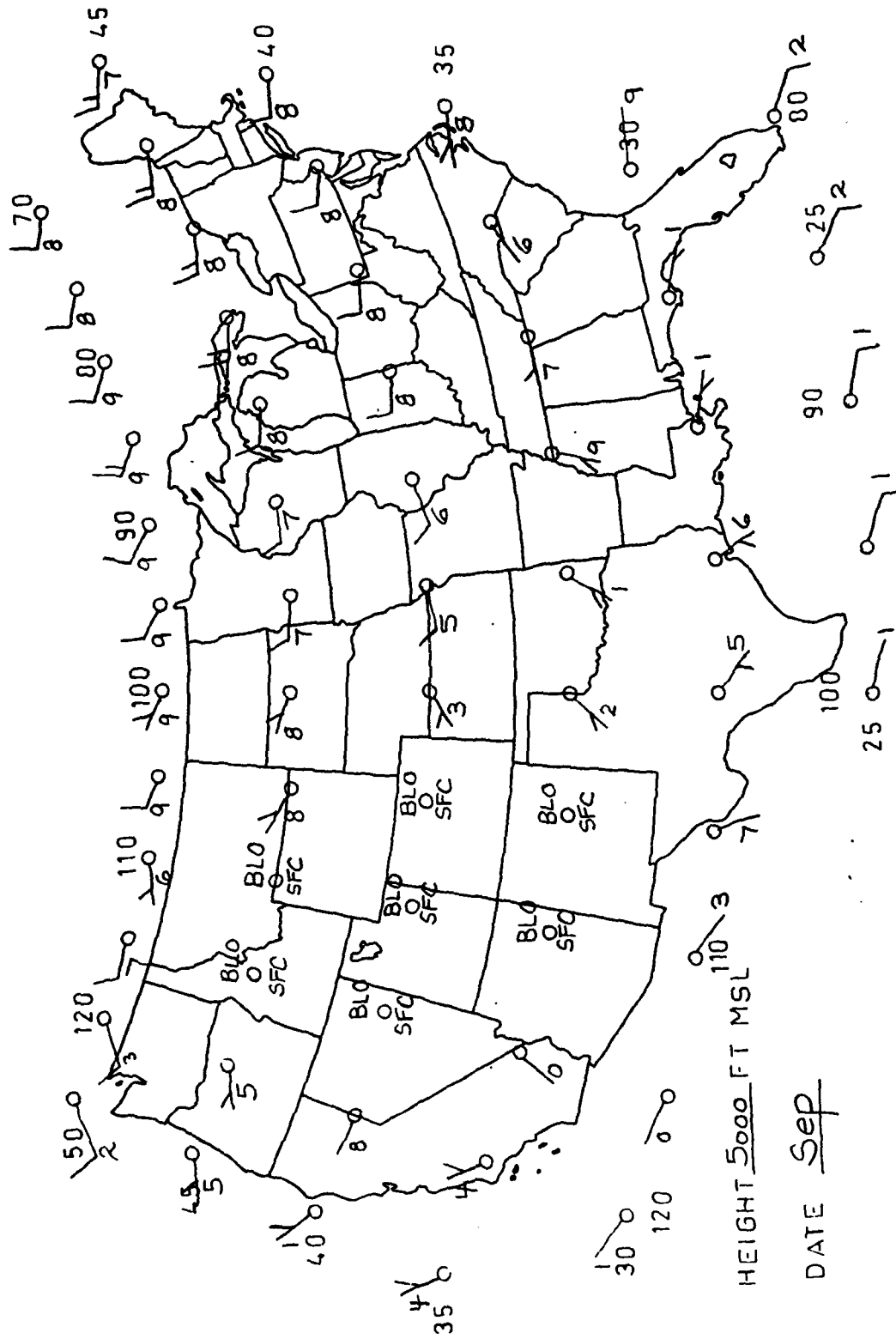
HEIGHT 40,000 FT MSL

DATE AUG

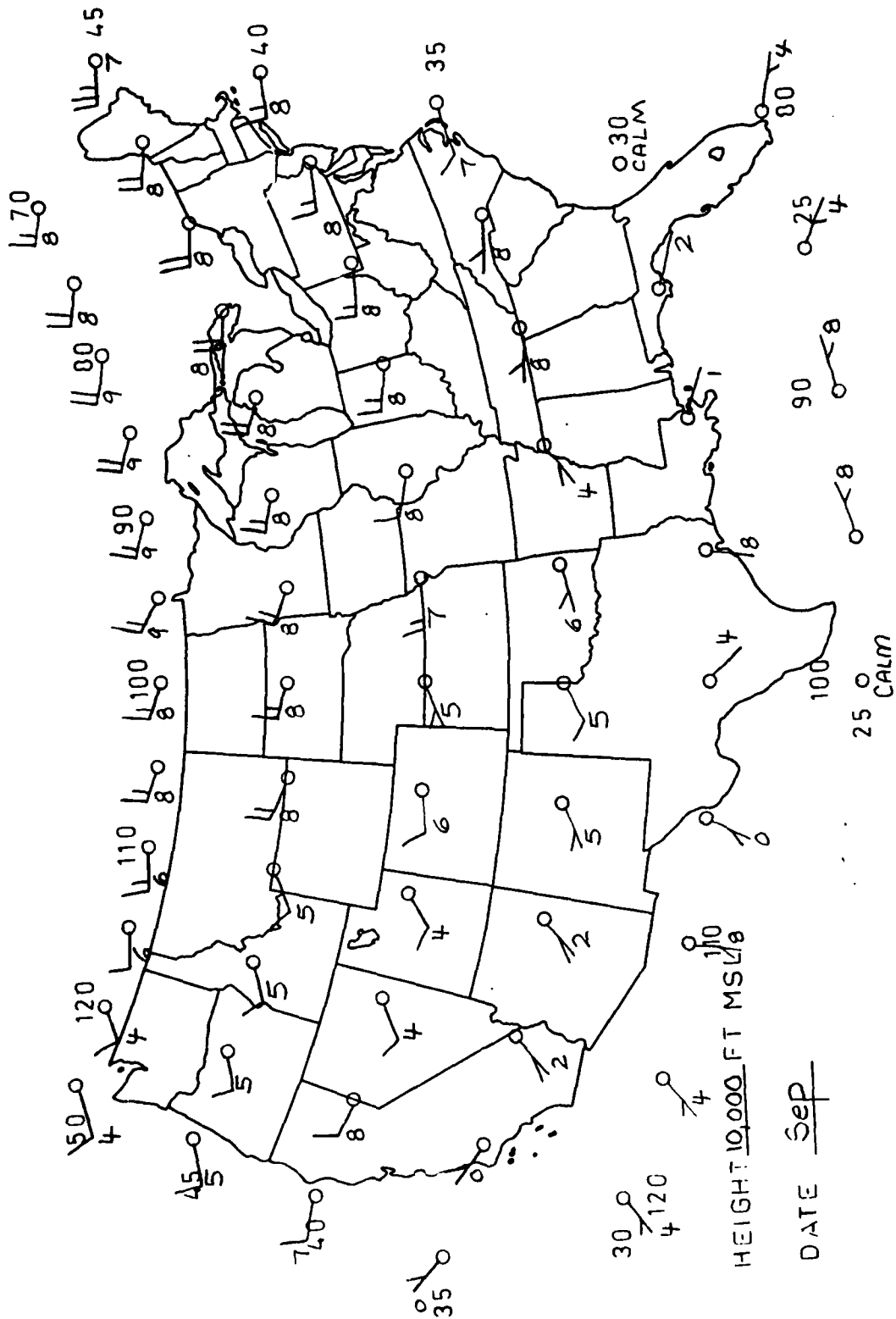
AUGUST, 45,000 FEET MSL



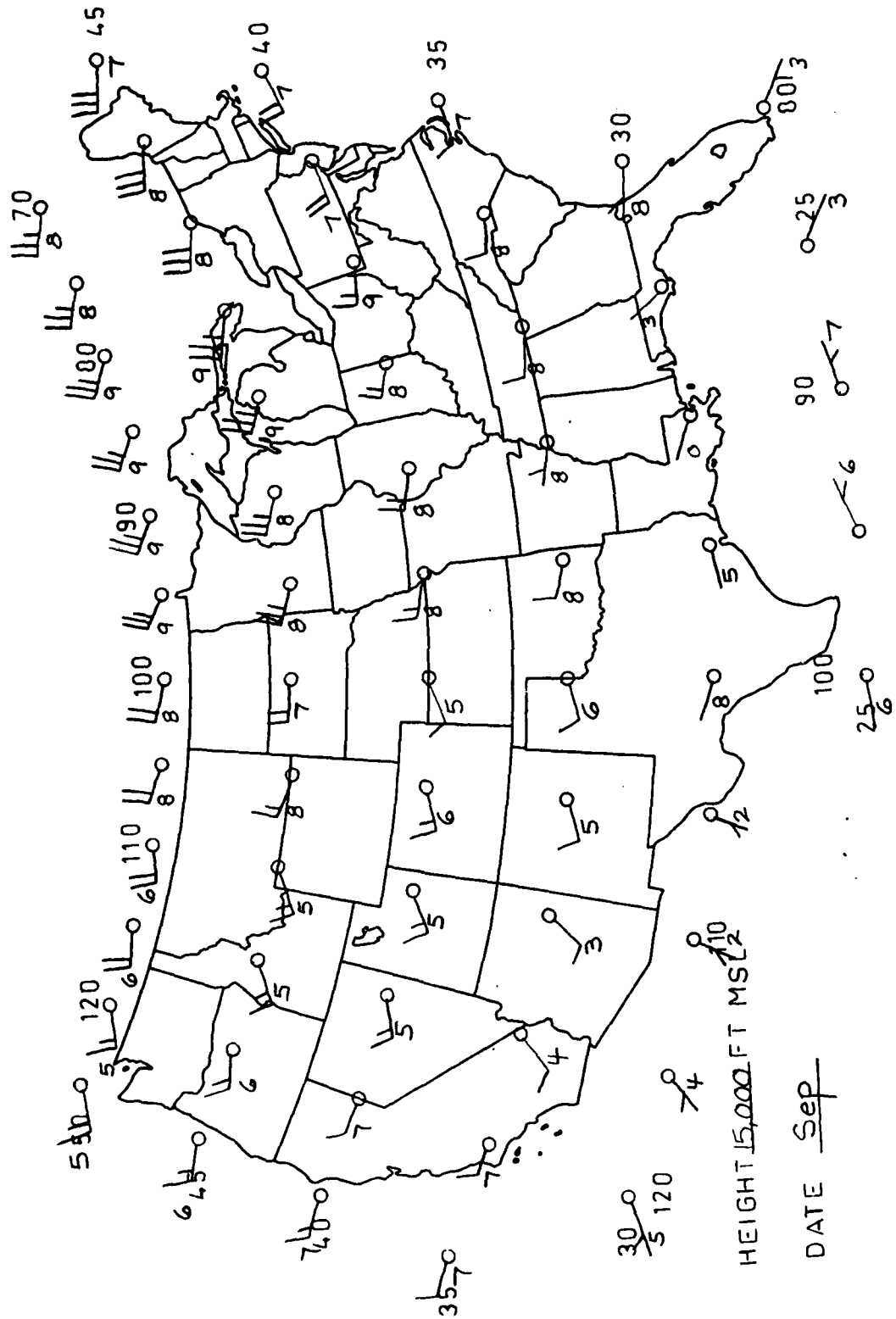
SEPTEMBER, 5,000 FEET MSL



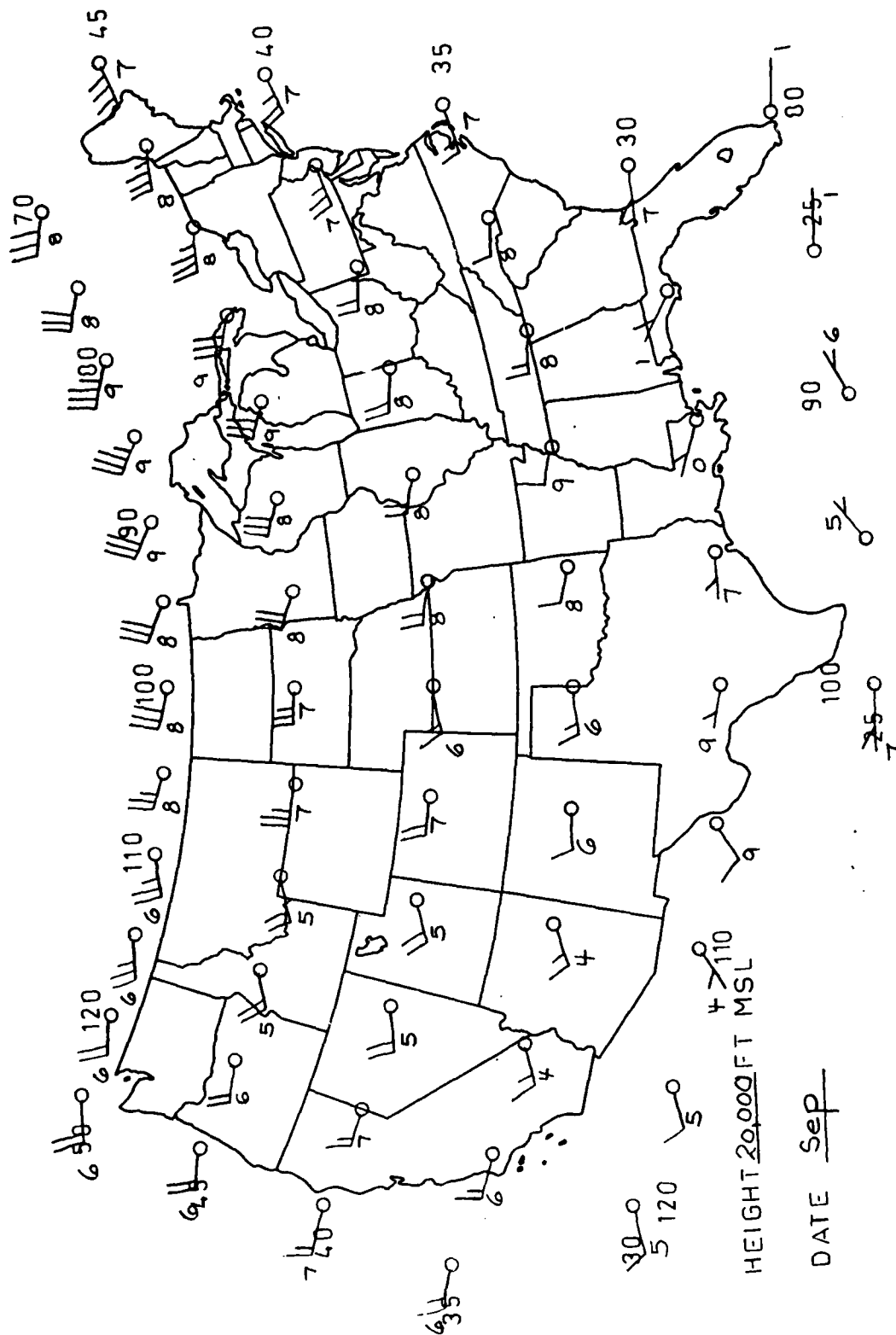
SEPTEMBER, 10,000 FEET MS�



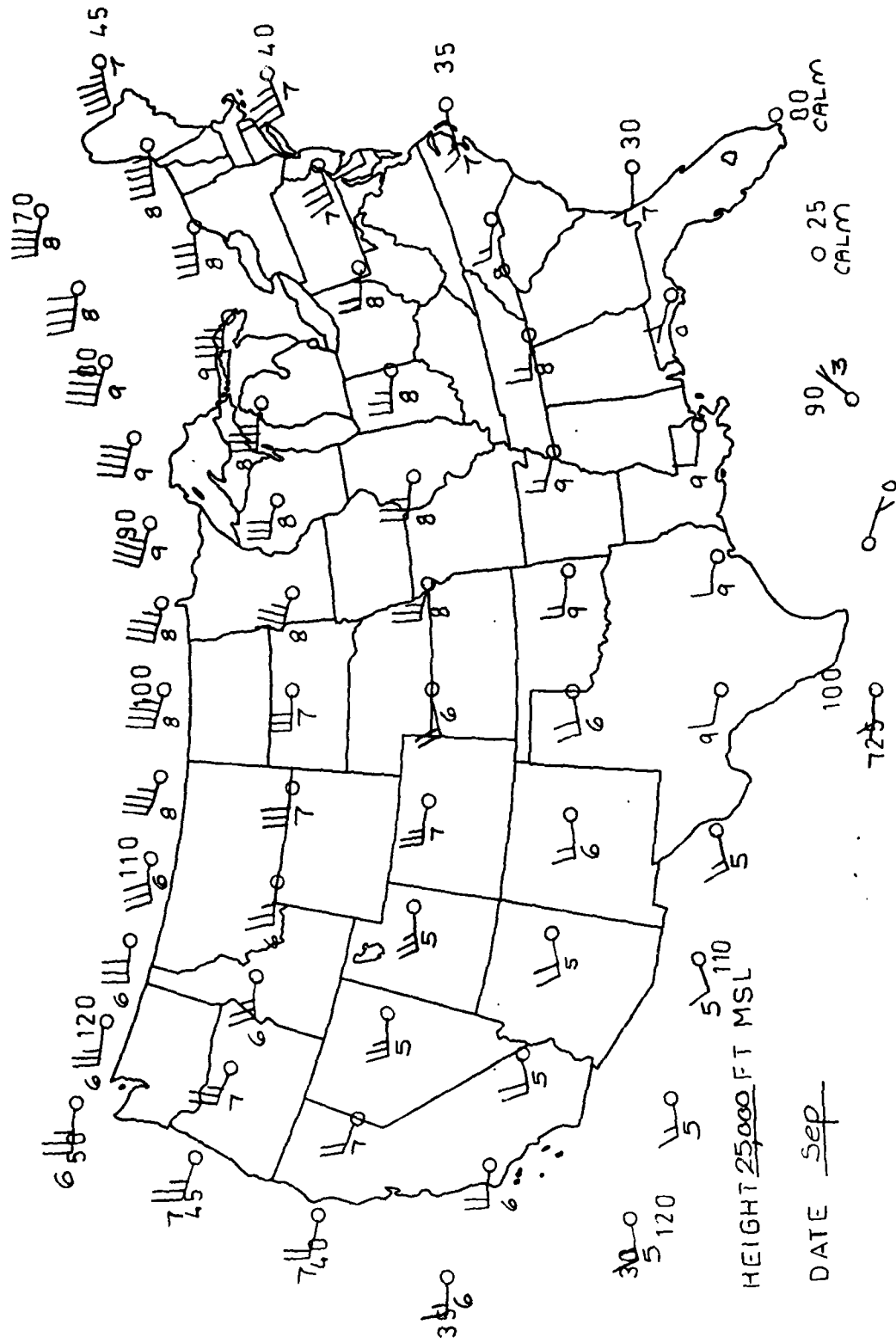
SEPTEMBER, 15,000 FEET MSL



SEPTEMBER, 20,000 FEET MSL



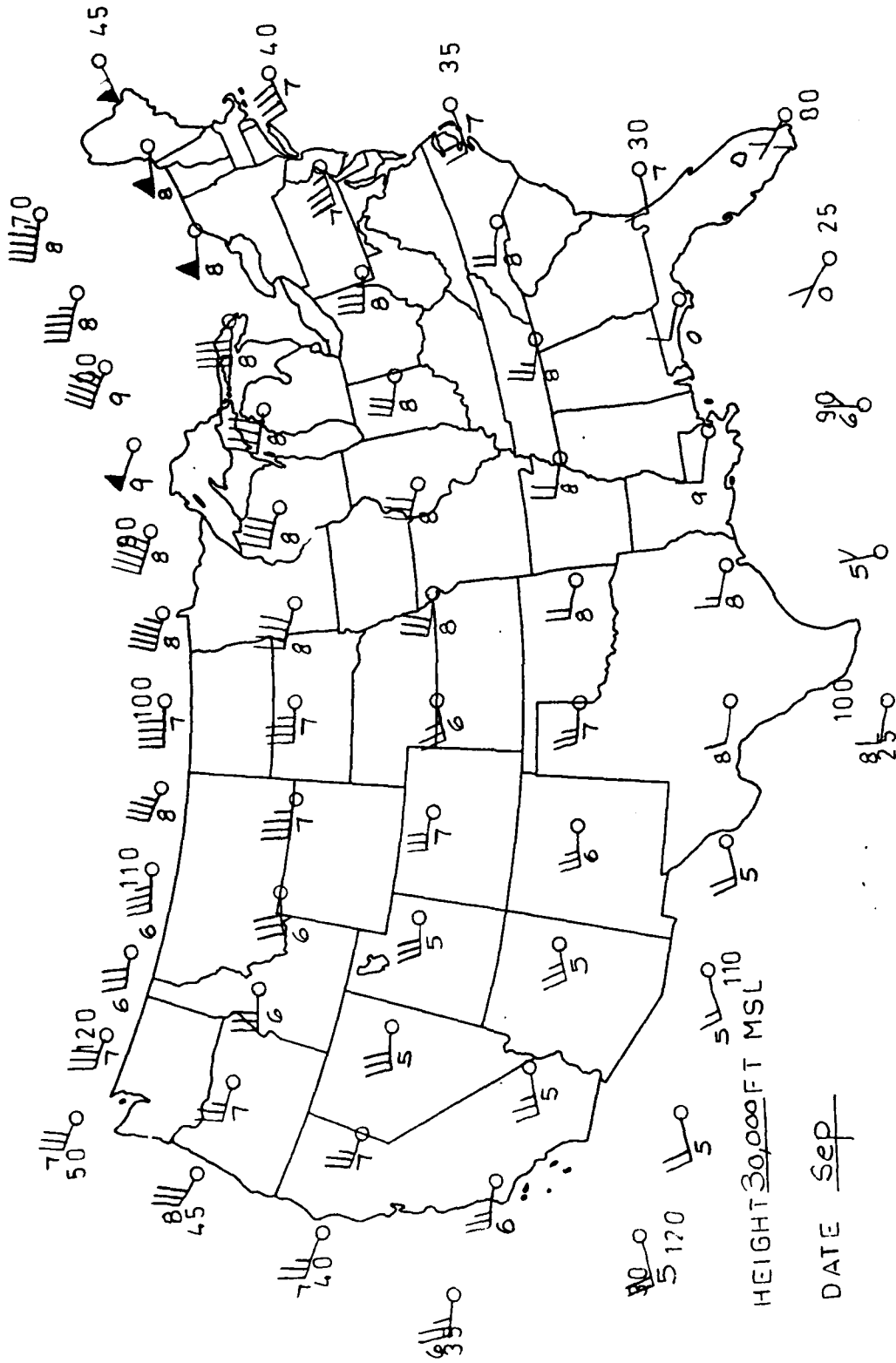
SEPTEMBER, 25,000 FEET MSL



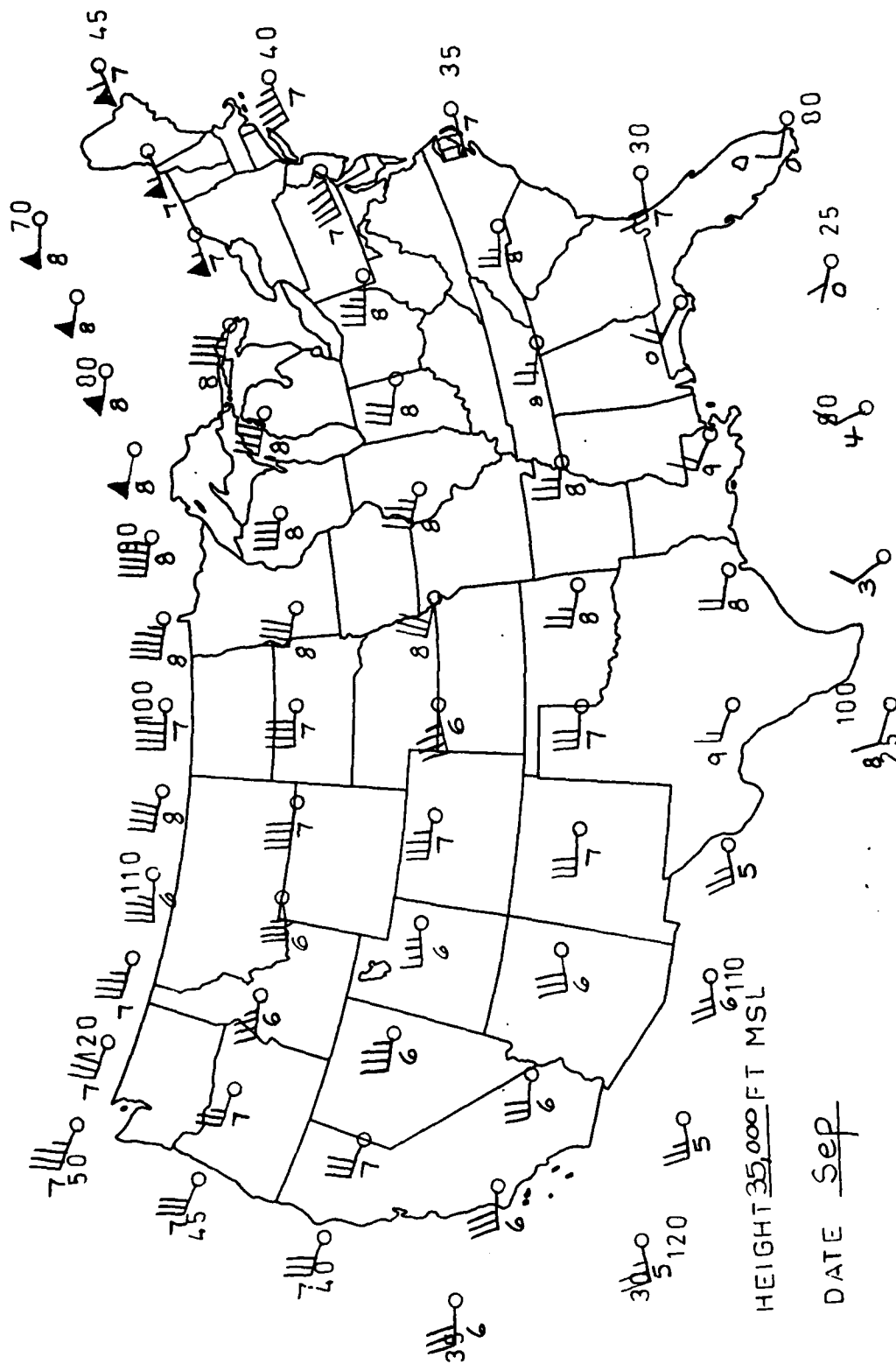
HEIGHT 25,000 FT MSL

DATE Sep

SEPTEMBER, 30,000 FEET MSL



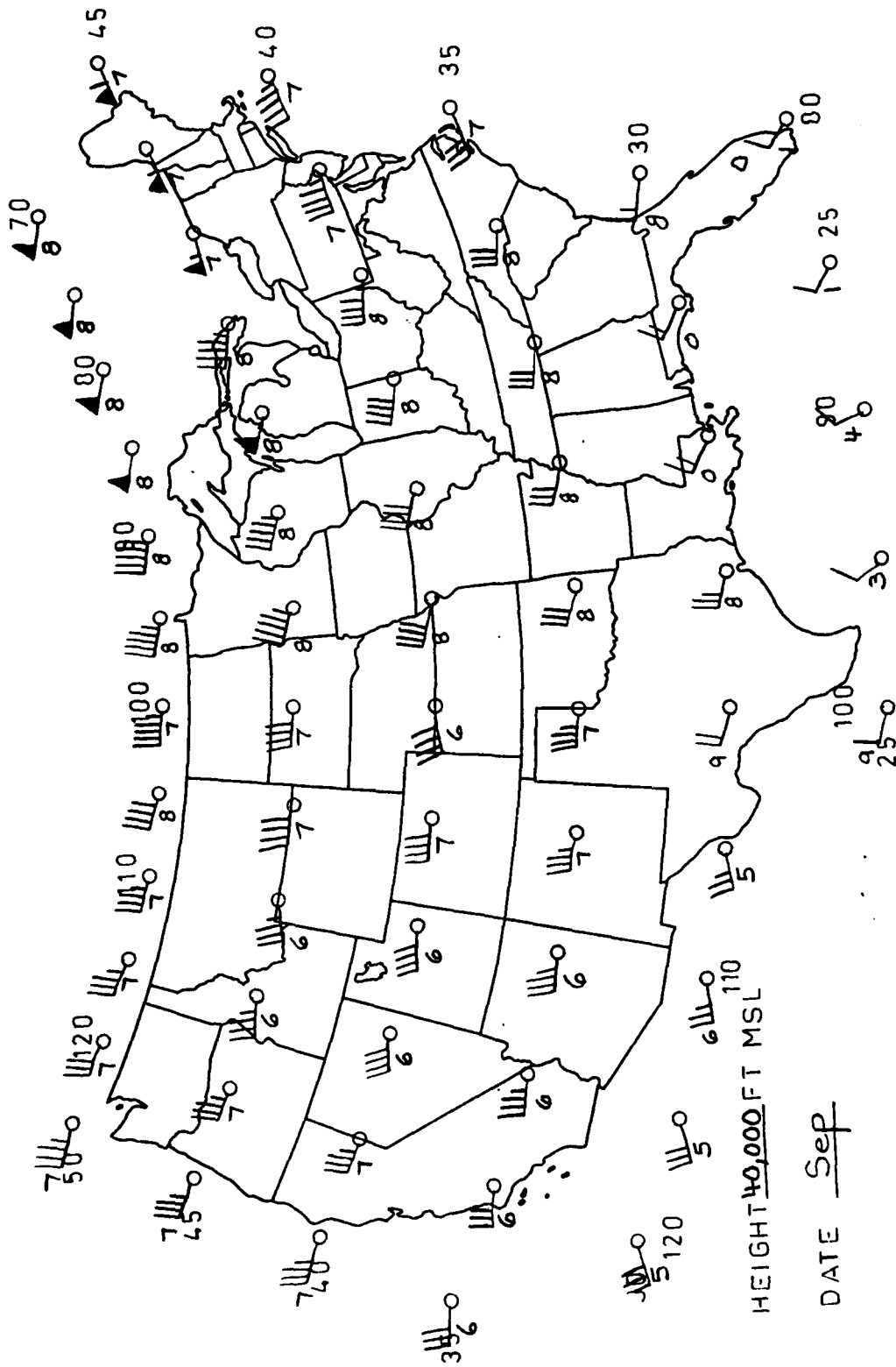
SEPTEMBER, 35,000 FEET MSL



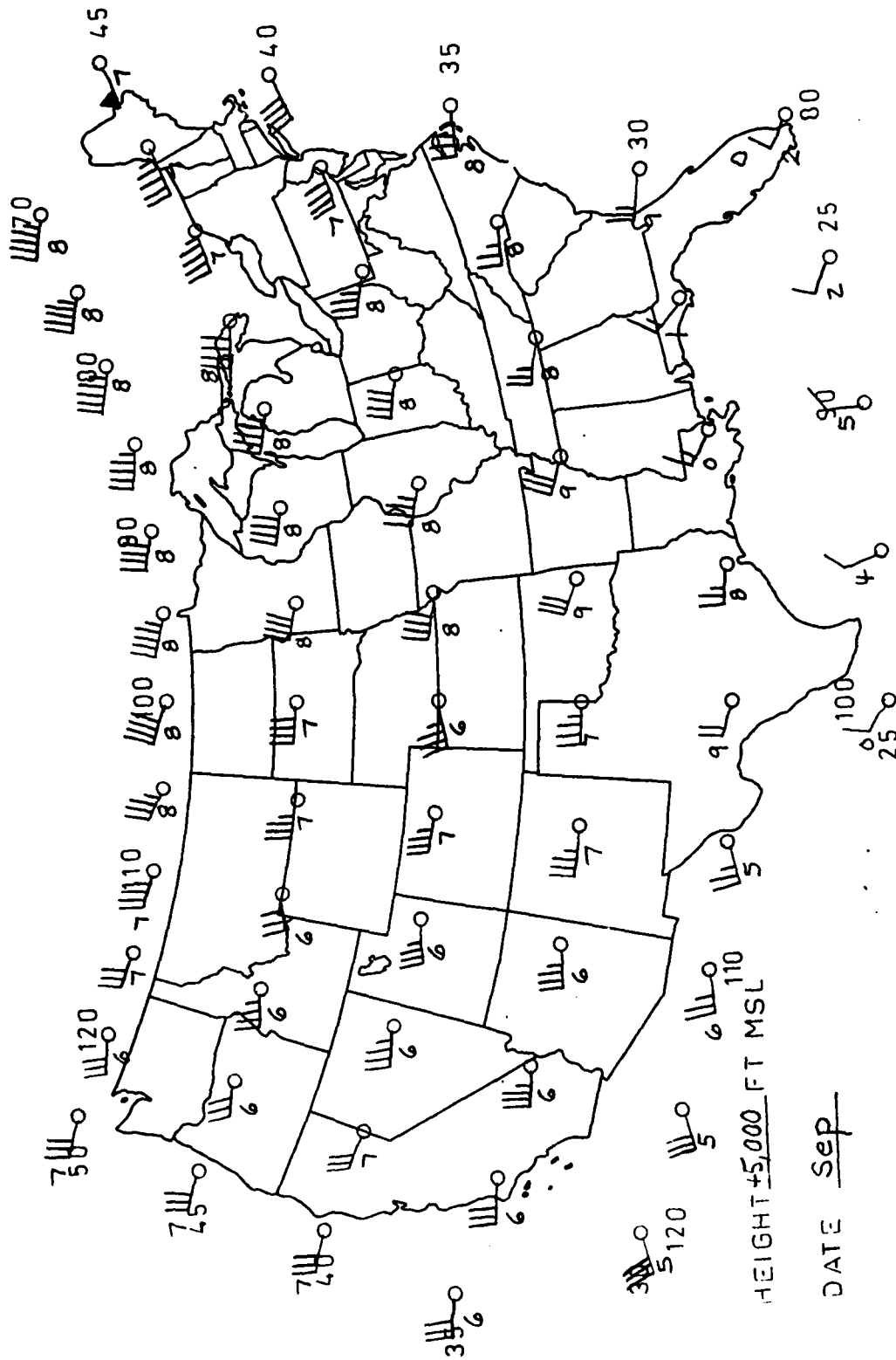
HEIGHT 35,000 FT MSL

DATE Sep

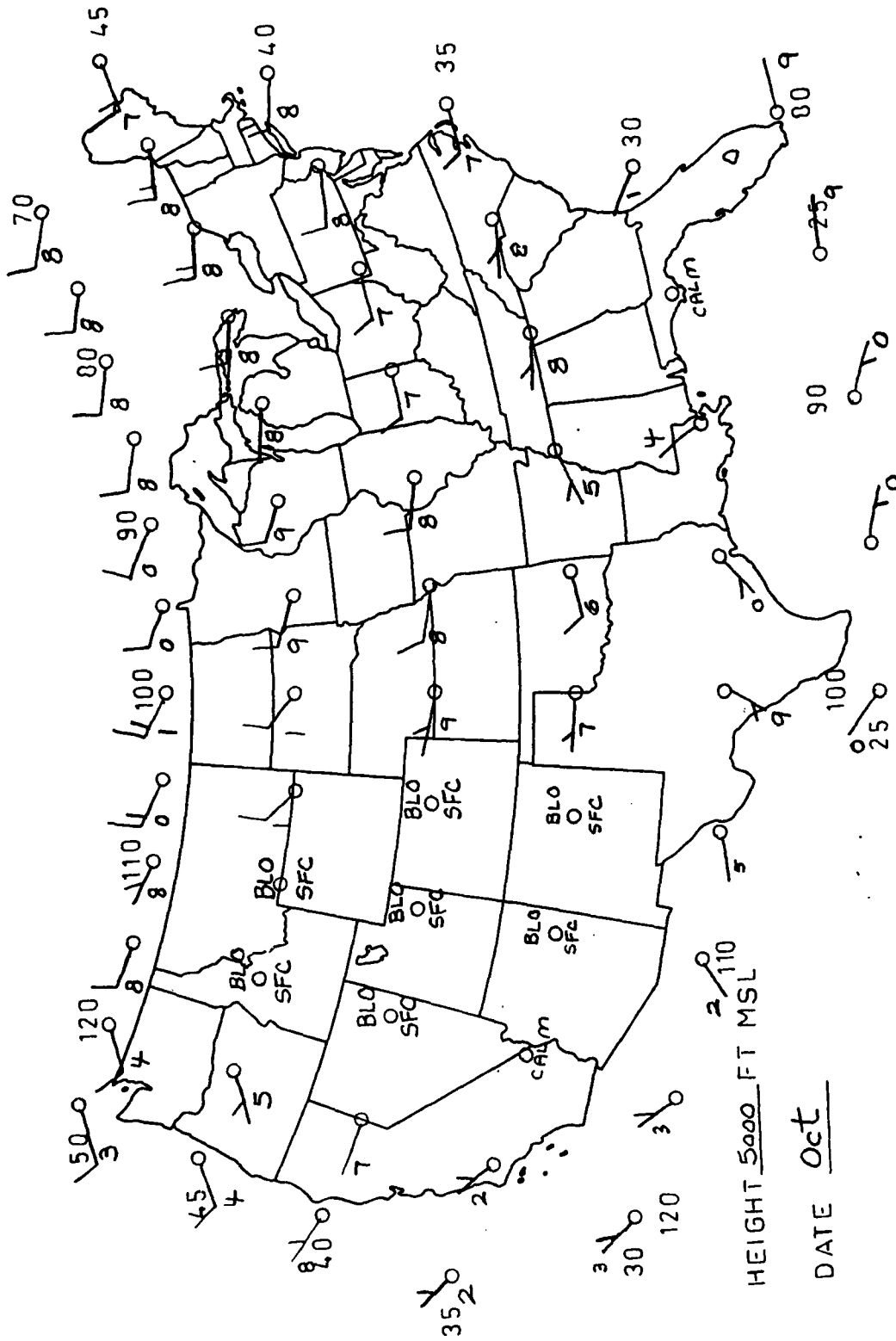
SEPTEMBER, 40,000 FEET MSL



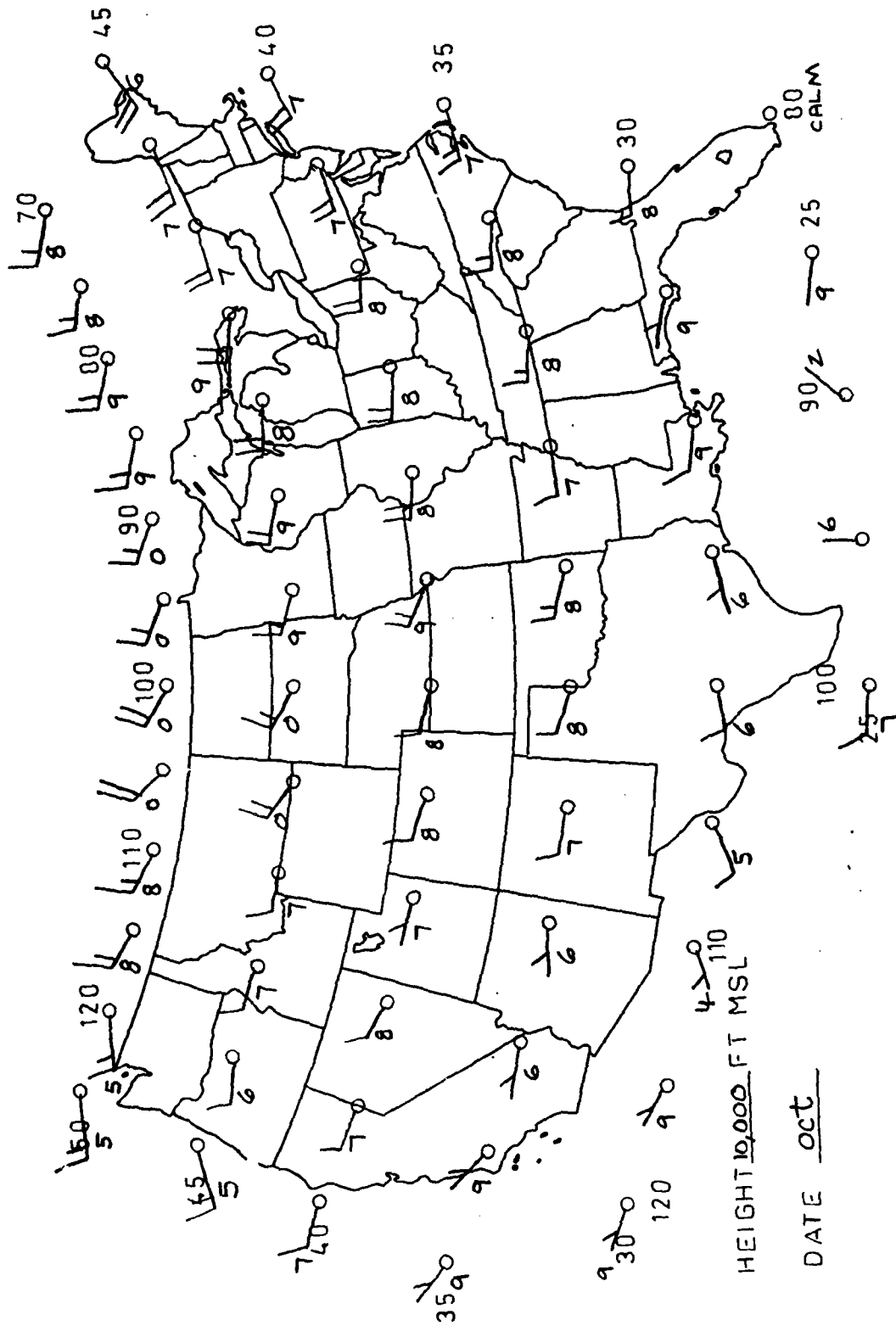
SEPTEMBER, 45,000 FEET MSL



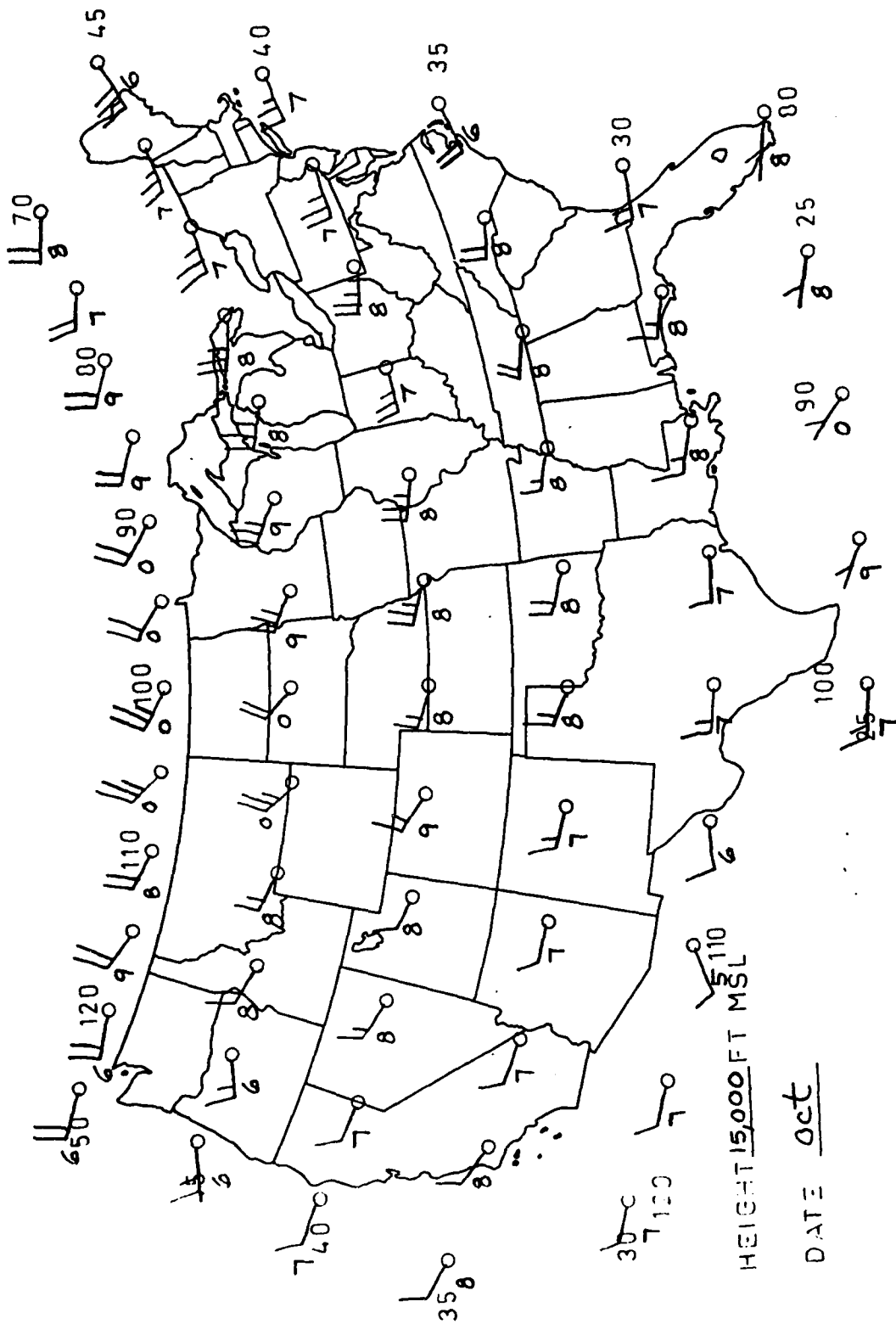
OCTOBER, 5,000 FEET MSL



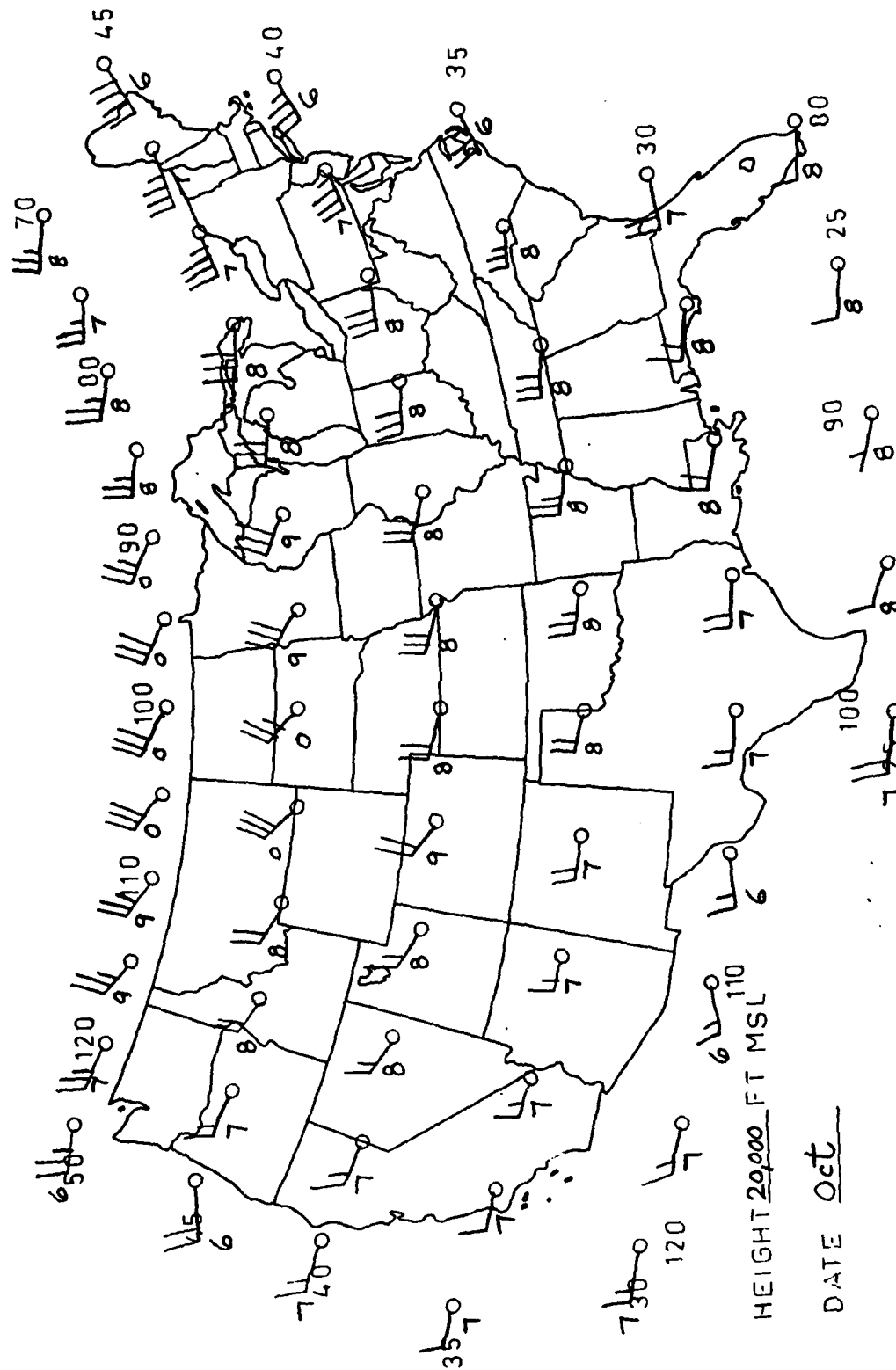
OCTOBER, 10,000 FEET MSL



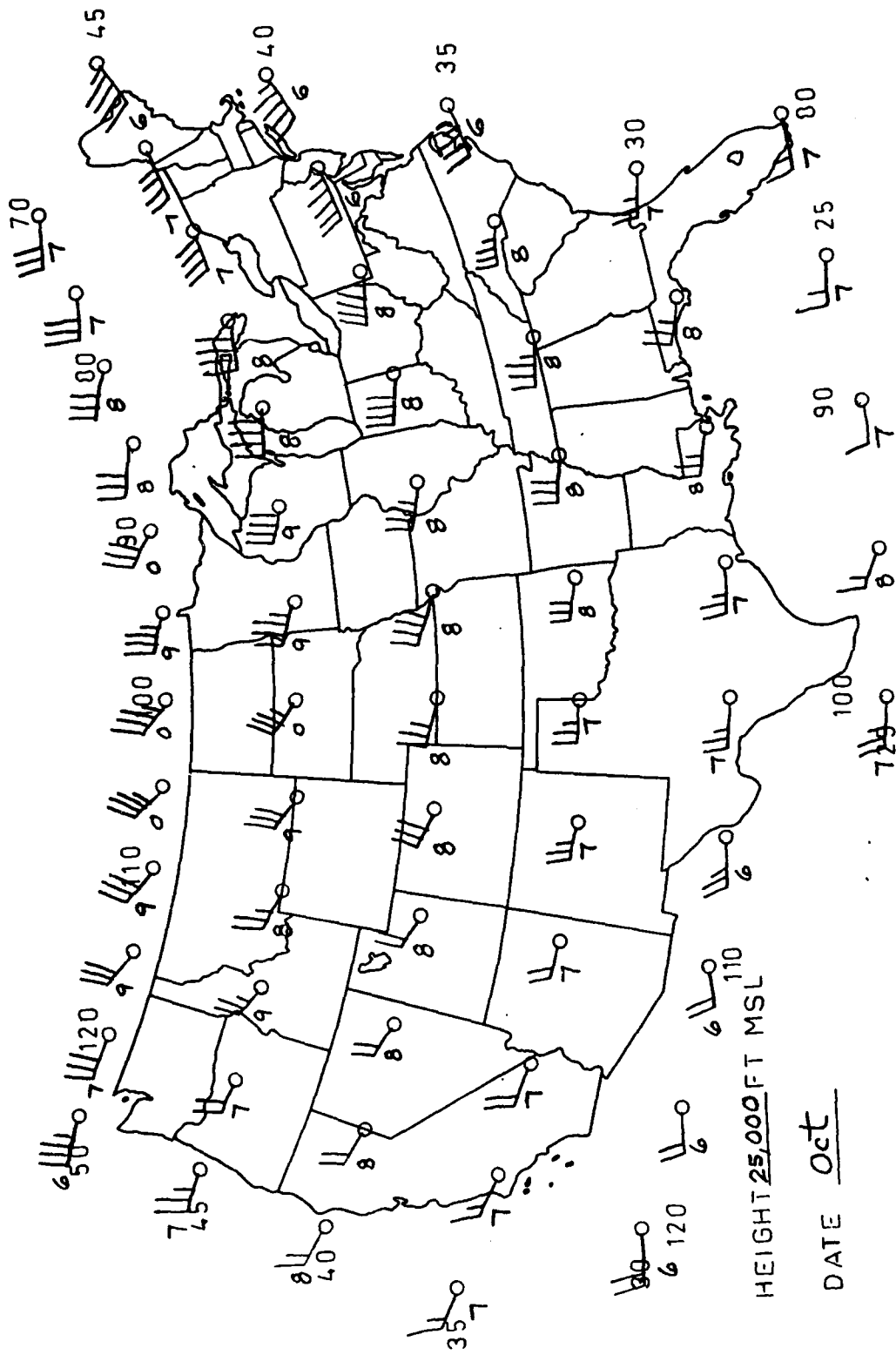
OCTOBER, 15,000 FEET MSL



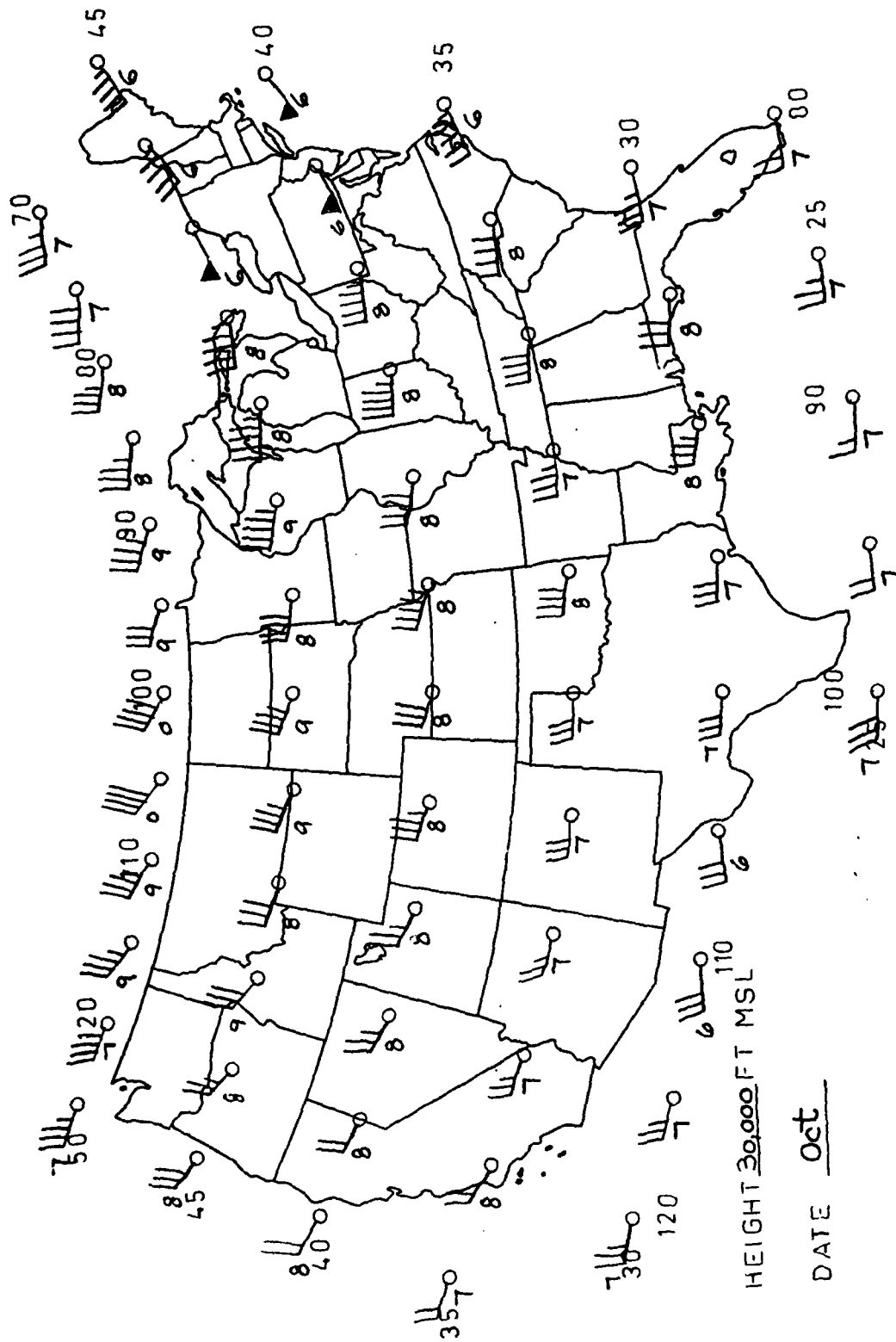
OCTOBER, 20,000 FEET MSL



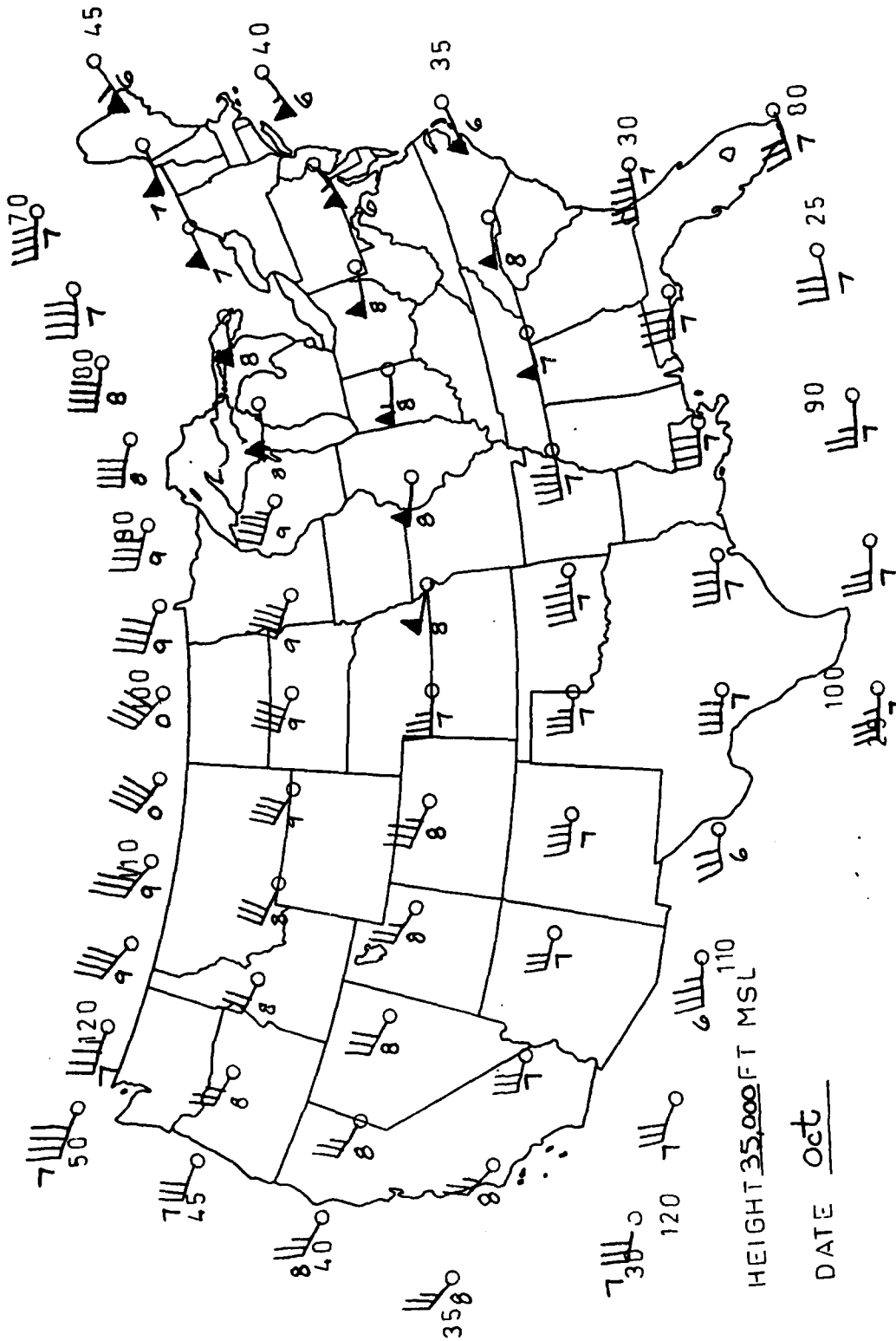
OCTOBER, 25,000 FEET MSL



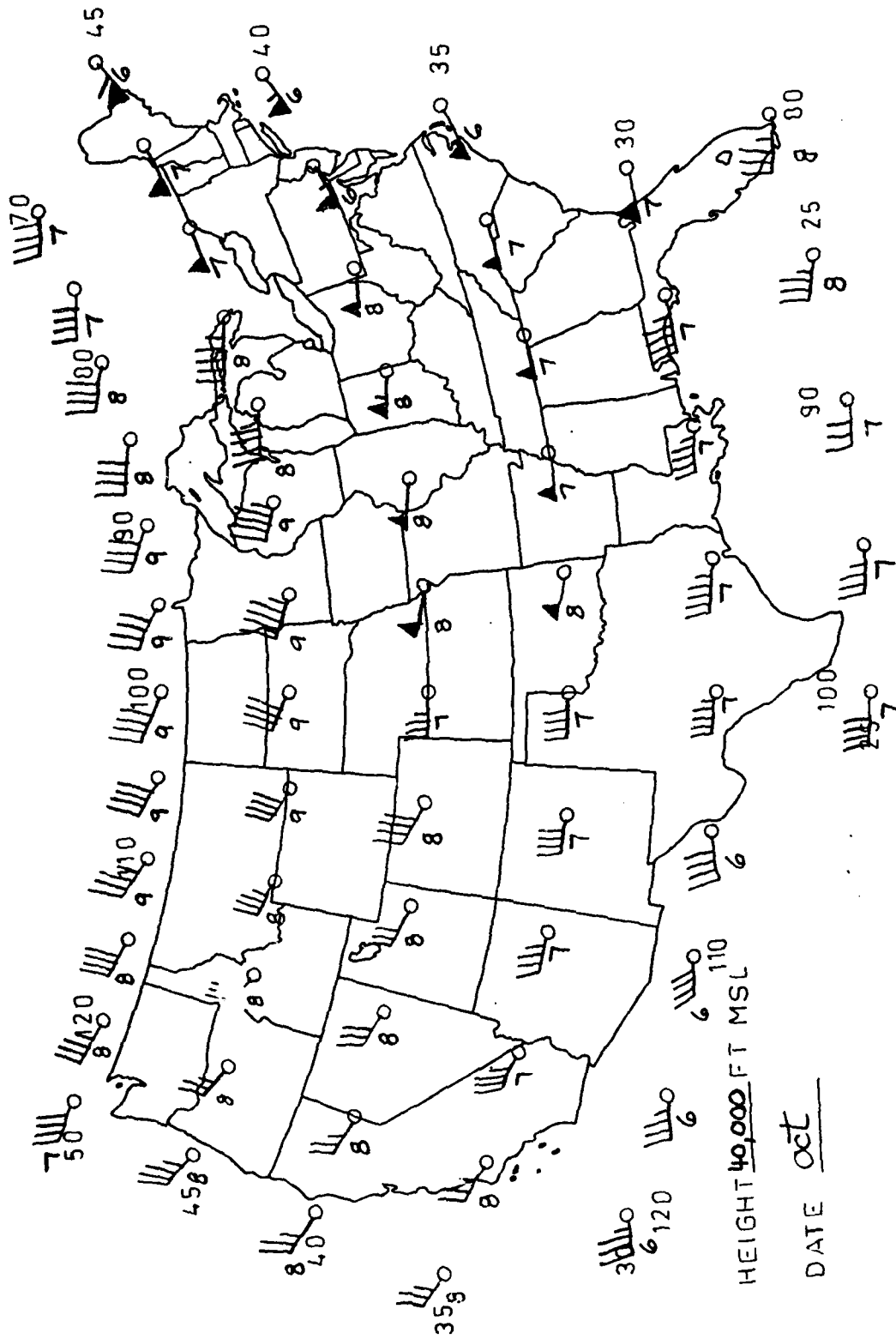
OCTOBER, 30,000 FEET MSL



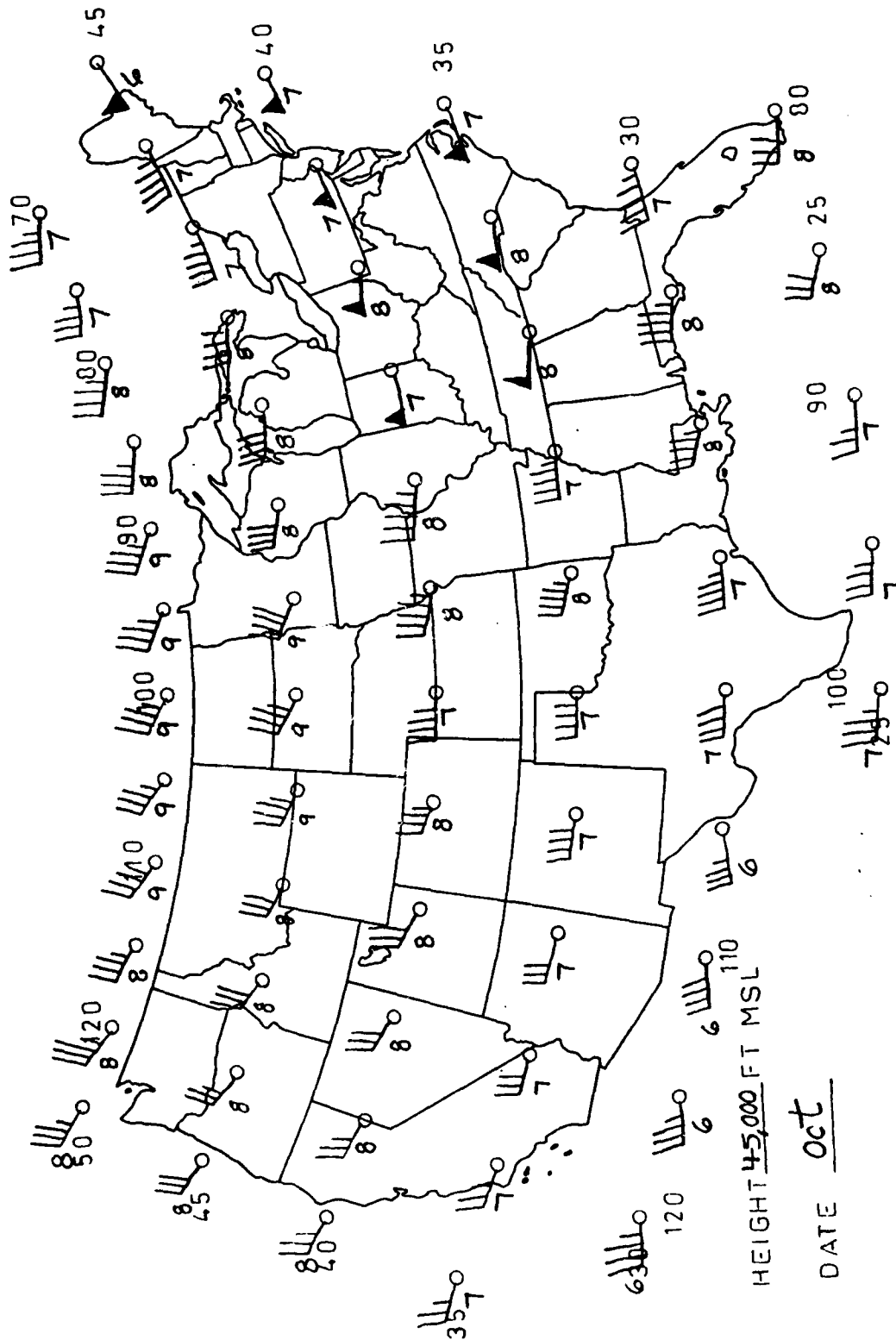
OCTOBER, 35,000 FEET MSL



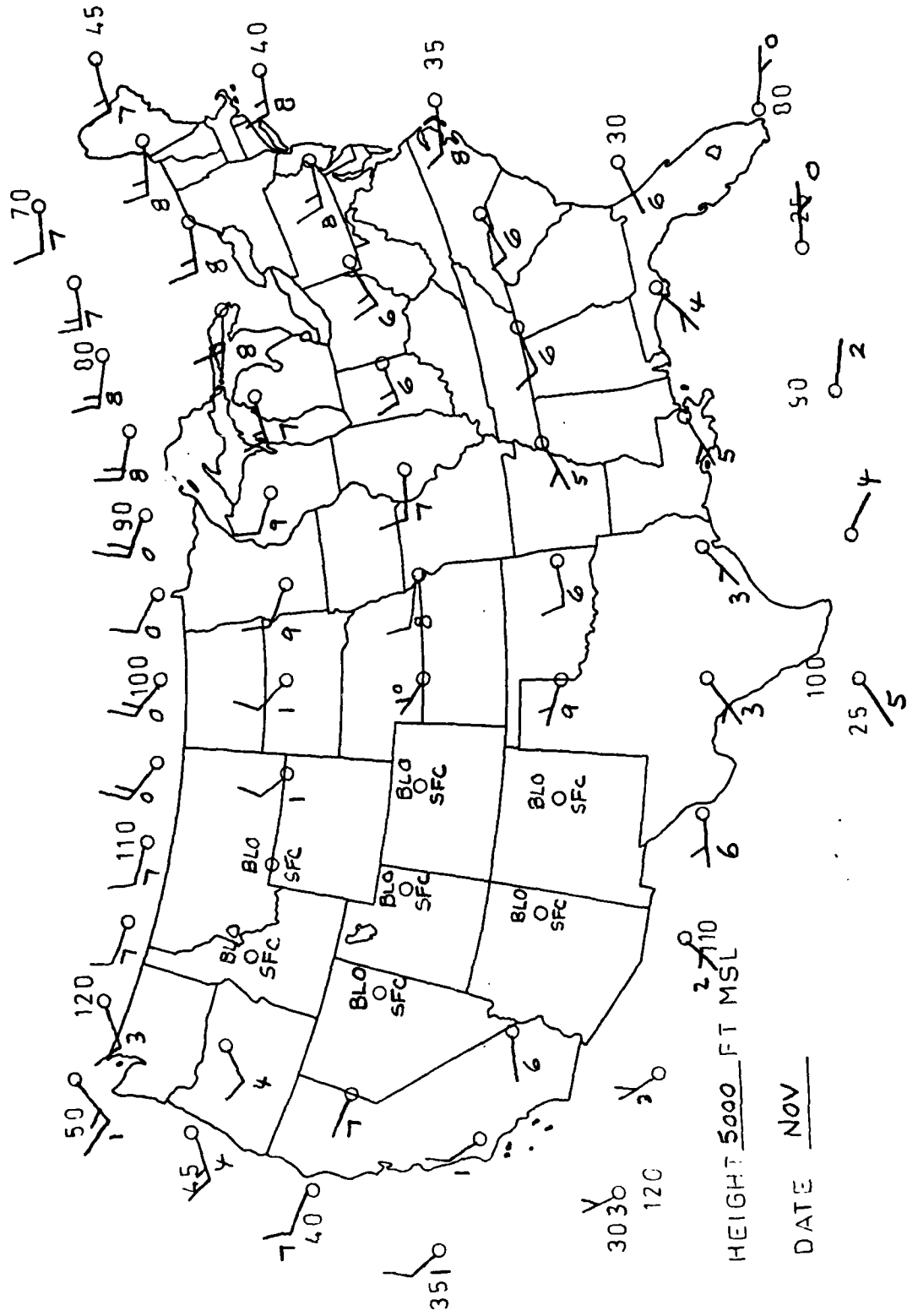
OCTOBER, 40,000 FEET MSL



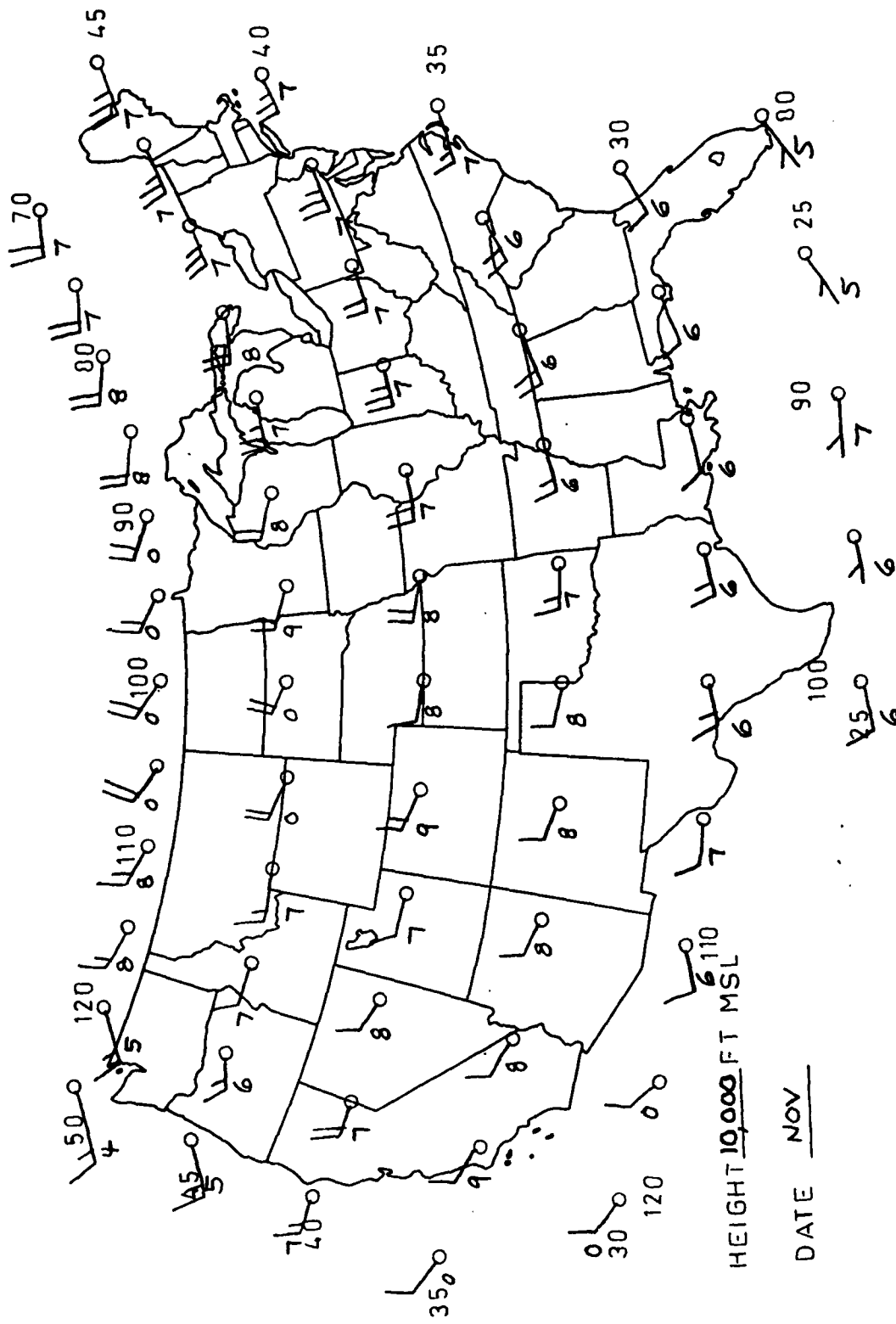
OCTOBER, 45,000 FEET MSL



NOVEMBER, 5,000 FEET MSL



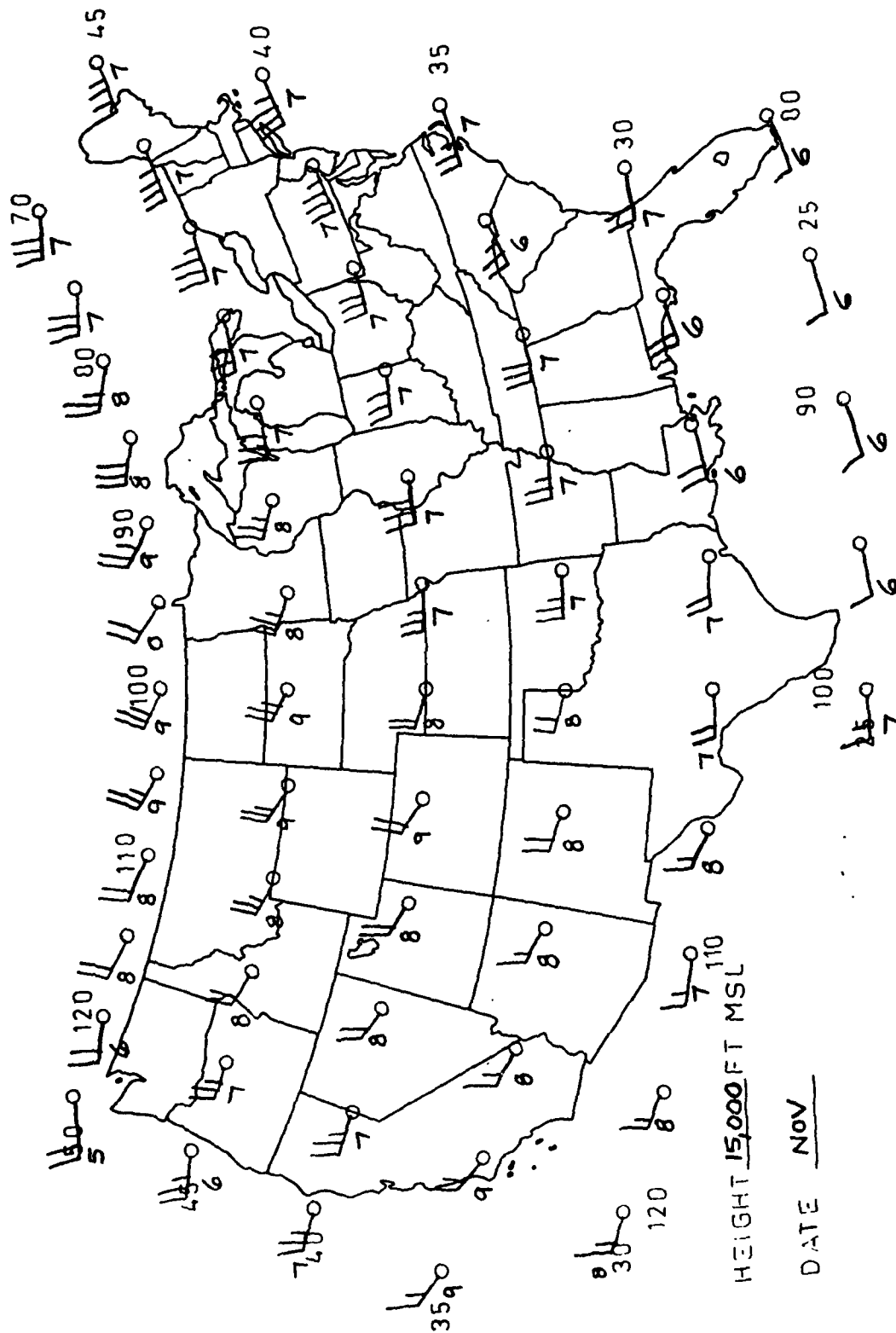
NOVEMBER, 10,000 FEET MSL



HEIGHT 10,000 FT MSL

DATE NOV

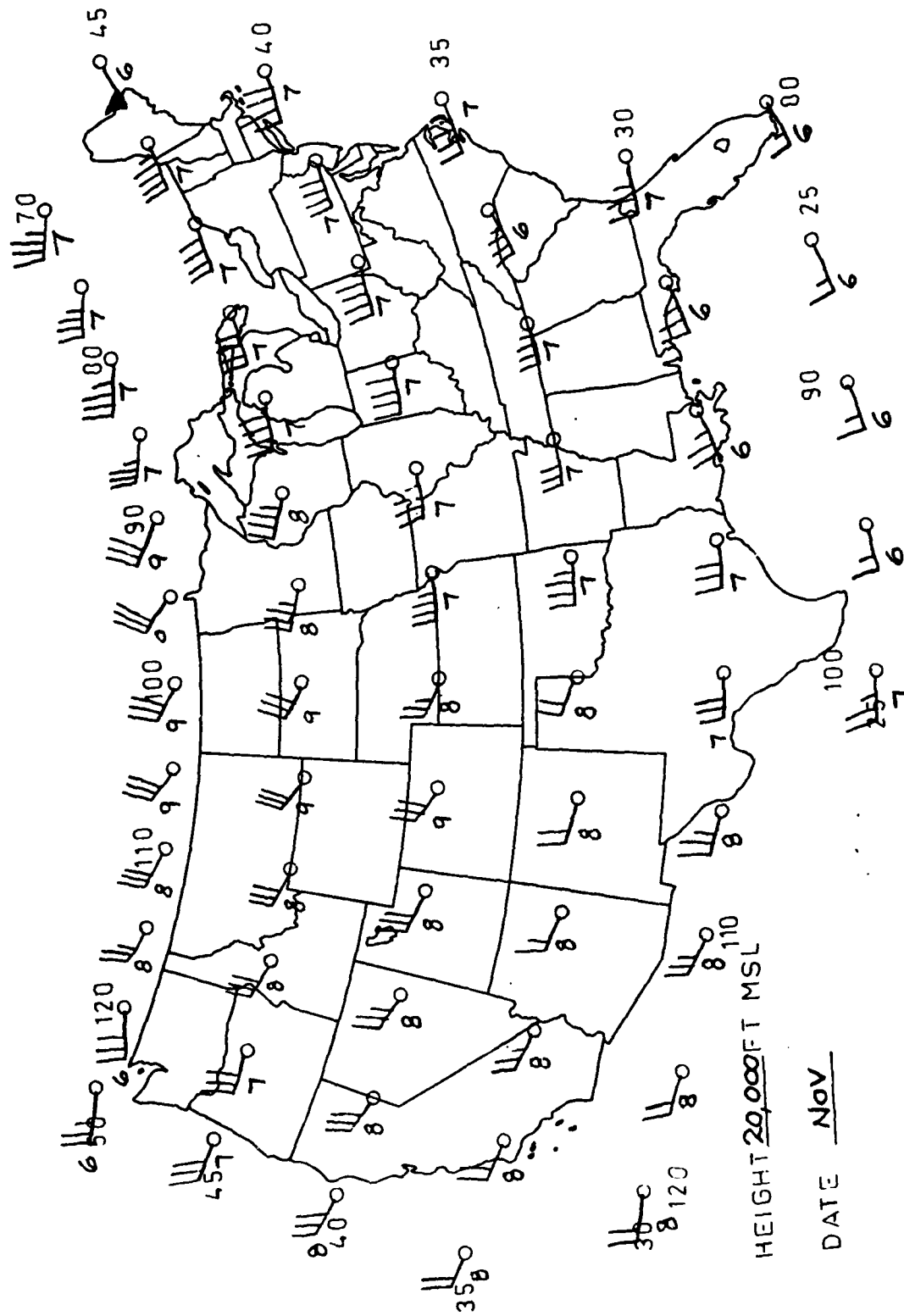
NOVEMBER, 15,000 FEET MSL



HEIGHT 15,000 FT MSL

DATE NOV

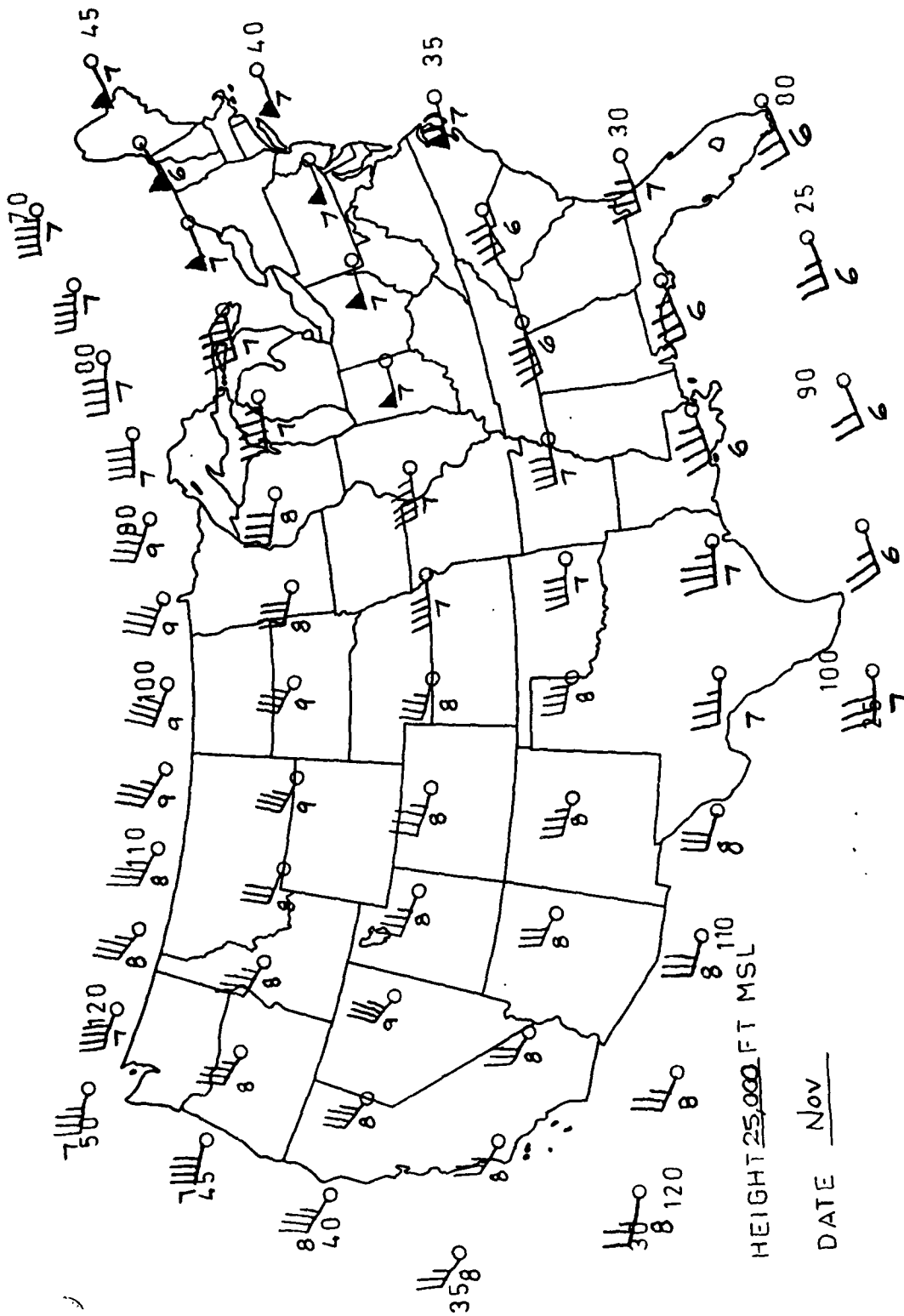
NOVEMBER, 20,000 FEET MSL



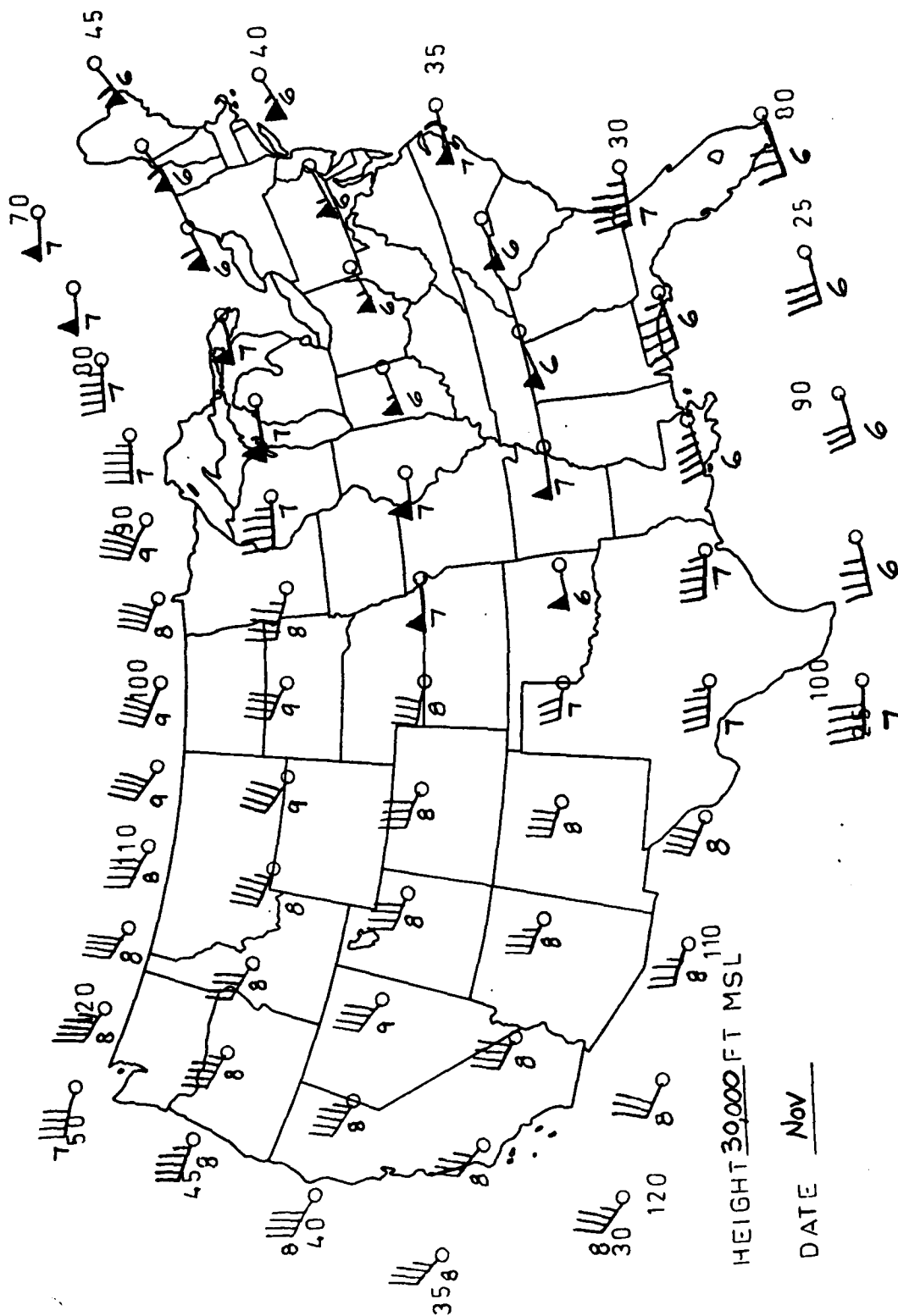
HEIGHT 20,000 FT MSL

DATE Nov

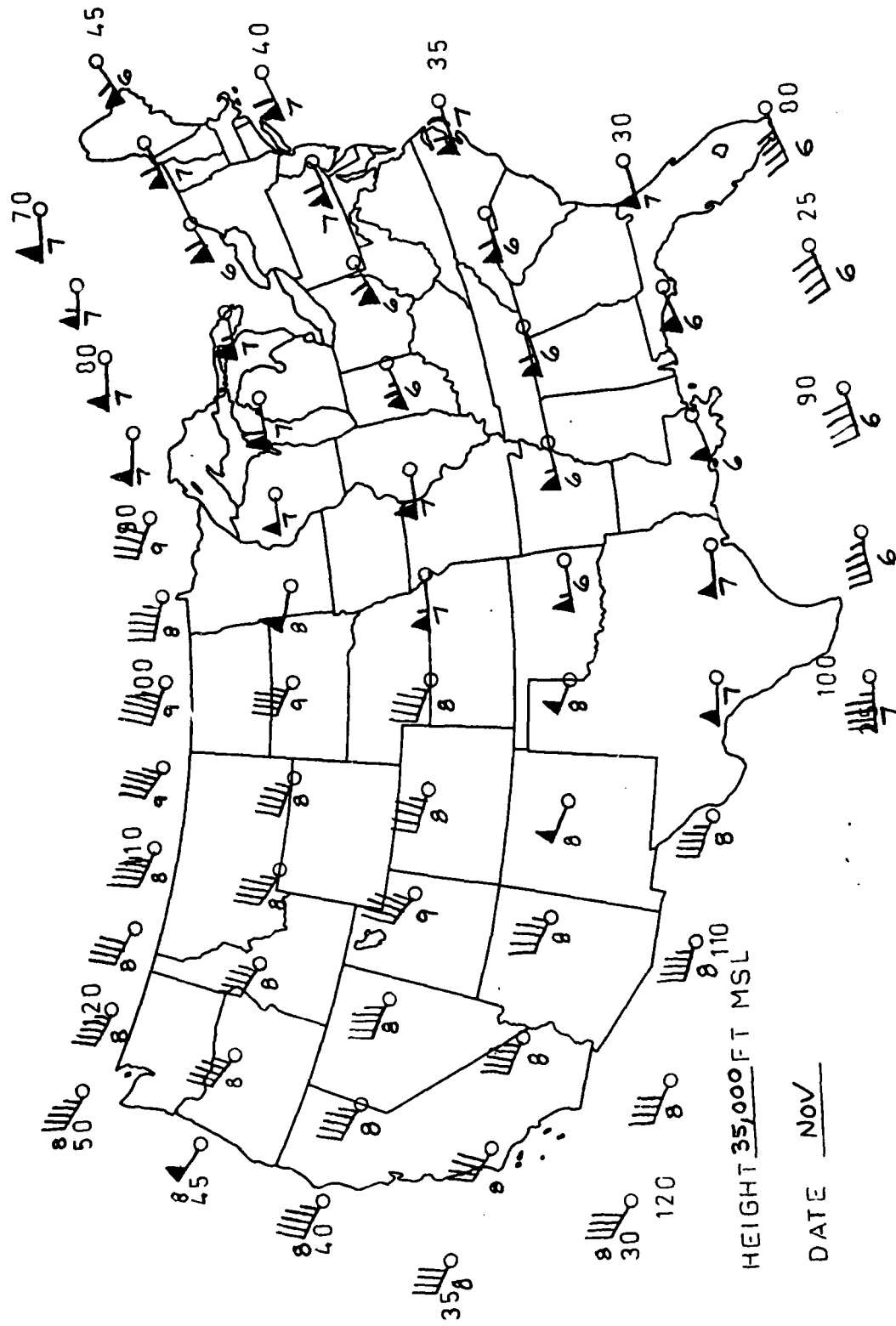
NOVEMBER, 25,000 FEET MSL



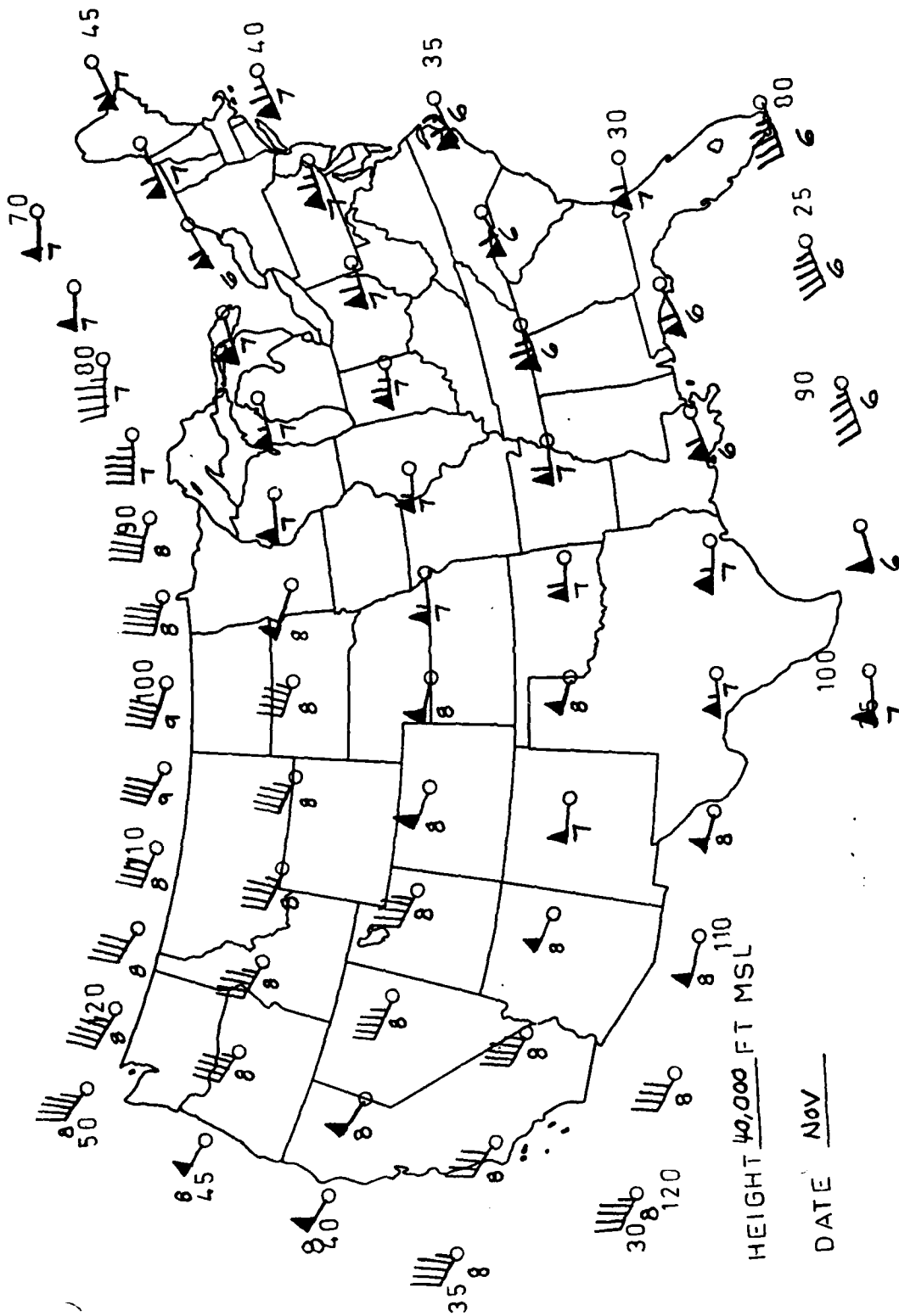
NOVEMBER, 30,000 FEET MSL



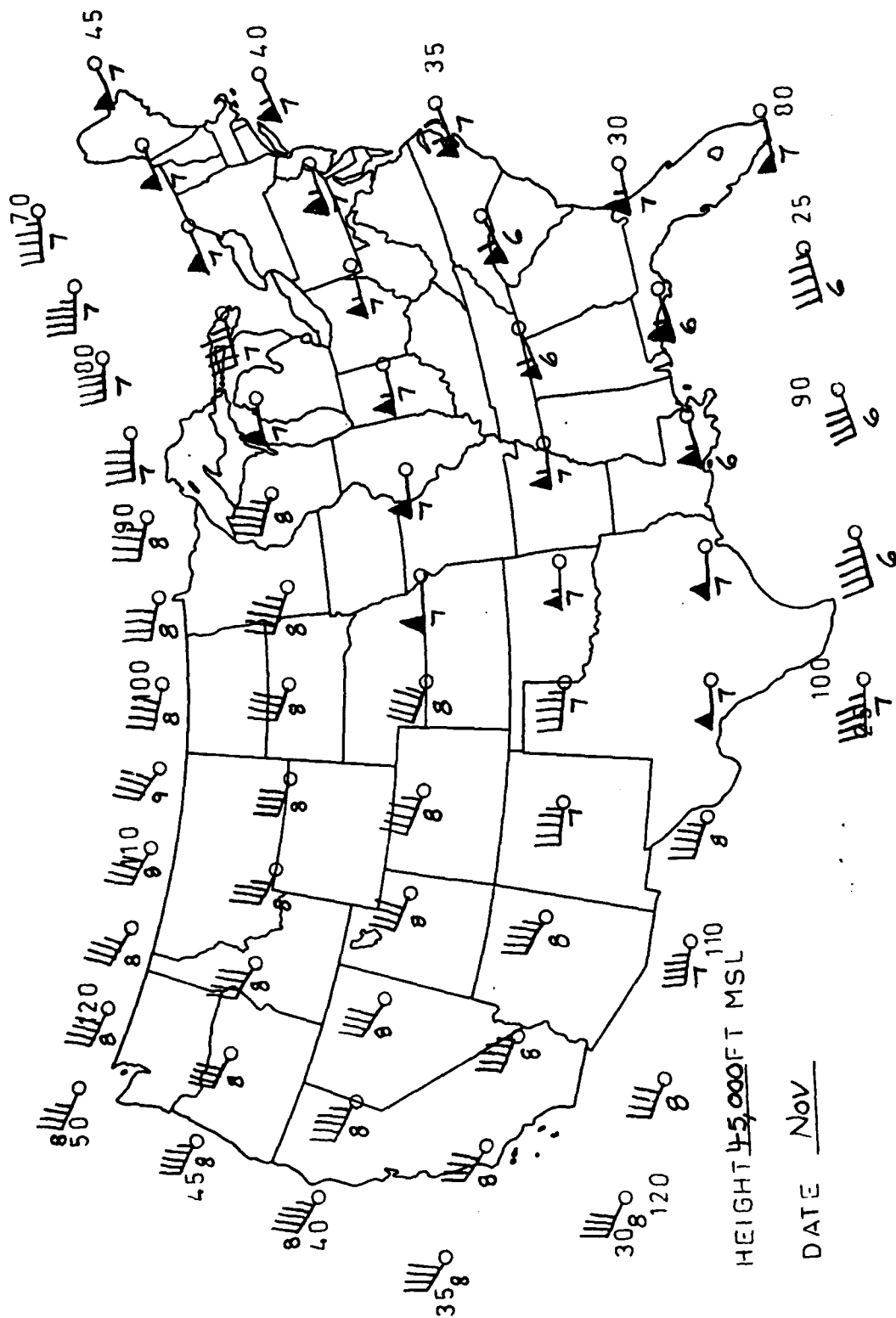
NOVEMBER, 35,000 FEET MSL



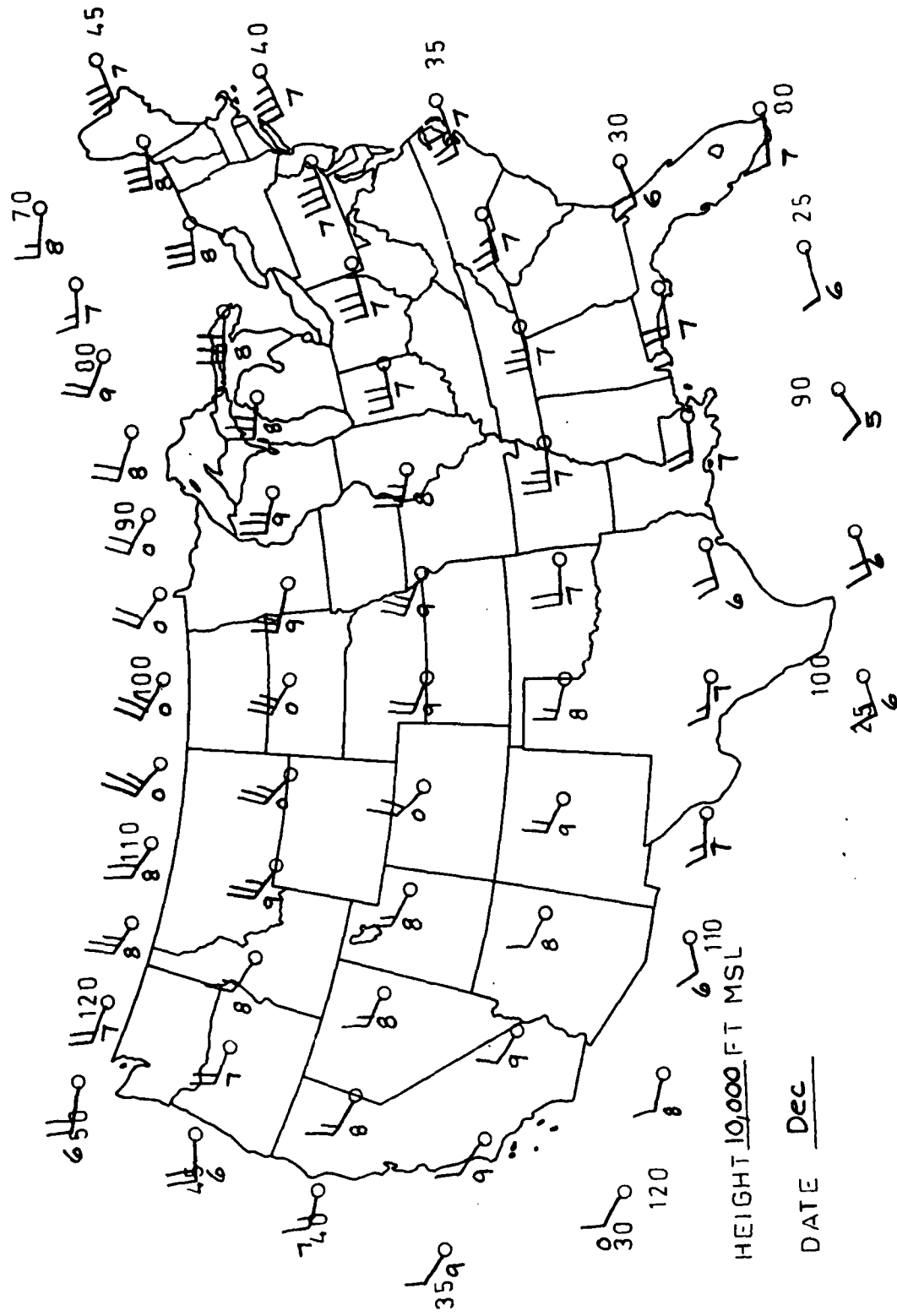
NOVEMBER, 40,000 FEET MSL



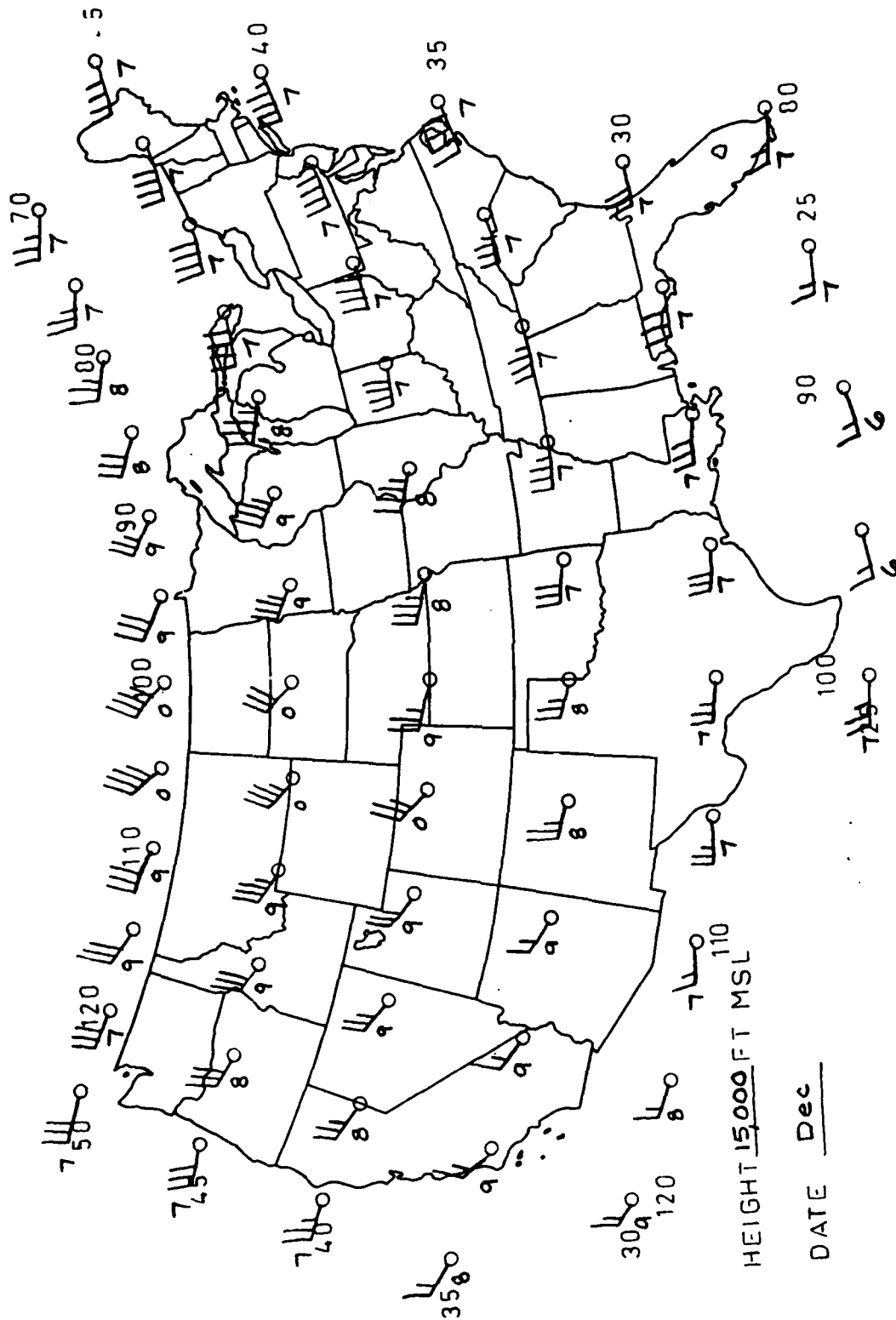
NOVEMBER, 45,000 FEET MSL



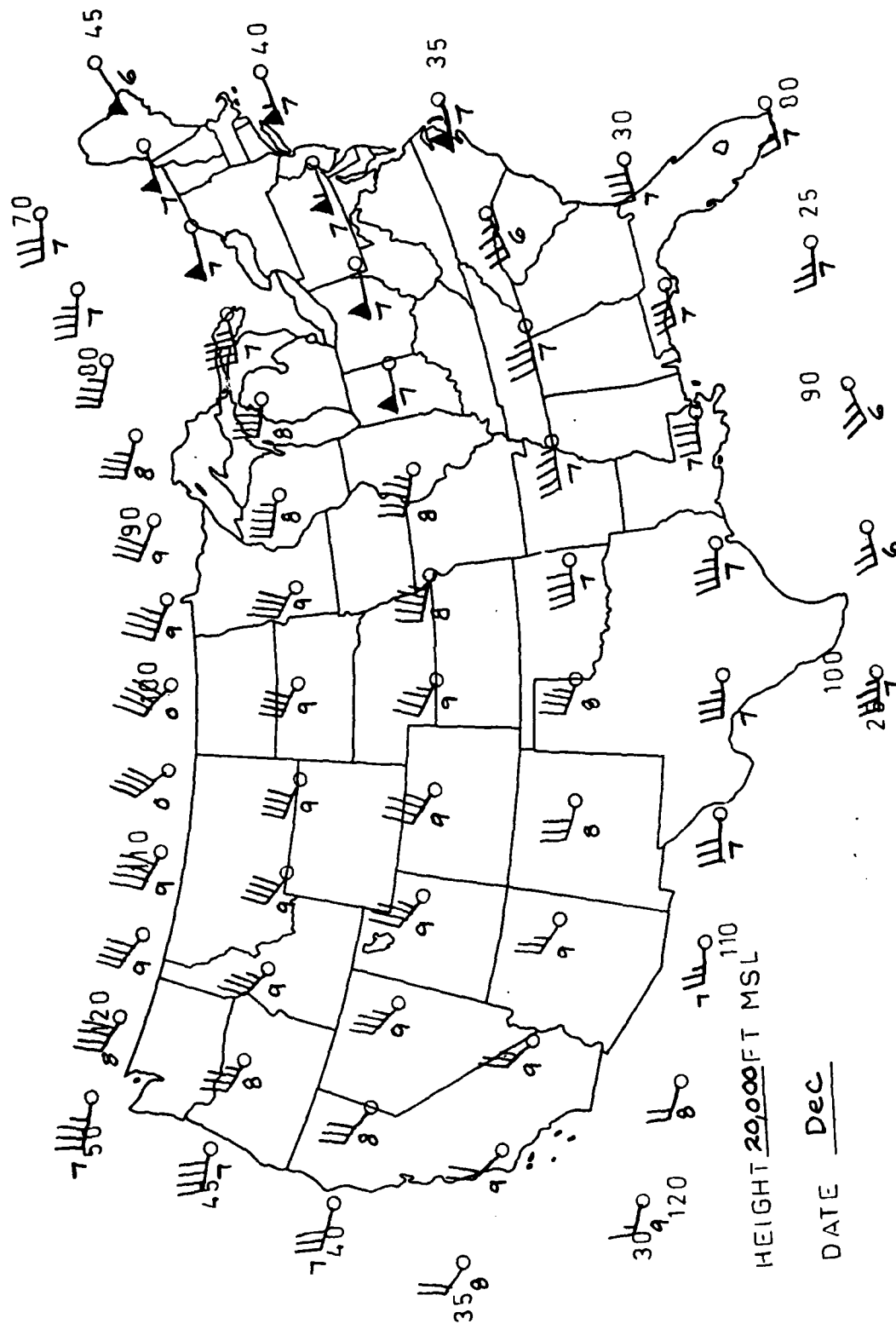
DECEMBER, 10,000 FEET MSL



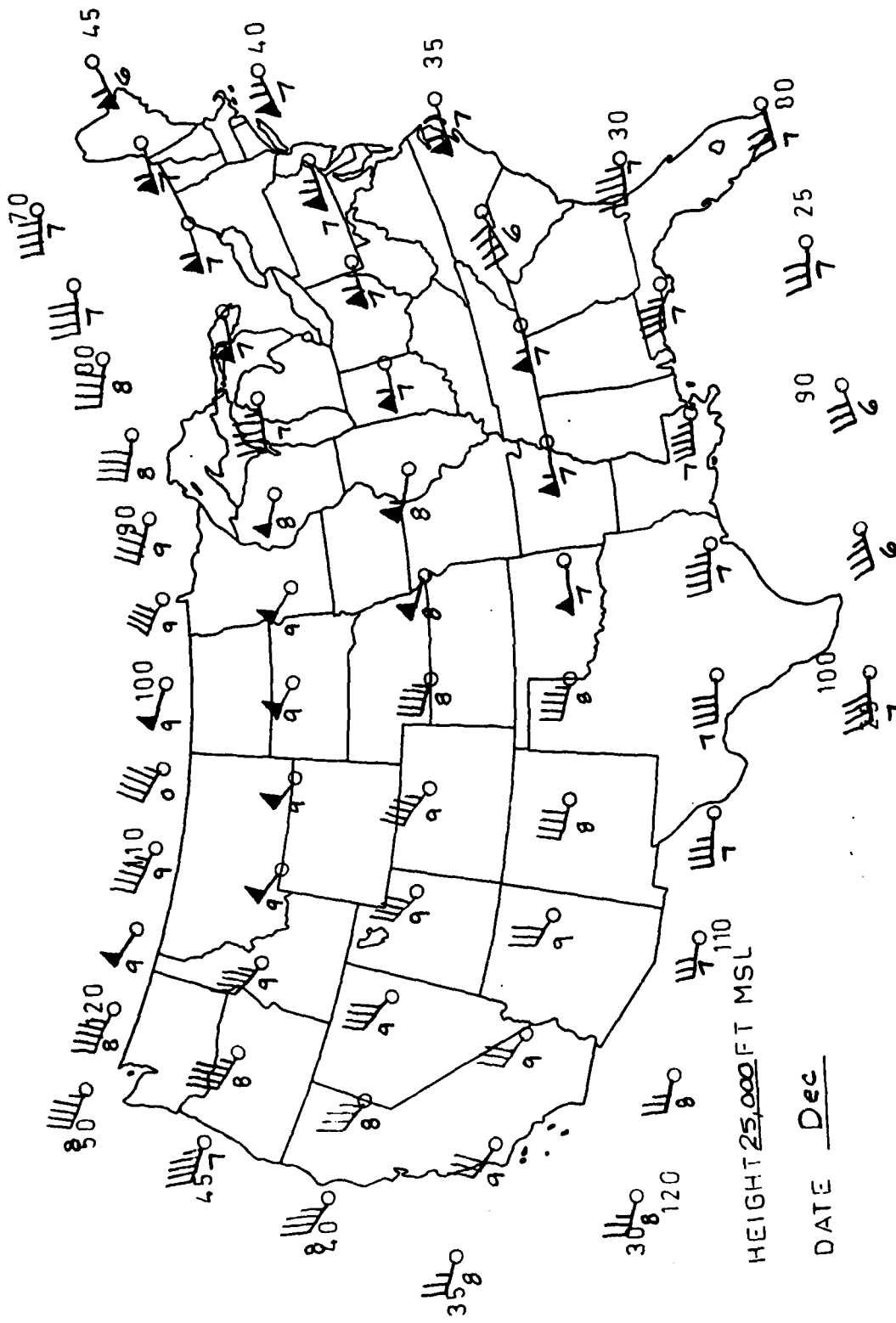
DECEMBER, 15,000 FEET MSL



DECEMBER, 20,000 FEET MSL



DECEMBER, 25,000 FEET MSL



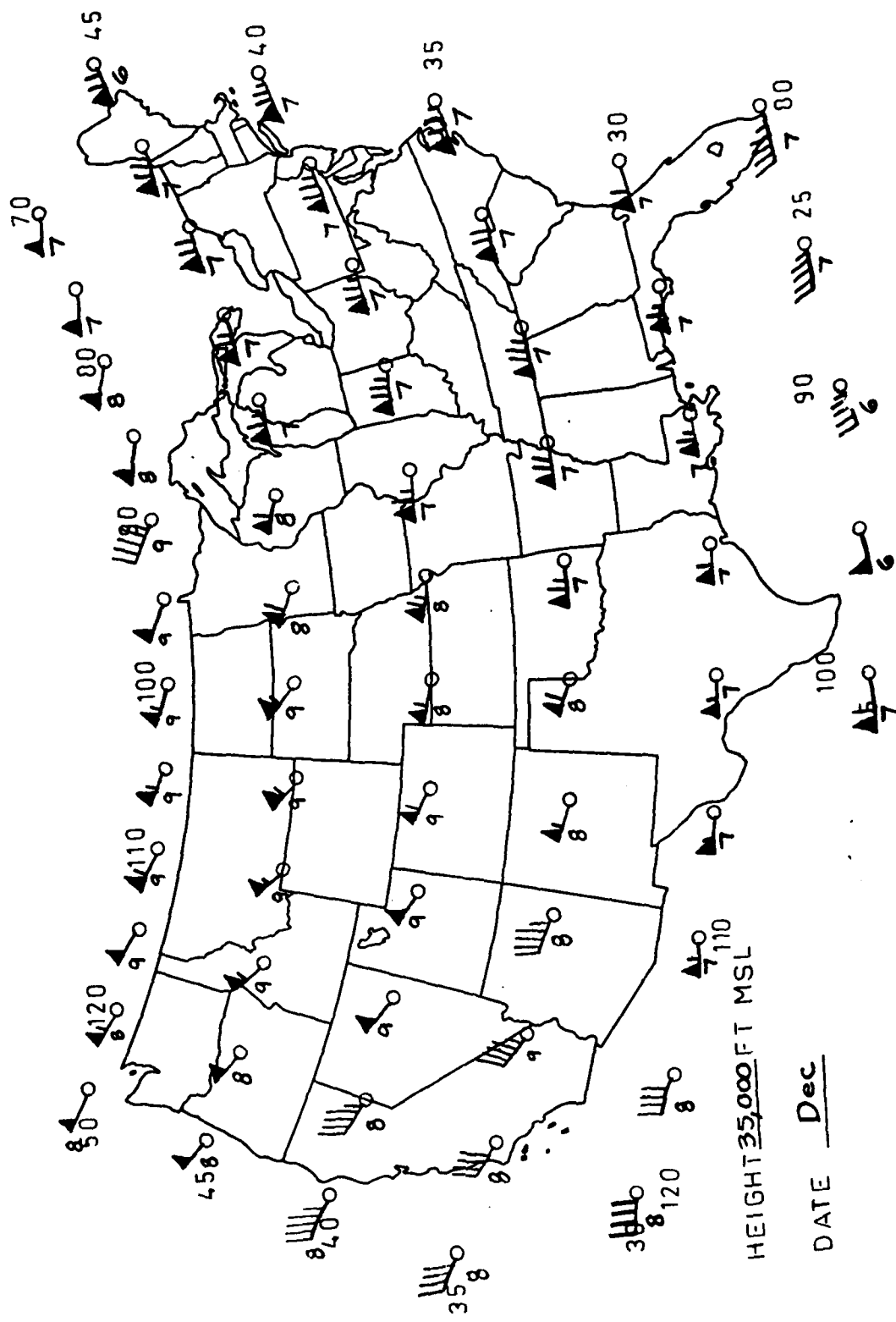
HEIGHT 30,000 FT MSL

DATE Dec

HEIGHT 30,000 FT MSL

DATE Dec

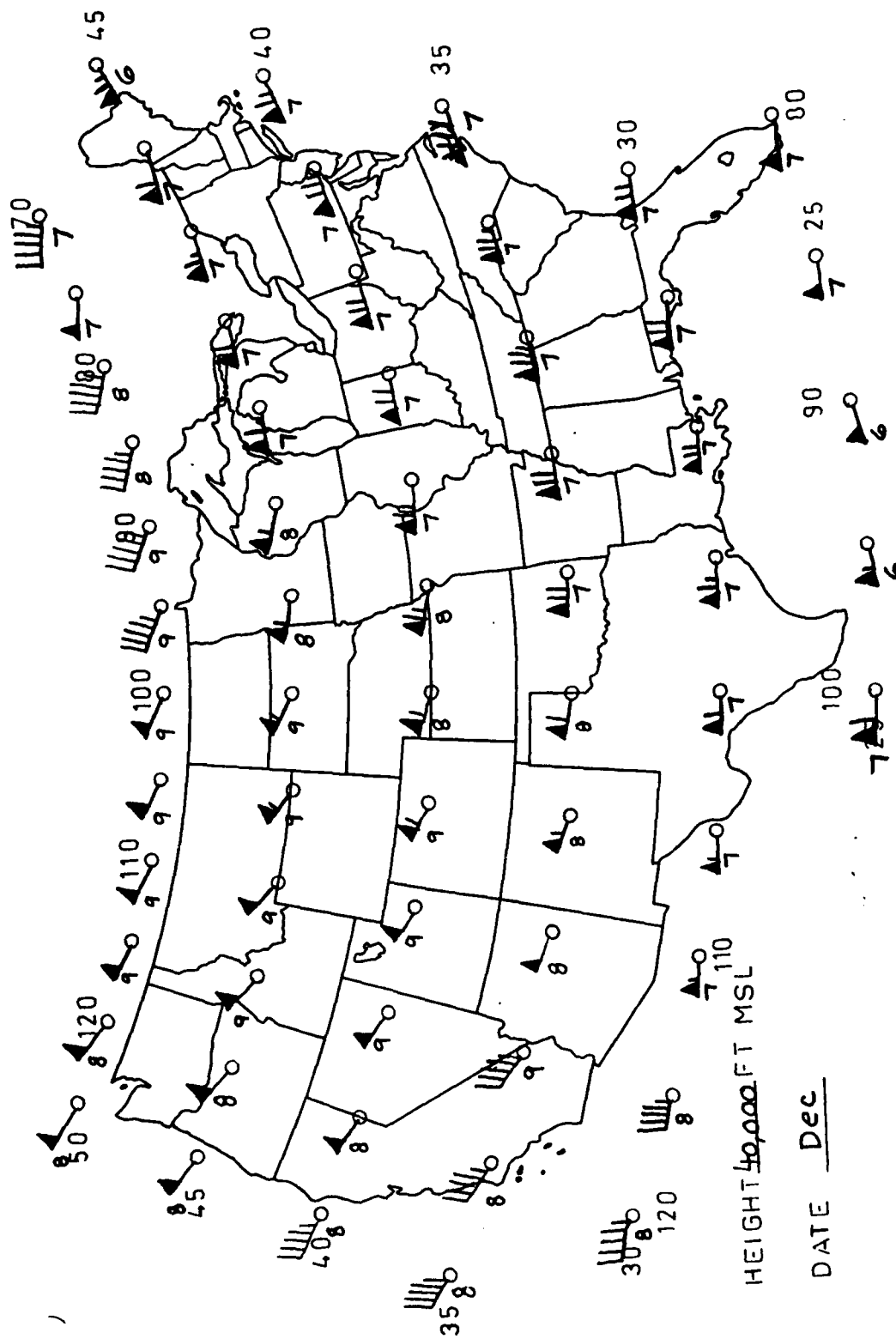
DECEMBER, 35,000 FEET MSL



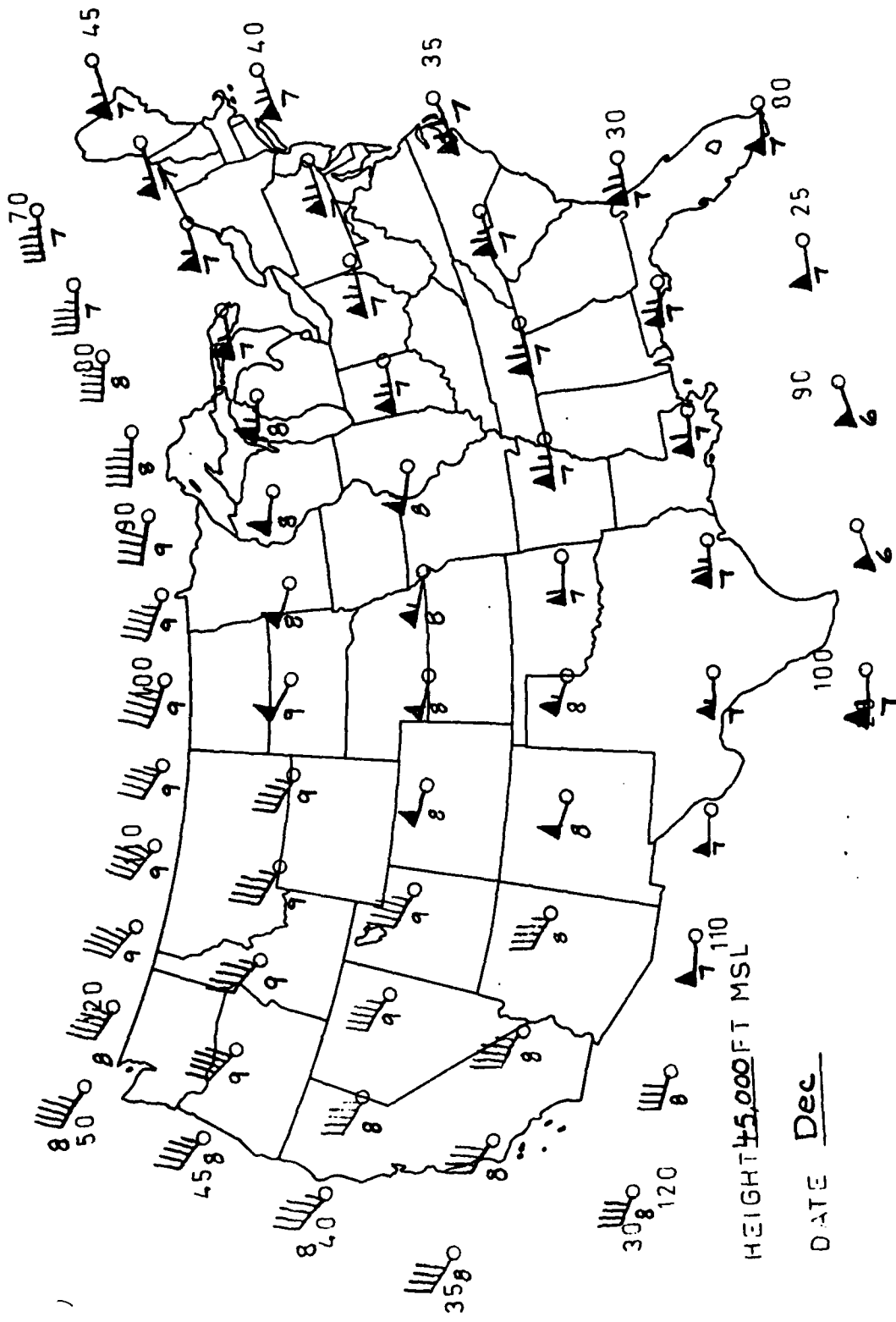
HEIGHT 35,000 FT MSL

DATE Dec

DECEMBER, 40,000 FEET MSL



DECEMBER, 45,000 FEET MSL



DISTRIBUTION

AWS/DN, Scott AFB, IL 62225-5008	3
AWS/DO, Scott AFB, IL 62225-5008	3
OL A, HQ AWS, Buckley ANG Base, Aurora, CO 80011-9599	1
OL-B, HQ AWS, Langley AFB, VA 23665-5000	1
AFOTEC/WE, Kirtland AFB, NM 87117-7001	1
CACDA, OL-E, HQ AWS, ATZL-CAW, Ft Leavenworth, KS 66027-5300	1
SD/CWDA, PO Box 92960, Worldway Postal Ctr, Los Angeles, CA 90009-2960	1
OL-H, HQ AWS (ATSI-CD-CS-SWO), Ft Huachuca, AZ 85613-7000	1
OL-I, HQ AWS (ATDO-WE), Ft Monroe, VA 23651-5000	1
AFOTEC OL-NX, 1313 Halley Circle, Norman, OK 73069-8493	1
Det 1, HQ AWS, Pentagon, Washington, DC 20330-6560	1
Det 2, HQ AWS, Pentagon, Washington, DC 20330-5054	1
AFSCF/WE, PO Box 3430, Onizuka AFS, CA 94088-3430	1
Det 8, HQ AWS, PO Box 4239, N Las Vegas, NV 89030	1
Det 9, HQ AWS, PO Box 12297, Las Vegas, NV 89112-0297	1
1WW/DN, Hickam AFB, HI 96853-5000	3
20WS/DN, APO San Francisco 96328-5000	1
30WS/DN, APO San Francisco 96301-0420	1
2WW/DN, APO New York 09012-5000	3
7WS/DN, APO New York 09403-5000	1
28WS/DN, APO New York 09127-5000	1
31WS/DN, APO New York 09130-5000	1
3WW/DN, Offutt AFB, NE 68113-5000	3
9WS/DN, March AFB, CA 92518-5000	1
11WS/DN, Elmendorf AFB, AK 99506-5000	1
24WS/DN, Randolph AFB, TX 78150-5000	1
26WS/DN, Barksdale AFB, LA 71110-5002	1
4WW/DN, Peterson AFB, CO 80914-5000	3
2WS/DN, Andrews AFB, MD 20334-5000	19
5WW/DN, Langley AFB, VA 23665-5000	3
1WS, MacDill AFB, FL 33608-5000	1
3WS/DN, Shaw AFB, SC 29152-5000	1
5WS/DN, Ft McPherson, GA 30330-5000	1
25WS/DN, Bergstrom AFB, TX 78743-5000	1
AFGWC/SDSL, Offutt AFB, NE 68113-5000	5
USAFETAC, Scott AFB, IL 62225-5438	6
7WW/DN, Scott AFB, IL 62225-5008	3
6WS, Hurlburt Field, FL 32544-5000	1
15WS/DN, McGuire AFB, NJ 08641-5002	1
17WS/DN, Travis AFB, CA 94535-5000	1
JSOC/Weather, P.O. Box 70239, Fort Bragg, NC 28307-5000	1
3350 TECH TG/TTGU-W, Stop 62, Chanute AFB, IL 61868-5000	2
AFIT/CIR, Wright-Patterson AFB, OH 45433-6583	1
AFCSA/SAGW, Washington, DC 20330-5000	1
NAVOCEANCOMDET, Federal Building, Asheville, NC 28801-2723	1
NAVOCEANCOMDET, Patuxent River NAS, MD 20670-5103	1
COMNAVOCEAN, NSTL, Bay St Louis, MS 39529-5000	2
NAVOCEANO, Code 4601 (Ms Loomis), NSTL Bay St Louis, MS 39529-5001	1
NEPRF, Monterey, CA 93943-5006	1
Naval Research Laboratory, Code 4323, Washington, DC 20375	1

Naval Postgraduate School, Chmn, Dept of Meteorology, Code 63, Monterey, CA 93943-5000.....	1
Naval Eastern Oceanography Ctr, U117 McCady Bldg, Attn: Clim Section (AG2 Kopera),	
NAS Norfolk, Norfolk, VA 23511-5000.....	1
Naval Western Oceanography Ctr, Box 113, Attn: Tech Library, Pearl Harbor, HI 96860-5000	1
Naval Oceanography Command Ctr, COMNAVMAR Box 12, FPO San Francisco, CA 96630-5000	1
AFGL Library, Attn: SULLR, Stop 29, Hanscom AFB, MA 01731-5000.....	1
Atmospheric Sciences Laboratory, White Sands Missile Range, NM 88002-5501	1
U.S. Army Missile Command, ATTN: AMSMI-RD-TE-T, Redstone Arsenal, AL 35898-5250	1
Technical Library, Dugway Proving Ground, Dugway, UT 84022-5000.....	1
NCDC Library (D542X2), Federal Building, Asheville, NC 28801-2723.....	1
DTIC-FDAB, Cameron Station, Alexandria, VA 22304-6145	2
75th Ranger Btn (Attn: Lt David Musick), Ft Benning GA 31905-5000.....	1
HQ 5th U.S. Army, AFKB-OP (SWO), Ft Sam Houston, TX 78234-7000 (All DSs)	1
AUL/LSE, Maxwell AFB, AL 36112-5564	1
AWSTL, Scott AFB, IL 62225-5438	100