UFOB INDEX CARD AISS-UFOB-372-55

1. DATE 29 22 October 1955	2. LOCATION Minneapolis, Minnesota	12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft ☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical ☑ Other TEMP. INVER. ☐ Insufficient Data for Evaluation ☐ Unknown
3. DATE-TIME GROUP Local _____ GMT 21/0200Z and 21/0140Z	4. TYPE OF OBSERVATION ☐ Ground-Visual ☒ Ground-Radar ☒ Air-Visual ☐ Air-Intercept Radar	
5. PHOTOS ☐ Yes ☒ No	6. SOURCE Military	
7. LENGTH OF OBSERVATION Electronic-15 to 20 seconds Visual- 2 seconds	8. NUMBER OF OBJECTS One (possible two different objects)	9. COURSE Erratic

10. BRIEF SUMMARY OF SIGHTING

Air-Visual sighting--White, oblong, very fast, ninety degree turns, glowing, and tear dop in shape.

Air-electronic--Oblong, smaller than pea, first estimated to be at 7 miles distance. In 15 or 20 seconds it appeared to be at 15 miles.

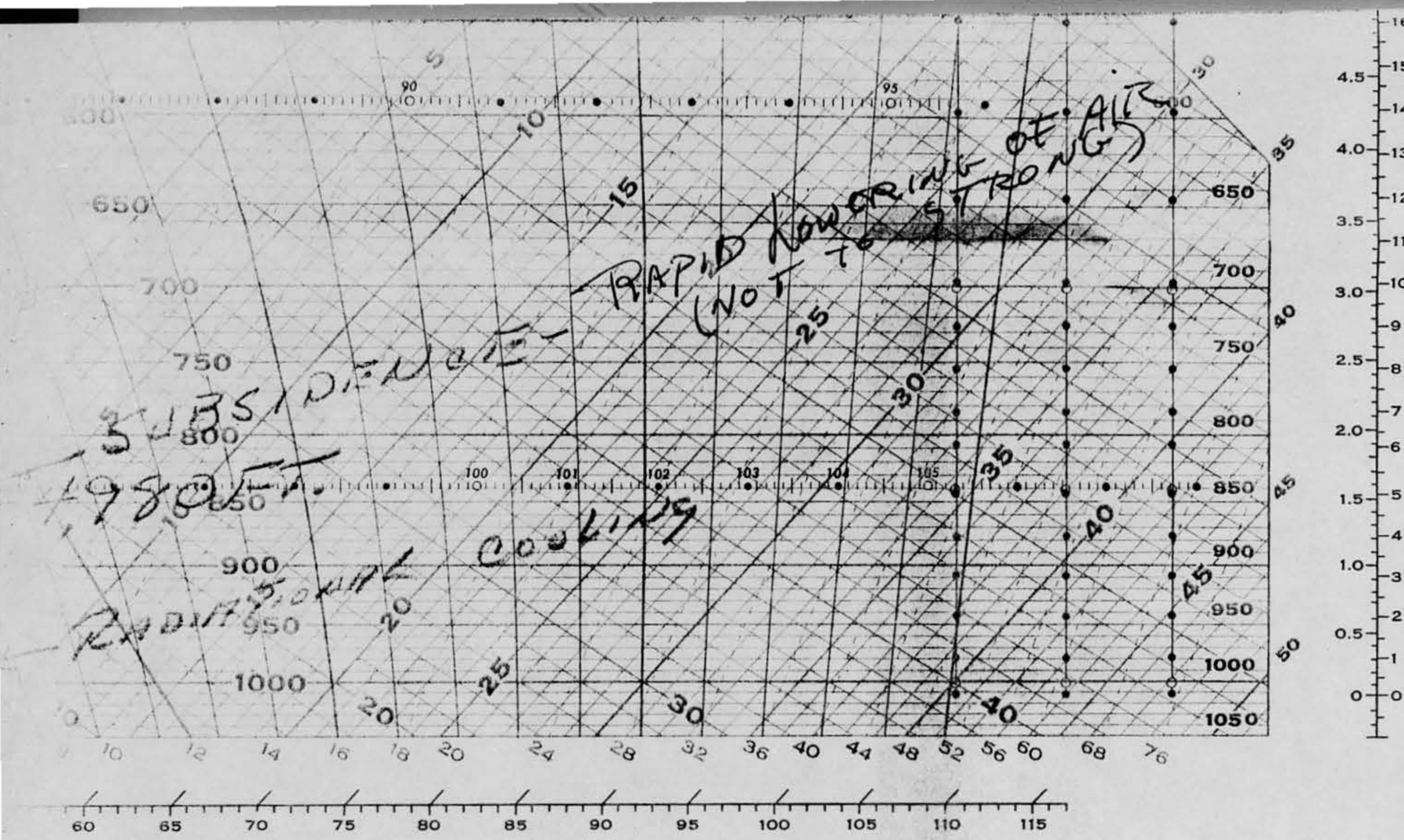
Ground-electronic--Object estimated to be going at speeds of about 1000 knots.

11. COMMENTS

A request was sent to ATIC to forward Radar Data Sheets to the radar observer of this sighting. Results of analysis Radar Data Sheets to be recorded on this card after receipt of conclusions from ATIC.

AISOP Form 5 (15 Oct 54)

	AIR-VISUAL	AIR ELECTRONIC
DATE TIME	21 OCTOBER 55 2000 0200Z (NIGHT)	21 OCTOBER 55 1940 0140Z (NIGHT)
LENGTH OF OBSERV.	2 - 5 Sec.	15 OR 20 Sec
NO OF OBJECTS	1	1
COURSE	WEST, THEN 90° TURN TO NORTH	EAST
SHAPE	OBLONG, FUZZY REAR EDGE	OBLONG - FUZZY EDGES
SOUND	None	N/A
COLOR	GLOWING White	N/A
EST. SPEED	1000 - 1500 MPH	1000K (GROUND ELECT)
ALTITUDE	2,500'	20,000'



NUMBER	STATION
TIME (GCT)	DATE (GCT)

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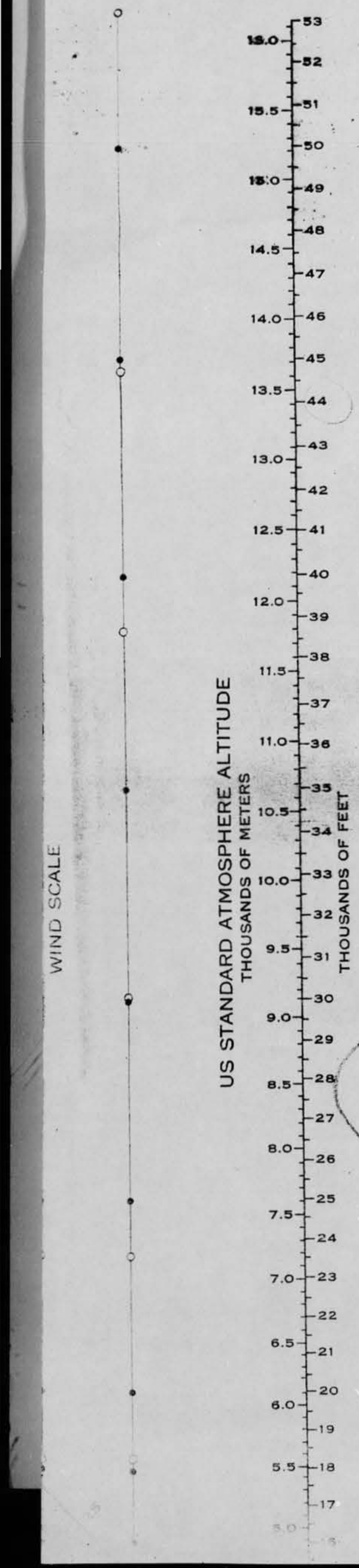
Form: AWS WPC 9-16

Lithographed by ACIC 5-55

STC 21/03007



EXPLANATION

ISOBARS are straight, horizontal brown lines. The heights in feet of the pressure surfaces in the U.S. Standard atmosphere are in parenthesis () below the pressure values on the left.

ISOTHERMS (°C) are the straight, equidistant brown lines running diagonally upward from left to right.

DRY ADIABATS are the slightly curved brown lines that intersect the 1000 mb. isobar at intervals of 2°C, and run diagonally upward from right to left. The Dry Adiabats for the folded portion of the pressure range are labeled with two (2) values. (See below).

SATURATED ADIABATS are the curved green lines that intersect the 1000 mb. isobar at intervals of 2°C, diverging upward and tending to become parallel to the dry adiabats.

SATURATION MIXING RATIO (in gm. per kg.) is represented by dashed green lines. Their values appear at the bottom of diagram.

THICKNESS (in hundreds of geopotential feet) of the layers between the levels 1000, 700, 500, 300, 200, 150 and 100 mb. is represented by numbers and a graduation along the middle of each layer. The thicknesses are obtained from the virtual temperature curve by the equal-area method, using any straight line as a dividing line.

HEIGHT in geopotential feet above mean sea level, or station level, of the 1000 mb. surface is obtained from the nomogram in the upper left-hand corner by drawing a straight line from the point on the temperature scale (°F) through the point p_o (mean sea level or station pressure) on the pressure scale, and reading the height on the height scale.

U.S. STANDARD ATMOSPHERE SOUNDING is indicated by a thick brown line.

The saturated adiabats and isopleths of saturation mixing ratio are computed by use of vapor pressure over a plane water surface at all temperatures.

Extension of chart to 50 mb has been accomplished by overlap with pressure indicated in brackets, [200] at 400 mb, and [50] at 100 mb. Dry adiabats for the overlap are labeled in parentheses ( ).

APPROXIMATE VIRTUAL TEMPERATURE may be obtained from the formula $T_v = T + \frac{w}{6}$ where T_v is virtual temperature in °C, T is free air temperature in °C, and w is mixing ratio in grams/kilogram. For purposes of thickness computation, use the mean temperature of the layer for T and use the mean mixing ratio of the layer for w.

Sounding data will be entered on two (2) sets of charts. One chart will include 0300Z and 1500Z soundings; the other 0900Z and 2100Z soundings. To provide twelve (12) hour continuity the preceding 1500Z or the 2100Z soundings, whichever the case may be, will be entered as a trace of the temperature curve without the reproduction of data or circling of any point. (See AWSM-105-22).

Black dots • along wind scale lines indicate the levels for which wind data is reported and plotted. The open circles ○ indicate the mandatory pressure levels at which wind data is also entered.

(S, T) on 0900Z 21/1500Z

21/0300Z

US STANDARD ATMOSPHERE ALTITUDE

THOUSANDS OF METERS

THOUSANDS OF FEET

WIND SCALE

Top Plate

USAF SKEW T, log p DIAGRAM

TEMPERATURE IN DEGREES FAHRENHEIT

-10° 0° 10° -20° -30° -40° -50°

90 (170.3) 100 (182.5) 110 (194.7) 120 (206.9) 130 (219.1) 140 (231.3) 150 (243.5)

-90 -85 -80 -75 -70 -65 -60 -55

-95 -80 -75 -70 -65 -60 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5

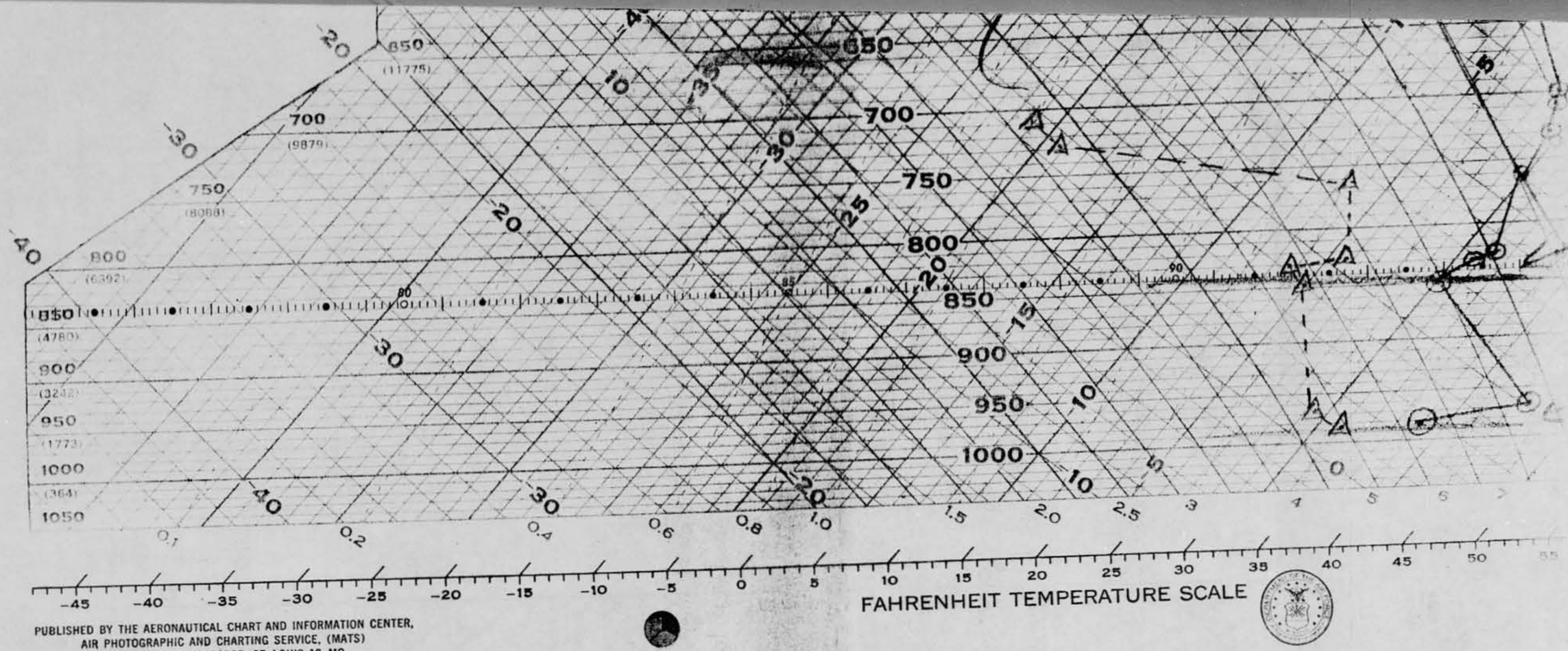
75 80 85 55 60 65 18 20 24 26 28 30 95 90

150 200 250 300 350 400 450 500

110 115 120 125

STRONG

110/120



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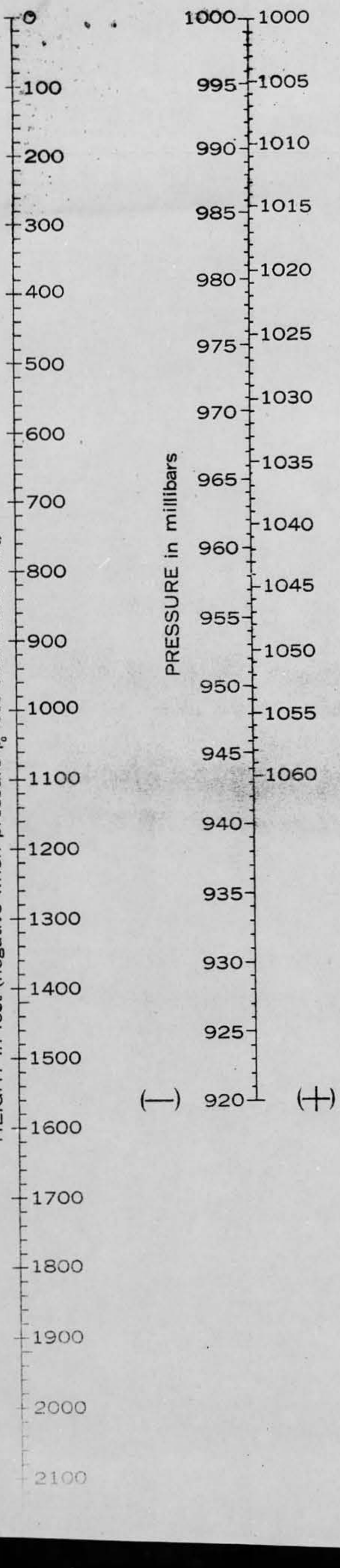
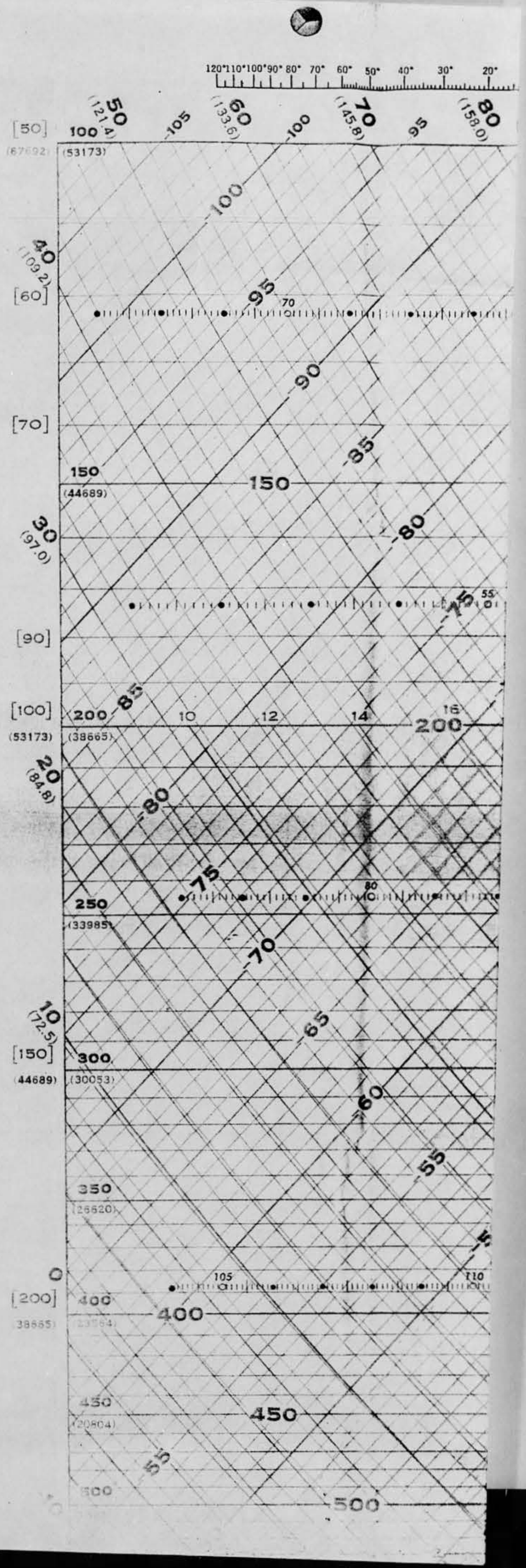
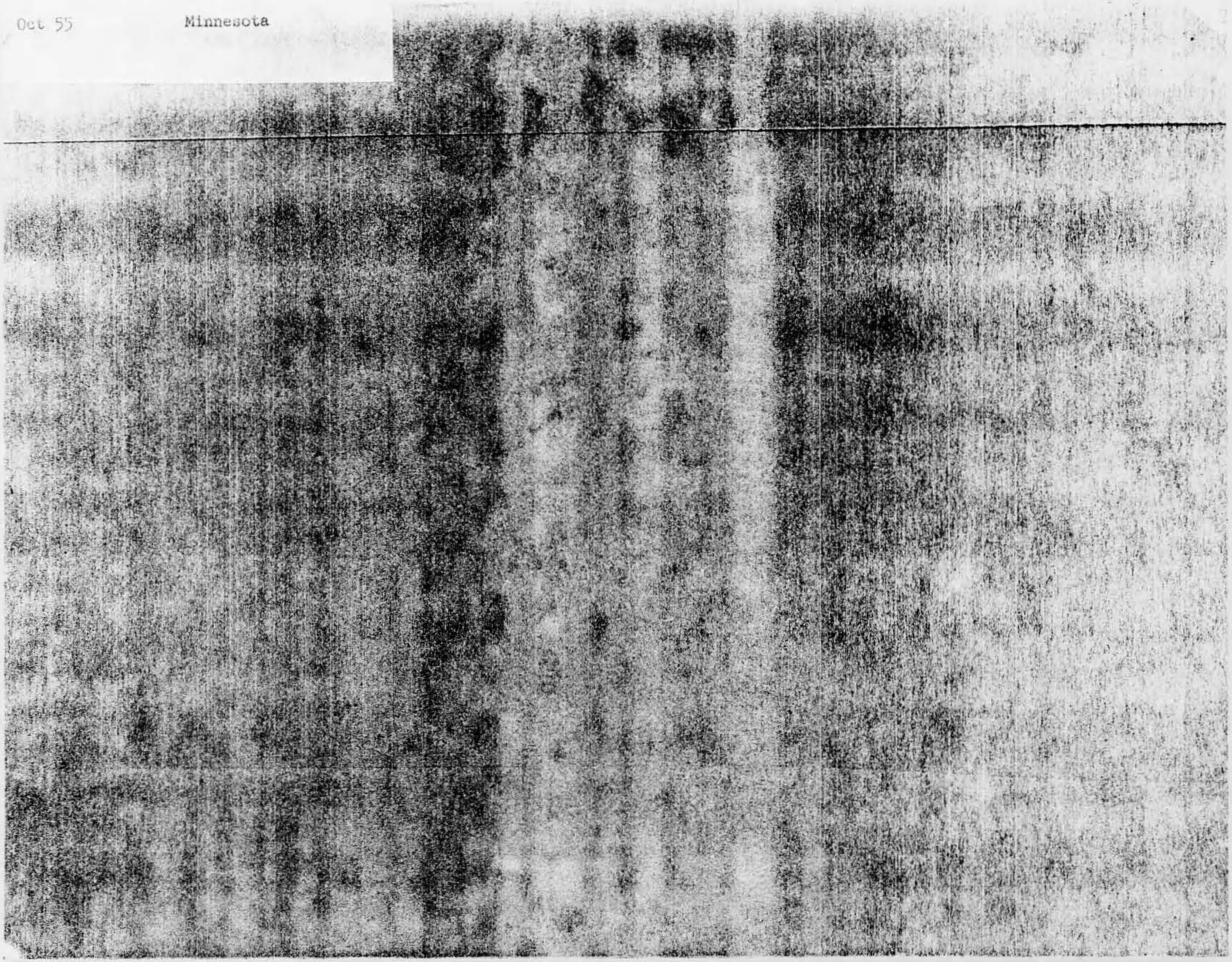
Form: AWS WPC 9-16





Oct 55 Minnesota