

**U.S. DEPARTMENT OF COMMERCE  
National Technical Information Service**

**PB-282 149**

**Flight Data of Electric Field  
Thunderstorm Research International  
Project, Trip 76, July 1976**

**National Oceanic and Atmospheric Administration, Boulder, Colo**

**Prepared for**

**National Aeronautics and Space Administration, Cocoa Beach, Fla  
John F Kennedy Space Center**

**Jan 78**

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16. ABSTRACT  
**This catalog contains graphs of the gradient components (negative electric field components) recorded on the three airplanes, during the thunderstorm project 1976 at Kennedy Space Center, Florida. (Author extracted)**

17. KEY WORDS AND DOCUMENT ANALYSIS

17A. DESCRIPTORS  
**\*Thunderstorms, \*Electric fields, Data displays**

17B. IDENTIFIERS/OPEN-ENDED TERMS  
**Catalogs, Florida, Data reports**

17C. COSATI FIELD/GROUP  
**4B**

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78042703

PB 282 149

NOAA DATA REPORT ERL APCL-1



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FLIGHT DATA OF ELECTRIC FIELD  
THUNDERSTORM RESEARCH INTERNATIONAL PROJECT, TRIP 76  
JULY 1976

Heinz W. Kasemir

Atmospheric Physics and Chemistry Laboratory  
Boulder, Colorado  
January 1978

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**noaa**

NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION /

Environmental  
Research Laboratories

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SPRINGFIELD, VA. 22161

NOAA DATA REPORT ERL APCL-1

FLIGHT DATA OF ELECTRIC FIELD  
THUNDERSTORM RESEARCH INTERNATIONAL PROJECT, TRIP 76  
JULY 1976

Heinz W. Kasemir

This NOAA project was partly supported  
by a NASA-KSC contract CC 593 60 A

Atmospheric Physics and Chemistry Laboratory  
Boulder, Colorado  
January 1978



**UNITED STATES  
DEPARTMENT OF COMMERCE**  
Juanita M. Kreps, Secretary

NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION  
Richard A. Frank, Administrator

Environmental Research  
Laboratories  
Wilmot N. Hess, Director

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## I. Comments on data catalog

### a. Airplanes

This catalog contains graphs of the gradient components (negative electric field components) recorded on the three airplanes, C131 (page 1), S2D (page 58), and NASA6 (page 124), during the thunderstorm project 1976 at Kennedy Space Center, Florida.

### b. Tape Directory

For each airplane the data set starts with a copy of the tape directory stored always in file 1 of each tape. The tape directory lists the following information in 7 columns.

File	Date	Airplane	Cloud	Pass	Scale	$Y_{\max}$
2	July 10, 1976	C131	1	2	25k	93A
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.

Each graph has the same heading as the directory in column 1-5. In column 6 scale is replaced by G-scale to remind the user that the gradient is shown, which is identical with the field in the atmospheric electric definition but opposite in sign to the physical definition of the field.

### c. Time Scale and Registers

$Y_{\max}$  in column 7 is replaced by Y-UNIT = 5 sec. 5 sec was originally the sample rate in converting the analog records into digital numbers, i. e. the data points were sampled in 5 sec. intervals.  $Y_{\max}$  would be identical with the last file register that contains data. In the graph the horizontal y axis displays time. The number at the right of the axis gives the length of the time axis in time units. If for instance this number is 50 and the time unit is 5 sec. the length of the time axis is equivalent to 250 sec. To convert time into distance multiply by the airplane

speed given below. For instance if the airplane speed of the C131 was 165 knt =  $85 \frac{m}{s}$  the length of the y axis represents  $85 \times 250 = 21250 \text{ m} = 21.25 \text{ km}$ .

During the evaluation of the analog records it became desirable to increase the sample rate from 5 sec to 2.5 sec (A) or 1.25 (B). This is indicated by the letter A or B respectively in the column  $Y_{max}$  of the tape directory. The number still gives the last data register of the file. For instance 93A means that the file contains 93 data register but that the sampling rate was 2.5 sec.

#### d. Gradient Scale

The vertical axis gives the gradient in a normalized scale from -1 to +1. Multiply the normalized value by the indicated G-SCALE to obtain the gradient value in kV/m. For instance if the normalized GZ value is .5 and the G-SCALE 50kV/m the GZ value is  $.5 \times 50\text{kV/m} = 25\text{kV/m}$ . In the upper right corner of the graph is a list of symbols Y, +, x, 0 used to plot the gradient components GY, GXt, GXn, GZ respectively. The x, y, z coordinate system is defined with respect to the main airplane axis. The positive direction of x, y, z is left to right wing tip, tail to nose, lower to upper part of the fuselage respectively. Since data were evaluated in level flight, the x-y plane is parallel to the earth surface.

The index t and n at GX indicates that GXt was measured by the top field mill and GXn by the nose field mill. The quality of the data can be judged by the agreement between the GXt and the GXn curve.

#### e. Airplane Speed

C131	Average Speed: 165 KNT = 85 m/s
S2D	Average Speed: 135 KNT = 70 m/s
NASA6	Average Speed: 125 KNT = 64.3 m/s



## f. Participating Agencies

National Oceanic and Atmospheric Administration, Atmospheric  
Physics and Chemistry Laboratory

Heinz W. Kasemir, Project Leader  
 James Hoiitza }  
 Dave Rust } Scientists  
 Bill Cobb }  
 Fred Gould, Computer Expert

Fred Werly }  
 Gerald Saladin } Pilots of C131  
 Dave Turner }

National Aeronautic and Space Administration, Kennedy Space Center

Angelo J. Taiani, Program Coordinator  
 William Durrett, Scientific Advisor  
 Ronald Wojtasinski, Technical Representative  
 Jesse Gulick, Staff Meteorologist }  
 James Nicholson, Assistant Staff Meteorologist } KSC Weather Office, NOAA

Marvin Heckendorf }  
 Linwood Mason } Pilots of NASA6  
 Jan Pruett }  
 James Neff }

U. S. Navy, Naval Research Laboratory, Washington, D. C.

Lothar H. Ruhnke, Lab. Director  
 Wolfram Kasemir, Scientist

Marshal Willharm }  
 Michael Pica } Pilots of S2D

The NOAA project was partly supported by a NASA-KSC contract CC 593 60 A

## C131 DATA TAPE 1

FILE	DATE	AIR/LANE	CLOUD	PASS	SCALE	Ymax
2	JULY 10, 1976	C131	1	2	25K	93A
3	JULY 10, 1976	C131	1	3	25K	109A
4	JULY 10, 1976	C131	1	4	50K	105A
5	JULY 10, 1976	C131	1	5	25K	105A
6	JULY 10, 1976	C131	1	6	25K	159A
7	JULY 10, 1976	C131	1	7	25K	151A
8	JULY 10, 1976	C131	3	1	25K	107A
9	JULY 10, 1976	C131	3	2	25K	99A
10	JULY 10, 1976	C131	3	3	25K	115A
11	JULY 10, 1976	C131	3	4	25K	143A
12	JULY 10, 1976	C131	3	5	25K	145A
13	JULY 10, 1976	C131	3	6	25K	153A
14	JULY 10, 1976	C131	3	7	10K	169A
15	JULY 10, 1976	C131	3	8	10K	181A
16	JULY 12, 1976	C131	1	2	25K	133A
17	JULY 12, 1976	C131	1	3	25K	121A
18	JULY 12, 1976	C131	1	4	10K	101A
19	JULY 12, 1976	C131	1	5	25K	137A
20	JULY 12, 1976	C131	1	6	10K	151A
21	JULY 12, 1976	C131	1	7	10K	121A
22	JULY 13, 1976	C131	2	1	25K	239A
23	JULY 13, 1976	C131	2	2	25K	117A
24	JULY 13, 1976	C131	2	3	50K	167A
25	JULY 13, 1976	C131	2	4	10K	131A
26	JULY 13, 1976	C131	2	5	10K	97A
27	JULY 13, 1976	C131	2	6	5K	117A
28	JULY 13, 1976	C131	2	7	10K	81A
29	JULY 13, 1976	C131	2	8	1K	83A
30	JULY 14, 1976	C131	1	1	1K	77A
31	JULY 14, 1976	C131	1	4	10K	49B

FILE	DATE	AIRPLANE	CLOUD	PASS	SCALE	Ymax
2	JULY 15, 1976	C131	2	3	5K	111A
3	JULY 15, 1976	C131	2	4	25K	115A
4	JULY 15, 1976	C131	2	5	10K	67A
5	JULY 15, 1976	C131	3	1	10K	83
6	JULY 15, 1976	C131	3	3	25K	101A
7	JULY 15, 1976	C131	3	4	100K	81A
8	JULY 15, 1976	C131	3	5	100K	97A
9	JULY 15, 1976	C131	3	6	25K	97A
10	JULY 15, 1976	C131	3	7	25K	68A
11	JULY 15, 1976	C131	3	8	25K	107A
12	JULY 15, 1976	C131	3	9	5K	91A
13	JULY 15, 1976	C131	3	10	50K	73A
14	JULY 15, 1976	C131	3	11	1K	85A
15	JULY 15, 1976	C131	3	12	1K	87A
16	JULY 16, 1976	C131	1	1	10K	117A
17	JULY 16, 1976	C131	1	2	25K	111A
18	JULY 16, 1976	C131	1	3	25K	87A
19	JULY 16, 1976	C131	1	4	25K	87A
20	JULY 16, 1976	C131	1	5	25K	119A
21	JULY 16, 1976	C131	1	6	25K	181A
22	JULY 16, 1976	C131	1	7	25K	181A
23	JULY 16, 1976	C131	1	8	25K	193A
24	JULY 16, 1976	C131	1	9	50K	231A
25	JULY 16, 1976	C131	1	10	50K	189A
26	JULY 16, 1976	C131	1	11	25K	254A

FILE  
2

DATE  
JULY 10, 1976

AIRPLANE  
C131

CLOUD  
1

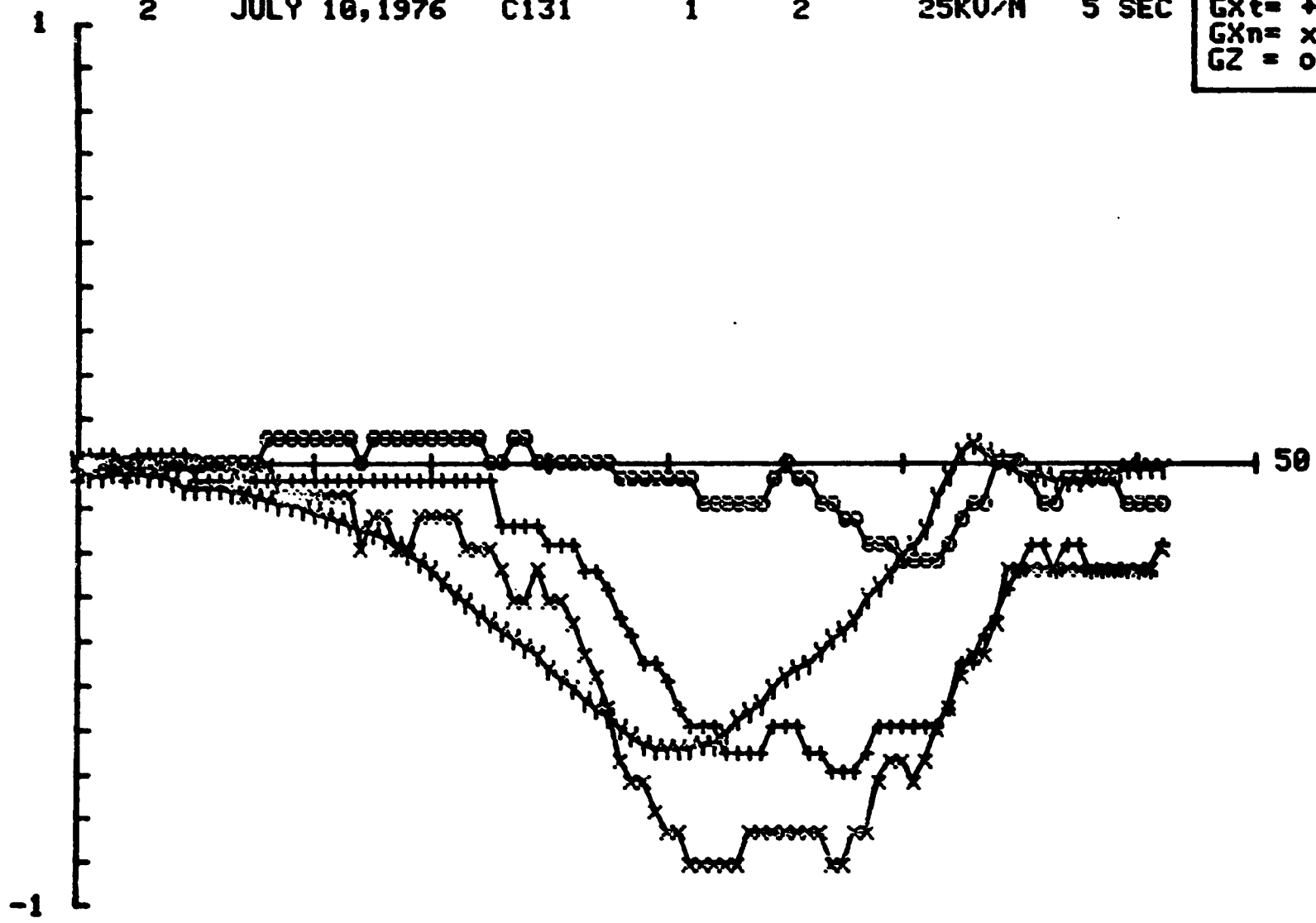
PASS  
2

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

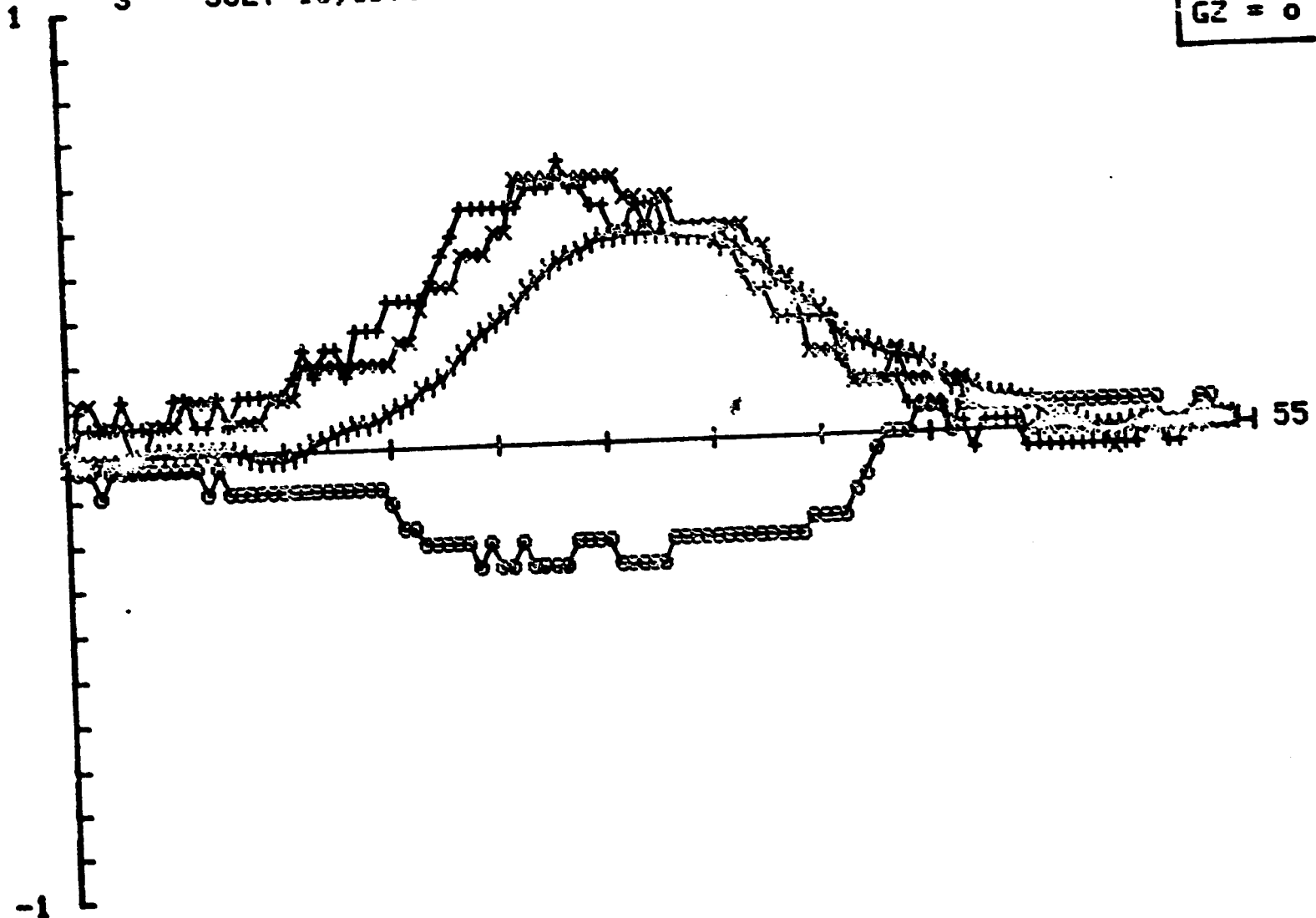
2



4

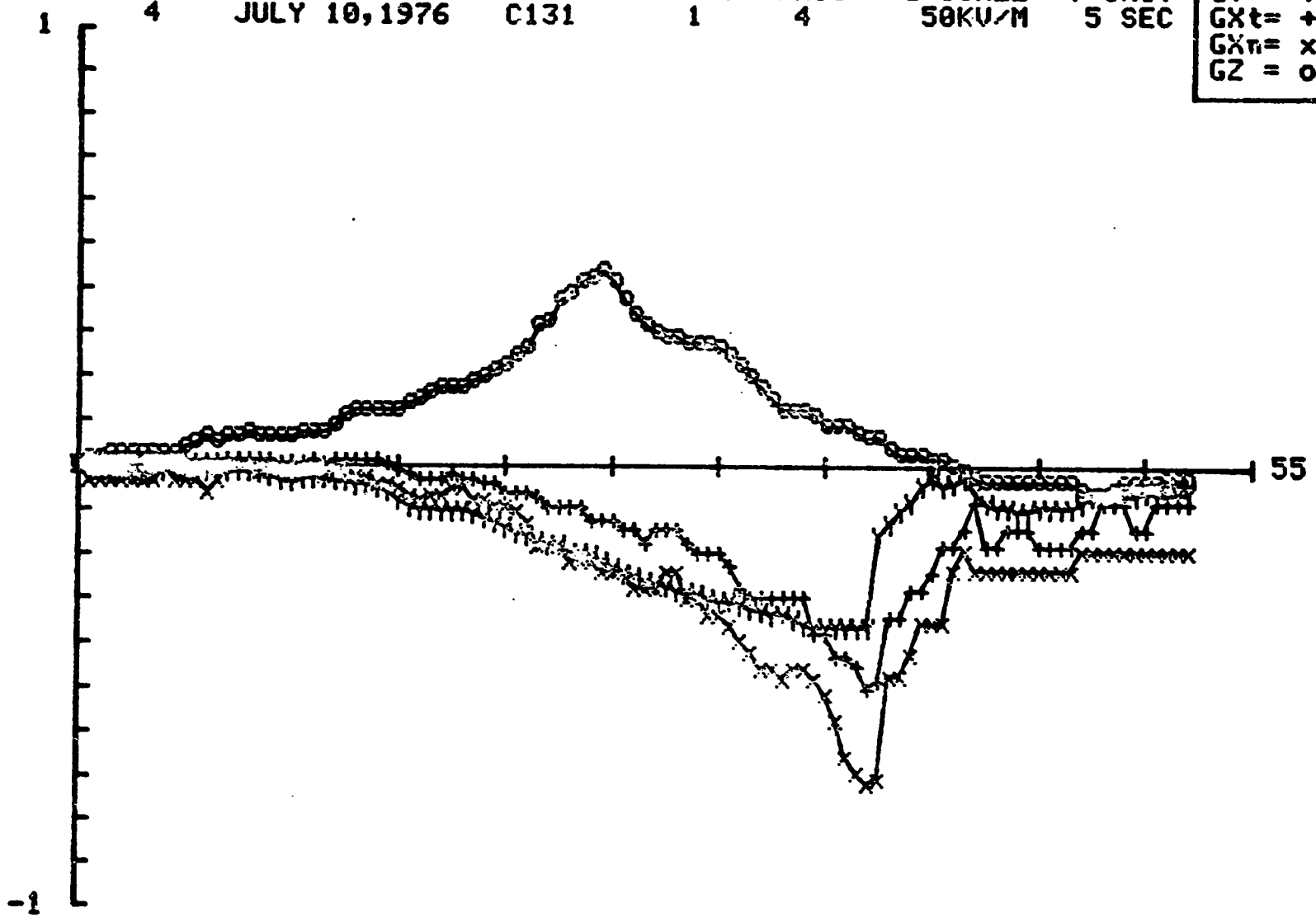
FILE 3      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 1      PASS 3      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 4      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 1      PASS 4      G-SCALE 50KV/M      Y-UNIT 5 SEC

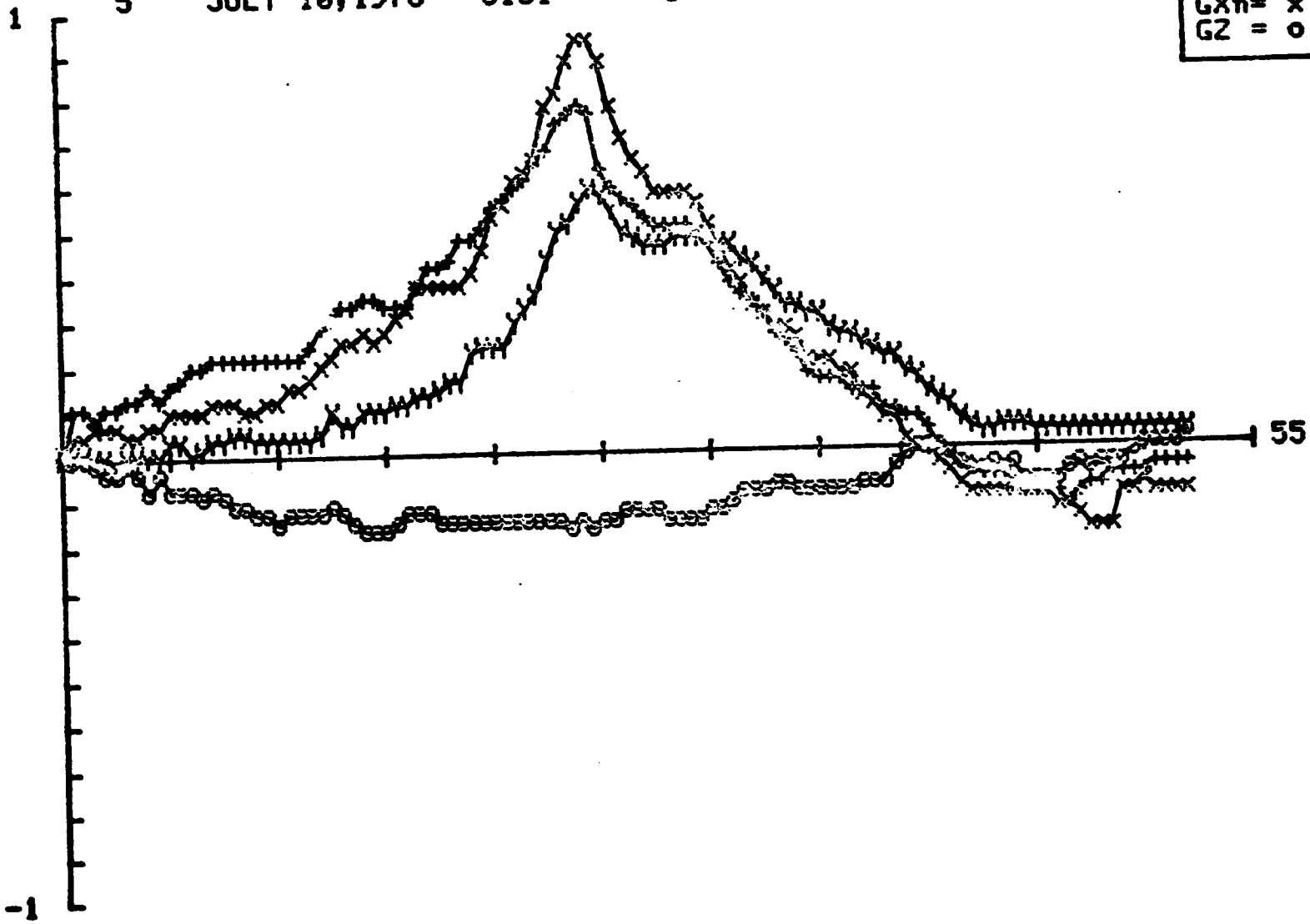
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



6

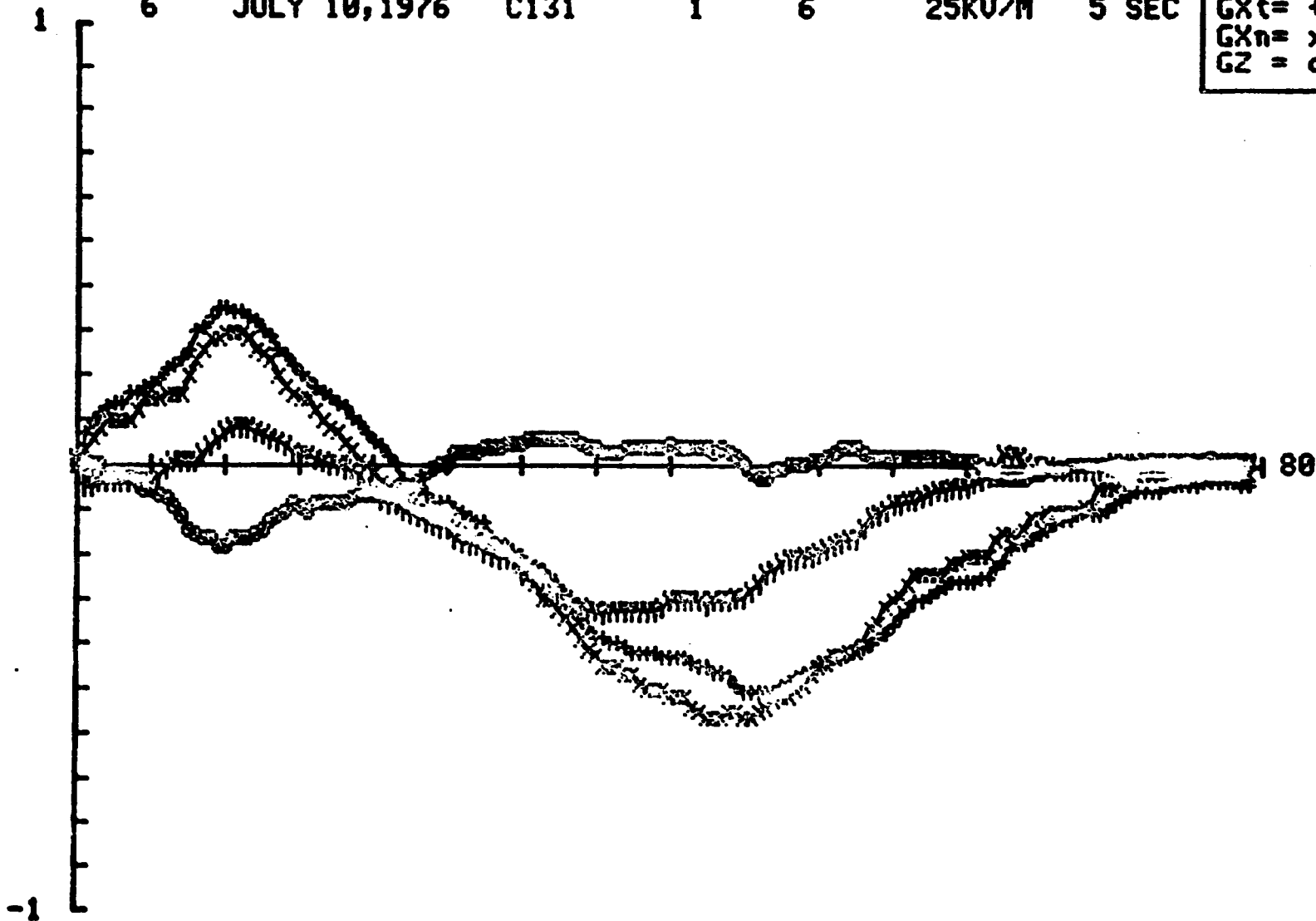
FILE 5      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 1      PASS 5      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 6      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 1      FASS 6      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY = Y
GXt = +
GXn = x
GZ = o

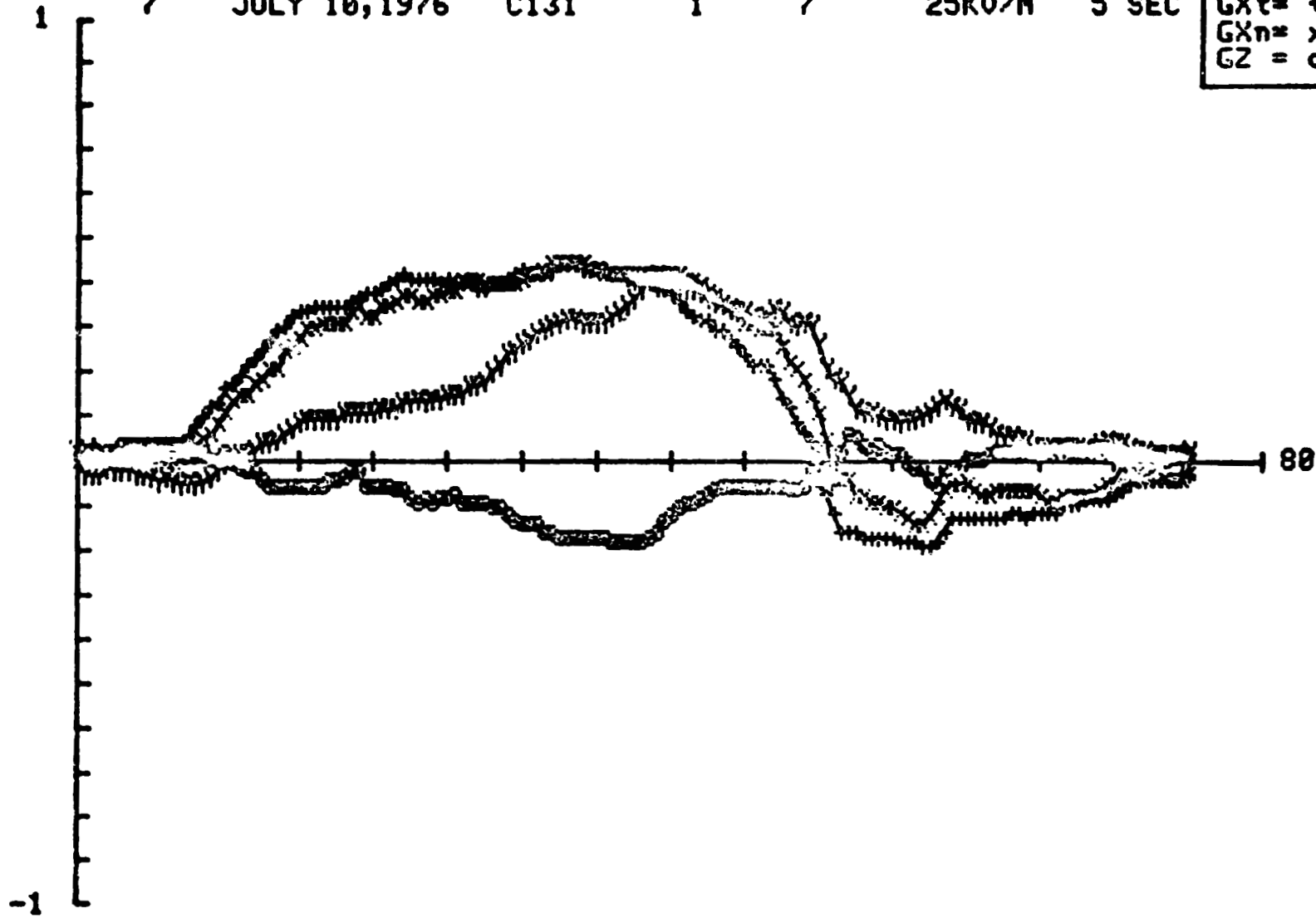




8

FILE 7      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 1      PASS 7      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
8

DATE  
JULY 10, 1976

AIRPLANE  
C131

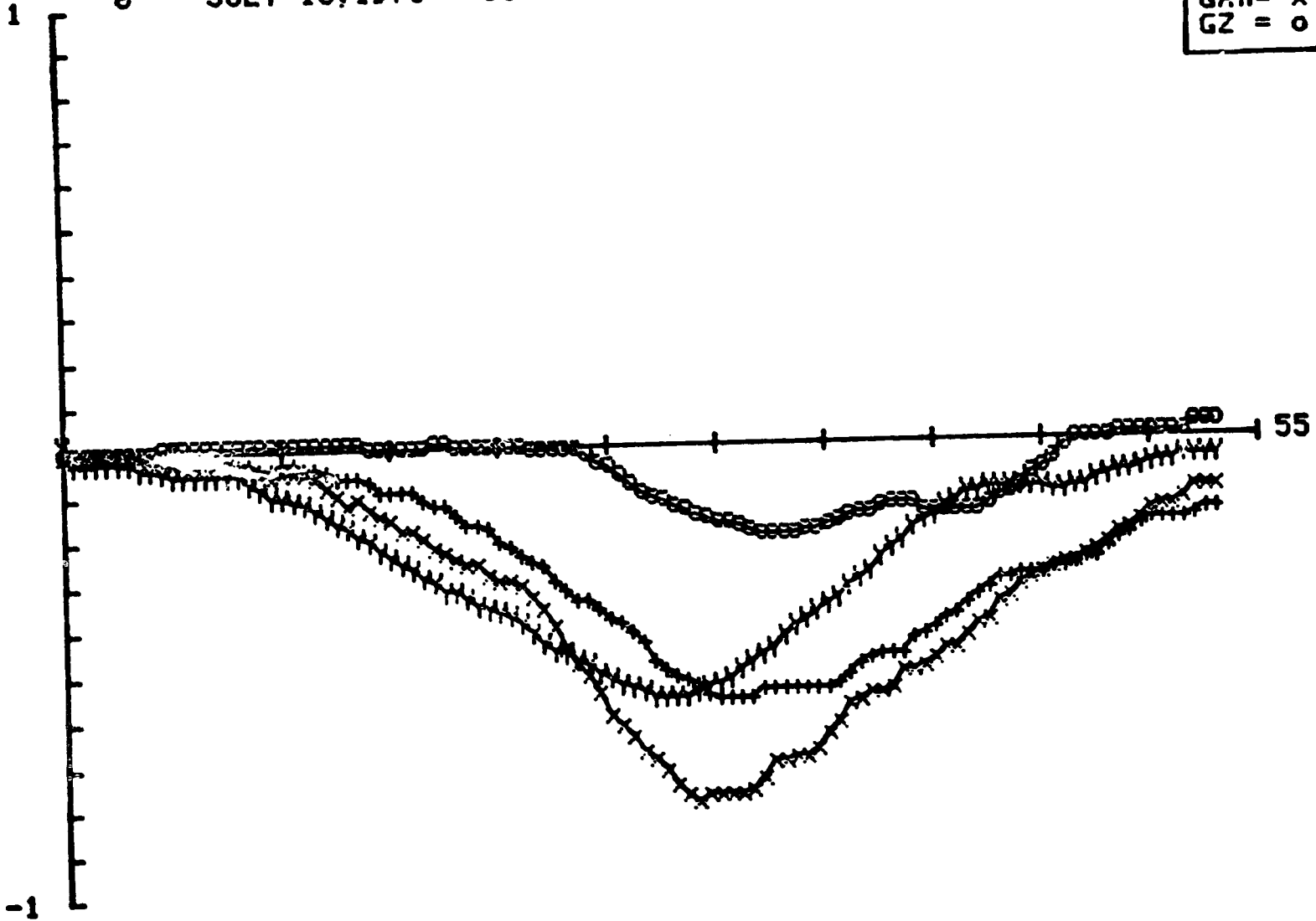
CLOUD  
3

PASS  
1

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

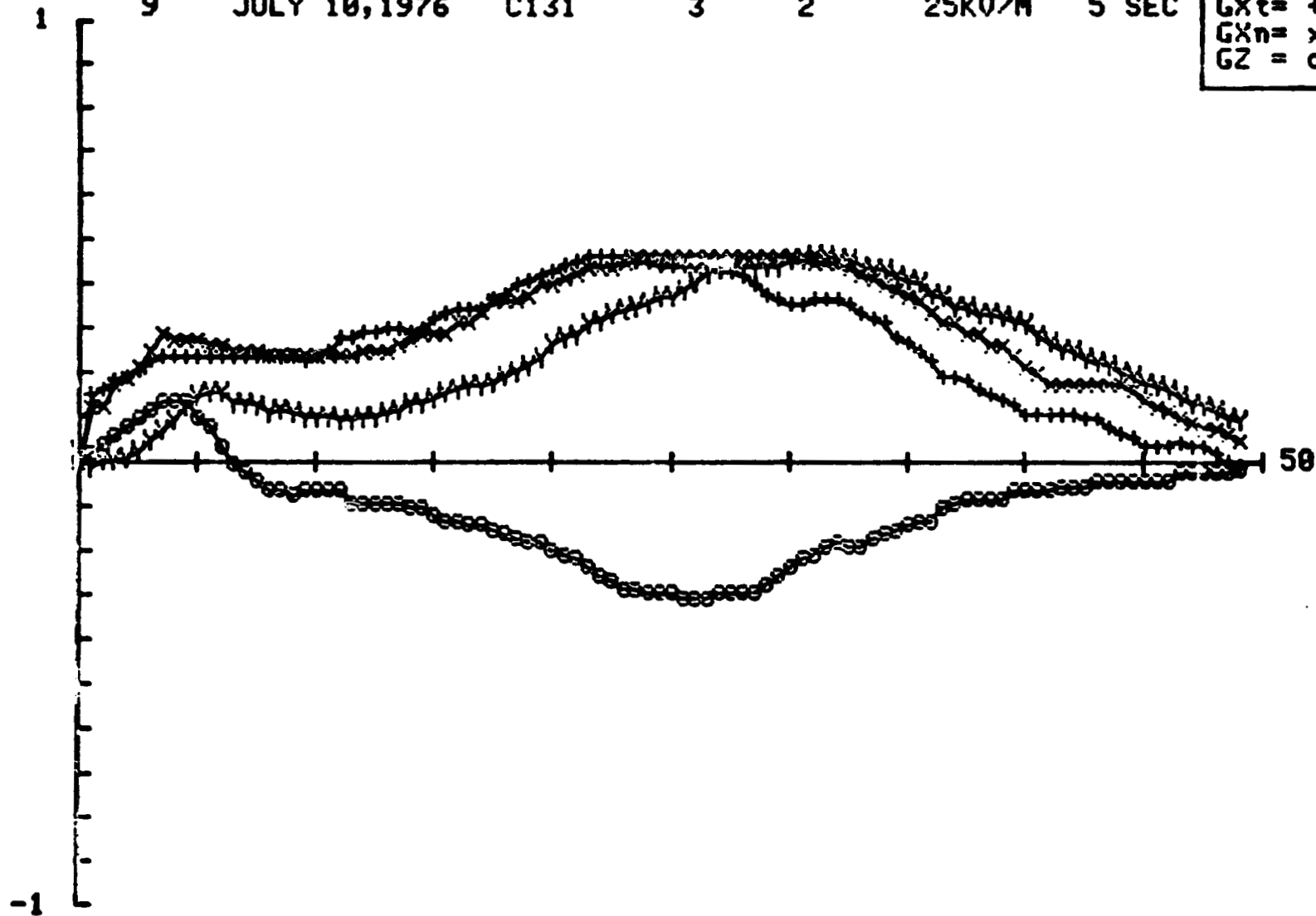
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GXt	=	+
GXn	=	x
GZ	=	o



10

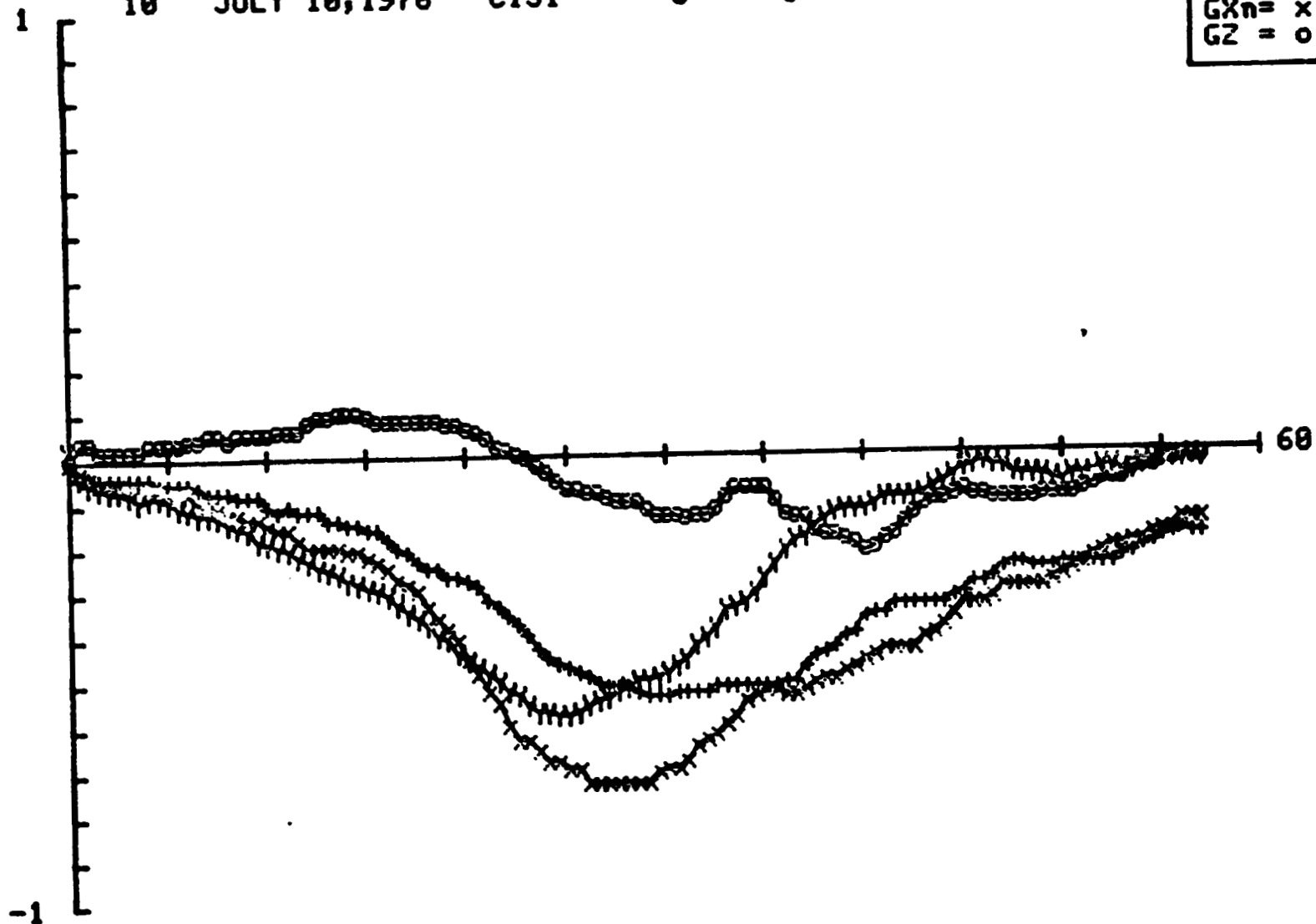
FILE 9      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 3      PASS 2      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
10DATE  
JULY 10, 1976AIRPLANE  
C131CLOUD  
3PASS  
3G-SCALE  
25KV/MY-UNIT  
5 SEC

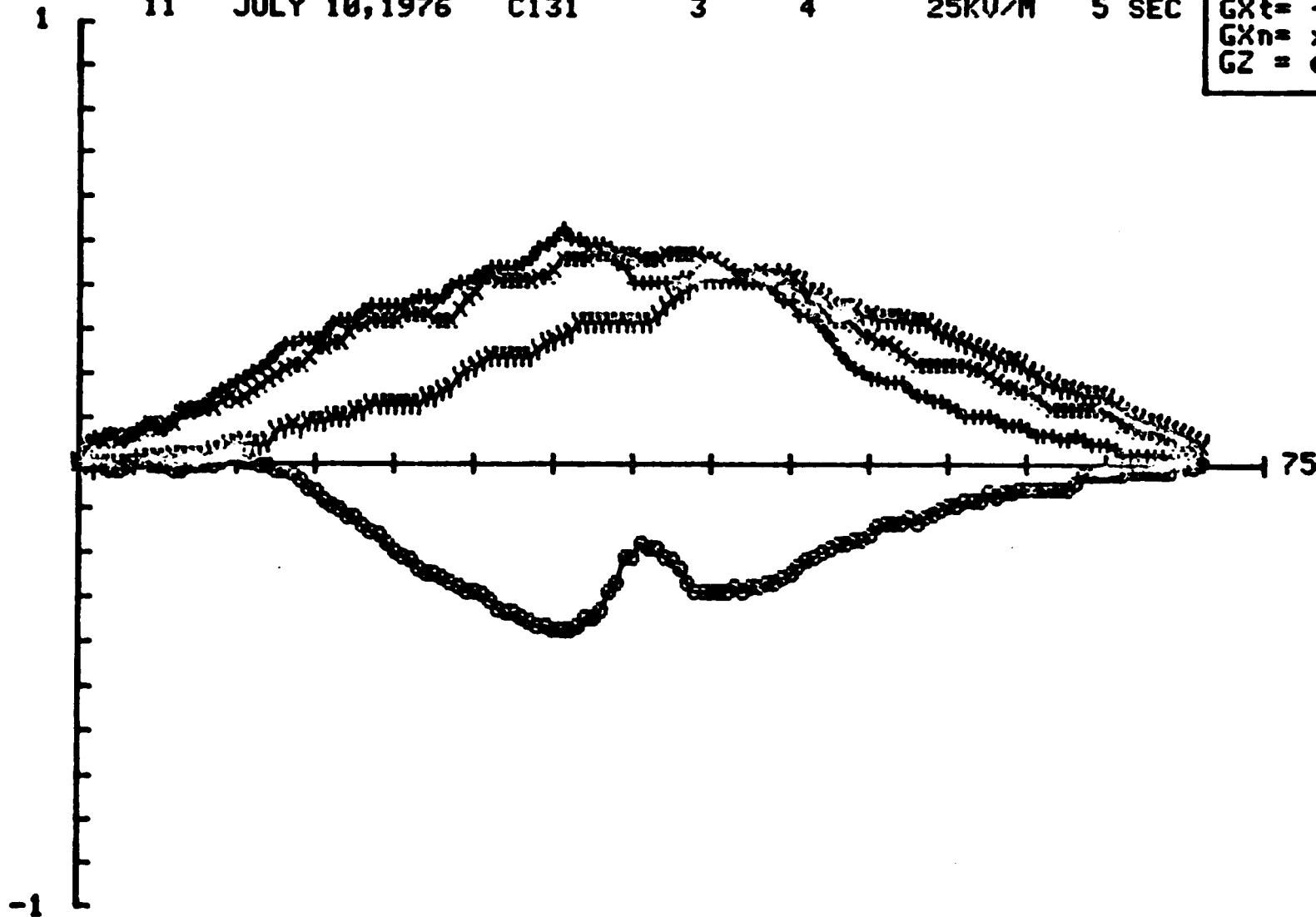
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



1 2

FILE 11    DATE JULY 10, 1976    AIRPLANE C131    CLOUD 3    PASS 4    G-SCALE 25KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
12

DATE  
JULY 10, 1976

AIRPLANE  
C131

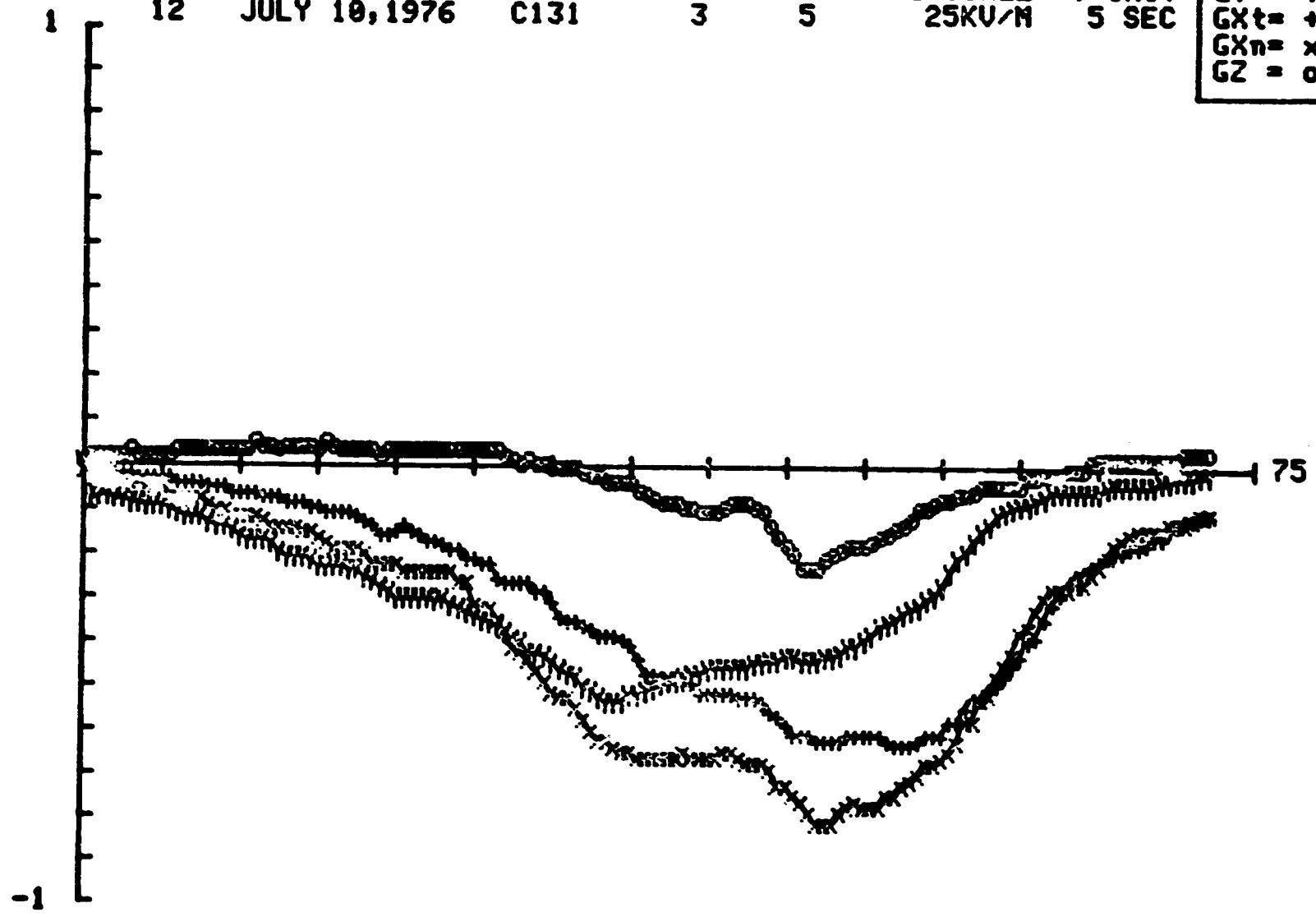
CLOUD  
3

PASS  
5

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

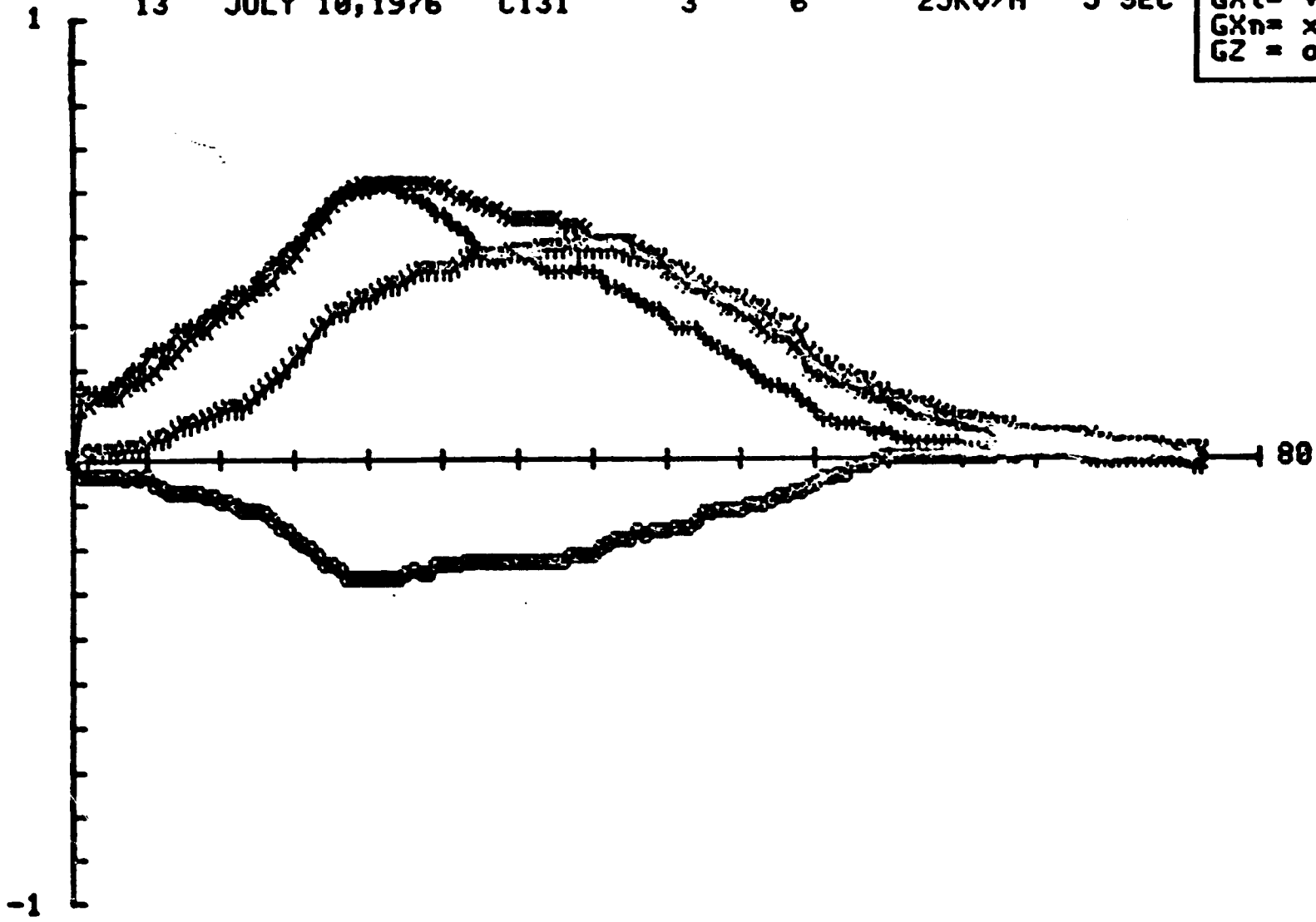
GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



14

FILE 13      DATE JULY 10, 1976      AIRPLANE C131      CLOUD 3      PASS 6      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
14

DATE  
JULY 10, 1976

AIRPLANE  
C131

CLOUD  
3

PASS  
7

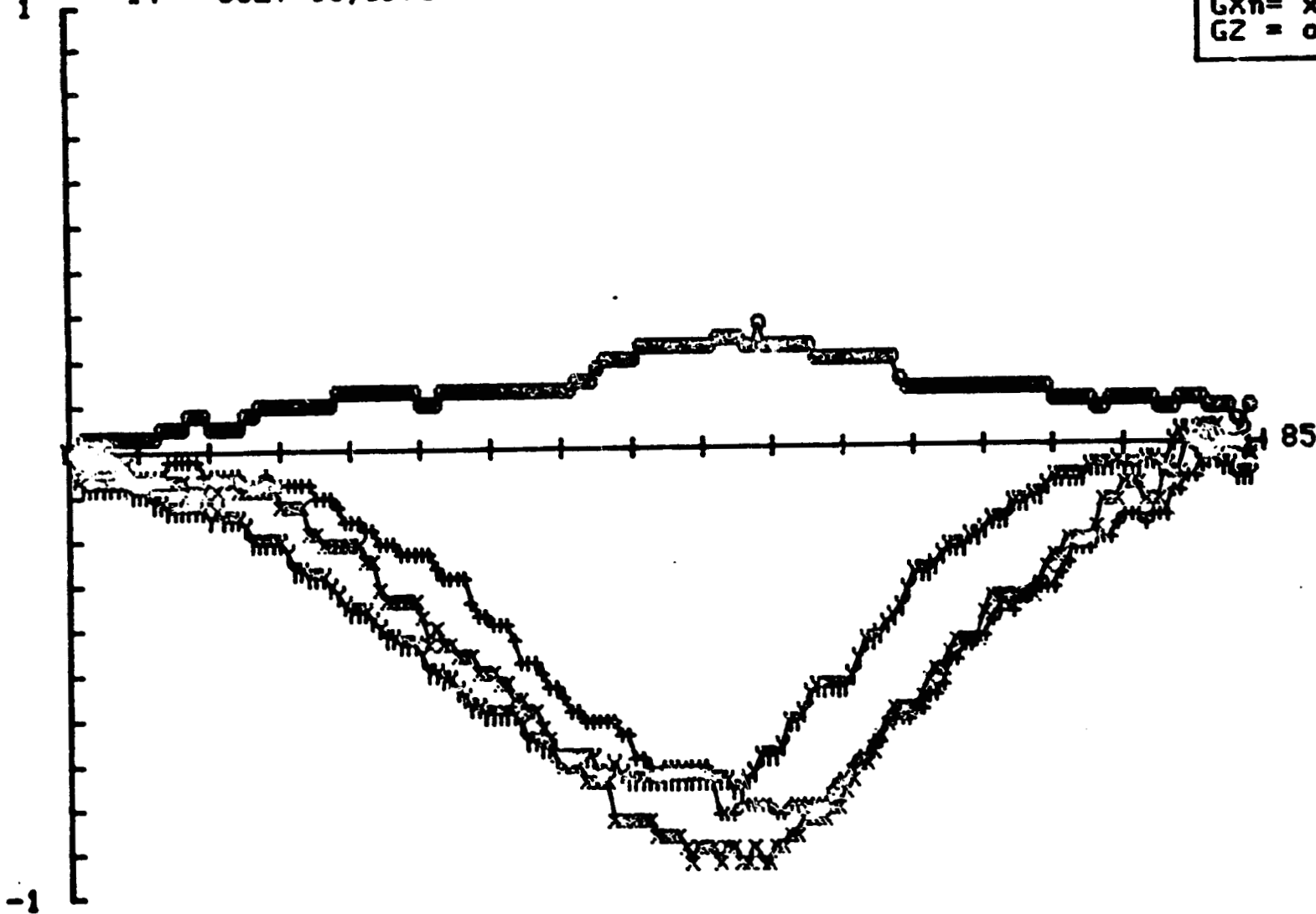
G-SCALE  
10KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

15

1





16

FILE  
15

DATE  
JULY 10, 1976

AIRPLANE  
C131

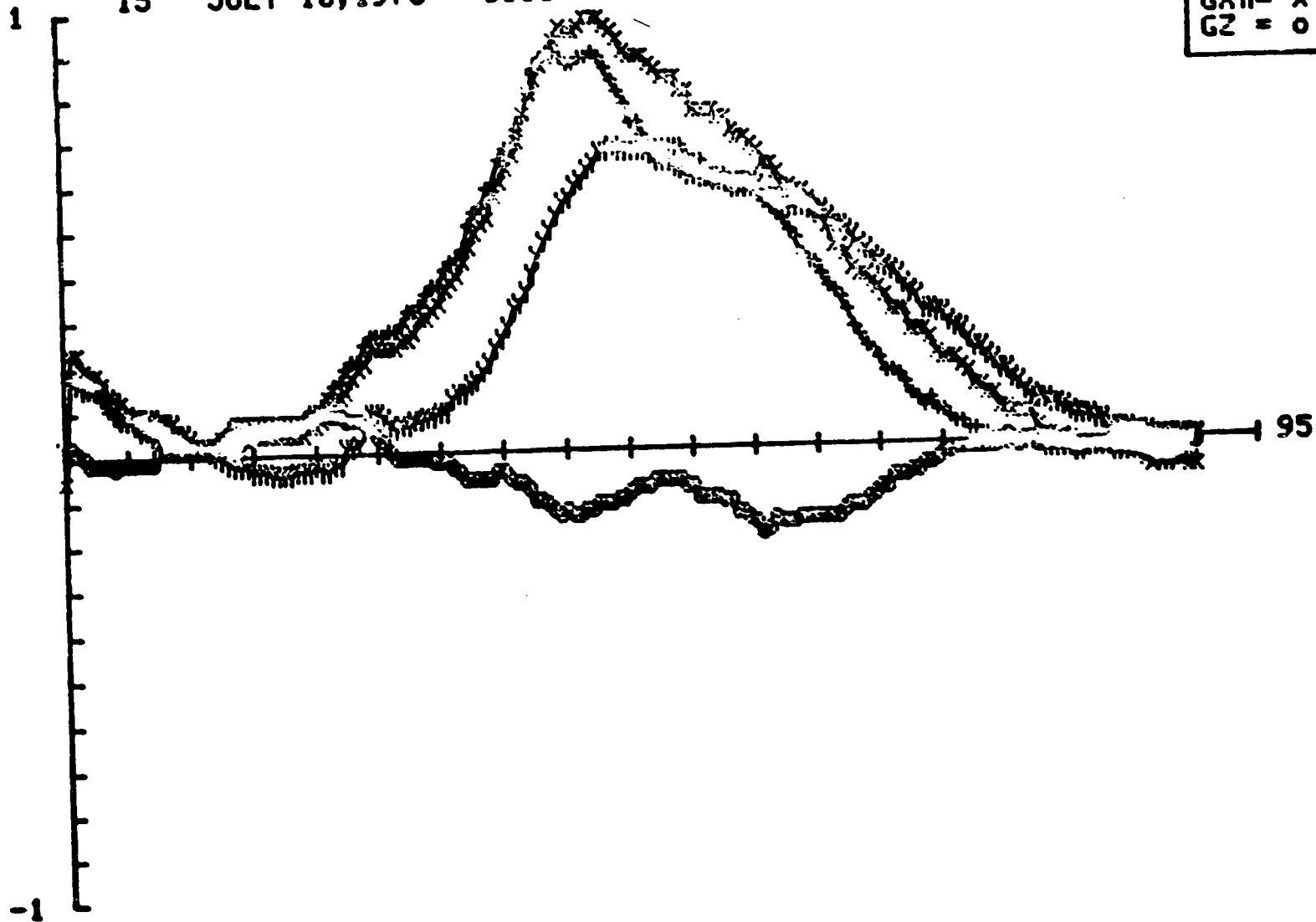
CLOUD  
3

PASS  
3

G-SCALE  
10KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
16

DATE  
JULY 12, 1976

AIRPLANE  
C131

CLOUD  
1

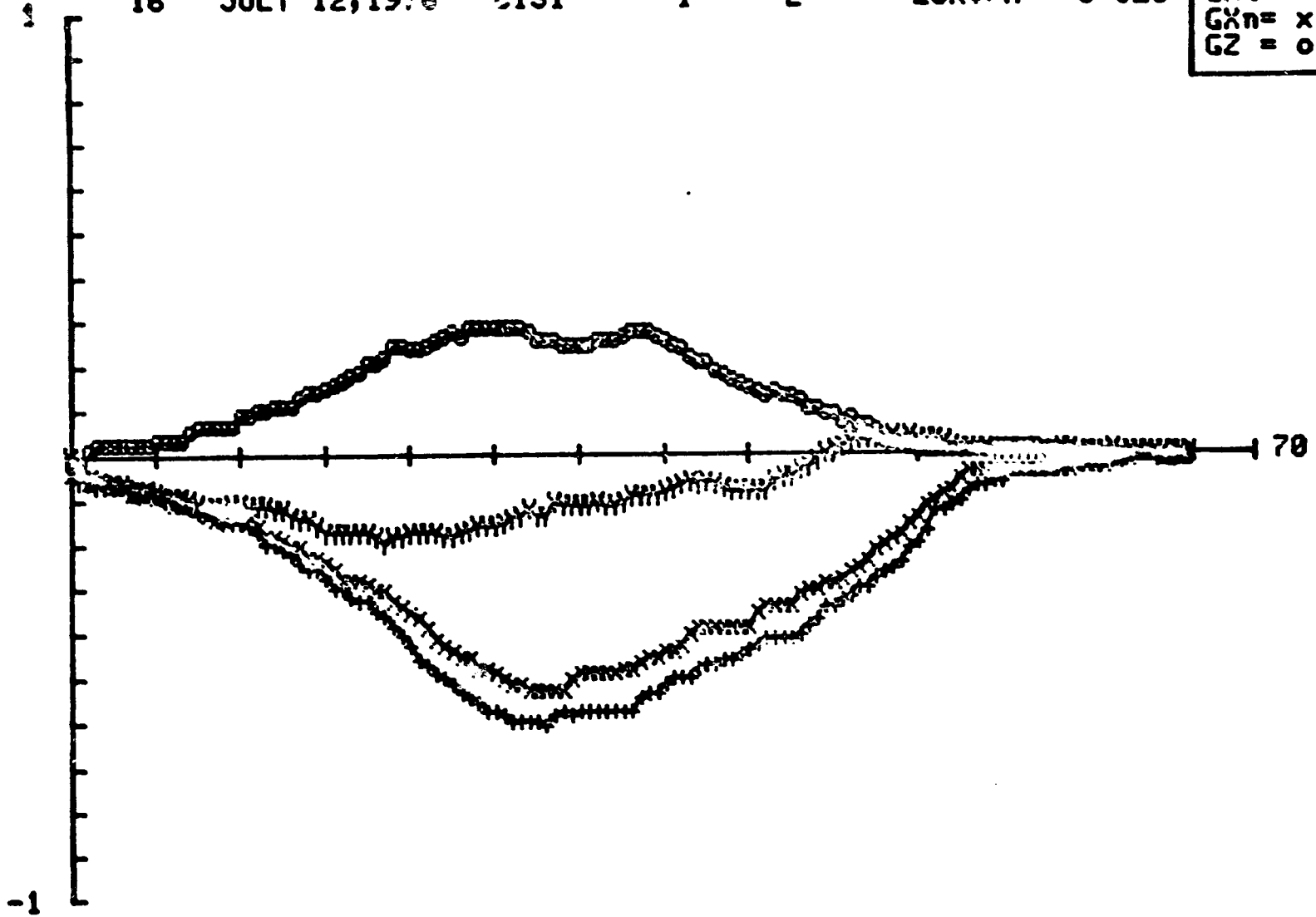
PASS  
2

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o

17



18

FILE  
17

DATE  
JULY 12, 1976

AIRPLANE  
C131

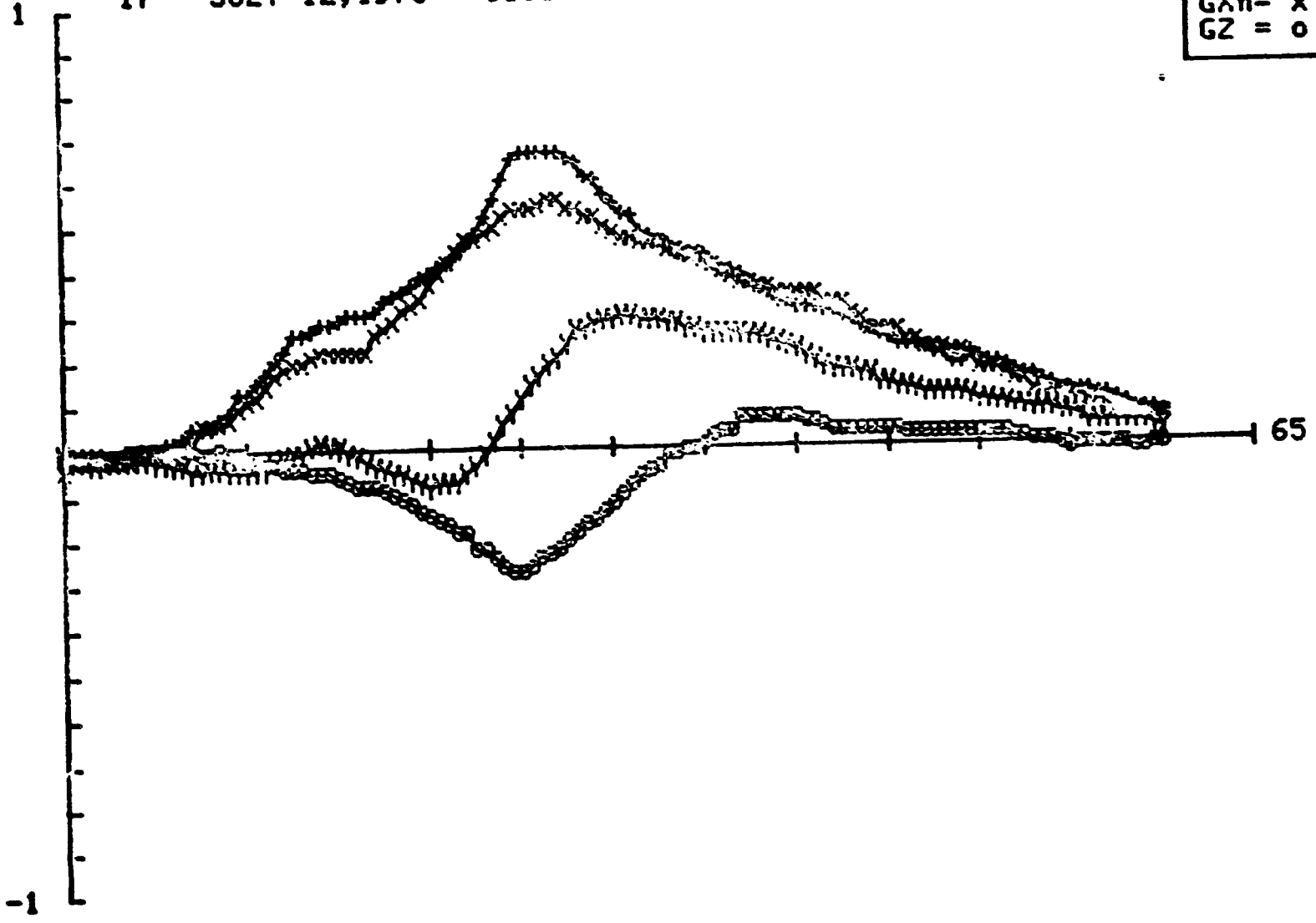
CLOUD  
1

PASS  
3

G-SCALE  
25KV/1.

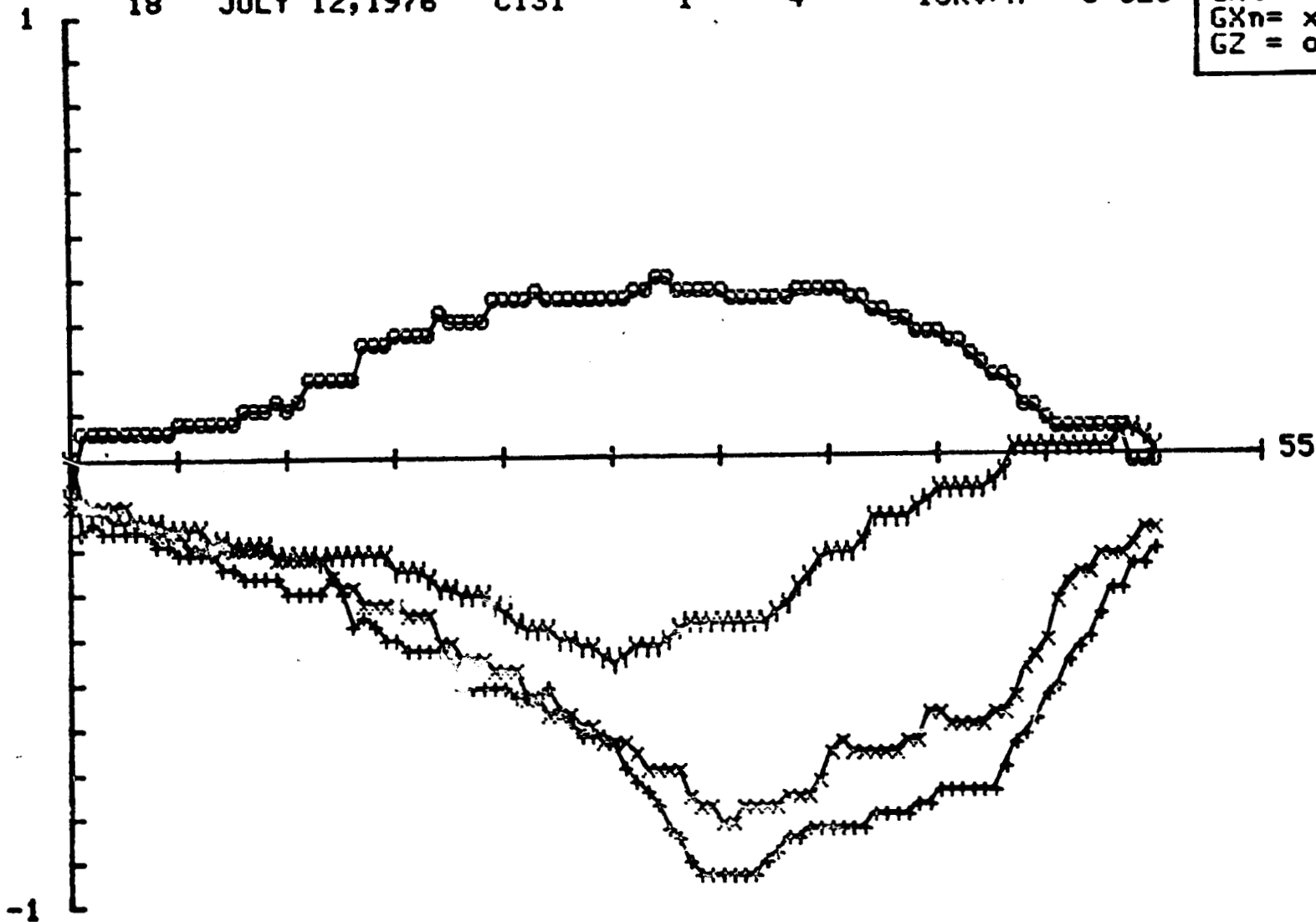
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
18DATE  
JULY 12, 1976AIRPLANE  
C131CLOUD  
1PASS  
4G-SCALE  
10KV/MY-UNIT  
5 SEC

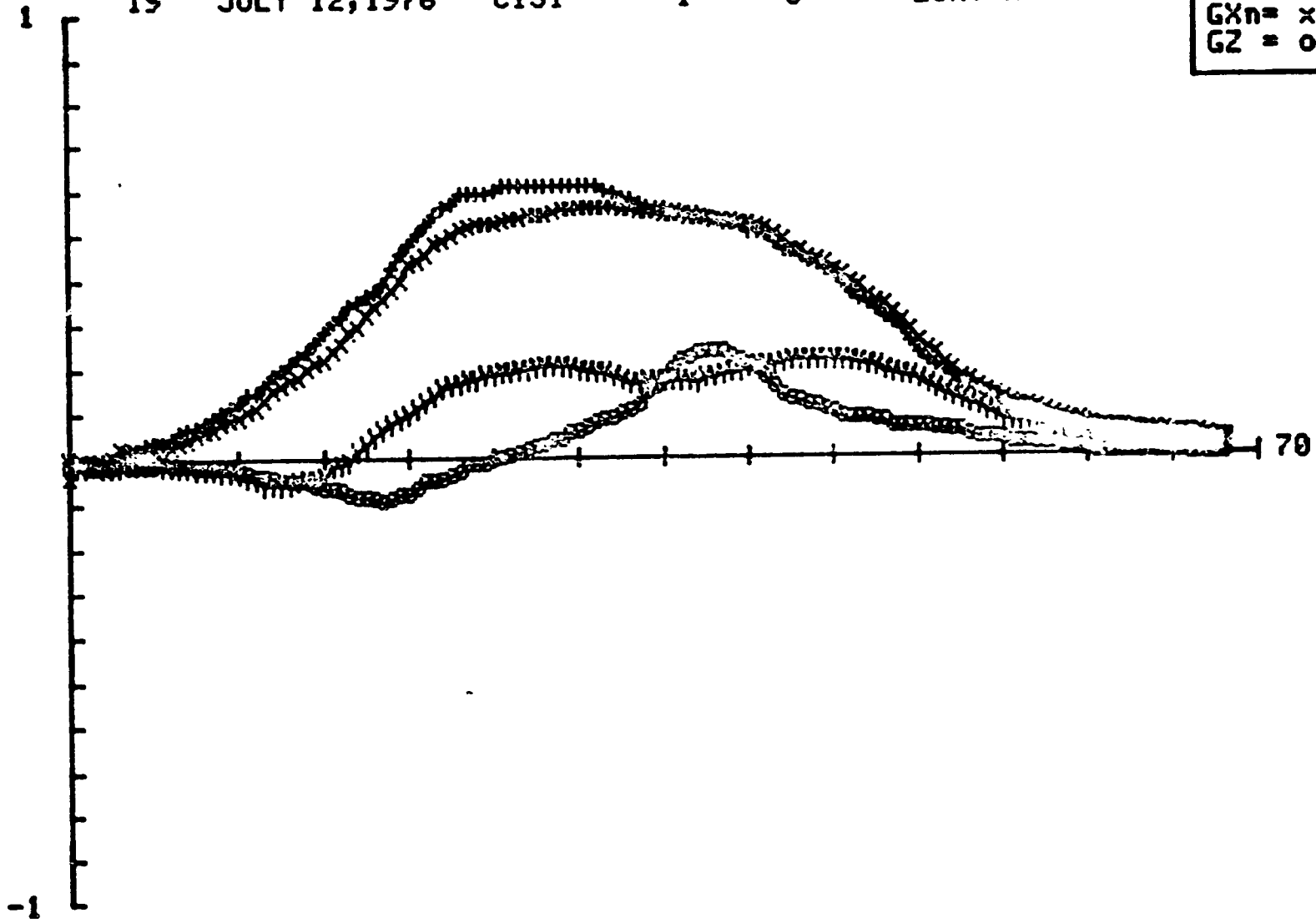
GY	=	o
GXt	=	+
GXn	=	x
GZ	=	o



20

FILE 19      DATE JULY 12, 1976      AIRPLANE C131      CLOUD 1      PASS 5      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
20

DATE  
JULY 12, 1976

AIRPLANE  
C131

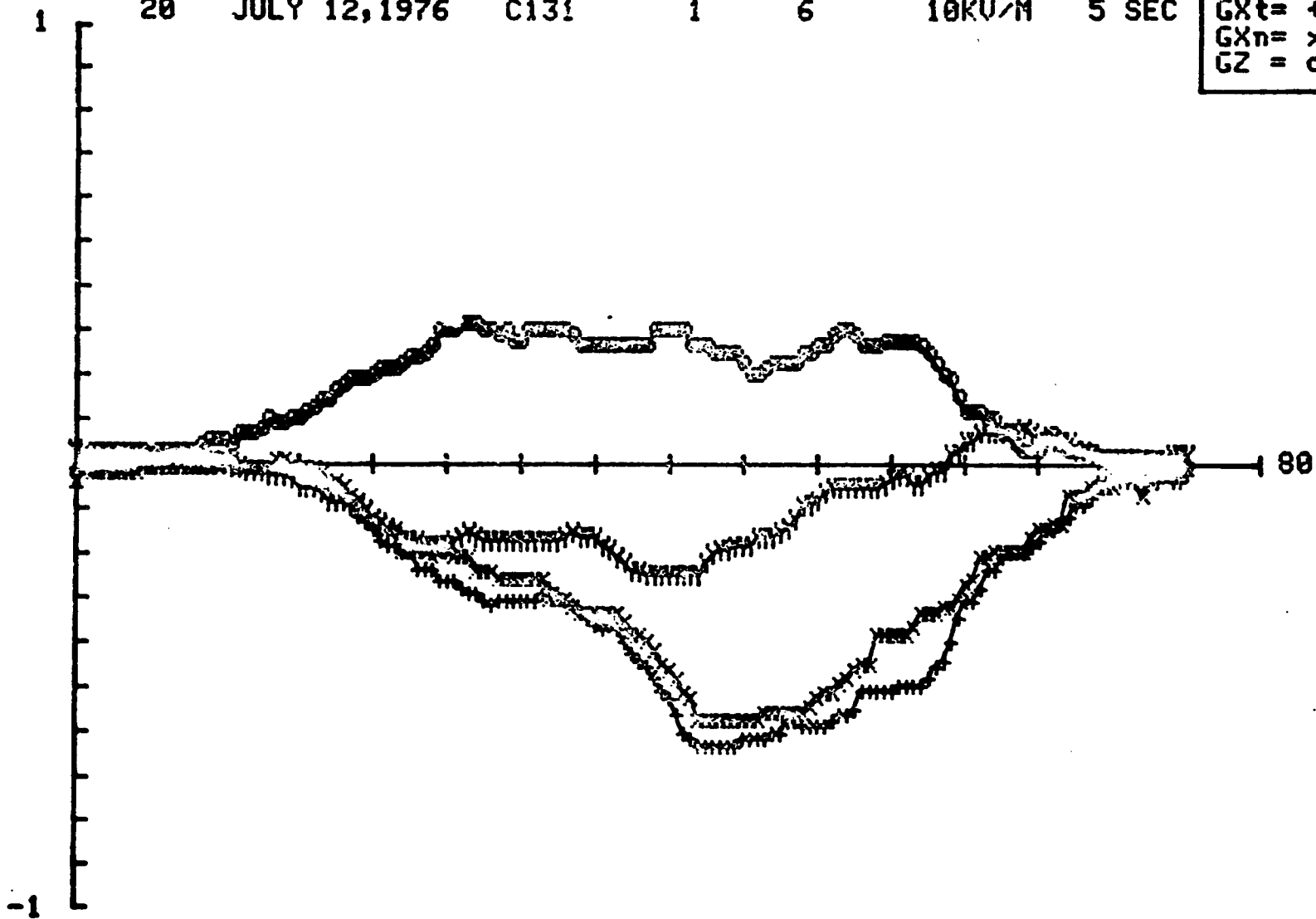
CLOUD  
1

PASS  
6

G-SCALE  
10KV/M

Y-UNIT  
5 SEC

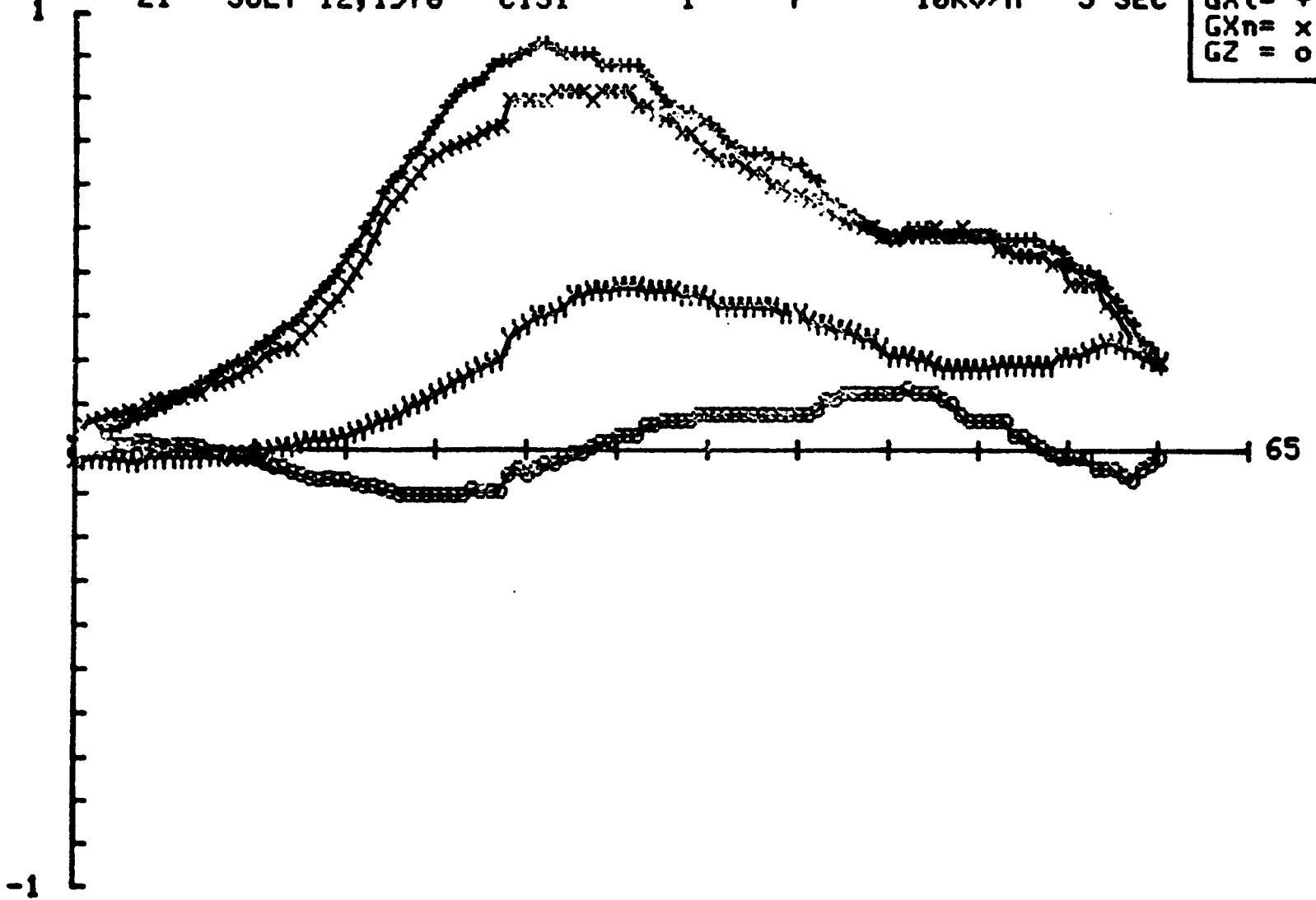
GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



2 2

FILE 21    DATE JULY 12, 1976    AIRPLANE C131    CLOUD 1    PASS 7    G-SCALE 10KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
22

DATE  
JULY 13, 1976

AIRPLANE  
C131

CLOUD  
2

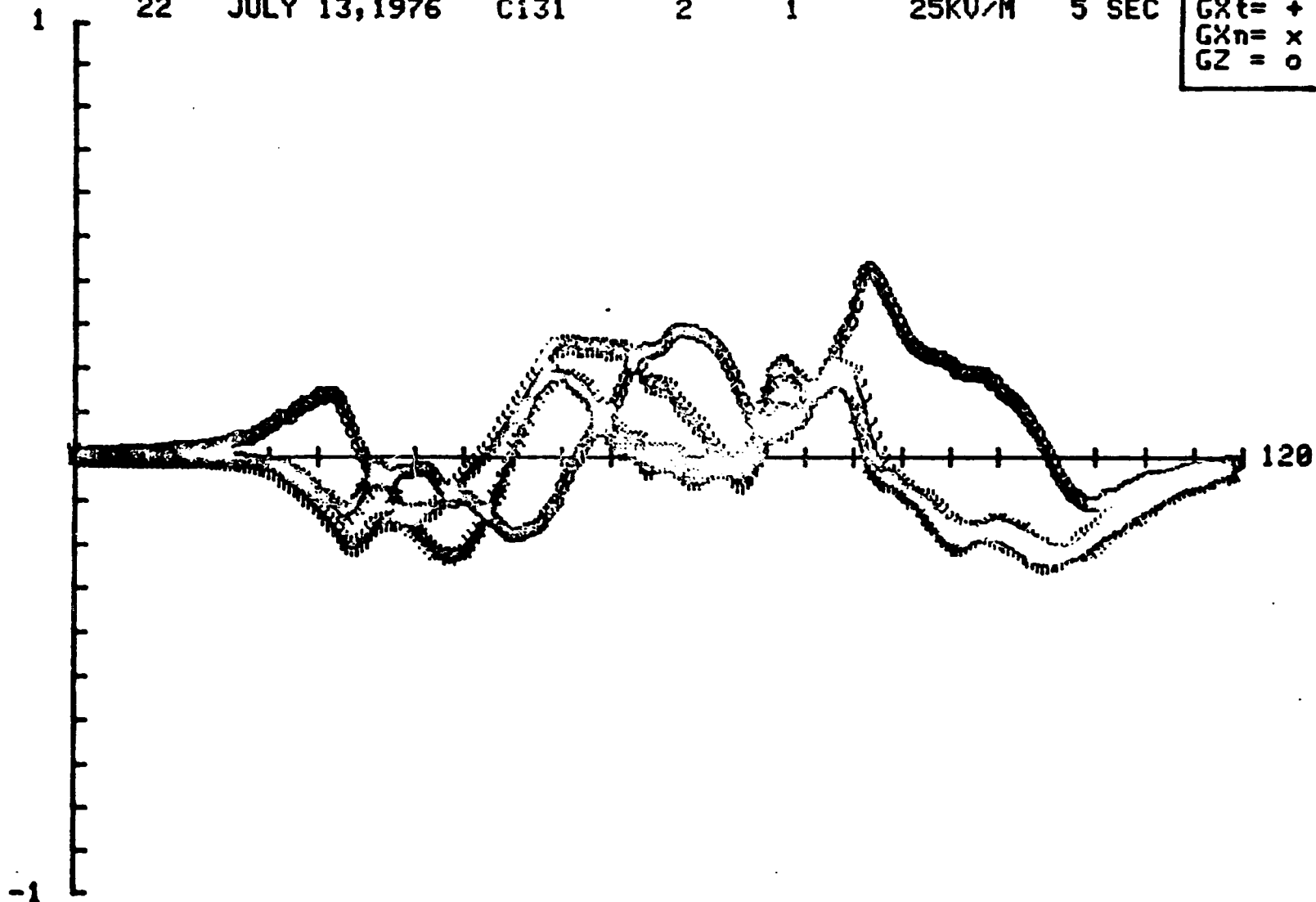
PASS  
1

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

23

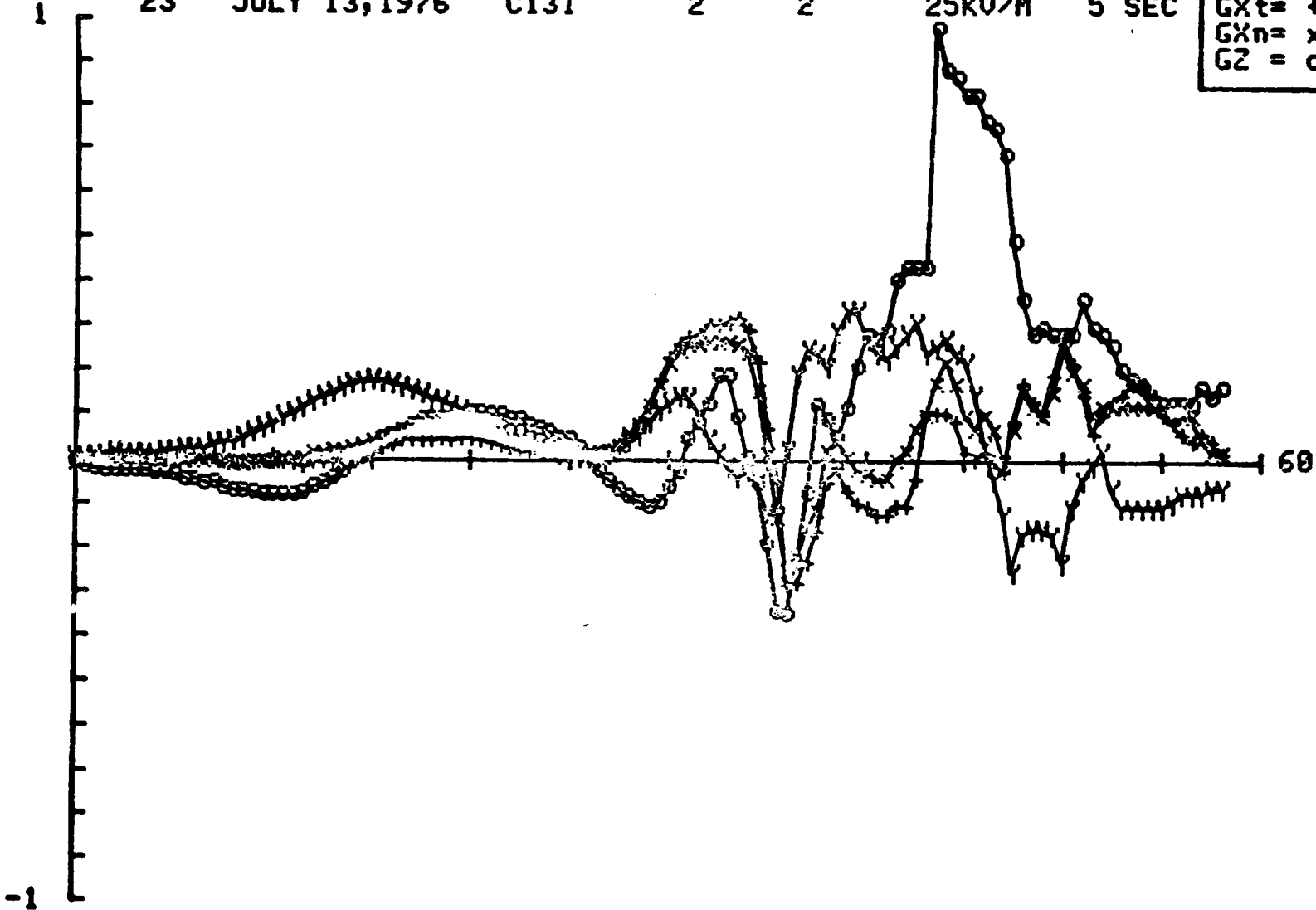




24

FILE 23    DATE JULY 13, 1976    AIRPLANE C131    CLOUD 2    PASS 2    G-SCALE 25KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE  
24

DATE  
JULY 13, 1976

AIRPLANE  
C131

CLOUD  
2

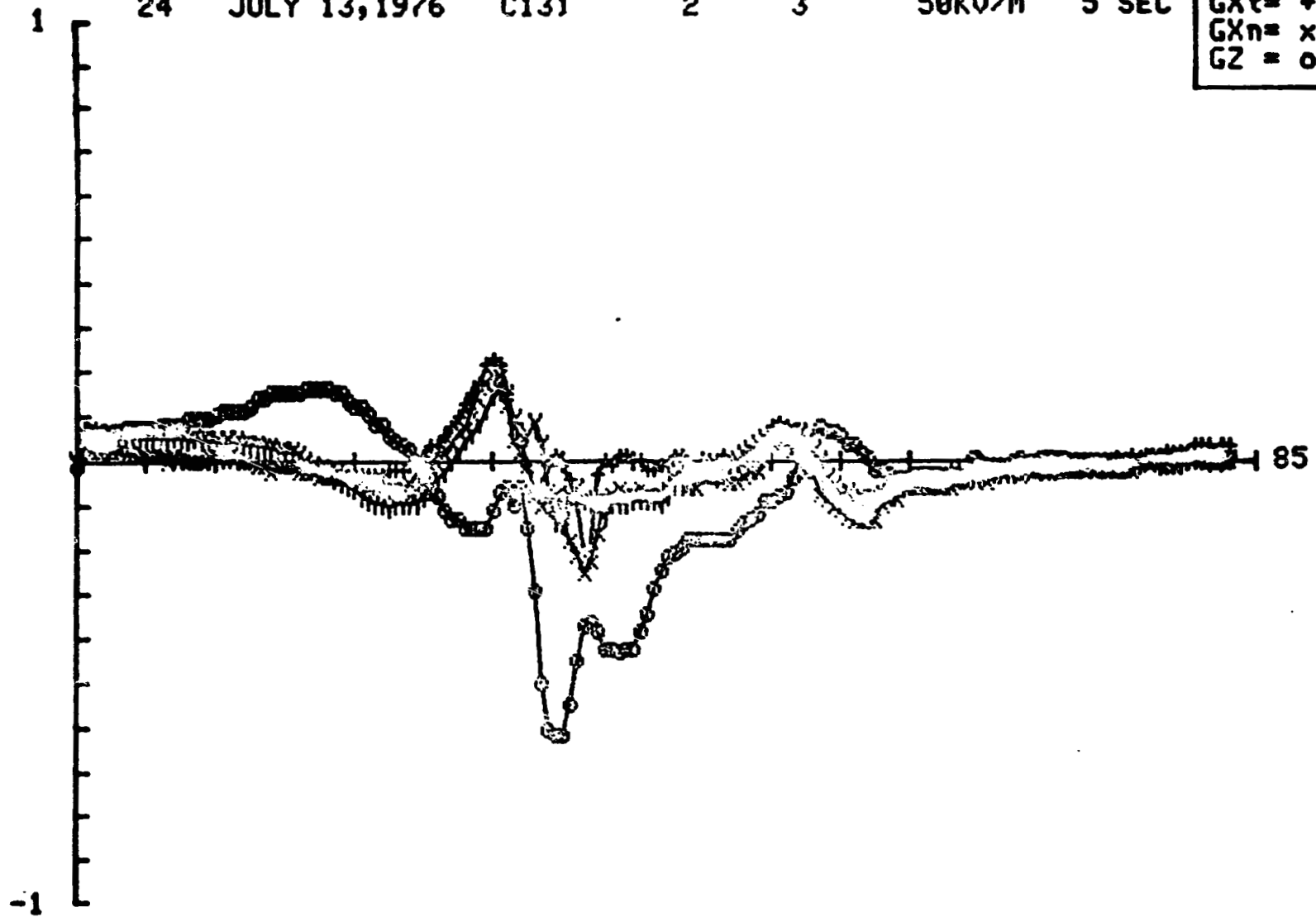
PASS  
3

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

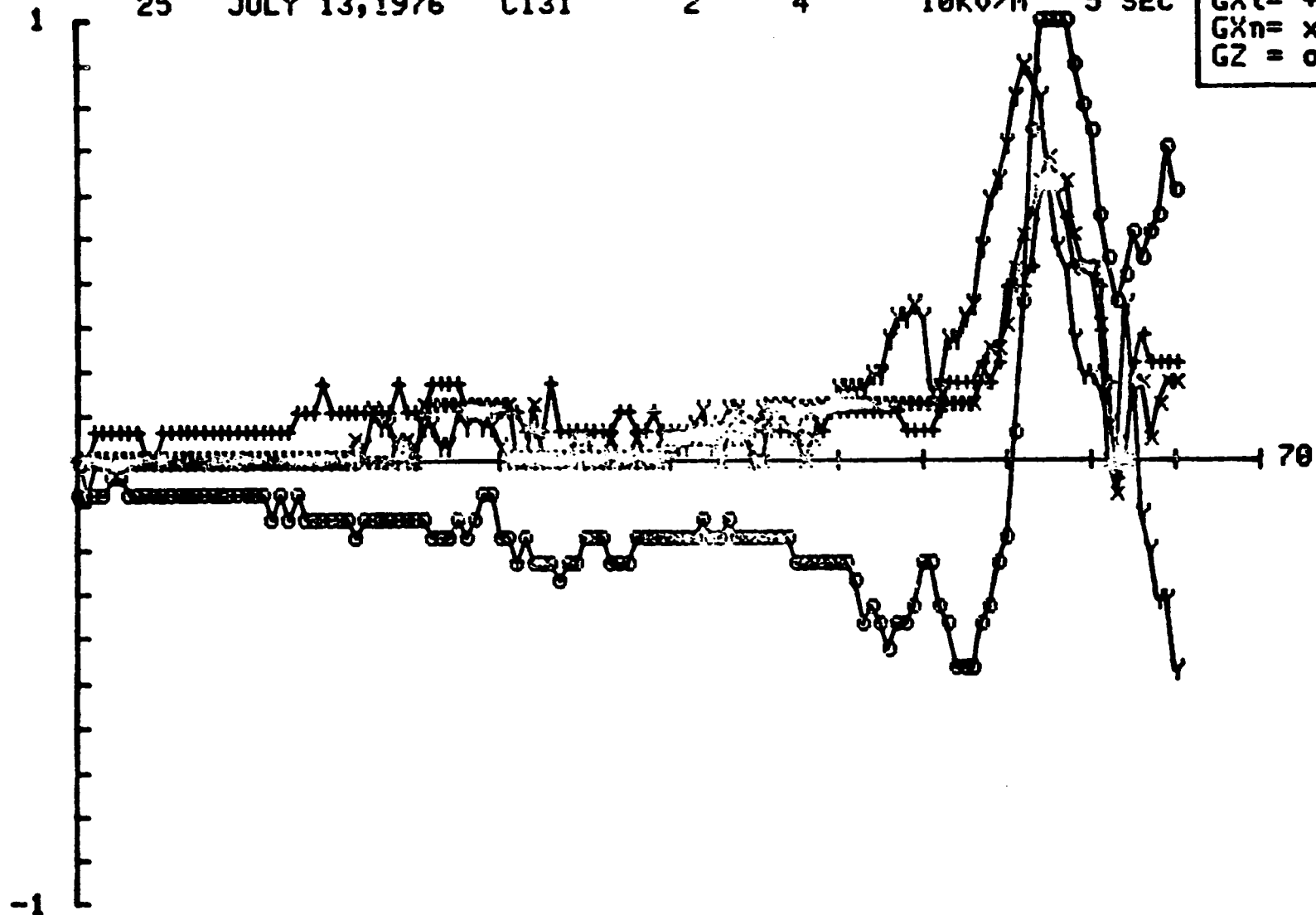
25



26

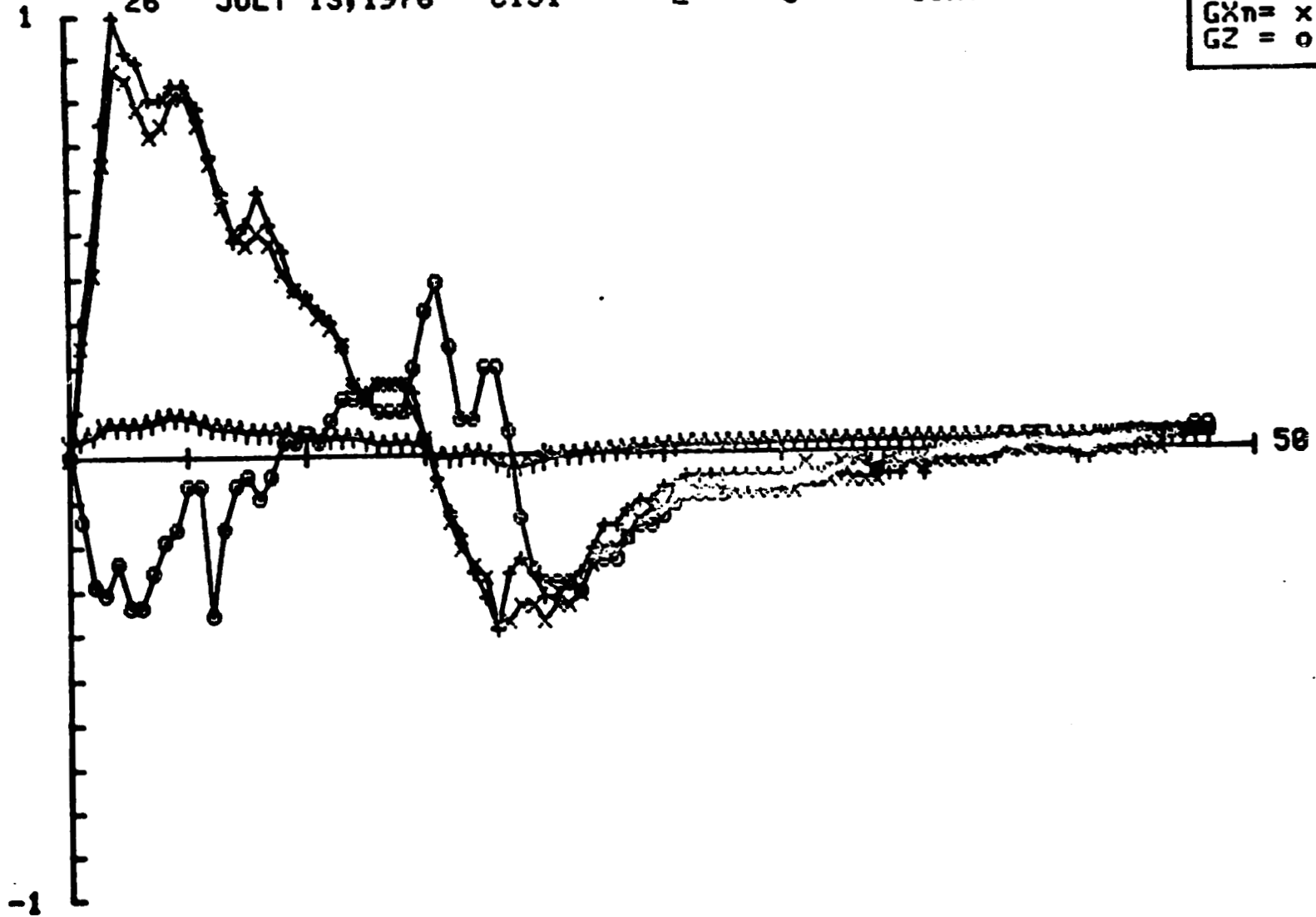
FILE 25    DATE JULY 13, 1976    AIRPLANE C131    CLOUD 2    PASS 4    G-SCALE 10KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 26      DATE JULY 13, 1976      AIRPLANE C131      CLOUD 2      PASS 5      G-SCALE 10KV/M      Y-UNIT 5 SEC

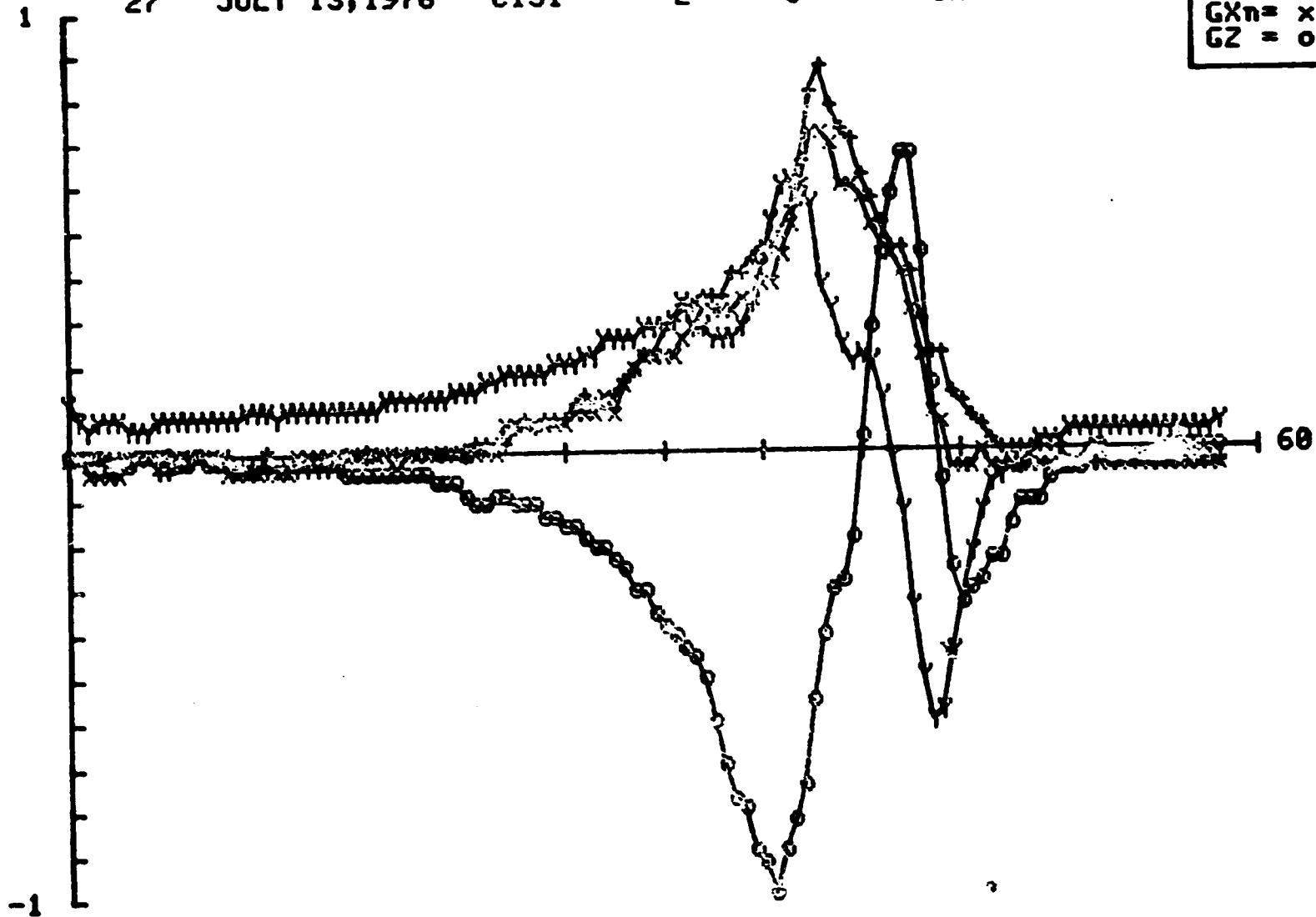
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



28

FILE 27    DATE JULY 13, 1976    AIRPLANE C131    CLOUD 2    PASS 6    G-SCALE 5KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
GXn	=	x
GZ	=	o



FILE  
28

DATE  
JULY 13, 1976

AIRPLANE  
C131

CLOUD  
2

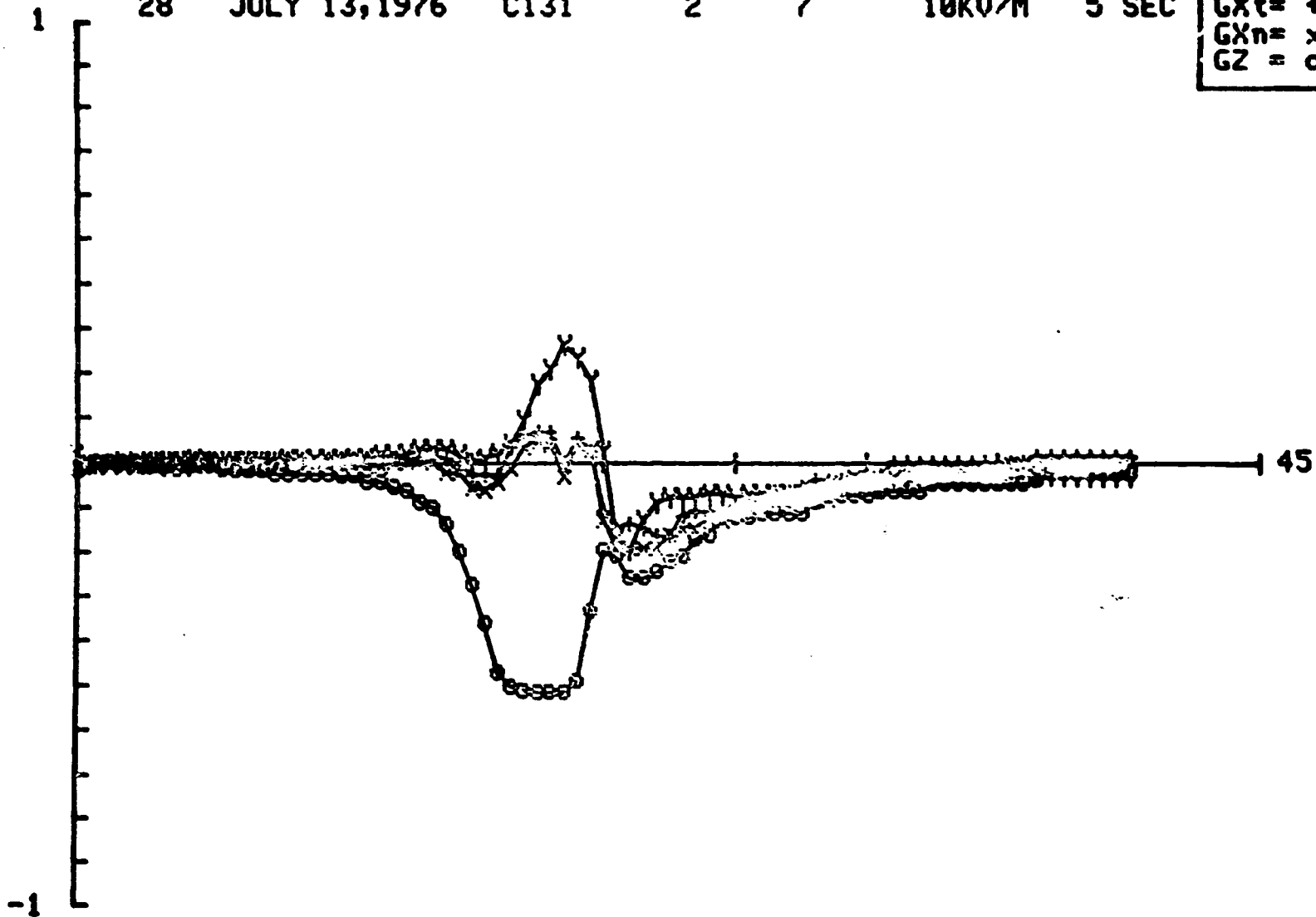
PASS  
7

G-SCALE  
10KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

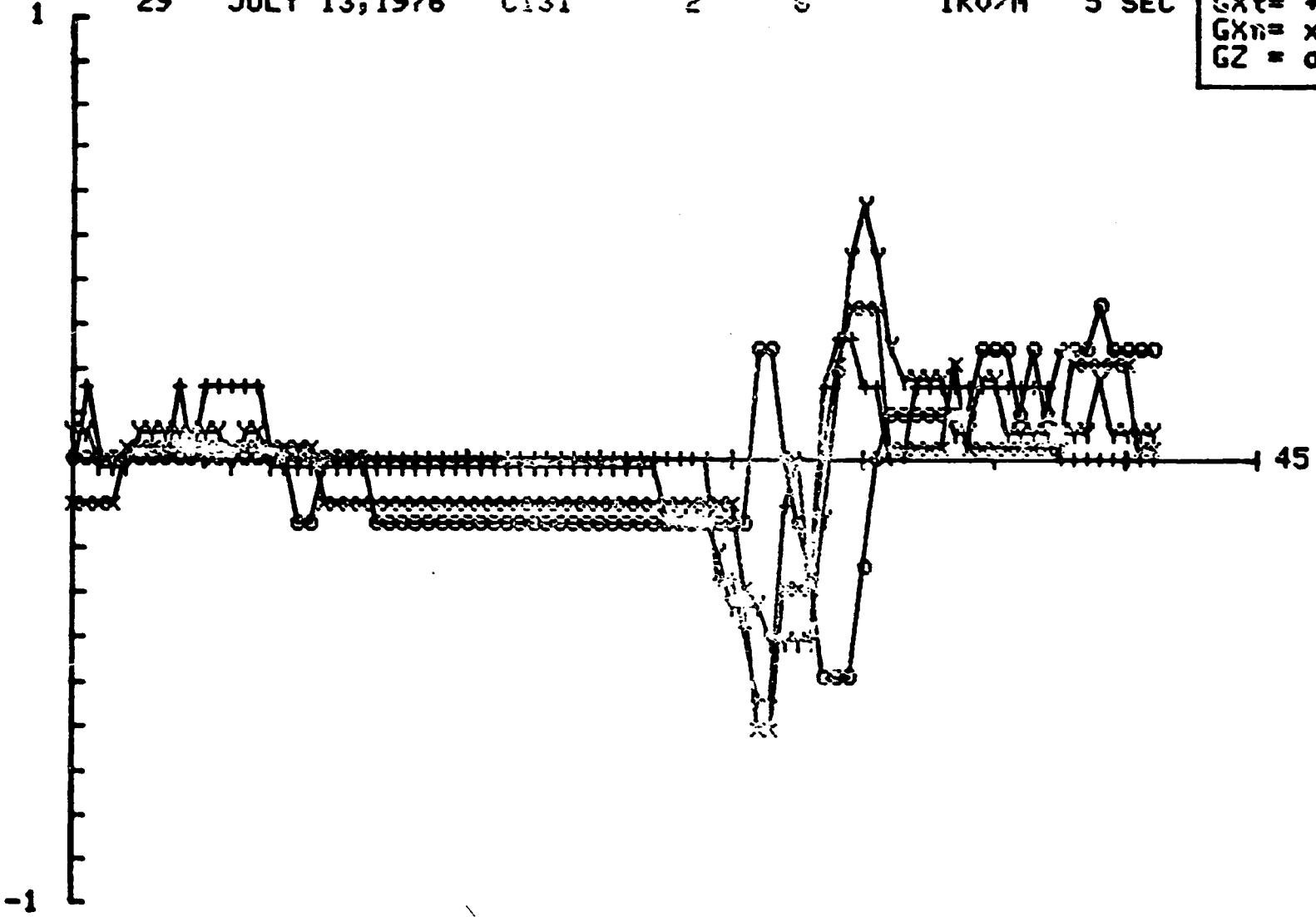
29



30

FILE 29    DATE JULY 13, 1976    AIRPLANE C131    CLOUD 2    PASS 3    G-SCALE 1KV/H    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
30

DATE  
JULY 14, 1976

AIRPLANE  
C131

CLOUD  
1

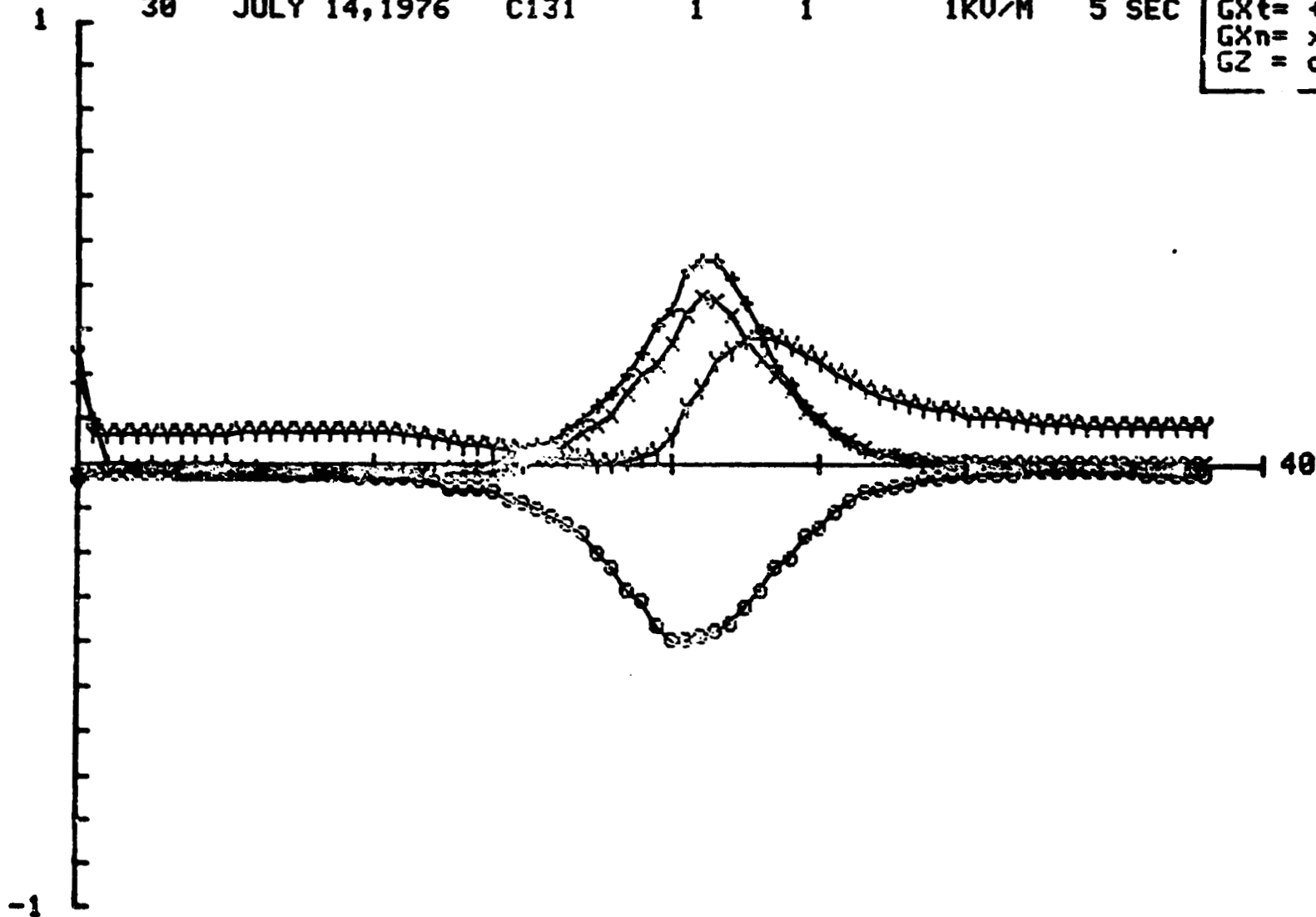
PASS  
1

G-SCALE  
1KU/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

31

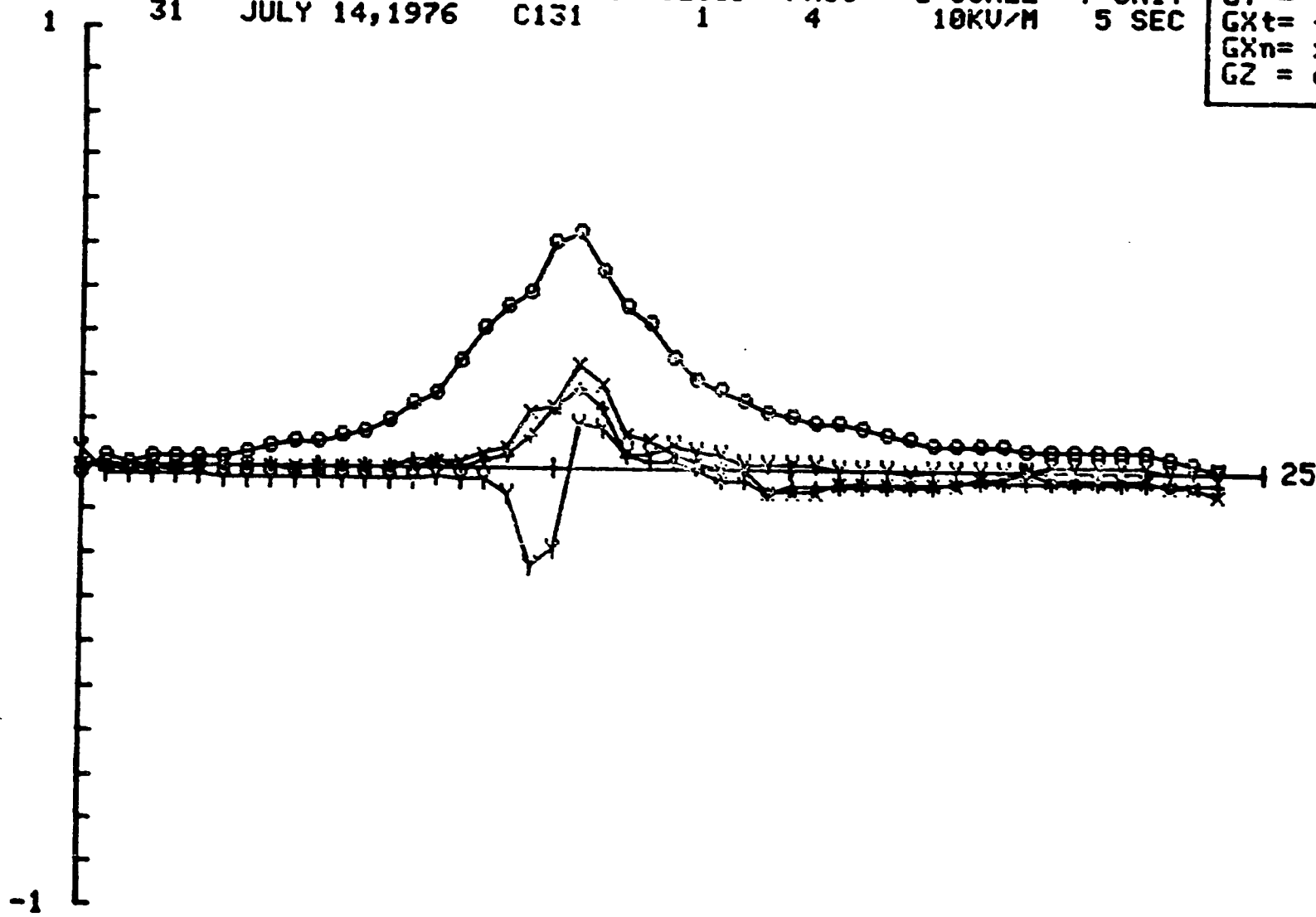




38

FILE 31      DATE JULY 14, 1976      AIRPLANE C131      CLOUD 1      PASS 4      G-SCALE 10KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
2

DATE  
JULY 15, 1976

AIRPLANE  
C131

CLOUD  
2

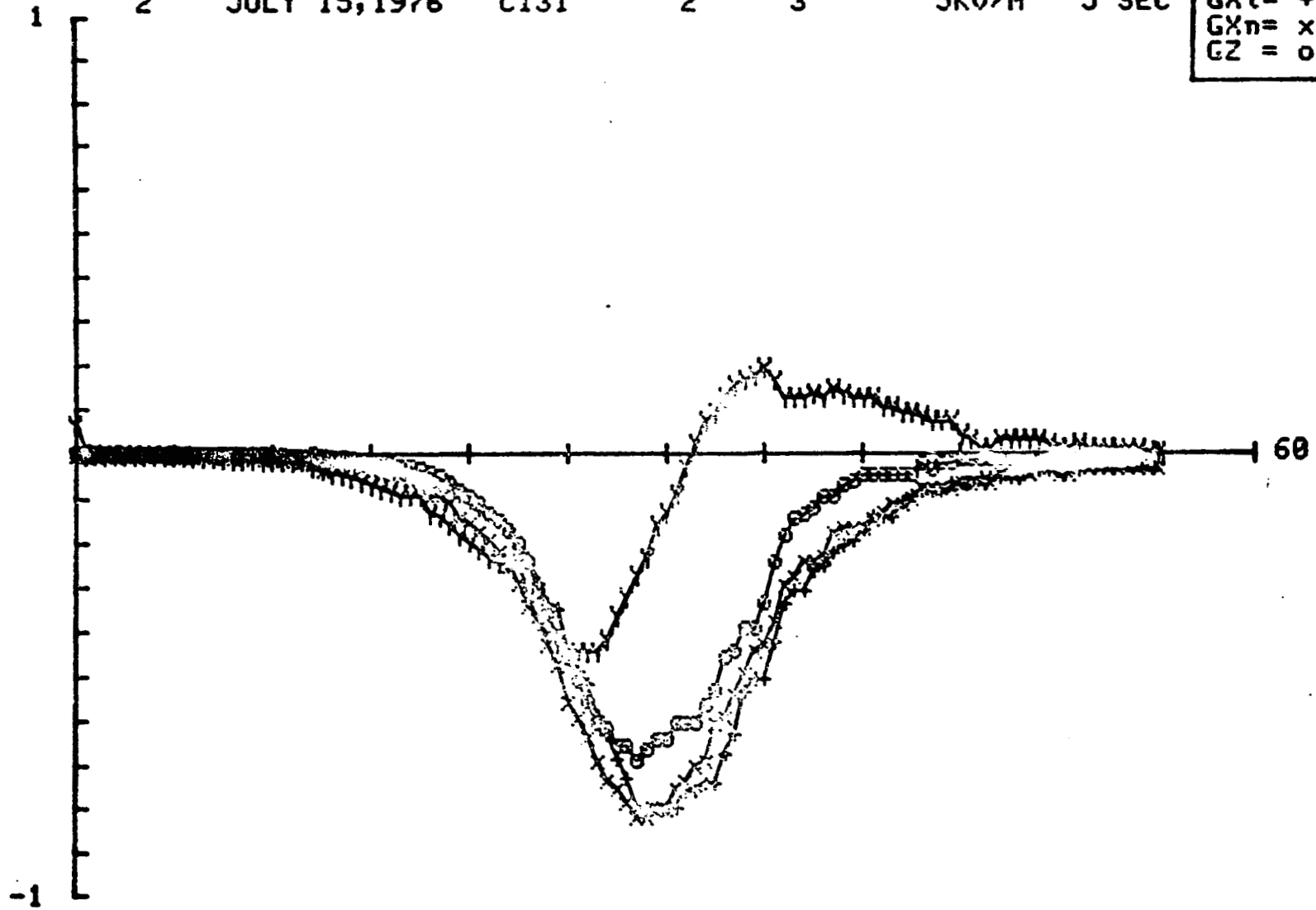
PASS  
3

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

88



84

FILE  
3

DATE  
JULY 15, 1976

AIRPLANE  
C131

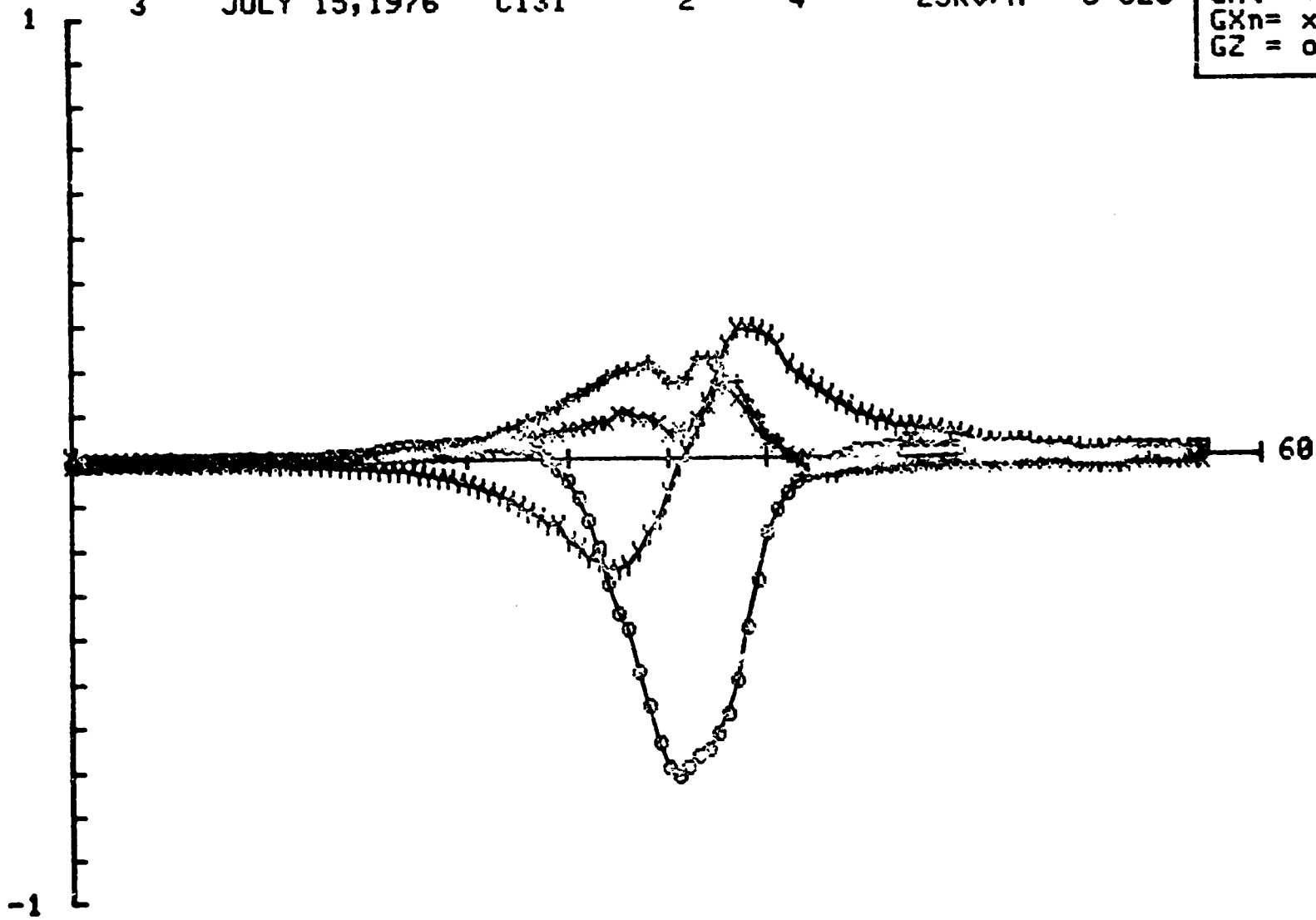
CLOUD  
2

PASS  
4

G-SCALE  
25KV/M

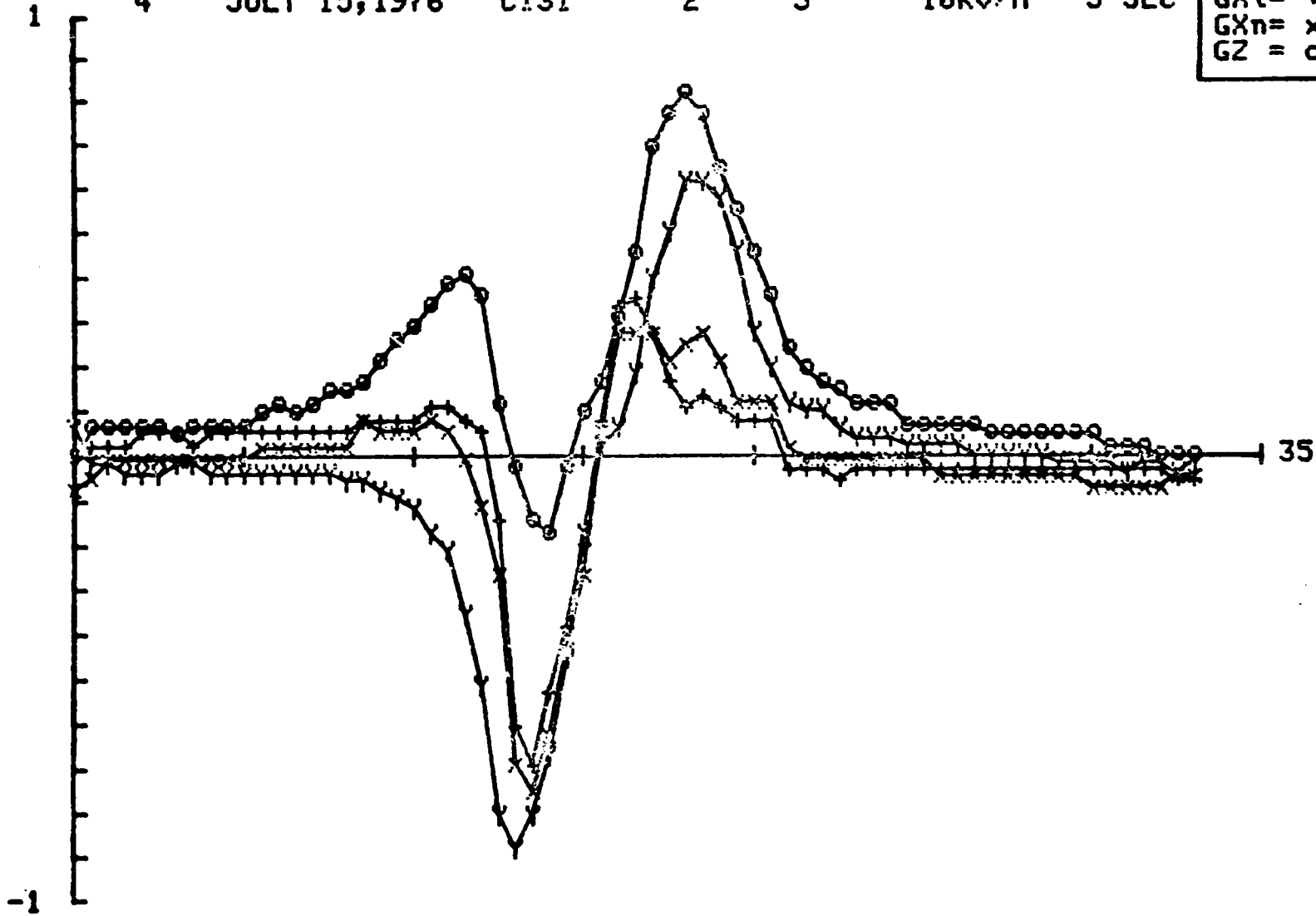
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



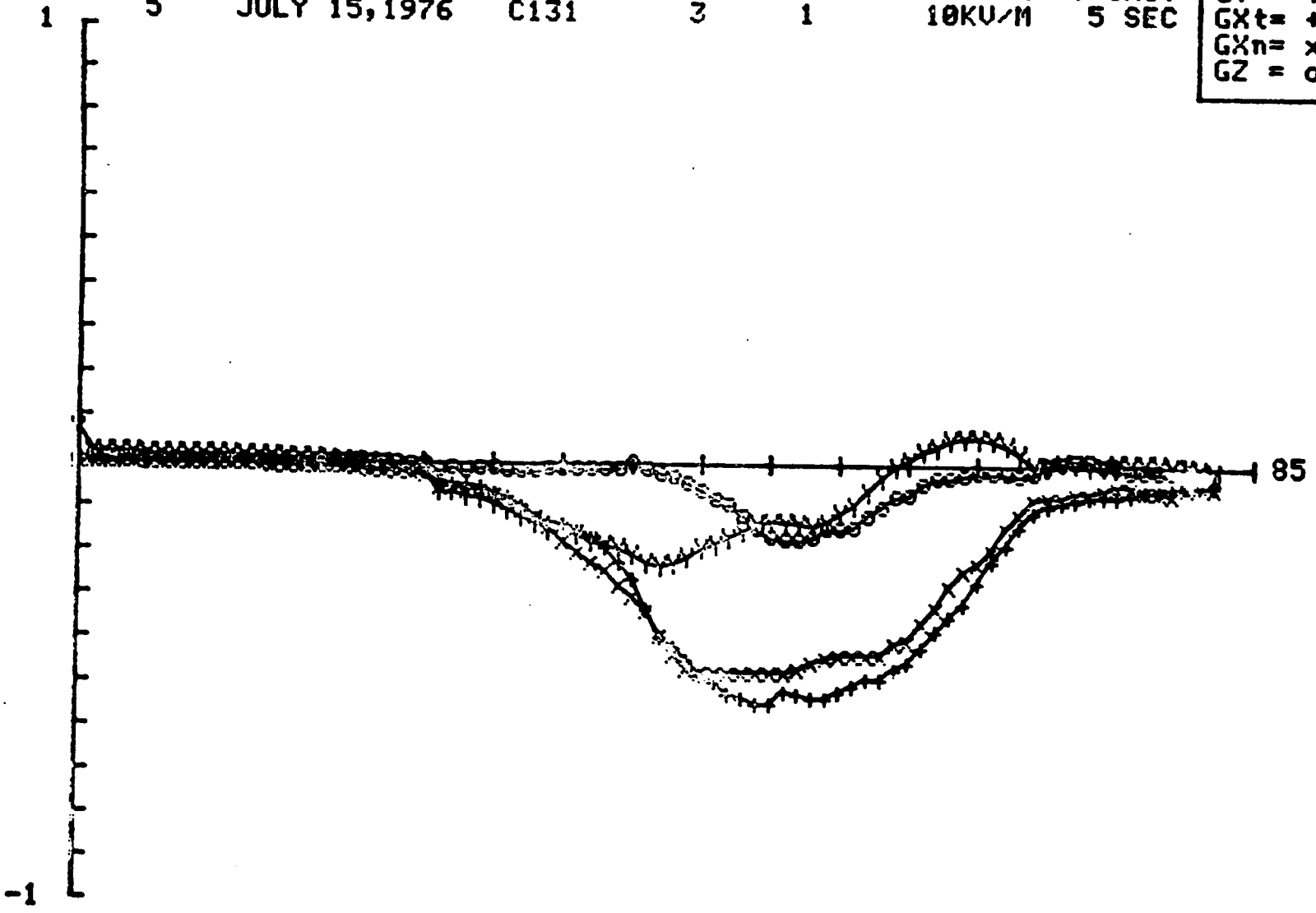
FILE 4      DATE JULY 15, 1976      AIRPLANE C131      CLOUD 2      PASS 5      G-SCALE 10KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 5      DATE JULY 15, 1976      AIRPLANE C131      CLOUD 3      PASS 1      G-SCALE 10KU/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
GXn	=	x
GZ	=	o



FILE  
6

DATE  
JULY 15, 1976

AIRPLANE  
C131

CLOUD  
3

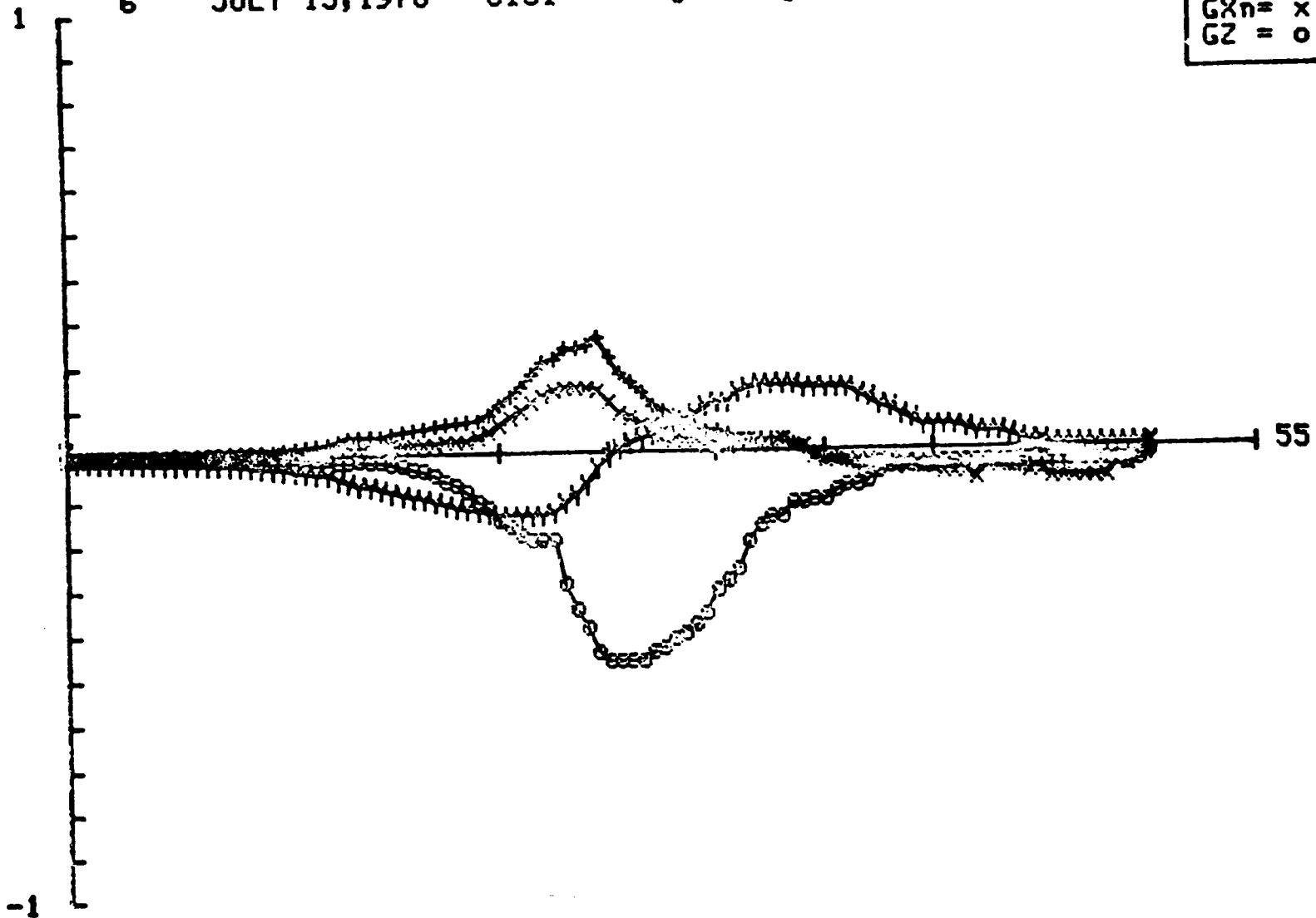
PASS  
3

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

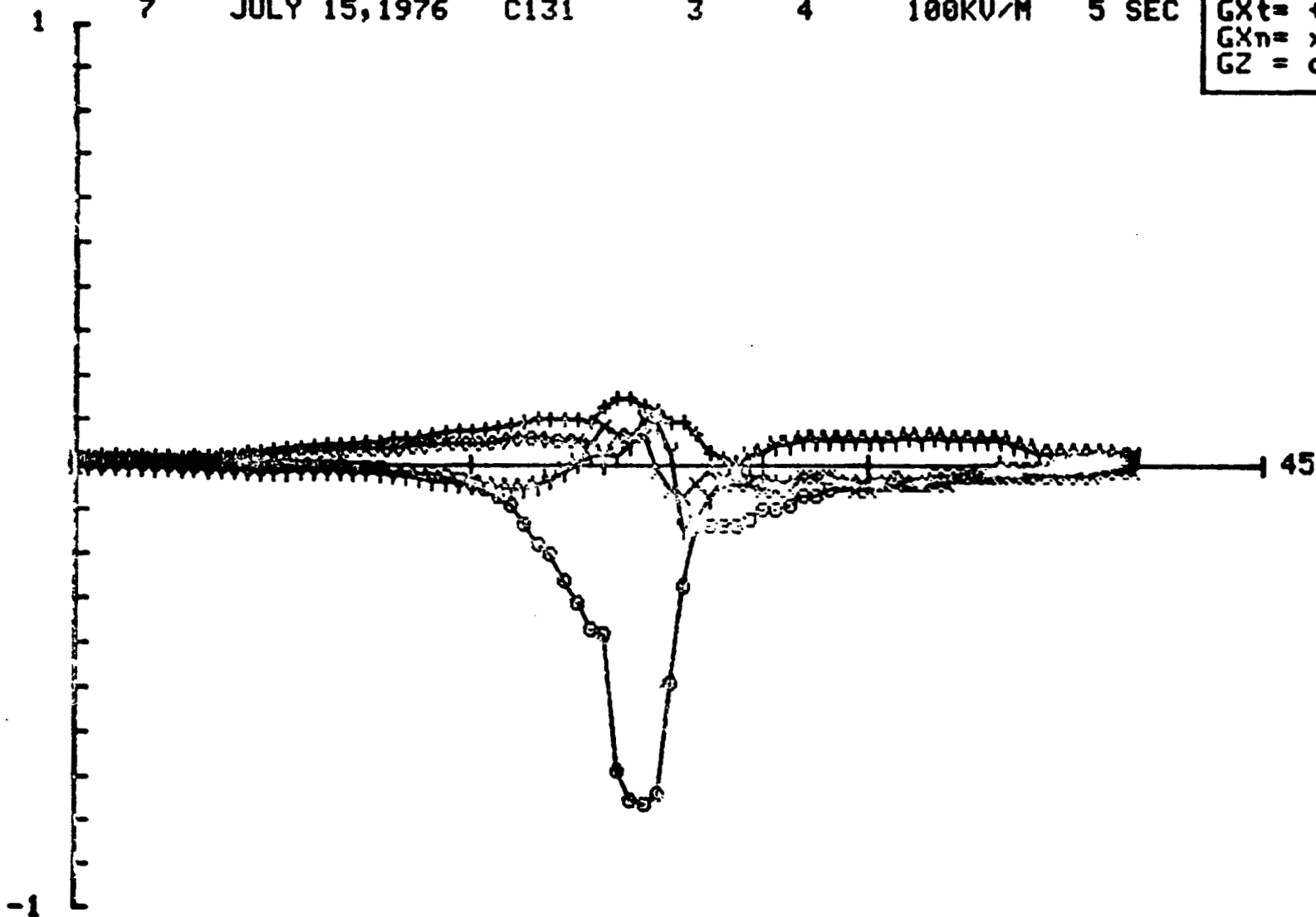
87



38

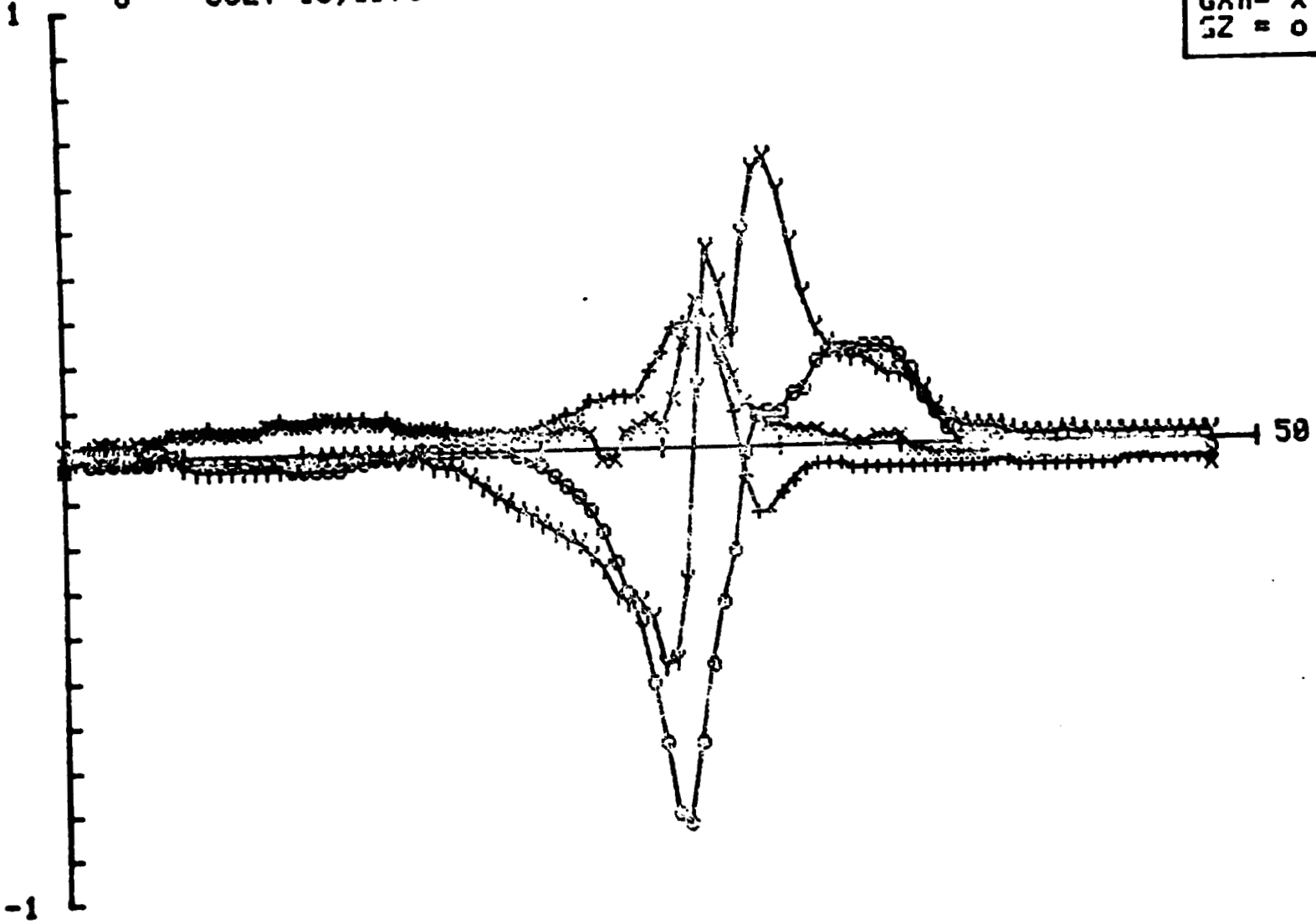
FILE 7 DATE JULY 15, 1976 AIRPLANE C131 CLOUD 3 PASS 4 G-SCALE 100KV/M Y-UNIT 5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o



FILE 8      DATE JULY 15, 1976      AIRPLANE C131      CLOUD 3      PASS 5      G-SCALE 100KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o





40

FILE  
9

DATE  
JULY 15, 1976

AIRPLANE  
C131

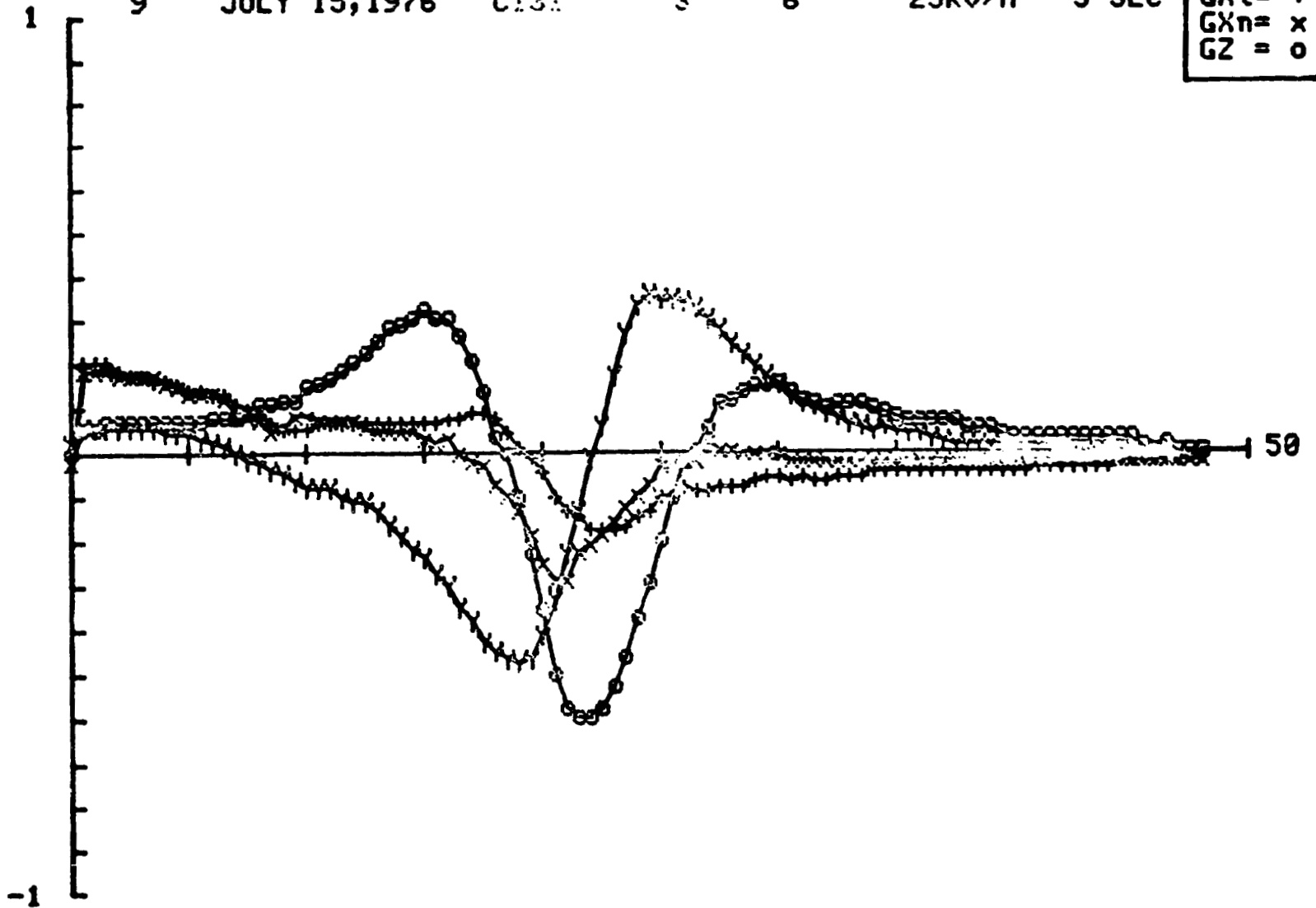
CLOUD  
3

PASS  
6

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

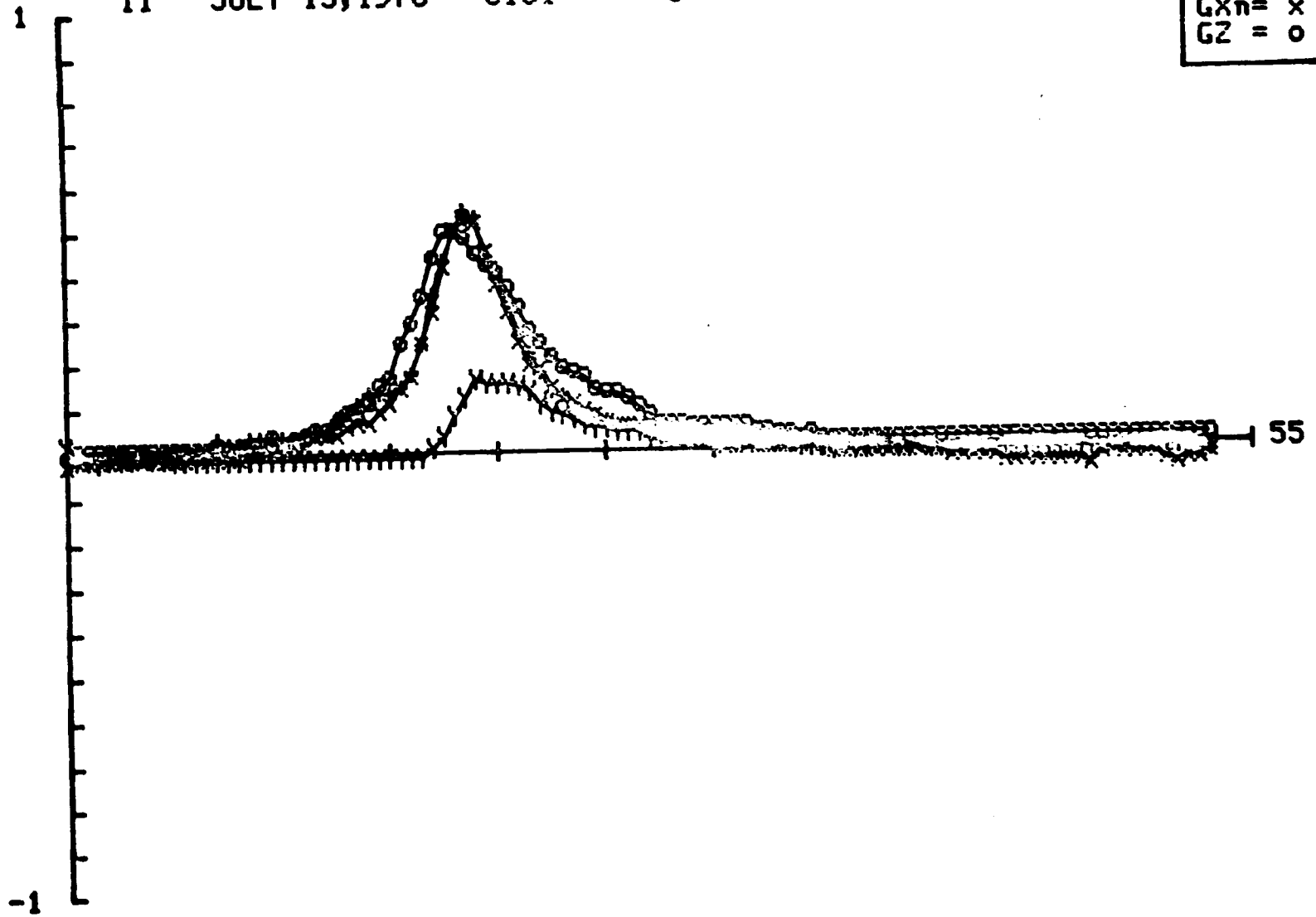




42

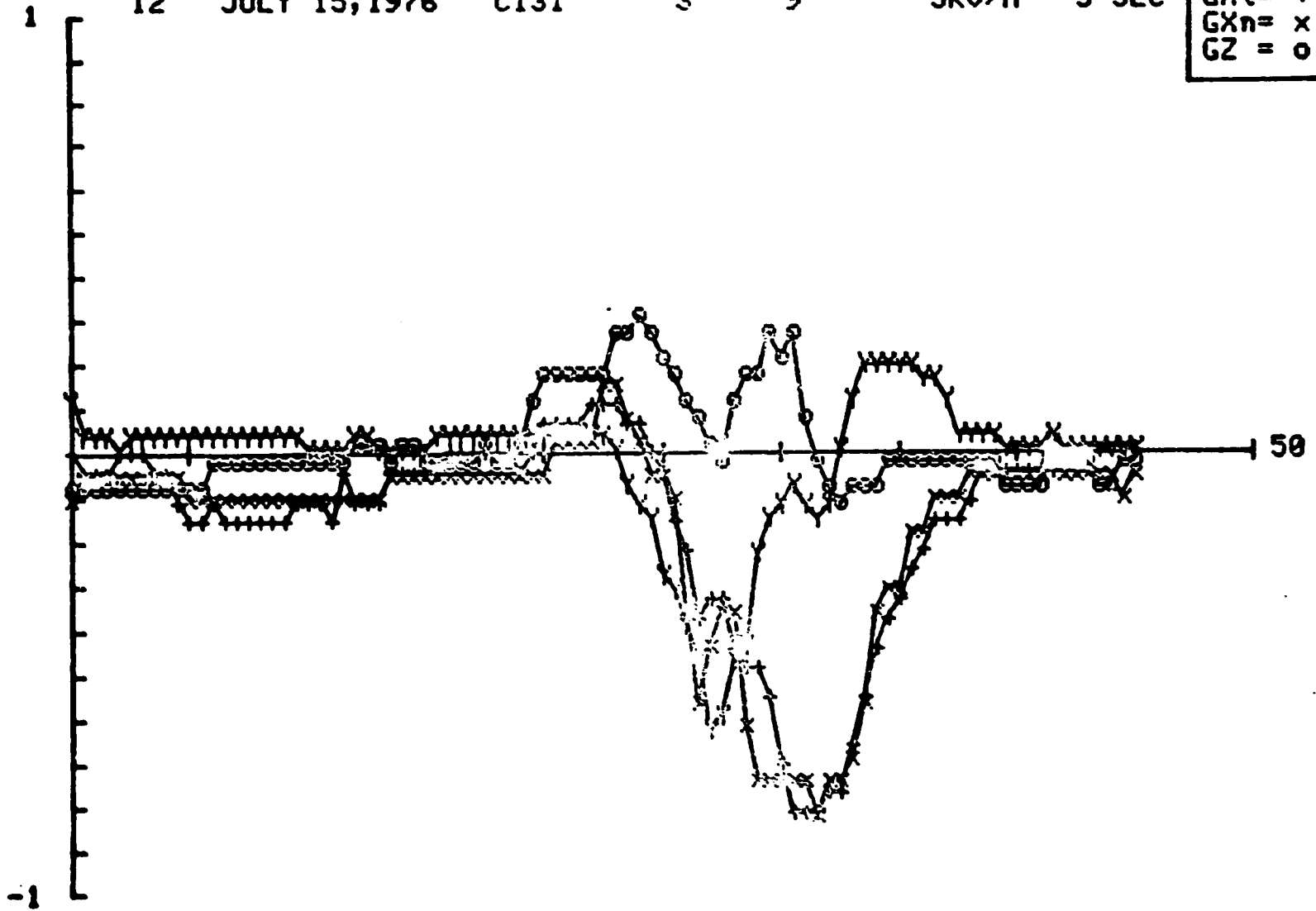
FILE 11      DATE JULY 15, 1976      AIRPLANE C131      CLOUD 3      PASS 8      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 12    DATE JULY 15, 1976    AIRPLANE C131    CLOUD 3    PASS 9    G-SCALE 5KV/M    Y-UNIT 5 SEC

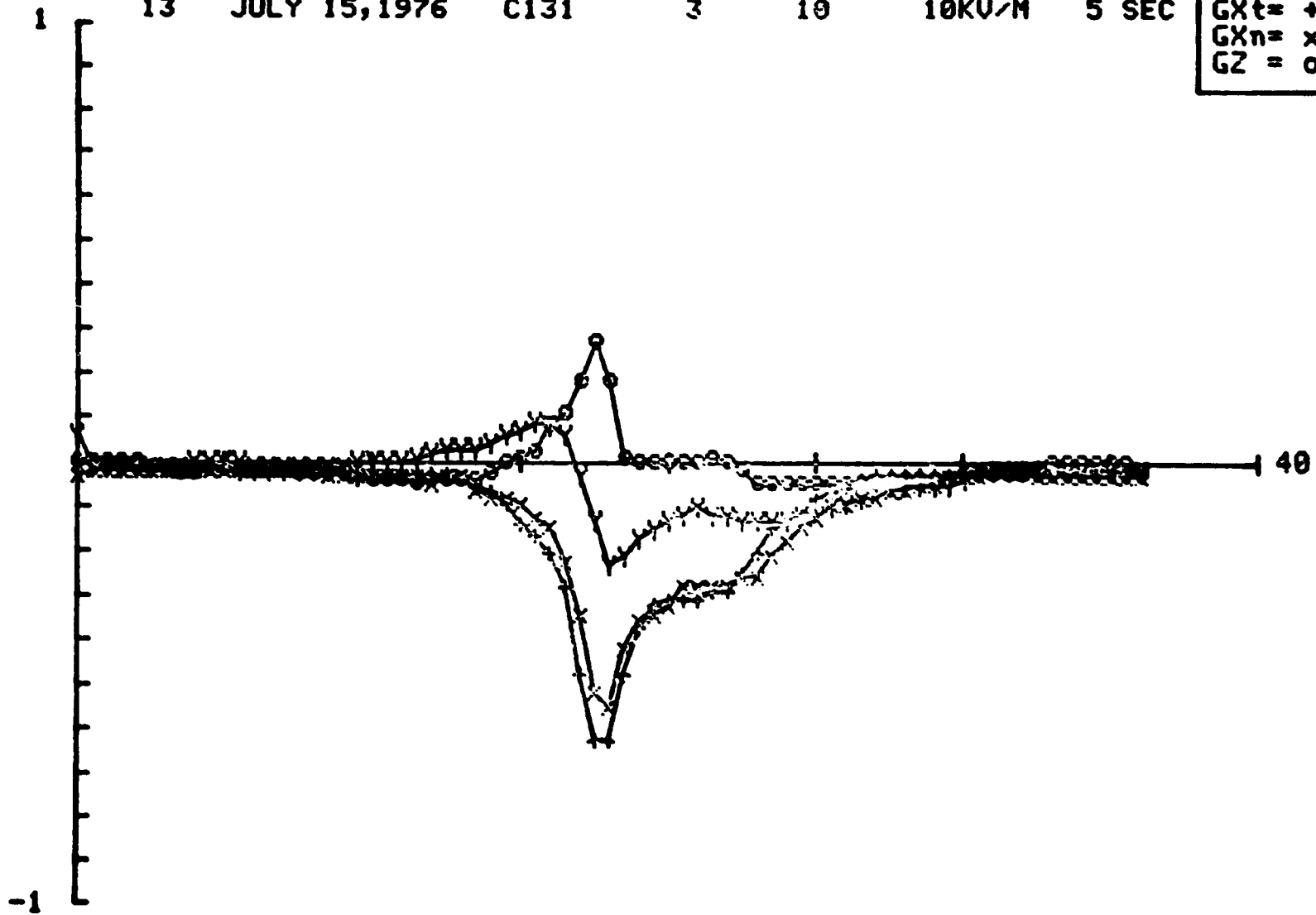
GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



44

FILE 13    DATE JULY 15, 1976    AIRPLANE C131    CLOUD 3    PASS 10    G-SCALE 10KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
14

DATE  
JULY 15, 1976

AIRPLANE  
C131

CLOUD  
3

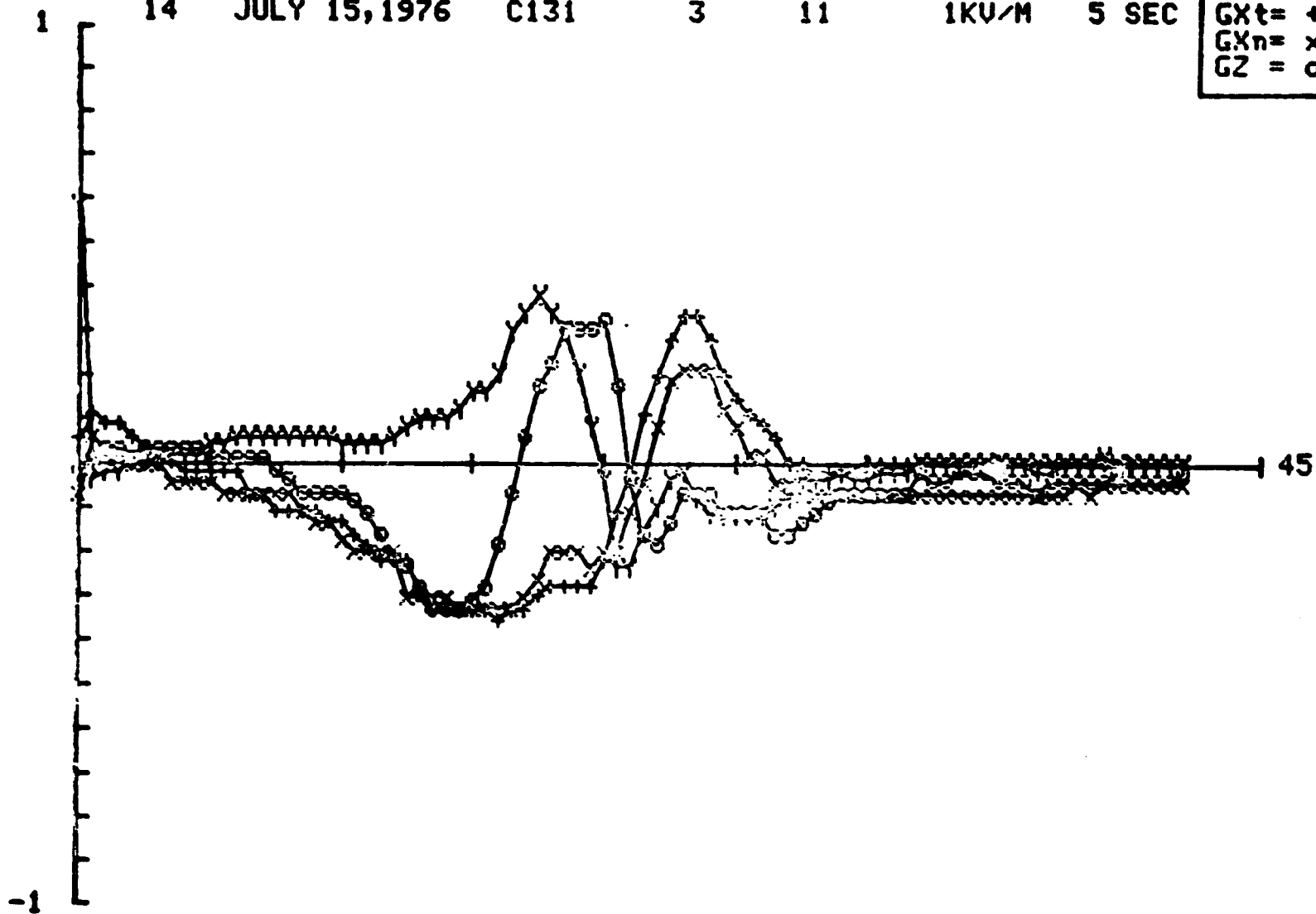
PASS  
11

G-SCALE  
1KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

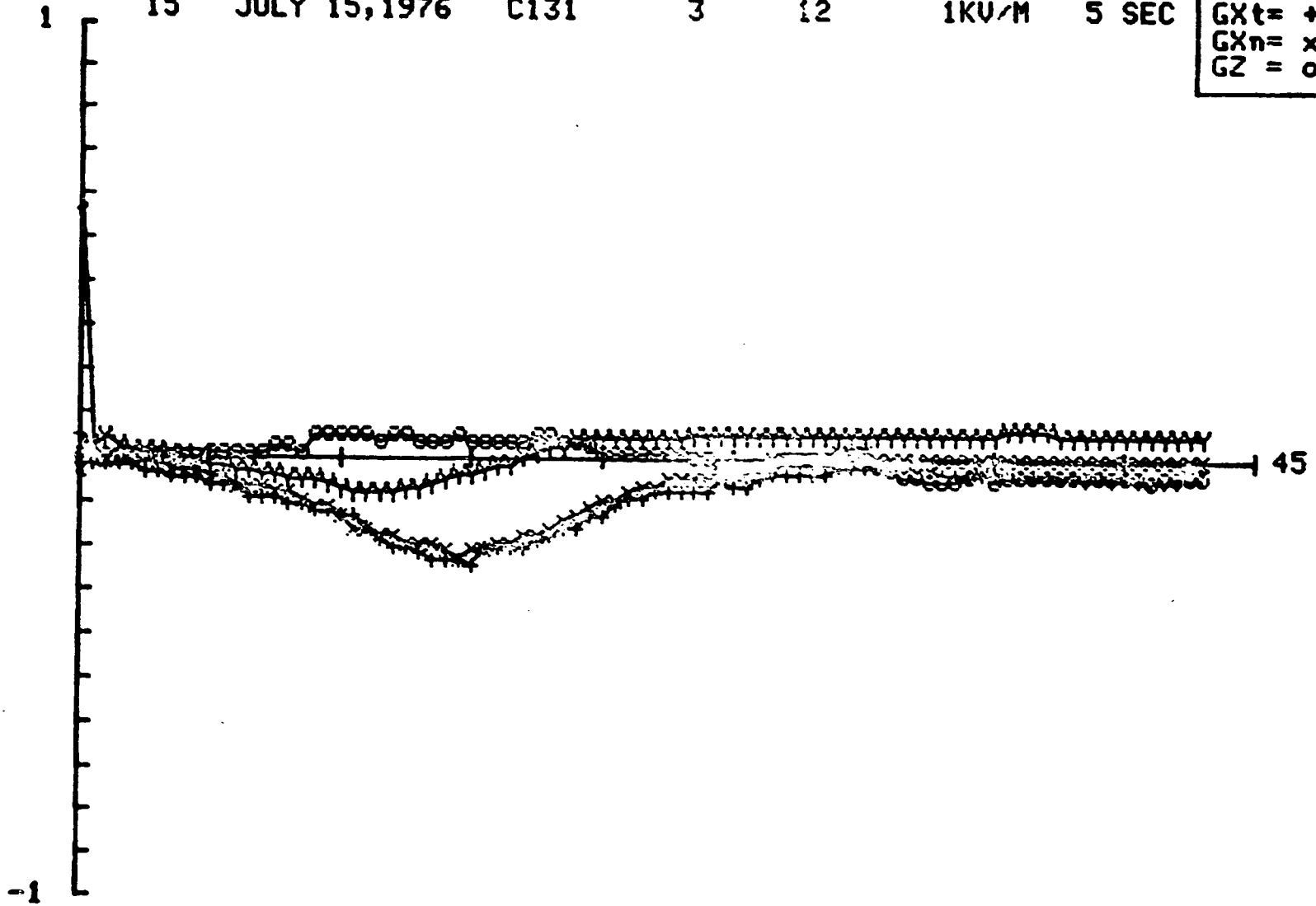
45



46

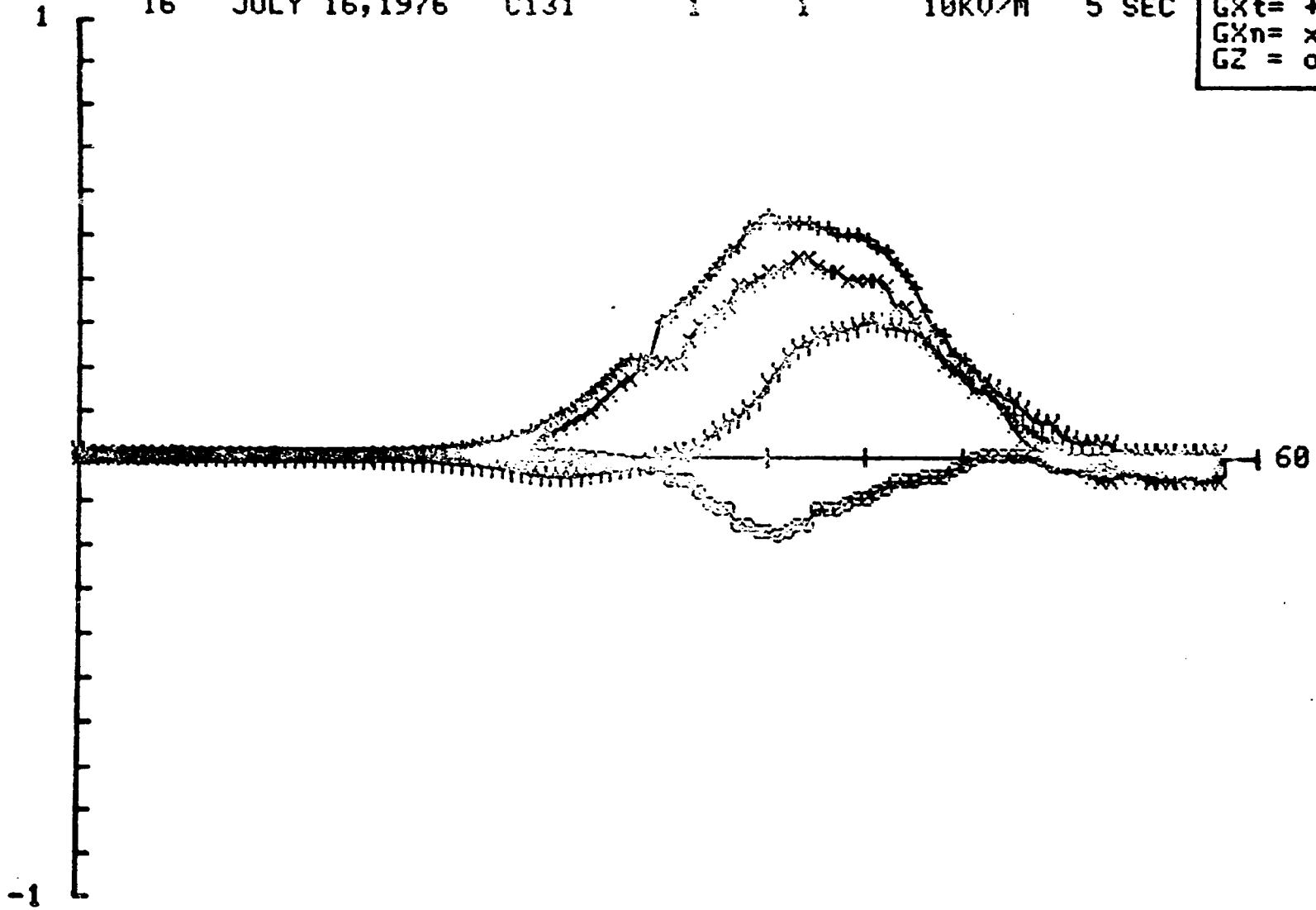
FILE 15      DATE JULY 15, 1976      AIRPLANE C131      CLOUD 3      PASS 12      G-SCALE 1KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 16      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 1      G-SCALE 10KV/M      Y-UNIT 5 SEC

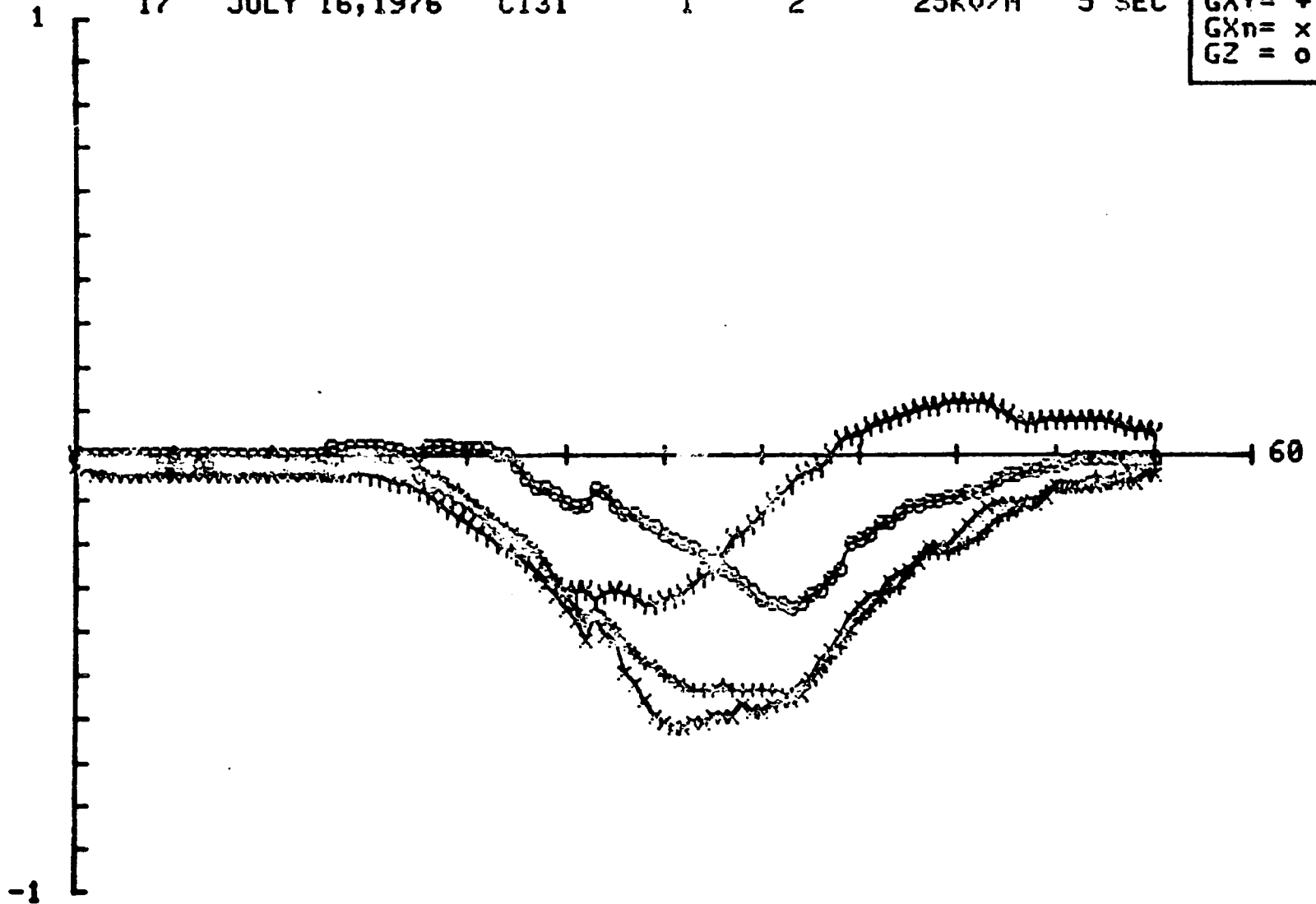
GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o





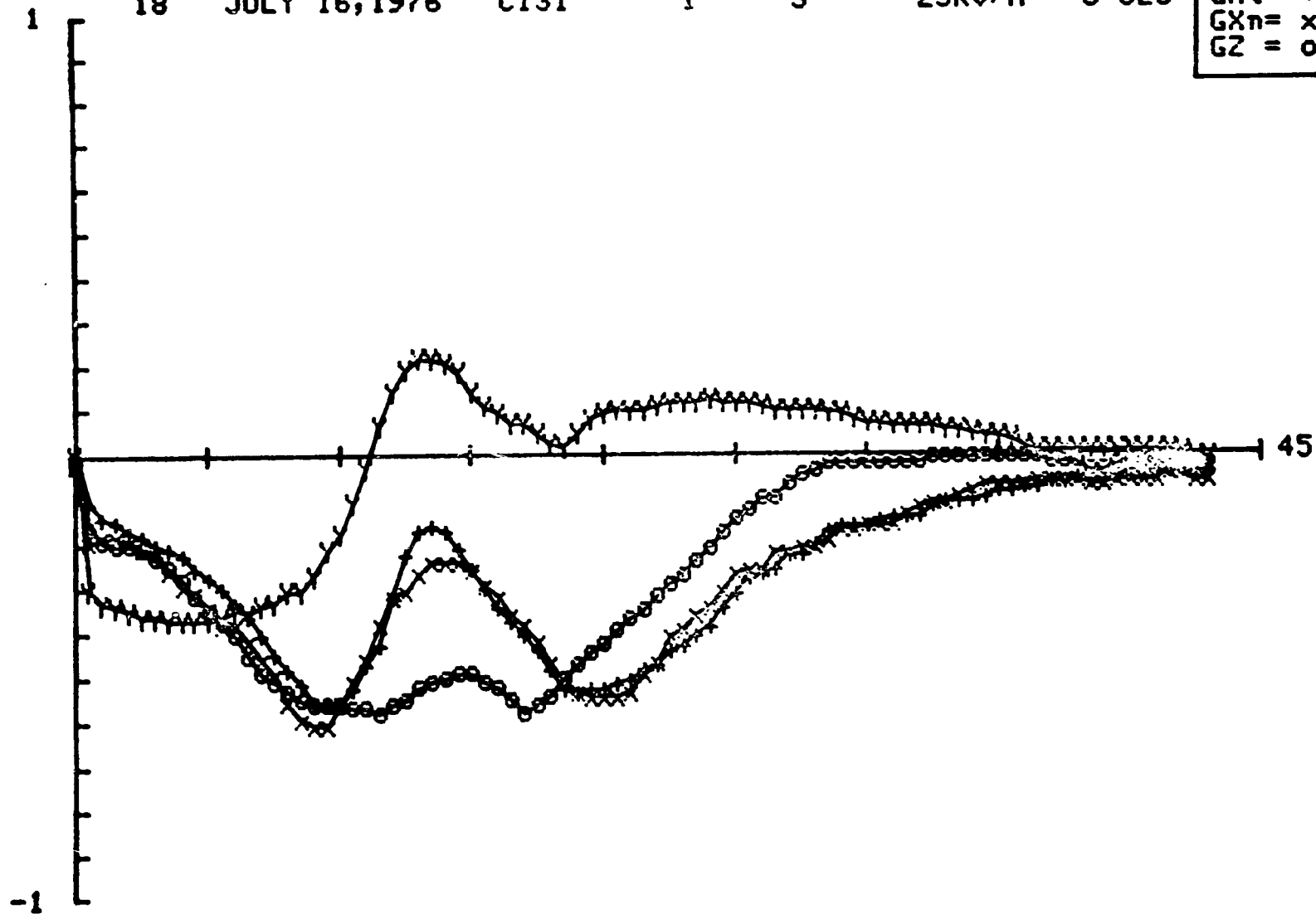
FILE DATE AIRPLANE CLOUD PASS G-SCALE Y-UNIT  
17 JULY 16, 1976 C131 1 2 25KV/M 5 SEC

GY = Y  
GX+ = +  
GXn = x  
GZ = o



FILE 18      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 3      G-SCALE 25KV/M      Y-UNIT 5 SEC

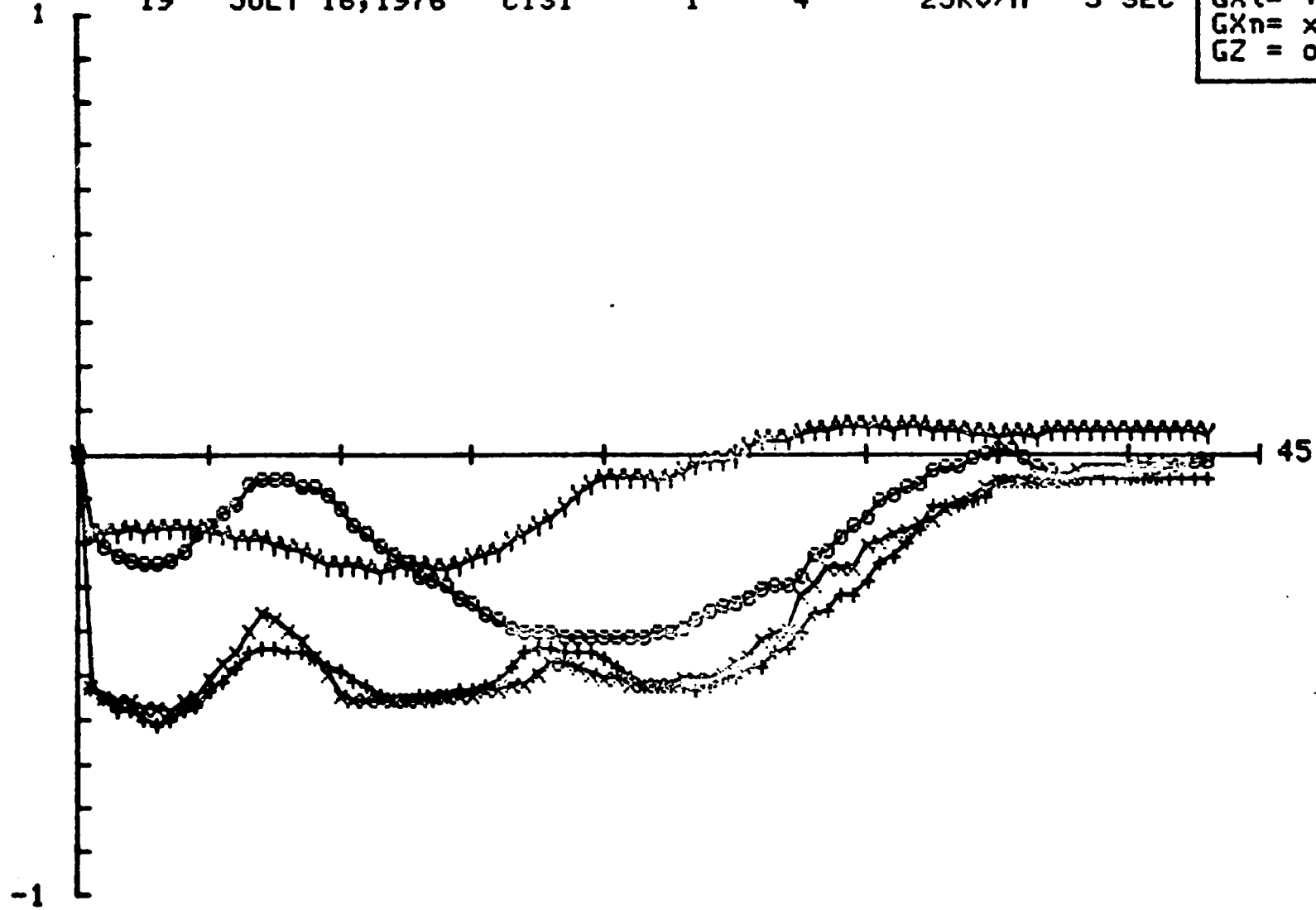
GY = Y  
GXt = +  
GXn = x  
GZ = o



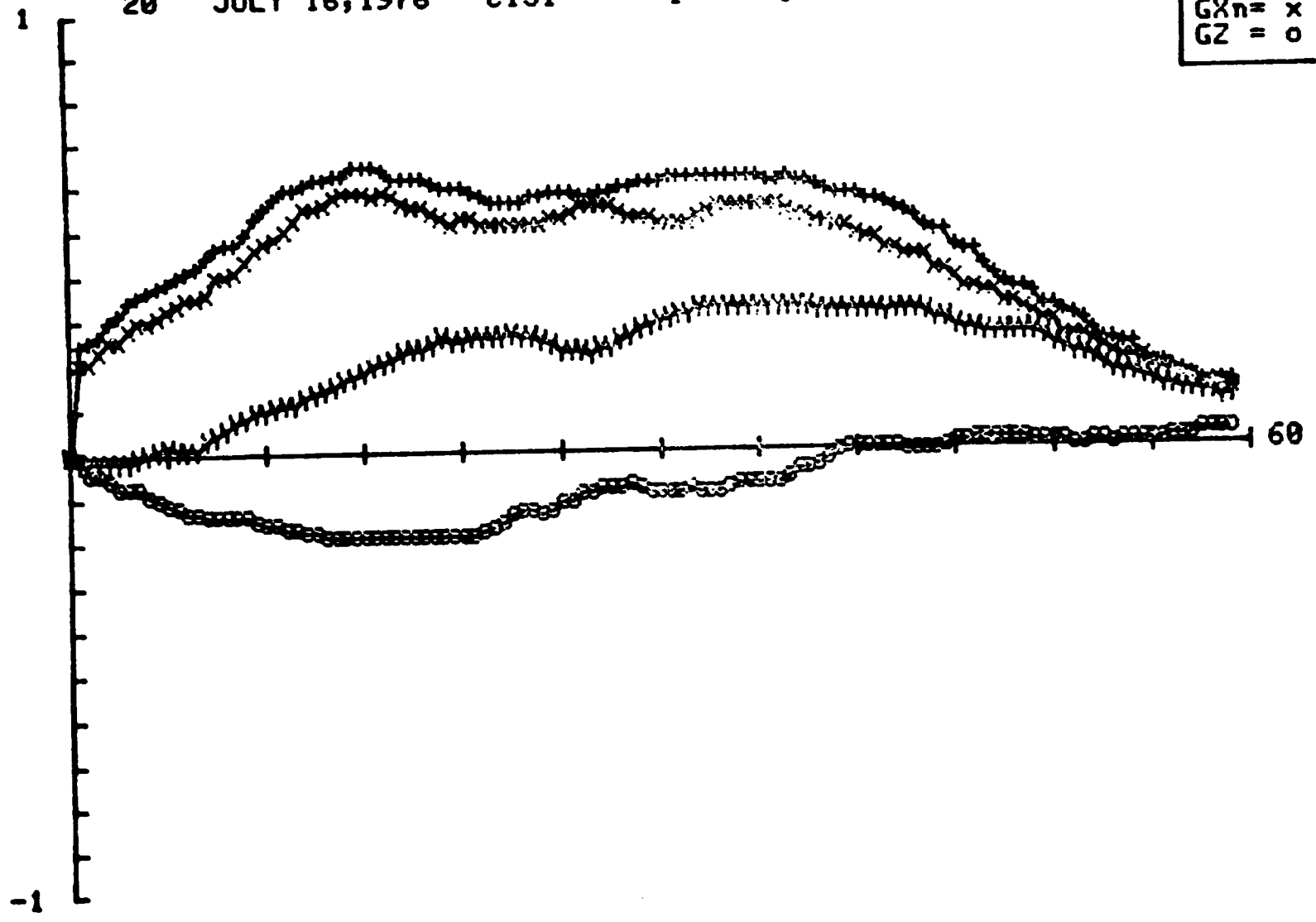
80

FILE 19    DATE JULY 16, 1976    AIRPLANE C131    CLOUD 1    PASS 4    G-SCALE 25KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



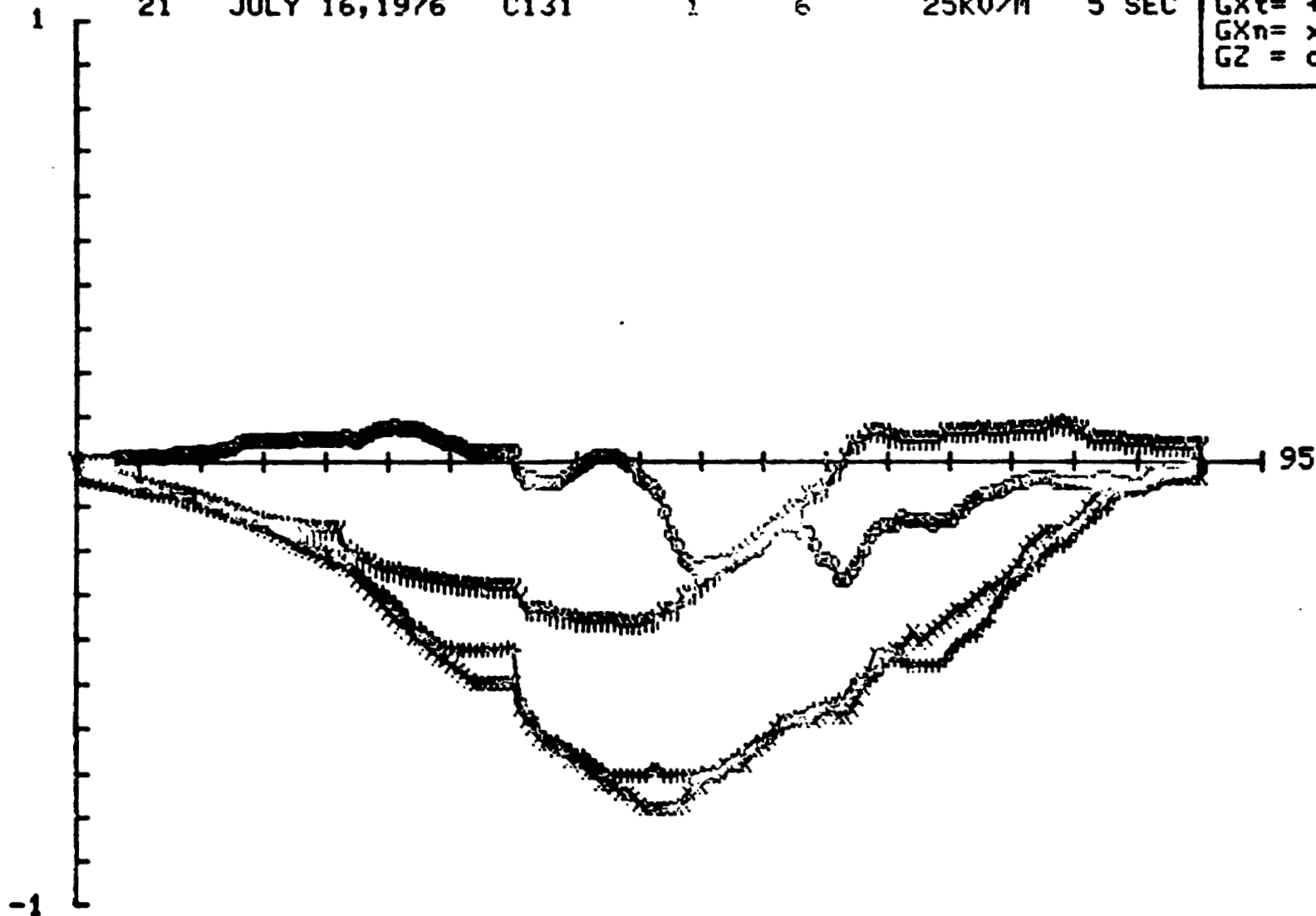
FILE	DATE	AIRPLANE	CLOUD	PASS	G-SCALE	Y-UNIT	GY = Y
20	JULY 16, 1976	C131	1	5	25KV/M	5 SEC	GXt = +
							GXn = x
							GZ = o



5 2

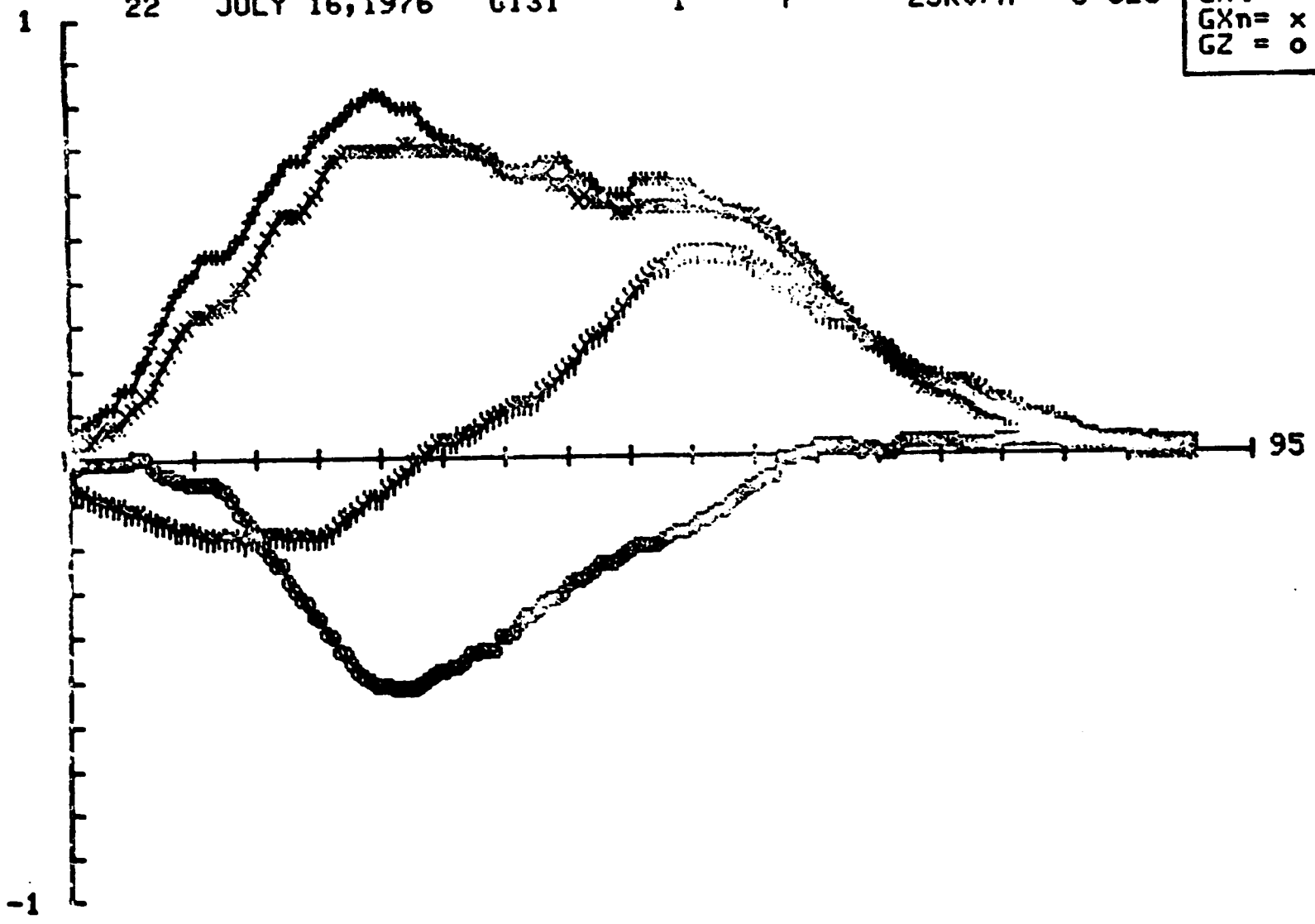
FILE 21      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 6      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE 22      DATE JULY 16, 1976      AIRPLANE G131      CLOUD 1      PASS 7      G-SCALE 25KV/M      Y-UNIT 5 SEC

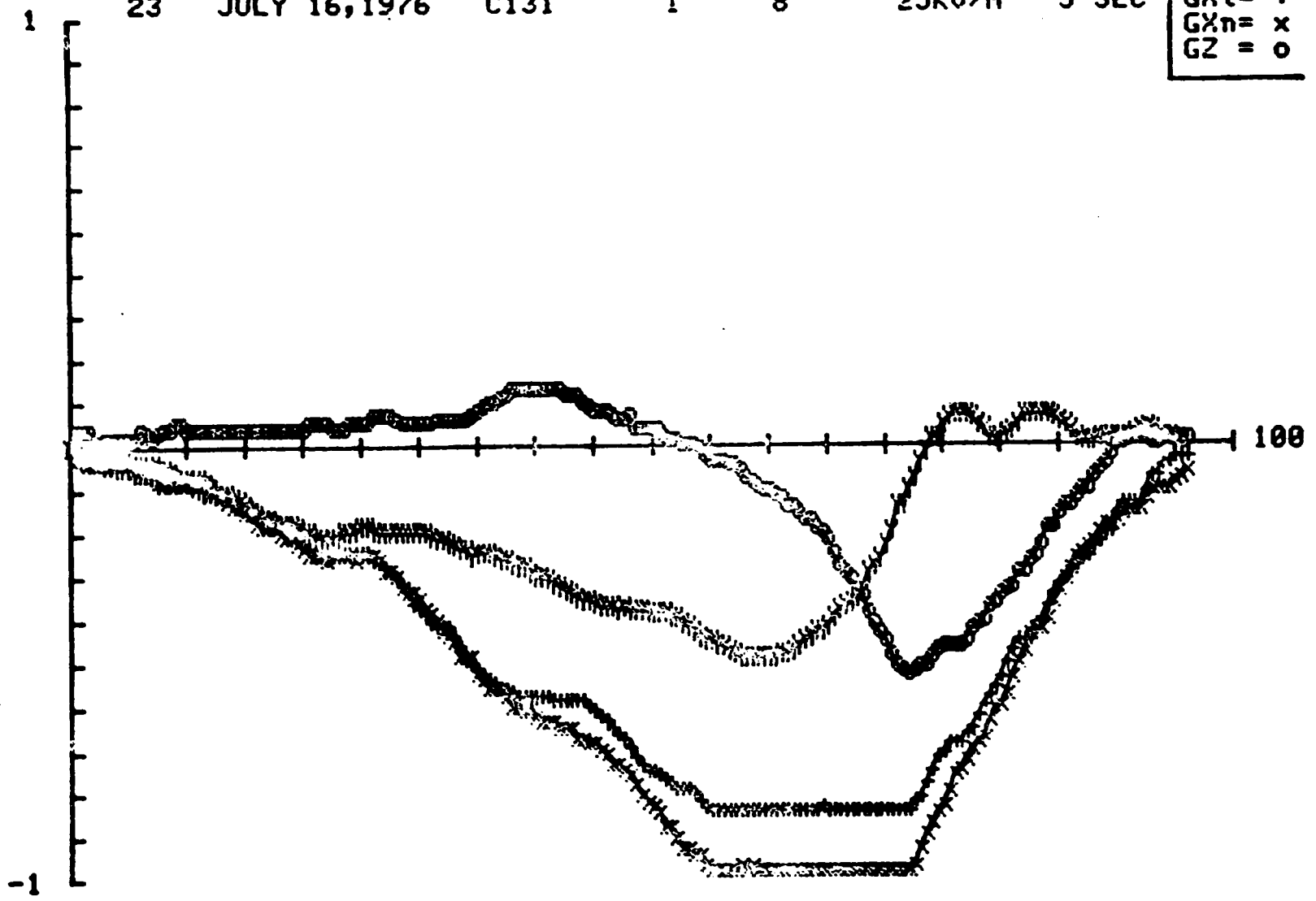
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



54

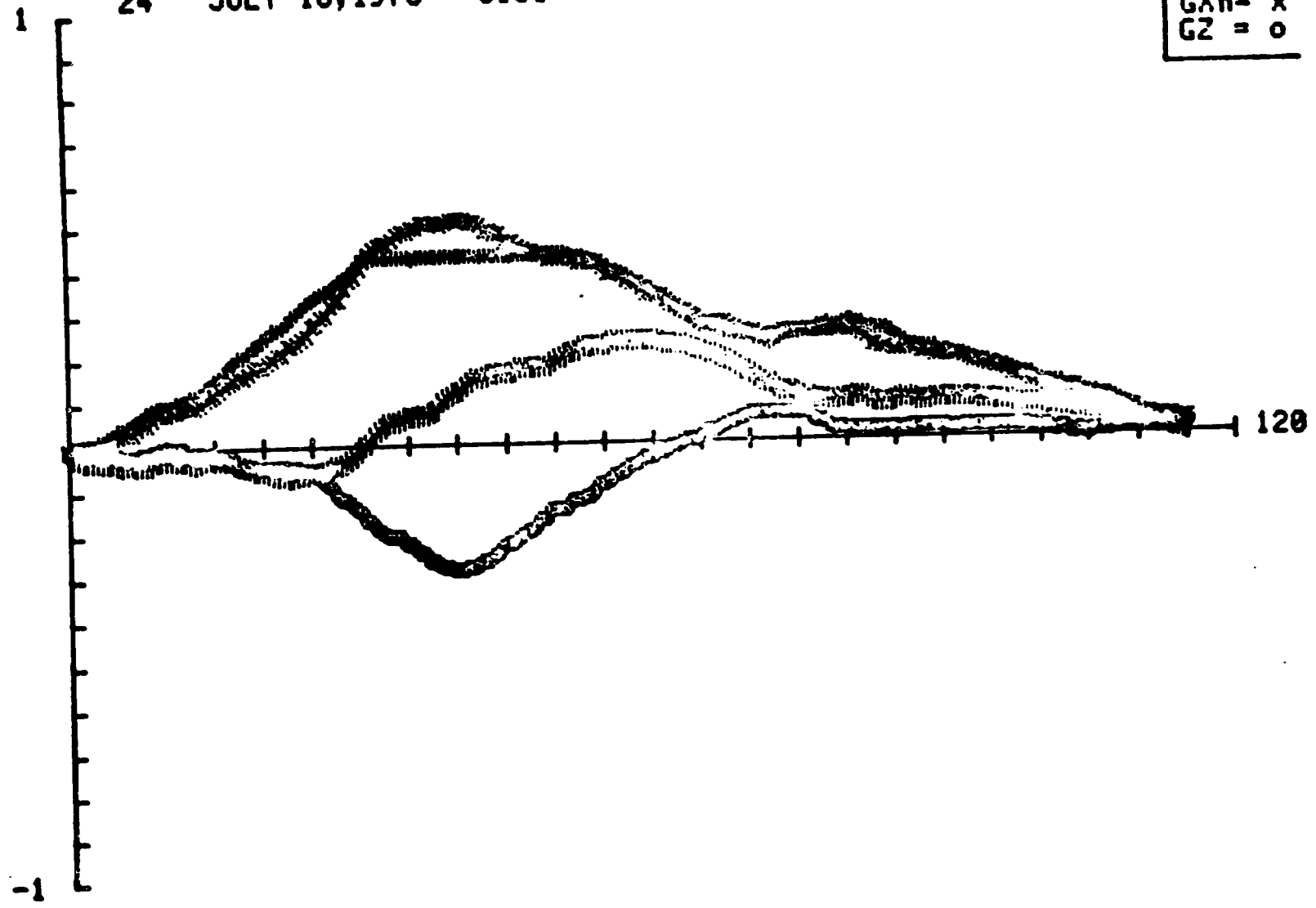
FILE 23      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 8      G-SCALE 25KU/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 24      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 9      G-SCALE 50KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

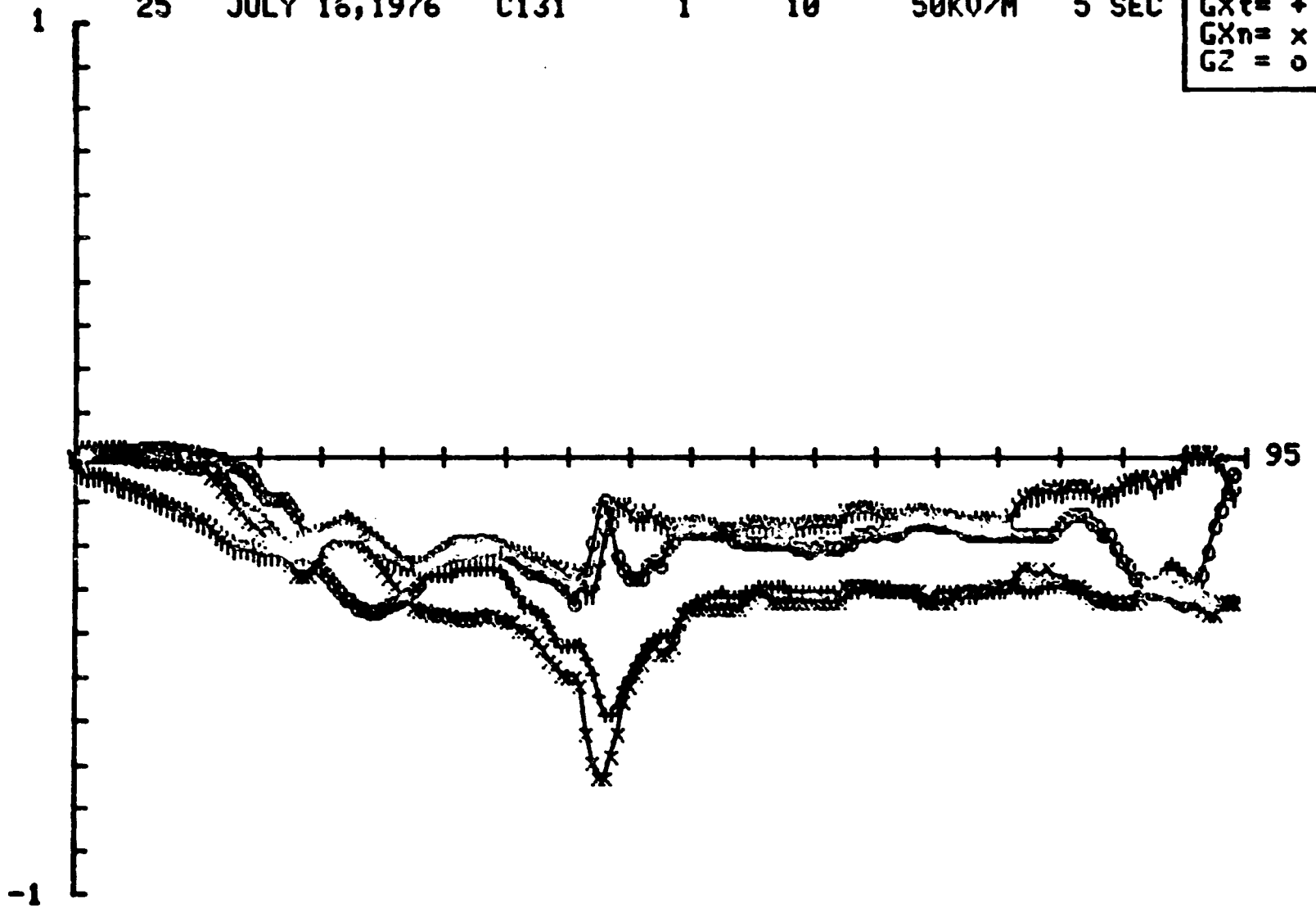




56

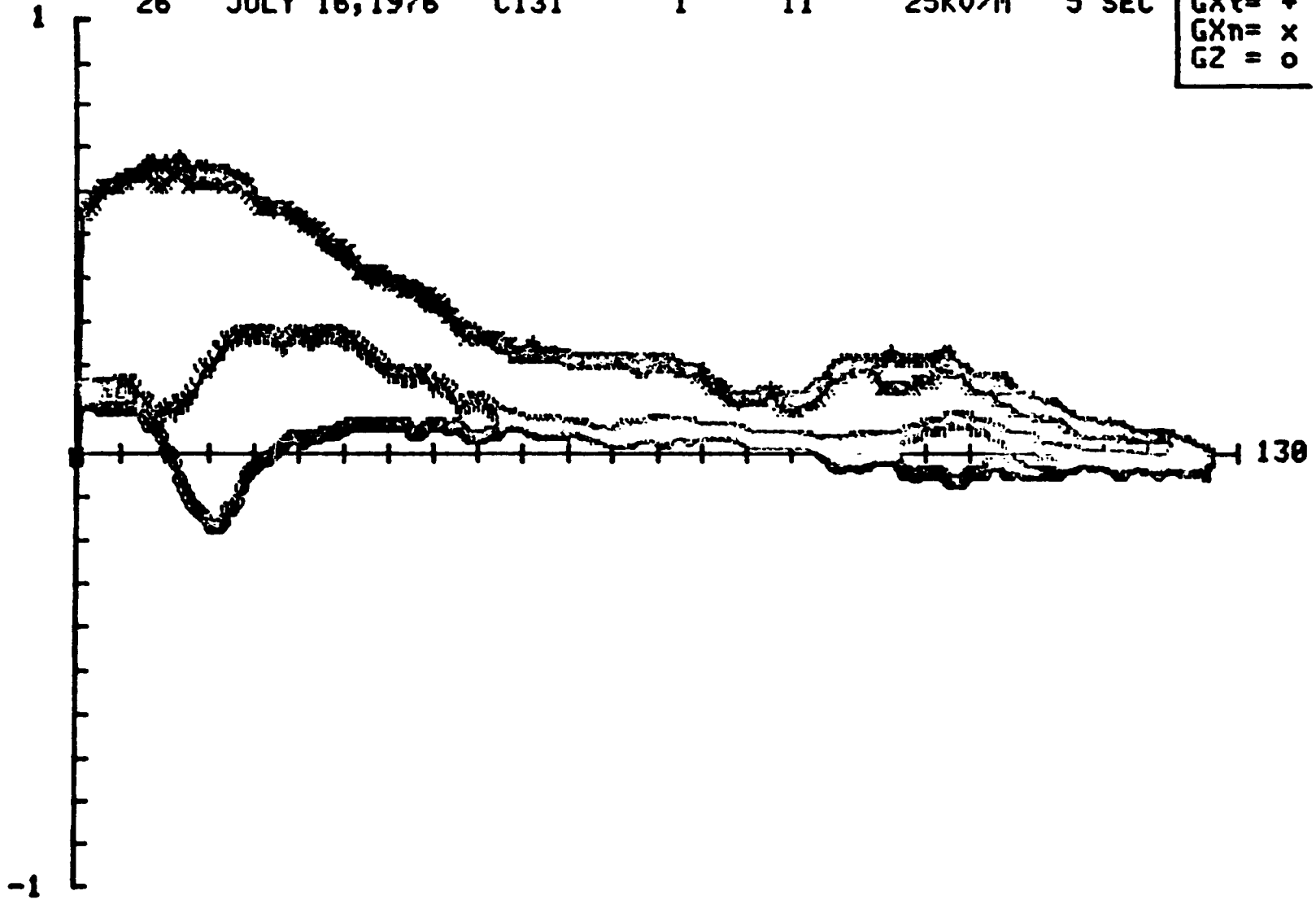
FILE 25      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 10      G-SCALE 50KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 26      DATE JULY 16, 1976      AIRPLANE C131      CLOUD 1      PASS 11      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
GXn	=	x
GZ	=	o



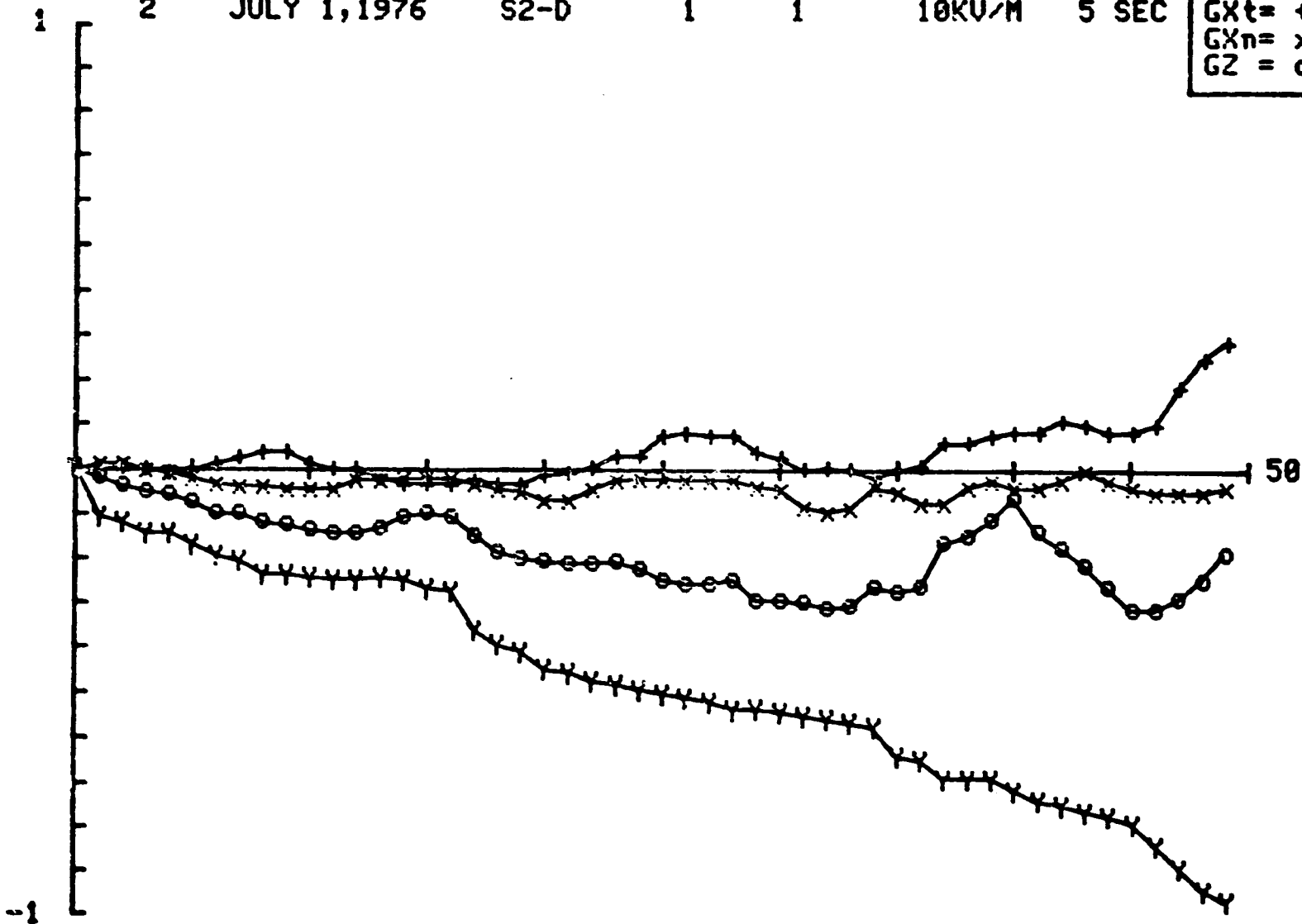
FILE	DATE	AIRPLANE	CLOUD	PASS	SCALE	Ymax
2	JULY 1, 1976	S2-D	1	1	10K	58
3	JULY 1, 1976	S2-D	1	2	25K	59
4	JULY 1, 1976	S2-D	2	1	1K	63
5	JULY 1, 1976	S2-D	2	2	5K	29
6	JULY 1, 1976	S2-D	2	3	5K	19
7	JULY 1, 1976	S2-D	2	4	BLANK	24
8	JULY 1, 1976	S2-D	2	5	BLANK	24
9	JULY 1, 1976	S2-D	2	6	10K	53
10	JULY 1, 1976	S2-D	2	7	25K	47
11	JULY 1, 1976	S2-D	2	8	25K	66
12	JULY 1, 1976	S2-D	2	9	50K	59
13	JULY 1, 1976	S2-D	2	10	25K	92
14	JULY 1, 1976	S2-D	2	11	25K	94
15	JULY 1, 1976	S2-D	2	12	10K	66
16	JULY 1, 1976	S2-D	2	13	10K	59
17	JULY 1, 1976	S2-D	2	14	5K	67
18	JULY 2, 1976	S2-D	1	1	5K	69
19	JULY 2, 1976	S2-D	1	2	100K	57
20	JULY 2, 1976	S2-D	1	3	BLANK	76
21	JULY 2, 1976	S2-D	1	4	10K	99
22	JULY 2, 1976	S2-D	1	5	5K	88
23	JULY 2, 1976	S2-D	1	6	5K	69
24	JULY 2, 1976	S2-D	1	7	10K	98
25	JULY 2, 1976	S2-D	2	1	10K	36
26	JULY 2, 1976	S2-D	2	2	5K	46
27	JULY 2, 1976	S2-D	2	3	2.5K	34
28	JULY 2, 1976	S2-D	2	4	5K	46
29	JULY 2, 1976	S2-D	2	5	100K	61
30	JULY 2, 1976	S2-D	2	6	25K	30
31	JULY 2, 1976	S2-D	2	7	25K	43
32	JULY 2, 1976	S2-D	2	8	50K	28
33	JULY 2, 1976	S2-D	2	9	5K	37
34	JULY 2, 1976	S2-D	2	10	5K	59

35	JULY 2, 1976	S2-D	2	11	100K	40
36	JULY 2, 1976	S2-D	2	12	50K	34
37	JULY 2, 1976	S2-D	2	13	50K	53
38	JULY 2, 1976	S2-D	2	14	50K	60
39	JULY 2, 1976	S2-D	2	15	50K	56
40	JULY 2, 1976	S2-D	2	16	100K	60
41	JULY 2, 1976	S2-D	2	17	BLANK	64
42	JULY 2, 1976	S2-D	2	18	50K	43
43	JULY 2, 1976	S2-D	2	19	100K	48
44	JULY 2, 1976	S2-D	2	20	50K	41
45	JULY 7, 1976	S2-D	1	1	BLANK	47
46	JULY 7, 1976	S2-D	1	2	50K	47
47	JULY 7, 1976	S2-D	1	3	50K	39
48	JULY 7, 1976	S2-D	1	4	25K	30
49	JULY 8, 1976	S2-D	1	1	50K	37
50	JULY 8, 1976	S2-D	1	2	100K	47
51	JULY 8, 1976	S2-D	1	3	50K	42
52	JULY 8, 1976	S2-D	1	4	100K	56
53	JULY 8, 1976	S2-D	1	5	100K	36
54	JULY 8, 1976	S2-D	1	6	100K	48
55	JULY 8, 1976	S2-D	1	7	100K	54
56	JULY 8, 1976	S2-D	1	8	100K	61
57	JULY 8, 1976	S2-D	1	9	100K	59
58	JULY 8, 1976	S2-D	1	10	100K	63
59	JULY 8, 1976	S2-D	1	11	100K	69
60	JULY 8, 1976	S2-D	1	12	100K	75
61	JULY 8, 1976	S2-D	1	13	100K	74
62	JULY 8, 1976	S2-D	1	14	100K	54
63	JULY 8, 1976	S2-D	1	15	100K	55
64	JULY 8, 1976	S2-D	1	16	50K	34
65	JULY 8, 1976	S2-D	1	17	100K	38
66	JULY 8, 1976	S2-D	1	18	50K	50

60

FILE 2      DATE JULY 1, 1976      AIRPLANE S2-D      CLOUD 1      PASS 1      G-SCALE 10KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
3

DATE  
JULY 1, 1976

AIRPLANE  
S2-D

CLOUD  
1

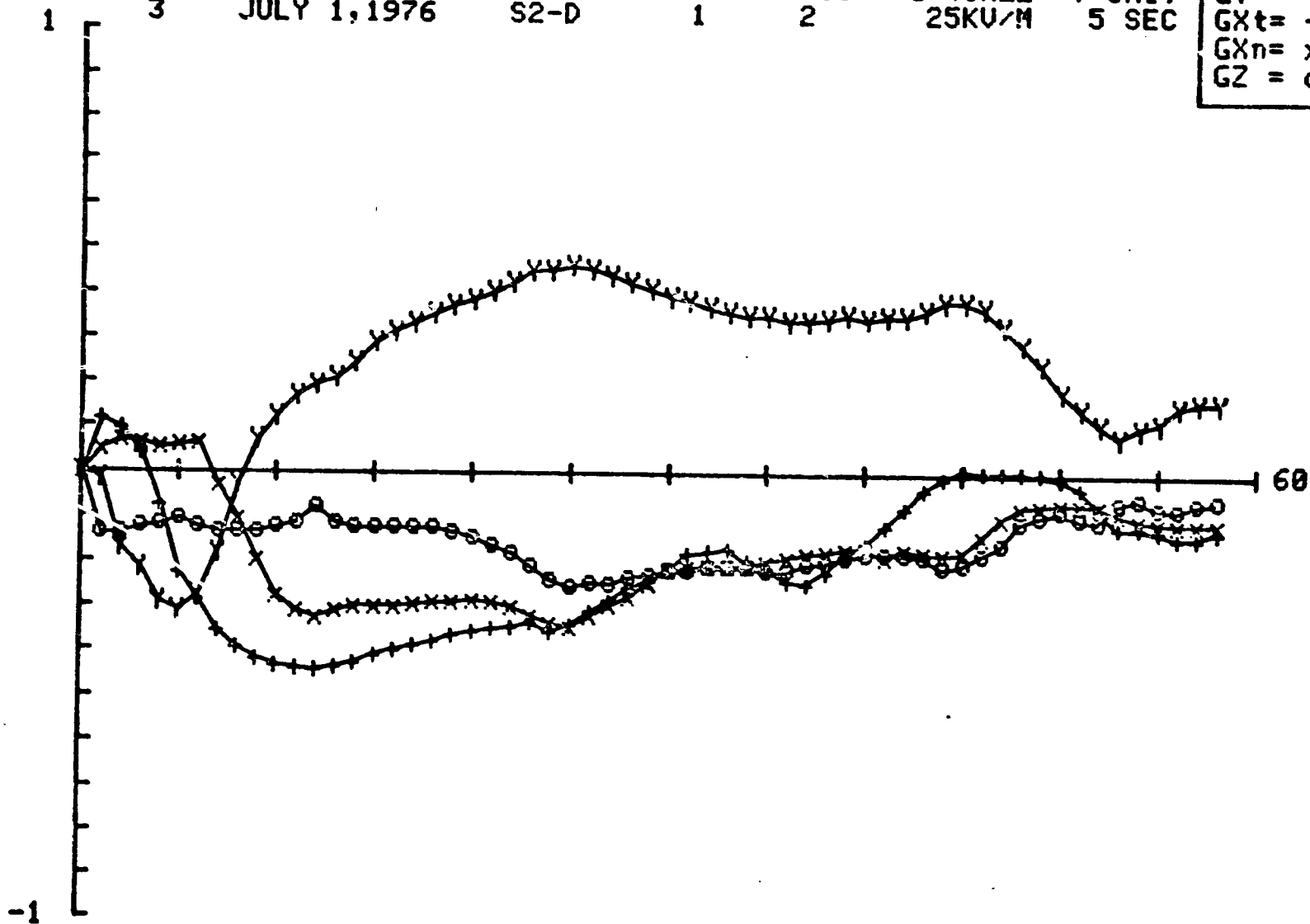
PASS  
2

G-SCALE  
25KV/M

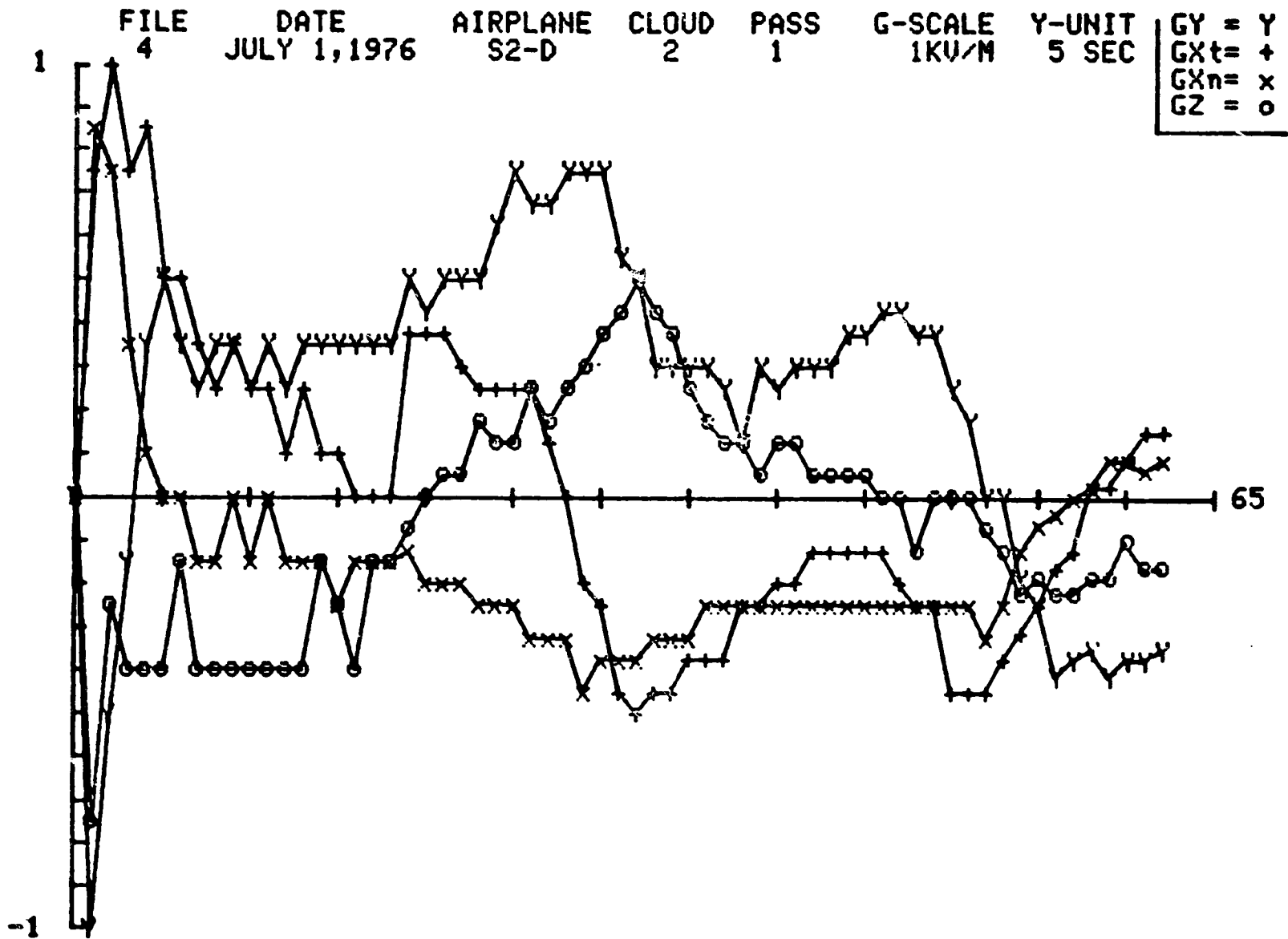
Y-UNIT  
5 SEC

GY = y  
GXt = +  
GXn = x  
GZ = o

61



6.2



FILE  
6

DATE  
JULY 1, 1976

AIRPLANE  
S2-D

CLOUD  
2

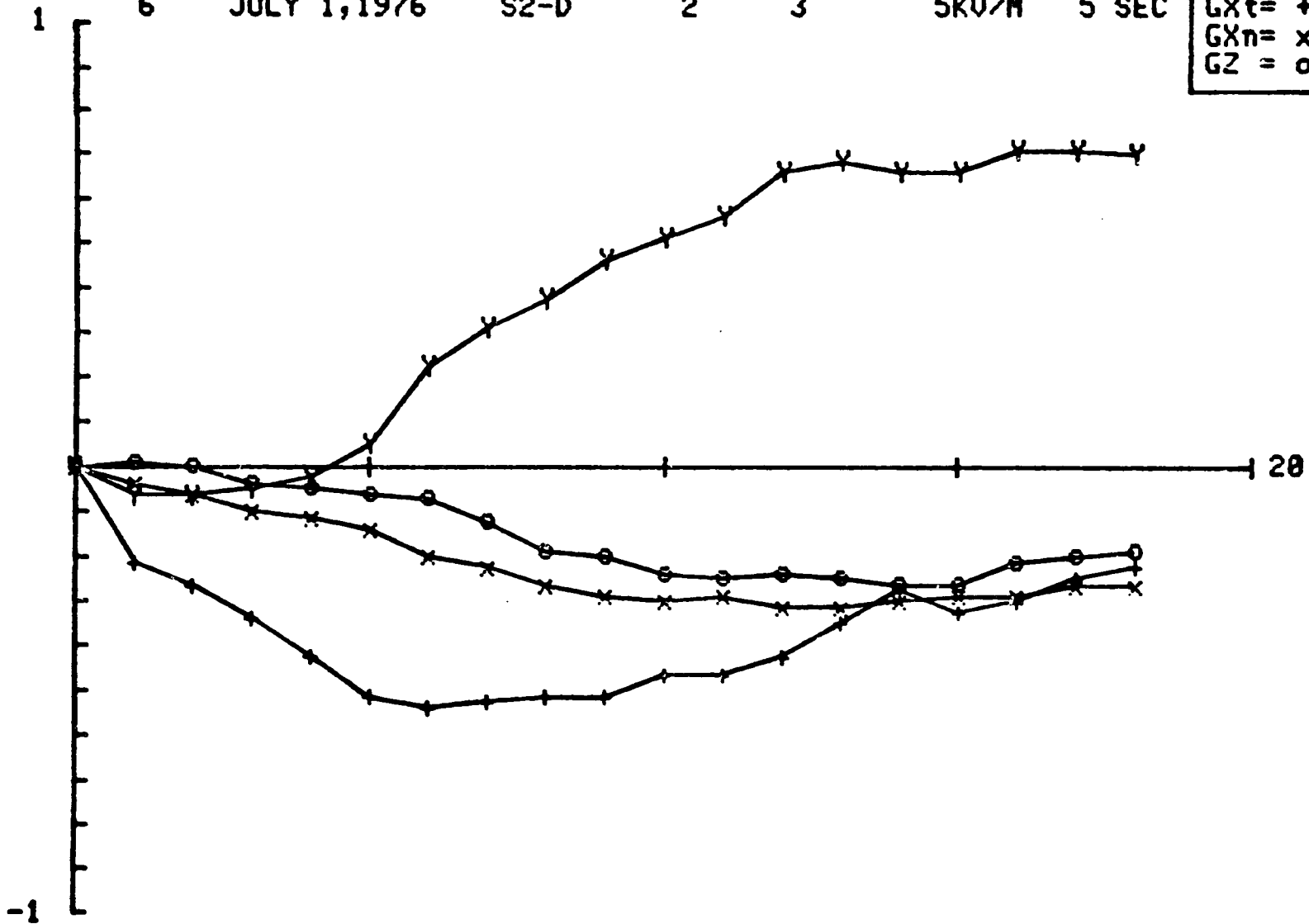
PASS  
3

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o

63

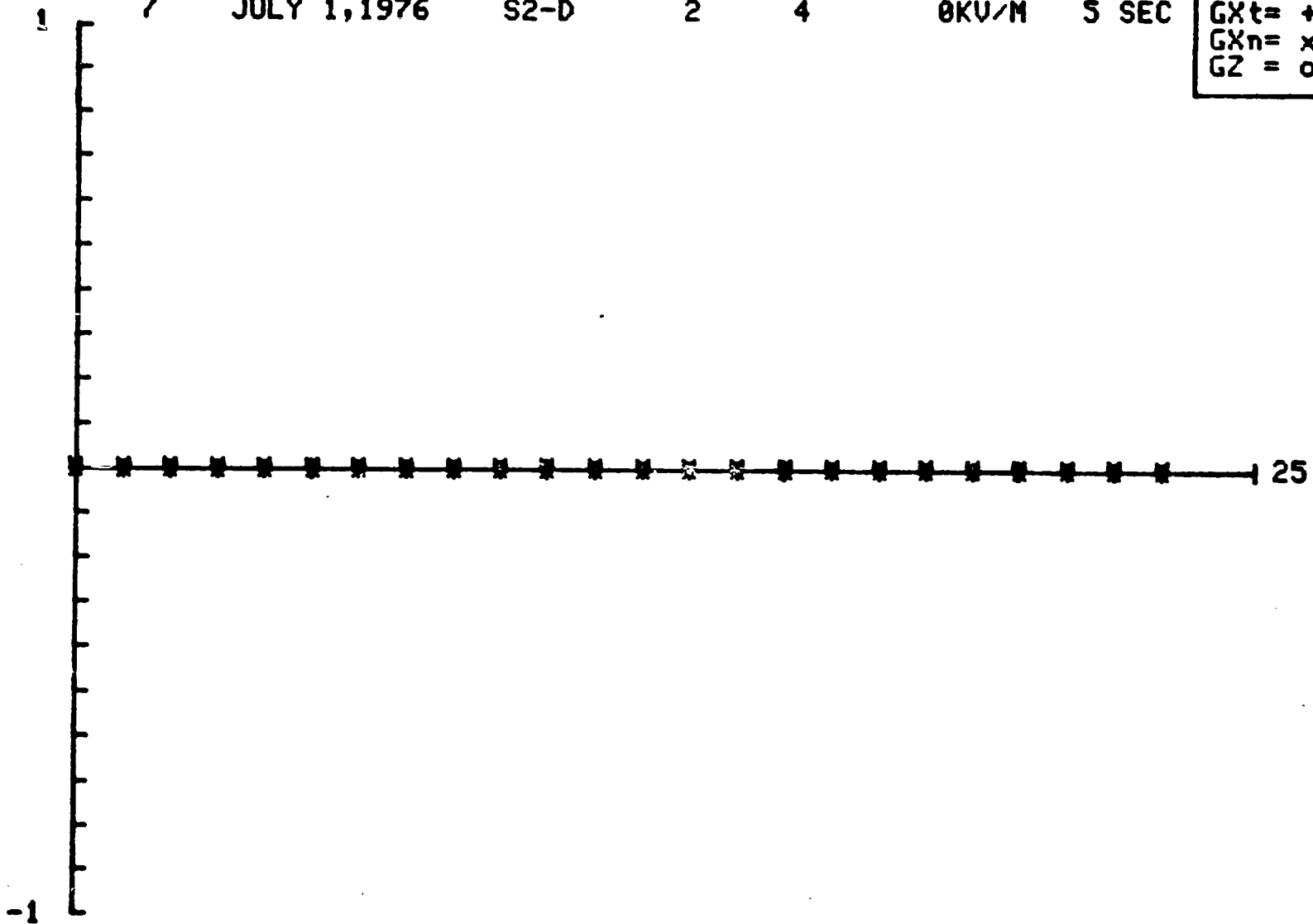




64

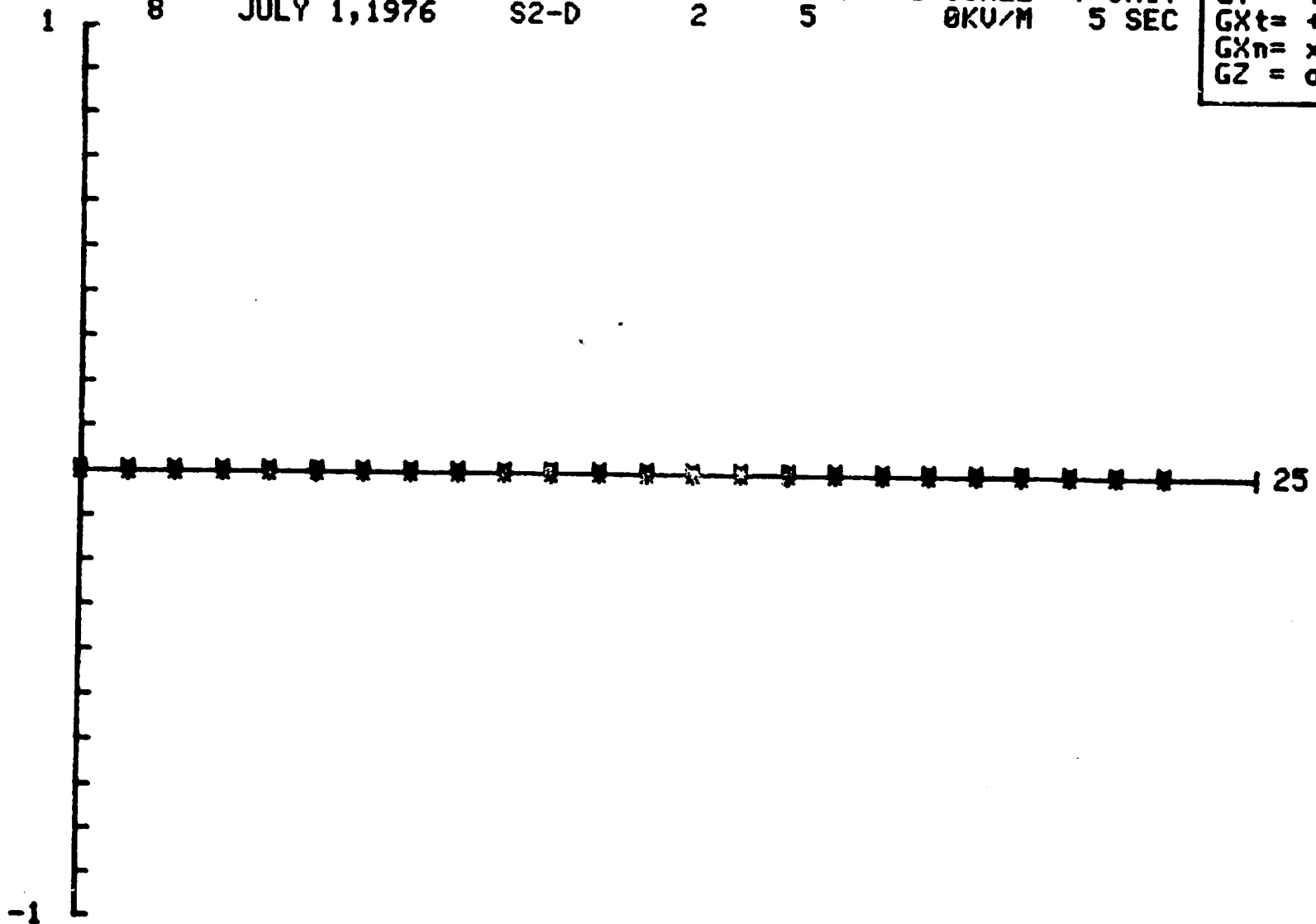
FILE 7      DATE JULY 1, 1976      AIRPLANE S2-D      CLOUD 2      PASS 4      G-SCALE 0KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 8      DATE JULY 1, 1976      AIRPLANE S2-D      CLOUD 2      PASS 5      G-SCALE 0KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



66

FILE  
9

DATE  
JULY 1, 1976

AIRPLANE  
S2-D

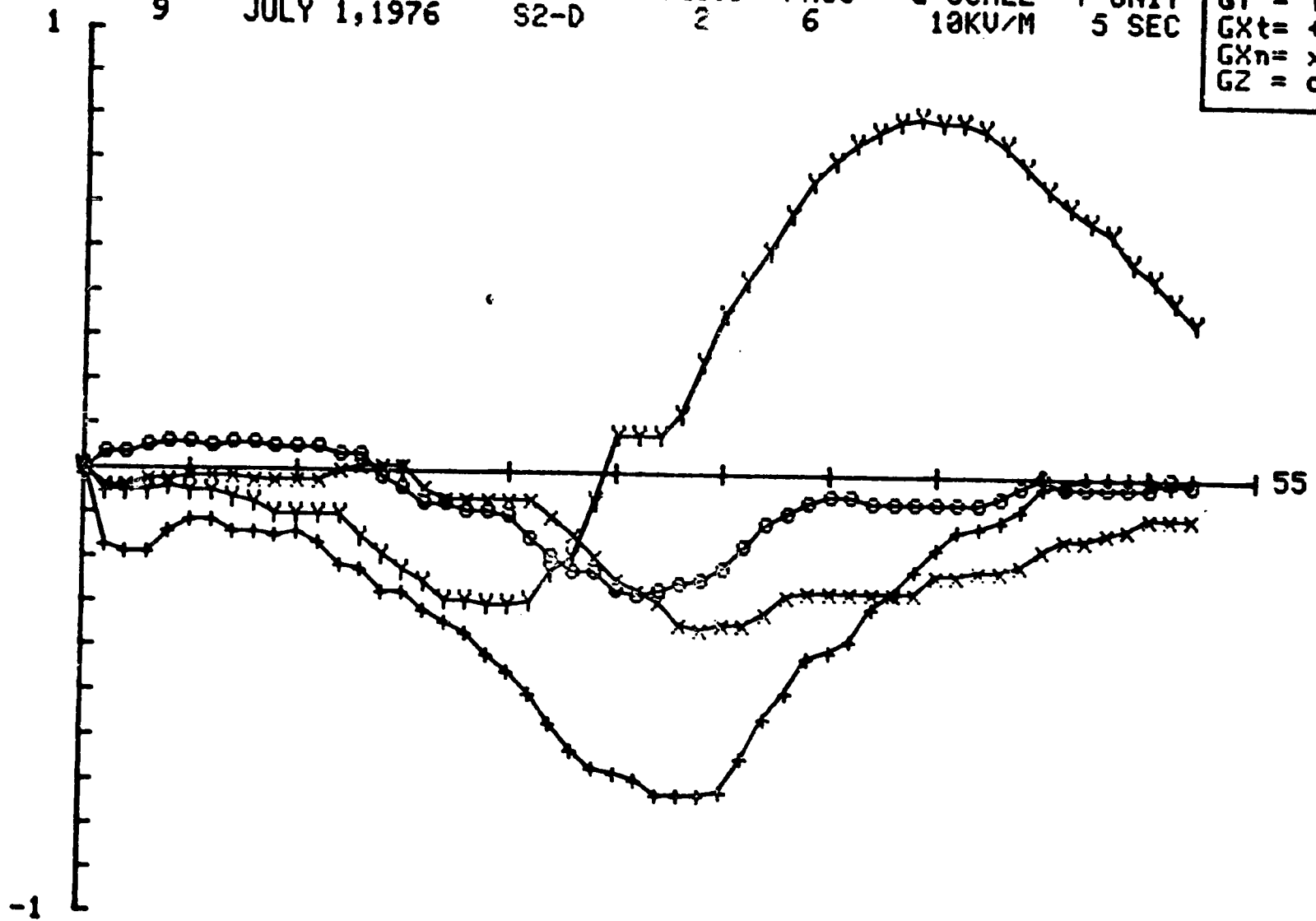
CLOUD  
2

PASS  
6

G-SCALE  
10KV/M

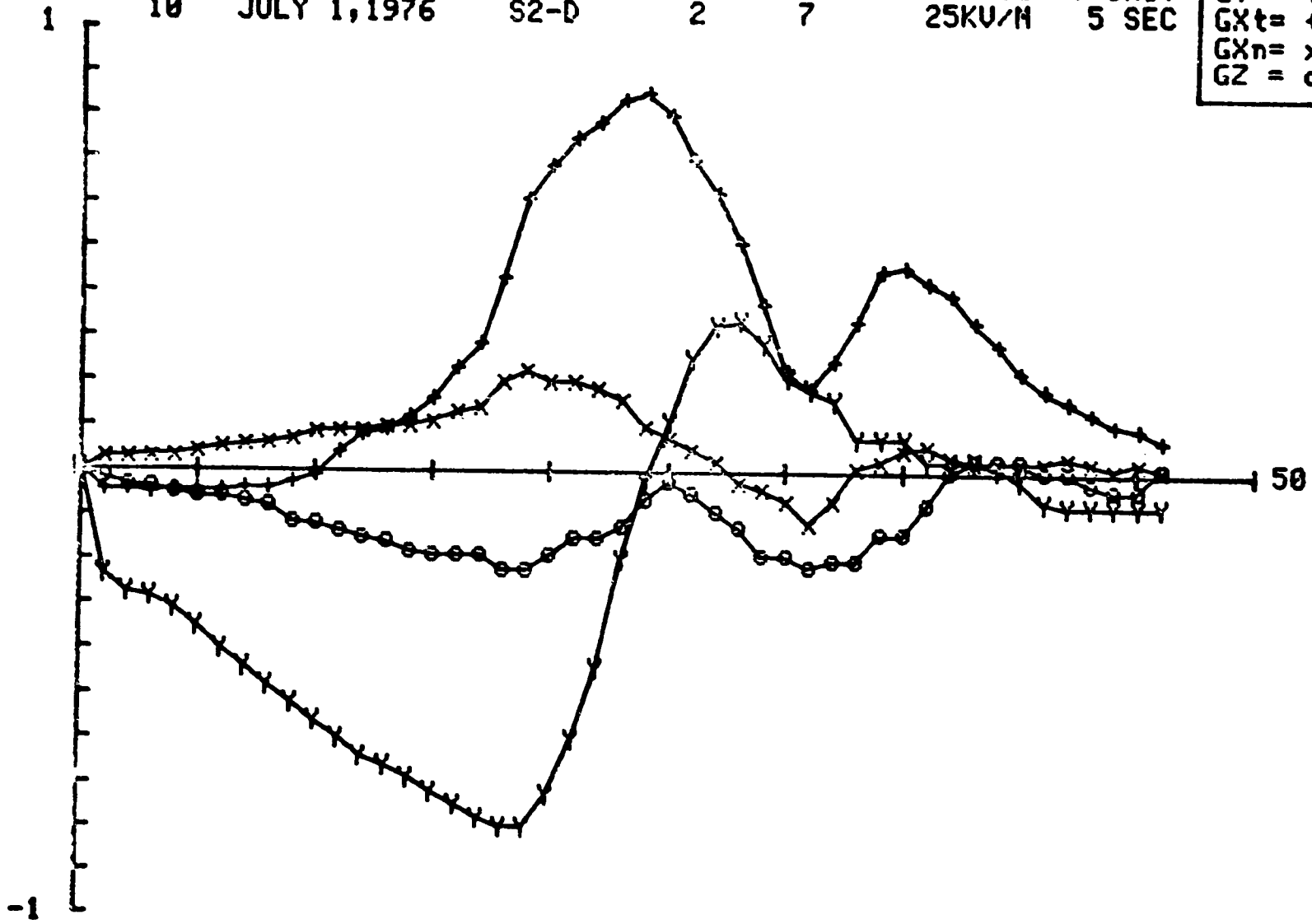
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 10    DATE JULY 1, 1976    AIRPLANE S2-D    CLOUD 2    PASS 7    G-SCALE 25KV/H    Y-UNIT 5 SEC

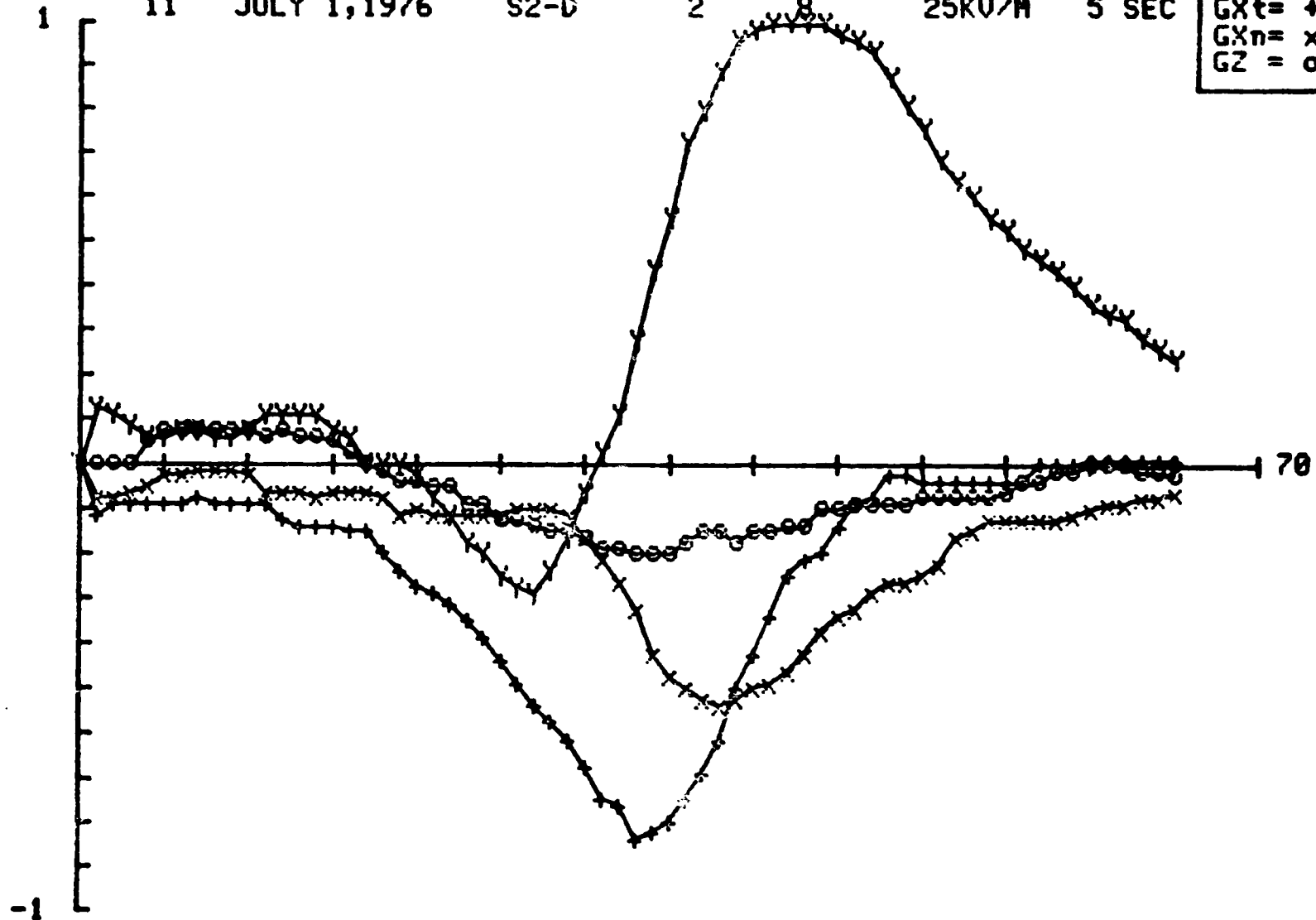
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



68

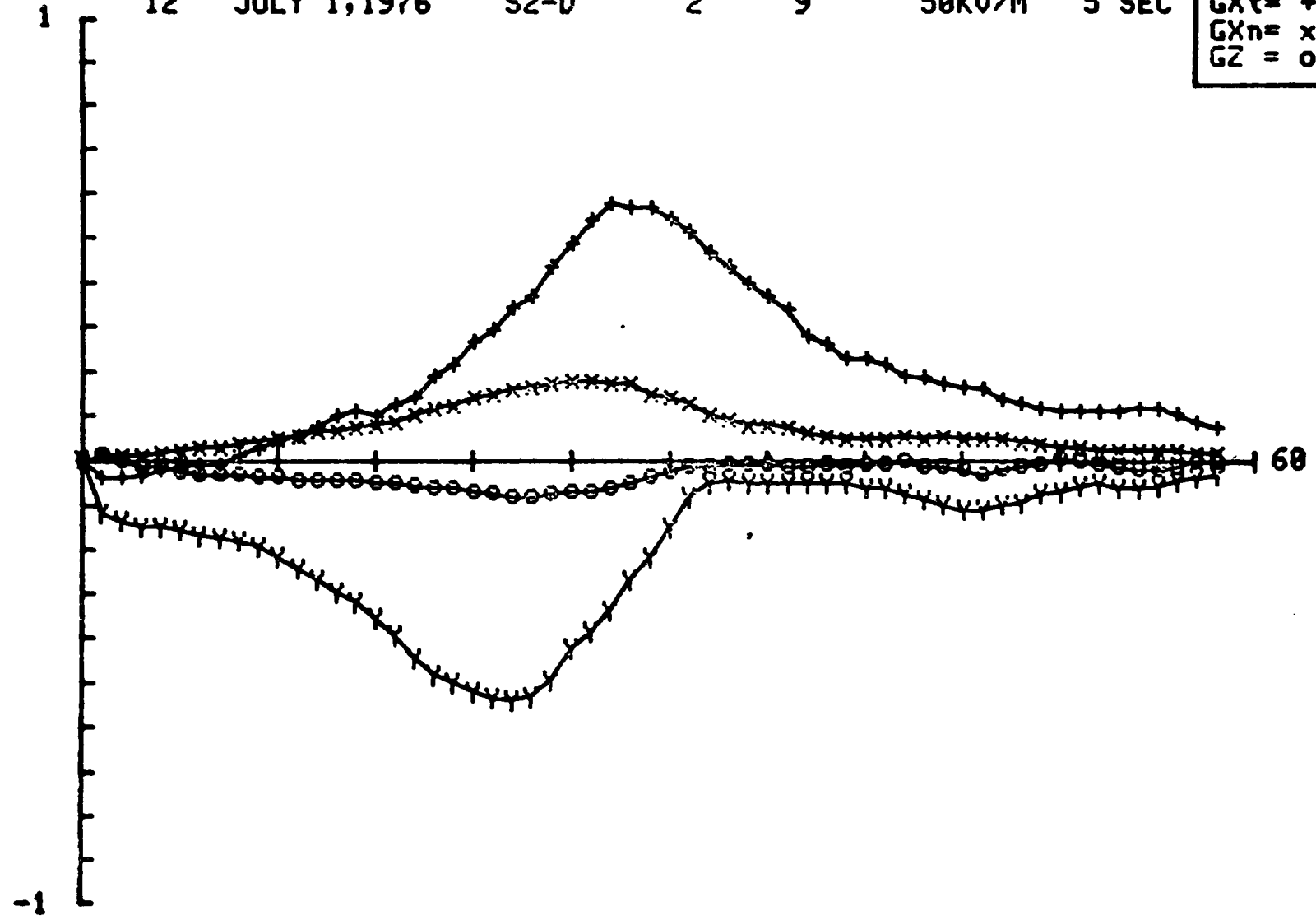
FILE 11    DATE JULY 1, 1976    AIRPLANE S2-D    CLOUD 2    PASS 8    G-SCALE 25KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 12 DATE JULY 1, 1976 AIRPLANE S2-D CLOUD 2 PASS 9 G-SCALE 50KV/M Y-UNIT 5 SEC

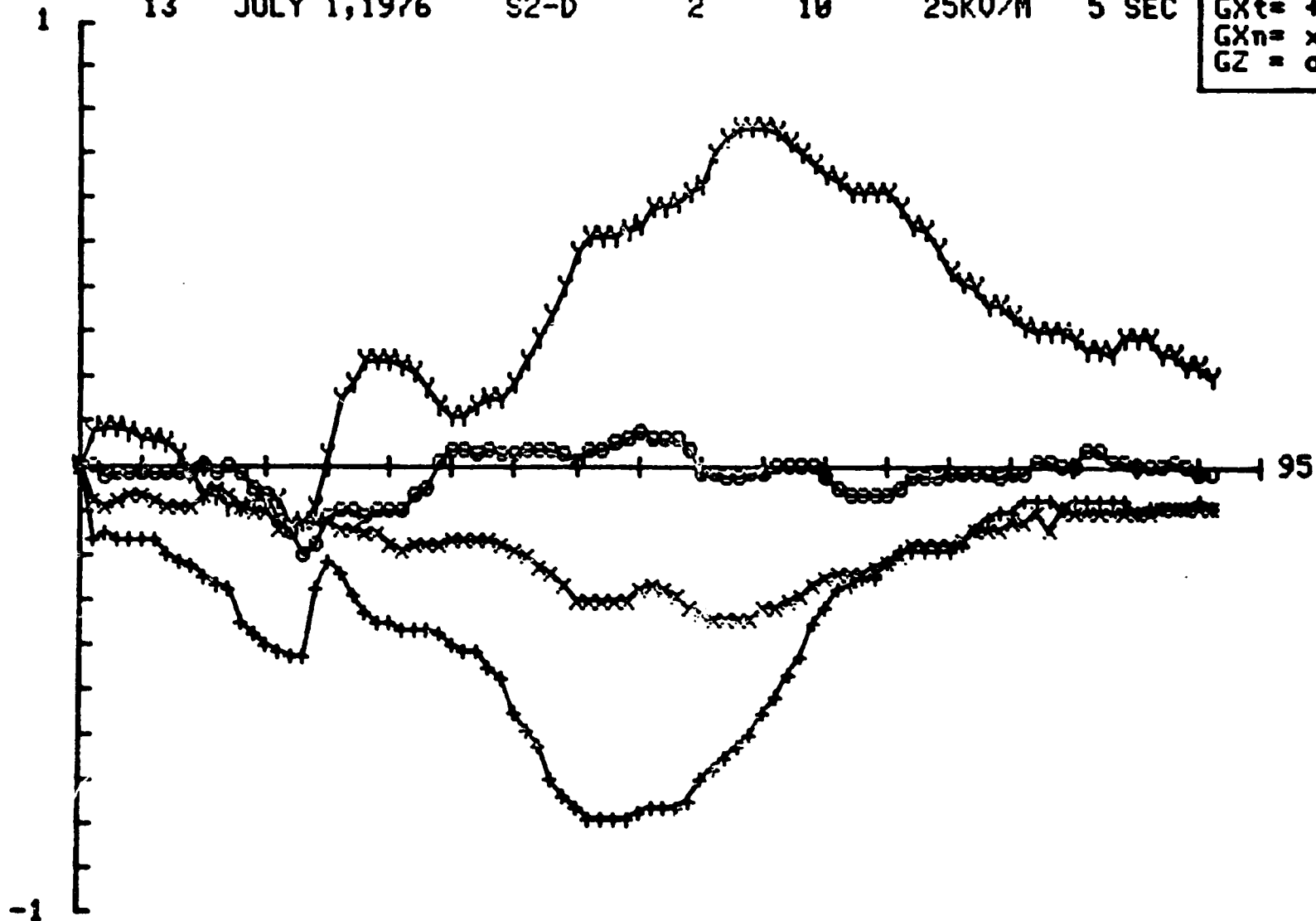
GY = Y  
GXt = +  
GXn = x  
GZ = o



70

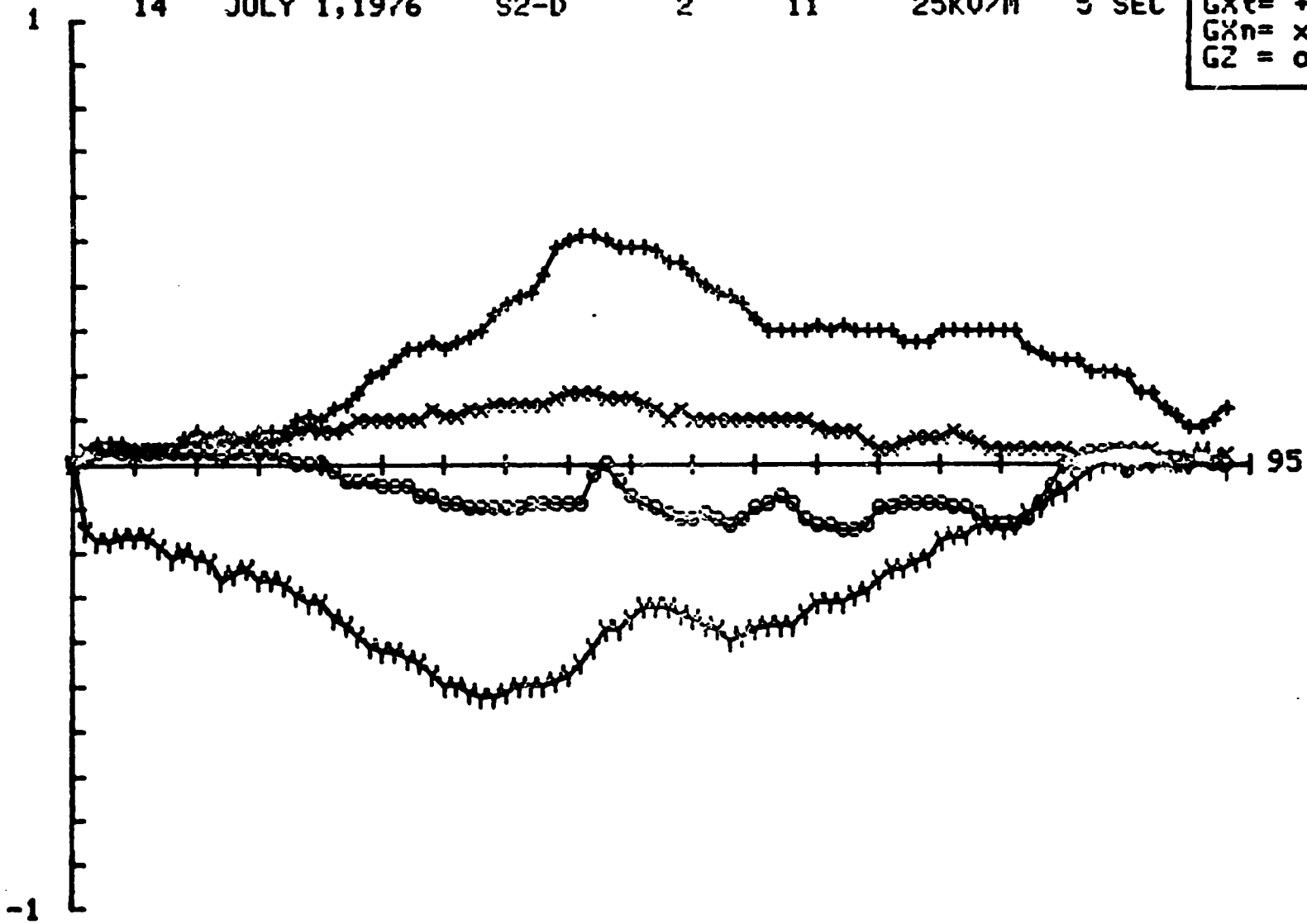
FILE 13    DATE JULY 1, 1976    AIRPLANE S2-D    CLOUD 2    PASS 10    G-SCALE 25KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 14      DATE JULY 1, 1976      AIRPLANE S2-D      CLOUD 2      PASS 11      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o

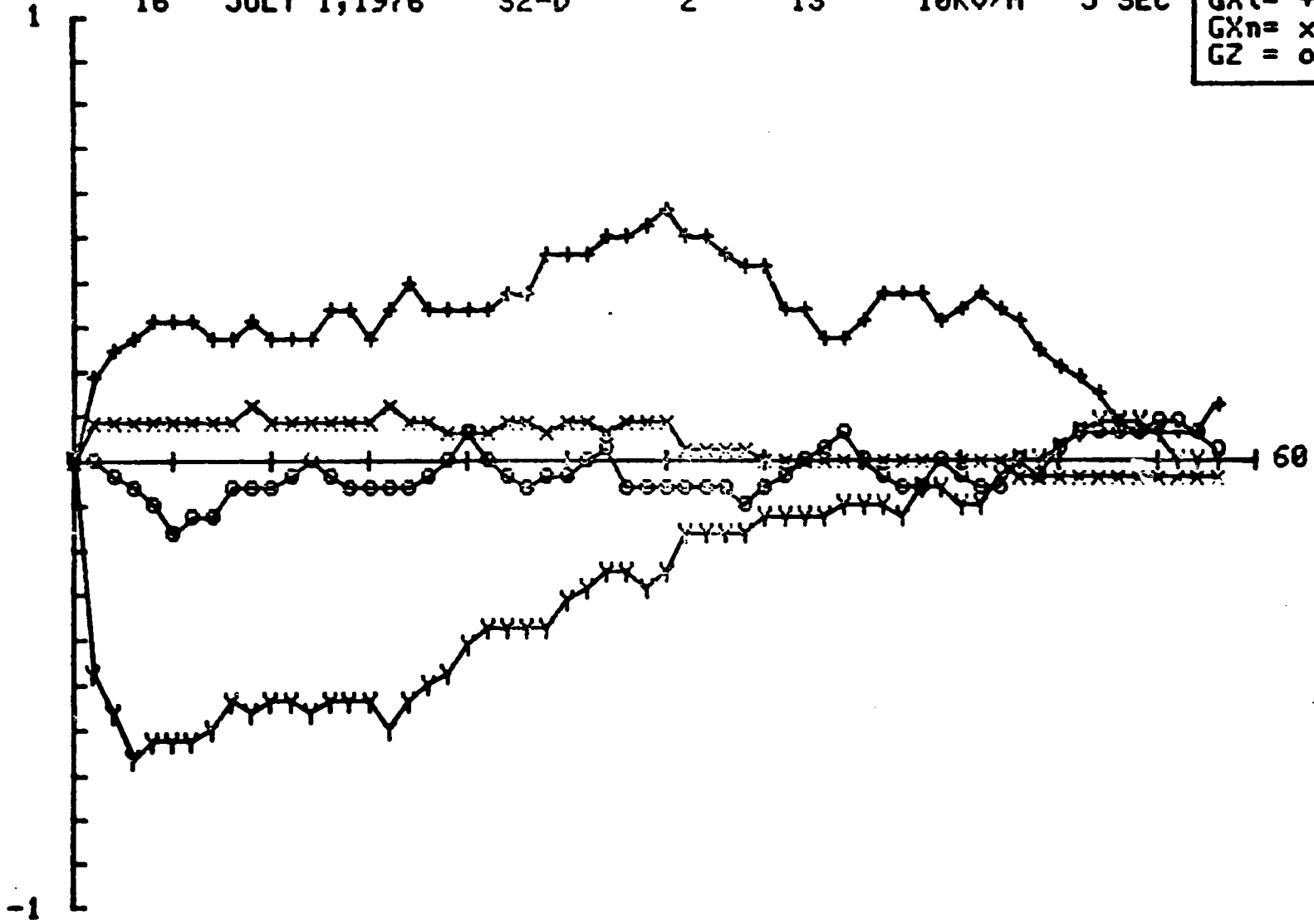






FILE 16      DATE JULY 1, 1976      AIRPLANE S2-D      CLOUD 2      PASS 13      G-SCALE 10KV/M      Y-UNIT 5 SEC

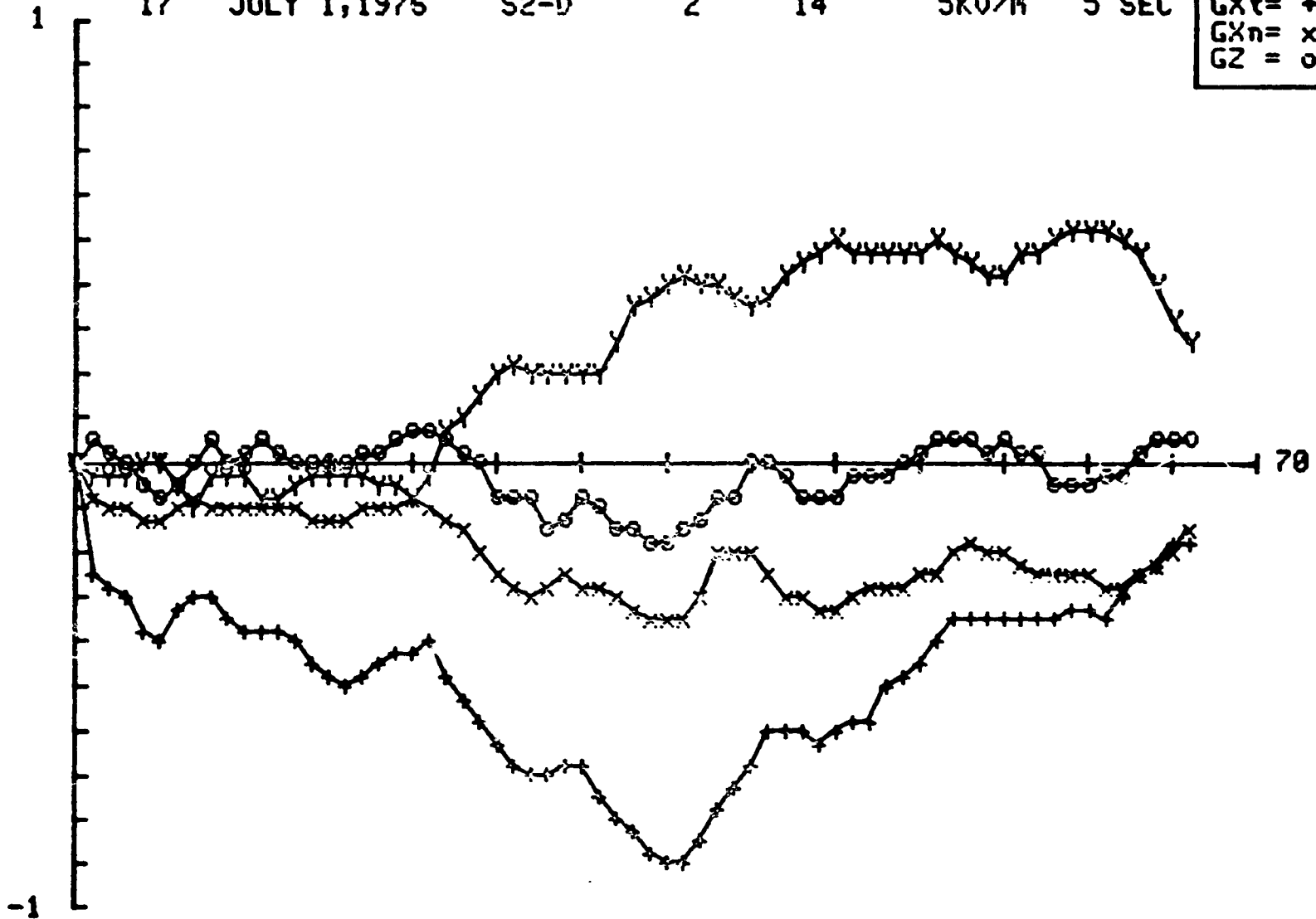
GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



74

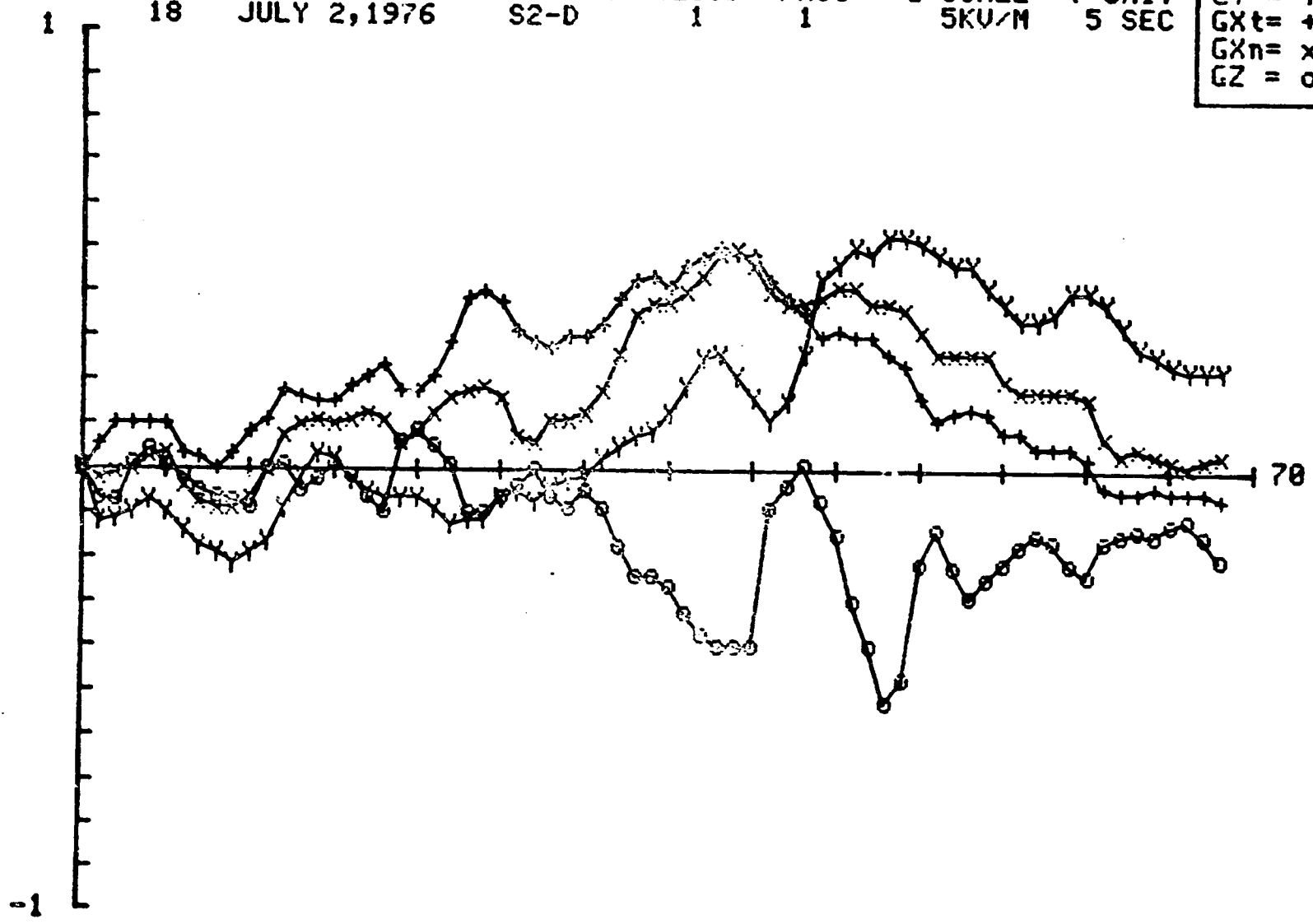
FILE 17      DATE JULY 1, 1976      AIRPLANE S2-D      CLOUD 2      PASS 14      G-SCALE 5KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 18      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 1      PASS 1      G-SCALE 5KV/M      Y-UNIT 5 SEC

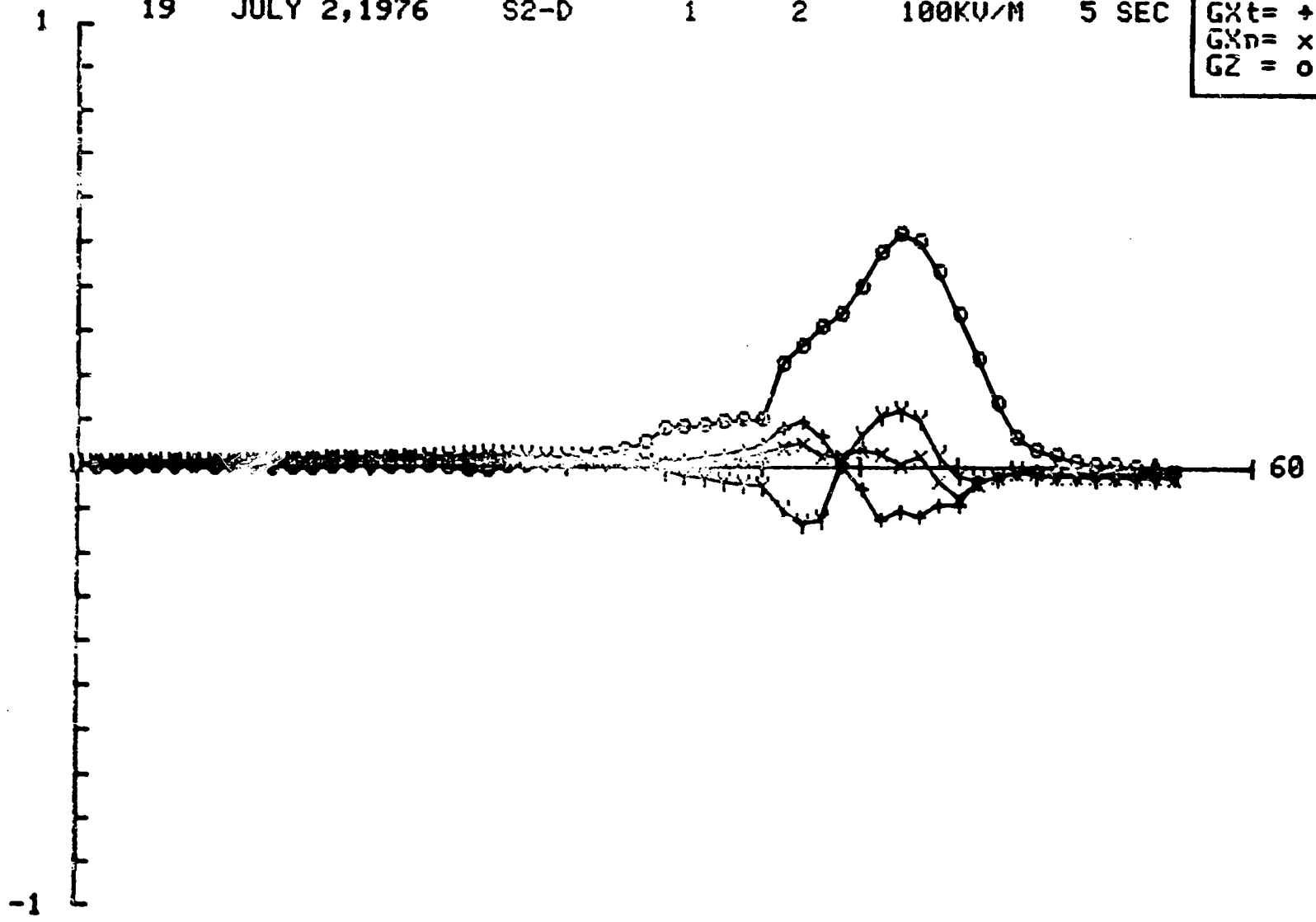
Gy	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



76

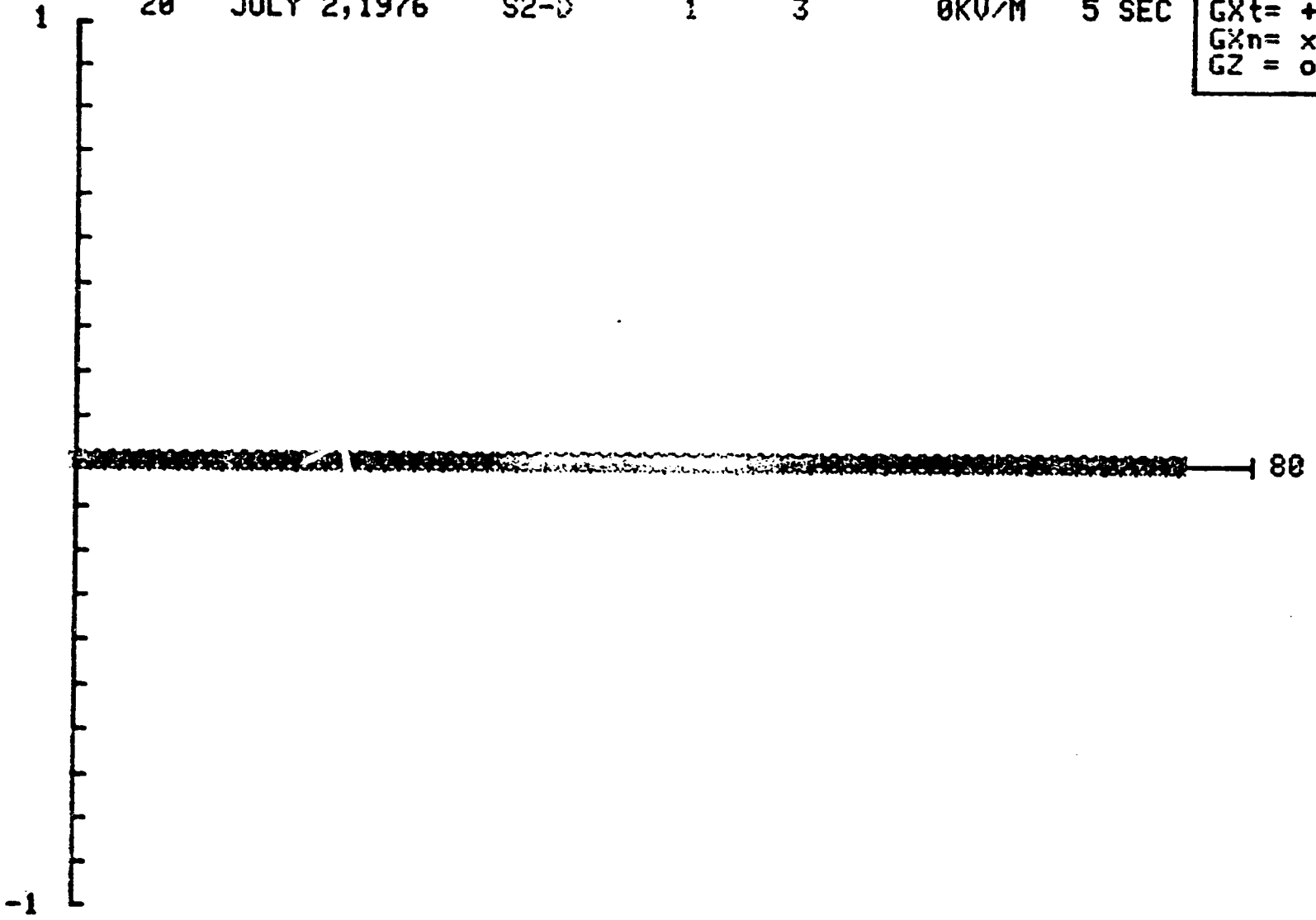
FILE 19    DATE JULY 2, 1976    AIRPLANE S2-D    CLOUD 1    PASS 2    G-SCALE 100KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE 20      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 1      PASS 3      G-SCALE 0KV/M      Y-UNIT 5 SEC

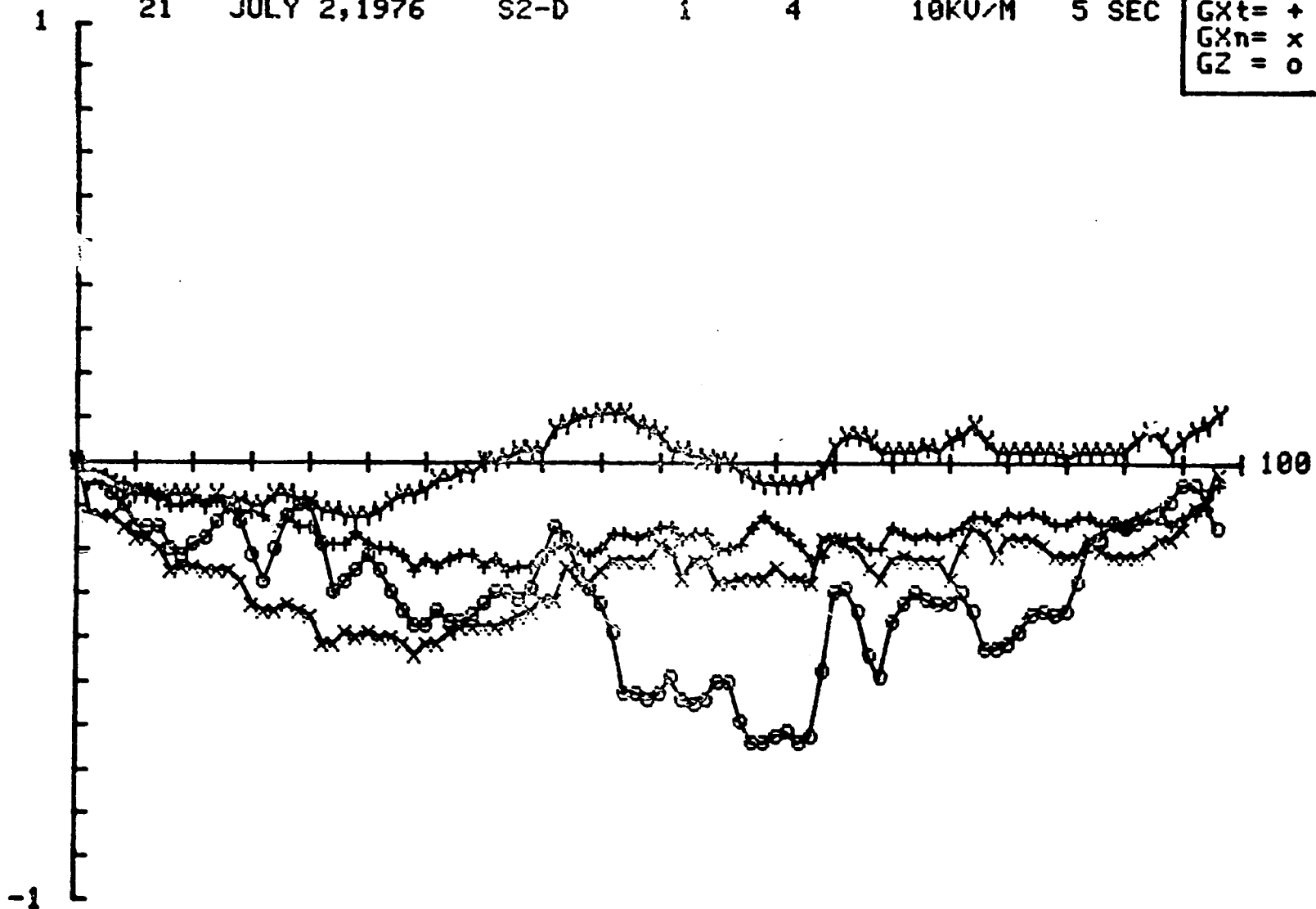
GY = Y
GXt = +
GXn = x
GZ = o



78

FILE 21      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 1      PASS 4      G-SCALE 10KV/M      Y-UNIT 5 SEC

GY =	Y
Gxt =	+
GXn =	x
GZ =	o



FILE  
22

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
1

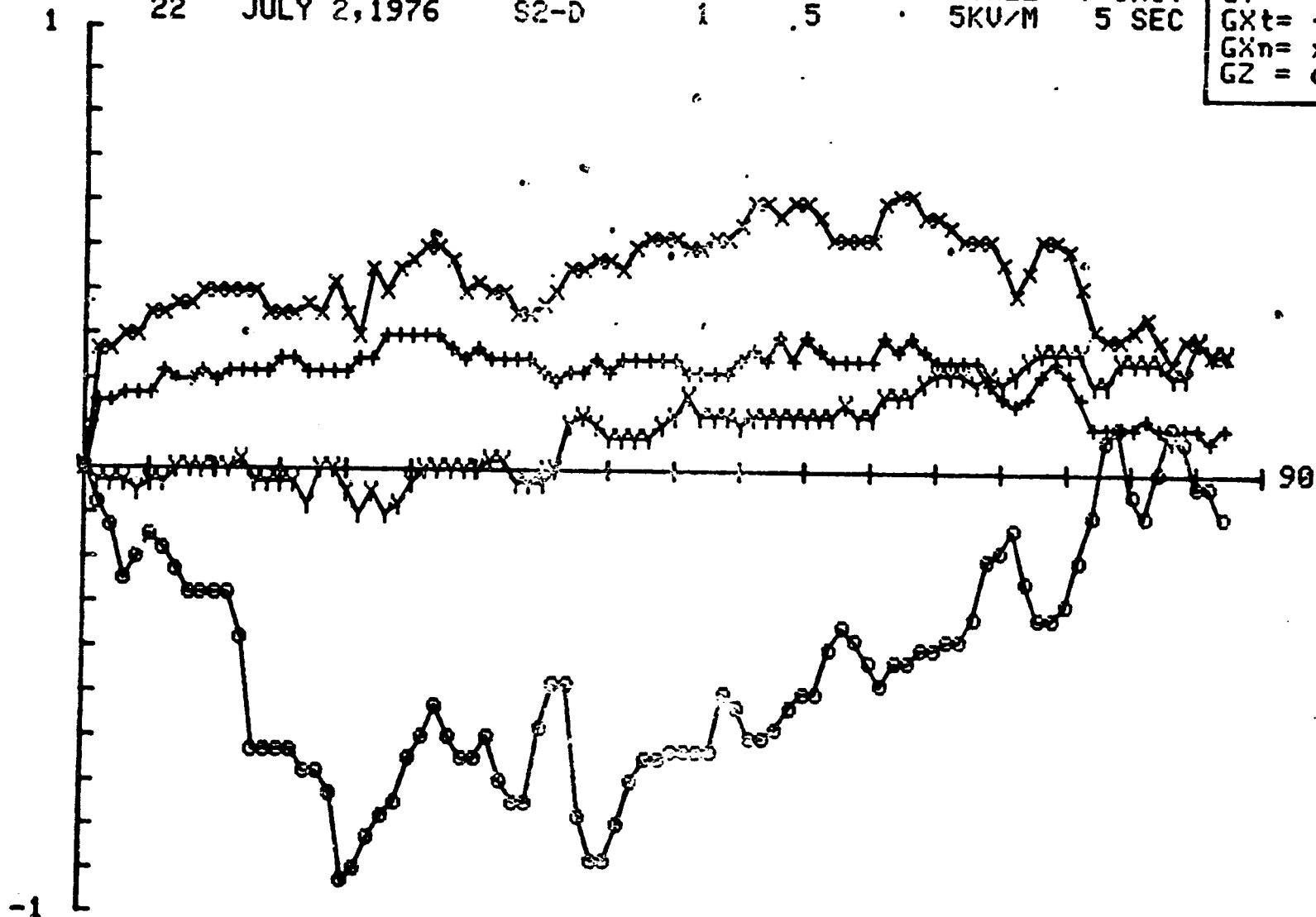
PASS  
.5

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

79

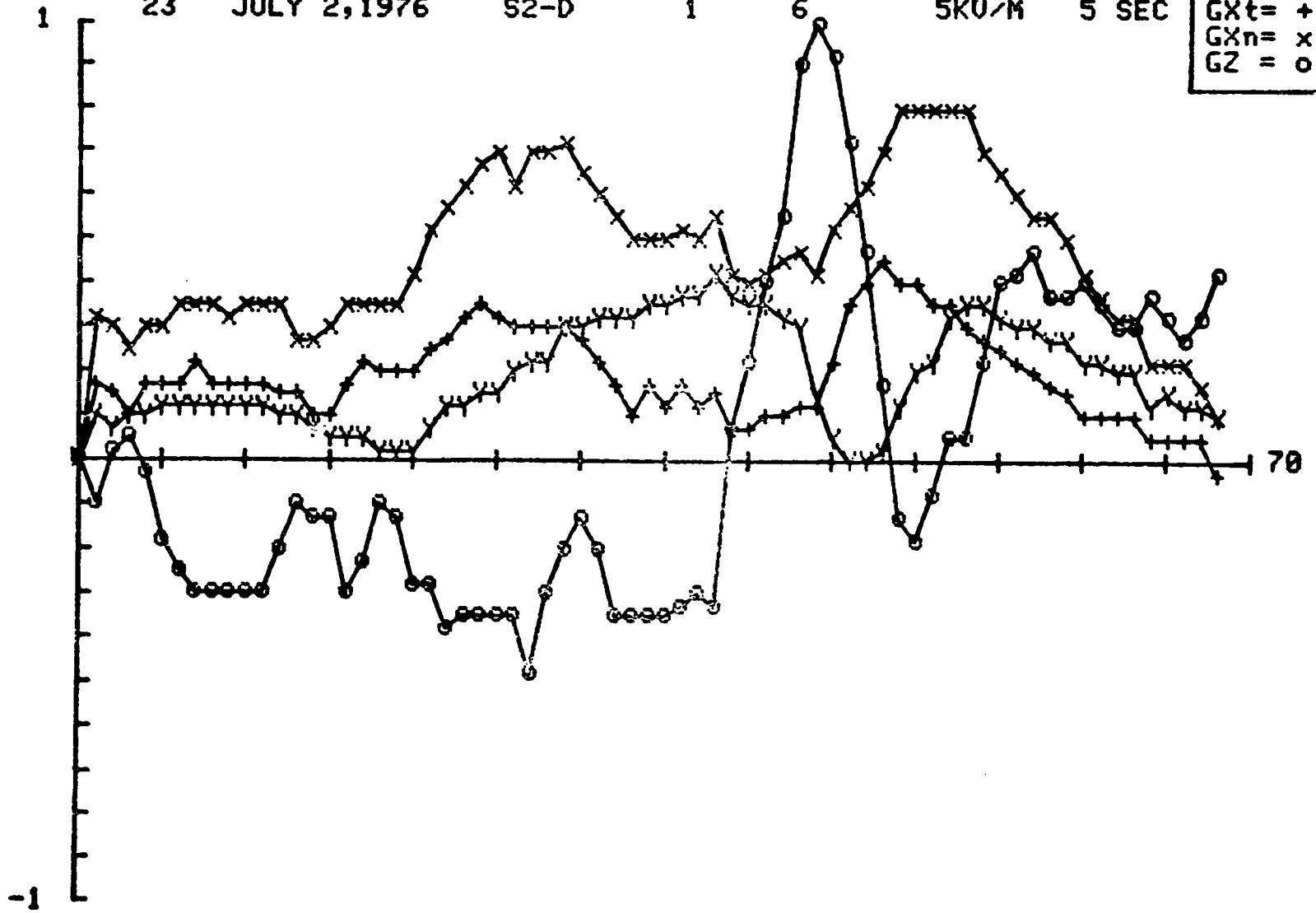




80

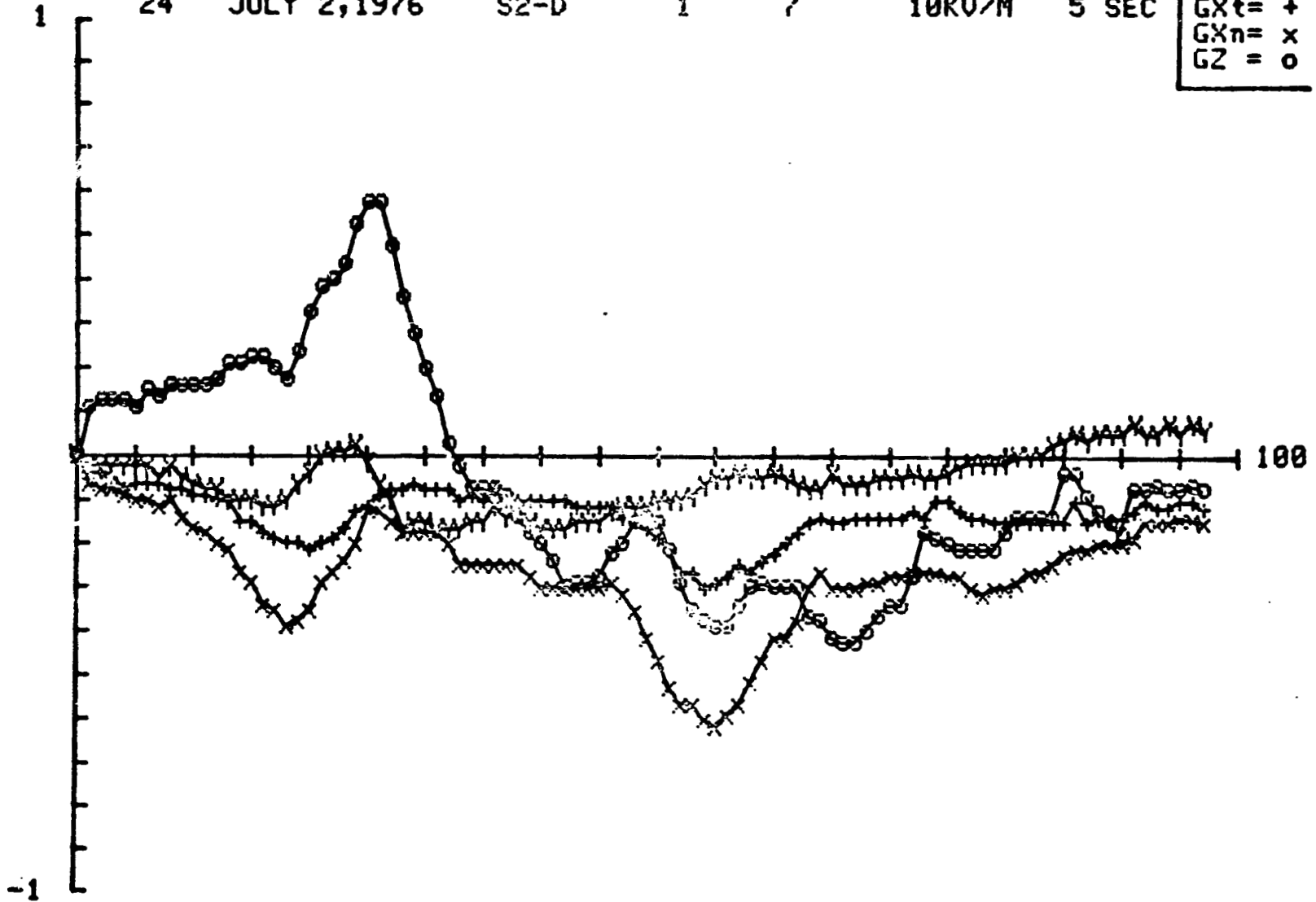
FILE 23      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 1      PASS 6      G-SCALE 5KU/M      Y-UNIT 5 SEC

GY = Y
Gxt = +
Gxn = x
GZ = o



FILE 24      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 1      PASS 7      G-SCALE 10KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



8 2

FILE  
25

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

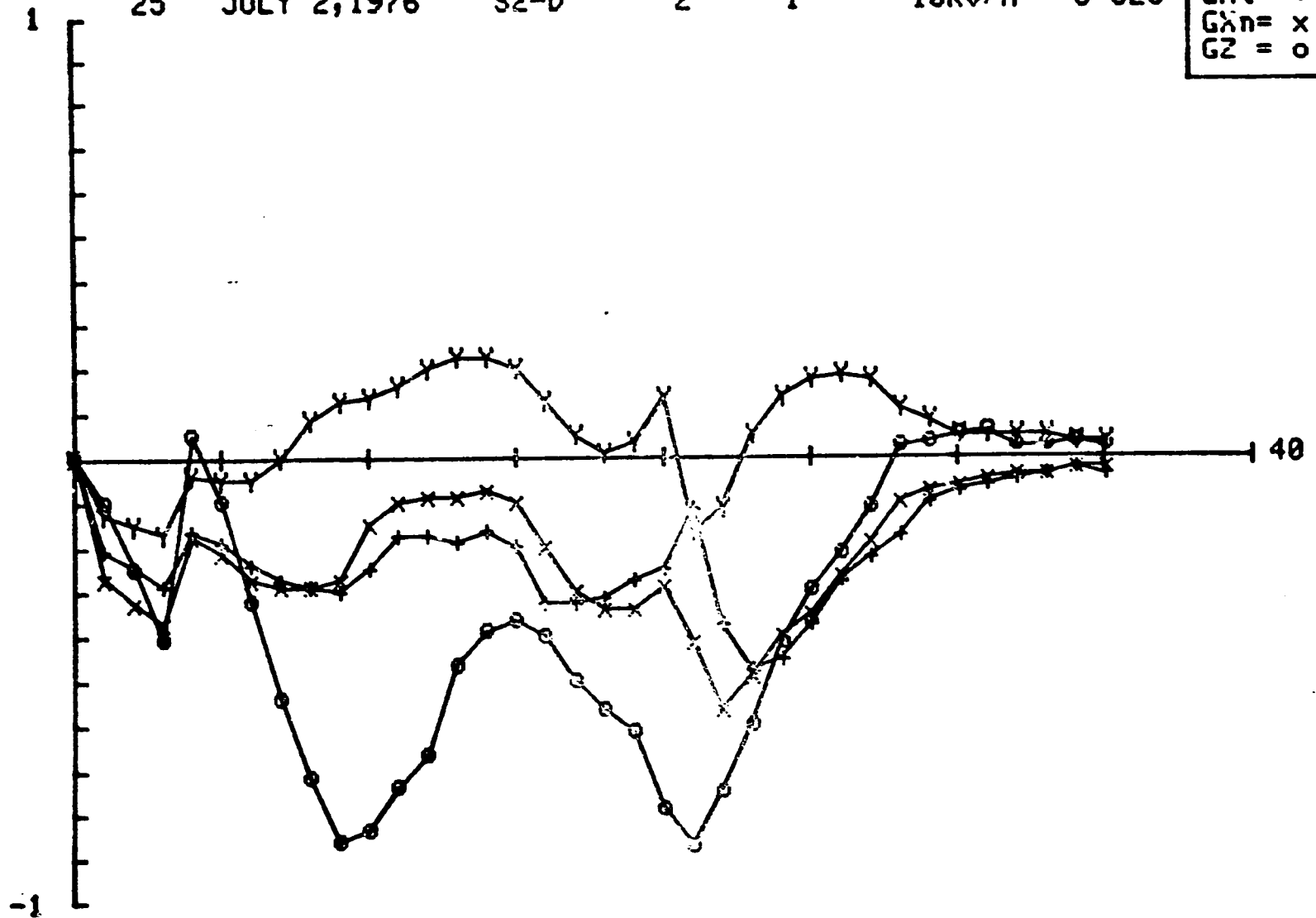
CLOUD  
2

PASS  
1

G-SCALE  
10KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE  
26

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
2

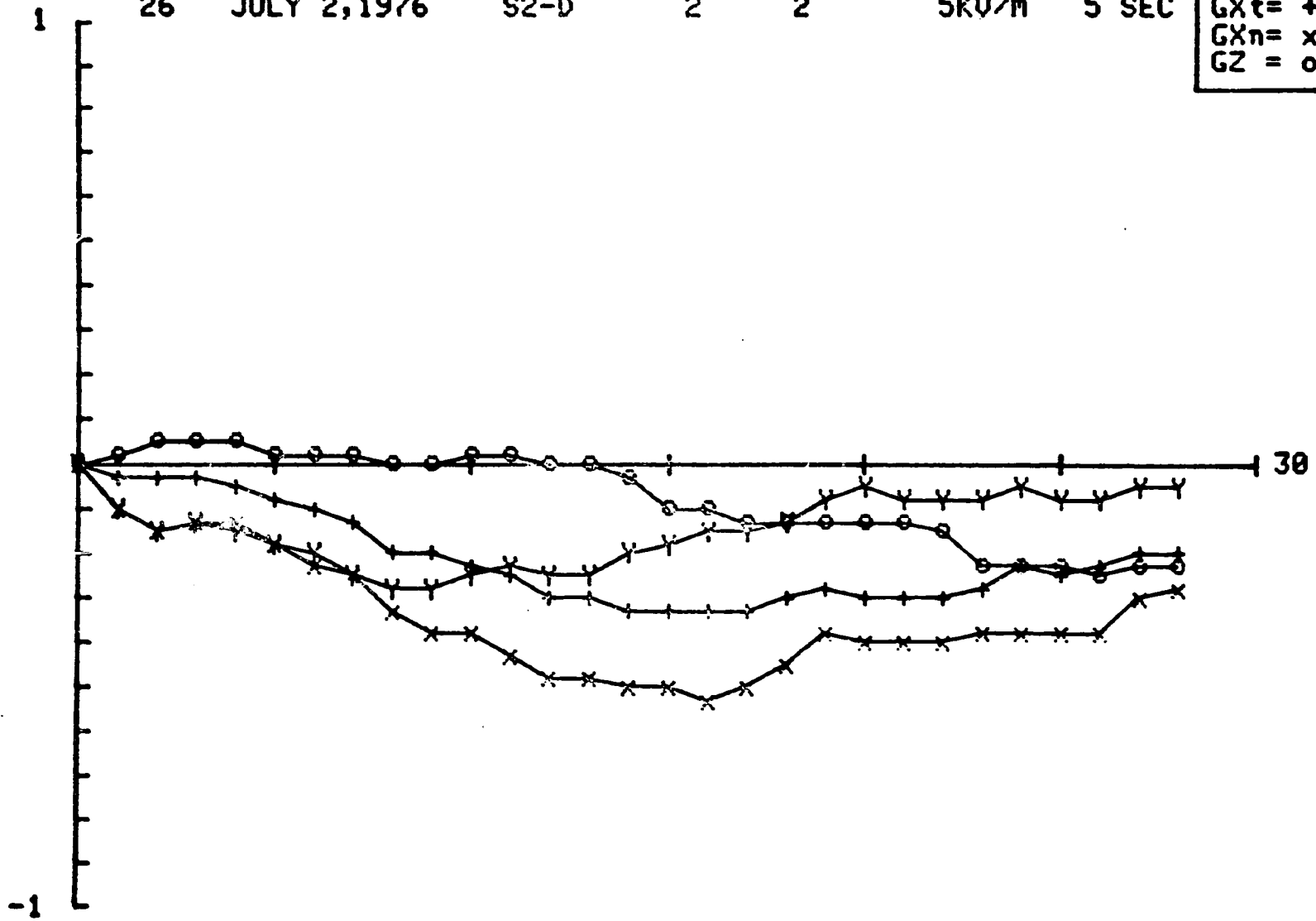
PASS  
2

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

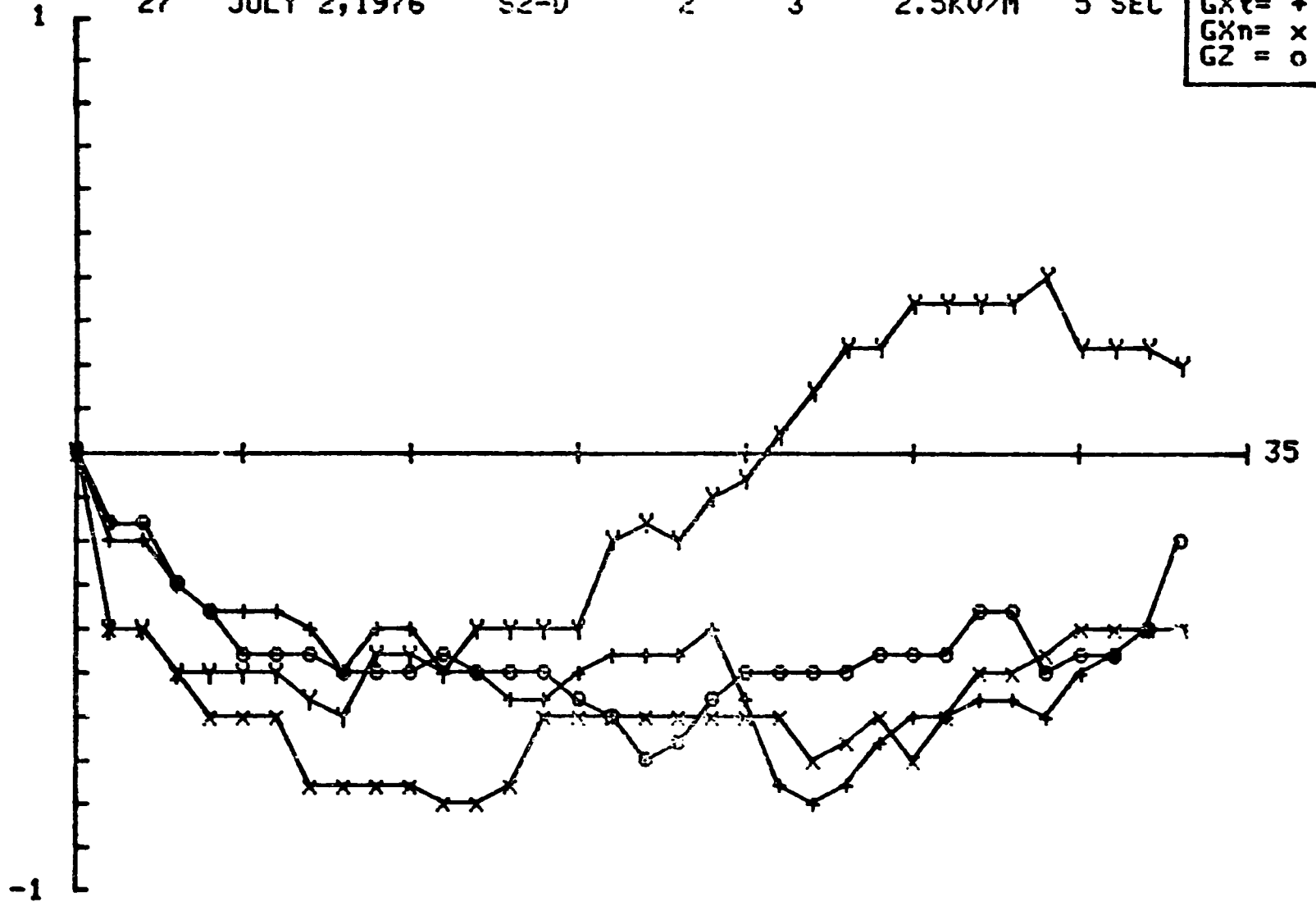
8 8



84

FILE 27      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 2      PASS 3      G-SCALE 2.5KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
28

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
2

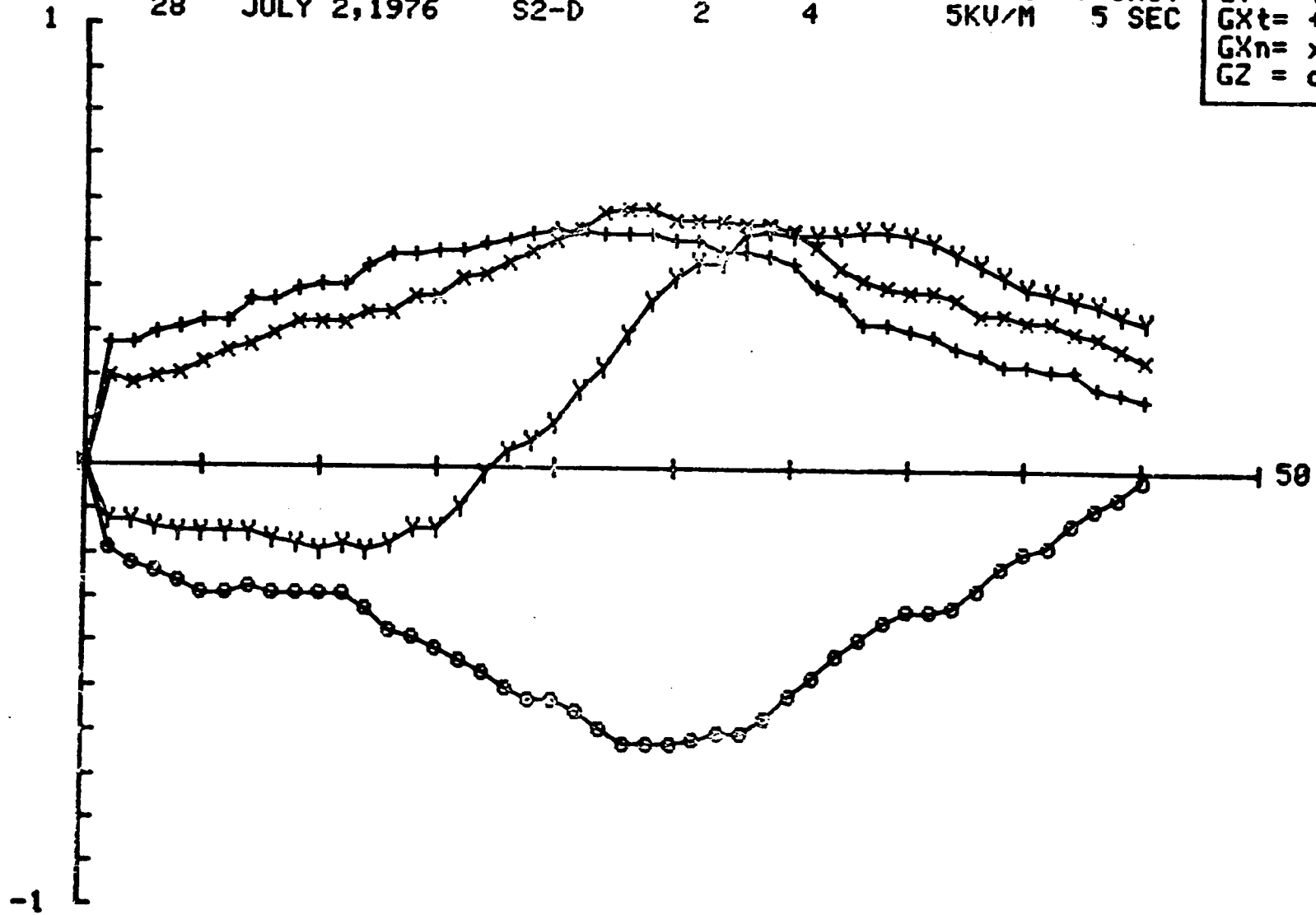
PASS  
4

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

8 5



86

FILE  
29

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

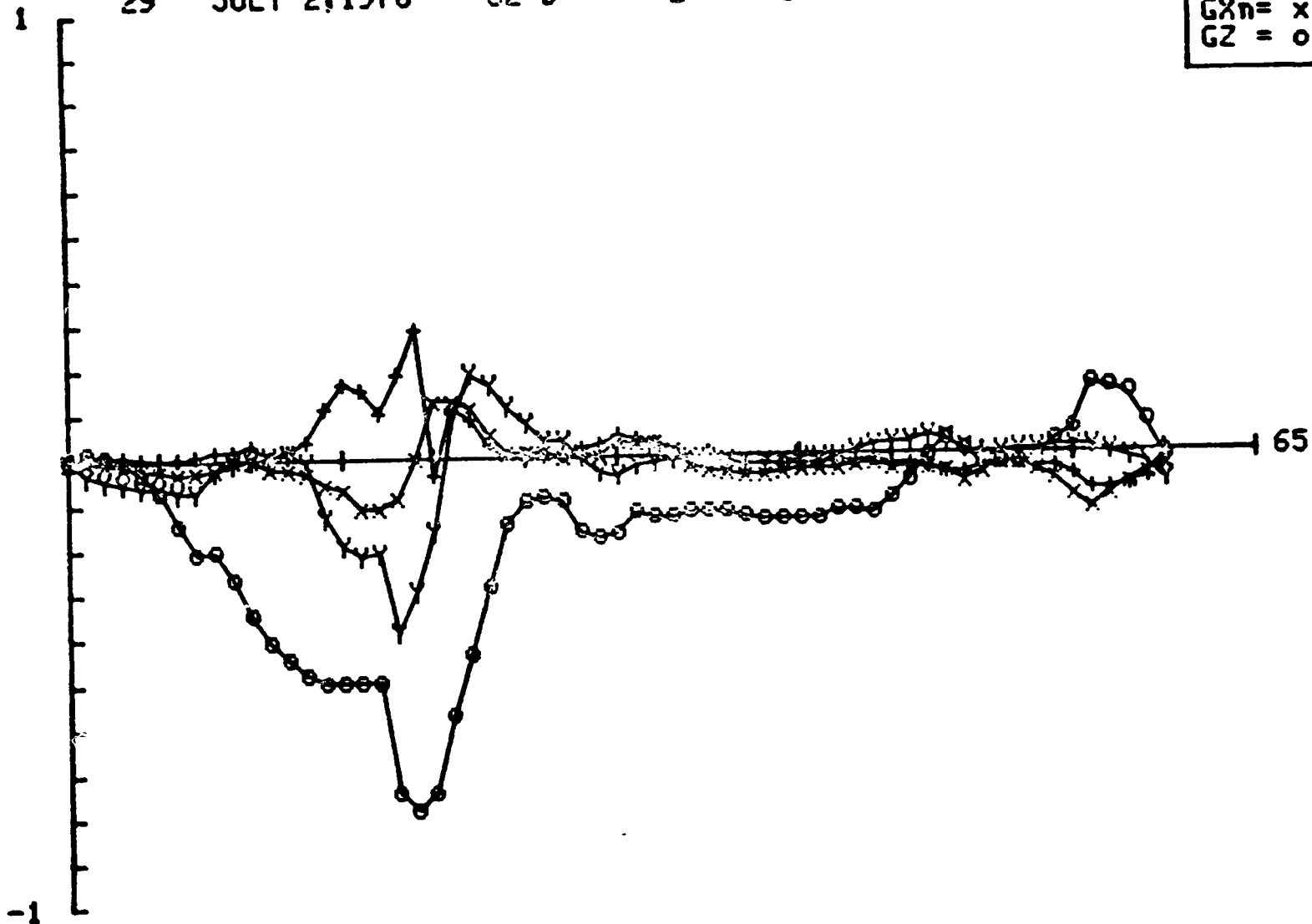
CLOUD  
2

PASS  
5

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



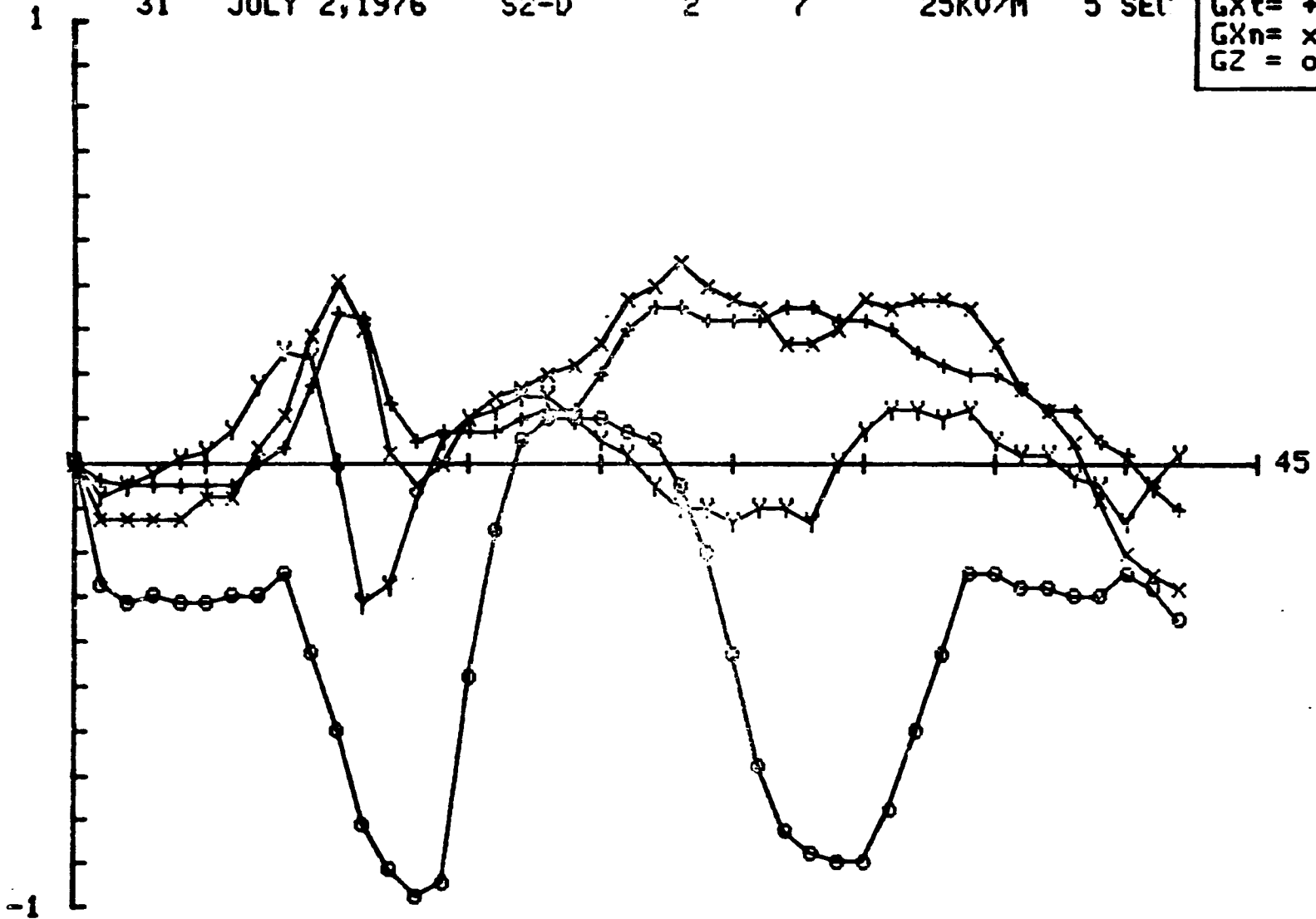




88

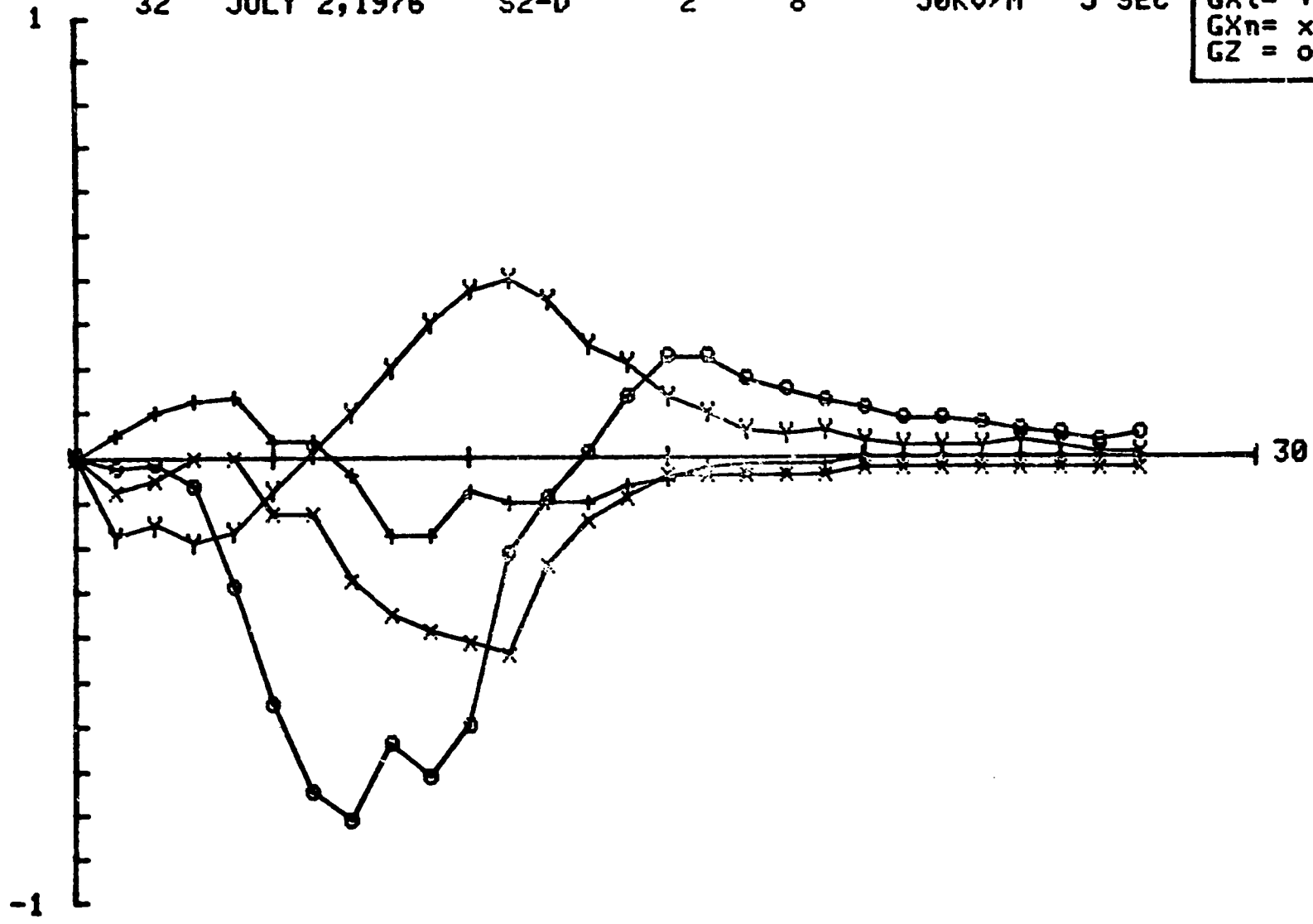
FILE 31    DATE JULY 2, 1976    AIRPLANE S2-D    CLOUD 2    PASS 7    G-SCALE 25KU/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 32    DATE JULY 2, 1976    AIRPLANE S2-D    CLOUD 2    PASS 8    G-SCALE 50KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



90

FILE  
33

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

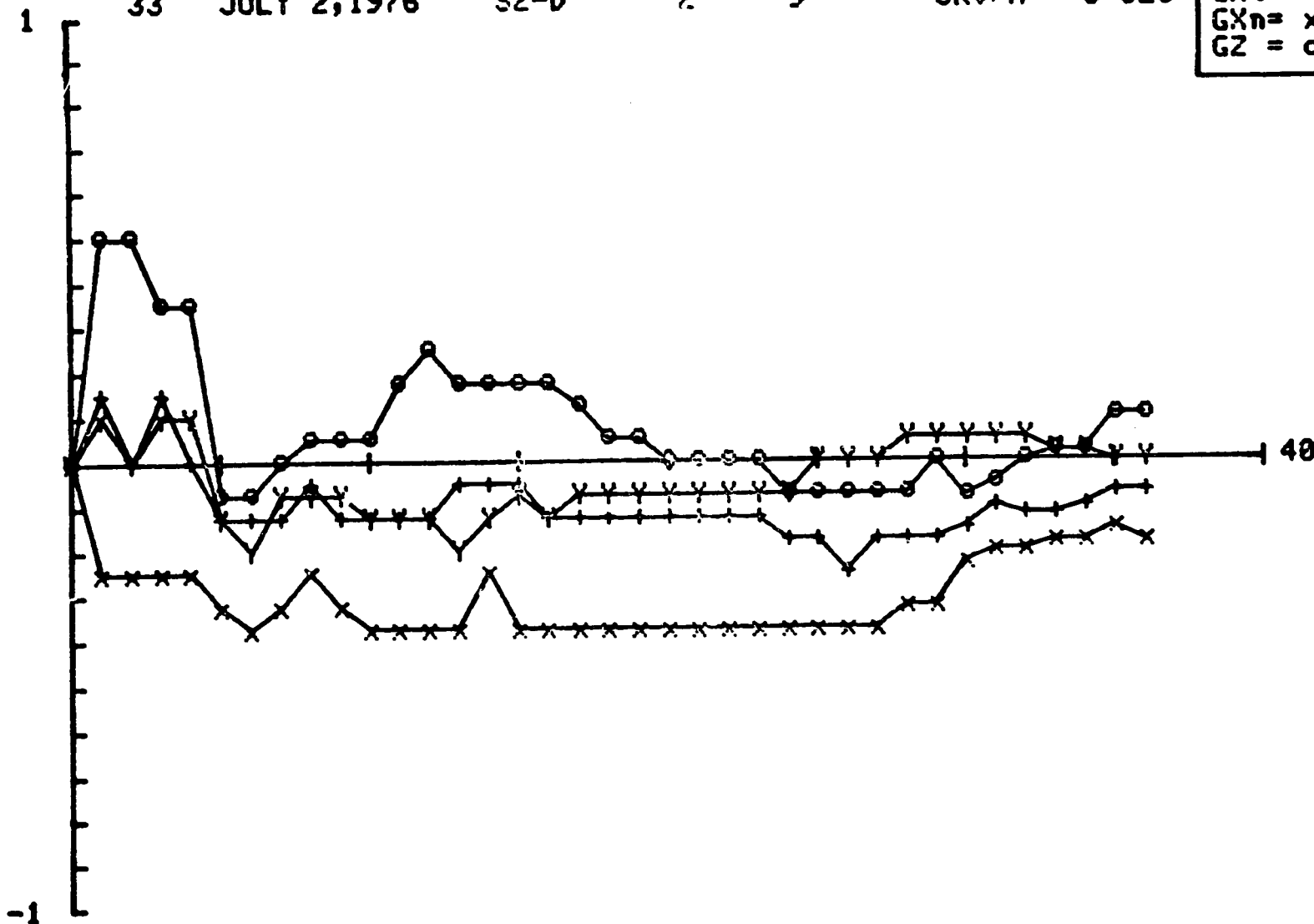
CLOUD  
2

PASS  
9

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
GXn	=	x
GZ	=	o



FILE  
34

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
2

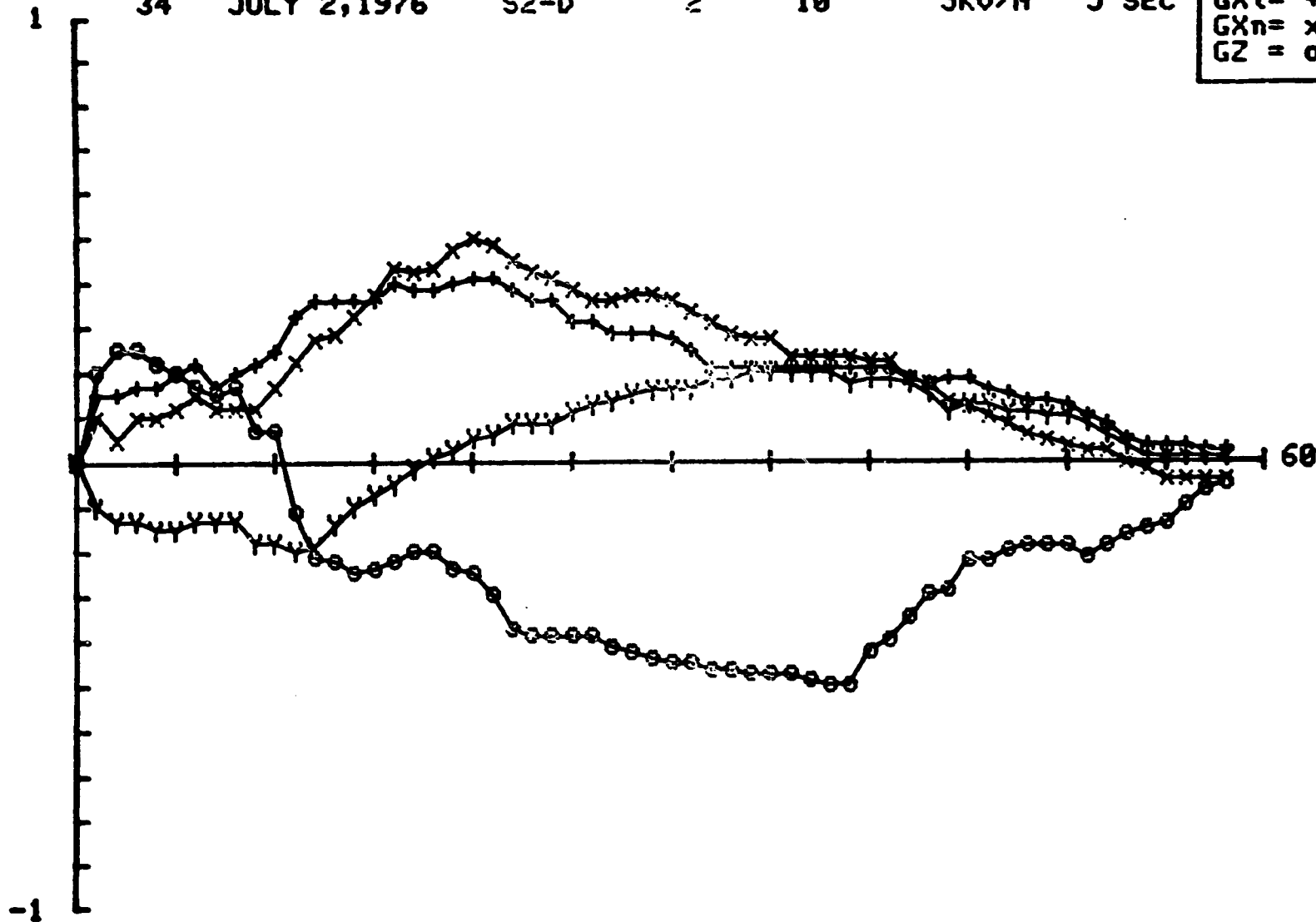
PASS  
10

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

91





FILE  
36

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
2

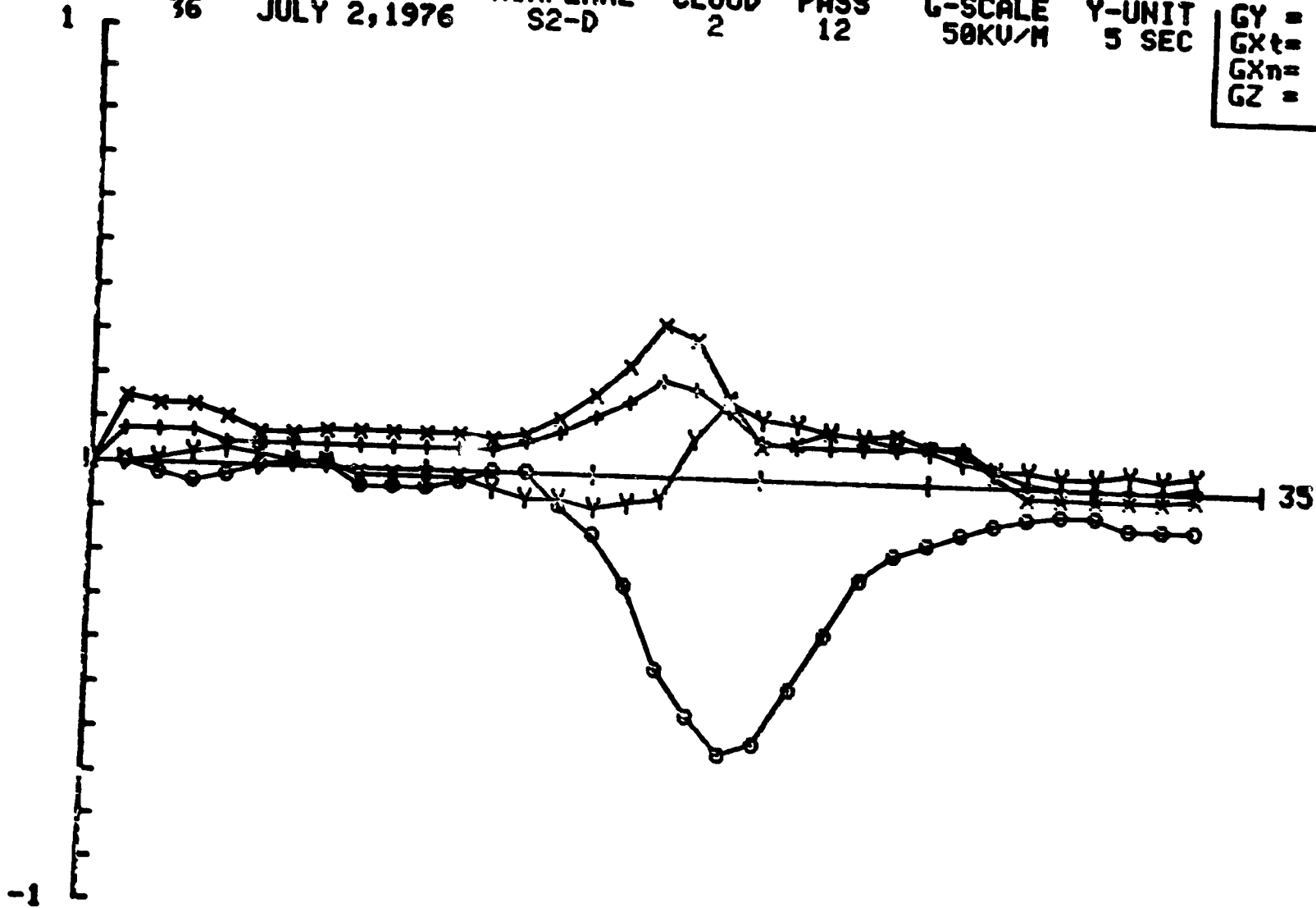
PASS  
12

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

93



94

FILE  
37

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

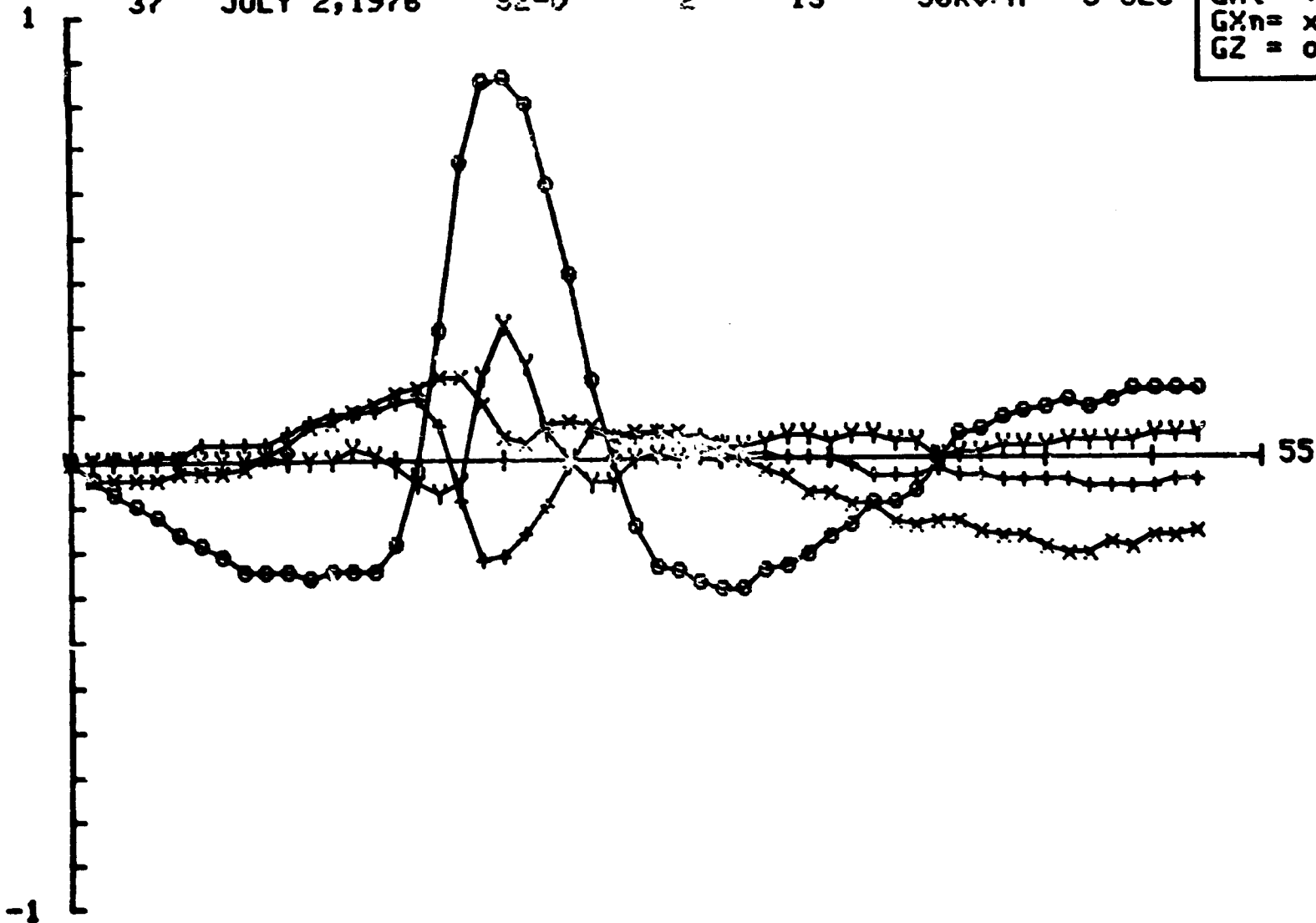
CLOUD  
2

PASS  
13

G-SCALE  
50KV/1

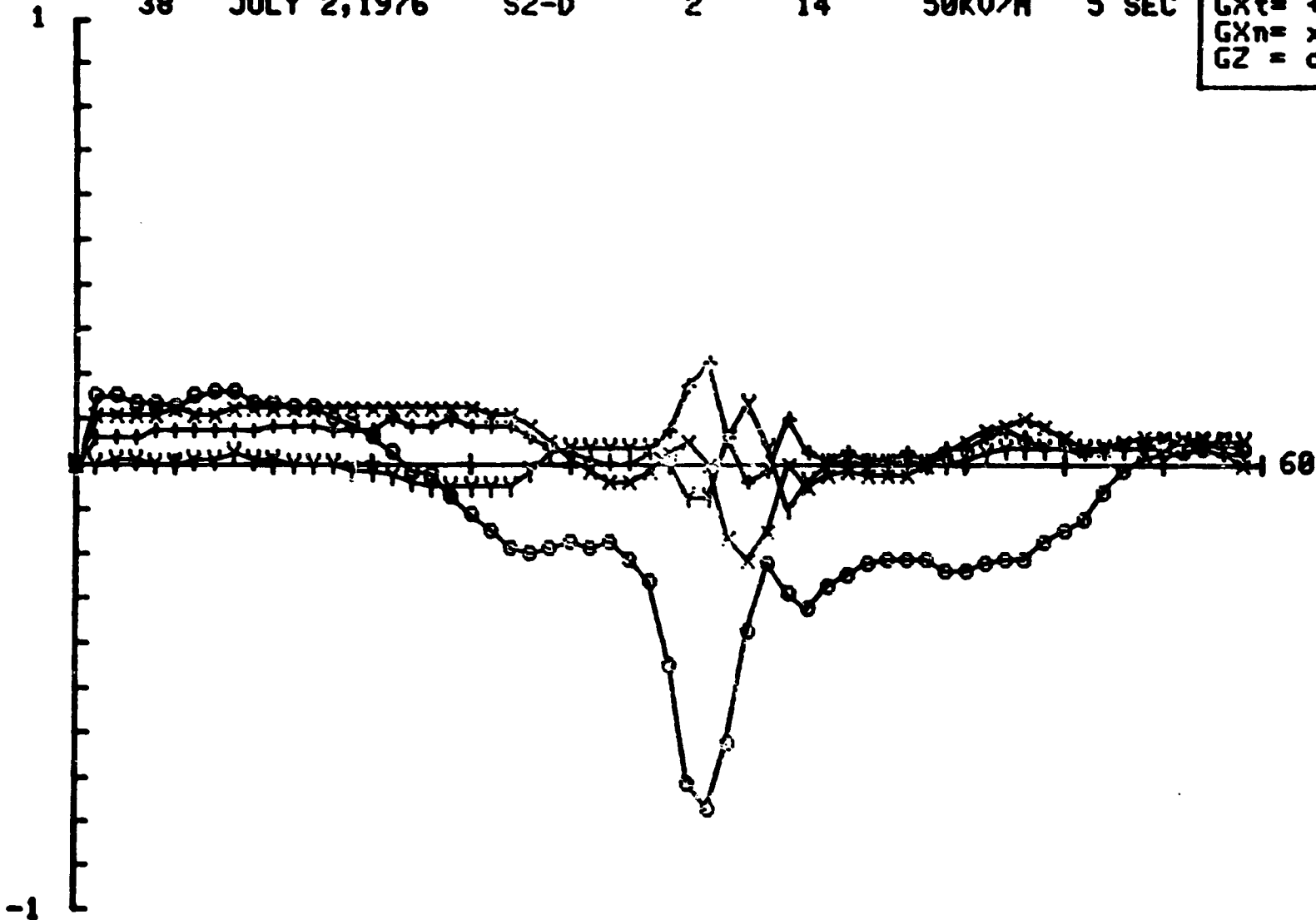
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 38      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 2      PASS 14      G-SCALE 50KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

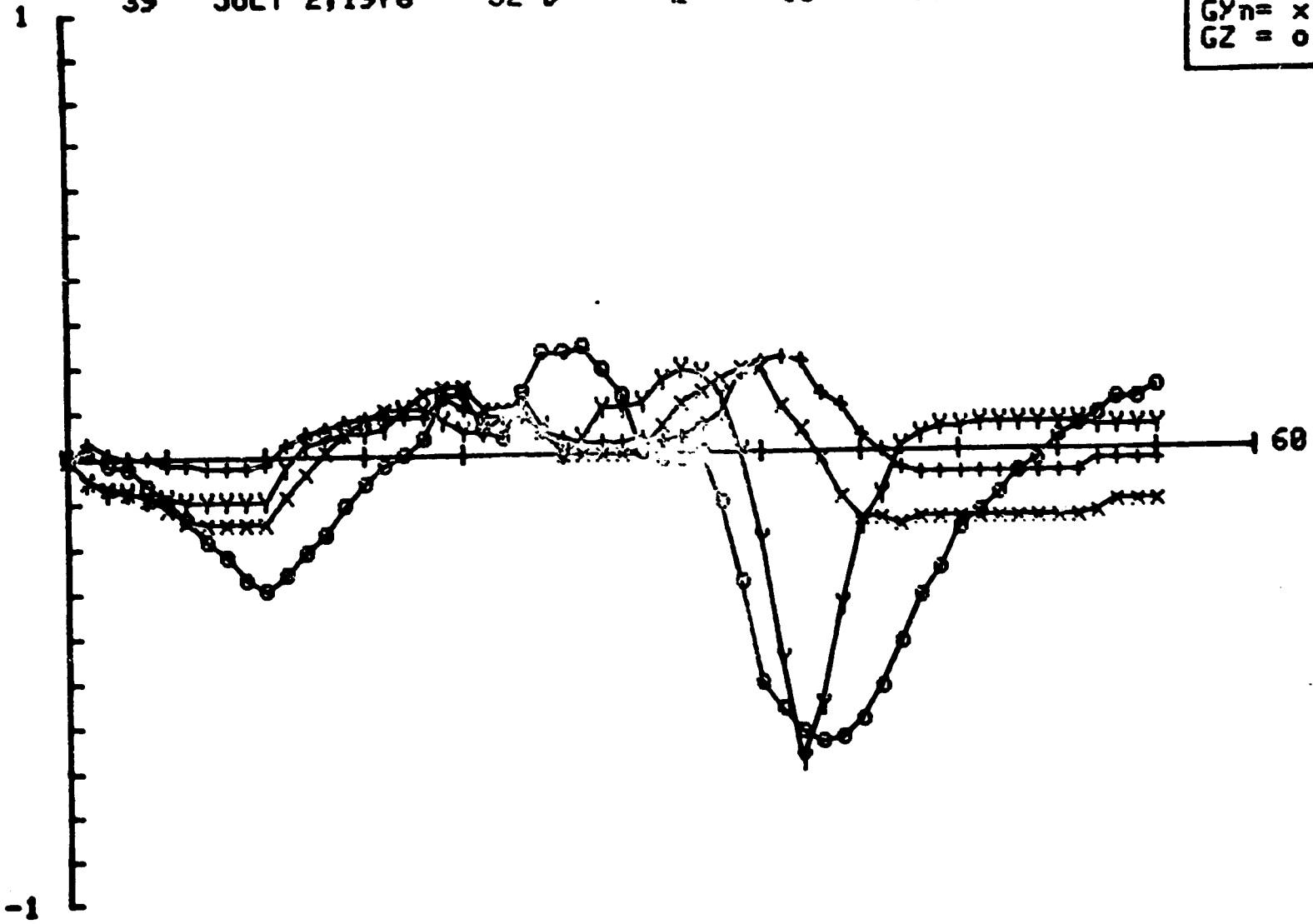




96

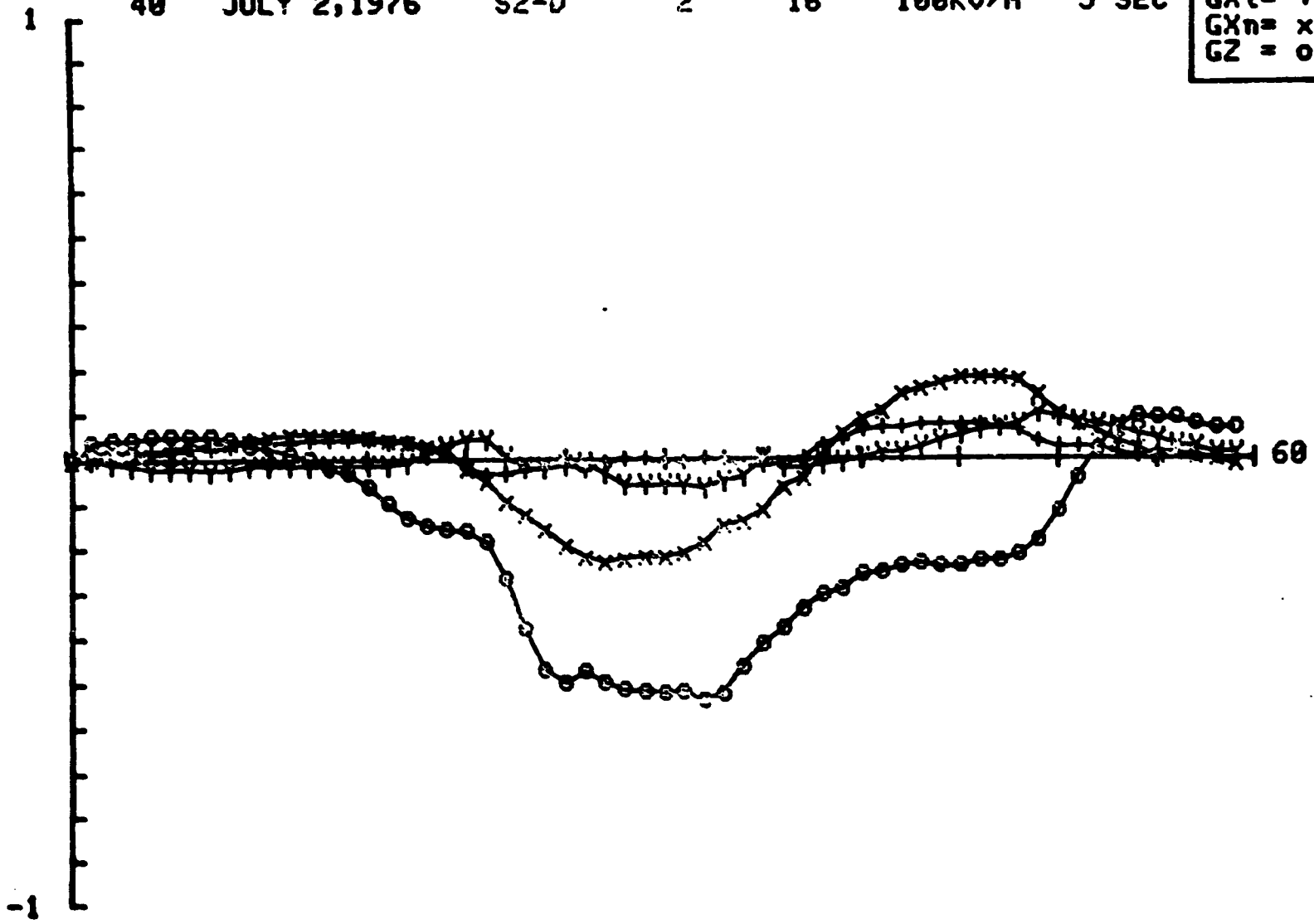
FILE 39    DATE JULY 2, 1976    AIRPLANE S2-D    CLOUD 2    PASS 15    G-SCALE 50KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gyn	=	x
GZ	=	o



FILE 40      DATE JULY 2, 1976      AIRPLANE S2-D      CLOUD 2      PASS 16      G-SCALE 100KV/M      Y-UNIT 5 SEC

GY = Y
GXt = +
GXn = x
GZ = o



98

FILE  
41

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

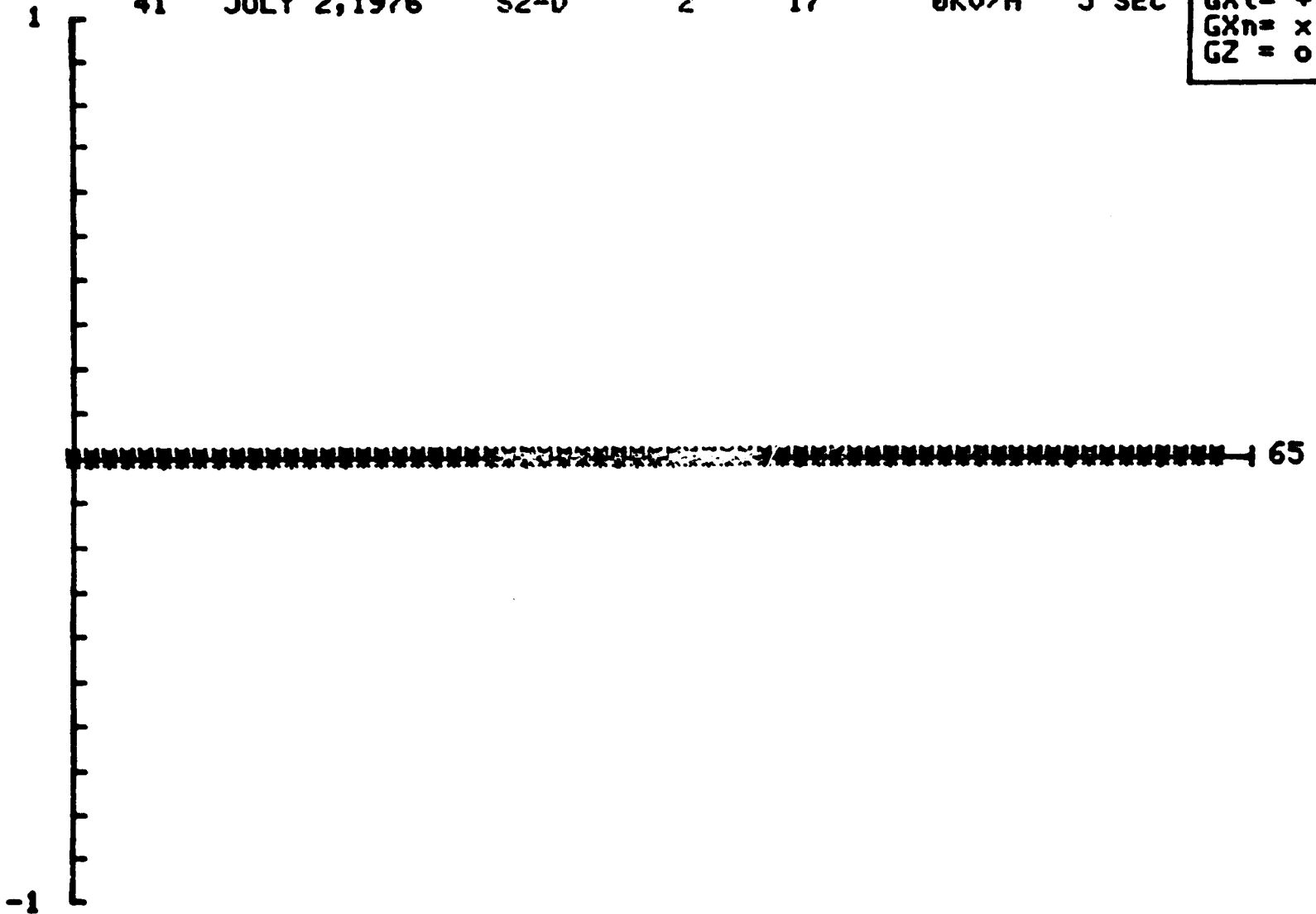
CLOUD  
2

PASS  
17

G-SCALE  
0KV/M

Y-UNIT  
5 SEC

GY = Y
GXt = +
GXn = x
GZ = 0



FILE  
42

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
2

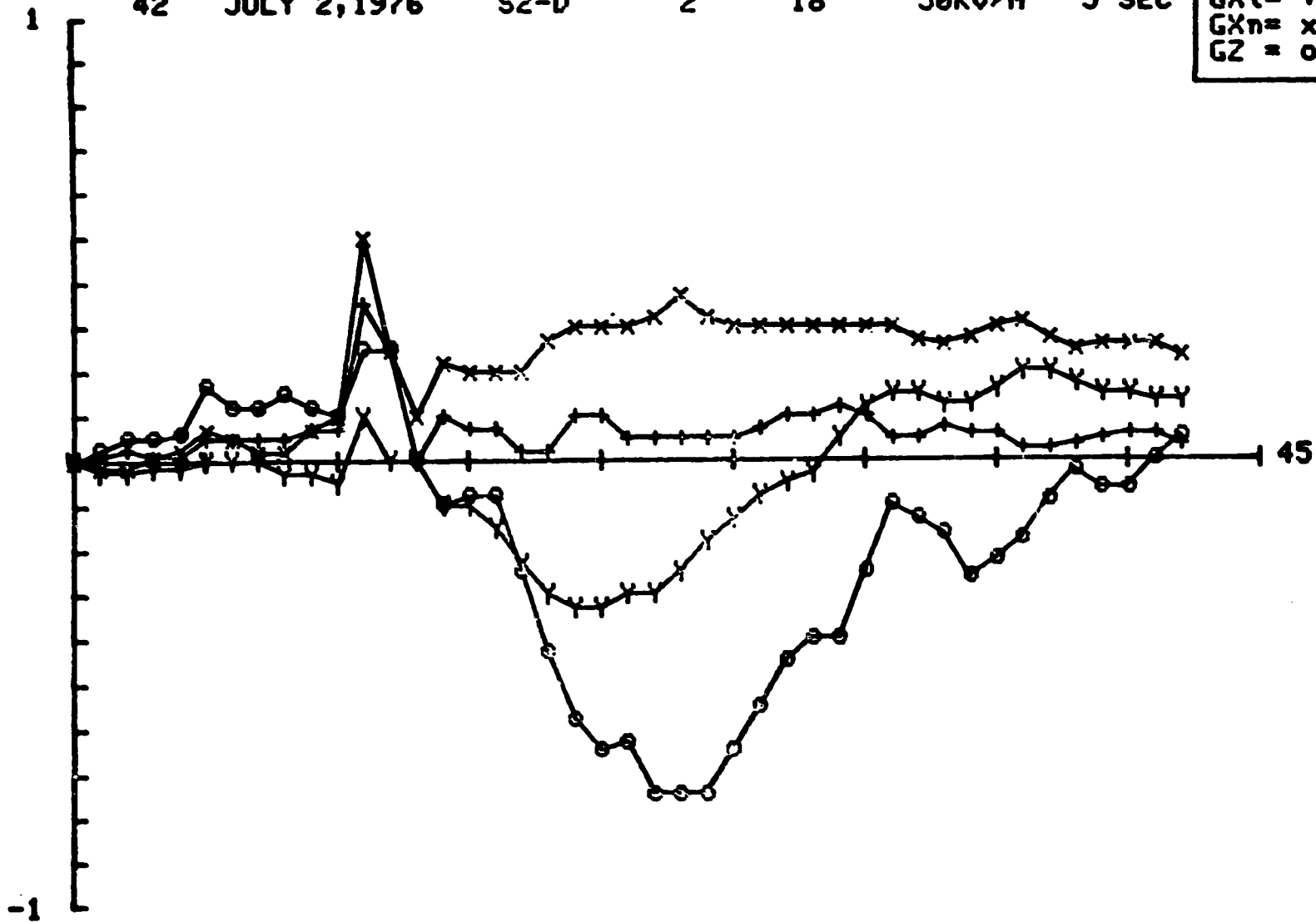
PASS  
18

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

99



100

FILE  
43

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

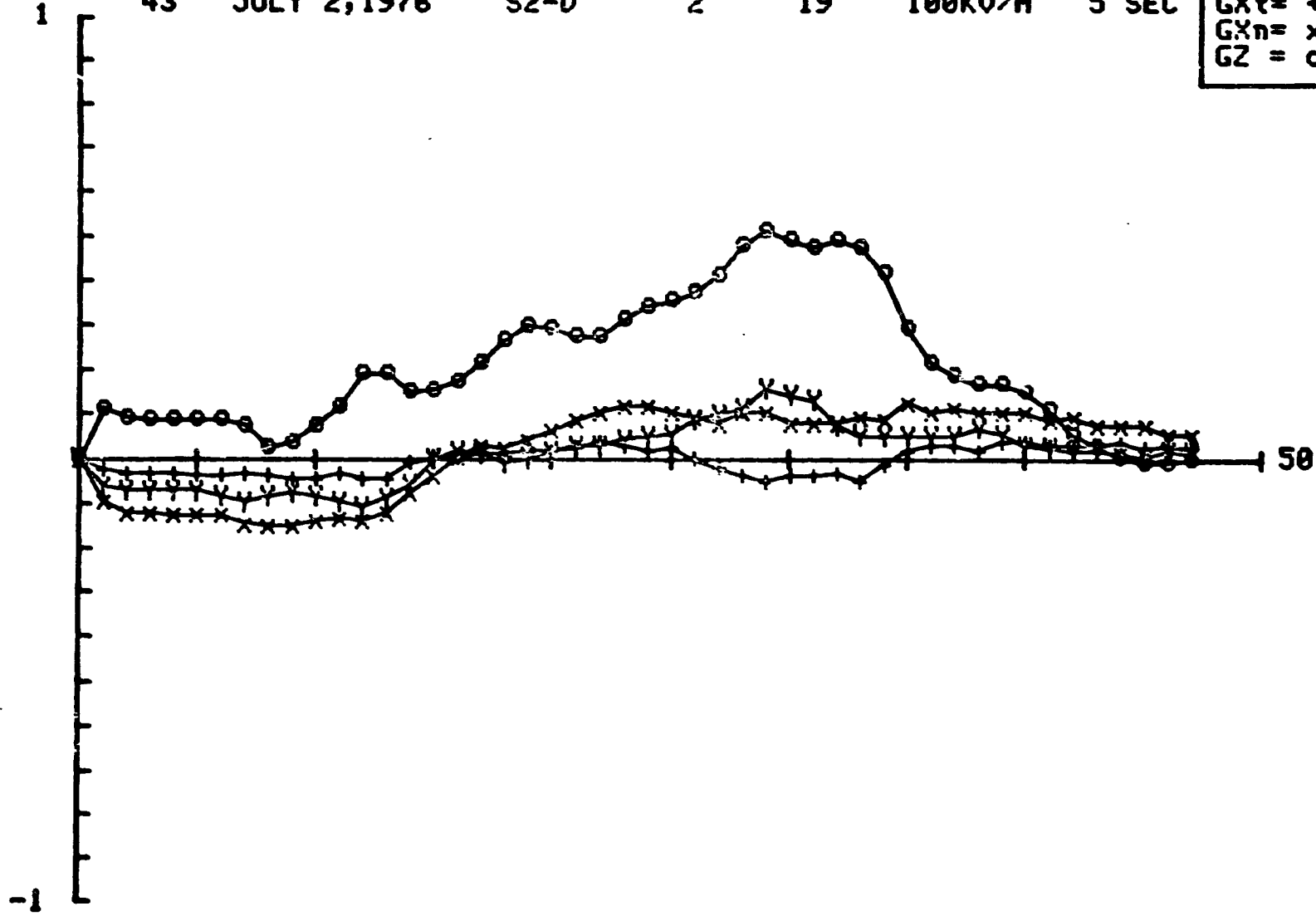
CLOUD  
2

PASS  
19

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
44

DATE  
JULY 2, 1976

AIRPLANE  
S2-D

CLOUD  
2

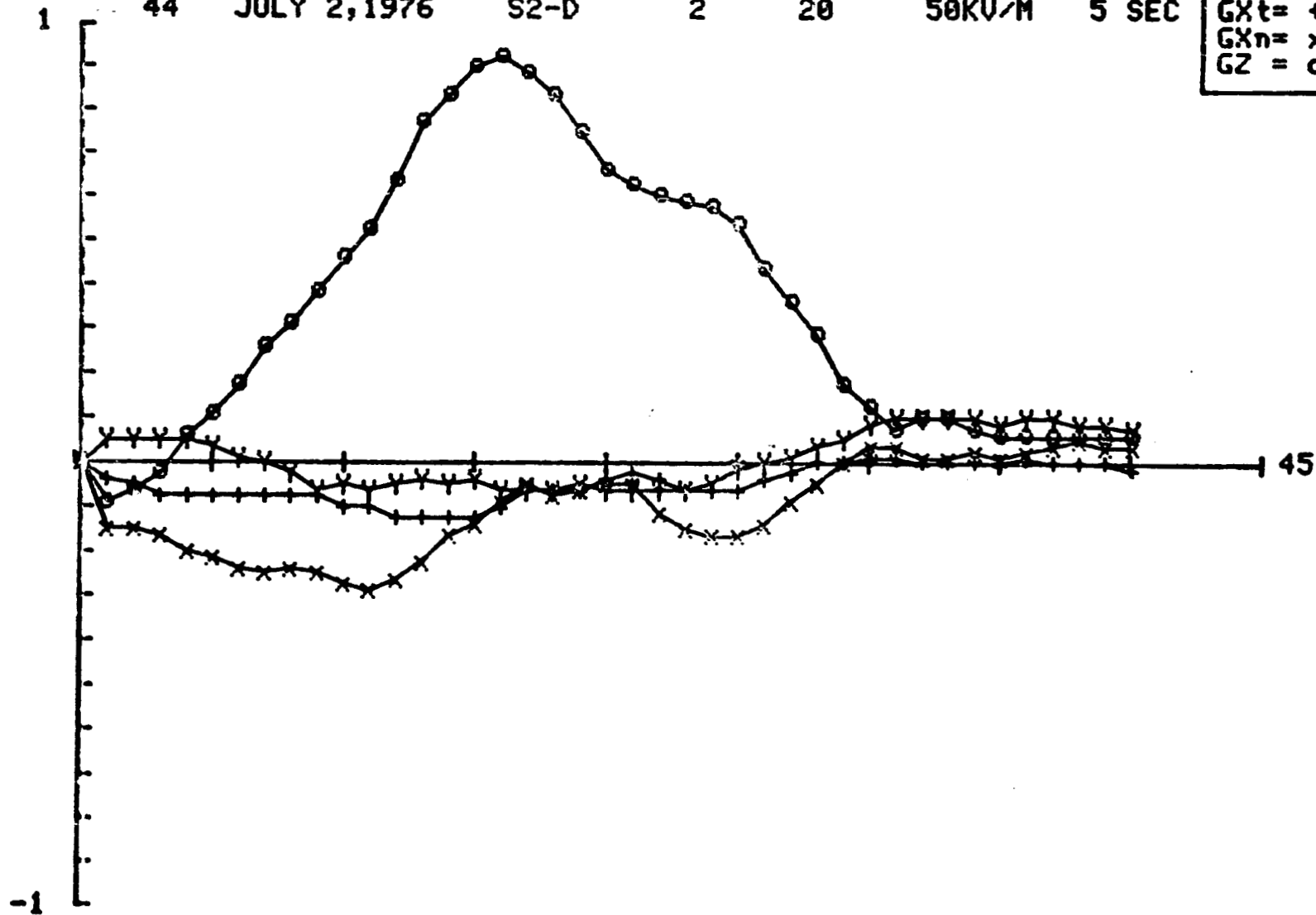
PASS  
20

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

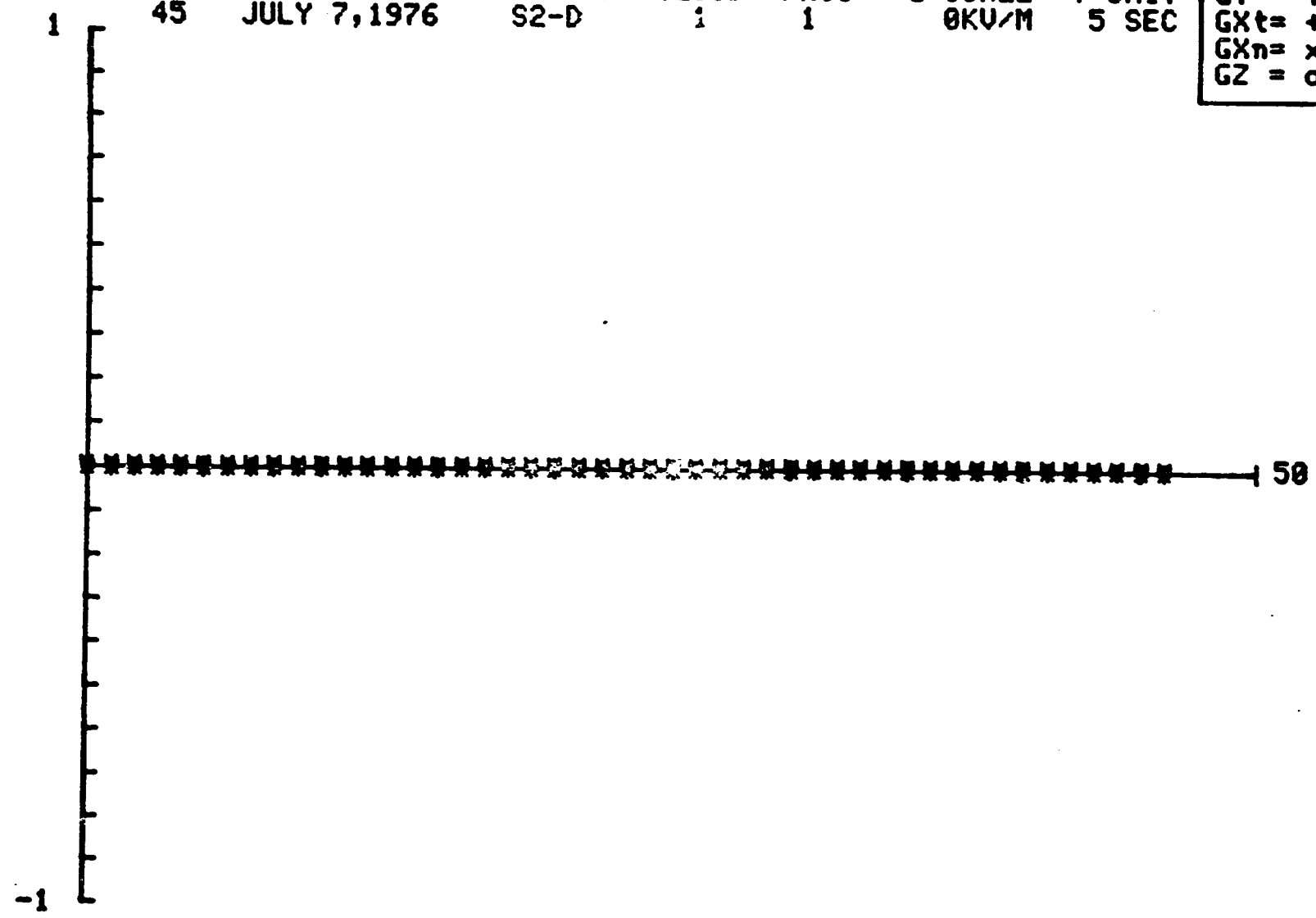
101



102

FILE 45      DATE JULY 7, 1976      AIRPLANE S2-D      CLOUD 1      PASS 1      G-SCALE 0KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
46

DATE  
JULY 7, 1976

AIRPLANE  
S2-D

CLOUD  
1

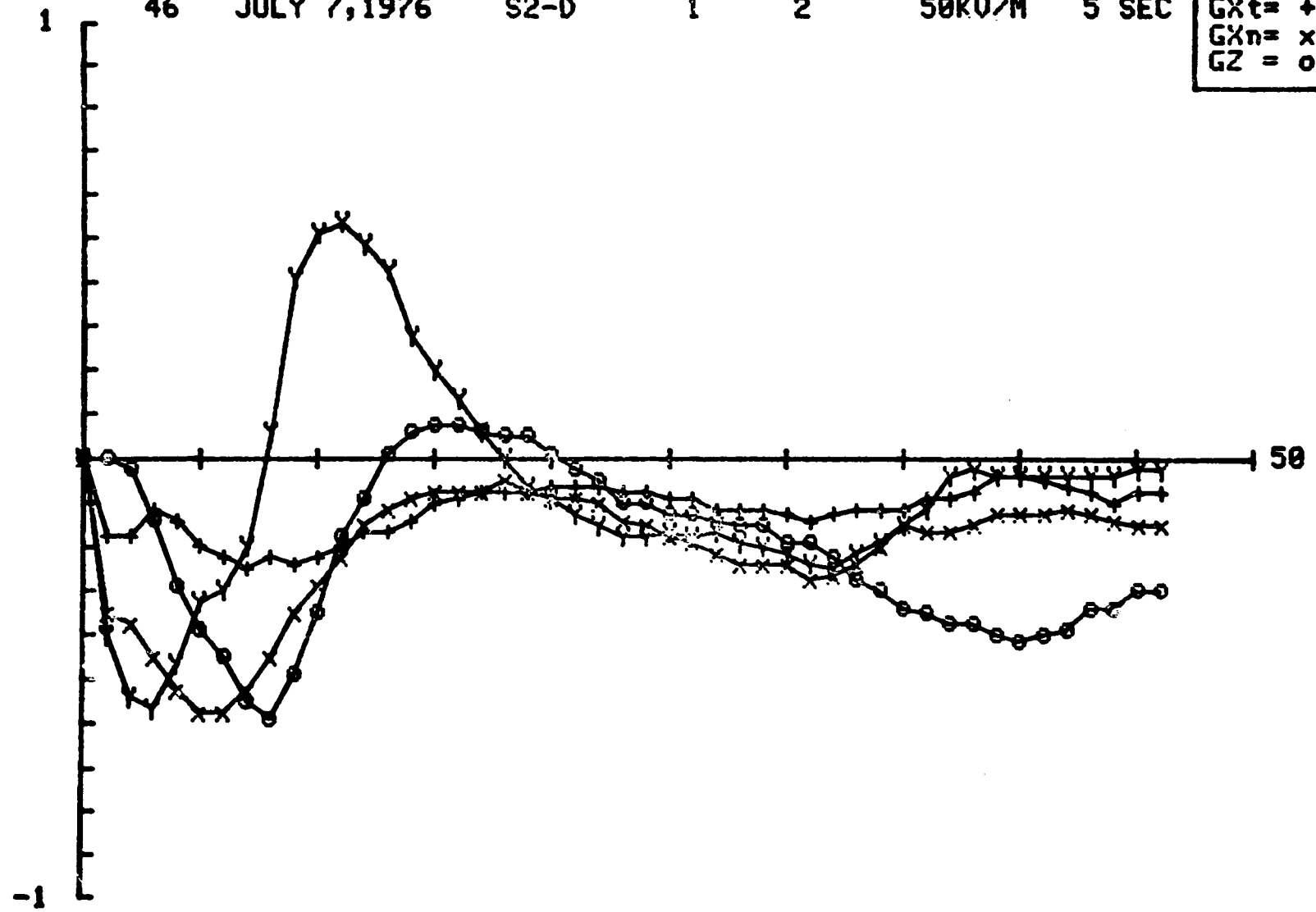
PASS  
2

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY = y  
GXt = +  
GXn = x  
GZ = o

103

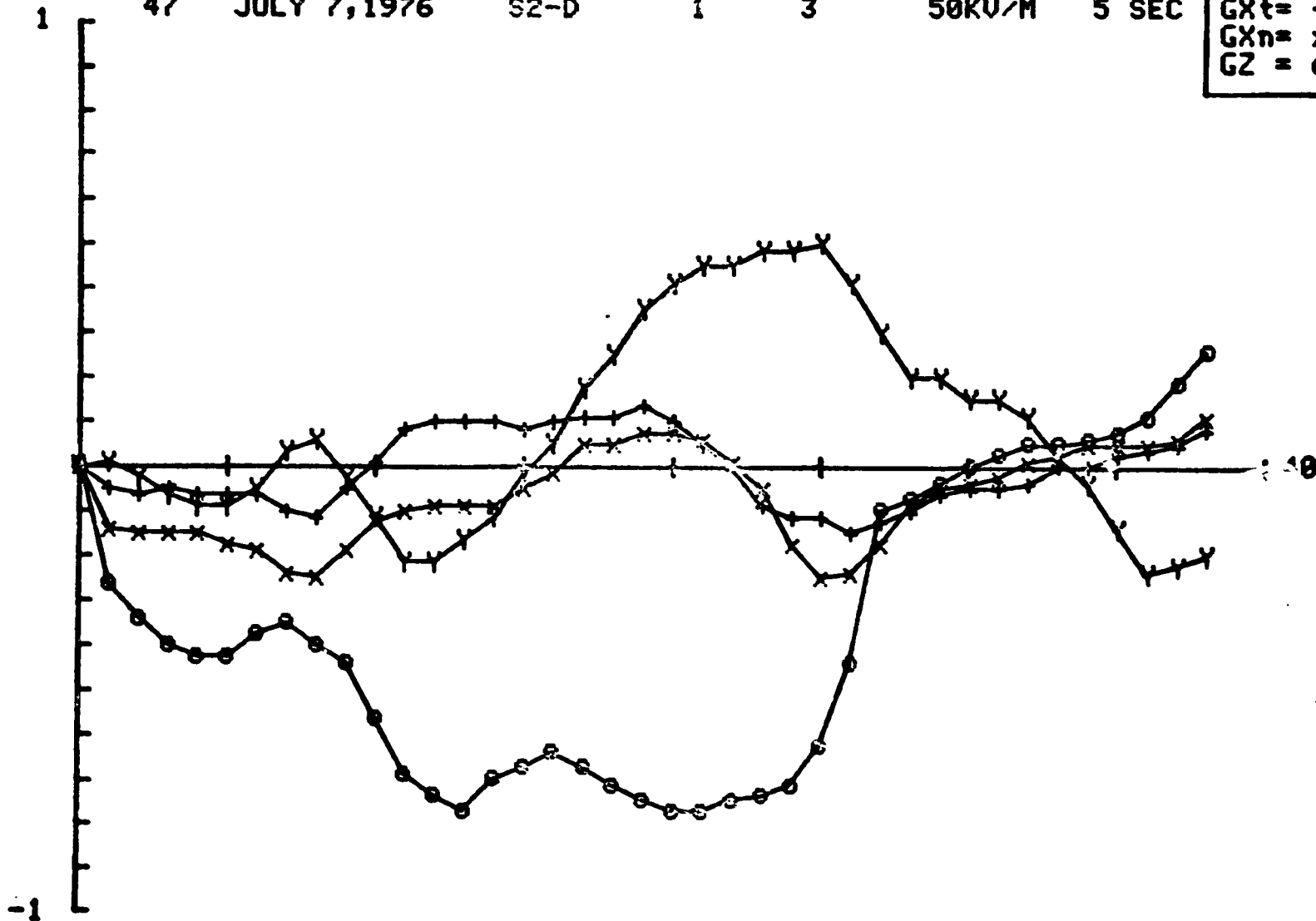




104

FILE 47    DATE JULY 7, 1976    AIRPLANE S2-D    CLOUD 1    PASS 3    G-SCALE 50KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
48

DATE  
JULY 7, 1976

AIRPLANE  
S2-D

CLOUD  
1

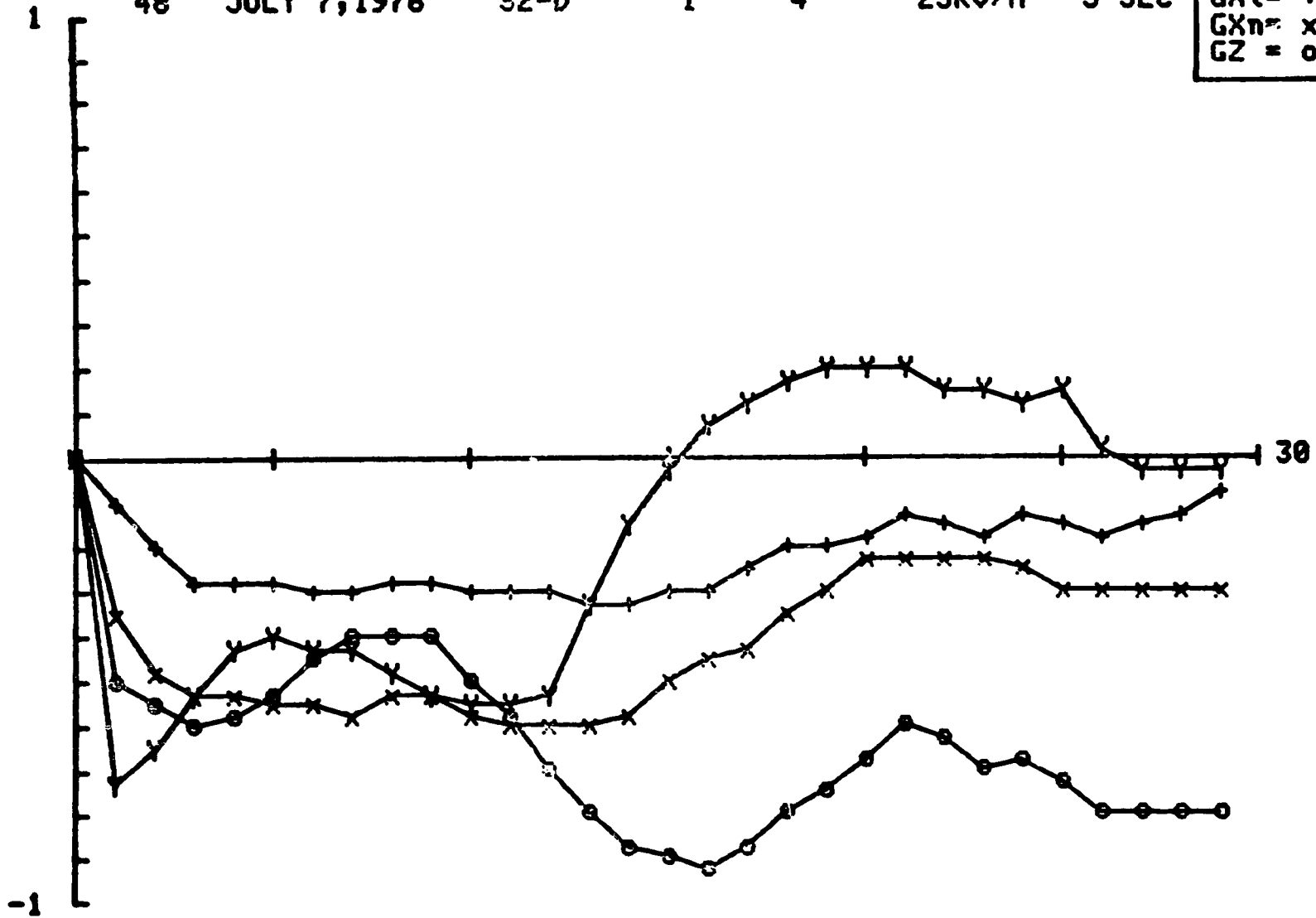
PASS  
4

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

105



106

FILE  
49

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

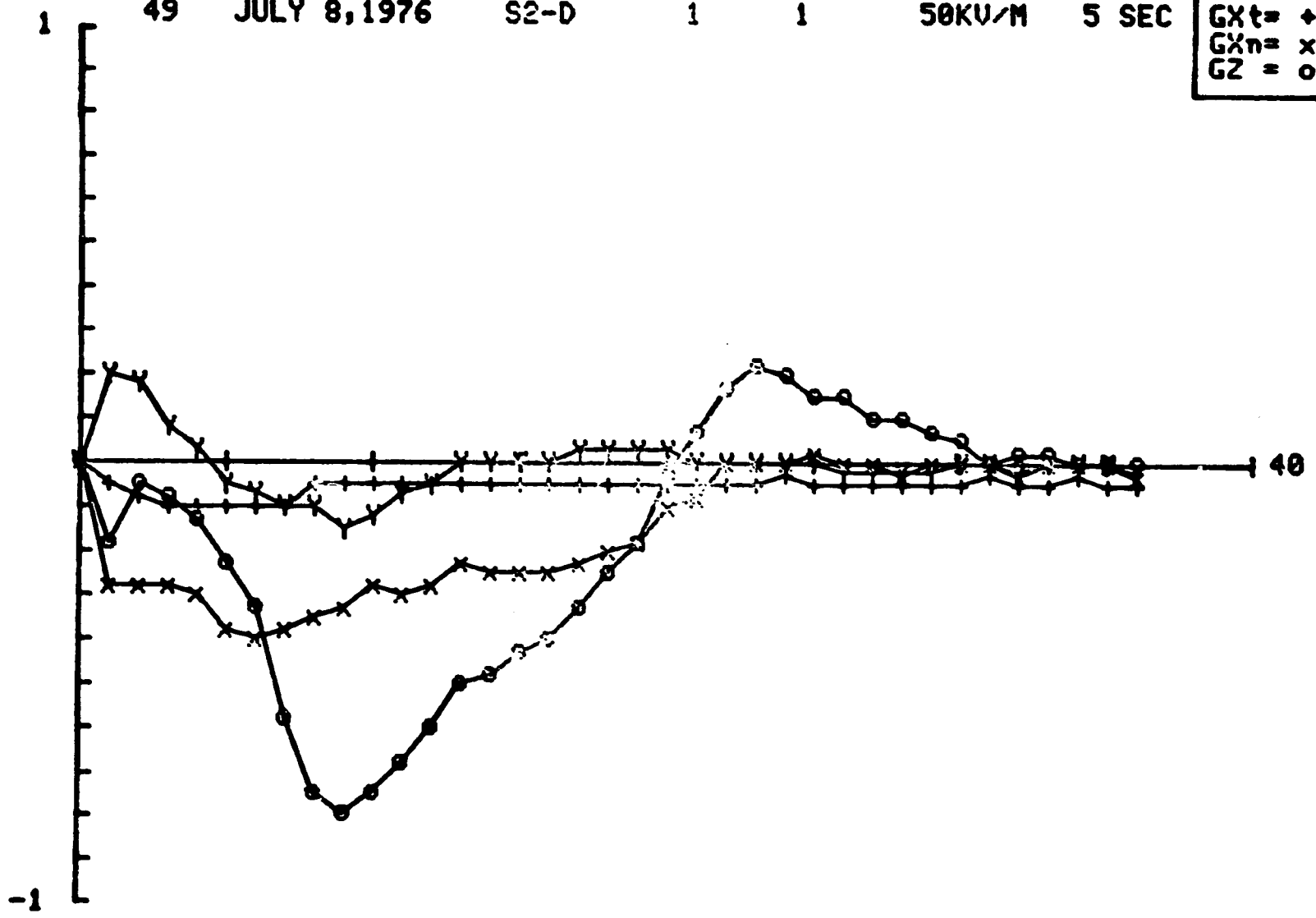
CLOUD  
1

PASS  
1

G-SCALE  
50KV/M

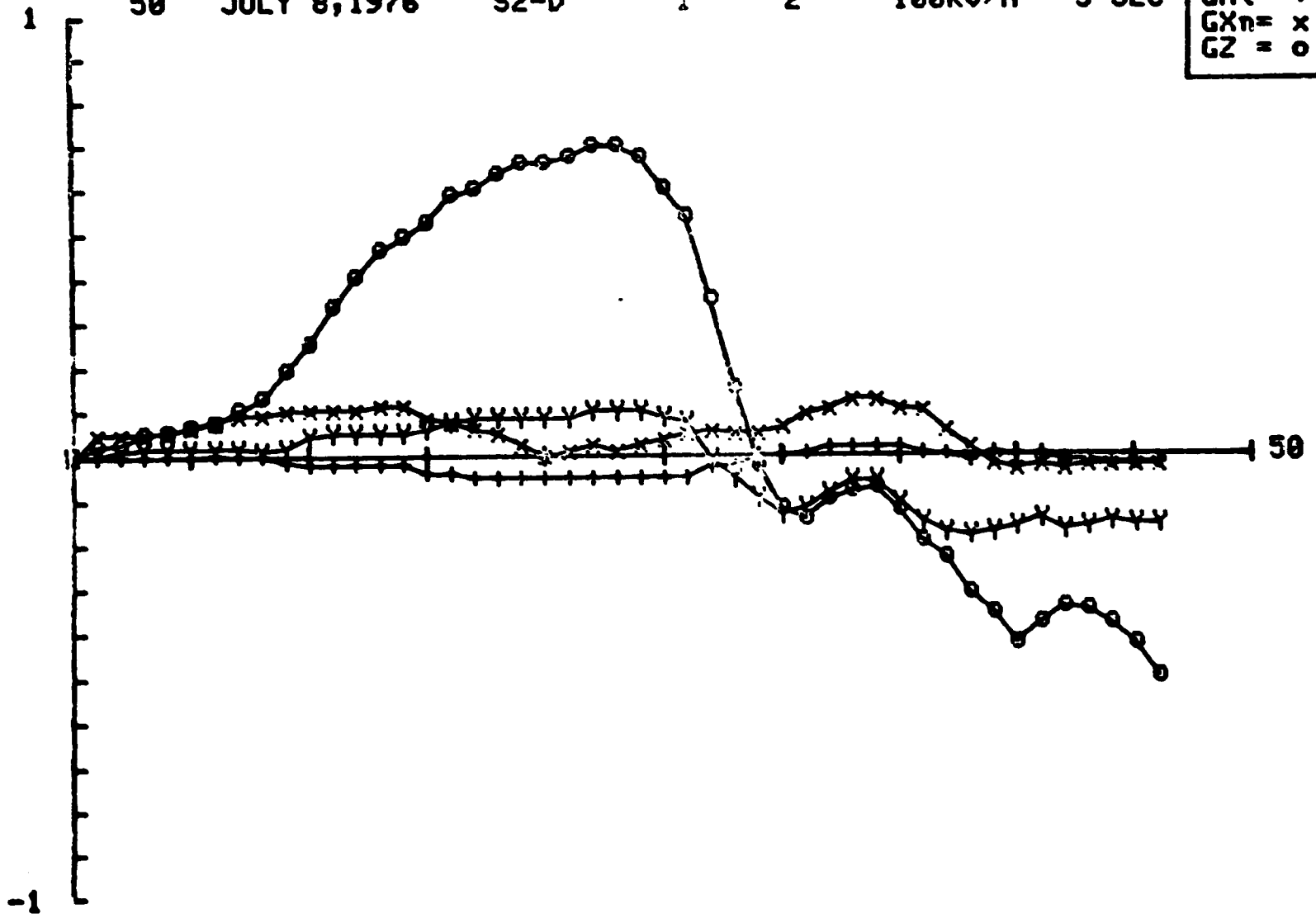
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE 50      DATE JULY 8, 1976      AIRPLANE S2-D      CLOUD 1      PASS 2      G-SCALE 100KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



108

FILE  
51

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

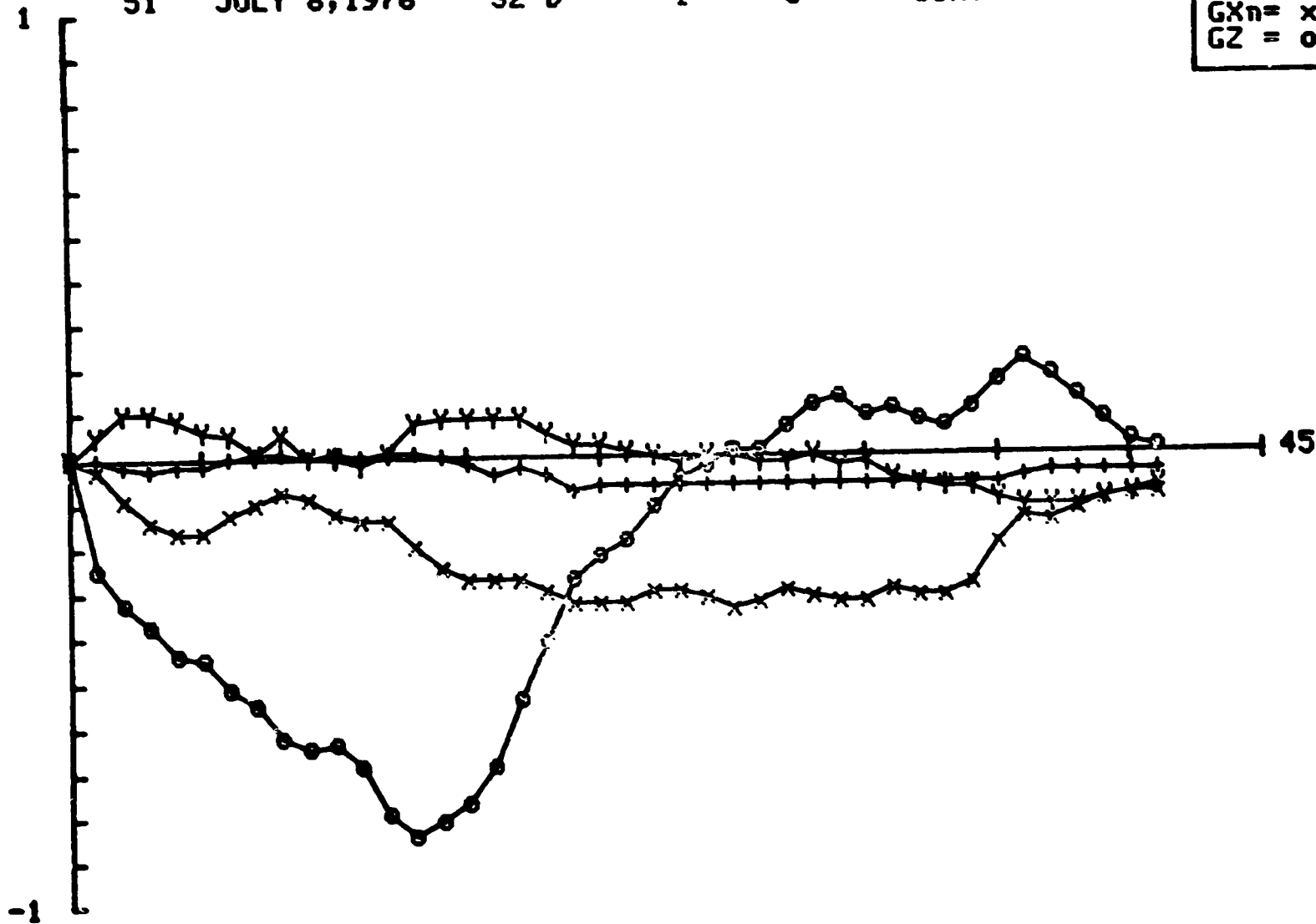
CLOUD  
1

PASS  
3

G-SCALE  
50KV/M

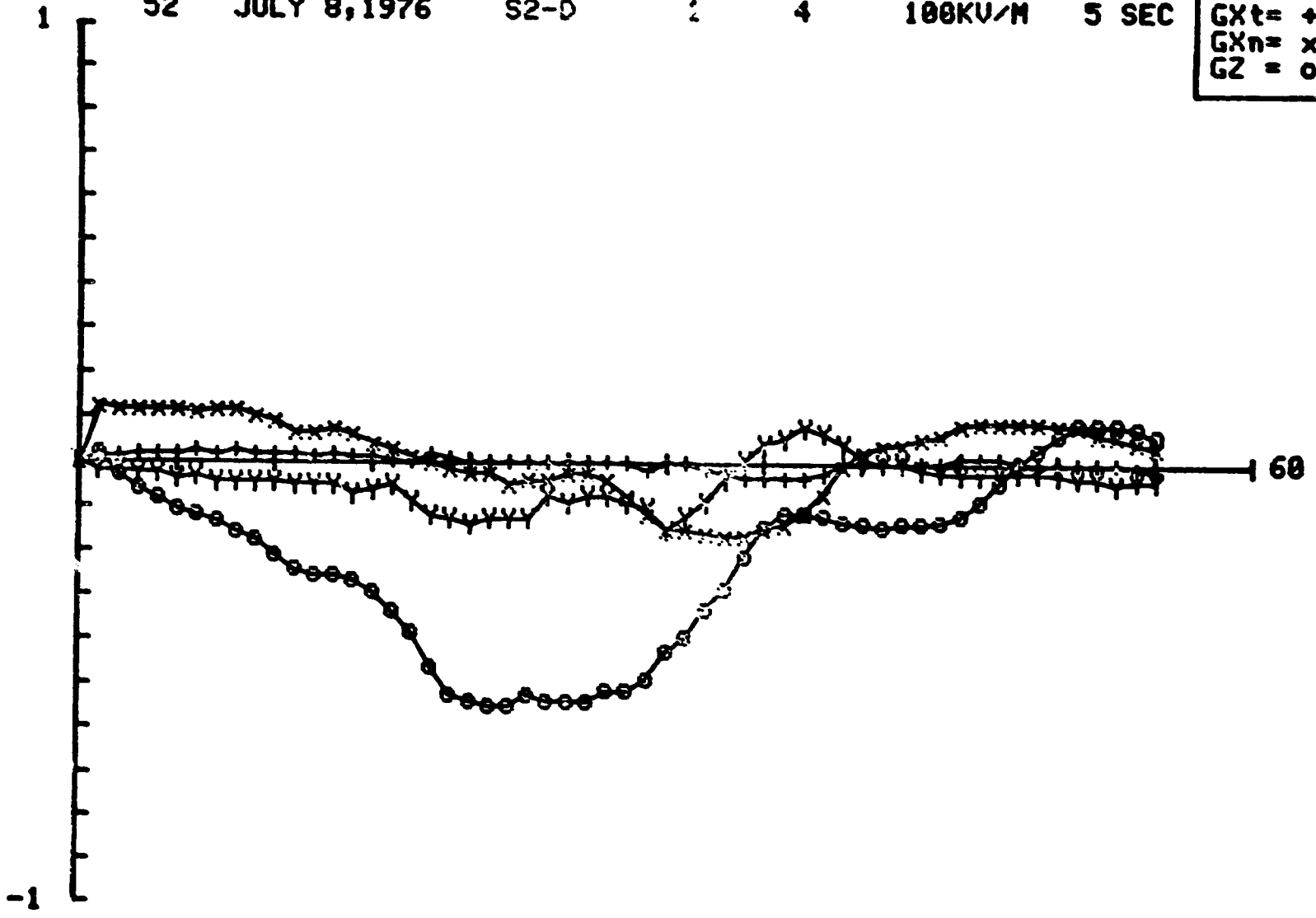
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 52      DATE JULY 8, 1976      AIRPLANE S2-D      CLOUD 2      PASS 4      G-SCALE 100KV/M      Y-UNIT 5 SEC

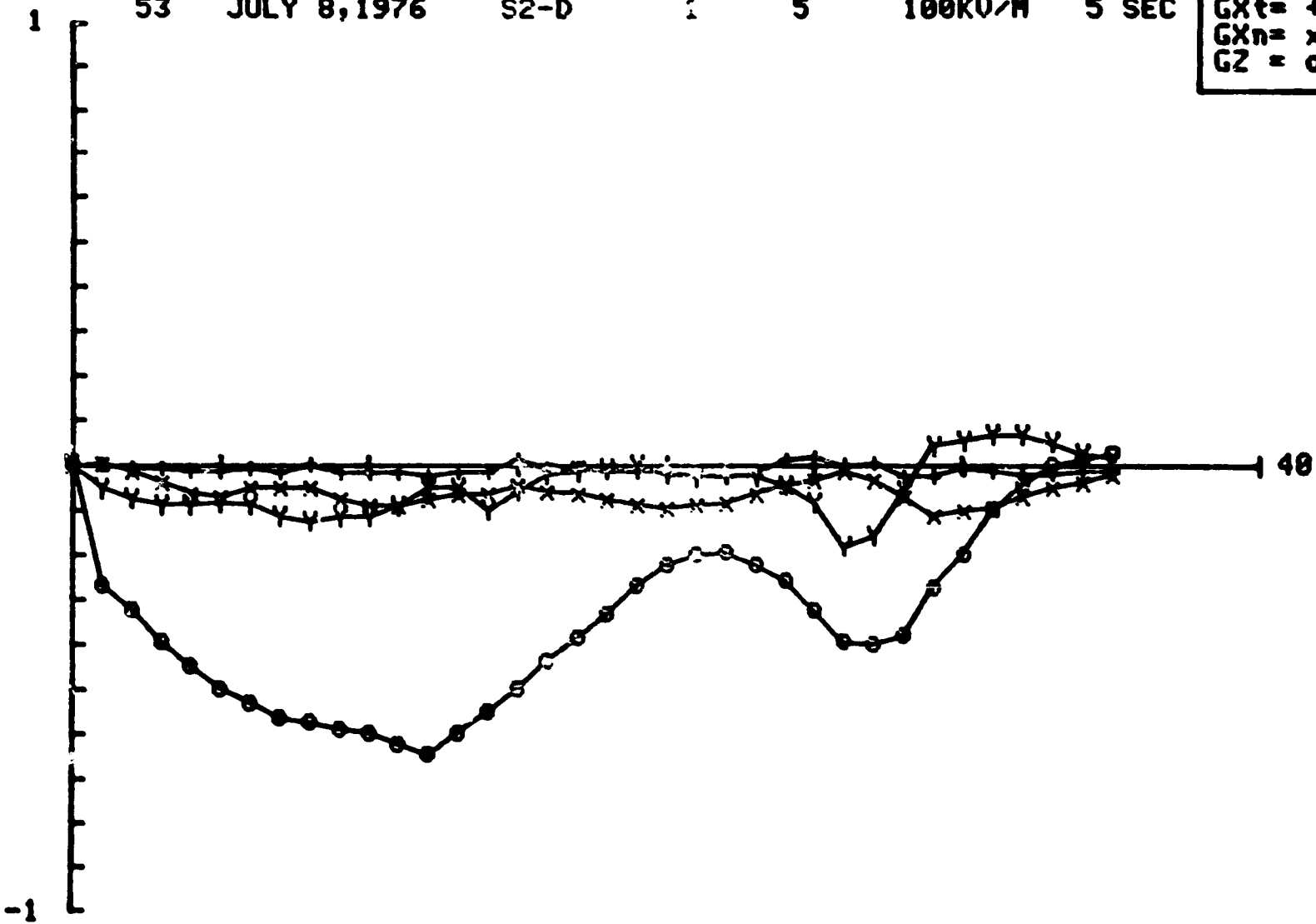
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



110

FILE 53      DATE JULY 8, 1976      AIRPLANE S2-D      CLOUD 1      PASS 5      G-SCALE 100KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
54

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

CLOUD  
1

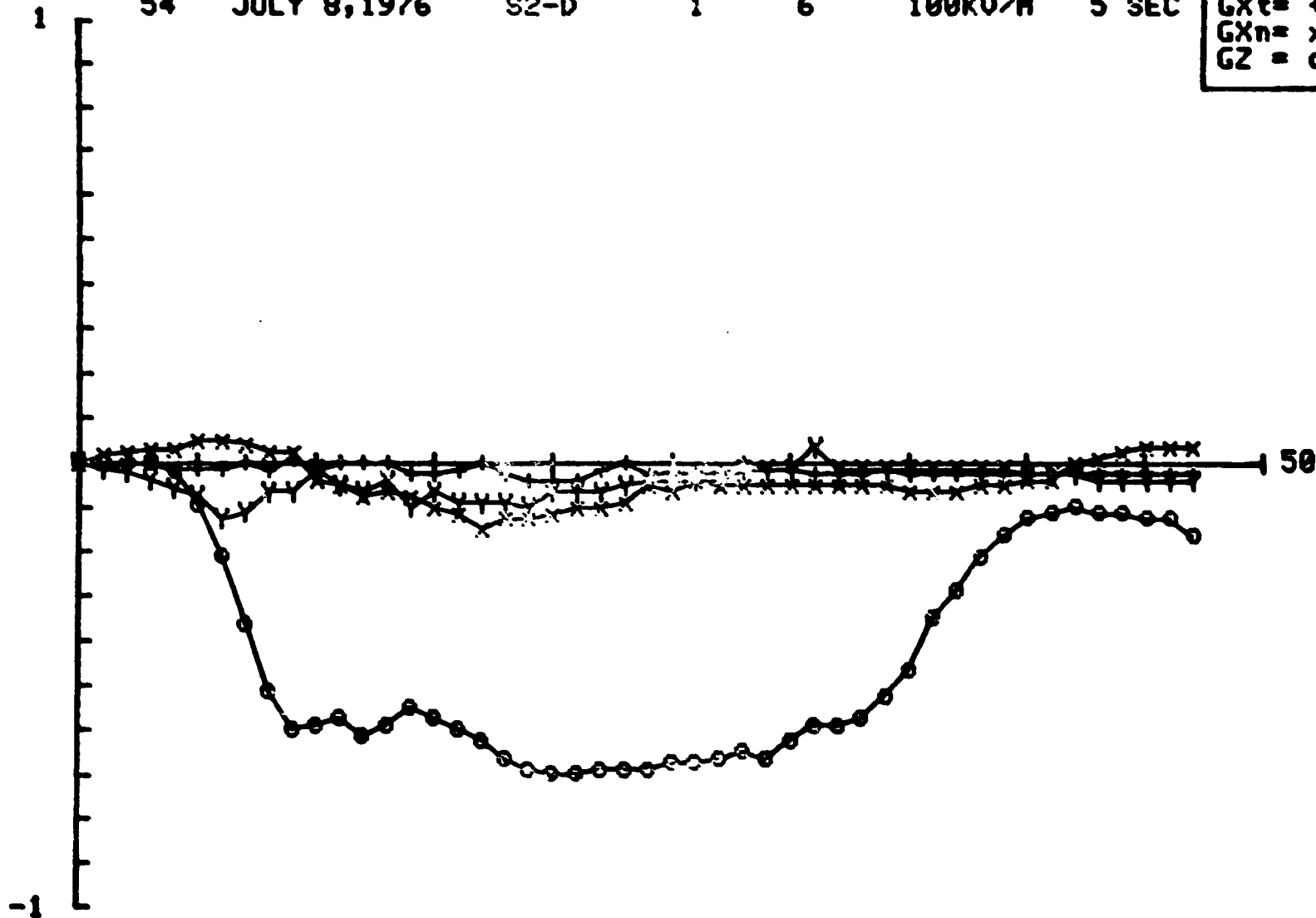
PASS  
6

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

111







FILE  
56

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

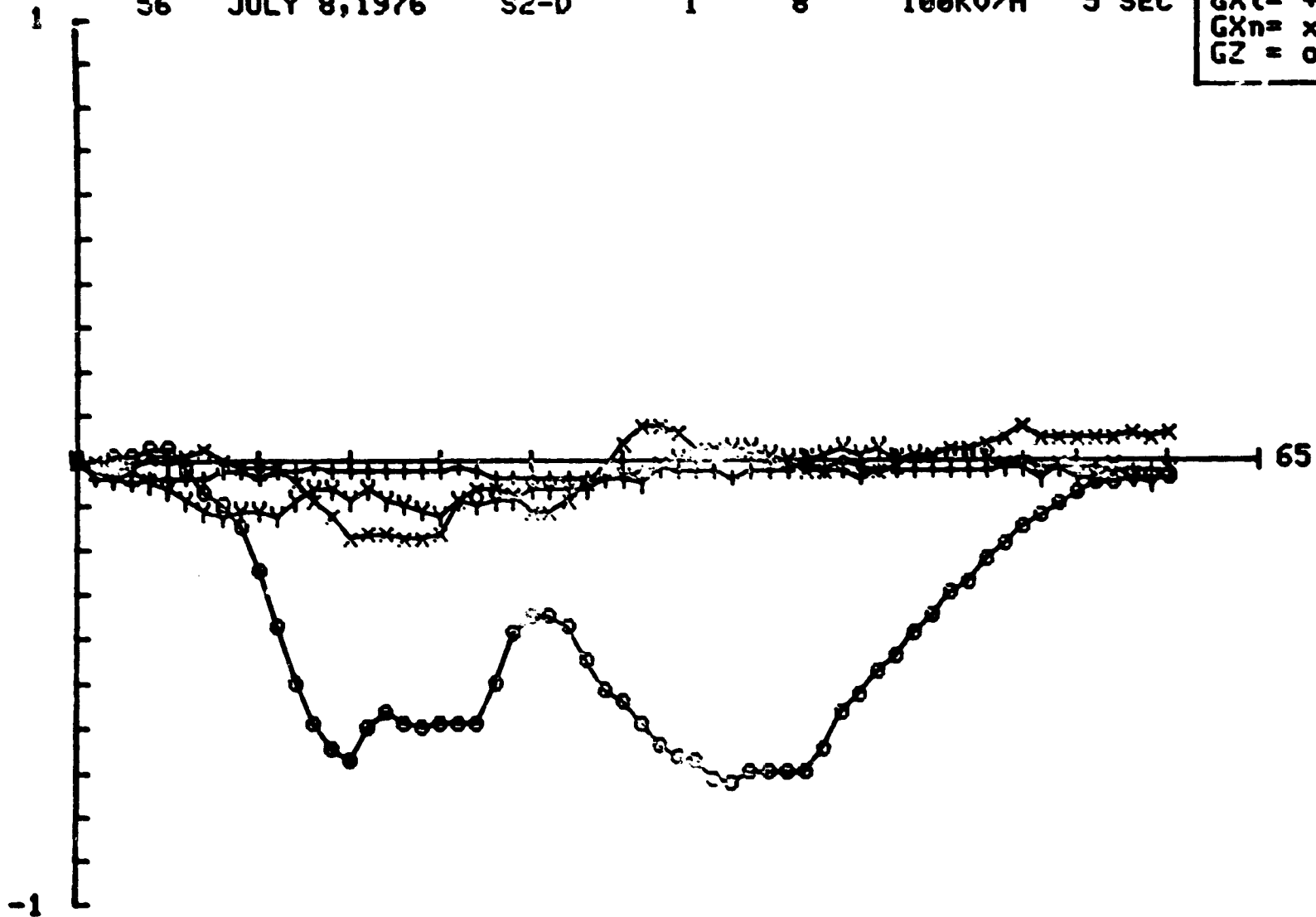
CLOUD  
1

PASS  
8

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



114

FILE  
57

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

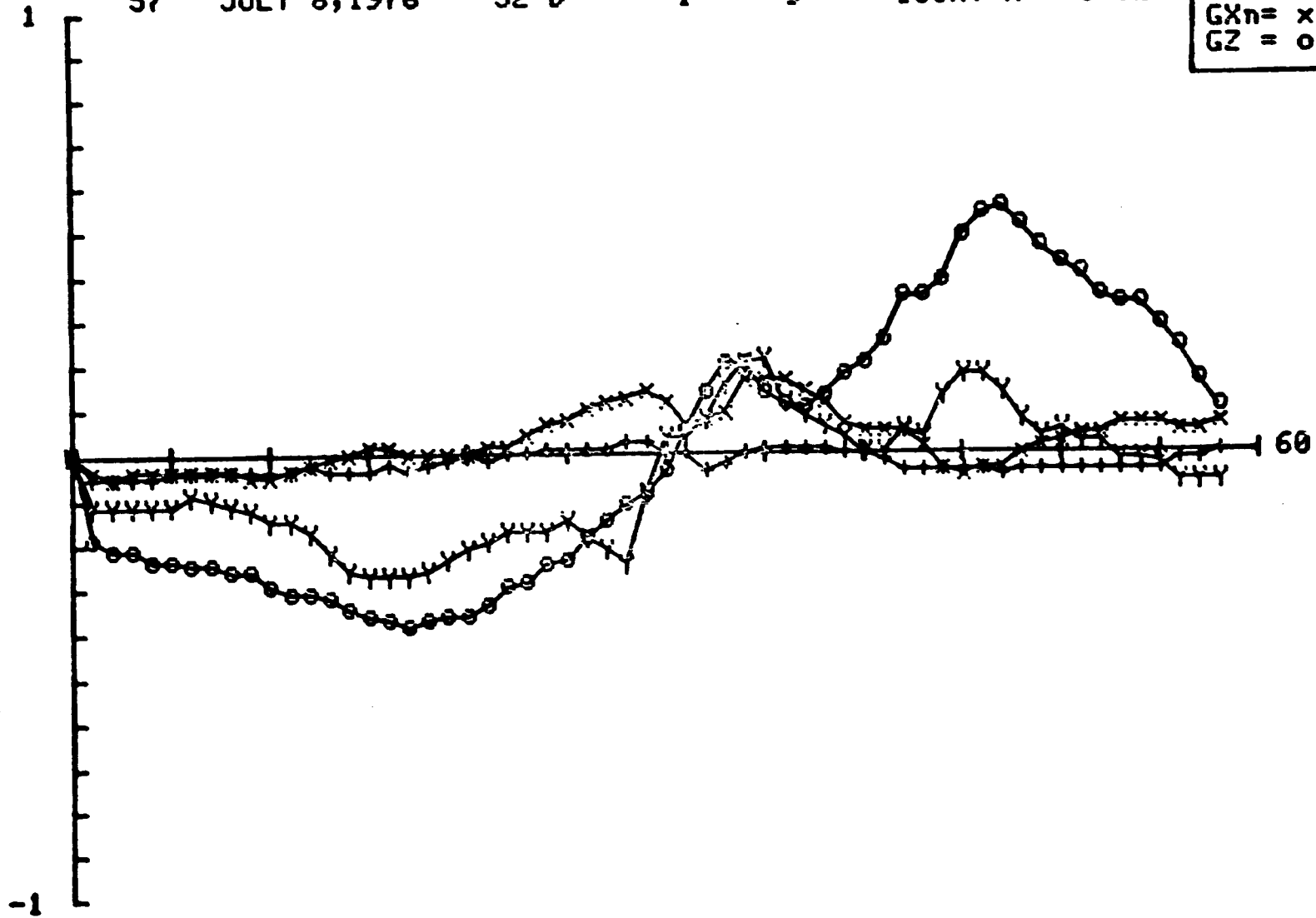
CLOUD  
1

PASS  
9

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
58

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

CLOUD  
1

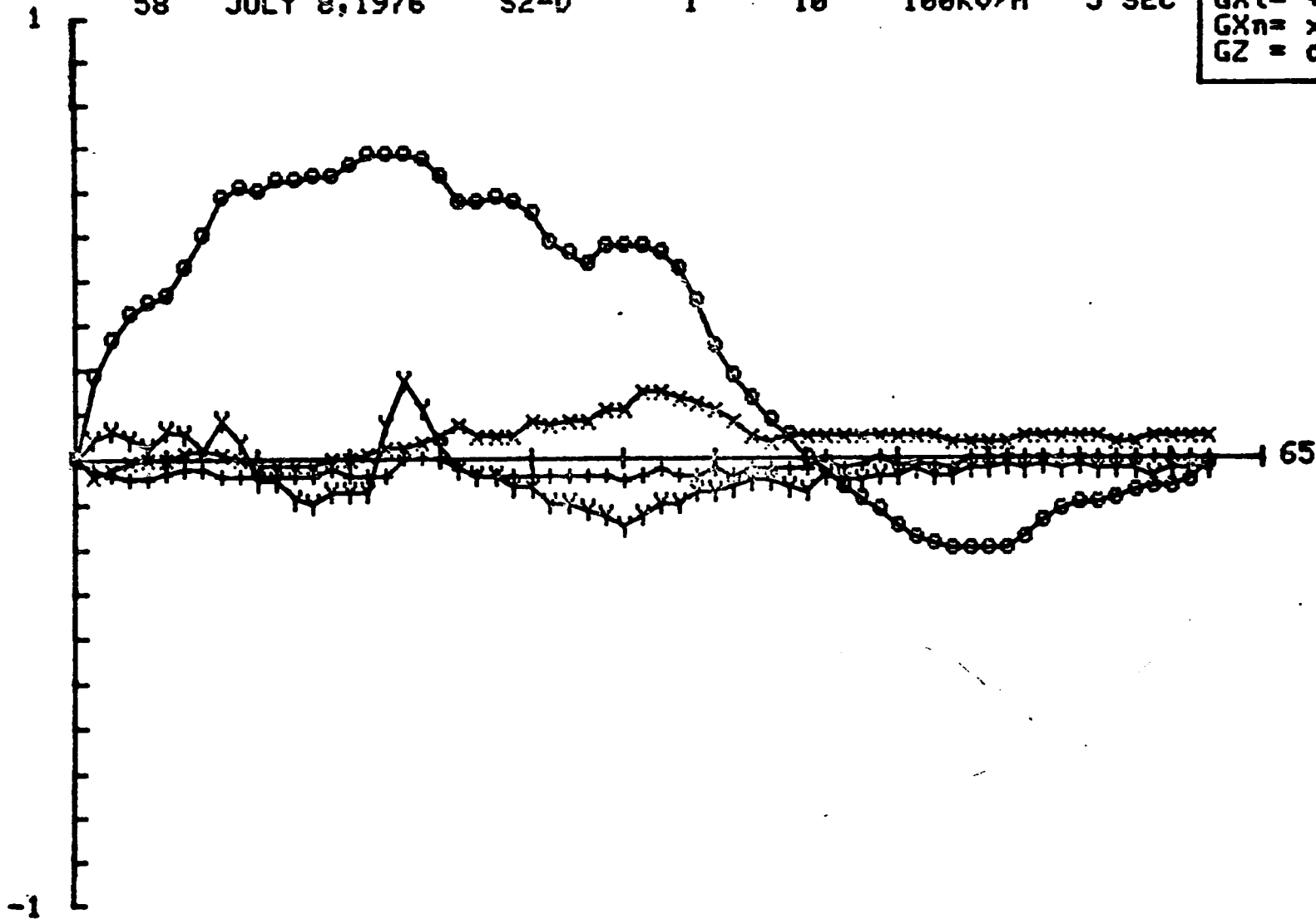
PASS  
10

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

115



116

FILE  
59

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

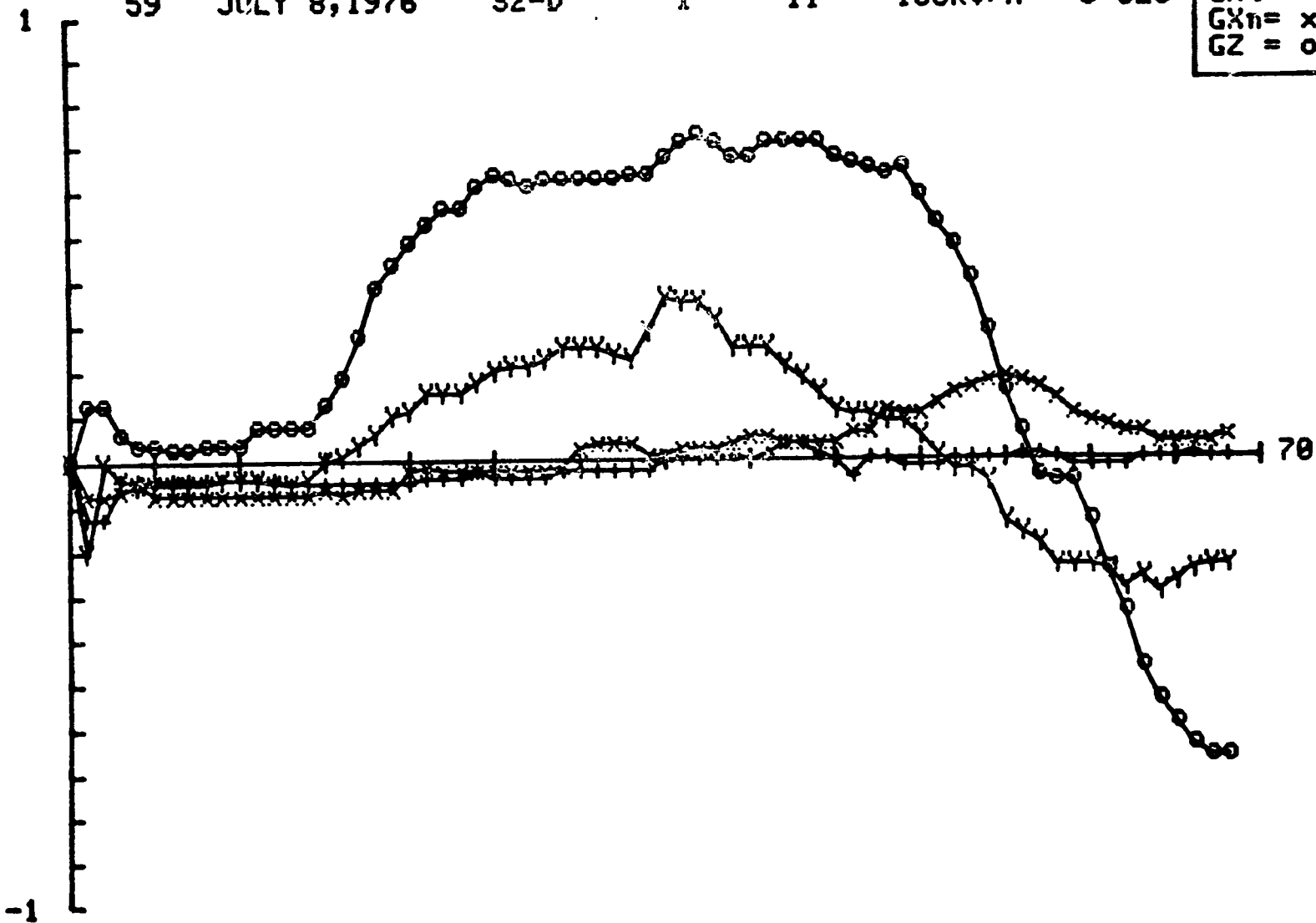
CLOUD  
1

PASS  
11

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE  
60

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

CLOUD  
1

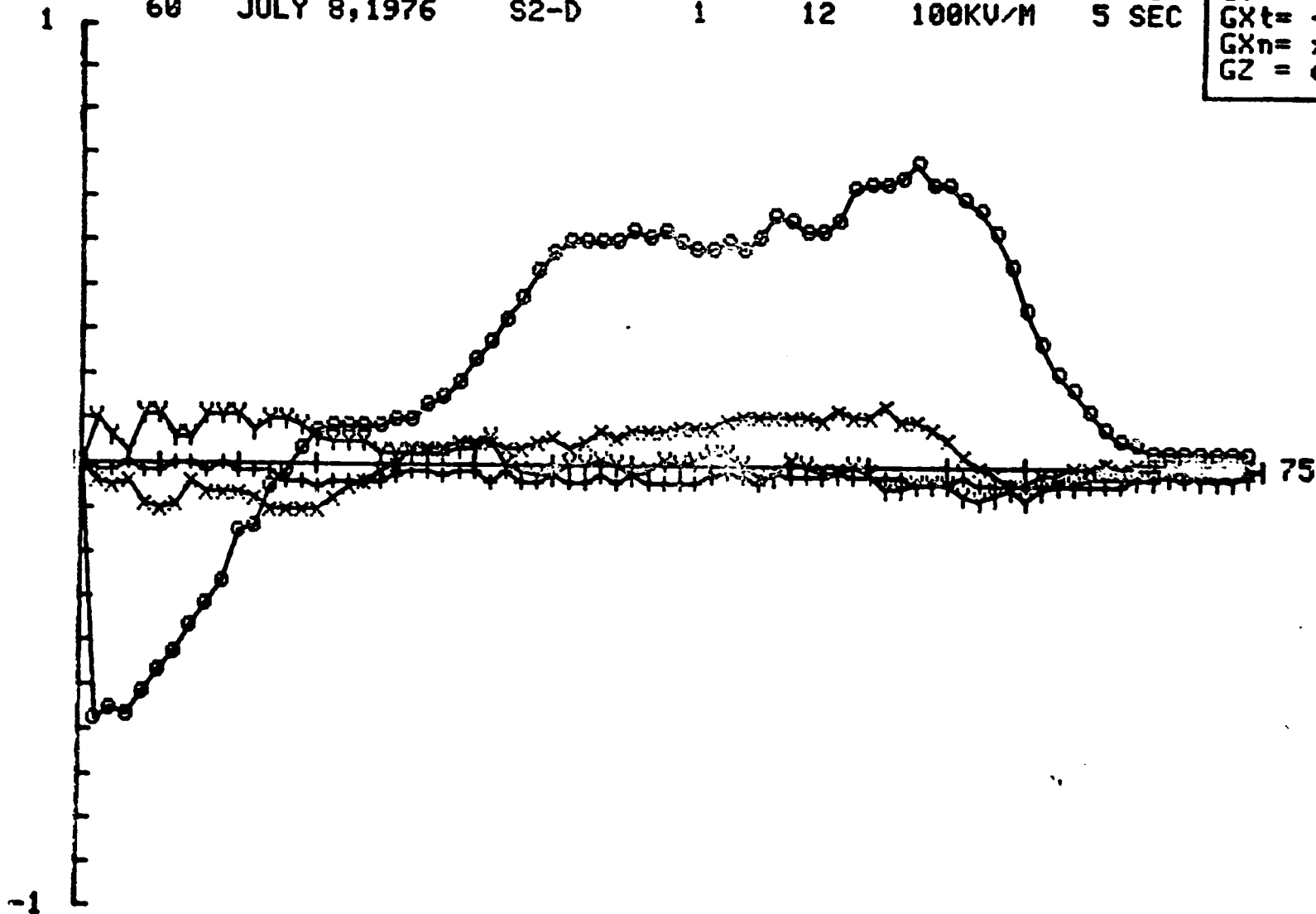
PASS  
12

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

117



118

FILE  
61

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

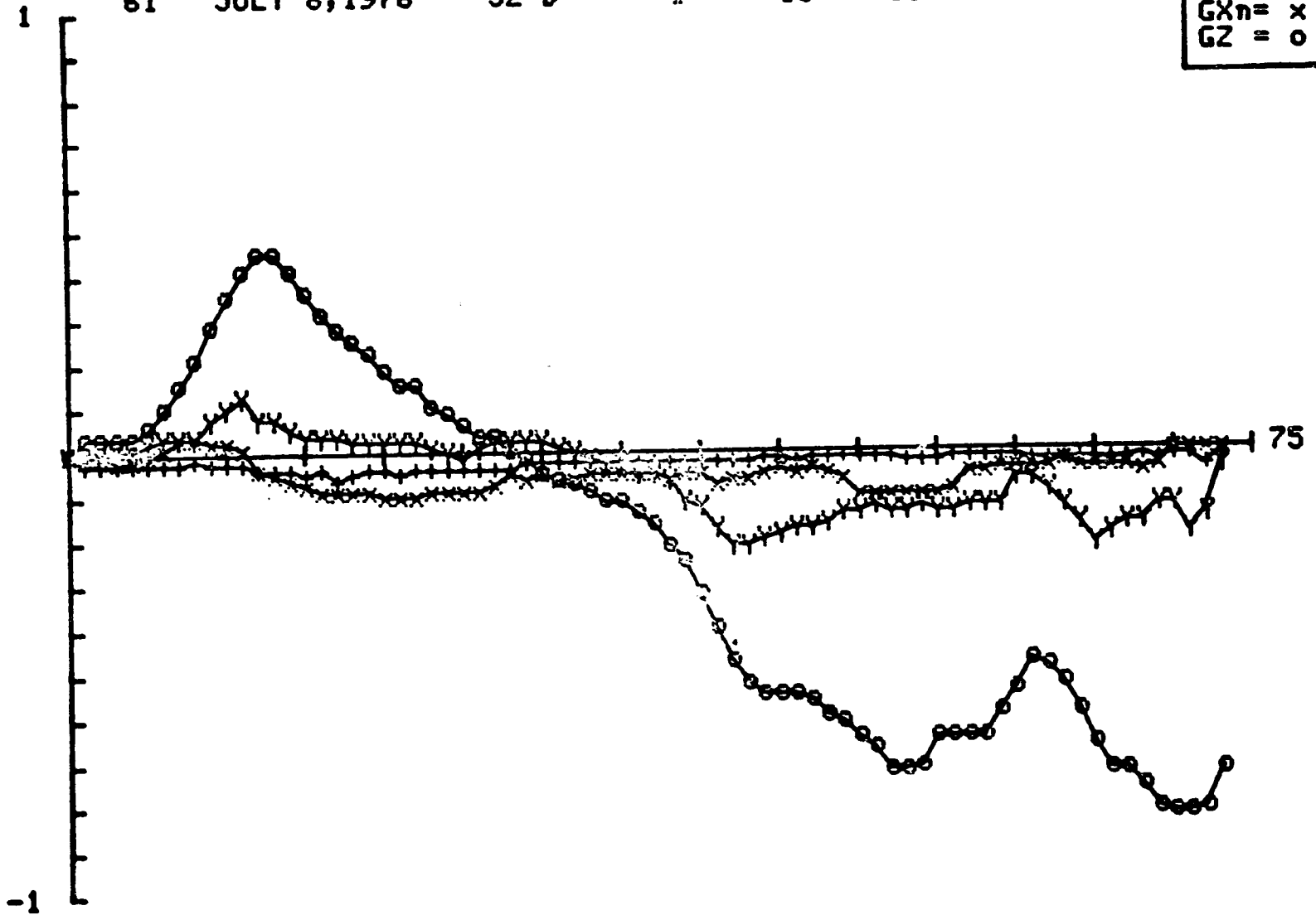
CLOUD  
1

PASS  
13

G-SCALE  
100KV/M

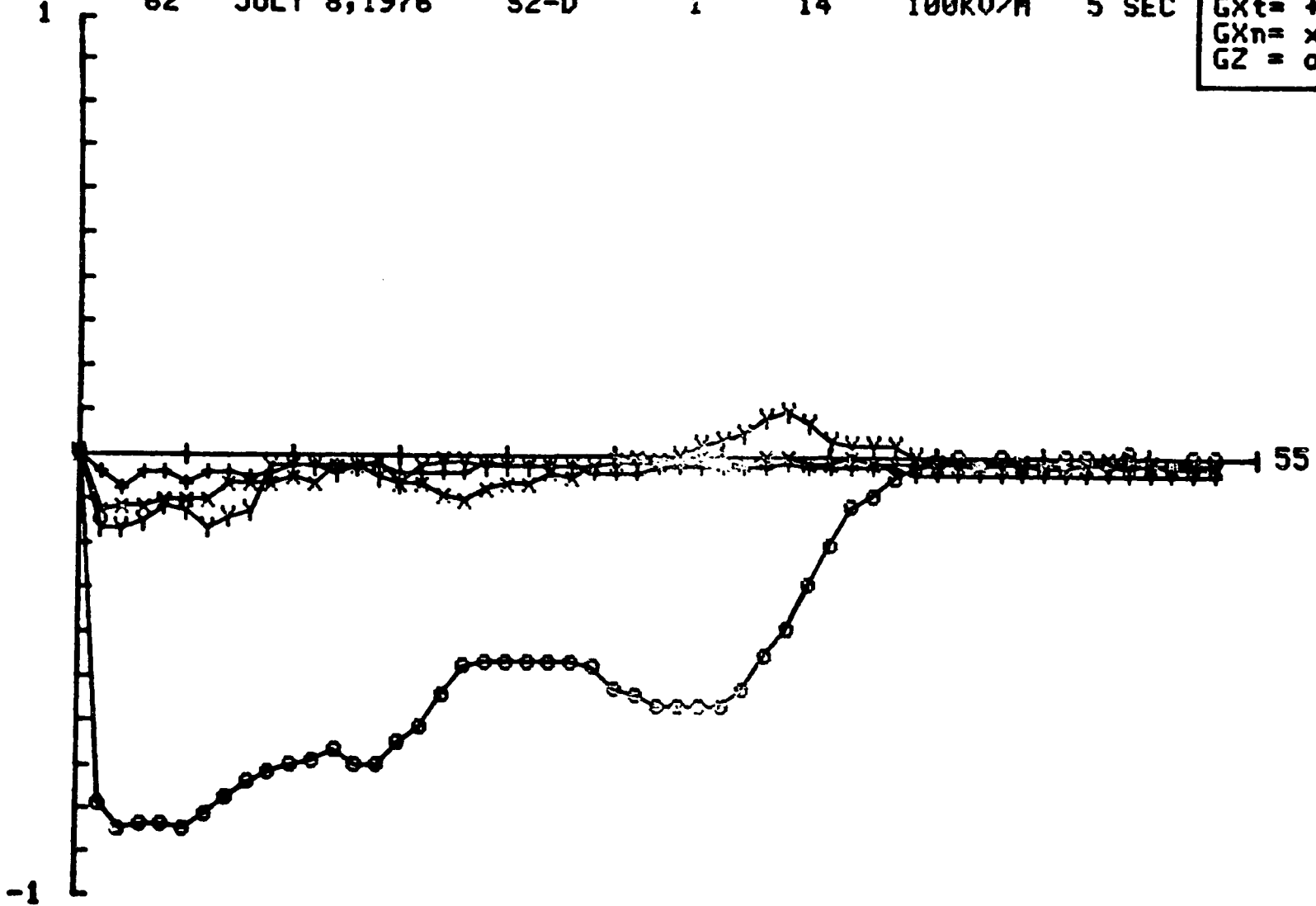
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 62      DATE JULY 8, 1976      AIRPLANE S2-D      CLOUD 1      PASS 14      G-SCALE 100KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o





120

FILE  
63

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

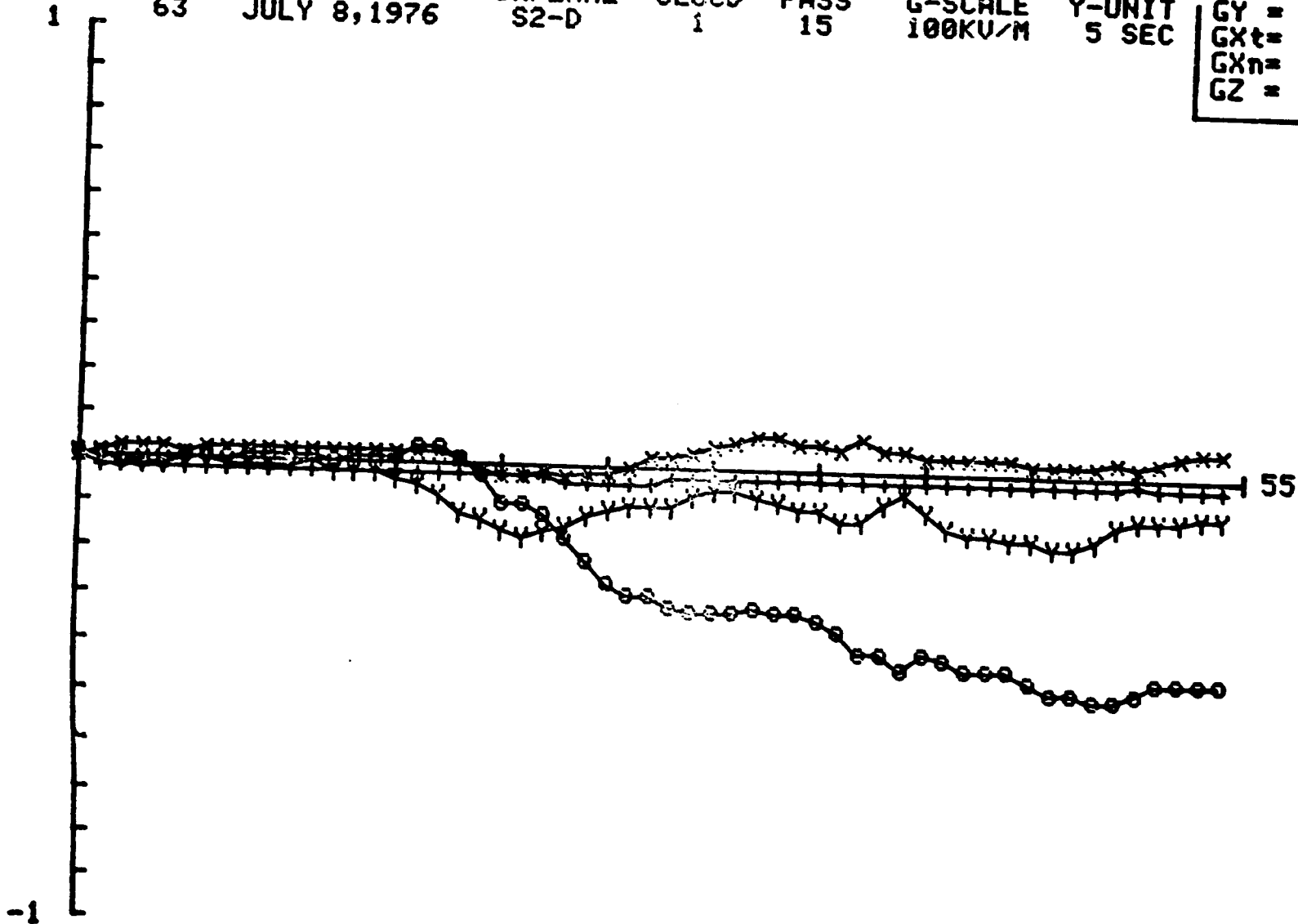
CLOUD  
1

PASS  
15

G-SCALE  
100KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o





122

FILE  
65

DATE  
JULY 8, 1976

AIRPLANE  
S2-D

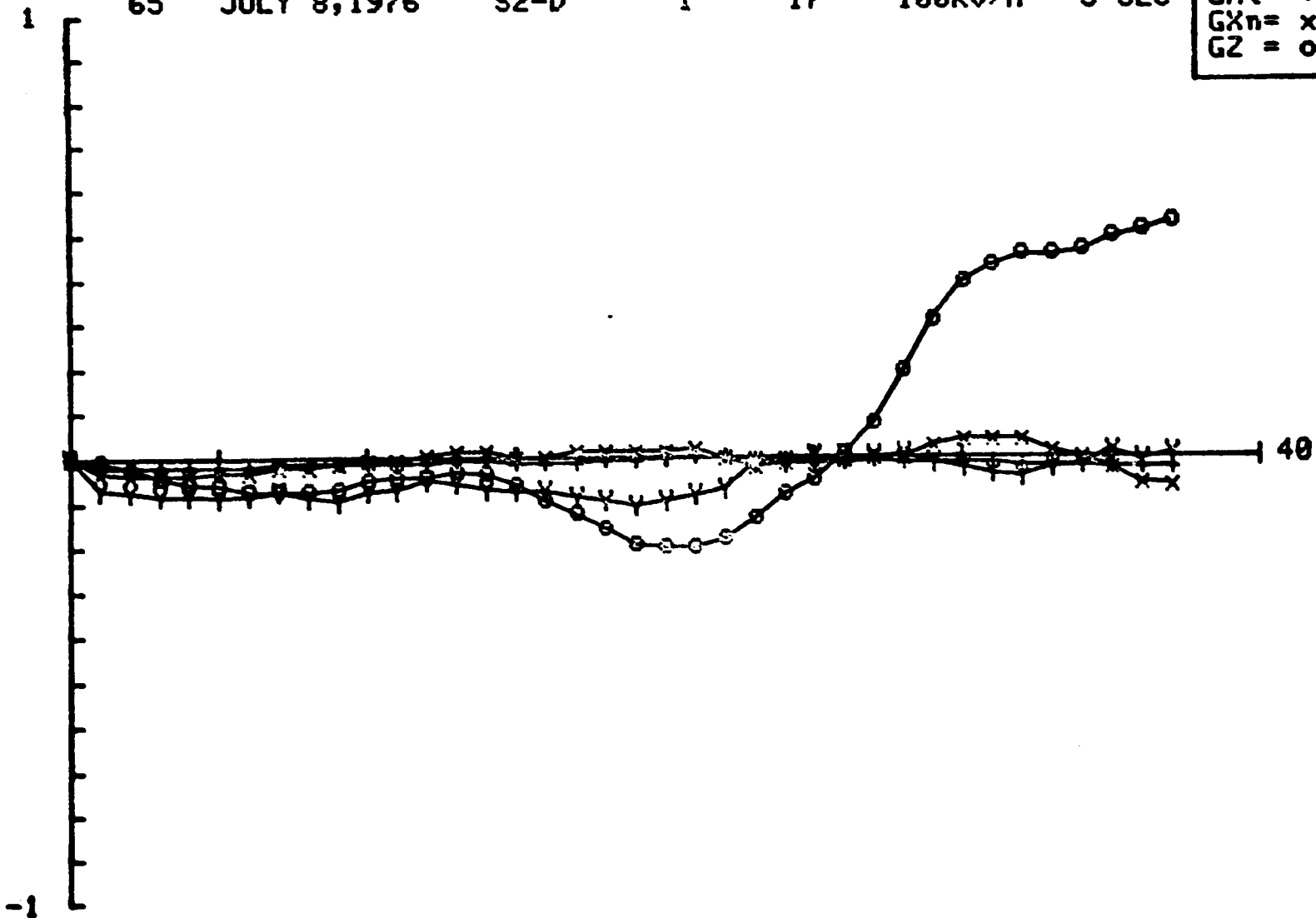
CLOUD  
1

PASS  
17

G-SCALE  
100KV/M

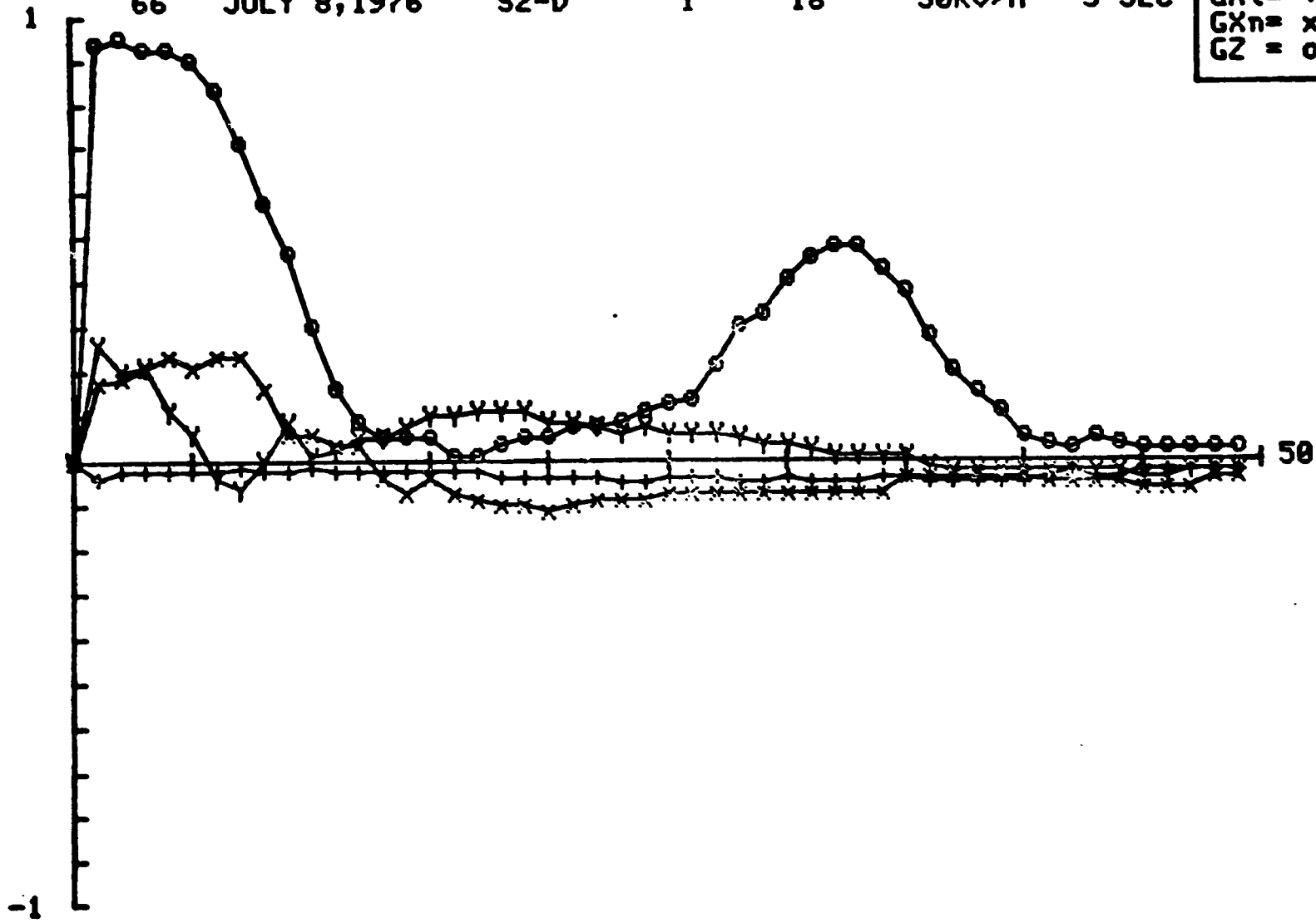
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 66    DATE JULY 8, 1976    AIRPLANE S2-D    CLOUD 1    PASS 18    G-SCALE 50KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



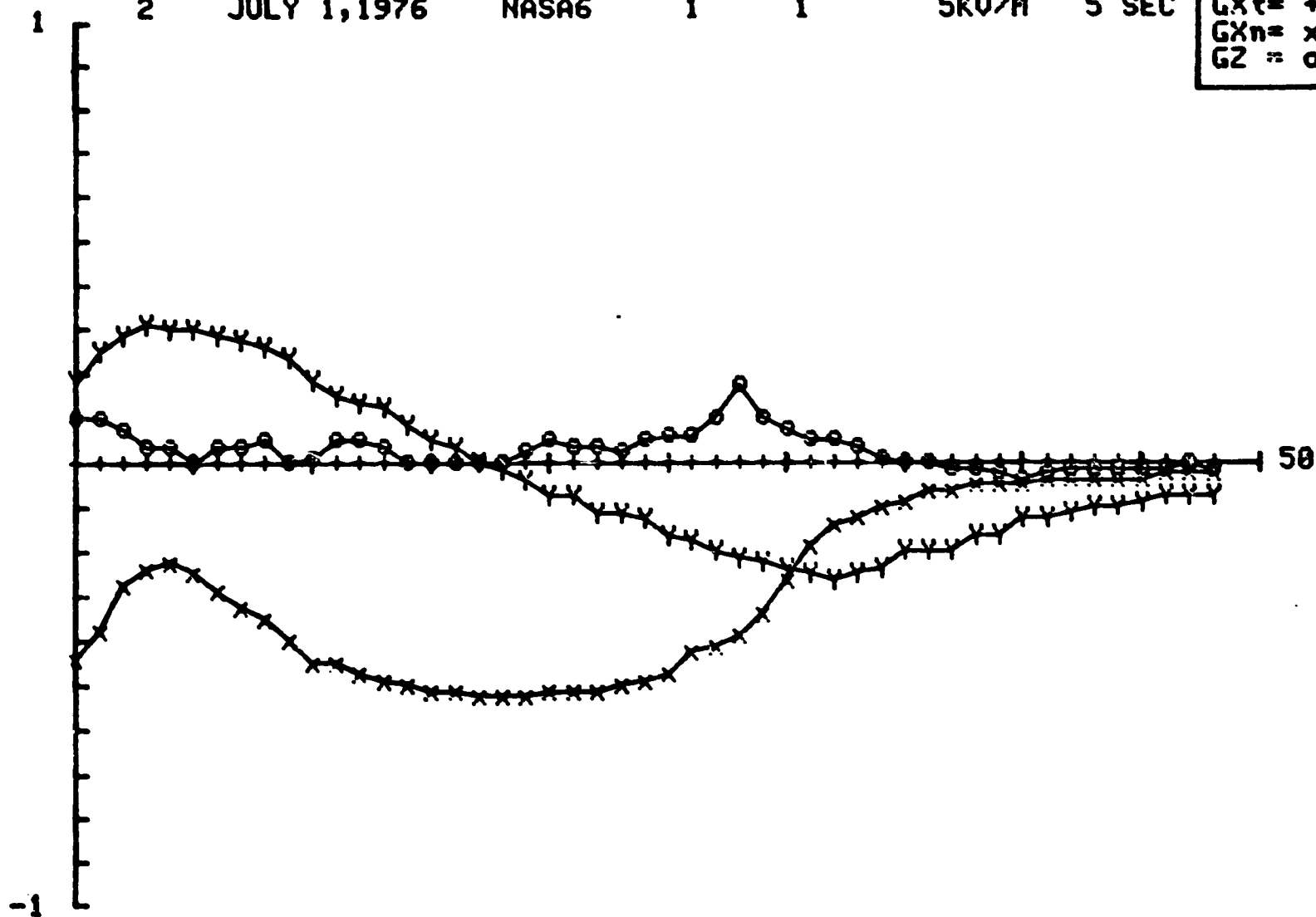
124	FILE	DATE	AIRPLANE	CLOUD	PASS	SCALE	Ymax
	2	JULY 1, 1976	NASA6	1	1	5K	49
	3	JULY 1, 1976	NASA6	1	2	5K	60
	4	JULY 1, 1976	NASA6	1	3	50K	61
	5	JULY 1, 1976	NASA6	2	1	50K	56
	6	JULY 1, 1976	NASA6	2	2	50K	55
	7	JULY 1, 1976	NASA6	2	3	10K	49
	8	JULY 1, 1976	NASA6	2	4	2.5K	50
	9	JULY 1, 1976	NASA6	2	5	2.5K	39
	10	JULY 1, 1976	NASA6	3	1	5K	45
	11	JULY 1, 1976	NASA6	3	2	5K	55
	12	JULY 2, 1976	NASA6	1	1	25K	46
	13	JULY 2, 1976	NASA6	1	2	50K	37
	14	JULY 2, 1976	NASA6	1	3	50K	48
	15	JULY 2, 1976	NASA6	1	4	50K	51
	16	JULY 2, 1976	NASA6	1	5	50K	68
	17	JULY 2, 1976	NASA6	1	6	50K	60
	18	JULY 2, 1976	NASA6	1	7	25K	63
	19	JULY 2, 1976	NASA6	1	8	25K	58
	20	JULY 2, 1976	NASA6	1	9	50K	54
	21	JULY 2, 1976	NASA6	1	10	100K	50
	22	JULY 2, 1976	NASA6	1	11	100K	56
	23	JULY 2, 1976	NASA6	1	12	50K	35
	24	JULY 6, 1976	NASA6	1	1	50K	22
	25	JULY 6, 1976	NASA6	1	2	50K	51
	26	JULY 6, 1976	NASA6	1	3	50K	54
	27	JULY 6, 1976	NASA6	1	4	50K	44
	28	JULY 6, 1976	NASA6	1	5	25K	48
	29	JULY 6, 1976	NASA6	1	6	50K	56
	30	JULY 6, 1976	NASA6	1	7	50K	61
	31	JULY 6, 1976	NASA6	1	8	50K	66
	32	JULY 6, 1976	NASA6	1	9	25K	50
	33	JULY 6, 1976	NASA6	1	10	25K	64
	34	JULY 6, 1976	NASA6	1	11	50K	69

35	JULY	6, 1976	NASA6	1	12	25K	66
36	JULY	8, 1976	NASA6	1	1	50K	68
37	JULY	8, 1976	NASA6	1	2	100K	63
38	JULY	8, 1976	NASA6	1	3	25K	26
39	JULY	8, 1976	NASA6	1	4	50K	27
40	JULY	8, 1976	NASA6	1	5	50K	44
41	JULY	13, 1976	NASA6	1	1	10K	77
42	JULY	13, 1976	NASA6	1	2	5K	79
43	JULY	13, 1976	NASA6	1	3	5K	44
44	JULY	13, 1976	NASA6	1	4	2.5K	52
45	JULY	13, 1976	NASA6	1	5	2.5K	47
46	JULY	13, 1976	NASA6	1	6	500	38
47	JULY	13, 1976	NASA6	1	7	500	46
48	JULY	13, 1976	NASA6	1	8	500	60

126

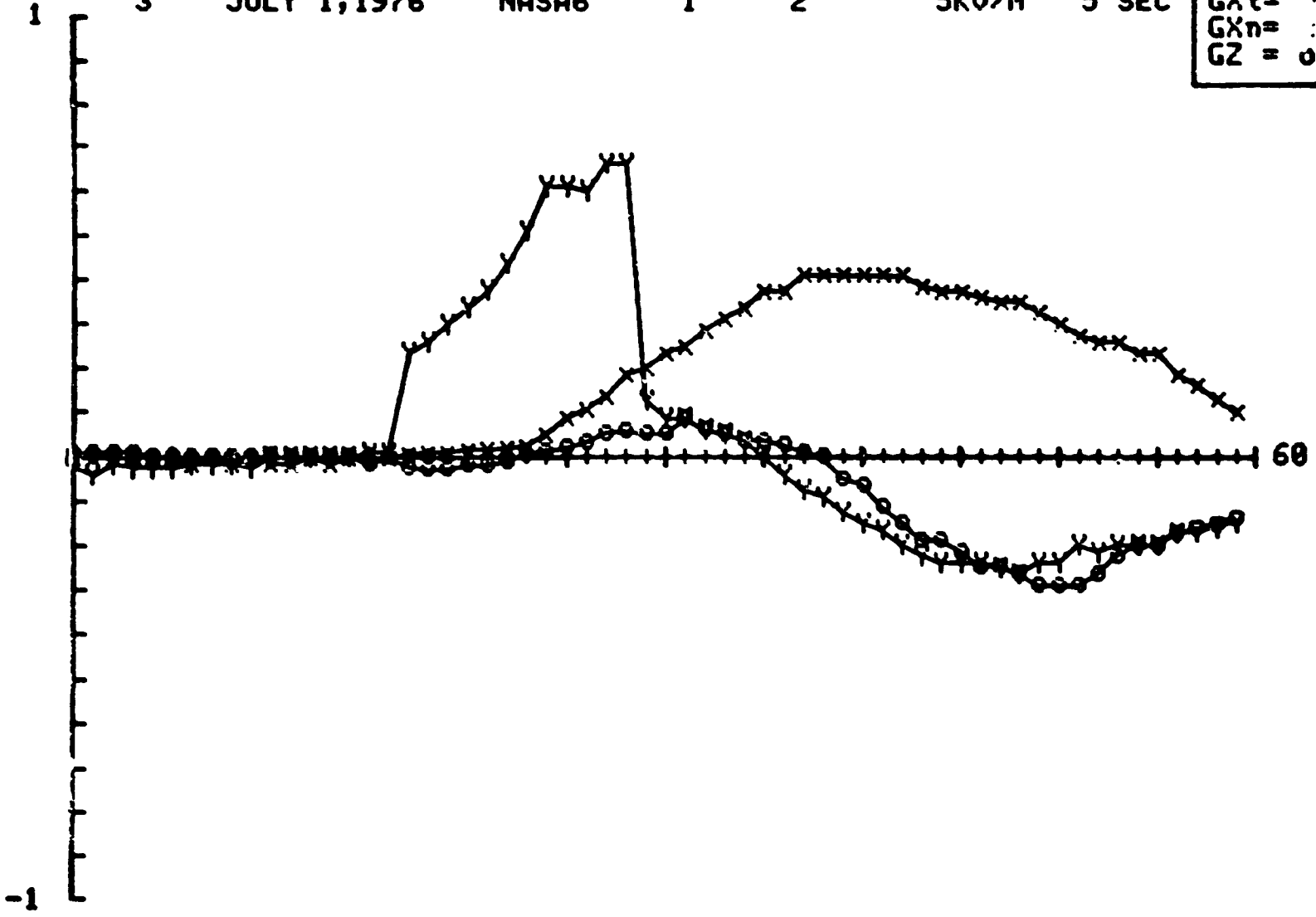
FILE 2 DATE JULY 1, 1976 AIRPLANE NASAG CLOUD 1 PASS 1 G-SCALE 5KV/H Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE 3      DATE JULY 1, 1976      AIRPLANE NASA6      CLOUD 1      PASS 2      G-SCALE 5KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	.
Gxn	=	.
GZ	=	o





128

FILE  
4

DATE  
JULY 1, 1976

AIRPLANE  
NASA6

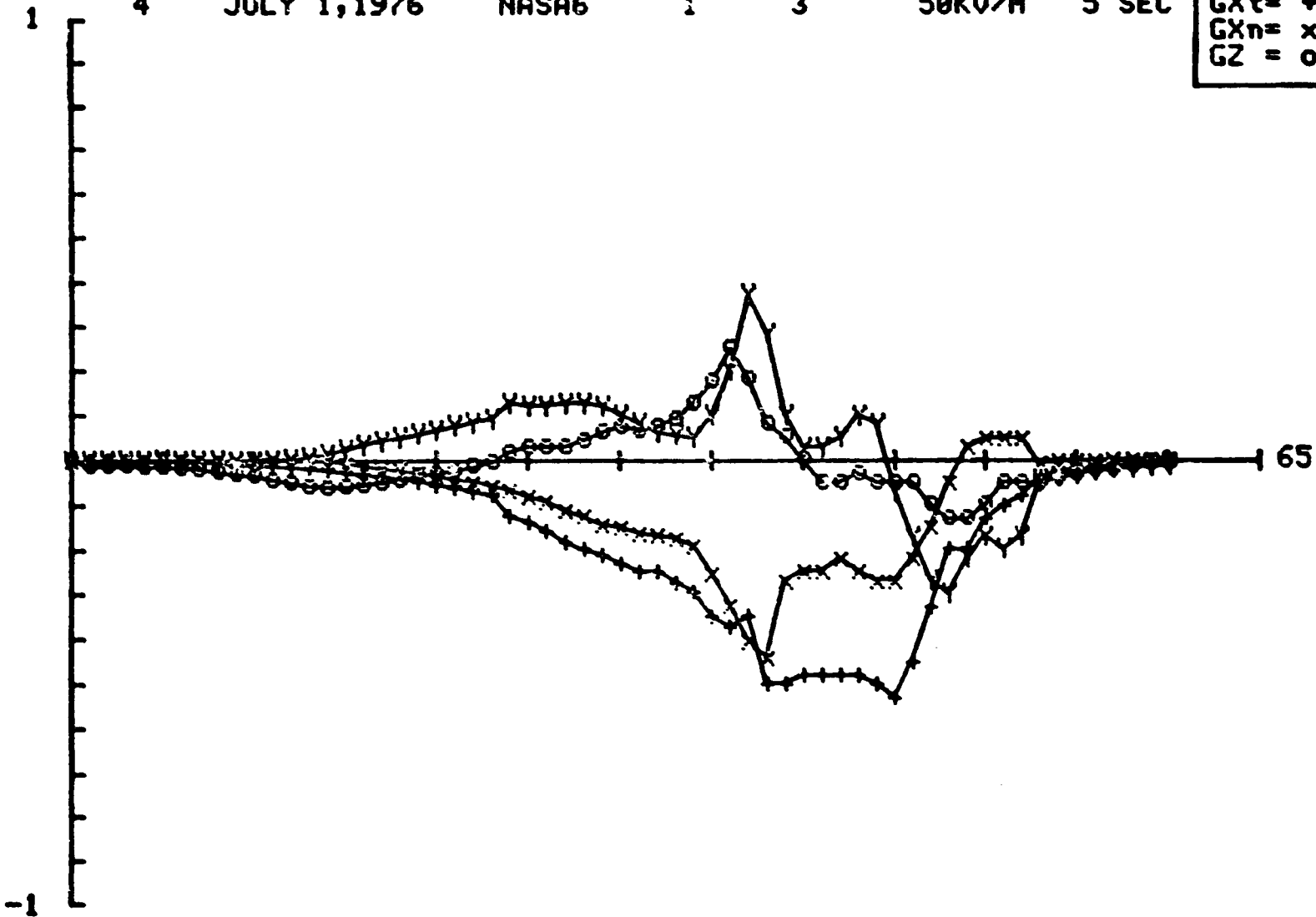
CLOUD  
1

PASS  
3

G-SCALE  
50KV/M

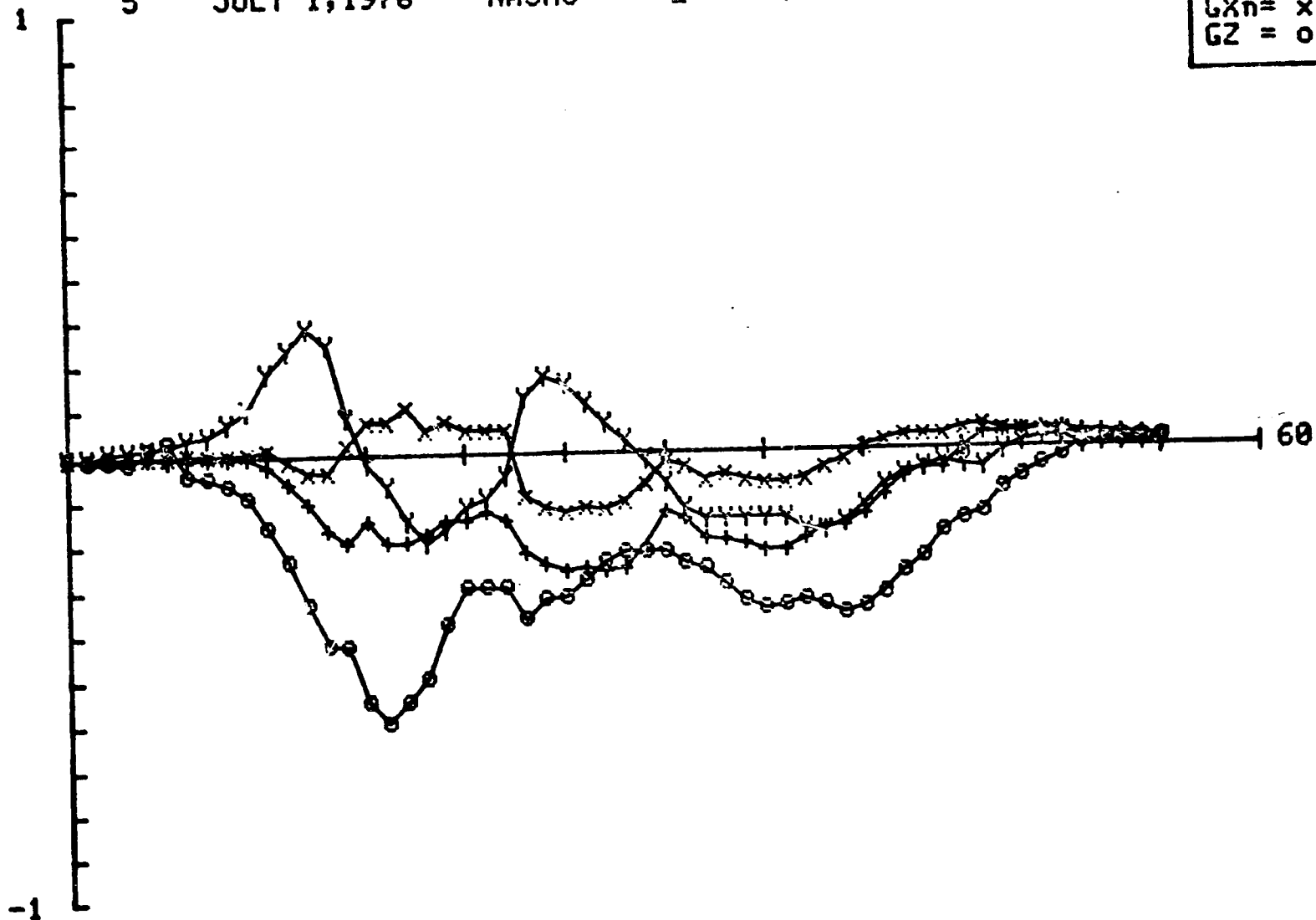
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE  
5DATE  
JULY 1, 1976AIRPLANE  
NASA6CLOUD  
2PASS  
1G-SCALE  
50KV/MY-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



130

FILE  
6

DATE  
JULY 1, 1976

AIRPLANE  
NASA6

CLOUD  
2

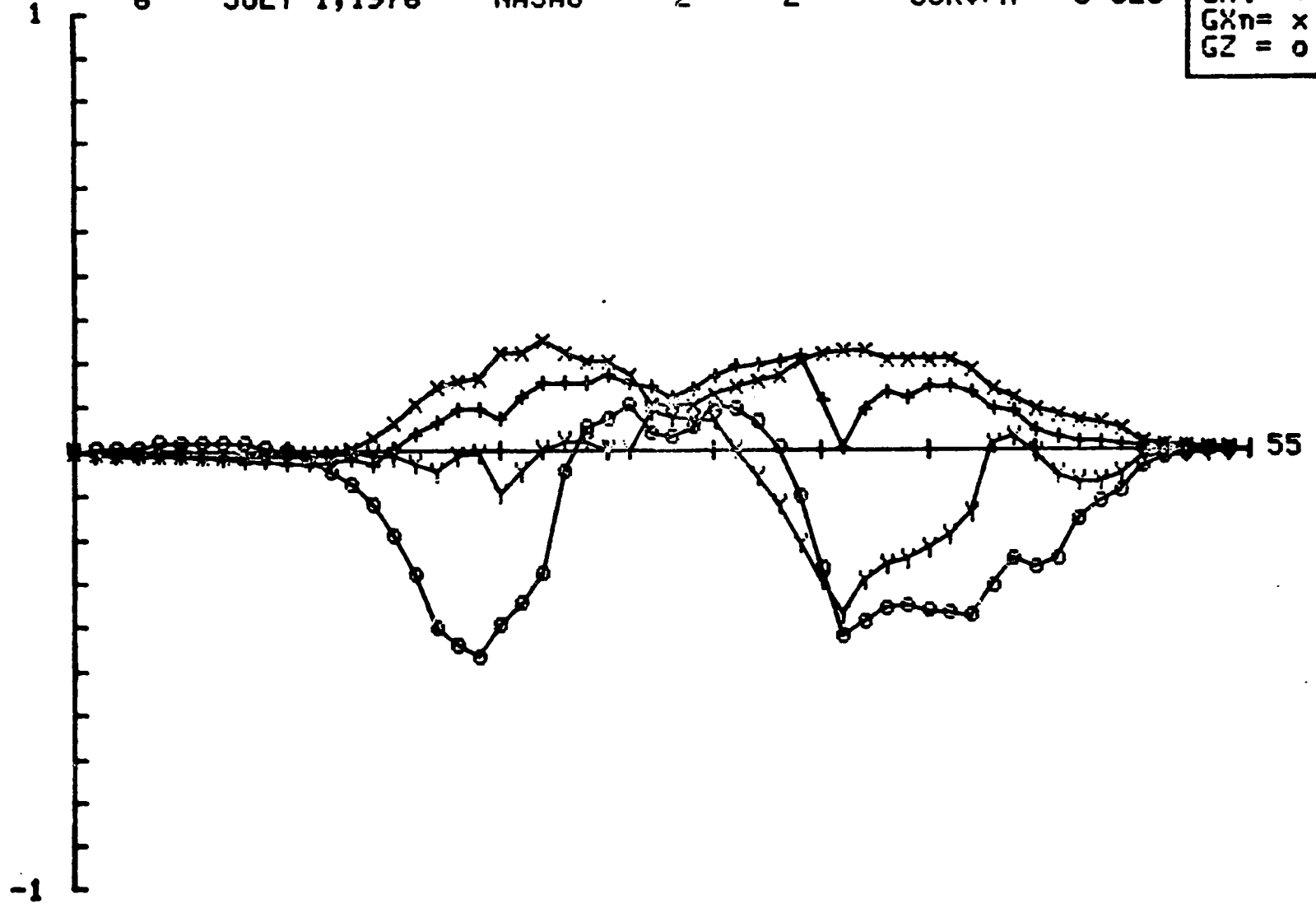
PASS  
2

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

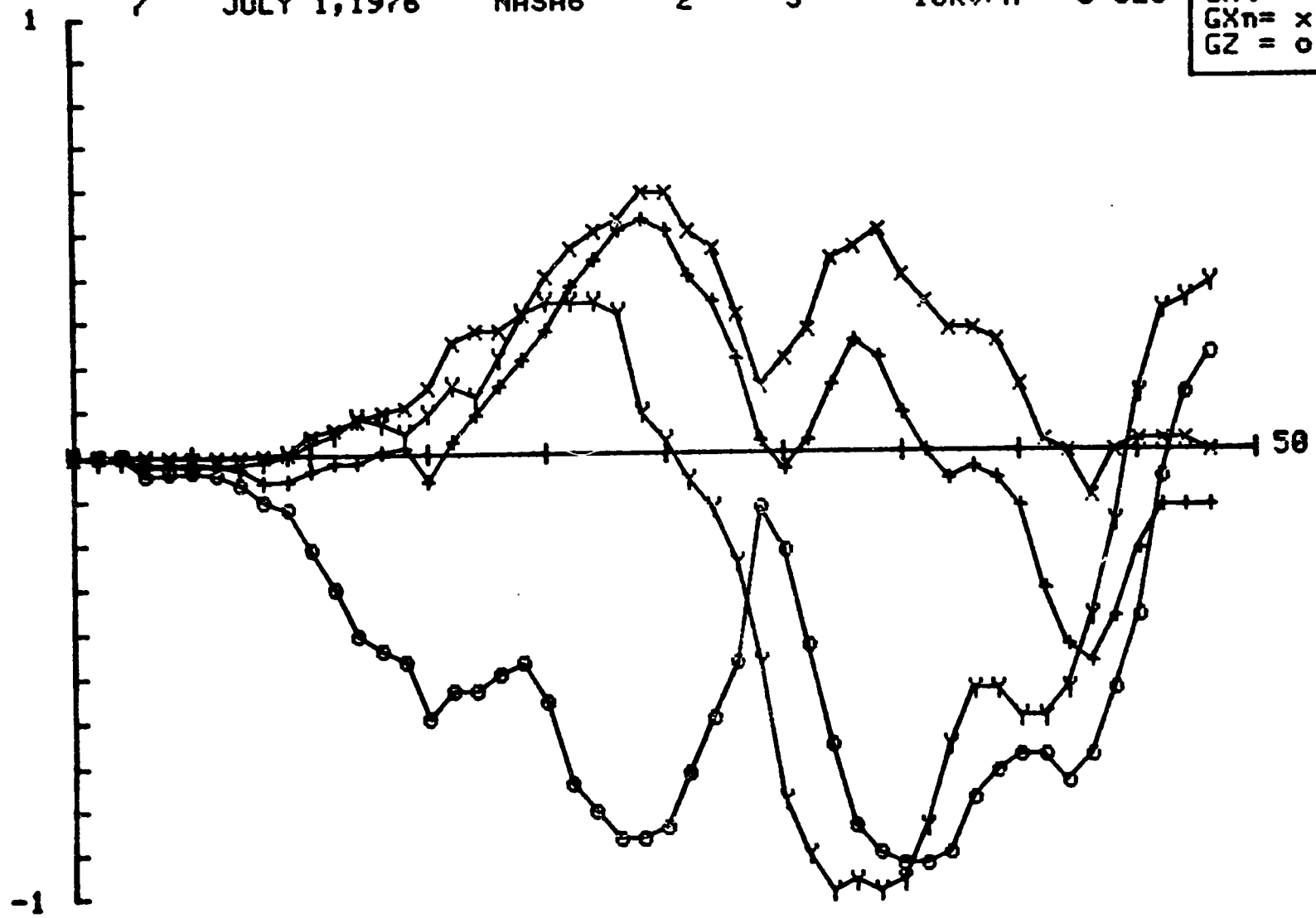
GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o

130



FILE 7      DATE JULY 1, 1976      AIRPLANE NASA6      CLOUD 2      PASS 3      G-SCALE 10KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o

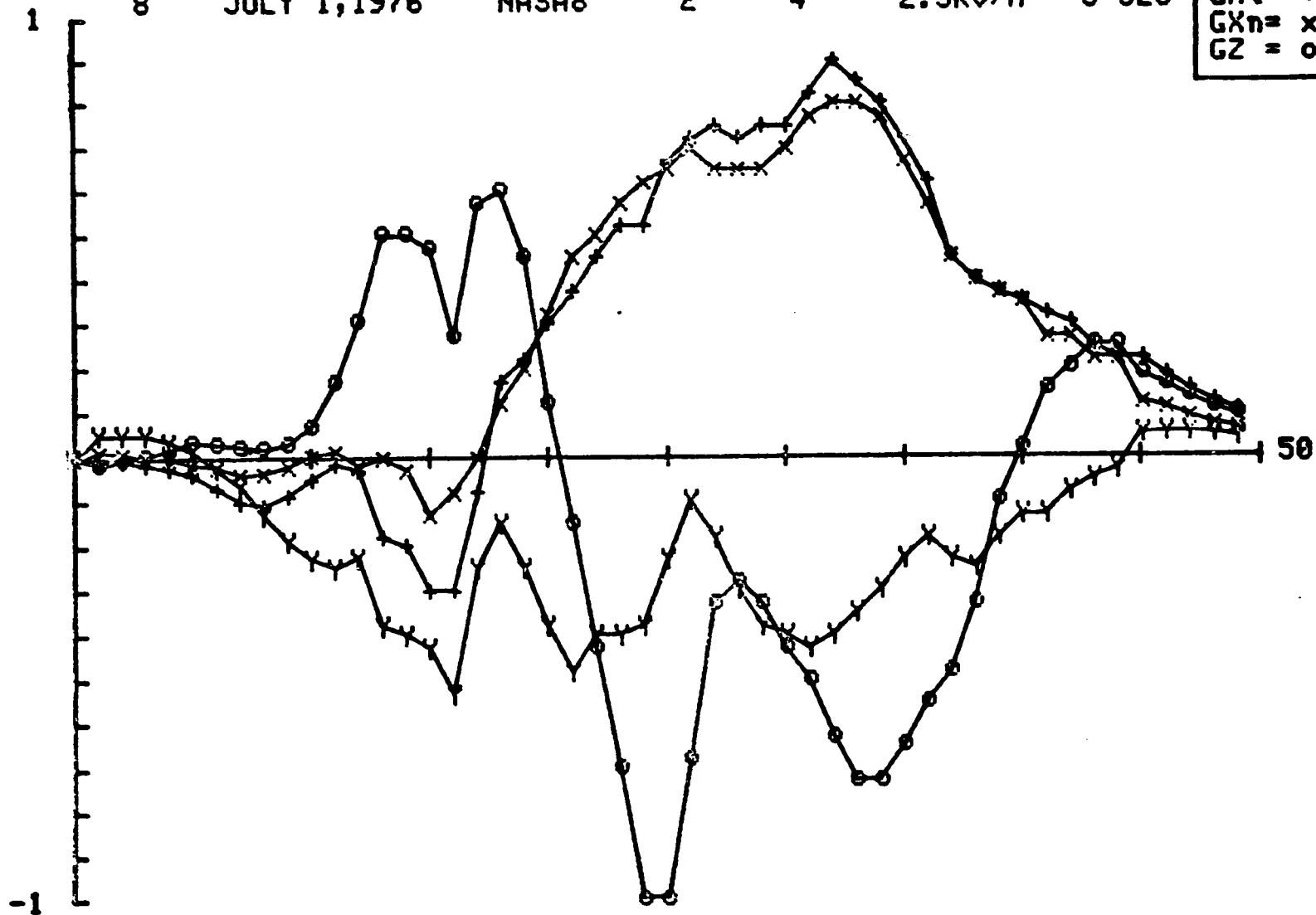


182

FILE  
8DATE  
JULY 1, 1976AIRPLANE  
NASA6CLOUD  
2PASS  
4G-SCALE  
2.5KV/MY-UNIT  
5 SEC

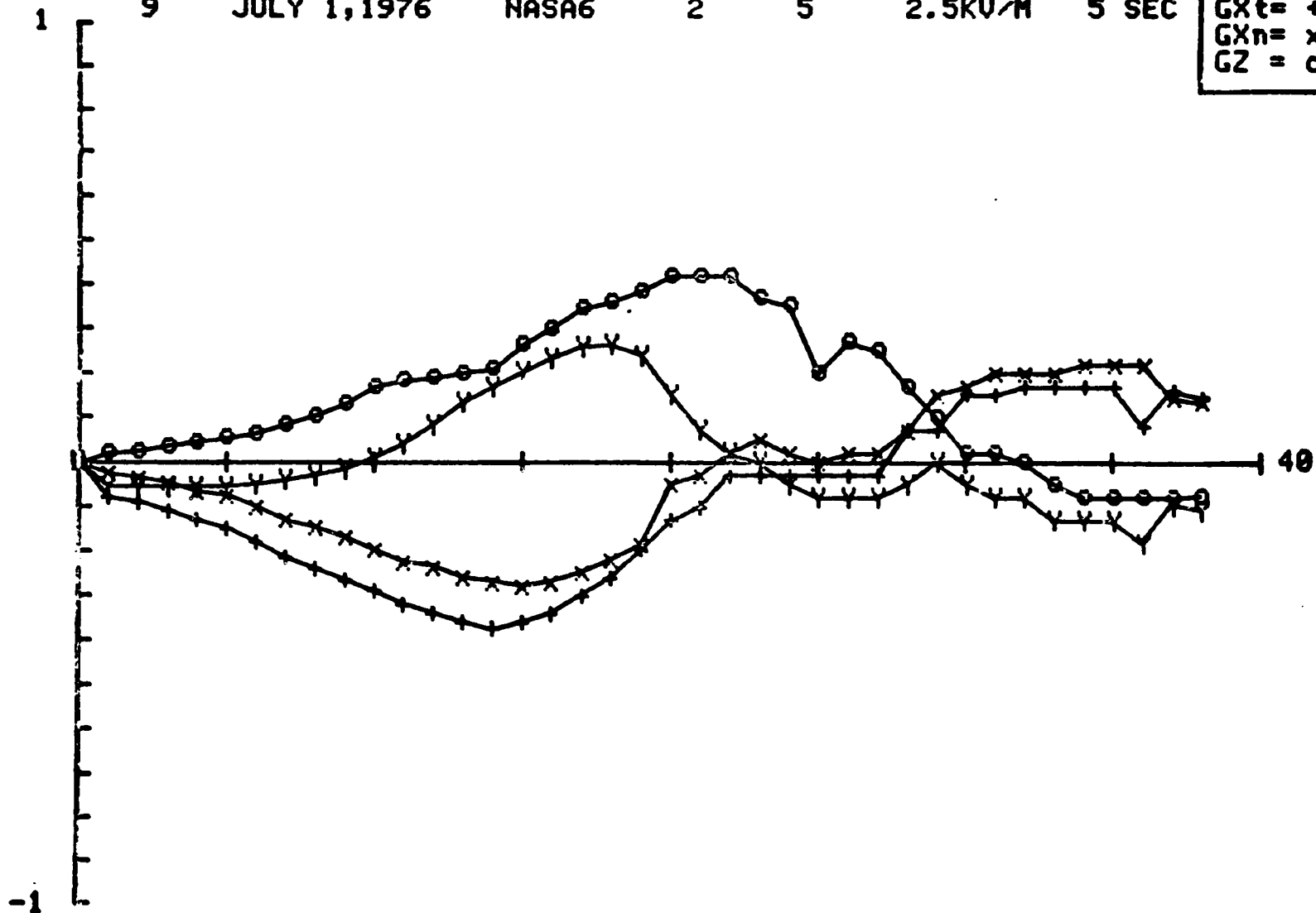
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

182



FILE 9 DATE JULY 1, 1976 AIRPLANE NASA6 CLOUD 2 PASS 5 G-SCALE 2.5KV/M Y-UNIT 5 SEC

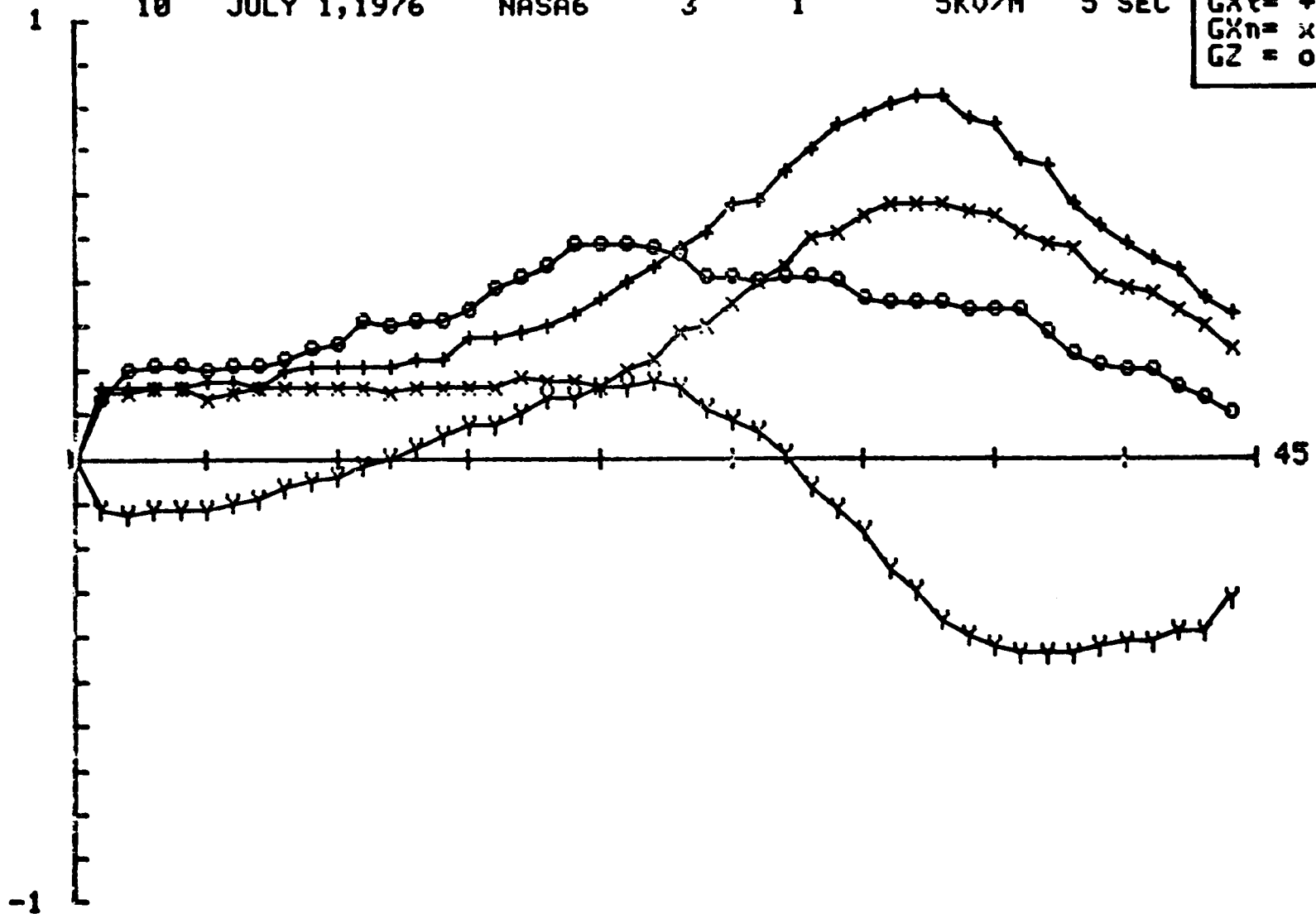
GY = Y  
 GXt = +  
 GXn = x  
 GZ = o



184

FILE 10      DATE JULY 1, 1976      AIRPLANE NASA6      CLOUD 3      PASS 1      G-SCALE 5KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE  
11

DATE  
JULY 1, 1976

AIRPLANE  
NASA6

CLOUD  
3

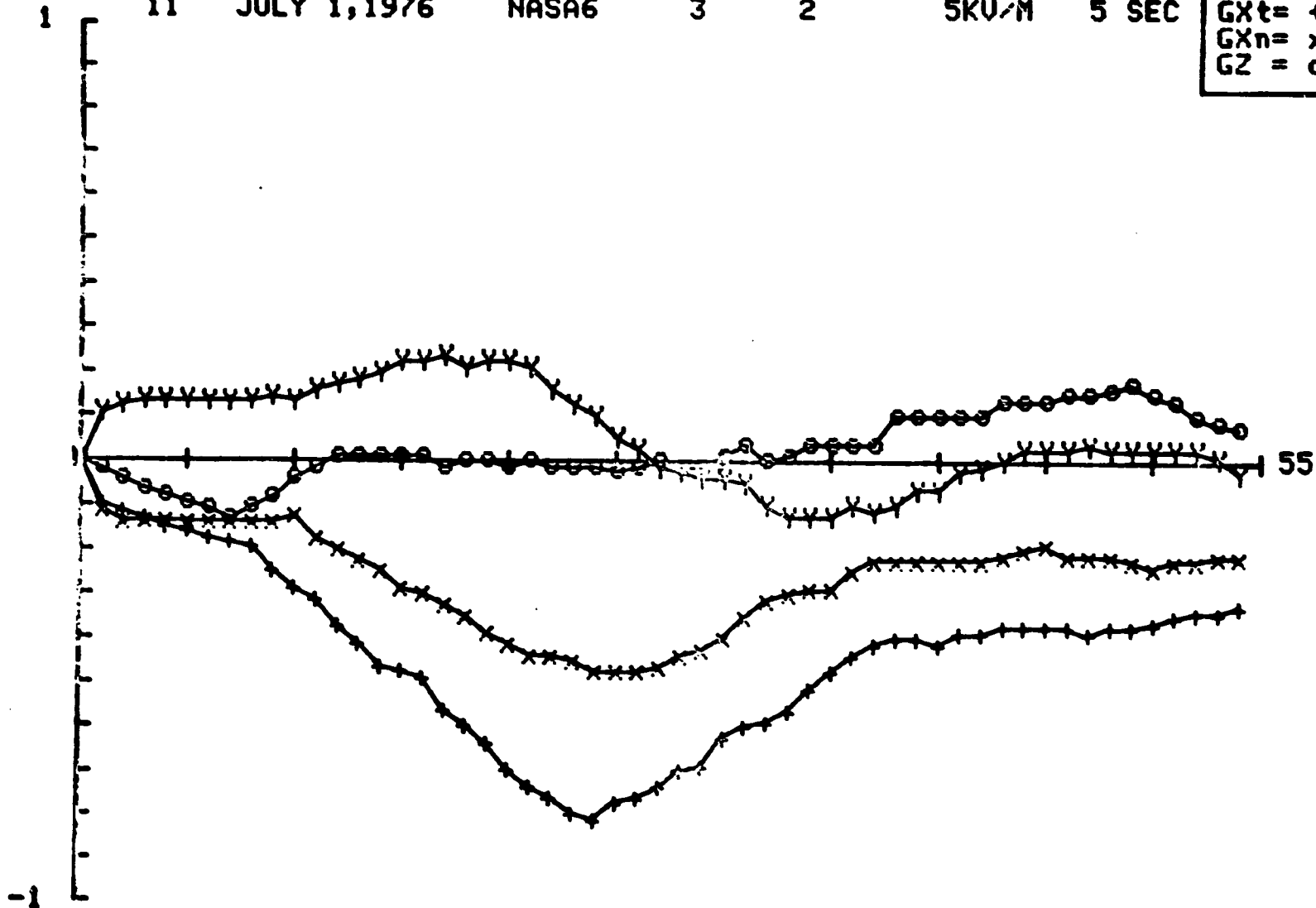
PASS  
2

G-SCALE  
SKU/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o

185





136

FILE  
12

DATE  
JULY 2, 1976

AIRPLANE  
NASA6

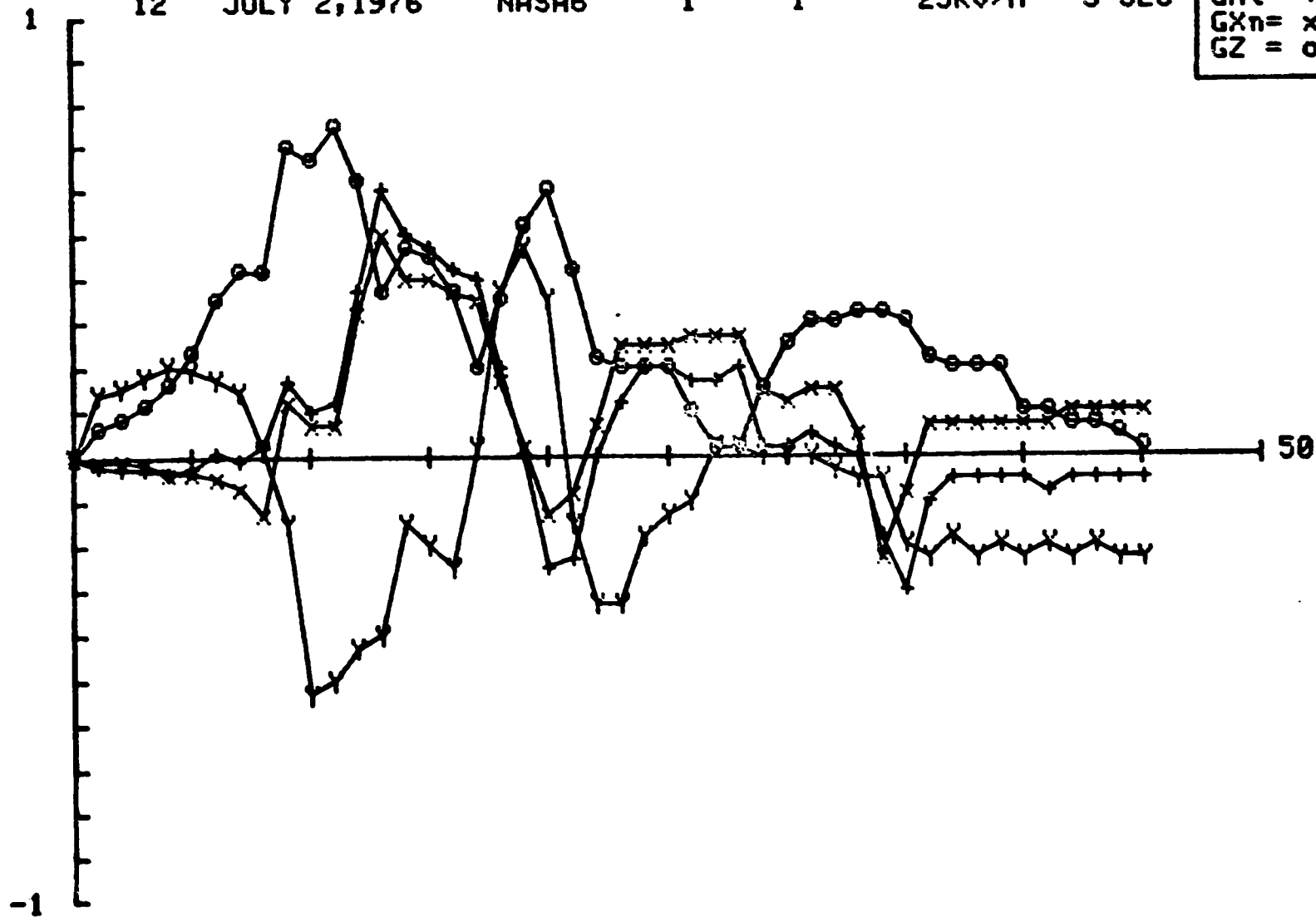
CLOUD  
1

PASS  
1

G-SCALE  
25KV/M

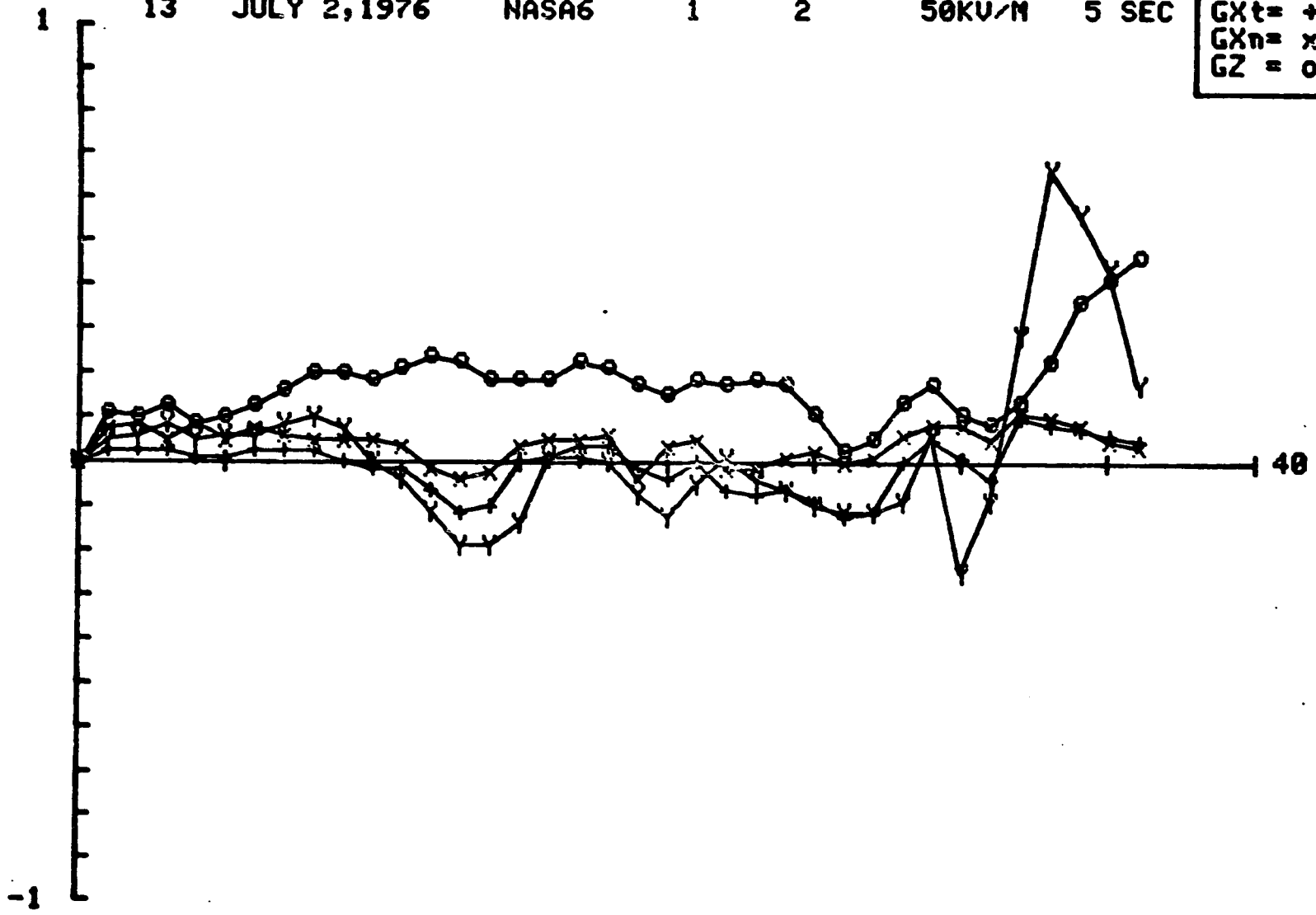
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 13      DATE JULY 2, 1976      AIRPLANE NASA6      CLOUD 1      PASS 2      G-SCALE 50KV/M      Y-UNIT 5 SEC

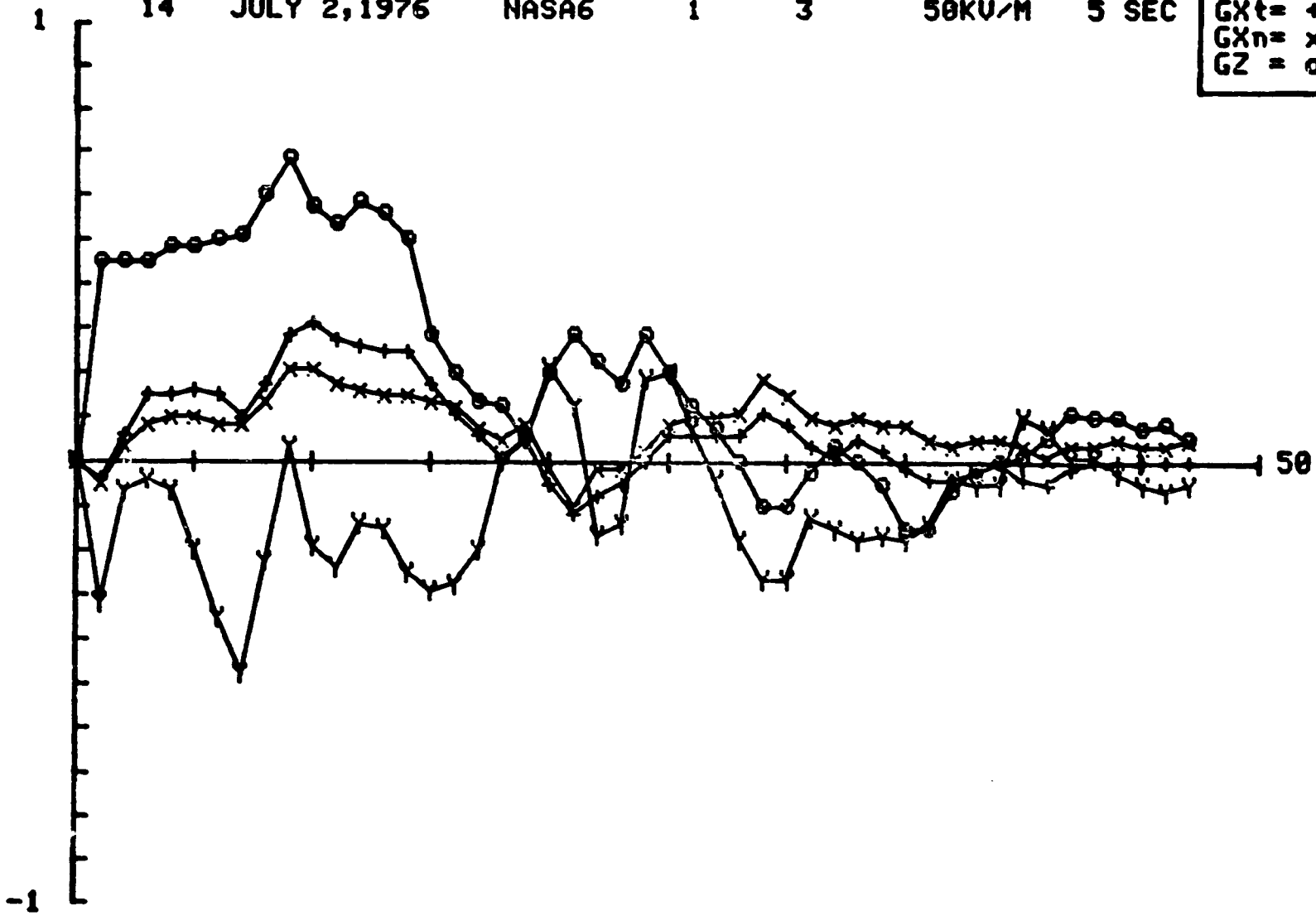
GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



188

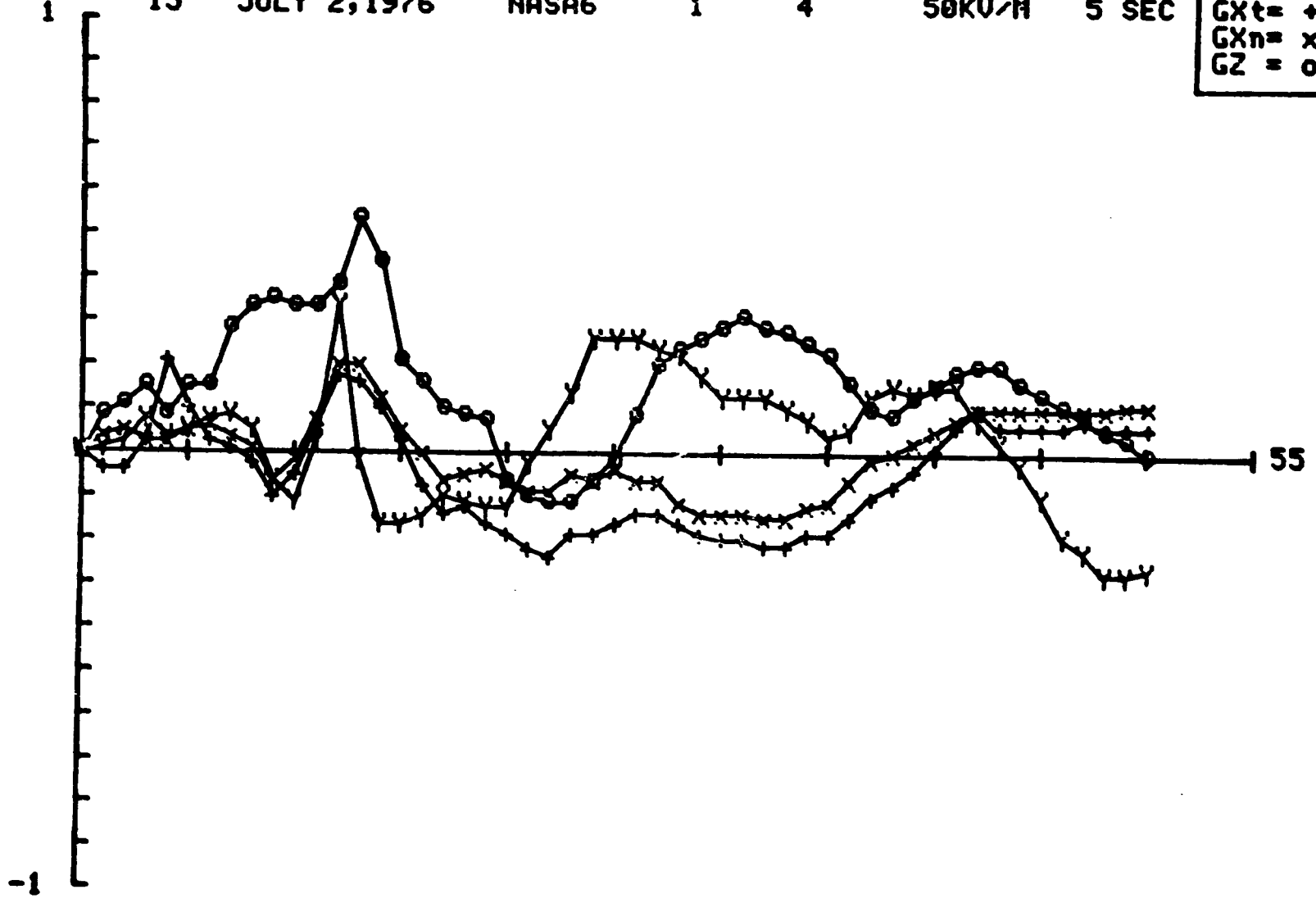
FILE 14      DATE JULY 2, 1976      AIRPLANE NASA6      CLOUD 1      PASS 3      G-SCALE 50KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 15      DATE JULY 2, 1976      AIRPLANE NASA6      CLOUD 1      PASS 4      G-SCALE 50KV/H      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
GXn	=	x
GZ	=	o



140

FILE  
16

DATE  
JULY 2, 1976

AIRPLANE  
NASA6

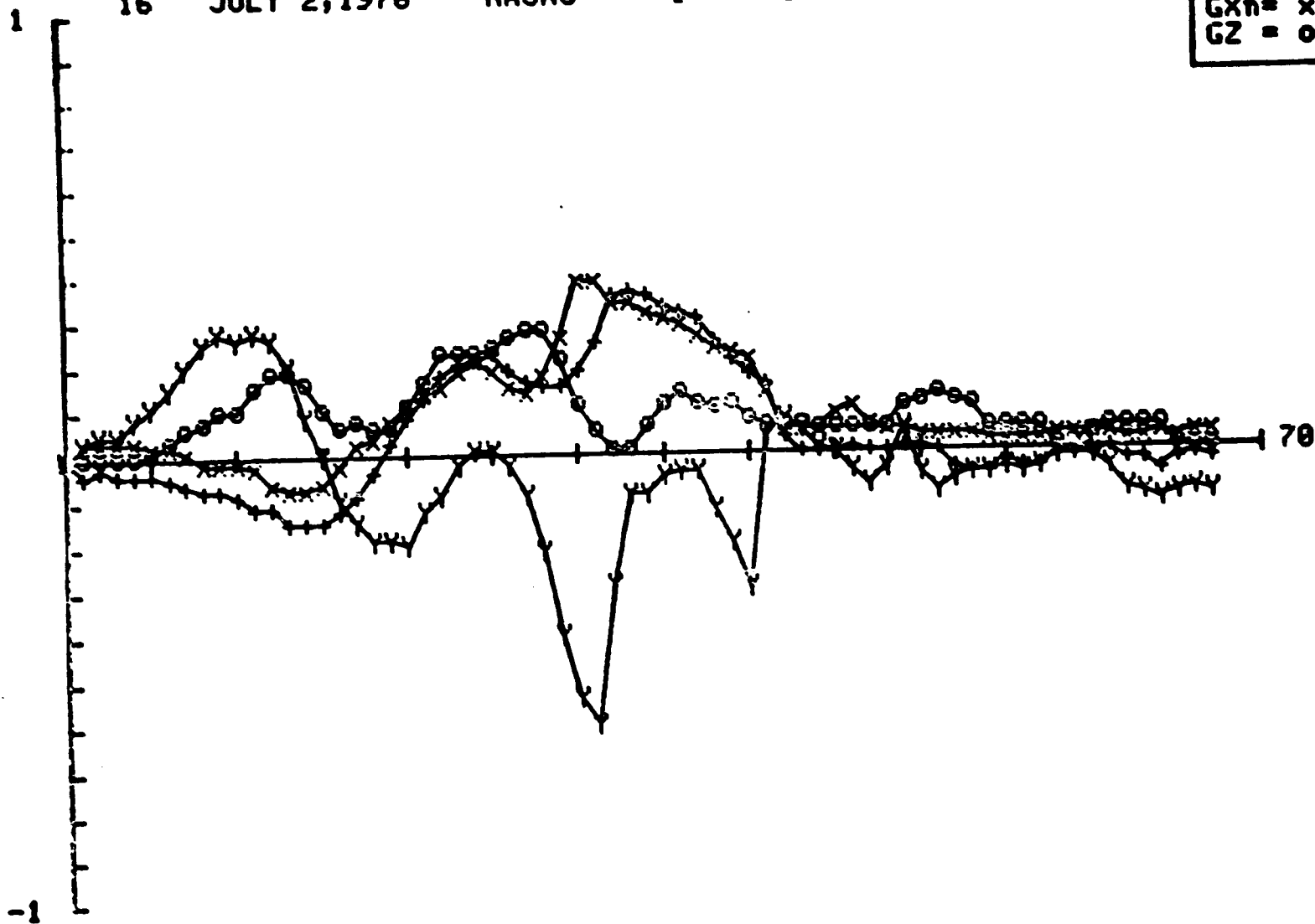
CLOUD  
1

PASS  
5

G-SCALE  
50KV/M

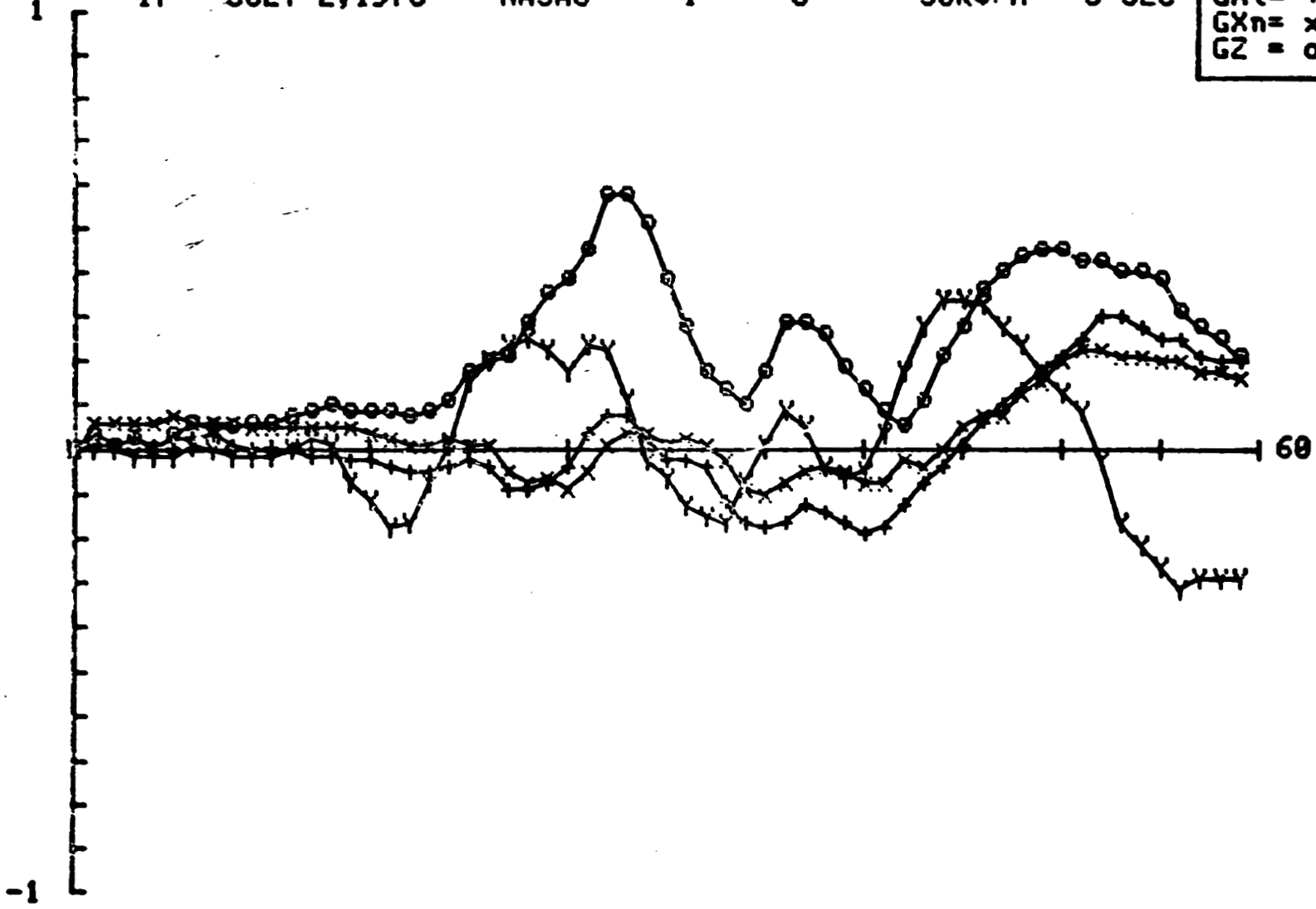
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 17      DATE JULY 2, 1976      AIRPLANE NASA6      CLOUD 1      PASS 6      G-SCALE 50KU/M      Y-UNIT 5 SEC

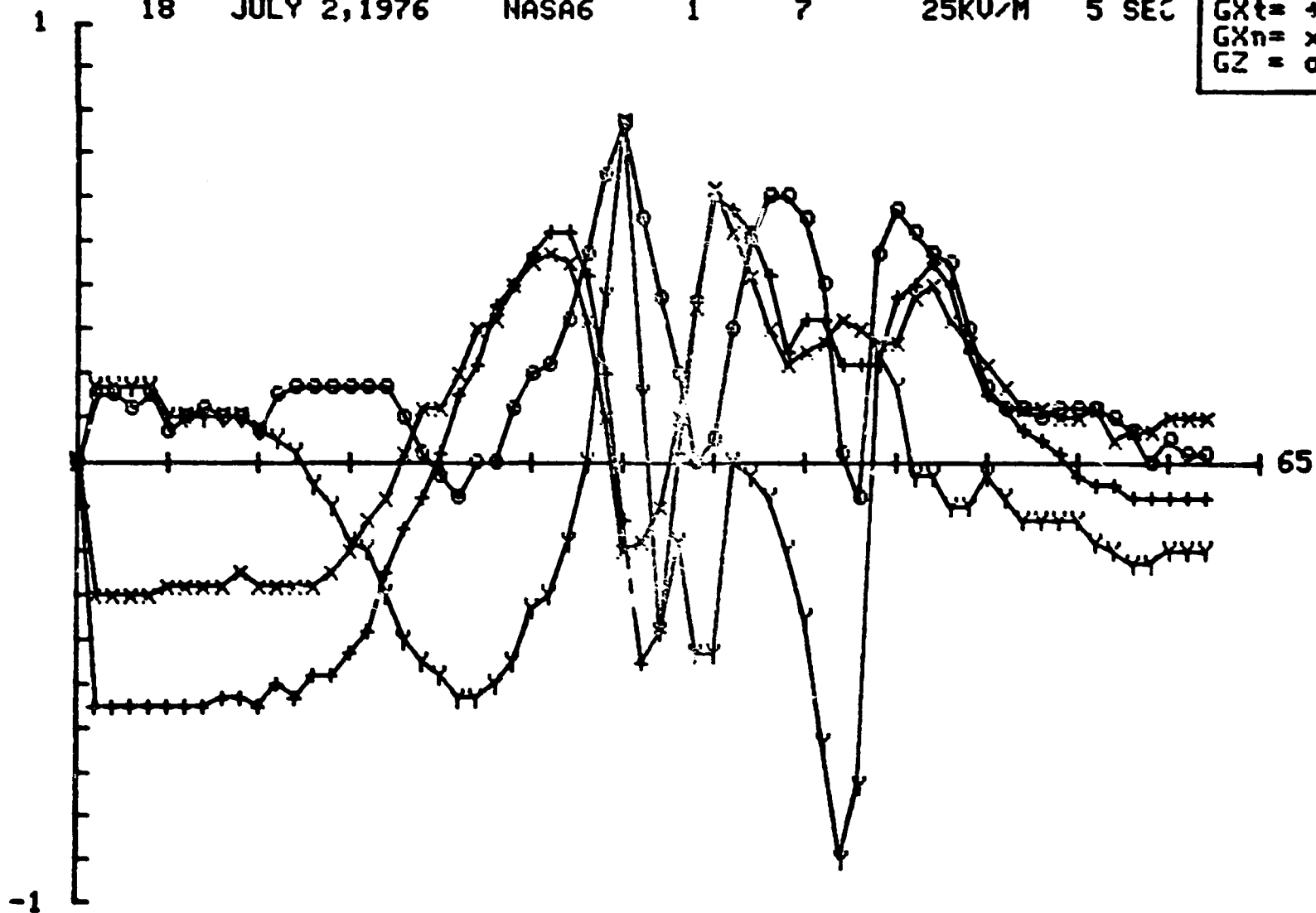
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



142

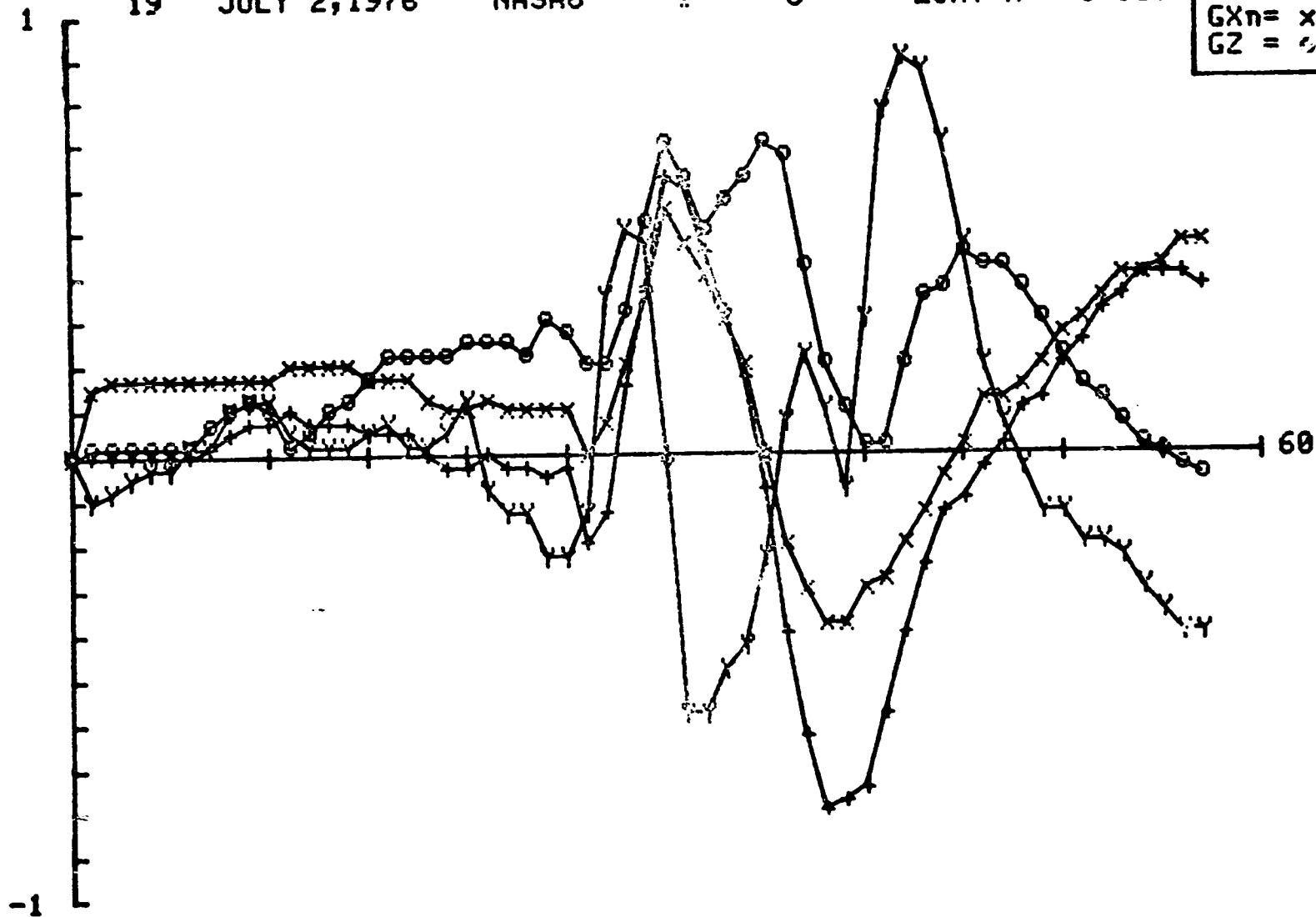
FILE 18    DATE JULY 2, 1976    AIRPLANE NASA6    CLOUD 1    PASS 7    G-SCALE 25KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE  
19DATE  
JULY 2, 1976AIRPLANE  
NASA6CLOUD  
!PASS  
8G-SCALE  
25KV/MY-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o





144

FILE  
20

DATE  
JULY 2, 1976

AIRPLANE  
NASA6

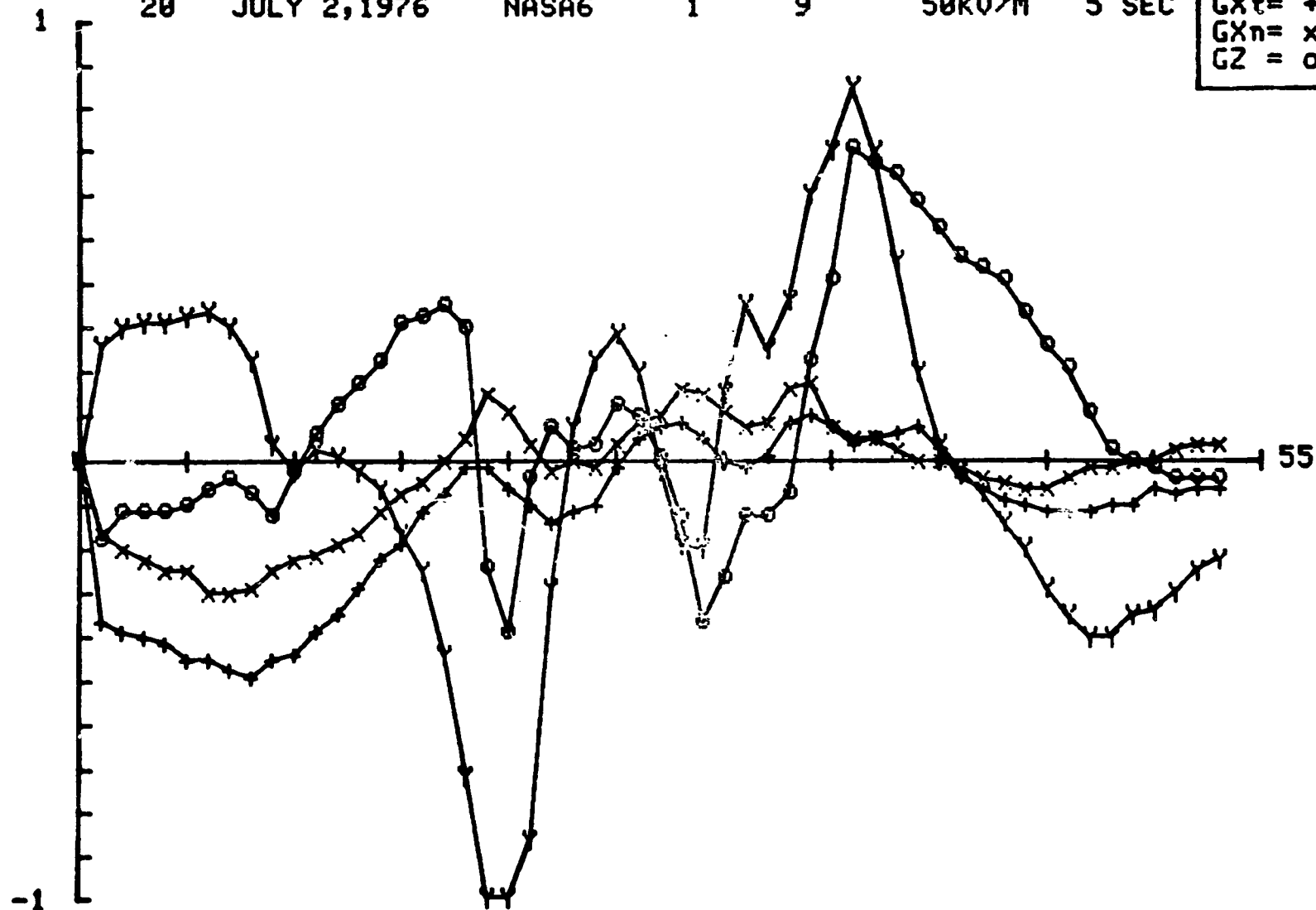
CLOUD  
1

PASS  
9

G-SCALE  
50KV/M

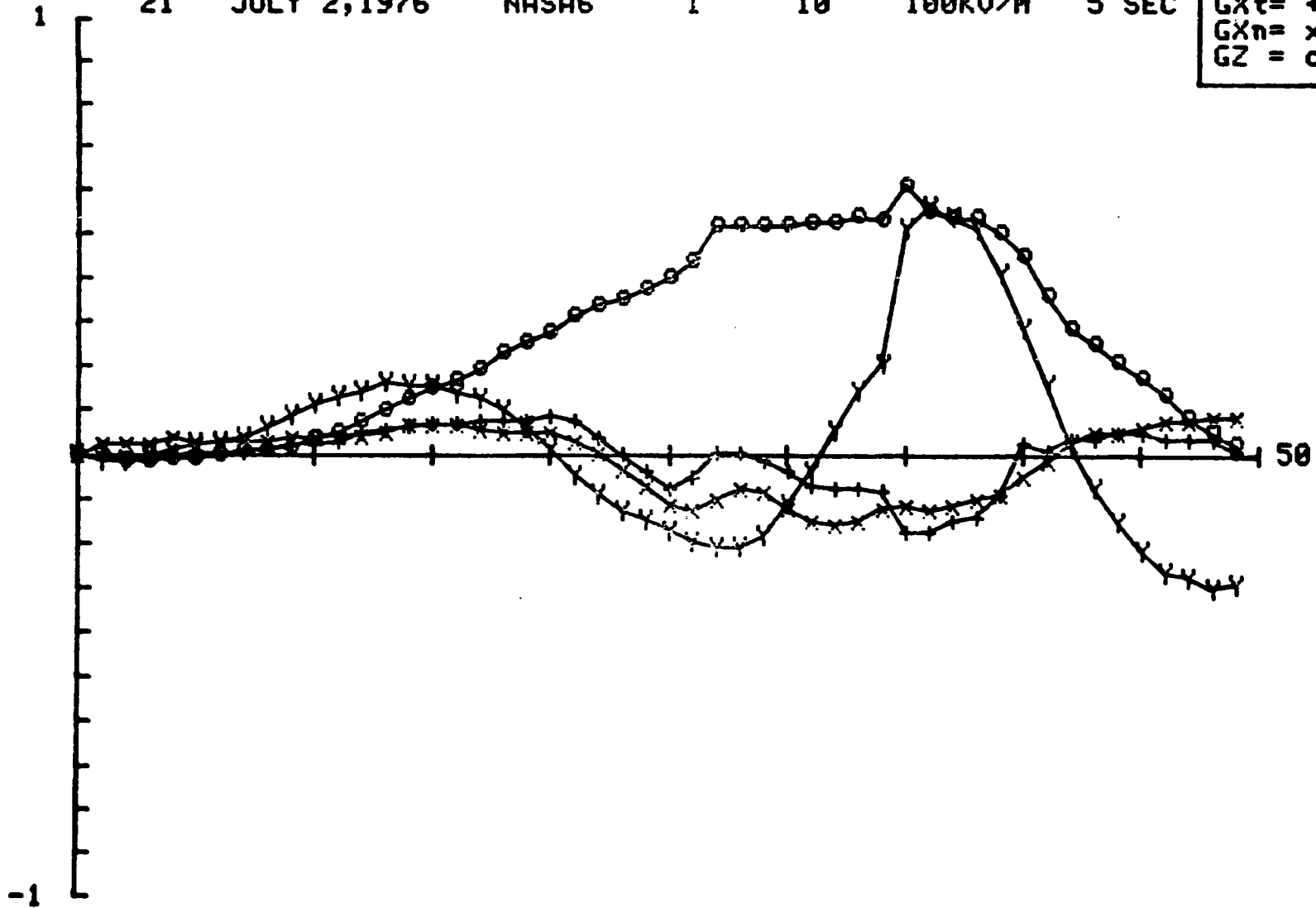
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 21 DATE JULY 2, 1976 AIRPLANE NASA6 CLOUD 1 PASS 10 G-SCALE 100KV/M Y-UNIT 5 SEC

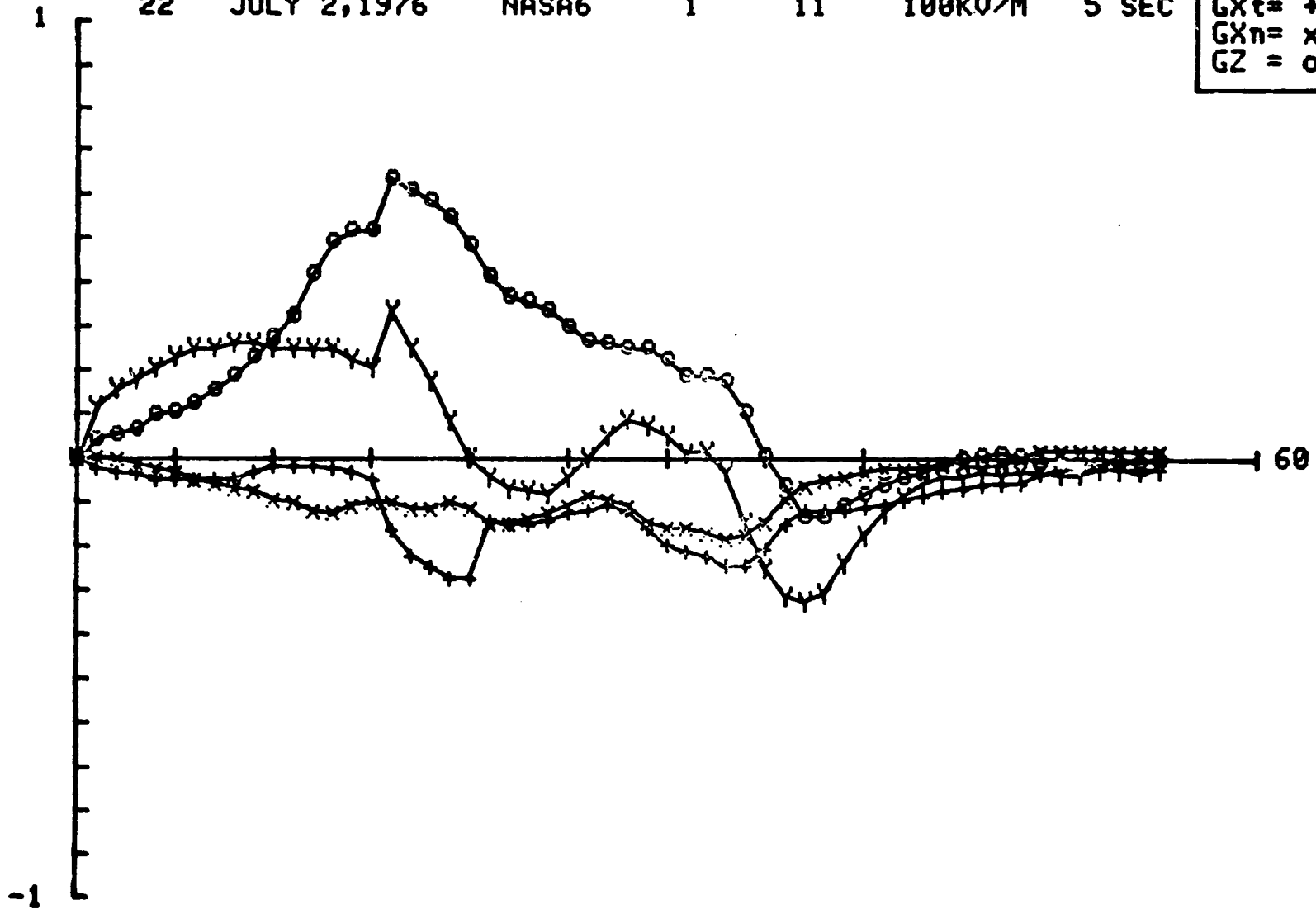
GY = Y  
GXt = +  
GXn = x  
GZ = o



146

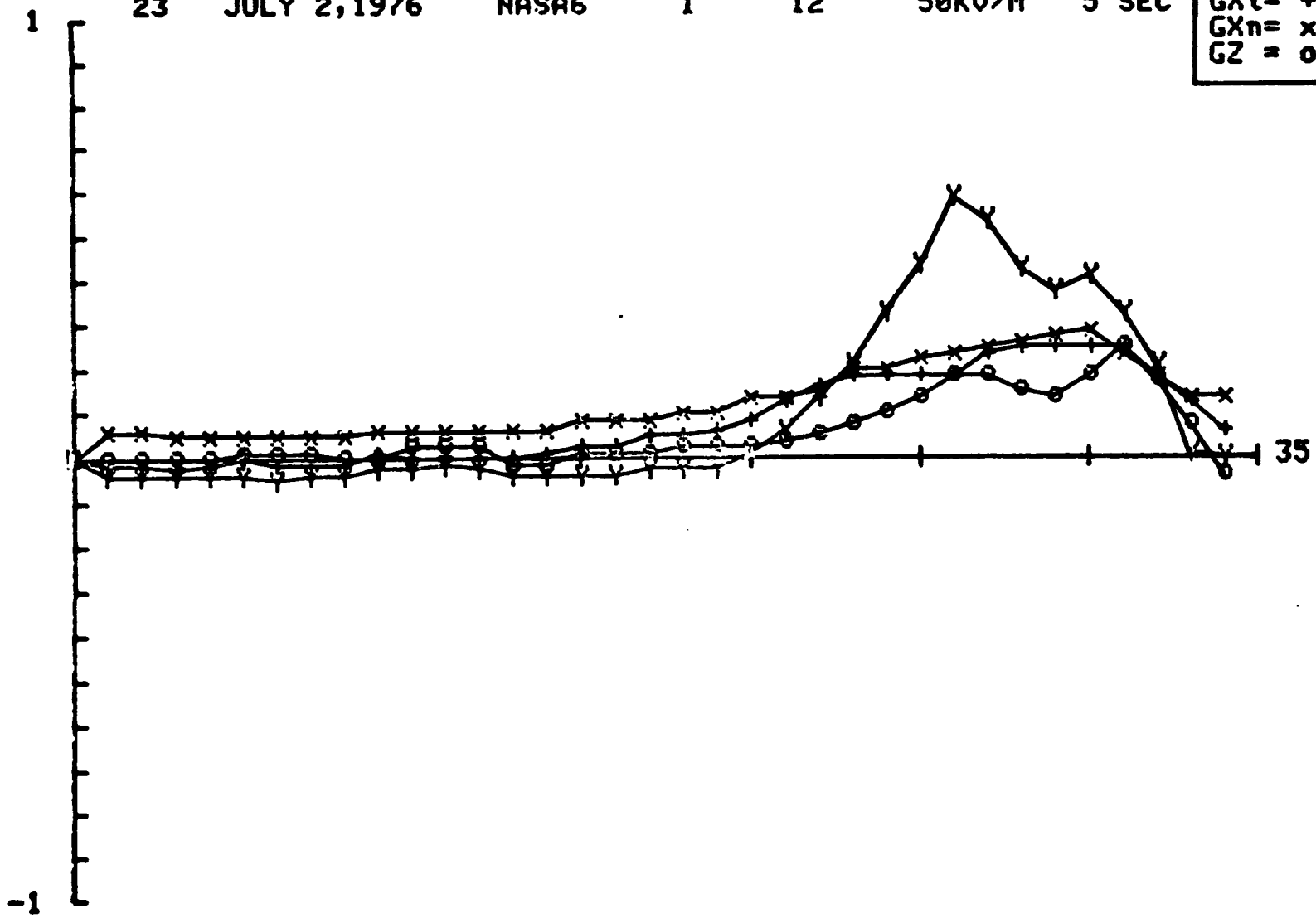
FILE 22      DATE JULY 2, 1976      AIRPLANE NASA6      CLOUD 1      PASS 11      G-SCALE 100KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 23      DATE JULY 2, 1976      AIRPLANE NASA6      CLOUD 1      PASS 12      G-SCALE 50KV/M      Y-UNIT 5 SEC

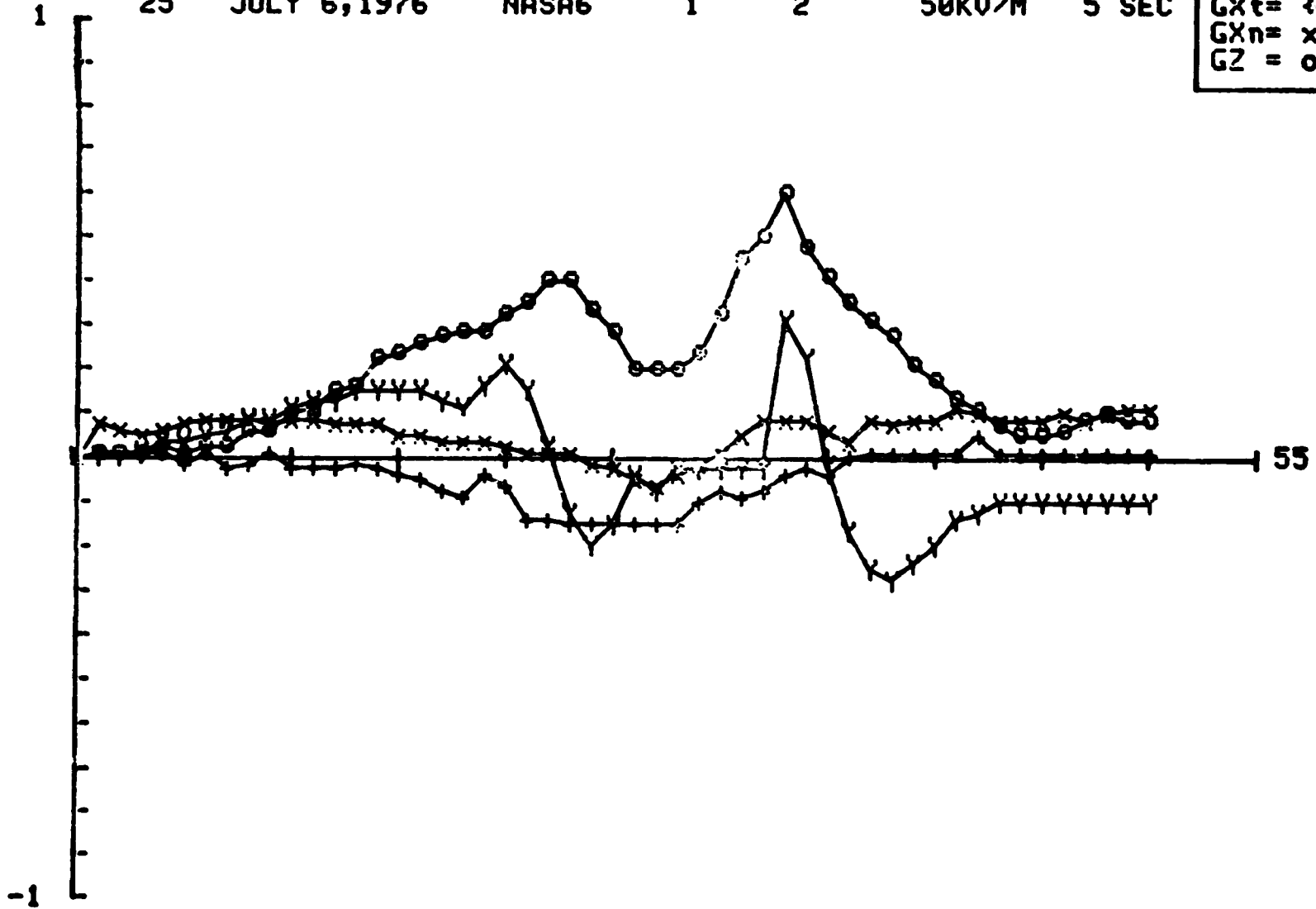
GY = Y  
Gxt = +  
GXn = x  
GZ = o





FILE 25    DATE JULY 6, 1976    AIRPLANE NASA6    CLOUD 1    PASS 2    G-SCALE 50KV/M    Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
GXn	=	x
GZ	=	o



150

FILE  
26

DATE  
JULY 6, 1976

AIRPLANE  
NASA6

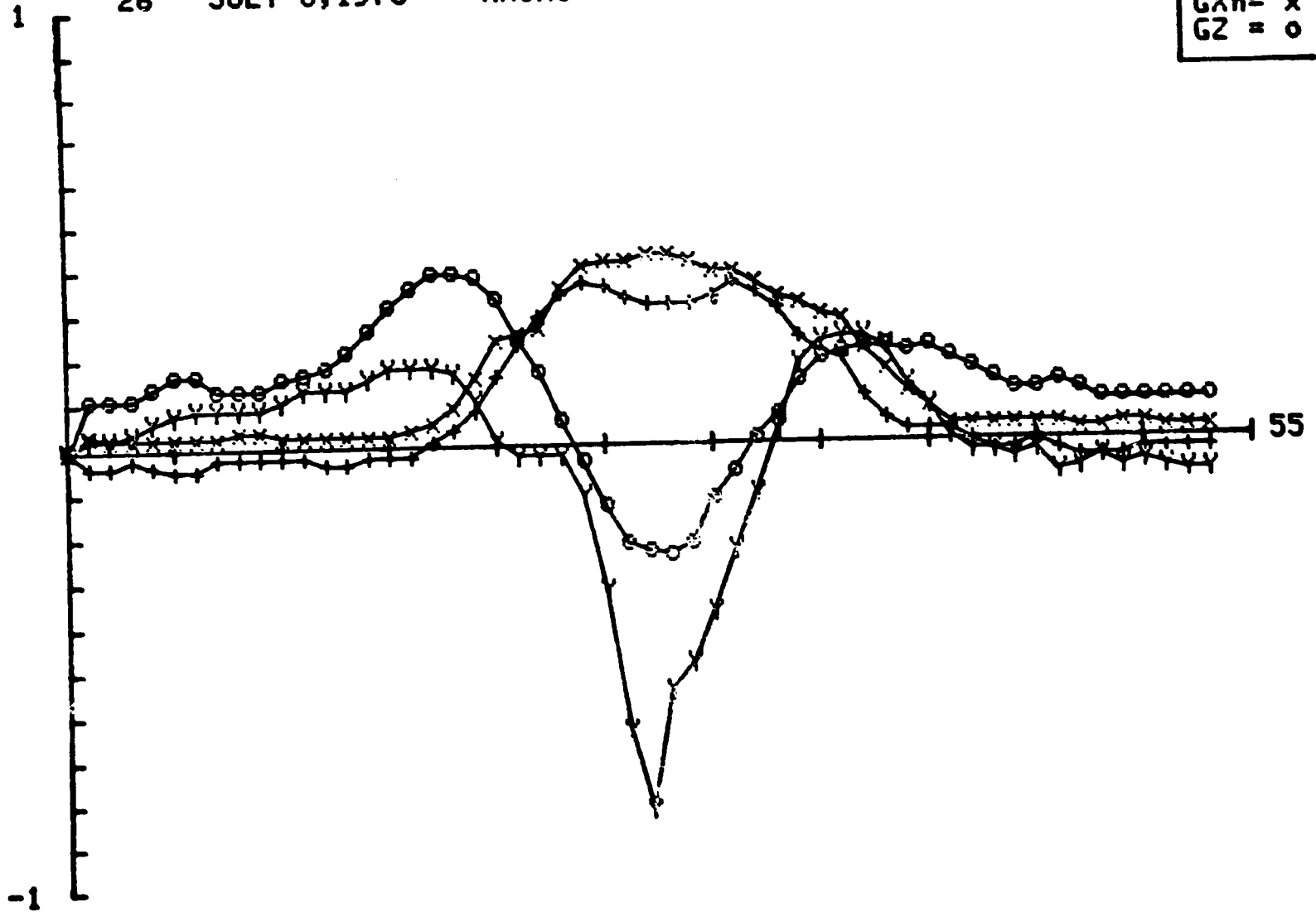
CLOUD  
1

PASS  
3

G-SCALE  
50KV/M

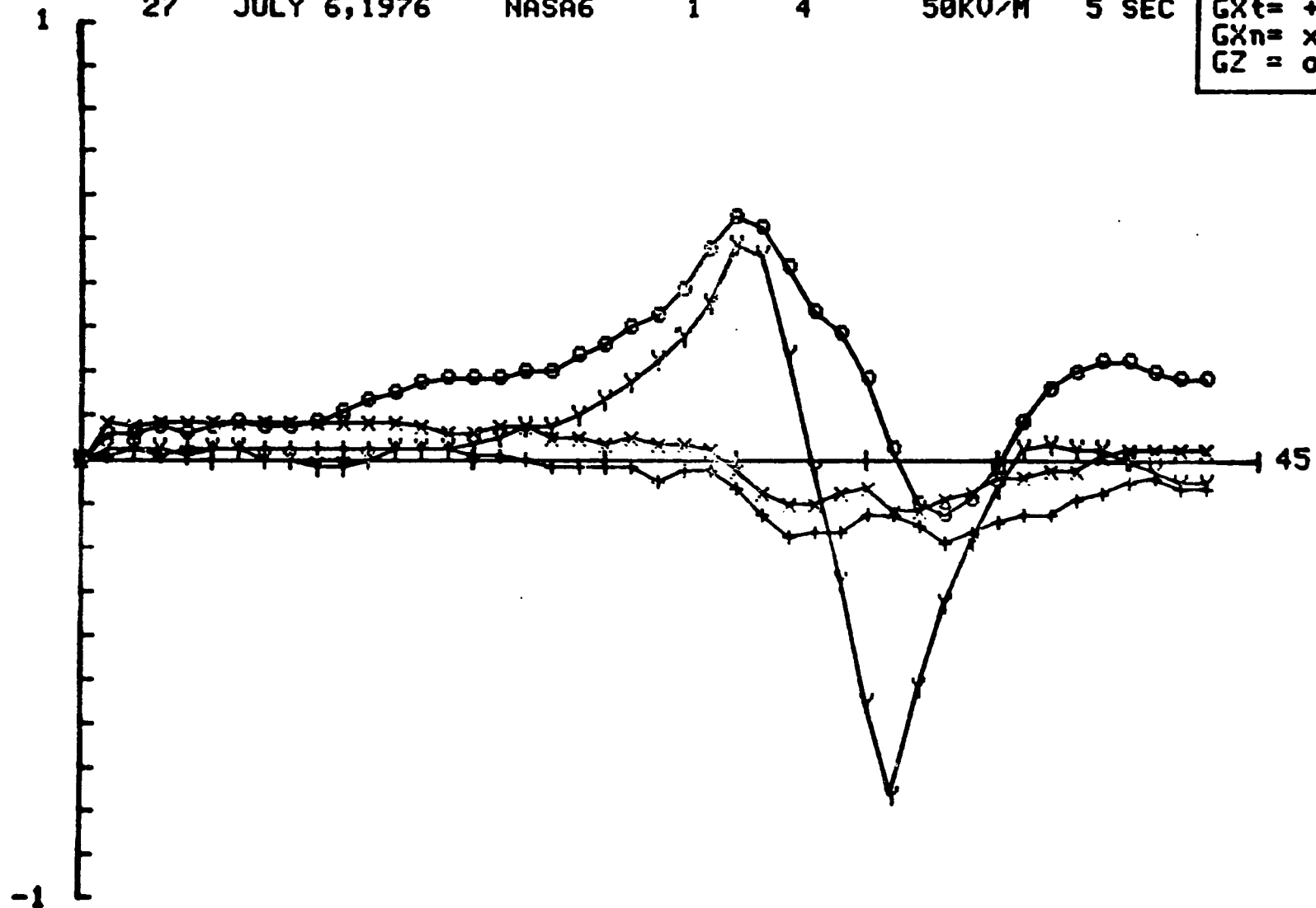
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE 27      DATE JULY 6, 1976      AIRPLANE NASA6      CLOUD 1      PASS 4      G-SCALE 50KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

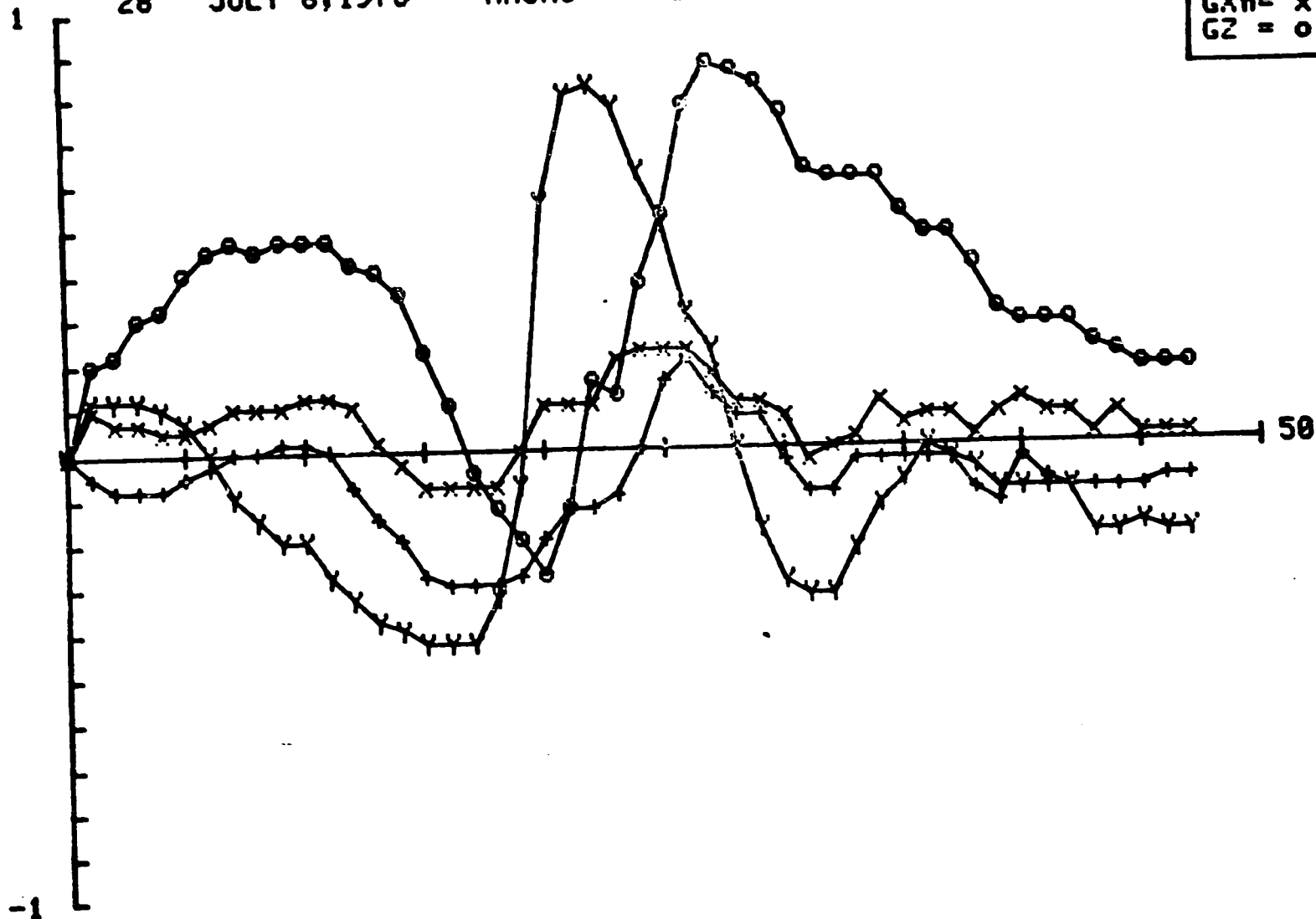




152

FILE 28      DATE JULY 6, 1976      AIRPLANE NASA6      CLOUD 1      PASS 5      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
29

DATE  
JULY 6, 1976

AIRPLANE  
NASA6

CLOUD  
1

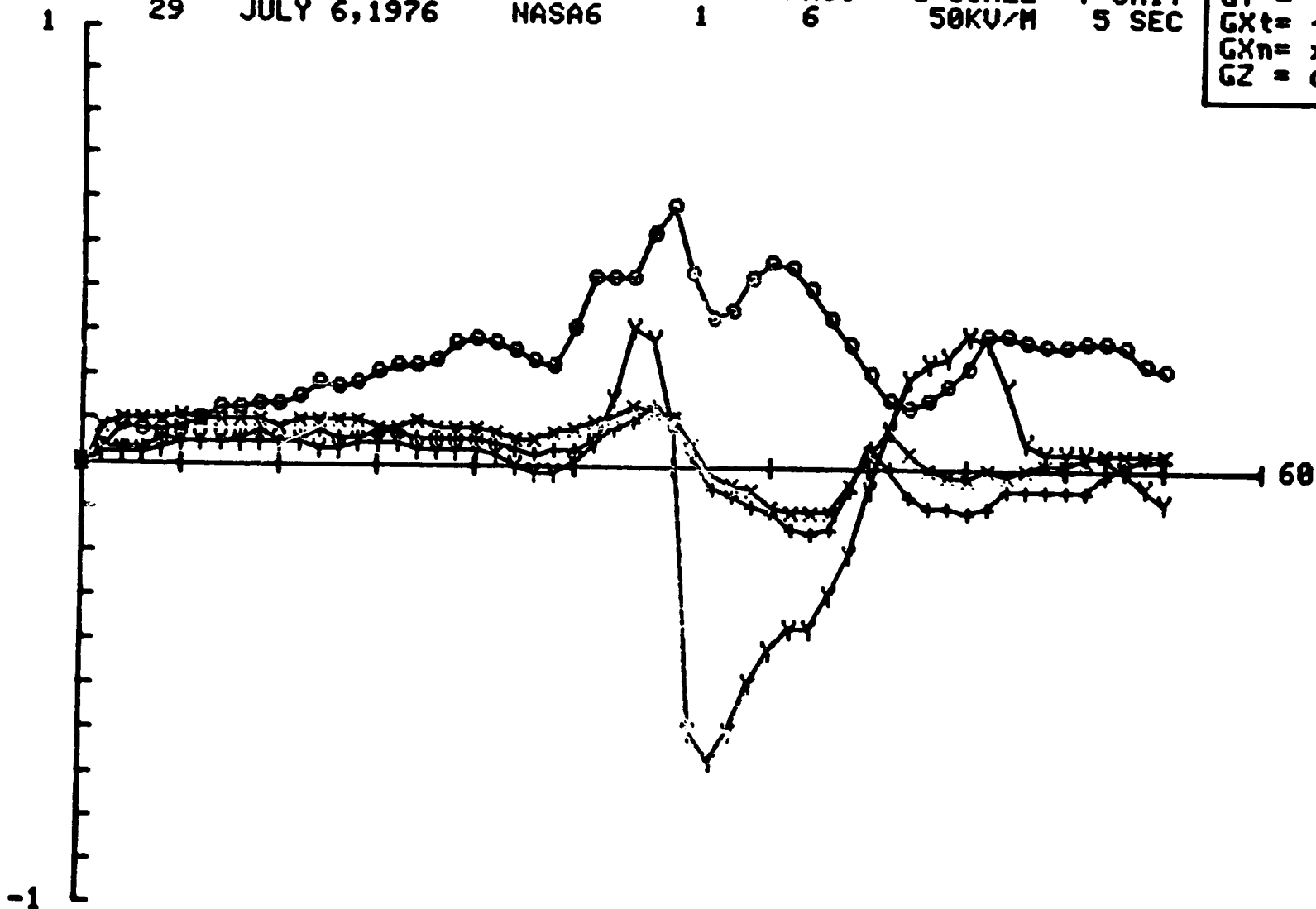
PASS  
6

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

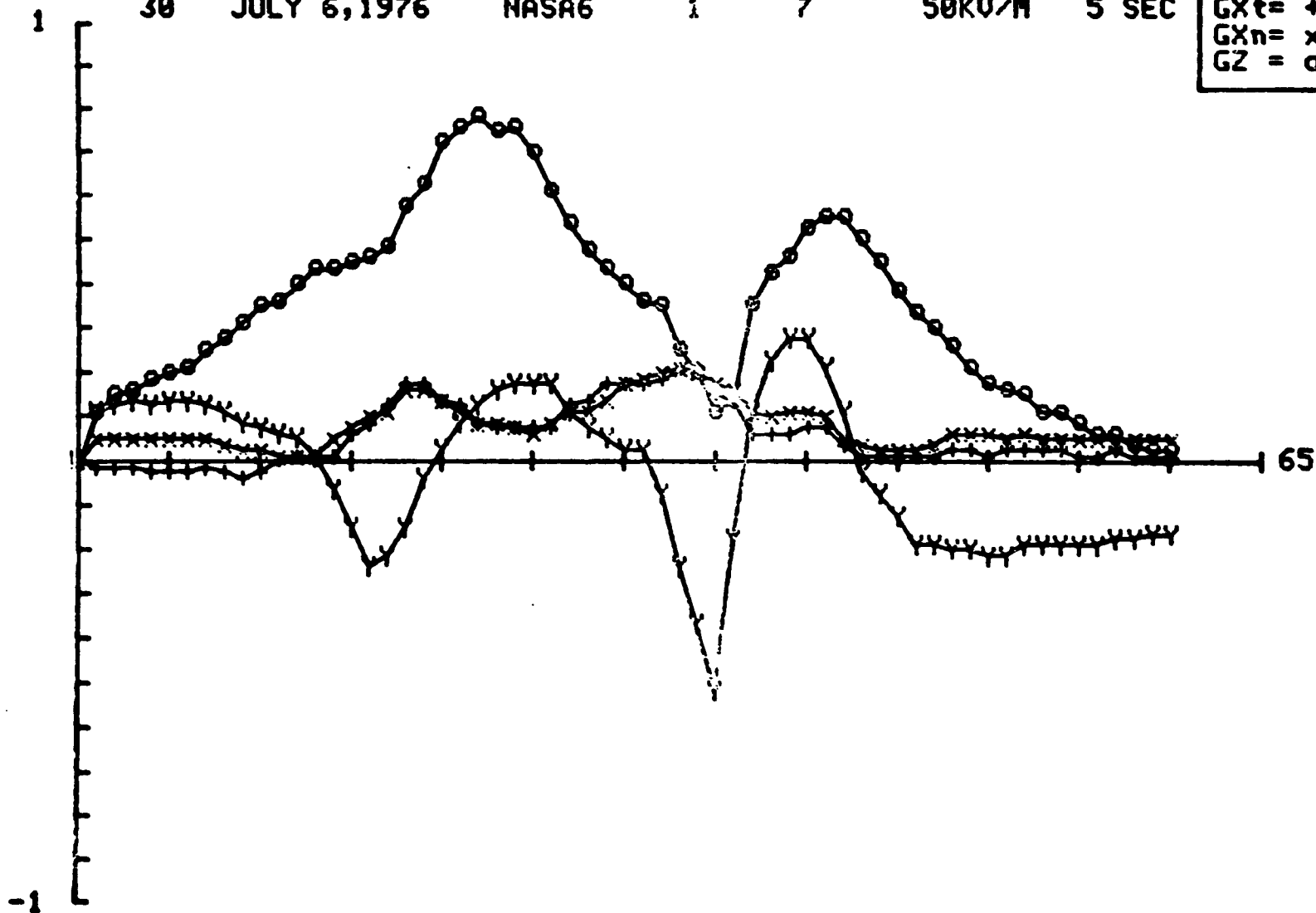
153



154

FILE 30    DATE JULY 6, 1976    AIRPLANE NASA6    CLOUD 1    PASS 7    G-SCALE 50KU/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
31

DATE  
JULY 6, 1976

AIRPLANE  
NASA6

CLOUD  
1

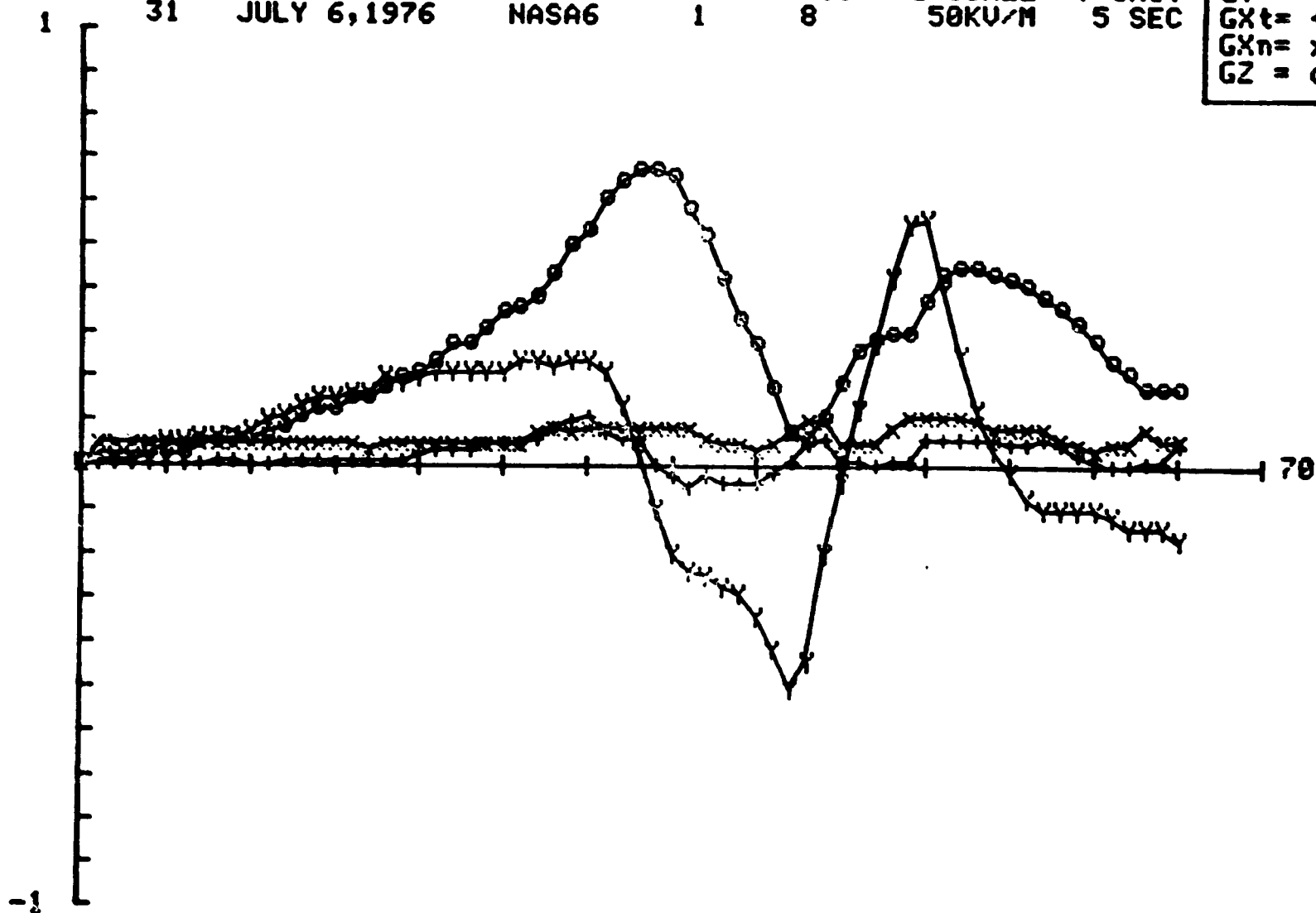
PASS  
8

G-SCALE  
50KV/M

Y-UNIT  
5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = 0

155



156

FILE  
32

DATE  
JULY 6, 1976

AIRPLANE  
NASA6

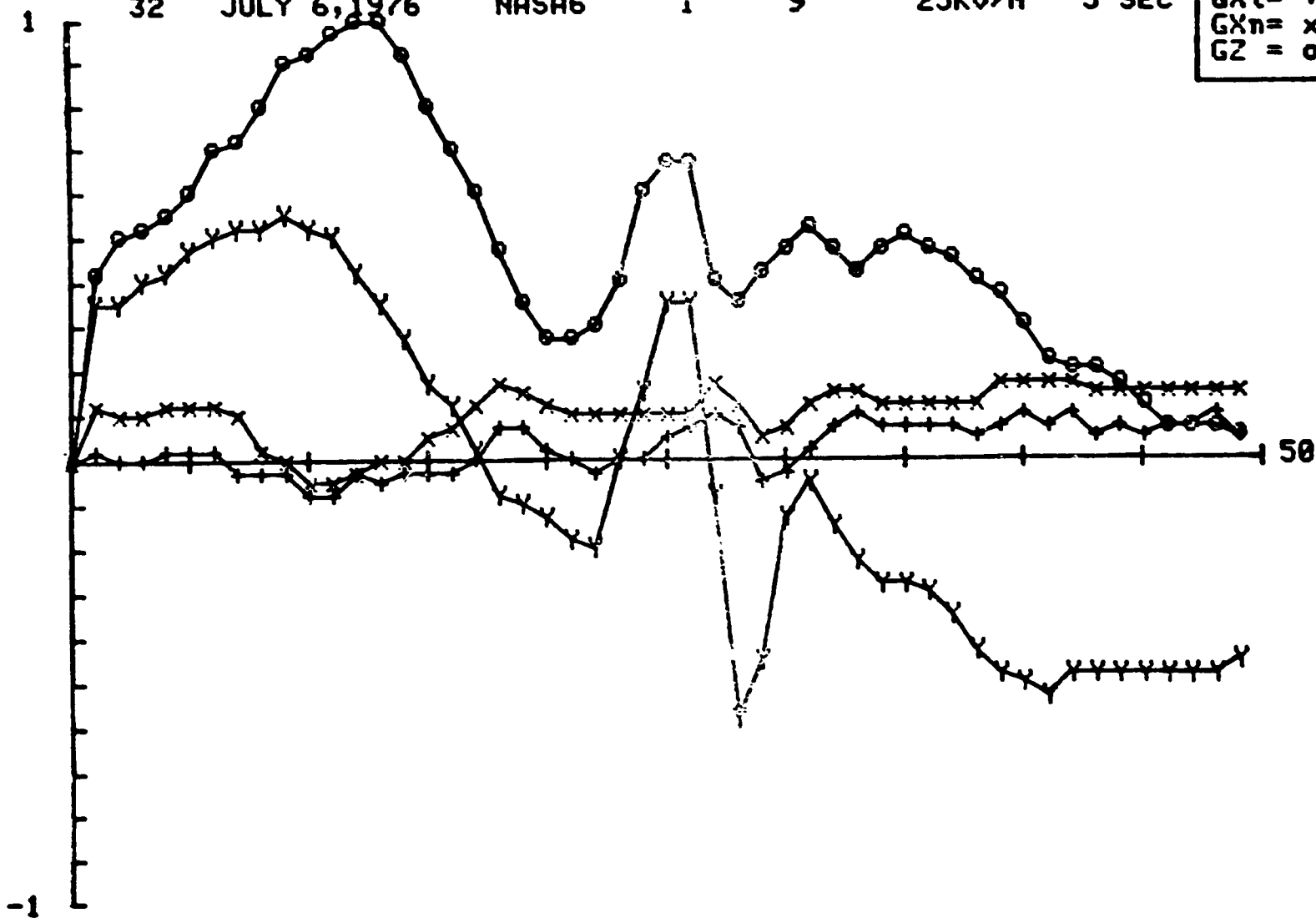
CLOUD  
1

PASS  
9

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
33

DATE  
JULY 6, 1976

AIRPLANE  
NASA6

CLOUD  
1

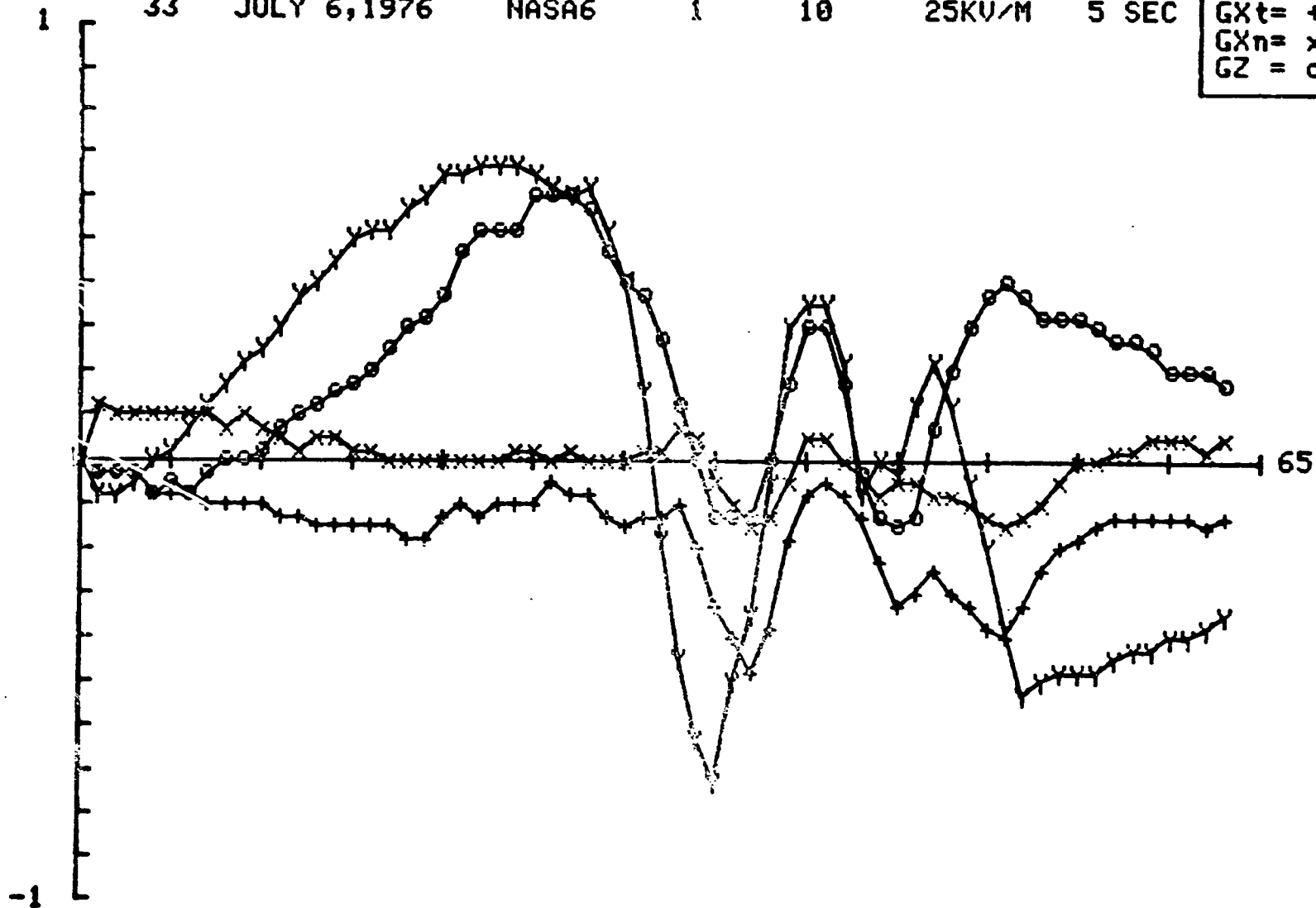
PASS  
10

G-SCALE  
25KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

157



158

FILE  
34

DATE  
JULY 6, 1976

AIRPLANE  
NASA6

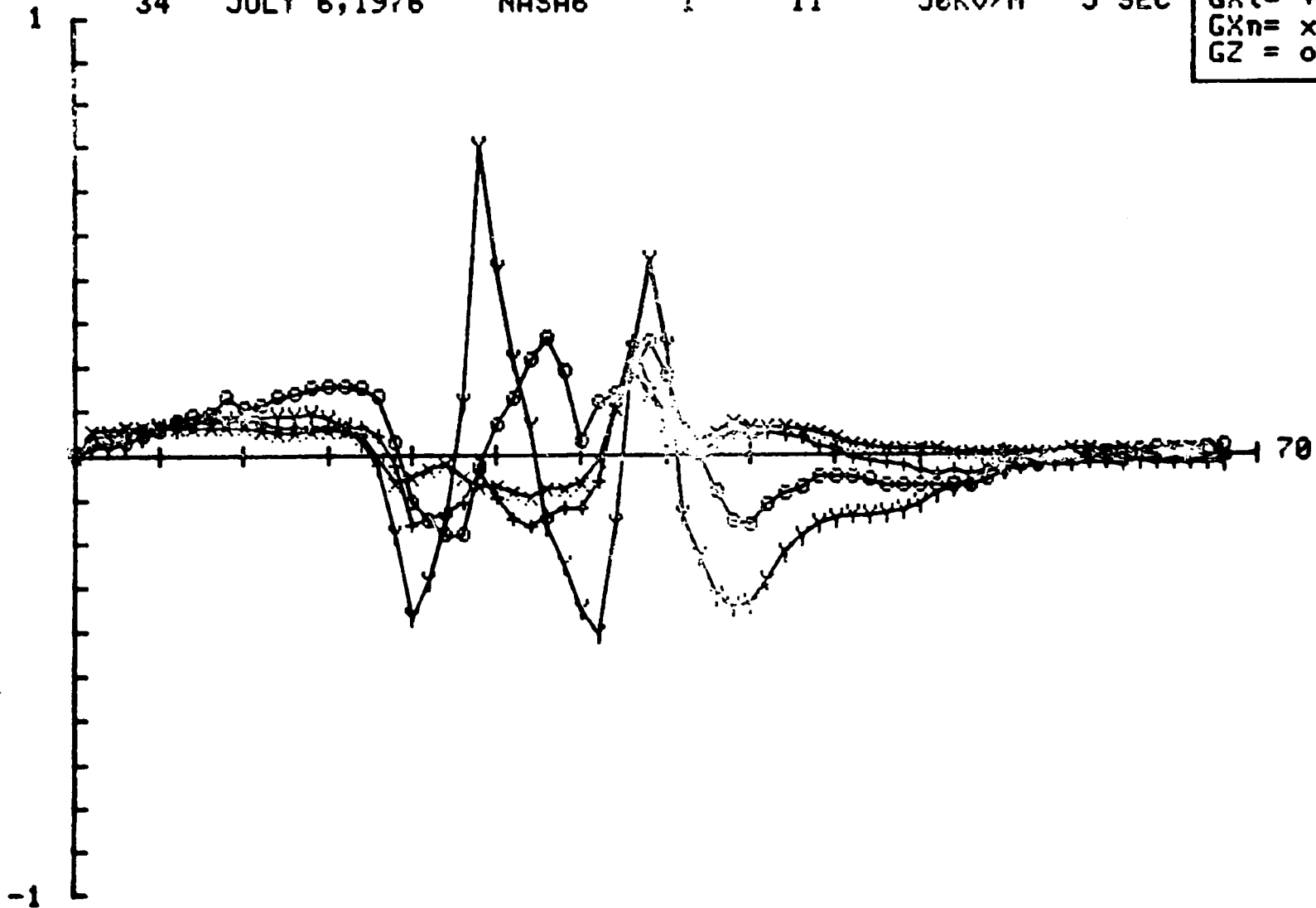
CLOUD  
1

PASS  
11

G-SCALE  
50KV/M

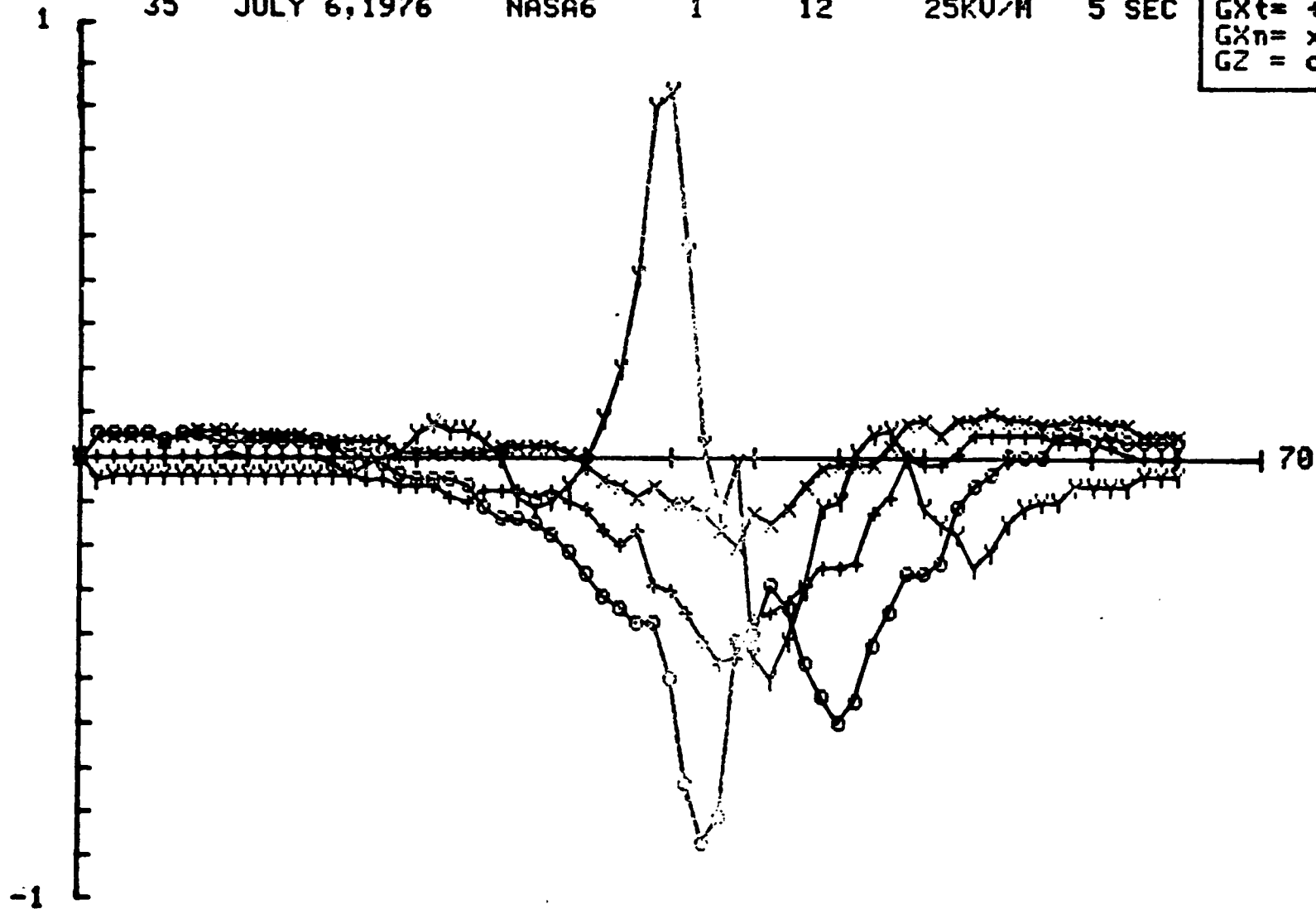
Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o



FILE 35      DATE JULY 6, 1976      AIRPLANE NASA6      CLOUD 1      PASS 12      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY = Y  
GXt = +  
GXn = x  
GZ = o





160

FILE  
36

DATE  
JULY 8, 1976

AIRPLANE  
NASA6

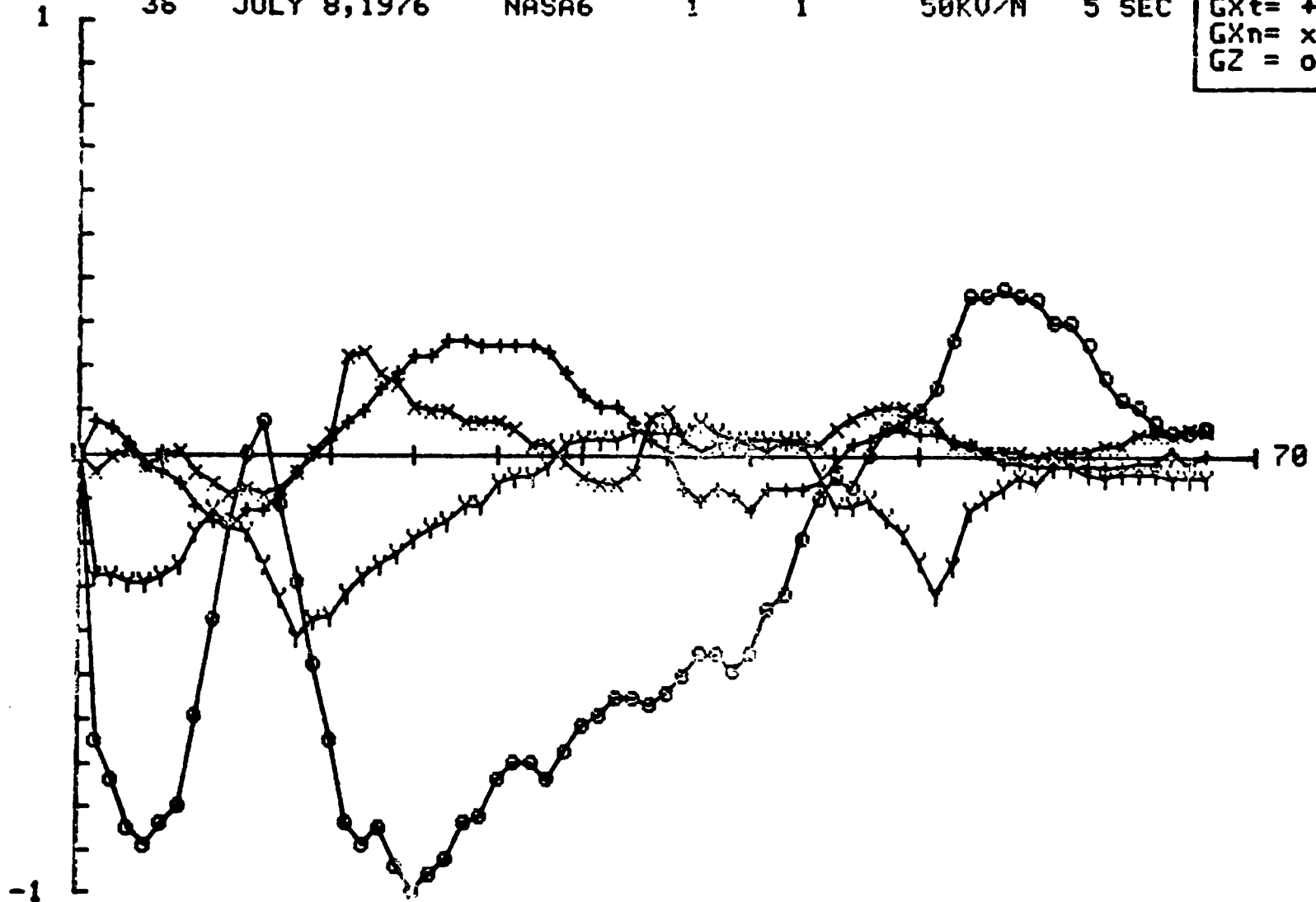
CLOUD  
1

PASS  
1

G-SCALE  
50KV/M

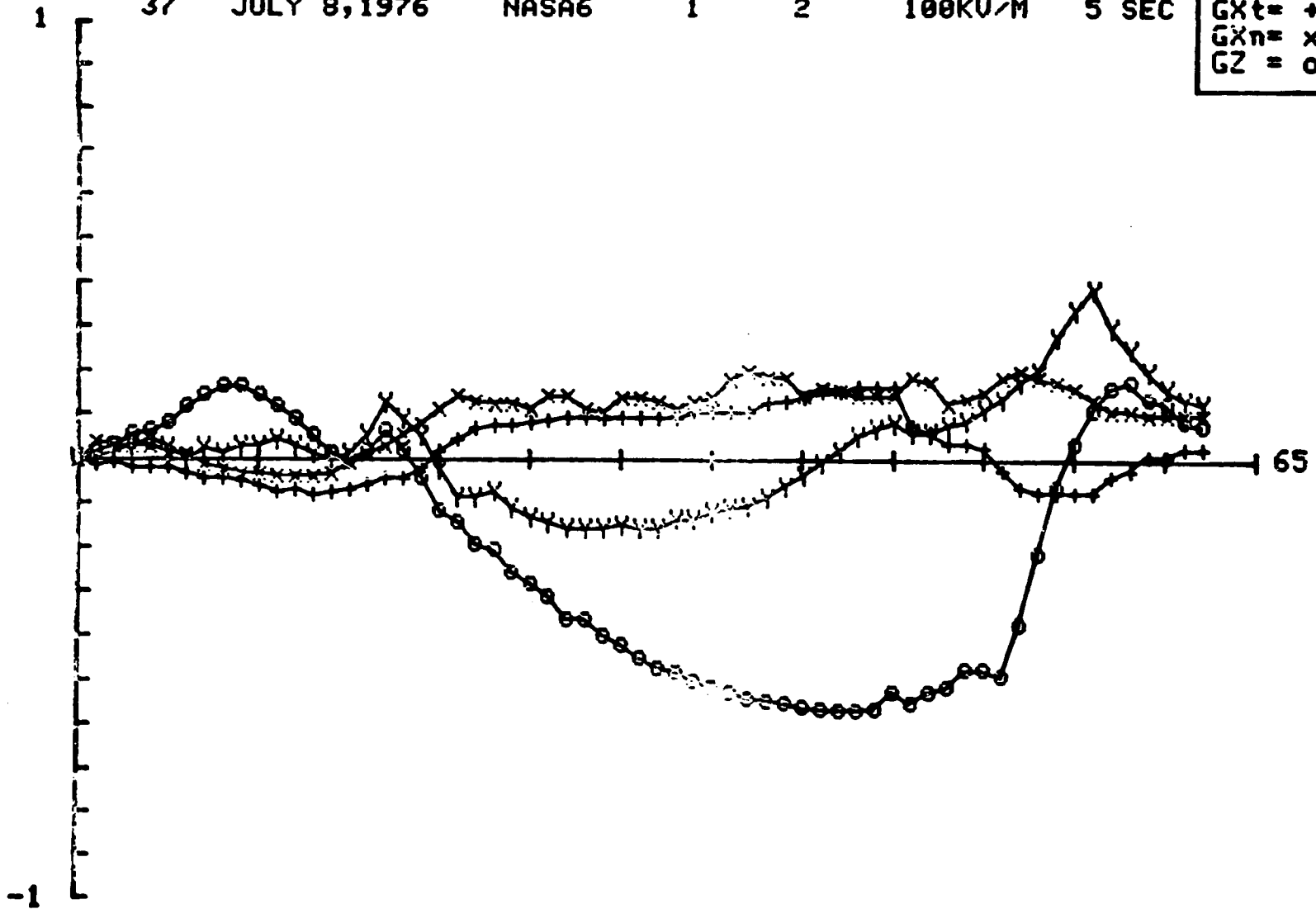
Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 37    DATE JULY 8, 1976    AIRPLANE NASA6    CLOUD 1    PASS 2    G-SCALE 100KV/M    Y-UNIT 5 SEC

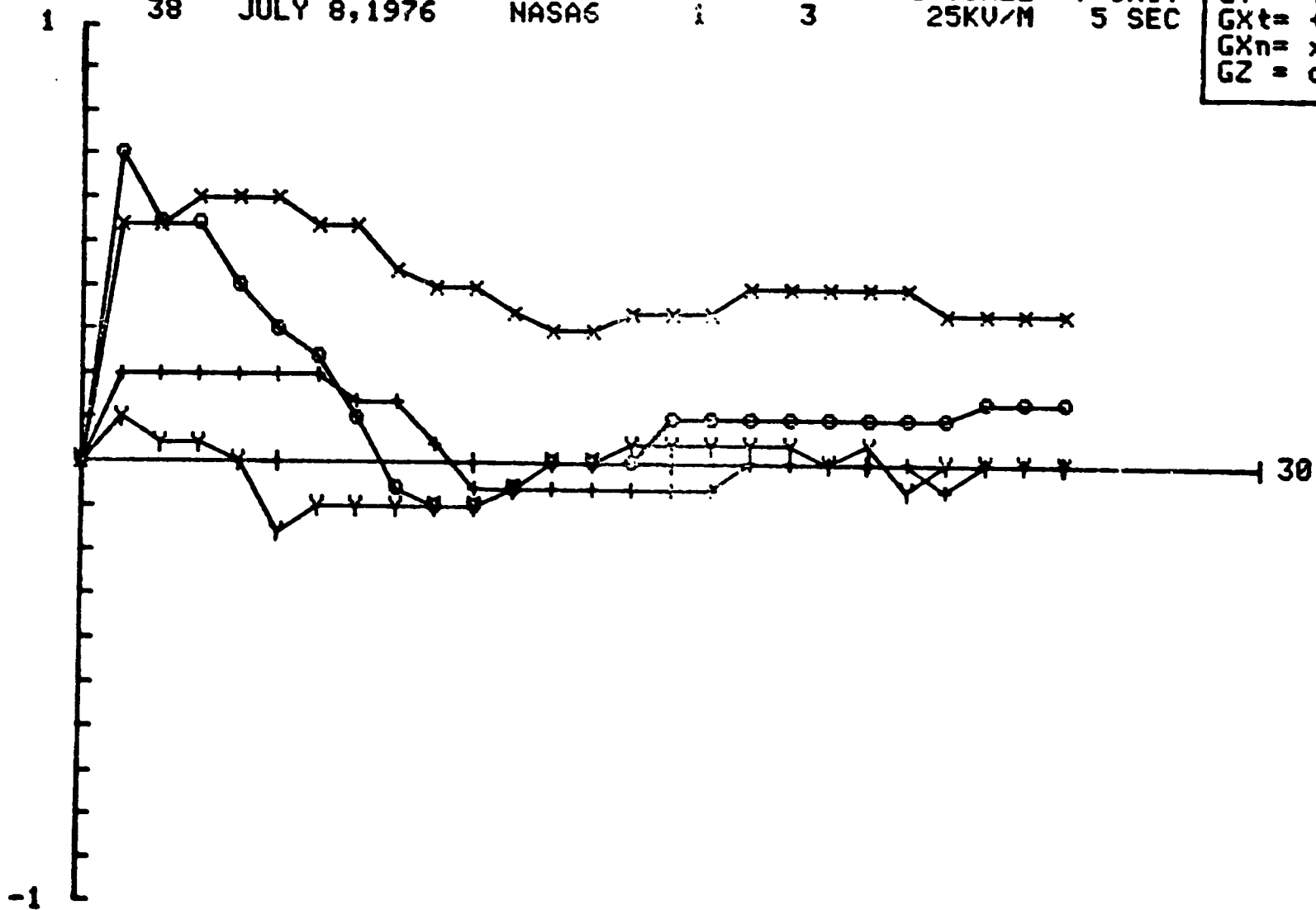
GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



162

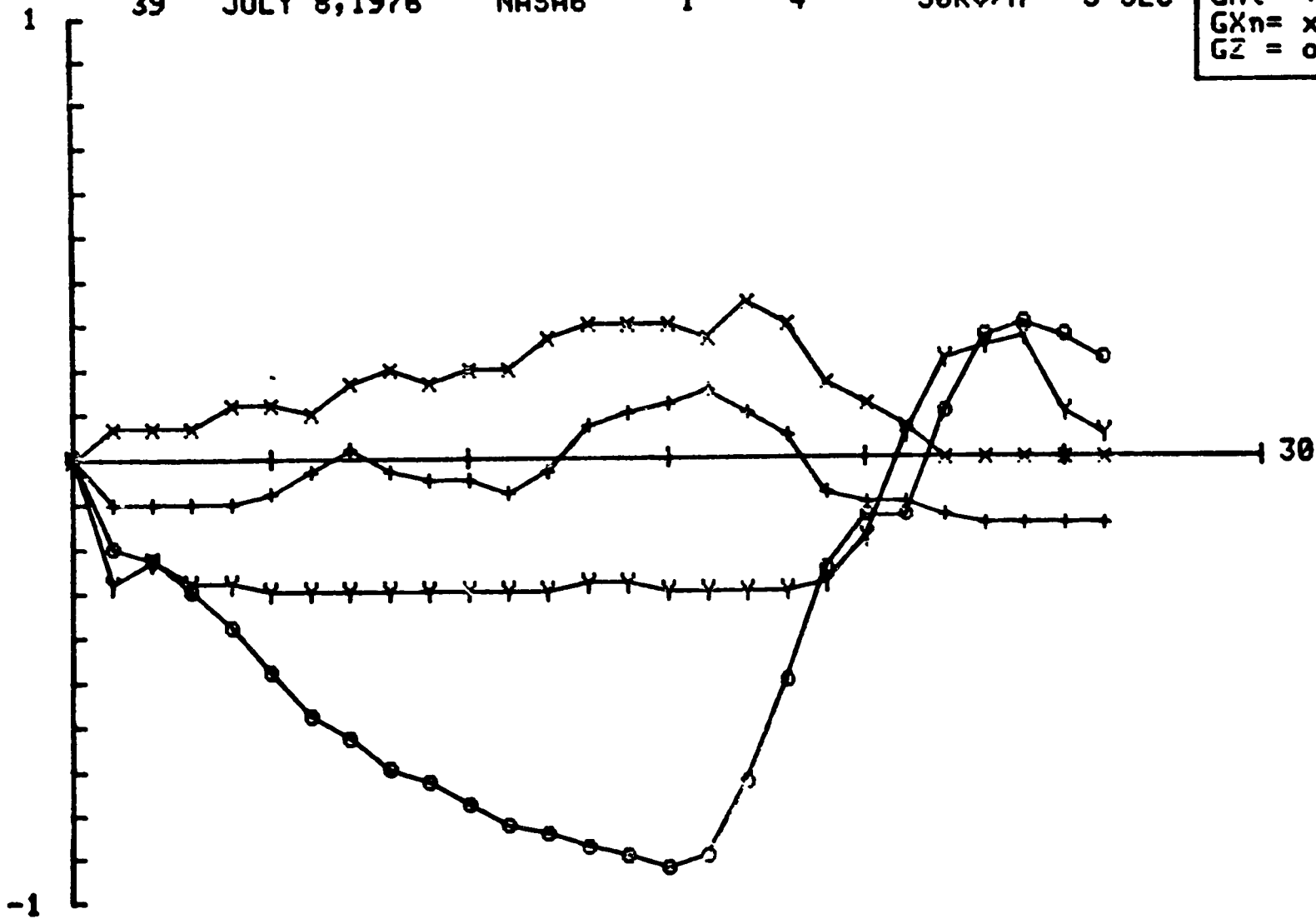
FILE 38      DATE JULY 8, 1976      AIRPLANE NASAG      CLOUD 1      PASS 3      G-SCALE 25KV/M      Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 39      DATE JULY 8, 1976      AIRPLANE NASA6      CLOUD 1      PASS 4      G-SCALE 50KV/M      Y-UNIT 5 SEC

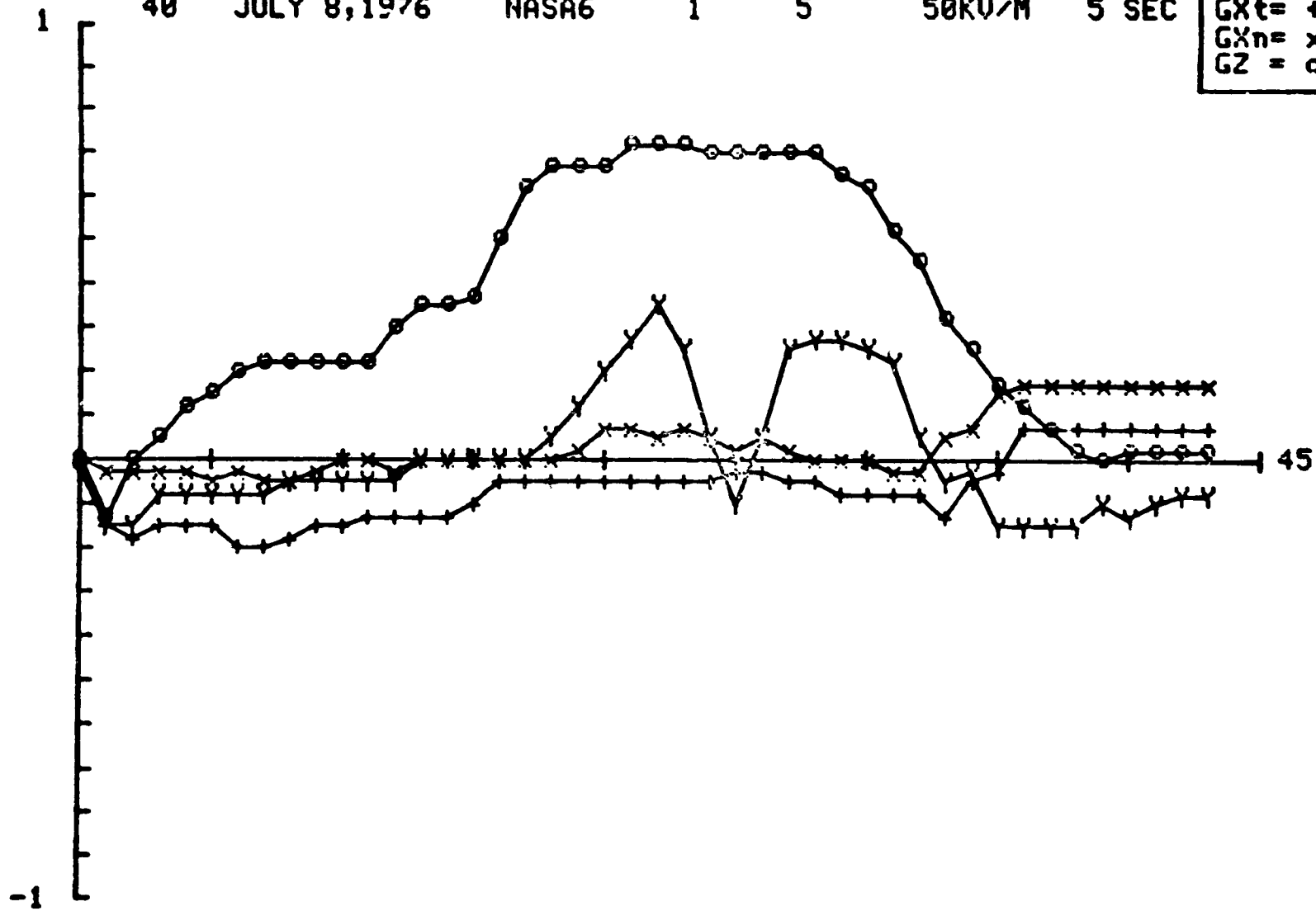
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



164

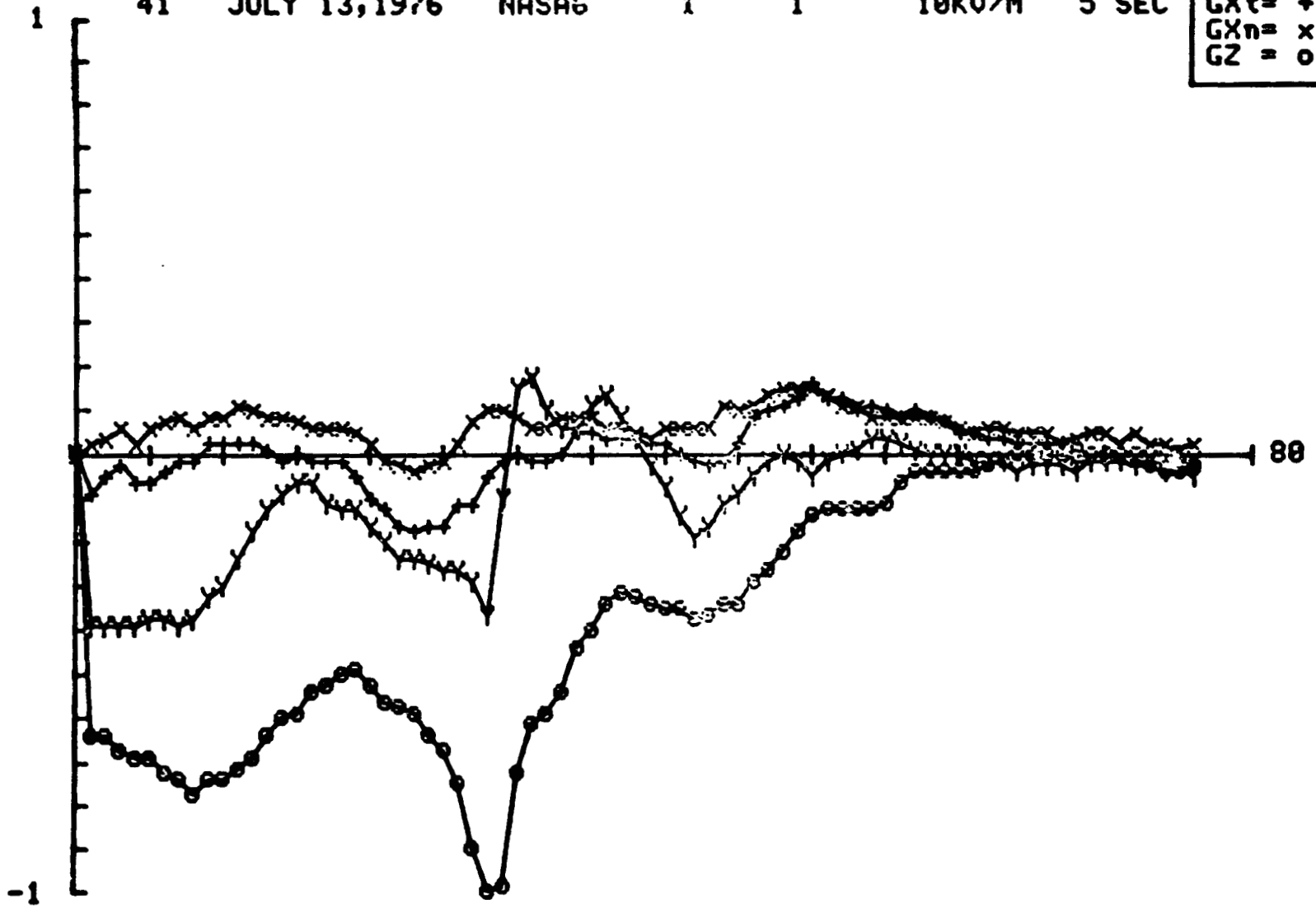
FILE 40    DATE JULY 8, 1976    AIRPLANE NASA6    CLOUD 1    PASS 5    G-SCALE 50KV/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE 41    DATE JULY 13, 1976    AIRPLANE NASA6    CLOUD 1    PASS 1    G-SCALE 10KV/M    Y-UNIT 5 SEC

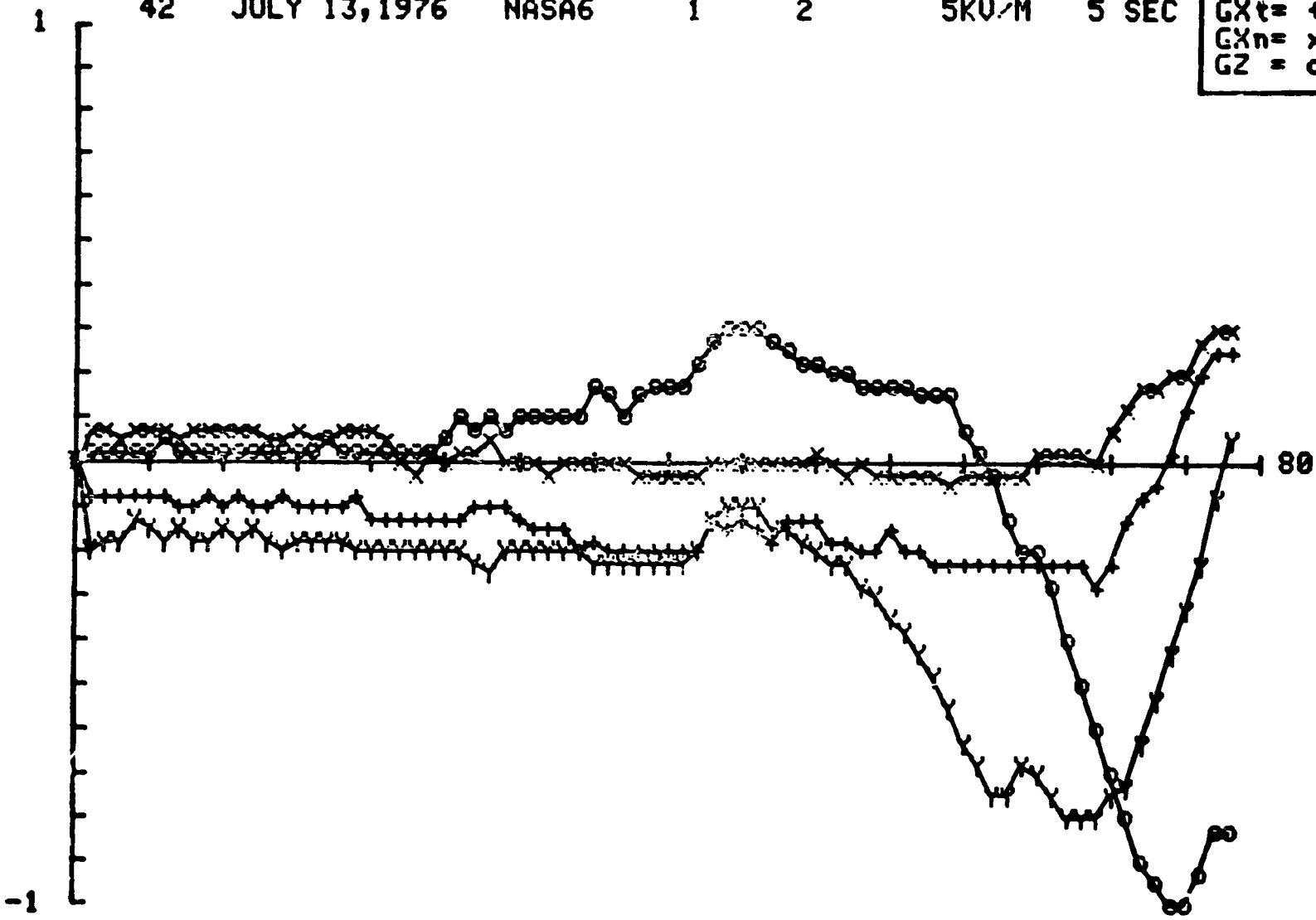
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



168

FILE 42 DATE JULY 13, 1976 AIRPLANE NASA6 CLOUD 1 PASS 2 G-SCALE 5KV/M Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
43

DATE  
JULY 13, 1976

AIRPLANE  
NASA6

CLOUD  
1

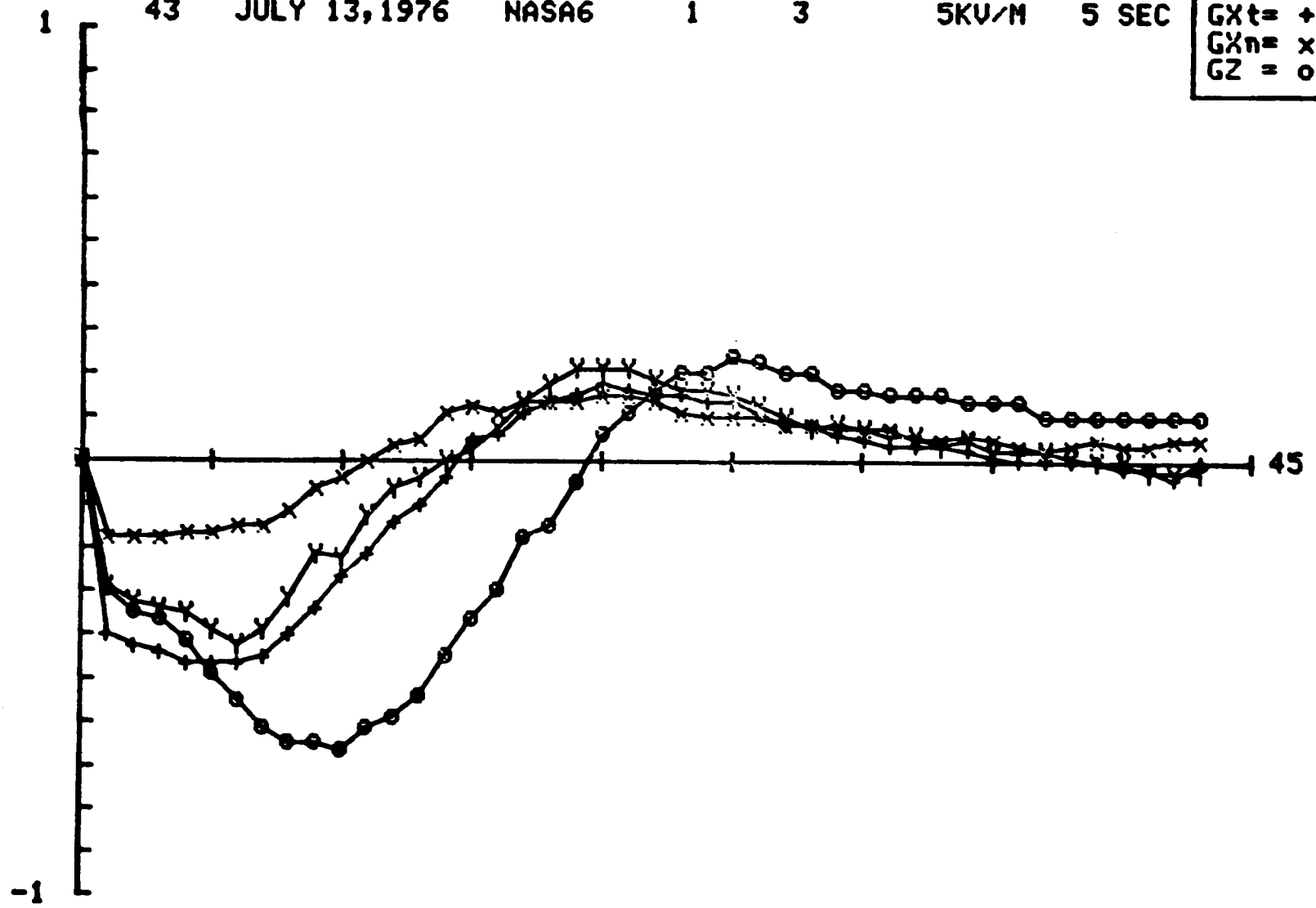
PASS  
3

G-SCALE  
5KV/M

Y-UNIT  
5 SEC

GY	=	Y
Gxt	=	+
GXn	=	X
GZ	=	O

167

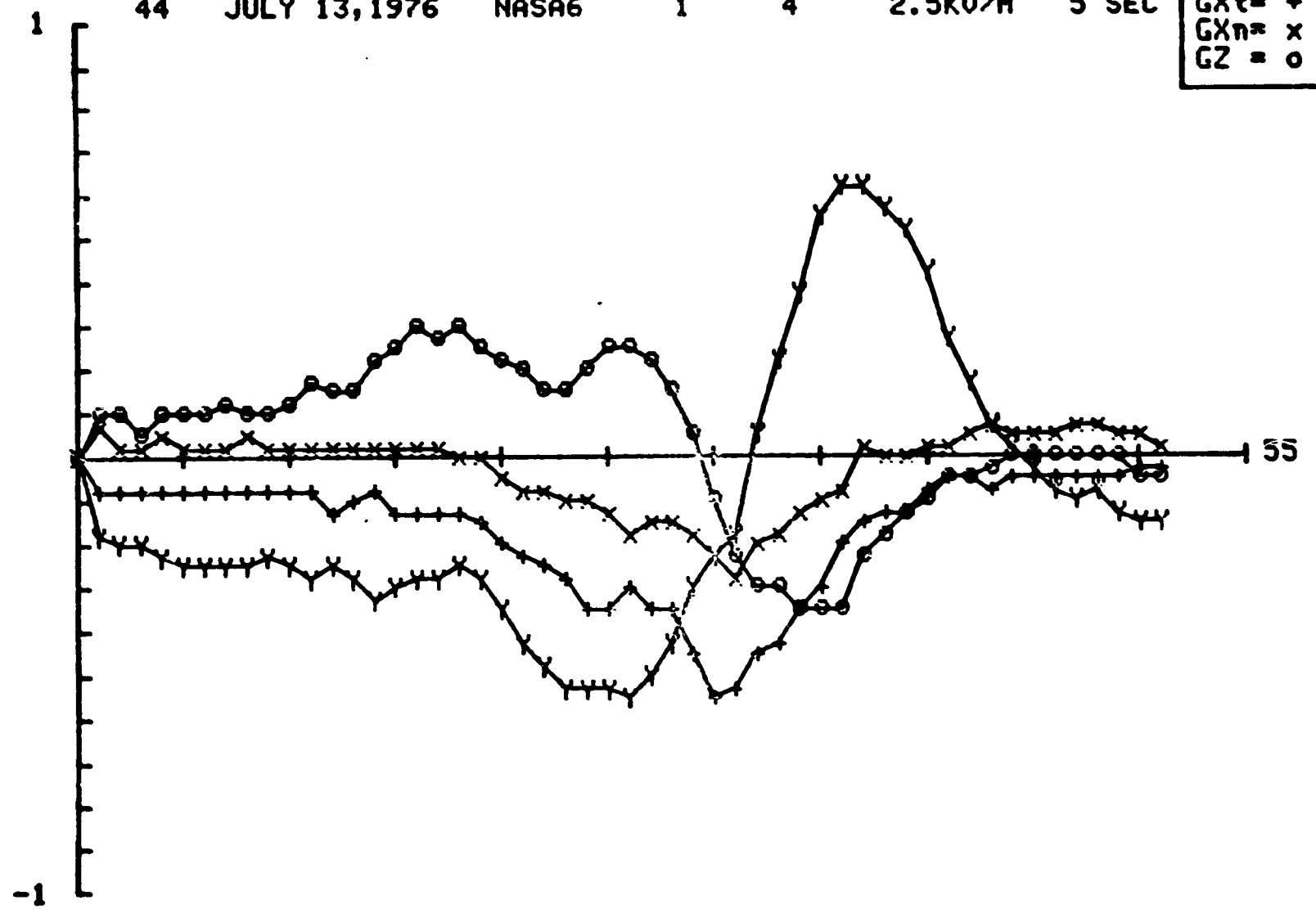




168

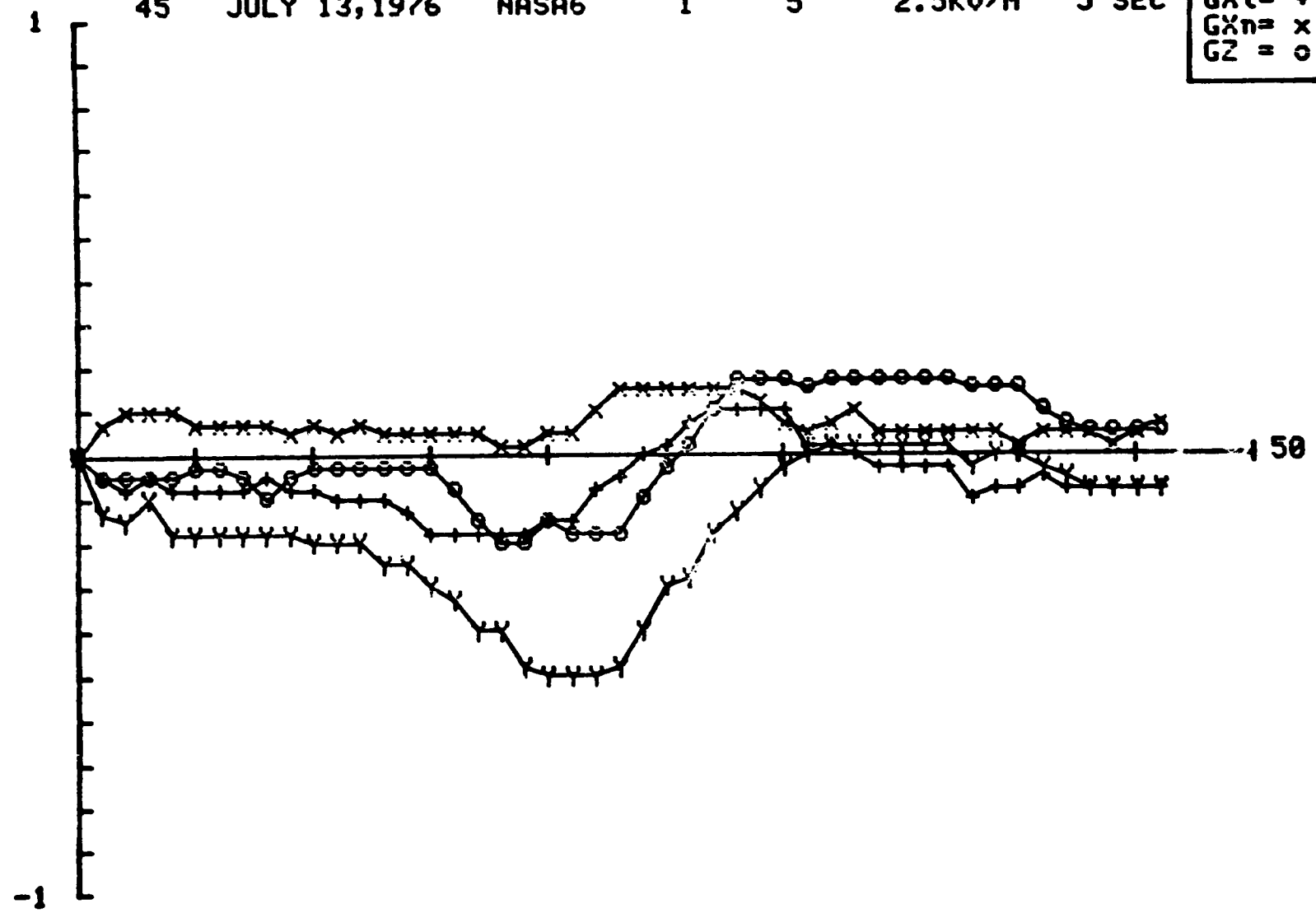
FILE 44      DATE JULY 13, 1976      AIRPLANE NASA6      CLOUD 1      PASS 4      G-SCALE 2.5KV/M      Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
Gz	=	o



FILE 45      DATE JULY 13, 1976      AIRPLANE NASA6      CLOUD 1      PASS 5      G-SCALE 2.5KV/M      Y-UNIT 5 SEC

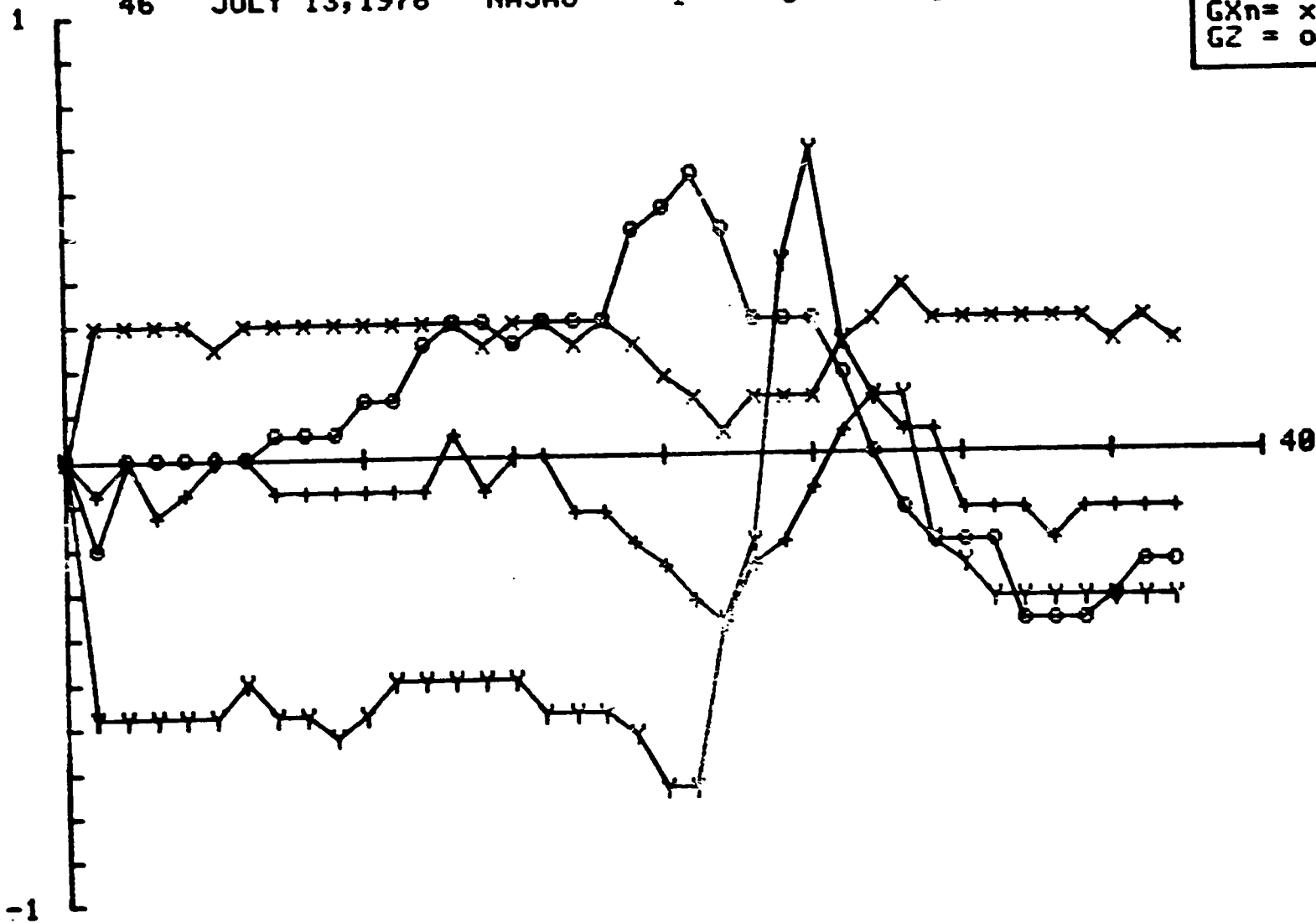
GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



170

FILE 46    DATE JULY 13, 1976    AIRPLANE NASA6    CLOUD 1    PASS 6    G-SCALE 1KU/M    Y-UNIT 5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o



FILE  
47

DATE  
JULY 13, 1976

AIRPLANE  
NASA6

CLOUD  
1

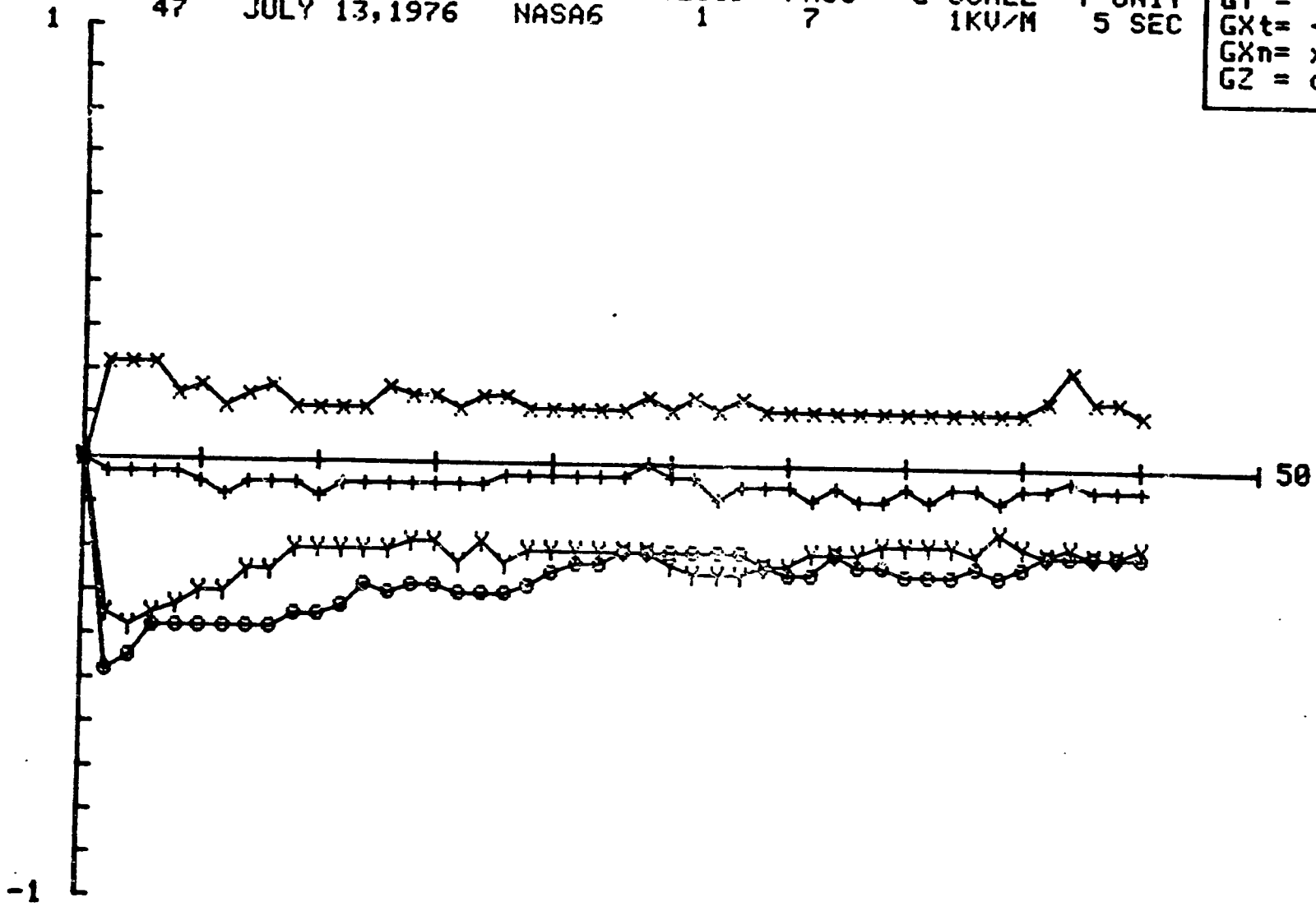
PASS  
7

G-SCALE  
1KV/M

Y-UNIT  
5 SEC

GY	=	Y
GXt	=	+
GXn	=	x
GZ	=	o

171



172

FILE 49 DATE JULY 13, 1976 AIRPLANE NASA6 CLOUD 1 PASS 8 G-SCALE 1KV/M Y-UNIT 5 SEC

GY	=	Y
Gxt	=	+
Gxn	=	x
GZ	=	o

