



REPORT - ARQL - 3/79

Environmental Data Study Related to the Alaska
Highway Gas Pipeline Project
Report No. 3 - Minisonde Data, 1978
Beaver Creek

by

R.E. Mickle, J. Kovalick and A. Moser

Air Quality and Inter-Environmental Research Branch
Atmospheric Environment Service
Downsview, Ontario, Canada

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1. Introduction

In November/December 1978, a third field experiment was undertaken in conjunction with the Atmospheric Environment Service, Pacific Region to increase the meteorological data base for limited dispersion cases near two proposed compressor sites along the Alaska Highway, Y.T. As in previous studies, Burwash Landing Airport and Beaver Creek were chosen to conduct simultaneous studies of stability and resultant flow patterns within the Shakwak Valley and Wellesley Basin areas. Regular minisonde (Turner and Markes, 1974) releases were scheduled at 0900, 1015, 1130, 1530 and 1645 for both sites between November 23 and December 3 to assess the synoptic scale influence on valley related inversions and flow patterns. At Beaver Creek, a tethersonde (Mickle et al, 1978) was also flown to enhance detailed observations within the lowest 500 metres of the boundary layer. During a regular day (~10 hours), the sonde was continuously profiled (approximately 3 profiles/hour) in order to investigate the temporal changes within the boundary layer. Collocated with the minisonde and tethersonde units, an acoustic sounder was used to monitor continuously the heights of inversions especially during those periods when the other two systems were not operational. At both locations, hourly observations were taken during the daytime operational period.

These data (tethersonde, hourly observations and minisonde profiles for Burwash Landing) will be presented in future reports. This report presents data from the minisonde flights at Beaver Creek, Y.T.

2. Instrumentation and Site Description

Beaver Creek $62^{\circ}26'N$ $140^{\circ}48'W$

2.1 Site

The site (Figure 1) for the 1978 Beaver Creek study was located at the Far West Texaco station at the north end of the village. The trailer/instrument complex was located 150 metres east of the Alaska Highway in a clearing bounded by trees (6-15 metres in height) at a distance not less than 150 metres from the trailer site.

2.2 Minisonde Program

Dual theodolite tracking (baseline 259.1 metres) of minisondes was used for the experiment. Bearing from theodolite #1 to #2 was 260° True. During the period between November 23 and December 3, 1978, flights were taken at 0900, 1015, 1130, 1530 and 1645 PST unless poor visibility precluded tracking of the pibal balloon. Flights were extended on November 25 to 2130 PST and on November 30 to 2230 PST to investigate after sunset the deeping of a surface based inversion. Analysis using Thyer's method (Thyer, 1962) was completed in the field using an HP 9830. Printouts for these data are tabled in Appendix I while the plotted profiles to 2 kms m.s.l. are presented in Appendix II.

2.3 Tethersonde Program

For the majority of the experiment, a single tethersonde was profiled to a maximum of 500 metres a.g.l. in order to obtain detailed measurements of temperature, relative humidity and vector winds. Profiling rates permitted 2-3 metre vertical resolution with 2 to 3 complete profiles being taken in one hour. On November 25, profiling was extended to coincide with extended minisonde flights. On November 28, two instruments

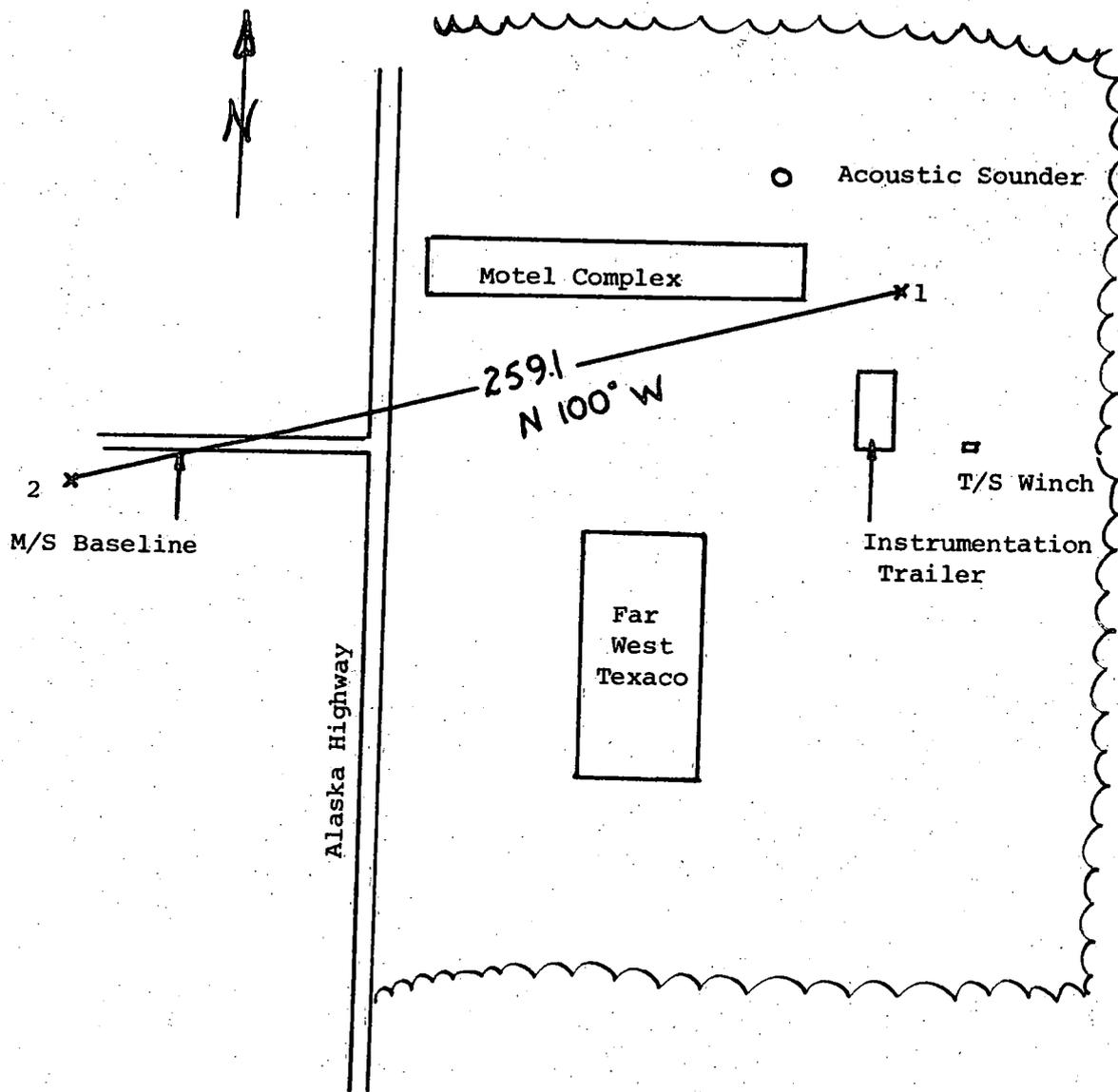


Figure 1: Site Location for Beaver Creek Experiment

were flown on either side of the top of a strong inversion at 30 m to study the mixing and consequent erosion of the inversion from aloft. On November 30, profiling was once again extended to coincide with the extra minisonde flights. Profiles from the tethersonde will be presented in a later report.

2.4 Acoustic Sounder

The acoustic sounder was deployed to determine inversion heights and in particular to extend these measurements to periods when in situ measurements were not being made. The rationale behind such a determination lay in the often increased acoustic returns associated with sizeable gradients in temperature, wind and humidity. Initial circuit problems hampered data collection however after considerable effort, returns were recorded for the final six days of the experiment on analogue facsimile. Requests for these data should be made directly to the authors.

2.5 Surface Weather Program

Hourly surface observations were taken daily from 0700 to 1700 PST. These included standard surface temperature, minimum/maximum temperatures read at 0700 and 1600, visibility, present weather, accumulated snow between readings (at 0800 and 1400 PST), wind speed, and direction at 10 metres, cloud grouping and surface pressure. Also during the experimental period, pressure was continuously recorded on microbarograph chart.

3. Data Listings

Listings of calculated wind and temperature profiles from minisonde flights may be obtained from Atmospheric Environment Service, ARQL, 4905 Dufferin Street, Downsview, Ontario, M3H 5T4.

4. References

Mickle, R.E., S.V. Derco and W.F. Kobelka, 1978: Atmospheric Environment Service Environmental Data Study Related to the Alaska Gas Pipeline Project, Report No. 2 - Tethersonde Data, Beaver Creek-Report - ARQL - 9/78.

Thyer, N.H., 1962: Double Theodolite Pibal Evaluation by Computer. *J. Appl. Meteor.*, 1, 66-68.

Turner, H.E. and J. Markes, 1974: A Minisonde System for Atmospheric Profiles. Report - ARQT - 1/74.

Appendix I

Data Listings for Minisonde Flights at Beaver Creek, 1978

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 0

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 23, 1978 TIME: 0908PST

FLINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	634			-7.5	SURFACE CONDITIONS	
1	660	0.9	255	-5.5	686	-5.4
2	716	1.2	312	-5.3	747	-5.5
3	761	3.0	293	-5.5	776	-5.6
4	815	6.8	307	-5.8	854	-6.0
5	882	5.7	299	-6.2	909	-6.5
6	936	5.7	300	-6.7	962	-7.0
7	988	7.3	302	-7.2	1015	-7.5
8	1036	7.2	301	-7.6	1058	-7.8
9	1079	7.3	300	-8.0	1100	-8.1
10	1122	7.6	300	-8.2	1144	-8.5
11	1167	9.0	299	-8.6	1190	-8.8
12	1213	7.9	305	-9.0	1237	-9.1
13	1260	8.9	306	-9.3	1283	-9.7
14	1307	5.6	312	-9.9	1337	-10.0
15	1353	7.3	315	-10.1	1377	-10.3
16	1400	7.7	317	-10.5	1423	-10.8
17	1446	7.6	318	-10.8	1470	-10.9
18	1493	7.5	319	-10.9	1516	-10.9
19	1540	7.5	319	-11.0	1563	-11.1
20	1586	7.5	319	-11.1	1610	-11.2
21	1633	7.5	319	-11.2	1656	-11.4
22	1679	7.6	320	-11.5	1703	-11.7
23	1726	7.6	320	-11.9	1749	-12.0
24	1773	7.7	318	-12.1	1796	-12.2
25	1819	7.7	318	-12.3	1843	-12.4
26	1866	7.7	318	-12.5	1889	-12.6
27	1913	7.7	318	-12.8	1936	-13.0
28	1960			-13.1	1984	-13.3
29	2008			-13.5	2032	-13.5
30	2056			-13.8	2080	-13.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 1

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 23, 1978 TIME: 1020 PST

SLINE: 259.1 (m) GPA: 0.2 BRG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	637			-10.6	SURFACE CONDITIONS	
1	671	0.8	330	-8.6	705	-8.3
2	740	2.2	310	-8.4	776	-8.6
3	814	3.4	295	-8.8	852	-8.9
4	891	4.1	295	-9.3	930	-9.7
5	959	4.2	295	-9.9	1007	-10.3
6	1045	4.1	289	-10.6	1082	-10.9
7	1120	4.3	292	-11.2	1158	-11.5
8	1195	4.3	292	-11.8	1232	-12.2
9	1268	4.9	294	-12.4	1304	-12.7
10	1346	5.3	299	-13.0	1388	-13.4
11	1427	5.9	307	-13.7	1466	-14.0
12	1505	5.6	311	-14.3	1545	-14.5
13	1584			-14.6	1622	-14.6
14	1659			-15.0	1697	-15.1
15	1735			-15.1	1773	-15.2
16	1811			-15.3	1849	-15.5
17	1887			-15.6	1925	-15.7
18	1962			-15.8	2000	-16.0
19	2038			-16.2	2076	-16.4
20	2114			-16.5	2152	-16.6
21	2190			-16.8	2227	-17.0
22	2265			-17.2	2303	-17.3
23	2341			-17.5	2379	-17.8
24	2417			-17.9	2455	-18.0
25	2493			-18.3	2530	-18.7
26	2568			-18.9	2606	-19.0
27	2644			-19.3	2682	-19.7
28	2720			-19.8	2758	-19.8
29	2795			-19.9	2833	-20.0
30	2871			-18.4	2909	-18.6

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 2

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 23, 1978 TIME: 1137PST

ELINE: 259.1 (m) GPA: 0.2 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	635			-12.2	SURFACE CONDITIONS	
1	663	0.5	309	-10.0	691	-9.5
2	725	2.6	292	-9.5	759	-9.9
3	789	3.9	295	-10.0	818	-10.1
4	852	4.1	298	-10.2	886	-10.5
5	918	5.0	304	-10.7	949	-11.1
6	979	5.9	302	-11.4	1009	-11.7
7	1036	6.0	302	-11.8	1063	-12.0
8	1091	6.0	301	-12.2	1119	-12.5
9	1156	7.3	303	-12.7	1192	-13.0
10	1229	5.9	312	-13.4	1265	-13.7
11	1296	6.0	313	-14.0	1328	-14.2
12	1359	6.2	314	-14.4	1390	-14.8
13	1422	7.0	322	-14.9	1453	-15.0
14	1484	7.6	329	-15.1	1516	-15.0
15	1547	8.2	331	-14.8	1578	-14.8
16	1610	8.7	335	-14.9	1641	-15.0
17	1672	7.4	342	-15.1	1704	-15.3
18	1735	7.1	342	-15.5	1766	-15.9
19	1798	5.5	338	-16.1	1829	-16.3
20	1860	5.3	334	-16.6	1892	-17.0
21	1923	4.9	332	-17.3	1954	-17.7
22	1986	4.9	327	-18.0	2017	-18.3
23	2048	5.0	322	-18.5	2079	-18.5
24	2111	4.8	309	-18.6	2142	-18.9
25	2173	4.0	290	-19.0	2205	-19.3
26	2236	4.4	286	-19.5	2267	-19.7
27	2299	4.1	276	-19.8	2330	-20.0
28	2361	4.0	272	-20.1	2393	-20.3
29	2424	4.0	267	-20.5	2455	-20.7
30	2487	4.0	269	-20.9	2518	-21.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 3

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 23, 1978 TIME: 1330 PST

FLINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-9.0	SURFACE CONDITIONS	
1	671	0.6	317	-8.4	707	-8.6
2	728	1.8	311	-8.9	749	-9.0
3	798	2.7	292	-9.1	846	-9.4
4	878	4.2	283	-9.6	911	-9.9
5	942	5.3	277	-9.9	973	-10.0
6	1005	5.1	277	-10.1	1037	-10.5
7	1075	5.3	280	-10.8	1113	-11.1
8	1152	5.4	285	-11.5	1190	-11.9
9	1229	5.2	289	-12.2	1267	-12.5
10	1303	5.8	298	-12.7	1339	-13.0
11	1373	4.9	307	-13.4	1408	-13.6
12	1442	4.7	319	-14.0	1477	-14.3
13	1511	5.5	324	-14.5	1546	-14.6
14	1580	6.6	333	-14.7	1615	-14.6
15	1649	6.8	338	-14.8	1683	-15.0
16	1718	7.2	339	-15.1	1752	-15.3
17	1787	7.2	339	-15.5	1821	-15.8
18	1856	7.1	339	-16.0	1890	-16.3
19	1924	6.3	338	-16.5	1959	-16.9
20	1993	5.3	334	-17.0	2028	-17.4
21	2062	3.8	321	-17.7	2097	-17.9
22	2131	3.4	298	-18.0	2166	-18.5
23	2200	3.8	289	-18.6	2234	-19.0
24	2269	4.1	286	-19.2	2303	-19.5
25	2338	4.3	291	-19.9	2372	-20.1
26	2407	4.6	287	-20.5	2441	-20.5
27	2475	4.6	287	-20.1	2510	-19.4
28	2544	4.6	287	-18.5	2579	-18.2
29	2613			-18.3	2648	-18.6
30	2683			-18.3	2718	-18.3
31	2752			-19.5	2787	-19.9
32	2822			-20.0	2856	-20.4
33	2891			-20.6	2926	-21.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 4

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 23, 1978 TIME: 1540PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-9.2	SURFACE CONDITIONS	
1	672	2.9	331	-8.7	709	-8.8
2	746	5.1	320	-8.9	782	-9.1
3	822	5.8	316	-9.4	852	-9.6
4	899	6.2	307	-9.8	936	-10.0
5	973	5.9	301	-10.3	1011	-10.6
6	1048	5.3	295	-10.9	1085	-11.2
7	1122	4.3	290	-11.5	1158	-12.0
8	1193	4.3	282	-12.1	1227	-12.2
9	1262	4.3	282	-12.5	1296	-12.8
10	1331	4.2	288	-13.0	1365	-13.2
11	1399	5.5	305	-13.4	1433	-13.5
12	1462	4.7	325	-13.6	1491	-13.9
13	1520	5.2	328	-14.0	1549	-14.3
14	1580	5.6	327	-14.4	1611	-14.6
15	1642	7.6	320	-14.7	1673	-14.9
16	1704	6.3	327	-15.0	1736	-15.3
17	1767	6.3	327	-15.5	1798	-15.7
18	1829	6.9	323	-15.8	1860	-16.0
19	1891	9.2	325	-16.2	1923	-16.4
20	1954	9.2	323	-16.6	1985	-16.8
21	2016	3.9	313	-16.9	2047	-17.2
22	2078	5.4	295	-17.3	2110	-17.7
23	2141	5.4	295	-18.0	2172	-18.2
24	2203	4.8	294	-18.4	2234	-18.7
25	2265	4.3	283	-18.8	2296	-19.0
26	2328	4.2	278	-19.2	2359	-19.7
27	2390	4.2	278	-20.0	2421	-20.3
28	2454			-20.7	2487	-21.0
29	2520			-21.3	2553	-20.2
30	2586			-19.5	2619	-19.7

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 5

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 6

DATE: NOVEMBER 23, 1978 TIME: 1650PST

ELINE: 259.1 (m) GPA: 0.2 IRC: 250 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-11.2	SURFACE CONDITIONS	
1	656	2.1	19	-9.2	576	-8.8
2	694	3.0	357	-8.7	712	-8.7
3	733	3.8	351	-8.8	753	-8.9
4	777	4.1	338	-9.0	800	-9.1
5	824	5.2	324	-9.2	847	-9.3
6	867	5.3	315	-9.4	883	-9.5
7	908	5.4	311	-9.6	928	-9.8
8	946	5.2	307	-9.9	965	-10.0
9	981	3.7	293	-10.1	996	-10.1
10	1015	5.2	289	-10.2	1035	-10.2
11	1054	5.1	287	-10.3	1073	-10.5
12	1093	4.8	284	-10.5	1112	-10.7
13	1135	5.8	296	-10.9	1158	-11.0
14	1181	6.8	300	-11.2	1204	-11.3
15	1227	5.5	308	-11.5	1250	-11.7
16	1273	5.1	312	-11.9	1295	-12.1
17	1318	7.5	315	-12.2	1341	-12.4
18	1364	7.2	324	-12.5	1387	-12.7
19	1410	6.7	335	-12.8	1433	-13.0
20	1456	6.5	338	-13.1	1479	-13.3
21	1502	6.6	341	-13.4	1525	-13.5
22	1548	7.3	338	-13.7	1571	-13.8
23	1594	6.7	346	-14.0	1617	-14.1
24	1653	6.0	349	-14.2	1639	-14.2
25	1721	9.7	338	-14.3	1752	-14.4
26	1784	9.5	337	-14.5	1815	-14.8
27	1848	2.9	330	-15.0	1880	-15.4
28	1912	3.0	328	-15.7	1944	-15.3
29	1975	4.6	331	-15.0	2007	-15.1
30	2039	10.6	329	-15.2	2071	-15.4

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 5

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 24, 1978 TIME: 0355PST

ELINE: 259.1 (m) GPA: 0.2 IRC: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	634			-15.0	SURFACE CONDITIONS	
1	656	0.6	120	-14.7	682	-13.8
2	705	0.6	16	-13.7	729	-13.8
3	754	1.4	351	-13.9	779	-14.0
4	804	0.9	13	-14.0	829	-14.1
5	853	1.0	17	-14.2	876	-14.2
6	901	1.6	1	-14.3	926	-14.5
7	950	1.5	2	-14.6	974	-14.6
8	996	1.0	345	-14.6	1019	-14.7
9	1043	0.9	338	-14.8	1068	-15.0
10	1091	0.7	1	-15.0	1115	-15.2
11	1137	0.6	2	-15.4	1160	-15.7
12	1186	0.4	39	-15.8	1212	-16.0
13	1241	0.8	79	-16.1	1271	-16.4
14	1296	1.4	82	-16.6	1322	-16.7
15	1351	2.2	103	-16.6	1379	-16.4
16	1400	3.4	98	-16.3	1422	-16.5
17	1451	3.3	100	-16.6	1480	-16.7
18	1506	4.8	107	-16.8	1532	-16.9
19	1558	5.4	110	-16.9	1583	-17.0
20	1609	5.4	110	-17.1	1635	-17.2
21	1660	5.2	109	-17.4	1685	-17.7
22	1710	5.5	108	-17.8	1735	-18.1
23	1760	3.5	134	-18.2	1785	-18.4
24	1810	4.8	130	-18.5	1836	-18.7
25	1861	4.9	146	-18.8	1886	-19.0
26	1911	4.7	152	-19.2	1936	-19.5
27	1961	4.7	152	-19.6	1986	-19.7
28	2011	4.7	152	-19.9	2036	-20.0
29	2061			-20.1	2086	-20.3
30	2111			-20.4	2136	-20.7
31	2161			-20.8	2186	-20.8
32	2211			-20.7	2236	-19.9
33	2261			-17.9	2286	-17.6
34	2311			-17.3	2336	-17.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 7

STATION: BEAVER CREEK Y.P. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 24 1978 TIME: 1015PST

FLINE: 259.1 (m) GPA: 0.2 ERG: 250 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-14.0	SURFACE CONDITIONS	
1	668	0.4	166	-13.9	701	-13.7
2	732	0.6	348	-13.7	762	-13.8
3	790	0.8	24	-13.8	818	-13.8
4	853	1.2	33	-13.8	888	-14.0
5	918	1.5	41	-14.1	948	-14.3
6	979	1.4	30	-14.4	1010	-14.6
7	1041	1.2	41	-14.7	1073	-14.9
8	1104	1.0	45	-15.0	1136	-15.2
9	1163	0.7	66	-15.4	1189	-15.6
10	1203	1.1	121	-15.8	1217	-16.0
11	1241	2.7	148	-16.0	1265	-16.1
12	1289	3.2	132	-16.2	1313	-16.3
13	1336	3.2	132	-16.4	1360	-16.6
14	1388			-16.7	1416	-16.9
15	1444			-17.0	1472	-17.1
16	1500			-17.2	1527	-17.3
17	1555			-17.3	1583	-17.4
18	1611			-17.5	1639	-17.7
19	1667			-17.9	1695	-18.1
20	1722			-18.2	1750	-18.4
21	1778			-18.5	1806	-18.6
22	1834			-19.0	1862	-19.2
23	1890			-19.5	1918	-19.9
24	1945			-20.0	1973	-20.5
25	2001			-20.7	2029	-20.9
26	2057			-18.6	2085	-16.4
27	2113			-15.8	2140	-16.0
28	2168			-16.1	2196	-16.4
29	2224			-16.7	2252	-17.0
30	2280			-17.2	2308	-17.5

MINISCOPIC ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 8

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 24, 1978 TIME: 1135 PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-13.0	SURFACE CONDITIONS	
1	668	0.6	47	-13.3	700	-13.3
2	728	1.1	28	-13.4	756	-13.5
3	788	1.6	338	-13.6	820	-13.5
4	851	1.1	344	-13.6	882	-13.9
5	913	0.7	351	-14.0	944	-14.2
6	975	1.0	69	-14.5	1007	-14.5
7	1039	1.3	115	-14.4	1071	-14.4
8	1103	1.6	126	-14.6	1135	-14.9
9	1168	2.7	129	-15.0	1200	-15.2
10	1230	3.1	129	-15.5	1260	-15.7
11	1292	3.5	129	-15.7	1324	-15.8
12	1351	3.8	129	-15.9	1378	-16.0
13	1409			-16.1	1440	-16.2
14	1471			-16.3	1502	-16.5
15	1533			-16.6	1563	-16.7
16	1594			-16.9	1625	-17.1
17	1656			-17.2	1687	-17.3
18	1718			-17.2	1749	-17.2
19	1780			-17.3	1811	-17.4
20	1842			-17.6	1872	-17.6
21	1903			-18.0	1934	-18.1
22	1965			-18.5	1996	-18.6
23	2027			-18.9	2058	-19.4
24	2089			-19.7	2120	-19.9
25	2151			-19.9	2182	-17.5
26	2212			-15.3	2243	-15.0
27	2274			-15.0	2305	-15.3
28	2336			-15.4	2367	-15.6
29	2398			-15.8	2429	-16.1
30	2460			-16.3	2491	-16.5
31	2521			-16.8	2552	-17.0
32	2583			-17.3	2614	-17.5
33	2645			-17.7	2676	-18.0
34	2707			-18.1	2738	-18.3
35	2769			-18.5	2800	-18.7
36	2831			-18.9	2861	-19.2

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 9

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 24 1978 TIME: 1335PST

ELINE: 259.1 (m) GPA: 0.2 FRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-11.7	SURFACE CONDITIONS	
1	673	0.5	323	-12.4	710	-12.8
2	743	1.1	359	-13.1	775	-13.1
3	805	1.0	360	-13.2	834	-13.4
4	866	0.9	6	-13.5	897	-13.6
5	927	0.4	176	-13.7	958	-13.3
6	989	1.4	172	-13.9	1020	-14.0
7	1052	2.1	155	-14.1	1083	-14.3
8	1111	2.5	137	-14.5	1140	-14.6
9	1173	2.5	119	-15.0	1206	-15.1
10	1246	3.6	125	-15.2	1287	-15.5
11	1302	4.1	118	-15.7	1317	-15.9
12	1352	4.1	123	-15.8	1387	-15.8
13	1415	3.5	132	-15.8	1443	-15.9
14	1474			-16.0	1505	-16.2
15	1536			-16.3	1567	-16.4
16	1598			-16.5	1629	-16.7
17	1660			-15.9	1691	-17.0
18	1722			-17.1	1753	-17.3
19	1784			-17.4	1816	-17.6
20	1847			-17.9	1878	-18.1
21	1909			-18.3	1940	-18.7
22	1971			-19.0	2002	-19.5
23	2033			-17.5	2064	-15.4
24	2095			-14.5	2126	-14.3
25	2157			-14.4	2188	-14.7
26	2219			-14.9	2250	-15.0
27	2281			-15.1	2312	-15.5
28	2343			-15.7	2374	-15.9
29	2405			-16.0	2436	-16.2
30	2467			-16.6	2498	-16.9
31	2529			-17.0	2560	-17.1
32	2591			-17.4	2622	-17.5
33	2653			-17.8	2684	-18.1
34	2715			-18.5	2746	-18.6
35	2777			-18.9	2808	-19.1
36	2839			-19.5	2870	-19.9
37	2901			-20.0	2932	-20.2
38	2963			-20.5	2994	-20.9
39	3025			-21.0	3056	-21.3
40	3087			-21.5	3118	-21.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 10

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 24, 1978 TIME: 1532PST

ELINE: 259.1 (m) GFA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-11.4	SURFACE CONDITIONS	
1	669	1.4	3	-12.0	701	-12.3
2	733	1.6	356	-12.5	764	-12.5
3	796	1.1	3	-12.6	828	-12.7
4	859	0.7	137	-12.7	889	-12.8
5	919	2.1	153	-12.9	943	-13.0
6	976	2.7	148	-13.2	1004	-13.4
7	1034	2.8	133	-13.4	1064	-13.5
8	1091	3.7	123	-13.7	1117	-13.9
9	1143	4.1	122	-14.1	1168	-14.3
10	1199	4.3	115	-14.4	1230	-14.5
11	1256	4.8	114	-14.6	1282	-14.7
12	1308	3.6	127	-14.6	1335	-14.6
13	1370	4.0	140	-14.7	1405	-14.9
14	1439	5.2	143	-15.0	1472	-15.1
15	1496	5.2	143	-15.2	1519	-15.4
16	1540	5.2	143	-15.6	1550	-15.3
17	1589			-15.9	1518	-15.0
18	1647			-16.2	1576	-16.4
19	1705			-16.6	1733	-16.3
20	1762			-16.9	1791	-17.0
21	1820			-17.0	1849	-17.1
22	1878			-17.1	1907	-17.2
23	1935			-17.2	1964	-17.2
24	1993			-17.2	2022	-17.2
25	2051			-17.2	2080	-17.3
26	2109			-17.3	2137	-17.3
27	2166			-17.3	2195	-17.2
28	2224			-17.2	2253	-17.1
29	2282			-17.1	2311	-17.1
30	2340			-17.0	2368	-17.0
31	2397			-16.9	2426	-16.6
32	2455			-16.7	2484	-16.6
33	2513			-16.5	2542	-16.4
34	2570			-16.4	2599	-16.3
35	2628			-16.2	2657	-16.1
36	2686			-16.1	2715	-16.0
37	2744			-15.9	2772	-15.8
38	2801			-15.8	2830	-15.7
39	2859			-15.6	2888	-15.6
40	2917			-15.4	2946	-15.3

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 11

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 25 1978 TIME: 0903PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-13.3	SURFACE CONDITIONS	
1	662	0.9	72	-13.6	691	-13.6
2	717	1.4	130	-13.6	743	-13.7
3	765	2.7	120	-13.7	786	-13.8
4	825	3.0	139	-13.9	864	-14.0
5	901	4.4	134	-14.2	938	-14.4
6	962	5.9	132	-14.6	986	-14.8
7	1009	6.7	138	-14.8	1032	-14.9
8	1051	6.8	140	-14.9	1070	-14.6
9	1085	5.5	131	-14.5	1099	-14.5
10	1135	10.8	129	-14.2	1170	-14.1
11	1212	11.0	129	-14.0	1253	-14.2
12	1291	13.4	133	-14.4	1330	-14.7
13	1358	7.8	135	-14.8	1337	-14.9
14	1415	7.0	148	-14.9	1444	-14.5
15	1473	9.7	154	-14.5	1503	-13.5
16	1533	10.1	150	-12.5	1564	-11.5
17	1594	3.9	131	-10.5	1624	-10.2
18	1654	8.9	131	-10.0	1634	-9.8
19	1715	8.8	132	-9.4	1745	-8.9
20	1775	8.5	134	-8.8	1805	-8.7
21	1835	8.5	134	-8.6	1866	-8.7
22	1896	8.5	134	-8.7	1925	-8.8
23	1956	8.5	134	-8.8	1986	-8.8
24	2017	3.5	134	-8.9	2047	-9.0
25	2076			-9.1	2106	-9.3
26	2135			-9.6	2164	-9.9
27	2194			-10.0	2223	-10.2
28	2253			-10.2	2282	-10.2
29	2312			-10.2	2341	-10.3
30	2371			-10.4	2400	-10.6
31	2429			-10.8	2459	-11.2
32	2488			-11.3	2518	-11.3
33	2547			-11.9	2577	-12.1
34	2606			-12.3	2636	-12.4
35	2665			-12.6	2694	-12.7
36	2724			-12.9	2753	-13.2
37	2783			-13.5	2812	-13.6
38	2842			-13.8	2871	-13.9
39	2901			-14.0	2930	-14.1
40	2959			-14.1	2989	-14.2

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 12

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 25, 1978 TIME: 1025PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 250 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	637			-13.3	SURFACE CONDITIONS	
1	672	2.0	149	-13.3	707	-13.4
2	742	3.4	130	-13.5	777	-13.7
3	812	4.8	128	-13.7	847	-13.9
4	879	7.2	133	-14.0	912	-14.1
5	943	7.1	139	-14.4	974	-14.1
6	1006	3.2	137	-14.0	1039	-14.2
7	1071	8.5	135	-14.2	1104	-13.6
8	1136	9.5	130	-13.5	1169	-13.6
9	1201	9.3	131	-13.8	1234	-14.0
10	1266	9.0	134	-14.1	1299	-13.9
11	1331	8.7	137	-13.8	1364	-13.8
12	1396	9.0	139	-13.7	1429	-13.2
13	1461	11.7	147	-13.1	1494	-12.8
14	1526	11.5	146	-12.2	1559	-11.8
15	1591	9.7	141	-11.5	1624	-10.0
16	1656	10.0	133	-9.1	1689	-8.1
17	1721	11.2	139	-7.5	1754	-7.1
18	1786	11.5	136	-7.4	1819	-7.7
19	1851	10.3	131	-7.8	1884	-7.9
20	1916	9.9	132	-8.0	1949	-8.2
21	1981	9.8	136	-8.4	2014	-8.8
22	2046	9.7	141	-8.9	2079	-9.0
23	2111	11.1	152	-8.9	2144	-9.1
24	2176	9.5	167	-9.2	2209	-9.1
25	2241	8.3	174	-9.2	2274	-9.6
26	2306	9.0	196	-9.8	2339	-10.0
27	2371	9.2	197	-10.0	2404	-10.1
28	2436	9.5	195	-10.4	2469	-10.7
29	2501	9.7	194	-10.8	2534	-10.8
30	2566	11.8	209	-10.7	2599	-11.0
31	2631			-11.1	2664	-11.4
32	2697			-11.7	2729	-11.9
33	2762			-12.2	2795	-12.4
34	2827			-12.7	2860	-13.3
35	2893			-13.7	2926	-13.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 13

STATION: BEAVER CREEK Y.P. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 25, 1978 TIME: 1135PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	635			-12.7	SURFACE CONDITIONS	
1	680	1.2	33	-12.8	724	-12.3
2	773	3.5	132	-12.9	822	-13.0
3	871	6.4	148	-13.0	921	-13.3
4	961	6.1	171	-13.5	1002	-13.9
5	1042	7.9	134	-13.8	1082	-13.5
6	1116	8.3	144	-13.3	1151	-13.1
7	1180	8.1	144	-13.1	1209	-13.1
8	1252	9.6	142	-13.1	1295	-11.7
9	1337	8.6	141	-10.7	1379	-10.1
10	1421	8.0	137	-10.0	1463	-10.1
11	1497	8.3	135	-10.0	1532	-9.9
12	1568	5.7	139	-9.5	1604	-9.0
13	1646	12.0	142	-7.7	1688	-6.5
14	1730	11.5	141	-6.1	1772	-6.3
15	1814	3.4	136	-6.5	1856	-6.3
16	1898	8.9	136	-6.9	1941	-7.1
17	1983	13.4	137	-7.3	2025	-7.3
18	2067	13.4	137	-7.9	2109	-8.1
19	2146	14.2	139	-8.1	2184	-8.2
20	2226	8.1	161	-8.1	2263	-7.9
21	2311	8.1	165	-8.0	2353	-8.1
22	2395	8.1	177	-8.2	2438	-8.5
23	2480	8.9	190	-8.9	2522	-9.1
24	2565	11.7	190	-9.2	2607	-9.5
25	2649	11.7	190	-9.7	2692	-10.0
26	2724	10.9	193	-10.3	2756	-10.8
27	2786	11.8	233	-11.0	2816	-11.5
28	2847	11.8	233	-11.9	2877	-12.3
29	2907	13.2	238	-12.2	2937	-12.5
30	2967	15.8	246	-12.7	2997	-12.6
31	3036			-12.5	3076	-12.9
32	3115			-13.1	3154	-13.3
33	3194			-13.5	3233	-14.0
34	3272			-14.0	3312	-14.5
35	3351			-14.6	3390	-14.9
36	3430			-15.3	3469	-15.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 14

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 532 (m) FLIGHT: 4

DATE: NOVEMBER 25 1978 TIME: 1335PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-12.0	SURFACE CONDITIONS	
1	680	1.2	157	-12.2	723	-12.8
2	771	2.0	144	-13.1	819	-13.3
3	860	2.7	130	-12.3	902	-12.5
4	942	3.6	122	-12.7	982	-13.0
5	1024	4.6	139	-13.3	1067	-13.6
6	1103	5.3	137	-13.9	1140	-14.1
7	1176	6.4	135	-13.9	1213	-13.6
8	1247	6.4	144	-13.0	1282	-12.8
9	1323	8.2	145	-12.3	1365	-11.7
10	1406	10.5	148	-11.6	1447	-10.5
11	1487	9.0	137	-10.0	1527	-8.8
12	1557	9.5	130	-7.2	1607	-6.6
13	1647	8.6	136	-6.3	1687	-5.5
14	1728	11.7	139	-5.1	1768	-5.0
15	1808	9.8	135	-5.2	1848	-5.4
16	1888	9.0	134	-5.6	1928	-5.6
17	1968	6.8	167	-5.6	2008	-5.3
18	2048	5.2	167	-6.0	2088	-6.6
19	2123	6.4	182	-6.8	2169	-7.1
20	2209	7.4	202	-7.3	2249	-7.3
21	2289	7.3	205	-8.0	2329	-8.4
22	2369	8.6	211	-8.5	2409	-9.0
23	2449	9.1	214	-9.2	2489	-9.3
24	2529	10.4	220	-9.5	2570	-9.8
25	2610	11.6	223	-10.0	2650	-10.0
26	2690	12.6	226	-10.3	2730	-10.6
27	2770	12.7	226	-10.8	2810	-11.2
28	2850	13.7	227	-11.4	2890	-11.7
29	2930	15.2	226	-11.9	2970	-12.2
30	3011	16.5	220	-12.4	3051	-12.6
31	3091			-12.8	3131	-13.2
32	3171			-13.6	3212	-14.0
33	3252			-14.3	3292	-14.6
34	3332			-14.9	3373	-15.2
35	3413			-15.6	3453	-16.0
36	3493			-16.3	3533	-16.6
37	3574			-16.8	3614	-17.2
38	3654			-17.5	3694	-18.0
39	3735			-18.1	3775	-18.5
40	3815			-18.6	3855	-18.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 15

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 25 1978 TIME: 1533PST

FLINE: 259.1 (m) GPA: 0.2 ARG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-14.2	SURFACE CONDITIONS	
1	673	0.6	252	-12.3	710	-12.4
2	747	0.4	184	-12.5	784	-12.7
3	821	2.5	136	-12.6	858	-12.4
4	900	4.3	141	-12.1	942	-12.0
5	986	5.0	141	-12.2	1030	-12.5
6	1063	5.1	139	-12.7	1096	-13.0
7	1139	6.9	139	-13.2	1183	-13.3
8	1224	9.4	144	-11.9	1264	-11.8
9	1310	9.8	145	-11.7	1355	-11.6
10	1400	10.9	146	-10.6	1444	-9.6
11	1488	11.7	148	-8.7	1532	-7.7
12	1576	10.5	150	-7.0	1619	-5.9
13	1661	8.3	152	-4.2	1703	-3.8
14	1745	7.7	173	-3.8	1787	-3.8
15	1829	6.8	190	-3.9	1872	-3.8
16	1914	7.1	206	-3.9	1956	-4.2
17	1998	7.9	213	-4.4	2040	-4.3
18	2082	8.1	214	-5.0	2124	-5.4
19	2166	8.5	217	-5.6	2208	-5.6
20	2250	9.6	222	-6.1	2293	-6.4
21	2335	11.1	227	-6.5	2377	-6.8
22	2419	10.5	225	-7.0	2461	-7.2
23	2503	10.5	225	-7.5	2545	-7.8
24	2587	10.8	226	-8.0	2629	-8.1
25	2672	11.7	229	-8.2	2714	-8.4
26	2756	7.3	205	-8.7	2798	-9.0
27	2840	8.9	220	-9.2	2882	-9.6
28	2924	12.7	240	-9.7	2966	-9.9
29	3008	15.2	250	-10.0	3051	-10.4
30	3093	16.5	258	-10.6	3135	-10.6
31	3177	11.5	272	-10.9	3219	-11.4
32	3261	9.3	275	-11.7	3303	-11.8
33	3345			-12.0	3387	-12.6
34	3428			-13.0	3470	-13.6
35	3512			-13.9	3553	-14.3
36	3595			-14.6	3637	-15.0
37	3678			-15.2	3720	-15.4
38	3762			-15.6	3803	-15.4
39	3845			-15.1	3887	-15.2
40	3928			-15.6	3970	-15.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 16

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 532 (m) FLIGHT: 6

DATE: NOVEMBER 25, 1978 TIME: 1650 PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	635			-19.0	SURFACE CONDITIONS	
1	665	0.8	237	-16.0	694	-15.0
2	723	0.5	221	-14.9	752	-14.7
3	781	0.7	93	-14.5	810	-14.2
4	838	0.8	39	-13.5	857	-13.4
5	891	2.8	129	-13.4	916	-13.4
6	952	4.5	134	-13.4	938	-13.7
7	1021	5.6	130	-13.7	1054	-13.5
8	1085	5.9	126	-13.5	1118	-13.6
9	1148	6.2	124	-13.8	1179	-14.0
10	1209	5.9	130	-13.9	1239	-13.9
11	1270	8.7	144	-13.7	1300	-13.4
12	1330	9.7	144	-13.2	1361	-12.3
13	1391	11.5	150	-11.7	1421	-11.0
14	1452	11.3	150	-10.5	1482	-9.5
15	1513	8.9	160	-6.7	1543	-5.2
16	1573	8.0	168	-5.1	1604	-5.1
17	1634	7.1	178	-5.1	1664	-5.0
18	1695	5.0	194	-4.7	1725	-4.3
19	1755	4.8	213	-4.2	1786	-4.4
20	1816	5.4	213	-4.7	1846	-4.9
21	1877	6.9	214	-5.0	1907	-5.3
22	1937	7.7	212	-5.4	1968	-5.7
23	1998	8.4	217	-5.8	2029	-6.0
24	2059	8.9	220	-6.3	2089	-6.5
25	2120			-6.4	2150	-6.3
26	2180			-6.3	2210	-6.5
27	2241			-6.7	2271	-7.1
28	2301			-7.2	2332	-7.3
29	2362			-7.4	2392	-7.8
30	2422			-8.0	2453	-8.4
31	2483			-8.6	2513	-8.9
32	2544			-9.0	2574	-9.3
33	2604			-9.4	2634	-9.6
34	2665			-9.7	2695	-10.0
35	2725			-10.3	2756	-10.6
36	2786			-10.8	2816	-10.8
37	2847			-10.9	2877	-11.0
38	2907			-11.3	2937	-11.7
39	2968			-11.8	2998	-12.0
40	3028			-12.3	3059	-12.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 17

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 7

DATE: NOVEMBER 25 1978 TIME: 1934PST

HLINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-17.5	SURFACE CONDITIONS	
1	669	1.3	183	-15.5	704	-14.5
2	739	2.9	153	-14.3	774	-14.0
3	809	1.2	142	-13.9	843	-13.7
4	888	2.3	110	-13.8	932	-13.9
5	976	5.9	113	-13.8	1020	-13.9
6	1048	6.8	121	-13.4	1076	-13.0
7	1105	6.1	134	-12.5	1134	-12.5
8	1167	6.2	139	-12.7	1200	-12.8
9	1237	7.8	142	-12.9	1273	-12.8
10	1309	11.7	152	-11.6	1346	-10.5
11	1382	15.7	157	-8.5	1419	-6.0
12	1455	12.5	154	-5.5	1491	-4.3
13	1527	10.9	162	-4.1	1564	-4.0
14	1600	10.7	178	-3.5	1636	-3.1
15	1673	11.0	185	-3.0	1709	-3.0
16	1745	9.1	191	-3.0	1782	-3.0
17	1818	7.0	193	-3.1	1854	-3.5
18	1890	6.6	185	-3.6	1927	-3.8
19	1963	6.3	182	-3.9	1999	-4.0
20	2036	3.7	181	-4.1	2072	-4.3
21	2108	3.6	183	-4.4	2145	-4.6
22	2181	3.9	187	-4.7	2217	-4.7
23	2254	3.9	188	-4.8	2290	-4.9
24	2326	3.2	206	-5.0	2362	-5.0
25	2399	4.0	222	-5.0	2435	-5.3
26	2471	3.5	234	-5.6	2508	-6.1
27	2544	3.4	232	-6.3	2580	-6.5
28	2617	5.2	195	-6.5	2653	-6.6
29	2689	4.9	192	-6.8	2726	-6.9
30	2762	4.6	193	-7.2	2798	-7.4
31	2834			-7.6	2870	-7.9
32	2906			-8.0	2942	-8.4
33	2979			-8.5	3015	-8.6
34	3051			-8.8	3087	-8.8
35	3123			-8.9	3159	-9.1
36	3195			-9.2	3231	-9.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 18

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 8

DATE: NOVEMBER 25 1978 TIME: 2130PST

ELINE: 259.1 (m) GPA: 0.2 PRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	631			-16.2	SURFACE CONDITIONS	
1	663	3.1	264	-16.2	695	-14.8
2	727	3.6	88	-14.7	759	-14.6
3	792	2.5	143	-14.3	824	-13.3
4	856	3.5	120	-13.0	883	-13.0
5	922	6.2	117	-12.9	956	-12.4
6	1000	8.7	114	-12.2	1043	-12.0
7	1062	6.6	126	-11.9	1082	-11.7
8	1100	4.5	135	-11.7	1118	-11.8
9	1139	5.0	139	-11.9	1159	-12.0
10	1185	8.4	152	-11.0	1211	-10.0
11	1239			-7.1	1268	-5.0
12	1297			-3.8	1326	-3.1
13	1355			-3.0	1384	-2.7
14	1413			-2.2	1442	-0.7
15	1471			-0.8	1500	-1.0
16	1529			-1.2	1558	-1.4
17	1587			-1.7	1616	-1.8
18	1645			-1.9	1674	-2.0
19	1703			-2.3	1732	-2.9
20	1761			-3.0	1790	-3.5
21	1819			-3.8	1848	-4.0
22	1877			-3.8	1906	-4.1
23	1935			-4.6	1964	-5.6
24	1993			-5.4	2022	-5.8
25	2051			-6.2	2080	-6.7
26	2109			-7.0	2138	-7.4
27	2167			-7.7	2196	-7.7
28	2225			-7.8	2254	-8.0
29	2283			-8.0	2312	-8.1
30	2341			-8.3	2370	-8.6
31	2399			-8.7	2427	-9.0
32	2456			-9.1	2485	-9.3
33	2514			-9.4	2543	-9.6
34	2572			-9.7	2601	-10.0
35	2630			-9.9	2659	-10.0
36	2688			-10.0	2717	-10.1
37	2746			-10.1	2775	-10.2
38	2804			-10.3	2833	-10.4
39	2862			-10.5	2891	-10.6
40	2920			-10.6	2949	-10.6

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 19

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 26, 1978 TIME: 0900PST

ELINE: 259.1 (m) GPA: 0.2 PRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-16.2	SURFACE CONDITIONS	
1	662	0.8	26	-16.2	690	-16.0
2	719	2.7	329	-15.9	747	-15.2
3	776	3.3	353	-14.9	804	-14.3
4	833	2.3	350	-14.9	861	-14.6
5	890	0.8	199	-14.3	918	-14.4
6	947	1.9	156	-14.2	975	-13.0
7	1004	2.3	120	-12.9	1032	-12.5
8	1061	4.6	124	-10.8	1089	-10.2
9	1118	7.3	161	-9.6	1146	-8.3
10	1175	7.6	137	-7.7	1203	-7.0
11	1232	7.3	165	-5.3	1260	-3.9
12	1289	5.7	176	-3.2	1317	-3.1
13	1346	4.8	179	-2.9	1374	-1.9
14	1403	2.7	236	-1.3	1431	-1.0
15	1460	5.7	254	-0.9	1488	0.2
16	1517	7.6	243	0.4	1545	0.1
17	1574	8.1	244	0.0	1602	-0.3
18	1631	8.7	240	-0.5	1659	-0.3
19	1688	9.7	242	-0.9	1716	-1.0
20	1745	10.7	240	-1.2	1773	-1.5
21	1802	11.0	240	-1.7	1830	-1.8
22	1859	11.5	238	-1.9	1887	-2.0
23	1916	11.4	240	-2.1	1944	-2.3
24	1973	14.3	230	-2.3	2001	-2.3
25	2030	12.6	230	-2.4	2058	-2.6
26	2087	12.9	229	-2.8	2115	-3.0
27	2144	10.6	232	-3.2	2172	-3.4
28	2201	10.8	232	-3.7	2229	-4.0
29	2258	7.1	237	-4.3	2286	-4.5
30	2315	7.6	231	-4.8	2343	-5.2

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 20

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 26 1978 TIME: 1017PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-16.9	SURFACE CONDITIONS	
1	667	1.0	253	-16.0	698	-15.9
2	729	0.5	301	-15.8	761	-15.7
3	793	2.2	286	-15.6	824	-15.5
4	852	1.0	303	-15.5	880	-15.3
5	909	0.7	345	-15.0	933	-14.8
6	950	1.1	115	-14.6	962	-13.8
7	1017	3.6	176	-13.1	1072	-13.1
8	1107	5.5	121	-12.4	1143	-11.3
9	1176	6.8	140	-10.7	1210	-10.1
10	1235	6.9	159	-9.5	1260	-9.4
11	1288	8.8	167	-7.5	1316	-5.5
12	1347	6.5	212	-3.5	1379	-2.4
13	1415	8.7	240	-1.3	1451	0.8
14	1493	11.7	238	0.8	1535	0.8
15	1567	9.7	236	0.9	1600	0.8
16	1639	12.8	226	0.5	1679	0.0
17	1719	14.6	228	-0.5	1758	-0.5
18	1798	19.9	222	-0.7	1838	-0.9
19	1877	15.5	225	-1.0	1917	-1.3
20	1957	16.4	225	-1.5	1996	-1.8
21	2036	17.1	224	-2.0	2076	-2.4
22	2115	19.2	224	-2.6	2155	-2.9
23	2195	17.3	224	-3.0	2234	-3.5
24	2274	15.9	227	-3.8	2314	-4.2
25	2353	13.3	228	-4.5	2393	-5.0
26	2432	13.3	228	-5.1	2472	-5.5
27	2512	13.3	228	-5.7	2551	-6.0
28	2591	18.3	228	-6.1	2631	-6.1
29	2666			-6.3	2702	-6.6
30	2738			-6.7	2773	-6.9
31	2809			-7.0	2845	-7.1
32	2880			-7.3	2916	-7.2
33	2951			-7.2	2987	-7.5
34	3023			-7.5	3058	-7.5
35	3094			-7.6	3130	-7.9
36	3165			-8.0	3201	-8.0
37	3236			-8.0	3272	-8.2
38	3308			-8.5	3343	-8.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 2 - 21

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 26 1978 TIME: 1136PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-16.0	SURFACE CONDITIONS	
1	673	1.6	200	-15.7	709	-15.5
2	745	0.9	241	-15.3	781	-15.7
3	815	0.9	286	-15.0	849	-15.0
4	888	0.4	253	-14.9	928	-14.7
5	968	0.2	90	-14.2	1008	-14.0
6	1050	2.3	173	-13.9	1092	-13.5
7	1131	5.2	138	-13.1	1170	-12.0
8	1200	5.7	137	-11.0	1231	-10.9
9	1268	6.5	144	-10.8	1305	-9.0
10	1343	6.9	214	-4.5	1380	-0.5
11	1417	10.9	246	1.0	1454	1.0
12	1491	12.7	244	1.0	1528	0.9
13	1565	13.9	241	0.7	1603	0.5
14	1640	14.2	241	0.2	1677	-0.1
15	1714	12.6	237	-0.2	1751	-0.6
16	1788	9.8	238	-0.9	1825	-1.5
17	1862	9.2	238	-1.9	1900	-2.4
18	1937	10.3	239	-2.6	1974	-3.0
19	2011	12.3	236	-3.2	2048	-3.7
20	2085	13.0	237	-3.9	2122	-4.2
21	2160	12.9	241	-4.3	2197	-4.6
22	2234	12.0	245	-4.6	2271	-4.6
23	2308	12.5	247	-4.8	2345	-5.0
24	2382	10.5	251	-5.0	2420	-5.1
25	2457	9.1	259	-5.2	2494	-5.6
26	2531	8.2	264	-5.8	2568	-6.1
27	2605	8.1	277	-6.4	2642	-7.0
28	2680	7.9	275	-7.1	2717	-7.5
29	2754	8.4	274	-7.6	2791	-7.7
30	2828	8.4	274	-7.7	2865	-7.9
31	2902			-8.1	2940	-8.6
32	2977			-8.9	3014	-9.2
33	3051			-9.4	3088	-9.9
34	3125			-10.1	3162	-10.6
35	3200			-10.9	3237	-11.4
36	3274			-11.5	3311	-11.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 0

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 26, 1978 TIME: 1333PST

FLINE: 259.1 (m) GPA: 0.2 FRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-14.5	SURFACE CONDITIONS	
1	674	1.6	152	-15.0	712	-14.9
2	751	2.2	183	-14.5	791	-14.2
3	828	2.1	187	-13.9	866	-13.7
4	904	3.3	162	-12.9	941	-12.5
5	977	4.7	128	-11.0	1013	-10.0
6	1043	5.4	151	-9.0	1074	-9.0
7	1105	6.6	149	-7.9	1135	-3.5
8	1174	3.5	188	-1.7	1213	-1.3
9	1262	1.6	199	-1.4	1312	-1.5
10	1363	3.3	285	-1.8	1414	-0.9
11	1449	6.1	267	-0.2	1484	-0.4
12	1519	5.8	273	-0.6	1554	-0.5
13	1589	6.9	255	-0.6	1624	-0.6
14	1660	8.4	251	-0.6	1697	-0.9
15	1725	8.5	249	-1.0	1754	-1.3
16	1784	8.5	247	-1.6	1814	-1.6
17	1844	8.4	242	-1.7	1874	-1.7
18	1909	10.0	240	-1.8	1944	-2.1
19	1979	10.1	240	-2.3	2014	-2.5
20	2049	10.8	241	-2.8	2084	-3.0
21	2119	10.8	241	-3.1	2154	-3.5
22	2189	10.8	241	-3.9	2224	-4.1
23	2259	10.6	245	-4.2	2294	-4.5
24	2329	10.4	251	-4.6	2364	-4.8
25	2399	10.4	250	-5.0	2434	-5.1
26	2469	10.2	258	-5.3	2505	-5.4
27	2540	10.3	255	-5.3	2575	-5.8
28	2610	10.3	255	-6.0	2645	-6.1
29	2680	10.3	255	-6.1	2715	-6.5
30	2751			-6.9	2787	-6.9
31	2822			-6.9	2858	-7.1
32	2894			-7.4	2930	-8.0
33	2966			-8.2	3002	-8.5
34	3037			-8.5	3073	-8.8
35	3109			-9.0	3145	-9.2
36	3181			-9.2	3217	-9.5
37	3253			-10.0	3288	-10.2
38	3324			-10.5	3360	-11.0
39	3396			-11.2	3432	-11.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 1

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 26 1978 TIME: 1536PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-14.2	SURFACE CONDITIONS	
1	679	1.9	43	-14.6	721	-14.4
2	753	1.3	147	-14.1	786	-14.0
3	819	3.2	158	-14.0	852	-13.6
4	892	1.2	106	-12.2	932	-12.0
5	970	2.4	133	-10.7	1003	-9.5
6	1043	5.6	133	-8.8	1078	-8.5
7	1122	7.0	155	-7.5	1156	-5.1
8	1221	6.5	148	-2.4	1277	-0.9
9	1297	3.8	130	-0.8	1317	-0.9
10	1355	4.5	84	-1.1	1394	-1.1
11	1437	4.5	70	-0.9	1479	-0.8
12	1510	1.8	19	-0.9	1540	-1.0
13	1571	1.3	358	-1.2	1602	-1.3
14	1633	1.0	250	-1.0	1664	-0.8
15	1697	1.2	232	-0.8	1730	-1.0
16	1765	1.4	219	-1.3	1800	-1.6
17	1837	1.7	215	-1.9	1874	-2.0
18	1916	3.1	215	-2.2	1958	-2.5
19	1996	4.5	229	-2.7	2034	-3.0
20	2072	6.2	237	-3.2	2111	-3.5
21	2149	6.9	240	-3.7	2187	-3.7
22	2224			-3.8	2251	-3.9
23	2298			-4.1	2335	-4.7
24	2371			-5.1	2403	-5.2
25	2445			-5.3	2482	-5.6
26	2519			-5.8	2556	-6.0
27	2593			-6.2	2630	-6.6
28	2667			-6.8	2703	-6.9
29	2740			-6.8	2777	-7.0
30	2814			-7.0	2851	-7.3
31	2888			-7.7	2925	-8.4
32	2962			-8.7	2999	-9.0
33	3036			-9.4	3072	-9.9
34	3109			-10.2	3146	-10.7
35	3183			-11.0	3220	-11.2
36	3257			-11.5	3294	-12.0
37	3331			-12.1	3368	-12.5
38	3404			-12.8	3441	-13.2
39	3478			-13.4	3515	-13.9
40	3552			-14.1	3589	-14.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 2

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 27, 1978 TIME: 0855 PST

ELINE: 259.1 (m) GPA: 0.2 BEG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	632			-11.8	SURFACE CONDITIONS	
1	668	0.4	203	-12.1	703	-12.0
2	736	0.6	325	-11.6	769	-11.7
3	801	0.7	7	-11.7	834	-11.2
4	869	1.5	321	-11.0	904	-11.1
5	939	2.0	298	-10.8	973	-10.6
6	1006	1.0	285	-10.2	1038	-10.1
7	1073	0.6	299	-10.2	1103	-10.0
8	1141	1.2	233	-8.8	1174	-8.5
9	1209	2.5	184	-8.3	1244	-8.0
10	1280	3.1	153	-8.0	1316	-7.3
11	1350			-7.4	1384	-6.8
12	1418			-5.8	1453	-5.6
13	1487			-5.3	1521	-5.0
14	1555			-4.3	1589	-3.8
15	1623			-3.8	1658	-3.6
16	1692			-3.5	1726	-3.4
17	1760			-3.4	1794	-3.3
18	1828			-3.0	1863	-2.3
19	1897			-3.0	1931	-3.3
20	1965			-3.6	1999	-3.3
21	2034			-3.7	2068	-3.8
22	2102			-4.0	2136	-4.2
23	2170			-4.4	2204	-4.7
24	2239			-5.0	2273	-5.2
25	2307			-5.3	2341	-5.6
26	2375			-5.7	2409	-5.8
27	2444			-5.9	2478	-6.1
28	2512			-6.3	2546	-6.8
29	2580			-7.0	2614	-7.2
30	2649			-7.4	2683	-7.7
31	2717			-7.9	2751	-8.3
32	2785			-8.7	2820	-9.0
33	2854			-9.3	2888	-9.6
34	2922			-9.7	2956	-10.0
35	2990			-10.3	3025	-10.7
36	3059			-10.9	3093	-11.2
37	3127			-11.4	3161	-11.7
38	3195			-12.0	3230	-12.2
39	3264			-12.6	3298	-12.9
40	3332			-13.1	3366	-13.4

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 3

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 27 1978 TIME: 1017PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-12.0	SURFACE CONDITIONS	
1	669	0.3	179	-12.8	702	-12.9
2	734	0.4	176	-12.7	755	-12.5
3	799	0.9	292	-12.3	832	-12.1
4	863	1.5	316	-12.0	894	-11.8
5	927	2.8	324	-11.6	959	-11.2
6	993	1.6	321	-11.0	1027	-10.9
7	1062	1.5	338	-10.8	1093	-10.5
8	1139	1.9	313	-10.1	1130	-9.7
9	1215			-9.5	1249	-9.6
10	1283			-9.6	1317	-9.5
11	1351			-8.9	1335	-7.7
12	1419			-6.5	1453	-5.1
13	1487			-5.0	1521	-5.0
14	1555			-4.3	1589	-4.5
15	1623			-4.5	1657	-4.6
16	1691			-4.6	1725	-4.7
17	1759			-4.7	1793	-4.4
18	1827			-4.2	1861	-4.1
19	1895			-4.1	1929	-4.4
20	1963			-4.6	1997	-4.9
21	2031			-5.0	2065	-5.2
22	2099			-5.5	2133	-5.9
23	2167			-6.0	2201	-6.0
24	2235			-6.0	2269	-6.0
25	2303			-6.1	2337	-6.2
26	2371			-6.4	2405	-6.7
27	2439			-6.8	2473	-6.9
28	2507			-7.0	2541	-7.0
29	2575			-7.1	2609	-7.2
30	2643			-7.3	2677	-7.4
31	2711			-7.6	2745	-7.8
32	2779			-7.9	2813	-8.0
33	2847			-8.0	2881	-7.9
34	2915			-7.8	2949	-7.7
35	2983			-7.6	3017	-7.6
36	3051			-7.5	3085	-7.4
37	3119			-7.3	3153	-7.2
38	3187			-7.1	3221	-7.0
39	3255			-7.0	3289	-7.0
40	3323			-6.9	3357	-6.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 4

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 27, 1973 TIME: 1132 PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	637			-10.9	SURFACE CONDITIONS	
1	682	3.5	166	-11.5	726	-11.8
2	754	2.4	169	-11.0	781	-10.8
3	815	2.2	180	-10.7	849	-10.4
4	881	1.8	164	-9.9	914	-9.5
5	946	2.1	165	-9.3	979	-9.0
6	1011	1.2	151	-8.6	1043	-8.1
7	1076	1.3	159	-8.2	1108	-8.4
8	1143	2.5	166	-8.4	1177	-8.3
9	1216	3.4	175	-8.1	1254	-6.2
10	1288	2.2	235	-3.6	1321	-1.5
11	1360	2.0	259	0.0	1399	0.0
12	1434	1.7	302	-0.2	1469	-0.6
13	1505	1.8	310	-0.9	1540	-1.2
14	1569	2.3	317	-1.4	1598	-1.8
15	1630	2.3	334	-2.0	1661	-2.4
16	1699	2.4	354	-2.7	1738	-3.0
17	1760	3.5	11	-3.2	1783	-3.5
18	1813	3.6	12	-3.7	1854	-3.9
19	1885	4.0	14	-4.2	1916	-4.7
20	1953	3.8	5	-5.0	1990	-5.2
21	2036	4.1	0	-5.5	2082	-5.8
22	2113	5.5	340	-6.0	2154	-6.2
23	2189	6.9	337	-6.4	2225	-6.7
24	2261	6.8	337	-6.9	2296	-7.0
25	2332	5.7	336	-7.2	2368	-7.5
26	2403	5.3	334	-7.7	2439	-7.9
27	2475	4.0	315	-8.1	2511	-8.2
28	2546	3.7	293	-8.4	2582	-8.4
29	2618	5.7	275	-8.4	2653	-8.7
30	2689	6.6	273	-9.1	2725	-9.7
31	2760			-9.9	2794	-10.2
32	2829			-10.6	2864	-11.0
33	2899			-11.2	2934	-11.7
34	2968			-11.9	3003	-12.1
35	3038			-12.4	3073	-12.7
36	3108			-12.9	3142	-13.1
37	3177			-13.3	3212	-13.6
38	3247			-13.8	3282	-13.9
39	3316			-14.2	3351	-14.4
40	3386			-14.7	3421	-15.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 5

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 27 1978 TIME: 1335 PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	635			-12.0	SURFACE CONDITIONS	
1	676	1.2	20	-12.4	718	-10.8
2	760	3.5	169	-10.5	802	-9.4
3	838	5.4	164	-9.0	875	-8.6
4	913	4.6	150	-8.0	951	-8.0
5	988	4.9	145	-8.2	1024	-8.4
6	1060	5.8	157	-8.1	1097	-5.9
7	1128	8.0	160	-4.7	1159	-3.0
8	1191	5.9	161	-2.2	1223	-1.5
9	1255	3.9	157	-1.4	1288	-1.1
10	1326	2.2	138	-0.6	1364	-0.1
11	1402	1.4	116	0.0	1440	-0.4
12	1478	2.1	111	-0.6	1516	-0.9
13	1554	3.0	125	-1.0	1592	-1.4
14	1624	2.6	100	-1.6	1656	-2.0
15	1699	3.4	124	-2.2	1743	-2.5
16	1773	1.5	76	-2.3	1803	-3.2
17	1854	2.5	93	-3.4	1905	-3.8
18	1951	2.5	67	-4.1	1998	-4.6
19	2033	2.5	21	-4.9	2068	-5.2
20	2117	2.6	27	-5.6	2167	-5.9
21	2205	2.7	353	-6.0	2243	-6.2
22	2264	4.4	333	-6.2	2284	-6.4
23	2309	4.0	337	-6.6	2334	-6.9
24	2376	2.4	336	-7.3	2418	-7.7
25	2468	1.6	326	-7.9	2518	-8.1
26	2563	1.6	284	-8.3	2607	-8.6
27	2629	3.8	270	-8.8	2650	-8.9
28	2687	4.3	272	-9.1	2725	-9.3
29	2739	6.2	274	-9.6	2753	-9.6
30	2786	7.9	271	-9.9	2819	-10.0
31	2856			-10.3	2892	-10.6
32	2929			-10.8	2965	-11.0
33	3001			-11.1	3038	-11.3
34	3074			-11.5	3111	-11.7
35	3147			-11.9	3183	-12.2
36	3220			-12.6	3256	-12.9
37	3293			-13.1	3329	-13.4
38	3365			-13.9	3402	-14.2
39	3438			-14.4	3475	-15.0
40	3511			-15.2	3547	-15.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 6

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 27 1978 TIME: 1530PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-12.5	SURFACE CONDITIONS	
1	675	1.8	26	-12.9	713	-12.1
2	750	0.4	353	-11.2	788	-11.1
3	822	1.6	166	-10.2	857	-9.2
4	904	2.2	131	-8.7	951	-8.4
5	981	5.7	147	-7.7	1011	-7.3
6	1041	7.0	164	-5.3	1070	-3.1
7	1106	5.3	170	-2.9	1141	-1.9
8	1176	3.3	179	-0.6	1211	-0.3
9	1246	3.1	166	0.0	1281	0.5
10	1313	2.7	163	0.6	1345	0.5
11	1378	3.5	148	0.4	1411	0.1
12	1444	4.0	139	0.0	1476	-0.4
13	1504	3.3	132	-0.6	1532	-0.9
14	1563	3.6	134	-1.1	1595	-1.4
15	1627	3.7	139	-1.7	1659	-2.1
16	1690	3.2	144	-2.3	1721	-2.8
17	1755	3.4	142	-3.0	1789	-3.3
18	1824	2.4	133	-3.6	1858	-3.9
19	1894	2.3	131	-4.0	1929	-4.4
20	1968	1.1	112	-4.6	2008	-5.0
21	2050	1.0	108	-5.1	2093	-5.3
22	2136	0.1	64	-5.4	2179	-5.7
23	2209	0.9	308	-6.0	2239	-6.4
24	2272	0.7	305	-6.6	2306	-7.0
25	2345	0.5	235	-7.3	2384	-7.7
26	2423	1.2	236	-7.9	2461	-8.0
27	2491	3.2	256	-8.2	2521	-8.4
28	2546	4.1	270	-8.6	2571	-9.0
29	2603	5.2	261	-9.2	2634	-9.6
30	2669			-9.8	2703	-10.0
31	2737			-10.4	2772	-10.6
32	2806			-10.0	2841	-11.1
33	2875			-11.3	2910	-11.6
34	2944			-11.8	2979	-12.0
35	3013			-12.4	3047	-12.6
36	3082			-12.8	3116	-13.1
37	3151			-13.4	3185	-13.8
38	3220			-14.0	3254	-14.2
39	3288			-14.4	3323	-14.6
40	3357			-14.8	3392	-15.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 7

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 6

DATE: NOVEMBER 27 1978 TIME: 1649PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-13.3	SURFACE CONDITIONS	
1	667	1.0	341	-13.6	700	-13.4
2	736	1.1	231	-12.0	771	-11.9
3	804	3.0	171	-11.4	837	-10.5
4	872	2.9	151	-9.8	907	-8.5
5	943	4.5	137	-7.9	979	-7.7
6	1011	6.2	151	-7.7	1044	-5.8
7	1077	8.4	167	-4.7	1110	-2.5
8	1147	4.7	166	-1.6	1183	-1.2
9	1221	2.9	186	-1.1	1259	-0.5
10	1294	2.6	175	-0.4	1329	-0.2
11	1364	3.3	154	-0.1	1399	-0.3
12	1431	3.7	146	-0.4	1464	-0.7
13	1499	4.5	146	-0.9	1533	-1.1
14	1569	4.9	144	-1.4	1605	-1.7
15	1637	4.2	142	-1.9	1670	-2.3
16	1704	3.9	141	-2.5	1738	-2.9
17	1770	4.0	144	-3.1	1802	-3.5
18	1838	3.3	146	-3.7	1873	-4.0
19	1921	4.2	146	-4.2	1969	-4.5
20	1997	0.2	164	-4.8	2025	-5.0
21	2062	2.0	170	-5.1	2098	-5.5
22	2132	1.1	171	-5.8	2166	-5.3
23	2202	1.4	151	-6.5	2239	-6.8
24	2275	2.2	147	-7.1	2311	-7.5
25	2347	3.2	140	-7.7	2383	-8.0
26	2416	2.7	165	-8.3	2450	-8.5
27	2474	1.4	219	-8.8	2497	-9.0
28	2534	2.7	208	-9.1	2571	-9.6
29	2607	3.2	217	-9.9	2644	-10.0
30	2681	4.0	227	-10.2	2717	-10.5
31	2752			-10.8	2787	-11.0
32	2821			-11.1	2856	-11.4
33	2891			-11.7	2926	-12.0
34	2950			-12.3	2995	-12.5
35	3030			-12.8	3065	-13.1
36	3099			-13.4	3134	-13.6
37	3169			-13.9	3204	-14.2
38	3233			-14.4	3273	-14.7
39	3303			-14.9	3343	-15.1
40	3377			-15.3	3412	-15.3

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 3

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 28 1978 TIME: 0900 PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-14.9	SURFACE CONDITIONS	
1	664	0.4	123	-12.3	695	-10.4
2	726	0.5	151	-9.2	757	-5.7
3	787	2.7	167	-5.4	817	-4.8
4	847	2.6	155	-3.9	876	-3.0
5	891	1.2	164	-1.7	907	0.4
6	933	1.9	182	0.9	959	1.4
7	1011	4.1	192	1.5	1063	1.4
8	1096	4.1	191	1.5	1129	1.3
9	1161	2.6	177	1.7	1194	1.4
10	1226	2.3	155	1.3	1253	0.9
11	1288	1.6	177	0.8	1318	0.7
12	1356	2.6	194	0.5	1393	0.2
13	1430	2.9	223	0.1	1468	-0.2
14	1508	4.2	241	-0.5	1548	-0.8
15	1586	5.5	245	-0.9	1623	-1.2
16	1661	7.0	249	-1.6	1698	-2.0
17	1731	7.7	250	-2.1	1765	-2.4
18	1800	7.8	250	-2.6	1835	-3.0
19	1872	8.4	251	-3.3	1909	-3.6
20	1950	10.2	252	-3.8	1991	-4.0
21	2027	9.9	252	-4.3	2063	-4.6
22	2094	8.2	264	-4.7	2125	-4.9
23	2155	8.0	270	-5.0	2186	-5.5
24	2217	8.0	270	-5.7	2248	-6.1
25	2273	8.0	270	-6.4	2309	-6.7
26	2340	8.0	270	-7.0	2370	-7.3
27	2401	8.0	270	-7.5	2432	-8.0
28	2463	8.0	270	-8.3	2493	-8.7
29	2524	8.0	270	-8.8	2555	-9.1
30	2583			-9.4	2621	-9.7
31	2654			-9.9	2687	-10.0
32	2721			-10.4	2754	-10.7
33	2787			-10.9	2820	-11.1
34	2853			-11.4	2886	-11.5
35	2919			-11.7	2952	-11.9
36	2986			-12.0	3019	-12.1
37	3052			-12.4	3085	-12.7
38	3118			-12.9	3151	-13.1
39	3134			-13.3	3218	-13.5
40	3251			-13.7	3284	-14.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 9

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 28 1978 TIME: 1024PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-16.4	SURFACE CONDITIONS	
1	665	1.1	231	-14.8	695	-12.4
2	728	1.0	223	-10.9	761	-7.5
3	797	1.3	158	-7.0	832	-4.9
4	866	4.3	169	-1.0	900	-0.4
5	932	5.5	196	0.0	965	1.5
6	997	5.8	209	2.5	1028	2.9
7	1060	4.5	202	2.8	1091	2.7
8	1123	3.8	207	2.4	1154	2.2
9	1183	3.8	208	2.1	1212	1.9
10	1241	4.6	206	1.7	1269	1.5
11	1298	4.9	201	1.3	1326	1.2
12	1352	5.4	204	1.1	1377	0.3
13	1404	5.5	209	0.6	1431	0.5
14	1458	5.6	212	0.3	1485	0.0
15	1512	6.8	216	-0.1	1539	-0.4
16	1566	6.6	218	-0.6	1594	-0.8
17	1622	7.1	224	-0.9	1650	-1.1
18	1679	6.8	228	-1.3	1707	-1.8
19	1736	5.8	248	-2.1	1764	-2.5
20	1792	6.7	249	-2.6	1821	-2.8
21	1849	6.9	247	-2.9	1878	-3.1
22	1906	7.3	248	-3.3	1934	-3.6
23	1963	5.3	252	-3.9	1991	-4.1
24	2020	5.3	252	-4.3	2048	-4.7
25	2076	5.3	252	-4.9	2105	-5.1
26	2133	5.3	252	-5.4	2162	-5.7
27	2190	5.3	252	-6.0	2218	-6.4
28	2247	5.3	252	-6.3	2275	-7.3
29	2304	5.3	252	-7.6	2332	-7.9
30	2360	5.3	252	-8.2	2389	-8.8
31	2418			-9.1	2447	-9.5
32	2477			-9.9	2506	-10.2
33	2535			-10.5	2564	-10.8
34	2593			-11.0	2623	-11.2
35	2652			-11.5	2681	-11.9
36	2710			-12.2	2740	-12.6
37	2759			-12.9	2798	-13.1
38	2827			-13.5	2856	-13.8
39	2886			-14.0	2915	-14.4
40	2944			-14.7	2973	-15.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 10

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 28 1978 TIME: 1135PST

ELINE: 259.7 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	635			-16.3	SURFACE CONDITIONS	
1	669	0.6	138	-14.0	703	-12.9
2	740	0.7	25	-9.1	777	-5.7
3	813	3.9	144	-2.0	849	-0.3
4	386	2.5	178	0.4	923	1.3
5	965	4.8	168	1.6	1006	1.8
6	1048	7.6	181	1.8	1091	2.1
7	1125	7.6	191	2.3	1159	2.1
8	1195	9.4	192	2.0	1232	1.9
9	1268	9.5	200	1.7	1304	1.3
10	1340	7.8	205	1.1	1376	0.7
11	1412	8.2	210	0.5	1448	0.1
12	1484	7.9	214	-0.2	1520	-0.6
13	1556	6.4	223	-0.8	1593	-1.3
14	1631	8.1	215	-1.6	1669	-1.9
15	1706	7.7	218	-2.1	1744	-2.4
16	1781	5.8	228	-2.5	1818	-2.9
17	1855	6.1	229	-3.2	1892	-3.6
18	1929	9.2	221	-3.9	1965	-4.4
19	2002	9.1	222	-4.6	2039	-4.8
20	2076	8.9	226	-5.0	2113	-5.4
21	2150	9.8	230	-5.6	2186	-5.9
22	2223	10.4	232	-6.0	2260	-6.3
23	2297	10.4	232	-6.3	2334	-6.4
24	2370	10.3	233	-6.5	2407	-6.8
25	2444	10.3	233	-6.9	2481	-7.1
26	2518	10.3	233	-7.2	2555	-7.4
27	2591	10.3	233	-7.6	2628	-7.7
28	2665	10.3	233	-7.9	2702	-8.1
29	2739	10.3	233	-8.4	2775	-8.7
30	2812	10.3	233	-8.9	2849	-9.0
31	2886			-9.2	2923	-9.7
32	2960			-9.9	2997	-10.5
33	3034			-10.7	3070	-11.0
34	3107			-11.5	3144	-11.9
35	3181			-12.2	3218	-12.6
36	3255			-12.8	3292	-13.0
37	3329			-13.4	3366	-13.7
38	3402			-14.1	3439	-14.4
39	3476			-14.8	3513	-15.1
40	3550			-15.5	3587	-15.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 11

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 23 1978 TIME: 1335 PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-11.7	SURFACE CONDITIONS	
1	673	1.8	74	-11.9	710	-5.5
2	750	3.5	161	-2.9	789	-1.2
3	829	5.0	147	-1.1	863	-1.1
4	904	6.7	173	0.0	939	1.9
5	975	9.2	178	2.1	1011	2.5
6	1048	9.2	179	2.5	1086	2.4
7	1132	9.7	192	2.6	1178	2.5
8	1223	9.0	205	2.3	1267	2.0
9	1305	8.8	222	1.9	1343	1.2
10	1332	8.9	218	1.0	1421	0.5
11	1459	7.4	213	0.1	1498	-0.2
12	1537	7.8	216	-0.5	1576	-0.8
13	1614	8.9	219	-1.2	1653	-1.7
14	1692	9.5	215	-2.0	1731	-2.5
15	1770	9.2	213	-2.9	1808	-3.3
16	1847	9.7	216	-3.7	1886	-4.1
17	1925	11.1	223	-4.4	1964	-4.5
18	2002	12.2	226	-4.9	2041	-5.3
19	2080	12.7	226	-5.5	2119	-6.0
20	2158	13.2	228	-6.1	2195	-6.4
21	2235	14.1	229	-6.6	2274	-7.0
22	2313	14.6	230	-7.1	2352	-7.5
23	2390	14.9	231	-7.7	2429	-7.8
24	2468	14.3	230	-7.9	2507	-8.0
25	2545	15.0	227	-8.5	2584	-8.9
26	2623	15.7	228	-9.0	2662	-9.5
27	2701	17.9	233	-9.4	2739	-9.0
28	2778	18.0	233	-9.1	2817	-9.2
29	2856	18.0	233	-9.2	2895	-9.5
30	2934			-9.4	2972	-9.3
31	3011			-9.2	3050	-9.2
32	3089			-9.4	3128	-9.7
33	3167			-10.0	3206	-10.4
34	3245			-10.8	3284	-11.2
35	3323			-11.5	3362	-11.8
36	3401			-12.0	3440	-12.5
37	3479			-12.7	3518	-12.7
38	3557			-13.1	3595	-13.4
39	3634			-13.8	3673	-14.3
40	3712			-14.5	3751	-14.7

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 12

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 28 1978 TIME: 1535PST

SLINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	636			-11.4	SURFACE CONDITIONS	
1	664	0.5	18	-10.8	591	-6.8
2	741	0.8	130	-4.0	790	-3.7
3	833	4.2	187	-3.1	875	-2.0
4	913	7.6	189	-0.2	952	0.3
5	986	10.7	187	1.4	1020	2.4
6	1055	11.2	196	2.6	1090	2.3
7	1133	10.9	198	2.7	1176	2.4
8	1221	10.2	203	2.1	1265	1.8
9	1309	8.8	208	1.5	1354	1.3
10	1398	8.3	207	1.0	1443	0.4
11	1488	8.2	208	0.1	1534	-0.1
12	1584	13.1	211	-0.6	1634	-1.0
13	1684	13.2	215	-1.2	1734	-1.6
14	1783	12.5	218	-1.8	1833	-2.3
15	1883	13.6	216	-2.8	1933	-3.6
16	1983	15.6	215	-4.1	2033	-4.3
17	2083	16.3	218	-4.7	2133	-5.2
18	2183	17.6	221	-5.5	2233	-5.9
19	2283	17.4	222	-6.1	2332	-6.5
20	2382	16.9	224	-6.8	2432	-6.9
21	2482	16.9	224	-7.0	2532	-7.3
22	2582	16.9	224	-7.4	2632	-7.9
23	2682	16.9	224	-8.0	2732	-8.2
24	2782	16.9	224	-8.4	2832	-9.0
25	2877			-9.4	2923	-9.9
26	2969			-10.1	3015	-10.4
27	3060			-10.4	3106	-10.5
28	3152			-10.7	3198	-10.8
29	3243			-11.1	3289	-11.6
30	3335			-11.9	3381	-12.2
31	3426			-12.5	3472	-12.9
32	3518			-13.3	3563	-13.8
33	3609			-14.1	3655	-14.7
34	3701			-15.0	3746	-15.3
35	3792			-15.8	3838	-16.2
36	3884			-16.6	3929	-17.1
37	3975			-17.7	4021	-18.2
38	4067			-18.8	4112	-19.3
39	4158			-19.7	4204	-20.2
40	4250			-20.6	4295	-21.0
41	4341			-21.3	4387	-21.6

MINISOWDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 13

STATION: BEAVER CREEK T.F. STATION HEIGHT: 632 (m) FLIGHT: 6

DATE: NOVEMBER 28 1978 TIME: 1650PST

LLINE: 259.1 (m) GPA: 0.3 PRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	632			-14.7	SURFACE CONDITIONS	
1	664	2.0	166	-10.5	696	-3.0
2	728	5.9	152	-1.3	760	-0.1
3	791	7.1	161	-0.1	822	0.2
4	853	9.6	165	0.5	884	1.9
5	914	10.1	169	2.5	944	2.5
6	974	9.7	177	2.9	1004	2.8
7	1033	9.2	181	2.7	1062	2.5
8	1092	9.4	183	2.4	1122	2.1
9	1151	8.1	185	2.0	1179	1.6
10	1215	8.6	186	1.5	1250	1.0
11	1236	8.3	186	0.9	1321	0.4
12	1358	7.0	183	0.1	1394	-0.5
13	1434	7.2	187	-0.6	1471	-0.9
14	1514	7.0	183	-1.1	1554	-1.5
15	1590	4.8	189	-1.9	1626	-2.2
16	1662	2.8	201	-2.4	1698	-2.9
17	1734	3.1	208	-3.1	1770	-3.4
18	1806	3.1	200	-3.8	1842	-4.2
19	1878	3.1	202	-4.4	1914	-4.8
20	1950	6.3	195	-5.0	1986	-5.5
21	2016	6.0	197	-5.7	2046	-6.1
22	2071	5.1	204	-6.3	2095	-6.8
23	2119	6.0	215	-7.0	2143	-7.5
24	2166	6.9	219	-7.6	2189	-7.9
25	2212	5.9	204	-8.0	2236	-8.1
26	2259	10.5	208	-8.1	2282	-8.2
27	2305	11.9	208	-8.1	2329	-8.1
28	2352	13.4	207	-8.0	2375	-8.0
29	2398	13.5	207	-8.0	2422	-8.0
30	2445	13.5	207	-8.0	2468	-8.0
31	2499			-8.0	2529	-8.0
32	2560			-8.1	2590	-8.0
33	2621			-8.1	2652	-8.0
34	2682			-8.1	2713	-8.2
35	2743			-8.2	2774	-8.2
36	2805			-8.3	2835	-8.5
37	2866			-8.6	2896	-8.7
38	2927			-8.8	2957	-8.9
39	2988			-9.0	3019	-9.1
40	3049			-9.2	3080	-9.3

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 14

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 29 1978 TIME: 0853PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	632			-21.3	SURFACE CONDITIONS	
1	668	0.9	233	-15.0	703	-12.4
2	729	0.9	238	-11.4	755	-9.6
3	785	2.0	198	-8.9	815	-8.2
4	844	1.9	166	-5.7	873	-4.9
5	903	2.2	161	-4.7	934	-4.8
6	964	2.0	165	-4.8	994	-4.9
7	1024	1.7	180	-4.9	1054	-4.8
8	1086	0.6	186	-4.8	1117	-4.9
9	1147	1.5	5	-4.4	1178	-4.2
10	1207	1.7	33	-4.1	1236	-4.0
11	1269	1.8	60	-3.8	1302	-3.8
12	1335	2.1	72	-3.8	1368	-3.9
13	1397	3.3	80	-4.1	1427	-4.3
14	1456	4.0	91	-4.4	1486	-4.6
15	1516	4.1	91	-4.7	1545	-4.9
16	1581	6.3	99	-5.0	1617	-5.3
17	1656	7.1	103	-5.4	1694	-5.8
18	1727	6.8	107	-6.0	1759	-6.3
19	1788	5.9	115	-6.4	1816	-6.6
20	1844	5.7	118	-6.7	1872	-6.5
21	1902	5.2	127	-6.8	1933	-6.9
22	1969	5.1	127	-7.0	2004	-7.2
23	2037	4.4	135	-7.5	2071	-7.5
24	2104	4.4	136	-8.0	2137	-8.3
25	2170	4.2	140	-8.5	2203	-8.3
26	2236	3.7	145	-8.9	2269	-9.1
27	2302	3.5	147	-9.2	2335	-9.2
28	2369	2.8	140	-9.2	2402	-9.4
29	2435	3.3	145	-9.6	2468	-9.8
30	2501	3.2	144	-10.0	2534	-10.1
31	2566			-10.4	2597	-10.7
32	2629			-10.8	2661	-11.0
33	2693			-11.1	2724	-11.3
34	2756			-11.4	2788	-11.7
35	2819			-11.9	2851	-12.1
36	2883			-12.3	2914	-12.5
37	2946			-12.7	2978	-12.9
38	3009			-13.1	3041	-13.4
39	3073			-13.7	3105	-14.0
40	3136			-14.2	3168	-14.6

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 15

STATION: DEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 29 1978 TIME: 1022PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	635			-22.3	SURFACE CONDITIONS	
1	671	0.7	151	-16.4	706	-11.7
2	742	1.5	130	-10.3	778	-9.5
3	814	1.5	192	-8.0	849	-7.1
4	893	1.9	193	-7.0	937	-6.4
5	979	3.7	157	-5.1	1020	-4.9
6	1058	2.2	161	-4.9	1097	-4.7
7	1132	2.3	159	-4.8	1167	-5.0
8	1206	3.0	129	-5.0	1245	-4.9
9	1285	4.2	110	-4.8	1324	-4.8
10	1366	4.9	117	-4.8	1409	-4.8
11	1440	5.3	114	-4.8	1472	-4.9
12	1508	6.5	113	-5.0	1544	-5.2
13	1586	7.1	120	-5.5	1629	-5.8
14	1672	7.2	122	-5.9	1715	-6.1
15	1756	6.9	120	-6.4	1797	-6.8
16	1835	5.3	125	-6.9	1872	-7.3
17	1910	4.6	134	-7.5	1947	-7.7
18	1985	3.9	157	-7.9	2023	-8.0
19	2060	4.7	144	-8.1	2098	-8.4
20	2135	5.3	133	-8.6	2173	-9.0
21	2211	5.0	132	-9.2	2248	-9.6
22	2286	3.8	134	-9.8	2323	-10.0
23	2361	3.3	139	-10.2	2399	-10.5
24	2436	2.6	138	-10.5	2474	-10.5
25	2511	2.5	188	-10.4	2549	-10.6
26	2587	2.8	136	-10.9	2624	-11.2
27	2662	3.0	136	-11.5	2699	-12.1
28	2737	3.0	135	-12.4	2775	-12.8
29	2812	3.0	136	-13.0	2850	-13.5
30	2888	3.0	135	-13.7	2925	-14.0
31	2963			-14.2	3001	-14.7
32	3040			-14.9	3078	-15.0
33	3116			-15.2	3154	-15.5
34	3192			-15.7	3230	-16.1
35	3269			-16.2	3307	-16.4
36	3345			-16.7	3383	-16.9
37	3421			-17.3	3459	-17.7
38	3493			-17.9	3535	-18.3
39	3574			-18.6	3612	-18.9
40	3550			-19.1	3688	-19.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 16

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: NOVEMBER 29 1978 TIME: 1135PST

BLINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-20.5	SURFACE CONDITIONS	
1	666	0.4	64	-17.6	697	-14.5
2	726	0.3	207	-11.5	755	-10.4
3	784	0.7	221	-9.7	814	-8.3
4	842	1.2	223	-8.2	870	-7.7
5	905	1.2	112	-6.8	939	-6.4
6	959	3.8	149	-5.7	999	-5.3
7	1030	3.7	155	-5.2	1060	-5.1
8	1093	3.0	148	-4.4	1126	-4.3
9	1156	2.8	141	-4.6	1186	-4.7
10	1218	3.8	140	-4.8	1250	-4.9
11	1281	4.5	127	-4.7	1312	-4.6
12	1346	6.1	123	-4.4	1380	-4.6
13	1419	7.3	121	-4.7	1459	-4.9
14	1492	7.7	118	-5.0	1525	-5.3
15	1558	8.6	114	-5.5	1592	-5.7
16	1625	8.6	114	-5.9	1658	-6.1
17	1691	8.6	114	-6.3	1725	-6.4
18	1758	8.0	117	-6.5	1791	-6.7
19	1824	6.5	123	-6.8	1858	-7.1
20	1891	4.9	136	-7.4	1924	-7.7
21	1957	5.3	142	-7.8	1991	-7.9
22	2024	5.5	148	-8.0	2057	-8.1
23	2090	3.5	161	-8.3	2124	-8.6
24	2157	4.3	156	-8.6	2190	-8.7
25	2223	5.2	143	-8.8	2256	-8.9
26	2290	5.2	143	-8.9	2323	-9.0
27	2356	4.7	141	-9.1	2389	-9.3
28	2423	3.1	153	-9.6	2456	-9.3
29	2489	3.1	153	-9.9	2522	-10.2
30	2556	3.1	153	-10.4	2589	-10.0
31	2621			-11.1	2654	-11.4
32	2687			-11.7	2719	-12.0
33	2752			-12.2	2784	-12.7
34	2817			-12.9	2849	-13.1
35	2882			-13.1	2914	-13.4
36	2947			-13.6	2979	-13.7
37	3012			-13.8	3045	-13.9
38	3077			-14.2	3110	-14.4
39	3142			-14.7	3175	-15.0
40	3207			-15.1	3240	-15.2

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 17

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 29 1978 TIME: 1335 PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	638			-15.3	SURFACE CONDITIONS	
1	674	1.5	257	-15.2	709	-13.4
2	745	1.1	151	-12.1	781	-10.4
3	808	1.4	131	-9.1	835	-8.2
4	869	0.4	125	-7.8	902	-5.9
5	937	3.1	136	-5.7	971	-5.9
6	1006	4.4	155	-5.6	1041	-5.2
7	1076	4.7	154	-5.0	1111	-5.0
8	1144	2.7	146	-5.0	1177	-5.0
9	1213	3.0	143	-5.0	1248	-5.1
10	1283	3.8	149	-5.2	1319	-5.1
11	1354	3.7	162	-5.2	1389	-5.5
12	1422	3.2	149	-5.6	1455	-5.5
13	1483	4.2	126	-5.7	1522	-5.5
14	1556	5.3	117	-5.7	1590	-5.9
15	1627	6.6	121	-6.0	1665	-6.2
16	1703	6.2	123	-6.4	1741	-6.6
17	1773	6.1	124	-6.8	1815	-7.0
18	1843	4.0	117	-7.2	1881	-7.5
19	1916	3.3	134	-7.6	1950	-7.8
20	1985	4.1	141	-7.9	2019	-8.0
21	2054	4.2	143	-8.1	2088	-8.2
22	2122	4.4	147	-8.3	2157	-8.5
23	2191	5.3	152	-8.9	2226	-9.1
24	2260	5.2	155	-9.3	2295	-9.5
25	2329	5.4	161	-9.7	2363	-9.9
26	2398	6.3	164	-10.1	2432	-10.6
27	2467	5.2	169	-10.9	2501	-11.2
28	2536	6.7	169	-11.5	2570	-11.8
29	2604	9.7	168	-11.9	2639	-12.2
30	2673	10.2	168	-12.4	2708	-12.6
31	2742			-12.9	2777	-13.1
32	2811			-13.4	2846	-13.5
33	2880			-13.7	2915	-13.9
34	2949			-14.0	2984	-14.2

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 13

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 29 1978 TIME: 1533PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-15.5	SURFACE CONDITIONS	
1	671	1.1	120	-14.3	705	-12.2
2	739	2.2	170	-11.1	773	-9.2
3	807	4.1	175	-8.7	842	-8.7
4	878	4.9	159	-8.2	914	-6.9
5	949	3.7	160	-6.1	934	-5.5
6	1019	2.8	124	-4.9	1054	-5.0
7	1085	4.1	133	-4.9	1117	-4.7
8	1151	4.8	138	-4.5	1186	-4.4
9	1220	5.6	135	-4.3	1255	-4.4
10	1290	5.4	132	-4.6	1324	-4.8
11	1359	6.1	131	-4.8	1394	-4.8
12	1427	5.1	134	-4.9	1460	-5.0
13	1494	5.8	139	-5.0	1527	-4.9
14	1559	7.0	139	-4.8	1592	-5.0
15	1625	7.0	135	-5.2	1657	-5.5
16	1690	5.6	128	-5.7	1723	-5.9
17	1758	6.8	131	-6.0	1792	-6.1
18	1827	4.6	137	-6.1	1861	-6.0
19	1896	6.1	141	-6.1	1930	-6.3
20	1966	6.2	141	-6.5	2003	-6.9
21	2038	6.8	142	-7.1	2074	-7.5
22	2110	9.7	146	-7.7	2146	-8.0
23	2182	7.0	152	-8.2	2217	-8.5
24	2254	5.9	165	-8.7	2290	-8.9
25	2323	9.5	162	-9.0	2366	-9.3
26	2404	9.3	163	-9.6	2442	-9.8
27	2480	11.7	166	-9.9	2518	-9.9
28	2556	12.0	167	-10.0	2593	-10.0
29	2631	9.8	180	-10.0	2659	-9.5
30	2707	9.8	180	-9.7	2745	-10.0
31	2780			-10.1	2815	-10.4
32	2850			-10.7	2886	-10.7
33	2921			-11.1	2956	-11.4
34	2991			-11.6	3026	-12.0
35	3061			-12.3	3096	-12.1
36	3131			-12.9	3167	-13.1
37	3202			-13.4	3237	-13.7
38	3272			-13.9	3307	-14.1
39	3342			-14.4	3377	-14.7
40	3413			-15.0	3448	-15.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 19

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 6

DATE: NOVEMBER 29 1978 TIME: 1650 PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 250 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	533			-19.3	SURFACE CONDITIONS	
1	665	1.4	9	-17.0	698	-15.9
2	732	1.1	257	-13.9	765	-11.9
3	797	2.1	205	-11.0	830	-9.5
4	853	0.4	69	-9.0	897	-8.7
5	930	2.3	133	-6.8	964	-6.4
6	997	3.7	133	-6.4	1029	-6.6
7	1063	4.7	132	-6.6	1097	-6.7
8	1127	5.9	132	-6.3	1158	-5.7
9	1189	5.9	138	-5.4	1221	-5.3
10	1253	5.7	143	-5.5	1284	-5.3
11	1316	5.6	145	-5.7	1347	-5.5
12	1379	5.6	145	-5.1	1410	-5.0
13	1442	5.9	145	-5.0	1474	-5.1
14	1505	3.5	147	-5.1	1536	-5.5
15	1568	7.4	143	-5.6	1600	-5.8
16	1631	7.8	137	-5.9	1662	-6.1
17	1692	5.8	132	-6.3	1723	-6.6
18	1753	5.8	132	-6.8	1783	-6.9
19	1814	6.4	137	-7.0	1844	-7.3
20	1874	7.0	143	-7.4	1905	-7.5
21	1935	5.7	158	-7.6	1965	-7.8
22	1996	9.3	147	-7.9	2026	-7.8
23	2056	9.0	143	-7.9	2087	-8.1
24	2117	5.8	141	-8.3	2147	-8.5
25	2178	7.4	139	-8.7	2208	-9.1
26	2239	3.0	144	-9.2	2269	-9.5
27	2299	10.0	154	-9.6	2330	-10.0
28	2360	10.7	155	-10.1	2390	-10.4
29	2421	9.1	170	-10.6	2451	-10.9
30	2481	9.1	175	-10.9	2512	-11.3
31	2543			-11.3	2574	-11.5
32	2606			-11.6	2637	-11.5
33	2668			-11.6	2700	-11.9
34	2731			-12.0	2762	-12.3
35	2794			-12.5	2825	-12.9
36	2856			-13.1	2888	-13.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 20

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: NOVEMBER 30 1978 TIME: 0355 PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	632			-7.1	SURFACE CONDITIONS	
1	668	2.5	291	-7.2	705	-7.4
2	741	5.9	283	-7.7	777	-7.9
3	811	6.7	292	-8.1	845	-8.6
4	880	6.7	294	-8.9	914	-9.2
5	952	6.6	292	-9.6	939	-10.0
6	1026	6.5	293	-10.2	1064	-10.8
7	1101	6.1	292	-11.0	1139	-11.4
8	1176	5.3	301	-11.7	1213	-12.0
9	1251	5.7	307	-12.1	1288	-12.4
10	1325	6.4	315	-12.7	1363	-13.0
11	1400	6.0	322	-12.8	1437	-11.8
12	1471	6.0	333	-10.6	1505	-10.1
13	1539	9.3	321	-10.0	1573	-10.2
14	1607	8.6	320	-10.4	1641	-10.7
15	1674	6.9	313	-10.9	1708	-11.2
16	1742	5.7	297	-11.3	1776	-11.7
17	1810	6.3	293	-11.9	1844	-12.3
18	1878	6.3	292	-12.5	1912	-12.4
19	1946	5.7	282	-13.0	1980	-13.0
20	2014	6.5	295	-12.0	2048	-11.3
21	2081	8.0	310	-10.3	2115	-10.0
22	2149	7.6	314	-10.4	2183	-10.7
23	2217	7.6	314	-11.0	2251	-11.2
24	2285	7.6	314	-11.4	2319	-11.6
25	2353	5.8	300	-11.6	2387	-11.5
26	2421	7.2	312	-11.3	2455	-11.0
27	2489	4.5	270	-11.0	2522	-11.2
28	2556	4.5	270	-11.3	2590	-11.6
29	2624	4.5	270	-11.8	2658	-12.1
30	2692	4.5	270	-12.2	2726	-12.4
31	2761			-12.6	2796	-12.9
32	2831			-13.1	2866	-13.5
33	2900			-13.7	2935	-14.1
34	2970			-14.2	3005	-14.6
35	3040			-14.9	3075	-15.2
36	3110			-15.5	3145	-15.9
37	3180			-16.0	3215	-16.4
38	3250			-16.6	3284	-17.0
39	3319			-17.3	3354	-17.7
40	3389			-18.0	3424	-18.3

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 4 - 21

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: NOVEMBER 30 1978 TIME: 1130 PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-11.3	SURFACE CONDITIONS	
1	671	2.5	323	-8.5	705	-8.3
2	738	4.7	320	-8.5	772	-8.5
3	805	3.8	315	-8.6	838	-8.8
4	871	3.1	310	-8.9	905	-9.2
5	938	3.1	307	-9.4	972	-9.7
6	1006	2.7	291	-9.9	1039	-10.1
7	1072	2.8	283	-10.3	1105	-10.6
8	1135	2.8	262	-10.8	1166	-11.1
9	1194	2.8	261	-11.2	1222	-11.4
10	1246	1.0	259	-11.2	1270	-10.2
11	1300	0.9	271	-10.2	1330	-10.5
12	1350	0.8	327	-10.6	1389	-10.7
13	1421	1.1	37	-10.9	1453	-11.2
14	1484	1.0	34	-11.2	1515	-11.3
15	1552	1.6	265	-11.4	1590	-11.6
16	1621	1.8	254	-11.9	1651	-12.2
17	1683	2.7	267	-12.4	1716	-12.9
18	1748	3.1	285	-13.0	1781	-12.9
19	1805	2.4	293	-13.0	1829	-13.2
20	1867	4.7	292	-13.1	1905	-11.5
21	1948	5.0	291	-10.7	1990	-10.3
22	2006	3.3	306	-10.2	2022	-10.5
23	2045	4.2	293	-10.7	2069	-10.5
24	2093	3.5	259	-10.6	2117	-10.8
25	2146	4.1	244	-10.9	2175	-11.3
26	2211	4.9	240	-11.6	2247	-11.9
27	2280	4.9	233	-12.2	2312	-12.6
28	2344	5.0	229	-12.9	2375	-13.2
29	2400	4.3	224	-13.6	2426	-13.9
30	2471	5.5	233	-14.2	2516	-14.6
31	2547			-14.9	2578	-14.9
32	2610			-14.6	2641	-14.5
33	2672			-14.5	2704	-14.7
34	2735			-14.8	2766	-14.9
35	2798			-14.9	2829	-15.0
36	2860			-15.1	2892	-15.2
37	2923			-15.2	2954	-15.1
38	2985			-15.0	3017	-15.1
39	3048			-15.2	3079	-15.3
40	3111			-15.4	3142	-15.5

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 0

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: NOVEMBER 30 1978 TIME: 1533PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT (m)	SPEED (m/s)	DIRECTION	TEMP	HEIGHT (m)	TEMP
0	636			-13.0	SURFACE CONDITIONS	
1	671	0.1	244	-11.9	705	-10.4
2	740	0.5	184	-9.2	774	-8.9
3	811	1.4	161	-8.9	848	-8.9
4	883	3.3	150	-8.9	917	-9.0
5	950	4.2	145	-9.1	982	-9.4
6	1015	4.8	150	-9.5	1047	-9.6
7	1081	5.9	156	-9.7	1115	-9.8
8	1147	8.0	169	-9.9	1180	-9.8
9	1214	7.4	169	-9.8	1247	-9.9
10	1282	6.4	167	-9.9	1318	-9.8
11	1355	7.2	164	-9.8	1393	-9.8
12	1427	6.5	163	-9.9	1461	-10.1
13	1503	7.6	168	-10.4	1544	-10.6
14	1577	7.1	174	-10.5	1609	-10.5
15	1643	6.4	165	-10.6	1676	-9.5
16	1710	5.6	135	-8.9	1744	-8.6
17	1777	6.2	132	-8.8	1809	-9.0
18	1839	5.2	130	-9.2	1868	-9.2
19	1899	3.6	139	-9.3	1929	-9.6
20	1962	5.6	155	-9.8	1996	-10.1
21	2029	4.7	180	-8.7	2062	-8.5
22	2095	2.0	240	-8.6	2128	-8.8
23	2161	2.9	246	-8.9	2194	-9.2
24	2227	4.2	251	-9.4	2260	-9.6
25	2293	6.5	254	-9.7	2326	-9.6
26	2359	8.2	255	-9.5	2392	-9.4
27	2425	7.7	260	-9.6	2458	-9.9
28	2491	7.3	257	-10.0	2524	-9.9
29	2557	7.9	273	-9.8	2590	-9.8
30	2623	7.9	273	-9.9	2656	-10.1
31	2690			-10.3	2724	-10.7
32	2757			-10.9	2791	-11.1
33	2825			-11.4	2858	-11.5
34	2892			-11.7	2926	-12.0
35	2959			-12.4	2993	-12.7
36	3026			-12.9	3060	-13.1
37	3094			-13.4	3127	-13.7
38	3161			-13.9	3195	-14.2
39	3228			-14.4	3262	-14.5
40	3296			-14.6	3329	-14.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 1

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 5

DATE: NOVEMBER 30 1978 TIME: 1650PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	632			-17.2	SURFACE CONDITIONS	
1	665	1.0	68	-14.0	698	-12.2
2	716	0.2	333	-11.0	734	-10.3
3	784	0.7	64	-10.3	833	-10.3
4	874	3.7	126	-10.4	915	-10.5
5	955	7.0	136	-10.3	996	-10.5
6	1031	7.4	147	-10.6	1066	-10.5
7	1097	8.8	160	-10.2	1128	-10.0
8	1160	8.8	163	-9.8	1191	-9.6
9	1226	8.5	163	-9.8	1261	-10.1
10	1299	8.5	166	-10.2	1338	-10.0
11	1375	7.2	163	-10.0	1412	-10.1
12	1445	6.0	157	-10.2	1477	-10.3
13	1509	7.0	163	-10.4	1542	-10.6
14	1573	7.4	164	-10.6	1605	-10.7
15	1634	8.3	169	-10.7	1663	-9.7
16	1693	7.1	179	-8.8	1723	-8.0
17	1750	2.7	229	-7.5	1776	-7.1
18	1803	2.6	227	-7.2	1831	-7.5
19	1863	3.7	233	-7.8	1895	-8.0
20	1928	5.0	241	-8.1	1960	-8.2
21	1993	6.9	246	-8.0	2025	-8.1
22	2058	7.4	249	-8.2	2090	-8.2
23	2123	8.7	254	-8.0	2155	-7.8
24	2188	7.5	254	-7.8	2220	-7.9
25	2253	6.5	256	-8.0	2285	-8.2
26	2318	7.1	255	-8.4	2350	-8.6
27	2383	6.7	254	-8.9	2415	-9.1
28	2448	6.2	265	-9.3	2480	-9.5
29	2513	5.8	265	-9.8	2545	-10.0
30	2578	5.9	265	-10.4	2610	-10.3
31	2643			-10.5	2676	-10.5
32	2709			-10.7	2742	-11.0
33	2775			-11.2	2808	-11.2
34	2841			-11.4	2874	-11.5
35	2907			-11.5	2940	-11.6
36	2973			-11.9	3006	-12.3
37	3039			-12.5	3072	-12.9
38	3105			-13.2	3138	-13.5
39	3171			-13.9	3204	-14.1
40	3237			-14.2	3270	-14.4

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 2

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 6

DATE: NOVEMBER 30 1978 TIME: 2045PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-20.5	SURFACE CONDITIONS	
1	663	1.7	293	-15.6	692	-12.6
2	722	0.4	143	-11.7	752	-11.6
3	781	1.8	154	-11.5	809	-11.1
4	838	2.5	124	-10.9	866	-11.0
5	906	4.6	133	-10.9	946	-10.8
6	984	6.5	154	-10.8	1022	-10.9
7	1046	6.9	145	-11.0	1070	-11.2
8	1102	7.4	145	-11.3	1134	-11.6
9	1165	7.2	151	-11.7	1195	-11.8
10	1223	9.7	163	-11.0	1250	-9.7
11	1279	11.4	169	-8.6	1307	-8.4
12	1336	10.9	167	-8.3	1365	-8.2
13	1395	7.1	166	-7.7	1424	-7.0
14	1453	7.2	162	-6.6	1483	-5.6
15	1513	5.8	165	-5.4	1542	-4.9
16	1574	6.4	162	-4.8	1606	-4.6
17	1636	5.4	151	-3.6	1666	-3.4
18	1692	1.9	152	-3.4	1717	-3.4
19	1743	1.4	240	-3.5	1769	-3.6
20	1795	2.5	247	-3.7	1820	-3.3
21	1849	6.4	205	-4.0	1877	-4.1
22	1905	4.4	257	-3.9	1933	-3.9
23	1961	3.9	256	-3.9	1990	-4.0
24	2018	2.6	254	-4.1	2046	-4.2
25	2074	2.3	262	-4.4	2102	-4.8
26	2130	2.0	261	-4.9	2159	-5.1
27	2187	2.1	270	-5.4	2215	-5.8
28	2243	2.3	287	-6.0	2271	-6.3
29	2300	2.6	283	-6.6	2328	-6.8
30	2357			-6.9	2386	-7.1
31	2415			-7.1	2445	-7.3
32	2474			-7.5	2503	-7.9
33	2532			-7.9	2562	-7.9
34	2591			-8.0	2620	-8.1
35	2649			-8.2	2679	-8.4
36	2708			-8.6	2737	-8.9
37	2766			-9.0	2795	-9.2
38	2825			-9.5	2854	-9.7
39	2883			-10.0	2912	-10.2
40	2942			-10.5	2971	-10.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 3

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 7

DATE: NOVEMBER 30 1978 TIME: 2220 PST

ELINE: 259.1 (m) GPA: 0.3 FR3: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-21.3	SURFACE CONDITIONS	
1	660	1.2	217	-15.0	637	-12.5
2	714	2.7	129	-12.2	740	-11.8
3	758	2.7	151	-11.4	796	-11.2
4	827	3.0	116	-11.3	857	-11.2
5	883	5.7	124	-11.1	918	-10.8
6	948	6.9	133	-10.9	979	-10.8
7	1007	3.0	139	-10.8	1035	-10.9
8	1063	7.9	142	-11.0	1091	-11.1
9	1119	8.5	144	-11.0	1147	-11.1
10	1175	9.2	158	-10.3	1204	-10.2
11	1233	11.5	159	-10.2	1261	-10.3
12	1290	13.4	160	-9.8	1319	-8.7
13	1347	11.6	159	-8.1	1375	-7.9
14	1403	8.3	164	-7.8	1431	-7.0
15	1459	9.3	165	-5.9	1487	-5.7
16	1515	3.6	159	-5.4	1543	-5.2
17	1571	5.7	156	-4.5	1599	-4.0
18	1627	6.2	144	-4.0	1655	-3.5
19	1683	6.4	137	-3.6	1711	-2.7
20	1739	4.0	132	-2.0	1767	-1.9
21	1795	3.7	137	-2.0	1823	-2.1
22	1851	3.7	138	-2.2	1879	-2.4
23	1907	1.6	117	-2.6	1935	-2.9
24	1963	1.5	117	-3.0	1991	-3.4
25	2019	1.8	123	-3.5	2047	-3.7
26	2075	4.2	149	-3.7	2103	-3.8
27	2131	1.4	160	-3.9	2159	-4.1
28	2187	1.2	161	-4.3	2215	-4.6
29	2243	1.9	251	-4.7	2271	-4.8
30	2299	1.9	251	-4.9	2327	-5.1
31	2355			-5.3	2384	-5.6
32	2412			-5.8	2440	-6.1
33	2468			-6.4	2497	-6.7
34	2525			-6.9	2553	-7.0
35	2581			-7.3	2610	-7.4
36	2638			-7.0	2666	-7.2
37	2694			-7.5	2723	-7.6
38	2751			-7.8	2779	-7.9
39	2807			-8.0	2836	-8.1
40	2864			-8.3	2892	-8.6

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 4

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: DECEMBER 1 1978 TIME: 0900PST

ELINE: 259.1 (m) GPA: 0.2 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	634			-12.8	SURFACE CONDITIONS	
1	668	2.0	291	-12.3	703	-11.8
2	736	1.2	269	-11.3	769	-11.1
3	803	1.5	348	-11.1	835	-11.2
4	853	0.9	58	-10.7	890	-10.4
5	924	1.6	126	-10.2	958	-10.1
6	995	3.9	145	-10.0	1032	-9.8
7	1069	6.5	138	-9.5	1107	-10.0
8	1144	6.0	152	-10.2	1131	-10.5
9	1210	8.4	168	-10.2	1240	-9.0
10	1269	6.3	181	-7.1	1299	-4.9
11	1328	3.3	213	-3.9	1358	-3.5
12	1388	3.7	253	-3.0	1418	-2.8
13	1453	4.4	253	-2.9	1489	-3.0
14	1527	5.2	262	-3.2	1565	-3.5
15	1603	5.8	260	-3.7	1641	-3.9
16	1677	7.6	255	-4.0	1714	-4.1
17	1739	6.3	247	-4.0	1765	-4.0
18	1795	7.4	238	-4.1	1826	-4.3
19	1877	8.9	225	-4.7	1928	-5.0
20	1975	8.5	224	-5.1	2022	-5.4
21	2069	8.5	224	-5.7	2115	-6.1
22	2162	8.5	224	-6.2	2209	-6.5
23	2256	8.6	224	-6.8	2303	-7.2
24	2350	9.9	222	-7.4	2396	-7.9
25	2443	12.2	219	-8.1	2490	-8.6
26	2537	12.5	217	-8.9	2584	-9.2
27	2631	12.9	215	-9.4	2677	-9.8
28	2724	14.3	210	-9.9	2771	-10.0
29	2818	15.7	206	-10.1	2865	-10.0
30	2912	16.8	203	-10.0	2958	-10.0
31	2997			-10.1	3036	-10.2
32	3075			-10.4	3113	-10.5
33	3152			-10.5	3191	-10.6
34	3230			-10.7	3268	-10.8
35	3307			-11.0	3346	-11.1
36	3385			-11.3	3423	-11.5
37	3462			-11.7	3501	-11.8
38	3540			-11.9	3578	-12.0
39	3617			-12.1	3656	-12.4
40	3695			-12.6	3733	-12.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 5

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: DECEMBER 1 1978 TIME: 1130PST

ELINE: 259.1 (m) GPA: 0.2 BRG: 250 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-12.8	SURFACE CONDITIONS	
1	672	0.4	233	-13.5	706	-13.0
2	744	1.0	239	-13.1	781	-12.3
3	813	1.1	256	-12.8	855	-12.3
4	893	0.9	111	-12.2	930	-12.1
5	969	3.6	118	-11.2	1009	-11.1
6	1047	4.1	120	-11.1	1035	-11.0
7	1124	3.9	115	-10.5	1162	-10.2
8	1200	3.1	124	-9.3	1233	-9.9
9	1272	5.1	159	-9.6	1306	-8.5
10	1340	3.4	167	-6.2	1375	-3.3
11	1410	0.5	180	-3.5	1446	-3.7
12	1482	1.4	259	-3.3	1519	-4.1
13	1559	2.1	259	-4.2	1599	-4.7
14	1639	4.1	259	-4.9	1679	-5.0
15	1723	6.0	246	-4.8	1767	-4.9
16	1812	6.7	237	-5.0	1857	-5.1
17	1899	10.2	240	-5.2	1940	-5.8
18	1982	11.6	236	-5.0	2024	-6.4
19	2066	12.6	232	-6.6	2107	-7.0
20	2149	12.7	232	-7.1	2191	-7.6
21	2232	13.2	231	-7.8	2274	-3.2
22	2316	13.3	231	-3.5	2357	-8.8
23	2399	13.7	231	-9.0	2441	-9.2
24	2482	15.6	228	-9.5	2524	-10.0
25	2566	15.6	228	-10.2	2607	-10.7
26	2649	15.6	228	-10.9	2691	-11.2
27	2732	18.6	233	-11.4	2774	-12.0
28	2816	16.3	229	-12.2	2857	-12.6
29	2899	17.1	231	-12.8	2941	-13.3
30	2983	17.1	231	-13.6	3024	-14.0
31	3064			-14.4	3104	-14.7
32	3144			-14.5	3183	-14.7
33	3223			-15.0	3263	-15.3
34	3303			-15.7	3343	-16.0
35	3382			-16.2	3422	-16.7
36	3462			-17.0	3502	-17.2
37	3541			-17.4	3581	-17.7
38	3621			-18.0	3661	-18.2
39	3701			-18.3	3740	-18.6
40	3780			-18.6	3820	-19.1

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 6

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: DECEMBER 1 1978 TIME: 1335PST

RLINE: 259.1 (m) GPA: 0.2 PRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-11.8	SURFACE CONDITIONS	
1	672	0.9	215	-11.9	707	-12.0
2	742	0.5	89	-12.0	777	-11.8
3	809	1.0	203	-11.5	842	-11.4
4	875	3.0	155	-10.9	908	-10.4
5	939	2.9	117	-9.8	971	-9.4
6	1011	4.0	118	-9.1	1052	-8.9
7	1093	4.6	139	-7.9	1134	-7.9
8	1171	4.1	156	-7.9	1207	-8.1
9	1243	8.3	166	-6.9	1278	-4.5
10	1316	5.4	178	-3.9	1354	-3.5
11	1379	1.5	161	-3.1	1404	-2.9
12	1442	1.9	113	-2.9	1481	-3.1
13	1514	0.9	118	-3.3	1547	-3.5
14	1580	1.4	235	-3.6	1612	-3.9
15	1645	1.5	232	-4.0	1678	-4.3
16	1711	2.2	227	-4.5	1745	-4.8
17	1788	2.9	213	-5.0	1831	-5.3
18	1872	2.4	227	-5.5	1912	-5.9
19	1974	3.4	222	-5.9	2035	-6.5
20	2111	6.3	222	-7.0	2187	-7.8
21	2255	7.3	218	-8.1	2323	-9.0
22	2400	9.9	234	-9.5	2477	-10.1
23	2550	14.5	229	-10.6	2622	-10.9
24	2675	14.3	230	-11.0	2728	-11.5
25	2781	15.0	228	-11.9	2834	-12.3
26	2887	15.5	226	-12.8	2941	-13.1
27	2994	15.5	226	-13.5	3047	-14.0
28	3100	15.5	226	-14.1	3153	-14.8
29	3197			-14.9	3242	-15.1
30	3287			-15.4	3332	-15.6
31	3377			-15.7	3422	-15.9
32	3467			-16.1	3512	-16.0
33	3557			-16.2	3602	-16.5
34	3647			-16.8	3691	-17.1
35	3736			-17.5	3781	-17.9
36	3825			-18.1	3871	-18.4
37	3915			-18.5	3961	-18.6
38	4006			-18.7	4051	-18.9
39	4096			-19.0	4141	-19.3
40	4186			-19.6	4230	-19.9

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 7

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: DECEMBER 1 1973 TIME: 1525 PST

ELINE: 259.1 (m) GPA: 0.2 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-11.2	SURFACE CONDITIONS	
1	674	1.9	27	-11.4	710	-11.4
2	747	0.3	140	-11.0	733	-11.1
3	820	0.7	104	-10.9	856	-10.5
4	890	2.0	84	-9.5	925	-9.3
5	962	4.0	121	-8.9	1000	-8.4
6	1034	5.1	132	-7.6	1069	-7.0
7	1119	6.1	145	-6.4	1169	-6.2
8	1203	8.5	166	-5.9	1237	-3.9
9	1289	6.4	168	-3.6	1341	-3.0
10	1380	2.9	152	-2.8	1420	-3.0
11	1456	2.2	129	-3.2	1492	-3.4
12	1532	3.7	104	-3.5	1572	-3.6
13	1599	2.0	76	-3.6	1627	-3.3
14	1671	2.5	35	-3.9	1715	-4.2
15	1761	0.5	114	-4.6	1806	-5.0
16	1851	0.5	206	-5.2	1897	-5.8
17	1939	0.9	223	-6.0	1981	-6.5
18	2027	2.5	219	-6.9	2074	-7.4
19	2114	3.9	232	-7.6	2155	-7.9
20	2195	5.4	232	-8.1	2235	-8.5
21	2276	5.6	223	-8.9	2316	-9.4
22	2356	5.9	230	-9.6	2397	-10.0
23	2437	6.8	235	-10.1	2477	-10.5
24	2518	7.8	244	-10.9	2558	-11.4
25	2599	8.5	245	-11.9	2639	-12.3
26	2679	8.7	245	-12.8	2720	-13.1
27	2760	9.5	244	-13.3	2800	-13.7
28	2841	10.3	245	-14.1	2881	-14.5
29	2921	11.8	246	-14.9	2962	-15.0
30	3002	14.0	243	-15.0	3042	-15.1
31	3083			-15.2	3123	-15.4
32	3163			-15.5	3203	-15.7
33	3243			-16.0	3283	-16.2
34	3323			-16.4	3363	-16.6
35	3403			-17.0	3443	-17.3
36	3483			-17.5	3524	-17.9
37	3564			-18.0	3604	-18.2
38	3644			-18.4	3684	-18.8
39	3724			-19.1	3764	-19.4
40	3804			-19.8	3844	-20.1

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 8

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: december 2 1978 TIME: 0900PST

ELINE: 259.1 (m) GPA: 0.3 ERS: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	633			-14.4	SURFACE CONDITIONS	
1	668	2.0	341	-13.6	703	-12.4
2	736	2.1	353	-11.2	769	-11.5
3	799	1.3	303	-10.8	828	-9.0
4	858	1.9	154	-7.2	889	-6.5
5	927	3.7	111	-6.3	966	-5.8
6	1011	7.3	105	-5.5	1056	-5.5
7	1100	9.8	105	-4.9	1145	-4.7
8	1173	7.5	117	M		
9	1230	6.6	121	M		
10	1290	5.0	119	M		
11	1351	4.6	115	M		
12	1412	4.3	120	M		
13	1472	4.9	128	M		
14	1533	4.9	128	M	1563	-5.3
15	1593	5.3	129	-5.3	1623	-5.4
16	1654	7.5	135	-5.4	1684	-5.3
17	1714	7.9	137	-5.2	1744	-5.3
18	1774	10.1	147	-5.4	1804	-5.5
19	1834	9.9	149	-5.6	1864	-5.4
20	1895	9.4	153	-5.1	1925	-4.9
21	1955	9.2	152	-3.9	1985	-3.8
22	2015	11.5	151	-3.9	2045	-4.1
23	2075	12.1	152	-4.1	2105	-4.2
24	2136	8.7	163	-3.7	2166	-3.7
25	2196	9.4	168	-3.9	2226	-4.2
26	2256	9.8	172	-4.4	2286	-4.6
27	2316	10.3	173	-4.7	2346	-4.9
28	2376	11.1	178	-5.0	2407	-5.3
29	2437	12.3	181	-5.7	2467	-5.9
30	2497	12.3	181	-6.0	2527	-6.3
31	2559			-6.5	2590	-6.7
32	2622			-6.8	2653	-7.0
33	2685			-7.1	2717	-7.2
34	2748			-7.3	2780	-7.5
35	2811			-7.7	2843	-8.2
36	2874			-3.5	2906	-9.0
37	2938			-9.2	2969	-9.6
38	3001			-9.9	3032	-10.4
39	3064			-10.6	3095	-10.8
40	3127			-10.9	3159	-11.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 9

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: DECEMBER 2 1978 TIME: 1120PST

ELINE: 259.1 (m) GPA: 0.3 PRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-17.4	SURFACE CONDITIONS	
1	672	1.3	232	-15.1	707	-14.7
2	743	3.1	277	-13.8	778	-13.5
3	814	2.0	303	-12.5	849	-12.3
4	894	1.4	262	-11.9	939	-11.7
5	972	2.5	188	-10.7	1005	-9.2
6	1039	3.3	81	-8.2	1072	-7.0
7	1111	6.1	87	-6.8	1150	-6.6
8	1192	8.5	96	-6.7	1234	-6.7
9	1275	10.4	105	-6.6	1317	-6.8
10	1359	10.5	108	-7.0	1400	-7.2
11	1441	9.9	113	-7.4	1483	-6.9
12	1523	9.8	113	-6.5	1564	-6.2
13	1604	9.8	113	-6.2	1645	-6.3
14	1686	9.9	114	-6.3	1727	-6.6
15	1769	11.7	127	-6.7	1811	-6.9
16	1852	11.0	131	-6.8	1894	-6.9
17	1936	11.9	134	-7.0	1977	-7.2
18	2019	13.9	134	-7.2	2060	-7.0
19	2102	14.2	133	-6.7	2144	-6.6
20	2185	14.2	133	-6.3	2227	-6.0
21	2269	12.8	130	-5.7	2310	-5.8
22	2352	9.3	125	-6.1	2394	-6.6
23	2435	9.3	125	-6.9	2477	-7.3
24	2518	9.5	124	-7.7	2560	-8.0
25	2602	10.7	122	-8.2	2643	-8.4
26	2685	10.7	122	-8.7	2727	-8.9
27	2768	10.3	124	-9.2	2810	-9.8
28	2852	9.5	129	-9.7	2893	-9.7
29	2935	8.1	143	-9.6	2976	-9.7
30	3018	8.4	139	-9.8	3050	-9.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 10

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: DECEMBER 2 1978 TIME: 1336PST

ELINE: 259.1 (m) GPA: 0.3 ERC: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-11.8	SURFACE CONDITIONS	
1	676	0.5	143	-12.1	715	-12.3
2	756	2.5	276	-12.5	796	-12.4
3	840	6.2	293	-12.4	885	-12.1
4	921	6.3	312	-11.2	956	-11.0
5	989	5.8	326	-10.6	1022	-10.3
6	1060	5.4	324	-10.2	1097	-10.1
7	1142	3.7	292	-9.9	1187	-9.6
8	1230	1.6	357	-9.1	1273	-8.6
9	1312	4.1	66	-7.8	1352	-7.5
10	1392	6.3	38	-7.2	1432	-6.9
11	1472	7.7	103	-6.4	1512	-6.4
12	1552	10.2	112	-6.6	1592	-6.3
13	1632	10.2	101	-6.9	1671	-6.9
14	1711	8.9	115	-6.5	1751	-6.1
15	1791	3.8	117	-6.0	1831	-6.0
16	1871	9.6	125	-6.0	1911	-6.1
17	1951	10.2	123	-6.2	1990	-6.5
18	2030	10.3	127	-6.8	2070	-6.9
19	2110	10.3	127	-7.0	2150	-7.4
20	2190	9.9	126	-7.7	2230	-6.0
21	2270	10.3	124	-8.3	2309	-6.5
22	2349	10.5	116	-8.2	2389	-6.3
23	2429	10.7	116	-8.4	2469	-8.5
24	2509	9.3	136	-8.6	2549	-8.3
25	2589	8.0	143	-8.7	2629	-8.9
26	2668	7.8	149	-9.1	2708	-9.6
27	2748	7.3	151	-9.9	2788	-10.1
28	2828	6.8	162	-10.1	2868	-10.0
29	2908	4.3	167	-9.7	2948	-9.3
30	2987	3.9	167	-9.2	3027	-9.6

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 11

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: DECEMBER 2 1978 TIME: 1536PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	638			-10.5	SURFACE CONDITIONS	
1	673	0.1	94	-10.7	708	-10.9
2	745	2.2	303	-11.0	782	-11.1
3	819	4.3	300	-11.1	856	-10.8
4	894	5.2	311	-10.4	931	-10.1
5	968	5.3	330	-10.0	1005	-10.1
6	1042	5.9	338	-10.4	1079	-10.5
7	1116			-10.3	1153	-10.2
8	1190			-9.2	1227	-8.2
9	1263			-7.8	1300	-7.6
10	1337			-7.5	1374	-7.4
11	1411			-7.3	1447	-7.3
12	1484			-7.2	1521	-6.8
13	1558			-6.7	1595	-6.5
14	1631			-6.5	1668	-6.4
15	1705			-6.8	1742	-7.1
16	1779			-7.2	1815	-7.4
17	1852			-7.7	1889	-8.1
18	1926			-8.3	1963	-8.6
19	1999			-8.8	2036	-9.0
20	2073			-9.2	2110	-9.4
21	2147			-9.6	2183	-9.8
22	2220			-10.0	2257	-10.3
23	2294			-10.7	2331	-10.6
24	2367			-9.9	2404	-9.8
25	2441			-9.9	2478	-10.0
26	2515			-10.0	2551	-10.0
27	2588			-9.8	2525	-9.7
28	2662			-9.7	2699	-9.7
29	2735			-9.5	2772	-9.3
30	2809			-9.4	2846	-9.7
31	2882			-9.9	2919	-10.1
32	2956			-10.4	2993	-10.8

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 12

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 1

DATE: DECEMBER 3 1978 TIME: 0855PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	632			-7.0	SURFACE CONDITIONS	
1	675	5.5	285	-7.0	713	-7.1
2	754	7.2	291	-7.4	790	-7.6
3	817	9.0	290	-7.8	845	-8.0
4	888	11.7	304	-8.1	931	-8.4
5	974	11.6	305	-8.8	1017	-9.3
6	1060	11.6	305	-9.7	1103	-10.0
7	1146	11.9	306	-10.7	1189	-11.1
8	1232	11.8	305	-11.4	1275	-11.9
9	1318	13.3	312	-12.1	1361	-12.4
10	1404	13.3	312	-12.0	1447	-11.9
11	1490	13.3	312	-11.9	1533	-11.8
12	1576	12.8	310	-11.8	1619	-11.7
13	1662	12.2	304	-11.7	1705	-11.5
14	1748	12.0	303	-11.6	1791	-11.7
15	1834	11.5	291	-11.9	1877	-12.2
16	1920	12.1	288	-12.3	1963	-12.5
17	2006	12.1	288	-12.6	2049	-12.8
18	2092	12.1	288	-13.0	2135	-13.2
19	2178	12.1	288	-13.3	2221	-13.4
20	2264	12.1	288	-13.5	2307	-13.2
21	2349			-13.0	2390	-12.3
22	2432			-12.2	2474	-12.1
23	2516			-12.1	2558	-12.2
24	2600			-12.4	2642	-12.8
25	2684			-12.9	2725	-13.0
26	2767			-13.2	2809	-13.4
27	2851			-13.6	2893	-14.0
28	2935			-14.4	2977	-14.6
29	3019			-14.9	3060	-15.2
30	3102			-15.6	3144	-16.0

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 13

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 2

DATE: DECEMBER 2 1978 TIME: 1020PST

ELINE: 259.1 (m) GPA: 0.3 ERG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-6.4	SURFACE CONDITIONS	
1	688	3.2	237	-6.5	740	-6.9
2	787	6.4	283	-7.2	834	-7.6
3	879	7.7	292	-8.0	923	-8.5
4	968	10.0	292	-8.9	1013	-9.3
5	1056	10.3	299	-9.7	1099	-9.9
6	1142	10.7	300	-10.4	1185	-11.6
7	1227	13.0	315	-11.4	1270	-11.6
8	1313	12.9	319	-11.7	1356	-11.9
9	1399	14.7	326	-11.8	1442	-11.5
10	1484	14.3	326	-11.5	1527	-11.8
11	1570	13.6	324	-11.9	1613	-11.9
12	1656	9.7	311	-12.0	1699	-12.1
13	1741	10.7	299	-12.0	1784	-12.3
14	1827	9.7	291	-12.5	1870	-13.1
15	1913	9.3	287	-13.3	1955	-13.7
16	1998	8.4	270	-13.8	2041	-13.9
17	2084	8.3	259	-14.2	2127	-14.5
18	2170	8.6	248	-14.8	2212	-14.1
19	2255	13.7	256	-13.5	2298	-13.1
20	2341	13.8	254	-13.1	2384	-13.2
21	2427	19.0	249	-13.4	2469	-13.7
22	2512	19.0	249	-13.9	2555	-14.2
23	2598	19.0	249	-14.4	2641	-14.5
24	2683	19.0	249	-14.7	2726	-14.8
25	2770			-14.8	2813	-14.9
26	2857			-14.9	2900	-15.1
27	2944			-15.3	2988	-15.6
28	3031			-15.9	3075	-16.3
29	3118			-16.6	3162	-17.0
30	3205			-17.0	3249	-17.2

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 14

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 3

DATE: DECEMBER 3 1978 TIME: 1132PST

ELINE: 259.1 (m) GPA: 0.3 BRG: 260 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	636			-7.2	SURFACE CONDITIONS	
1	684	6.0	300	-7.4	732	-7.9
2	780	3.2	293	-8.3	828	-8.7
3	879	8.7	301	-9.1	931	-9.7
4	977	9.8	309	-10.0	1023	-10.6
5	1069	12.3	319	-10.8	1115	-11.2
6	1160	12.6	321	-11.5	1206	-11.8
7	1252	12.2	326	-12.2	1298	-12.6
8	1344	14.0	328	-12.8	1390	-13.2
9	1436	15.2	330	-13.3	1482	-13.4
10	1528	20.8	330	-13.4	1574	-13.3
11	1620	21.9	332	-13.0	1666	-13.0
12	1712	19.0	329	-13.1	1758	-13.2
13	1804	13.0	321	-13.1	1849	-13.1
14	1896			-13.5	1943	-13.8
15	1989			-14.0	2036	-14.4
16	2083			-14.7	2129	-15.1
17	2176			-15.6	2223	-15.9
18	2269			-16.2	2316	-16.6
19	2363			-16.4	2409	-16.4
20	2456			-15.8	2503	15.2
21	2549			-15.3	2596	-15.5
22	2643			-15.6	2689	-15.6
23	2736			-15.9	2783	-16.1
24	2829			-16.2	2876	-16.6
25	2923			-16.7	2969	-17.0
26	3016			-17.2	3062	-17.4
27	3109			-17.7	3156	-17.3
28	3202			-18.0	3249	-18.4
29	3295			-18.6	3342	-19.0
30	3389			-19.1	3436	-19.4

MINISONDE ANALYSIS USING SINGLE OR DOUBLE THEODOLITE

DATA FILE NUMBER: 6 - 15

STATION: BEAVER CREEK Y.T. STATION HEIGHT: 632 (m) FLIGHT: 4

DATE: DECEMBER 3 1978 TIME: 1350PST

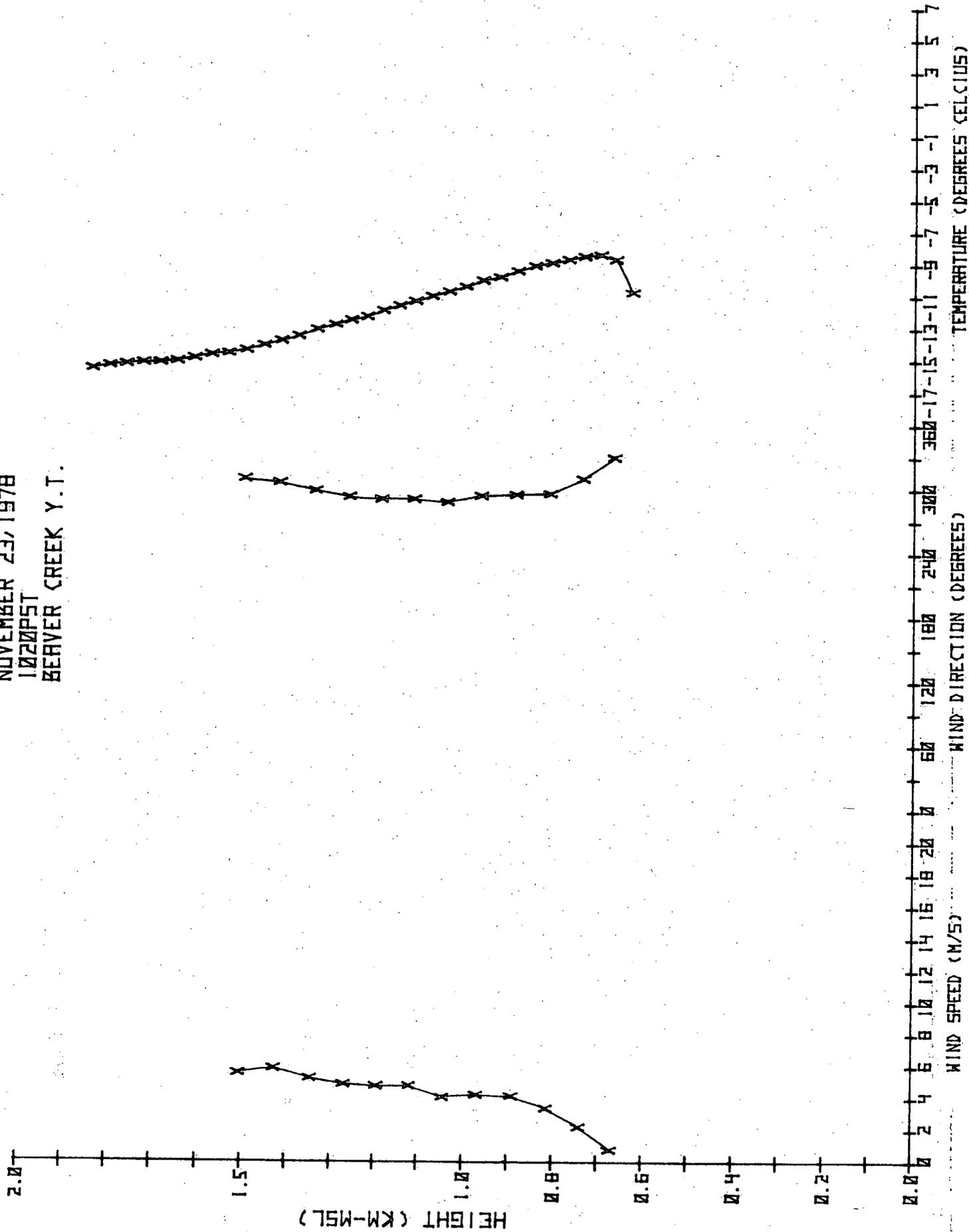
ELINE: 259.1 (m) GPA: 0.3 BRG: 250 (degrees)

LEVEL	HEIGHT(m)	SPEED(m/s)	DIRECTION	TEMP	HEIGHT(m)	TEMP
0	637			-7.3	SURFACE CONDITIONS	
1	697	3.7	312	-7.4	758	-7.9
2	789	4.5	305	-8.3	820	-8.9
3	898	9.0	304	-9.3	975	-9.3
4	1023	8.5	311	-10.1	1071	-10.6
5	1115	9.1	319	-11.0	1161	-11.4
6	1204	12.1	325	-11.7	1248	-11.9
7	1291	14.2	329	-11.9	1334	-12.2
8	1378	15.3	323	-12.4	1421	-12.5
9	1465	19.7	329	-12.8	1508	-12.8
10	1552	16.8	334	-12.7	1595	-12.7
11	1639	15.7	334	-12.9	1683	-13.1
12	1726	13.3	327	-13.1	1770	-13.0
13	1814	10.1	318	-13.2	1857	-13.7
14	1901	11.1	307	-13.9	1944	-14.2
15	1988	9.8	300	-14.5	2032	-14.2
16	2075	8.0	279	-14.4	2119	-14.7
17	2162	10.7	267	-14.7	2206	-14.6
18	2250	14.3	261	-14.4	2293	-15.8
19	2337	15.3	257	-13.9	2380	-14.1
20	2424	16.8	257	-14.3	2467	-14.5
21	2511	16.5	253	-14.6	2555	-14.8
22	2598	16.9	246	-14.9	2642	-15.2
23	2685	16.9	244	-15.5	2729	-16.0
24	2773	17.4	243	-16.2	2816	-16.7
25	2860	17.2	243	-16.8	2903	-17.2
26	2947	17.0	238	-17.5	2991	-17.9
27	3034	16.5	237	-18.3	3078	-18.7
28	3121	16.5	237	-19.0	3165	-19.6
29	3210			-19.9	3255	-20.3
30	3300			-20.8	3346	-21.3

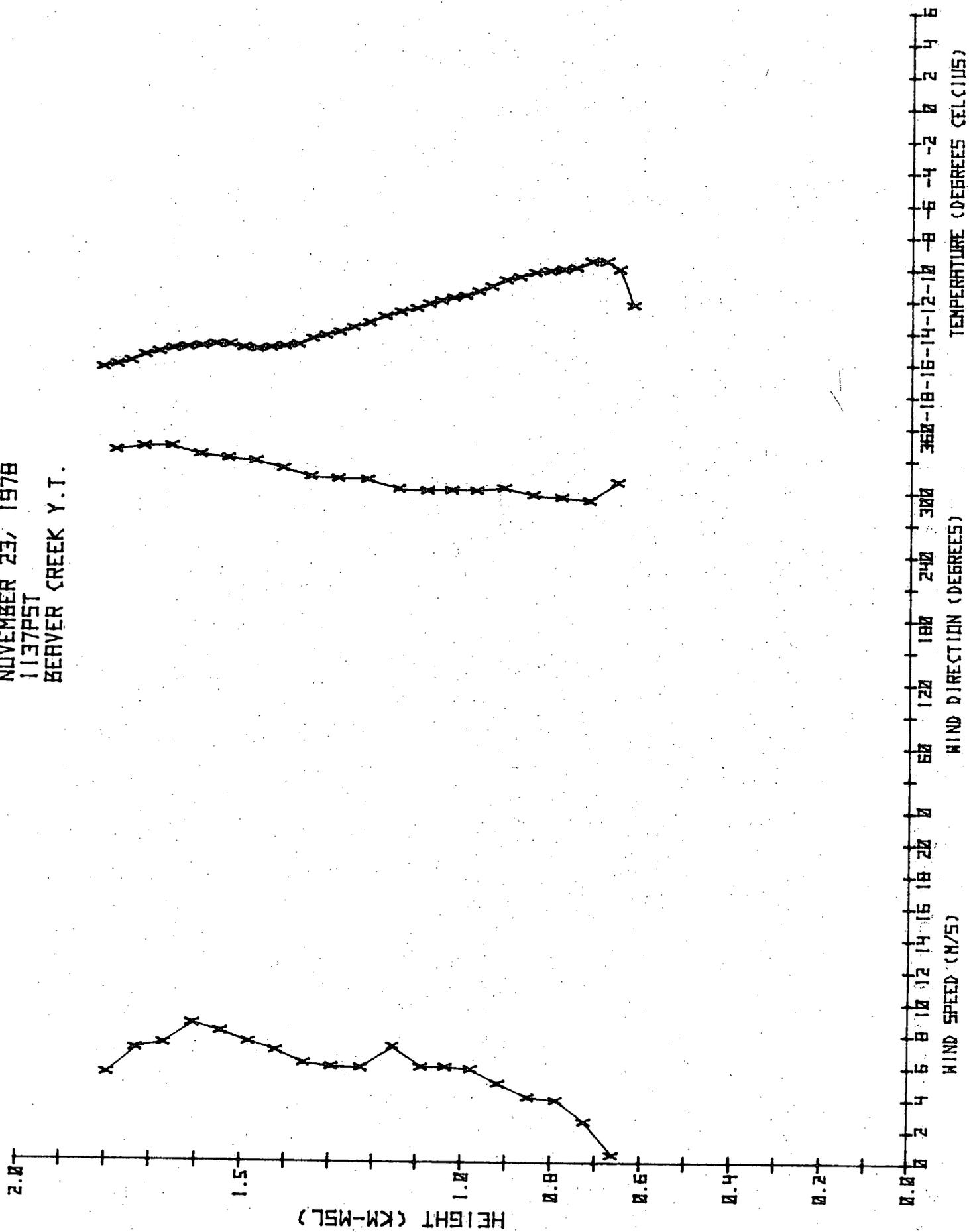
Appendix II

Profile Plots for Minisonde Flights at Beaver Creek, 1978

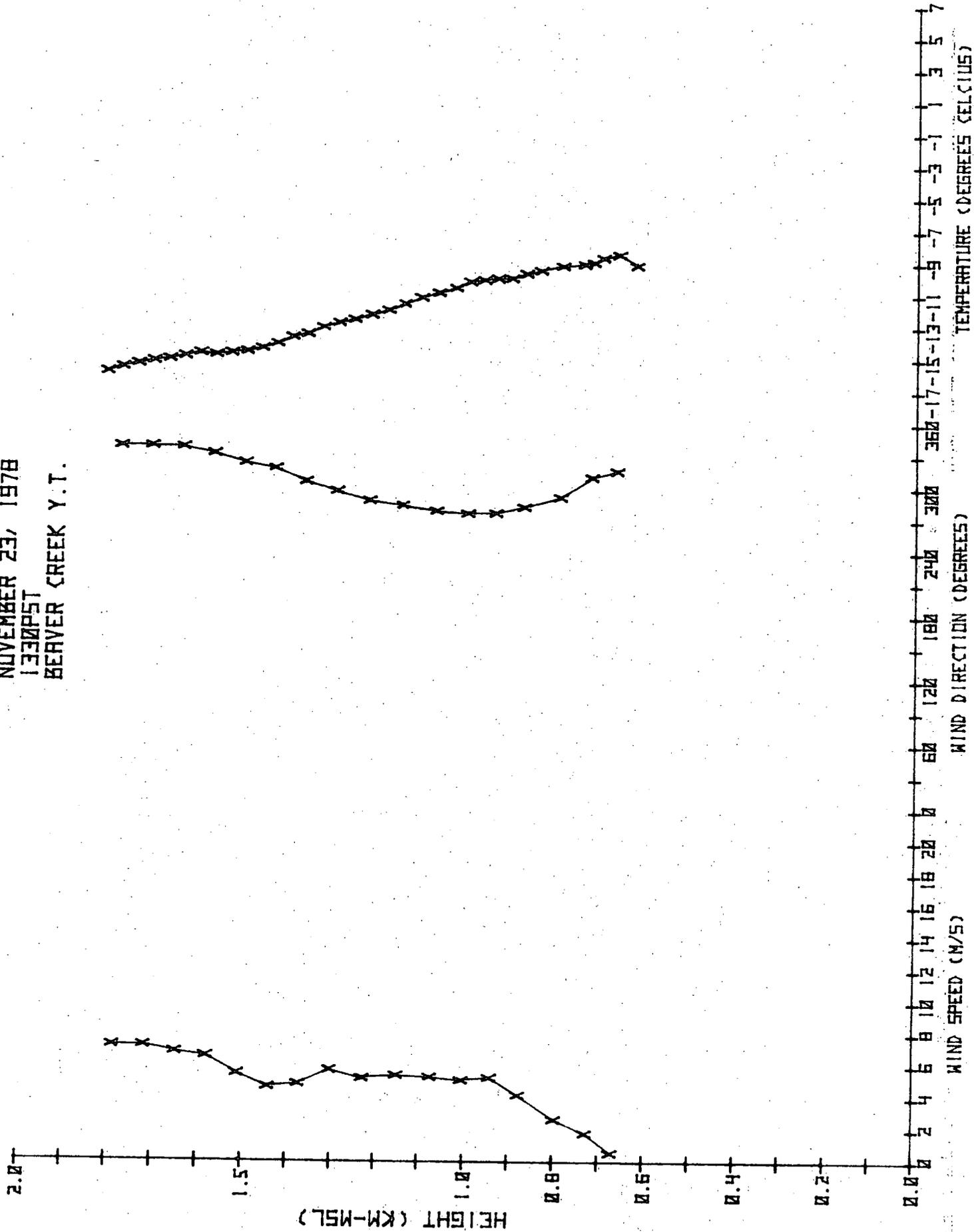
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 BEAVER CREEK Y.T.



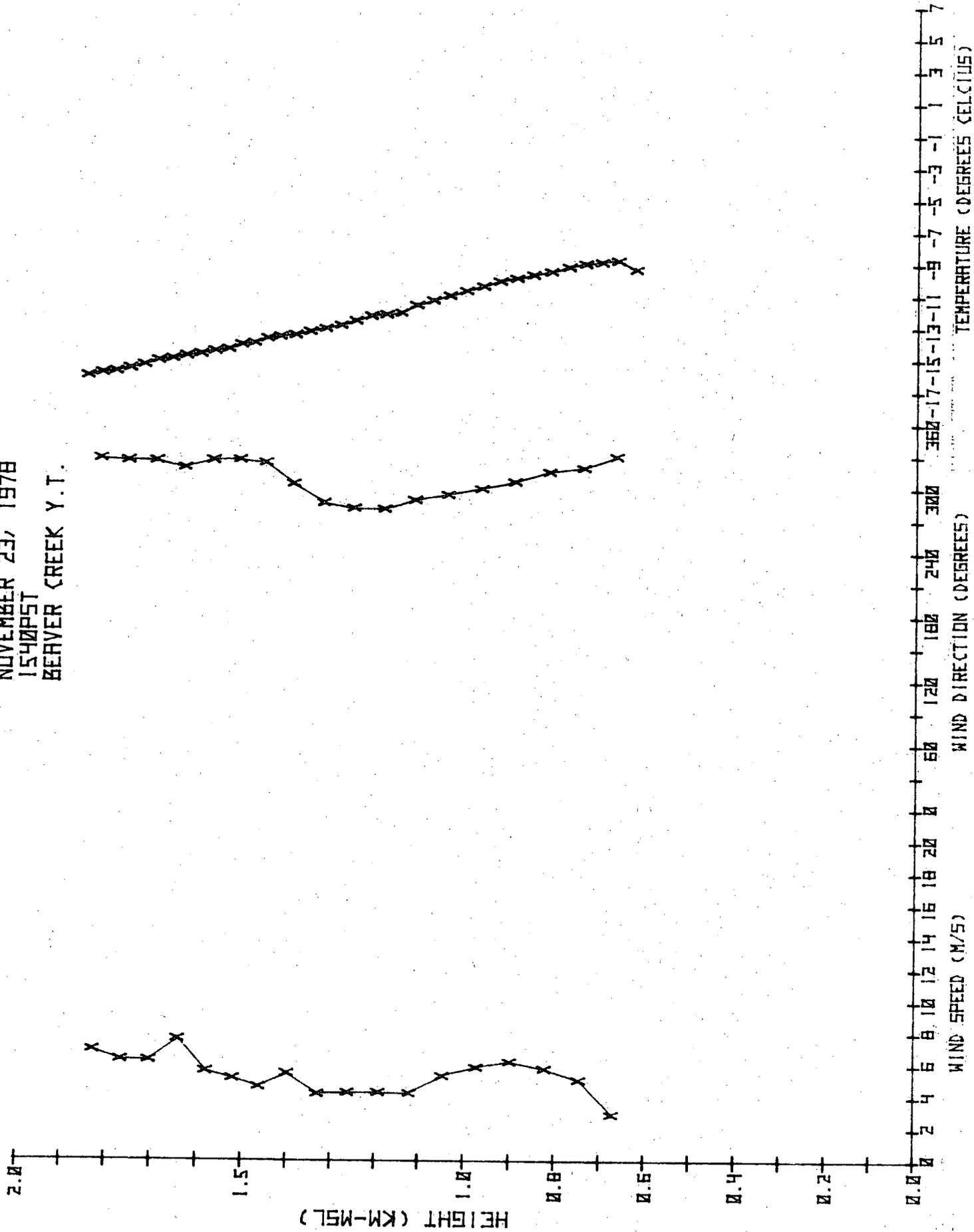
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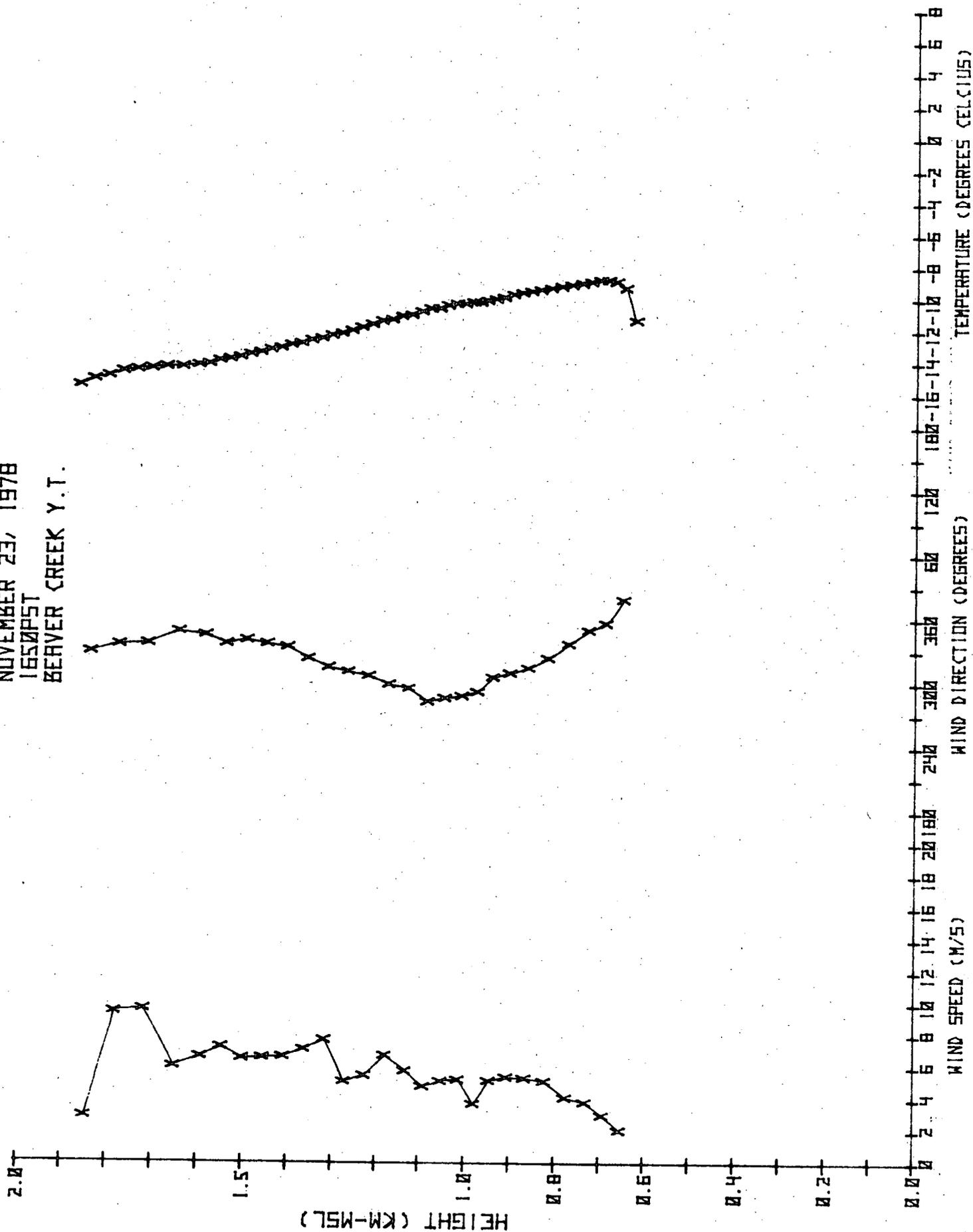
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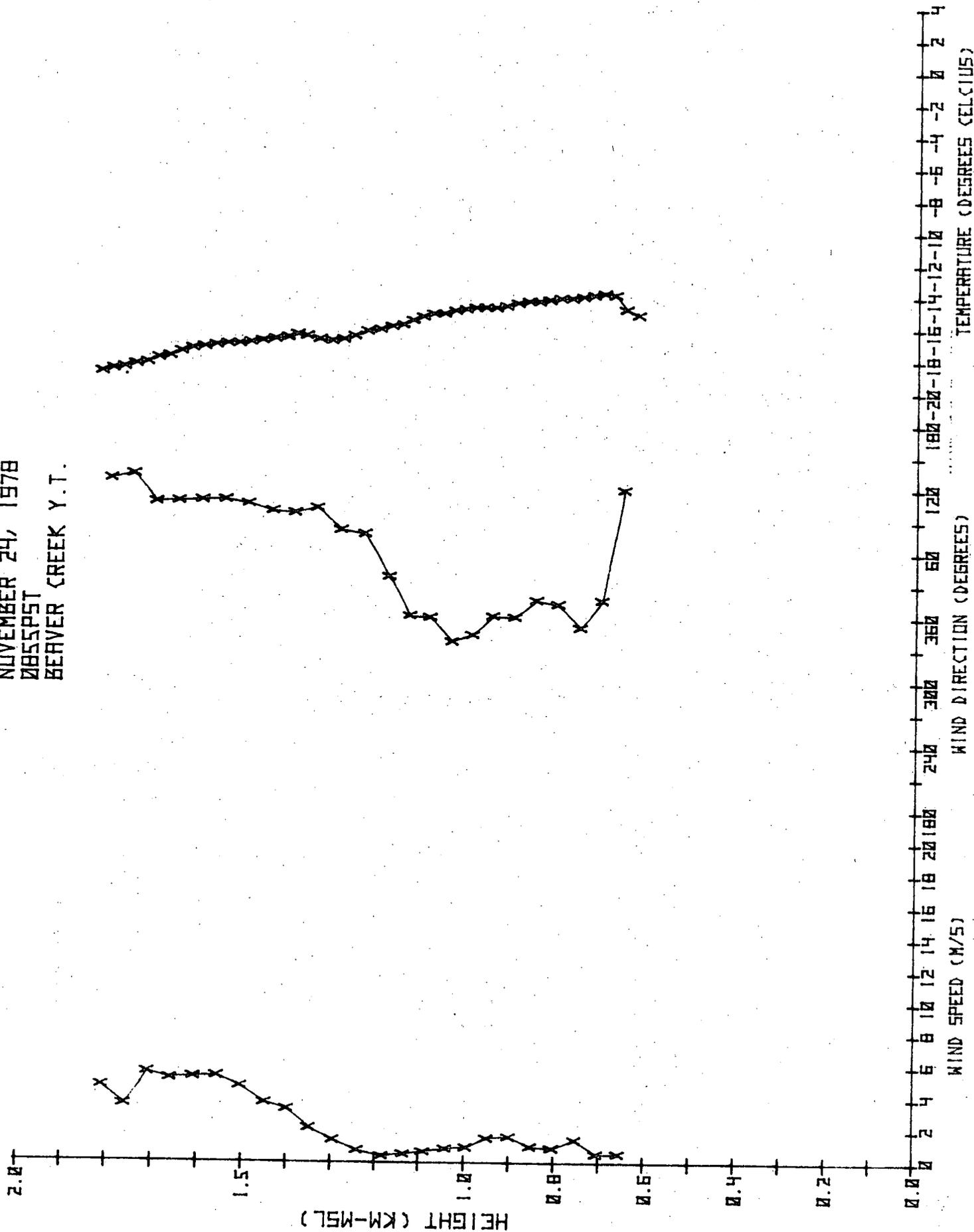
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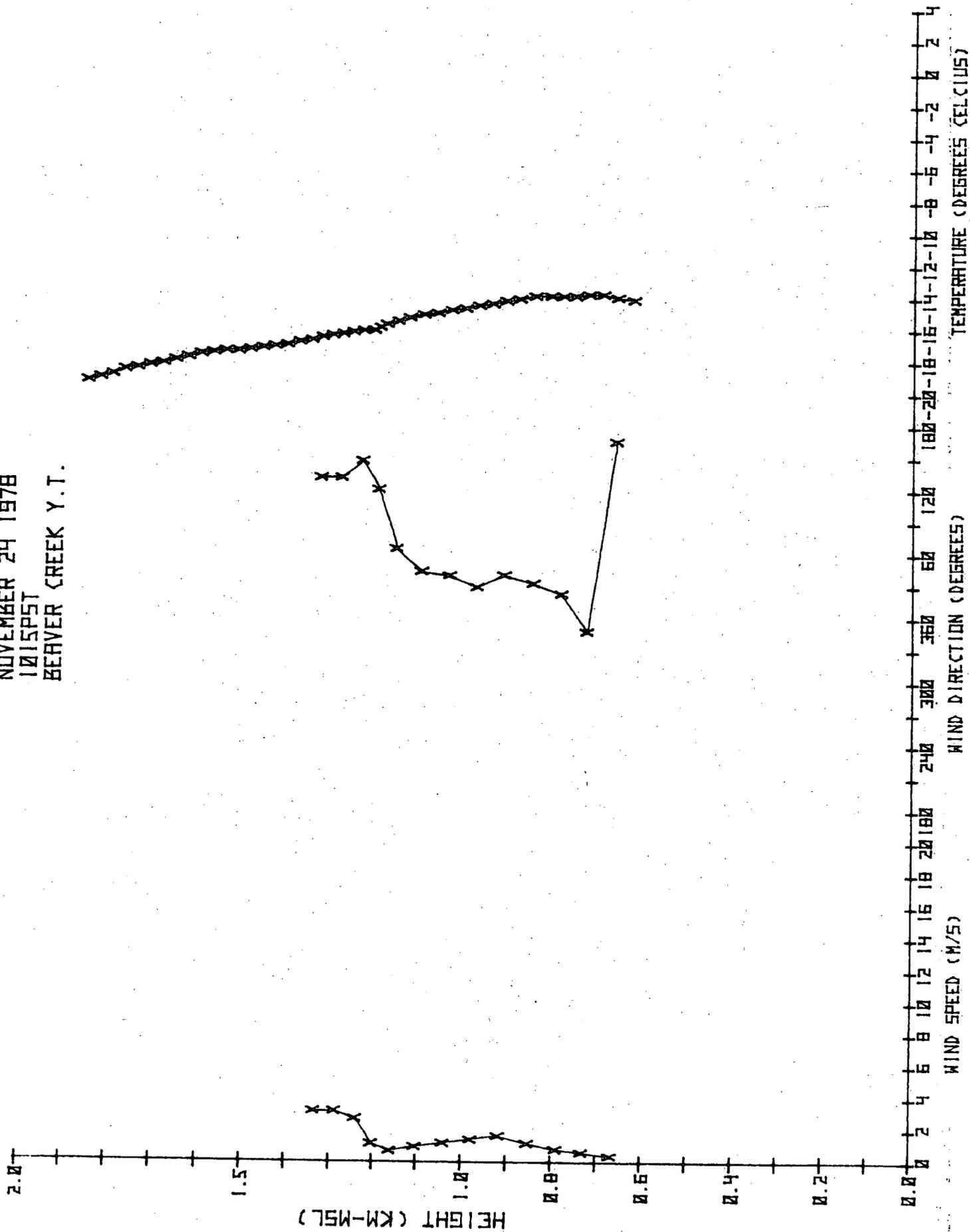
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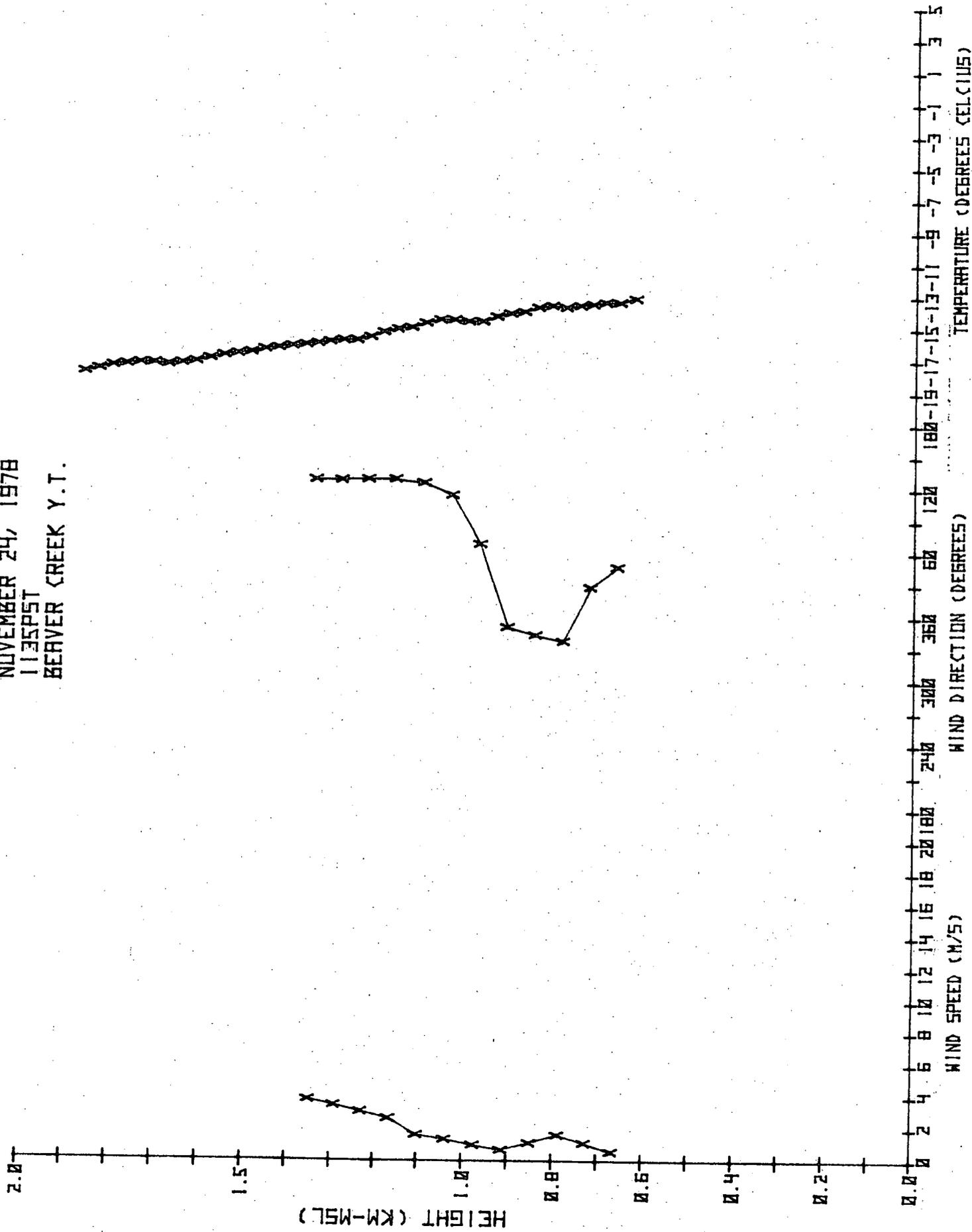
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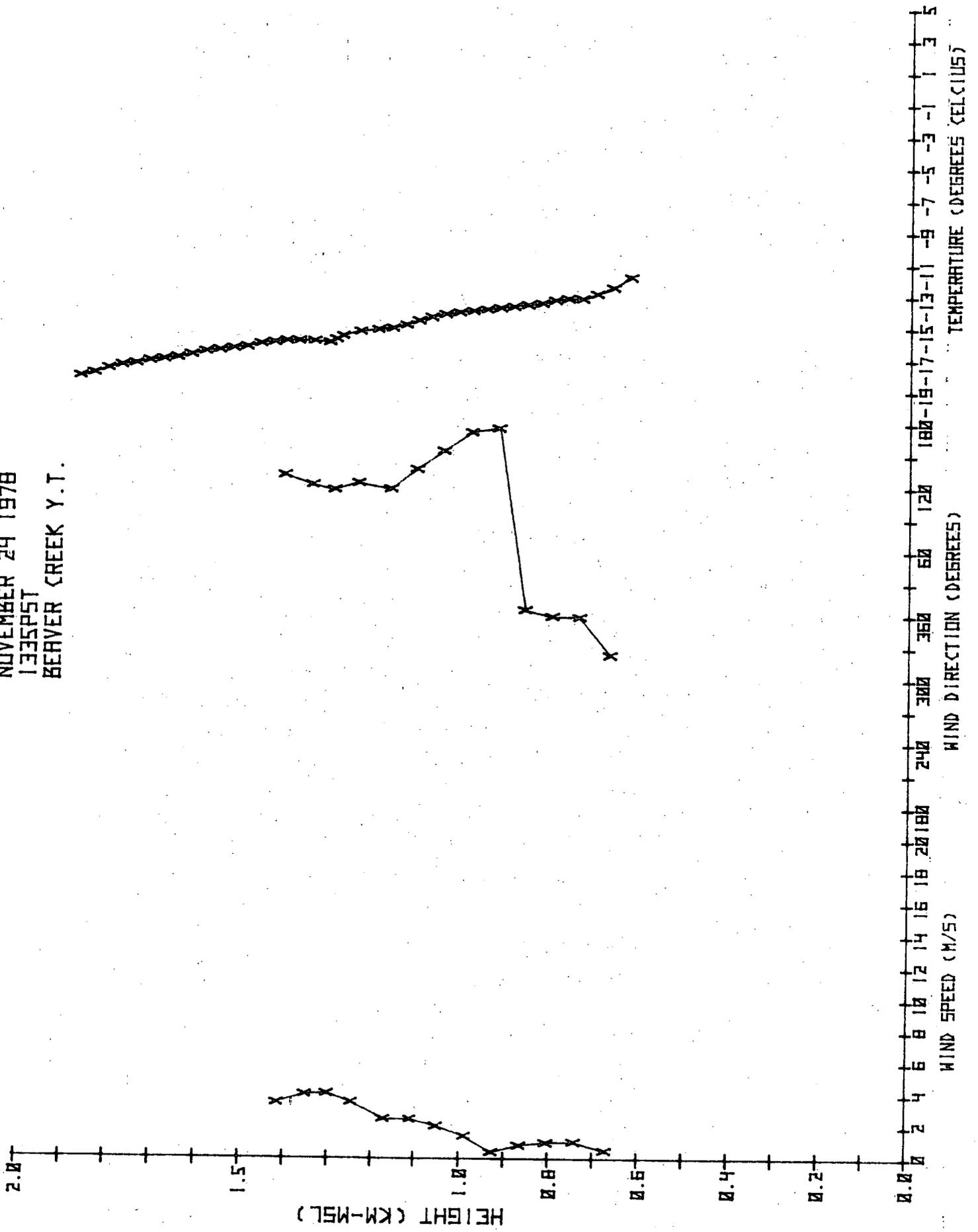
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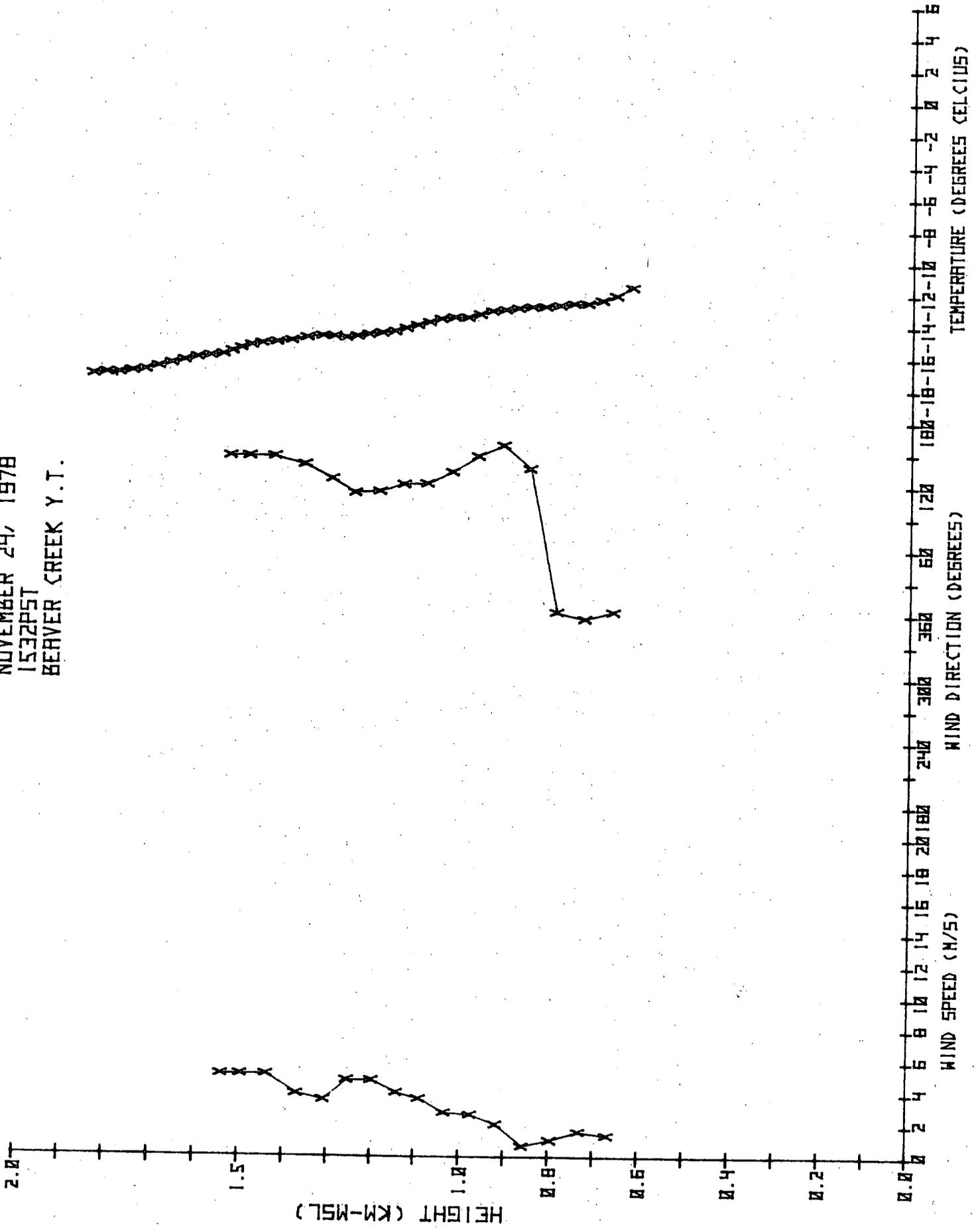
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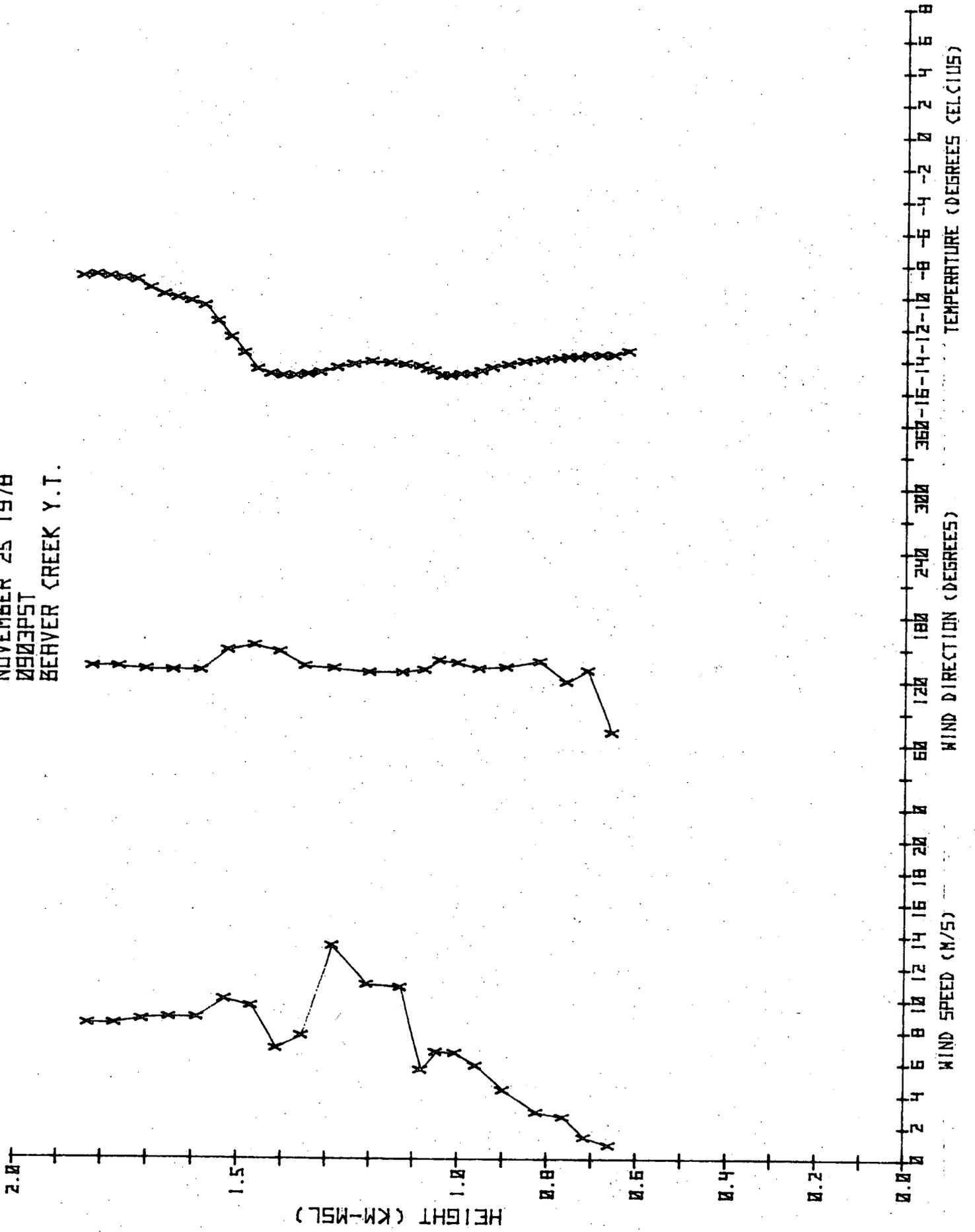
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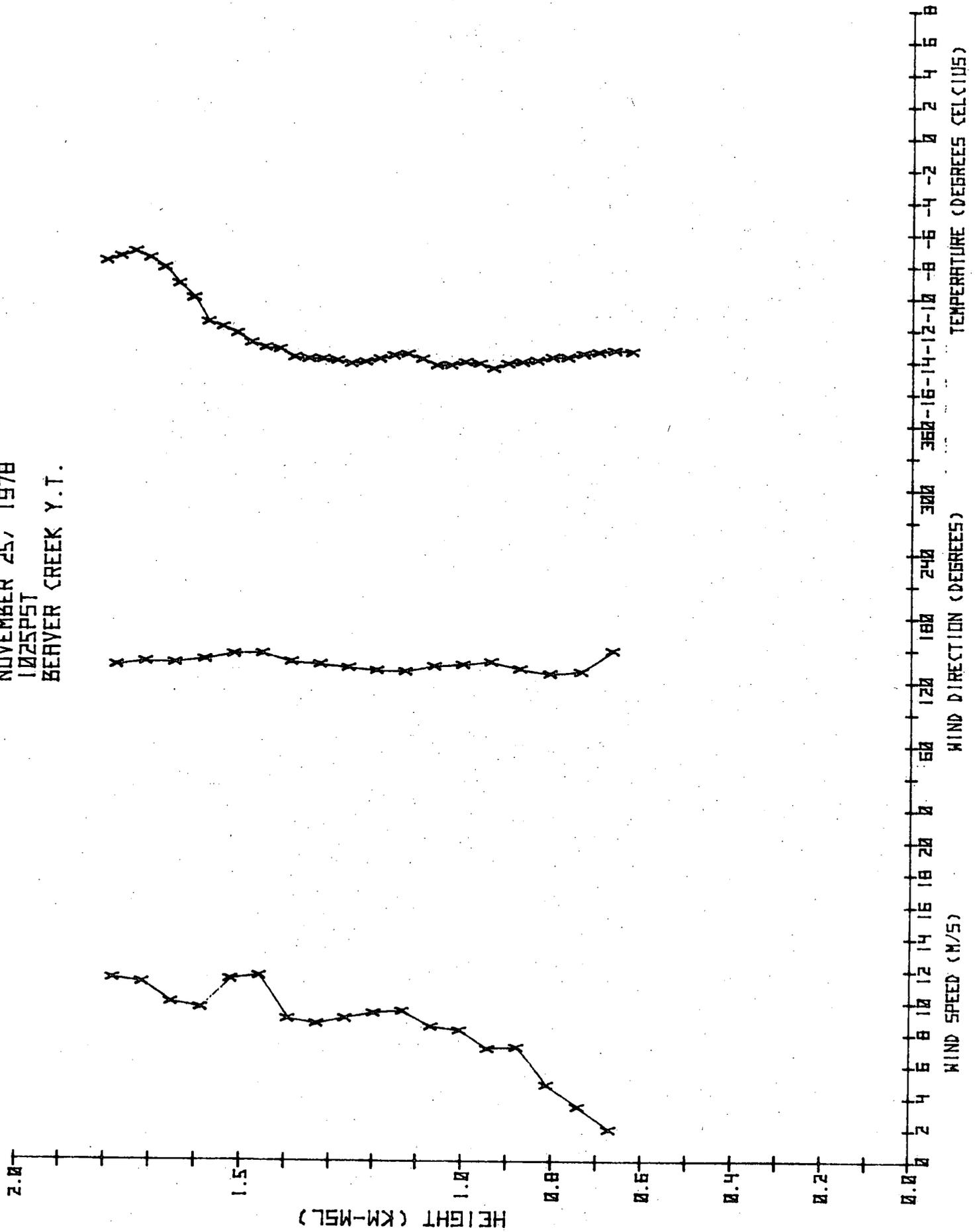
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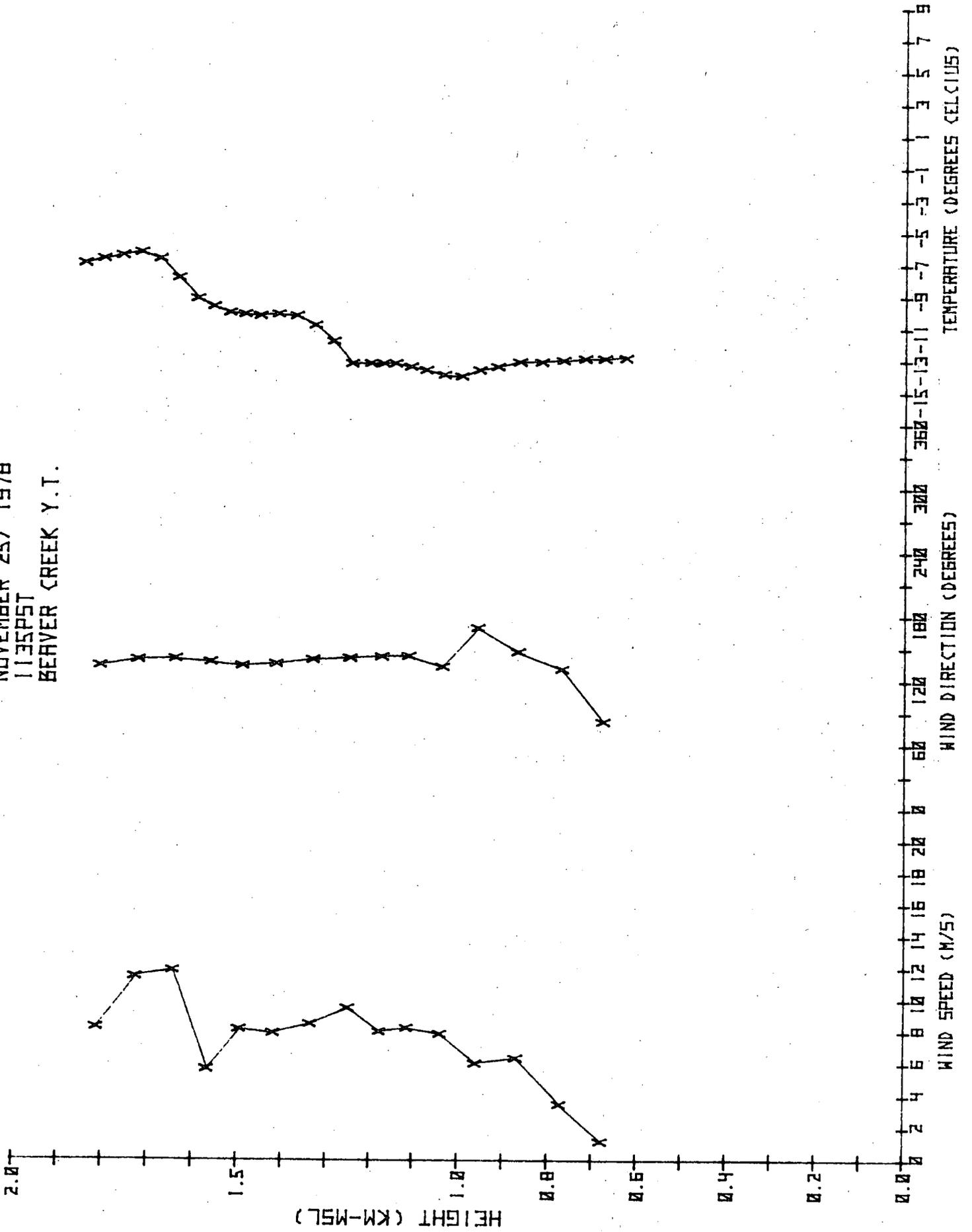
NOVEMBER 25 1978
 0903PST
 BEVER CREEK Y.T.



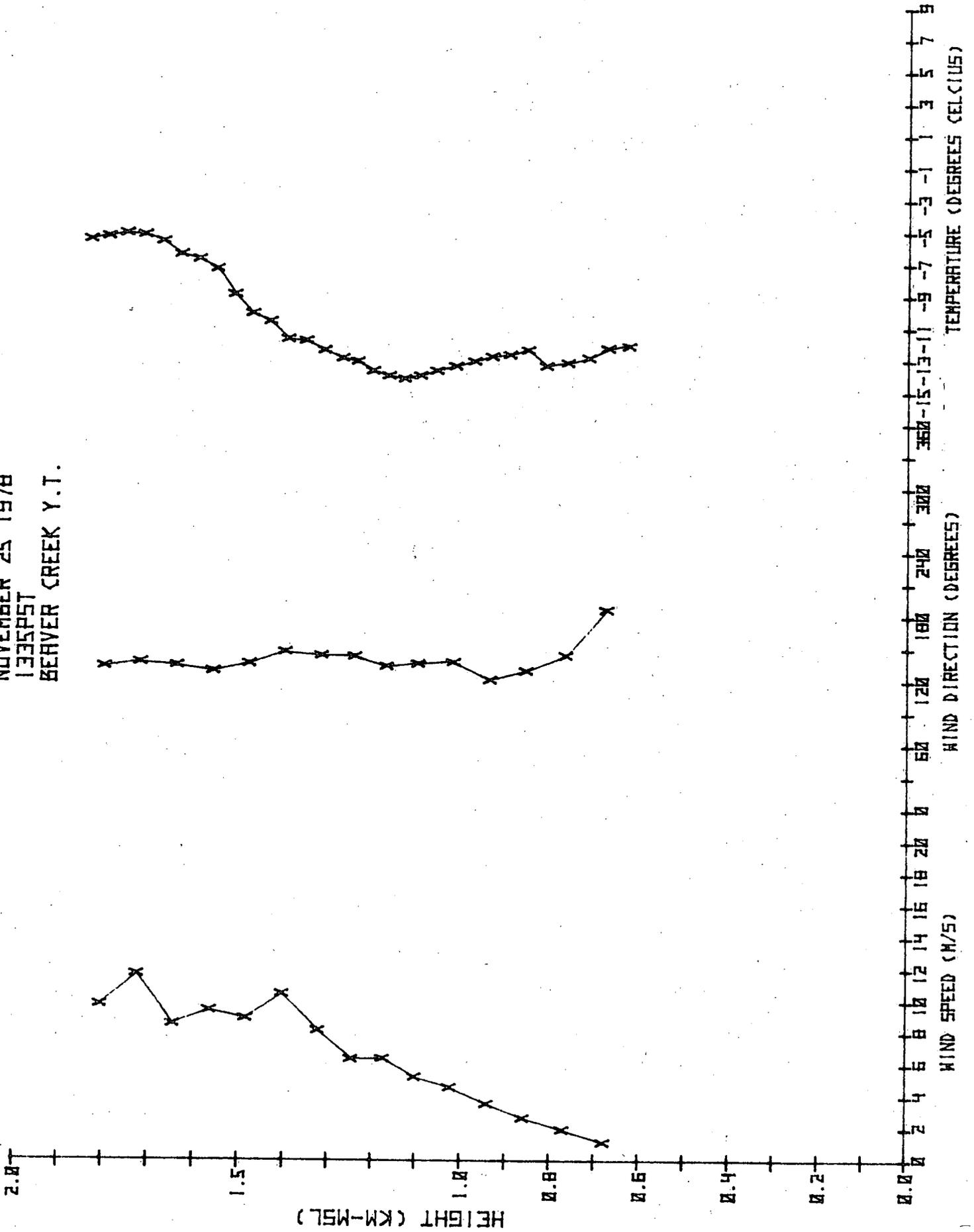
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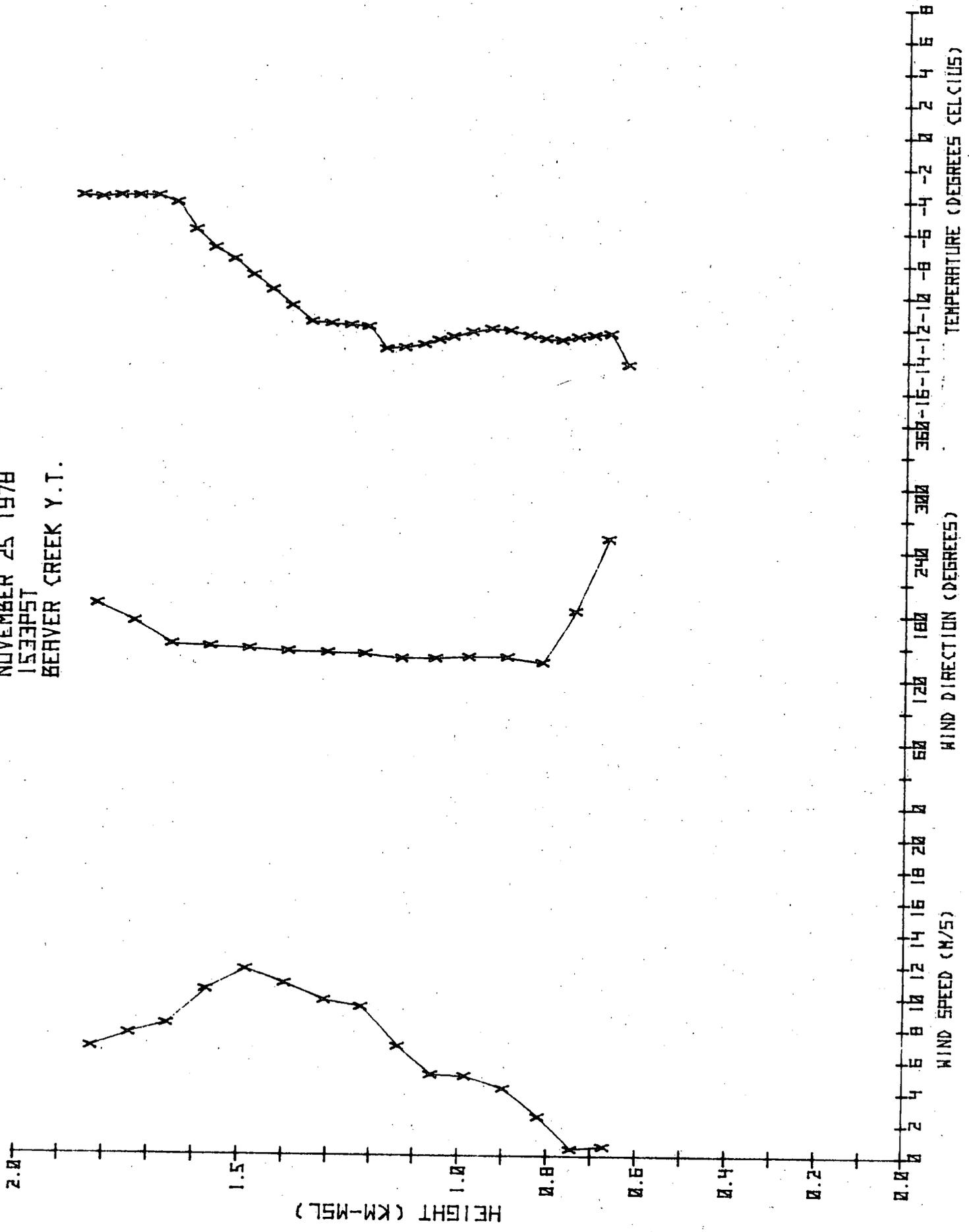
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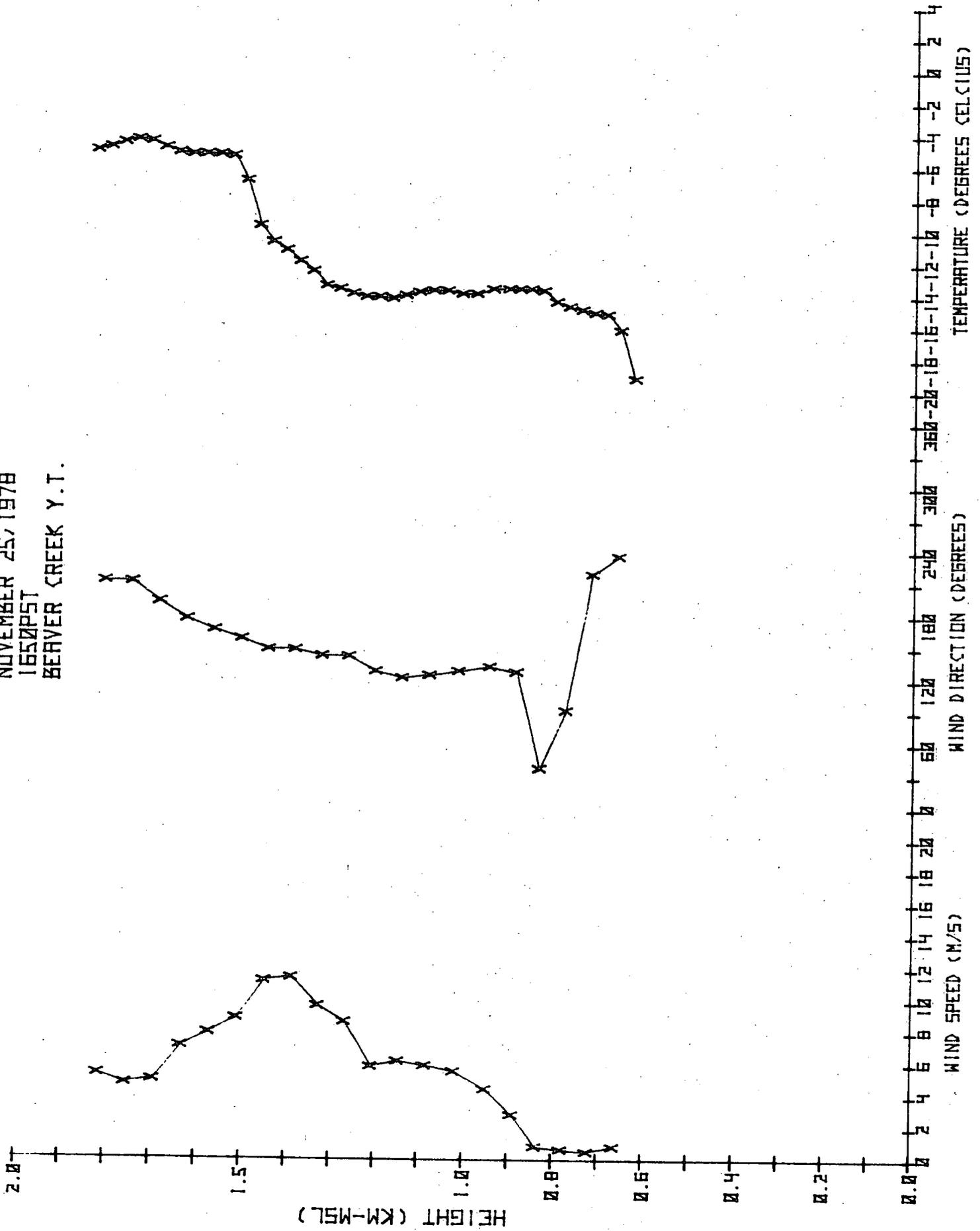
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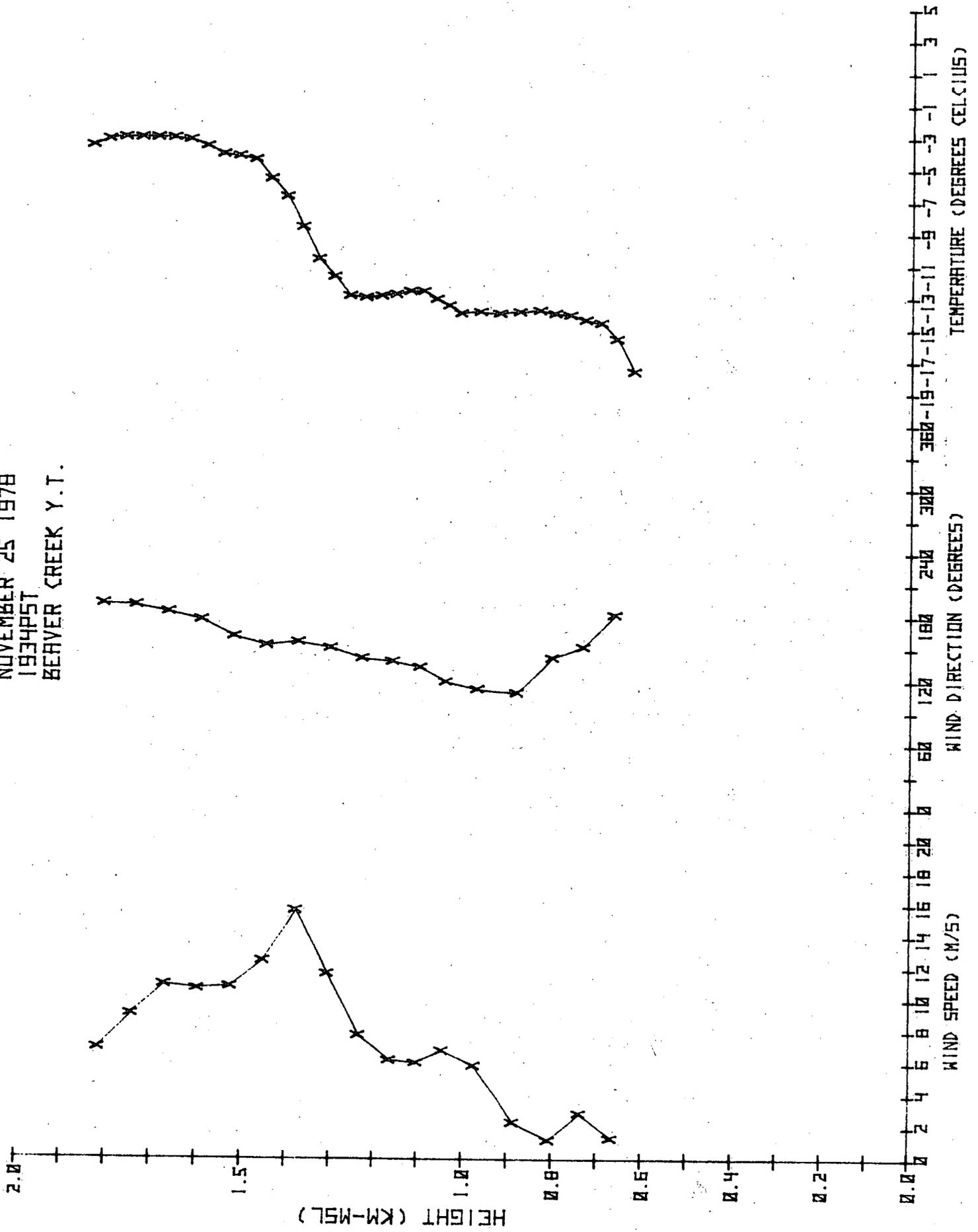
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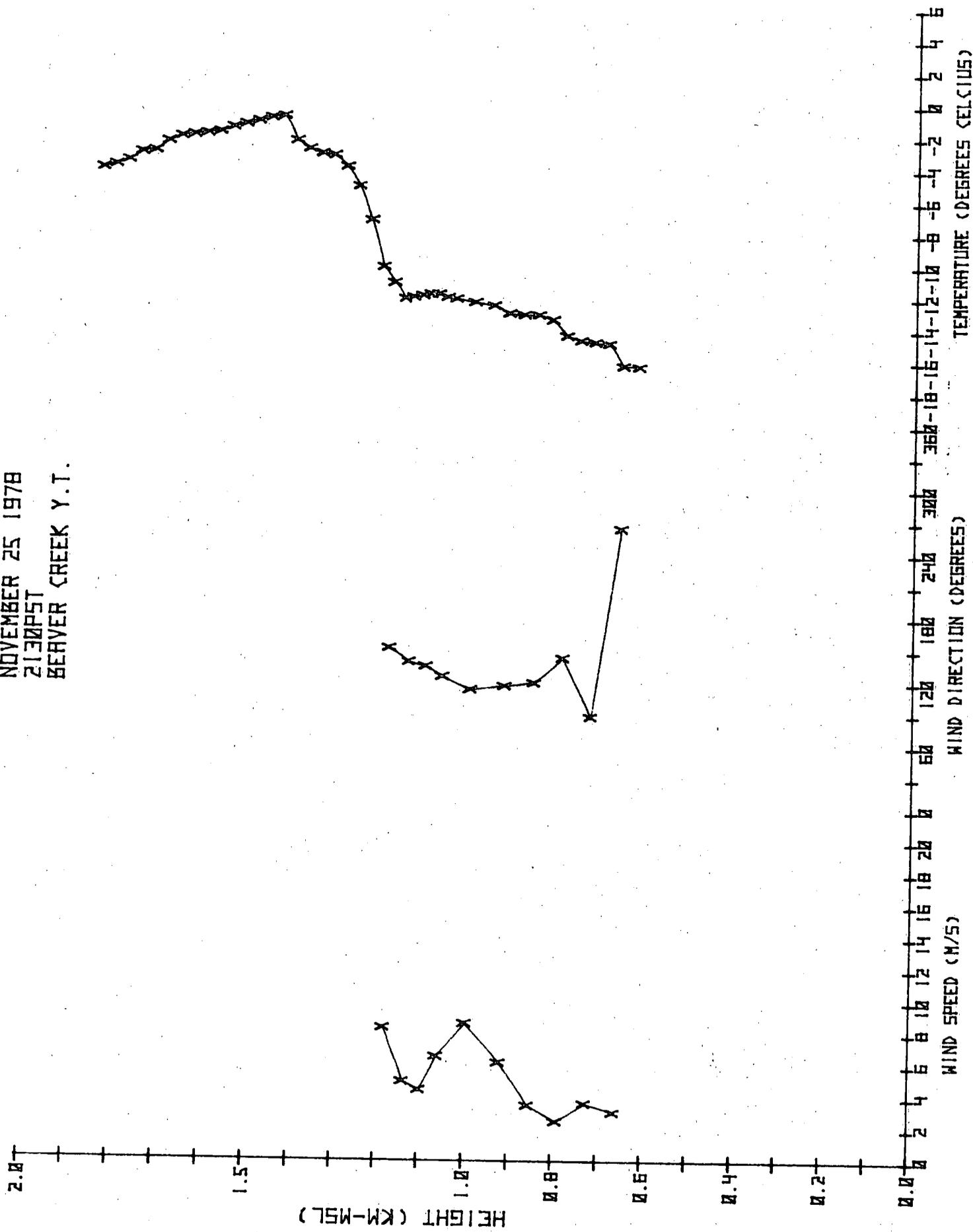
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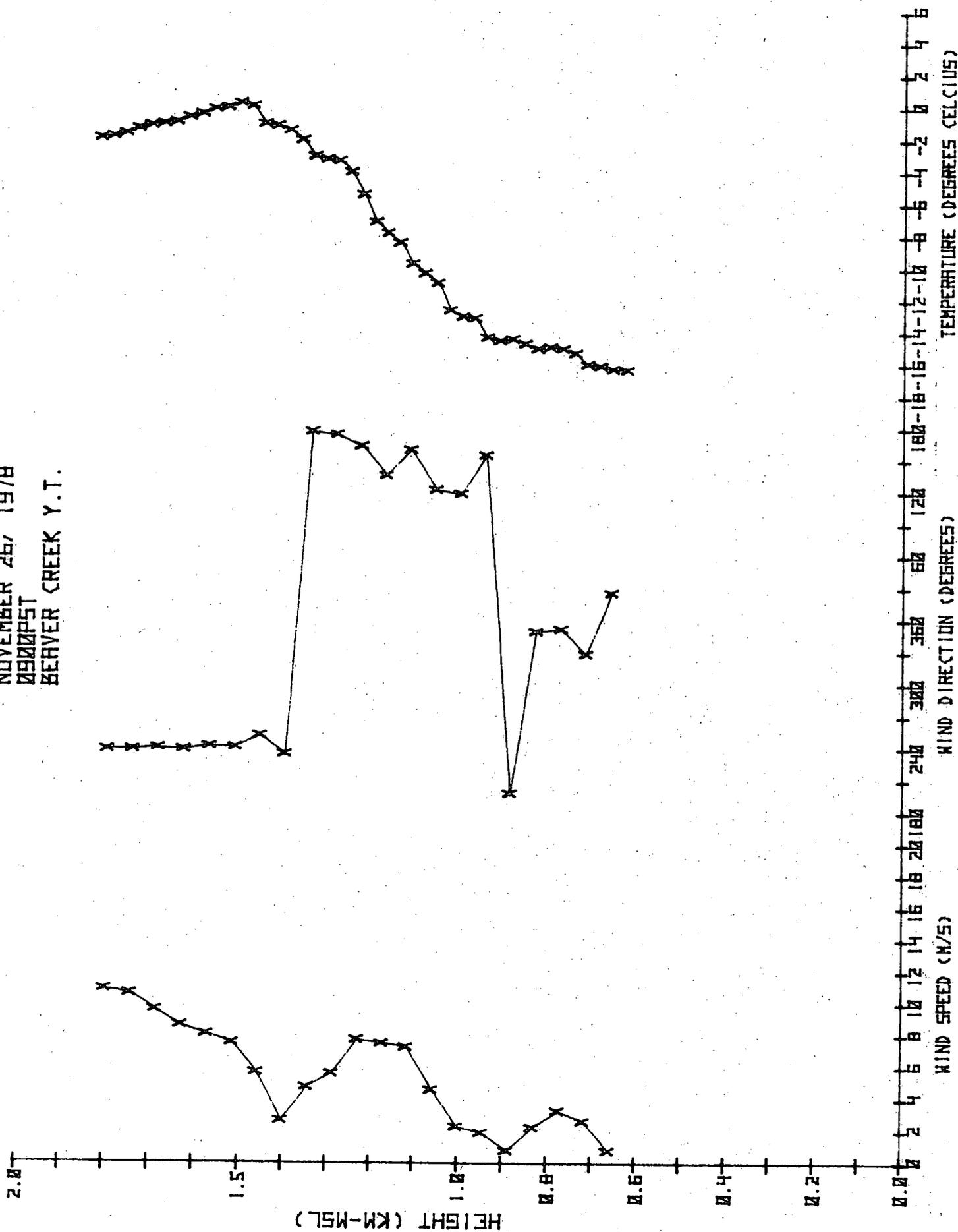
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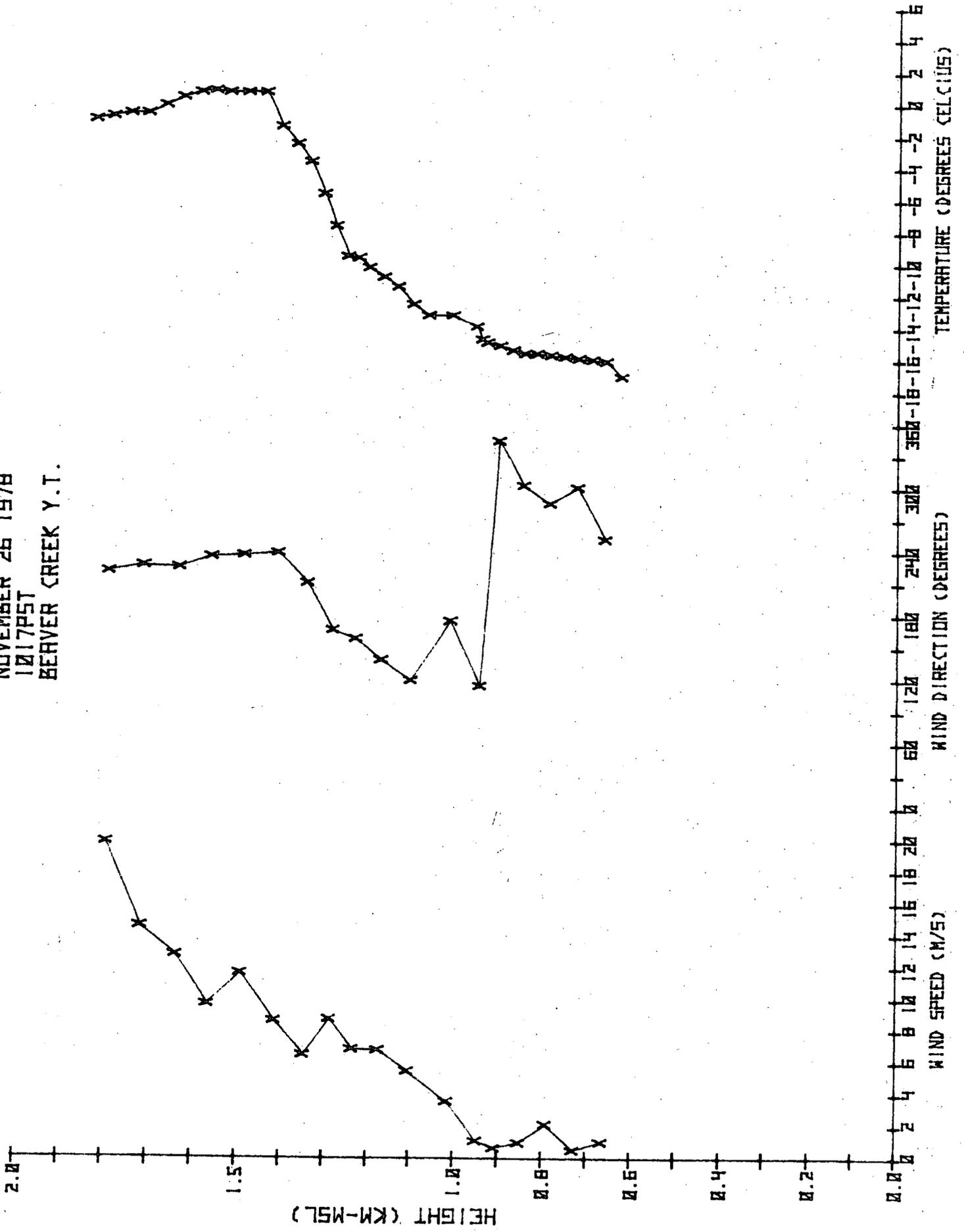
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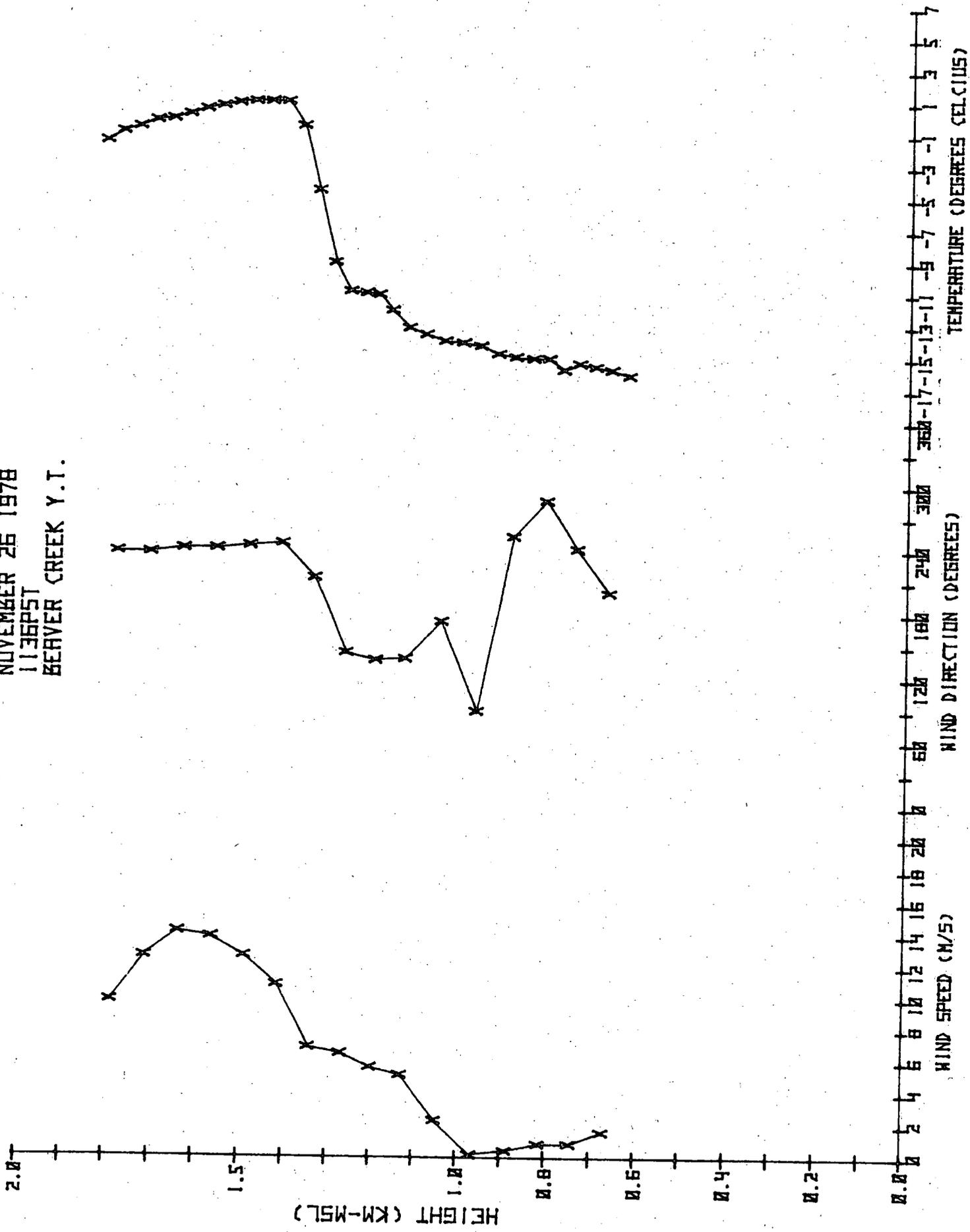
NOVEMBER 26, 1978
 0900 PST
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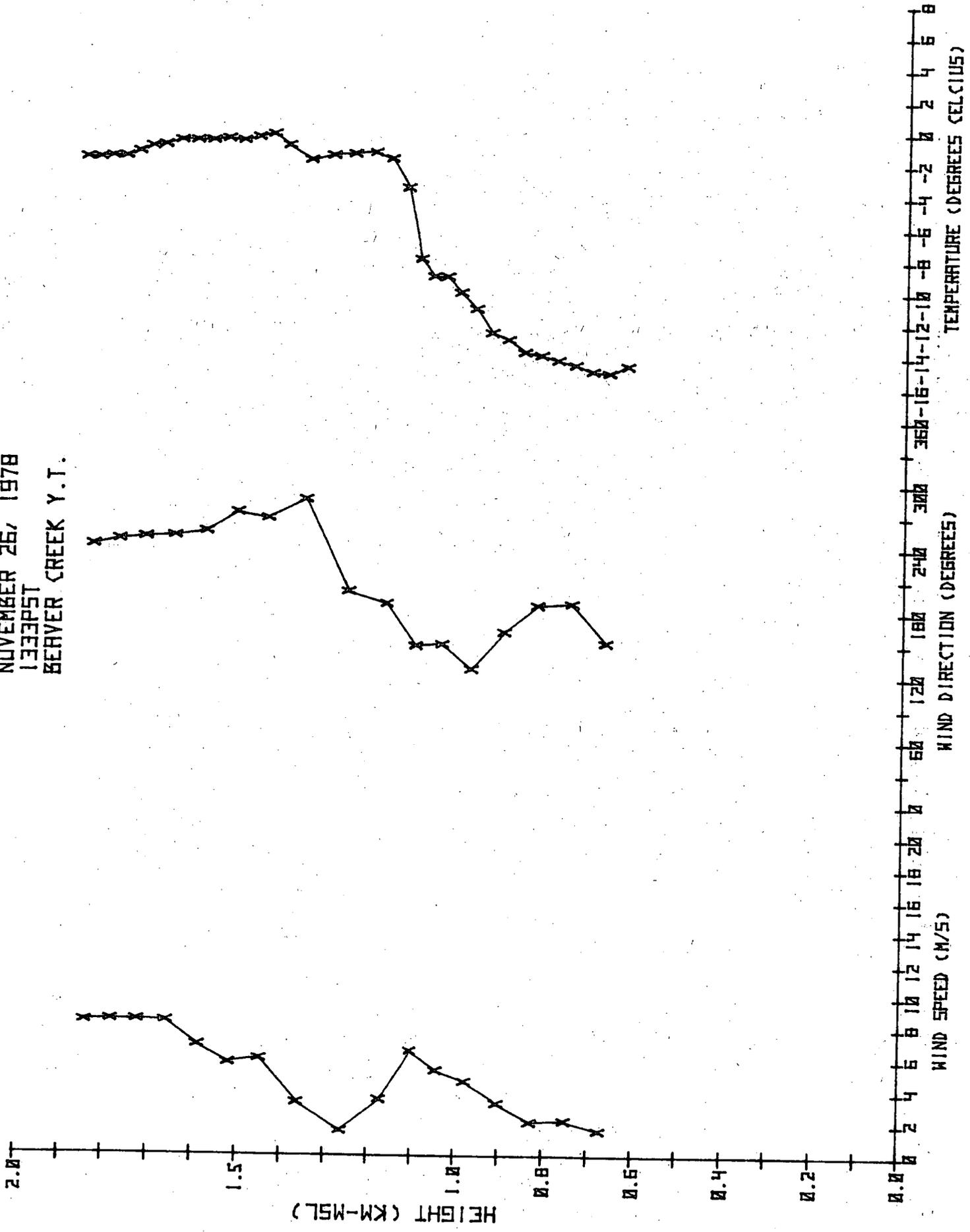
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 BEAVER CREEK Y.T.



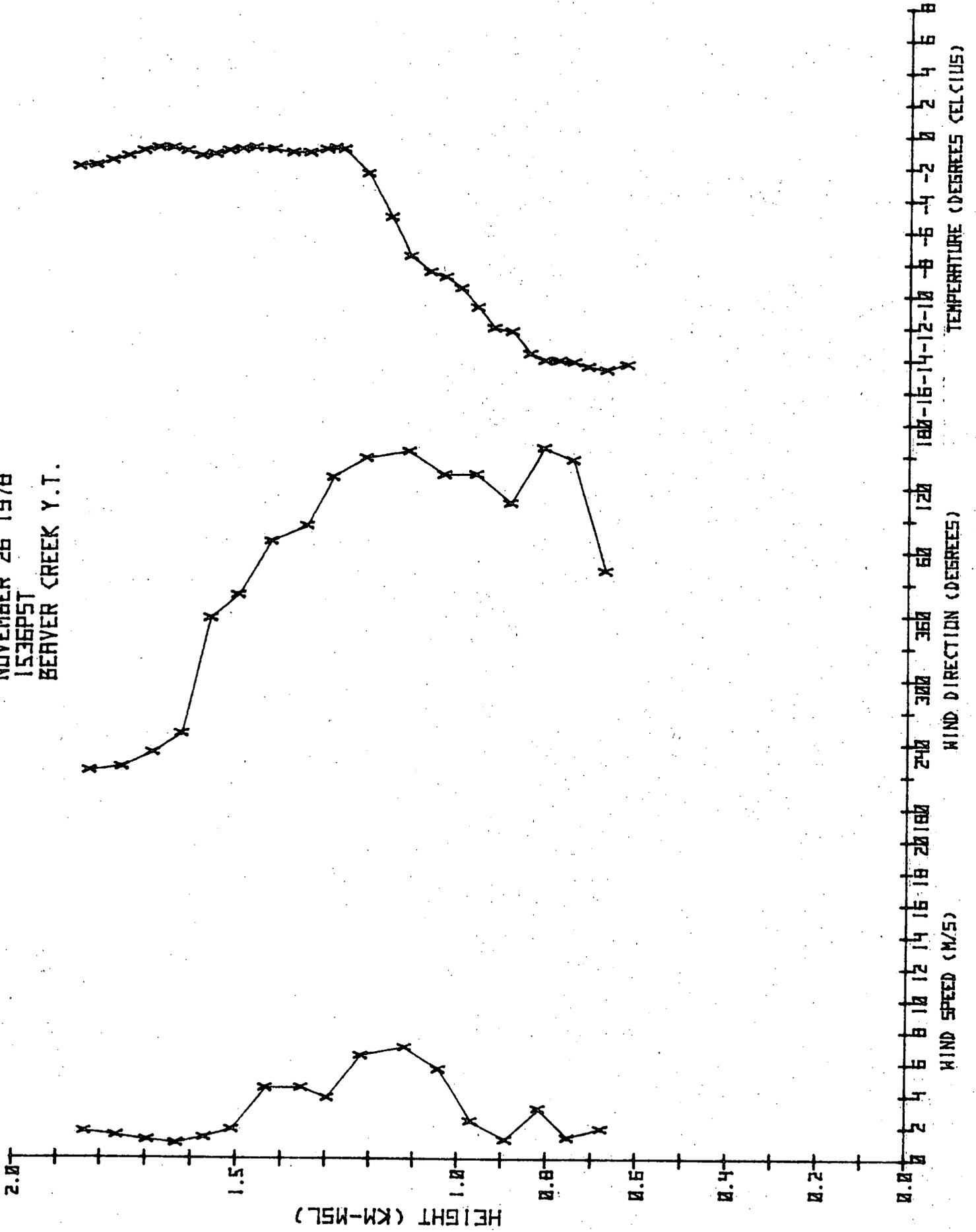
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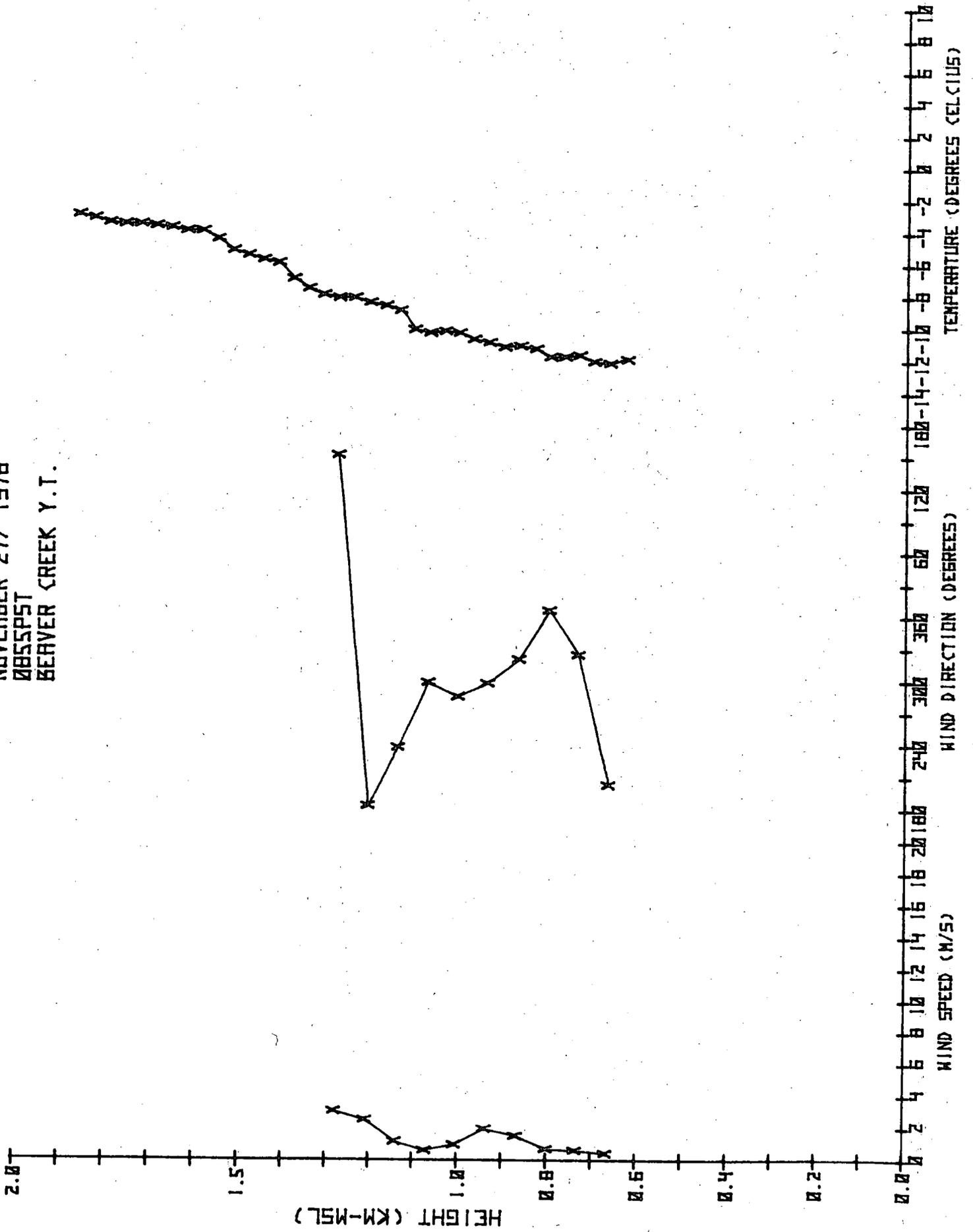
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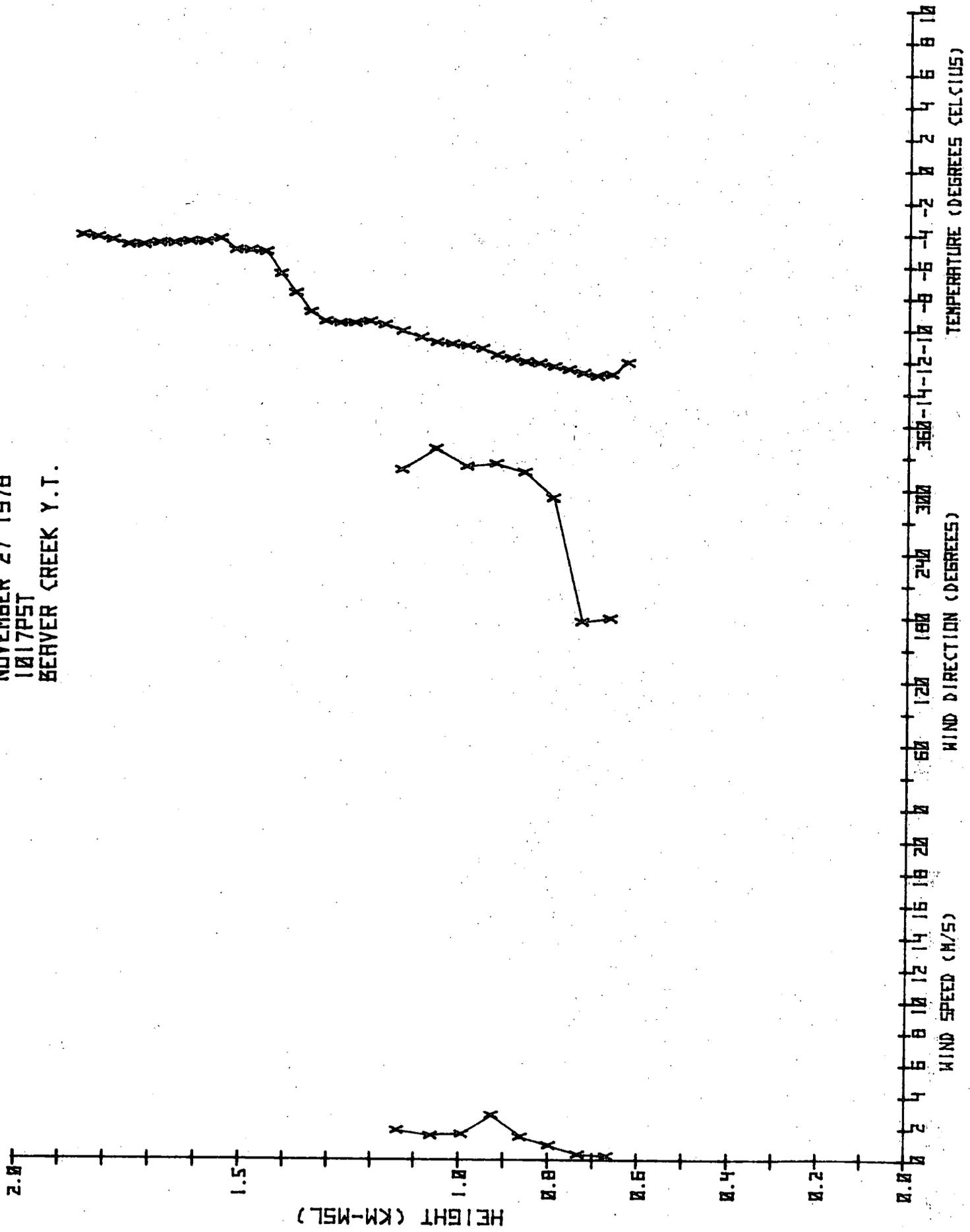
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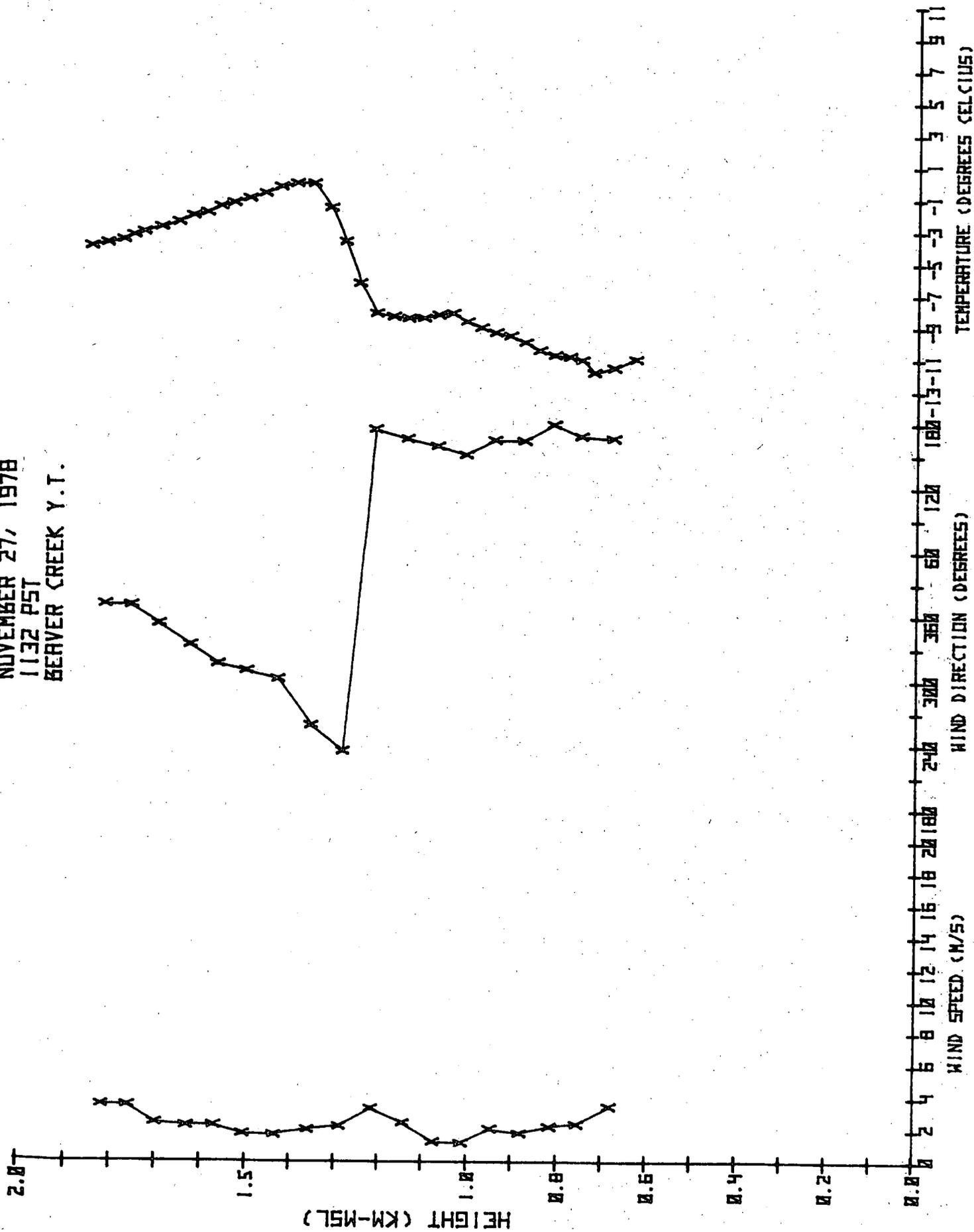
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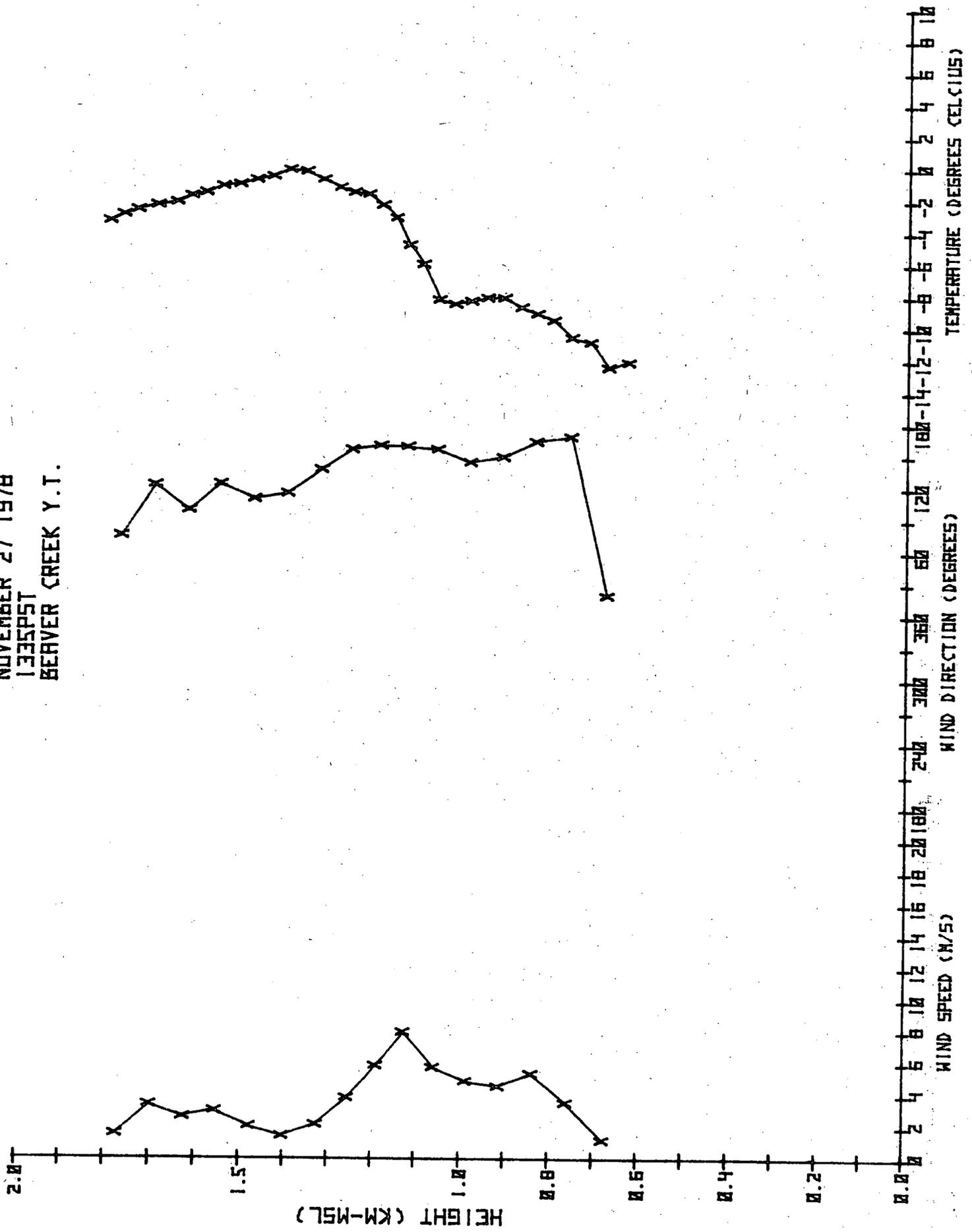
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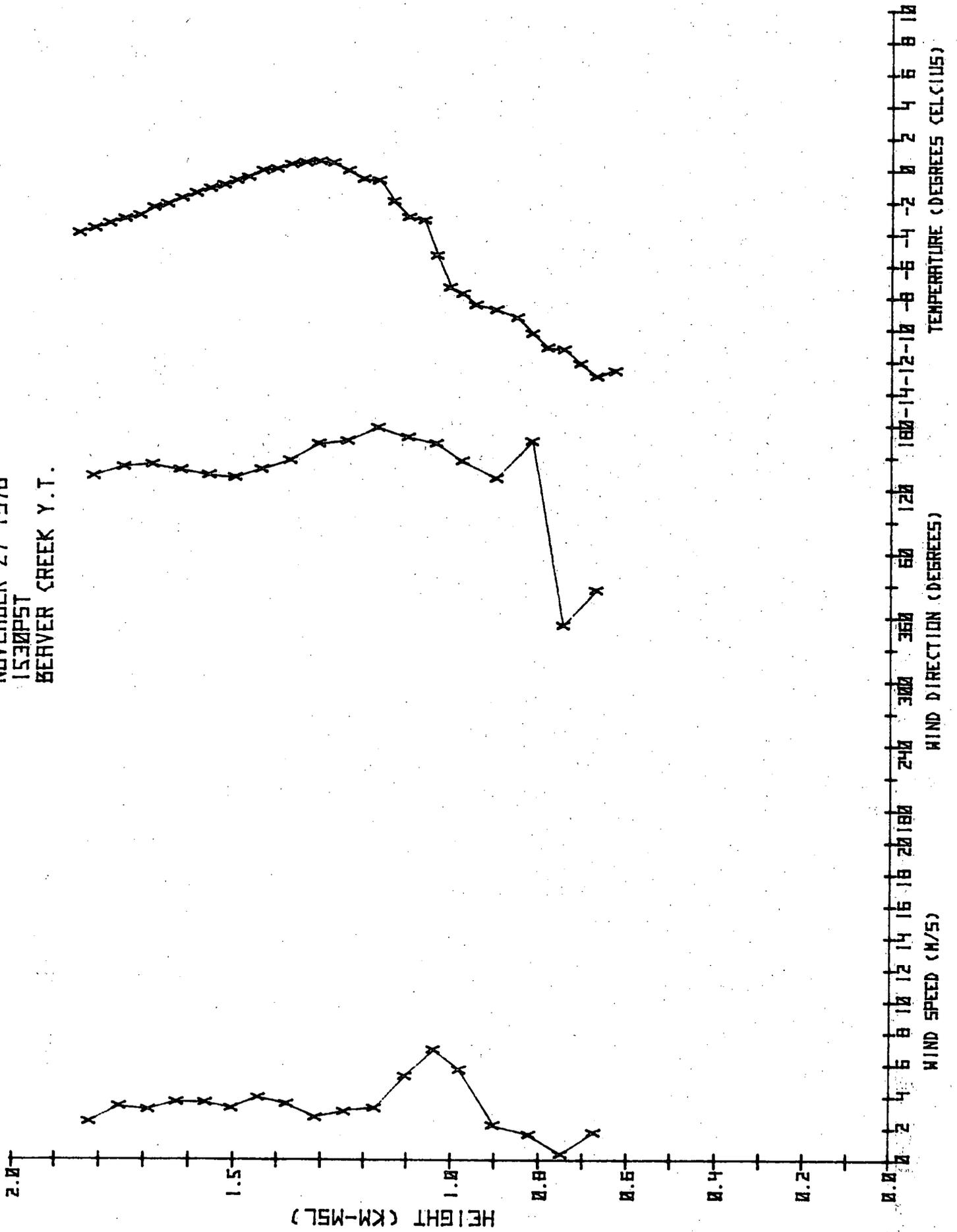
NOVEMBER 27, 1978
 1132 PST
 BEAVER CREEK Y.T.



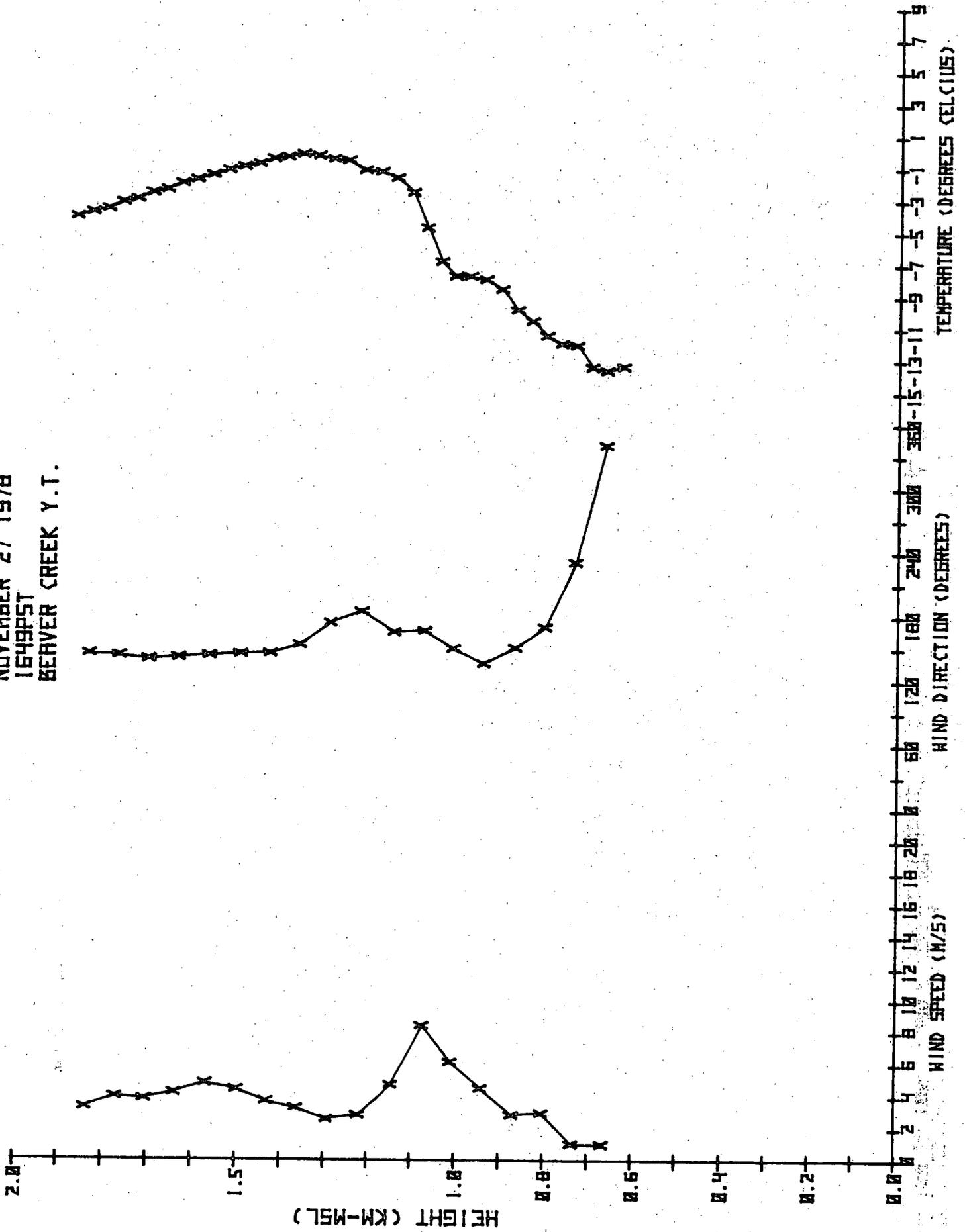
NOVEMBER 27 1978
 1335PST
 BEAVER CREEK Y.T.



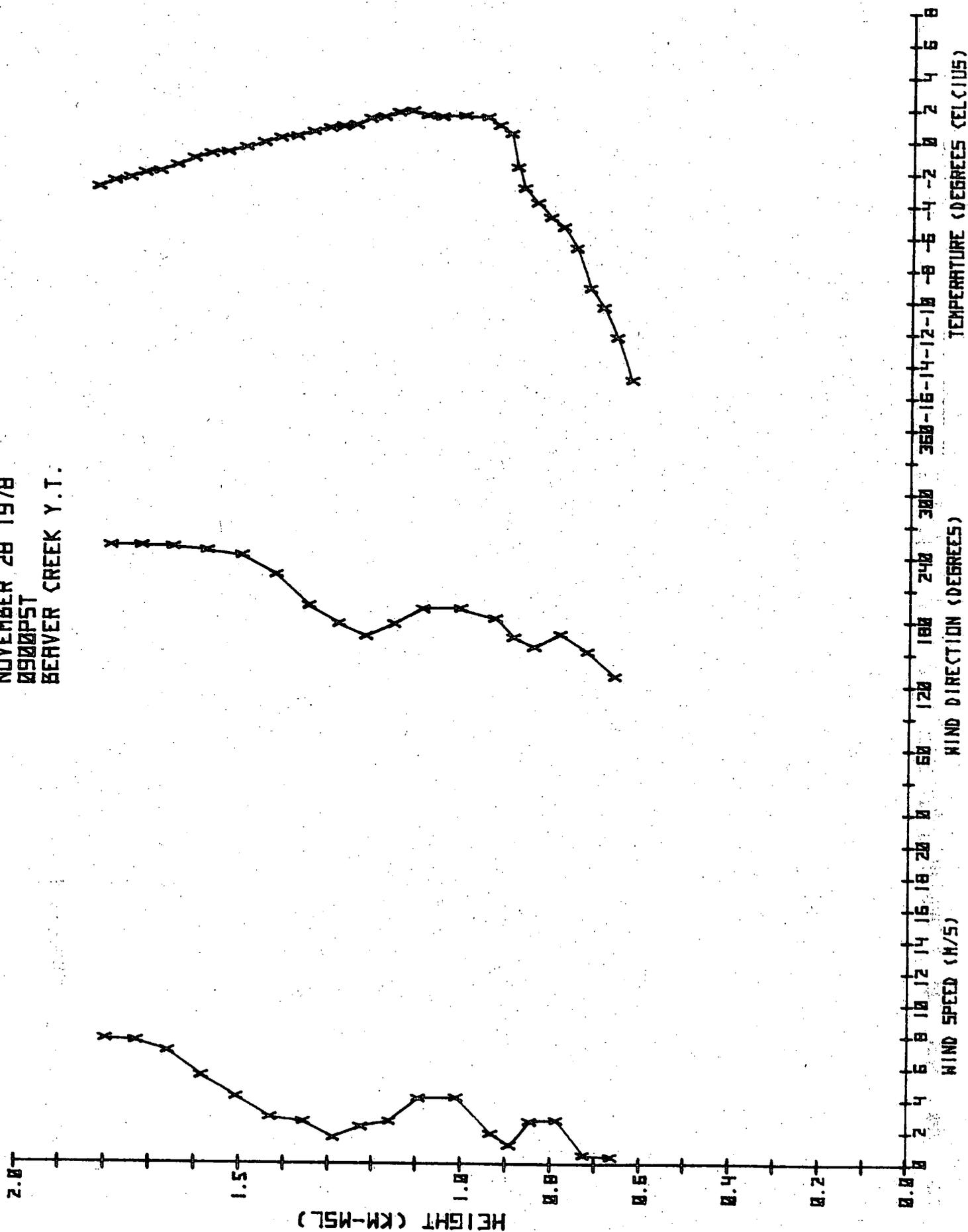
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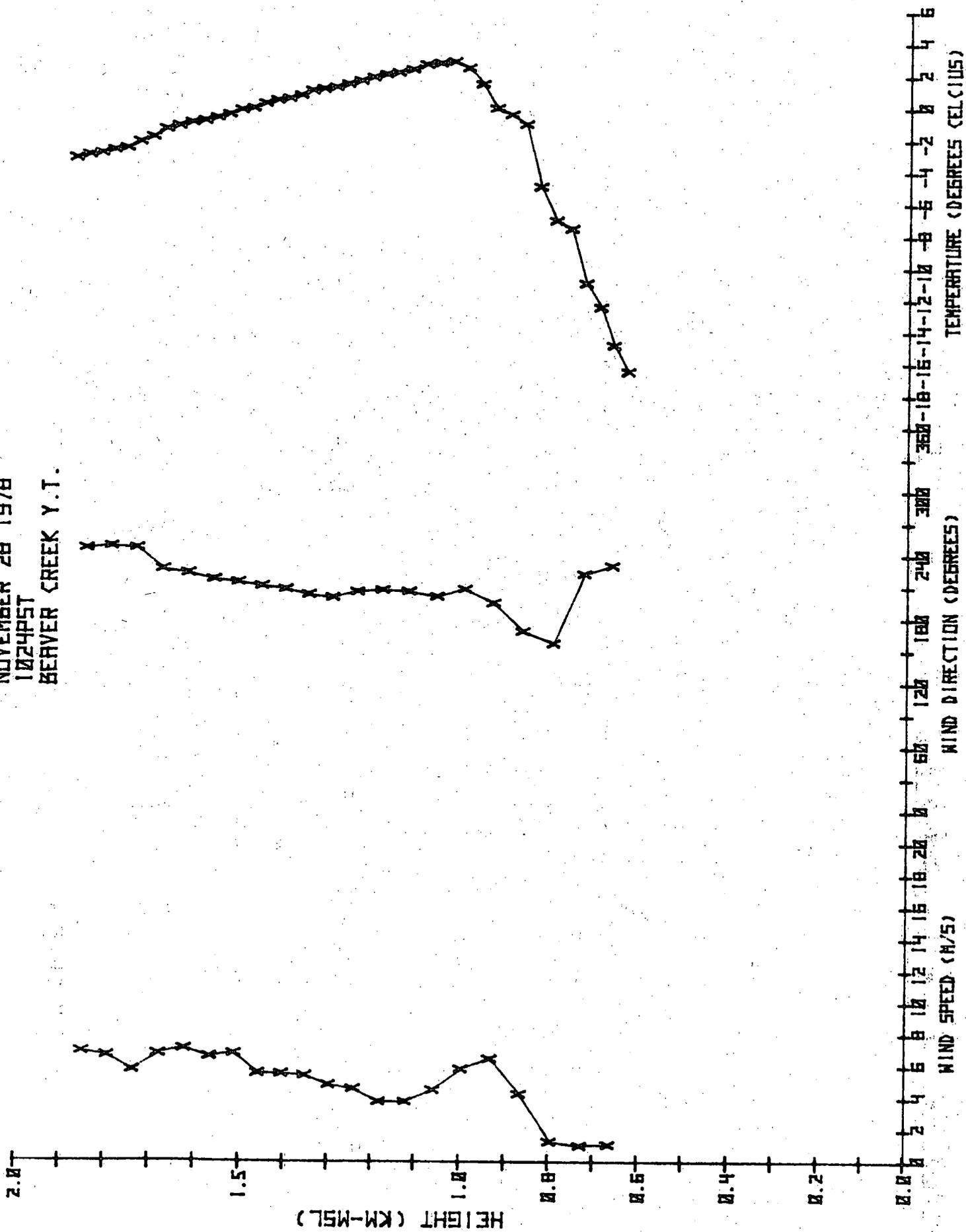
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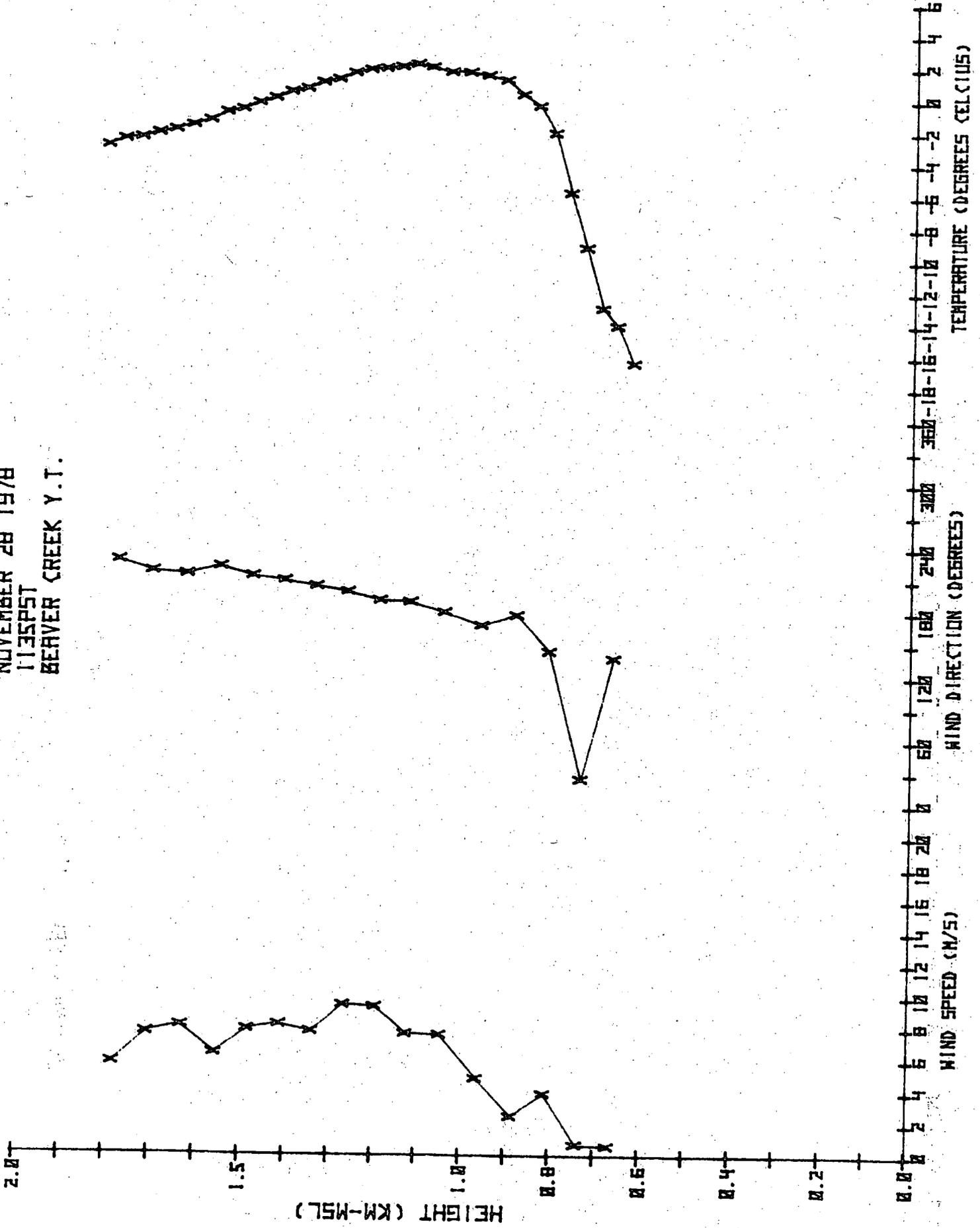
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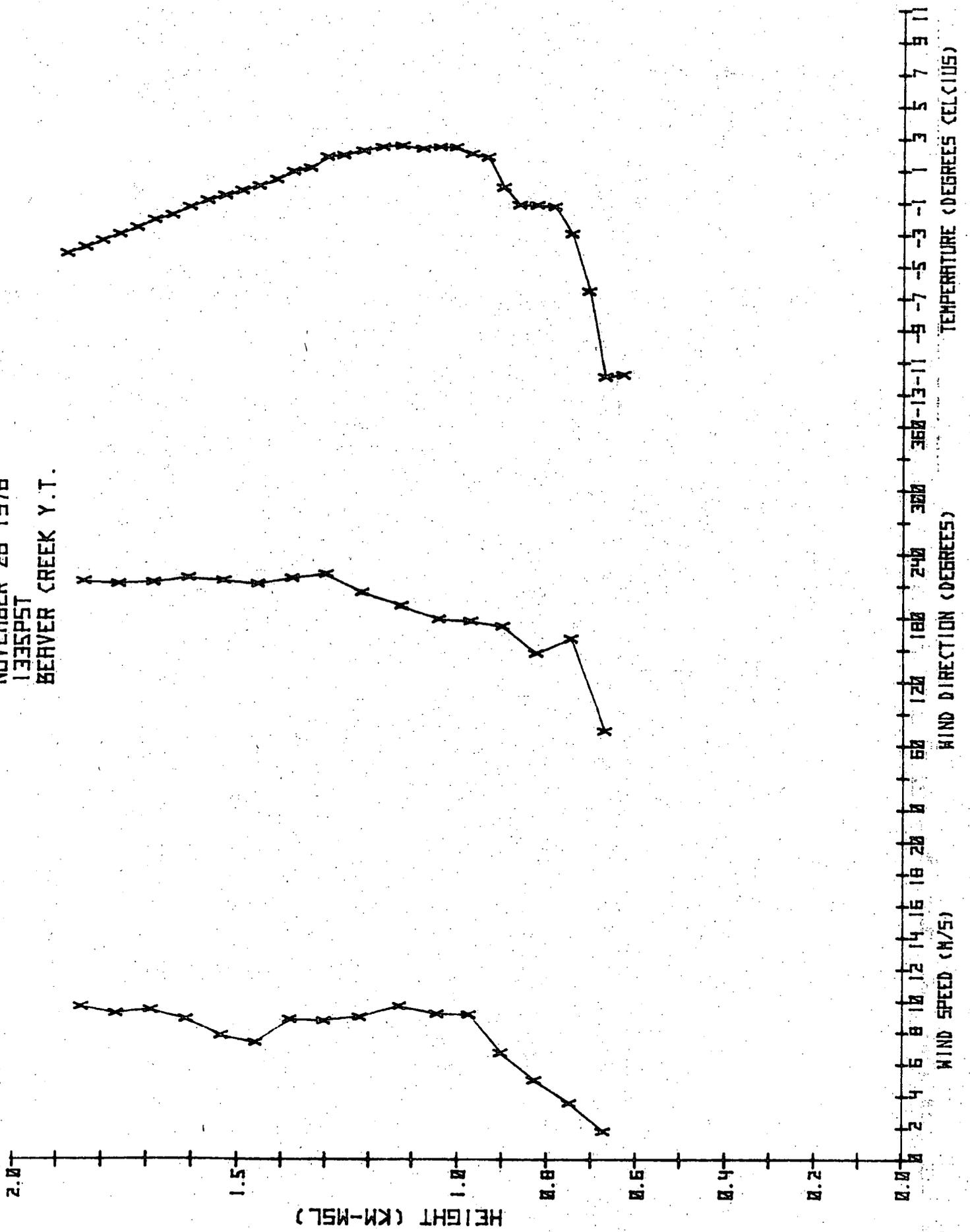
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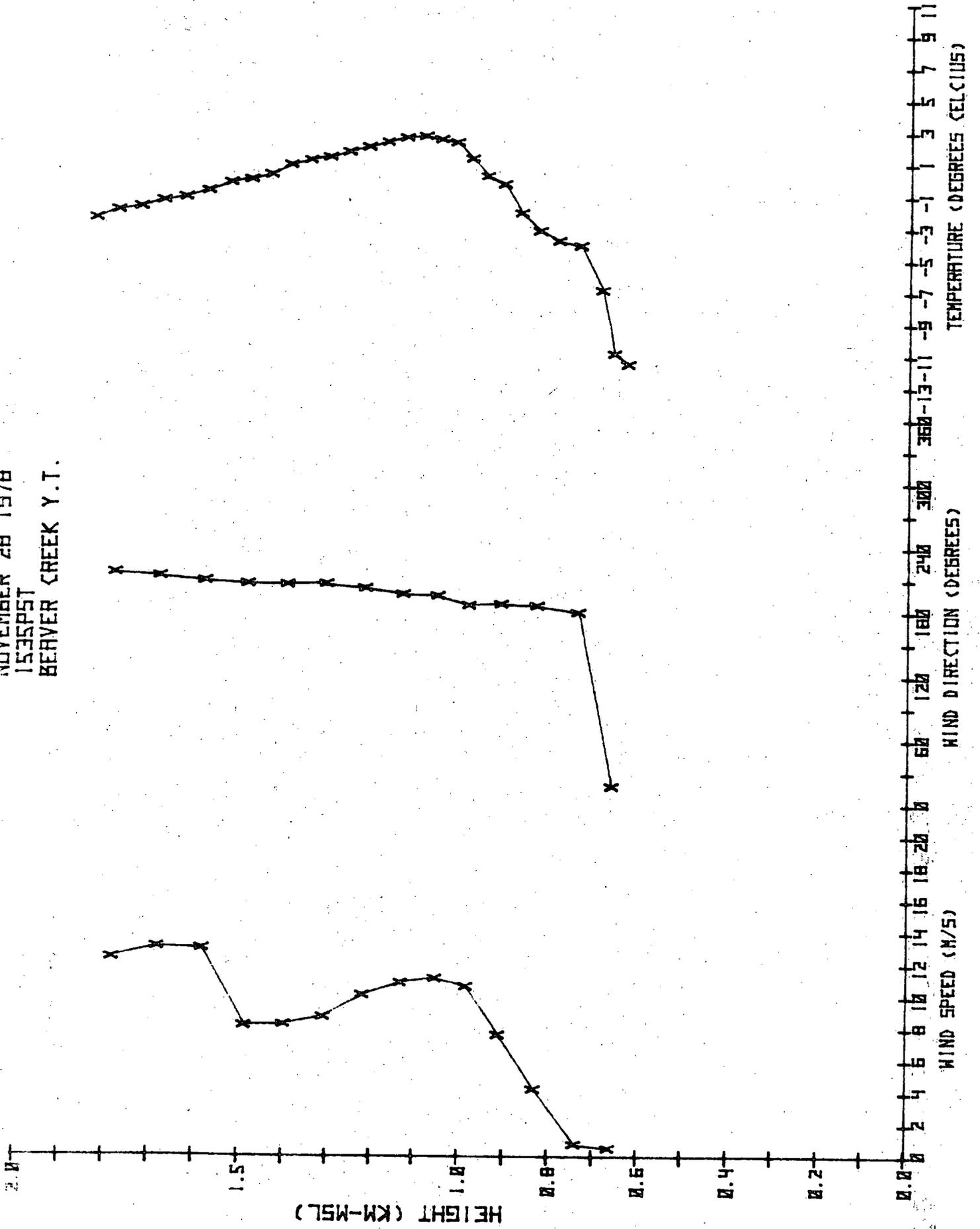
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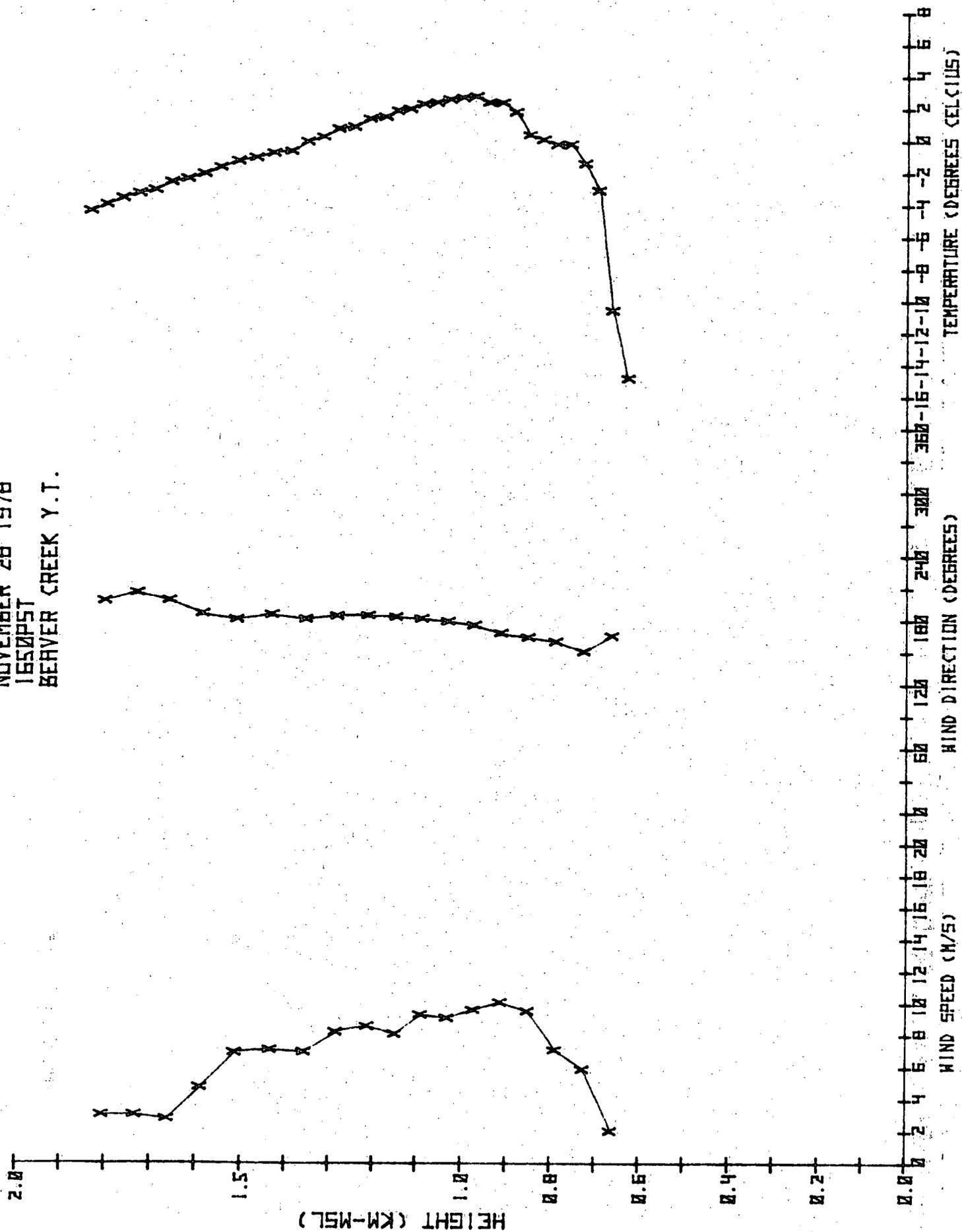
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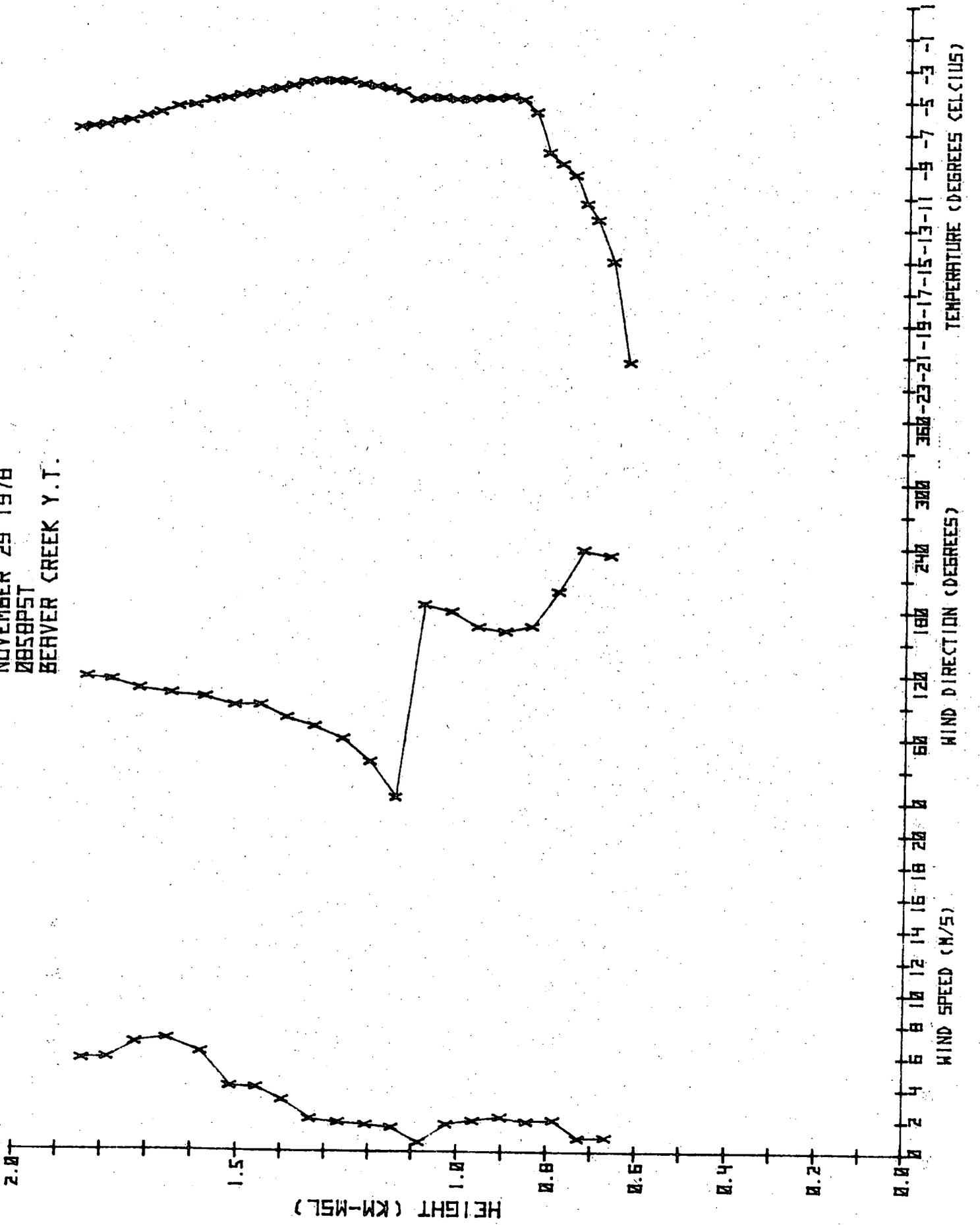
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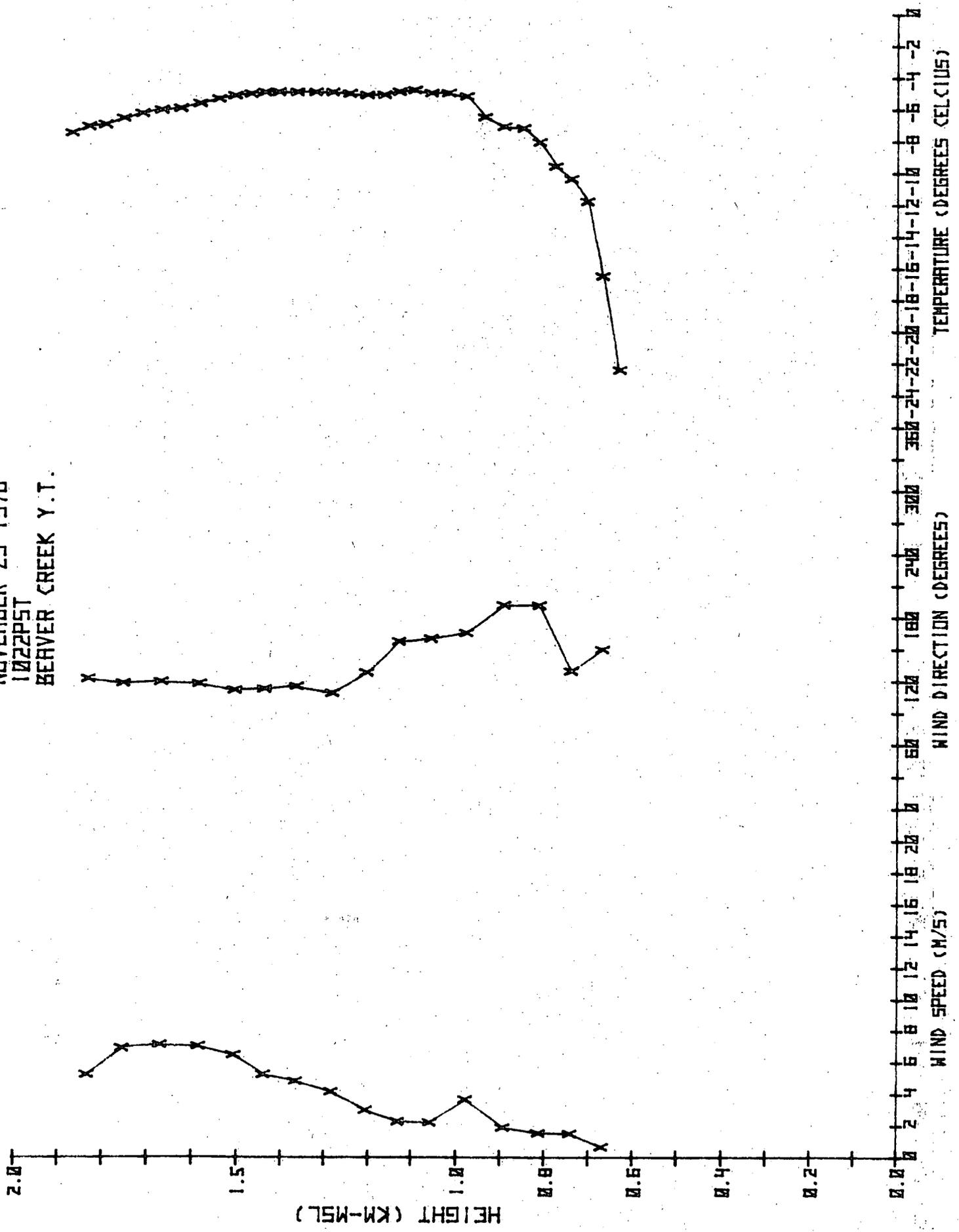
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NOVEMBER 29 1978
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 BEAVER CREEK Y.T.



NOVEMBER 29 1978
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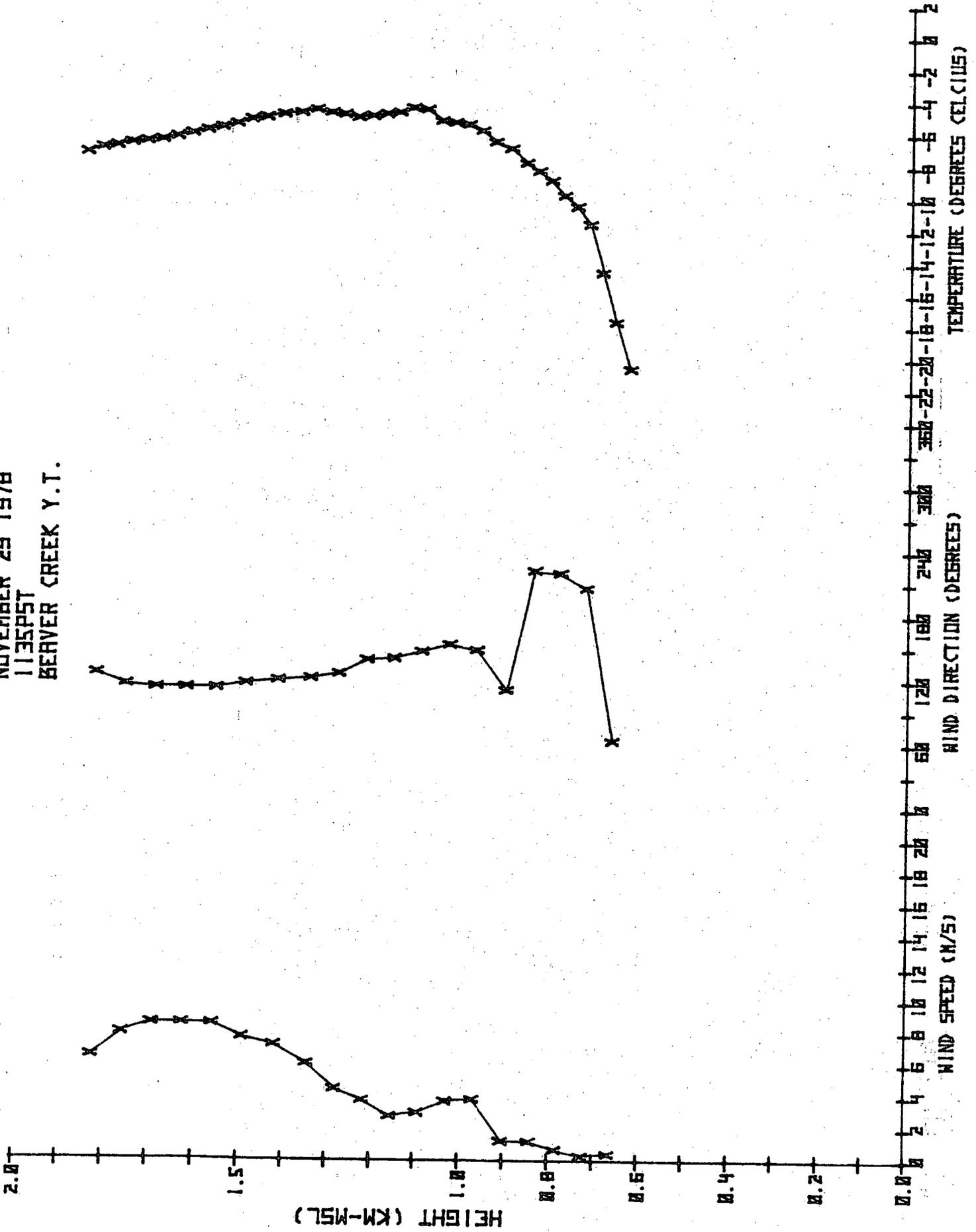


TEMPERATURE (DEGREES CELCIUS)

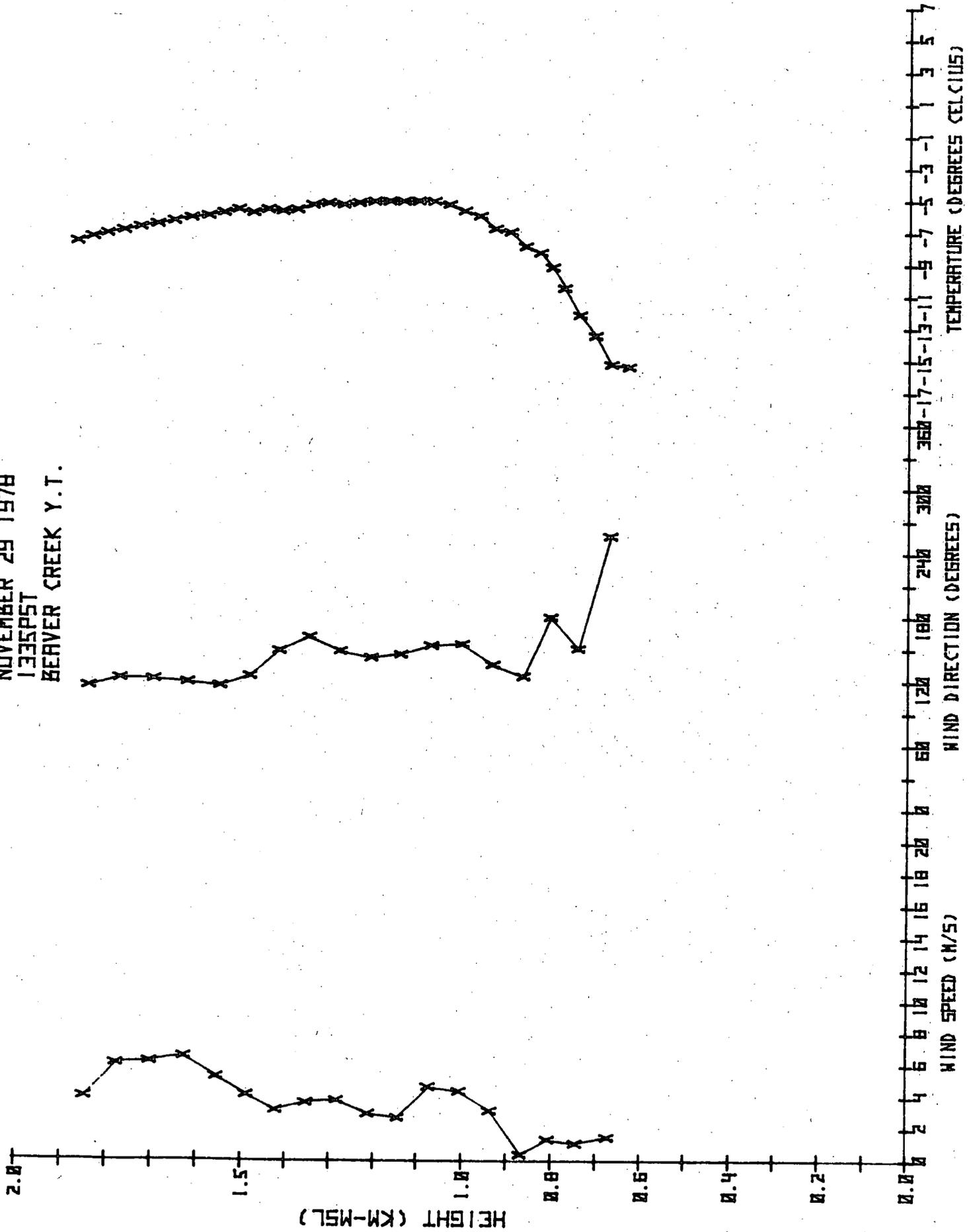
WIND DIRECTION (DEGREES)

WIND SPEED (M/S)

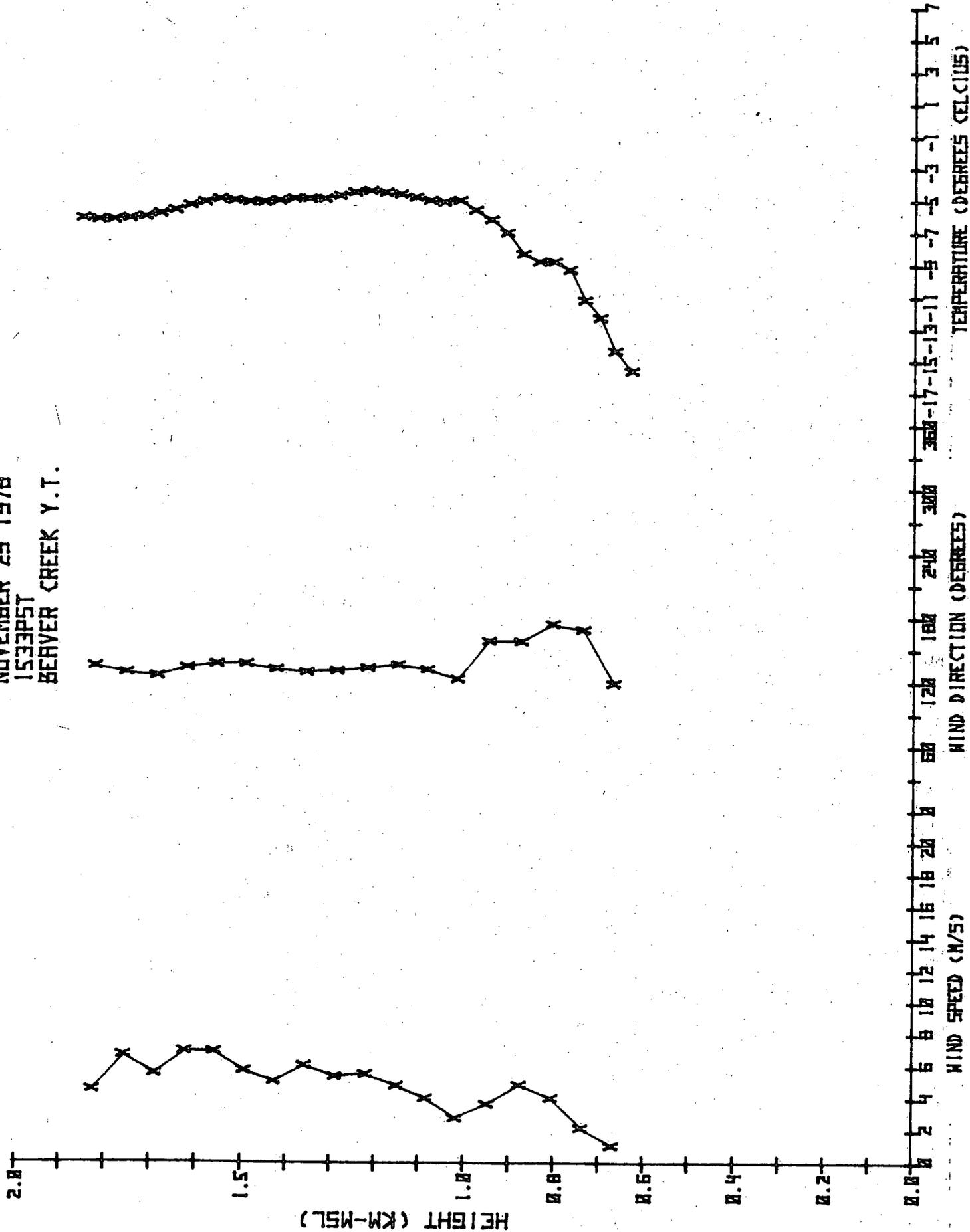
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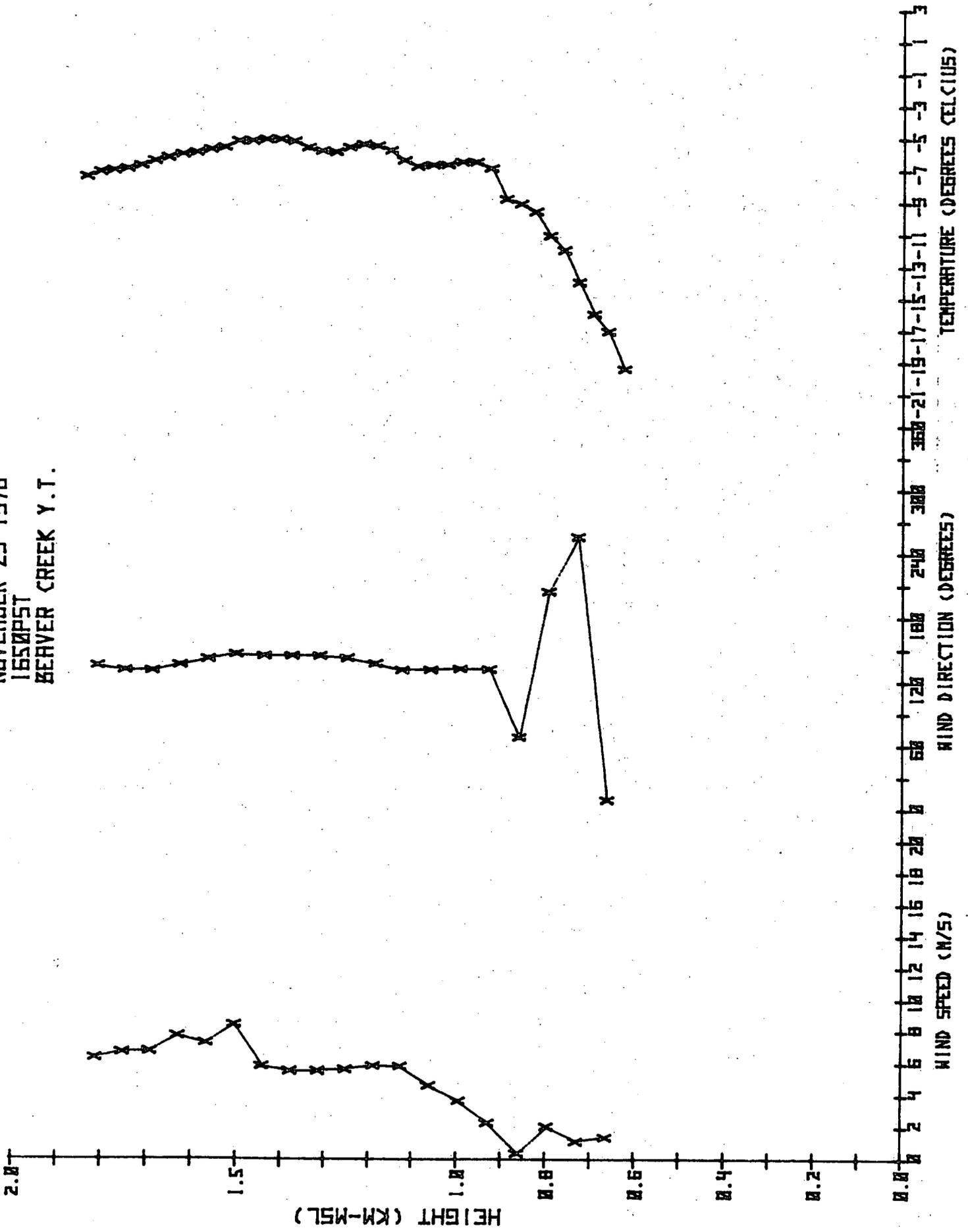
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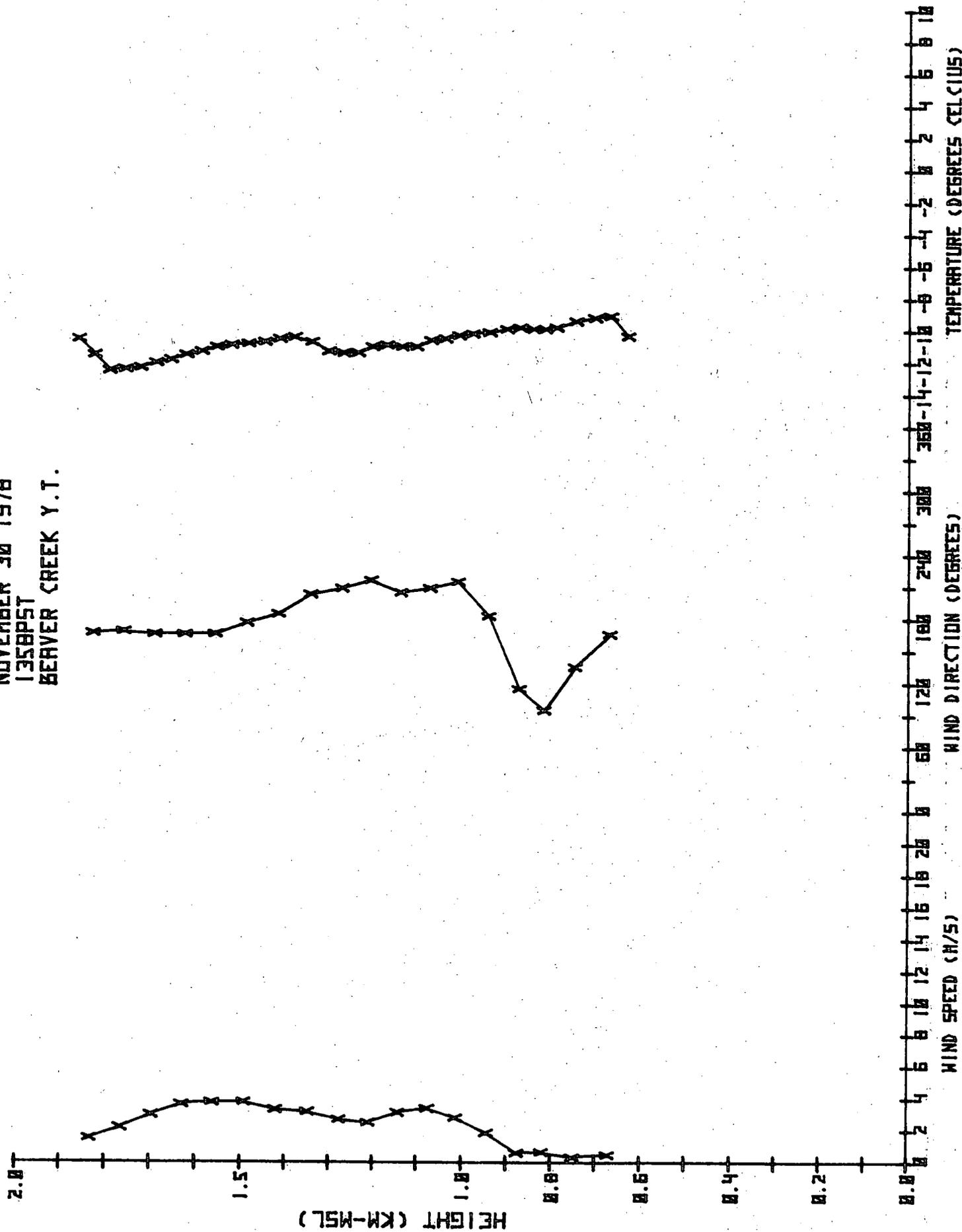
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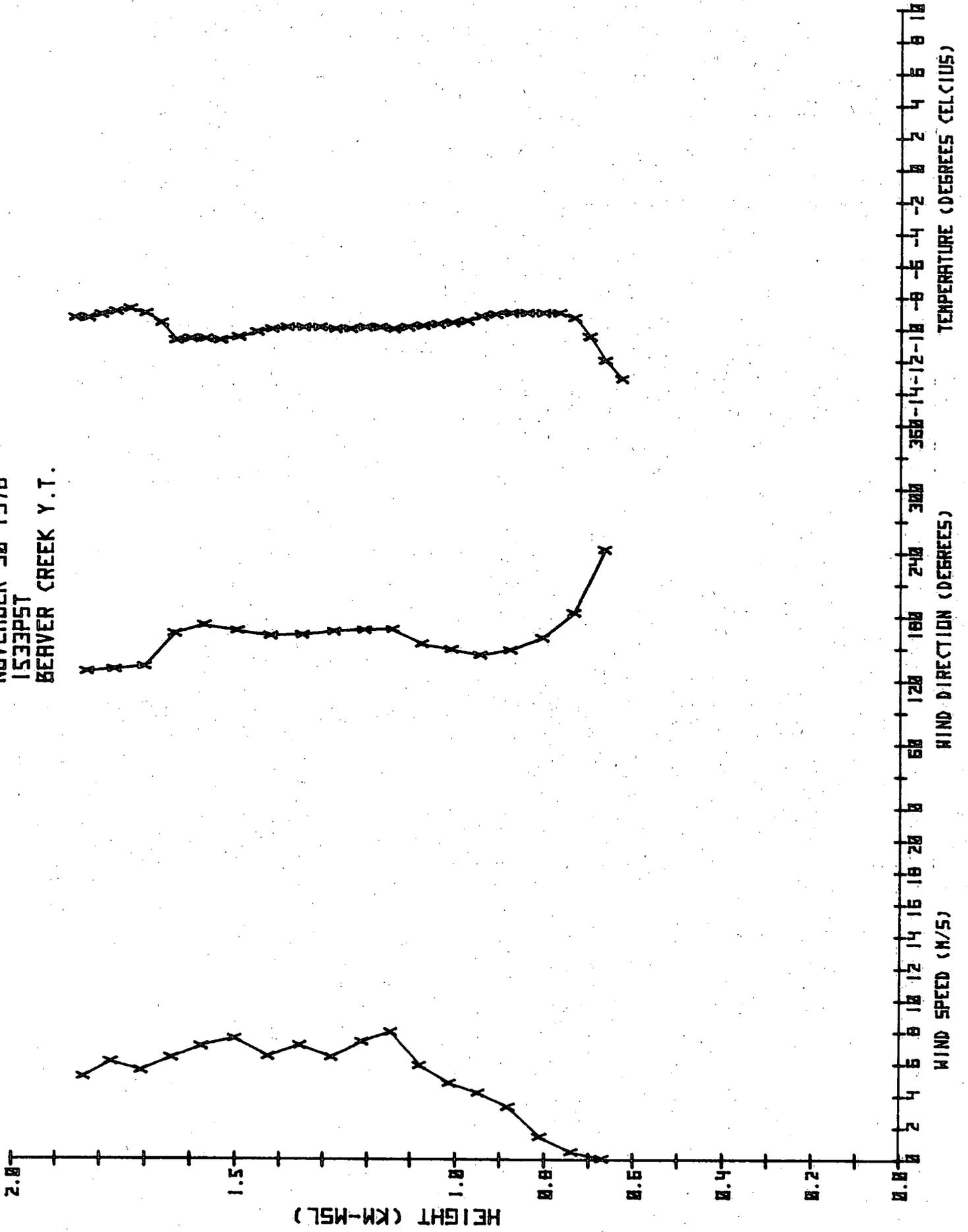
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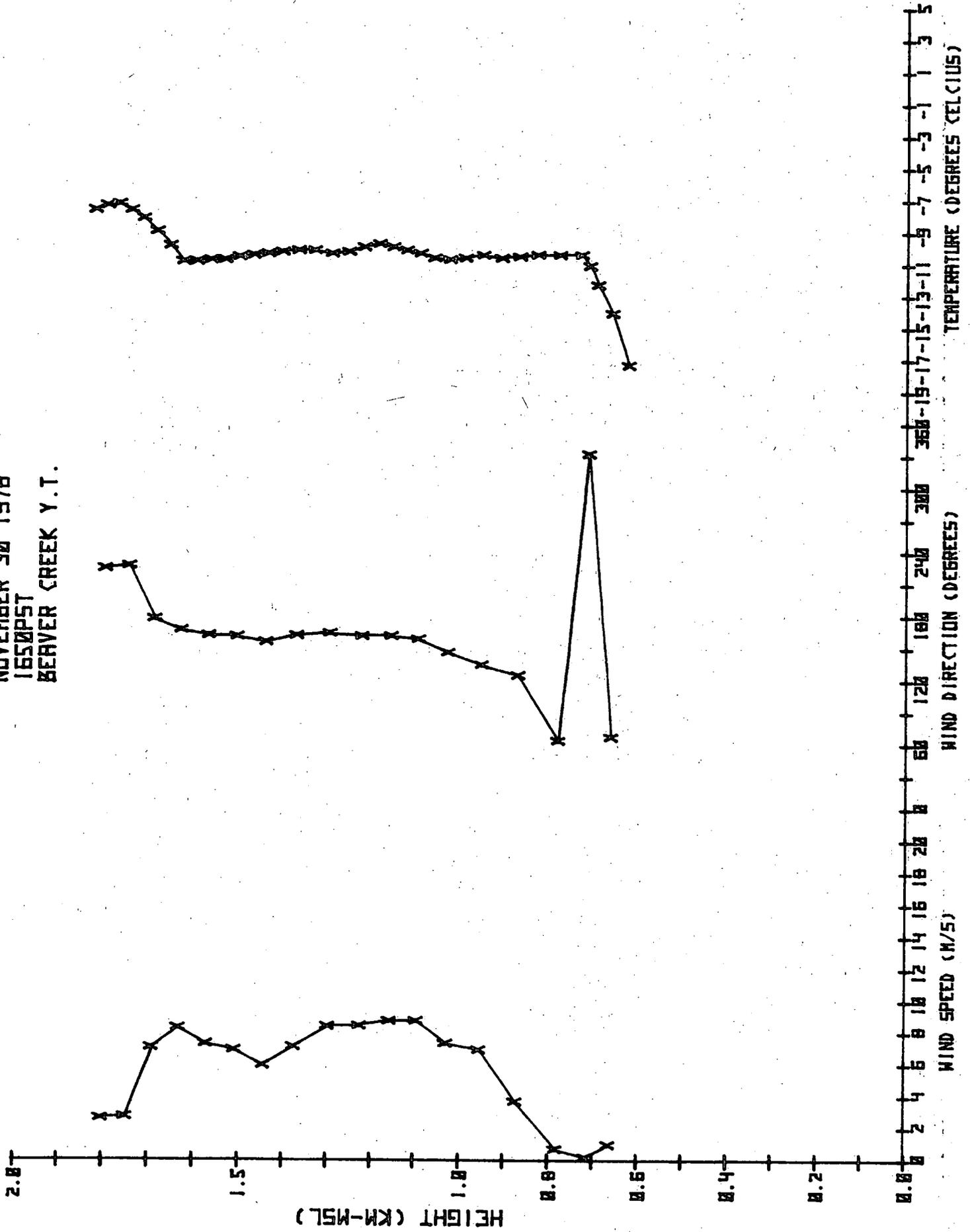
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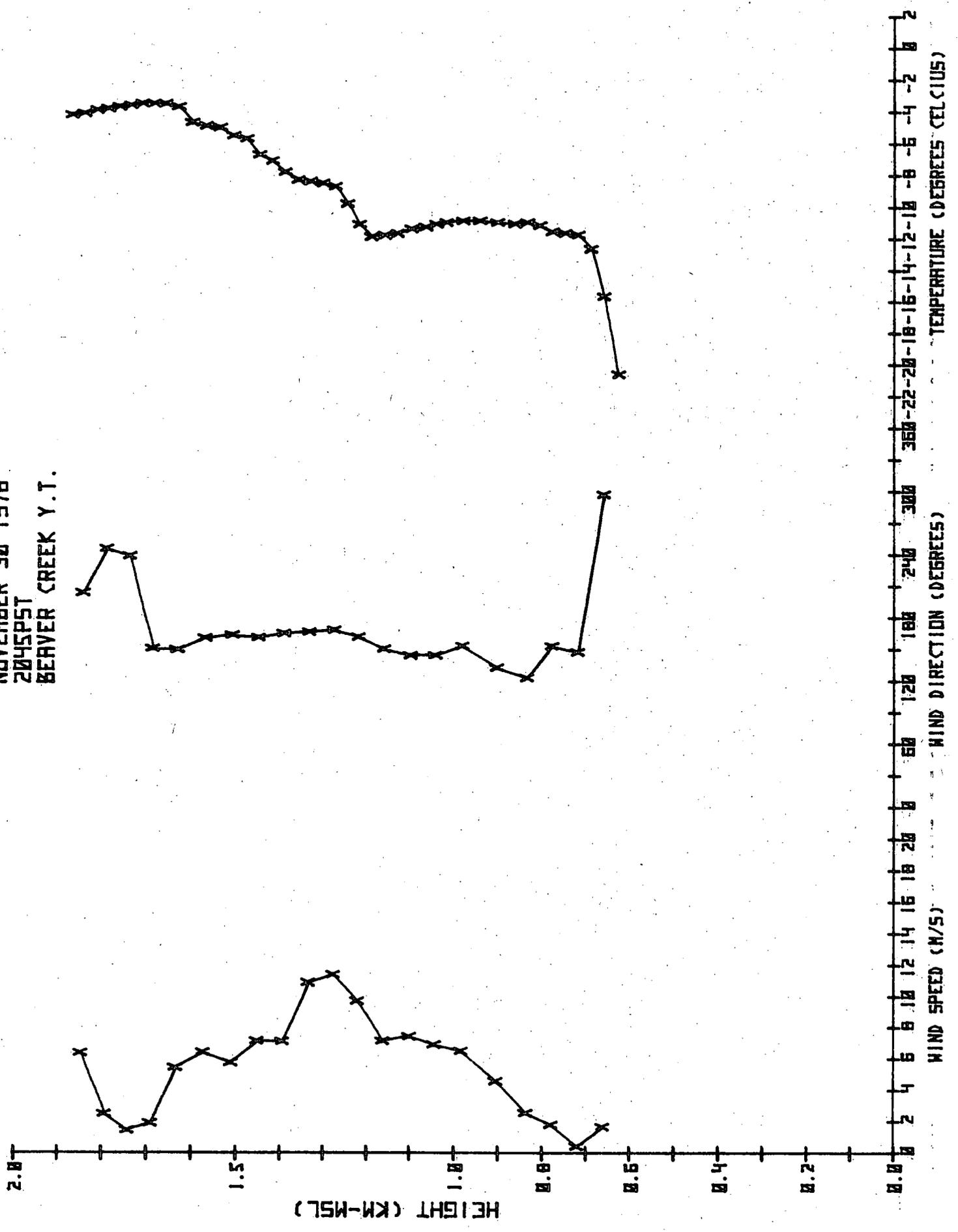
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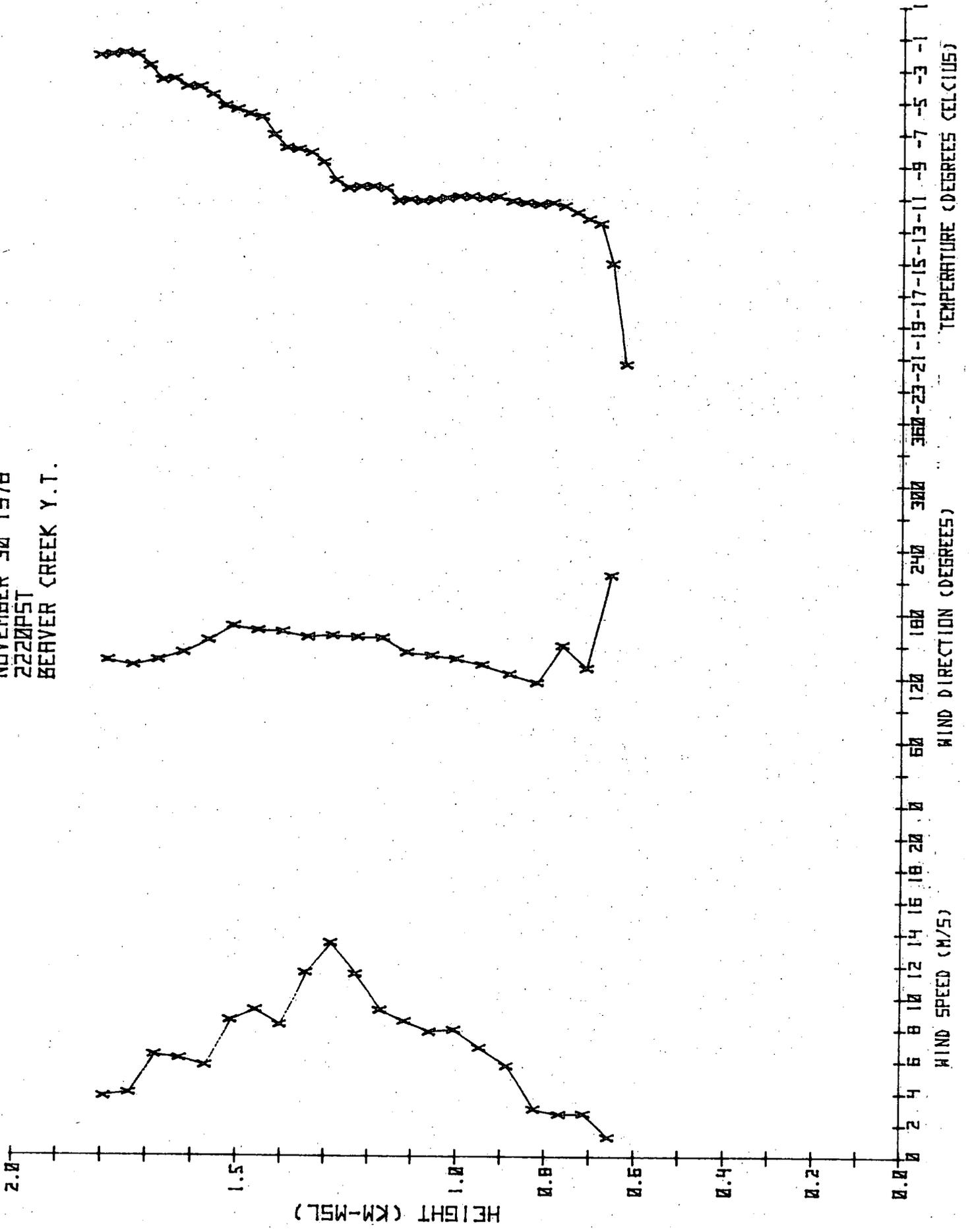
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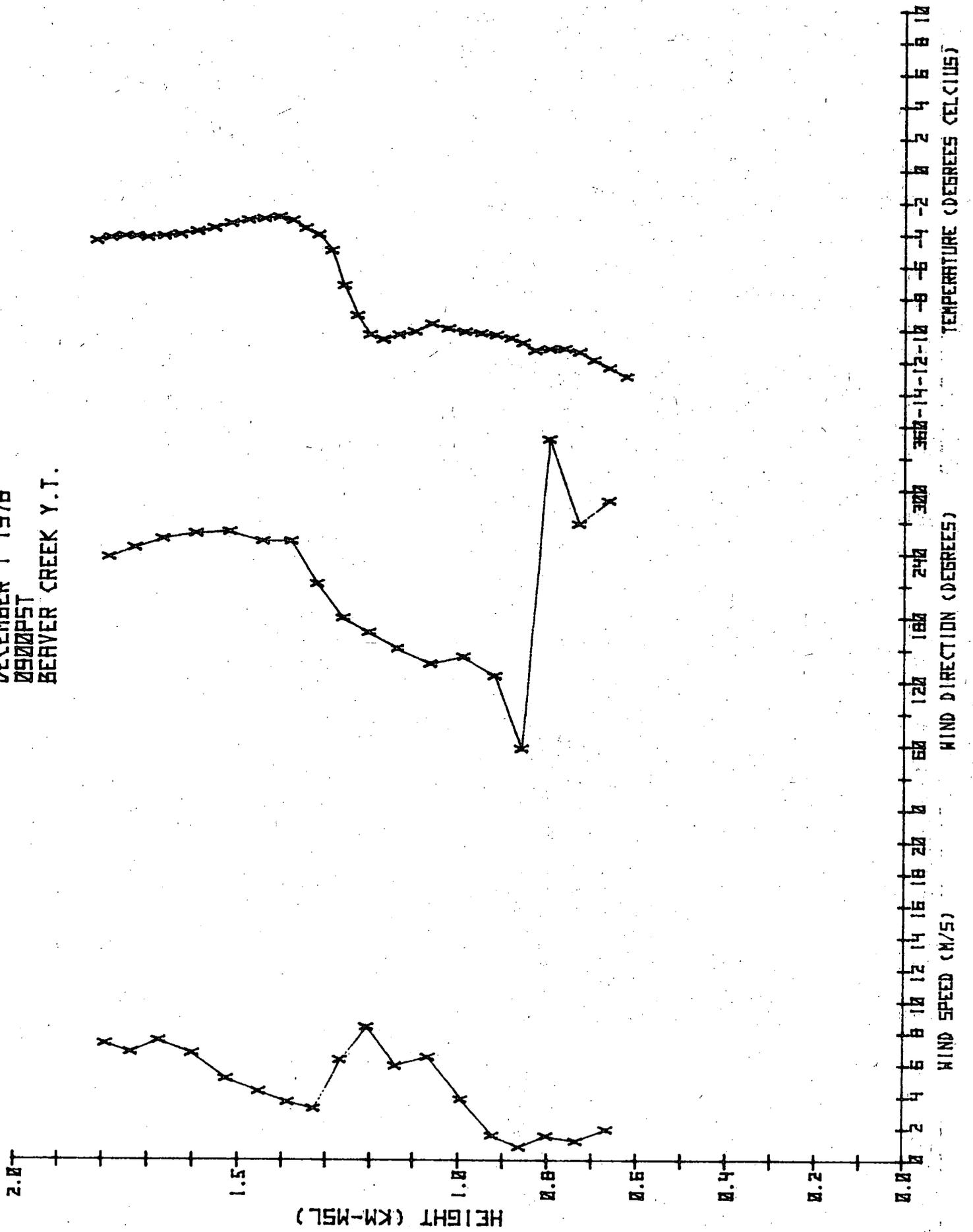
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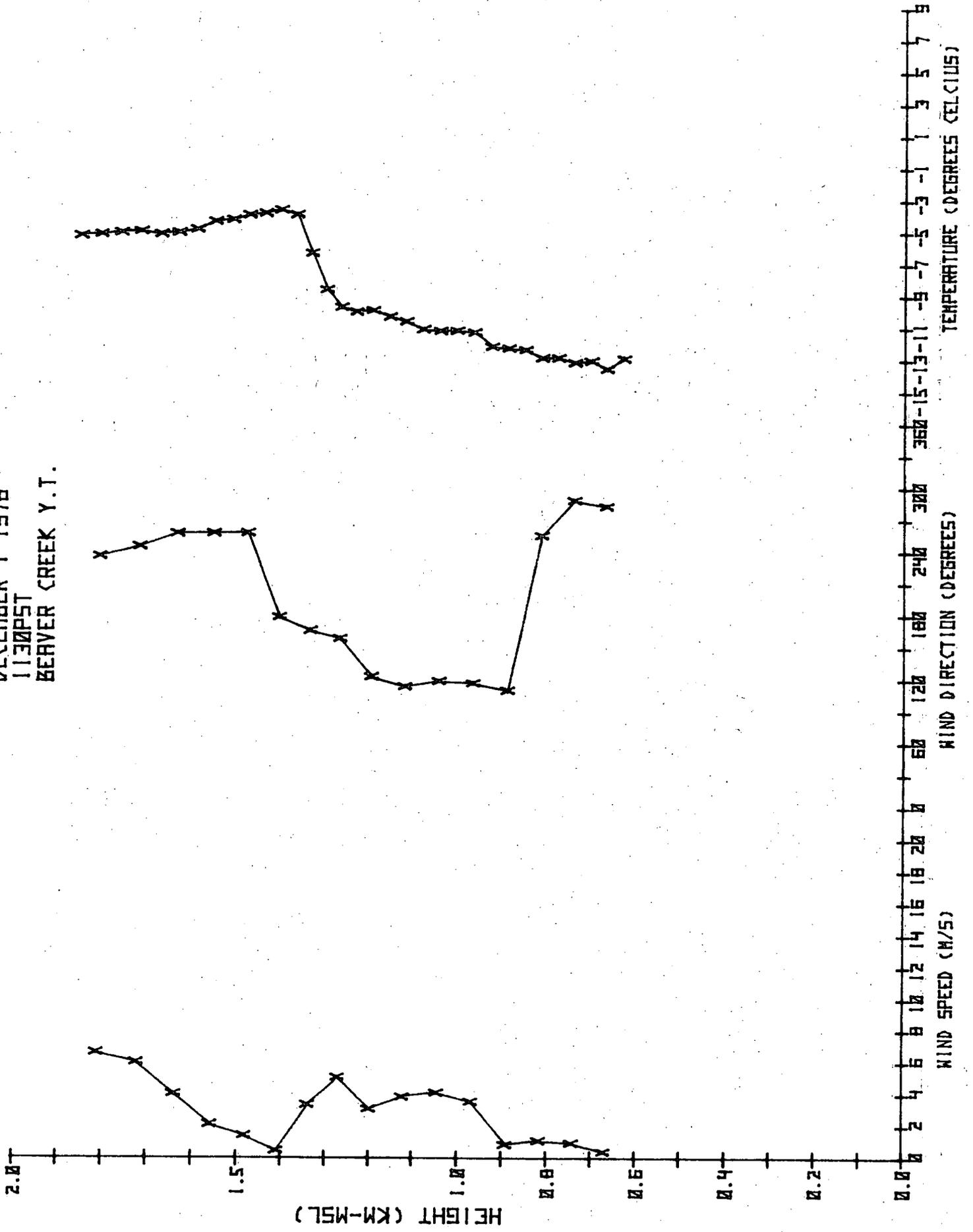
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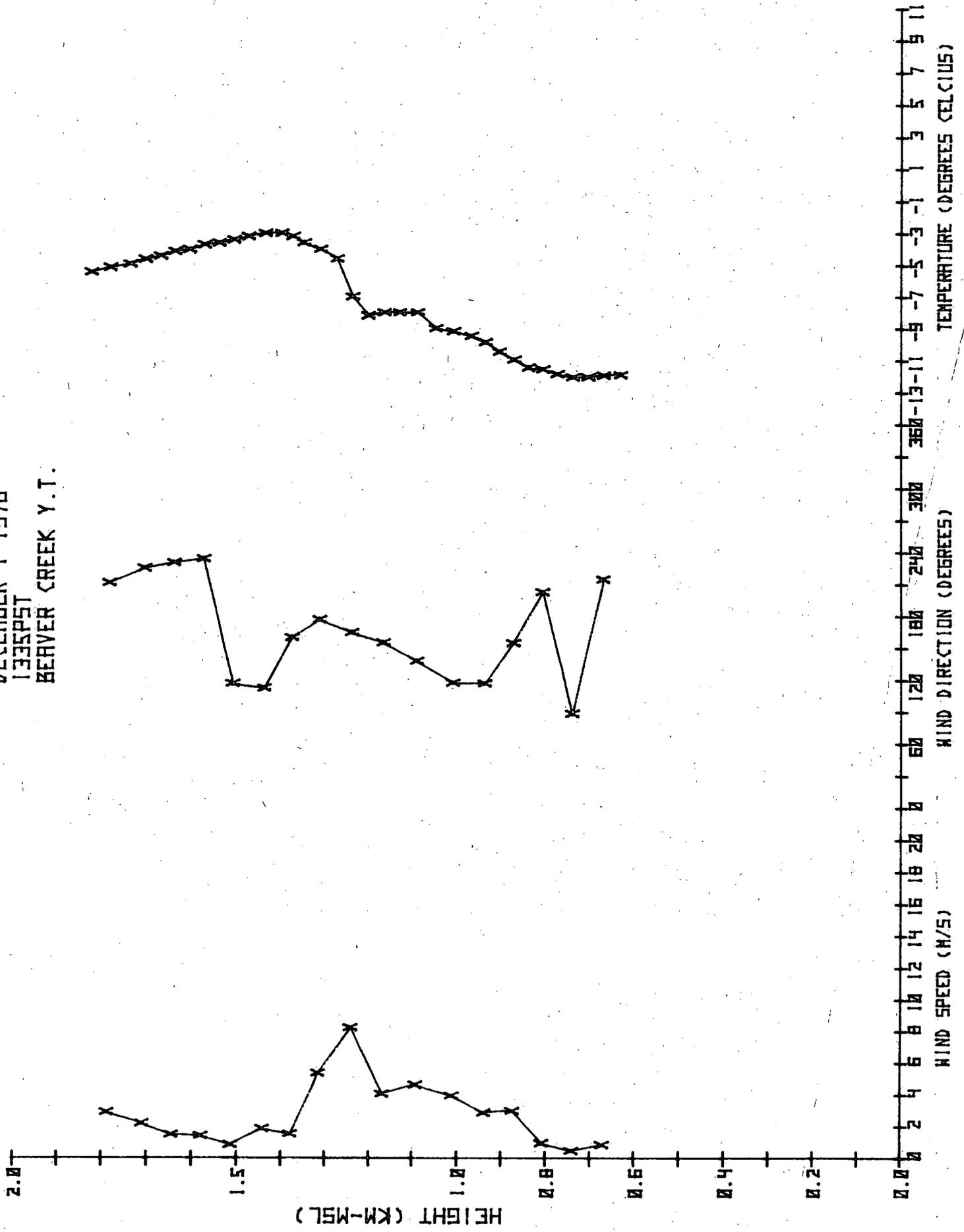
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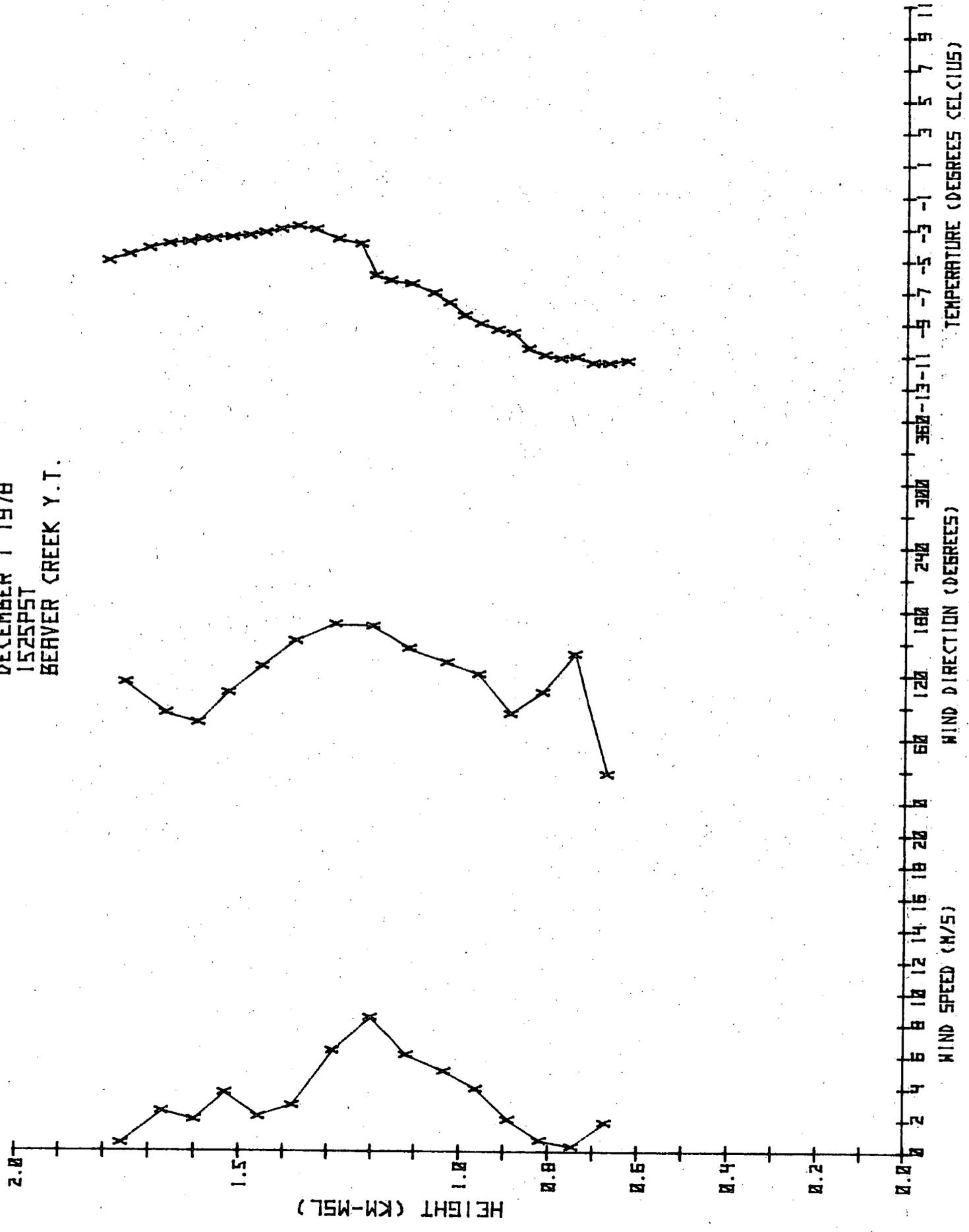
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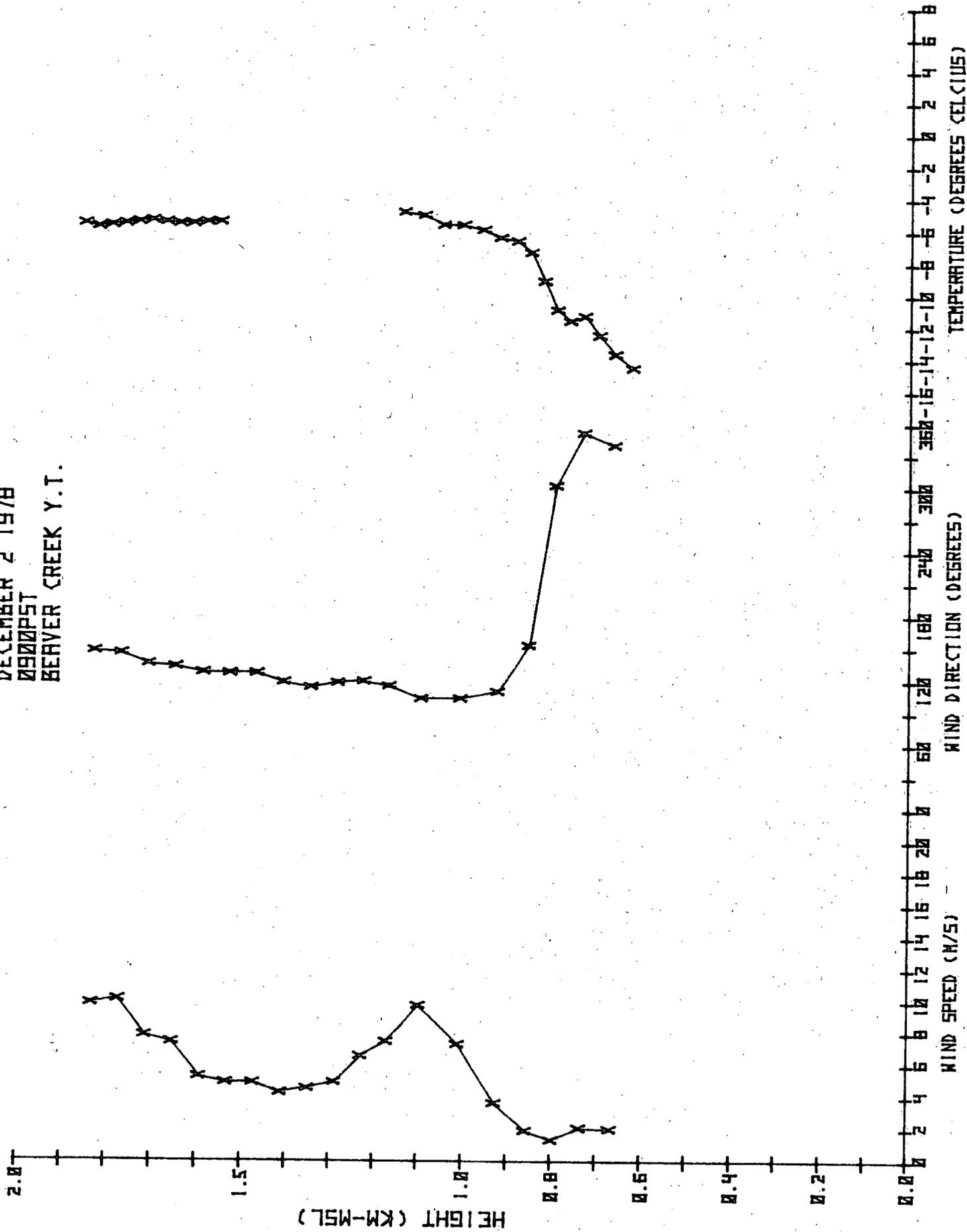
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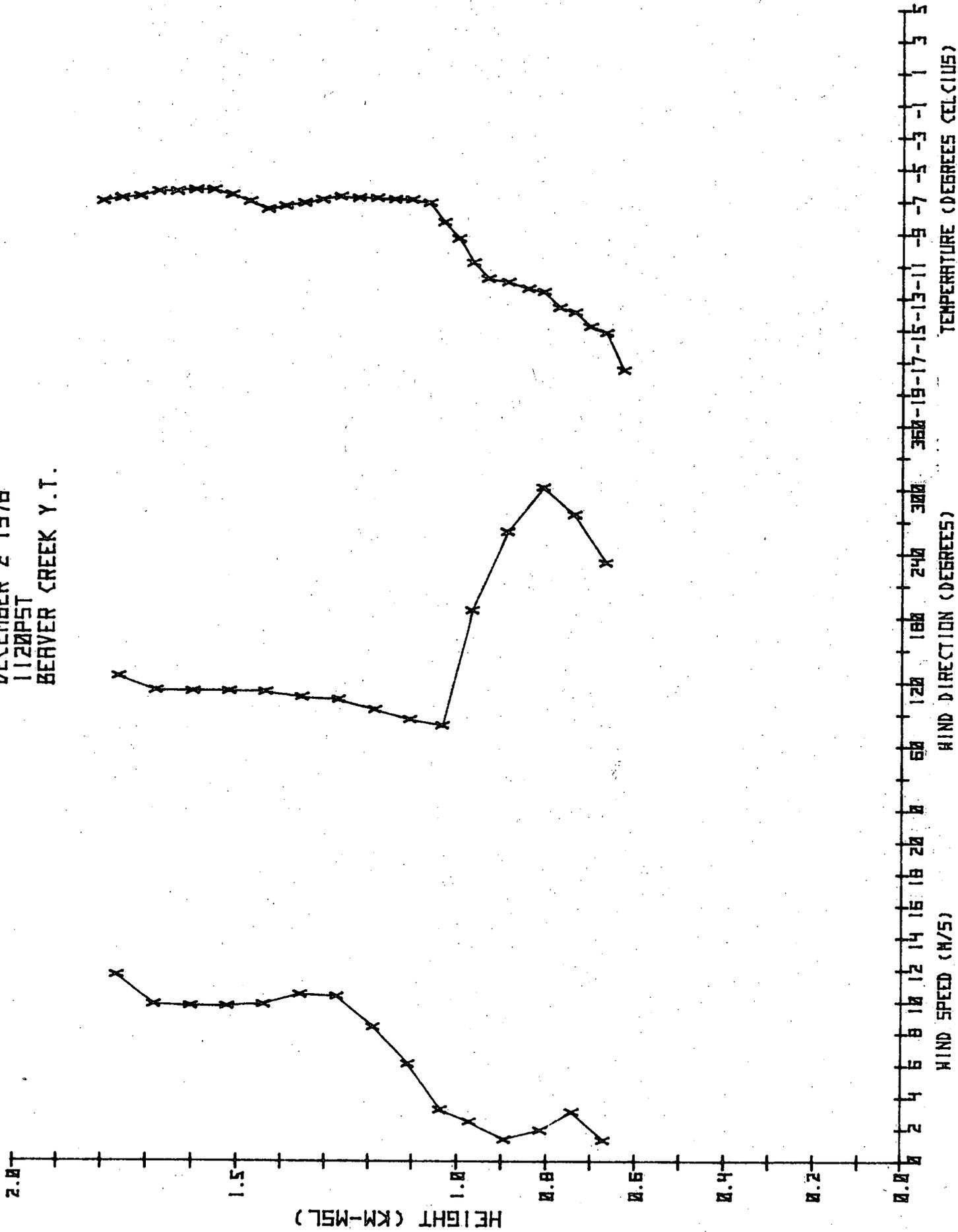
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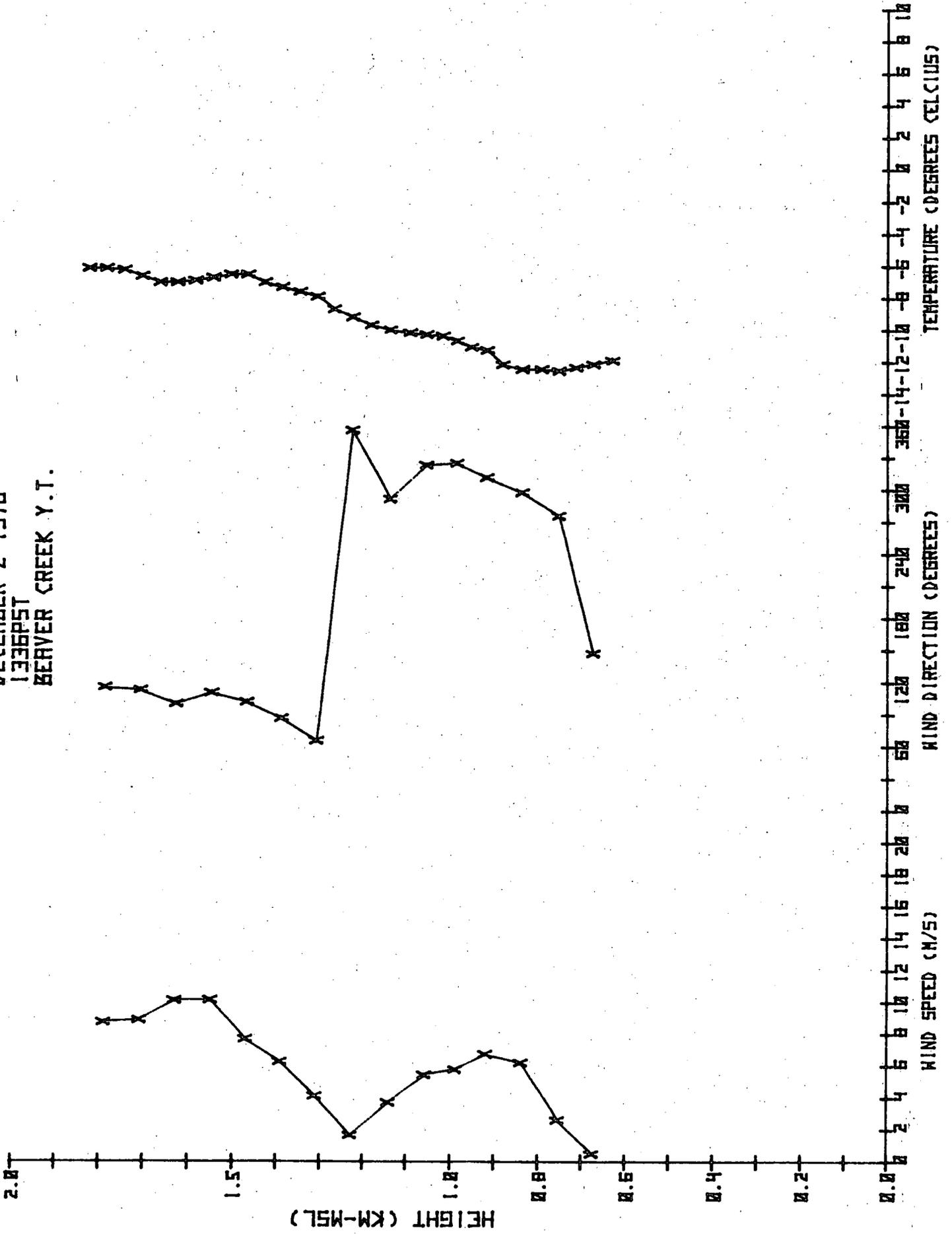
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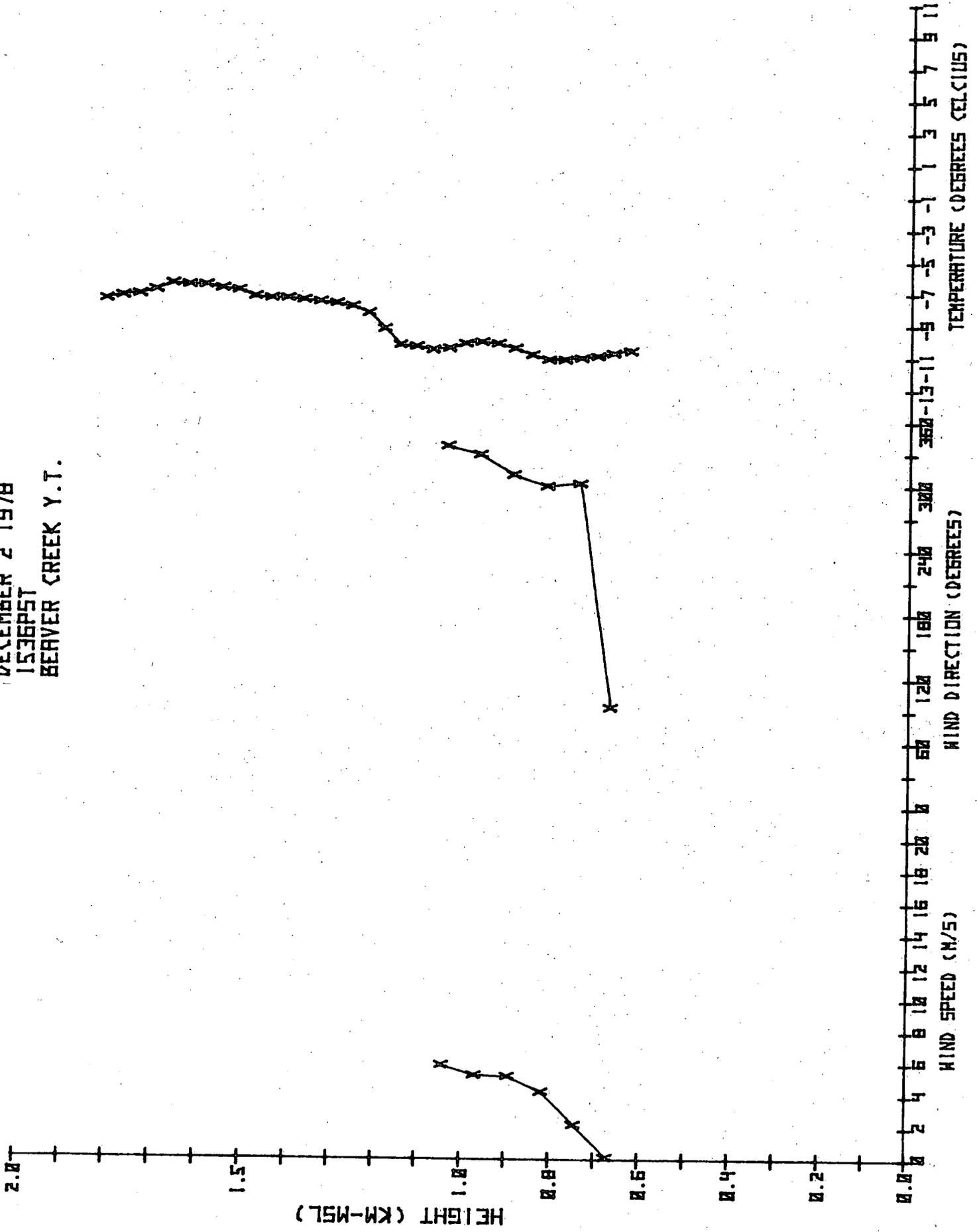
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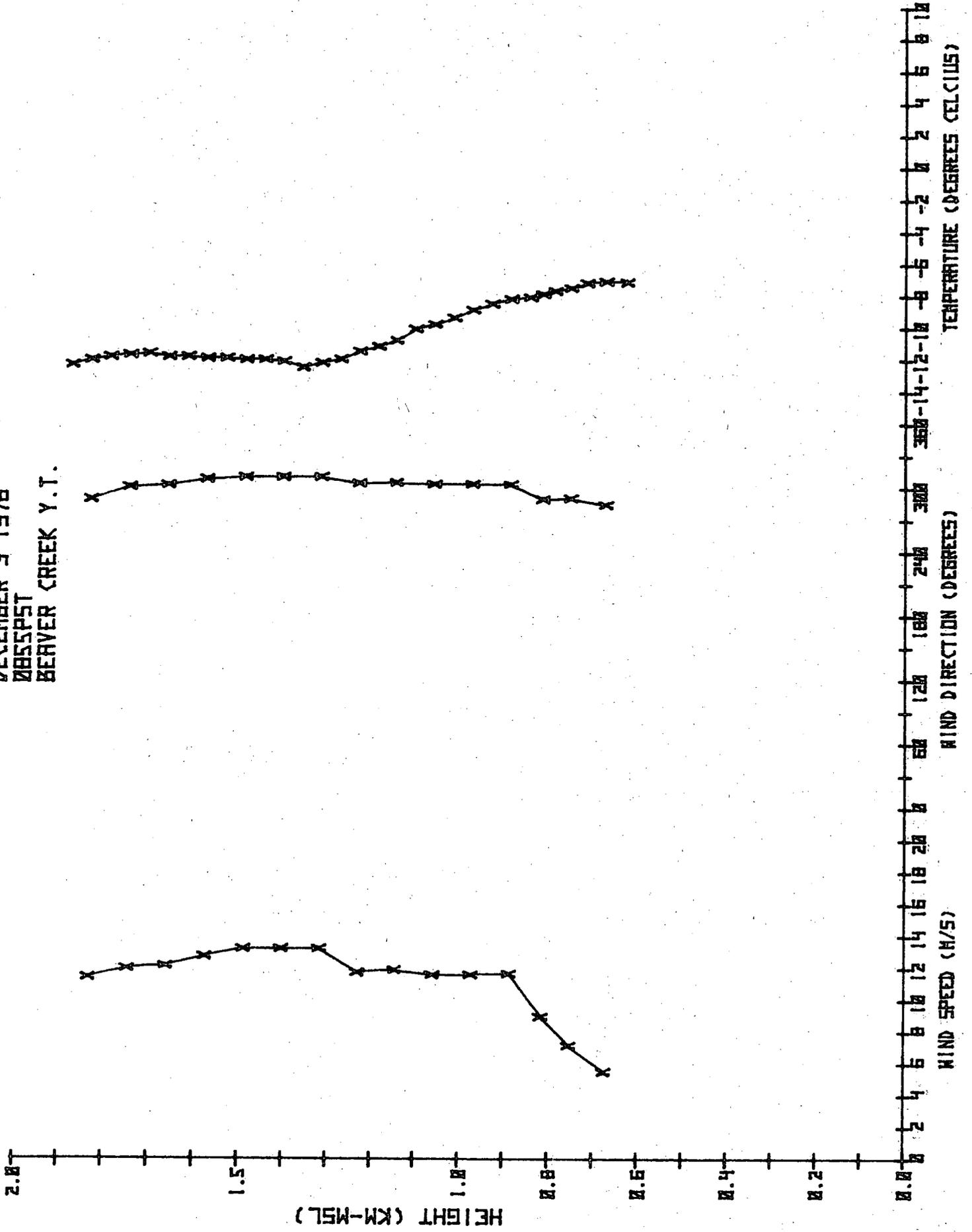
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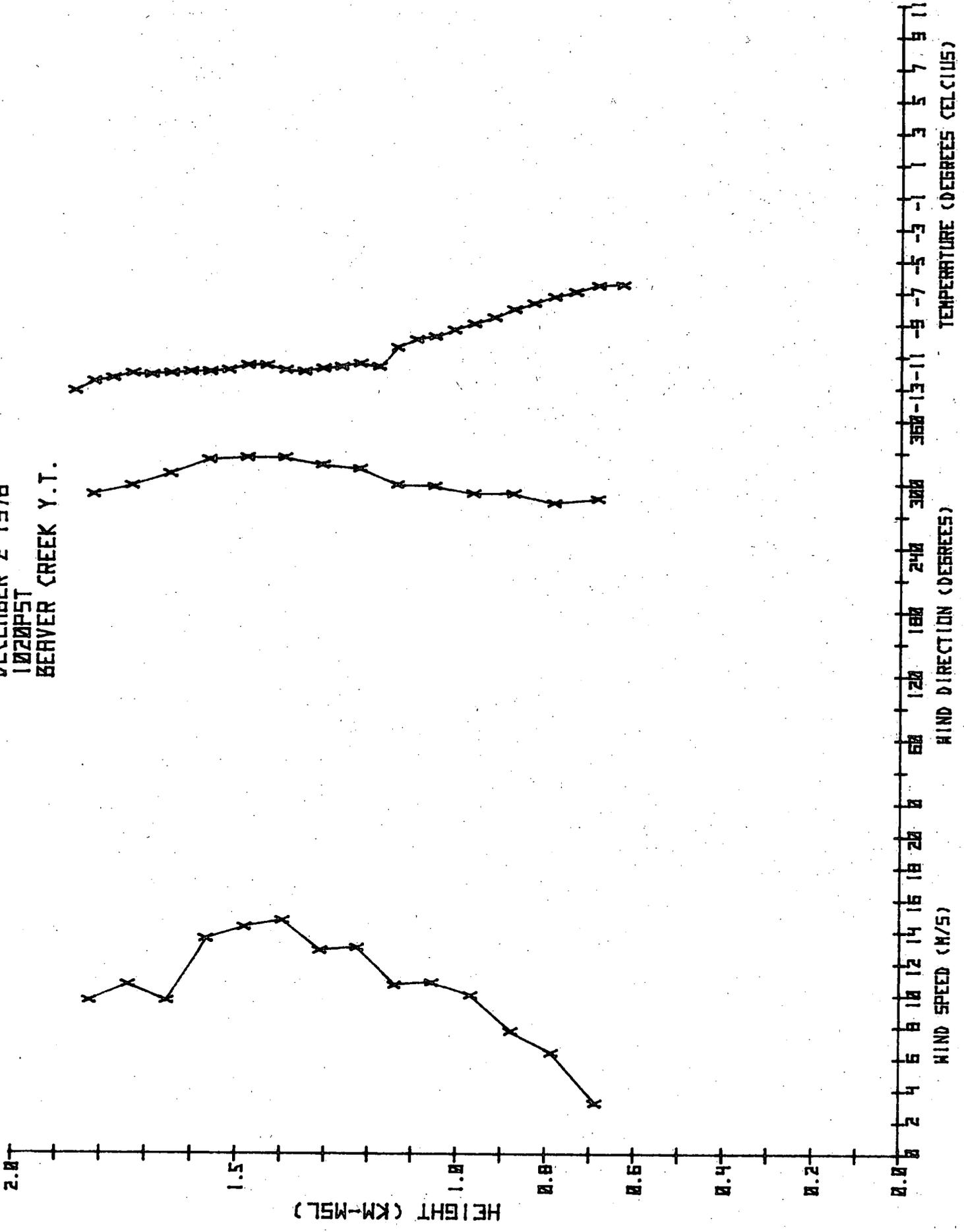
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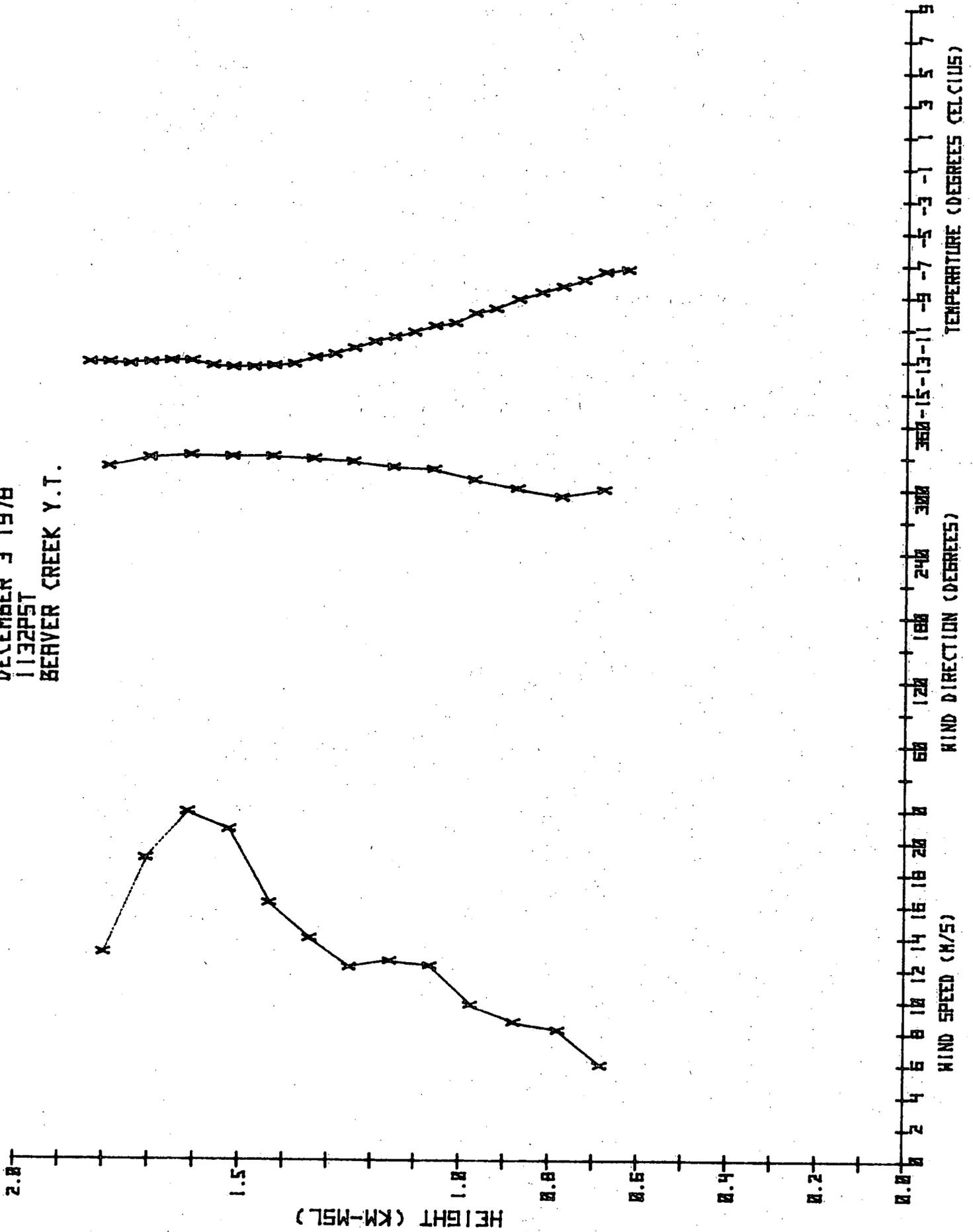
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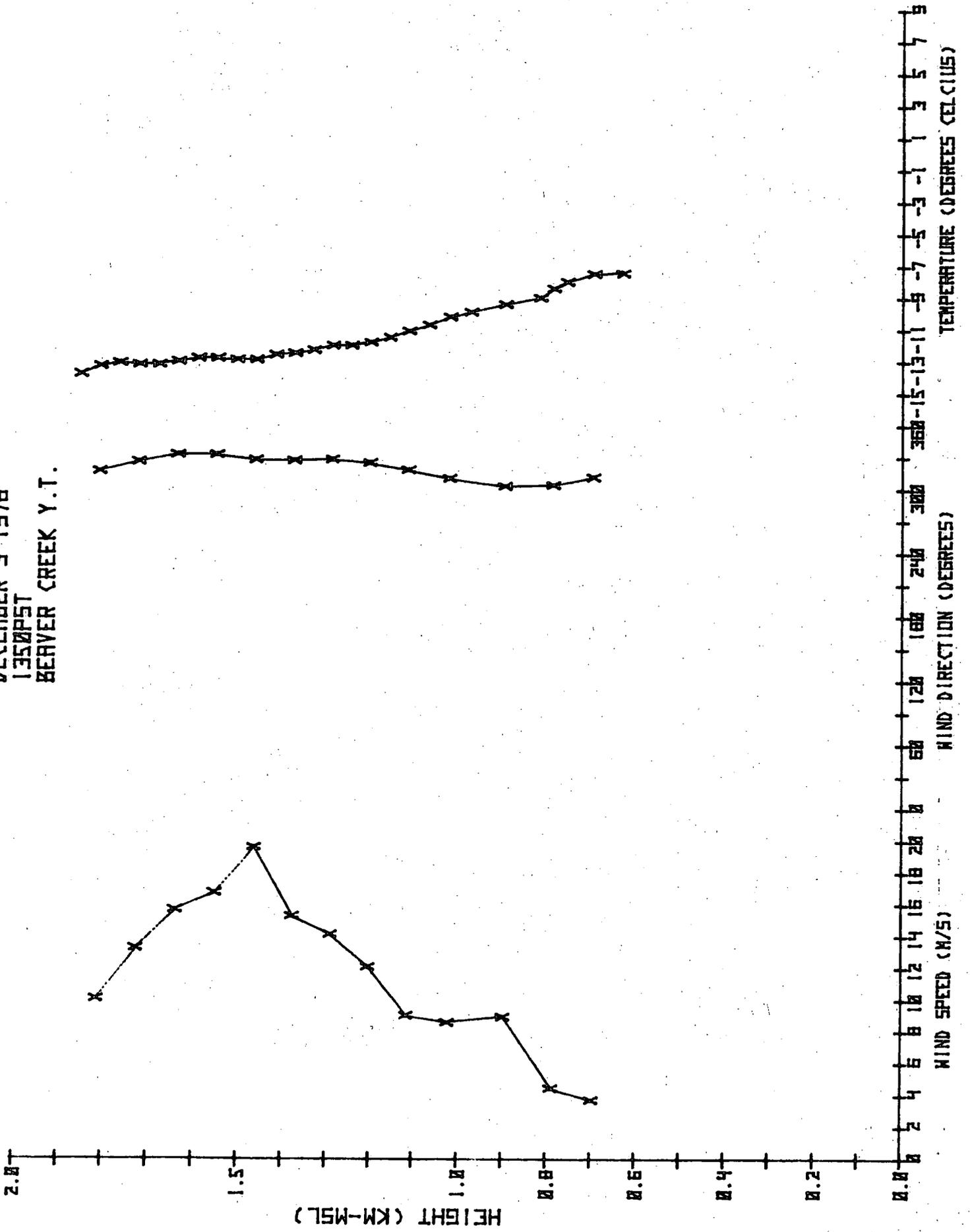
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 1020PST
 BEAVER CREEK Y.T.



DECEMBER 3 1978
 1132PST
 BEAVER CREEK Y.T.



DECEMBER 3 1978
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 BEAVER CREEK Y.T.





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