

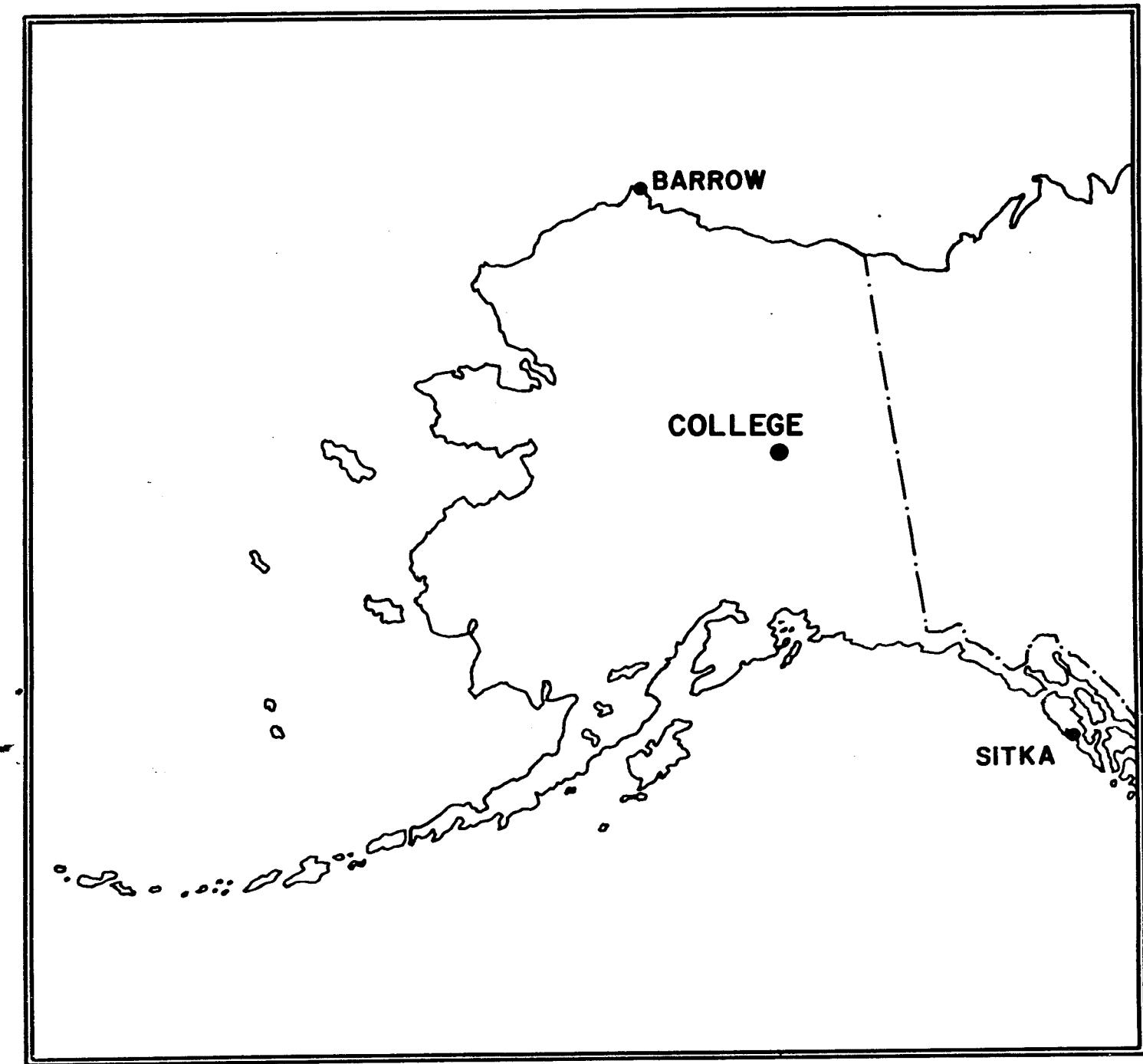
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALASKAN GEOLOGY BRANCH
TECHNICAL DATA FILE

PRELIMINARY GEOMAGNETIC DATA
COLLEGE OBSERVATORY
FAIRBANKS, ALASKA

OCTOBER 1978

OPEN FILE REPORT 78-300J



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Normal Magnetograms
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THIS REPORT WAS PREPARED UNDER THE DIRECTION OF JOHN B. TOWNSHEND, CHIEF OF THE COLLEGE OBSERVATORY WITH THE ASSISTANCE OF OBSERVATORY STAFF MEMBERS J. E. PAPP, ASST. CHIEF, AND S. P. TILTON, AND IN COOPERATION WITH THE GEOPHYSICAL INSTITUTE OF THE UNIVERSITY OF ALASKA. THE COLLEGE OBSERVATORY IS A PART OF THE BRANCH OF ELECTROMAGNETISM AND GEOMAGNETISM OF THE U.S. GEOLOGICAL SURVEY.

COLLEGE OBSERVATORY PRELIMINARY GEOMAGNETIC DATA

INTRODUCTION

The preliminary geomagnetic data included here is made available to scientific personnel and organizations, as part of a cooperative effort and on a data exchange basis because of the early need by some users. To avoid delay, all of the data is copied from original forms processed at the observatory; therefore it should be regarded as preliminary. Inquiries about this report or about the College Observatory should be addressed to:

Chief, College Observatory
 U.S. Geological Survey
 Yukon Drive on West Ridge
 Fairbanks, Alaska 99701

Requests for copies of the magnetograms except for the current month should be addressed to:

World Data Center A-NOAA
 Environmental Data Service
 Boulder, Colorado 80302

OBSERVATORY LOCATION

The College Observatory, operated by the U. S. Geological Survey, is located at the University of Alaska, Fairbanks, Alaska. It is near the Auroral Zone and the northern limit of the world's greatest earthquake belt, the circum-Pacific Seismic belt. Although the observatory's basic operation is in geomagnetism and seismology, it cooperates with other scientists and organizations in areas where the facility and personnel can be of service.

The observatory is one of three operated by the USGS in Alaska. The others are located at Barrow and Sitka.

The position of the observatory site is:
 Geographic latitude..... $64^{\circ}51.6'N$
 Geographic longitude..... $147^{\circ}50.2'W$
 Geomagnetic latitude..... $+64.6^{\circ}$
 Geomagnetic longitude..... $+256.5^{\circ}$
 Elevation.....200 meters

GEOMAGNETIC DATA

Normal, Storm, and Rapid Run magnetograms and appropriate calibration data are processed daily at the observatory and are available for analysis or copying. Also available are mean hourly scalings, K-Indices, selected magnetic phenomena reports, and on a real-time basis are recordings from a 3-component fluxgate magnetometer and F-component proton magnetometer.

Magnetic Activity

The K-Index. The K-Index is a logarithmic measurement of the range of the most disturbed component (D or H) of the geomagnetic field for eight intervals beginning 0000-0300, 0300-0600...2100-2400 UT. It is a measure of the difference between the highest and lowest deviation from a smooth curve to be expected for a component on a magnetically quiet day, within a three hour interval.

The Equivalent Daily Amplitude, AK. The K-Index is converted into an equivalent range, ak, which is near the center of the limiting gamma ranges for a given K. The average of the eight values is called equivalent daily amplitude AK. The unit 10γ has been chosen so as not to give the illusion of an accuracy not justified.

The schedule for converting gamma range to K, and K to ak is as follows:

| Gamma Range | K - Index | ak* |
|-------------|-----------|--------------------|
| 0 < 25 | 0 | 0 |
| 25 < 50 | 1 | 3 |
| 50 < 100 | 2 | 7 |
| 100 < 200 | 3 | 15 |
| 200 < 350 | 4 | 27 |
| 350 < 600 | 5 | 48 |
| 600 < 1000 | 6 | 80 |
| 1000 < 1650 | 7 | 140 |
| 1650 < 2500 | 8 | 240 |
| 2500+ | 9 | 400 (10γ) |

The Magnetic Daily Character Figure, C. To each Universal day a character is assigned on the basis C=0, if it is quiet; C=1 if it is moderately disturbed; C=2 if it is greatly disturbed. The method used to assign characters at the College Observatory is based on AK as follows:

| AK Range | C |
|-----------------|---|
| 0 \approx 11 | 0 |
| 11 \approx 50 | 1 |
| 50+ | 2 |

Routine assignment of C was discontinued at College on January 1, 1976.

Selected Phenomena & Outstanding Magnetic Effects

Prior to January 1, 1976, the Normal & Rapid Run records were reviewed at the observatory for selected magnetic phenomena and the events identified were forwarded to the IUGG Commission on Magnetic Variations and Disturbances. This was discontinued on January 1, 1976, but a report on Outstanding Magnetic Effects is prepared monthly for this report.

Principal Magnetic Storms

Gradual and sudden commencement magnetic disturbances with at least one K-Index of 5 or greater, which are believed to be part of a world-wide disturbance, are classified as principal magnetic storms. The time of the storm beginning and ending; direction and amplitude of sudden commencements; period of maximum activity; and storm range are reported. Monthly reports of these data are forwarded to the World Data Center A in Boulder, Colorado.

Magnetogram Hourly Scalings

Magnetogram hourly scalings are averages for successive periods of one hour for the D, H, and Z elements. The value in the column headed "01" is the average for the hour beginning 0000 and ending 0100. Note that the values on the scaling sheets are in tenths of mm with the decimal point omitted. The user of these scalings should keep in mind that the tabular values are hourly means and if he is interested in the detailed morphology of the magnetic field, he should refer directly to the magnetograms.

Magnetograms

The normal magnetograms in this report are reproduced at about one-third the size of the originals. Preliminary base-line values and scale values adopted for use with the original magnetograms are included. For days when the magnetic field is too disturbed for the Normal magnetogram to be readable, Storm magnetograms are reproduced.

Absolutes, Base-lines, and Scale Values

To determine the absolute value of the magnetic field from the hourly means or from point scalings the following equations should be used:

$D = B_D \cdot S_D$; $H = B_H \cdot S_H$; $Z = B_Z \cdot S_Z$
 where D, H, and Z are absolute values;
 B_D , B_H and B_Z are base-line values;
 S_D , S_H and S_Z are scale values;
 and d, h, and z are scalings in millimeters.

NOAA FORM 76-133 (9-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONMAGNETIC ACTIVITY
(Greenwich civil time, counted from midnight to midnight)

OBSERVATORY

COLLEGE, ALASKA

MONTH AND YEAR

OCTOBER 1978

| DATE | K-INDICES | | | | | | | | SUM | AK | TIME SCALE ON MAGNETOGRAMS | | | | | |
|------|-----------|-------|-------|-------|-------|-------|-------|-------|-----|----|--|-----|---|---|---|---|
| | 00-03 | 03-06 | 06-09 | 09-12 | 12-15 | 15-18 | 18-21 | 21-24 | | | 20 mm/hr | d | h | m | | |
| 1 | 2 | 2 | 3 | 5 | 5 | 4 | 2 | 3 | 26 | 22 | SUDDEN COMMENCEMENTS | | | | | |
| 2 | 2 | 2 | 2 | 6 | 5 | 4 | 1 | 1 | 23 | 23 | | | | | | |
| 3 | 1 | 2 | 3 | 5 | 4 | 2 | 1 | 1 | 19 | 14 | | | | | | |
| 4 | 3 | 4 | 5 | 6 | 5 | 3 | 2 | 2 | 30 | 31 | | | | | | |
| 5 | 2 | 1 | 1 | 5 | 4 | 1 | 1 | 0 | 15 | 12 | | | | | | |
| 6 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 06 | 02 | | | | | | |
| 7 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 03 | 01 | | | | | | |
| 8 | 0 | 2 | 1 | 5 | 3 | 0 | 1 | 1 | 13 | 10 | | | | | | |
| 9 | 0 | 1 | 2 | 4 | 4 | 2 | 1 | 2 | 16 | 10 | | | | | | |
| 10 | 2 | 3 | 2 | 6 | 5 | 0 | 1 | 2 | 21 | 21 | | | | | | |
| 11 | 1 | 1 | 2 | 3 | 0 | 0 | 0 | 1 | 08 | 04 | | | | | | |
| 12 | 1 | 1 | 0 | 6 | 5 | 5 | 2 | 2 | 22 | 25 | | | | | | |
| 13 | 2 | 2 | 3 | 2 | 0 | 0 | 2 | 1 | 12 | 06 | | | | | | |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 09 | 04 | | | | | | |
| 15 | 1 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 08 | 03 | | | | | | |
| 16 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 03 | 01 | | | | | | |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 03 | 01 | | | | | | |
| 18 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 3 | 32 | 30 | POSSIBLE SOLAR-FLARE EFFECTS BASED ON INSPECTION OF GRAMS ALONE (WITHOUT REFERENCE TO DATA FROM OTHER SOURCES) | | | | | |
| 19 | 3 | 4 | 7 | 5 | 6 | 3 | 2 | 2 | 32 | 42 | | | | | | |
| 20 | 2 | 2 | 1 | 6 | 4 | 3 | 2 | 1 | 21 | 19 | | | | | | |
| 21 | 1 | 2 | 1 | 6 | 5 | 3 | 2 | 2 | 22 | 21 | BEGIN | END | | | | |
| 22 | 2 | 2 | 5 | 6 | 3 | 3 | 2 | 1 | 24 | 23 | d | h | m | d | h | m |
| 23 | 0 | 1 | 3 | 3 | 3 | 2 | 1 | 1 | 14 | 08 | | | | | | |
| 24 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 06 | 02 | | | | | | |
| 25 | 0 | 0 | 1 | 5 | 4 | 3 | 2 | 1 | 16 | 13 | | | | | | |
| 26 | 0 | 1 | 2 | 3 | 5 | 4 | 4 | 4 | 23 | 19 | | | | | | |
| 27 | 4 | 5 | 5 | 6 | 5 | 3 | 1 | 2 | 31 | 35 | | | | | | |
| 28 | 2 | 4 | 6 | 4 | 4 | 4 | 1 | 1 | 26 | 25 | | | | | | |
| 29 | 2 | 2 | 3 | 4 | 6 | 5 | 5 | 2 | 29 | 30 | | | | | | |
| 30 | 2 | 4 | 4 | 6 | 5 | 6 | 5 | 3 | 35 | 41 | | | | | | |
| 31 | 2 | 2 | 3 | 5 | 6 | 6 | 3 | 2 | 29 | 32 | | | | | | |

K SCALE USED:

LOWER LIMIT FOR K = 9.....

D

H

Z

(mm)

CURRENT SCALE VALUE.....

683.8

321.7

(Y/mm)

LOWER LIMIT FOR K = 9

3.75

7.80

(to nearest 10Y)

2560

2510

SCALINGS AND COMPUTATIONS HAVE BEEN CHECKED.

APPROVED JOHN B. TOWNSHEND, CHIEF, COLLEGE OBSERVATORY

OBSERVER IN CHARGE

| OUTSTANDING MAGNETIC EFFECTS | | | OBSERVATORY COLLEGE, ALASKA |
|------------------------------|--------------|--------------------------------------|------------------------------------|
| DATE | TIME U.T. | NATURE OF PHENOMENON ¹ | MONTH OCTOBER YEAR 1978 |
| 4 | 0047 | ssc* | |
| 9 | 0321 | si* | |
| 11 | 19XX | pc4 | |
| 31 | 1831 | si* | |

IDENTIFIED BY:

GBT

VERIFIED BY:

JEP

1. NATURE OF PHENOMENON: ssc, ssc*, si, si*, b, bp, bs, bps, pcl, pc2 - - - pc5,
pg, pi 1, pi 2, sfe.

**PRINCIPAL MAGNETIC STORMS
COLLEGE OBSERVATORY, COLLEGE,
ALASKA
OCTOBER 1978**

WDC-A FOR SOLAR-TERRESTRIAL PHYSICS
ENVIRONMENTAL DATA SERVICE, NOAA
BOULDER, COLORADO 80303 U.S.A.

COLLEGE OBSERVATORY, COLLEGE, ALASKA
OCTOBER 1978

| Obs. 2 letter code | Geomag. lat. | Commencement | | | SC - amplitudes | | | Max. 3 hr - index K | | | Ranges | | | UT End day hr |
|-----------------------------|-----------------|--------------|----------------|-------|-----------------|------|------|---------------------|-----------------|---|--------|------|------|------------------|
| | | day | hr min (UT) | type | D(') | H(Y) | Z(Y) | day | (3 hr - period) | K | D(') | H(Y) | Z(Y) | |
| CO | 64.96 N | 04 | 0047 | s.c.* | +15 | +100 | +23 | 04 | 4 | 6 | 83 | 830 | 380 | 04 16 |
| | | 17 | 23XX | .. | .. | .. | .. | 19 | 3 | 7 | 186 | 1640 | 1010 | 19 16 |
| | | 26 | 08XX | .. | .. | .. | .. | 27 | 4 | 6 | 240 | 1480 | 1080 | 31 19 |
| | | | | | | | | 28 | 3 | 6 | 6 | 29 | 5 | |
| | | | | | | | | 30 | 4,6 | 6 | 6 | 31 | 5,6 | |
| | | | | | | | | 31 | | | | | | |

COLLEGE OBSERVATORY, COLLEGE, ALASKA -- PRELIMINARY CALIBRATION DATA FOR:

OCTOBER1978

| NORMAL MAGNETOGRAPH | | | | |
|---------------------|---------------------|---------------------|-------------|---------------------|
| COMPONENT | PERIOD | | CALIBRATION | |
| | FROM | TO | SCALE VALUE | BASELINE |
| D | 0000 U.T., 10-1-78 | 2400 U.T., 10-31-78 | 1.0'/mm | 3.8 x/mm 27° 47.2 E |
| | | | | |
| | | | | |
| | | | | |
| H | 0000 U.T., 10-1-78 | 2400 U.T., 10-15-78 | 7.88'/mm | 12771.8 |
| | 0000 U.T., 10-16-78 | 2400 U.T., 10-31-78 | " | 12760.8 |
| | | | | |
| | | | | |
| Z | 0000 U.T., 10-1-78 | 2400 U.T., 10-15-78 | 7.88'/mm | 55122.8 |
| | 0000 U.T., 10-16-78 | 2400 U.T., 10-31-78 | " | 55128.8 |
| | | | | |
| | | | | |

STORM MAGNETOGRAPH

| COMPONENT | PERIOD | | CALIBRATION | |
|-----------|--------------------|---------------------|-------------|----------------------|
| | FROM | TO | SCALE VALUE | BASELINE |
| D | 0000 U.T., 10-1-78 | 2400 U.T., 10-31-78 | 7.9'/mm | 29.7 x/mm 24° 18.7 E |
| | | | | |
| | | | | |
| | | | | |
| H | 0000 U.T., 10-1-78 | 2400 U.T., 10-31-78 | 44.18'/mm | 11518.8 |
| | | | | |
| | | | | |
| | | | | |
| Z | 0000 U.T., 10-1-78 | 2400 U.T., 10-31-78 | 48.8 x/mm | 54001.8 |
| | | | | |
| | | | | |
| | | | | |

RAPID RUN MAGNETOGRAPH

| COMPONENT | PERIOD | | CALIBRATION | |
|-----------|--------|----|-------------|--|
| | FROM | TO | SCALE VALUE | |
| D | | | | |
| | | | | |
| | | | | |
| | | | | |
| H | | | | |
| | | | | |
| | | | | |
| | | | | |
| Z | | | | |
| | | | | |
| | | | | |
| | | | | |

MONTHLY MEAN ABSOLUTE VALUES*

| D | H | Z |
|---|---------|---------|
| 28° 14.5 E | 13033.8 | 55383.8 |
| * COMPUTED FROM TEN QUIETEST DAYS DURING MONTH. | | |
| DAYS USED: OCT 6, 7, 11, 13, 14, 15, 16, 17, 23, 24 | | |

No. 15 FORM 74-104

MAGNETOGRAPH HOURLY SCALINGS

(UNIVERSAL TIME) Shifting corrections have been applied. Negative values are in red. with minus signs shown.

| C | G | T ¹ | H ¹ | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | YEAR | | MONTH | | ELE- MENT | |
|----|-----|----------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|-----|-------|--|--------------|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | CO | 78 | OCT | II | | | |
| 01 | 260 | 236 | 250 | 260 | 469 | 267 | 265 | 284 | 192 | 170 | 239 | 01 | 299 | 311 | 334 | 297 | 394 | 350 | 361 | 371 | 303 | 289 | 258 | 248 | 248 | 6912 | | | | | | | |
| 02 | 251 | 257 | 250 | 271 | 268 | 251 | 241 | 256 | 300 | 241 | 178 | 453 | 02 | 468 | 531 | 519 | 551 | 311 | 305 | 312 | 281 | 277 | 257 | 242 | 242 | 7420 | | | | | | | |
| 03 | 244 | 250 | 249 | 248 | 240 | 241 | 278 | 241 | 847 | 196 | 247 | 241 | 03 | 312 | 271 | 280 | 340 | 343 | 351 | 330 | 329 | 370 | 370 | 238 | 260 | 251 | 6518 | | | | | | |
| 04 | 249 | 230 | 244 | 248 | 200 | 231 | 161 | 159 | 232 | 419 | 301 | 205 | 04 | 404 | 443 | 218 | 310 | 356 | 357 | 337 | 339 | 367 | 188 | 238 | 250 | 6658 | | | | | | | |
| 05 | 240 | 237 | 248 | 258 | 241 | 258 | 260 | 270 | 251 | 340 | 219 | 281 | 05 | 380 | 292 | 308 | 323 | 337 | 337 | 306 | 312 | 279 | 253 | 241 | 6602 | | | | | | | | |
| 06 | 241 | 248 | 251 | 256 | 259 | 251 | 253 | 251 | 260 | 256 | 264 | 271 | 06 | 278 | 287 | 291 | 310 | 320 | 339 | 337 | 336 | 393 | 328 | 250 | 250 | 6662 | | | | | | | |
| 07 | 244 | 241 | 251 | 250 | 251 | 257 | 247 | 227 | 242 | 247 | 248 | 252 | 07 | 281 | 297 | 301 | 319 | 316 | 317 | 321 | 310 | 303 | 281 | 253 | 258 | 6700 | | | | | | | |
| 08 | 260 | 257 | 244 | 238 | 229 | 231 | 241 | 246 | 250 | 247 | 242 | 256 | 08 | 301 | 308 | 299 | 308 | 314 | 320 | 308 | 303 | 300 | 299 | 267 | 251 | 6565 | | | | | | | |
| 09 | 257 | 250 | 250 | 251 | 251 | 251 | 251 | 251 | 251 | 251 | 251 | 251 | 09 | 326 | 324 | 329 | 321 | 333 | 333 | 307 | 313 | 310 | 303 | 282 | 319 | 282 | 6757 | | | | | | |
| 10 | 208 | 221 | 209 | 229 | 178 | 199 | 231 | 209 | 240 | 239 | 219 | 243 | 10 | 316 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 297 | 6471 | | | | | |
| 11 | 248 | 241 | 221 | 241 | 252 | 238 | 247 | 240 | 249 | 249 | 249 | 249 | 11 | 266 | 214 | 249 | 280 | 289 | 281 | 298 | 308 | 319 | 326 | 318 | 300 | 261 | 358 | 6465 | | | | | |
| 12 | 232 | 231 | 239 | 238 | 242 | 250 | 242 | 250 | 251 | 249 | 251 | 256 | 12 | 238 | 236 | 238 | 248 | 246 | 246 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 239 | 237 | | | | | |
| 13 | 210 | 227 | 229 | 241 | 246 | 250 | 246 | 254 | 234 | 239 | 242 | 268 | 13 | 281 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 292 | 263 | 6313 | | | | | |
| 14 | 248 | 251 | 241 | 242 | 252 | 251 | 260 | 291 | 258 | 269 | 269 | 269 | 14 | 279 | 292 | 300 | 334 | 338 | 389 | 349 | 318 | 304 | 391 | 369 | 366 | 6828 | | | | | | | |
| 15 | 232 | 241 | 246 | 246 | 249 | 251 | 252 | 261 | 261 | 269 | 286 | 287 | 15 | 276 | 15 | 279 | 281 | 301 | 329 | 339 | 339 | 310 | 298 | 271 | 269 | 6680 | | | | | | | |
| 16 | 448 | 230 | 229 | 218 | 260 | 261 | 254 | 259 | 261 | 254 | 259 | 261 | 270 | 288 | 291 | 16 | 290 | 294 | 292 | 301 | 320 | 342 | 349 | 332 | 318 | 282 | 262 | 6743 | | | | | |
| 17 | 351 | 247 | 247 | 242 | 242 | 248 | 248 | 249 | 248 | 248 | 250 | 250 | 270 | 17 | 360 | 281 | 291 | 292 | 310 | 343 | 356 | 363 | 311 | 255 | 233 | 238 | 6548 | | | | | | |
| 18 | 227 | 159 | 161 | 110 | 384 | 66 | 263 | 179 | 322 | 341 | 207 | 207 | 18 | 396 | 334 | 291 | 328 | 371 | 342 | 308 | 404 | 151 | 167 | 421 | 227 | 6189 | | | | | | | |
| 19 | 306 | 221 | 241 | 241 | 208 | 213 | 207 | 76 | 94 | 186 | 253 | 281 | 19 | 507 | 201 | 414 | 308 | 306 | 310 | 318 | 338 | 327 | 322 | 239 | 236 | 6151 | | | | | | | |
| 20 | 371 | 268 | 231 | 852 | 260 | 252 | 261 | 249 | 249 | 257 | 281 | 281 | 20 | 277 | 270 | 280 | 320 | 358 | 351 | 310 | 269 | 230 | 230 | 264 | 264 | 6713 | | | | | | | |
| 21 | 262 | 244 | 244 | 240 | 242 | 244 | 240 | 244 | 250 | 250 | 249 | 260 | 241 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 281 | 6699 | | | | | | |
| 22 | 244 | 248 | 248 | 210 | 201 | 240 | 249 | 126 | 191 | 152 | 102 | 102 | 301 | 279 | 22 | 281 | 282 | 318 | 289 | 294 | 297 | 250 | 251 | 251 | 251 | 251 | 5772 | | | | | | |
| 23 | 270 | 261 | 259 | 226 | 226 | 289 | 289 | 292 | 292 | 258 | 330 | 300 | 279 | 291 | 23 | 341 | 361 | 361 | 328 | 300 | 298 | 317 | 314 | 273 | 244 | 261 | 6856 | | | | | | |
| 24 | 350 | 238 | 242 | 242 | 248 | 261 | 360 | 253 | 262 | 267 | 262 | 261 | 24 | 268 | 271 | 271 | 270 | 270 | 271 | 271 | 271 | 271 | 271 | 271 | 271 | 271 | 261 | 6501 | | | | | |
| 25 | 257 | 251 | 251 | 256 | 259 | 260 | 260 | 259 | 268 | 262 | 241 | 313 | 25 | 469 | 417 | 439 | 347 | 347 | 347 | 347 | 347 | 347 | 347 | 347 | 347 | 347 | 271 | 7058 | | | | | |
| 26 | 268 | 251 | 248 | 248 | 241 | 241 | 251 | 251 | 249 | 249 | 240 | 251 | 271 | 341 | 28 | 317 | 411 | 572 | 451 | 349 | 351 | 311 | 181 | 280 | 309 | 288 | 117 | 7111 | | | | | |
| 27 | 258 | 235 | 170 | 140 | 201 | 172 | -3 | 5 | 86 | 205 | 491 | 323 | 27 | 371 | 371 | 277 | 323 | 347 | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 230 | 6010 | | | | | |
| 28 | 241 | 231 | 238 | 250 | 211 | 236 | 367 | 191 | 241 | 237 | 271 | 271 | 26 | 290 | 306 | 408 | 318 | 299 | 300 | 308 | 308 | 308 | 278 | 242 | 251 | 249 | 6370 | | | | | | |
| 29 | 241 | 237 | 440 | 348 | 250 | 236 | 242 | 249 | 250 | 256 | 291 | 336 | 26 | 424 | 404 | 610 | 596 | 530 | 530 | 530 | 530 | 530 | 530 | 530 | 530 | 530 | 229 | 7320 | | | | | |
| 30 | 232 | 233 | 242 | 242 | 250 | 241 | 201 | 199 | 187 | 86 | 126 | 102 | 253 | 30 | 618 | 571 | 705 | 525 | 610 | 324 | 296 | 365 | 148 | 199 | 210 | 216 | 207 | 207 | 207 | | | | |
| 31 | 231 | 254 | 236 | 246 | 229 | 219 | 241 | 219 | 258 | 322 | 472 | 406 | 31 | 376 | 546 | 729 | 602 | 359 | 281 | 291 | 272 | 247 | 210 | 214 | 247 | 247 | 7687 | | | | | | |

Preliminary base-line and scale value:
 Interval Beginning
 Reckoning

SCALE BY S^QT
 CHECKED BY S^QT, EAS
 NAME REC'D. BY S^QT
 PUNCHED BY S^QT

Bearing Value
 Scale Value

(¹) Interpolated.
 (²) Significant portion of hour interpolated.
 (<>) Record of sheet for part of all hours if value is given, otherwise estimated for missing part.

No record or more than one value available because of normal gap.

Derived from Storm Map, converted to Normal Map.

ALASKAN GEOLOGY BRANCH
TECHNICAL DATA FILE

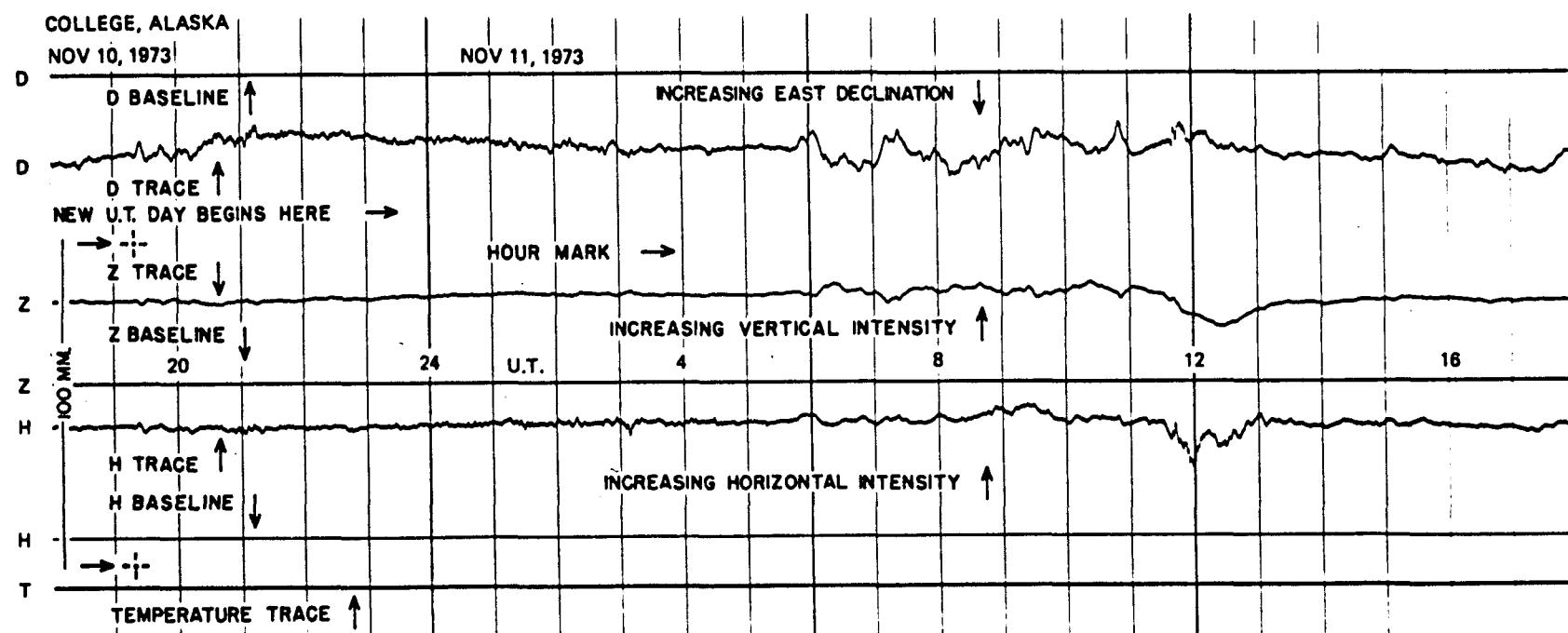
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | | | | | | | | | | | | YEAR | MONTH | ELE- | MONTLY SUM | | | | | | | | | | | |
|---|-------------|------------|-------------|----------------|----|----|----|----|----|----|----|------|-------|------|------------|------|------------|----|----|----|----|----|----|----|-------|-------|
| U. S. DEPARTMENT OF COMMERCE | | | | | | | | | | | | DAY | STORM | YR | MONTH | ELE- | MONTLY SUM | | | | | | | | | |
| MAGNETOGRAM HOURLY SCALINGS | | | | | | | | | | | | 6 AM | 6 PM | 78 | 79 | 80 | 81 | | | | | | | | | |
| (UNIVERSAL TIME) | (150W M.T.) | in hour 11 | of the same | universal day. | | | | | | | | | | | | | | | | | | | | | | |
| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | SUM | |
| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 6,096 | |
| 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 56,51 | |
| 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 73,90 | |
| 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 70,12 |
| 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 76,89 |
| 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 80,55 |
| 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 80,55 |
| 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 80,55 | |
| 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | |
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | |
| 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | |
| 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | |
| 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | |
| 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | |
| 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | |
| 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | |
| 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | |
| 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | |
| 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | |
| 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | |
| 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | |
| 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | |
| 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | |
| 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | |
| 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | |
| 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | |
| 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | |
| 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | |
| 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | |
| 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | |
| 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | | | | | | | | | |

MAGNETOGRAM HOURLY SCALINGS

Values are in tenths of min., and are averages for successive periods of one hour beginning at midnight.
Shrinkage corrections have been applied. Negative values are in red with minus signs shown.

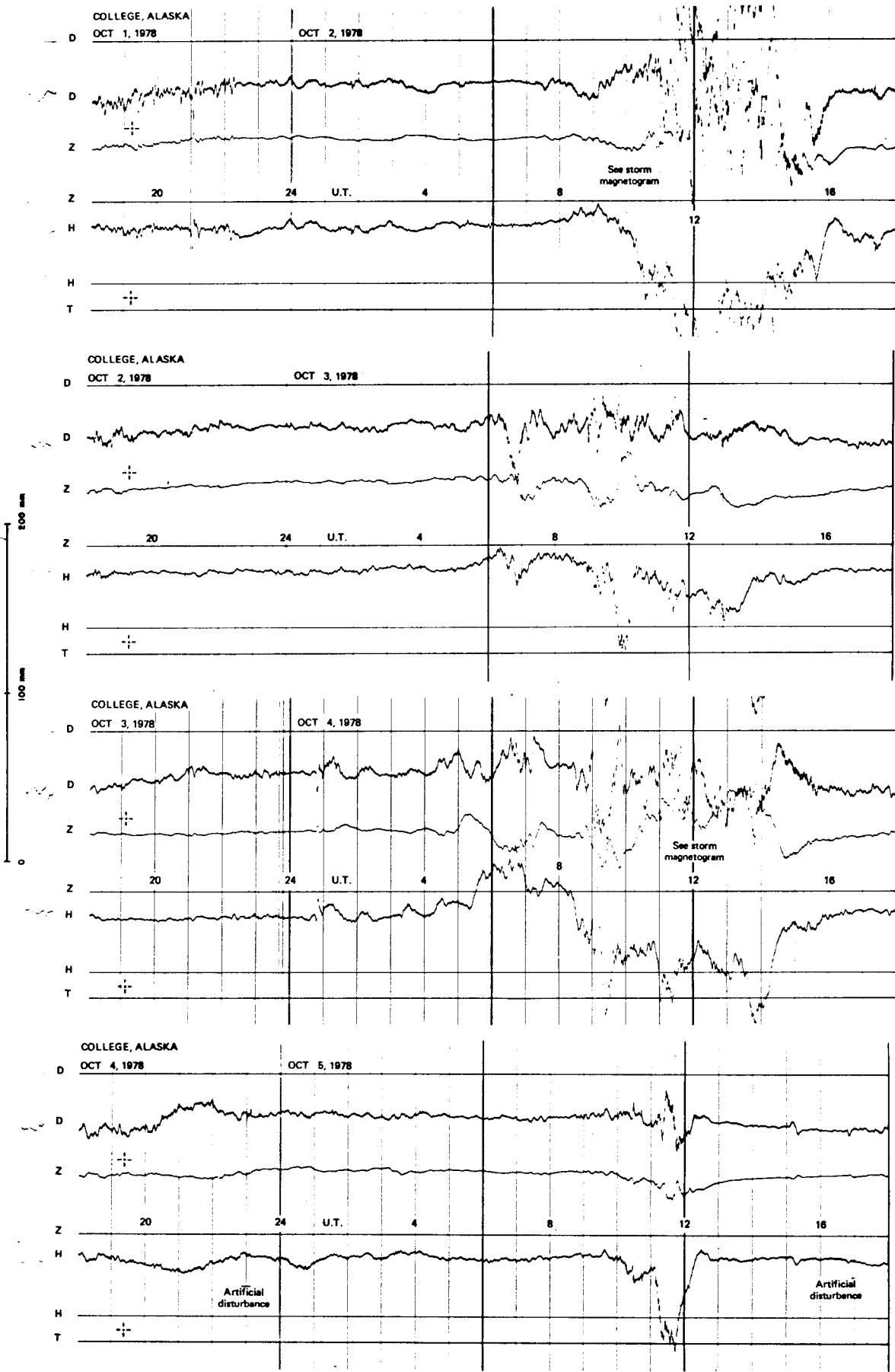
| U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| DAILY, MONTHLY, AND ANNUAL MEANS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAGNETOGRAM HOURLY SCALINGS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Values are in tenths of mm., and are averages for successive periods of one hour beginning at midnight, Hour 01 of local day, (150°W.T.) to hour 11 of the same universal day. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c. | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | SUM | | | | |
| C. 5 | 9 | 01 | 379 | 380 | 380 | 380 | 380 | 374 | 379 | 337 | 320 | 305 | 266 | 324 | 238 | 01 | 379 | 243 | 170 | 149 | 189 | 277 | 327 | 330 | 354 | 377 | 7718 | | | |
| | 02 | 381 | 367 | 361 | 383 | 369 | 361 | 369 | 374 | 377 | 338 | 337 | 406 | 02 | 671 | 8 | 676 | 343 | 237 | 327 | 334 | 349 | 356 | 361 | 377 | 9032 | | | | |
| | 03 | 379 | 378 | 331 | 371 | 390 | 399 | 387 | 338 | 377 | 284 | 4/3 | 309 | 03 | 311 | 236 | 273 | 365 | 316 | 330 | 347 | 340 | 340 | 347 | 354 | 354 | 8182 | | | |
| | 04 | 363 | 380 | 368 | 360 | 358 | 409 | 376 | 343 | 331 | 347 | 364 | 494 | 04 | 451 | 8 | 557 | 331 | 289 | 320 | 339 | 340 | 347 | 331 | 347 | 377 | 8649 | | | |
| | 05 | 388 | 371 | 376 | 369 | 371 | 376 | 367 | 366 | 360 | 367 | 369 | 277 | 05 | 279 | 323 | 339 | 343 | 350 | 351 | 344 | 340 | 338 | 336 | 338 | 338 | 331 | 8831 | | |
| | 06 | 339 | 344 | 348 | 350 | 350 | 347 | 347 | 349 | 351 | 351 | 350 | 351 | 351 | 351 | 351 | 351 | 348 | 344 | 341 | 345 | 341 | 310 | 309 | 329 | 337 | 8197 | | | |
| | 07 | 356 | 354 | 350 | 350 | 356 | 345 | 360 | 357 | 352 | 350 | 356 | 352 | 350 | 356 | 350 | 350 | 339 | 330 | 300 | 289 | 320 | 337 | 340 | 341 | 338 | 337 | 8184 | | |
| | 08 | 342 | 342 | 340 | 341 | 344 | 376 | 371 | 360 | 353 | 320 | 193 | 08 | 189 | 492 | 326 | 336 | 336 | 340 | 333 | 331 | 330 | 336 | 340 | 339 | 339 | 339 | 7879 | | |
| | 09 | 341 | 340 | 340 | 339 | 337 | 341 | 341 | 346 | 350 | 251 | 277 | 960 | 09 | 366 | 320 | 347 | 316 | 339 | 335 | 332 | 336 | 333 | 332 | 332 | 331 | 337 | 8027 | | |
| | 10 | 369 | 397 | 382 | 387 | 417 | 419 | 398 | 359 | 351 | 357 | 387 | 437 | 10 | 204 | 266 | 332 | 339 | 343 | 343 | 345 | 343 | 345 | 343 | 345 | 345 | 345 | 340 | 8485 | |
| | 11 | 346 | 350 | 354 | 354 | 354 | 349 | 346 | 358 | 361 | 358 | 358 | 376 | 11 | 951 | 345 | 340 | 338 | 340 | 343 | 340 | 338 | 330 | 330 | 330 | 330 | 330 | 330 | 331 | 8329 |
| | 12 | 332 | 332 | 334 | 337 | 340 | 339 | 340 | 346 | 341 | 340 | 341 | 345 | 12 | 154 | 318 | 350 | 140 | 244 | 284 | 312 | 311 | 331 | 320 | 320 | 329 | 329 | 336 | 7451 | |
| | 13 | 344 | 350 | 346 | 346 | 346 | 339 | 337 | 326 | 311 | 341 | 341 | 339 | 13 | 339 | 330 | 330 | 333 | 338 | 339 | 338 | 316 | 297 | 290 | 290 | 299 | 331 | 7941 | | |
| | 14 | 345 | 346 | 352 | 350 | 349 | 358 | 357 | 359 | 357 | 358 | 358 | 376 | 11 | 330 | 326 | 309 | 311 | 310 | 301 | 300 | 310 | 311 | 312 | 312 | 312 | 312 | 7952 | | |
| | 15 | 347 | 338 | 340 | 337 | 334 | 334 | 337 | 339 | 340 | 340 | 340 | 345 | 15 | 333 | 330 | 320 | 316 | 324 | 338 | 333 | 334 | 330 | 330 | 330 | 330 | 330 | 8003 | | |
| | 16 | 321 | 330 | 337 | 340 | 347 | 344 | 339 | 337 | 332 | 332 | 336 | 330 | 16 | 326 | 324 | 320 | 314 | 317 | 323 | 320 | 329 | 330 | 328 | 326 | 324 | 321 | 7911 | | |
| | 17 | 326 | 327 | 327 | 328 | 329 | 329 | 331 | 331 | 331 | 331 | 331 | 330 | 17 | 330 | 329 | 330 | 330 | 329 | 329 | 319 | 314 | 319 | 313 | 310 | 311 | 311 | 7191 | | |
| | 18 | 301 | 359 | 364 | 344 | -116 | 437 | 281 | 461 | 525 | 331 | 331 | 331 | 18 | 454 | 437 | 16 | 313 | 321 | 244 | 151 | 205 | 243 | 303 | 357 | 379 | 6685 | | | |
| | 19 | 378 | 389 | 359 | 347 | 330 | 351 | 237 | 64 | 330 | 331 | 370 | 361 | 19 | 486 | 170 | 276 | 275 | 331 | 323 | 316 | 318 | 316 | 336 | 349 | 350 | 7703 | | | |
| | 20 | 351 | 341 | 350 | 367 | 316 | 337 | 340 | 340 | 351 | 364 | 337 | 361 | 20 | 203 | 340 | 188 | 293 | 301 | 315 | 300 | 301 | 301 | 301 | 301 | 301 | 301 | 7586 | | |
| | 21 | 342 | 347 | 340 | 347 | 351 | 350 | 373 | 357 | 349 | 366 | 352 | 191 | 21 | 235 | 266 | 417 | 230 | 291 | 290 | 291 | 291 | 290 | 291 | 291 | 291 | 291 | 7278 | | |
| | 22 | 366 | 355 | 360 | 375 | 367 | 361 | 236 | 341 | 268 | 182 | 273 | 306 | 22 | 311 | 330 | 329 | 280 | 287 | 301 | 290 | 280 | 293 | 310 | 334 | 350 | 7503 | | | |
| | 23 | 341 | 342 | 337 | 363 | 360 | 353 | 281 | 307 | 310 | 297 | 286 | 286 | 23 | 286 | 259 | 234 | 281 | 279 | 316 | 321 | 317 | 317 | 317 | 328 | 331 | 7516 | | | |
| | 24 | 334 | 332 | 339 | 341 | 330 | 331 | 330 | 331 | 331 | 367 | 356 | 354 | 24 | 319 | 321 | 323 | 319 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 7962 | | |
| | 25 | 330 | 332 | 331 | 330 | 331 | 330 | 331 | 330 | 331 | 331 | 331 | 331 | 25 | 381 | 360 | 303 | 292 | 289 | 299 | 281 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 7752 | |
| | 26 | 330 | 331 | 330 | 328 | 331 | 330 | 337 | 338 | 340 | 350 | 339 | 337 | 26 | 280 | 299 | 378 | 321 | 279 | 281 | 271 | 287 | 287 | 287 | 287 | 287 | 287 | 7702 | | |
| | 27 | 364 | 341 | 306 | 337 | 272 | 244 | 170 | 149 | 309 | 708 | 494 | 27 | 27 | 569 | 411 | 270 | 300 | 271 | 323 | 349 | 338 | 338 | 339 | 339 | 339 | 8312 | | | |
| | 28 | 376 | 377 | 383 | 387 | 367 | 330 | 372 | 318 | 357 | 291 | 320 | 116 | 7 | 291 | 298 | 285 | 281 | 298 | 286 | 103 | 286 | 337 | 341 | 355 | 355 | 355 | 7813 | | |
| | 29 | 350 | 355 | 351 | 350 | 361 | 381 | 369 | 350 | 475 | 261 | 311 | 29 | 29 | 374 | 551 | 365 | 126 | 109 | 286 | 103 | 286 | 319 | 311 | 329 | 337 | 7529 | | | |
| | 30 | 341 | 349 | 353 | 352 | 348 | 346 | 299 | 216 | 116 | 339 | 453 | 30 | 361 | 475 | 514 | 474 | 551 | 551 | 248 | 368 | 367 | 379 | 411 | 391 | 8367 | | | | |
| | 31 | 389 | 379 | 377 | 367 | 364 | 386 | 371 | 323 | 300 | 347 | 293 | 337 | 31 | 337 | 614 | 306 | 160 | 221 | 254 | 287 | 316 | 328 | 339 | 354 | 355 | 8109 | | | |

FORMAT FOR NORMAL & STORM MAGNETOGRAMS
(SAMPLE ONLY)

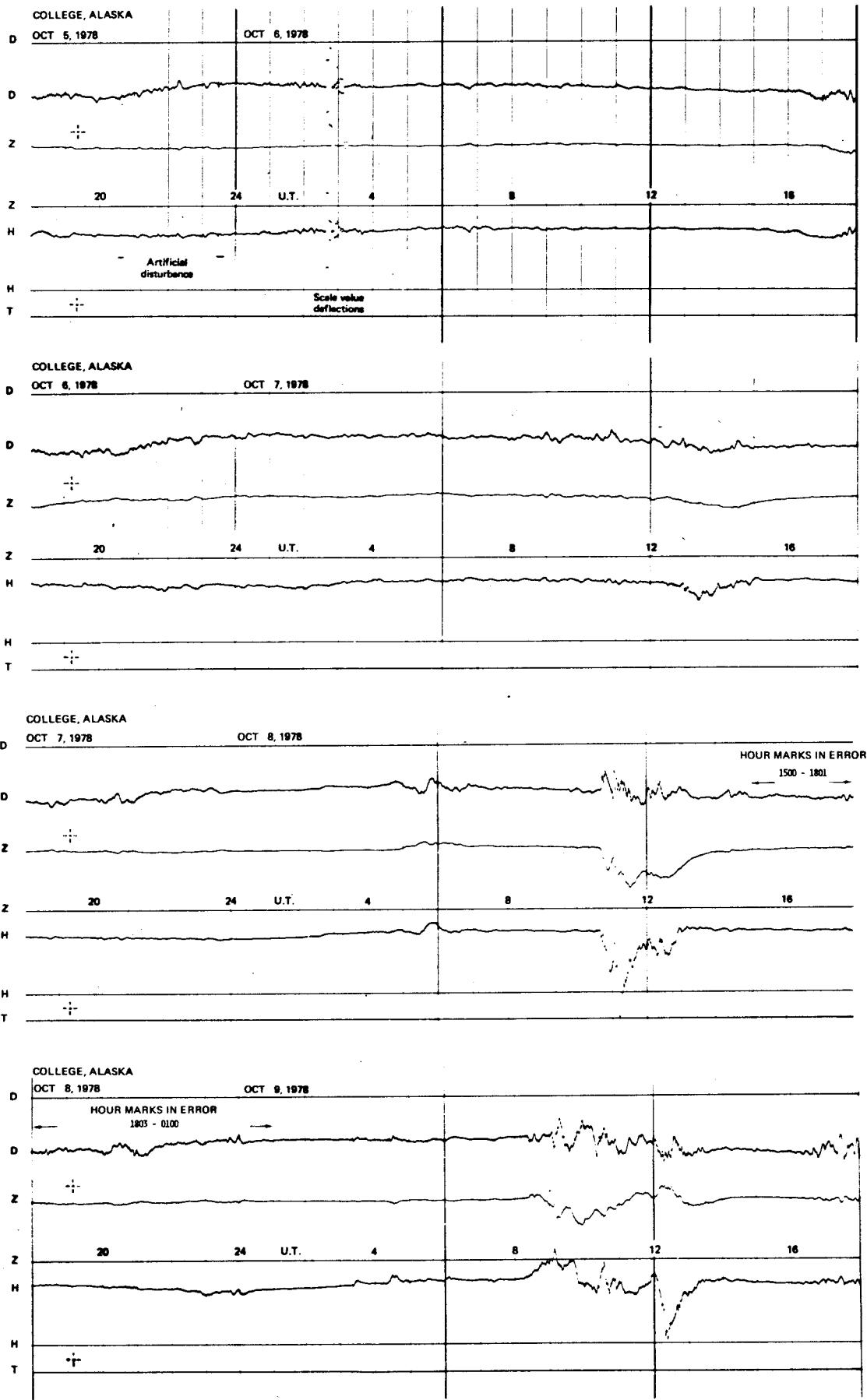


SEE PRELIMINARY CALIBRATION DATA FOR SCALE VALUES & BASELINE VALUES

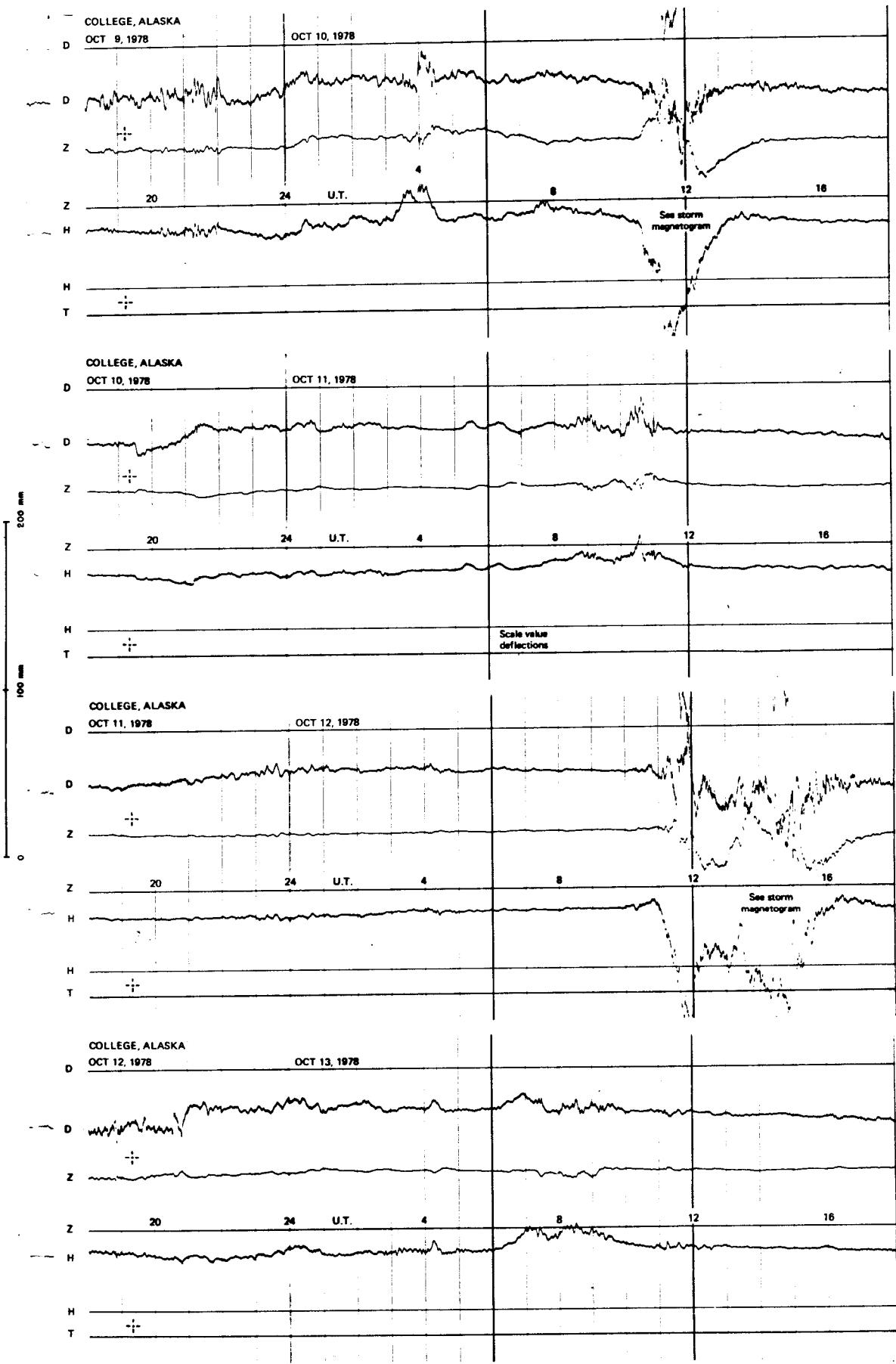
NORMAL MAGNETOGRAMS



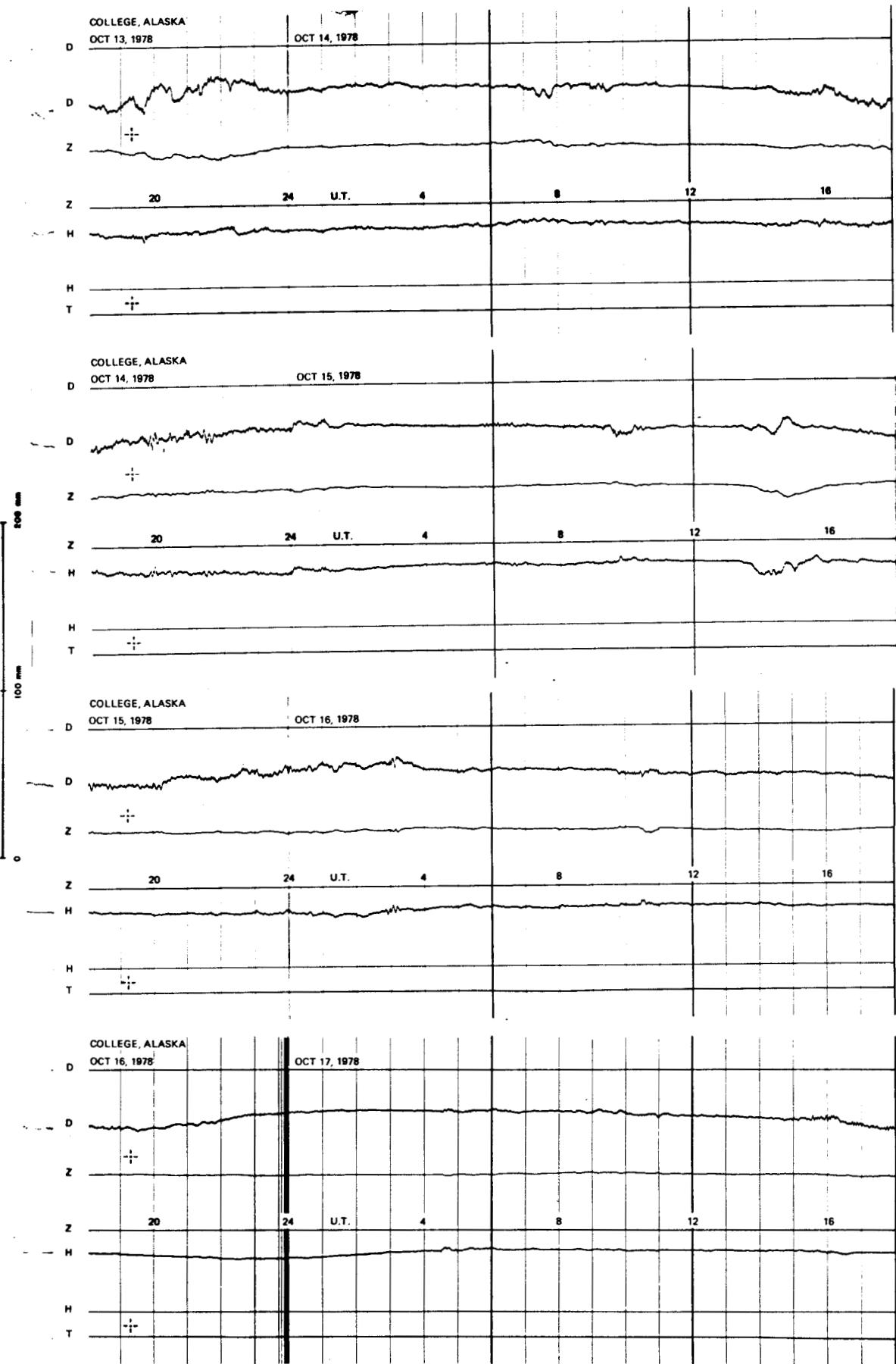
NORMAL MAGNETograms



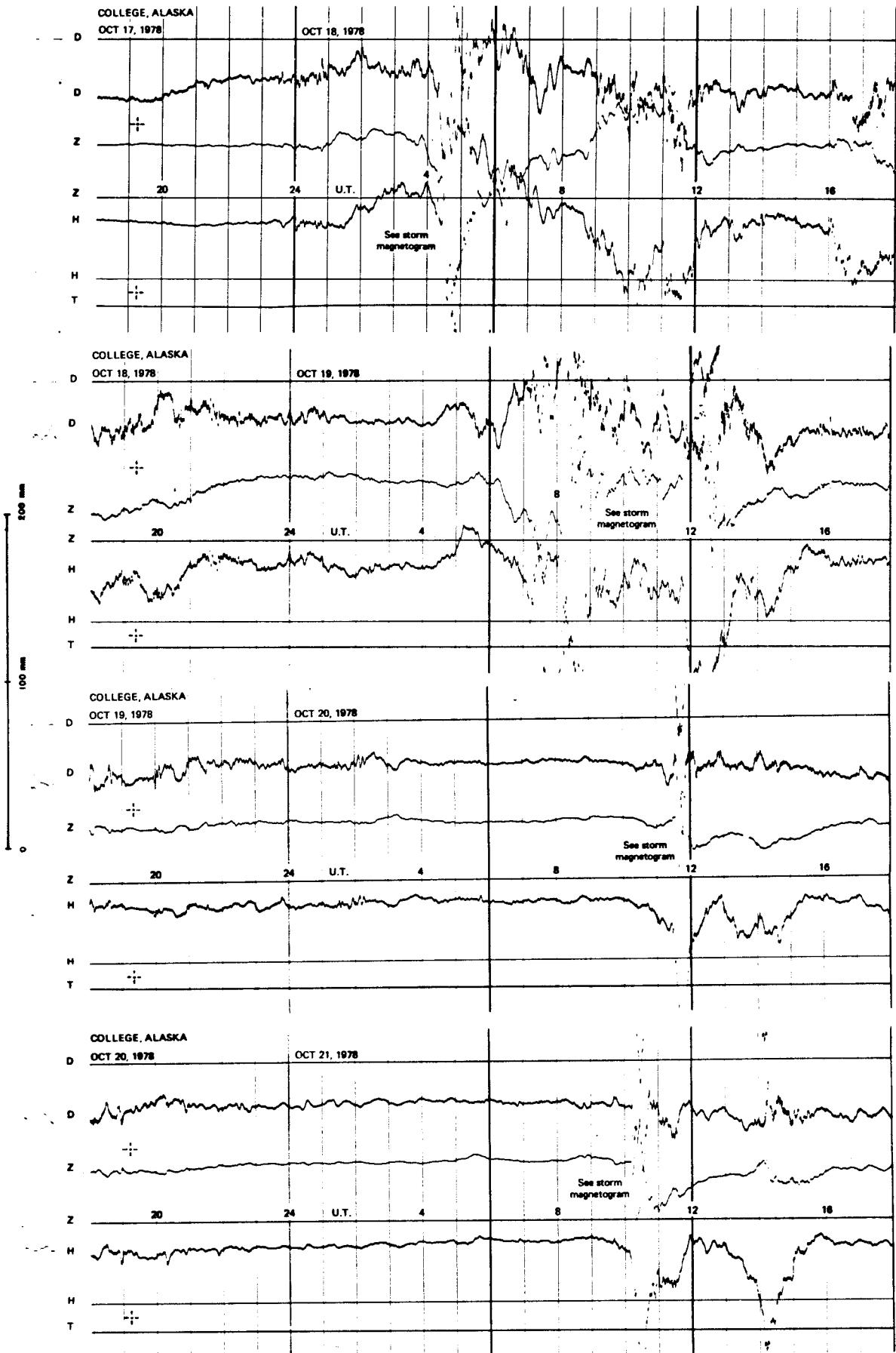
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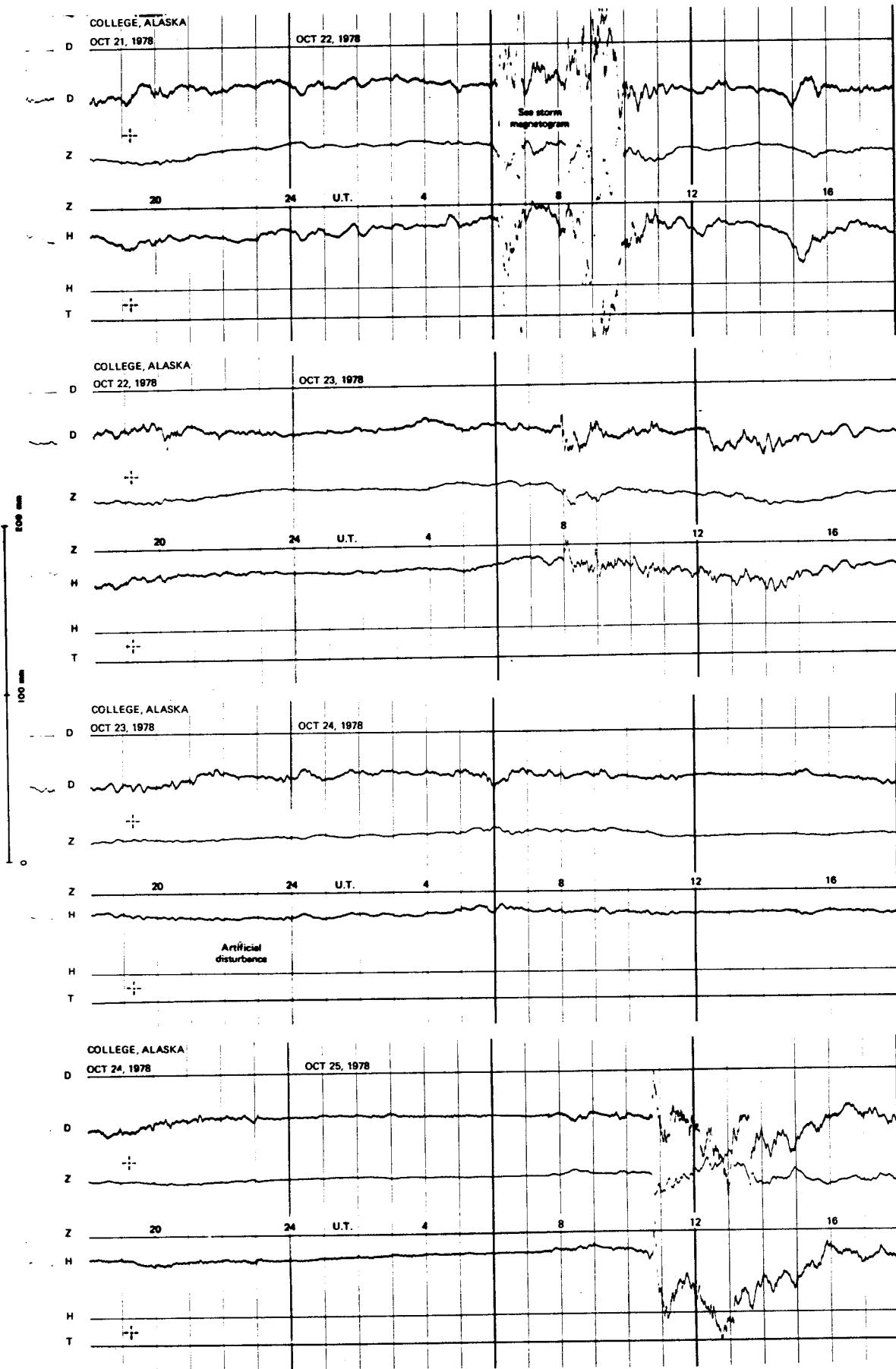
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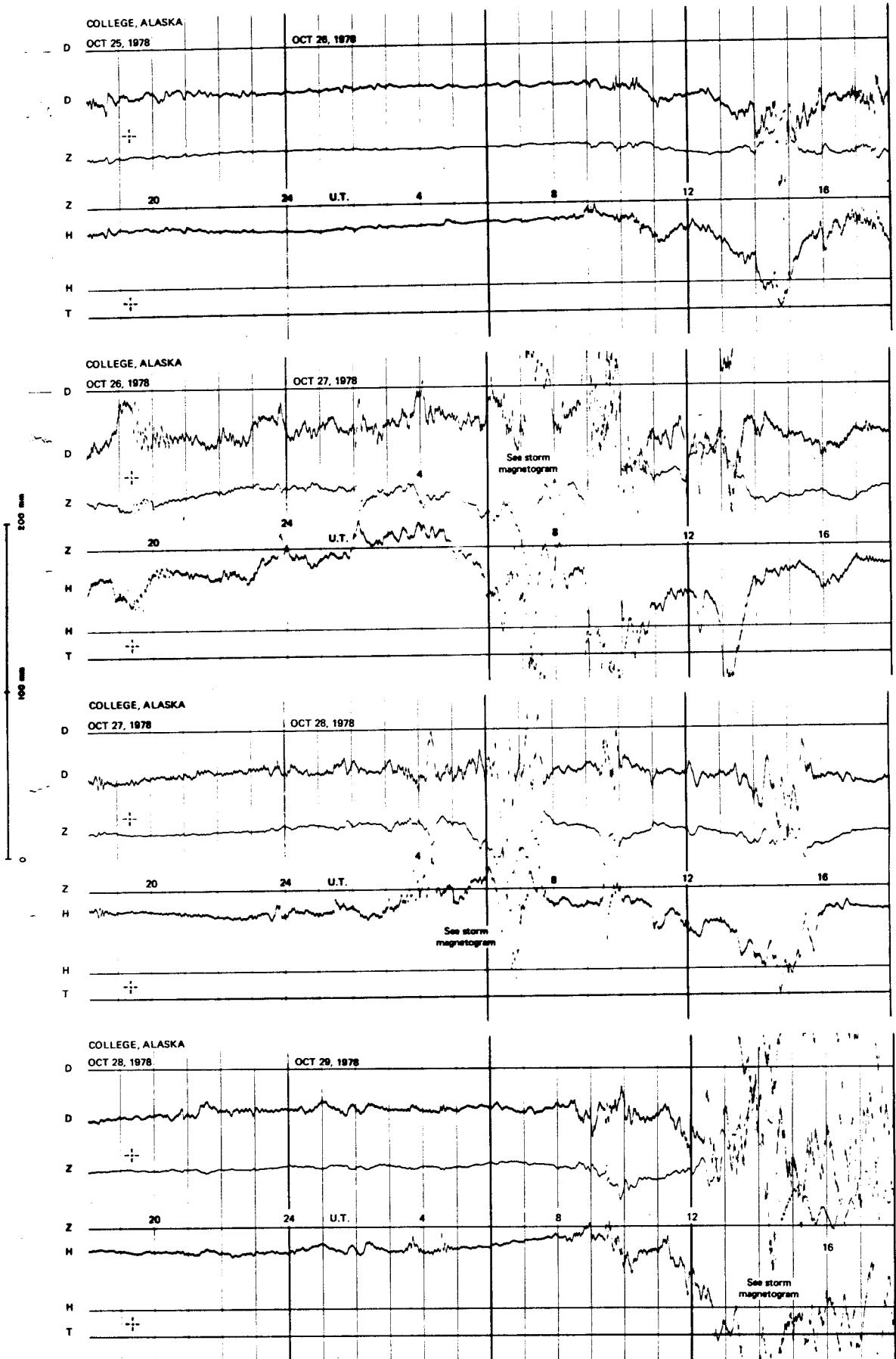
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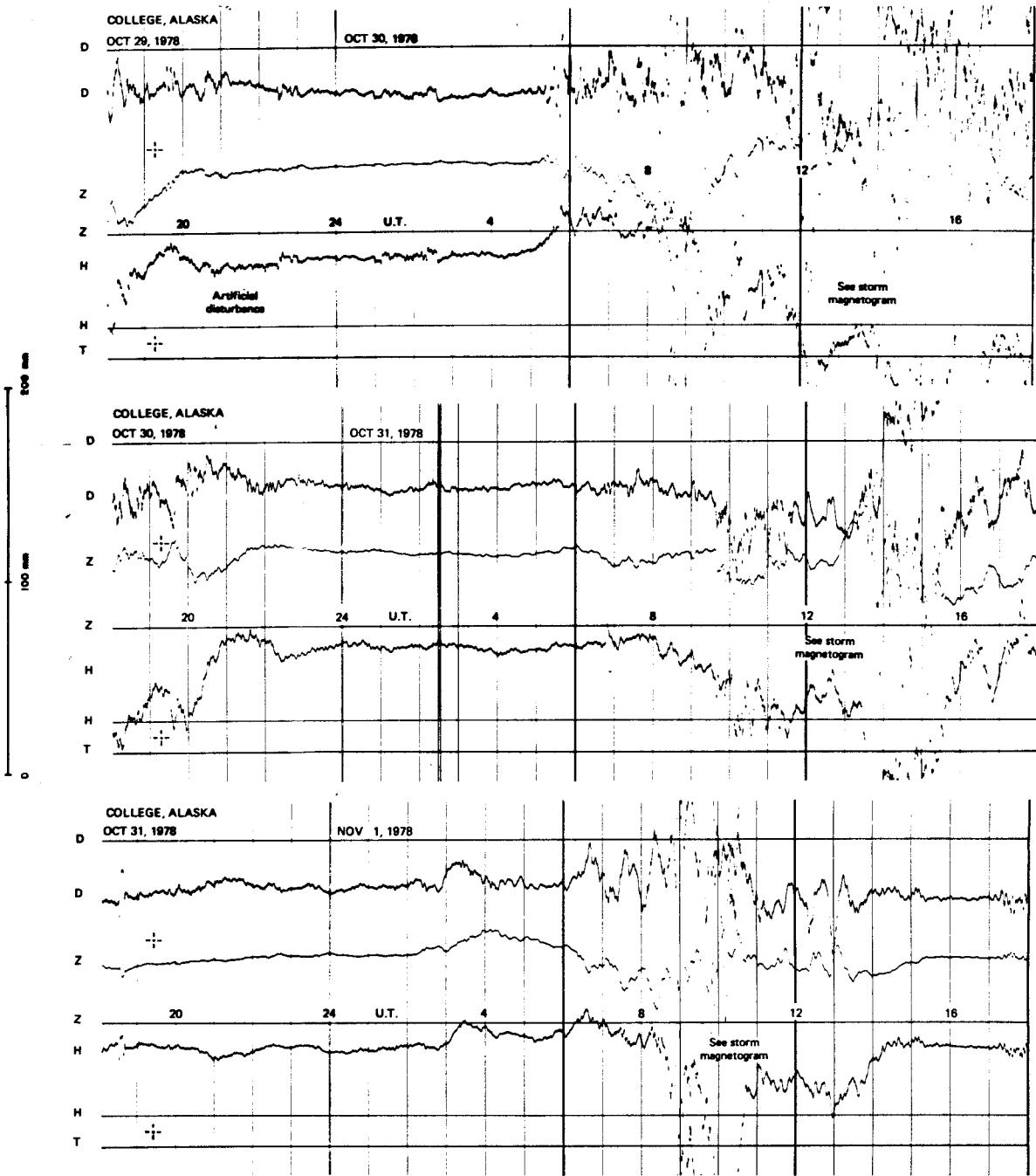
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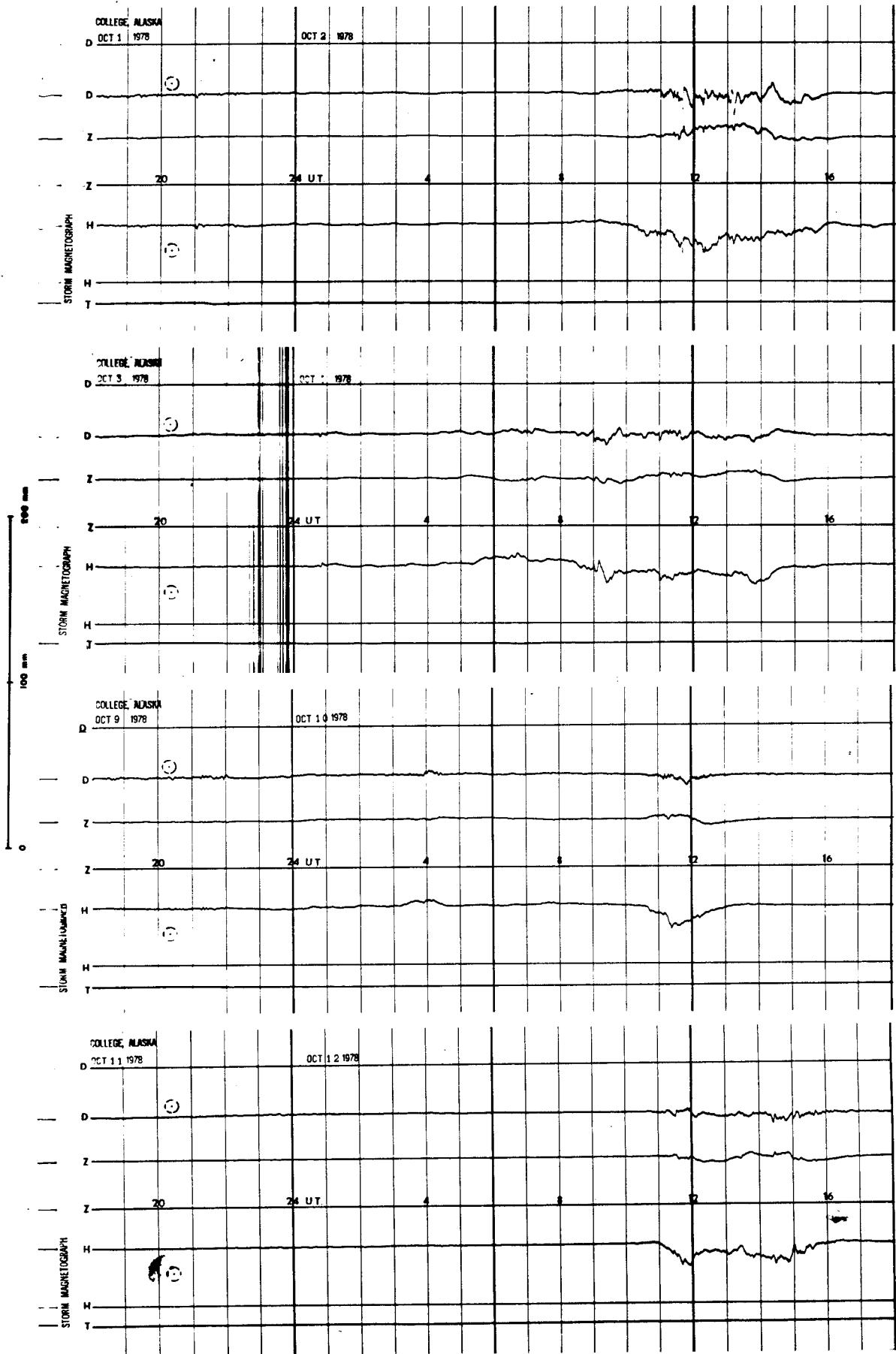
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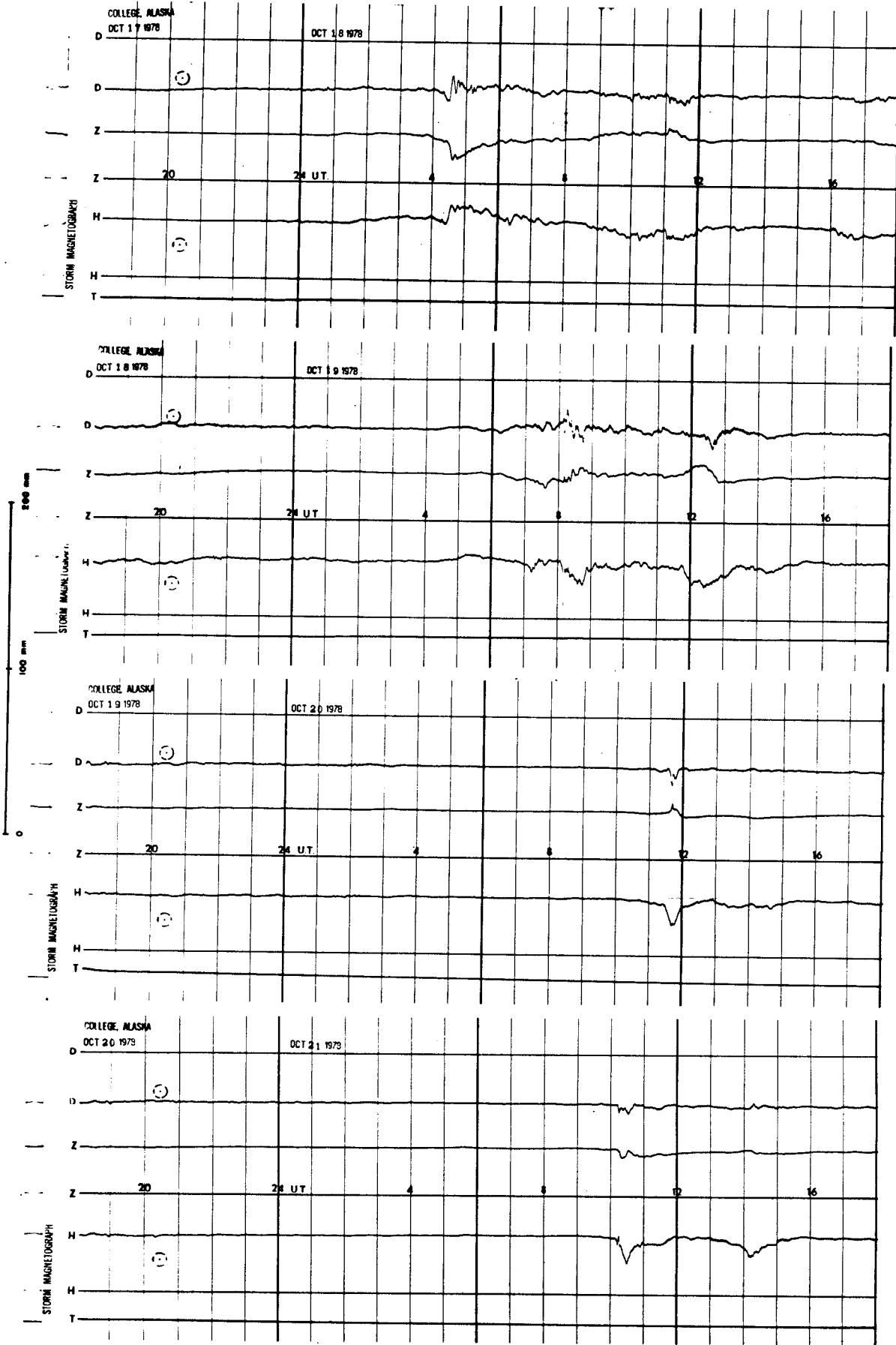
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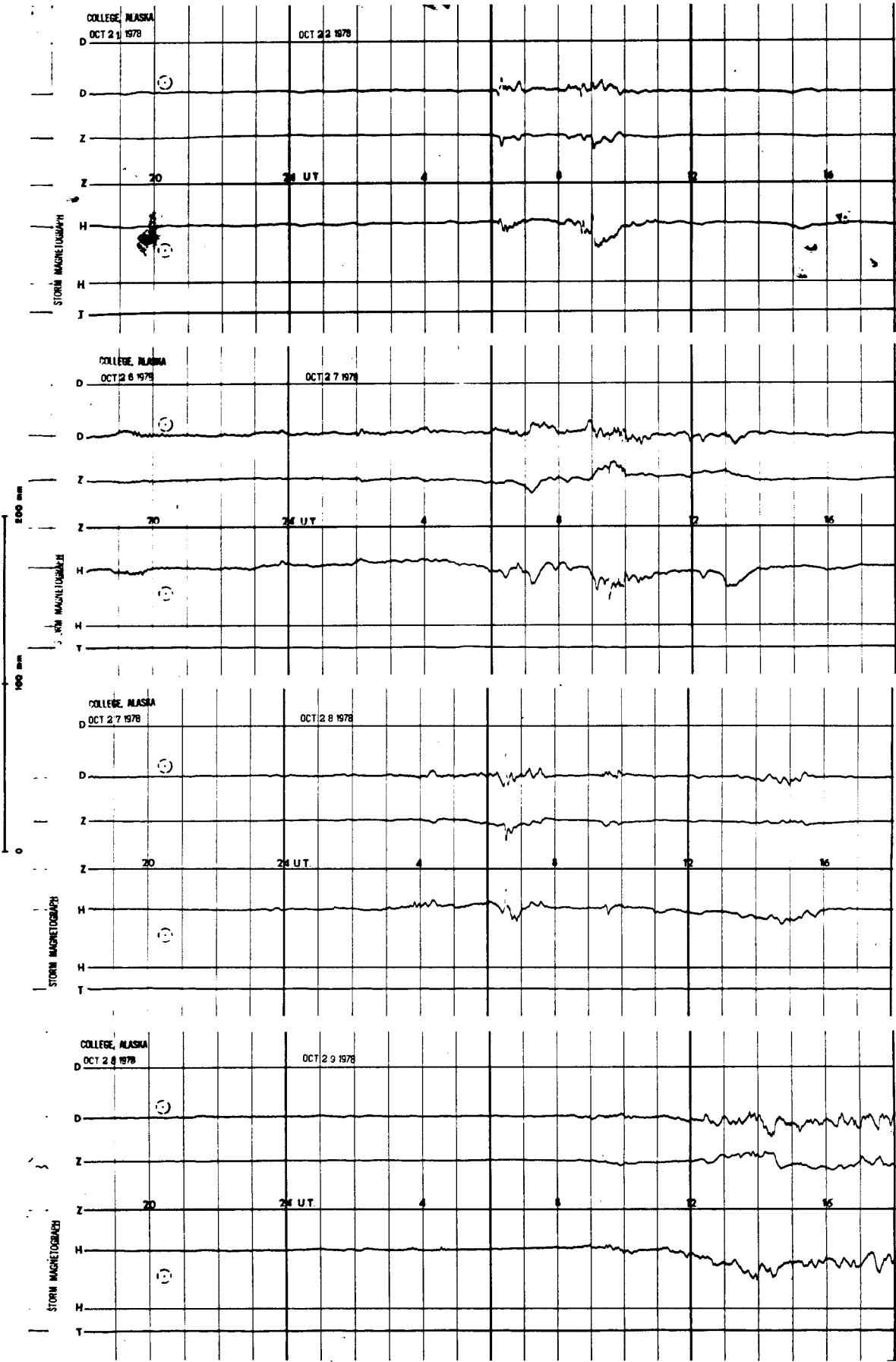
STORM MAGNETOGrams



STORM MAGNETOGRAMS



STORM MAGNETOGrams



STORM MAGNETOGRAMS

