

NOAA Data Report ERL AOML-5



CURRENT VELOCITY AND HYDROGRAPHIC OBSERVATIONS IN THE STRAITS OF
FLORIDA: SUBTROPICAL ATLANTIC CLIMATE STUDY (STACS) 1983 AND 1984

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TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION.....	1
II. DATA COLLECTION AND ANALYSIS.....	1
A. Pegasus Current Profiler.....	1
1. Editing.....	5
2. Calibration.....	5
3. Velocity Calculation.....	7
B. CTD Data.....	7
1. System Description.....	7
2. Calibration.....	7
C. XBT Data.....	8
D. Ametek Straza Data.....	8
III. REFERENCES.....	9
IV. ACKNOWLEDGMENTS.....	9
Appendix A.....	10
Appendix B.....	208
Appendix C.....	217
Appendix D.....	224

I. INTRODUCTION

The primary objective of the Sub-Tropical Climate Study (STACS) is to define which oceanographic processes are important in meridional heat flux. As the Florida Current has been shown to play an important role in this flux, the initial emphasis of STACS was to develop the capability to monitor the variability of oceanic heat and mass transport in the Straits of Florida. As described in Molinari et al. (1985), STACS consisted of several separate projects designed to verify the ability of different remote sensing techniques to measure continuously Florida Current velocity, transport and/or temperature. The verification data were collected by different organizations using independent instruments and techniques. Pegasus current profilers were used by the Atlantic Oceanographic and Meteorological Laboratory/NOAA (AOML) and the University of Miami Rosenstiel School of Marine and Atmospheric Science (RSMAS), and current meter moorings were deployed by RSMAS. The remote sensing techniques included an electromagnetic (telephone) cable monitored by the Pacific Marine Environmental Laboratory/NOAA (PMEL), a coastal radar system operated by the Wave Propagation Laboratory/NOAA (WPL), coastal tide and bottom pressure gauges used by AOML and acoustic techniques, RSMAS. Results from the verification experiment are described in a series of SCIENCE articles (Molinari et al., 1985).

Data collection efforts discussed here were concentrated in the region of 27°N across the Straits of Florida. The approximate position(s) of the various observation strategies are presented in Figure 1. Pegasus data collected by AOML during six research cruises in April, August and December 1983 and January, March and June 1984 will be presented in this report. Data from other STACS Pegasus cruises are described in Williams et al. (1983), Leaman and Vertes (1982), and Vertes and Leaman (1983).

II. DATA COLLECTION AND ANALYSIS

Data from STACS cruises conducted on the R/V VIRGINIA KEY in April and August 1983 and January and June of 1984 and on the NOAA Ship RESEARCHER in December 1983 and March 1984 are listed in this report. Table 1 shows the type of data collected on each cruise. We now describe the techniques used to reduce the Pegasus, CTD, XBT and Ametek-Straza data to final form.

A. Pegasus Current Profiler

The Pegasus instrument is an acoustically-tracked, free-falling profiler of horizontal current components (Spain et al., 1981). A schematic of the Pegasus system as it is used in the Straits of Florida is shown in Figure 2. The Pegasus instrument used by AOML consists of a hollow cylindrical metal tube with the electronics package sealed within. A floatation collar attached to the exterior of the cylinder provides the instrument buoyancy in the water. Pegasus houses a transducer/receiver, a thermistor and a pressure sensor. When the Pegasus is in the water, its transducer interrogates two fixed transponders on the ocean bottom at a frequency of 10 KHz at an interval of eight or sixteen seconds. Each transponder responds at a different frequency. The Pegasus internally records the acoustic travel times from the transponders, along with temperature and pressure. Transponder frequency pairs are

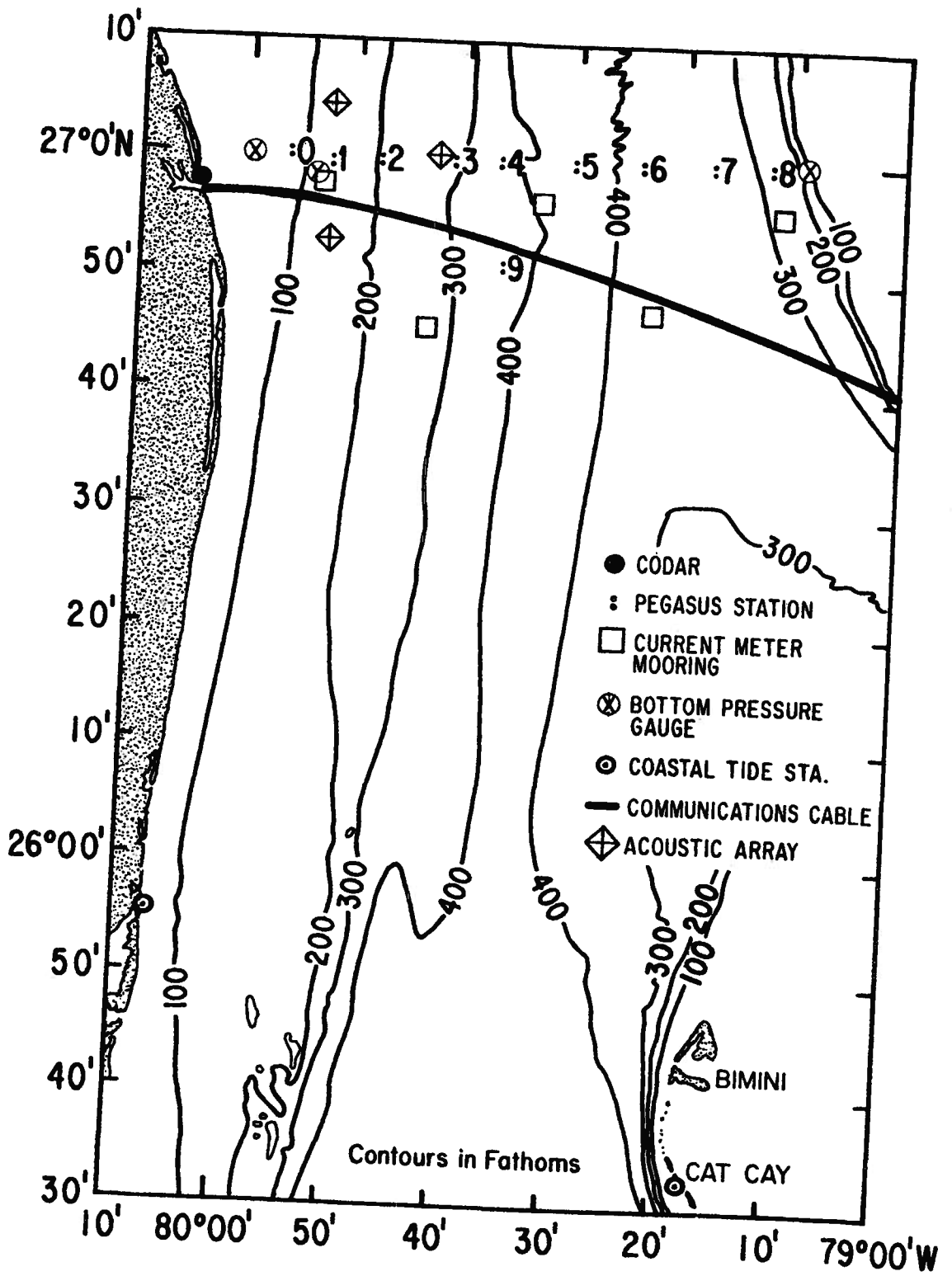


Figure 1: Locations of STACS projects in the Straits of Florida.

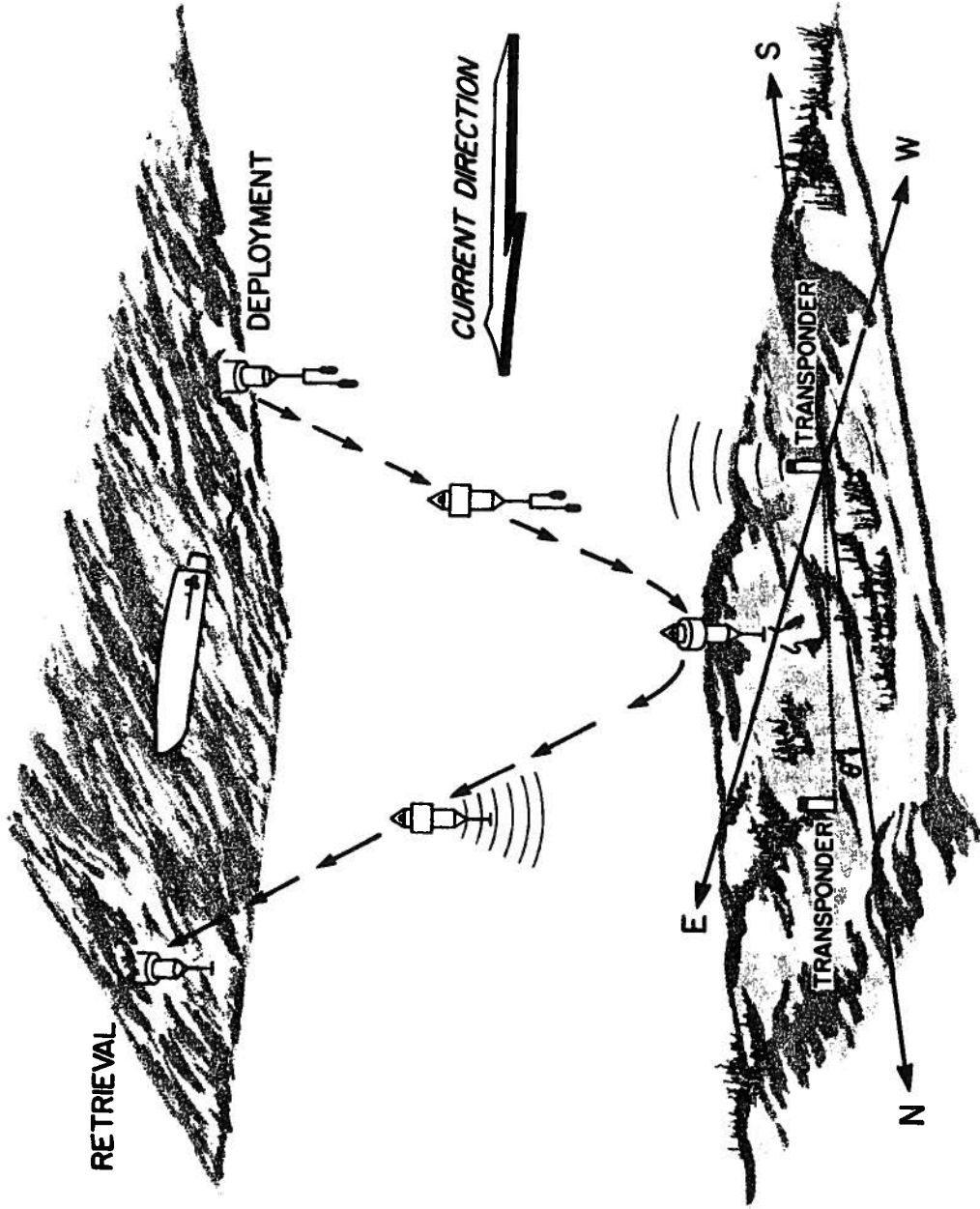


Figure 2: Schematic of the Pegasus current profiler as it is used in the Straits of Florida.

Table 1. Types of Data Collected by Cruise.

Cruise	Vessel	Pegasus	CTD	XBT	Ametek St
April 1983 (VK-STACS 6-83)	VIRGINIA KEY	X	---	---	---
August 1983 (VK-STACS 9-83)	VIRGINIA KEY	X	---	---	---
December 1983 (RES-STACS 12-83)	RESEARCHER	X	X	X	X
January 1984 (VK-STACS 13-84)	VIRGINIA KEY	X	---	X	---
March 1984 (RES-STACS 14-84)	RESEARCHER	X	X	X	X
June 1984 (VK-STACS 15-84)	VIRGINIA KEY	X	---	---	---

alternated between stations in order to avoid interference from adjacent stations.

The instrument is weighted at the beginning of the drop and falls at a rate between 28-50 cm/sec. This rate may be adjusted by adding or removing the weights contained inside the Pegasus. External weights are released by a bottom trip mechanism when the weights touch the ocean floor. The instrument ascends at approximately the same rate as it descends.

The appropriate drop sites have been determined as being approximately one water depth south and one water depth east of the southernmost transponder. Due to the strong northward velocities encountered in the Florida Current, the positioning of the instrument drop site is crucial. The instrument could be carried beyond the range of the transponders if it is deployed too far north. The geometry used to compute the absolute velocity of the instrument also requires that the instrument does not move across the baseline.

Each Pegasus station is defined by a unique geometry (see Table 2). A mean sound velocity profile for each station is used to convert the acoustic travel times from the transponders to the instrument into ranges in meters. The baseline becomes the base of a triangle which is projected onto the bottom. The X and Y coordinates of the instrument at each pressure can then be determined.

Following a Pegasus cast the contents of the instrument's solid state memory are transferred to a Hewlett Packard 85 computer for conversion to decimal values and storage on flexible diskettes. The conversion of raw data to a velocity profile is done on an HP-86 in three steps: editing, calibration and velocity computations. Following is a brief description of each step.

1. Editing

Two files are created for each Pegasus cast: an ASCII character header file on magnetic tape containing cast information and a multi-record data file on magnetic disk. Each record contains decimal values of the original Pegasus memory address, corresponding pressure and temperature sensor output counts and two travel times significant to 10^{-4} second. HP-86 BASIC programs allow graphic display and printed listings of the data for preliminary evaluation of data quality.

Errors can be introduced into the raw data due to instrument hardware errors and into the travel times by acoustic propagation irregularities such as the detection of reflected instead of direct path signals. Erroneous points are hand edited from the record and replaced by points estimated by a low order polynomial fit.

2. Calibration

Prior to each research cruise the Pegasus pressure sensor is calibrated to produce second order polynomial fits of pressure counts versus pressure in decibars (db). Standard deviations from the fits over the working range of

Table 2. Summary of PEGASUS Station Geometry.

Station	Transponder Parameters						Mean Sound* Velocity (m/s)	Baseline Length (m)
	Latitude (N)	Longitude (W)	Frequency (KHz)	Depth (m)				
0	27°00.38'	79°56.46'	12.0	126.0	-----	650		
	27°00.08'	79°56.51'	11.5	134.0				
1	26°59.74'	79°52.37'	13.0	222.2	1521.9	852		
	26°59.34'	79°52.41'	12.5	219.1				
2	26°59.19'	79°47.26'	12.0	360.7	1515.7	1210		
	26°58.57'	79°47.31'	11.5	359.2				
3a	27°00.41'	79°41.48'	12.5	500.7	1512.7	1489		
	26°59.64'	79°41.51'	13.0	503.0				
4	26°59.42'	79°36.86'	12.0	613.0	1511.7	1337		
	26°58.72'	79°36.76'	11.5	618.3				
5	27°00.19'	79°30.02'	13.0	748.9	1511.5	1499		
	26°59.36'	79°29.97'	12.5	762.6				
6	26°59.91'	79°24.13'	11.5	717.6	1517.2	1722		
	26°59.15'	79°24.20'	12.0	696.4				
6a (July 1983)	27°00.75'	79°22.66'	11.5	688.0	-----	1722		
	26°59.79'	79°22.83'	12.0	690.0				
7 7a (March 1984)	26°59.93'	79°17.68'	13.0	637.2	1523.6	1313		
	26°59.19'	79°17.63'	12.5	633.8				
8	27°00.21'	79°12.14'	11.5	505.9	1528.5	1564		
	26°59.34'	79°12.04'	12.0	516.6				
9	26°51.20'	79°36.16'	12.0	672.7	1510.1	1338		
	26°50.49'	79°36.20'	11.5	674.7				

*As computed from June 1982 CTD data and historical data.

the sensors are generally on the order of 1 db. After the raw data has been edited the pressure counts are converted to decibars. Pressure is further smoothed with a five point running mean. Cast limits (surface/bottom/surface) are recorded in the header file and the data are split into downcast and upcast files containing two travel times and pressure (db).

3. Velocity Calculation

Given the transponder depths, baseline length, pressure and the travel times, the Pegasus position can be determined as described in the explanation of the Pegasus station geometry. Each station has an associated sound velocity profile used to calculate harmonic mean velocity and thus convert acoustic travel times to distance for input into the position equations. The resulting profiles of X and Y position (in unrotated baseline coordinates) versus depth are smoothed with a seven point convolution. The resulting U and V velocity components are then rotated into a true geographic coordinate system. Each cast produces two profiles: one represents the downcast portion and the other the upcast. Only one profile from each cast was chosen and these data for each cruise are presented by increasing cast number in Appendix A.

B. CTD Data

1. System Description

The Neil Brown Instrument Mark III CTD system is equipped with a fast response thermistor. Stations were conducted primarily along 27°N latitude and at longitudes not necessarily coincident with Pegasus stations.

The instrument scans in the vertical at a rate of 30 scans per second. The descent rate is approximately 30 meters per minute to a depth of 200 meters then increases to 60 meters per minute for the remainder of the cast. CTD values are averaged in one decibar increments. Appendix B contains graphic representations of CTD profiles arranged by cruise and cast number. CTD values are listed at selected depths.

2. Calibration

Four hydrocasts were taken during the December 1983 cruise and nine taken on the March 1984 cruise for purposes of calibrating the raw data for instrument drift. Differences between CTD values recorded at the time of bottle trip and Niskin bottle values for corrected protected temperature (reversing thermometers) and salinity were determined. Calibration results for December 1983 follow:

delta-T: mean = -0.01, s.d. = .04, N = 5
delta-S: mean = 0.00, s.d. = .02, N = 12

Based on these values, no correction was made to the CTD data.

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In March 1984, calibration data were not collected for temperatures. Based on the previous history of the CTD no correction for temperature was made. Calibration results for salinity were

delta-S: mean = $-.038$, s.d. = $.012$, N = 39

In this case CTD salinities were corrected by adding $.038\text{‰}$ before further processing.

C. XBT Data

Expendable bathythermograph (XBT) probes were used during the December 1983 and January and March 1984 research cruises. The XBT probes used were T-7's which record a temperature profile down to 750 meters. Appendix C presents XBT data by cruise and cast number.

D. Ametek Straza Data

Beginning in November of 1982, all cruises on the NOAA Ship RESEARCHER have provided continuous upper ocean current velocity shear data collected by an Ametek Straza Doppler acoustic current profiler. The installation and early data sets are described in Bitterman and Wilson (1983); further results and an evaluation of referencing the profiles by navigation is described in Wilson *et al.* (1984). Other data sets from this source are evaluated in Leetmaa and Wilson (1985a, 1985b).

The Florida Current velocity sections in this report (Appendix D) are a highly condensed version of an initially large data set. In its commonly used mode, the Ametek Straza profiler records velocity shear data in the upper 350 meters of the ocean at 6.4 meter vertical intervals 35 times per minute. The profiler is driven by a PDP 11/23 computer which converts velocity data to north and south components, averages for one minute, and writes the average to tape along with all ship's navigation data acquired in that minute.

In the Straits of Florida, LORAN C navigation is used to estimate ship velocity to reference the shear profiles. LORAN C time delays are recorded from four to seven times per minute; these are smoothed and converted to latitude and longitude. Latitude and longitude are first differenced over 30 seconds to give northward and eastward ship velocity components; these are further smoothed and averaged over the same one minute periods as the shear data. The resulting absolute velocities are further averaged over 10 to 30 minutes (to allow no coarser than 2 to 3 km spatial resolution); these averages are interpolated to 10 meter depth intervals. Finally the average absolute profiles are mapped (using a 10 to 20 km wide Gaussian window) onto the 4 or 5 km by 10 meter grids seen in the sections.

Previous comparisons with Pegasus data have shown a mean agreement of better than 10 cm/s to 250 m depth. Comparisons in the Straits of Florida suggest that the Ametek Straza data may overestimate the northward velocity below 200 m in the high speed core by 10 to 20 cm/s.

In the sections, tic marks along the axes represent locations of mapped current profile data; the dark line represents bottom topography at 27°N .

III. REFERENCES

- Bitterman, D. and W. D. Wilson, 1983. Ocean current profiling with a shipboard Doppler acoustic backscatter system. In: Oceans '83. Conference sponsored by Marine Technology Society, IEEE Council on Oceanic Engineering, San Francisco, August 29-September 1983, 1200 pp.
- Leaman, K. D. and P. S. Vertes, 1983. The Subtropical Atlantic Climate Study (STACS), 1982. Summary of RSMAS Pegasus observations in the Florida Straits. Technical Report UM RSMAS No. 83012, 154 pp.
- Leetmaa, A. and W. D. Wilson, 1985a. El Niño Atlas; 1982-1983. NOAA publication, in press.
- Leetmaa, A. and W. D. Wilson, 1985b. Characteristics of near surface circulation patterns in the eastern equatorial Pacific. In: Essays in Oceanography. A tribute to John Swallow. Progress in Oceanography, 14, 339-352.
- Molinari, R. L., W. D. Wilson and K. D. Leaman, 1985. Volume and heat transports of the Florida Current: April 1982 through August 1983. Science, 227, 295-297.
- Spain, P. F., D. L. Dorson and H. T. Rossby, 1981. Pegasus: A simple acoustically-tracked velocity profiler. Deep-Sea Res., 28A, 1553-1567.
- Vertes, P. S. and K. D. Leaman, 1984. The Subtropical Atlantic Climate Study (STACS), 1983. Summary of RSMAS Pegasus observations in the Florida Straits. Technical Report UM RSMAS No. 84002, 172 pp.
- Williams, E. J., E. Marmolejo, D. Wilson and R. L. Molinari, 1983. Current velocity profiles in the Straits of Florida from the Pegasus current profiler: Subtropical Atlantic Climate Study (STACS), 1982. NOAA Technical Memorandum ERL AOML-55, 181 pp.
- Wilson, W. D., C. Roffer and A. Herman, 1984. Referencing shipboard acoustic Doppler current shear profiles (Abstract). Trans. AGU, 65(16), 224.

IV. ACKNOWLEDGMENTS

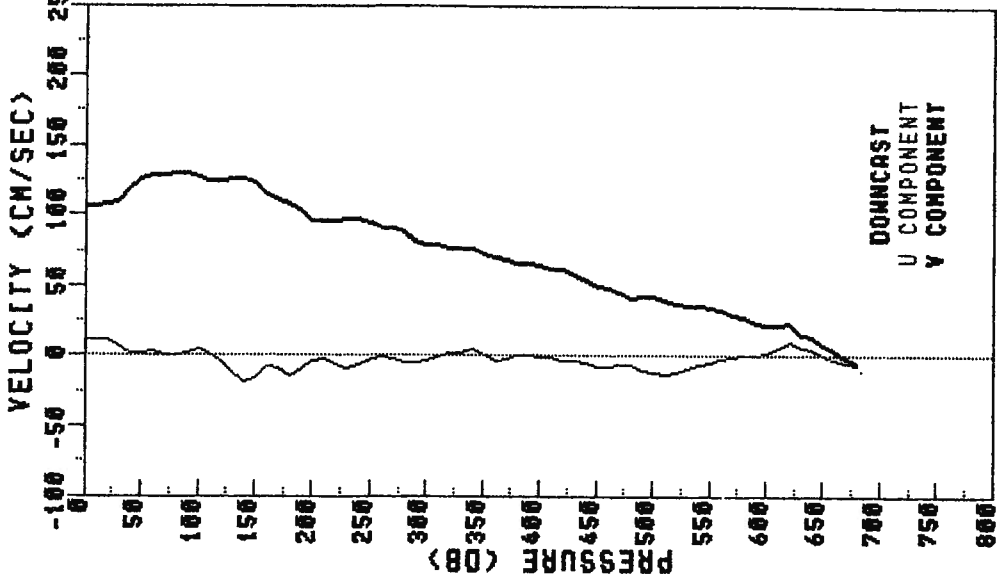
The extensive efforts of the officers and crew of the R/V VIRGINIA KEY and NOAA Ship RESEARCHER are gratefully acknowledged. Contributions by NOAA scientific and technical personnel, Mark Bushnell, Dave Bitterman, Eric Marmolejo, Doug Anderson, Bob Roddy and Warren Krug and by Liz Williams (University of Miami) are gratefully appreciated.

APPENDIX A: PEGASUS DATA

Casts are presented by cruise and increasing cast number. The cruise number and vessel, Pegasus cast and station number, Julian day and time, and position are shown at the top of each plot. "U" represents the east-west component of velocity. "V" represents the north-south component.

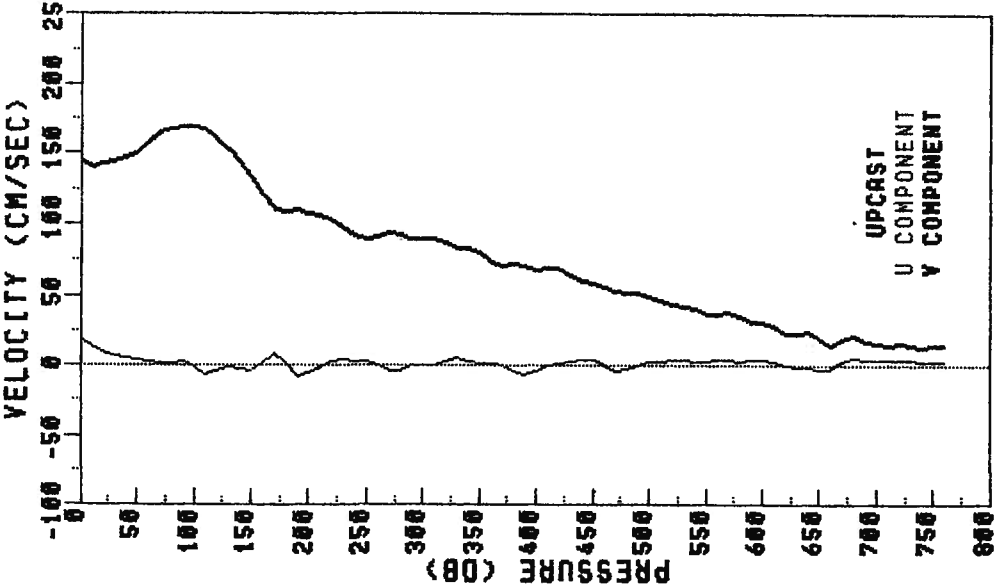
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 R/V VIRGINIA KEY JOY 106 TIME 1107Z
 LATITUDE 26.99 N LONGITUDE 79.40 W

PRES	U	V
0	11.6	107.7
10	11.2	108.8
20	11.0	108.3
30	7.0	110.9
40	2.4	126.1
50	2.3	128.1
60	1.0	129.6
70	0.6	130.9
80	1.3	130.5
90	4.2	127.4
100	2.2	125.0
110	-4.1	125.2
120	-4.1	126.8
130	-12.0	126.3
140	-15.6	124.1
150	-8.1	115.4
160	-8.9	111.0
170	-15.0	108.1
180	-8.8	103.1
190	-3.8	96.5
200	-5.6	96.4
220	-5.9	97.6
240	-1.5	91.1
260	-4.9	87.8
280	-3.4	79.9
300	-3.3	77.1
320	1.3	77.1
340	4.0	76.9
360	0.0	76.6
380	0.4	66.5
400	-0.4	64.6
420	-3.7	61.7
440	-6.3	45.6
460	-11.7	37.3
480	-0.5	29.3
500	9.6	23.6
520	-4.7	-0.6

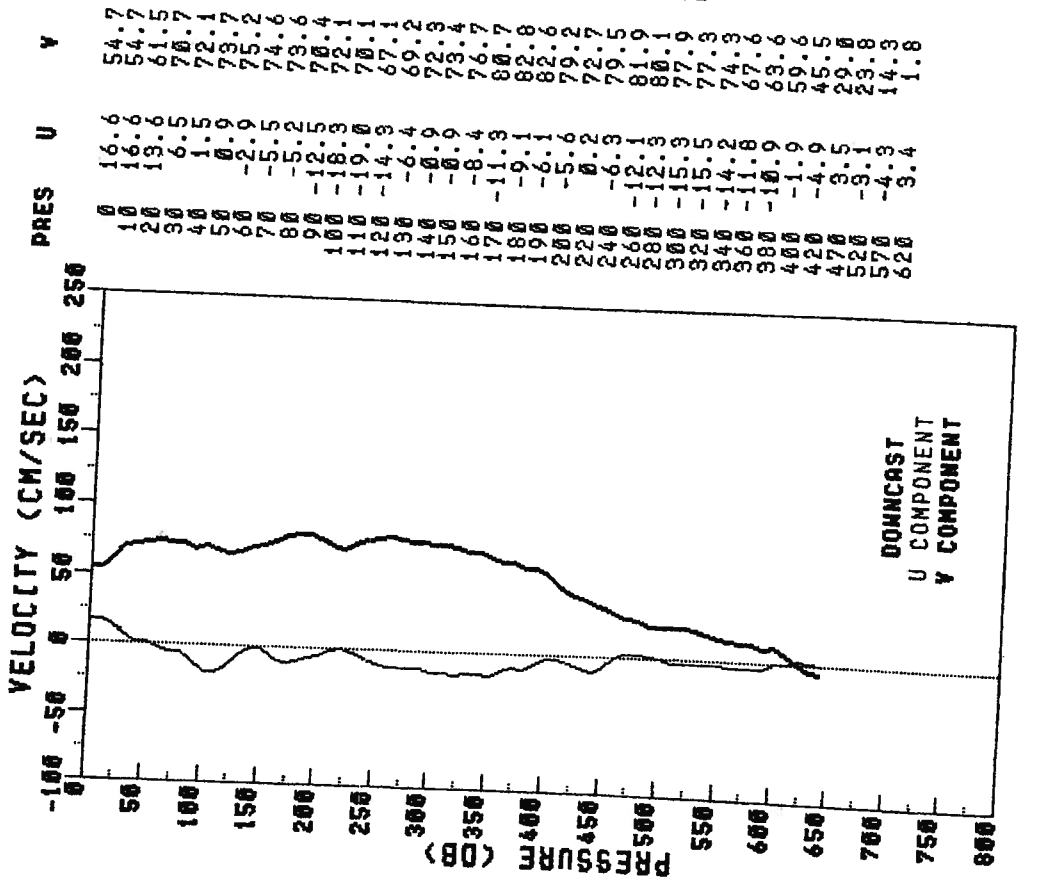


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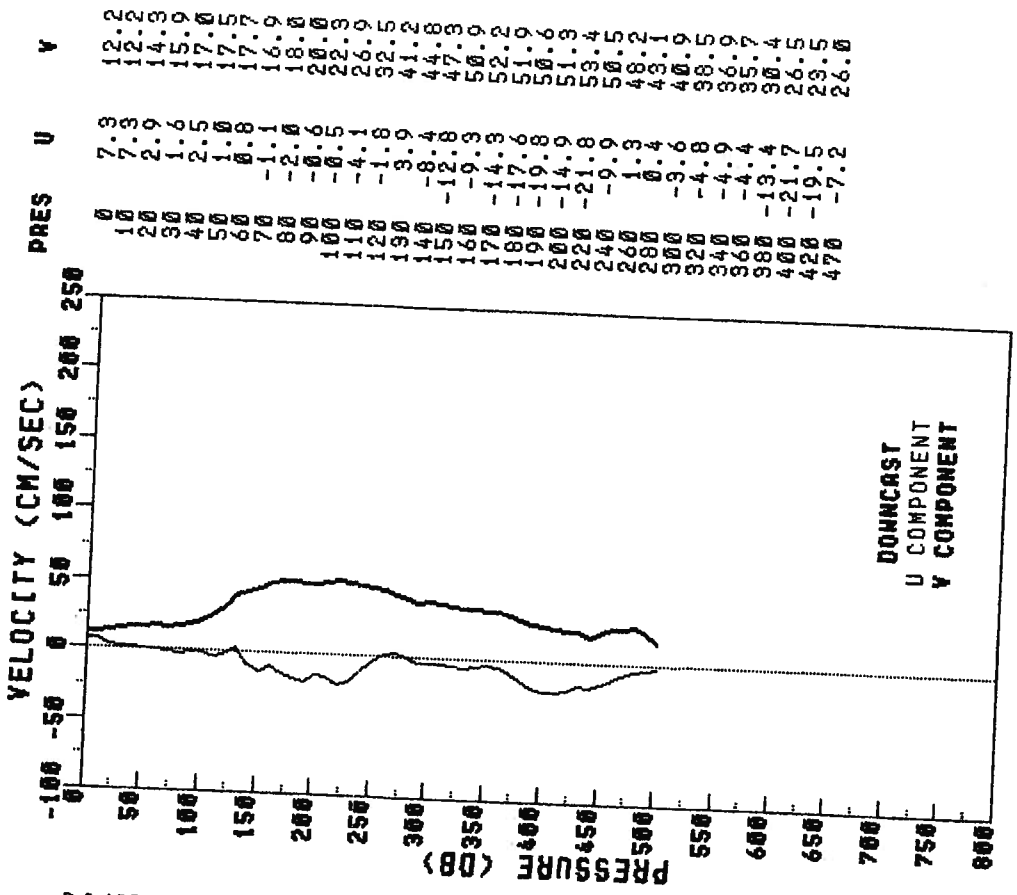
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20	10.0	144.4
30	17.5	145.3
40	6.4	147.6
50	4.4	150.5
60	2.7	158.2
70	1.1	165.1
80	1.4	168.6
90	3.8	170.3
100	-7.3	168.6
110	-4.3	161.3
120	-1.2	153.4
130	-2.0	148.8
140	-3.5	132.3
150	1.9	121.2
160	8.3	111.5
170	1.1	109.6
180	-7.4	110.3
190	-5.9	104.2
200	3.3	93.4
220	3.4	93.3
240	-0.2	93.0
260	-0.2	90.3
280	0.7	87.3
300	3.4	83.5
320	3.3	74.4
340	1.7	72.3
360	-3.9	69.2
380	-3.7	69.4
400	1.8	53.7
420	-3.8	48.6
440	-3.8	38.4
460	4.2	24.0
480	0.6	19.1
500	2.9	16.3
520	3.9	
540		
560		
580		
600		
620		
640		
660		
680		
700		
720		



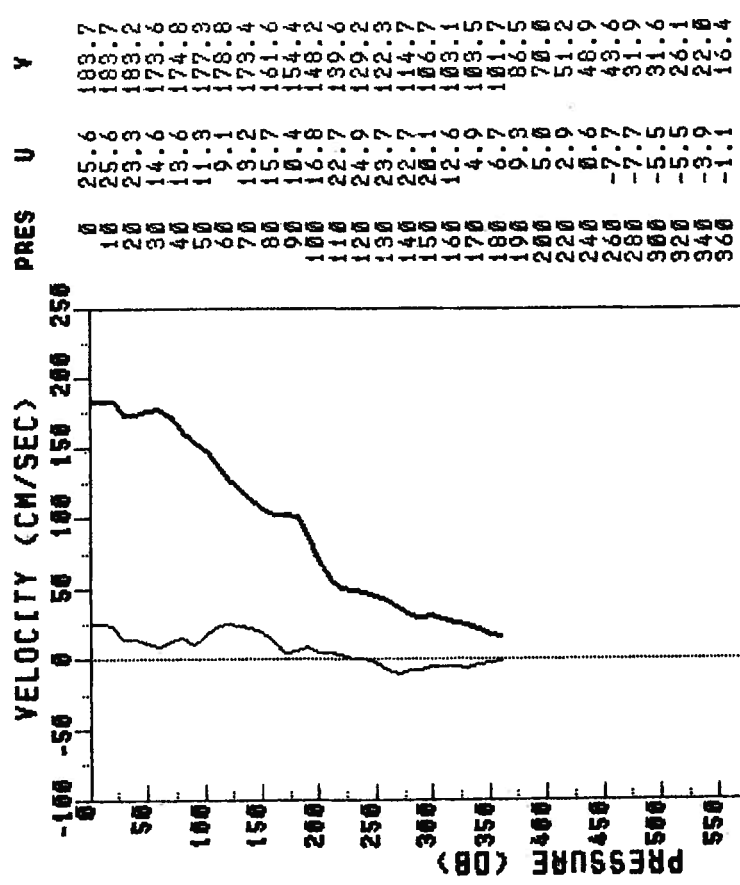
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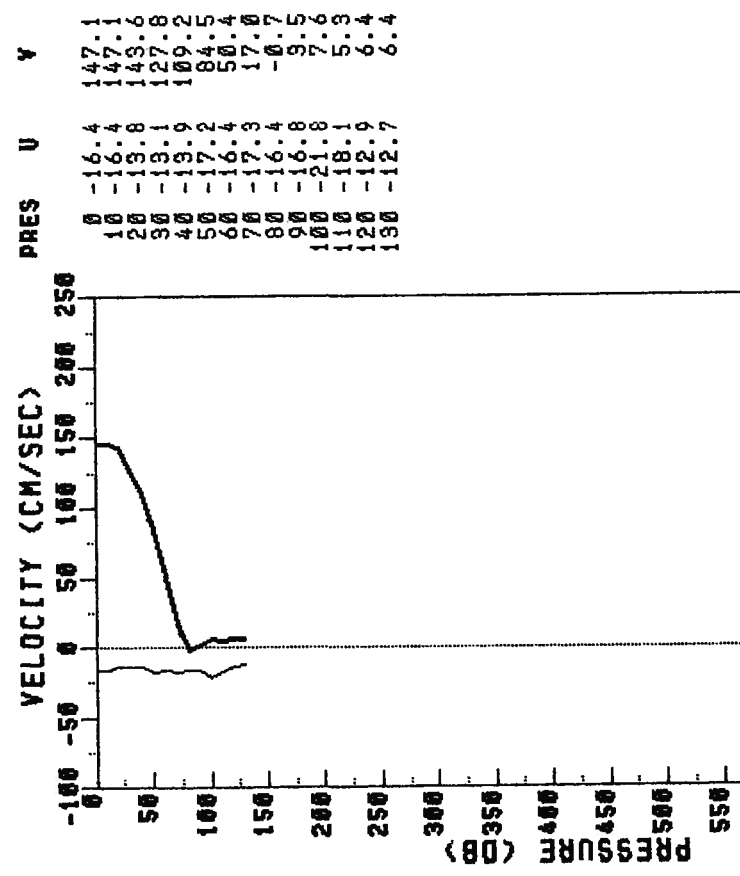
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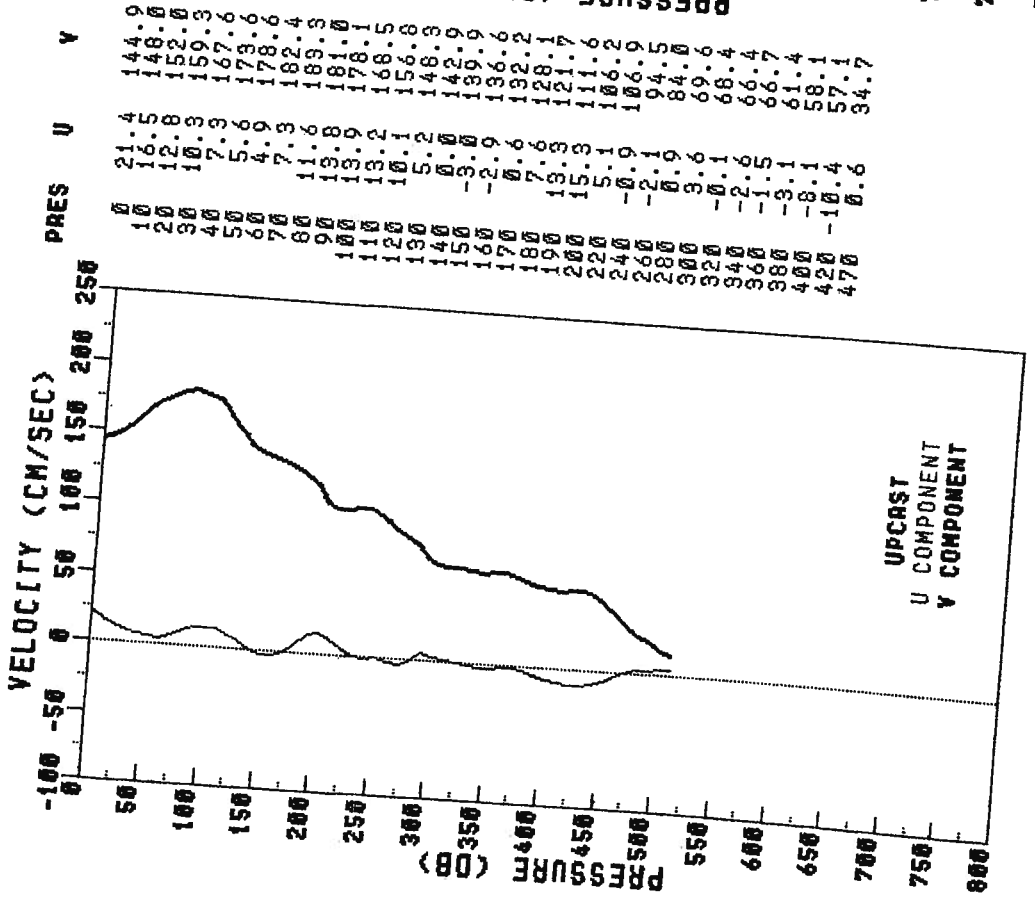
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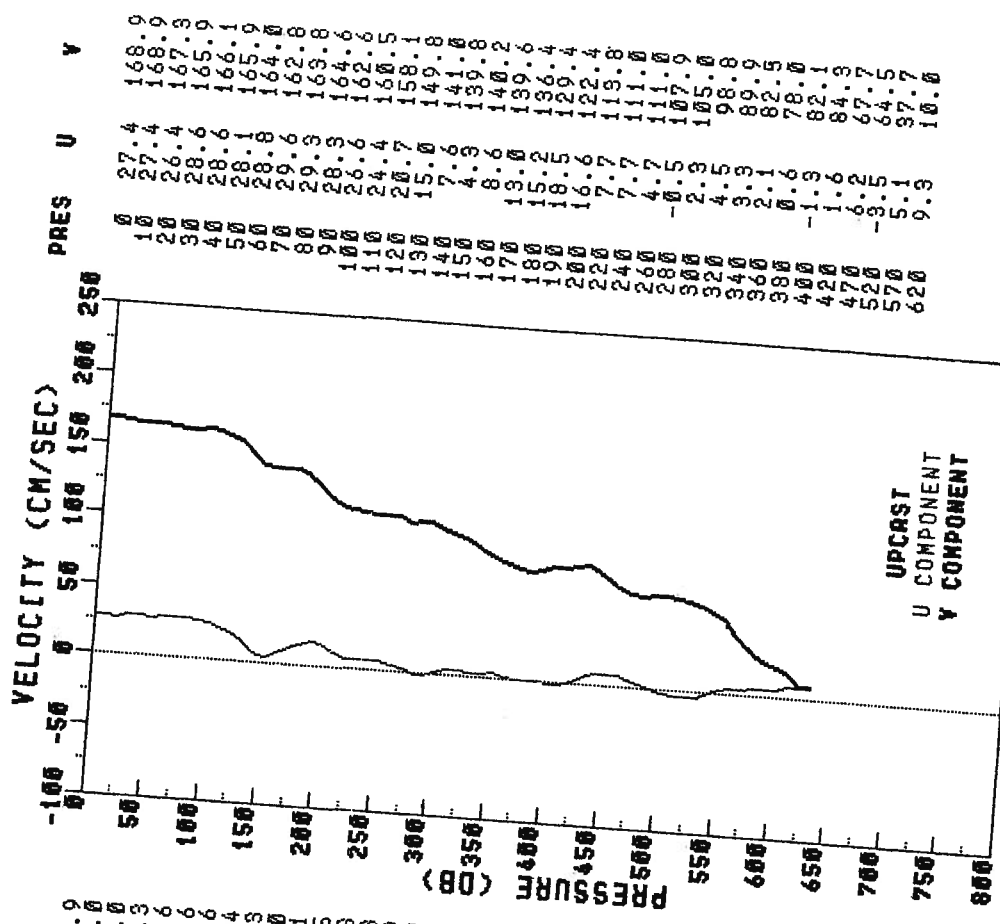
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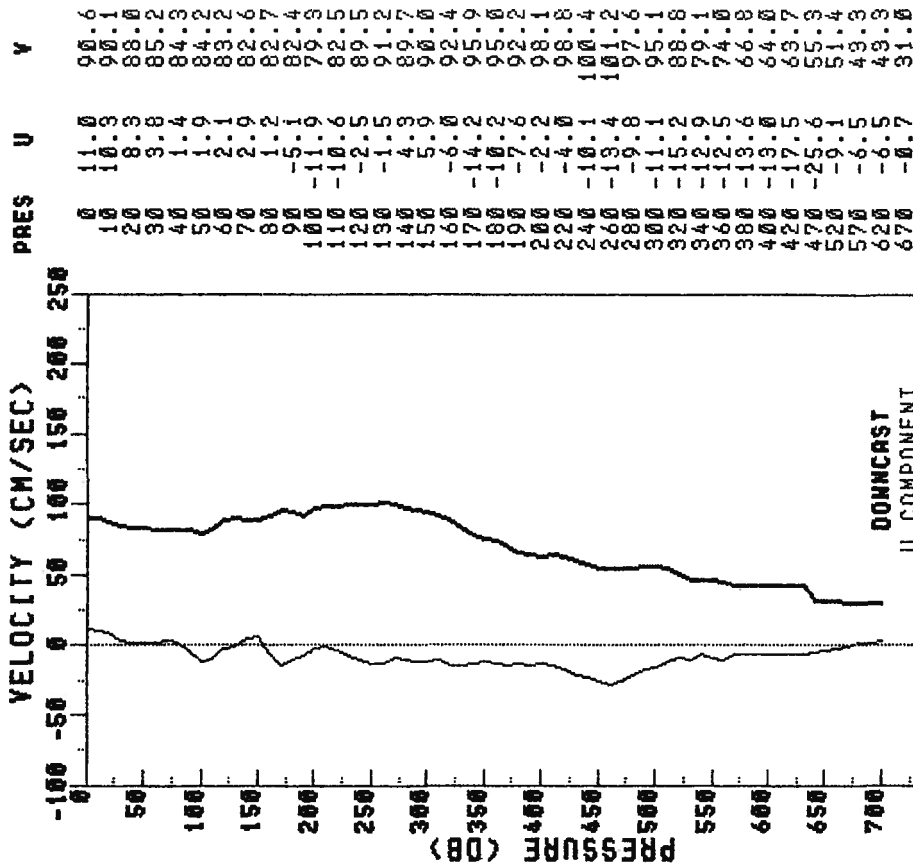
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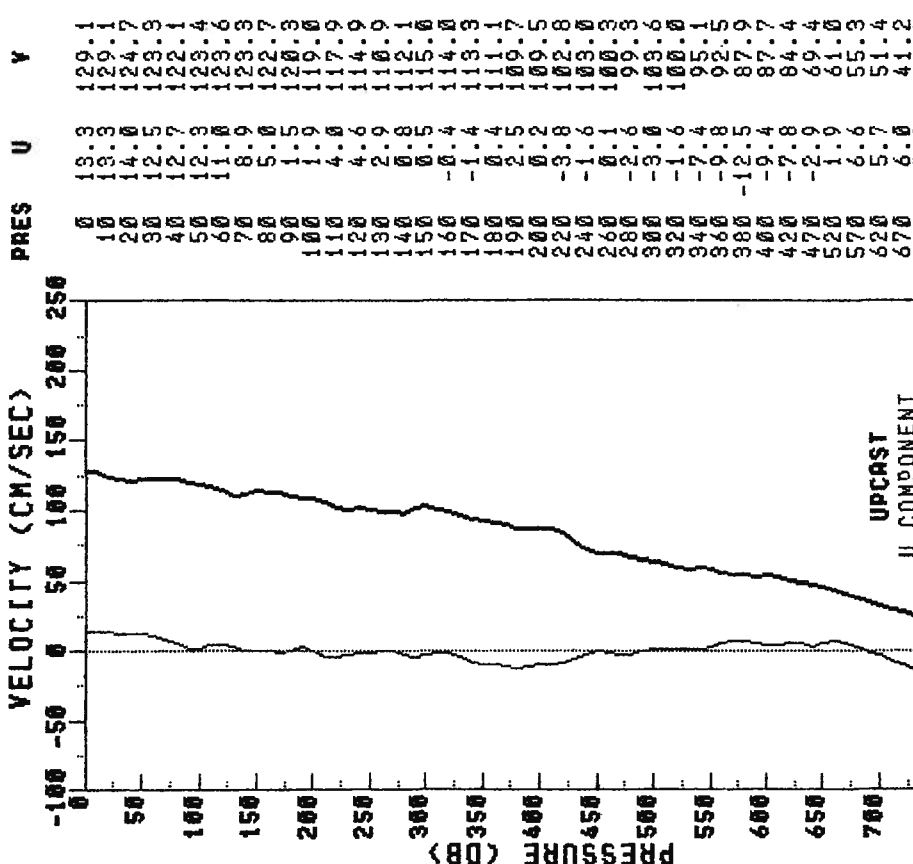
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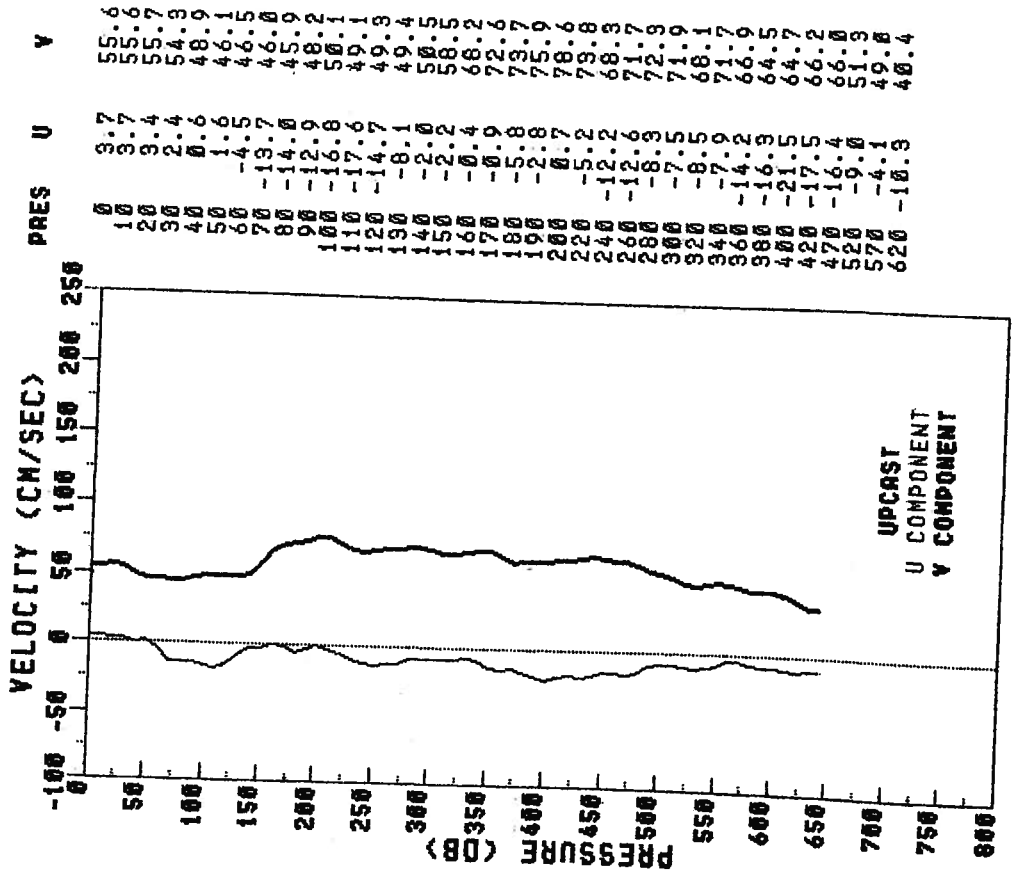
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 LATITUDE 27.00 N LONGITUDE 79.40 W



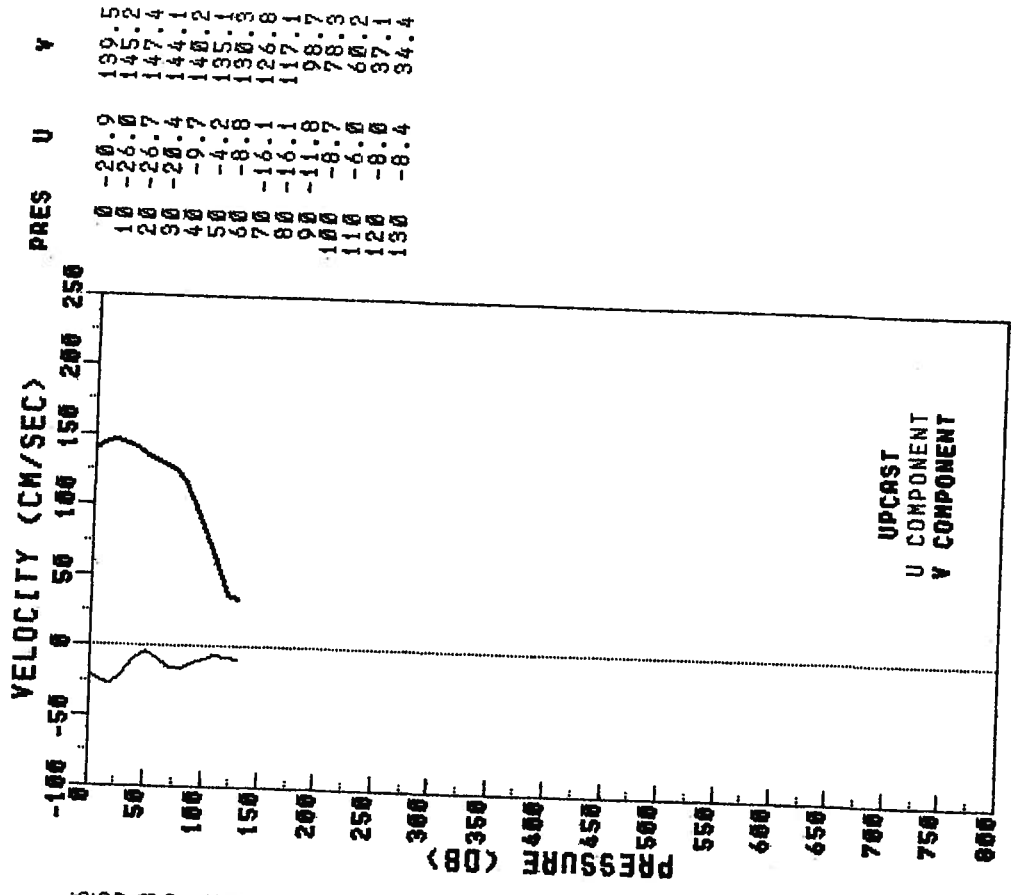
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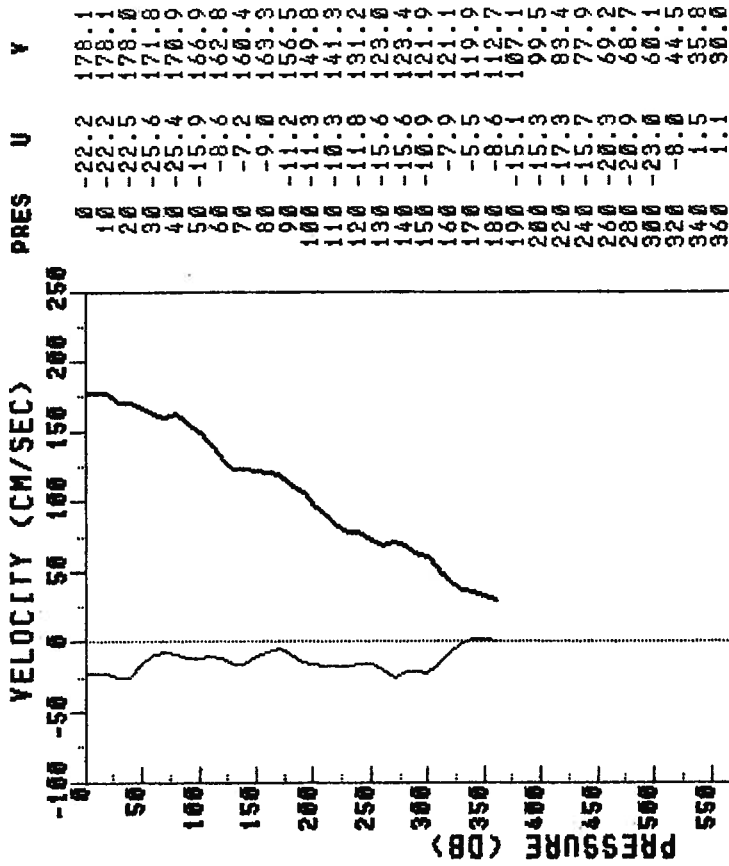
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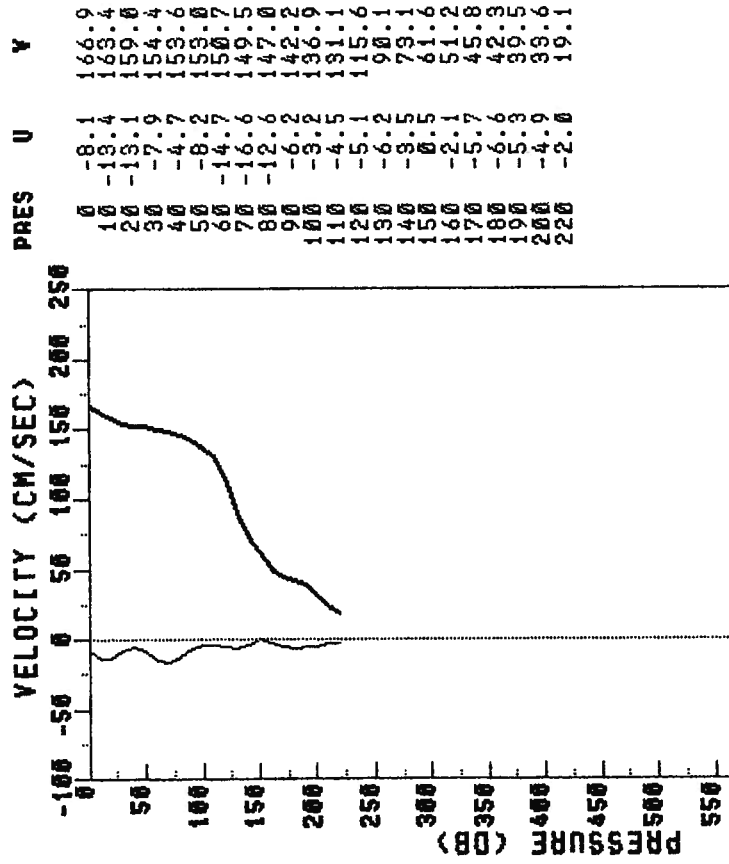
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 LATITUDE 26.99 N LONGITUDE 79.93 W



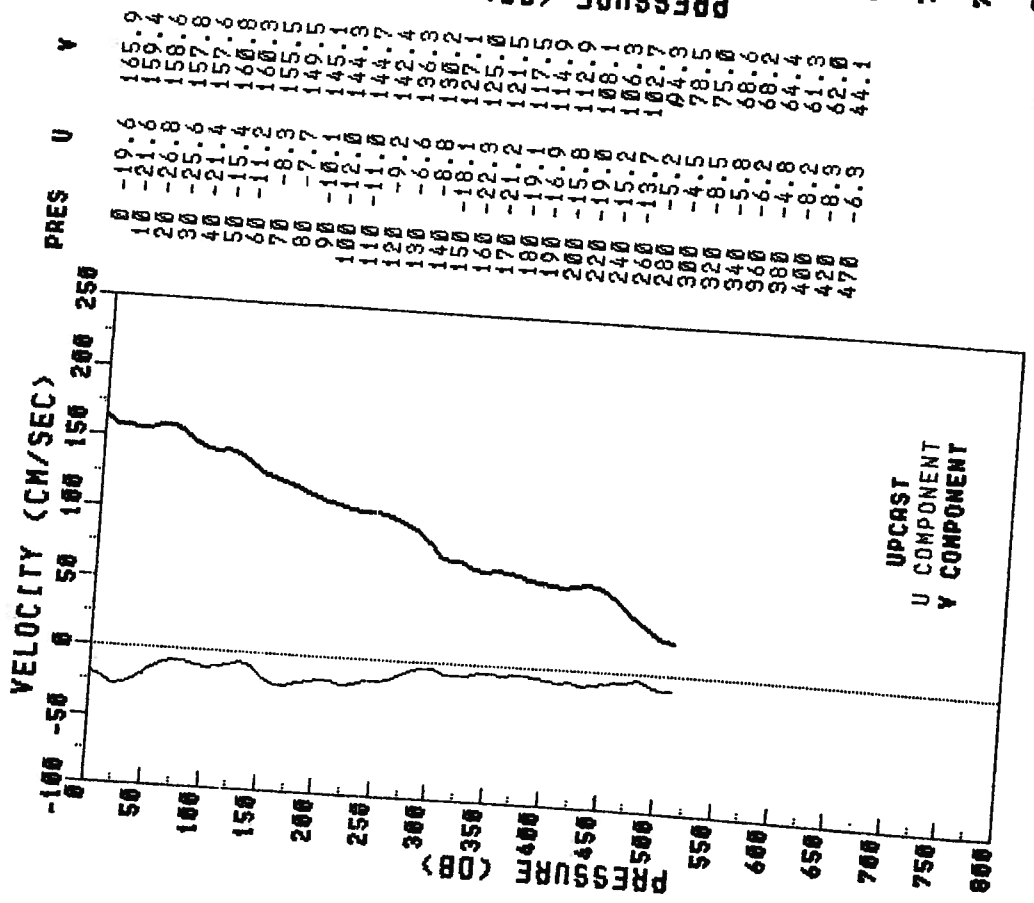
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 LATITUDE 26.98 N LONGITUDE 79.79 W



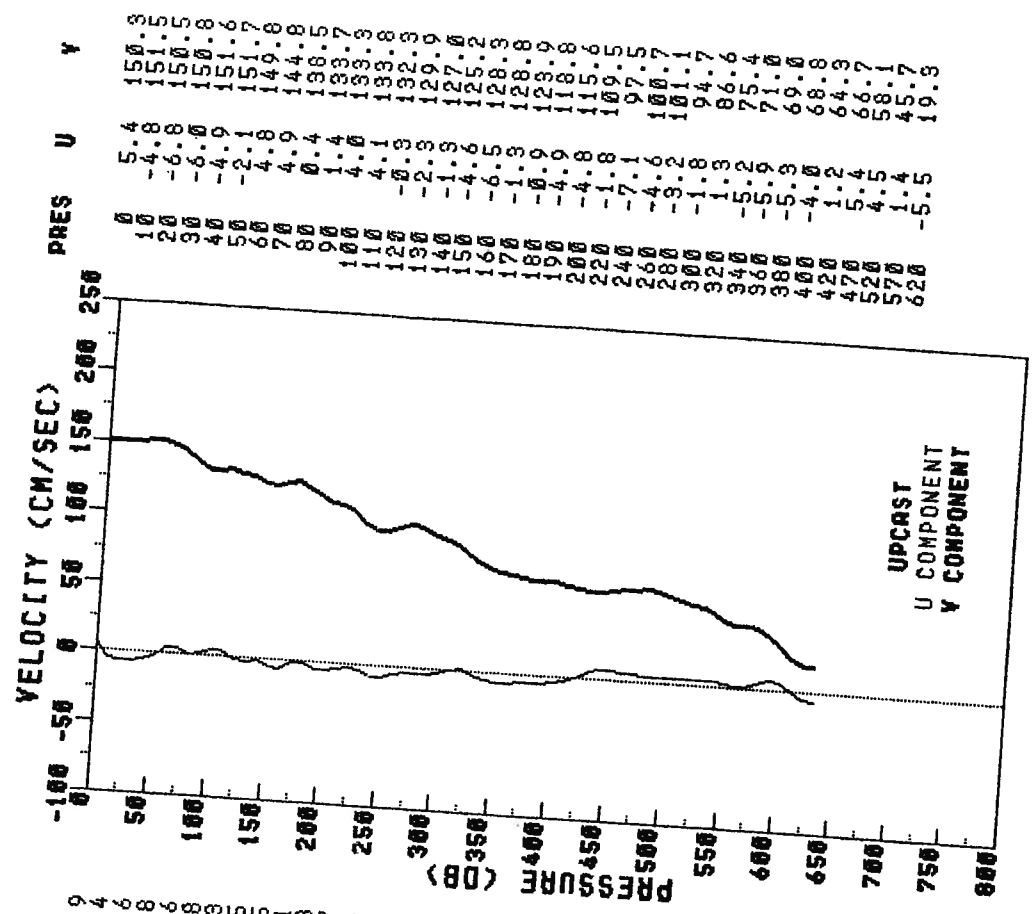
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 LATITUDE 27.00 N LONGITUDE 79.88 W



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 LATITUDE 26.99 N LONGITUDE 79.74 W

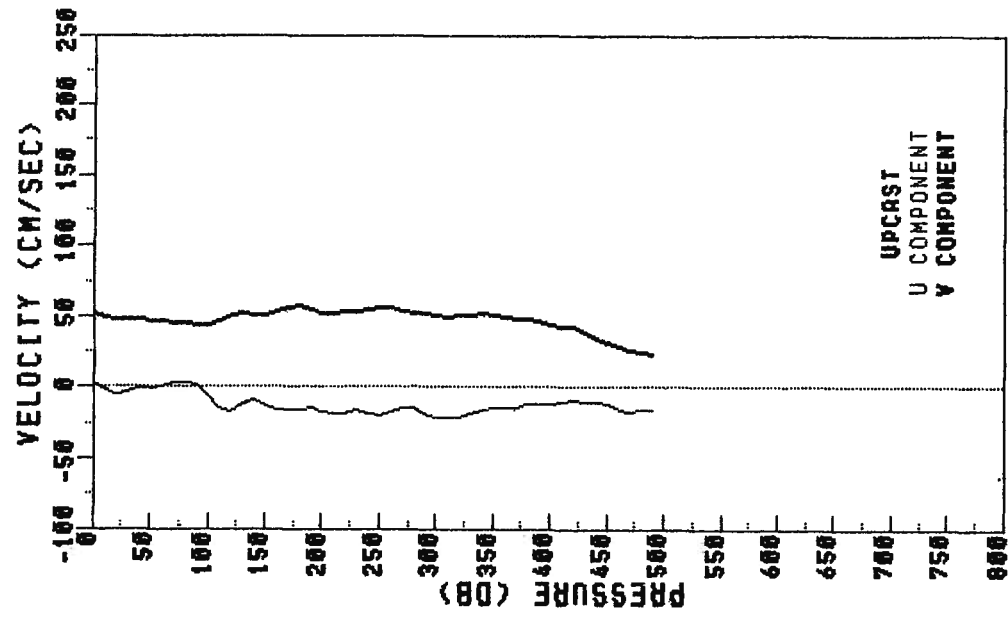
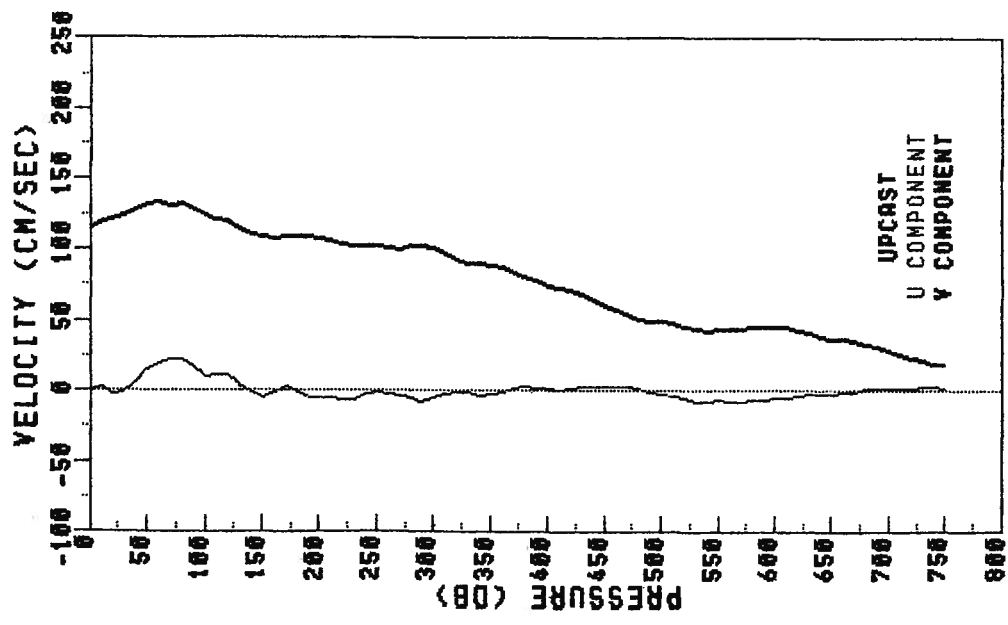


VK-STACS6-83 PEGASUS 024 STN 4
 R/V VIRGINIA KEY JDAY 109 TIME 2114Z
 LATITUDE 26.98 N LONGITUDE 79.61 W

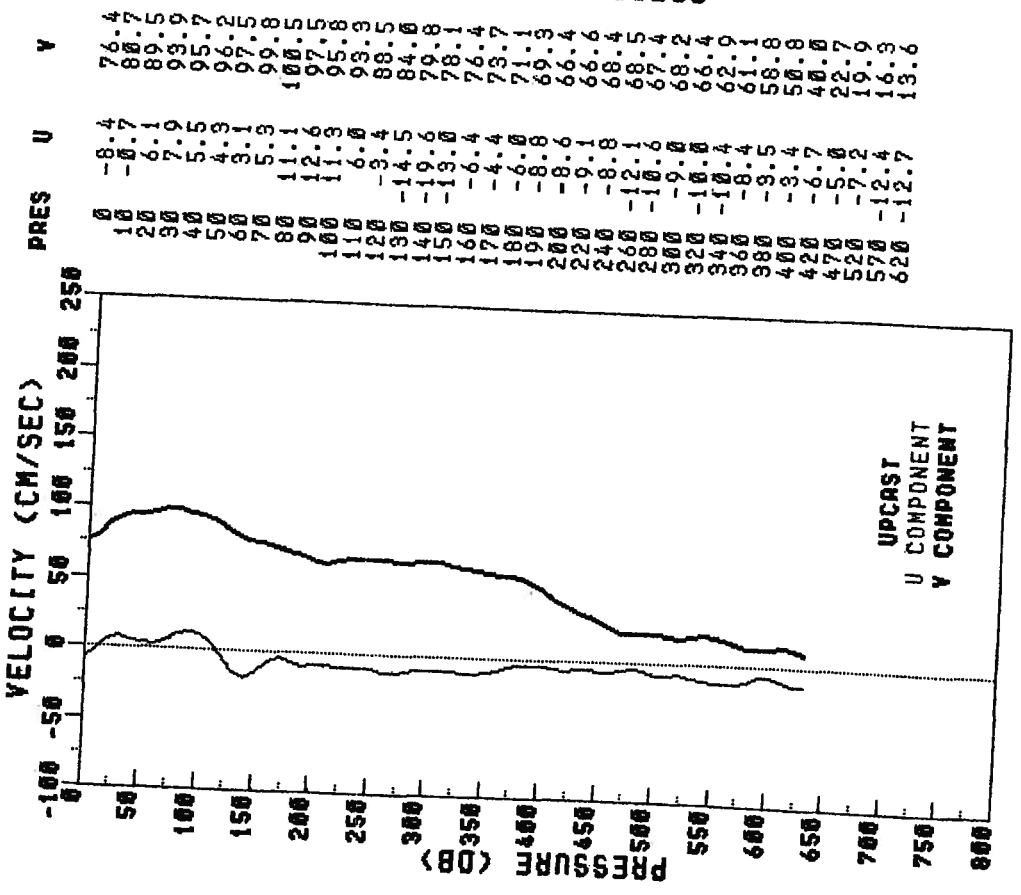


VK-STAC6-83 PEGASUS 025 STN 5
 R/V VIRGINIA KEY JDAY 109 TIME 2309Z
 LATITUDE 26.99 N LONGITUDE 79.50 W

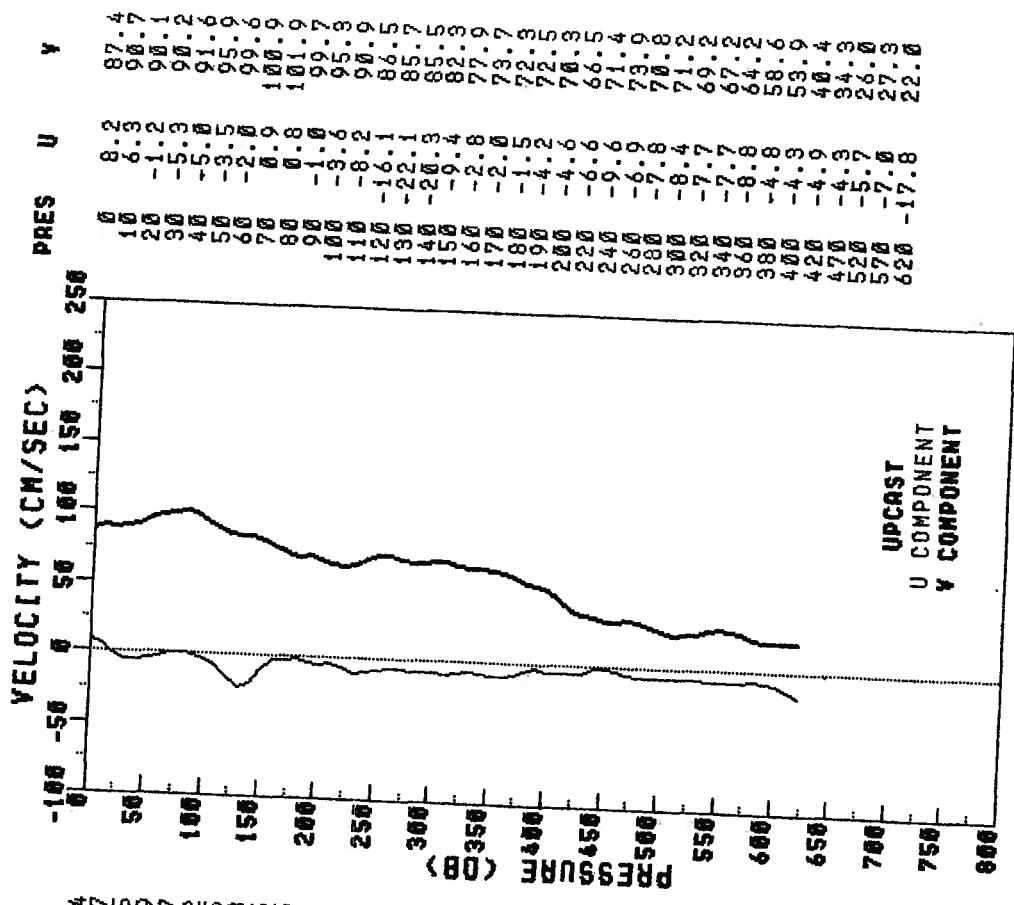
VK-STACS6-83 PEGASUS 029 STN 8
 R/V VIRGINIA KEY JDAY 110 TIME 1848Z
 LATITUDE 27.00 N LONGITUDE 79.20 W



YK-STACS6-83 PEGASUS 030 STN 7
 R/V VIRGINIA KEY JDAY 110 TIME 2020Z
 LATITUDE 27.00 N LONGITUDE 79.30 W



YK-STACS6-83 PEGASUS 031 STN 7
 R/V VIRGINIA KEY JDAY 110 TIME 2235Z
 LATITUDE 27.00 N LONGITUDE 79.29 W



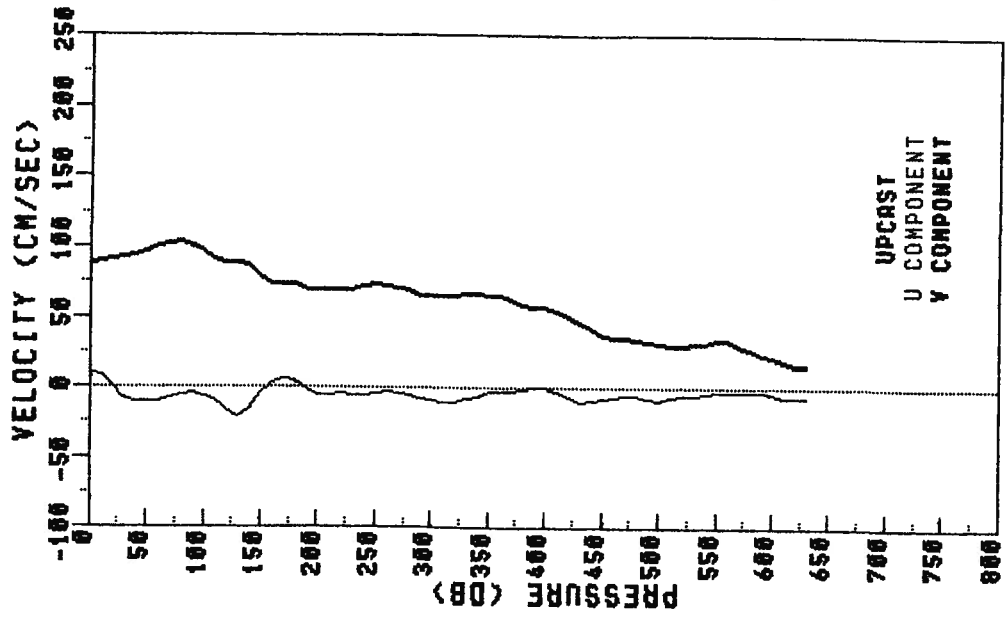
YK-STACS6-83

PEGASUS 032

STN 7

R/V VIRGINIA KEY JDAY 111 TIME 0040Z

LATITUDE 27.00 N LONGITUDE 79.30 W



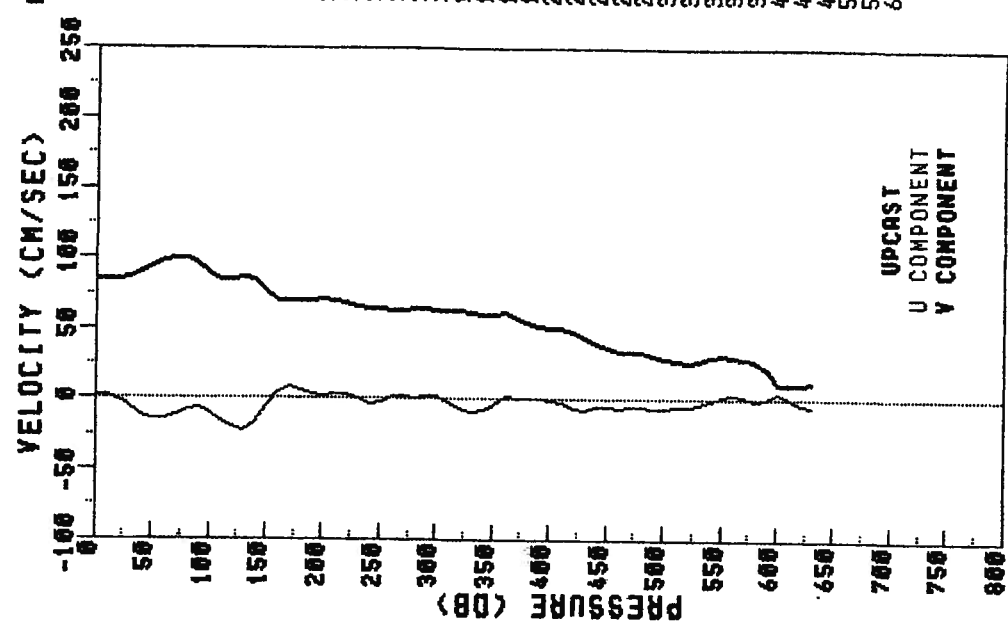
YK-STACS6-83

PEGASUS 033

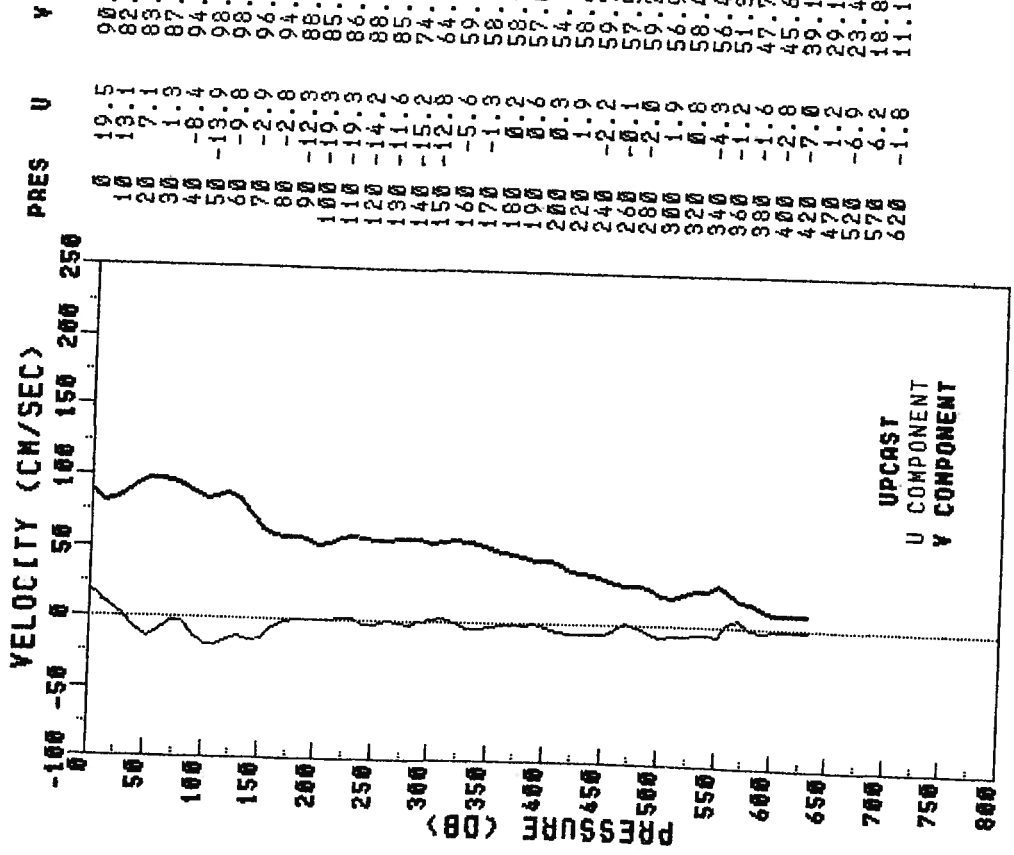
STN 7

R/V VIRGINIA KEY JDAY 111 TIME 0238Z

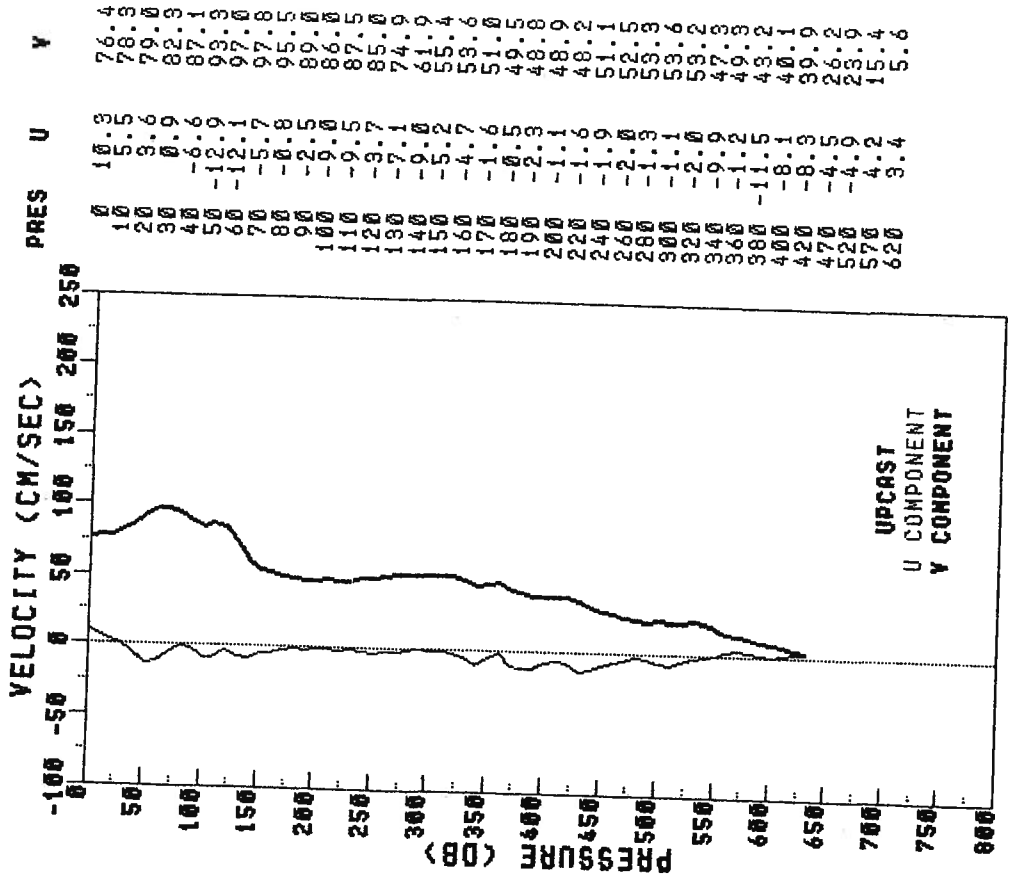
LATITUDE 27.00 N LONGITUDE 79.30 W



YK-STACS6-83 PEGASUS 034 STN 7
 R/V VIRGINIA KEY JOY 111 TIME 0430Z
 LATITUDE 27.00 N LONGITUDE 79.30 W



YK-STACS6-83 PEGASUS 035 STN 7
 R/V VIRGINIA KEY JOY 111 TIME 0632Z
 LATITUDE 27.00 N LONGITUDE 79.30 W



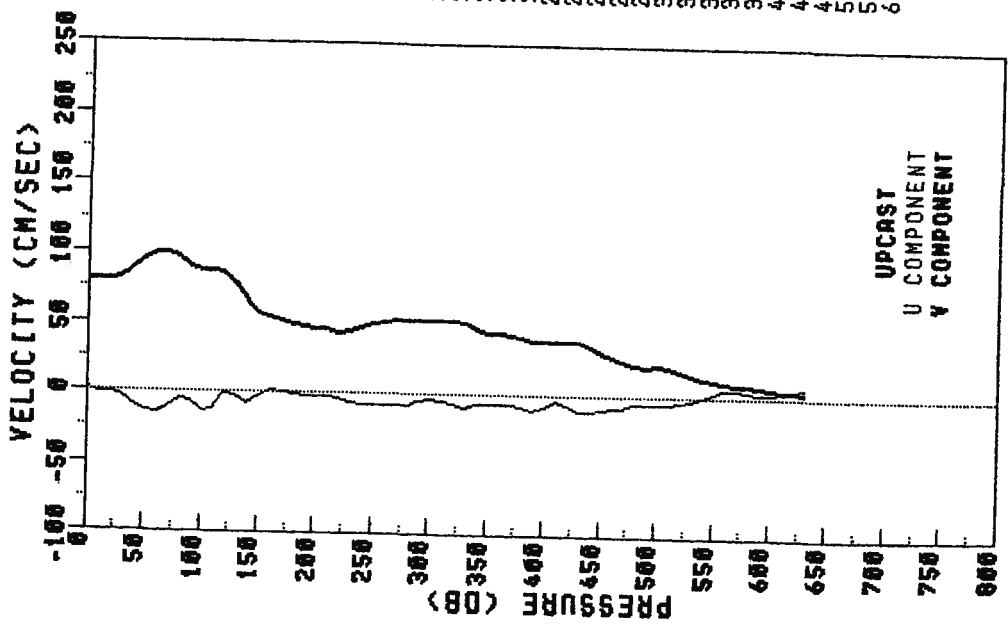
VK-STACS6-83

PEGASUS 036

STN 7

R/V VIRGINIA KEY JOY 111 TIME 0830Z

LATITUDE 27.00 N LONGITUDE 79.30 W



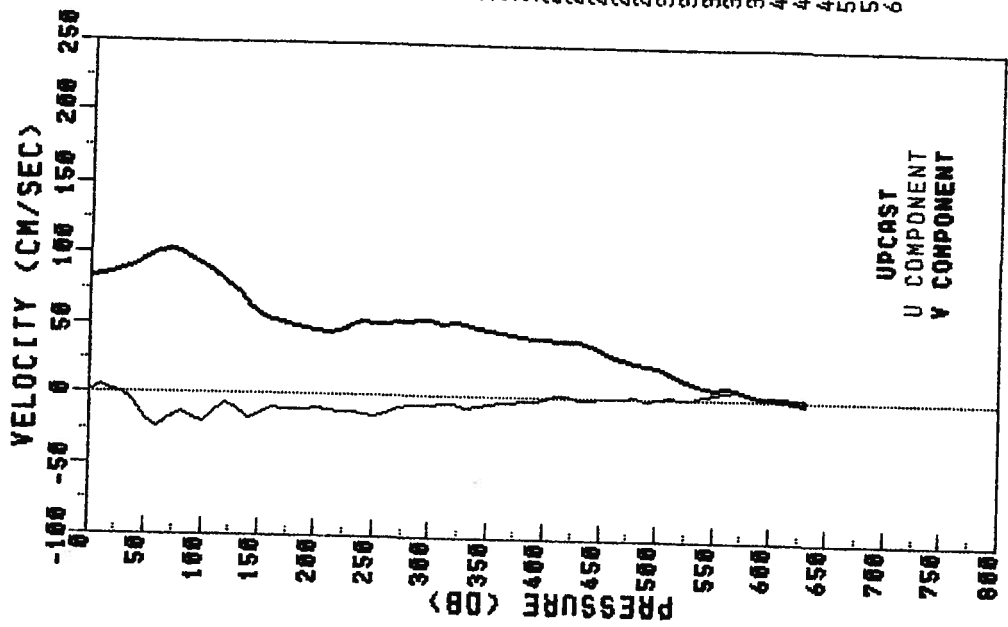
VK-STACS6-83

PEGASUS 037

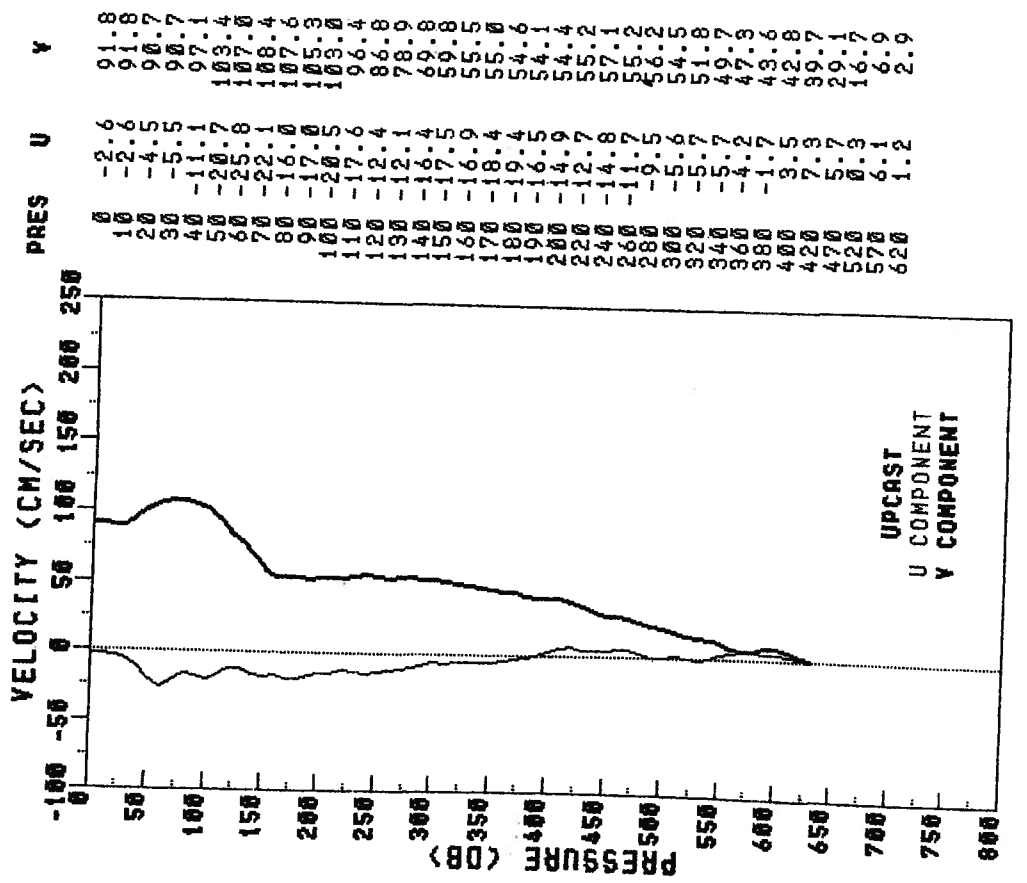
STN 7

R/V VIRGINIA KEY JOY 111 TIME 1035Z

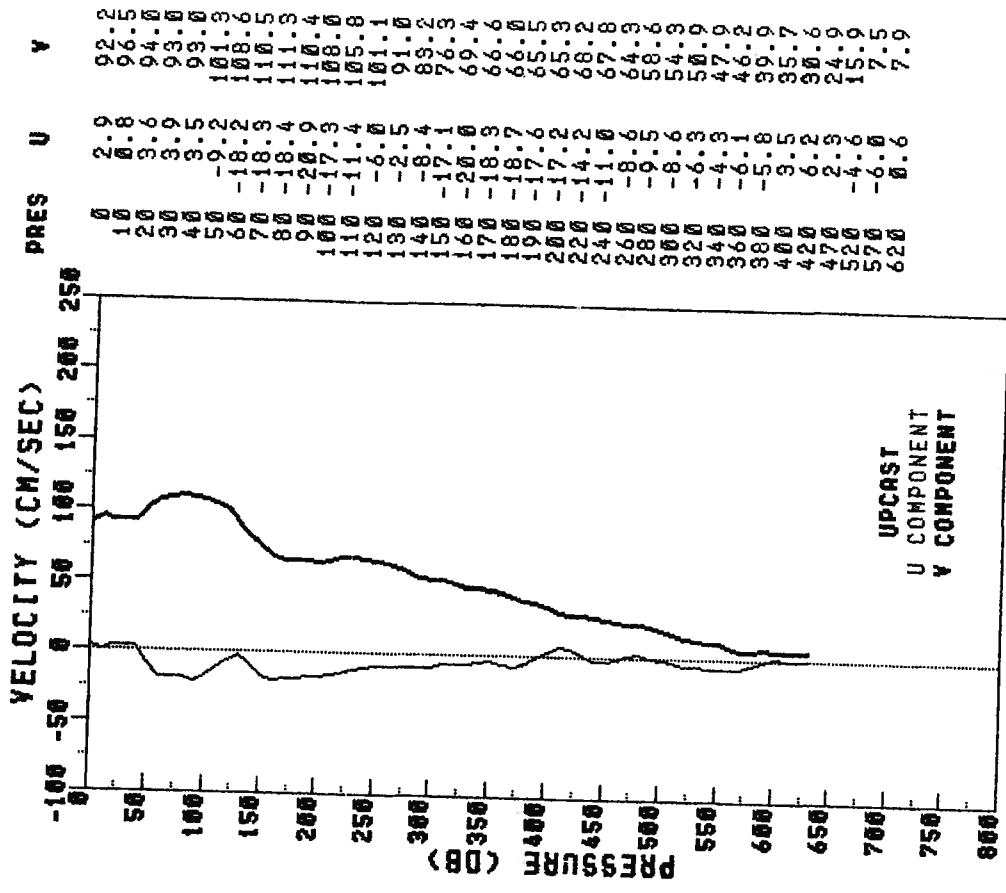
LATITUDE 27.00 N LONGITUDE 79.30 W



YK-STACS6-83 PEGASUS 038 STN 7
 R/V VIRGINIA KEY JOY 111 TIME 1227Z
 LATITUDE 27.00 N LONGITUDE 79.30 W

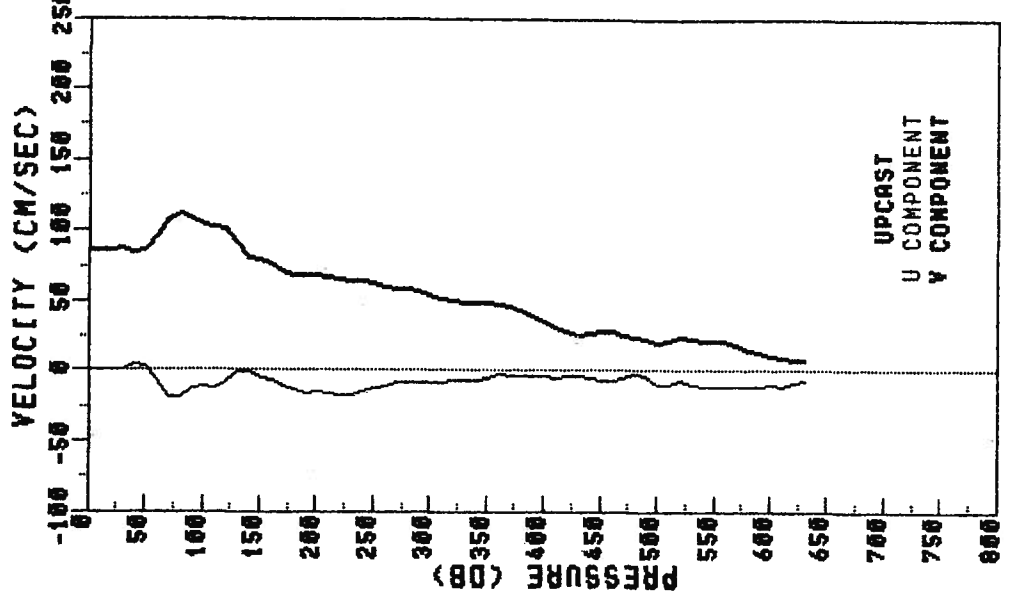


YK-STACS6-83 PEGASUS 040 STN 7
 R/V VIRGINIA KEY JOY 111 TIME 1625Z
 LATITUDE 27.00 N LONGITUDE 79.30 W



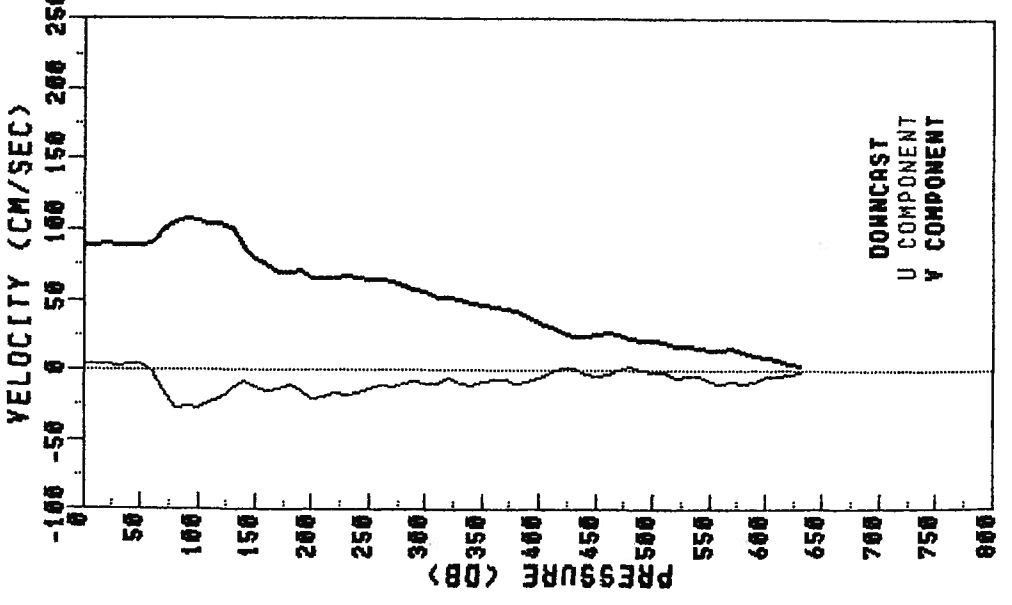
YK-STACS6-83 PEGASUS 042 STN 7
 R/V VIRGINIA KEY JDAY 111 TIME 2024Z
 LATITUDE 27.00 N LONGITUDE 79.30 W

PRES	U	V
0	1.2	86.4
10	1.2	86.4
20	0.3	86.8
30	0.4	87.5
40	4.0	85.1
50	0.0	86.5
60	3.0	96.9
70	-6.9	108.6
80	-18.1	113.1
90	-12.0	108.6
100	-10.0	103.8
110	-11.4	103.3
120	-8.1	101.2
130	-0.8	90.6
140	-1.3	80.9
150	-4.8	77.2
160	-5.7	77.0
170	-10.2	71.2
180	-13.6	69.4
190	-15.4	69.4
200	-15.0	68.7
220	-17.0	65.7
240	-15.0	64.4
260	-10.2	64.3
300	-7.5	61.2
320	-6.0	54.1
340	-2.1	50.5
360	-4.2	48.3
380	-4.0	44.3
400	-3.5	36.1
420	-3.5	29.0
470	-4.8	24.9
520	-6.0	19.6
570	-10.5	9.3
620	-8.3	9.3

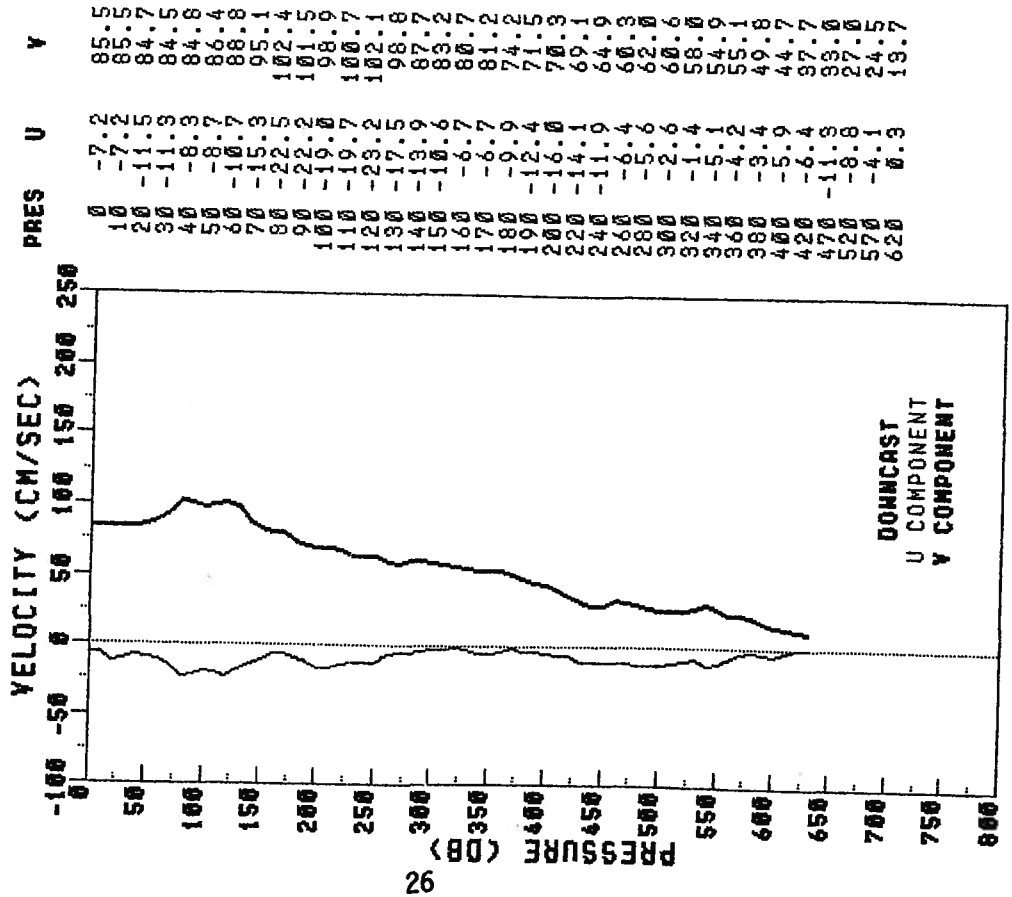


YK-STACS6-83 PEGASUS 041 STN 7
 R/V VIRGINIA KEY JDAY 111 TIME 1825Z
 LATITUDE 27.00 N LONGITUDE 79.30 W

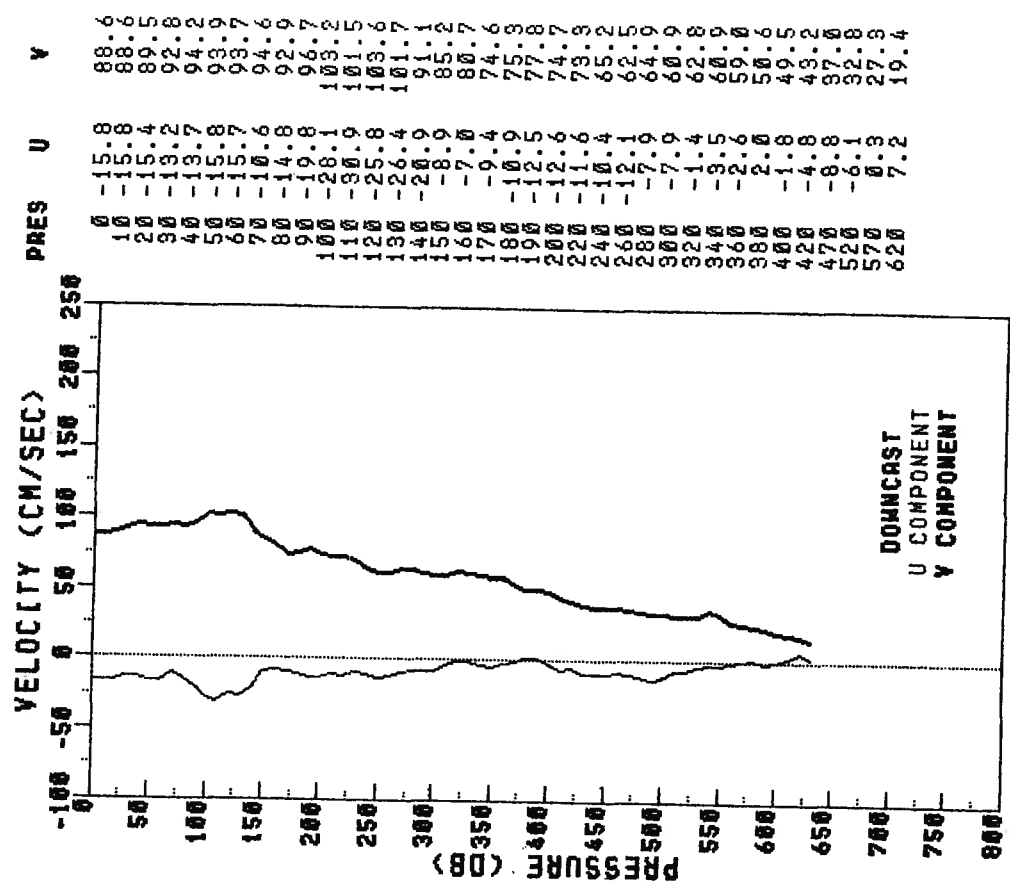
PRES	U	V
0	4.8	89.2
10	4.3	89.2
20	2.5	90.2
30	4.8	89.4
40	3.9	89.2
50	-0.6	90.1
60	-14.4	100.6
70	-26.6	106.2
80	-26.0	108.8
90	-27.1	106.5
100	-22.9	104.7
110	-19.8	103.5
120	-14.0	101.6
130	-8.4	88.1
140	-12.6	80.1
150	-14.6	75.9
160	-14.6	70.7
170	-11.7	70.8
180	-14.7	65.8
190	-19.8	65.8
200	-16.8	66.2
220	-16.6	64.0
240	-10.2	59.8
260	-9.3	55.7
300	-5.0	51.8
320	-11.1	48.7
340	-6.1	45.0
360	-9.9	42.5
380	-5.6	34.9
400	-1.4	27.1
420	0.5	25.6
470	-4.9	18.4
520	-6.4	16.1
570	-2.0	15.5
620	-2.0	15.5



YK-STACS6-83 PEGASUS 043 STN 7
 R/V VIRGINIA KEY JDY 111 TIME 2233Z
 LATITUDE 27.00 N LONGITUDE 79.30 W



YK-STACS6-83 PEGASUS 044 STN 7
 R/V VIRGINIA KEY JDY 112 TIME 0030Z
 LATITUDE 27.00 N LONGITUDE 79.30 W



VK-STACS6-83

PEGASUS 045

STN 7

VK-STACS6-83

PEGASUS 047

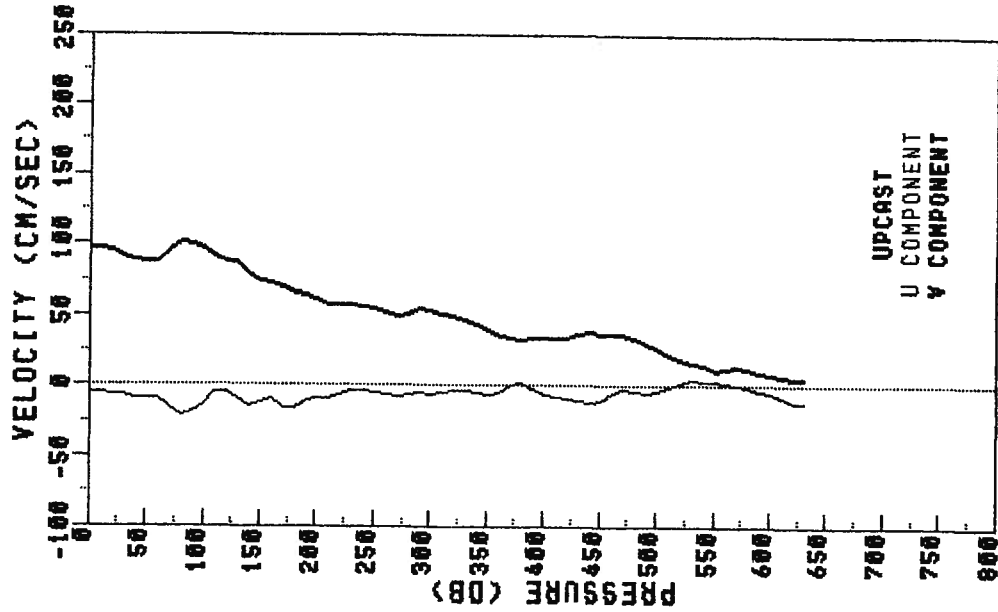
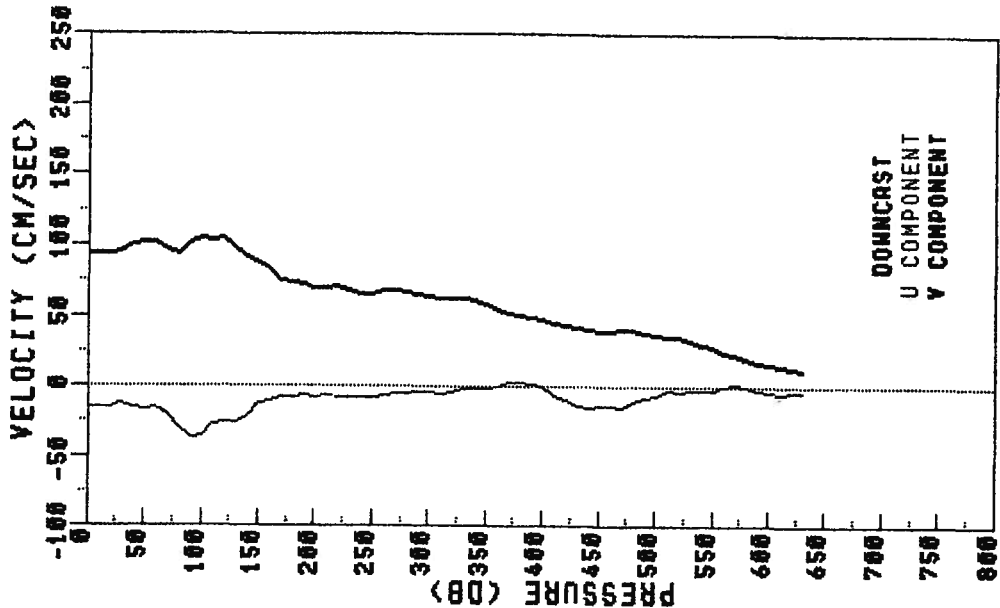
STN 7

R/Y VIRGINIA KEY JDAY 112 TIME 0230Z

R/Y VIRGINIA KEY JDAY 112 TIME 0635Z

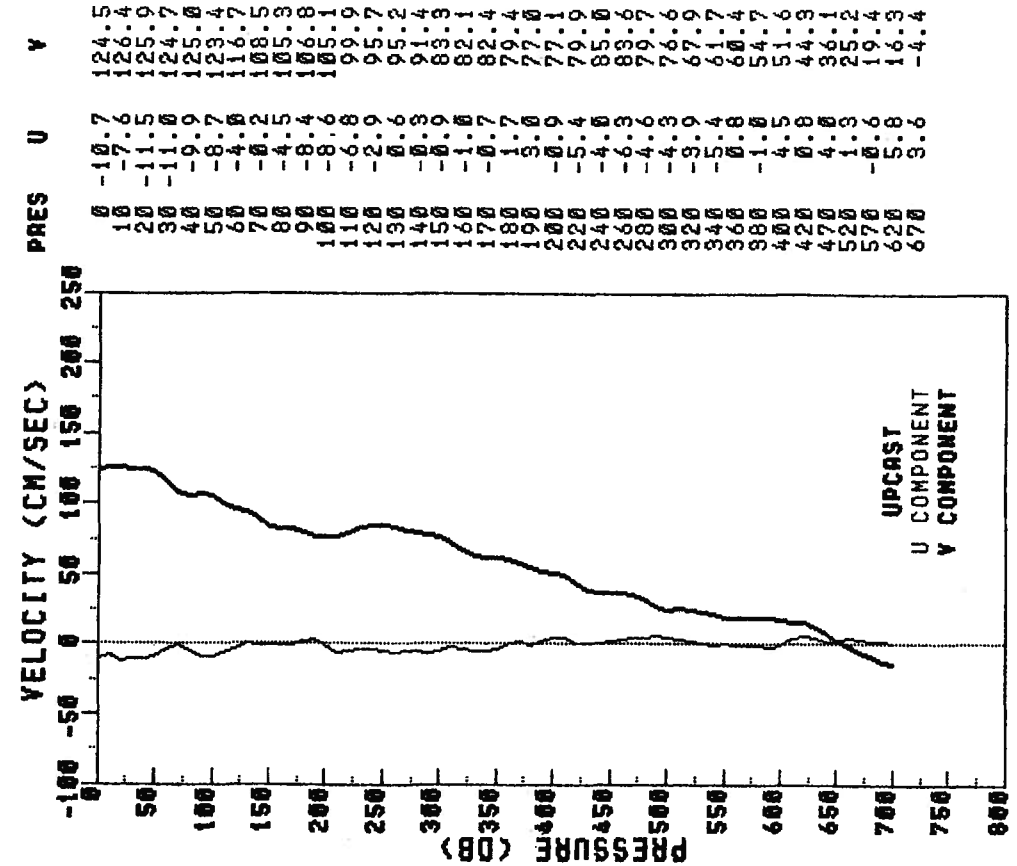
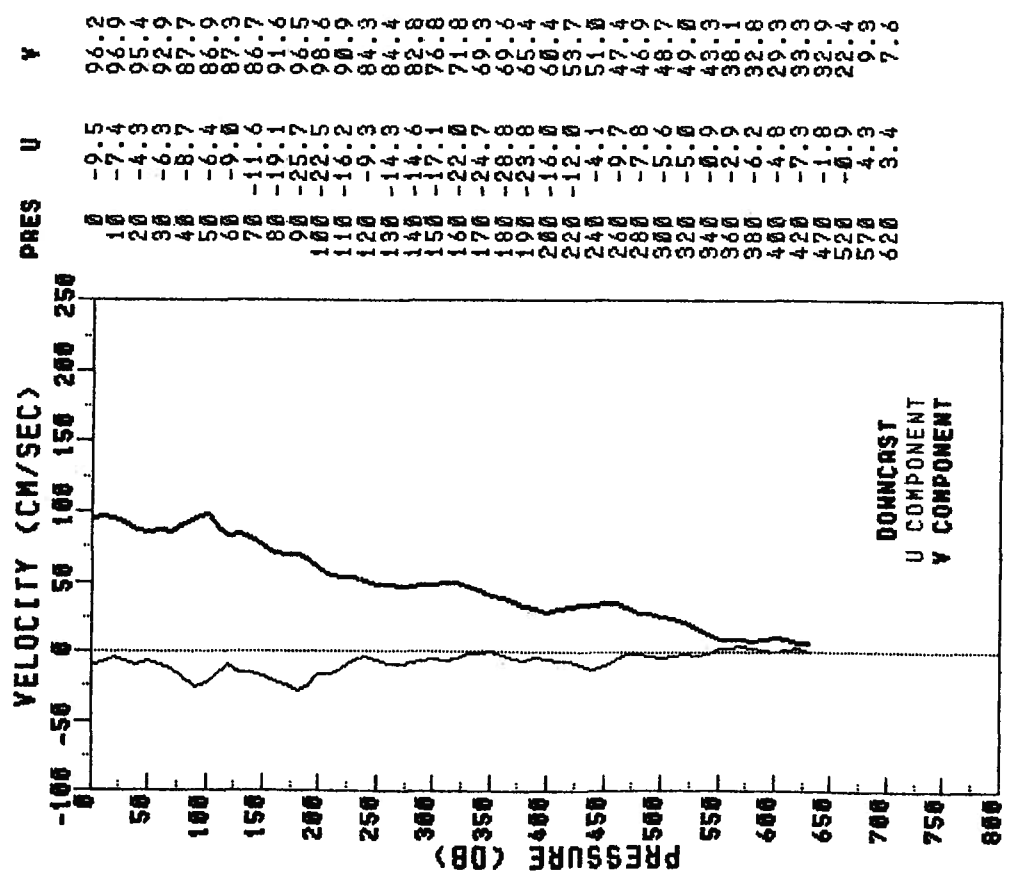
LATITUDE 27.00 N LONGITUDE 79.30 W

LATITUDE 27.00 N LONGITUDE 79.30 W

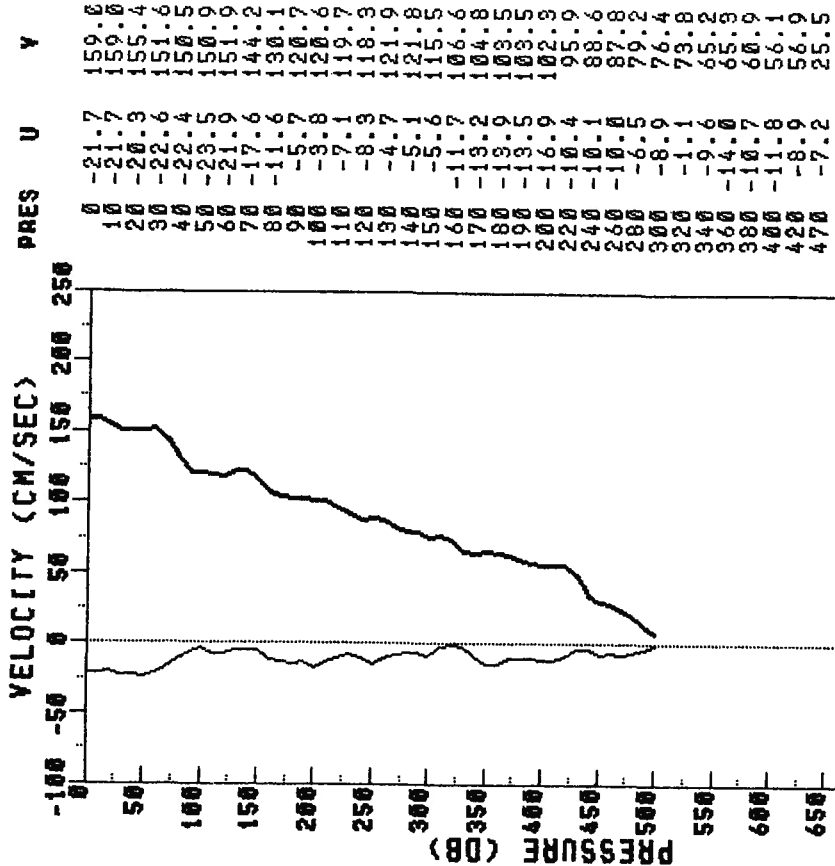


VK-STACS6-83 PEGASUS 048 STN 7
 R/Y VIRGINIA KEY JDAY 112 TIME 0846Z
 LATITUDE 27.00 N LONGITUDE 79.30 W

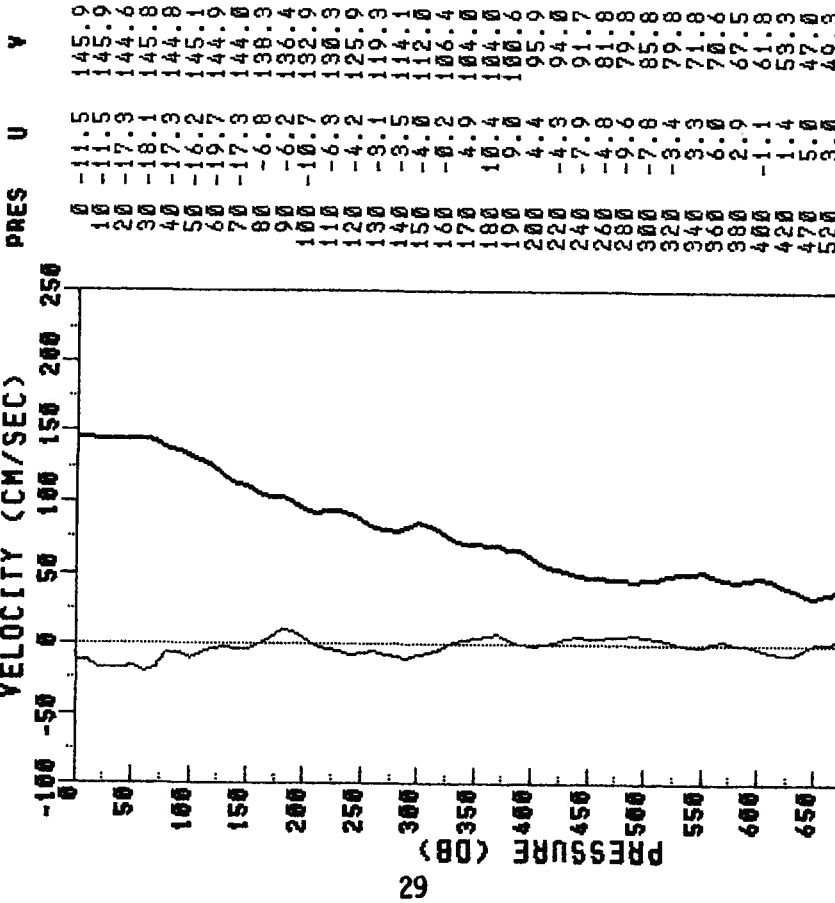
VK-STACS6-83 PEGASUS 049 STN 6
 R/Y VIRGINIA KEY JDAY 112 TIME 1037Z
 LATITUDE 26.99 N LONGITUDE 79.40 W



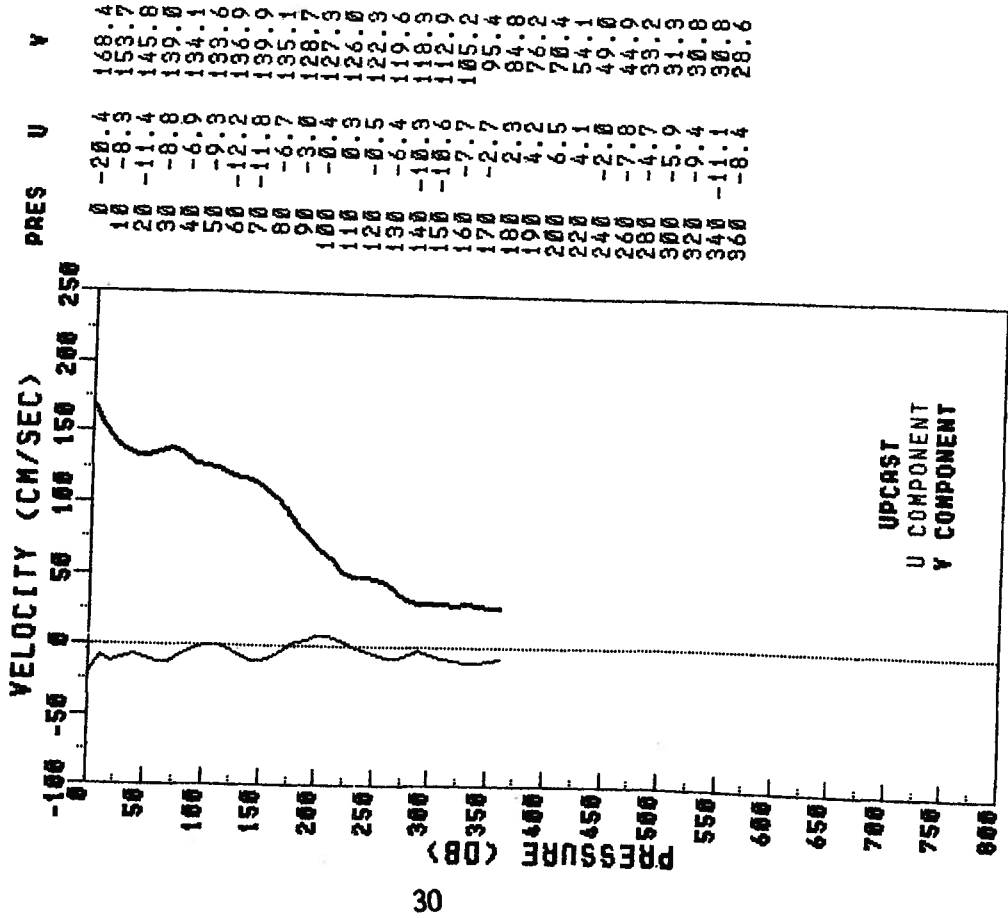
YK-STACS6-83 PEGASUS 054 STN 3
 R/V VIRGINIA KEY JOY 112 TIME 1814Z
 LATITUDE 26.99 N LONGITUDE 79.69 W



YK-STACS6-83 PEGASUS 050 STN 5
 R/V VIRGINIA KEY JOY 112 TIME 1222Z
 LATITUDE 26.99 N LONGITUDE 79.50 W

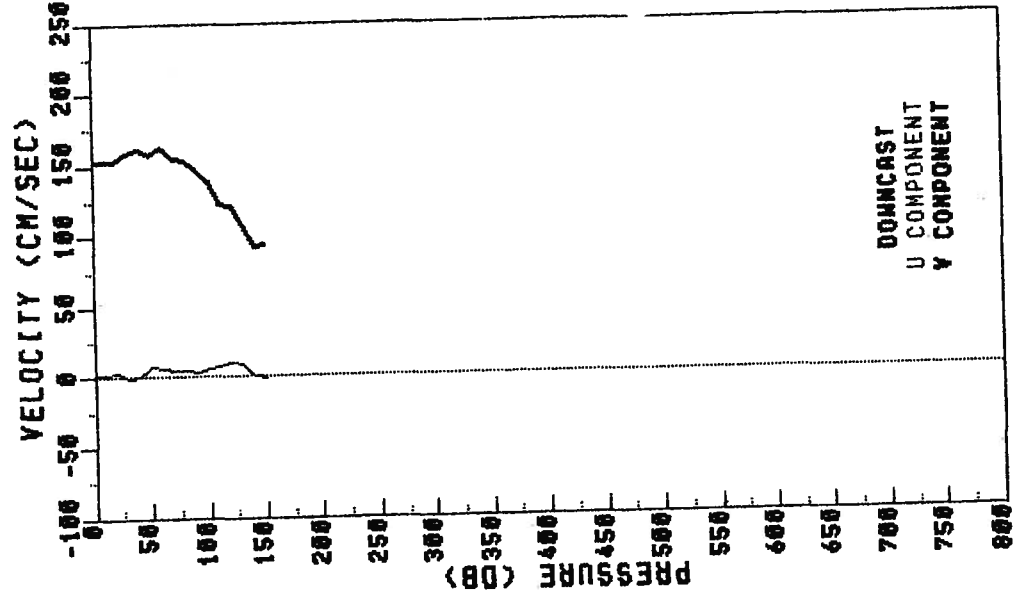


VK-STACS6-83 PEGASUS 056 STN 2
 R/V VIRGINIA KEY JDY 112 TIME 2124Z
 LATITUDE 26.98 N LONGITUDE 79.79 W



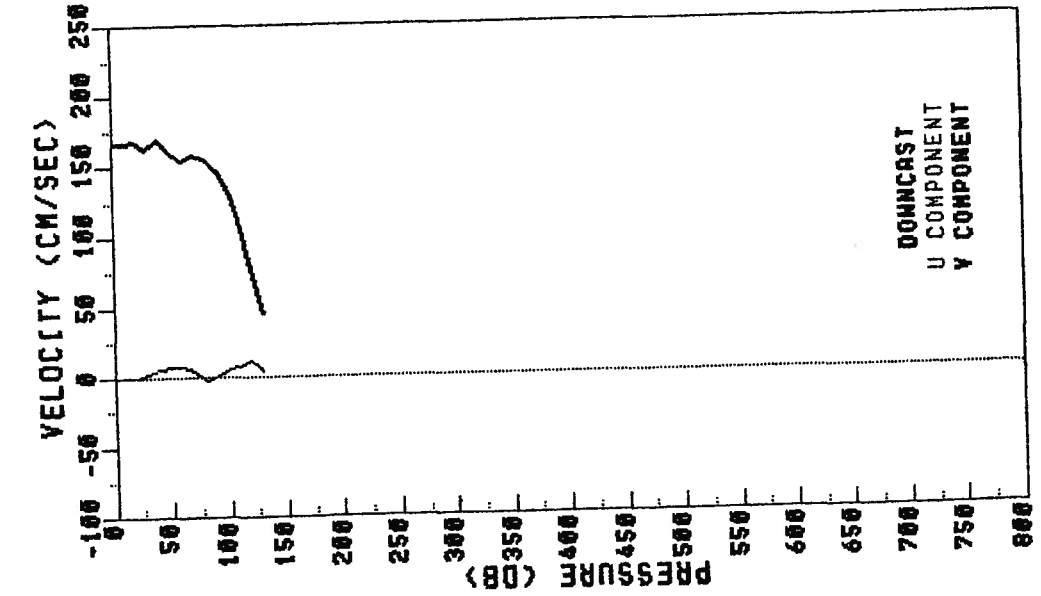
YK-STACS9-83 PEGASUS 002 STN 1
 R/Y VIRGINIA KEY JDAY 210 TIME 0205Z
 LATITUDE 26.97 N LONGITUDE 79.83 N

PRES	U	V
0	1.8	153.0
10	1.8	153.0
20	3.1	153.1
30	-0.8	159.6
40	-0.1	161.7
50	6.7	158.3
60	6.5	163.7
70	4.0	154.8
80	5.1	153.3
90	3.3	146.9
100	6.1	138.3
110	7.8	122.9
120	10.2	121.6
130	9.0	107.3
140	1.0	93.5
150	-0.8	95.4

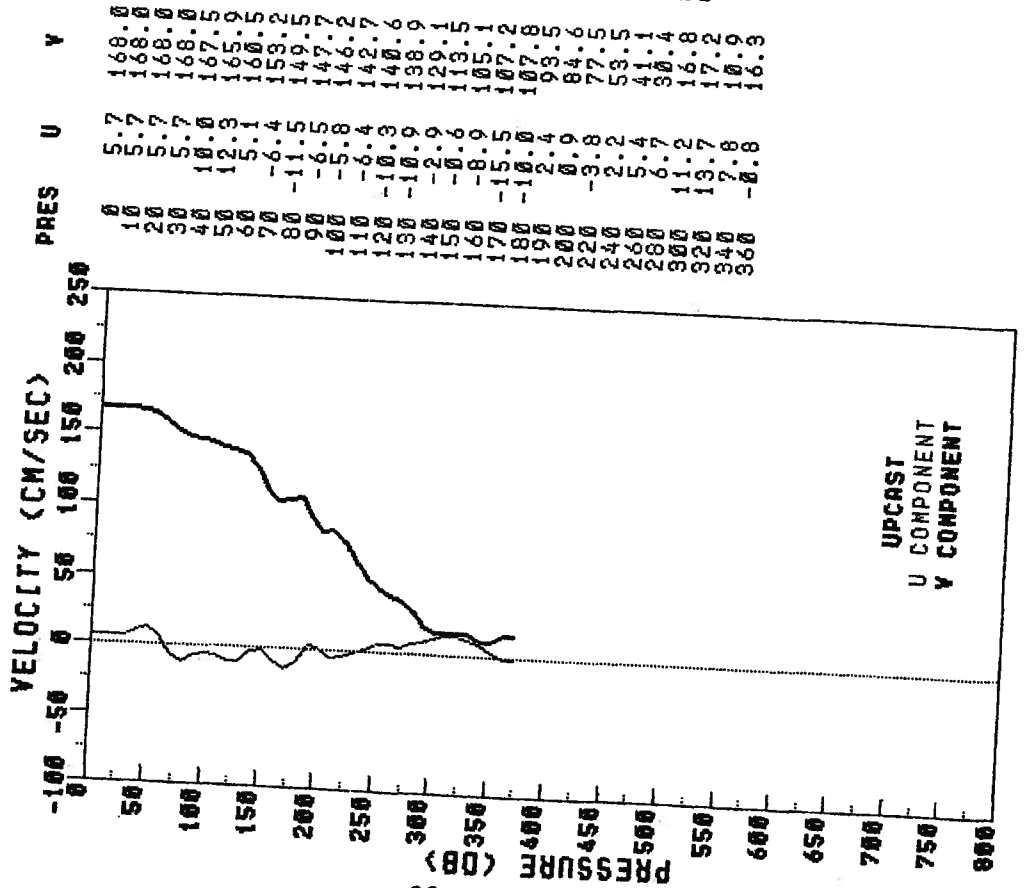


YK-STACS9-83 PEGASUS 001 STN 0
 R/Y VIRGINIA KEY JDAY 209 TIME 2320Z
 LATITUDE 26.93 N LONGITUDE 79.83 N

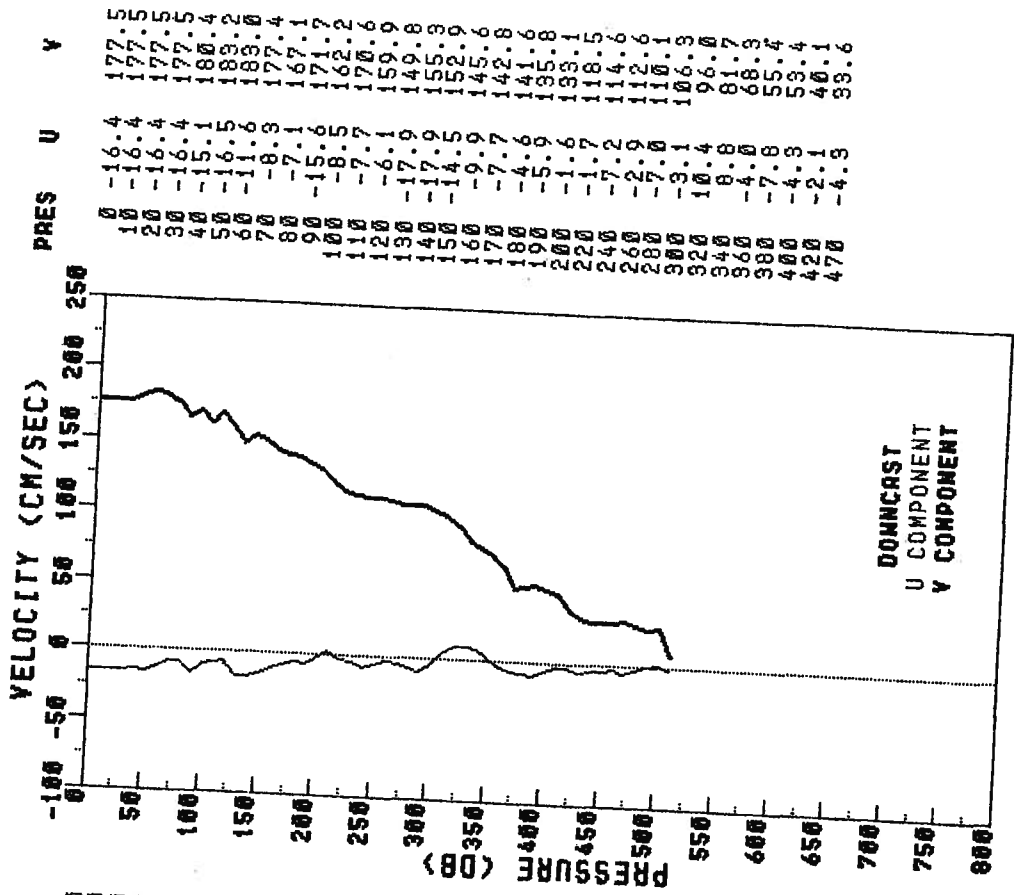
PRES	U	V
0	-0.4	166.4
10	-0.4	168.1
20	0.4	162.9
30	2.3	170.0
40	5.4	161.6
50	7.5	155.2
60	6.9	158.9
70	3.8	156.4
80	-2.7	147.5
90	1.2	139.3
100	5.4	112.5
110	7.1	76.2
120	10.6	45.0
130	4.7	



VK-STACS9-83 PEGASUS 003 STN 2
 R/V VIRGINIA KEY JDY 210 TIME 0456Z
 LATITUDE 26.97 N LONGITUDE 79.76 W



VK-STACS9-83 PEGASUS 004 STN 3
 R/V VIRGINIA KEY JDY 210 TIME 0844Z
 LATITUDE 26.99 N LONGITUDE 79.66 W



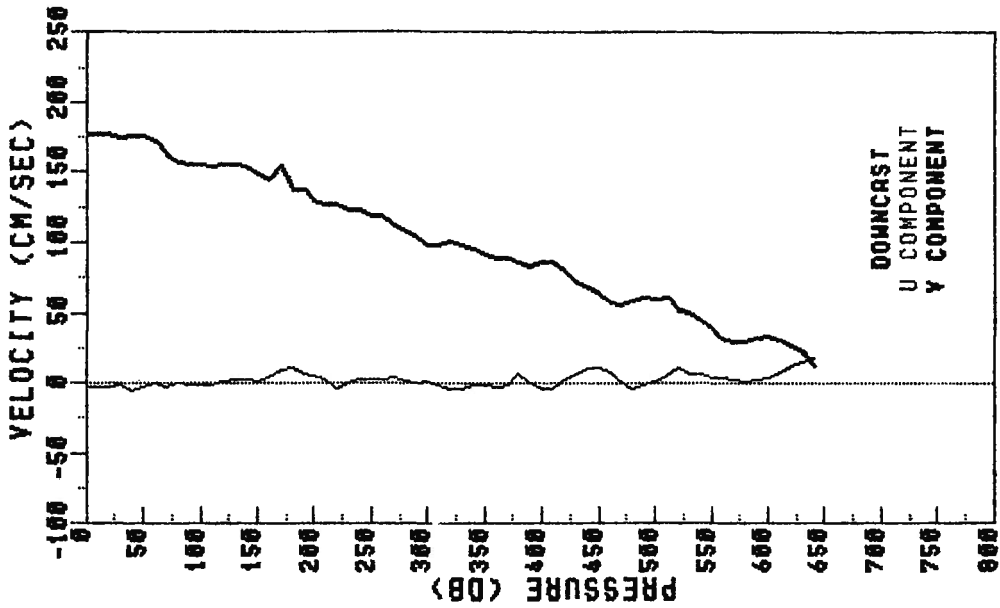
YK-STACS9-83

PEGASUS 005

STN 4

R/Y VIRGINIA KEY JOY 210 TIME 1158Z

LATITUDE 26.97 N LONGITUDE 79.59 W



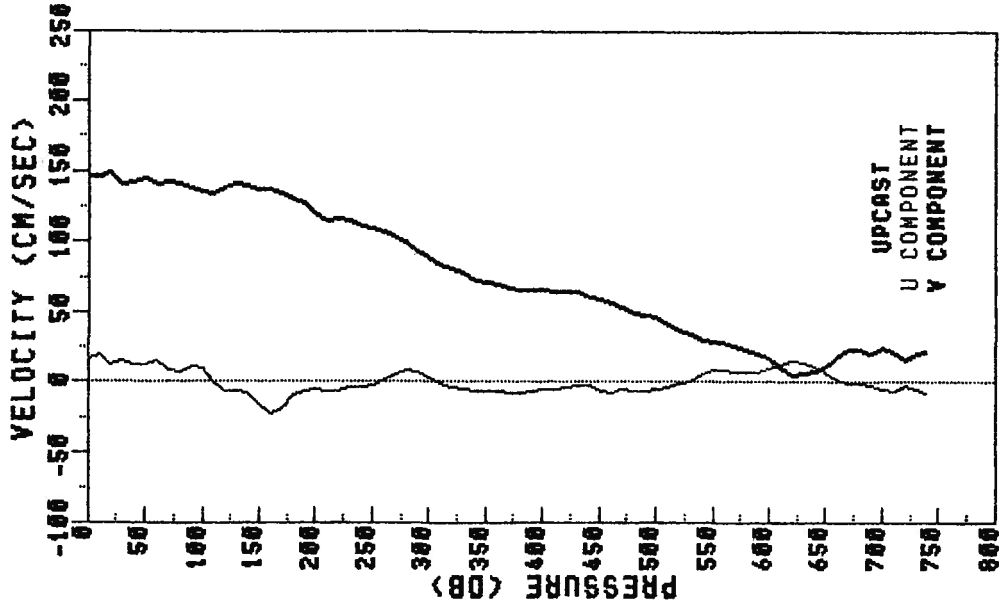
YK-STACS9-83

PEGASUS 006

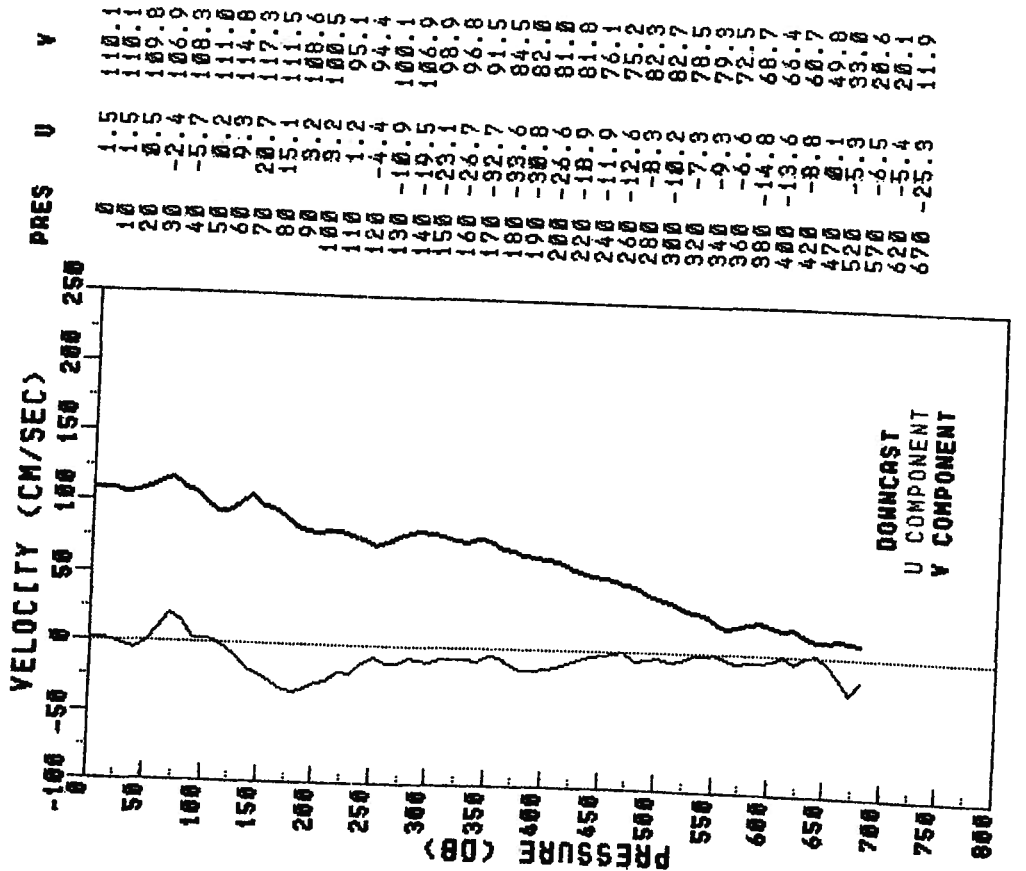
STN 5

R/Y VIRGINIA KEY JOY 210 TIME 1436Z

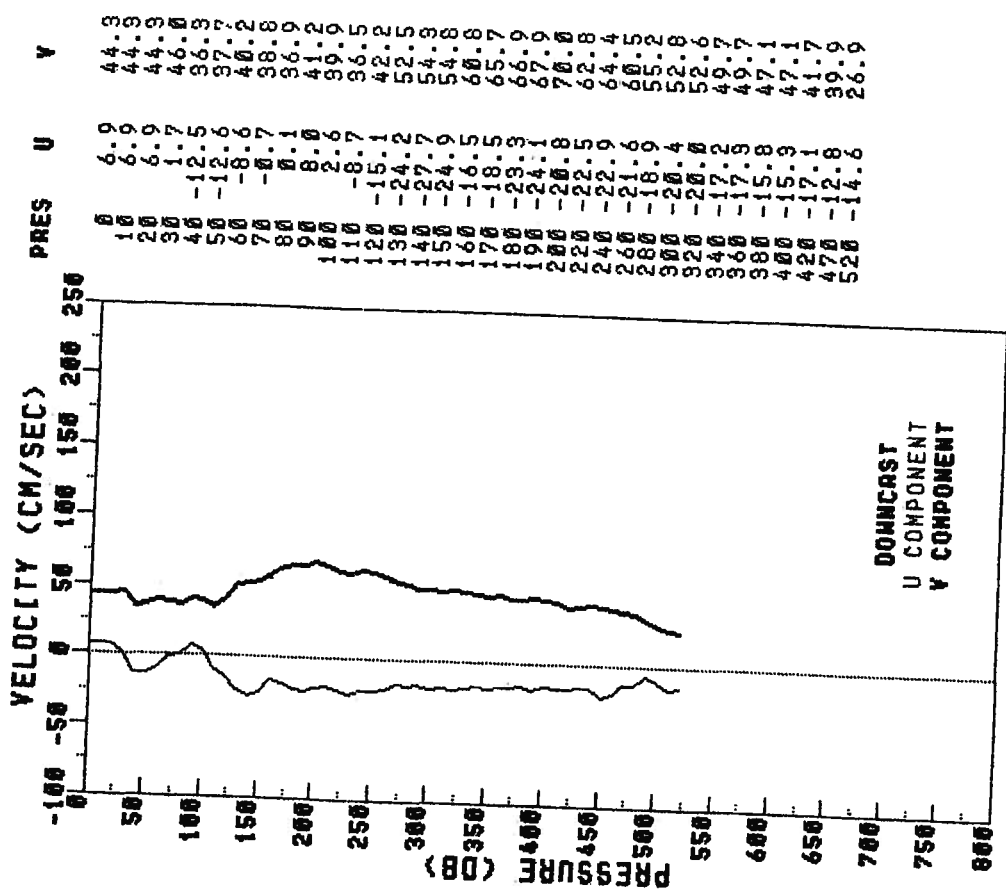
LATITUDE 26.99 N LONGITUDE 79.48 W



VK-STACS9-83 PEGASUS 007 STN 6
 R/V VIRGINIA KEY JDAY 210 TIME 1732Z
 LATITUDE 26.98 N LONGITUDE 79.36 W

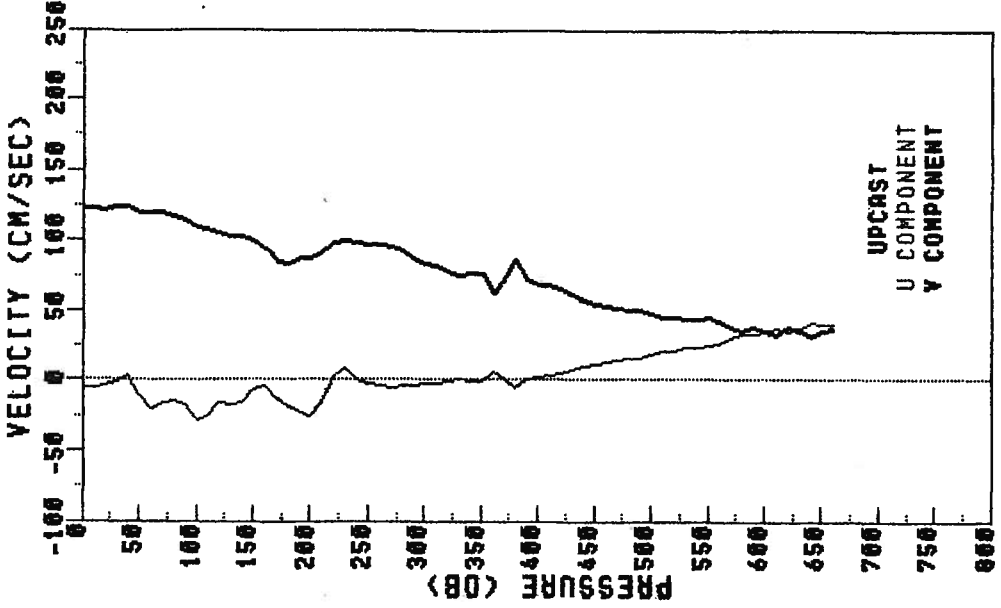


VK-STACS9-83 PEGASUS 009 STN 8
 R/V VIRGINIA KEY JDAY 210 TIME 2341Z
 LATITUDE 26.99 N LONGITUDE 79.19 W



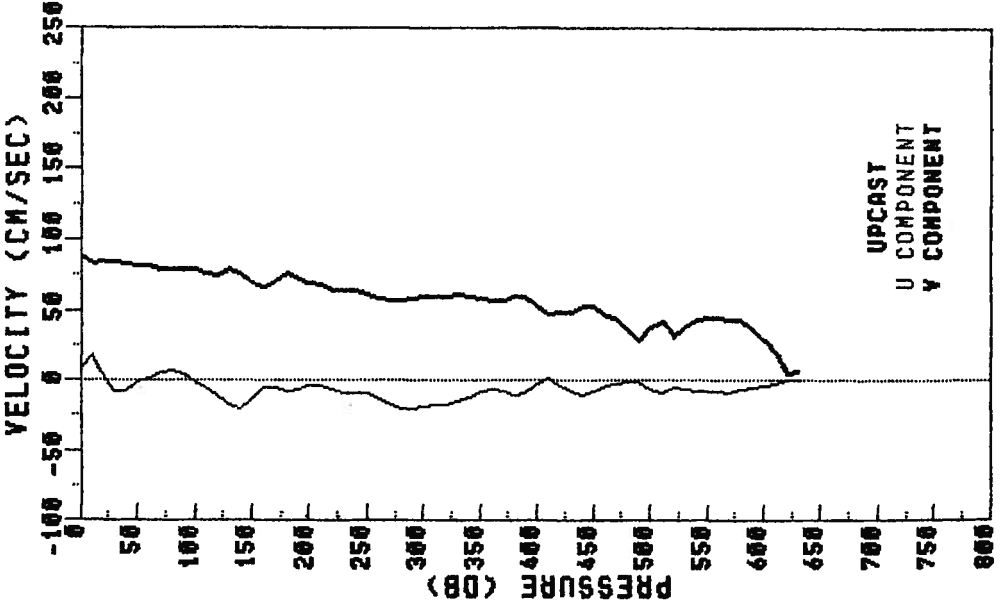
YK-STACS9-83 PEGASUS 011 STN 6
 R/V VIRGINIA KEY JOY 211 TIME 0357Z
 LATITUDE 26.98 N LONGITUDE 79.36 W

PRES	U	V
0	-5.0	129.0
10	-4.5	124.2
20	-3.1	122.9
30	-1.1	124.6
40	3.1	121.3
50	-10.5	120.4
60	-20.3	121.4
70	-16.3	117.8
80	-14.8	114.7
90	-17.5	110.5
100	-25.6	108.2
110	-16.4	105.7
120	-17.4	102.5
130	-15.6	102.4
140	-6.2	94.7
150	-4.2	85.7
160	-13.1	84.3
170	-13.2	87.6
180	-22.5	87.5
190	-26.1	90.0
200	2.4	97.7
240	0.4	99.6
260	-3.6	84.1
280	-2.2	78.8
300	-2.9	77.1
320	0.6	62.0
340	-6.0	69.5
360	-5.5	66.6
400	2.2	52.9
420	4.2	45.7
470	19.8	21.3
520	30.7	38.4
570	35.2	38.8
620	35.2	38.8



YK-STACS9-83 PEGASUS 010 STN 7
 R/V VIRGINIA KEY JOY 211 TIME 0141Z
 LATITUDE 26.99 N LONGITUDE 79.26 W

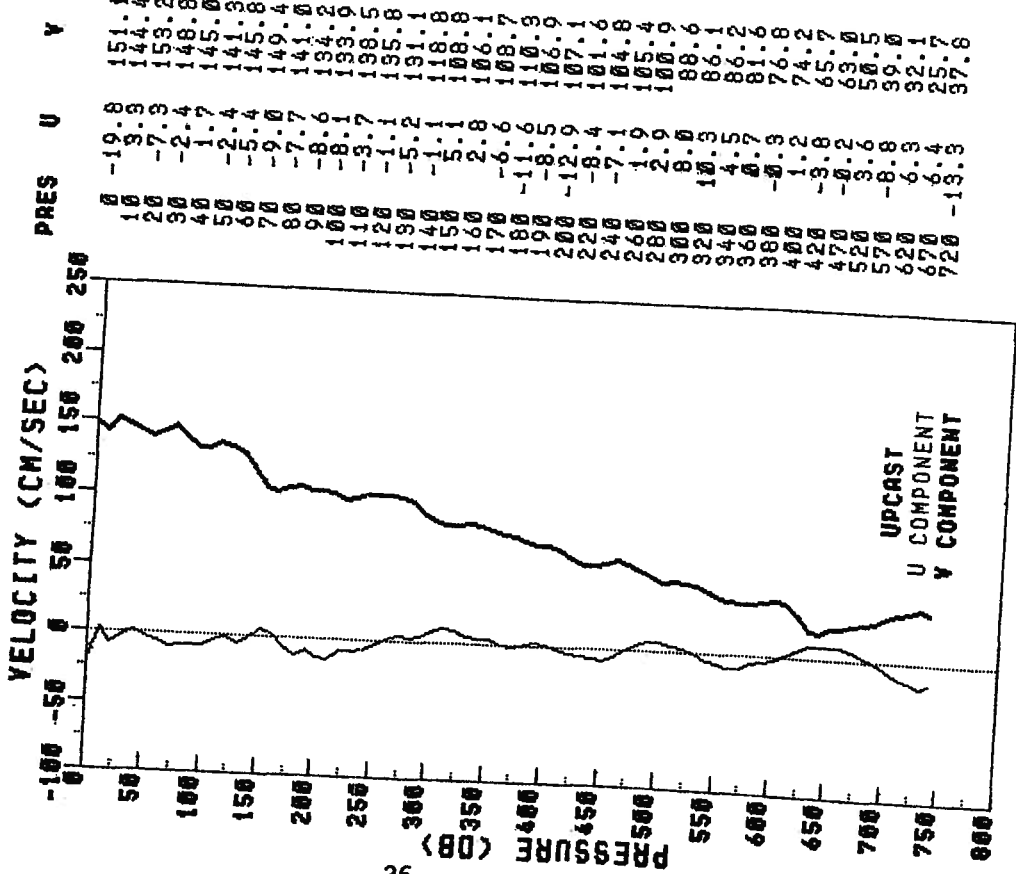
PRES	U	V
0	9.0	89.8
10	18.6	84.8
20	4.1	85.6
30	-8.0	89.4
40	-1.0	82.9
50	2.3	81.8
60	5.7	79.9
70	6.6	79.3
80	3.9	79.6
90	-0.7	76.3
100	-4.7	75.9
110	-10.4	79.3
120	-18.1	76.4
130	-19.7	76.4
140	-13.5	70.5
150	-5.1	67.3
160	-4.8	71.7
170	0.4	76.5
180	-0.3	73.0
190	-3.7	69.8
200	-6.4	64.9
220	-9.4	59.9
240	-13.0	57.0
260	-19.6	59.8
280	-18.7	59.8
300	-17.2	61.0
320	-11.6	57.5
340	-6.2	60.4
360	-11.0	59.7
400	-2.0	48.9
420	-4.3	45.7
470	-3.0	31.8
520	-5.7	44.1
570	-8.7	44.1
620	-8.3	45.9



VK-STACS9-83 PEGASUS 012 STN 5

R/Y VIRGINIA KEY JOY 211 TIME 0715Z

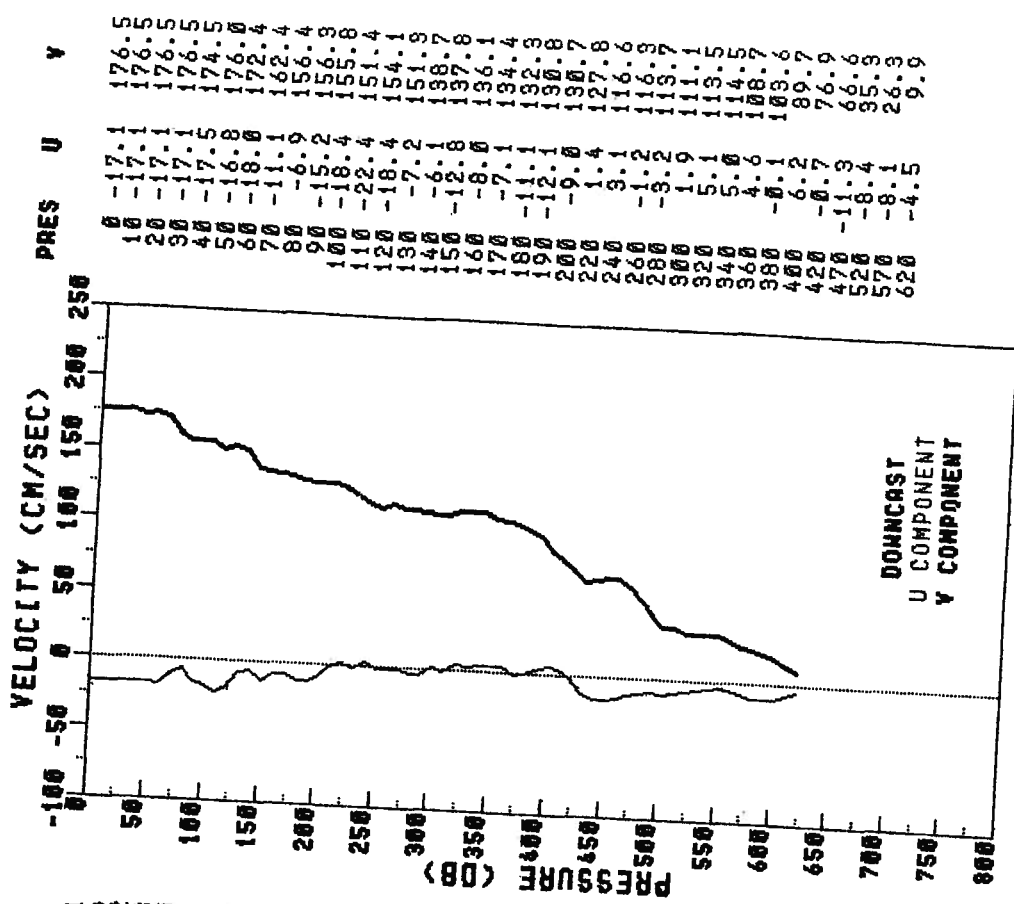
LATITUDE 26.99 N LONGITUDE 79.47 W



VK-STACS9-83 PEGASUS 013 STN 4

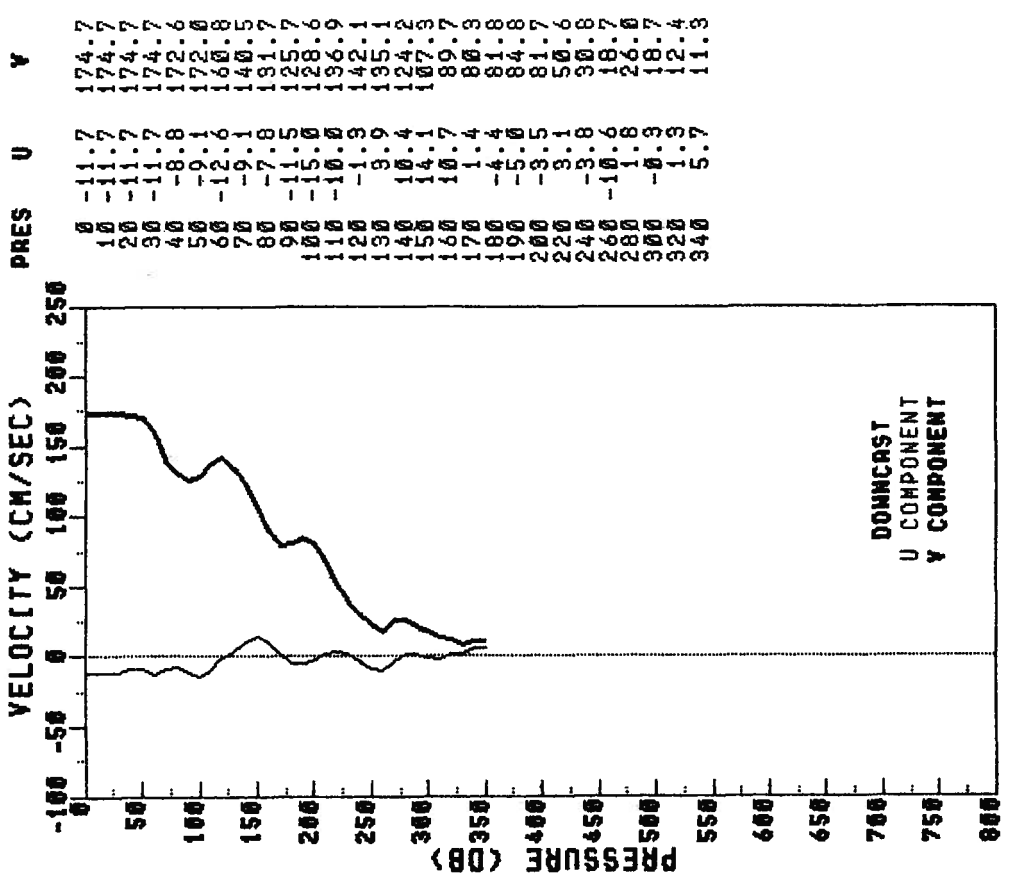
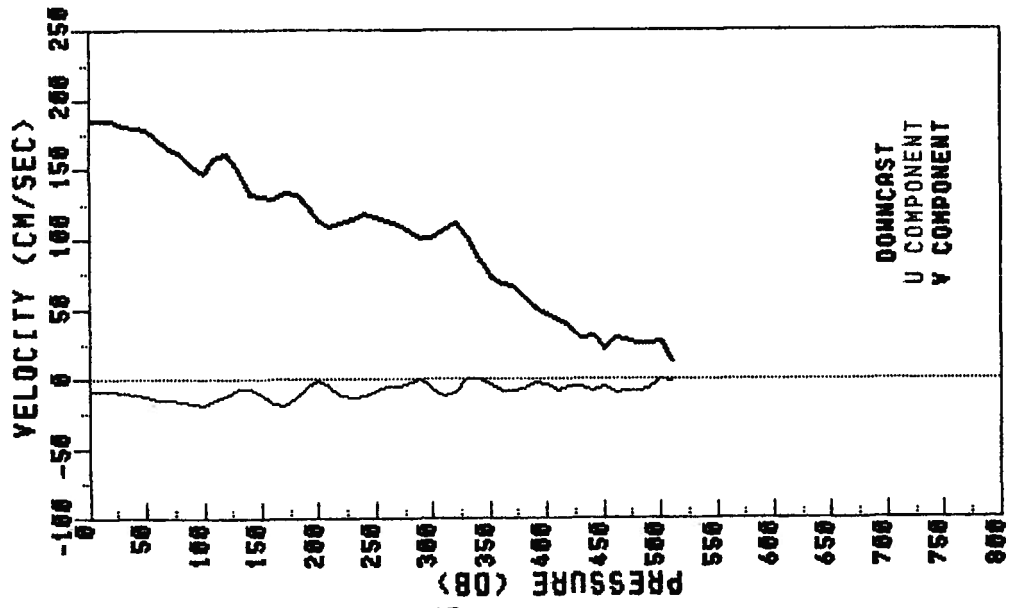
R/Y VIRGINIA KEY JOY 211 TIME 1126Z

LATITUDE 26.96 N LONGITUDE 79.58 W



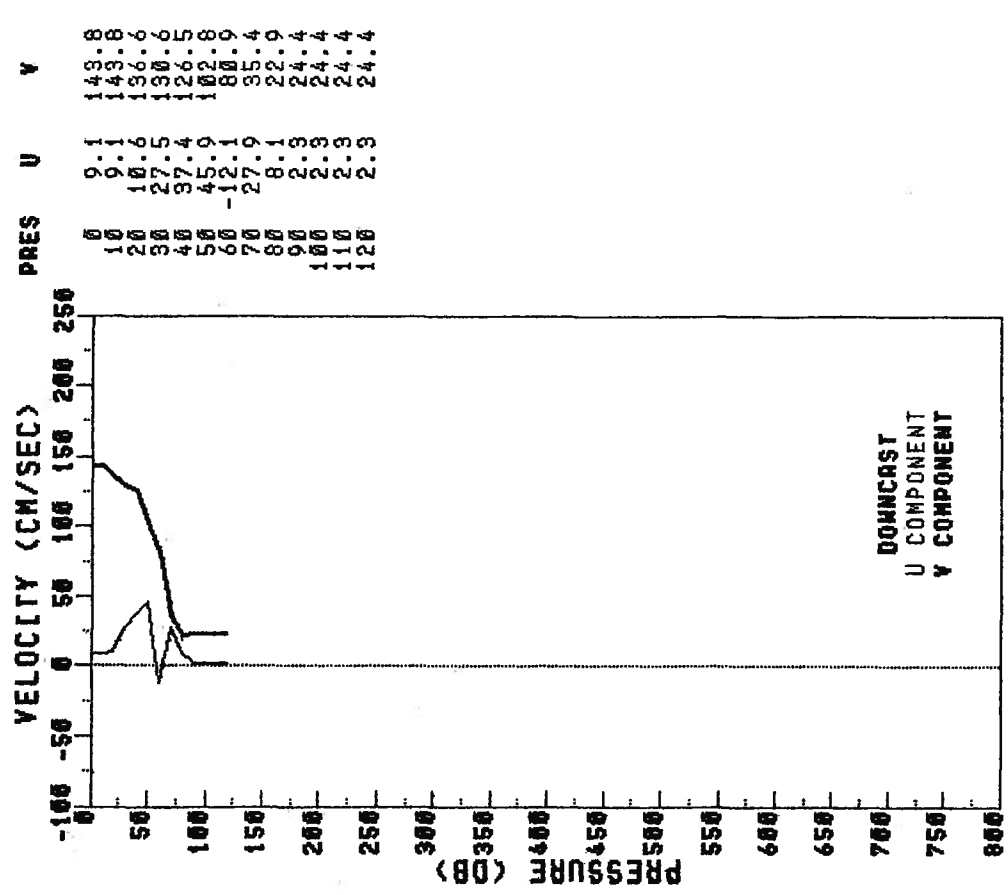
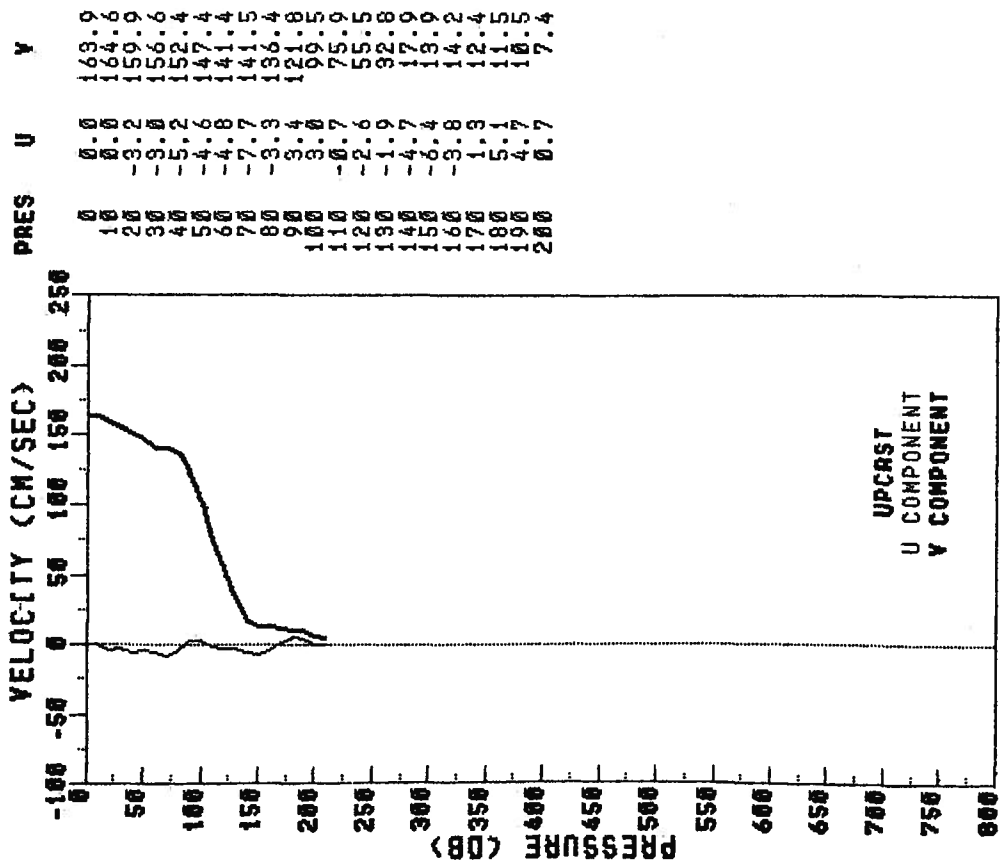
YK-STACS9-83 PEGASUS 014 STN 3
 R/V VIRGINIA KEY JOY 211 TIME 1404Z
 LATITUDE 26.98 N LONGITUDE 79.66 W

YK-STACS9-83 PEGASUS 015 STN 2
 R/V VIRGINIA KEY JOY 211 TIME 1637Z
 LATITUDE 26.95 N LONGITUDE 79.75 W



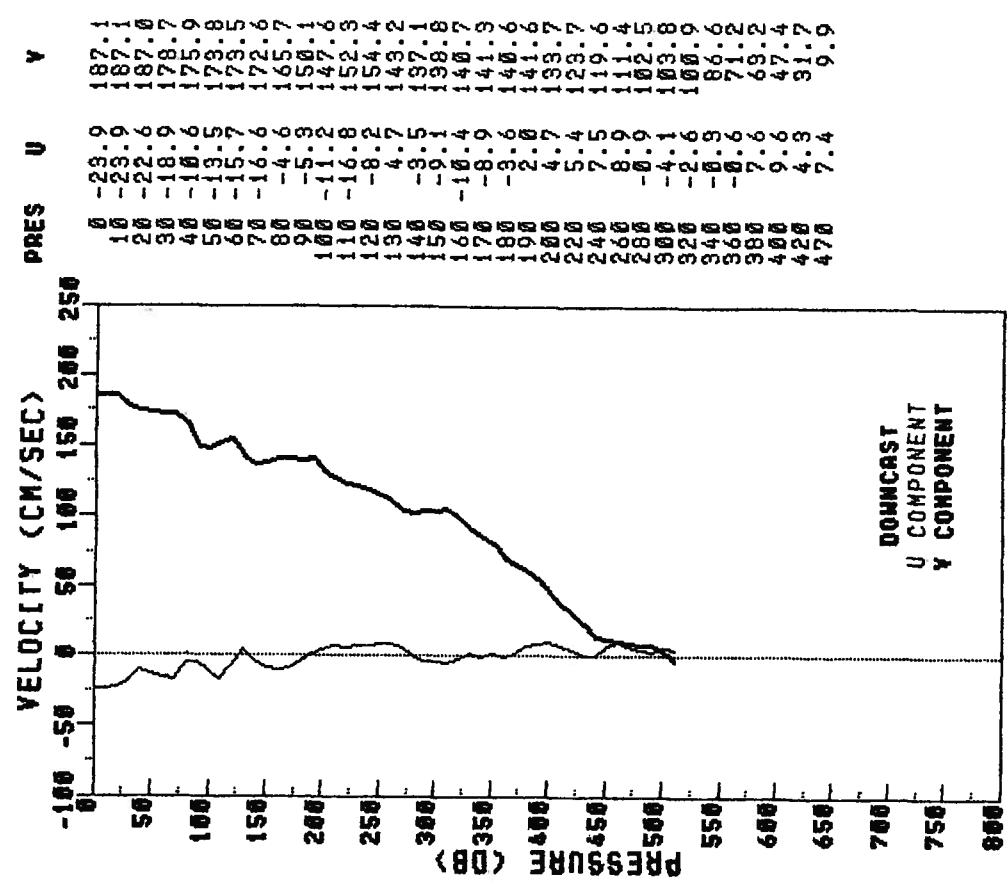
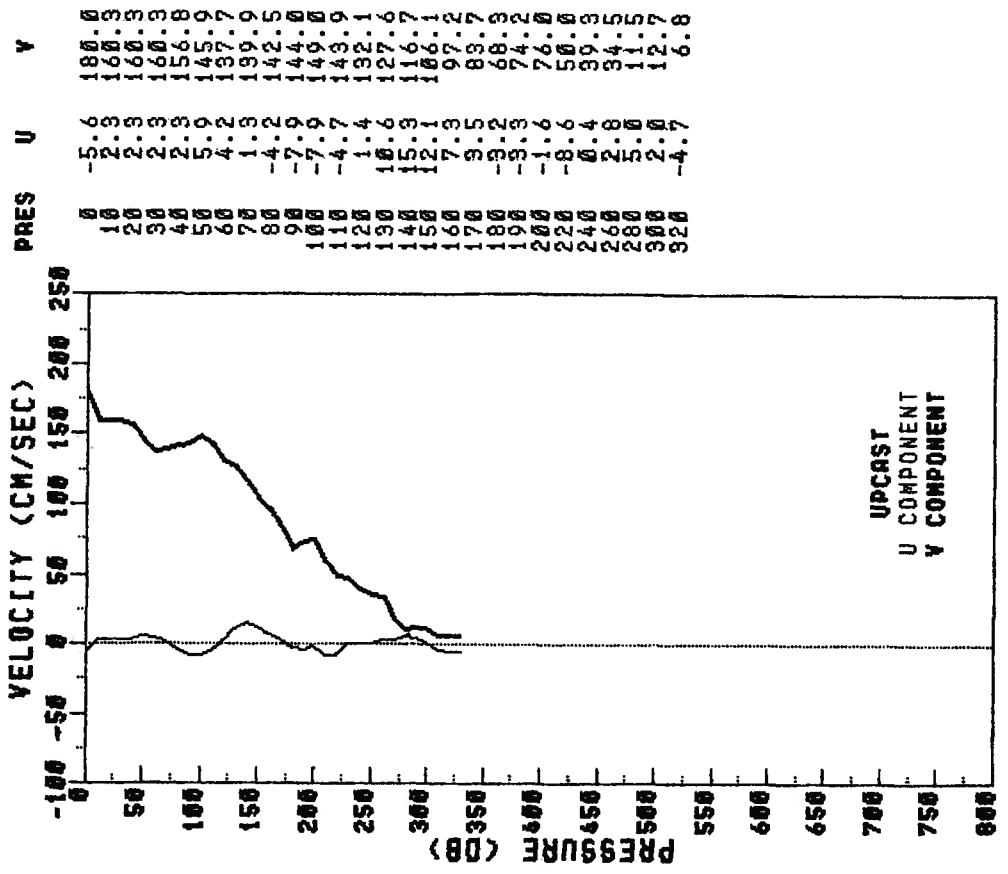
VK-STACS9-83 PEGASUS 016 STN 1
 R/V VIRGINIA KEY JOY 211 TIME 1943Z
 LATITUDE 26.99 N LONGITUDE 79.87 N

VK-STACS9-83 PEGASUS 017 STN 0
 R/V VIRGINIA KEY JOY 211 TIME 2131Z
 LATITUDE 26.97 N LONGITUDE 79.88 N

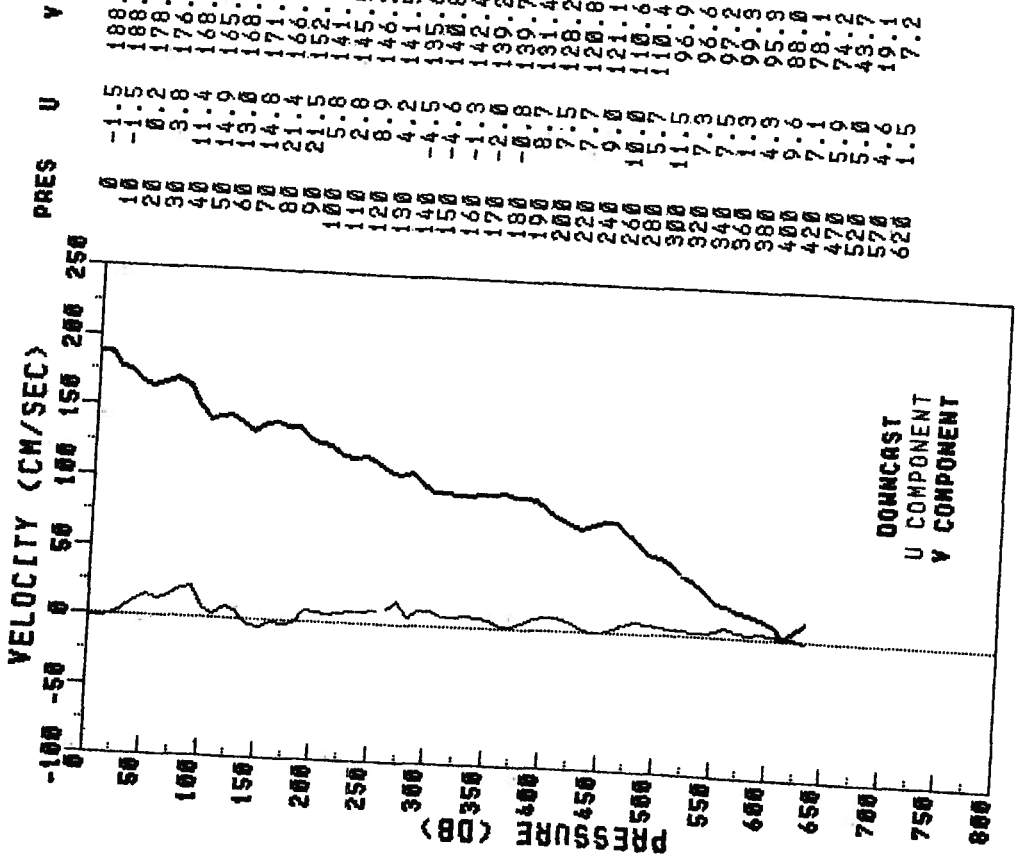


VK-STACS9-83 PEGASUS 019 STN 2
 R/Y VIRGINIA KEY JDAY 212 TIME 0233Z
 LATITUDE 26.96 N LONGITUDE 79.76 W

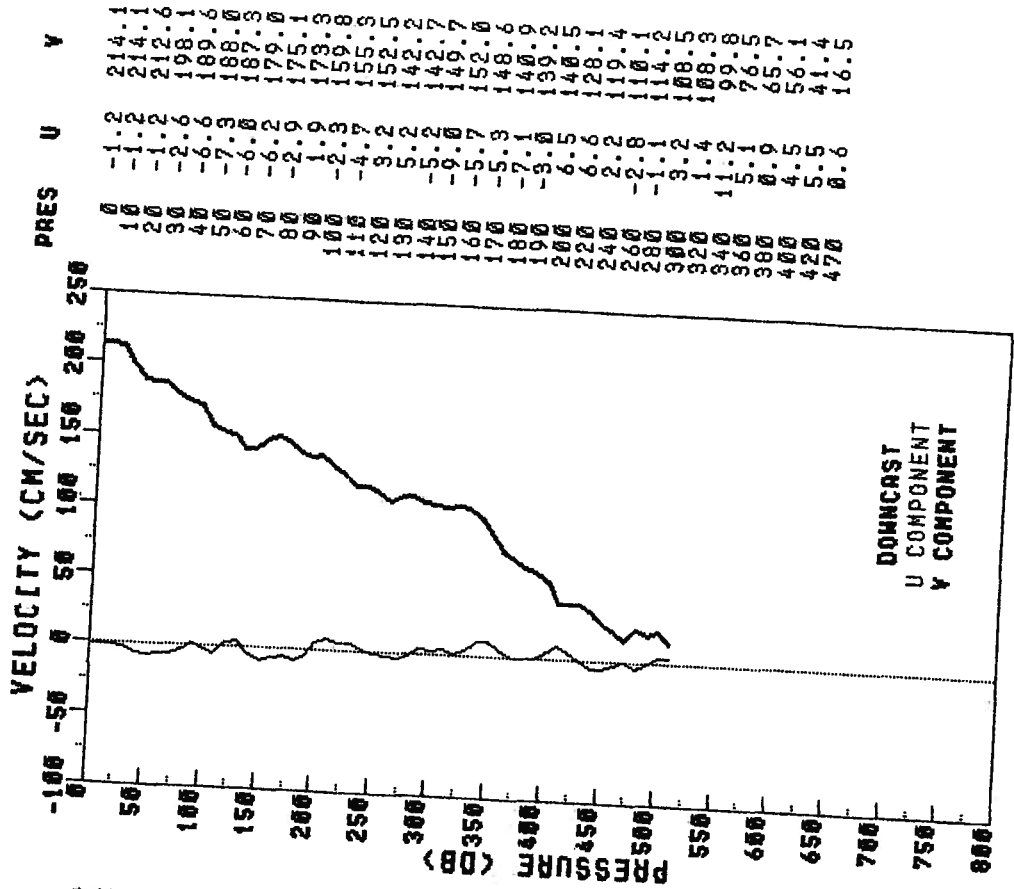
VK-STACS9-83 PEGASUS 020 STN 3
 R/Y VIRGINIA KEY JDAY 212 TIME 0539Z
 LATITUDE 26.98 N LONGITUDE 79.67 W



VK-STACS9-83 PEGASUS 021 STN 4
 R/Y VIRGINIA KEY JOY 212 TIME 0838Z
 LATITUDE 26.97 N LONGITUDE 79.58 W

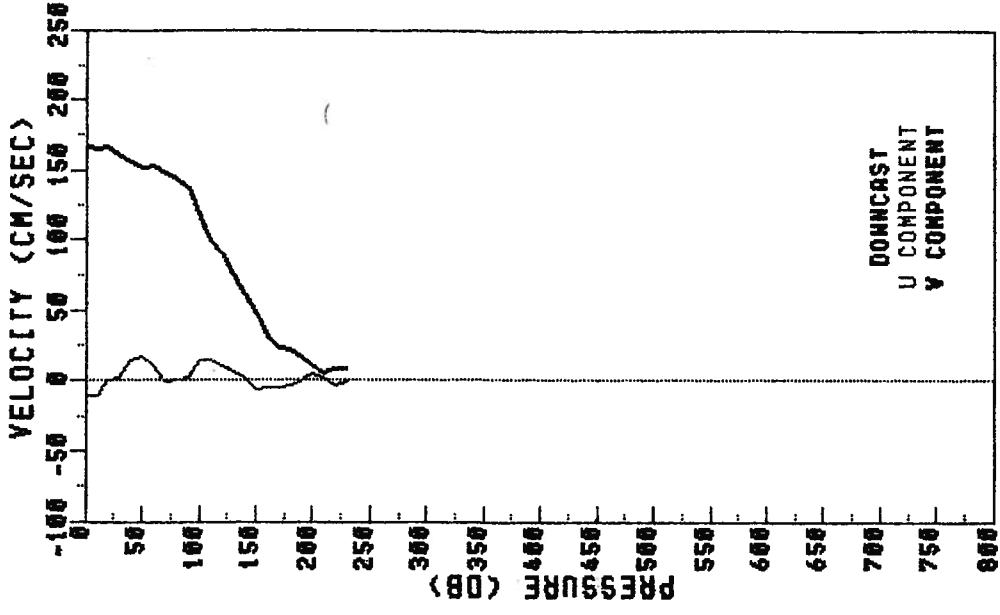


VK-STACS9-83 PEGASUS 022 STN 3
 R/Y VIRGINIA KEY JOY 212 TIME 1127Z
 LATITUDE 26.99 N LONGITUDE 79.67 W



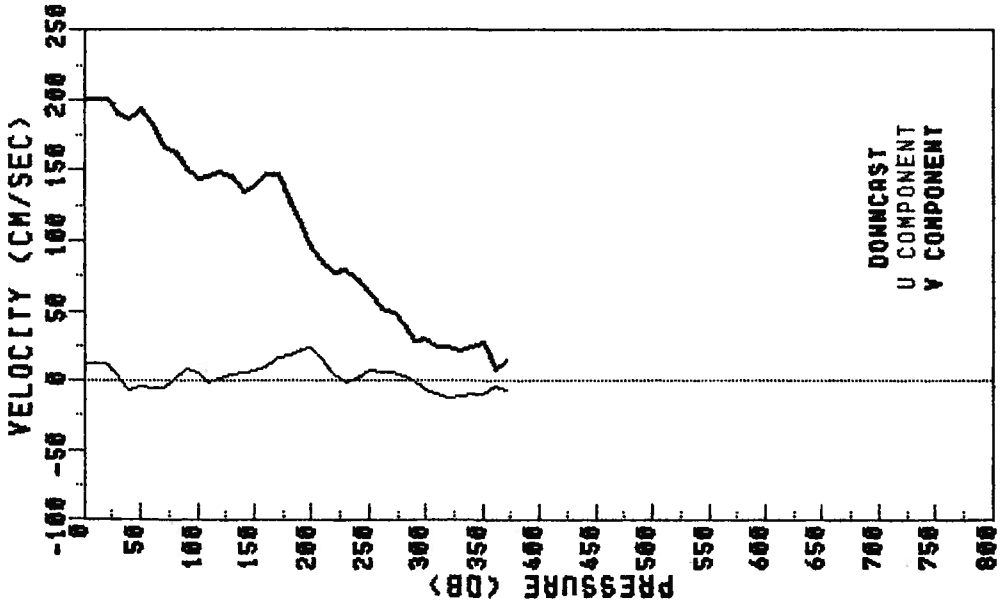
VK-STACS9-83 PEGASUS 024 STN 1
 R/V VIRGINIA KEY JDAY 212 TIME 1654Z
 LATITUDE 26.97 N LONGITUDE 79.83 N

PRES	U	V
0	-19.7	167.2
10	0.6	166.1
20	2.3	167.1
30	13.7	162.3
40	16.5	155.8
50	10.6	151.7
60	1.0	148.8
70	1.0	144.3
80	2.9	137.3
90	11.5	115.1
100	14.7	98.4
110	9.4	89.0
120	6.0	73.7
130	1.8	60.8
140	5.5	31.4
150	-5.3	24.1
160	-3.5	22.0
170	0.4	16.6
180	5.3	11.0
190	-3.3	8.6
200		
220		

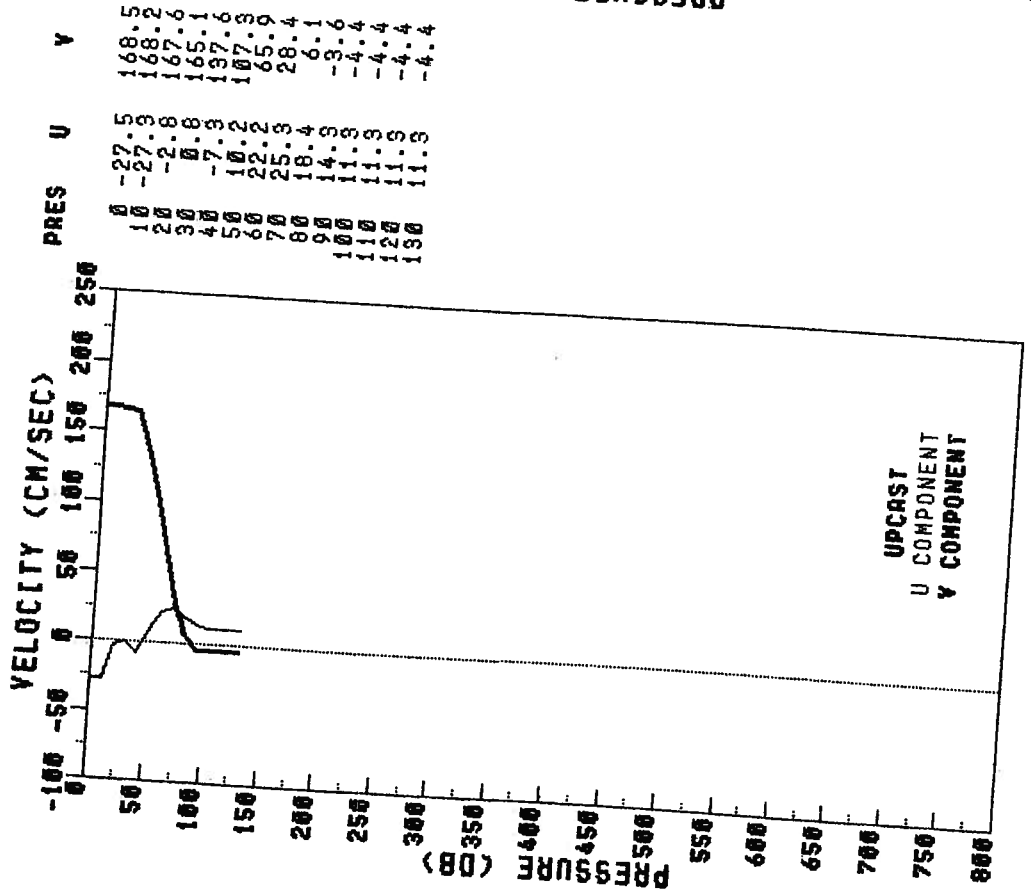


VK-STACS9-83 PEGASUS 023 STN 2
 R/V VIRGINIA KEY JDAY 212 TIME 1445Z
 LATITUDE 26.96 N LONGITUDE 79.75 W

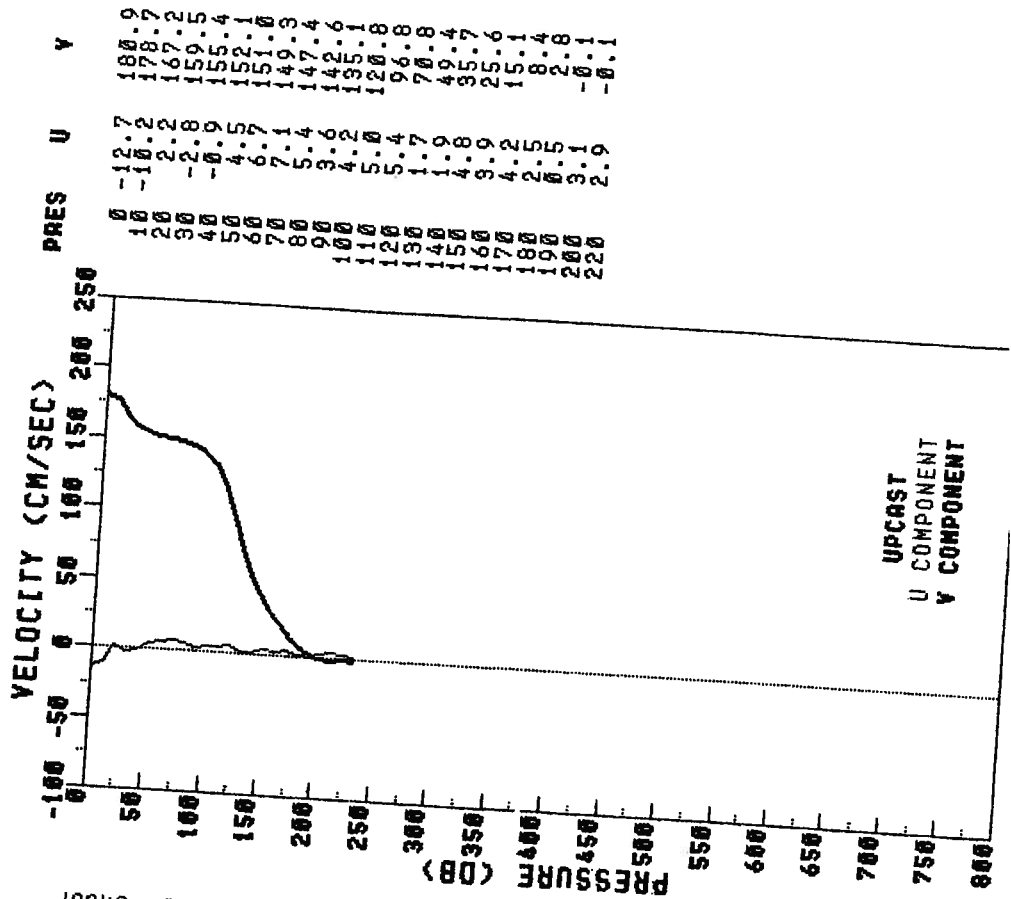
PRES	U	V
0	12.0	201.4
10	12.0	201.4
20	12.0	201.4
30	4.0	191.9
40	-6.3	188.1
50	-3.4	193.8
60	-5.1	182.9
70	-4.9	166.5
80	1.1	162.5
90	8.2	153.2
100	5.8	146.5
110	-1.4	149.8
120	2.0	146.1
130	4.5	135.9
140	5.9	139.9
150	7.0	148.1
160	10.1	147.4
170	16.5	128.6
180	18.2	111.6
190	22.8	94.6
200	23.1	78.6
220	4.8	72.5
240	1.8	52.2
260	5.9	29.0
280	2.5	30.0
300	-6.3	24.3
320	-12.1	24.9
340	-8.7	24.9
360	-4.5	



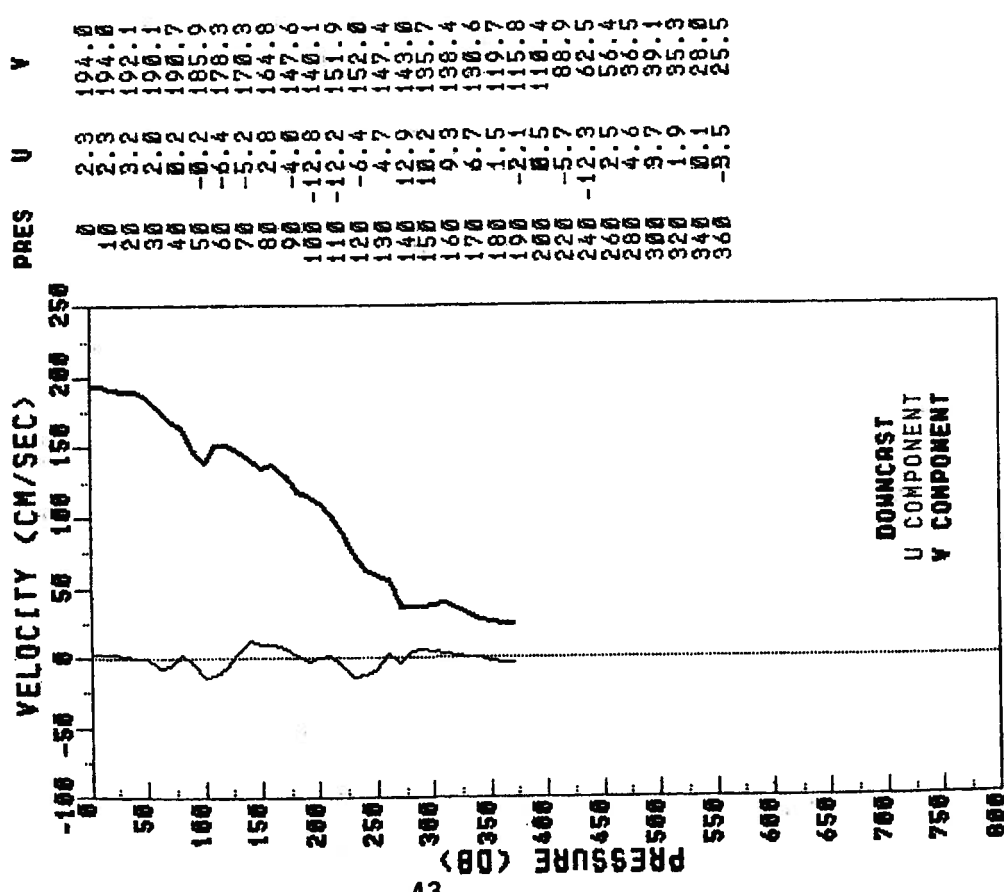
YK-STACS9-83 PEGASUS 025 STN 0
 R/Y VIRGINIA KEY JOY 212 TIME 1819Z
 LATITUDE 26.98 N LONGITUDE 79.92 W



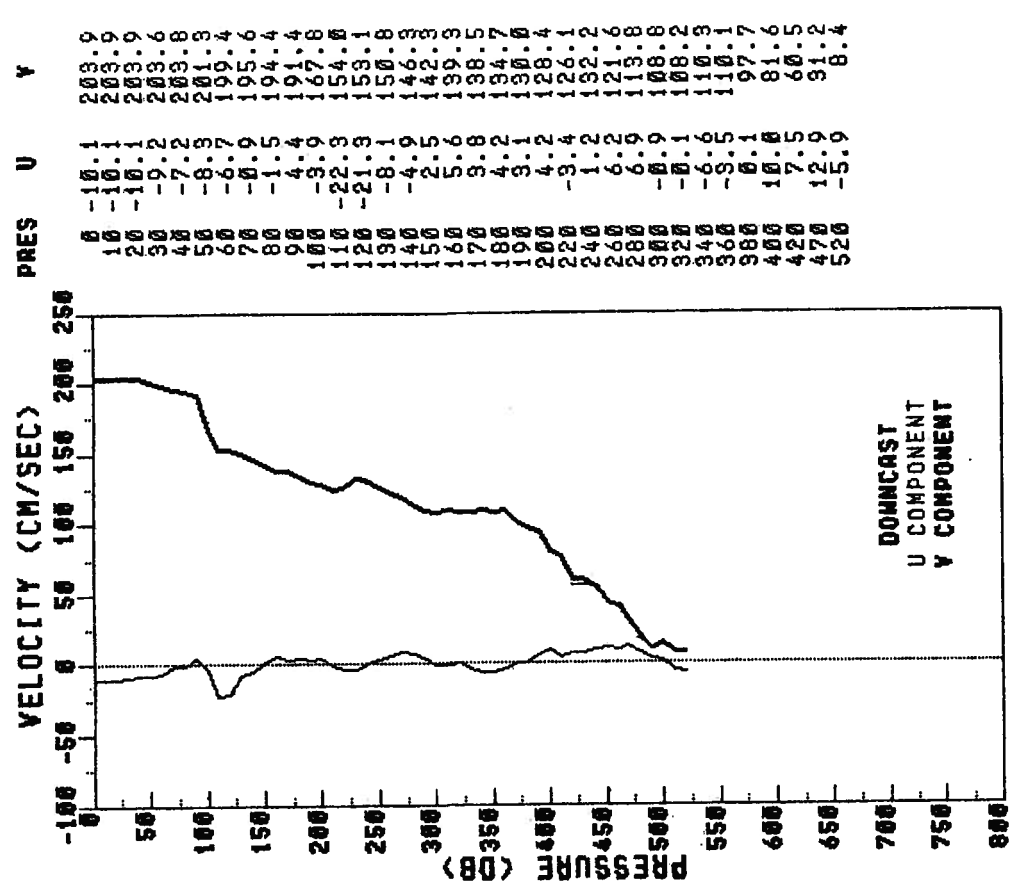
YK-STACS9-83 PEGASUS 026 STN 1
 R/Y VIRGINIA KEY JOY 212 TIME 2024Z
 LATITUDE 26.98 N LONGITUDE 79.85 W



YK-STACS9-83 PEGASUS 027 STN 2
 R/V VIRGINIA KEY JDAY 212 TIME 2249Z
 LATITUDE 26.94 N LONGITUDE 79.73 W



YK-STACS9-83 PEGASUS 028 STN 3
 R/V VIRGINIA KEY JDAY 213 TIME 0350Z
 LATITUDE 26.99 N LONGITUDE 79.66 W



YK-STACS9-83

PEGASUS 029

STN 4

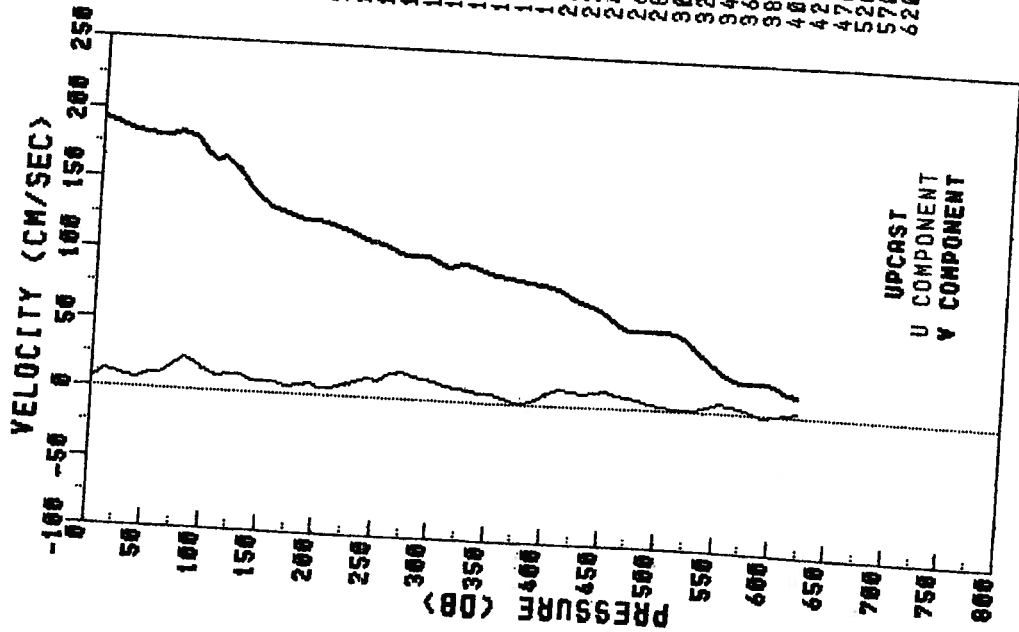
R/Y VIRGINIA KEY

JOY 213

TIME.0647Z

LATITUDE 26.96 N

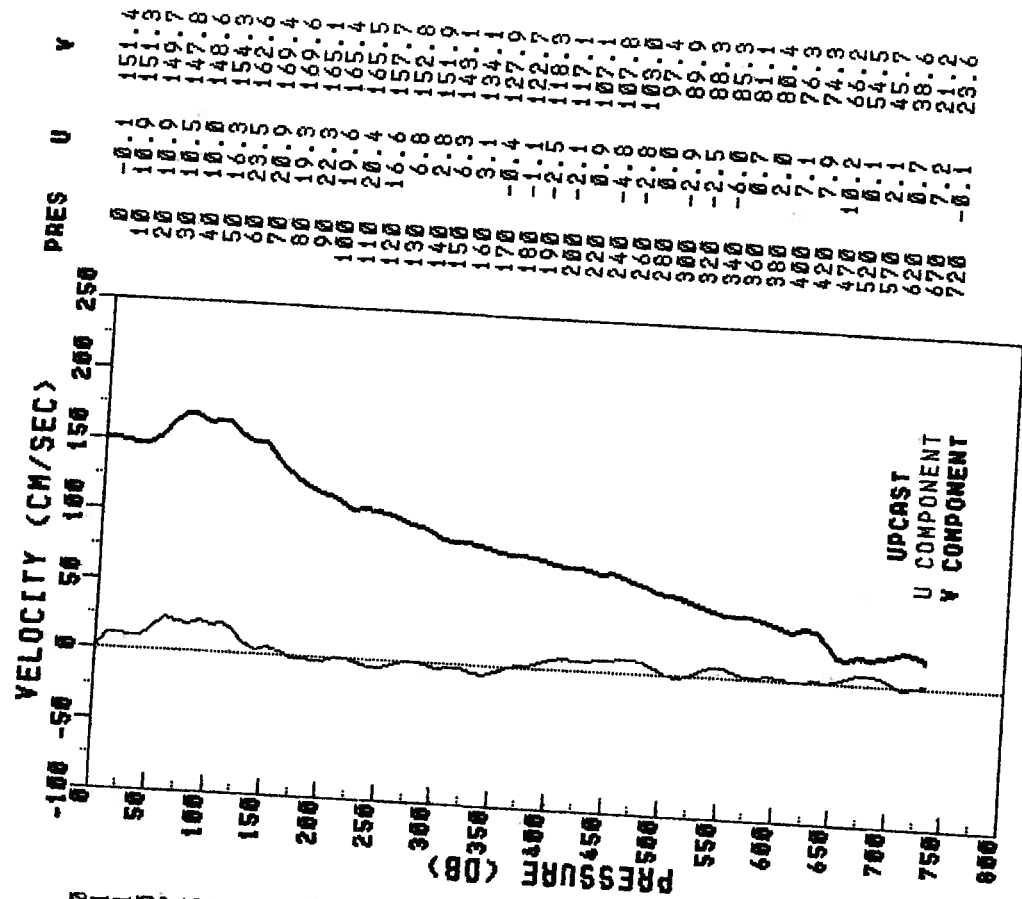
LONGITUDE 79.59 W



YK-STACS9-83 PEGASUS 030 STN 5

R/Y VIRGINIA KEY JOY 213 TIME 0937Z

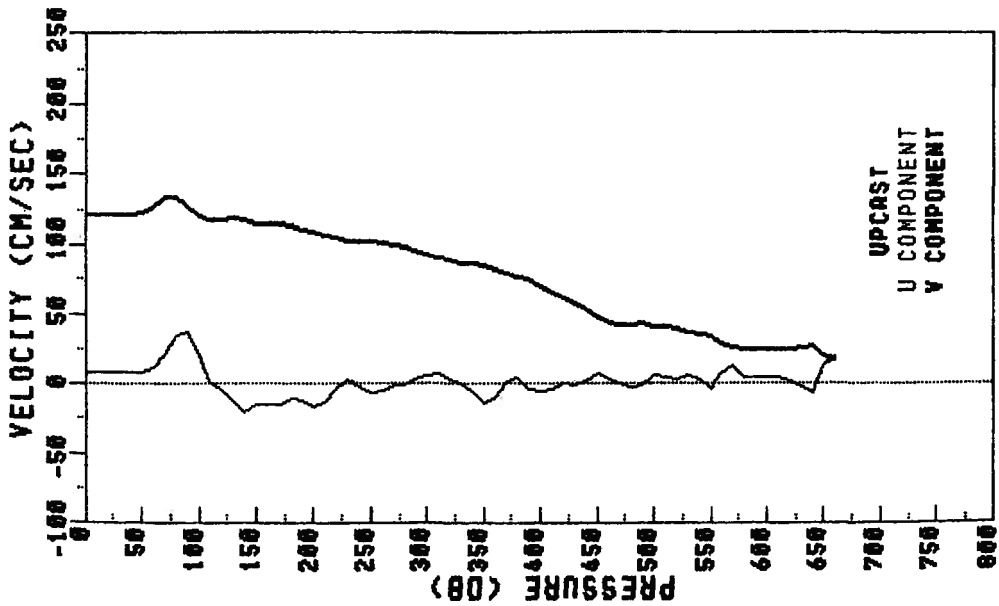
LATITUDE 26.98 N LONGITUDE 79.48 W



YK-STACS9-83 PEGASUS 032 STN 6

R/V VIRGINIA KEY JDAY 213 TIME 1347Z

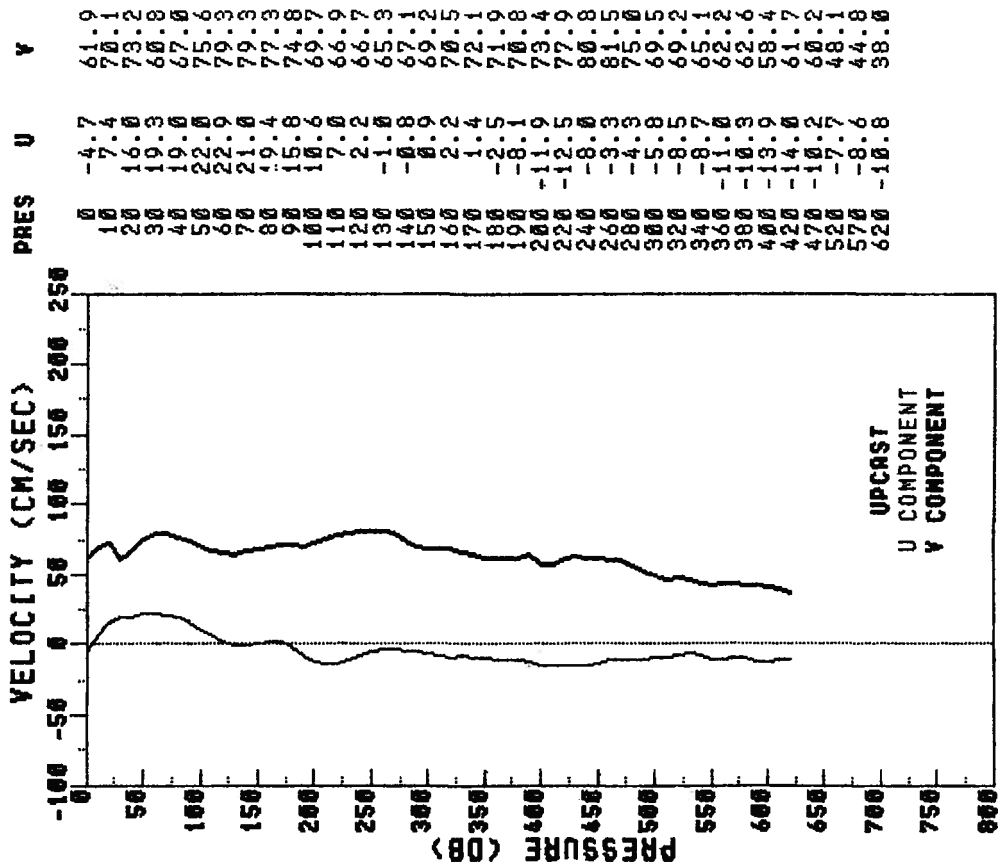
LATITUDE 26.98 N LONGITUDE 79.36 W



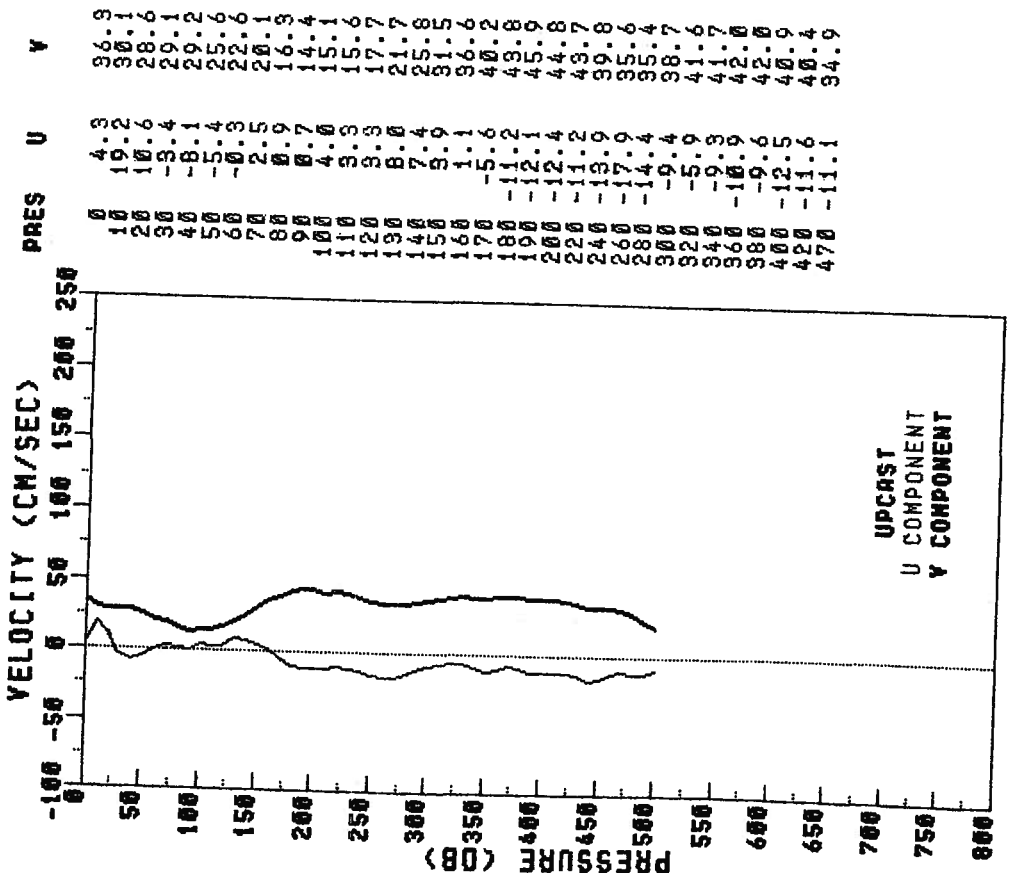
YK-STACS9-83 PEGASUS 033 STN 7

R/V VIRGINIA KEY JDAY 213 TIME 1557Z

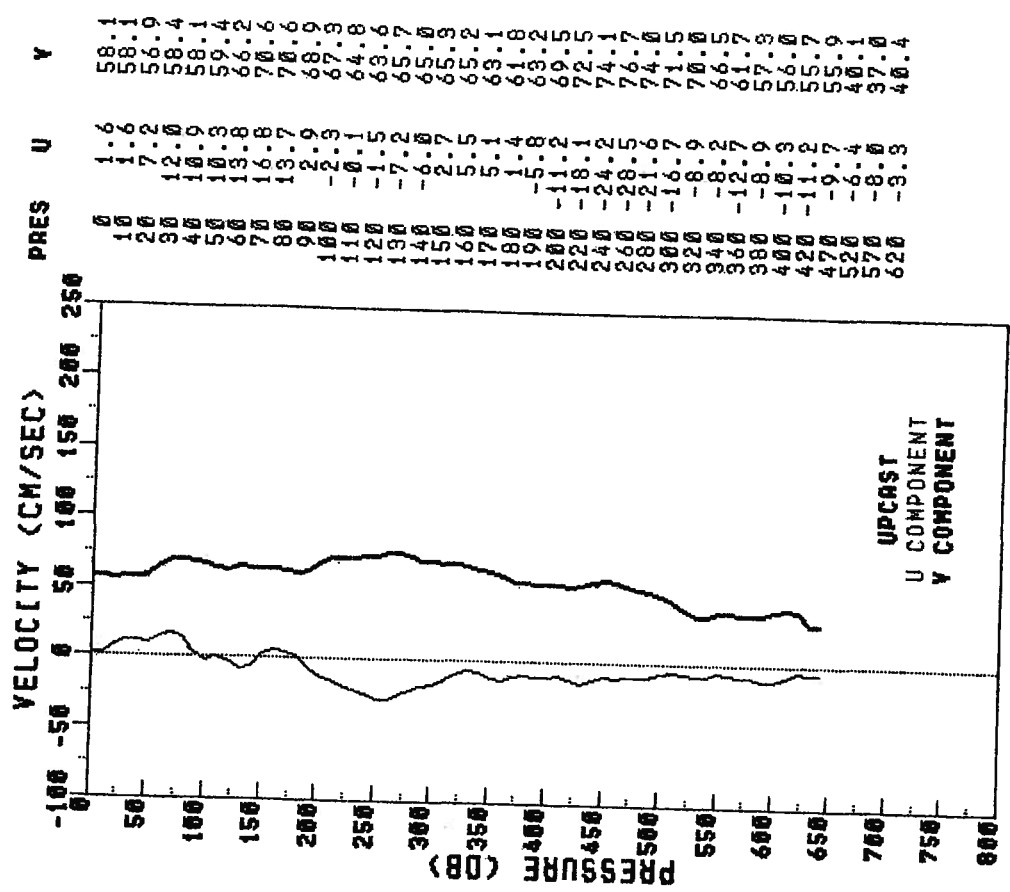
LATITUDE 26.98 N LONGITUDE 79.26 W



YK-STACS9-83 PEGASUS 034 STN 8
 R/Y VIRGINIA KEY JOY 213 TIME 1810Z
 LATITUDE 26.99 N LONGITUDE 79.19 W

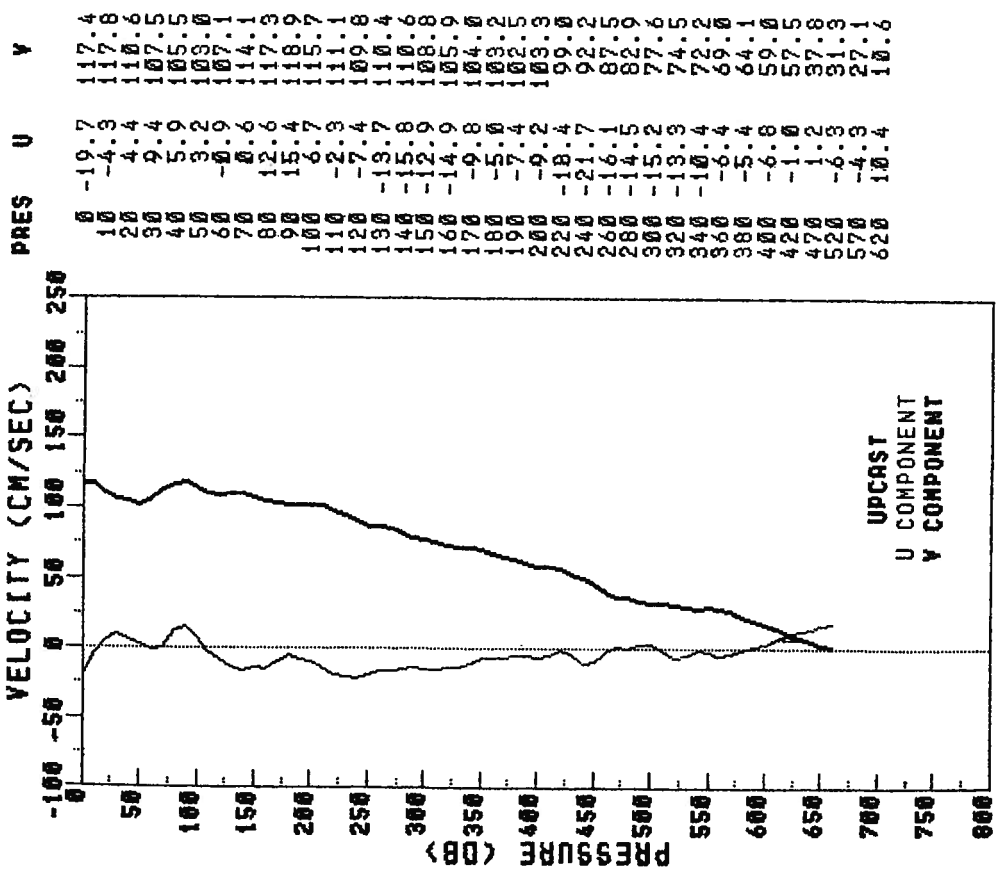
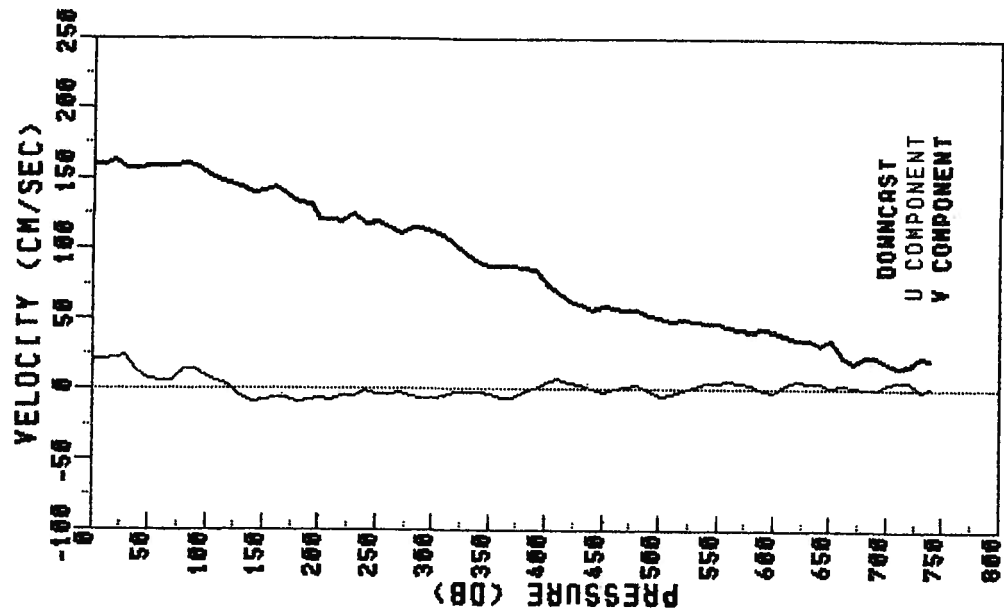


YK-STACS9-83 PEGASUS 035 STN 7
 R/Y VIRGINIA KEY JOY 213 TIME 2004Z
 LATITUDE 26.96 N LONGITUDE 79.27 W

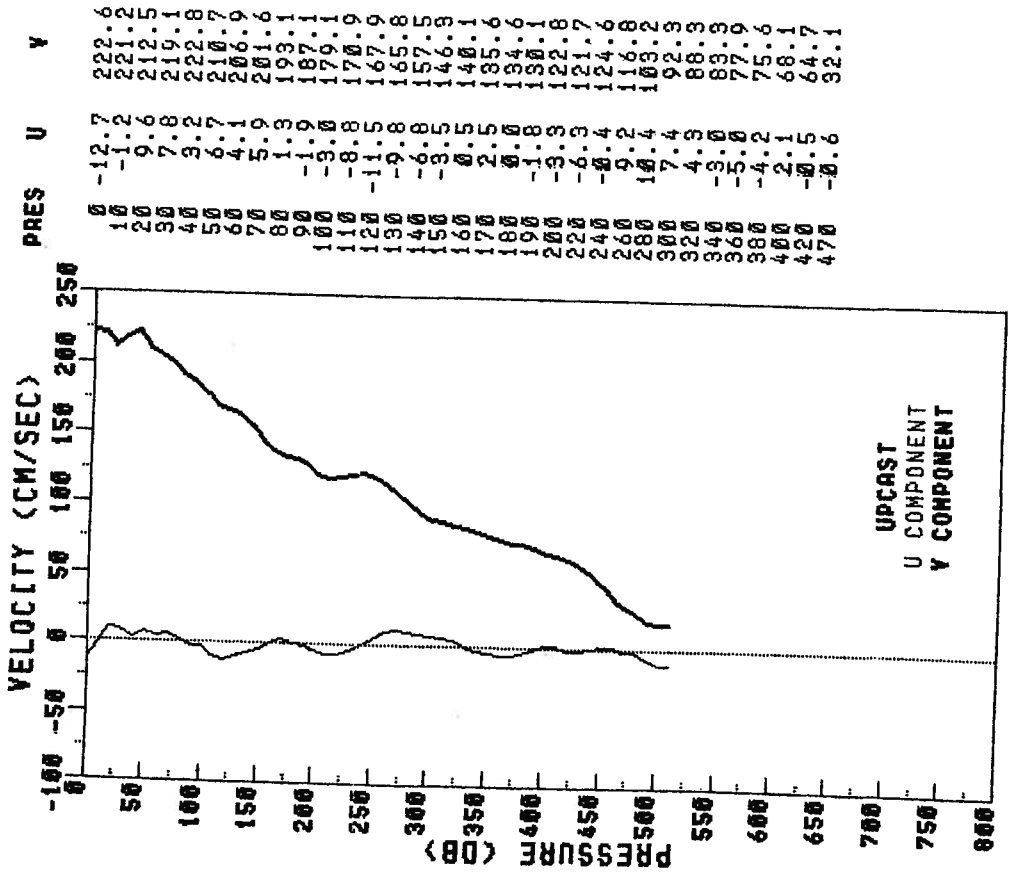


VK-STACS9-83 PEGASUS 037 STN 5
 R/V VIRGINIA KEY JOY 214 TIME 0029Z
 LATITUDE 26.98 N LONGITUDE 79.47 W

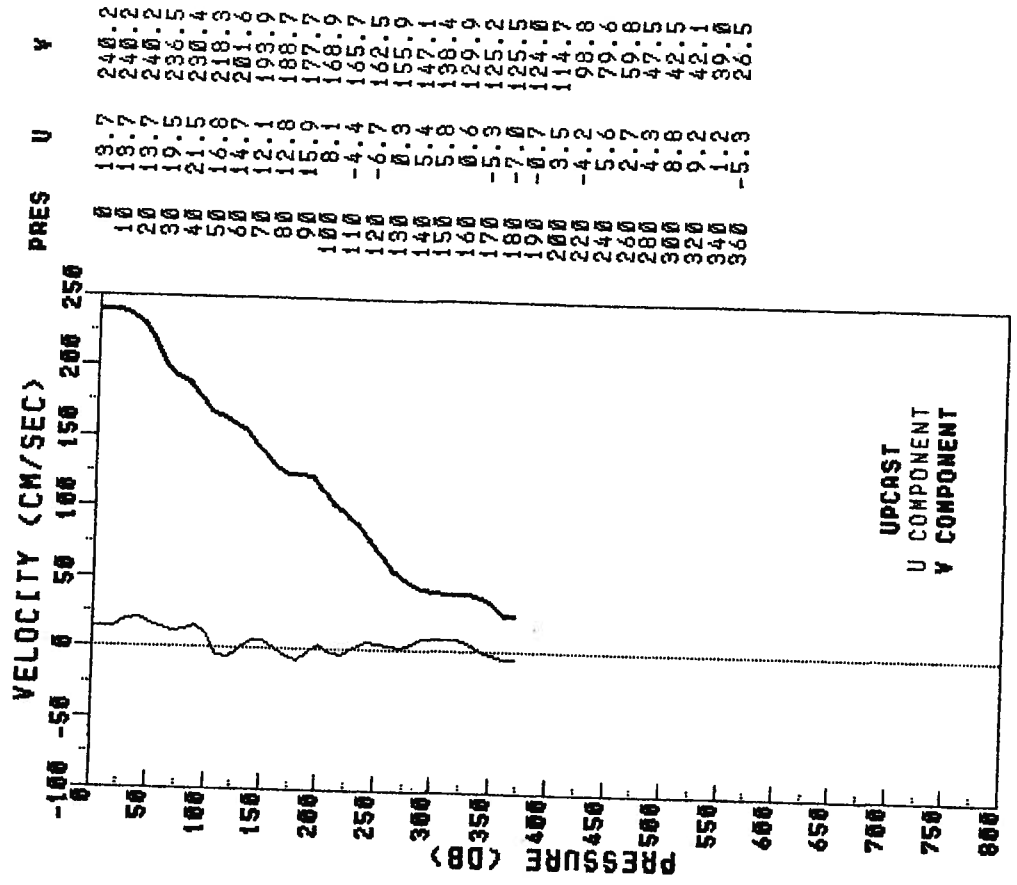
VK-STACS9-83 PEGASUS 036 STN 6
 R/V VIRGINIA KEY JOY 213 TIME 2206Z
 LATITUDE 26.99 N LONGITUDE 79.36 W



VK-STACS9-83 PEGASUS 039 STN 3
 R/V VIRGINIA KEY JDAY 214 TIME 0624Z
 LATITUDE 26.98 N LONGITUDE 79.67 W



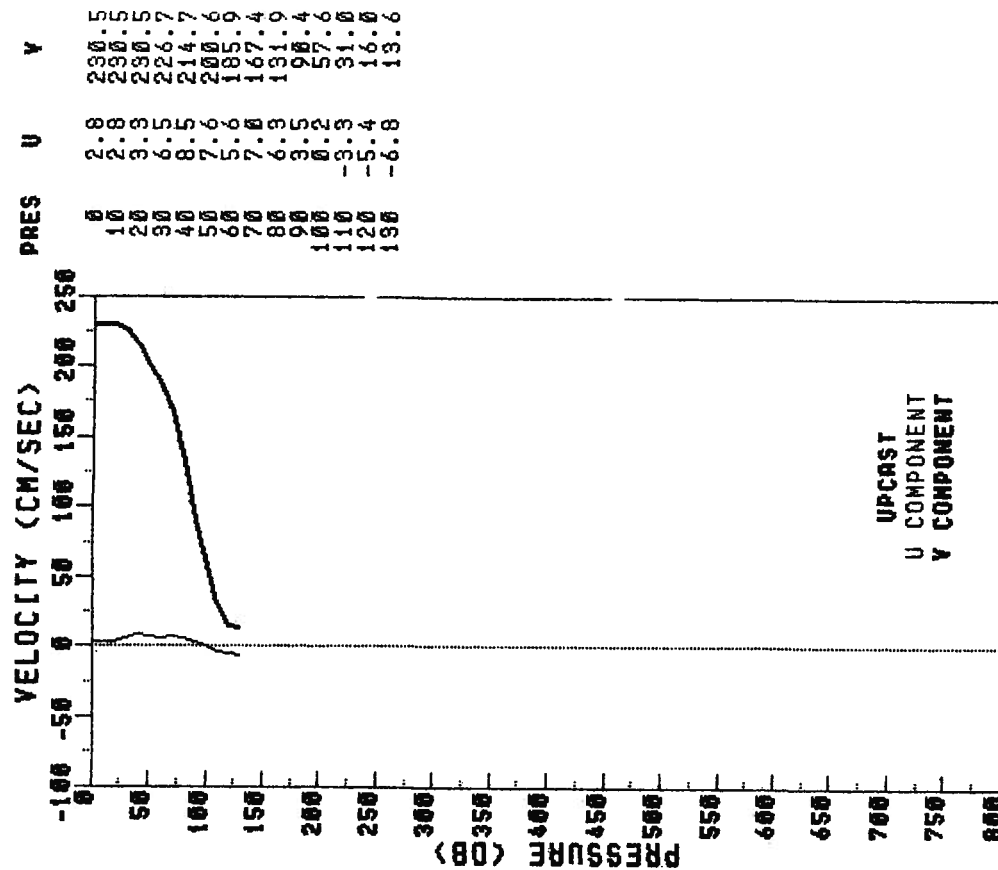
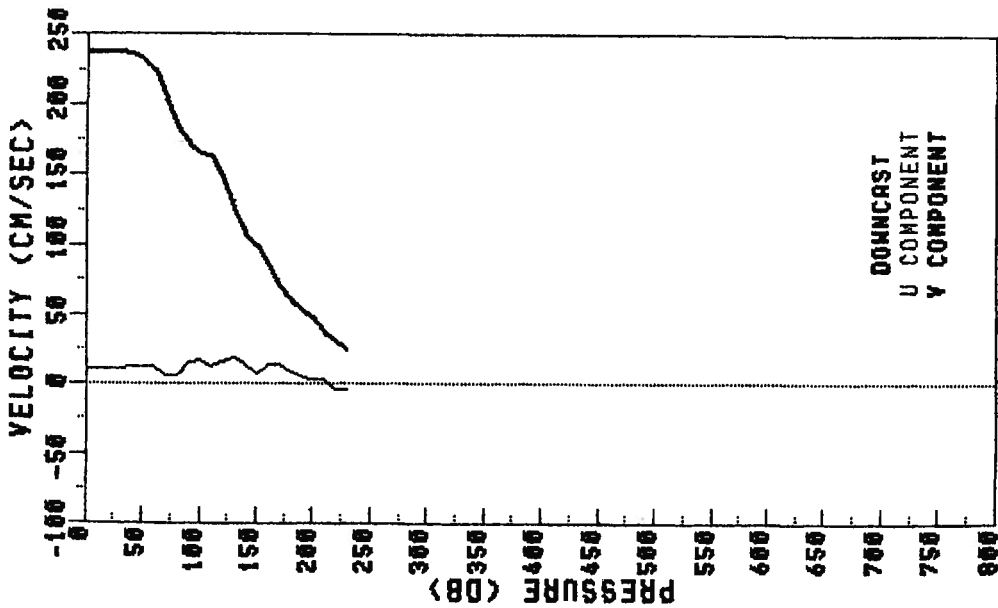
VK-STACS9-83 PEGASUS 040 STN 2
 R/V VIRGINIA KEY JDAY 214 TIME 0921Z
 LATITUDE 26.96 N LONGITUDE 79.76 W



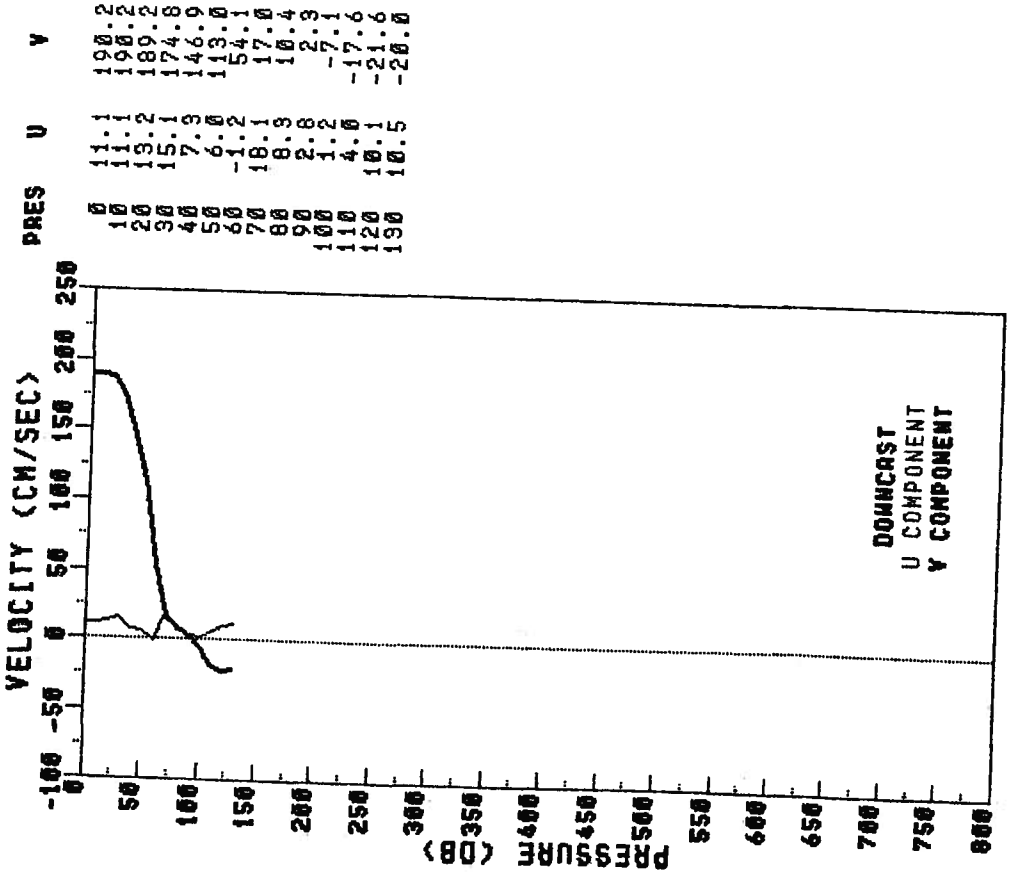
VK-STACS9-83 PEGASUS 043 STN 1

R/V VIRGINIA KEY JOY 214 TIME 1258Z

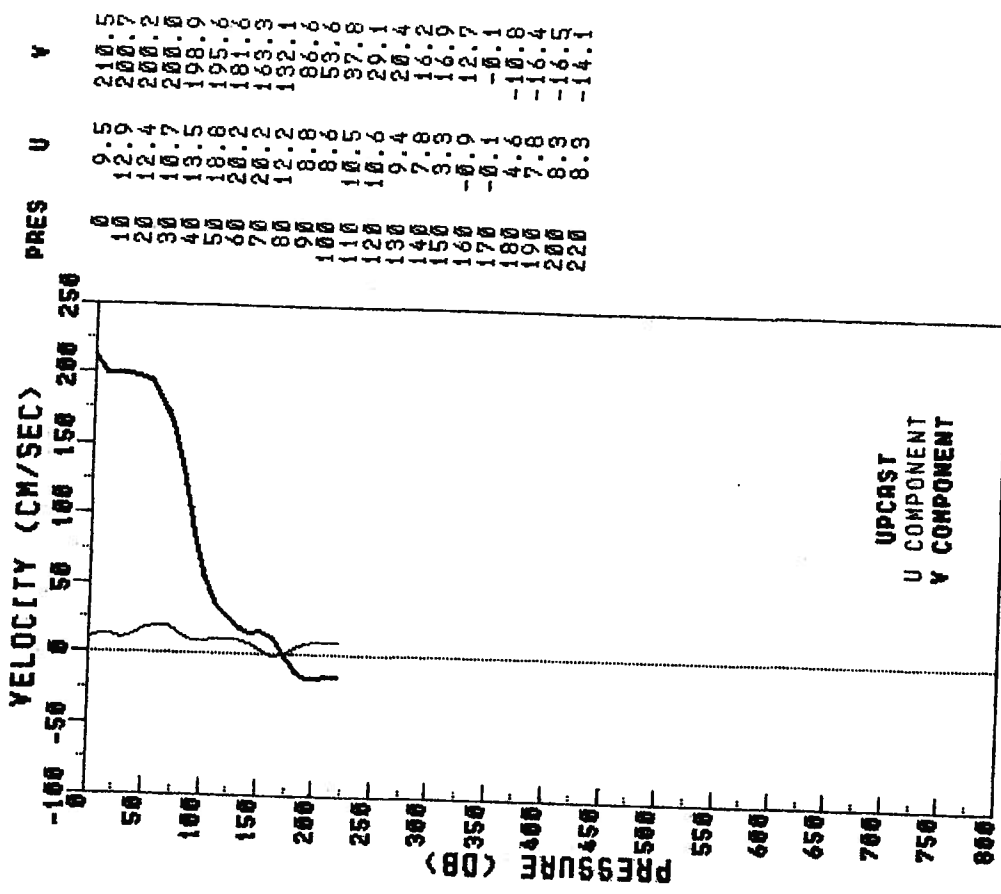
LATITUDE 26.97 N LONGITUDE 79.84 W



YK-STACS9-83 PEGASUS 045 STN 0
 R/V VIRGINIA KEY JOY 218 TIME 0017Z
 LATITUDE 27.00 N LONGITUDE 79.94 W

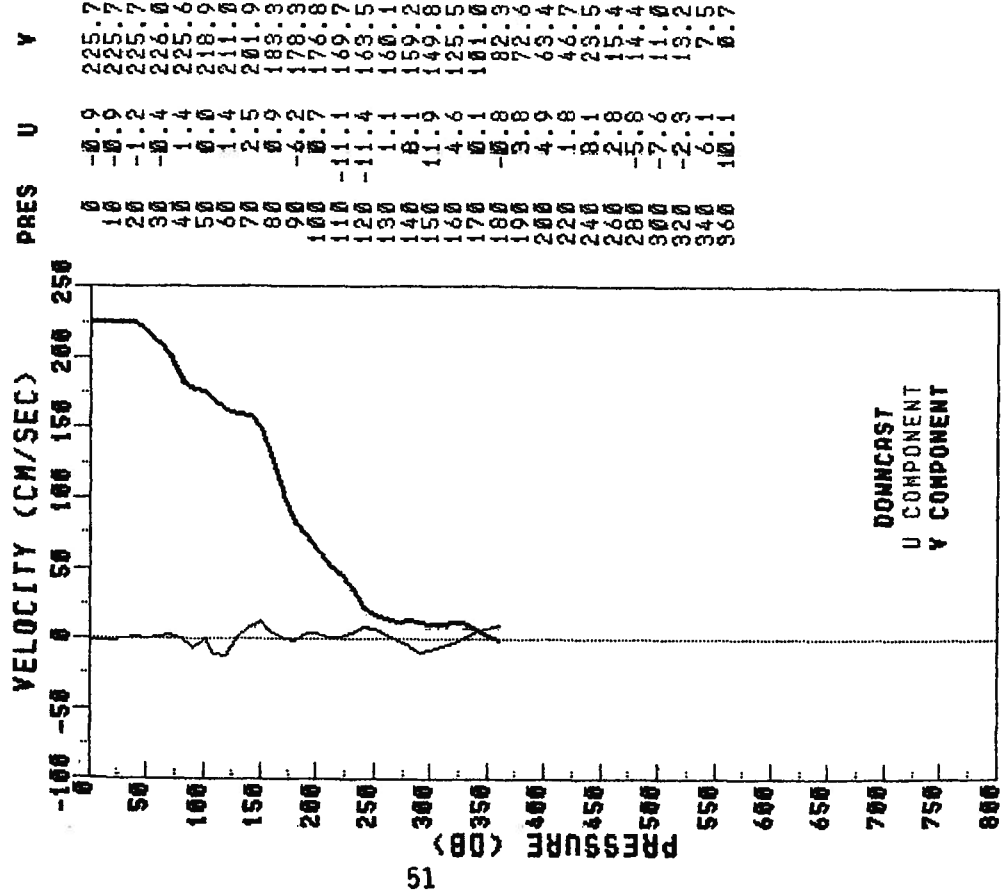
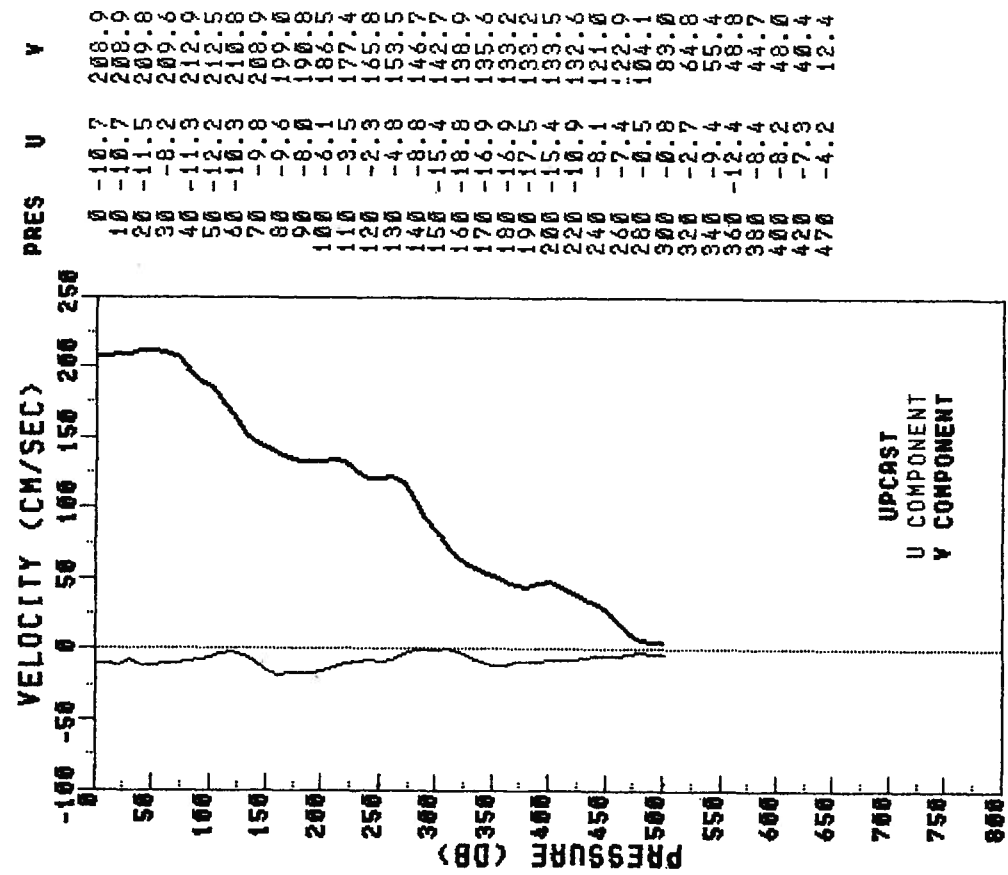


YK-STACS9-83 PEGASUS 046 STN 1
 R/V VIRGINIA KEY JOY 218 TIME 0147Z
 LATITUDE 26.99 N LONGITUDE 79.87 W

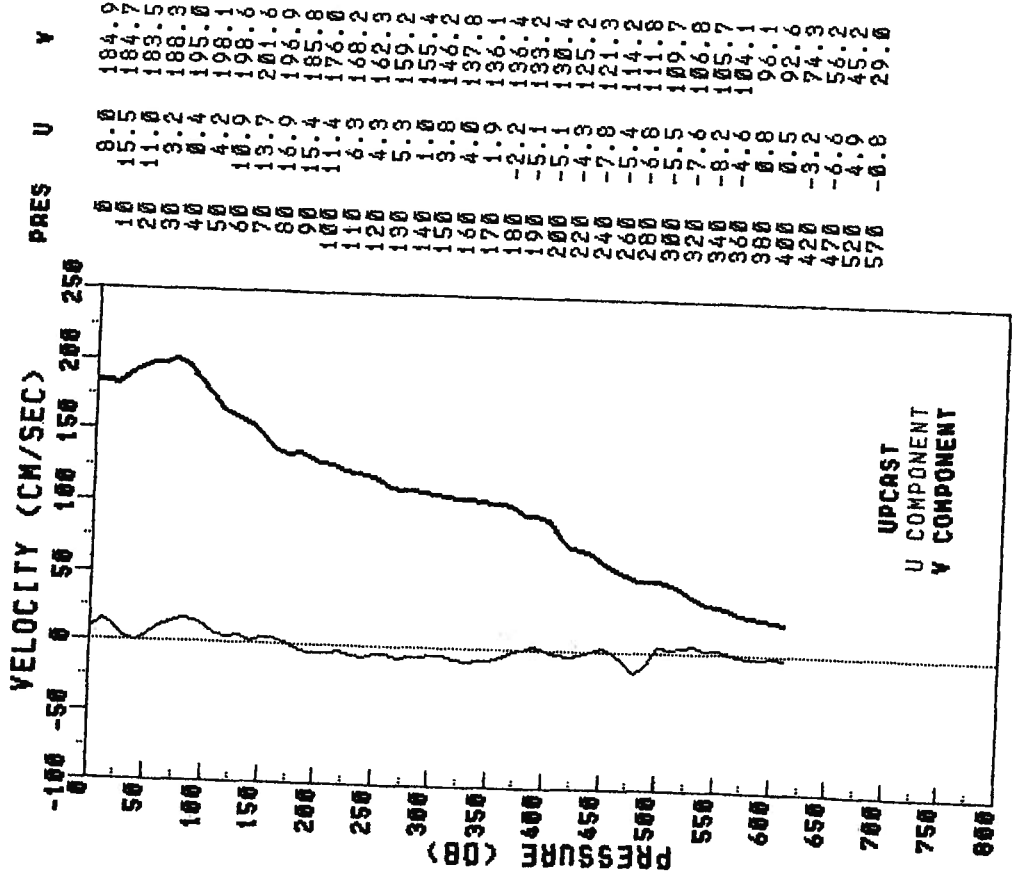


VK-STACS9-83 PEGASUS 048 STN 3
 R/V VIRGINIA KEY JDAY 218 TIME 0655Z
 LATITUDE 27.00 N LONGITUDE 79.69 W

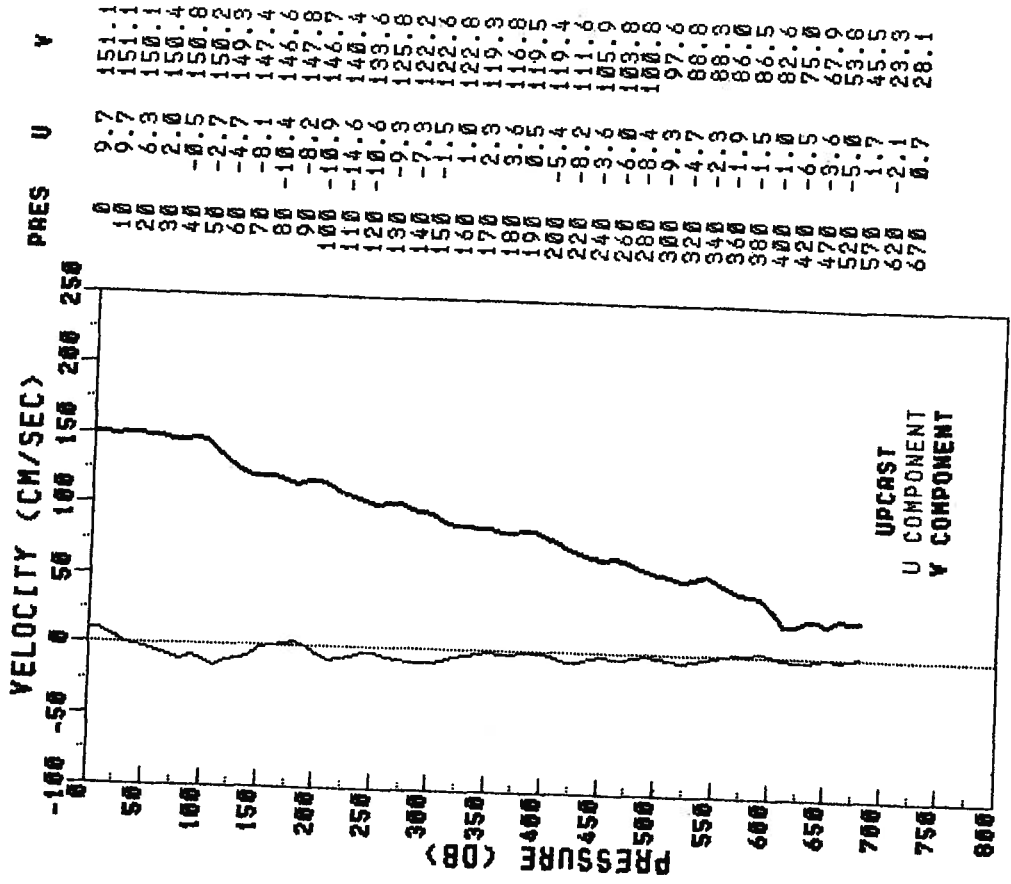
VK-STACS9-83 PEGASUS 047 STN 2
 R/V VIRGINIA KEY JDAY 218 TIME 0348Z
 LATITUDE 26.98 N LONGITUDE 79.78 W



VK-STACS9-83 PEGASUS 049 STN 4
 R/Y VIRGINIA KEY JDAY 218 TIME 0905Z
 LATITUDE 26.98 N LONGITUDE 79.61 W

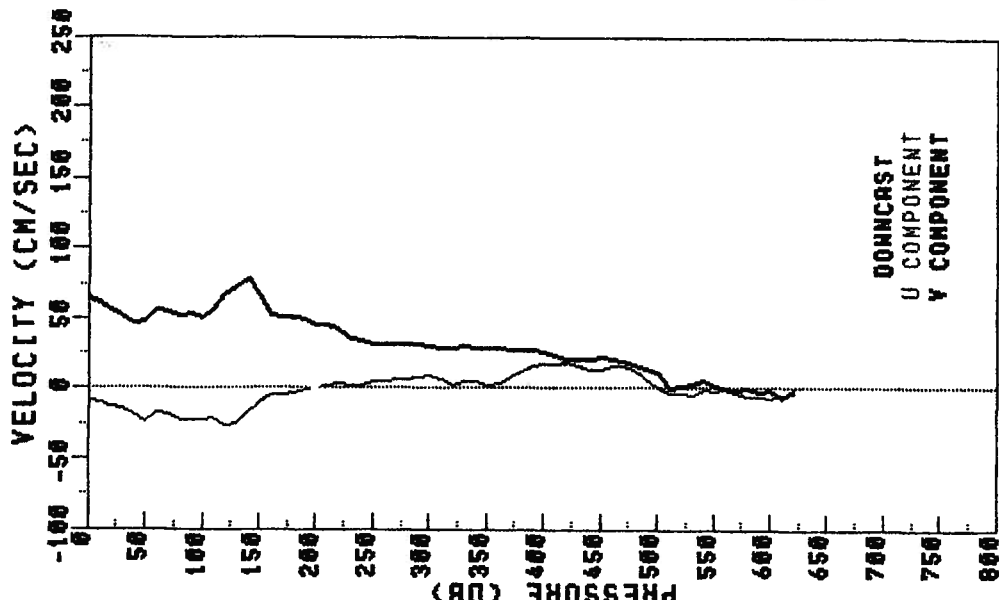


VK-STACS9-83 PEGASUS 050 STN 5
 R/Y VIRGINIA KEY JDAY 218 TIME 1206Z
 LATITUDE 26.99 N LONGITUDE 79.49 W



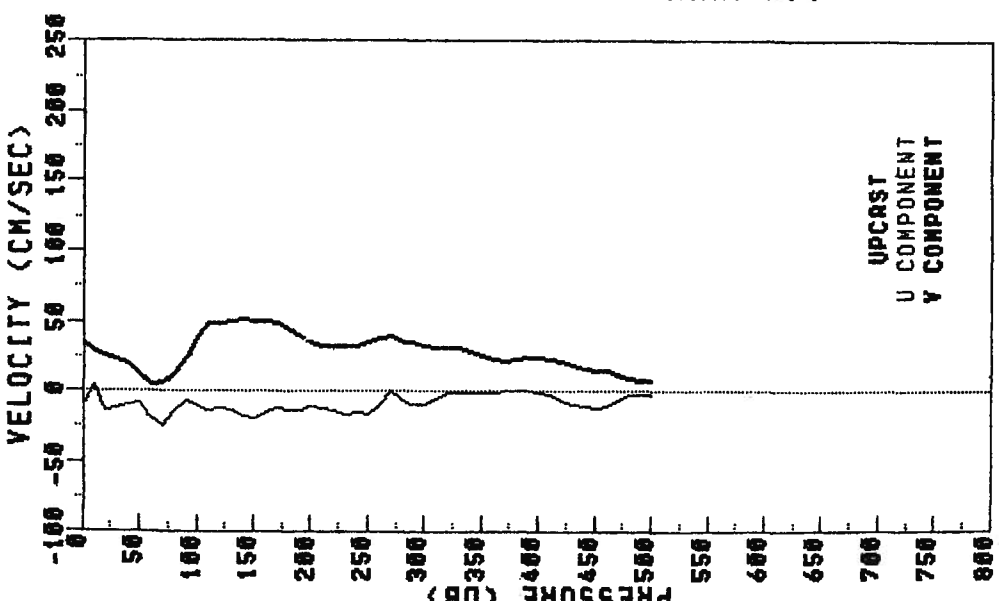
YK-STACS9-83 PEGASUS 054 STN 7
 R/V VIRGINIA KEY JOY 219 TIME 0303Z
 LATITUDE 27.00 N LONGITUDE 79.29 W

PRES	U	V
0	8.0	65.9
10	-11.2	61.9
20	-14.3	56.0
30	-18.2	52.0
40	-23.0	46.0
50	-23.0	49.0
60	-18.4	56.7
70	-22.6	52.0
80	-22.4	54.7
90	-22.6	50.1
100	-21.9	57.1
110	-26.2	68.0
120	-25.6	73.0
130	-17.8	78.5
140	-	65.5
150	-2.0	59.1
160	-5.0	4.6
170	-3.8	50.8
180	-1.3	46.0
190	-	42.4
200	0.9	35.1
220	2.3	32.0
240	4.1	31.6
260	6.4	31.1
280	8.2	29.2
300	2.3	28.9
320	4.6	27.7
340	3.6	25.9
360	11.6	20.8
380	16.3	20.2
400	17.9	11.0
420	16.1	1.9
470	-4.2	-0.8
570	-9.0	-1.2
620	-4.3	-

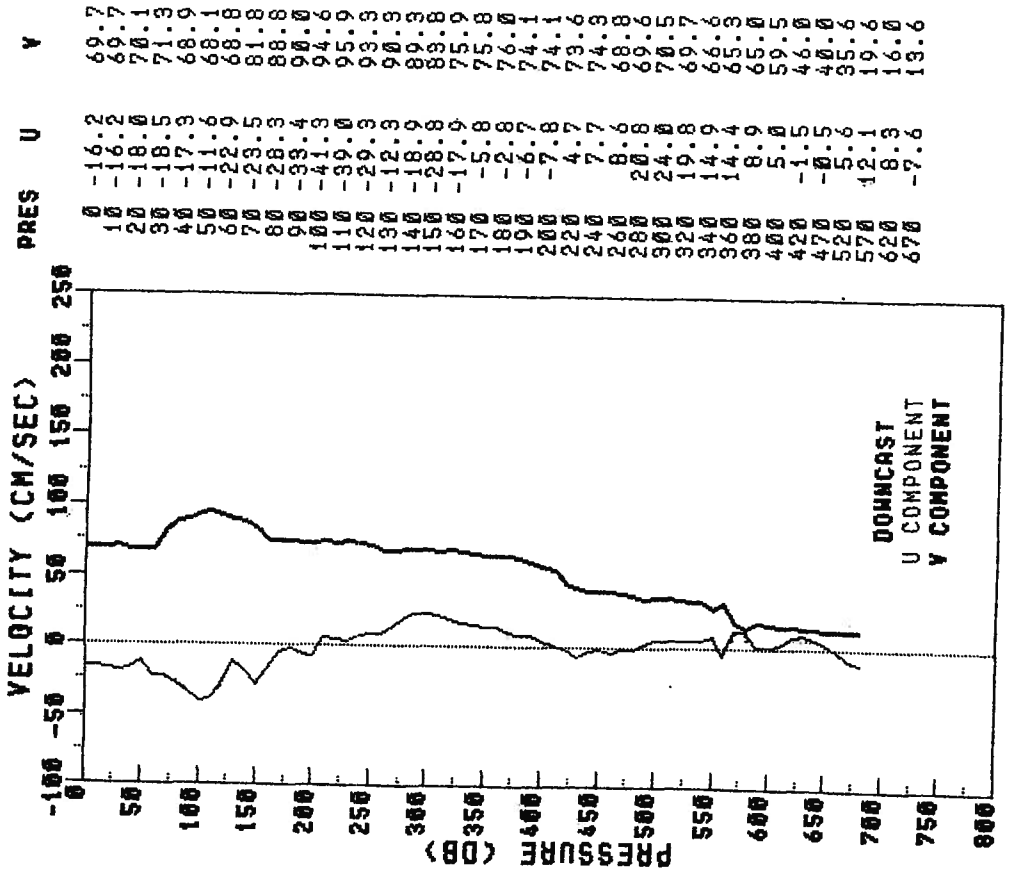


YK-STACS9-83 PEGASUS 053 STN 8
 R/V VIRGINIA KEY JOY 219 TIME 0118Z
 LATITUDE 26.99 N LONGITUDE 79.20 W

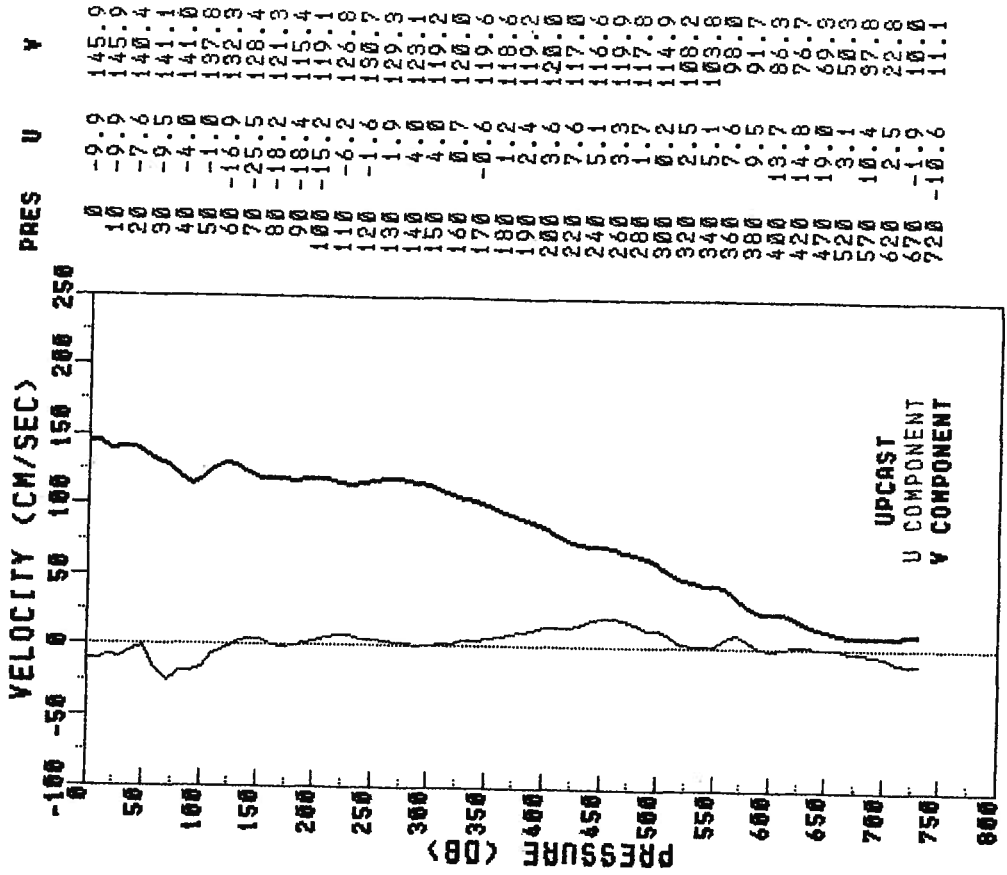
PRES	U	V
0	-9.6	35.3
10	4.3	28.0
20	-12.5	26.1
30	-9.0	23.1
40	-8.6	20.4
50	-19.3	13.0
60	-23.9	6.0
70	-13.3	7.3
80	-6.0	14.5
90	-10.9	24.2
100	-13.2	39.3
110	-12.2	48.9
120	-13.7	48.8
130	-17.6	50.6
140	-18.3	51.9
150	-15.3	51.5
160	-12.1	49.8
170	-13.5	46.0
180	-13.4	40.4
190	-10.1	35.5
200	-13.8	32.6
220	-14.3	33.0
240	-0.3	30.2
260	-6.7	36.1
280	-8.7	33.4
300	-1.7	32.1
320	-0.9	28.7
340	-0.9	28.9
360	-0.5	23.5
380	-1.0	24.3
400	-6.3	22.9
420	-6.4	12.9
470	-	-



VK-STACS9-83 PEGASUS 055 STN 6
 R/Y VIRGINIA KEY JDAY 219 TIME 0458Z
 LATITUDE 26.99 N LONGITUDE 79.40 W



VK-STACS9-83 PEGASUS 057 STN 5
 R/Y VIRGINIA KEY JDAY 219 TIME 0846Z
 LATITUDE 26.99 N LONGITUDE 79.49 W



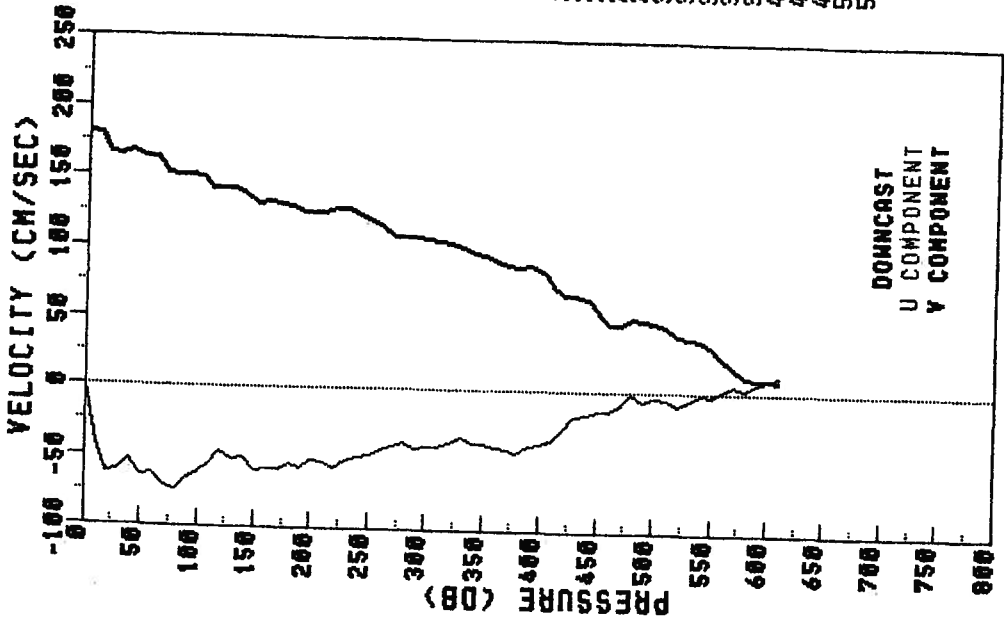
YK-STACS9-83

PEGASUS 058

STN 4

R/V VIRGINIA KEY JOY 219 TIME 1152Z

LATITUDE 26.98 N LONGITUDE 79.61 W



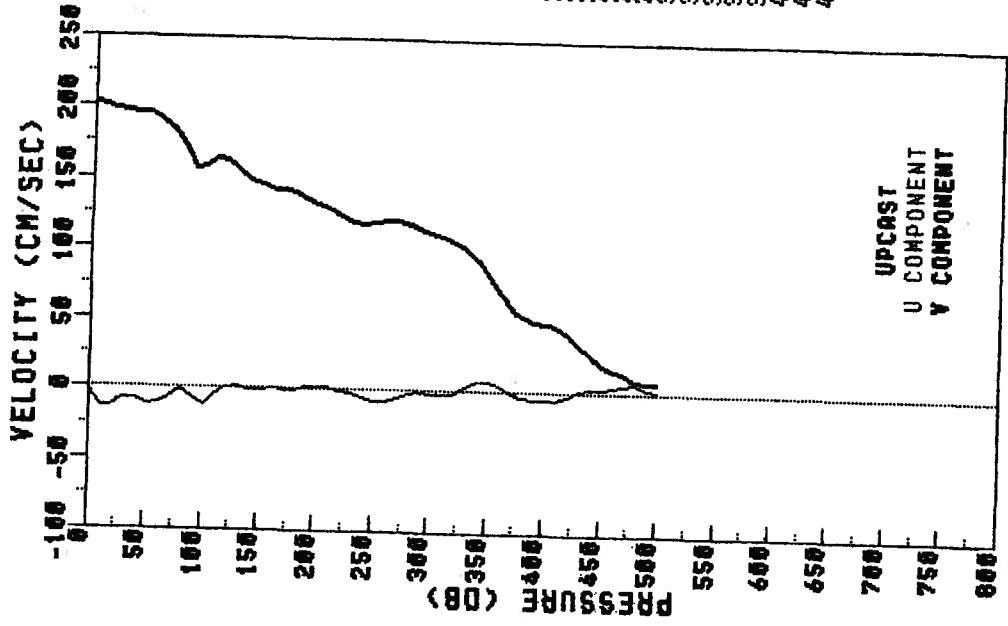
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PEGASUS 059

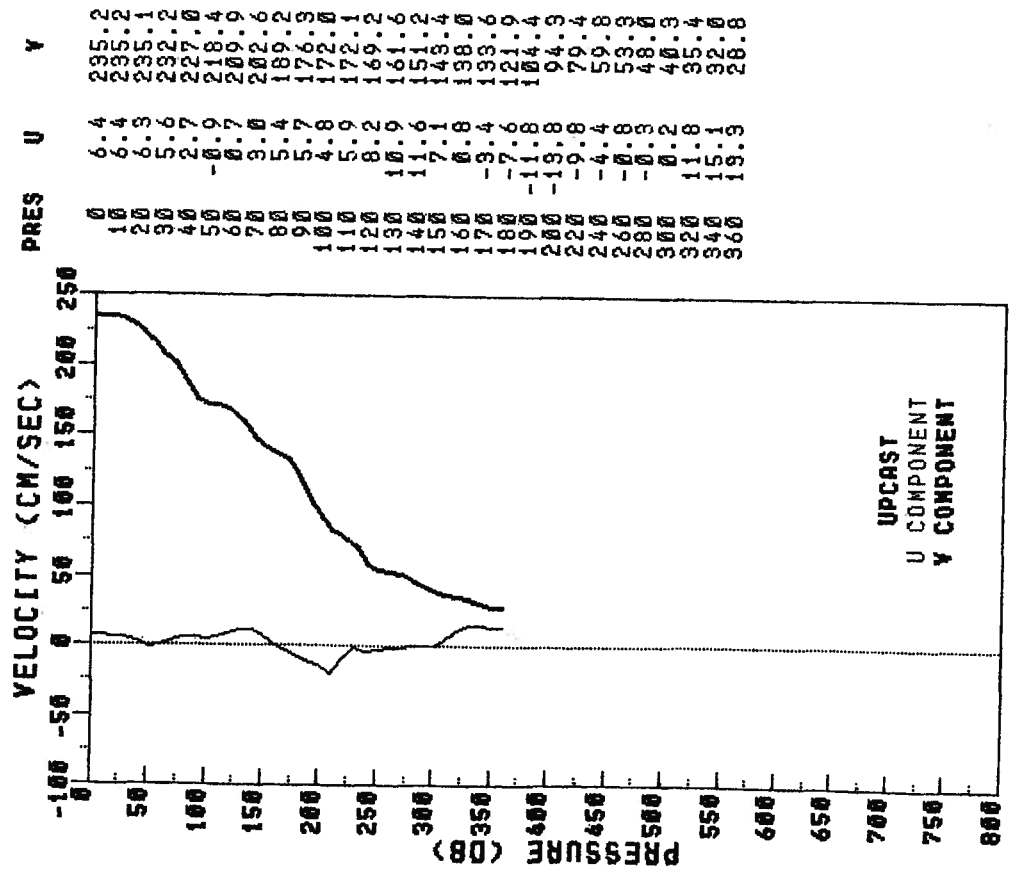
STN 3

R/V VIRGINIA KEY JOY 219 TIME 1341Z

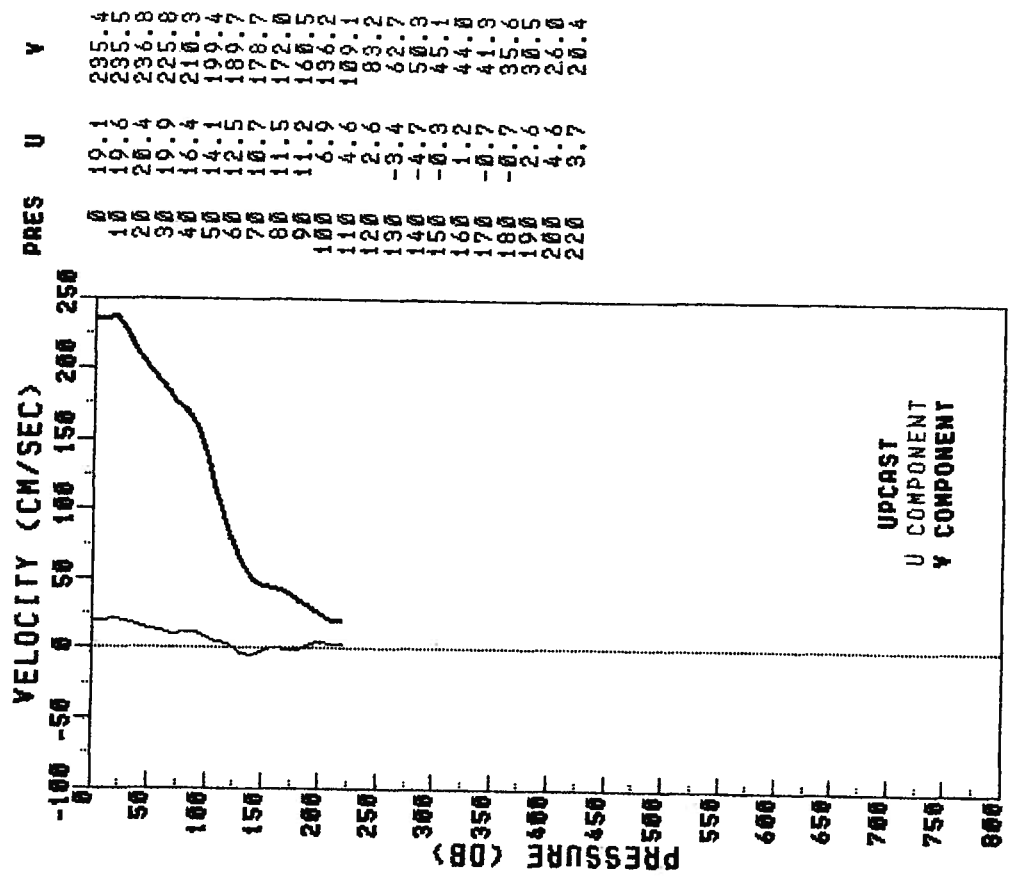
LATITUDE 27.00 N LONGITUDE 79.69 W



VK-STAC9-83 PEGASUS 060 STN 2
 R/Y VIRGINIA KEY JDAY 219 TIME 1547Z
 LATITUDE 26.98 N LONGITUDE 79.78 W



VK-STACS9-83 PEGASUS 061 STN 1
 R/Y VIRGINIA KEY JDAY 219 TIME 1736Z
 LATITUDE 26.99 N LONGITUDE 79.87 W



VK-STACS9-83

PEGASUS 062

STN 0

VK-STACS9-83

PEGASUS 064

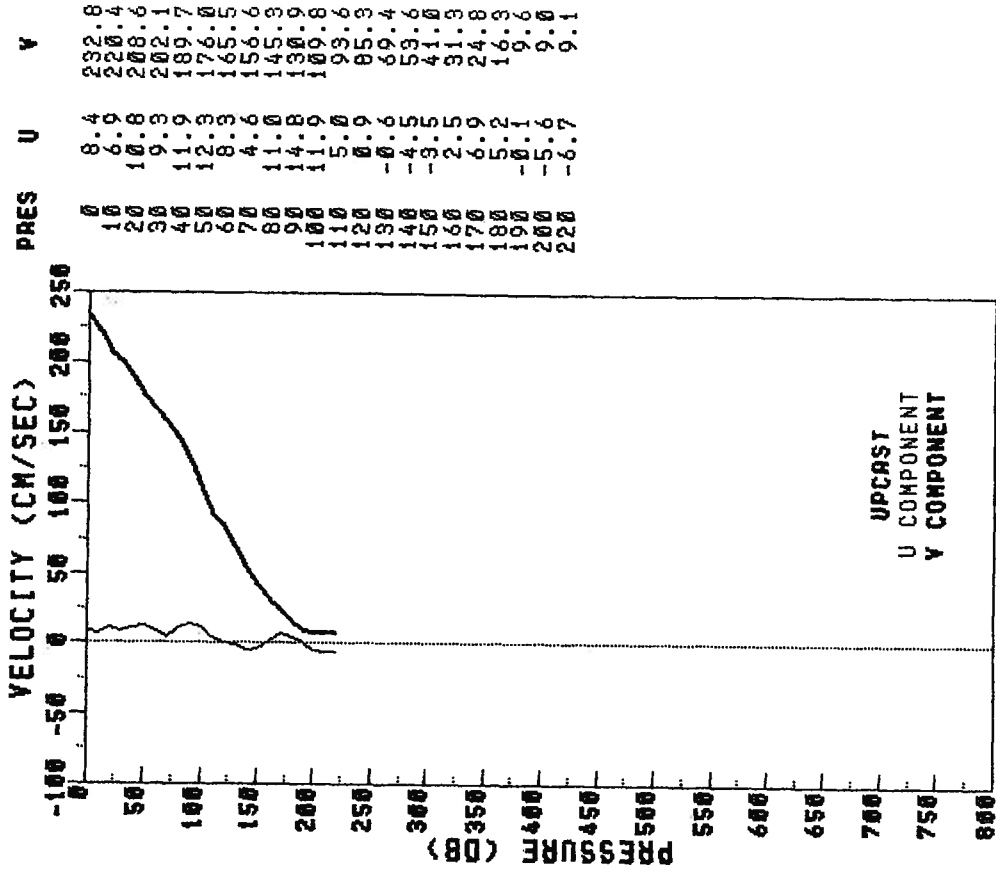
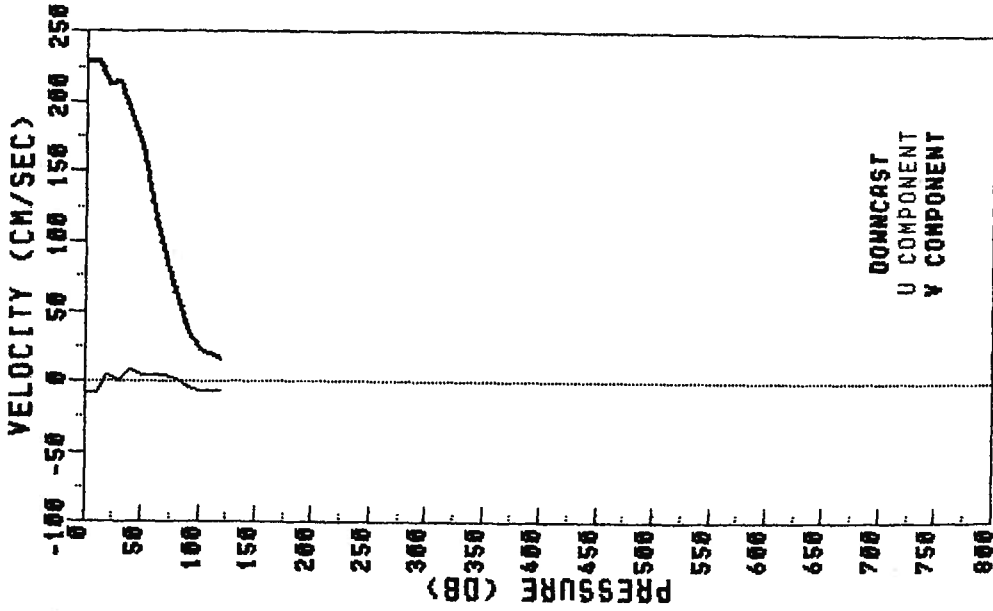
STN 1

R/V VIRGINIA KEY JDAY 219 TIME 1943Z

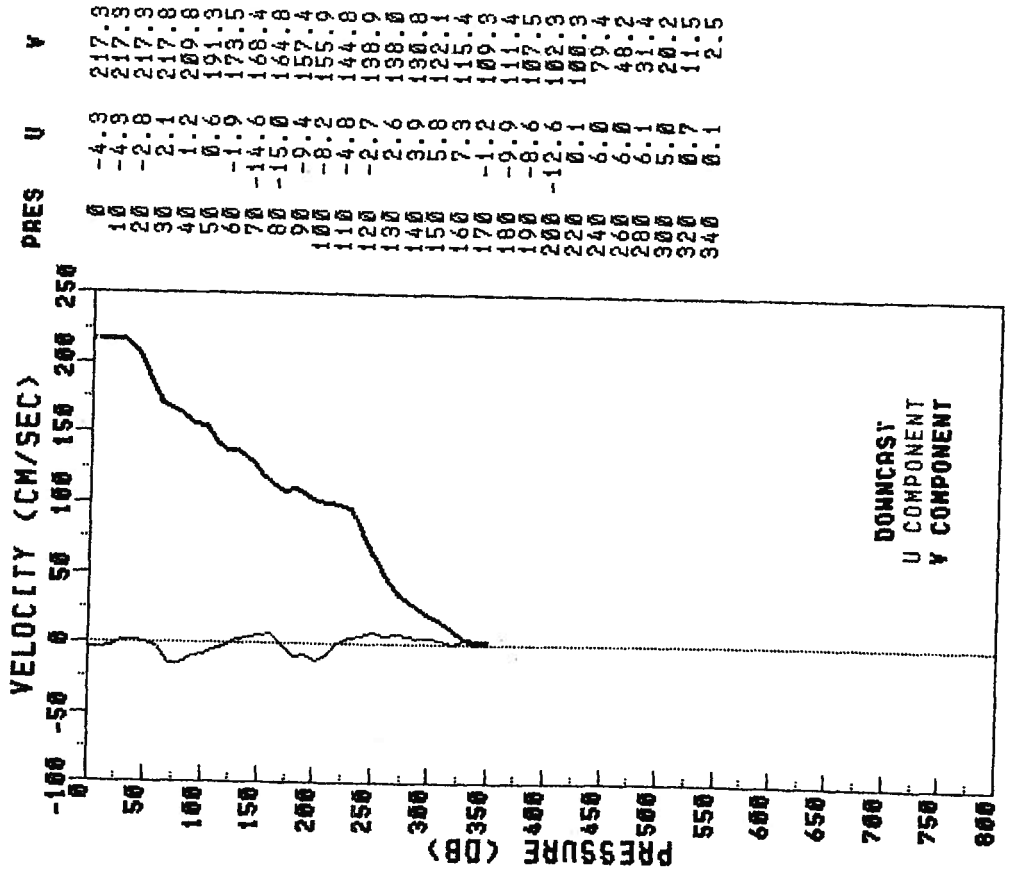
R/V VIRGINIA KEY JDAY 219 TIME 2229Z

LATITUDE 27.00 N LONGITUDE 79.94 W

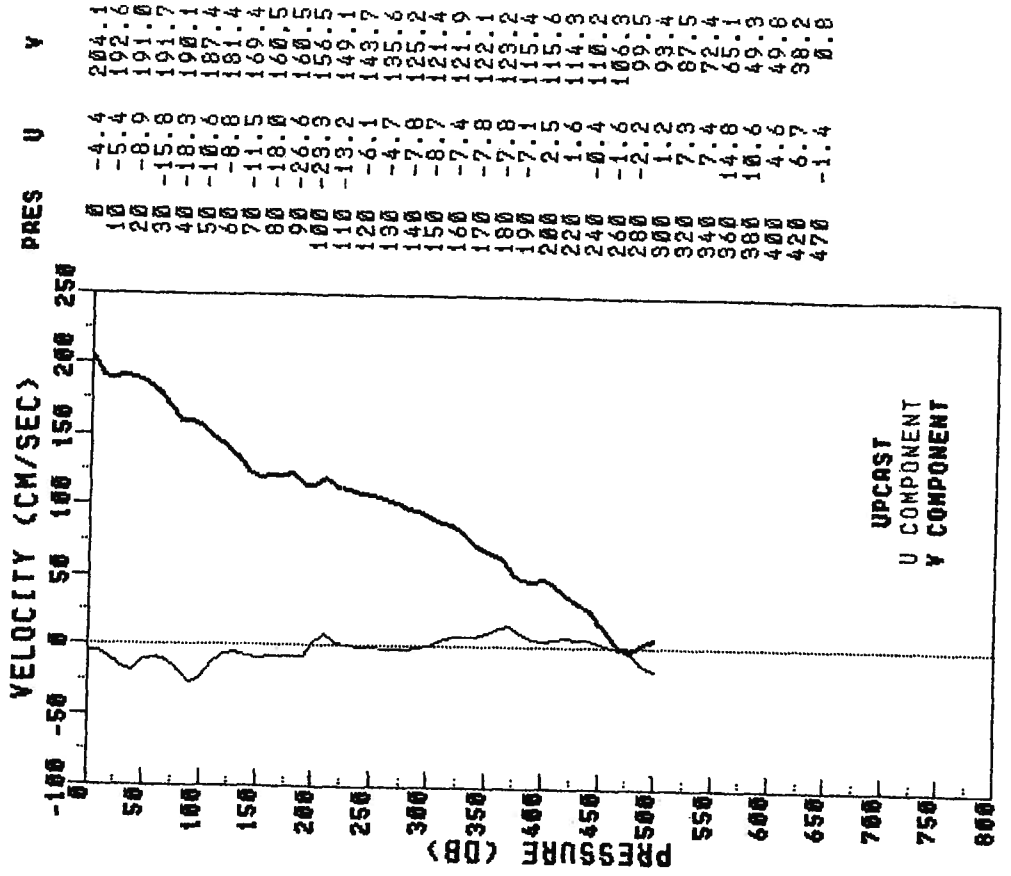
LATITUDE 26.99 N LONGITUDE 79.87 W



YK-STACS9-83 PEGASUS 065 STN 2
 R/Y VIRGINIA KEY JOY 220 TIME 0001Z
 LATITUDE 26.98 N LONGITUDE 79.78 W

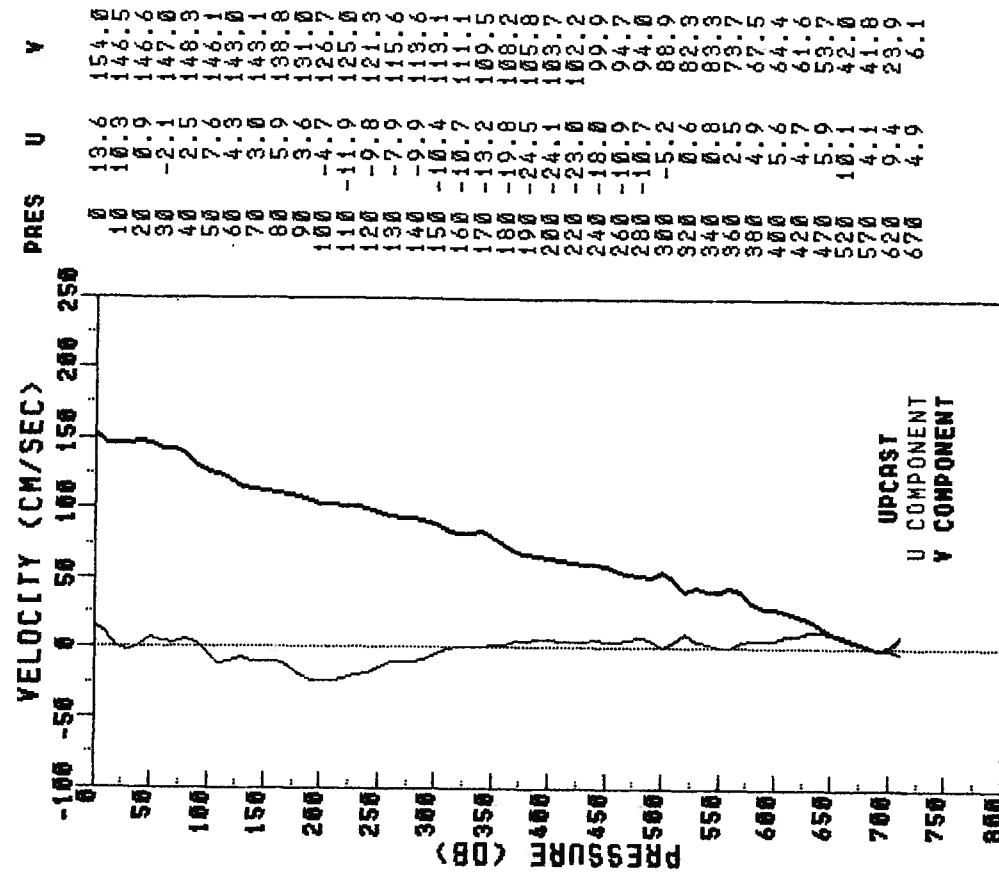
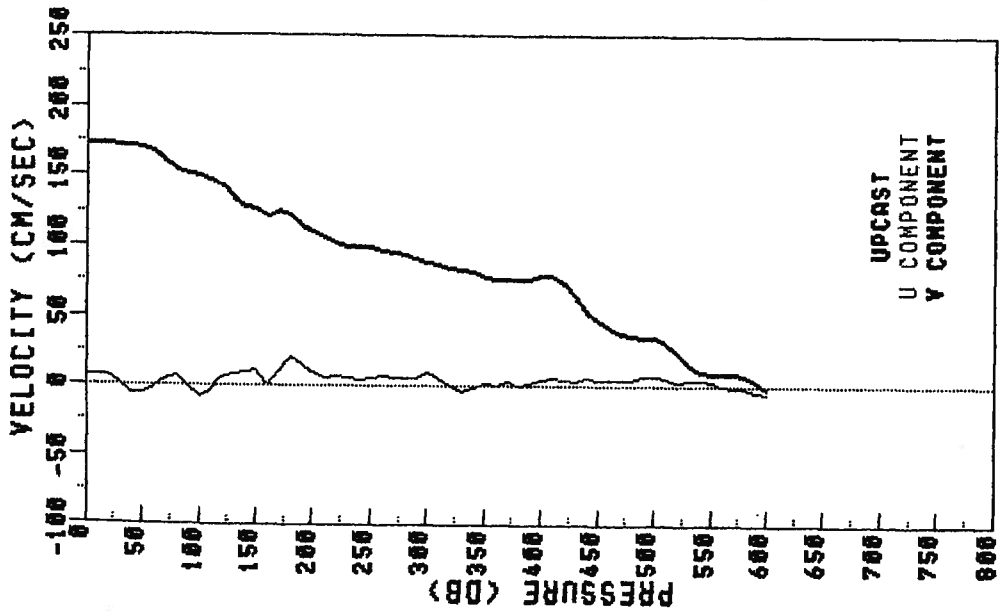


YK-STACS9-83 PEGASUS 066 STN 3
 R/Y VIRGINIA KEY JOY 220 TIME 0123Z
 LATITUDE 27.00 N LONGITUDE 79.69 W



YK-STACS9-83 PEGASUS 067 STN 4
 R/V VIRGINIA KEY JOY 220 TIME 0305Z
 LATITUDE 26.98 N LONGITUDE 79.61 W

YK-STACS9-83 PEGASUS 068 STN 5
 R/V VIRGINIA KEY JOY 220 TIME 0504Z
 LATITUDE 26.99 N LONGITUDE 79.49 W



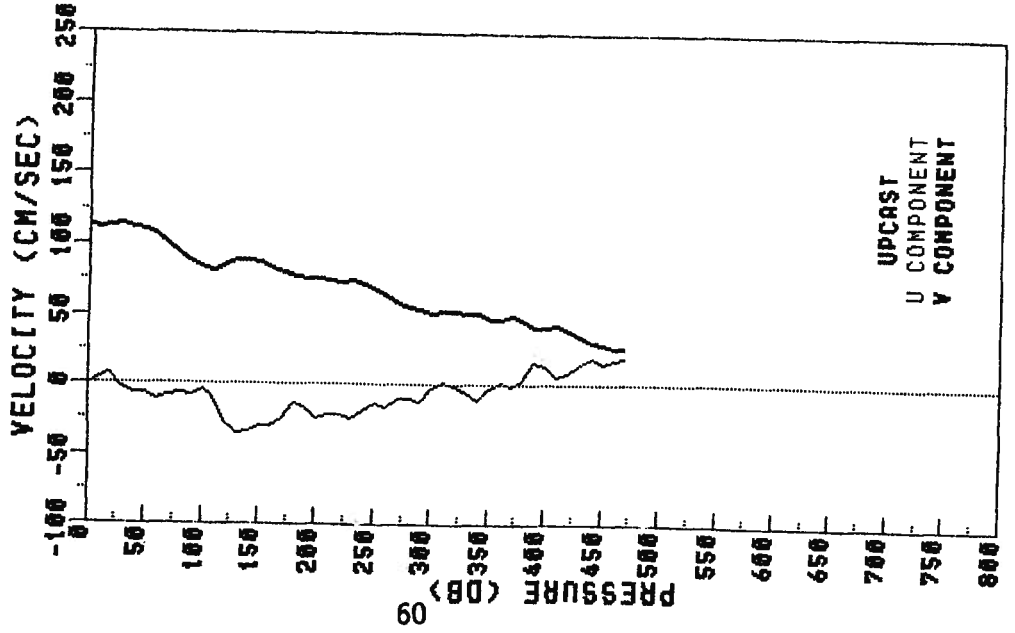
VK-STACS9-83

PEGASUS 069

STN 6

R/Y VIRGINIA KEY JOY 220 TIME 0715Z

LATITUDE 26.99 N LONGITUDE 79.40 W



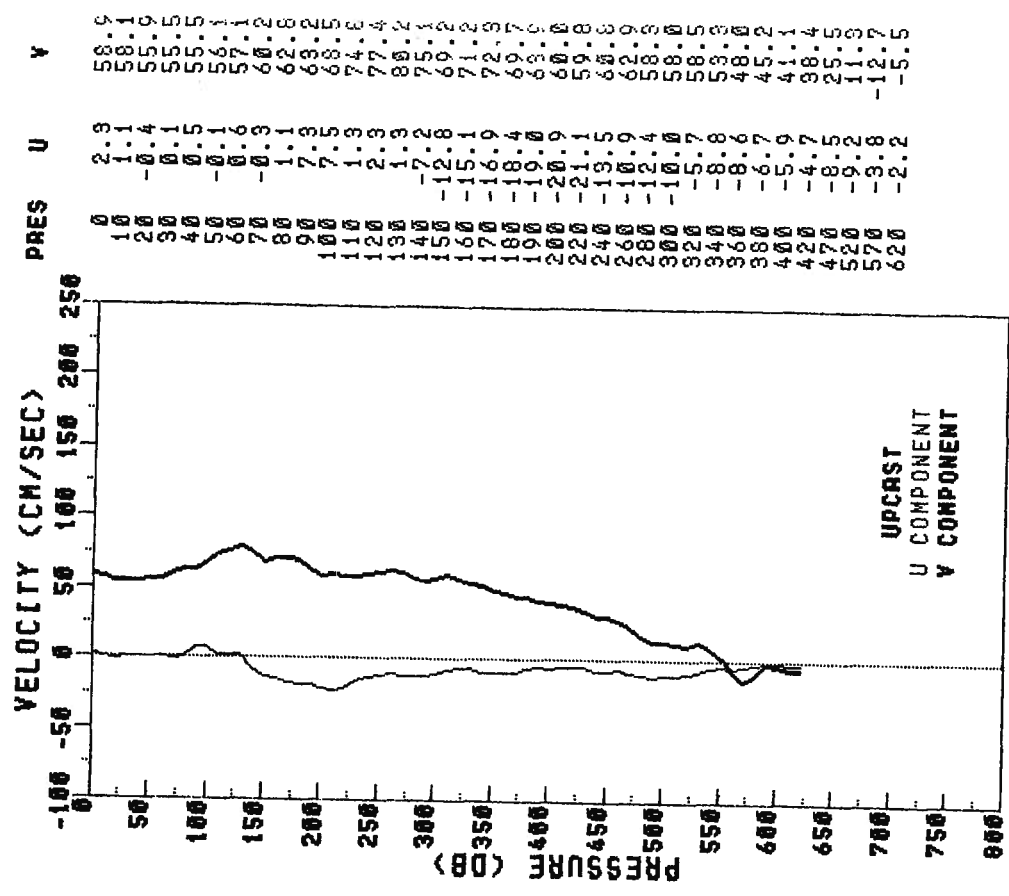
VK-STACS9-83

PEGASUS 070

STN 7

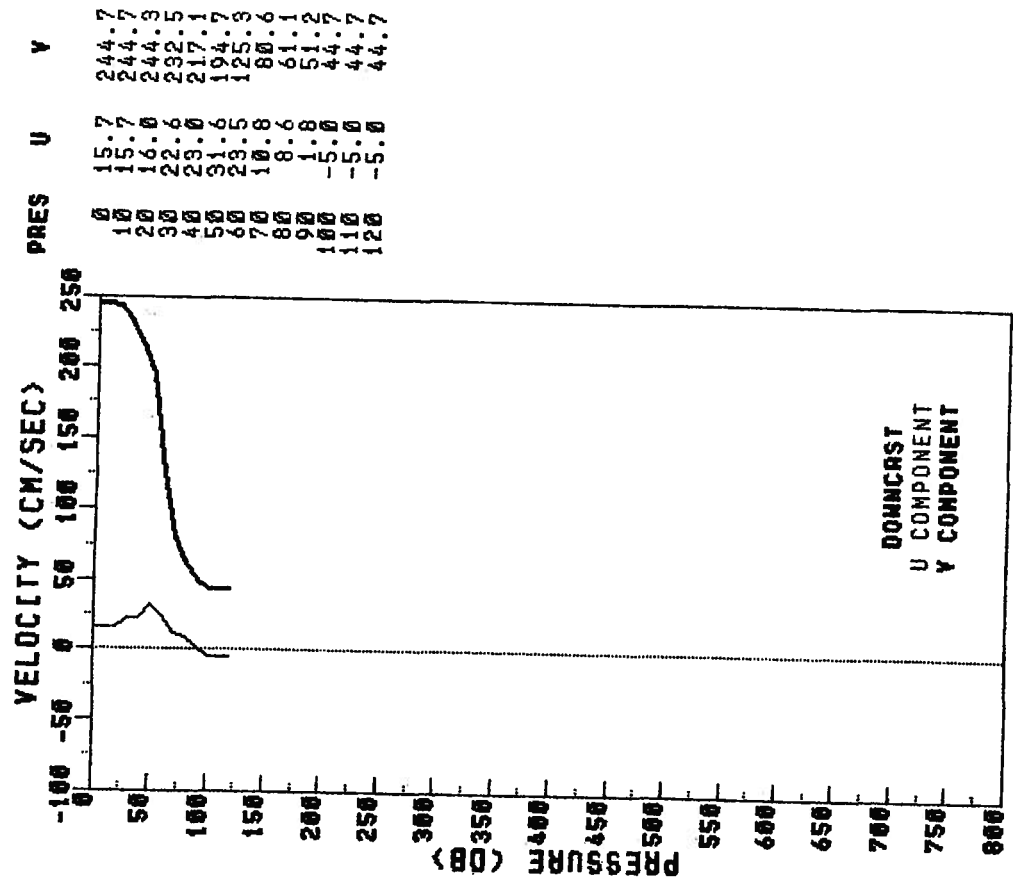
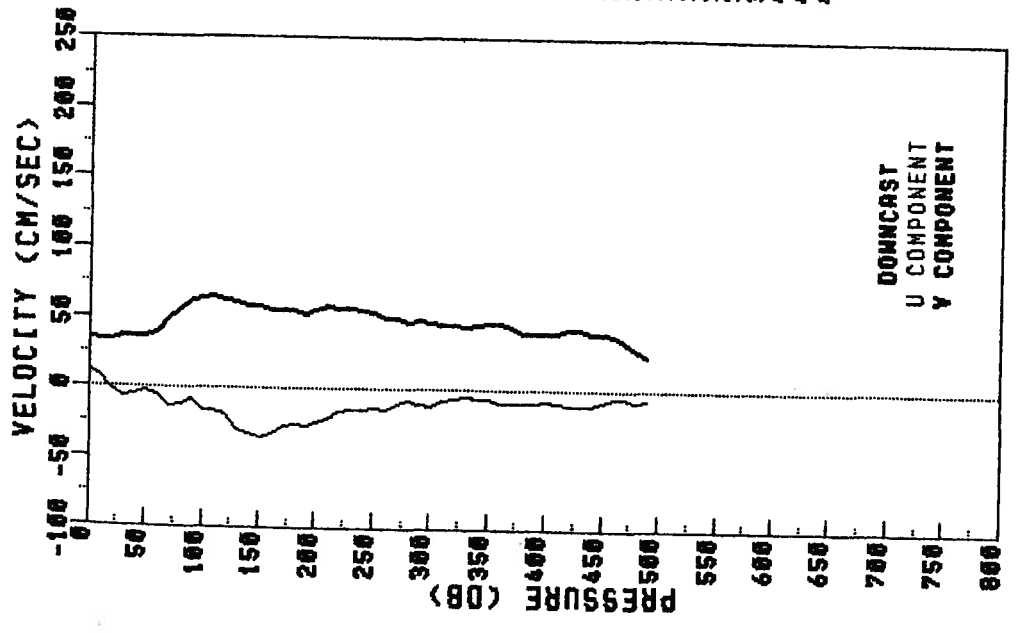
R/Y VIRGINIA KEY JOY 220 TIME 0908Z

LATITUDE 26.99 N LONGITUDE 79.29 W

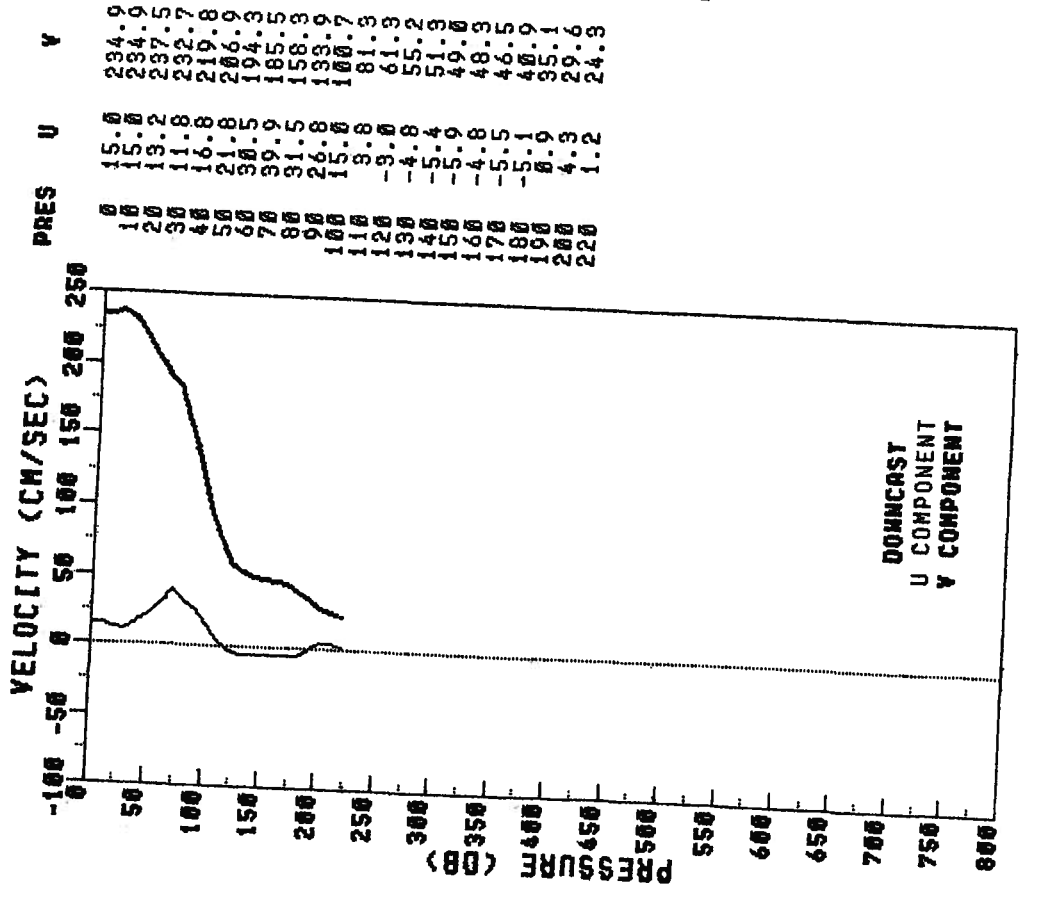


YK-STACS9-83 STN 8
 R/V VIRGINIA KEY JDAY 220 TIME 1052Z
 LATITUDE 26.99 N LONGITUDE 79.20 W

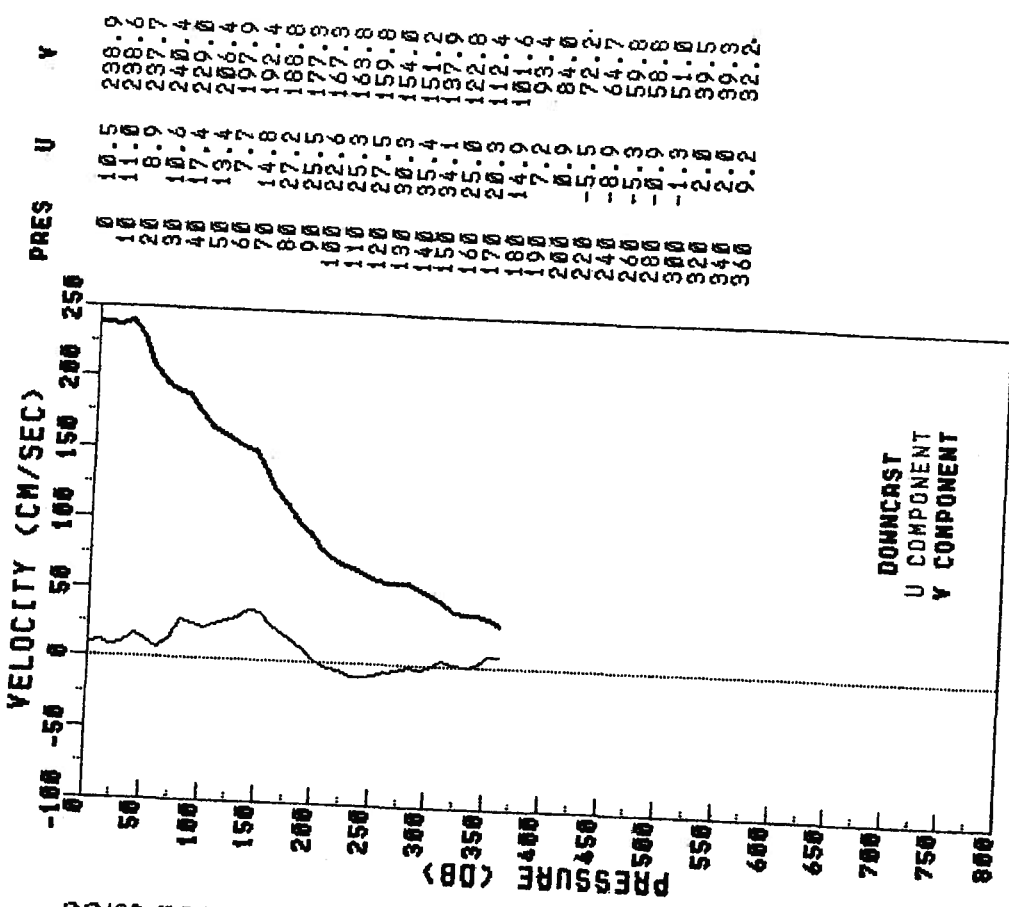
YK-STACS9-83 STN 0
 R/V VIRGINIA KEY JDAY 223 TIME 2028Z
 LATITUDE 27.00 N LONGITUDE 79.94 W



VK-STACS9-83 PEGASUS 073 STN 1
 R/V VIRGINIA KEY JOY 223 TIME 2125Z
 LATITUDE 26.99 N LONGITUDE 79.87 W

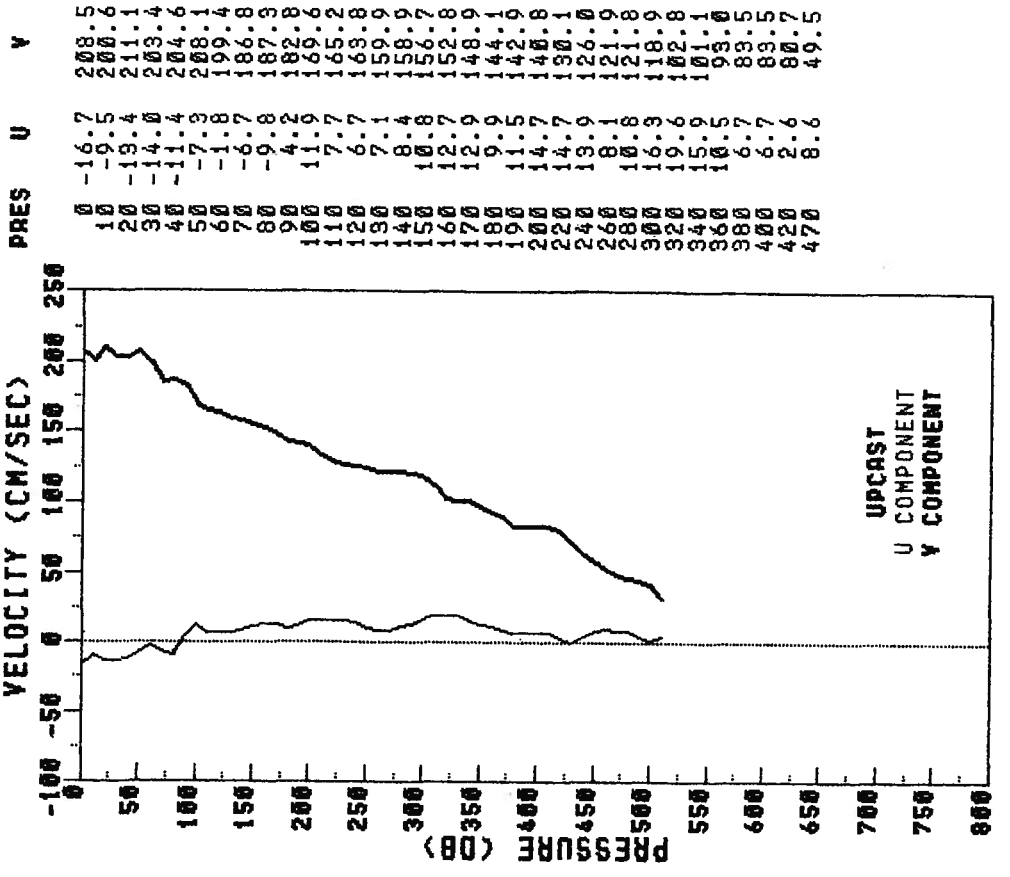
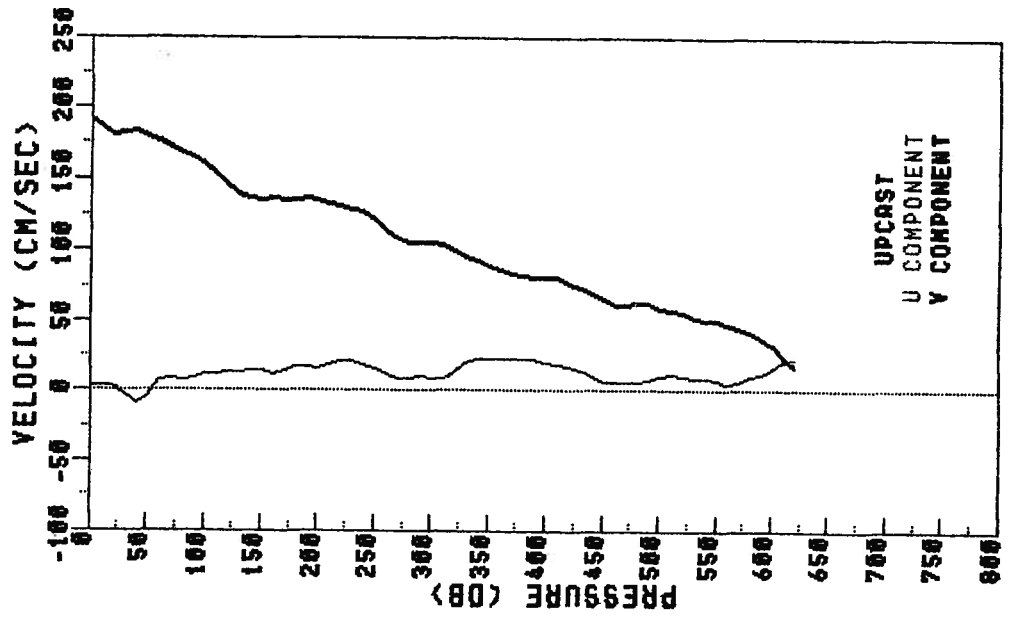


VK-STACS9-83 PEGASUS 074 STN 2
 R/V VIRGINIA KEY JOY 223 TIME 2247Z
 LATITUDE 26.98 N LONGITUDE 79.78 W

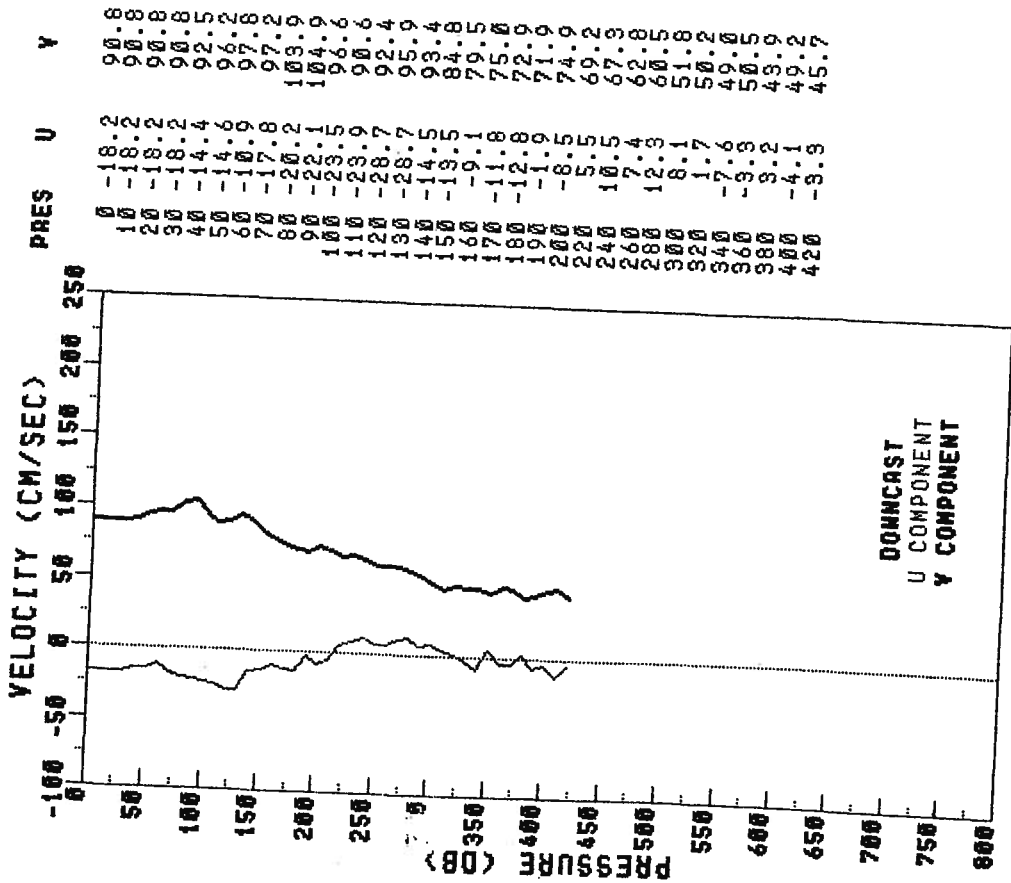


YK-STACS9-83 PEGASUS 076 STN 4
 R/Y VIRGINIA KEY JOY 224 TIME 0205Z
 LATITUDE 26.98 N LONGITUDE 79.61 N

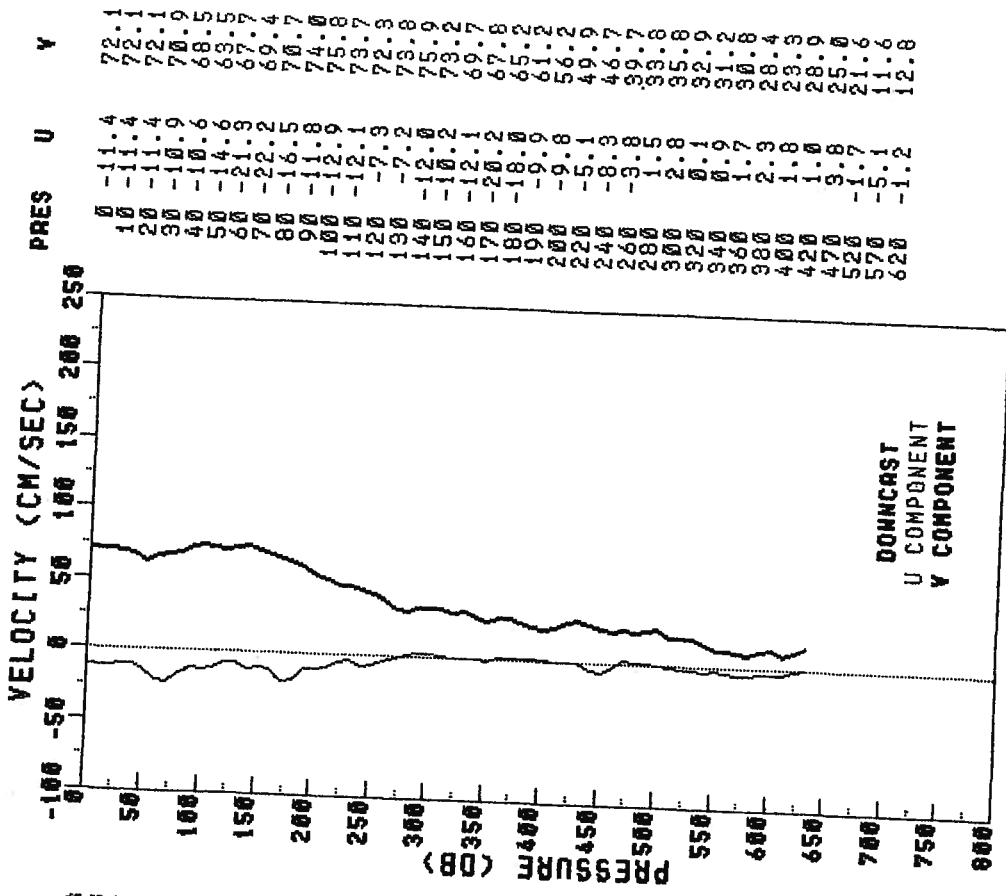
YK-STACS9-83 PEGASUS 075 STN 3
 R/Y VIRGINIA KEY JOY 224 TIME 0027Z
 LATITUDE 27.00 N LONGITUDE 79.69 N



YK-STACS9-83 PEGASUS 078 STN 6
 R/V VIRGINIA KEY JOY 224 TIME 0558Z
 LATITUDE 26.99 N LONGITUDE 79.40 W



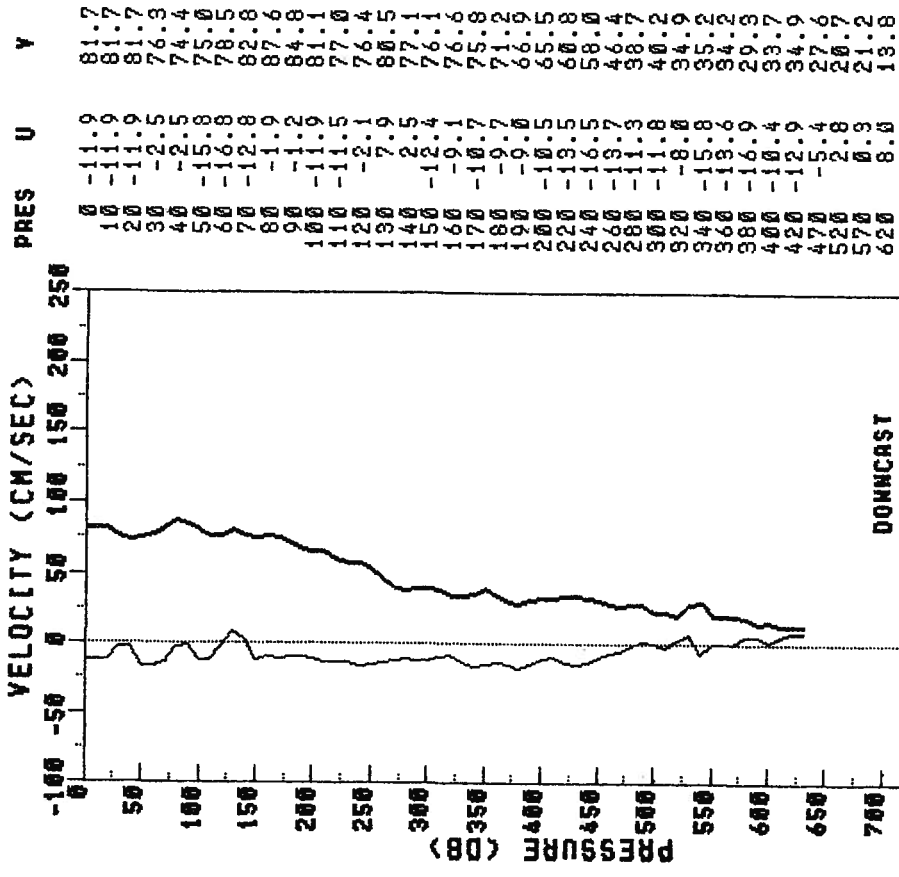
YK-STACS9-83 PEGASUS 079 STN 7
 R/V VIRGINIA KEY JOY 224 TIME 0802Z
 LATITUDE 26.99 N LONGITUDE 79.29 W



YK-STACS9-83 PEGASUS 081 STN 7

R/V VIRGINIA KEY JOY 224 TIME 1118Z

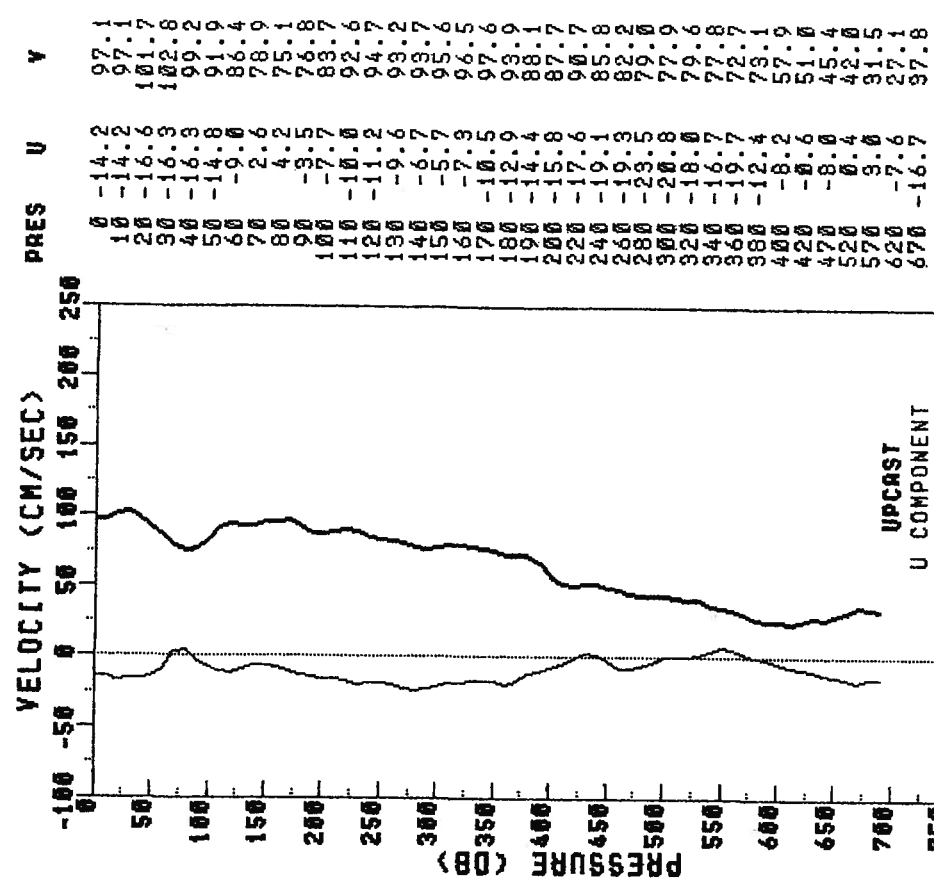
LATITUDE 27.00 N LONGITUDE 79.29 W



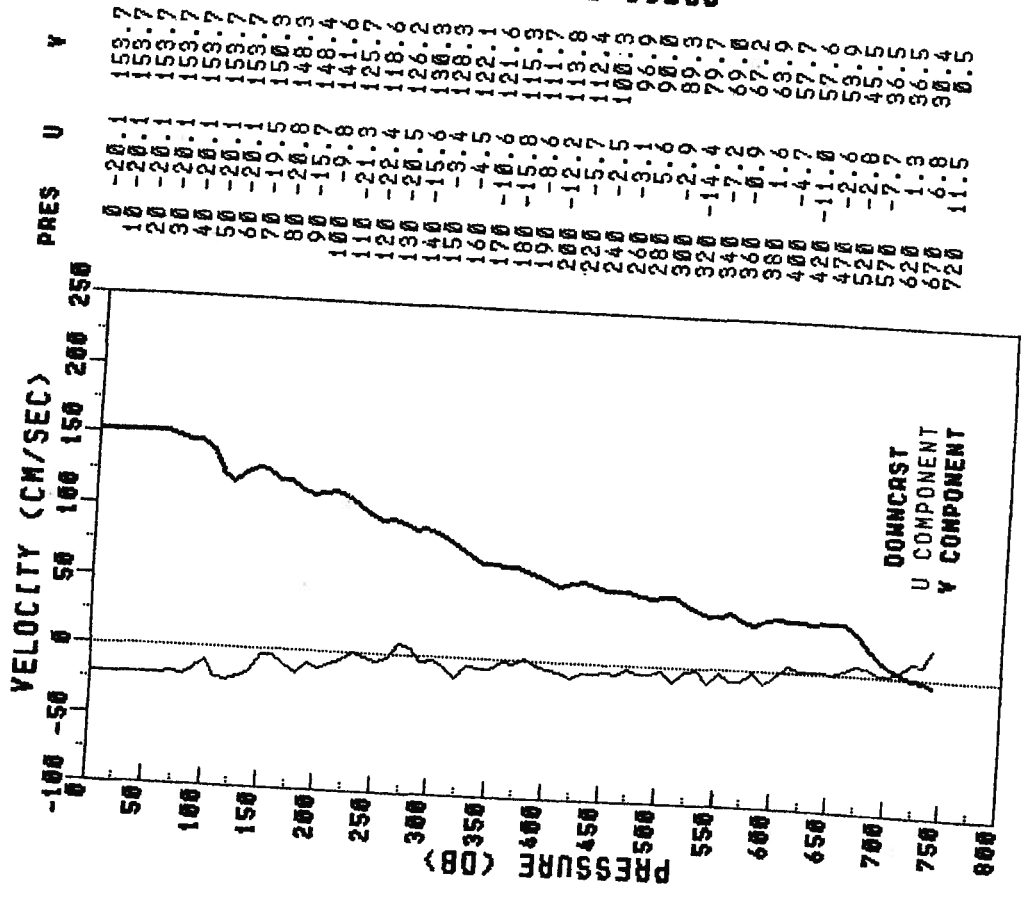
YK-STACS9-83 PEGASUS 084 STN 6

R/V VIRGINIA KEY JOY 224 TIME 2123Z

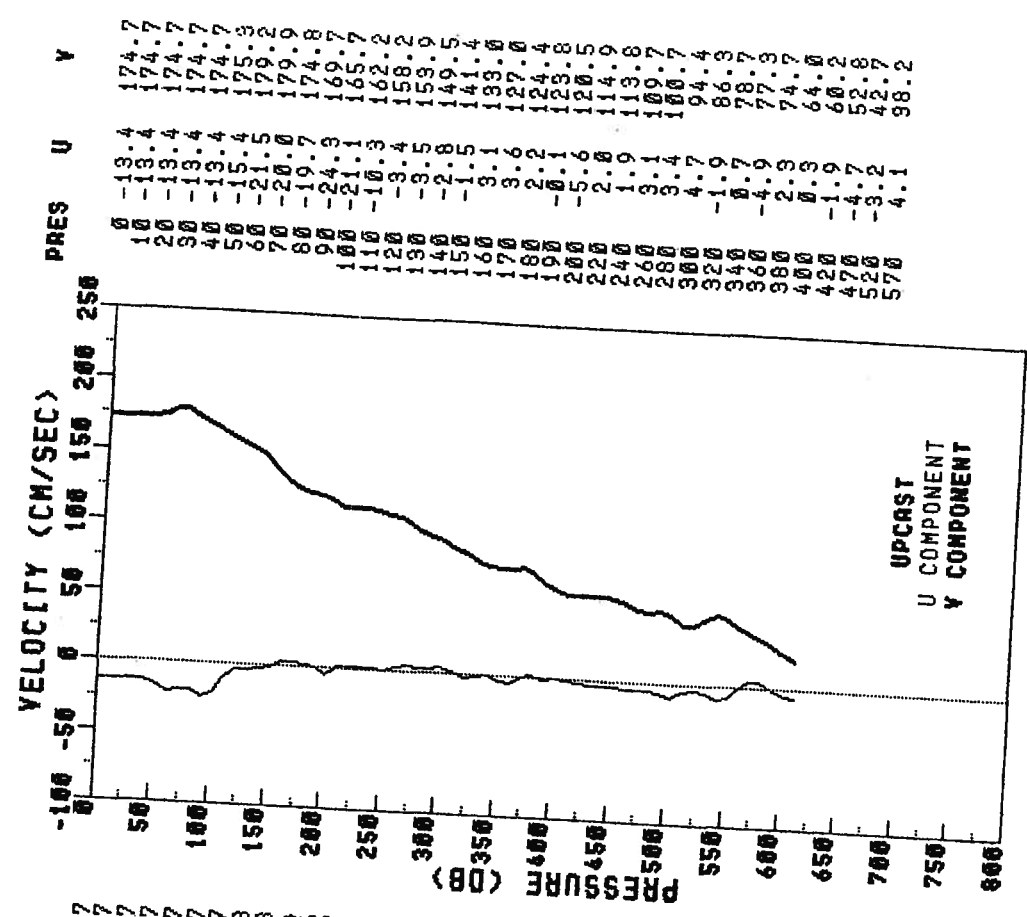
LATITUDE 26.99 N LONGITUDE 79.40 W



YK-STACS9-83 PEGASUS 085 STN 5
 R/V VIRGINIA KEY JOY 224 TIME 2318Z
 LATITUDE 26.99 N LONGITUDE 79.49 W

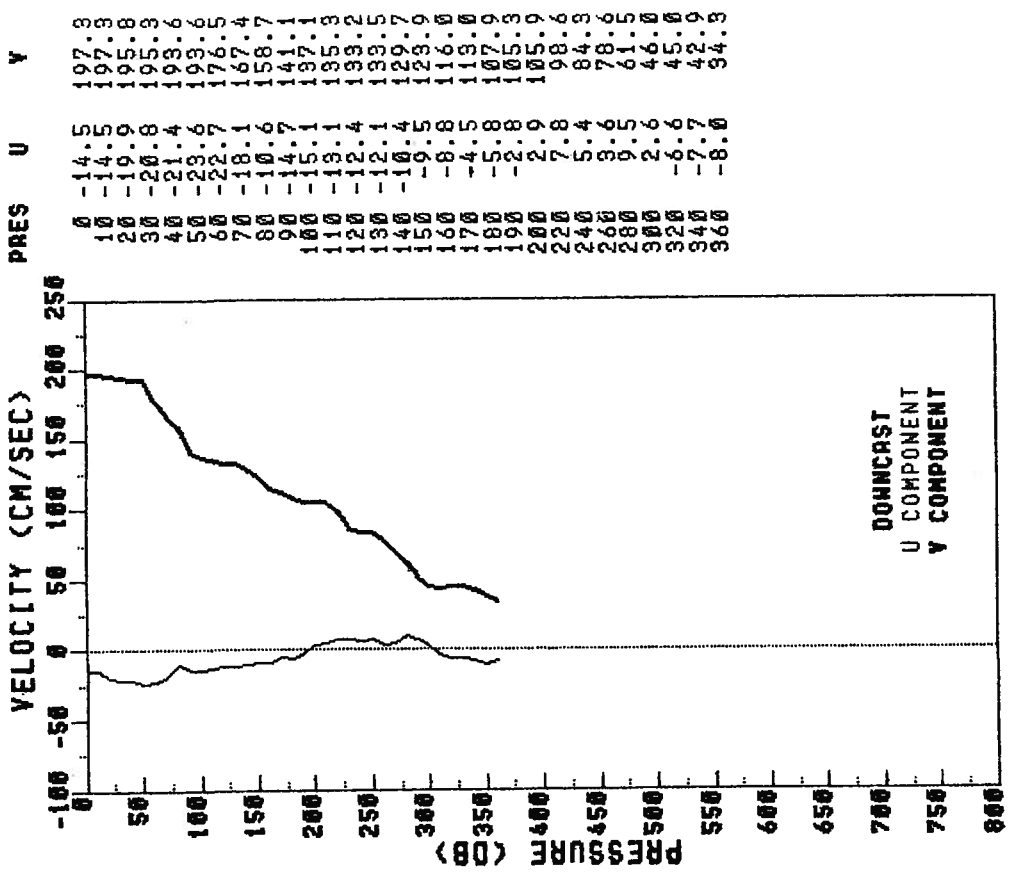
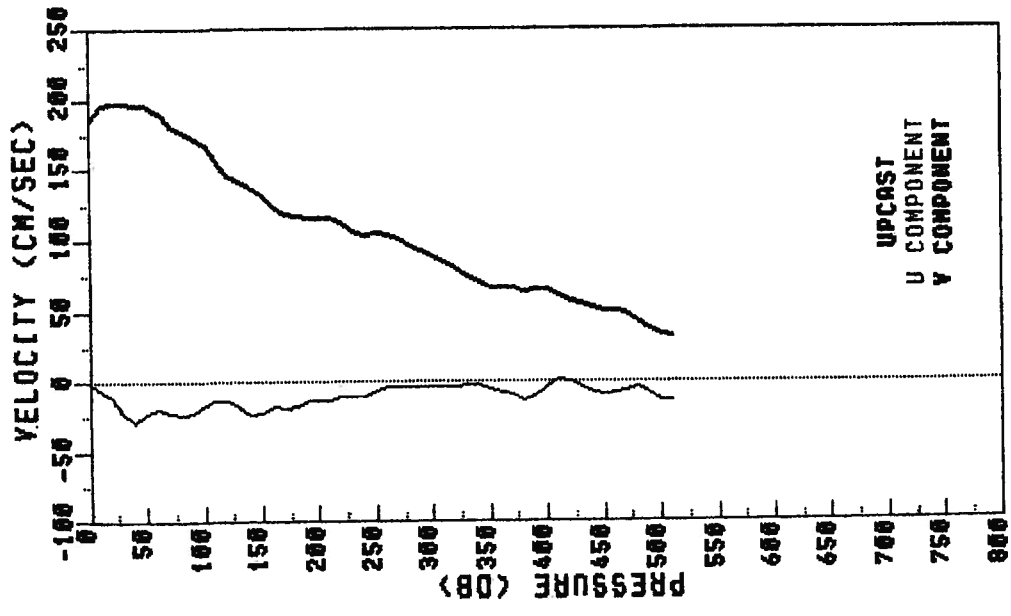


YK-STACS9-83 PEGASUS 086 STN 4
 R/V VIRGINIA KEY JOY 225 TIME 0125Z
 LATITUDE 26.98 N LONGITUDE 79.61 W



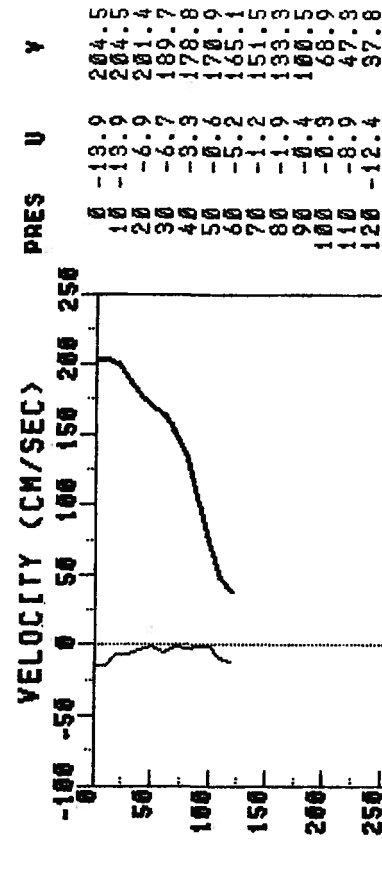
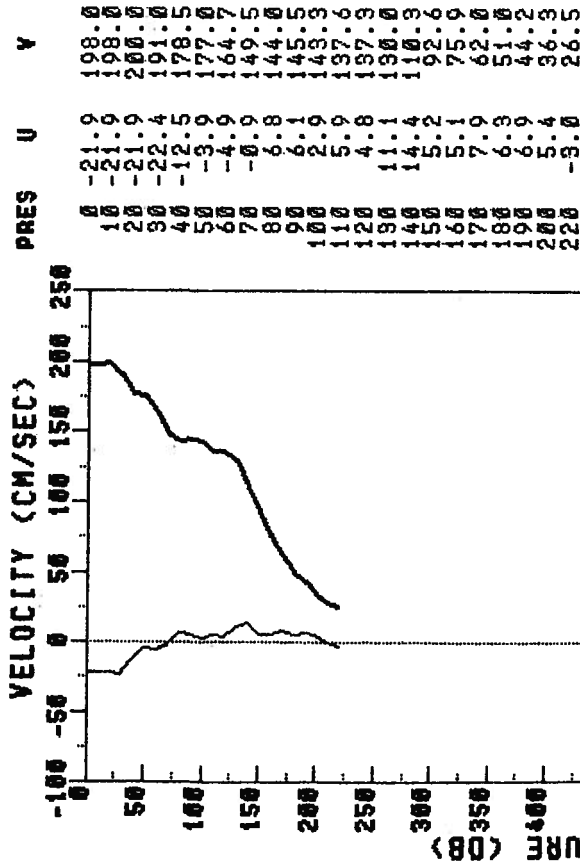
VK-STACS9-83 PEGASUS 087 STN 3
 R/V VIRGINIA KEY JDAY 225 TIME 0303Z
 LATITUDE 27.00 N LONGITUDE 79.69 W

VK-STACS9-83 PEGASUS 088 STN 2
 R/V VIRGINIA KEY JDAY 225 TIME 0445Z
 LATITUDE 26.98 N LONGITUDE 79.78 W



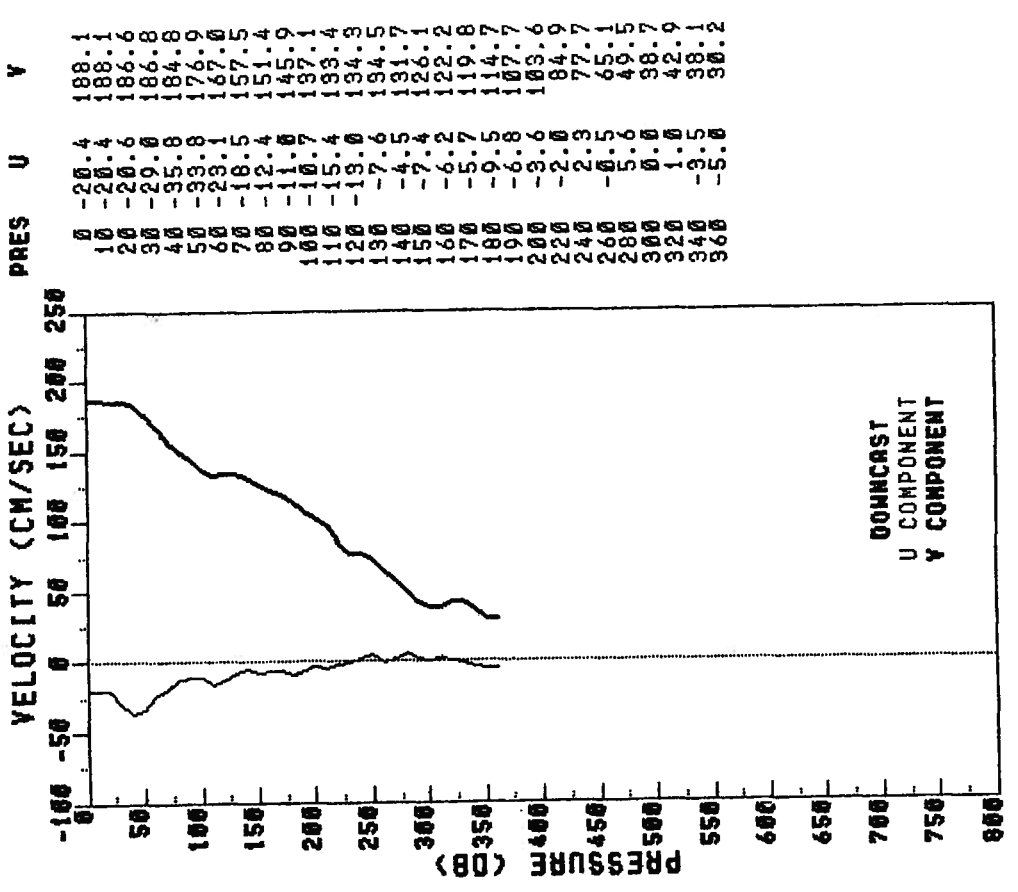
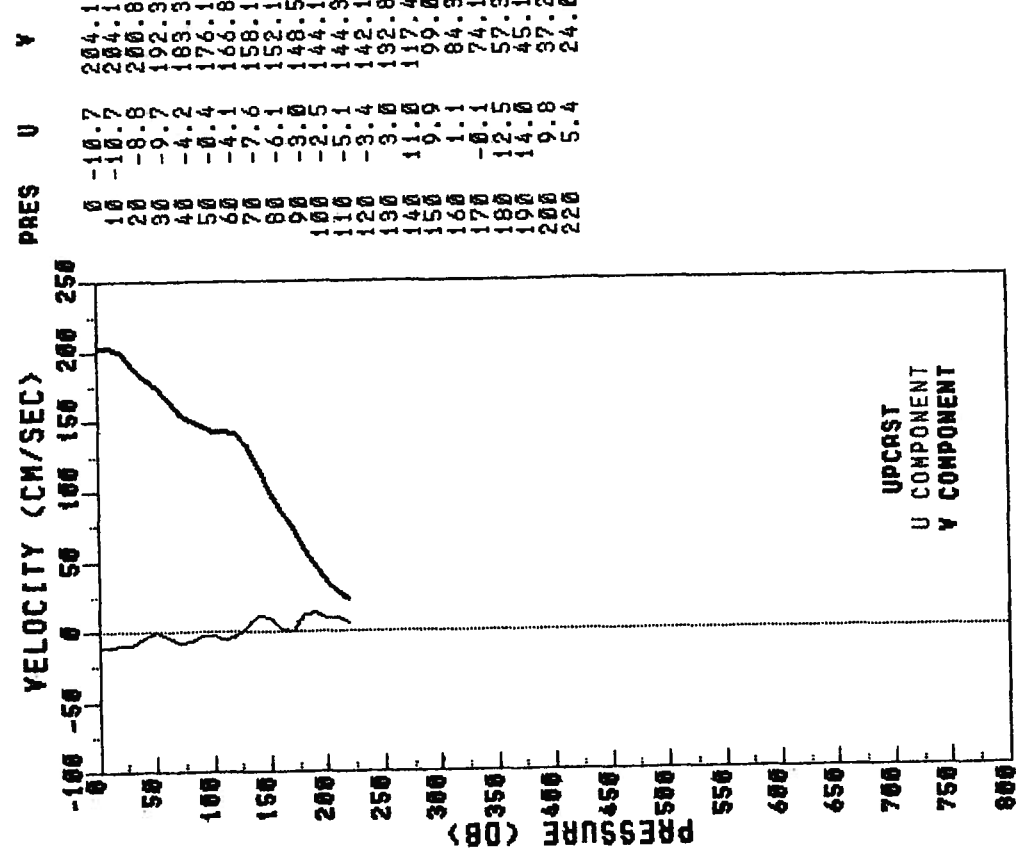
YK-STACS9-83 PEGASUS 089 STN 1
 R/V VIRGINIA KEY JDAY 225 TIME 0558Z
 LATITUDE 26.99 N LONGITUDE 79.87 W

YK-STACS9-83 PEGASUS 090 STN 0
 R/V VIRGINIA KEY JDAY 225 TIME 0703Z
 LATITUDE 27.00 N LONGITUDE 79.94 W



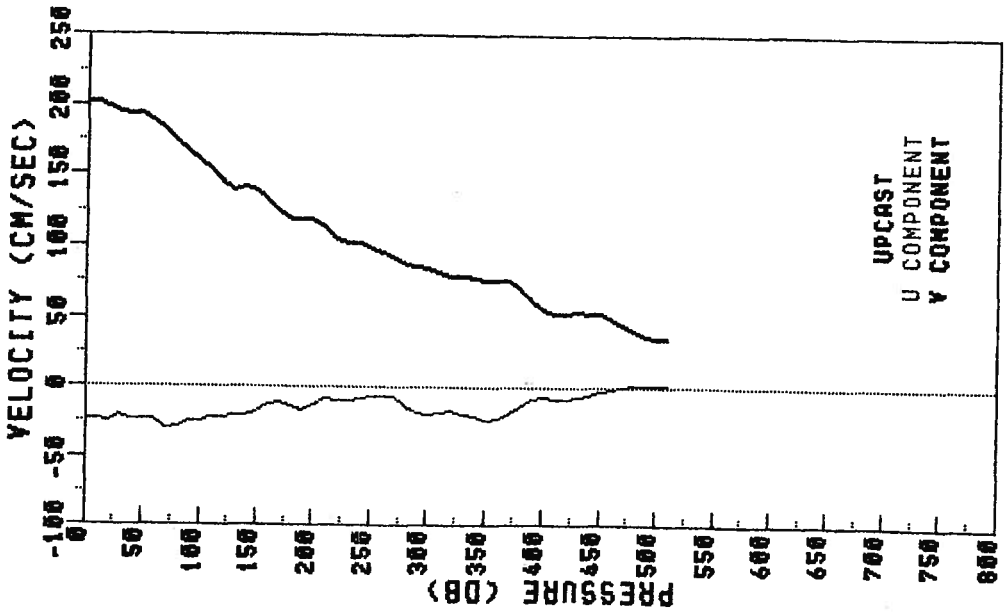
YK-STACS9-83 PEGASUS 091 STN 1
 R/V VIRGINIA KEY JOY 225 TIME 0800Z
 LATITUDE 26.99 N LONGITUDE 79.87 W

YK-STACS9-83 PEGASUS 092 STN 2
 R/V VIRGINIA KEY JOY 225 TIME 0919Z
 LATITUDE 26.98 N LONGITUDE 79.78 W



YK-STACS9-83 PEGASUS 093 STN 3
 R/V VIRGINIA KEY JOY 225 TIME 1043Z
 LATITUDE 27.00 N LONGITUDE 79.69 W

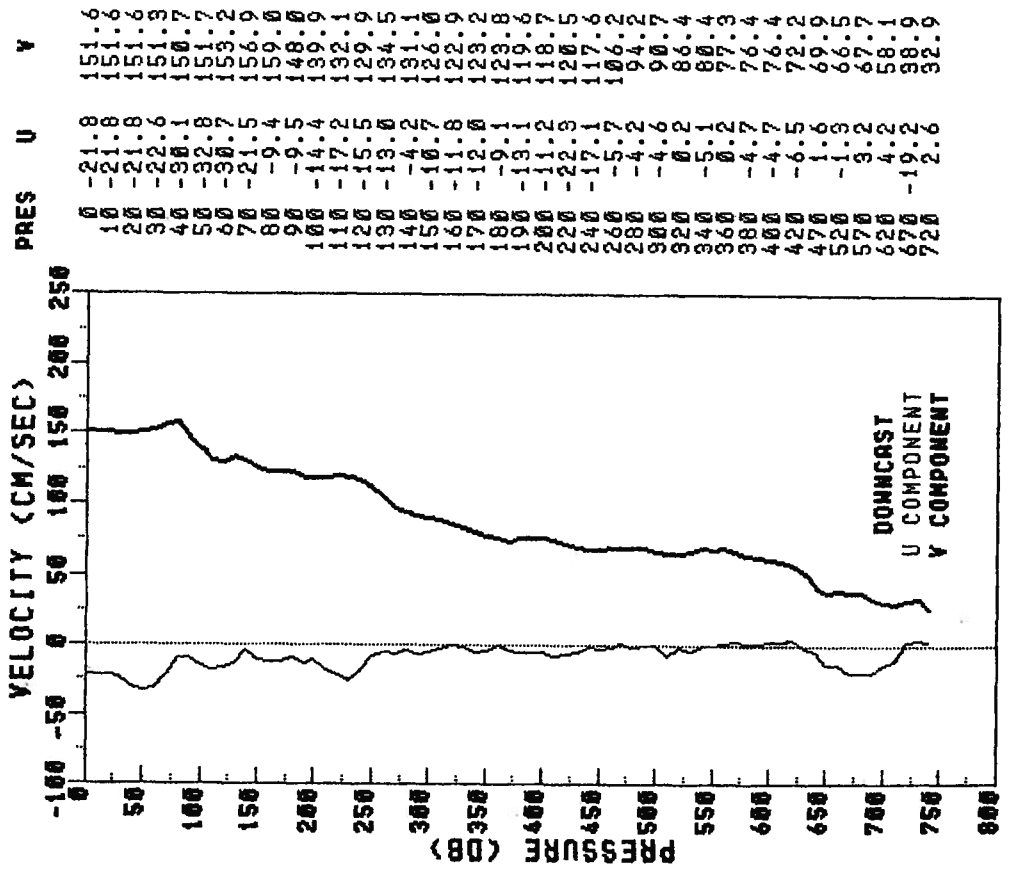
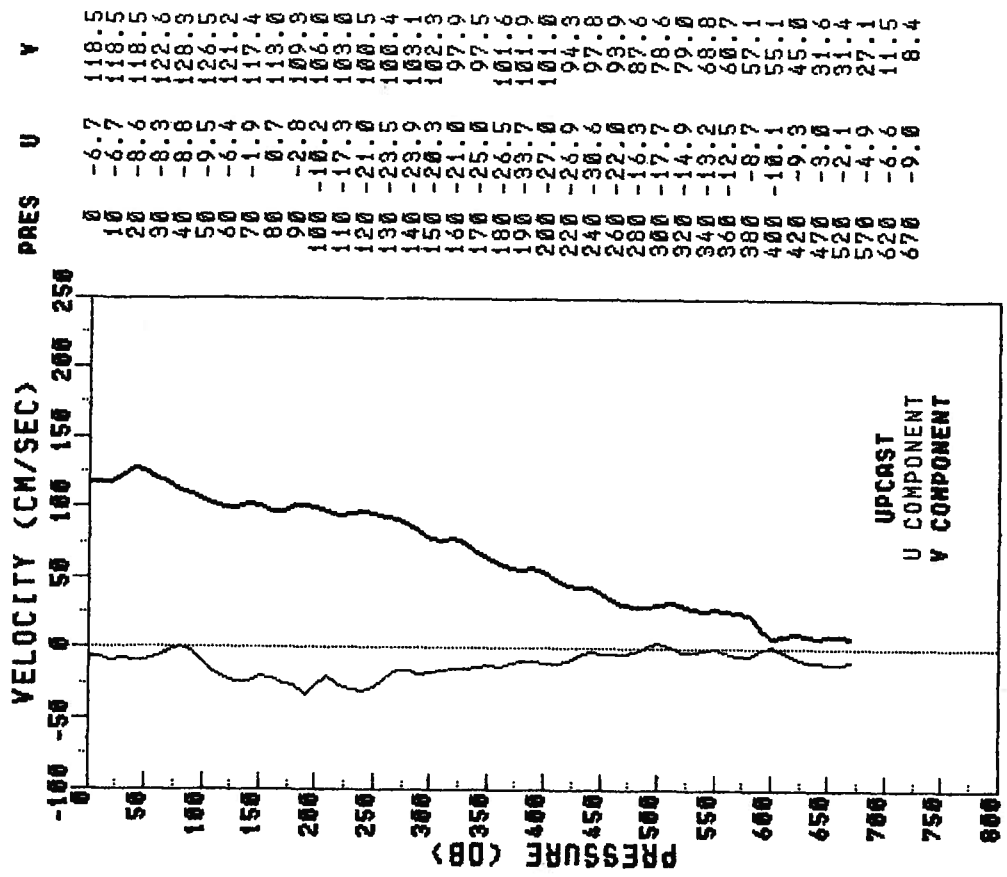
YK-STACS9-83 PEGASUS 094 STN 4
 R/V VIRGINIA KEY JOY 225 TIME 1230Z
 LATITUDE 26.98 N LONGITUDE 79.61 W



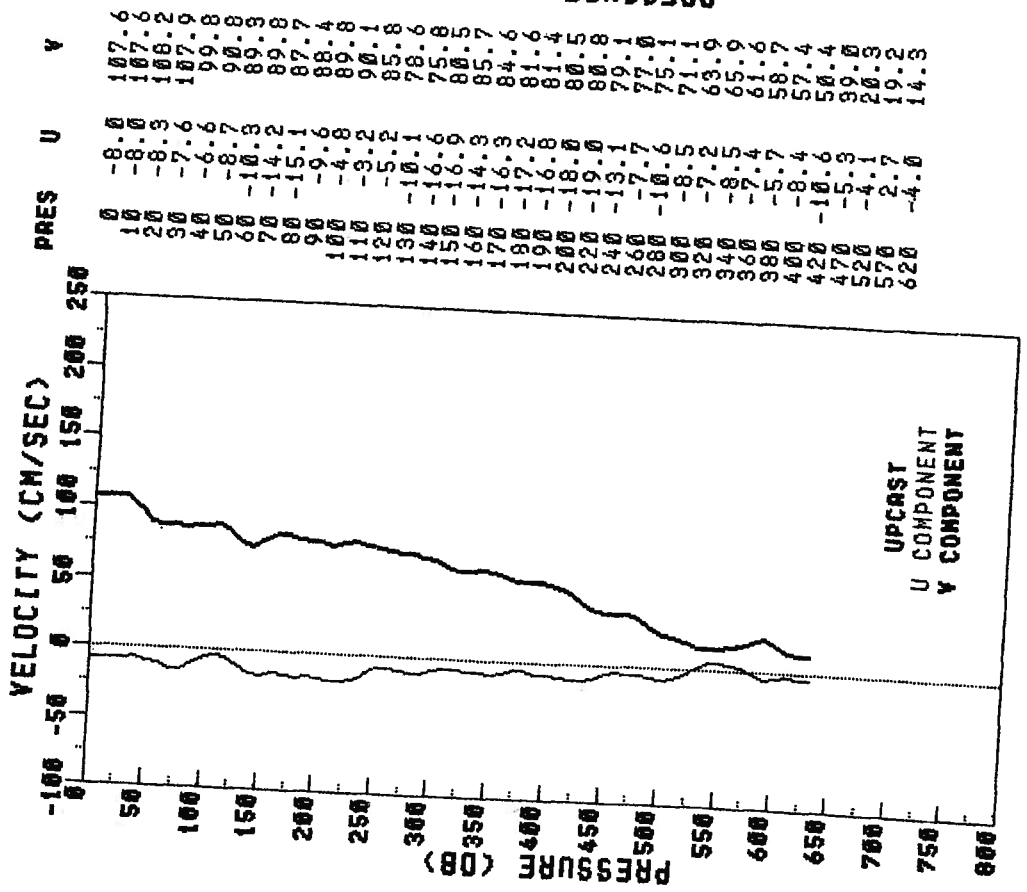
PRES	U	V
0	5.1	187.3
10	-5.1	187.2
20	-5.5	186.4
30	-9.8	185.4
40	-15.4	185.9
50	-13.7	184.6
60	-10.0	185.6
70	-6.8	185.7
80	-6.8	179.7
90	-15.6	175.2
100	-14.1	171.9
110	-9.5	159.3
120	-6.6	147.6
130	-8.7	139.6
140	-2.5	135.0
150	-1.5	134.4
160	-3.4	136.1
170	-1.0	133.8
180	5.4	126.8
190	5.4	119.9
200	-9.4	113.4
220	-11.4	111.4
240	-5.5	105.2
260	-5.2	100.3
280	-8.9	97.6
300	-7.5	89.6
320	-7.9	86.7
340	-7.2	84.8
360	-6.9	82.1
380	-9.7	76.7
400	-9.5	75.5
420	-5.3	53.8
470		
570		

YK-STACS9-83 PEGASUS 096 STN 6
 R/V VIRGINIA KEY JOY 225 TIME 1711Z
 LATITUDE 26.99 N LONGITUDE 79.40 W

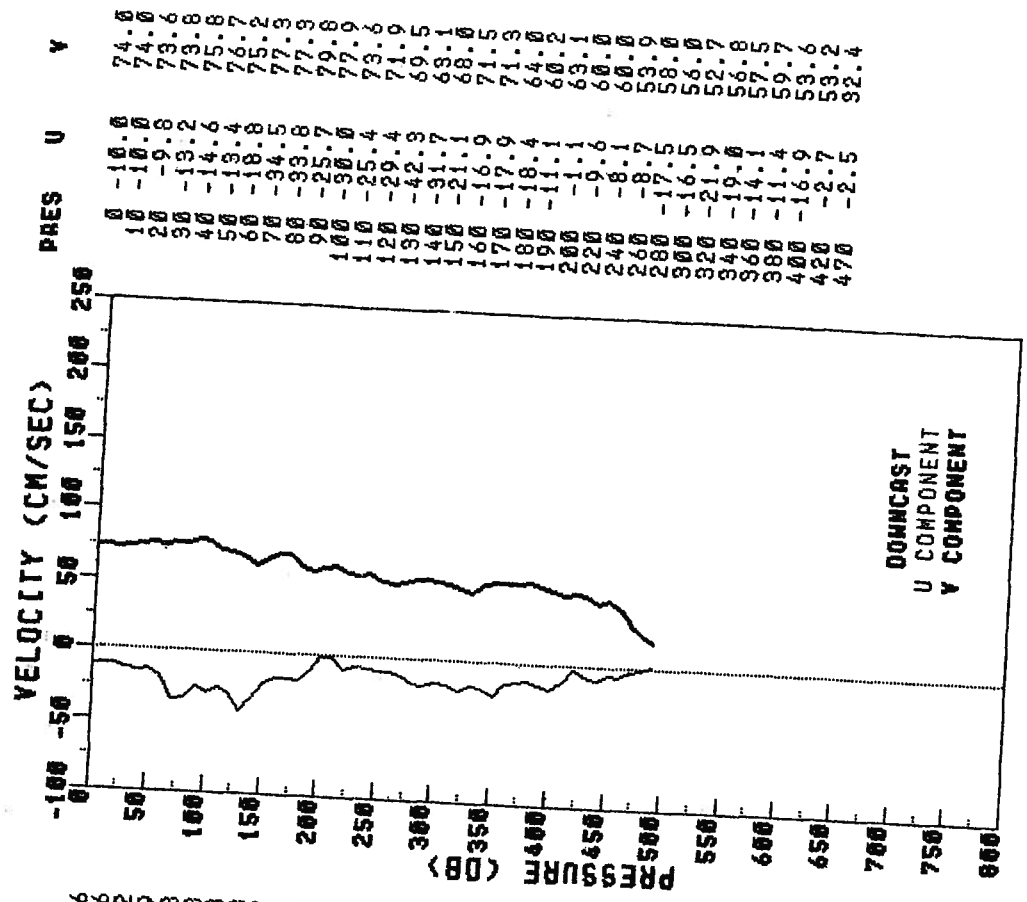
YK-STACS9-83 PEGASUS 095 STN 5
 R/V VIRGINIA KEY JOY 225 TIME 1414Z
 LATITUDE 26.99 N LONGITUDE 79.49 W



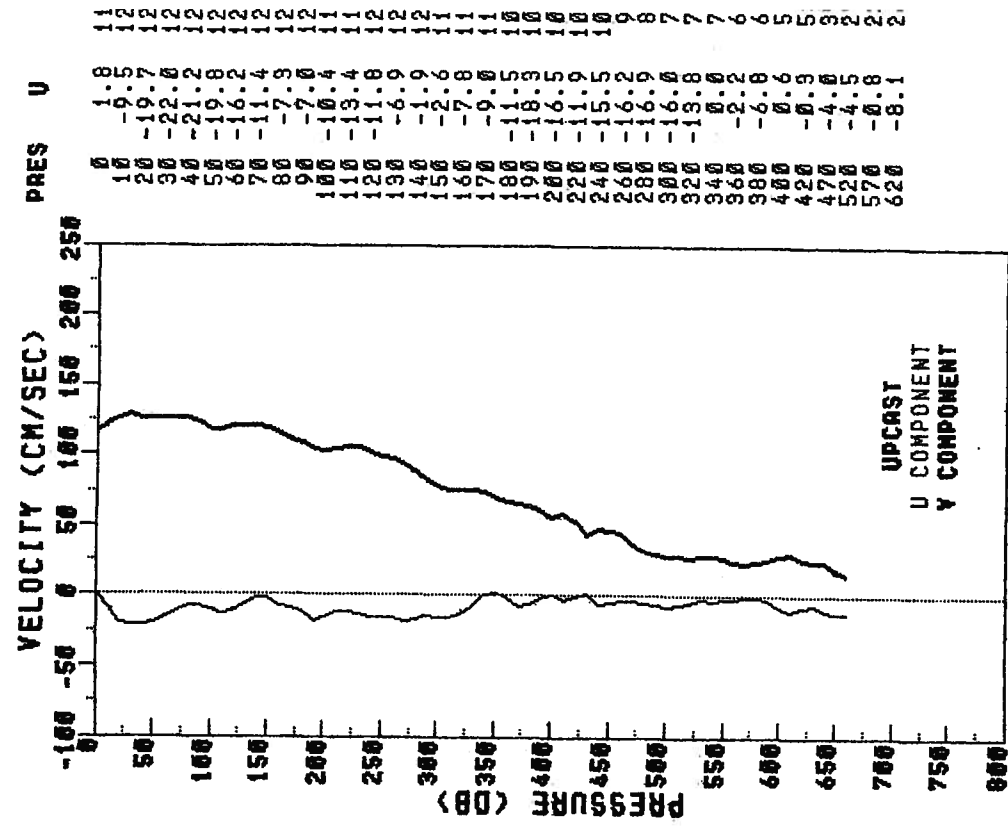
VK-STACS9-83 PEGASUS 097 STN 7
 R/V VIRGINIA KEY JOY 225 TIME 1806Z
 LATITUDE 27.00 N LONGITUDE 79.29 W



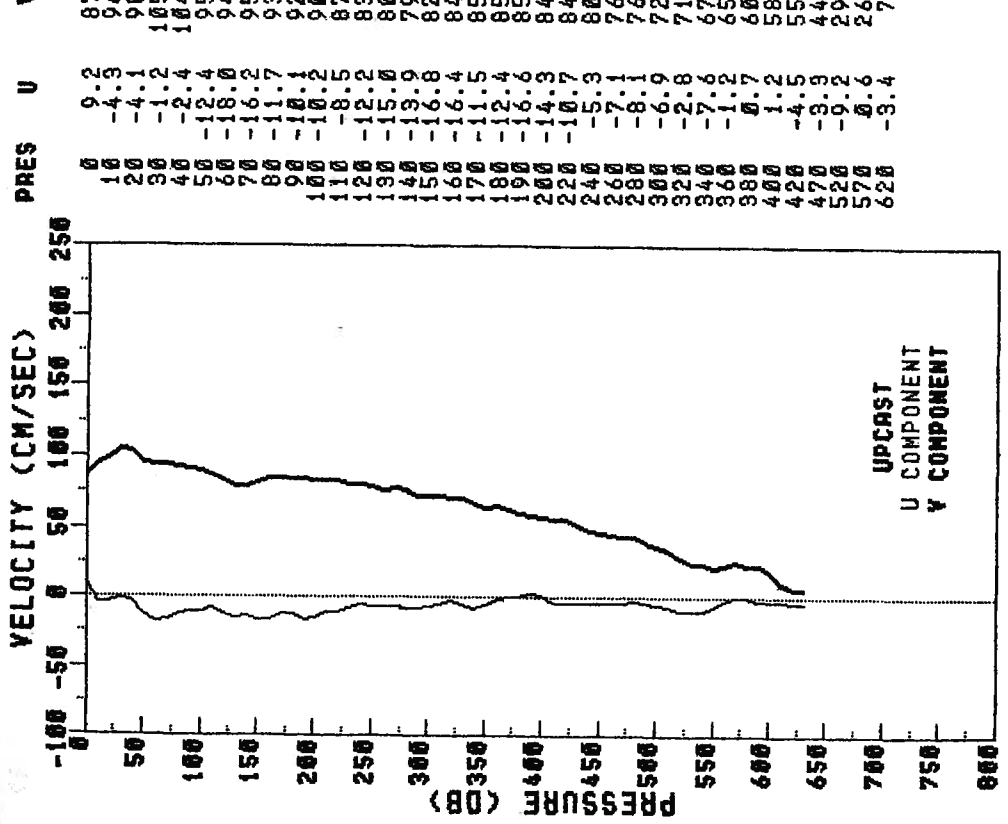
VK-STACS9-83 PEGASUS 098 STN 8
 R/V VIRGINIA KEY JOY 225 TIME 1941Z
 LATITUDE 26.99 N LONGITUDE 79.20 W



VK-STACS9-83 PEGASUS 100 STN 6
 R/V VIRGINIA KEY JOY 225 TIME 2253
 LATITUDE 26.99 N LONGITUDE 79.40 W

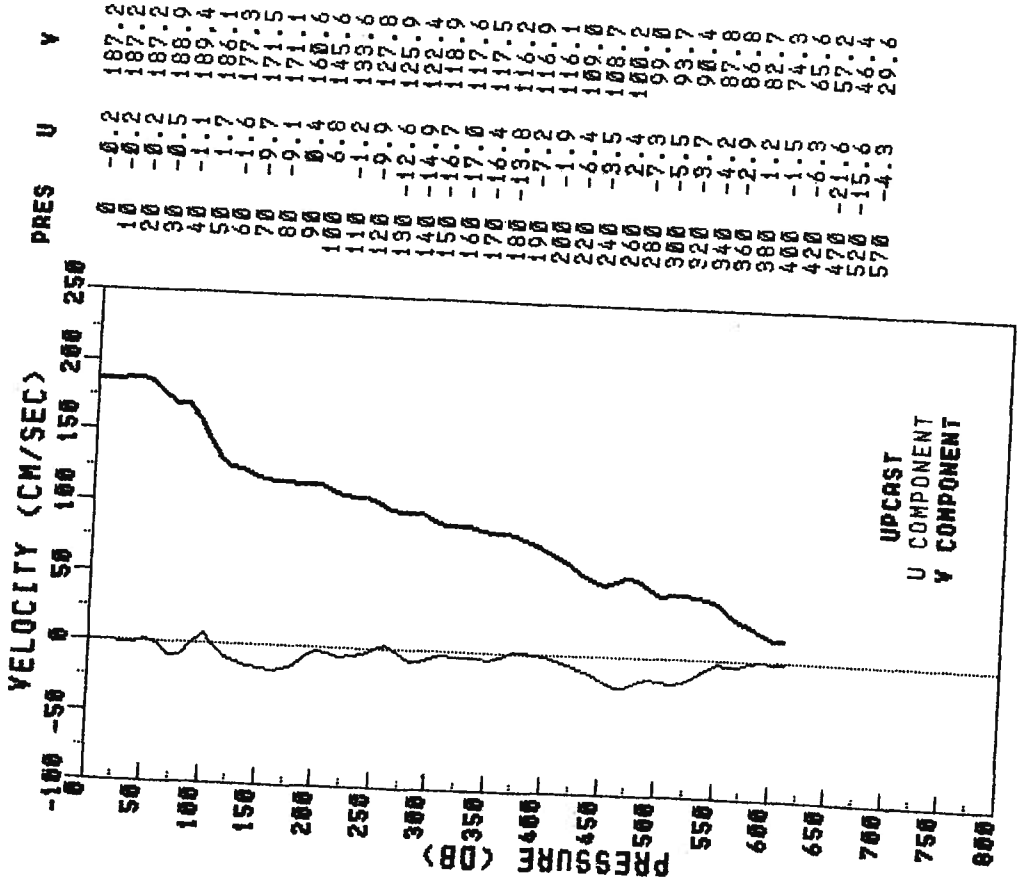


VK-STACS9-83 PEGASUS 099 STN 7
 R/V VIRGINIA KEY JOY 225 TIME 2108Z
 LATITUDE 27.00 N LONGITUDE 79.29 W

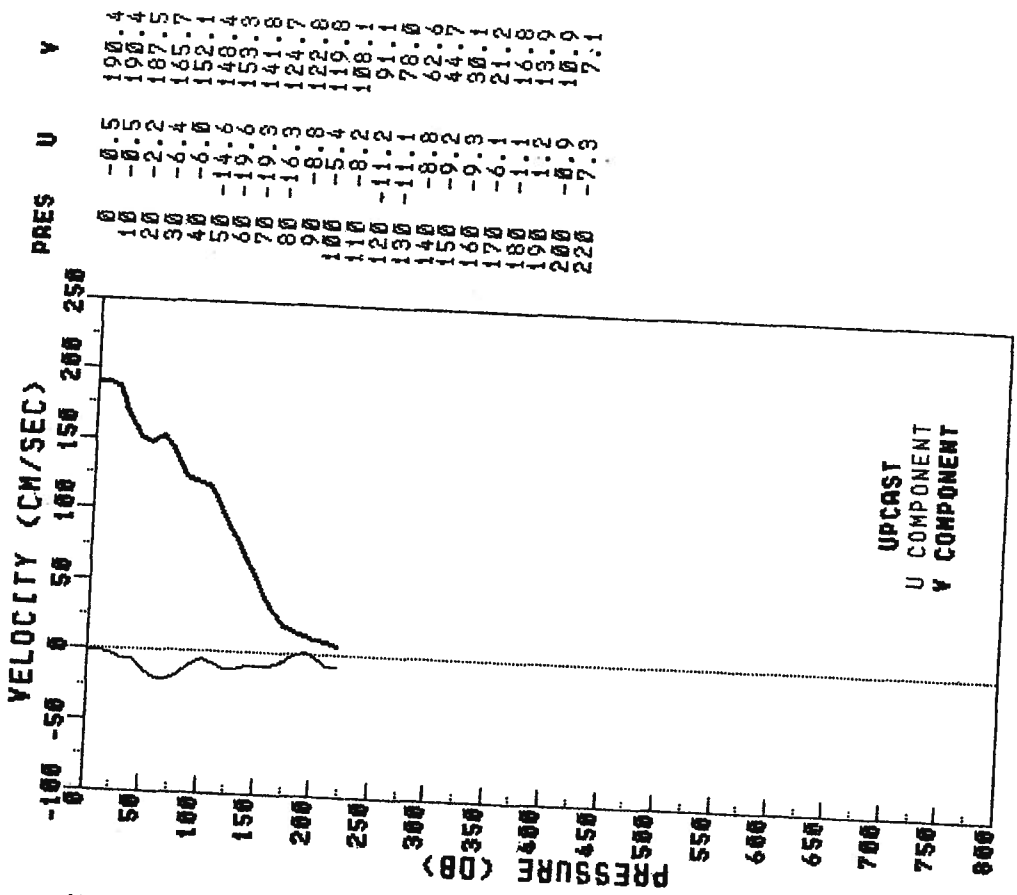


PRES U
 0 1.5
 10 9.6
 20 98.2
 30 105.0
 40 104.1
 50 95.3
 60 94.6
 70 93.4
 80 92.9
 90 90.6
 100 87.1
 110 89.0
 120 89.2
 130 79.8
 140 82.7
 150 84.7
 160 85.1
 170 85.0
 180 84.2
 190 84.0
 200 80.4
 220 76.6
 240 72.5
 260 71.8
 280 67.4
 300 65.4
 320 68.0
 340 55.9
 360 44.6
 380 29.6
 400 26.6
 420 7.0
 440 1.5

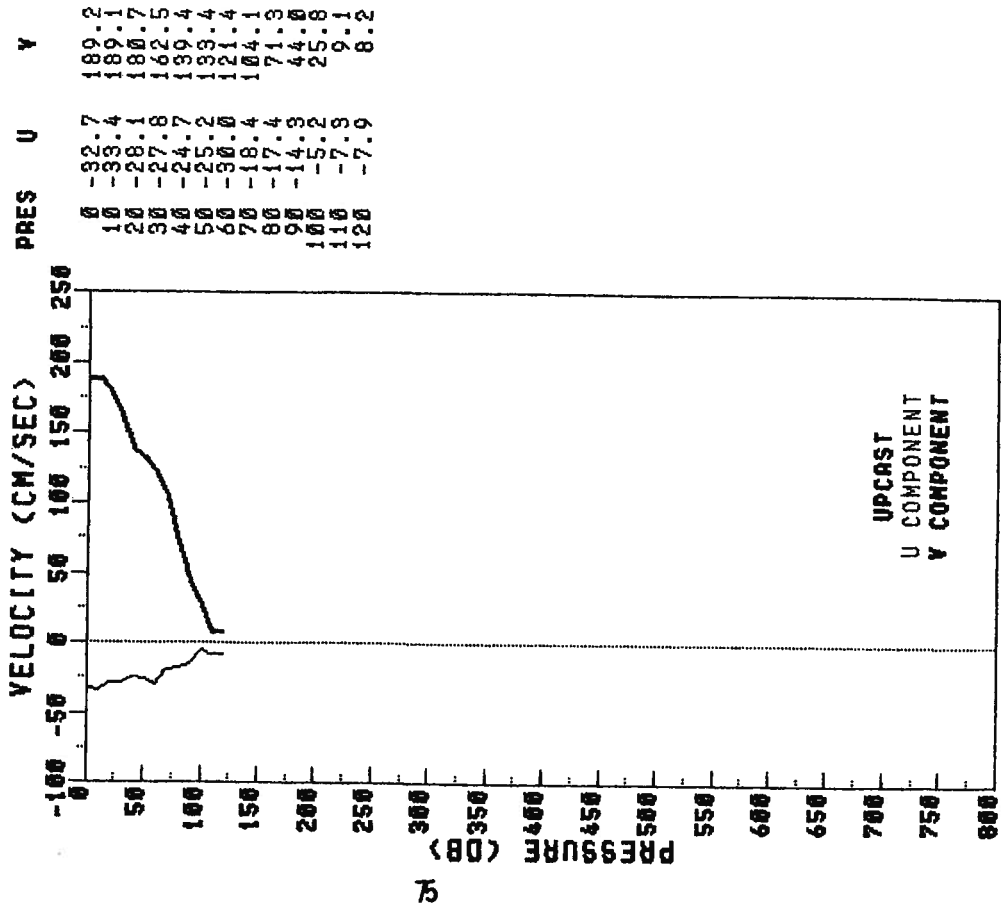
VK-STACS9-83 PEGASUS 102 STN 4
 R/Y VIRGINIA KEY JOY 226 TIME 0242Z
 LATITUDE 26.98 N LONGITUDE 79.61 W



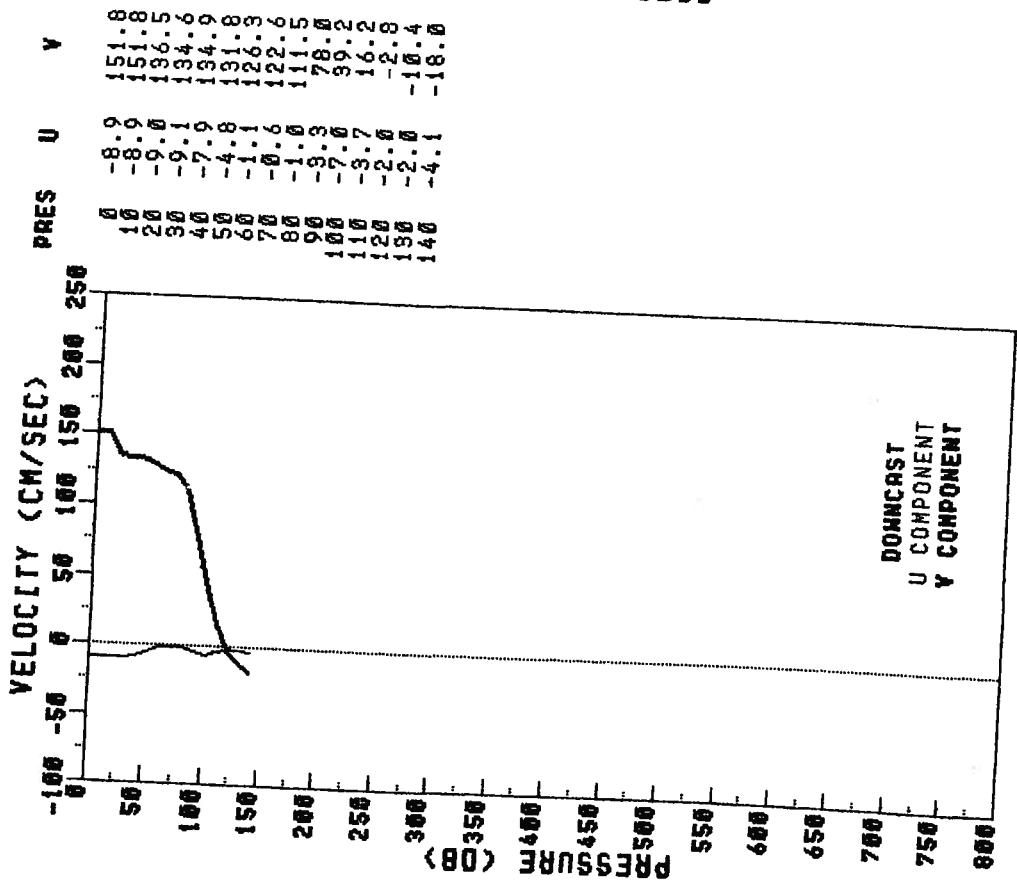
VK-STACS9-83 PEGASUS 105 STN 1
 R/Y VIRGINIA KEY JOY 226 TIME 0705Z
 LATITUDE 26.99 N LONGITUDE 79.87 W



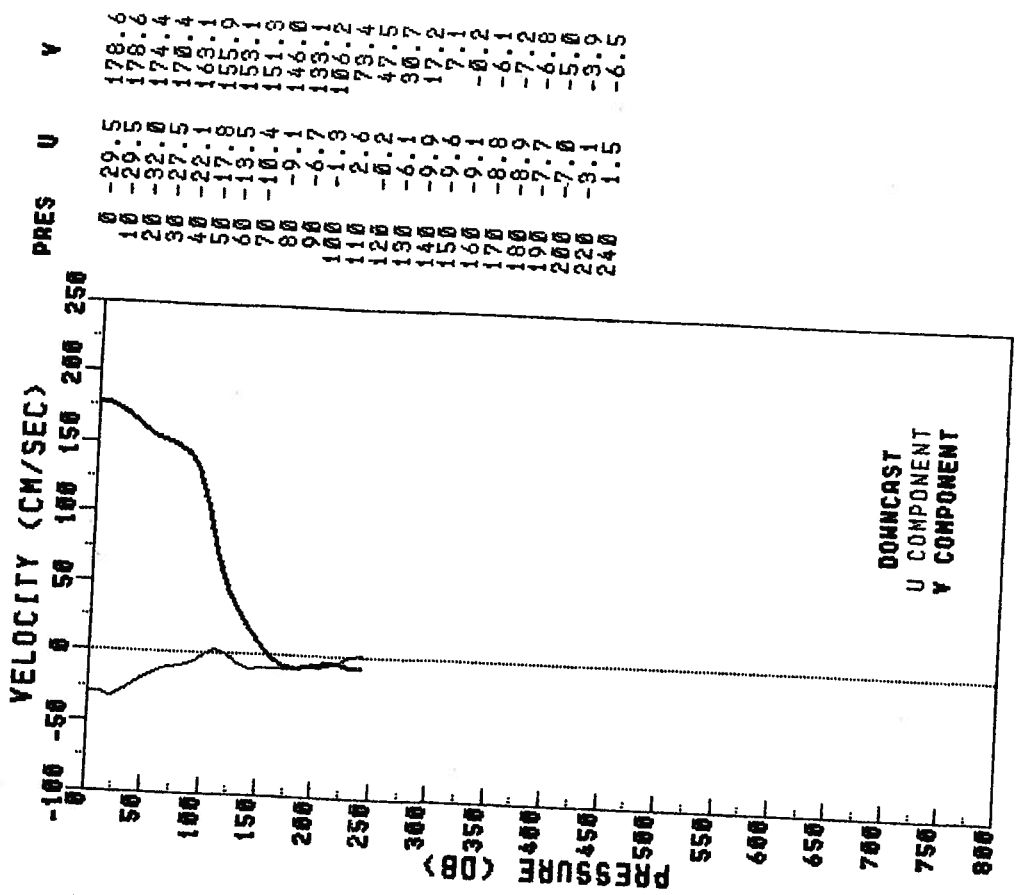
YK-STACS9-83 PEGASUS 106 STN 0
 R/V VIRGINIA KEY JDAY 226 TIME 0758Z
 LATITUDE 27.00 N LONGITUDE 79.94 W



RES-STAC12-83 PEGASUS 001 STN 0
 R/V RESEARCHER JOY 333 TIME 0050Z
 LATITUDE 26.98 N LONGITUDE 79.92 W

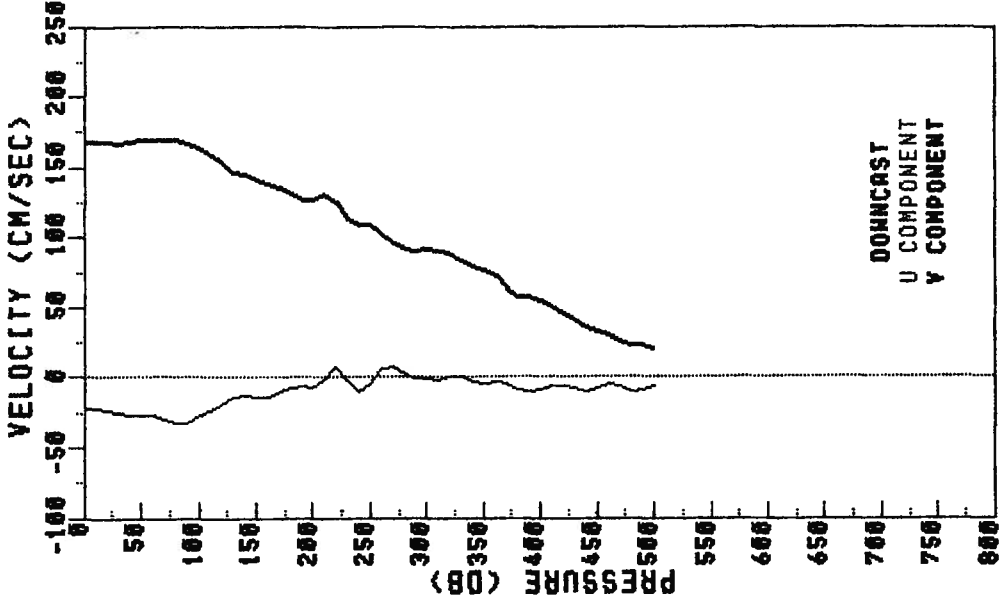


RES-STAC12-83 PEGASUS 002 STN 1
 R/V RESEARCHER JOY 333 TIME 0202Z
 LATITUDE 26.98 N LONGITUDE 79.87 W



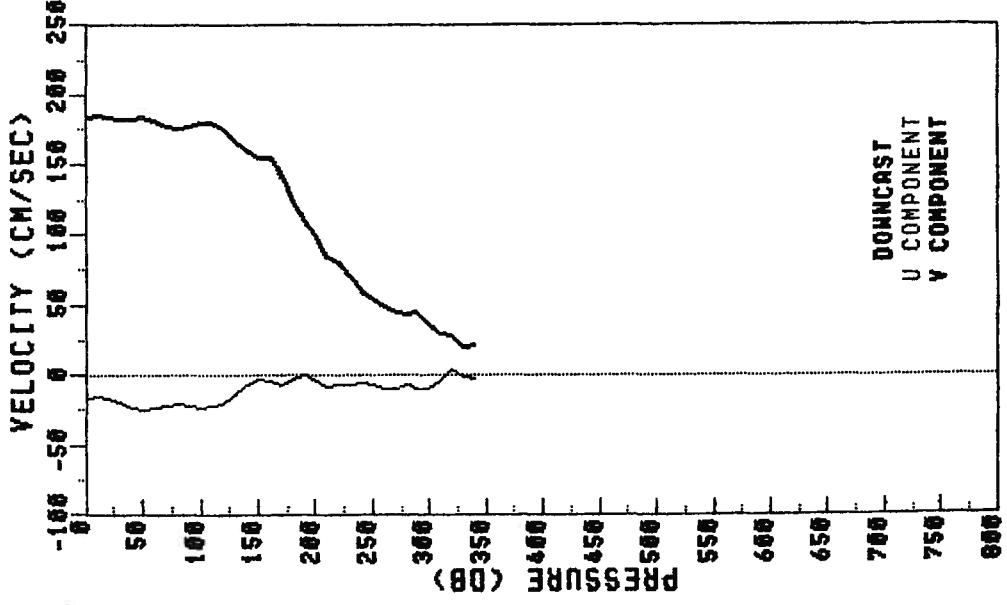
RES-STACS12-83 PEGASUS 004 STN 3
 R/V RESEARCHER JOY 333 TIME 0532Z
 LATITUDE 26.98 N LONGITUDE 79.68 W

PRES	U	V
0	29.9	168.5
10	29.3	168.3
20	24.7	168.1
30	25.0	168.0
40	26.6	169.0
50	26.4	169.8
60	27.0	169.5
70	29.0	170.4
80	32.3	170.7
90	31.7	166.7
100	27.3	164.7
110	24.0	160.3
120	19.9	154.9
130	14.9	147.3
140	12.6	145.5
150	14.0	141.6
160	14.0	130.9
170	10.0	136.5
180	7.4	132.2
190	6.9	127.1
200	7.9	126.6
220	6.8	126.9
240	10.1	102.3
260	6.2	91.8
280	2.4	89.8
300	0.9	79.6
320	0.2	78.0
340	3.3	58.4
360	3.5	55.5
380	8.4	45.5
400	9.4	45.5
420	5.9	26.7
470	6.8	26.7

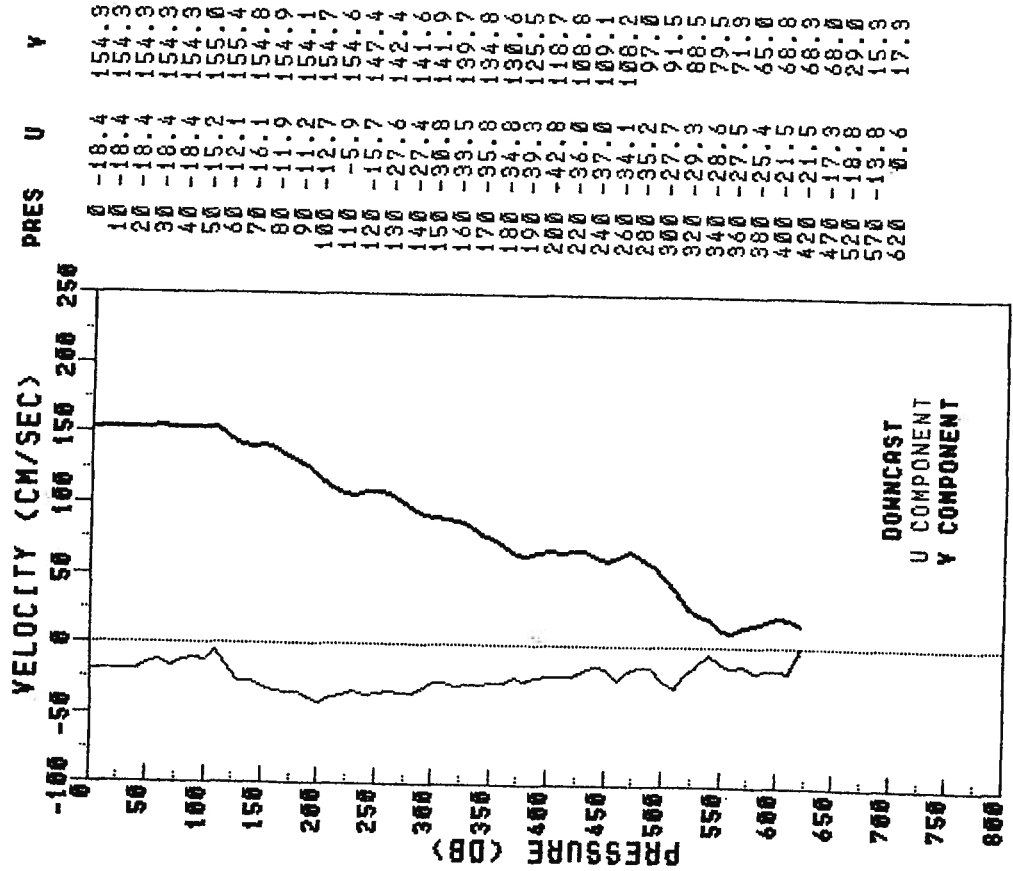


RES-STACS12-83 PEGASUS 003 STN 2
 R/V RESEARCHER JOY 333 TIME 0353Z
 LATITUDE 26.98 N LONGITUDE 79.79 W

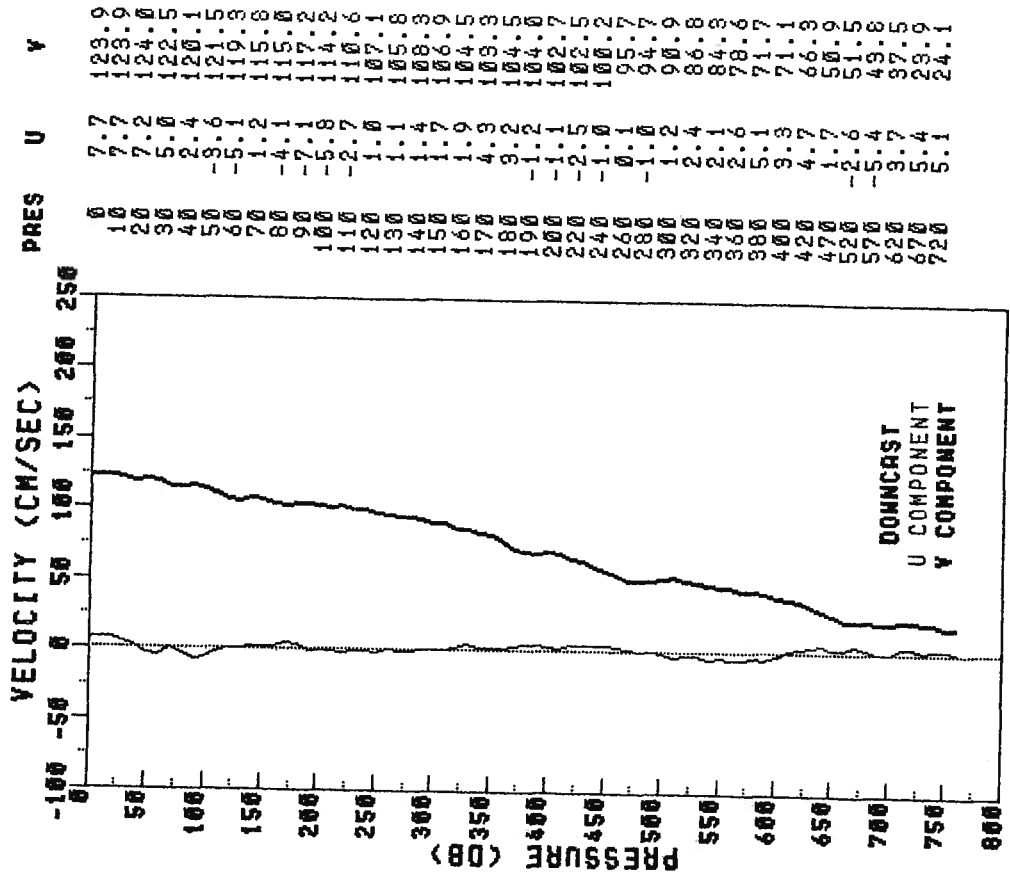
PRES	U	V
0	16.8	185.8
10	14.8	184.6
20	15.8	184.7
30	18.4	184.0
40	23.1	184.9
50	25.0	182.2
60	23.3	178.1
70	21.2	176.7
80	20.7	177.6
90	22.4	180.1
100	22.4	180.2
110	21.8	176.9
120	19.9	169.0
130	14.1	161.3
140	6.3	155.6
150	2.8	156.5
160	5.5	141.8
170	6.9	122.6
180	3.0	110.3
190	0.4	81.4
200	2.4	60.3
220	7.2	49.9
240	5.9	43.4
260	9.4	36.8
280	7.0	29.5
300	9.0	22.1
320	4.2	22.1
340	2.7	22.1



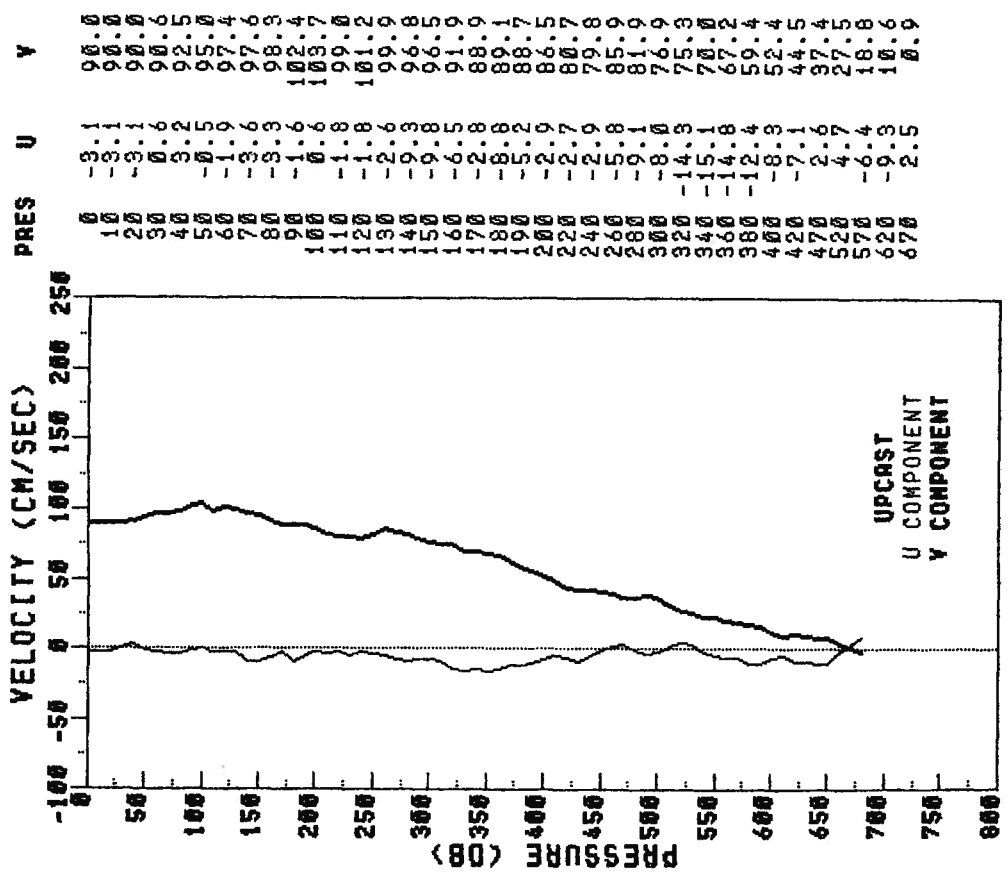
RES-STACS12-83 PEGASUS 006 STN 4
 R/V RESEARCHER JOY 333 TIME 0916Z
 LATITUDE 26.96 N LONGITUDE 79.63 W



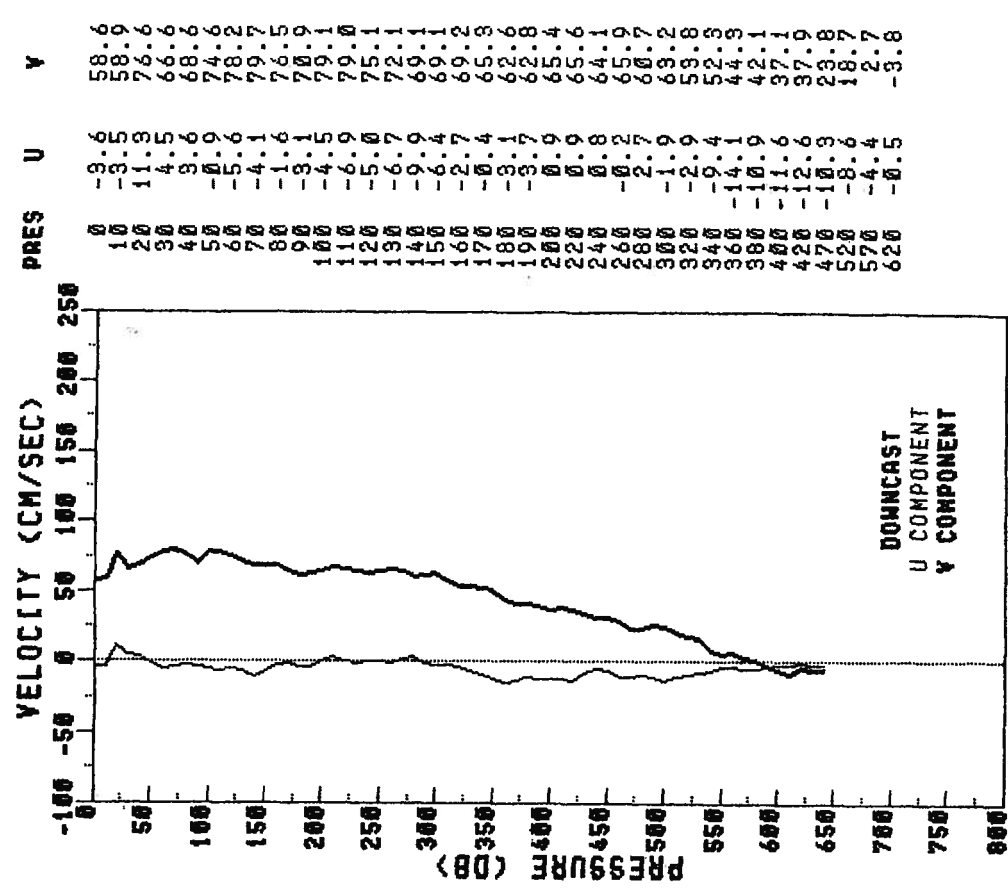
RES-STACS12-83 PEGASUS 007 STN 5
 R/V RESEARCHER JOY 333 TIME 1212Z
 LATITUDE 26.97 N LONGITUDE 79.49 W



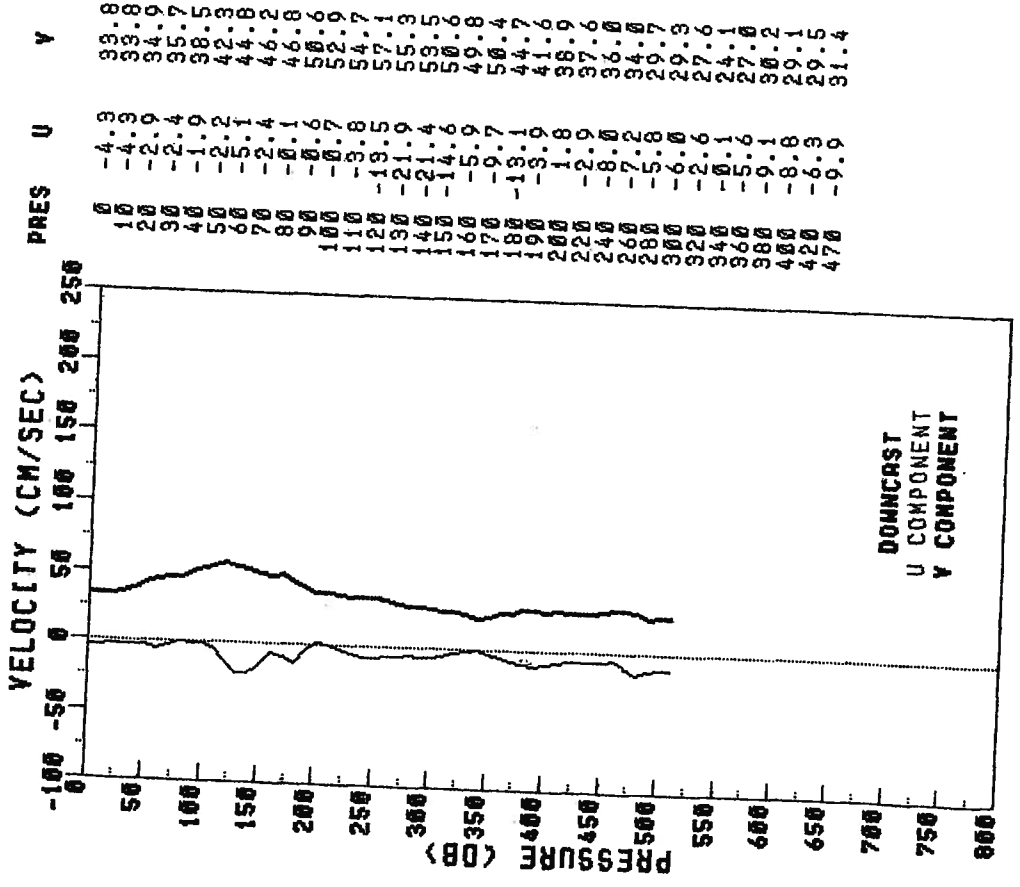
RES-STAC512-83 PEGASUS 009 STN 6
 R/V RESEARCHER JOY 333 TIME 1613Z
 LATITUDE 26.98 N LONGITUDE 79.37 W



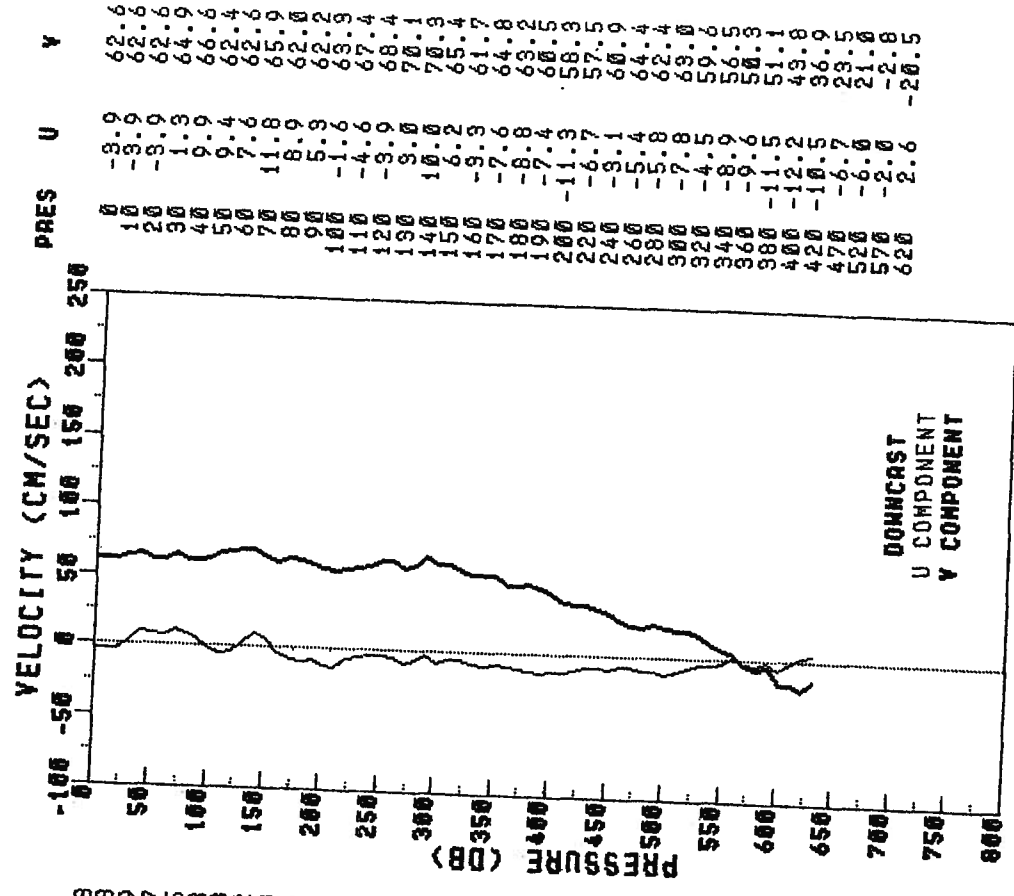
RES-STAC512-83 PEGASUS 010 STN 7
 R/V RESEARCHER JOY 333 TIME 1832Z
 LATITUDE 26.98 N LONGITUDE 79.27 W



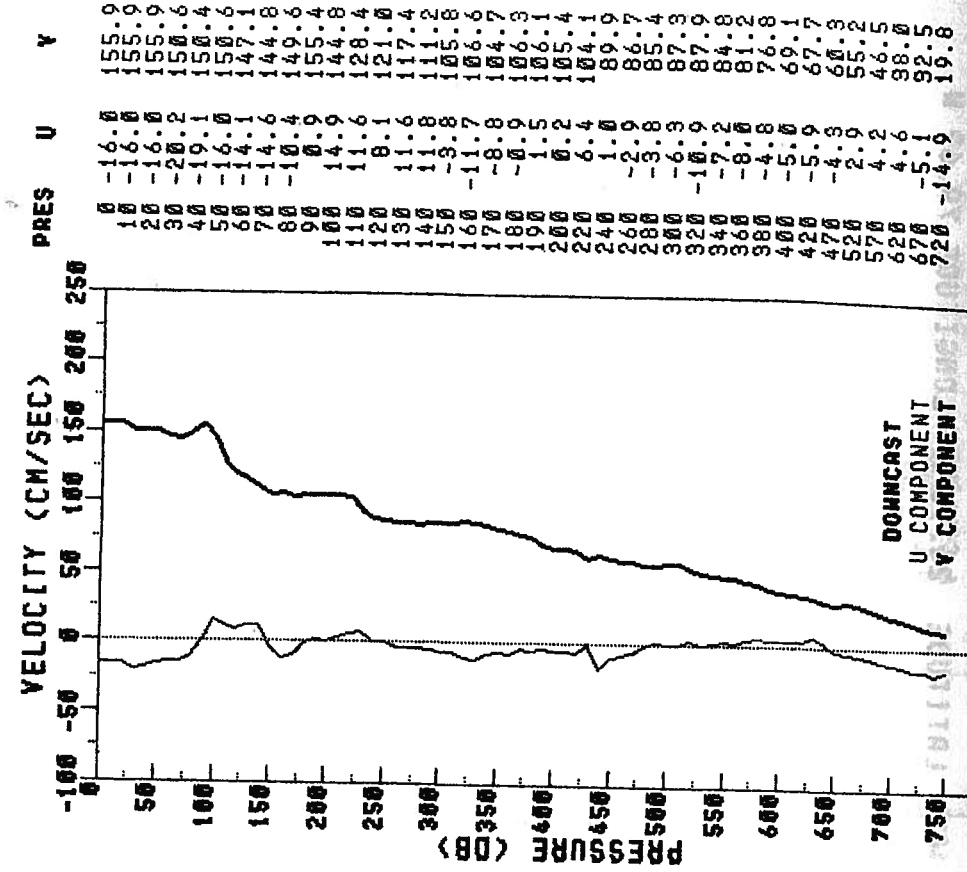
RES-STAC12-83 PEGASUS 011 STN 8
 R/V RESEARCHER JDAY 333 TIME 0201Z
 LATITUDE 26.99 N LONGITUDE 79.19 W



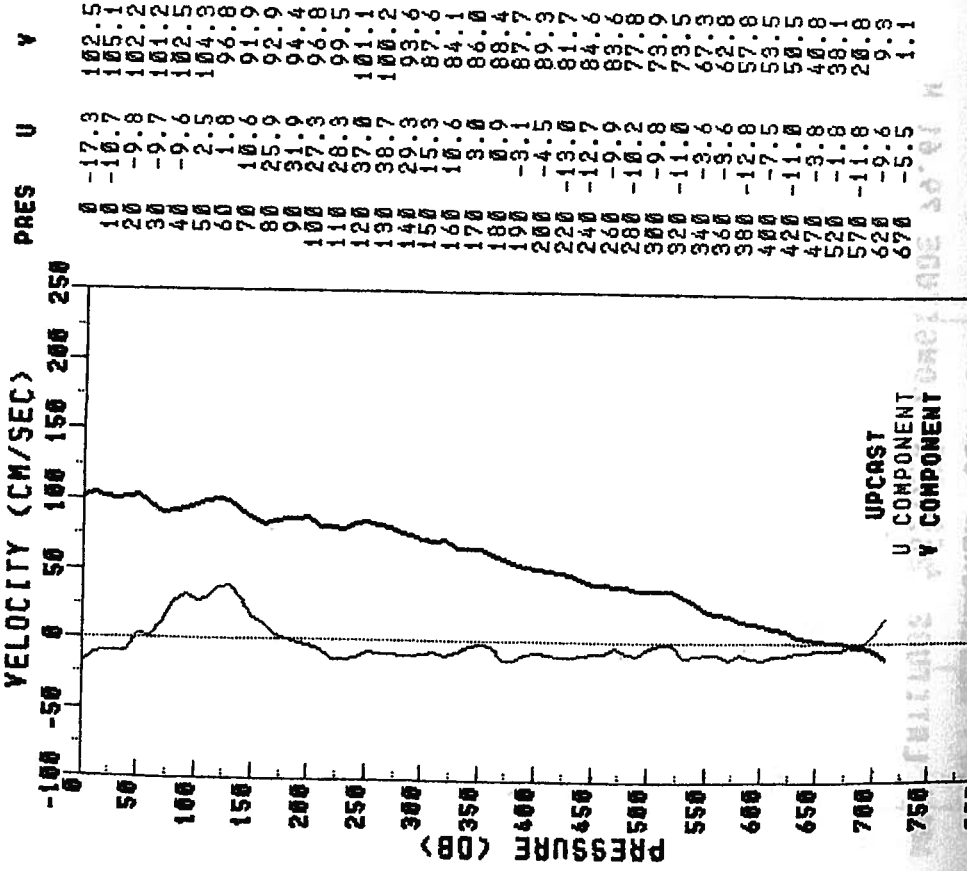
RES-STAC12-83 PEGASUS 012 STN 7
 R/V RESEARCHER JDAY 333 TIME 2153Z
 LATITUDE 26.97 N LONGITUDE 79.27 W



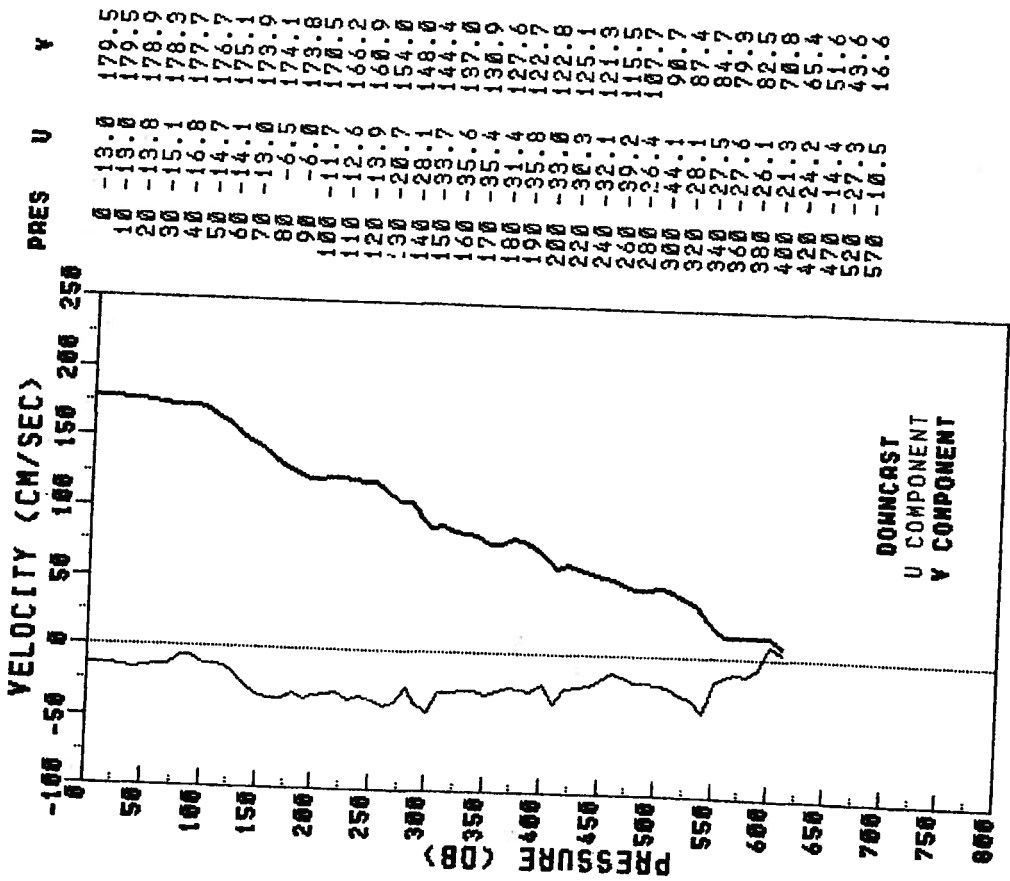
RES-STACS12-83 PEGASUS 015 STN 5
 R/V RESEARCHER JOY 334 TIME 0423Z
 LATITUDE 26.98 N LONGITUDE 79.49 W



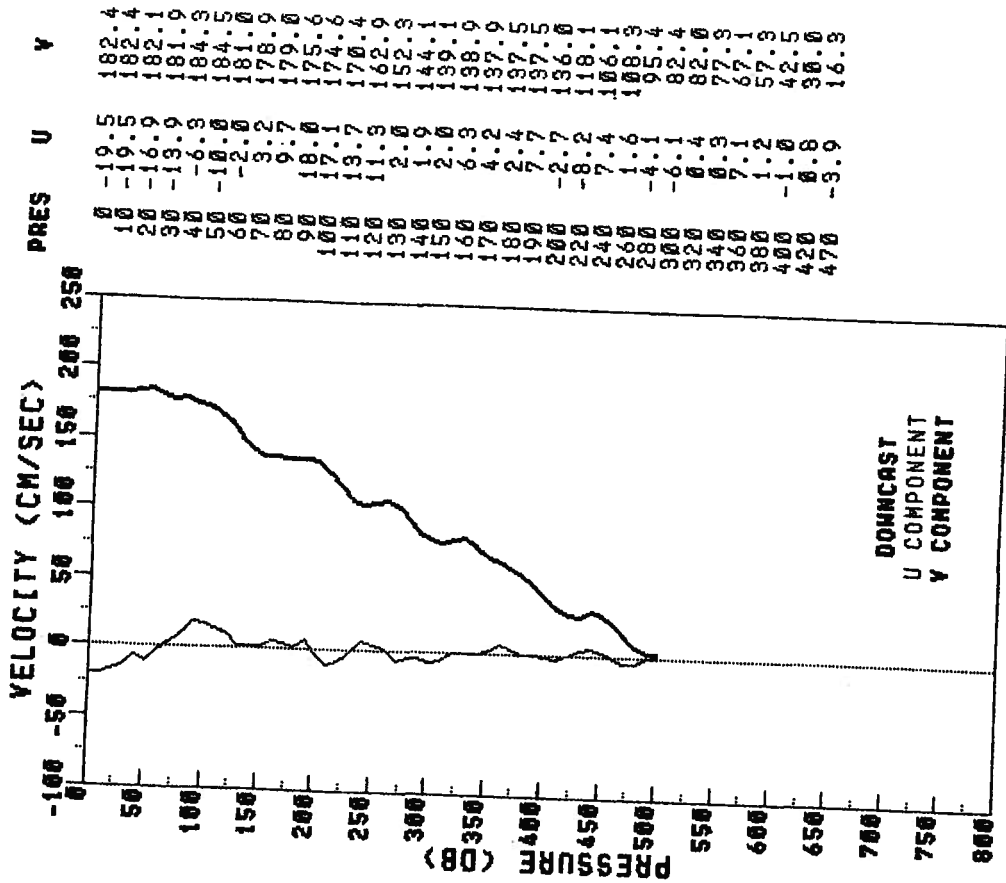
RES-STACS12-83 PEGASUS 014 STN 6
 R/V RESEARCHER JOY 334 TIME 0218Z
 LATITUDE 26.98 N LONGITUDE 79.37 W



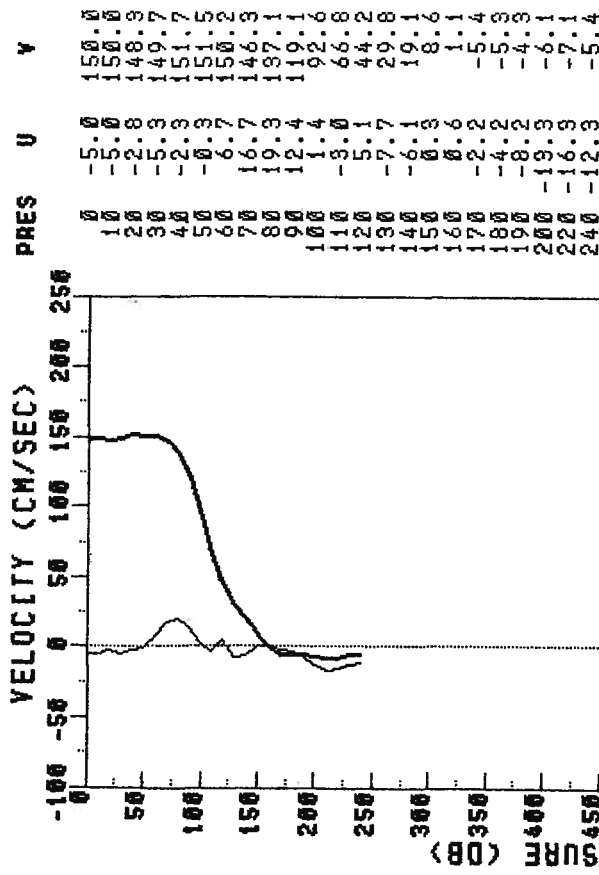
RES-STACS12-83 PEGASUS 016 STN 4
 R/V RESEARCHER JDAY 334 TIME 0635Z
 LATITUDE 26.97 N LONGITUDE 79.61 W



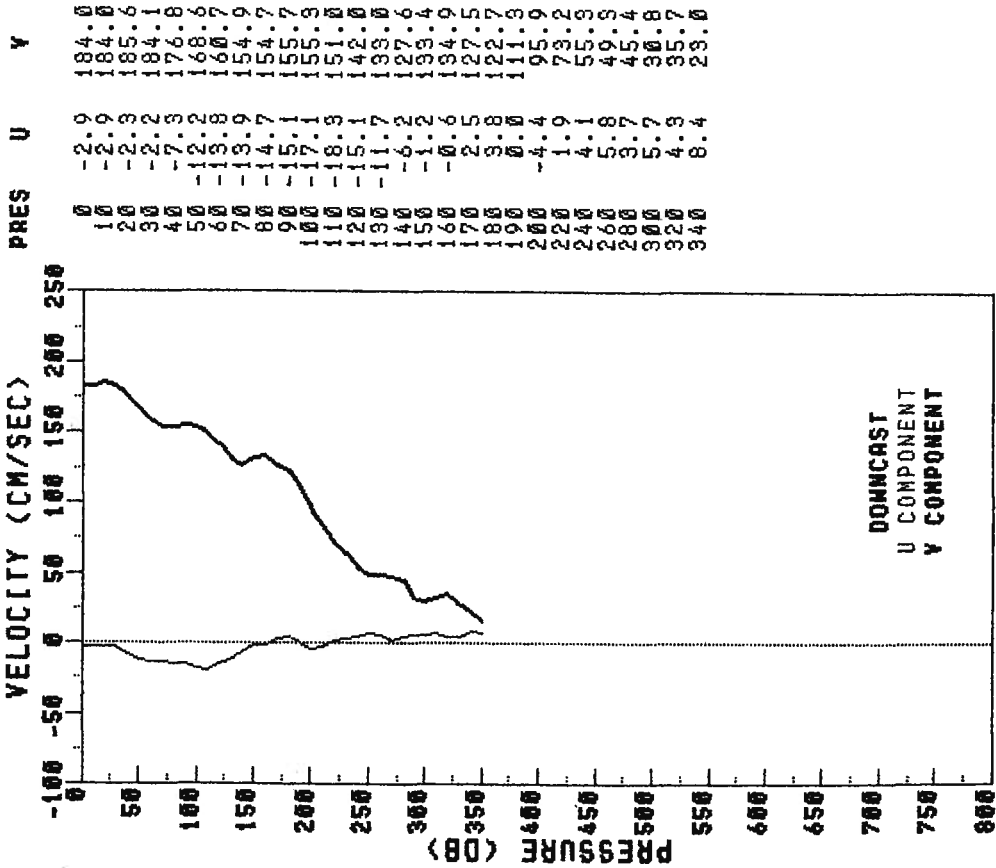
RES-STACS12-83 PEGASUS 017 STN 3
 R/V RESEARCHER JDAY 334 TIME 0837Z
 LATITUDE 26.98 N LONGITUDE 79.69 W



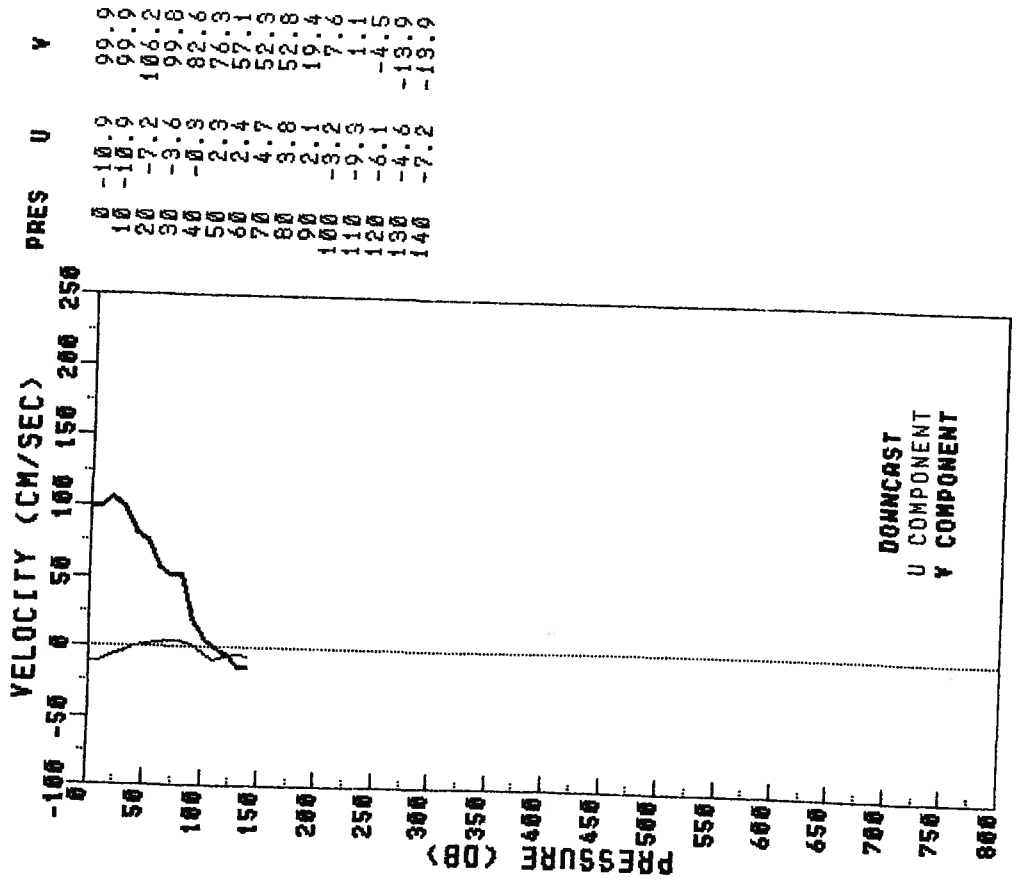
RES-STACS12-83 PEGASUS 019 STN 1
 R/V RESEARCHER JDAY 334 TIME 1338Z
 LATITUDE 27.00 N LONGITUDE 79.88 W



RES-STACS12-83 PEGASUS 018 STN 2
 R/V RESEARCHER JDAY 334 TIME 1042Z
 LATITUDE 26.97 N LONGITUDE 79.79 W

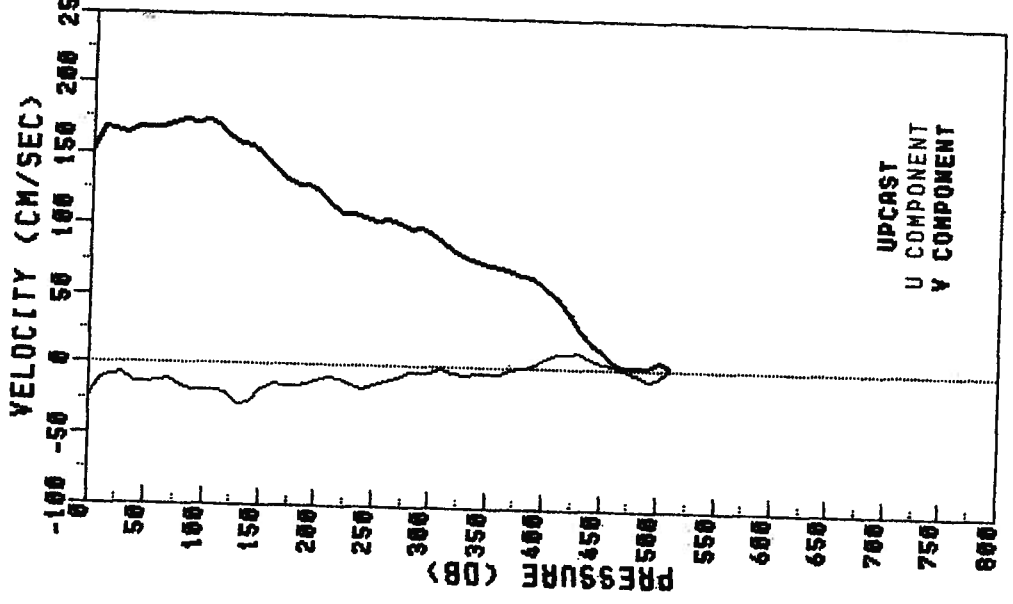


RES-STACS12-83 PEGASUS 020 STN 0
 R/V RESEARCHER JDAY 334 TIME 1430Z
 LATITUDE 26.99 N LONGITUDE 79.91 W



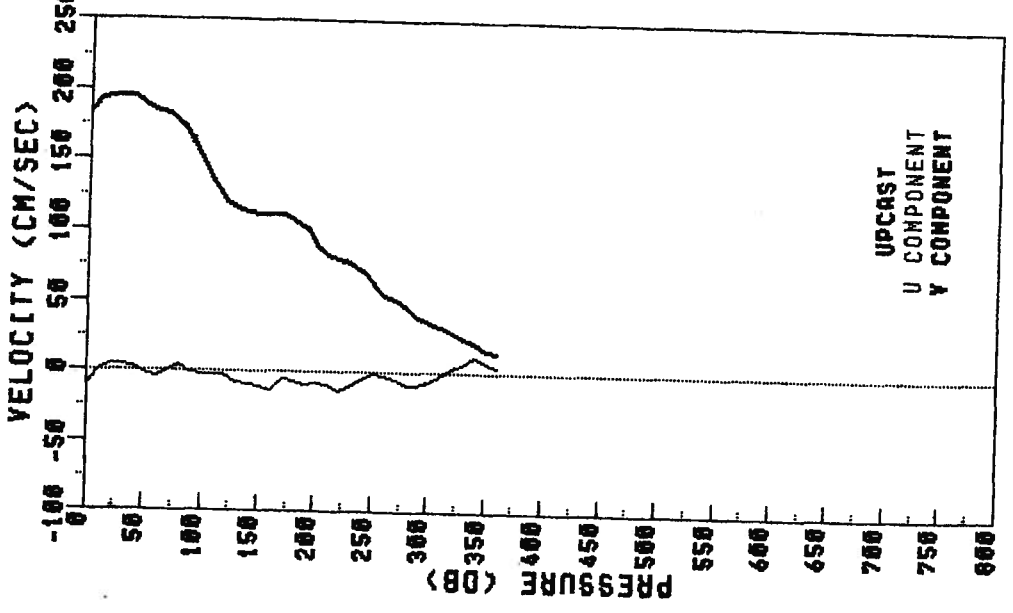
RES-STACS12-83 PEGASUS 023 STN 3
 R/Y RESEARCHER JDAY 334 TIME 2145Z
 LATITUDE 26.97 N LONGITUDE 79.67 N

PRES	U	V
0	-23.9	152.7
10	-11.1	169.1
20	-8.1	167.1
30	-7.0	164.6
40	-13.3	169.0
50	-12.9	169.1
60	-11.9	168.8
70	-10.9	170.8
80	-16.2	173.9
90	-19.0	173.4
100	-18.9	173.7
110	-18.2	171.5
120	-19.7	162.0
130	-28.1	158.4
140	-26.8	156.2
150	-16.8	149.1
160	-12.6	141.1
170	-14.3	132.9
180	-14.9	129.5
190	-12.7	128.5
200	-9.8	124.7
220	-8.4	110.5
240	-15.7	107.0
260	-10.3	109.6
280	-9.5	96.3
300	-2.9	84.1
320	-4.2	76.5
340	-3.8	72.4
360	-9.6	67.3
380	0.1	59.6
400	7.2	42.1
420	11.3	3.1
470	0.0	3.5



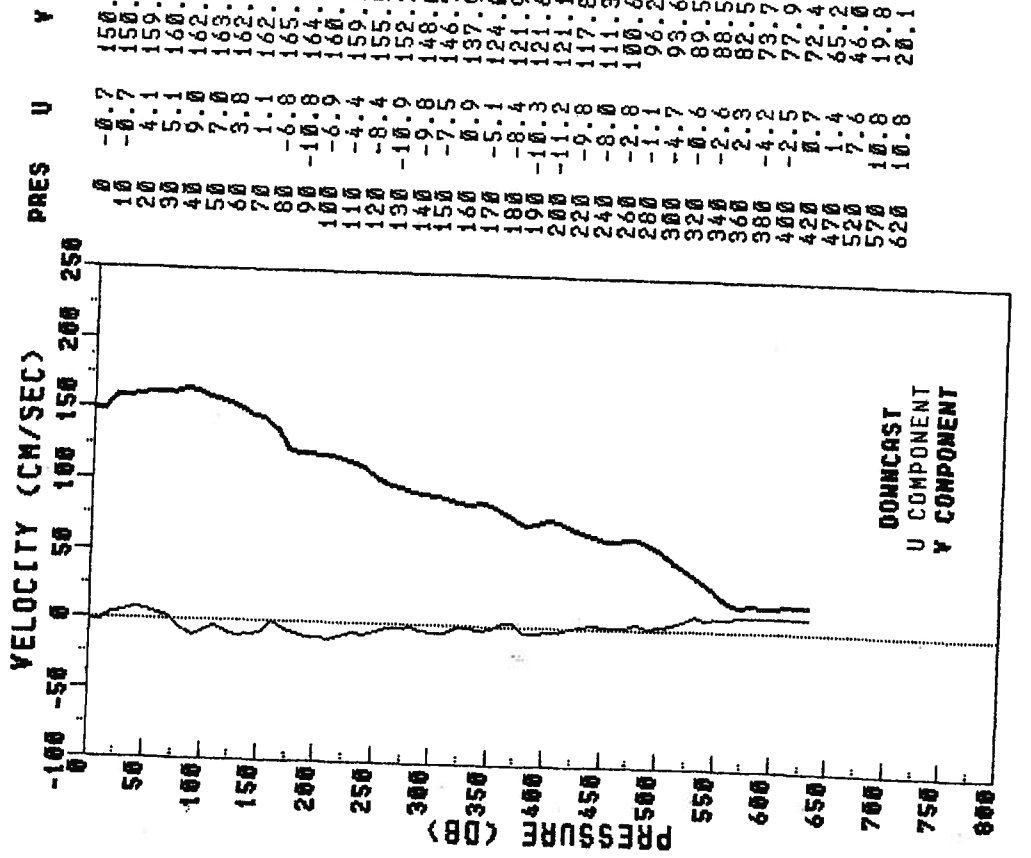
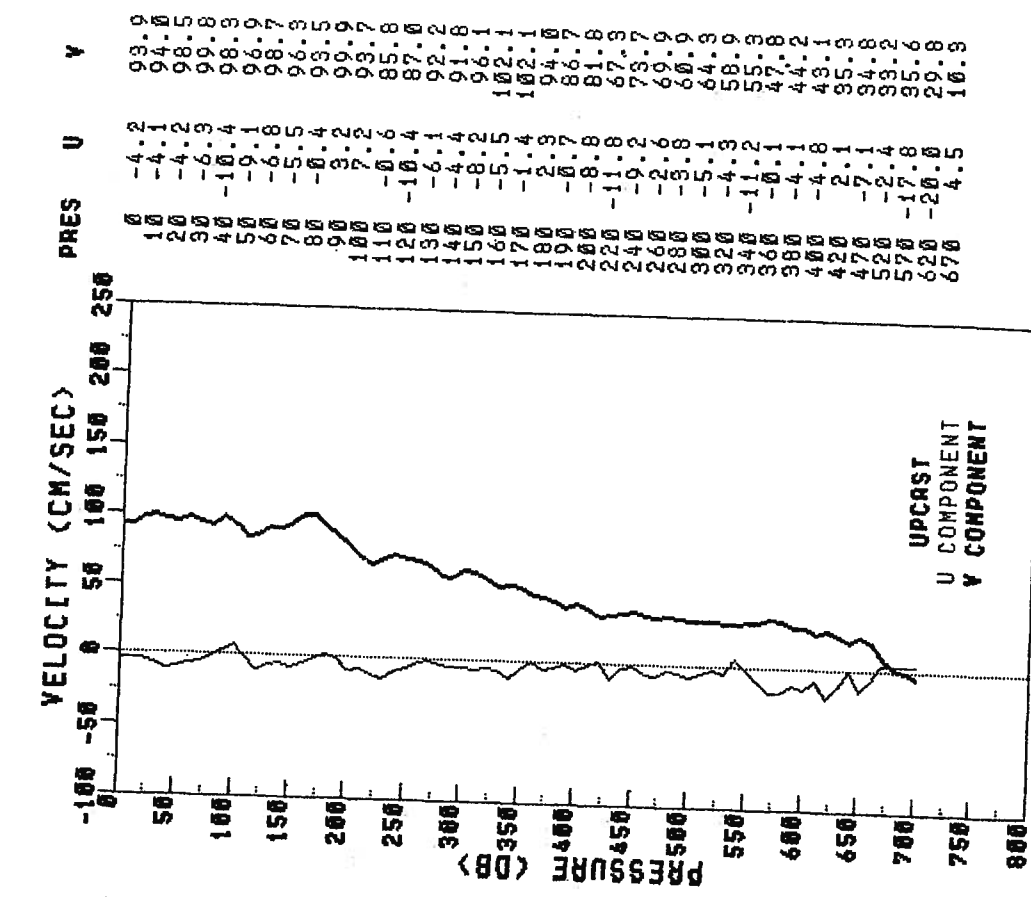
RES-STACS12-83 PEGASUS 022 STN 2
 R/Y RESEARCHER JDAY 334 TIME 1942Z
 LATITUDE 26.96 N LONGITUDE 79.78 N

PRES	U	V
0	-11.0	185.4
10	0.8	194.6
20	4.3	195.6
30	3.8	195.5
40	2.4	195.5
50	-1.2	189.9
60	-3.9	184.9
70	-0.9	182.9
80	4.1	175.4
90	-1.4	162.3
100	-3.1	146.7
110	-2.9	139.3
120	-2.7	121.2
130	-7.5	116.4
140	-0.2	114.1
150	-10.7	112.7
160	-12.9	112.0
170	-4.9	108.7
180	-6.2	102.7
190	-9.9	90.1
200	-7.6	81.1
220	-13.6	72.6
240	-5.9	55.1
260	-3.6	46.7
280	-9.7	36.4
300	-7.2	29.2
320	2.9	21.8
340	11.7	15.4
360	4.8	



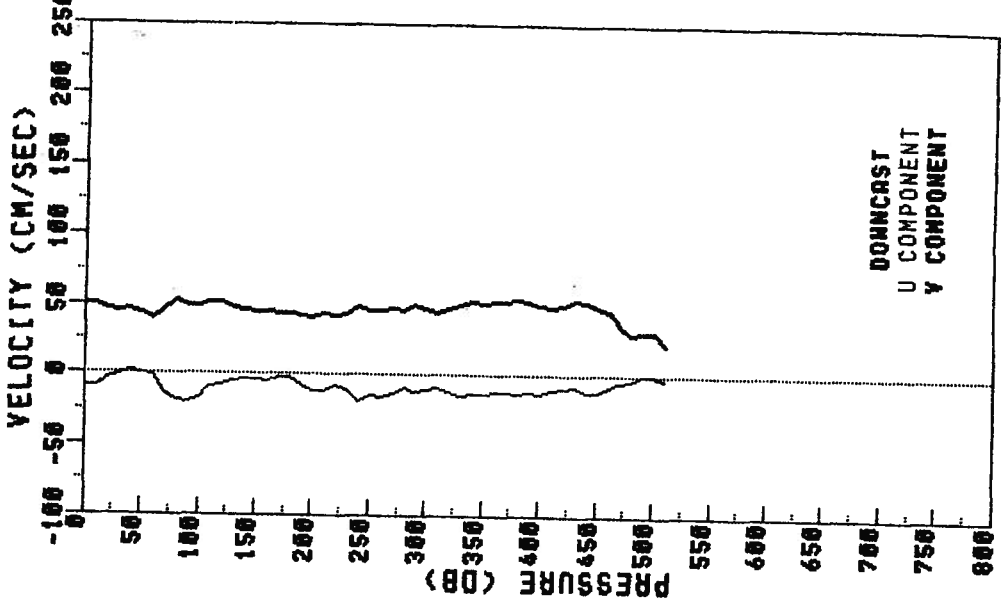
RES-STAC12-83 PEGASUS 026 STN 6
 R/V RESEARCHER JOY 335 TIME 0932Z
 LATITUDE 26.98 N LONGITUDE 79.37 W

RES-STAC12-83 PEGASUS 024 STN 4
 R/V RESEARCHER JOY 335 TIME 0021Z
 LATITUDE 26.97 N LONGITUDE 79.61 W



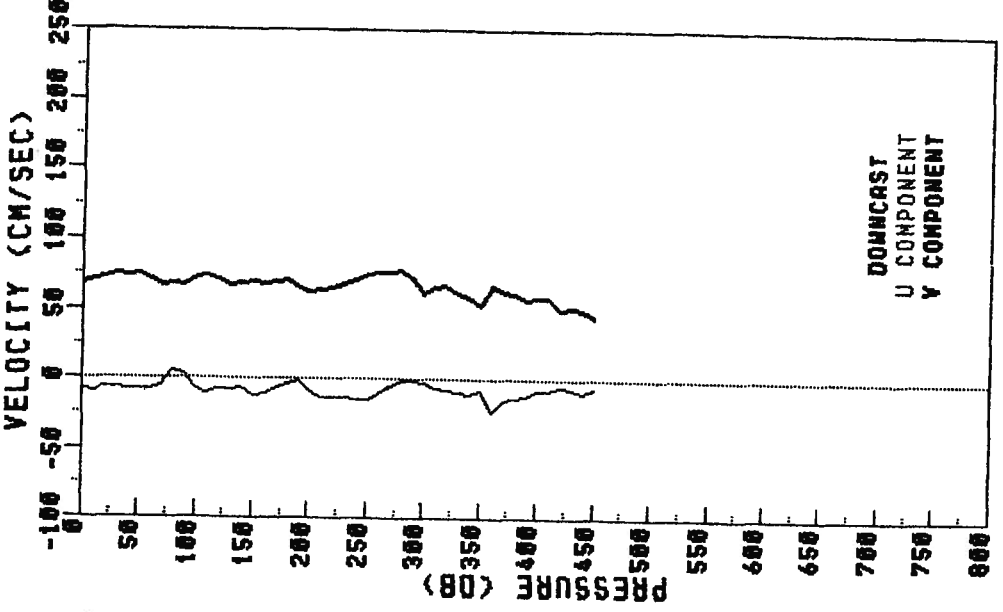
RES-STAC12-83 PEGASUS 028 STN 8
 R/V RESEARCHER JOY 335 TIME 1521Z
 LATITUDE 26.99 N LONGITUDE 79.19 N

PRES	U	V
0	-8.4	51.6
10	-8.4	51.6
20	-8.1	46.7
30	-8.4	46.8
40	-1.9	46.8
50	0.1	45.0
60	-1.2	46.8
70	-12.6	46.8
80	-18.1	46.2
90	-20.8	49.9
100	-17.7	49.9
110	-7.7	52.8
120	-4.3	49.0
130	-4.0	46.4
140	-3.8	45.2
150	-5.5	45.2
160	-2.6	44.6
170	-2.1	44.6
180	-7.3	43.1
190	-7.9	41.4
200	-11.3	42.1
220	-7.9	40.1
240	-15.6	47.0
260	-8.5	48.9
300	-10.7	48.6
320	-12.5	53.9
340	-13.6	53.9
360	-11.0	55.7
380	-12.6	55.7
400	-12.6	50.8
420	-16.9	50.8
470	-5.5	37.7



RES-STAC12-83 PEGASUS 027 STN 7
 R/V RESEARCHER JOY 335 TIME 1245Z
 LATITUDE 26.99 N LONGITUDE 79.27 N

PRES	U	V
0	7.9	69.7
10	-6.8	70.0
20	-6.5	72.9
30	-7.8	74.5
40	-8.1	75.5
50	-7.8	71.4
60	-4.8	67.8
70	5.2	69.2
80	2.9	67.1
90	-7.4	72.5
100	-10.2	73.9
110	-7.4	70.9
120	-7.3	67.9
130	-6.9	69.1
140	-6.6	69.5
150	-11.8	69.0
160	-10.8	70.6
170	-6.6	71.0
180	-3.8	66.8
190	-0.6	66.8
200	-8.6	65.5
220	-13.2	65.5
240	-14.1	71.9
260	-11.2	77.1
280	-11.8	78.3
300	-7.6	62.4
320	-11.4	66.6
340	-22.5	59.3
360	-13.1	67.8
380	-13.1	61.9
400	-8.9	58.9
420	-4.9	51.4

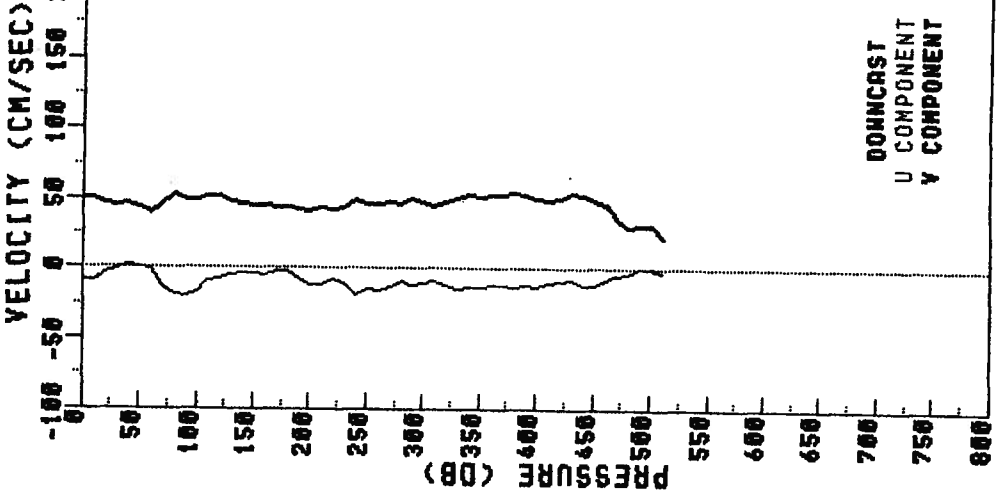
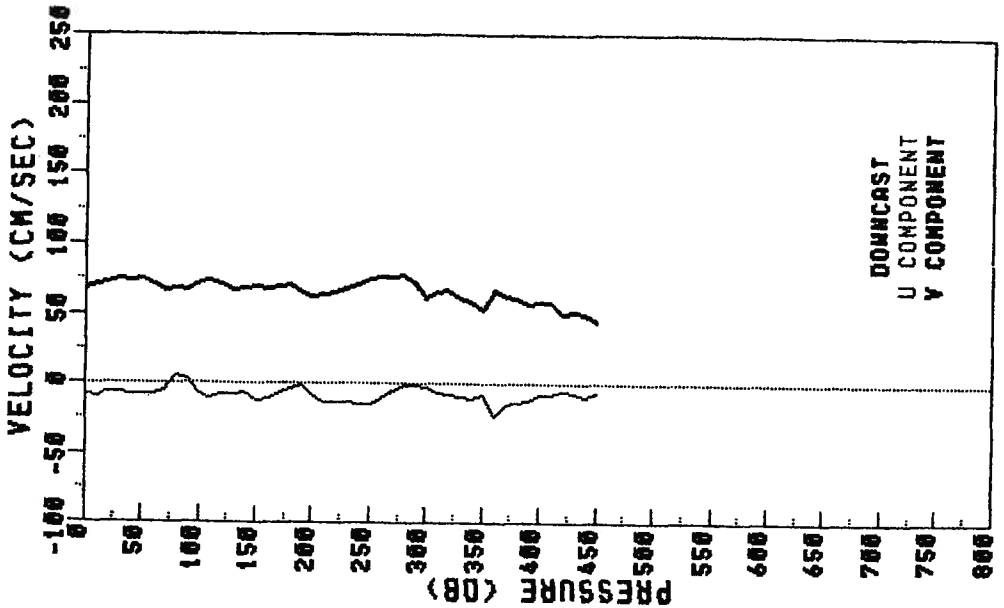


RES-STACS12-83 PEGASUS 027 STN 7 RES-STACS12-83 PEGASUS 028 STN 8

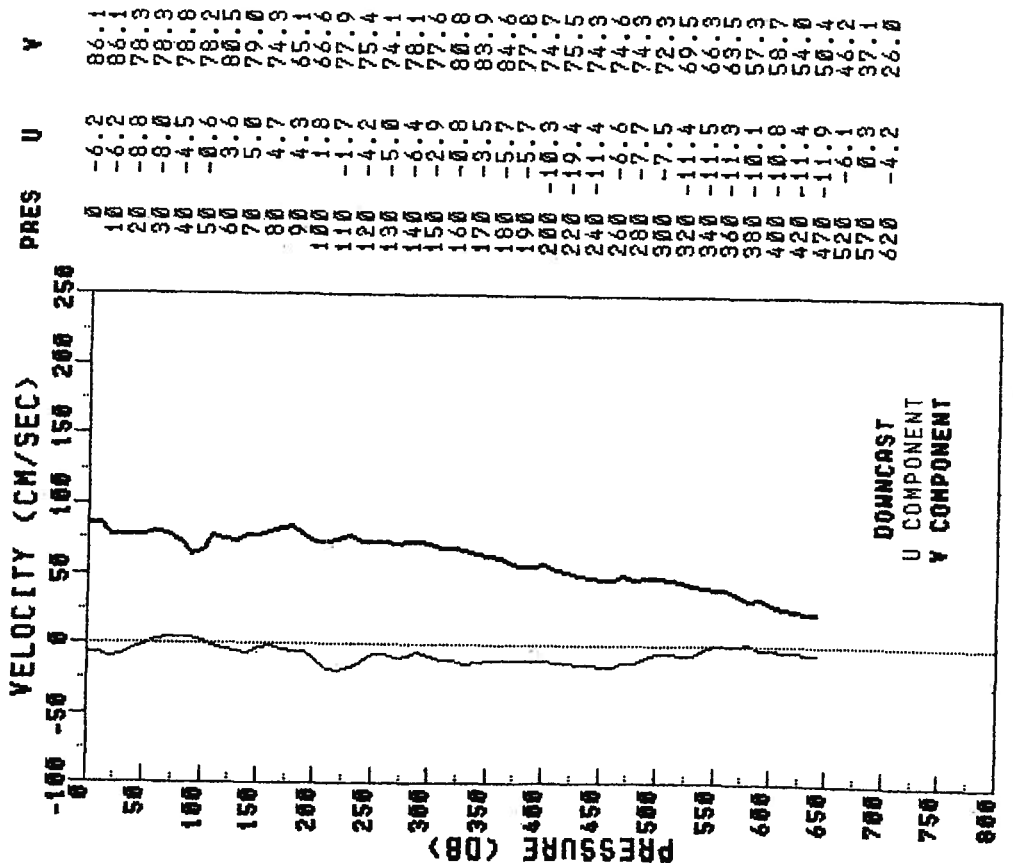
R/Y RESEARCHER JORY 335 TIME 1245Z R/Y RESEARCHER JORY 335 TIME 1521Z

LATITUDE 26.99 N LONGITUDE 79.27 W

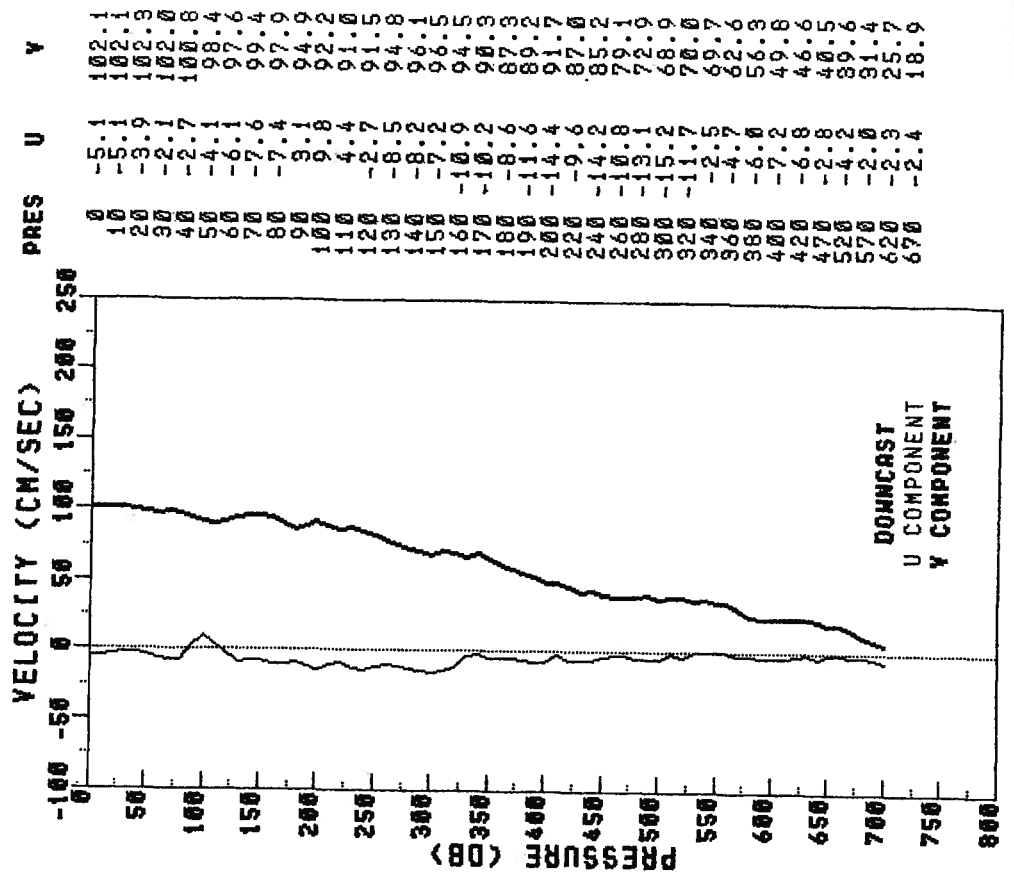
LATITUDE 26.99 N LONGITUDE 79.19 W



RES-STACS12-83 PEGASUS 029 STN 7
 R/V RESEARCHER JOY 335 TIME 1653Z
 LATITUDE 26.98 N LONGITUDE 79.28 W

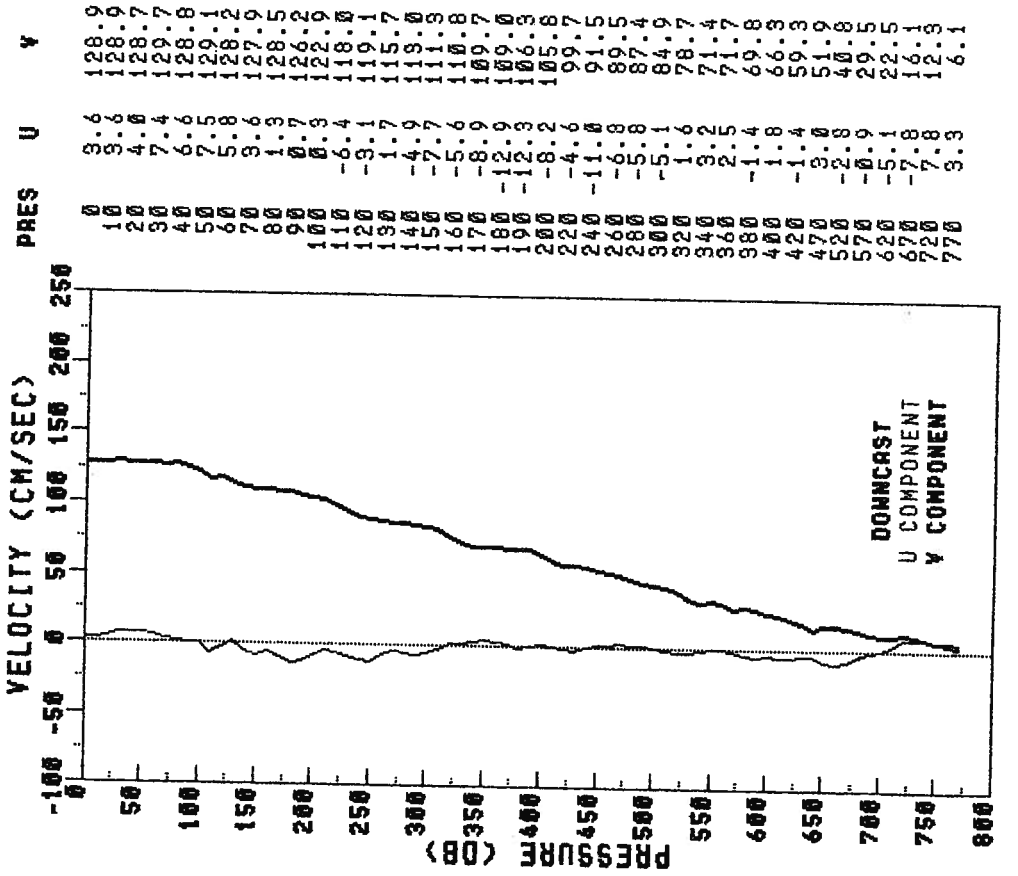
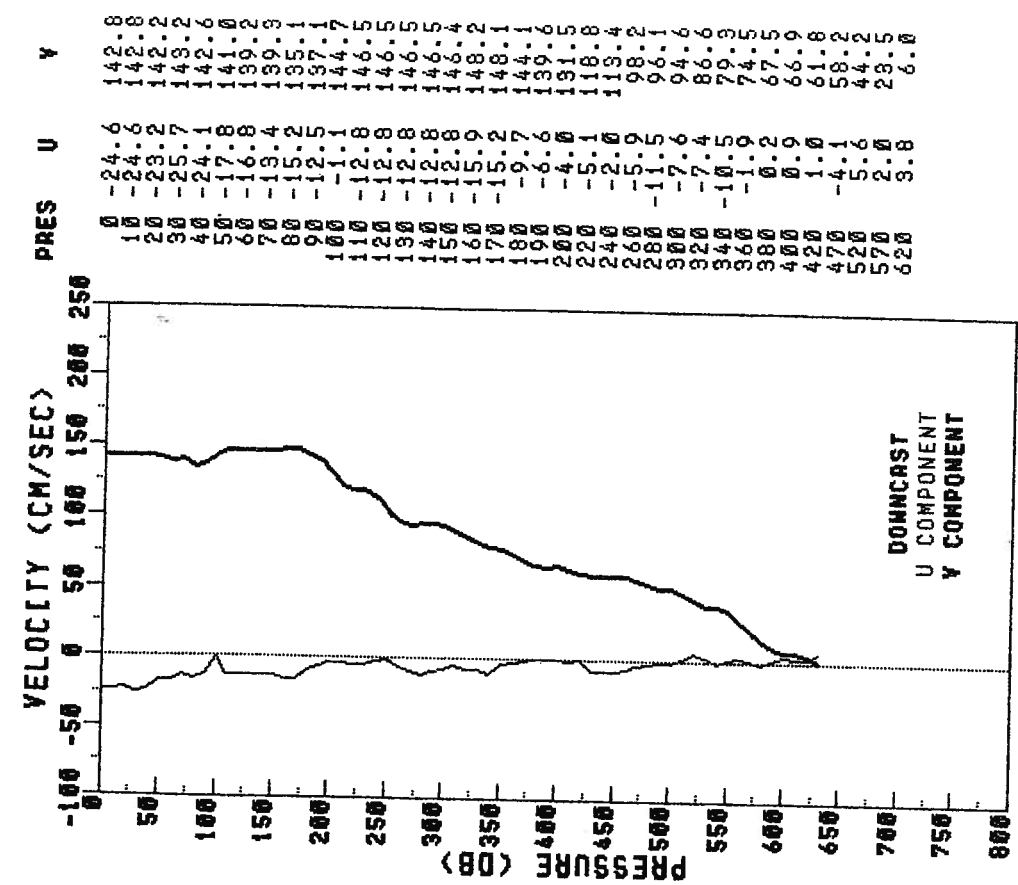


RES-STACS12-83 PEGASUS 030 STN 6
 R/V RESEARCHER JOY 335 TIME 1847Z
 LATITUDE 26.98 N LONGITUDE 79.36 W



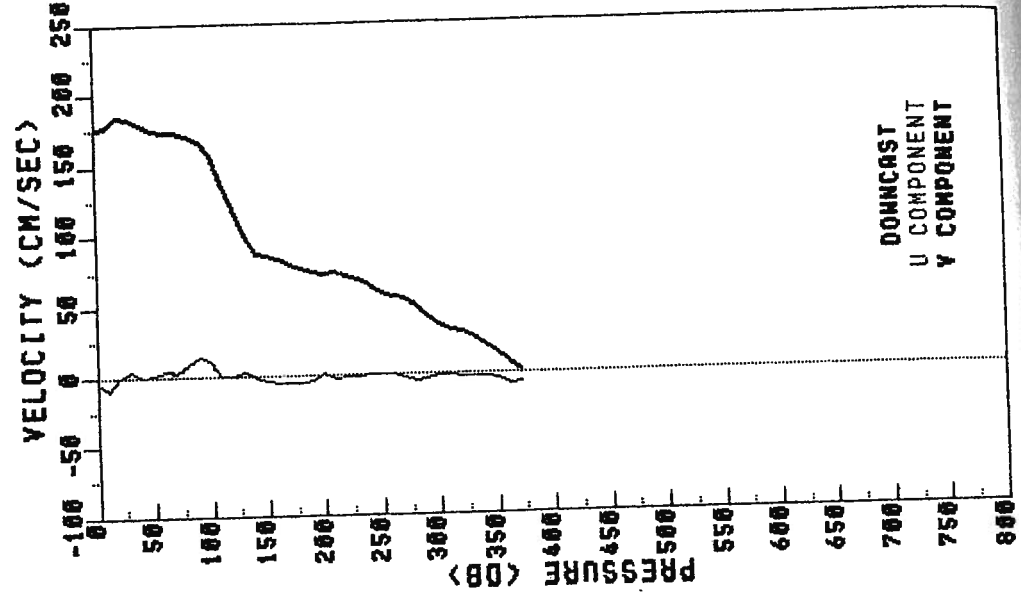
RES-STACS12-83 PEGASUS 032 STN 4
 R/V RESEARCHER JDAY 335 TIME 0234Z
 LATITUDE 26.97 N LONGITUDE 79.61 W

RES-STACS12-83 PEGASUS 031 STN 5
 R/V RESEARCHER JDAY 335 TIME 2045Z
 LATITUDE 26.97 N LONGITUDE 79.49 W



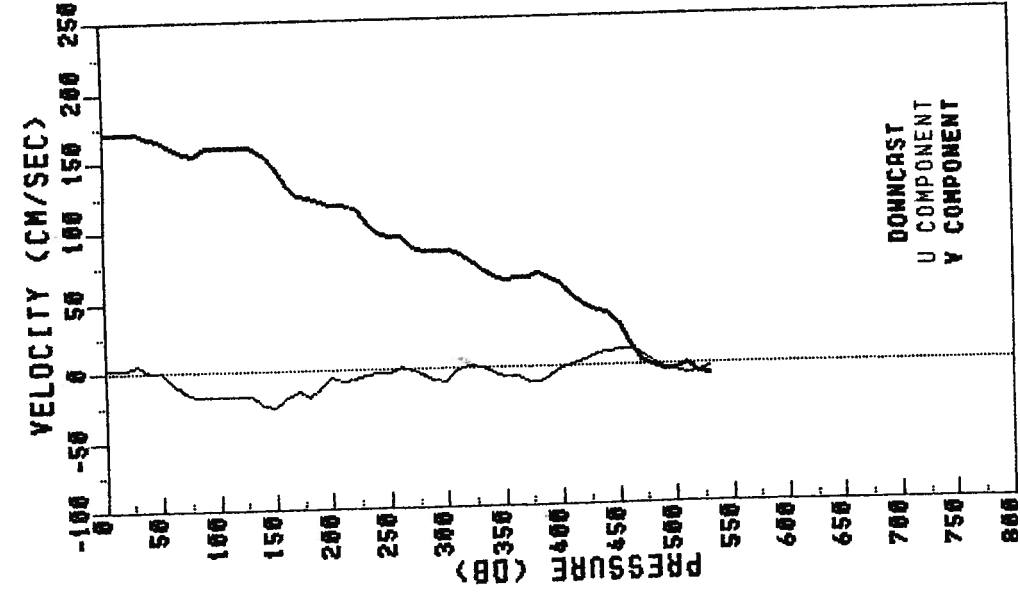
RES-STACSI2-83 PEGASUS 034 STN 2
 R/V RESEARCHER JDAY 336 TIME 0247Z
 LATITUDE 26.97 N LONGITUDE 79.78 N

PRES	U	V
0	-4.0	176.5
10	-8.7	178.8
20	0.0	184.5
30	4.2	189.5
40	0.6	179.3
50	2.2	175.5
60	4.2	174.5
70	3.0	174.1
80	9.1	170.9
90	14.4	167.7
100	0.7	157.2
110	0.2	138.6
120	0.7	119.6
130	2.7	99.9
140	-1.0	88.3
150	-3.4	86.6
160	-5.3	84.4
170	-5.6	79.9
180	-4.5	76.7
190	-3.0	73.4
200	-0.5	71.6
220	-0.2	65.3
240	1.1	56.6
260	1.4	46.7
280	-1.2	35.7
300	-1.7	30.6
320	-1.8	21.6
340	-7.7	2.8
360		



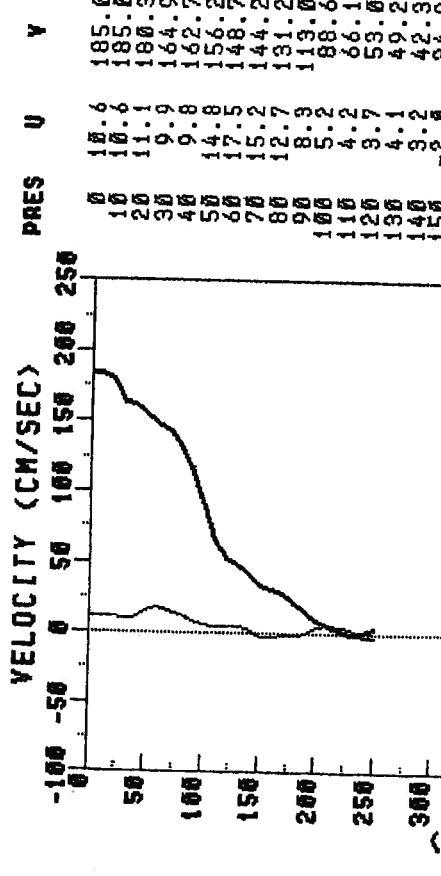
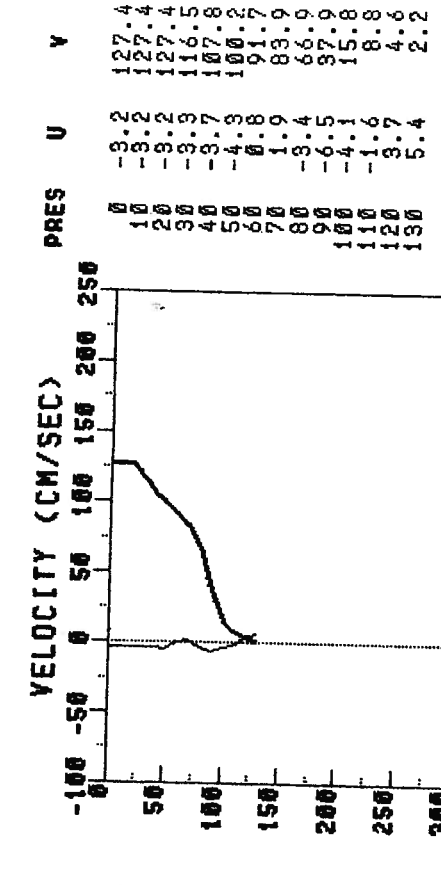
RES-STACSI2-83 PEGASUS 033 STN 3
 R/V RESEARCHER JDAY 336 TIME 0056Z
 LATITUDE 26.97 N LONGITUDE 79.68 N

PRES	U	V
0	3.1	172.0
10	3.1	172.0
20	3.1	172.6
30	5.3	172.1
40	0.6	168.1
50	0.2	167.6
60	0.4	161.2
70	-8.8	157.4
80	-17.0	156.7
90	-17.3	161.7
100	-17.3	161.7
110	-17.3	161.7
120	-17.3	161.7
130	-17.3	161.7
140	-24.0	155.8
150	-26.4	134.6
160	-18.7	126.9
170	-14.4	124.9
180	-18.7	121.4
190	-11.8	119.7
200	-15.3	116.9
220	-7.0	98.5
240	-2.2	95.0
260	1.4	84.8
280	-5.4	84.8
300	-9.0	78.4
320	1.3	78.4
340	-4.1	66.2
360	-7.1	64.1
380	-11.0	66.8
400	-1.2	58.5
420	4.2	43.7
470	0.2	43.9
520	-5.4	-5.5



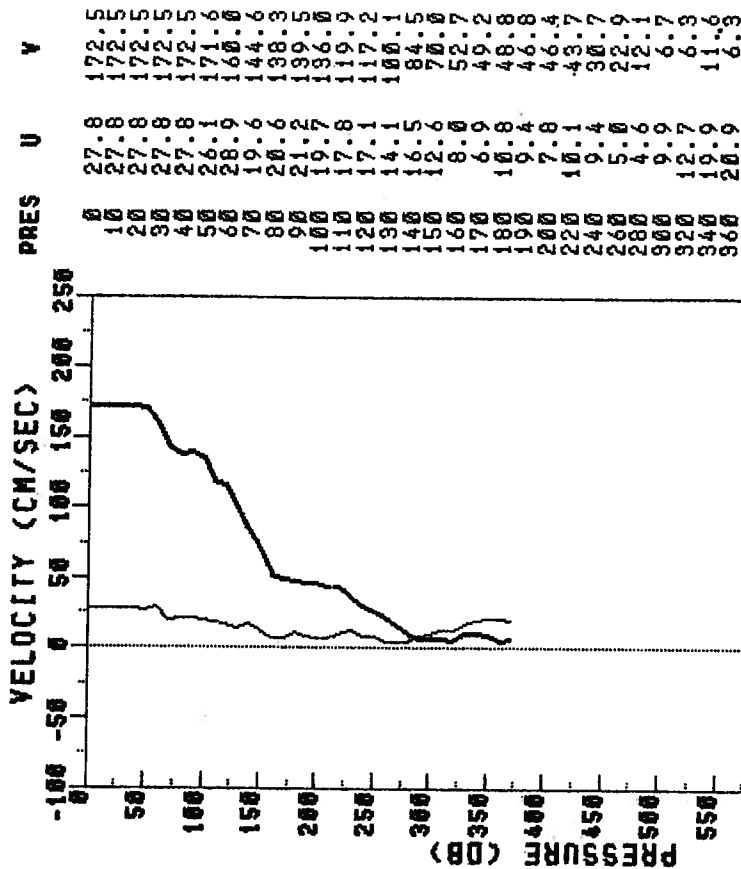
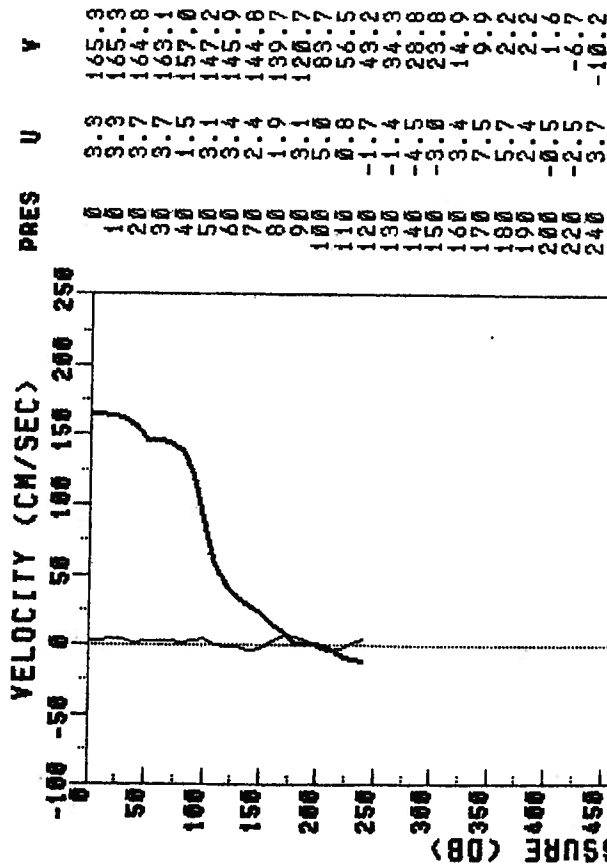
RES-STACS12-83 PEGASUS 036 STN 0
 R/Y RESEARCHER JDAY 336 TIME 0527Z
 LATITUDE 26.98 N LONGITUDE 79.95 W

RES-STACS12-83 PEGASUS 035 STN 1
 R/Y RESEARCHER JDAY 336 TIME 0411Z
 LATITUDE 26.98 N LONGITUDE 79.86 W



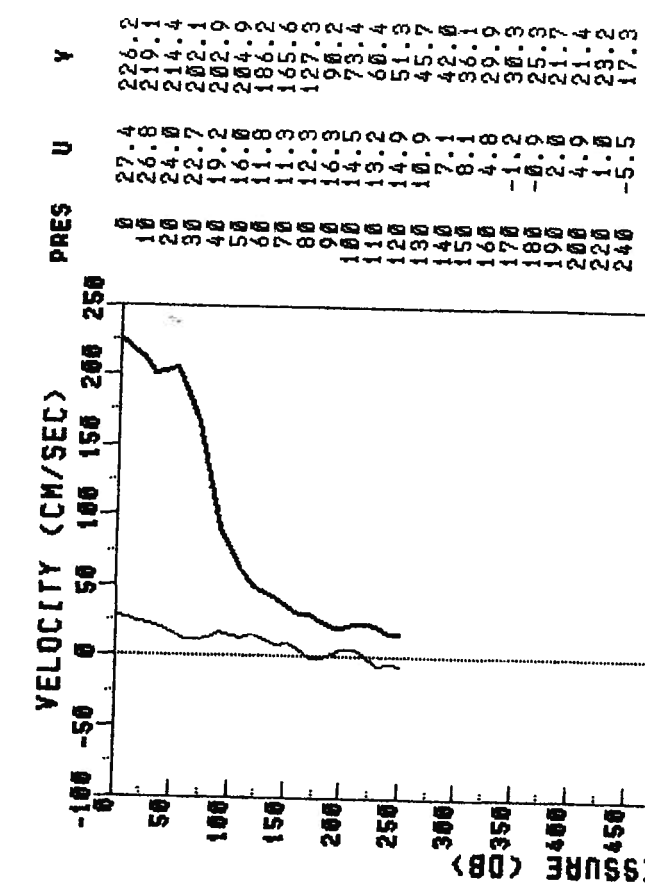
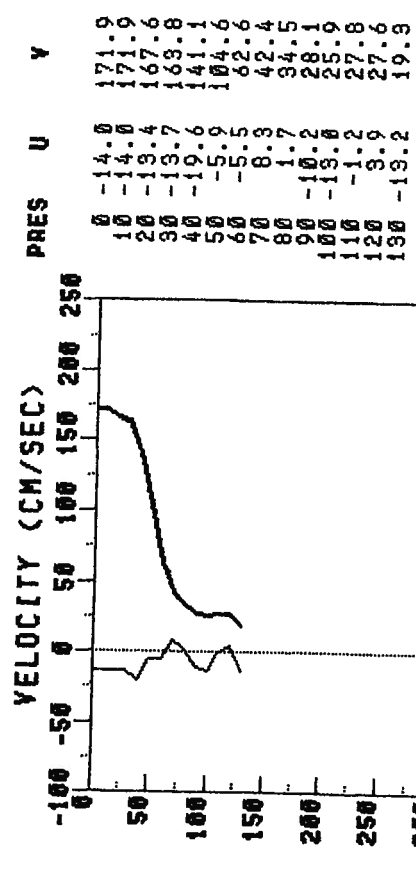
RES-STACS12-83 PEGASUS 038 STN 1
 R/V RESEARCHER JOY 336 TIME 1144Z
 LATITUDE 26.98 N LONGITUDE 79.86 W

RES-STACS12-83 PEGASUS 039 STN 2
 R/V RESEARCHER JOY 336 TIME 1310Z
 LATITUDE 26.96 N LONGITUDE 79.78 W

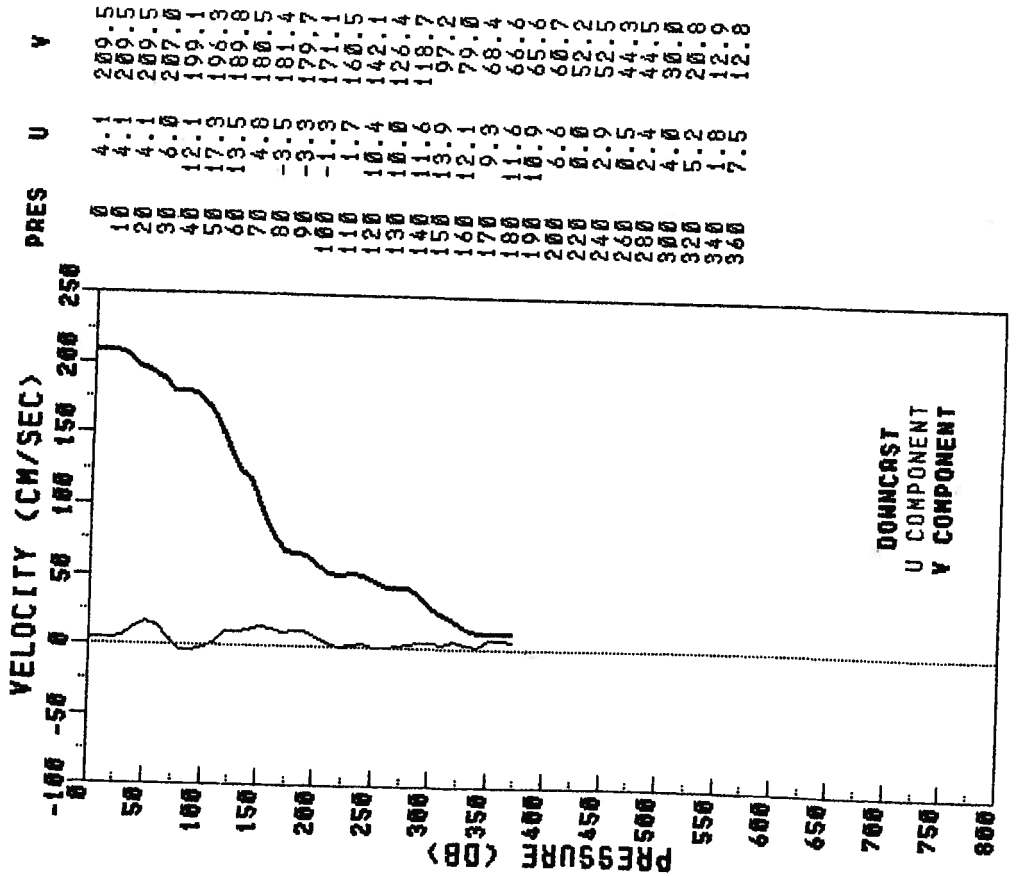


RES-STACSI2-83 PEGASUS 046 STN 0
 R/V RESEARCHER JDAY 337 TIME 1652Z
 LATITUDE 26.99 N LONGITUDE 79.93 N

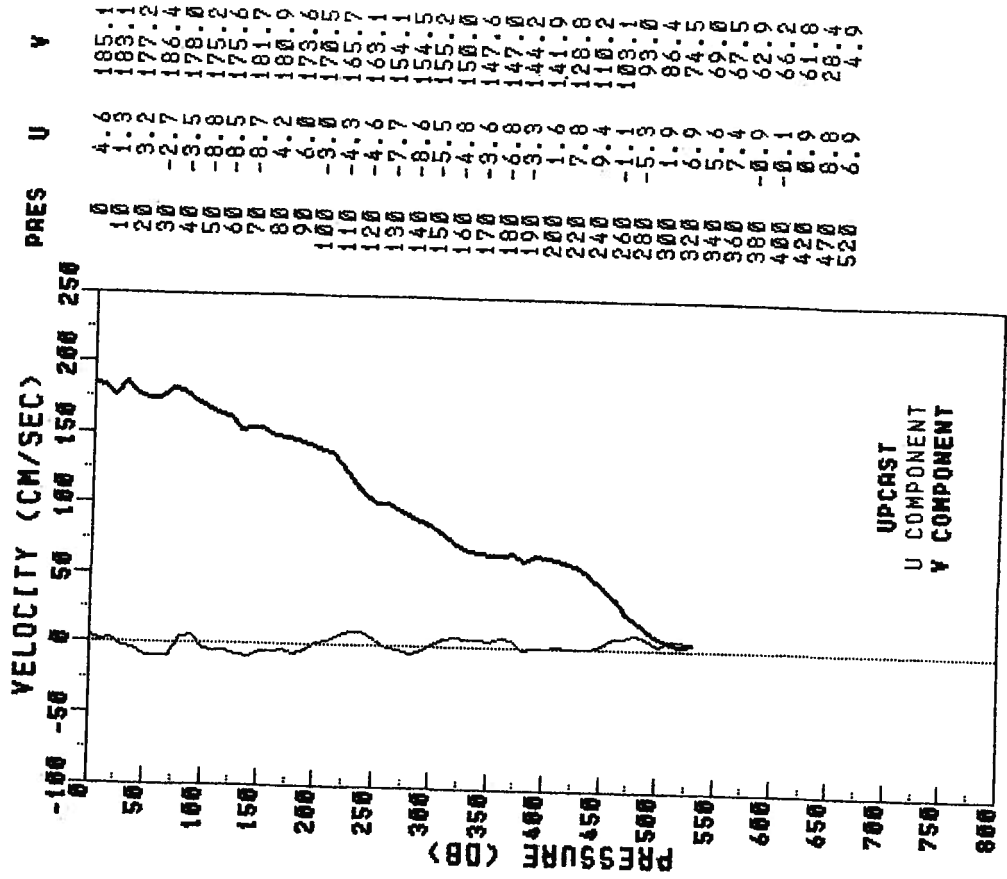
RES-STACSI2-83 PEGASUS 047 STN 1
 R/V RESEARCHER JDAY 337 TIME 0100Z
 LATITUDE 26.98 N LONGITUDE 79.86 N



RES-STAC12-83 PEGASUS 048 STN 2
 R/V RESEARCHER JOY 337 TIME 1917Z
 LATITUDE 26.97 N LONGITUDE 79.79 W



RES-STAC12-83 PEGASUS 050 STN 3
 R/V RESEARCHER JOY 337 TIME 2315Z
 LATITUDE 26.98 N LONGITUDE 79.67 W



RES-STAC512-83 PEGASUS 051 STN 4

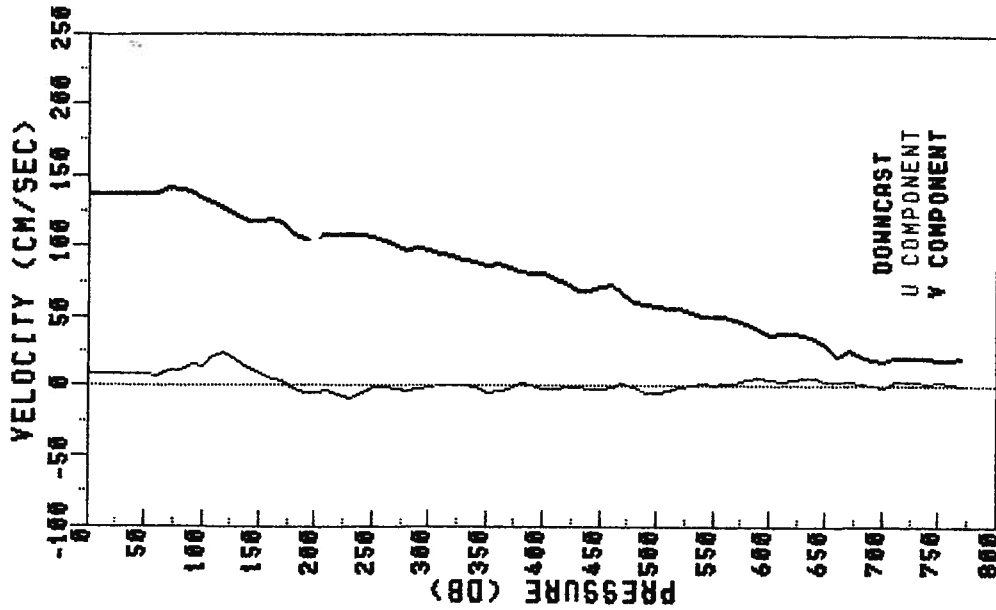
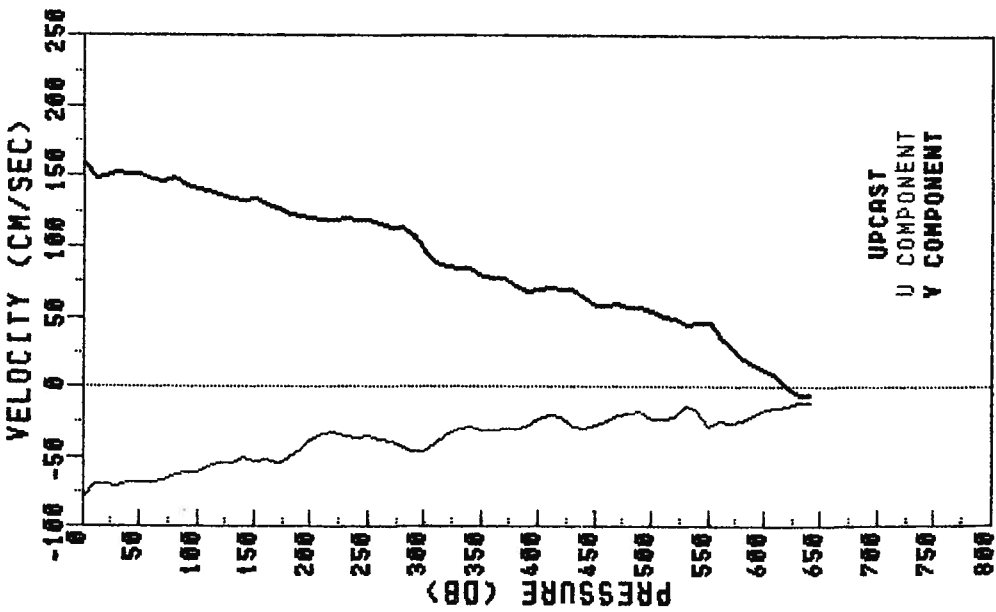
R/Y RESEARCHER JOY 338 TIME 0048Z

LATITUDE 26.96 N LONGITUDE 79.61 W

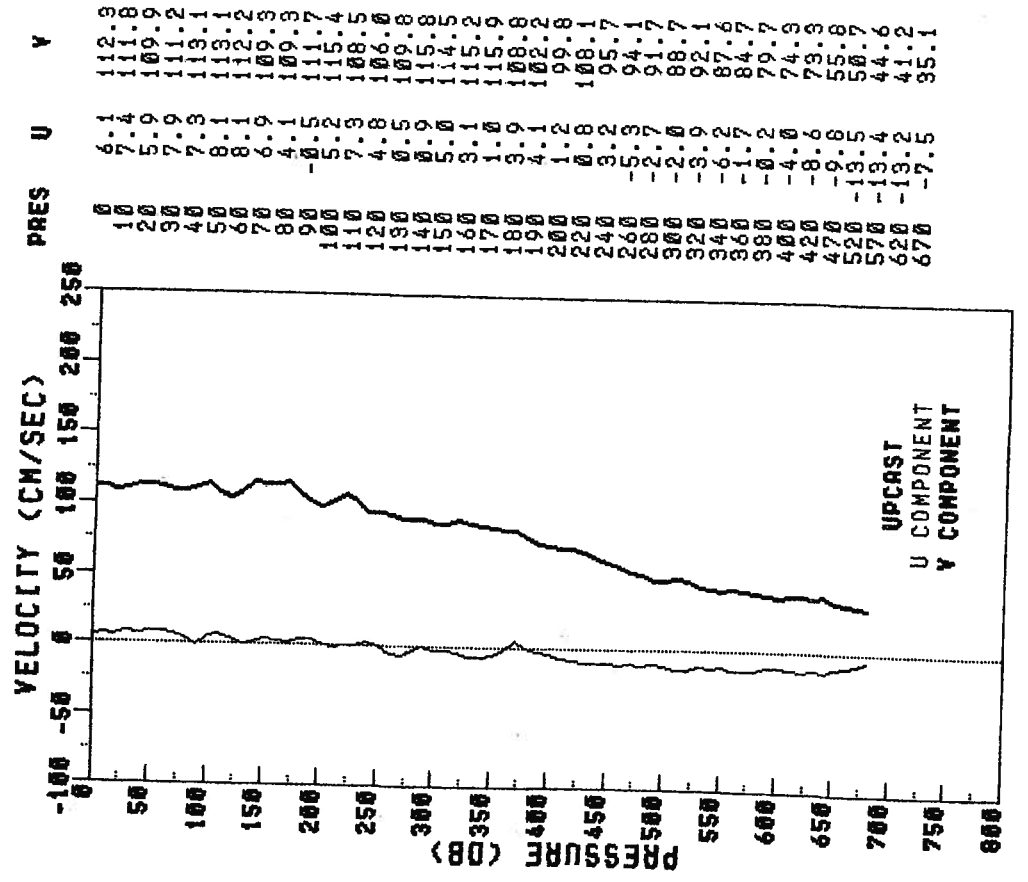
RES-STAC512-83 PEGASUS 052 STN 5

R/Y RESEARCHER JOY 338 TIME 0259Z

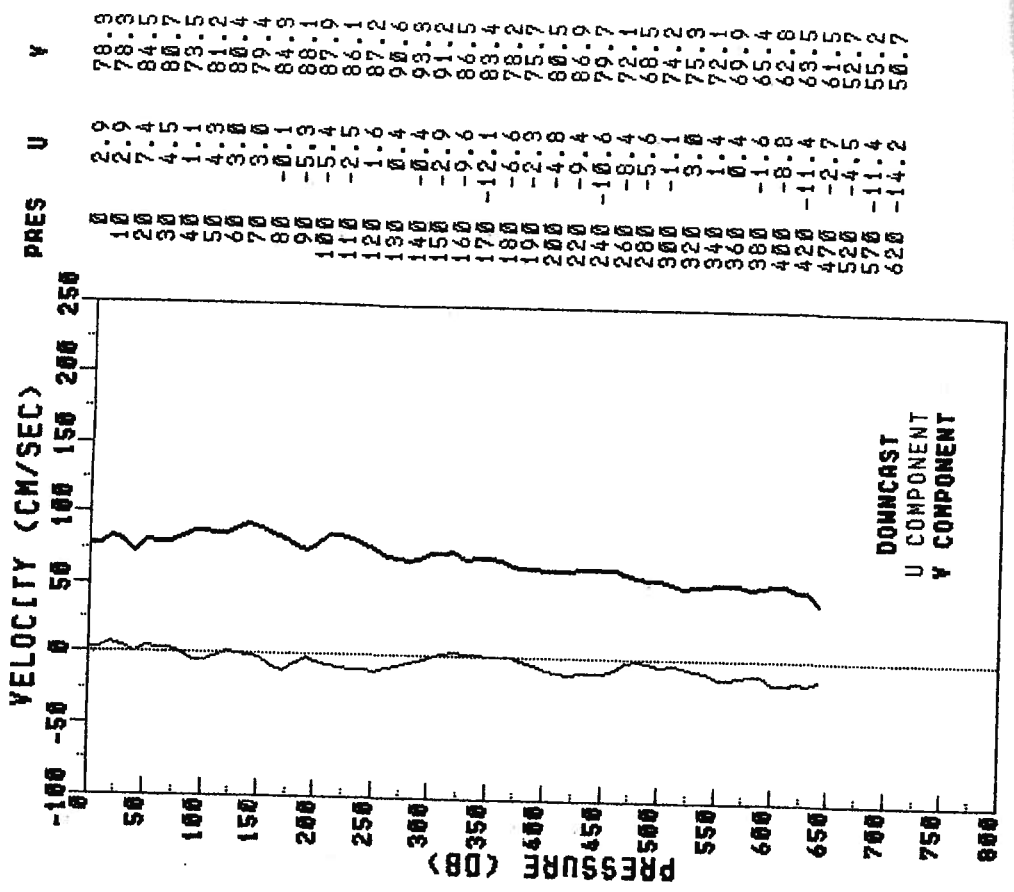
LATITUDE 26.97 N LONGITUDE 79.49 N



RES-STAC12-83 PEGASUS 053 STN 6
 R/V RESEARCHER JOY 338 TIME 0529Z
 LATITUDE 26.98 N LONGITUDE 79.37 W

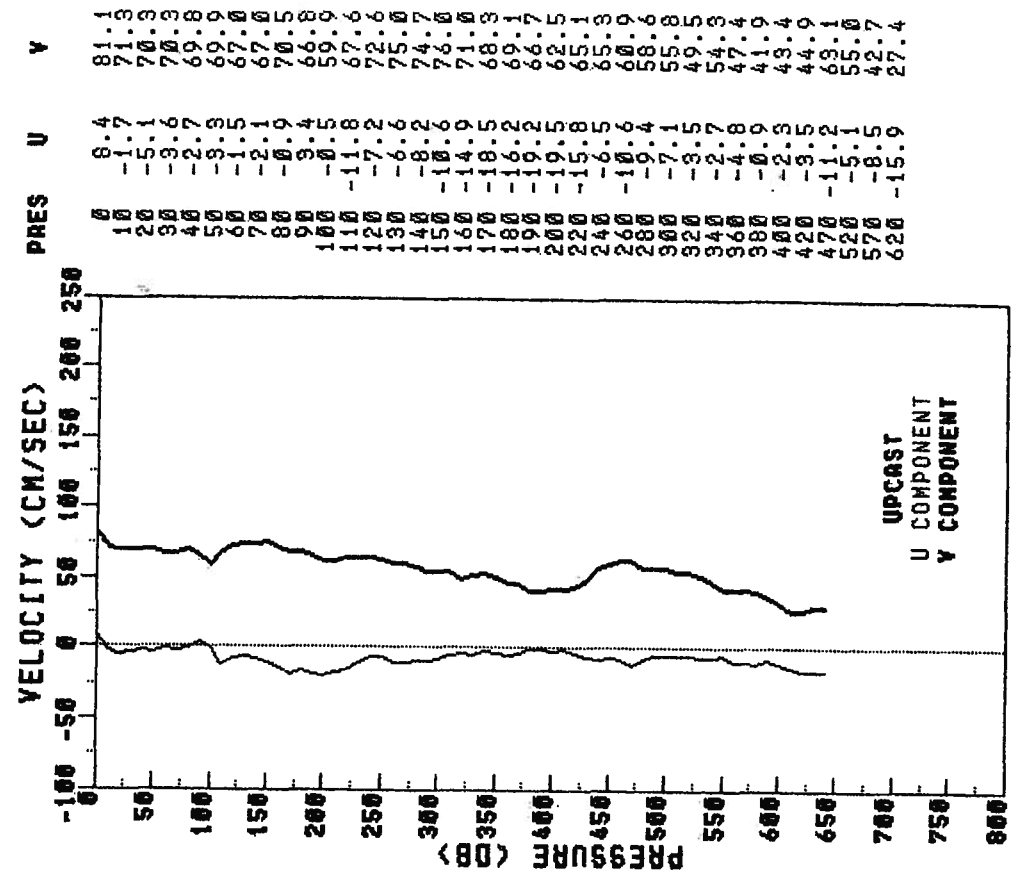
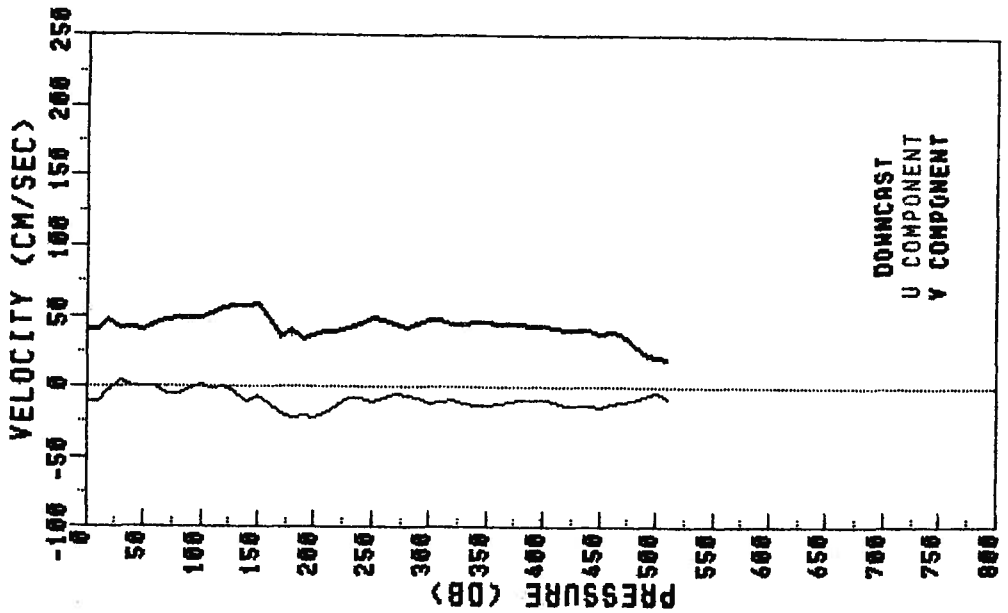


RES-STAC12-83 PEGASUS 054 STN 7
 R/V RESEARCHER JOY 338 TIME 0736Z
 LATITUDE 26.97 N LONGITUDE 79.27 W



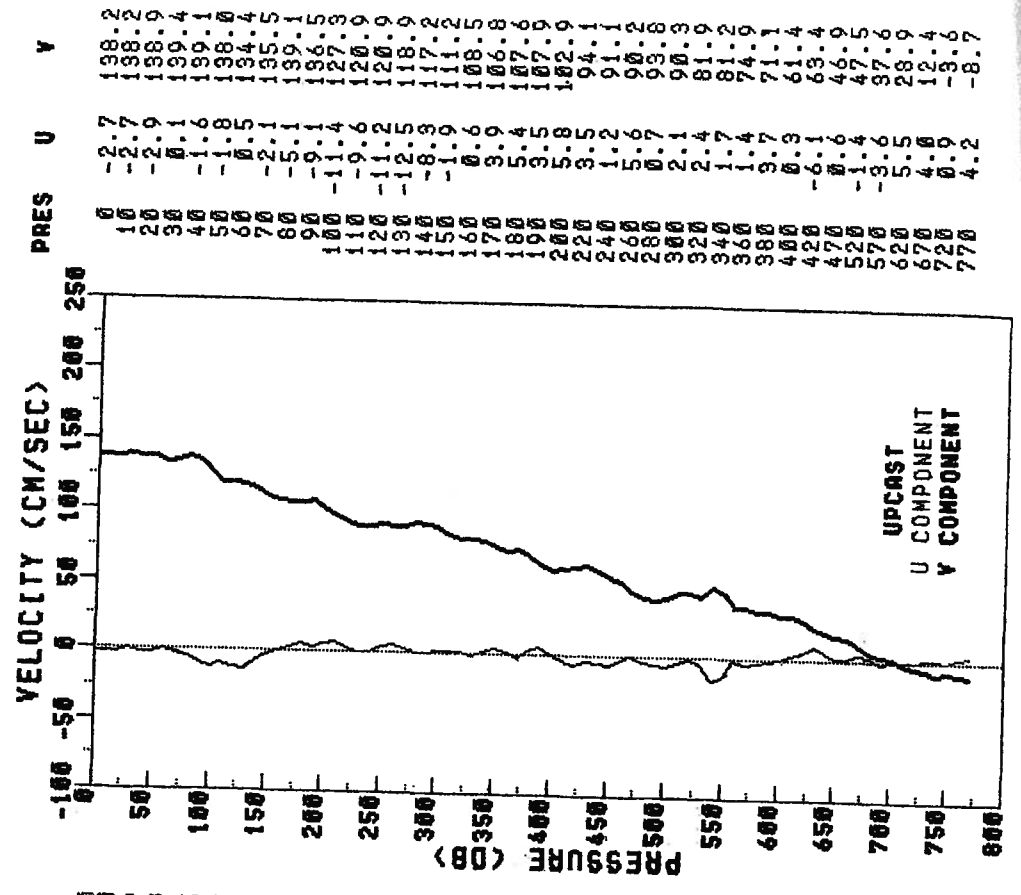
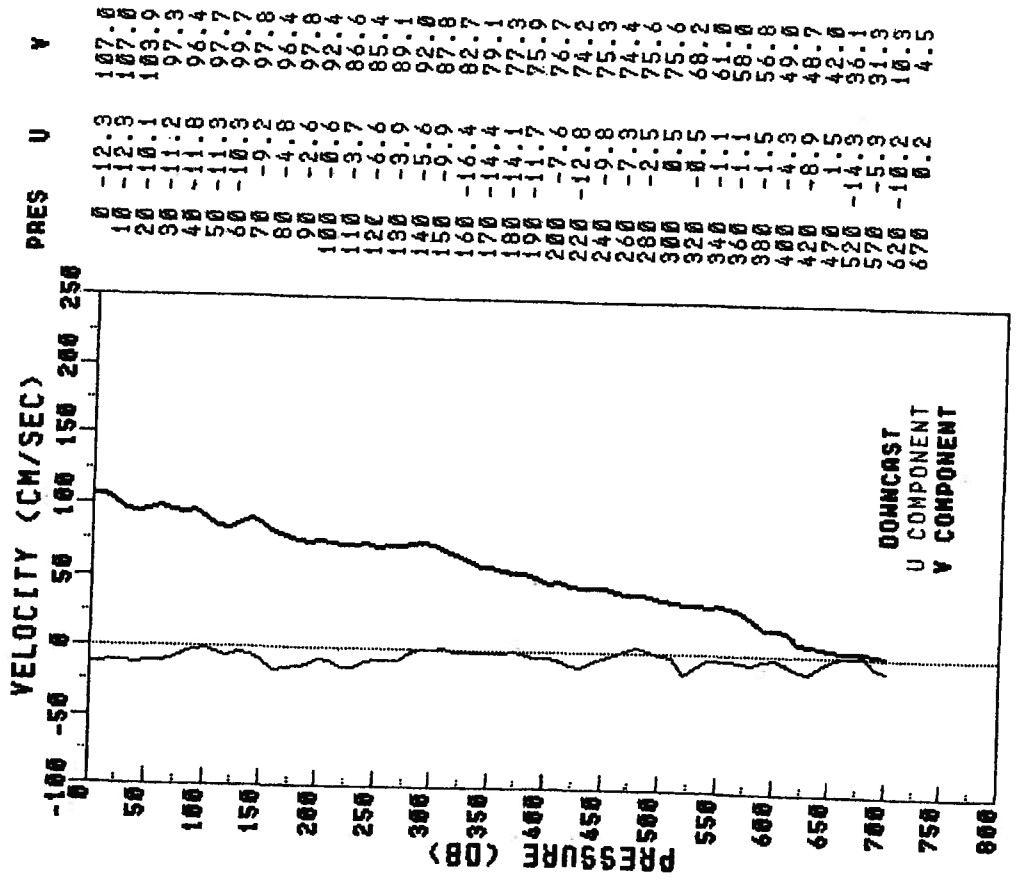
RES-STACS12-83 PEGASUS 055 STN 8
 R/V RESEARCHER JOY 338 TIME 0950Z
 LATITUDE 26.98 N LONGITUDE 79.19 N

RES-STACS12-83 PEGASUS 056 STN 7
 R/V RESEARCHER JOY 338 TIME 0122Z
 LATITUDE 26.98 N LONGITUDE 79.27 N



RES-STAC12-83 PEGASUS 057 STN 6
 R/V RESEARCHER JOY 338 TIME 1349Z
 LATITUDE 26.98 N LONGITUDE 79.28 W

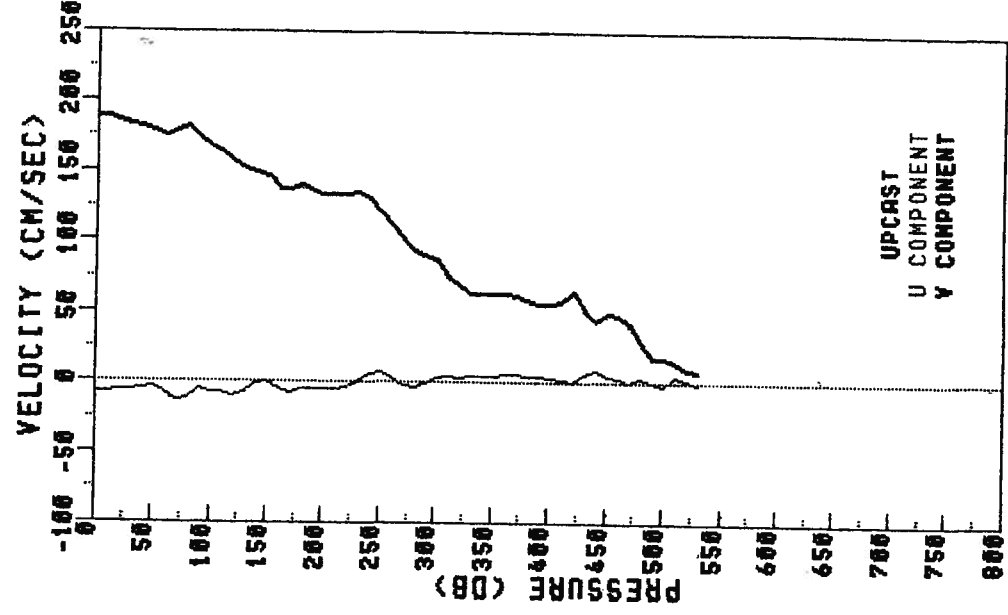
RES-STAC12-83 PEGASUS 058 STN 5
 R/V RESEARCHER JOY 338 TIME 1557Z
 LATITUDE 26.97 N LONGITUDE 79.49 W



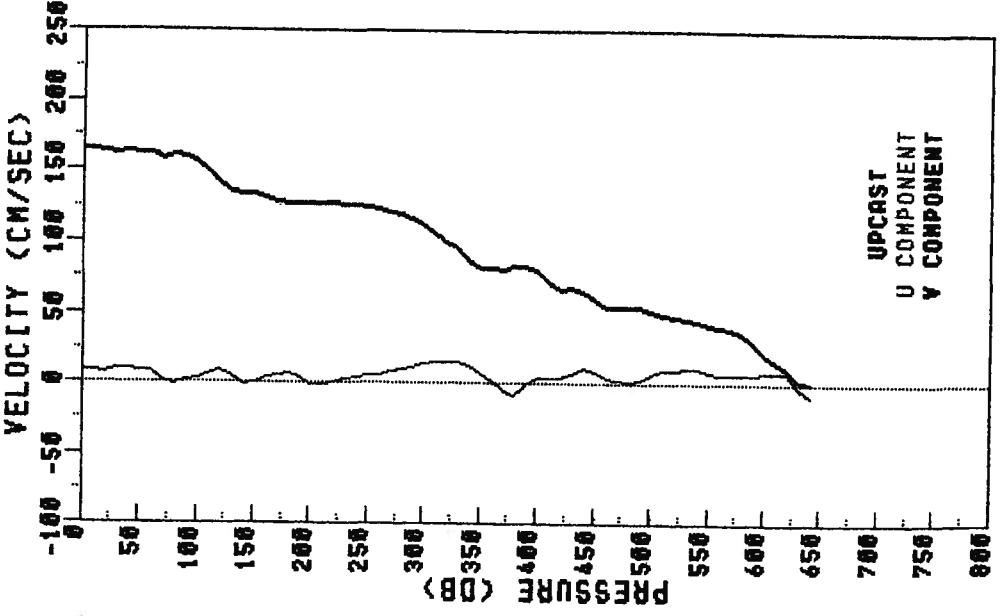
RES-STAC12-83 PEGASUS 060 STN 3
 R/V RESEARCHER JOY 338 TIME 1945Z
 LATITUDE 26.97 N LONGITUDE 79.67 W

RES-STAC12-83 PEGASUS 059 STN 4
 R/V RESEARCHER JOY 338 TIME 0187Z
 LATITUDE 26.96 N LONGITUDE 79.61 W

PRES	U	Y
0	7.7	189.8
10	-7.7	189.8
20	-6.4	186.8
30	-6.6	183.9
40	-5.2	182.4
50	-3.8	179.0
60	-7.0	176.2
70	-13.1	179.1
80	-12.1	182.0
90	-4.8	174.7
100	-7.4	165.1
110	-7.4	158.0
120	-9.3	151.6
130	-7.8	149.4
140	-0.5	137.1
150	-4.1	139.8
160	-4.7	135.6
170	-4.4	132.9
180	-3.9	129.6
190	5.8	111.2
200	3.9	88.2
220	3.6	70.1
240	3.0	63.1
260	4.5	59.5
280	4.3	56.0
300	3.0	42.9
320	0.7	42.9
340	0.2	10.0
360	0.2	10.0



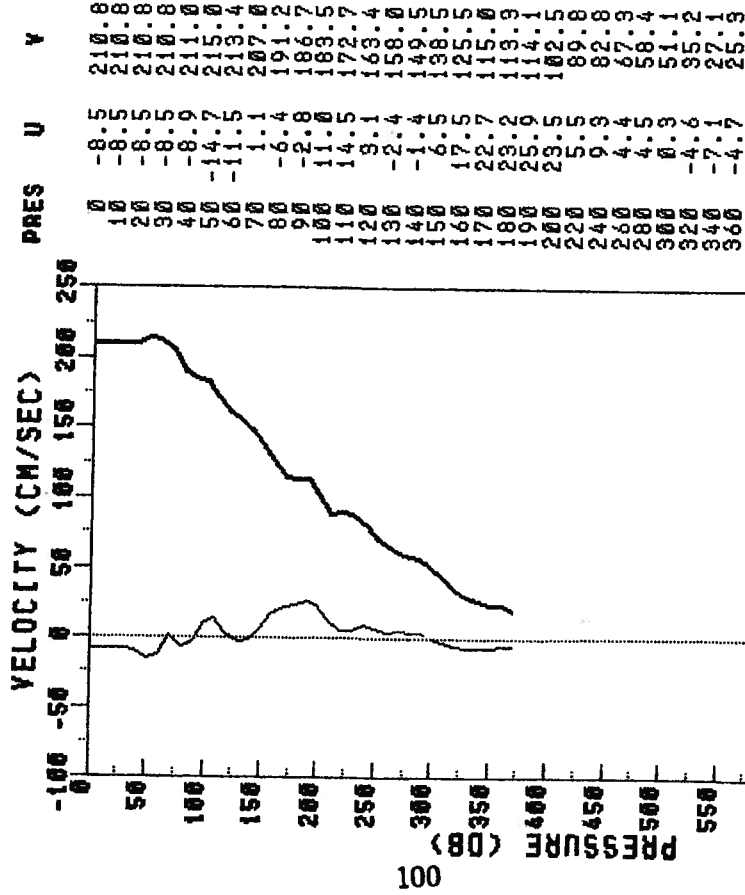
PRES	U	Y
0	7.9	165.4
10	7.1	164.6
20	9.3	163.3
30	9.4	163.6
40	8.9	163.1
50	8.9	163.1
60	1.5	158.8
70	-1.5	161.1
80	2.2	159.9
90	3.5	156.2
100	6.1	150.2
110	7.8	142.1
120	6.3	135.1
130	-1.6	134.5
140	-0.8	131.5
150	3.8	129.1
160	6.1	127.9
170	4.0	127.7
180	4.0	127.1
190	-1.0	127.3
200	3.7	125.6
220	6.2	123.1
240	9.5	119.1
260	13.4	112.3
280	15.7	100.4
300	12.6	87.4
320	1.7	81.6
340	-7.4	83.4
360	-4.8	80.4
380	3.9	67.8
400	2.8	54.5
420	9.6	48.2
440	7.7	40.3
460	8.3	10.6
480	8.3	10.6



RES-STACS12-83 PEGASUS 061 STN 2

R/V RESEARCHER JOY 338 TIME 2158Z

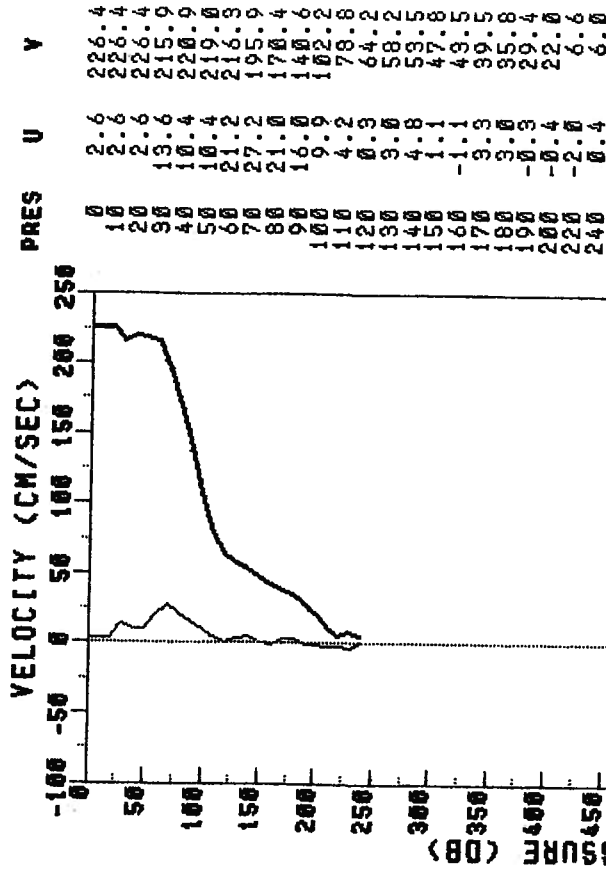
LATITUDE 26.97 N LONGITUDE 79.78 W



RES-STACS12-83 PEGASUS 062 STN 1

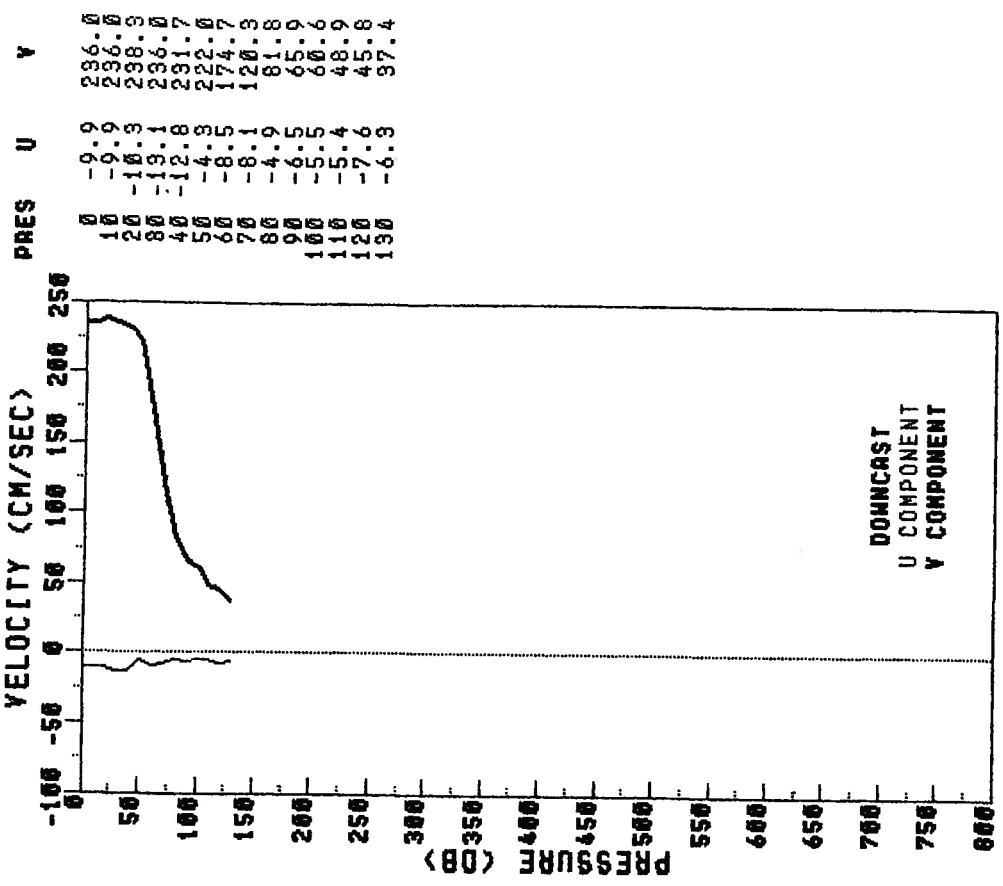
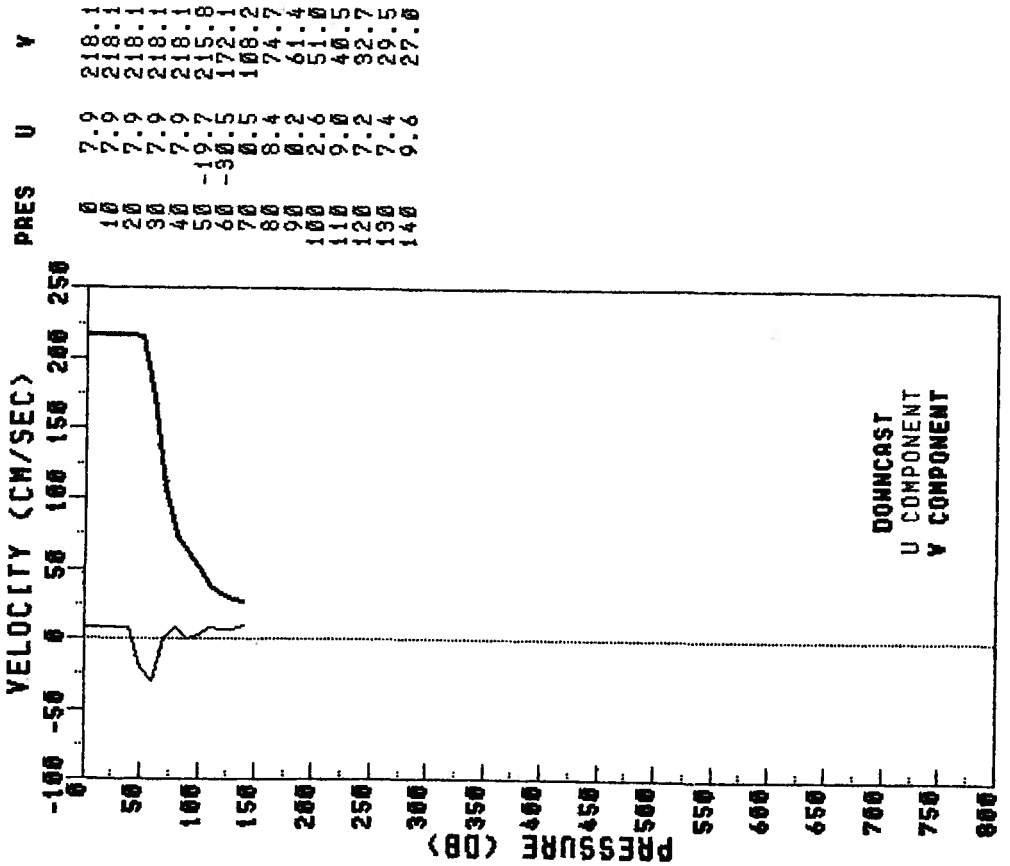
R/V RESEARCHER JOY 338 TIME 2326Z

LATITUDE 26.99 N LONGITUDE 79.86 W

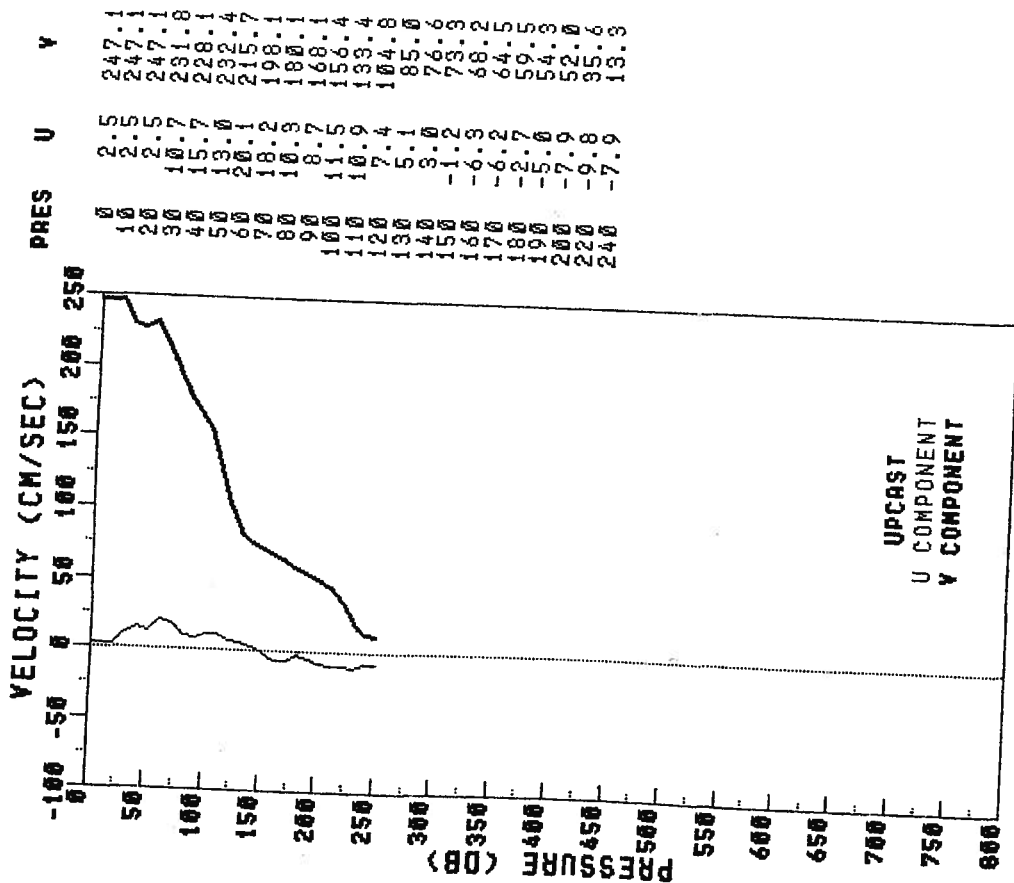


RES-STAC12-83 PEGASUS 063 STN 0
 R/V RESEARCHER JOY 339 TIME 0038Z
 LATITUDE 26.98 N LONGITUDE 79.93 W

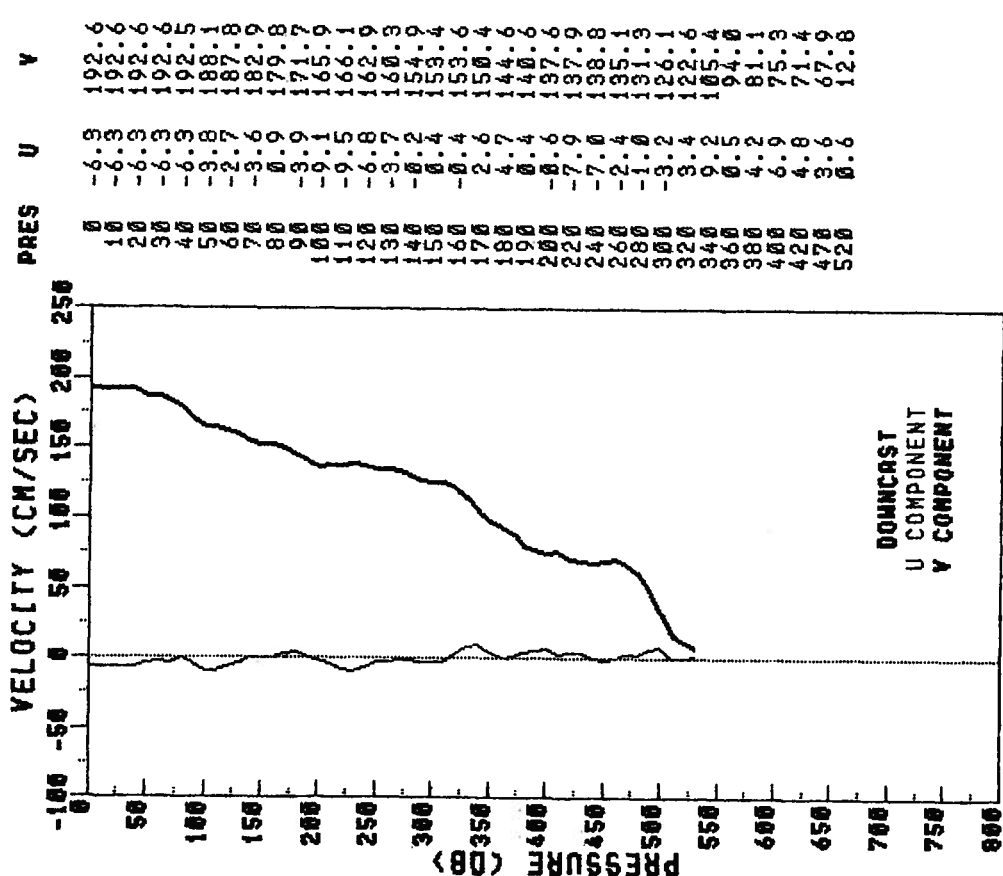
RES-STAC12-83 PEGASUS 064 STN 0
 R/V RESEARCHER JOY 339 TIME 0717Z
 LATITUDE 26.98 N LONGITUDE 79.93 W



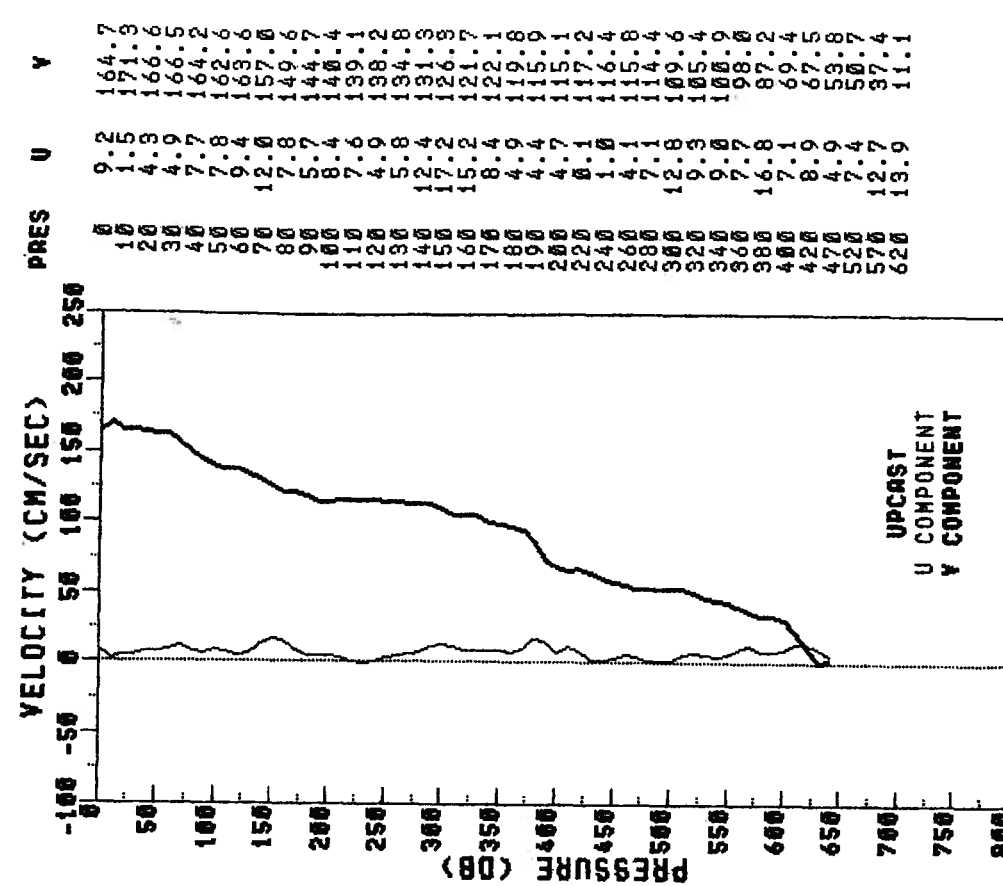
RES-STACS12-83 PEGASUS 065 STN 1
 R/V RESEARCHER JOY 339 TIME 0827Z
 LATITUDE 26.98 N LONGITUDE 79.86 W



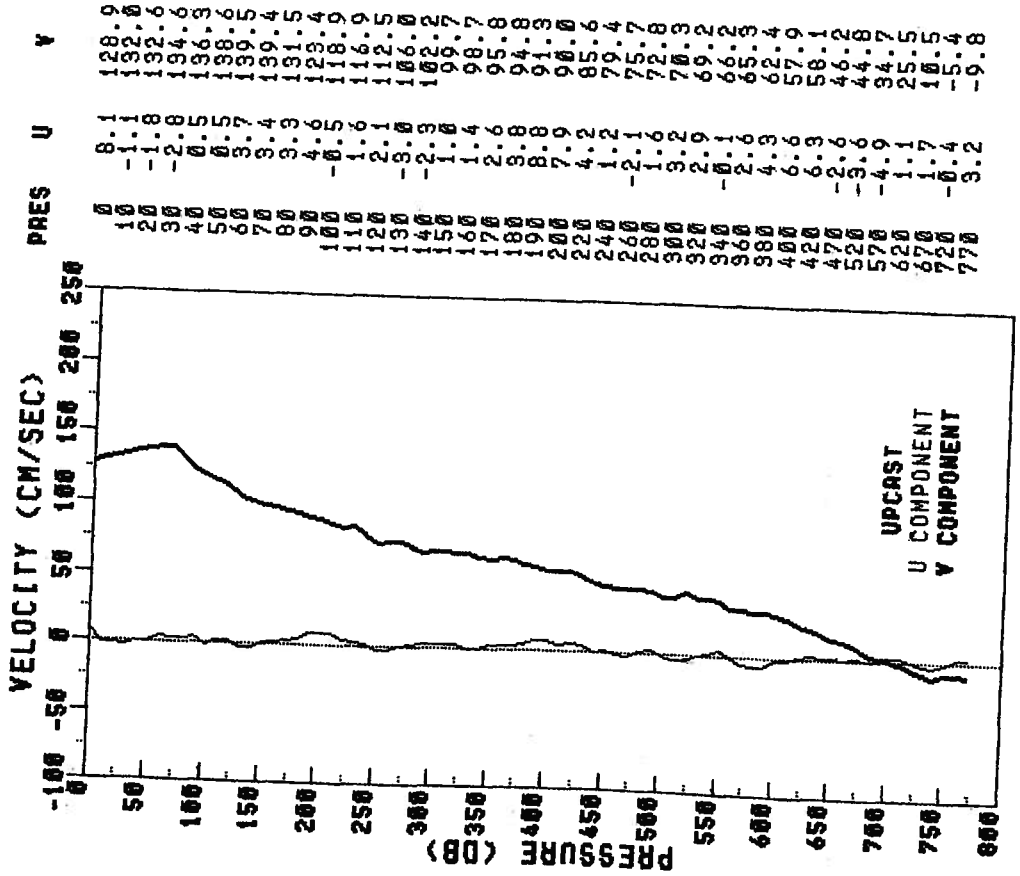
RES-STACS12-83 PEGASUS 067 STN 3
 R/Y RESEARCHER JOY 339 TIME 1127Z
 LATITUDE 26.98 N LONGITUDE 79.67 W



RES-STACS12-83 PEGASUS 068 STN 4
 R/Y RESEARCHER JOY 339 TIME 1318Z
 LATITUDE 26.96 N LONGITUDE 79.61 W

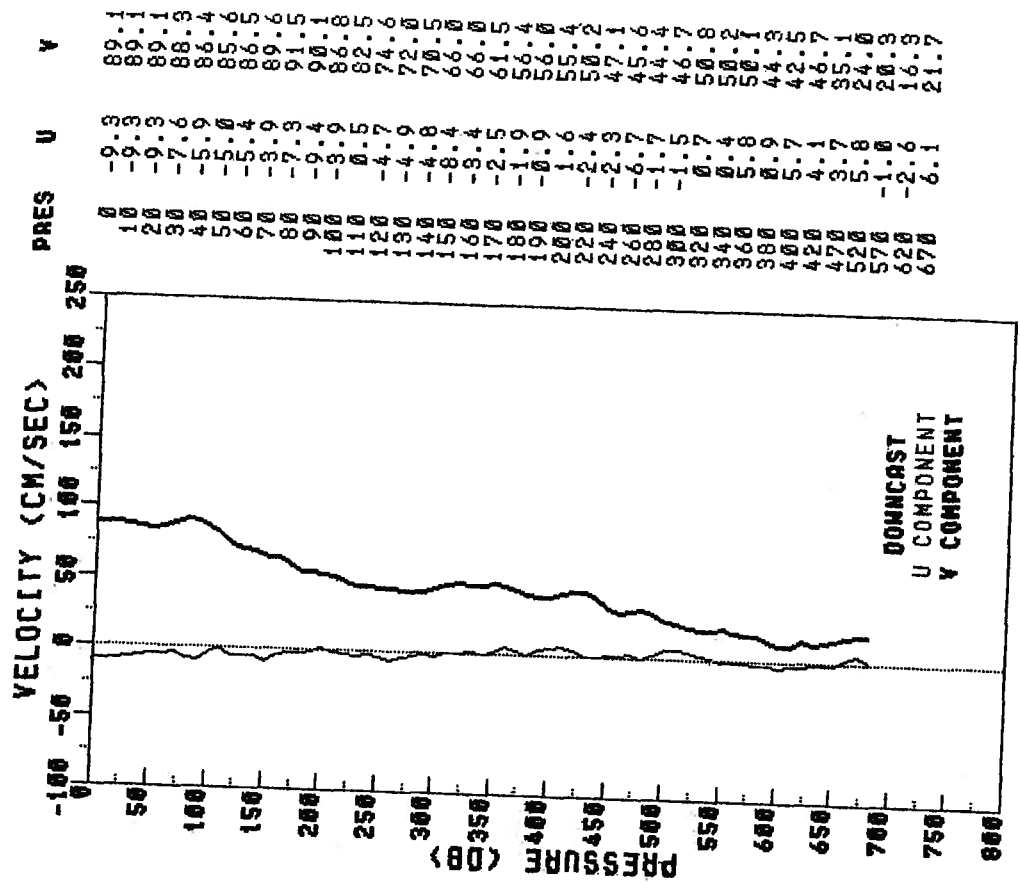


RES-STACS12-83 PEGASUS 069 STN 5
 R/V RESEARCHER JOY 339 TIME 1523Z
 LATITUDE 26.97 N LONGITUDE 79.49 W

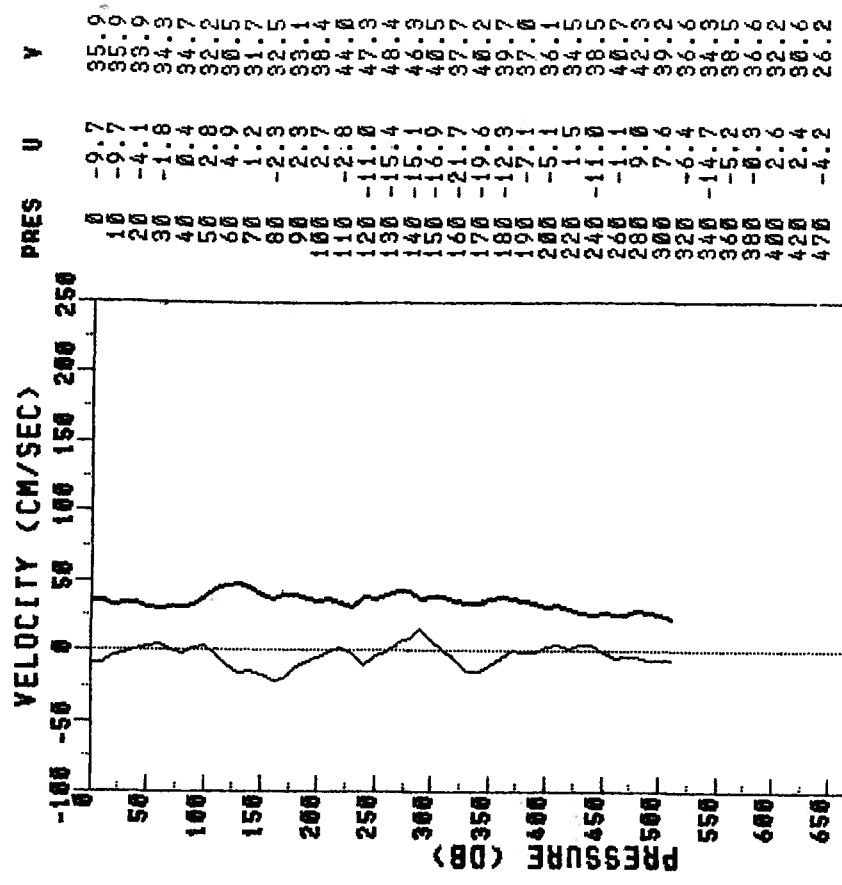


501

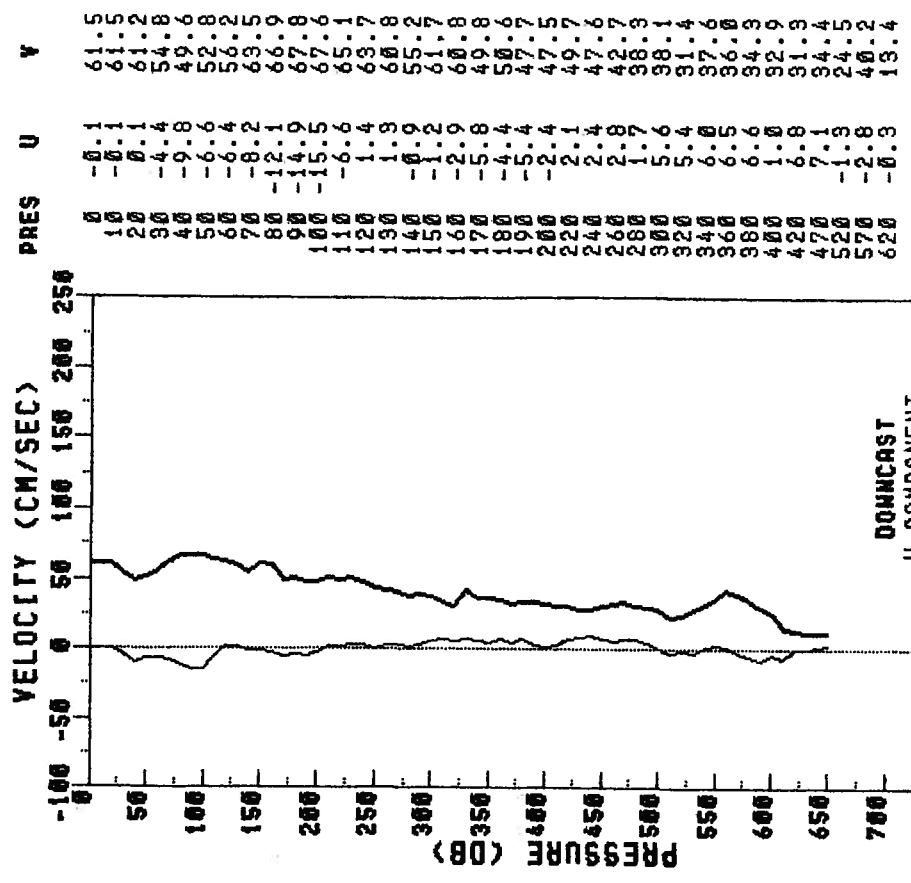
RES-STACS12-83 PEGASUS 070 STN 6
 R/V RESEARCHER JOY 339 TIME 1733Z
 LATITUDE 26.98 N LONGITUDE 79.36 W



RES-STACS12-83 PEGASUS 072 STN 8
 R/V RESEARCHER JDAY 339 TIME 0217Z
 LATITUDE 26.99 N LONGITUDE 79.19 W

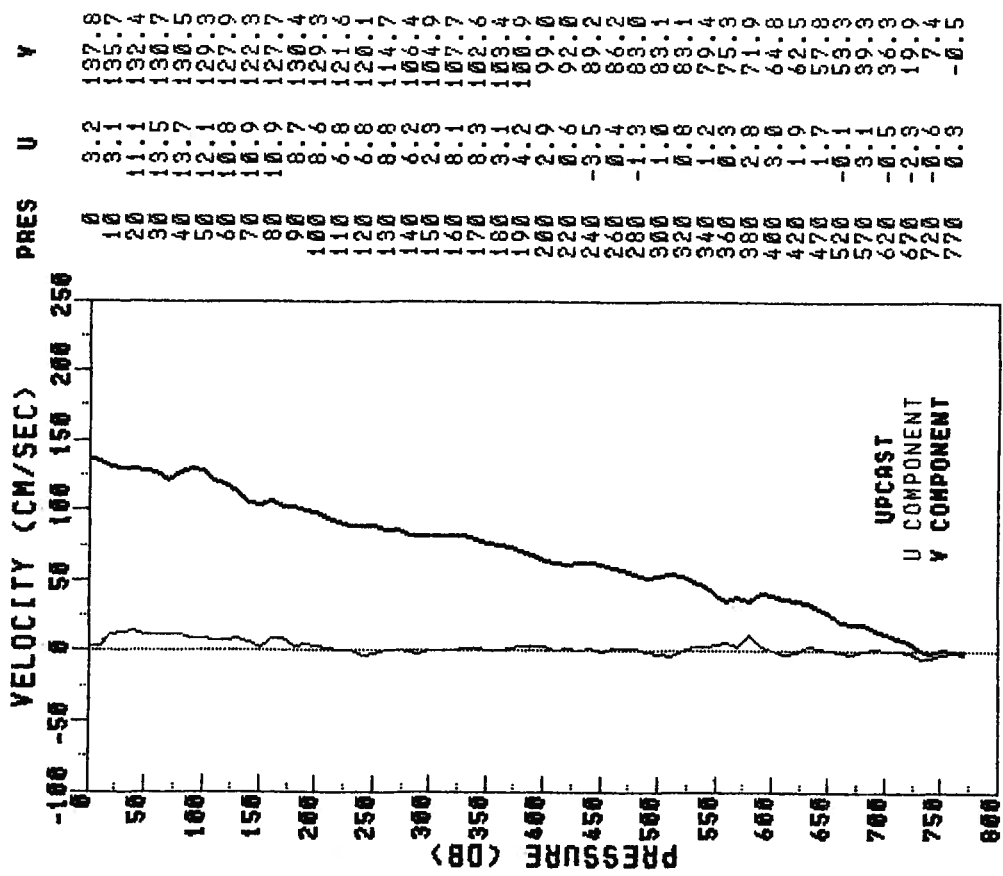
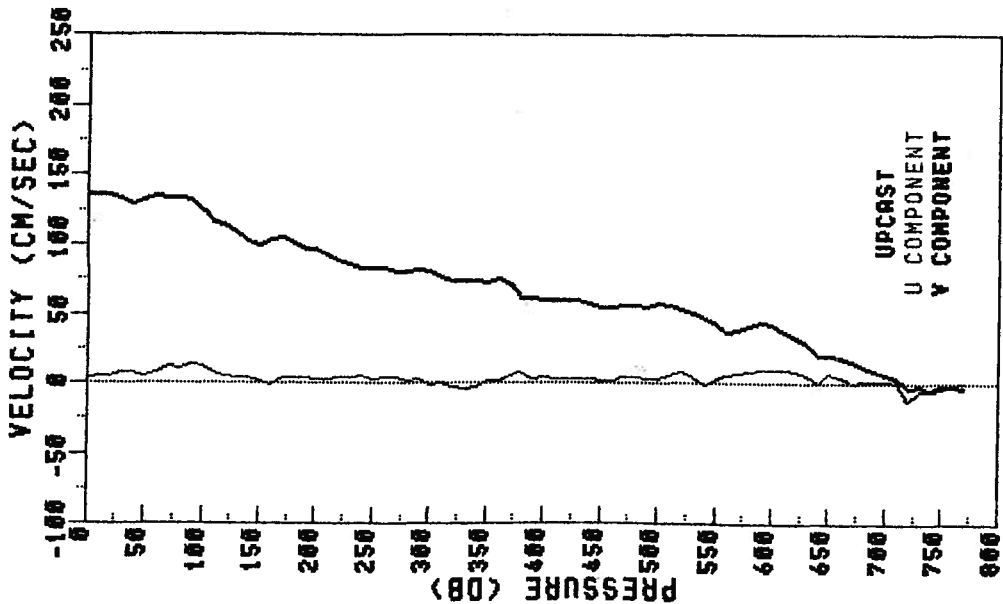


RES-STACS12-83 PEGASUS 071 STN 7
 R/V RESEARCHER JDAY 339 TIME 1917Z
 LATITUDE 26.97 N LONGITUDE 79.28 W

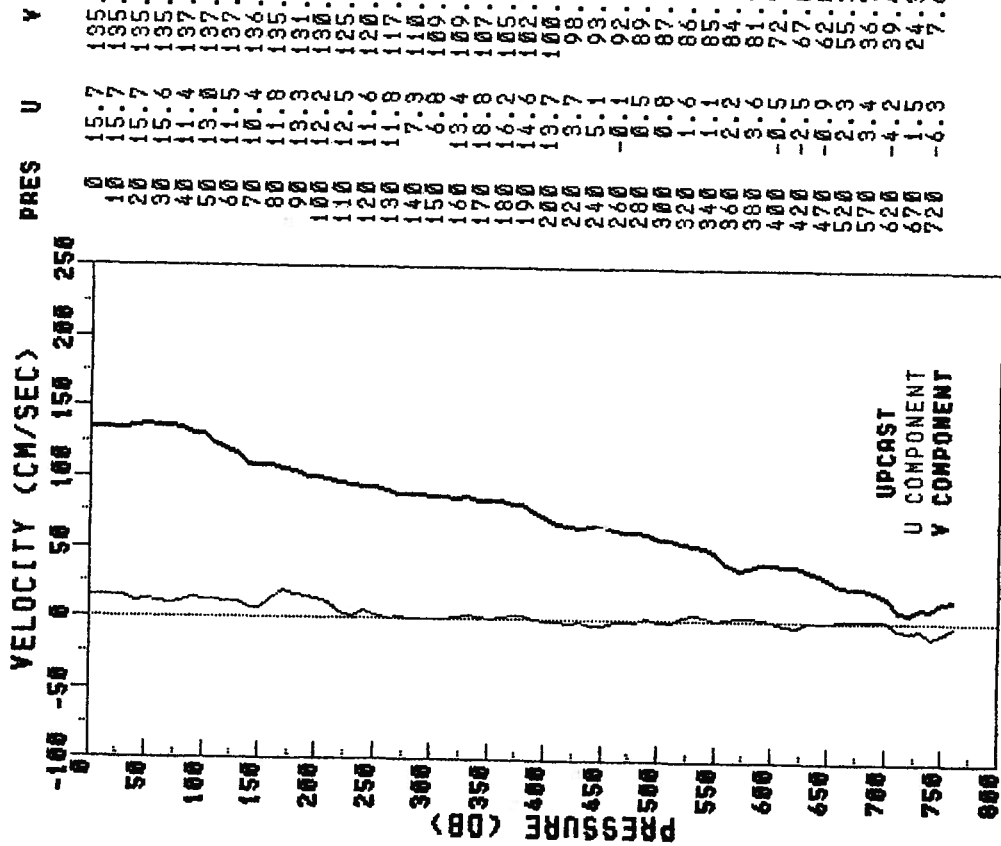


RES-STACS12-83 PEGASUS 073 STN 5
 R/V RESEARCHER JOY 339 TIME 0009Z
 LATITUDE 26.99 N LONGITUDE 79.49 N

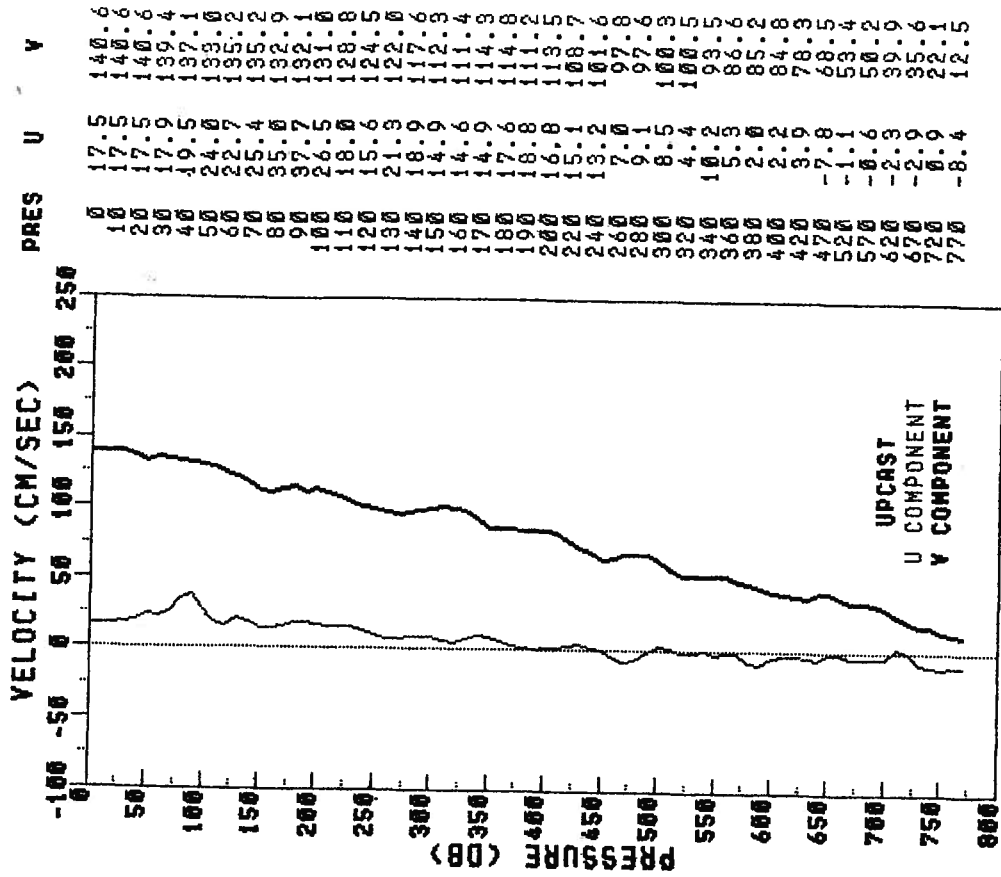
RES-STACS12-83 PEGASUS 074 STN 5
 R/V RESEARCHER JOY 340 TIME 0242Z
 LATITUDE 27.00 N LONGITUDE 79.50 N



RES-STACS12-83 PEGASUS 075 STN 5
 R/Y RESEARCHER JOY 340 TIME 0055Z
 LATITUDE 27.00 N LONGITUDE 79.50 W

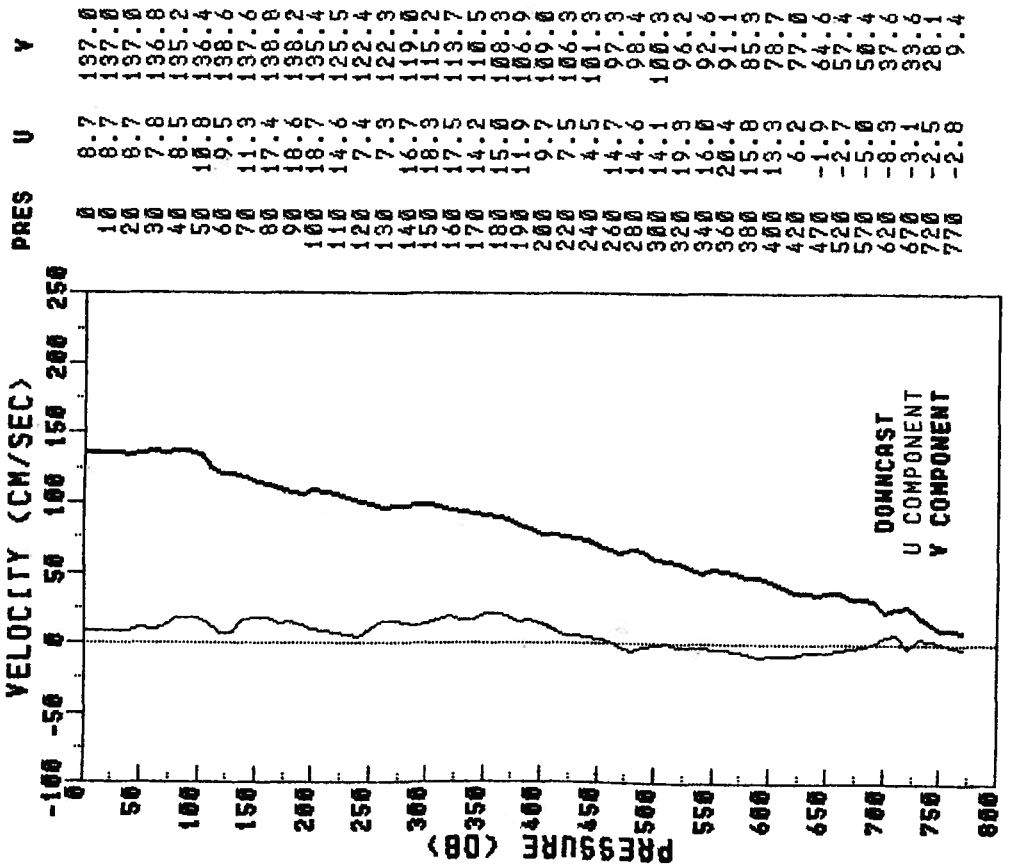
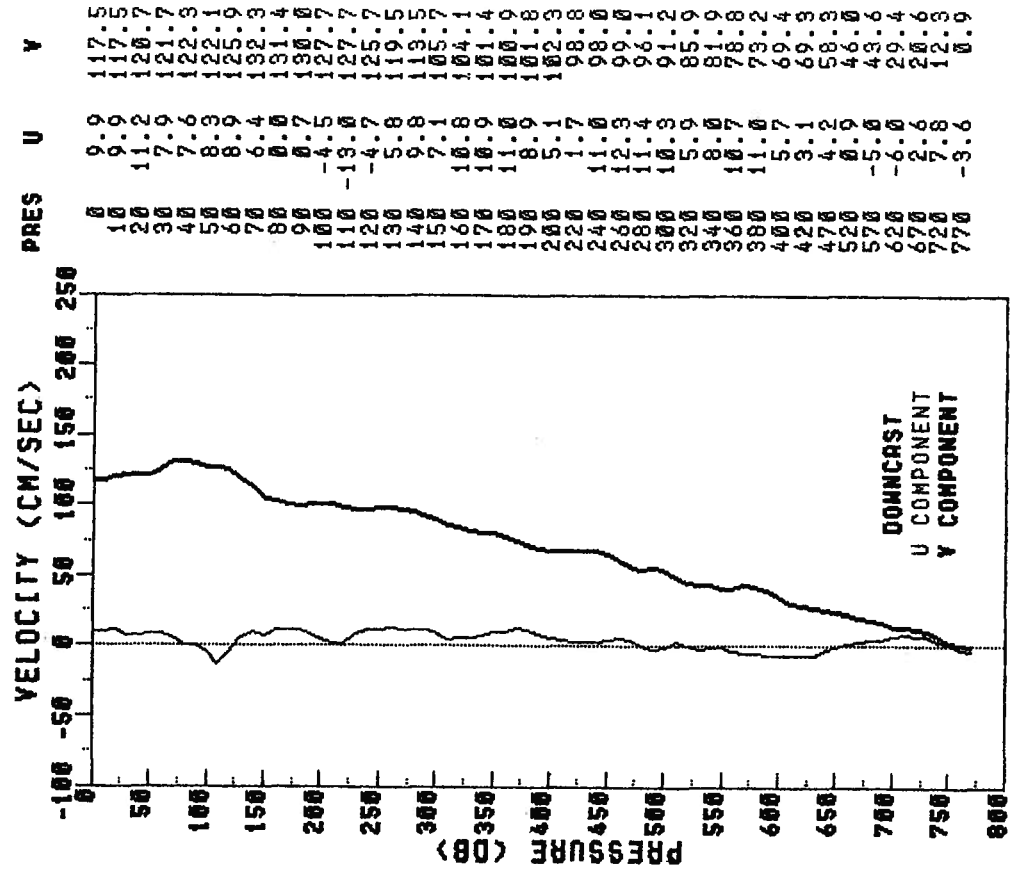


RES-STACS12-83 PEGASUS 076 STN 5
 R/Y RESEARCHER JOY 340 TIME 0749Z
 LATITUDE 26.99 N LONGITUDE 79.50 W

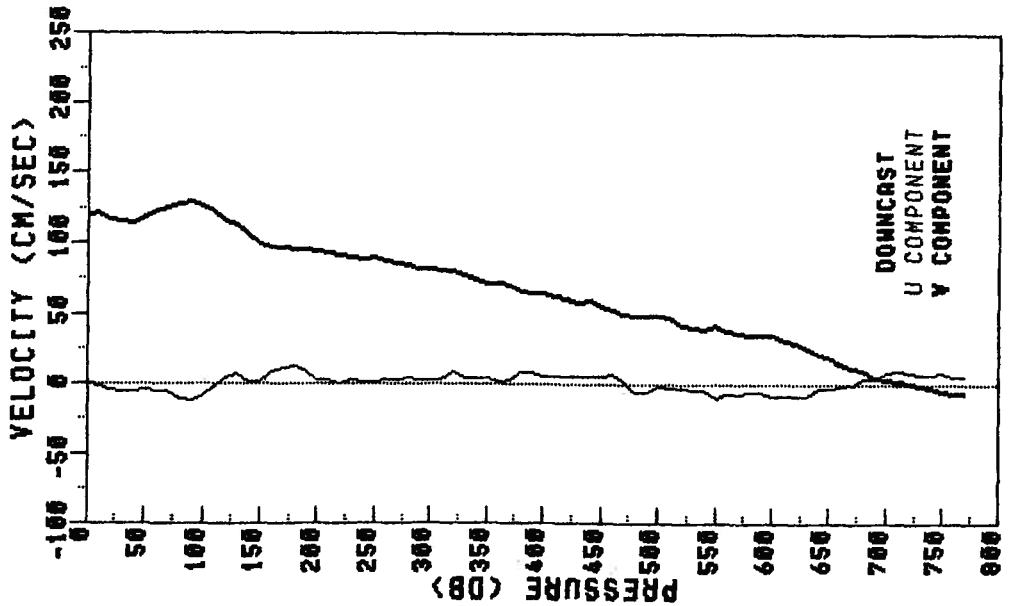


RES-STAC12-83 PEGASUS 078 STN 5
 R/V RESEARCHER JDAY 340 TIME 1242Z
 LATITUDE 27.00 N LONGITUDE 79.50 W

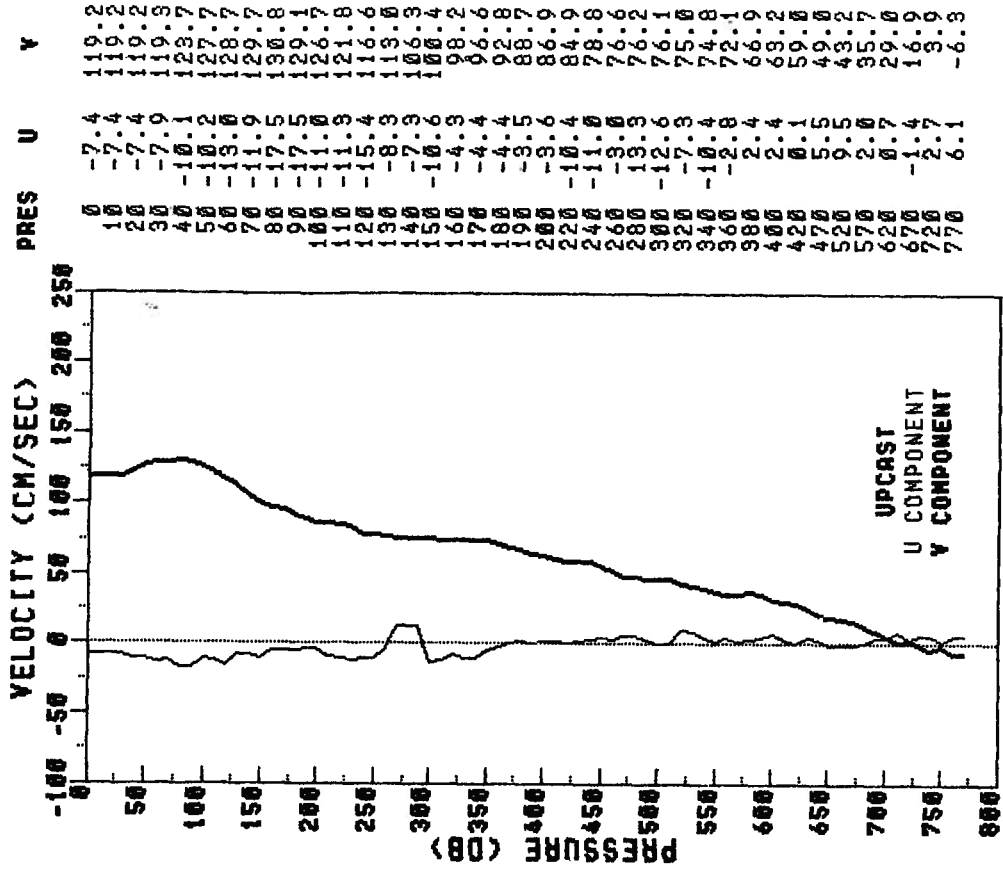
RES-STAC12-83 PEGASUS 077 STN 5
 R/V RESEARCHER JDAY 340 TIME 0109Z
 LATITUDE 27.00 N LONGITUDE 79.50 W



RES-STACS12-83 PEGASUS 079 STN 5
 R/V RESEARCHER JOY 340 TIME 1458Z
 LATITUDE 27.00 N LONGITUDE 79.50 W

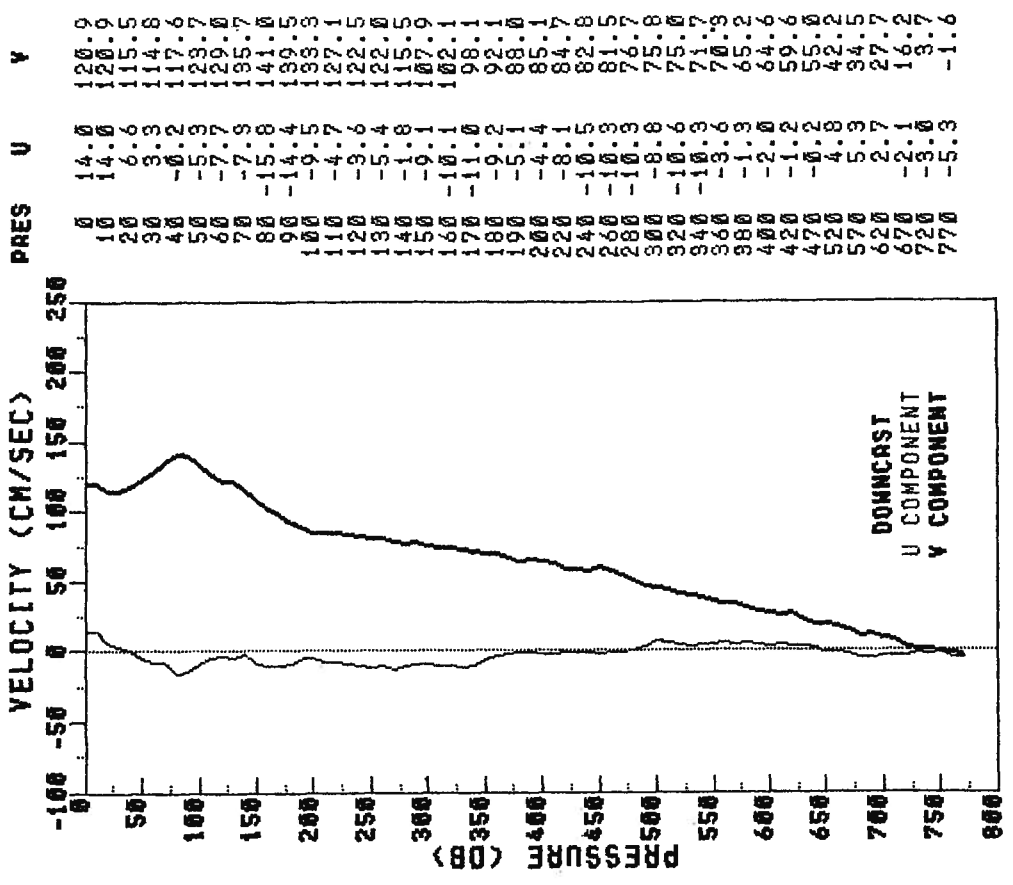
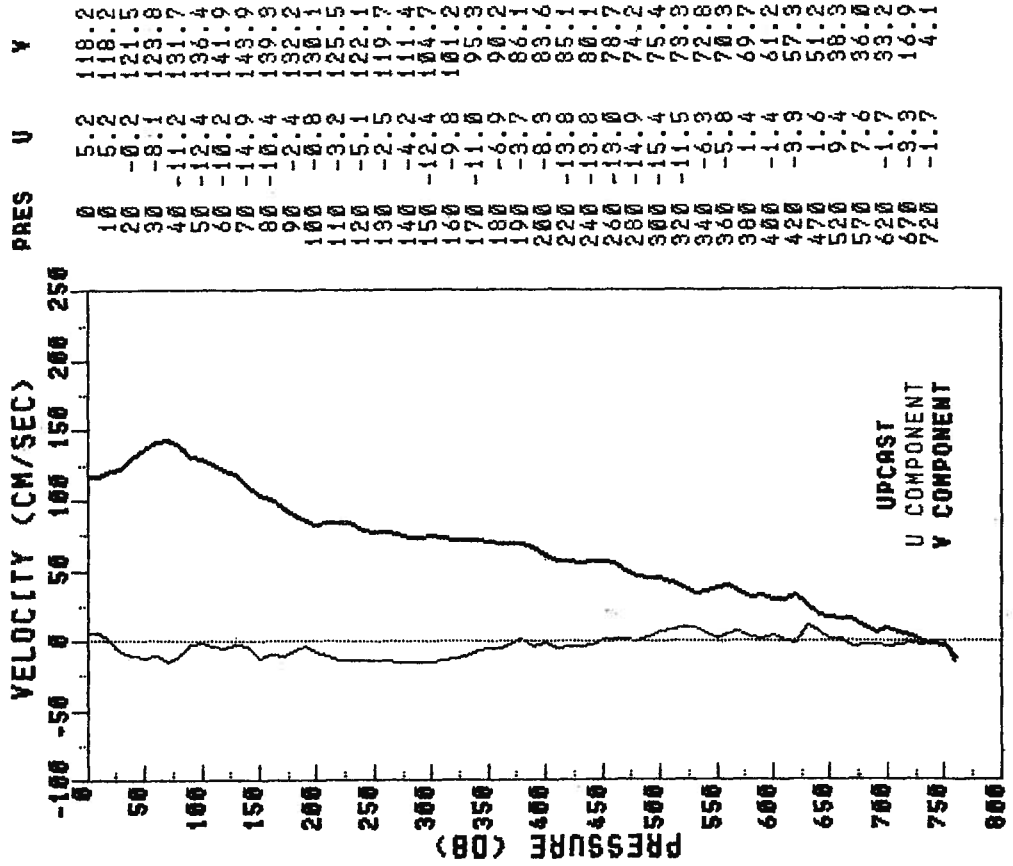


RES-STACS12-83 PEGASUS 081 STN 5
 R/V RESEARCHER JOY 340 TIME 1959Z
 LATITUDE 26.97 N LONGITUDE 79.38 W

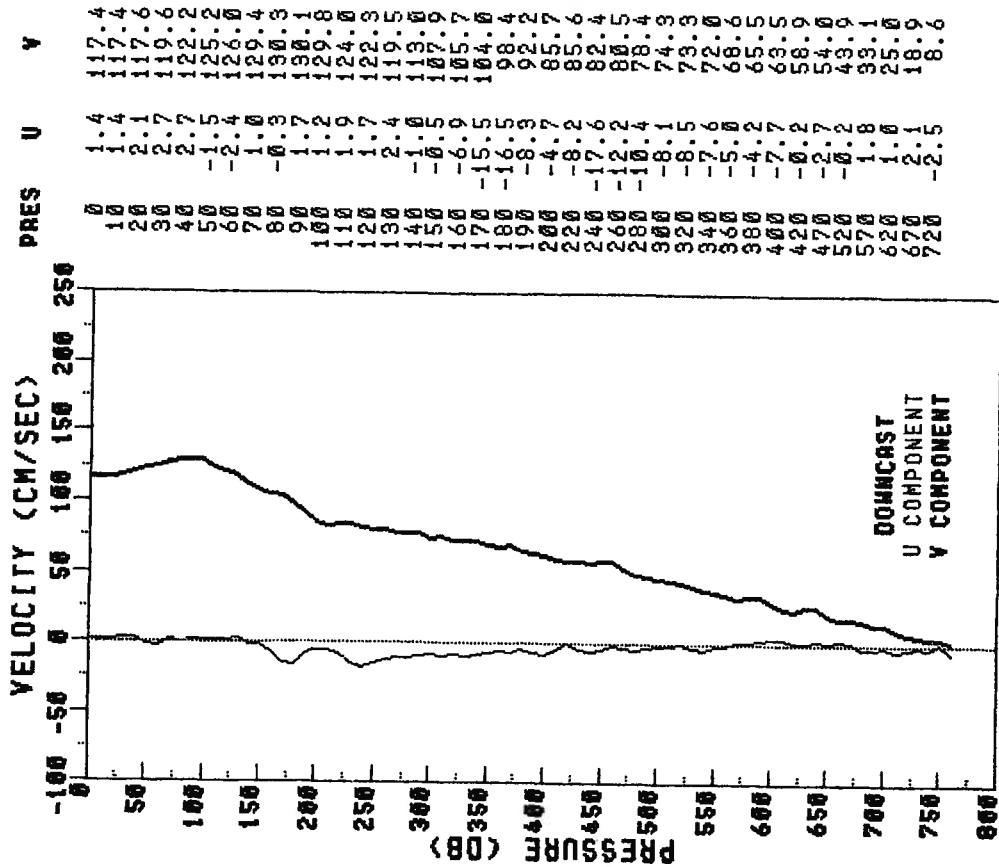


RES-STACS12-83 PEGASUS 082 STN 5
 R/V RESEARCHER JOY 340 TIME 2234Z
 LATITUDE 26.99 N LONGITUDE 79.50 N

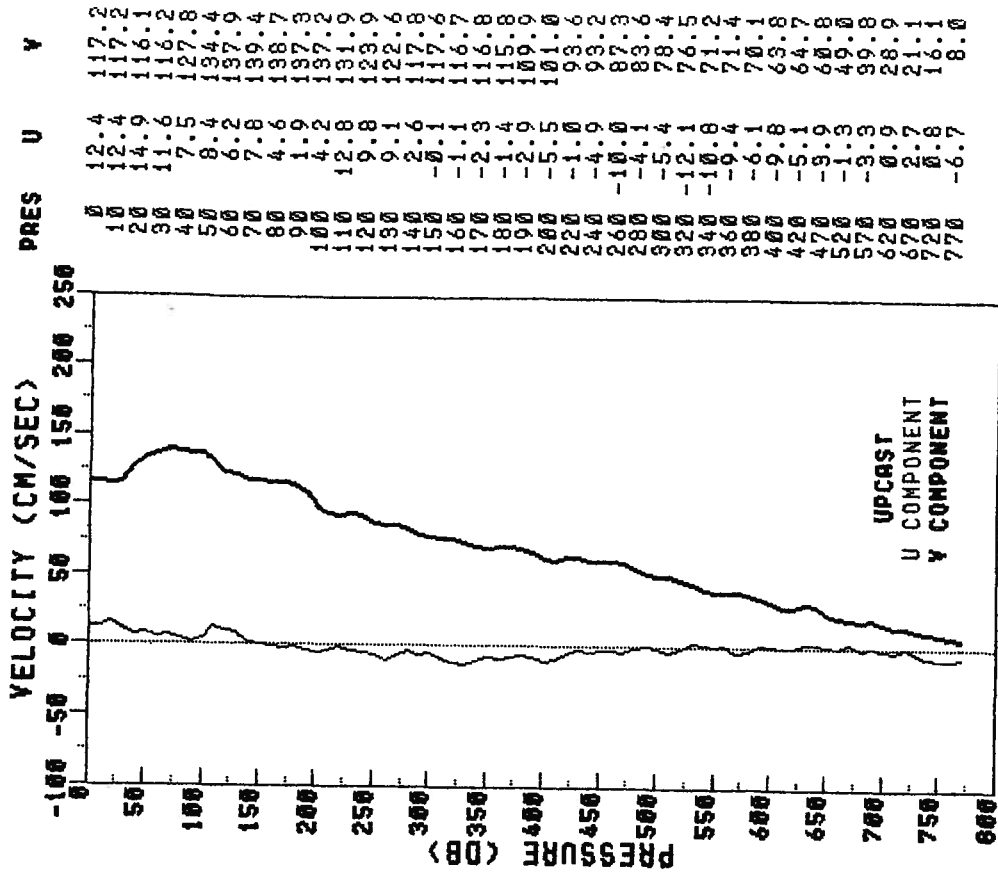
RES-STACS12-83 PEGASUS 083 STN 5
 R/V RESEARCHER JOY 341 TIME 0018Z
 LATITUDE 26.99 N LONGITUDE 79.50 N



RES-STACS12-83 PEGASUS 084 STN 5
 R/V RESEARCHER JOY 341 TIME 0337Z
 LATITUDE 27.00 N LONGITUDE 79.50 W



RES-STACS12-83 PEGASUS 085 STN 5
 R/V RESEARCHER JOY 341 TIME 0610Z
 LATITUDE 27.00 N LONGITUDE 79.51 W



STN 5

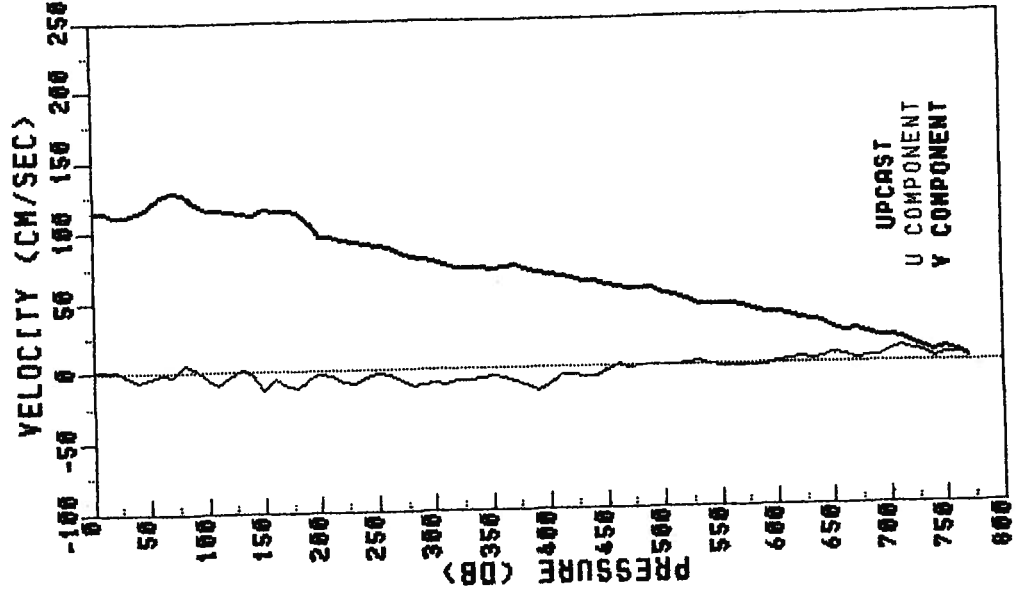
PEGASUS 087

RES-STACS12-83

R/Y RESEARCHER JDAY 341 TIME 1117Z

LATITUDE 26.97 N LONGITUDE 79.49 N

PRES	U	V
0	2.5	115.4
10	2.4	115.8
20	2.4	112.3
30	-2.8	113.3
40	-6.4	115.4
50	-3.1	119.6
60	-1.2	126.5
70	-2.1	129.1
80	6.0	127.1
90	2.3	121.1
100	4.7	117.2
110	-9.7	116.9
120	-4.2	114.4
130	2.6	114.4
140	-2.8	112.3
150	-12.0	117.3
160	-4.3	115.0
170	-10.2	113.9
180	-12.4	115.6
190	-4.4	1105.6
200	-1.7	96.8
220	-7.7	93.3
240	-4.9	87.8
260	-3.6	80.0
280	-11.4	80.0
300	-9.3	79.7
320	-7.9	72.7
340	-6.9	72.7
360	-6.9	73.2
380	-11.6	72.2
400	-11.3	67.1
420	-4.6	64.5
440	-0.3	57.1
470	-2.4	48.7
520	-0.3	42.7
570	-4.4	33.9
620	8.7	24.8
670	9.4	14.8
720	4.1	4.9
770		



STN 5

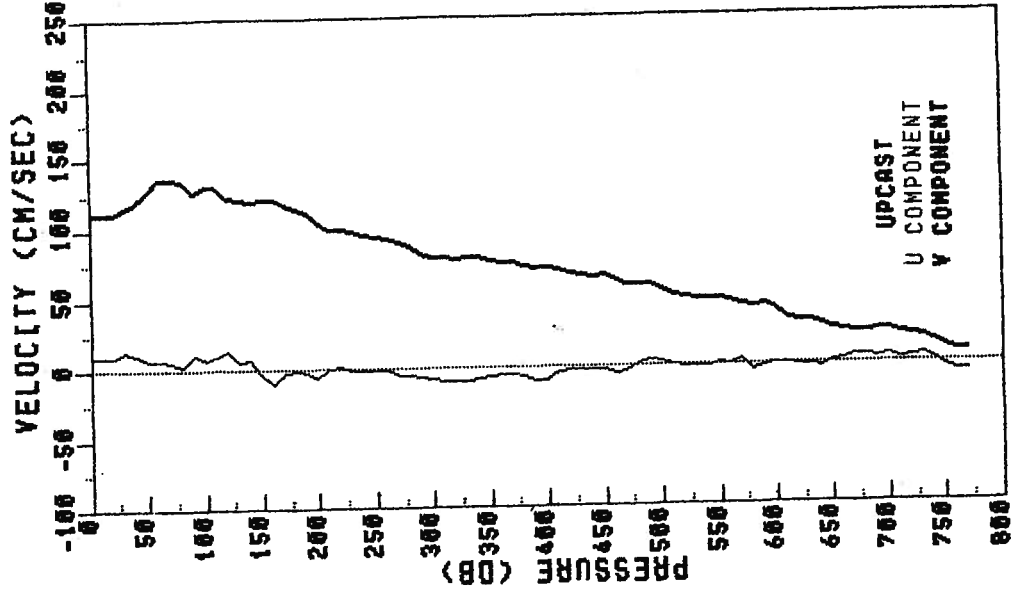
PEGASUS 086

RES-STACS12-83

R/Y RESEARCHER JDAY 341 TIME 0830Z

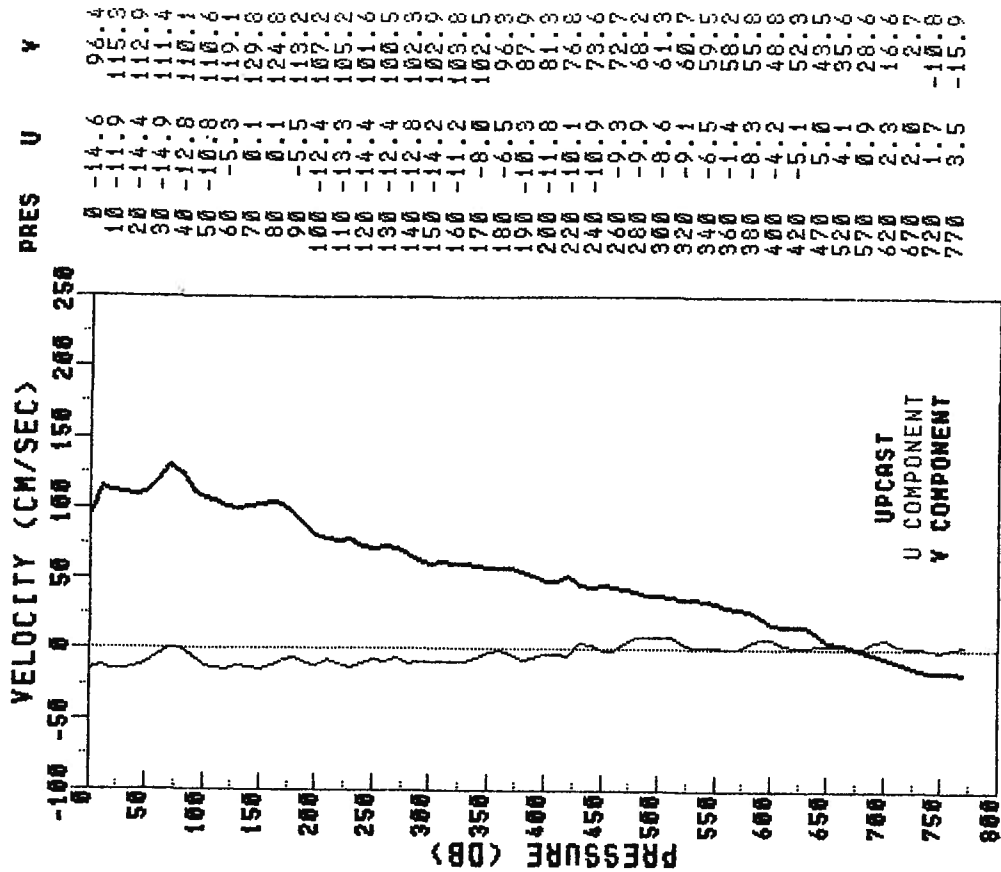
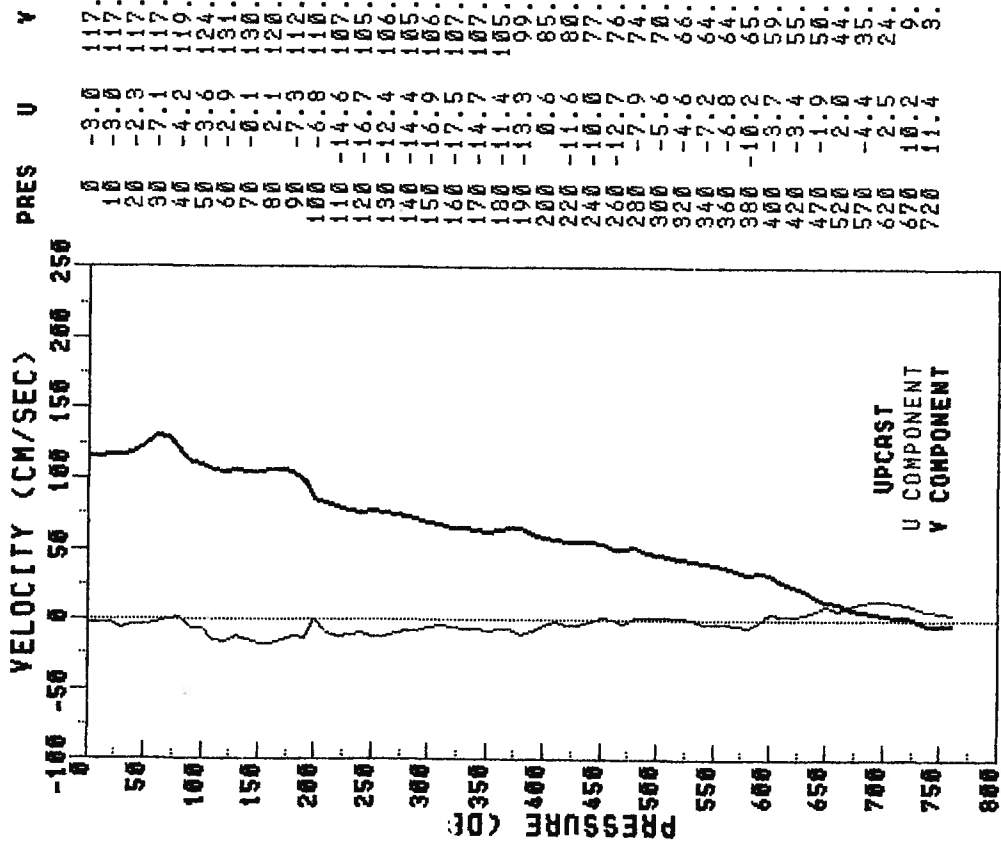
LATITUDE 26.99 N LONGITUDE 79.51 N

PRES	U	V
0	10.4	112.8
10	10.2	112.9
20	14.1	116.0
30	11.5	120.1
40	6.5	127.0
50	7.1	136.8
60	5.9	137.5
70	2.6	135.1
80	11.5	126.9
90	17.0	131.4
100	10.1	132.7
110	14.0	128.7
120	5.9	121.9
130	7.7	120.3
140	3.4	122.4
150	-8.4	117.6
160	-10.6	115.1
170	-2.1	112.4
180	-1.3	114.3
190	-1.9	105.3
200	-6.2	99.7
220	2.2	95.7
240	-0.7	92.6
260	-1.0	87.2
280	-4.2	87.2
300	-8.8	79.2
320	-8.8	78.5
340	-8.3	80.1
360	-5.8	76.0
380	-6.8	72.7
400	-8.9	71.0
420	-2.1	67.7
440	-4.3	58.2
470	-1.3	49.2
520	-3.8	43.4
570	-1.2	31.5
620	6.0	23.4
670	6.7	21.9
720	3.7	
770	-5.6	



RES-STAC12-83 PEGASUS 088 STN 5
 R/V RESEARCHER JDAY 341 TIME 1326Z
 LATITUDE 26.99 N LONGITUDE 79.51 W

RES-STAC12-83 PEGASUS 089 STN 5
 R/V RESEARCHER JDAY 341 TIME 0160Z
 LATITUDE 27.00 N LONGITUDE 79.50 W

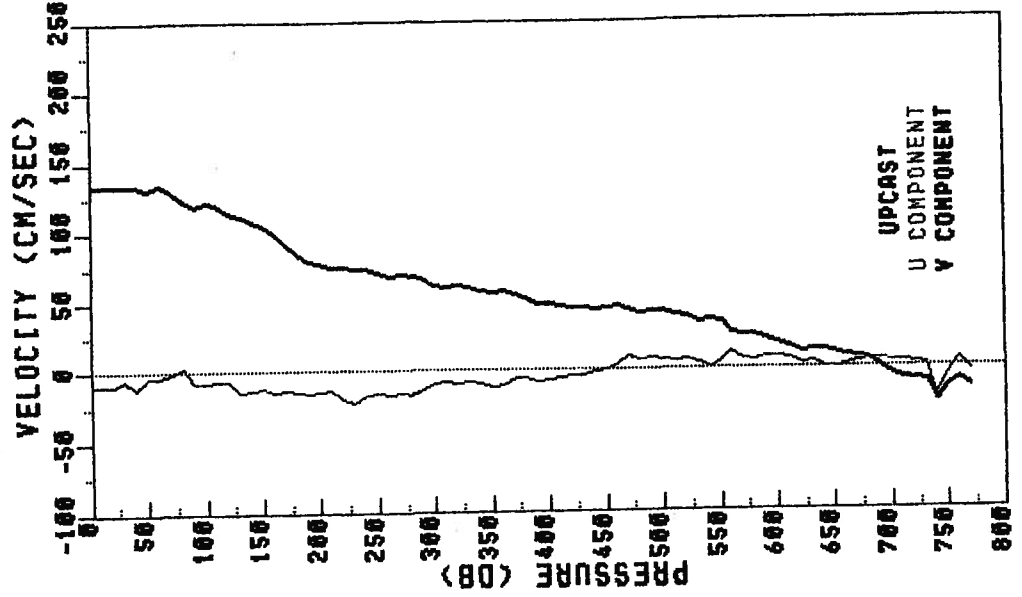


RES-STACS12-83 PEGASUS 091 STN 5

R/V RESEARCHER JOY 341 TIME 0212Z

LATITUDE 27.00 N LONGITUDE 79.51 W

PRES	U	V
0	0	0
10	-8.6	134.3
20	-8.9	134.8
30	-4.9	134.0
40	-11.2	134.2
50	-4.1	131.9
60	-3.9	134.4
70	-0.6	129.2
80	2.3	120.8
90	-7.3	121.0
100	-6.4	121.0
110	-6.4	114.9
120	-14.4	112.4
130	-19.4	109.2
140	-11.2	105.8
150	-14.9	100.0
160	-14.8	92.8
170	-14.2	88.3
180	-16.2	80.2
190	-15.1	78.6
200	-20.6	73.8
220	-17.0	68.7
240	-16.7	68.4
260	-17.0	63.7
280	-9.2	61.7
300	-8.5	62.7
320	-10.5	57.3
340	-15.0	52.2
360	-6.2	48.1
400	-3.6	46.1
420	0.9	44.5
440	7.4	38.9
460	7.4	24.2
480	3.6	19.2
500	4.9	8.2
520	3.4	0.2
540	3.4	0.2
560	3.4	0.2
580	3.4	0.2
600	3.4	0.2
620	3.4	0.2
640	3.4	0.2
660	3.4	0.2
680	3.4	0.2
700	3.4	0.2
720	3.4	0.2
740	3.4	0.2
760	3.4	0.2
780	3.4	0.2
800	3.4	0.2

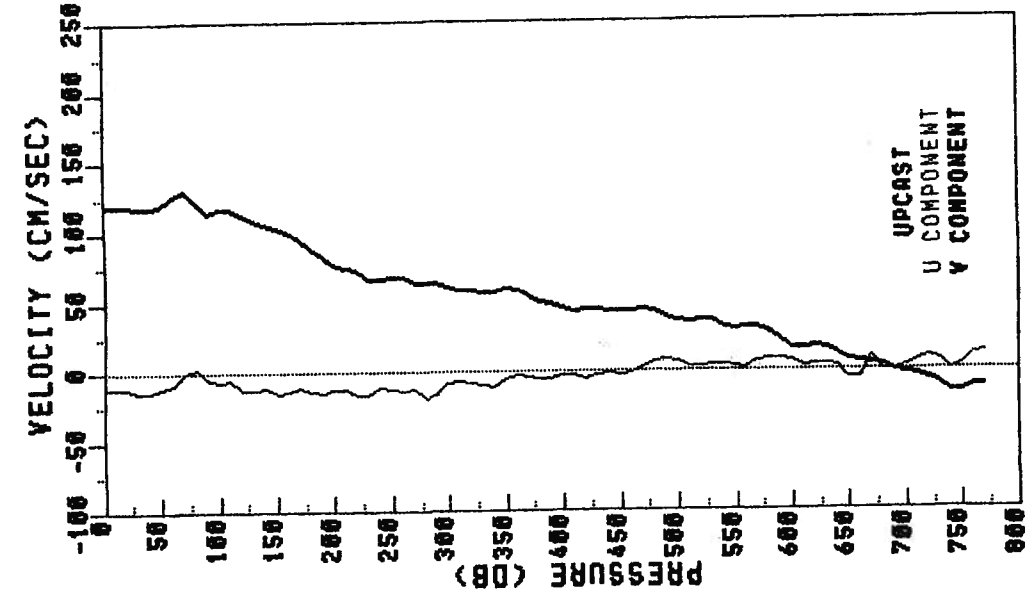


RES-STACS12-83 PEGASUS 090 STN 5

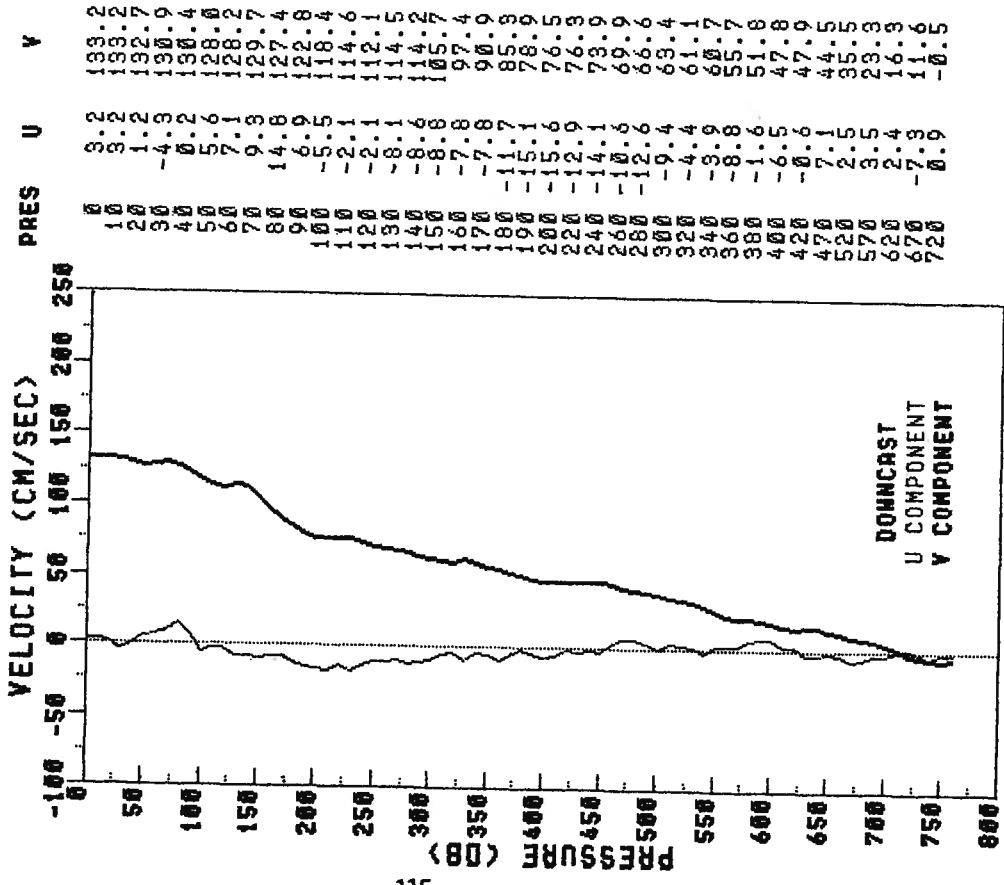
R/V RESEARCHER JOY 341 TIME 1848Z

LATITUDE 27.00 N LONGITUDE 79.51 W

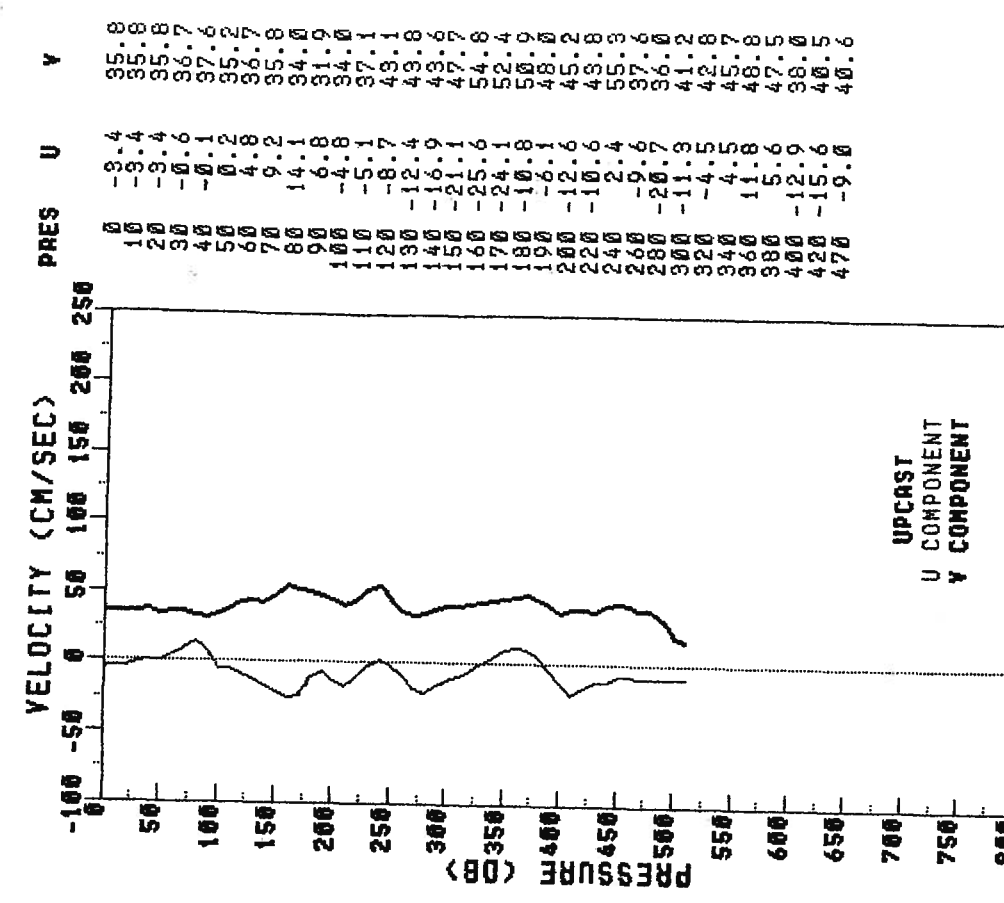
PRES	U	V
0	0	0
10	-10.9	120.5
20	-10.7	120.5
30	-12.8	119.9
40	-13.6	119.1
50	-10.9	120.4
60	-10.4	127.4
70	-0.4	121.6
80	2.9	122.8
90	-5.7	114.7
100	-6.6	117.8
110	-5.2	118.1
120	-11.4	114.4
130	-11.5	109.4
140	-15.4	107.0
150	-13.9	103.6
160	-13.9	101.0
170	-10.4	95.7
180	-12.4	89.1
190	-14.6	83.2
200	-16.0	78.9
220	-10.8	66.9
240	-12.4	64.0
260	-18.4	61.1
280	-8.5	58.3
300	-10.1	55.9
320	-2.4	50.3
340	-4.7	47.0
360	-2.5	45.5
380	3.4	44.7
400	3.4	44.7
420	3.4	37.0
440	3.4	32.1
460	3.4	18.1
480	3.4	15.6
500	10.4	-5.6
520	12.2	-10.9



RES-STAC12-83 PEGASUS 092 STN 5
 R/V RESEARCHER JDAY 341 TIME 2331Z
 LATITUDE 26.98 N LONGITUDE 79.49 W

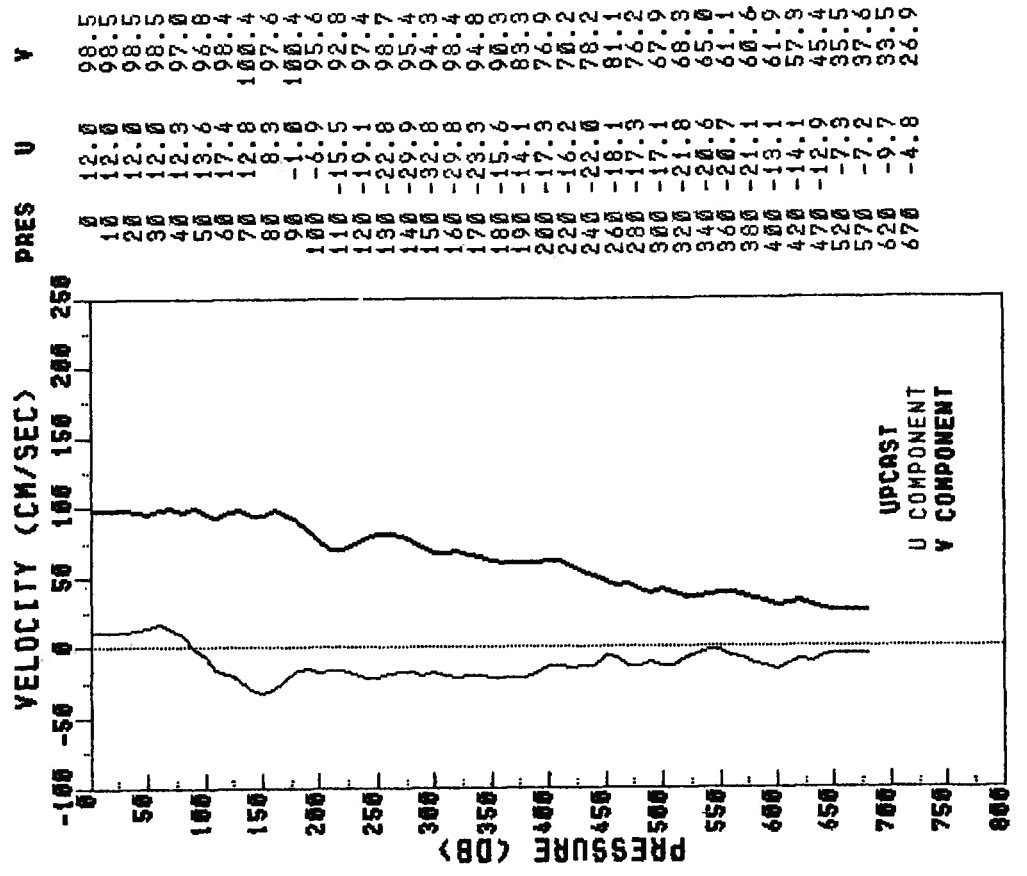
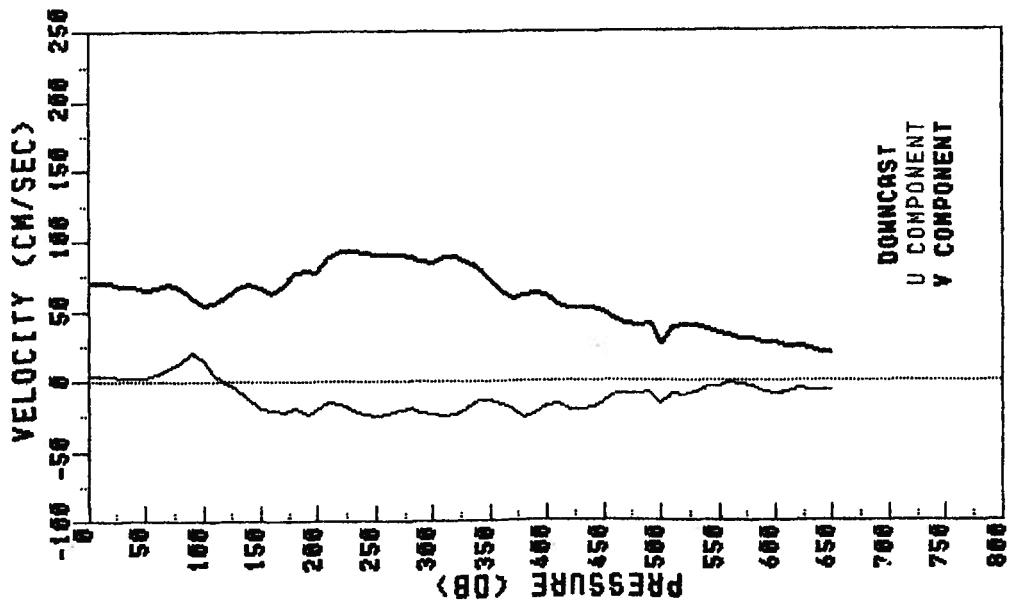


RES-STAC12-83 PEGASUS 093 STN 8
 R/V RESEARCHER JDAY 342 TIME 0221Z
 LATITUDE 26.99 N LONGITUDE 79.19 W



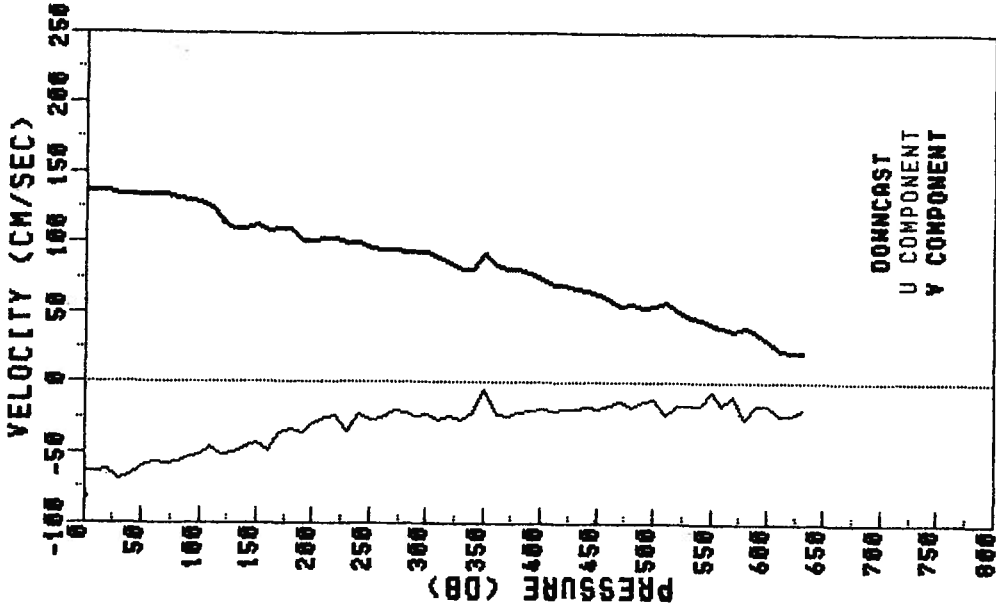
RES-STACS12-83 PEGASUS 094 STN 7
 R/Y RESEARCHER JOY 342 TIME 0348Z
 LATITUDE 26.98 N LONGITUDE 79.28 W

RES-STACS12-83 PEGASUS 095 STN 6
 R/Y RESEARCHER JOY 342 TIME 0532Z
 LATITUDE 26.98 N LONGITUDE 79.36 W



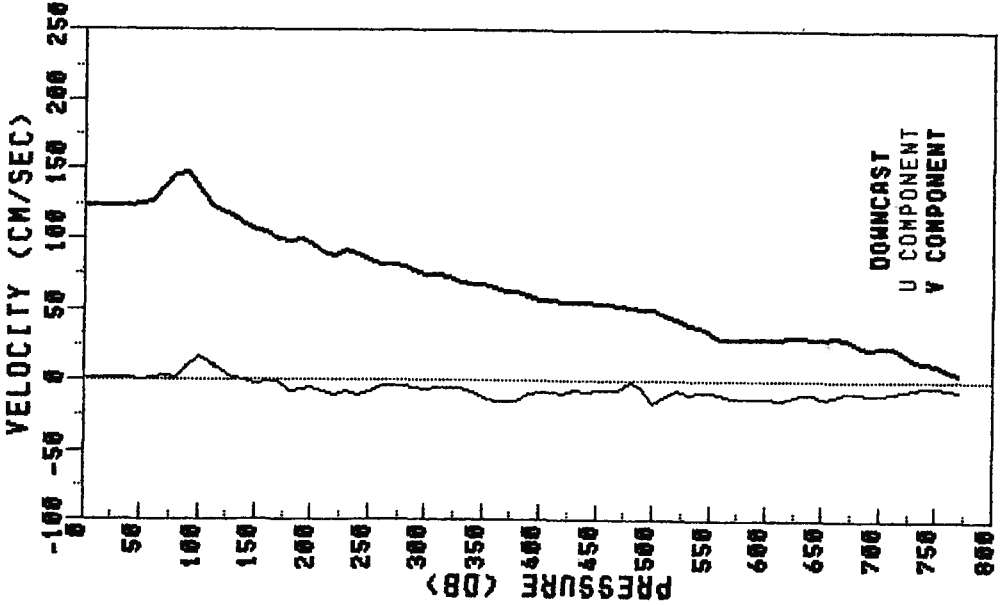
RES-STAC12-83 PEGASUS 097 STN 4
 R/V RESEARCHER JOY 342 TIME 1023Z
 LATITUDE 26.96 N LONGITUDE 79.61 N

PRES	U	V
0	-63.2	137.4
10	-62.2	137.4
20	-62.5	137.4
30	-67.1	134.4
40	-69.3	134.3
50	-59.6	134.8
60	-56.9	134.4
70	-57.5	132.1
80	-53.4	130.6
90	-50.9	129.4
100	-45.5	125.2
110	-52.1	115.3
120	-50.4	109.3
130	-45.7	110.0
140	-48.6	108.3
150	-36.7	110.2
160	-35.7	109.4
170	-29.3	101.1
180	-24.8	103.1
190	-22.2	100.9
200	-25.2	95.3
220	-23.3	94.0
240	-23.9	85.2
260	-21.0	80.4
280	-23.5	81.2
300	-18.9	74.5
320	-18.5	70.6
340	-13.5	55.3
360	-13.0	51.3
380	-16.0	38.0
400	-19.6	21.9
420	-22.2	
440		
460		
480		
500		
520		
540		
560		
580		
600		
620		
640		
660		
680		
700		
720		
740		
760		
780		
800		



RES-STAC12-83 PEGASUS 096 STN 5
 R/V RESEARCHER JOY 342 TIME 0757Z
 LATITUDE 26.99 N LONGITUDE 79.49 N

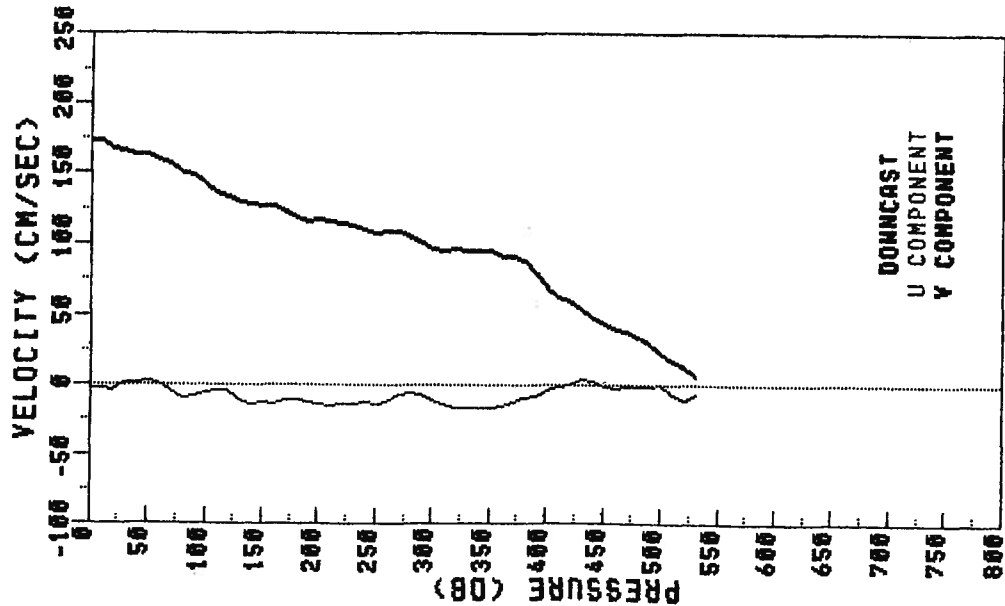
PRES	U	V
0	2.1	125.0
10	2.1	125.0
20	2.1	125.0
30	1.8	125.0
40	0.9	125.9
50	1.8	128.0
60	2.6	137.0
70	2.1	147.1
80	9.3	148.0
90	16.6	136.0
100	13.1	126.2
110	6.9	121.5
120	1.7	111.0
130	0.2	106.7
140	-3.0	105.5
150	-0.8	100.3
160	-1.7	98.9
170	-7.7	99.0
180	-6.5	96.8
190	-4.8	87.7
200	-10.5	89.2
220	-3.7	82.7
240	-7.0	80.5
260	-5.3	75.8
280	-8.5	73.2
300	-14.3	68.2
320	-14.6	65.8
340	-17.7	63.1
360	-9.0	58.2
380	-6.6	56.9
400	-6.5	53.3
420	-11.6	30.0
440	-8.6	30.8
460	-7.6	25.7
480	-6.3	25.7
500		
520		
540		
560		
580		
600		
620		
640		
660		
680		
700		
720		
740		
760		
780		
800		



RES-STACS12-83 PEGASUS 098 STN 3

R/Y RESEARCHER JOY 342 TIME 0130Z

LATITUDE 26.98 N LONGITUDE 79.66 W

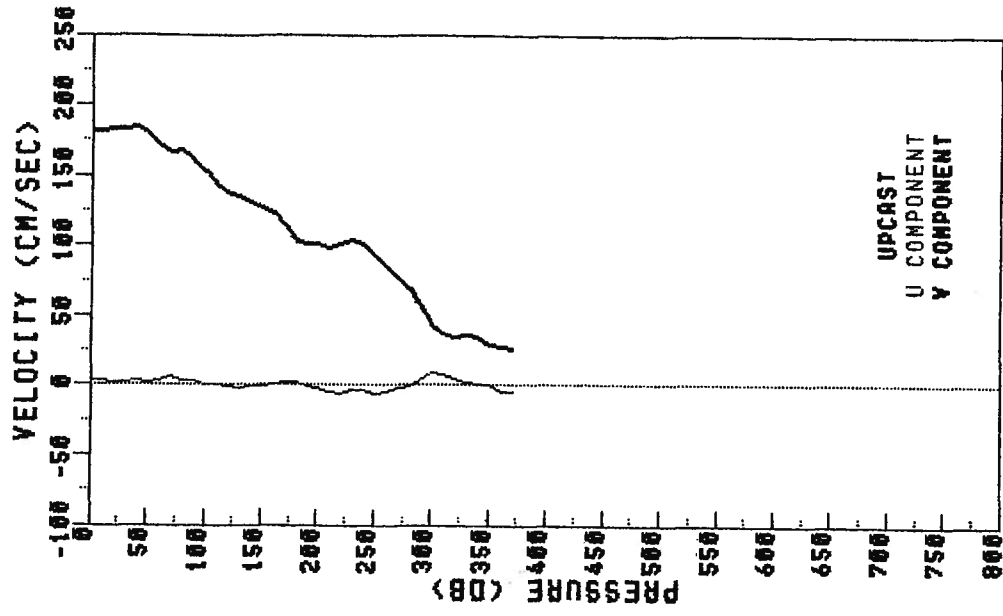


PRES	U	V
0	2.8	7.7
10	-2.8	173.7
20	-3.6	168.8
30	1.1	167.2
40	1.0	164.2
50	2.5	164.7
60	1.4	160.6
70	-3.2	157.3
80	-9.4	151.0
90	-8.6	149.2
100	-4.9	142.3
110	-3.8	137.2
120	-3.9	133.7
130	-10.0	130.3
140	-9.1	128.4
150	-12.0	127.6
160	-13.8	126.9
170	-11.0	123.9
180	-10.4	119.3
190	-12.2	117.1
200	-14.1	118.1
220	-13.9	115.5
240	-11.9	111.1
260	-12.4	109.8
280	-4.6	105.2
300	-10.4	97.5
320	-15.6	96.6
340	-15.8	96.0
360	-15.3	91.6
380	-8.8	89.5
400	-4.0	89.6
420	-0.8	60.8
470	-0.5	60.8
520	-10.2	38.8

RES-STACS12-83 PEGASUS 099 STN 2

R/Y RESEARCHER JOY 342 TIME 0159Z

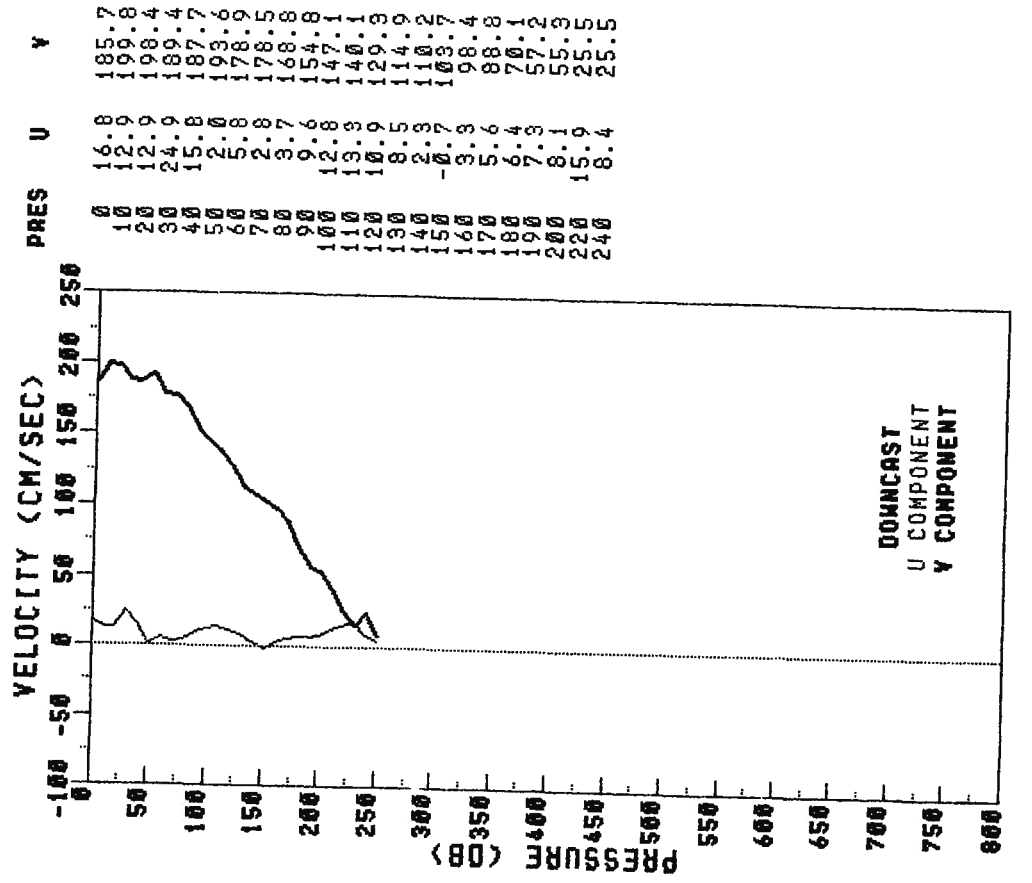
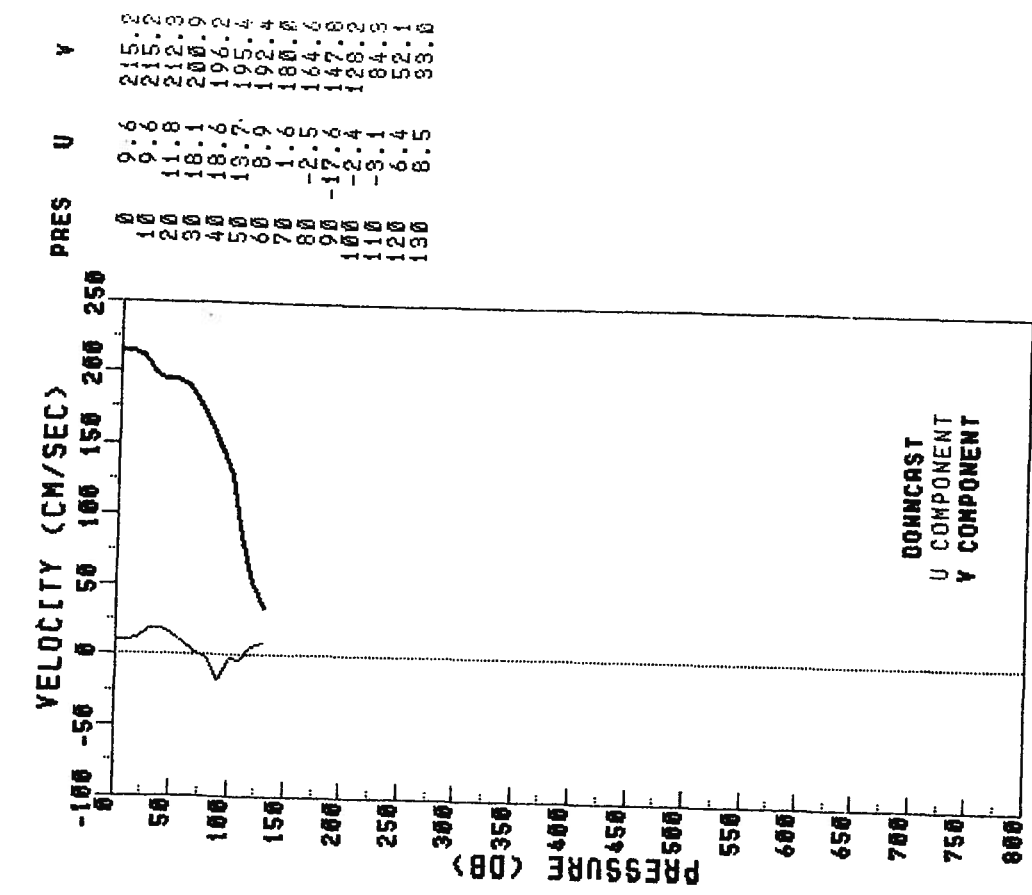
LATITUDE 26.97 N LONGITUDE 79.78 W



PRES	U	V
0	3.3	0.0
10	3.3	182.0
20	1.8	183.5
30	3.0	183.1
40	1.6	185.1
50	3.6	181.6
60	5.7	173.1
70	5.5	167.4
80	3.2	168.5
90	0.3	161.8
100	0.3	153.8
110	0.3	145.8
120	-2.2	138.2
130	-0.7	135.7
140	-1.3	131.4
150	-0.3	127.8
160	0.4	123.8
170	1.8	119.7
180	1.5	103.4
190	-0.3	101.6
200	-1.9	102.5
220	-4.1	101.0
240	-5.3	85.4
260	-1.2	69.4
280	4.2	44.9
300	0.5	35.0
320	0.5	35.0
340	0.5	34.7
360	0.5	27.0

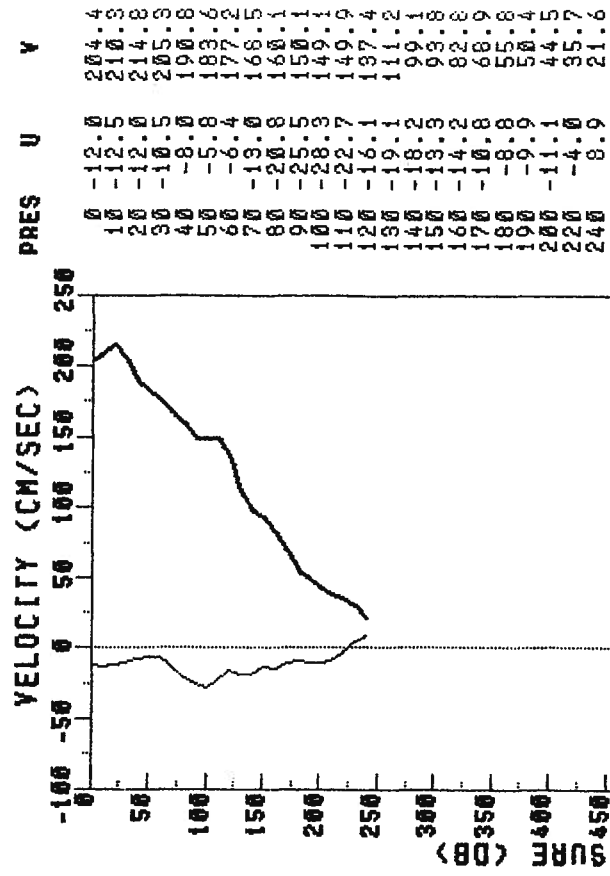
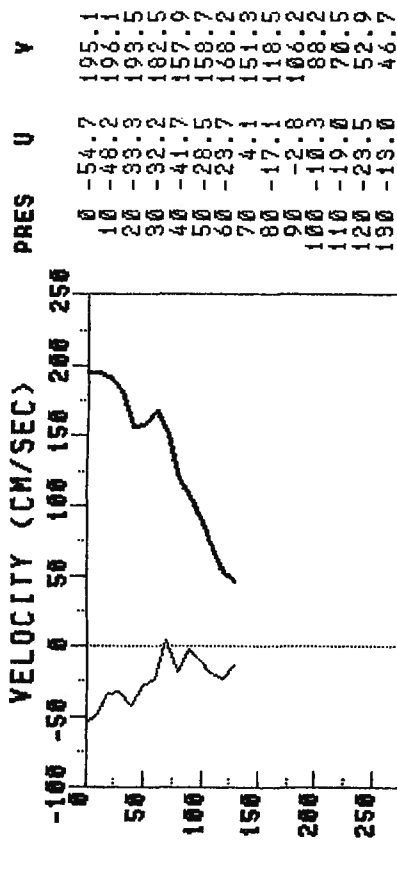
RES-STACS12-83 PEGASUS 101 STN 0
 R/V RESEARCHER JOY 342 TIME 1746Z
 LATITUDE 26.99 N LONGITUDE 79.93 W

RES-STACS12-83 PEGASUS 100 STN 1
 R/V RESEARCHER JOY 342 TIME 1652Z
 LATITUDE 26.98 N LONGITUDE 79.86 W



RES-STACS12-83 PEGASUS 102 STN 0
 R/V RESEARCHER JDAY 343 TIME 1335Z
 LATITUDE 26.99 N LONGITUDE 79.93 W

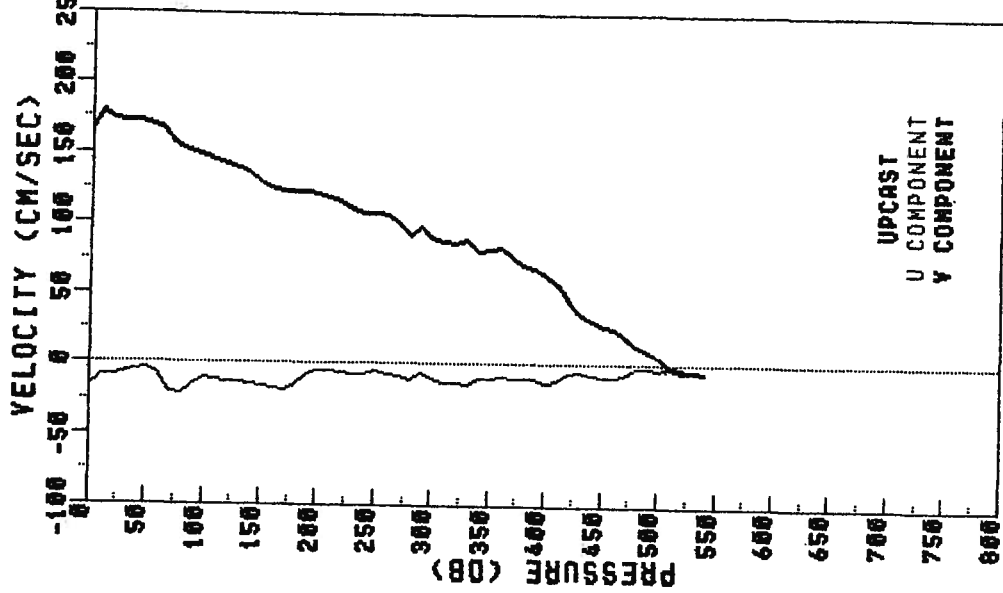
RES-STACS12-83 PEGASUS 103 STN 1
 R/V RESEARCHER JDAY 343 TIME 1445Z
 LATITUDE 26.98 N LONGITUDE 79.86 W



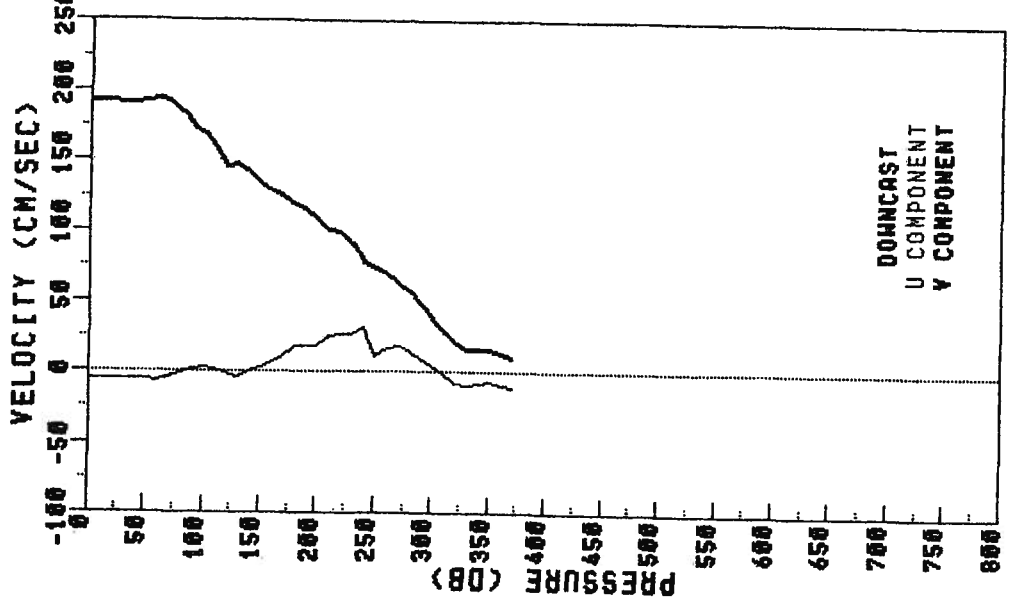
RES-STAC12-83 PEGASUS 105 STN 3
 R/Y RESEARCHER JDAY 343 TIME 1735Z
 LATITUDE 26.98 N LONGITUDE 79.67 W

RES-STAC12-83 PEGASUS 104 STN 2
 R/Y RESEARCHER JDAY 343 TIME 0169Z
 LATITUDE 26.97 N LONGITUDE 79.78 W

PRES	U	V
0	-16.1	167.9
10	-9.4	179.0
20	-8.4	173.8
30	-7.8	173.1
40	-5.0	172.7
50	-3.3	171.9
60	-7.9	168.1
70	-19.7	158.7
80	-21.0	154.3
90	-14.8	150.6
100	-10.2	148.4
110	-11.7	144.9
120	-11.8	142.4
130	-13.1	139.5
140	-14.8	135.8
150	-16.1	129.0
160	-17.6	124.9
170	-18.5	122.2
180	-15.3	124.2
190	-7.3	124.6
200	-4.9	121.6
220	-5.7	116.2
240	-7.2	108.6
260	-7.1	106.6
280	-11.9	101.9
300	-10.6	90.9
320	-12.7	86.8
340	-10.2	80.7
360	-19.4	83.8
380	-10.1	71.8
400	-12.9	64.3
420	-6.9	46.1
470	-6.6	21.1
520	-2.1	-3.9

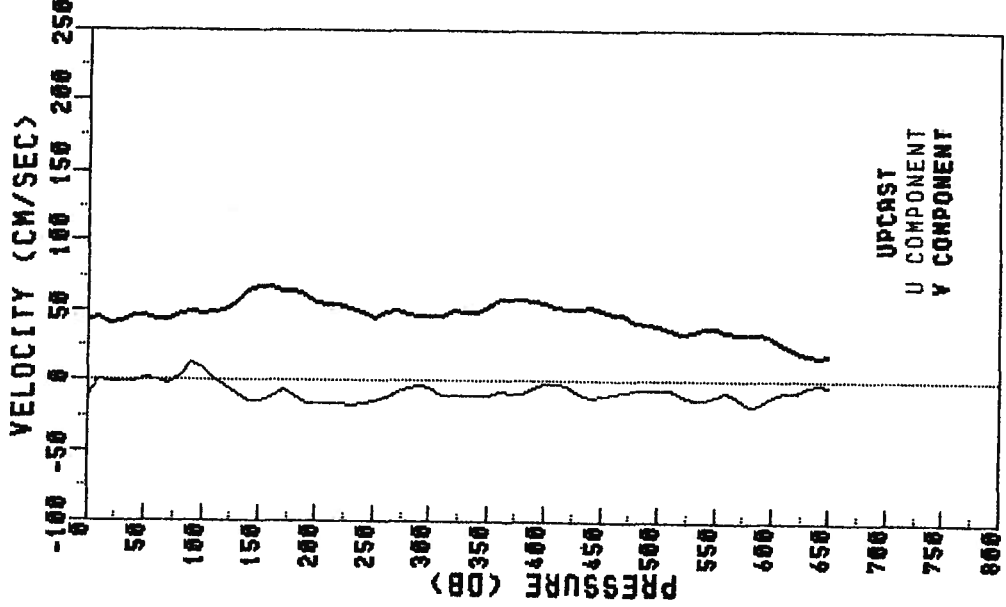


PRES	U	V
0	2.6	192.6
10	2.2	192.6
20	5.3	192.1
30	5.3	192.0
40	4.9	192.9
50	5.1	194.7
60	6.3	192.5
70	3.5	184.1
80	1.3	175.6
90	2.4	169.7
100	2.1	160.5
110	-1.1	146.0
120	-4.0	148.3
130	0.5	134.8
140	7.5	128.9
150	11.9	125.0
160	17.5	115.2
170	17.5	109.1
180	26.8	100.1
190	31.8	78.2
200	17.3	69.6
220	14.1	55.8
240	4.7	38.8
260	-8.3	22.3
280	-7.8	16.7
300	-8.0	14.6



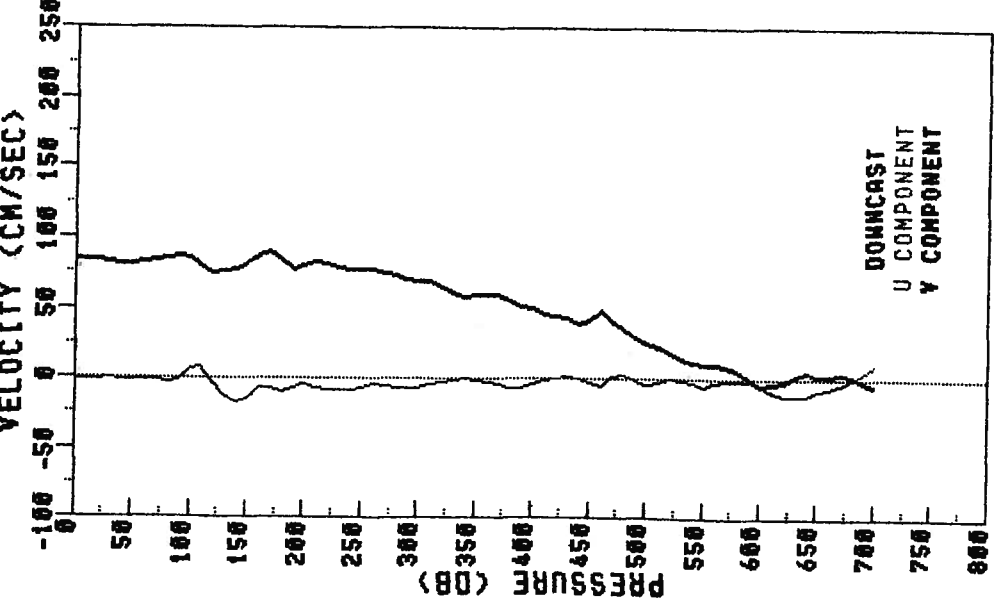
RES-STAC12-83 PEGASUS 109 STN 7
 R/V RESEARCHER JOY 344 TIME 0117Z
 LATITUDE 26.98 N LONGITUDE 79.28 W

PRES	U	V
0	-10.6	44.9
10	-11.1	45.9
20	-11.4	41.3
30	-12.9	42.4
40	-0.2	47.2
50	1.9	47.2
60	0.5	44.8
70	-2.4	44.8
80	-2.0	48.4
90	12.9	48.1
100	12.9	50.7
110	1.3	49.6
120	-3.0	51.3
130	-9.3	56.0
140	-14.0	65.5
150	-13.0	67.4
160	-11.7	65.4
170	-10.4	64.7
180	-16.2	62.2
190	-16.0	56.1
200	-16.9	54.9
220	-15.2	49.1
240	-11.0	49.4
260	-5.4	49.0
280	-4.8	46.5
300	-10.2	50.5
320	-10.2	49.7
340	-7.6	58.9
360	-8.5	57.0
380	-3.2	52.6
400	-9.2	47.8
420	-7.6	35.2
470	-10.4	34.2
520	-11.7	22.0
570	-11.7	22.0
620	-17.6	



RES-STAC12-83 PEGASUS 108 STN 6
 R/V RESEARCHER JOY 344 TIME 9999Z
 LATITUDE 26.98 N LONGITUDE 79.36 W

PRES	U	V
0	-1.0	84.5
10	-1.0	84.5
20	0.1	84.3
30	0.8	82.7
40	-0.7	83.6
50	-1.7	83.2
60	-1.7	84.6
70	-2.0	85.8
80	-0.5	87.3
90	6.4	86.1
100	8.3	81.2
110	-2.3	76.1
120	-12.3	77.0
130	-18.1	78.1
140	-14.2	82.3
150	-6.2	87.1
160	-6.1	90.8
170	-7.0	78.1
180	-4.5	80.7
190	-8.1	82.1
200	-4.4	78.1
220	-4.6	74.4
240	-5.2	69.6
260	-1.9	66.9
280	0.9	59.8
300	0.0	60.8
320	-0.2	55.7
340	0.3	50.5
360	0.0	45.3
380	2.1	42.0
400	0.3	19.3
420	-0.3	10.3
470	-1.4	10.7
520	-1.4	-4.9
570	-12.4	
620	-4.2	



RES-STAC12-83

PEGASUS 110

STN 8

R/V RESEARCHER

JDAY 344

TIME 0255Z

LATITUDE 26.99 N LONGITUDE 79.19 W

RES-STAC12-83

PEGASUS 111

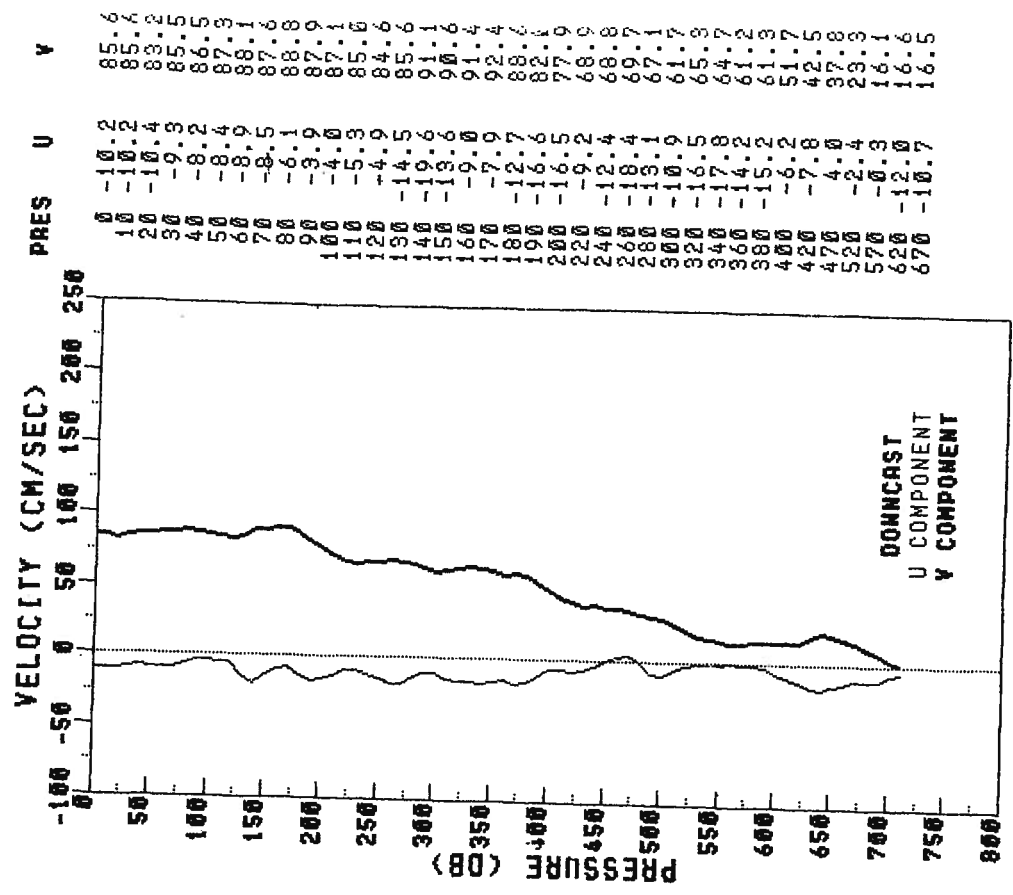
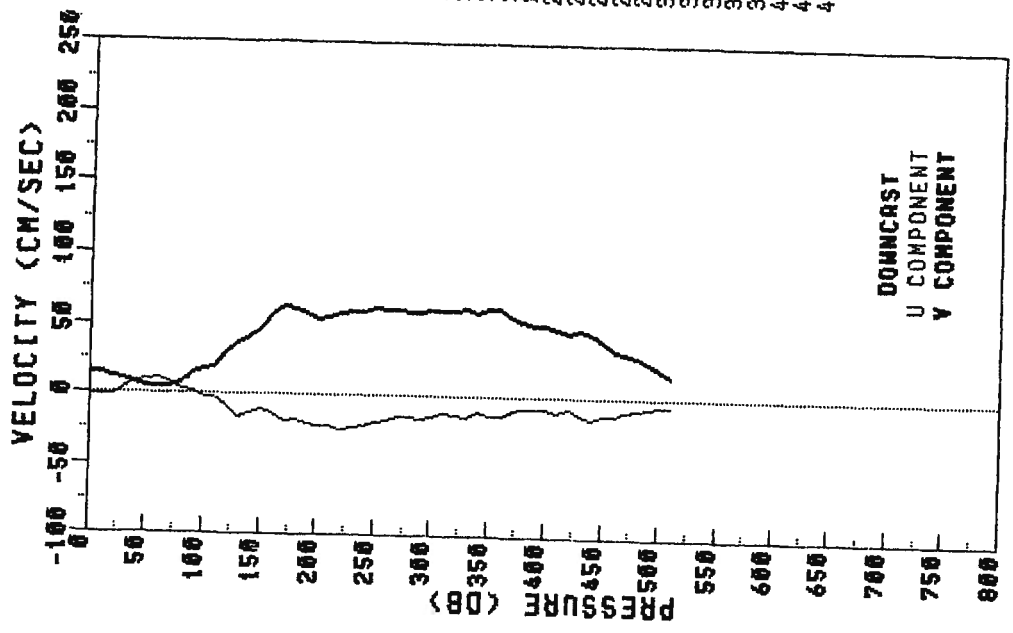
STN 6

R/V RESEARCHER

JDAY 344

TIME 0504Z

LATITUDE 27.00 N LONGITUDE 79.37 W



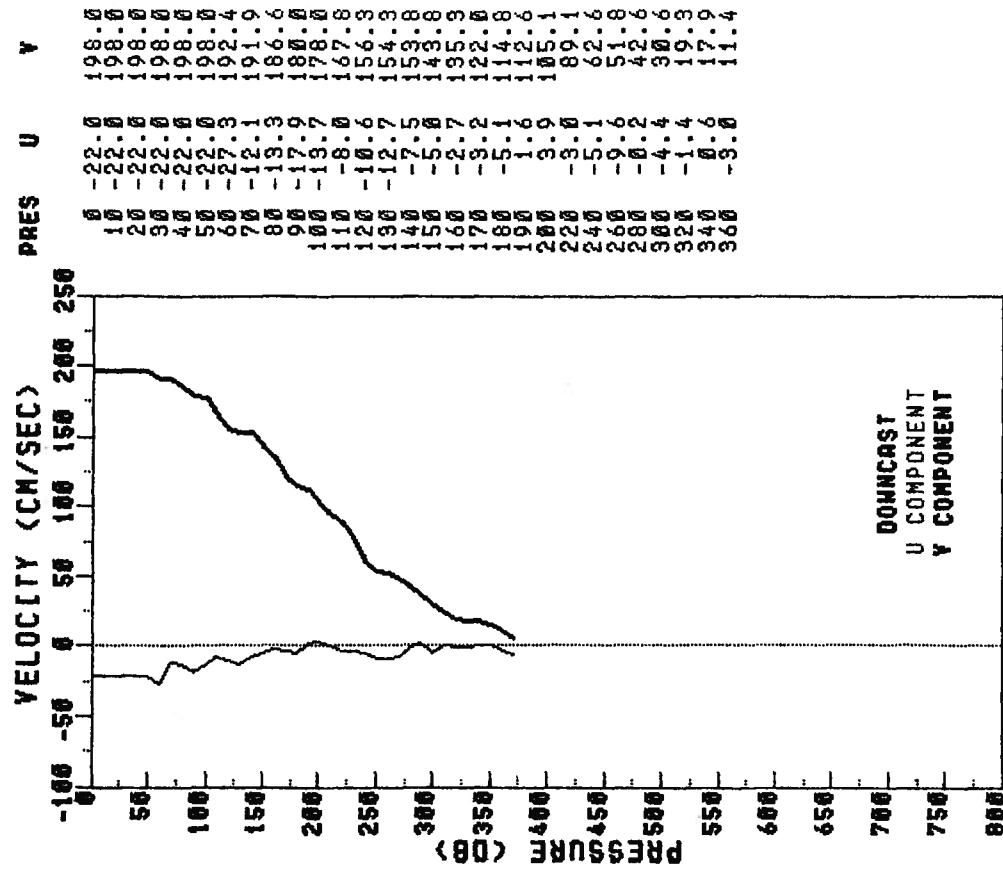
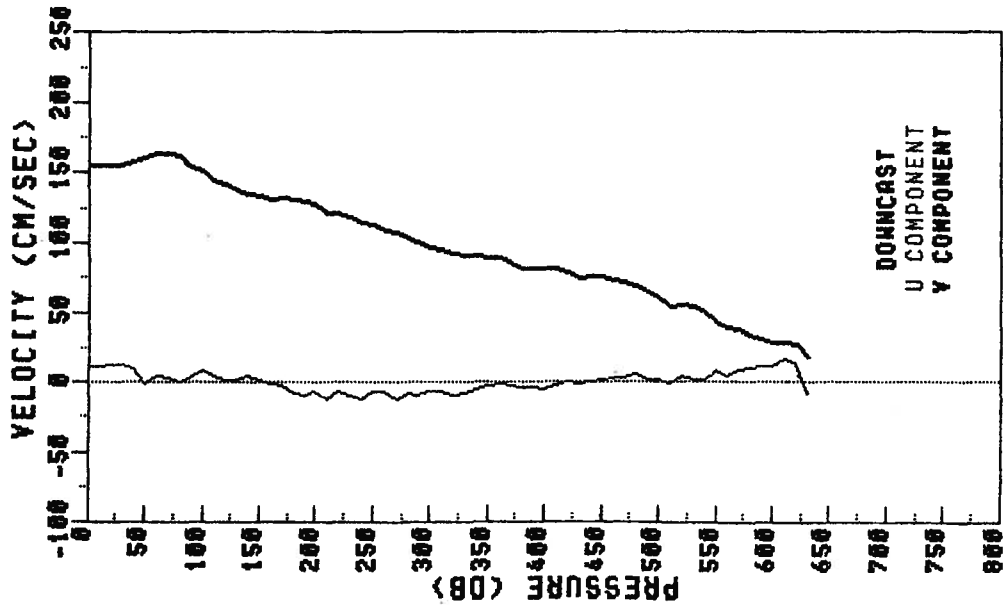
RES-STAC12-83 PEGASUS 112 STN 4 RES-STAC12-83 PEGASUS 113 STN 2

R/Y RESEARCHER JOY 344 TIME 0831Z

LATITUDE 27.00 N LONGITUDE 79.37 W

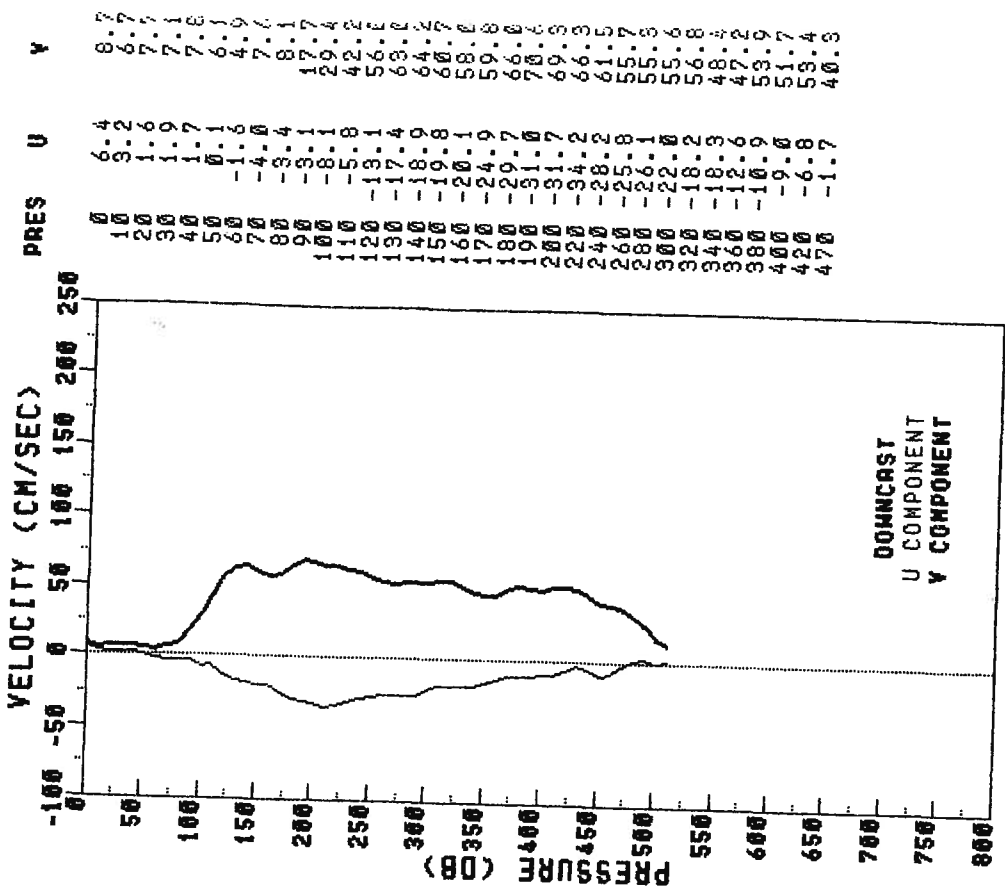
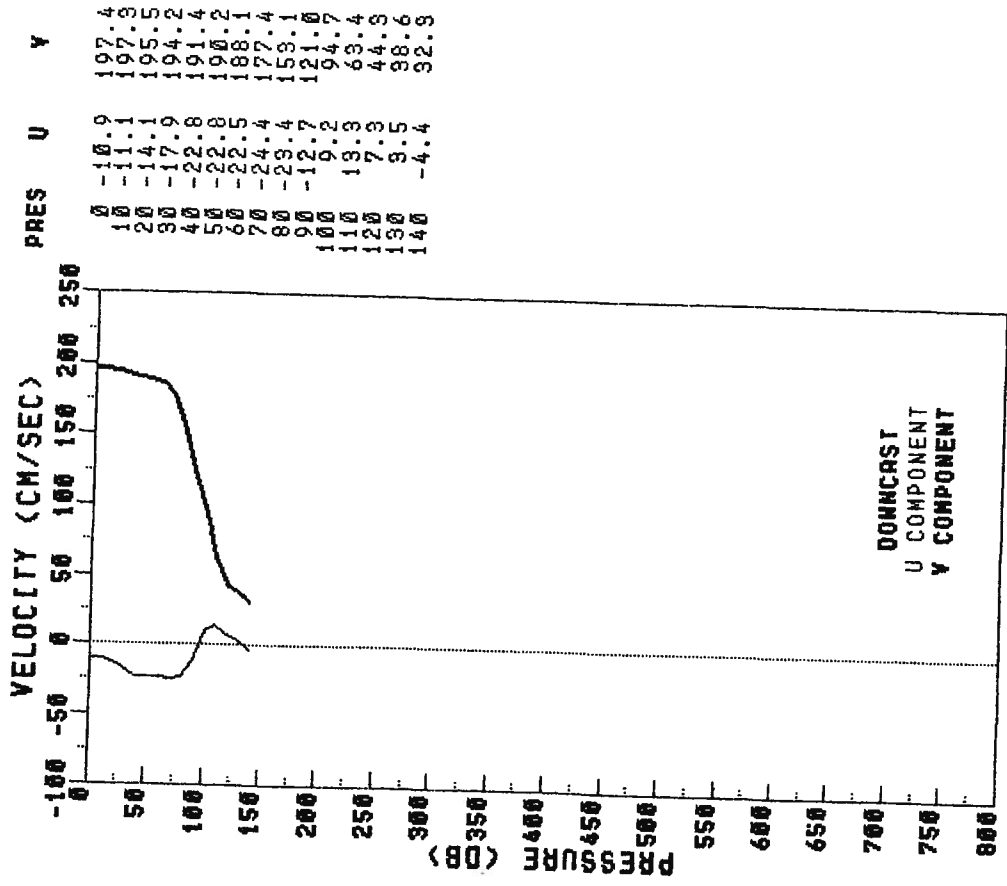
R/Y RESEARCHER JOY 344 TIME 1046Z

LATITUDE 26.99 N LONGITUDE 79.80 W



RES-STACS12-83 PEGASUS 114 STN 0
 R/V RESEARCHER JOY 344 TIME 1249Z
 LATITUDE 27.00 N LONGITUDE 79.93 W

RES-STACS12-83 PEGASUS 115 STN 8
 R/V RESEARCHER JOY 344 TIME 1656Z
 LATITUDE 27.01 N LONGITUDE 79.21 W



RES-STAC12-83

PEGASUS 116

STN 7

R/V RESEARCHER JOY 344 TIME 1822Z

LATITUDE 27.00 N LONGITUDE 79.29 W

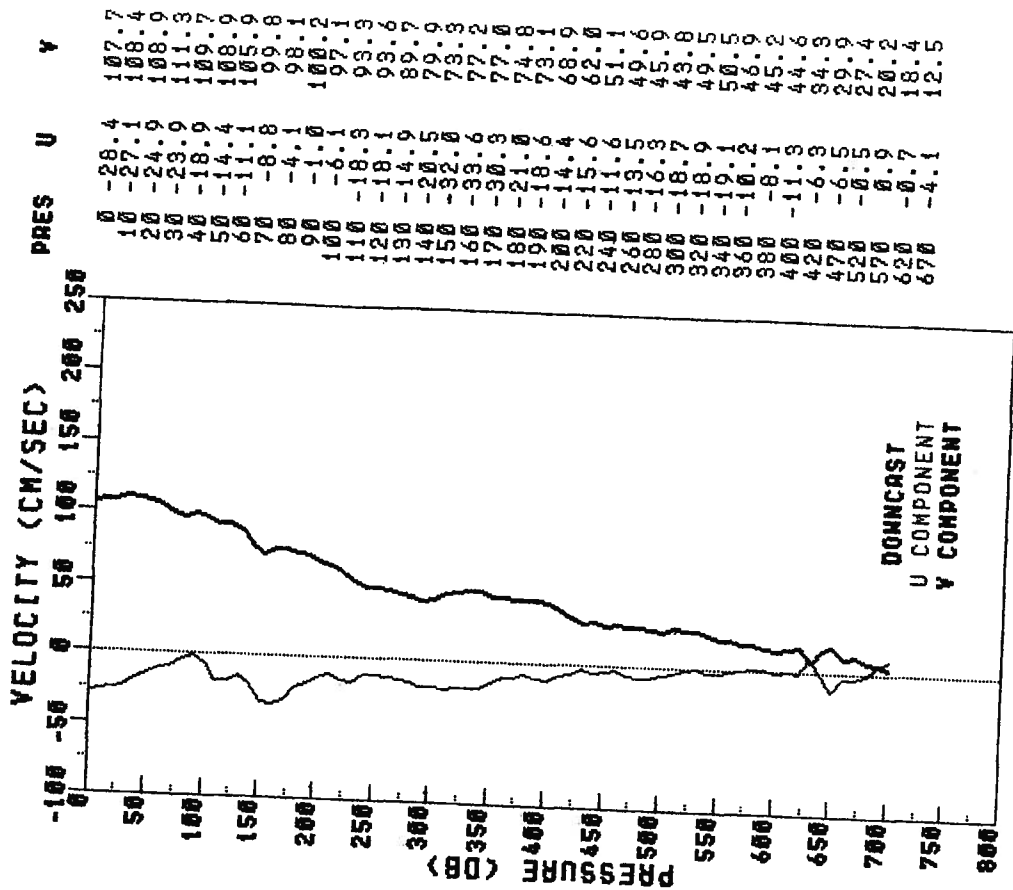
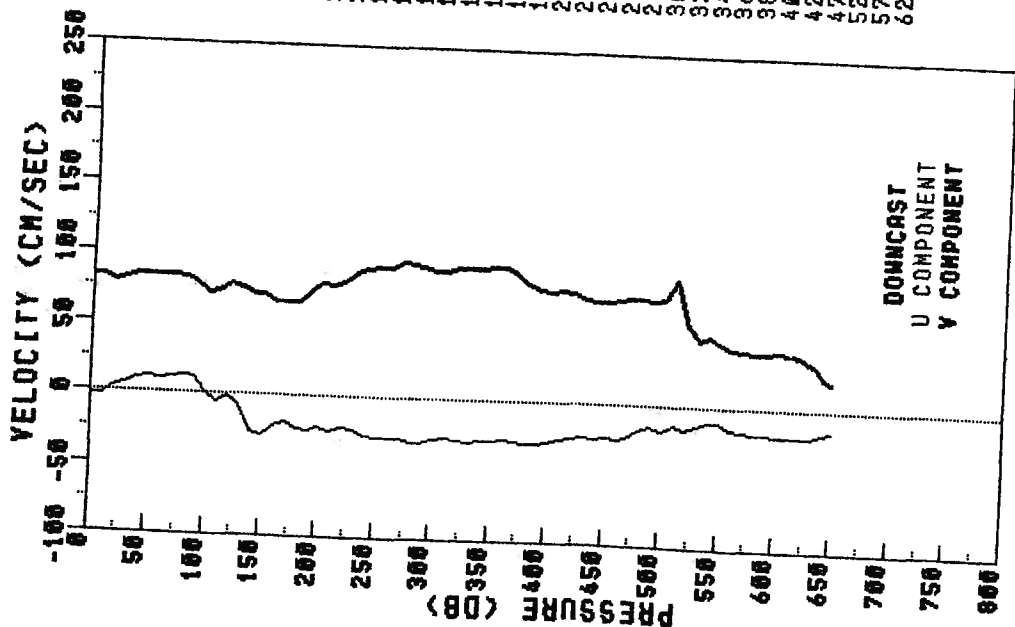
RES-STAC12-83

PEGASUS 117

STN 6

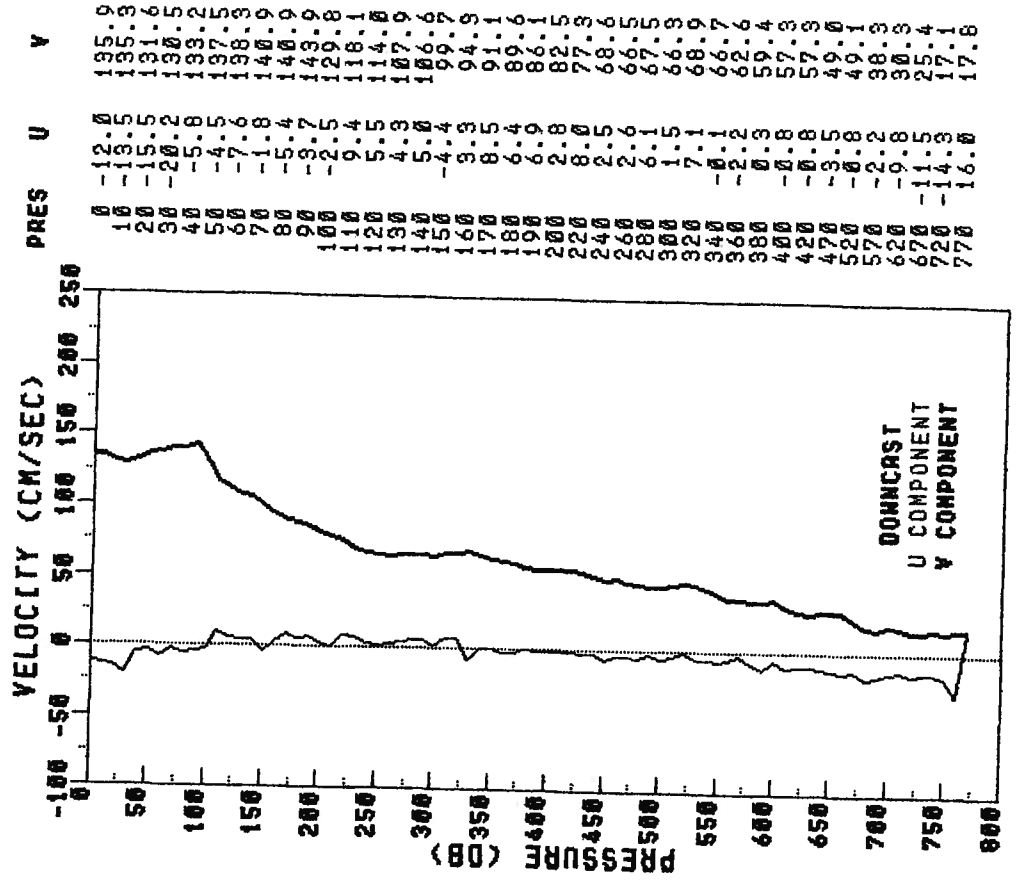
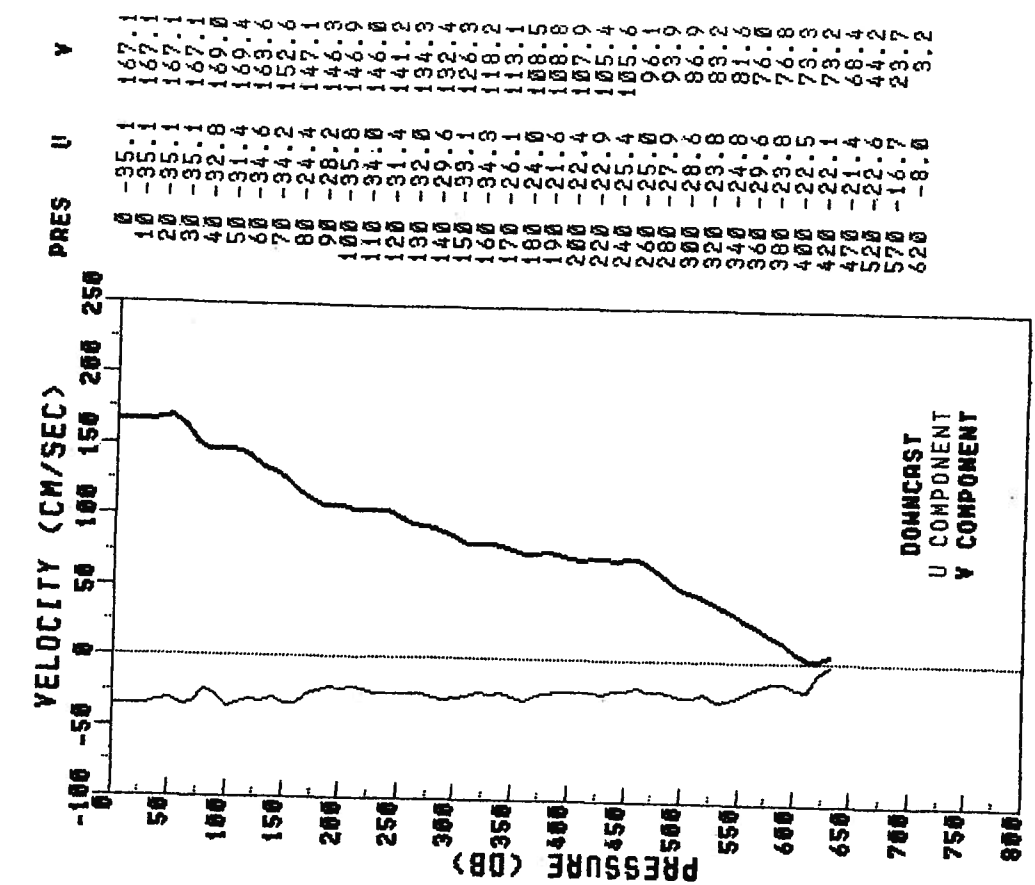
R/V RESEARCHER JOY 344 TIME 2013Z

LATITUDE 27.00 N LONGITUDE 79.38 W

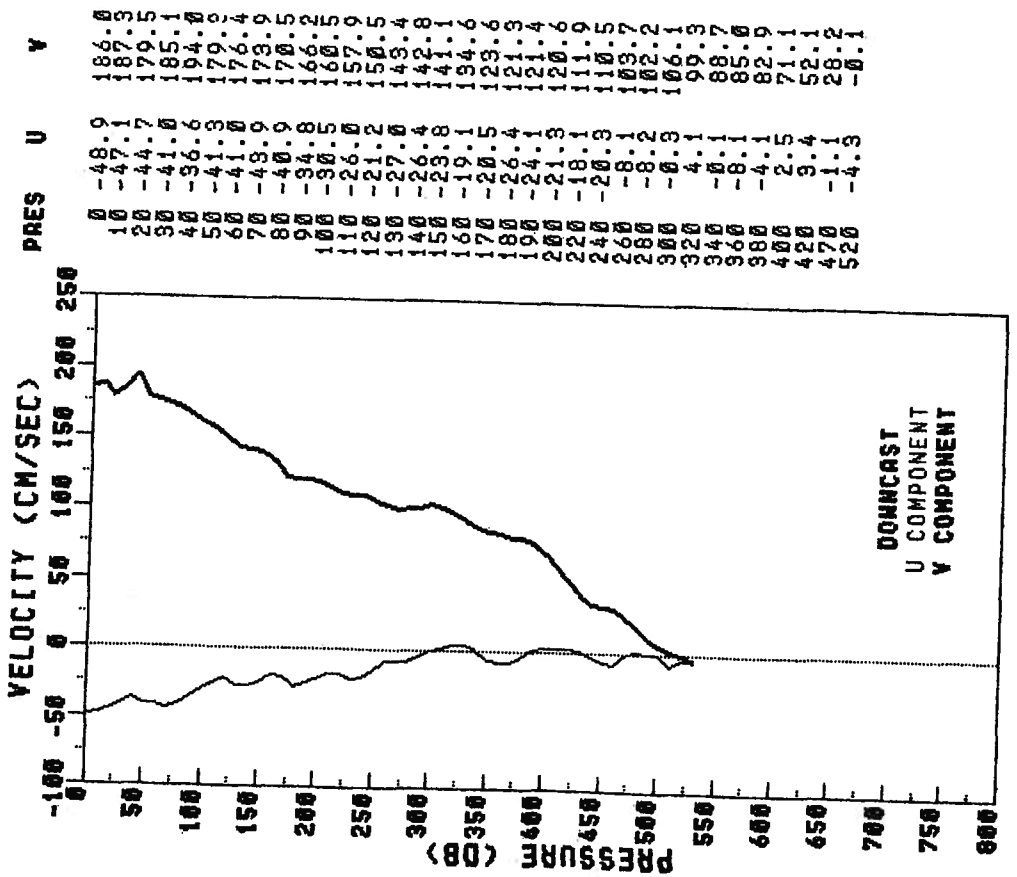


RES-STACS12-83 PEGASUS 119 STN 4
 R/Y RESEARCHER JOY 344 TIME 2359Z
 LATITUDE 26.98 N LONGITUDE 79.62 N

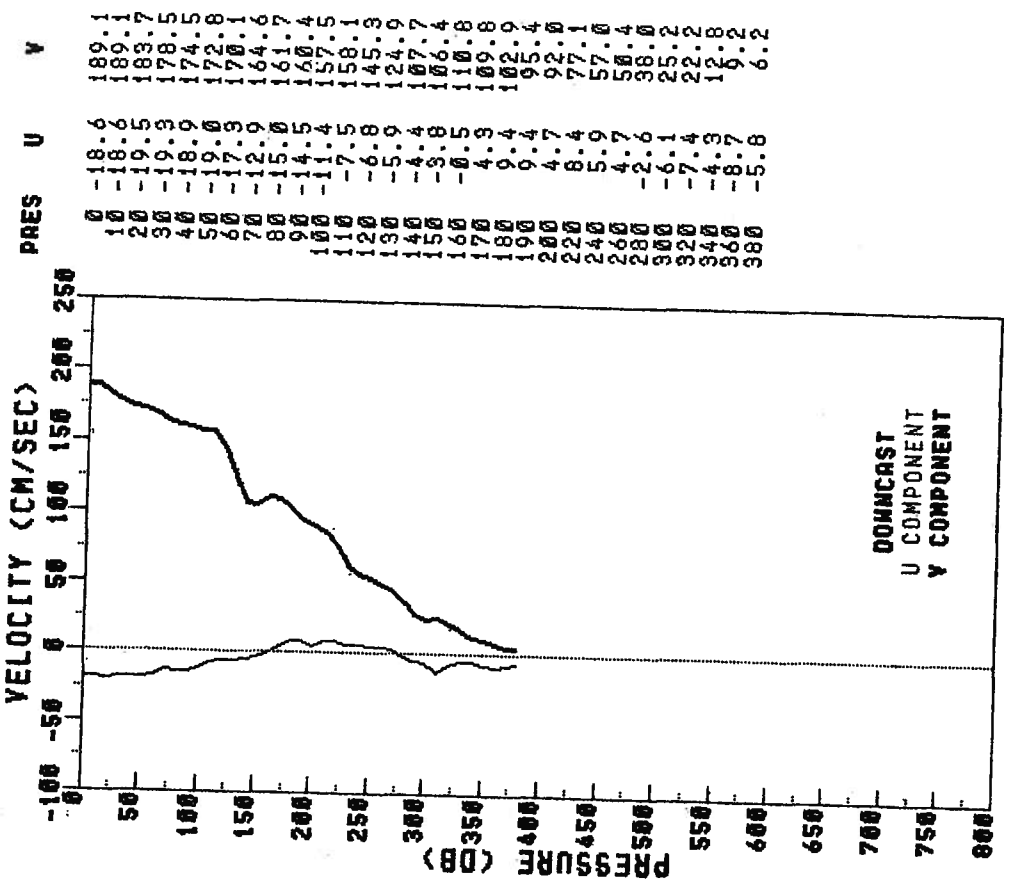
RES-STACS12-83 PEGASUS 118 STN 5
 R/Y RESEARCHER JOY 344 TIME 2155Z
 LATITUDE 27.00 N LONGITUDE 79.51 N



RES-STAC12-83 PEGASUS 120 STN 3
 R/V RESEARCHER JOY 345 TIME 0143Z
 LATITUDE 27.00 N LONGITUDE 79.69 W

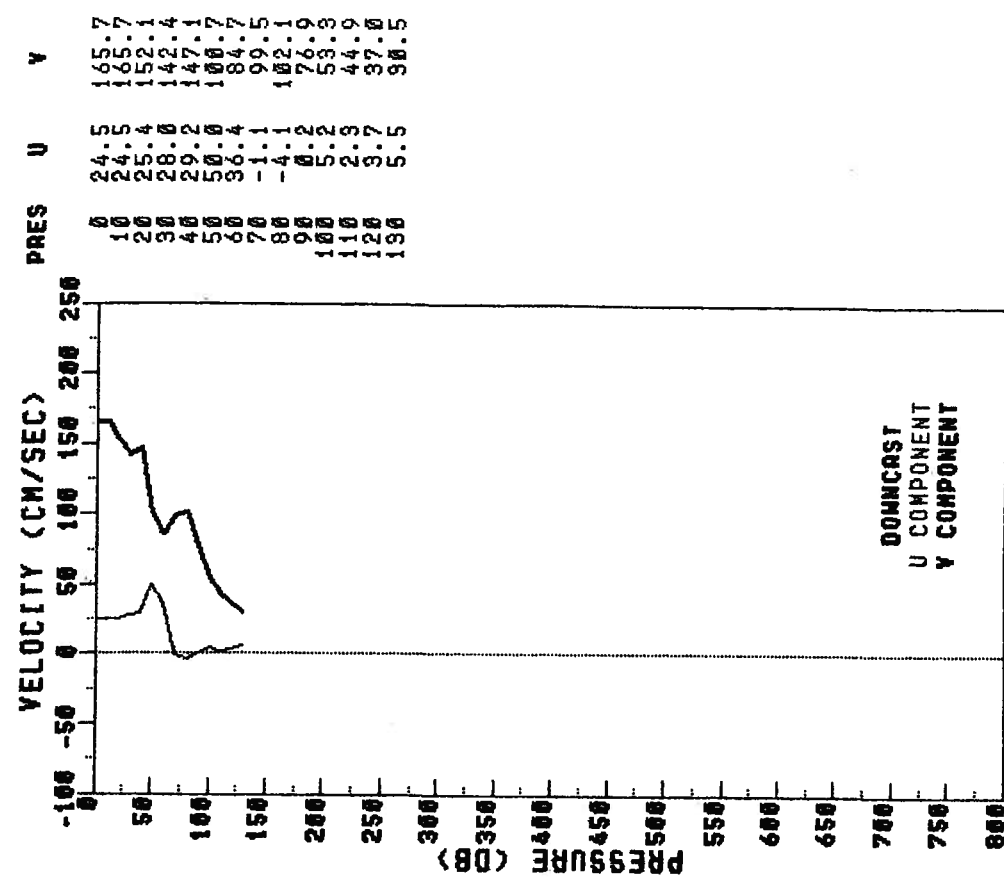
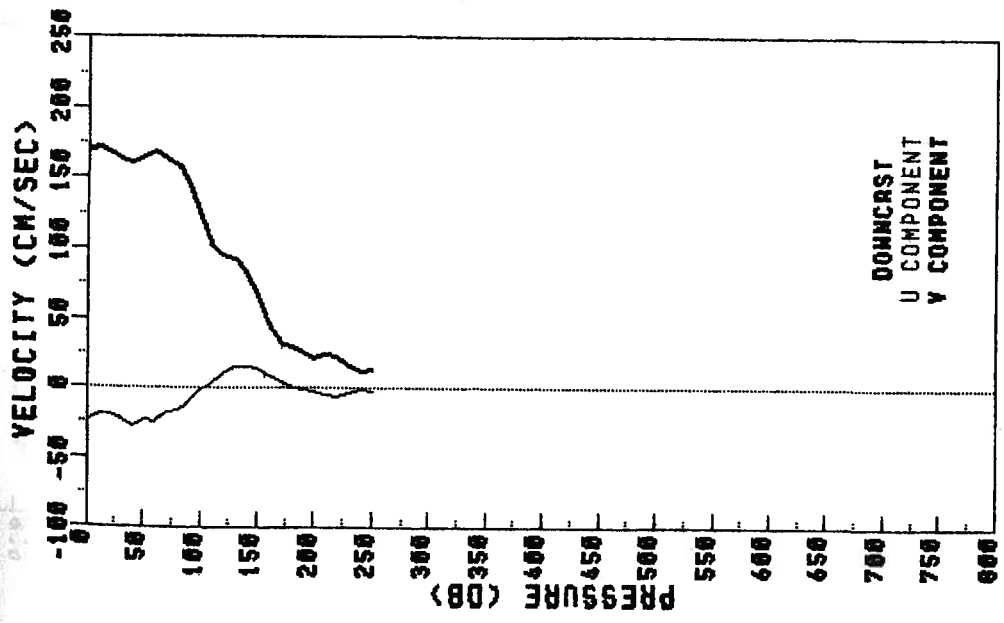


RES-STAC12-83 PEGASUS 121 STN 2
 R/V RESEARCHER JOY 345 TIME 0330Z
 LATITUDE 26.99 N LONGITUDE 79.80 W



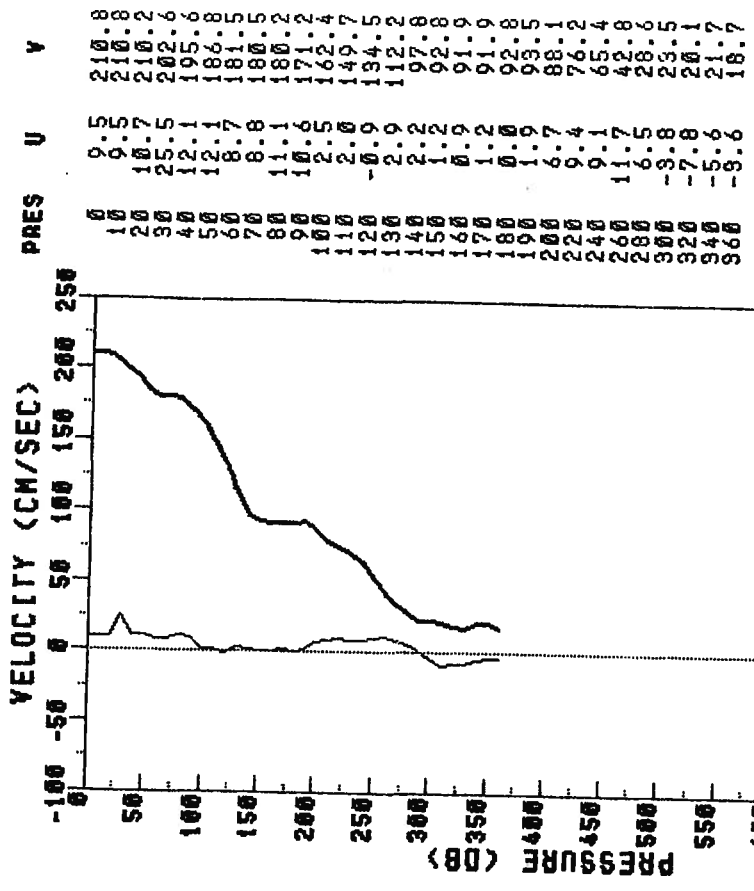
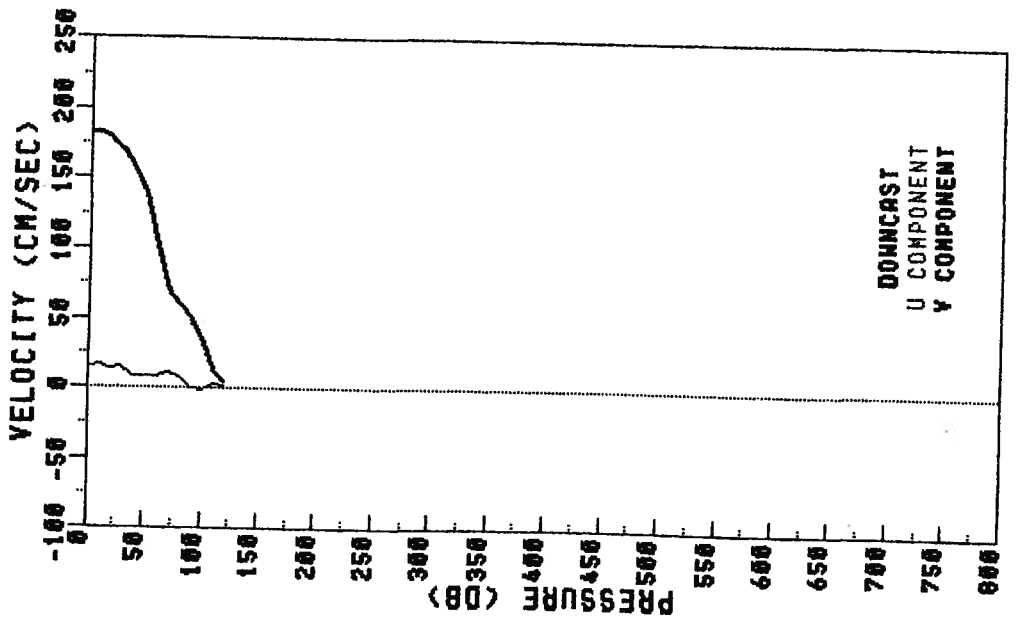
RES-STACS12-83 PEGASUS 122 STN 1
 R/V RESEARCHER JDAY 345 TIME 0451Z
 LATITUDE 27.00 N LONGITUDE 79.80 W

RES-STACS12-83 PEGASUS 123 STN 0
 R/V RESEARCHER JDAY 345 TIME 0656Z
 LATITUDE 27.00 N LONGITUDE 79.95 W



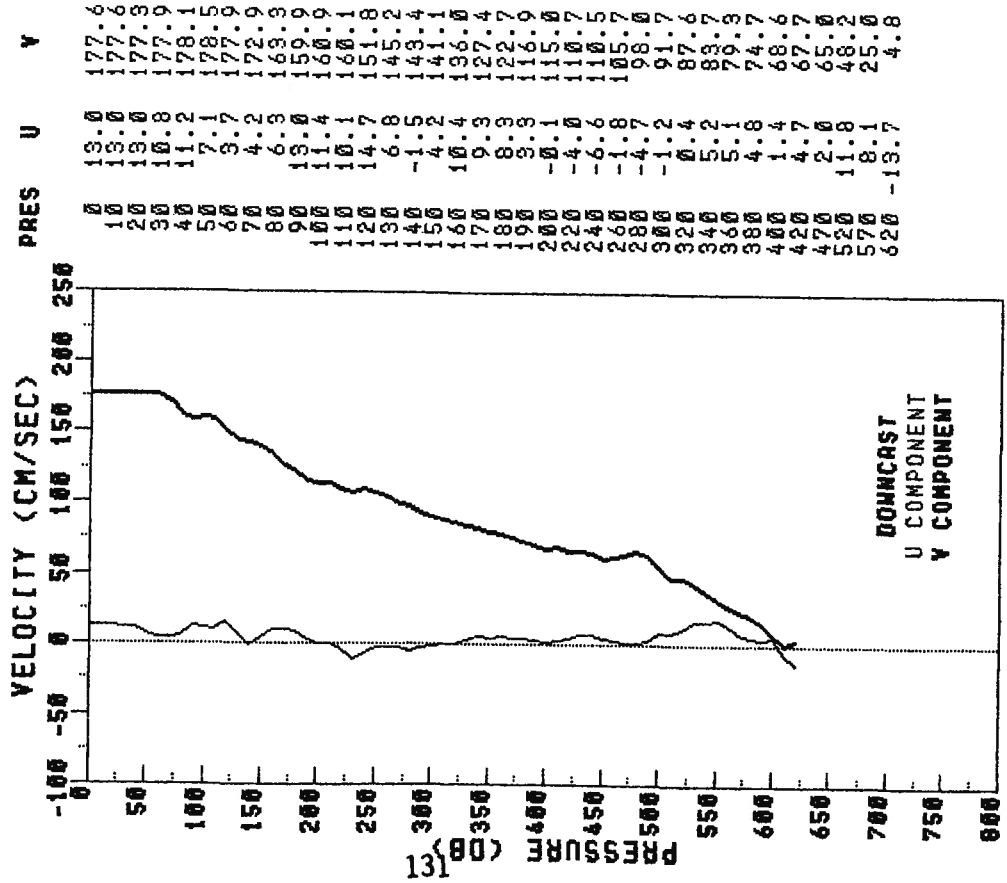
RES-STAC12-83 PEGASUS 124 STN 0
 R/V RESEARCHER JDAY 346 TIME 0029Z
 LATITUDE 27.00 N LONGITUDE 79.94 N

RES-STAC12-83 PEGASUS 125 STN 2
 R/V RESEARCHER JDAY 346 TIME 0346Z
 LATITUDE 26.99 N LONGITUDE 79.80 N



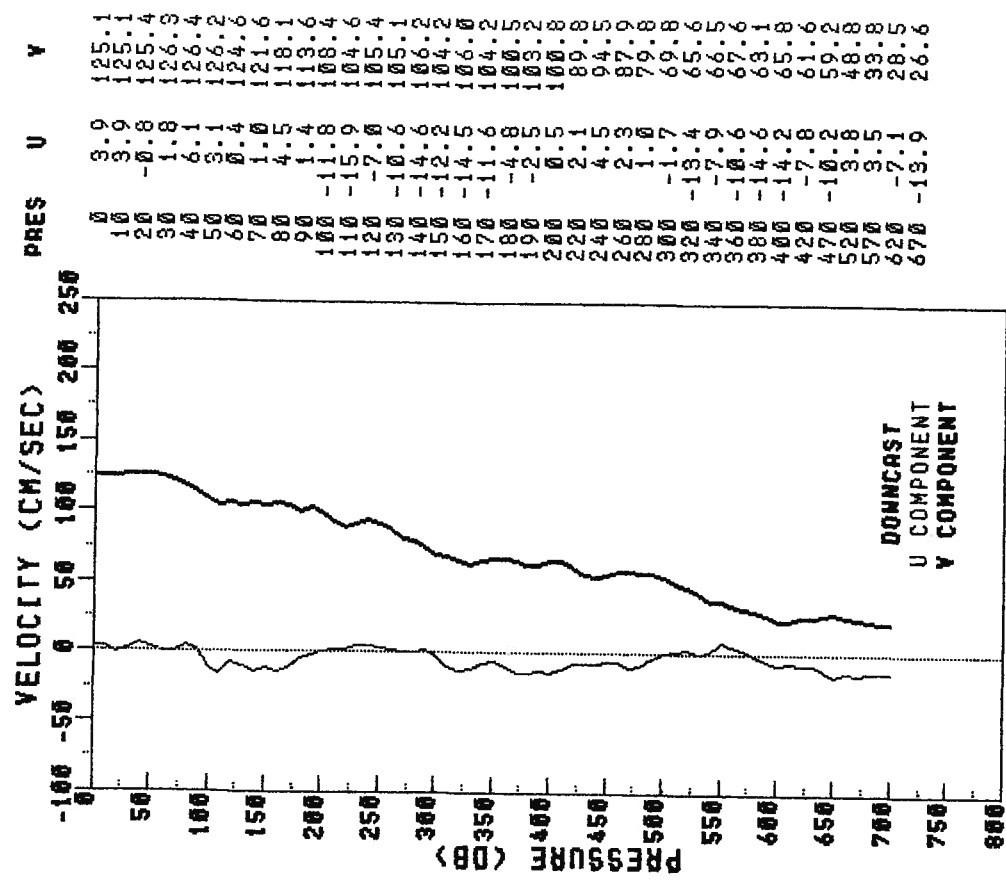
RES-STAC12-83 PEGASUS 126 STN 4
 R/V RESEARCHER JOY 346 TIME 0551Z

LATITUDE 26.98 N LONGITUDE 79.62 W



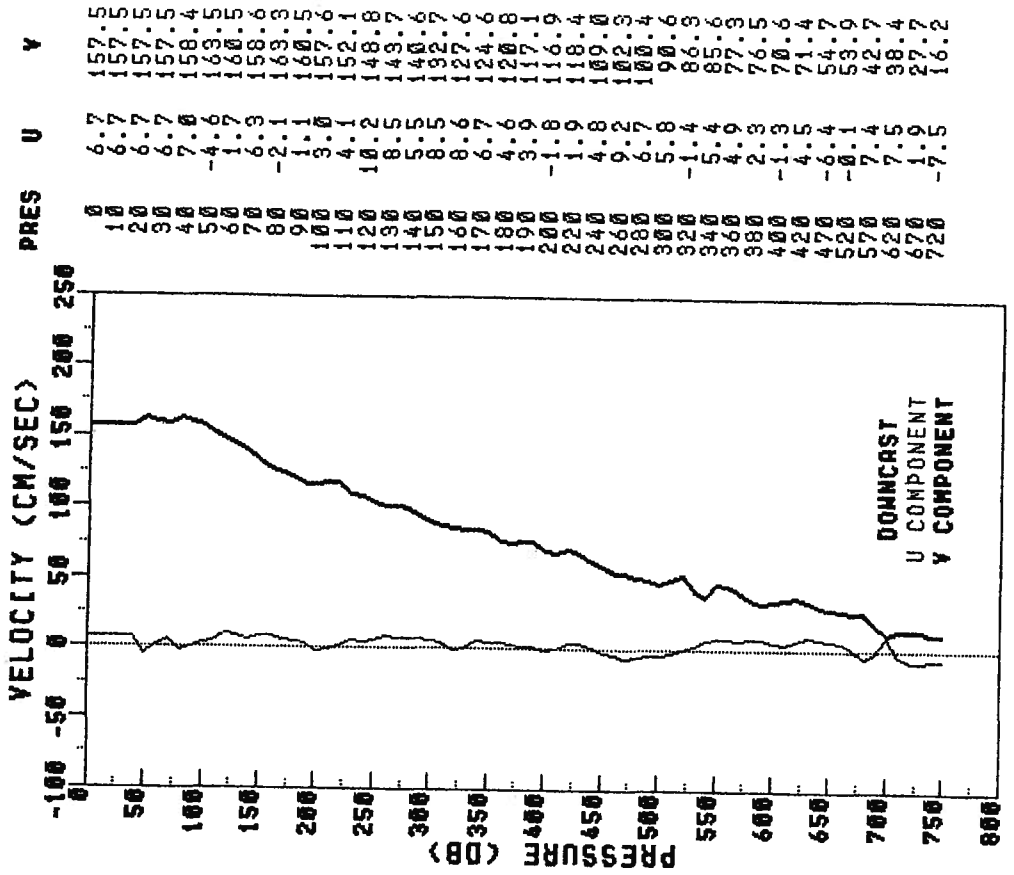
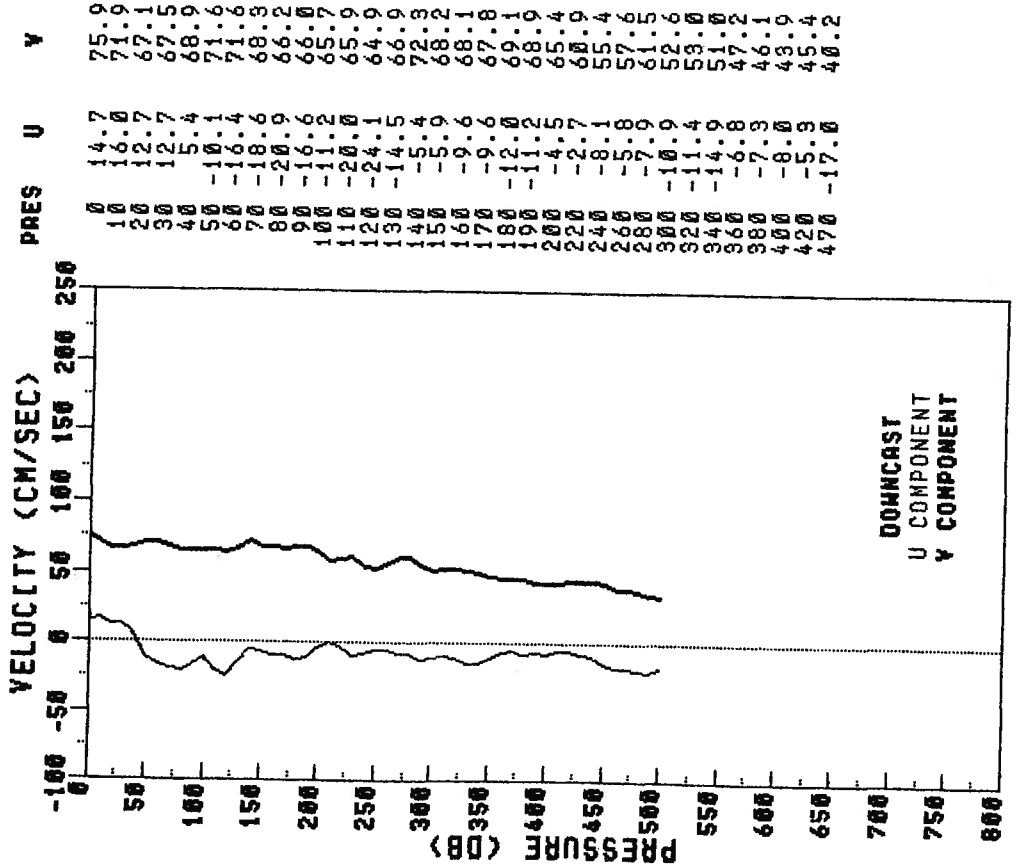
RES-STAC12-83 PEGASUS 127 STN 6
 R/V RESEARCHER JOY 346 TIME 0846Z

LATITUDE 27.00 N LONGITUDE 79.38 W

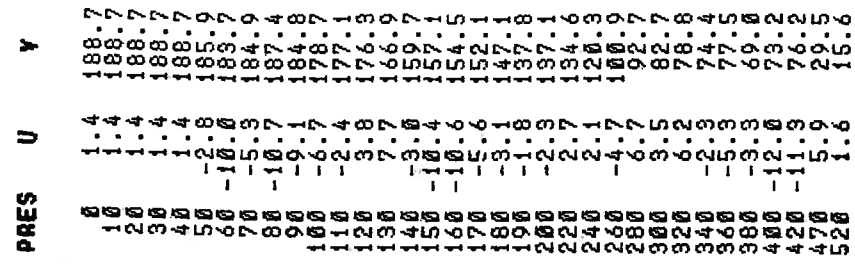


RES-STAC12-83 PEGASUS 128 STN 8
 R/V RESEARCHER JOY 346 TIME 1059Z
 LATITUDE 27.00 N LONGITUDE 79.20 W

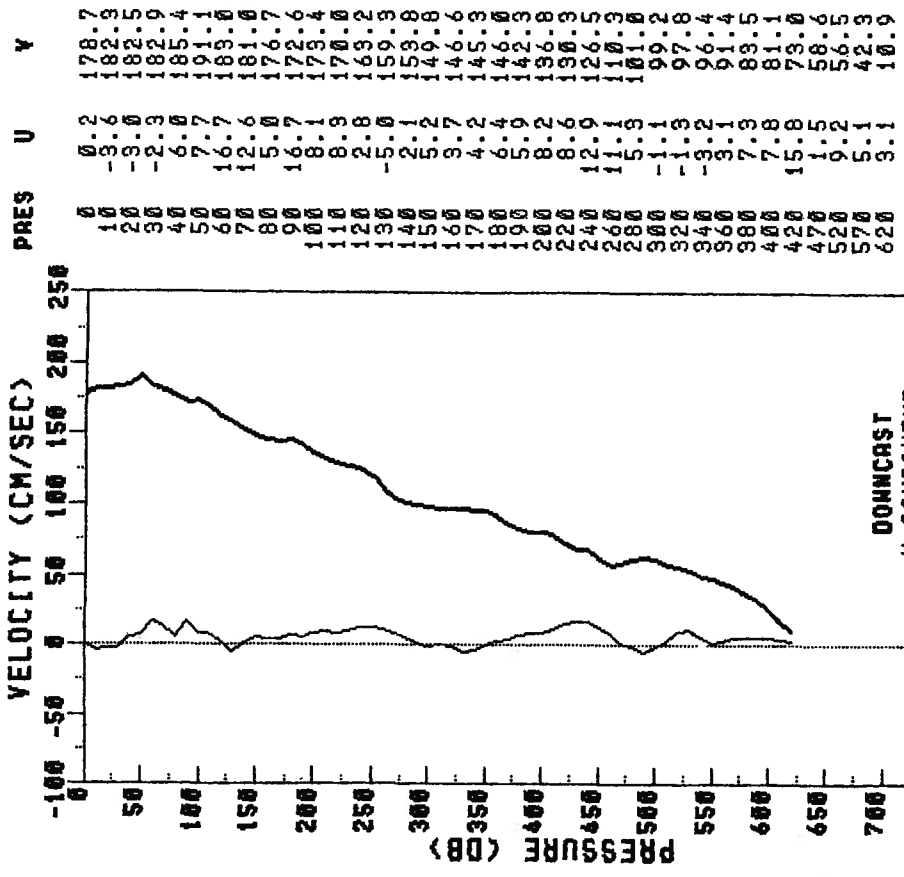
RES-STAC12-83 PEGASUS 129 STN 5
 R/V RESEARCHER JOY 347 TIME 0151Z
 LATITUDE 27.00 N LONGITUDE 79.50 W



RES-STACS12-83 PEGASUS 131 STN 3
 R/V RESEARCHER JOY 347 TIME 0633Z
 LATITUDE 26.99 N LONGITUDE 79.69 W

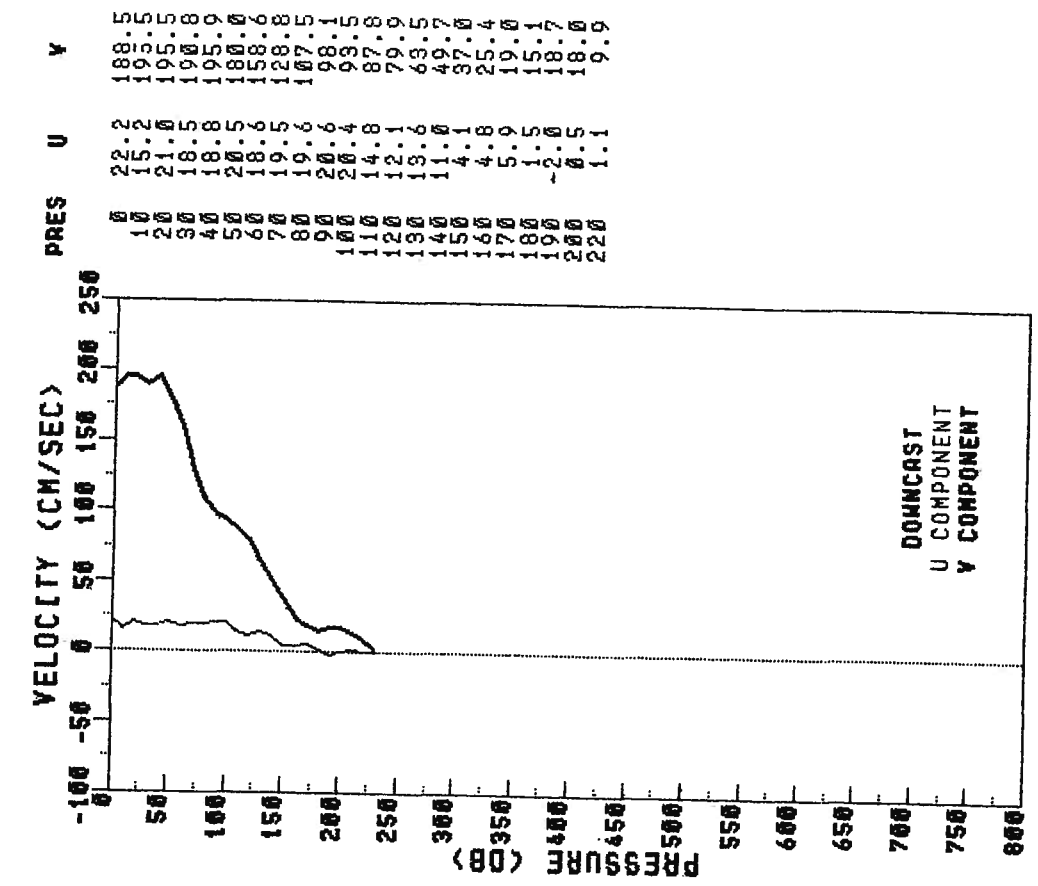
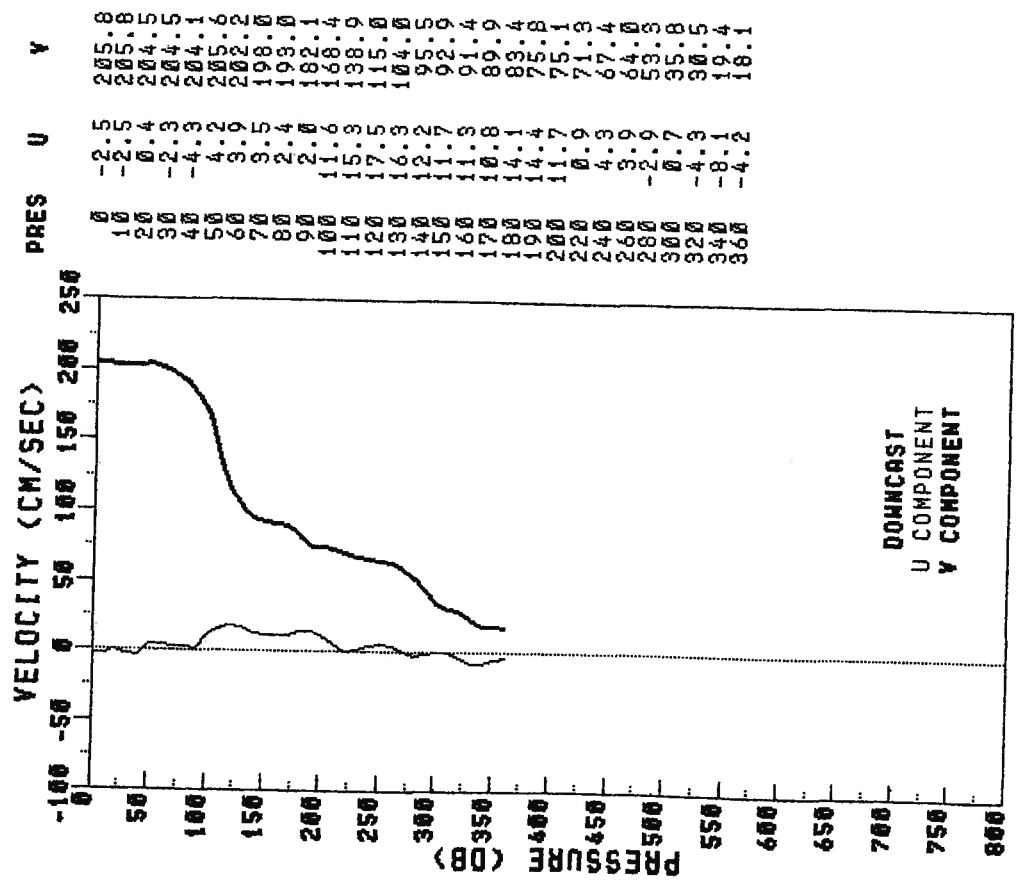


RES-STACS12-83 PEGASUS 130 STN 4
 R/V RESEARCHER JOY 347 TIME 0447Z
 LATITUDE 26.98 N LONGITUDE 79.62 W

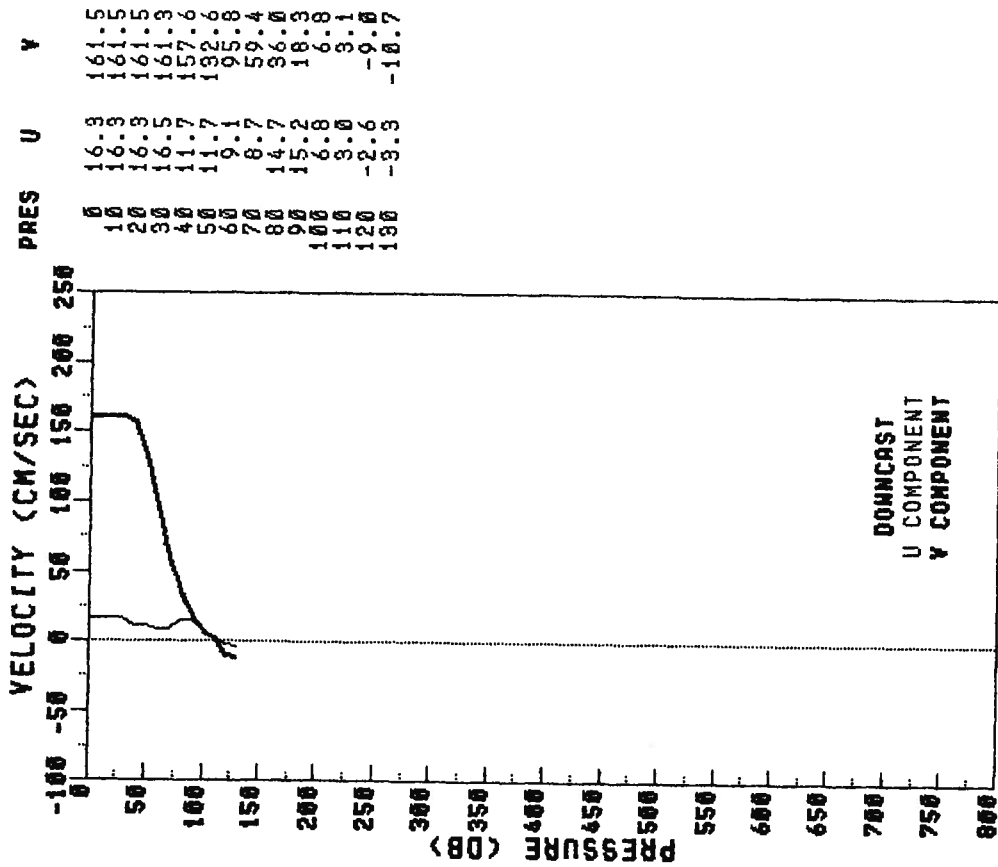


RES-STACS12-83 PEGASUS 132 STN 2
 R/Y RESEARCHER JOY 347 TIME 0092Z
 LATITUDE 26.99 N LONGITUDE 79.80 W

RES-STACS12-83 PEGASUS 133 STN 1
 R/Y RESEARCHER JOY 347 TIME 1033Z
 LATITUDE 27.00 N LONGITUDE 79.88 W

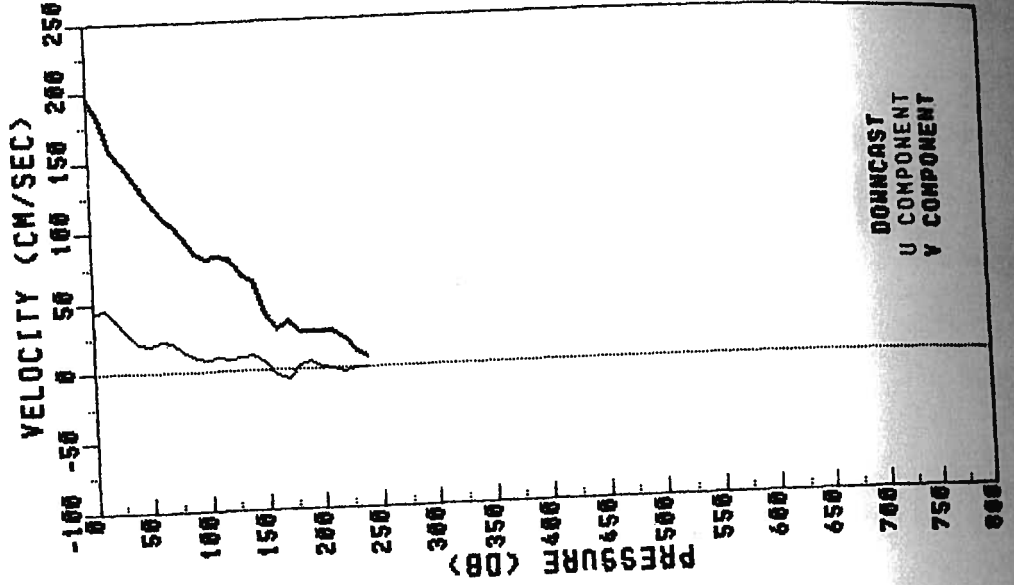


RES-STACS12-83 PEGASUS 134 STN 0
 R/V RESEARCHER JOAY 347 TIME 1149Z
 LATITUDE 27.00 N LONGITUDE 79.94 N



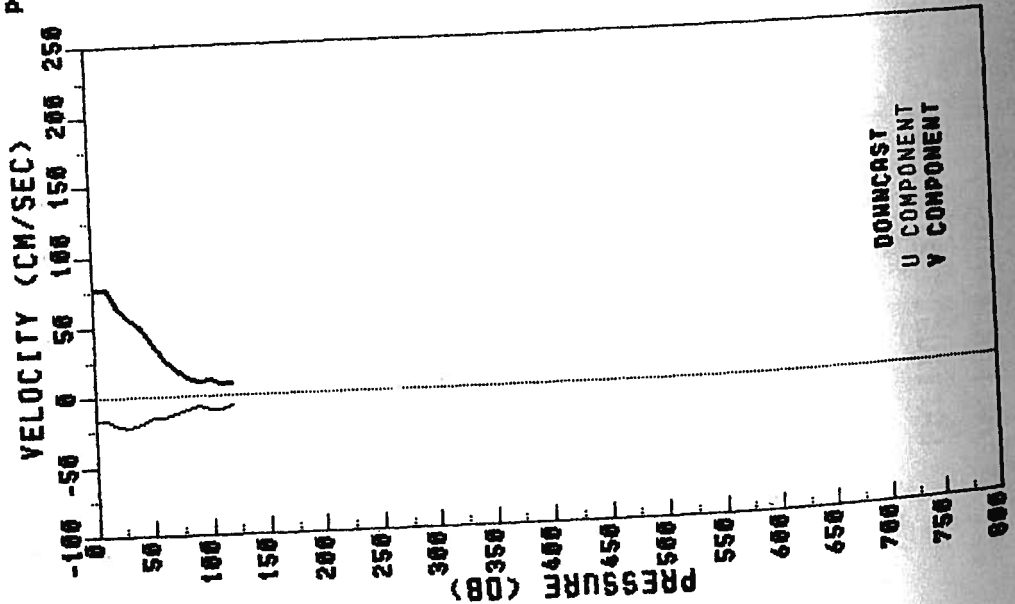
YK-STACSL3-84 PEGASUS 002 STN 1
 R/V VIRGINIA KEY JDAY 17 TIME 2205Z
 LATITUDE 27.00 N LONGITUDE 79.87 N

PRES	U	V
0	44.8	196.3
10	45.2	177.6
20	38.7	148.8
30	21.6	135.9
40	19.8	123.8
50	22.4	113.5
60	20.7	110.6
70	14.5	96.8
80	10.2	85.3
90	10.1	81.4
100	9.5	82.5
110	9.2	81.7
120	9.9	70.0
130	9.0	64.1
140	11.0	40.1
150	15.8	40.9
160	-3.4	36.1
170	-6.8	28.4
180	3.5	27.5
190	2.6	28.9
200	2.6	21.9
220	-1.9	21.9
240	-0.1	0



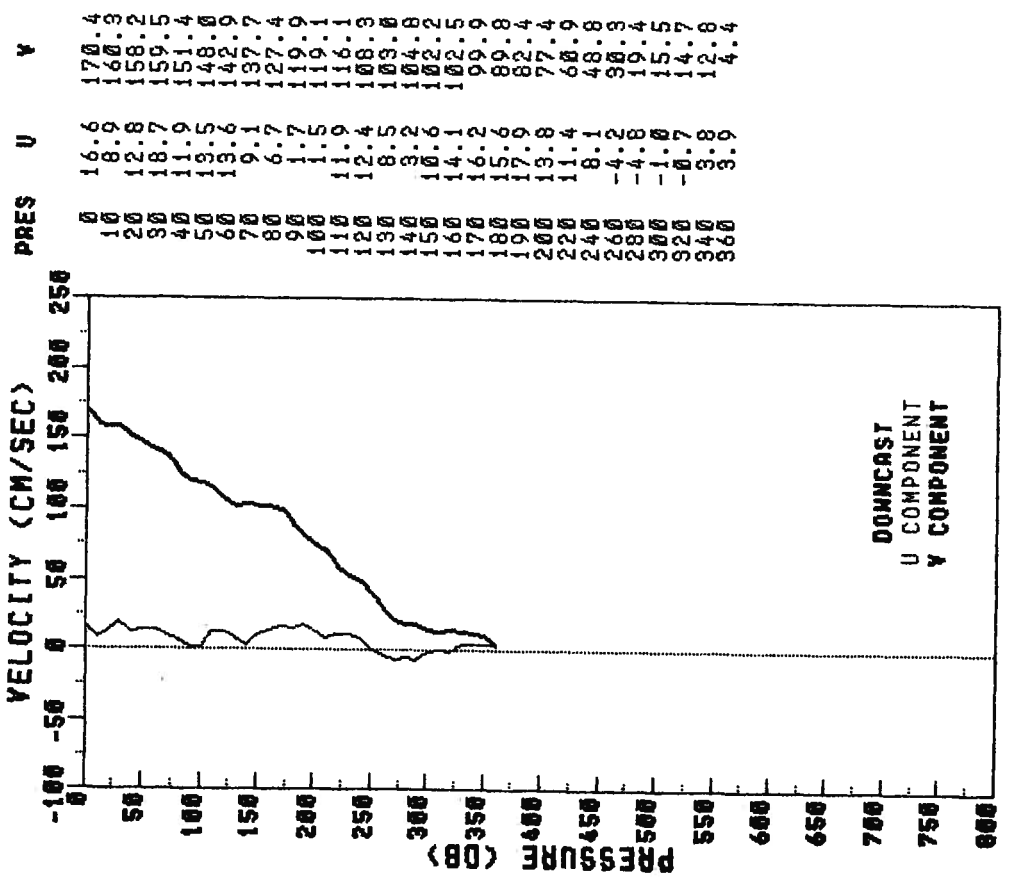
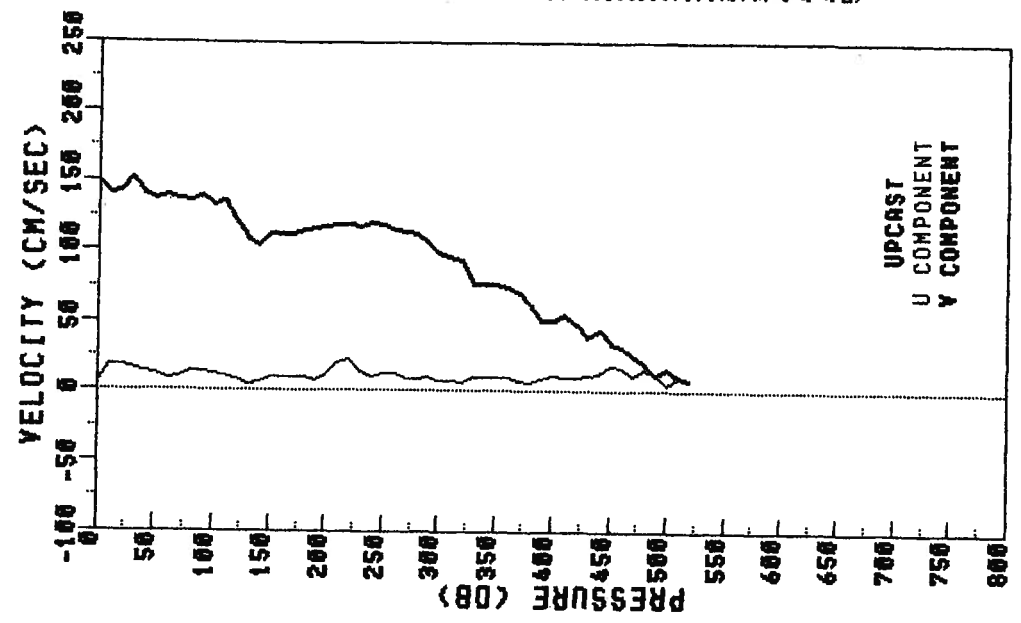
YK-STACSL3-84 PEGASUS 001 STN 0
 R/V VIRGINIA KEY JDAY 17 TIME 2056Z
 LATITUDE 26.99 N LONGITUDE 79.94 N

PRES	U	V
0	-16.8	77.8
10	-16.0	77.5
20	-20.2	66.3
30	-21.3	57.3
40	-19.0	51.0
50	-15.0	38.9
60	-14.2	28.1
70	-11.6	20.1
80	-8.8	14.6
90	-7.2	11.6
100	-9.0	12.8
110	-8.8	10.2
120	-6.3	10.3



YK-STAC13-84 PEGASUS 004 STN 3
 R/V VIRGINIA KEY JOY 18 TIME 0127Z
 LATITUDE 26.99 N LONGITUDE 79.68 W

YK-STAC13-84 PEGASUS 003 STN 2
 R/V VIRGINIA KEY JOY 17 TIME 2342Z
 LATITUDE 26.98 N LONGITUDE 79.79 W



VK-STAC13-84 PEGASUS 005 STN 4

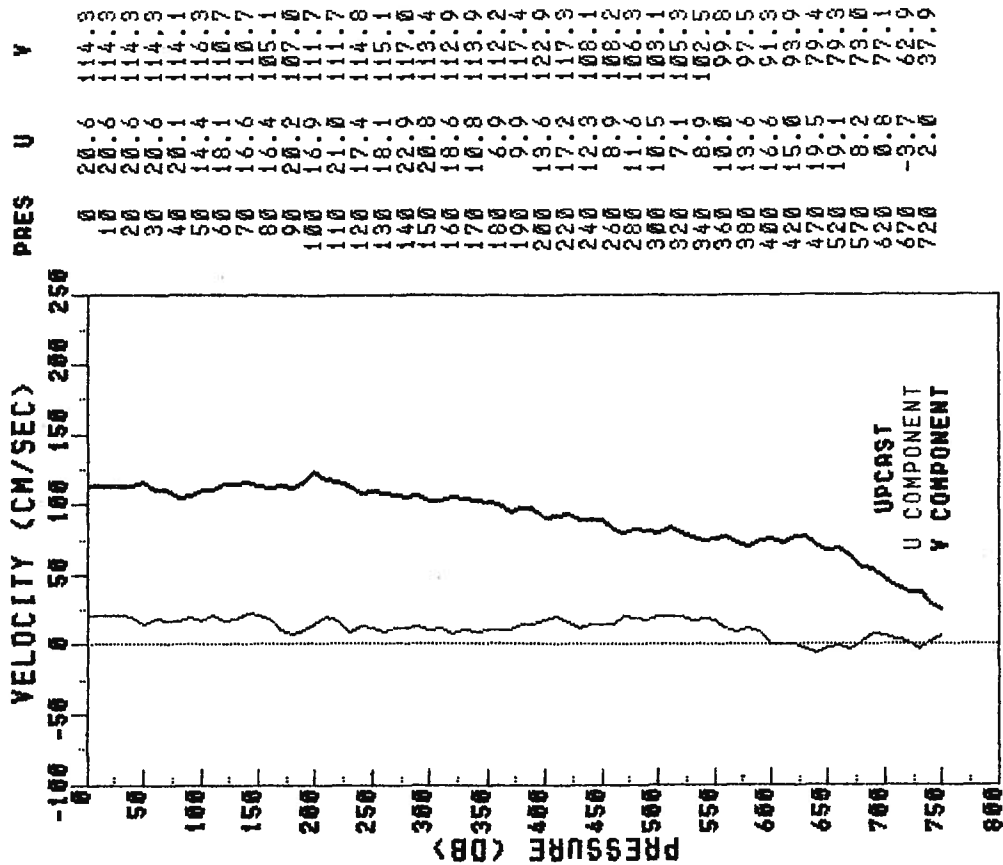
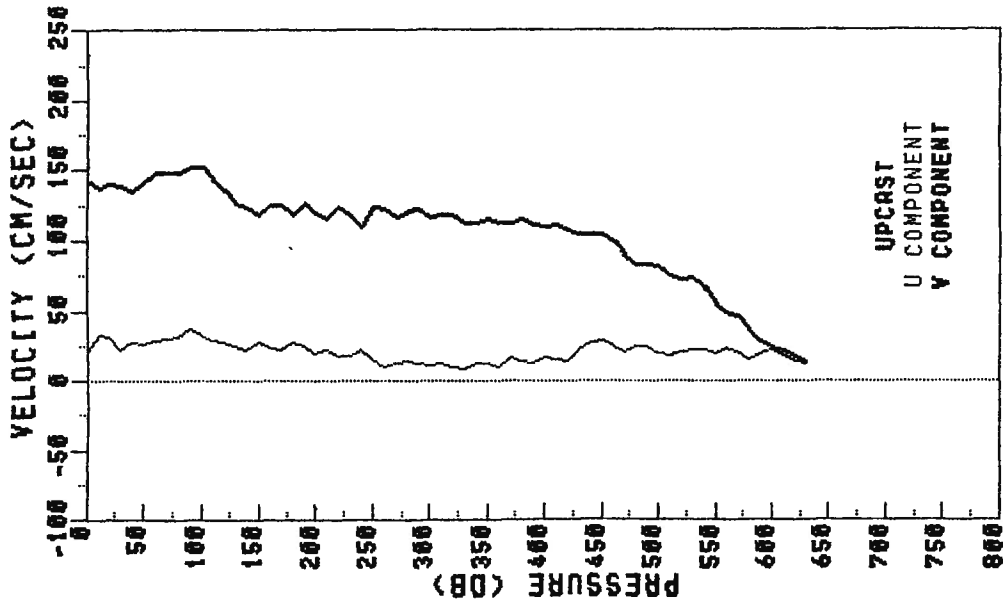
VK-STAC13-84 PEGASUS 006 STN 5

R/V VIRGINIA KEY JDAY 18 TIME 0314Z

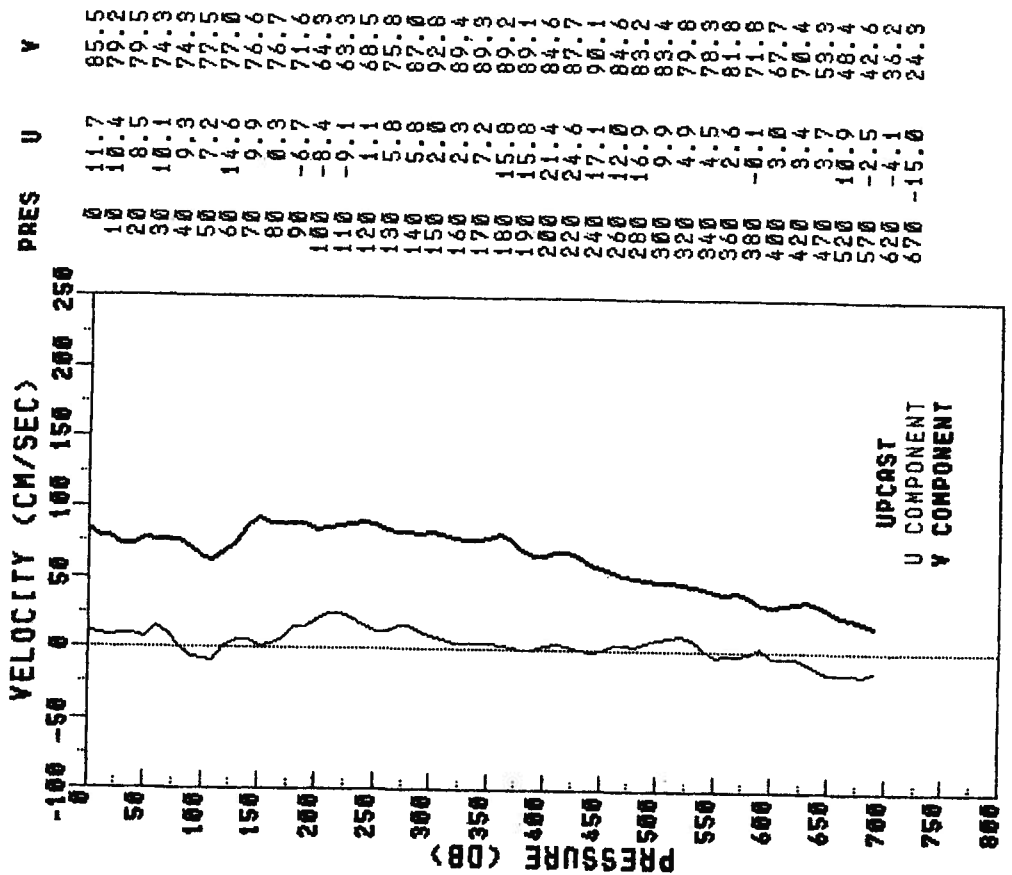
R/V VIRGINIA KEY JDAY 18 TIME 0529Z

LATITUDE 26.97 N LONGITUDE 79.61 W

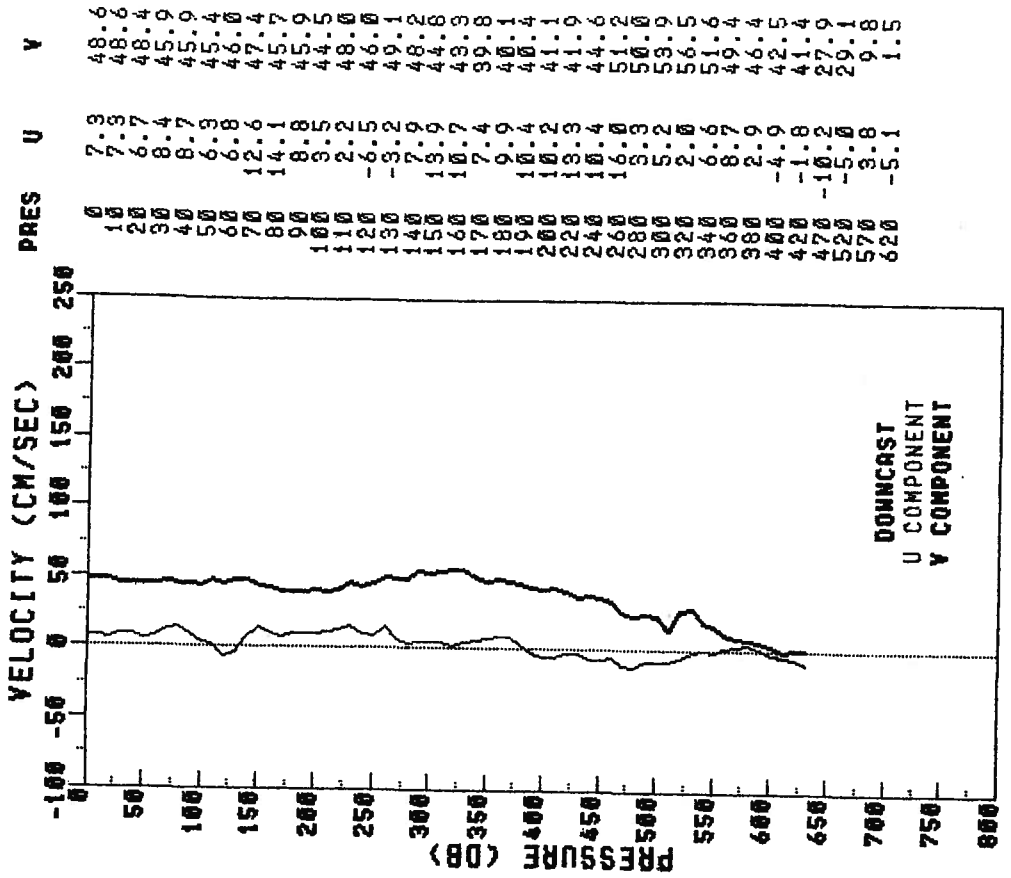
LATITUDE 26.99 N LONGITUDE 79.50 W



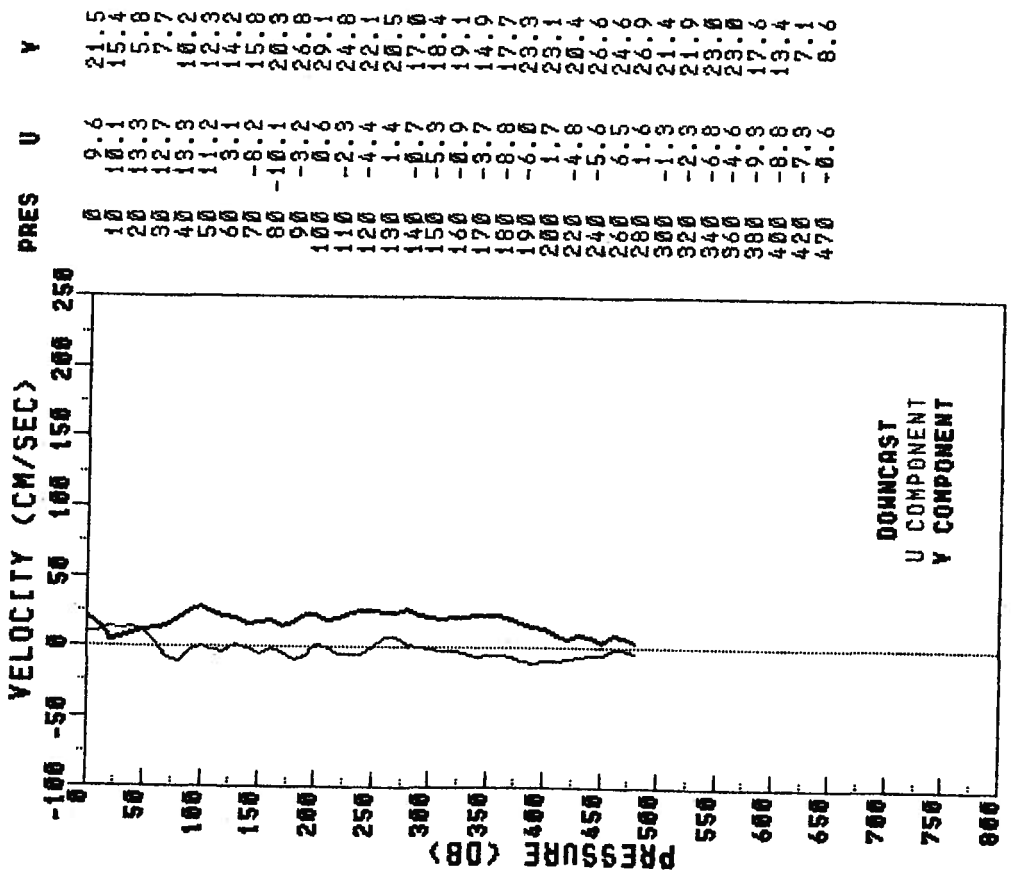
VK-STAC13-84 PEGASUS 007 STN 6
 R/V VIRGINIA KEY JOY 18 TIME 0834Z
 LATITUDE 27.00 N LONGITUDE 79.37 W



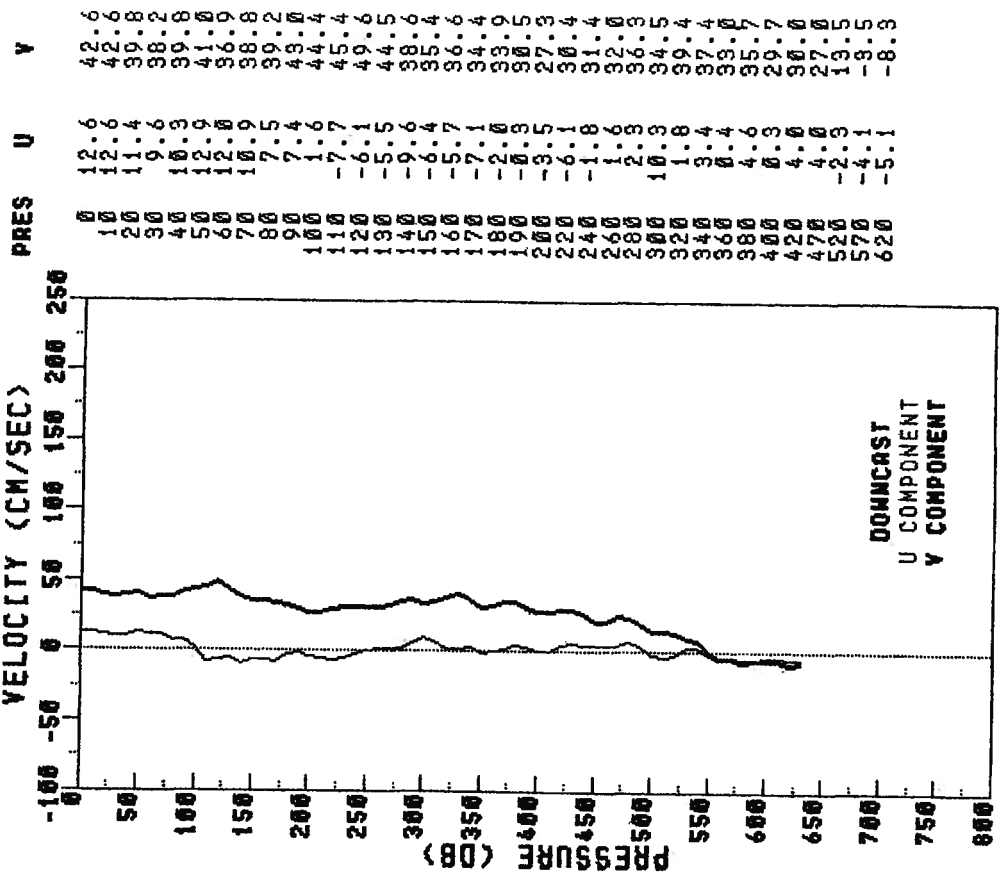
VK-STAC13-84 PEGASUS 008 STN 7
 R/V VIRGINIA KEY JOY 18 TIME 1037Z
 LATITUDE 26.99 N LONGITUDE 79.28 W



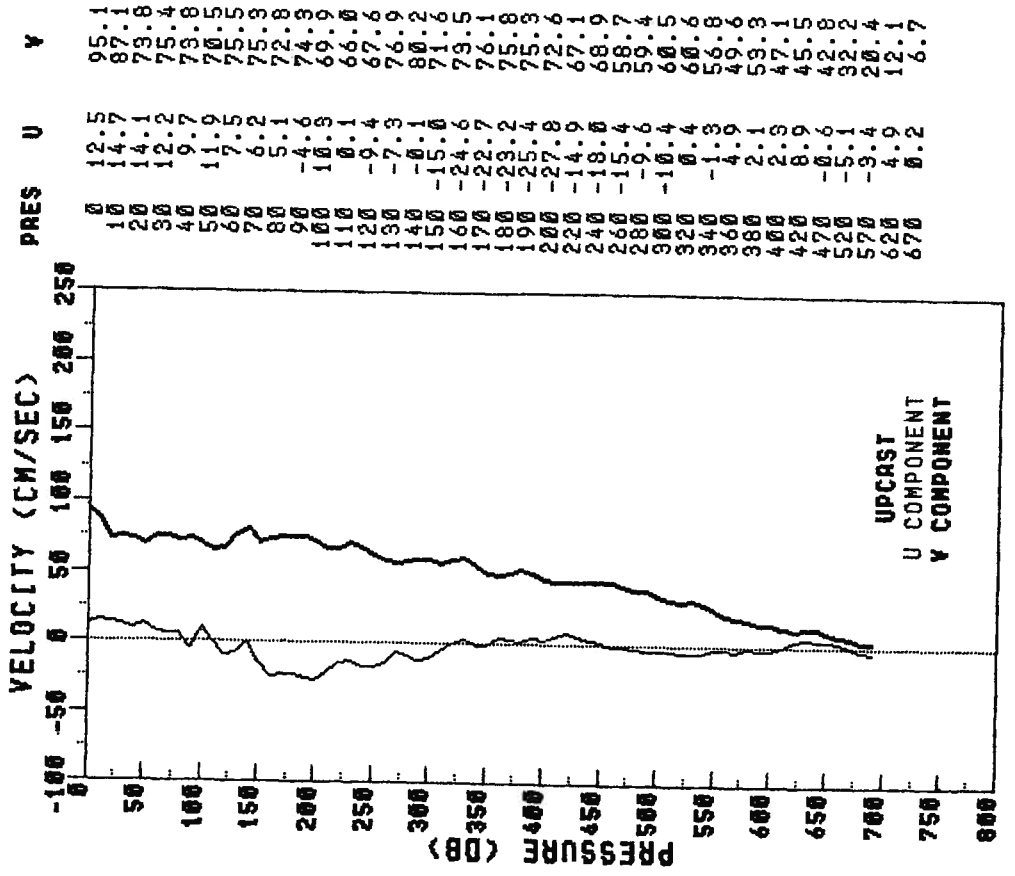
VK-STAC13-84 PEGASUS 009 STN 8
 R/V VIRGINIA KEY JOY 18 TIME 1333Z
 LATITUDE 27.00 N LONGITUDE 79.19 W



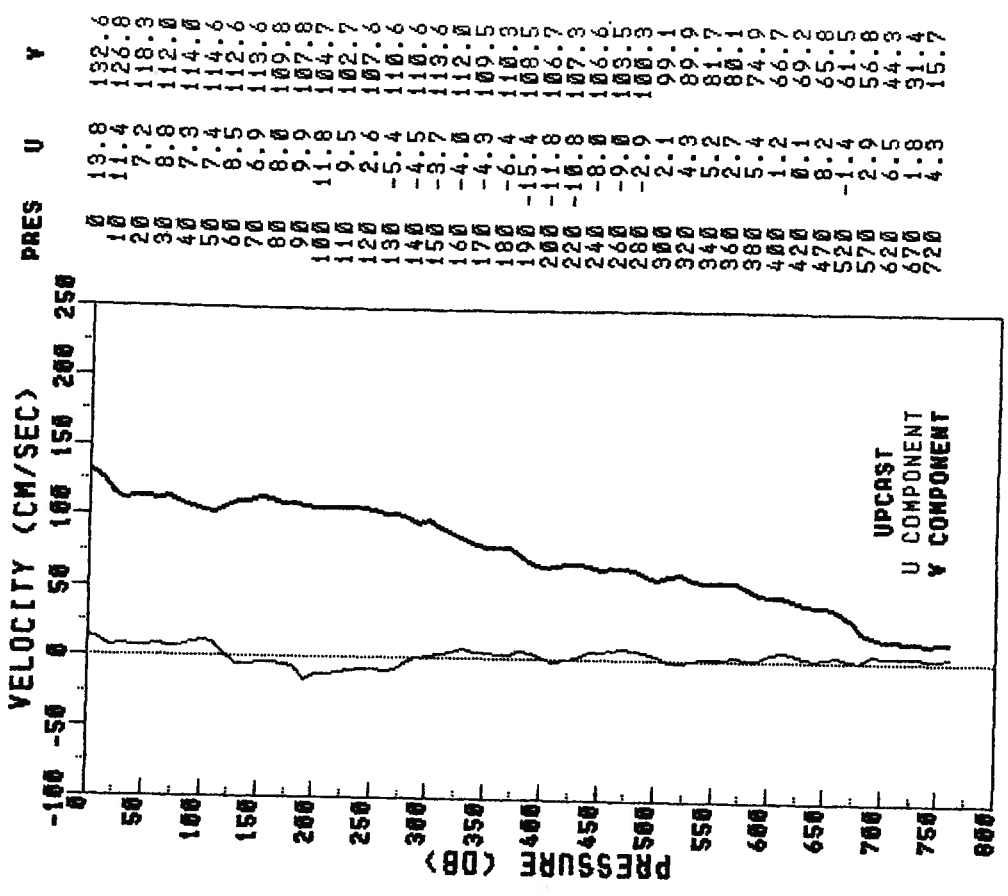
VK-STAC13-84 PEGASUS 010 STN 7
 R/V VIRGINIA KEY JOY 18 TIME 1557Z
 LATITUDE 26.99 N LONGITUDE 79.29 W



VK-STAC513-84 PEGASUS 011 STN 6
 R/Y VIRGINIA KEY JDAY 18 TIME 1757Z
 LATITUDE 26.99 N LONGITUDE 79.37 W

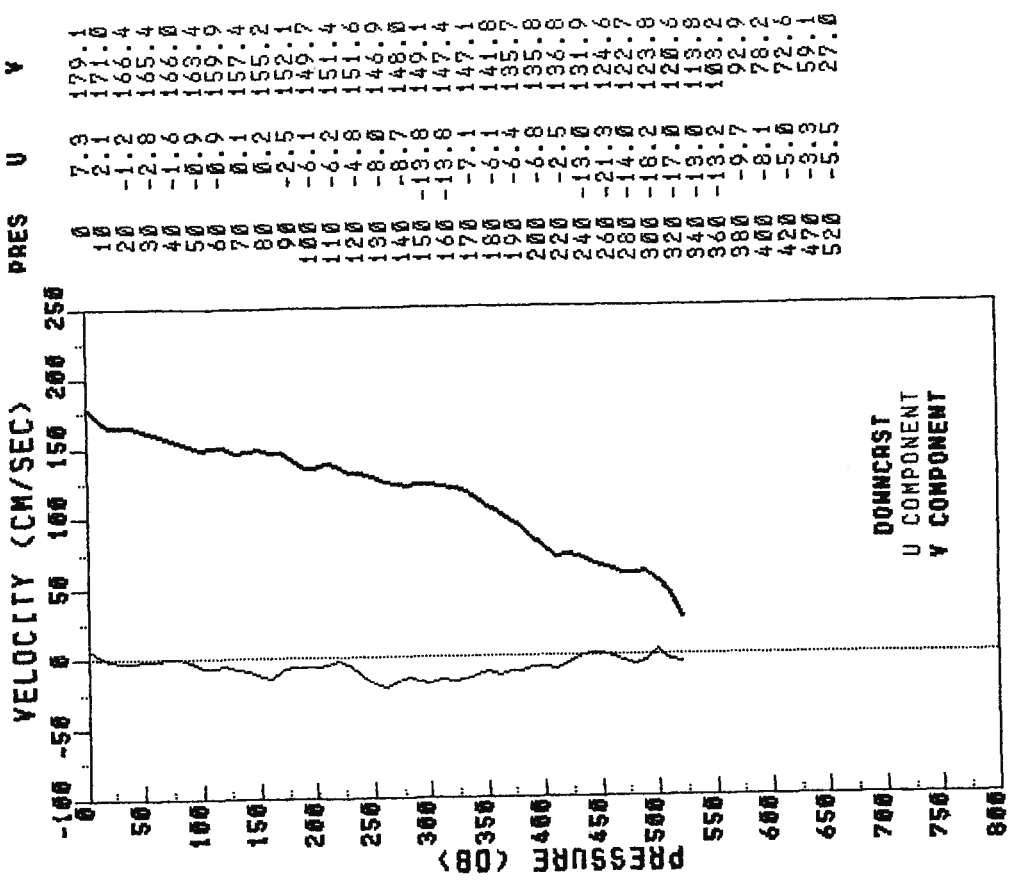
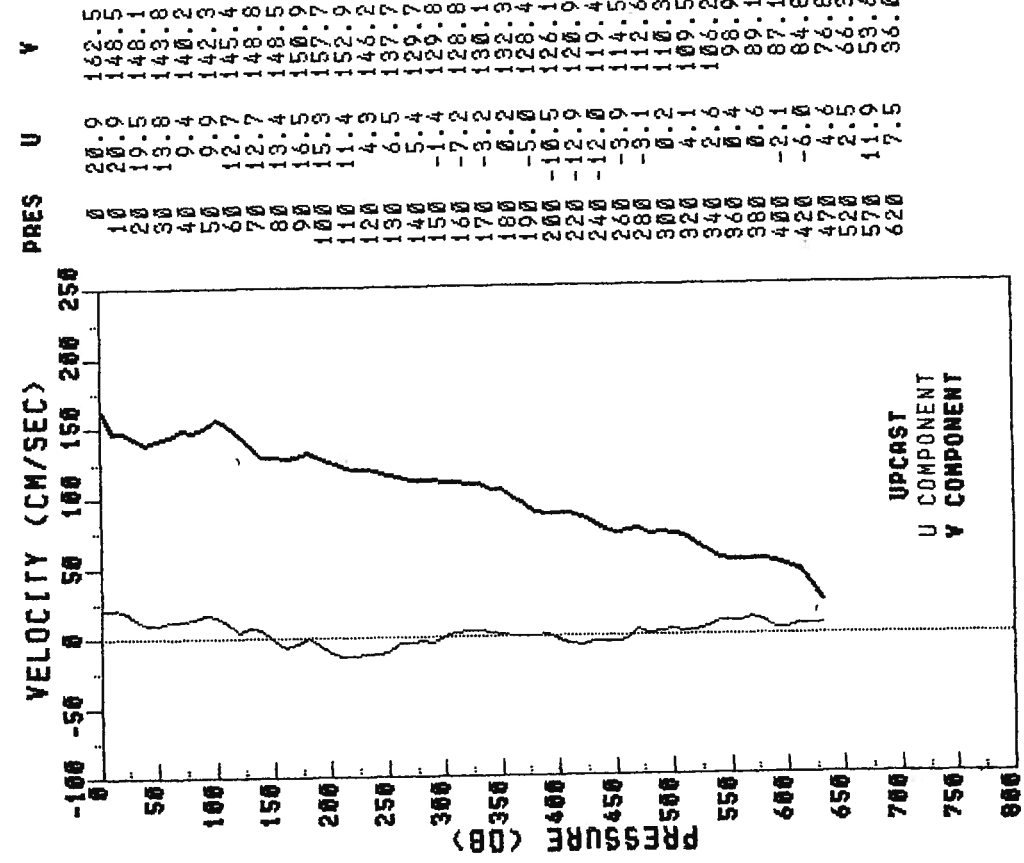


VK-STAC513-84 PEGASUS 012 STN 5
 R/Y VIRGINIA KEY JDAY 18 TIME 2014Z
 LATITUDE 26.99 N LONGITUDE 79.49 W

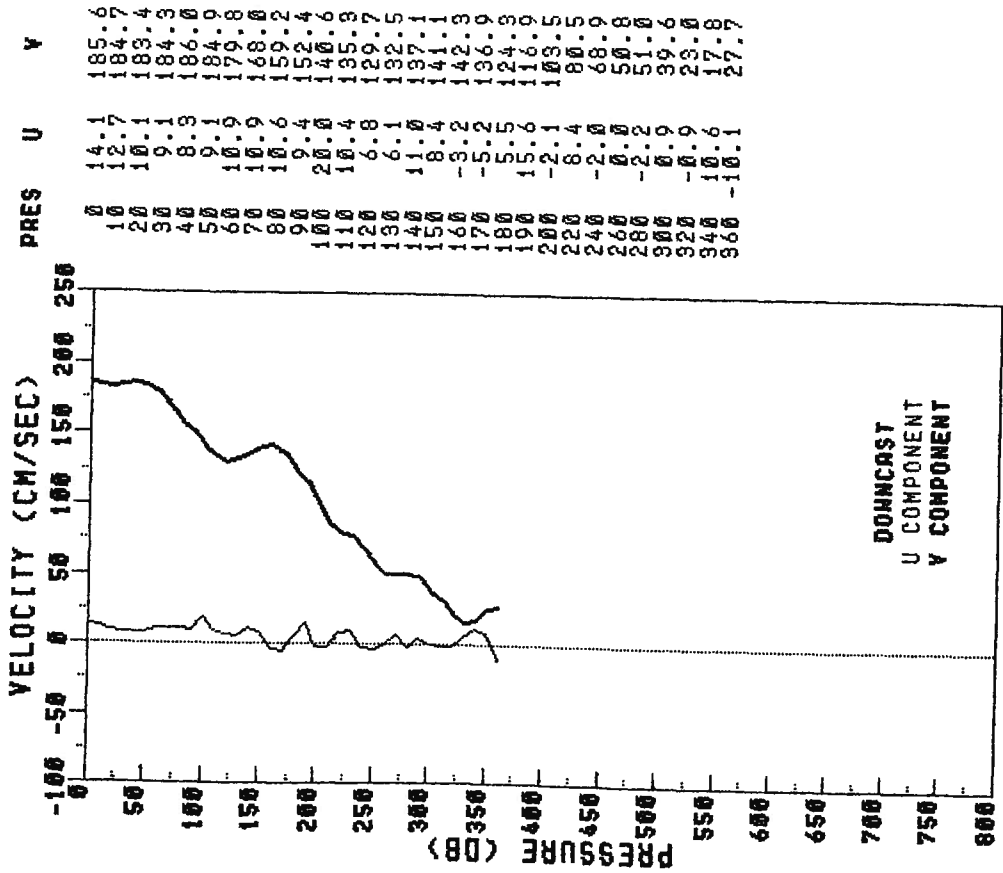


VK-STACSL3-84 PEGASUS 013 STN 4
 R/V VIRGINIA KEY JOY 18 TIME 2303Z
 LATITUDE 26.97 N LONGITUDE 79.61 W

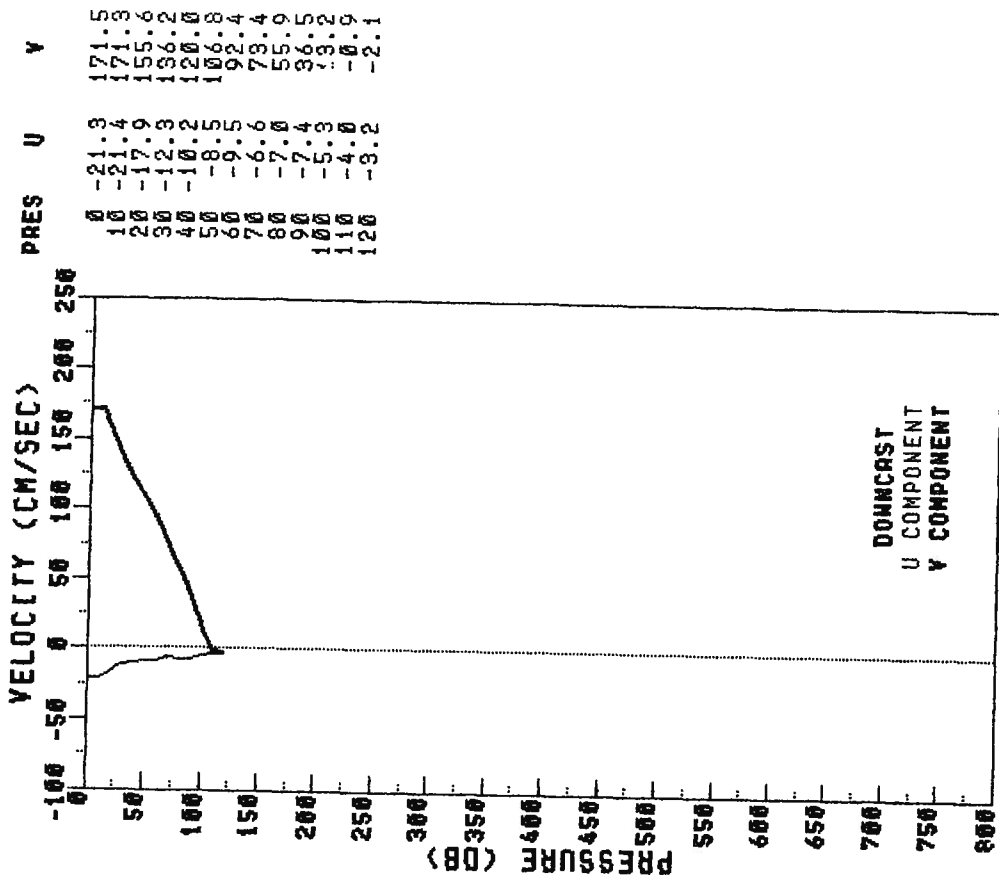
VK-STACSL3-84 PEGASUS 014 STN 3
 R/V VIRGINIA KEY JOY 19 TIME 0058Z
 LATITUDE 26.99 N LONGITUDE 79.68 W



VK-STACS13-84 PEGASUS 015 STN 2
 R/V VIRGINIA KEY JDAY 19 TIME 0300Z
 LATITUDE 26.98 N LONGITUDE 79.79 W

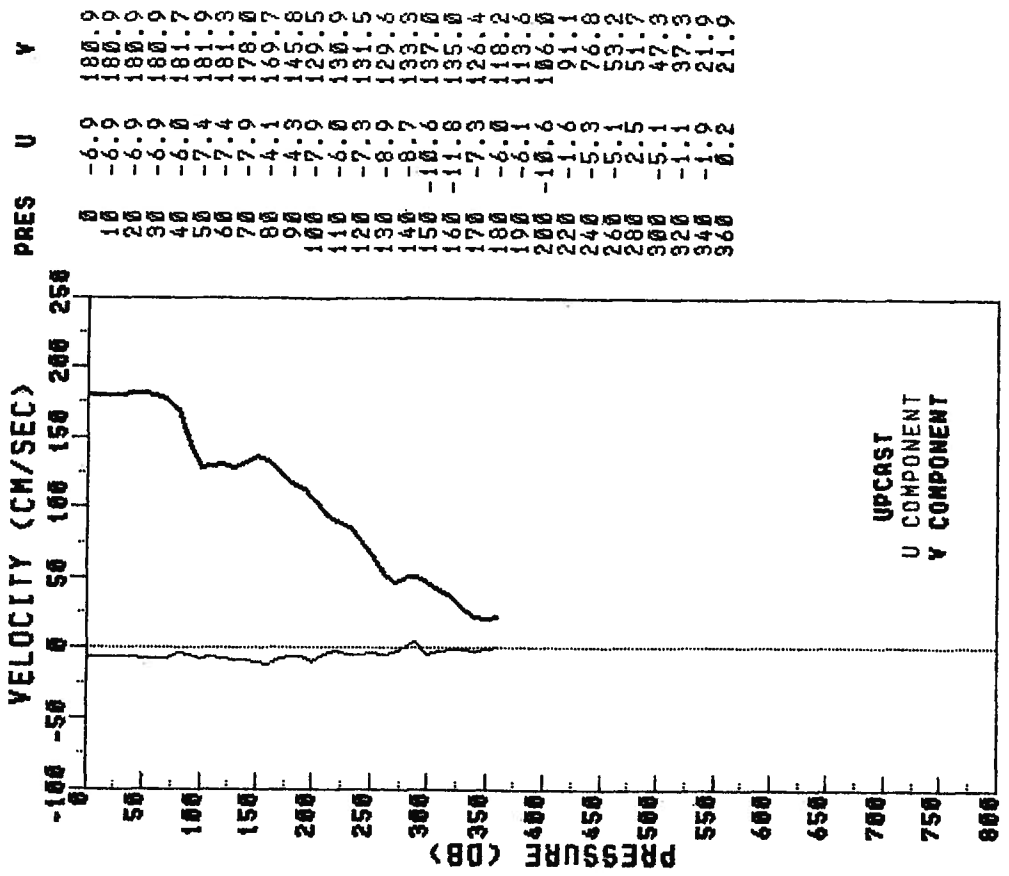
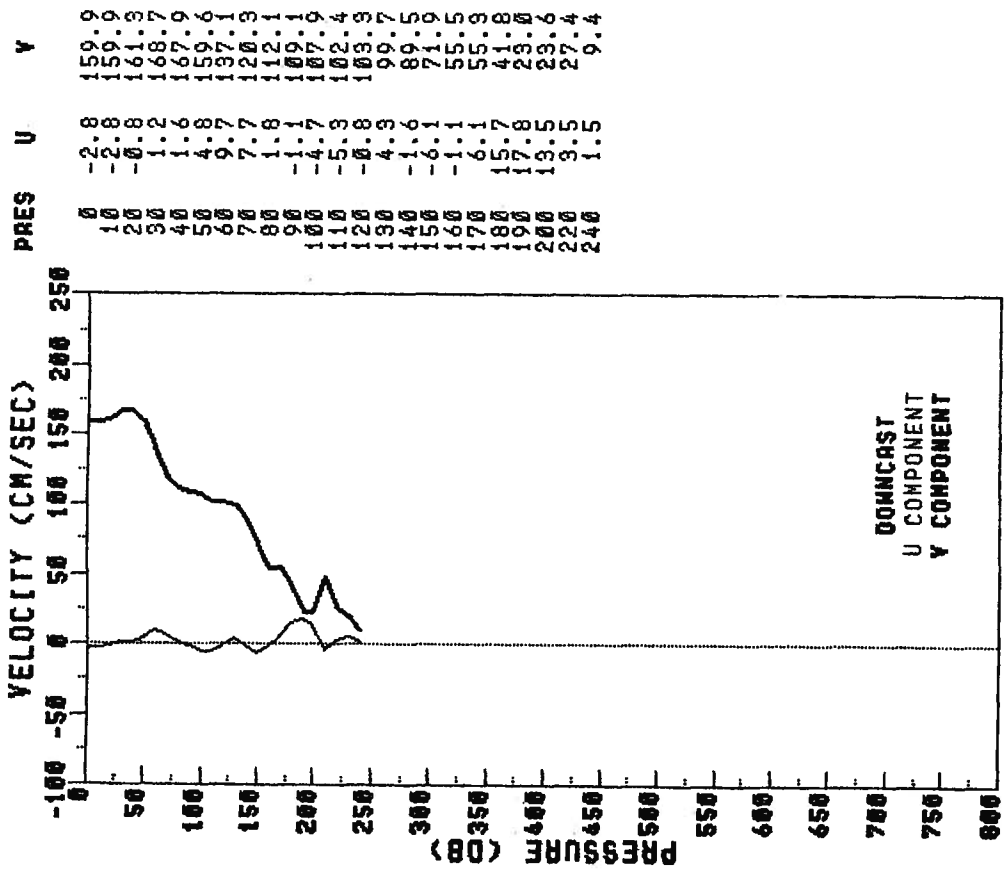


VK-STACS13-84 PEGASUS 017 STN 0
 R/V VIRGINIA KEY JDAY 19 TIME 0606Z
 LATITUDE 26.99 N LONGITUDE 79.93 W



VK-STAC13-84 PEGASUS 018 STN 1
 R/Y VIRGINIA KEY JOY 19 TIME 0654Z
 LATITUDE 26.99 N LONGITUDE 79.86 N

VK-STAC13-84 PEGASUS 019 STN 2
 R/Y VIRGINIA KEY JOY 19 TIME 0804Z
 LATITUDE 26.98 N LONGITUDE 79.79 N



YK-STACSL3-84

PEGASUS 020

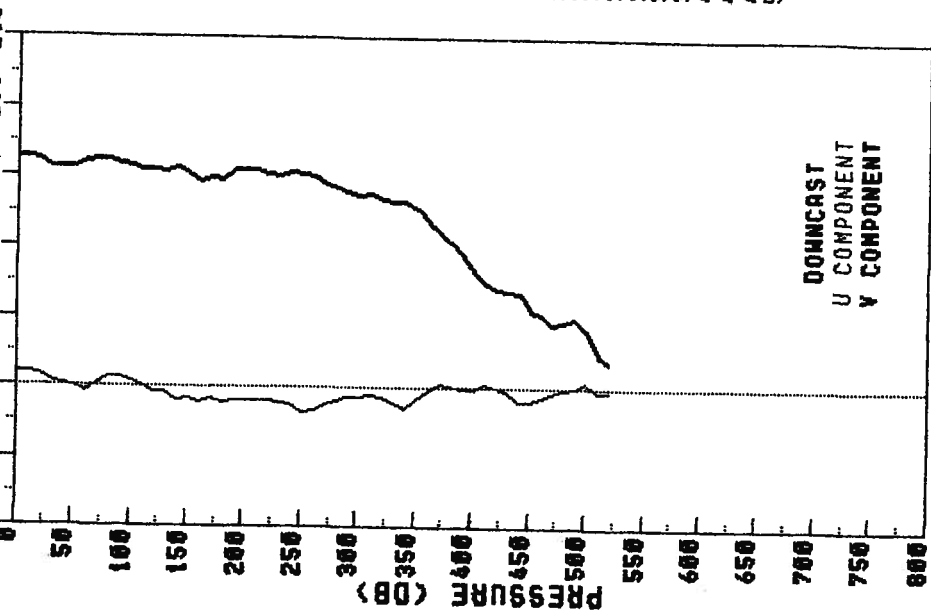
STN 3

R/V VIRGINIA KEY JOY 19 TIME 0941Z

LATITUDE 26.99 N LONGITUDE 79.68 W

VELOCITY (CM/SEC)

-100 -50 0 50 100 150 200 250



DOWNCAST
U COMPONENT
V COMPONENT

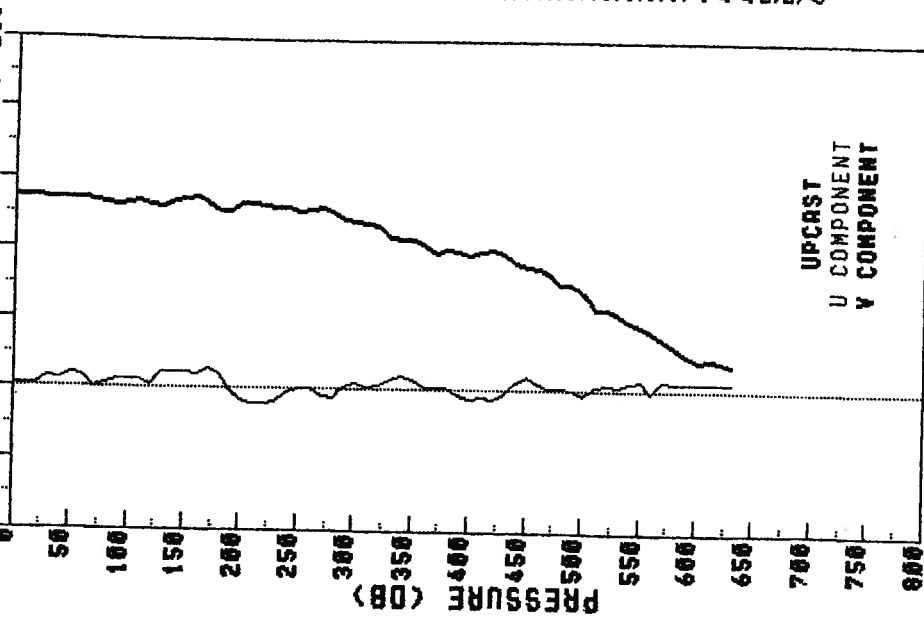
YK-STACSL3-84 PEGASUS 021 STN 4

R/V VIRGINIA KEY JOY 19 TIME 1209Z

LATITUDE 26.97 N LONGITUDE 79.61 N

VELOCITY (CM/SEC)

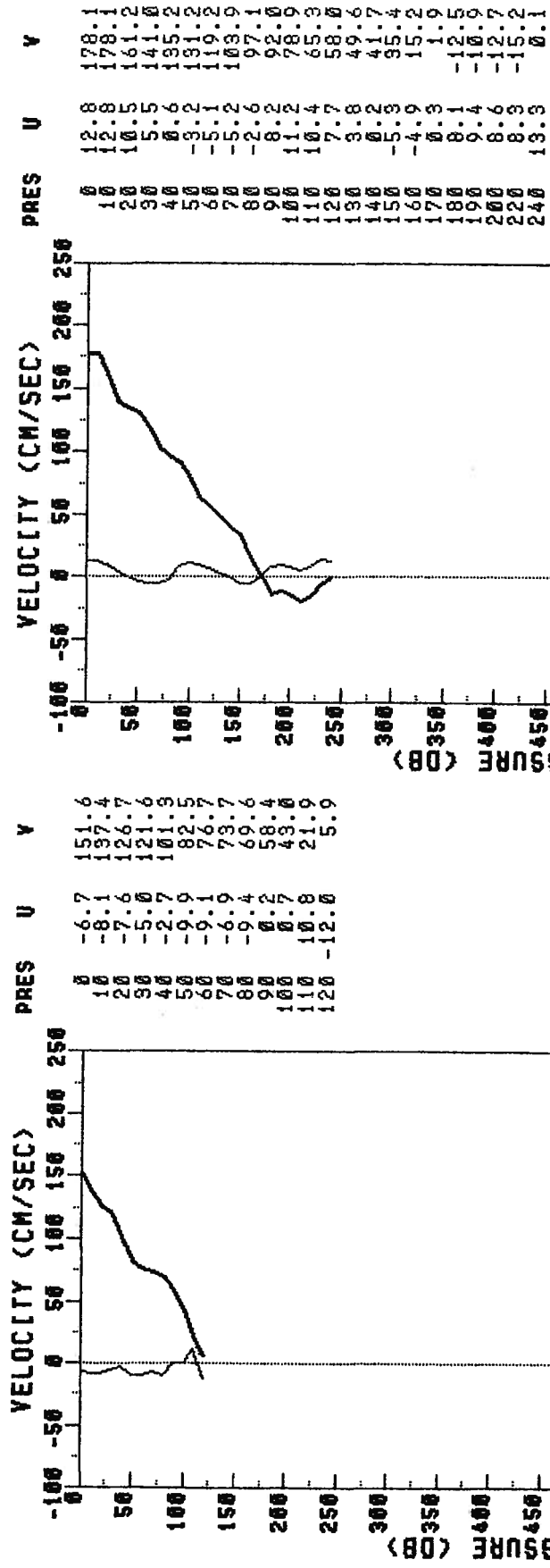
-100 -50 0 50 100 150 200 250



UPCAST
U COMPONENT
V COMPONENT

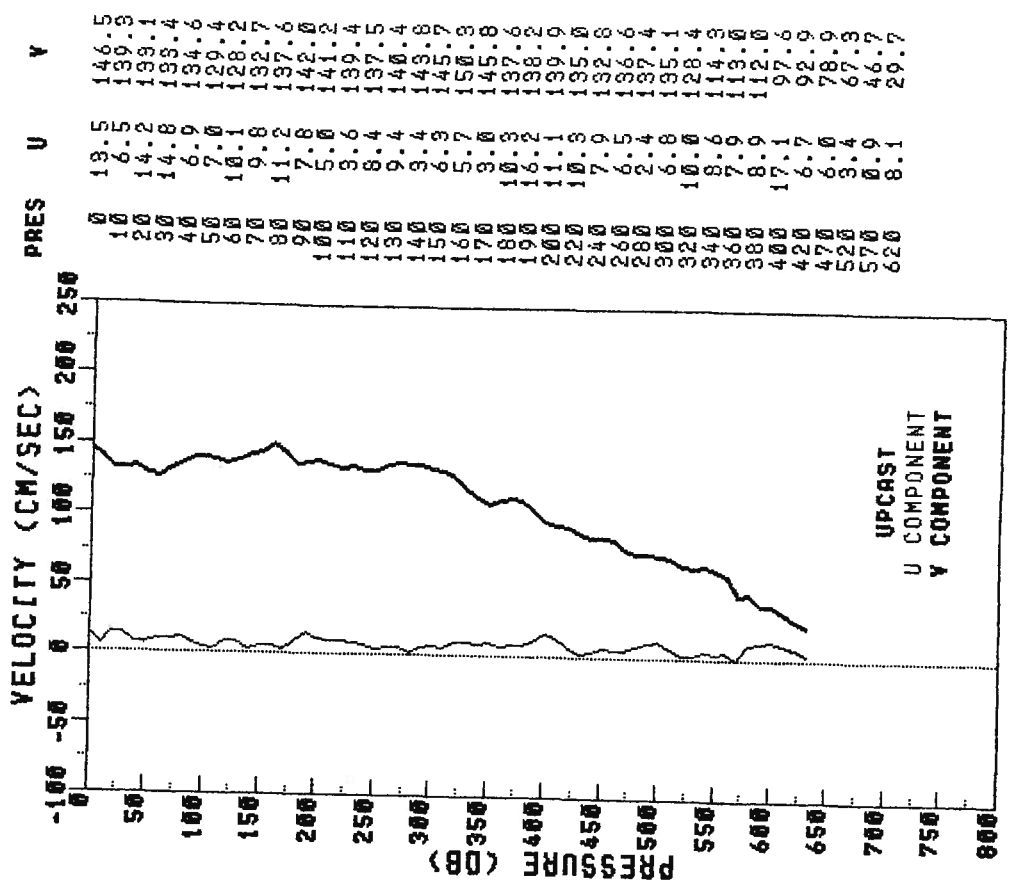
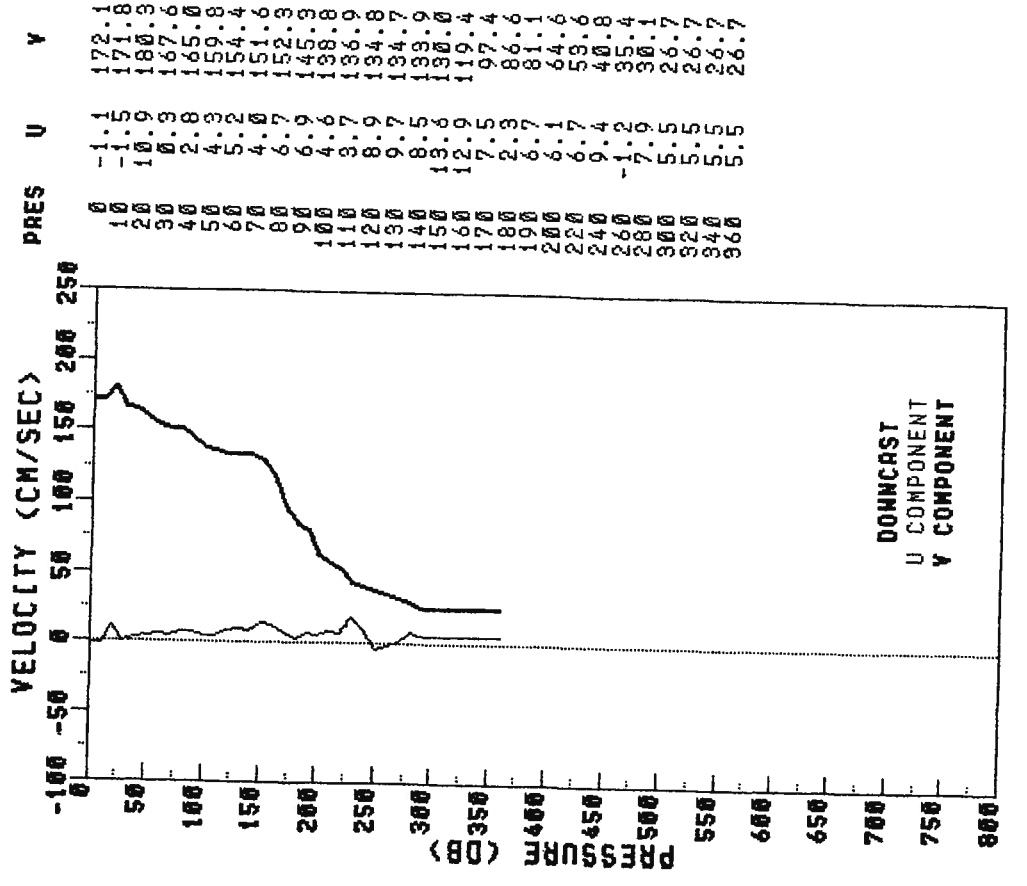
VK-STACSL3-84 PEGASUS 022 STN 0
 R/Y VIRGINIA KEY JDAY 25 TIME 1948Z
 LATITUDE 26.99 N LONGITUDE 79.93 W

VK-STACSL3-84 PEGASUS 023 STN 1
 R/Y VIRGINIA KEY JDAY 25 TIME 2045Z
 LATITUDE 26.99 N LONGITUDE 79.87 W

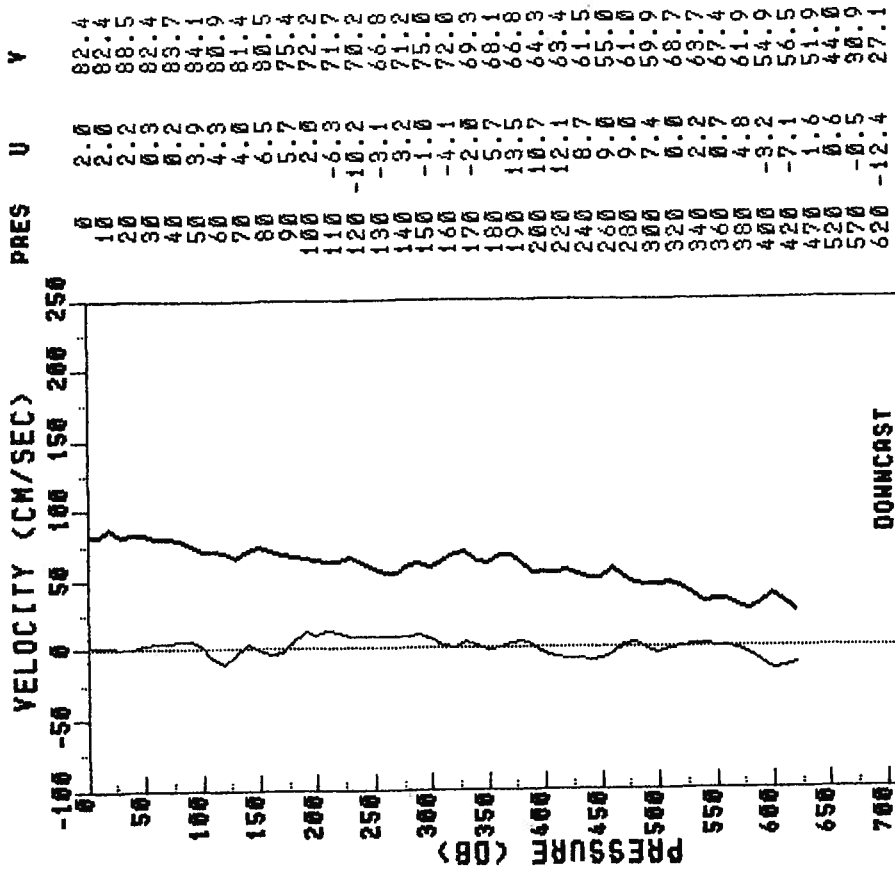


YK-STAC13-84 PEGASUS 024 STN 2
 R/Y VIRGINIA KEY JDY 25 TIME 2156Z
 LATITUDE 26.98 N LONGITUDE 79.79 W

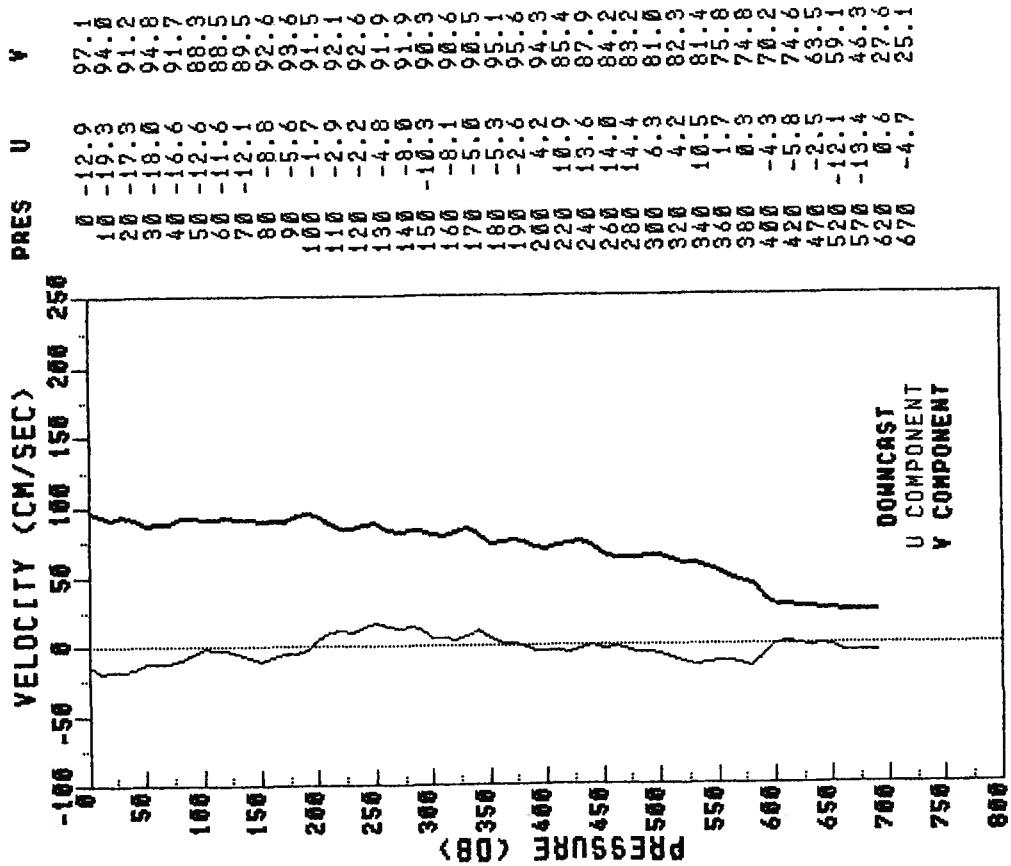
YK-STAC13-84 PEGASUS 026 STN 4
 R/Y VIRGINIA KEY JDY 26 TIME 0104Z
 LATITUDE 26.97 N LONGITUDE 79.61 W



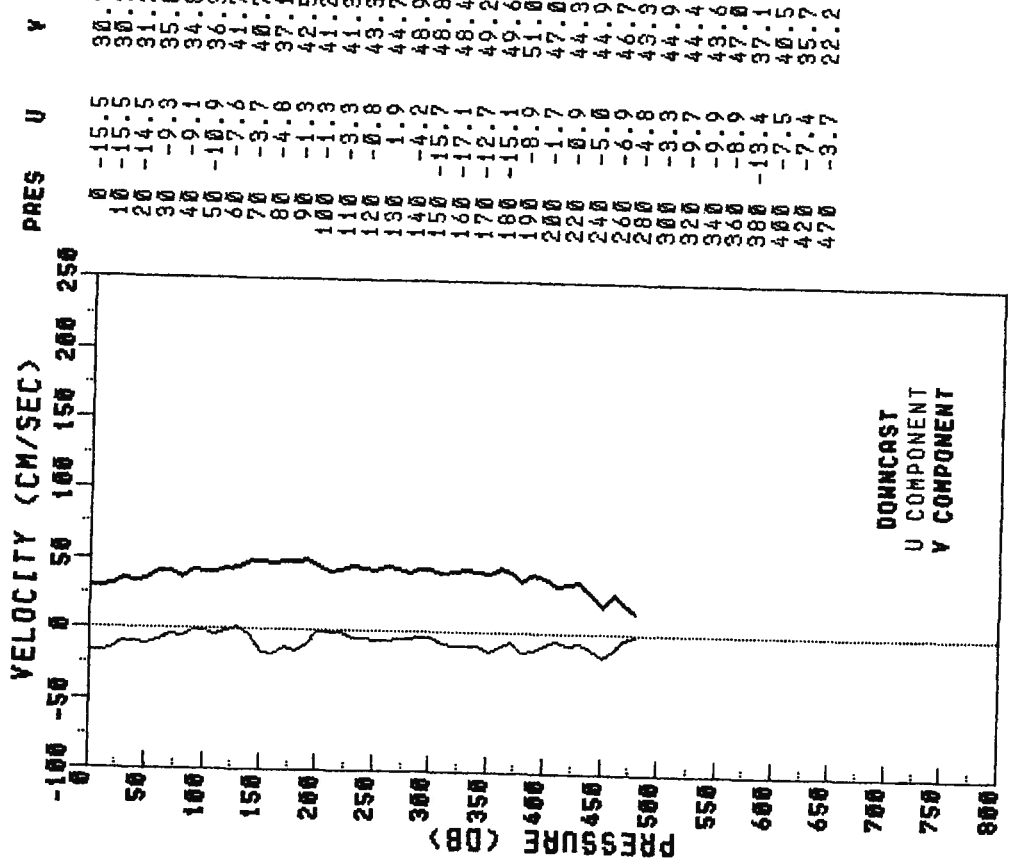
YK-STACS13-84 PEGASUS 029 STN 7
 R/V VIRGINIA KEY JDAY 26 TIME 0701Z
 LATITUDE 26.99 N LONGITUDE 79.24 W



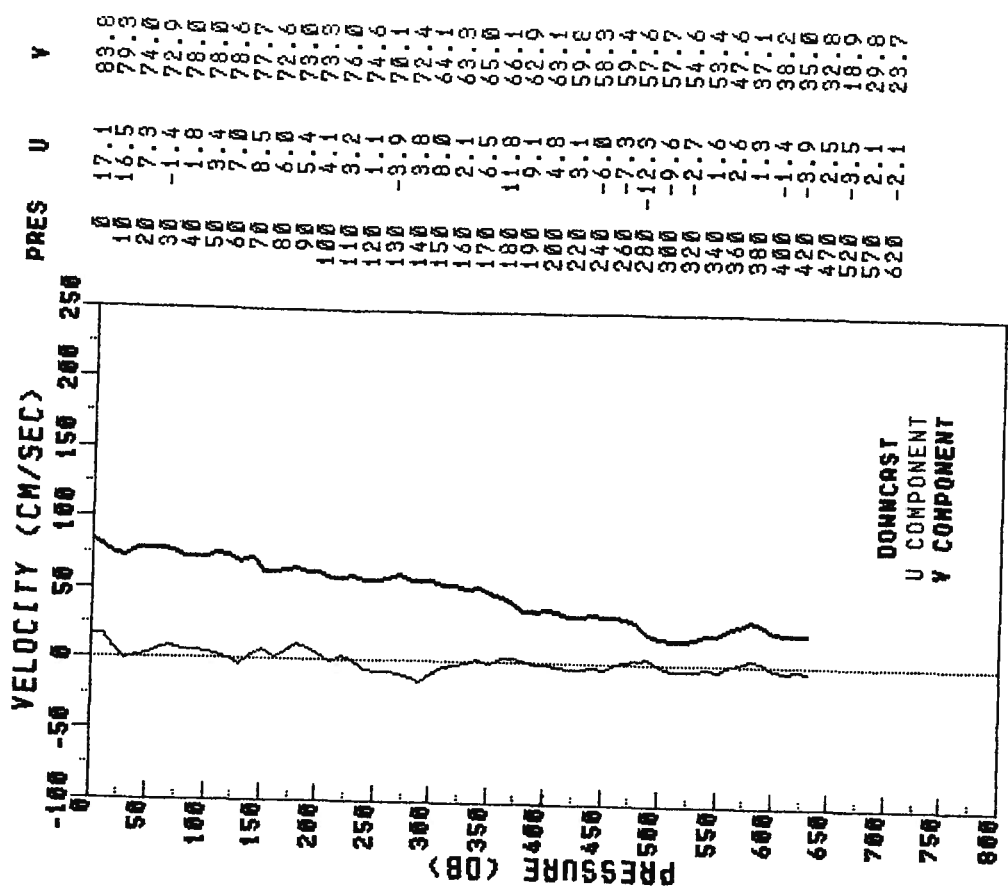
YK-STACS13-84 PEGASUS 028 STN 6
 R/V VIRGINIA KEY JDAY 26 TIME 0516Z
 LATITUDE 26.99 N LONGITUDE 79.37 W



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 R/V VIRGINIA KEY JDAY 26 TIME 0854Z
 LATITUDE 27.00 N LONGITUDE 79.19 W

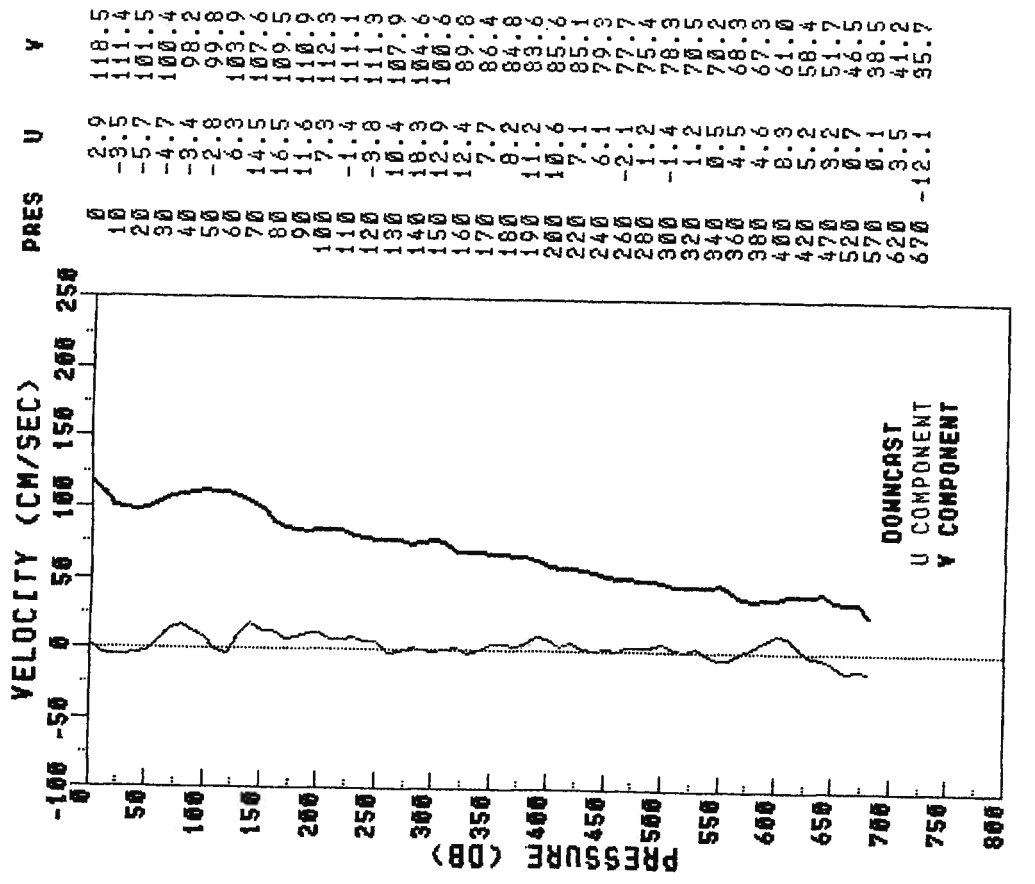
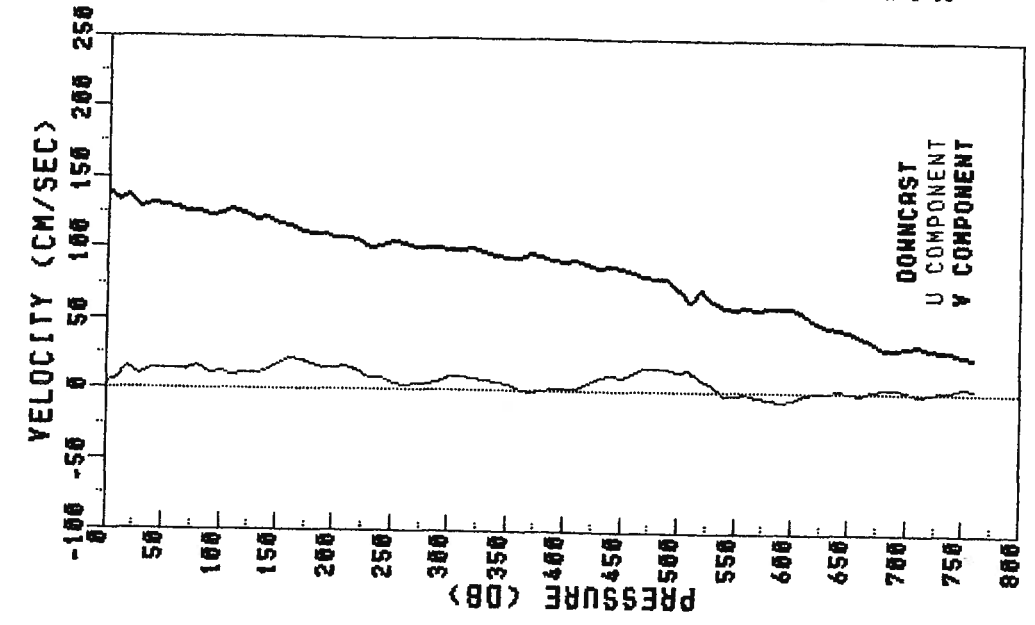


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 R/V VIRGINIA KEY JDAY 26 TIME 1822Z
 LATITUDE 26.99 N LONGITUDE 79.28 W



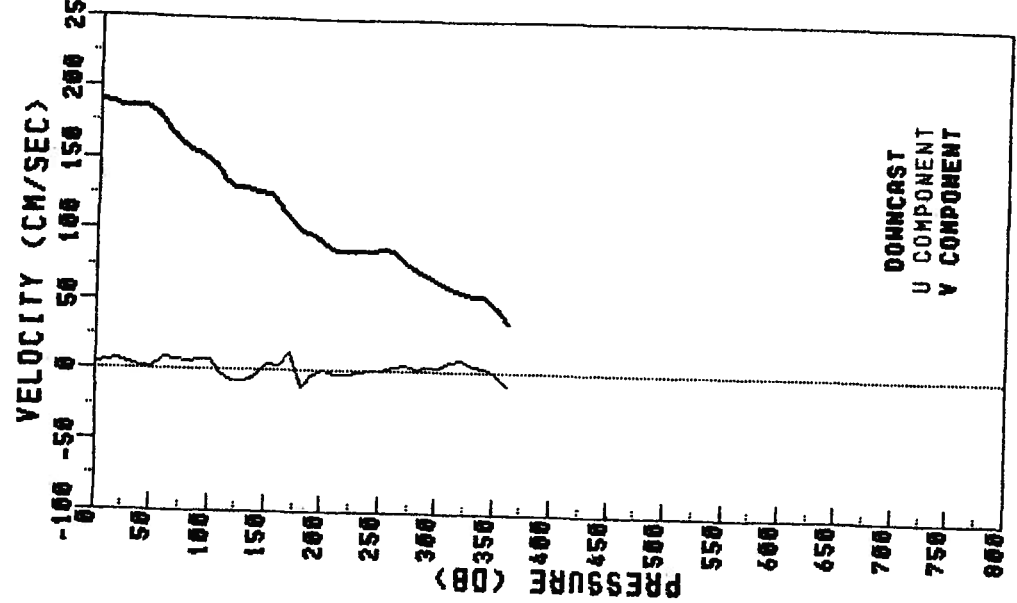
VK-STAC13-84 PEGASUS 034 STN 5
 R/V VIRGINIA KEY JOY 26 TIME 2223Z
 LATITUDE 26.99 N LONGITUDE 79.49 W

VK-STAC13-84 PEGASUS 033 STN 6
 R/V VIRGINIA KEY JOY 26 TIME 2007Z
 LATITUDE 26.99 N LONGITUDE 79.37 W



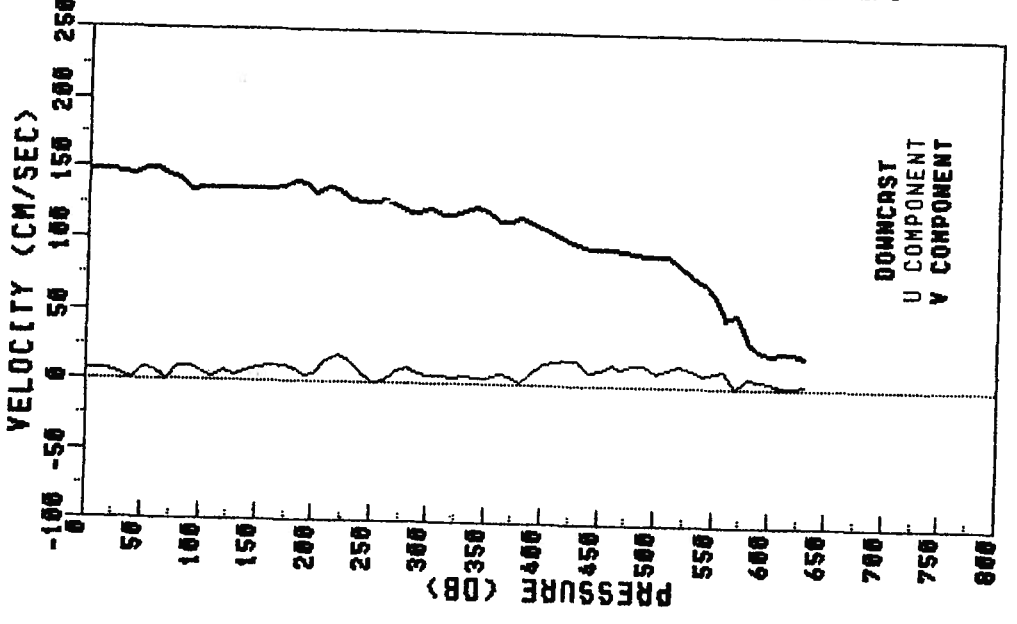
VK-STACSL3-84 PEGASUS 037 STN 2
 R/V VIRGINIA KEY JOY 27 TIME 0451Z
 LATITUDE 26.98 N LONGITUDE 79.79 W

PRES	U	V
0	5.1	191.0
10	5.9	189.7
20	7.2	185.8
30	5.2	186.6
40	1.4	182.9
50	2.5	171.1
60	8.9	162.8
70	7.5	157.0
80	5.5	153.8
90	7.5	146.3
100	7.3	136.3
110	-1.5	130.1
120	-7.9	129.9
130	-2.9	126.2
140	4.1	126.2
150	9.1	117.1
160	12.4	108.5
170	11.2	99.6
180	-1.7	97.7
190	0.6	87.2
200	0.1	86.6
220	3.7	82.4
240	2.2	72.6
260	3.2	64.9
300	8.6	57.9
320	2.6	55.6
340	-8.4	

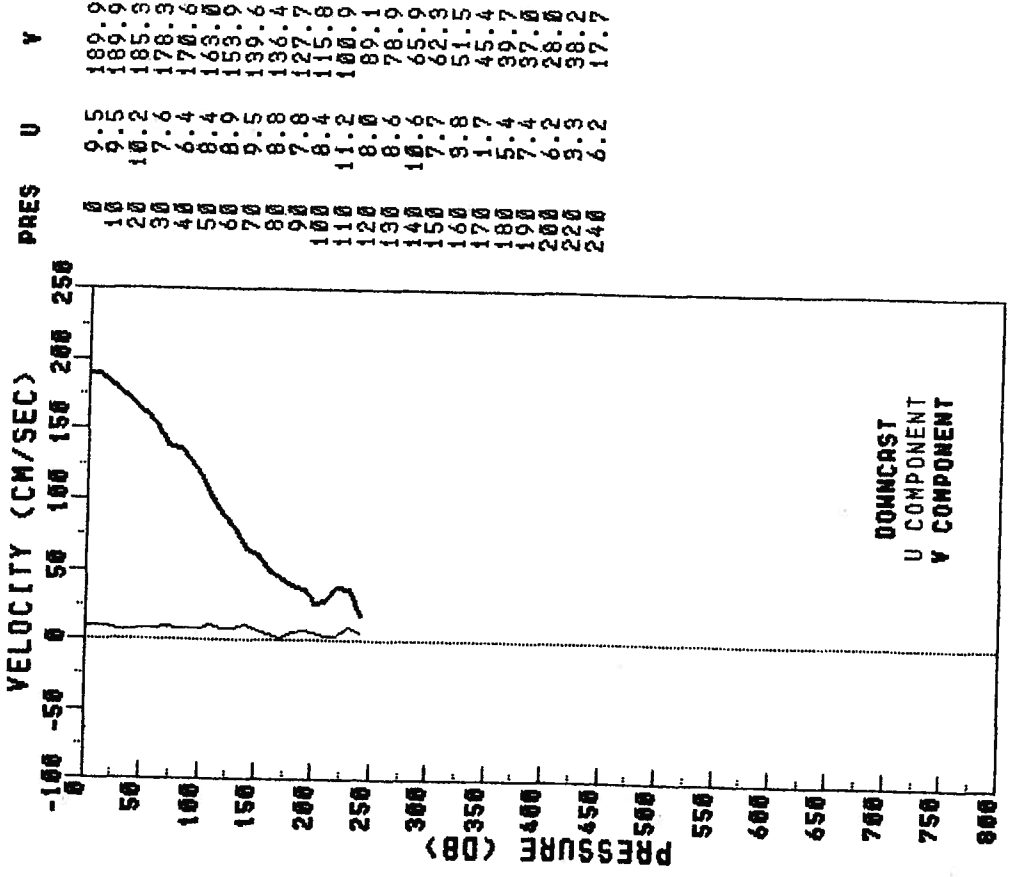


VK-STACSL3-84 PEGASUS 035 STN 4
 R/V VIRGINIA KEY JOY 27 TIME 0049Z
 LATITUDE 26.97 N LONGITUDE 79.61 W

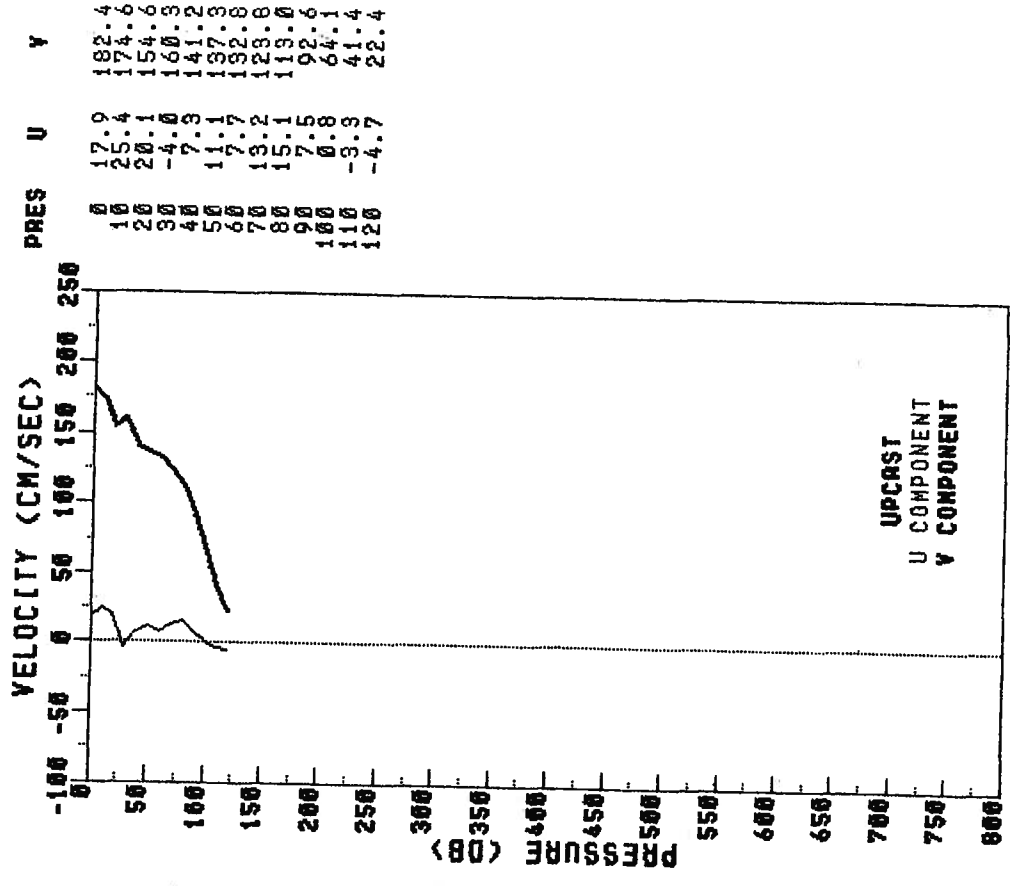
PRES	U	V
0	6.5	148.8
10	6.5	148.8
20	4.4	147.9
30	4.0	146.8
40	8.6	151.2
50	7.9	150.8
60	0.2	146.8
70	10.1	144.1
80	9.6	135.0
90	5.5	137.1
100	2.5	136.4
110	6.8	136.4
120	4.7	137.3
130	6.9	137.2
140	9.6	137.4
150	11.0	137.1
160	11.4	138.3
170	9.6	142.3
180	4.2	141.8
190	5.1	134.8
200	19.0	136.9
220	6.9	128.1
240	1.9	129.6
260	11.2	122.9
280	5.7	124.9
300	3.7	120.2
320	4.8	125.4
340	6.8	116.7
360	2.1	118.7
380	15.1	111.6
400	17.5	103.3
420	12.8	95.3
440	15.8	86.3
460	10.9	81.5
480	1.7	51.7
500		25.7



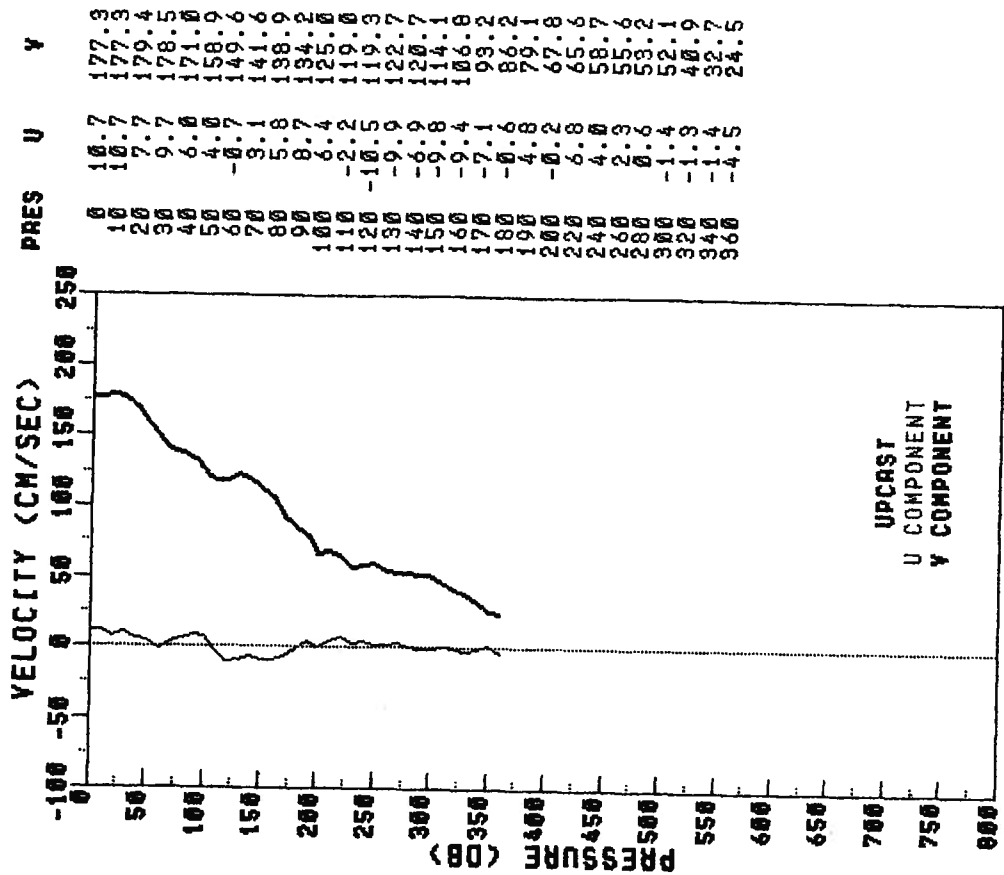
VK-STAC513-84 PEGASUS 038 STN 1
 R/V VIRGINIA KEY JOY 27 TIME 0616Z
 LATITUDE 27.00 N LONGITUDE 79.86 W



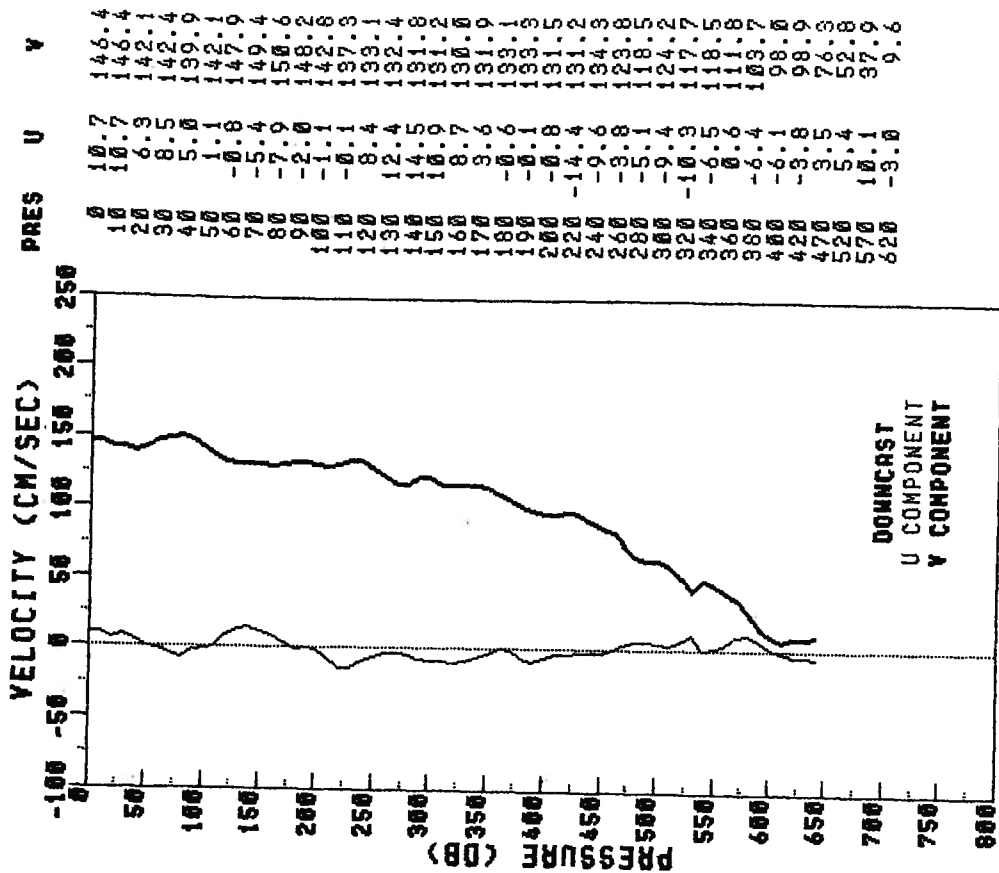
VK-STAC513-84 PEGASUS 039 STN 0
 R/V VIRGINIA KEY JOY 27 TIME 0741Z
 LATITUDE 26.99 N LONGITUDE 79.93 W



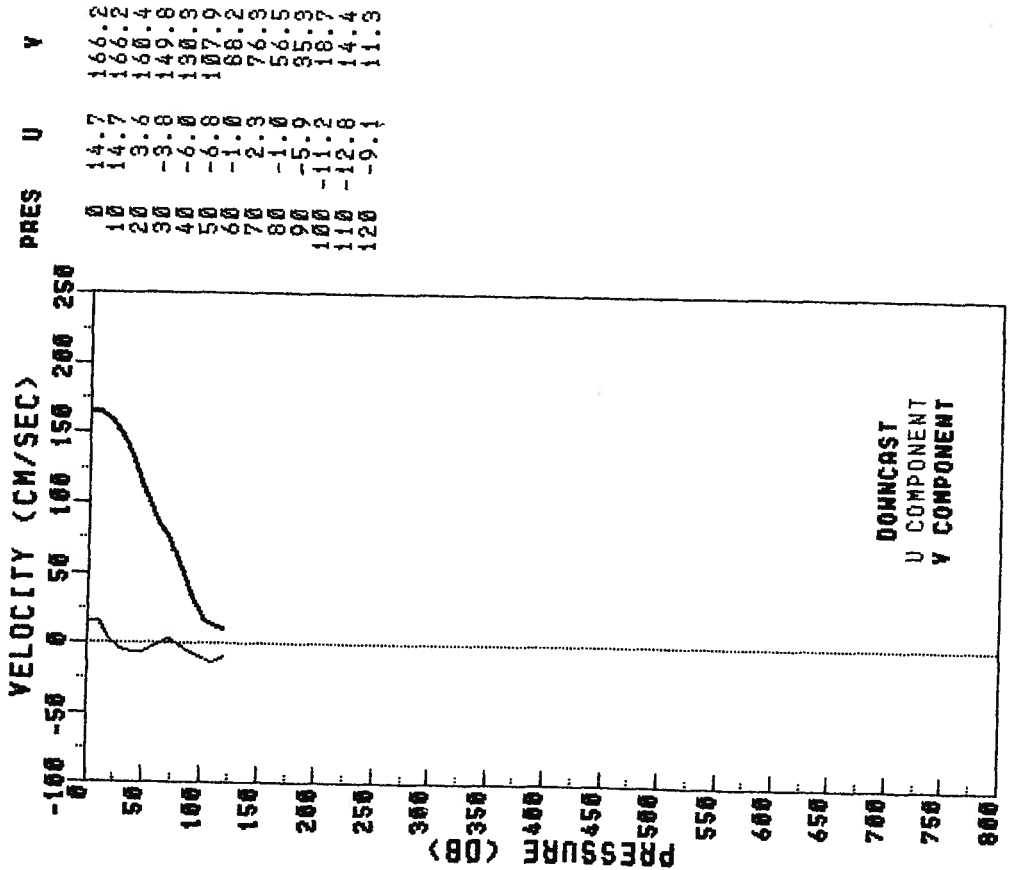
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 R/V VIRGINIA KEY JDAY 27 TIME 0921Z
 LATITUDE 26.98 N LONGITUDE 79.79 W



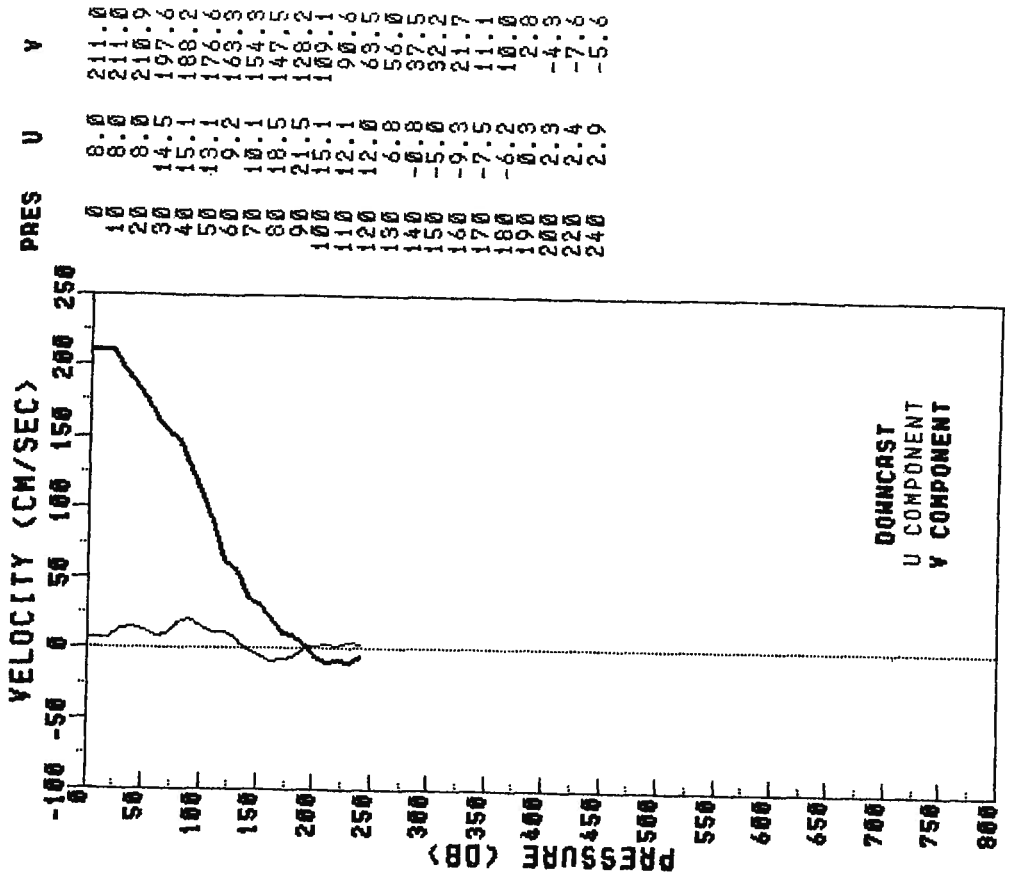
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 LATITUDE 26.97 N LONGITUDE 79.61 W



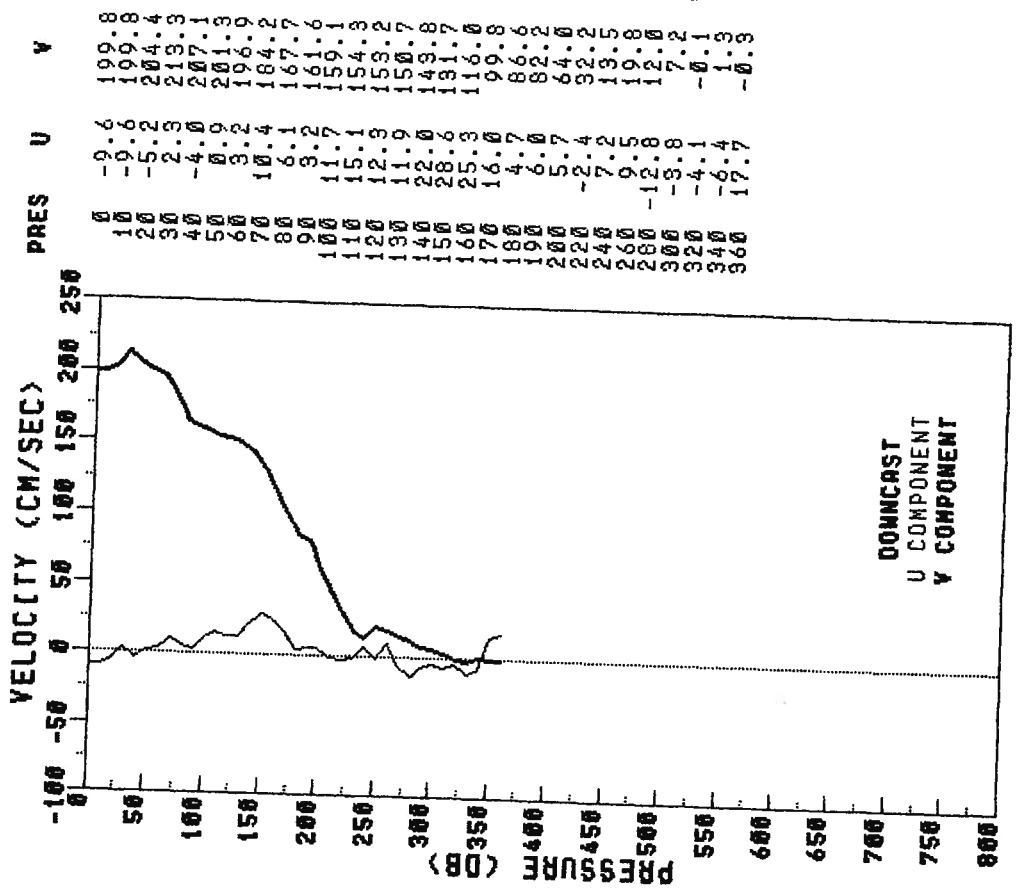
VK-STACSL3-84 PEGASUS 042 STN 0
 R/Y VIRGINIA KEY JOY 30 TIME 2054Z
 LATITUDE 26.99 N LONGITUDE 79.93 W



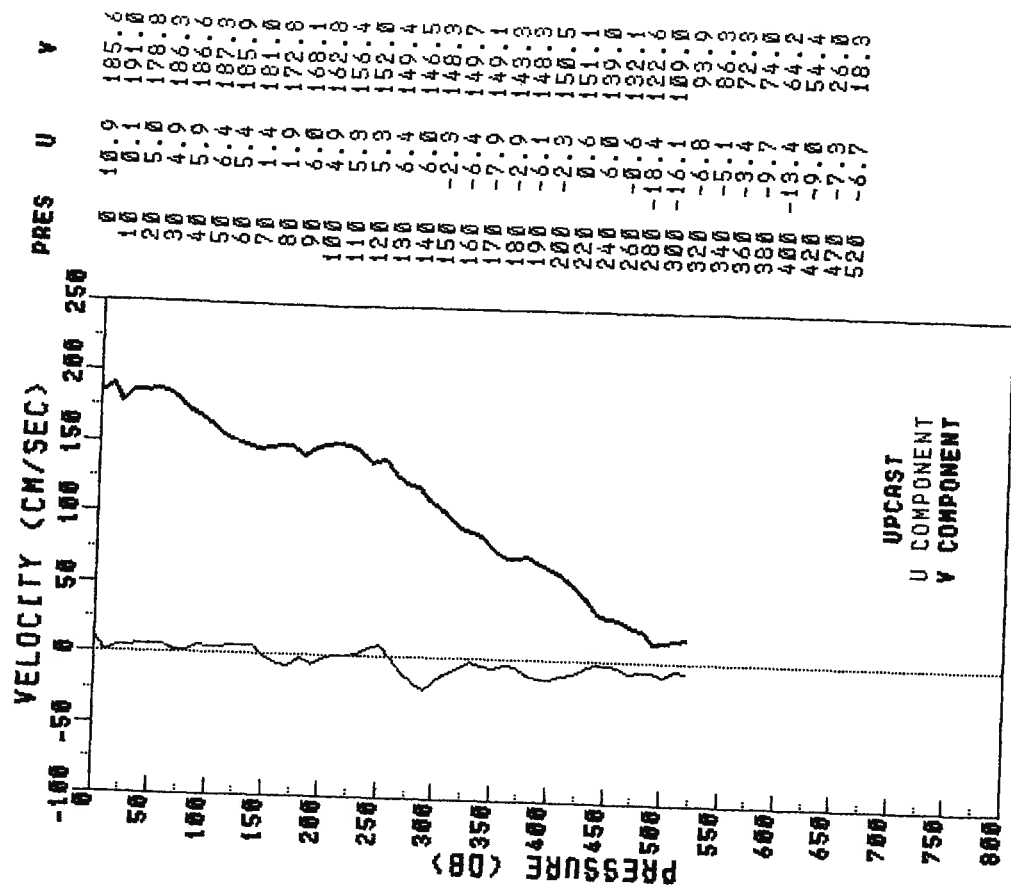
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 LATITUDE 26.99 N LONGITUDE 79.87 W



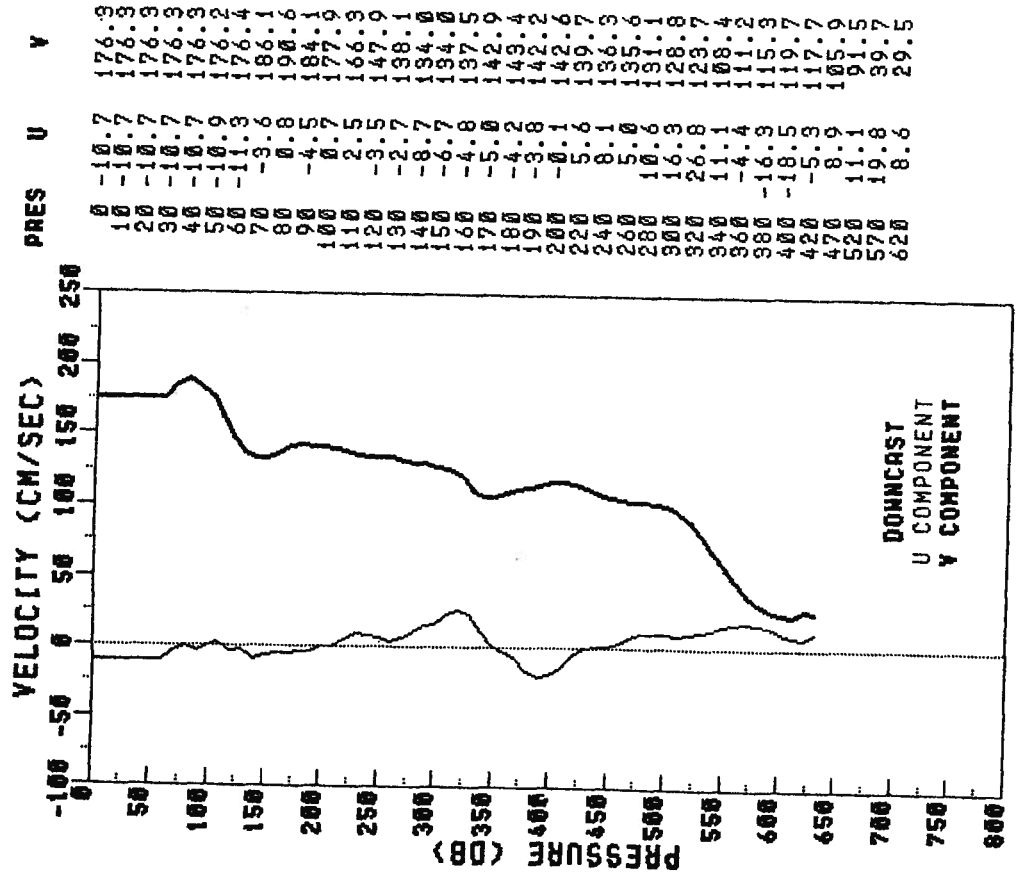
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 R/V VIRGINIA KEY JDAY 30 TIME 2300Z
 LATITUDE 26.98 N LONGITUDE 79.79 W



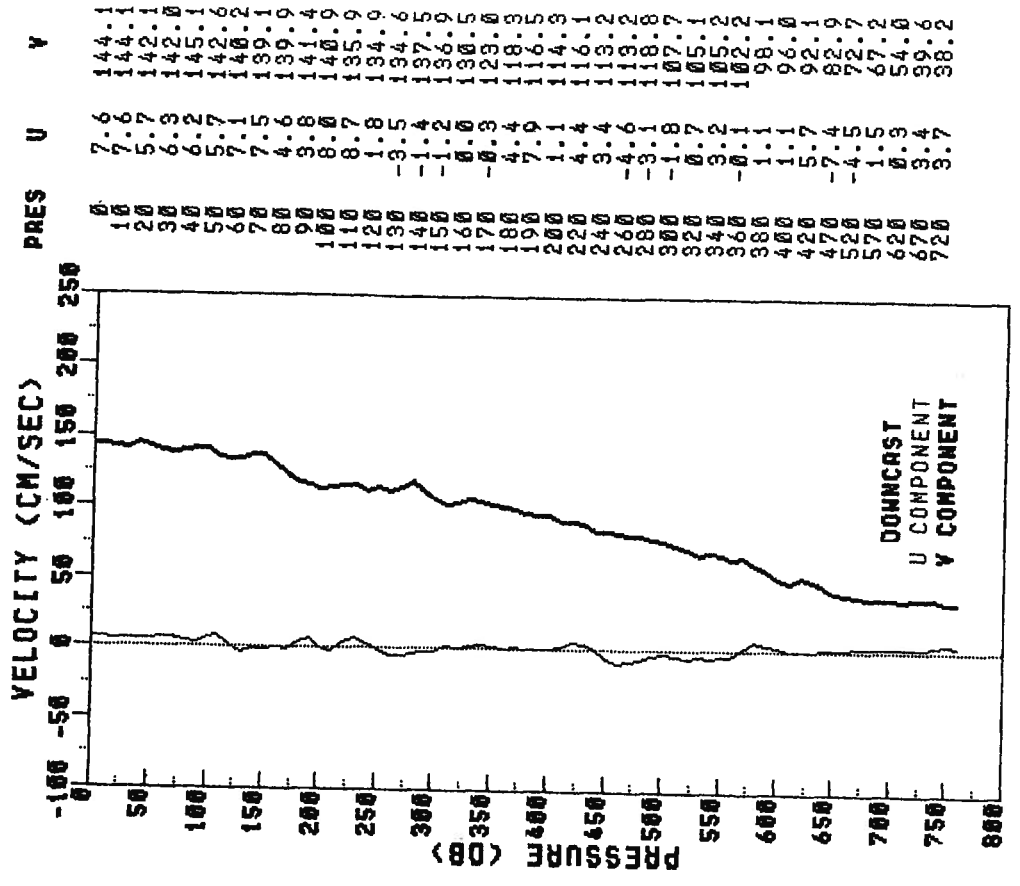
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 LATITUDE 26.99 N LONGITUDE 79.68 W



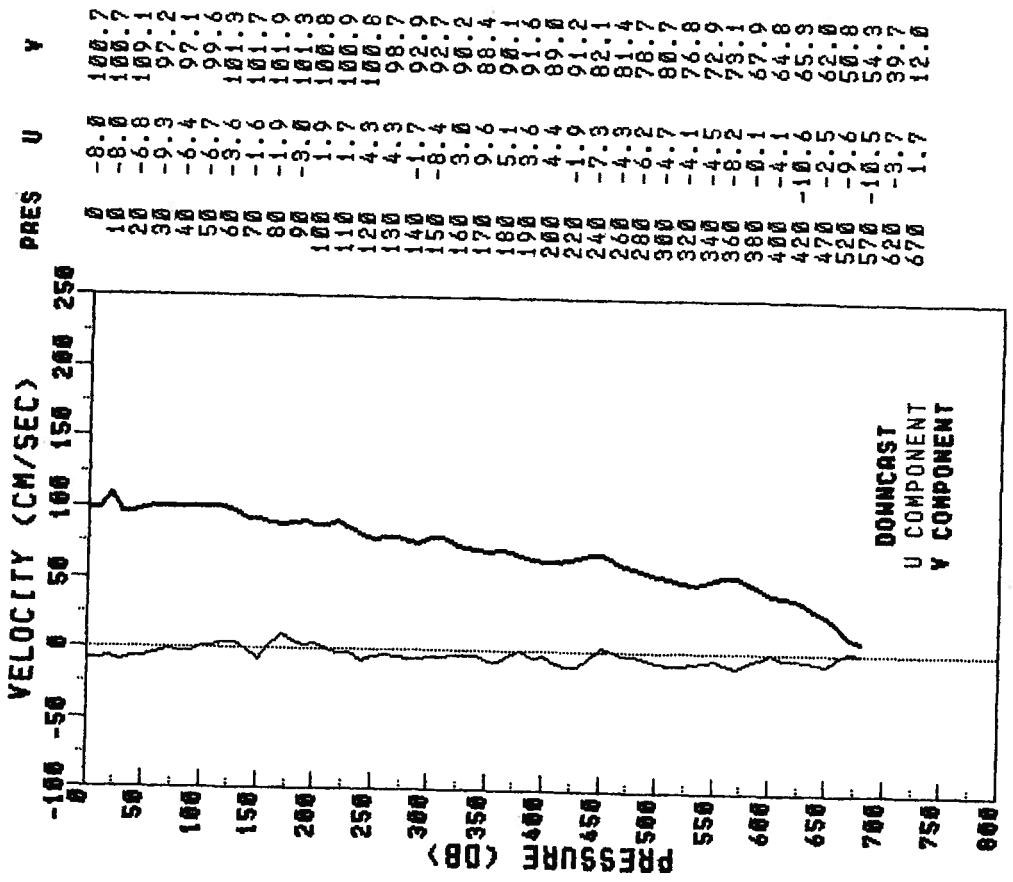
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 LATITUDE 26.97 N LONGITUDE 79.61 W



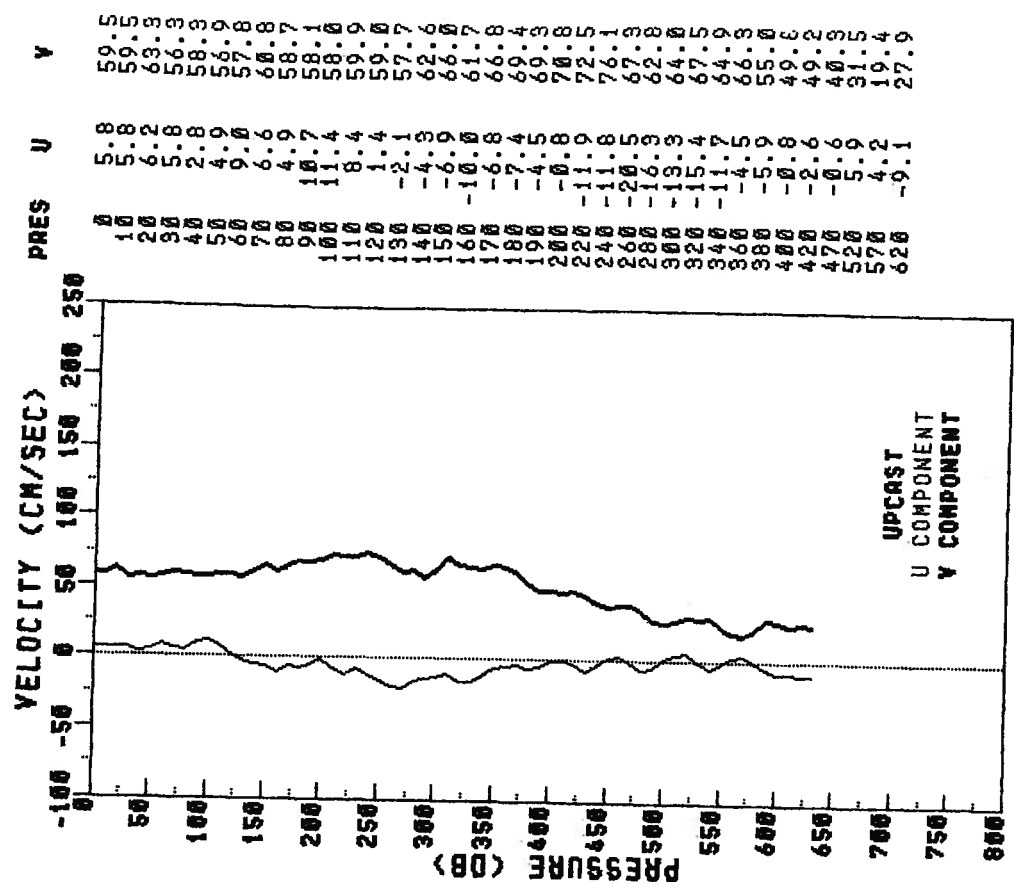
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 R/Y VIRGINIA KEY JOY 31 TIME 0359Z
 LATITUDE 26.98 N LONGITUDE 79.49 W



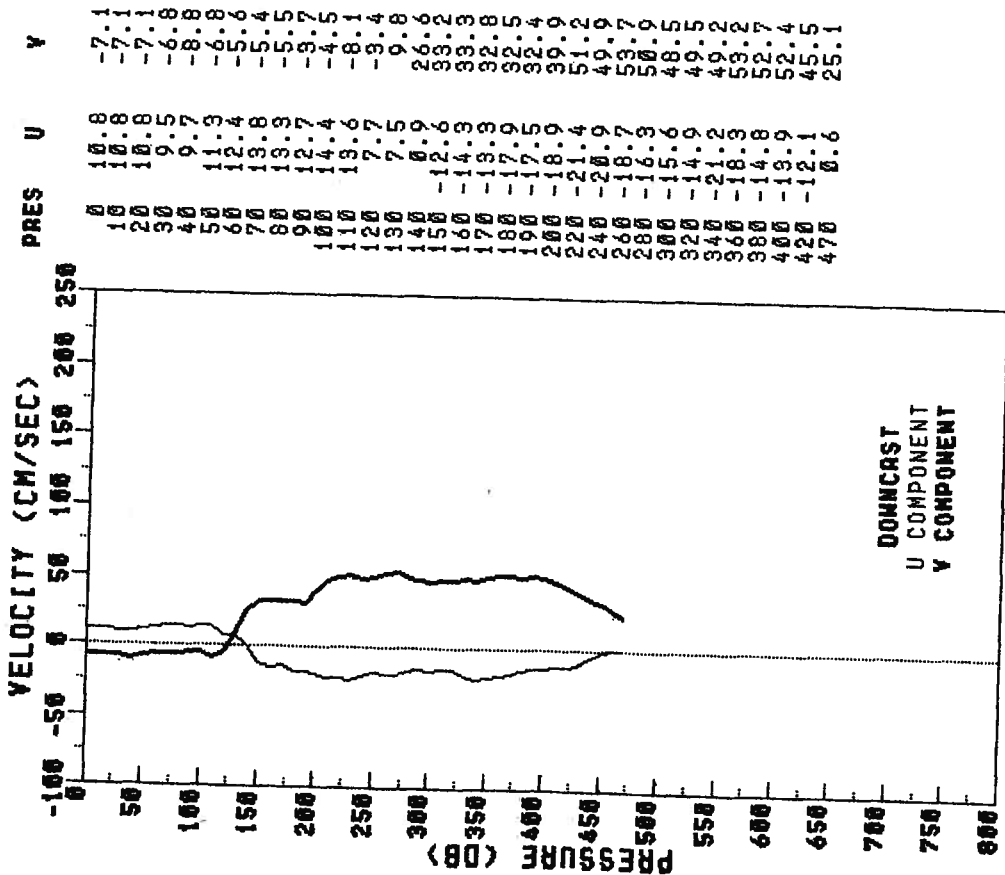
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 R/V VIRGINIA KEY JDAY 31 TIME 0618Z
 LATITUDE 26.99 N LONGITUDE 79.37 W



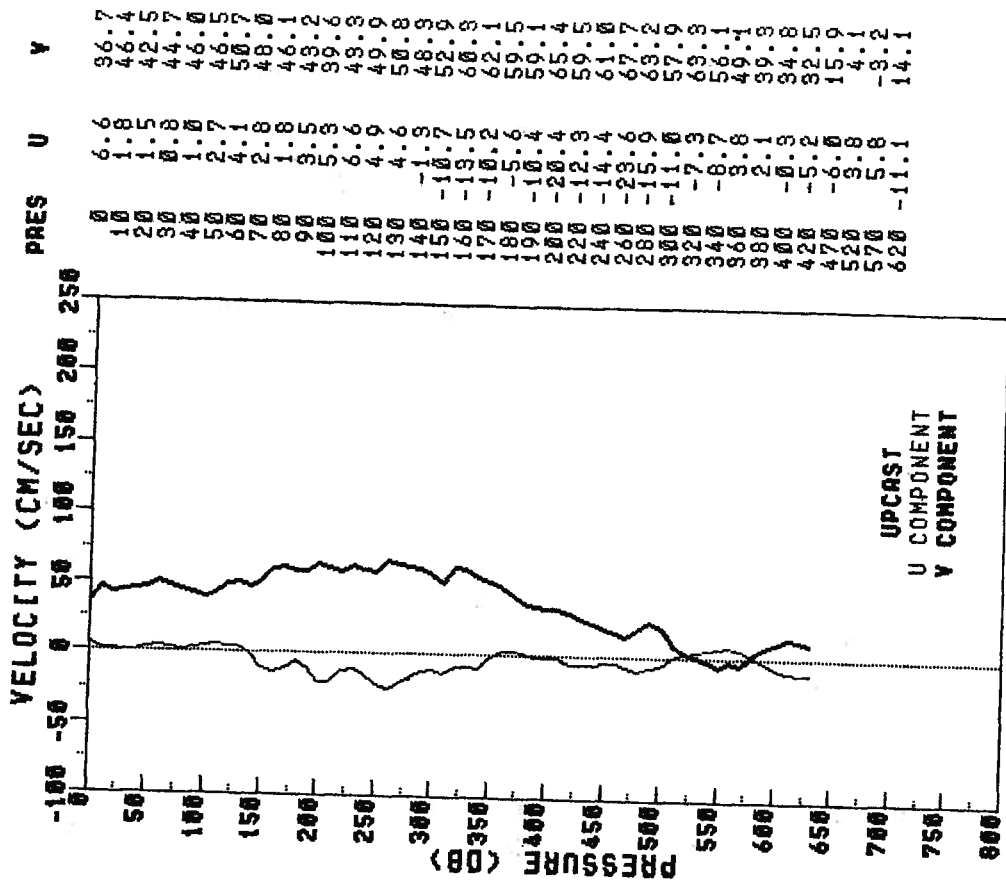
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 R/V VIRGINIA KEY JDAY 31 TIME 0817Z
 LATITUDE 26.99 N LONGITUDE 79.29 W



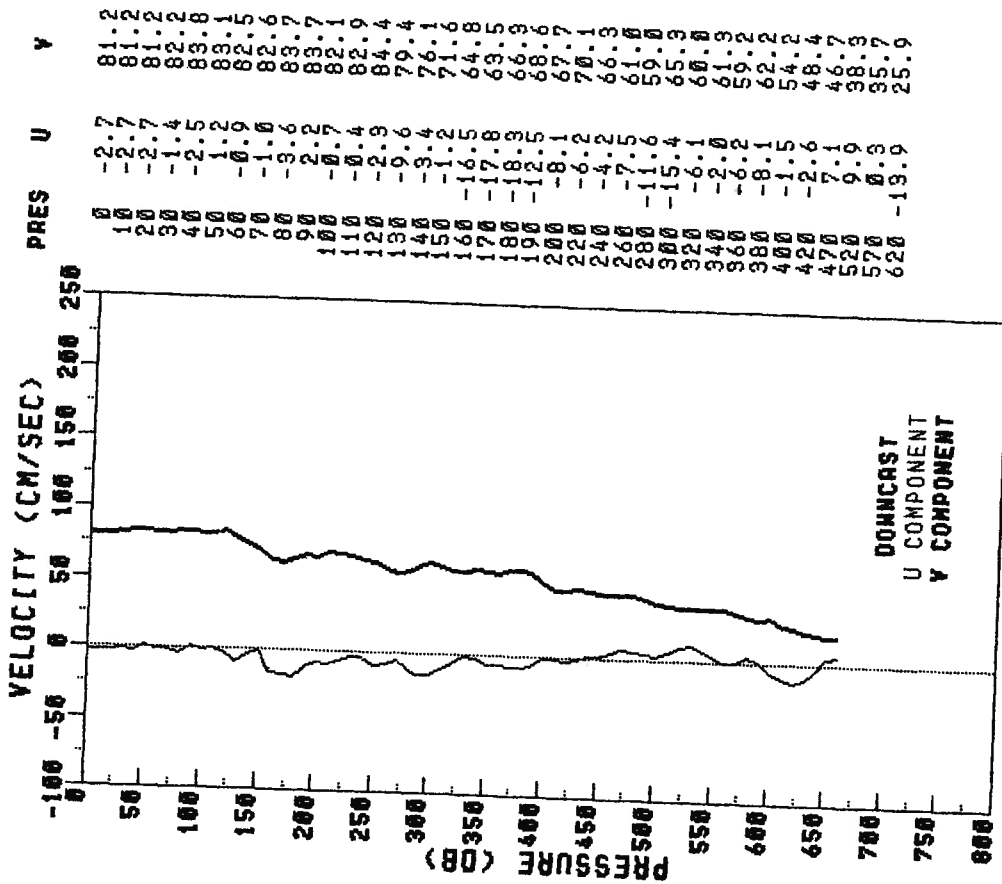
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 R/V VIRGINIA KEY JDAY 31 TIME 1121Z
 LATITUDE 26.99 N LONGITUDE 79.19 W



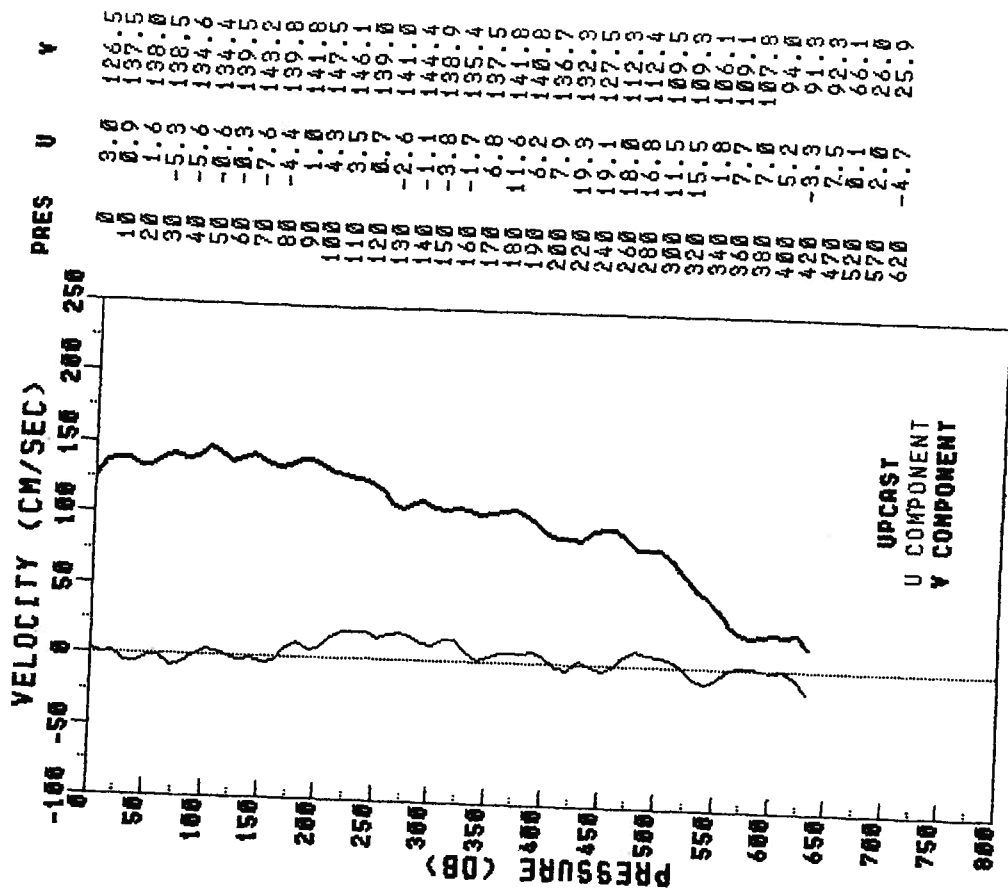
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 R/V VIRGINIA KEY JDAY 31 TIME 1304Z
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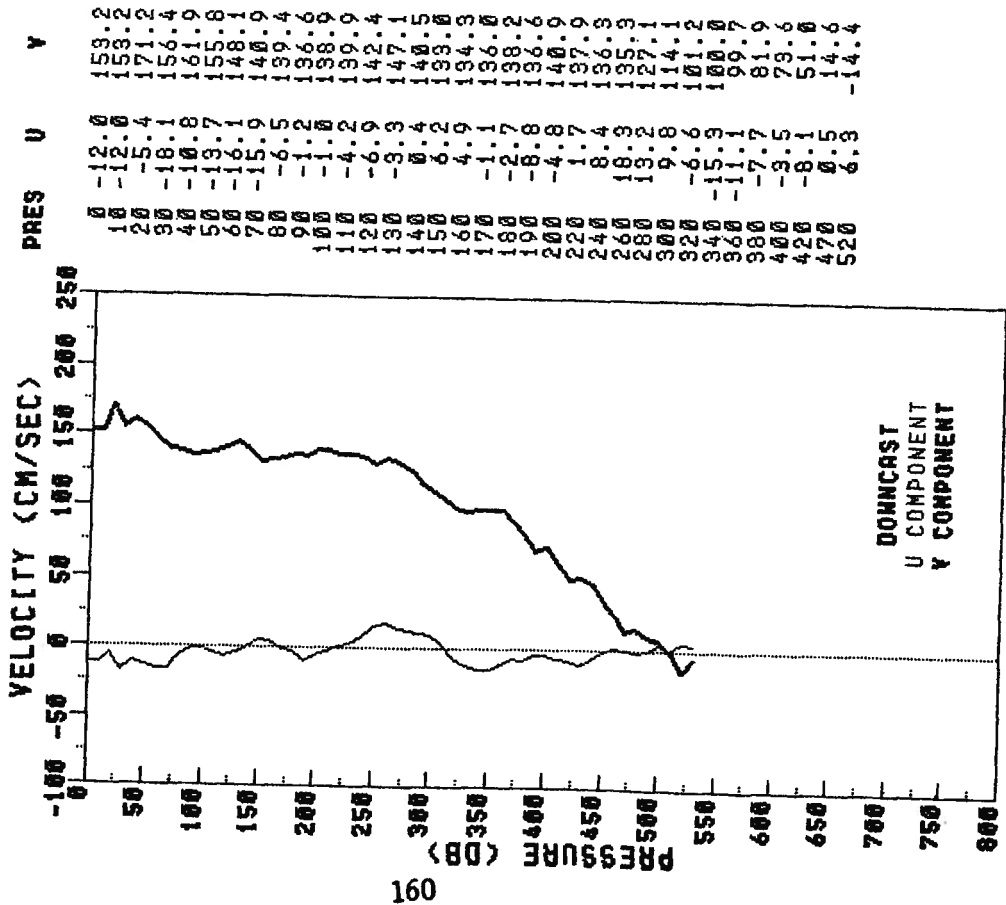
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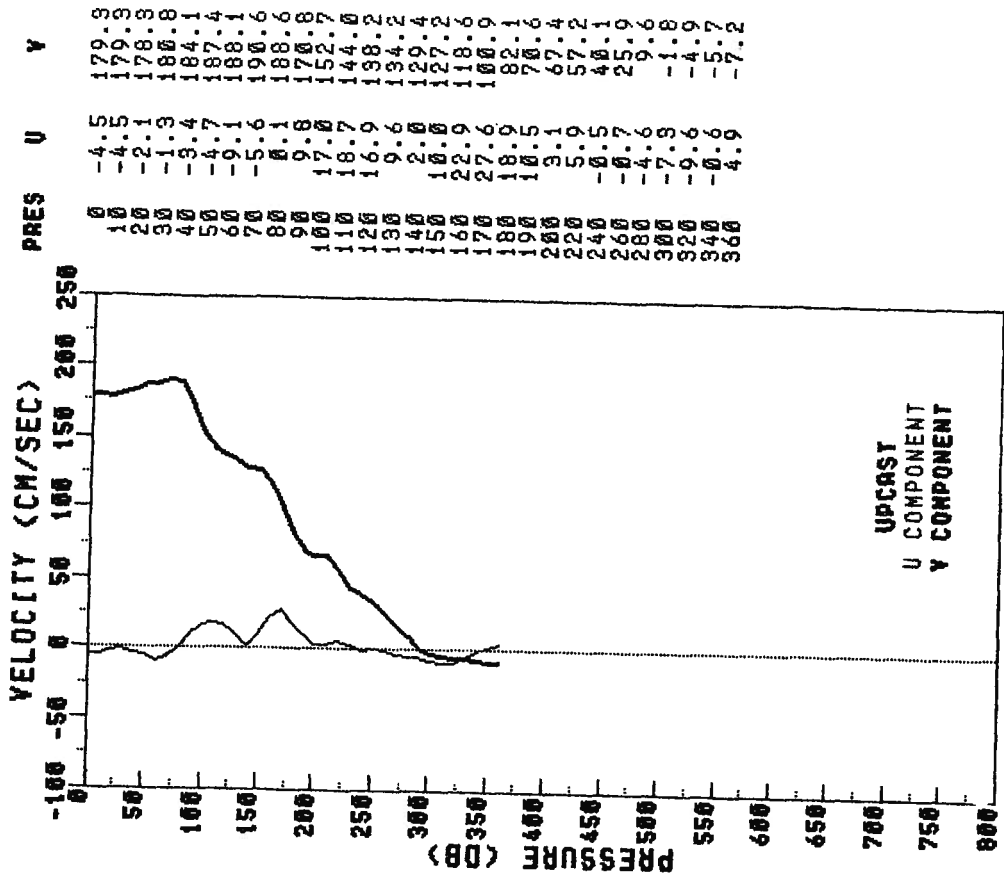
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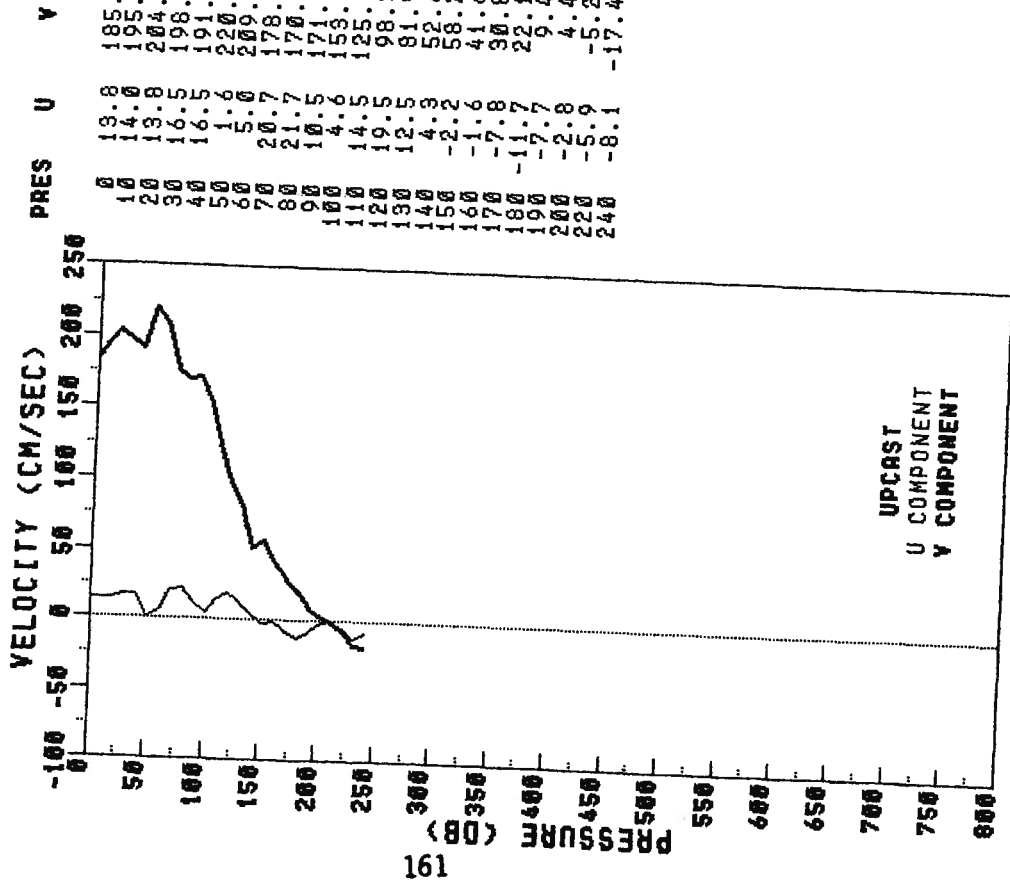
VK-STAC13-84 PEGASUS 056 STN 3
 R/Y VIRGINIA KEY JOY 31 TIME 2044Z
 LATITUDE 26.99 N LONGITUDE 79.68 N



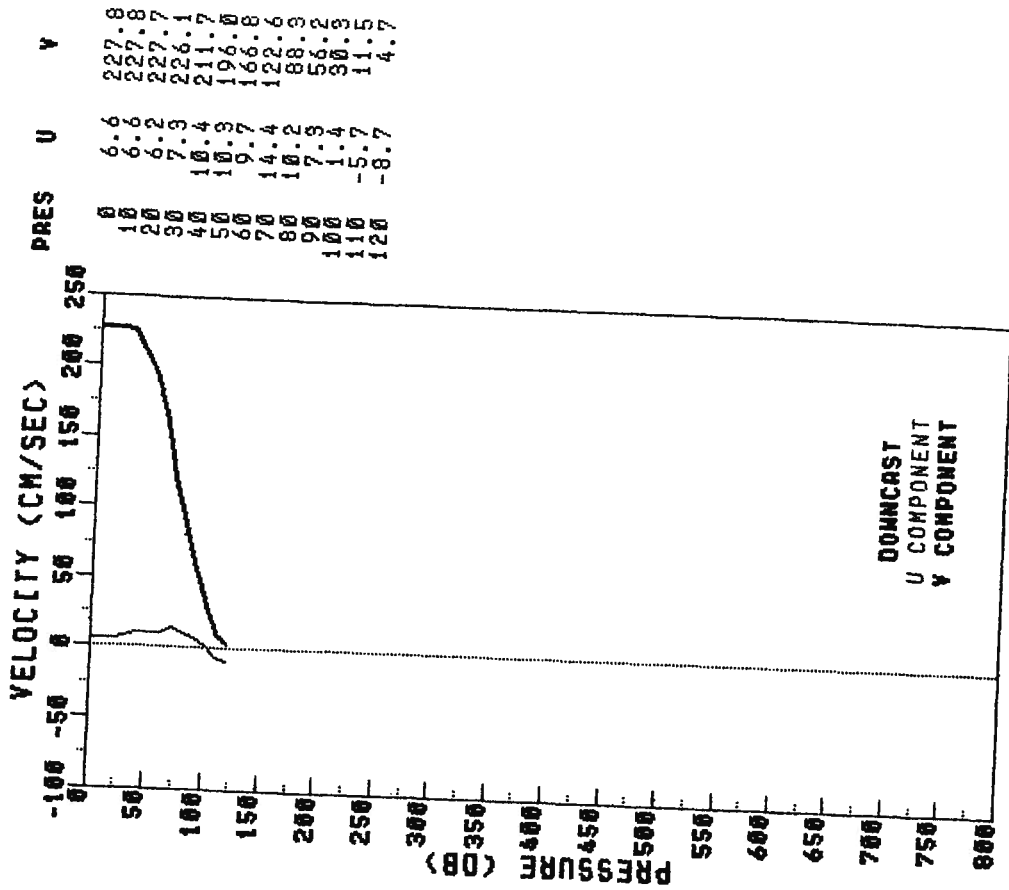
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 LATITUDE 26.98 N LONGITUDE 79.79 N



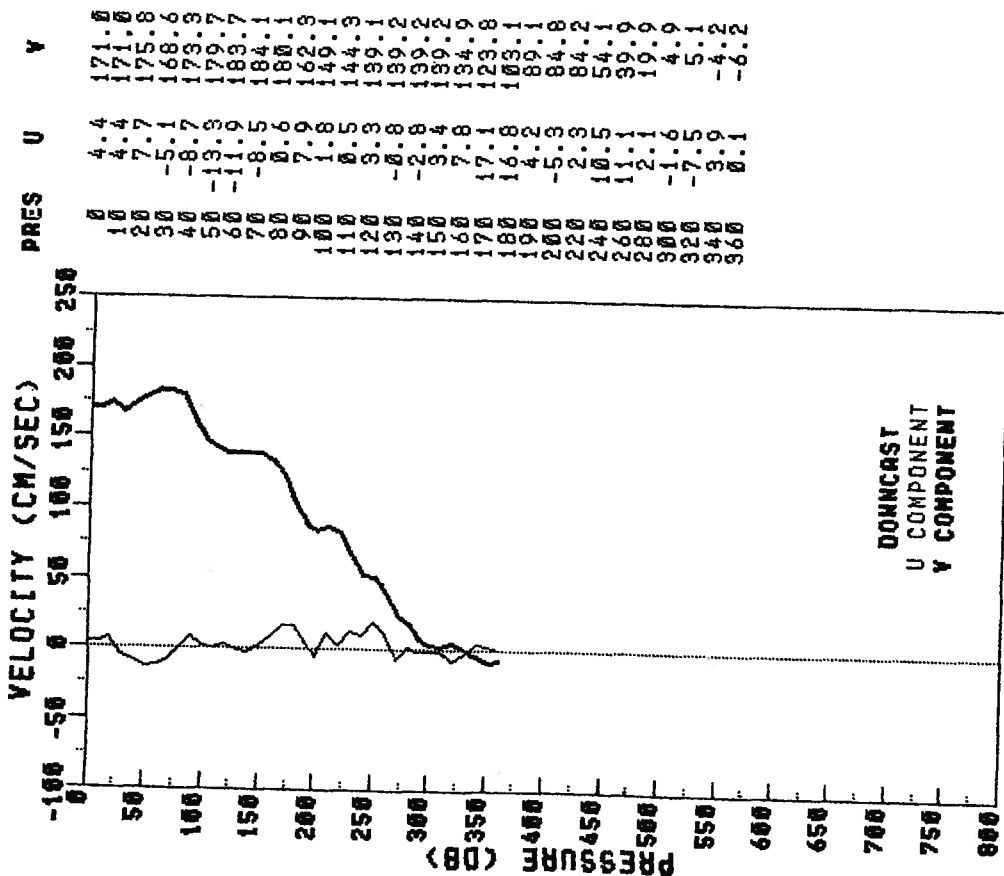
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 R/V VIRGINIA KEY JDAY 32 TIME 0015Z
 LATITUDE 27.00 N LONGITUDE 79.86 W



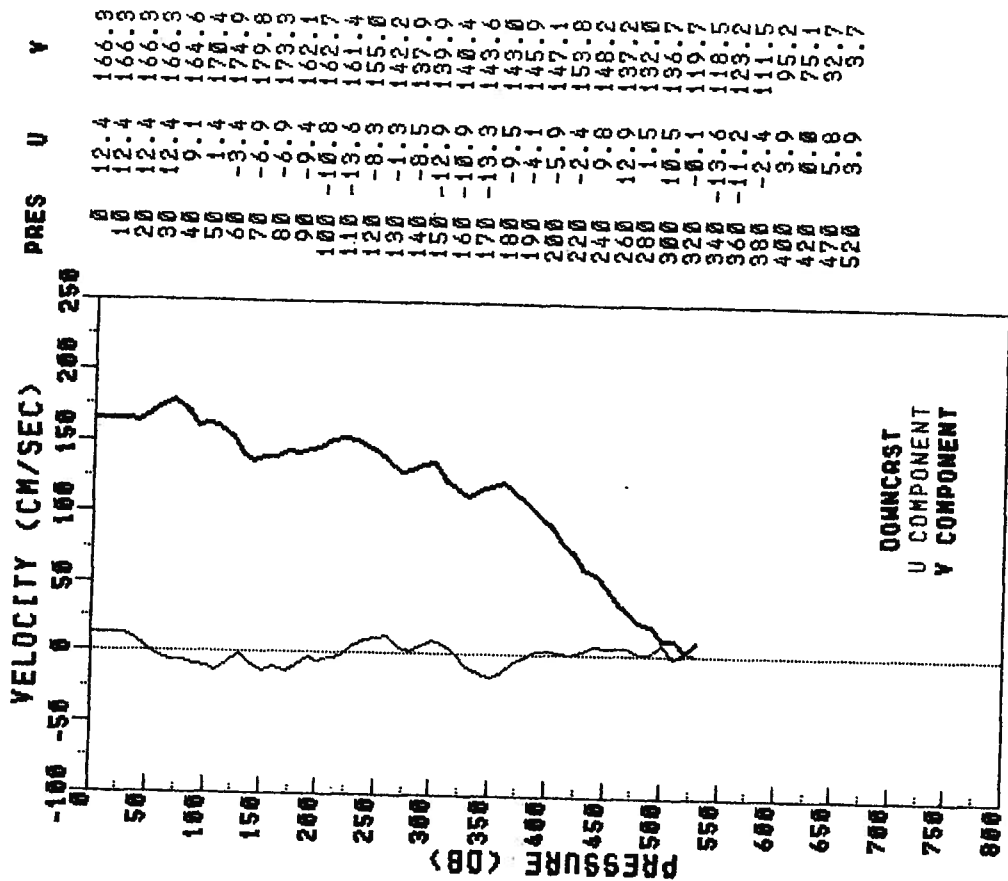
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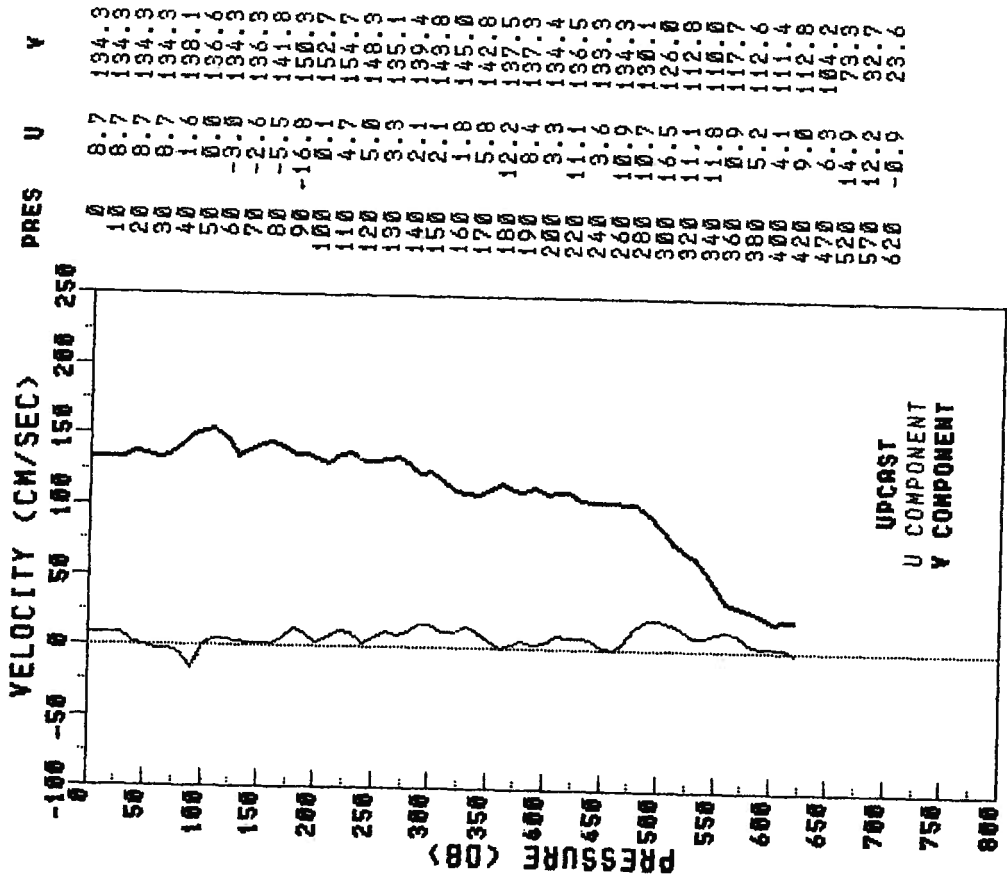
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 LATITUDE 26.98 N LONGITUDE 79.79 W



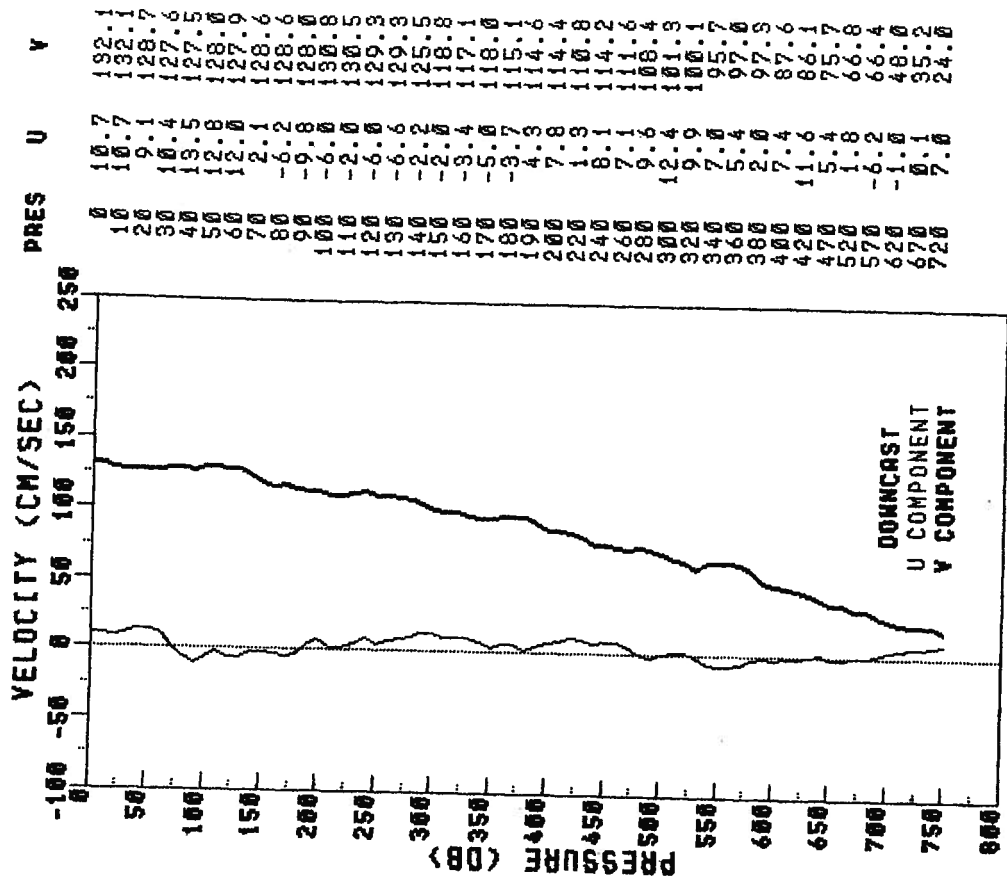
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 R/Y VIRGINIA KEY JDAY 32 TIME 0441Z
 LATITUDE 26.99 N LONGITUDE 79.68 W



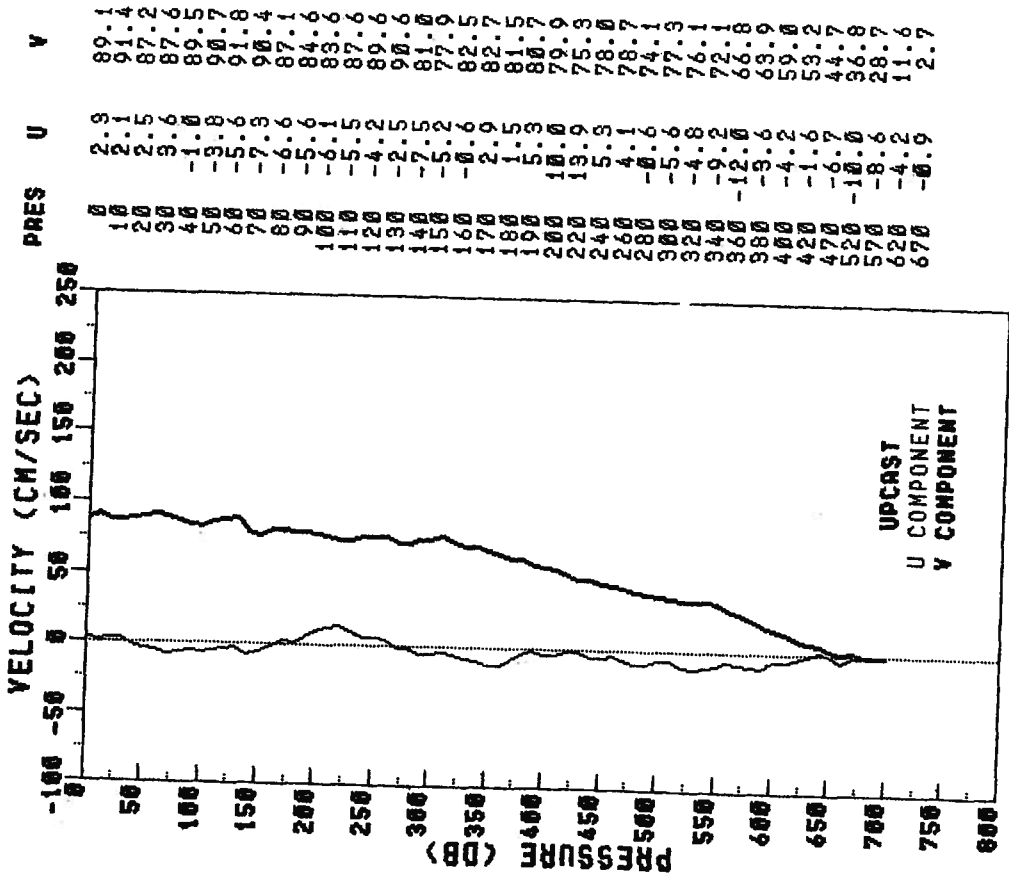
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 R/V VIRGINIA KEY JDAY 32 TIME 0617Z
 LATITUDE 26.97 N LONGITUDE 79.61 W



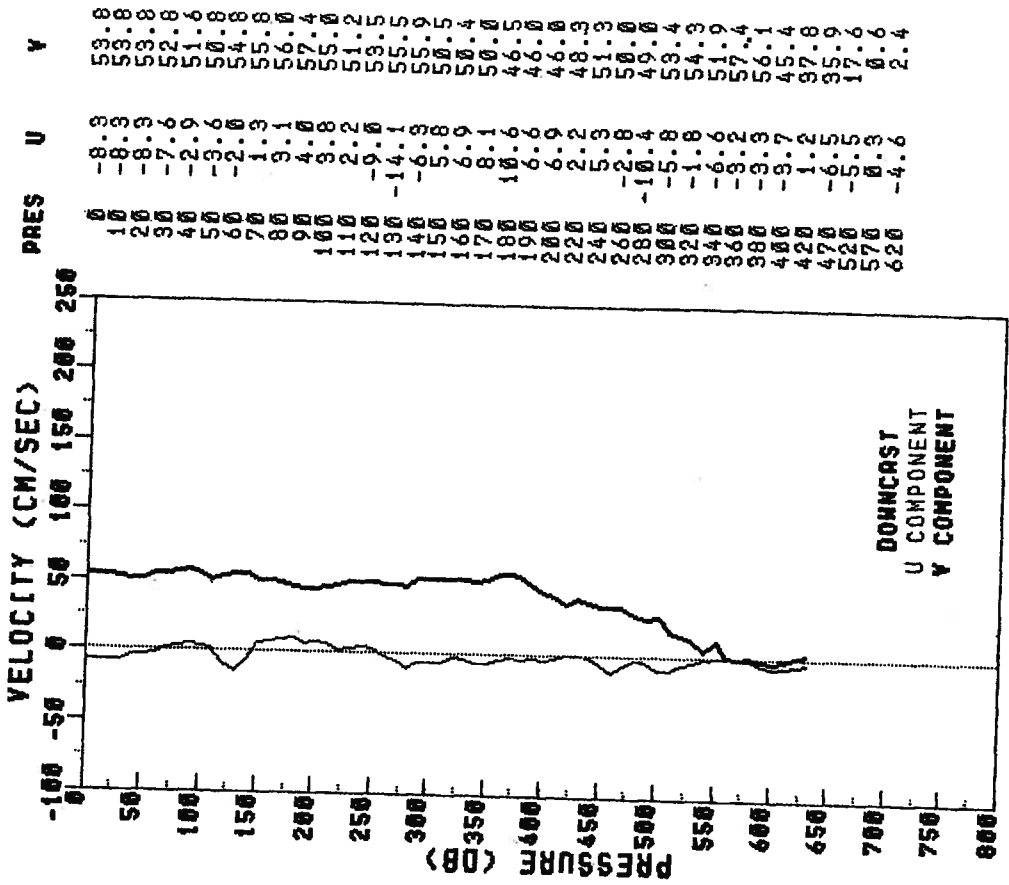
VK-STAC13-84 PEGASUS 063 STN 5
 R/V VIRGINIA KEY JDAY 32 TIME 0816Z
 LATITUDE 26.99 N LONGITUDE 79.49 W



VK-STACS13-84 PEGASUS 064 STN 6
 R/V VIRGINIA KEY JDAY 32 TIME 1028Z
 LATITUDE 26.99 N LONGITUDE 79.37 W

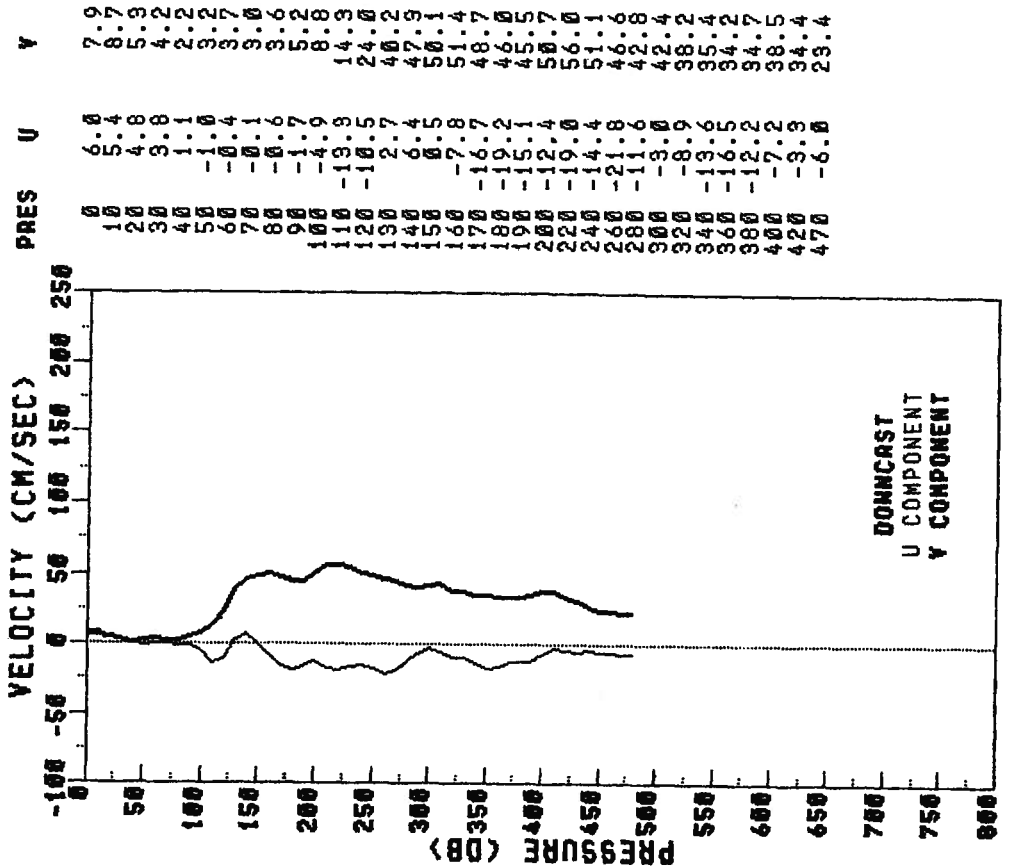
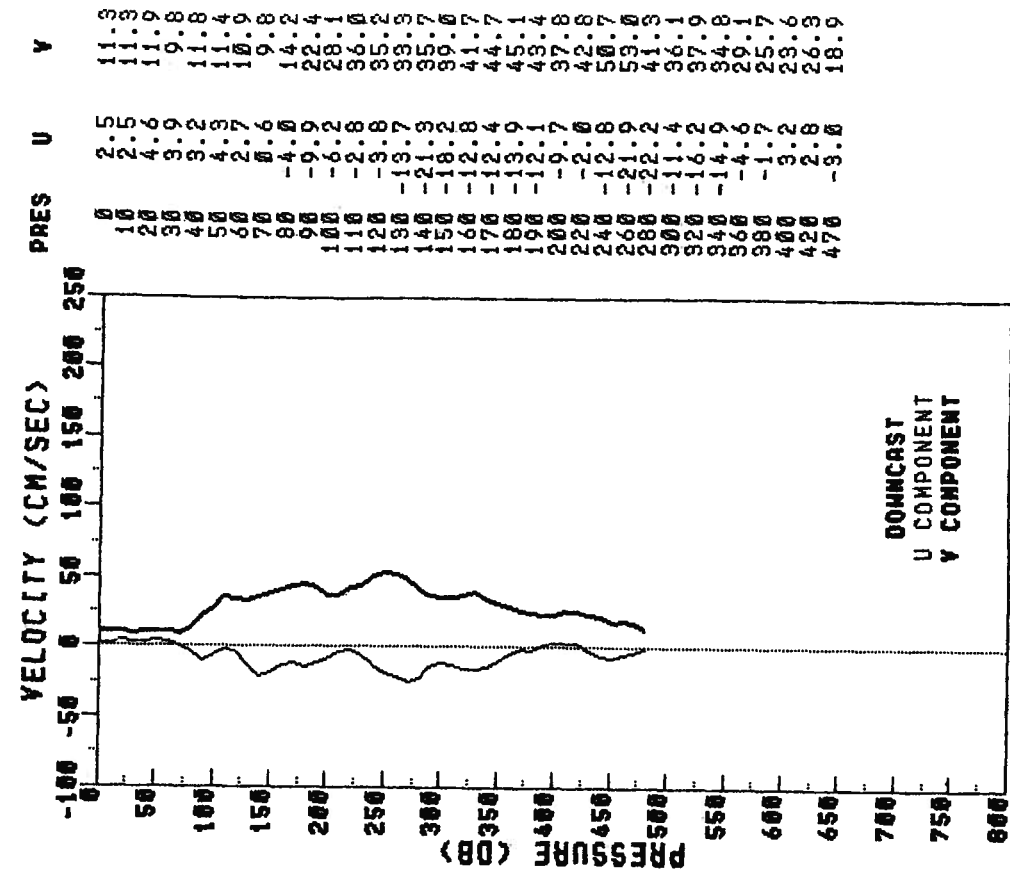


VK-STACS13-84 PEGASUS 065 STN 7
 R/V VIRGINIA KEY JDAY 32 TIME 1210Z
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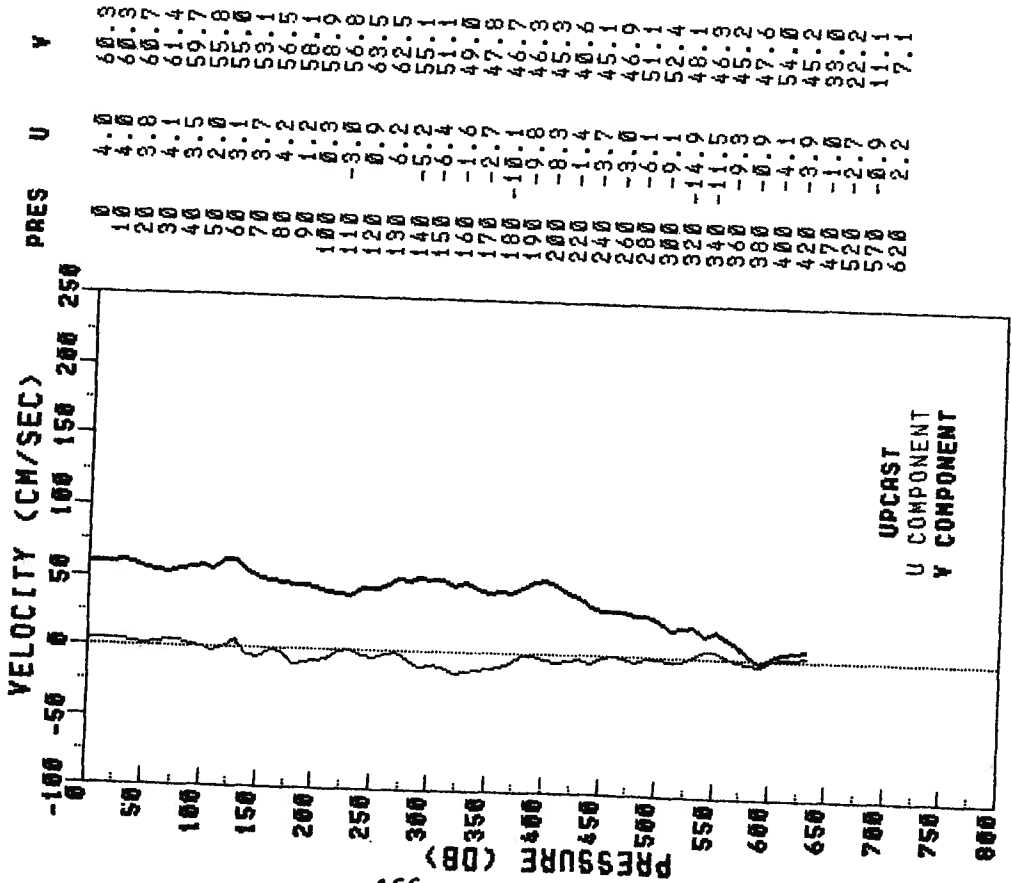


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 LATITUDE 26.99 N LONGITUDE 79.19 W

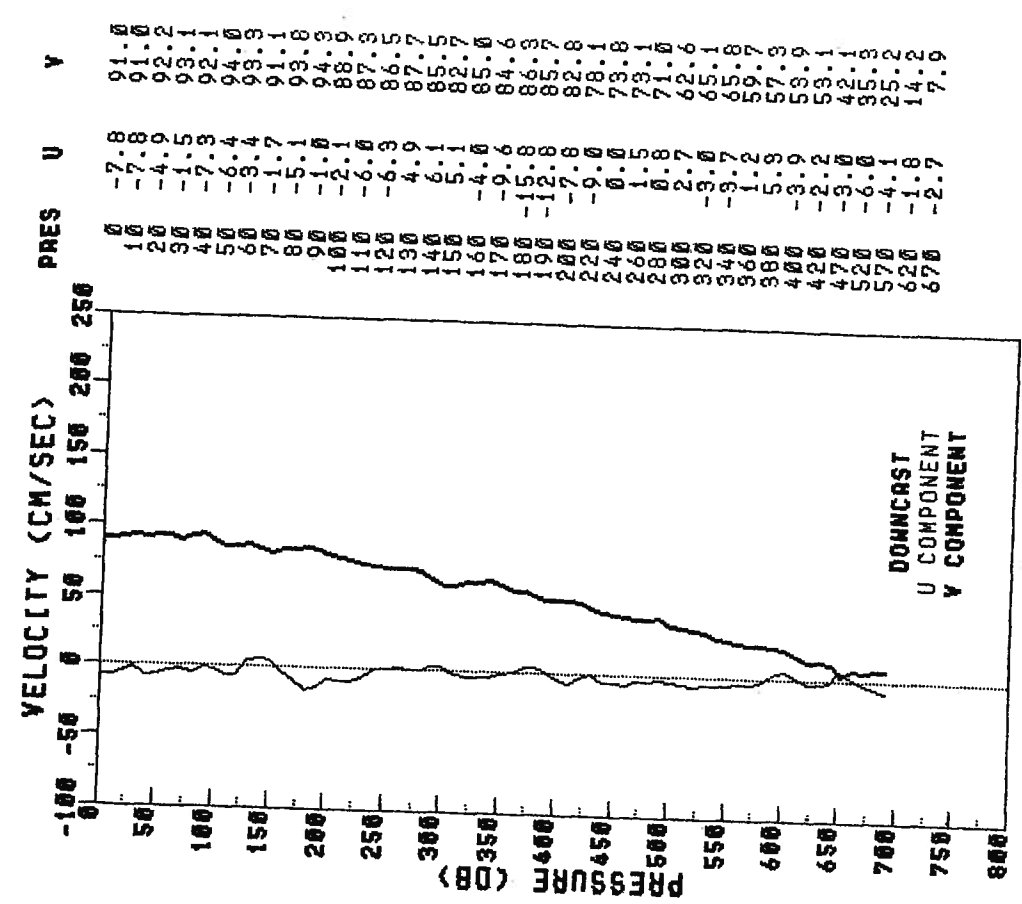
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 R/V VIRGINIA KEY JDAY 32 TIME 1400Z
 LATITUDE 27.00 N LONGITUDE 79.19 W



YK-STACSI3-84 PEGASUS 068 STN 7
 R/V VIRGINIA KEY JDAY 32 TIME 2208Z
 LATITUDE 26.99 N LONGITUDE 79.28 W

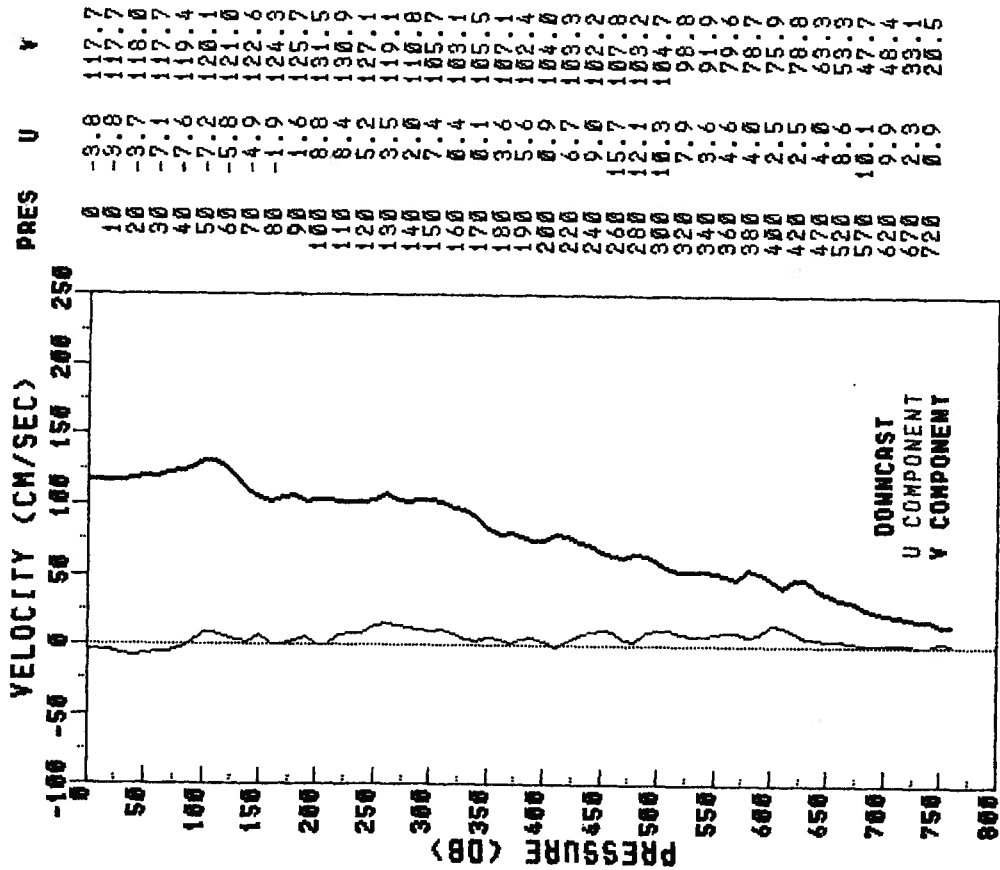
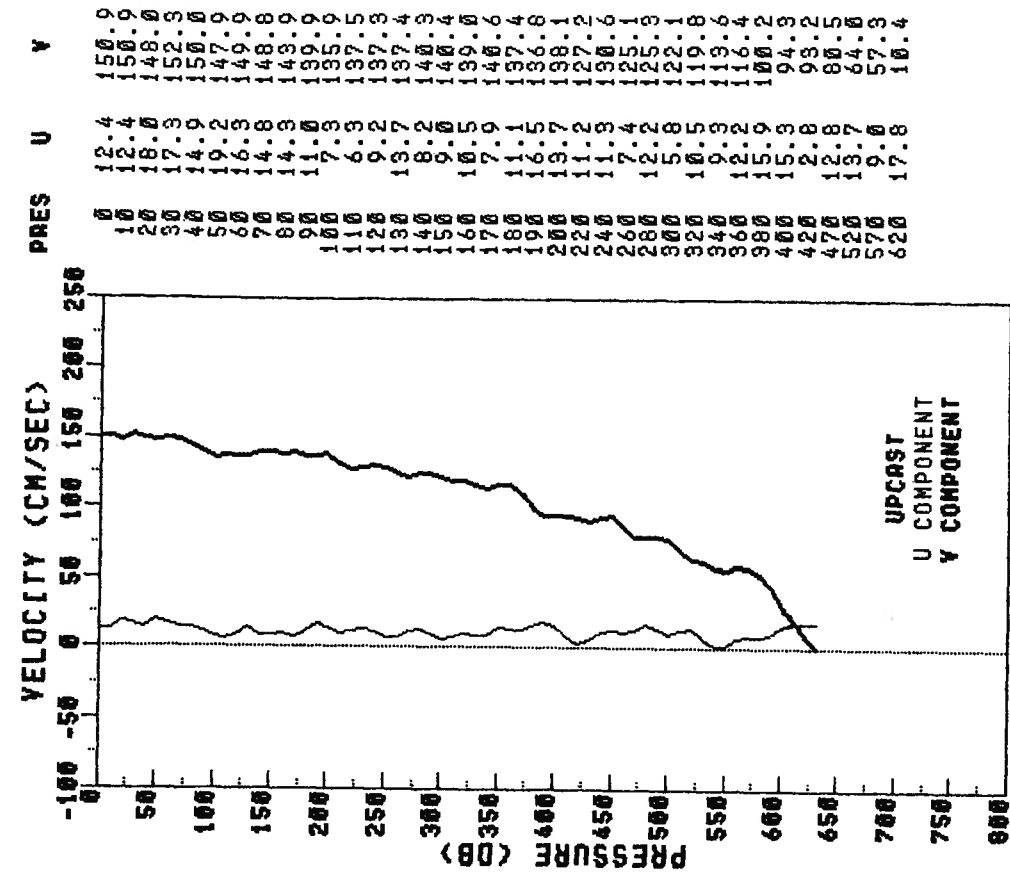


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 R/V VIRGINIA KEY JDAY 32 TIME 2350Z
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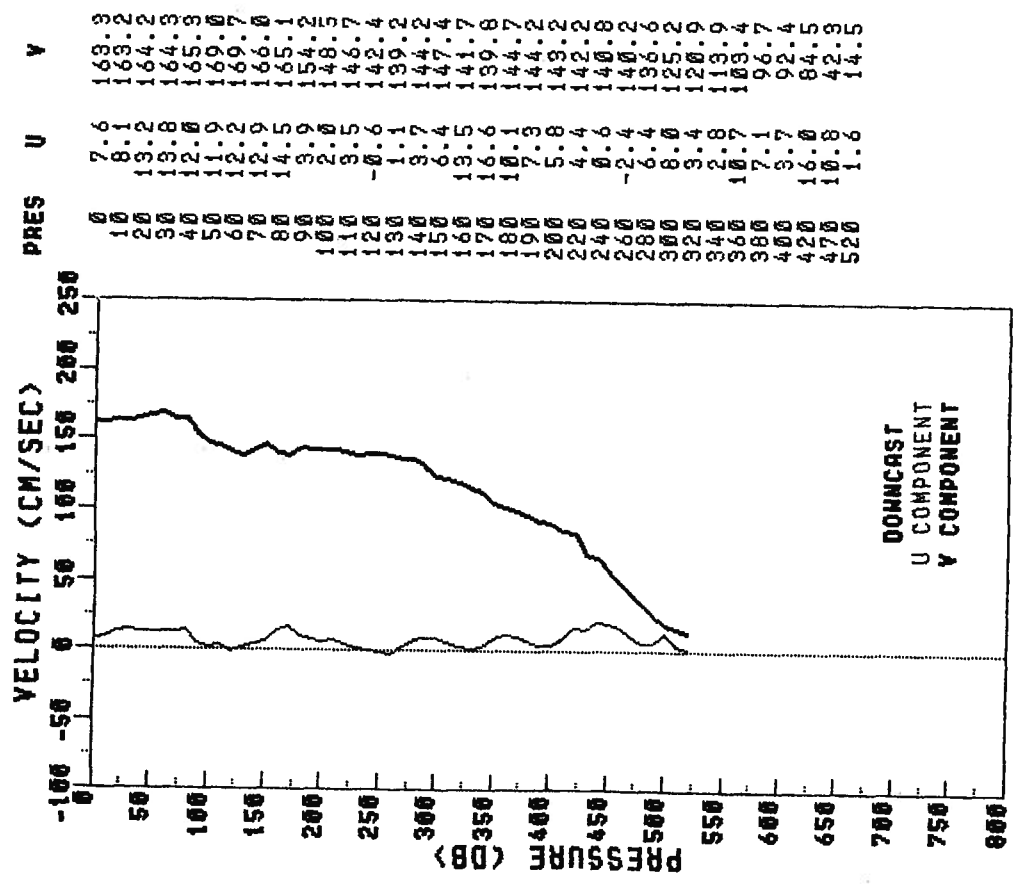


YK-STAC513-84 PEGASUS 071 STN 4
 R/V VIRGINIA KEY JOY 33 TIME 0412Z
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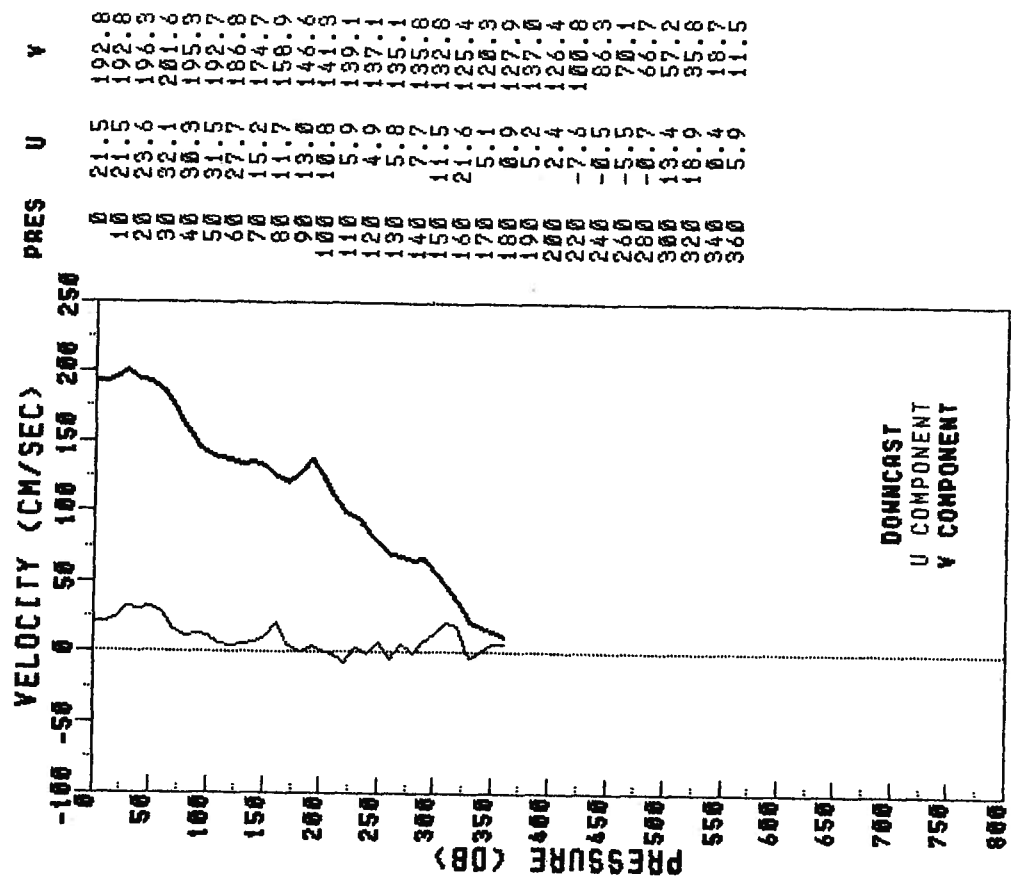
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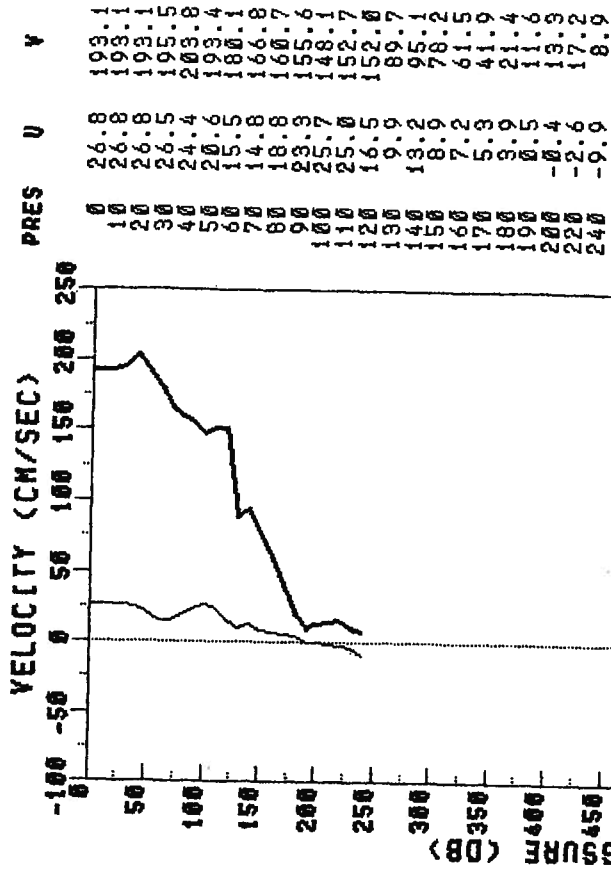
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 R/V VIRGINIA KEY JDAY 33 TIME 0555Z
 LATITUDE 26.99 N LONGITUDE 79.68 W



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 R/V VIRGINIA KEY JDAY 33 TIME 0803Z
 LATITUDE 26.98 N LONGITUDE 79.79 W

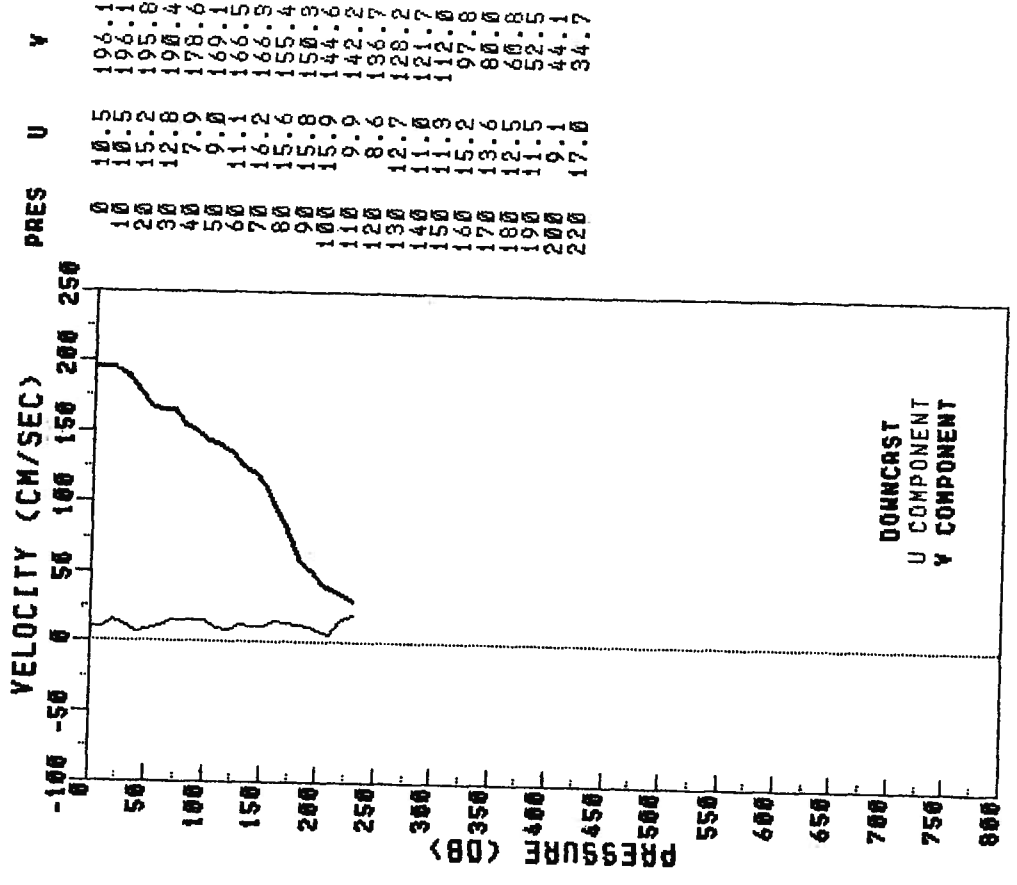
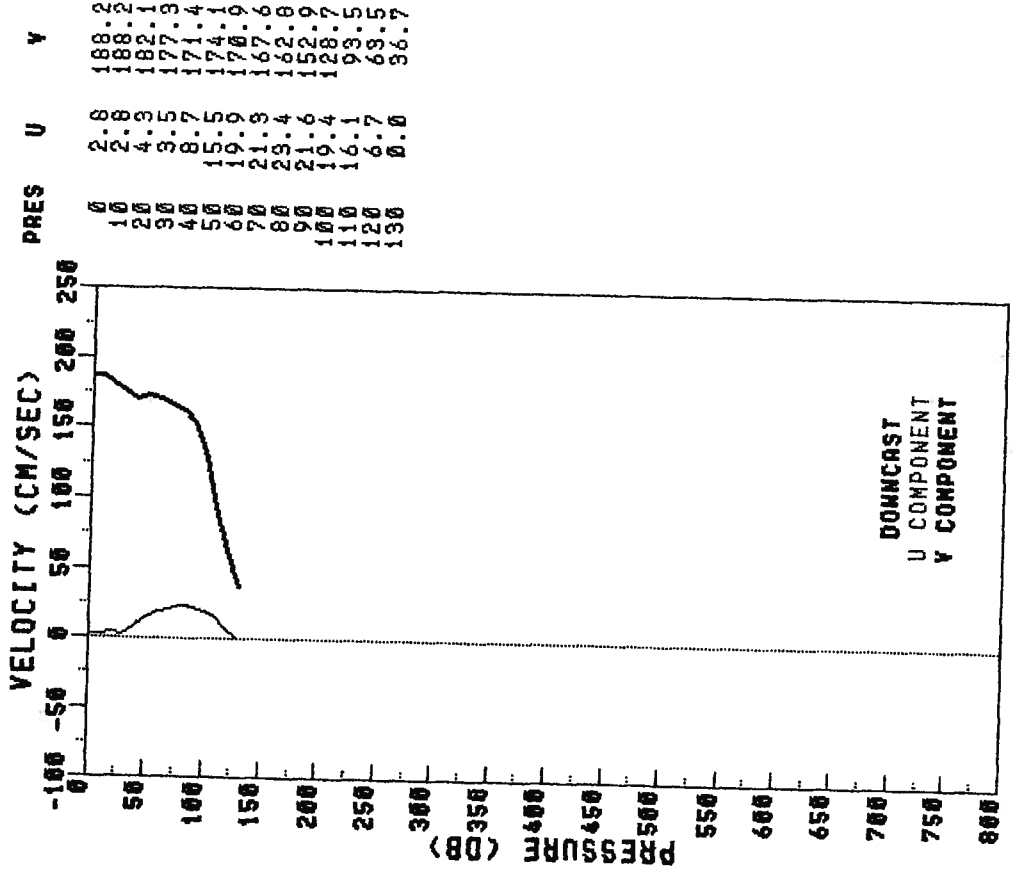


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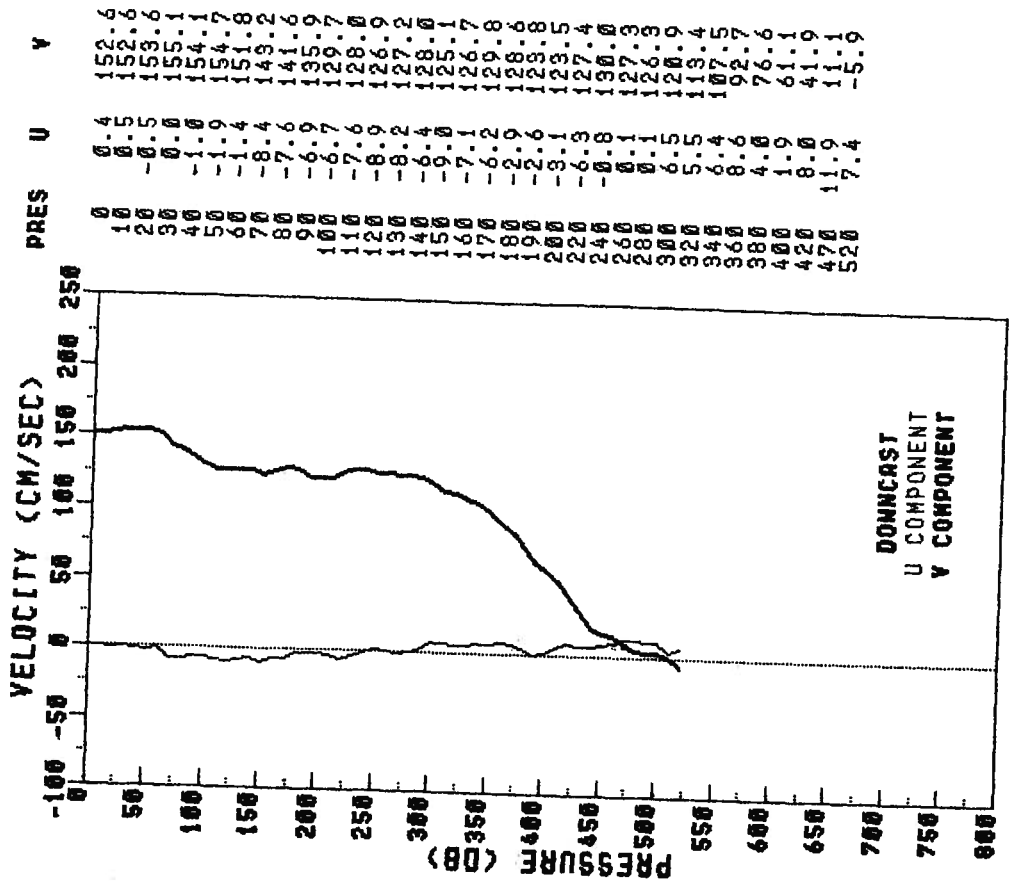


RES-STACSL4-84 PEGASUS 001 STN 0
 R/Y RESEARCHER JORY 75 TIME 0549Z
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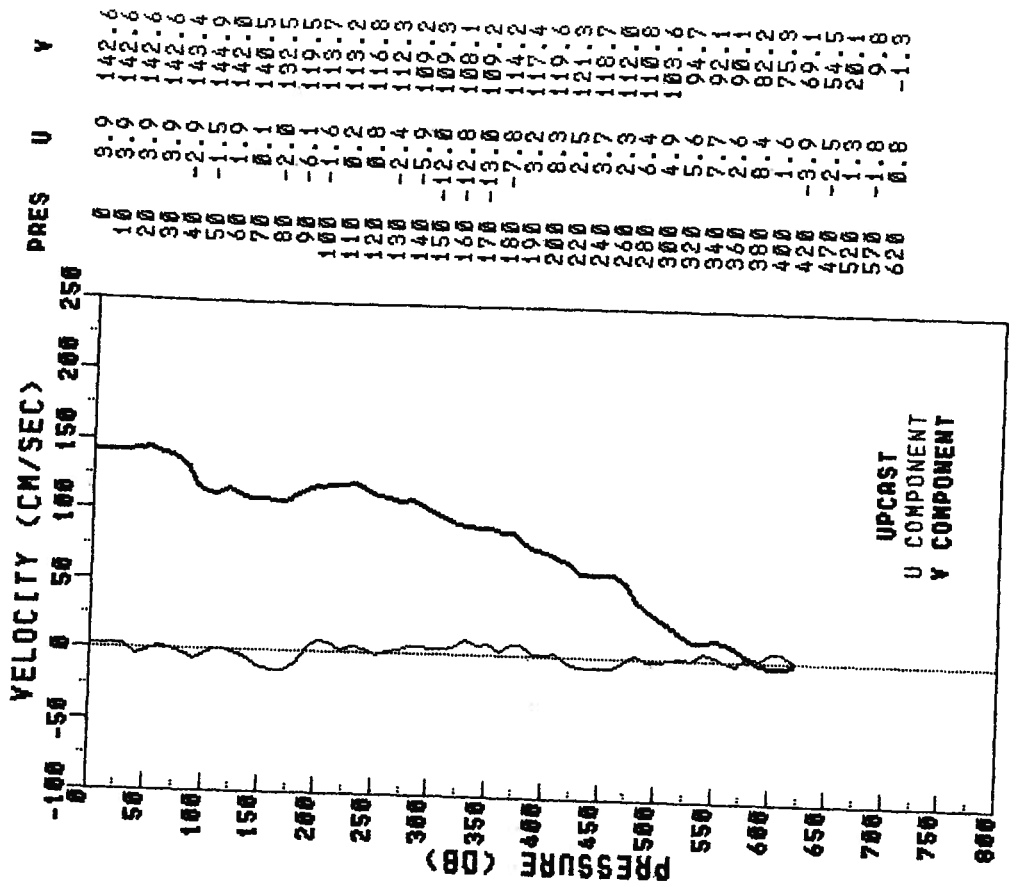
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 R/Y RESEARCHER JDAY 75 TIME 0656Z
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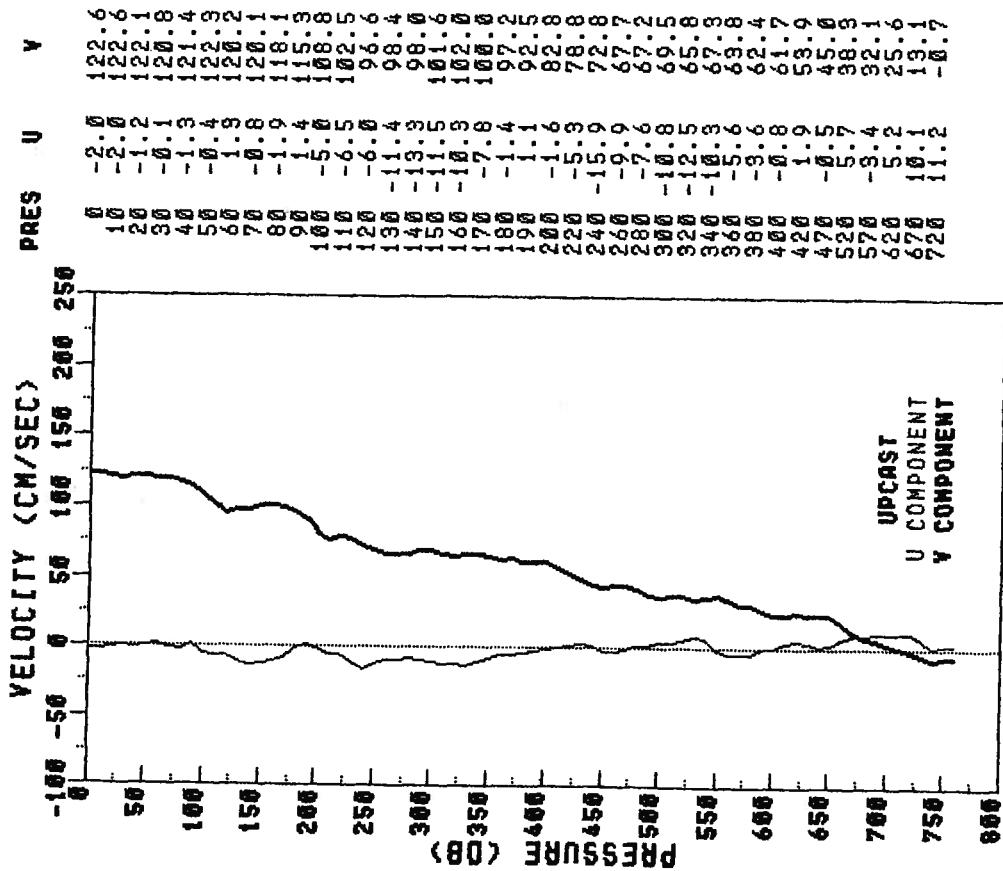
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 R/Y RESEARCHER JOY 75 TIME 0957Z
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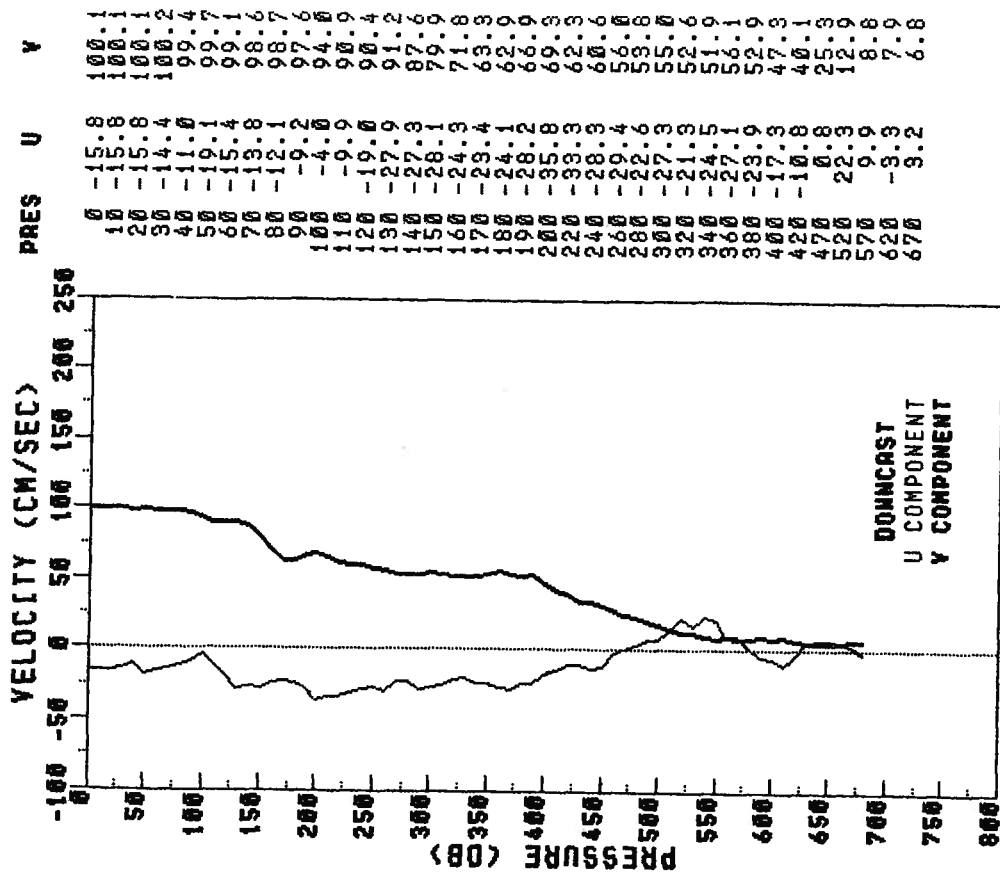
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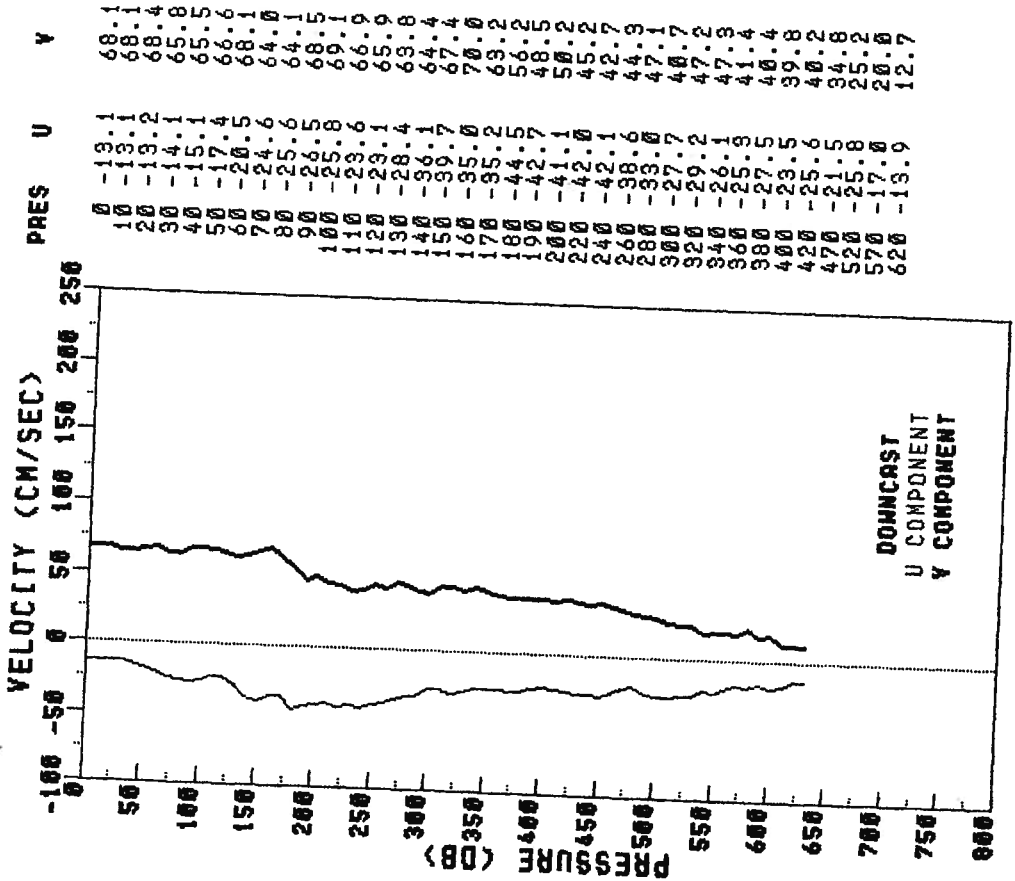
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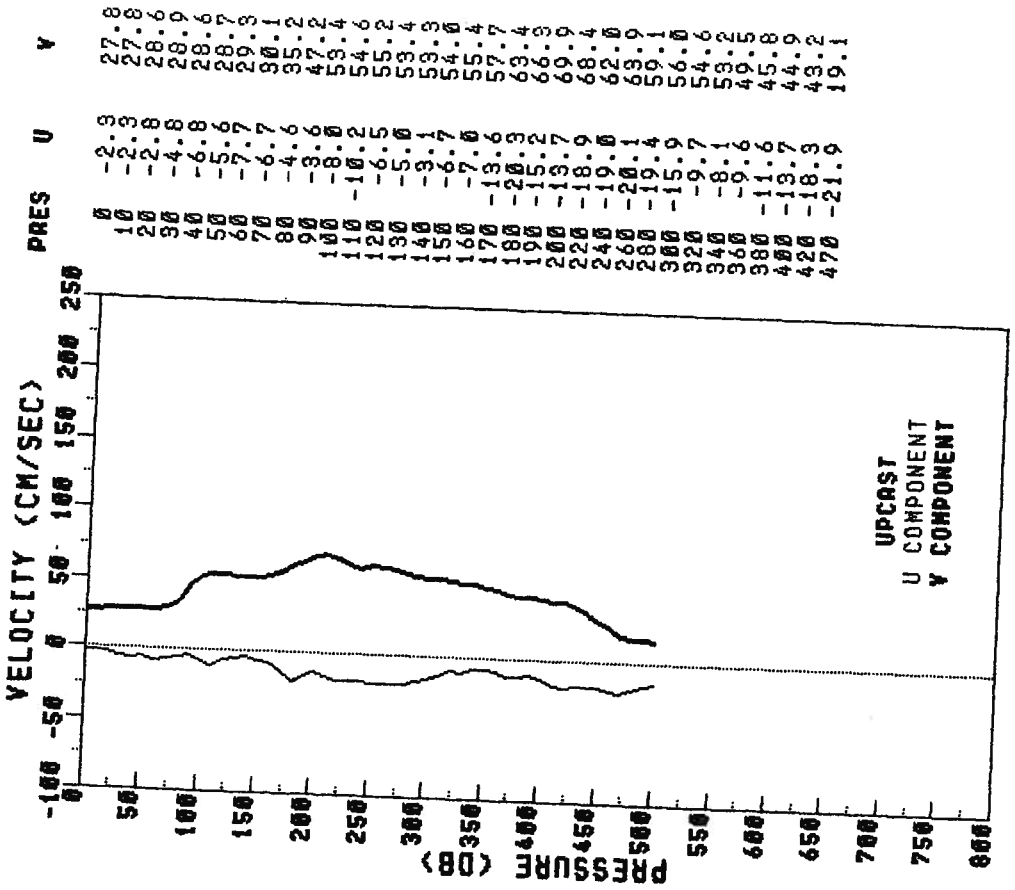
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 R/V RESEARCHER JOY 75 TIME 1656Z
 LATITUDE 27.00 N LONGITUDE 79.38 W



RES-STACSI4-84 PEGASUS 009 STN 7
 R/V RESEARCHER JDAY 76 TIME 0001Z
 LATITUDE 27.00 N LONGITUDE 79.29 W

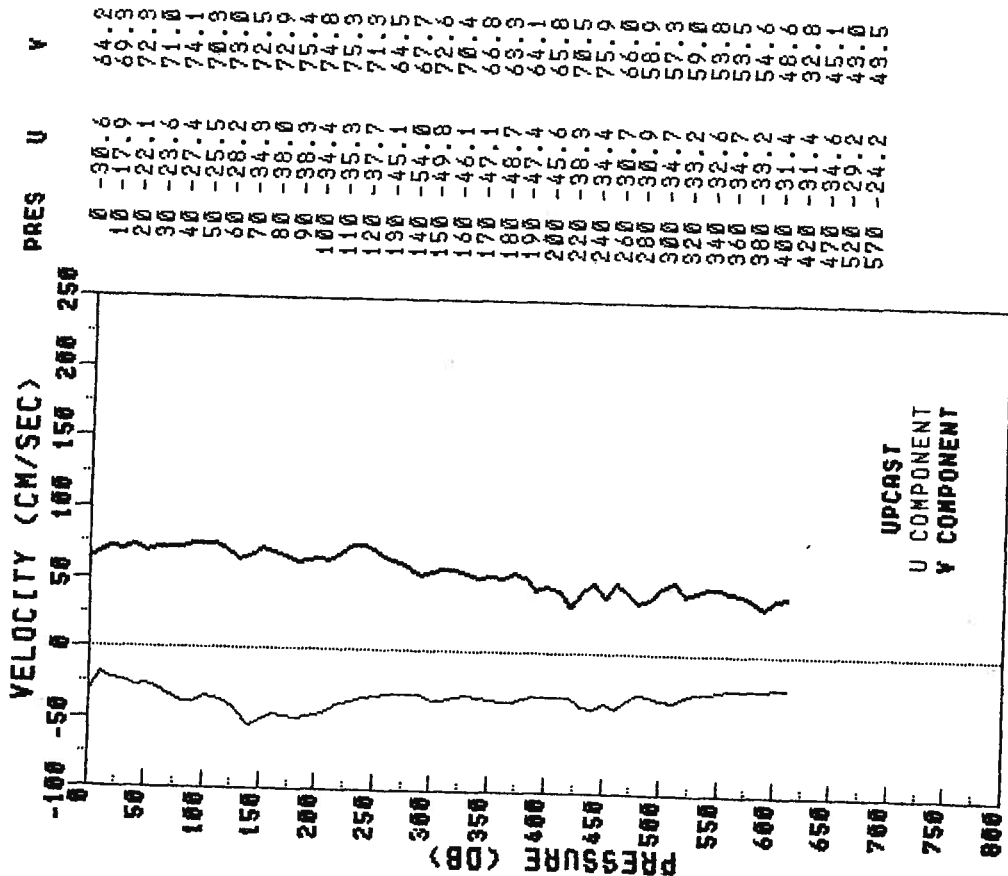
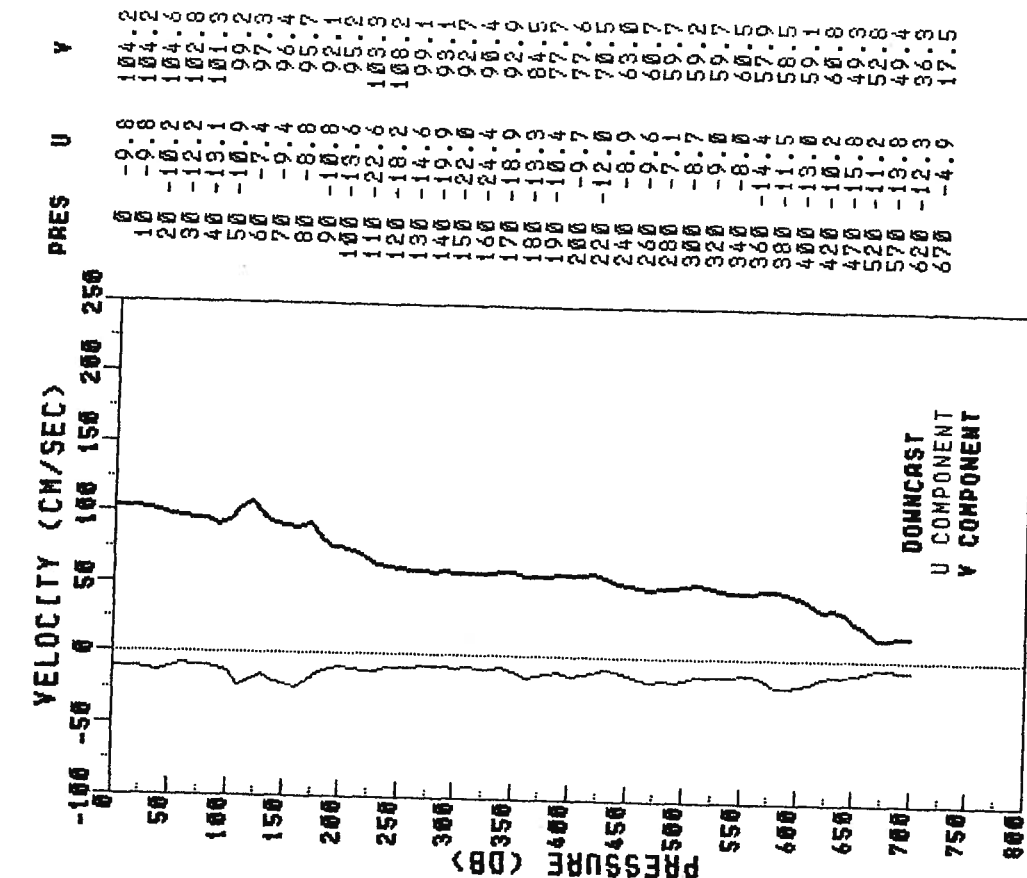


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 R/V RESEARCHER JDAY 76 TIME 0150Z
 LATITUDE 27.01 N LONGITUDE 79.20 W



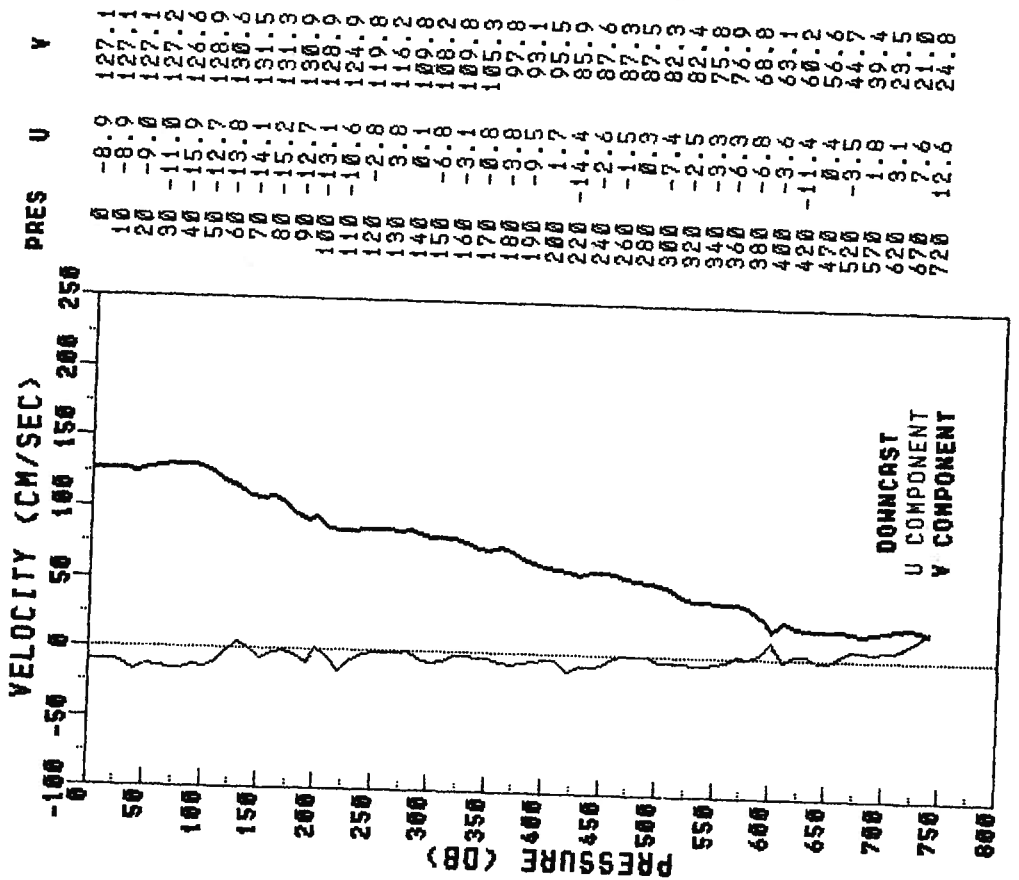
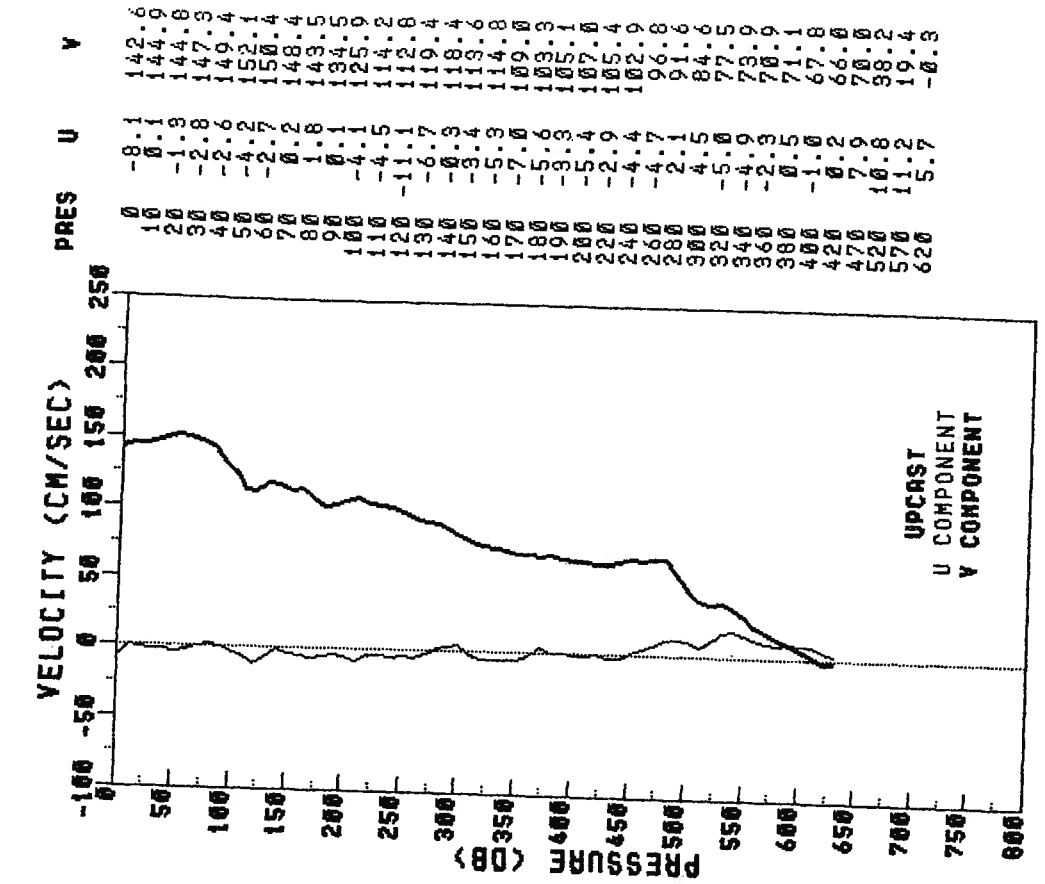
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 R/V RESEARCHER JOY 76 TIME 0553Z
 LATITUDE 27.00 N LONGITUDE 79.37 W

RES-STACSI4-84 PEGASUS 011 STN 7
 R/V RESEARCHER JOY 76 TIME 0359Z
 LATITUDE 27.00 N LONGITUDE 79.28 W

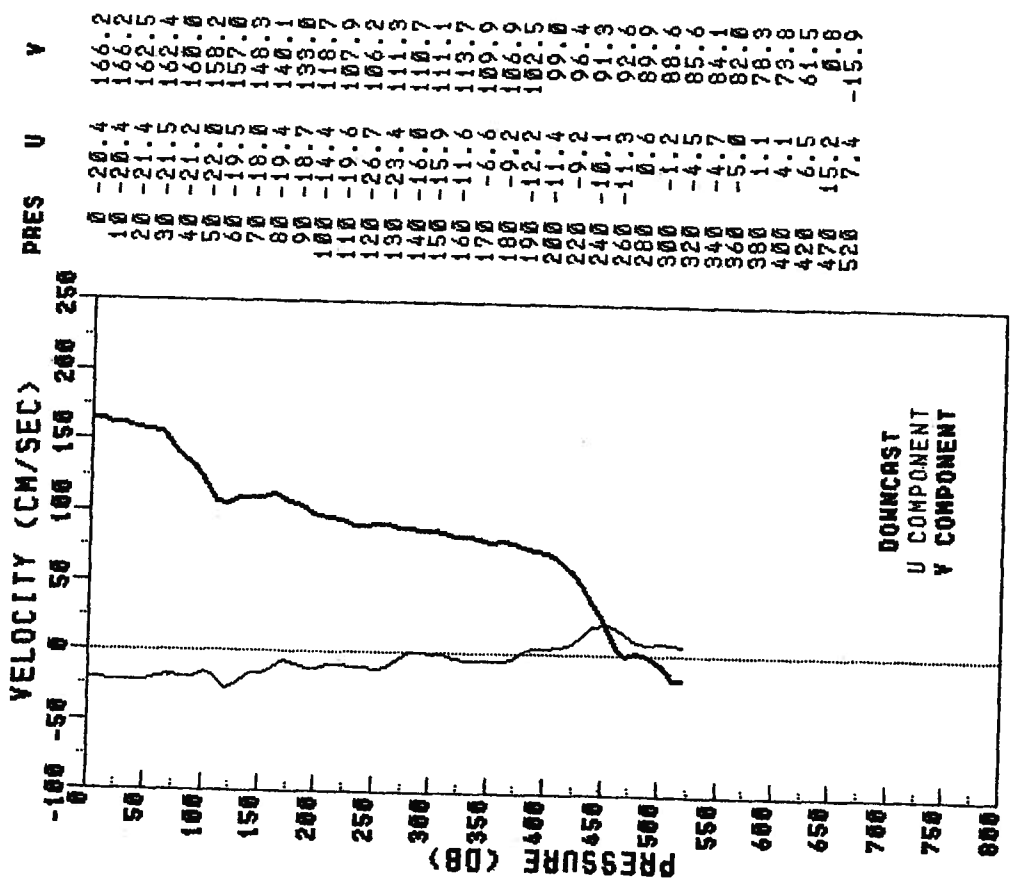


RES-STAC14-84 PEGASUS 014 STN 4
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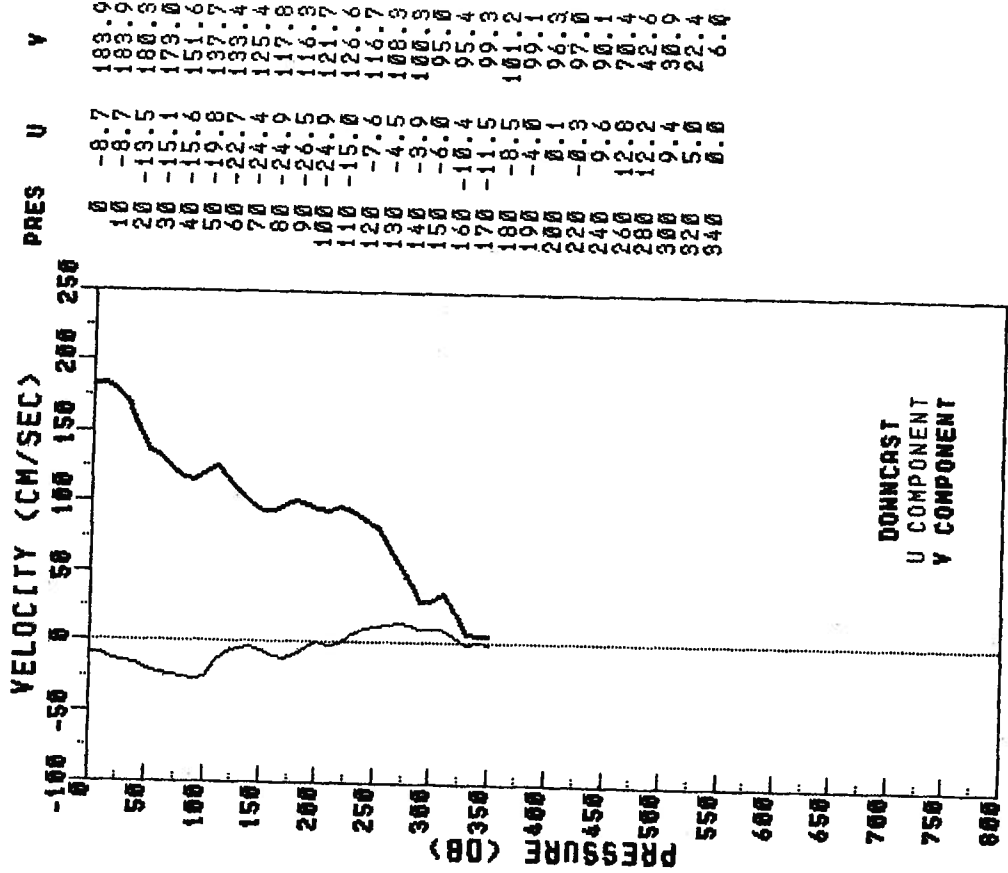
RES-STAC14-84 PEGASUS 013 STN 5
 R/V RESEARCHER JOY 76 TIME 0806Z
 LATITUDE 27.00 N LONGITUDE 79.50 W



RES-STACS14-84 PEGASUS 015 STN 3
 R/V RESEARCHER JDAY 76 TIME 1144Z
 LATITUDE 26.99 N LONGITUDE 79.69 W

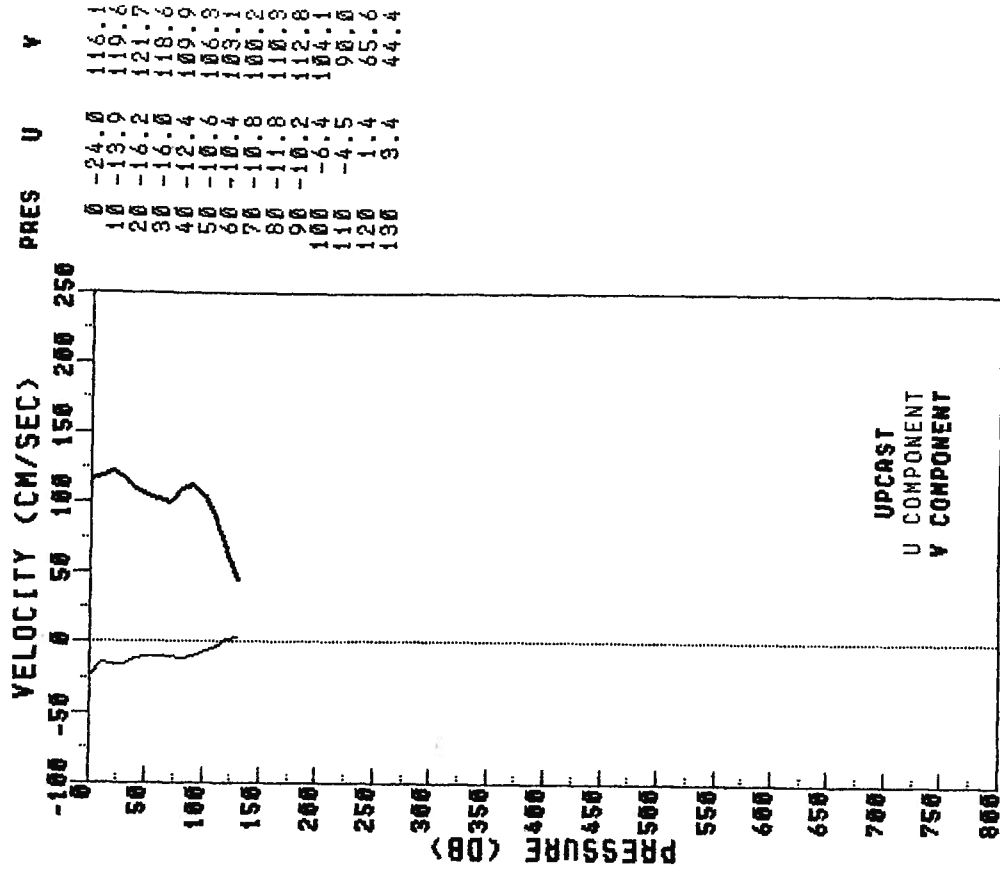
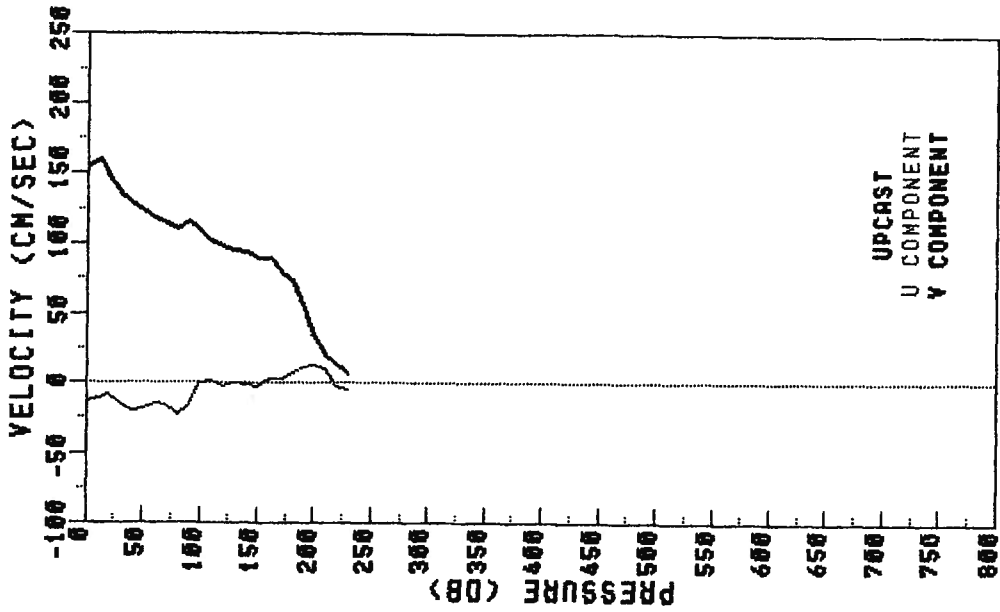


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 R/V RESEARCHER JDAY 76 TIME 1403Z
 LATITUDE 26.99 N LONGITUDE 79.80 W

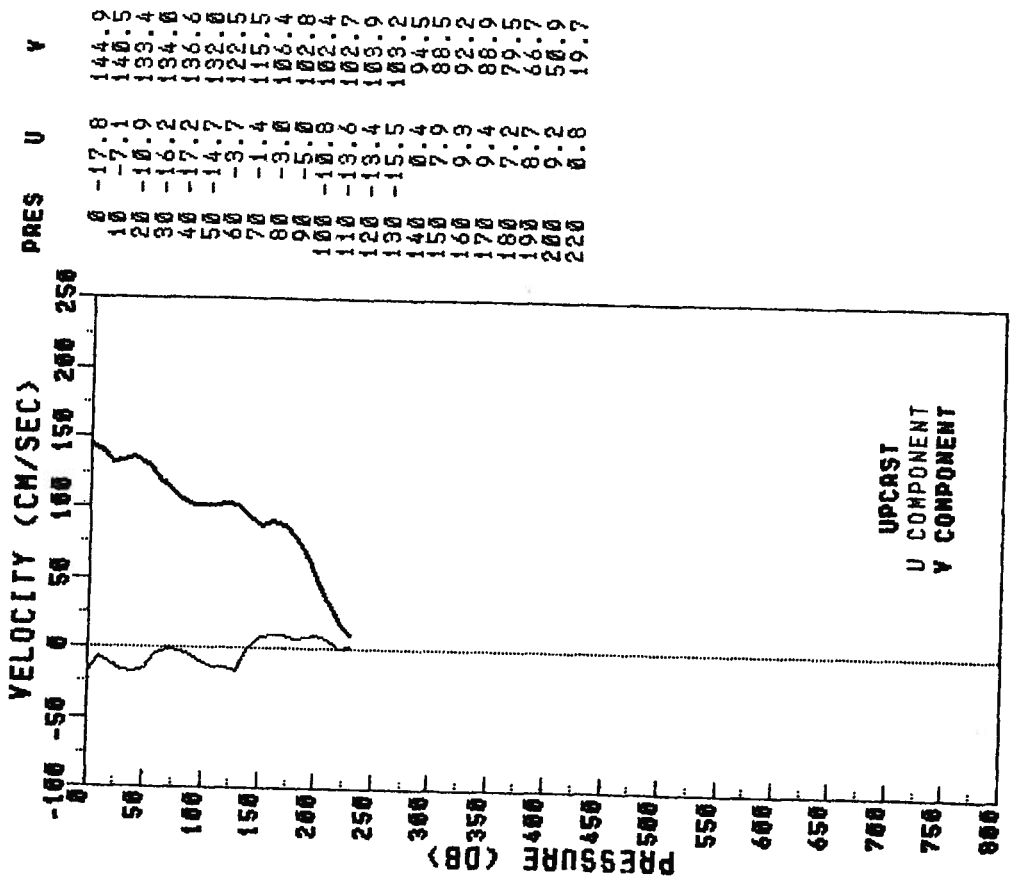


RES-STAC14-84 PEGASUS 017 STN 1
 R/V RESEARCHER JDAY 76 TIME 1528Z
 LATITUDE 27.00 N LONGITUDE 79.88 W

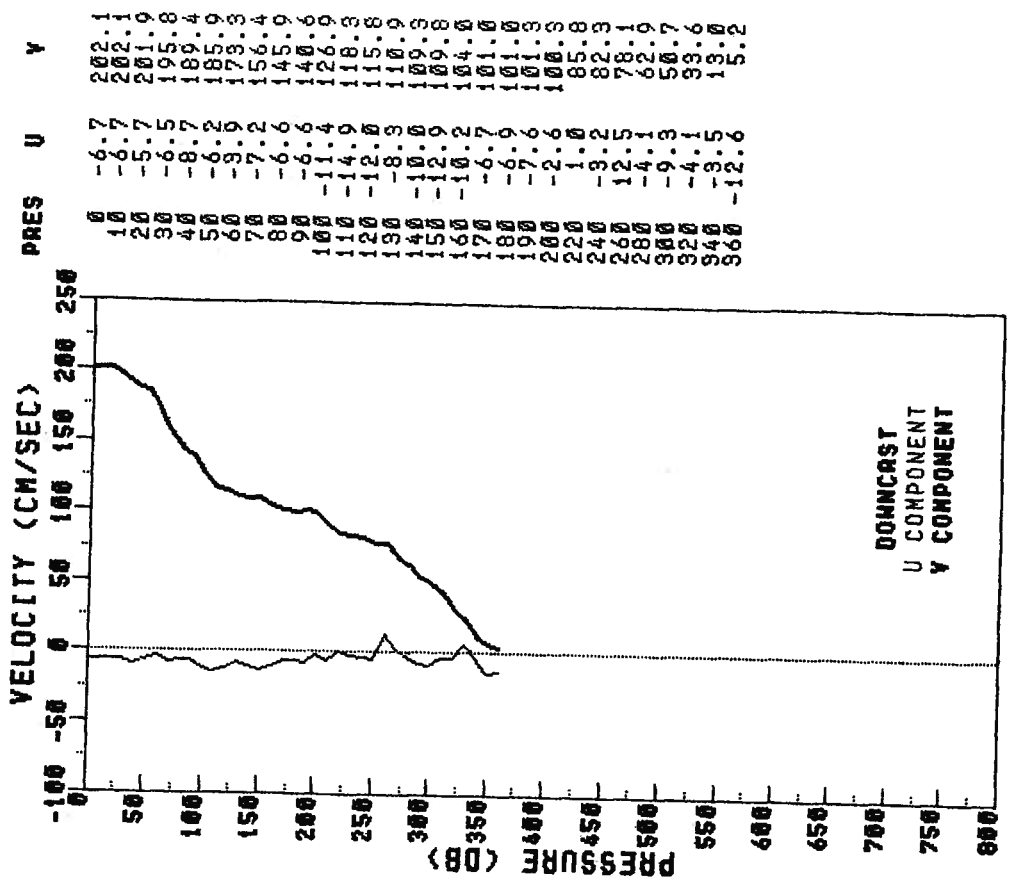
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 R/V RESEARCHER JDAY 76 TIME 1600Z
 LATITUDE 27.00 N LONGITUDE 79.93 W



RES-STACS14-84 PEGASUS 019 STN 1
 R/V RESEARCHER JDAY 76 TIME 1836Z
 LATITUDE 27.00 N LONGITUDE 79.88 W

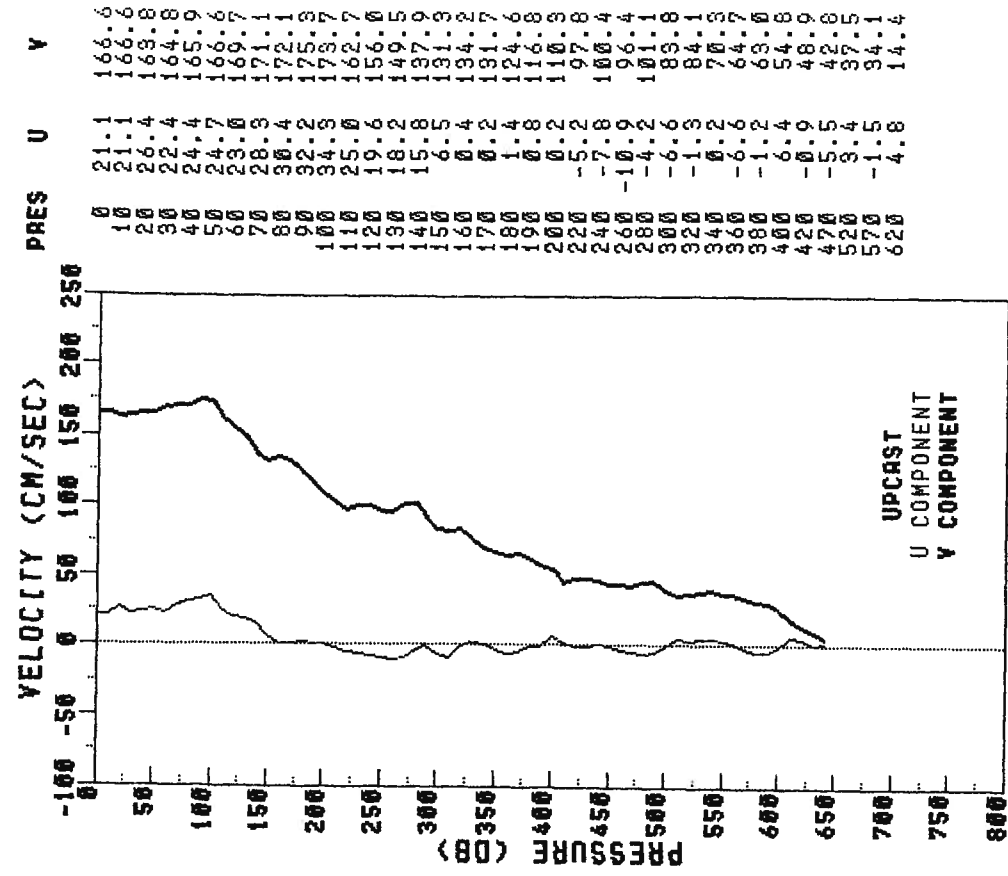
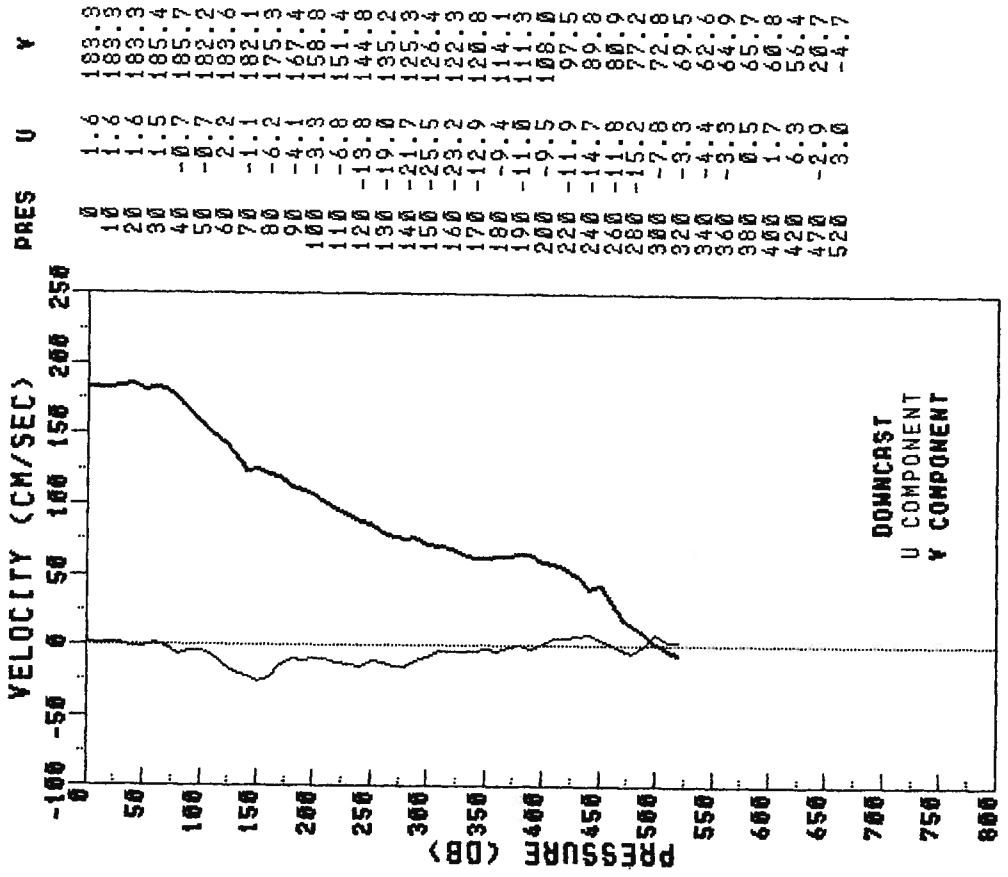


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 R/V RESEARCHER JDAY 76 TIME 2207Z
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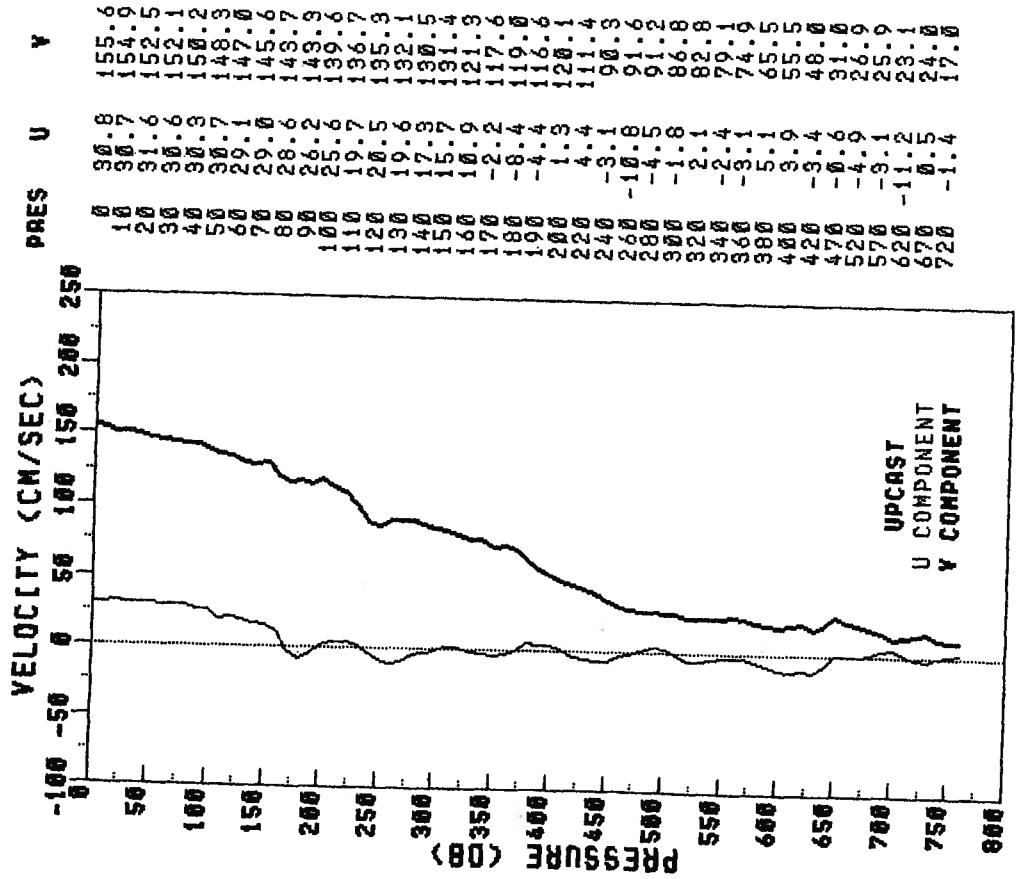


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 R/V RESEARCHER JOY 77 TIME 0142Z
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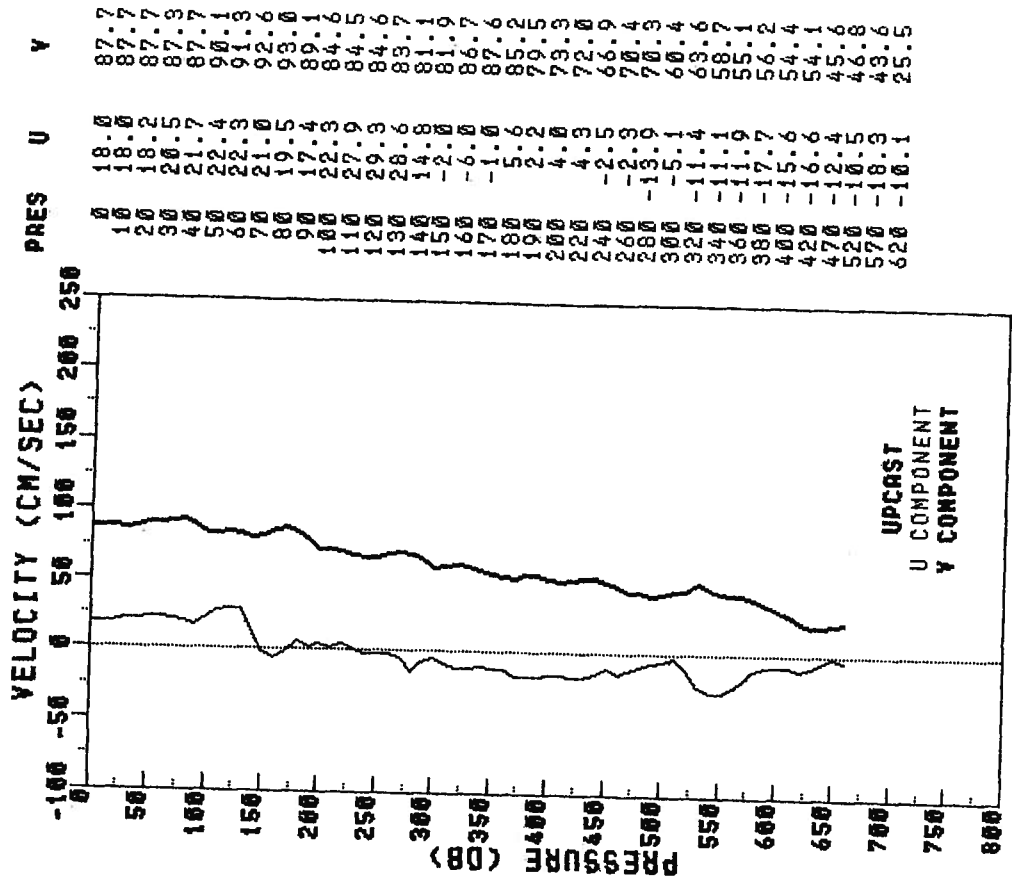
RES-STACSI4-84 PEGASUS 022 STN 4
 R/V RESEARCHER JOY 77 TIME 0442Z
 LATITUDE 26.98 N LONGITUDE 79.61 W



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 R/V RESEARCHER JOY 77 TIME 0839Z
 LATITUDE 27.00 N LONGITUDE 79.50 W

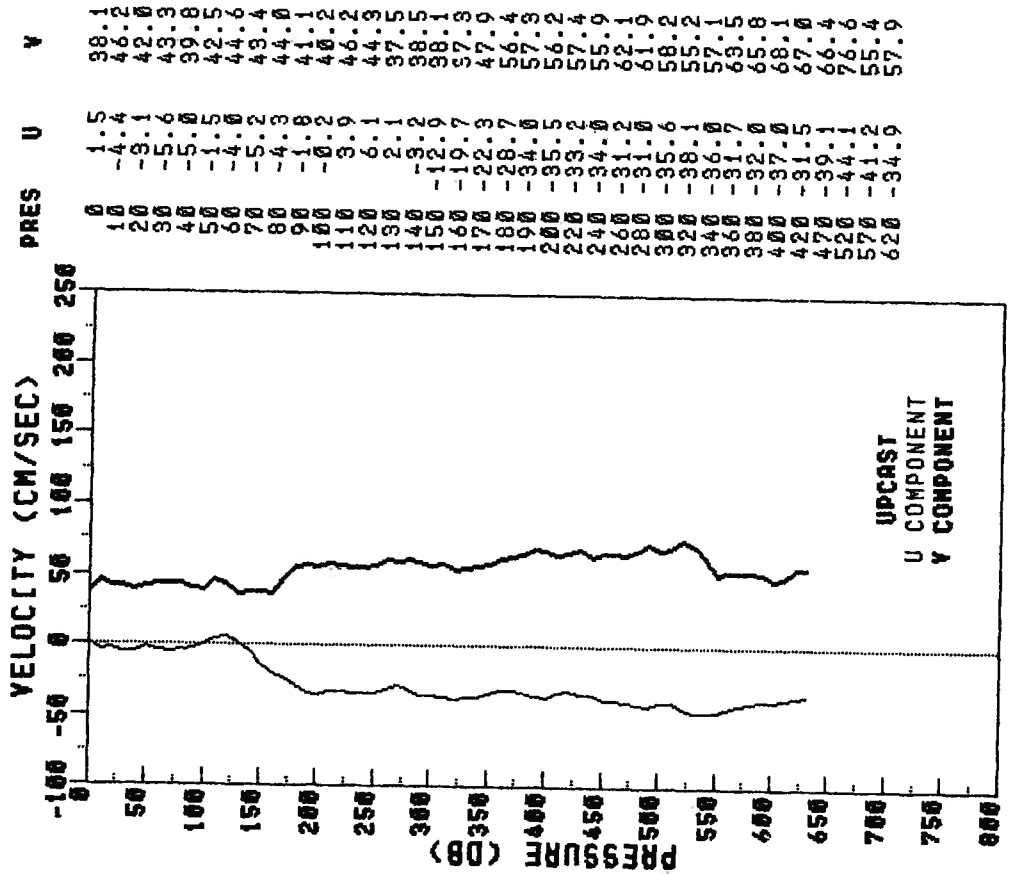
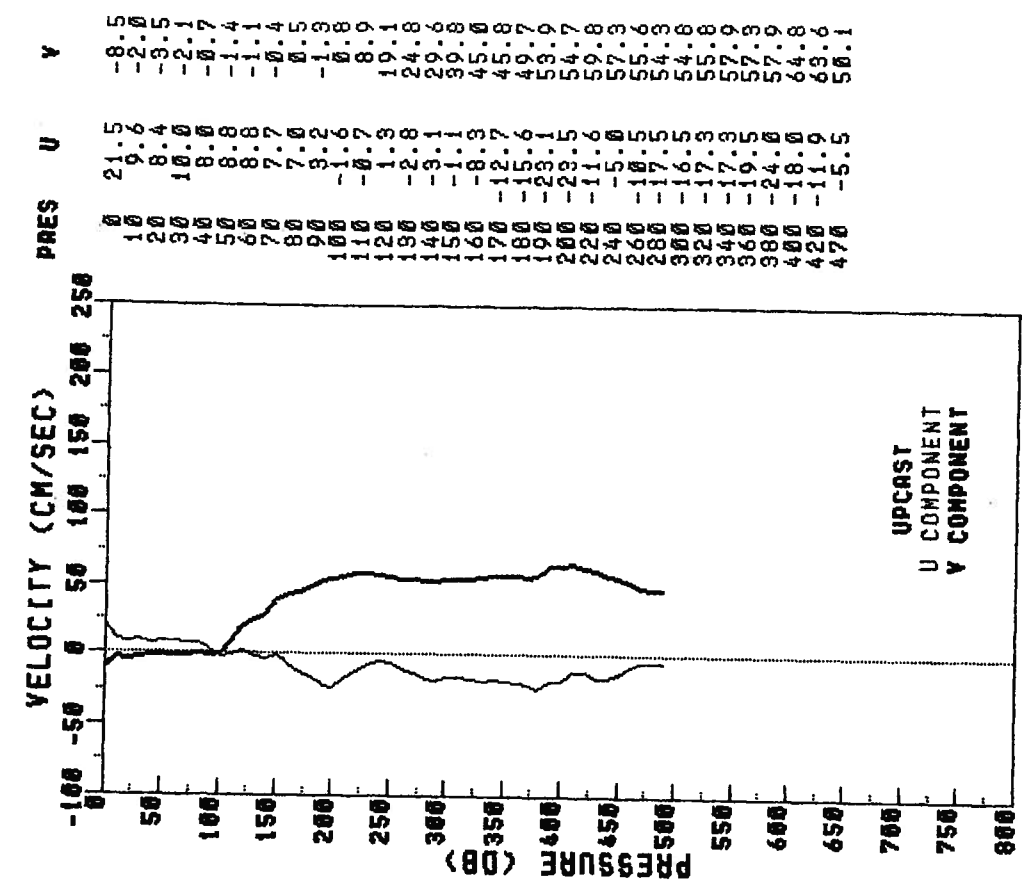


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 R/V RESEARCHER JOY 77 TIME 1213Z
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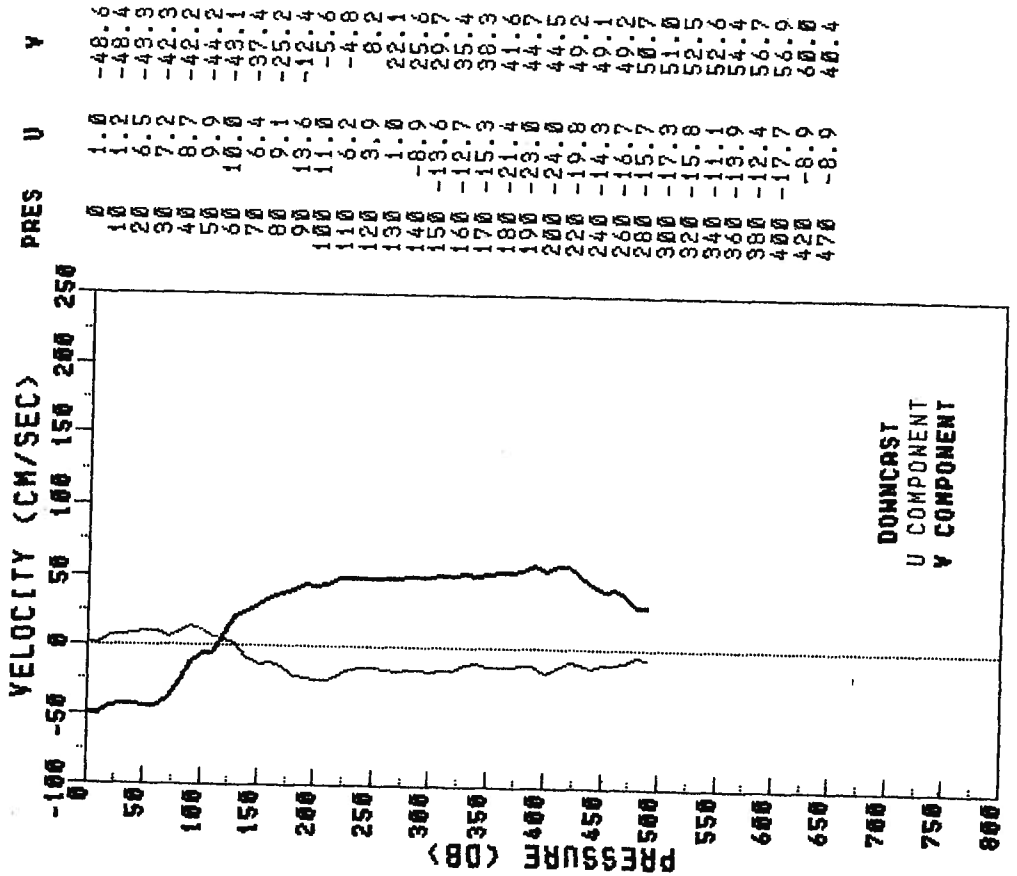


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 R/V RESEARCHER JOY 77 TIME 1847Z
 LATITUDE 27.01 N LONGITUDE 79.20 N

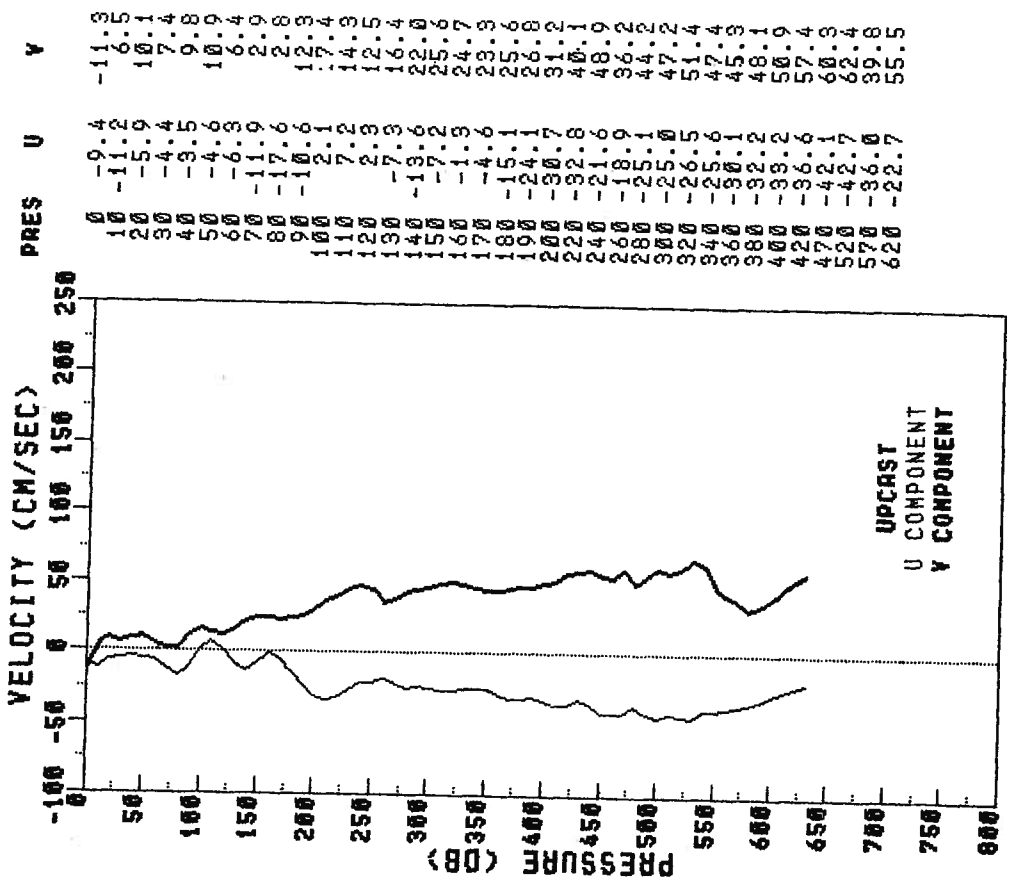
RES-STAC14-84 PEGASUS 025 STN 7
 R/V RESEARCHER JOY 77 TIME 1532Z
 LATITUDE 26.99 N LONGITUDE 79.29 N



RES-STAC14-84 PEGASUS 027 STN 8
 R/V RESEARCHER JOY 78 TIME 1633Z
 LATITUDE 27.01 N LONGITUDE 79.20 W

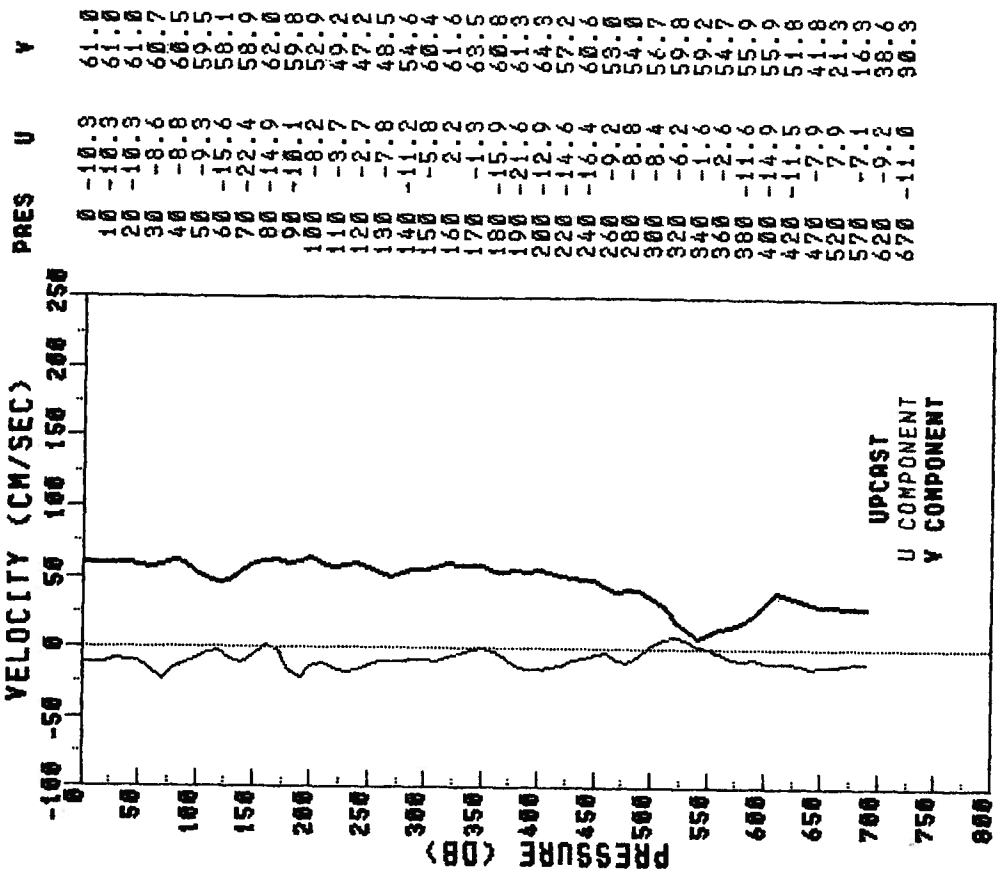
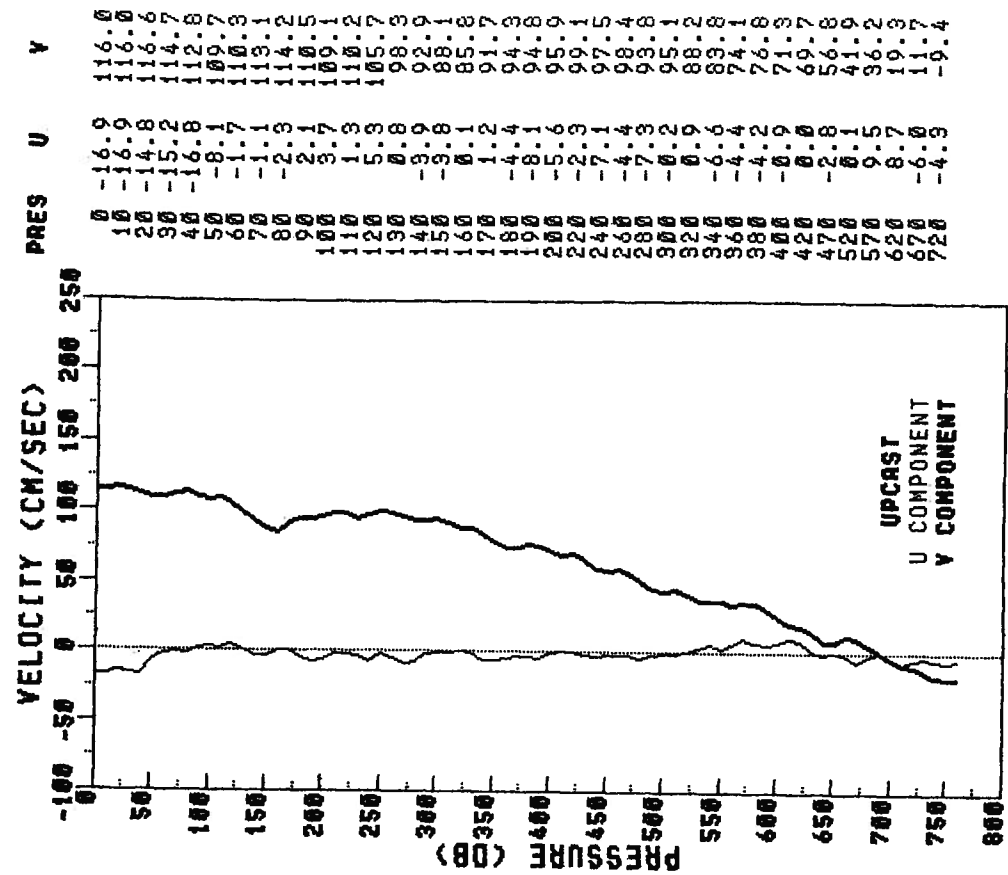


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 R/V RESEARCHER JOY 78 TIME 1815Z
 LATITUDE 27.00 N LONGITUDE 79.29 W



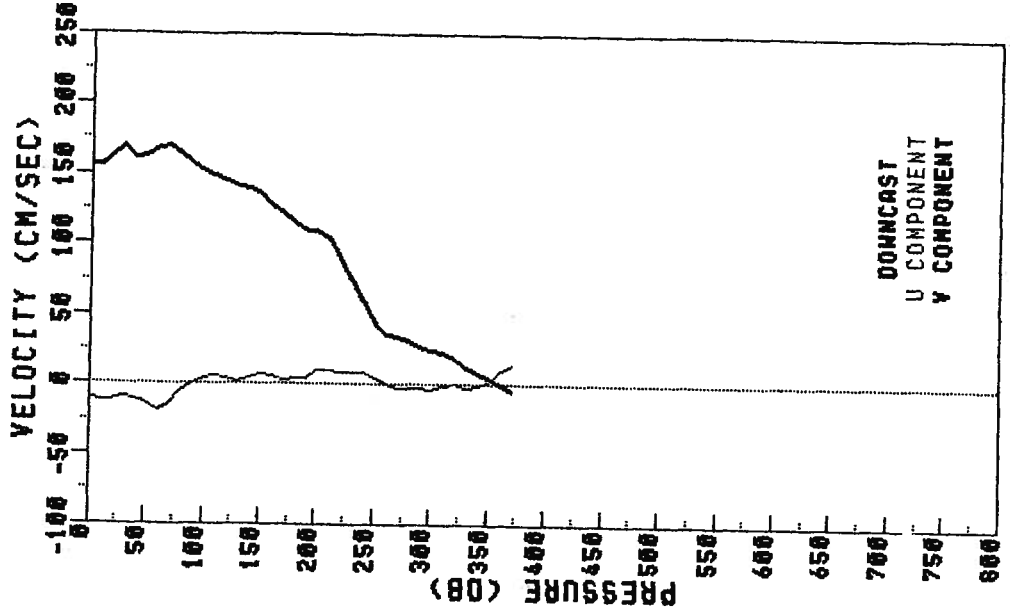
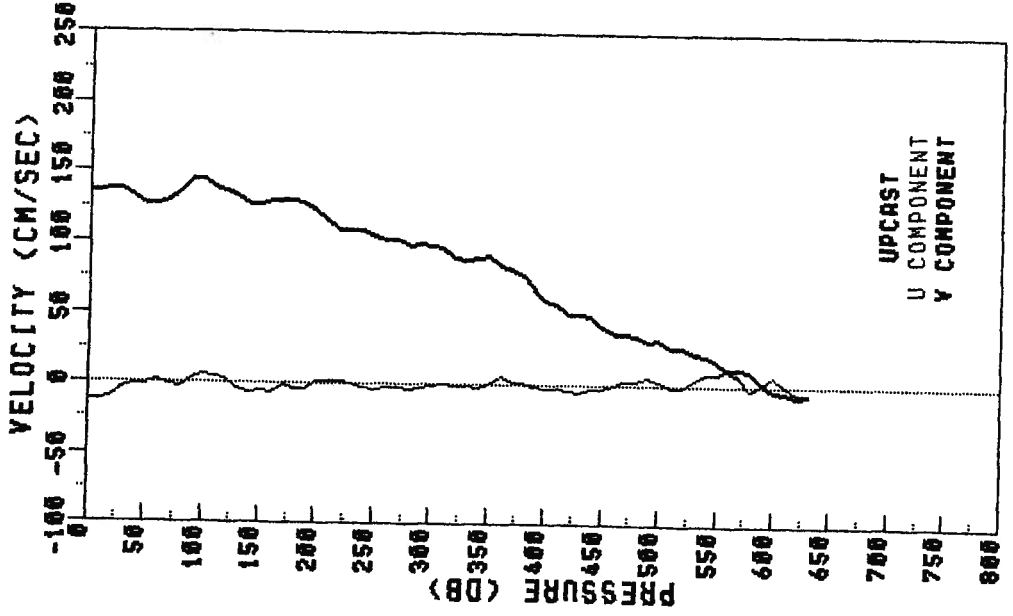
RES-STAC14-84 PEGASUS 030 STN 5
 R/V RESEARCHER JOY 78 TIME 2220Z
 LATITUDE 27.00 N LONGITUDE 79.50 W

RES-STAC14-84 PEGASUS 029 STN 6
 R/V RESEARCHER JOY 78 TIME 2017Z
 LATITUDE 27.00 N LONGITUDE 79.37 W



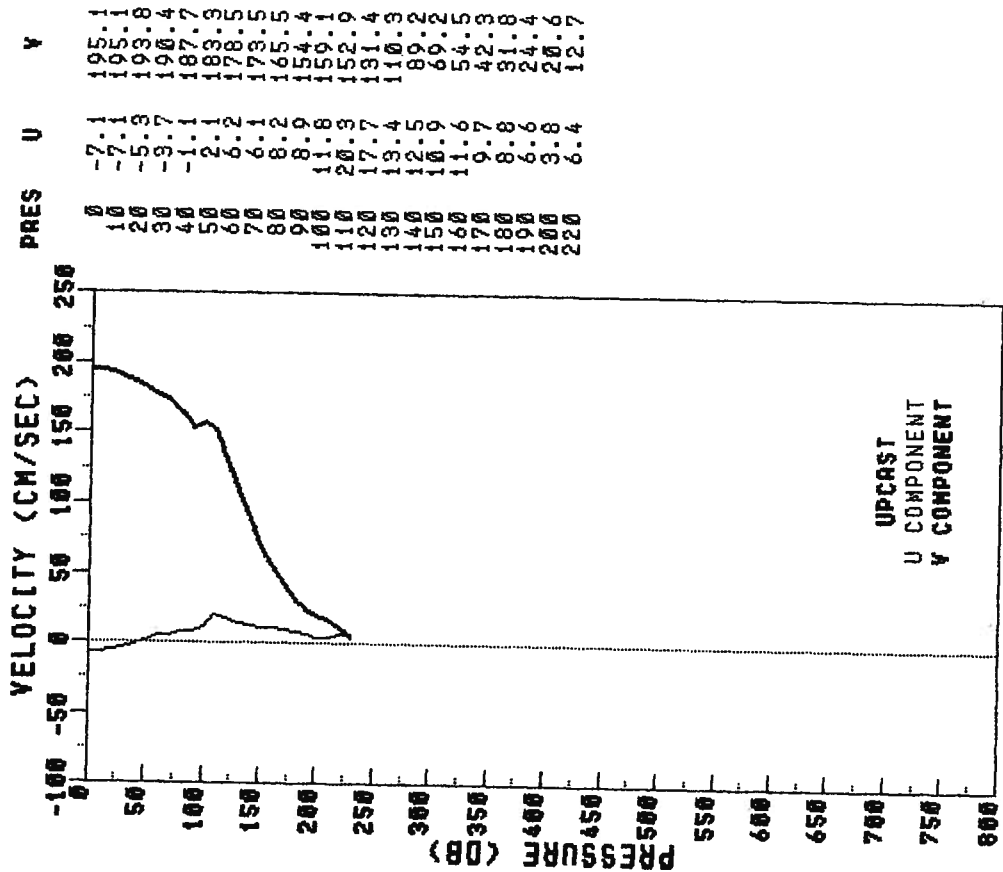
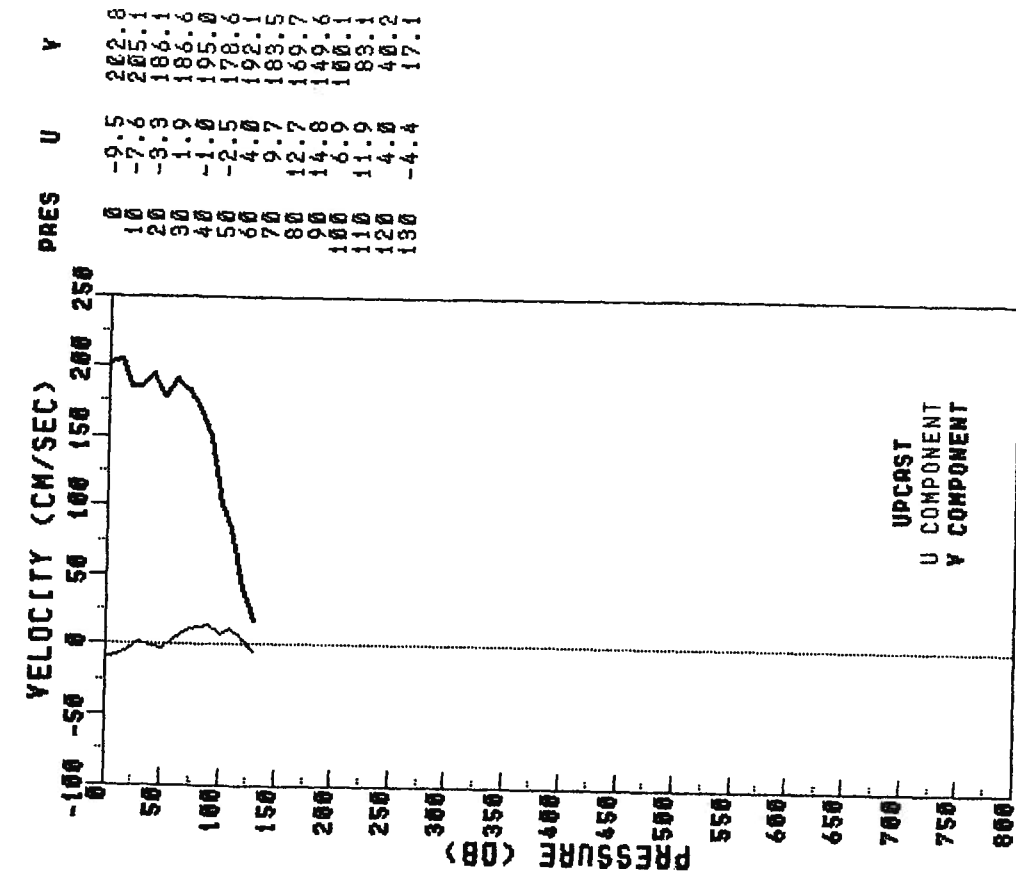
RES-STACS14-84 PEGASUS 031 STN 4
 R/Y RESEARCHER JOY 79 TIME 0023Z
 LATITUDE 26.98 N LONGITUDE 79.62 W

RES-STACS14-84 PEGASUS 033 STN 2
 R/Y RESEARCHER JOY 79 TIME 0345Z
 LATITUDE 26.98 N LONGITUDE 79.79 W



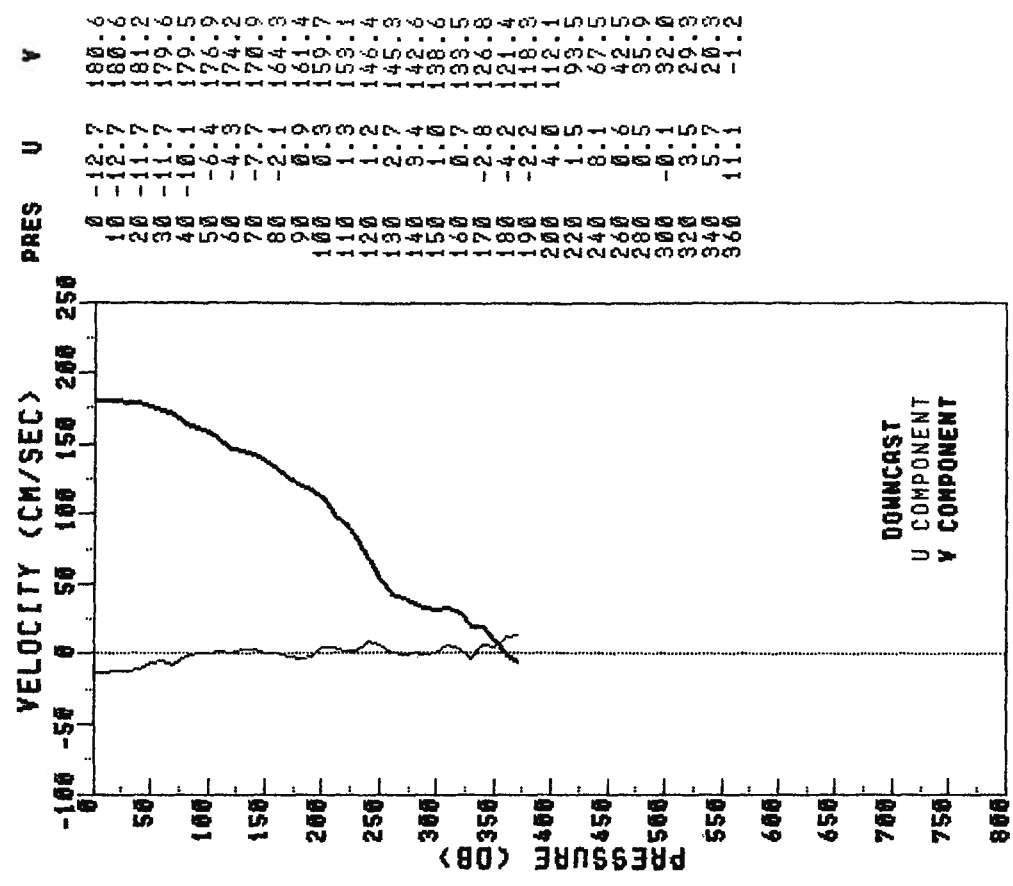
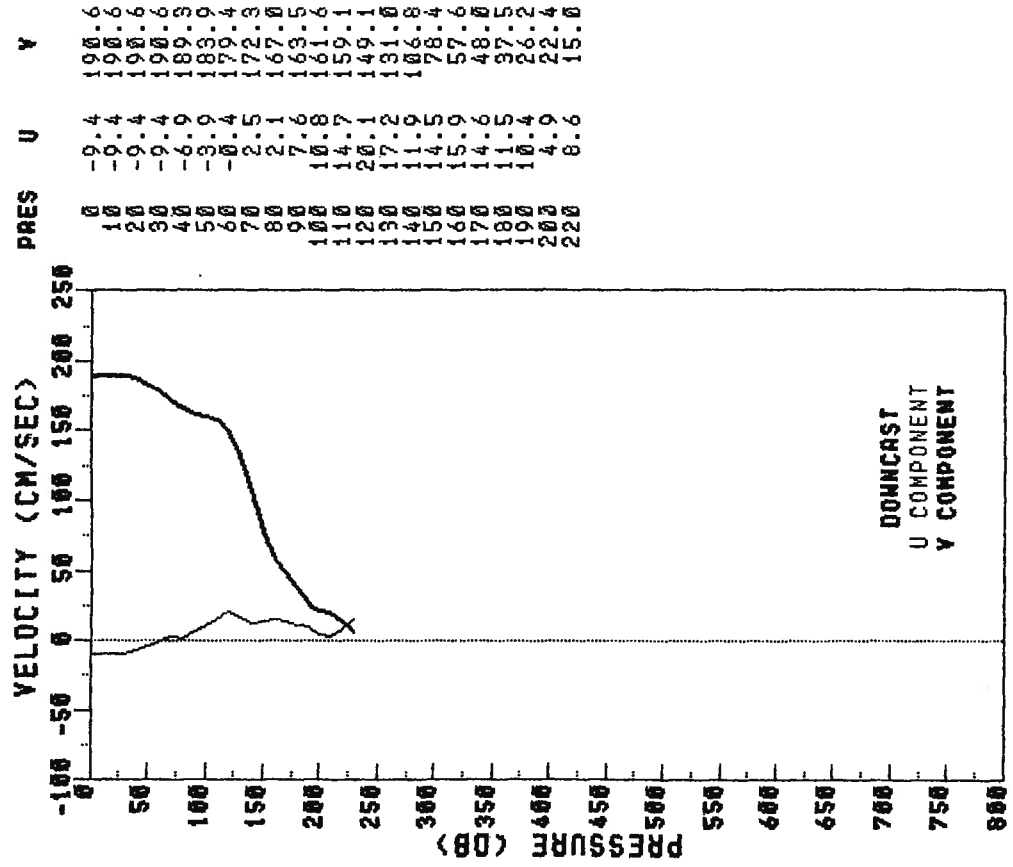
RES-STACS14-84 PEGASUS 035 STN 0
 R/V RESEARCHER JOY 79 TIME 0628Z
 LATITUDE 27.00 N LONGITUDE 79.93 W

RES-STACS14-84 PEGASUS 034 STN 1
 R/V RESEARCHER JOY 79 TIME 0505Z
 LATITUDE 27.00 N LONGITUDE 79.88 W

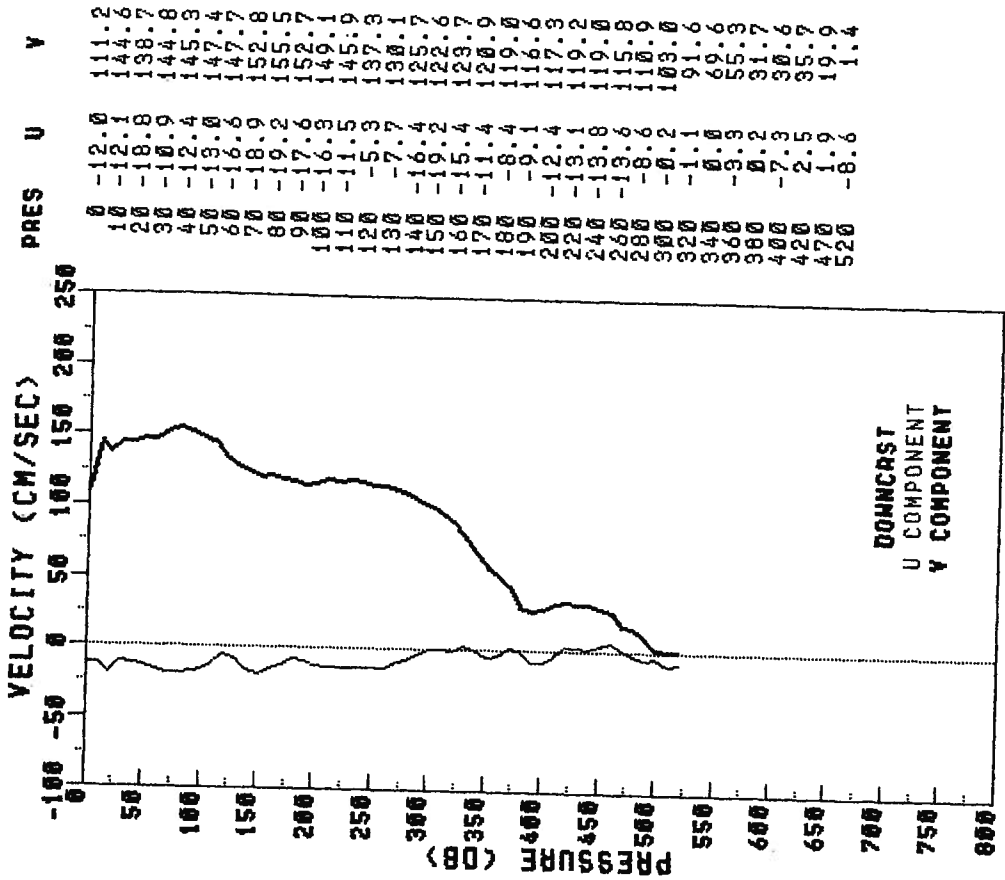


RES-STACSL4-84 PEGASUS 036 STN 1
 R/V RESEARCHER JDAY 79 TIME 0659Z
 LATITUDE 27.00 N LONGITUDE 79.88 W

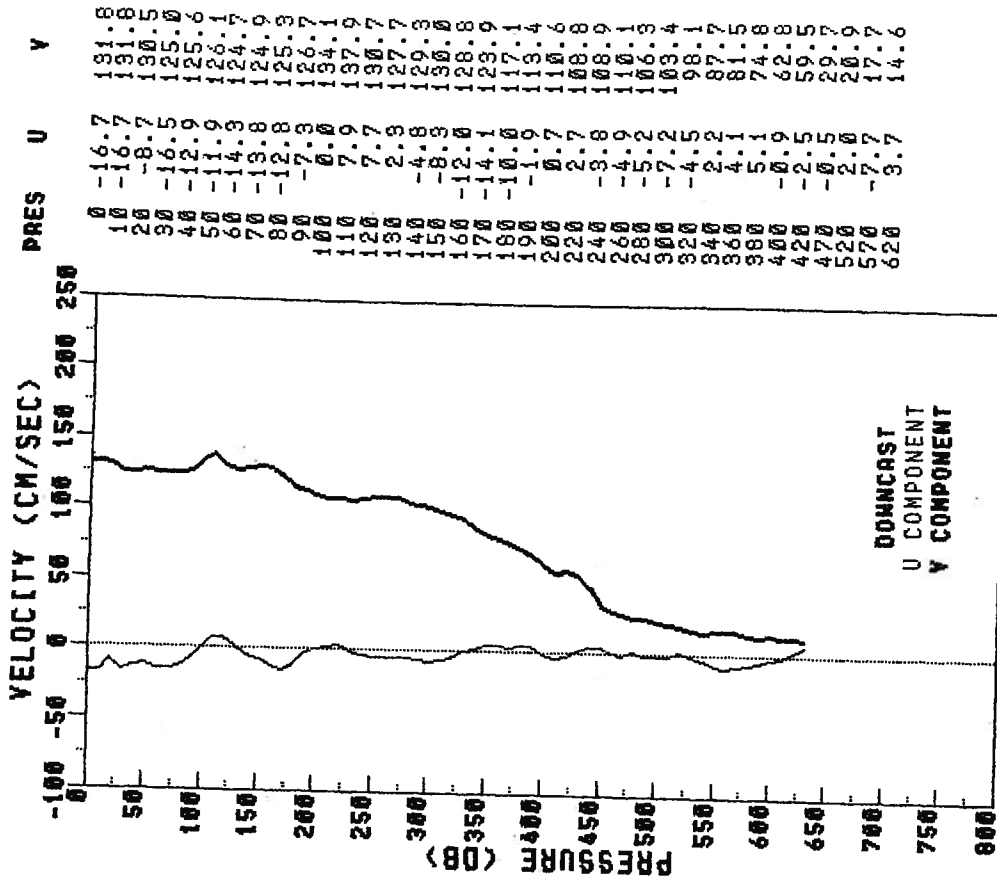
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 R/V RESEARCHER JDAY 79 TIME 0810Z
 LATITUDE 26.99 N LONGITUDE 79.79 W



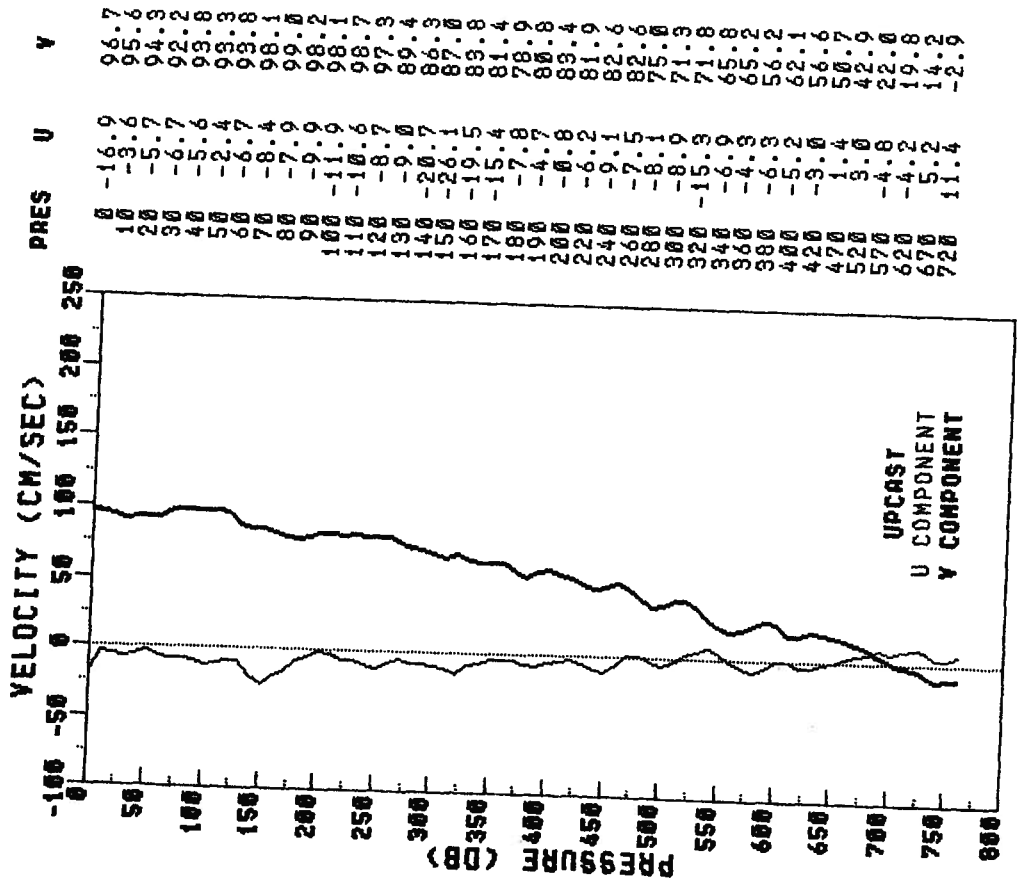
RES-STACS14-84 PEGASUS 038 STN 3
 R/V RESEARCHER JOY 79 TIME 0947Z
 LATITUDE 27.00 N LONGITUDE 79.69 W



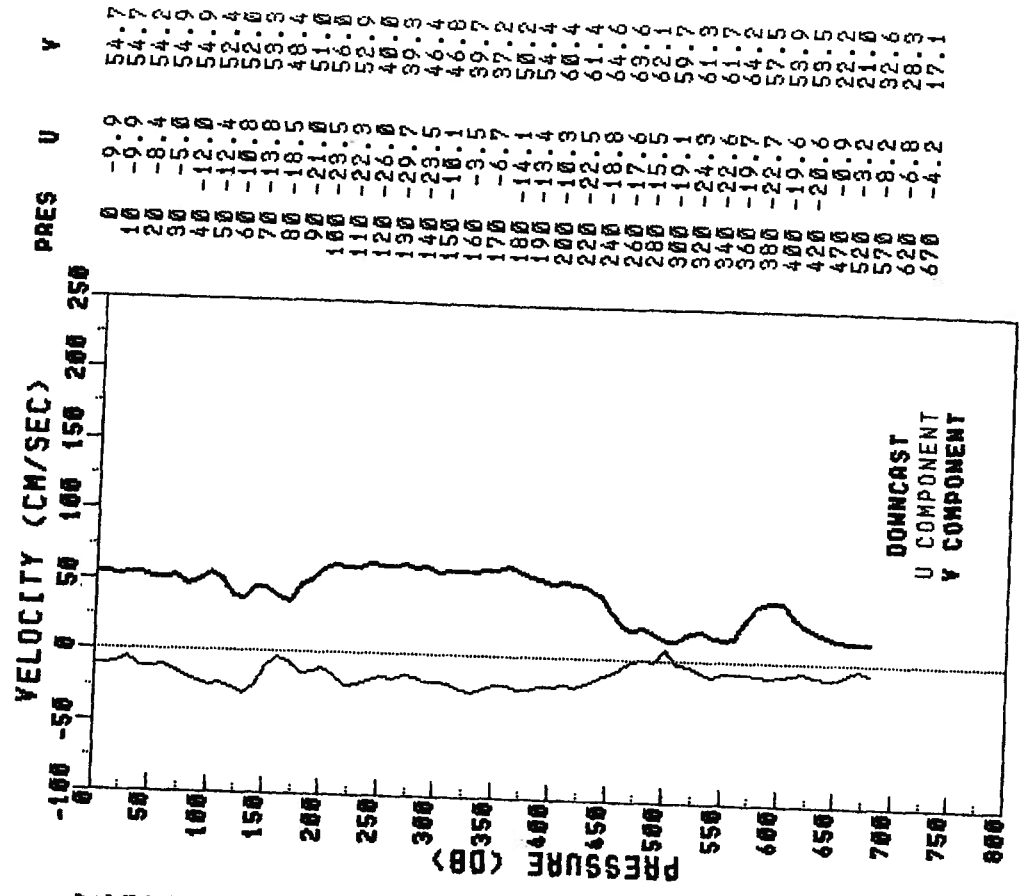
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 R/V RESEARCHER JOY 79 TIME 1116Z
 LATITUDE 26.99 N LONGITUDE 79.62 W



RES-STACS14-84 PEGASUS 040 STN 5
 R/Y RESEARCHER JDAY 79 TIME 1311Z
 LATITUDE 27.00 N LONGITUDE 79.50 N



RES-STACS14-84 PEGASUS 041 STN 6
 R/Y RESEARCHER JDAY 79 TIME 1535Z
 LATITUDE 27.00 N LONGITUDE 79.38 N



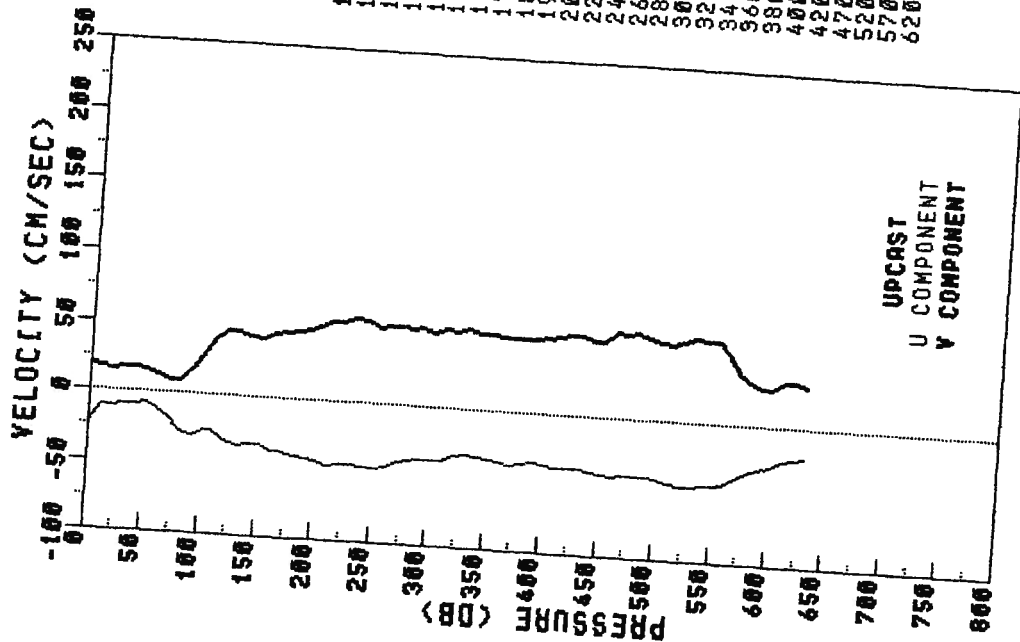
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PEGASUS 042

STN 7

R/V RESEARCHER JOY 79 TIME 1744Z

LATITUDE 27.00 N LONGITUDE 79.29 W



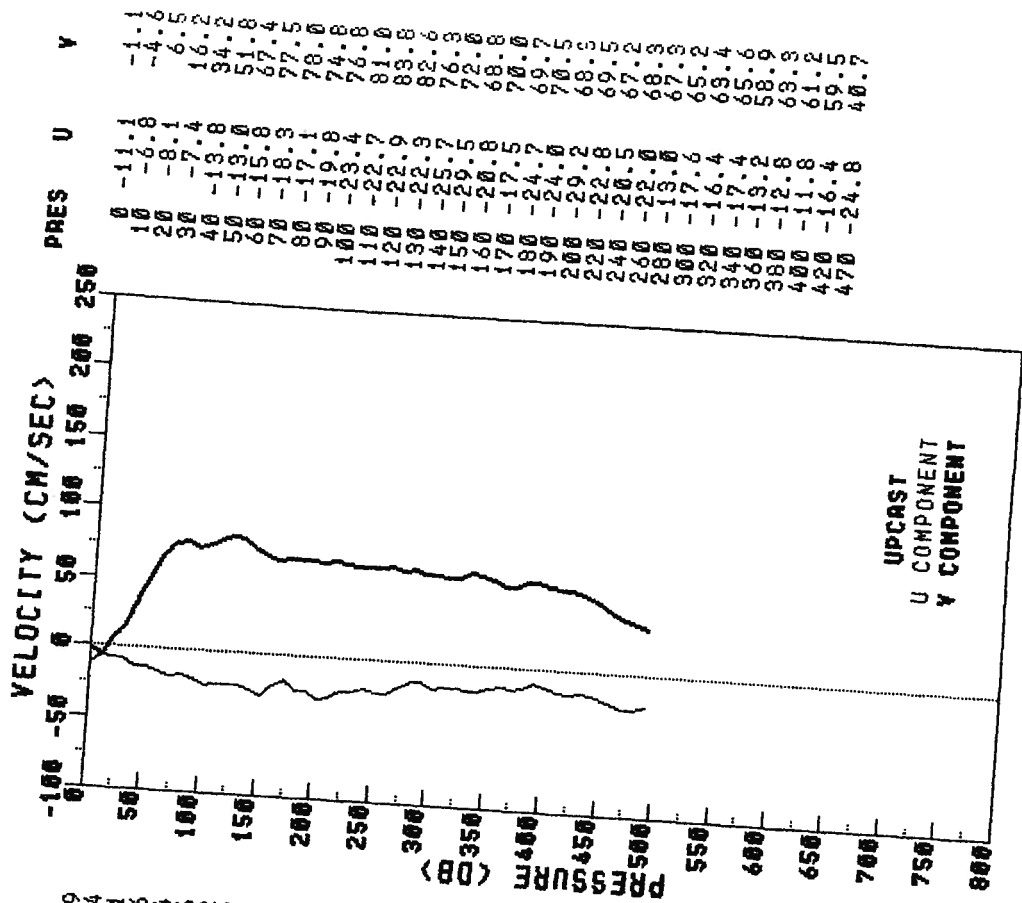
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PEGASUS 043

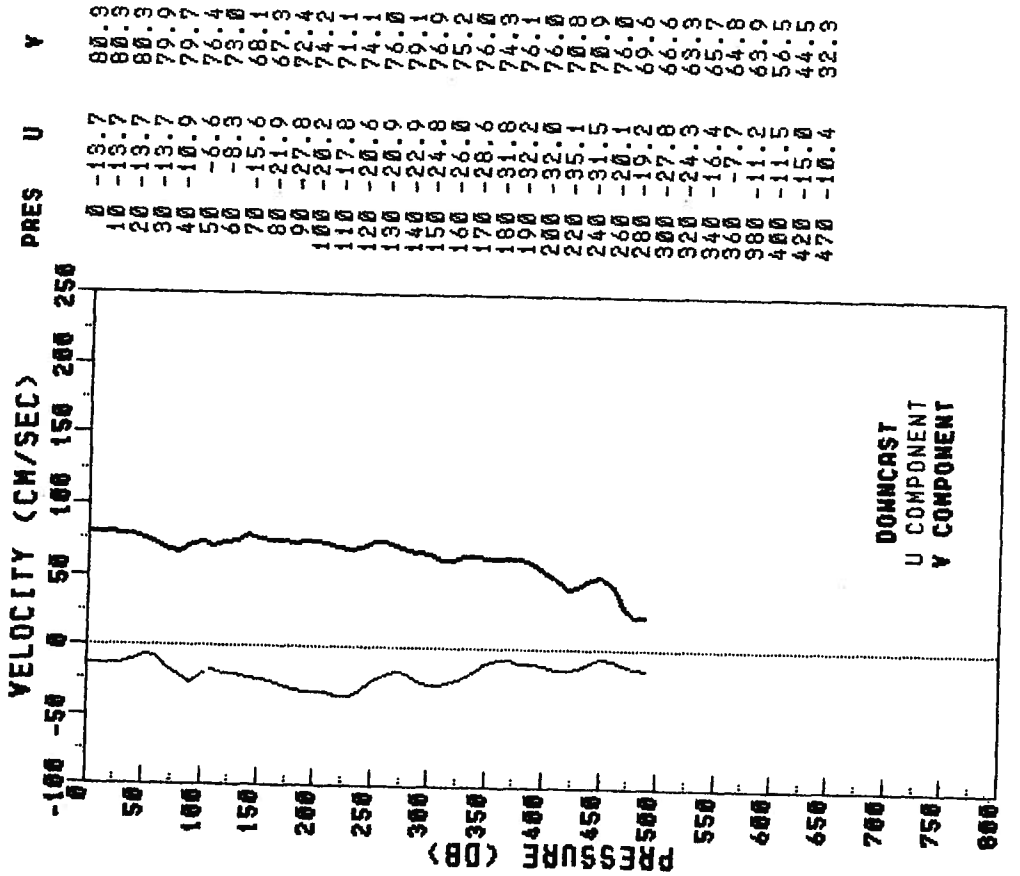
STN 8

R/V RESEARCHER JOY 79 TIME 1937Z

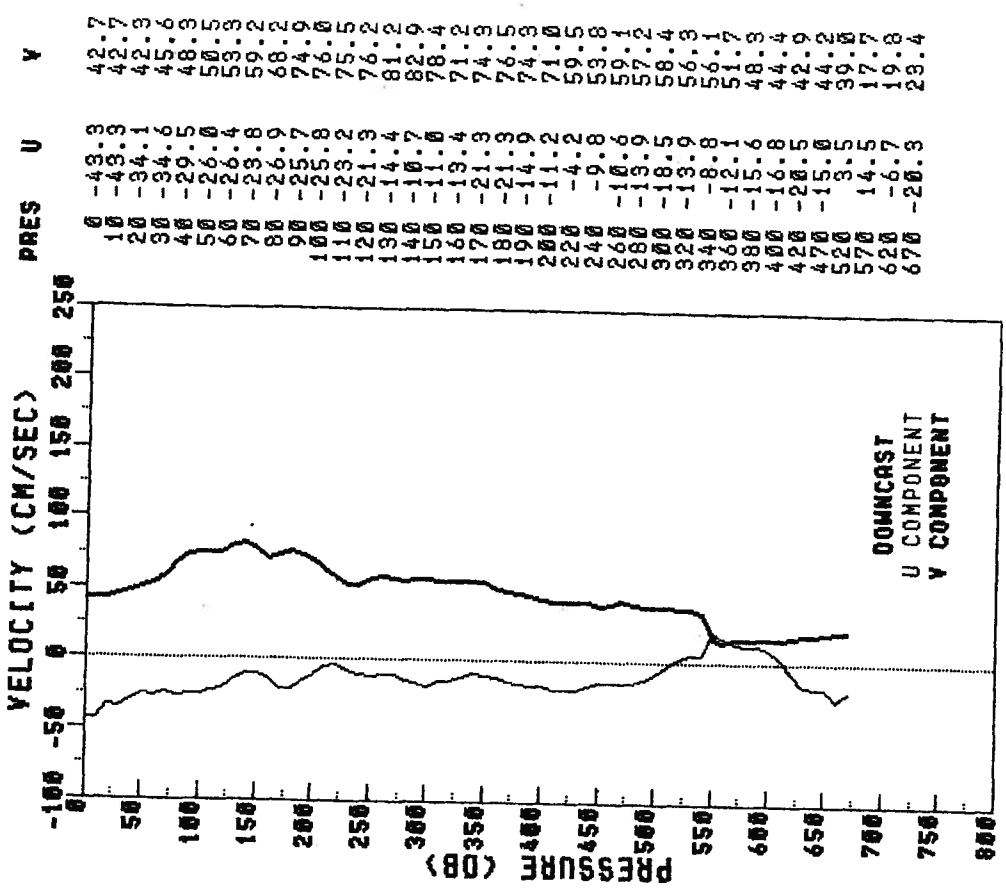
LATITUDE 27.01 N LONGITUDE 79.20 W



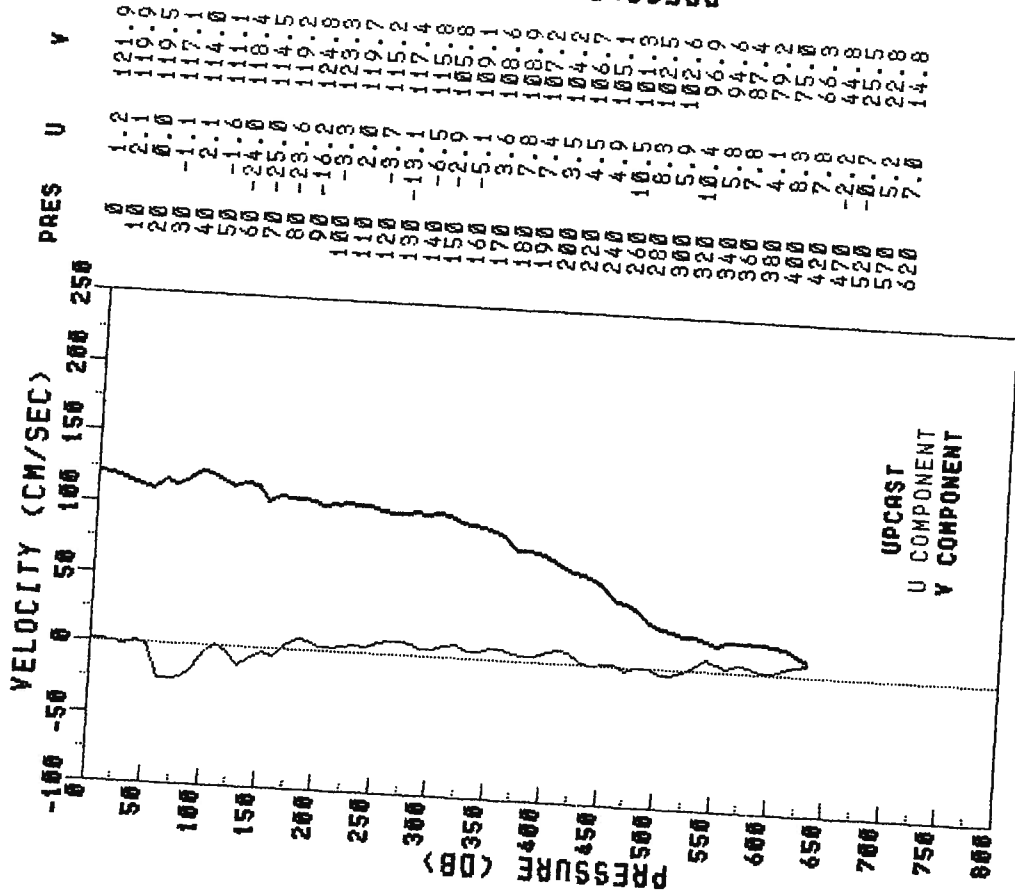
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 R/Y RESEARCHER JDAY 80 TIME 0926Z
 LATITUDE 27.01 N LONGITUDE 79.20 W



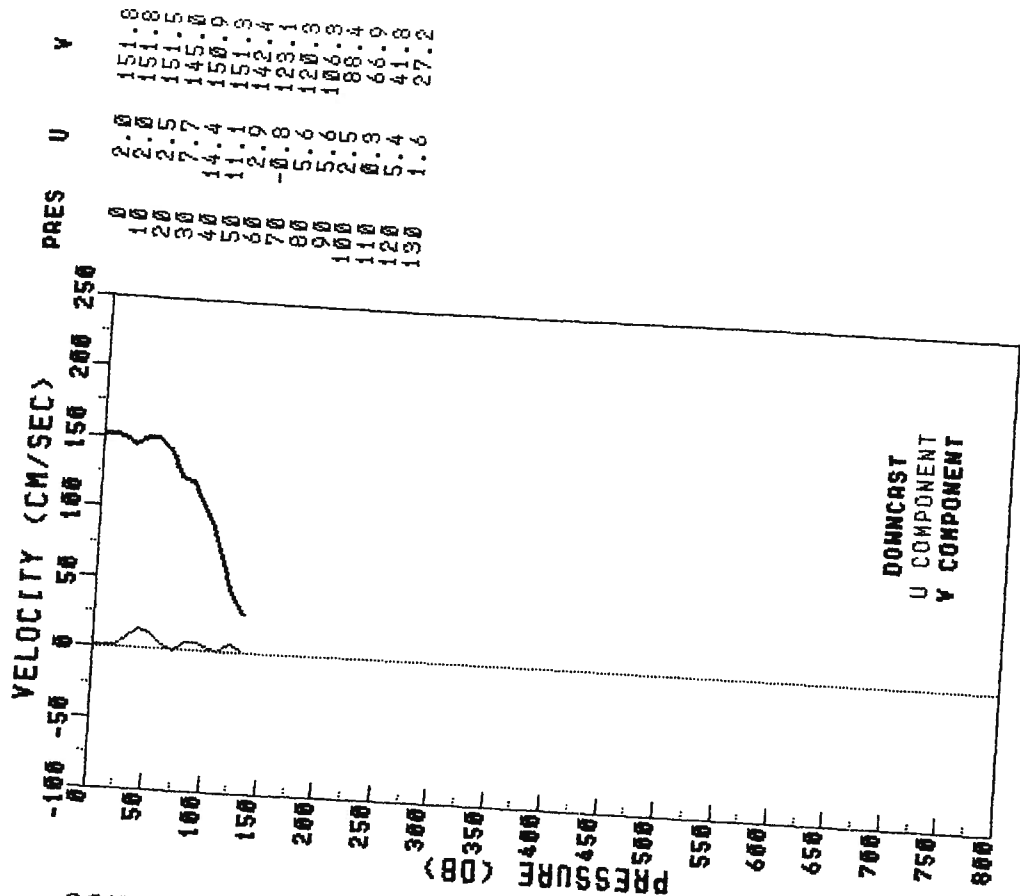
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 R/Y RESEARCHER JDAY 80 TIME 1116Z
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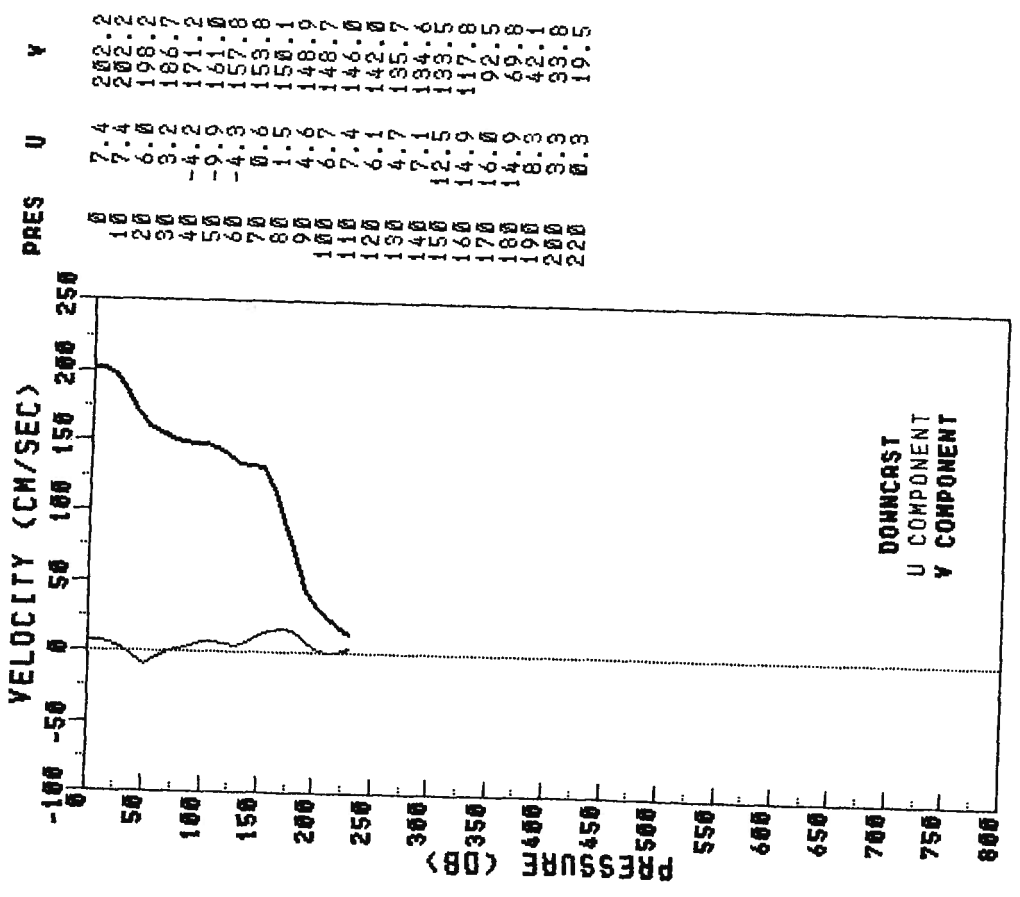
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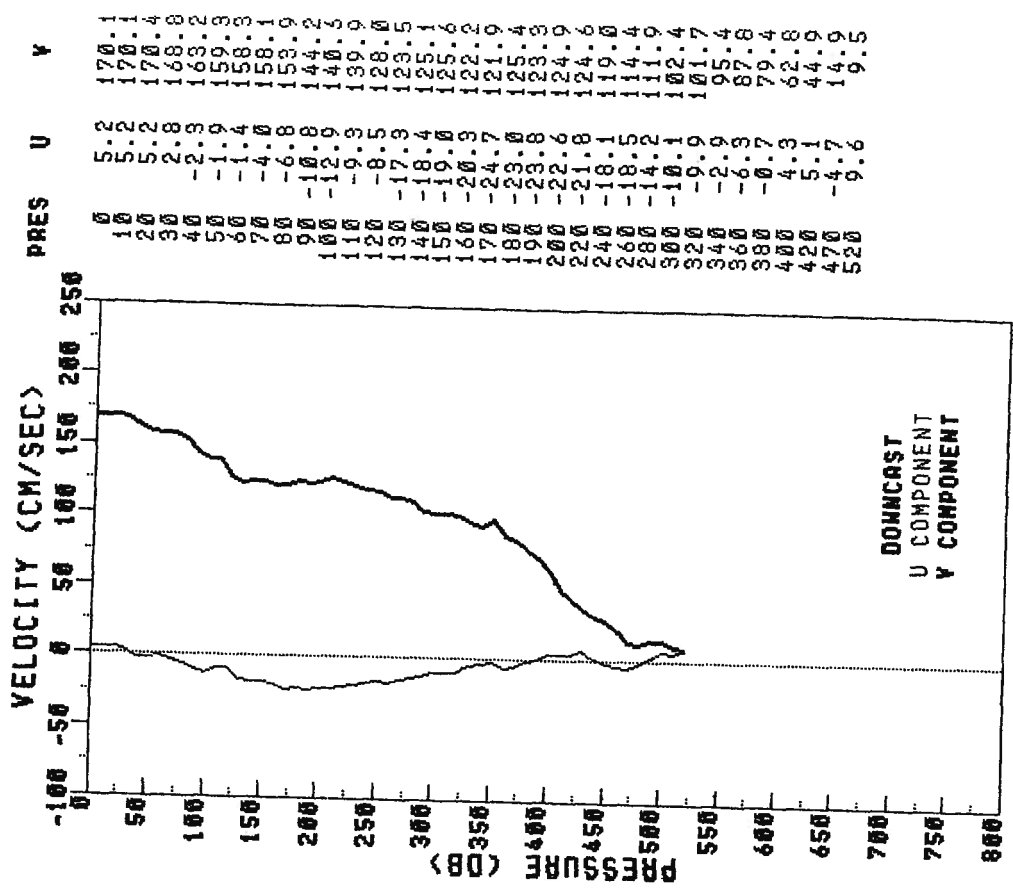
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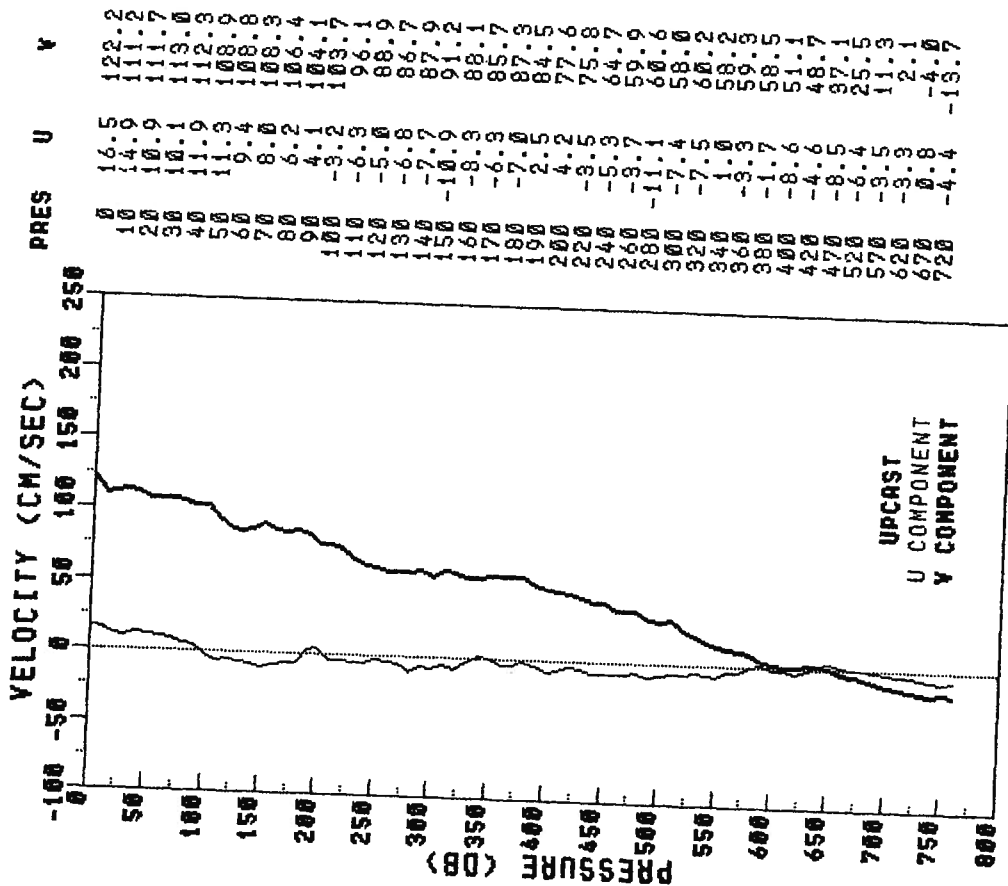
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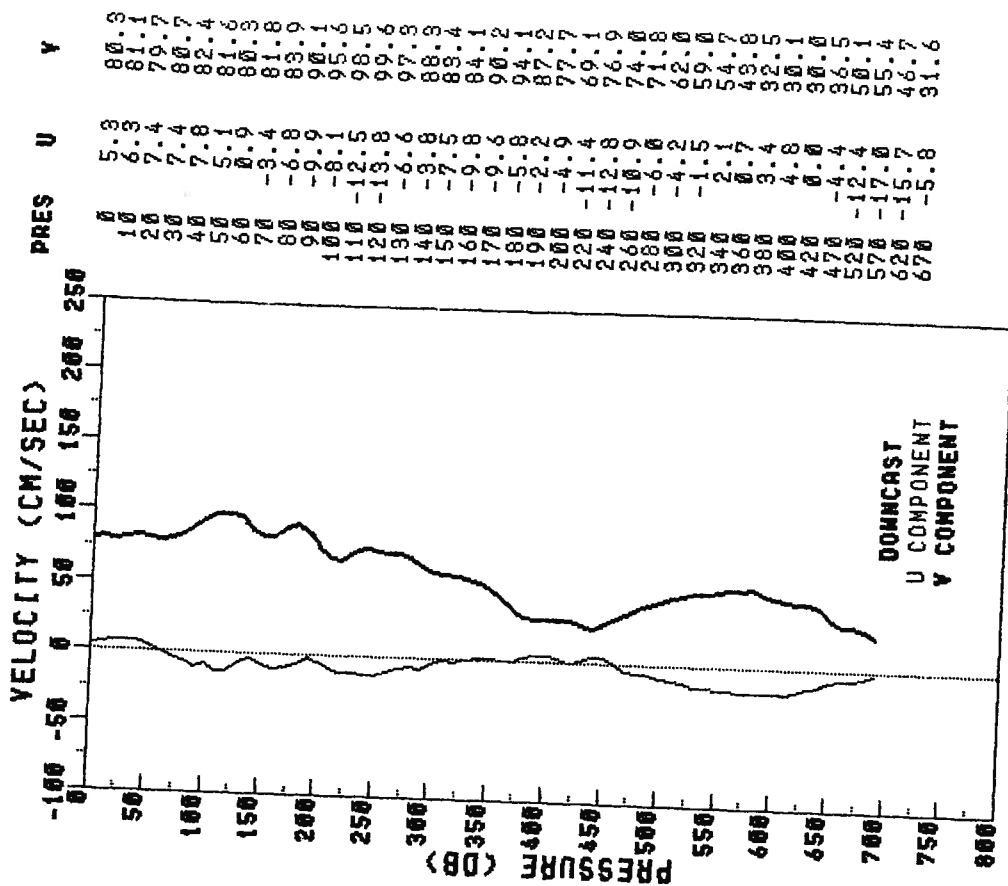
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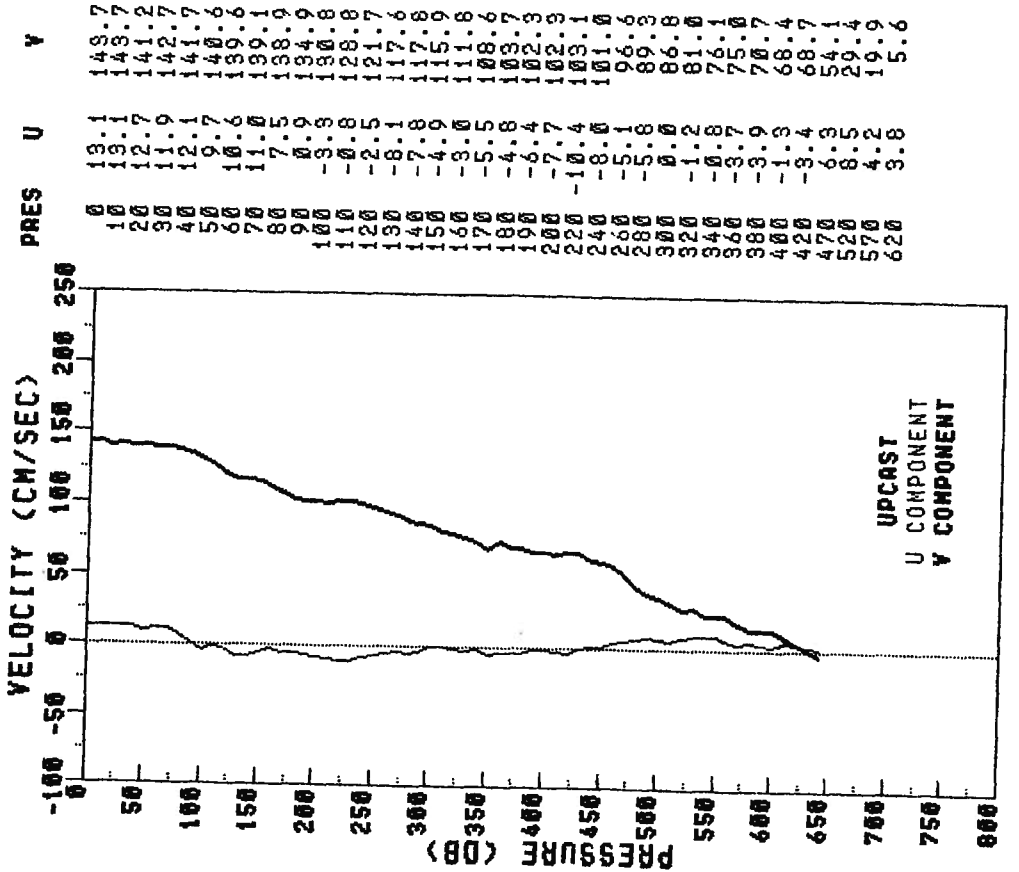
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 R/V RESEARCHER JDAY 81 TIME 0244Z
 LATITUDE 27.00 N LONGITUDE 79.50 N



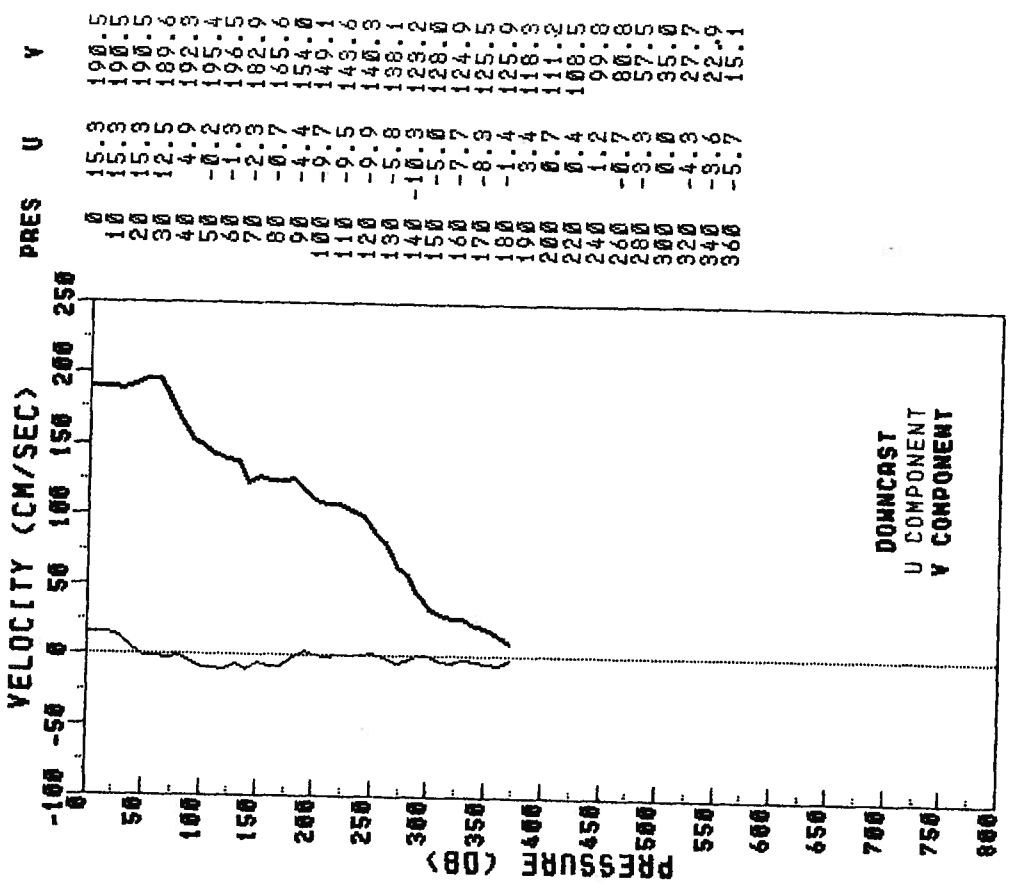
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 R/V RESEARCHER JDAY 81 TIME 0454Z
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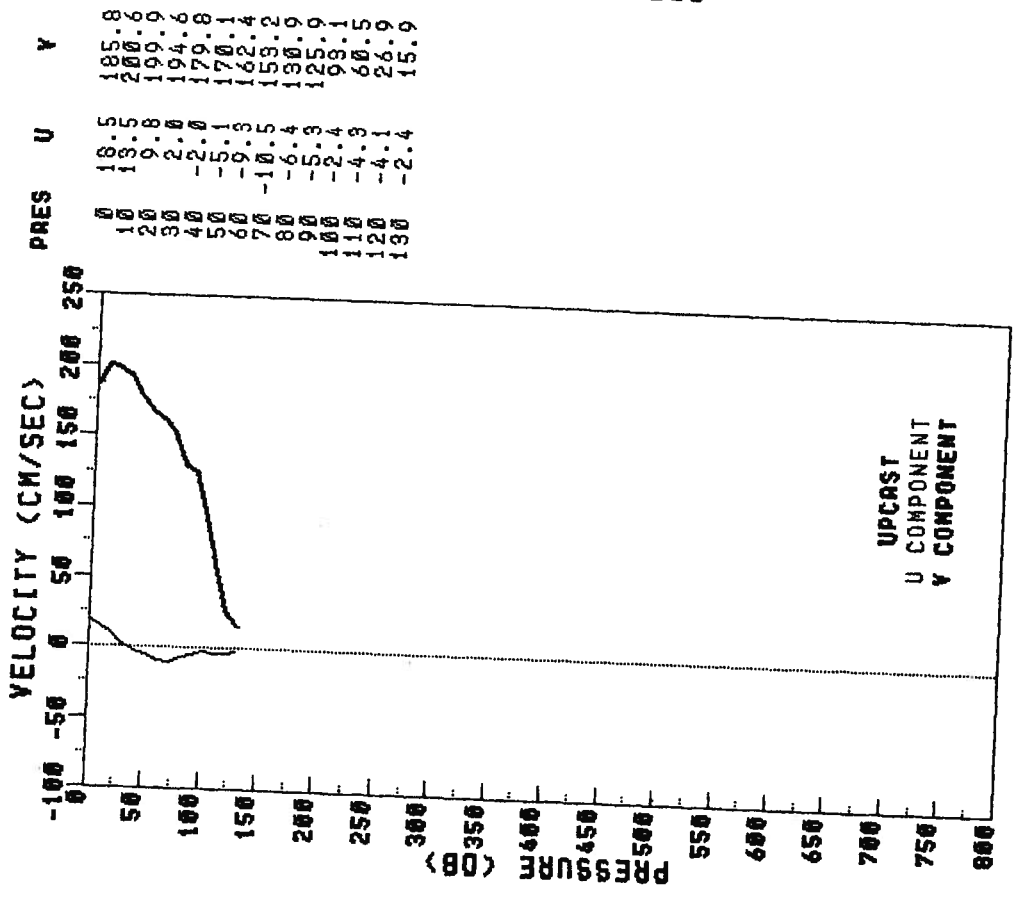
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 R/Y RESEARCHER JOY 81 TIME 0747Z
 LATITUDE 26.98 N LONGITUDE 79.61 W



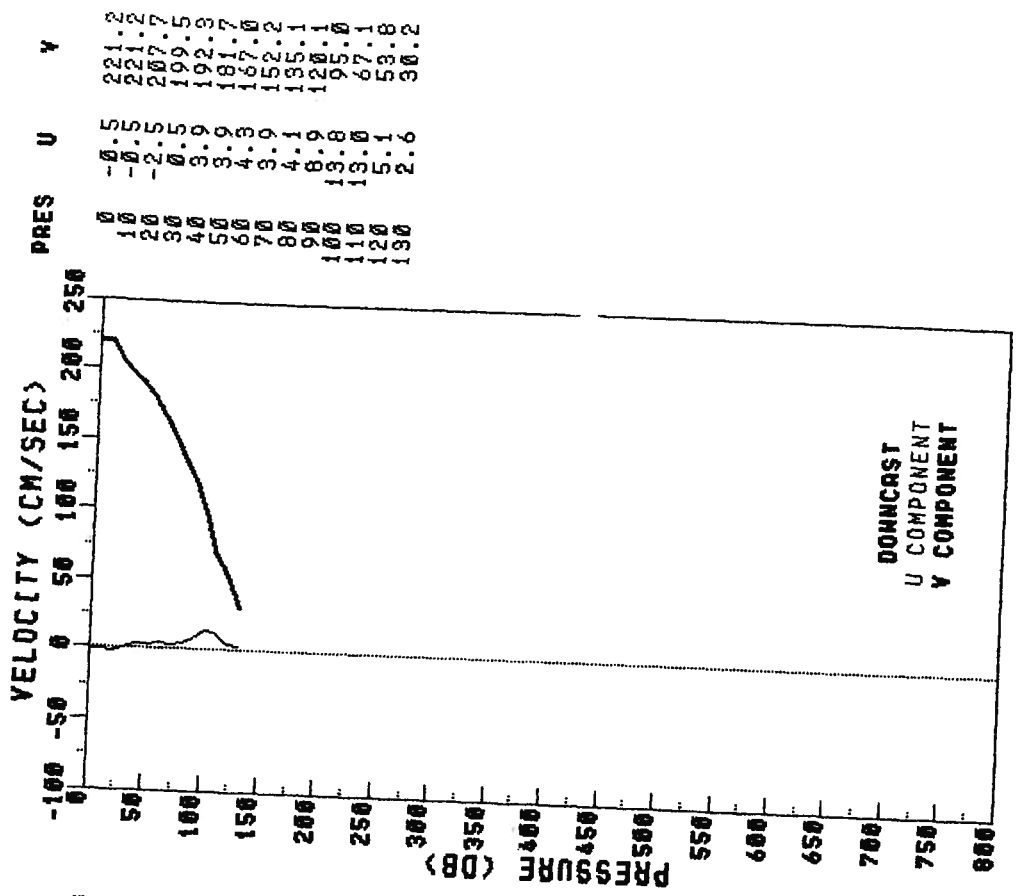
RES-STAC14-84 PEGASUS 054 STN 2
 R/Y RESEARCHER JOY 81 TIME 1026Z
 LATITUDE 26.99 N LONGITUDE 79.79 W



RES-STACSL4-84 PEGASUS 055 STN 0
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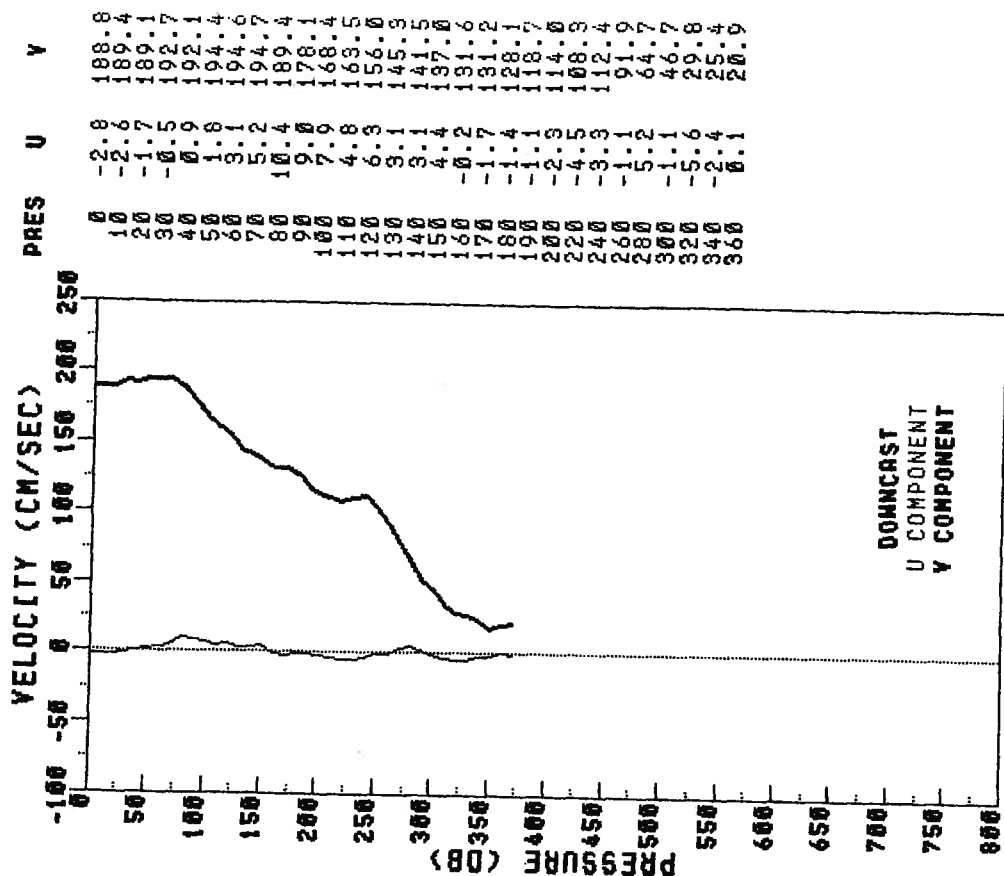
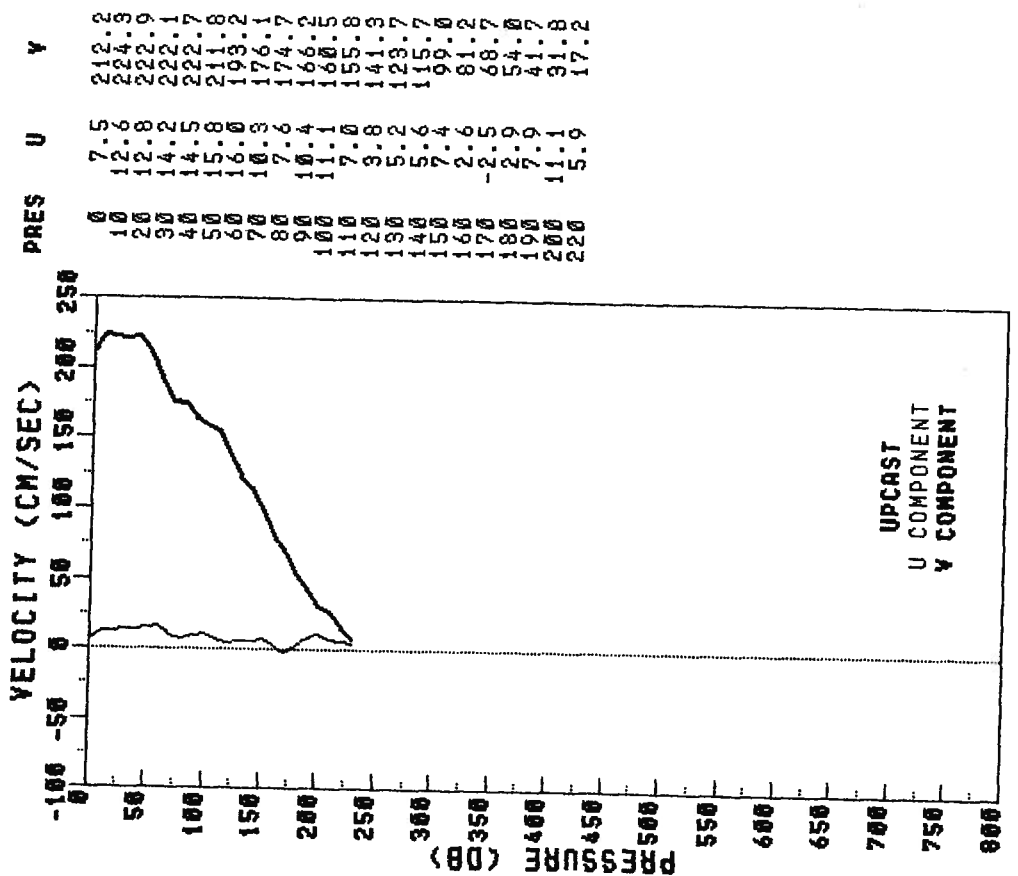


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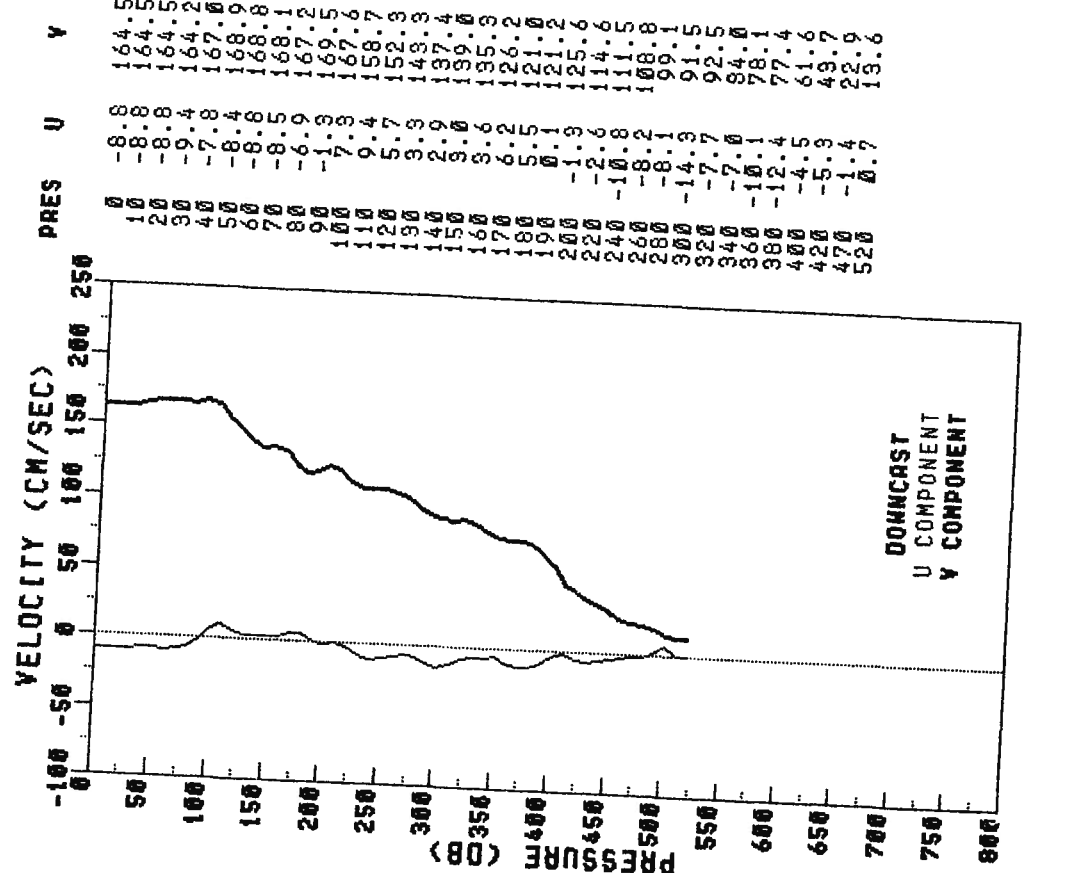
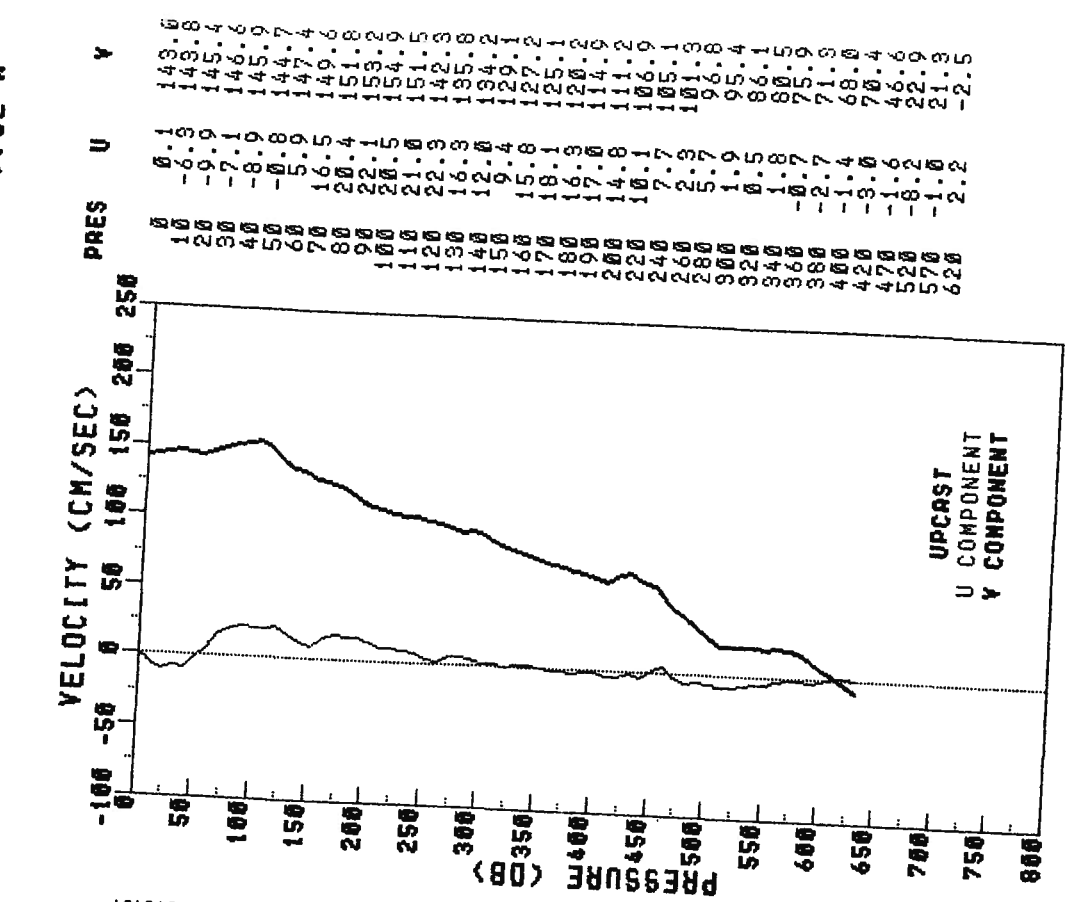
RES-STACSL4-84 PEGASUS 057 STN 1
 R/V RESEARCHER JDAY 81 TIME 2200Z
 LATITUDE 27.00 N LONGITUDE 79.88 W

RES-STACSL4-84 PEGASUS 058 STN 2
 R/V RESEARCHER JDAY 81 TIME 2337Z
 LATITUDE 26.99 N LONGITUDE 79.79 W

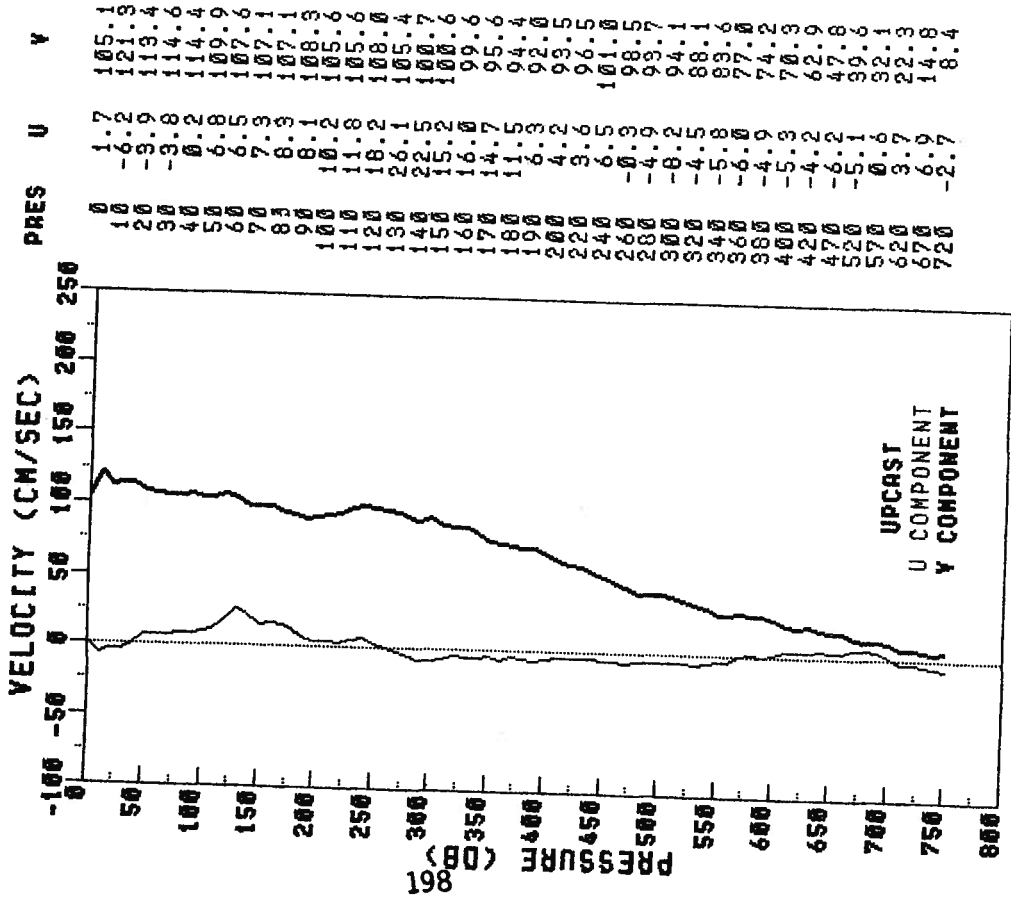


RES-STAC14-84 PEGASUS 060 STN 4
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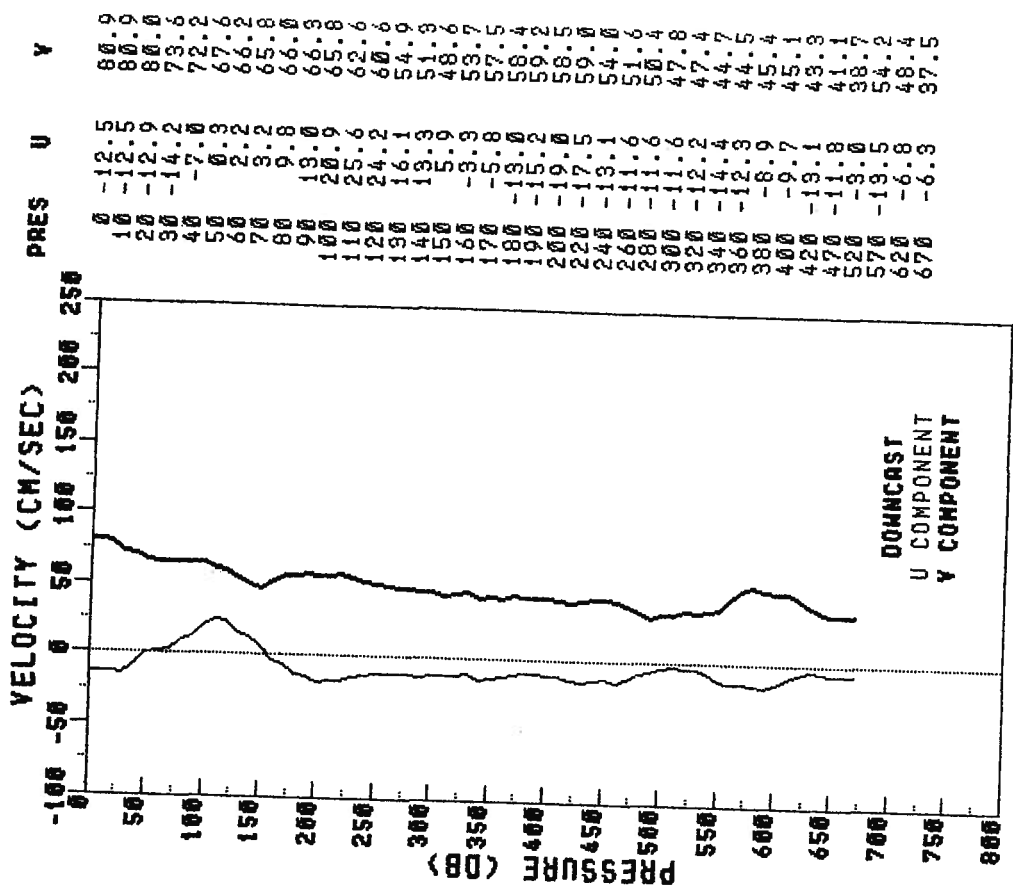
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 R/Y RESEARCHER JOY 82 TIME 0107Z
 LATITUDE 27.00 N LONGITUDE 79.68 W



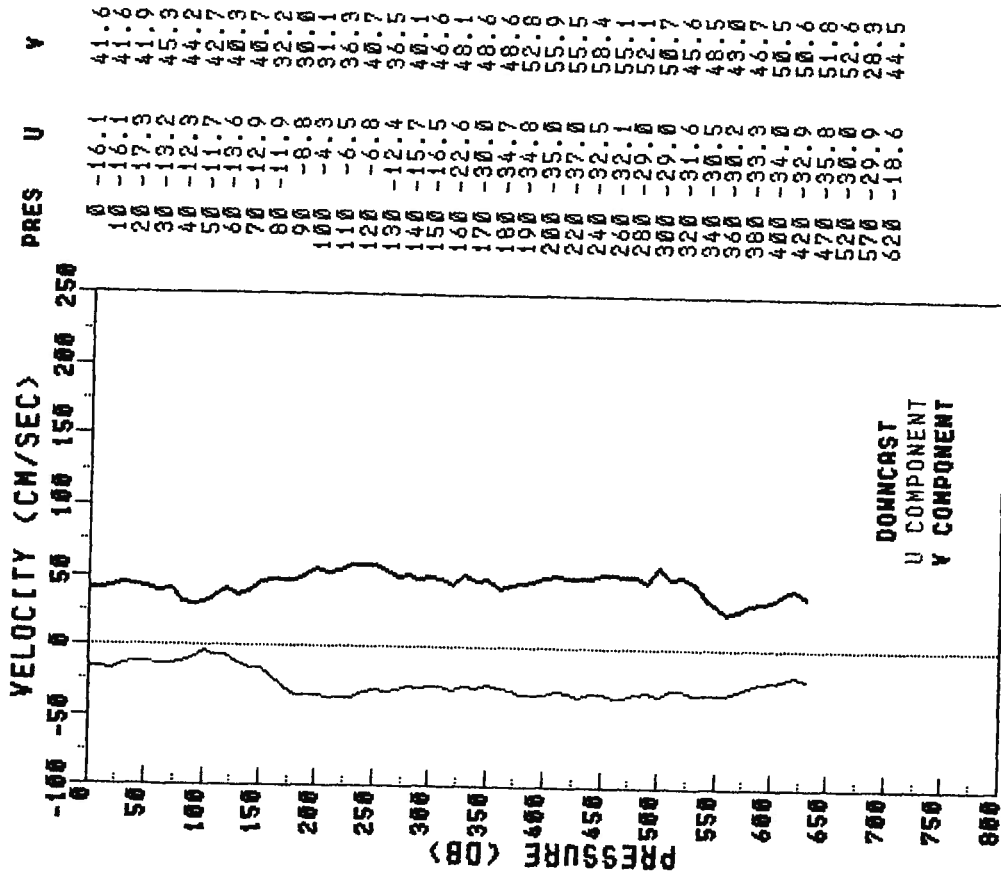
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 R/V RESEARCHER JOY 82 TIME 0436Z
 LATITUDE 27.00 N LONGITUDE 79.50 W



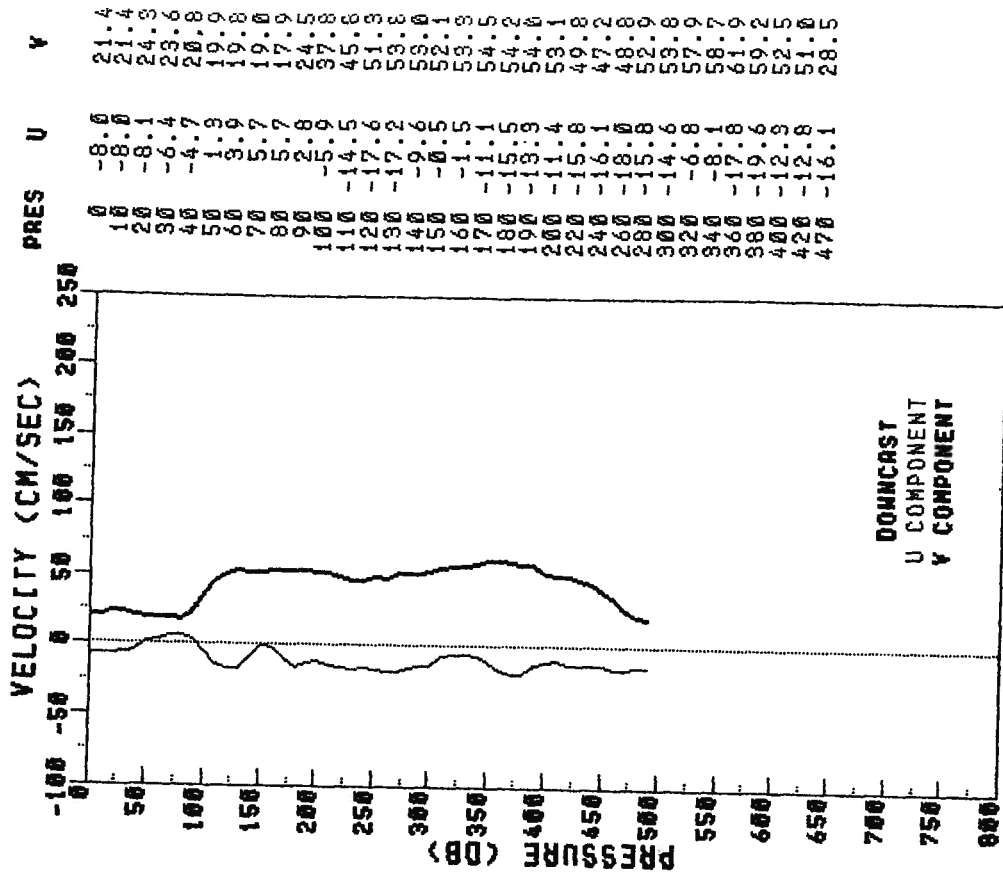
RES-STACSI4-84 PEGASUS 063 STN 6
 R/V RESEARCHER JOY 82 TIME 0820Z
 LATITUDE 26.99 N LONGITUDE 79.37 W



RES-STAC14-84 PEGASUS 064 STN 7
 R/V RESEARCHER JOY 82 TIME 1005Z
 LATITUDE 27.00 N LONGITUDE 79.29 W



RES-STAC14-84 PEGASUS 065 STN 8
 R/V RESEARCHER JOY 82 TIME 1144Z
 LATITUDE 27.00 N LONGITUDE 79.20 W



RES-STAC14-84

PEGASUS 066

STN 7

R/V RESEARCHER JOY 82 TIME 1307Z

LATITUDE 27.00 N LONGITUDE 79.29 W

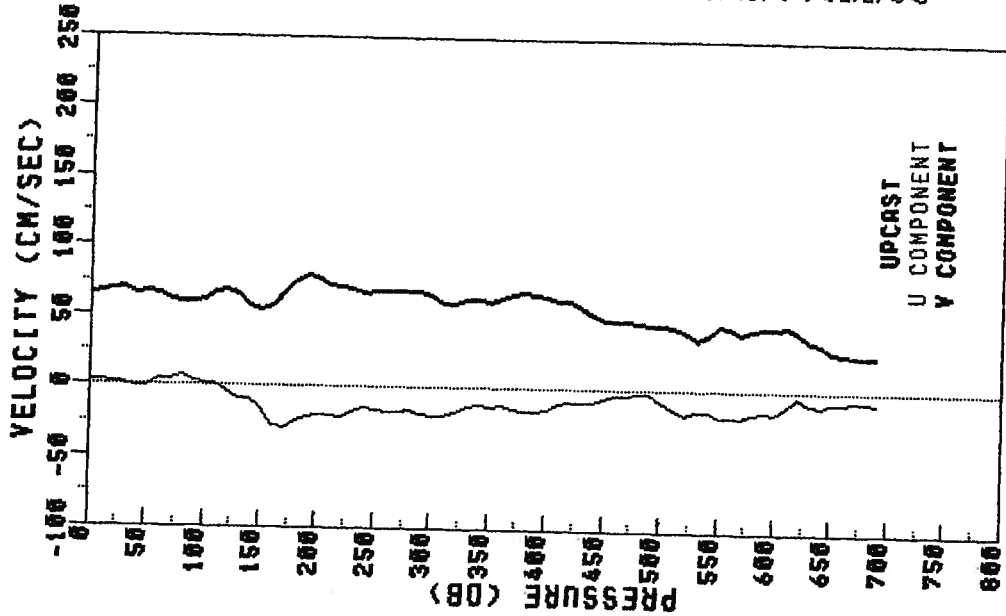
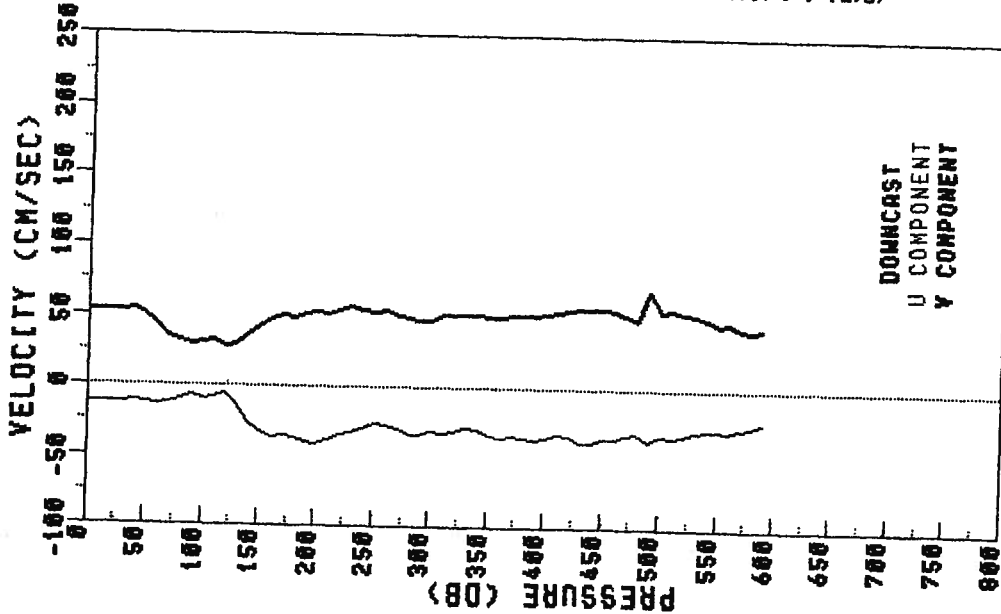
RES-STAC14-84

PEGASUS 067

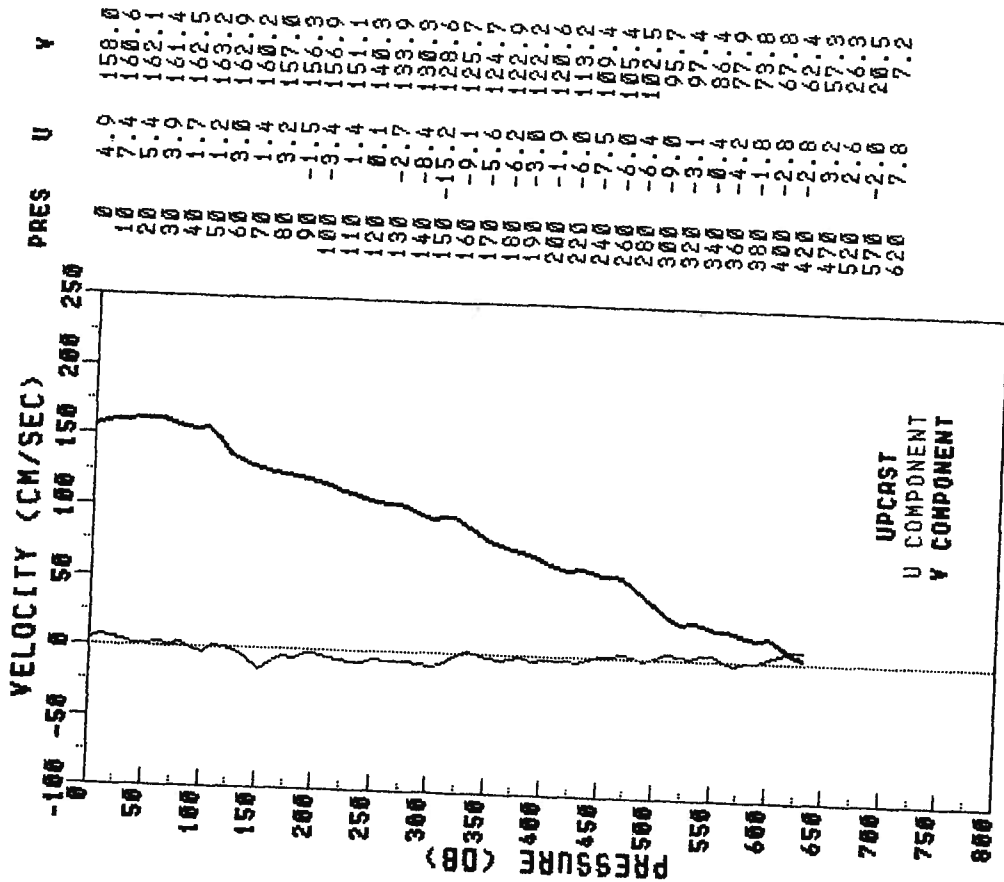
STN 6

R/V RESEARCHER JOY 82 TIME 1458Z

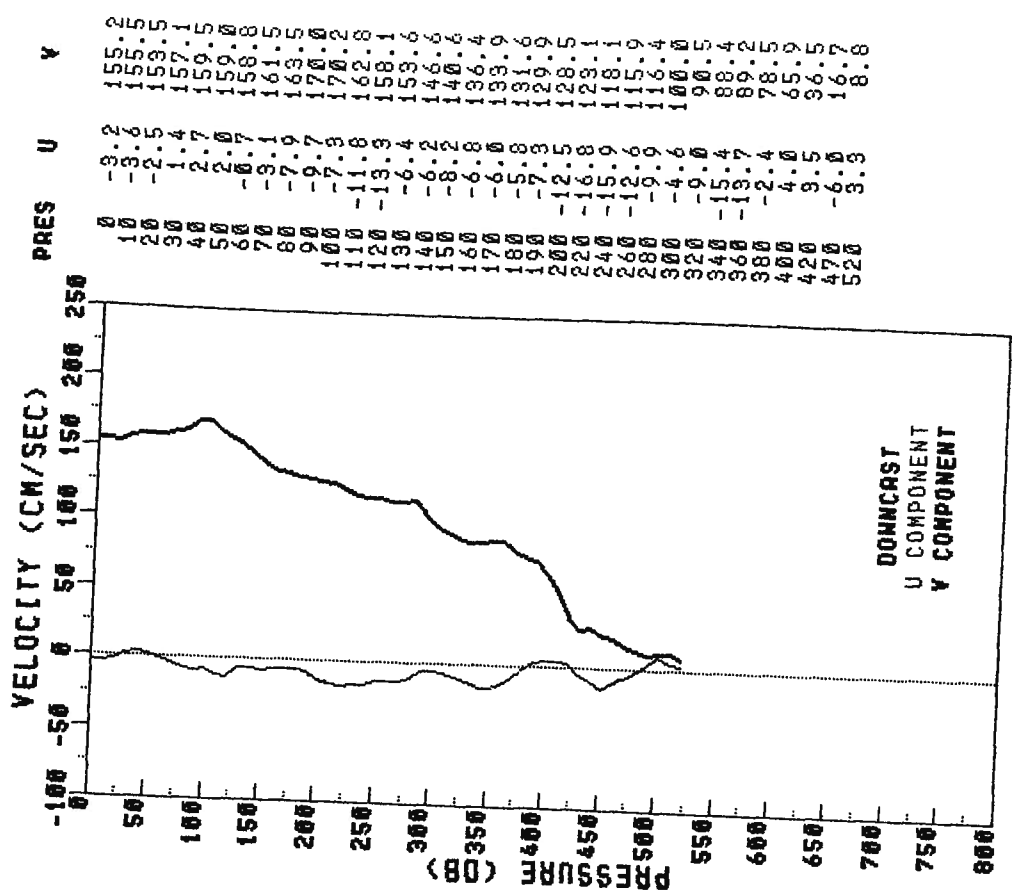
LATITUDE 27.00 N LONGITUDE 79.37 W



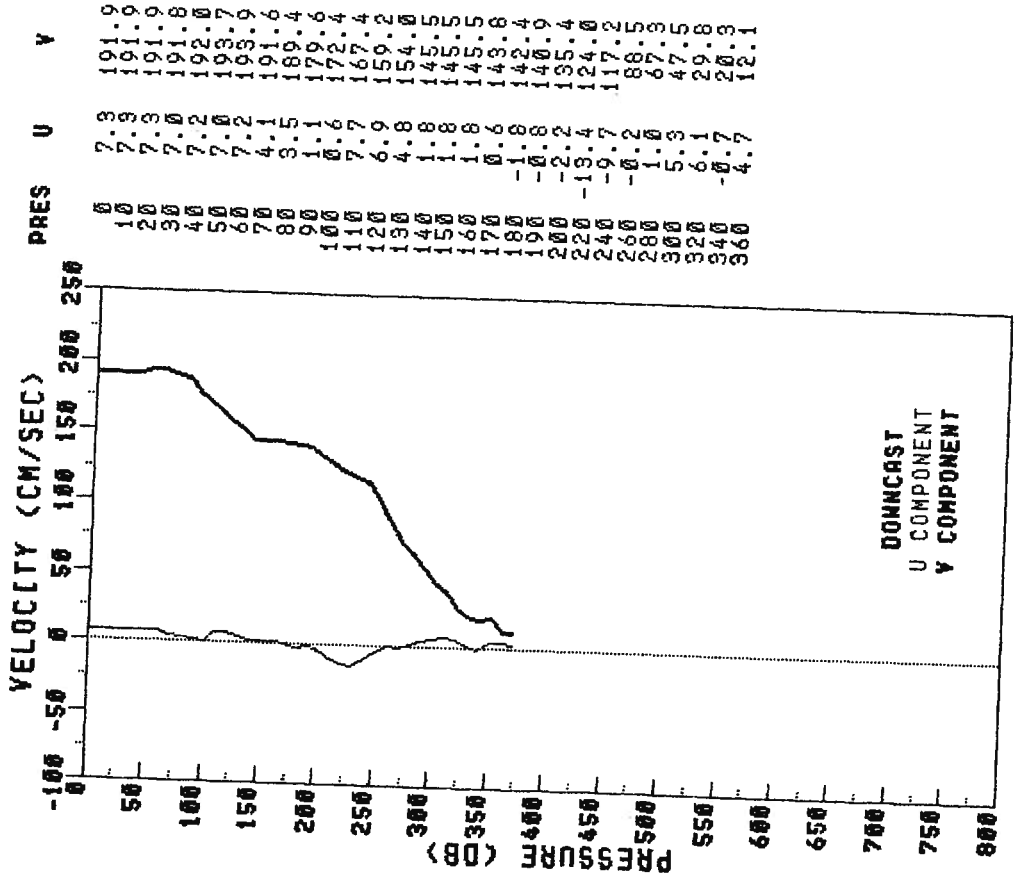
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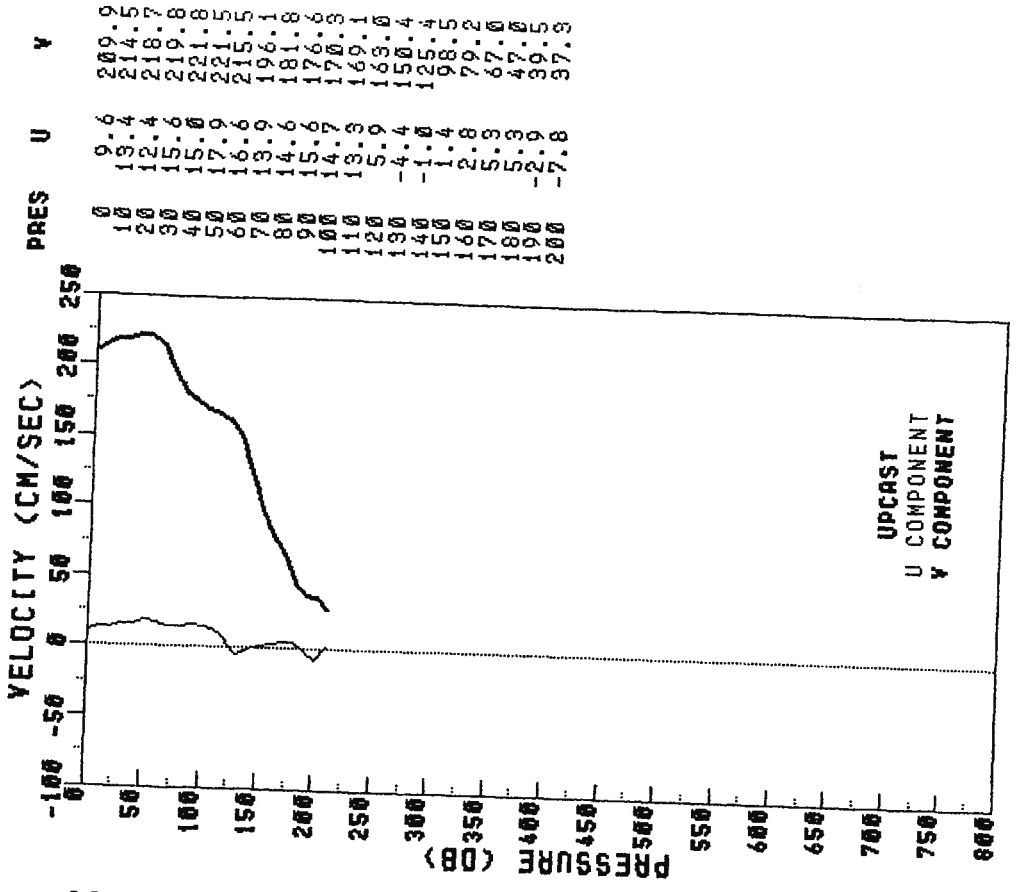
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 R/Y RESEARCHER JOY 82 TIME 2138Z
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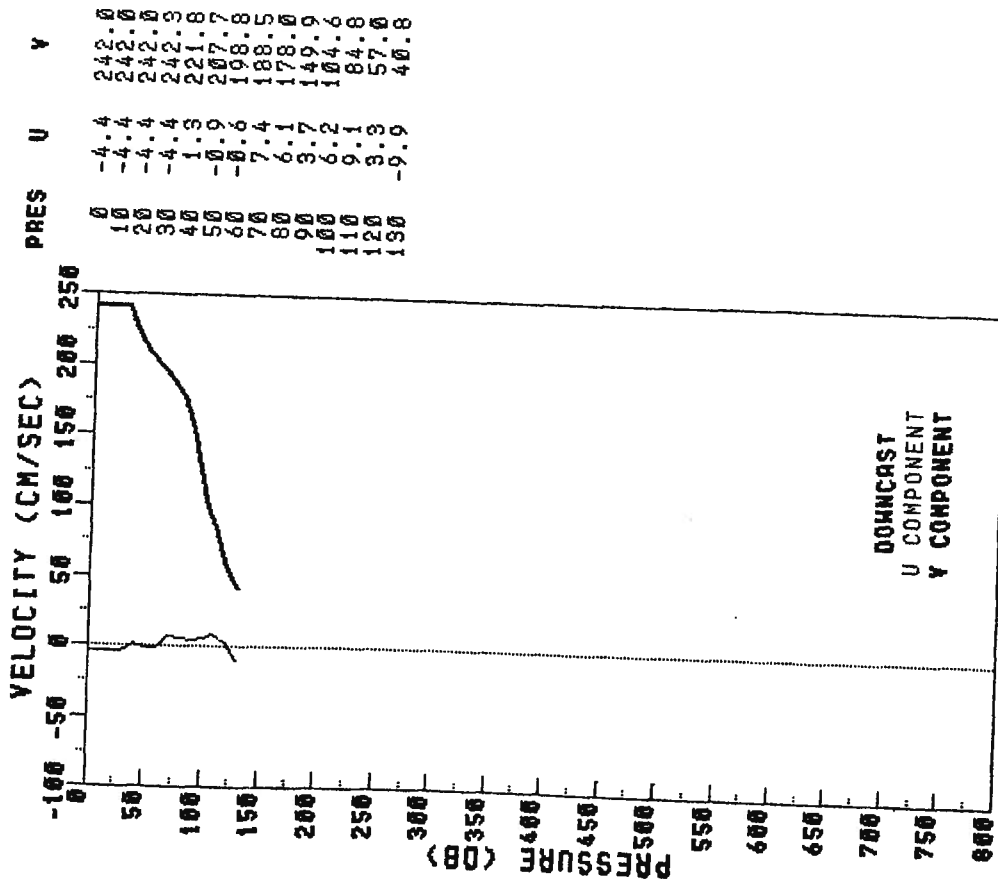
RES-STAC14-84 PEGASUS 071 STN 2
 R/V RESEARCHER JOY 82 TIME 2327Z
 LATITUDE 26.99 N LONGITUDE 79.79 W



RES-STAC14-84 PEGASUS 072 STN 1
 R/V RESEARCHER JOY 83 TIME 0058Z
 LATITUDE 27.00 N LONGITUDE 79.87 W



RES-STACS14-84 PEGASUS 073 STN 0
 R/V RESEARCHER JDAY 83 TIME 0206Z
 LATITUDE 27.00 N LONGITUDE 79.93 W



VK-STAC15-84

PEGASUS 001

STN 8

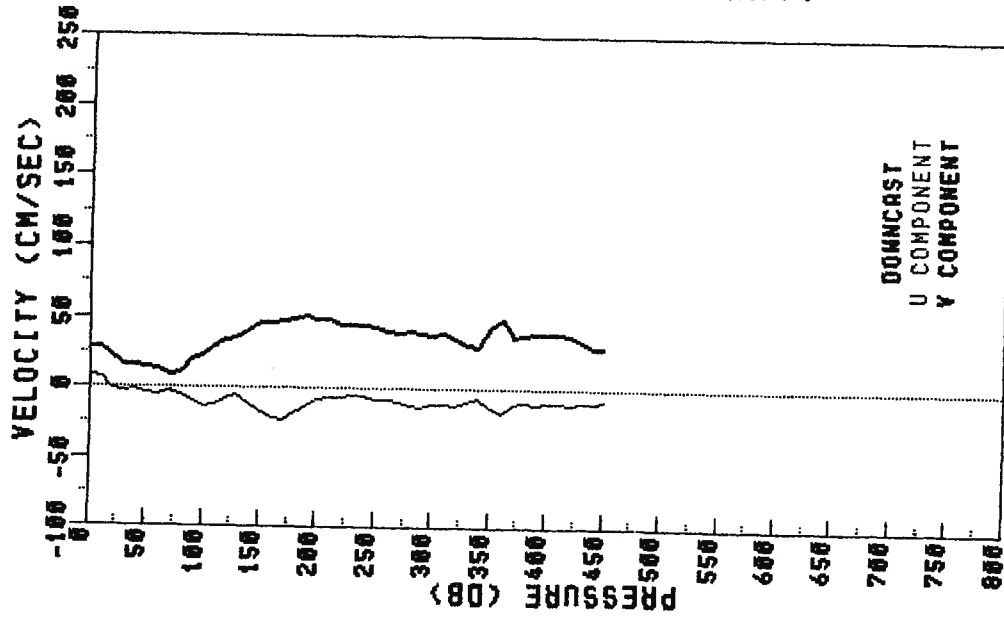
R/V VIRGINIA KEY

JDAY 173

TIME 0916Z

LATITUDE 27.01 N

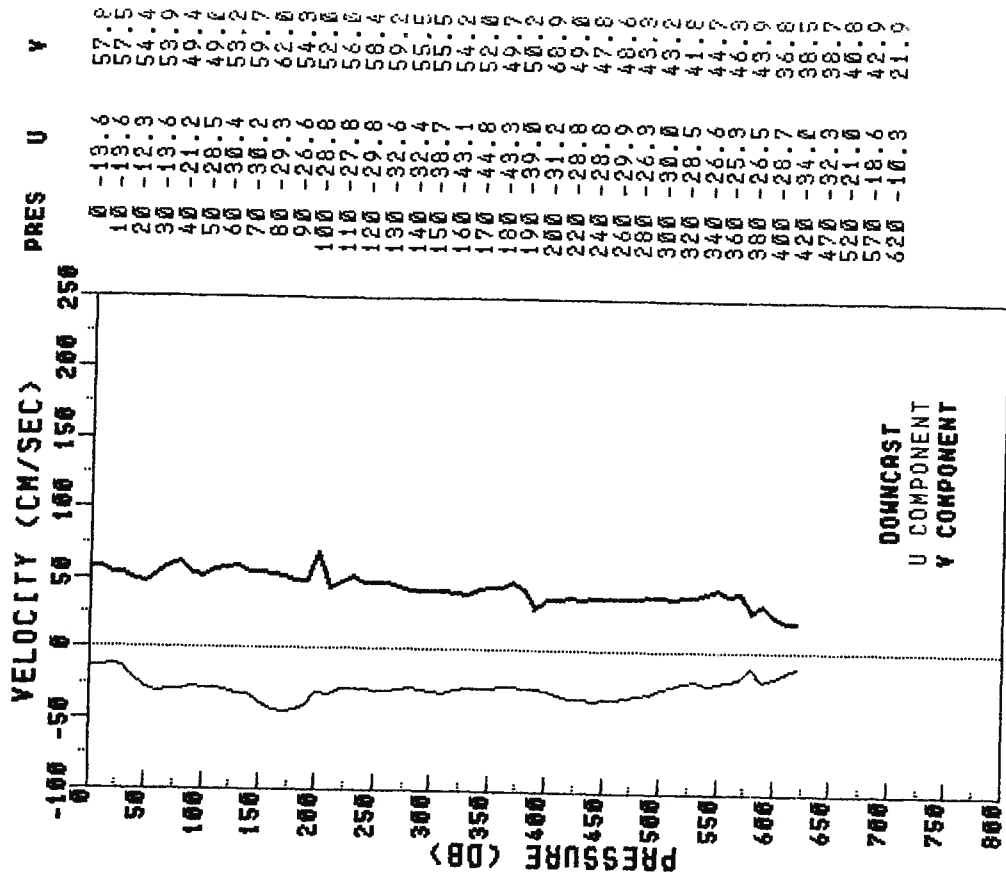
LONGITUDE 79.20 W



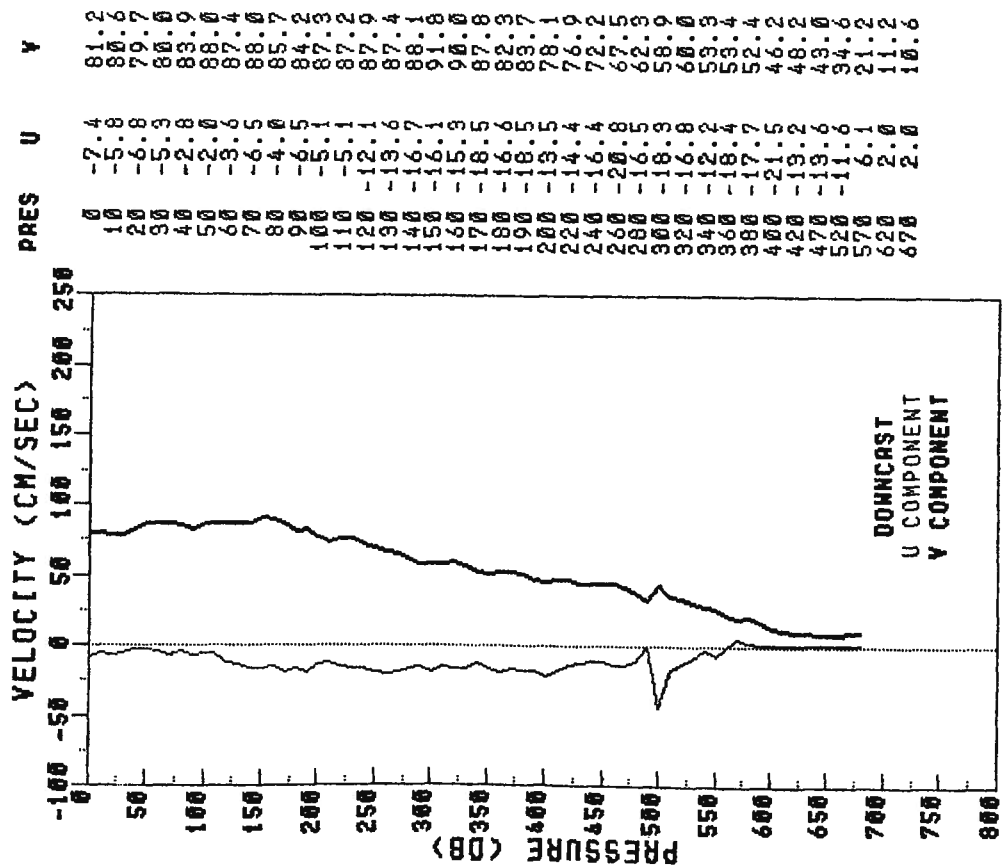
VK-STAC15-84 PEGASUS 002 STN 7

R/V VIRGINIA KEY JDAY 173 TIME 1045Z

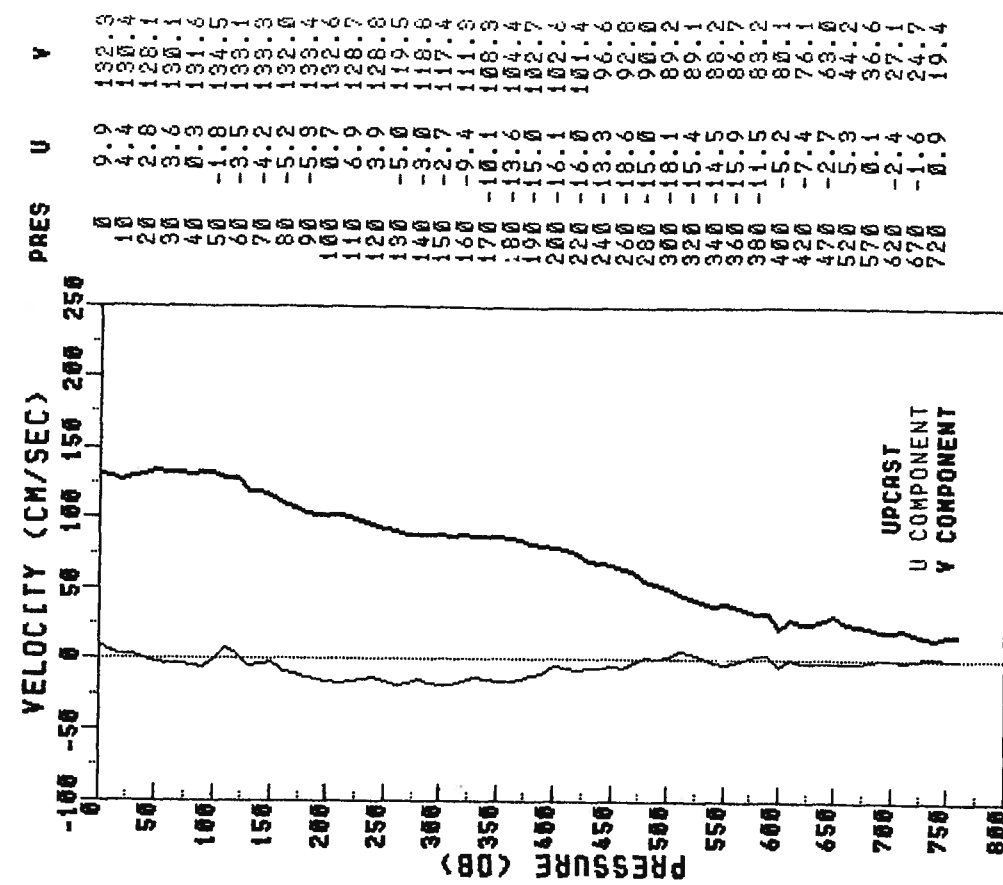
LATITUDE 27.00 N LONGITUDE 79.29 W



YK-STAC15-84 PEGASUS 003 STN 6
 R/V VIRGINIA KEY JDAY 173 TIME 1224Z
 LATITUDE 27.00 N LONGITUDE 79.38 W



YK-STAC15-84 PEGASUS 004 STN 5
 R/V VIRGINIA KEY JDAY 173 TIME 1422Z
 LATITUDE 26.99 N LONGITUDE 79.50 W



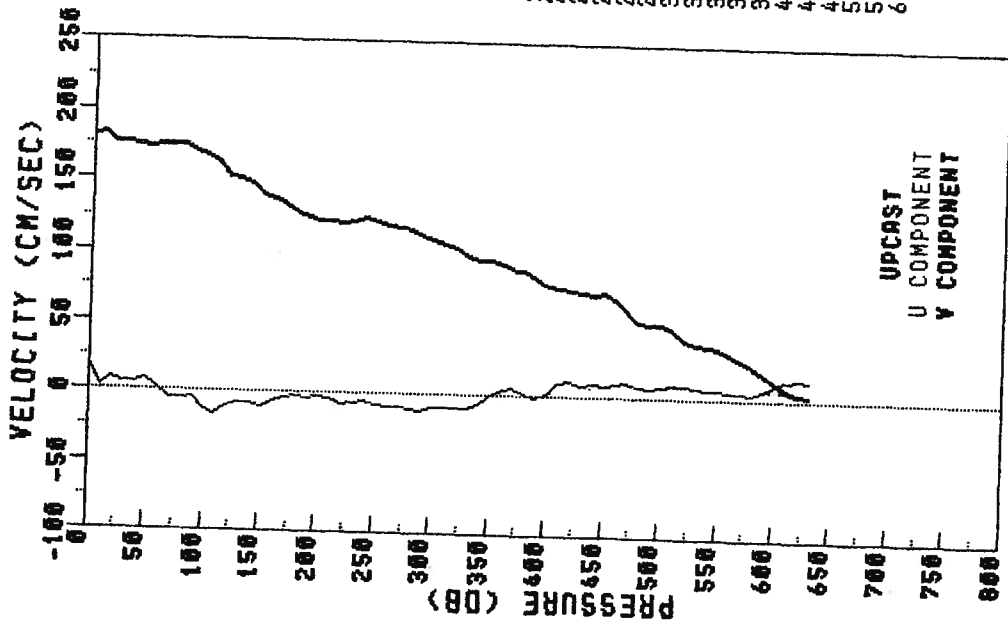
YK-STAC15-84

PEGASUS 005

STN 4

R/Y VIRGINIA KEY JOY 173 TIME 1631Z

LATITUDE 26.98 N LONGITUDE 79.62 W



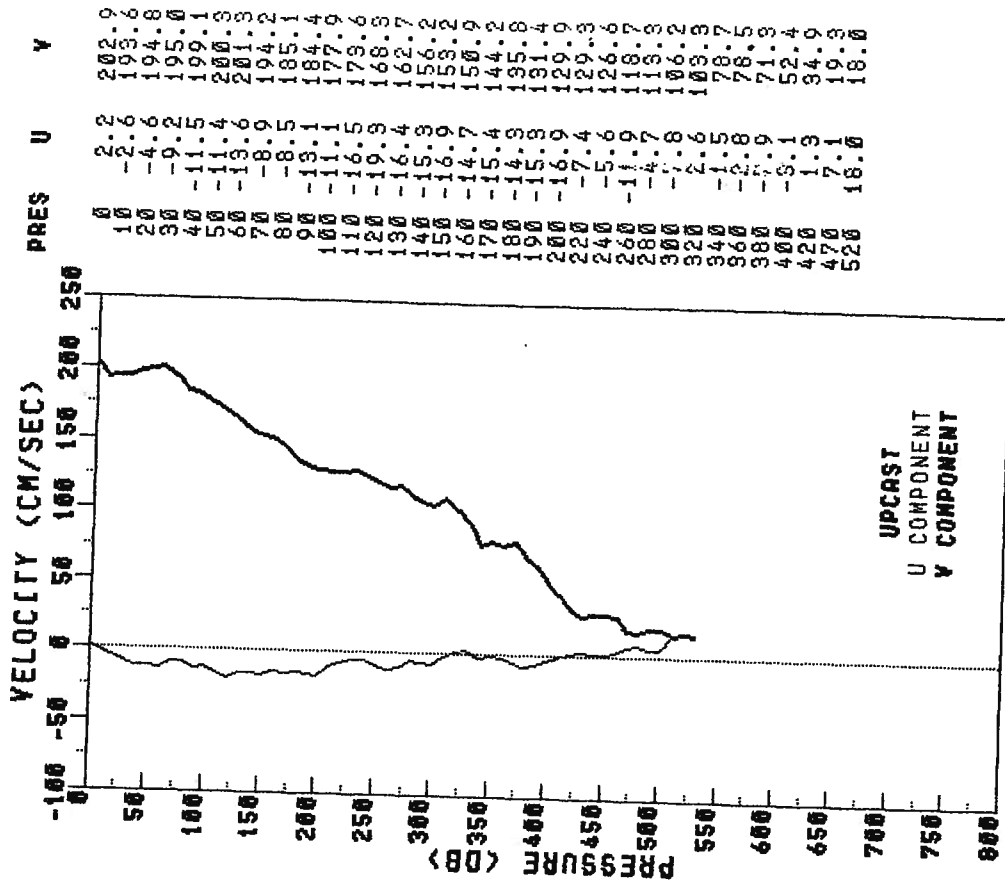
YK-STAC15-84

PEGASUS 006

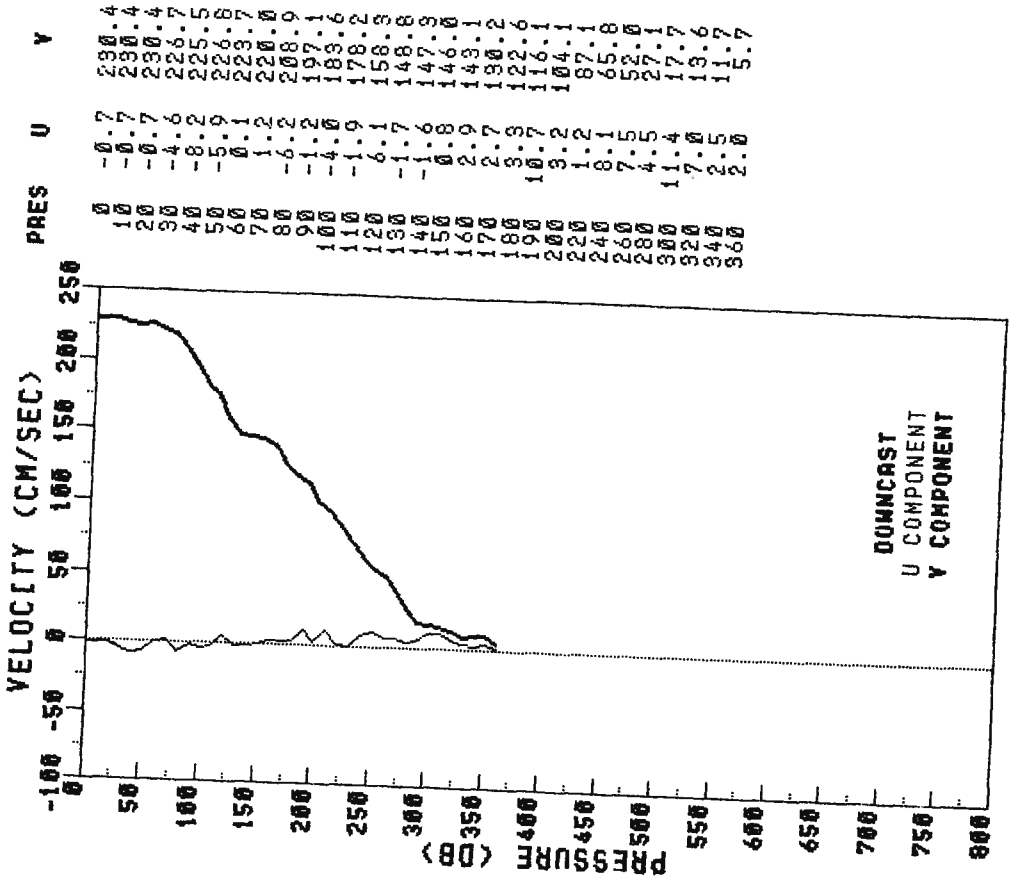
STN 3

R/Y VIRGINIA KEY JOY 173 TIME 1815Z

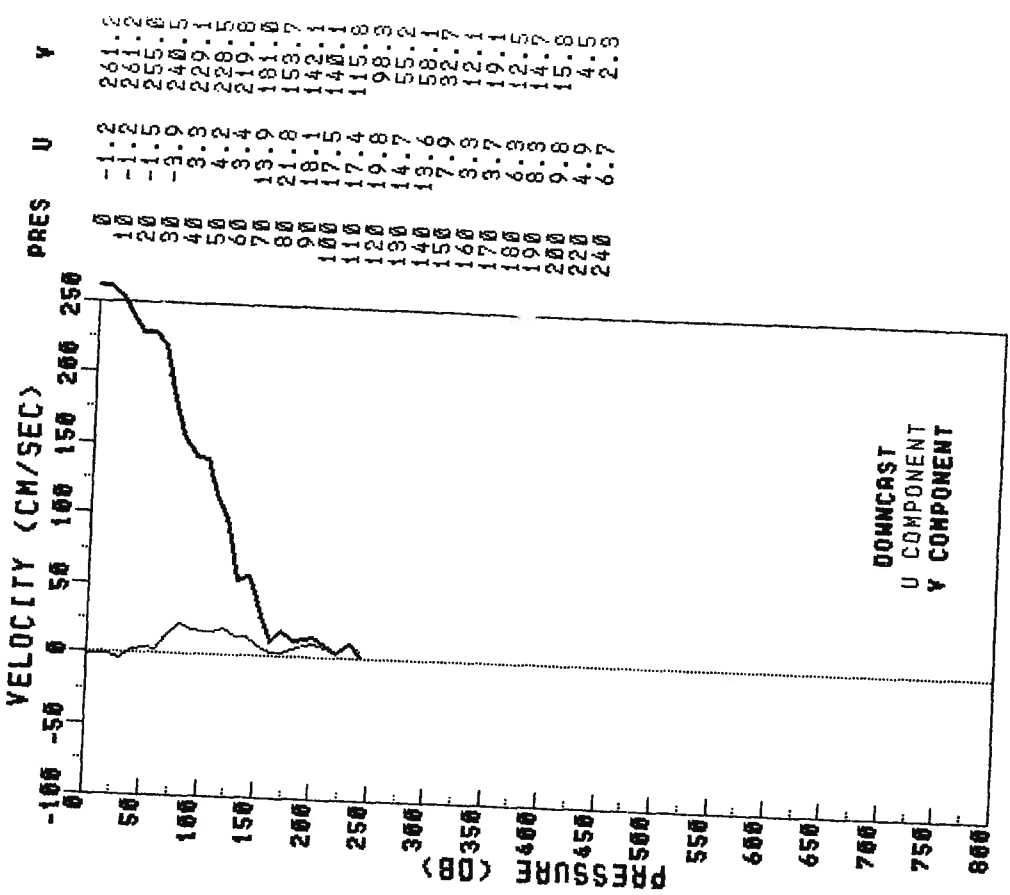
LATITUDE 26.99 N LONGITUDE 79.68 W



YK-STAC515-84 PEGASUS 007 STN 2
 R/V VIRGINIA KEY JOY 173 TIME 2029Z
 LATITUDE 26.99 N LONGITUDE 79.79 W



YK-STAC515-84 PEGASUS 008 STN 1
 R/V VIRGINIA KEY JOY 173 TIME 2307Z
 LATITUDE 27.00 N LONGITUDE 79.87 W



APPENDIX B: CTD DATA

Casts are presented by cruise and increasing cast number. Julian day and time, cruise number and vessel, and position are given at the top of each plot. Temperature (T), salinity (S) and sigma-t (ST) profiles are shown for each cast.

CTD 1

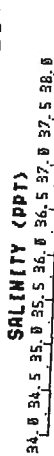
DATE 11 30 83

TIME 1618Z

RES-STACS12-83

R/V RESEARCHER

LATITUDE 26.983 N LONGITUDE 79.875 W



CTD 2

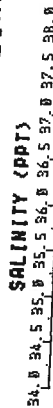
DATE 11 30 83

TIME 1951Z

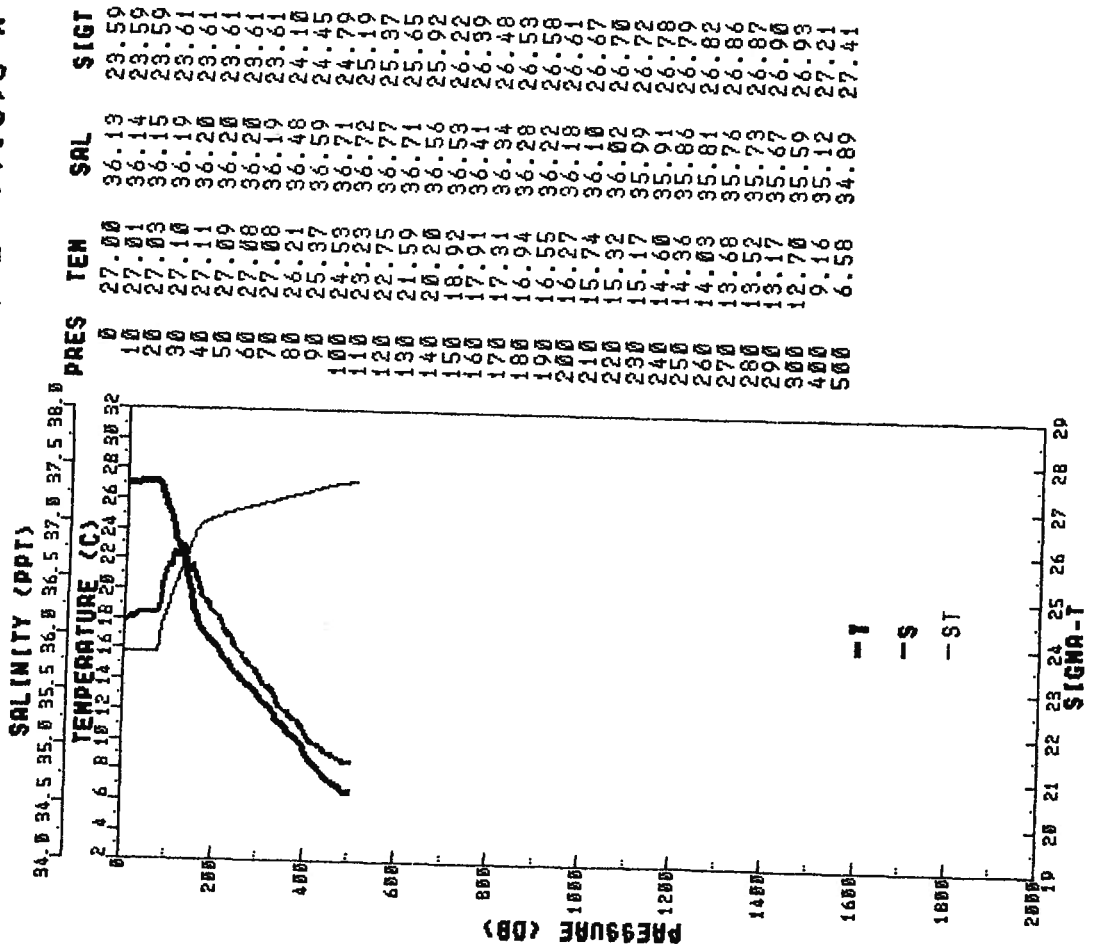
RES-STACS12-83

R/V RESEARCHER

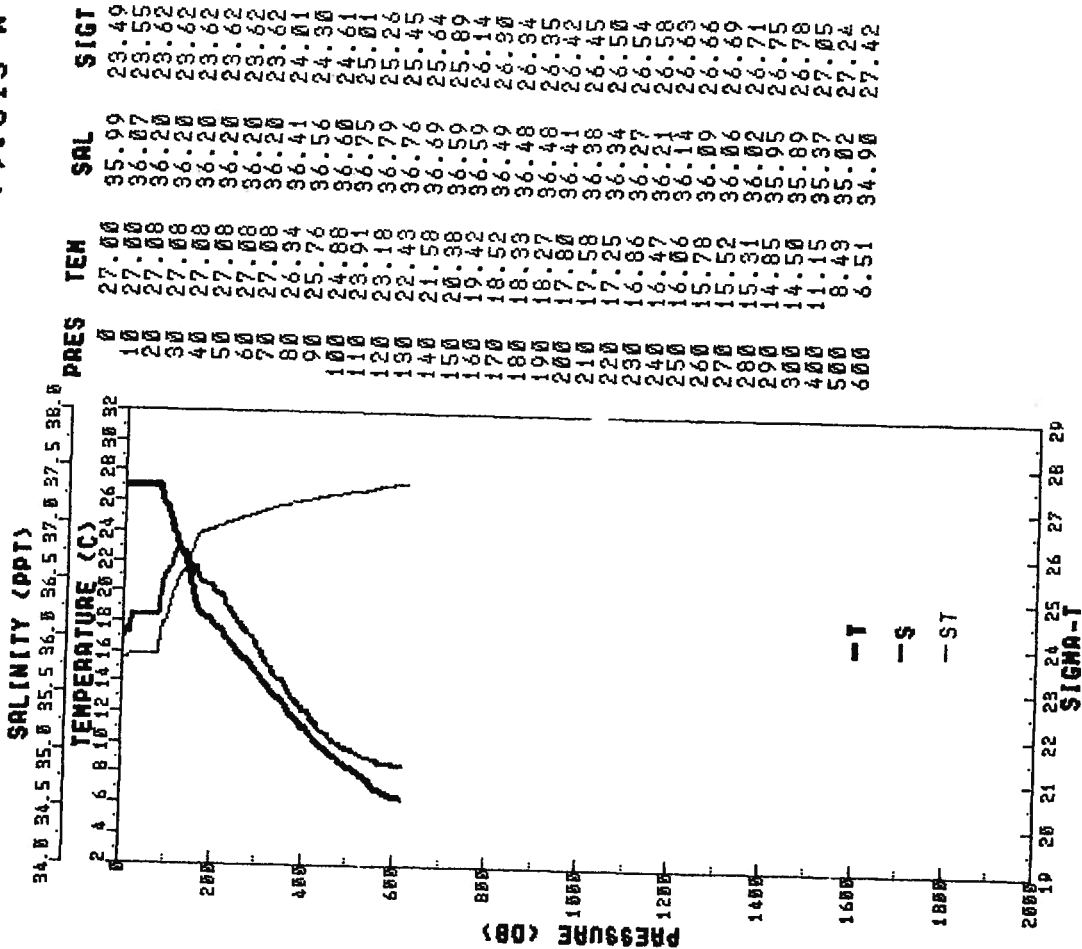
LATITUDE 27.032 N LONGITUDE 79.803 W



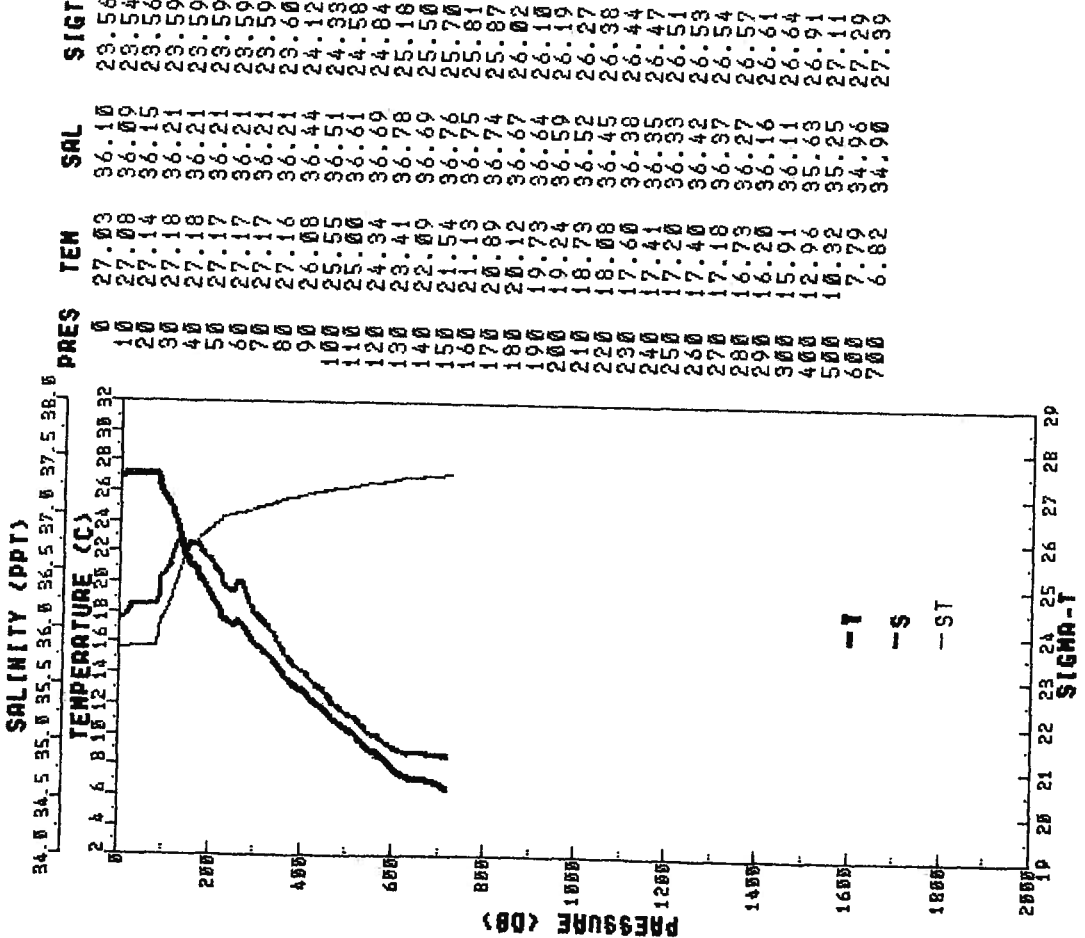
CTD 3 DATE 12 01 83 TIME 0003Z
 RES-STACS12-83 R/V RESEARCHER
 LATITUDE 26.998 N LONGITUDE 79.693 W



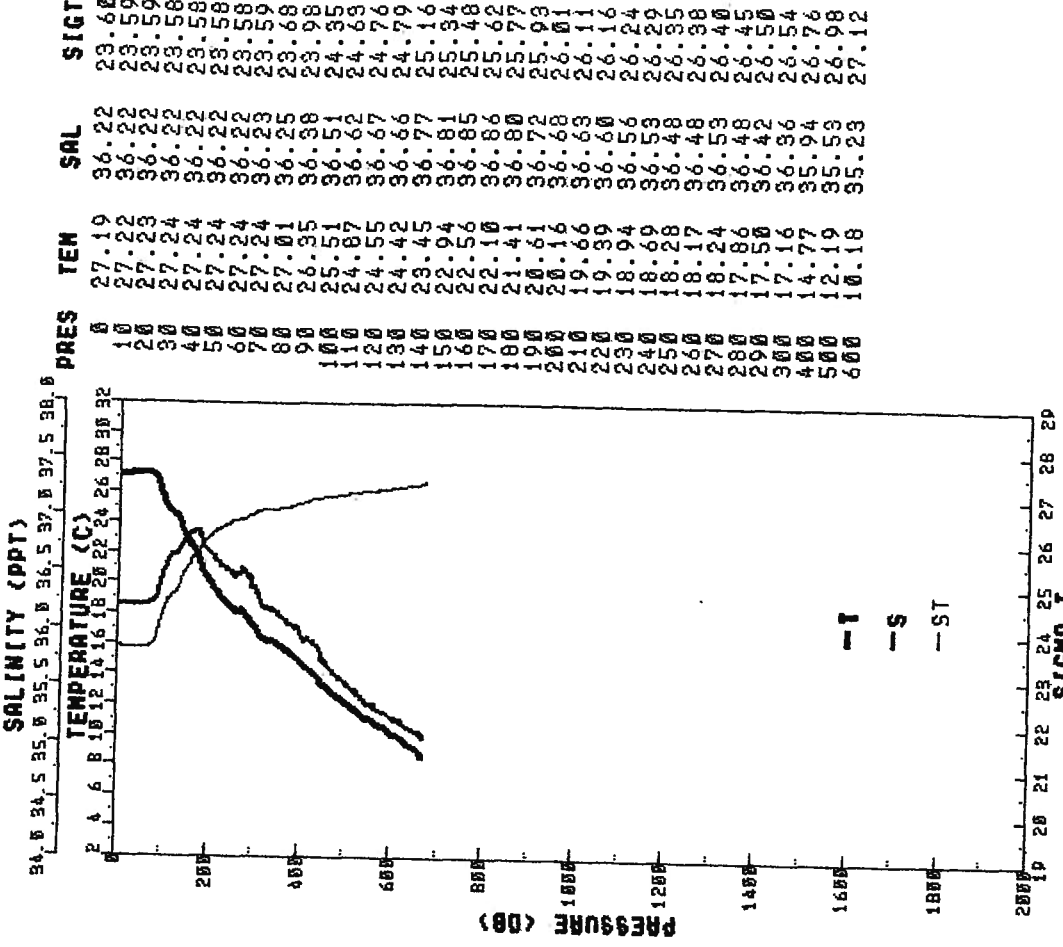
CTD 4 DATE 12 01 83 TIME 0135Z
 RES-STACS12-83 R/V RESEARCHER
 LATITUDE 26.965 N LONGITUDE 79.613 W



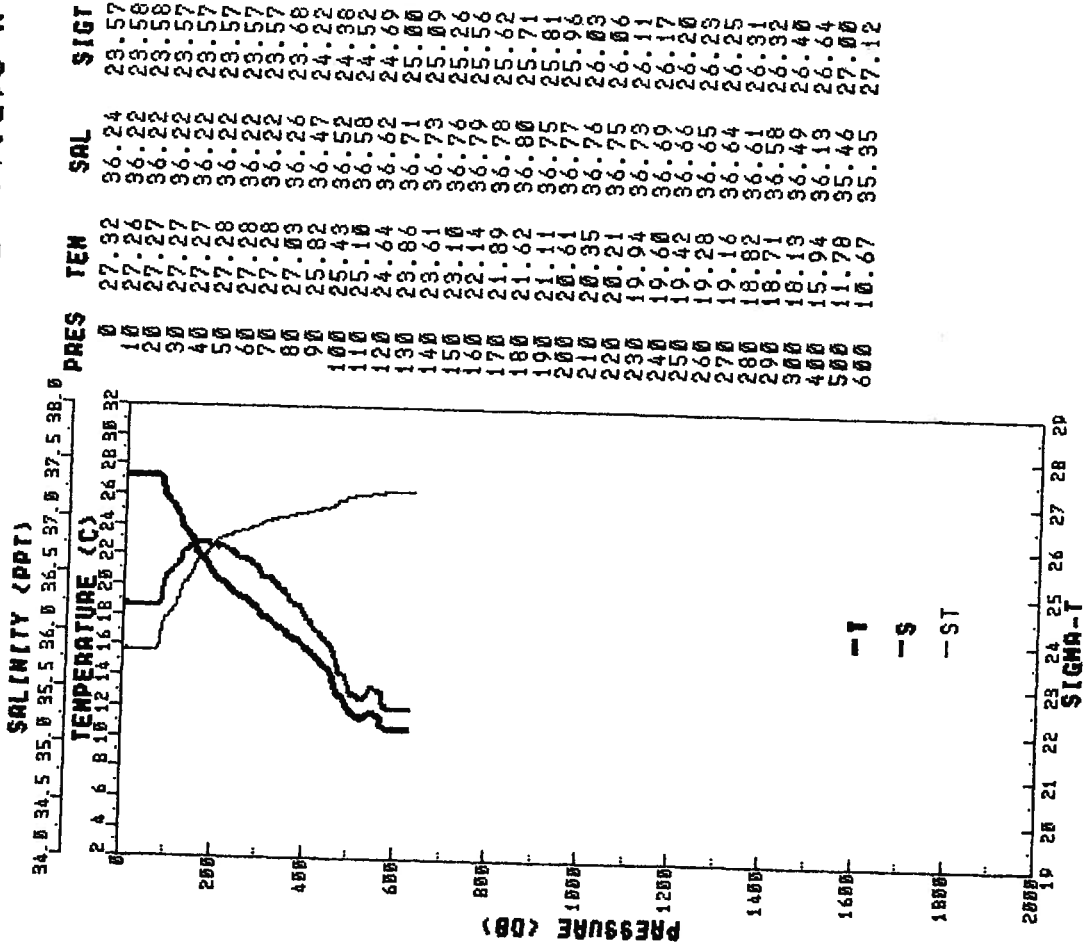
CTD 5 DATE 12 01 83 TIME 0422Z
 RES-STACS12-83 R/V RESEARCHER
 LATITUDE 26.980 N LONGITUDE 79.517 W



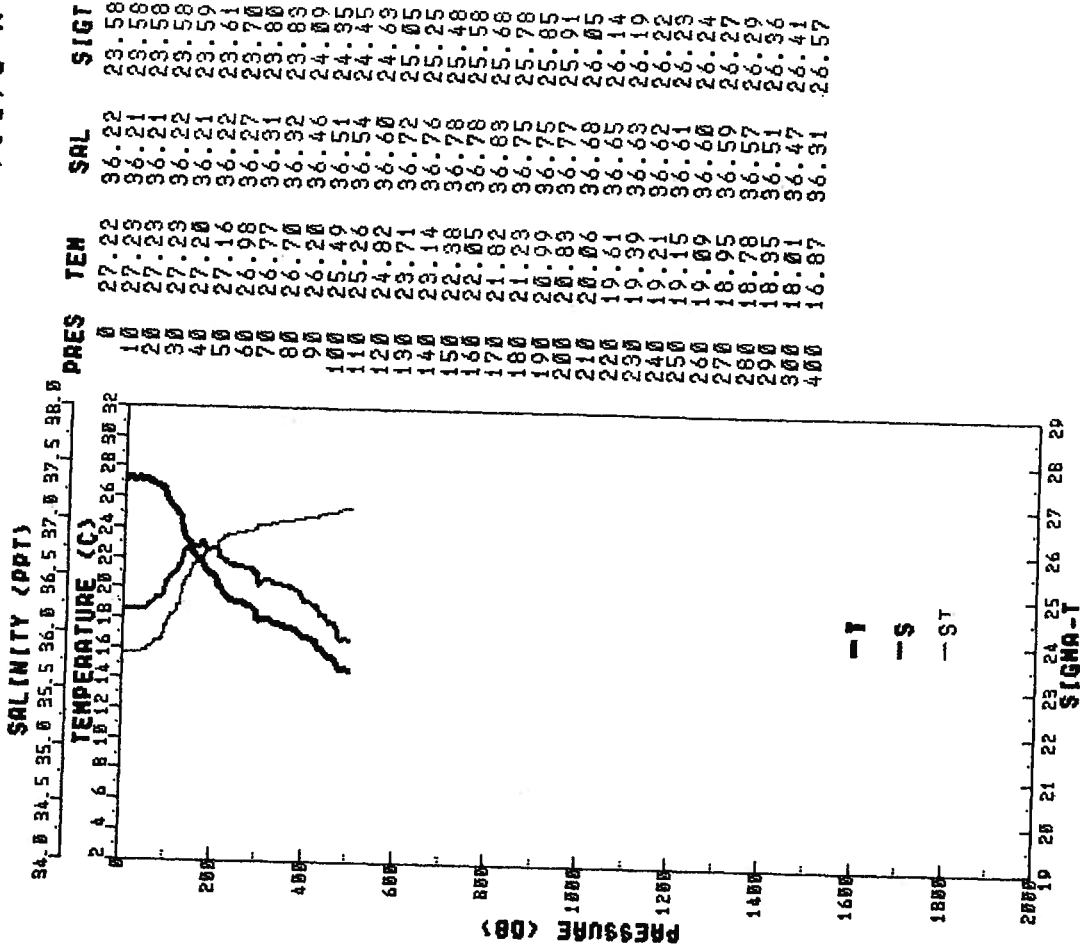
CTD 6 DATE 12 01 83 TIME 0836Z
 RES-STACS12-83 R/V RESEARCHER
 LATITUDE 26.995 N LONGITUDE 79.373 W



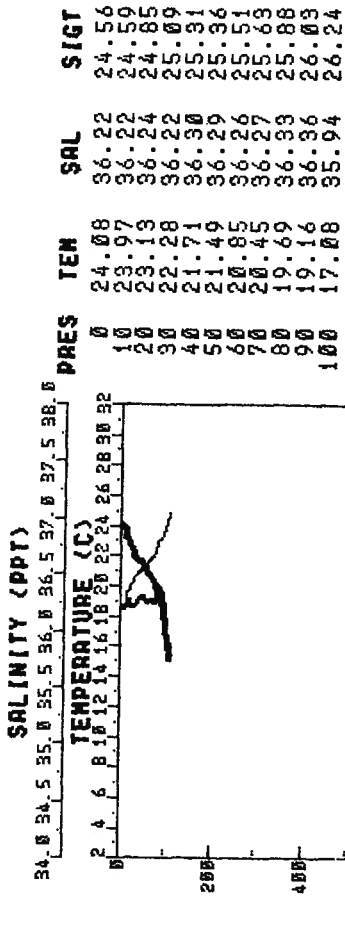
CTD 7 DATE 12 01 83 TIME 1206Z
 RES-STACS12-83 R/V RESEARCHER
 LATITUDE 26.988 N LONGITUDE 79.293 W



CTD 8 DATE 12 01 83 TIME 1432Z
 RES-STACS12-83 R/V RESEARCHER
 LATITUDE 26.940 N LONGITUDE 79.198 W

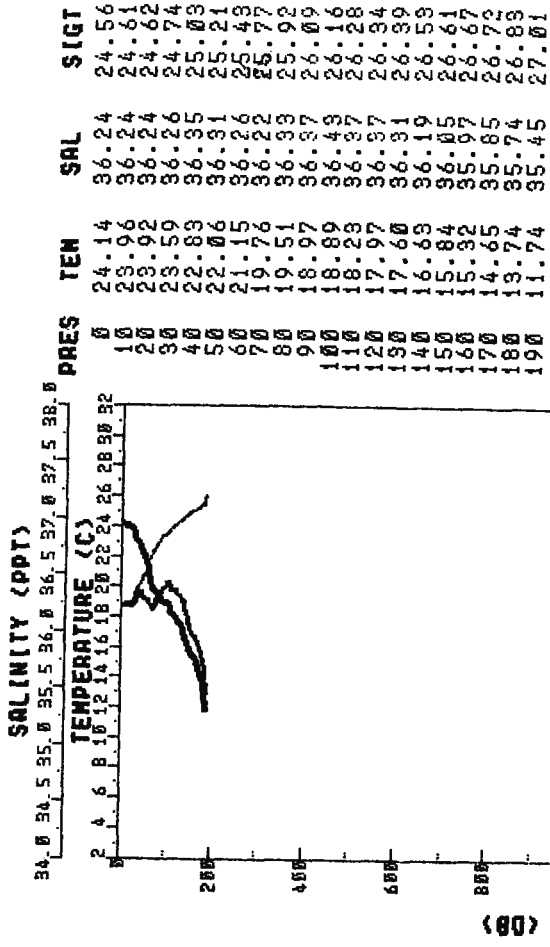


CTD 1 DATE 03 16 84 TIME 1725Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.029 N LONGITUDE 79.946 W

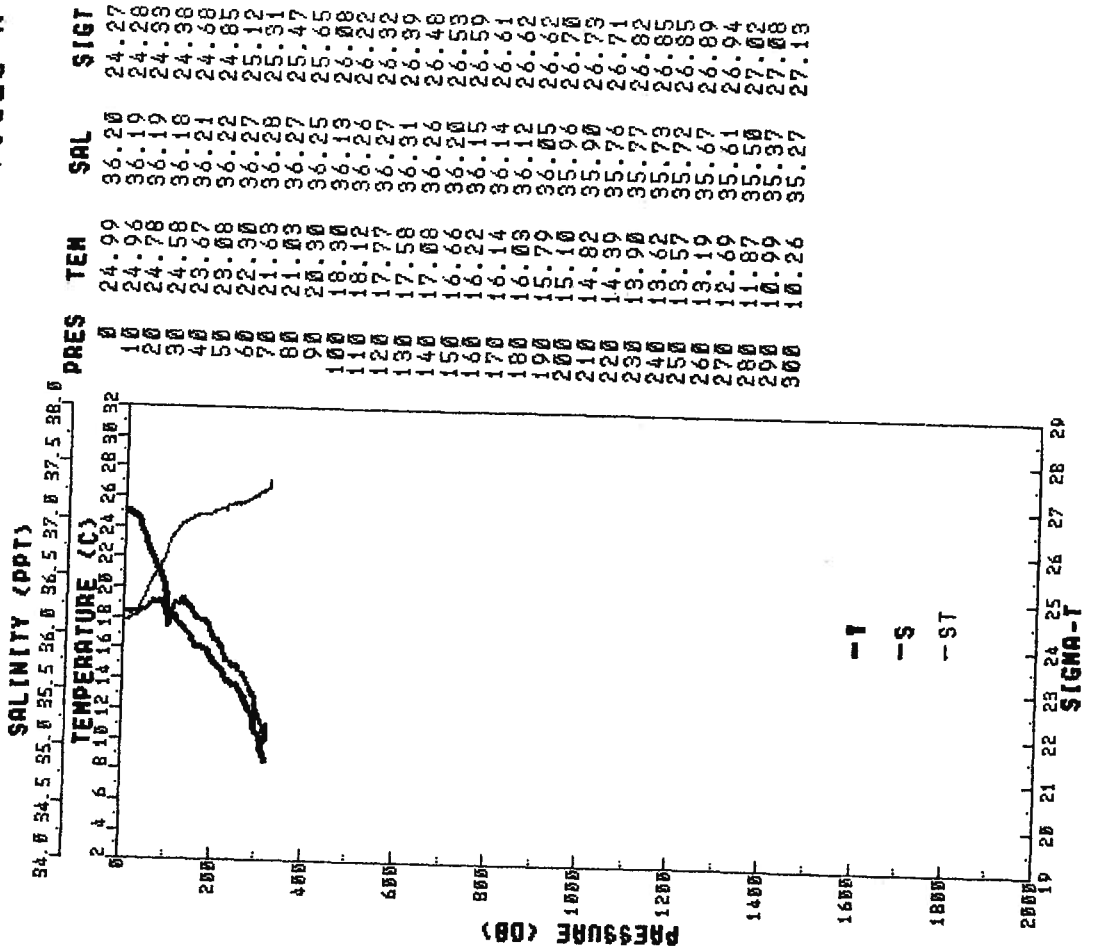


1312

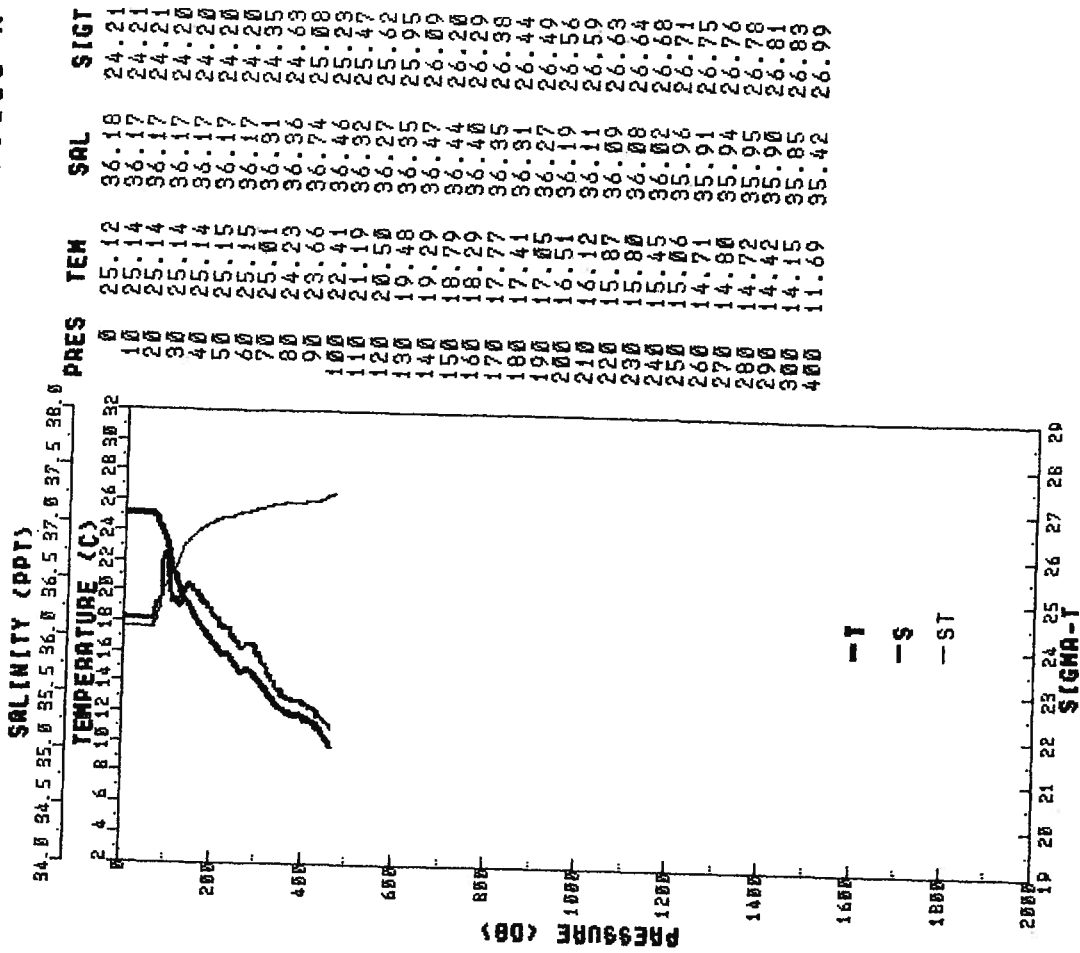
CTD 2 DATE 03 16 84 TIME 1955Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.052 N LONGITUDE 79.892 W



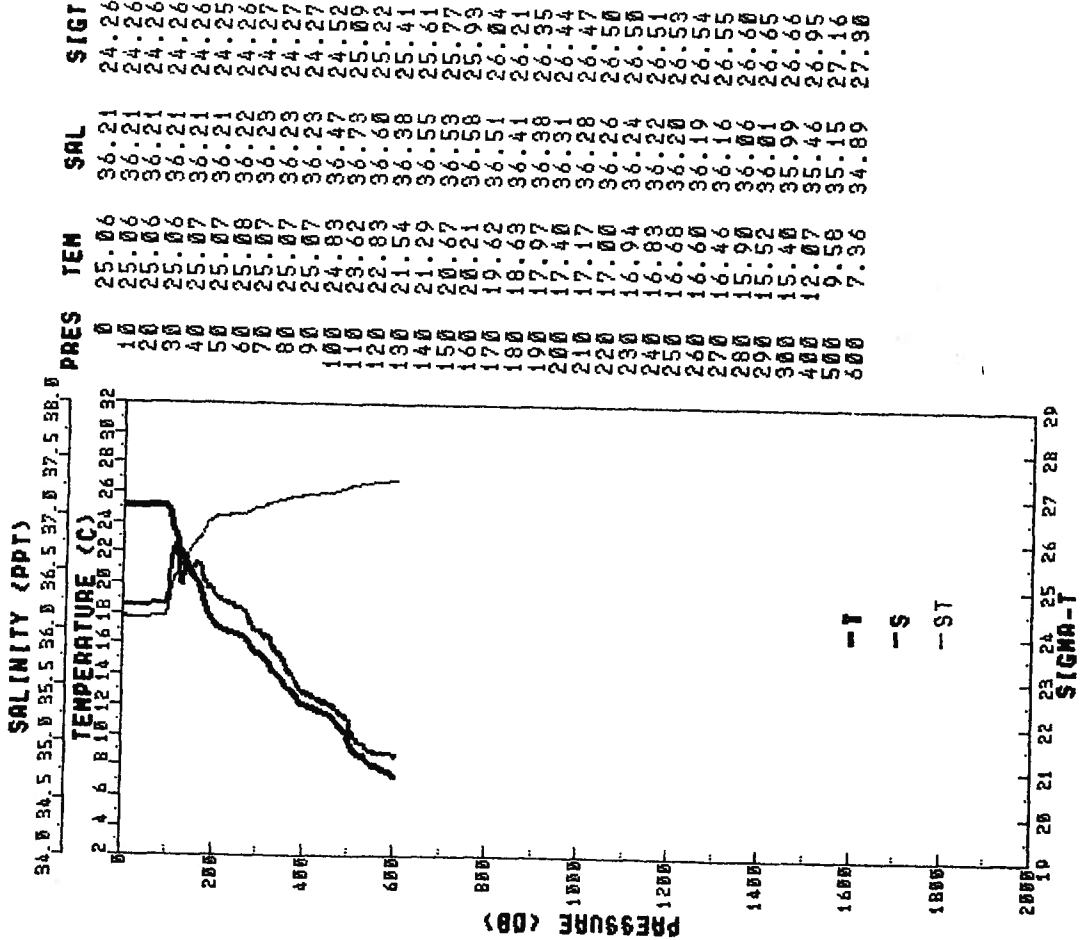
CTD 3 DATE 03 16 84 TIME 2345Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.037 N LONGITUDE 79.820 W



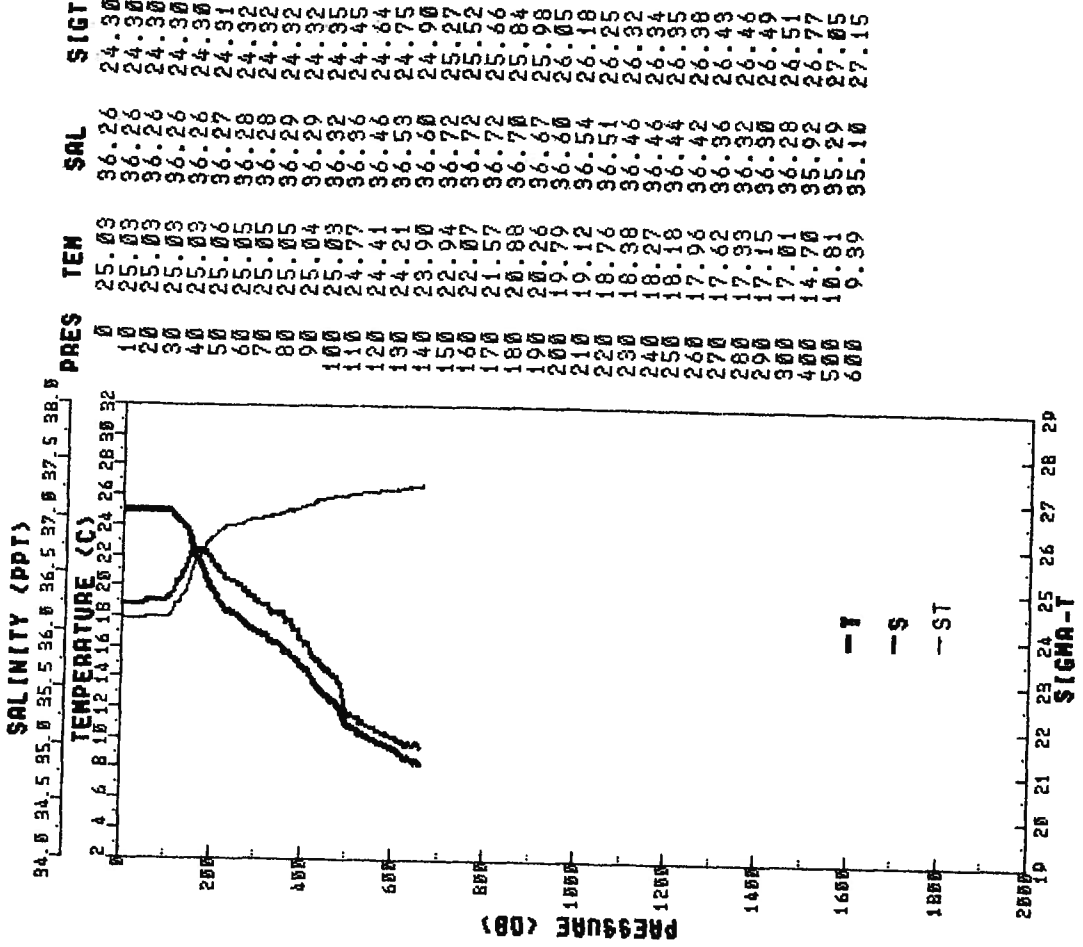
CTD 4 DATE 03 17 84 TIME 0300Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.055 N LONGITUDE 79.685 W



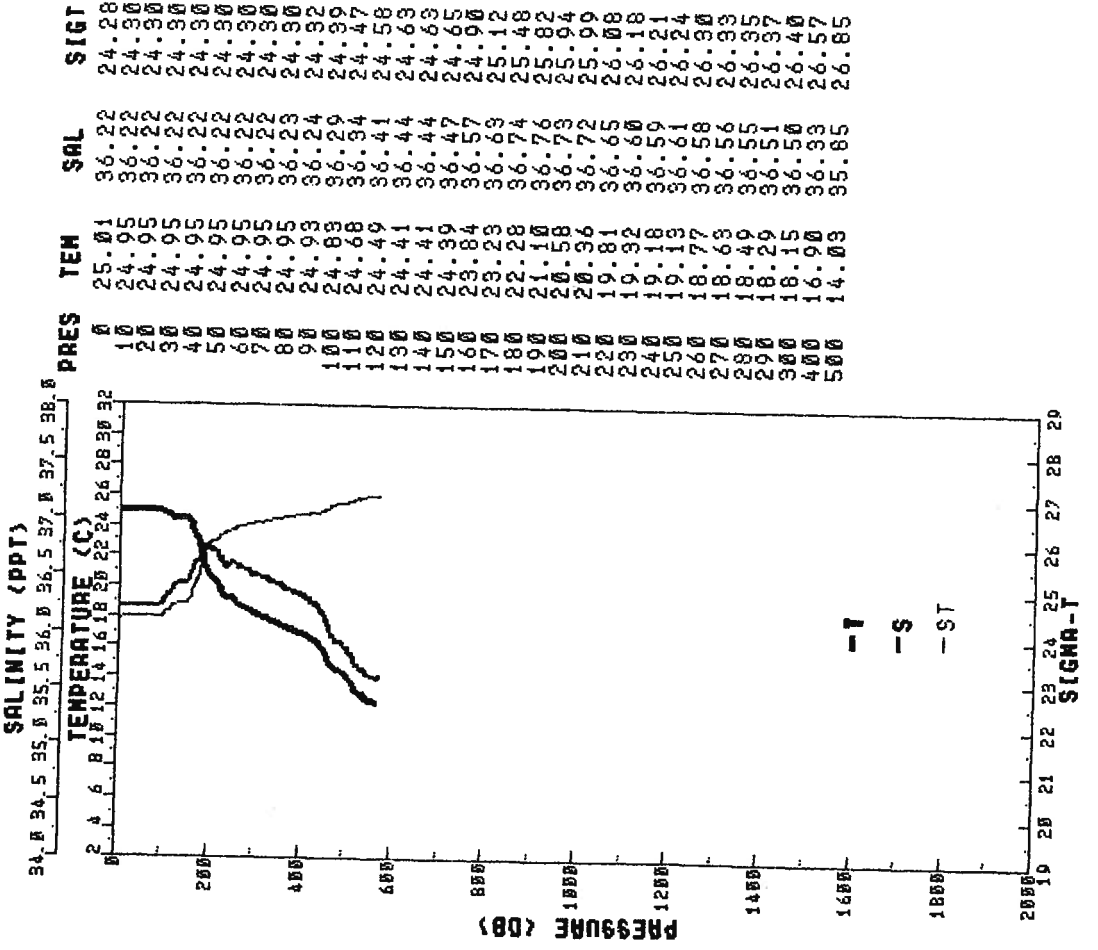
CTD 5 DATE 03 17 84 TIME 0631Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.077 N LONGITUDE 79.624 W



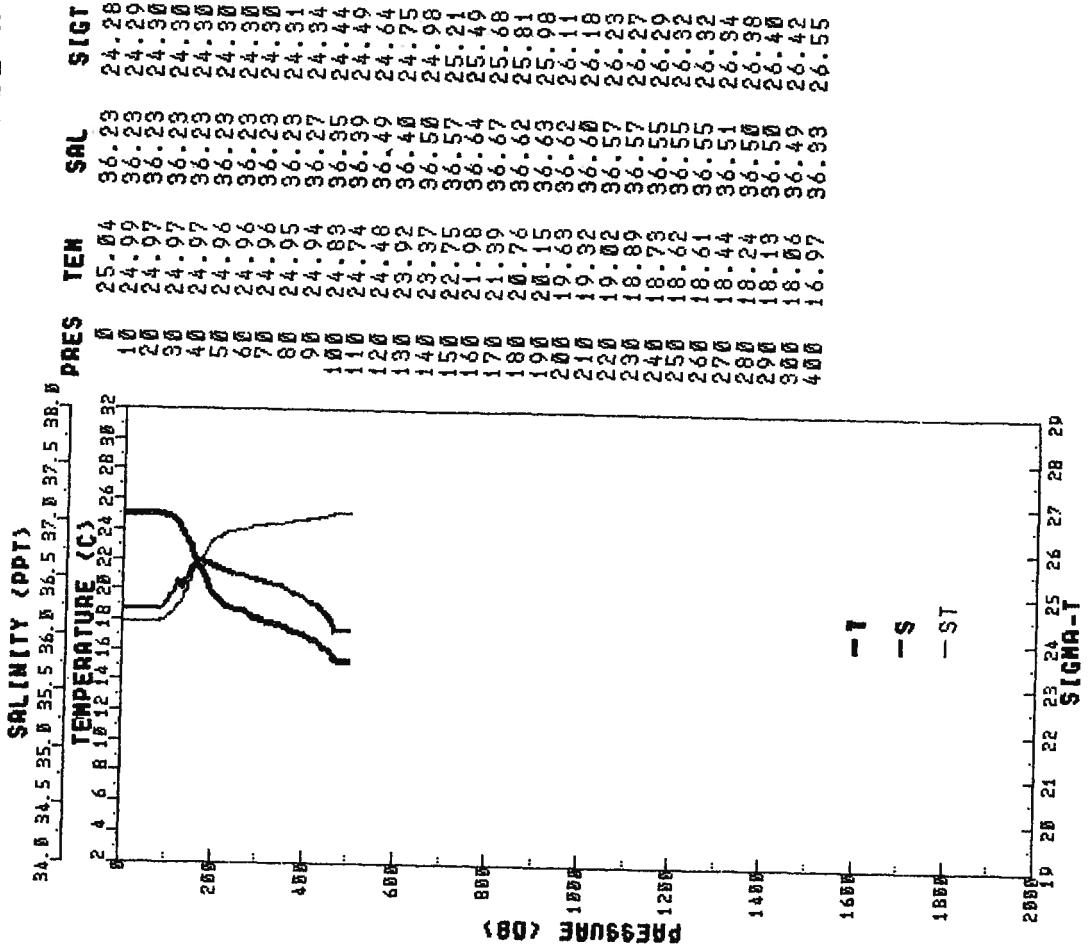
CTD 6 DATE 03 17 84 TIME 1034Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.073 N LONGITUDE 79.490 W



CTD 8 DATE 03 17 84 TIME 1710Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.027 N LONGITUDE 79.289 W



CTD 9 DATE 03 17 84 TIME 2005Z
 RES-STACS14-84 R/V RESEARCHER
 LATITUDE 27.016 N LONGITUDE 79.212 W



APPENDIX C: XBT DATA

Casts are presented by cruise and increasing cast number. Isotherm depths in meters are listed at temperatures ranging from 27 to 6 degrees Centigrade.

ISOTHERM DEPTHS (M)

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	1	2	3	4	5	6	7	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	1	1	1	1	1	1	1	
TIME (GMT)	1524	1624	1636	1838	2055	2019	2036	
LAT (N)	27.80	27.00	27.00	27.00	27.20	27.00	26.98	
LOX (W)	79.28	79.25	79.28	79.35	79.40	79.43	79.50	
SURF T (C)	27.4	27.1	27.3	27.2	27.2	27.1	27.4	
29								
28								
27	50	61	84	79	81	81	82	
26	94	94	95	96	95	93	93	
25	111	105	107	114	108	106	109	
24	121	114	120	128	119	117	123	
23	132	134	134	142	134	128	136	
22	149	155	149	153	148	142	148	
21	188	184	179	170	165	158	161	
20	205	202	202	194	187	177	178	
19	245	236	246	231	206	197	196	
18	289	286	280	266	243	225	216	
17	355	355	345	303	271	257	246	
16	399	403	379	333	314	291	285	
15	438	430	399	370	338	325	312	
14	430	430	433	416	371	356	343	
13	470	464	434	414	383	376		
12	530	496	470	453	422	411		
11		569	519	506	459	440		
10				622	558	514	490	
9					607	576	537	
8					644	626	586	
7						689	664	
6								

R/V RESEARCHER		RES-STACS12-83							
XBT NO.	8	9	10	11	12	13	14		
YEAR	83	83	83	83	83	83	83		
MONTH	12	12	12	12	12	12	12		
DAY (GMT)	1	1	2	2	2	2	2		
TIME (GMT)	2224	2240	0014	0031	0225	0256	0348		
LAT (N)	27.00	26.98	27.00	26.98	26.98	26.98	27.00		
LOX (W)	79.55	79.60	79.65	79.68	79.73	79.78	79.83		
SURF T (C)	27.2	27.1	27.1	27.3	27.3	27.1	26.9		
29									
28									
27	73	75	64	55	57	48			
26	91	93	100	87	81	71	60		
25	107	107	107	99	101	92	81		
24	120	121	119	111	106	97	85		
23	131	132	128	122	111	101	88		
22	142	142	136	131	115	105	92		
21	151	152	144	138	119	108	95		
20	161	163	153	144	123	113	98		
19	177	174	164	149	128	118	102		
18	202	189	174	156	134	122	106		
17	232	207	183	164	143	126	111		
16	250	232	195	171	152	131	125		
15	279	255	214	182	161	142	139		
14	307	283	238	205	175	156	151		
13	343	312	265	230	194	172	163		
12	368	337	290	259	218	192	188		
11	395	377	344	289	246	237	199		
10	442	415	391	349	291	254	210		
9	482	452	444	392	342	287	255		
8	536	498	465	424	375	319	266		
7	616	568	497	447	406				
6									

ISOTHERM DEPTHS (M)

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	15	16	17	18	19	20	21	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	2	2	2	2	2	5	5	
TIME (GMT)	0417	0503	0531	1317	1503	0700	0805	
LAT (N)	27.00	27.00	27.00	26.98	27.00	27.00	27.20	
LOX (W)	79.87	79.90	79.93	79.80	79.93	79.93	79.90	
SURF T (C)	27.0	26.8	26.7	27.2	26.6	26.7	26.1	
29								
28								
27				52				
26	60	51	51	84	39	34	32	
25	71	67	61	93	53	43	50	
24	74	72	63	98	57	48	54	
23	78	75	66	102	61	51	57	
22	81	78	69	106	64	54	61	
21	86	82	73	109	67	57	64	
20	90	86	76	114	71	60	68	
19	94	91	80	120	74	63	71	
18	99	97	85	127	78	65	74	
17	111	102	89	134	83	68	78	
16	120	107	96	141	91	71	83	
15	129	114	107	149	105	77	88	
14	137	127		160		84	98	
13	152	141		195		96	121	
12	167	154		211		110	140	
11	185			233			161	
10	204			254			174	
9				269				
8				280				
7				336				
6								

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	22	23	24	25	26	27	28	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	5	5	5	5	5	5	5	
TIME (GMT)	0911	0930	0952	1109	1246	1320	1435	
LAT (N)	27.20	27.00	27.20	27.00	27.00	26.98	27.20	
LOX (W)	79.85	79.80	79.73	79.78	79.65	79.62	79.60	
SURF T (C)	26.8	26.8	27.0	27.1	27.2	27.3	27.4	
29								
28								
27			41	44	60	55	63	
26	35	47	54	61	76	71	79	
25	47	60	72	76	90	85	92	
24	61	71	81	89	100	99	105	
23	67	78	91	101	109	112	118	
22	75	86	99	113	123	124	129	
21	84	102	115	125	136	134	140	
20	95	115	129	137	148	148	157	
19	102	125	143	151	167	166	175	
18	109	135	169	174	192	195	207	
17	115	140	193	207	220	234	238	
16	123	163	210	245	260	272	260	
15	133	177	234	270	302	307	332	
14	145	198	253	293	324	343	356	
13	161	213	273	313	347	357	368	
12	176	223	287	323	357	370	380	
11	190	234	298	333	368	387	410	
10	209	248	316	354	395	420	446	
9	238	278	352	396	444	462	495	
8	253	314	373	445	483	523	555	
7			401	463	512	569	612	
6								

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	29	30	31	32	33	34	35	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	5	5	5	5	5	5	5	
TIME (GMT)	1450	1520	1656	1714	1852	1907	2043	
LAT (N)	27.00	27.00	27.28	26.98	27.28	27.00	27.00	
LOX (W)	79.55	79.50	79.43	79.38	79.35	79.30	79.23	
SURF T (C)	27.5	27.3	27.5	27.5	27.6	27.4	27.4	
29								
28								
27	76	73	82	93	98	81	49	
26	93	89	96	106	102	108	98	
25	107	102	108	117	119	118	109	
24	117	115	120	131	131	127	141	
23	126	126	130	142	142	142	153	
22	134	137	140	155	152	156	161	
21	147	150	162	168	166	174	169	
20	164	166	174	193	189	199	179	
19	187	186	195	217	218	230	195	
18	219	214	242	276	263	265	297	
17	248	261	293	337	308	330	336	
16	325	399	332	369	378	395	364	
15	350	348	367	402	412	446	414	
14	381	363	396	440	455	464	457	
13	397	397	423	467	500	479	503	
12	421	436	460	503	536	506		
11	448	467	497	528	556	559		
10	497	519	576					
9	539	569	652					
8	600	626						
7	649	674						
6								

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	43	44	45	46	47	48	49	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	8	8	8	8	8	8	8	
TIME (GMT)	0720	0935	0953	1157	1305	1417	1520	
LAT (N)	27.00	27.20	27.00	26.90	27.00	27.00	26.90	
LOX (W)	79.50	79.53	79.60	79.65	79.60	79.75	79.80	
SURF T (C)	27.1	27.0	26.8	26.9	26.9	26.7	26.6	
29								
28								
27	71	43						
26	94	91	85	84	76	70	60	
25	100	107	96	96	87	94	69	
24	123	124	111	110	100	110	90	
23	139	136	131	123	110	116	96	
22	151	151	139	130	124	124	105	
21	171	167	153	140	140	142	115	
20	186	186	166	160	155	156	129	
19	212	202	183	174	165	170	144	
18	235	228	202	190	176	179	157	
17	262	251	232	215	203	197	172	
16	295	281	265	253	230	228	205	
15	326	310	293	279	254	255	228	
14	350	340	326	308	282	283	248	
13	378	380	349	334	311	295	251	
12	419	413	370	359	329	303	261	
11	475	436	405	380	348	319	271	
10	523	473	440	399	362	338	282	
9	609	570	508	424	383	357	290	
8	648	622	556	494	434	409	317	
7	704	677	644					
6								

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	36	37	38	39	40	41	42	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	5	8	8	8	8	8	8	
TIME (GMT)	2050	0322	0327	0423	0513	0640	0702	
LAT (N)	27.00	27.00	27.00	27.20	27.00	27.20	27.20	
LOX (W)	79.28	79.22	79.25	79.30	79.35	79.48	79.45	
SURF T (C)	27.3	26.8	26.8	27.0	26.8	26.9	26.9	
29								
28								
27	71							
26	101	99	99	96	87	86	92	
25	117	117	120	111	119	107	103	
24	131	131	138	127	132	118	118	
23	150	147	149	140	149	151	140	
22	163	160	161	161	177	180	163	
21	173	191	183	179	191	192	181	
20	182	194	207	196	202	203	198	
19	210	236	240	216	216	215	215	
18	314	371	266	250	238	235	240	
17	349	400	366	334	280	265	266	
16	370	417	414	390	336	316	310	
15	444	443	443	420	391	372	351	
14			400	401	437	422	382	
13				509	491	470	402	
12				559	533	501	430	
11					582	532	493	
10						620	564	
9							660	
8							698	
7								
6								

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
XBT NO.	50	51	52	53	54	55	56	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	8	8	8	8	8	8	8	
TIME (GMT)	1615	1720	1732	2002	2049	2142	2240	
LAT (N)	27.00	27.20	27.00	27.17	27.32	27.33	27.35	
LOX (W)	79.85	79.88	79.92	79.97	80.00	79.82	79.62	
SURF T (C)	26.5	26.6	26.6	25.7	25.3	26.5	26.9	
29								
28								
27								
26	43	40	34			60	83	
25	54	53	59	50	21	67	96	
24	72	72	71	52	38	90	112	
23	88	82	70	54	43	90	120	
22	86	90	83	56	47	106	142	
21	94	97	87	58		117	159	
20	105	106	91	61		131	171	
19	119	114	94	66		150	182	
18	135	121	96	70		162	202	
17	155	127	90	75		173	230	
16	172	137	105	79		187	266	
15	180	145	110			199	290	
14	180	151	114			211	327	
13	190	156	110			223	357	
12	207	161	122			237	385	
11	216	166	127			249	416	
10	223	179				264	458	
9	229					284	500	
8	261						570	
7							597	
6								

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
KBT NO.	57	58	59	61	62	63	64	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	8	9	9	9	9	9	9	
TIME (GMT)	2326	0836	0140	0358	0452	0531	0630	
LAT (N)	27.33	27.22	27.12	27.00	27.00	26.97	26.88	
LOM (W)	79.48	79.67	79.83	79.83	79.65	79.52	79.67	
SURF T (C)	26.8	26.9	26.5	26.5	26.8	26.8	26.8	
29								
28								
27								
26	85	81	47	41	78	86	72	
25	102	92	67	64	91	103	88	
24	119	106	77	80	100	127	107	
23	139	124	89	86	125	142	125	
22	157	138	97	93	140	154	140	
21	169	151	106	103	154	167	155	
20	187	165	121	115	168	176	170	
19	207	178	139	127	181	189	184	
18	231	189	154	139	196	211	202	
17	271	215	171	151	216	247	219	
16	302	241	206	161	240	282	244	
15	346	272	195	180	267	315	275	
14	378	311	201	192	296	349	310	
13	403	335	208	201	335	370	360	
12	441	349	220	211	374	402	382	
11	484	368	234	224	396	438	395	
10	558	392	249	241	421	480	485	
9	610	418	265	255	437	540	421	
8	657	490	279	265	460	646	450	
7								
6								

ISOTHERM DEPTHS (M)

R/V RESEARCHER		RES-STACS12-83						
KBT NO.	65	66	67	68	69	70	71	
YEAR	83	83	83	83	83	83	83	
MONTH	12	12	12	12	12	12	12	
DAY (GMT)	9	9	9	9	9	9	9	
TIME (GMT)	0734	0842	0939	1006	1054	1152	1245	
LAT (N)	26.78	26.65	26.65	26.65	26.65	26.78	26.90	
LOM (W)	79.82	79.95	79.75	79.65	79.48	79.65	79.60	
SURF T (C)	26.5	25.8	26.5	26.8	27.1	26.7	26.5	
29								
28								
27					98			
26	45		63	81	109	70	59	
25	65	31	89	105	117	103	72	
24	91	45	100	117	120	115	80	
23	100	55	119	131	140	129	85	
22	109	63	120	140	162	141	92	
21	120	69	137	150	175	152	100	
20	134	80	149	172	196	165	112	
19	146	90	169	184	213	179	129	
18	159	97	193	204	239	196	157	
17	173	104	208	230	274	216	175	
16	182	110	229	257	307	246	189	
15	191	115	254	281	340	279	200	
14	201	121	267	311	372	308	206	
13	211	126	282	340	411	351	217	
12	223	133	293	372	427	396	236	
11	236	146	311	400	462	423	245	
10	247		328	411	502	435	260	
9	266		346	419	577	446	274	
8	293		375	451	617	467	292	
7			413	488	680	512		
6								

ISOTHERM DEPTHS (M)

R/V VIRGINIA KEY		VK-STACS13-84						
KBT NO.	3	5	6	8	9	10	11	
YEAR	84	84	84	84	84	84	84	
MONTH	1	1	1	1	1	1	1	
DAY (GMT)	18	18	18	18	18	18	25	
TIME (GMT)	0029	0427	0657	0951	1153	1330	2006	
LAT (N)	27.00	27.01	27.03	27.02	27.01	27.00	27.00	
LOM (W)	79.79	79.61	79.49	79.37	79.28	79.19	79.94	
SURF T (C)	25.5	25.8	25.5	25.5	25.5	25.5	22.6	
27								
26								
25	90	124	121	113	102	91		
24	103	140	137	126	129	123		
23	110	156	156	130	144	136		
22	144	171	177	173	169	177	15	
21	174	187	202	193	191	188	45	
20	184	206	216	211	233	230	61	
19	193	227	237	261	269	264	67	
18	190	259	265	287	292	323		
17	204	283	296	323	368	412		
16	212	314	345	383	409	443		
15	226	346	375	406	430			
14	242	350	393	429	460			
13	250	385	417	451	505			
12	292	406	441	480	532			
11	303	435	472	523	584			
10	315	449	499	575				
9	330	472	549					
8		514	616					
7		575	673					
6								

ISOTHERM DEPTHS (M)

R/V VIRGINIA KEY		VK-STACS13-84						
KBT NO.	12	13	14	15	16	17	18	
YEAR	84	84	84	84	84	84	84	
MONTH	1	1	1	1	1	1	1	
DAY (GMT)	25	25	25	25	25	25	26	
TIME (GMT)	2026	2856	2126	2204	2259	2330	0032	
LAT (N)	27.00	27.00	27.00	26.98	26.99	26.99	27.91	
LOM (W)	79.89	79.86	79.83	79.79	79.73	79.68	79.65	
SURF T (C)	24.0	24.8	25.4	25.8	25.7	25.8	25.8	
27								
26								
25								
24		15	28	44	54	77	77	
23	20	44	58	66	69	89	93	
22	42	59	80	100	98	102	99	
21	64	82	94	107	125	119	122	
20	82	90	102	115	142	150	149	
19	87	90	100	126	150	163	167	
18	92	105	113	134	154	174	193	
17	96	111	119	139	159	180	210	
16	106	120	129	149	169	199	220	
15		149	146	162	182	210	225	
14		172	171	176	190	217	234	
13		186	185	191	190	223	244	
12			200	210	221	229	251	
11			213	226	234	246	259	
10			233	243	253	261	272	
9				256	270	301	321	
8				286	295	337	390	
7					330	397	424	
6						440	476	

ISOTHERM DEPTHS (M)

R/V VIRGINIA KEY

VK-STAC513-84

XBT NO.	19	20	21	22	23	24	26
YEAR	84	84	84	84	84	84	84
MONTH	1	1	1	1	1	1	1
DAY (GMT)	26	26	26	26	26	26	26
TIME (GMT)	0115	0234	0308	0445	0525	0640	0823
LAT (N)	26.98	27.00	26.99	27.00	26.99	27.00	27.00
LOX (W)	79.61	79.55	79.49	79.43	79.37	79.33	79.24
SURF T (C)	25.8	25.8	25.7	25.5	25.3	25.3	25.4
27							
26							
25	78	70	75	74	75	70	74
24	82	82	87	88	85	89	86
23	90	90	102	102	101	102	98
22	98	99	121	120	121	121	122
21	130	128	142	136	138	135	144
20	145	153	155	150	155	150	158
19	162	168	179	185	189	192	184
18	183	197	204	211	211	221	243
17	206	221	220	244	259	262	282
16	222	236	245	272	276	289	328
15	236	256	268	292	303	322	361
14	246	274	289	309	328	343	375
13	255	287	312	344	364	363	416
12	266	307	346	388	392	397	
11	282	331	379	441	440	519	
10	316	366	413	468	526		
9	369	438	484	531			
8	438	499	534	594			
7	493	550	592				
6	538	618					

ISOTHERM DEPTHS (M)

R/V VIRGINIA KEY

VK-STAC513-84

XBT NO.	27	28	29	30	31	32	33
YEAR	84	84	84	84	84	84	84
MONTH	1	1	1	1	1	1	1
DAY (GMT)	26	30	30	30	30	30	31
TIME (GMT)	0859	2059	2127	2152	2230	2306	0001
LAT (N)	27.00	27.00	27.00	27.00	27.01	26.98	26.99
LOX (W)	79.19	79.93	79.94	79.86	79.83	79.79	79.74
SURF T (C)	25.4	24.7	25.5	25.5	25.7	25.9	25.6
27							
26							
25	77		33	46	58	72	75
24	91	17	44	64	67	85	84
23	102	31	53	80	79	97	110
22	126	43	66	87	118	133	133
21	148	61	83	103	129	142	175
20	173	74	96	110	143	160	189
19	195	90	110	126	154	174	201
18	255	101	120	141	165	185	211
17	314		136	156	172	193	221
16	348		148	170	177	198	229
15		378		164	182	184	235
14					189	193	210
13					197	205	217
12					208	227	227
11					215	242	238
10					227	253	261
9						264	277
8						272	292
7						285	307
6							308

ISOTHERM DEPTHS (M)

R/V VIRGINIA KEY

VK-STAC513-84

XBT NO.	34	35	37	38	39	40	41
YEAR	84	84	84	84	84	84	84
MONTH	1	1	1	1	1	1	1
DAY (GMT)	31	31	31	31	31	31	31
TIME (GMT)	0046	0132	0225	0329	0408	0547	0627
LAT (N)	27.00	27.01	26.99	26.00	26.98	26.99	27.00
LOX (W)	79.67	79.65	79.61	79.55	79.50	79.43	79.37
SURF T (C)	25.8	25.8	25.9	25.1	25.4	25.3	25.3
27							
26							
25	80	76	104	121	68	84	89
24	88	88	114	133	95	97	105
23	115	108	123	146	110	112	119
22	140	145	164	163	120	128	131
21	178	172	184	182	137	143	147
20	198	185	206	205	166	164	165
19	222	209	224	226	182	189	185
18	247	238	245	241	203	214	213
17	265	277	280	260	226	238	238
16	272	280	301	291	247	263	268
15	277	297	313	310	276	291	306
14	284	307	333	331	305	315	327
13	293	316	348	344	331	339	372
12	306	323	357	378	356	387	397
11	316	328	372	419	382	434	489
10	327	347	398	457	428	515	
9	349	385	432	489	483	538	
8	387	417	495	519	501	563	
7	412	435	518	538	547	600	
6	468	518	589	652			

ISOTHERM DEPTHS (M)

R/V VIRGINIA KEY

VK-STAC513-84

XBT NO.	42	43	44	45
YEAR	84	84	84	84
MONTH	1	1	1	1
DAY (GMT)	31	31	31	31
TIME (GMT)	0746	0845	0947	1024
LAT (N)	27.00	26.99	26.98	27.00
LOX (W)	79.33	79.28	79.24	79.16
SURF T (C)	25.3	25.3	25.3	25.2
27				
26				
25	87	77	72	70
24	105	101	92	83
23	117	107	99	91
22	132	115	107	101
21	151	137	135	136
20	165	171	171	156
19	189	190	207	186
18	215	232	246	242
17	247	280	291	326
16	287	305	330	362
15	316	337	375	
14	350	388	399	
13	371	426	448	
12	408	470		
11	508			
10				
9				
8				
7				
6				

ISOTHERM DEPTHS (M)

R/V RESEARCHER

RES-STACS14-84

XBT NO.	1	2	3	4	5	6	7
YEAR	84	84	84	84	84	84	84
MONTH	3	3	3	3	3	3	3
DAY (GMT)	15	15	15	15	15	15	15
TIME (GMT)	0505	0625	0735	0802	0917	0945	1114
LAT (N)	26.98	27.28	27.08	26.98	27.28	26.98	27.28
LOX (W)	79.93	79.87	79.85	79.88	79.75	79.68	79.67
SURF T (C)	24.7	24.9	25.0	25.2	25.3	25.3	25.2
27							
26							
25				36	44	63	64
24	34	36	38	47	57	73	75
23	50	47	48	59	69	83	87
22	62	61	60	80	85	105	111
21	74	79	78	97	99	128	129
20	82	106	100	116	135	145	147
19	89	119	124	139	153	166	173
18	93	128	135	155	173	191	199
17	97	139	148	171	202	230	236
16	101	158	160	197	233	264	272
15	105	159	171	211	261	310	297
14	109	169	186	223	279	338	349
13	116	183	196	234	289	357	373
12		197	209	242	295	371	388
11		207	217	253	303	383	400
10		213	224	264	317	397	415
9			236	286	348	408	427
8				314	356	428	446
7						486	517
6							

ISOTHERM DEPTHS (M)

R/V RESEARCHER

RES-STACS14-84

XBT NO.	15	16	17	18	19	20	21
YEAR	84	84	84	84	84	84	84
MONTH	3	3	3	3	3	3	3
DAY (GMT)	16	16	16	17	18	18	18
TIME (GMT)	0139	0334	0346	2134	0420	0450	0525
LAT (N)	27.00	27.00	27.00	27.10	26.30	26.28	26.23
LOX (W)	79.28	79.25	79.28	79.37	78.87	78.92	79.30
SURF T (C)	25.0	25.0	25.1	25.3	24.7	24.8	25.0
27							
26							
25	52		72	104			
24	114	114	124	155	89	102	135
23	167	166	156	166	133	156	162
22	181	183	173	180	166	181	178
21	196	198	192	190	186	203	191
20	217	216	207	216	214	235	228
19	252	243	230	246	251	267	254
18	299	295	285	284	319	314	313
17	368	365	357	383	401	390	360
16	417	417	407	419	449	419	
15	466	451	446	448	485	431	
14		522	483	467	520		
13			524	482	566		
12				496	596		
11				544	626		
10					640		
9					661		
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V RESEARCHER

RES-STACS14-84

XBT NO.	8	9	10	11	12	13	14
YEAR	84	84	84	84	84	84	84
MONTH	3	3	3	3	3	3	3
DAY (GMT)	15	15	15	15	15	15	16
TIME (GMT)	1146	1335	1610	1630	1831	1921	0126
LAT (N)	26.97	26.98	27.28	27.00	27.28	27.00	27.28
LOX (W)	79.62	79.50	79.43	79.37	79.35	79.28	79.25
SURF T (C)	25.1	25.2	25.5	25.1	25.2	25.1	25.0
27							
26							
25	76	84	93	98	84	67	53
24	86	105	114	122	124	121	111
23	95	125	133	135	143	150	161
22	122	137	140	149	154	169	180
21	139	158	149	158	164	183	196
20	160	171	166	177	188	203	216
19	175	193	210	218	226	234	249
18	209	240	277	300	299	313	289
17	271	349	337	372	380	367	357
16	305	375	385	410	419	407	415
15	342	396	415	435	451	431	453
14	359	409	443	461	475	460	498
13	393	440	465	500	503	496	
12	430	460	494	520	519		
11	442	477	519	543	562		
10	449	512	538				
9	458	564	618				
8	489	626	691				
7	568	671					
6							

ISOTHERM DEPTHS (M)

R/V RESEARCHER

RES-STACS14-84

XBT NO.	22	23	24	25	26	27	28
YEAR	84	84	84	84	84	84	84
MONTH	3	3	3	3	3	3	3
DAY (GMT)	18	18	21	21	21	21	21
TIME (GMT)	0727	1749	2121	2138	2150	2302	2324
LAT (N)	26.80	26.98	27.28	27.28	27.00	27.30	26.98
LOX (W)	79.35	79.28	79.93	79.90	79.88	79.83	79.78
SURF T (C)	25.0	25.2	25.2	25.2	25.2	25.5	25.4
27							
26							
25	55	51	30	49	51	64	75
24	131	117	43	58	59	75	88
23	151	144	51	66	66	83	94
22	174	161	58	74	77	101	99
21	195	188	66	86	92	107	122
20	212	224	73	100	108	125	135
19	240	263	88	108	119	143	149
18	278	323	87	117	126	156	166
17	349	389	92	124	134	170	185
16	380	434	97	130	143	189	209
15	430	470	102	137	151	202	226
14	470	501	106	144	159	211	236
13	506	520	112	152	168	217	244
12				165	178	223	254
11					190	229	267
10							
9					210	245	275
8						275	287
7						299	338
6							

ISOTHERM DEPTHS (M)

R/V RESEARCHER

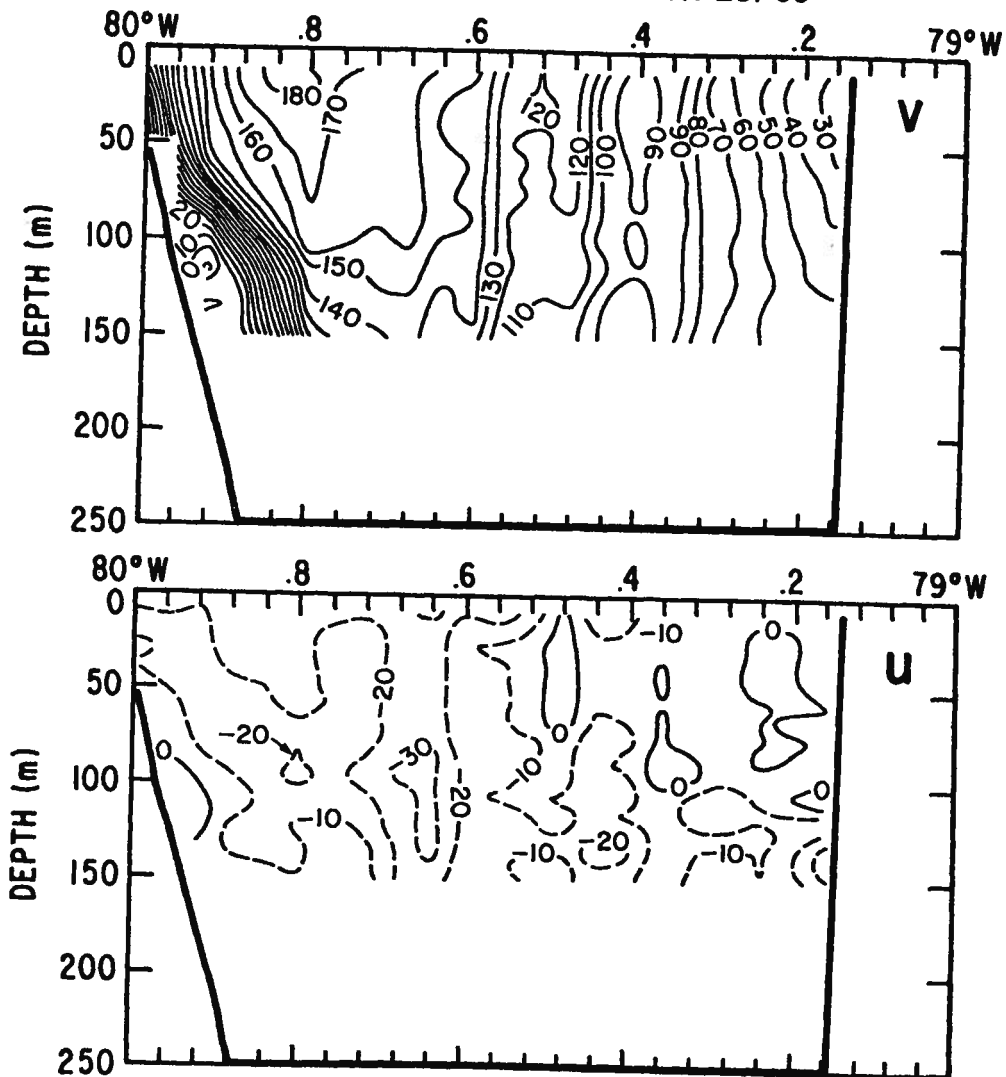
RES-STACS14-84

ST NO.	29	30	31	32	33	34
YEAR	84	84	84	84	84	84
MONTH	3	3	3	3	3	3
DAY (GMT)	22	22	22	22	22	22
TIME (GMT)	0039	0052	0217	0233	0405	0424
LAT (N)	27.00	27.00	27.20	26.98	27.20	26.98
LONG (W)	79.72	79.60	79.65	79.62	79.57	79.50
SURF T (C)	25.3	25.2	25.1	25.3	25.1	25.0
27						
26						
25	92	100	101	102	110	101
24	109	114	115	125	131	127
23	121	127	127	139	142	141
22	130	136	143	152	160	163
21	137	147	156	166	175	180
20	160	163	170	181	191	196
19	175	182	188	200	220	220
18	190	190	209	228	242	249
17	211	223	237	256	286	326
16	242	248	258	284	311	358
15	264	273	285	315	349	384
14	286	296	312	335	384	405
13	310	323	341	370	407	438
12	331	353	374	412	461	474
11	347	376	401	440	492	501
10	359	388	418	463	518	531
9	373	401	427	476	532	573
8	390	434	465	536	601	639
7					603	690
6						

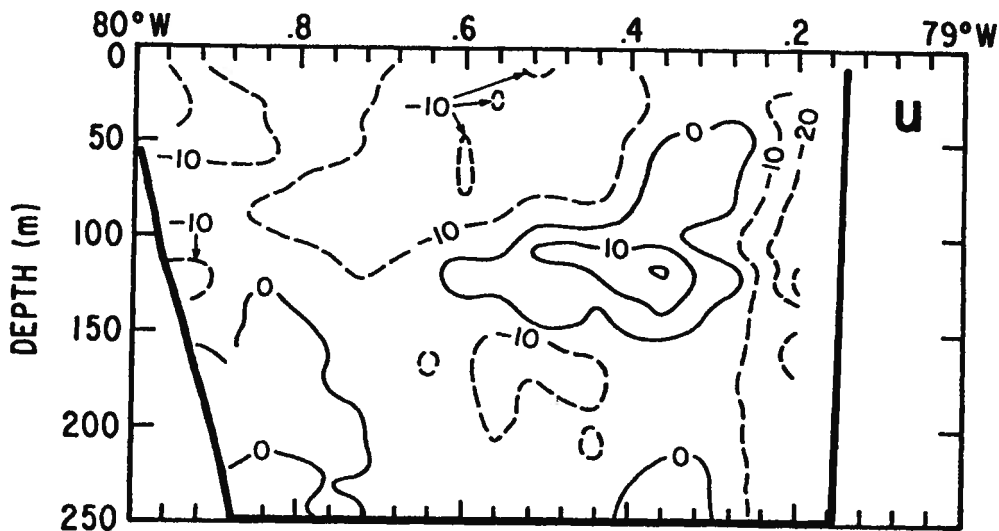
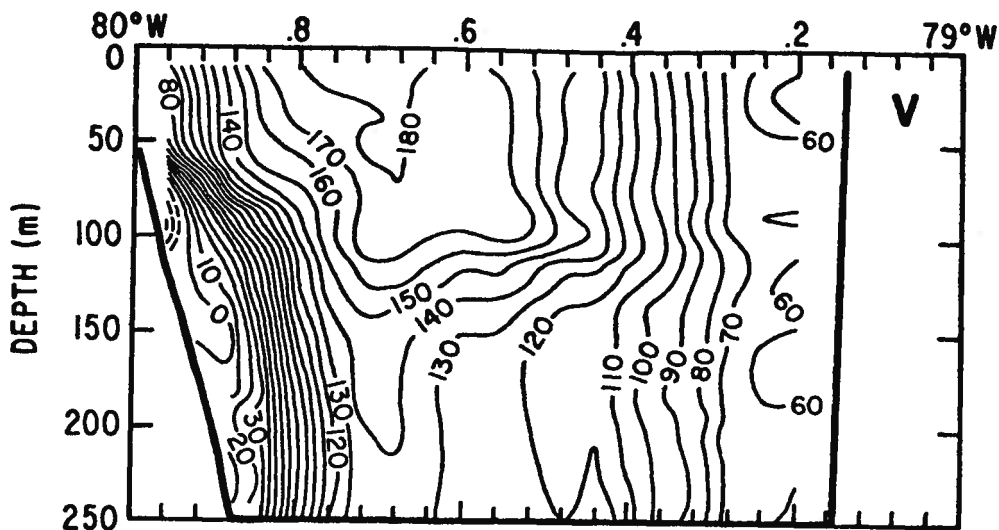
APPENDIX D: AMETEK STRAZA DATA

Sections taken along 27°N are presented by cruise and date. Northward (V) and eastward (U) components of current velocity in cm/sec to a depth of 250 meters are shown for each section.

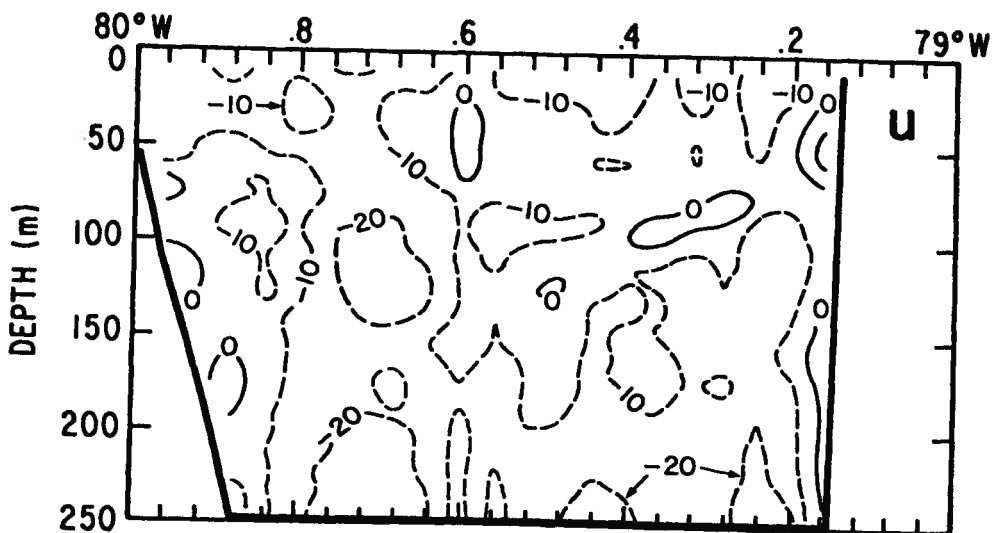
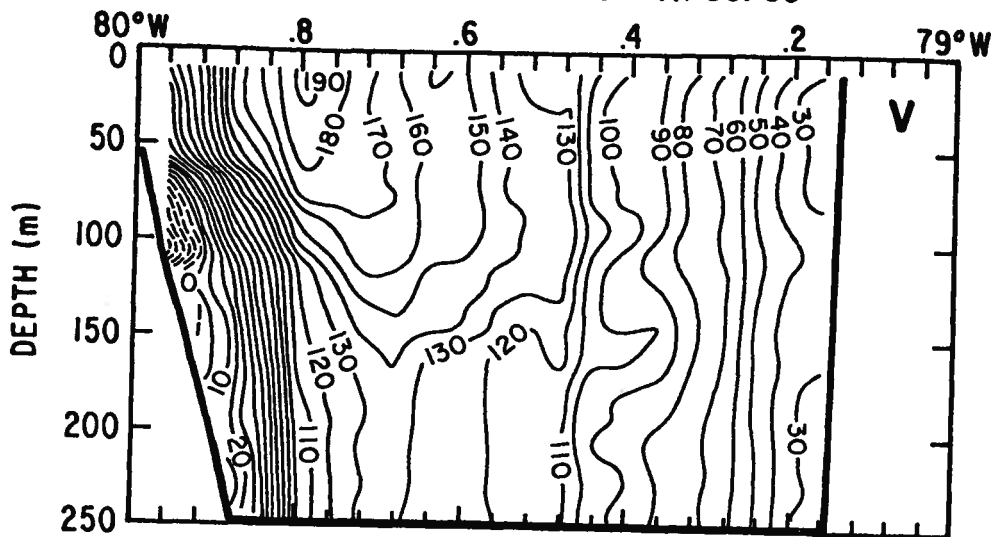
AMETEK STRAZA
RES-STACS 12-83 11/28/83



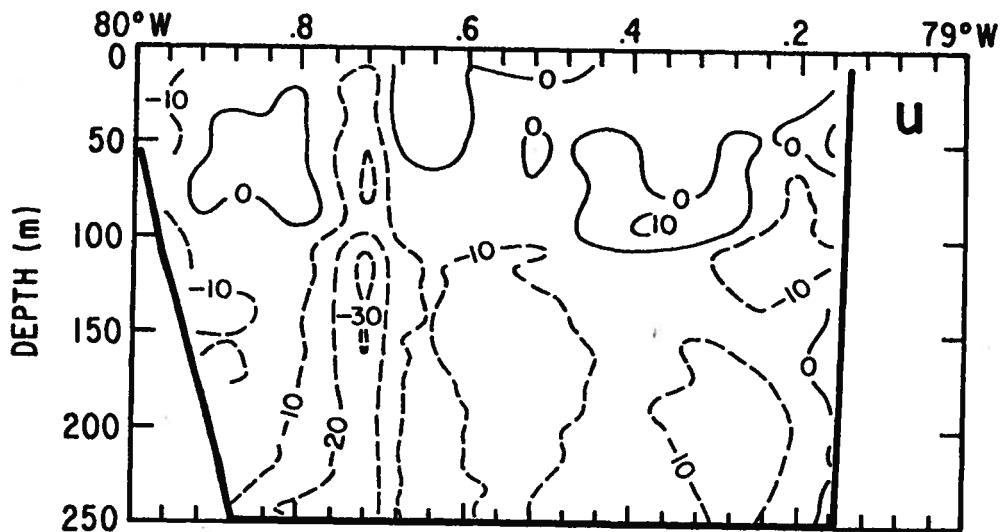
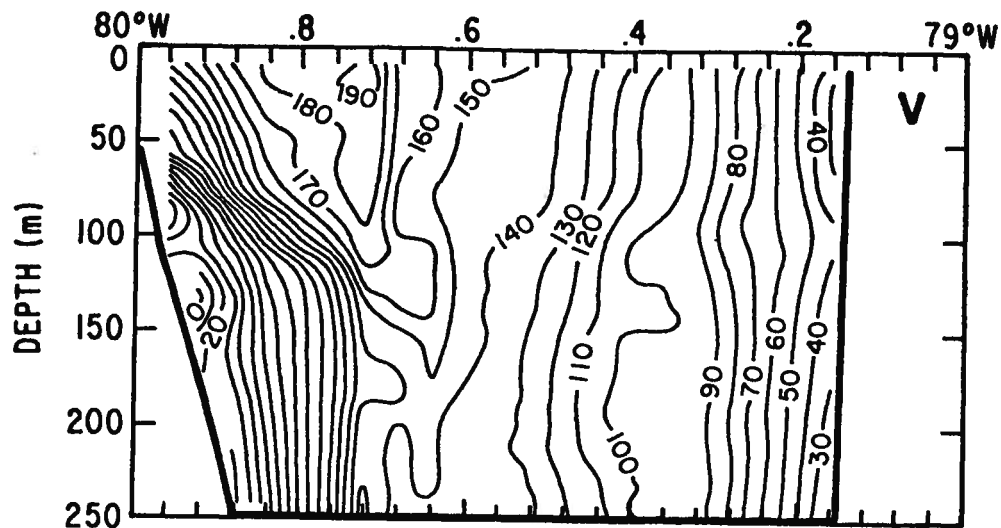
AMETEK STRAZA
RES-STACS 12-83 11/29/83



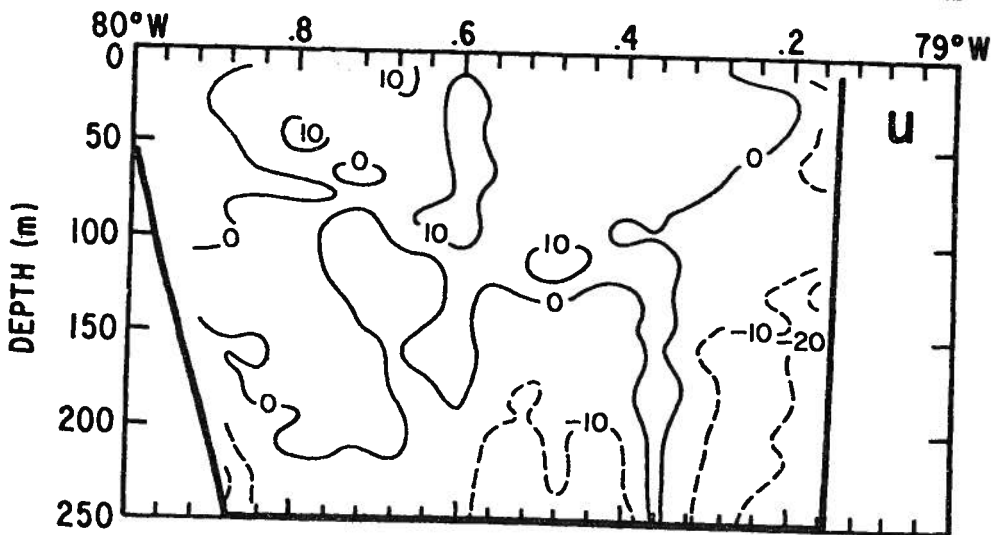
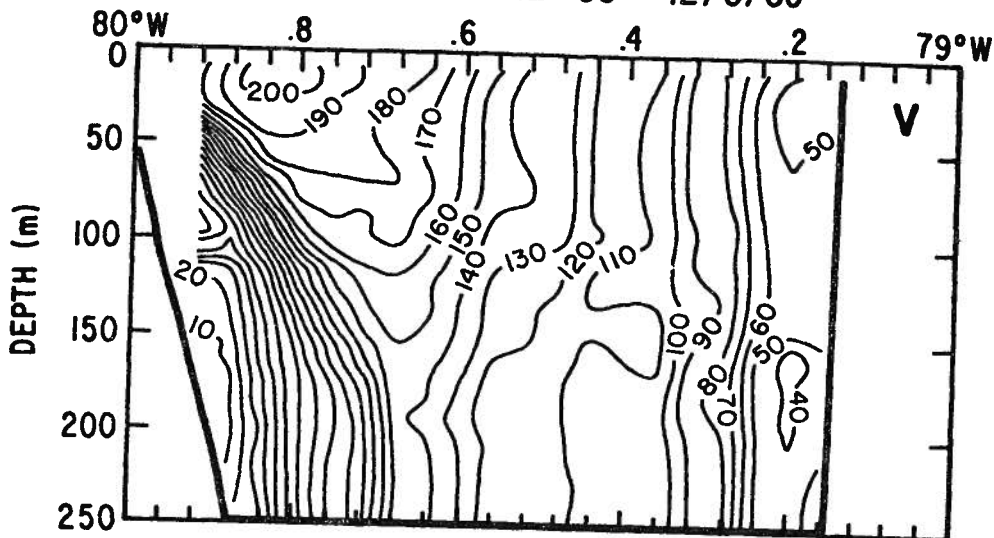
AMETEK STRAZA
RES-STACS 12-83 11/30/83



AMETEK STRAZA
RES-STACS 12-83 12/1/83

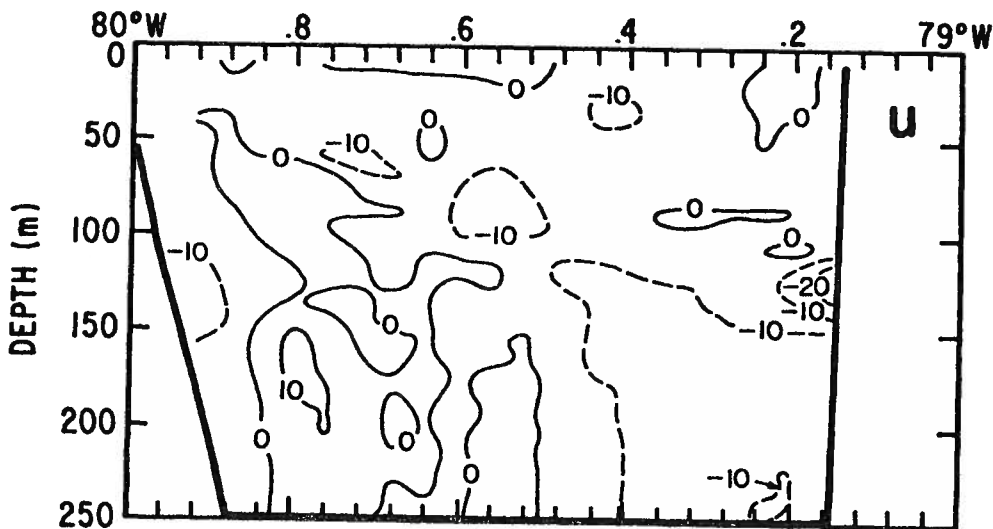
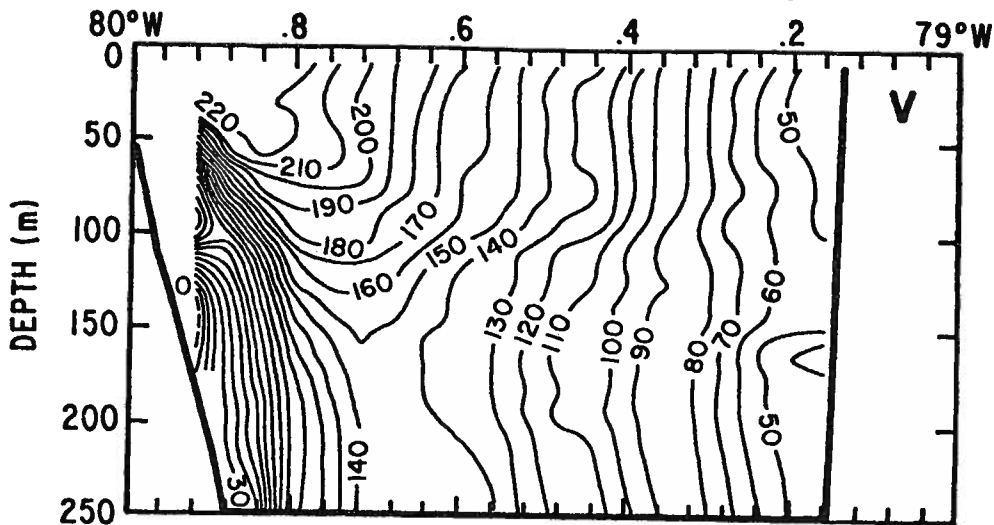


AMETEK STRAZA
RES - STACS 12-83 12/3/83

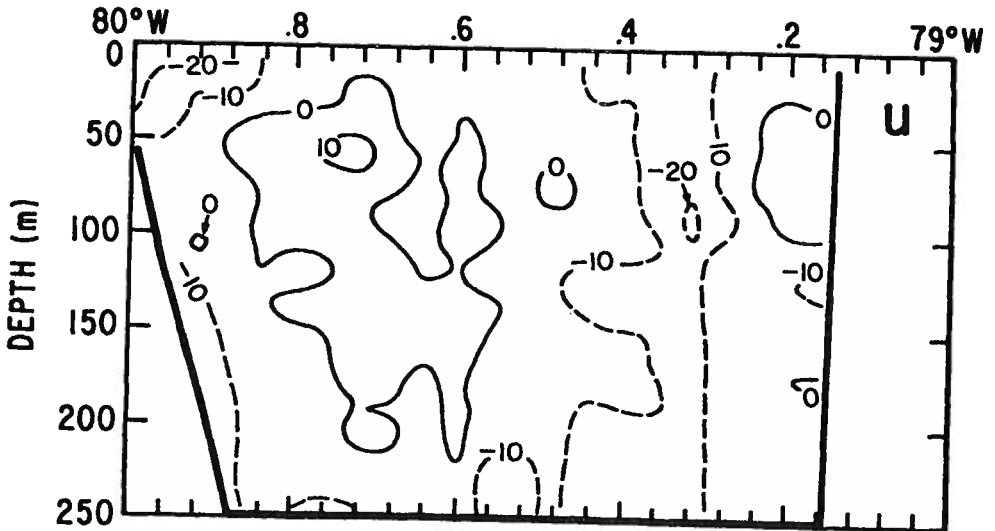
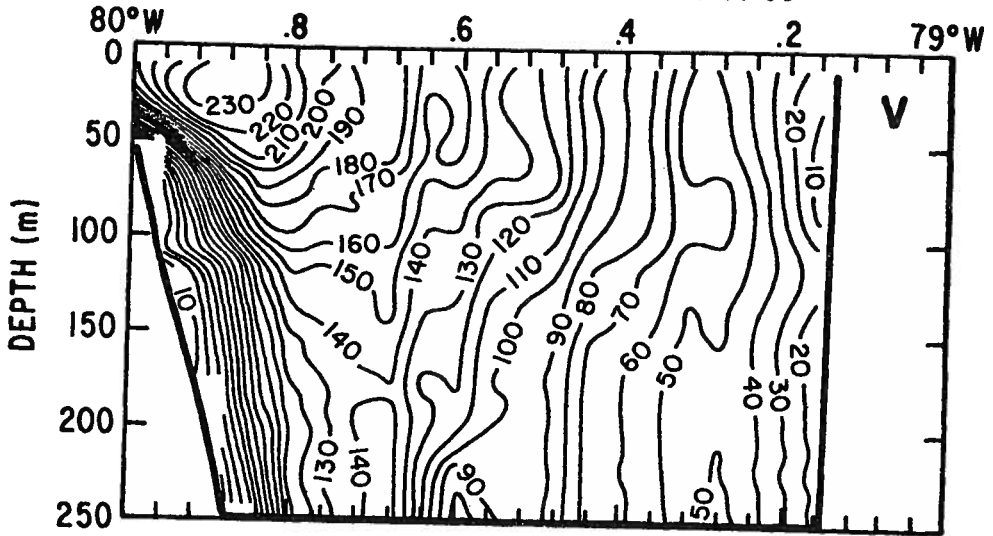


AMETEK STRAZA

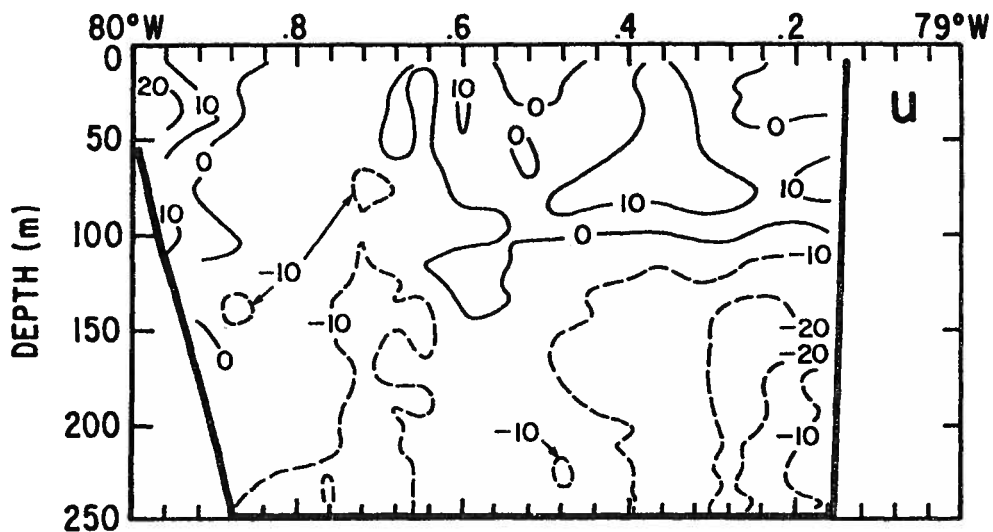
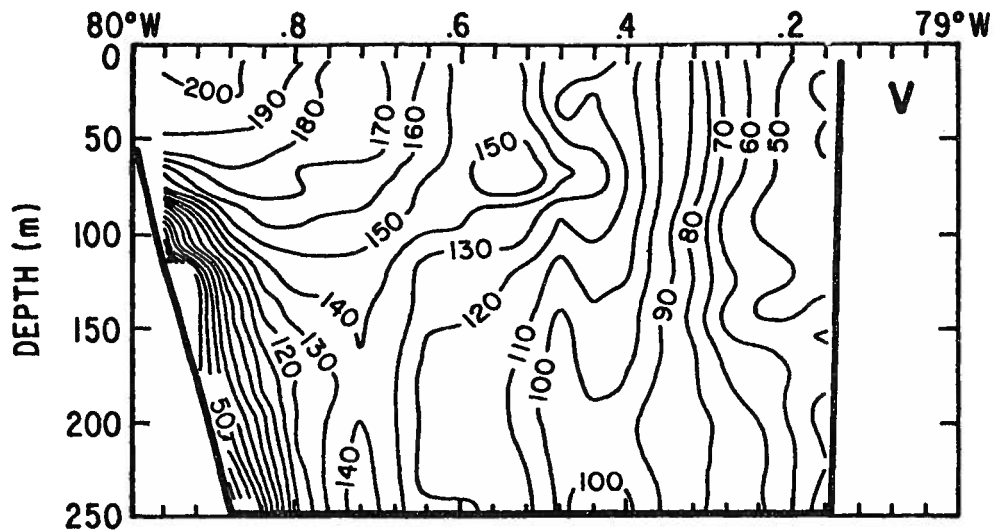
RES-STACS 12-83 12/4/83



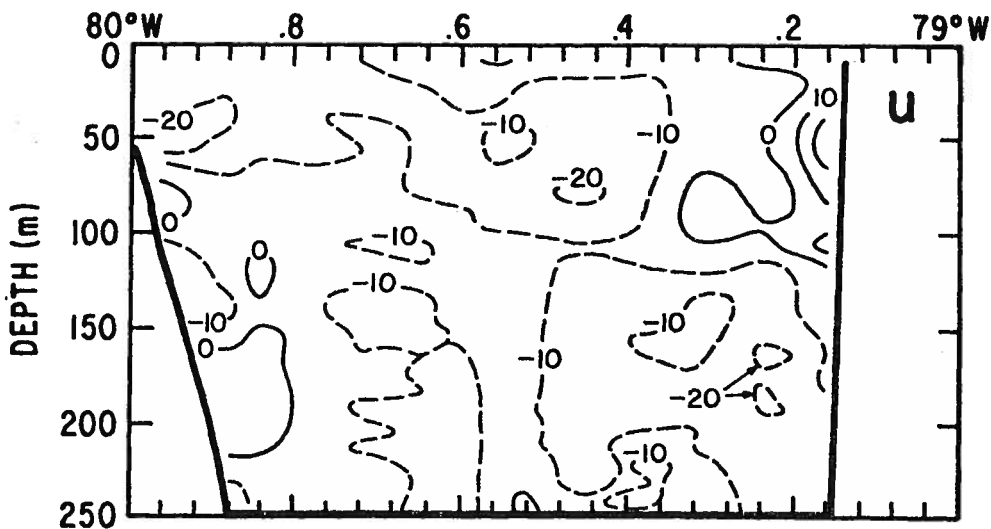
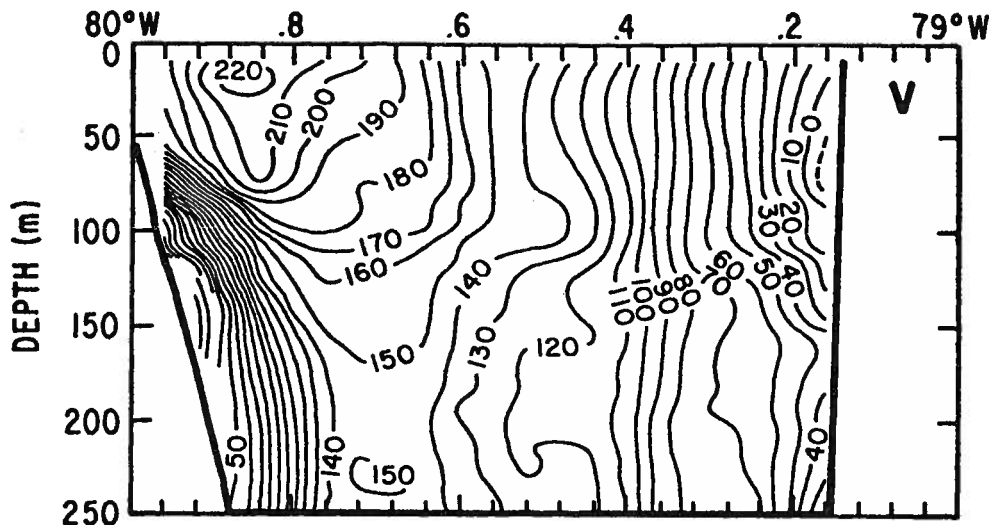
AMETEK STRAZA
RES-STACS 12-83 12/5/83



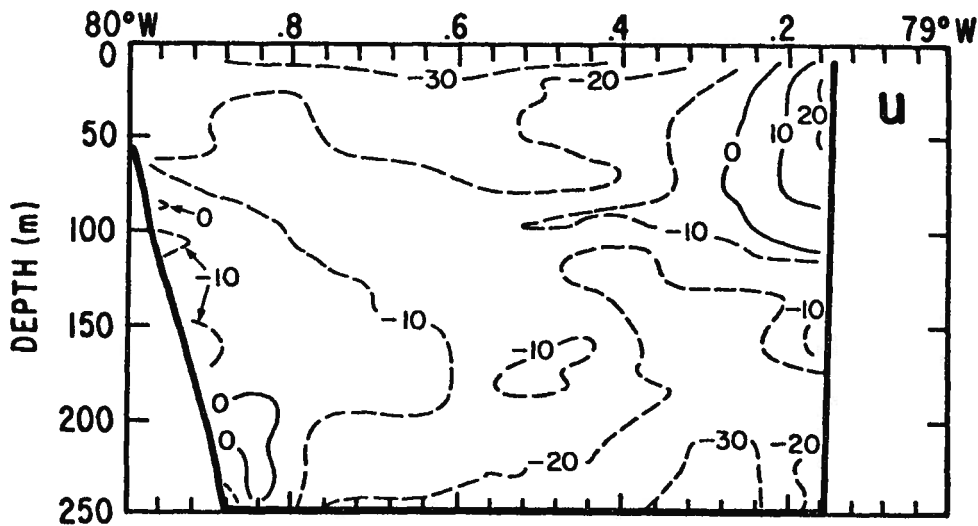
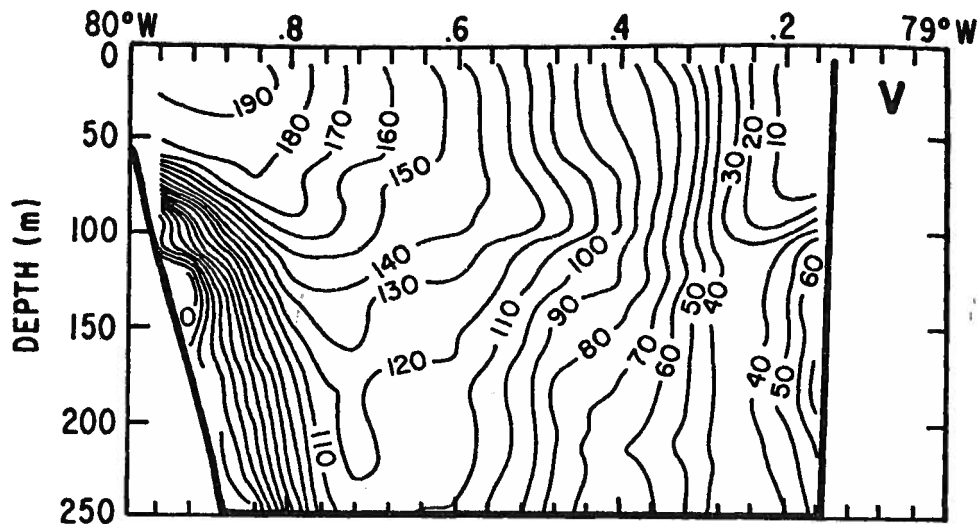
AMETEK STRAZA
RES-STACS 12-83 12/8/83



AMETEK STRAZA
RES-STACS 12-83 12/10/83 (a)

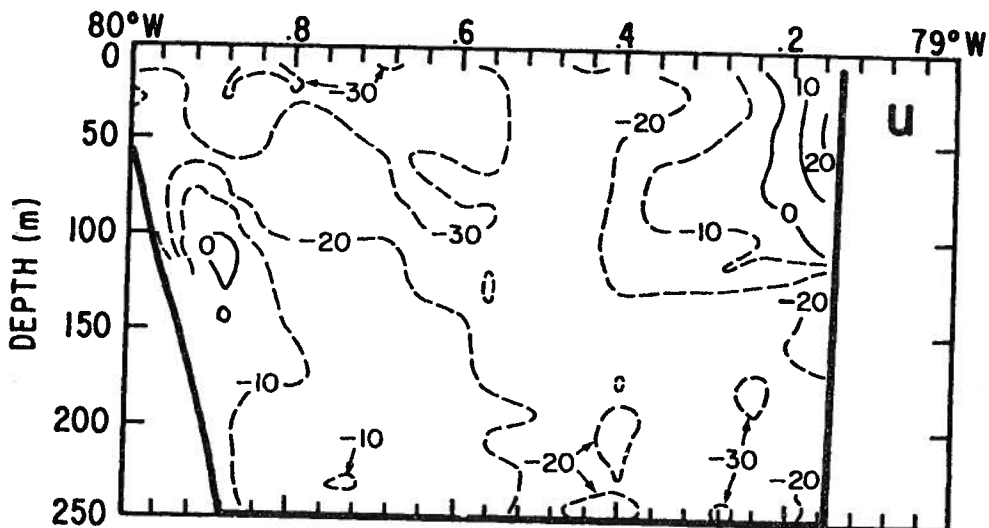
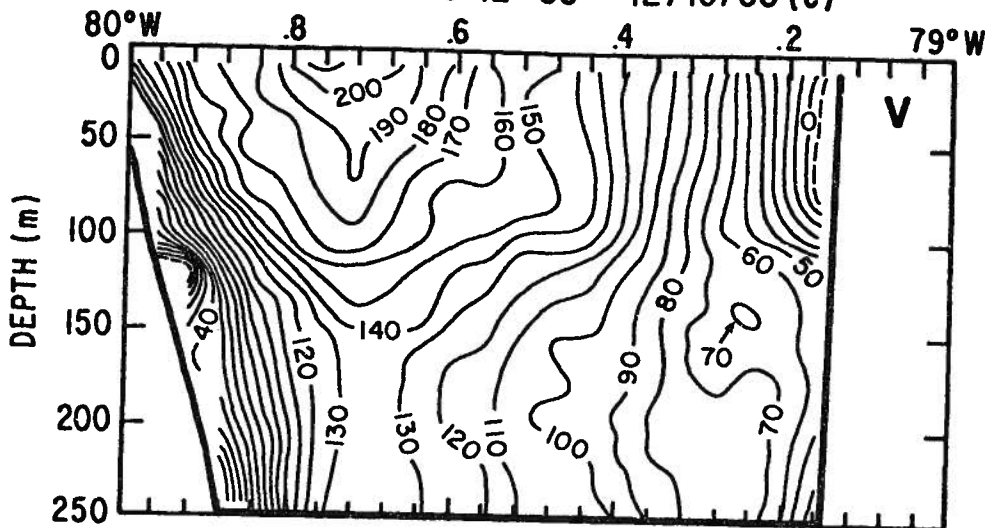


AMETEK STRAZA
RES - STACS 12-83 12/10/83 (b)

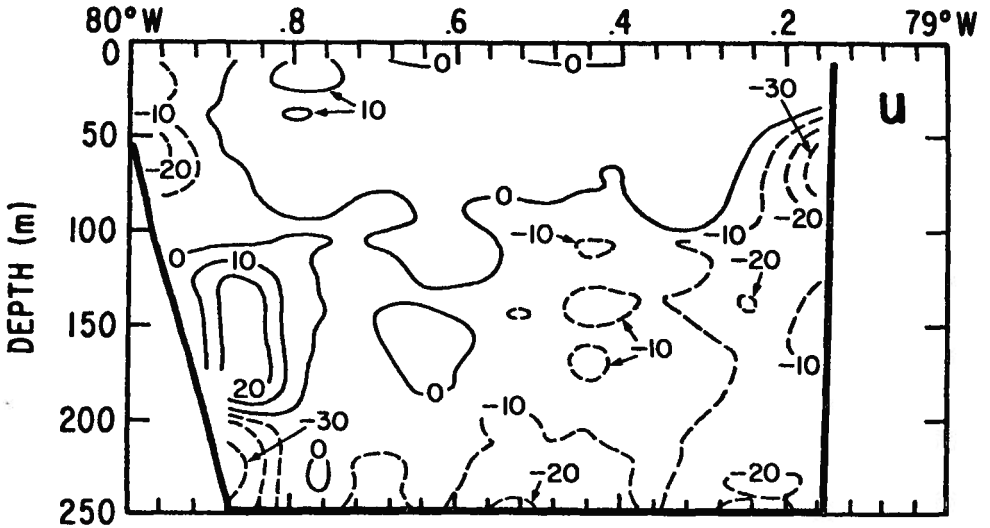
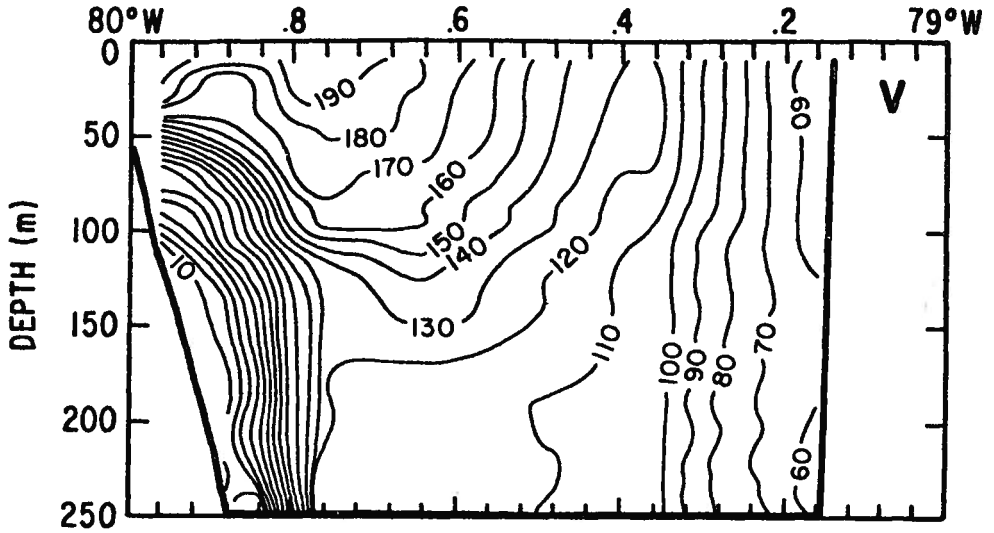


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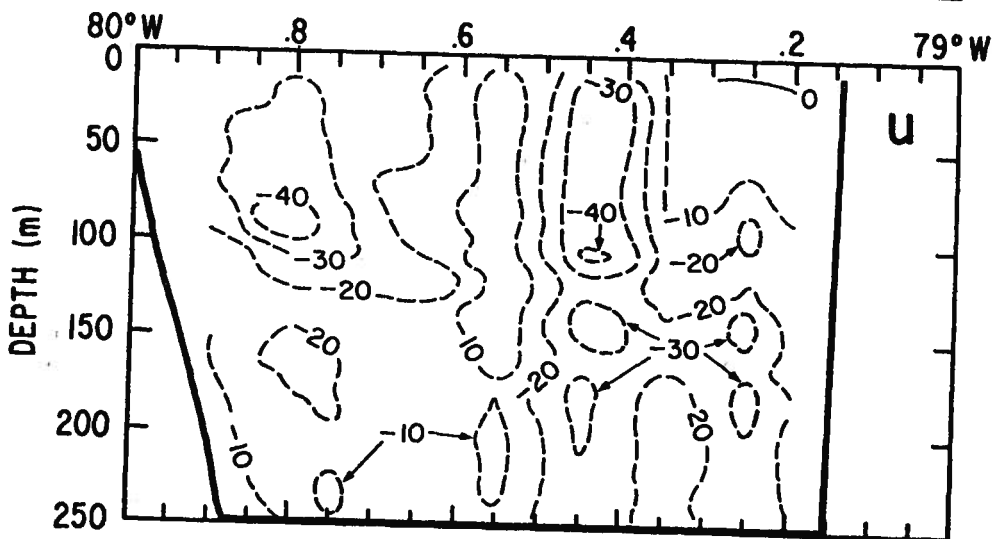
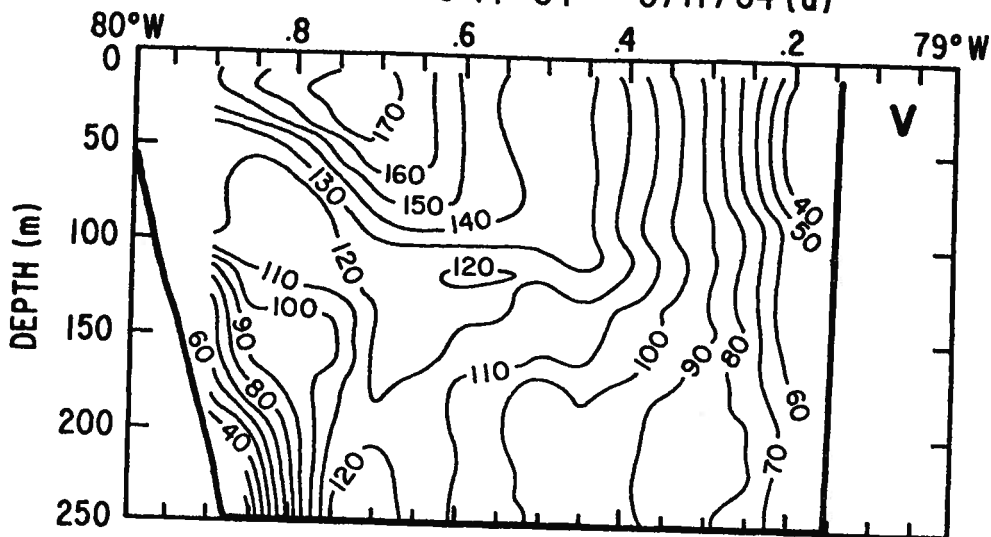
RES - STACS 12-83 12/10/83 (c)



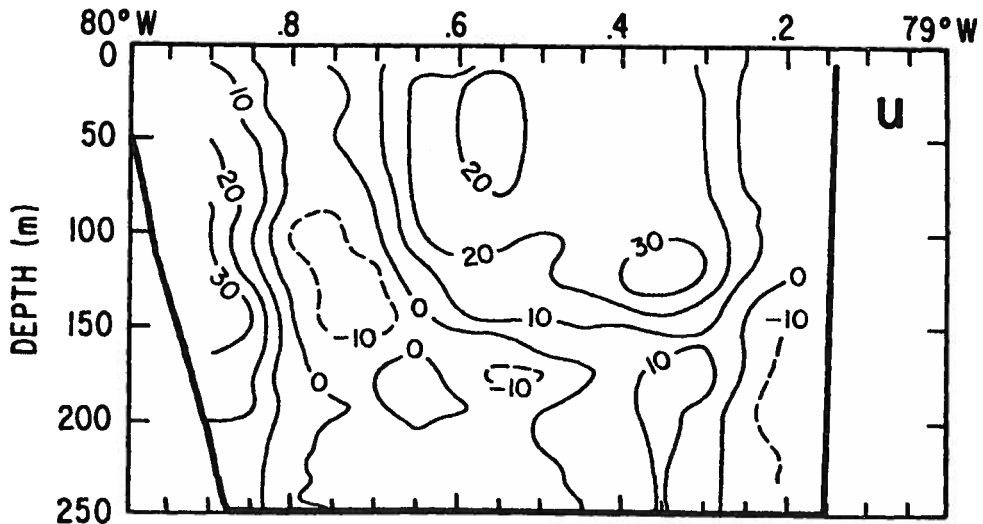
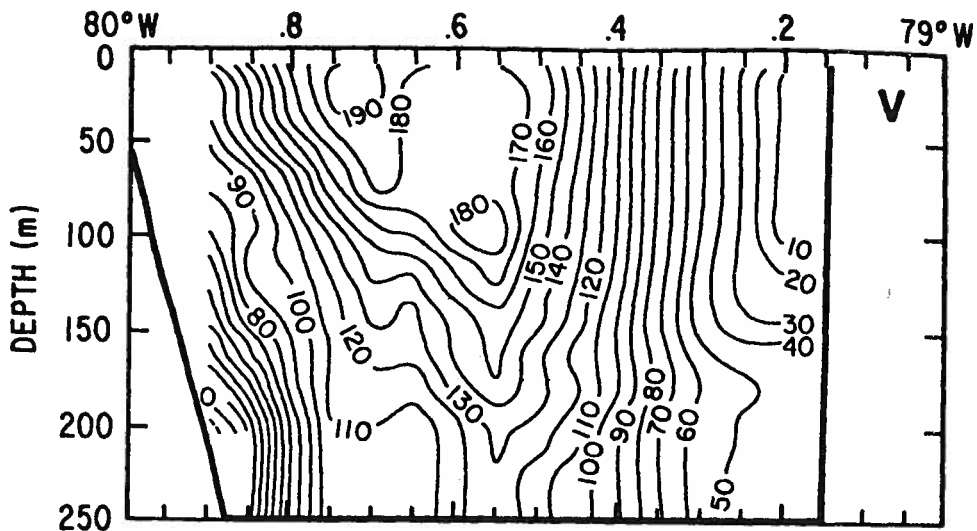
AMETEK STRAZA
RES-STACS 12-83 12/12/83



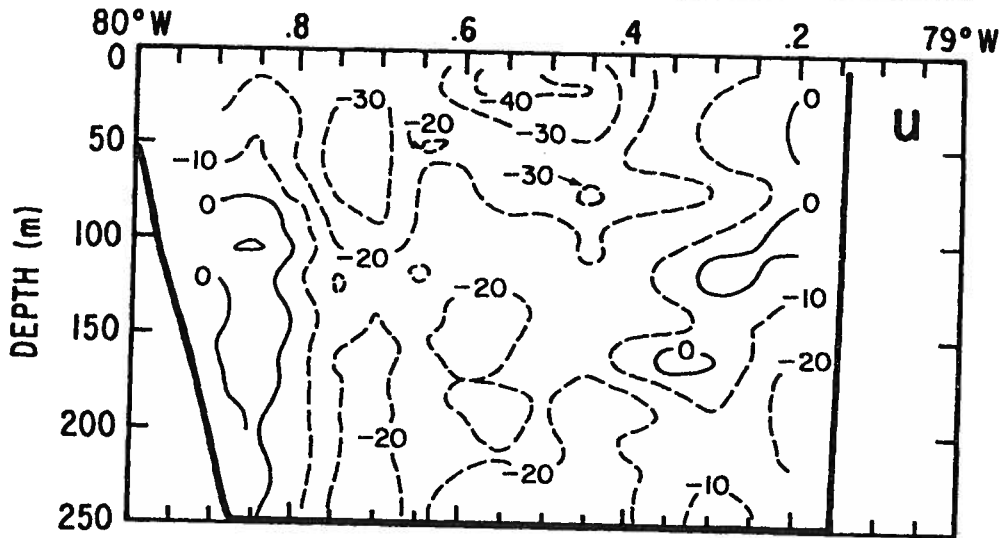
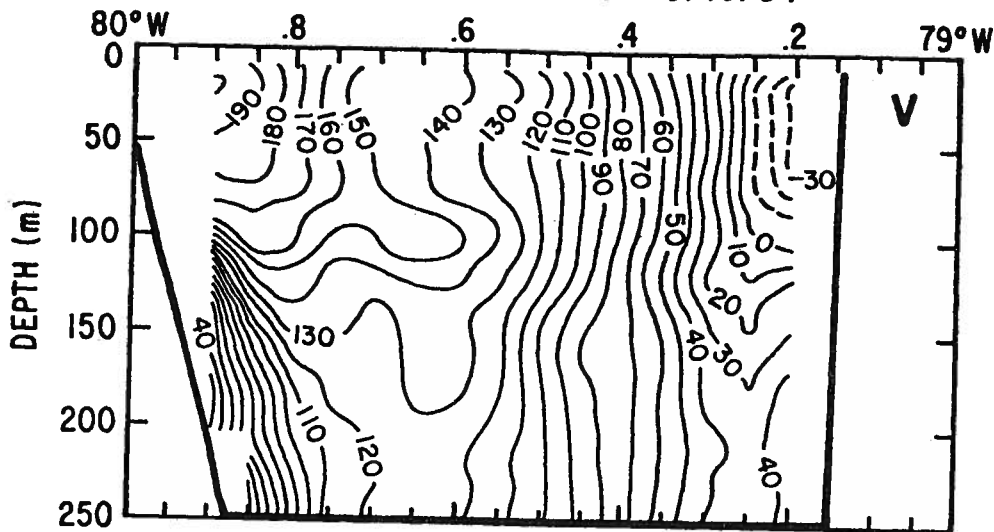
AMETEK STRAZA
RES-STACS 14-84 3/17/84 (a)



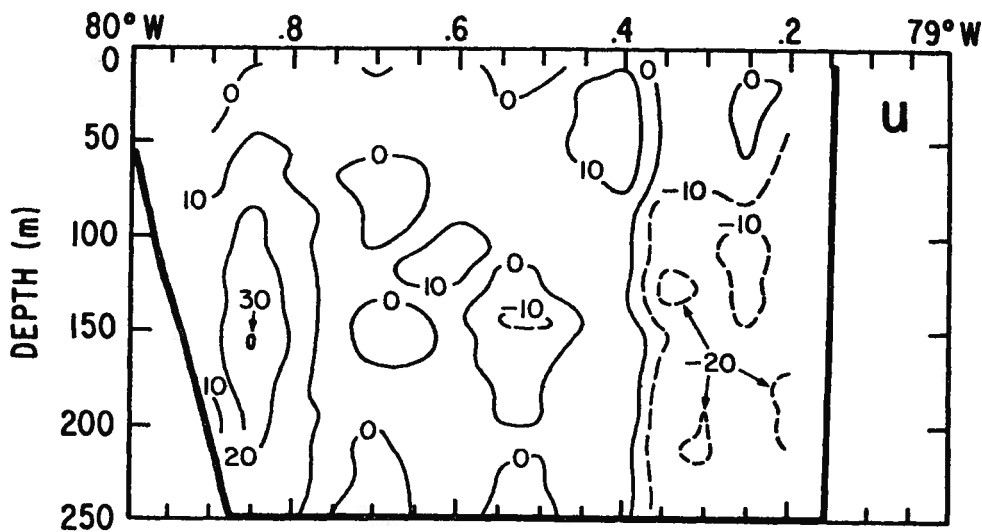
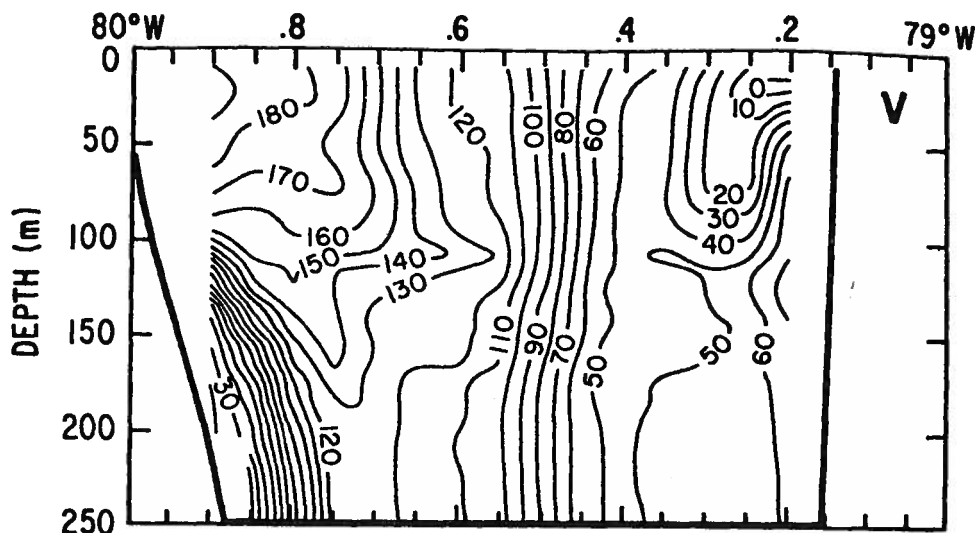
AMETEK STRAZA
RES-STACS 14-84 3/17/84 (b)



AMETEK STRAZA
RES-STACS 14-84 3/19/84



AMETEK STRAZA
RES - STACS 14-84 3/20/84



AMETEK STRAZA
RES-STACS 14-84 3/21/84

