

多摩川感潮汐域における塩分遡上及び 浮遊物質の輸送について

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1. はじめに

都市河川の多くは排水樋管、支川等を有しており、本川上流域からの浮遊物質の輸送と併せて多数の汚濁負荷源を有している。河口部では塩分の河道への侵入が存在しており、上流から輸送された粘土鉱物を含む浮遊物質は塩素イオンによる電気化学的な作用により凝集体を形成し、大きな沈降速度を有するようになり河床近くへの沈降が加速される。河床近くに沈降した凝集体の一部は堆積し、他の部分は密度の大きい下層塩水層に浮遊し、この塩水の流動に乗って上下流に浮遊移送される。

近年、都市河川河口域は余暇空間の一部としての高度利用が考えられており、このような河口域及びそれに連なる湾等での水質環境の保全、改良の為に、河口部での浮遊物質の挙動及び輸送の収支を明らかにする必要がある。感潮河口部での浮遊物質輸送量の定量評価を行う為には、凝集体の形成過程、堆積、再浮上、浮遊物質濃度の効果についての定量化が必要であるが未だ充分とは言えない。

又、我が国においては、現地観測の例は少なく、潮汐運動の下での複雑な様相を呈する塩分侵入現象、浮遊物質の輸送現象では不明点が多い。浮遊物質の内に含まれる有機物質の割合と、堆積物質中の有機物質の関連についての研究は皆無であると思われる。本研究では、河川から湾へ排出される汚濁負荷量及び河道内に堆積する物質の挙動を明らかにすることを目的として、多摩川河口域における潮汐周期の間の塩分、浮遊物質、流速分布の現地観測を行った。さらに浮遊物質中に含まれる有機物質の量及び、底泥の成分分析を行い、有機物質の挙動についても検討を加えた。又夏期、冬期では水面の高さによる潮汐プリズム、水温による微細粒子の粘着性、生活活動等の差異により浮遊物質濃度の挙動が異なる。この為に現地観測は夏期、冬期の代表的な時期に行った。

多摩川感潮域における流れの特性を把握することにより、汚濁物質の輸送量、堆積の状況を明らかにすることができ、水質環境の管理に対して基礎的な資料を提することができる。

本研究の調査、研究の組織は下記の如くである。

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2. 現地観測地点及び観測時期

現地観測の目的は、塩分遡上の実態の把握、浮遊物質輸送現象の把握、流速分布、乱れ成分の測定にあり、多摩川河口域を網羅するような多地点での測定が望ましい。しかし、本研究での観測では、流れを把握する事及び精度良いデータを数潮汐周期にわたって連続測定することを主目的とし、河口域内の代表地点での観測を行った。多摩川の感潮区間は調布堰（13.2Km地点）から下流域で、この区間での平均河床勾配は図-1に示すように2つの領域に大分される。河口から約7Kmの区間では河床勾配はほぼ平坦であり、7～13.2Kmの区間では約1/2000である。従って感潮区間内の約7Kmの地点までは幅広い水理条件に対して確実に塩水くさびが遡上していることが予測される。観測地点としては、この区間で断面形状の比較的矩形に近い4.6～5.2Km地点を選定した。浮遊物質濃度は冬期、夏期では潮汐プリズム、水温、生活活動等の差異により異なることが報告されているので、夏期を対象として

(1) 1984年8月2日午前 9時～8月4日午前10時

(2) 1985年8月2日午前10時～8月4日午前10時

の2回を行い、又冬期を対象として

(3) 1984年11月18日午前11時～11月18日午後16時

(4) 1985年 2月24日午前 4時～ 2月24日午後17時

の2回計4回の観測を行った。

3. 測定項目及び測定方法

3-1 測定項目

各観測での測定項目は以下の通りである。

1984年夏の観測

i) 水位変動, ii) 平均流速分布, iii) 浮遊物質濃度, iv) 塩分分布, v) 速度乱れ成分 (u' , v')

1985年夏の観測

i) 水位変動, ii) 平均流速分布, iii) 浮遊物質濃度, iv) 塩分分布, v) 水質 (DO, BOD₅)
vi) 採泥

上記項目を1984年の夏には5.2Kmの地点の断面内1測線上で測定を行い、1985年の夏には、5.2Km、4.6Kmの800m離れた2地点の各3測線で測定を行った。冬期は水質に着目して測定を行った。

1984年11月の観測

i) 水位変動 ii) 浮遊物質濃度

1985年 2月の観測

i) 水位変動, ii) 浮遊物質濃度, iii) 水質 (DO, BOD,)

又1985年2月の観測では、潜水によってヘドロの堆積状況を8mmフィルムに撮影した。

3-2 1984年夏期での測定方法

対象地点での水深は5~6.5mであり、流速を0.3~0.4m/secが予測されたので、測定期間中の安全確保、乱流計測の計測器の固定の為に河道内に作業台(写真-1)を設置し、観測ステーションとした。この作業台は大成建設東京湾作業所のご厚意により借用し、東京湾より台船に乗せて潮汐時に合せて、橋桁をくぐりながら5.2km地点まで運搬し、クレーン船で所定の位置に設置した。乱流計測の為にアームの溶接、計測器の固定はクレーン船で吊った状態で行った。この作業台は高さが8m、上部の作業スペースは4m×4mの大きさがあり、吊した様子は壮観であった。この作業スペースにデータレコーダー、ペンレコーダ、導電率計等の計測器を置き、発電機を電源として、4潮汐周期の間連続的に記録した。

図-2は作業台の模式図で、計測器の固定位置、測定位置を示したものである。

a) 流速成分の測定

流速成分としては流れ方向の流速成分 u 、鉛直方向の成分 w を2成分電磁流速計(E. M)を用いて測定した。 u 、 w は海向き、上向きを正とする。電磁流速計はファラデーの法則を利用した計測器であり、流れの方向に対する設置の仕方によって出力の正負が異なるので、流向が時間的、水深方向に変化する感潮域で使用する場合には設置と出力の正負に充分注意を払う必要がある。潮汐により水位が時間的に変化する流れ場では、鉛直断面内での測定の相対的な位置が時間と共に連続的に変化する所以、流速成分の断面内分布の連続測定は困難である。そこで本観測では、鉛直断面内の流速分布としては1時間間隔で主流を測定することとした。乱れ成分及び鉛直速度成分等の流速成分の構造の測定としては上層の淡水層、下層の塩水層を代表する固定点に2成分電磁流速計をそれぞれ設置した。水深が5~6.5mの間で変化するので、上、下層の代表地点として河床から1.2m及び4.2mの所を選んだ。密度、流速分布の測定結果より、これら2地点がそれぞれ上層淡水層、下層塩水層をおおむね代表していたことが確かめられた。流速変動成分を精度良く測定する為に振動しないように配慮し、1.5mのアームで作業台に固定した。出力はデータレコーダに連続的に記録した。又1時間間隔での主流速成分 u の鉛直分布は可搬式電磁流速計を用い30cm間隔で測定した。可搬式電磁流速計は逆向きの流れに対しては出力がゼロとなるので、正反の向きで2度鉛直方向にトラバースすることにより流向と流速を測定した。

b) 水位変動

作業台にメジャーを設置し、1時間間隔で読みとった。測定の精度は5cm単位で読み取った。

c) 塩分分布

塩分分布の測定は電導度より求めた。電導度の測定にはくし型の4電極のプロープを作成し、鉛直方向に30cmの間隔で24個設置し、導電率計により測定した。導電率計プロープ及び2成分電磁流

速計センサーは作業台に固定しており、作業台のヘドロ内への降下により実際は約20cm河床に近い地点である。なおプローブの形状は図-3に示したもので、電極には $\varnothing 1\text{mm}$ のステンレス線を用いた。

d) 浮遊物質濃度

固形物として浮遊している物質を対象として採水資料の分析よりSS濃度を測定した。採水方法は、空気抜き用のビニール管を水面上でクリップで挟み、所定の位置に採水ビンが達した後に空気抜き用のクリップを外して採水を行った。採水は1時間間隔で、河床より1.2m、4.2mの2点で1ℓ瓶2本ずつ採水した。又、代表的な時刻として、上潮、下げ潮時の中間の時刻には水面近くで20ℓの採水を行い、この資料により浮遊物質中の有機物質量を測定した。20ℓを一度に濾過することは濾紙の目詰りの進行により時間的に困難であるので7ℓずつに分けて分析を行った。濾紙としてガラス繊維のものを用いて7ℓずつ濾過して浮遊物質質量を測定し、その後このガラス繊維濾紙の燃えない最高温度450℃で燃焼し、減量の測定より有機物質量を測定した。重量測定の精度の為に最低7ℓの検水が必要である。浮遊物質の分析には90mm濾紙の使用できる濾過器を用いた。この濾過器は濾紙の撓みを防ぐ金網が敷いてあり、漏水を防ぐためのシリコンゴムのパッキンと4個の蝶ネジで固定出来るようになっている。濾過後の乾燥は揮発性物質の揮散を防ぐためと乾燥後室温に戻すまでの吸湿を防ぐために、真空乾燥器を用いて50℃で乾燥したものを恒量とした。

3-3 1985年冬期での測定方法

夏期との水質成分の比較を行う為に夏期と同一地点において水質のみの測定を行った。測定にはゴムボートを使用し、一潮汐を完全にカバーできるように13時間にわたって1時間間隔で採水を行い、深さ方向には各時刻の水面より1m間隔で河床まで採水を行った。

a) 浮遊物質濃度

1984年夏期に用いた採水の方法で、1m間隔で1ℓ瓶2本の採水を行い、浮遊物質濃度の鉛直分布を測定した。又下げ潮時に各深さで5ℓの採水を行い、焼熱減量の方法で有機物質量の鉛直分布を測定した。

b) 水質(DO, BOD₅)

DO, BOD₅の鉛直分布を測定する為に、1m間隔の所定の位置で採水したものを検水とした。BOD用検水は有機物含有量の多少により希釈を行うが、河口部では直接の排水は少なく有機物含有量は多くないと考えられたので、希釈は行わなかった。採水瓶は検水流入パイプが瓶底近くまで差し入れ、上部に空気抜きのビニール管が水面上に接続されているので、最初に瓶に入った検水は大気と接触するが、採水瓶の上部より大気が抜けるので最終的には大気と接触していない検水が採水されている。この検水をサイフォンを利用してDO瓶、ふらん瓶にオーバーフローするまで検水を満した。DO瓶、ふらん瓶の順で計4本に分注した。DO瓶中の検水は直ちに現地にてDO固定を行い、ふらんピンは直射日光による温度上昇と光合成反応の進行を防ぐ為に黒色ビニールで包み河川中に浸しておく、すみやかに実験室に運び20℃の恒温槽に静置した。採水後120時間後に固定を行い、BOD

を測定した。

3-4 1985年夏期の測定方法

河道の縦方向の2断面間での物質の収支を検討する為に5.2Km, 4.4Kmの800m離れた2地点で測定を行った。測定期間中の安全確保、計測器の固定の為に前年使用した作業台の設置が望ましいが、観測地点が上、下流断面内のそれぞれ3測線で行うので、観測位置にブイを設置し、船外機付ボートに計測器を乗せて各地点で計測を行った。測定の方法は前3回の方法と同じであるが、この時には河床の堆積物の採泥を行った。

a) 採泥及び分析の方法

潜水によって各測点での河床表面及びそれより50cm深い堆積層内のヘドロを200cc瓶にそれぞれ採泥を行った。この資料中の有機物質量の測定は、110℃で24時間乾燥した後600℃で4時間燃焼し減量の測定により有機物質量を測定した。

夏期の測定では高温となるので、水質分析用の検水は冷水の入ったクーラーの内に保存し、できるだけすみやかに実験室に運んで分析を行った。又計測器も室内実験用に開発されたものが多く日中の高温対策が必要であった。屋外観測用に開発された計器類も液晶部分が日射に弱く、クーラーボックスを使用した。

4. 流況の分類

1984年夏期の観測での、測定地点での水位及び代表時刻での密度分布、流速分布を示したのが図-4である。又図-5は1985年夏期の観測での6測点での水位変化を示したものである。潮汐は1984年夏期の方が規則的であり、水深も1m程深い、相似な潮汐であった。又図-5より見られるように800mの区間では水位の位相のずれは無く、同時に変化している。図-4の密度分布より明らかなように、下層塩水はくさびを形成して侵入していることがわかる。又分布形より緩混合型に属している。河口部流況の分類図としてはHansen・Rattray¹⁾のものがある。彼らの分類法を観測地点に適用すると2型で連続成層の領域に属する。2型の流況は“残差流の向きが水深方向に変化し、陸向きの塩分の輸送は拡散と残差流による”²⁾と定義されている。須賀²⁾は日本の河川下流部でのデータを基にして水面と底面での塩素イオン濃度 C_s 、 C_b との比によって

$$\begin{array}{ll} C_s / C_b < 0.1 & \text{弱混合} \\ 0.1 < C_s / C_b < 0.5 & \text{緩混合} \\ C_s / C_b > 0.5 & \text{強混合} \end{array} \quad (1)$$

と定義し、大潮時潮位変動と感潮区間長とによって整理した。(図-6) 図中黒丸が今回対象とした多

摩川でのデータであり、緩混合の領域に属している。又 C_s / C_b は約 0.2 である。両年とも観測時の潮位差は約 1 ~ 1.5 m で大潮～中潮の期間であった。又 Harleman・Abraham³⁾ はエスチュアリー数 E によって成層の度合を決定している。

$$E = \frac{P_T F_0^2}{Q_f T} \quad (2)$$

ここに P_T はタイダルプリズムで上潮時に河道内に侵入する総流量に相当しており、 Q_f は河川上流部から海に向かって流れる淡水流量、 T は潮汐周期、 F_0 は河口部での最大フルード数である。1984年8月3日3時から8月4日までの2潮汐周期平均のタイダルプリズム P_T は $15,540 m^3$ であり、 Q_f は $234 m^3/hr$ 、 T は 12 hr、 F は 0.04 であったのでエスチュアリー数 E は 0.0088 であった。Harleman・Abraham の論文より類推するとこの E の値ではシャープな界面を有する成層流を示し、観測結果とは一致しなかった。図-7 は 1984年夏期の観測期間中の2潮汐周期の深さごとの単位幅流量の潮汐周期平均を示したものである。河床から 3.7 m の間では陸向きの残差を示し、それより上層では海向きの残差を示し、重力循環流の存在を示している。又この差は海向きの量となり、河川淡水流量と大略一致しており、流速分布の測定精度が良好なことを示している。境界は密度分布より定義される中間層のほぼ中間的な位置に対応している。以上のことより、多摩川河口部では塩水くさびが潮汐周期のいずれの位相においても河道内に存在し、重力循環流の向きが水深方向に変化する緩混合型と分類することができる。図-8、9 は 1985年夏期での各測点での重力循環流を示したものである。潮汐周期としては水位変動より決定した。又図-10、11 は 5.2 Km、4.4 Km 地点の断面内の流速、密度分布を示したものである。5.2 Km の地点は断面がほぼ矩形であり、密度、流速分布共に3測線ではほぼ相似な形をしている。他方 4.4 Km 地点では断面はほぼ台形をしており左岸側に向かって浅くなっている。従って流速分布、密度分布は測線によってずいぶん異っている。下げ潮時に水深の浅い左岸寄りでは塩水はほぼ完全に後退し、全水深にわたって流向は海向きで密度はほぼ一様となる(図-11-3)。又、上げ潮時には、下げ潮時に海の水面近くに拡った希釈塩水がまず侵入し、その後に密度の大きい塩水が希釈塩水を押し上げて潜り込むようにして河道内に侵入する様子をよく現している。これらの流速分布より各深さごとの潮汐周期平均の流速分布(重力循環流)図-8、9においても、水深の浅い測線では海向きの残差が大きく底面近くに僅かに陸向きの残差流が存在していることが見られる。このように水深の浅い領域では遡上した塩水はほぼそのまま後退することが知られる。又等密度線はほぼ水平で、下げ潮時に浅瀬に高濃度塩水が取り残される現象も見られなかった。

5. 平均流速及び流れの特徴について

密度分布より水面と底面での密度差の 0.9 だけ水面の密度より大きい密度の位置を界面と定義し、この界面より水面に近い層を上層、底面に近い層を下層と分けて呼ぶこととする。

$$\rho_h = (\rho_b - \rho_s) \times 0.9 + \rho_s$$

ここに ρ_h は界面での密度、 ρ_s 、 ρ_b は河床、水面での密度である。図-12は上層、下層での平均流速の時間変化を示したものである。図中実線は上層を、点線は下層での流速を示す。又海向きの流速を正、陸向きを負とする。この図は1984年夏期の測定結果であるので、図-4の水位変化と合せて見ると次のことが知られる。

- i) 上層の流れは退潮時の中間時刻に最大流速が出現している。
- ii) 下層流速の大きさは概ね塩水の遡上速度を表わしており、塩水は上層流れが最大となる時刻より遡上を開始し、水位の最も低い位相より約1時間遅れた時刻で最も活発に遡上する。
- iii) 上層流れは水位変化より $1/4$ 周期位相が遅れており、下層塩水の運動は $1/2$ 周期位相が遅れている。

図-13、14は1985年夏期の結果である。5.2 Km地点の結果は上記前年の知見と同様であるが、断面が矩形でない4.4 Km地点での結果は測線によって複雑に様相を異にしている。上層流速は上、下流の断面の6測点全てほぼ同様な挙動を示しており、各測点での海向き、陸向きの流速のピークの位相のずれは僅かである。他方下層流速は最深部の測点では5.2 Km地点と同様な様相を呈しているが、水深が浅く陸向きの残差流の小さい測点では全水深にわたって一様に運動することを図-8、9で示したがこのことを良く示していることが知られる。測点5、6では上、下層の流れはピークのが一致し、位相の遅れは無い。

5-1 海向き、陸向き流量

図-15は海向き、陸向きの流量を流速分布より算定したものである(1984年夏期)。海向きの流量は下げ潮時の中間時刻にピークが出現し、陸向きの流量のピークは上げ潮時の中間時刻に出現している。図-16、17は1985年夏期の結果であるが、全ての測点で定性的には上記結果と一致している。又これらの結果を用いて5.2、4.4 Km地点での海向きの潮汐残差流量(河川流量)を計算すると $9.11 \text{ m}^3/\text{sec}$ 、 $10.37 \text{ m}^3/\text{sec}$ であり、流速分布の測定精度はほぼ良好であると思われる。

このように水位の低下開始と共に海向きの流量は増加し始め、最大流量の時刻より陸向きの流量(塩水)の増加が始まり、水位最低時刻にはすでに陸向きの流量は大きくなるが見られる。又深さごとの流向、流速はさらに複雑であり、このような流れによる浮遊物質の輸送量を評価する場合には注意が必要である。

6. 乱れ速度成分及び鉛直拡散係数

図-18、19は固定点での連続測定データより1時間間隔の変動の大きさを示したものである。図-18は主流速成分 u の2乗平均を、図-19は鉛直速度成分 w の変動の2乗平均を示したものであり、実

線は上層，点線は下層での値である。 $\sqrt{u'^2}$ ， $\sqrt{w'^2}$ 共にほぼ同時刻で大きな値を示している。この位相は図-15の海向きの流量の最大となる下げ潮時に乱れ速度が大となる他の観測者の結果とも一致している。又陸向きの流量が大きな位相（図-15）及び下層流速の大きな位相（図-12）では $\sqrt{u'^2}$ ， $\sqrt{w'^2}$ 共にほぼ同時刻で大きな値を示している。鉛直方向の平均流速の大きさは+5～-3 cm/secの大きさであり，予想以上に大きく，又変動流速も同等なオーダーであり，鉛直方向の物質の輸送が活発に生じていることを示唆している。又海向きの流量の大きな位相で上層流の乱れ成分が大きくなることより，この位相では上層に浮遊している物質の海に向っての輸送量は沈降量に比べて卓越していると思われる。他方陸向き流量の大きな位相（塩水の侵入が活発）では，上下層の変動成分は共に小さく，沈降が促進され，堆積が進行すると考えられる。

次に乱流計測のデータより鉛直方向の拡散係数を見積り，浮遊物質の鉛直方向の輸送について検討を行った。なお，拡散係数は，G.I. Taylor の定理を用いて次のように算定した。

$$K_z = \overline{w_L'^2} \int_0^{\infty} R_{Lw}(\tau) d\tau \quad (4)$$

ここに， $\overline{w_L'^2}$ はラグランジュ変動速度の2乗平均であり， $R_{Lw}(\tau)$ はZ方向（鉛直方向）のラグランジュ自己相関係数である。乱流計測では固定点での観測記録であり，オイラー系での諸量であるので，相互の系間の変換が必要である。自己相関分布の相似性を仮定すると，オイラー速度により次式のように書き直すことができる。

$$K_z = \overline{w_E'^2} \beta \theta_{Ew} \quad (5)$$

$\overline{w_E'^2}$ はオイラー変動速度の自乗平均であり， θ_{Ew} はオイラー系の自己相関係数の積分時間スケールで，

$$\theta_{Ew} = \int_0^{\infty} R_E(\tau) d\tau \quad (6)$$

である。 β は0.4～6の間にあるとされているが，多摩川上流域での横方向の拡散実験，乱流計測の結果では，0.6～1.0の値が得られたので，本論文では β として1.0を採用し，鉛直方向の拡散係数 K_z を算定した。

48時間連続的に記録したデータを1/100秒のサンプリング間隔でAD変換したデータを，11分ごとのブロックに分けて処理を行った。計測器の時定数を考慮して，1/50秒間隔で33000 ($2^{15} = 32768$)個のデータをFFT法により処理し，パワースペクトル及び自己相関係数を求めた。図-20は上層界面位置に相当する深さでの下げ潮時（A；1984年8月2日23時，C；8月3日14時）及び上げ潮時（B；8月3日6時）の鉛直方向流速のパワースペクトルである。各位相でレベルは異なるが，いずれのケースも低周波領域では-5/3乗則，高周波領域では-13/3乗則であり，他の研究者の結果とほぼ一致している。図-21は，図-20と同時刻の自己相関関数を示したものである。図-22は式(5)より求めた鉛直方向の拡散係数を表わしたものである。実線は上層，点線は下層での拡散係数である。図中で大

きな拡散係数が算定される位相は図-4での上げ潮、下げ潮時のほぼ中間の時刻に相当している。これらの位相においては鉛直拡散による底質の上層への輸送により、浮遊物質の高濃度が出現することが予測されると共に、鉛直塩分分布が一様化して成層の度合が低下することが考えられる。これらの項目については後で検討を行う。

7. 密度分布及び中間層の厚さ

前述したように多摩川河口域は緩混合型であり、塩水は下げ潮時の終期においても河道内に存在していることが図-4、図-10、11より知られる。又これらの図の密度分布の時間的な変化は、成層の度合が潮汐周期の各位相で異なることを示している。図-23、24、25は密度分布より定めた中間層の厚さを上層水深で無次元化し示したものである。図-26に示すように、混合層の厚さ l は、水面と底面との密度差の0.1、0.9だけ水面の密度より大きな密度の存在する水深位置の距離として定義され、 l/h_1 の値が大きいか成層の度合の低いことを示している。水位の下降する位相では上層での海向きの流速が大きく、水面近くの間層をフラッシュすると共に上流から淡水が流下してくるので上層の密度が小さくなり、一時的に界面が形成され、成層度が高くなる。この位相では図-22で示されているように鉛直拡散係数の比較的小さく、鉛直混合が抑制されて成層度が高くなることが知られる。このような比較的成層度の高い状態が水位上昇中期まで持続する。水位上昇に伴って海部の水面に広がっていた希釈塩水が下層塩水を覆うようにして河道内に侵入してくるので水面の塩分が上昇し、中間層の厚さは増加すると共に成層度は低下する。又この位相では乱れも大きく、鉛直拡散が活発に生じていることが知られる。但し、4.4 Km地点の水深の浅いNo.6測点では全体的に密度分布は一樣の傾向が有り、他の測点とは挙動を異にしている。全体的に言えることであるが、中間層の厚さは潮汐周期平均では上層厚さの約80%に達しており、多摩川河口部が緩混合の状態であることを良く示している。今回の観測ではEuler的な方法によっているが、中間層の厚さは上述したような特性を有しながら場所的にも時間的にも複雑な様相を呈することが図-24、25から容易に知ることができる。

8. 浮遊物質濃度

図-27は河床から1.2 m, 4.2 mの位置での浮遊物質の重量濃度 (ppm)の時間的な変化を示したものである(1984年夏期)。実線が上層での濃度で、点線が下層での濃度である。全体的には下部の方が濃度が高く、時として高濃度が出現している。図-27より次の4つの特徴を見出すことができる。

- i) 8月2日14時に下部の濃度が上昇し、この高濃度は5時間後の19時に再び出現し、さらに6時間後の8月3日1時に再度出現している。同様な現象が8月3日19時から8月4日の7時の間にも生じており、いずれも4~6時間の周期を有し、潮汐の半周期に近い値である。このことは同一の高濃度の流塊が潮汐によって上、下流に輸送されていることを示唆している(A_i, B_i, i=1~3)。このような周期的な高濃度の出現は、乱流強さ、塩水の遡上と結びつけて説明することができる。
- ii) 水位上昇期(塩水侵入期)を起点とする高濃度流塊Bの方が、水位下降末期を起点とするAよりも濃度が高い。河床のヘドロの再浮上による高濃度流塊の運動については次のように考えることができる。上げ潮時に再浮上したヘドロは下層に浮遊するが、水位下降末期では上層の $\sqrt{u'^2}$, $\sqrt{w'^2}$ は大きいので上層にまで混入しながら海に向かって輸送される。上水上昇期に再びこの流塊が遡上するので上層での高濃度が出現する(C₁, C₂)。又下層でのサイクリックに高濃度が出現する現象については次のように予測することができる。すなわち、A₁, B₁は塩水くさびの遡上開始時の位相に出現する強い乱れによって底質が再浮上して生じたと考えられる。従って底質の再浮上は塩水の河道への侵入時の乱れによって生じていると考えられる。又図-28, 29は1985年夏期の、5.2 Km, 4.4 Km地点での上層, 下層平均の浮遊物質の時間変化を示したものである。全体的には前述した特性を示しているが、水深の浅い測点では、ヘドロの堆積も多く、採水時の底質の攪乱の為に他の測点に比べて全体的に浮遊物質濃度の高い傾向が見られる。なお図-30は1985年夏期の5.2 Km地点(測点No.1)での浮遊物質濃度分布の1周期間の一例を示したものである。又図-31は1985年冬期での鉛直分布であり、冬期には全水深、全位相について夏期の約半分であり、水が澄んできれいなことを示している。

9. 浮遊物質の輸送量

図-32, 33, 34は、流速分布より各時刻の海向き, 陸向きの単位幅当りの流量を計算し、この流量による浮遊物質の輸送量を計算して図示したものである。実線は海向きの輸送量を示し、点線は陸向きの輸送を示す。又、図-32は1984年夏期のものであり、図-33, 34は1985年夏期での観測結果である。上層で海向きに輸送されているときにも下層では陸向きの浮遊物質の輸送が生じていることを示しているが、周期平均で見ると浮遊物質はこれらの地点を行ったり来たり遊泳していると判断しうる。単

位幅当りの2周期の海向き、陸向きの総輸送量は、1984年夏期の測定結果ではそれぞれ419.7、444.9 Kgでありこの差の分が陸向きに輸送されることになる。浮遊物質輸送量の残差は1985年夏期においても $\#1 \sim \#4$ の測点では前述のオーダーと同等であった。 $\#5$ 、 $\#6$ の測点では残差が海向きとなった。しかしいずれの場合も、この値は総輸送量に比べると微少であり、有意なものでは無い。このことは多摩川河口域での極端な河床上昇が見られないことよりも妥当な結果である。

10. BOD₅ , 有機物質について

河川水質の指標であるBOD₅を1985年の冬期、夏期に測定し、季節的な特性について検討を行った。図-35は冬期での代表的位相でのBOD₅の鉛直分布を示したのである。これは日中の位相に相当しており、DO、BOD共に下層ではほぼ同様であるが、水面近くのDOが増加するとBODも平行して増加する様子が見られる。このことは日射による光合成によりDOが水面近くで増加する時に、これと平行して光エネルギーによる有機物質の増加が生じ、微生物群への取込み、生物分解によるDOの消費が進行し、この両者がバランスしていることを示している。図-36、37は夏期での5.2、4.4 Km地点の $\#1$ 、 $\#4$ の地点でのBOD₅の分布を示したものである。水面近くでは多少大きいが定性的には冬期と同様なことが言える。さらに夜間のデータによると、夜間には水面のDOは減少するがそれよりもBODの減少の方が大きく、日中のバランスが崩れることが知られた。このように河床ではDOの変化は無くほぼ一定であり、水面下1~2 mの界面の深さまで日射の影響を受けることがわかる。冬期と夏期の比較では、夏期の方が全水深、全位相にわたって大きく、約2倍の濃度である。夏期には生活活動、生物活動が活発であること、農業用水の排水の為に大きくなるものと思われる日射量等の季節変化を反映している。図-38は、冬期での浮遊物質中の有機物質量の沿直分布を示したものである。冬期にはBOD₅も深さ方向に同様であったと同様に有機物質も深さ方向にはほぼ同様である。又浮遊物質量の約半分が有機物質であった。

表-1は夏期、冬期の水面での浮遊物質及びその内に含まれる有機物質を示したものである。冬期、夏期及び下げ潮、上げ潮の位相によらず、浮遊物質中約50%が有機物質であった。

表-2は潜水によって採取した底泥の粒径及び沈降速度を示したものである。河床表面はヘドロ状の堆積物であり、それより約50 cm地中では粒径は1オーダー大きく細砂であった。観測地点ではヘドロの堆積は多くなく、浮遊物質輸送量の陸向きの残差の余り大きくなかった事を裏づけている。

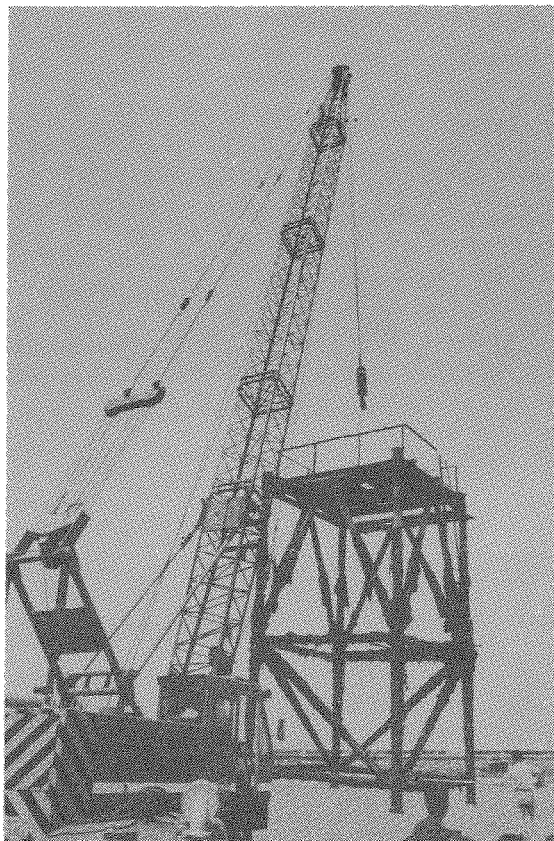
表-3は底泥中の有機物質量の割合を示したものである。河床底面では5~10%の有機物成分が含まれているが、50 cm下の細砂中ではせいぜい1~2%程度しか含まれていない。浮遊物質中の有機物質が約50%含まれていることを考えると、堆積、再浮上によっても物質の交換が行われていることを示唆している。又、底泥の深さ方向に有機物質量の濃度が分布を持つことは、長期間の水質を考える上では、底泥中での物質の移動を考える必要のあることも示唆している。

11. ま と め

多摩川河口部での現地観測により、緩混合状態の流況の概要、流速 2 成分の潮汐周期内での挙動、BOD₅、DO 等の水質、浮遊物質の輸送と塩分遡上、乱れ成分等の相関について明らかにすることができた。塩分遡上現象と浮遊物質の輸送、堆積物の再浮上をリンクした現象の把握が可能となり、定量化への基礎的な知見が得られた。塩分分布形より定義した中間層の厚さを成層度の指標として、各位相での成層度と塩分遡上現象の相関を明らかにした。又底泥の巻き上げが水位下降末期から水位上昇初期に大きくなる原因として、この位相で大きくなる上層の乱れ成分 $\sqrt{w'^2}$ 及び塩分遡上が大きな役割をしていることが明らかになった。水質指標の BOD₅ は上層の方が下層塩水よりいくぶん大きく、又有機物質量は浮遊物質中の約 50% を占めている。季節変化としては、冬期には、浮遊物質量、BOD₅、有機物質量等は、夏期の約半分であり、水質的には優れていることが知られた。浮遊物質中に半分近く含まれる有機物質の存在、底泥中の有機物質の割合の深さ方向の分布の存在は、長期の水質を考える上においては、泥質と流水との間の物質の交換及び底泥中での物質の移動を考える必要のあることを示唆している。

謝 辞

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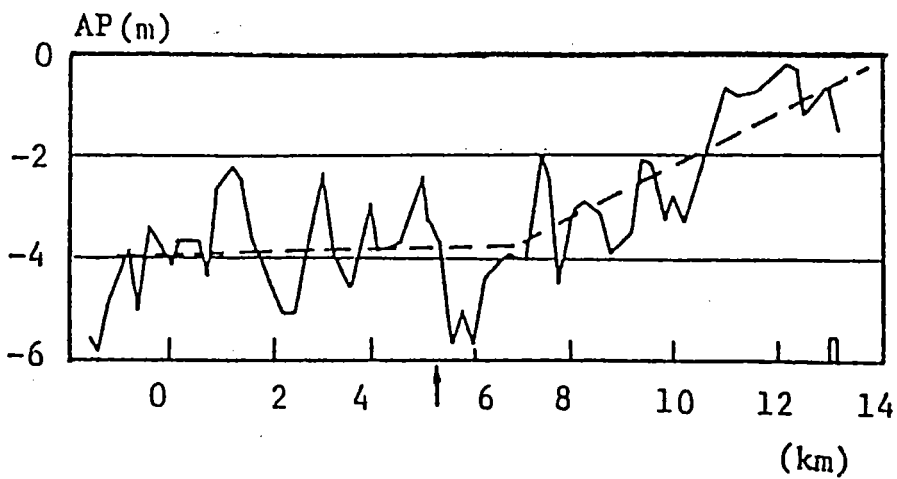


図-1 河床高の縦断図

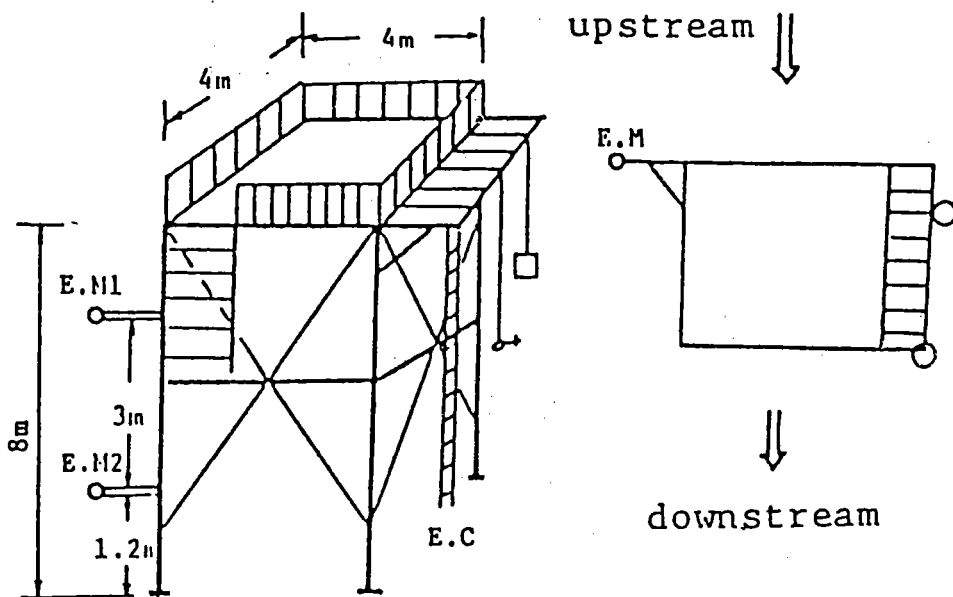


図-2 作業台及び測定設置位置

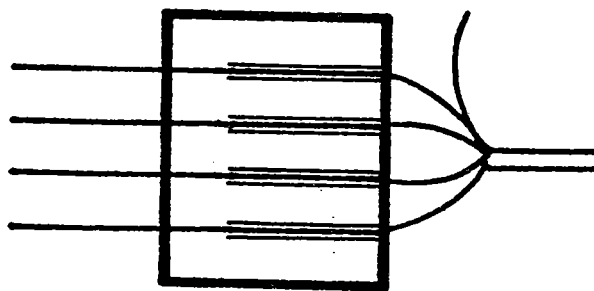


図-3 導電率計くし型プローブ

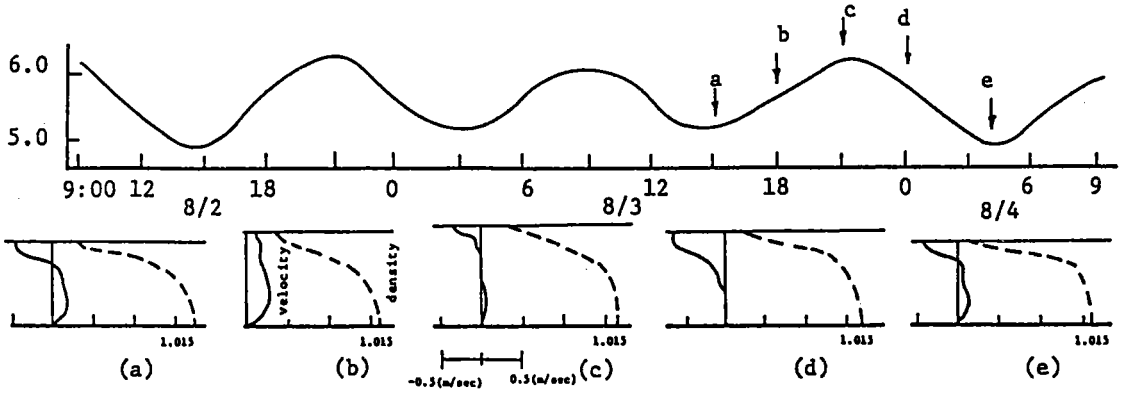


图-4 水位及び密度 流速分布(1984年夏期)

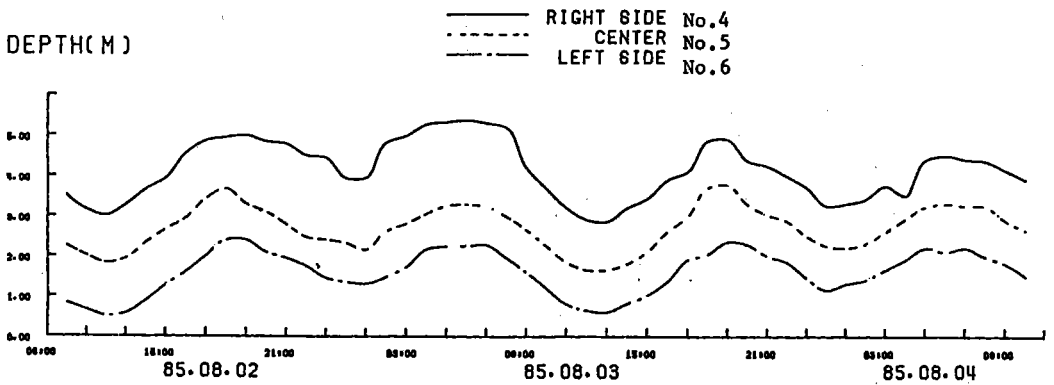
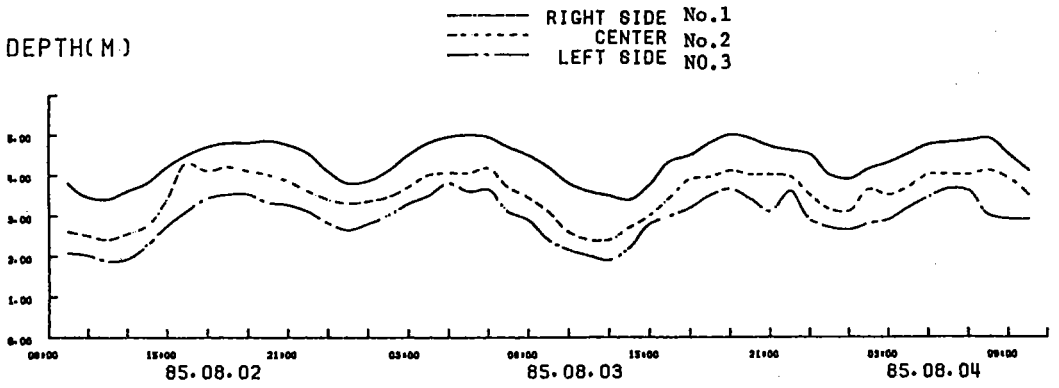


图-5 水位变化(1985年夏期)

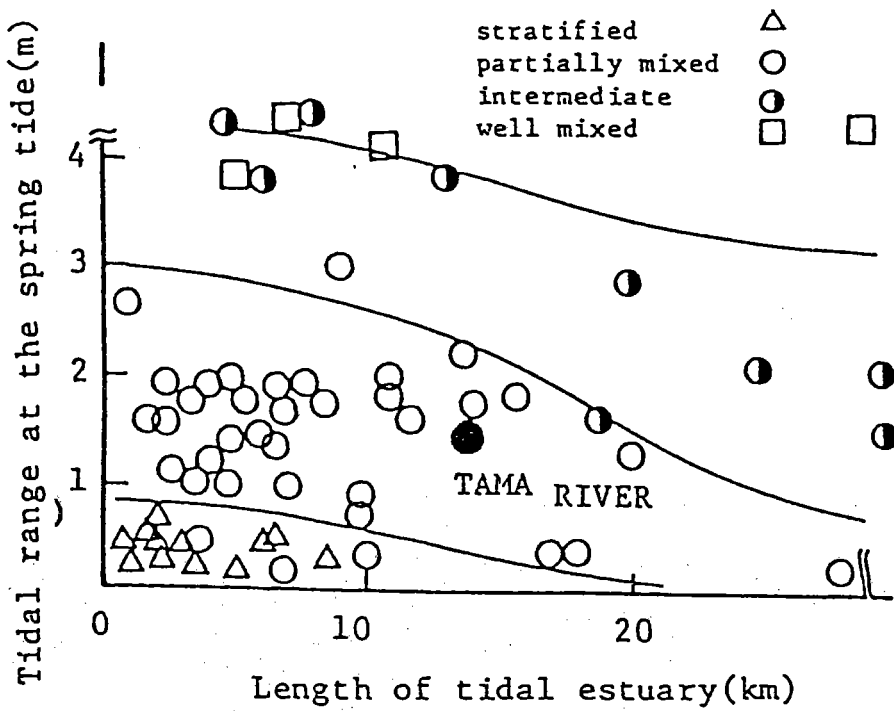


图-6 流況分類図(須賀)

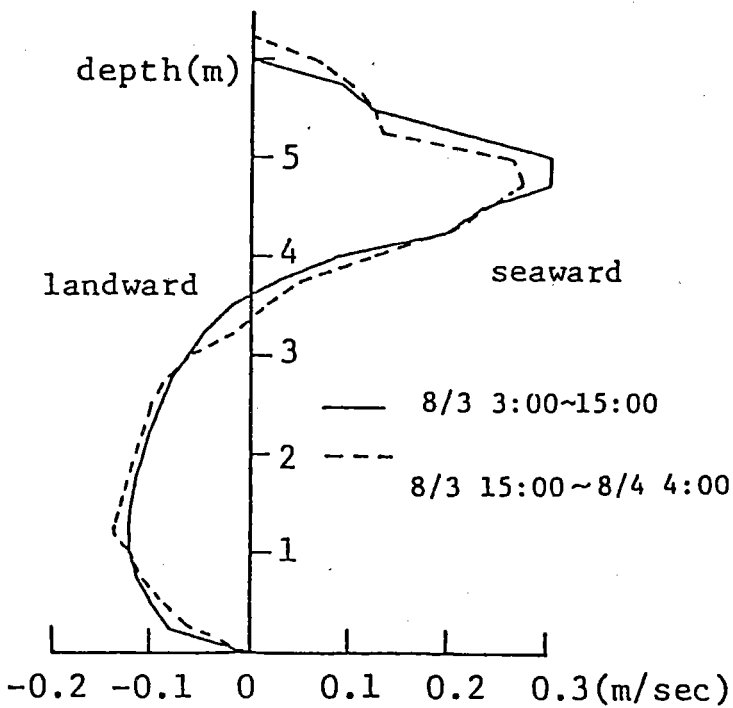


图-7 重力循環流(1984年夏期)

-----	8月2日18時	8月3日6時
.....	8月3日6時	8月3日19時
————	8月3日19時	8月4日6時

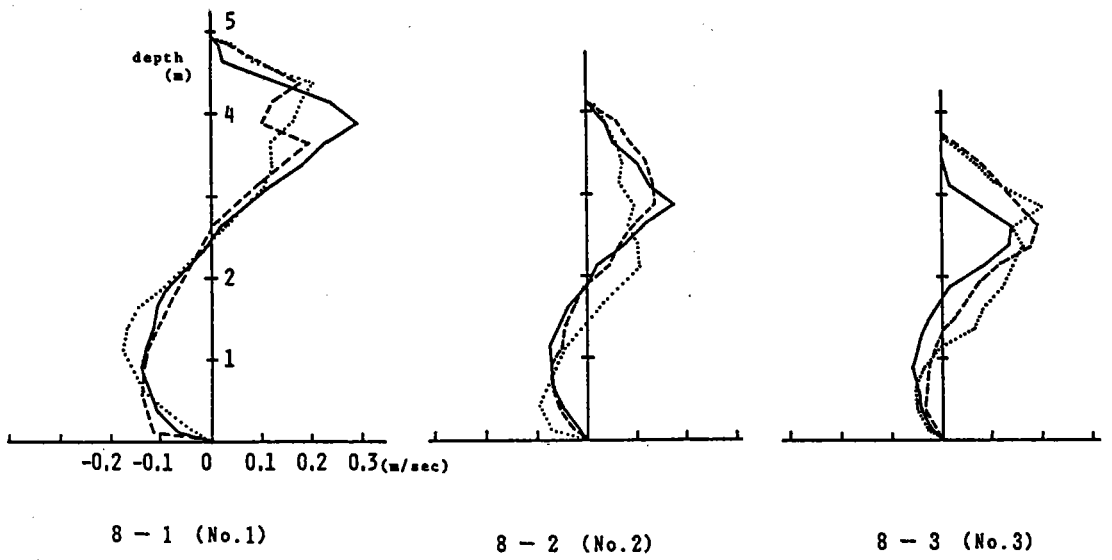


图-8 重力循環流 (1985年夏期、5.2Km)

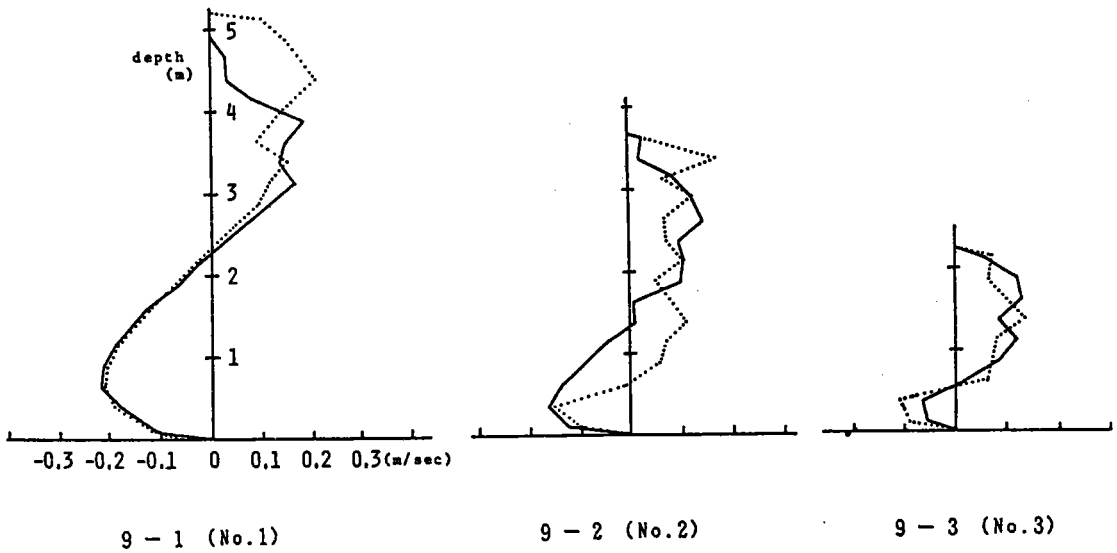
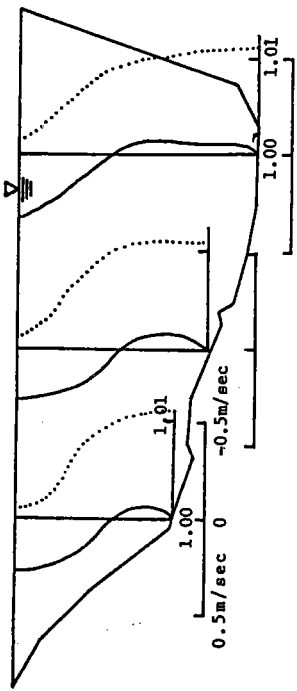
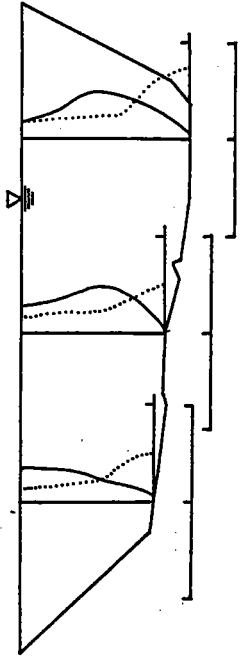


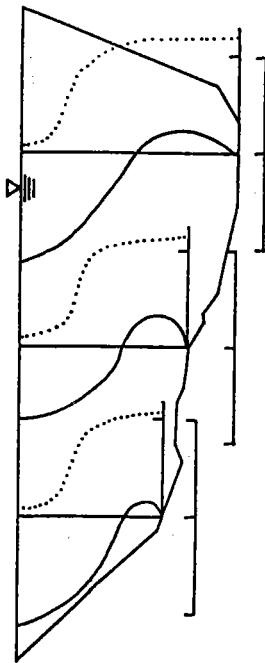
图-9 重力循環流 (1985年夏期、4.4Km)



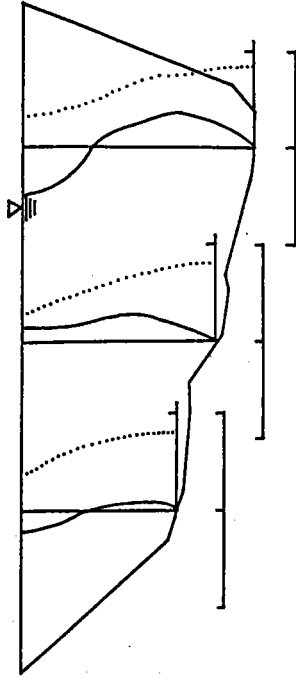
10-1 (8月3日6時)



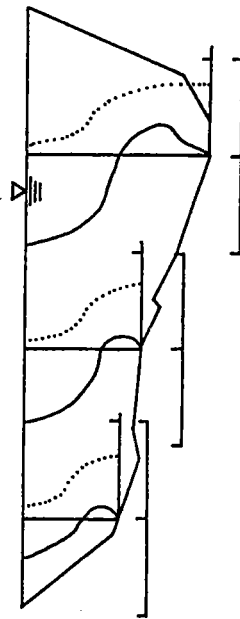
10-4 (8月3日15時)



10-2 (8月3日9時)

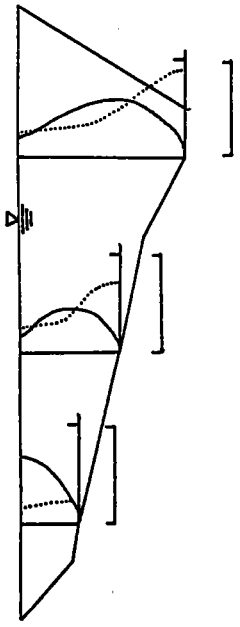
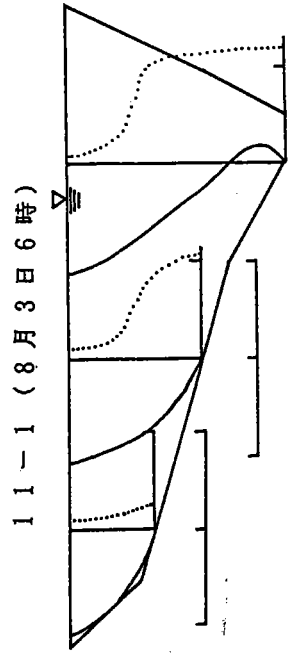
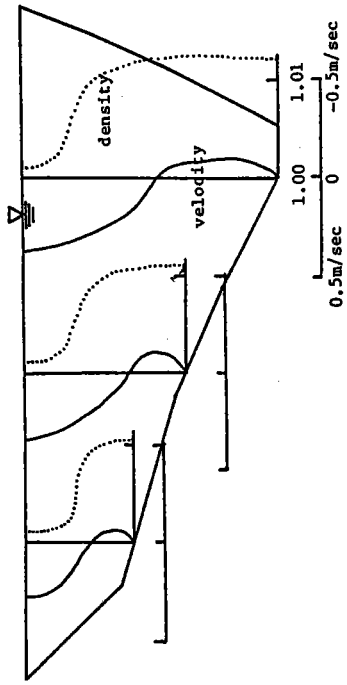


10-5 (8月3日19時)

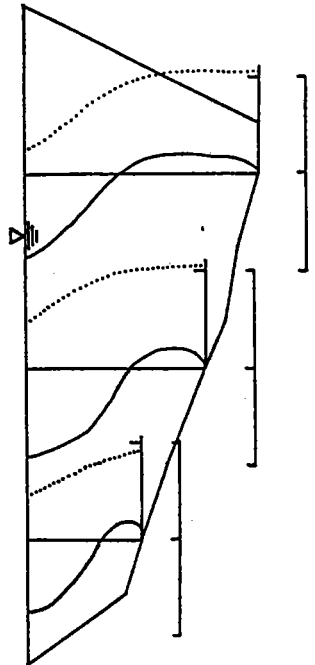


10-3 (8月3日12時)

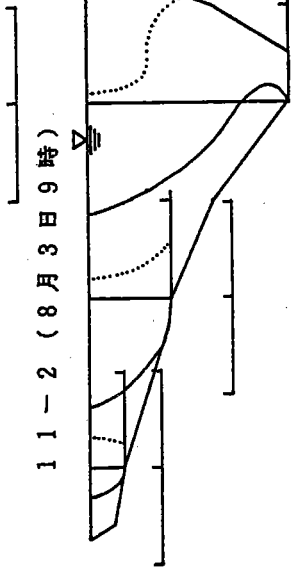
図-10 断面内密度 流速分布(1985年夏期、5.2km)



11-4 (8月3日15時)



11-5 (8月3日19時)



11-3 (8月3日12時)

图-11 断面内密度 流速分布(1985年夏期, 4.4km)

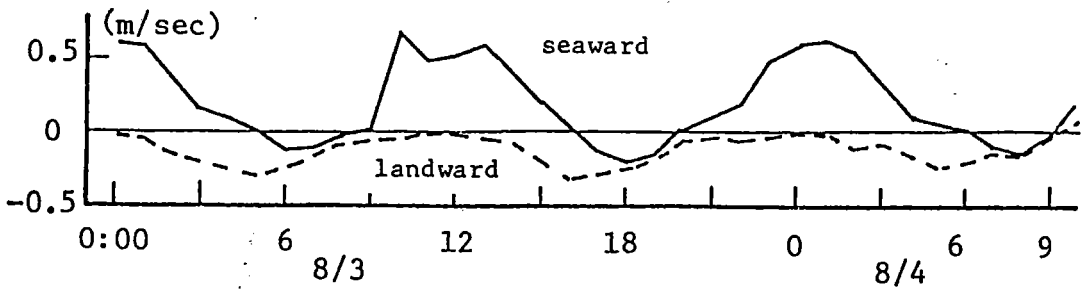
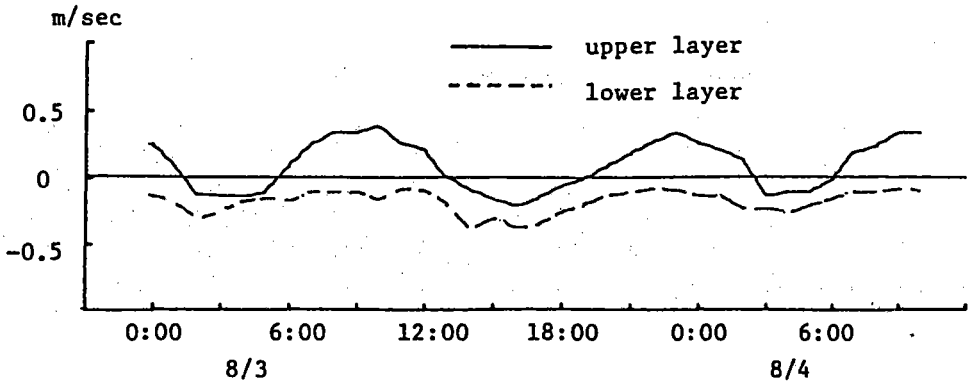
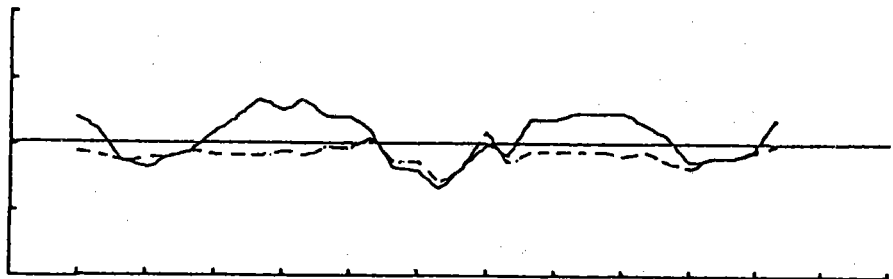


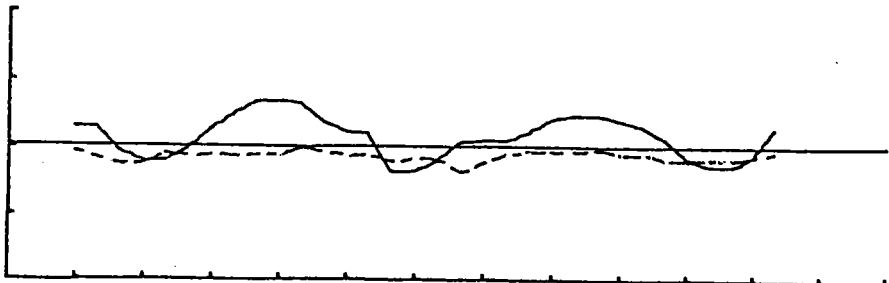
図-12 上、下層の平均流速(1984年夏期)



13-1 (No.1)



13-2 (No.2)



13-3 (No.3)

図-13 上、下層の平均流速(1985年夏期、5.2Km)

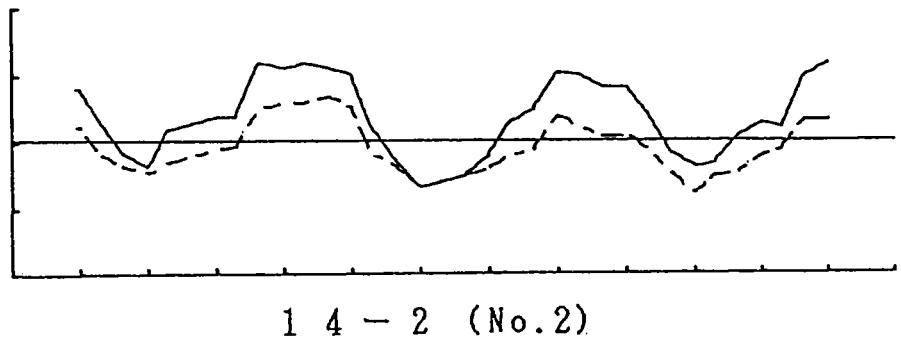
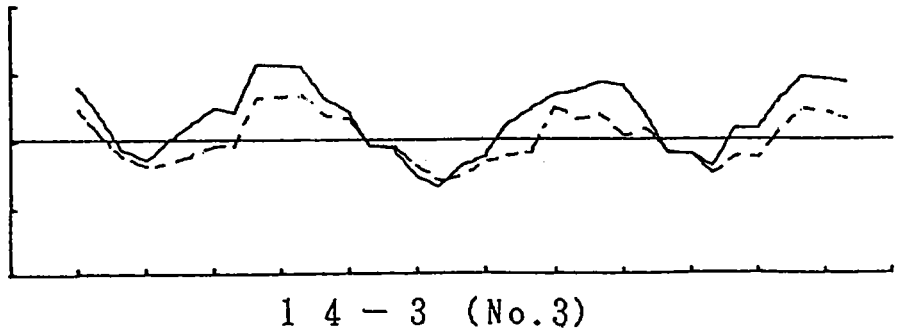
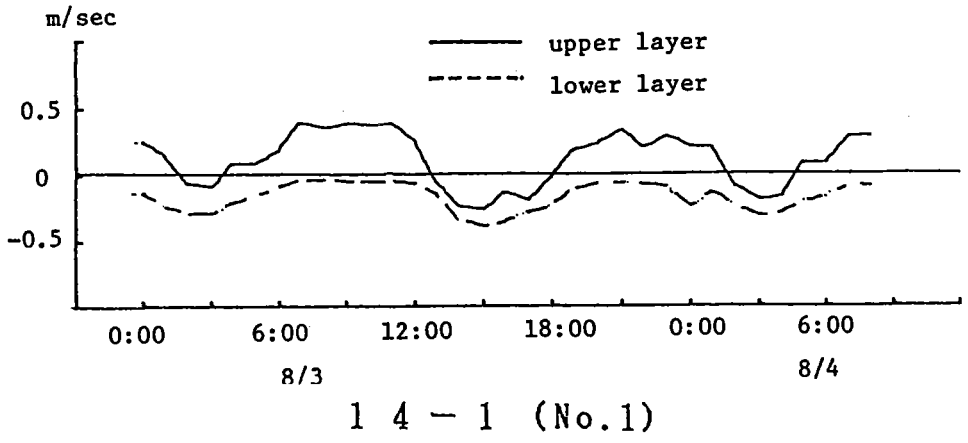


図-14 上、下層の平均流速(1985年夏期、4.4Km)

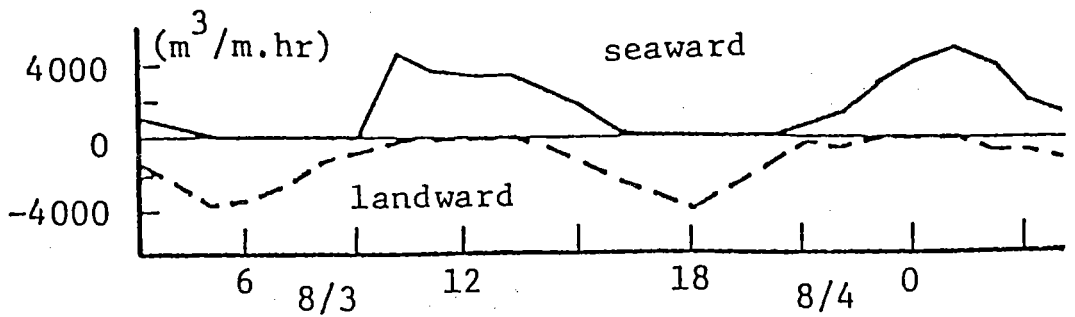


図-15 海向き、陸向き流量(1984年夏期)

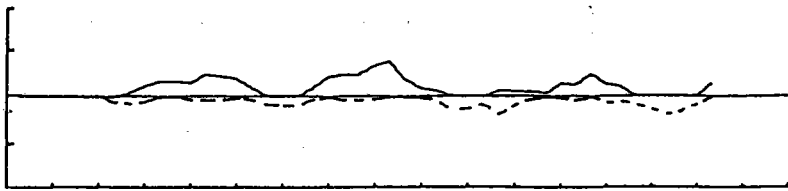
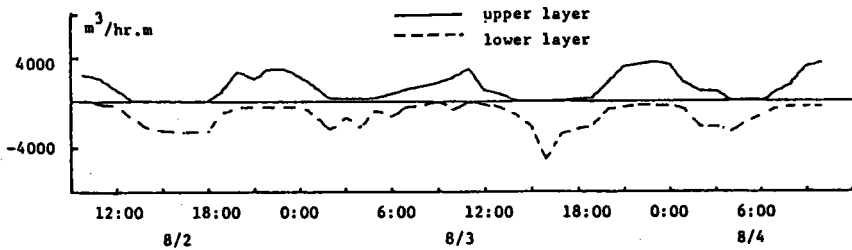


図-16 海向き、陸向き流量(1985年夏期、5.2Km)

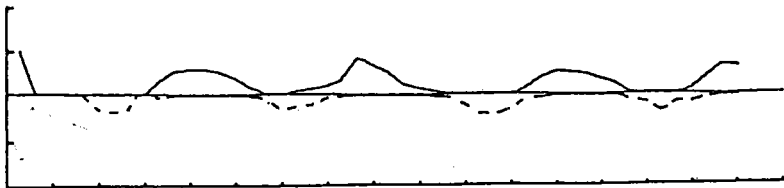
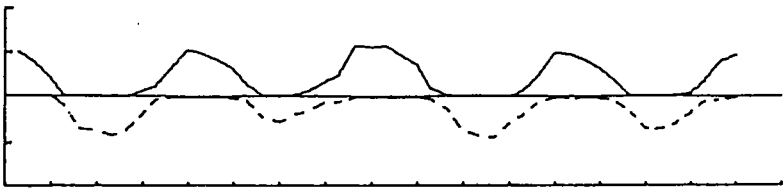
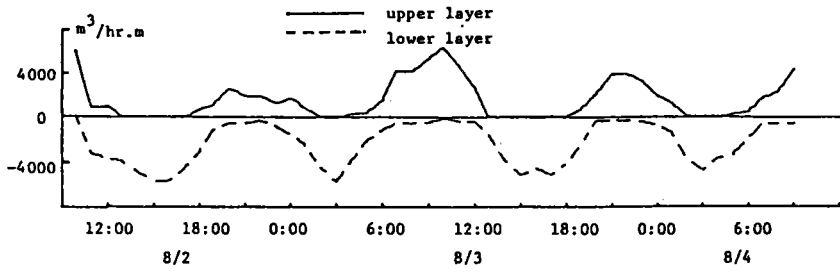


図-17 海向き、陸向き流量(1985年夏期、4.4Km)

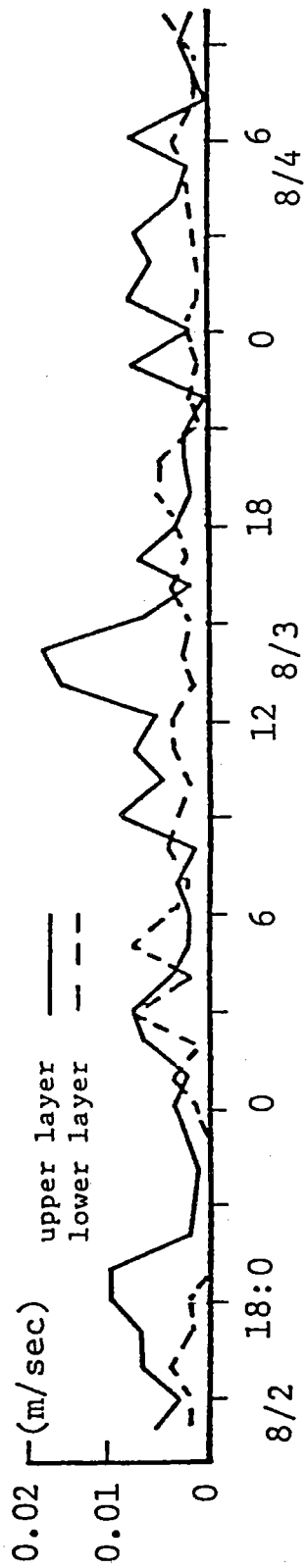


図-18 主流速度成分の変動速度(1984年夏期)

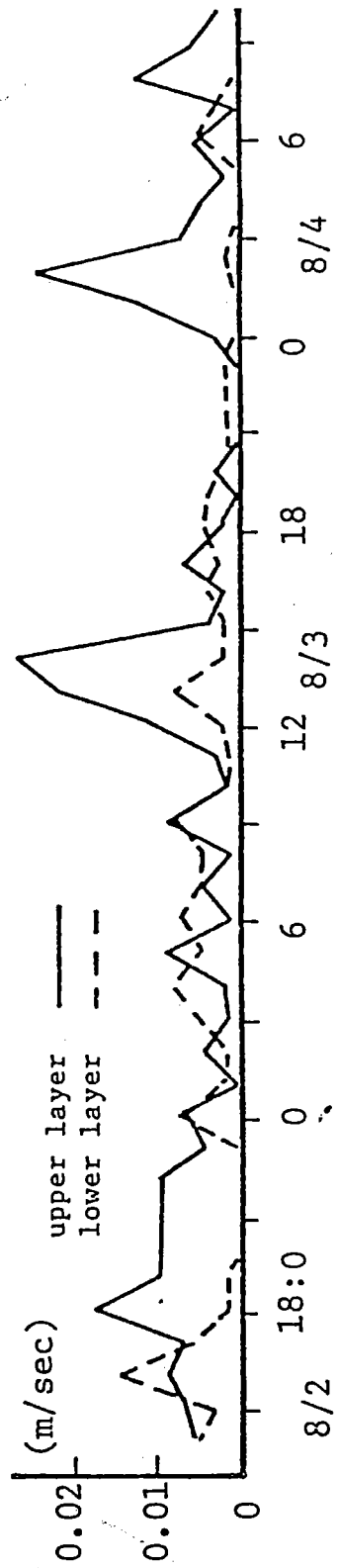
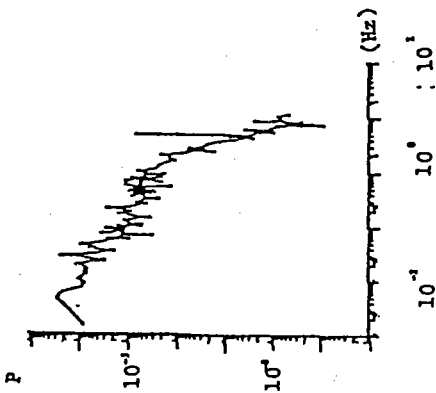
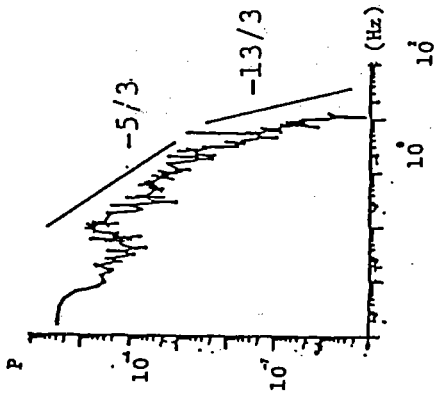


図-19 鉛直速度成分の変動速度(1984年夏期)

8/2 23:00
A : 下げ潮時



8/3 6:00
B : 上げ潮時



8/3 14:00
C : 下げ潮時

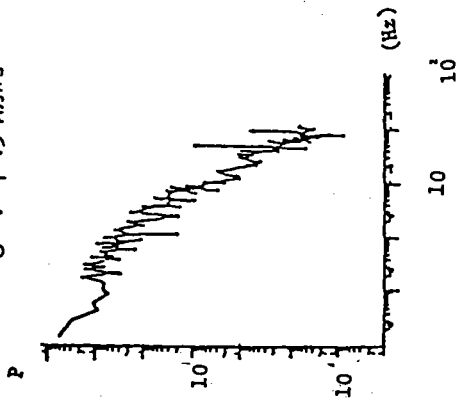


図-20 鉛直速度成分のパワースペクトル(1984年夏期)

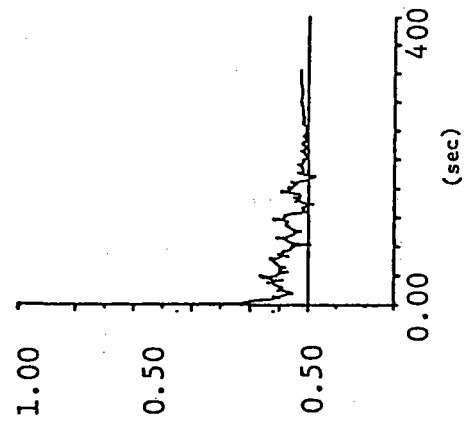
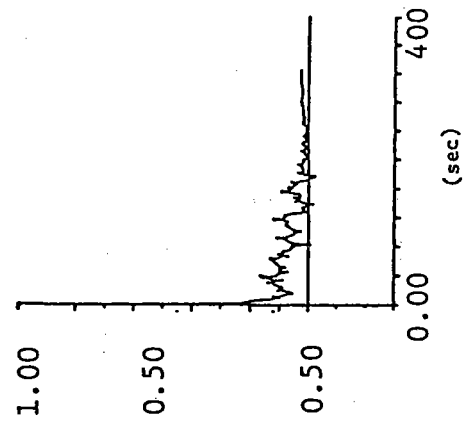
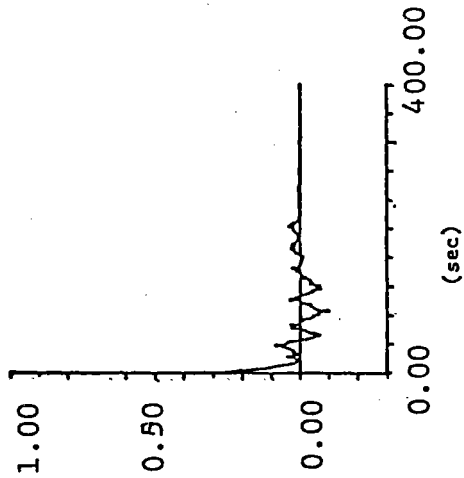


図-21 鉛直速度成分の自己相関関数(1984年夏期)

coefficient of
diffusion

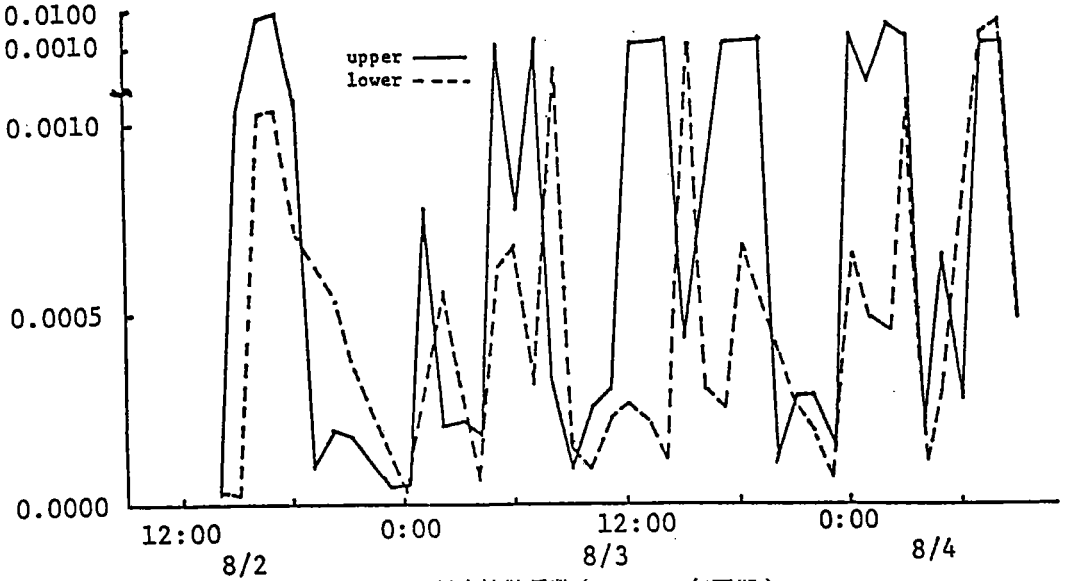


図-22 鉛直拡散係数(1984年夏期)

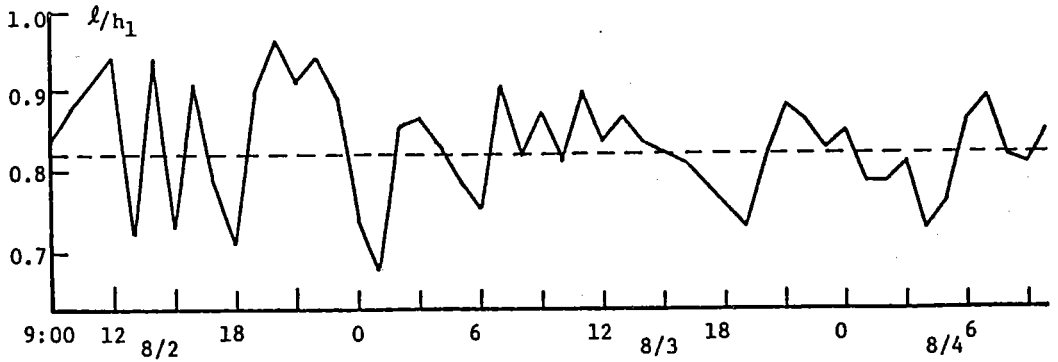
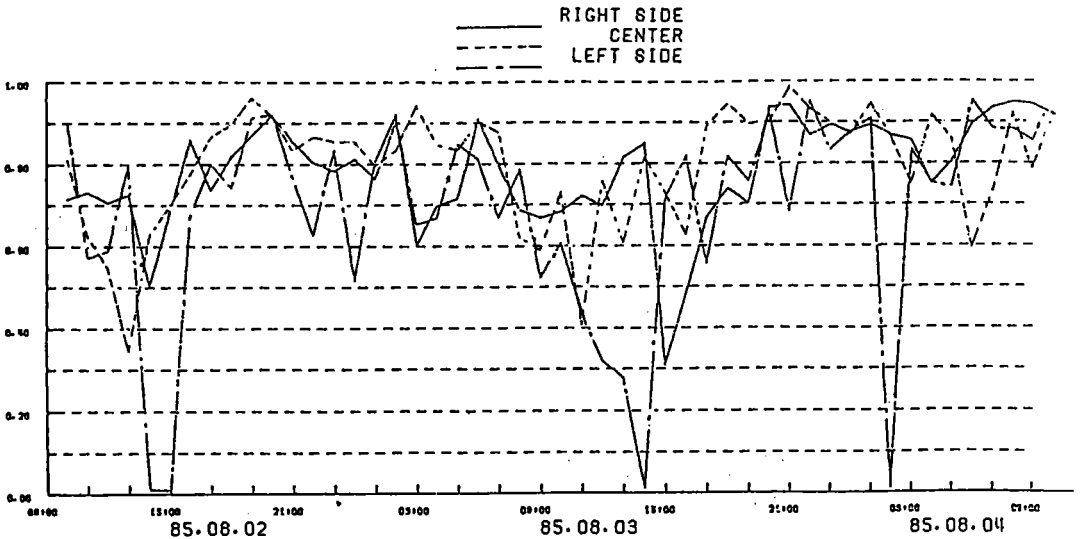


図-23 中間層の厚さ(1984年夏期)



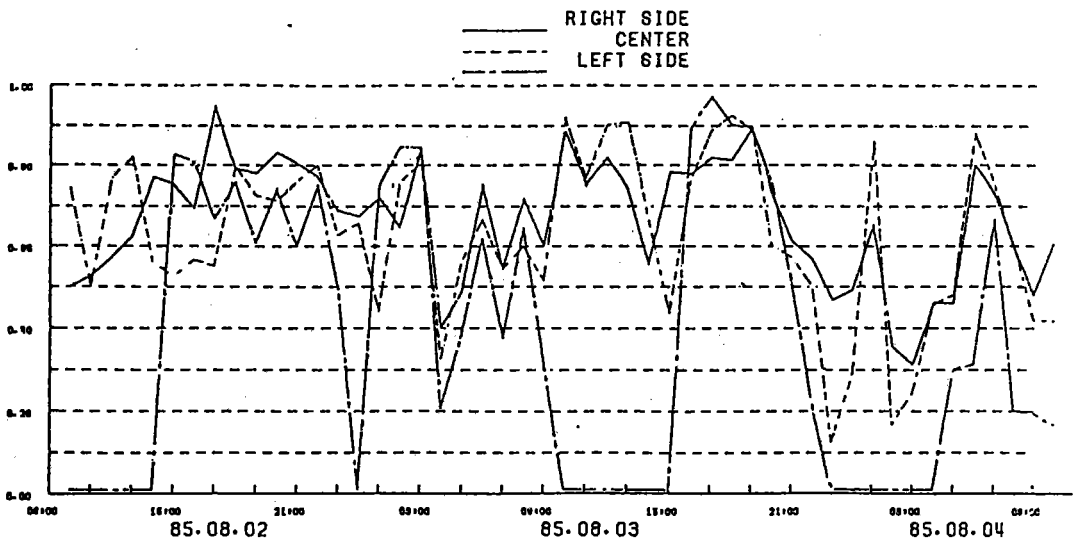


図-25 中間層の厚さ (1985年夏期、4.4 Km)

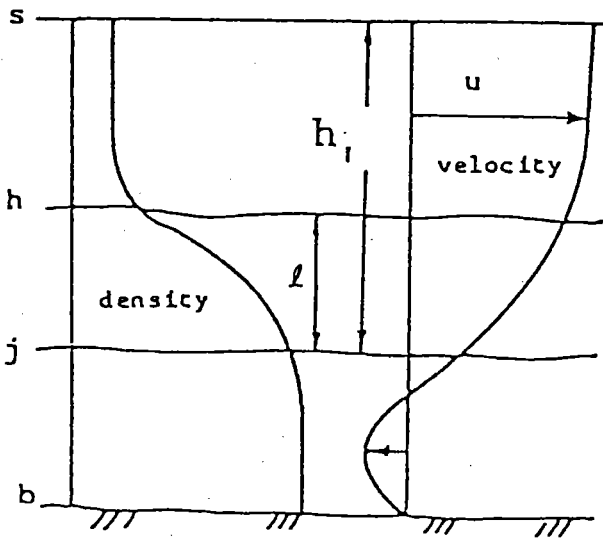


図-26 中間層の定義

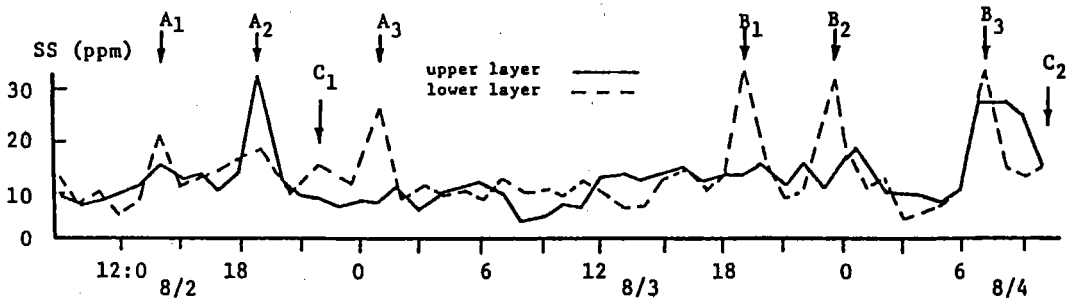
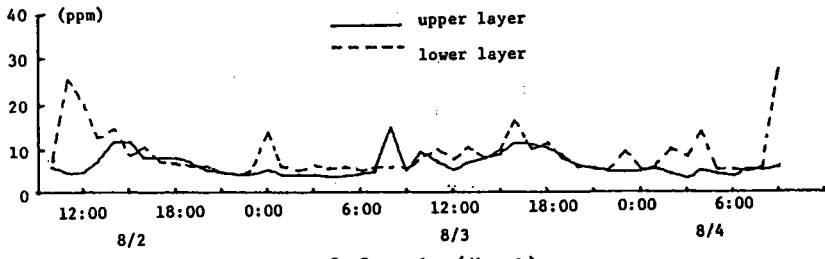
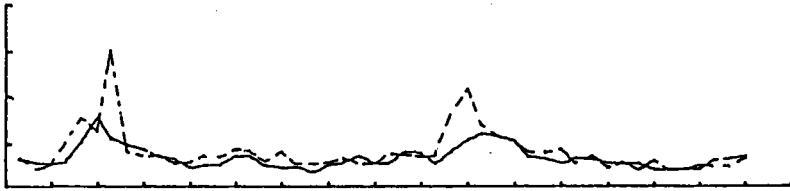


図-27 浮遊物質の濃度 (ppm) (1984年夏期)



28-1 (No.1)

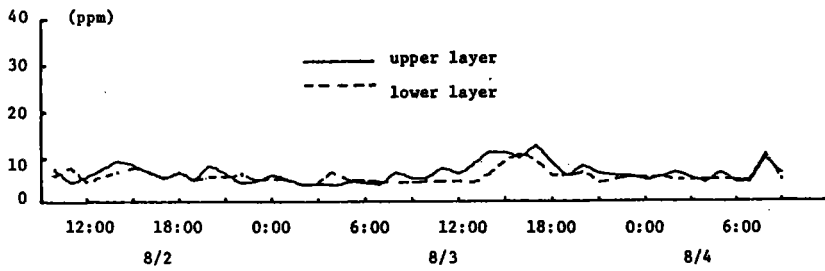


28-2 (No.2)



28-3 (No.3)

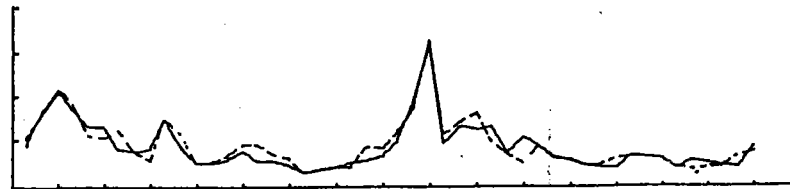
図-28 浮遊物質の濃度 (ppm) (1985年夏期、5.2Km)



29-1 (No.1)

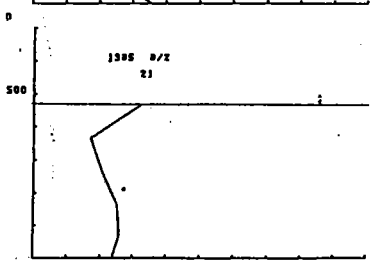
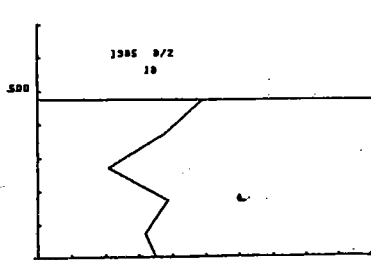
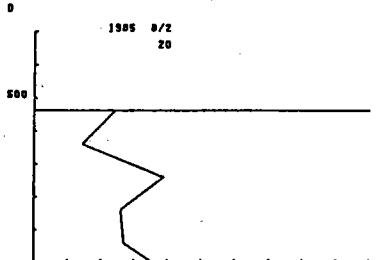
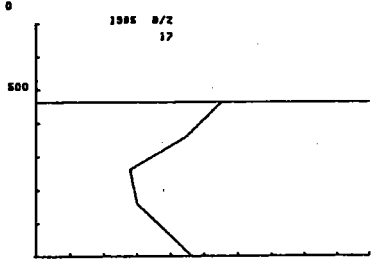
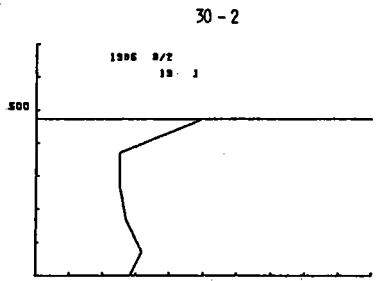
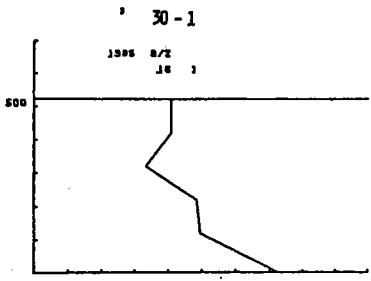
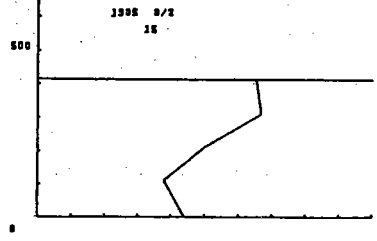
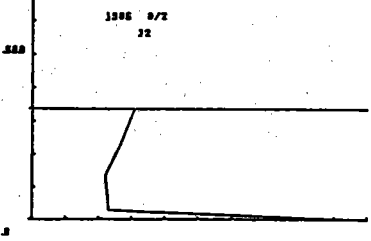
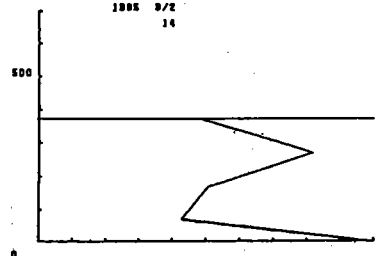
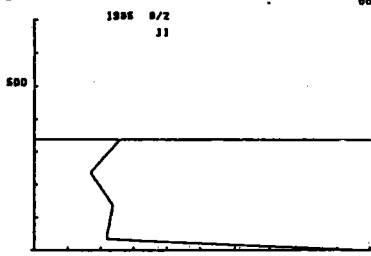
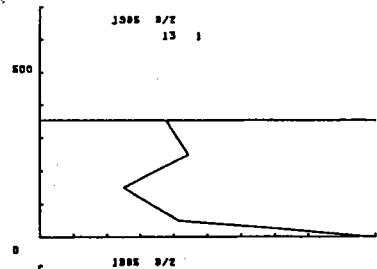
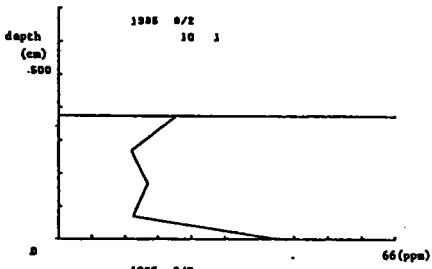


29-2 (No.2)



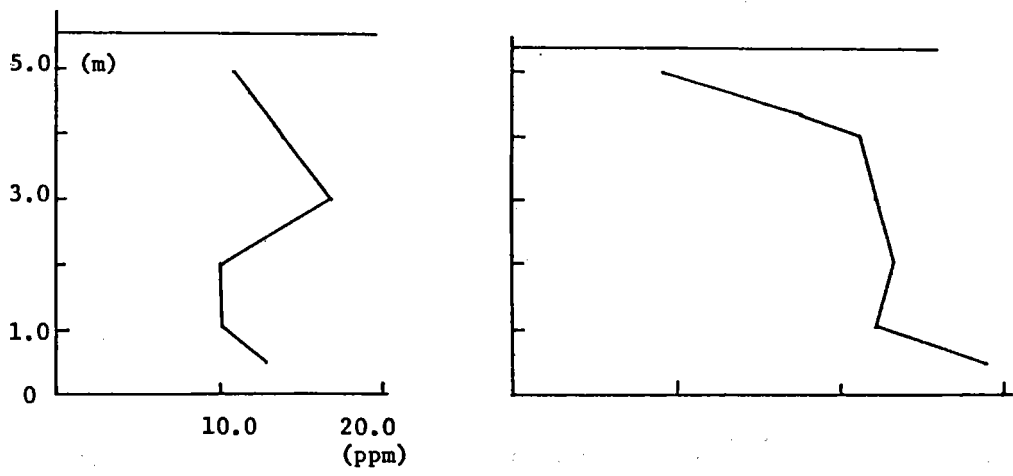
29-3 (No.3)

図-29 浮遊物質の濃度 (ppm) (1985年夏期、4.4Km)



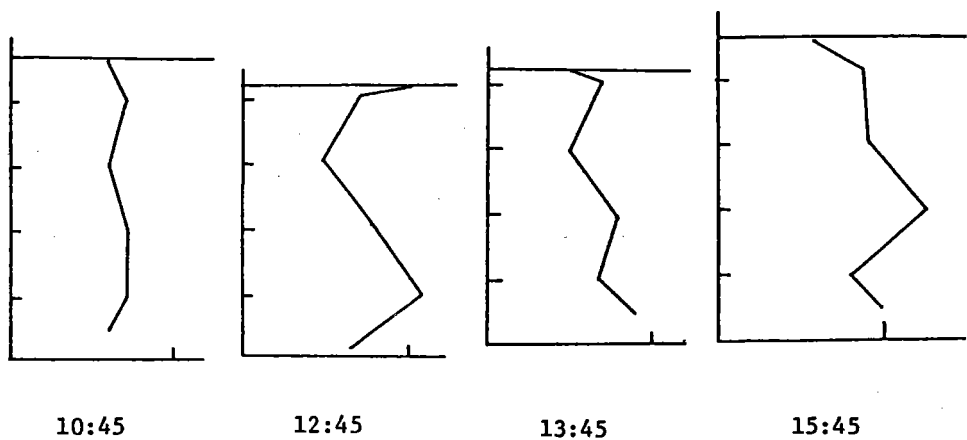
30-3

図-30 浮遊物質濃度分布の周期変化(1985年夏期5.2Km, No.1)



7:45

8:45



10:45

12:45

13:45

15:45

図-3 1 浮遊物質濃度分布の周期変化 (1985年冬期 5.2 Km, No.1)

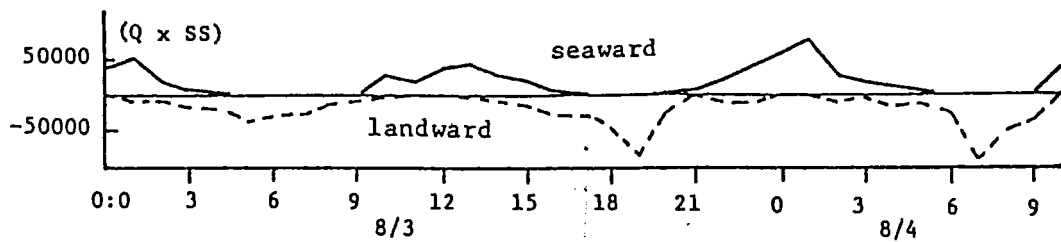


図-3 2 浮遊物質の輸送量 (1984年夏期)

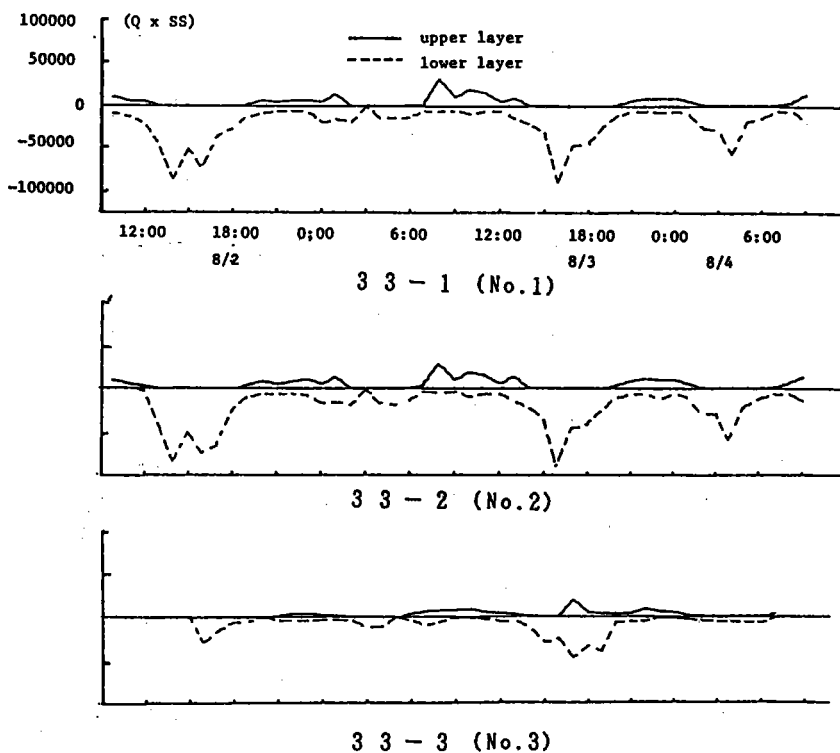


図-33 浮遊物質の輸送量(1985年夏期、5.2Km)

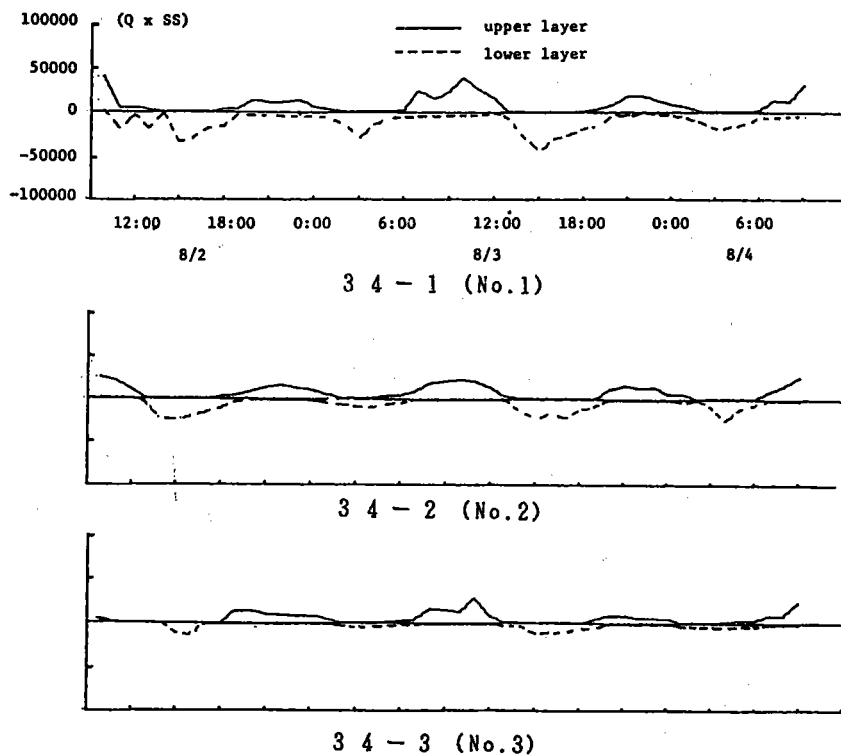


図-34 浮遊物質の輸送量(1985年夏期、4.4Km)

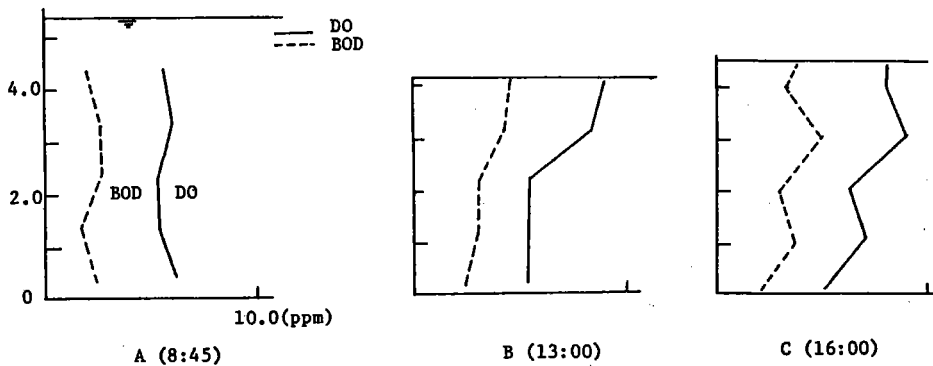
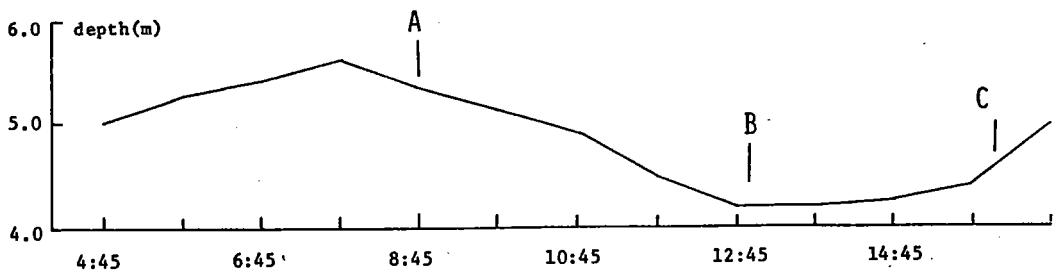
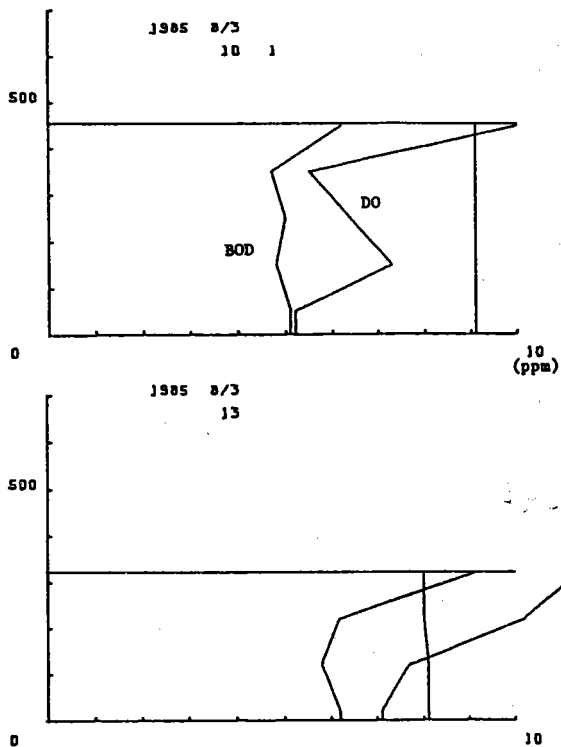


図-35 BOD の鉛直分布 (1985年冬期、5.2 Km)



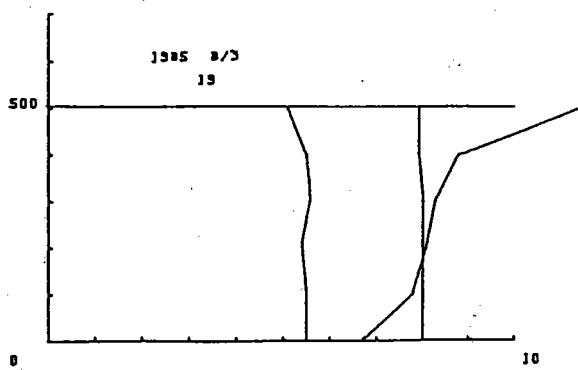


図-36 BOD の鉛直分布 (1985年夏期、5.2Km、No.1)

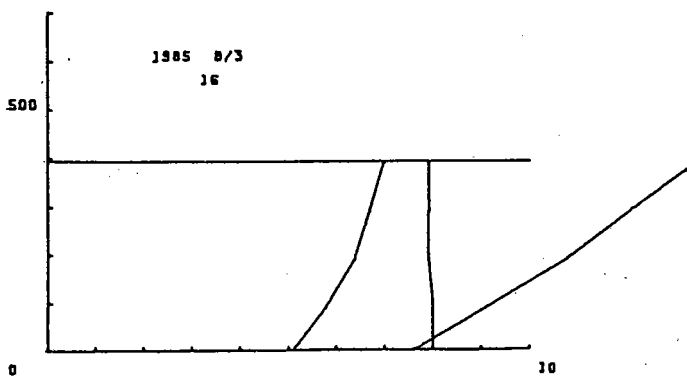
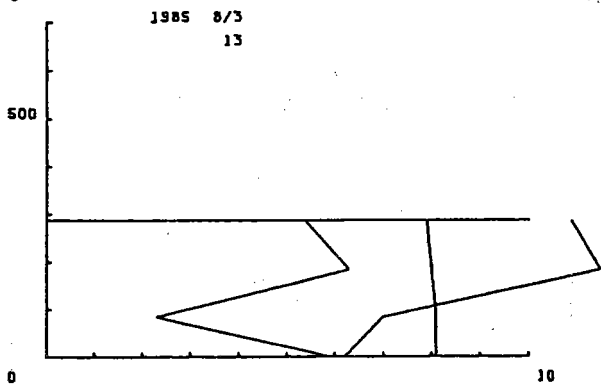
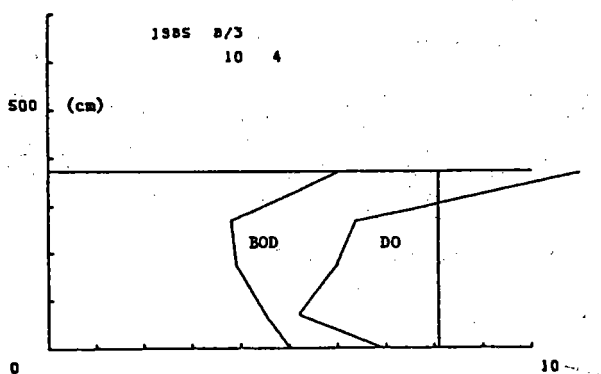


図-37 BOD の鉛直分布 (1985年夏期、4.4Km、No.4)

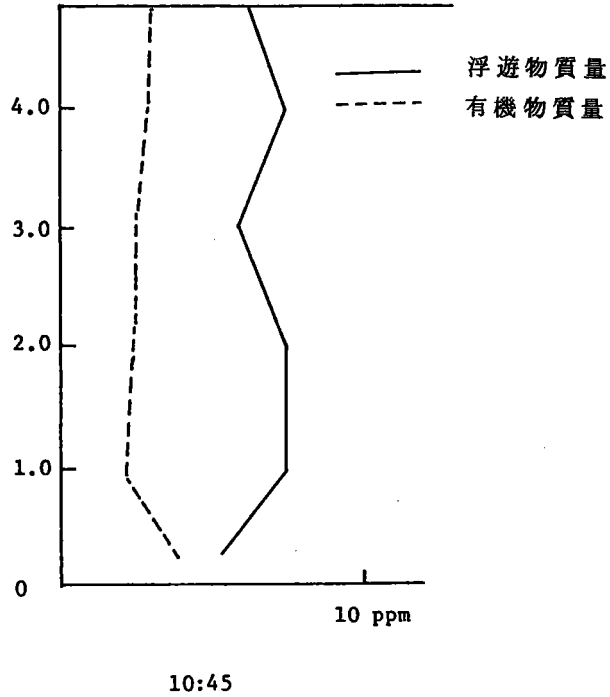


図-38 有機物質量の鉛直分布(1985年冬期)

time	phase	S.S.(ppm)	organic materials(ppm)
11:00 Aug.2,1984	ebb tide	11.3	5.7
17:00 Aug.2,1984	flood tide	12.5	5.6
10:00 Feb.24,1985	ebb tide	6.0	3.0
16:00 Feb.24,1985	flood tide	6.4	3.4
22:00 Aug.3,1985	ebb tide	20.1	10.1
4:00 Aug.4,1985	flood tide	14.5	7.0

表-1 浮遊物質中の有機物質含有量

No	土粒子の径 (cm)	沈降速度 (cm/sec)	No	土粒子の径 (cm)	沈降速度 (cm/sec)	No	土粒子の径 (cm)	沈降速度 (cm/sec)	No	土粒子の径 (cm)	沈降速度 (cm/sec)
1-上	65 多粒径	0.02	1-下	65 多粒径	3.66	4-上	65 多粒径	2.42	4-下	65 多粒径	2.66
	1.4×10^{-3}	0.02		2.6×10^{-2}	3.65		1.8×10^{-2}	2.40		1.77×10^{-1}	2.65
	50 多粒径	0.01		50 多粒径	2.56		50 多粒径	1.86		50 多粒径	2.00
	8.5×10^{-4}	0.01		1.93×10^{-2}	2.55		1.5×10^{-2}	1.85		1.5×10^{-2}	1.99
	30 多粒径	0.001		30 多粒径	1.42		30 多粒径	1.26		30 多粒径	1.30
	2.0×10^{-4}	0.001		1.3×10^{-2}	1.42		1.18×10^{-2}	1.25		1.23×10^{-2}	1.28
河川水の密度 土粒子の比重			河川水の密度 土粒子の比重			河川水の密度 土粒子の比重			河川水の密度 土粒子の比重		
上層 1.003	2.95	上層 1.003	2.80	上層 1.0012	2.89	上層 1.0012	2.86	上層 1.0012	2.86	下層 1.008	
下層 1.006		下層 1.006		下層 1.008		下層 1.008					
2-上	65 多粒径	0.23	2-下	65 多粒径	2.60	5-上	65 多粒径	0.026	5-下	65 多粒径	2.23
	4.8×10^{-3}	0.23		1.85×10^{-2}	2.55		1.65×10^{-2}	0.026		1.73×10^{-2}	2.21
	50 多粒径	0.06		50 多粒径	2.08		50 多粒径	0.017		50 多粒径	1.81
	2.4×10^{-2}	0.06		1.58×10^{-2}	2.08		1.5×10^{-3}	0.021		1.5×10^{-2}	1.79
	30 多粒径	0.003		30 多粒径	1.50		30 多粒径	1.0×10^{-4}		30 多粒径	1.31
	5.6×10^{-4}	0.003		1.28×10^{-2}	1.49		1.0×10^{-4}	1.0×10^{-4}		1.23×10^{-2}	1.30
河川水の密度 土粒子の比重			河川水の密度 土粒子の比重			河川水の密度 土粒子の比重			河川水の密度 土粒子の比重		
上層 1.0035	2.90	上層 1.0035	2.98	上層 1.0008	2.79	上層 1.0008	2.83	上層 1.0008	2.83	下層 1.003	
下層 1.0078		下層 1.0078		下層 1.003		下層 1.003					
3-上	65 多粒径	0.01	3-下	65 多粒径	2.66	6-上	65 多粒径	1.49	6-下	65 多粒径	2.23
	1.3×10^{-2}	0.01		1.9×10^{-2}	2.65		1.3×10^{-2}	1.49		1.7×10^{-2}	2.22
	50 多粒径	0.004		50 多粒径	2.00		50 多粒径	0.87		50 多粒径	1.76
	7.0×10^{-4}	0.004		1.55×10^{-2}	1.99		9.5×10^{-3}	0.86		1.45×10^{-2}	1.75
	30 多粒径	0.001		30 多粒径	1.30		30 多粒径	0.092		30 多粒径	1.24
	3.2×10^{-4}	0.001		1.18×10^{-2}	1.28		3.0×10^{-3}	0.091		1.17×10^{-2}	1.24
河川水の密度 土粒子の比重			河川水の密度 土粒子の比重			河川水の密度 土粒子の比重			河川水の密度 土粒子の比重		
上層 1.0025	2.49	上層 1.0025	2.95	上層 1.001	2.90	上層 1.001	2.88	上層 1.001	2.88	下層 1.004	
下層 1.0078		下層 1.0078		下層 1.004		下層 1.004					

表-2 底泥の粒度分布

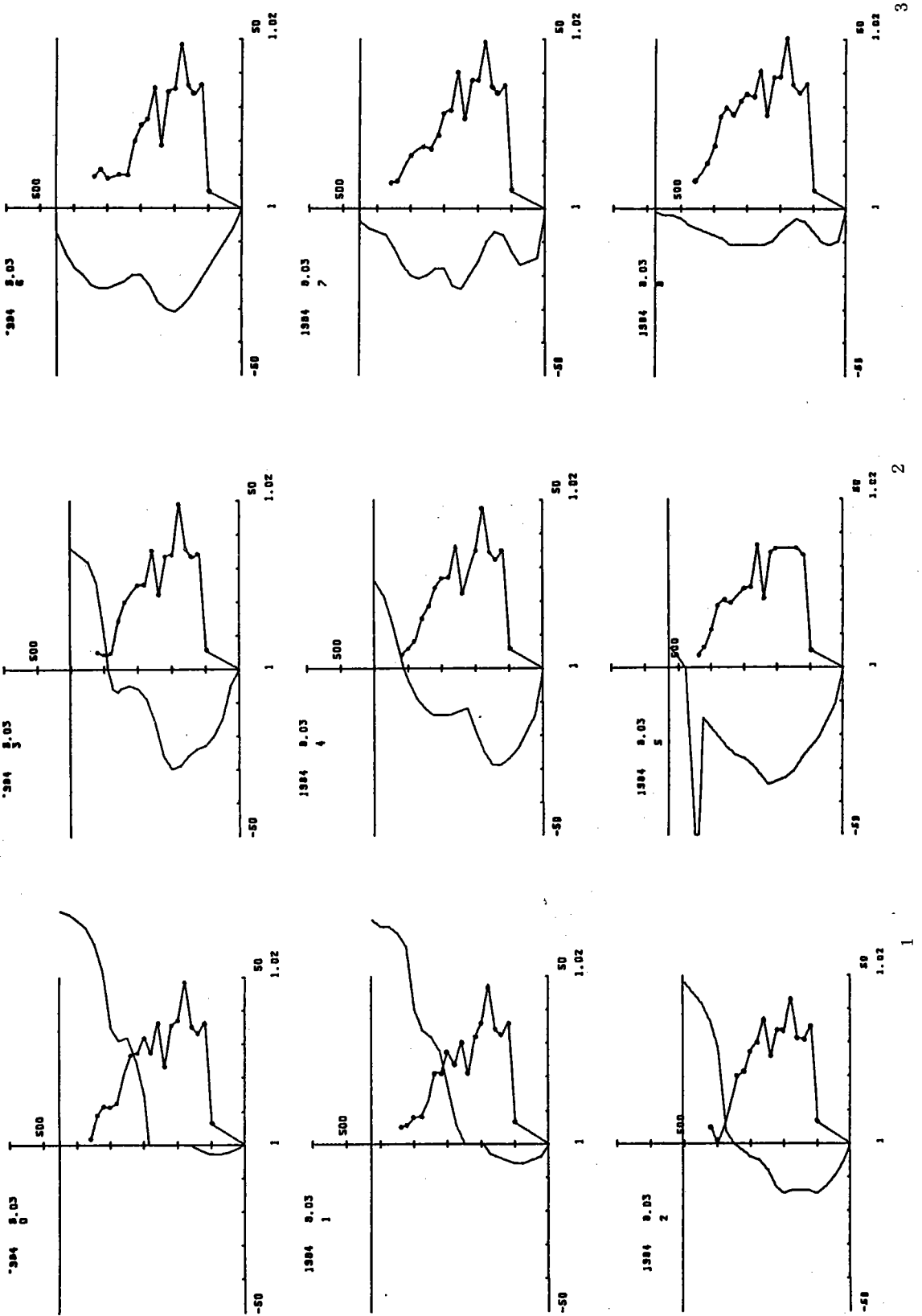
Position	Diameter(cm) $\times 10^{-3}$	Settling velocity (cm/sec)	Organic materials (%)
bottom surface	d ₆₅ 4.8	0.23	7.2%
	d ₅₀ 2.4	0.06	
	d ₃₅ 0.56	0.003	
- 50cm	d ₆₅ 18.5	2.6	1.4%
	d ₅₀ 15.8	2.08	
	d ₃₅ 12.8	1.5	

表-3 底泥中の有機物質質量

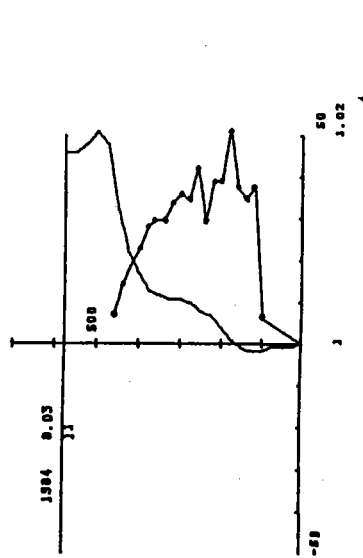
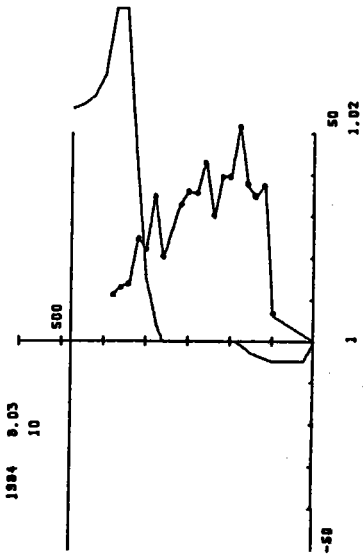
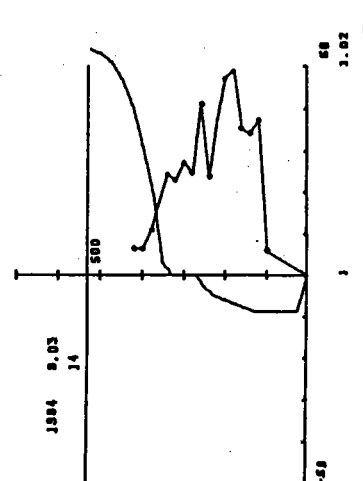
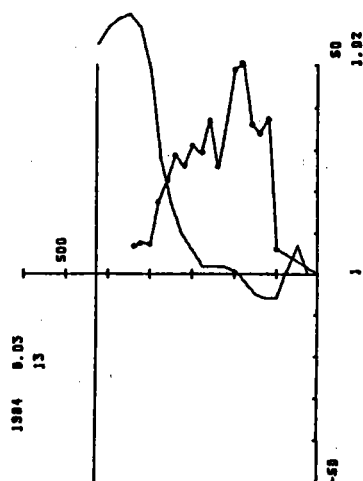
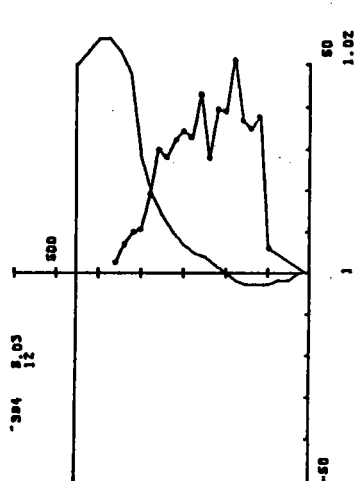
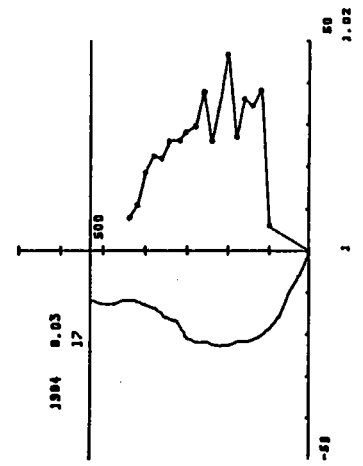
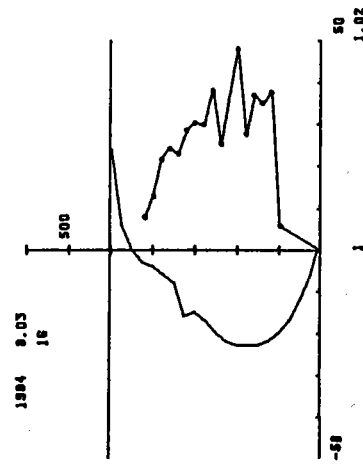
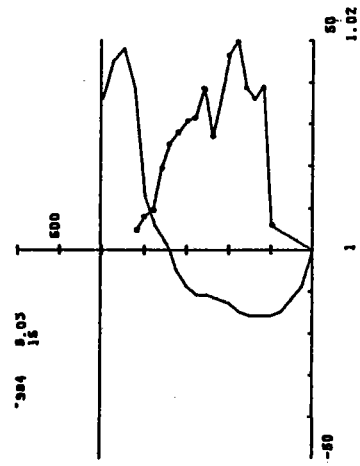
- 資料 - 1 密度分布及び流速分布 (1984年夏期)
1 ~ 11
- 資料 - 2 流速変動成分のスペクトル及び自己相関関数
1 ~ 142
- 資料 - 3 密度分布及び流速分布 (1985年夏期)
1 ~ 101
- 資料 - 4 浮遊物質濃度分布 (1985年夏期)
1 ~ 102
- 資料 - 5 DO、BODの分布 (1985年夏期)
1 ~ 6

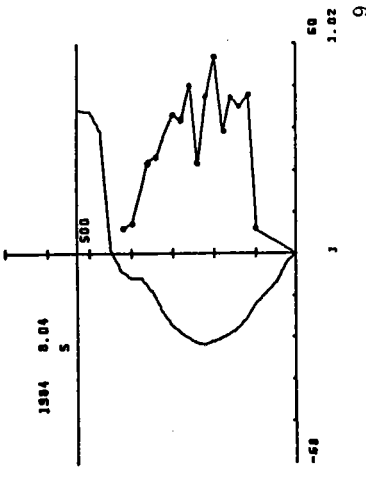
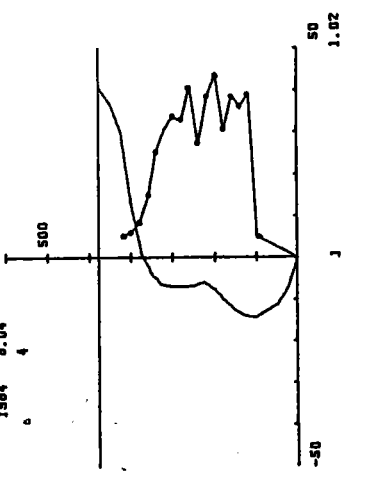
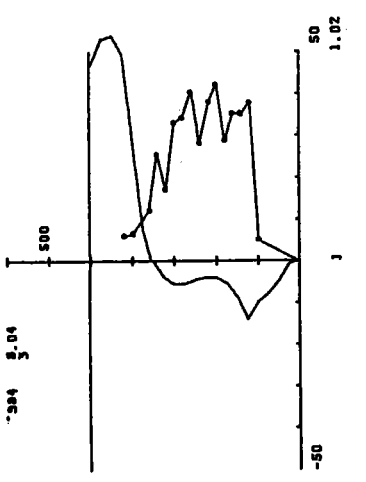
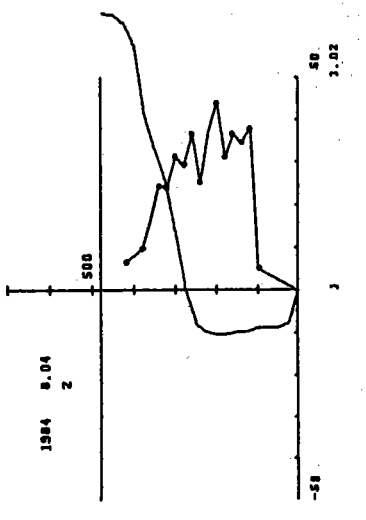
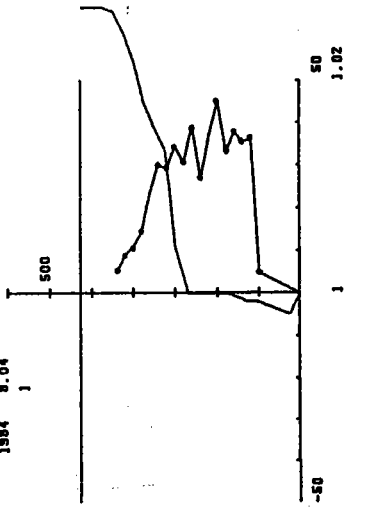
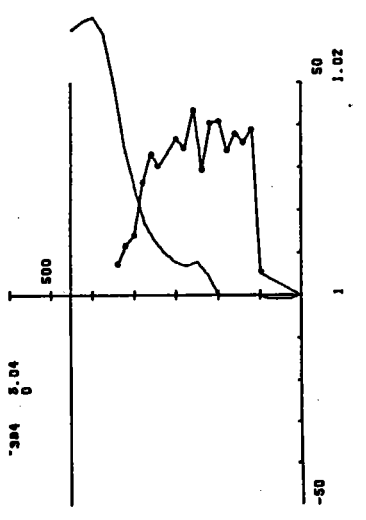
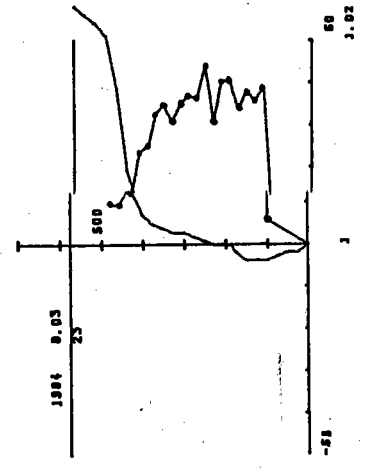
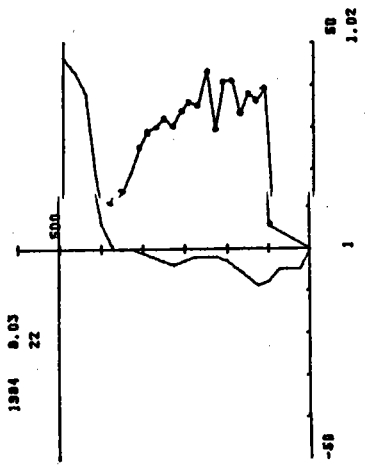
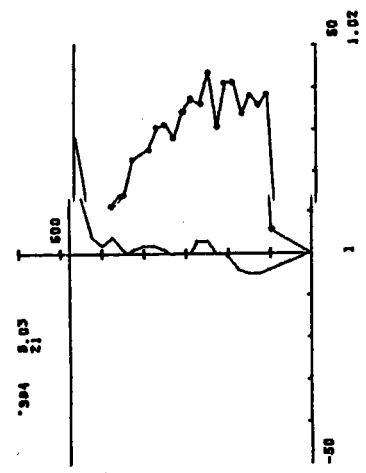
資料 - 1 密度分布及び流速分布 (1984年夏期)

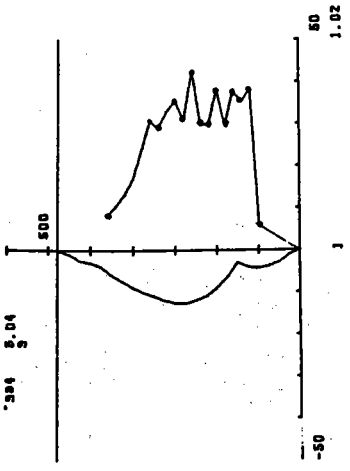
1 ~ 11



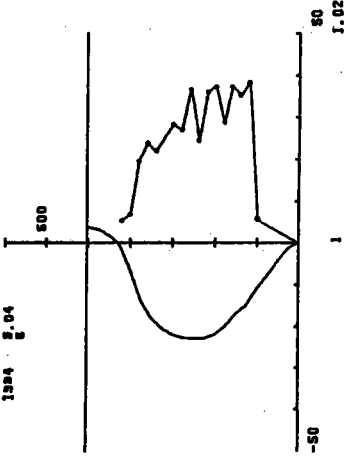
1
2
3



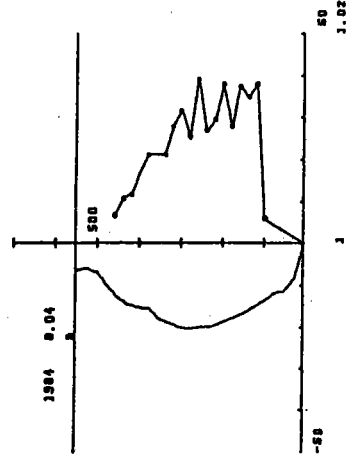
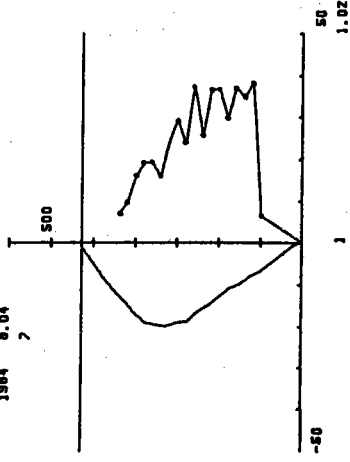




11



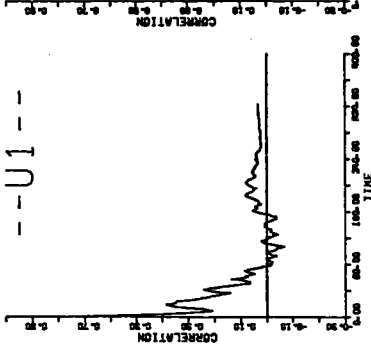
10



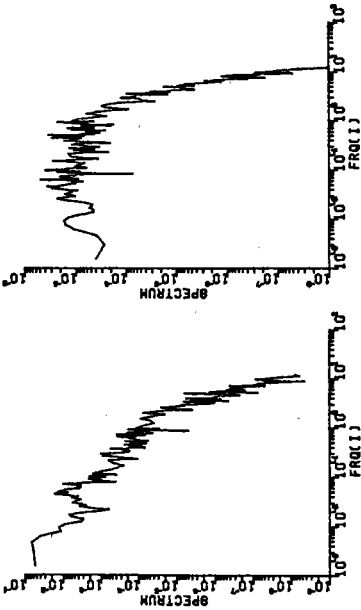
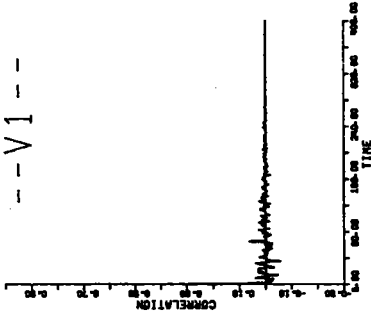
10

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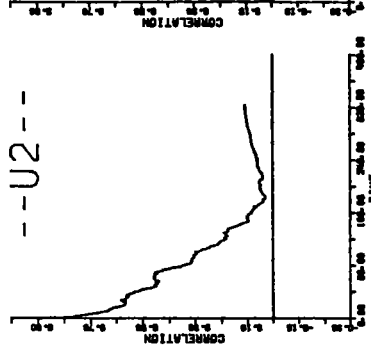
--U1--



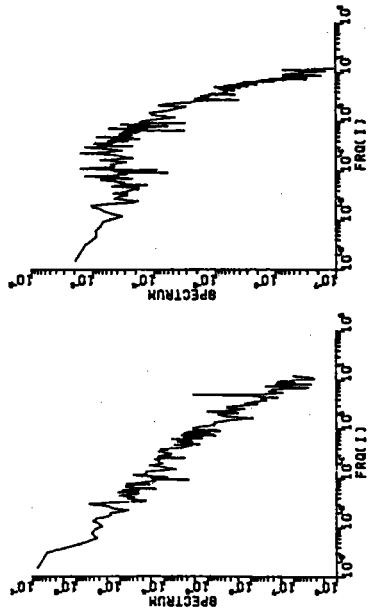
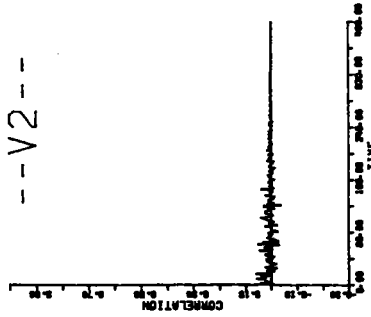
--V1--



--U2--

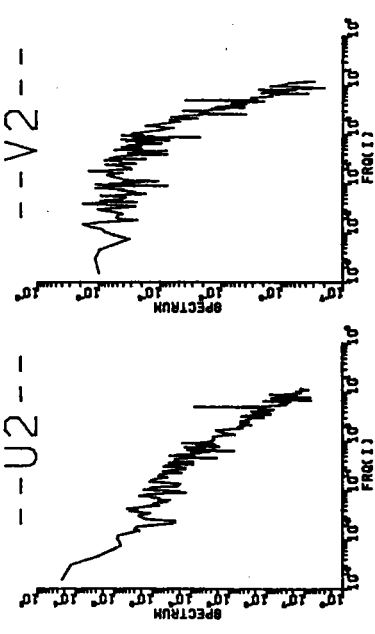
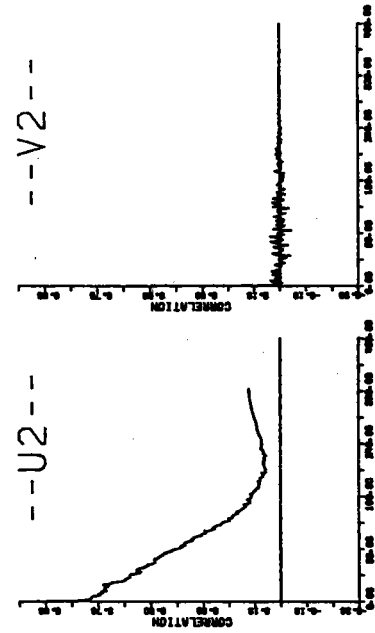
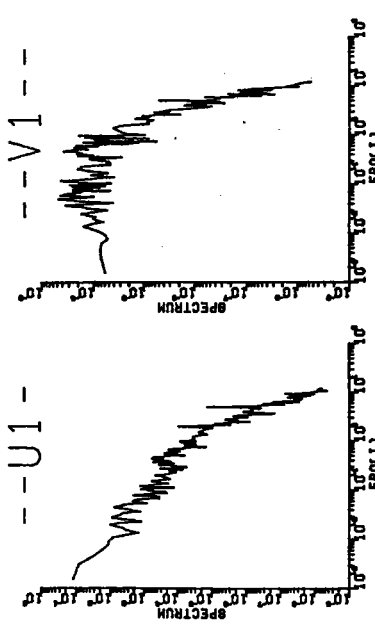
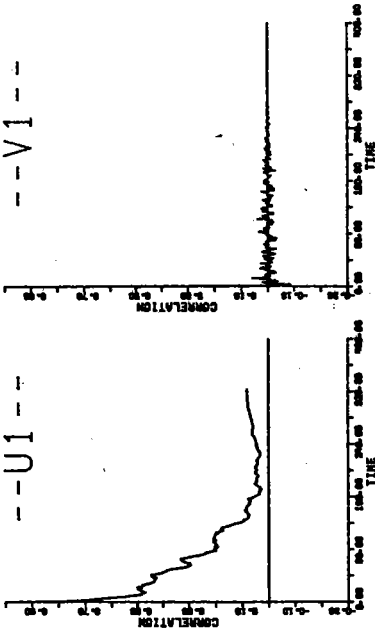


--V2--



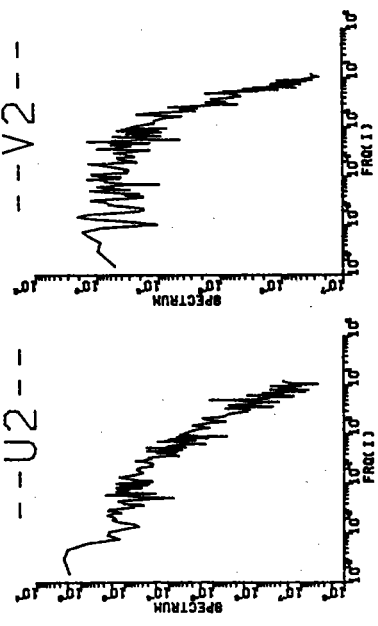
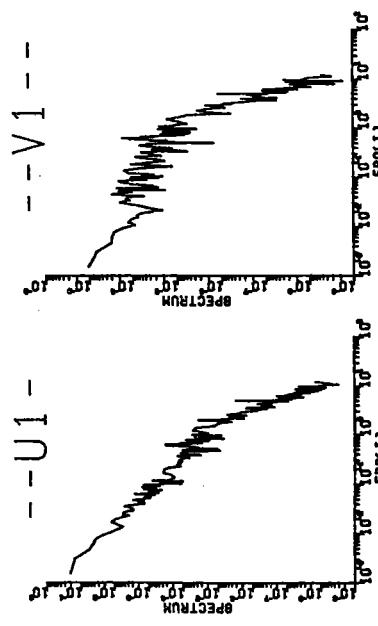
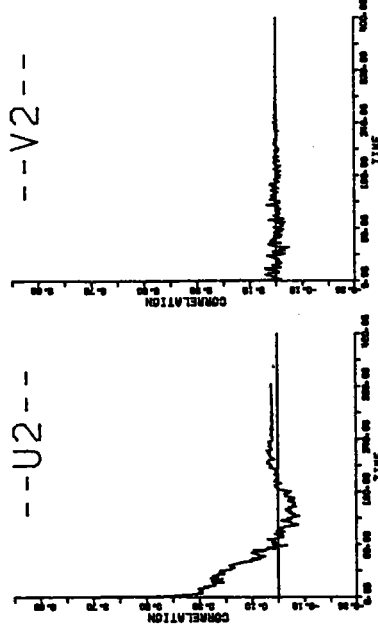
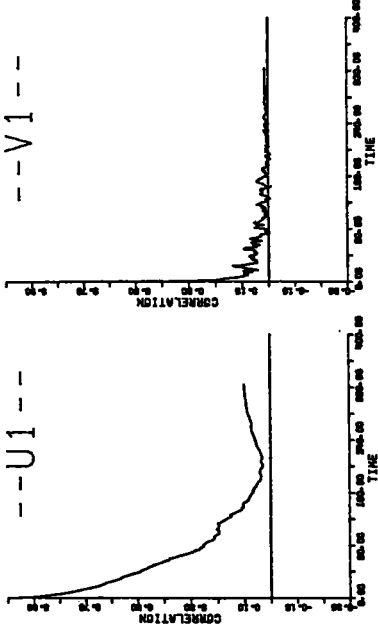
	MEAN	VELOCITY	DEFUSION	REYNOLDS
			STRESS	
U1	0.001180	0.288260	0.026100	0.000081
V1	0.001554	0.002914	0.000199	
U2	0.000431	0.268730	0.034400	0.000039
V2	0.000463	0.001399	0.000922	

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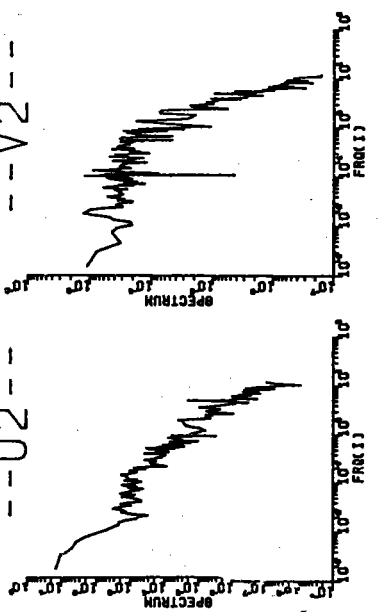
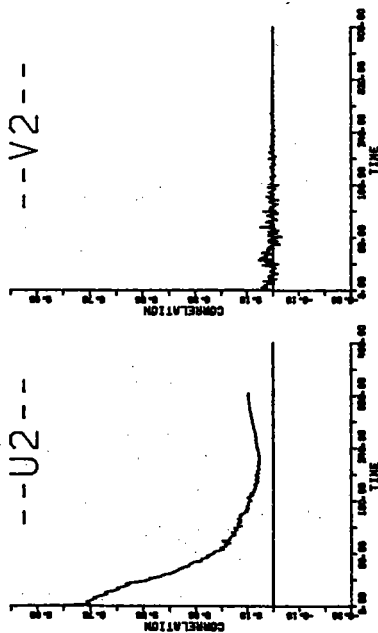
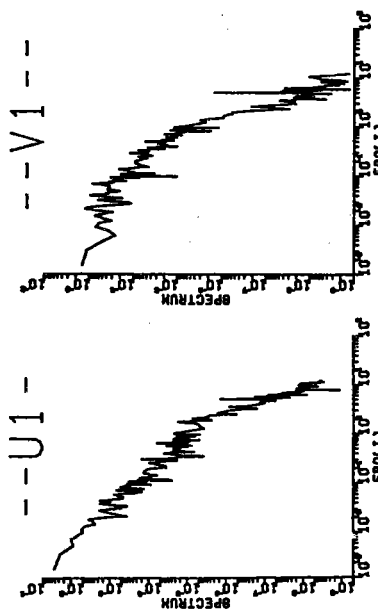
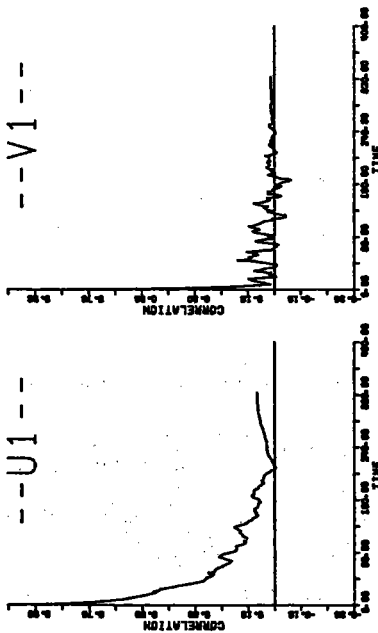
	TEMPERATURE	DENSITY	VELOCITY	DIFFUSION	REYNOLDS	STRESS
U1	1.252	2245.7	0.010	0.0002	0.000	
V1	1.252	2245.7	0.010	0.0002	0.000	
U2	1.252	2245.7	0.010	0.0002	0.000	
V2	1.252	2245.7	0.010	0.0002	0.000	

*x84.08.02 14:30**



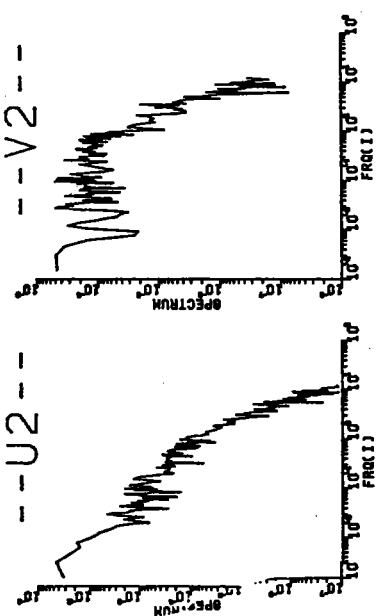
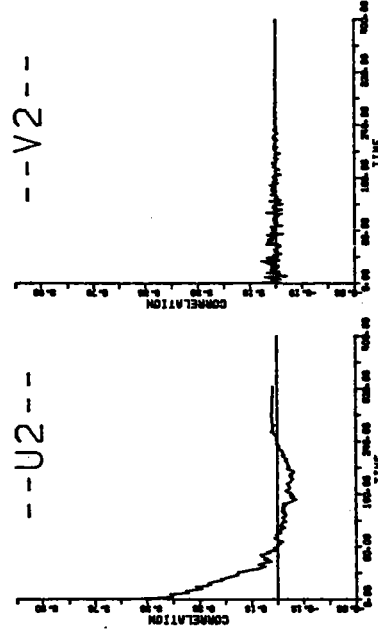
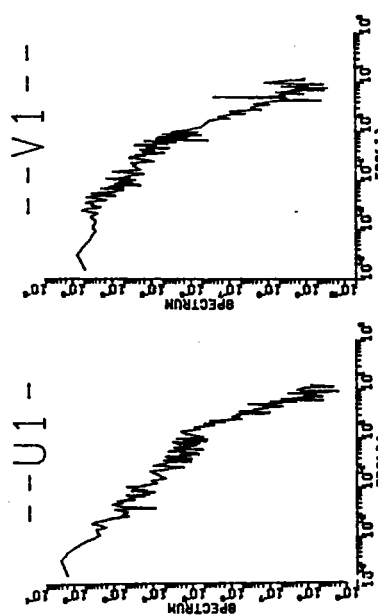
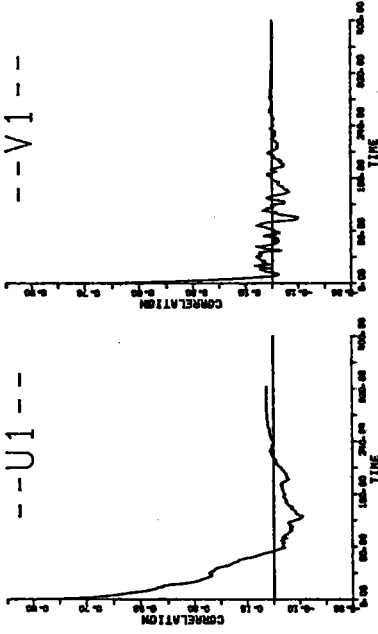
	TEMPERATURE	MEAN VELOCITY	DIFFUSION	REYNOLDS
U1	.0013	.350	.0762	.000
V1	.0001	.000	.0002	.000
U2	.0007	.350	.0060	.000
V2	.0006	.000	.0000	.000

84.08.02.15:00



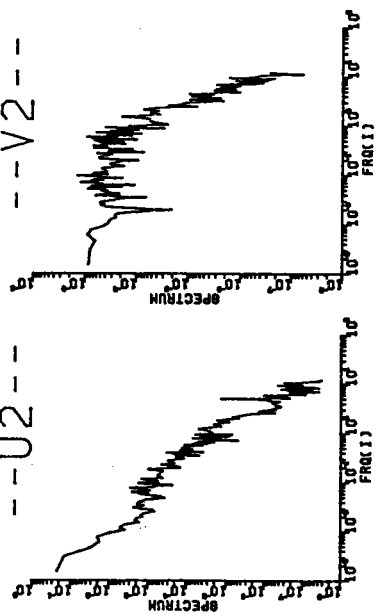
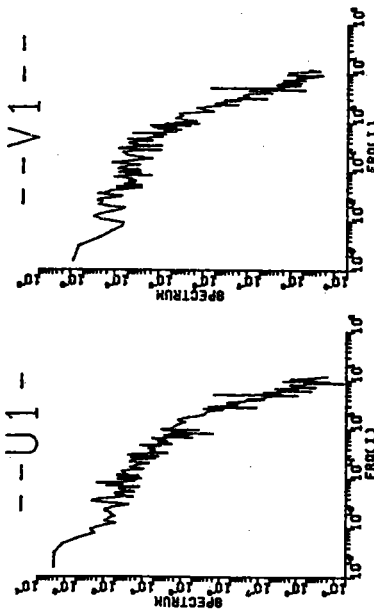
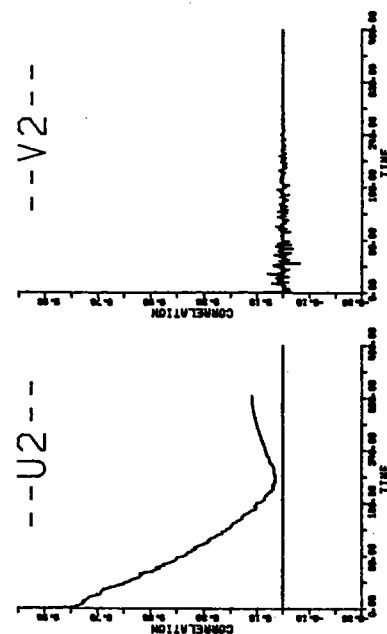
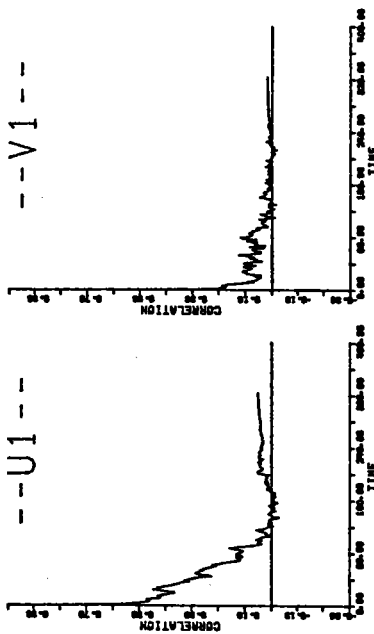
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	SCYNDIUM STRENGTH
U1	0.000486	0.041036	0.022500	0.000055
V1	0.000072	0.006853	0.000633	
U2	0.000969	-0.258730	0.067500	0.000001
V2	0.000337	0.006136	0.000482	

*84.08.02 15:15**



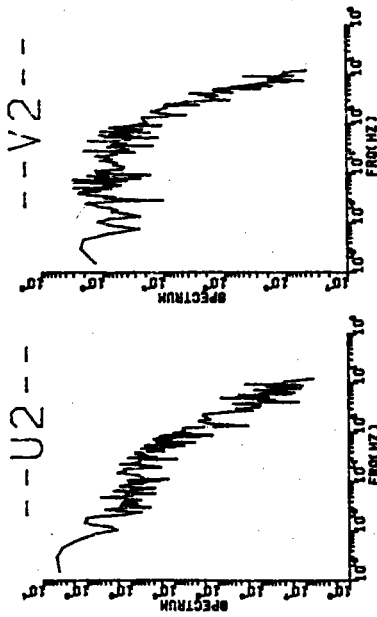
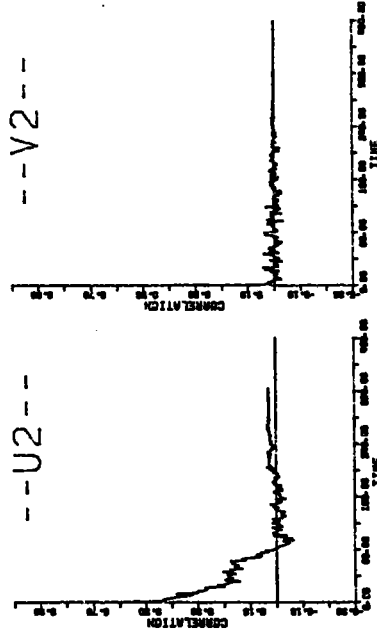
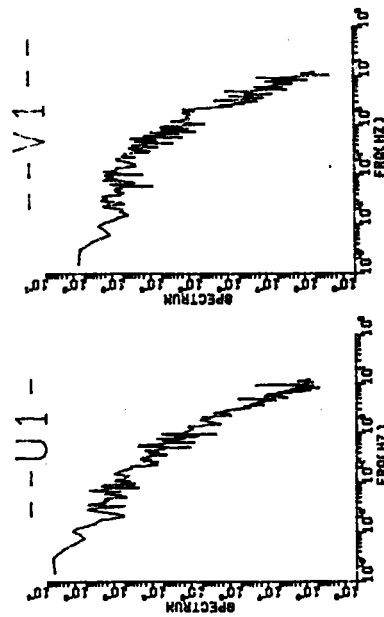
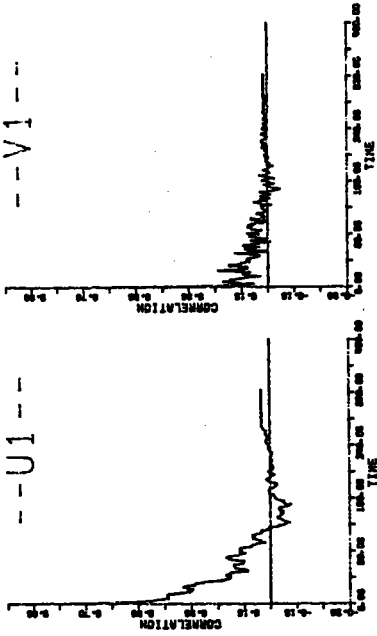
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	STRESS
U1	0.000412	0.002036	0.007140	-0.000040
V1	0.000062	0.05710	0.000136	
U2	0.000841	-0.200430	0.007070	0.000001
V2	0.000197	0.006204	0.000194	

* * 84.08.02 15:30 * *



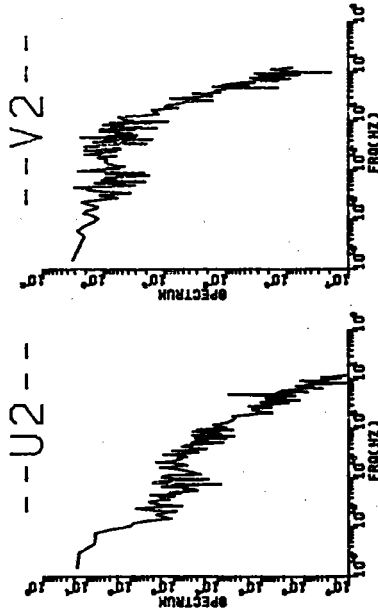
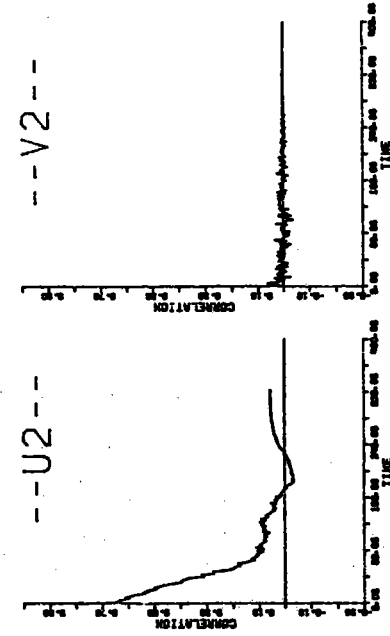
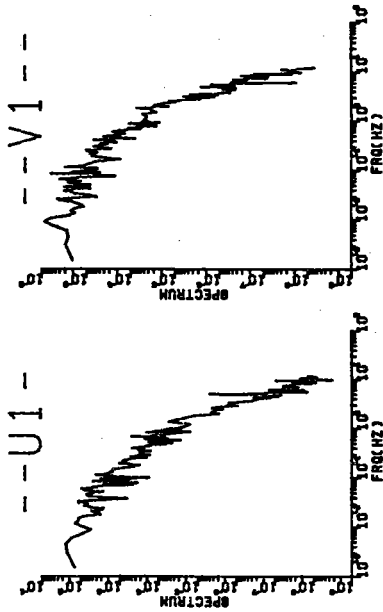
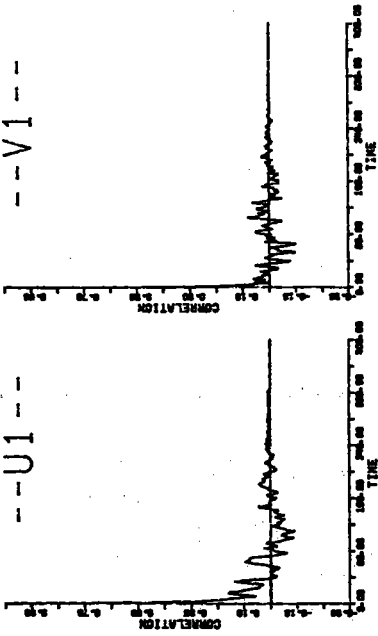
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000430	-0.084986	0.015000	-0.000026
V1	0.000082	0.018348	0.000722	
U2	0.001149	-0.211280	0.102000	-0.000030
V2	0.000444	0.004719	0.000308	

* * 84.08.02 15:55 * *



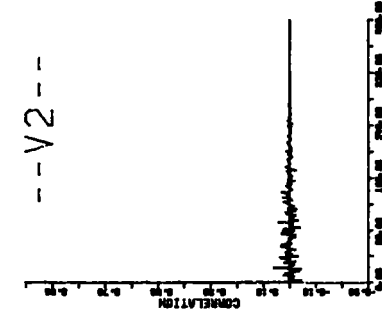
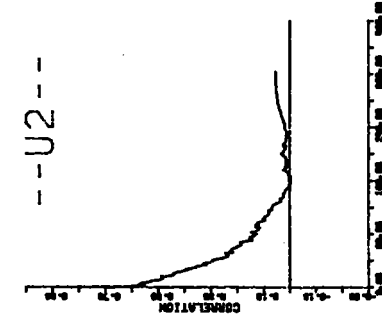
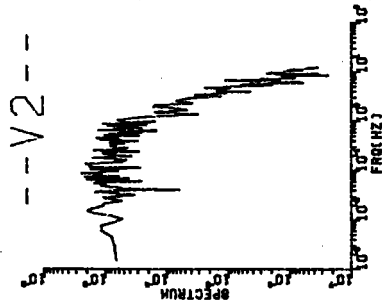
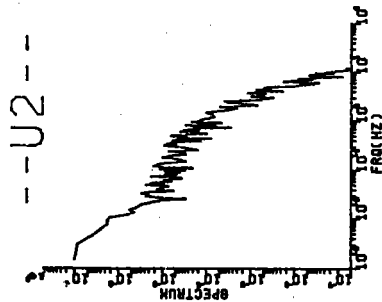
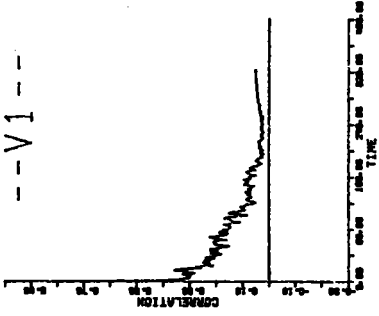
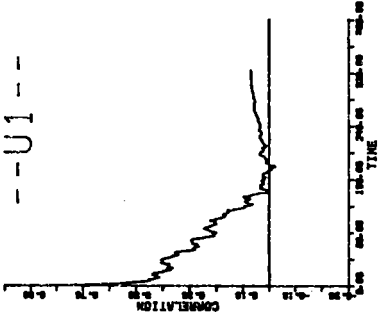
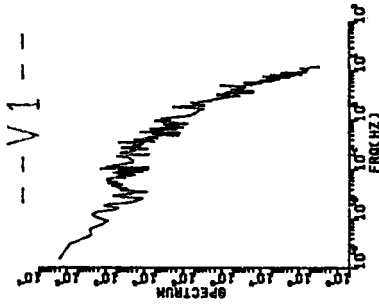
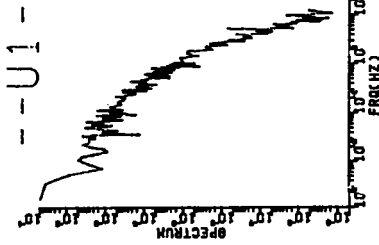
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS	STRESS
U1	0.00082	-0.118540	0.021200	0.000192	
V1	0.000586	0.018394	0.005850		
U2	0.000828	-0.382060	0.015800		
V2	0.001049	0.028347	0.000358	-0.000012	

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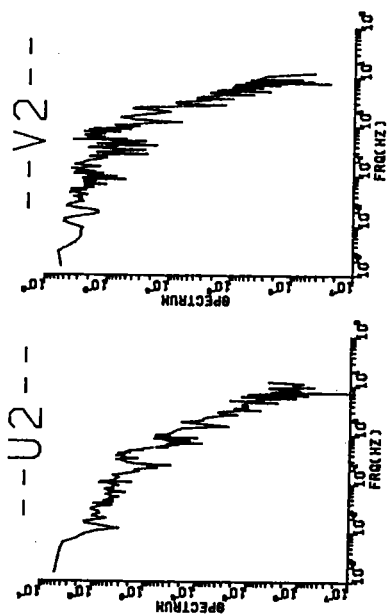
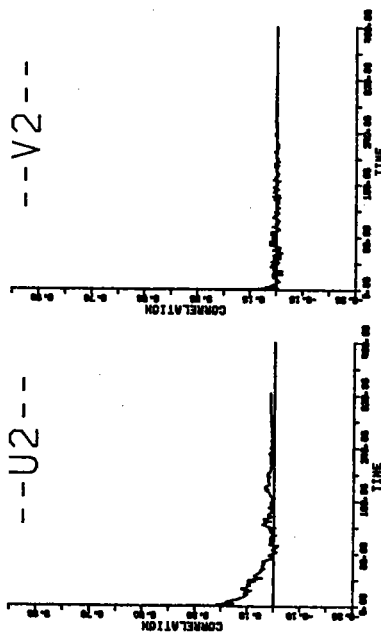
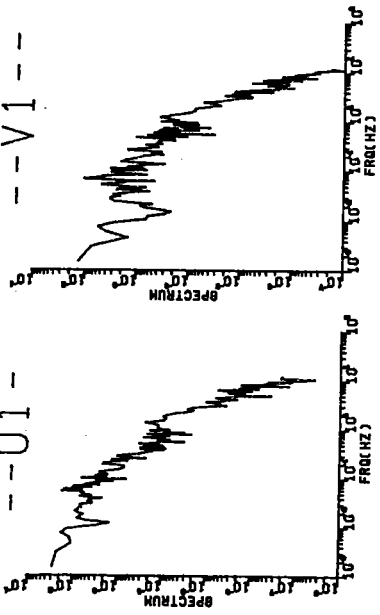
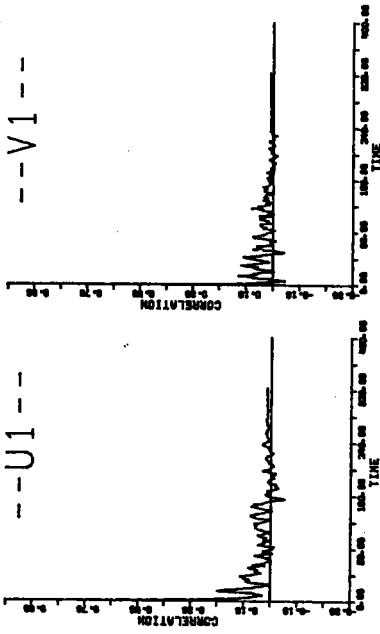
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000683	-0.136930	0.004550	0.000256
V1	0.000592	0.019808	0.000477	0.000256
U2	0.001574	-0.388170	0.061800	0.000113
V2	0.001078	0.030598	0.001470	0.000113

* * 84.08.02 16:15 * *



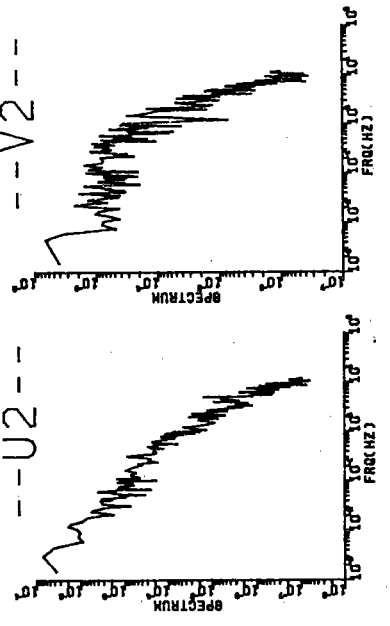
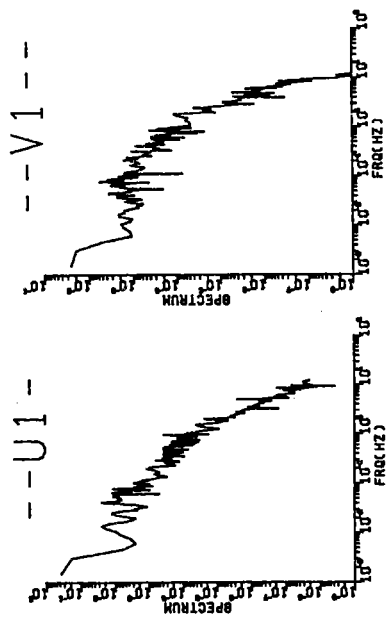
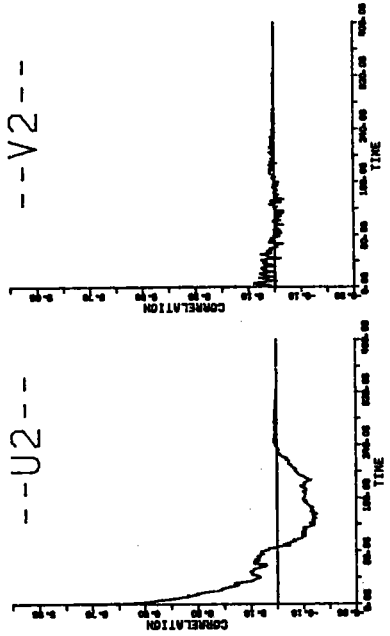
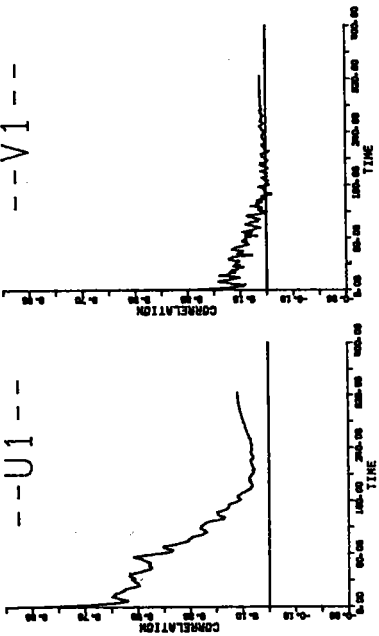
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	TURBULENCE
U1	0.000815	-0.153830	0.038800	0.000161
V1	0.000412	0.028870	0.014800	
U2	0.002048	-0.384780	0.078200	0.000084
V2	0.000975	0.028498	0.000287	

* * 84.08.02 16:45 * *



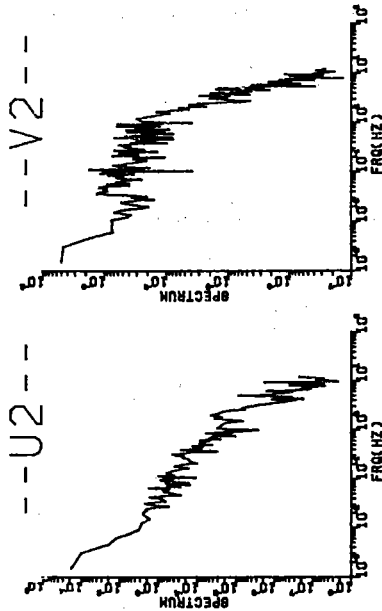
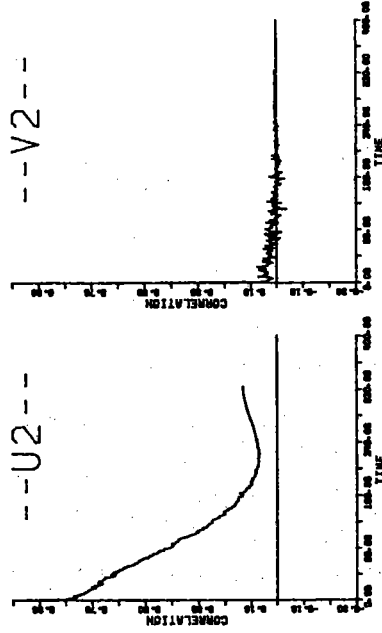
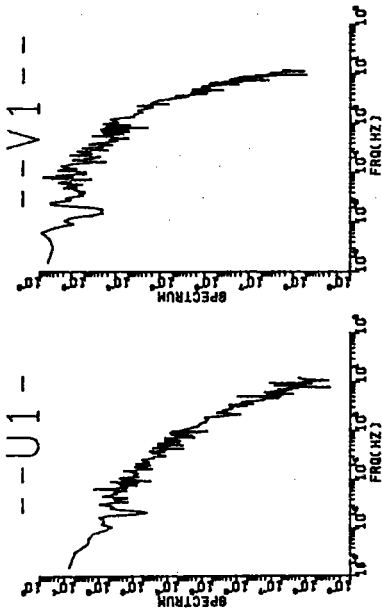
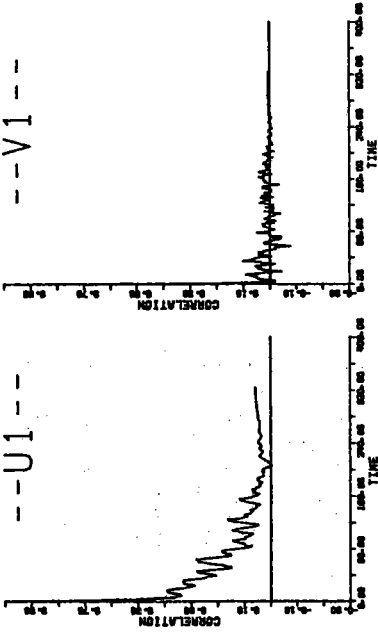
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION VELOCITY	REYNOLDS STRESS
U1	0.001269	-0.196230	0.012700	0.000018
V1	0.000891	0.012920	0.006280	
U2	0.002283	-0.379080	0.023900	-0.000573
V2	0.002098	0.009086	0.001670	

* * 84.08.02 16:55 * *



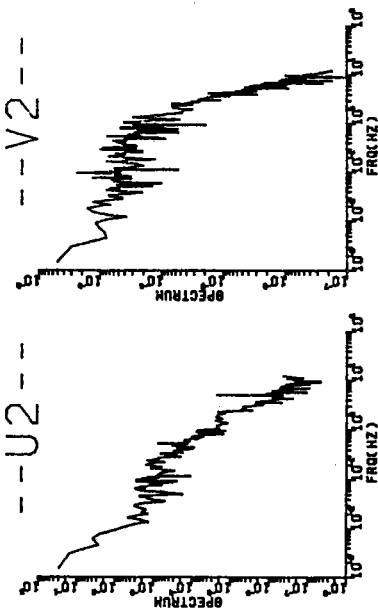
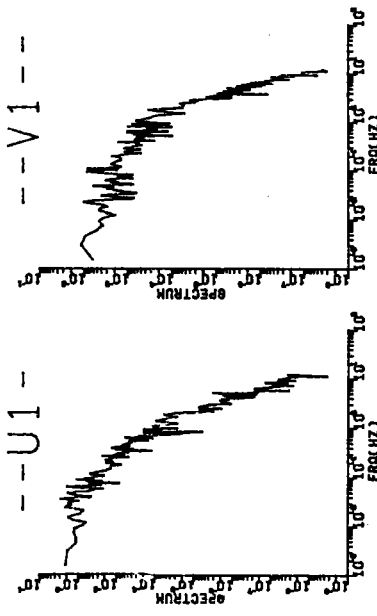
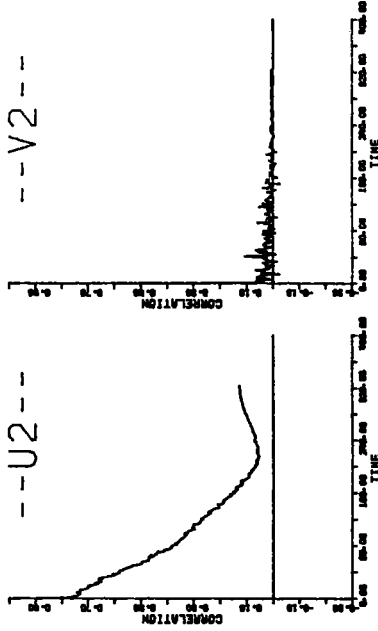
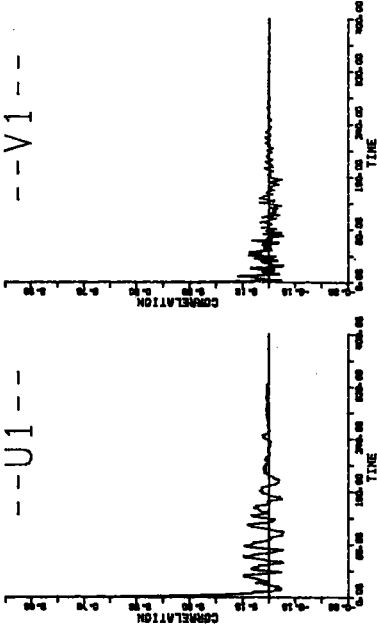
	TURBULENCE INTENSITY	PERIODICITY	DIFFUSION STRENGTH	REYNOLDS NUMBER
U1	0.002104	-0.220280	0.182000	0.000138
V1	0.000713	0.014857	0.010600	
U2	0.000829	-0.321810	0.000874	-0.000003
V2	0.000789	0.003662	0.001940	

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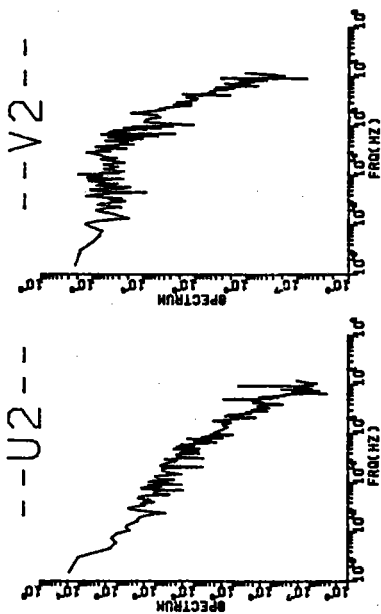
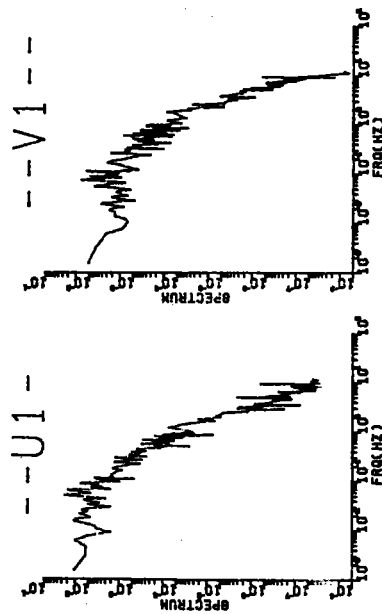
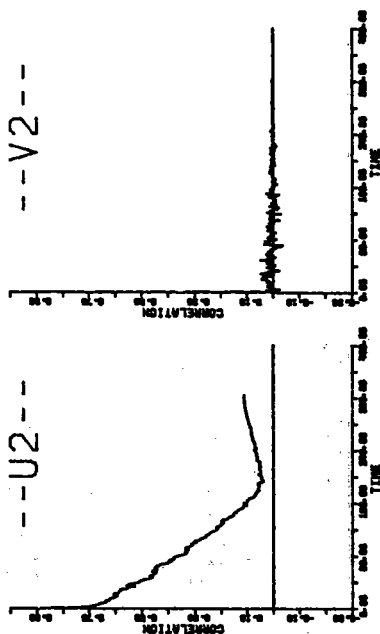
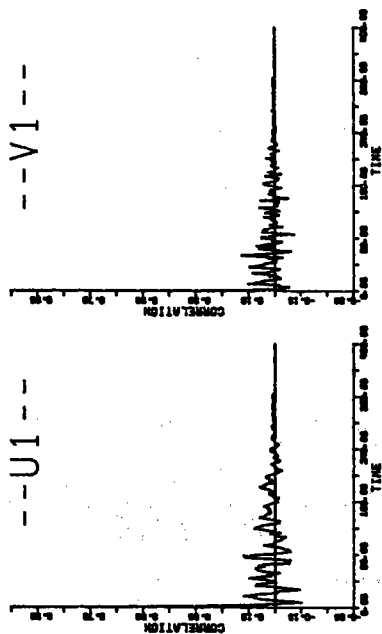
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	RESIDUAL STRESS
U1	0.001708	-0.230880	0.067900	-0.000066
U2	0.000902	0.012542	0.003020	
V1	0.000878	-0.277280	0.086800	
V2	0.000533	0.008385	0.001880	0.000038

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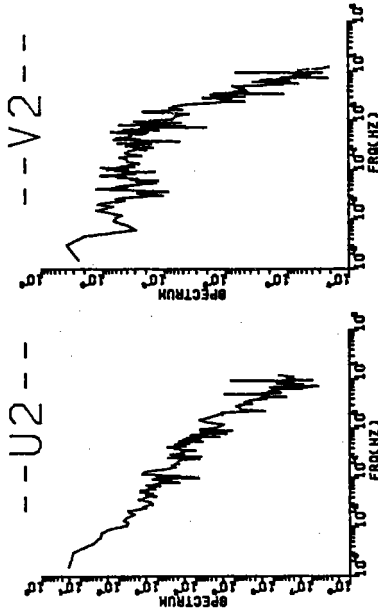
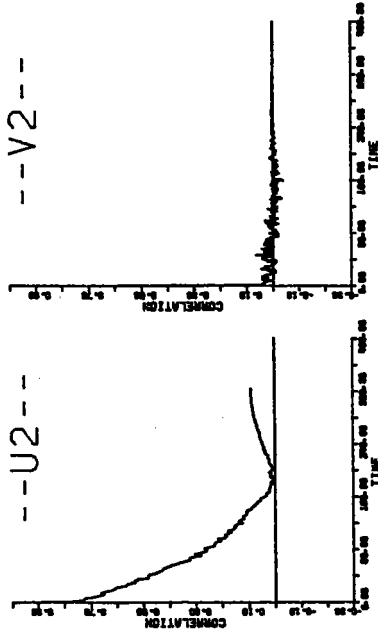
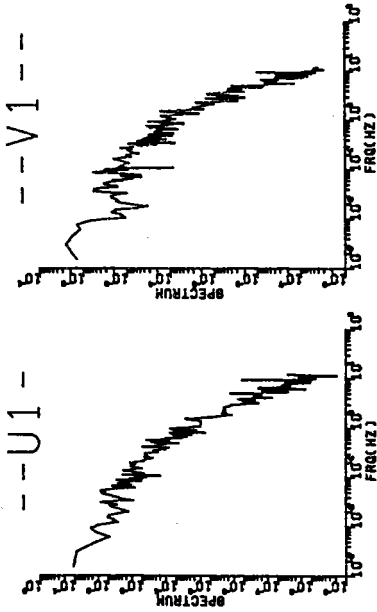
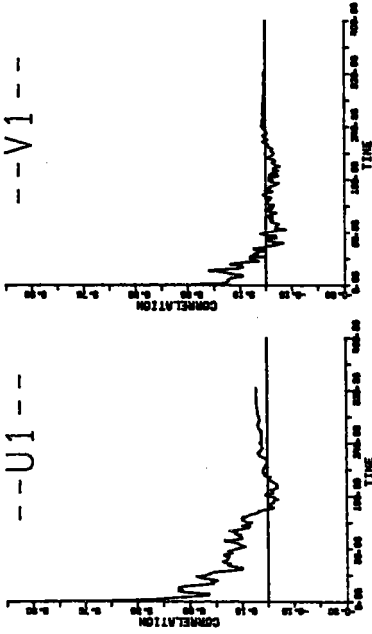
	TURBULENT MEAN INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.001578	-0.202020	0.008700	-0.000071
V1	0.001391	0.024986	0.000899	
U2	0.001461	-0.289130	0.192000	-0.000068
V2	0.000562	0.008889	0.002390	

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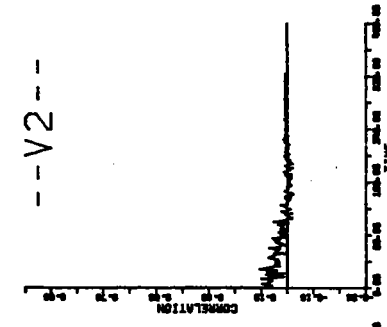
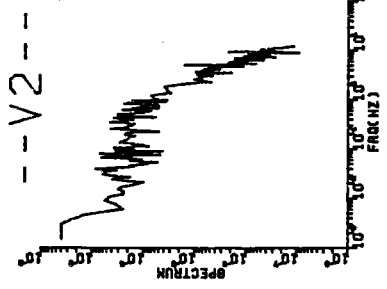
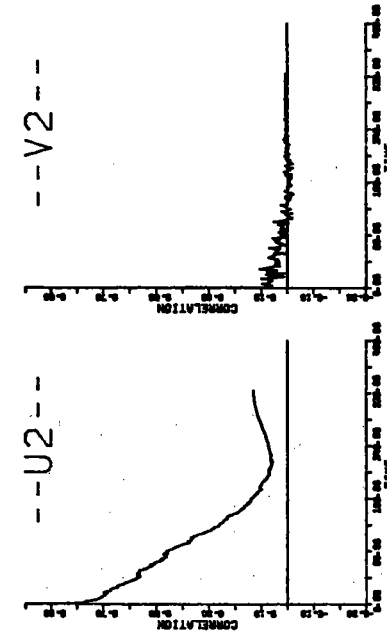
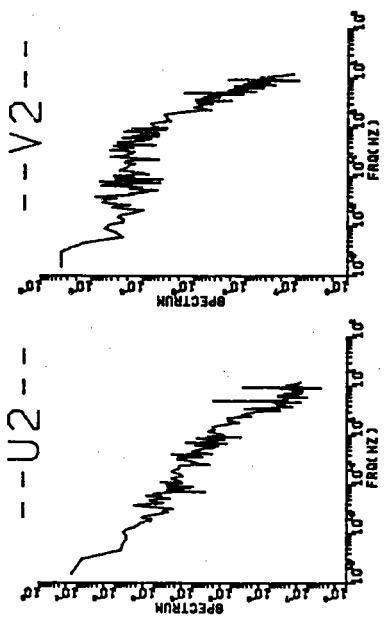
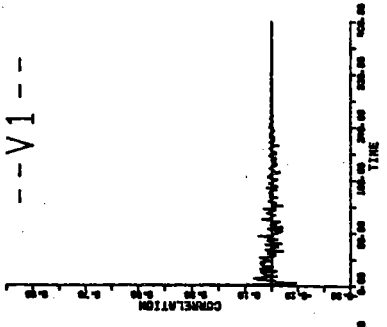
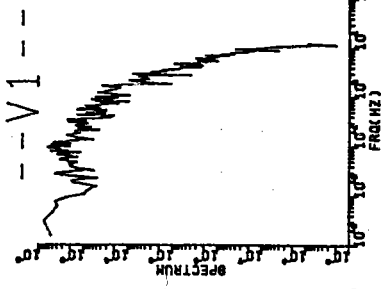
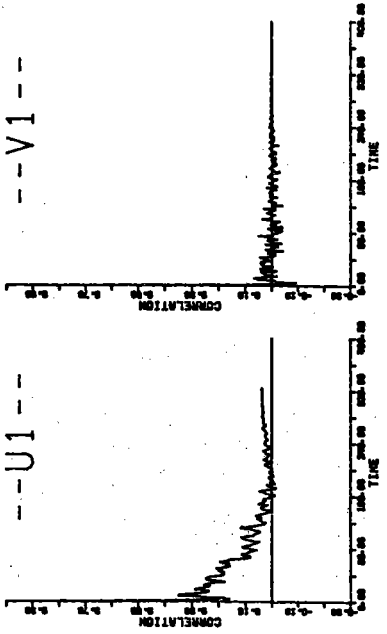
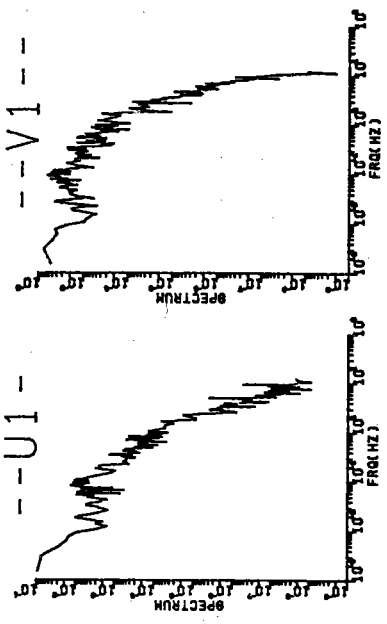
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	RESIDUAL STRESS
U1	0.001891	-0.216670	0.010100	-0.000205
U2	0.001949	0.090817	0.005250	
V1	0.001049	-0.271290	0.066000	
V2	0.000579	0.011559	0.001000	0.000018

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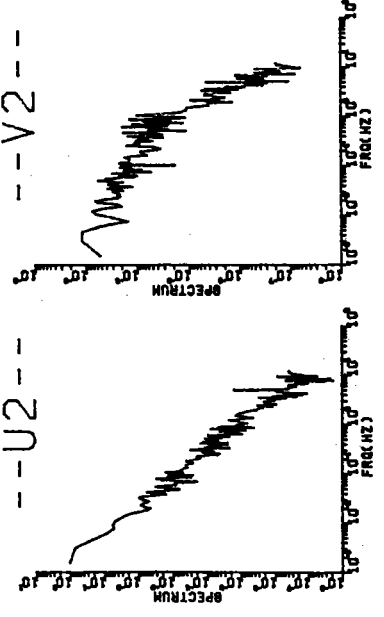
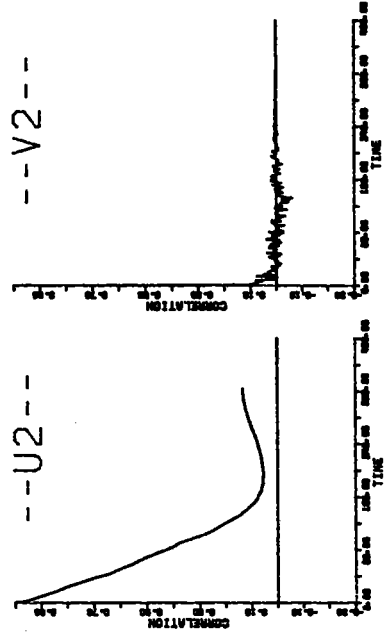
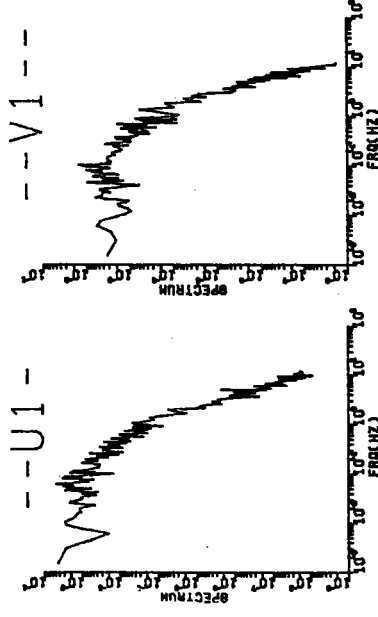
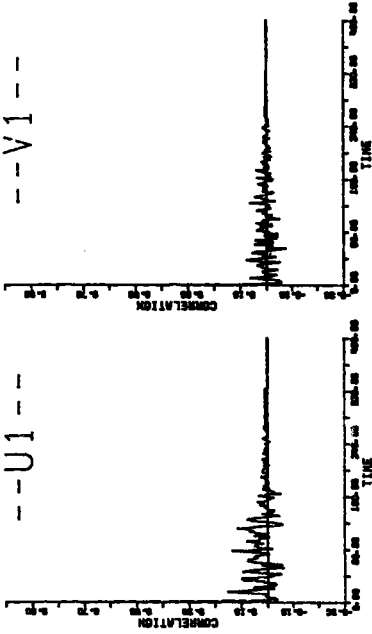
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	VELOCITY SKEWNESS
U1	0.001520	-0.206940	0.049700	0.000228
V1	0.000789	0.014068	0.002470	
U2	0.001311	-0.198790	0.085400	0.000052
V2	0.000444	0.002419	0.000450	

* * 84.08.02 18:25 * *



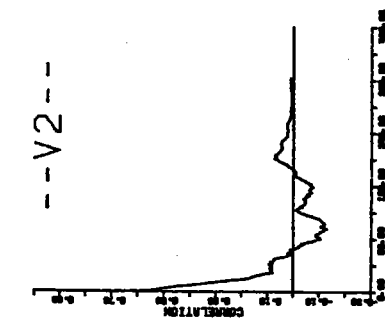
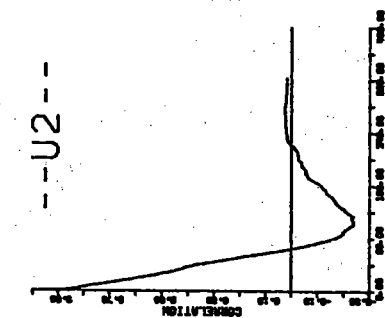
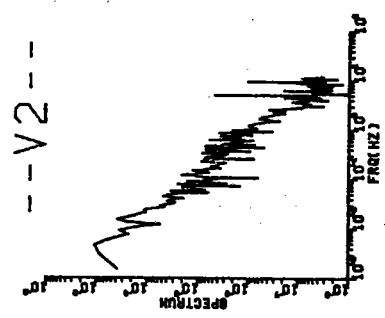
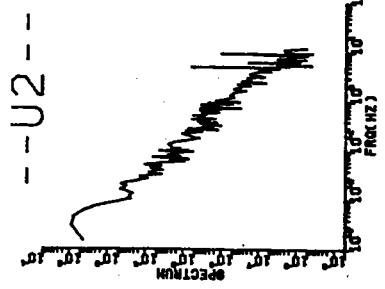
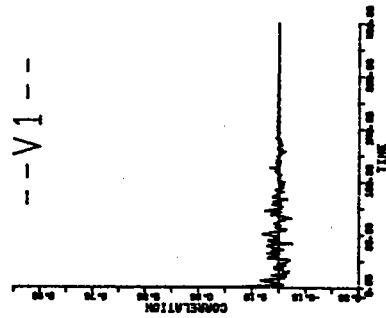
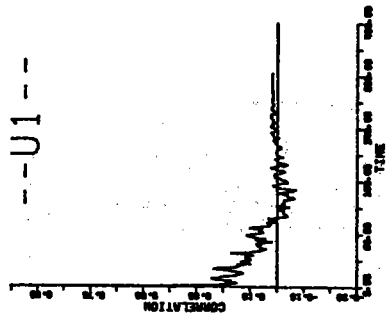
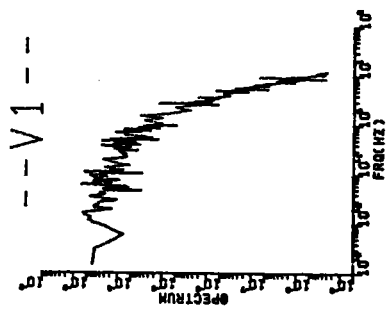
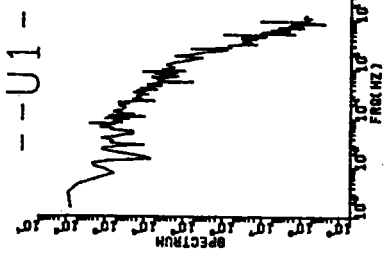
	CURRENTLY VARIABLE	MEAN VELOCITY	DIFFUSION COEFFICIENT	MEAN SIGNAL
U1	0.001955	-0.287020	0.039500	-0.00029
V1	0.001266	0.027572	0.001080	
U2	0.000704	-0.205220	0.068400	-0.00028
V2	0.000275	-0.005671	0.001370	

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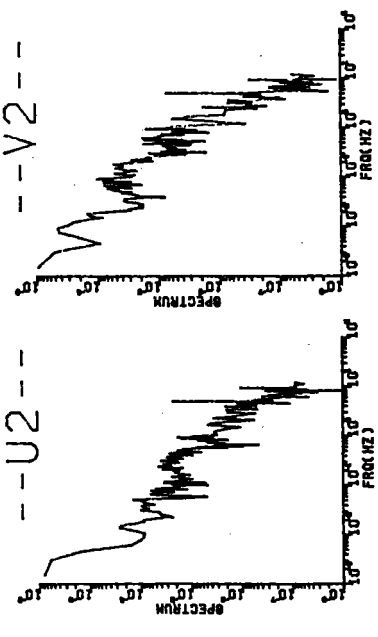
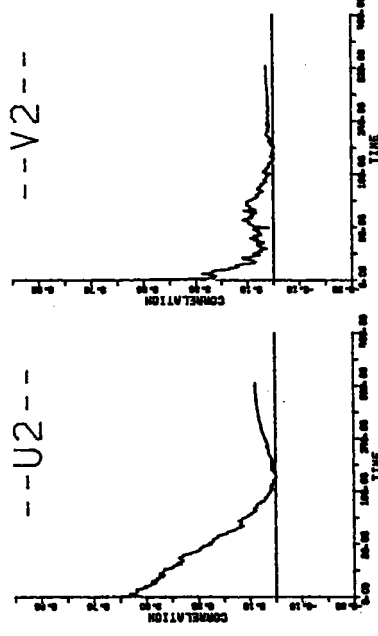
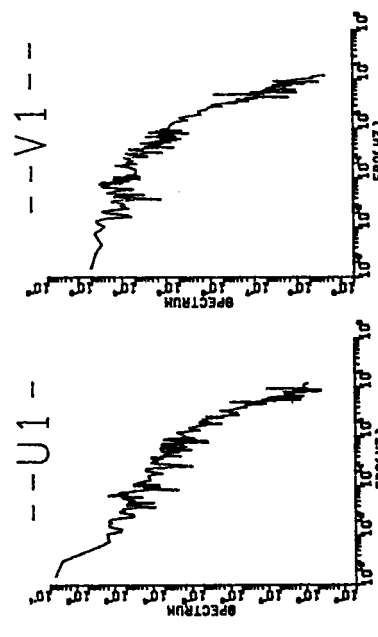
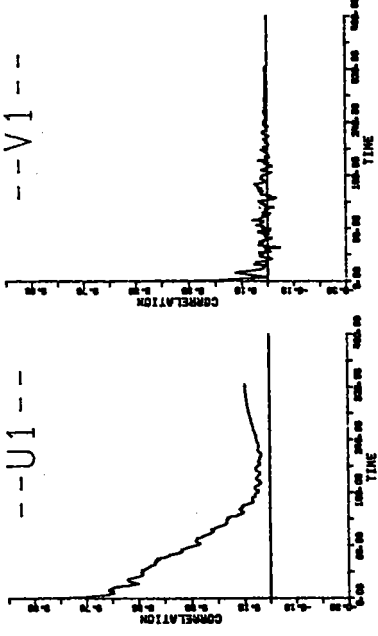
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	HEIGHT
U1	0.003486	-0.280290	0.021000	0.000110
V1	0.001848	0.032483	0.001540	
U2	0.004680	-0.098895	0.489000	-0.000023
V2	0.000140	-0.004785	0.000080	

* * 84.08.02 19:10 * *



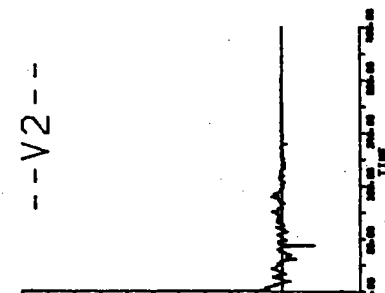
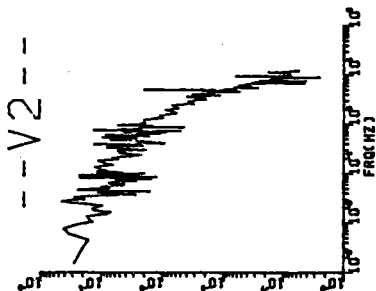
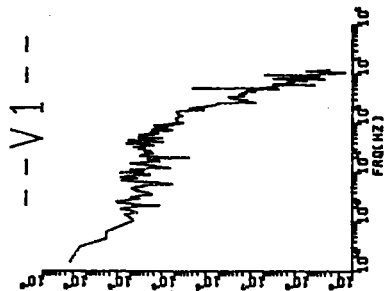
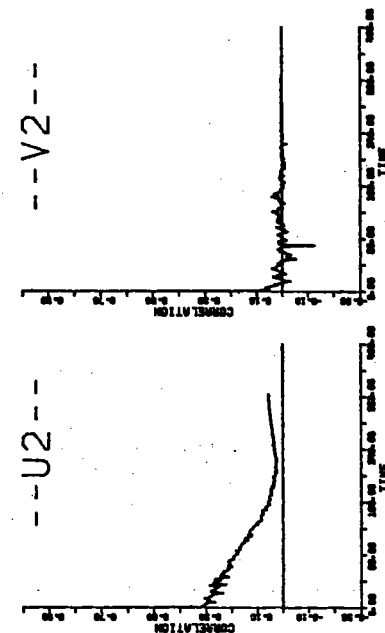
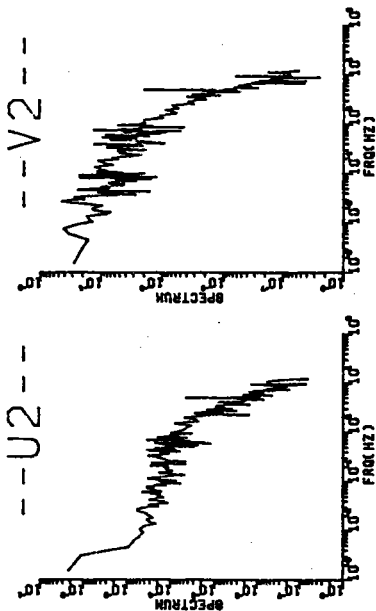
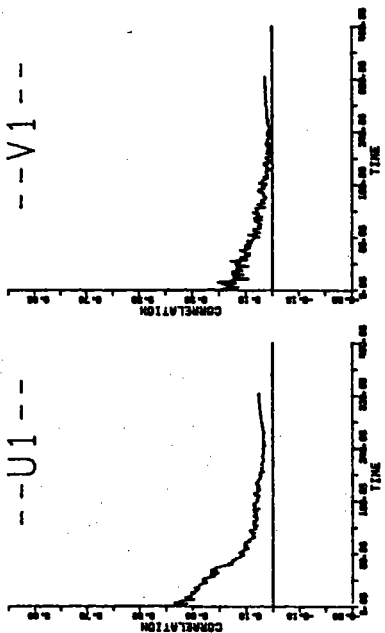
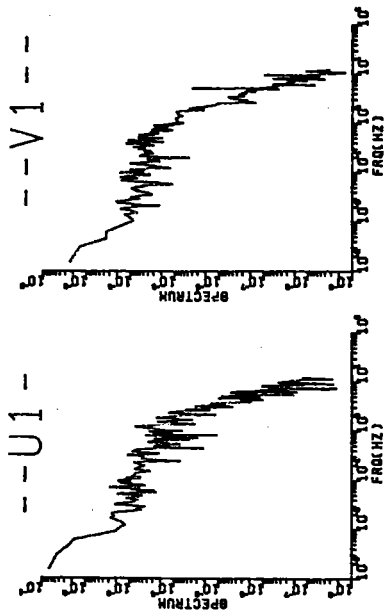
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000402	-0.241780	0.004840	-0.000059
V1	0.000200	0.021686	0.000284	
U2	0.000119	0.178620	0.001900	0.000032
V2	0.000016	0.015103	0.000121	

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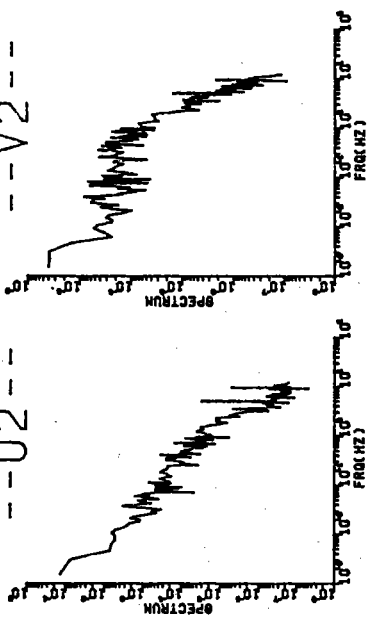
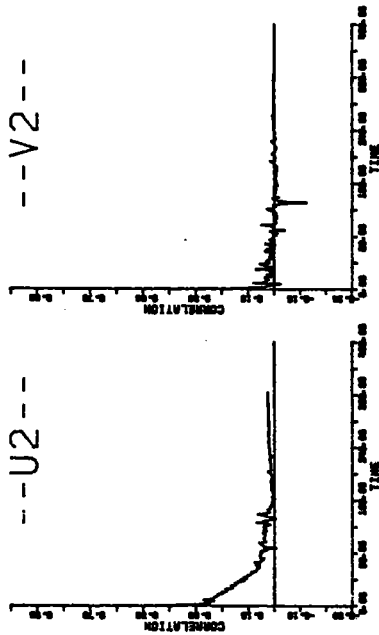
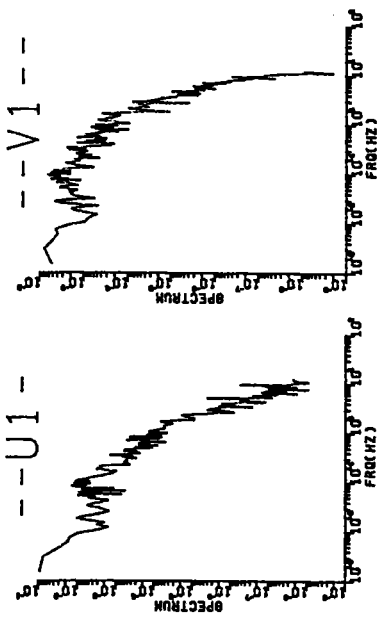
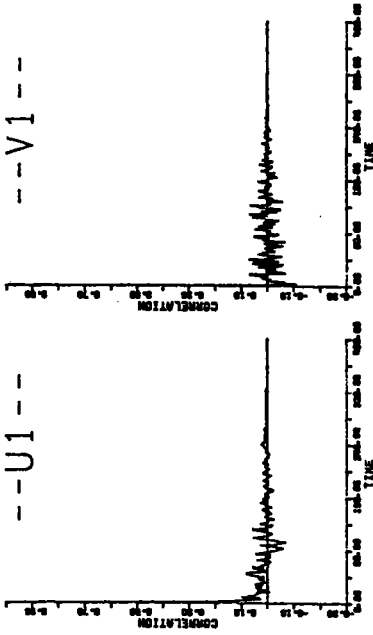
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000473	-0.207830	0.032300	-0.000040
V1	0.000101	0.020057	0.000508	
U2	0.000061	0.187320	0.003330	0.000001
V2	0.000027	0.015048	0.000478	

* * 84.08.02 19:30 * *



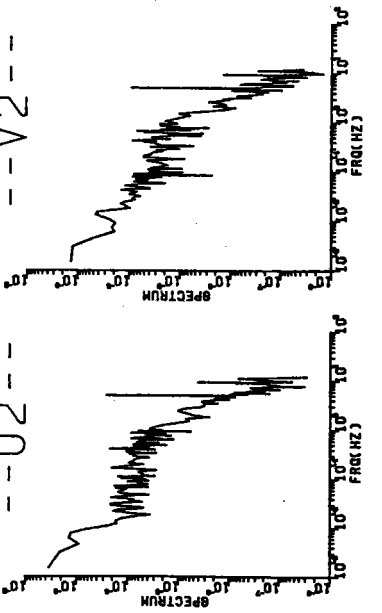
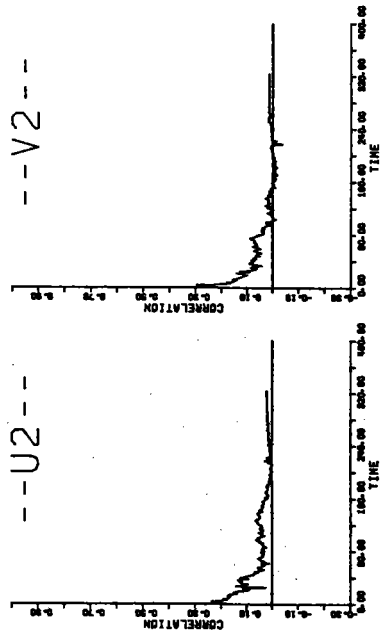
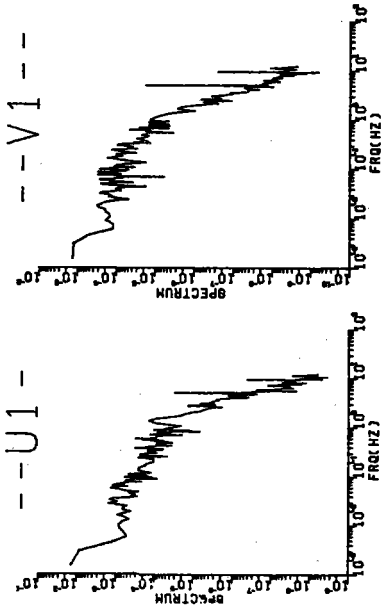
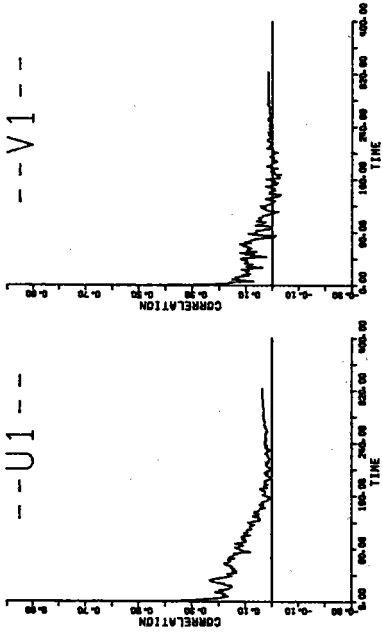
	TORRENTY INTEGRITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	VELOCITY NUMBER
U1	0.000868	-0.184390	0.034300	-0.000047
V1	0.000084	0.012715	0.001140	
U2	0.000289	0.191400	0.010900	0.000040
V2	0.000078	0.016970	0.000121	

84.08.02 20:05



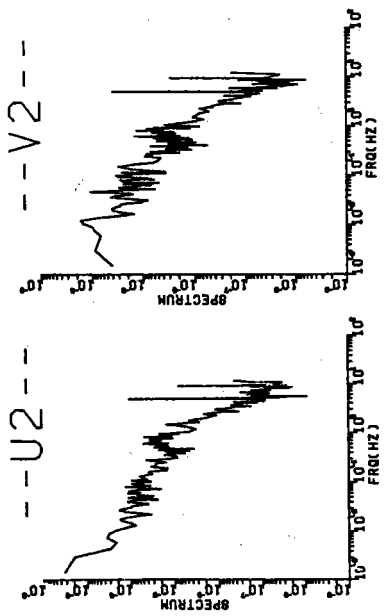
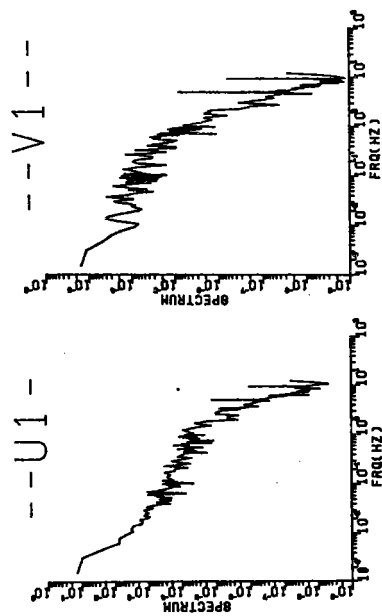
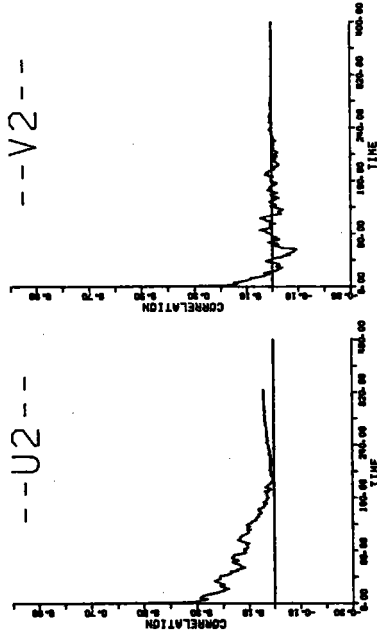
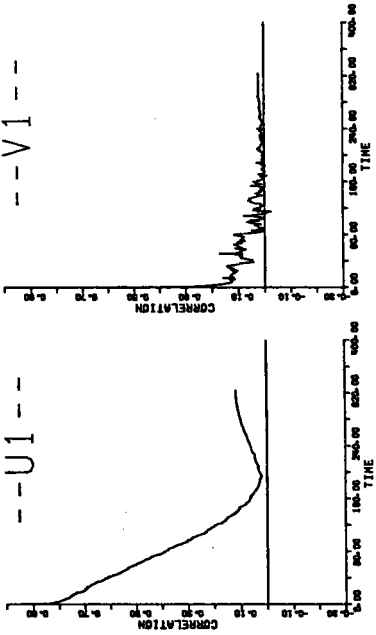
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	MEAN STRESS
U1	0.000365	-0.187010	0.001950	0.000012
V1	0.000184	0.011308	0.000011	
U2	0.000288	0.122190	0.005010	
V2	0.000124	0.011164	0.000178	-0.000019

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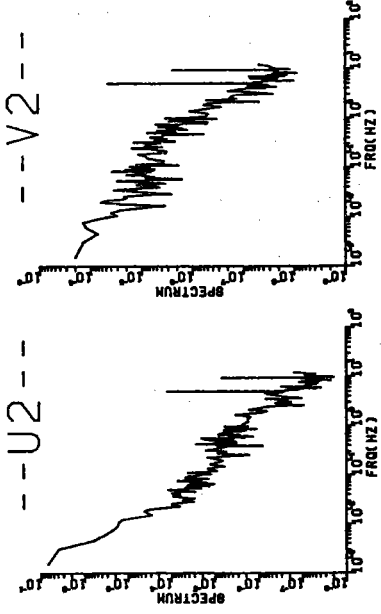
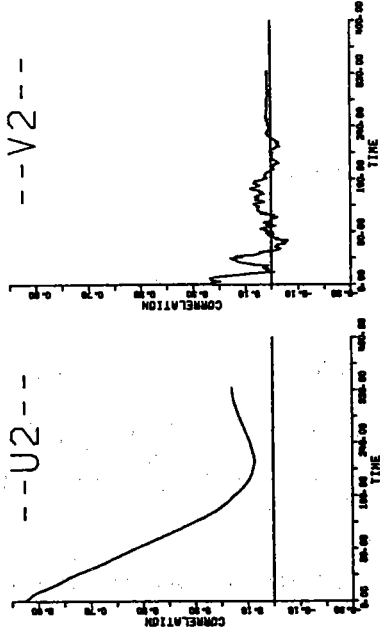
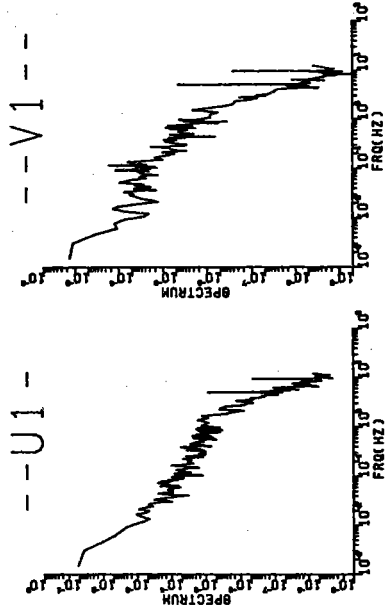
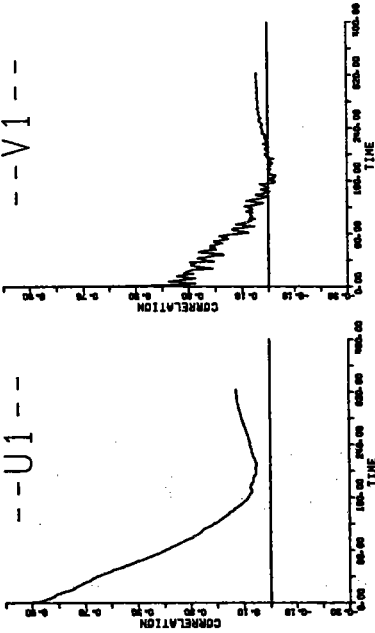
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000256	-0.189420	0.008340	0.000010
V1	0.000050	0.008886	0.000099	
U2	0.000115	0.116140	0.001620	0.000012
V2	0.000051	0.007165	0.000490	

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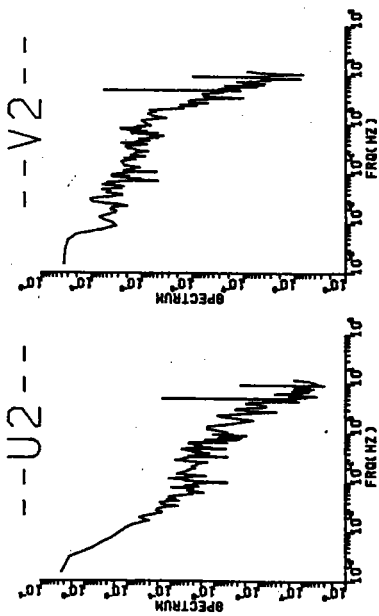
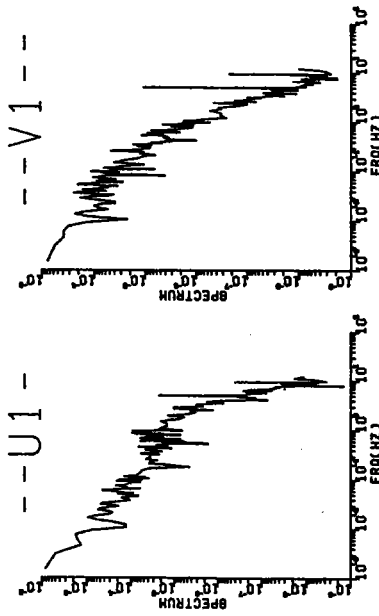
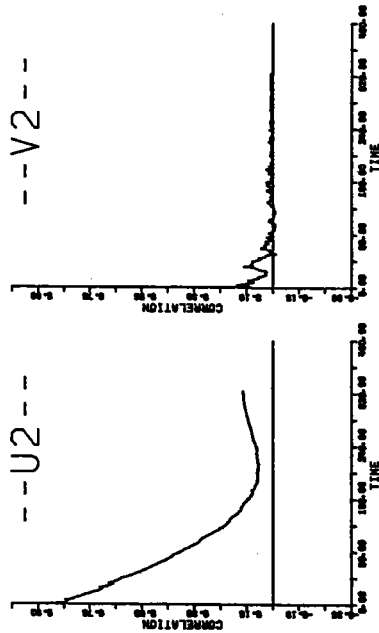
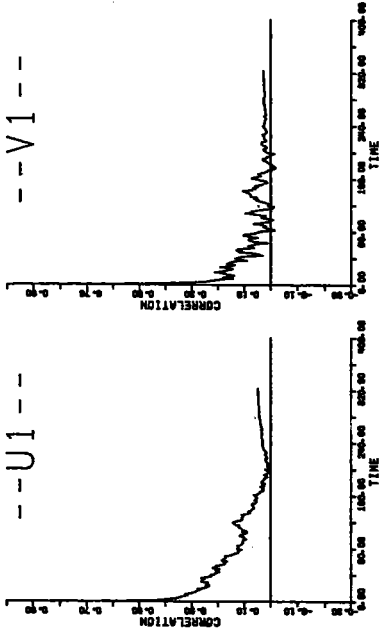
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION STRESS	REYNOLDS NUMBER
U1	0.000701	-0.158610	0.060900	-0.000052
V1	0.000047	0.010773	0.000668	
U2	0.000053	0.113240	0.001490	-0.000005
V2	0.000012	0.005691	0.000006	

* * 84.08.02 20:50 * *



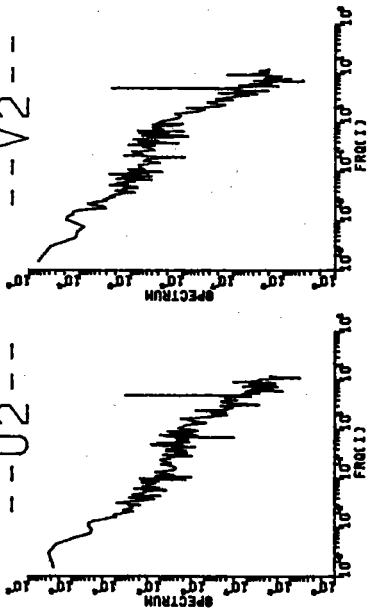
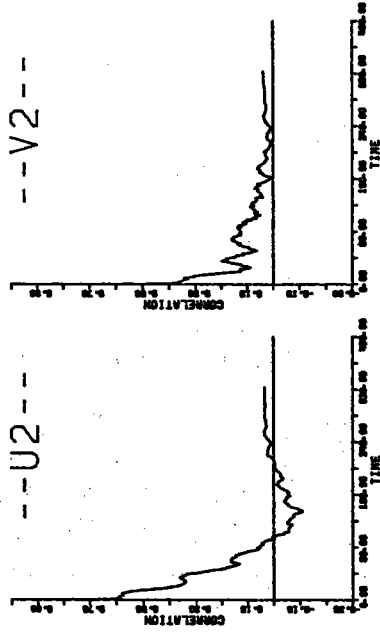
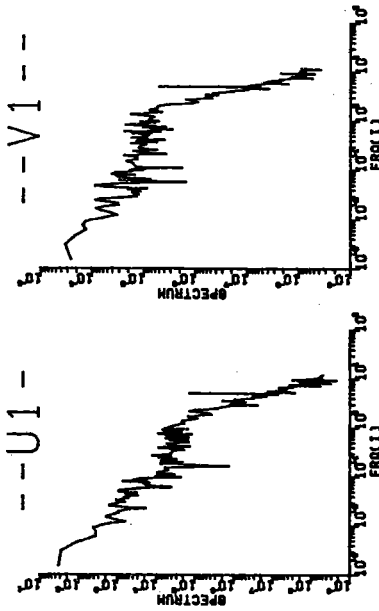
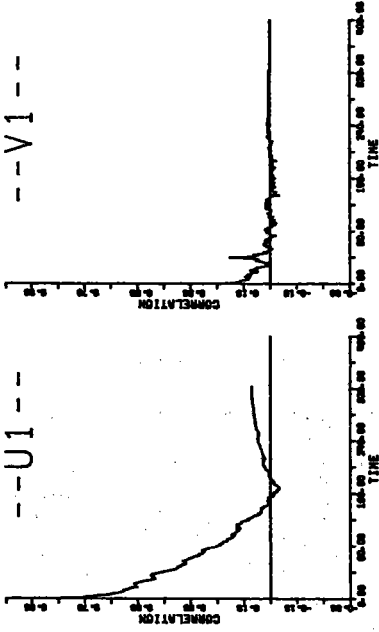
	TOURBULENCE INTENSITY	WIND VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000519	-0.061762	0.049500	-0.000048
V1	0.000096	0.007969	0.001030	
U2	0.000269	0.094020	0.032500	0.000005
V2	0.000010	0.003026	0.000091	

*84.08.02 21:10**



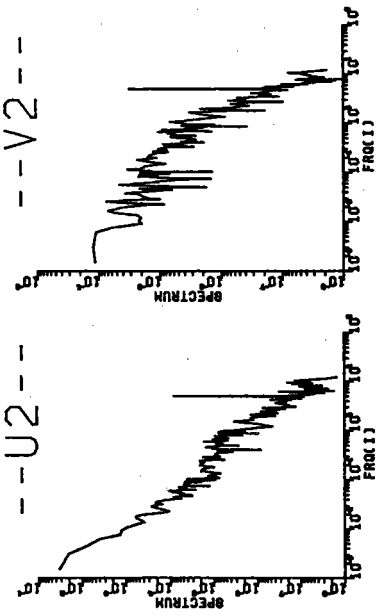
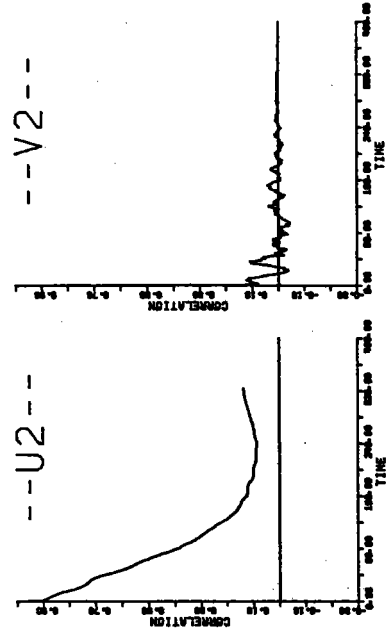
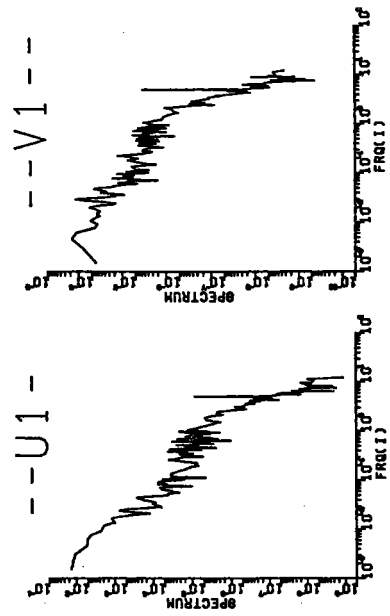
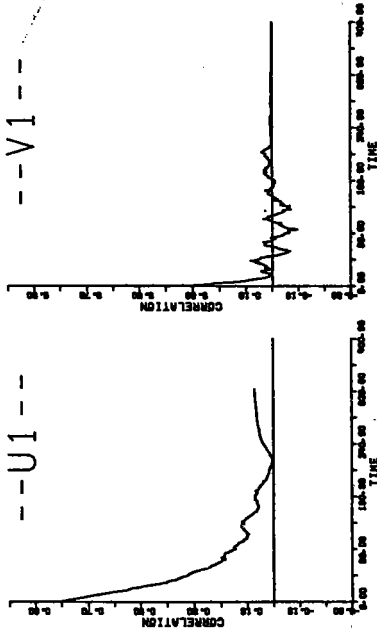
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	STRESS
U1	0.000115	-0.016675	0.003650	0.000002
V1	0.000021	0.006810	0.000378	0.000002
U2	0.000184	0.052108	0.015500	0.000022
V2	0.000029	0.002419	0.000166	0.000002

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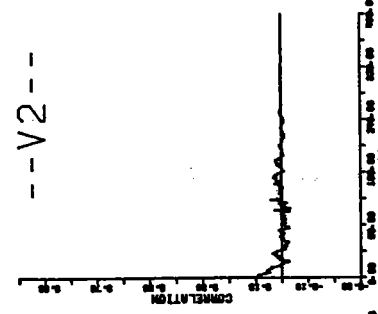
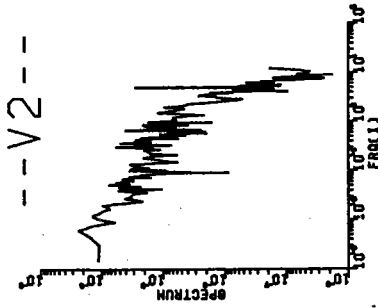
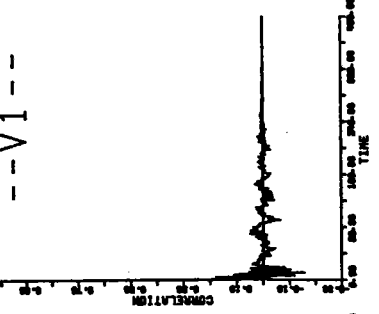
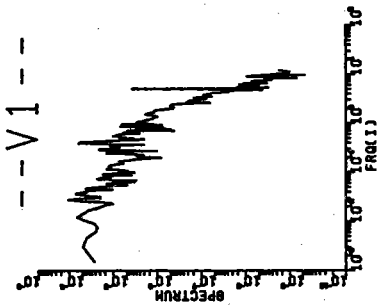
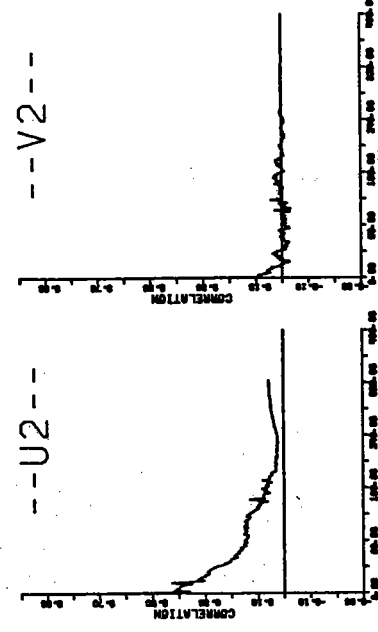
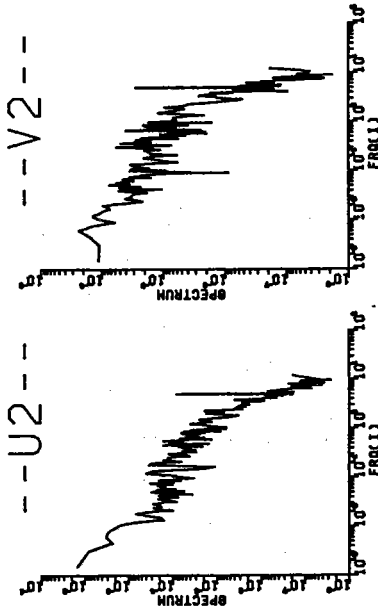
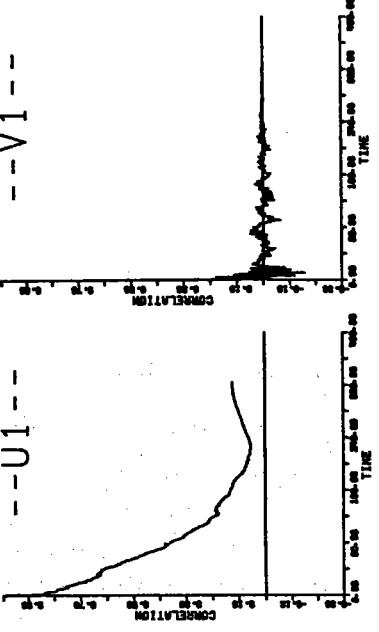
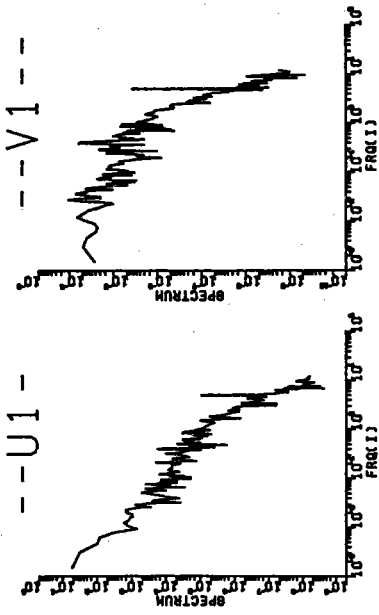
	CURRENT	VELOCITY	DIFFUSION	REYNOLDS
	INTEGRITY		STRESS	
U1	0.000285	0.17800	0.013100	-0.000007
V1	0.000023	0.003777	0.000078	
U2	0.000039	0.029891	0.000771	
V2	0.000013	-0.002244	0.000324	0.000006

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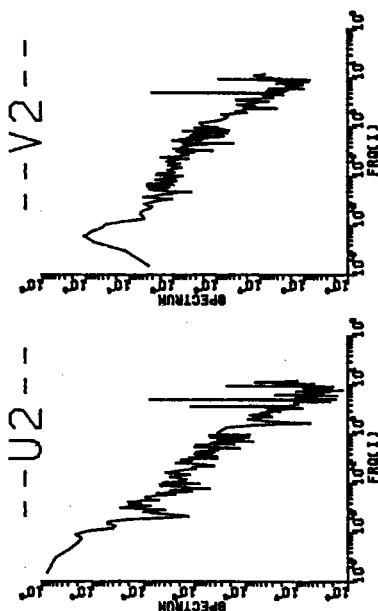
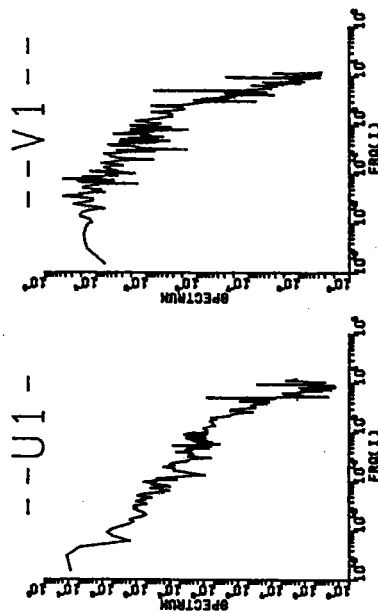
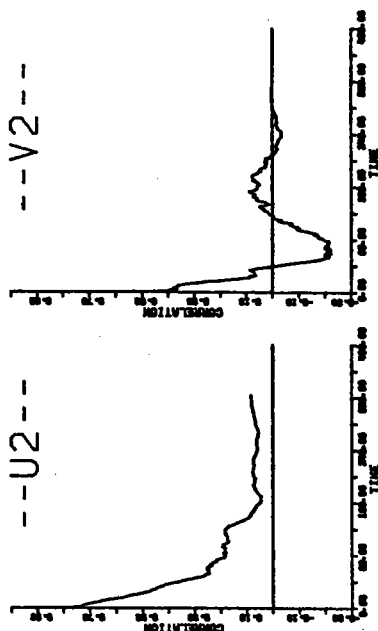
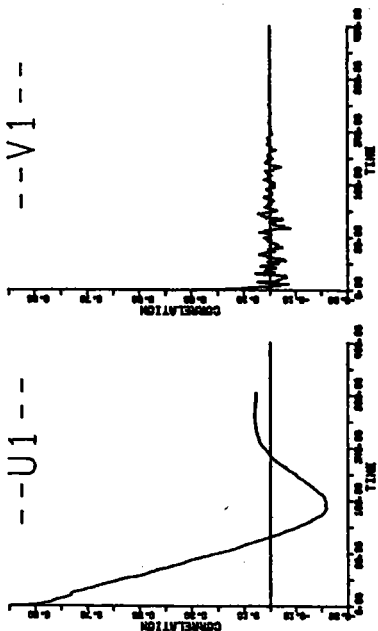
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000228	0.220820	0.011300	0.000004
V1	0.000015	0.000808	0.000038	
U2	0.000155	0.042075	0.018000	
V2	0.000015	-0.000987	0.000044	0.000013

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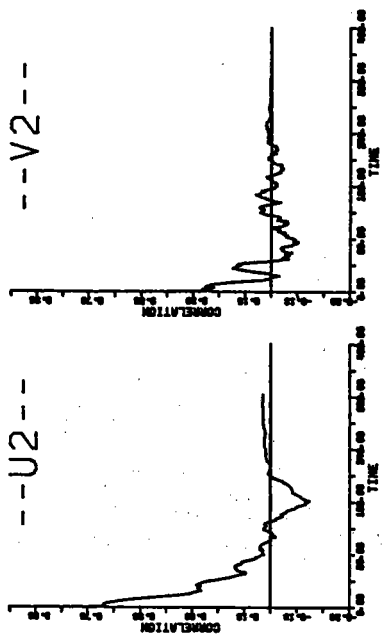
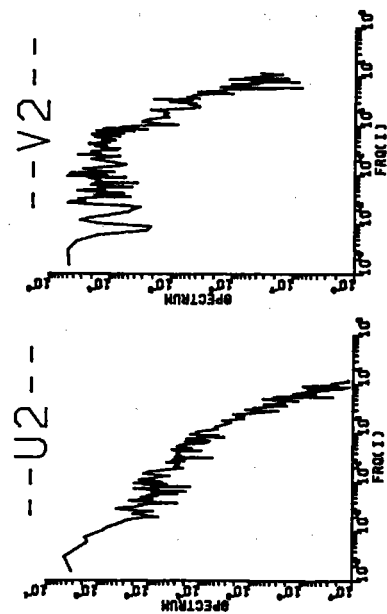
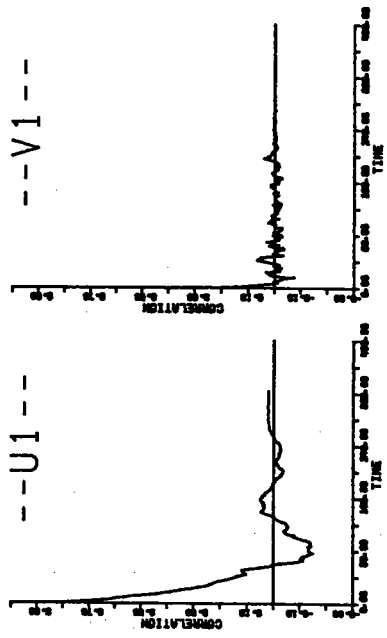
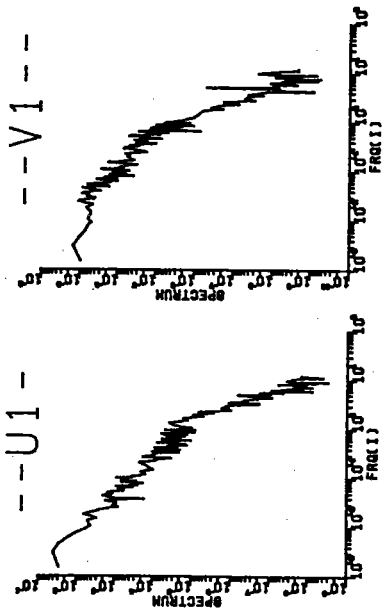
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION STRESS	REYNOLDS STRESS
U1	0.000544	0.279400	0.049800	0.000009
V1	0.000029	-0.001018	0.000008	0.000014
U2	0.000178	0.032467	0.006980	0.000042
V2	0.000032	-0.001728	0.000042	0.000014

*84.08.03 0:10**



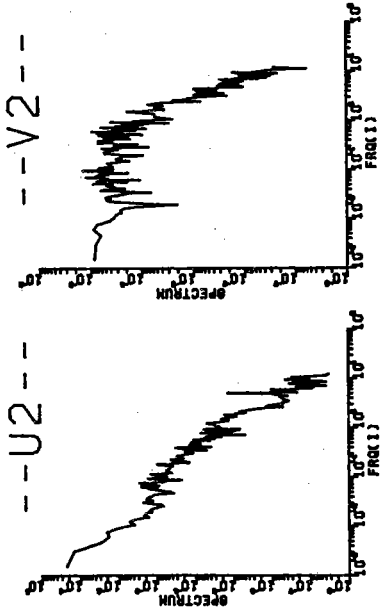
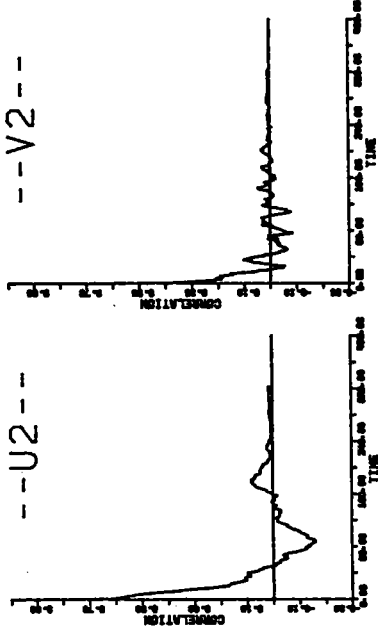
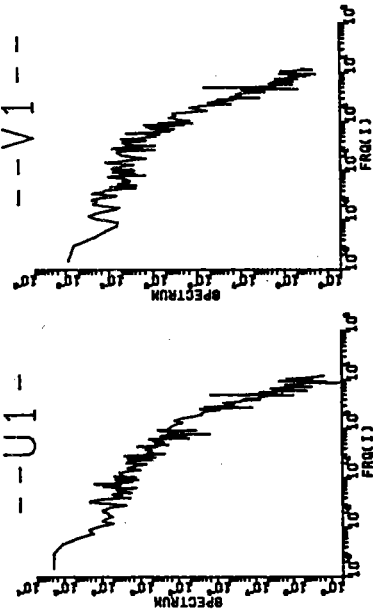
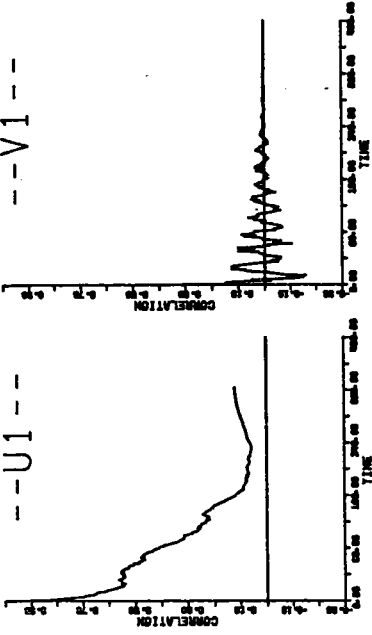
	TURBULENCE INTENSITY	VELOCITY FLUCT	DIFFUSION COEFF	STRENGTH
U1	.0011	.9998	.00029	.0000
V1	.0000	.0011	.00000	.0000
U2	.0001	-.9998	.00056	.0000
V2	.0000	.0013	.00000	.0000

84.08.03 0:20



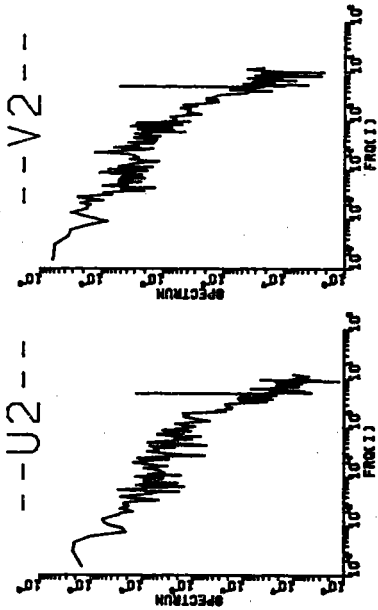
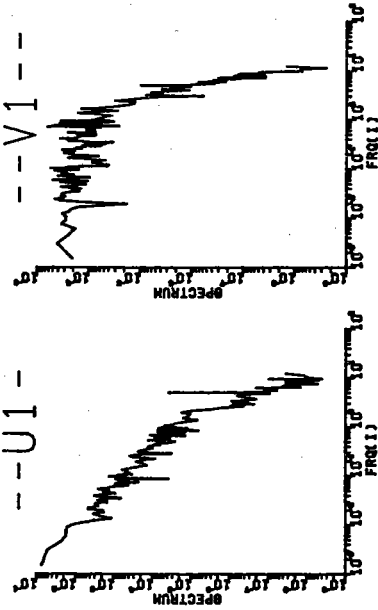
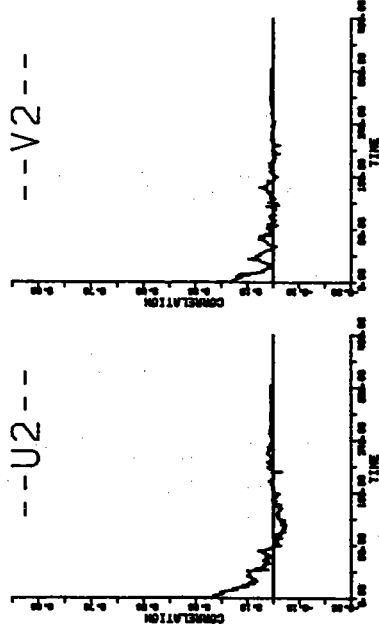
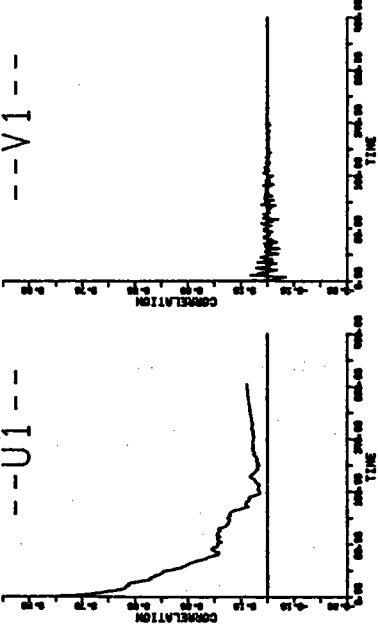
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000528	0.958400	0.008980	0.000007
V1	0.000061	-0.000308	0.000061	0.000000
U2	0.000052	-0.014870	0.001040	0.000006
V2	0.000011	0.000878	0.000028	0.000000

* * 84.08.03 0:30 * *



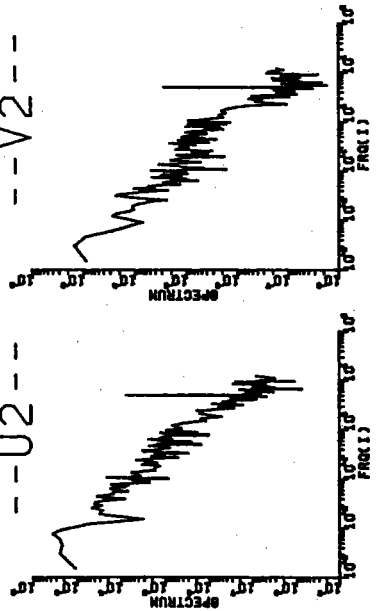
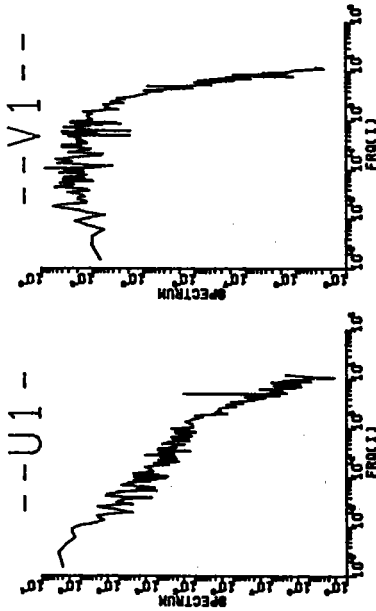
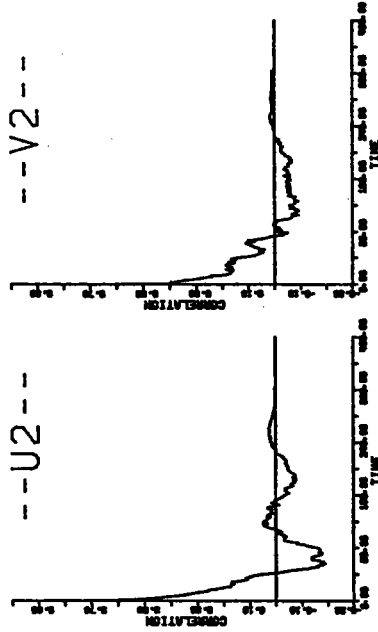
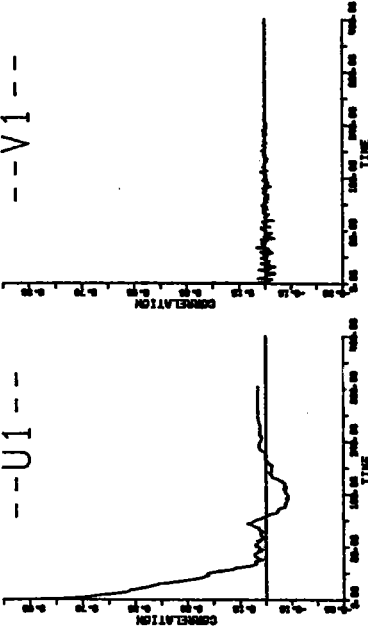
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000547	0.386210	0.048100	0.000016
V1	0.000078	-0.002184	0.000117	0.000003
U2	0.000051	-0.004299	0.000480	0.000003
V2	0.000019	0.002255	0.000059	0.000003

*x84.08.03 01:05**



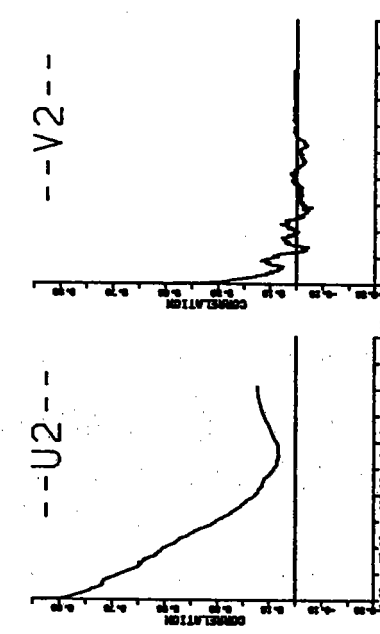
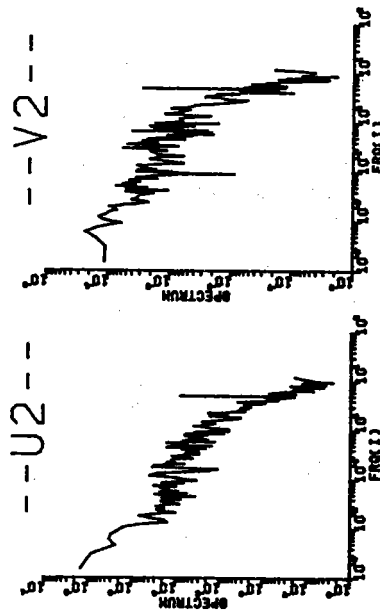
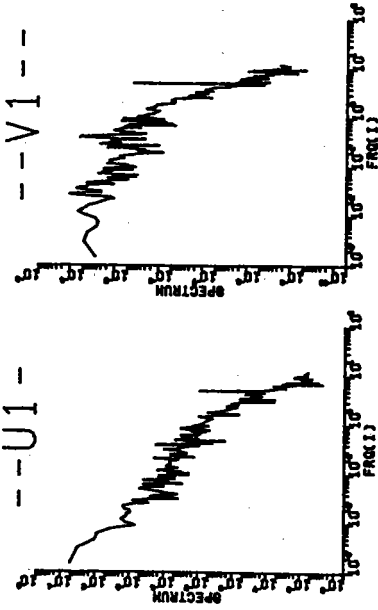
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	RETARDING
U1	.0006	.0012	.03356	.0000
U2	.0005	.0010	.00001	.0000
V1	.0001	-.0702	.00051	.0000
V2	.0000	-.0090	.00023	.0000

*84.08.03 1:15**



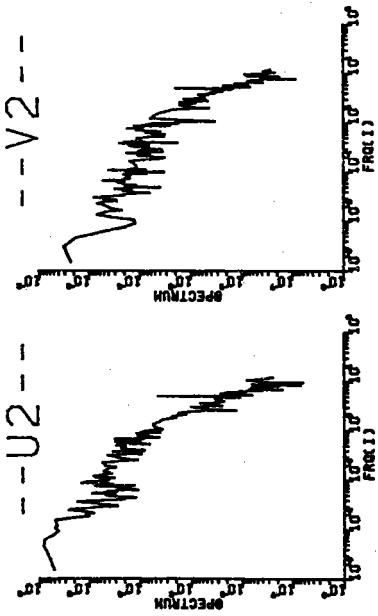
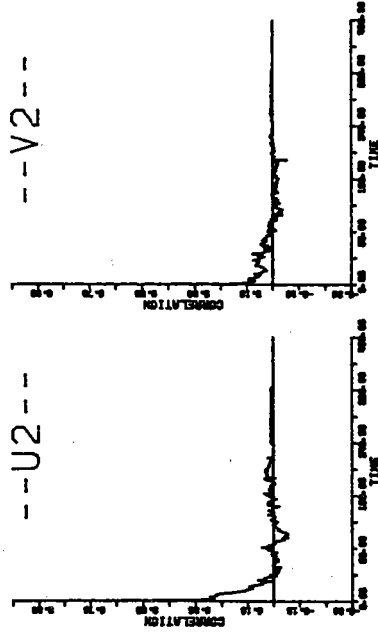
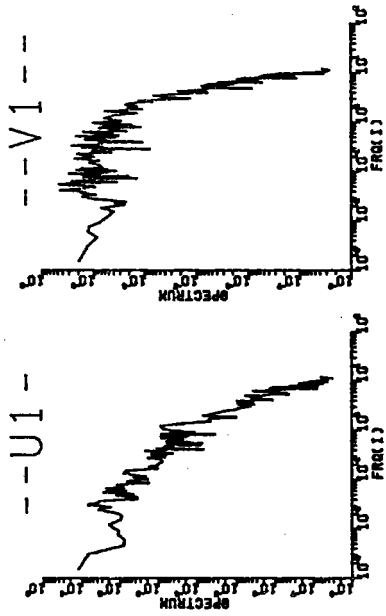
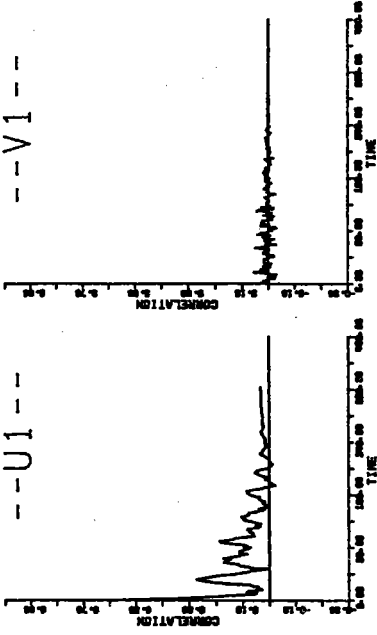
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000388	0.492470	0.008280	0.000002
V1	0.000388	-0.001871	0.000024	
U2	0.000080	-0.075817	0.000117	
V2	0.000025	-0.012604	0.000198	0.000002

*84.08.03 1:25**



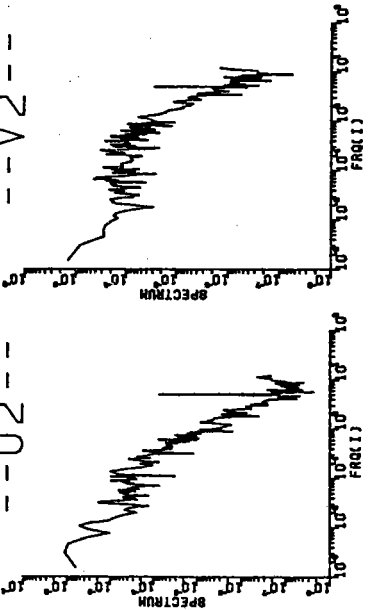
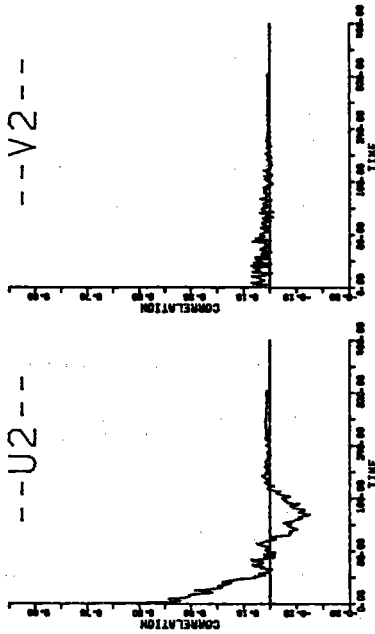
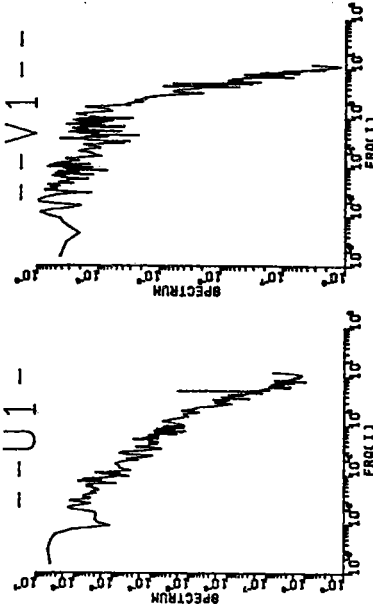
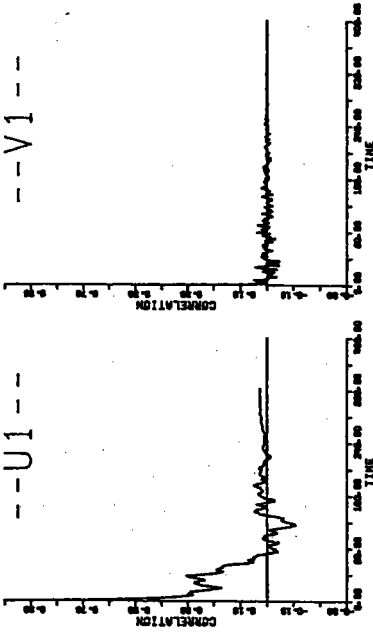
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.002587	0.407990	0.094600	0.000077
V1	0.001805	-0.008818	0.002190	
U2	0.000420	-0.080819	0.047500	0.000023
V2	0.000036	-0.006926	0.000296	

*84.08.03 1:55**



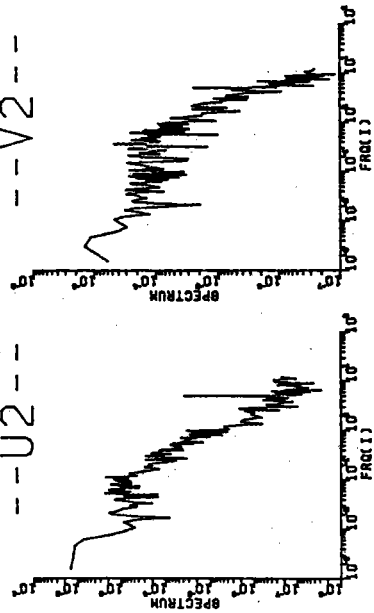
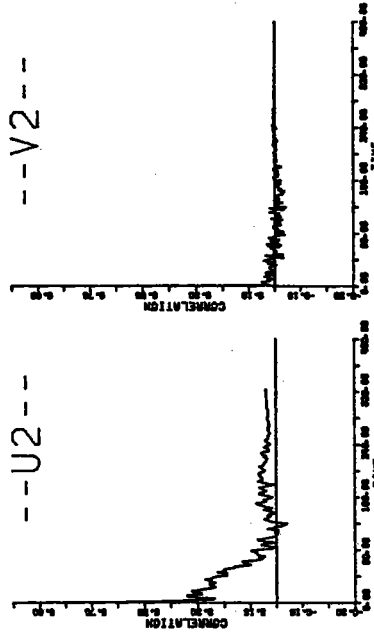
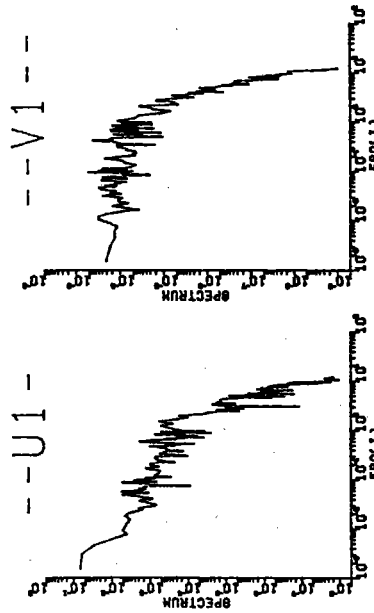
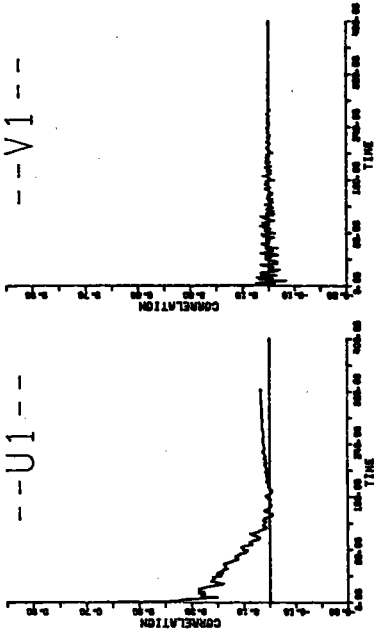
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	RES. NO. OF STRAIN
U1	0.002898	0.311200	0.058900	0.000059
V1	0.001352	-0.008021	0.000911	
U2	0.000978	-0.119450	0.002170	-0.000036
V2	0.000181	-0.010792	0.000562	

*84.08.03 2:05**



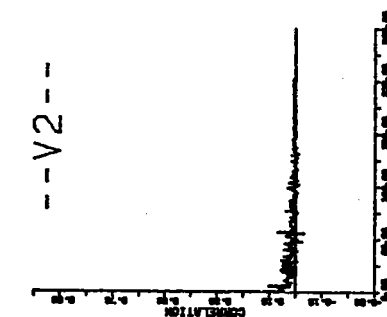
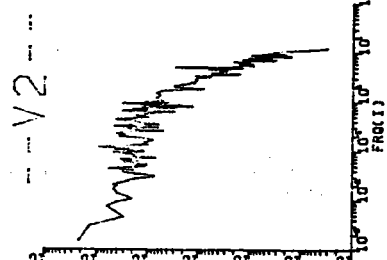
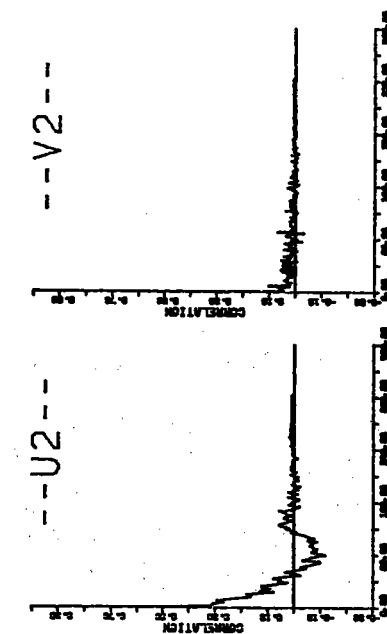
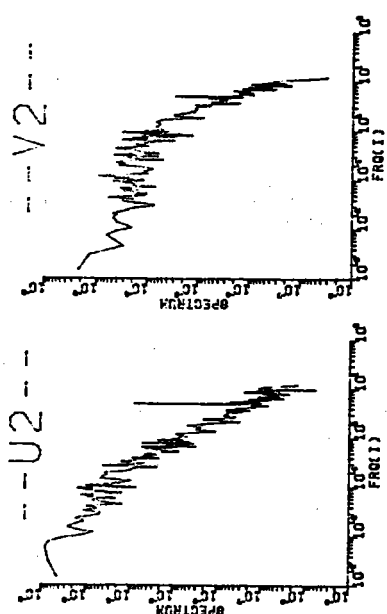
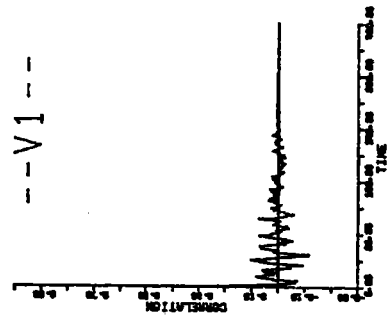
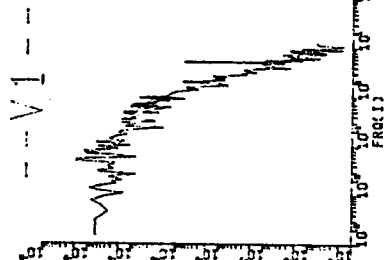
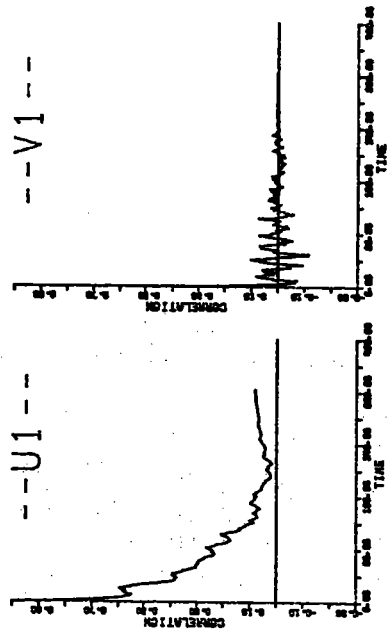
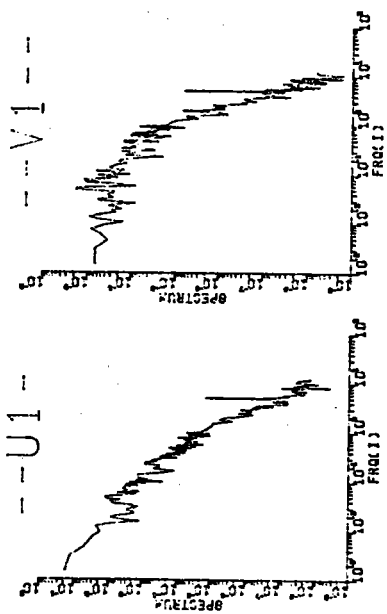
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000828	0.279650	0.015100	0.000045
V1	0.000912	-0.003160	0.000185	
U2	0.000185	-0.162410	0.001410	0.000007
V2	0.000145	-0.018789	0.000705	

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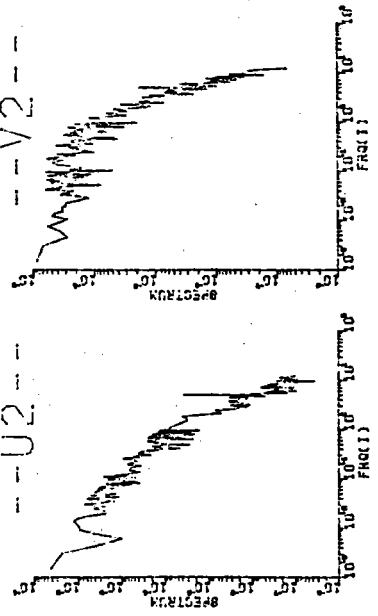
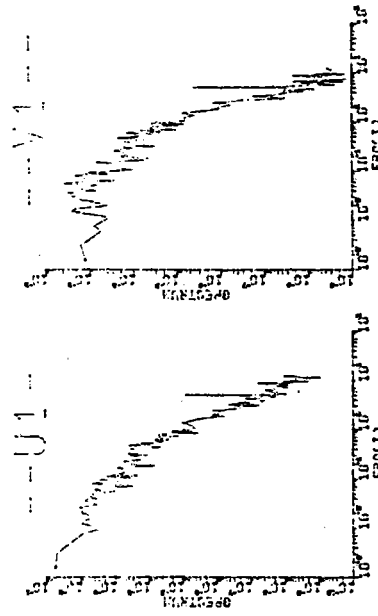
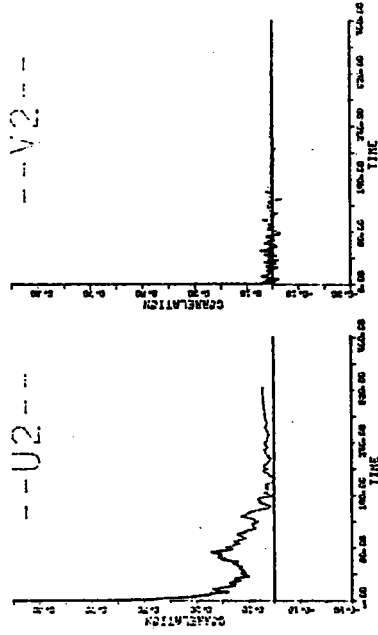
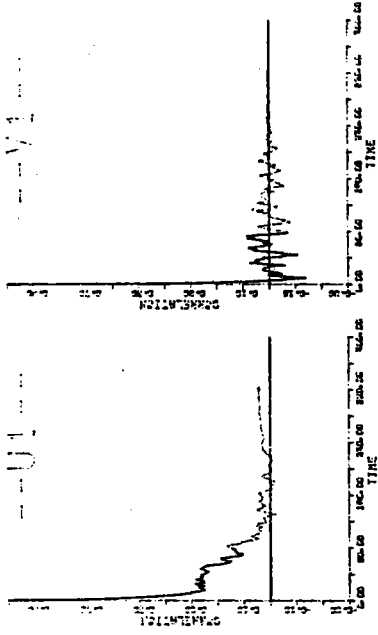
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS STRESS
U1	0.002910	0.235080	0.053600	0.000039
V1	0.000298	-0.002019	0.000187	0.000000
U2	0.000275	-0.171070	0.007320	0.000001
V2	0.000177	-0.015843	0.000008	0.000000

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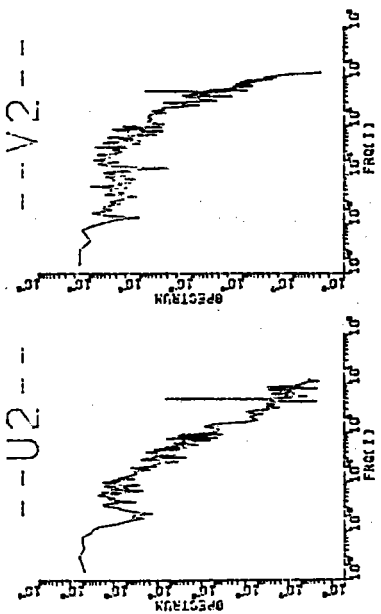
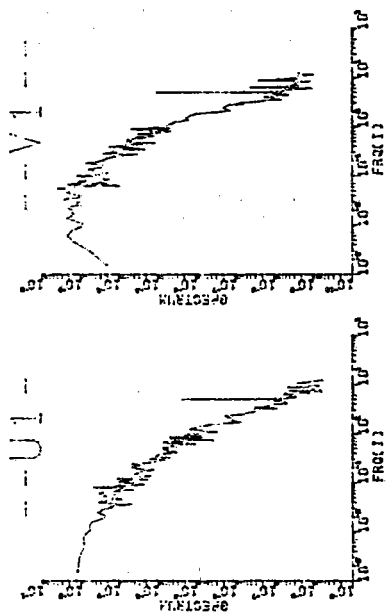
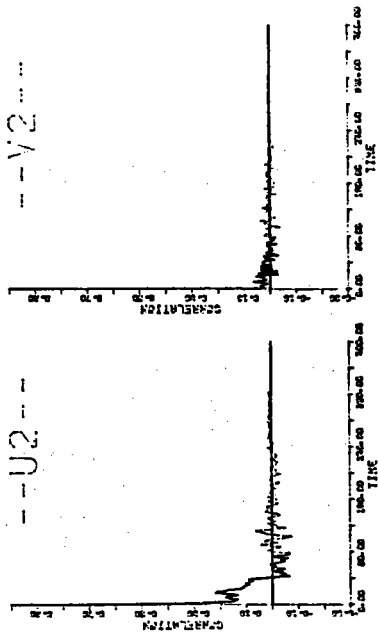
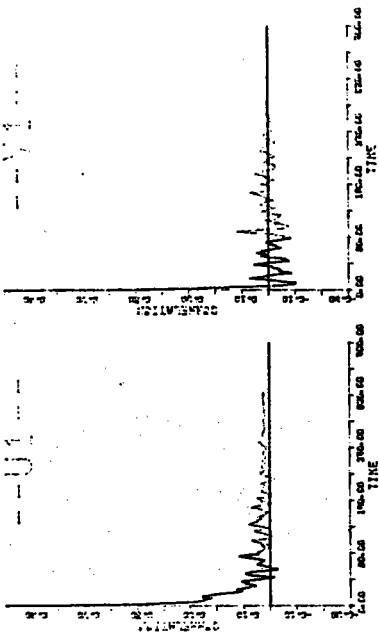
	TURBULENCE LEVEL	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001984	0.129200	0.080200	0.000106
V1	0.000190	-0.000988	0.000248	
U2	0.000215	-0.253770	0.001980	0.000019
V2	0.000295	-0.014272	0.001020	

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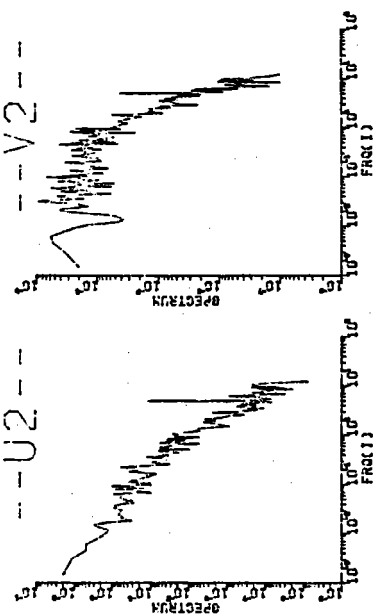
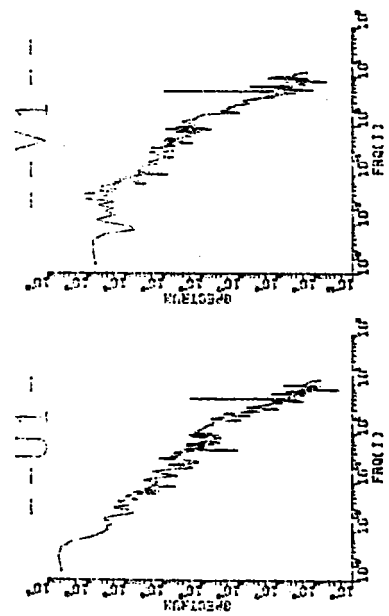
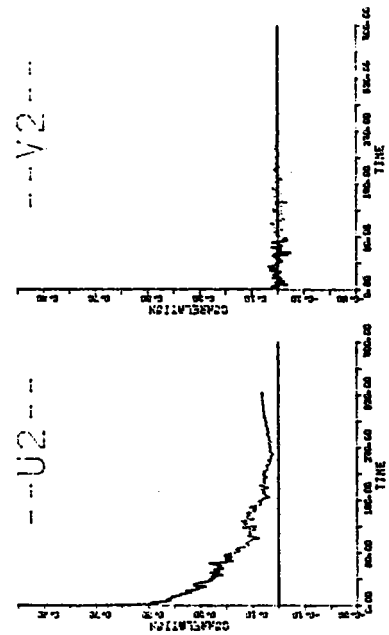
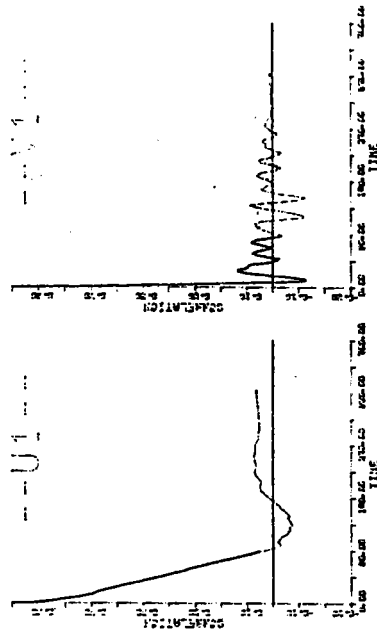
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	FRIC. COEFF.
U1	0.000749	0.071081	0.022200	0.000115
V1	0.000219	-0.001016	0.000348	
U2	0.000680	-0.256380	0.020100	-0.00001
V2	0.000285	-0.014832	0.000380	

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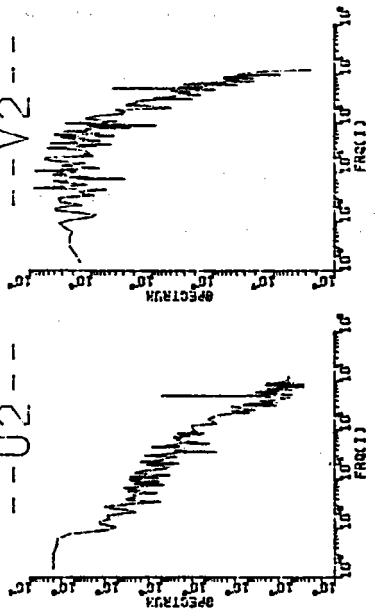
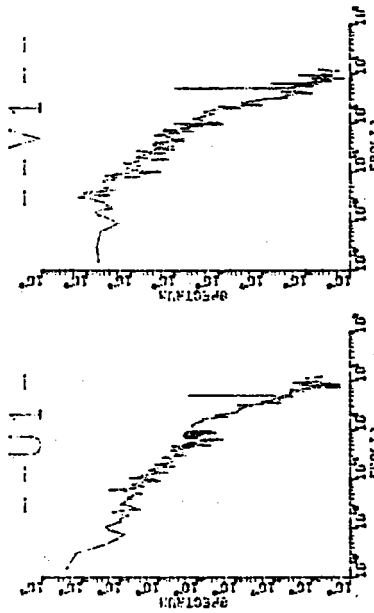
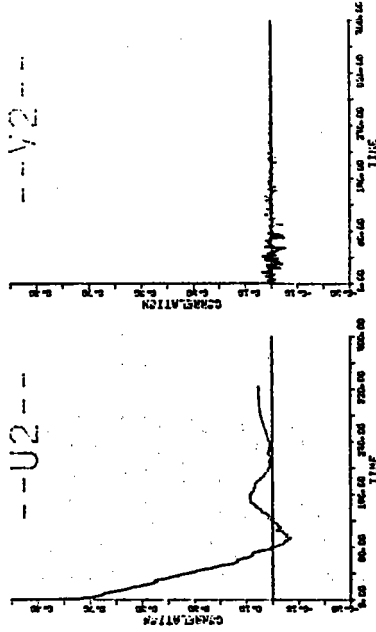
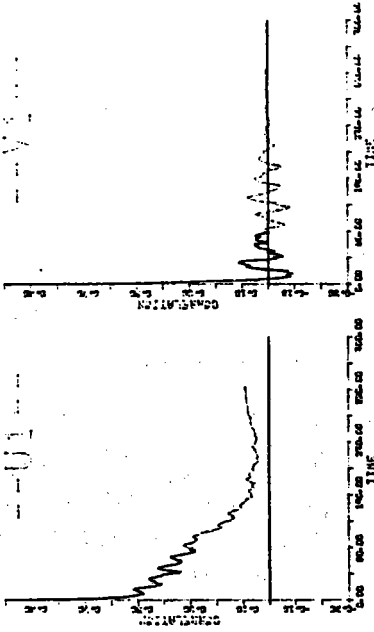
	CURRENTLY AVAILABLE	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000370	0.042986	0.005860	0.000102
V1	0.000204	-0.001347	0.000062	
U2	0.000440	-0.276750	0.002340	-0.000020
V2	0.000367	-0.015265	0.000613	

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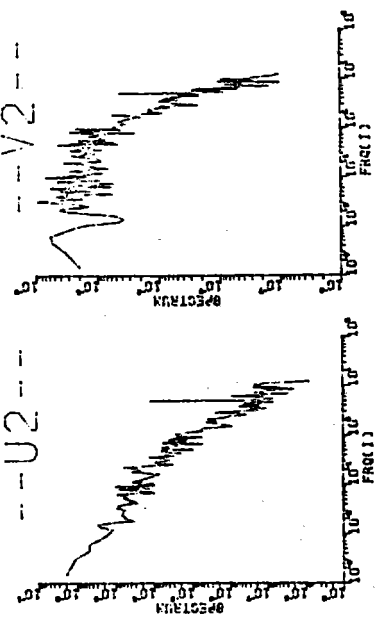
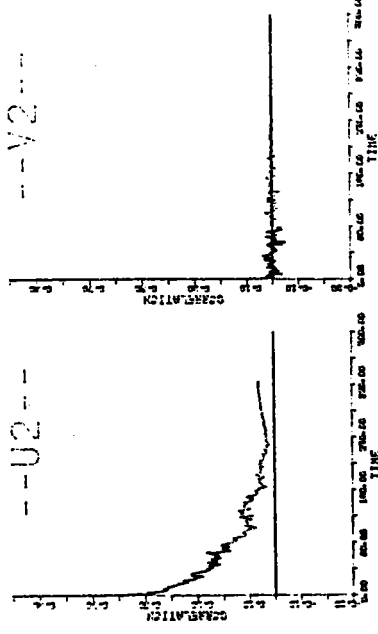
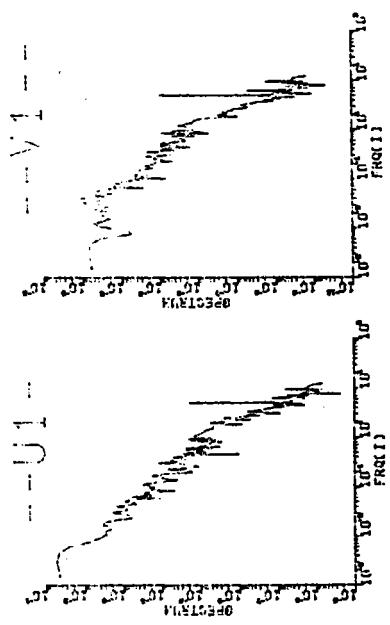
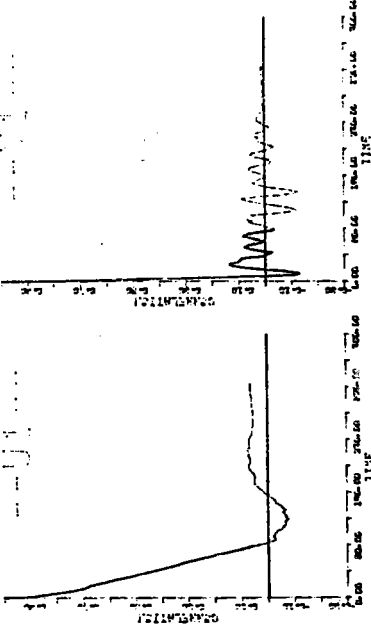
	CURRENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.00011	-0.054687	0.018700	-0.000024
V1	0.000037	0.003733	0.000252	
U2	0.000215	-0.209210	0.009310	0.000037
V2	0.000225	-0.003655	0.000059	

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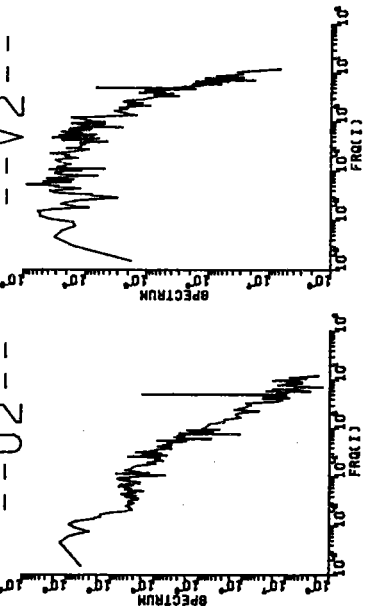
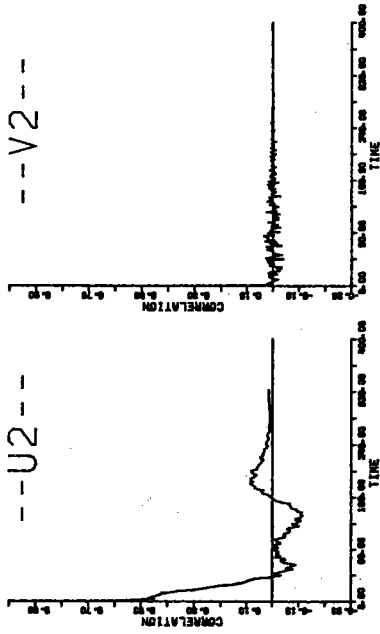
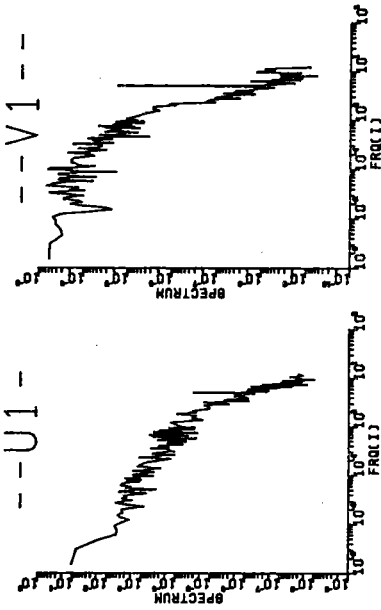
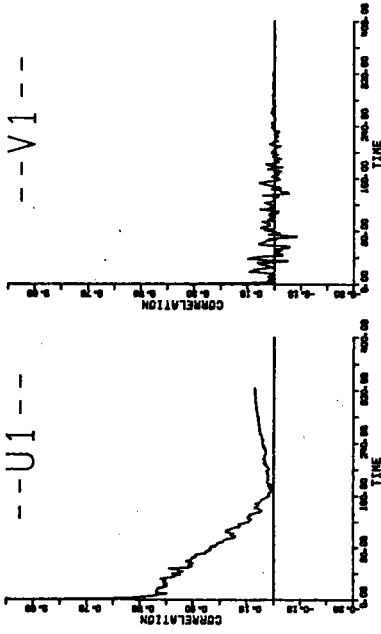
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	RELATIVE ERROR
U1	0.000177	-0.088548	0.011600	-0.00001
V1	0.000058	0.009684	0.000193	
U2	0.000328	-0.243810	0.011600	
V2	0.000246	-0.006893	0.000050	0.000020

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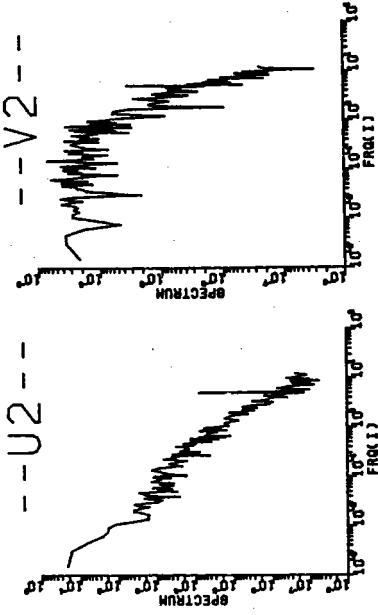
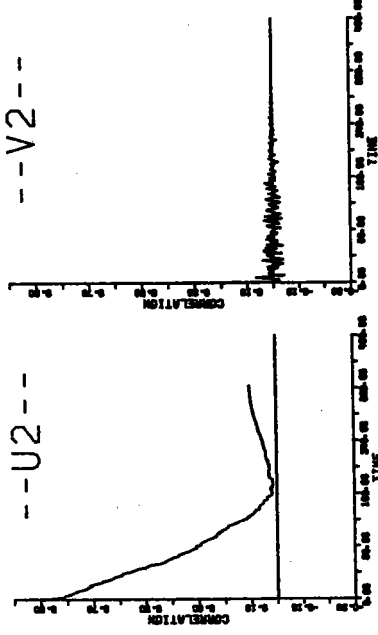
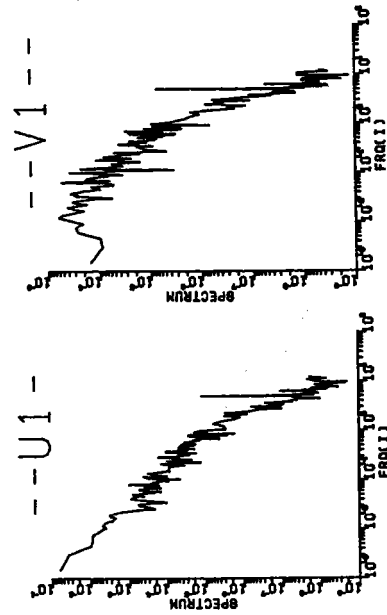
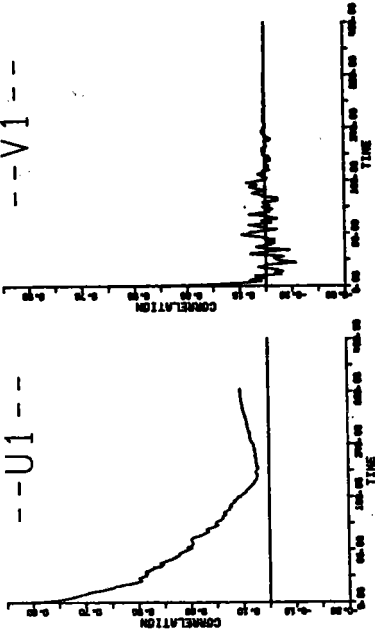
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	RELATIVE BIASES
U1	0.000411	-0.054687	0.018700	-0.000024
V1	0.000037	0.003733	0.000262	
U2	0.000215	-0.209210	0.009310	0.000007
V2	0.000225	-0.003655	0.000053	

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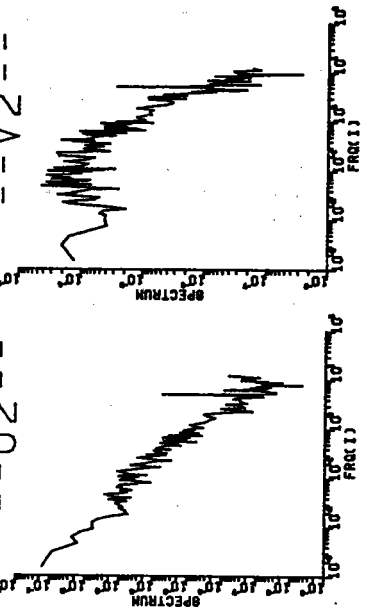
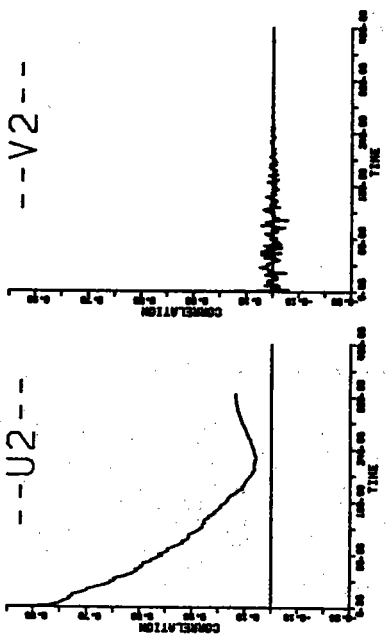
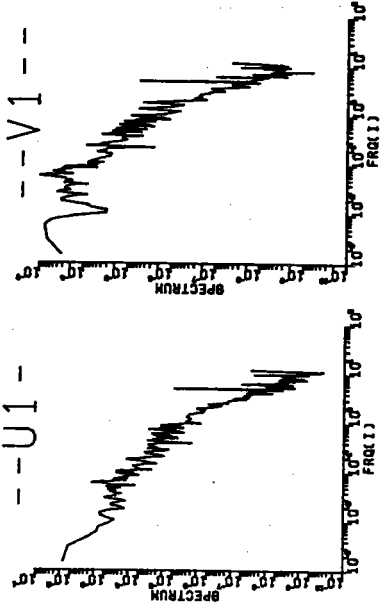
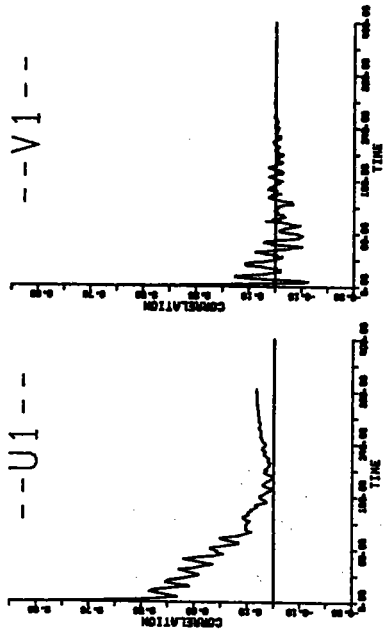
	CURRENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000929	-0.082904	0.045900	0.000012
V1	0.000074	0.007194	0.000214	
U2	0.000208	-0.224230	0.002070	0.000011
V2	0.000255	-0.012386	0.000009	

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	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000360	-0.145950	0.028600	-0.000023
V1	0.000041	0.011872	0.000071	
U2	0.001292	-0.194170	0.092000	-0.000010
V2	0.000246	-0.015482	0.000073	

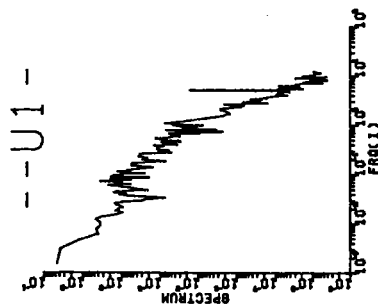
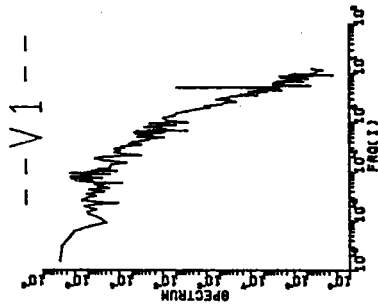
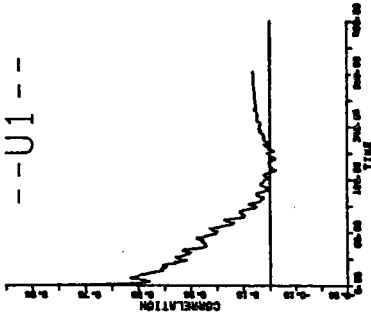
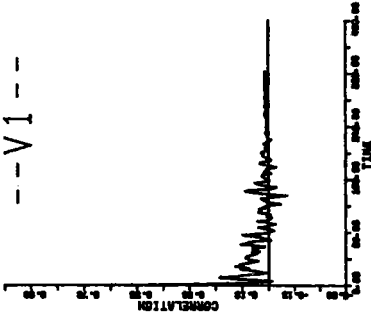
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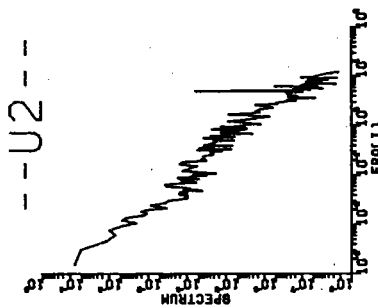
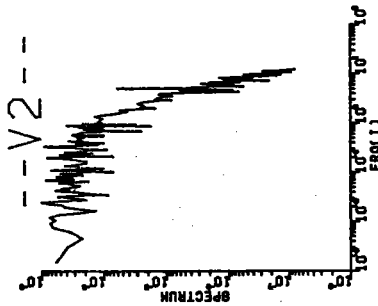
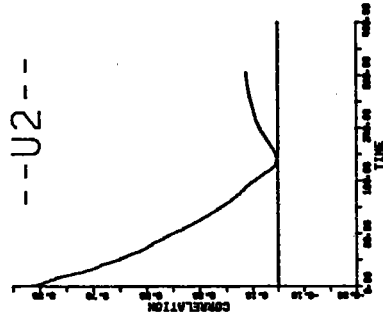
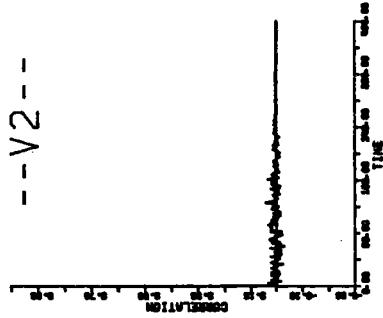
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000150	-0.161870	0.007050	-0.000004
V1	0.000048	0.016087	0.000016	
U2	0.000785	-0.108280	0.081100	-0.000014
V2	0.000088	-0.013899	0.000095	

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--V1--

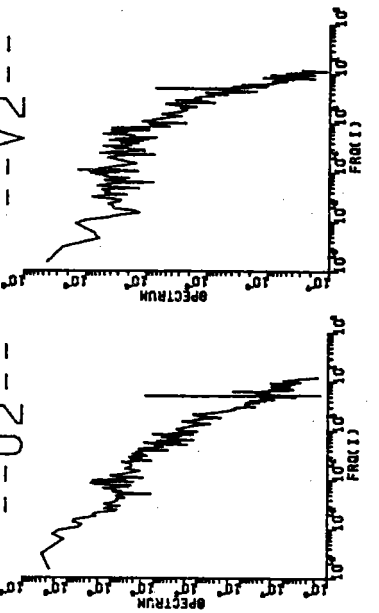
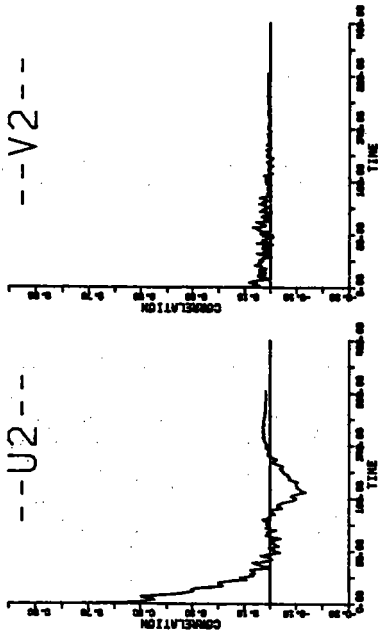
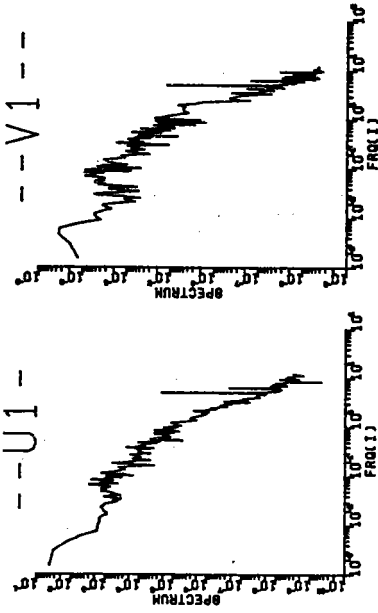
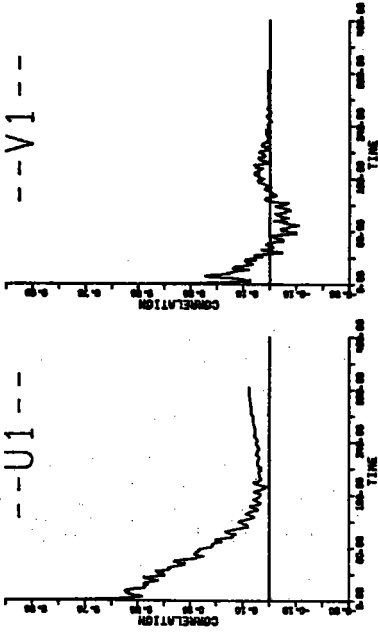


--V2--



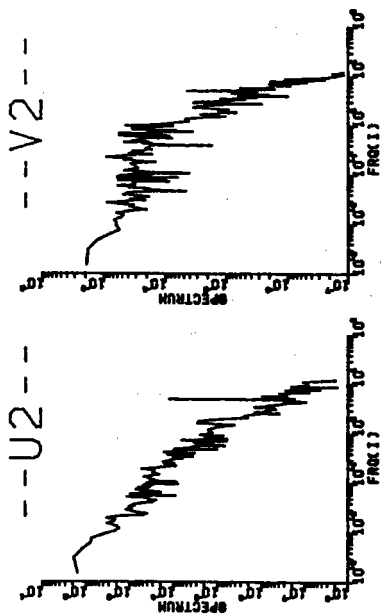
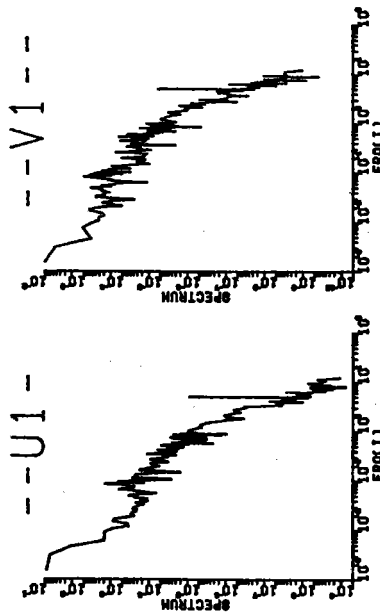
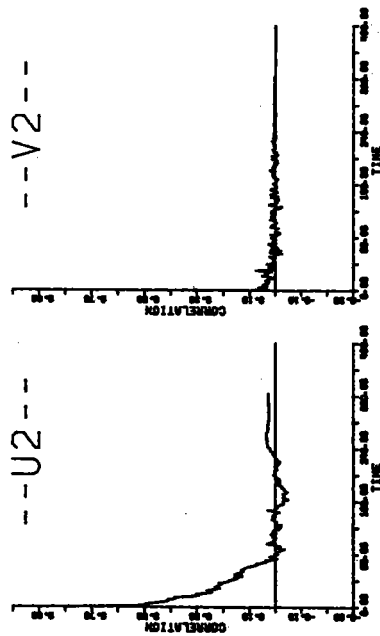
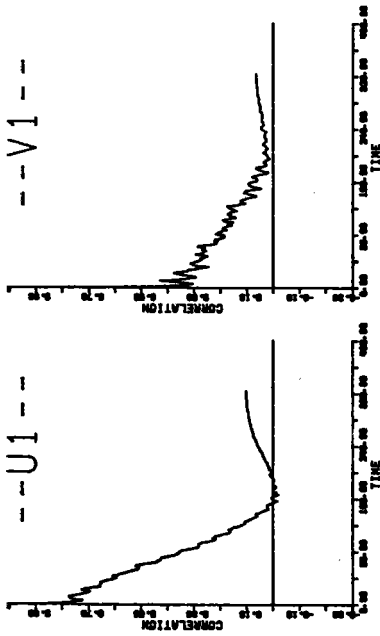
	TURBULENT MEAN VELOCITY	DIFFUSION	REYNOLDS
U1	0.000419	-0.162260	0.018700
V1	0.000203	0.005689	0.001800
U2	0.000786	-0.267680	0.088200
V2	0.000353	-0.010878	0.000262

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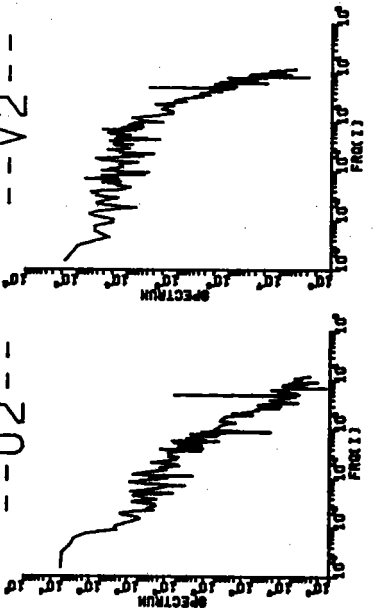
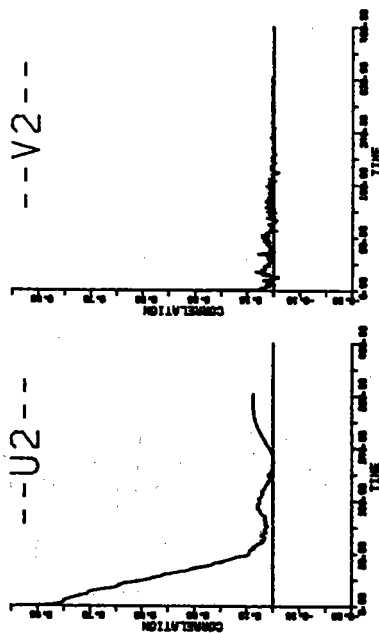
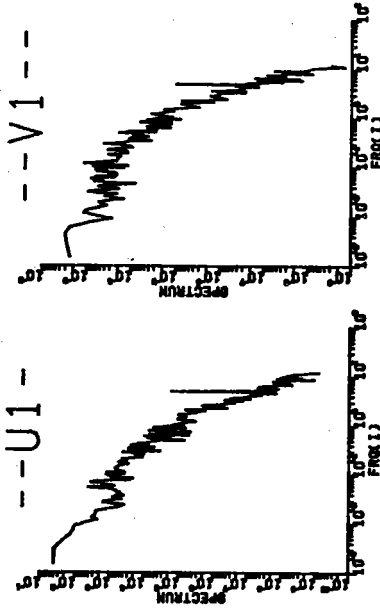
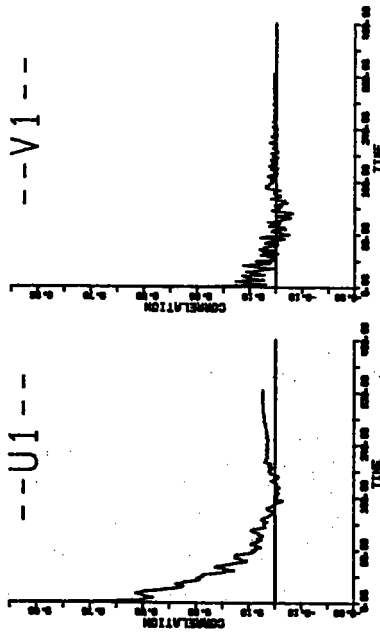
	TURBULENCE LATENCY	VELOCITY	DIFFUSION NUMBER	REYNOLDS NUMBER
U1	0.000599	-0.172100	0.018600	0.000001
V1	0.000104	0.002789	0.000584	0.000001
U2	0.000490	-0.274420	0.005950	-0.00002
V2	0.000366	-0.014952	0.002070	-0.00002

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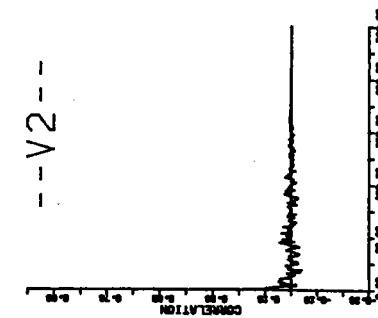
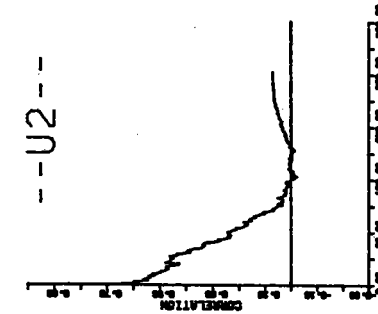
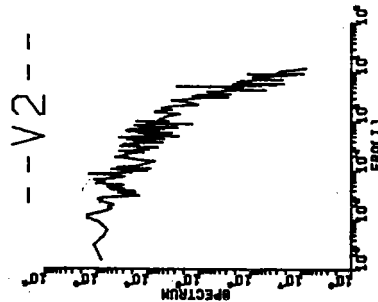
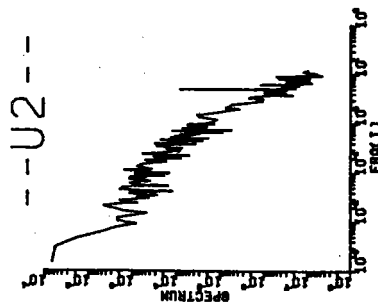
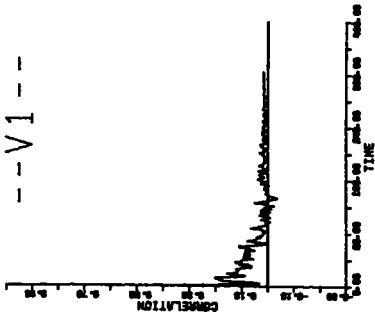
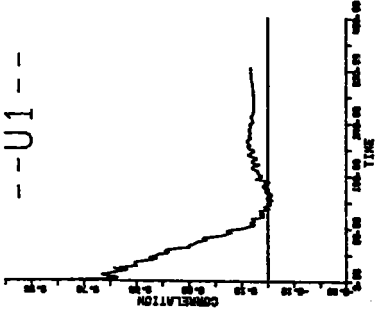
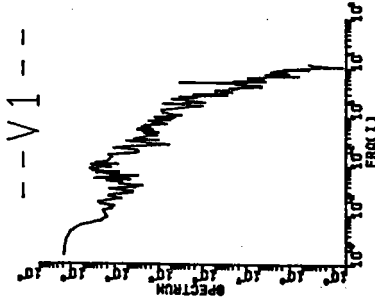
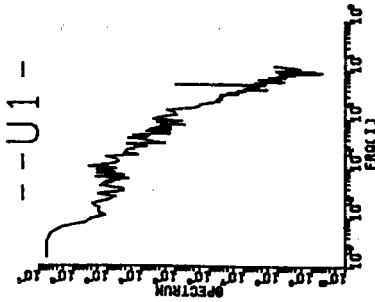
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION STRENGTH	REYNOLDS NUMBER
U1	0.000484	-0.208770	0.098500	0.000039
V1	0.000107	-0.000847	0.004860	0.000001
U2	0.000274	-0.288830	0.005090	0.000001
V2	0.000377	-0.015916	0.000895	0.000001

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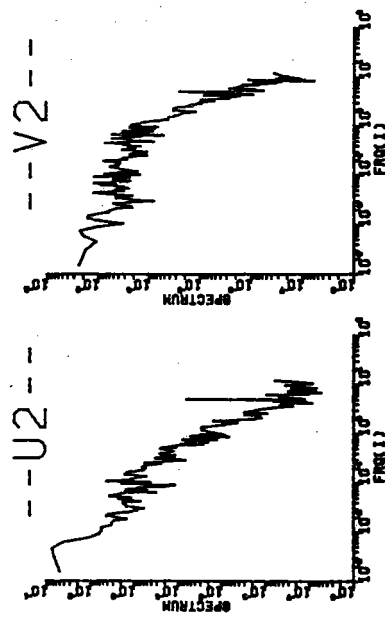
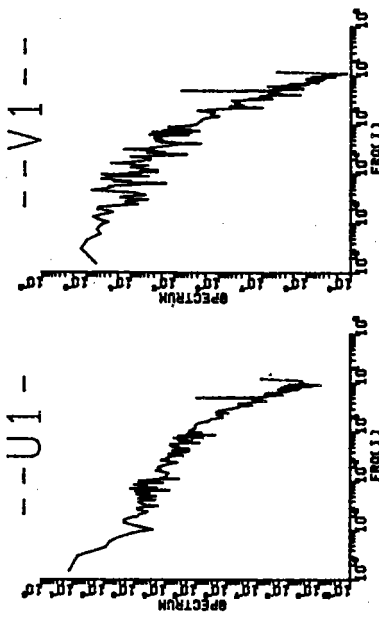
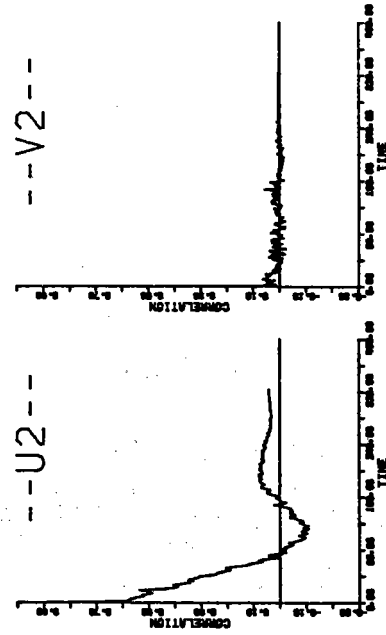
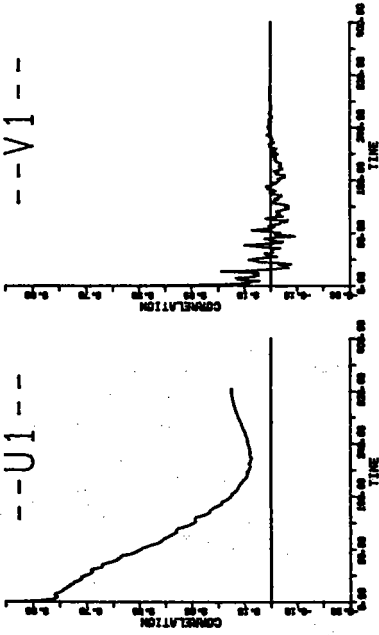
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000481	-0.184450	0.015400	0.000008
U2	0.000175	0.004255	0.000895	
V1	0.000747	-0.248570	0.038800	-0.000003
V2	0.000217	-0.008655	0.000806	

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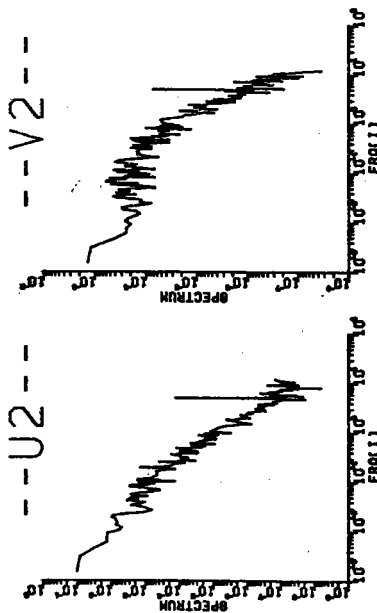
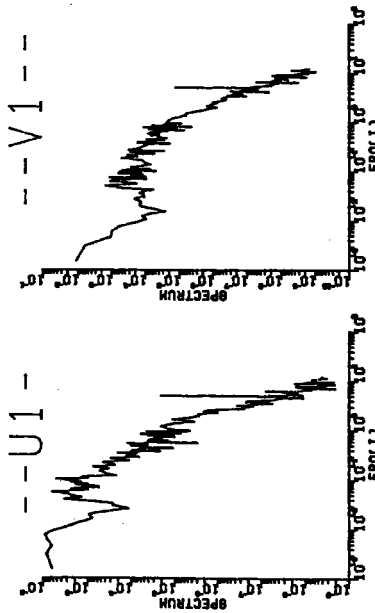
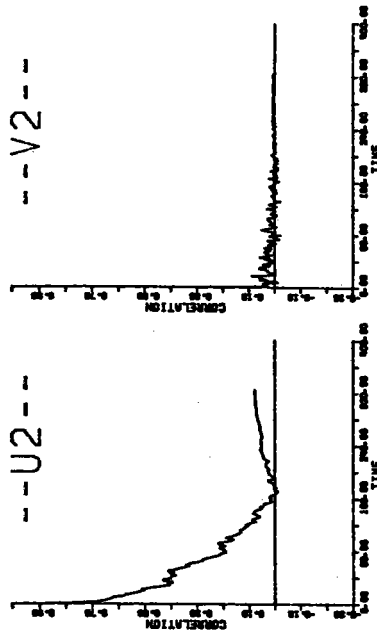
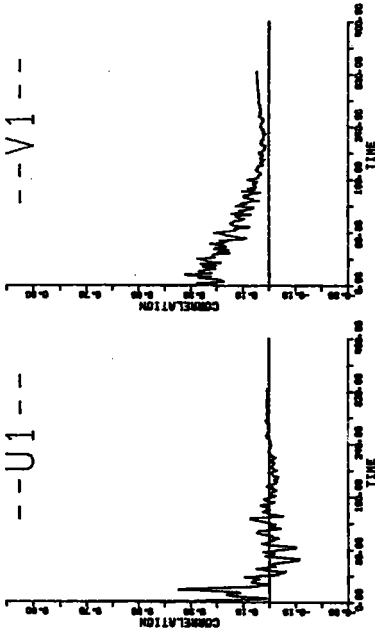
	TURBULENT INTENSITY	VELOCITY	DIFFUSION COEFF	WIND NUMBER
U1	0.000578	-0.206530	0.027100	-0.000035
V1	0.000117	-0.004242	0.011920	
U2	0.000515	-0.208070	0.025700	-0.00002
V2	0.000286	-0.004350	0.000192	

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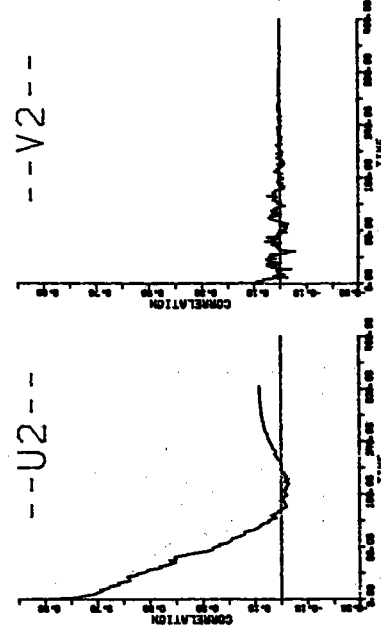
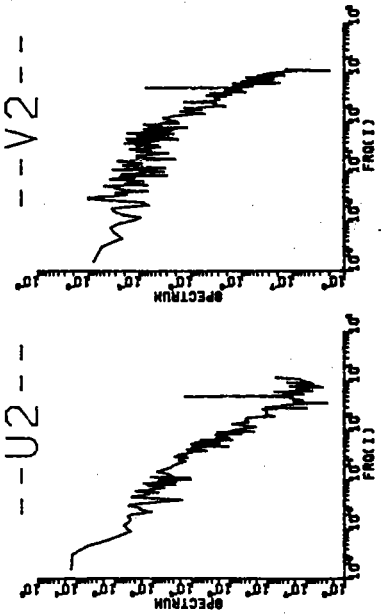
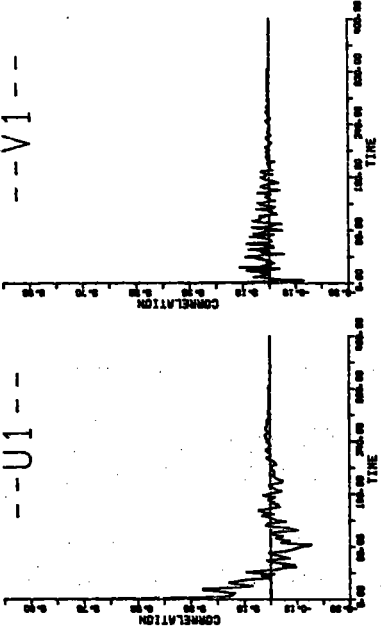
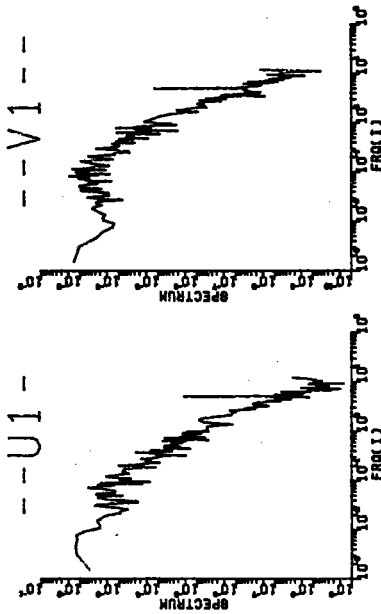
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000526	-0.196590	0.061400	0.000002
V1	0.000069	-0.005882	0.000029	
U2	0.000785	-0.237090	0.022200	0.000023
V2	0.000997	-0.007757	0.001060	

*x84.08.03 7:10**



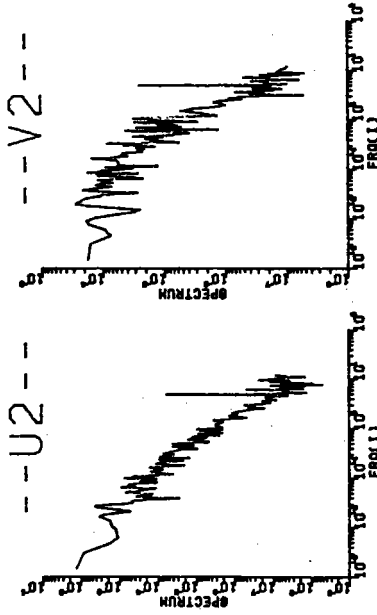
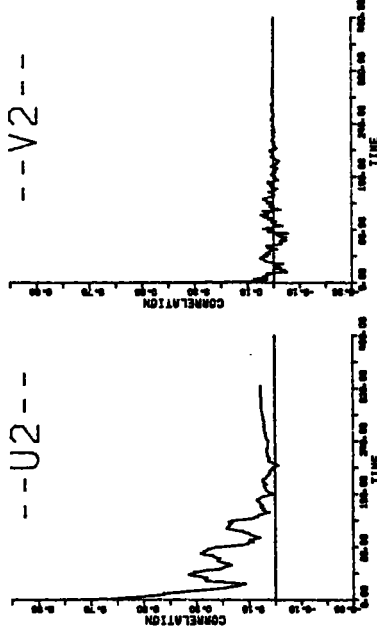
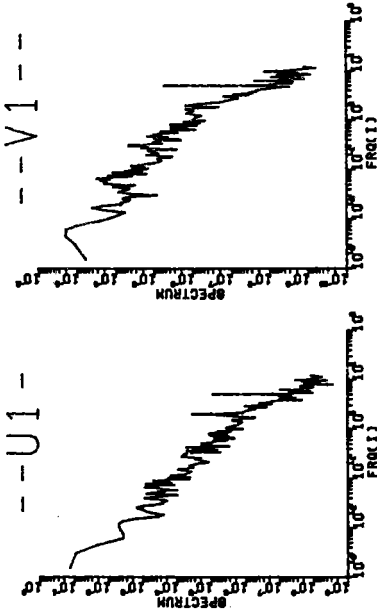
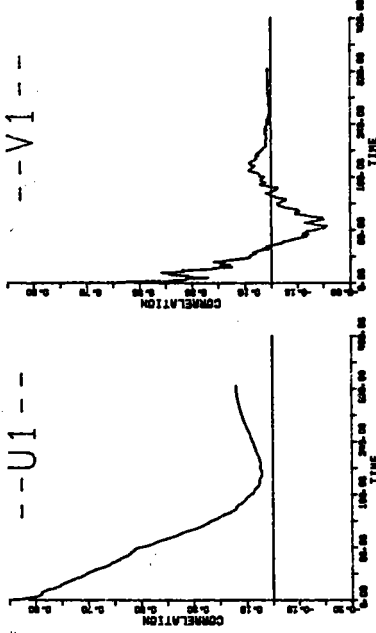
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFF	REYNOLDS NUMBER
U1	0.000358	-0.181080	0.001500	0.000041
V1	0.000189	-0.001409	0.005340	
U2	0.000807	-0.196880	0.044500	0.000046
V2	0.000155	-0.014922	0.000525	

*84.08.03 7:20**



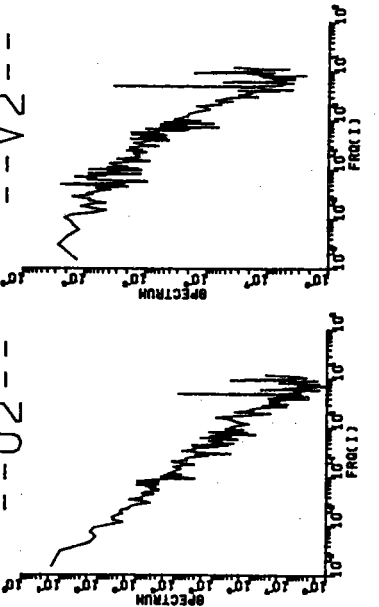
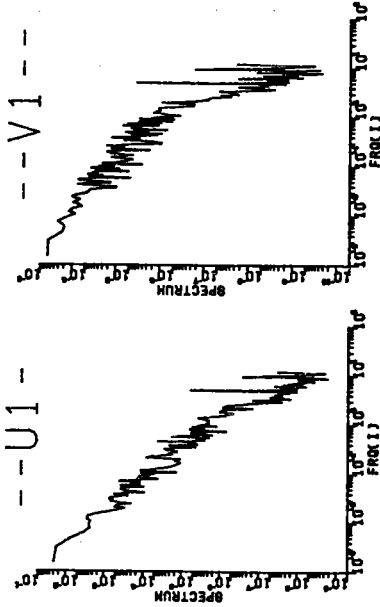
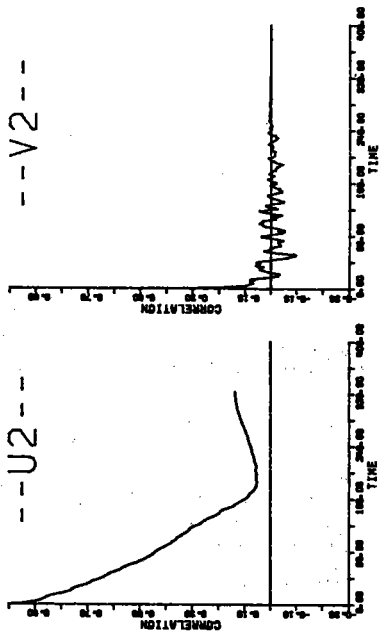
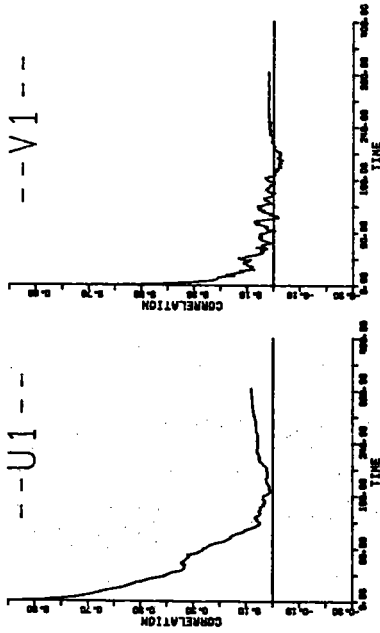
	TURBULENT INTENSITY	VELOCITY	DIFFUSION	PREVIOUS STRESS
U1	0.00024	-0.179510	0.001280	0.000098
V1	0.000184	0.000300	0.000831	
U2	0.000885	-0.179580	0.051800	0.000013
V2	0.000198	-0.013061	0.000354	

* * 84.08.03 7:30 * *



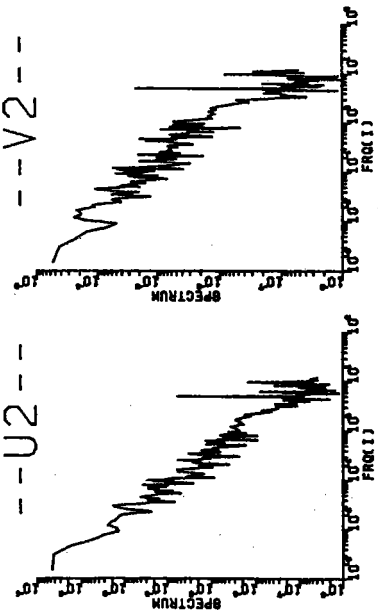
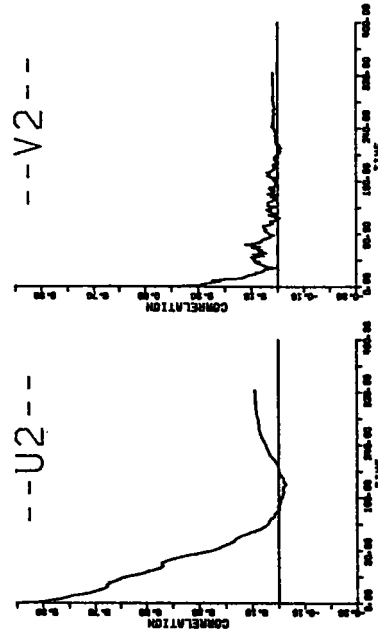
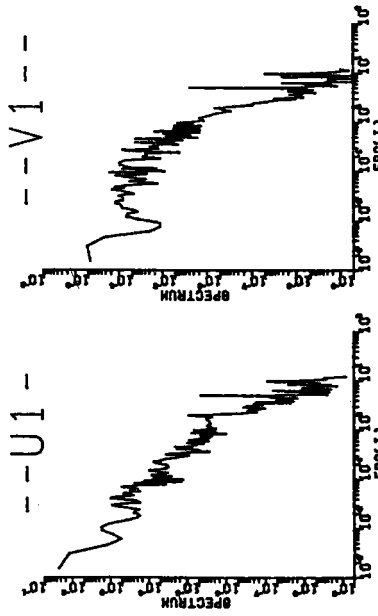
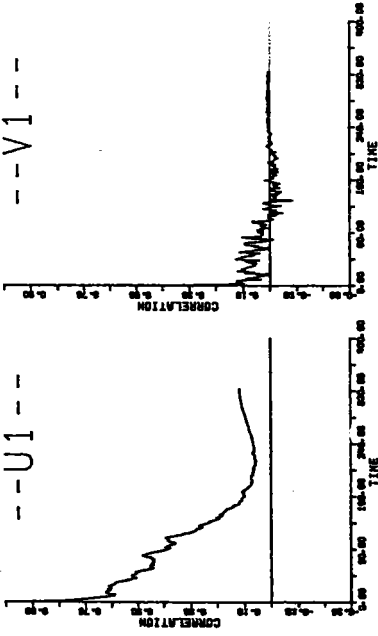
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000568	-0.161030	0.060300	-0.000010
V1	0.000029	0.013784	0.000256	
U2	0.000158	-0.120540	0.005980	0.000017
V2	0.000044	-0.013379	0.000065	

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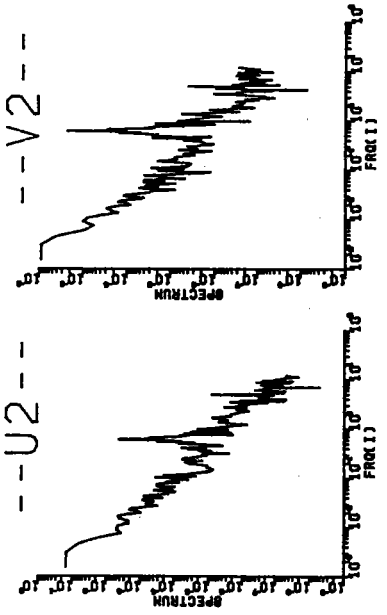
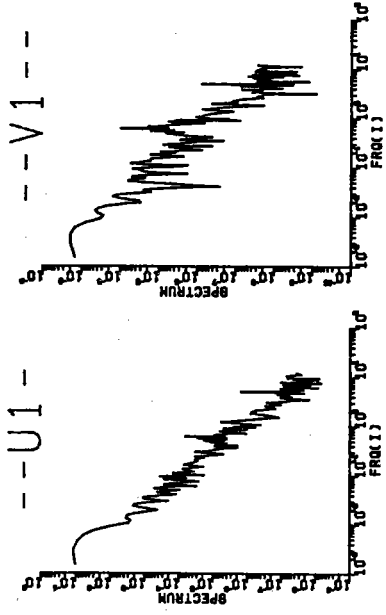
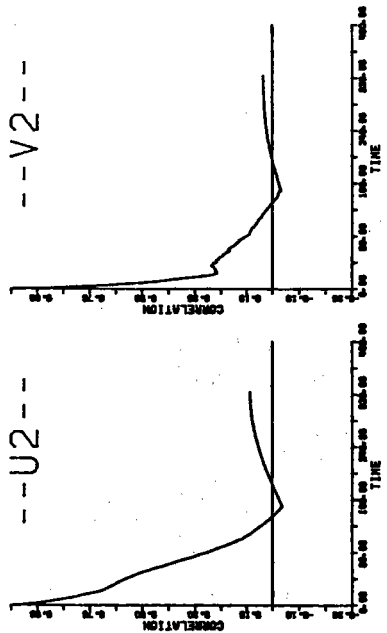
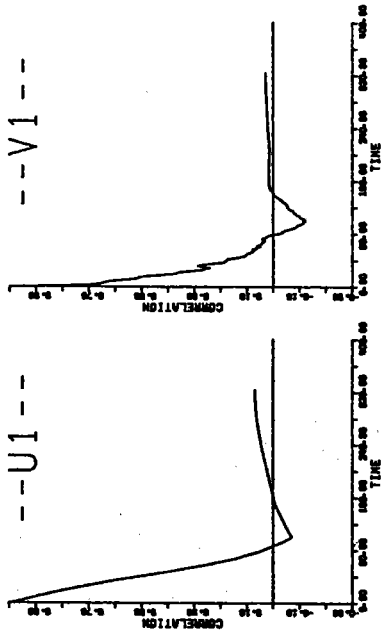
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000285	-0.108110	0.016800	-0.000006
V1	0.000020	0.009875	0.000258	
U2	0.000704	-0.065200	0.073400	0.000008
V2	0.000022	-0.008667	0.000006	

* * 84.08.03 8:10 * *



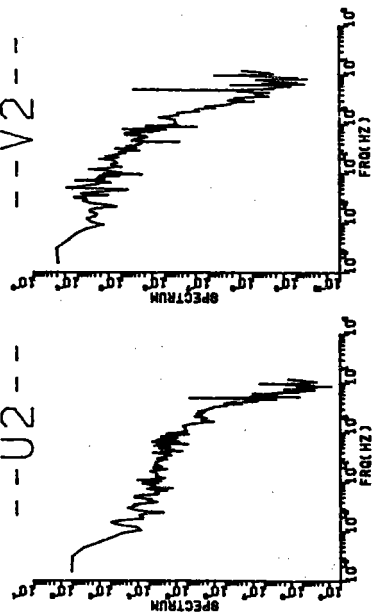
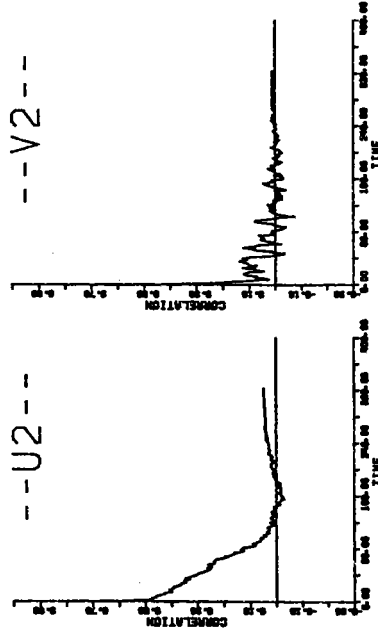
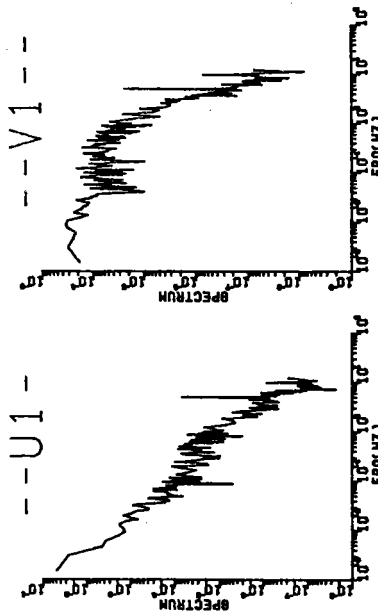
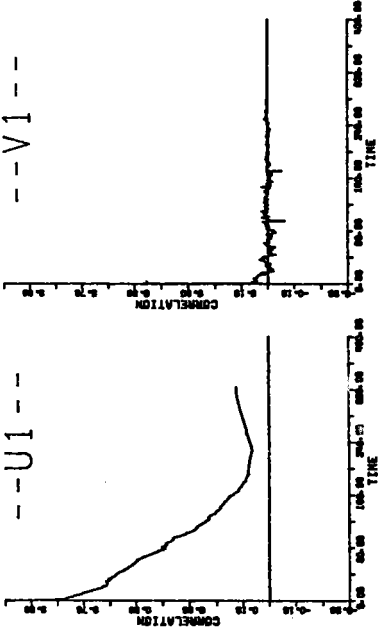
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000248	-0.084393	0.021800	-0.000008
V1	0.000041	0.011893	0.000244	
U2	0.000282	-0.052788	0.016900	-0.000005
V2	0.000018	-0.010082	0.000231	

*84.08.03 8:20**



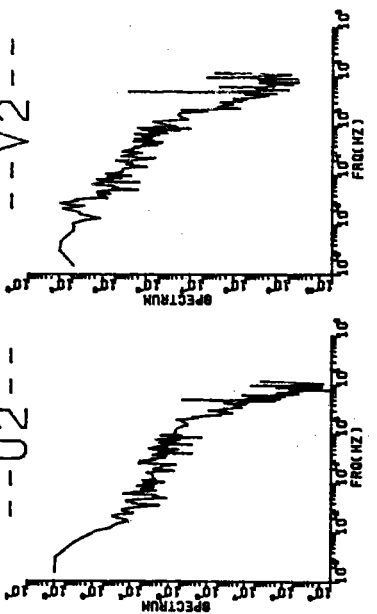
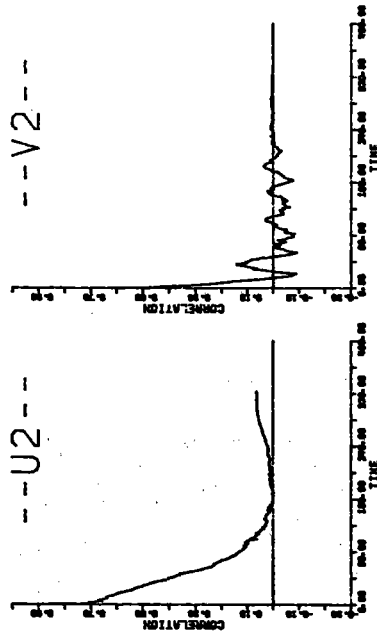
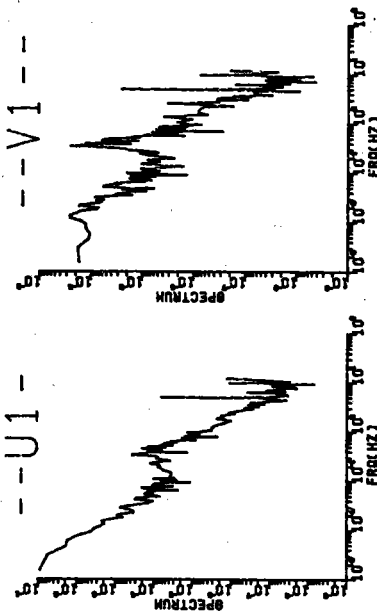
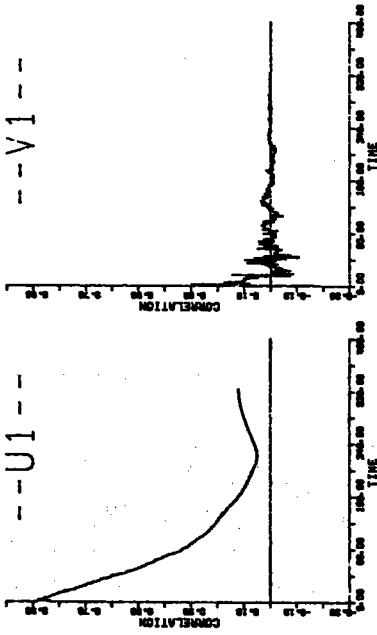
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000798	-0.011089	0.098400	0.000105
V1	0.000028	0.021143	0.000508	
U2	0.000918	-0.118320	0.057500	0.000305
V2	0.000140	-0.018252	0.003290	

* * 84.08.03 9:25 * *



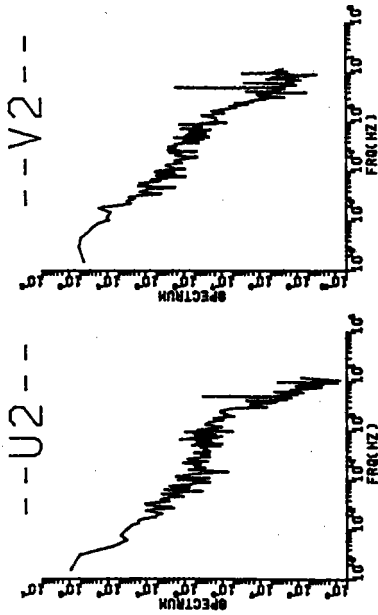
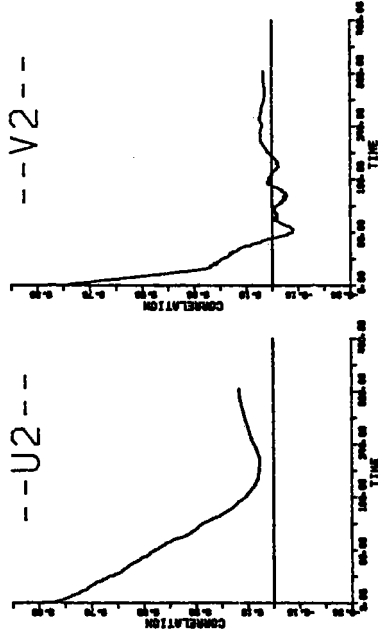
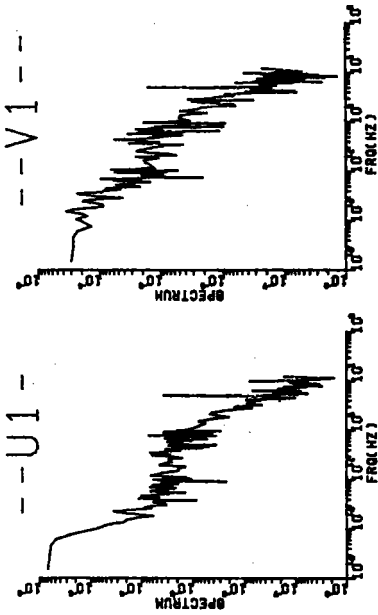
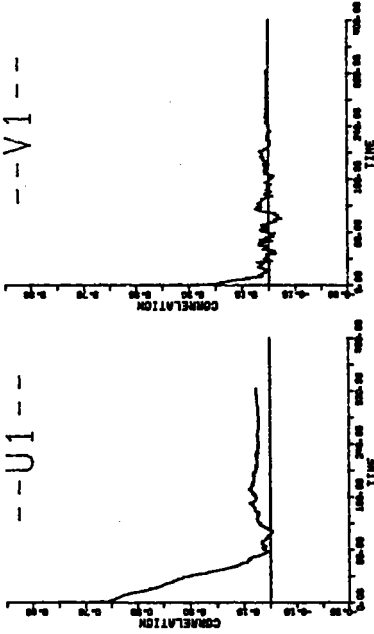
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	VELOCITY SKEWNESS
U1	0.000257	0.048197	0.024000	0.000007
V1	0.000082	-0.000351	0.000043	
U2	0.000121	-0.082874	0.003890	-0.000003
V2	0.000013	0.012818	0.000088	

* * 84.08.03 9:35 * *



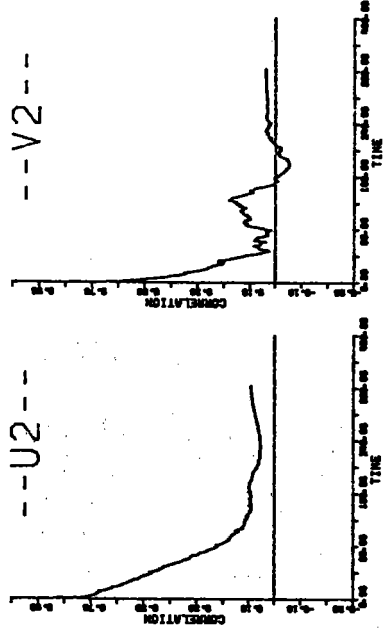
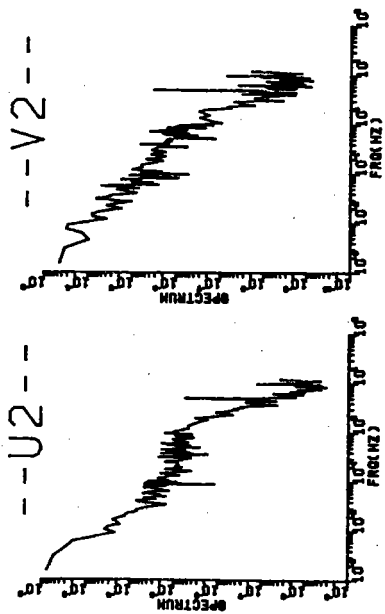
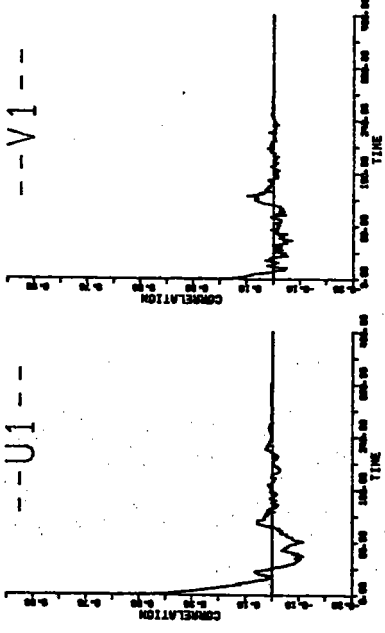
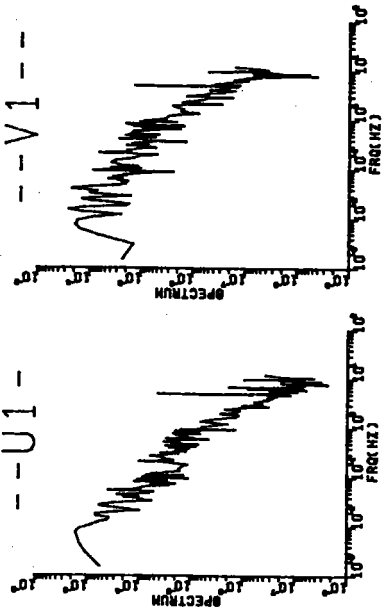
	TURBULENT INTERMITTENCY	MEAN VELOCITY	DIFFUSION REYNOLDS NUMBER
U1	0.000486	0.068216	0.042100
V1	0.000027	-0.000269	0.000054
U2	0.000161	-0.070029	0.007140
V2	0.000008	0.011185	0.000013

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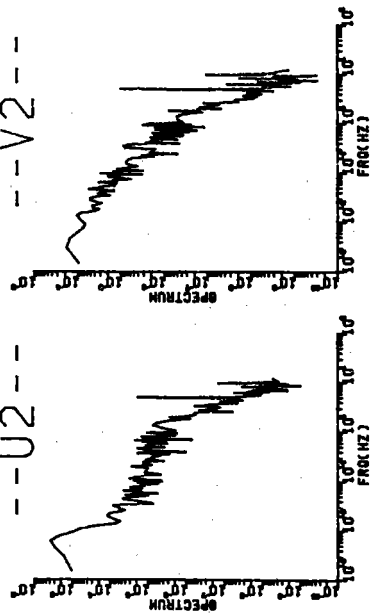
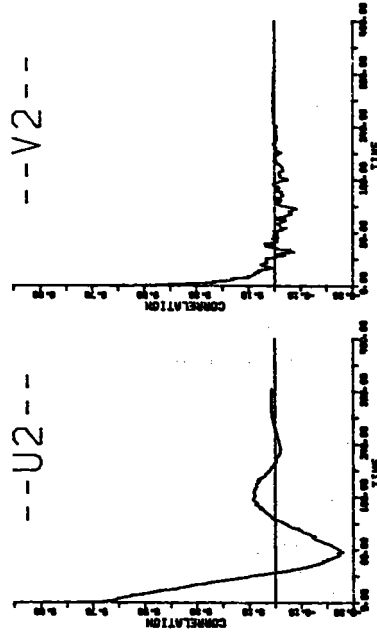
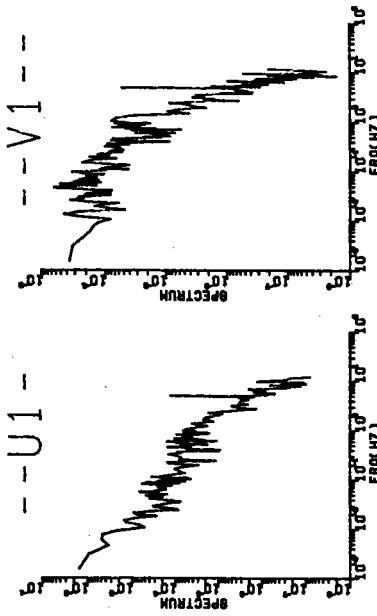
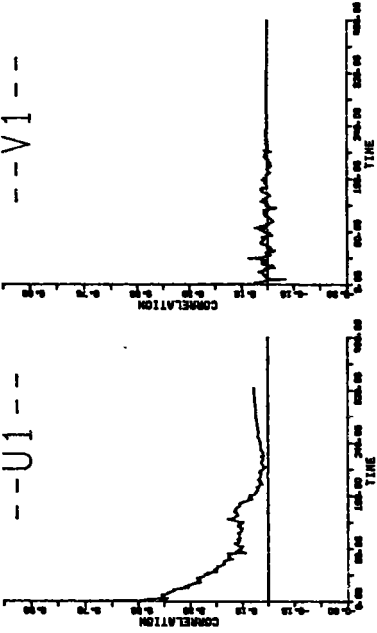
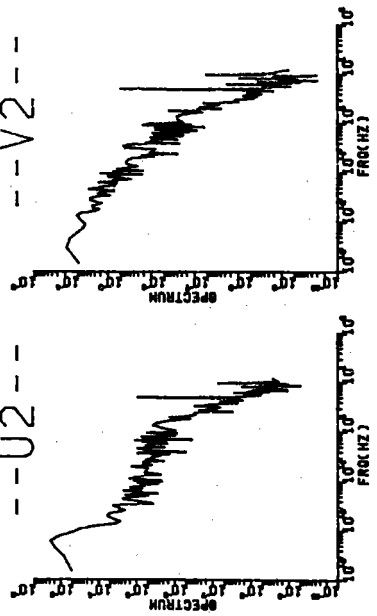
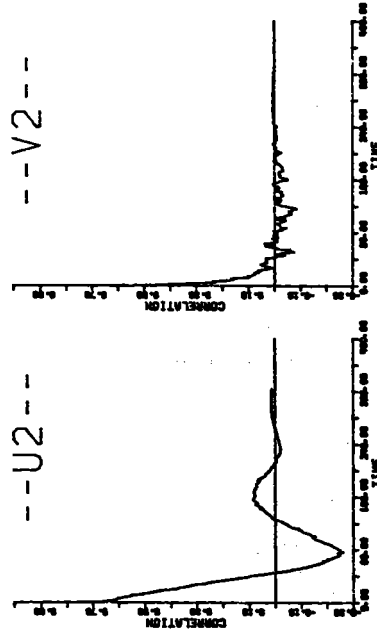
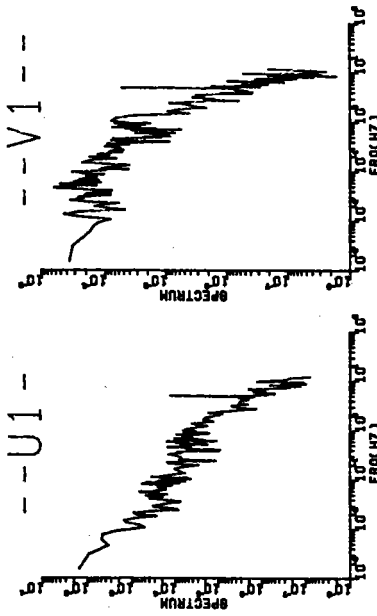
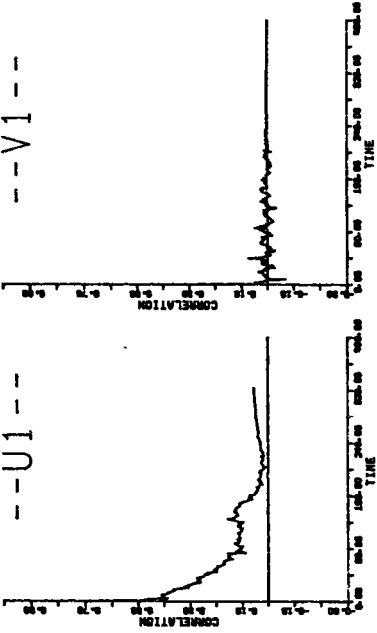
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000091	0.196770	0.003340	-0.000002
V1	0.000092	0.000504	0.000144	-0.000007
U2	0.000084	-0.047777	0.008520	-0.000007
V2	0.000019	0.008082	0.000286	-0.000007

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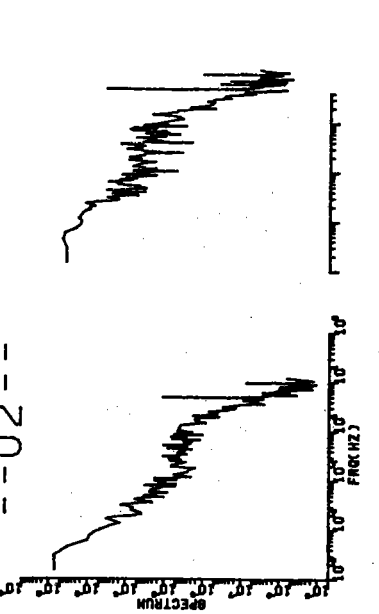
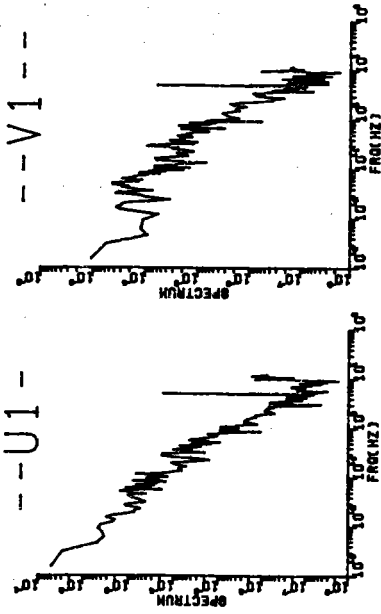
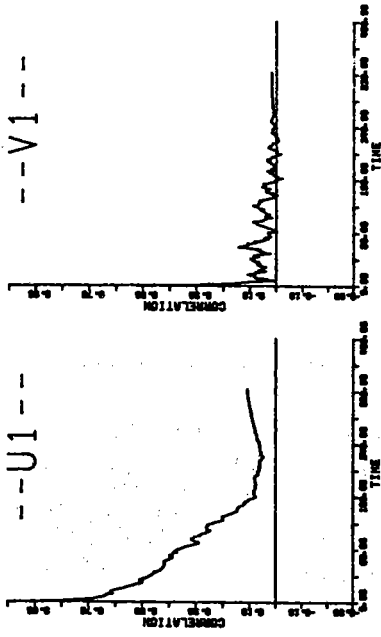
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS
U1	0.00058	0.190950	0.000190	0.000000
V1	0.00024	0.004914	0.000011	
U2	0.00054	-0.086195	0.003620	-0.000003
V2	0.000007	0.007075	0.000165	

* * 84.08.03 10:30 * *



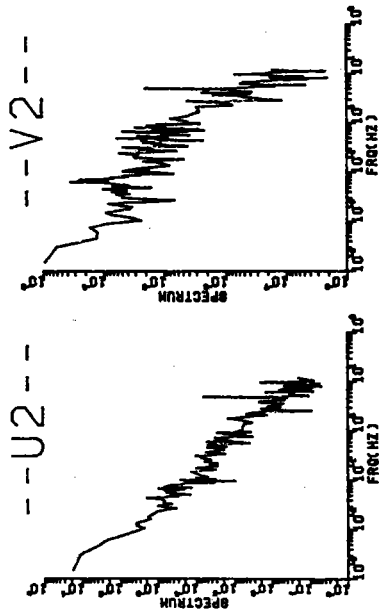
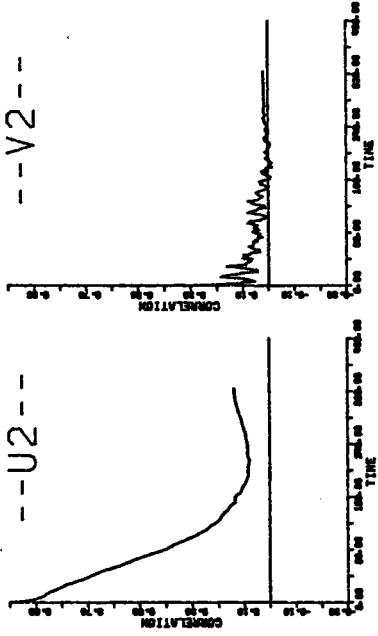
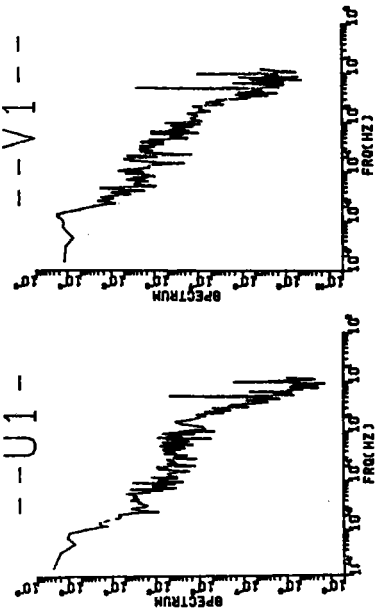
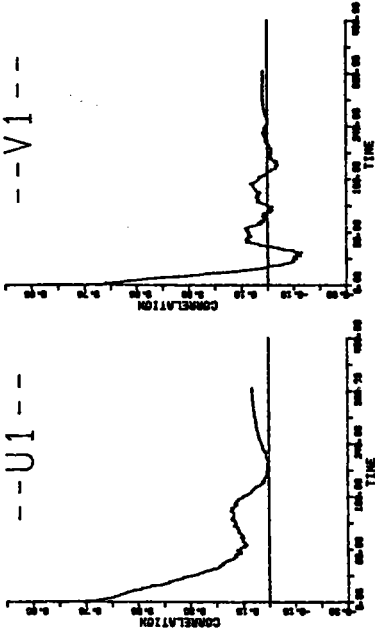
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS
U1	0.000188	0.124620	0.007460	-0.000006
U2	0.000104	0.004607	0.000185	-0.000000
V1	0.000036	-0.067253	0.000318	-0.000001
V2	0.000007	0.007186	0.000012	-0.000001

84.08.03 10:40



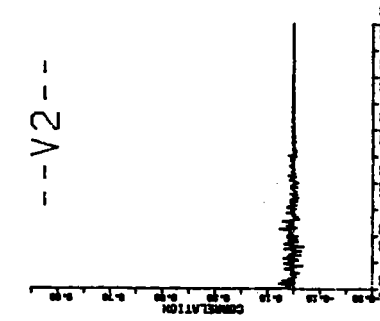
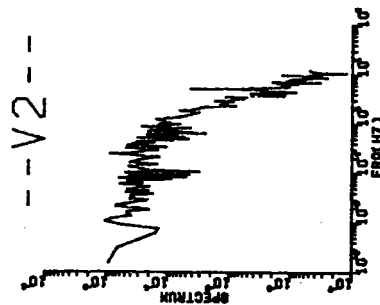
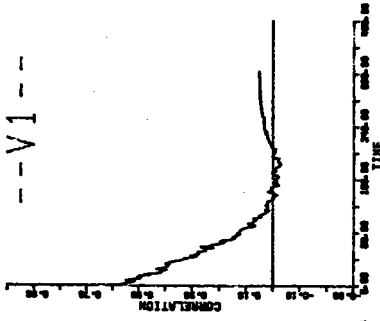
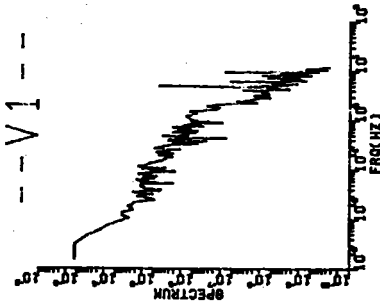
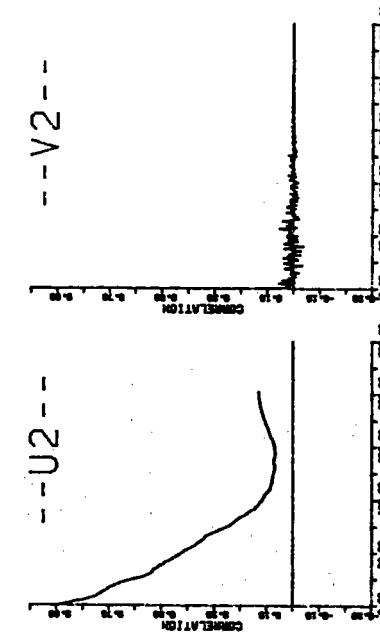
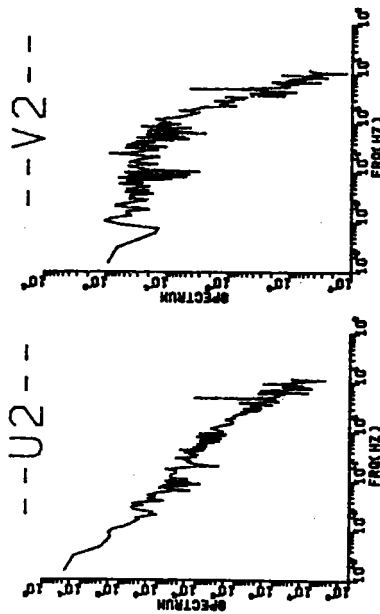
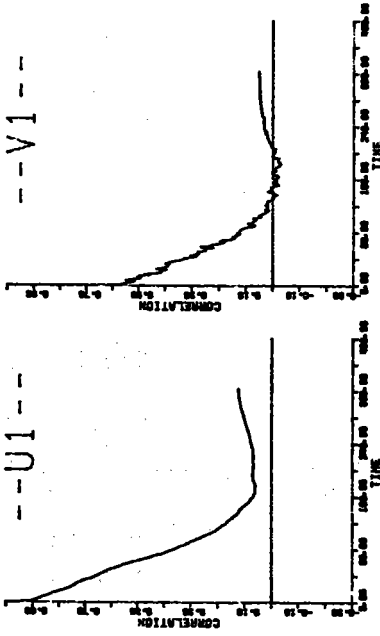
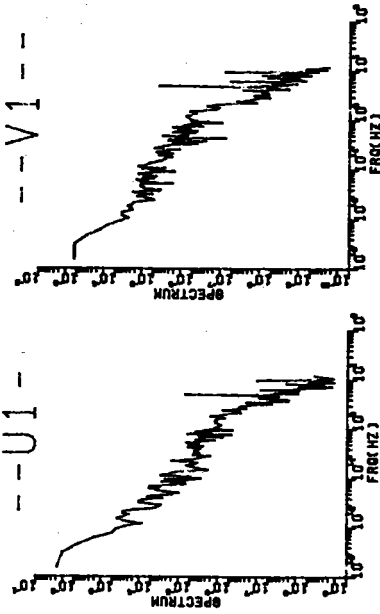
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000310	0.144580	0.024700	0.000030
V1	0.000044	0.005872	0.000528	
U2	0.000089	0.053316	0.004860	0.000002
V2	0.000004	0.005754	0.000048	

* * 84.08.03 11:05 * *



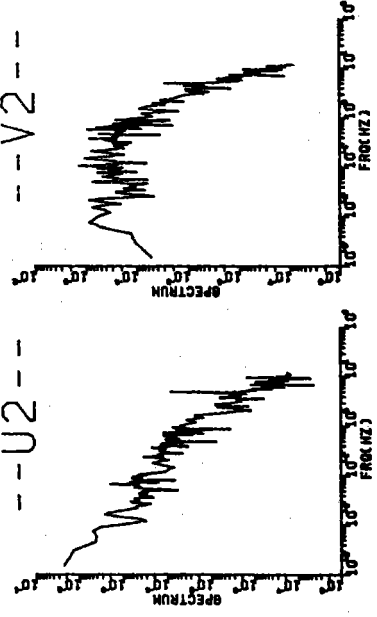
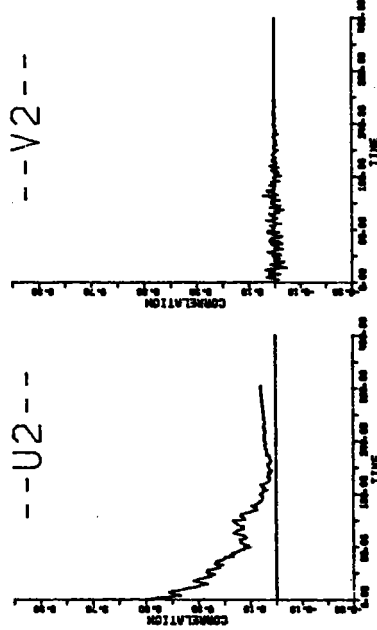
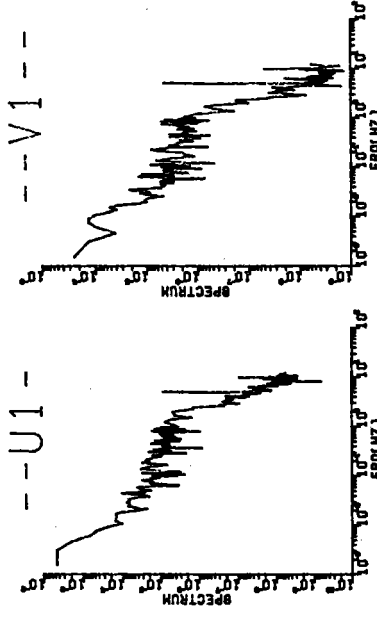
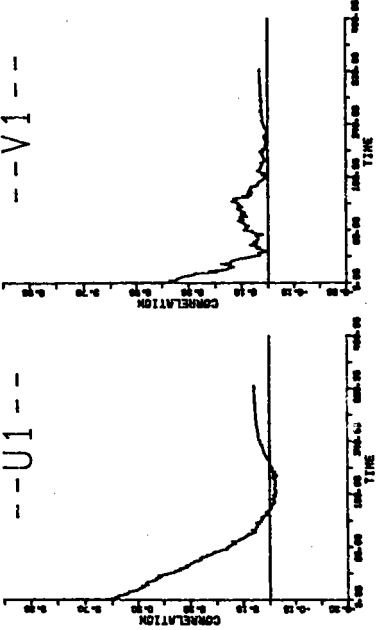
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000042	-0.007917	0.001910	-0.000002
V1	0.000007	0.004208	0.000085	
U2	0.000909	0.235250	0.084800	0.000042
V2	0.000036	0.012870	0.000029	

*x84.08.03 11:15**



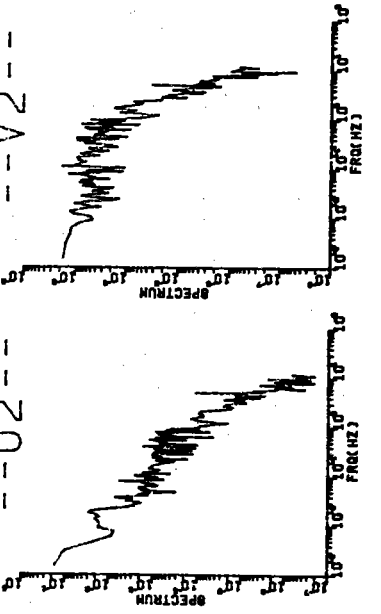
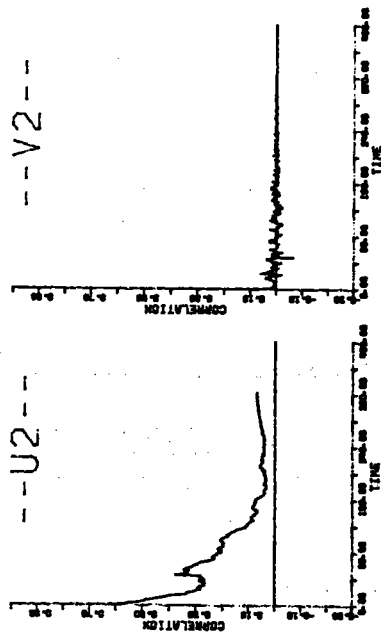
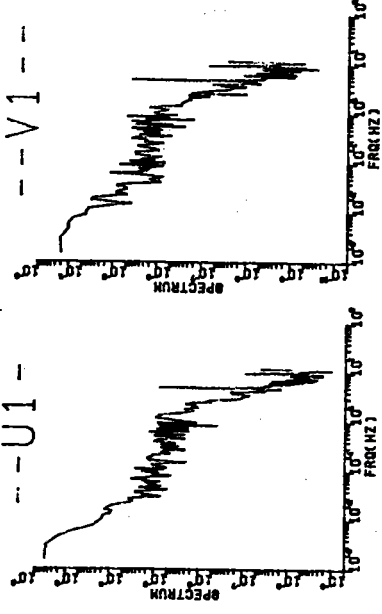
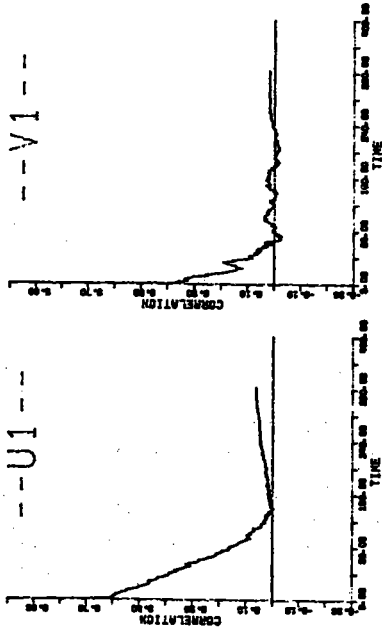
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000195	-0.018407	0.012700	-0.000015
V1	0.00012	0.004840	0.000419	
U2	0.001280	0.900860	0.125000	
V2	0.000287	0.018483	0.000434	0.000107

* * 84.08.03 11:25 * *



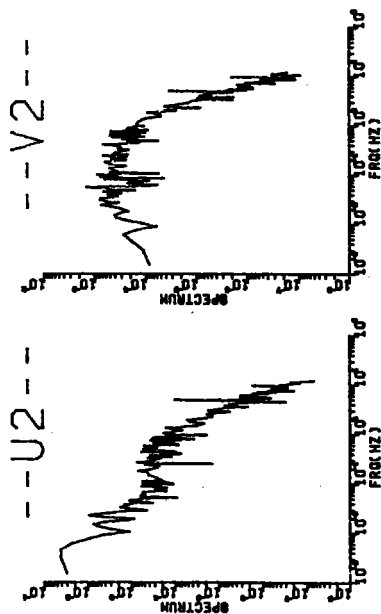
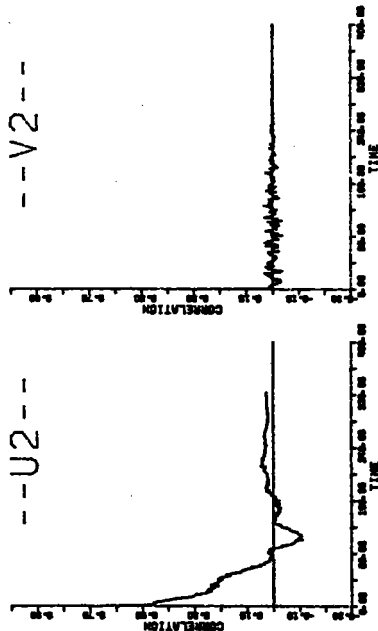
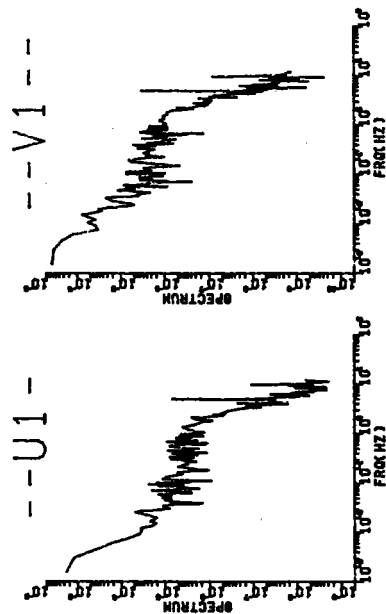
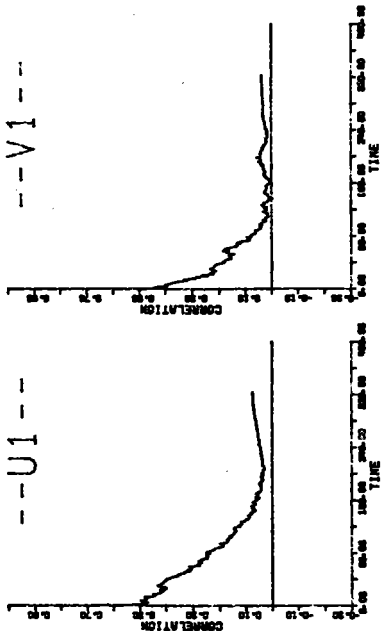
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.00042	-0.034620	0.001710	0.000001
U2	0.000006	0.009890	0.000124	
V1	0.000273	0.952860	0.011000	0.000032
V2	0.000351	0.016572	0.000017	

* * 84.08.03 12:00 * *



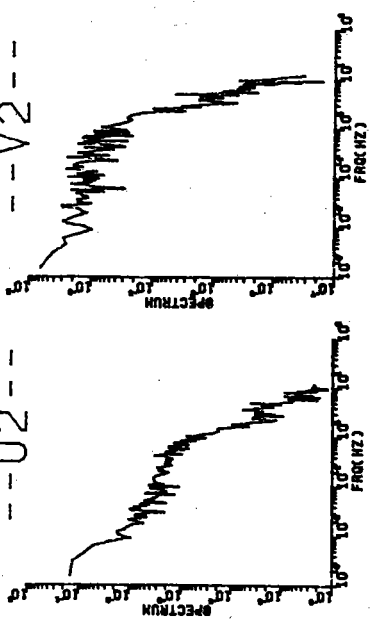
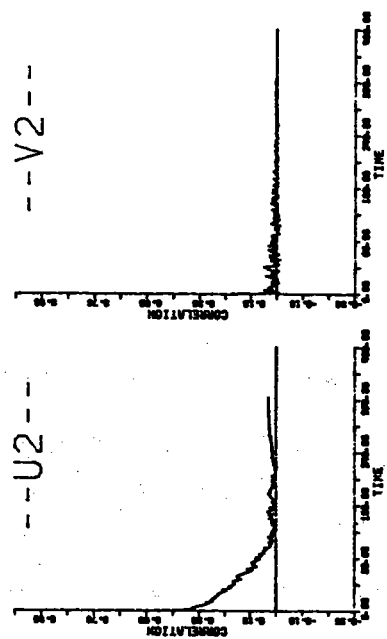
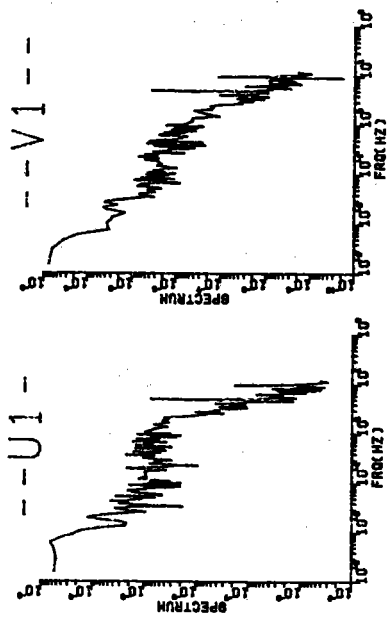
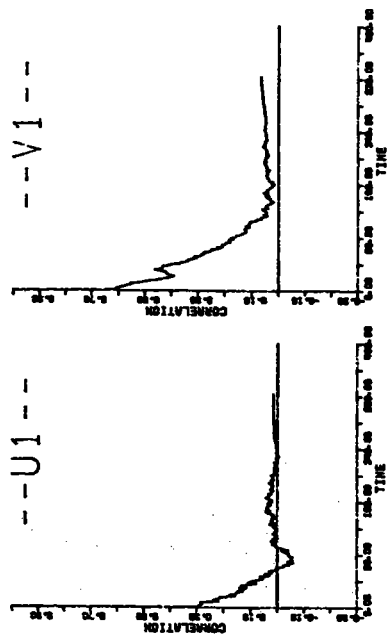
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION STRESS	REYNOLDS NUMBER
U1	0.000054	-0.044216	0.002980	-0.000004
V1	0.000008	0.004555	0.000100	-0.000000
U2	0.001668	0.376050	0.082200	-0.000114
V2	0.000561	0.023399	0.000767	-0.000114

* * 84.08.03 12:10 * *



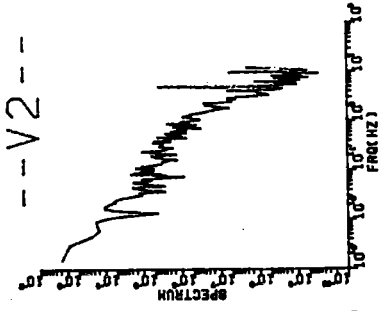
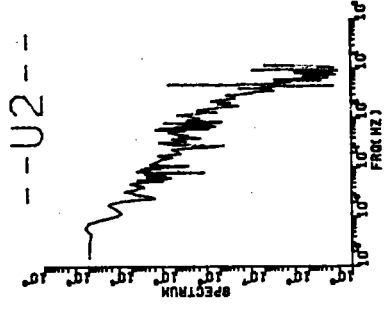
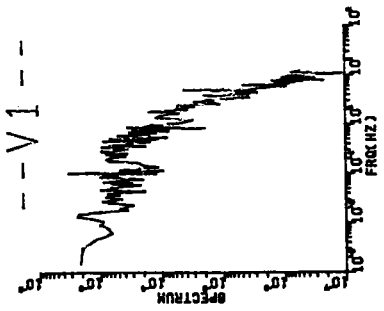
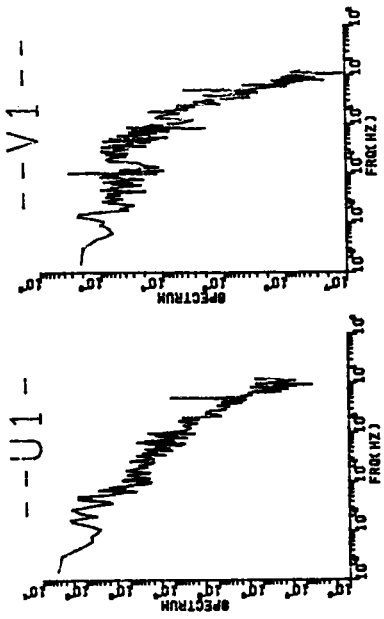
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.00031	-0.023690	0.001660	-0.000000
U2	0.00019	0.002579	0.000325	
V1	0.000686	0.443150	0.012100	0.000041
V2	0.000375	0.025262	0.000026	

84.08.03 12:20

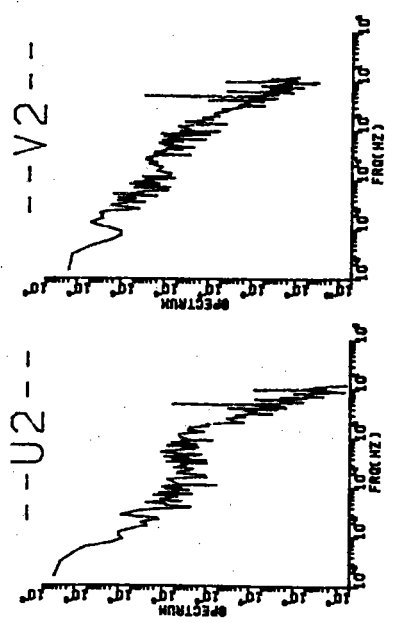
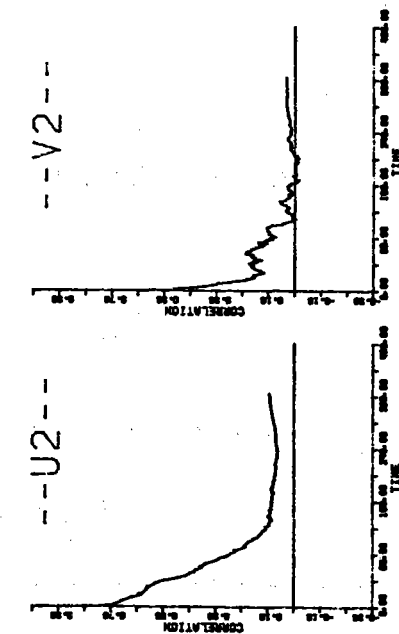
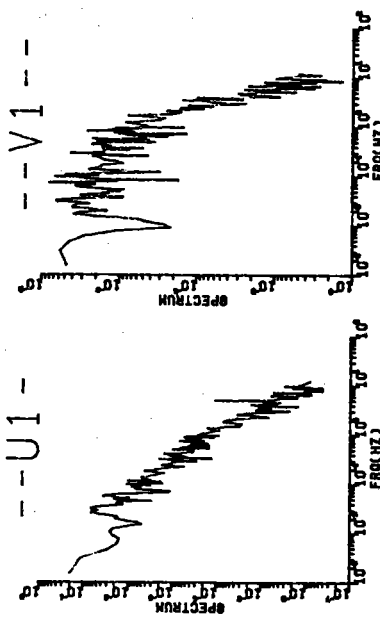
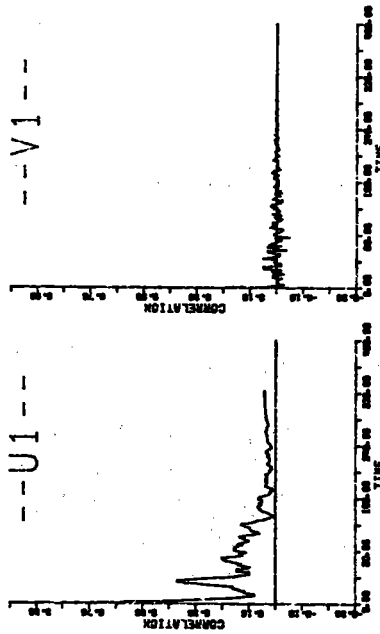


	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFF	REYNOLDS STRESS
U1	0.000022	-0.024128	0.000240	-0.000000
V1	0.000007	0.001819	0.000336	0.000000
U2	0.002852	0.481850	0.057800	-0.000064
V2	0.001359	0.031222	0.003250	0.000000

*x84.08.03 12:50**

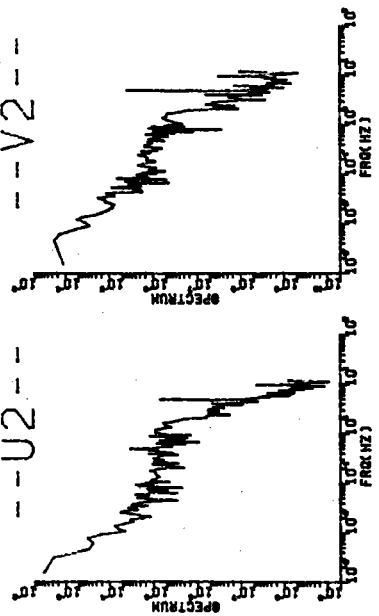
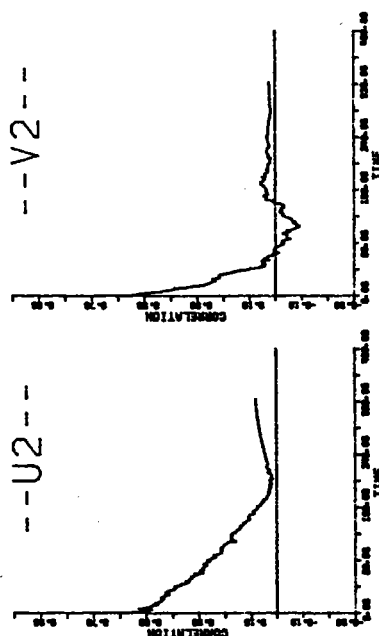
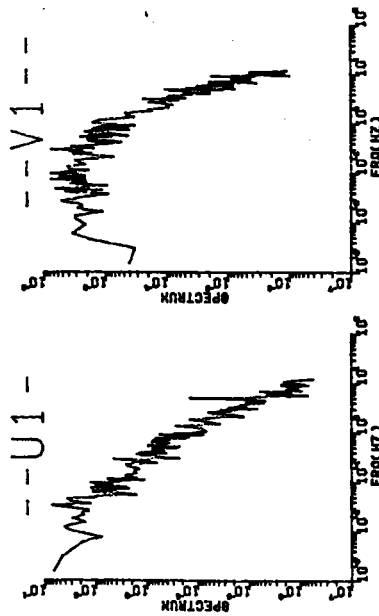
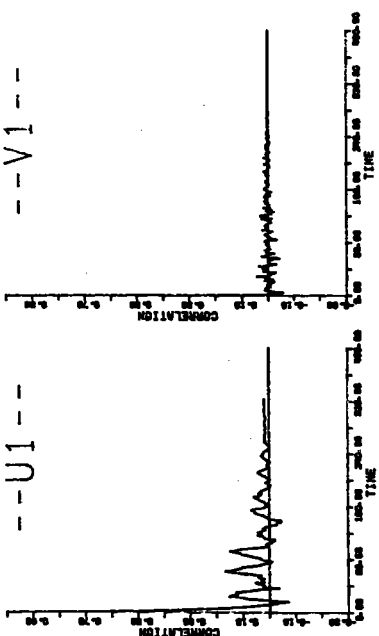


* * 84.08.03 13:00 * *



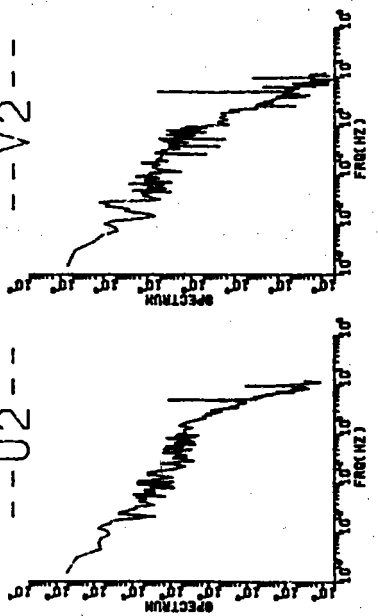
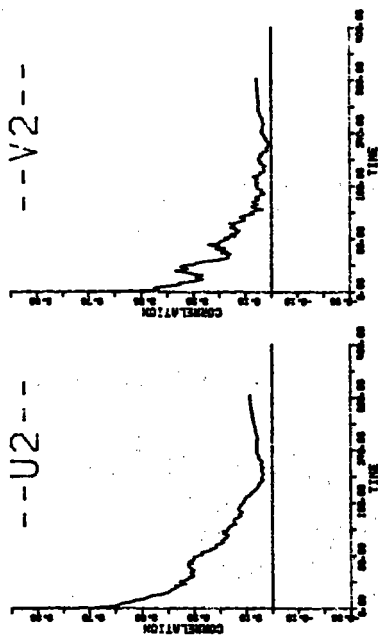
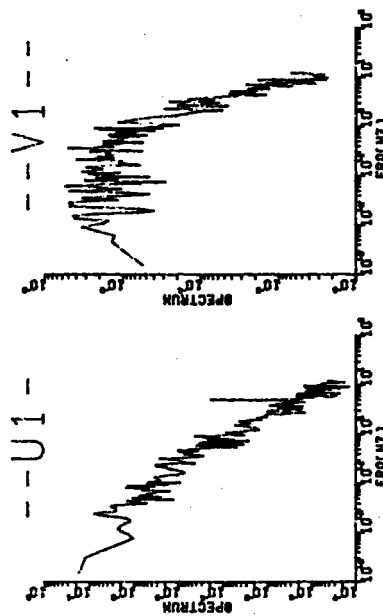
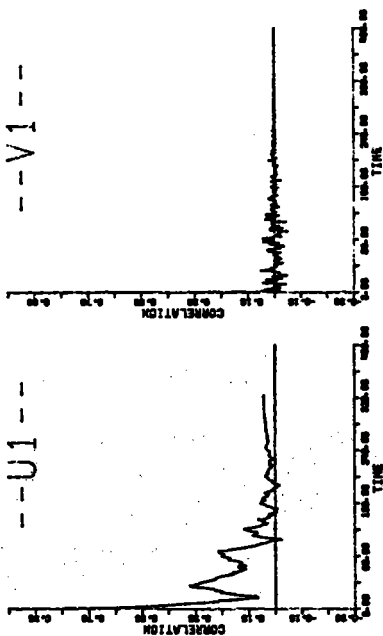
	TURBULENT VELOCITY INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.003236	0.547080	0.084200	0.000177
V1	0.002038	0.098197	0.001510	
U2	0.000000	-0.041814	0.002720	0.000006
V2	0.000006	0.001407	0.000119	

84.08.03 13:10



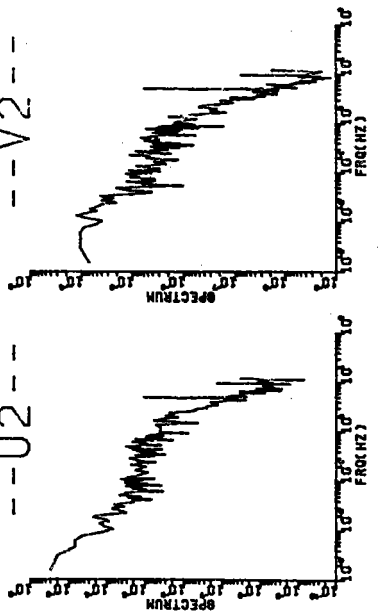
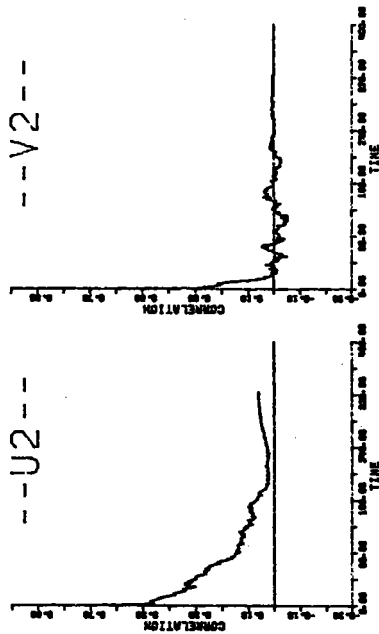
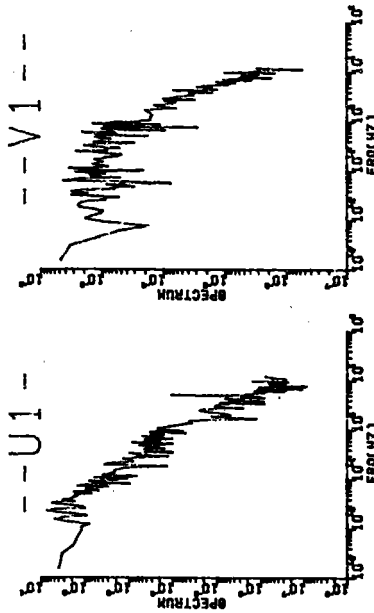
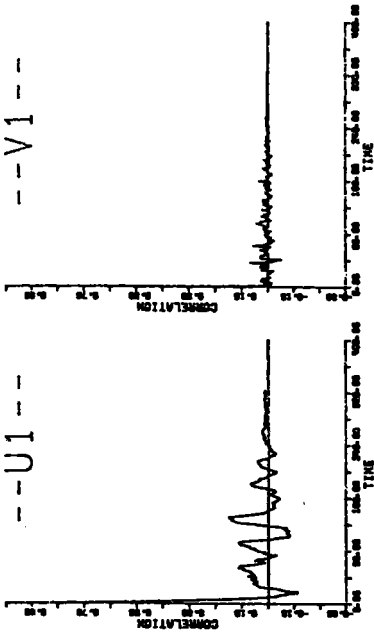
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	FREQUENCY
U1	0.002712	0.568470	0.039700	0.000216
U2	0.002590	0.041010	0.000201	0.002830
V2	0.000052	-0.046525	0.002830	-0.000000
	0.000006	0.004035	0.000097	

* * 84.08.03 13:40 * *



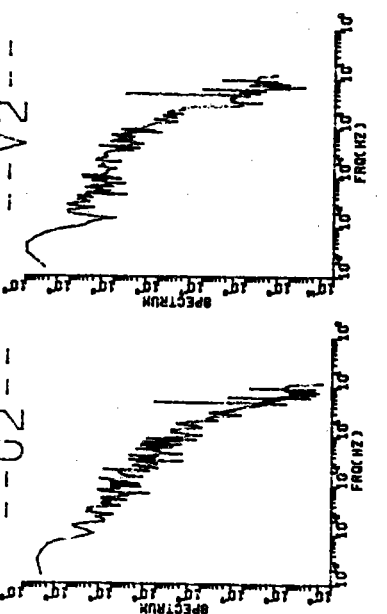
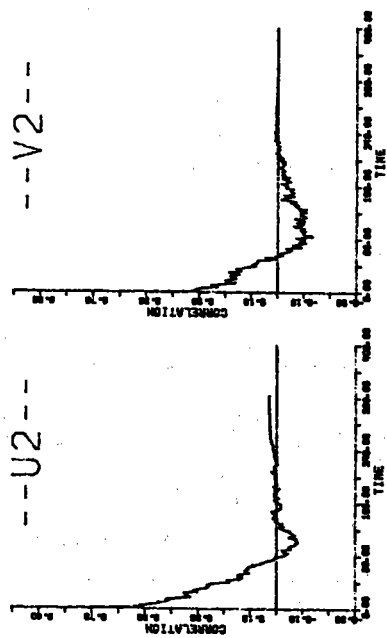
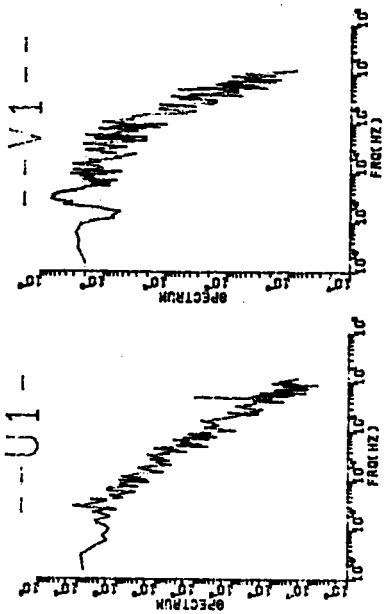
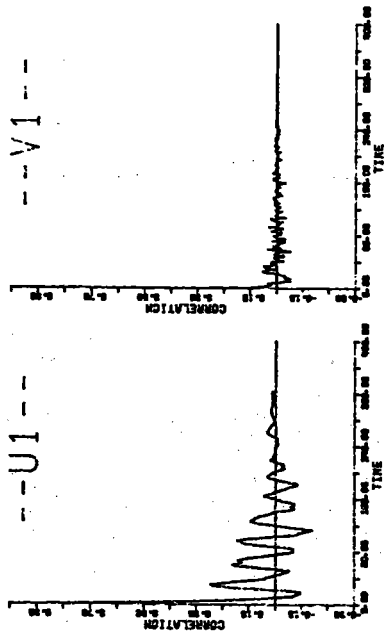
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.002585	0.540810	0.075700	0.000230
V1	0.002216	0.059564	0.000164	
U2	0.000085	-0.062156	0.005220	0.000011
V2	0.000016	0.007640	0.000825	

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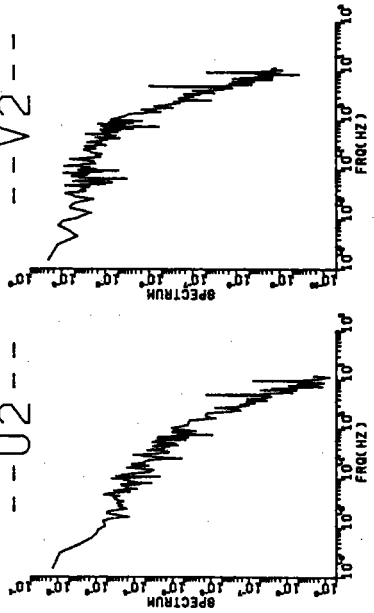
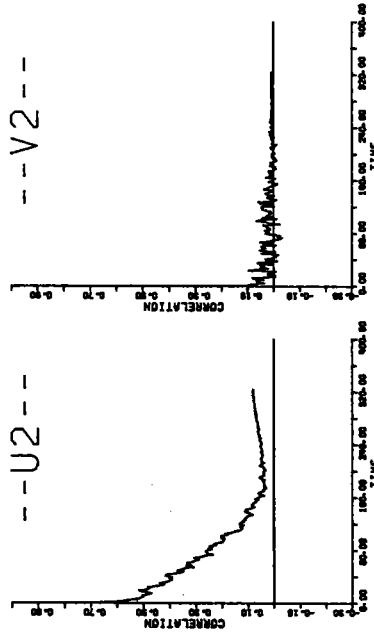
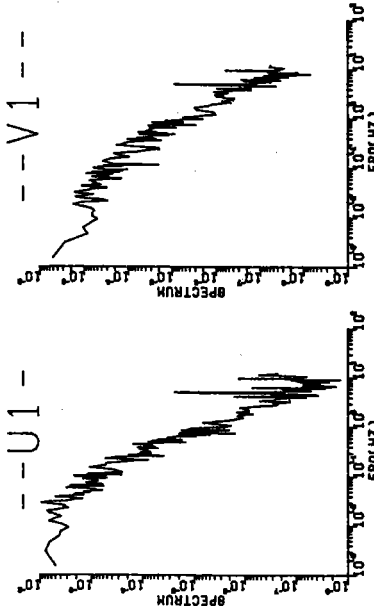
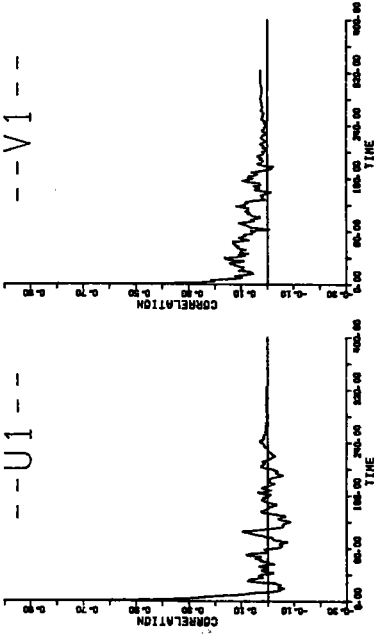
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	TREYNIG	STRESS
U1	0.002183	0.547830	0.017800	0.000125	
V1	0.001928	0.084106	0.002230	0.001370	
U2	0.000032	0.079108	0.001370	0.000003	
V2	0.000007	0.007324	0.000019		

*84.08.03 14:00**



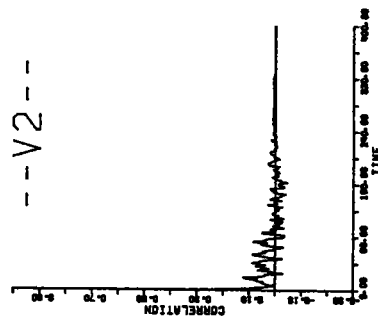
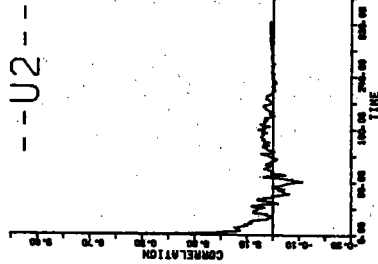
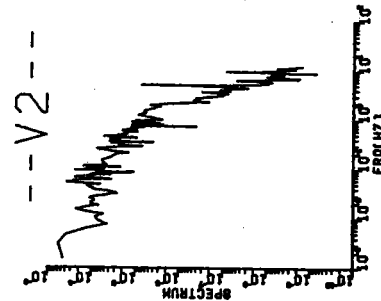
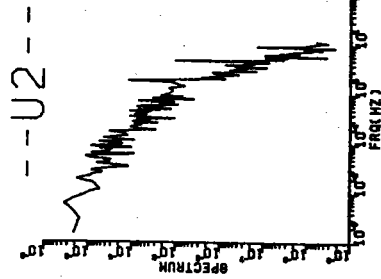
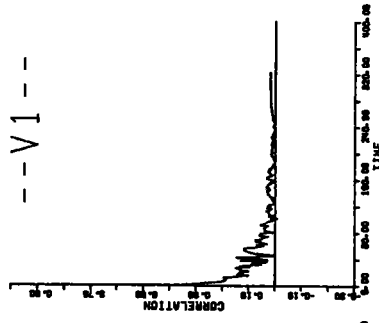
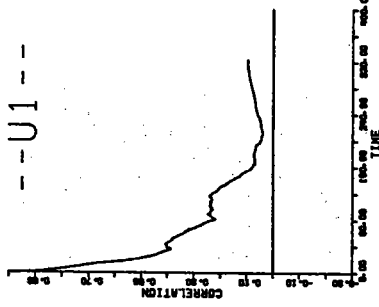
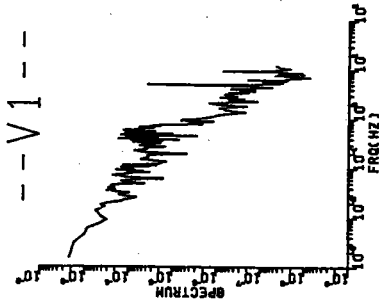
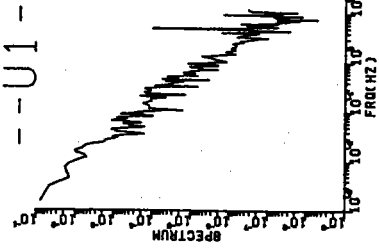
	TURBULENT MEAN VELOCITY INTENSITY	DIFFUSION COEFFICIENT	REYNOLDS STRESS
U1	0.002878	0.505850	0.020800
V1	0.011924	0.062375	0.000528
U2	0.000085	0.082667	0.001260
V2	0.000019	0.008568	0.000012

* * 84.08.03 14:30 * *



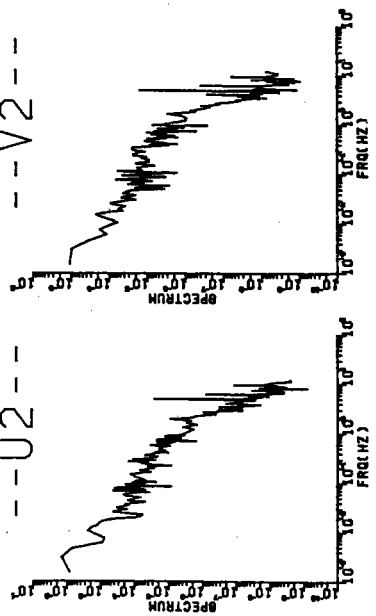
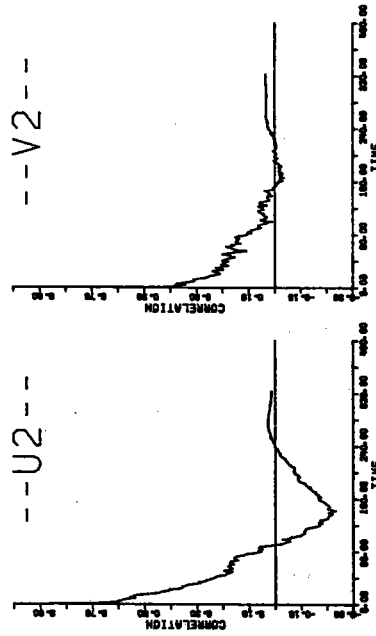
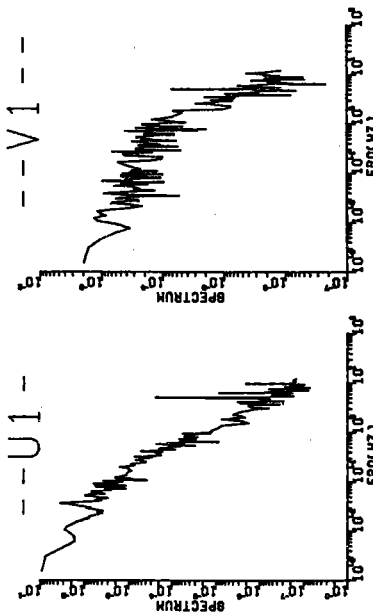
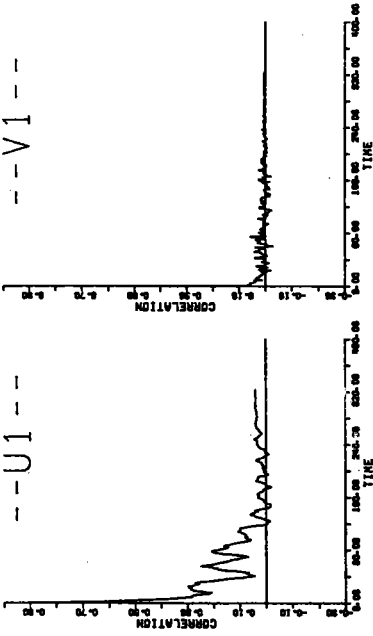
	TURBULENT MEAN VELOCITY INTENSITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000392	0.161620	0.001960
V1	0.000199	0.054749	0.002530
U2	0.000210	-0.210310	0.012100
V2	0.000098	0.010853	0.000189

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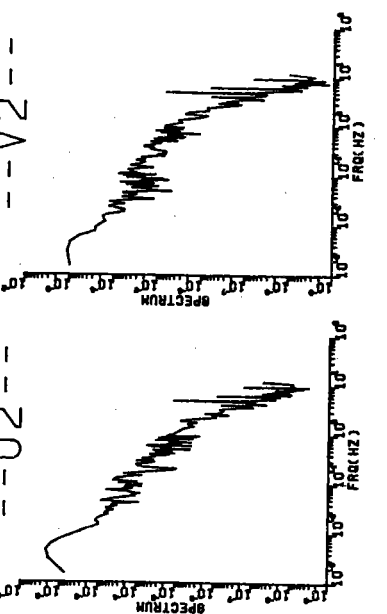
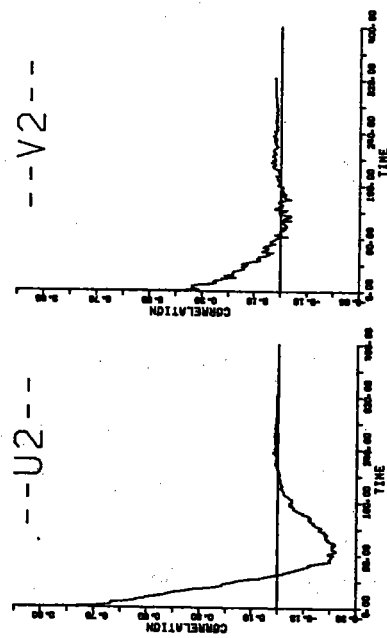
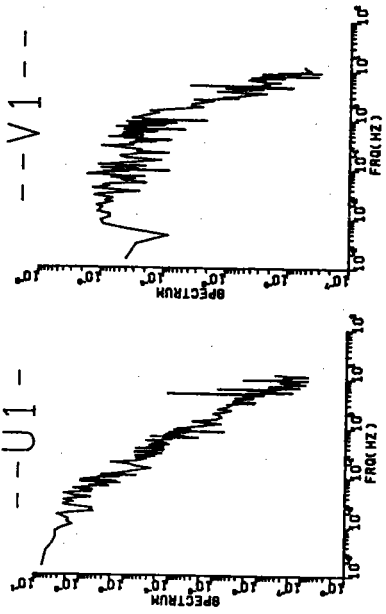
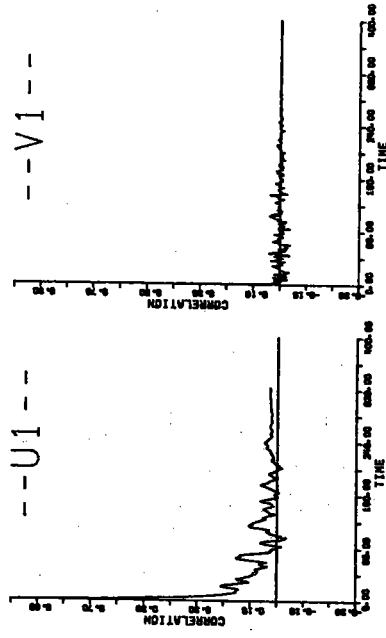
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000522	0.121150	0.037200	-0.000053
V1	0.000072	0.051862	0.000933	
U2	0.000198	-0.199480	0.000982	-0.000012
V2	0.000037	0.011523	0.000143	

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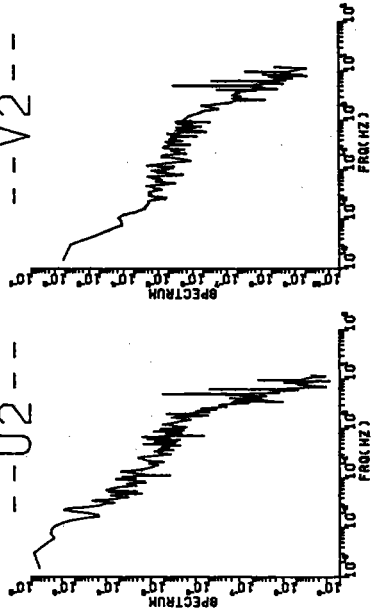
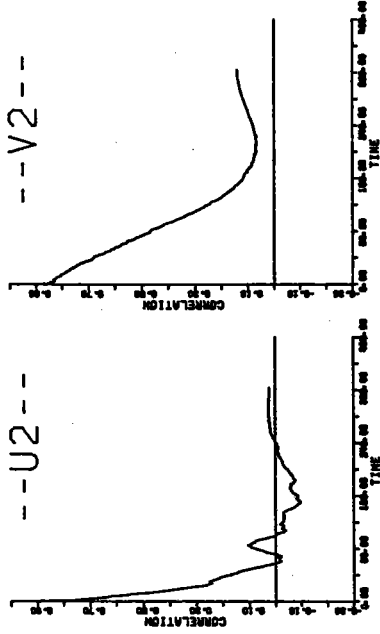
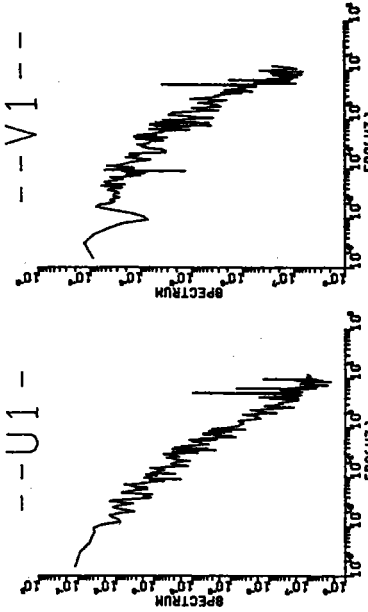
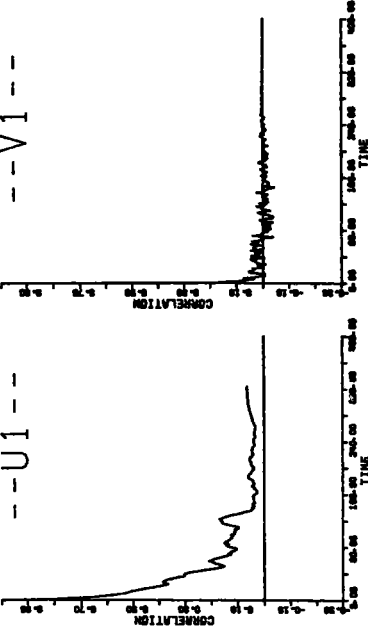
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	RELATIVE STRESS
U1	0.001380	0.378130	0.038400	0.000136
V1	0.000341	0.057716	0.008916	
U2	0.000105	-0.087719	0.001000	0.000008
V2	0.000017	0.011976	0.000412	

* * 84.08.03 15:30 * *



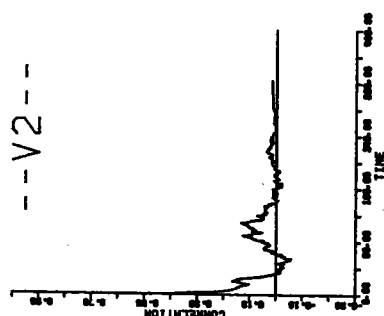
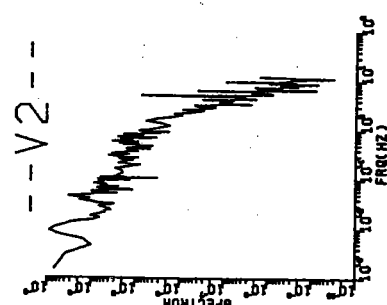
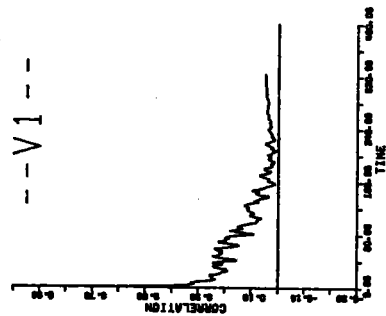
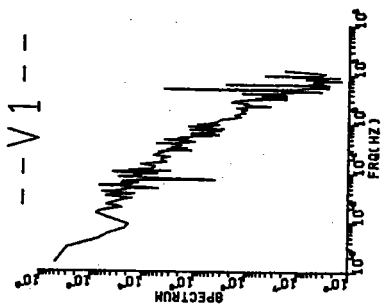
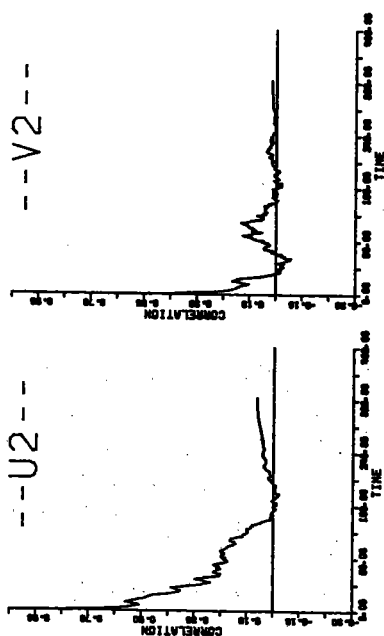
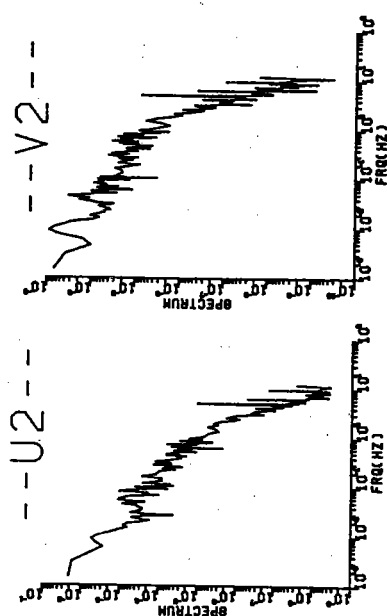
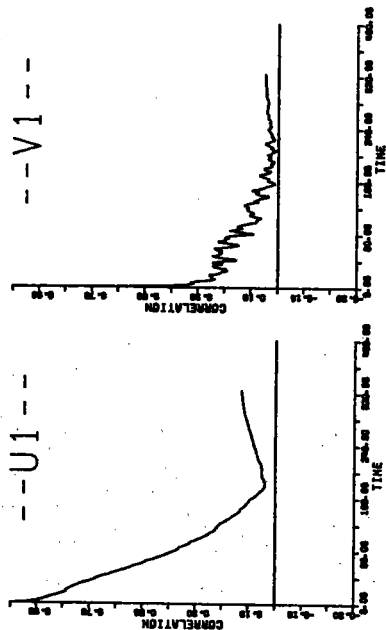
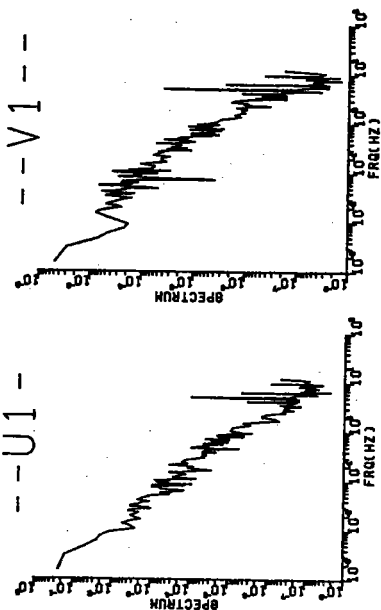
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS STRESS
U1	0.001839	0.321570	0.031400	0.000189
V1	0.000494	0.059957	0.000174	0.000189
U2	0.000208	-0.136420	0.000531	-0.000027
V2	0.000026	0.015233	0.000363	0.000027

* * 84.08.03 15:40 * *



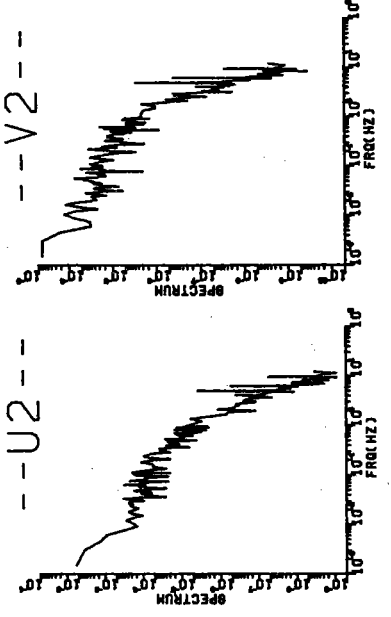
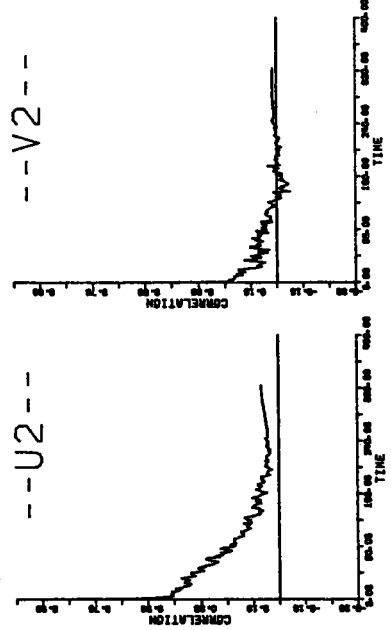
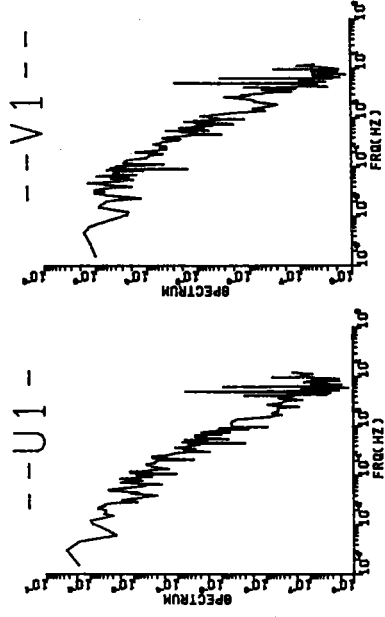
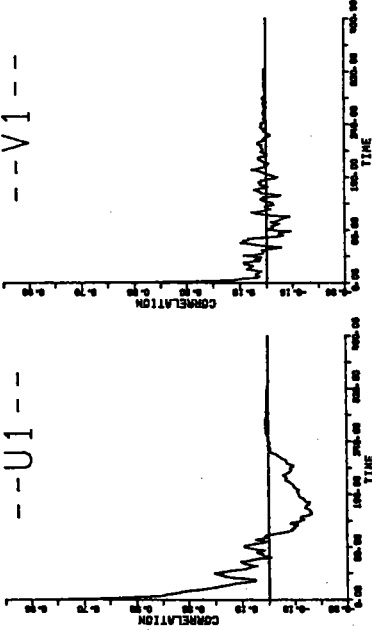
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001231	0.244470	0.054700	0.000105
V1	0.000110	0.051157	0.000186	
U2	0.000085	-0.157050	0.001430	-0.000013
V2	0.000050	0.021260	0.005330	

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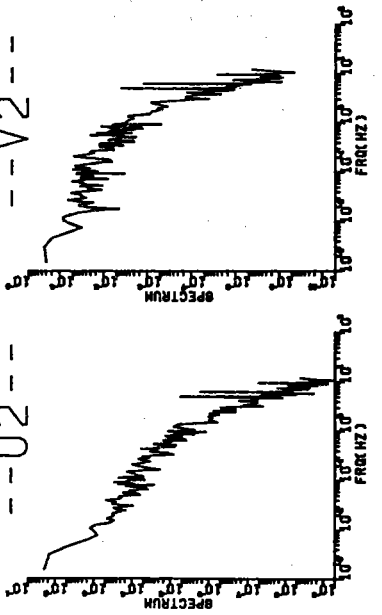
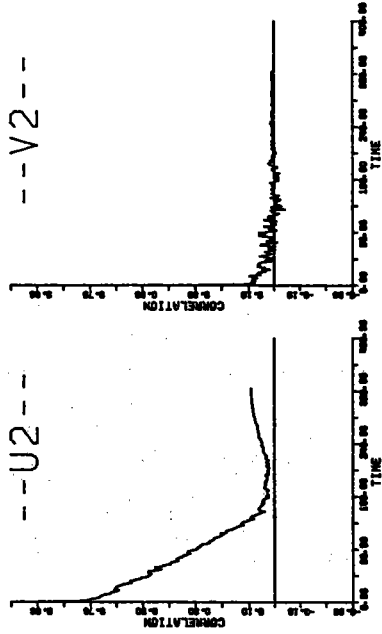
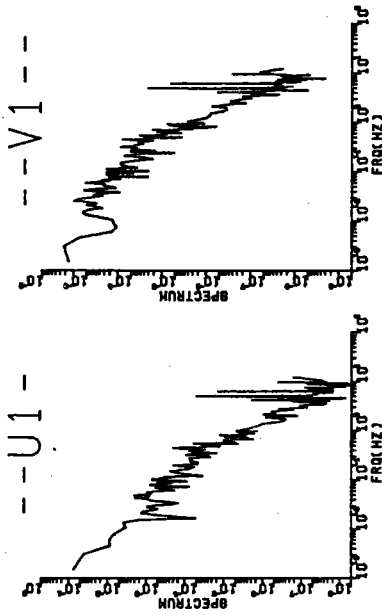
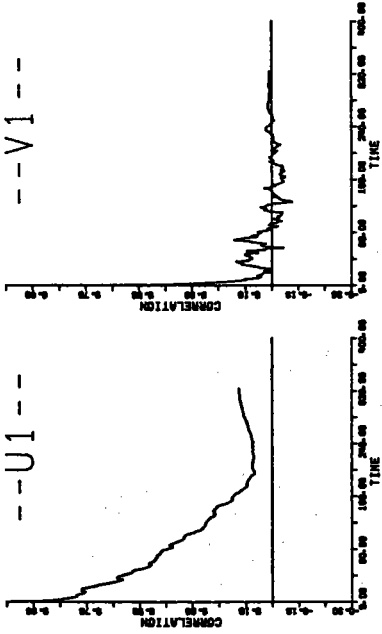
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	RELATIVE STRESS
U1	0.001115	-0.021852	0.107000	-0.000109
V1	0.000068	0.047487	0.002320	
U2	0.000180	-0.203280	0.008980	
V2	0.000030	0.022855	0.000326	-0.000016

* * 84.08.03 16:20 * *



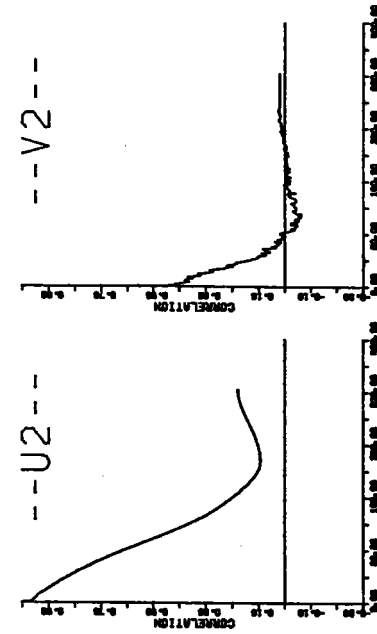
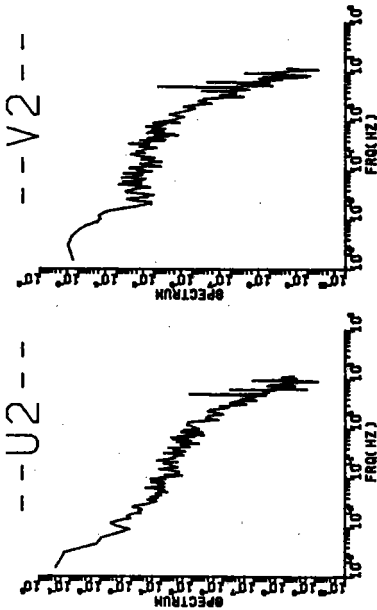
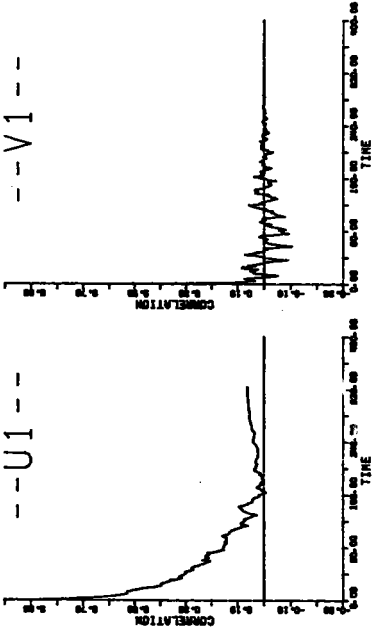
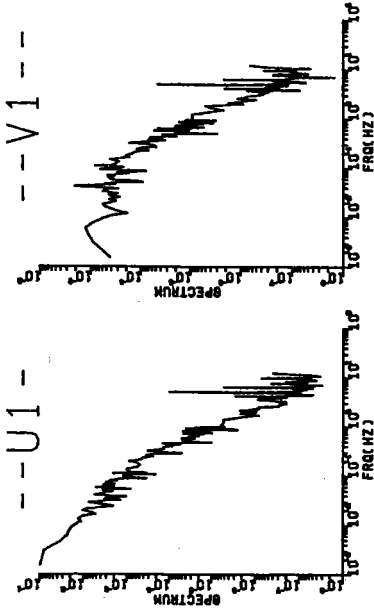
	TURBULENT INTENSITY	VELOCITY	DIFFUSION	STANDARD STRESS
U1	0.000391	-0.046613	0.000788	0.000009
V1	0.000082	0.049014	0.000456	
U2	0.000116	-0.223170	0.005480	-0.000013
V2	0.000029	0.023501	0.000292	

* * 84.08.03 16:30 * *



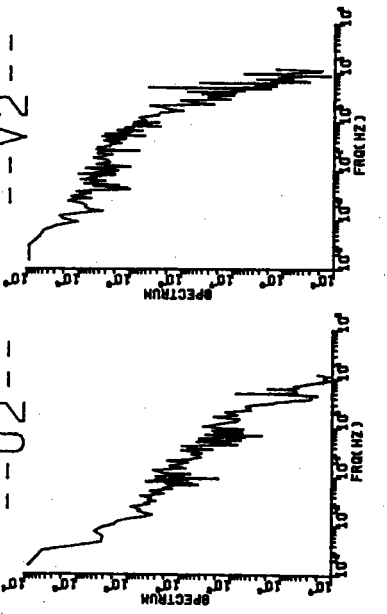
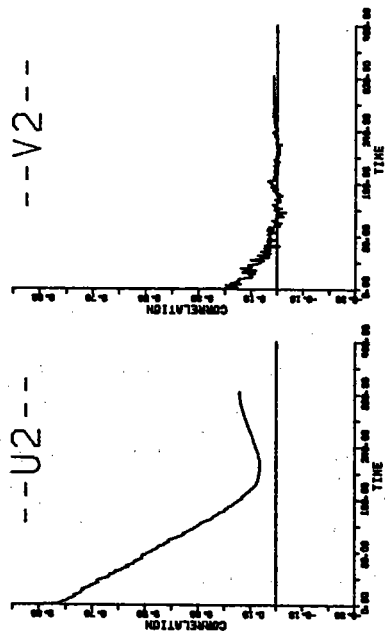
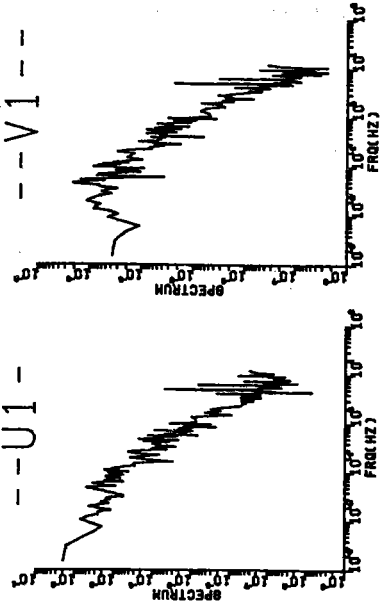
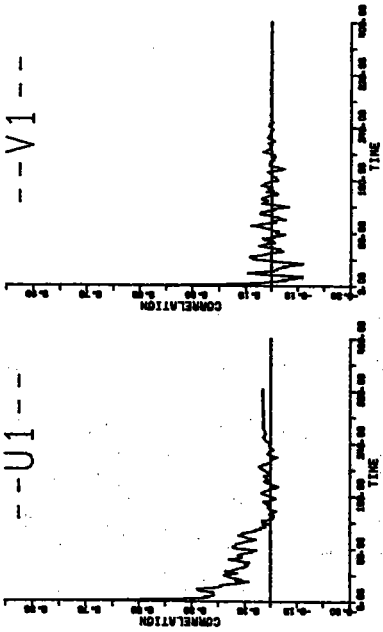
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000778	-0.097452	0.079500	0.000023
V1	0.000108	0.047943	0.000844	0.000023
U2	0.000238	-0.218430	0.015600	-0.000026
V2	0.000030	0.018622	0.000148	-0.000026

* * 84.08.03 16:55 * *



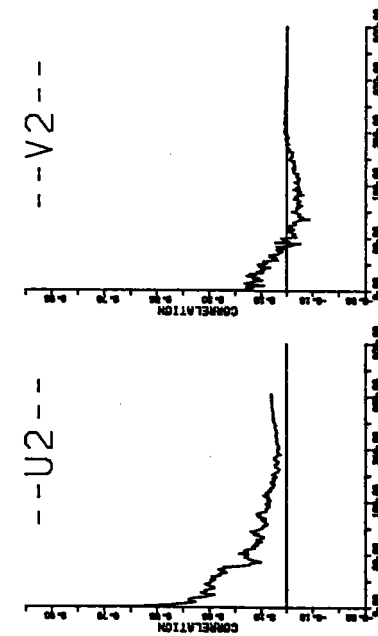
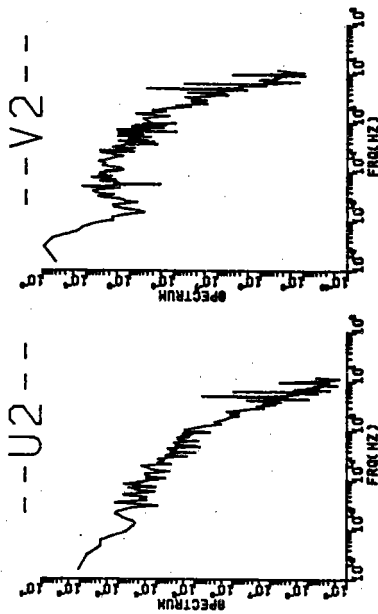
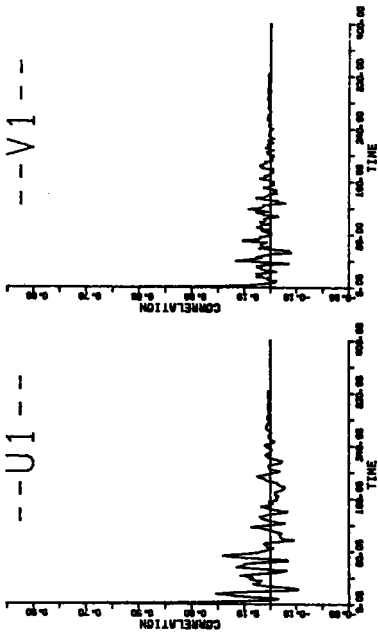
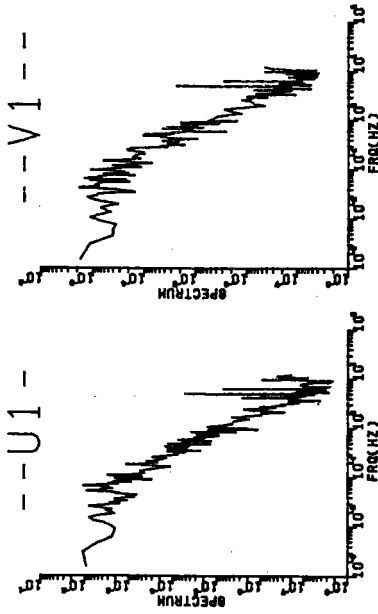
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.00095	-0.12510	0.041500	0.000031
V1	0.00106	0.043258	0.000012	
U2	0.001008	-0.229720	0.145000	-0.000040
V2	0.000091	0.017413	0.000010	

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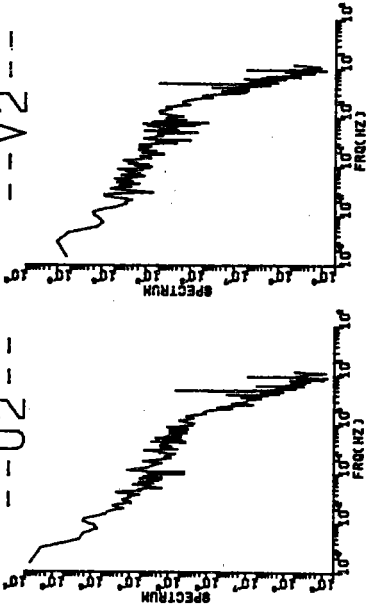
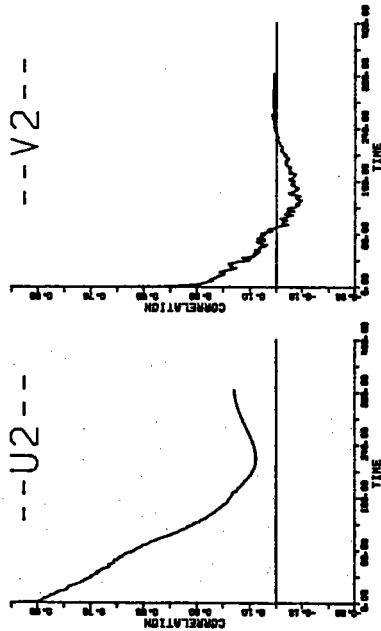
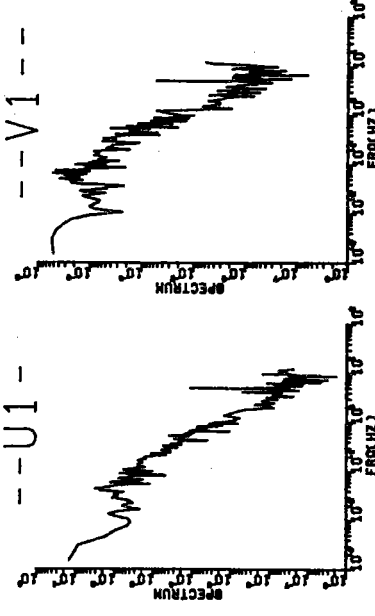
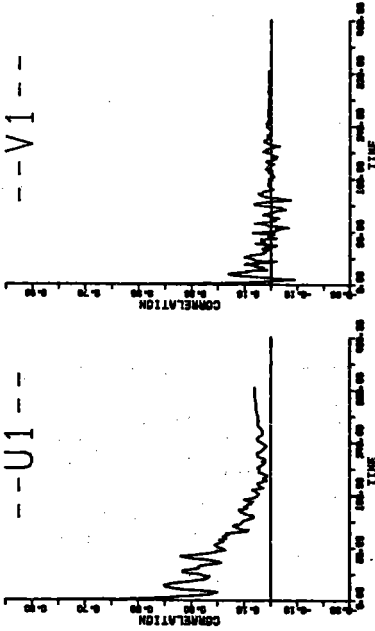
	TURBULENCE MEAN VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000368	-0.12350	0.00780
V1	0.000124	0.045244	0.000164
U2	0.000372	-0.217680	0.040600
V2	0.000036	0.019511	0.000328

*84.08.03 17:15**



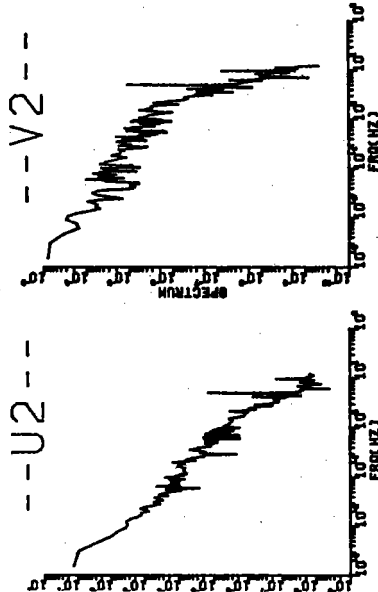
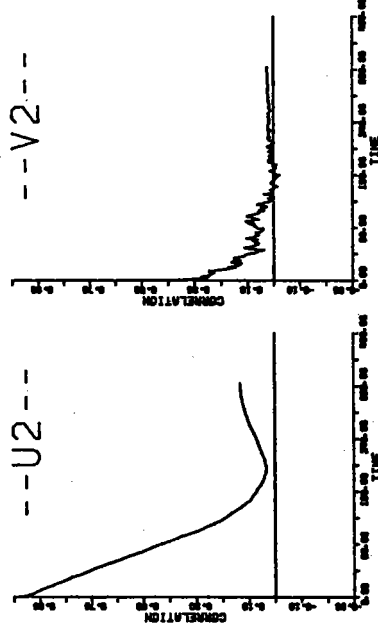
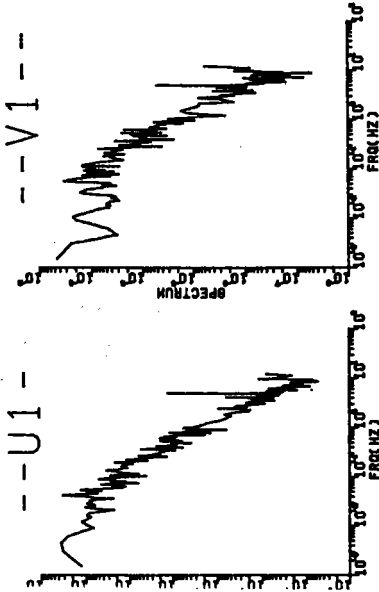
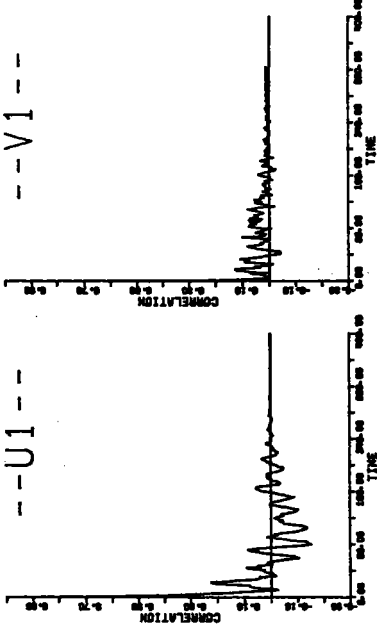
	TURBULENCE INTENSITY	GEN OCITY	DIFFUSION RADIUS	REYNOLDS NUMBER
U1	0.000480	-0.199650	0.002540	0.000019
V1	0.000198	0.038423	0.000788	0.000009
U2	0.000128	-0.216780	0.005410	-0.000008
V2	0.000025	0.016398	0.000059	-0.000008

* * 84.08.03 17:40 * *



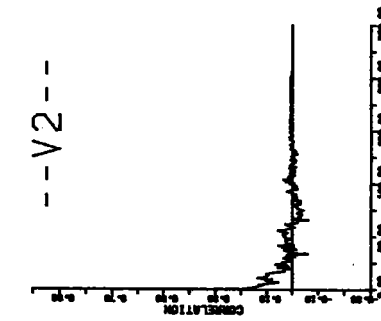
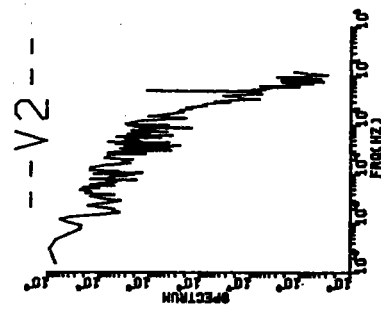
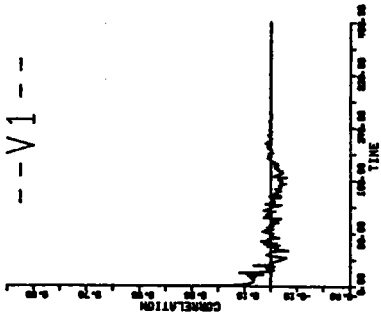
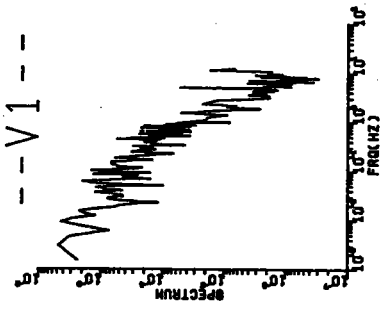
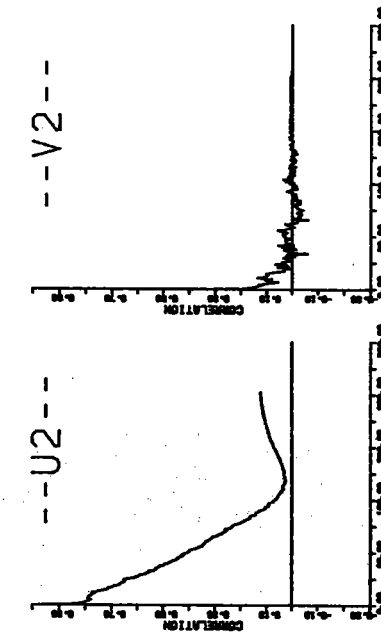
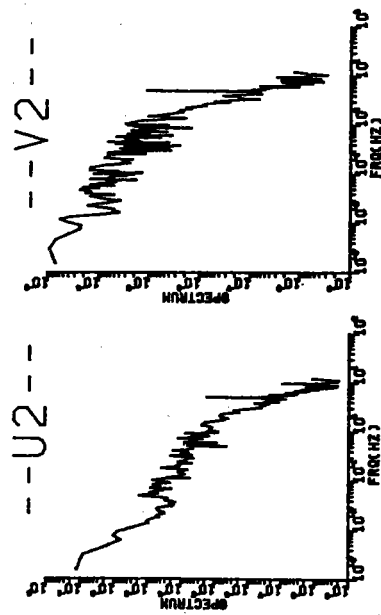
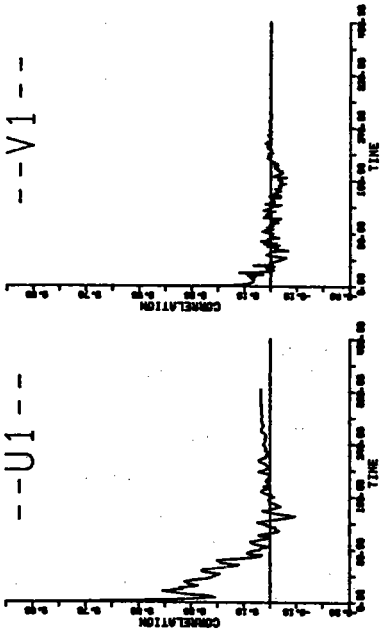
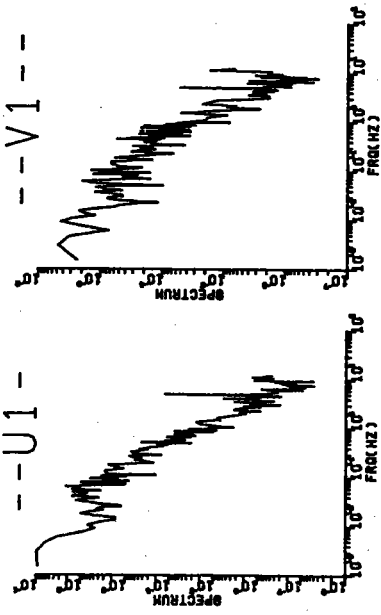
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS STRESS
U1	0.001561	-0.118590	0.067700	0.000247
V1	0.000978	0.040270	0.002100	
U2	0.000294	-0.280340	0.035800	-0.000024
V2	0.000032	0.020208	0.000203	

*x84.08.03 17:50**



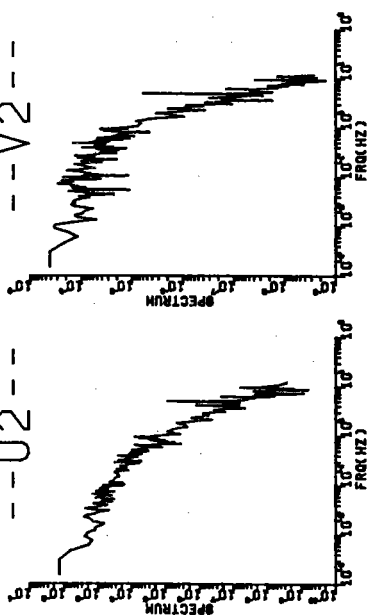
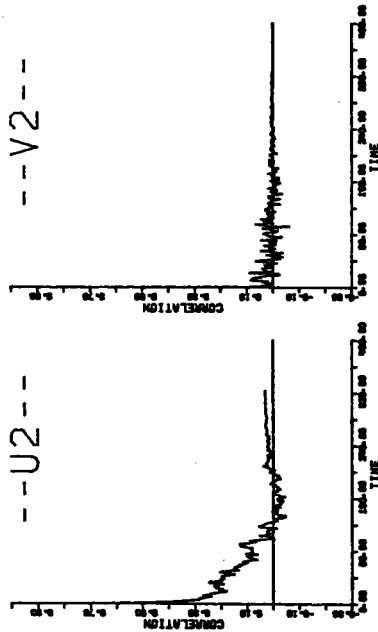
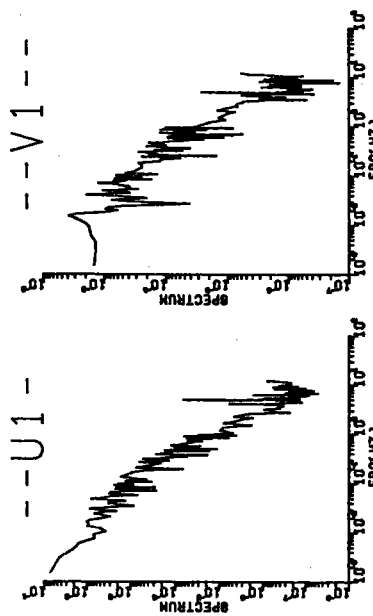
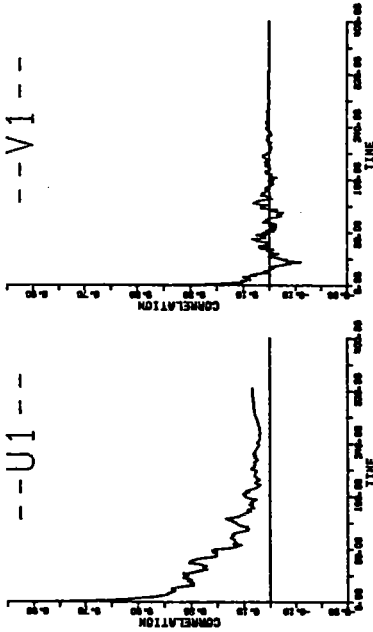
	TURBULENT INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.001026	-0.111670	0.000452	0.000048
V1	0.000289	0.034430	0.002200	
U2	0.000587	-0.225450	0.058700	
V2	0.000021	0.014230	0.000336	-0.000039

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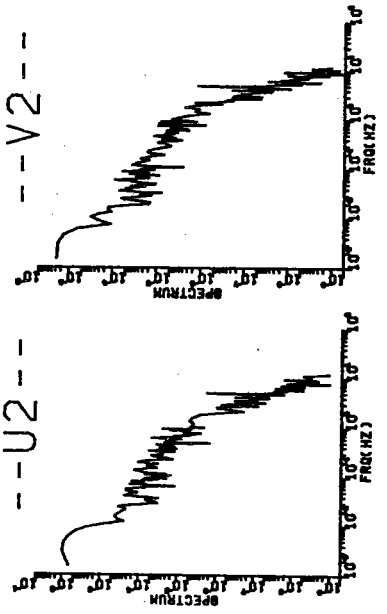
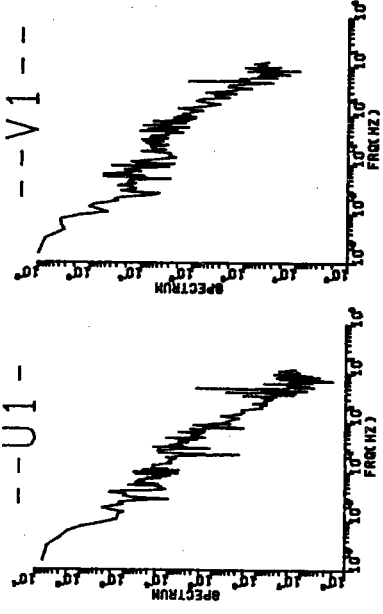
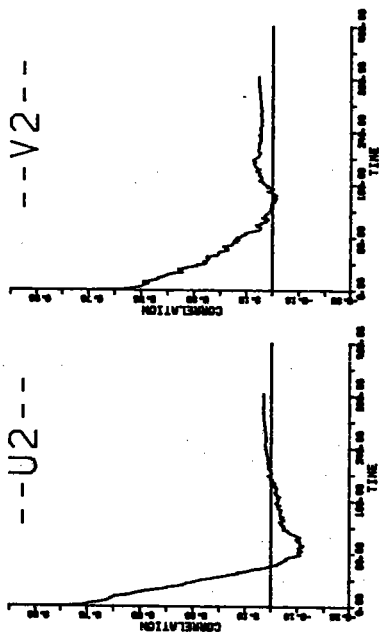
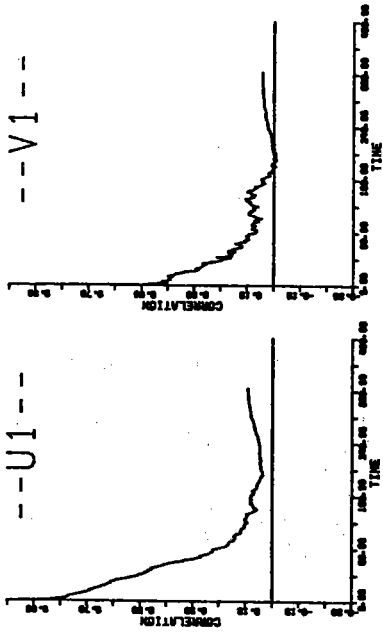
	CURRENT TANGENT	MEAN VELOCITY	DIFFUSION COEFFICIENT	REVISION NUMBER
U1	0.001409	-0.170190	0.094700	0.000064
V1	0.000928	0.028719	0.000202	
U2	0.000815	-0.228570	0.056700	-0.000010
V2	0.000050	0.011526	0.000218	

*84.08.03 18:40**



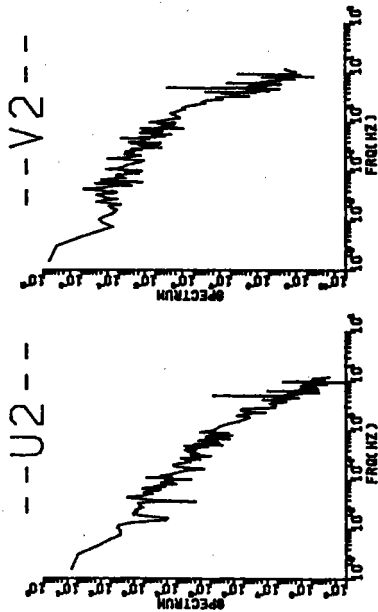
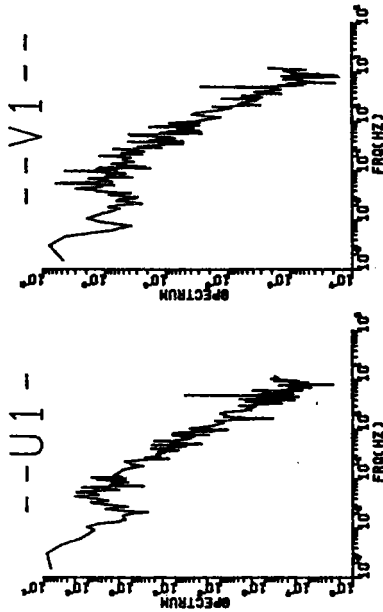
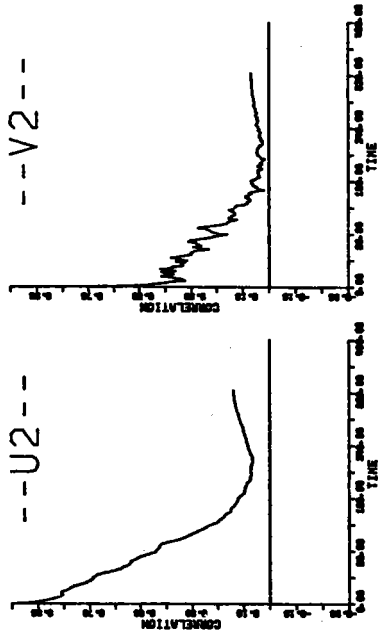
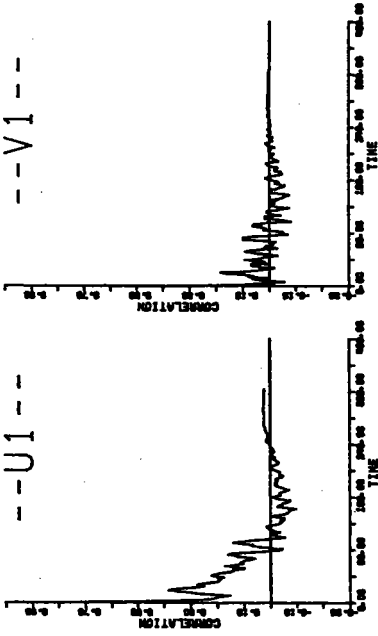
	TURBULENCE INTENSITY	WIND VELOCITY	DIFFUSION INDEX	REYNOLDS NUMBER
U1	0.000755	-0.183930	0.036000	0.000064
V1	0.000227	0.024676	0.006840	
U2	0.000248	-0.215880	0.004980	-0.000030
V2	0.000064	0.003286	0.000148	

* * 84.08.03 18:50 * *



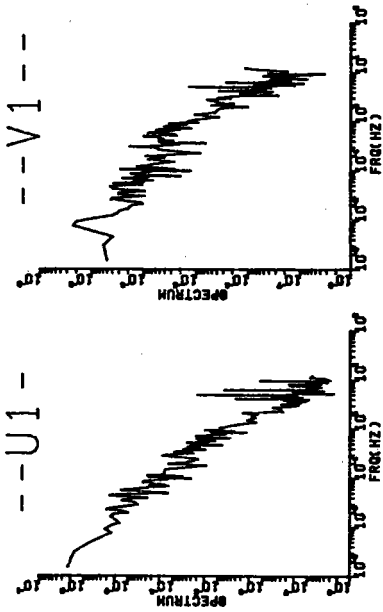
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION STRIPER	REYNOLDS NUMBER
U1	0.000436	-0.19350	0.028200	0.000006
V1	0.000197	0.018219	0.004140	
U2	0.000182	-0.208860	0.003790	0.000008
V2	0.000046	0.007159	0.001710	

* * 84.08.03 19:20 * *



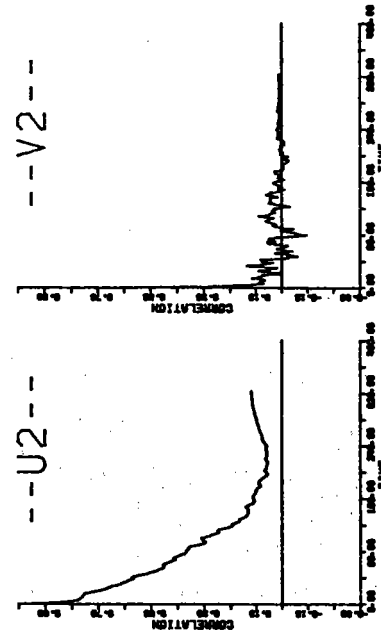
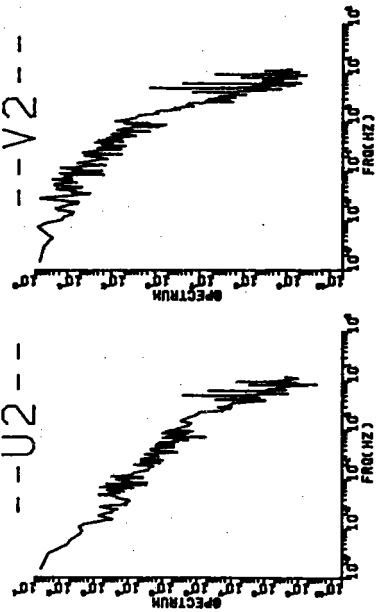
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	MEASUREMENT NUMBER
U1	0.001194	-0.191170	0.018100	0.000252
V1	0.000379	0.030980	0.000708	
U2	0.000878	-0.145580	0.071200	-0.000143
V2	0.000086	0.001771	0.009270	

* * 84.08.03 19:40 * *



--U1--

--V1--

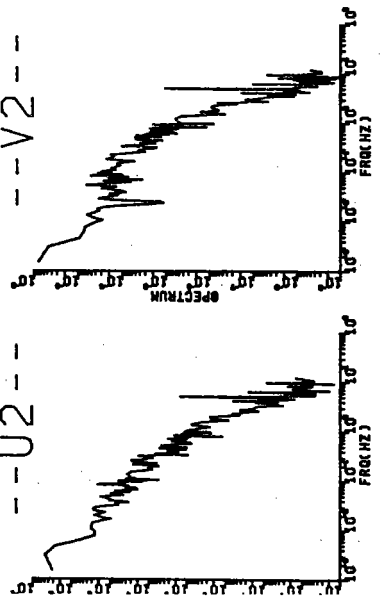
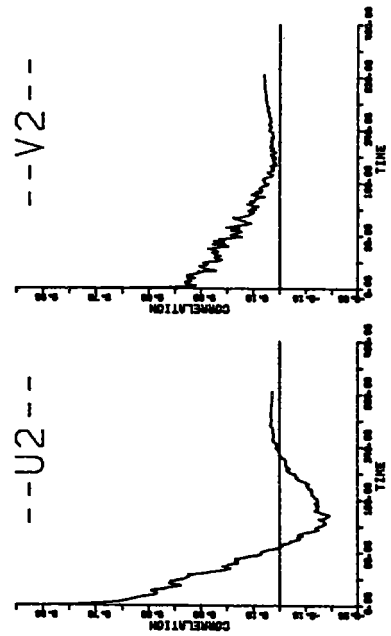
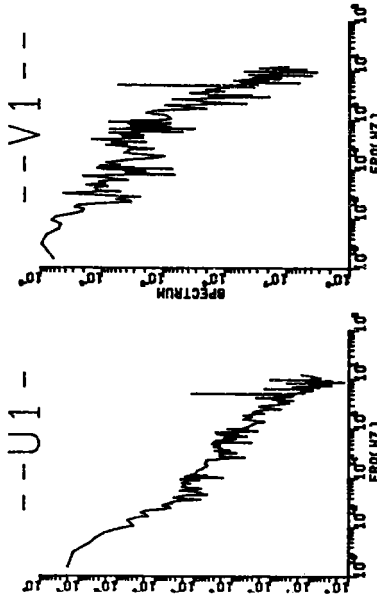
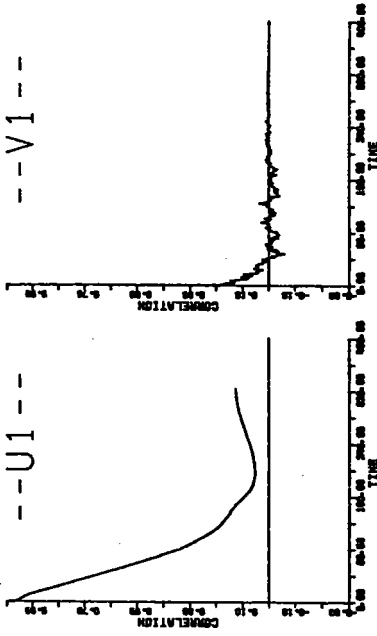


--U2--

--V2--

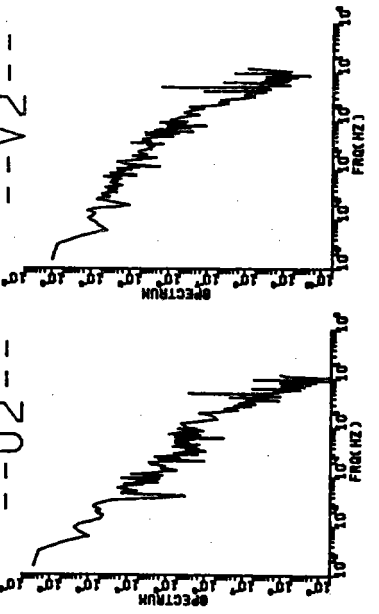
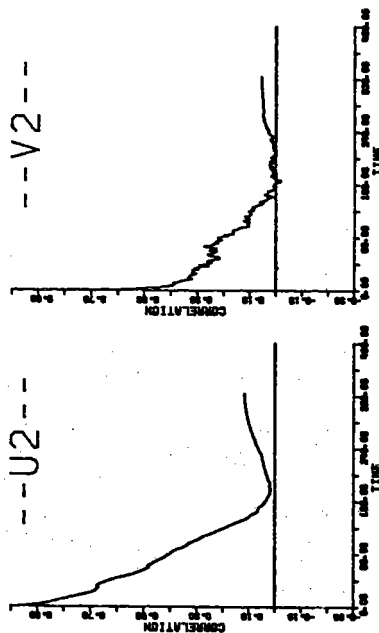
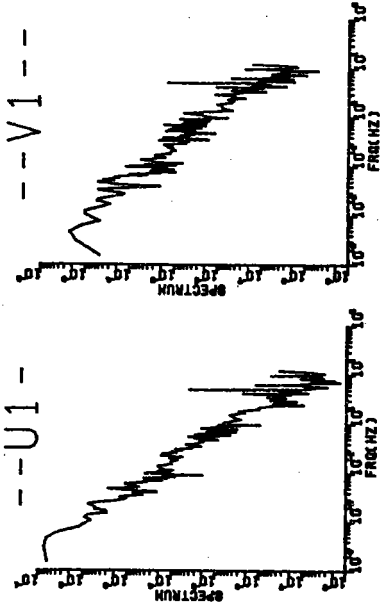
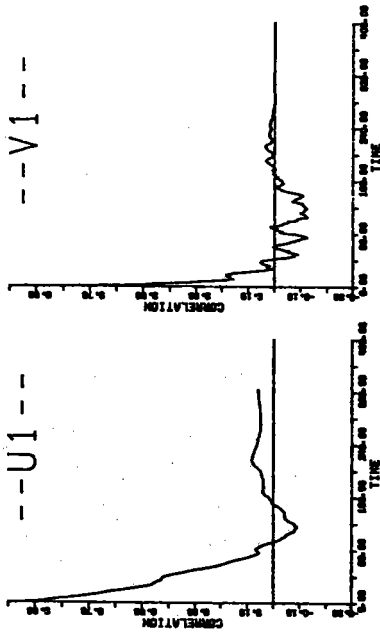
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS	STRESS
U1	0.000220	-0.175660	0.010500	0.000014	
V1	0.000085	0.098619	0.000188		
U2	0.000356	-0.087438	0.031500	-0.000010	
V2	0.000053	-0.000008	0.000372		

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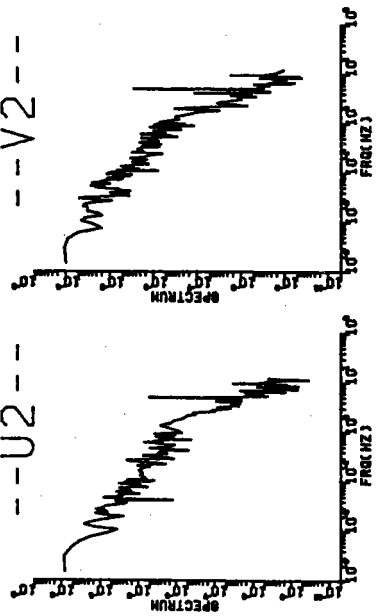
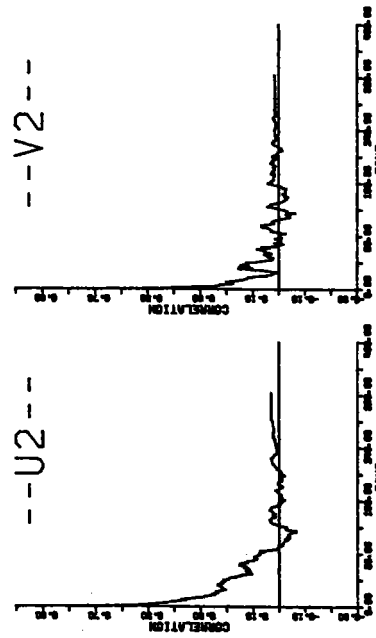
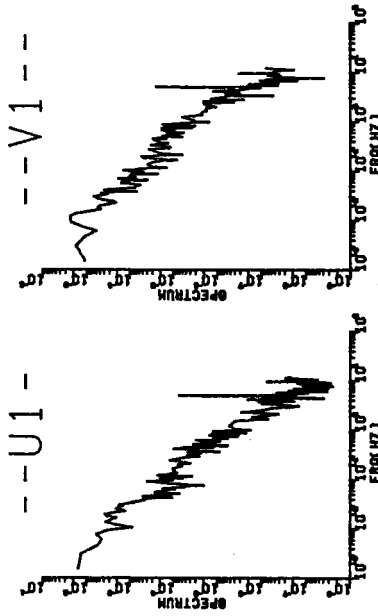
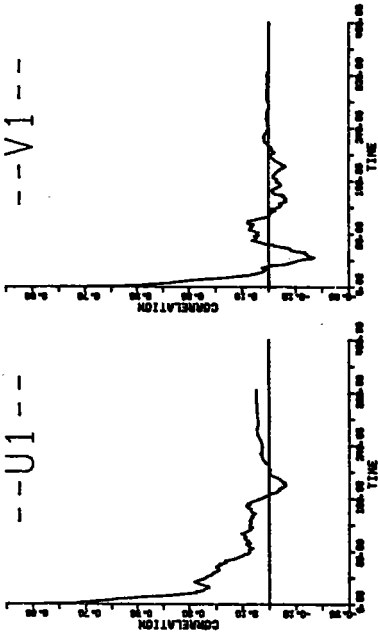
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS
				STRESS
U1	0.000906	-0.075784	0.086000	0.000019
V1	0.000085	0.096356	0.000150	
U2	0.000336	-0.108900	0.006220	
V2	0.000090	0.011005	0.003710	-0.000023

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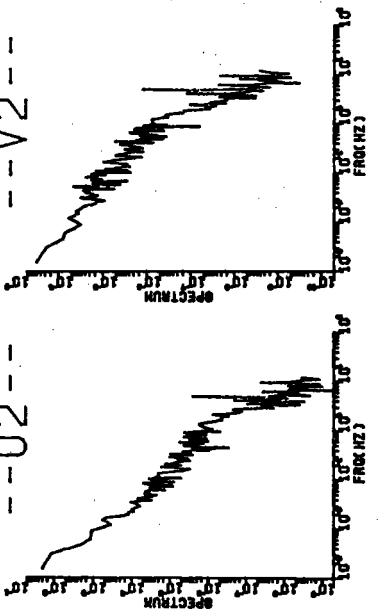
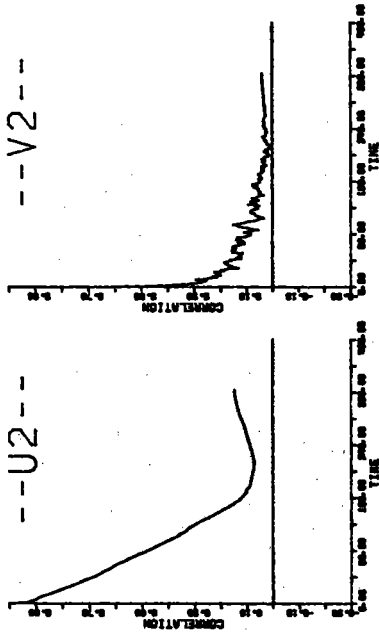
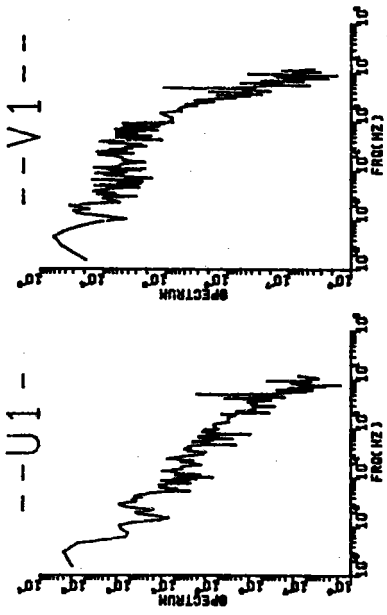
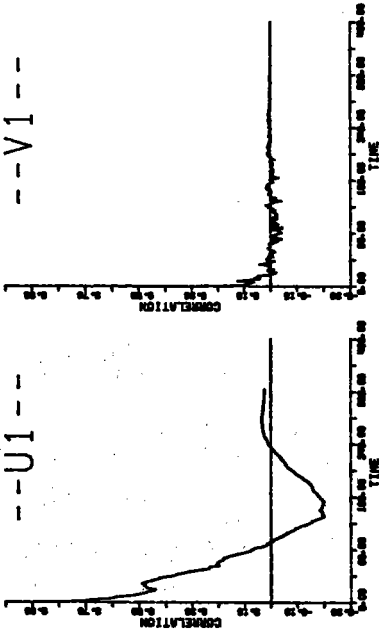
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000816	0.047401	0.025600	-0.000018
V1	0.000044	0.096213	0.000088	
U2	0.000249	-0.089354	0.021900	-0.000034
V2	0.000021	0.011281	0.000795	

* * 84.08.03 20:20 * *



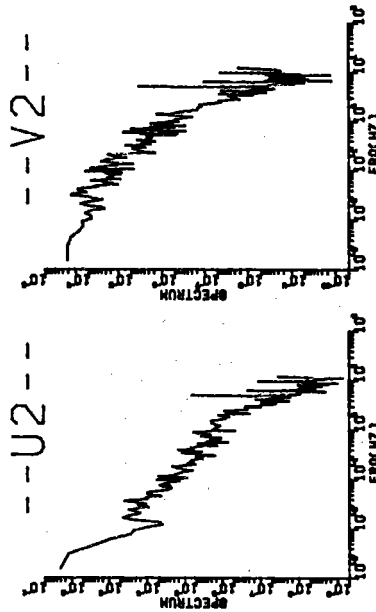
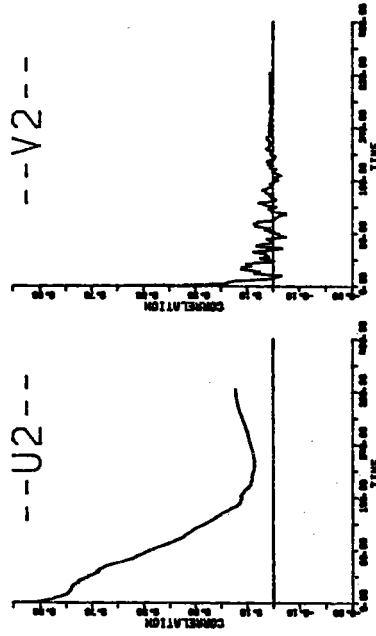
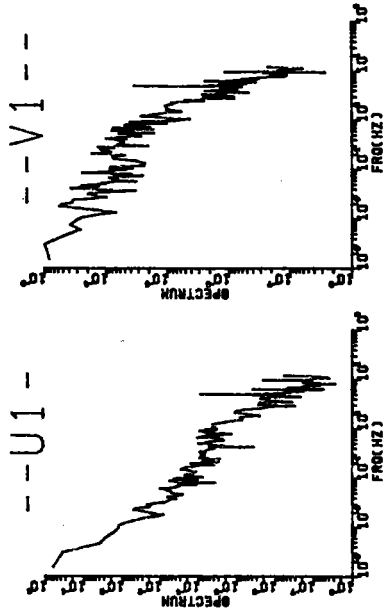
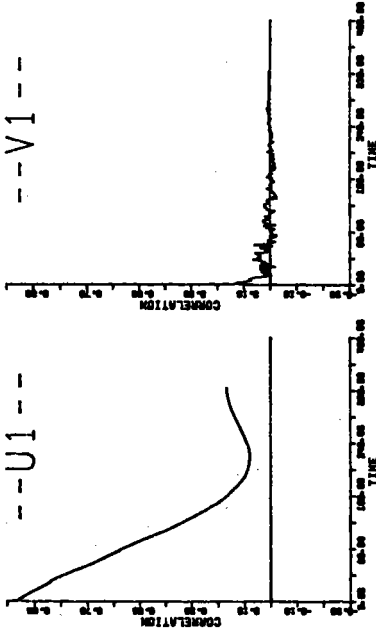
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000185	0.088573	0.006150	-0.00001
V1	0.000089	0.095116	0.000216	-0.00001
U2	0.000028	-0.069809	0.000577	-0.00000
V2	0.000008	0.007823	0.000084	-0.00000

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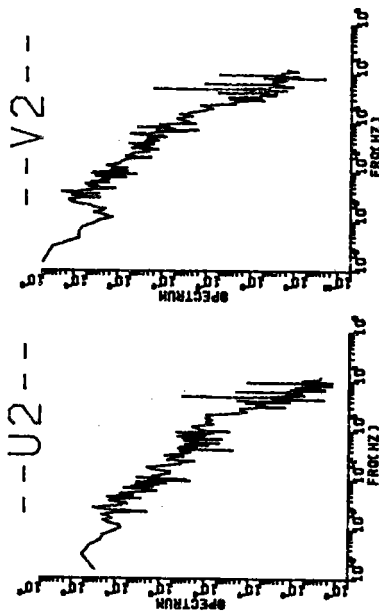
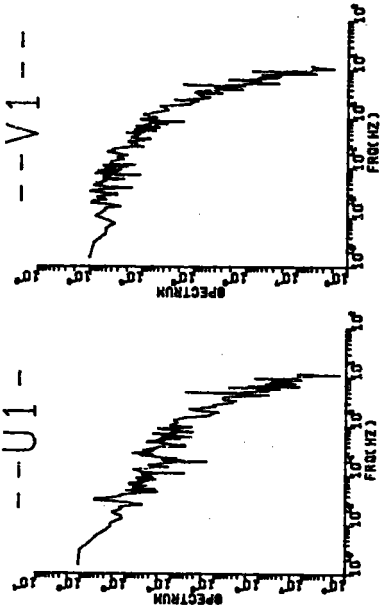
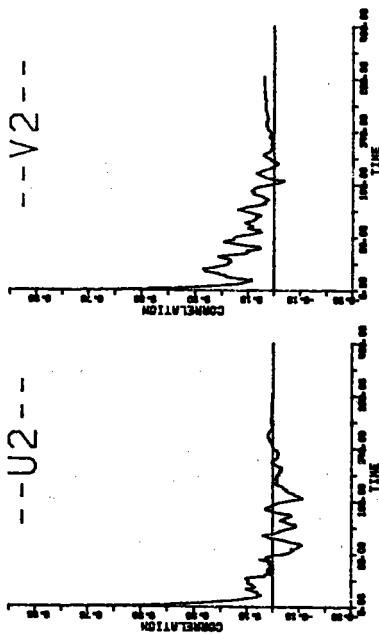
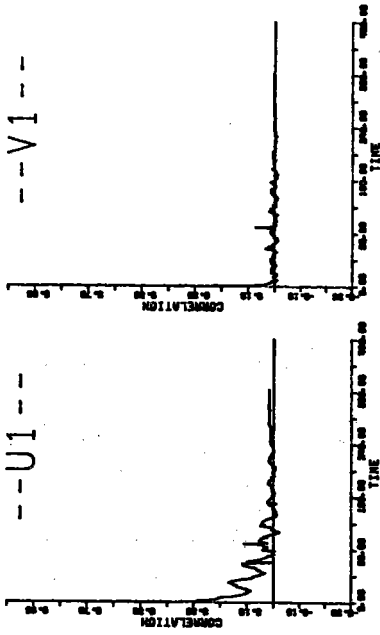
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFF	REYNOLDS STRESS
U1	0.000191	0.107250	0.009020	0.000012
U2	0.000088	0.099117	0.000081	0.000000
V1	0.000168	-0.048831	0.018200	-0.000018
V2	0.000011	0.005871	0.000910	0.000000

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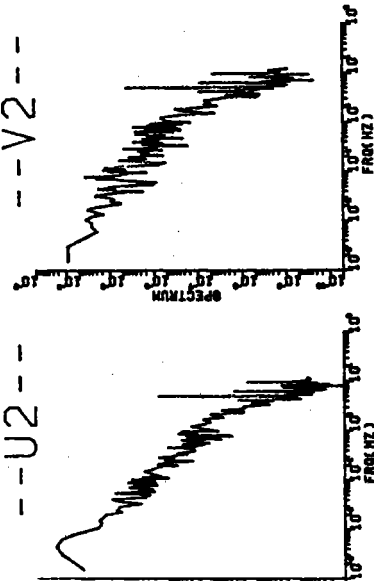
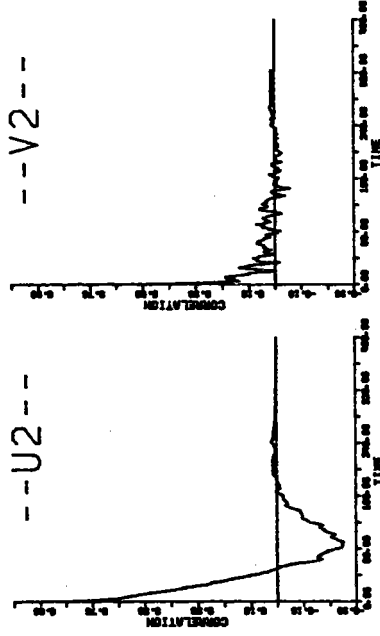
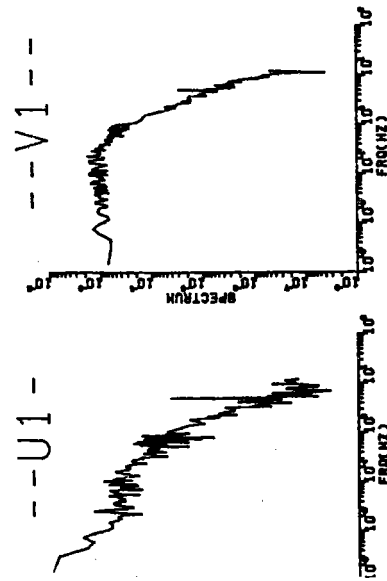
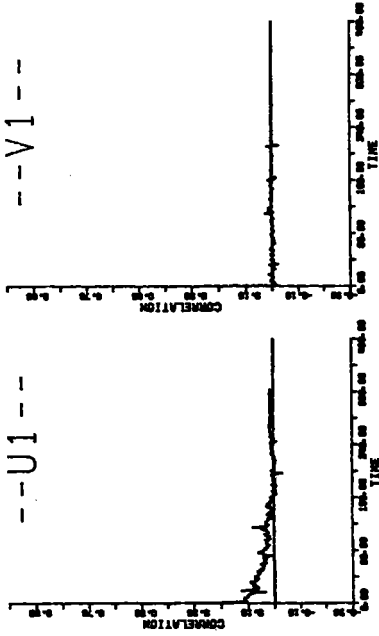
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.002905	0.117670	0.305000	
V1	0.000089	0.027540	0.000248	-0.000041
U2	0.000174	0.034015	0.019200	
V2	0.000018	0.001487	0.000134	-0.000012

*x84.08.03 21:10**



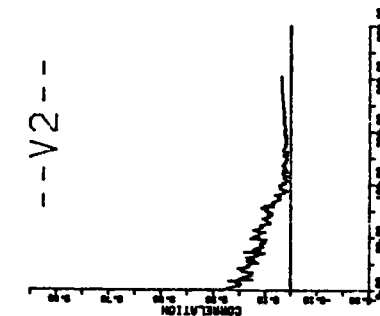
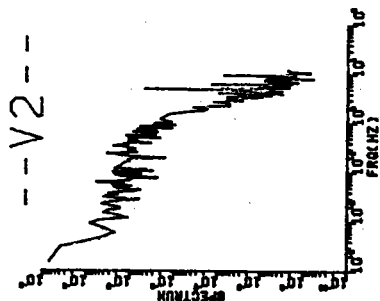
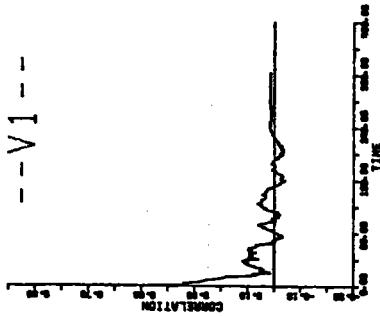
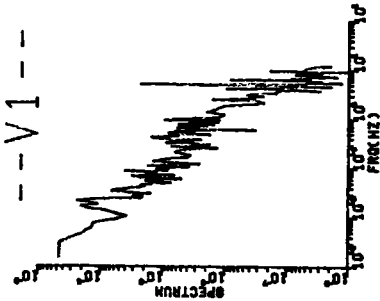
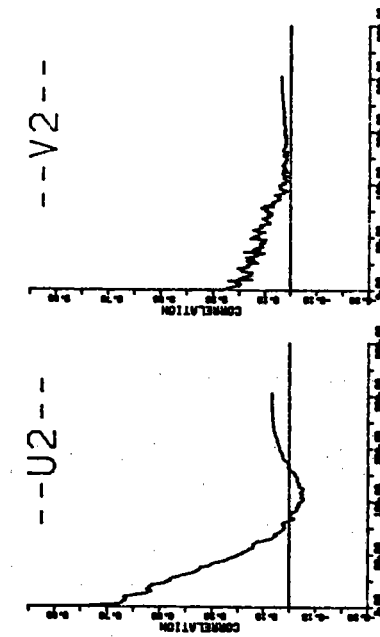
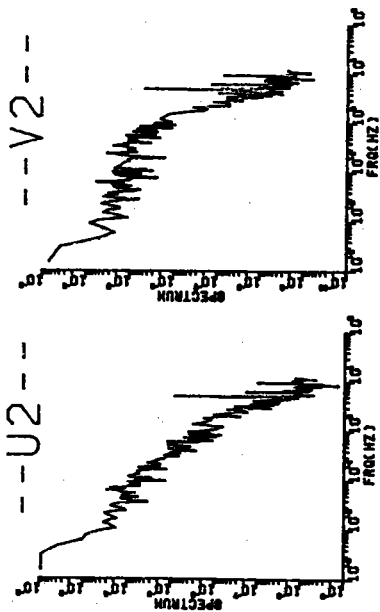
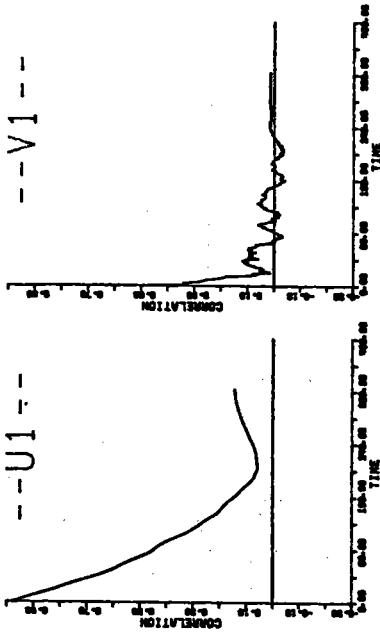
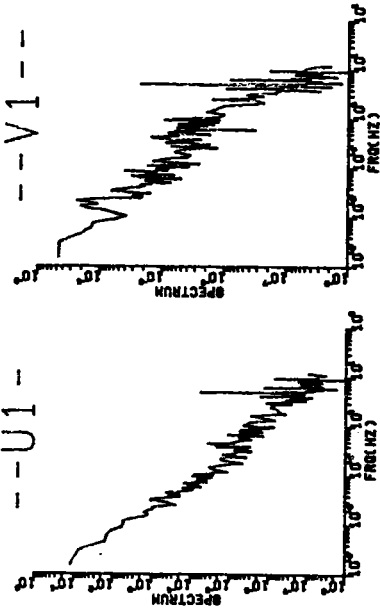
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	MEYER PG NUMBER
U1	0.000982	0.060919	0.004500	0.000107
V1	0.000289	0.090750	0.000427	0.000107
U2	0.000027	0.016119	0.000054	0.000000
V2	0.000017	0.000804	0.000045	0.000000

*84.08.03 21:20**



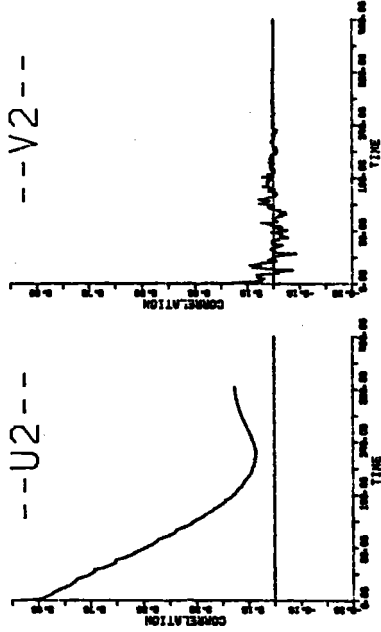
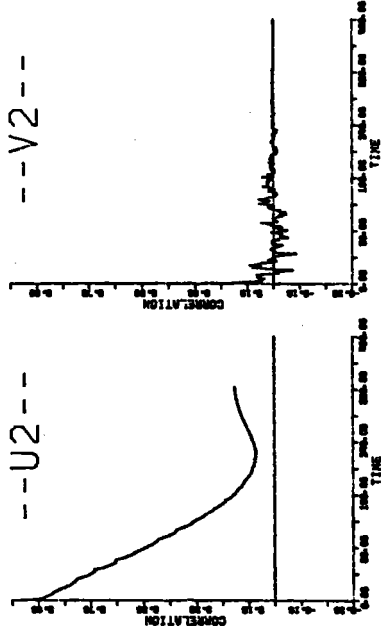
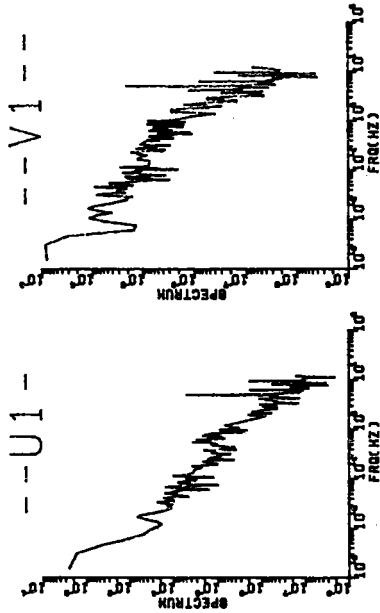
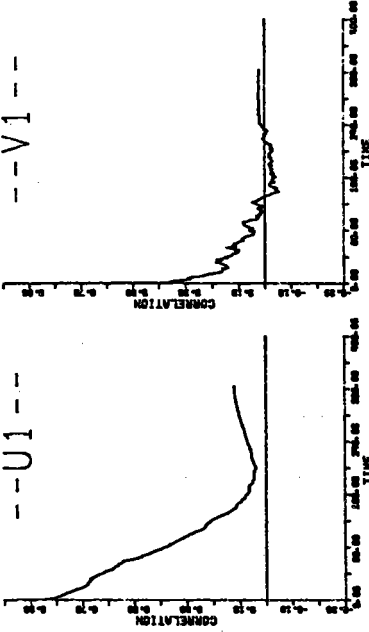
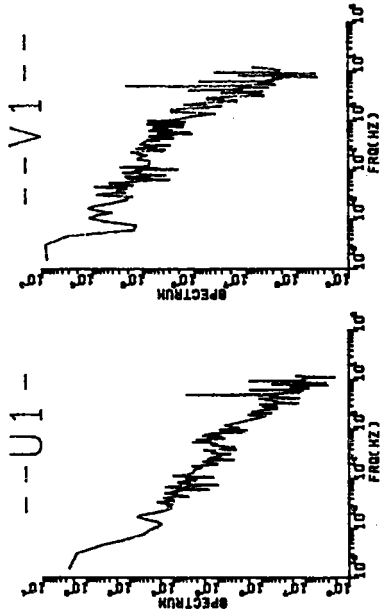
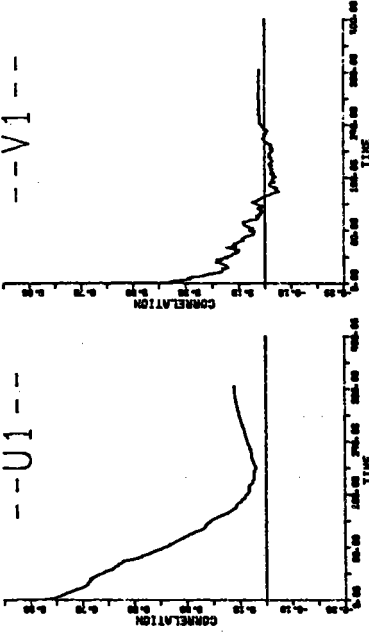
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.00044	0.087519	0.003770	0.000181
V1	0.000374	0.034388	0.000312	
U2	0.000037	-0.031989	0.000068	0.000002
V2	0.000007	0.003665	0.000061	

*84.08.03 21:55**



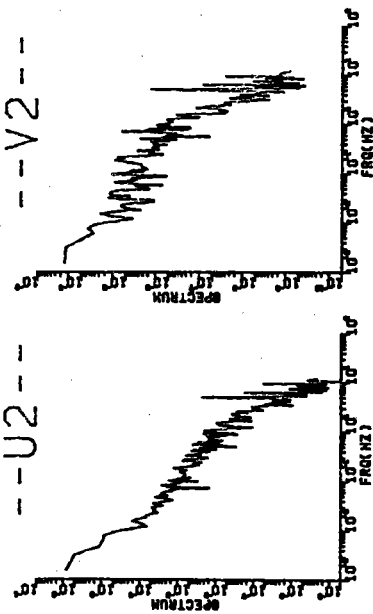
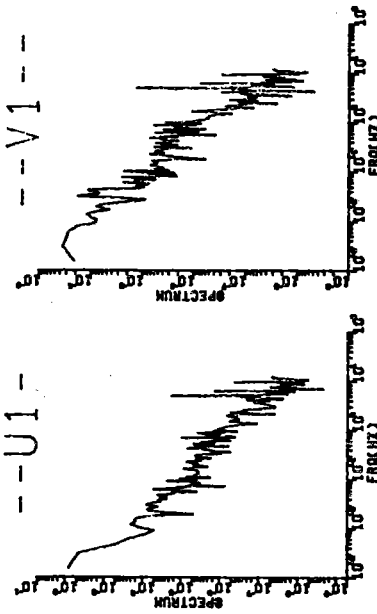
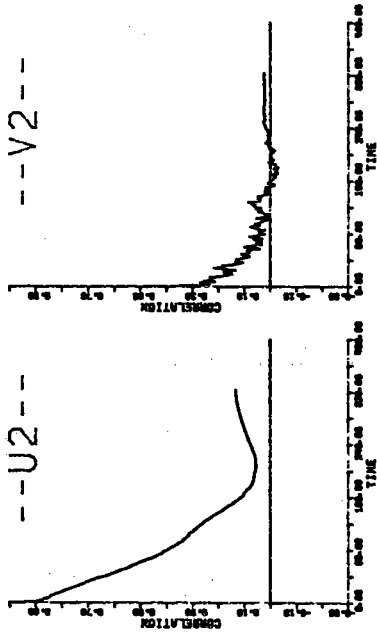
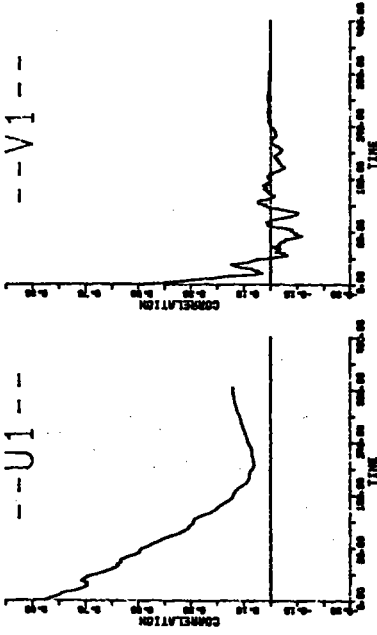
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFF	REYNOLDS STRESS
U1	0.000528	0.044021	0.058900	-0.000012
V1	0.000015	0.036742	0.000159	
U2	0.000087	-0.068745	0.003200	-0.000004
V2	0.000013	0.003534	0.000328	

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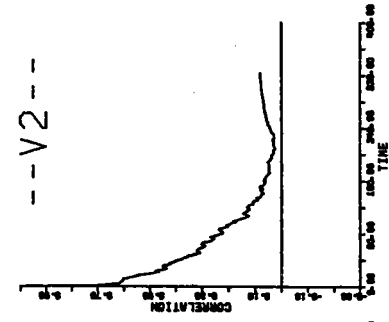
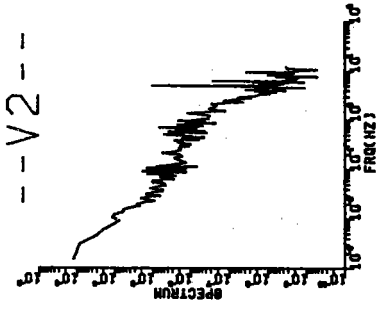
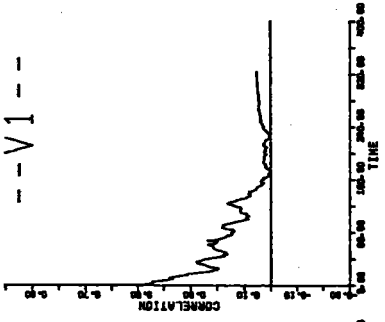
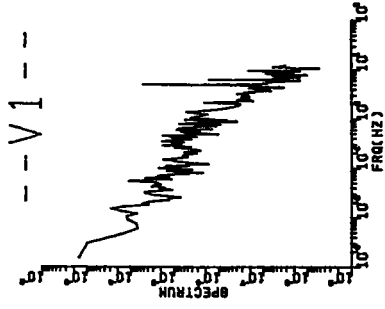
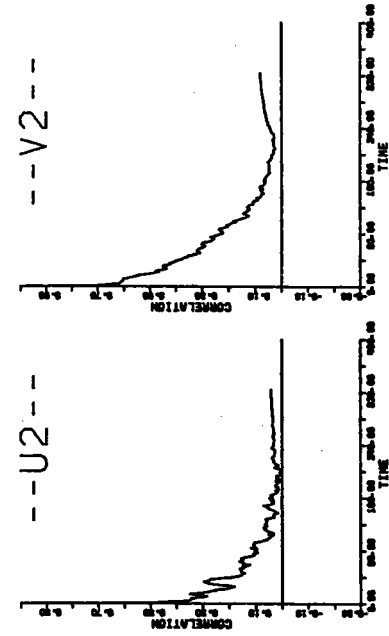
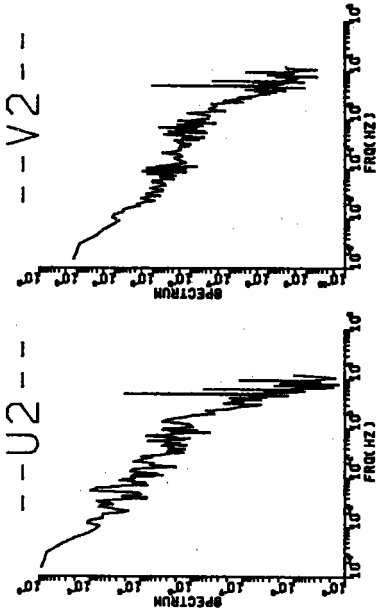
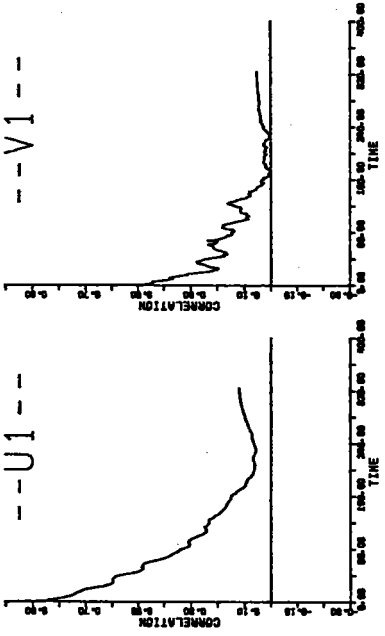
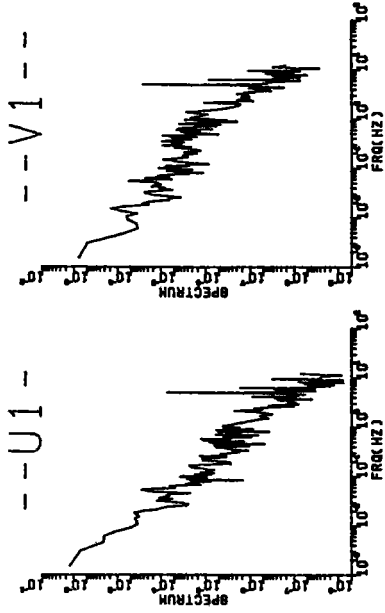
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000125	0.019809	0.011900	0.000012
U2	0.000017	0.098004	0.000249	
V1	0.000134	-0.074049	0.015800	0.000004
V2	0.000008	0.004573	0.000014	0.000004

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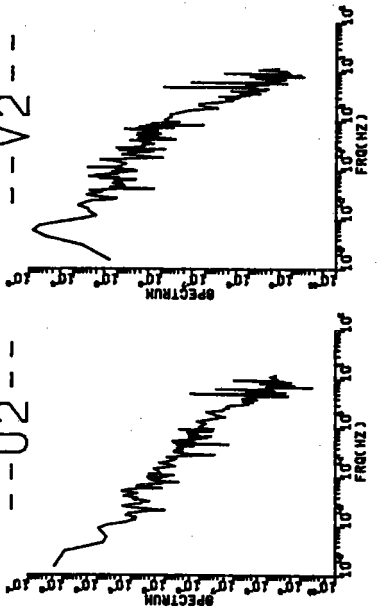
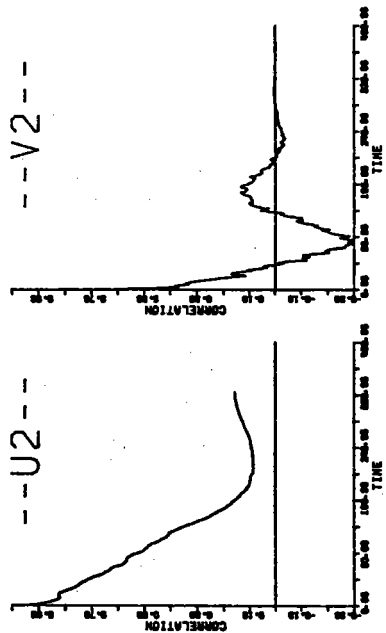
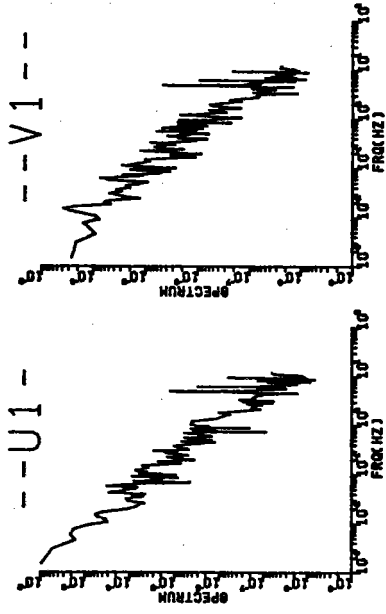
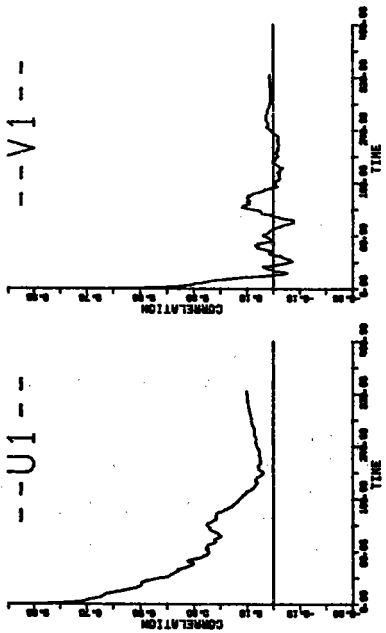
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS STRASS
U1	0.00072	0.122190	0.007750	0.000001
V1	0.000012	0.036719	0.000034	
U2	0.000075	0.042958	0.007610	0.000006
V2	0.000006	0.003927	0.000084	

*84.08.03 22:45**



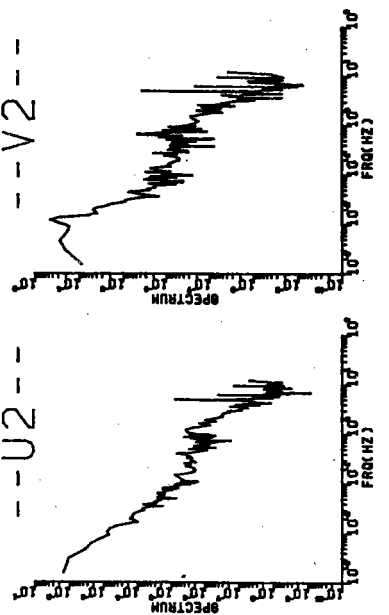
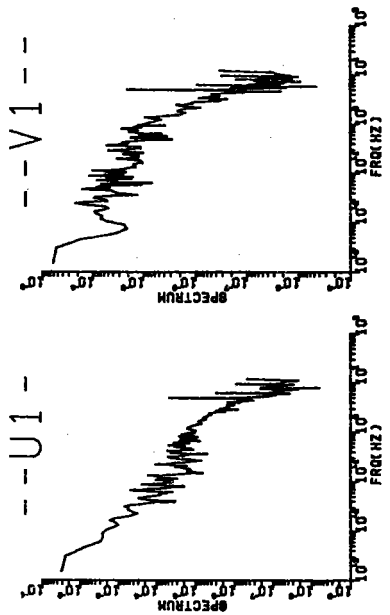
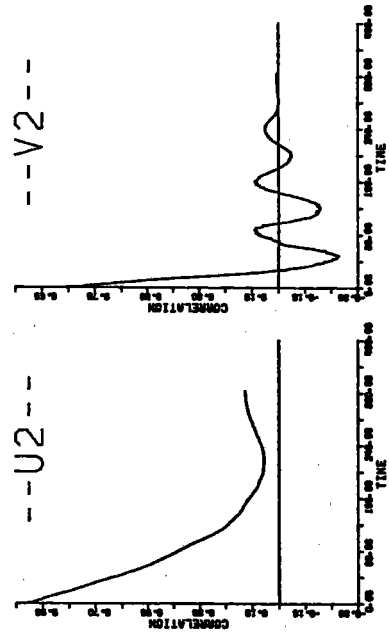
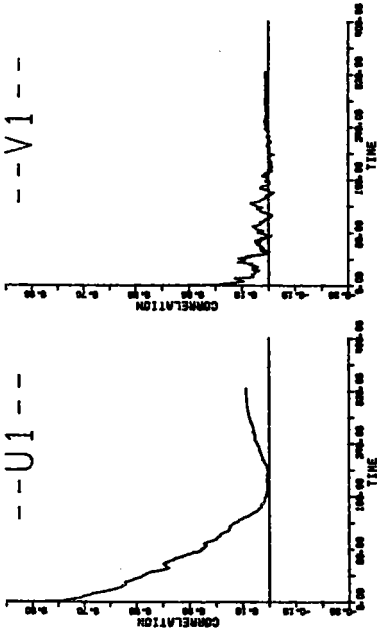
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	FREQUENCY	STRESS
U1	0.000190	0.129950	0.011700		-0.000011
V1	0.000018	0.041118	0.000696		
U2	0.000014	-0.043693	0.000410		-0.000007
V2	0.000010	0.002562	0.000546		

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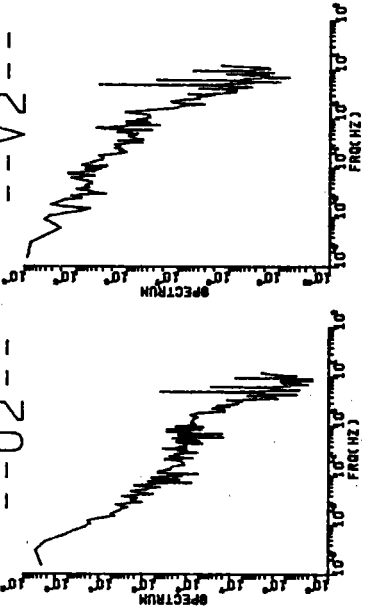
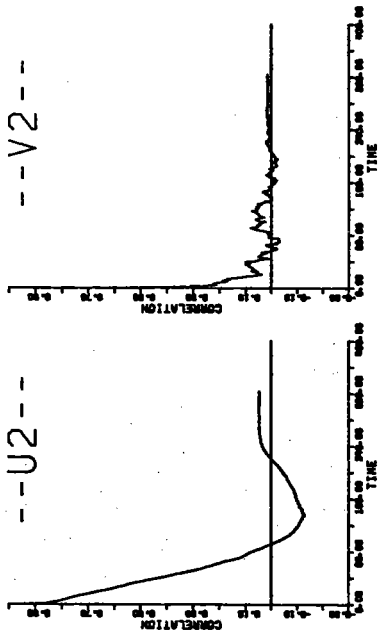
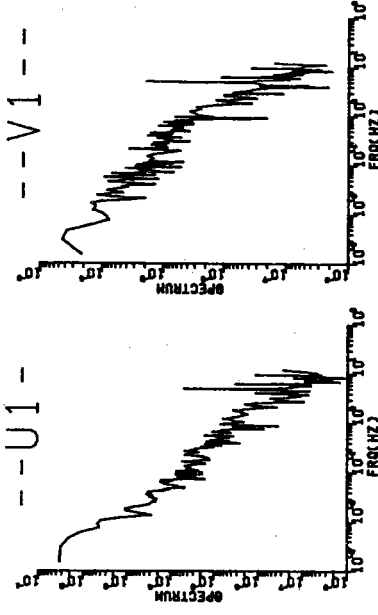
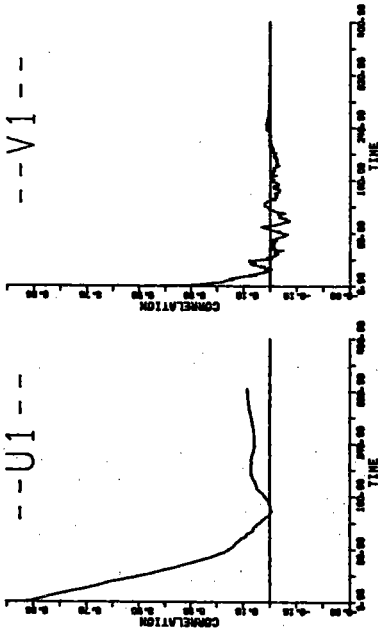
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000065	0.115290	0.004780	0.000008
V1	0.000012	0.041474	0.000107	0.000004
U2	0.000069	-0.042909	0.008430	0.000004
V2	0.000009	0.004743	0.000003	0.000003

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	TURBULENT MEAN INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS STRESS
U1	0.000202	0.163280	0.012400	0.000035
V1	0.000039	0.050027	0.000238	0.000000
U2	0.000072	0.012021	0.006850	-0.000004
V2	0.000008	0.002076	0.000024	0.000000

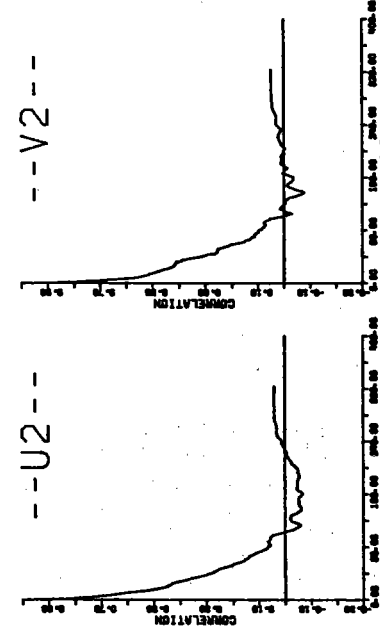
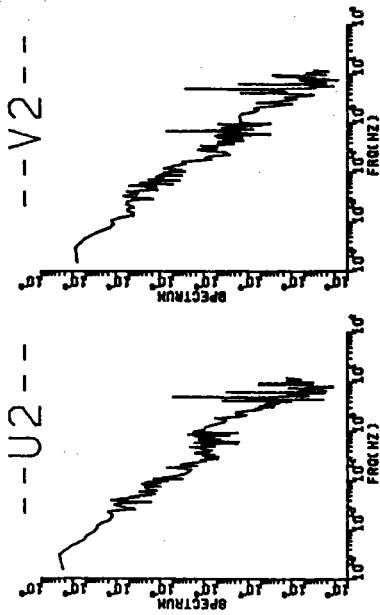
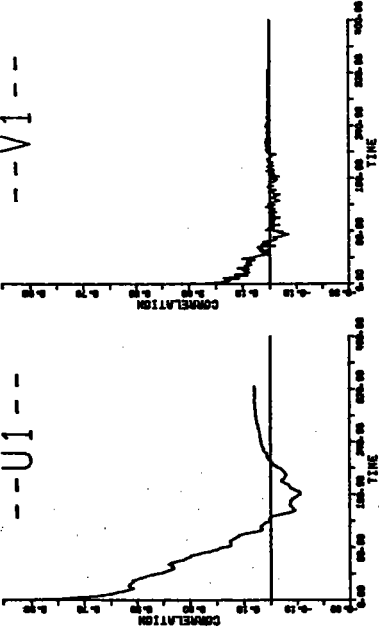
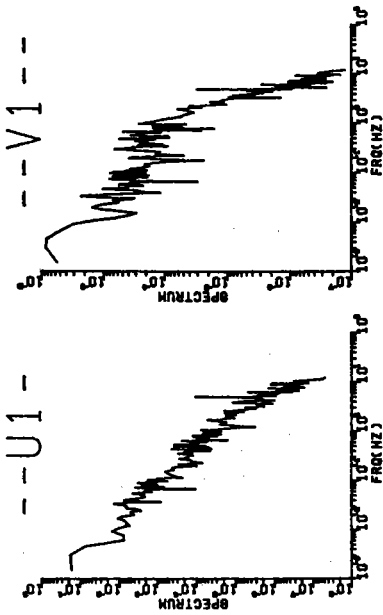
*x84.08.03 23:45**



	TURBULENT	MEAN	VELOCITY	DIFFUSION	REYNOLDS
	INTENSITY				NUMBER
U1	0.000233	0.189800	0.014200	0.000005	
V1	0.000020	0.052844	0.000032		
U2	0.000033	0.024257	0.001050		
V2	0.000004	0.001970	0.000038		

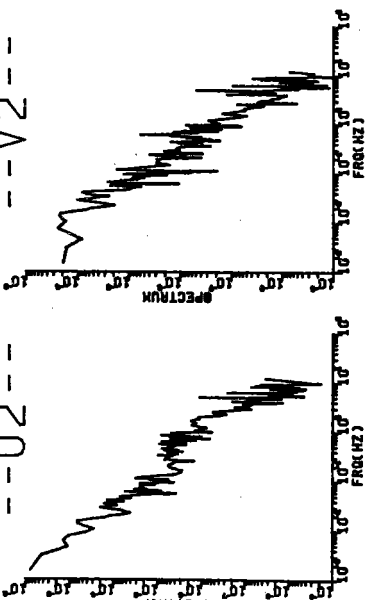
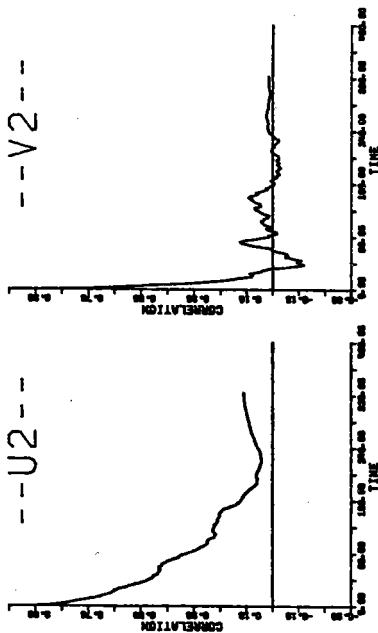
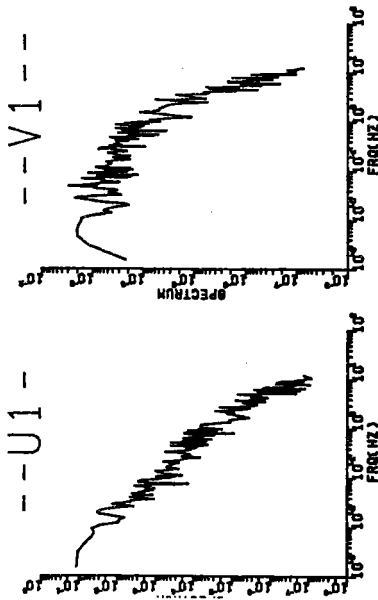
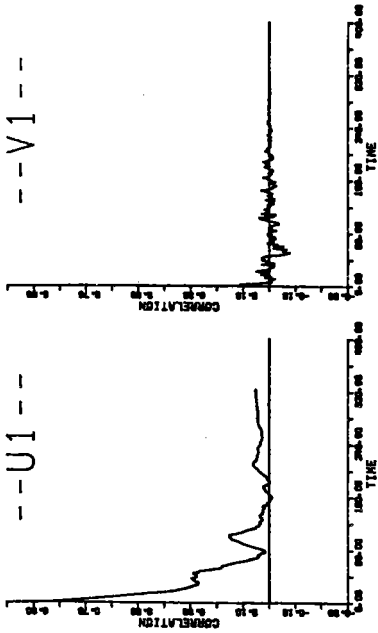
資料 - 2 流速変動成分のスペクトル及び自己相関関数
1 ~ 142

*84.08.04 0:15**



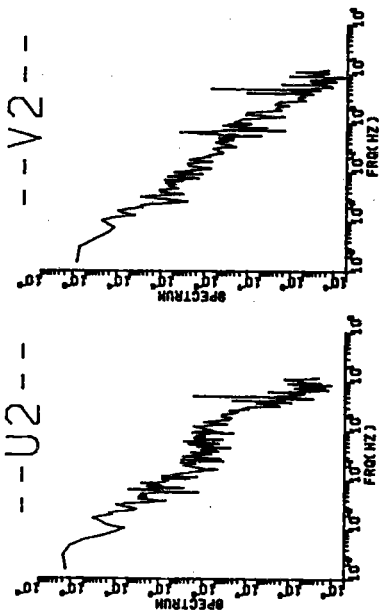
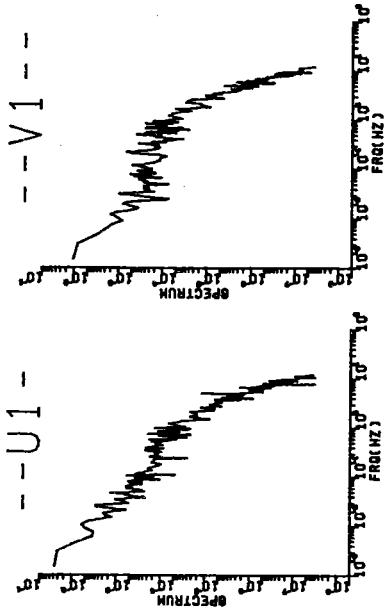
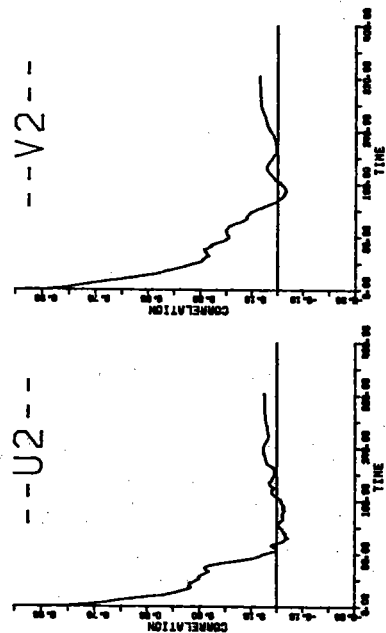
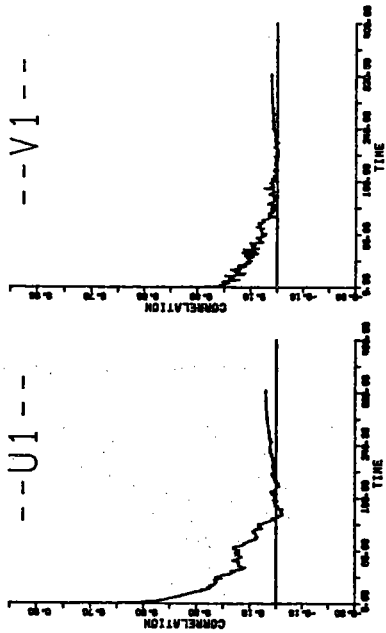
	TURBULENT MEAN INTENSITY	VELOCITY FLUCTUATION	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001280	0.381310	0.053100	0.000121
V1	0.000393	0.101490	0.001710	
U2	0.000034	0.034347	0.000934	
V2	0.000018	0.019178	0.000540	-0.000000

*84.08.04 0:25**



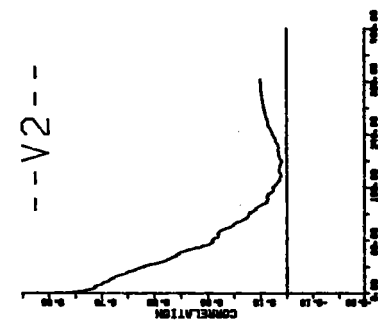
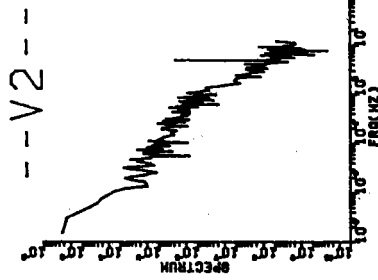
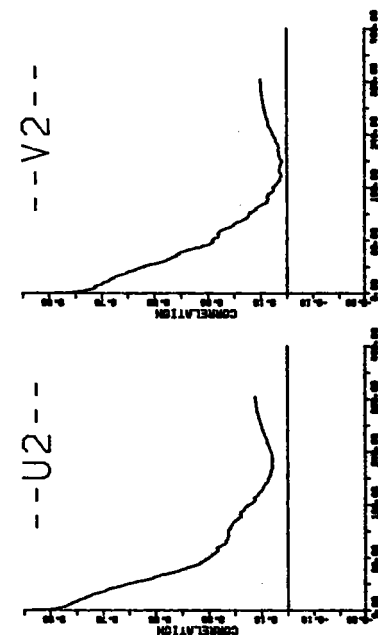
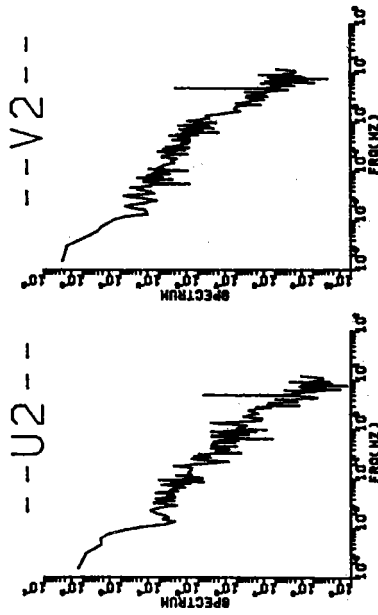
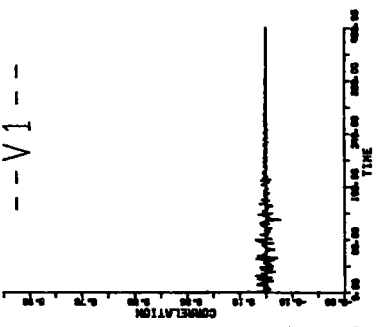
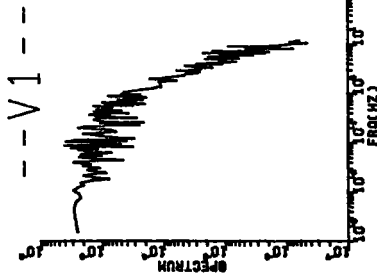
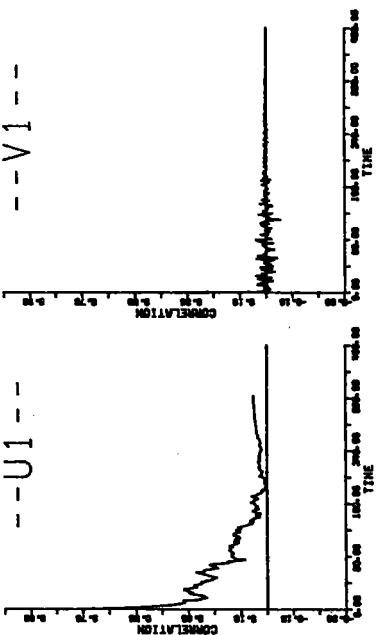
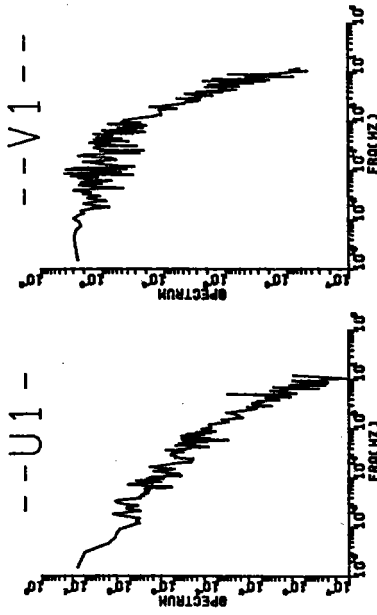
	TURBULENT KERN INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001972	0.444890	0.048100	0.000023
V1	0.000389	0.111100	0.000004	
U2	0.000045	0.020886	0.009700	0.000005
V2	0.000007	0.017889	0.000074	

84.08.04 0:35



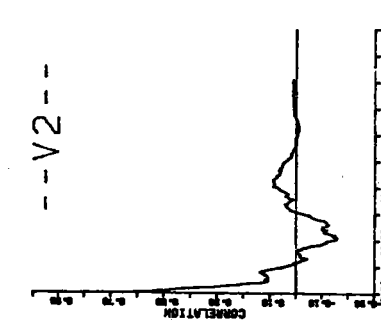
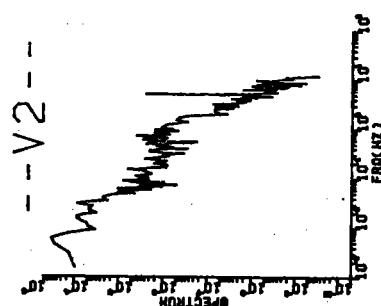
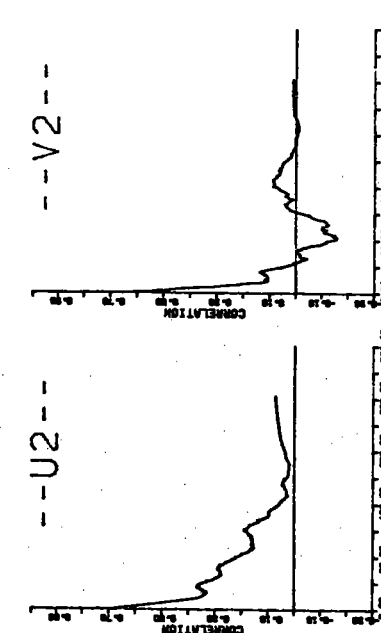
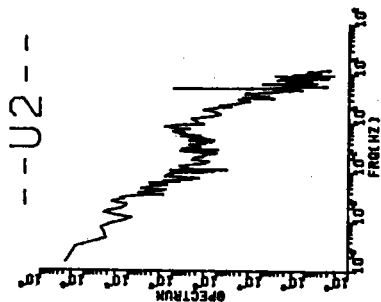
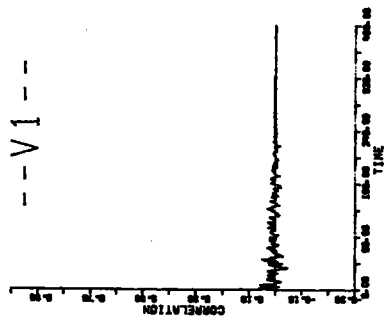
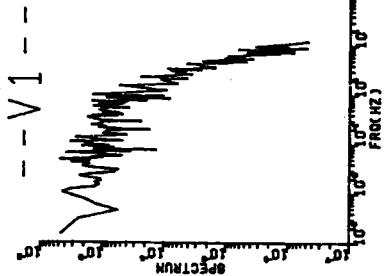
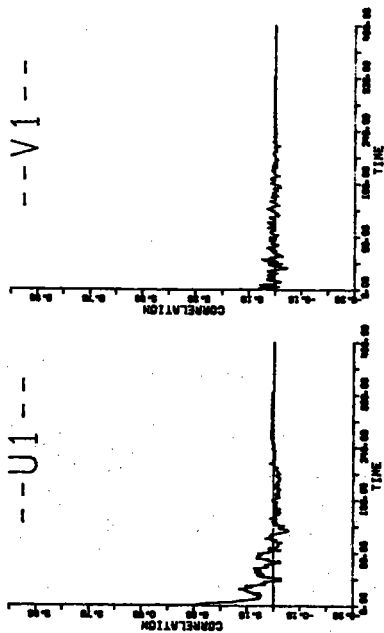
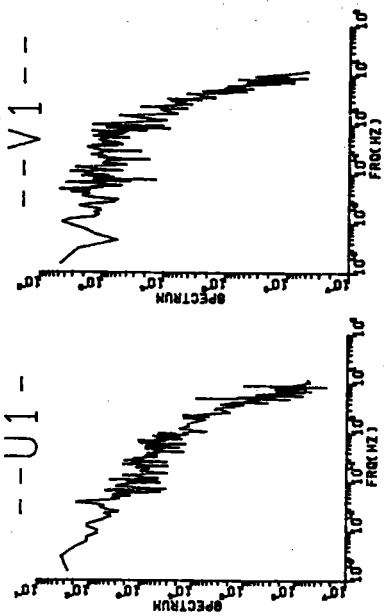
	TORBUENT INTENSITY	GEN OCCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000878	0.518110	0.018700	0.000142
V1	0.000555	0.134070	0.008290	0.000002
U2	0.000028	0.012251	0.000862	0.000002
V2	0.000012	0.023400	0.000611	0.000002

* * 84.08.04 1:05 * *



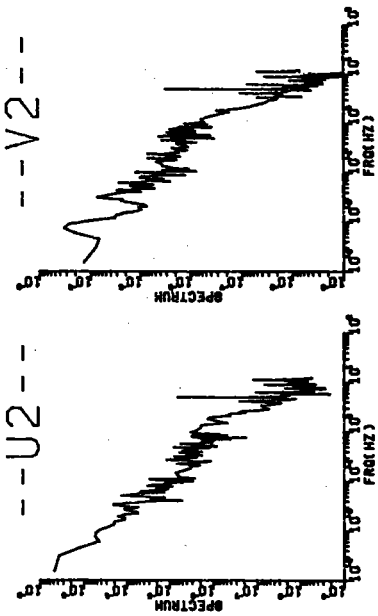
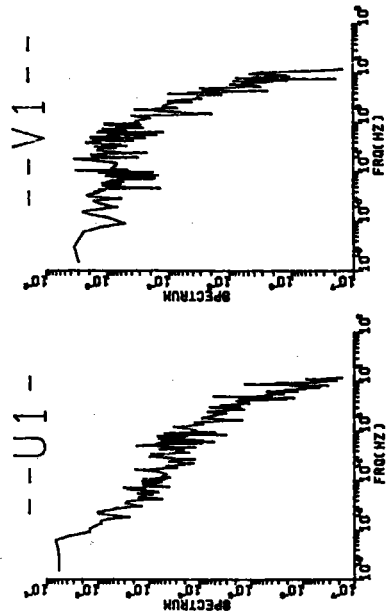
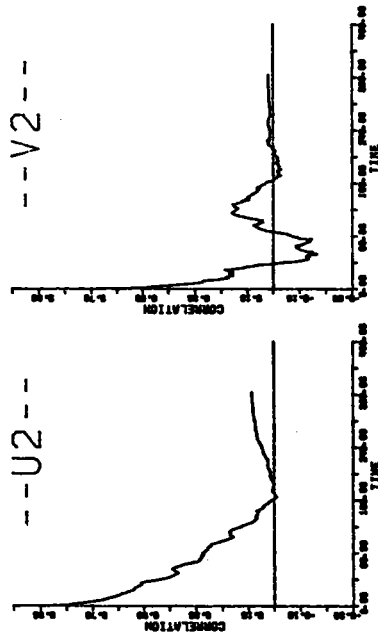
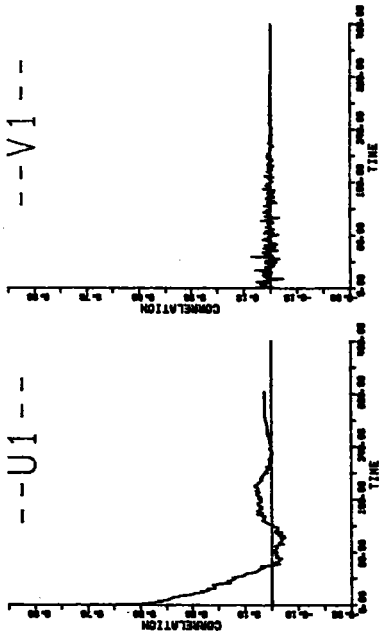
	CURRENT INTENSITY	VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001824	0.559100	0.067800	0.000125
V1	0.001924	0.157560	0.001110	
U2	0.000070	0.000739	0.006970	0.000026
V2	0.000020	0.033976	0.001410	

*84.08.04 1:15**



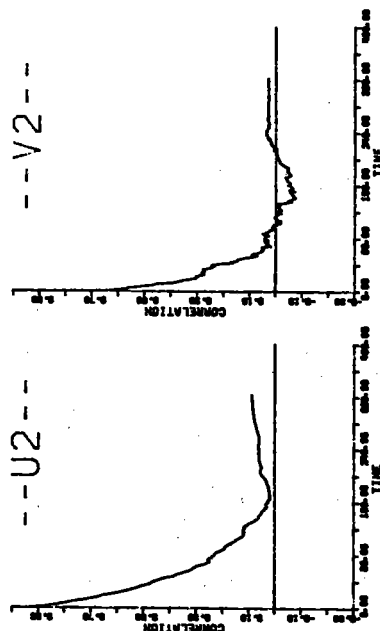
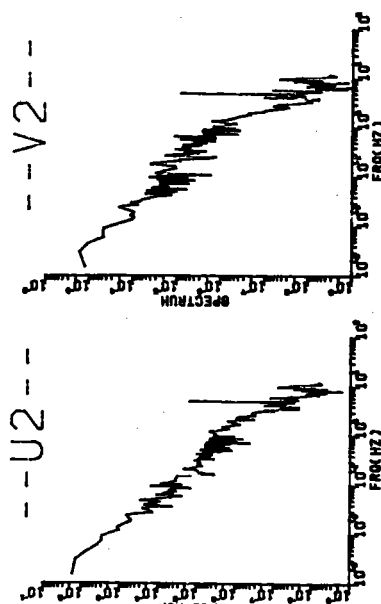
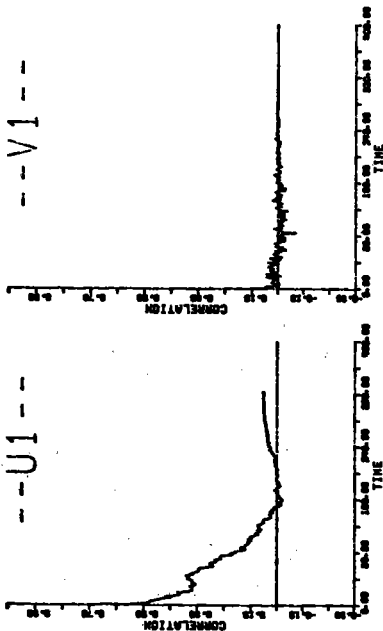
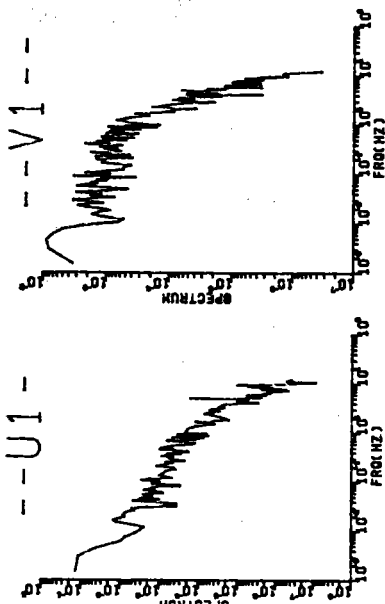
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.001961	0.624070	0.006950	0.000346
V1	0.001262	0.181160	0.002250	
U2	0.000023	0.022359	0.001200	0.000001
V2	0.000011	0.093590	0.000089	

84.08.04 1:25



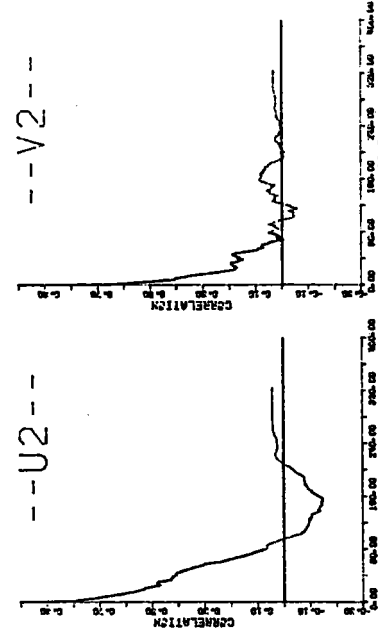
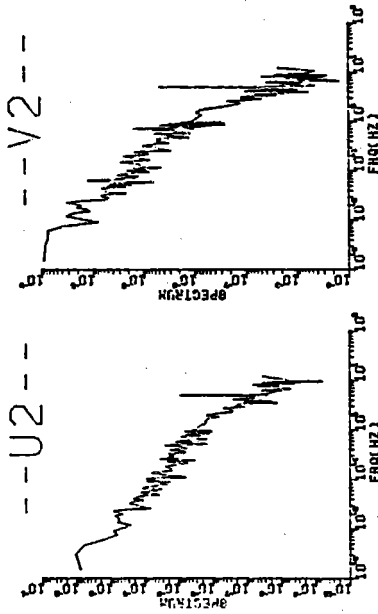
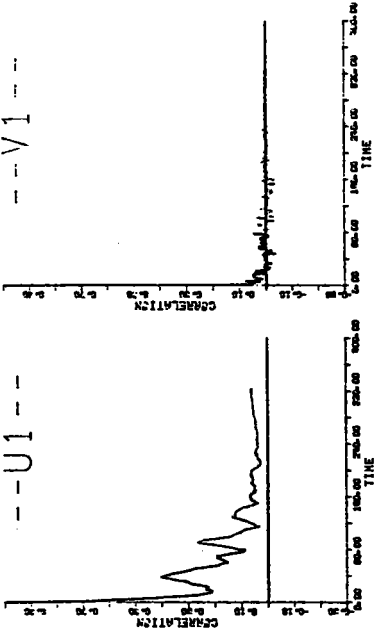
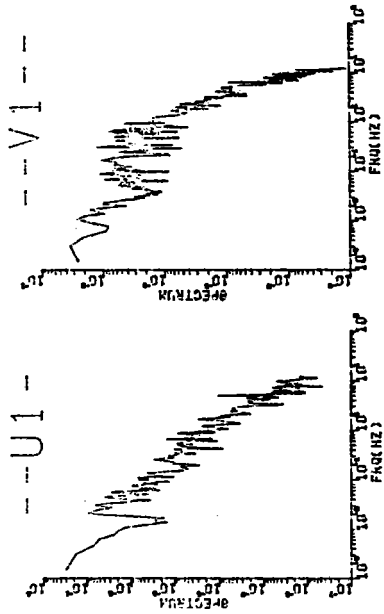
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	FREQUENCY	STRESS
U1	0.001360	0.840140	0.023400		0.000071
V1	0.001900	0.184070	0.000956		
U2	0.000032	0.013981	0.001860		
V2	0.000006	0.032635	0.000066		-0.000000

* * 84.08.04 1 50 * *



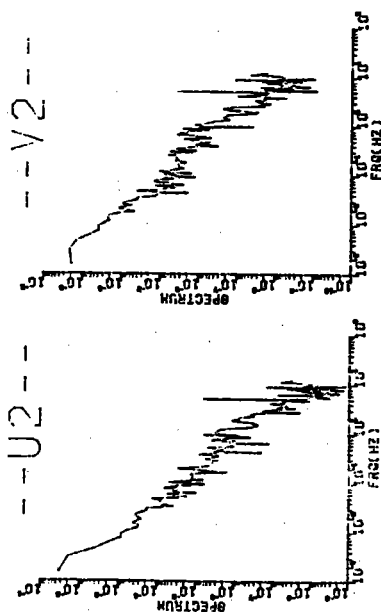
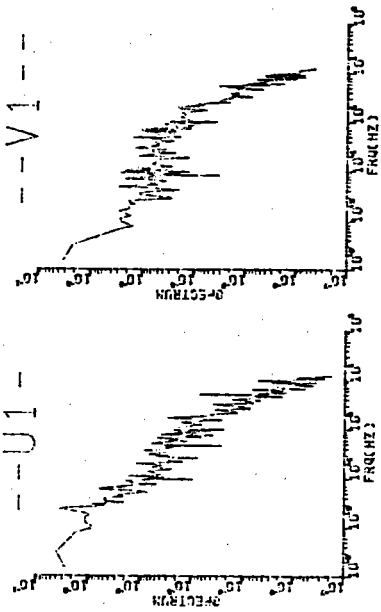
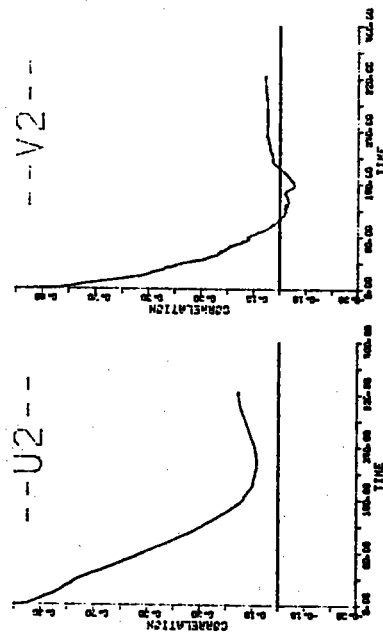
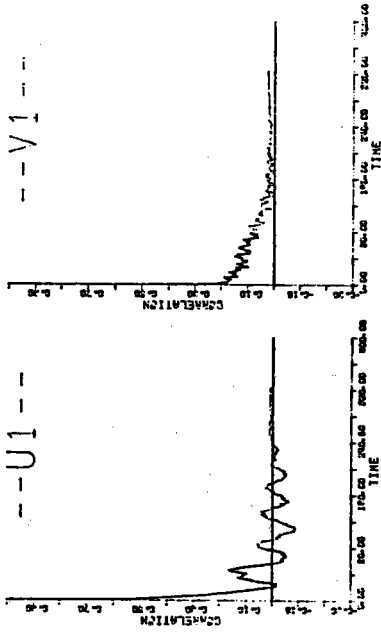
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	MEAN SPECTRUM
U1	0.001497	0.807010	0.052800	0.000139
V1	0.001182	0.192810	0.000231	
U2	0.000115	-0.092552	0.007280	
V2	0.000020	0.024034	0.000356	0.000022

84.08.04 2:00



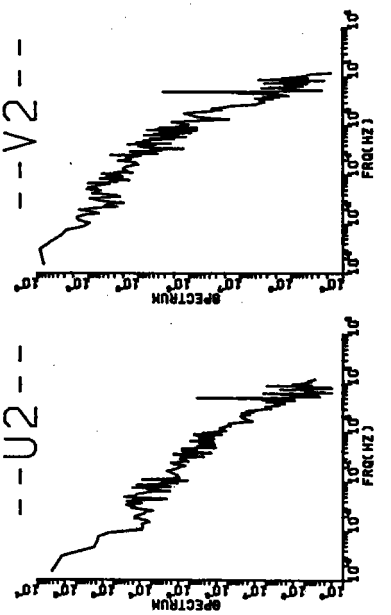
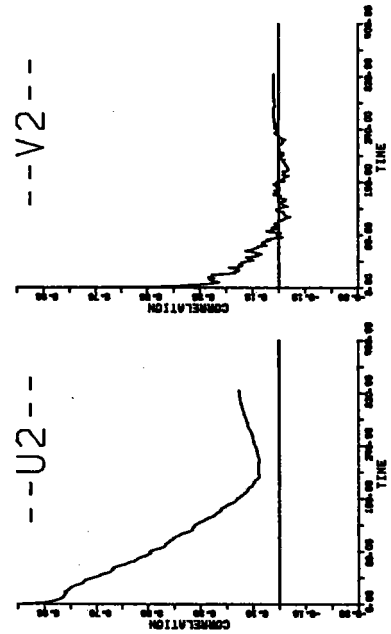
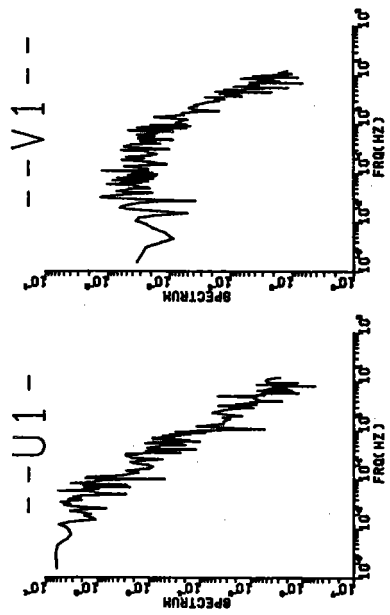
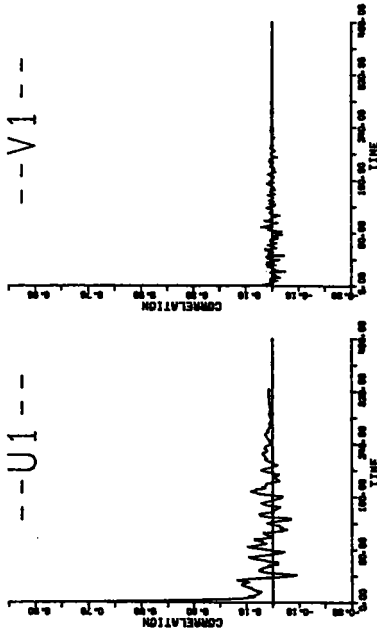
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.003534	0.550310	0.149000	0.000030
V1	0.004795	0.115430	0.008970	
U2	0.000073	-0.072657	0.002080	0.000006
V2	0.000018	0.012573	0.000373	

84.08.04 2:10



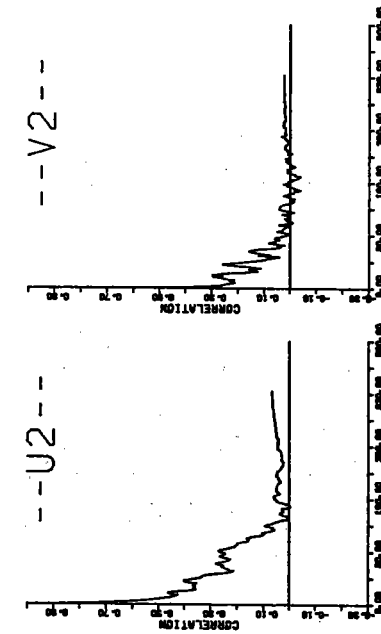
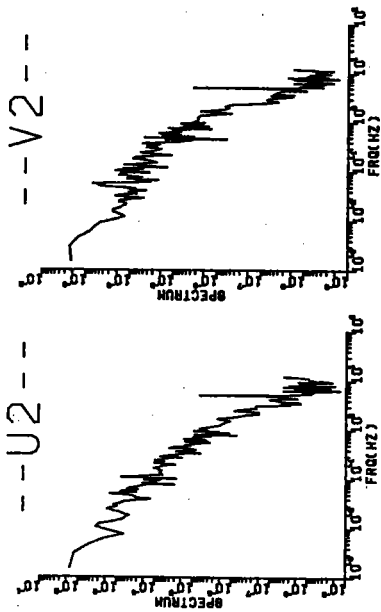
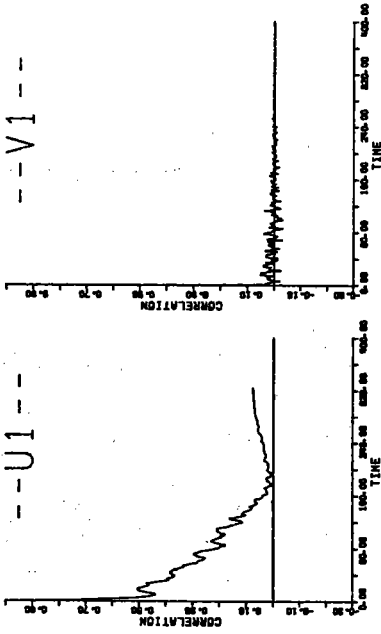
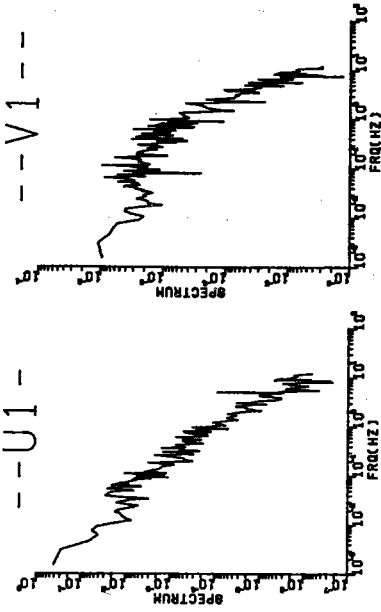
	TURBULENT MEAN VELOCITY	DIFFUSION REYNOLDS
U1	0.001020	0.008050
V1	0.000859	0.014800
U2	0.000133	0.016200
V2	0.000018	0.000890

* * 84.08.04 2:30 * *



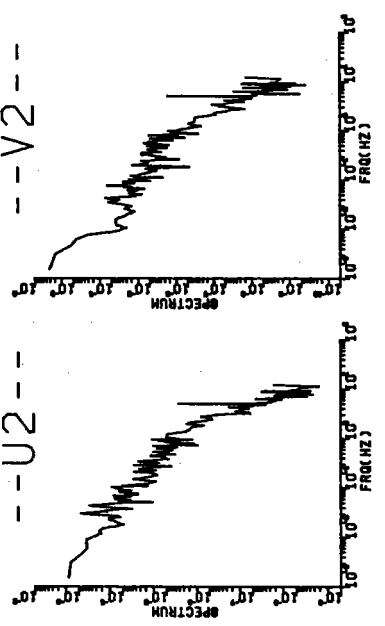
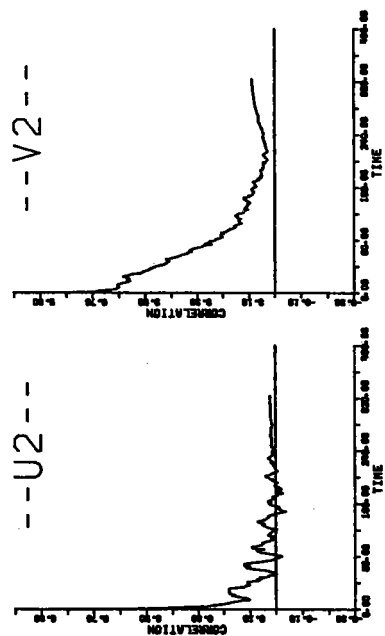
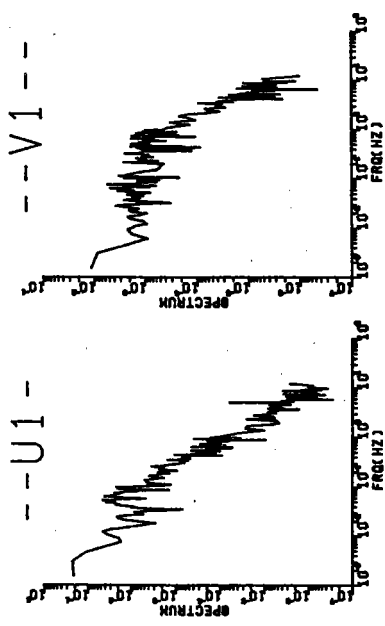
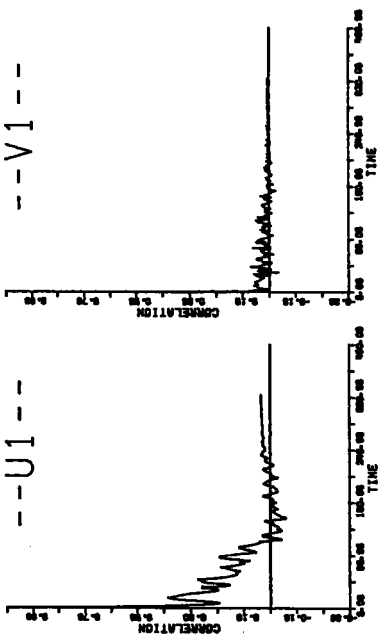
	TURBULENT MEAN INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER	STRESS
U1	0.003208	0.37250	0.028400		0.000222
V1	0.004129	0.093586	0.001590		
U2	0.000172	-0.071712	0.020300		
V2	0.000018	0.019092	0.000223		-0.000008

* * 84.08.04 2:40 * *



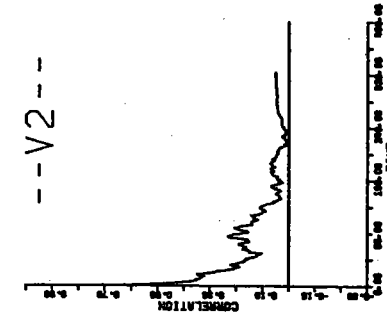
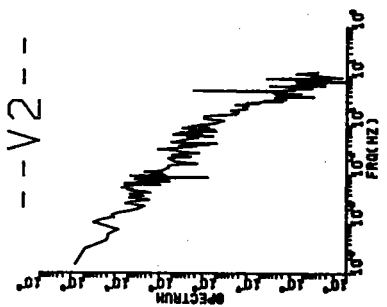
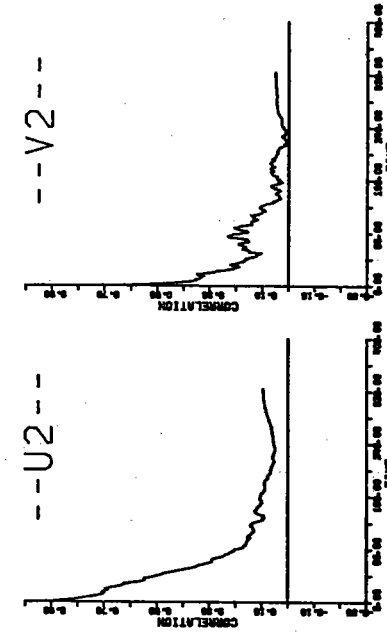
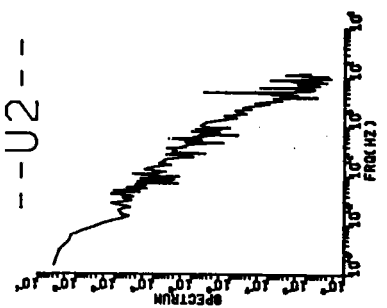
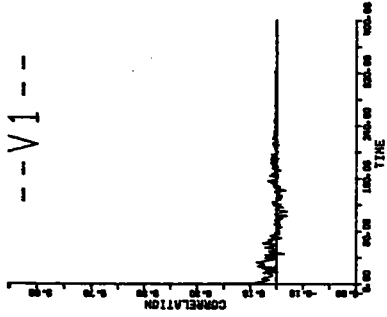
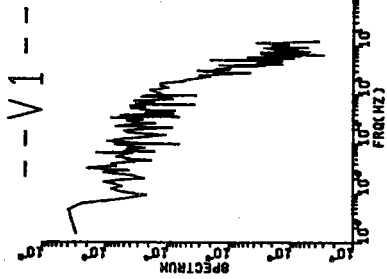
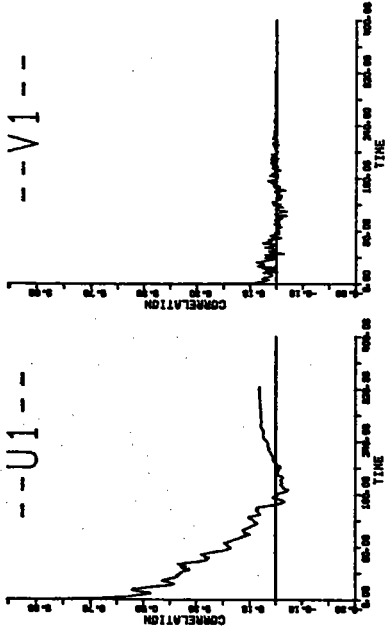
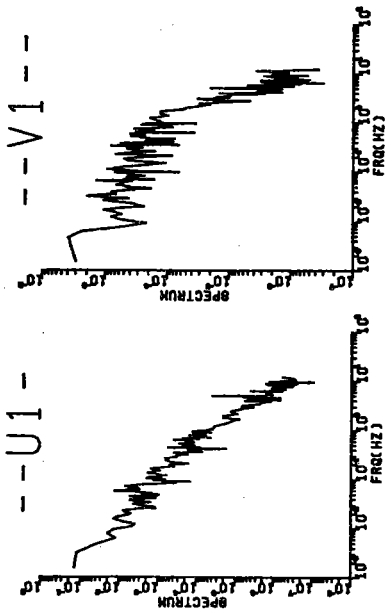
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION STRESS	REYNOLDS STRESS
U1	0.003304	0.420970	0.181000	0.000373
V1	0.002241	0.104640	0.002840	
U2	0.000149	-0.043478	0.007040	-0.000004
V2	0.000050	0.014289	0.000793	

* * 84.08.04 3:30 * *



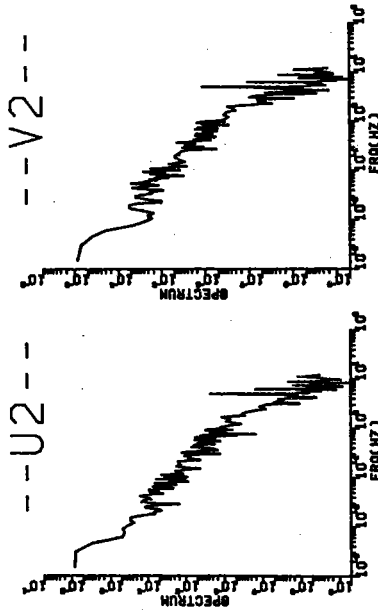
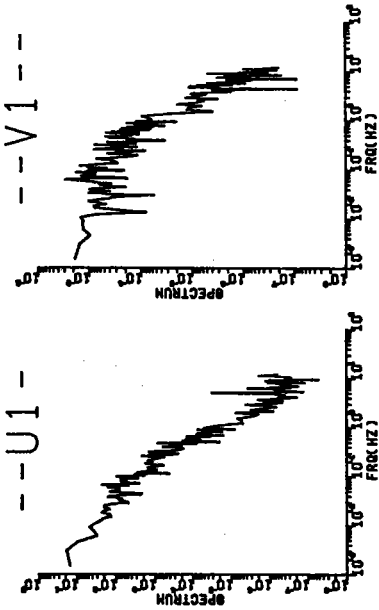
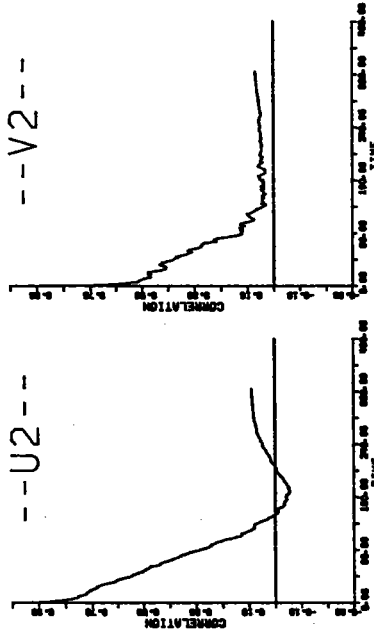
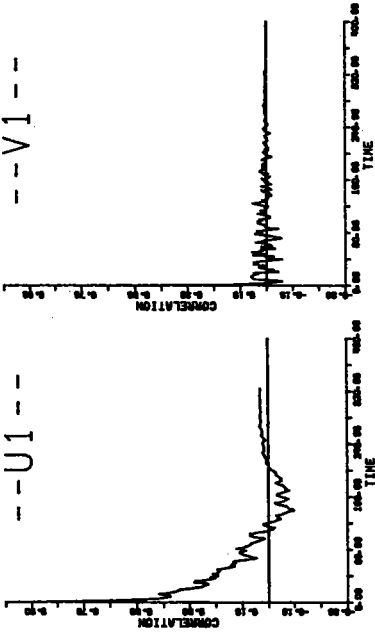
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.003971	0.303860	0.076400	0.000365
V1	0.001491	0.074932	0.004760	
U2	0.000049	-0.123240	0.000701	-0.000003
V2	0.000029	0.022990	0.001850	

84.08.04 3:40



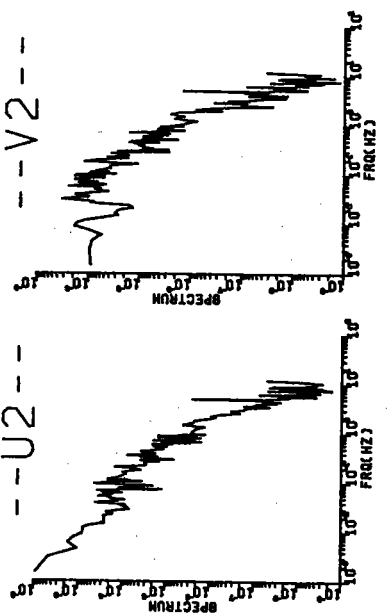
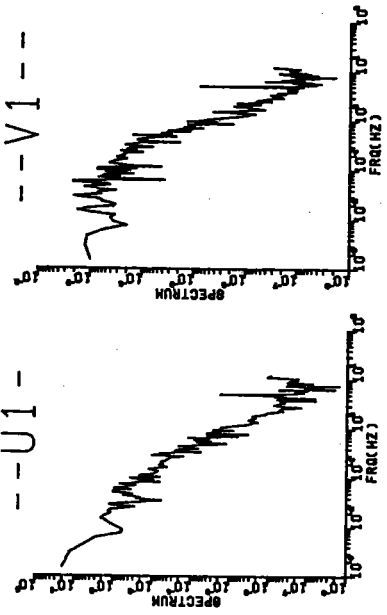
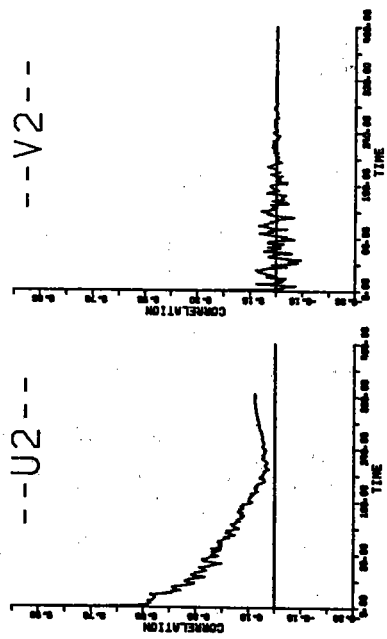
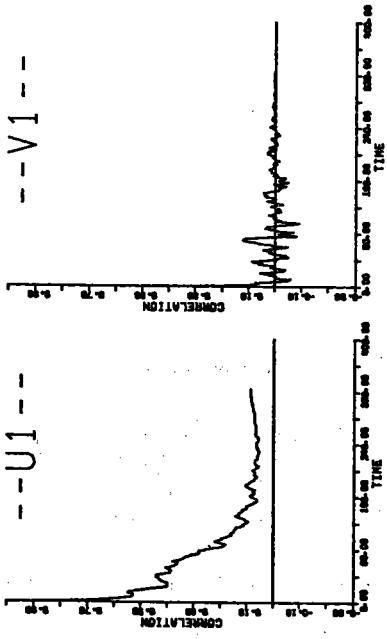
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	NEUTRALITY STRATEG
U1	0.001241	0.278930	0.055500	0.000148
V1	0.000449	0.085307	0.001390	
U2	0.000248	-0.193200	0.017200	-0.00002
V2	0.000022	0.022769	0.000750	

84.08.04 3:50



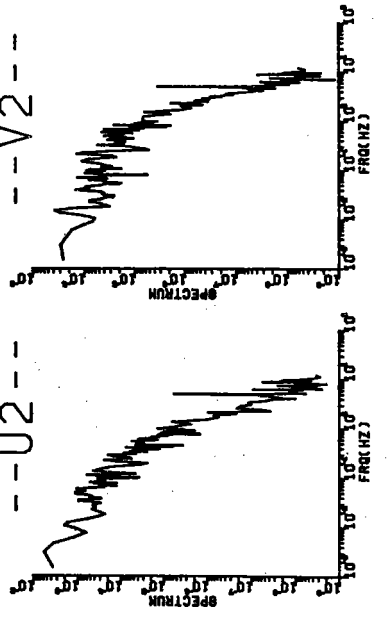
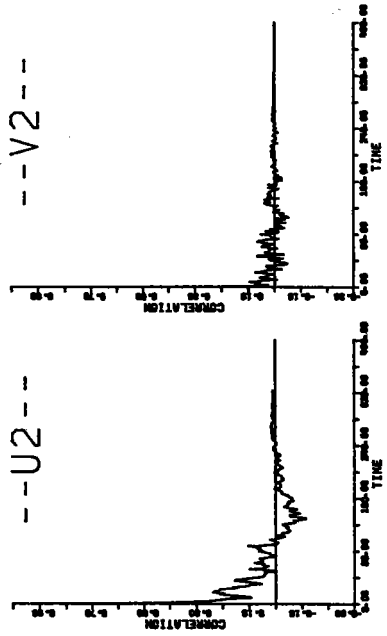
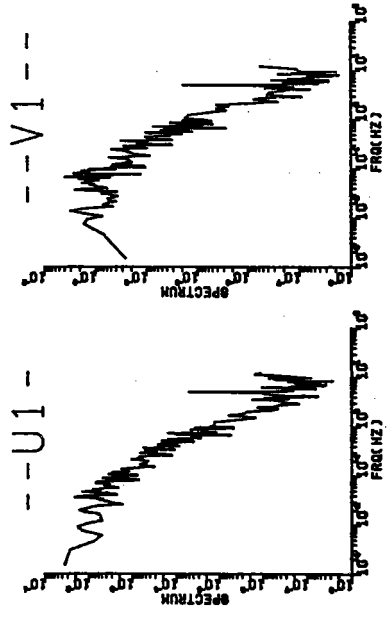
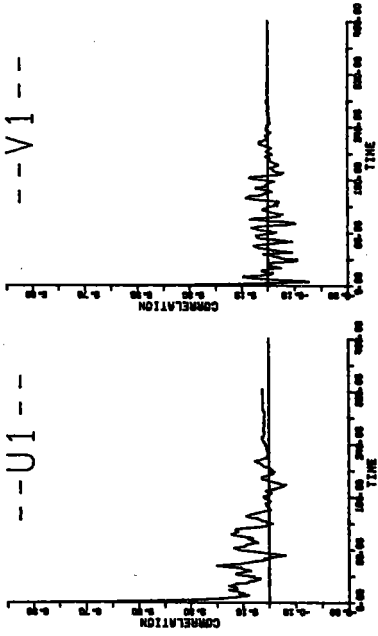
	TURBULENT VELOCITY INTENSITY	VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.002219	0.187320	0.045100	0.000155
V1	0.000328	0.056829	0.000787	
U2	0.000087	-0.198160	0.008110	-0.000017
V2	0.000016	0.020791	0.000768	

* * 84.08.04 4:15 * *



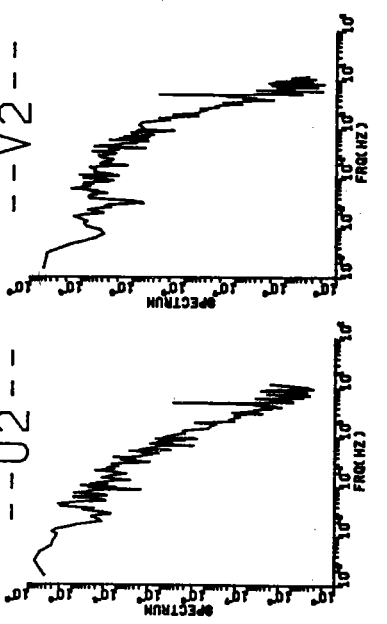
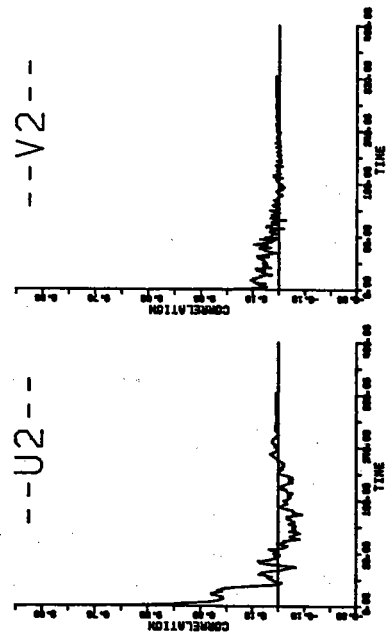
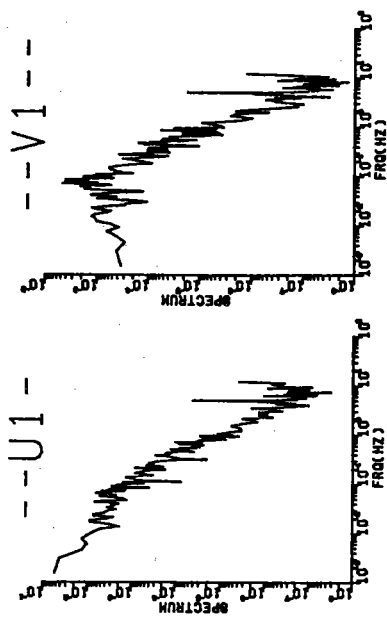
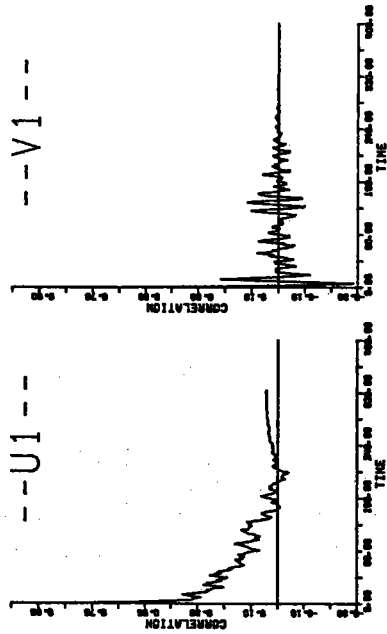
	TURBULENCE INTENSITY	WIND VELOCITY	DIFFUSION COEFFICIENT	RELATIVE STRESS
U1	0.001517	0.094900	0.095800	0.000181
V1	0.000154	0.028613	0.000403	
U2	0.000081	-0.146520	0.004480	0.000004
V2	0.000026	0.013669	0.000039	

84.08.04 4:25



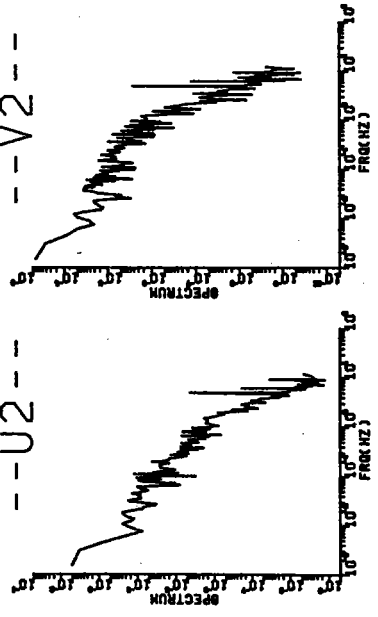
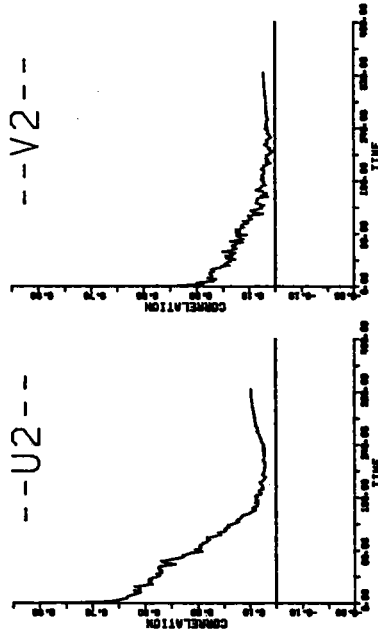
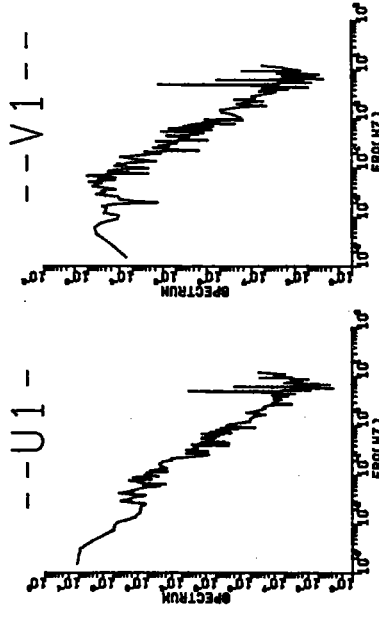
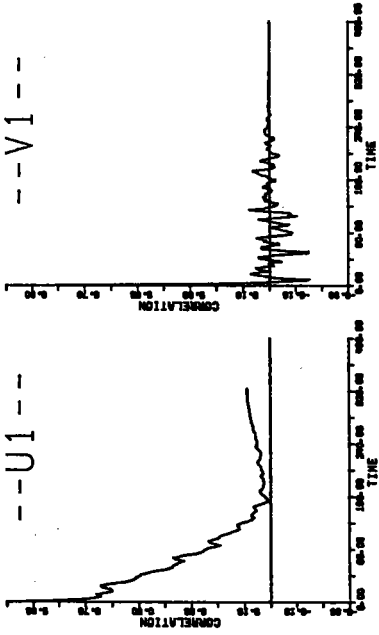
	TURBULENT MEAN VELOCITY INTENSITY	DIFFUSION VELOCITY	REYNOLDS NUMBER
U1	0.000814	0.070541	0.014800
V1	0.000211	0.028834	0.000040
U2	0.000118	-0.173040	0.000735
V2	0.000037	0.011617	0.000087

*84.08.04 4:35**



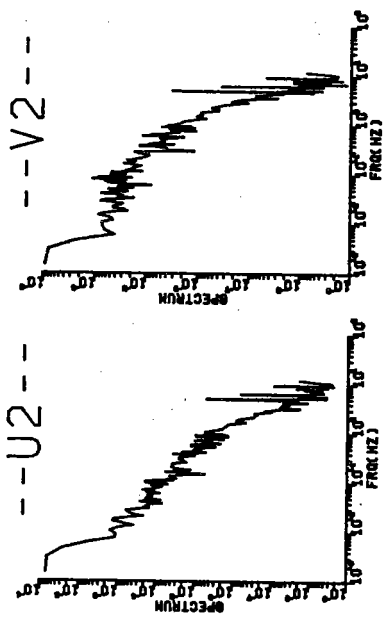
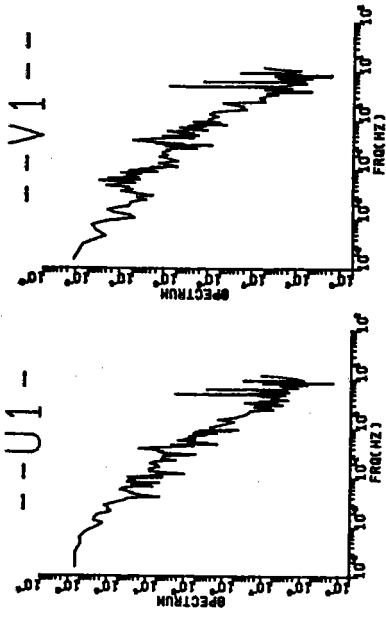
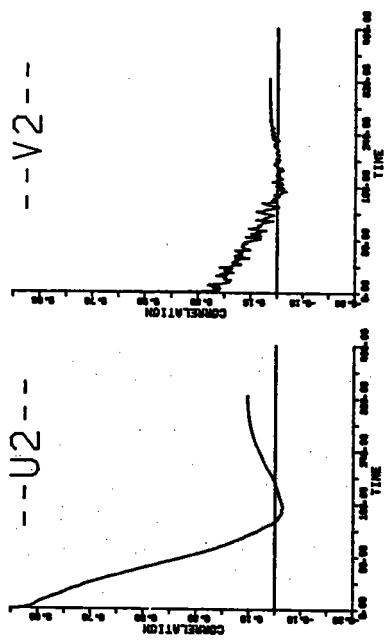
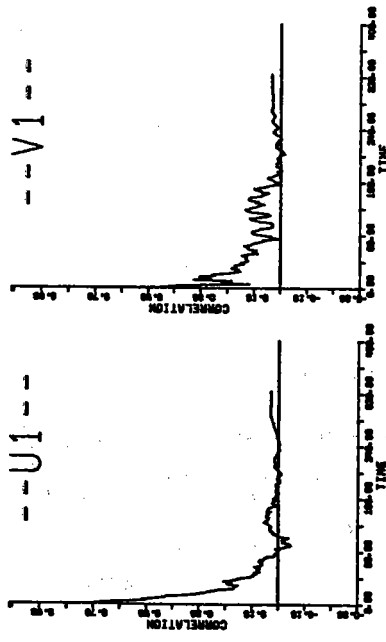
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION STRAEB	REYNOLDS NUMBER
U1	0.000743	0.067864	0.022100	0.000088
V1	0.000205	0.024785	0.000121	
U2	0.000145	-0.184040	0.000815	-0.000021
V2	0.000028	0.008738	0.000210	

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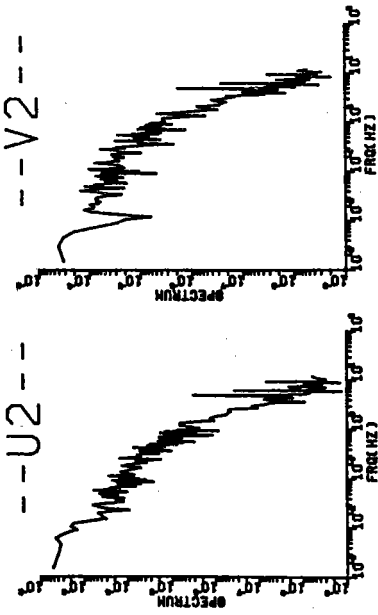
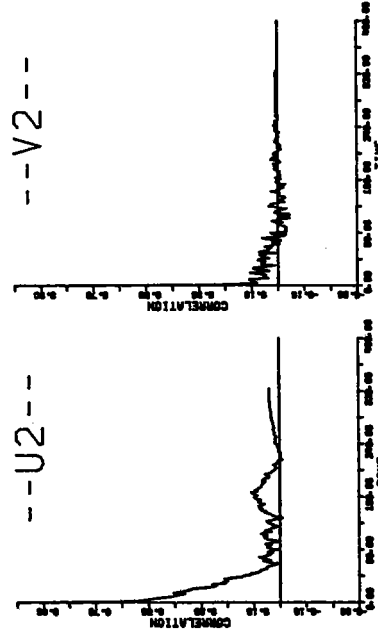
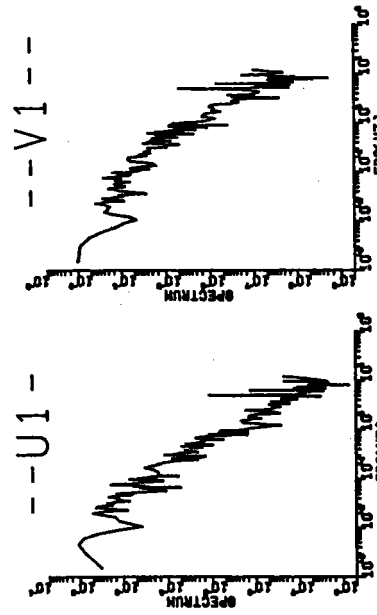
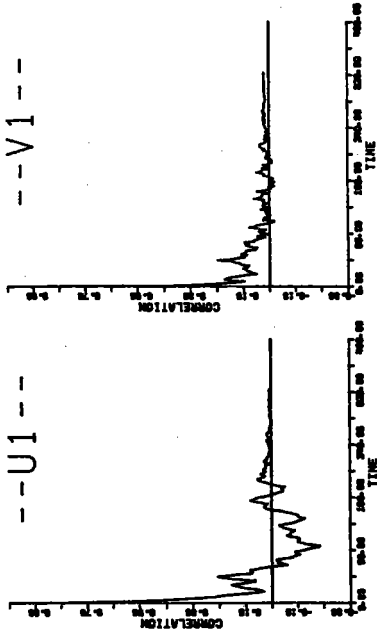
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS STRESS
U1	0.000748	-0.058420	0.047800	0.000000
V1	0.000057	0.018085	0.000080	0.000000
U2	0.000088	-0.183780	0.004700	-0.000011
V2	0.000014	0.012045	0.000422	0.000000

* * 84.08.04 5:10 * *



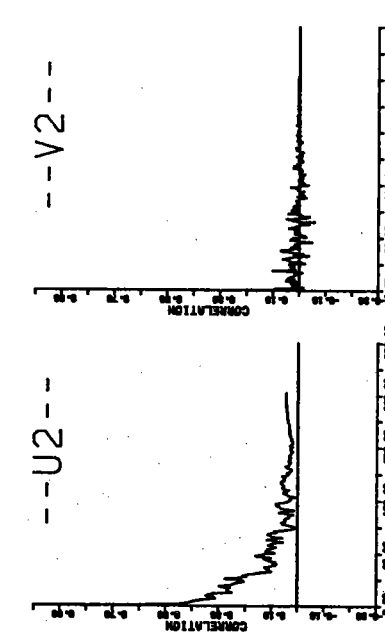
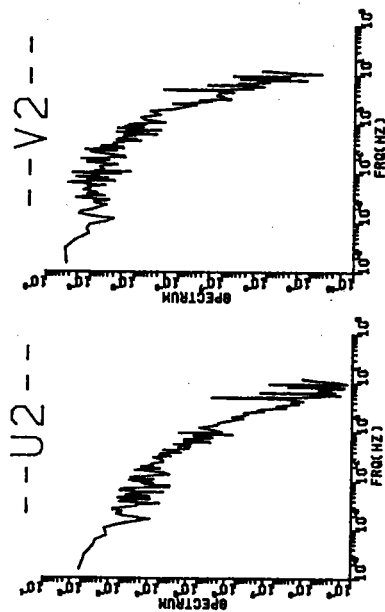
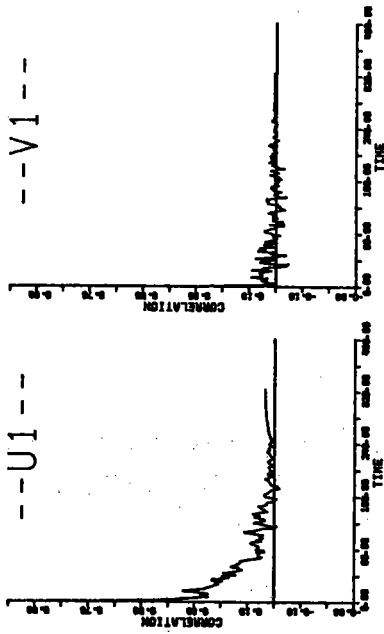
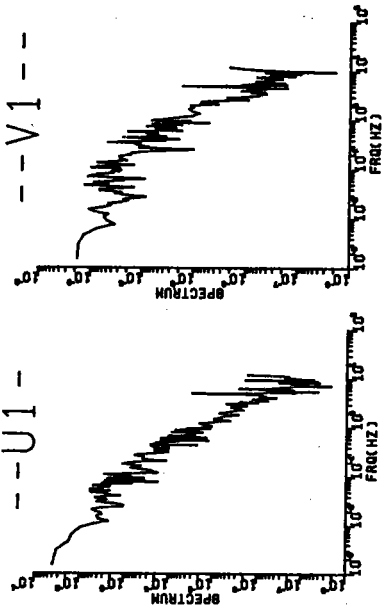
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFF	REYNOLDS NUMBER
U1	0.000292	-0.081800	0.004570	-0.000011
V1	0.000041	0.018388	0.000989	
U2	0.000340	-0.171770	0.027000	-0.000029
V2	0.000017	0.017987	0.000950	

*84.08.04 5:20**



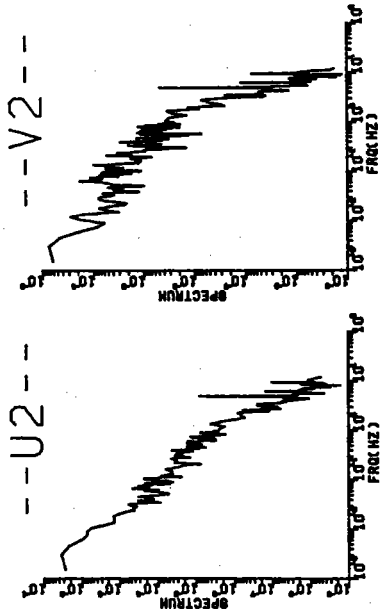
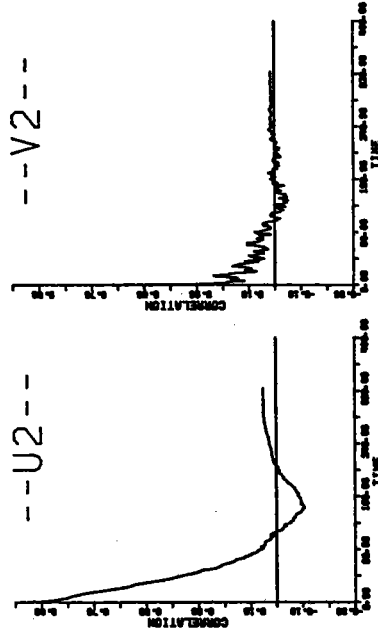
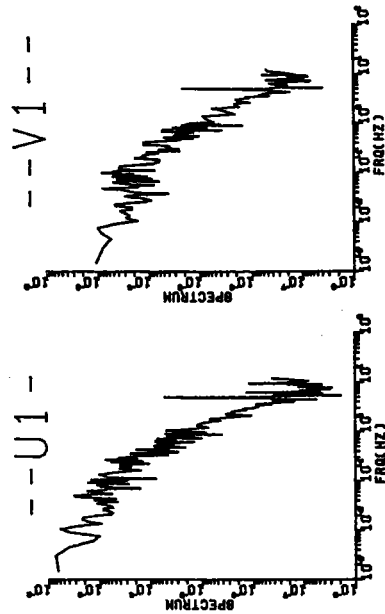
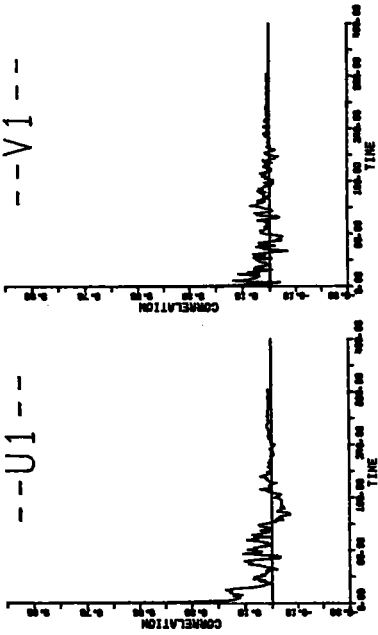
	TURBULENCE INTENSITY	WIND VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.000395	-0.107870	0.001840	-0.000001
V1	0.000068	0.023586	0.000888	
U2	0.000080	-0.193780	0.002320	-0.000007
V2	0.000023	0.018777	0.000107	

*84.08.04 6:00**



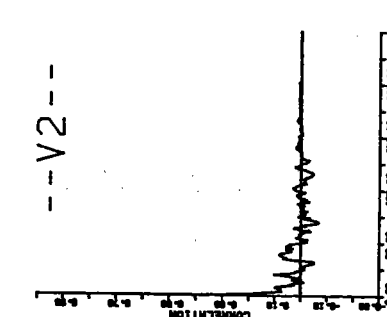
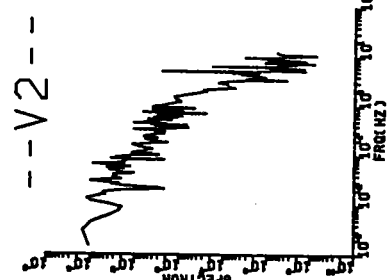
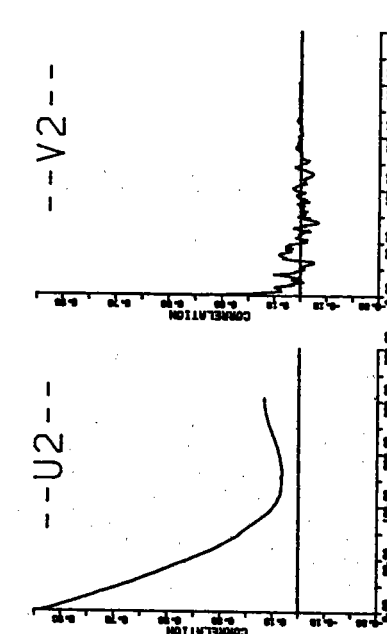
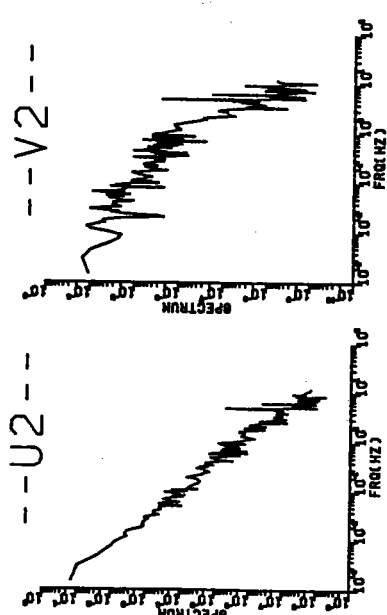
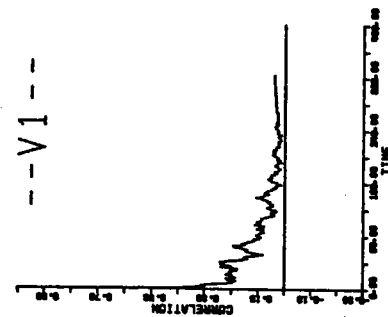
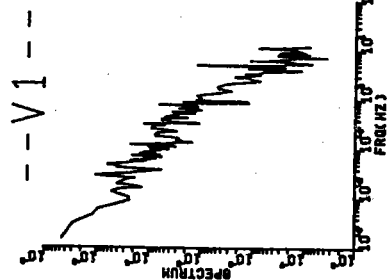
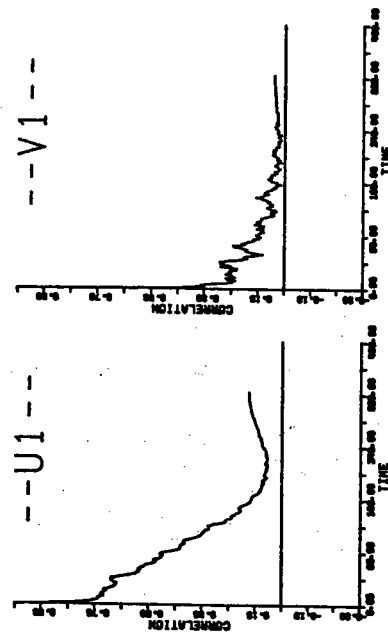
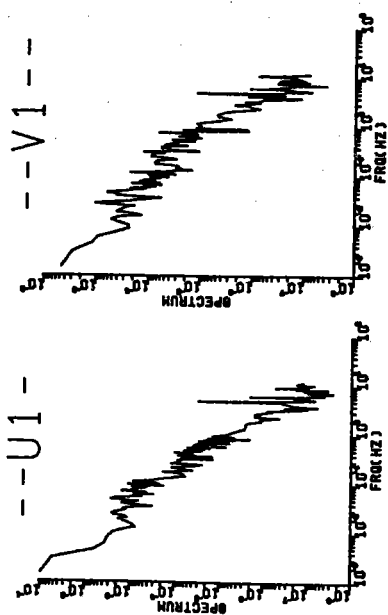
	TURBULENT MEAN INTENSITY	VELOCITY	DIFFUSION	REYNOLDS	STRESS
U1	0.000892	-0.206690	0.018500		0.000048
V1	0.000177	0.009192	0.000823		
U2	0.000168	-0.202440	0.005390		-0.000019
V2	0.000043	0.006458	0.000123		

84.08.04 6:10



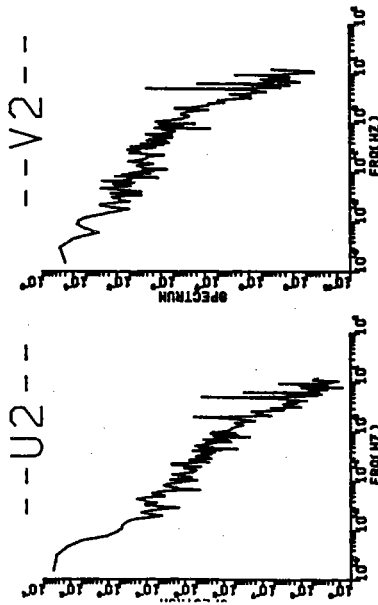
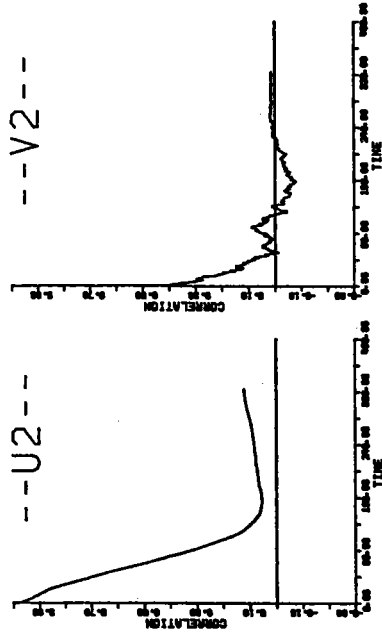
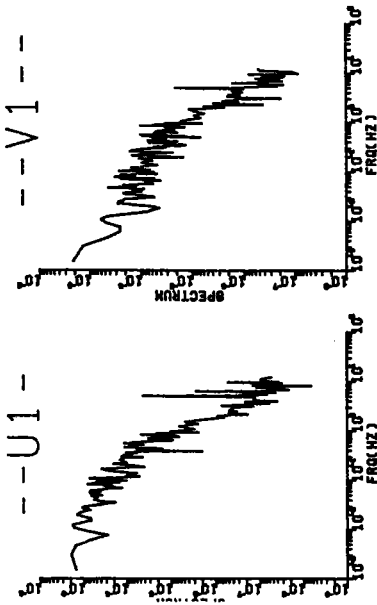
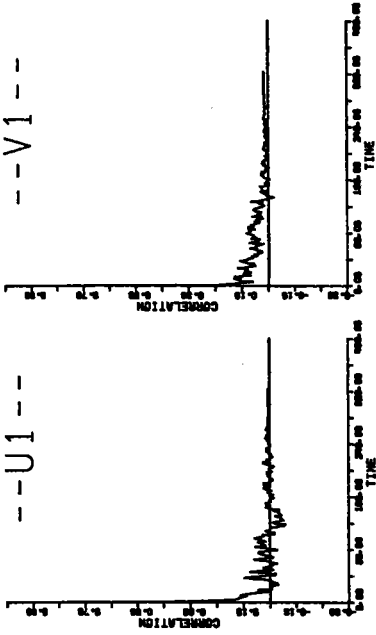
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000274	-0.186380	0.002240	0.000014
V1	0.000101	0.012543	0.000543	0.000014
U2	0.000236	-0.167210	0.006010	-0.000010
V2	0.000022	0.005016	0.000207	-0.000010

* * 84.08.04 6:35 * *



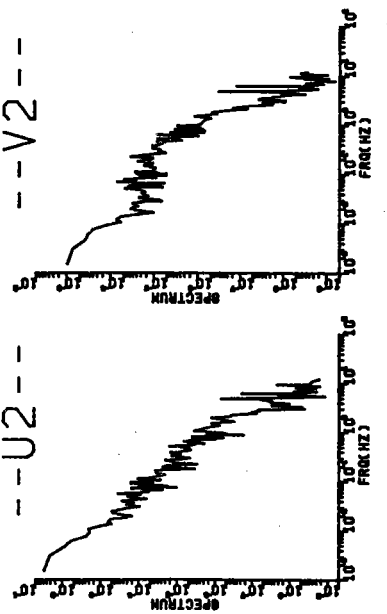
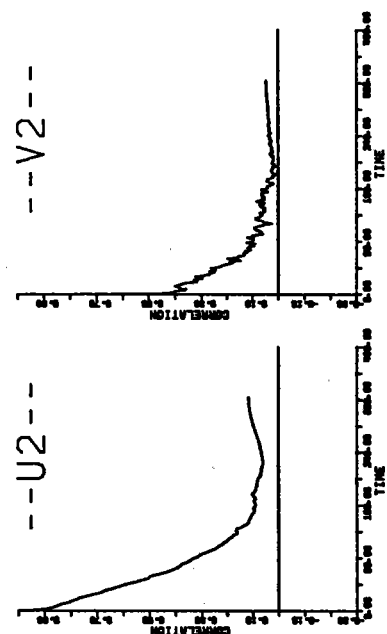
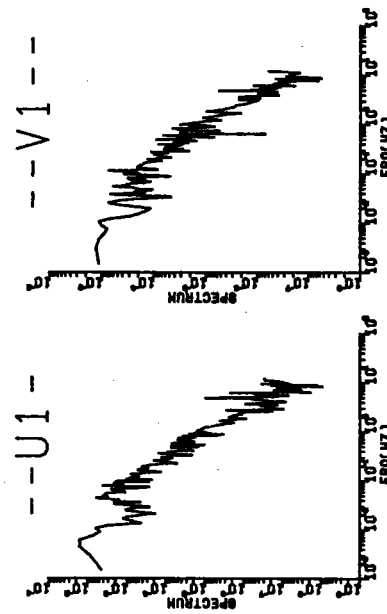
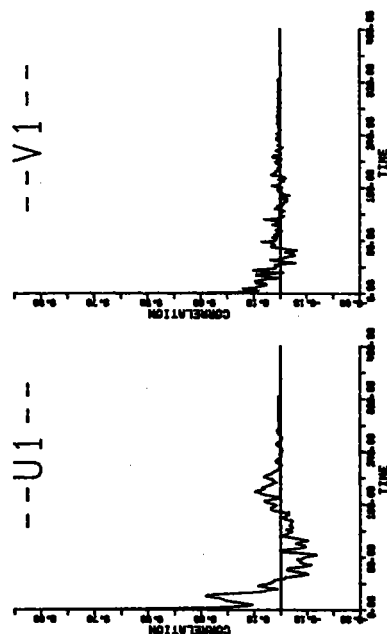
	TURBULENCE INTEGRALITY	VELOCITY	DIFFUSION	RESIDUAL STRESS
U1	0.000477	-0.185990	0.045400	-0.000063
V1	0.000081	0.014368	0.002230	
U2	0.000628	-0.115820	0.064000	
V2	0.000008	0.000516	0.000028	0.000000

84.08.04 6:45



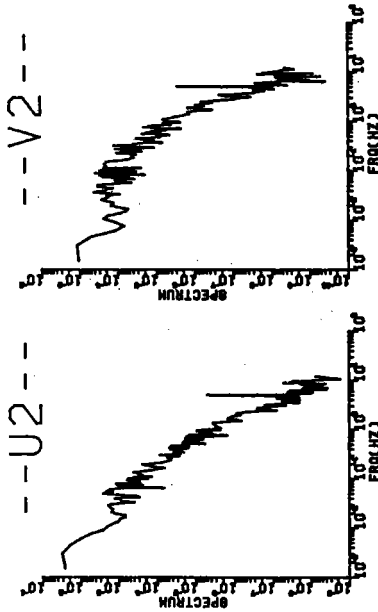
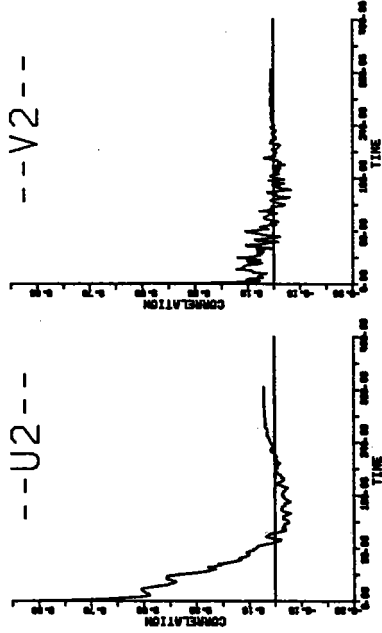
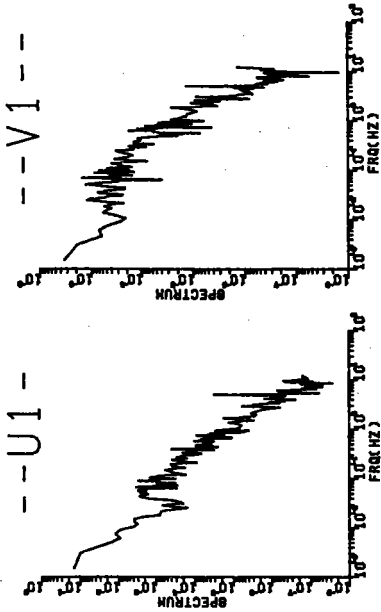
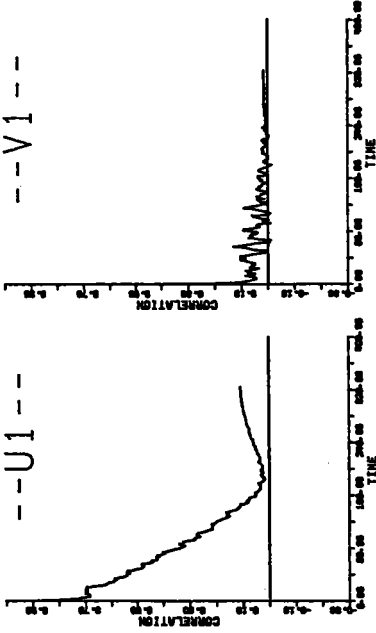
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000125	-0.205620	0.000532	0.000010
V1	0.000088	0.020018	0.000987	0.000015
U2	0.000266	-0.100900	0.024000	0.000015
V2	0.000008	0.002861	0.000072	0.000015

84.08.04 6:55



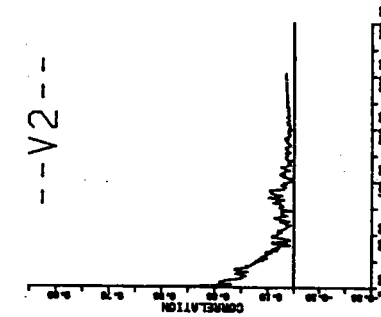
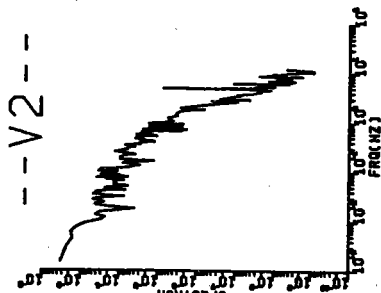
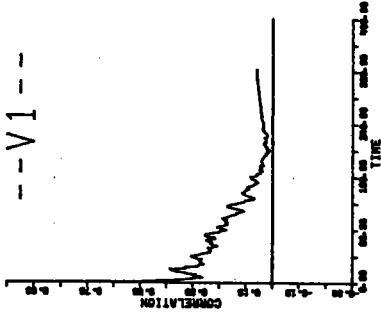
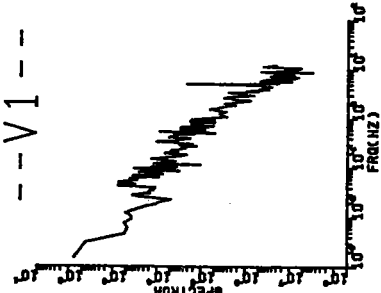
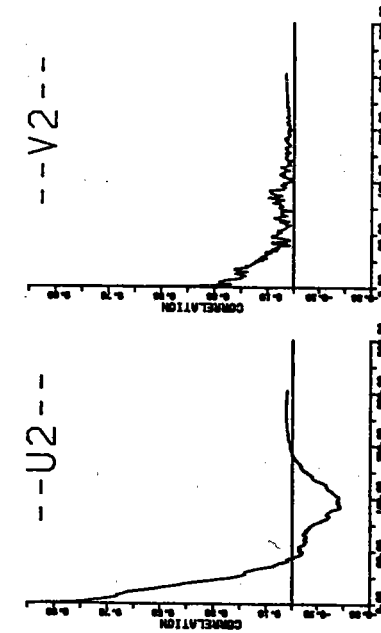
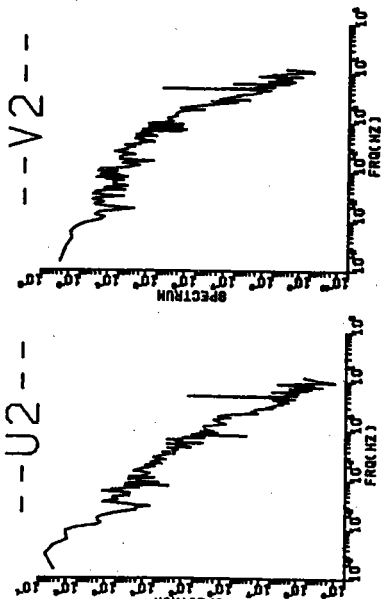
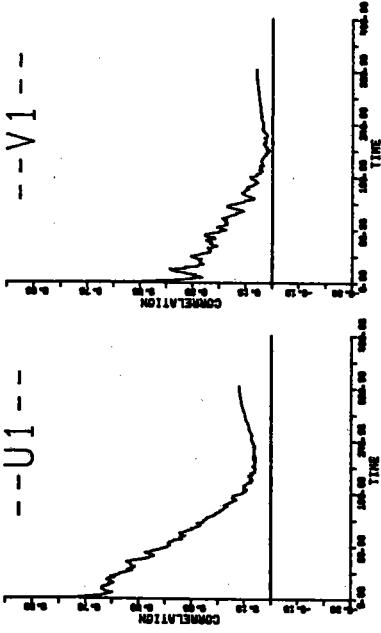
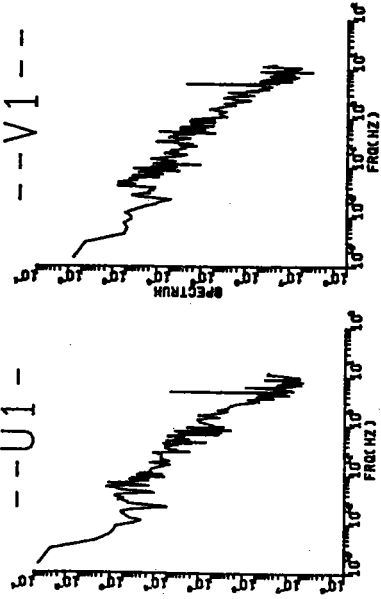
	TURBULENT INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.003364	-0.214080	0.001970	0.000057
V1	0.000087	0.017089	0.000468	
U2	0.000311	-0.086785	0.027000	-0.000029
V2	0.000027	0.001614	0.000885	

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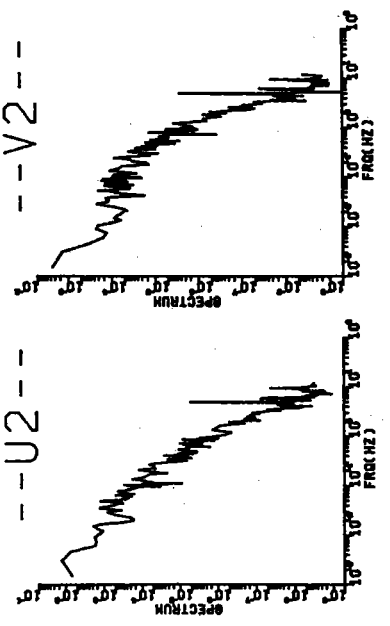
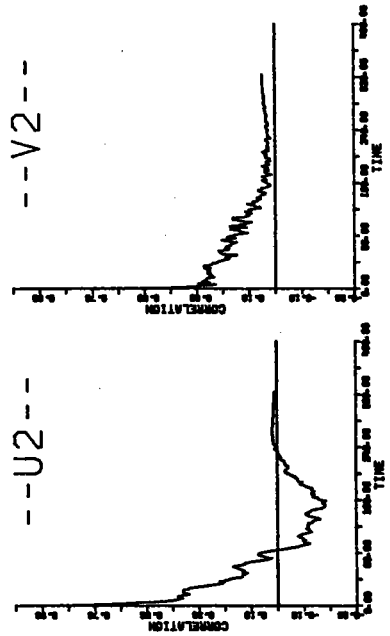
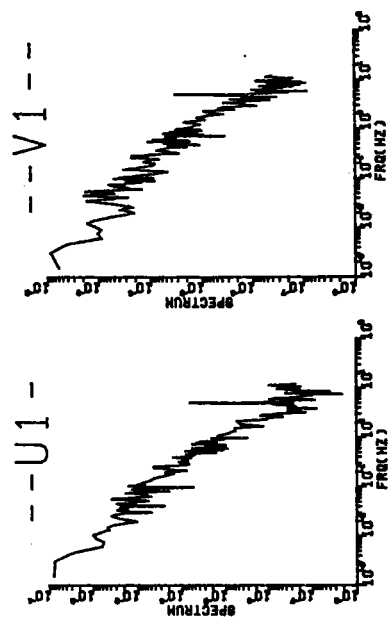
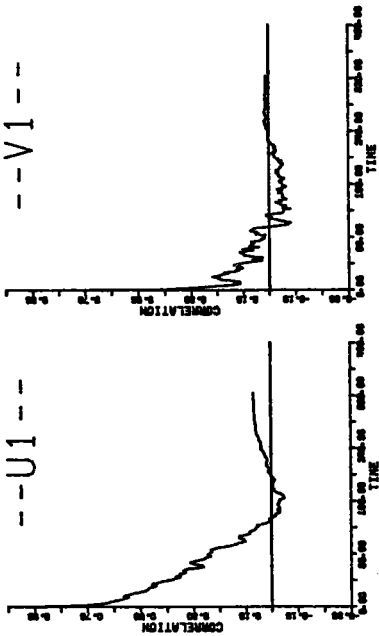
	TURBULENT INTENSITY	VELOCITY	DIFFUSION STRESS	REYNOLDS NUMBER
U1	0.000800	-0.228820	0.063500	-0.000064
V1	0.000168	0.014988	0.001640	
U2	0.000288	-0.128480	0.006080	-0.00004
V2	0.000048	-0.000605	0.000324	

* * 84.08.04 7:30 * *



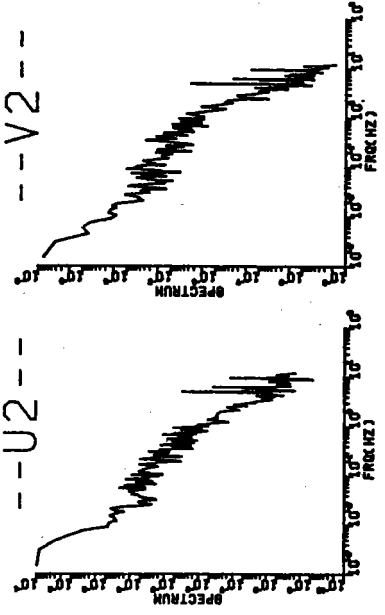
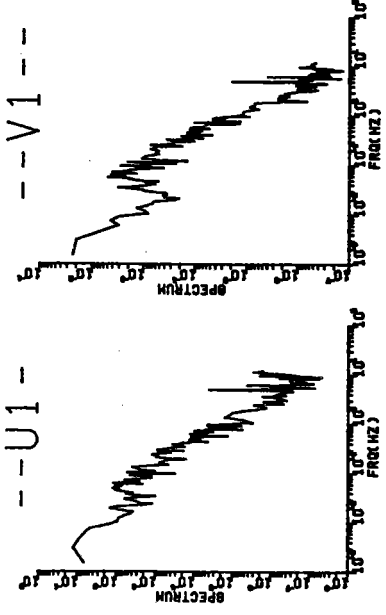
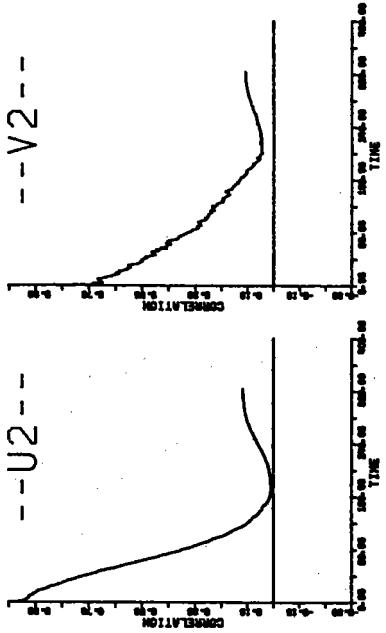
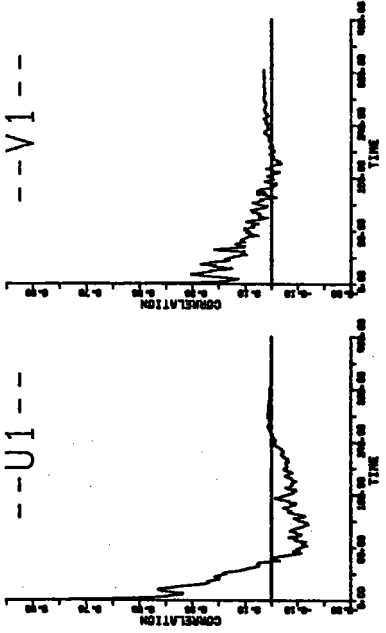
	TORSION	MEAN	VELOCITY	DIFFUSION	RES. RATIO
	ANGLE	ANGLE	ANGLE	ANGLE	ANGLE
U1	0.000431	-0.222590	0.098800	0.000030	0.000030
V1	0.000189	0.014840	0.007120	0.000000	0.000000
U2	0.000478	-0.190770	0.006580	0.000000	0.000000
V2	0.000076	-0.000676	0.001800	0.000000	0.000000

84.08.04 7:40



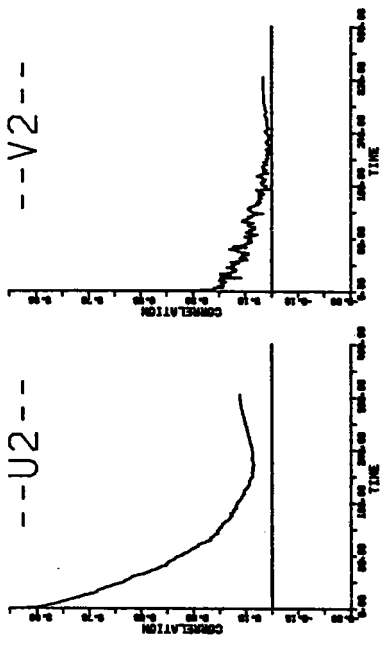
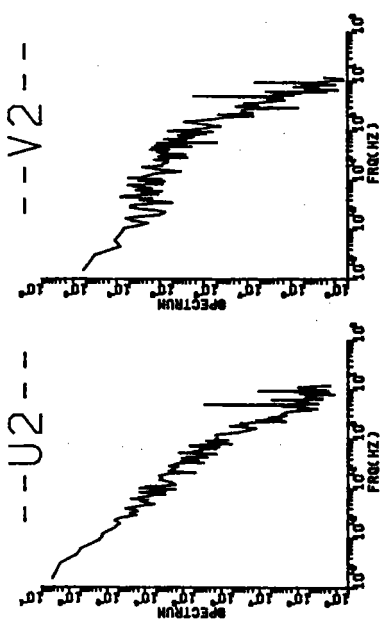
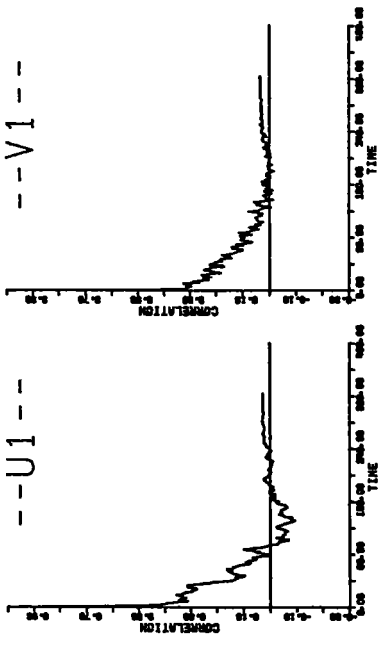
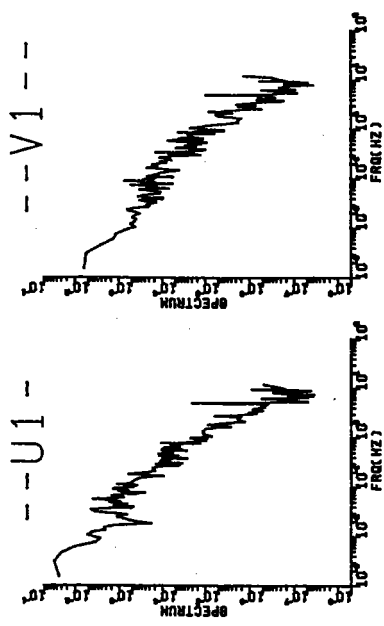
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000616	-0.218690	0.029500	-0.000050
V1	0.000179	0.008417	0.001230	
U2	0.000224	-0.108850	0.001470	-0.000038
V2	0.000065	-0.000431	0.002170	

84.08.04 8:10



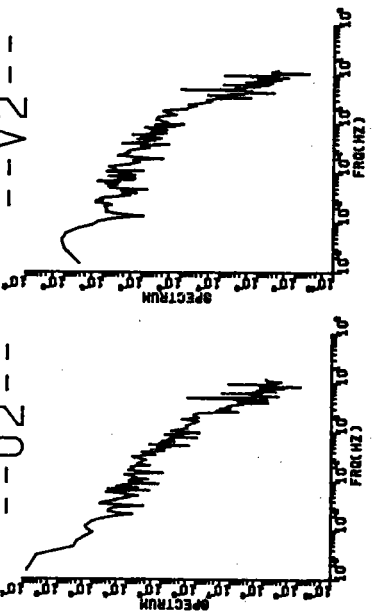
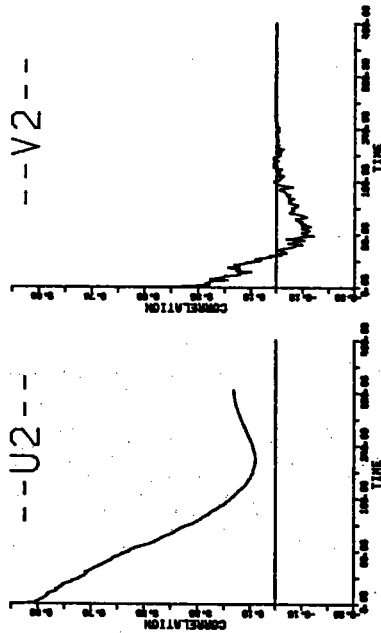
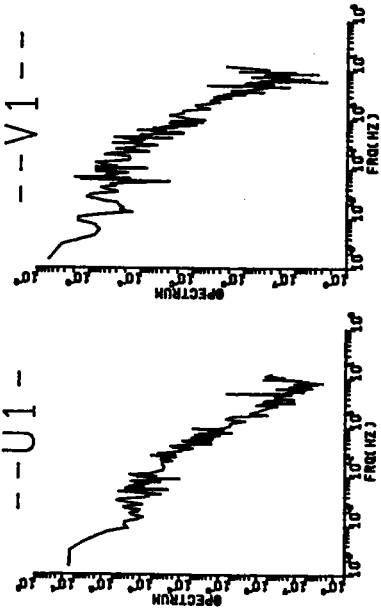
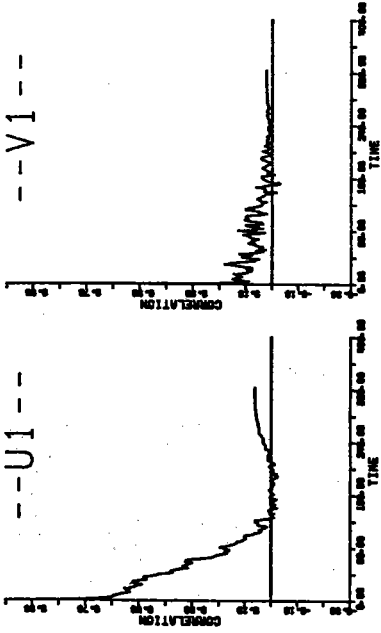
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001424	-0.201240	0.004220	0.000363
V1	0.000445	0.008165	0.008050	
U2	0.000448	-0.158710	0.038800	
V2	0.000045	0.001821	0.003620	-0.000084

* * 84.08.04 8:20 * *



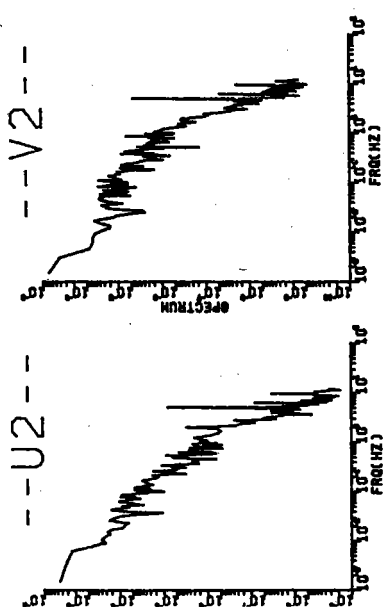
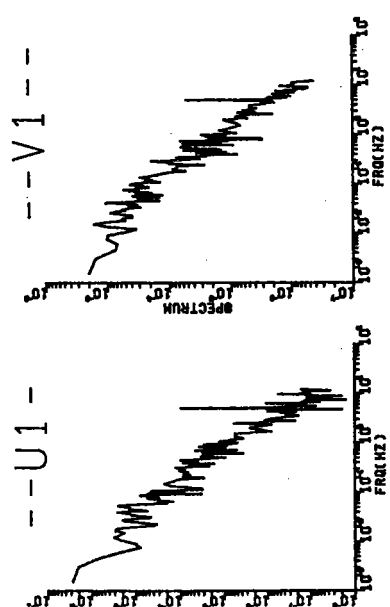
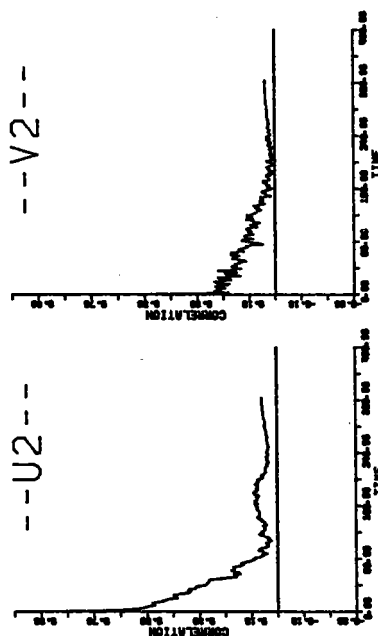
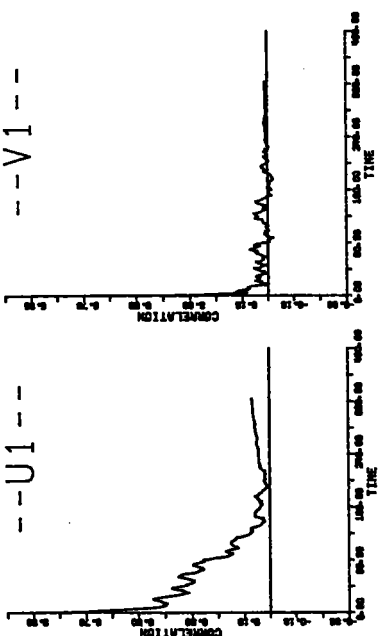
	TURBULENCE INTENSITY	VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000775	-0.182890	0.019700	0.0000098
V1	0.000218	0.010898	0.005070	
U2	0.000286	-0.194470	0.026200	
V2	0.00025	0.005485	0.000547	-0.000005

*84.08.04 8:30**



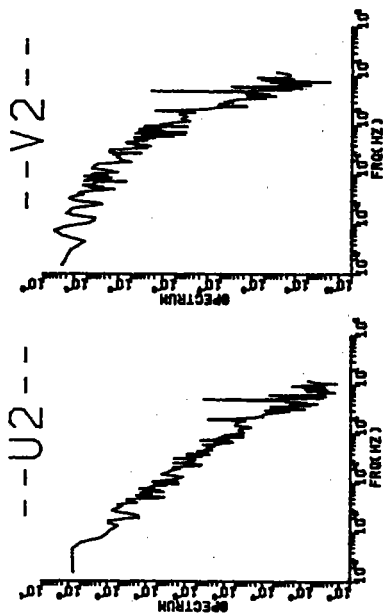
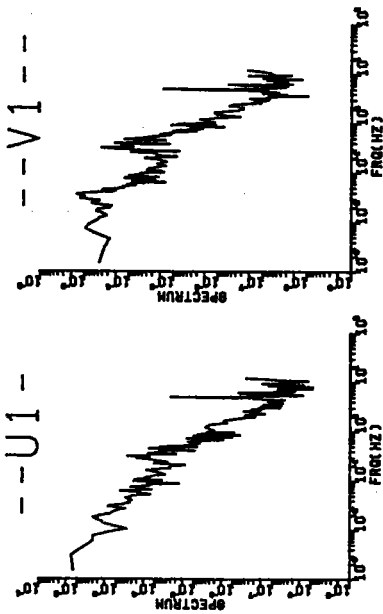
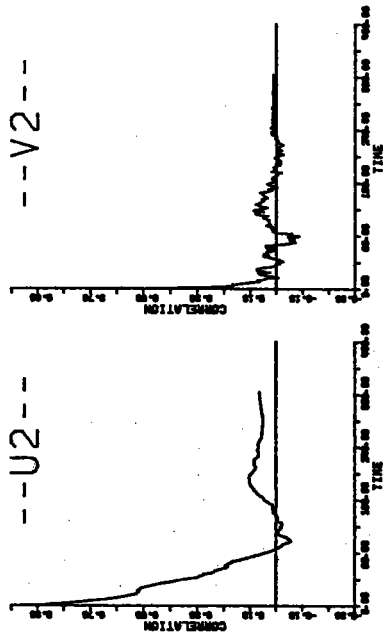
	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION COEFFICIENT	REYNOLDS NUMBER
U1	0.001088	-0.158280	0.048200	-0.00008
V1	0.000188	0.026766	0.002880	
U2	0.000901	-0.140110	0.038700	-0.00000
V2	0.000024	0.001865	0.000025	

*84.08.04 9:00**



	TURBULENCE INTENSITY	WIG ACTIVITY	DIFFUSION INDEX	PERIOD NUMBER
U1	0.000254	-0.192410	0.012200	0.000022
V1	0.000134	0.014282	0.000884	
U2	0.000053	-0.098847	0.002150	0.000000
V2	0.000014	0.004505	0.000354	

*84.08.04 9:10**

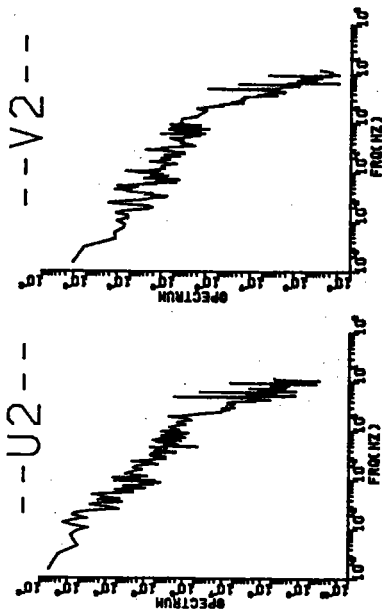
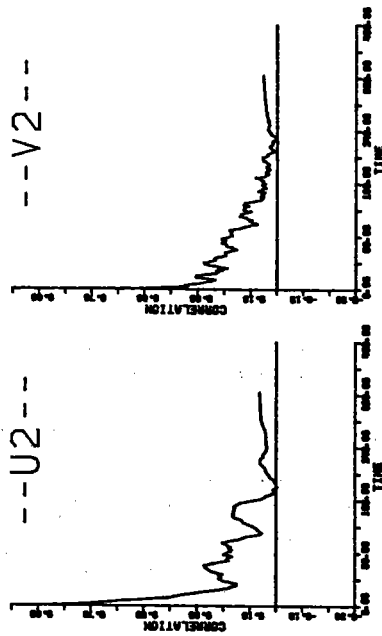
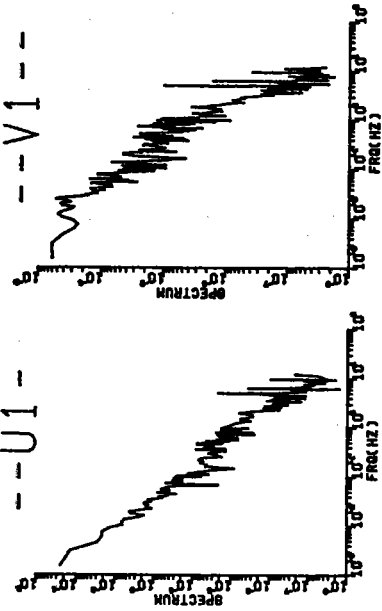
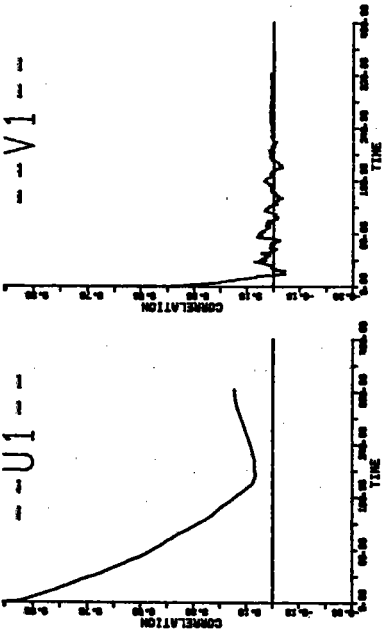


	TURBULENCE INTENSITY	MEAN VELOCITY	DIFFUSION	REYNOLDS NUMBER
U1	0.000181	-0.08087	0.003780	0.000020
V1	0.000086	0.011778	0.000216	
U2	0.000180	-0.082801	0.007080	-0.000021
V2	0.000024	0.000300	0.000170	

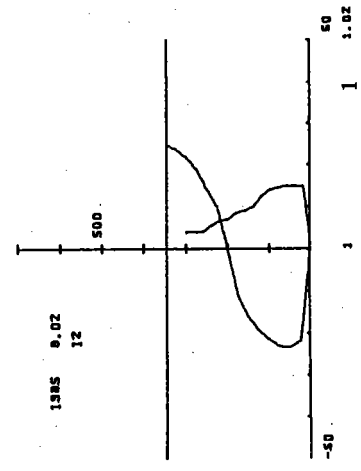
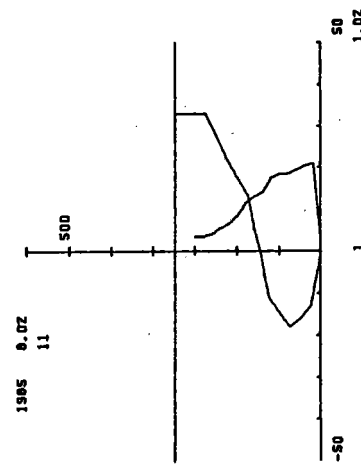
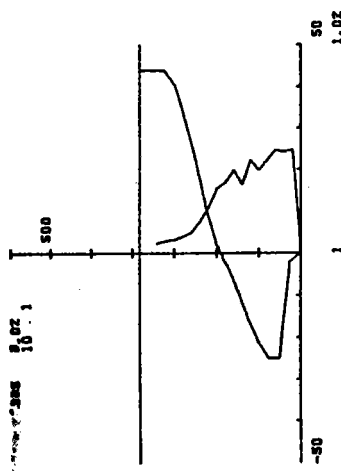
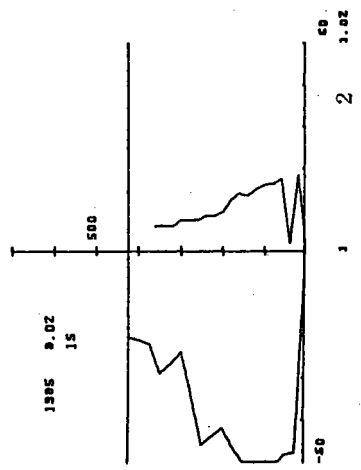
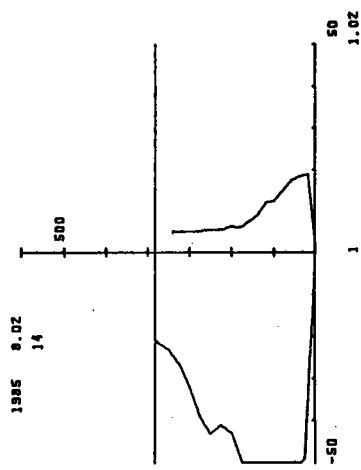
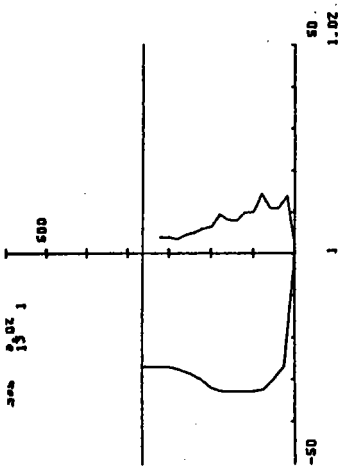
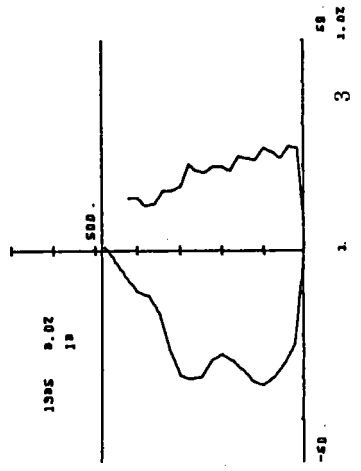
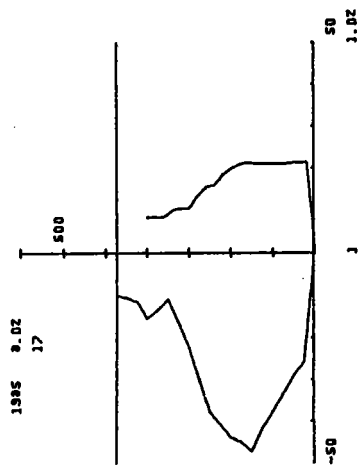
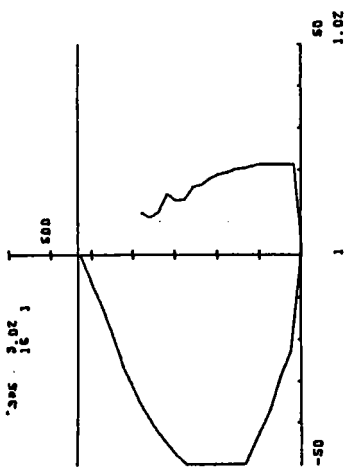
資料 - 3 密度分布及び流速分布 (1985年夏期)

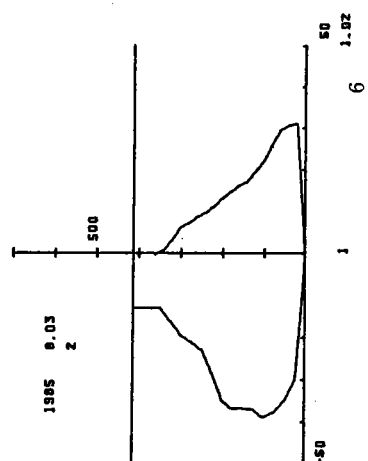
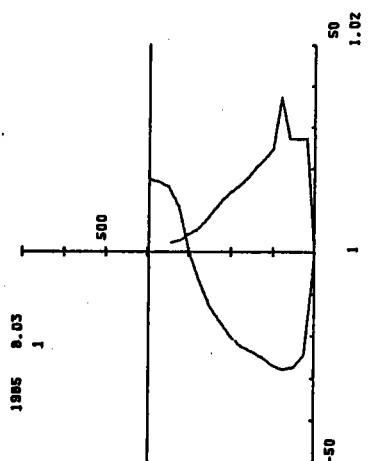
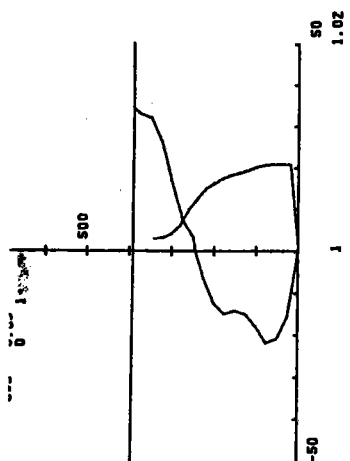
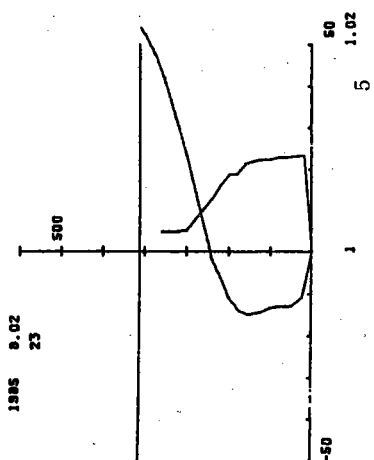
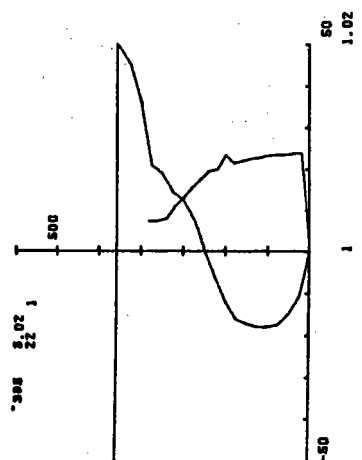
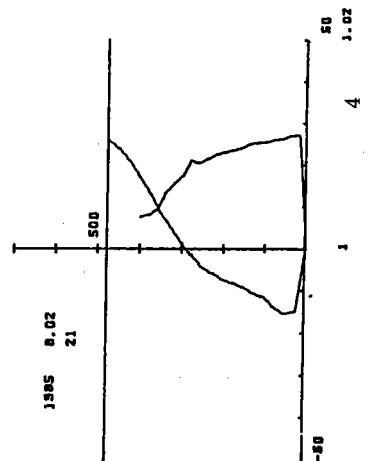
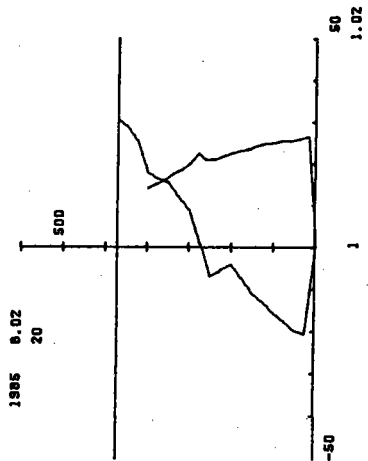
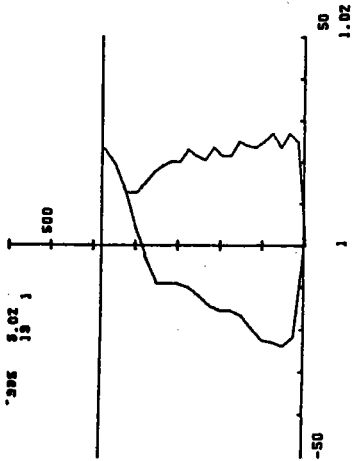
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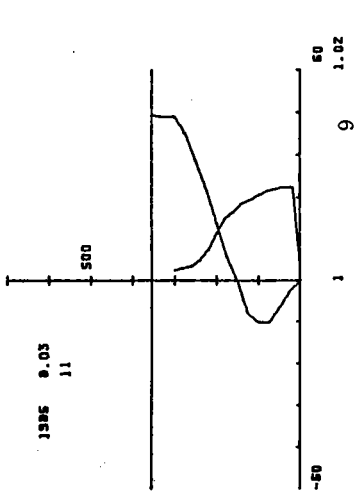
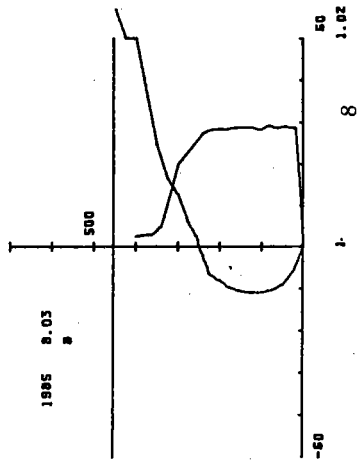
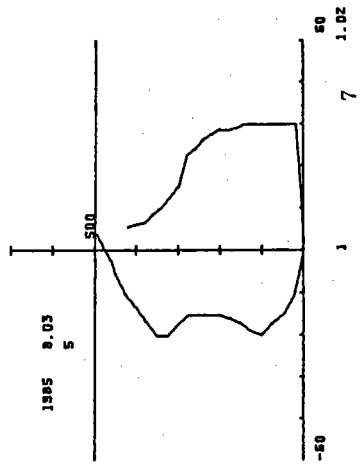
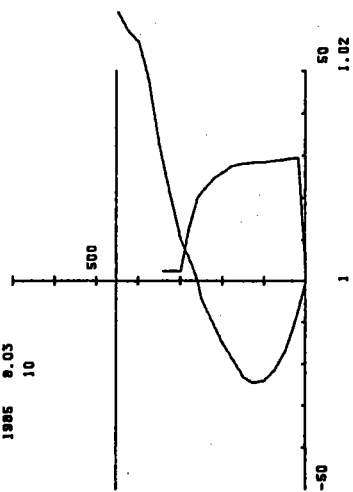
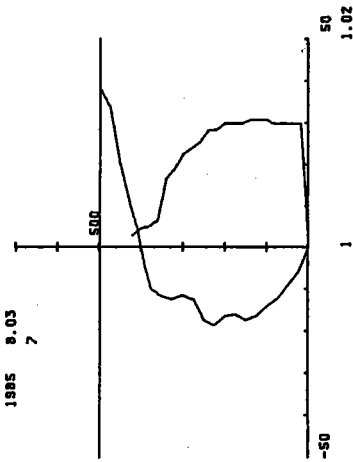
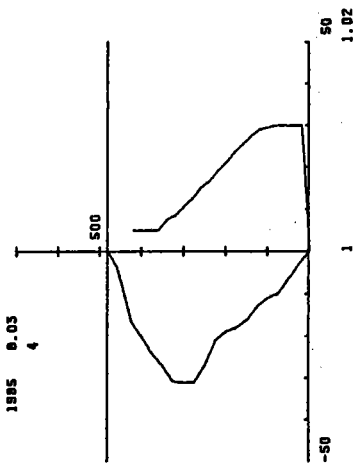
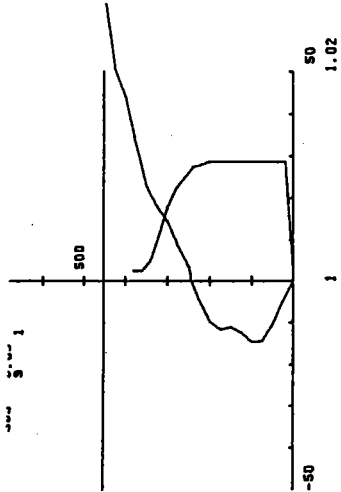
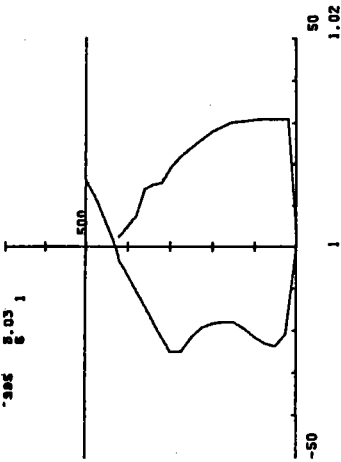
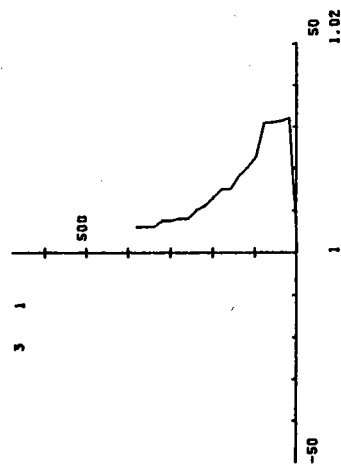
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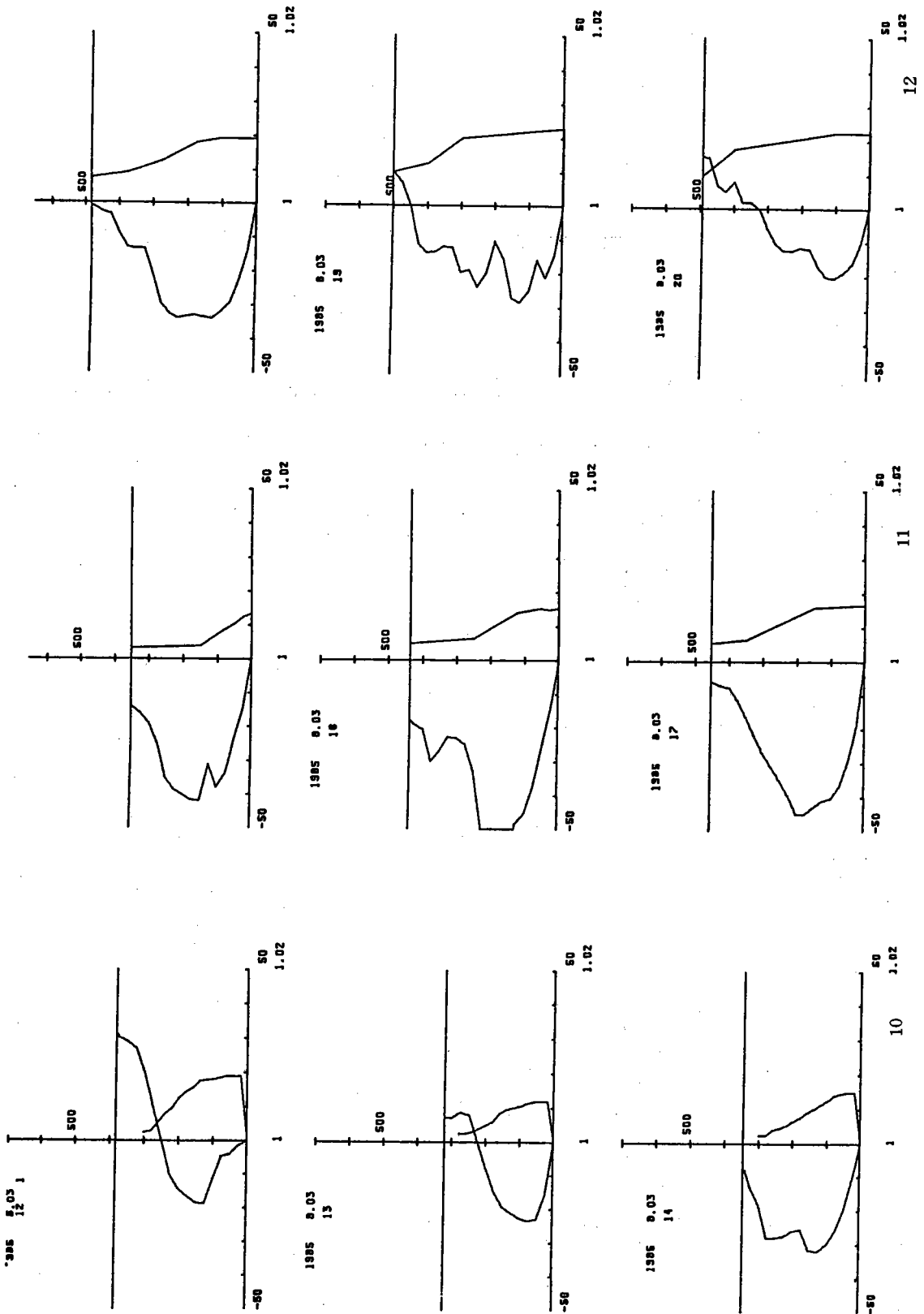


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U2	0.000088	-0.048678	0.002810	
V2	0.000027	0.003308	0.000961	0.000009

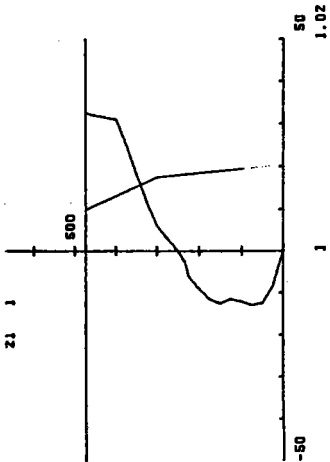




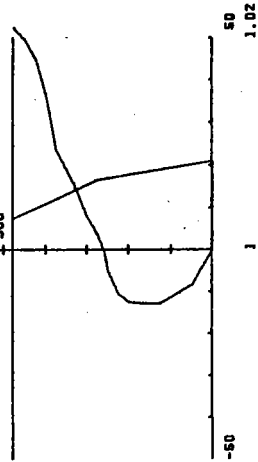




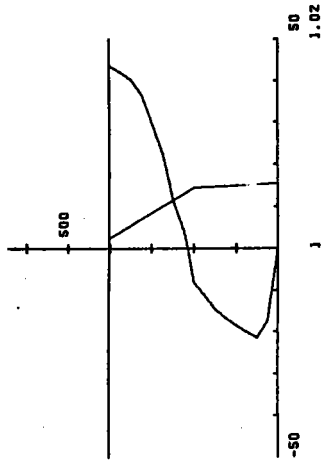
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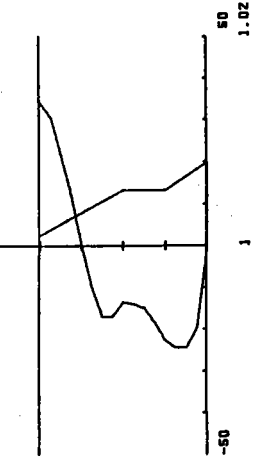
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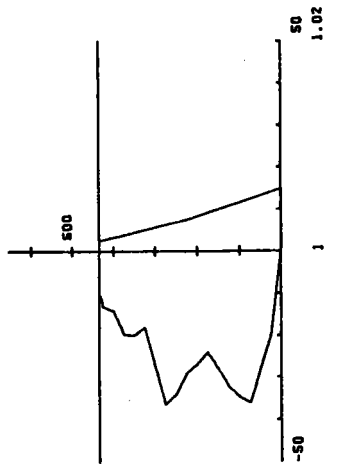
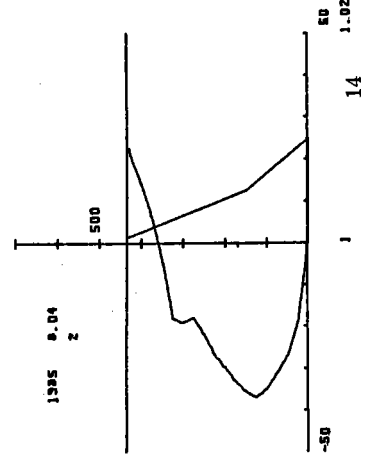
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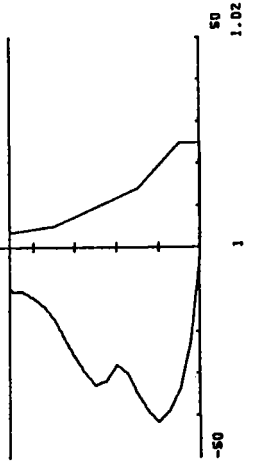
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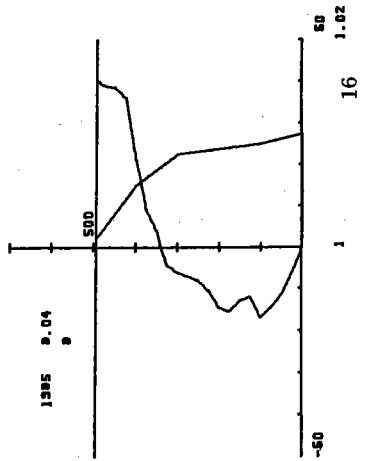
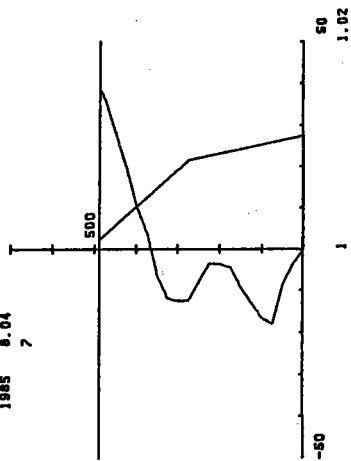
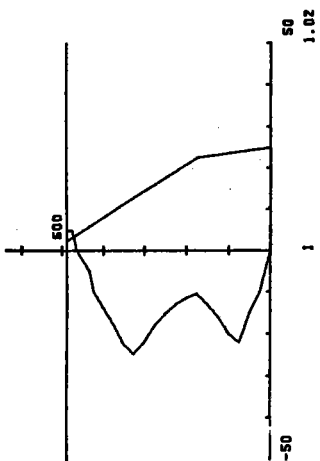
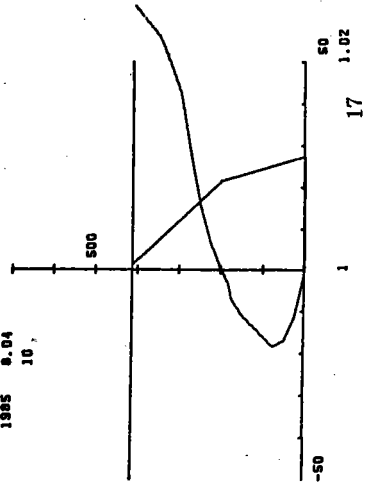
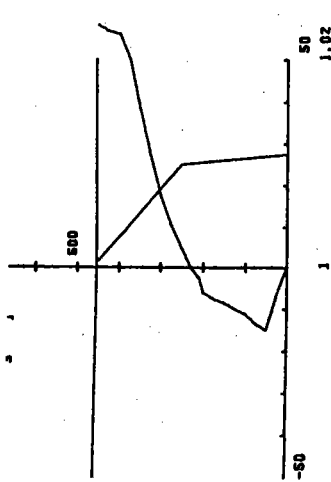
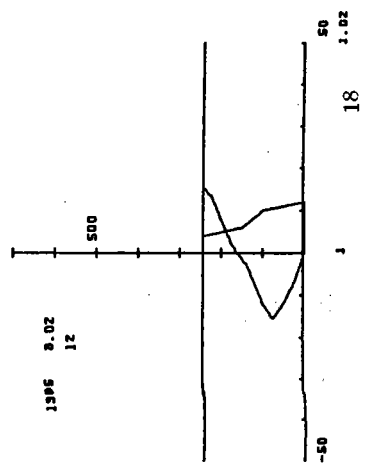
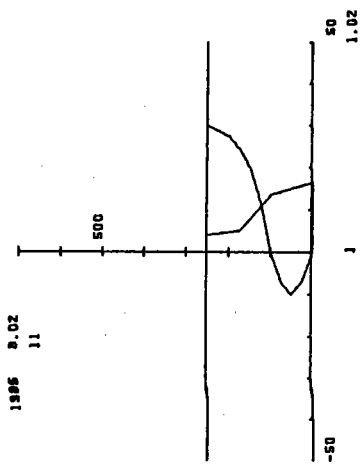
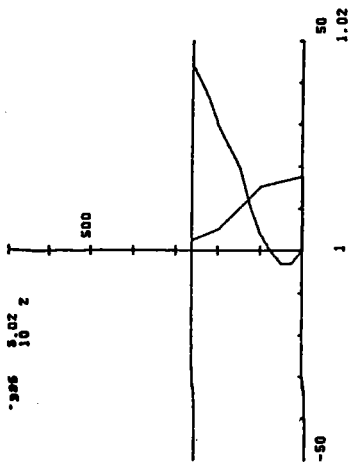
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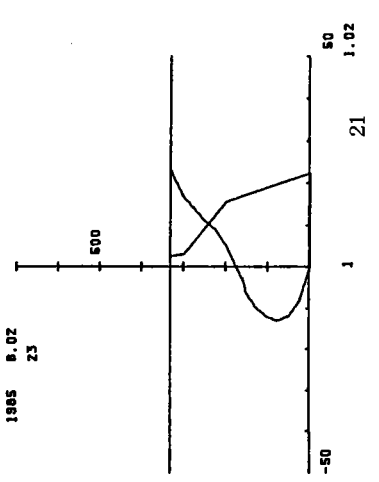
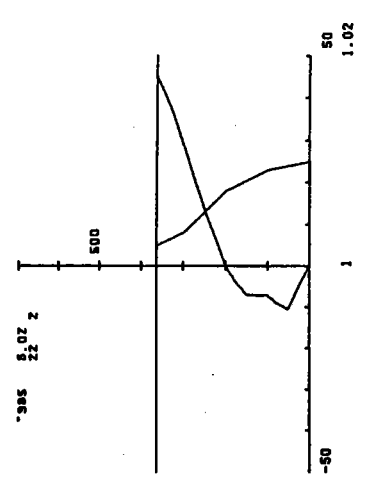
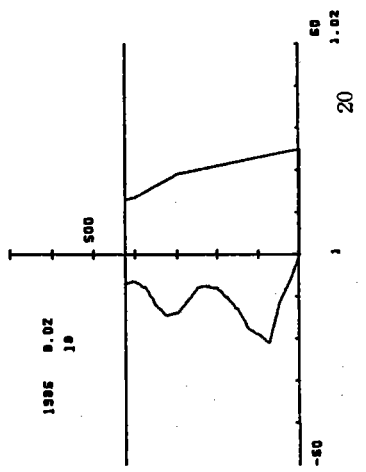
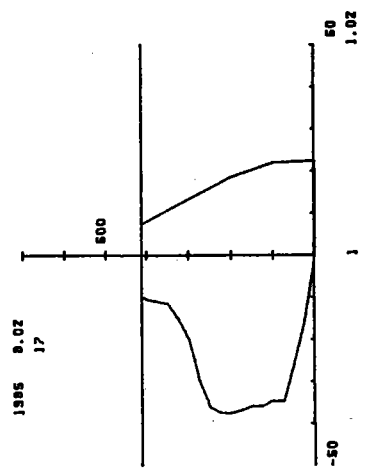
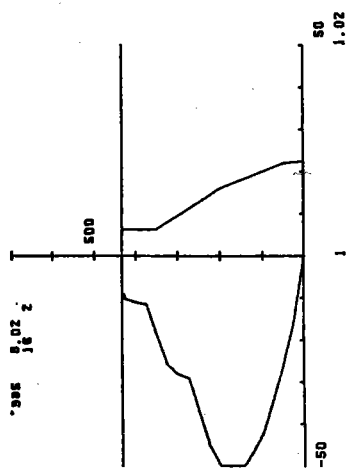
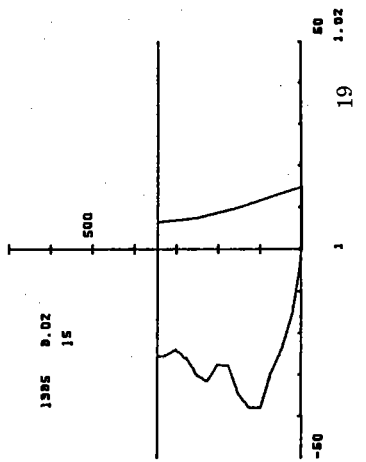
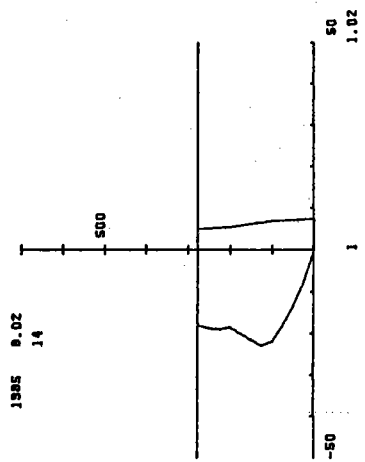
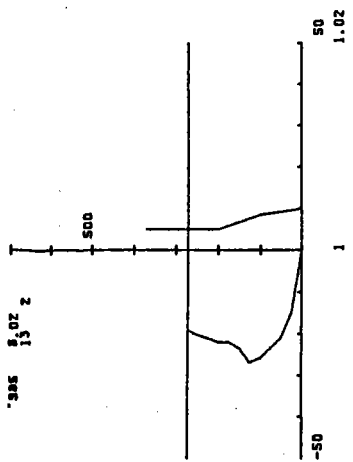


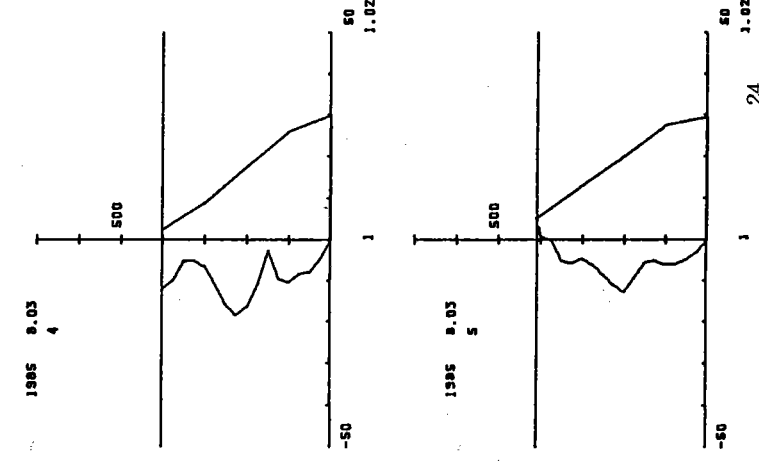
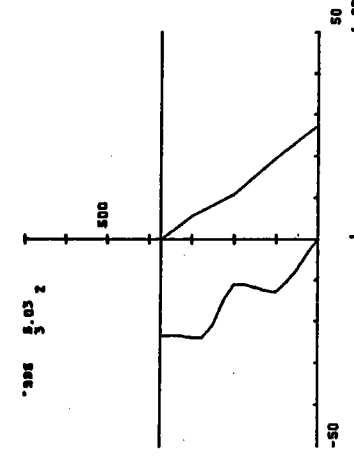
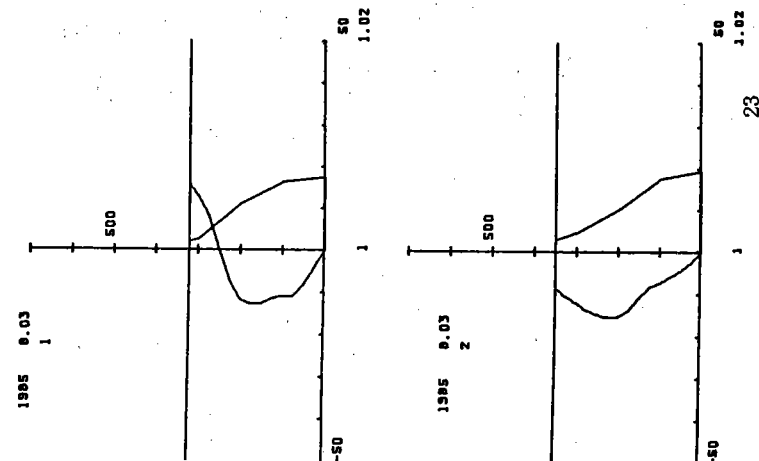
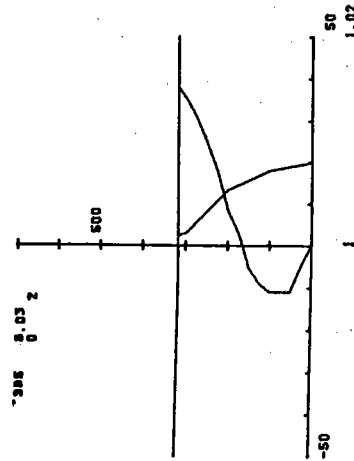
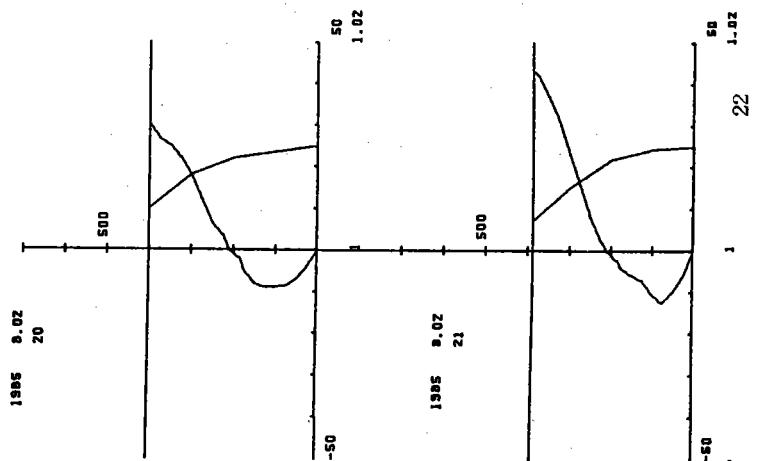
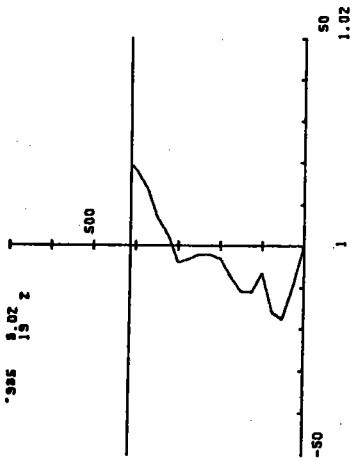
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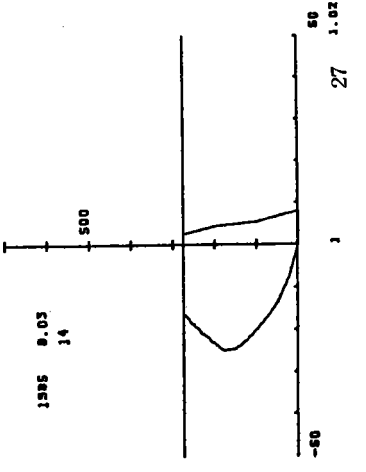
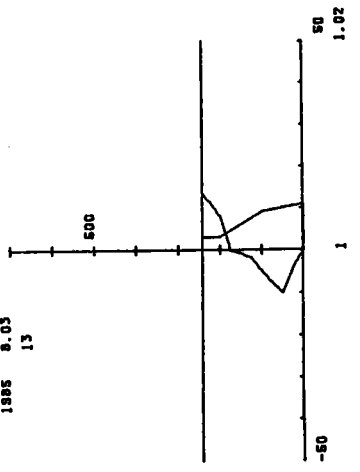
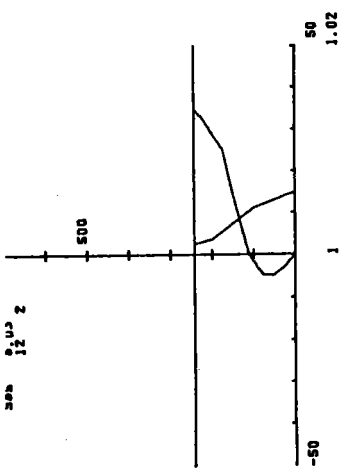
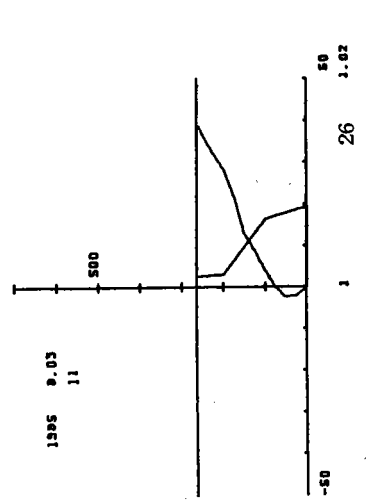
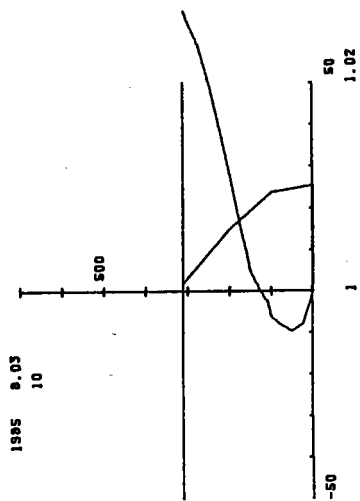
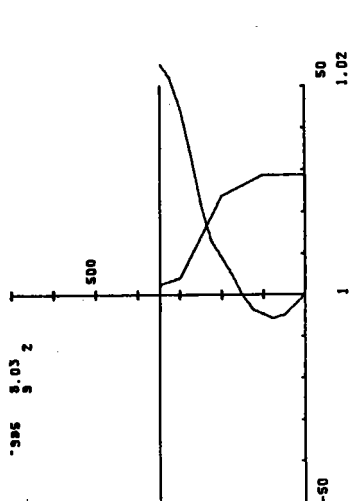
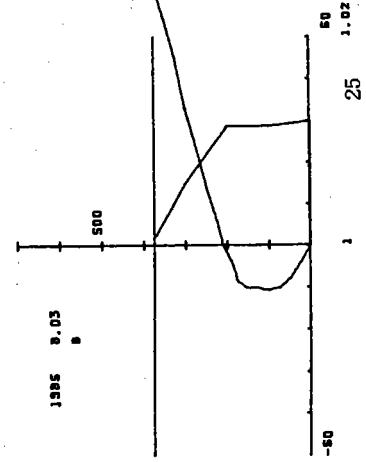
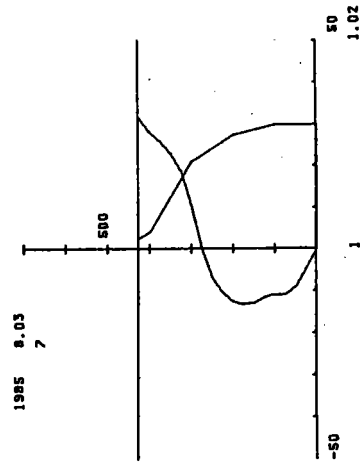
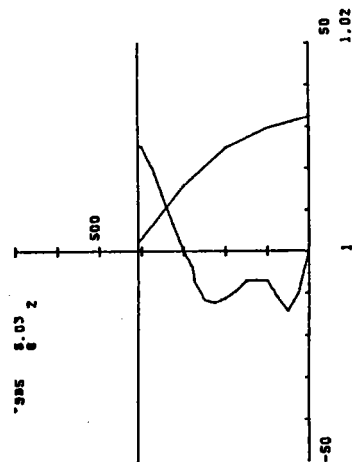


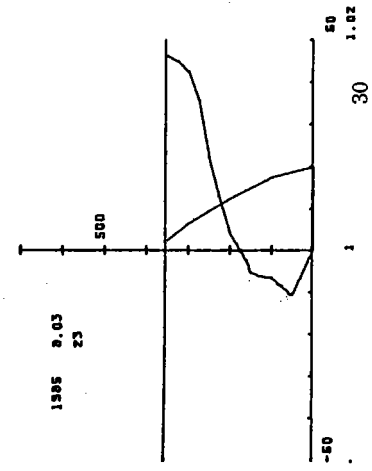
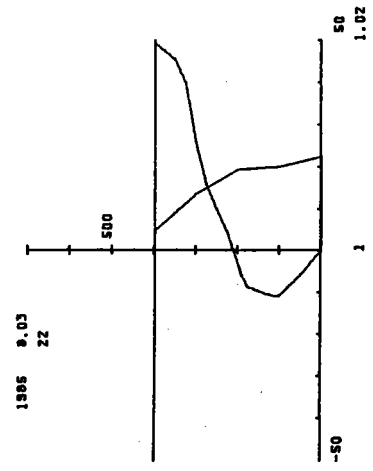
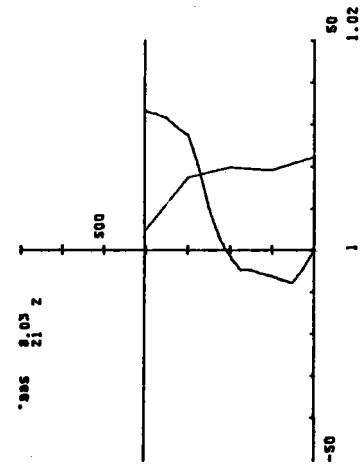
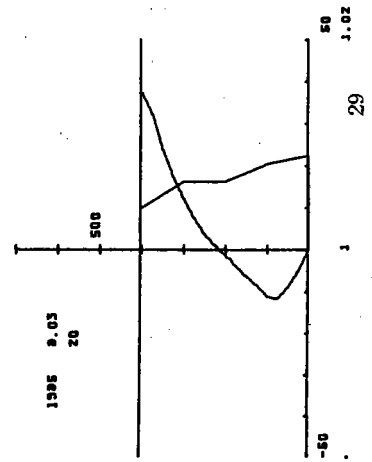
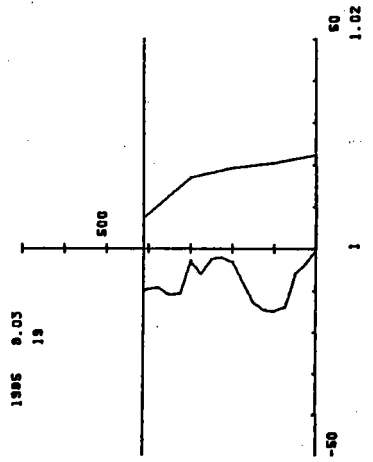
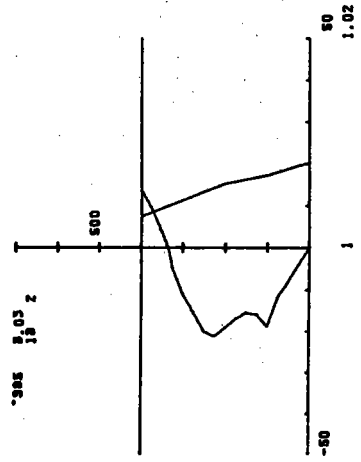
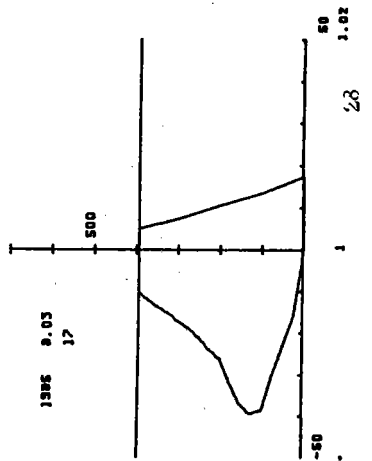
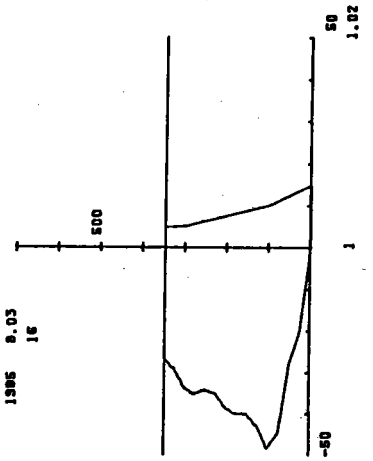
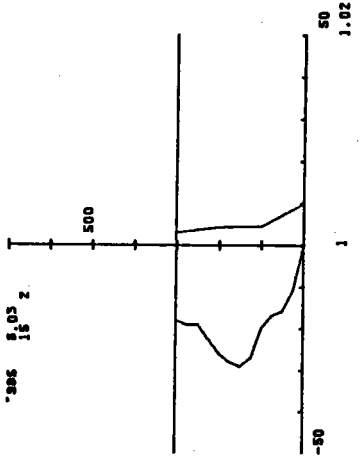
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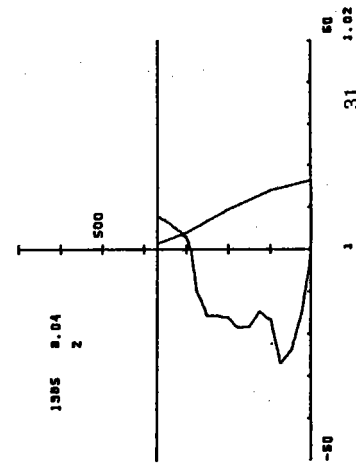
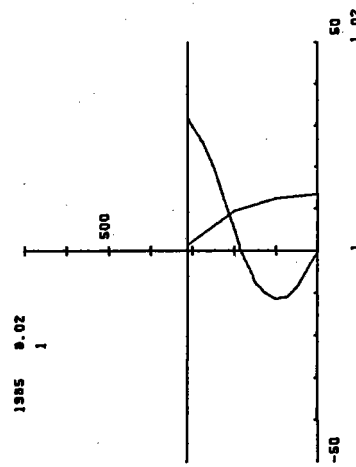
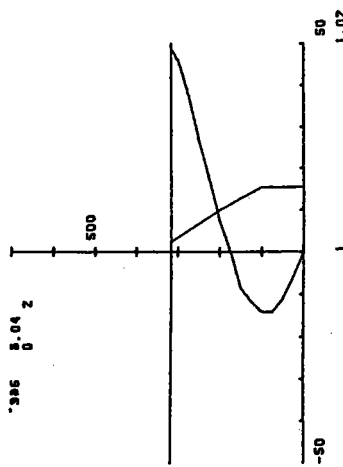
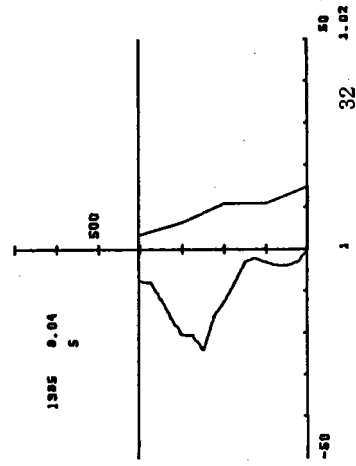
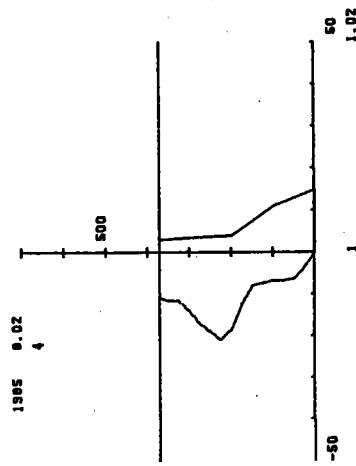
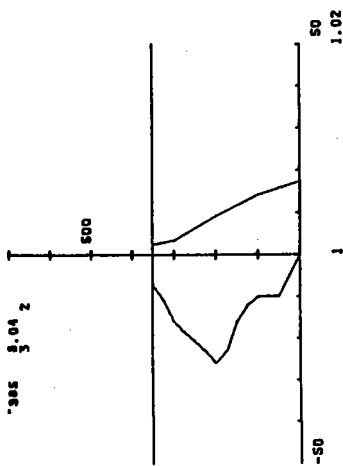
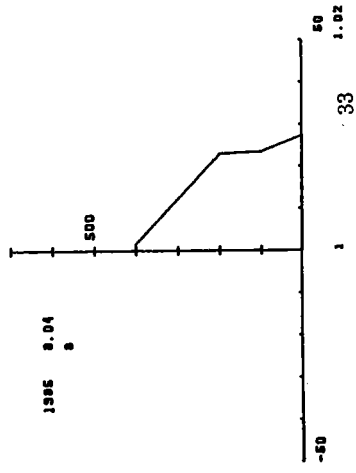
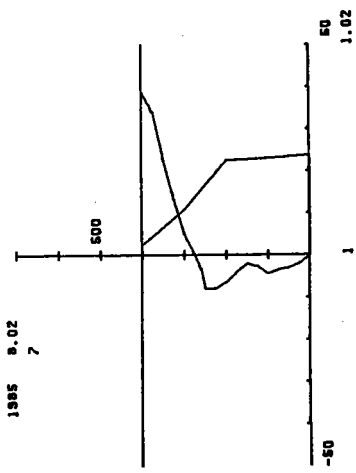
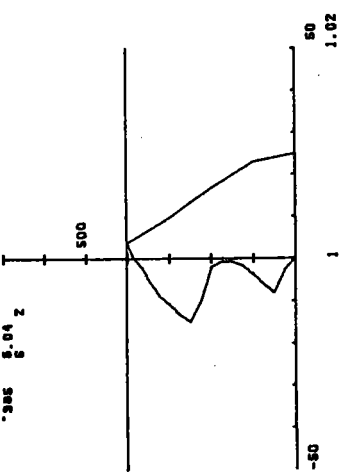


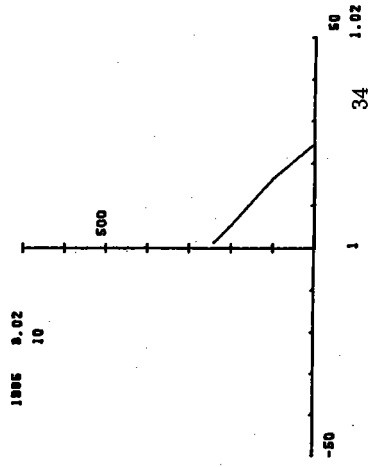
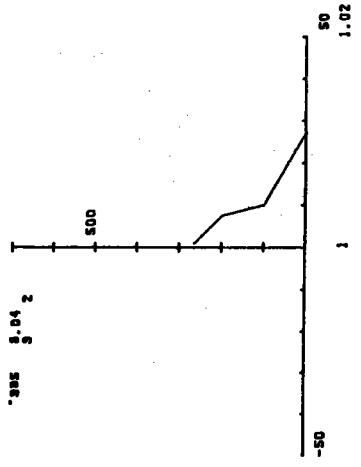
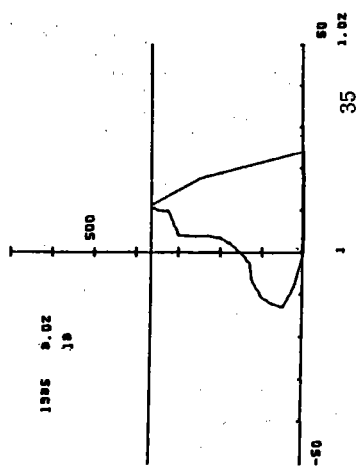
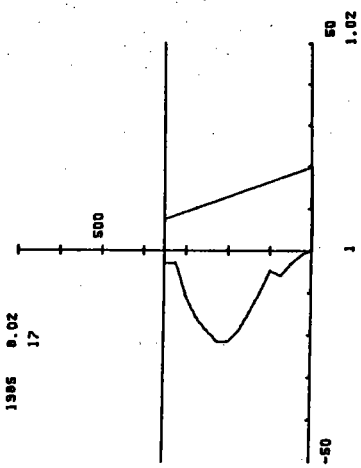
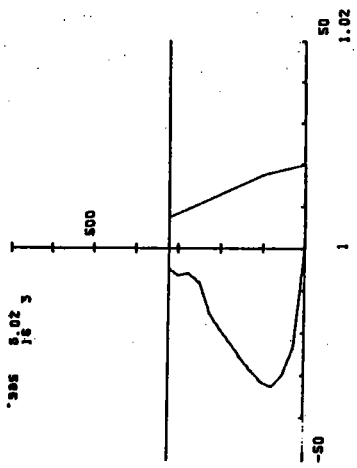
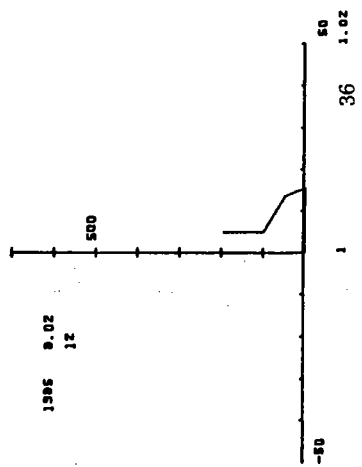
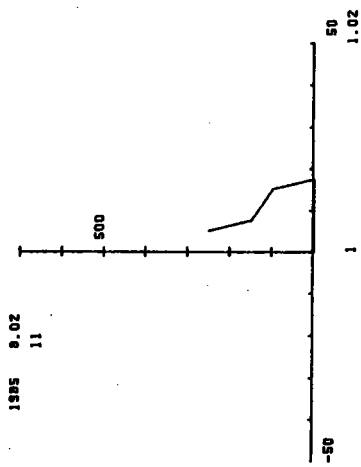
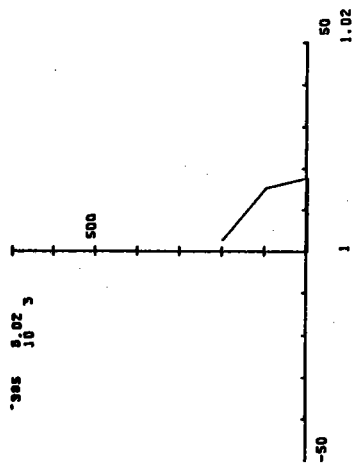


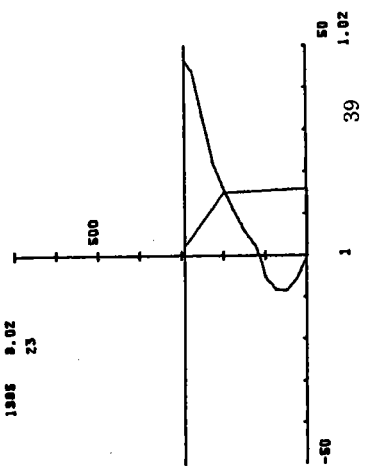
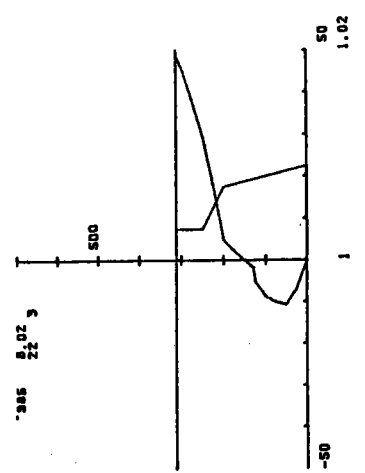
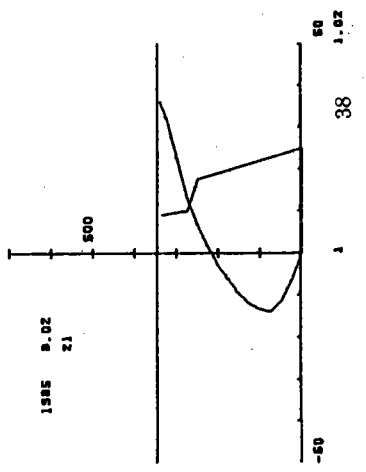
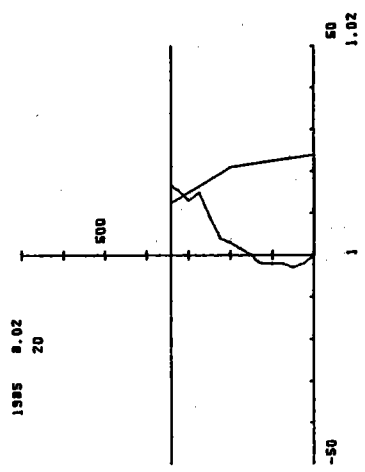
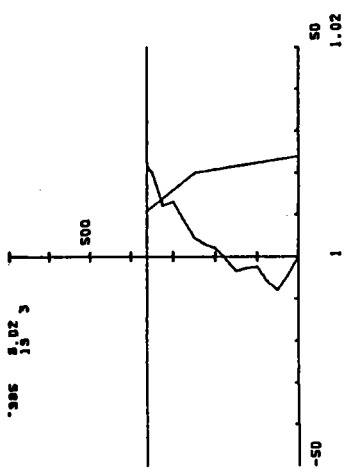
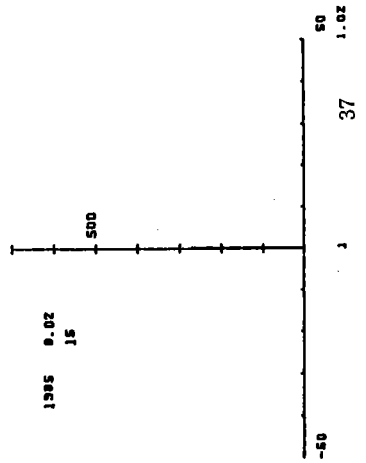
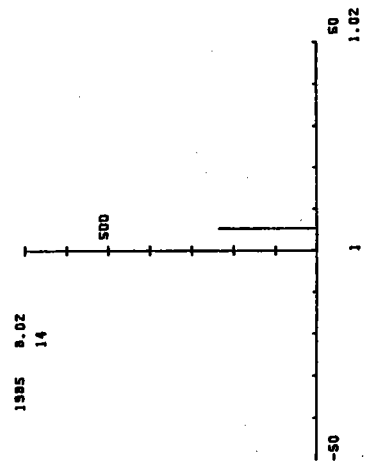
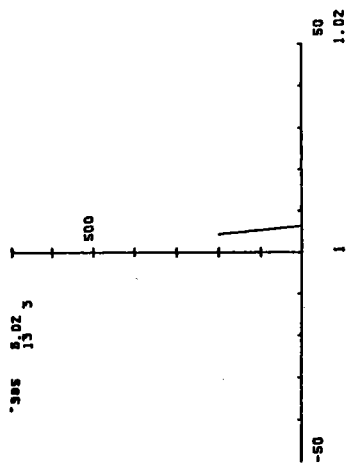


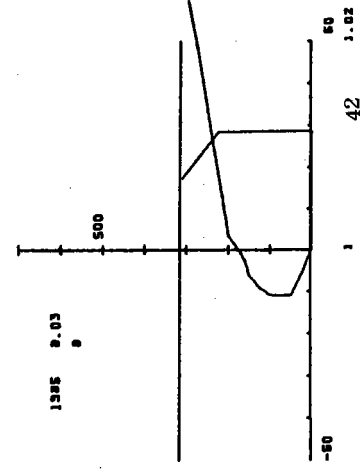
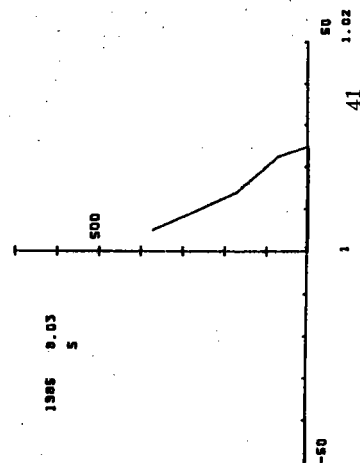
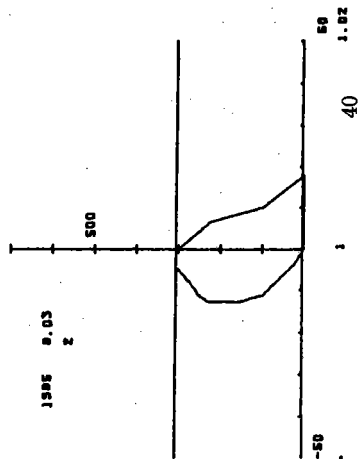
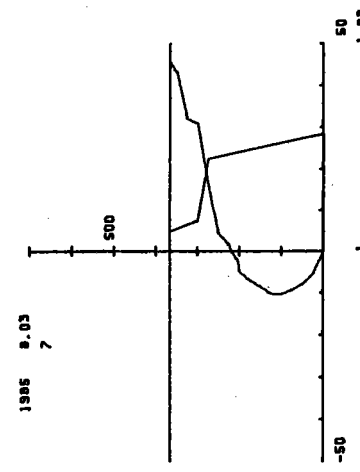
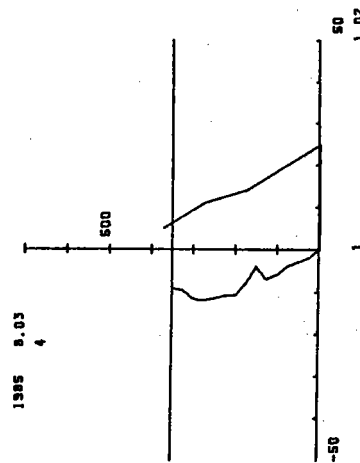
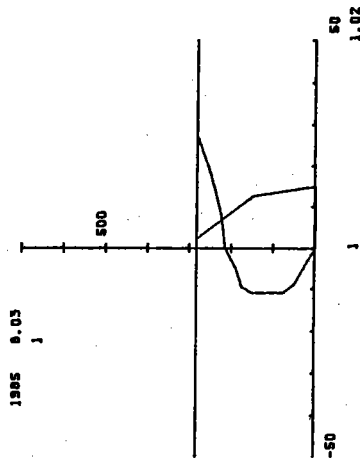
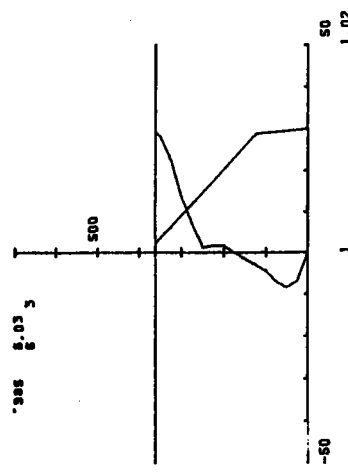
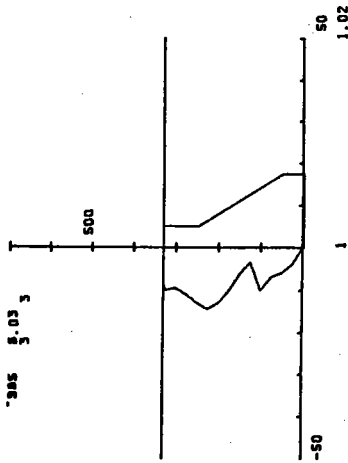
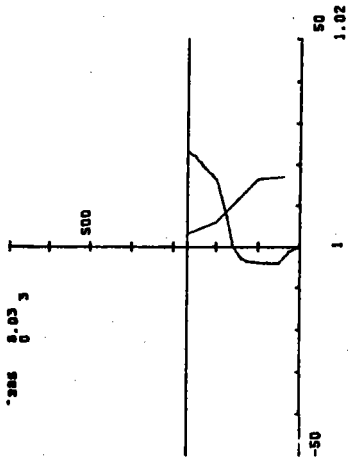


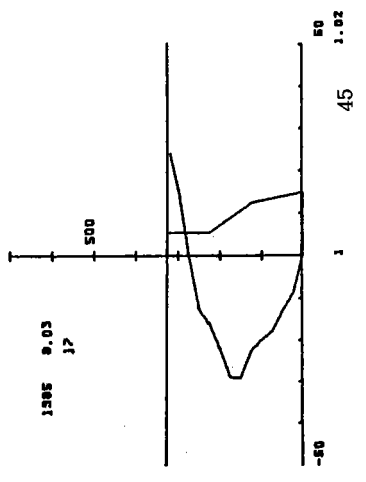
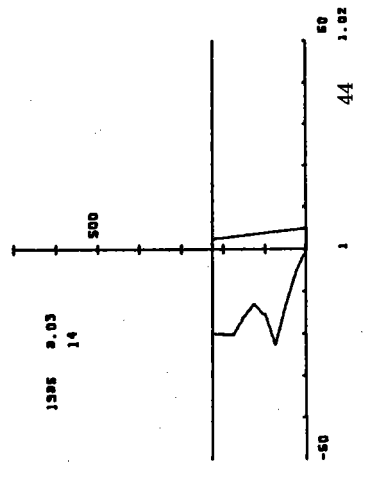
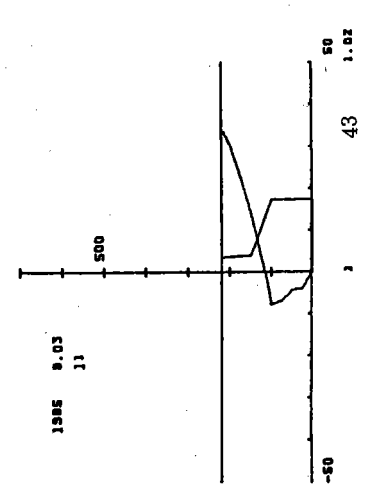
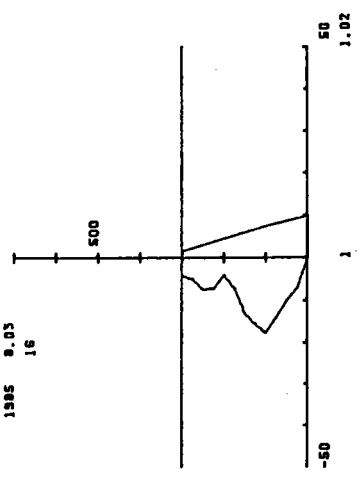
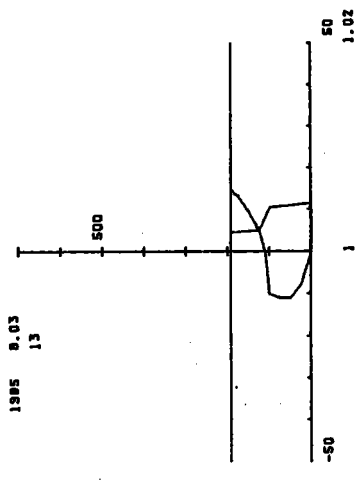
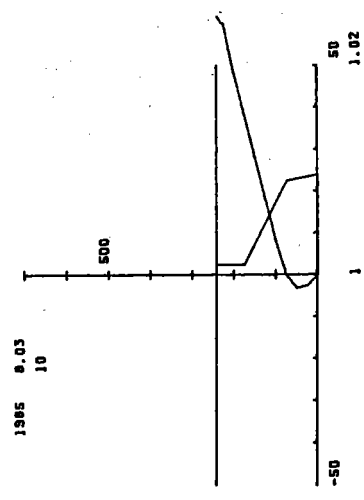
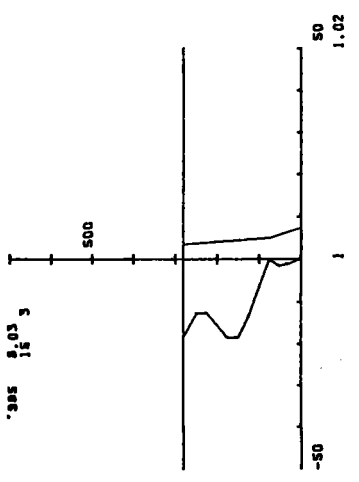
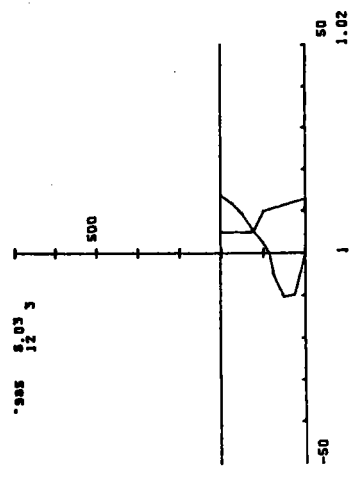
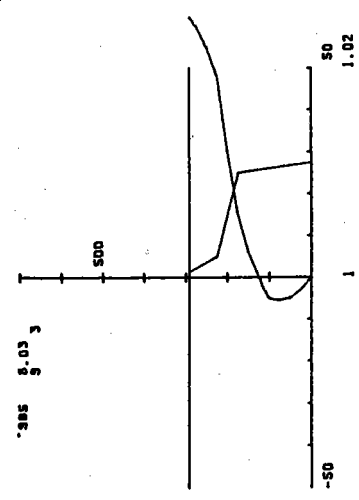


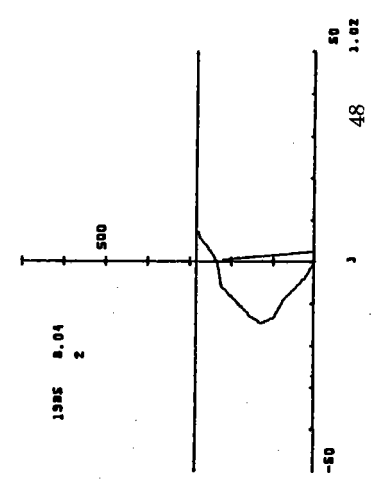
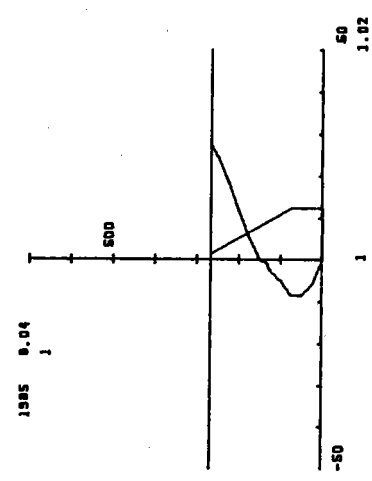
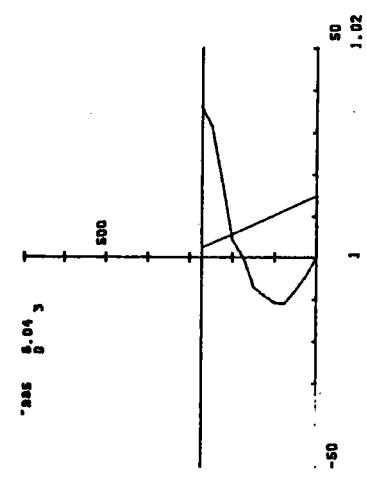
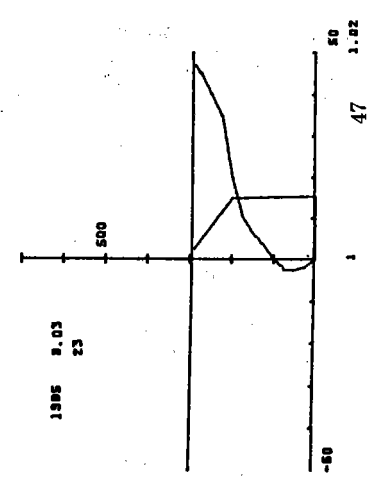
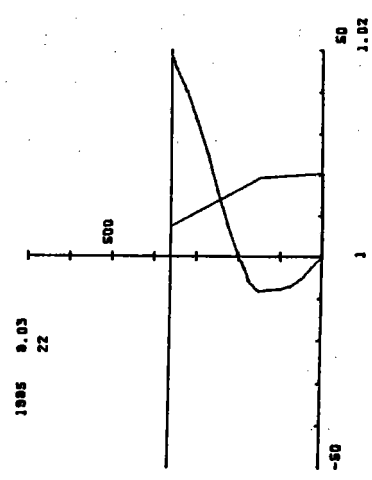
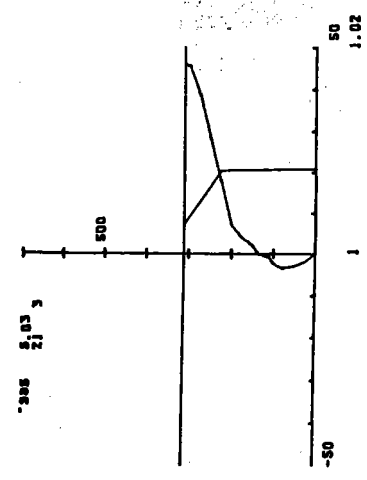
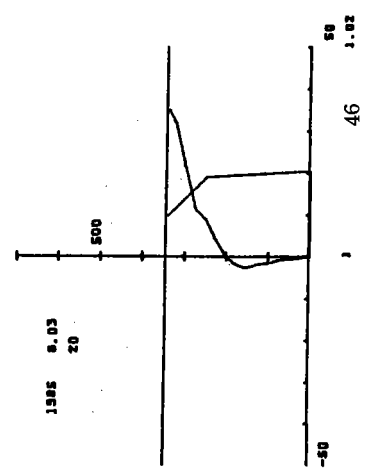
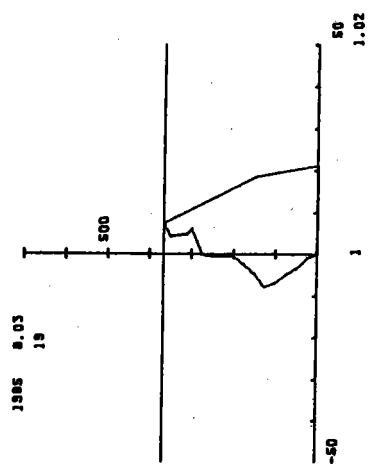
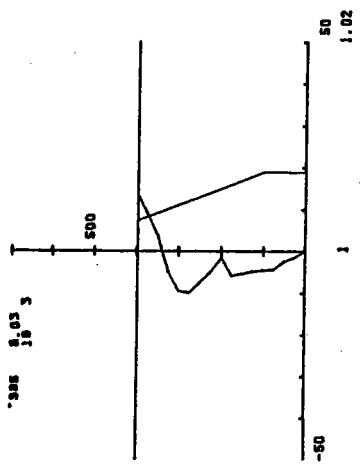


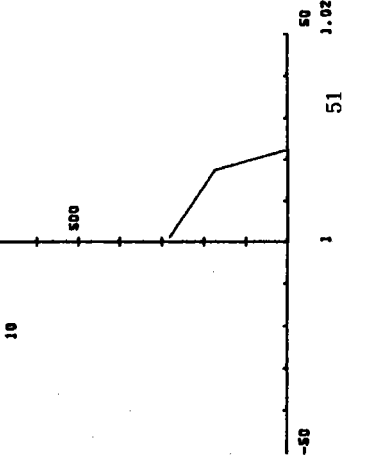
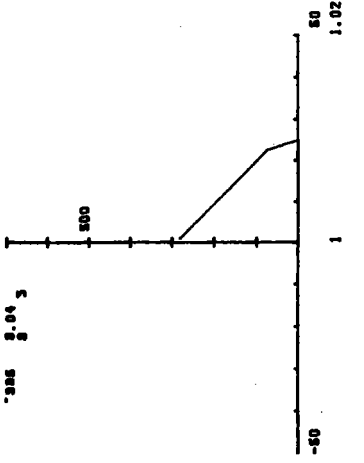
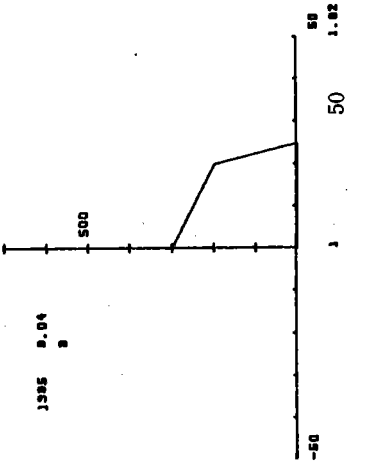
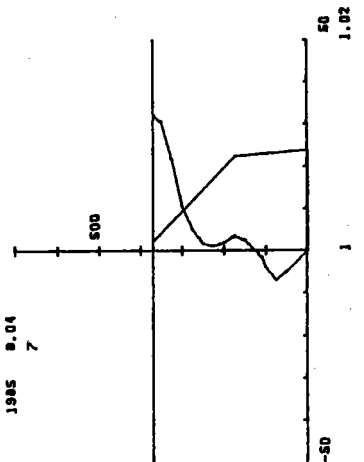
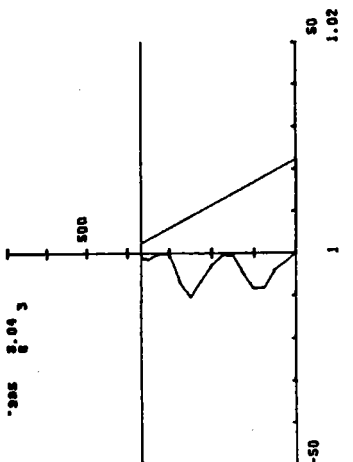
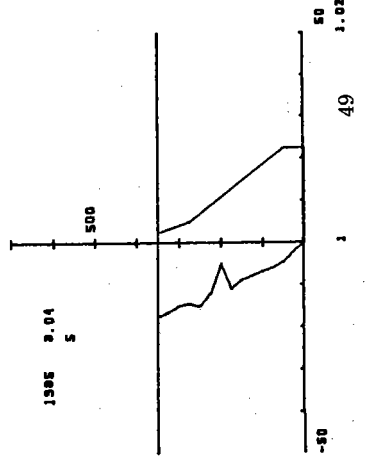
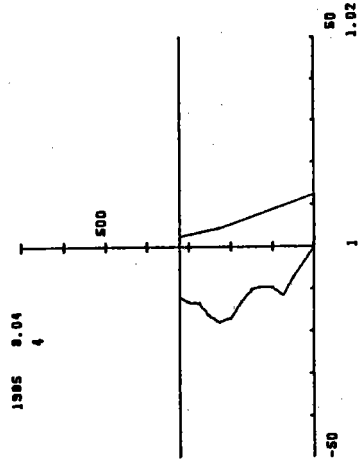
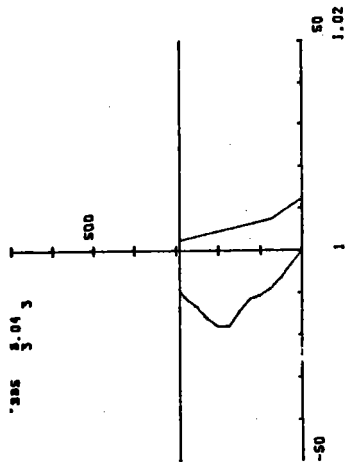


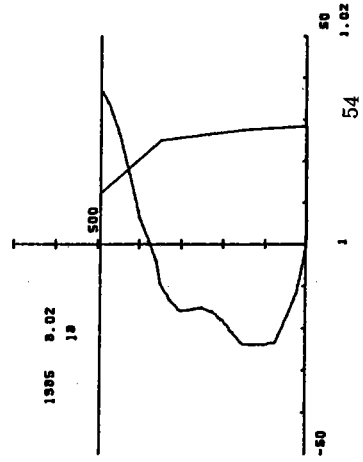
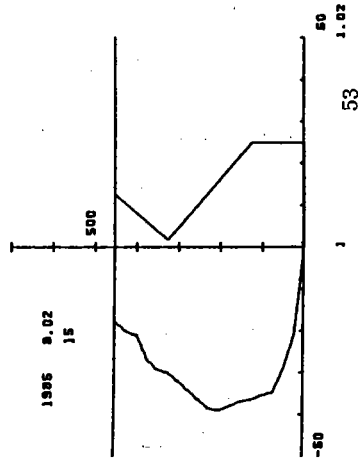
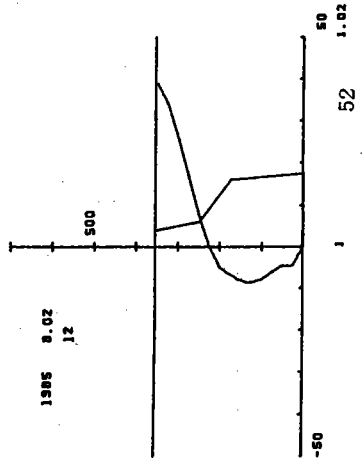
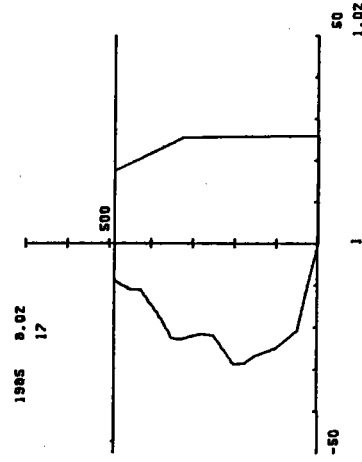
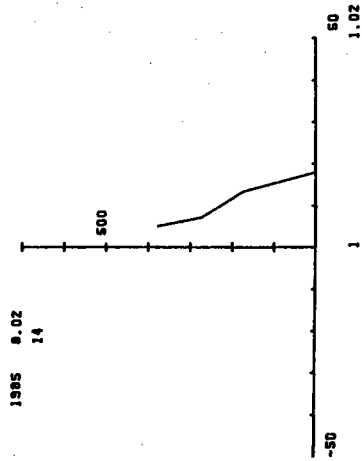
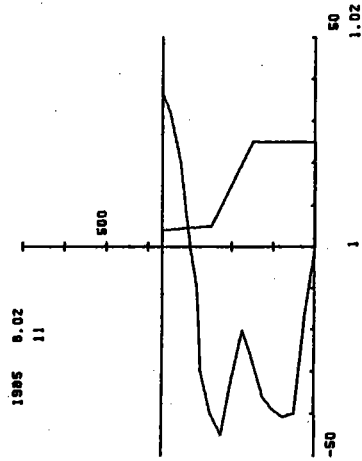
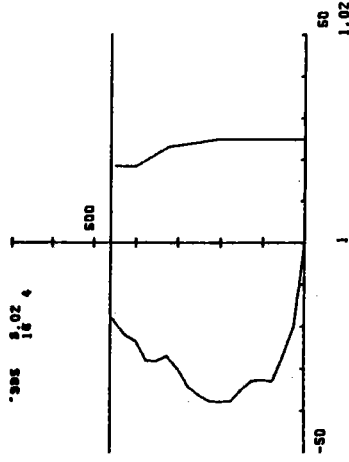
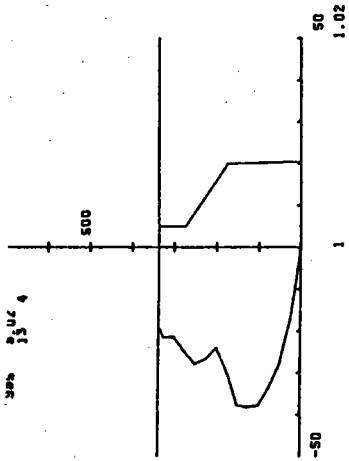
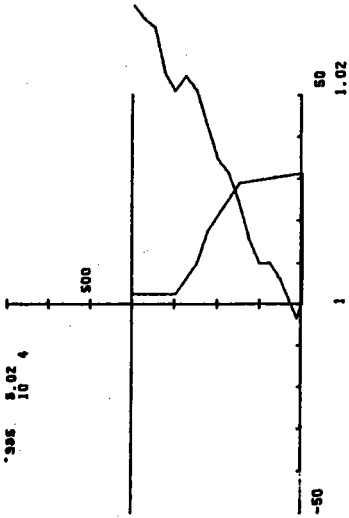


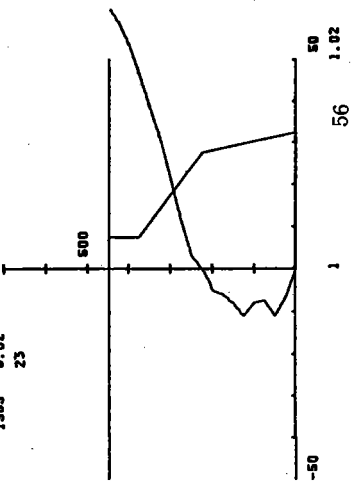
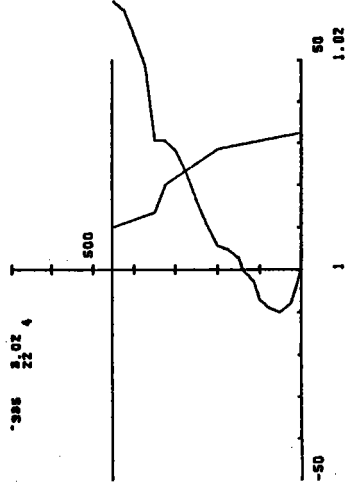
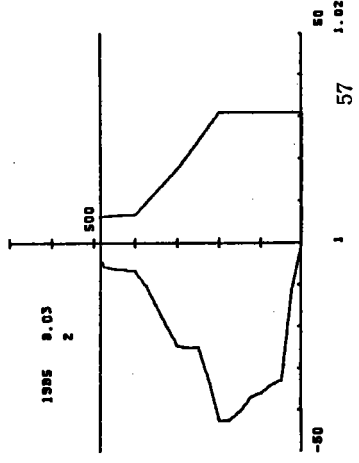
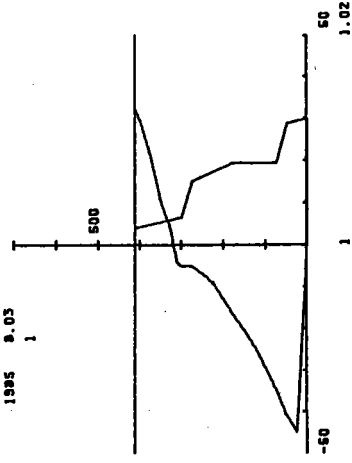
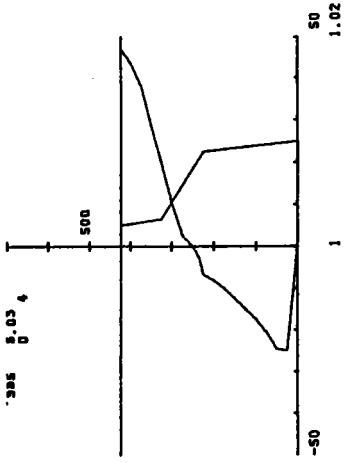
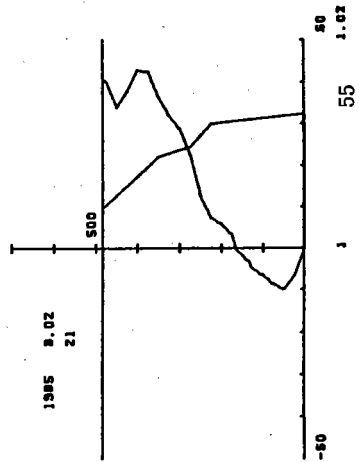
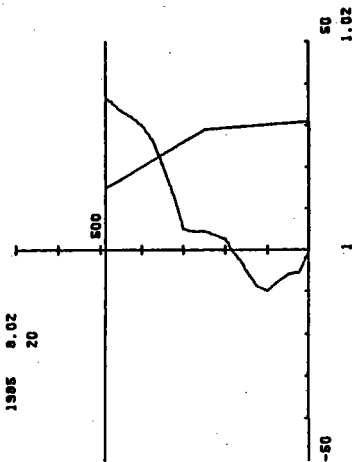
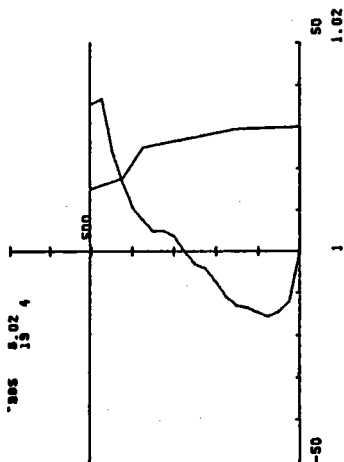


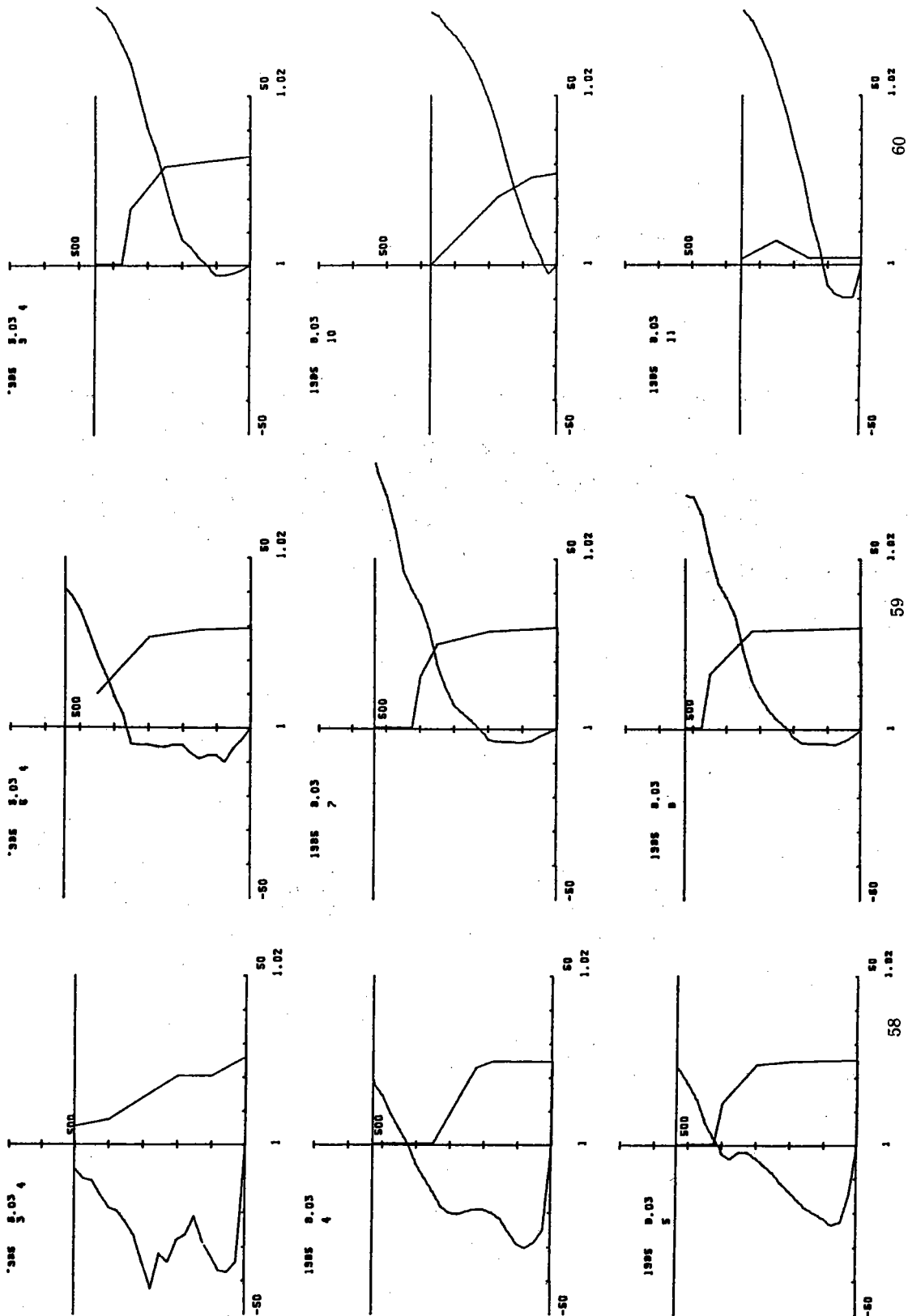


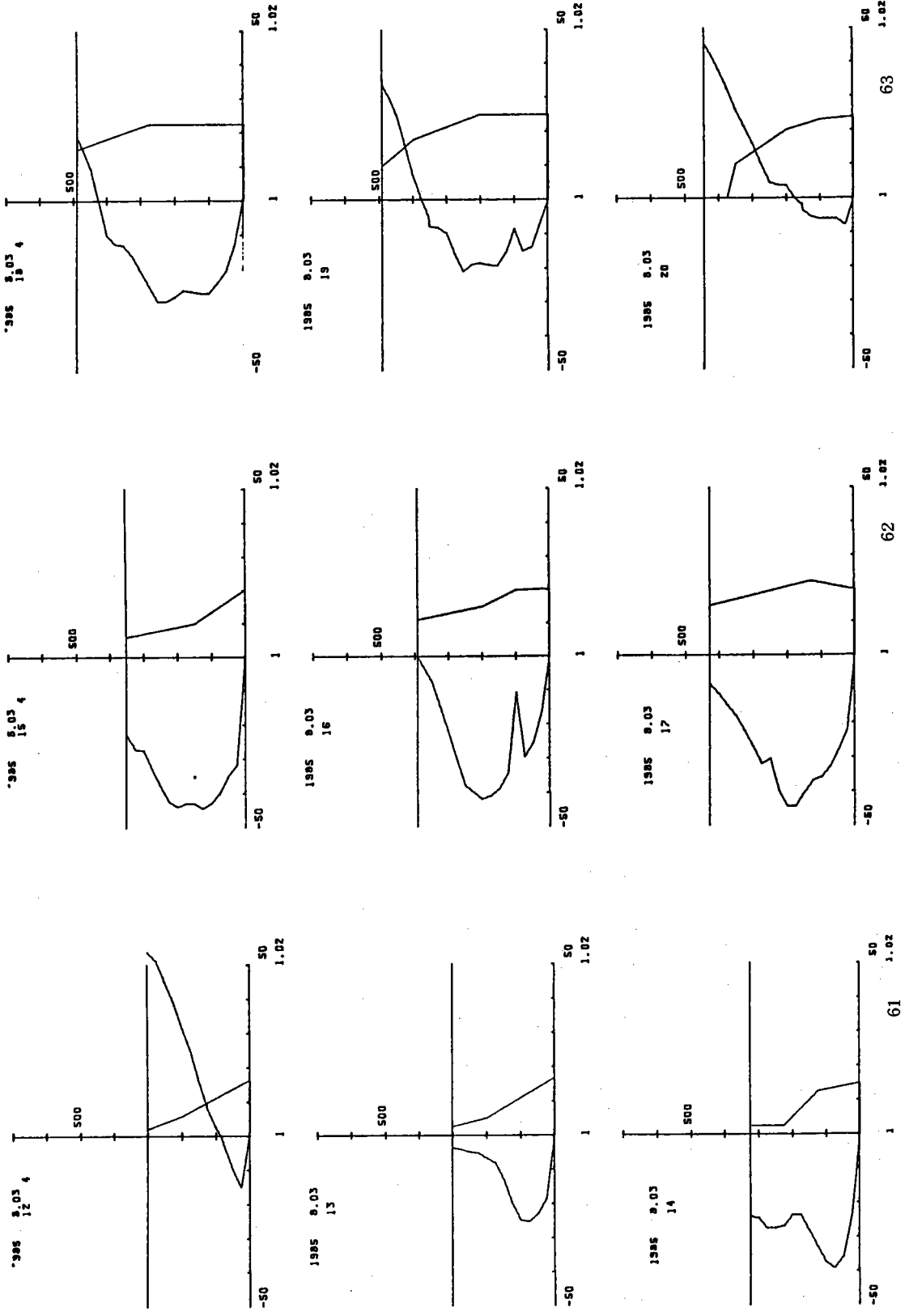


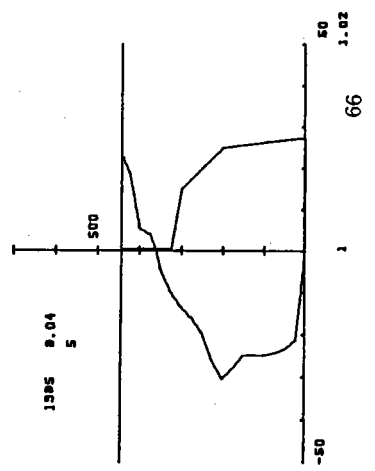
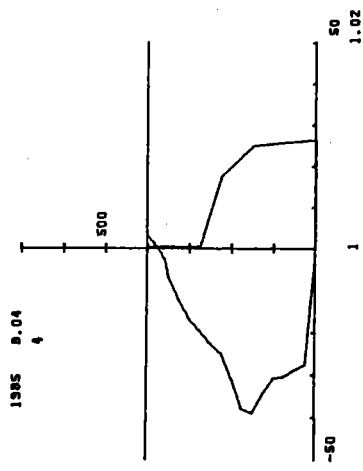
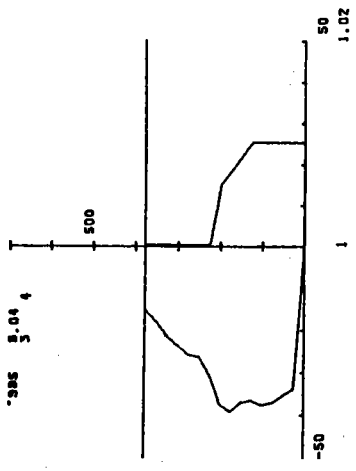
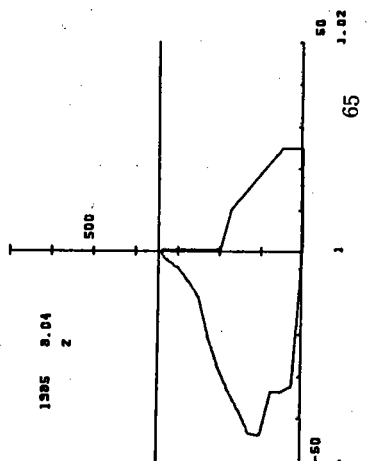
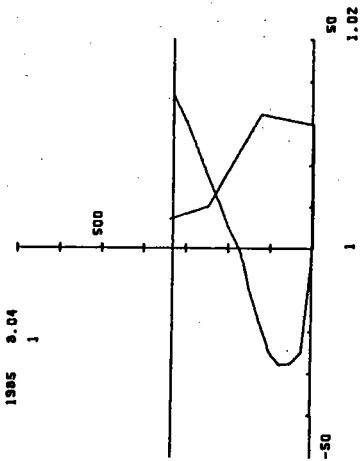
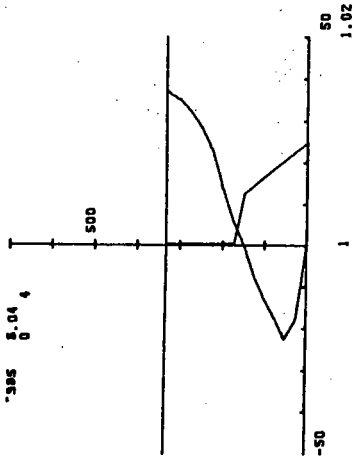
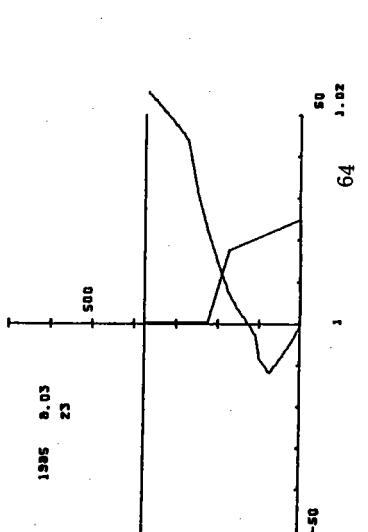
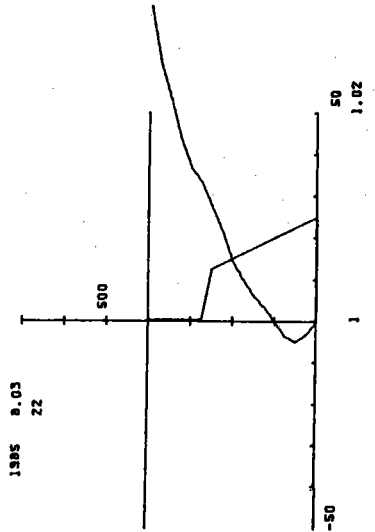
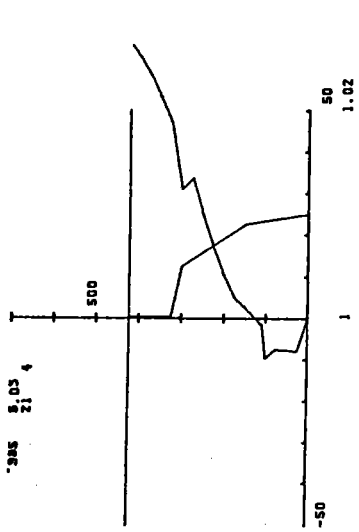


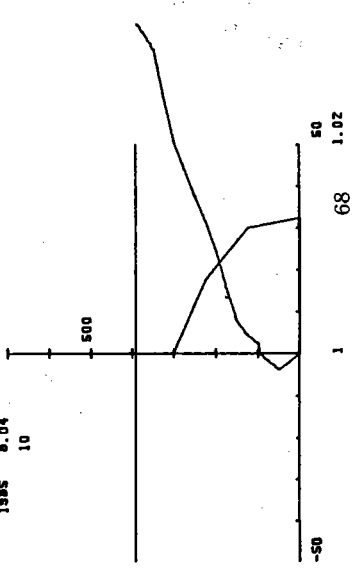
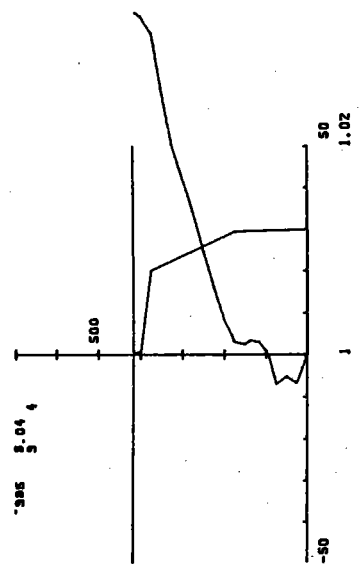
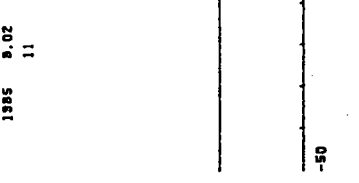
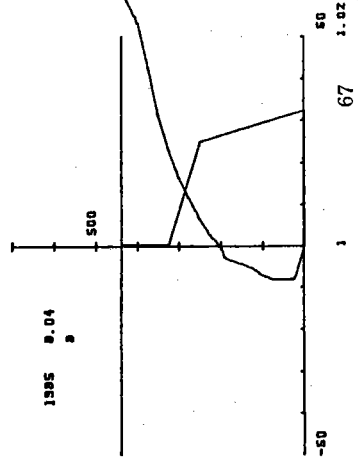
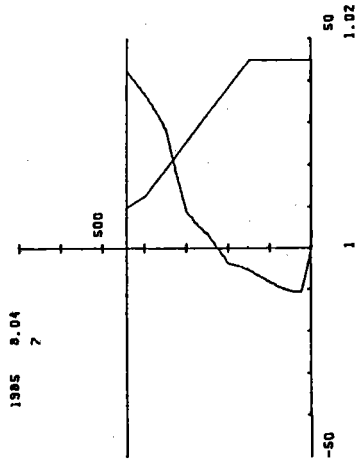
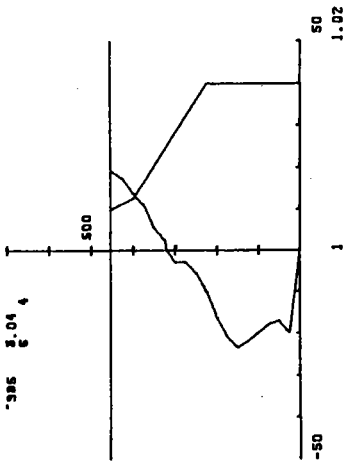


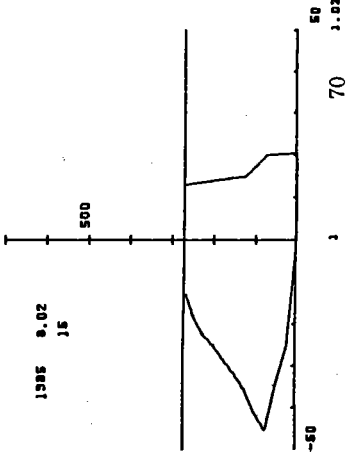
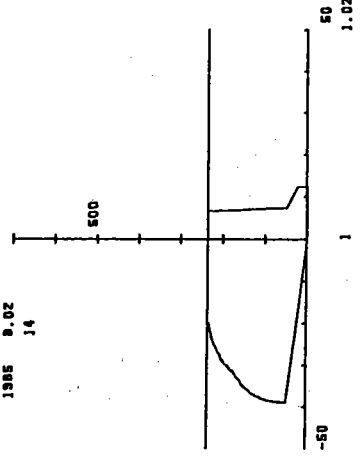
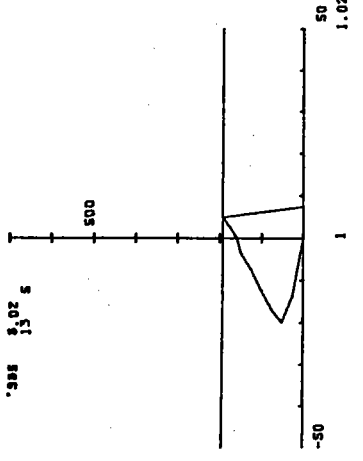
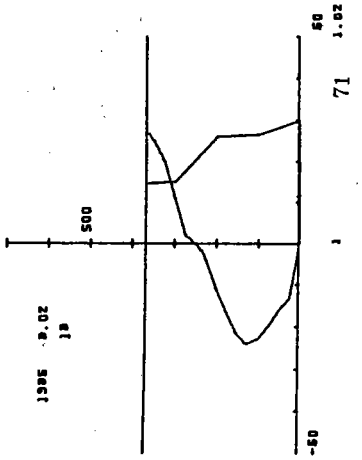
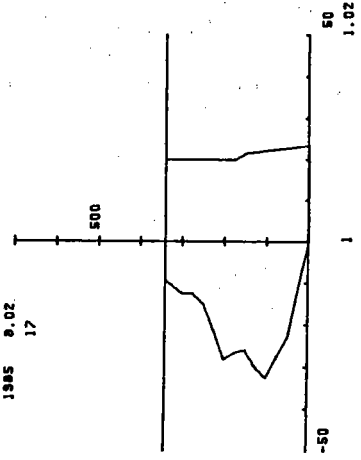
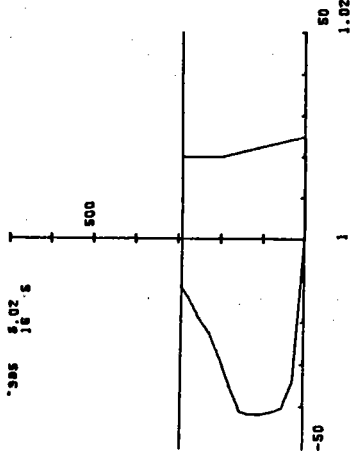
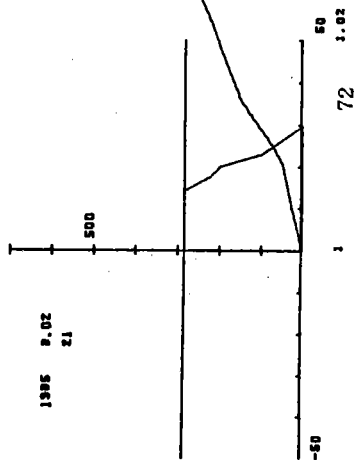
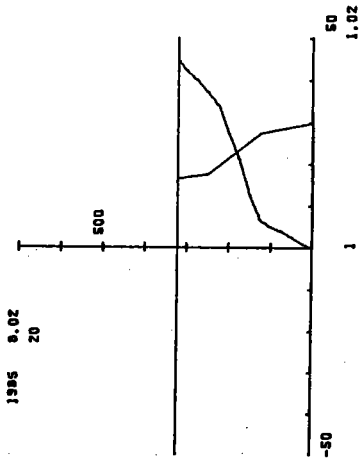
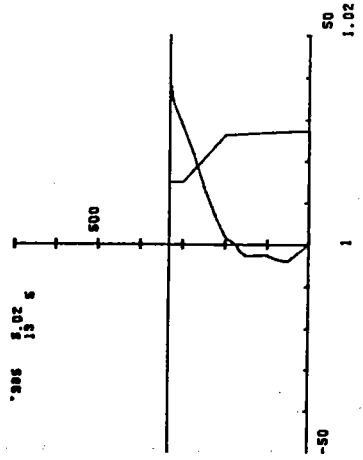


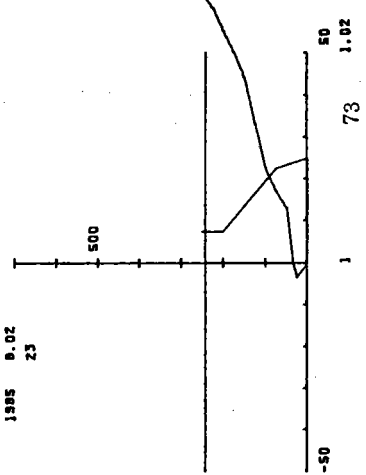
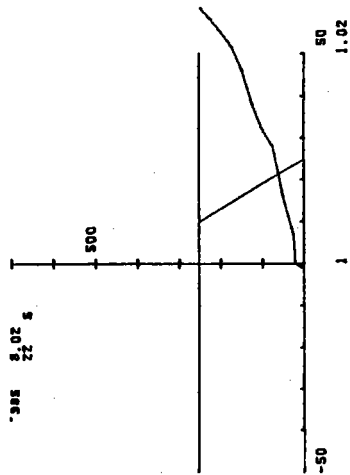
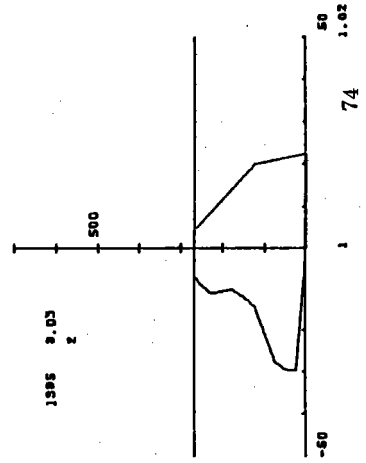
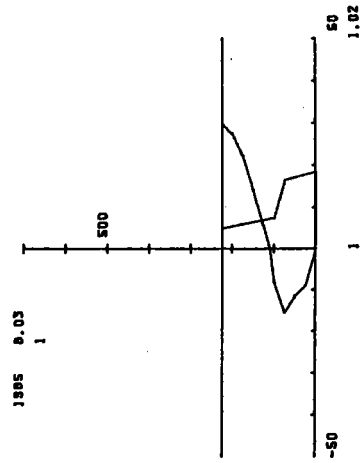
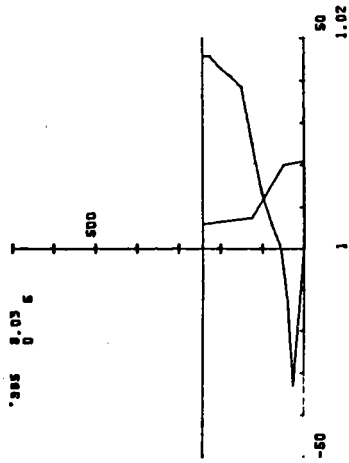
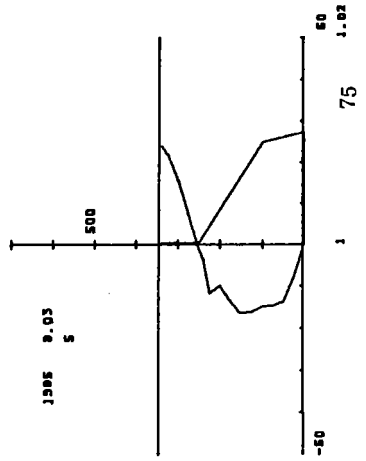
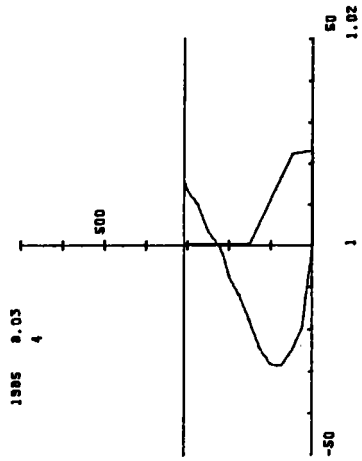
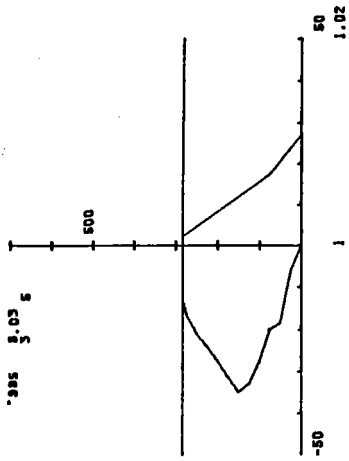


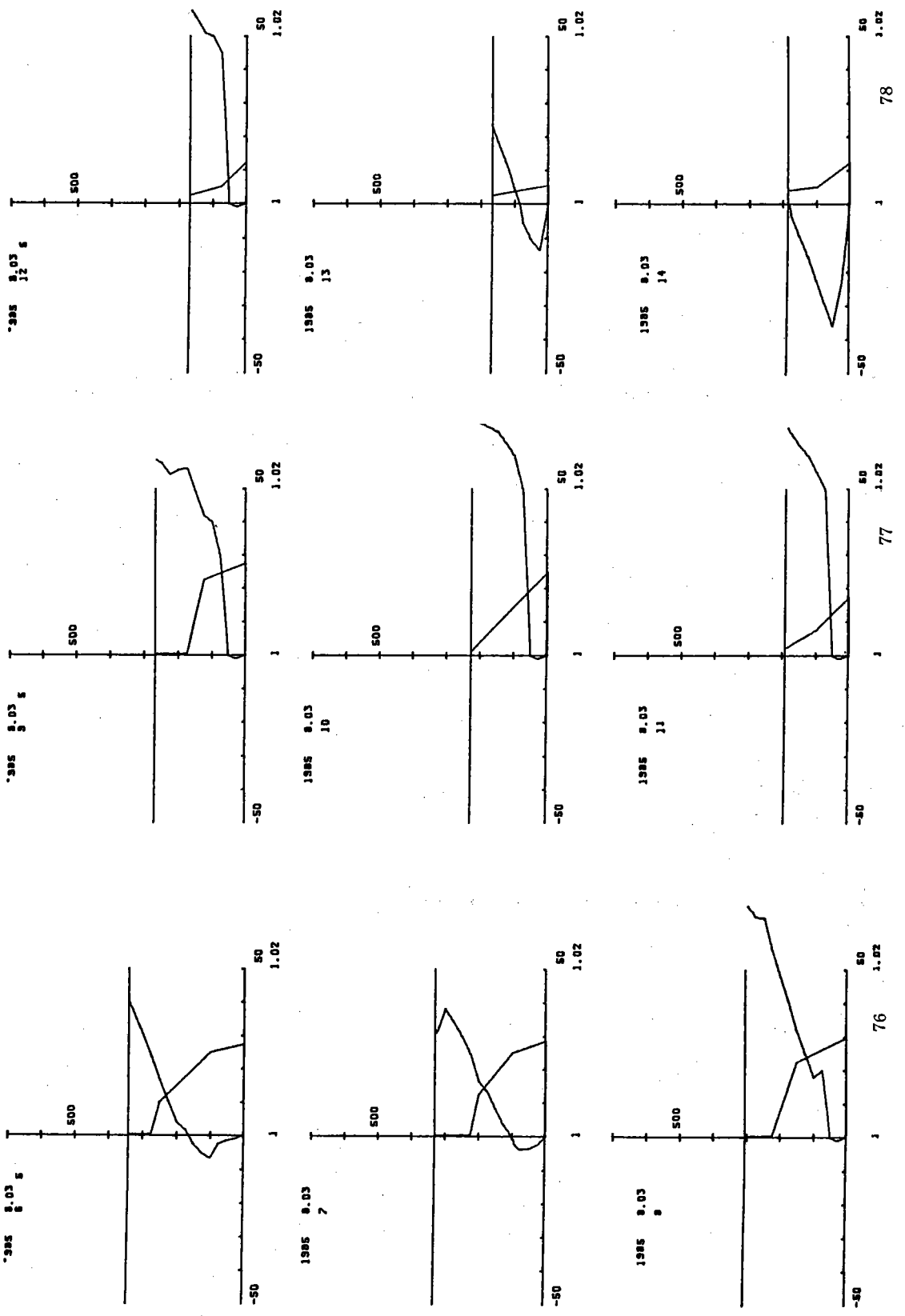




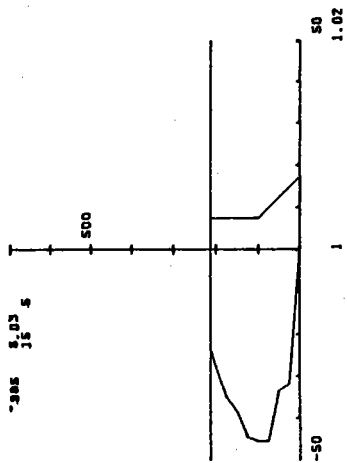




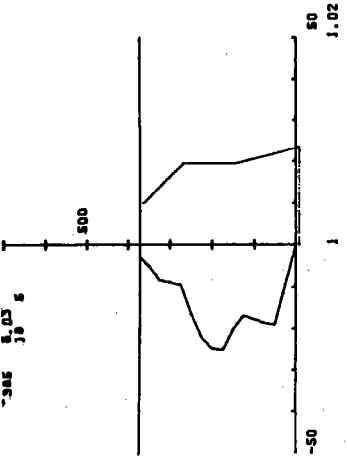




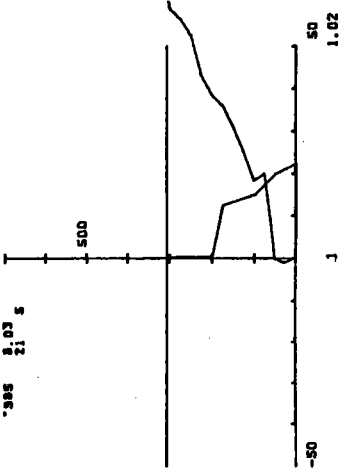
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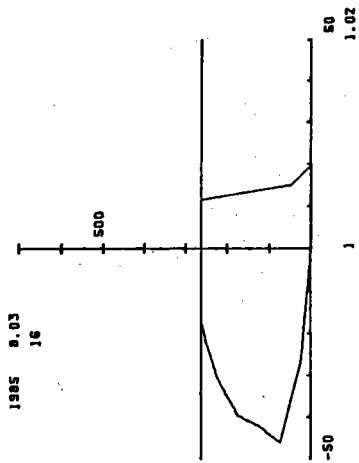
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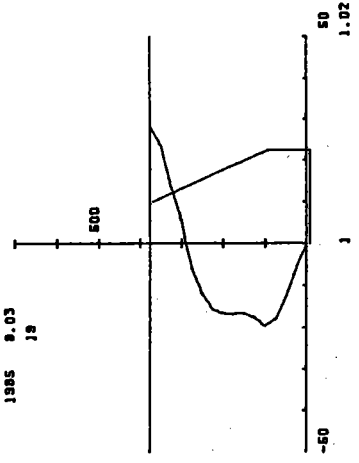
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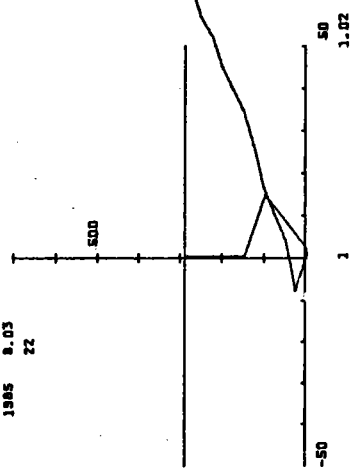
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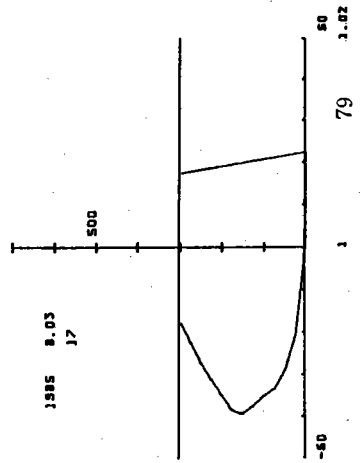
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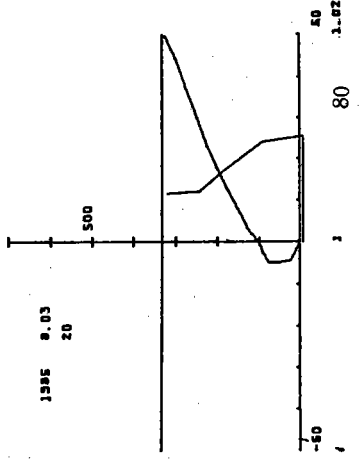
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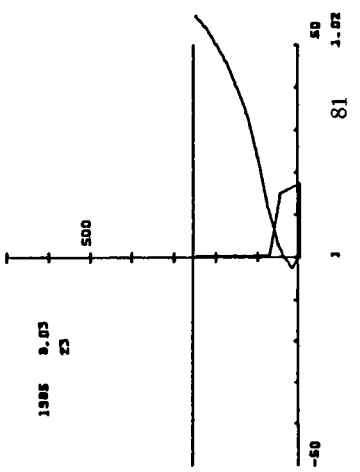
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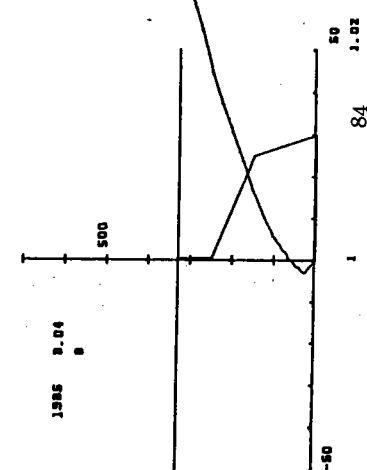
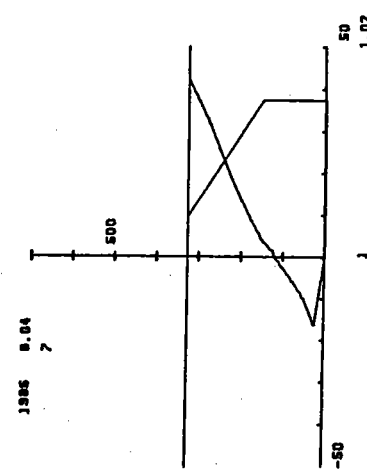
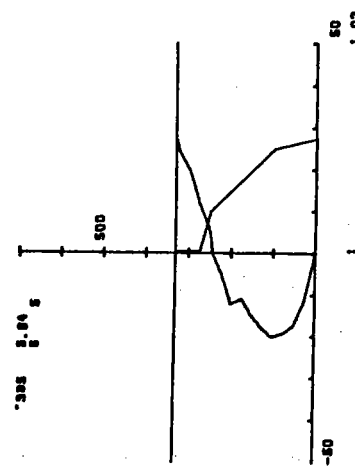
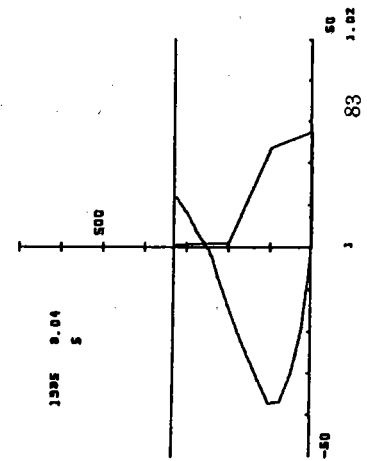
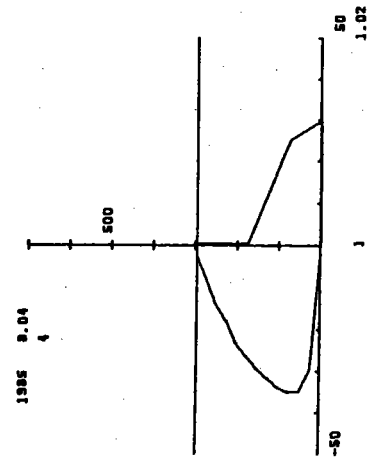
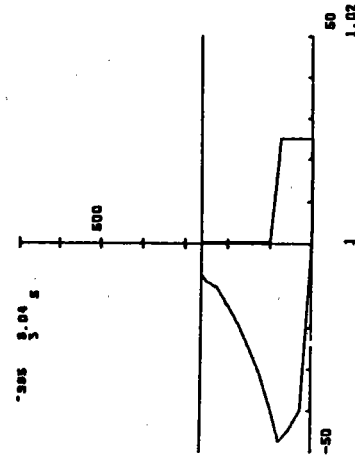
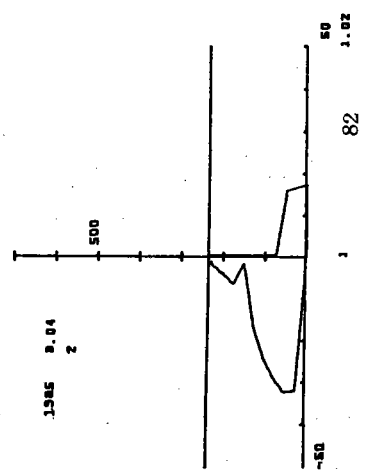
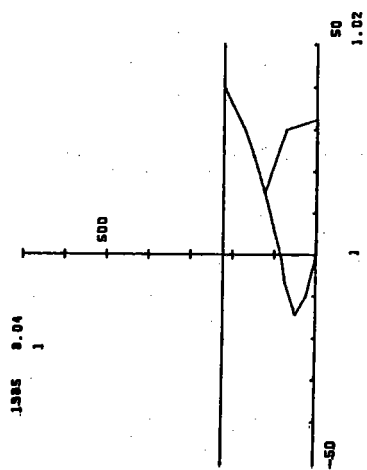
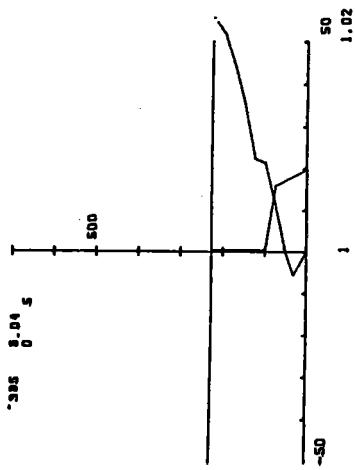


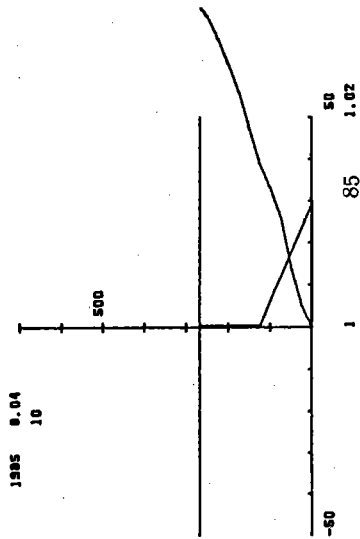
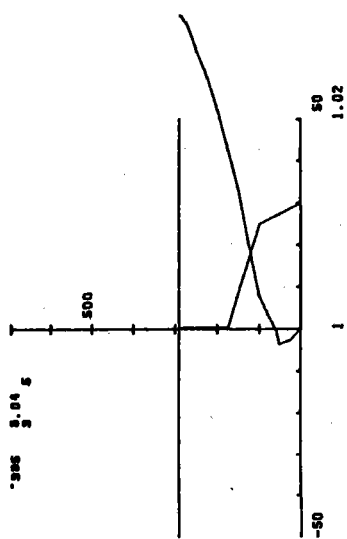
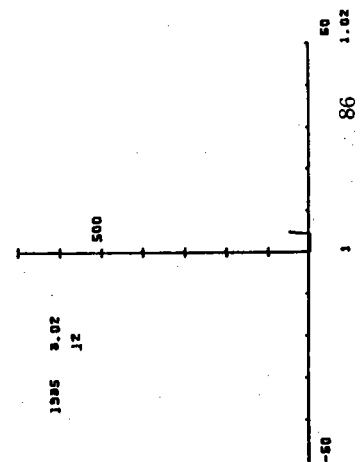
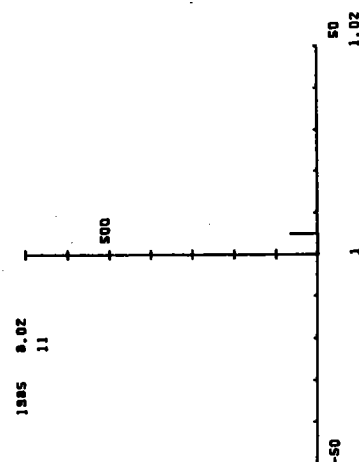
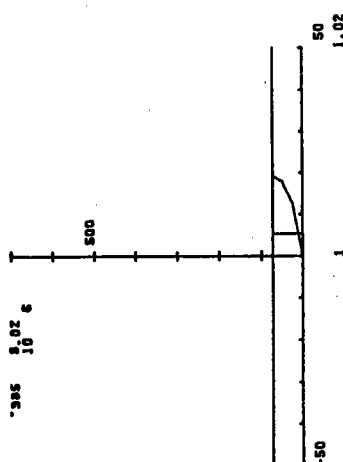
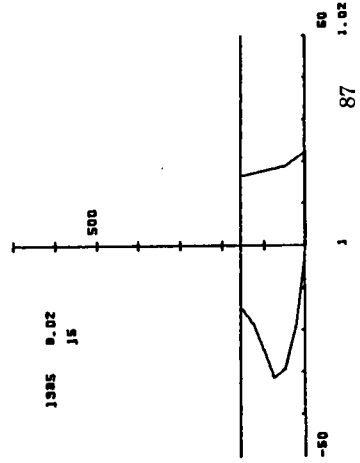
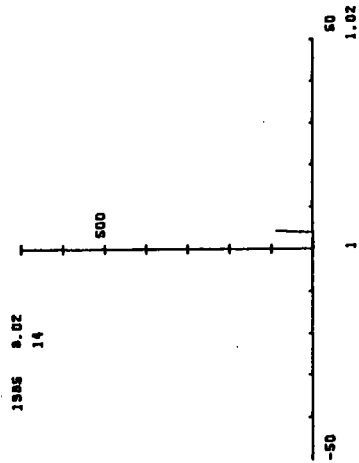
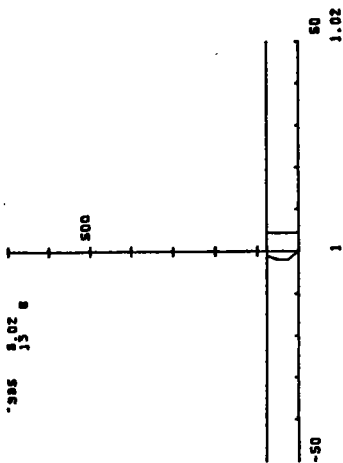
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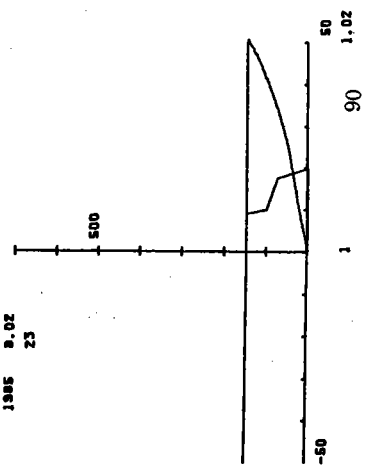
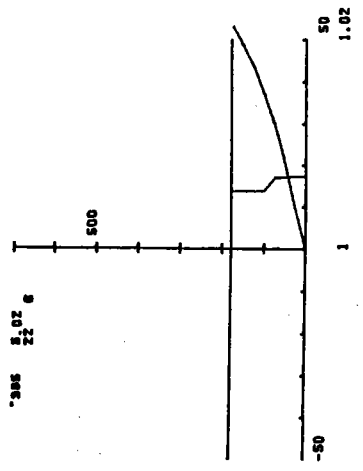
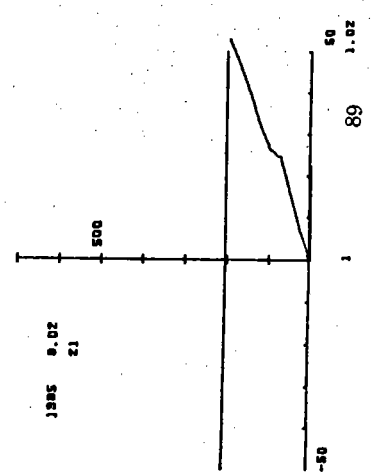
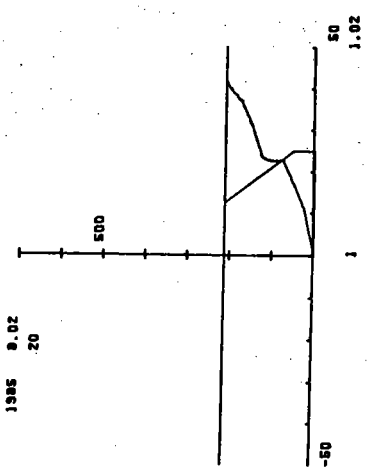
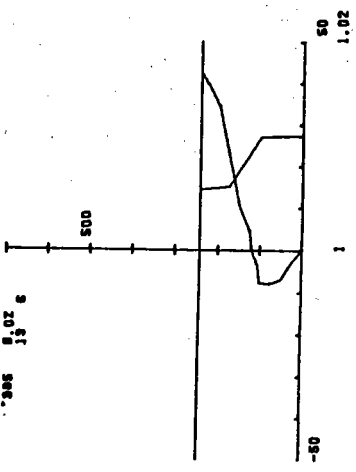
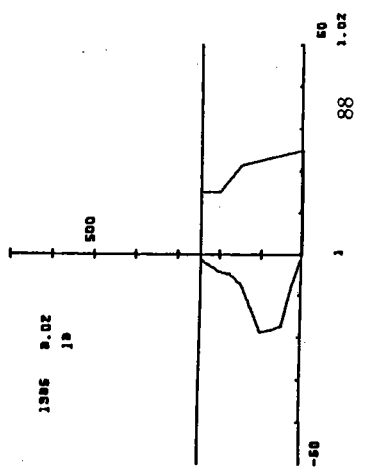
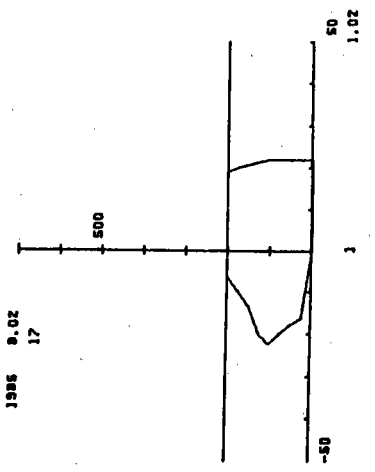
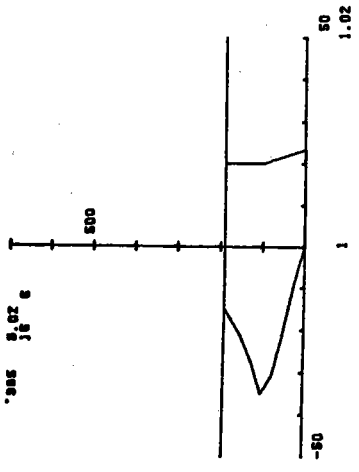


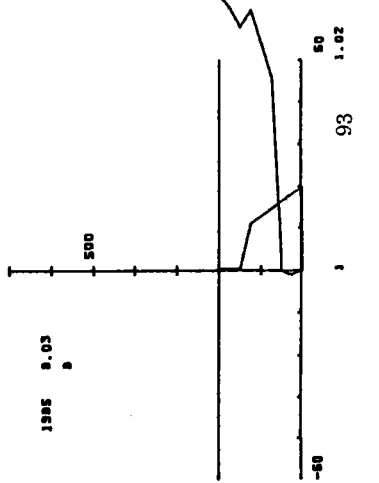
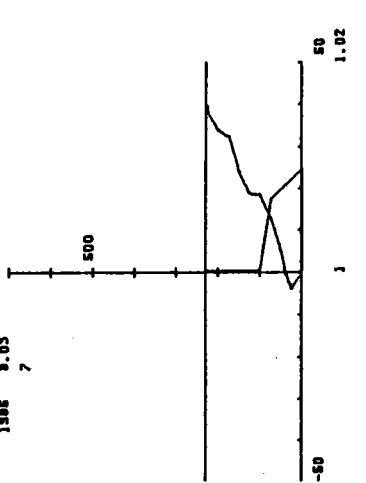
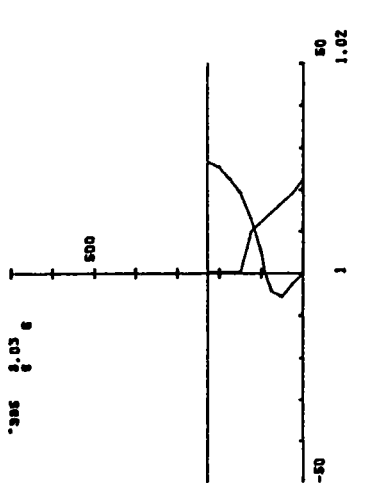
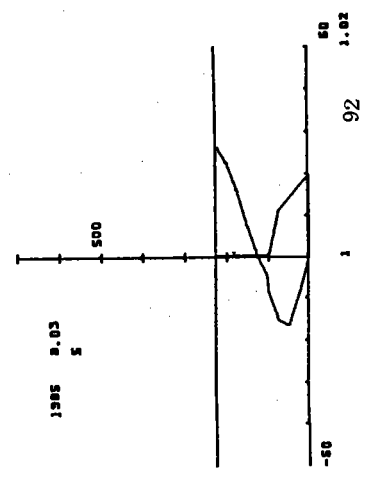
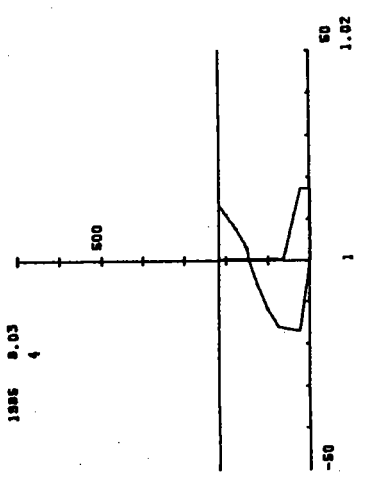
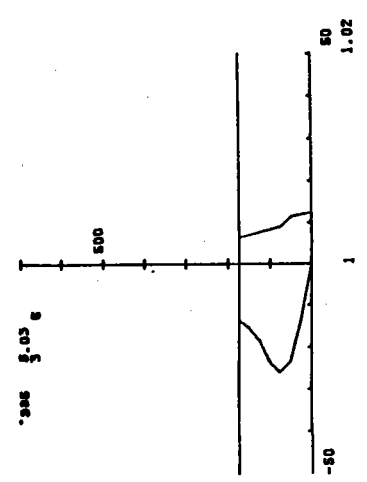
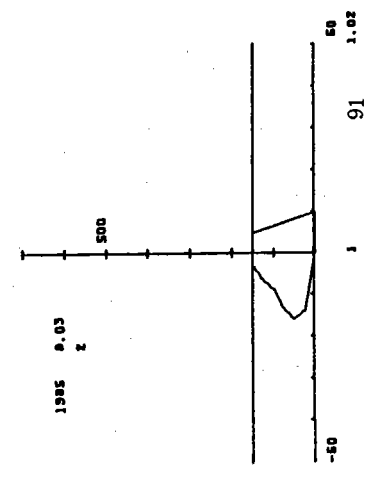
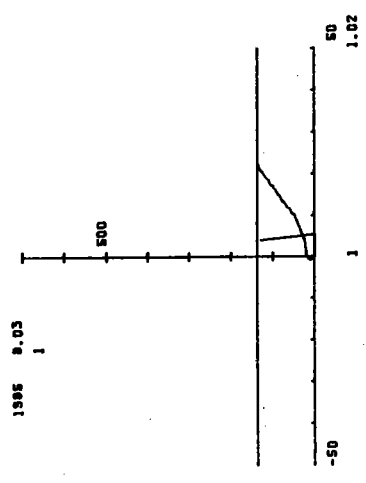
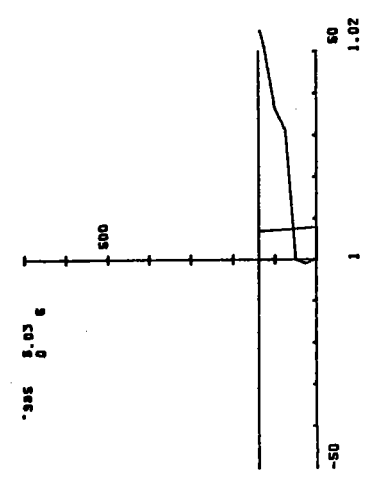
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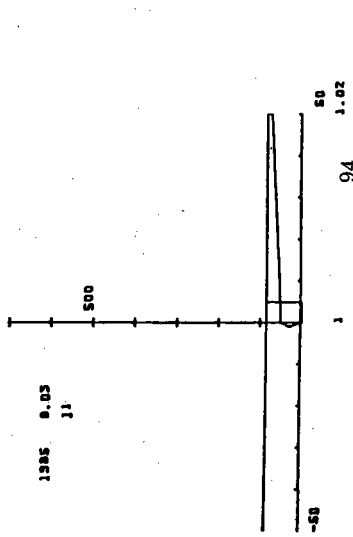
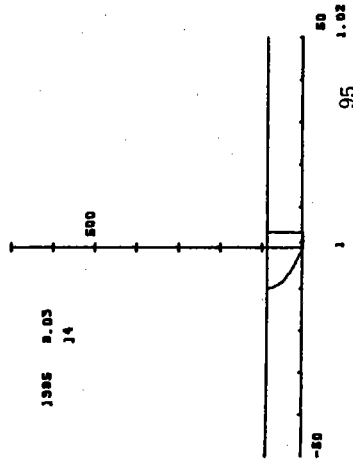
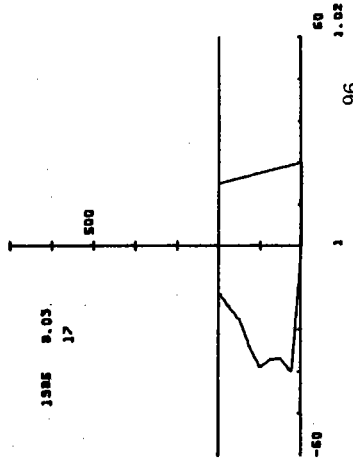
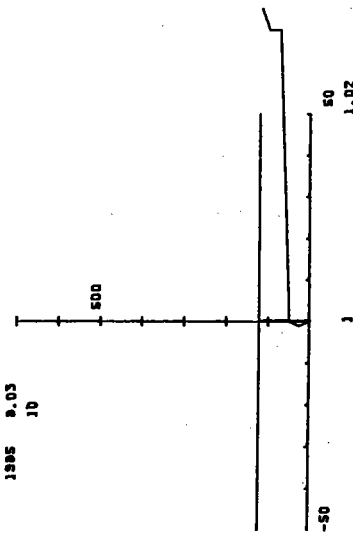
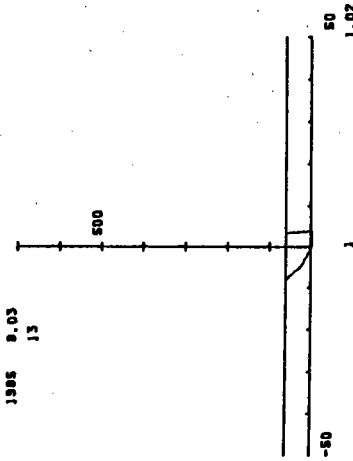
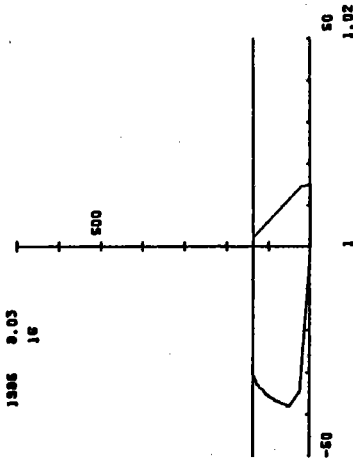
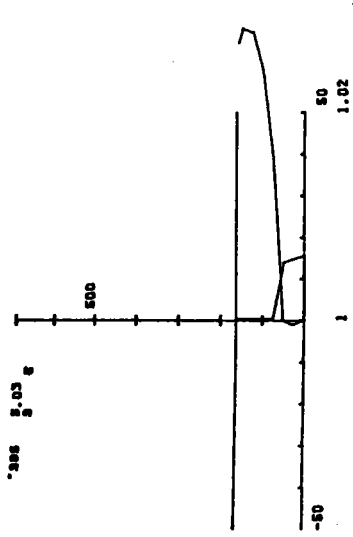
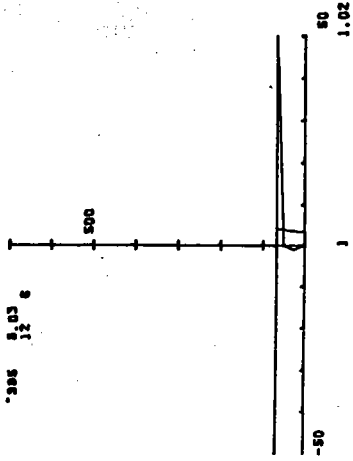
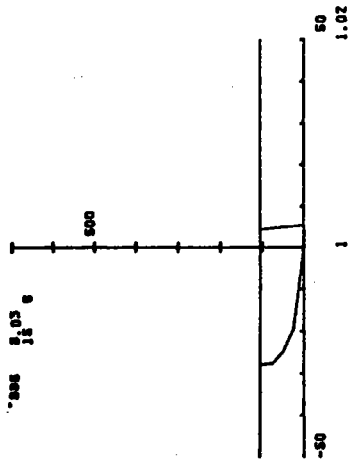


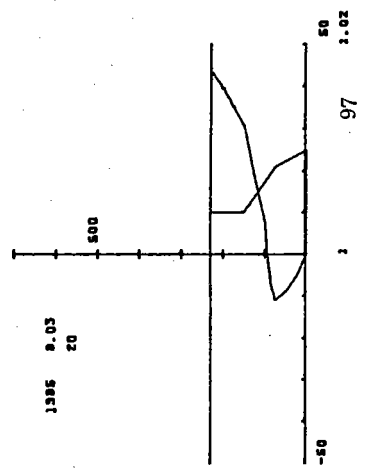
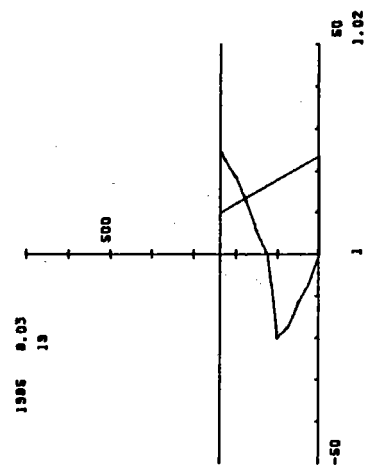
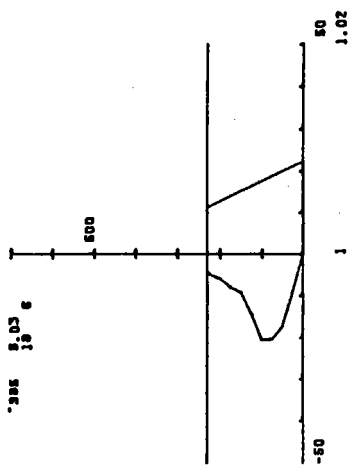
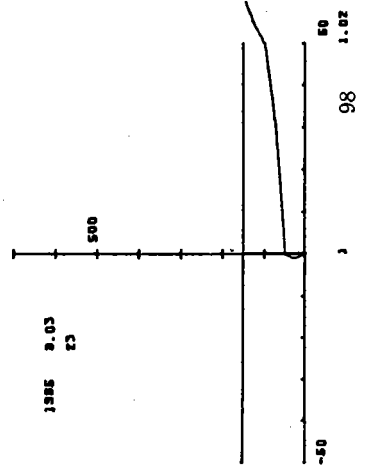
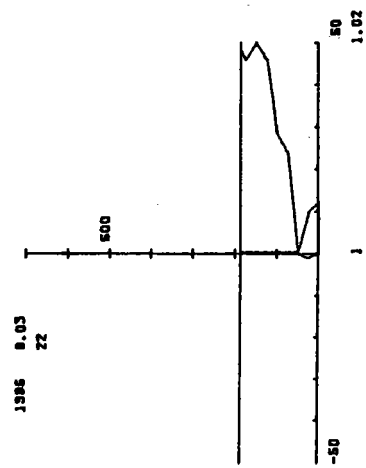
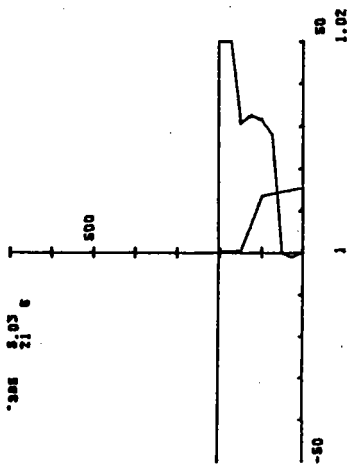
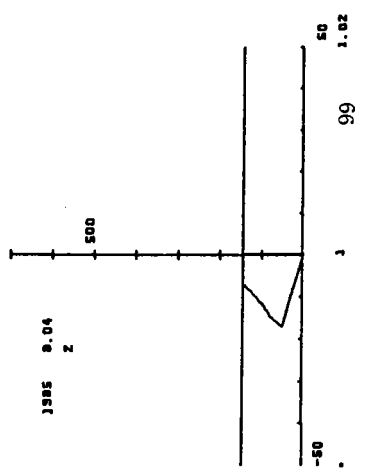
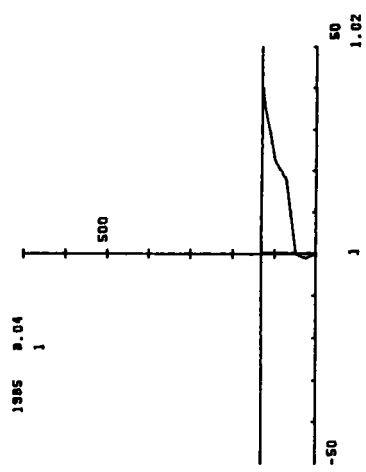
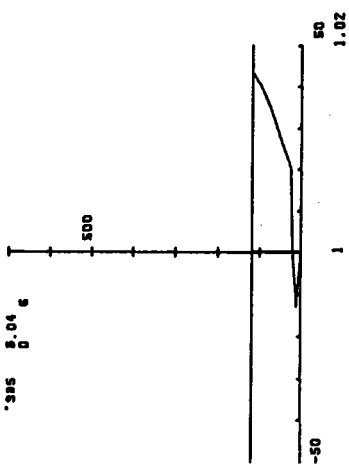


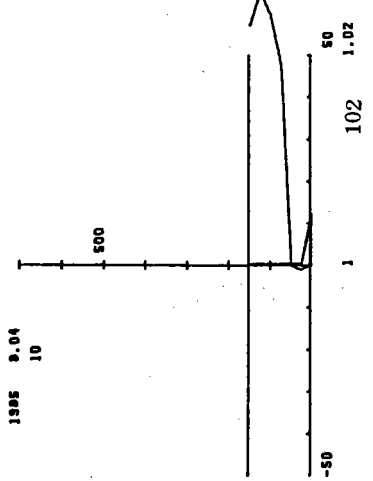
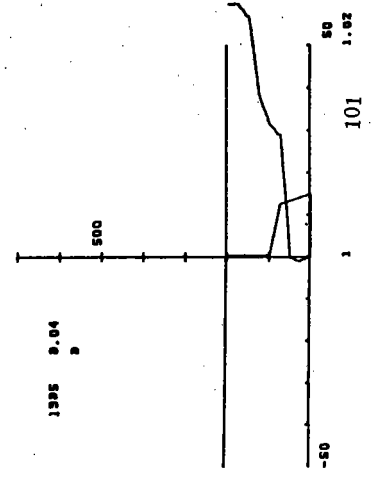
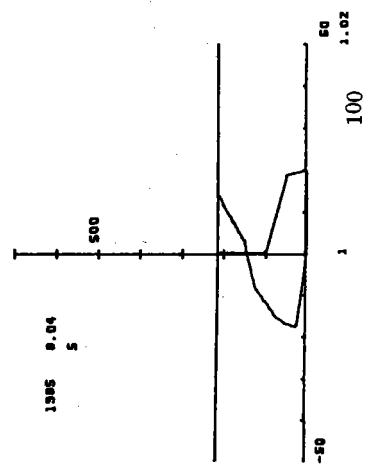
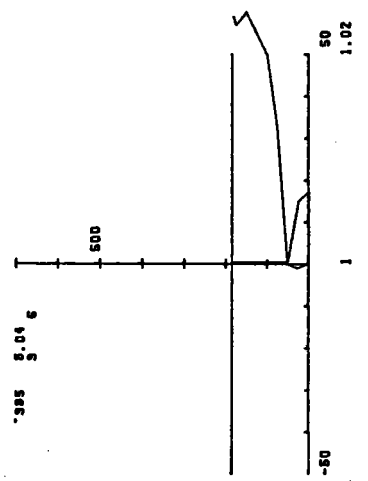
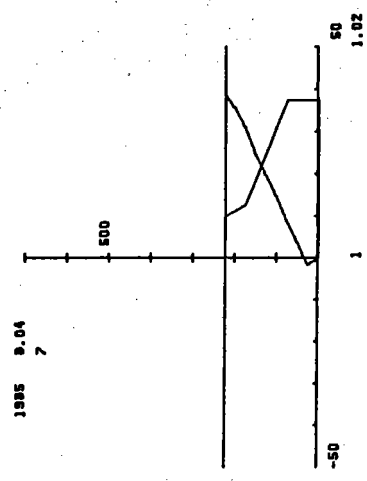
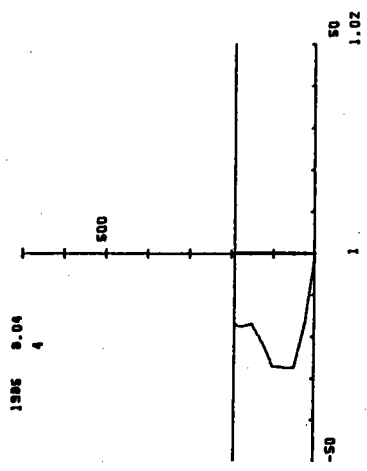
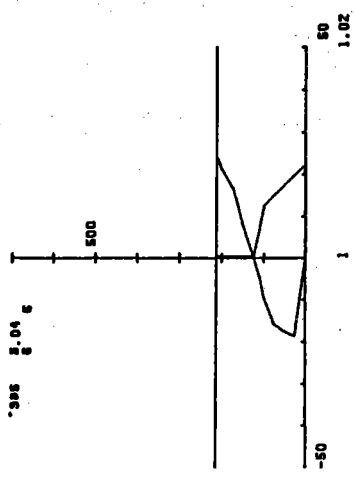
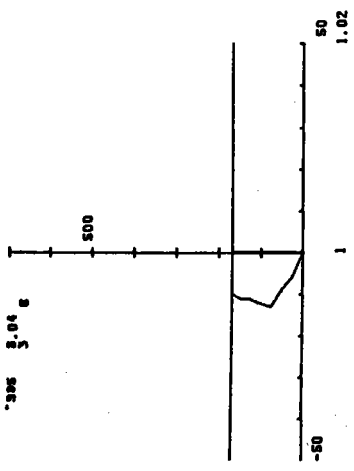






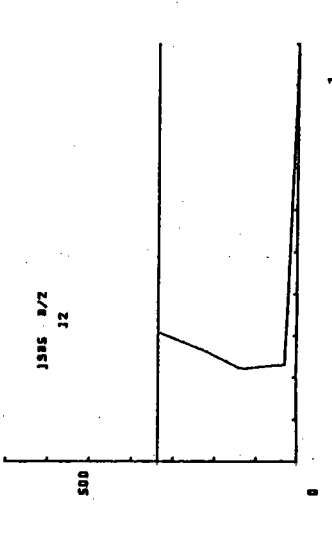
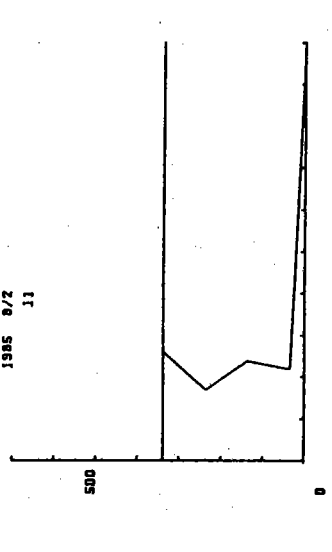
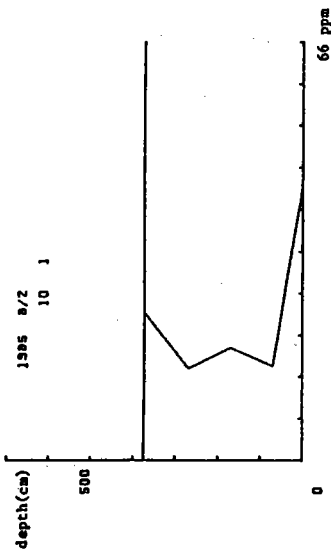
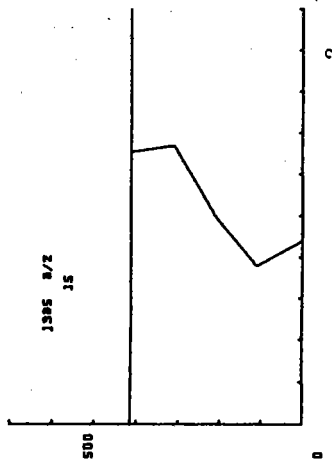
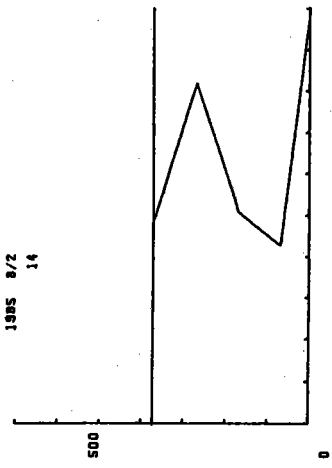
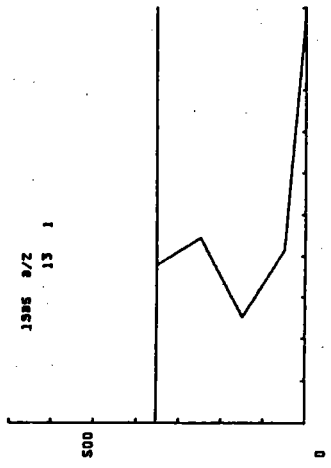
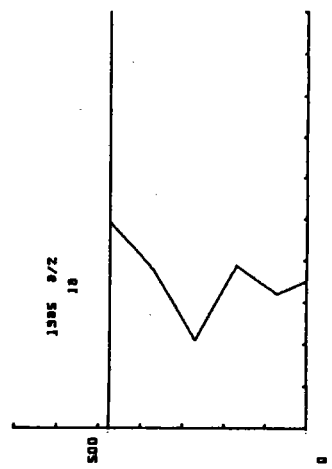
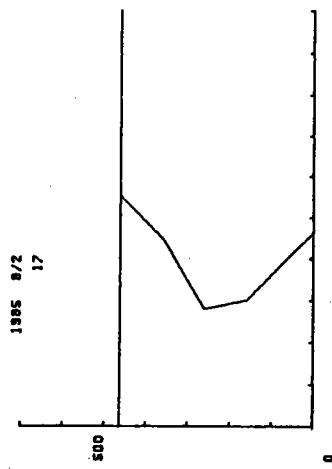
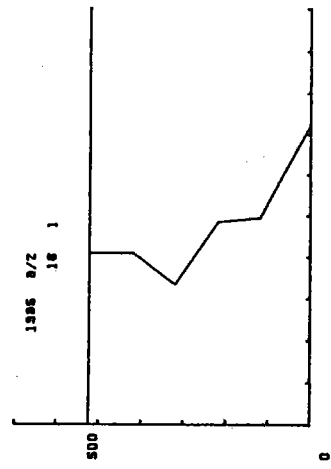






資料 - 4 浮遊物質濃度分布 (1985年夏期)

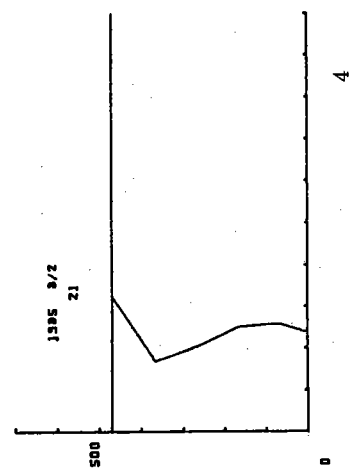
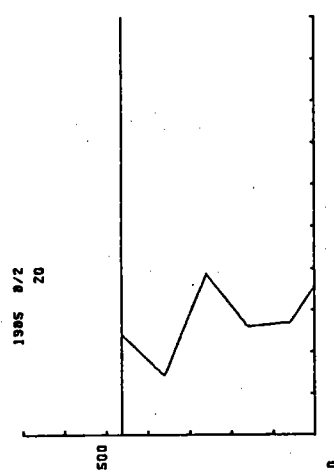
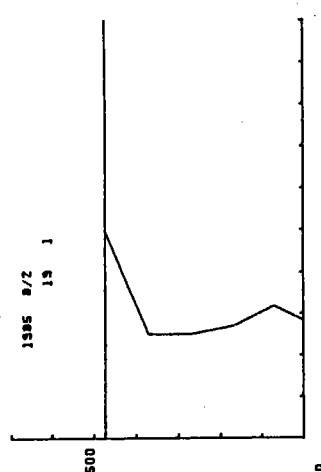
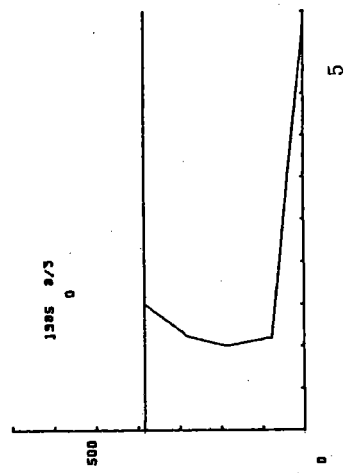
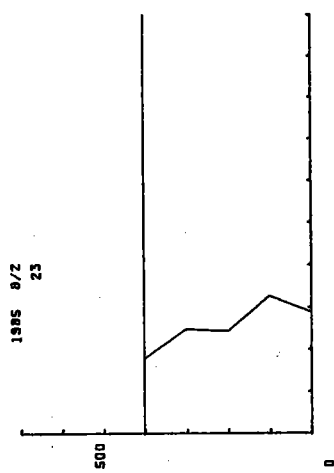
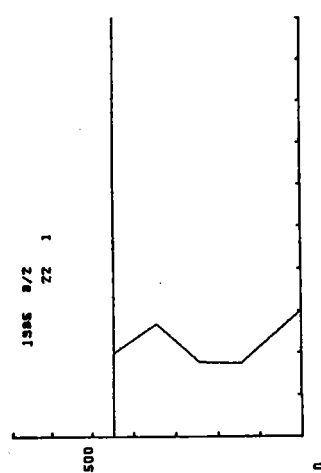
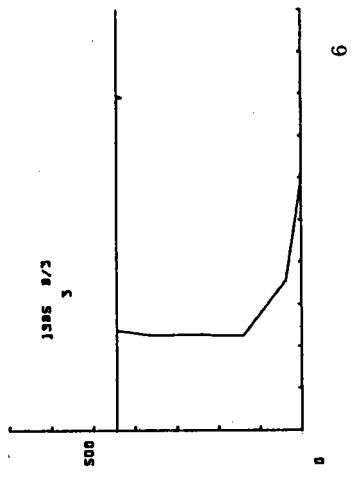
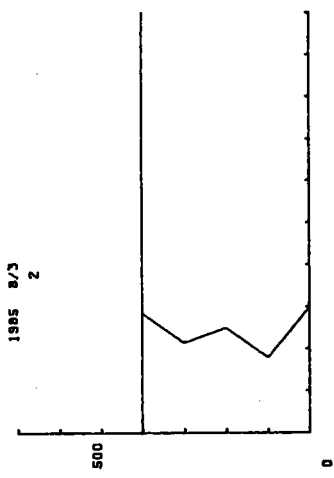
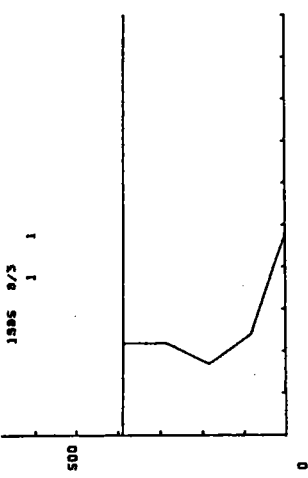
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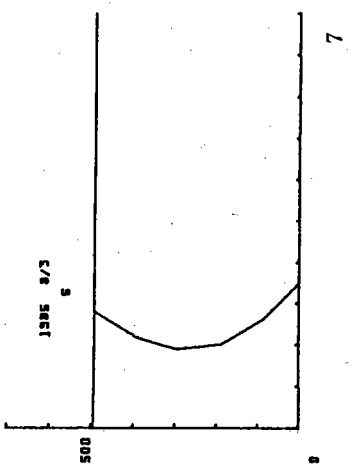
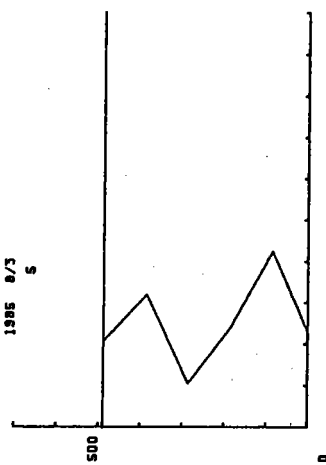
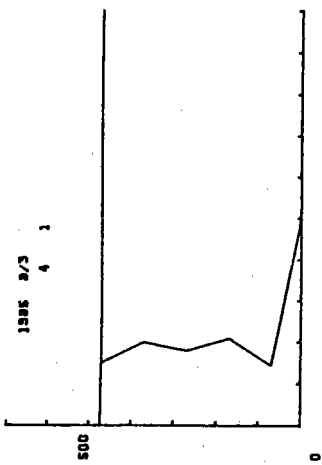
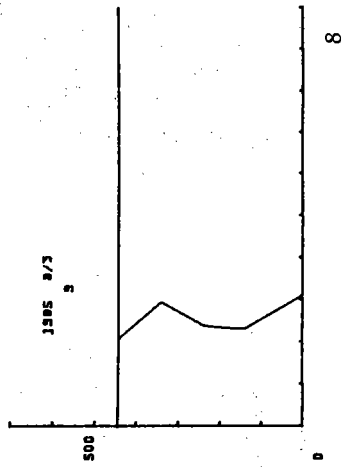
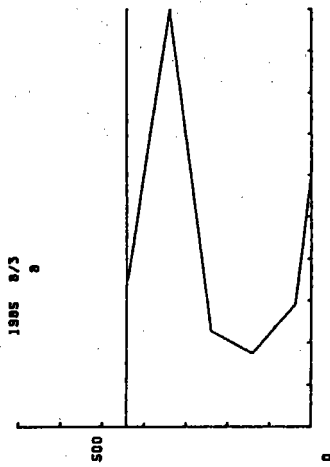
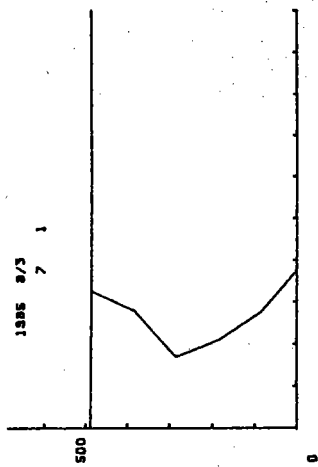
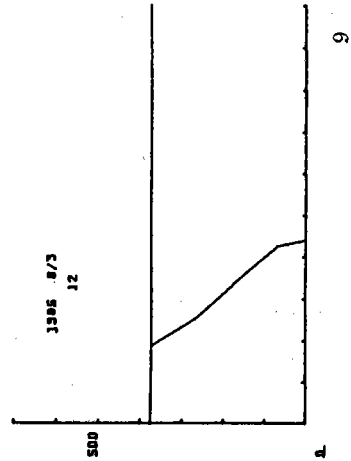
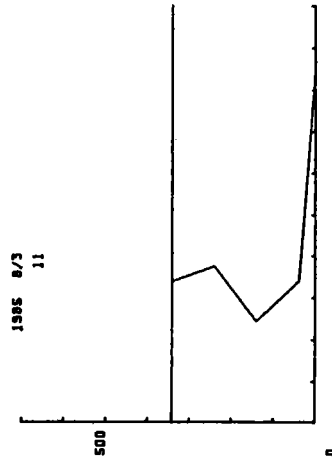
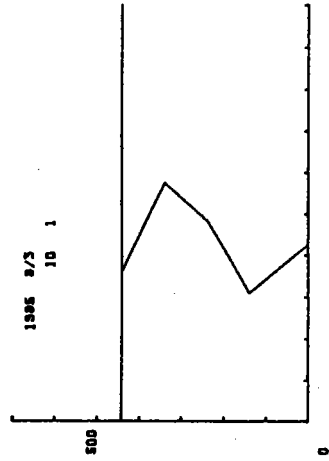
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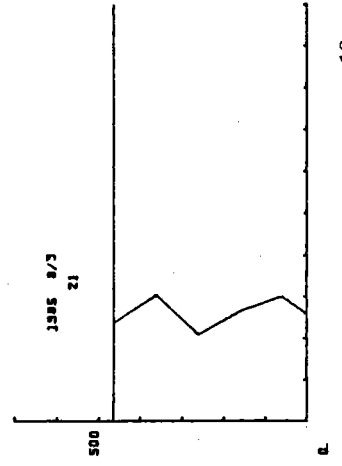
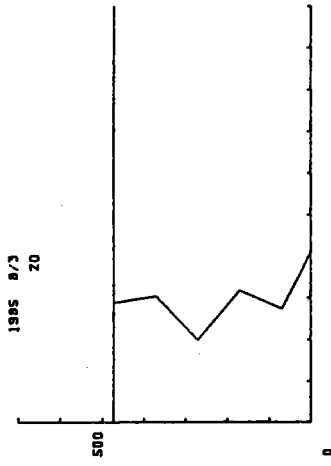
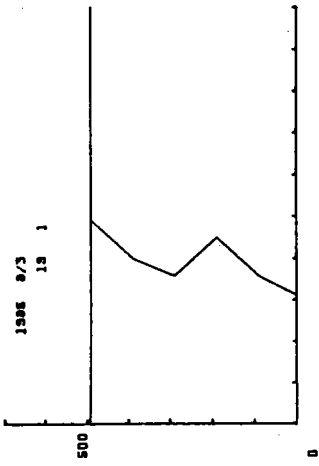


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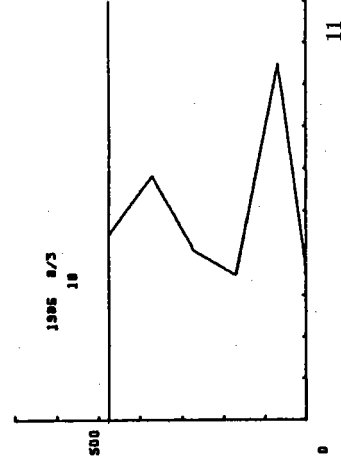
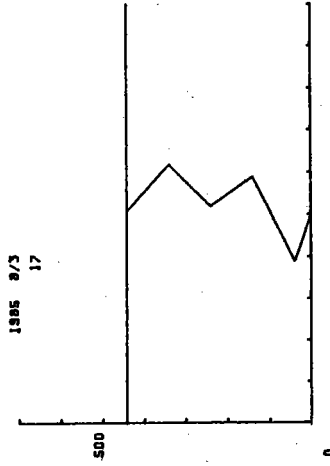
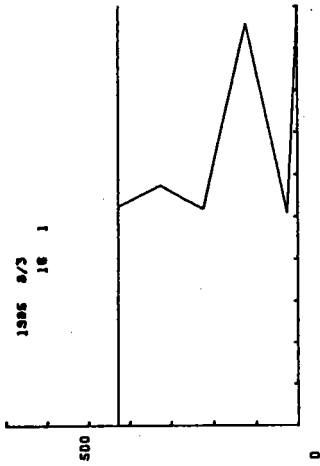
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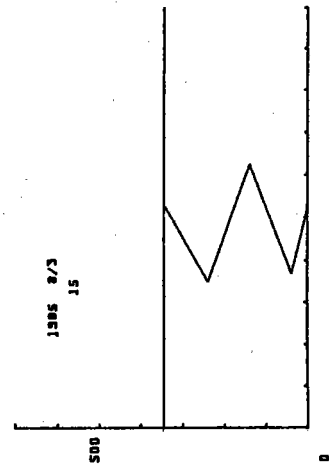
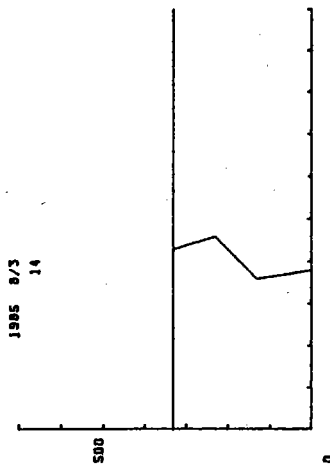
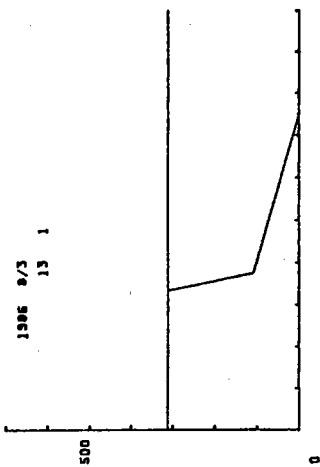




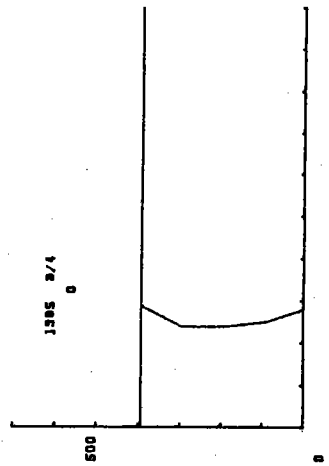
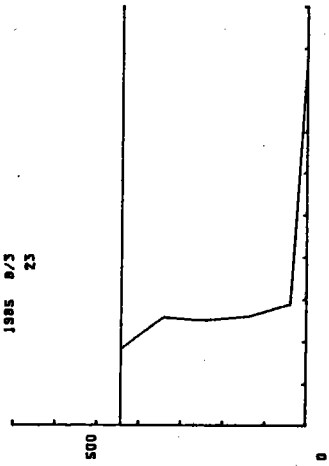
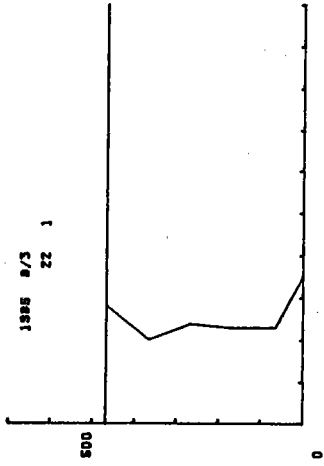
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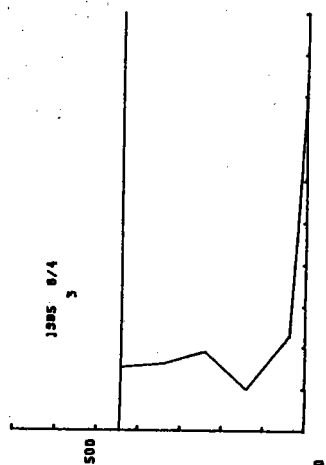
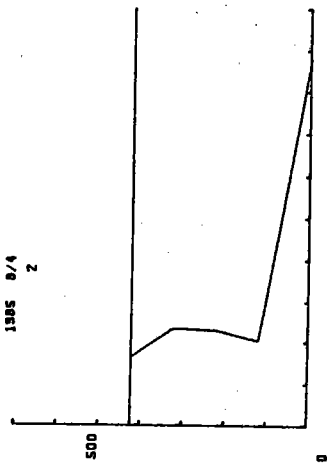
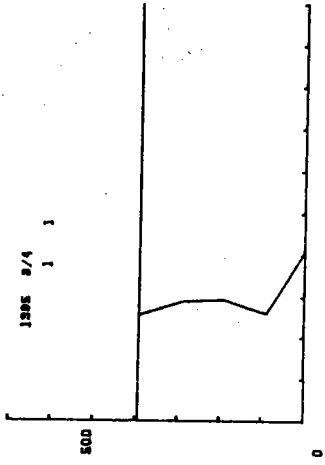
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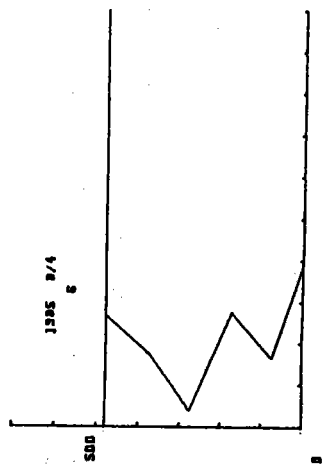
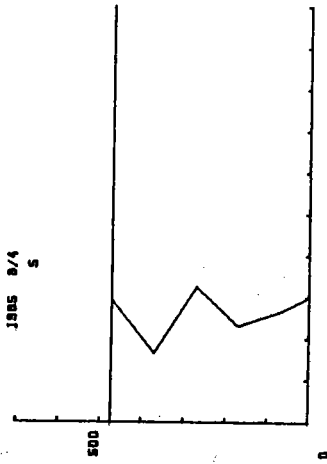
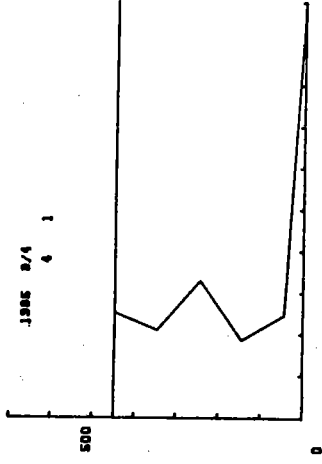
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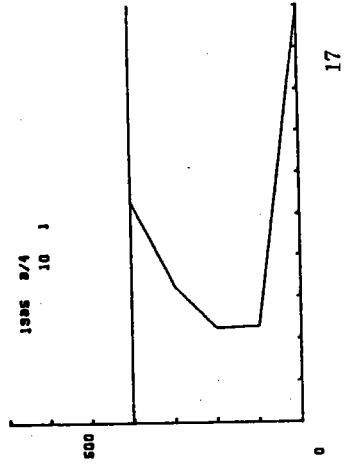
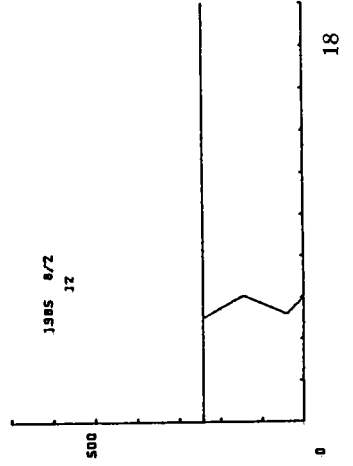
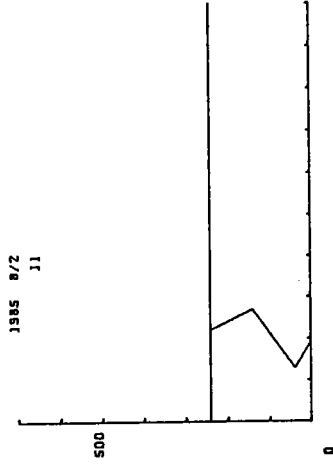
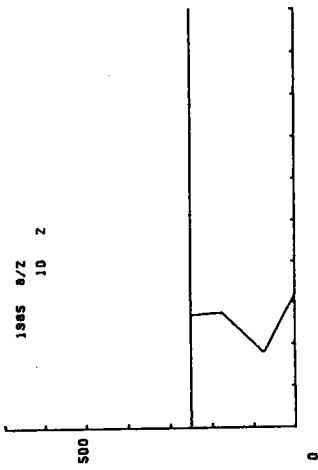
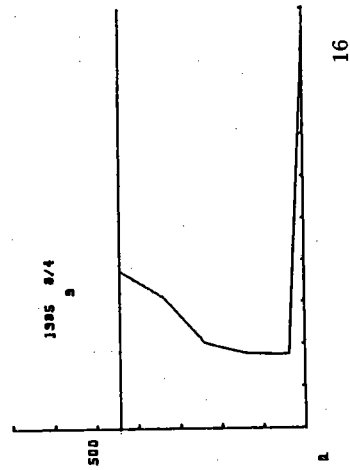
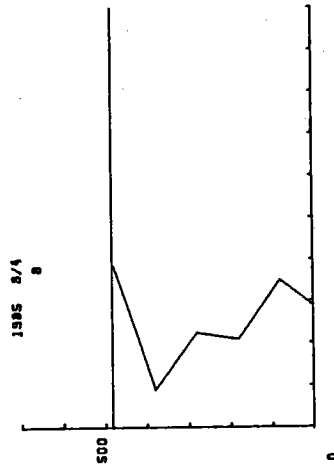
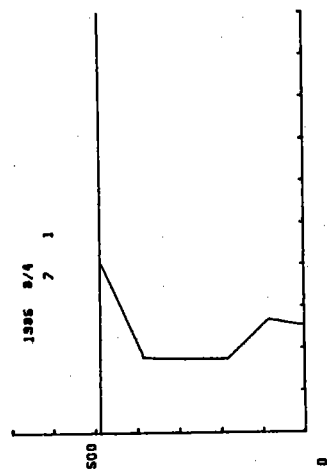
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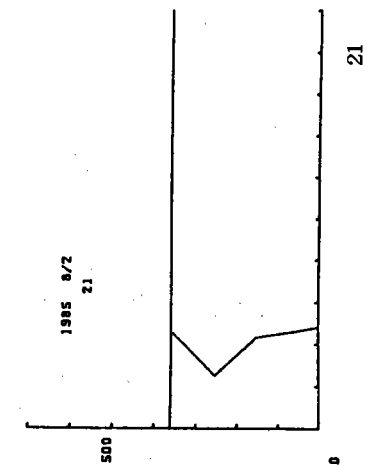
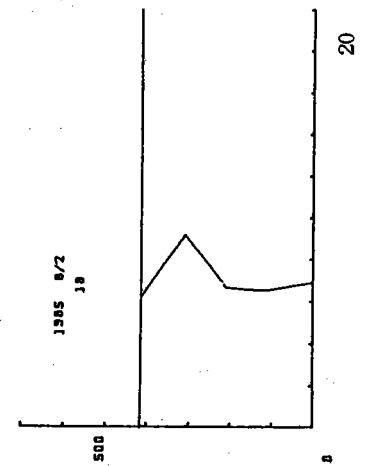
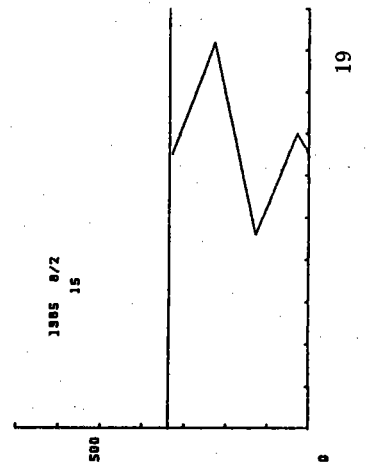
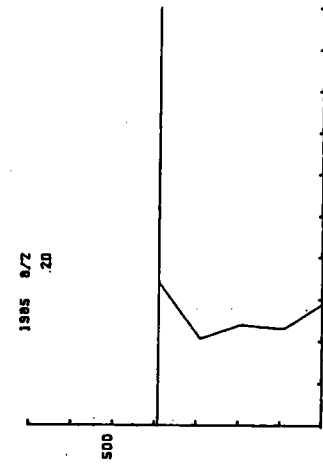
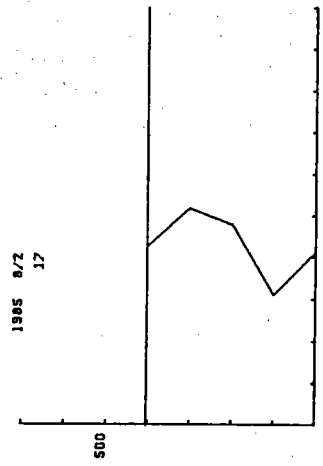
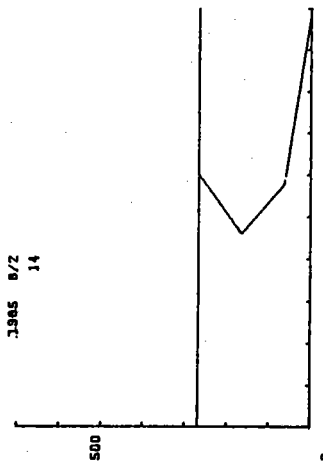
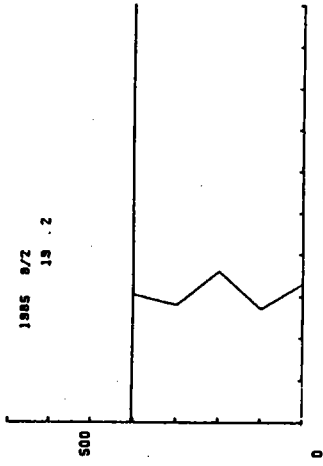
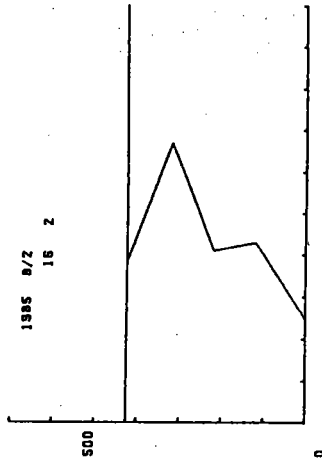
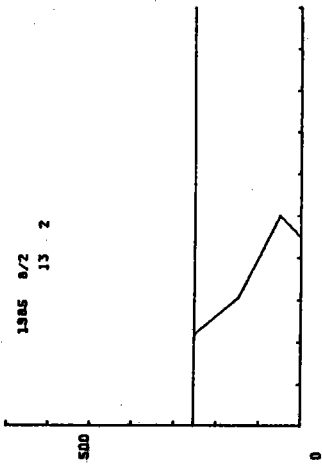


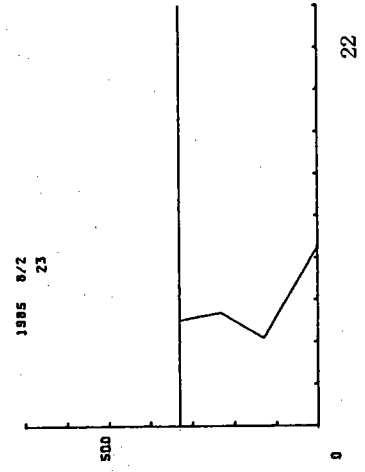
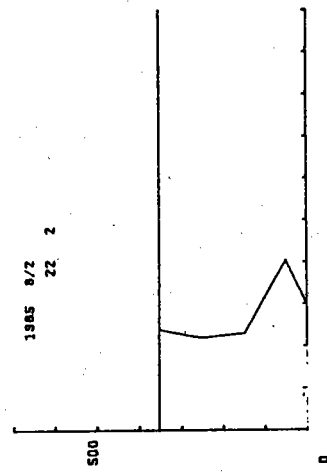
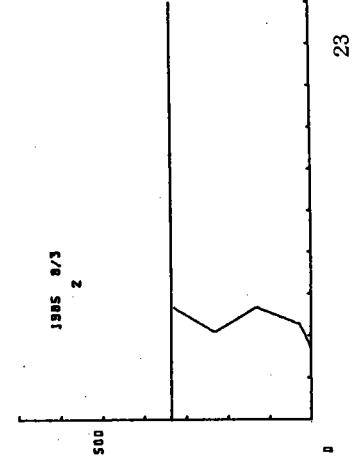
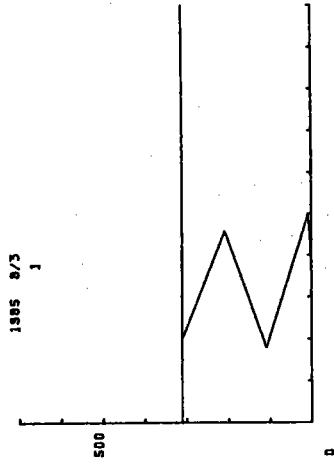
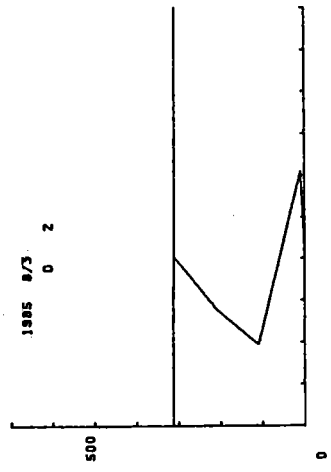
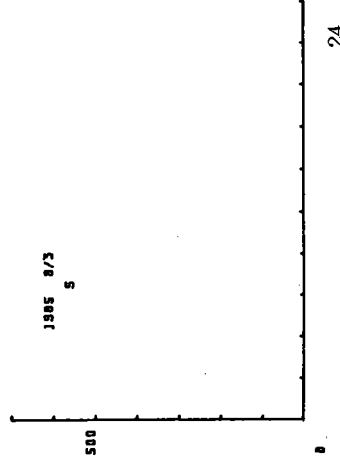
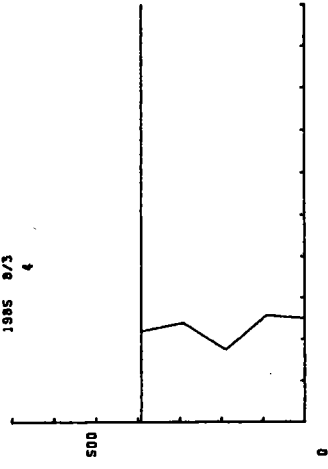
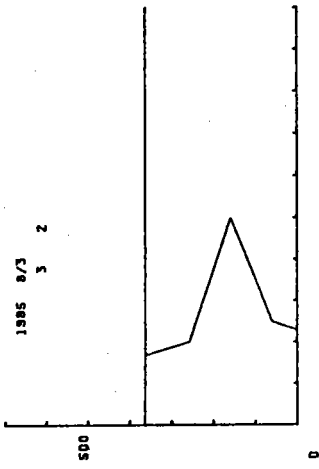
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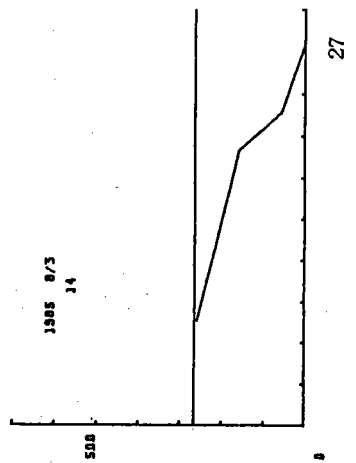
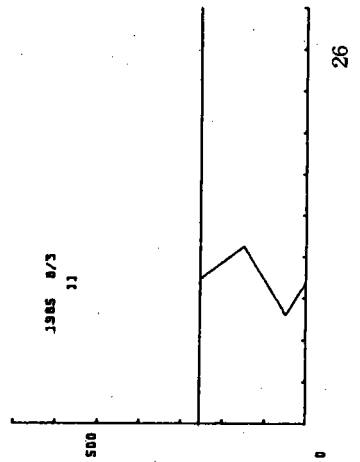
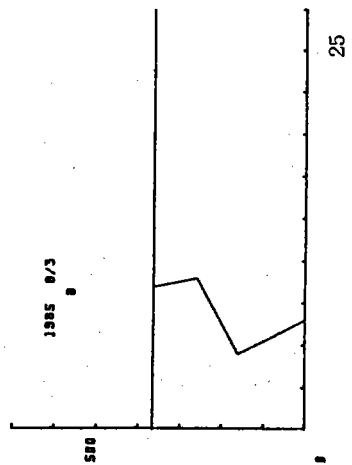
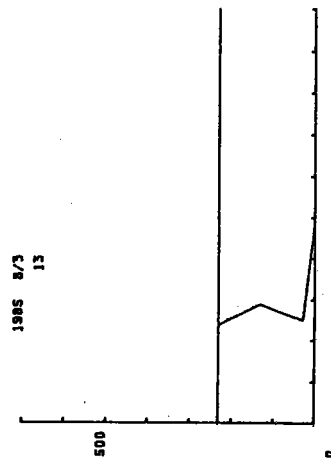
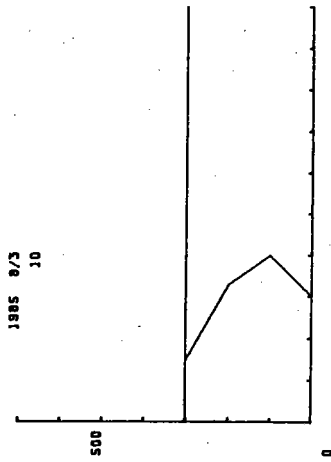
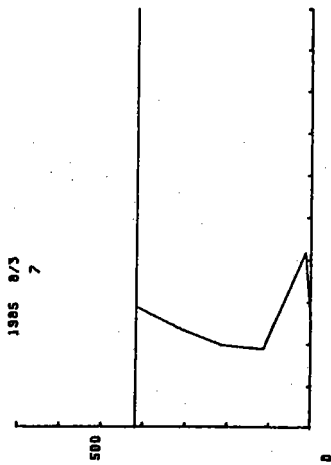
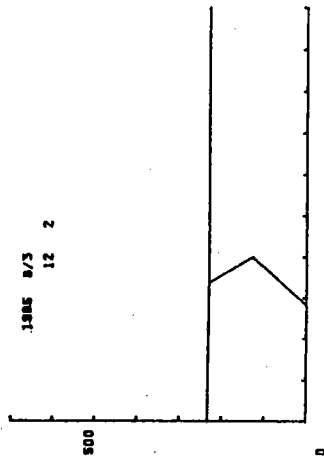
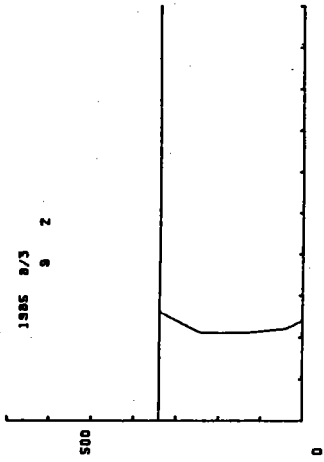
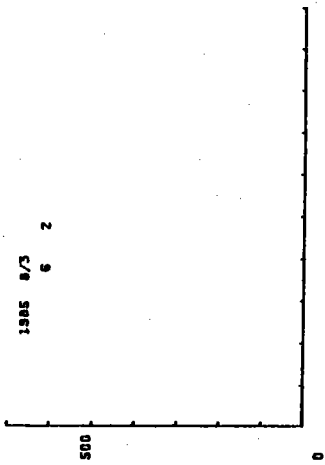


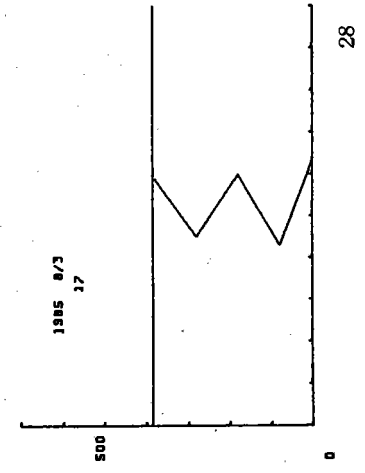
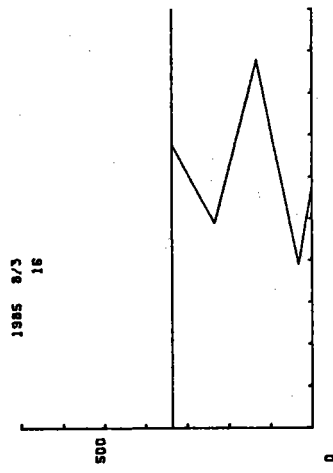
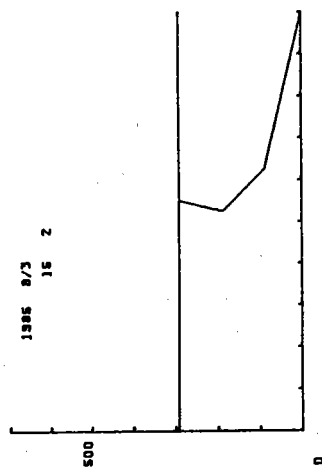
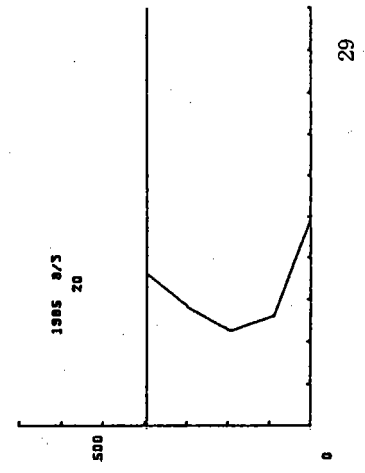
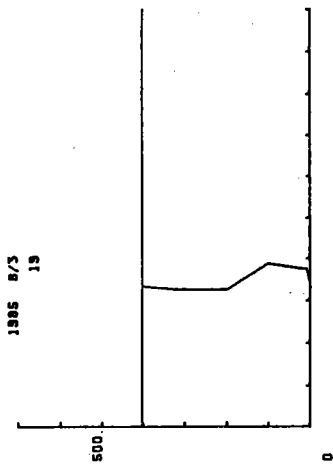
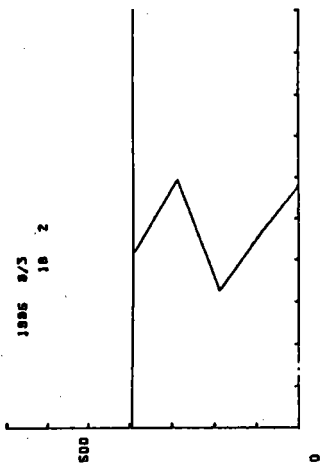
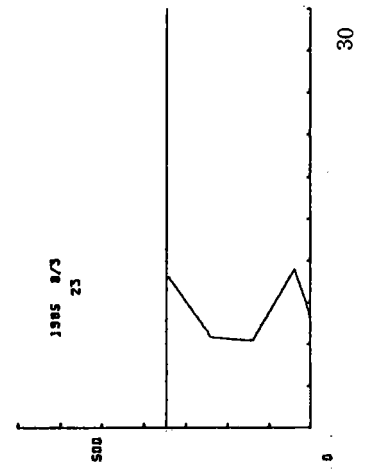
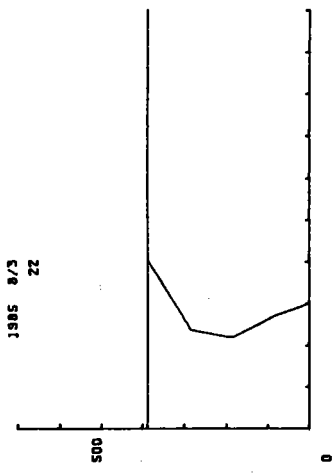
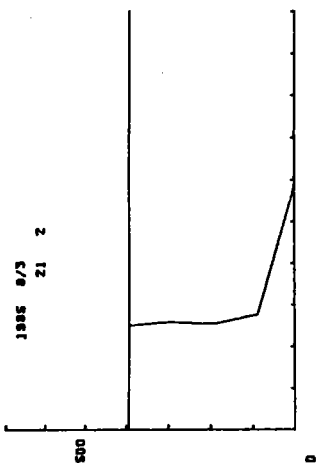


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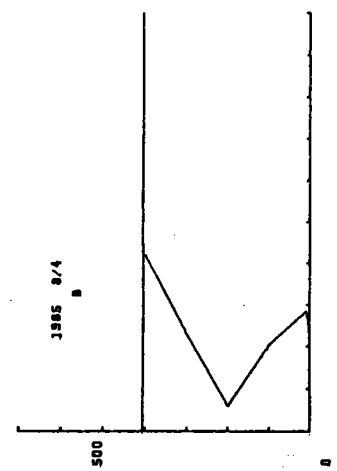
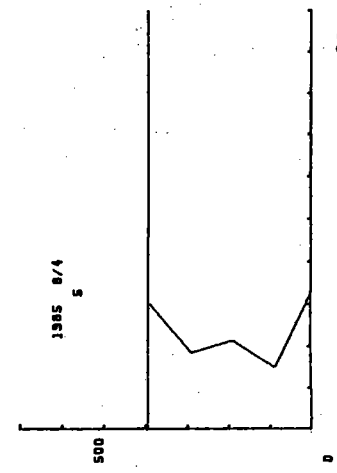
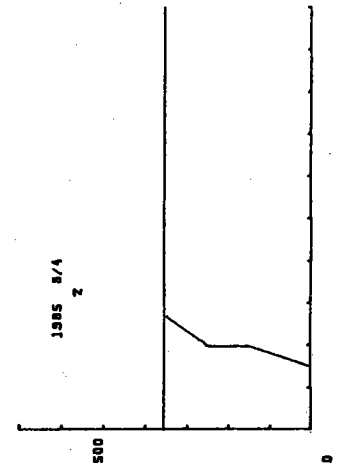
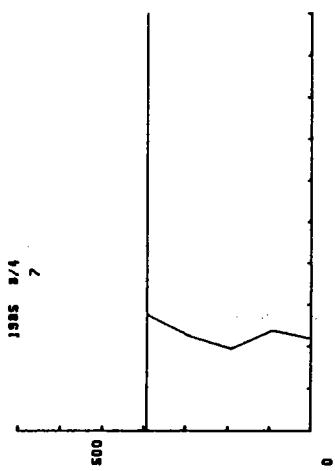
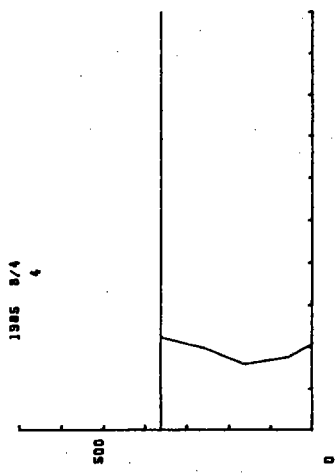
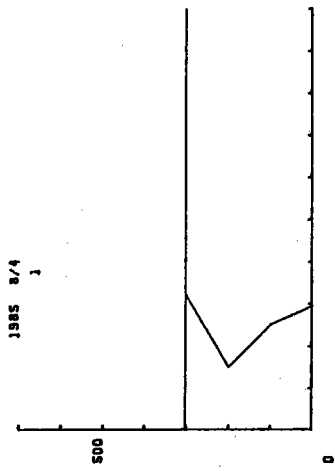
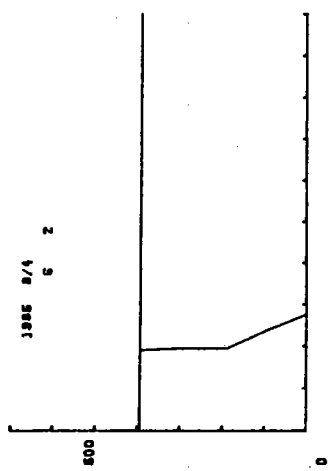
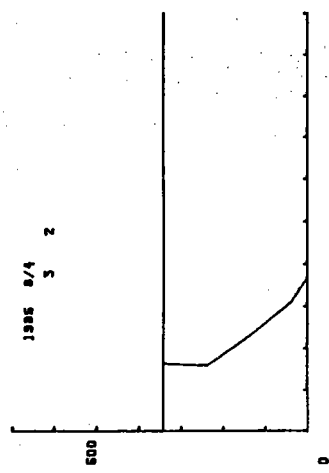
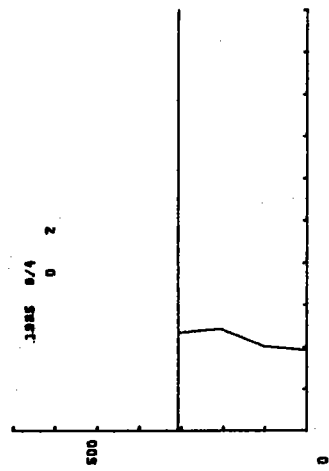


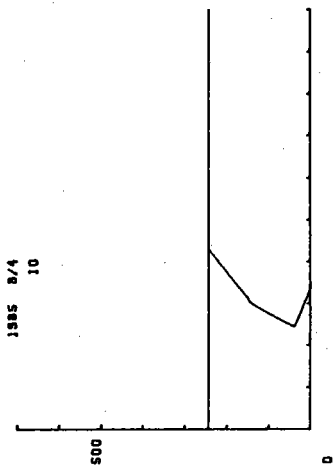
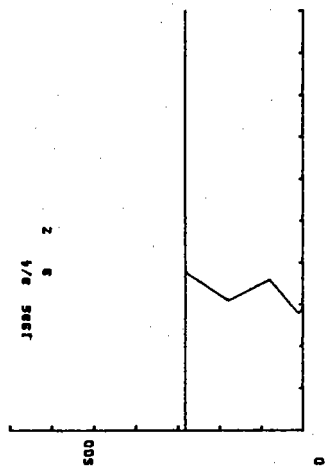
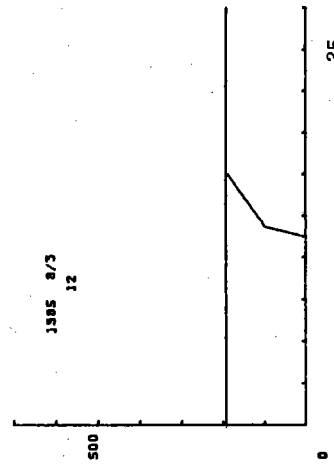
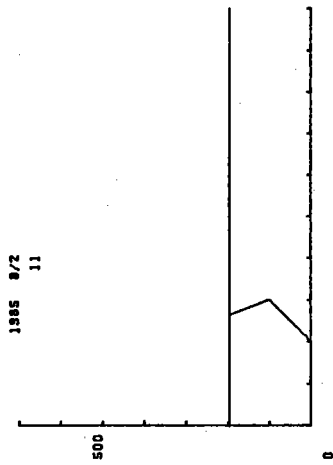
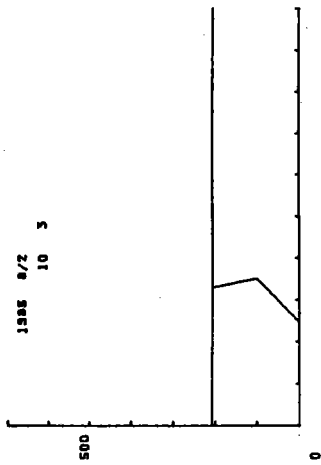
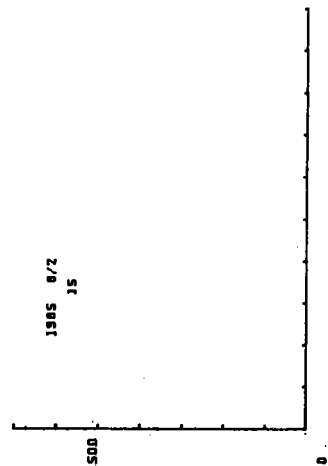
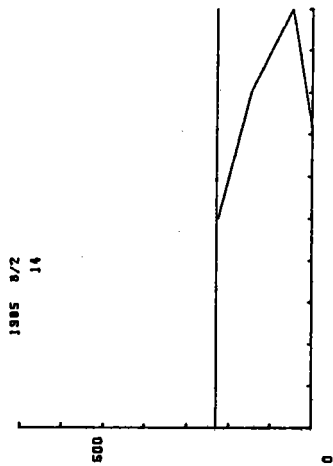
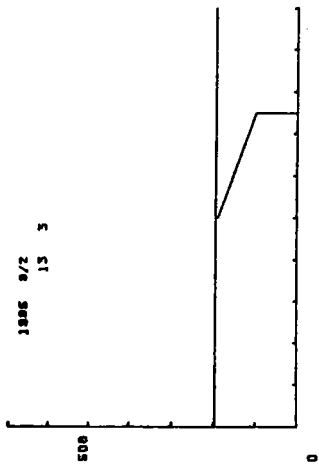


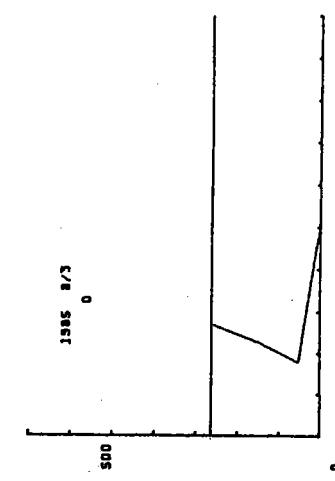
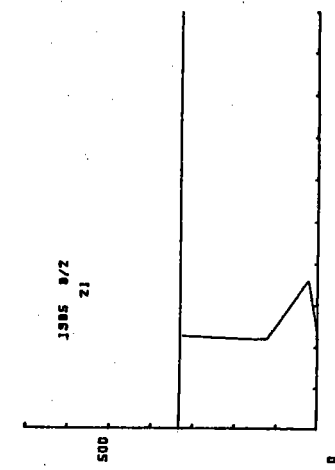
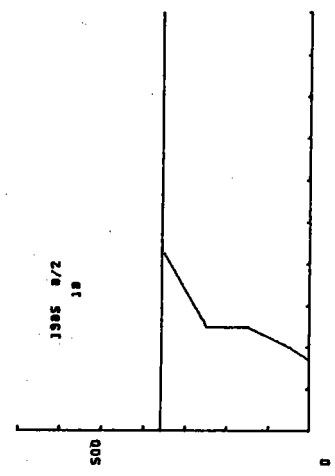
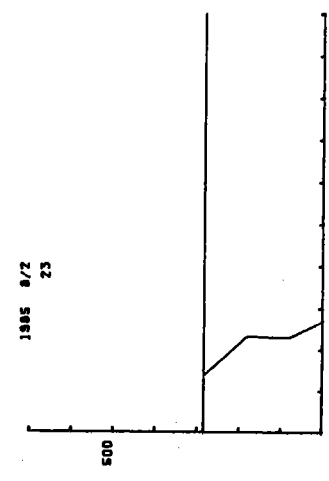
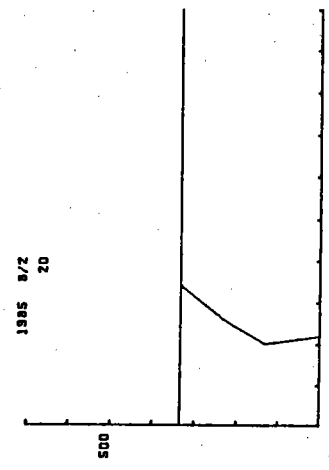
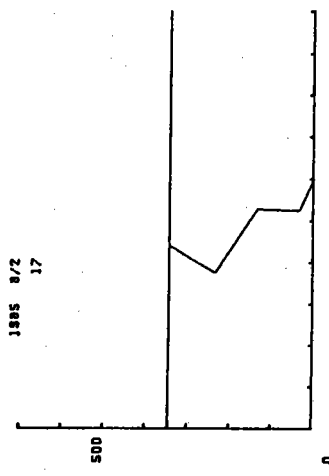
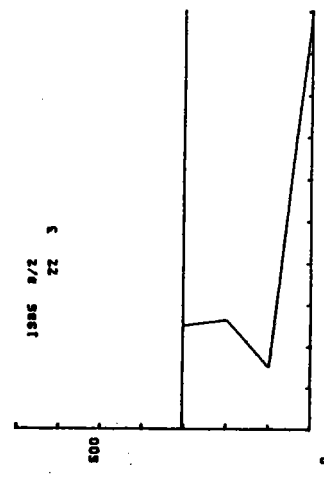
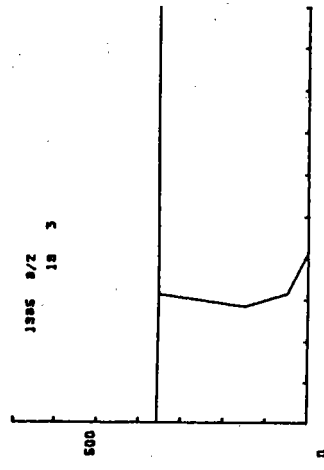
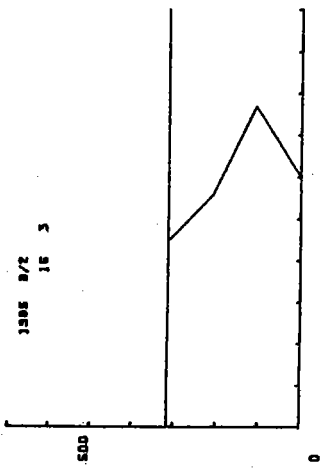
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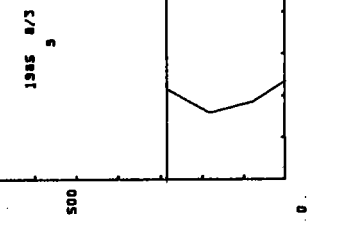
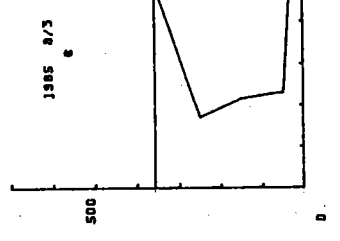
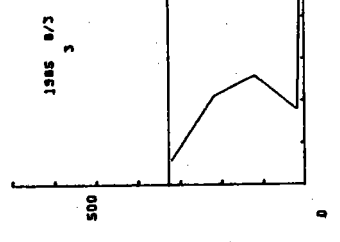
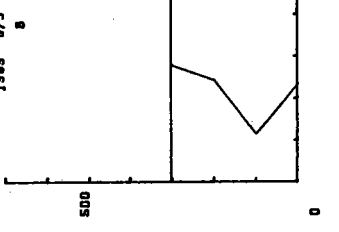
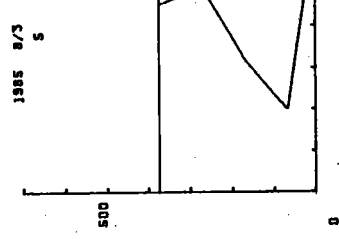
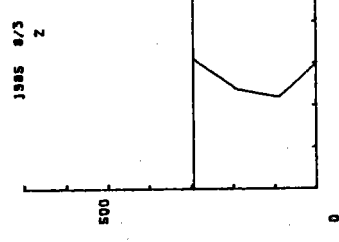
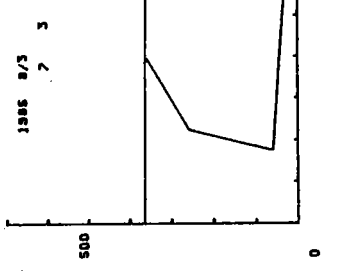
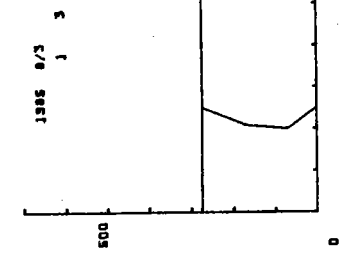


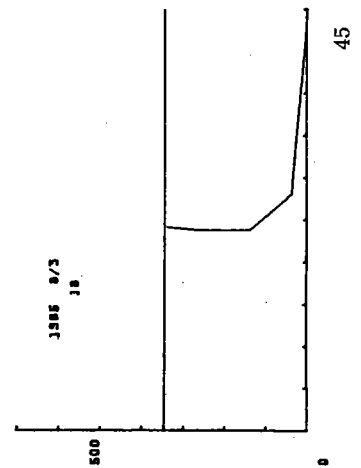
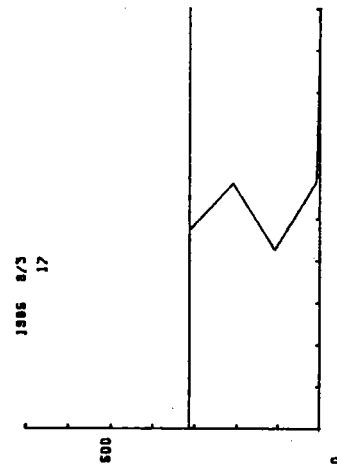
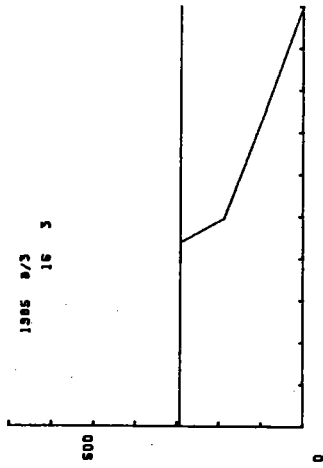
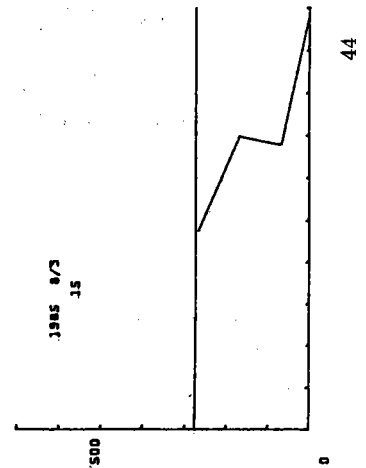
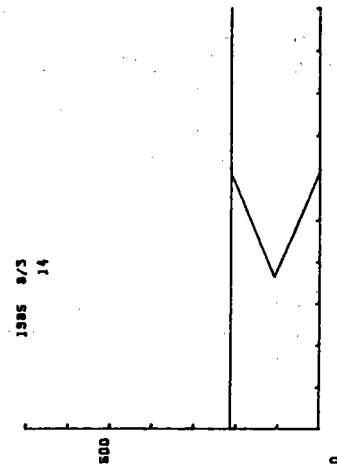
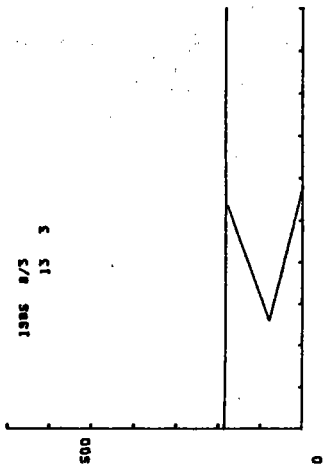
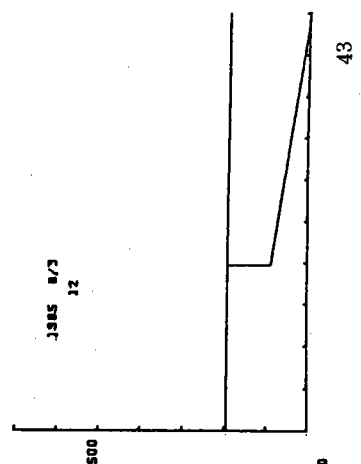
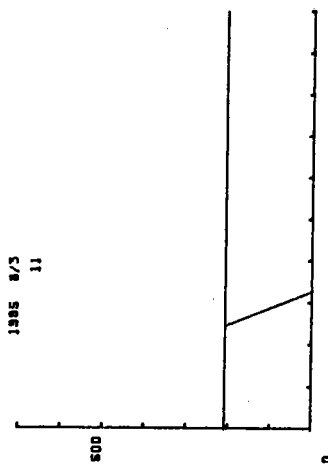
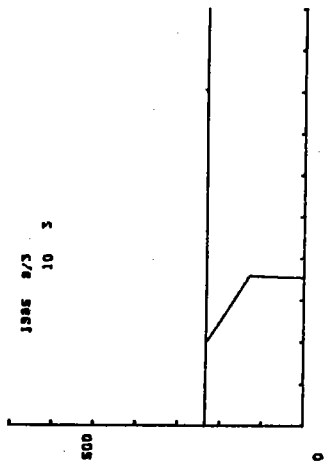


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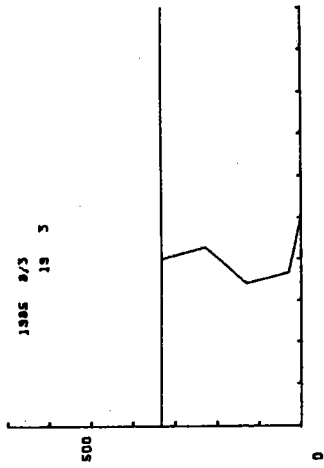
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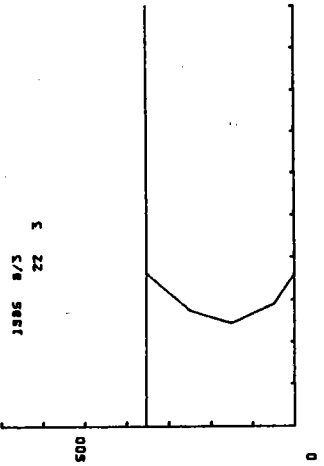




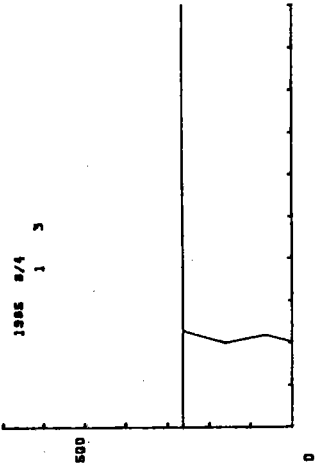
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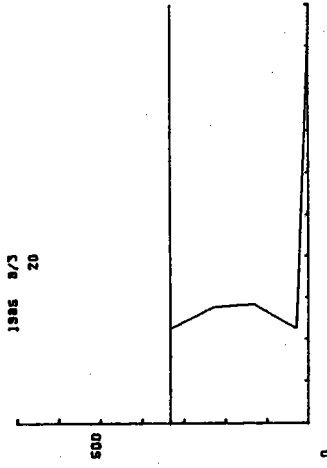
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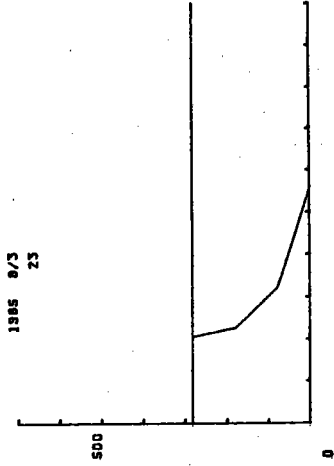
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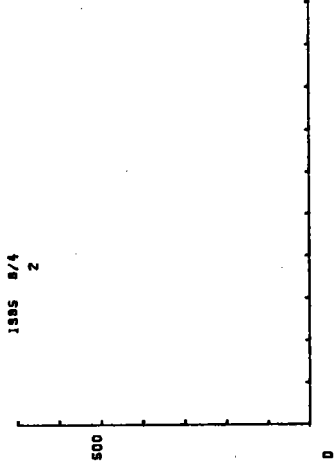
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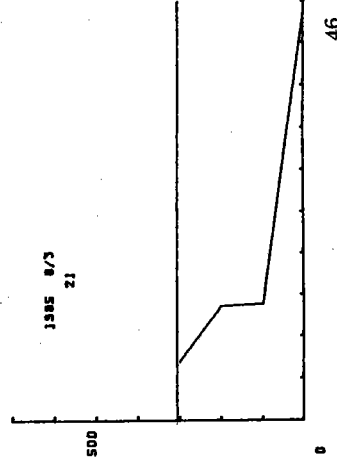
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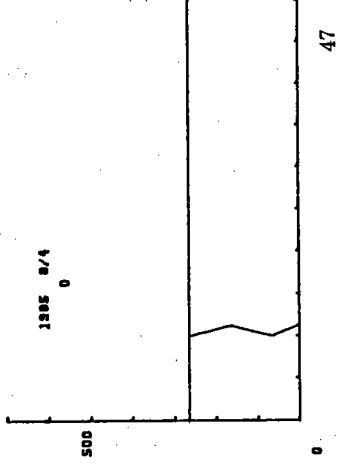
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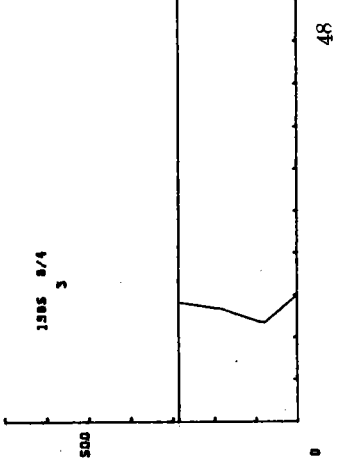
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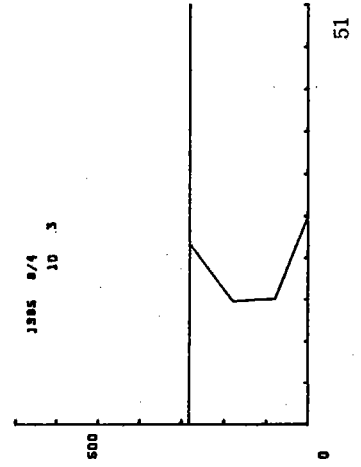
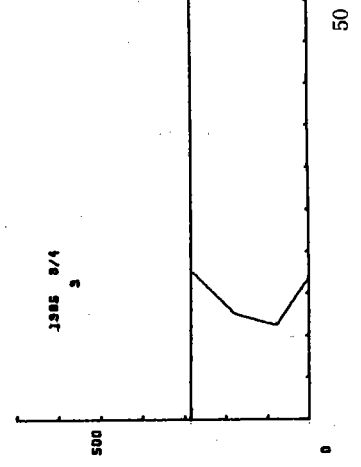
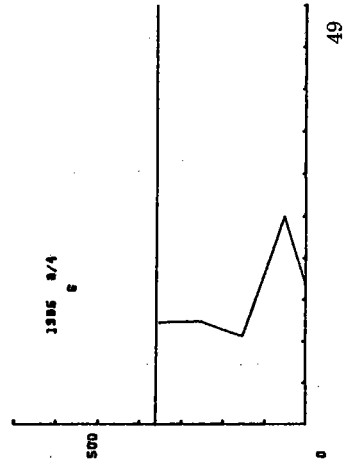
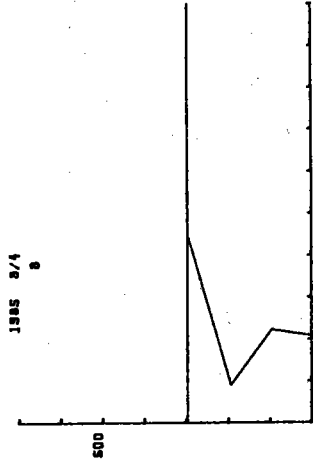
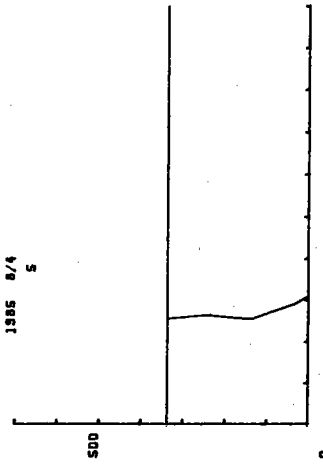
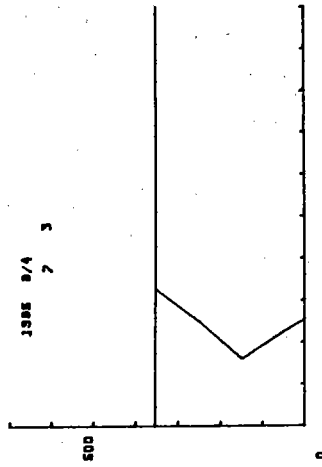
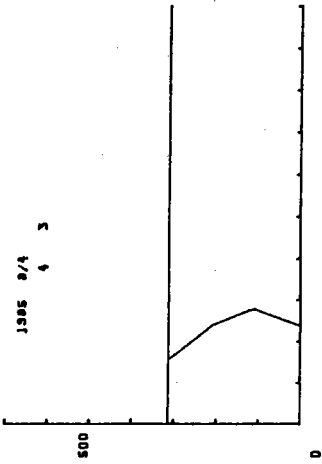


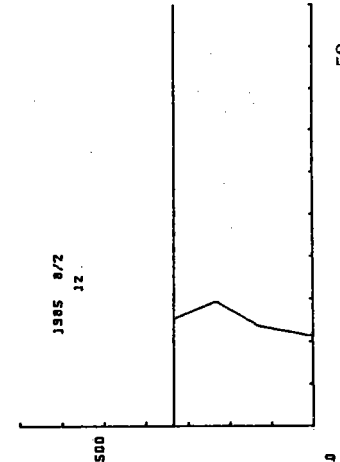
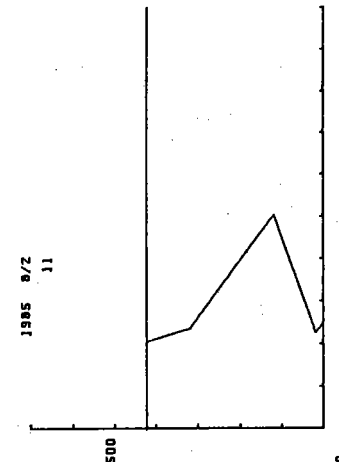
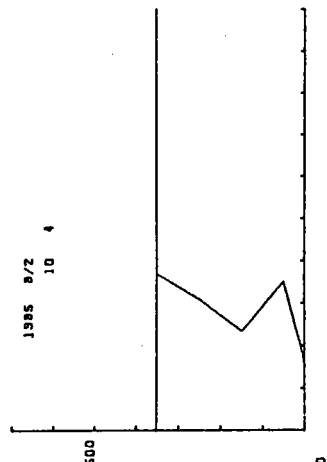
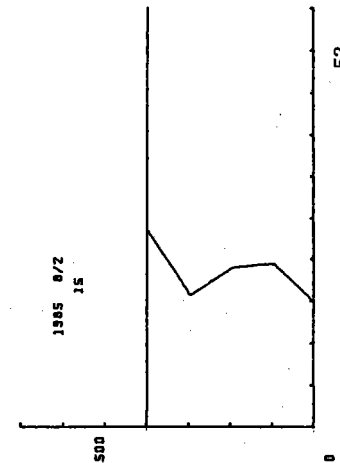
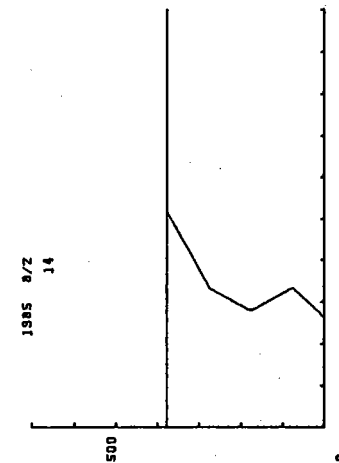
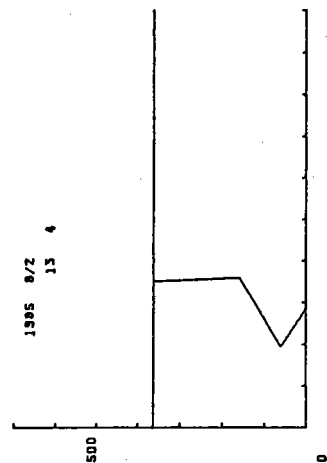
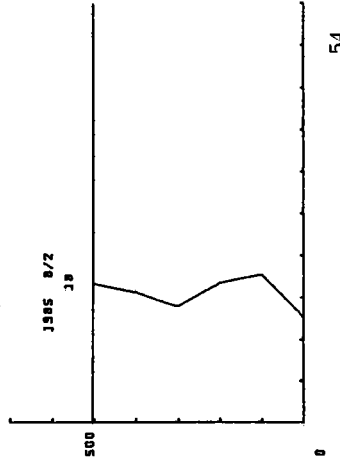
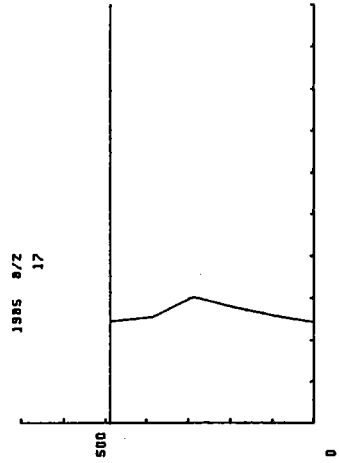
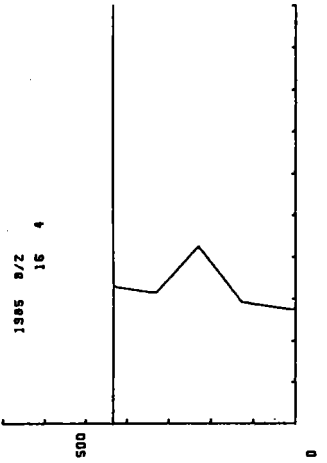
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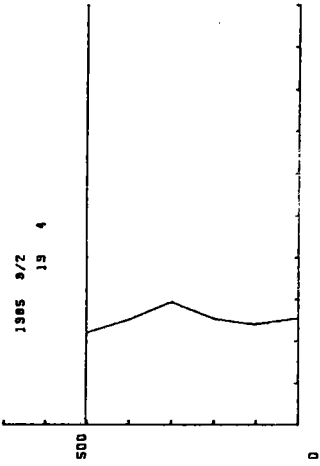


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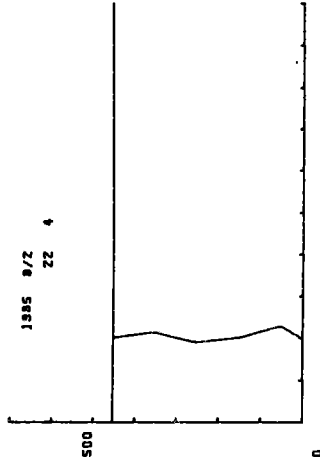
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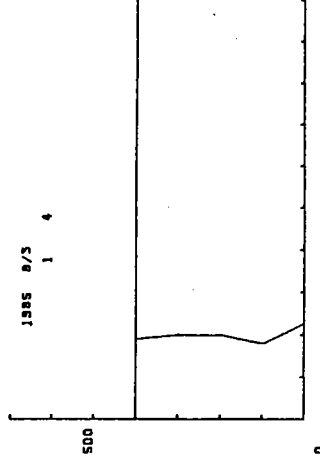
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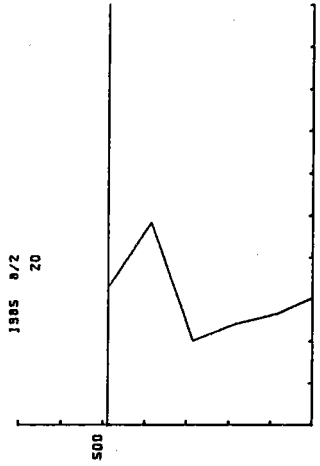
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22 4



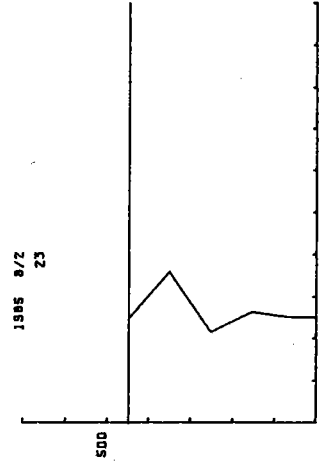
1985 8/3
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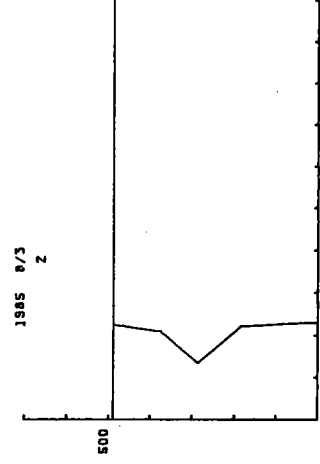
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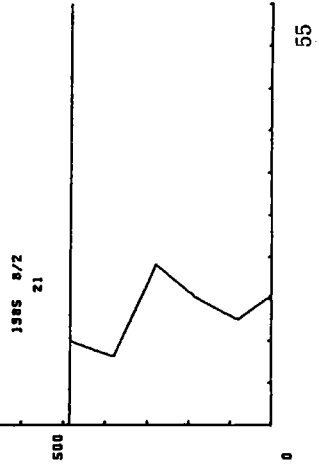
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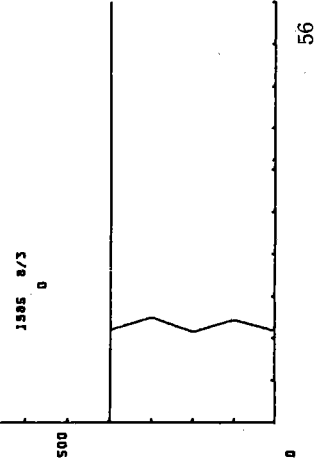
1985 8/3
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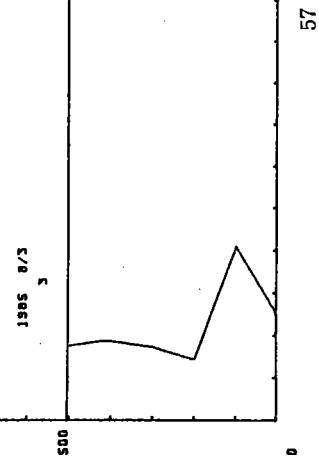
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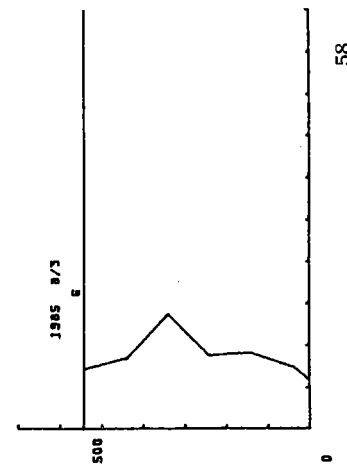
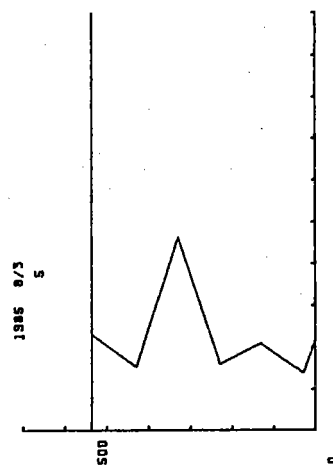
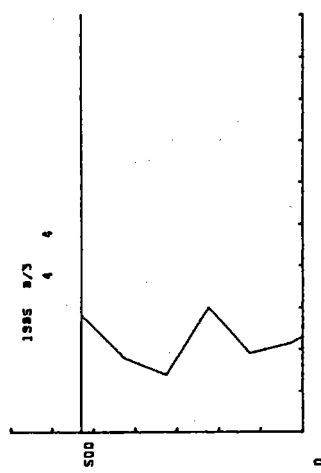
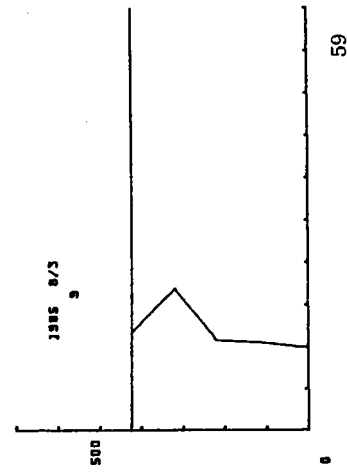
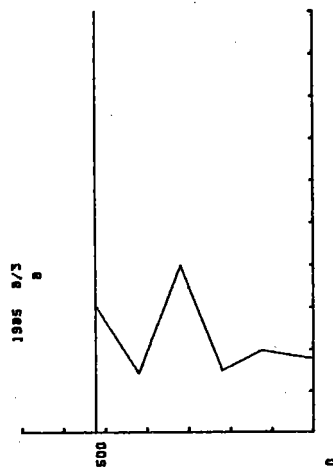
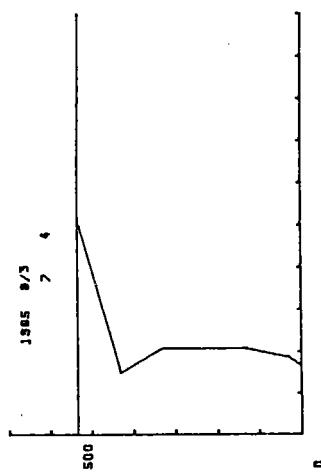
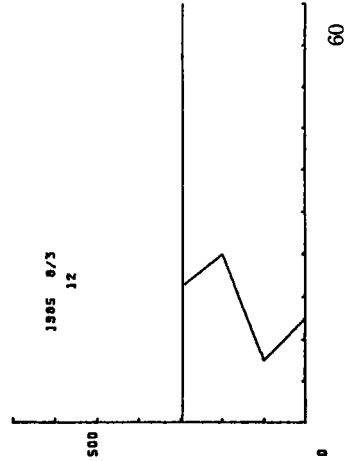
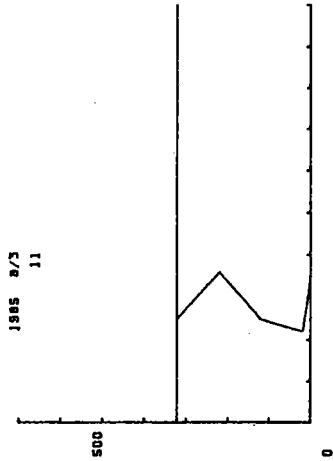
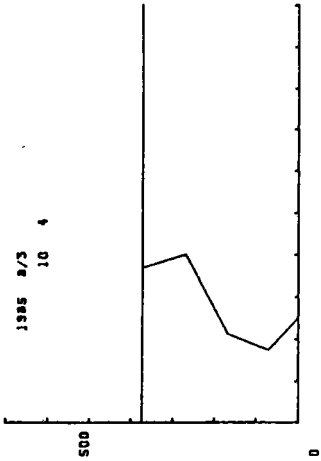


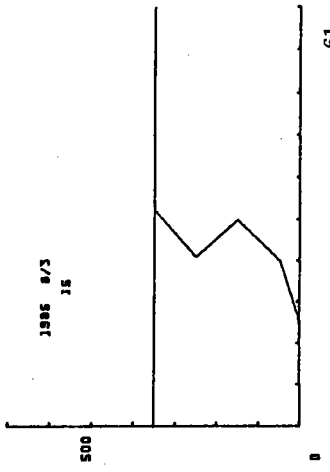
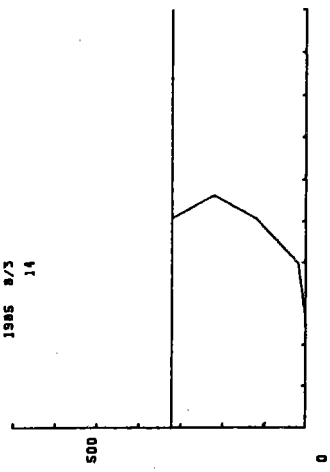
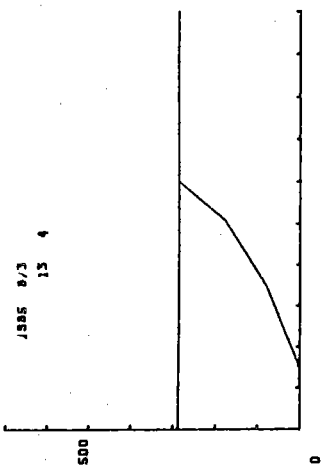
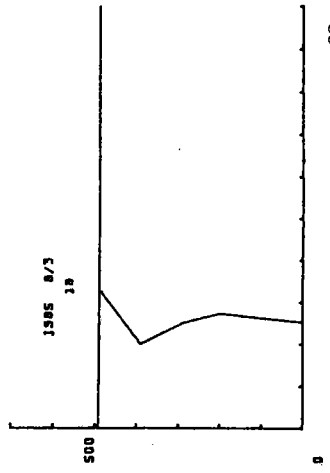
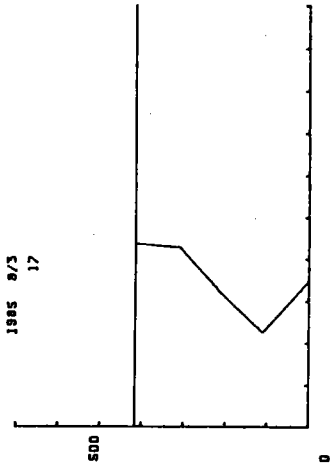
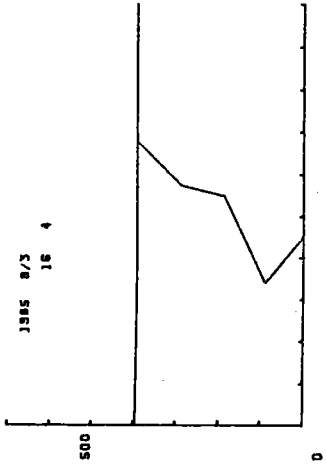
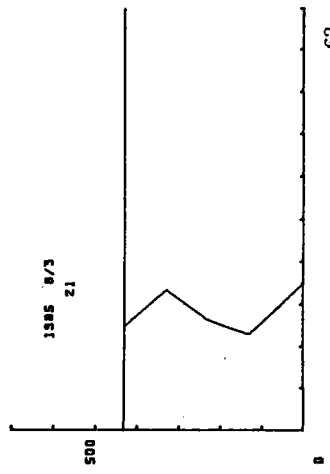
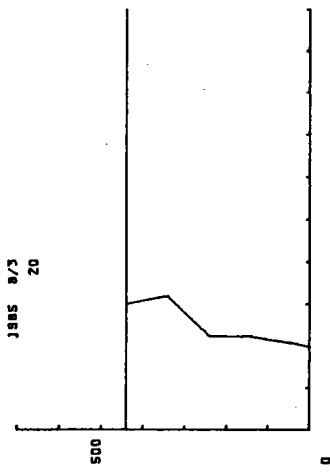
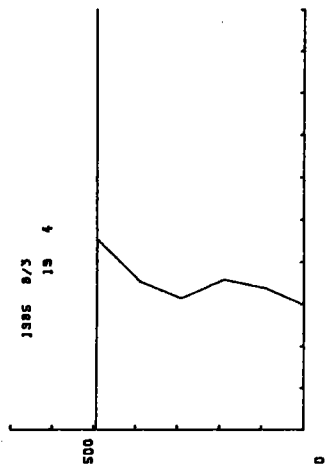
1985 8/3
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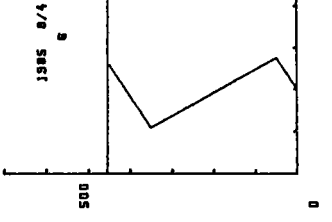
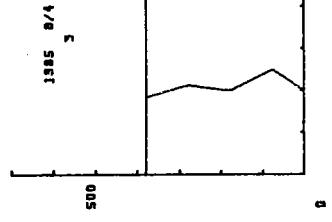
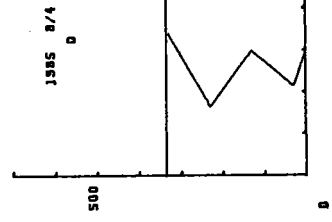
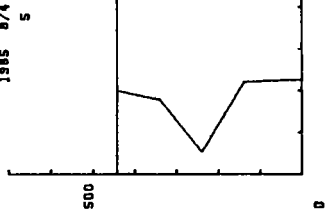
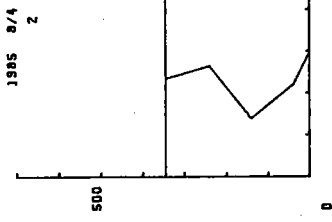
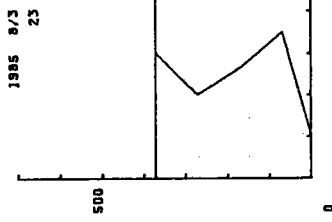
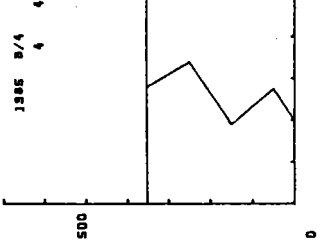
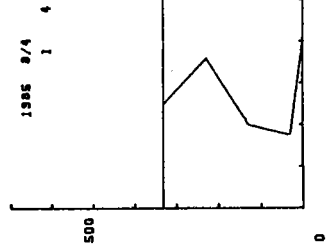
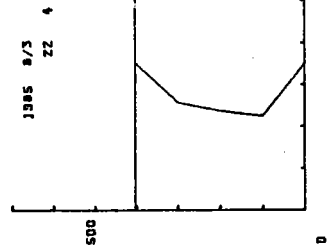


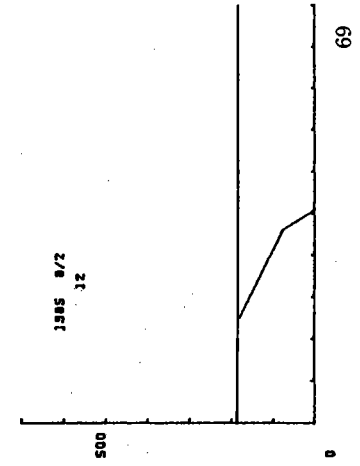
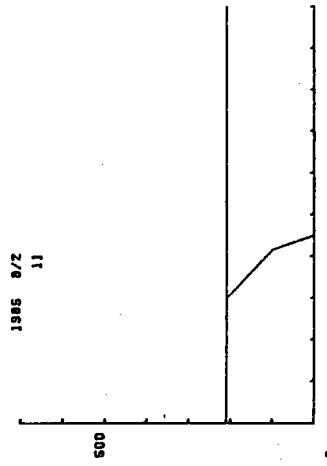
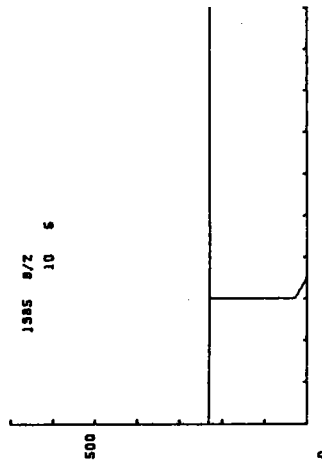
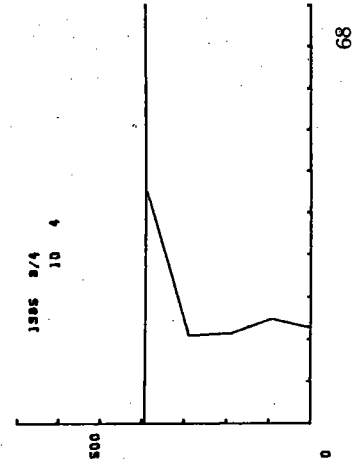
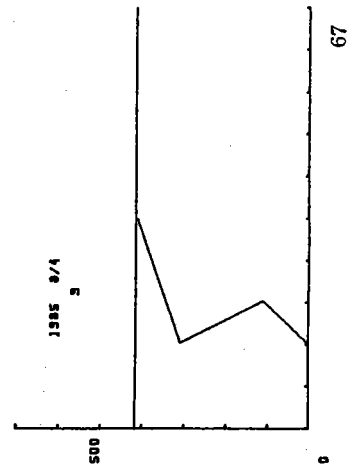
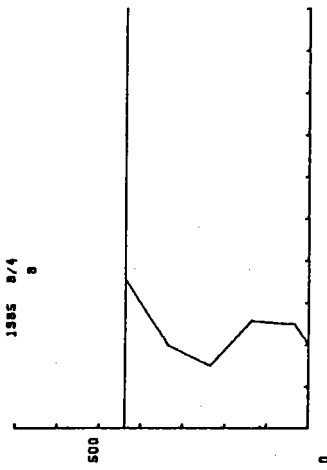
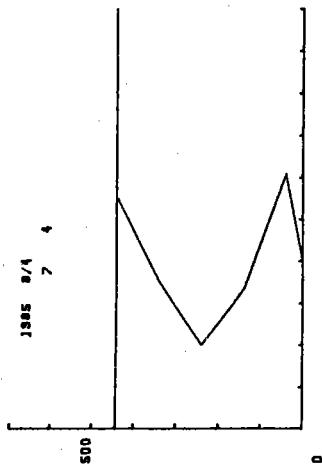


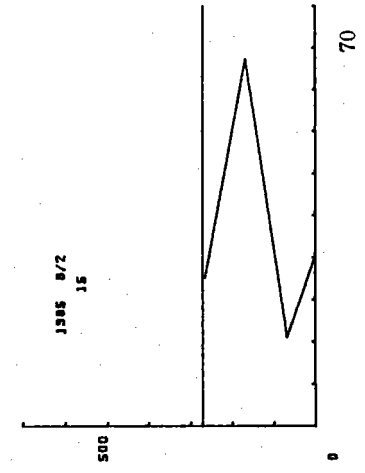
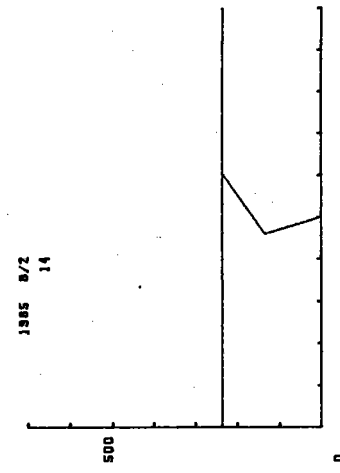
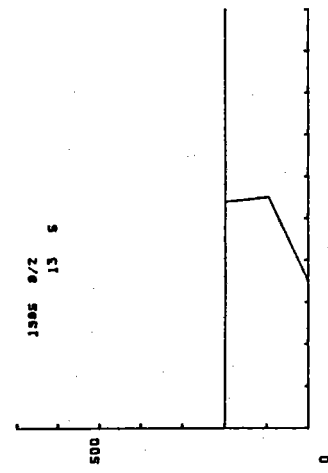
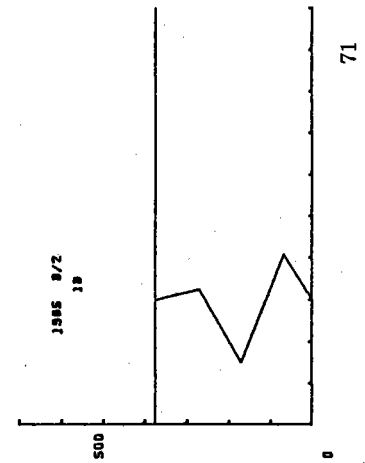
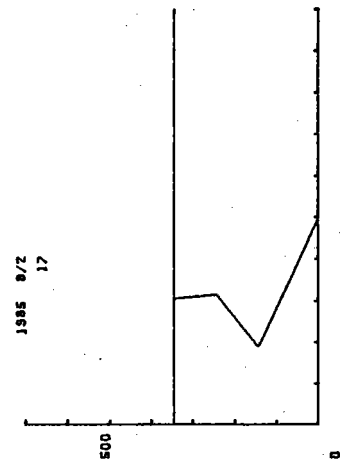
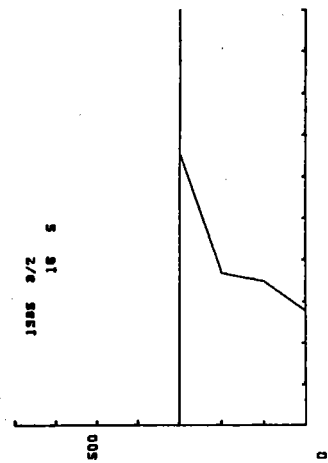
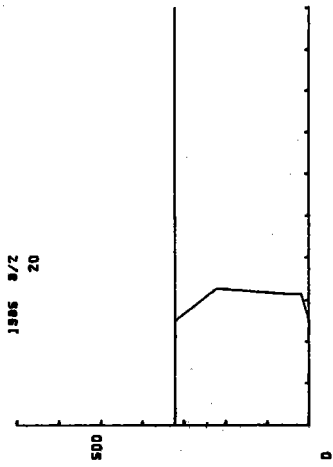
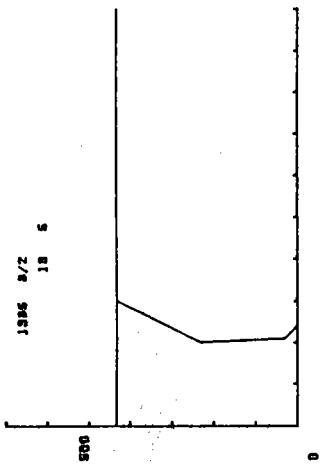
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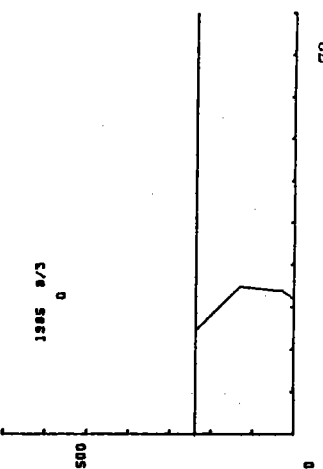
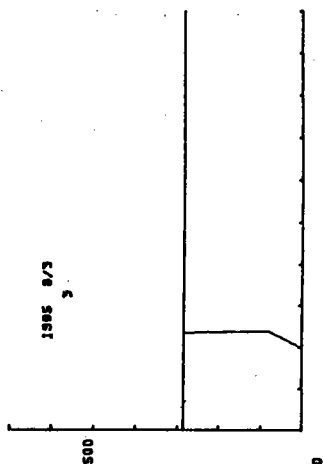
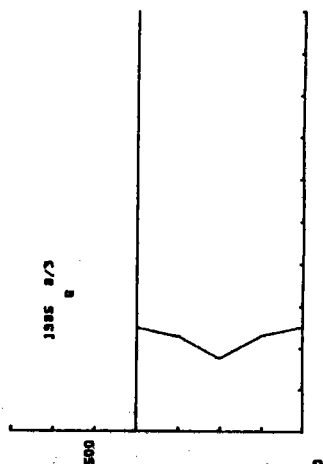
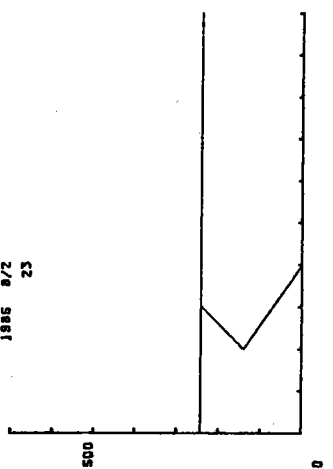
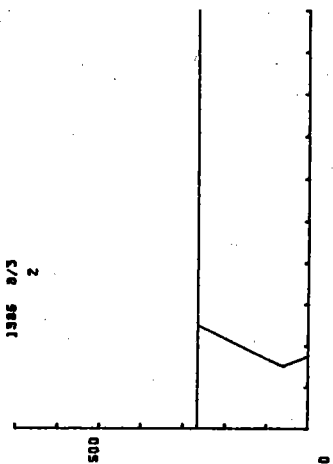
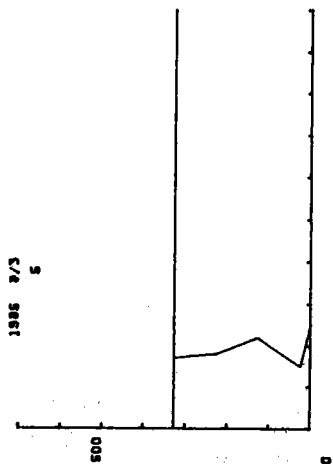
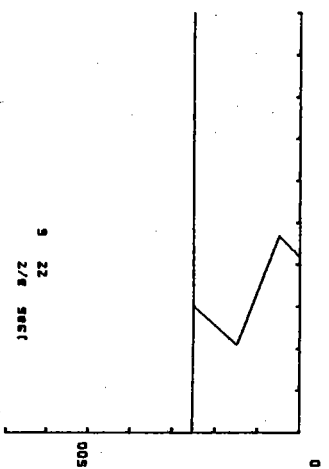
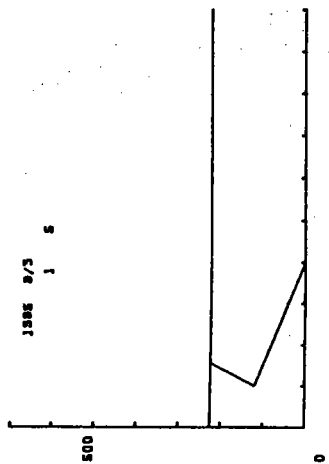
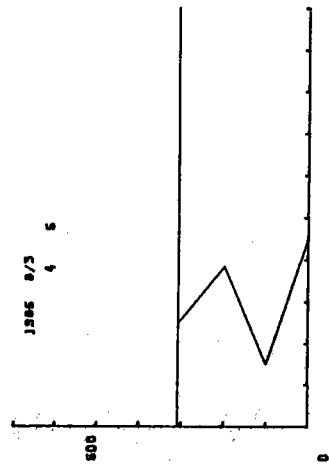
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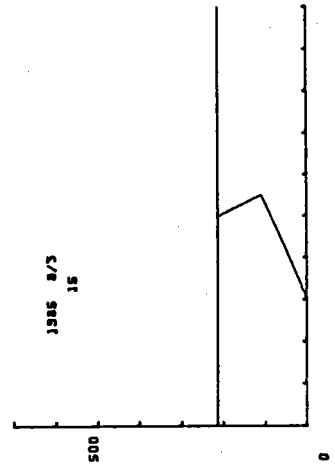
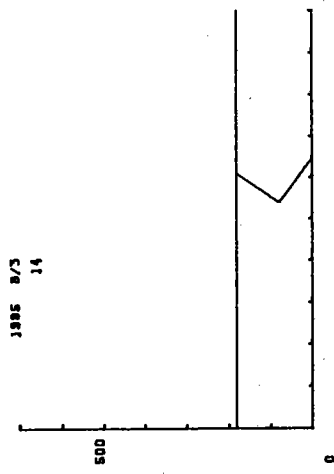
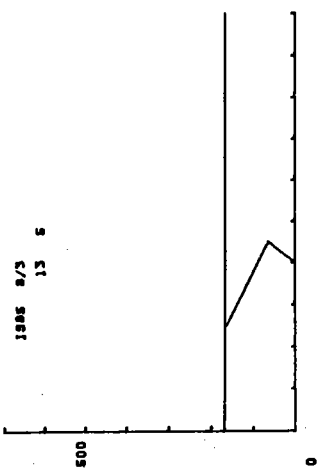




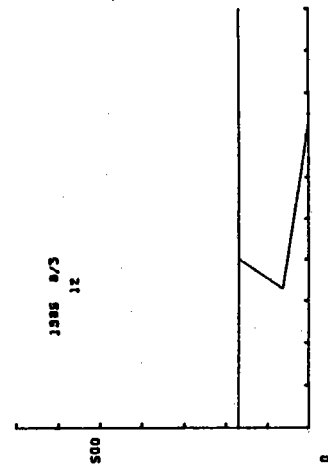
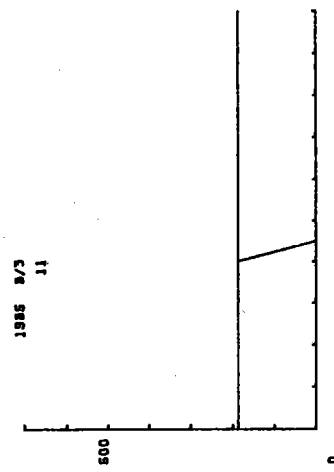
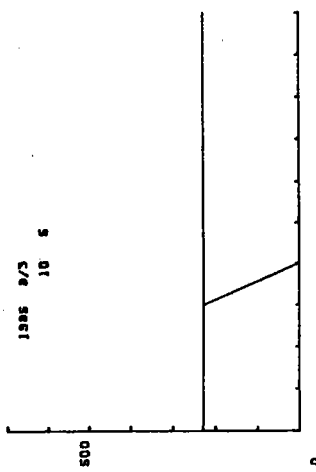
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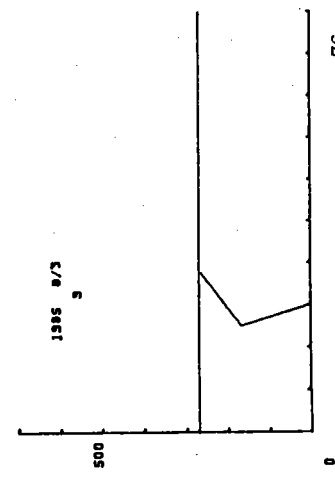
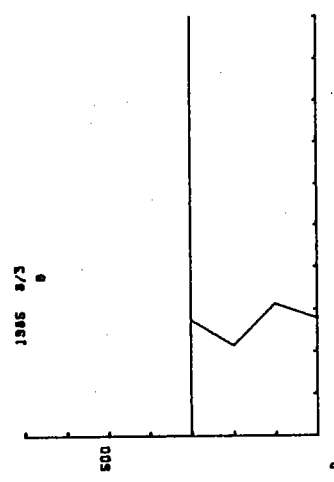
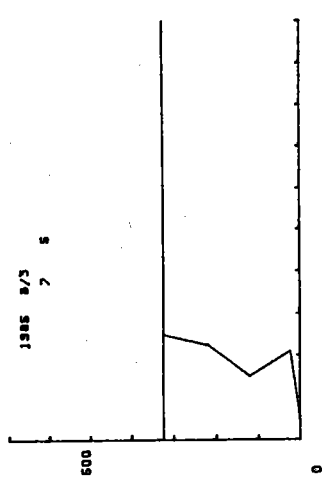
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16 S

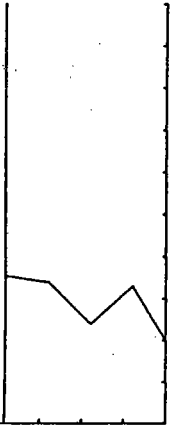
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0

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19 S

500



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22 S

500



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17

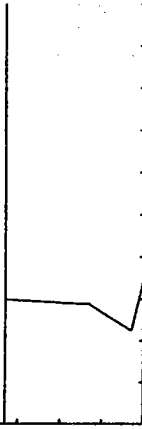
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0

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20

500



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23

500



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18

500



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21

500



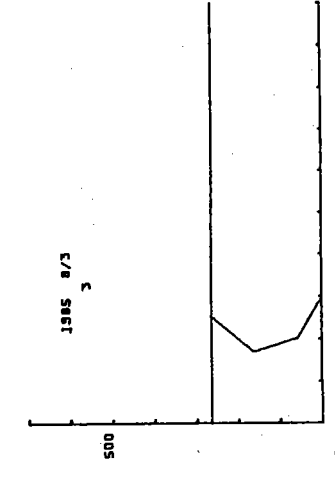
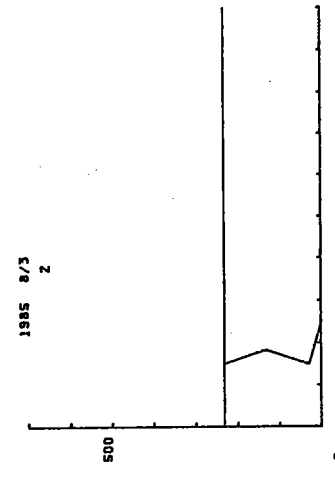
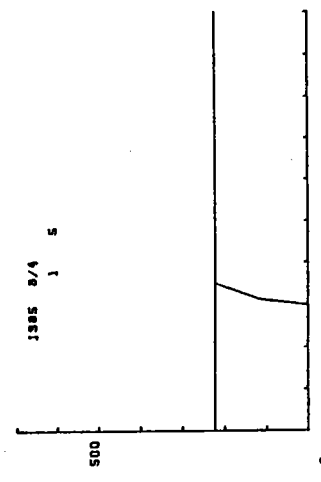
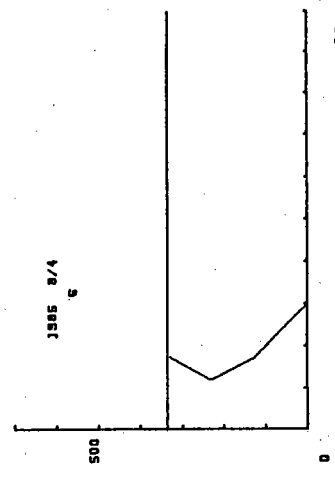
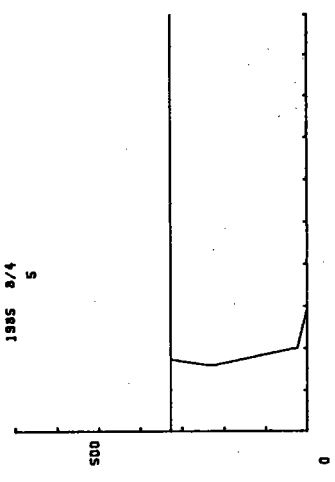
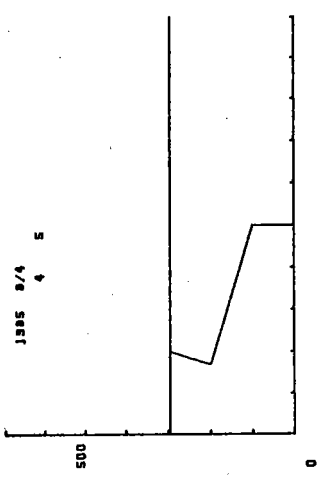
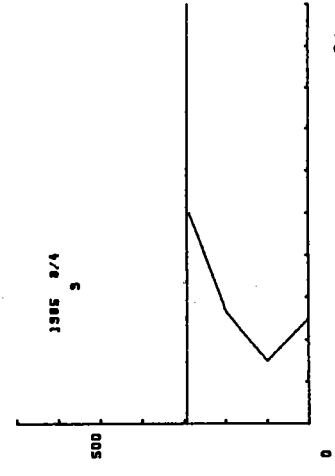
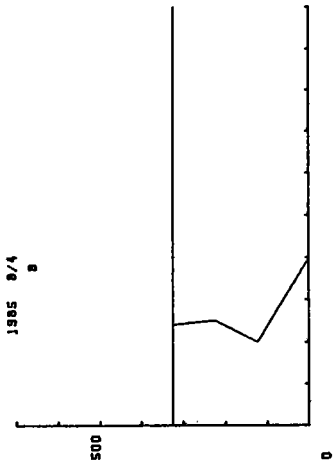
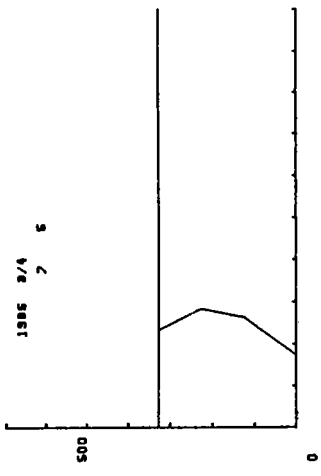
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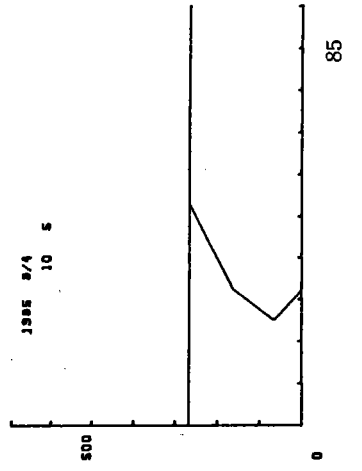
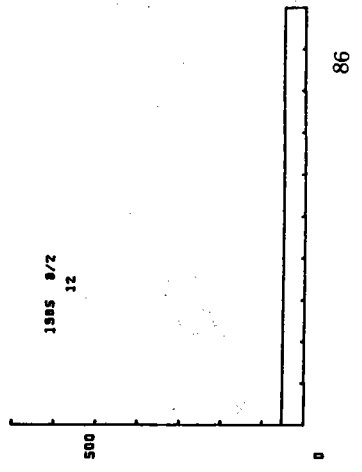
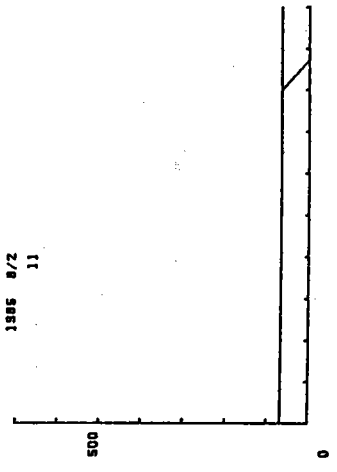
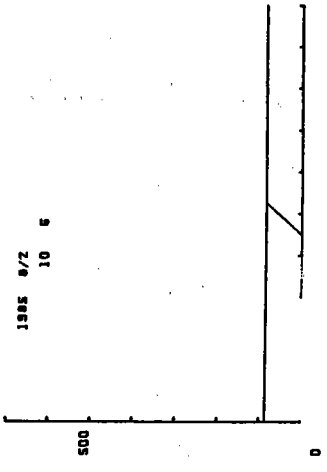
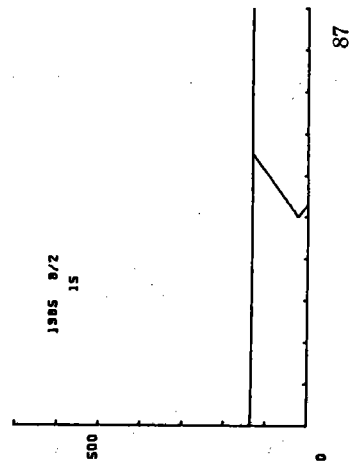
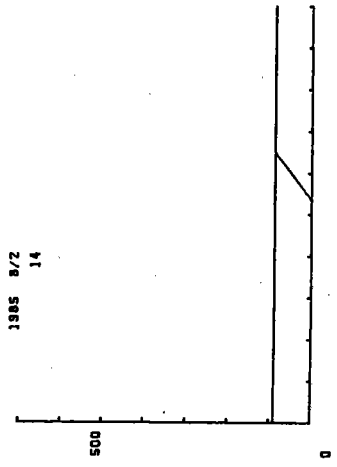
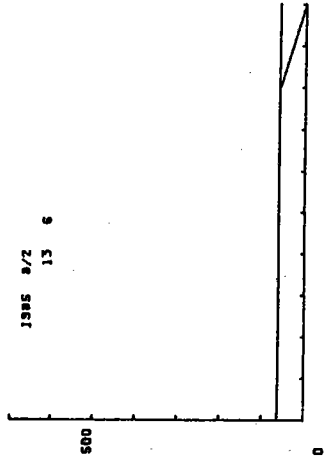
1985 8/4
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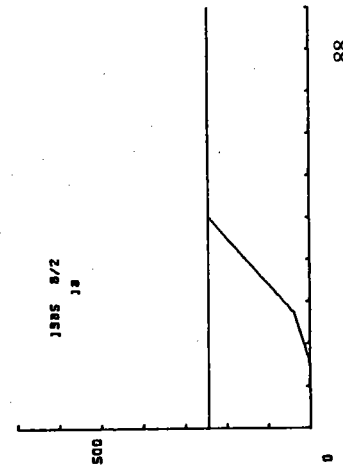
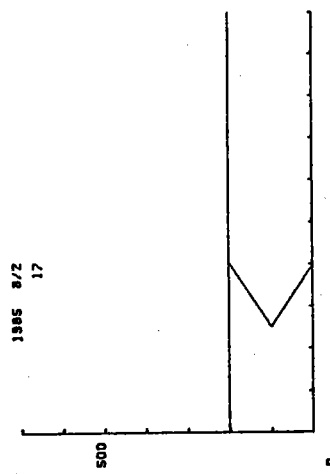
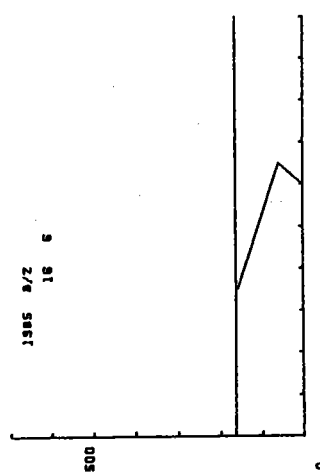
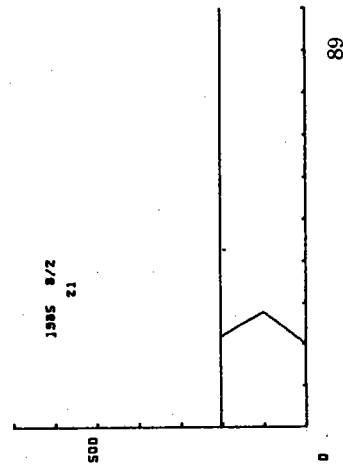
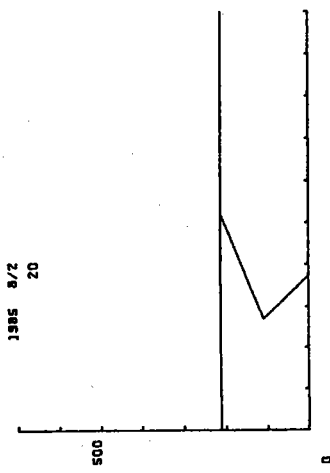
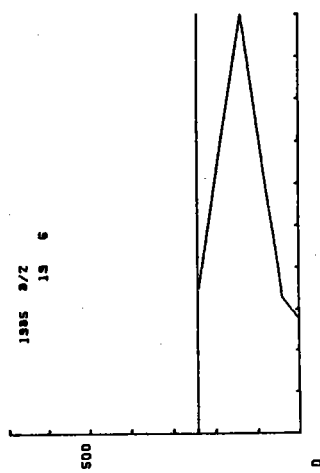
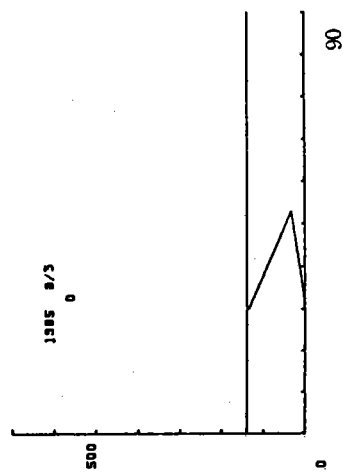
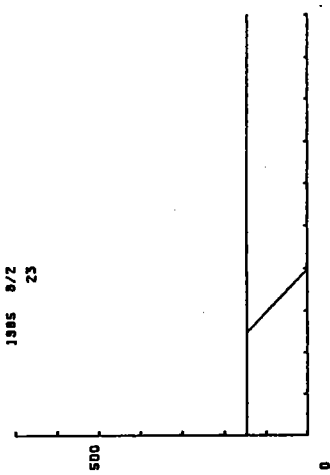
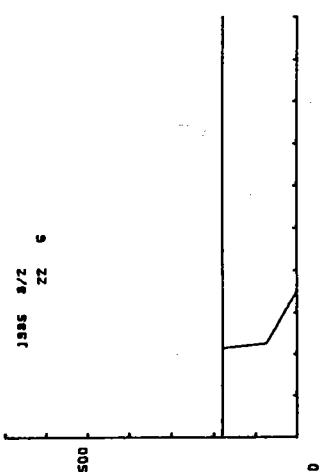
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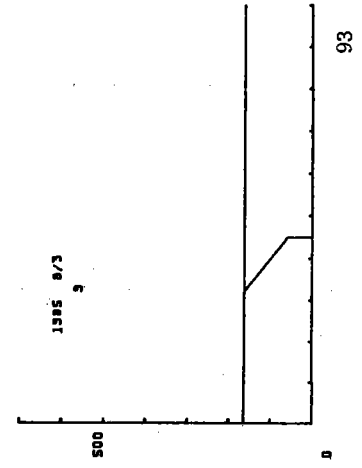
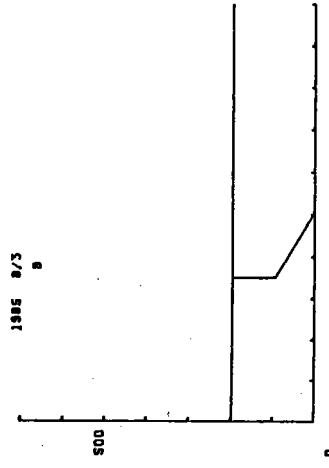
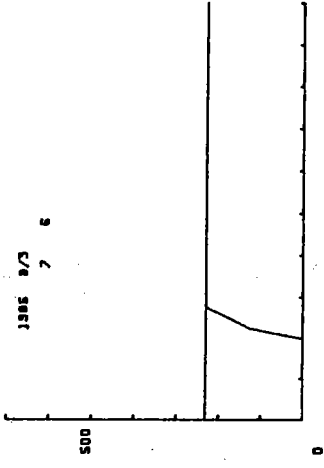
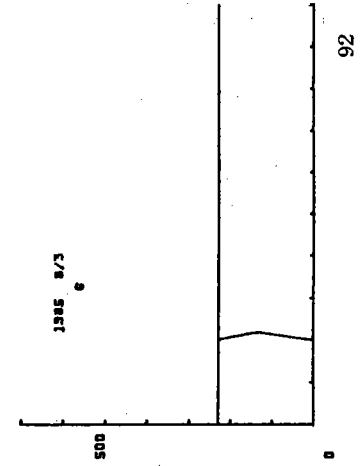
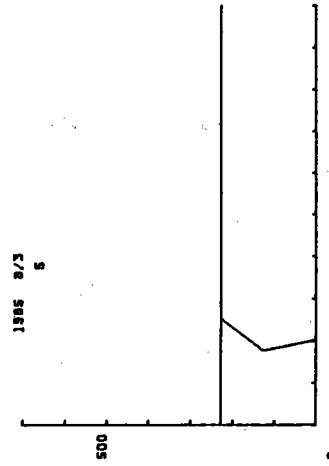
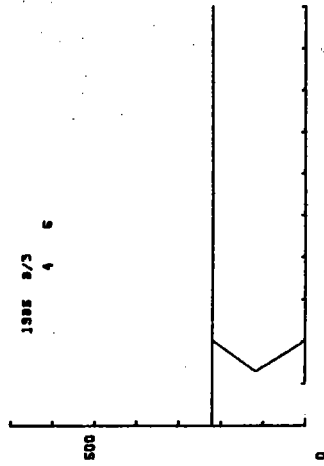
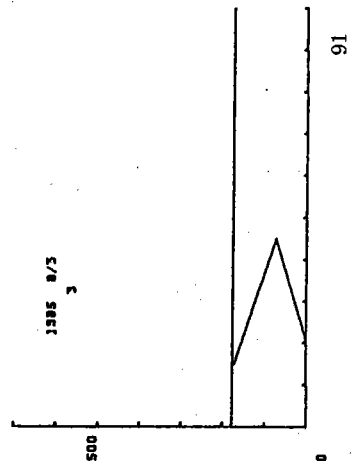
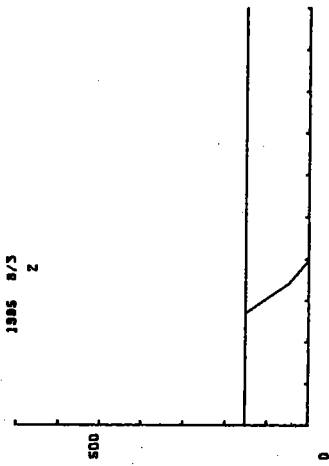
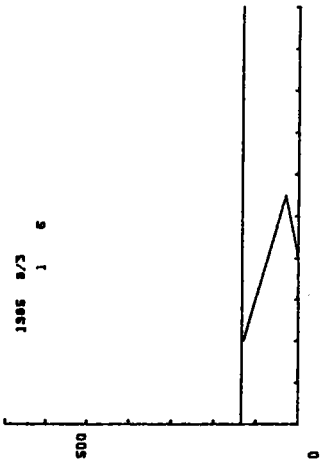


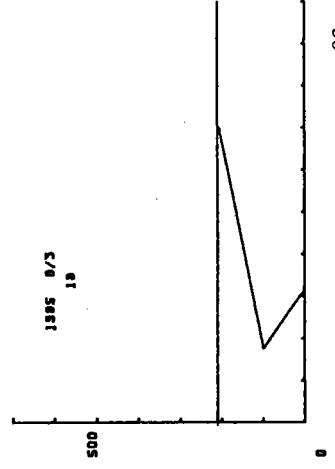
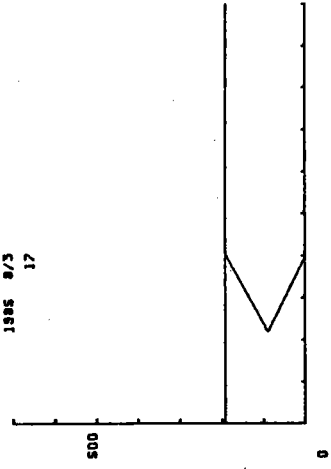
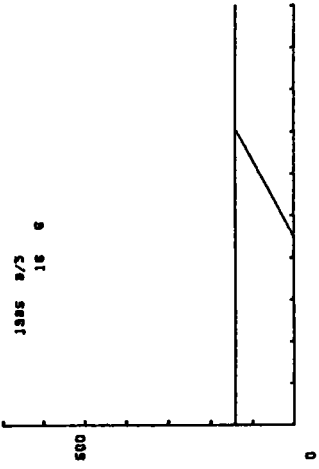
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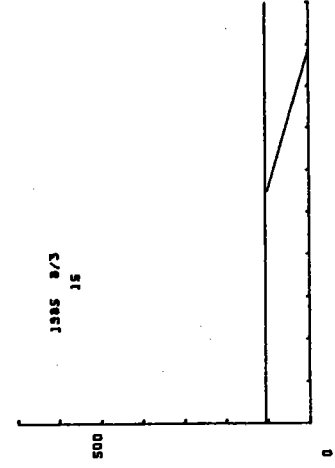
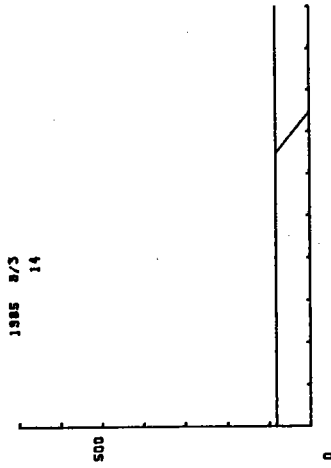
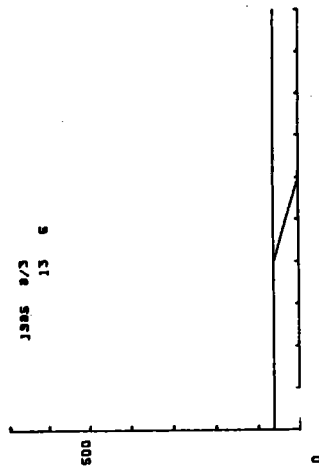




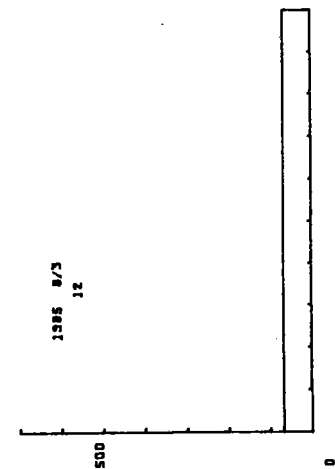
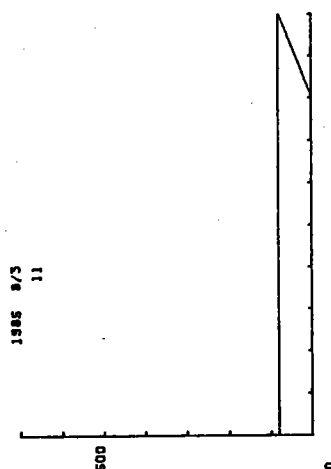
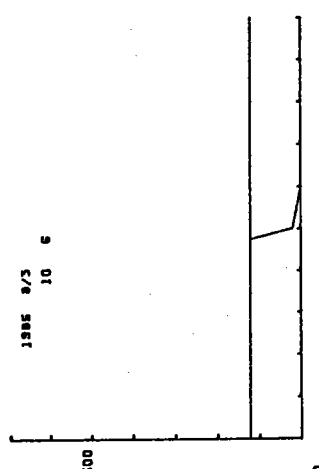




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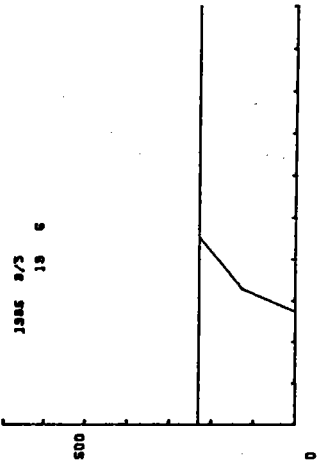


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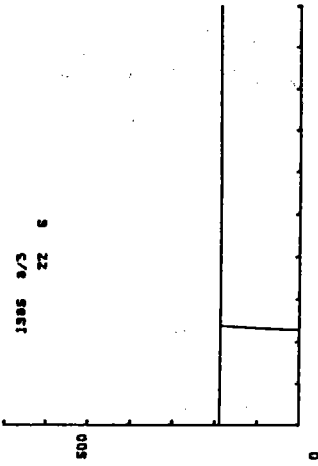


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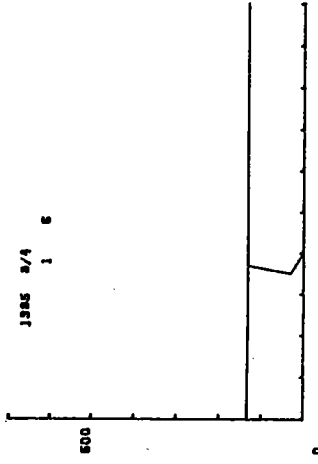
1985 8/16
C/E SECT



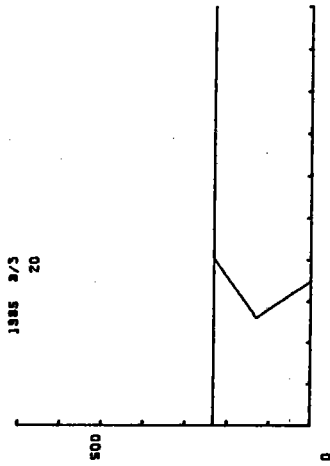
1985 8/22
C/E SECT



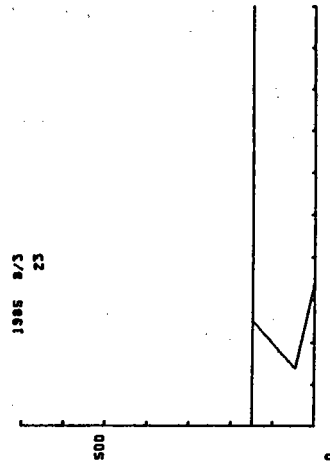
1985 8/1
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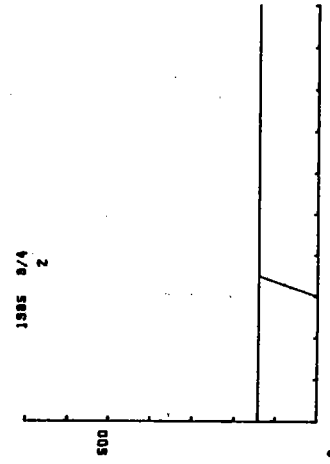
1985 8/2
C/E



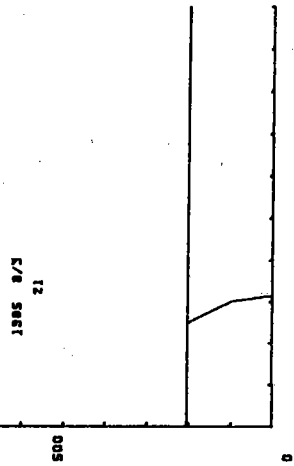
1985 8/23
C/E SECT



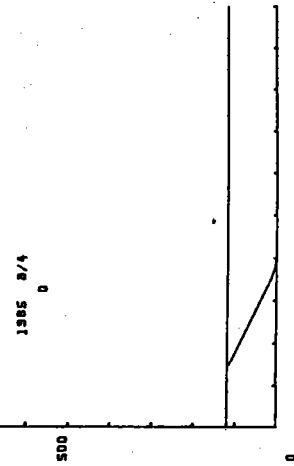
1985 8/7
2



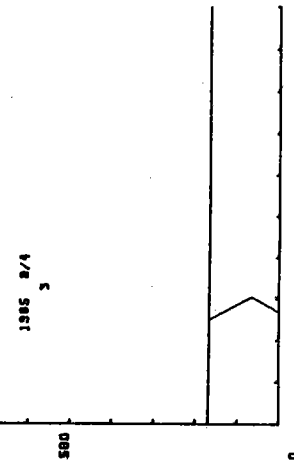
1985 8/2
21

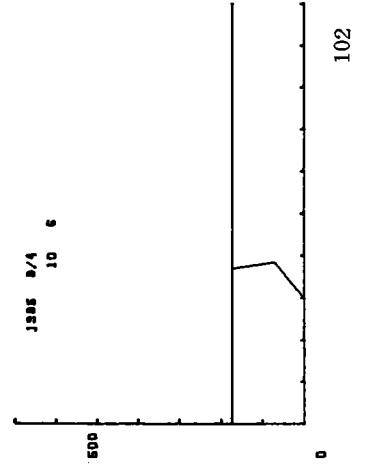
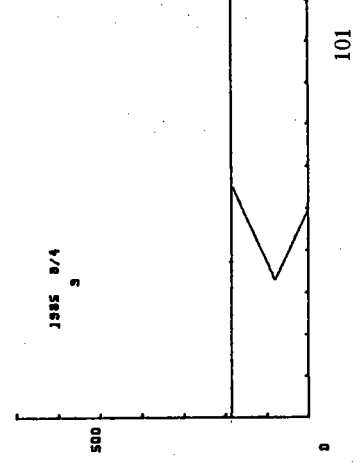
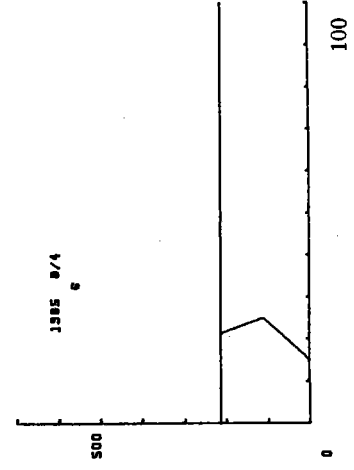
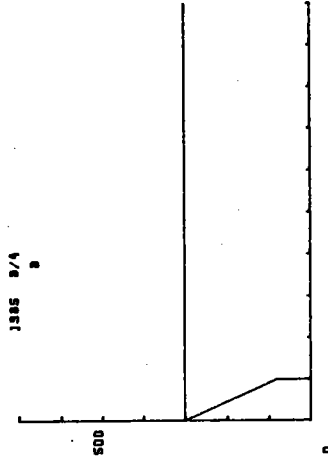
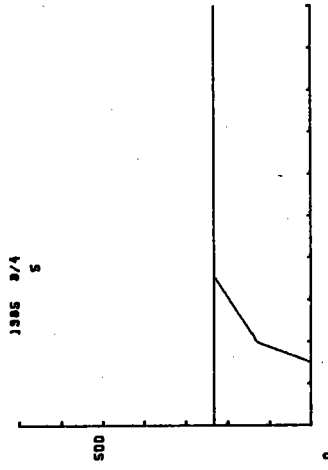
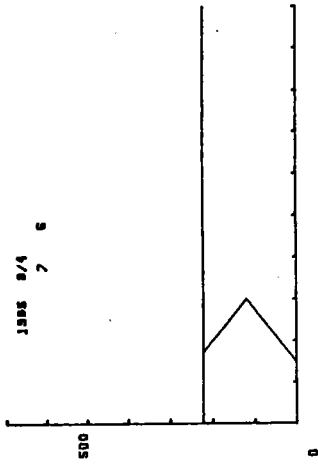
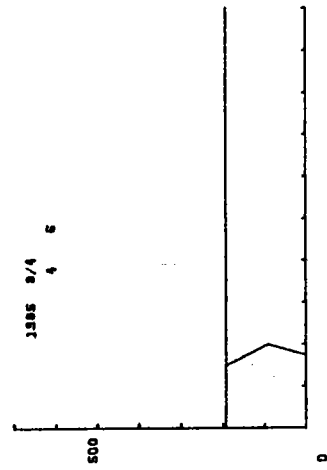


1985 8/0
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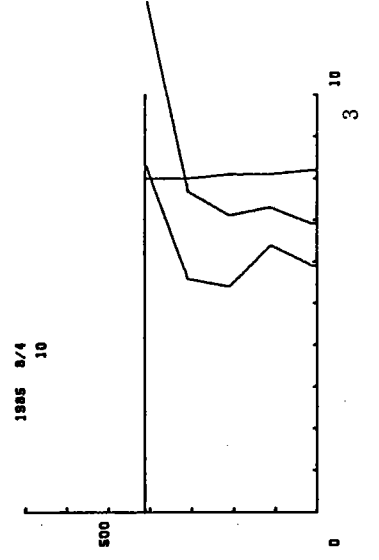
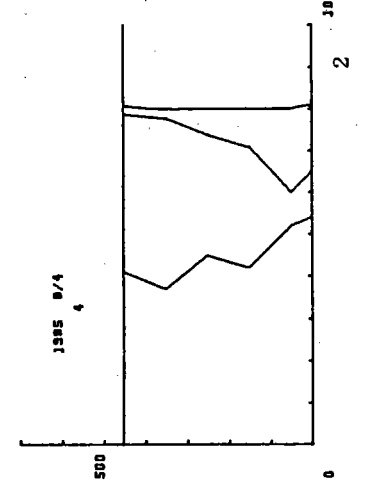
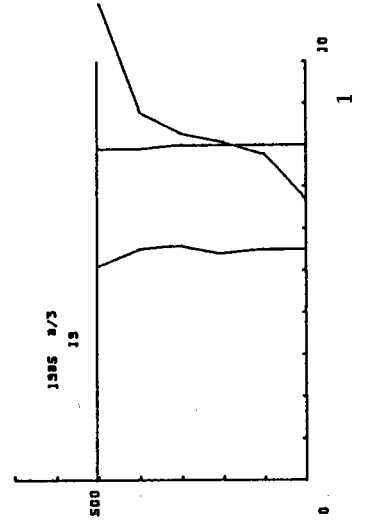
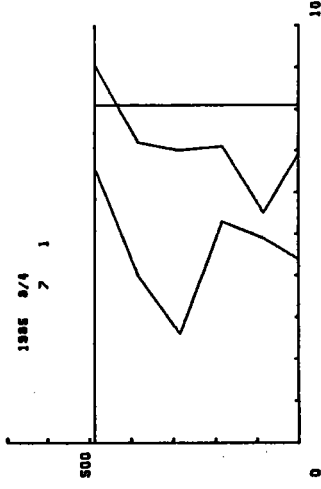
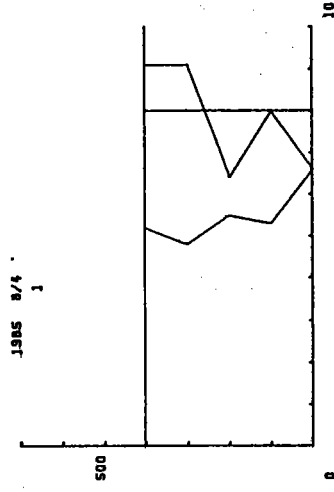
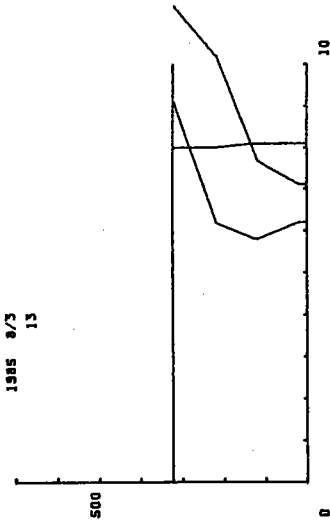
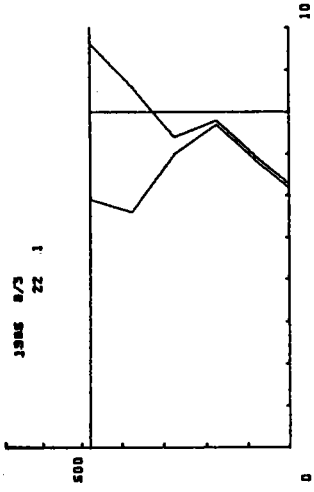
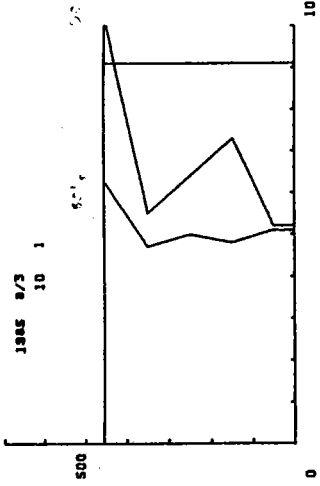
1985 8/1
3



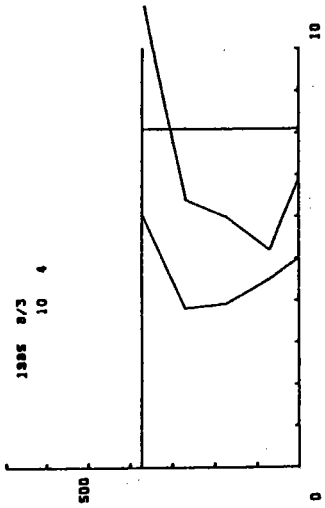


資料 - 5 DO、BODの分布 (1985年夏期)

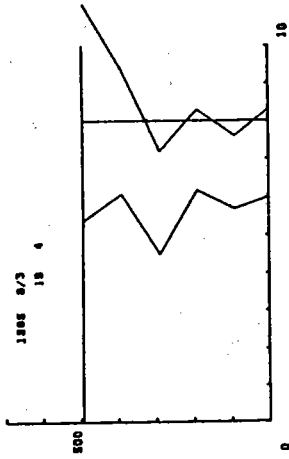
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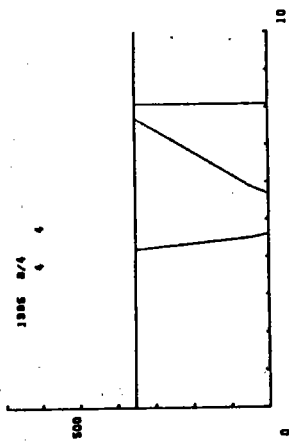
1985 9/3
10 4



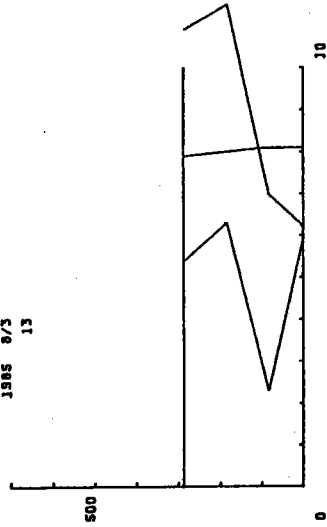
1985 9/3
10 4



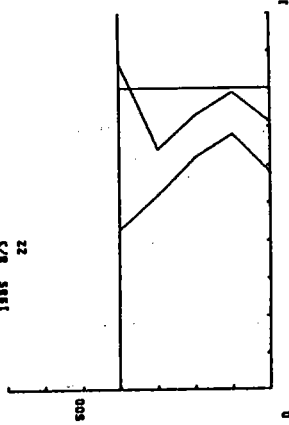
1985 9/4
4 4



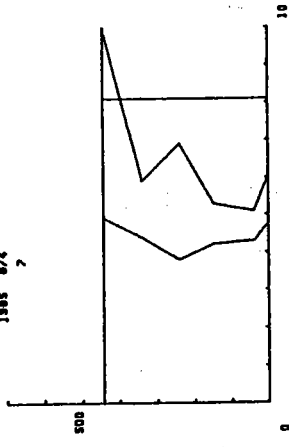
1985 9/3
13



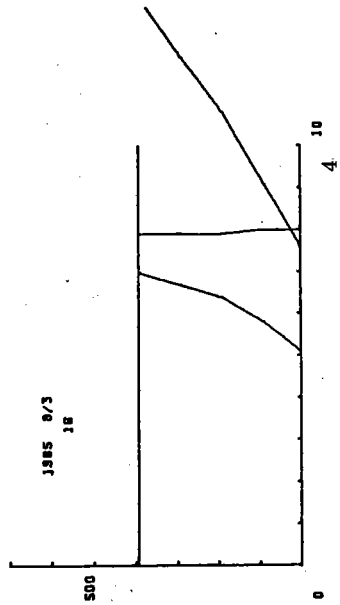
1985 9/3
22



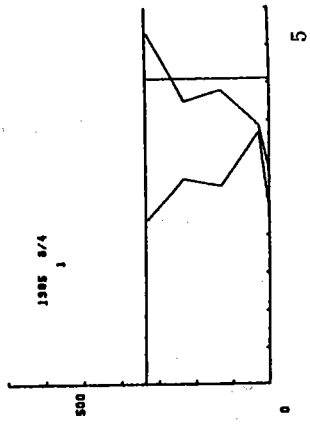
1985 9/4
7



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18



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1



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