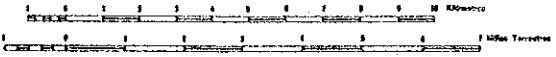


**SIEMPRE CONTENCIONALES**

Alto	-----
Carretera nacional de 40 a 60 Km	-----
Carretera provincial de 20 a 40 Km	-----
Carretera municipal de 10 a 20 Km	-----
Carretera de ferrocarril de 10 a 20 Km	-----
Carretera de ferrocarril de 20 a 40 Km	-----
Carretera de ferrocarril de 40 a 60 Km	-----
Carretera de ferrocarril de 60 a 80 Km	-----
Carretera de ferrocarril de 80 a 100 Km	-----
Carretera de ferrocarril de 100 a 120 Km	-----
Carretera de ferrocarril de 120 a 140 Km	-----
Carretera de ferrocarril de 140 a 160 Km	-----
Carretera de ferrocarril de 160 a 180 Km	-----
Carretera de ferrocarril de 180 a 200 Km	-----
Carretera de ferrocarril de 200 a 220 Km	-----
Carretera de ferrocarril de 220 a 240 Km	-----
Carretera de ferrocarril de 240 a 260 Km	-----
Carretera de ferrocarril de 260 a 280 Km	-----
Carretera de ferrocarril de 280 a 300 Km	-----
Carretera de ferrocarril de 300 a 320 Km	-----
Carretera de ferrocarril de 320 a 340 Km	-----
Carretera de ferrocarril de 340 a 360 Km	-----
Carretera de ferrocarril de 360 a 380 Km	-----
Carretera de ferrocarril de 380 a 400 Km	-----
Carretera de ferrocarril de 400 a 420 Km	-----
Carretera de ferrocarril de 420 a 440 Km	-----
Carretera de ferrocarril de 440 a 460 Km	-----
Carretera de ferrocarril de 460 a 480 Km	-----
Carretera de ferrocarril de 480 a 500 Km	-----
Carretera de ferrocarril de 500 a 520 Km	-----
Carretera de ferrocarril de 520 a 540 Km	-----
Carretera de ferrocarril de 540 a 560 Km	-----
Carretera de ferrocarril de 560 a 580 Km	-----
Carretera de ferrocarril de 580 a 600 Km	-----
Carretera de ferrocarril de 600 a 620 Km	-----
Carretera de ferrocarril de 620 a 640 Km	-----
Carretera de ferrocarril de 640 a 660 Km	-----
Carretera de ferrocarril de 660 a 680 Km	-----
Carretera de ferrocarril de 680 a 700 Km	-----
Carretera de ferrocarril de 700 a 720 Km	-----
Carretera de ferrocarril de 720 a 740 Km	-----
Carretera de ferrocarril de 740 a 760 Km	-----
Carretera de ferrocarril de 760 a 780 Km	-----
Carretera de ferrocarril de 780 a 800 Km	-----
Carretera de ferrocarril de 800 a 820 Km	-----
Carretera de ferrocarril de 820 a 840 Km	-----
Carretera de ferrocarril de 840 a 860 Km	-----
Carretera de ferrocarril de 860 a 880 Km	-----
Carretera de ferrocarril de 880 a 900 Km	-----
Carretera de ferrocarril de 900 a 920 Km	-----
Carretera de ferrocarril de 920 a 940 Km	-----
Carretera de ferrocarril de 940 a 960 Km	-----
Carretera de ferrocarril de 960 a 980 Km	-----
Carretera de ferrocarril de 980 a 1000 Km	-----

Este mapa fue producido en 1971 por la DIRECCIÓN DE CARTOGRAFÍA NACIONAL, mediante reducción de 1:50,000 a escala 1:25,000, realizada por métodos fotogramétricos con vistas aéreas tomadas en 1951. Clasificación de campo en 1963.

Escala 1:100,000



CURVAS DE NIVEL A INTERVALOS DE 40 METROS  
 SUPLEMENTARIAS A INTERVALOS DE 20 METROS  
 DATO VERTICAL: NIVEL MEDIO DEL MAR  
 PROYECCIÓN MERCATOR TRANSVERSAL  
 DATO HORIZONTAL: LA CANAL

DATO HORIZONTAL: DATO: APROXIMADO DE LA BAZARAR MERA  
 LAS LÍNEAS NUMÉRICAS SIGUIAN LA CARACTERÍSTICA UNIVERSAL TRANSVERSAL DE MERCATOR  
 CON EMPLEAMIENTO DE 1000 METROS, HUBO EL EMPLEO DE LA UNIDAD INTERNACIONAL

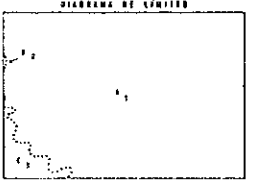
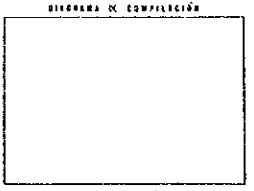
1:50,000 LA TERCERA EDICIÓN DE LOS MAPAS DE LA CUADRÍCULA PARA 600,000

**ÍNDICE DE HOJAS ESTADÍSTICAS**

640	640	640
641	641	641
642	642	642

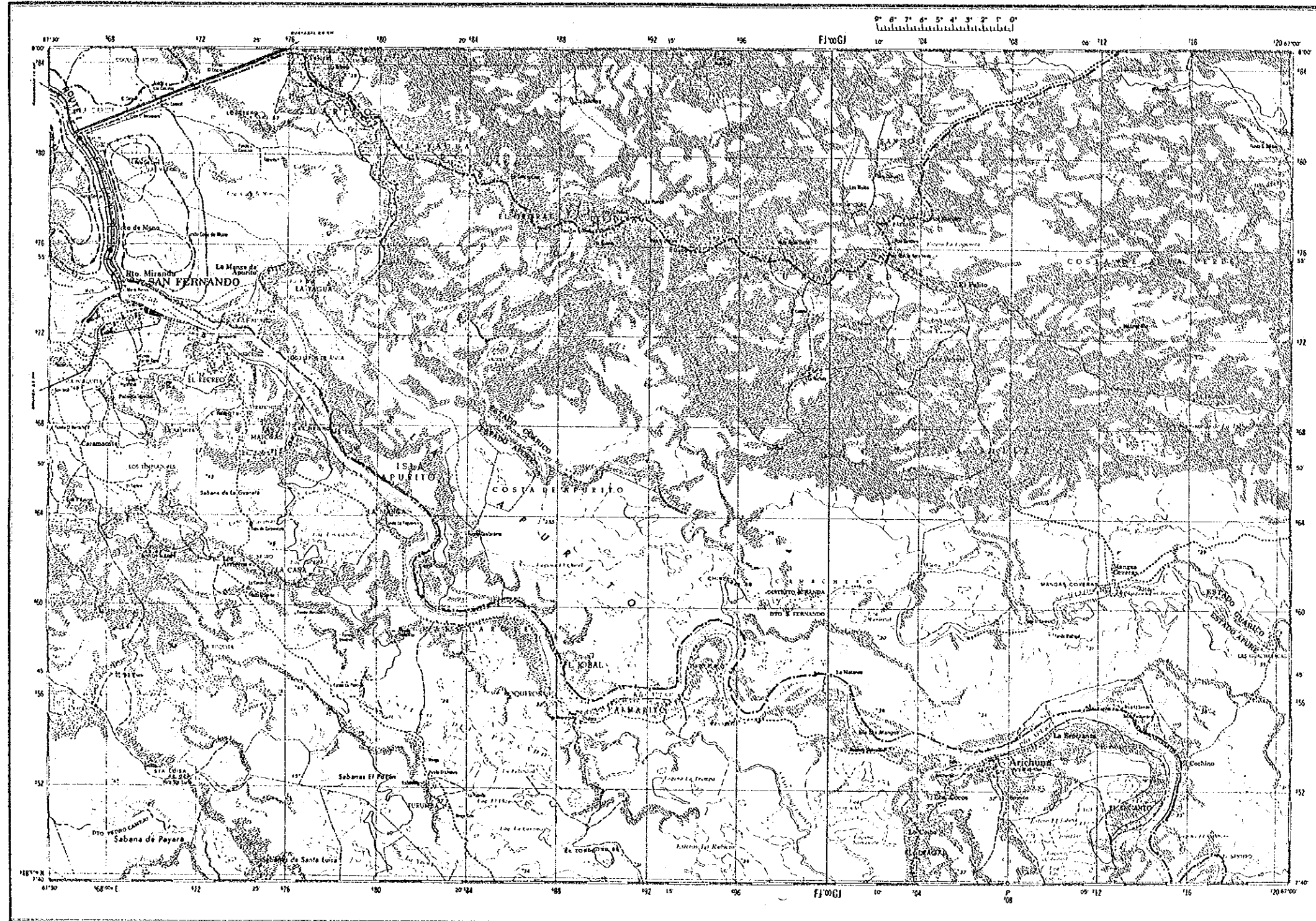
**LEGEND - ROUTE Nº 2**  
**FLOOD INUNDATION OBSERVATION**  
**OF THE APURE RIVER BASIN**  
**MISSION 17 - MISSION 28**  
 JUN - NOV. 1952

INFERED INUNDATED AREA



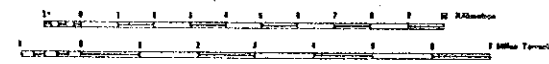
1. Eje Norte  
 2. Eje Sur  
 3. Eje Oeste  
 4. Eje Este





Este mapa fue publicado en 1971 por la DIRECCIÓN DE CARTOGRAFÍA NACIONAL, mediante  
reducción de hojas a escala 1:25 000, realizadas por métodos fotogramétricos con  
vistas aéreas tomadas en 1961. Clasificación de cartón en 1964 y 1966.

Escala 1:100.000



CURVAS DE NIVEL A INTERVALOS DE 40 METROS  
SUPLEMENTARIAS A INTERVALOS DE 20 METROS

DATO VERTICAL: NIVEL MEDIO DEL MAR  
PROYECCIÓN MERCATOR TRANSVERSAL  
DATO HORISONTAL: LA CANA

DATO COTOPLEGADO: NIVEL APROXIMADO DE LA SEÑAL MEDIA  
LAS LINEAS HORIZONTALES SIGUEN LA COORDENADA UNIVERSAL TRANSVERSAL DE MERCATOR,  
CON EMPALMAMIENTO DE ANCHO METRICO, MANTENIENDO ESTEREAOGRAFIA.

CON UNO Y CINCO DÍGITOS DE LOS NÚMEROS DE LA CUADRICULA PARA BORNES QUINTOS

INDICE DE VALORES ESTADÍSTICOS

600	670	690
620	670	650
620	670	650

El valor 670 puede compararse con el 670.00

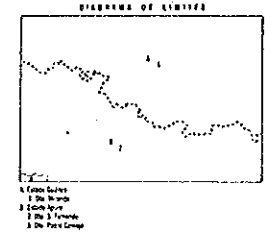
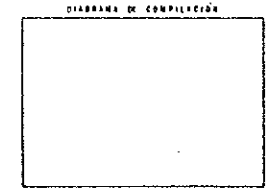
## LEGEND - ROUTE 1

FLOOD INUNDATION OBSERVATION  
OF THE APURE RIVER BASIN  
MISSION 17 - MISSION 28  
AUG - NOV. 1972

FOLLOWED ROUTE  
OBSERVATION POINT  
INFERED INUNDATED AREA  
OBSERVED INUNDATED AREA  
M17-22  
M23-26  
M28-28

SIEMPRE CONVENCIONALES

AGUAS	
Carretera pavimentada de 40 m de ancho	
Carretera pavimentada de 20 m de ancho	
Carretera asfaltada de 40 m de ancho	
Carretera asfaltada de 20 m de ancho	
Carretera de tierra	
Carretera sencilla	
Carretera doble	
Carretera de 4 carriles	
Carretera de 6 carriles	
Carretera de 8 carriles	
Carretera de 10 carriles	
Carretera de 12 carriles	
Carretera de 14 carriles	
Carretera de 16 carriles	
Carretera de 18 carriles	
Carretera de 20 carriles	
Carretera de 22 carriles	
Carretera de 24 carriles	
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Carretera de 82 carriles	
Carretera de 84 carriles	
Carretera de 86 carriles	
Carretera de 88 carriles	
Carretera de 90 carriles	
Carretera de 92 carriles	
Carretera de 94 carriles	
Carretera de 96 carriles	
Carretera de 98 carriles	
Carretera de 100 carriles	



INDICACIONES DE LOS VALORES ESTADÍSTICOS

Categoría	Valor
M17-22	100
M23-26	100
M28-28	100

DECLINACIÓN MAGNÉTICA PARA EL AÑO DE 1971  
RETOZO DEL CÁRTER  
SEÑAL DEL DIBUJO  
SEÑALACIONES EN BLANCO

Para obtener el valor de declinación magnética para un punto de terreno en el momento de su levantamiento, se debe aplicar el método de corrección de declinación magnética para el momento de su levantamiento. Este método se describe en el capítulo 11 del presente manual.



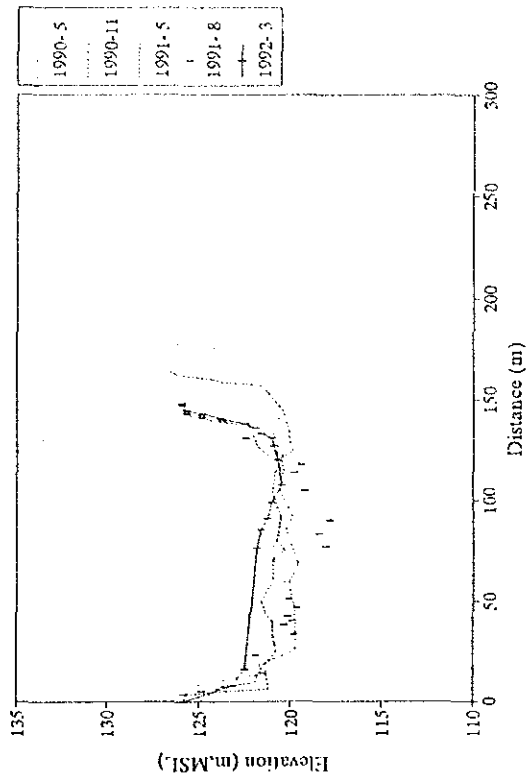
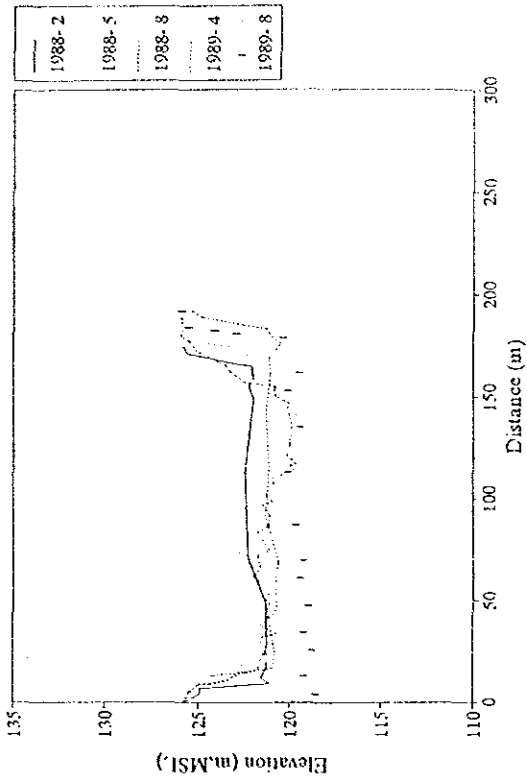


## **DATA - E1**

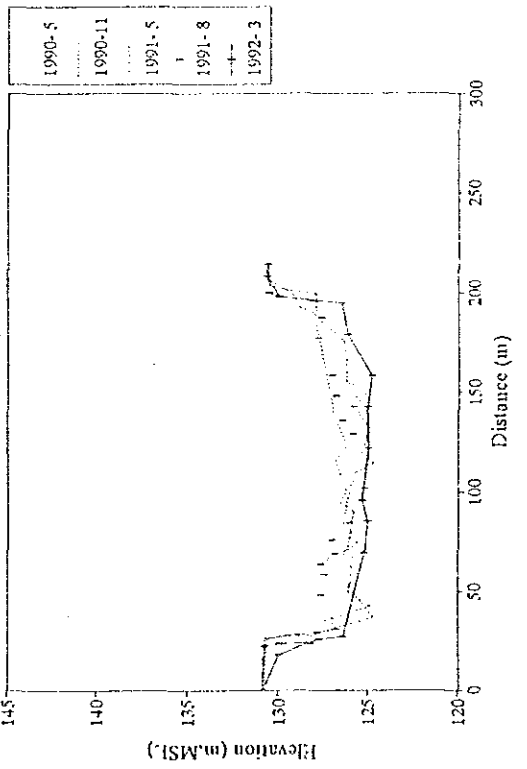
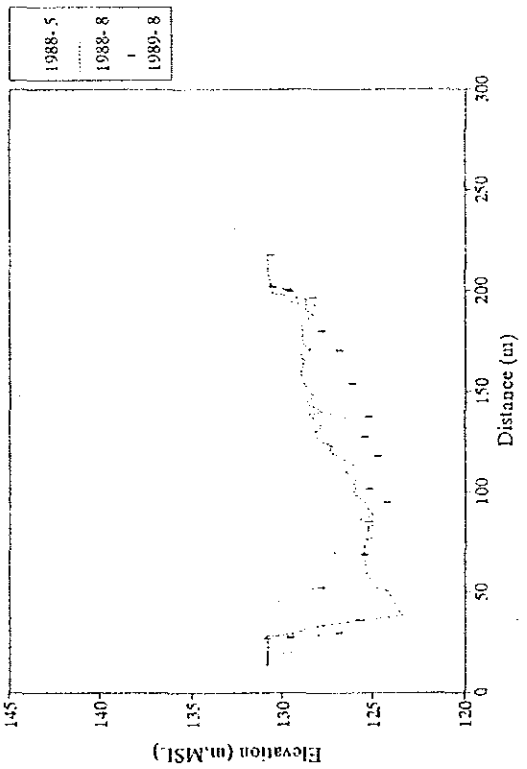
### **HISTORICAL CHANGES OF CHANNEL SECTIONS**

- Period : 1988 to 1992

Puerto Santos Luzardos

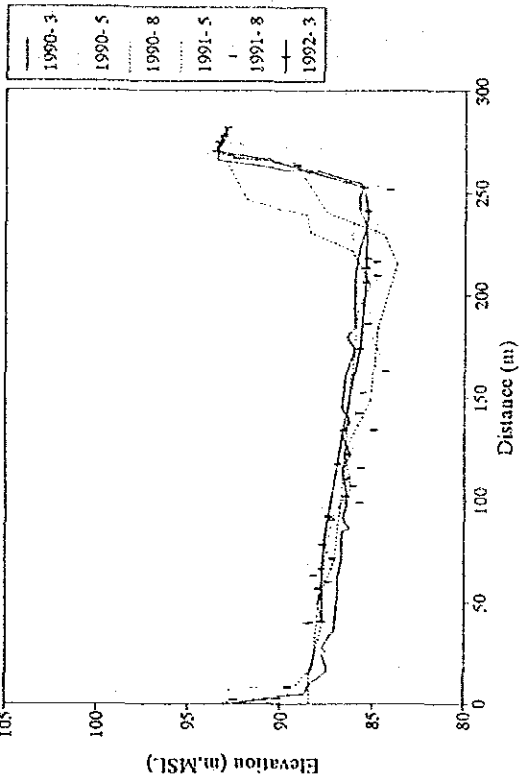
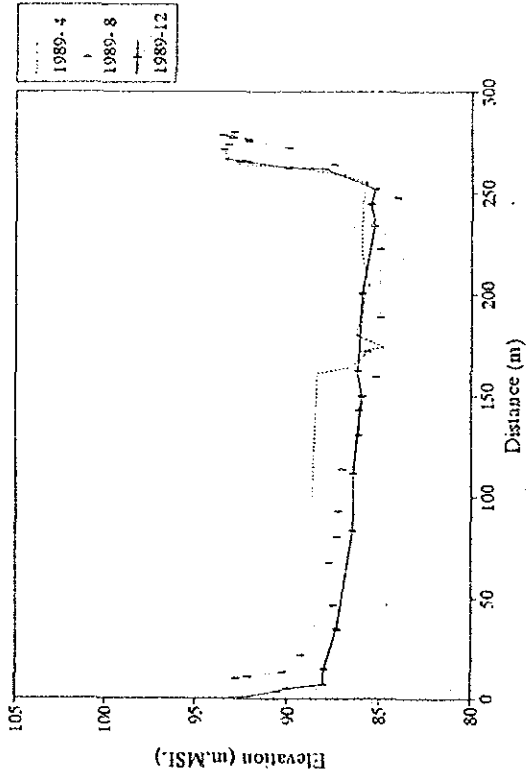


Puente Remolino

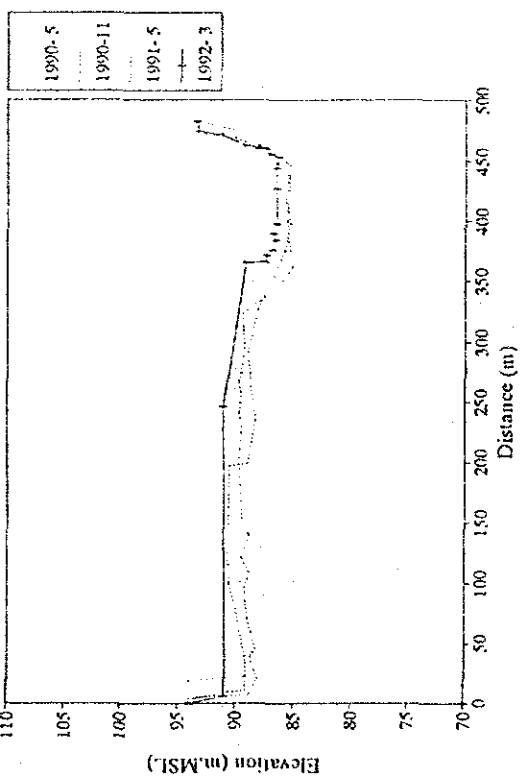
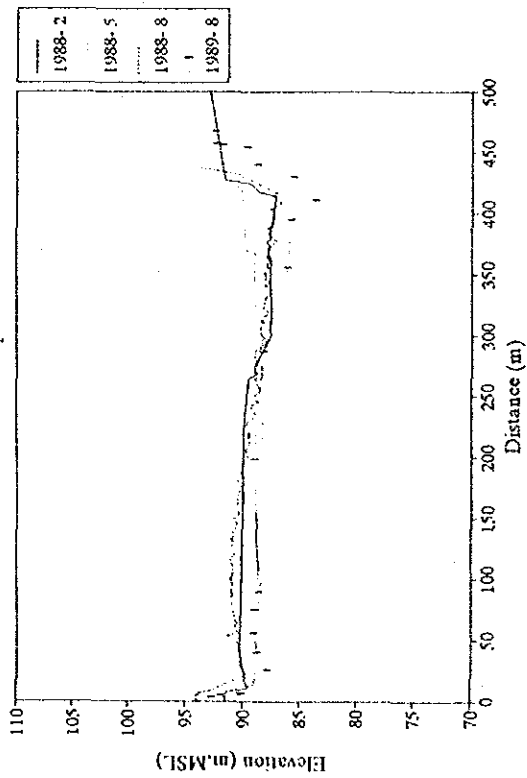


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 OF THE APURE RIVER BASIN  
 JAPAN INTERNATIONAL COOPERATION AGENCY

Quintero

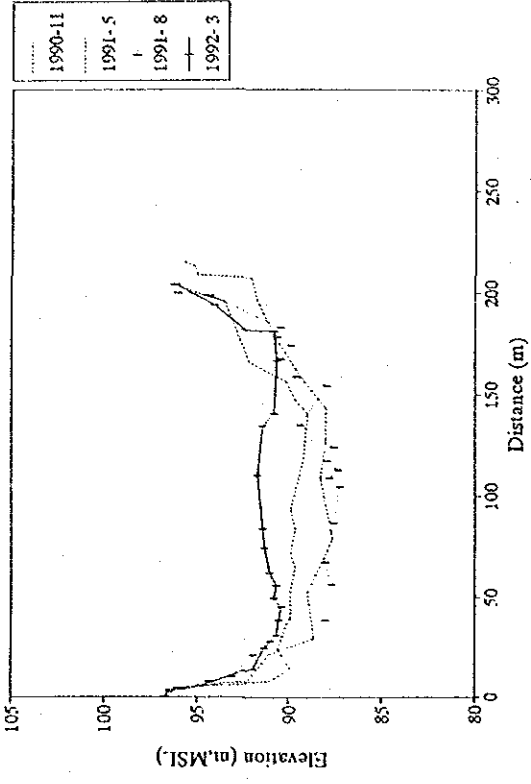


Boca del Suripa

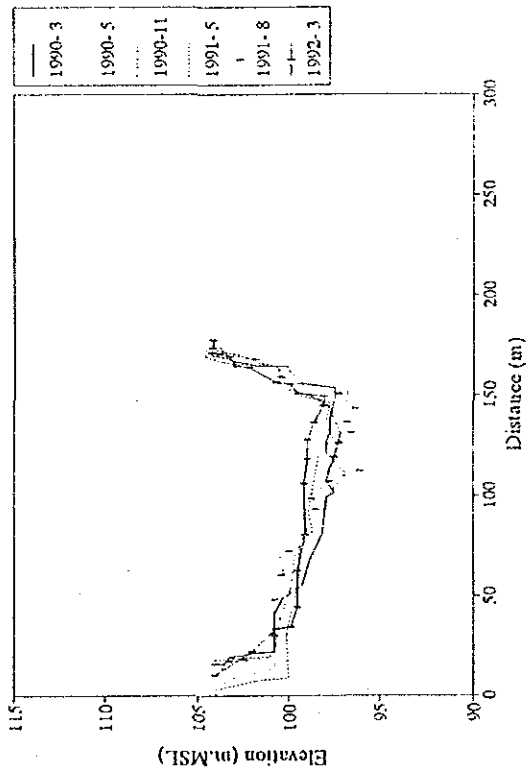
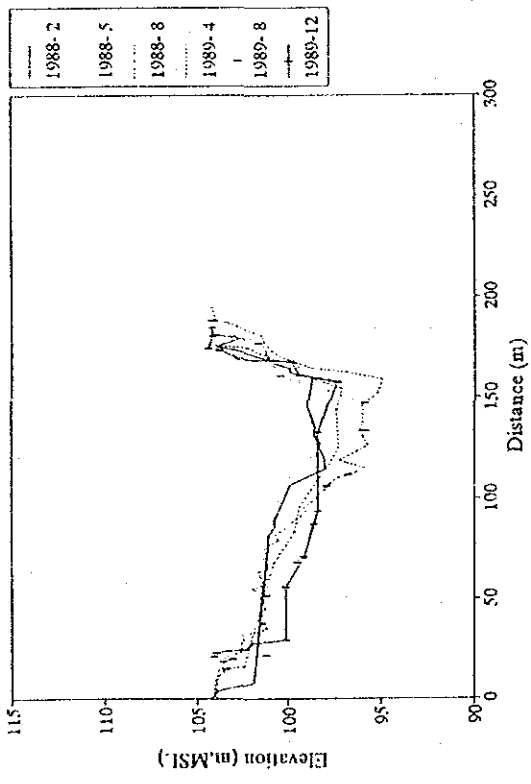


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Arecoston de la Tigra

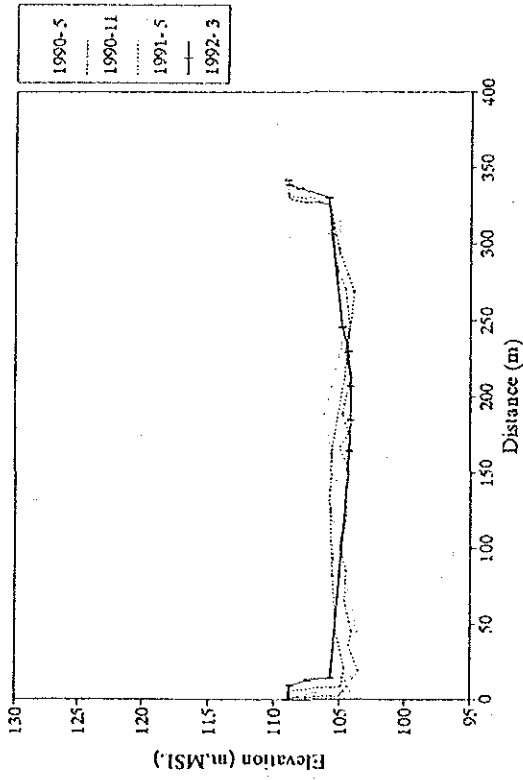


Palmarito

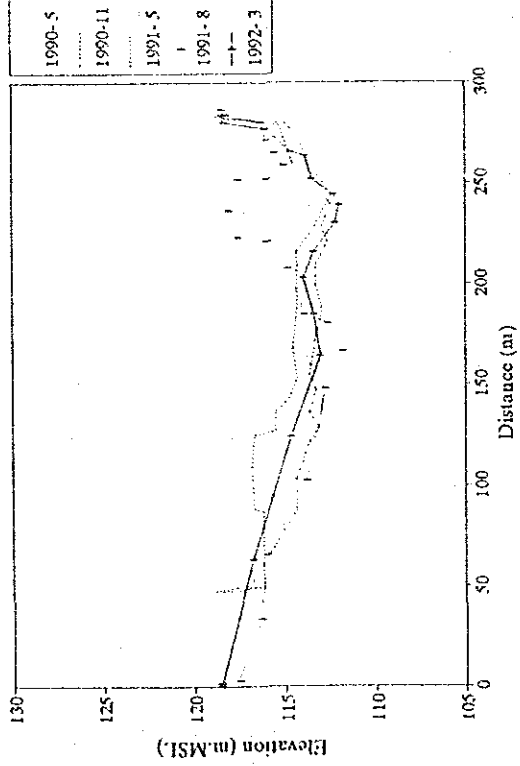
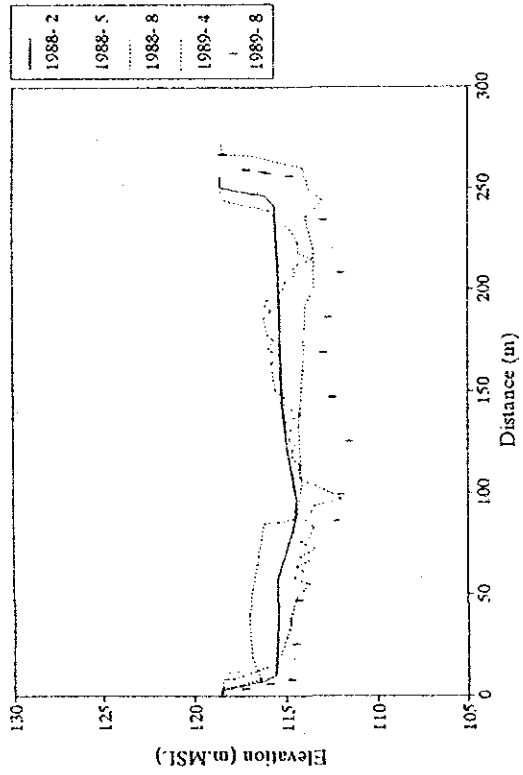


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 OF THE APURE RIVER BASIN  
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Samanal



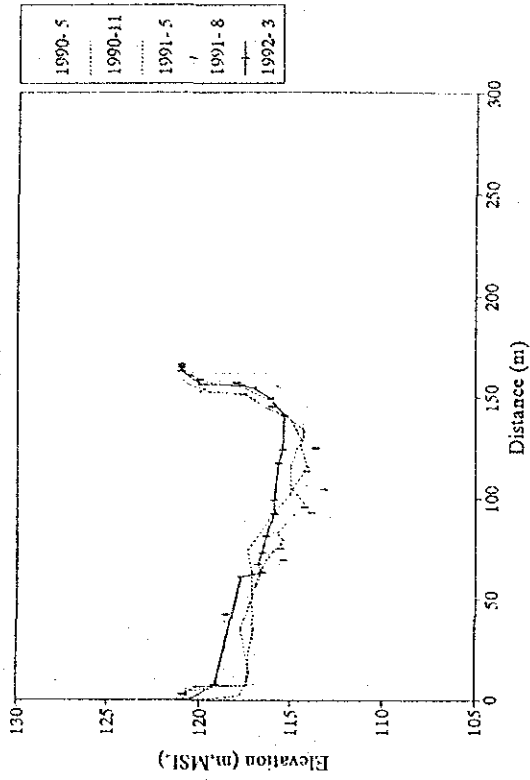
Totumito



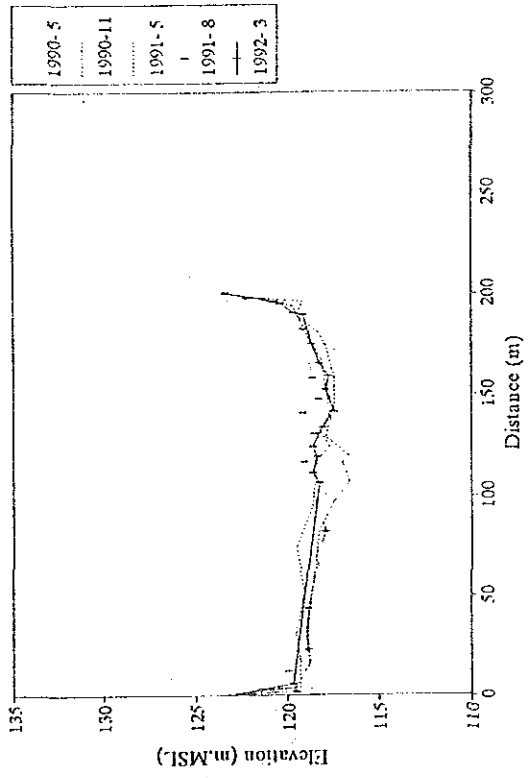
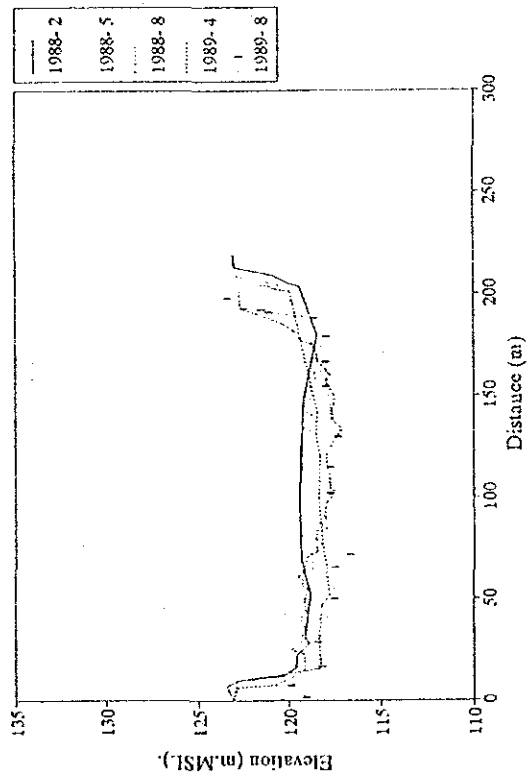
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Hata La Miel

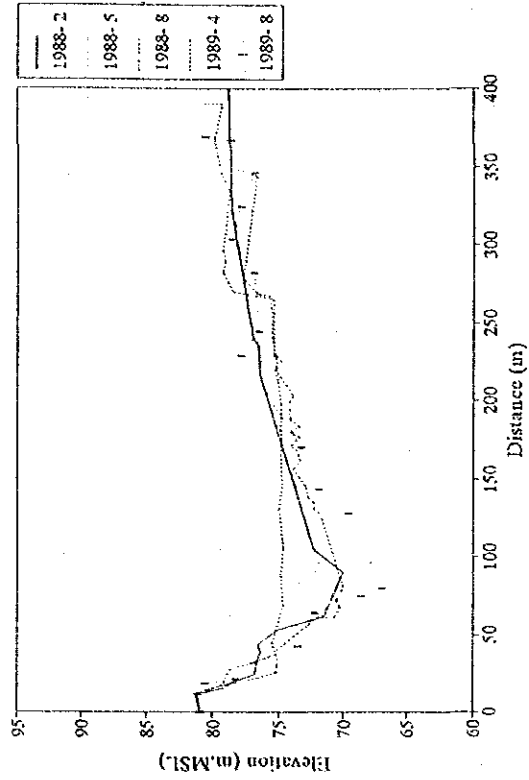
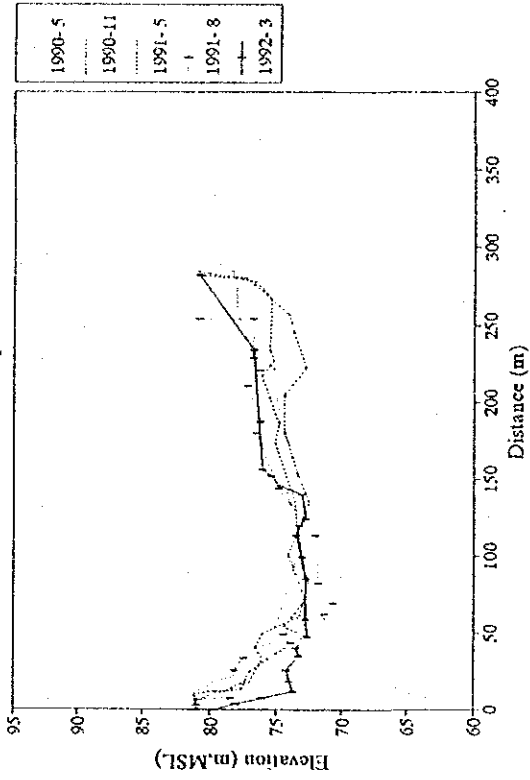


La Orurita

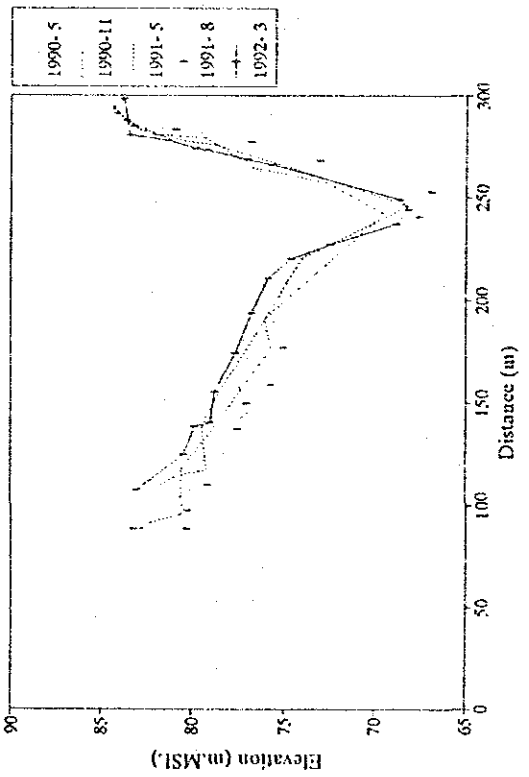
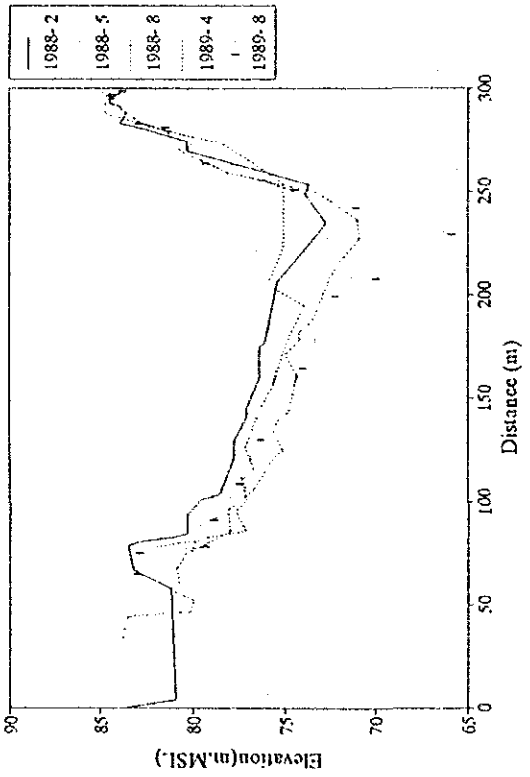


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 OF THE APURE RIVER BASIN  
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Boca del Masparró

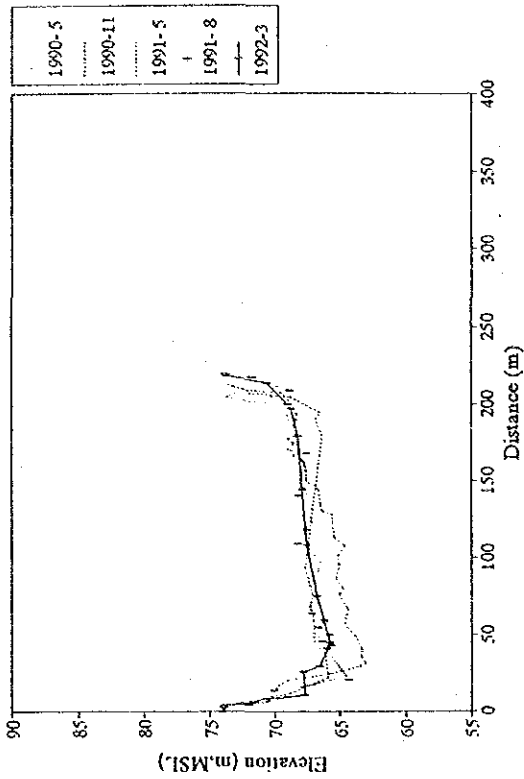


San Vicente

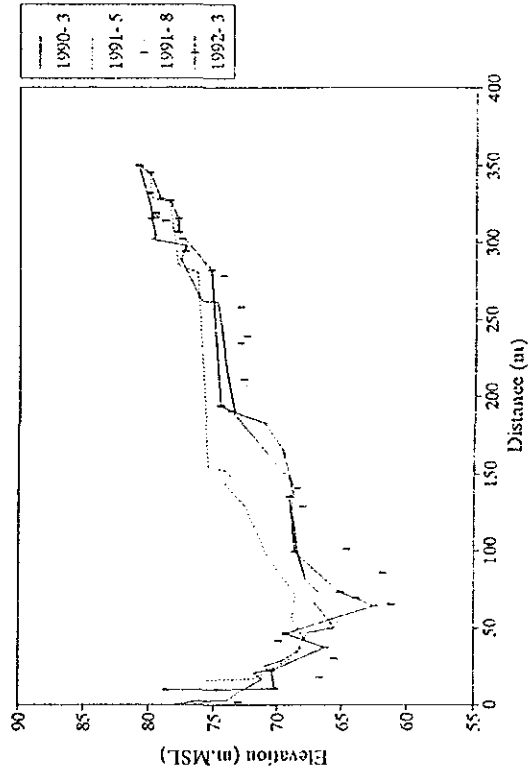
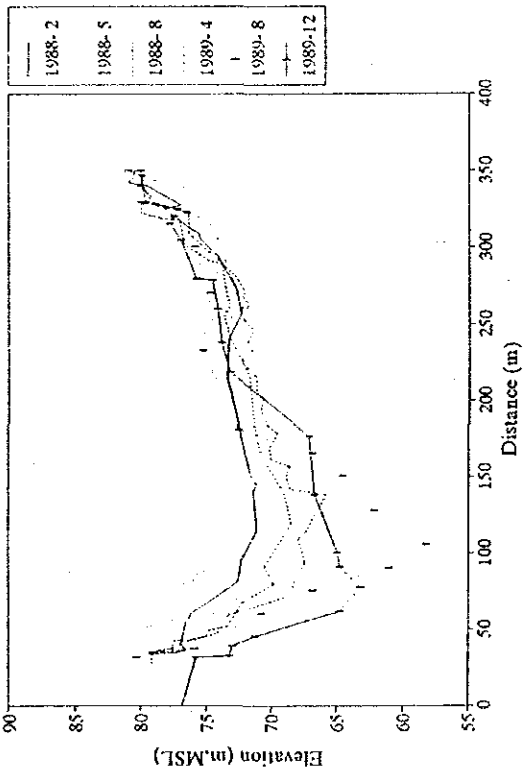


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El Chinal

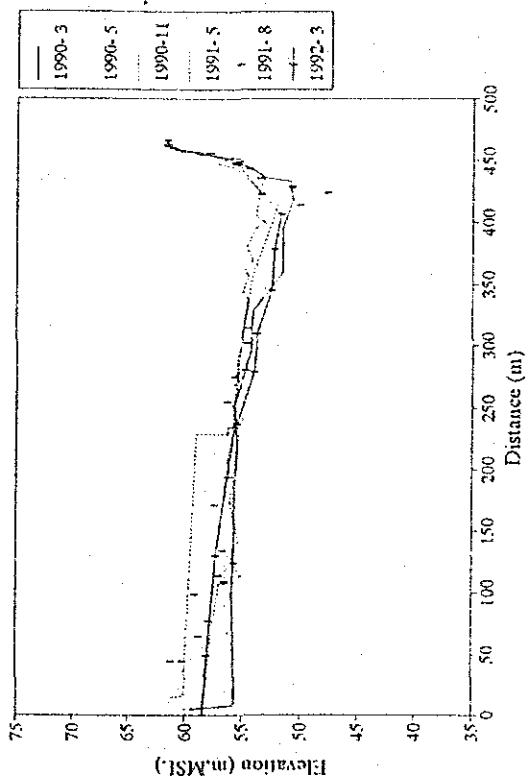
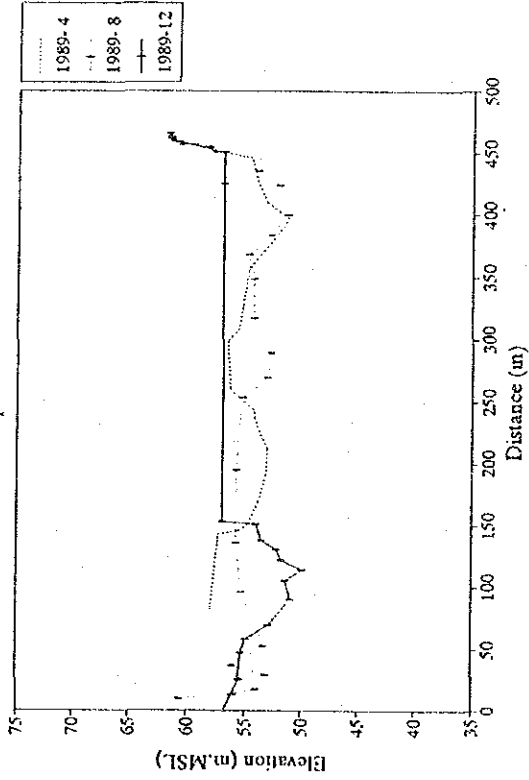


Bruzual

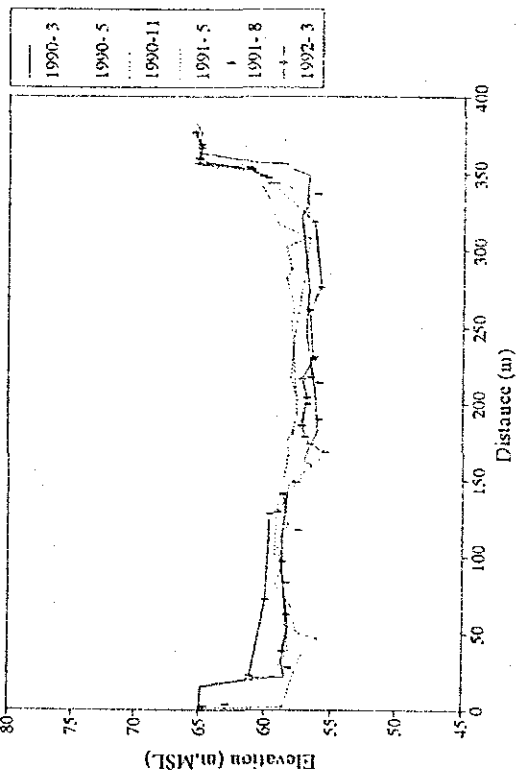
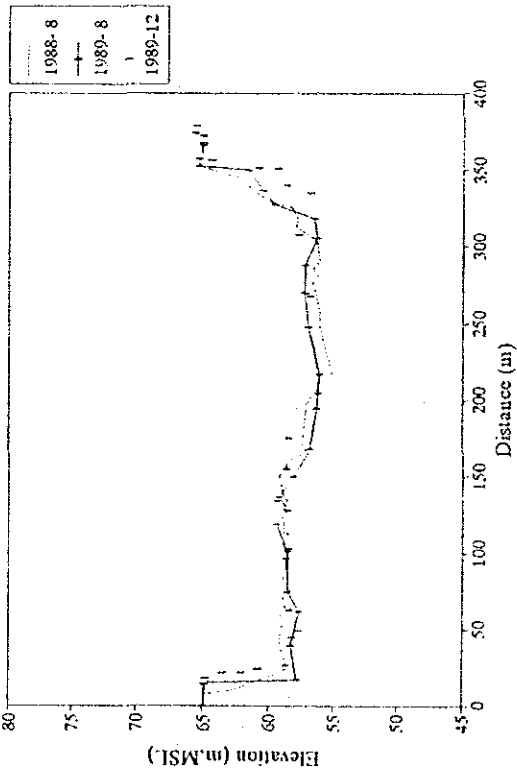


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Apurito

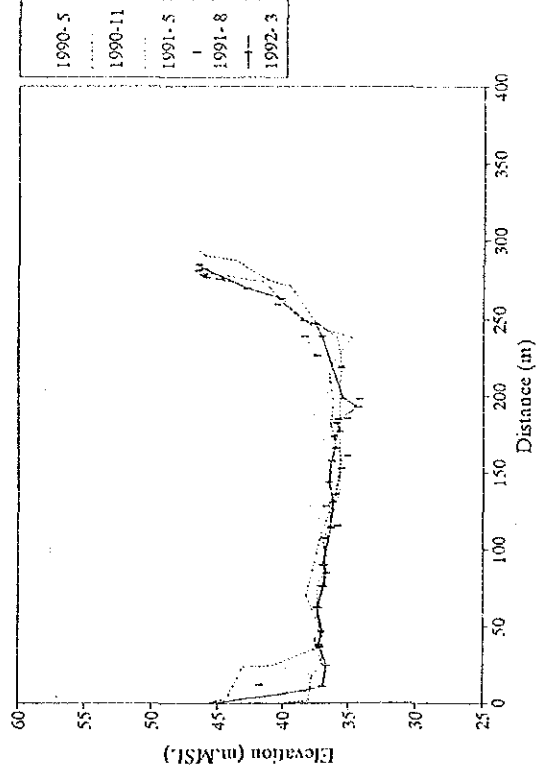
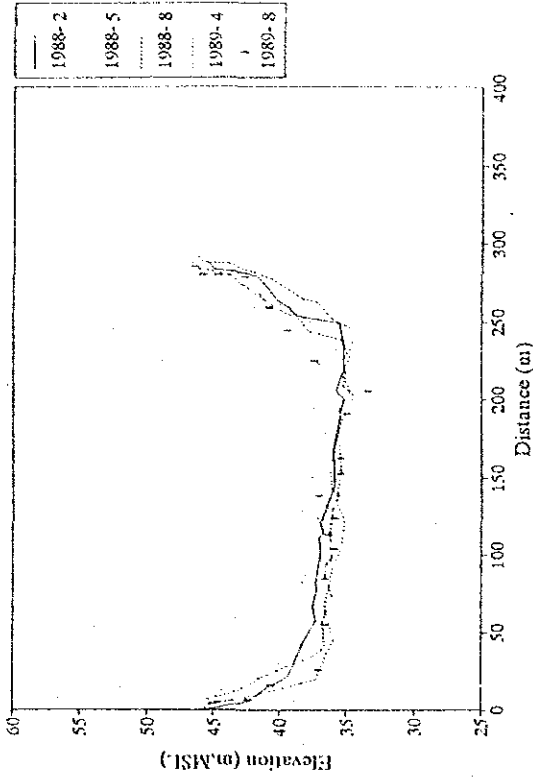


El Saman

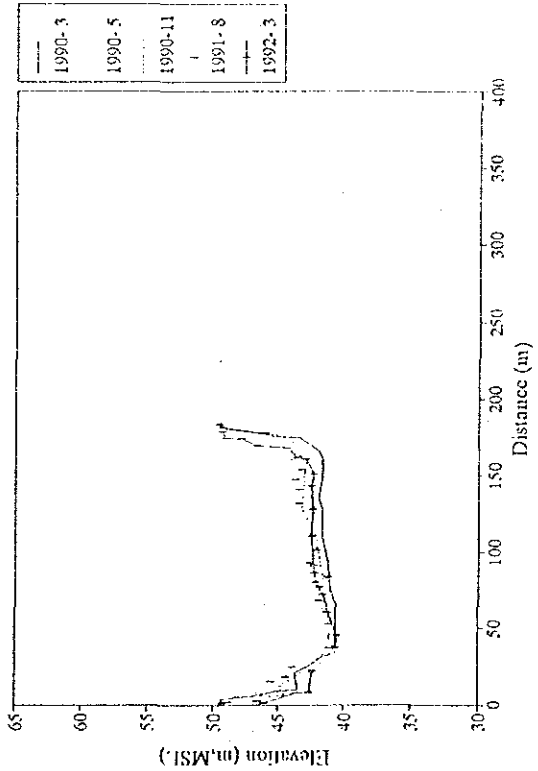
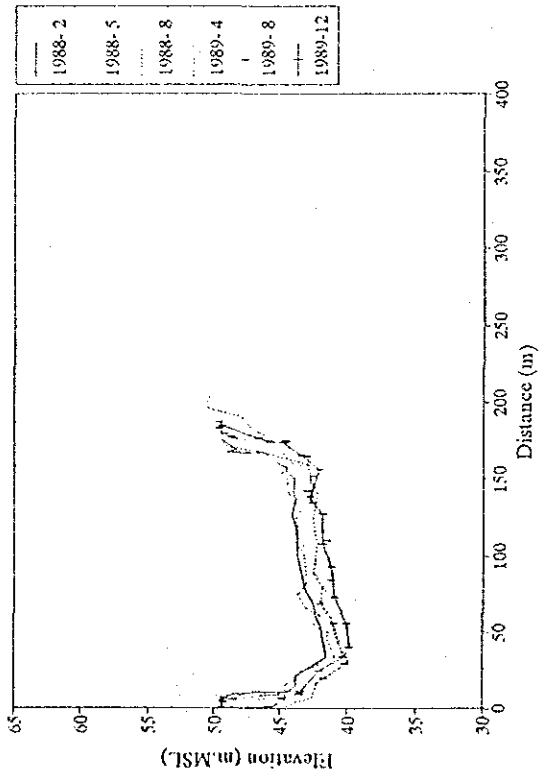


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Las Cuiatas

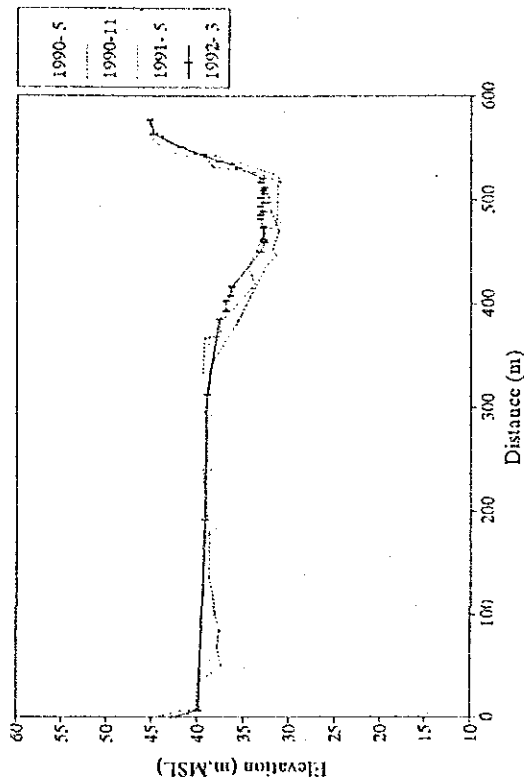
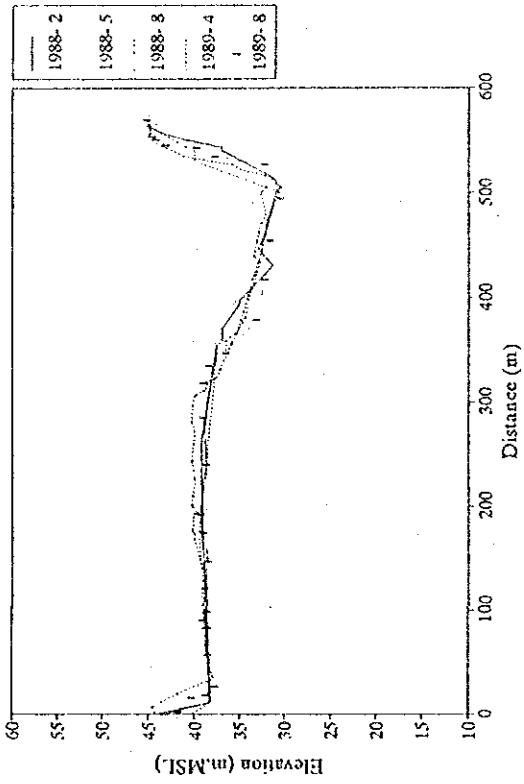


Chamizal/Ruende

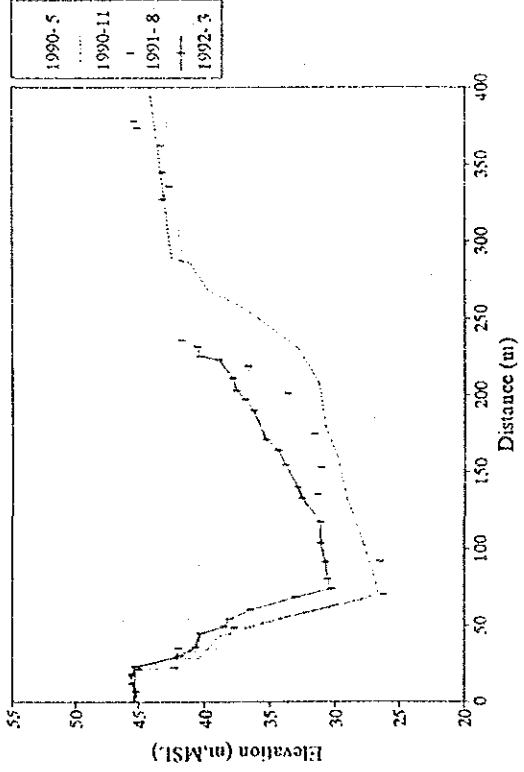
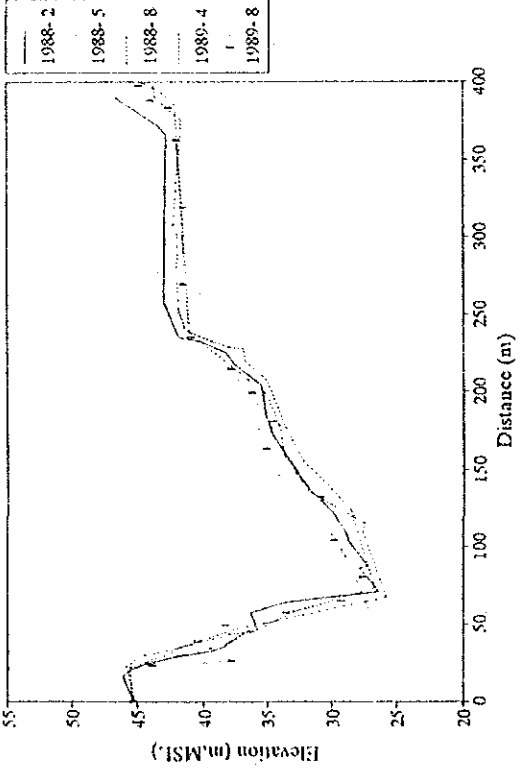


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 COMPREHENSIVE IMPROVEMENT  
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San Fernando

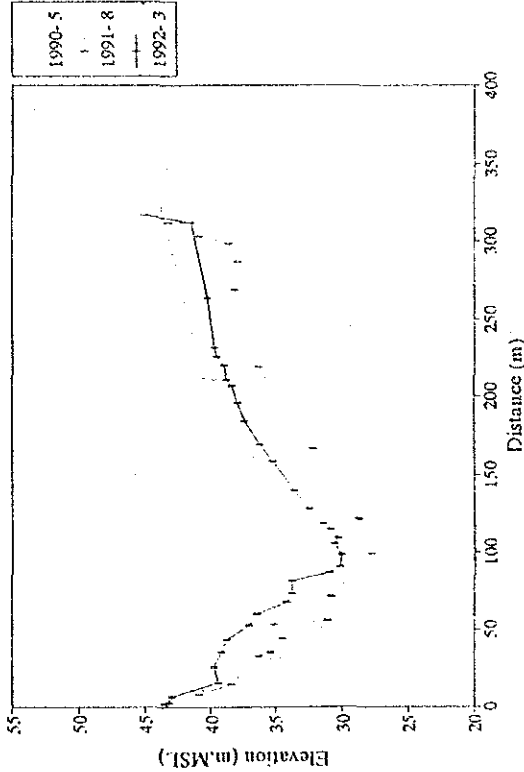
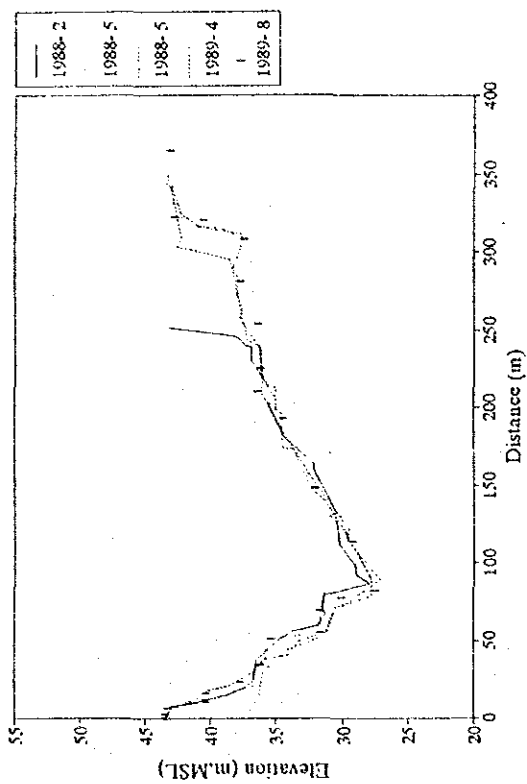


Las Gunnotas

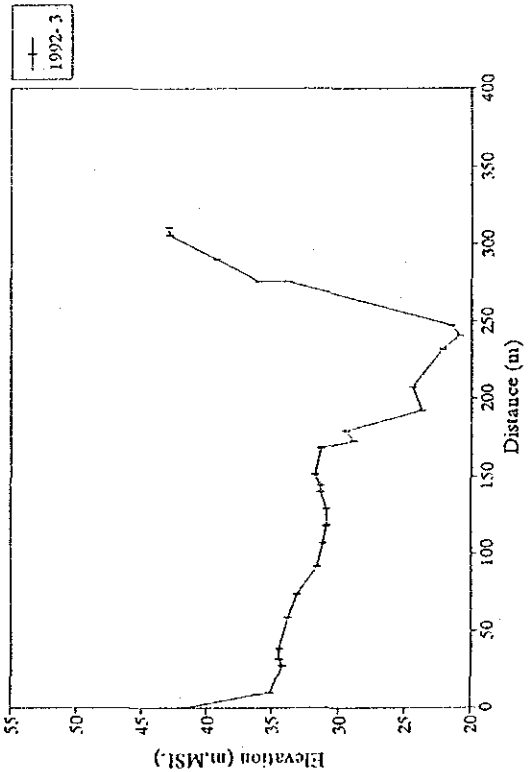


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El Jobal

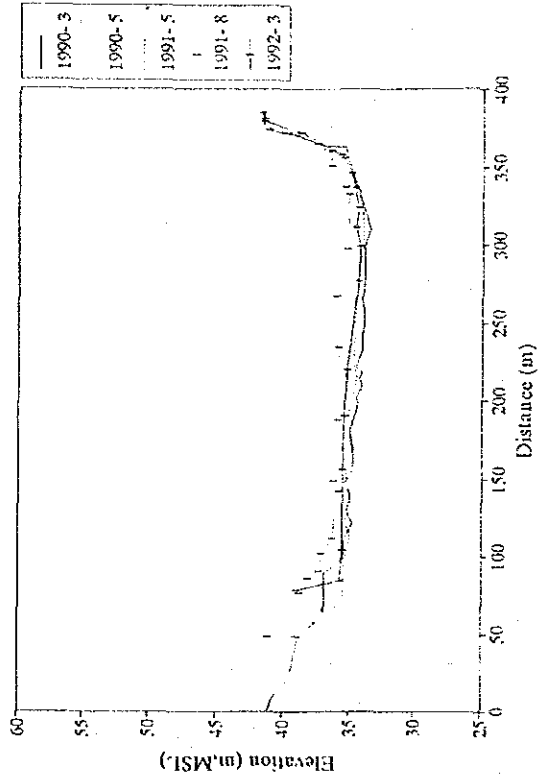
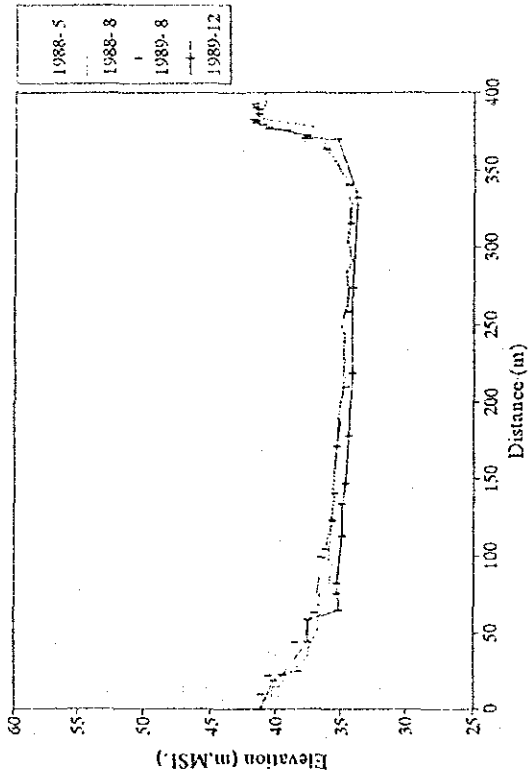


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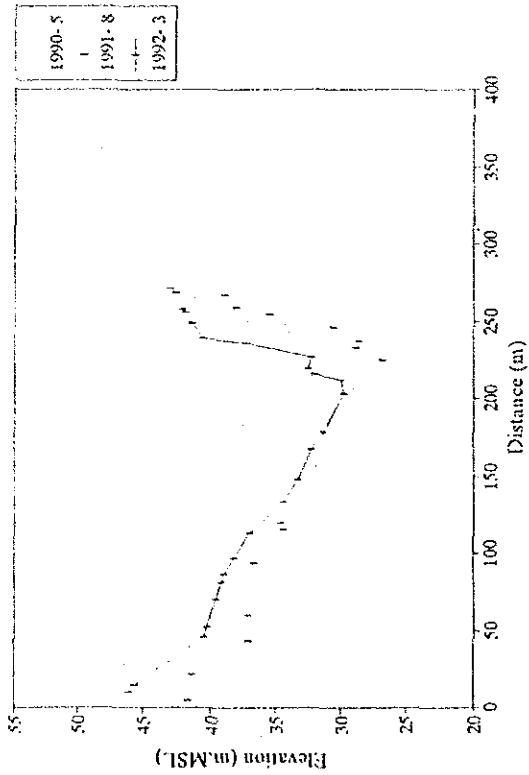


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 OF THE APURE RIVER BASIN  
 JAPAN INTERNATIONAL COOPERATION AGENCY

Arihuna



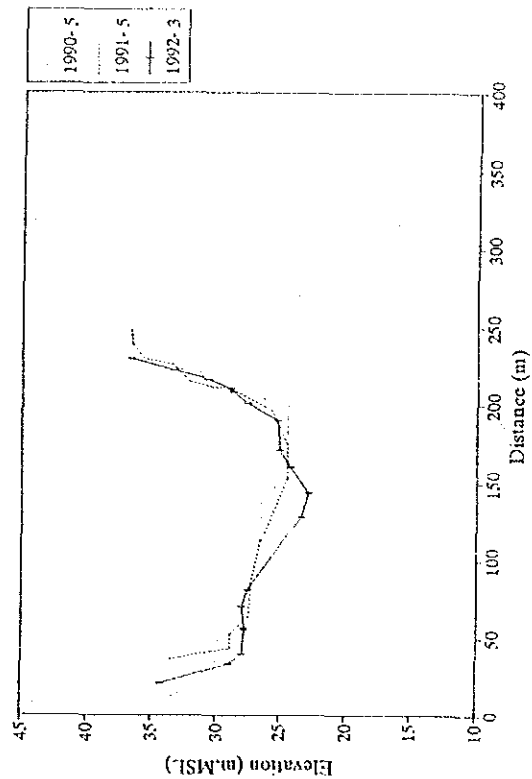
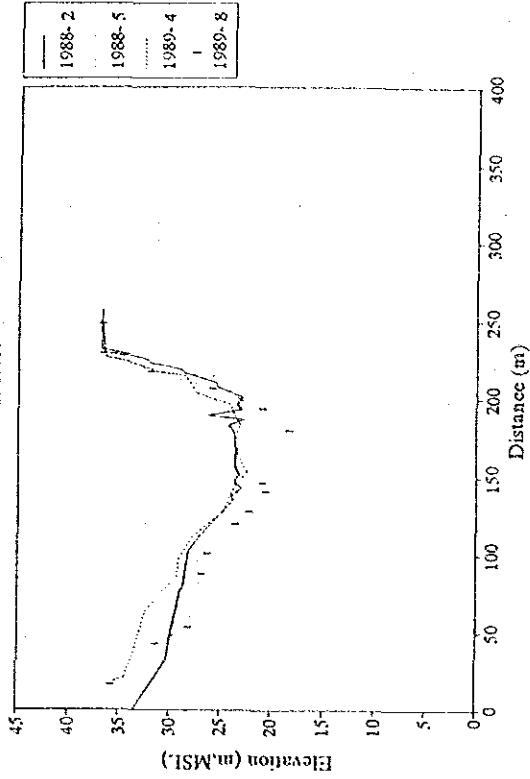
Chirel I



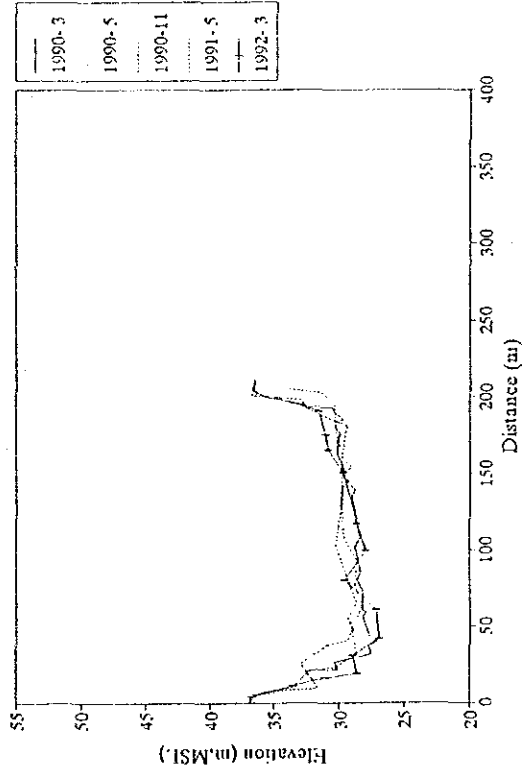
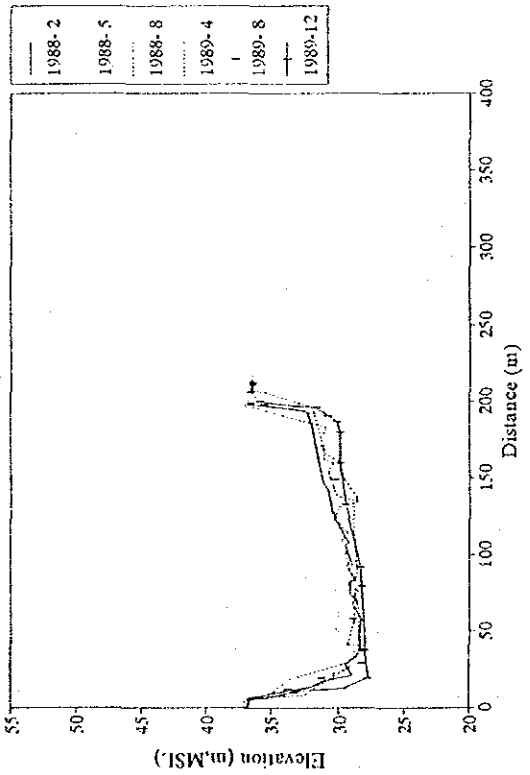
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La Maciera

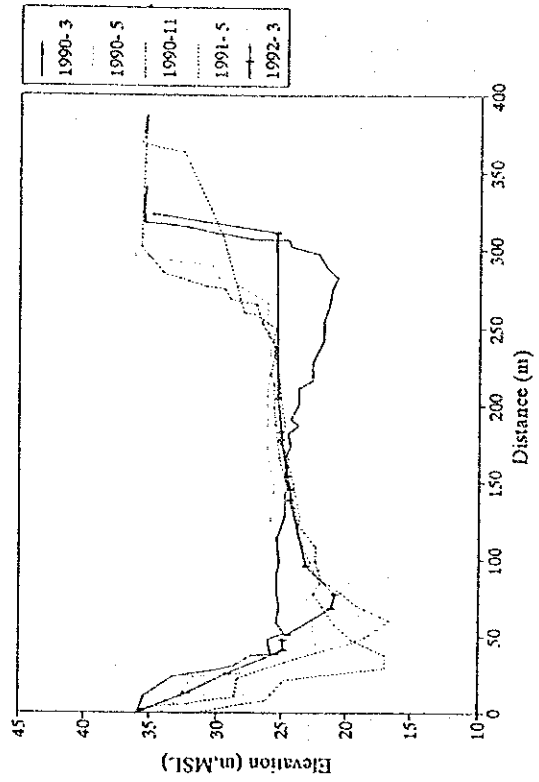
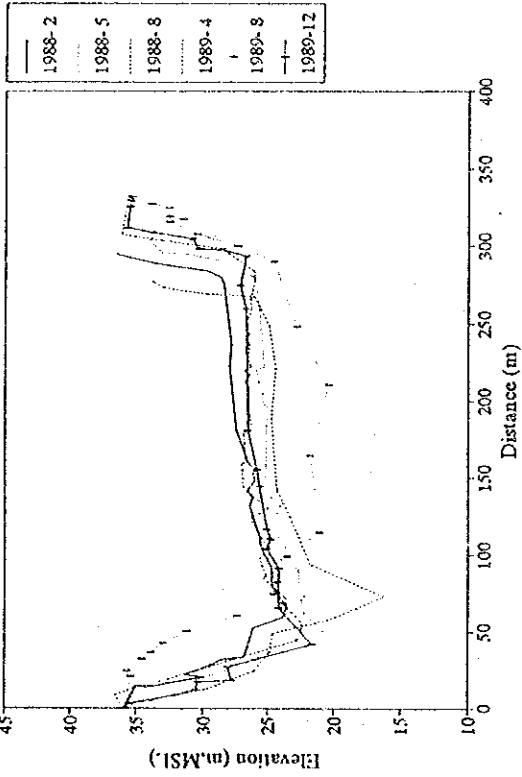


El Sausal

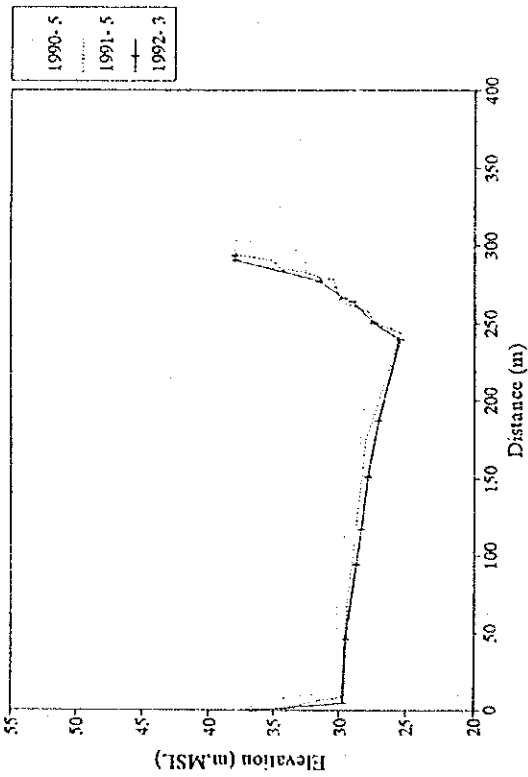


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El Petro

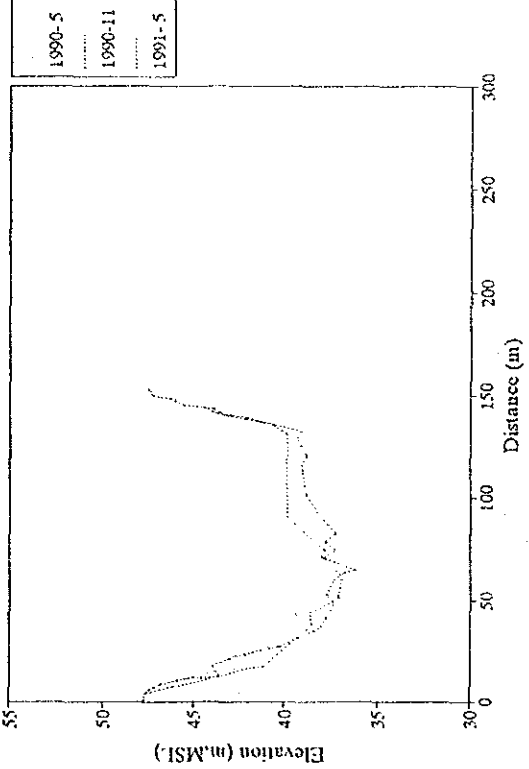
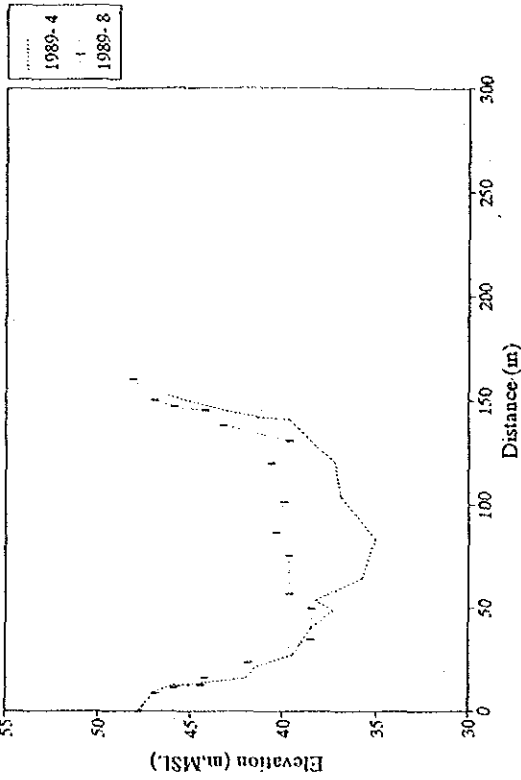


El Mamon

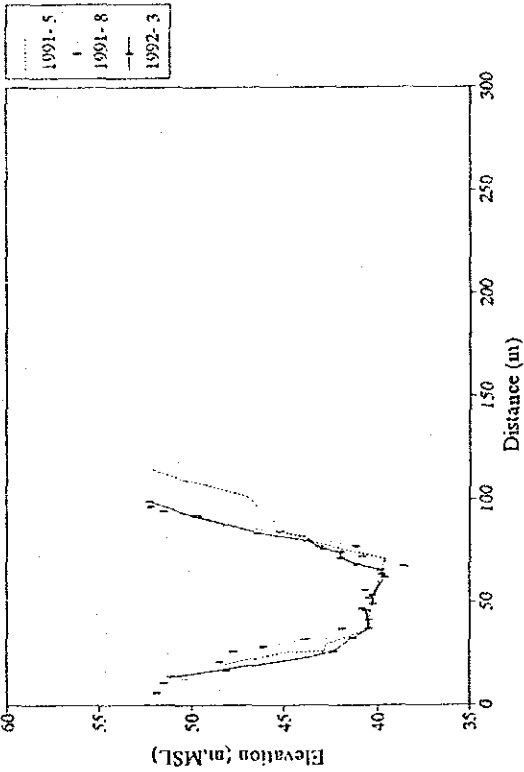


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Camaguan/Portuguesa

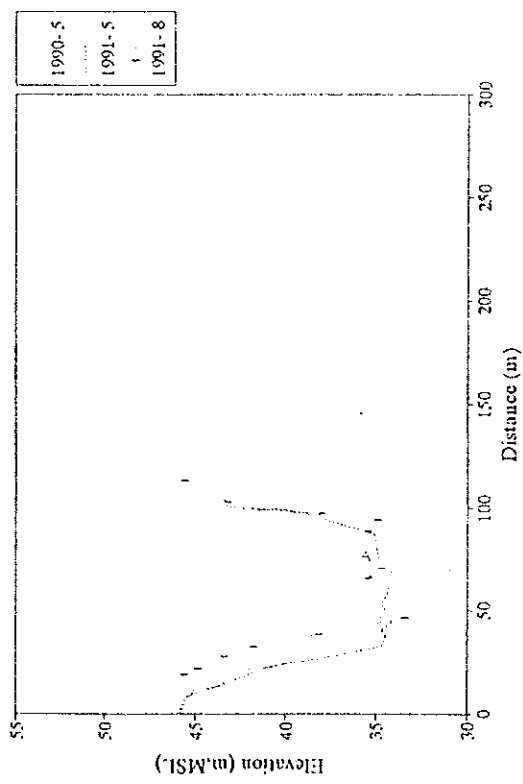
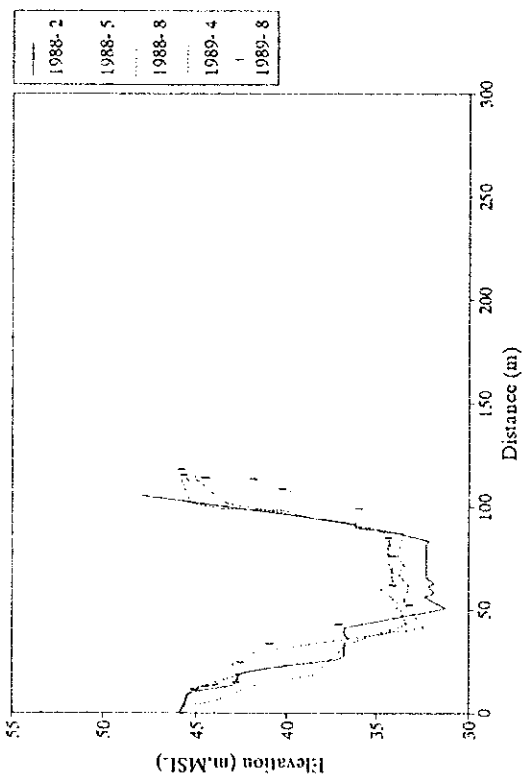


Sta. Rosalia/Portuguesa



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Sombrerito



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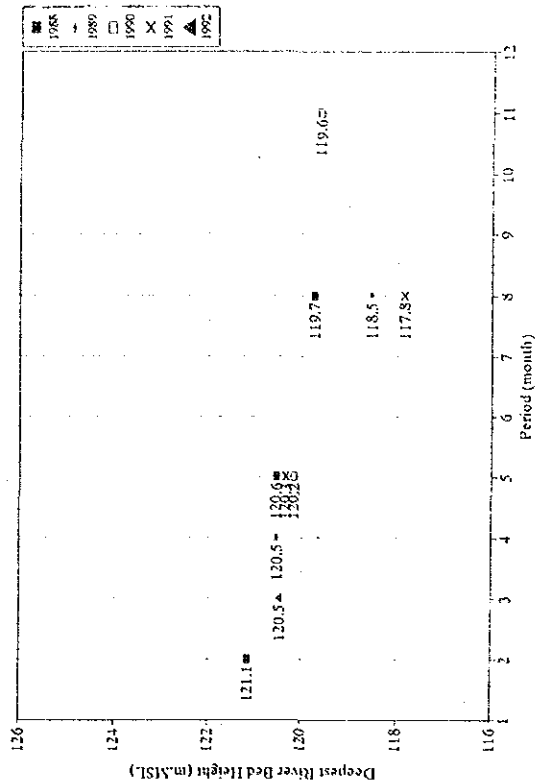
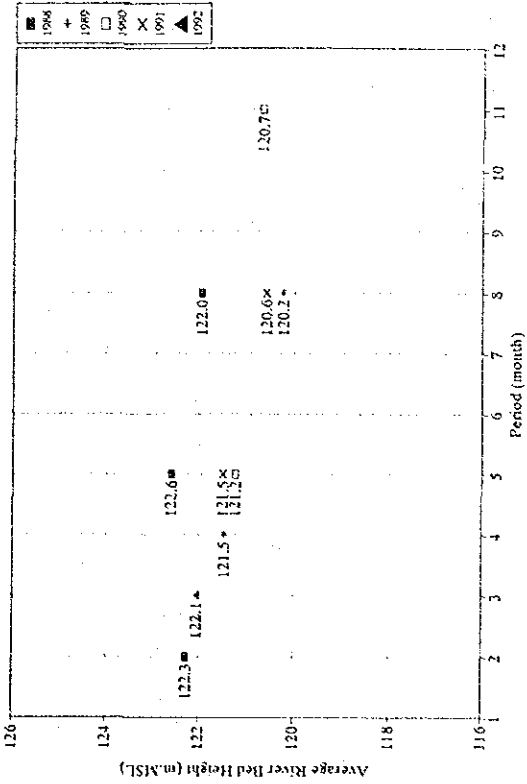
## **DATA - E2**

### **HISTORICAL AND SEASONAL CHANGES OF RIVER BED**

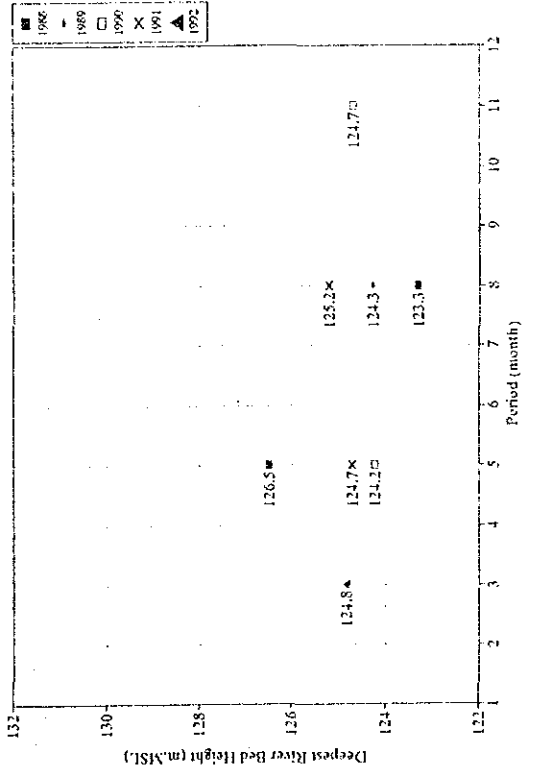
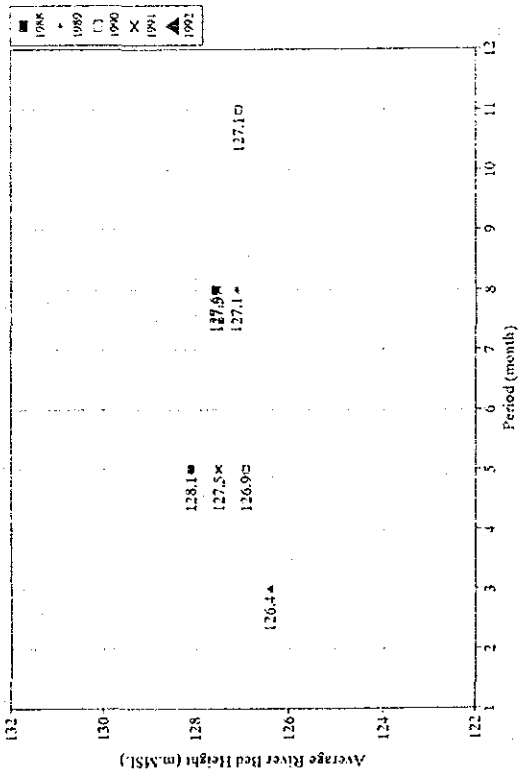
- Historical and seasonal changes of average river bed and deepest river bed from 1988 to 1992



Santos Luzardo

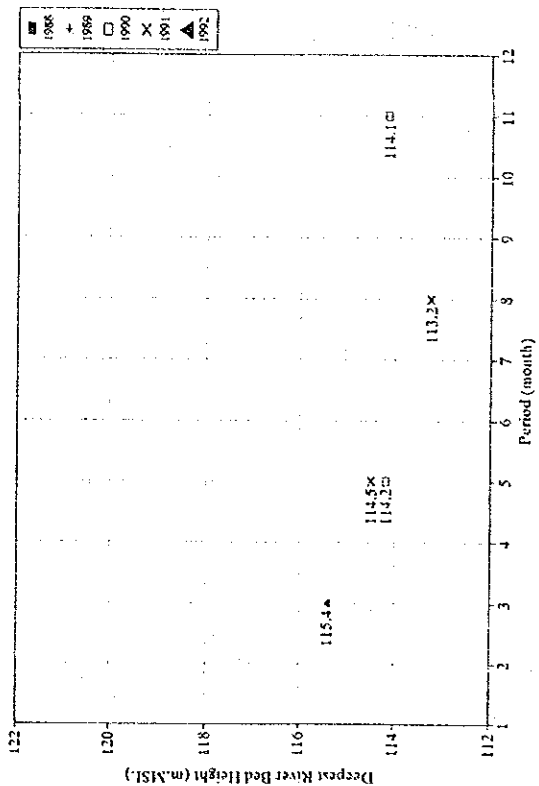
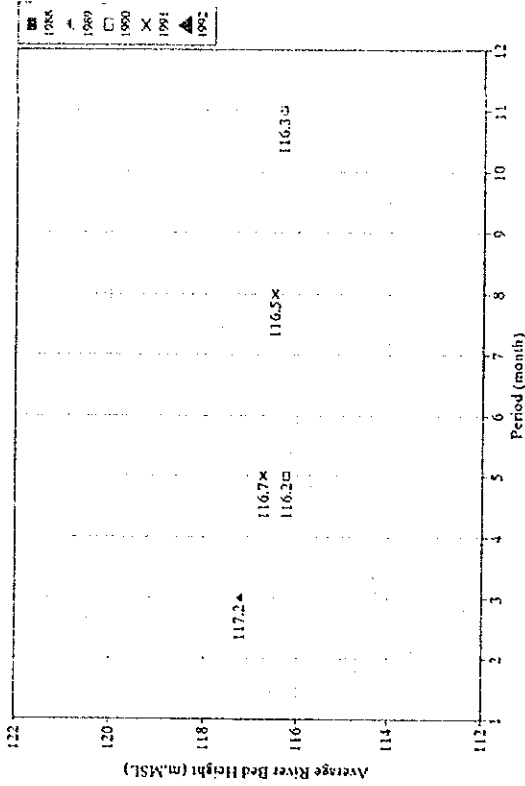


Puente Remolino

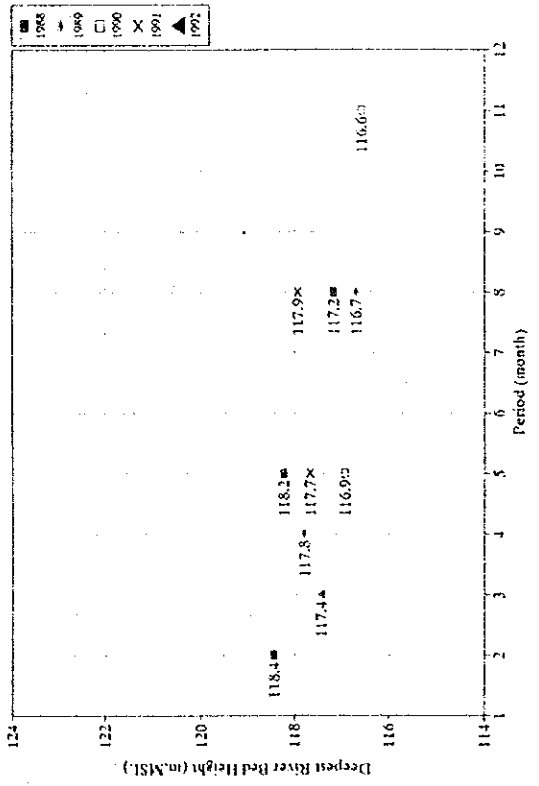
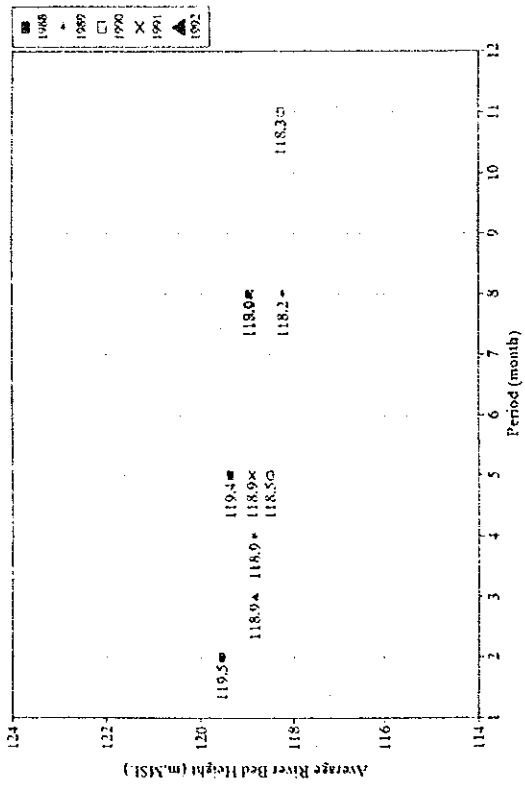


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### Hato la Miel



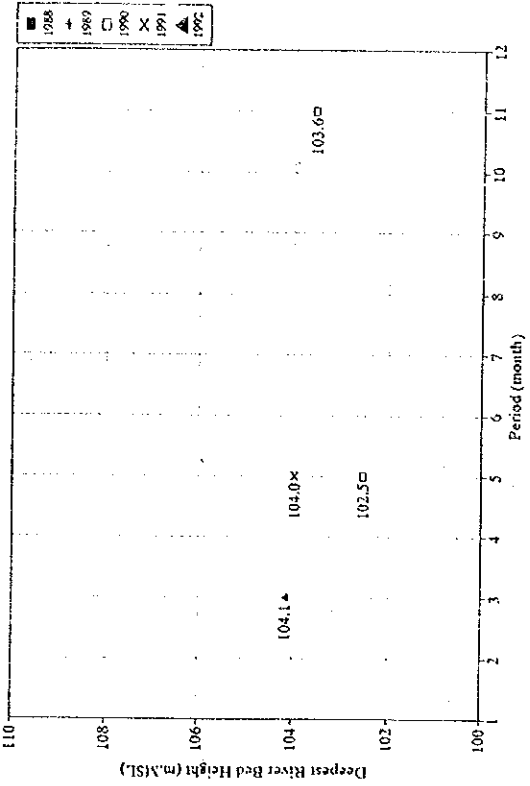
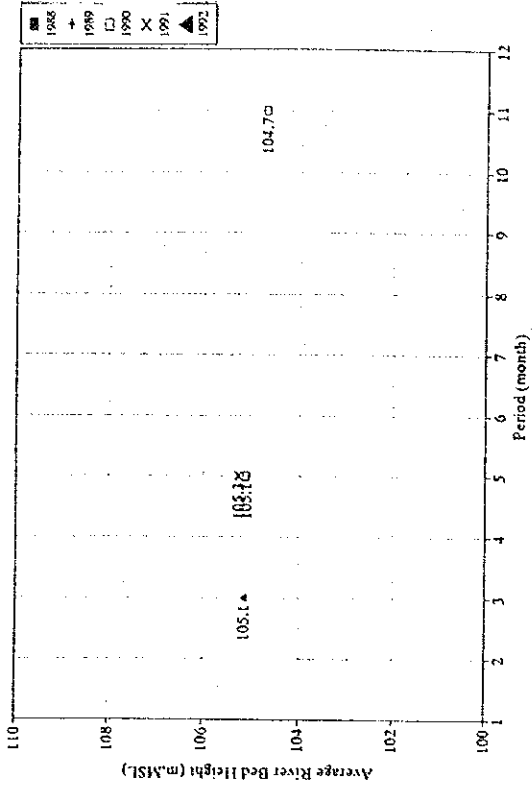
### La Orurita



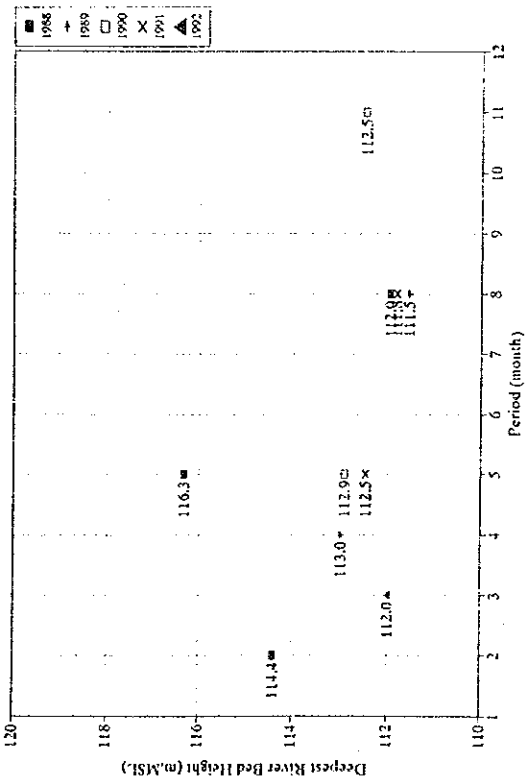
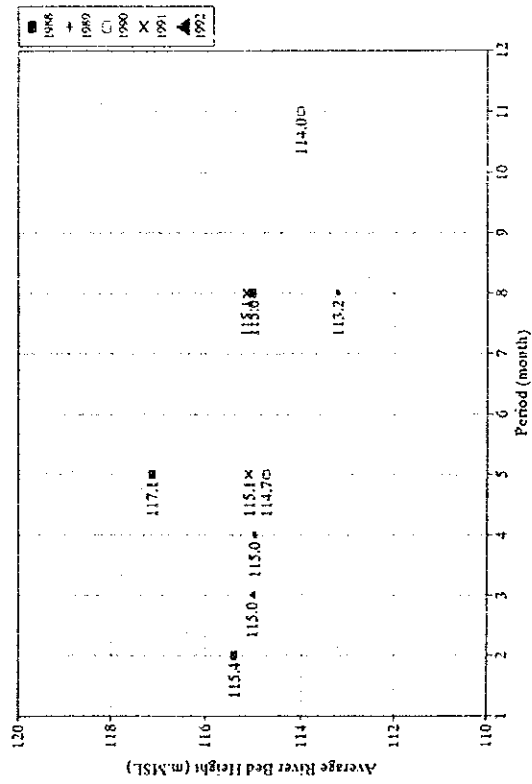
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Samanal

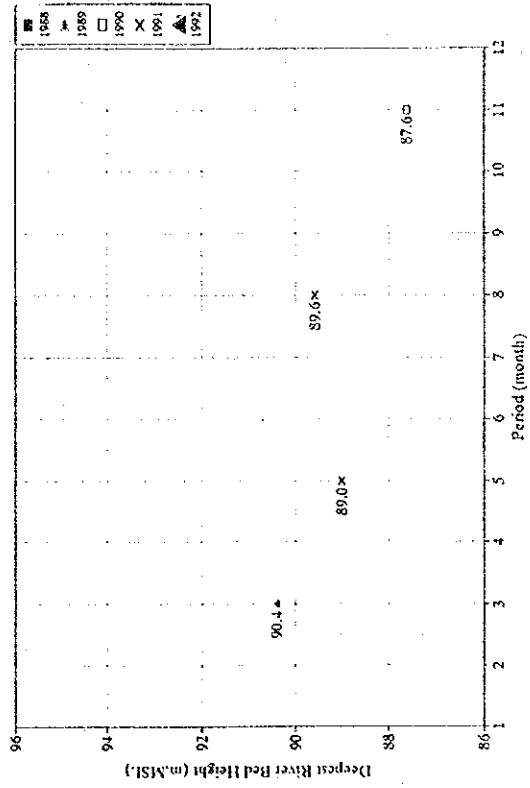
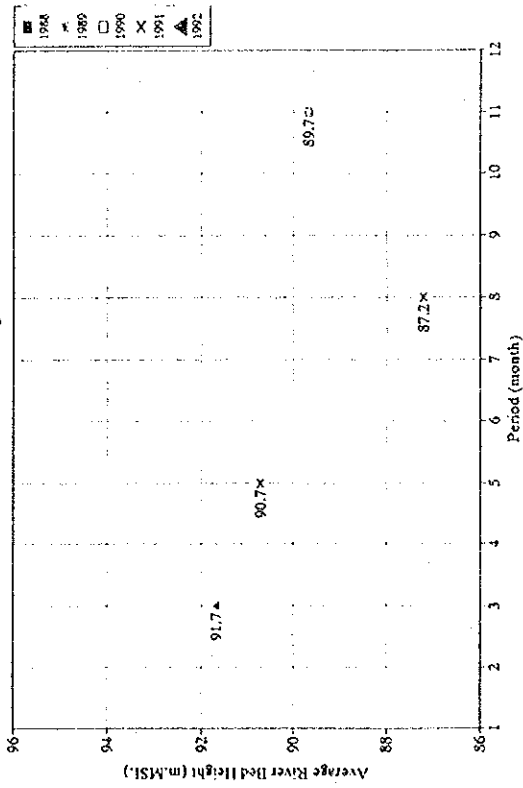


Toromito

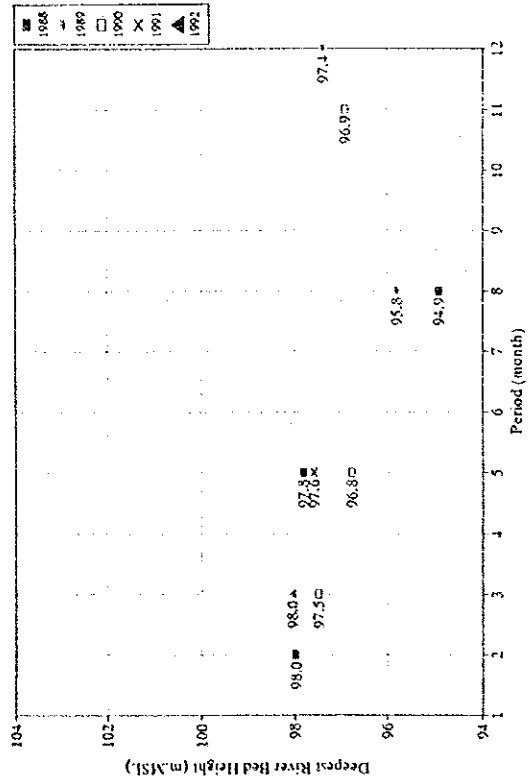
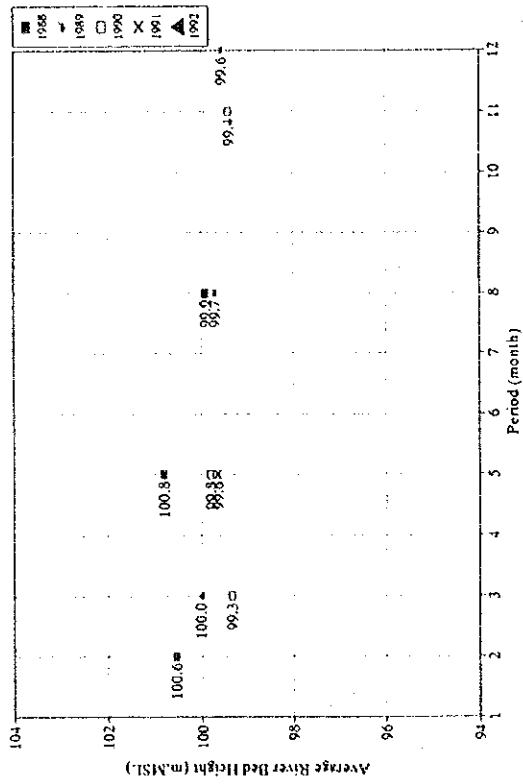


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Arecoston de la Tigra

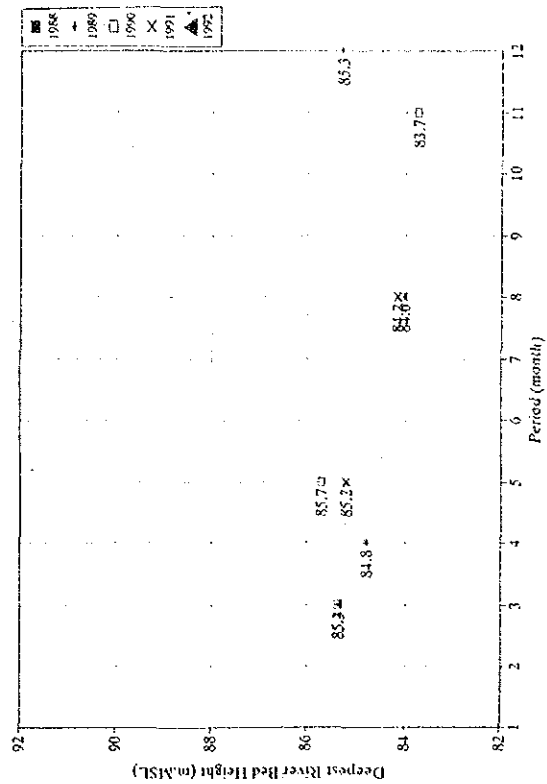
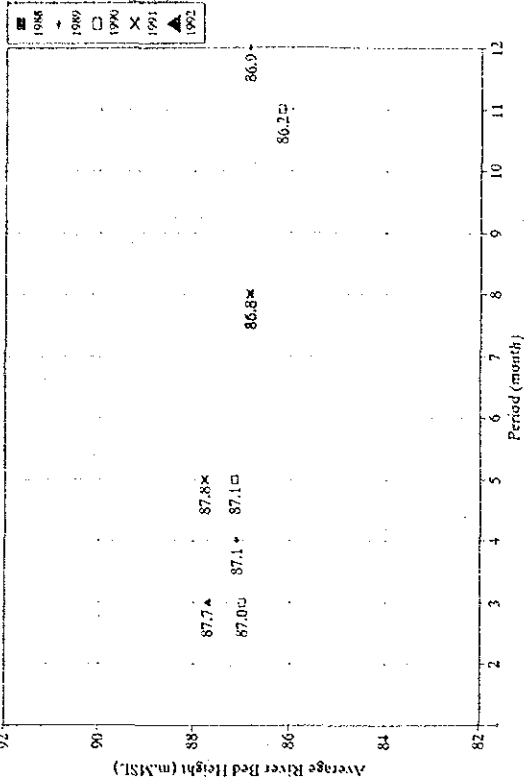


Palmarito

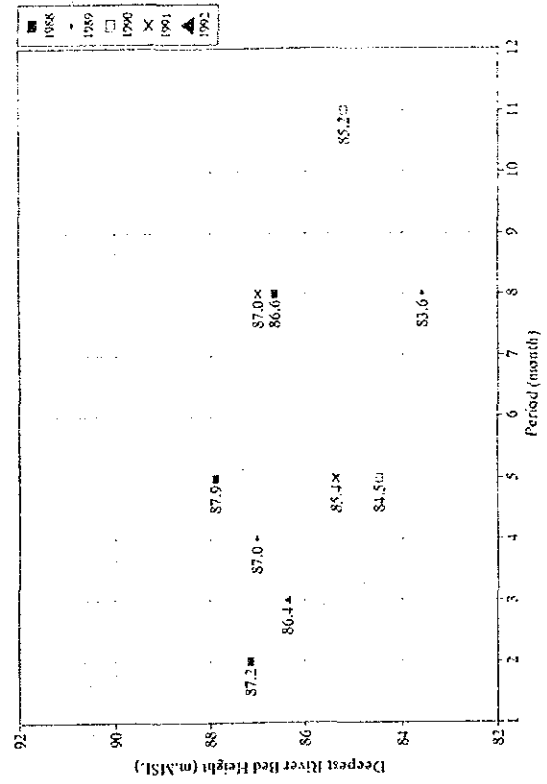
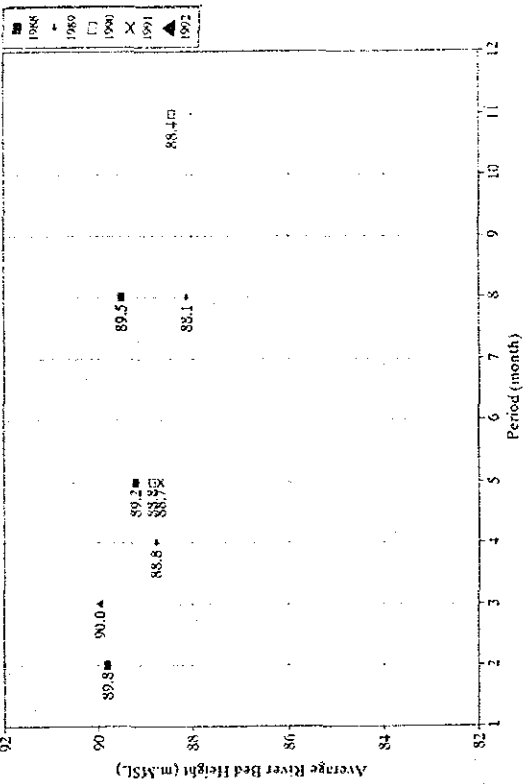


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Quintero

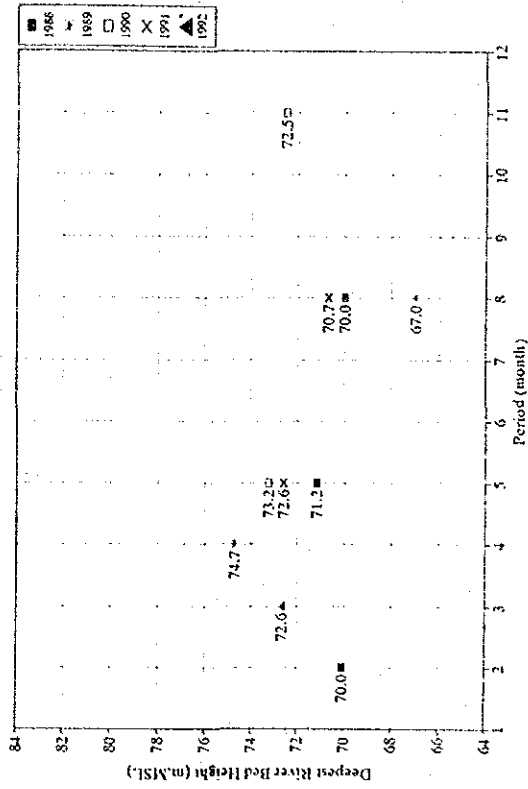
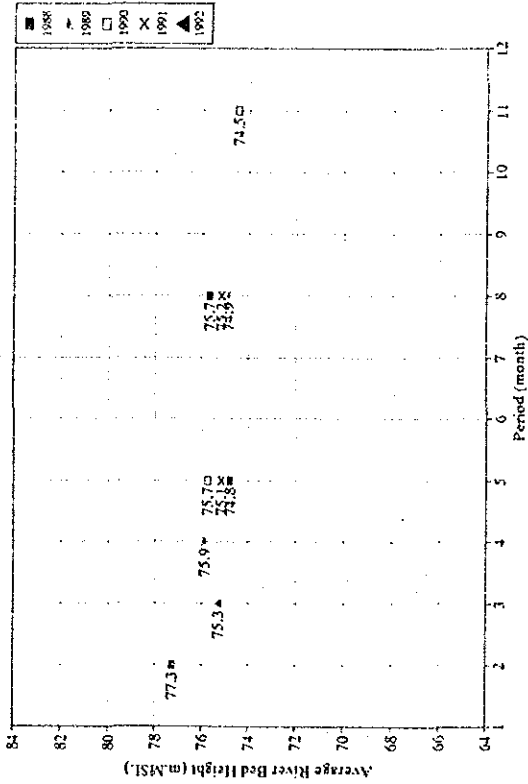


Boca del Suripa

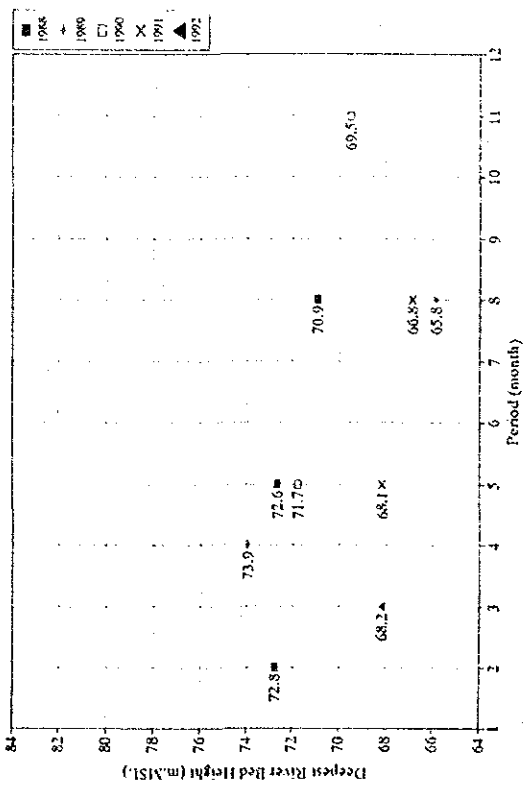
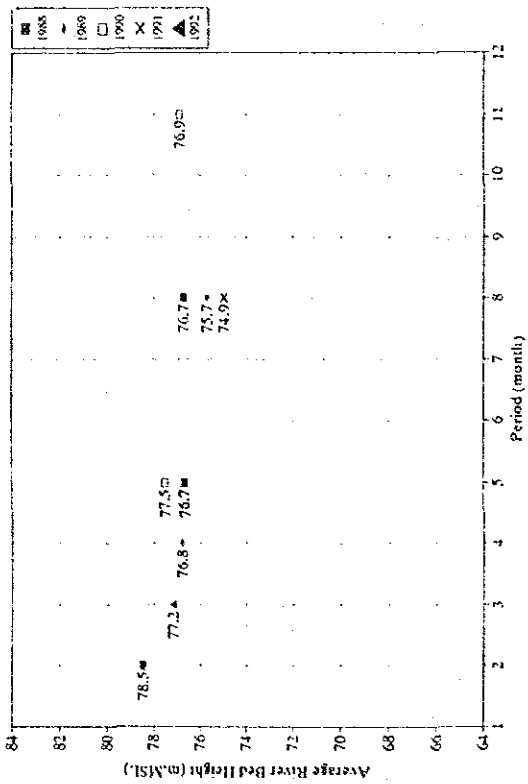


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Boca del Masparro

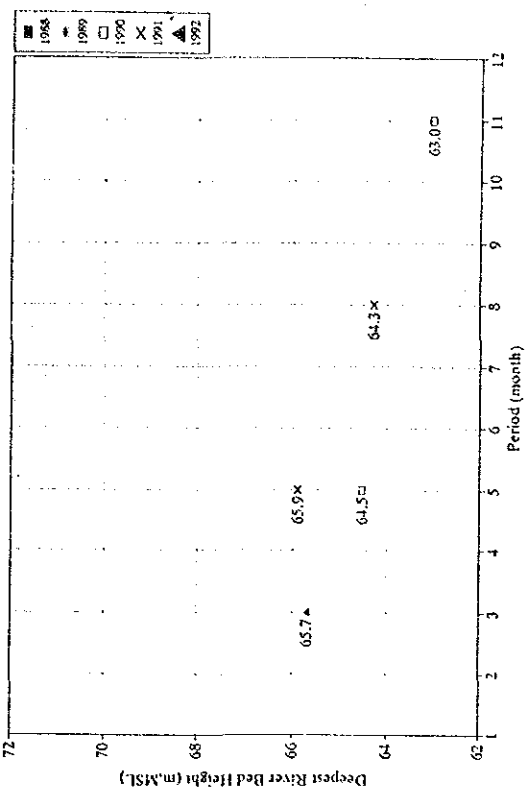
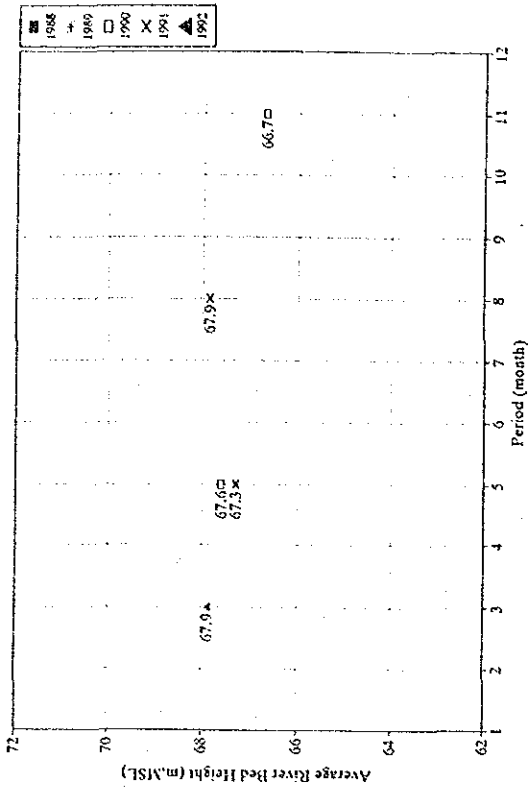


San Vicente

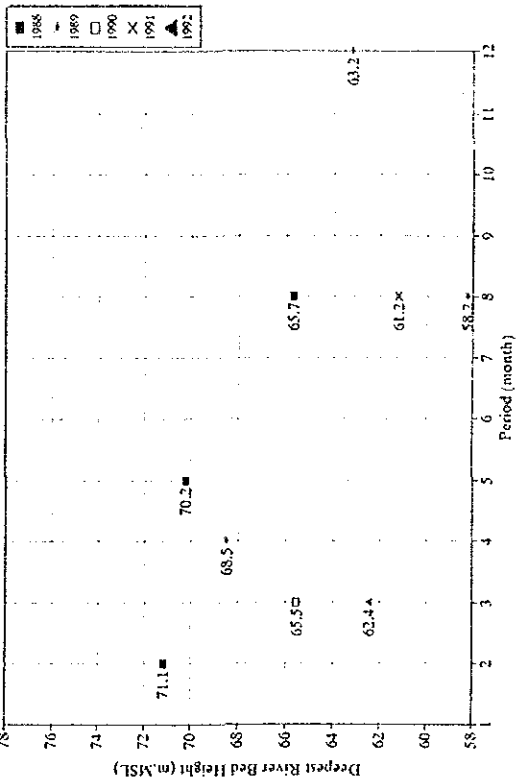
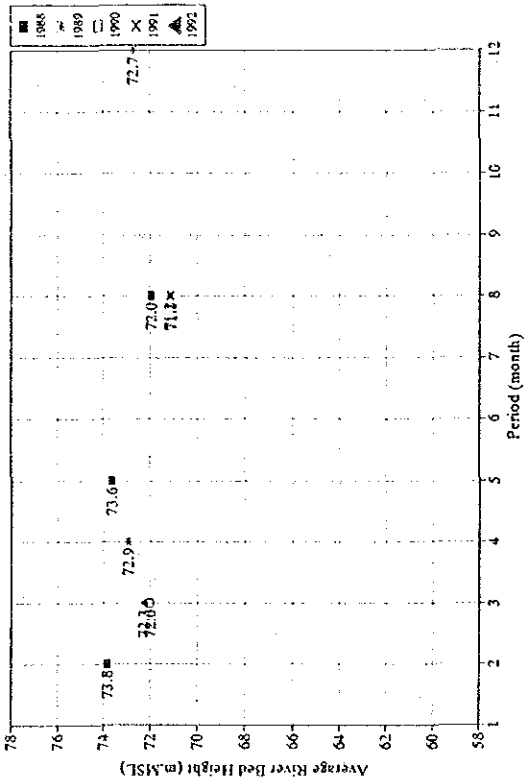


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El Chinal

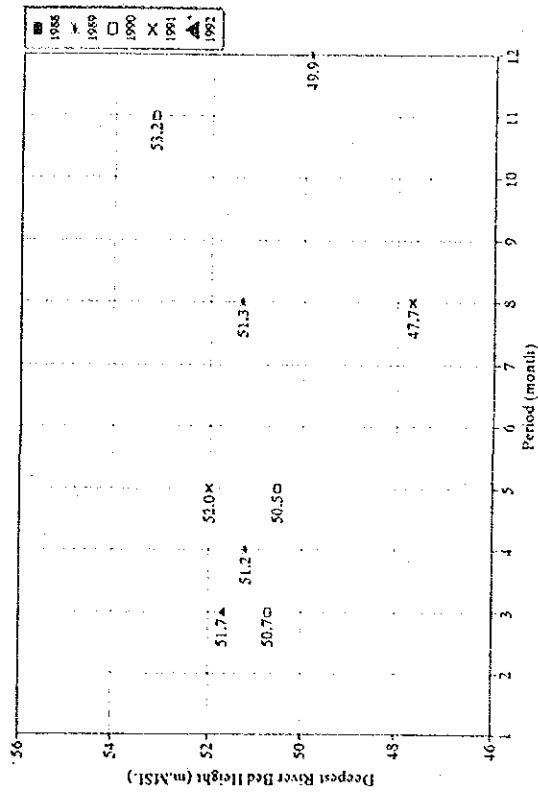
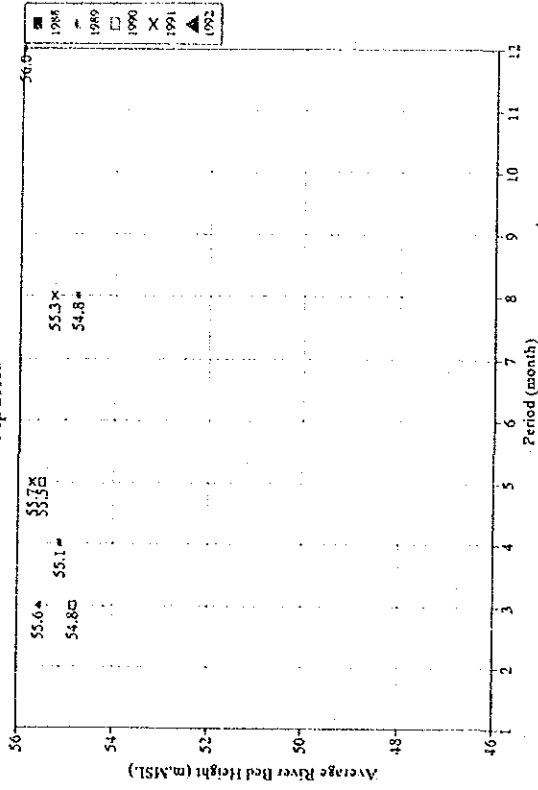


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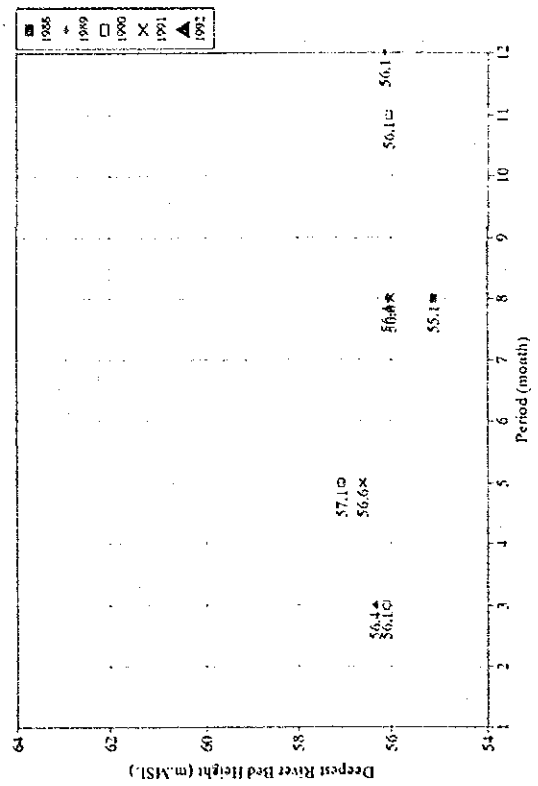
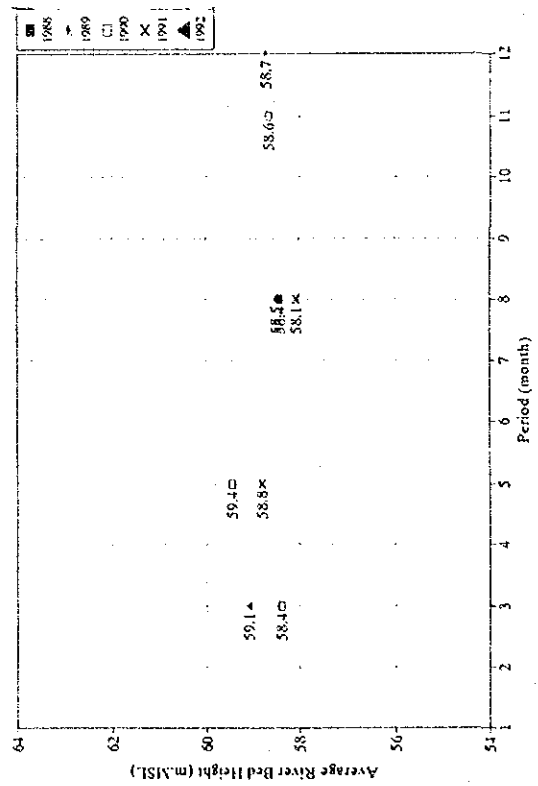


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Apurto

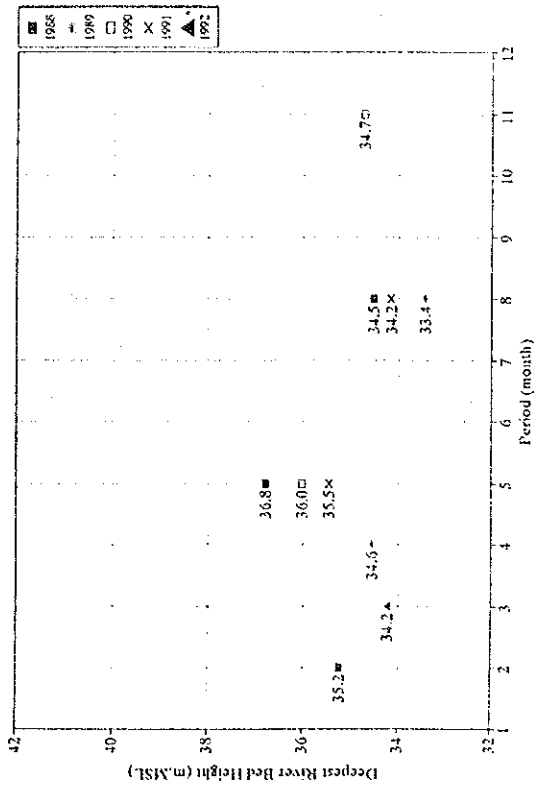
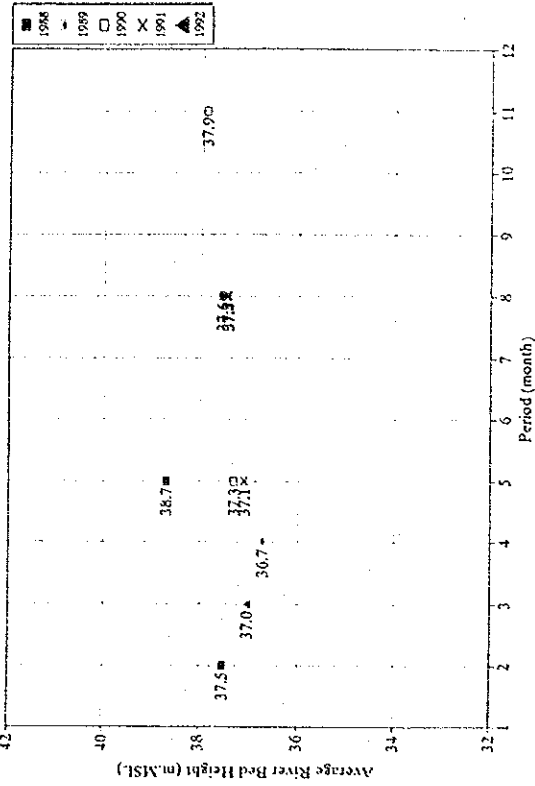


El Saman

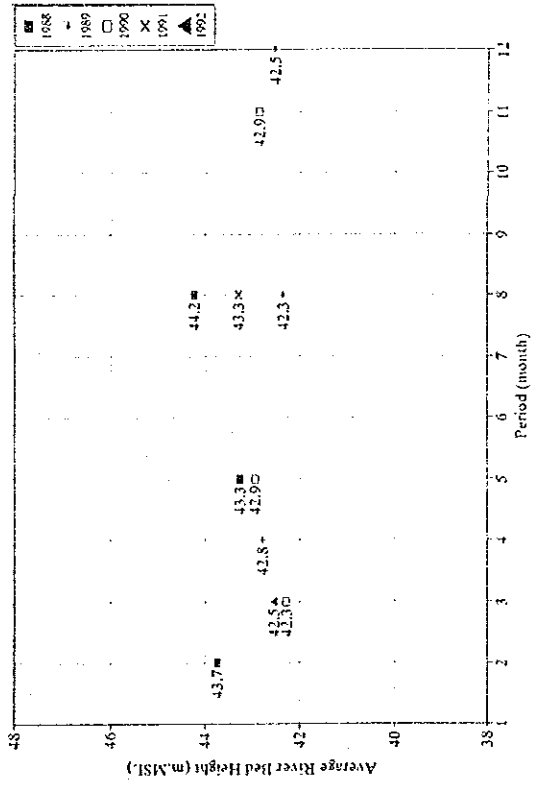
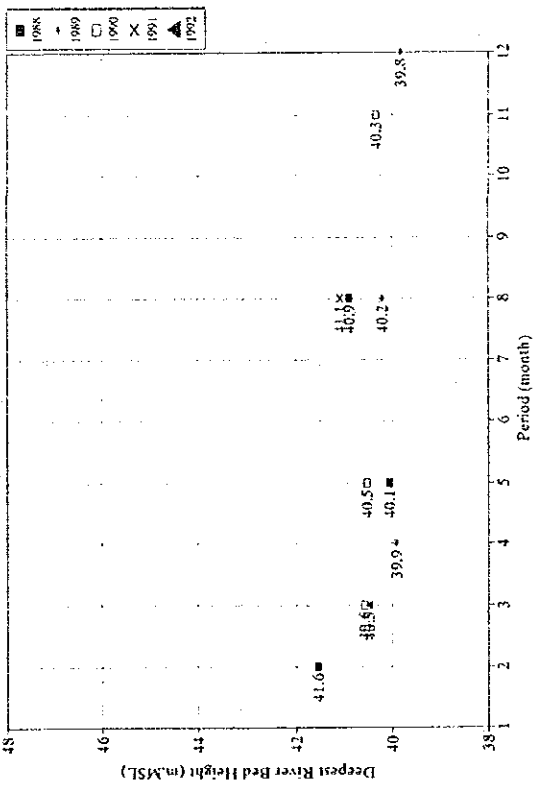


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Las Culatas

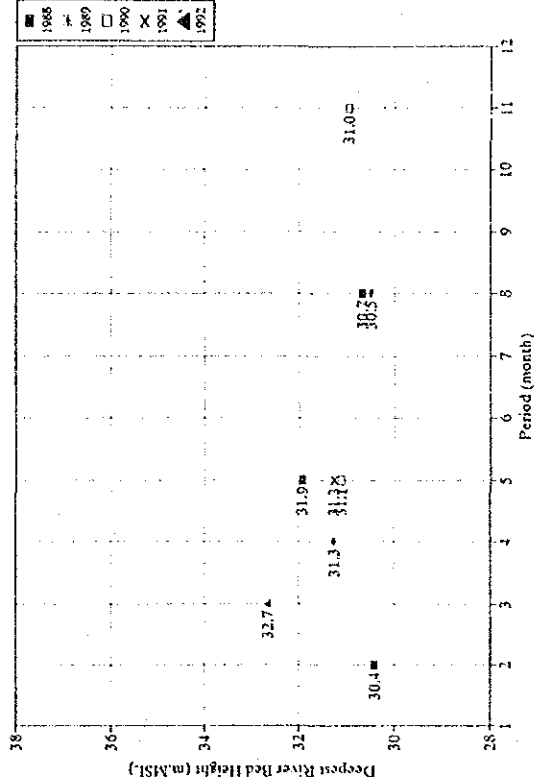
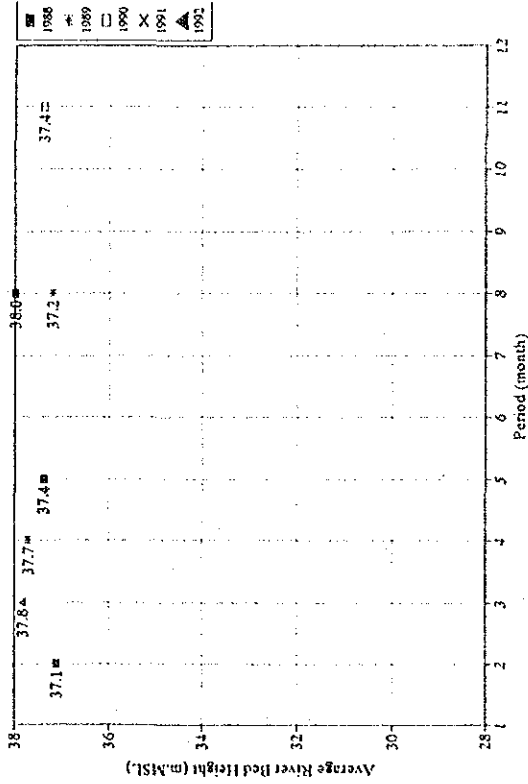


Chamizal/Ruende

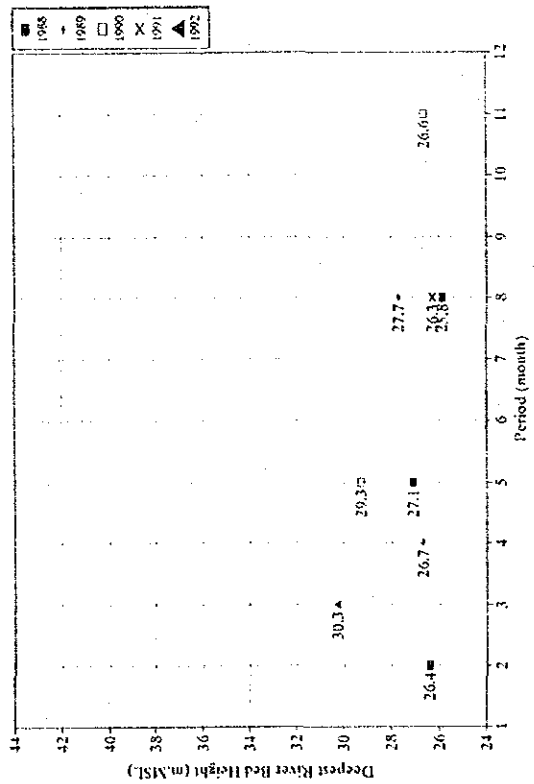
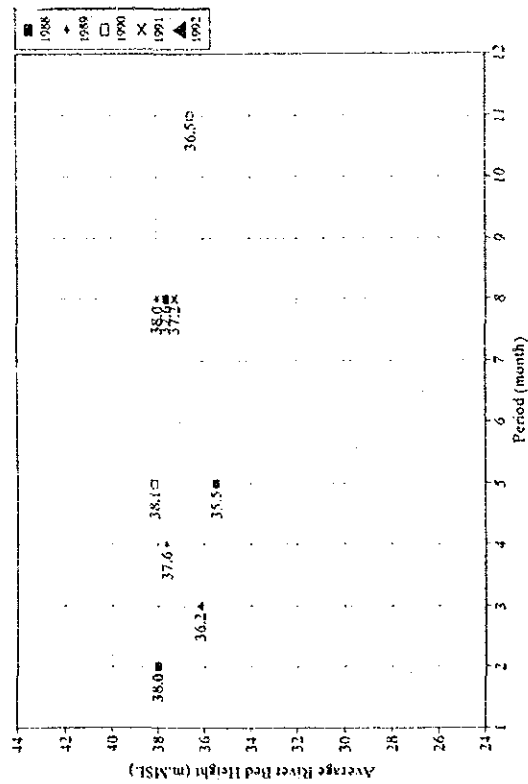


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San Fernando



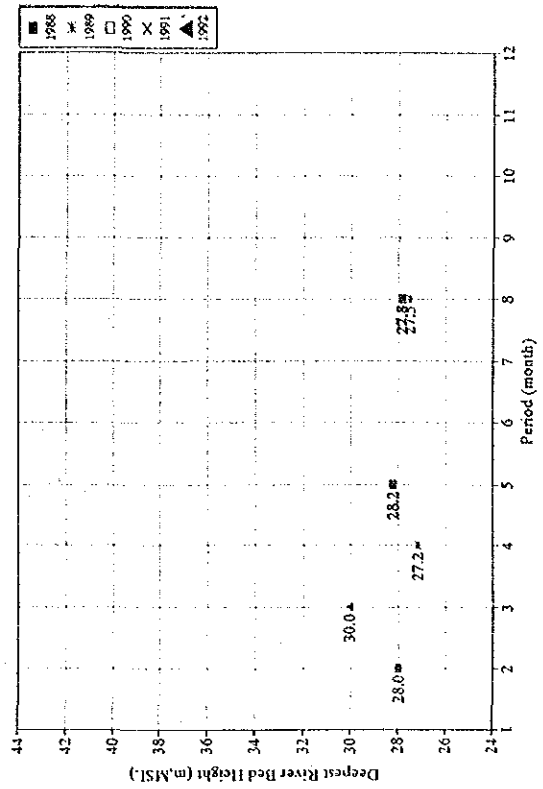
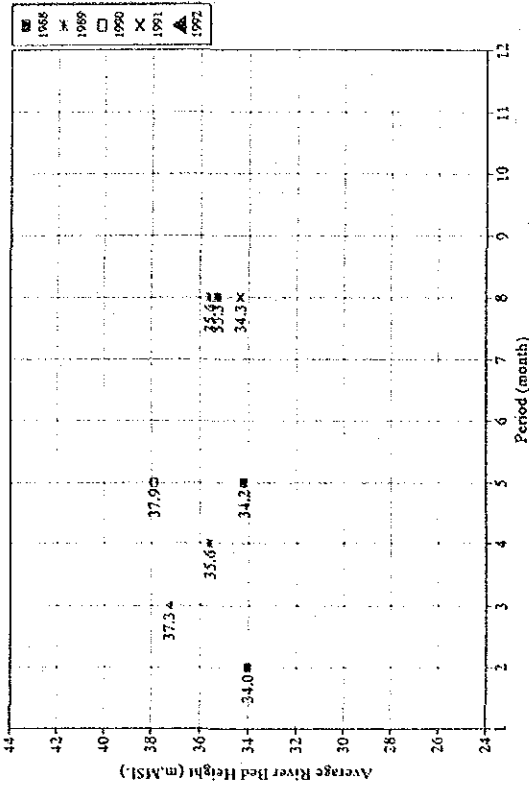
Las Guaranas



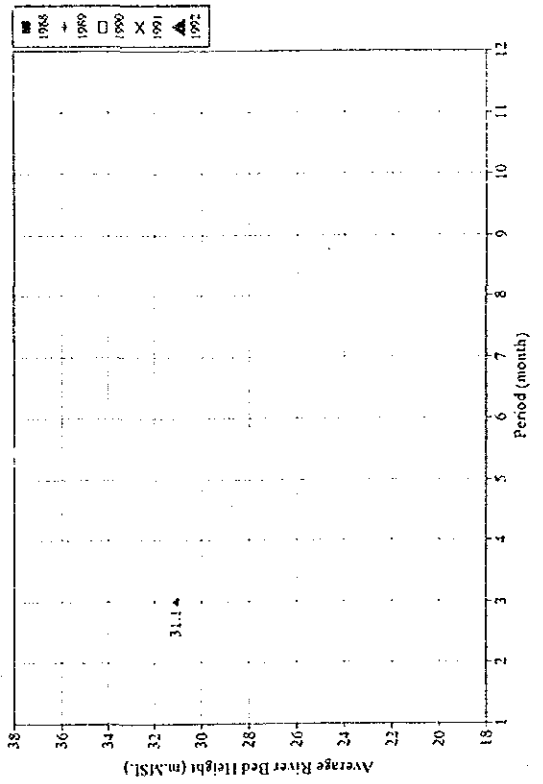
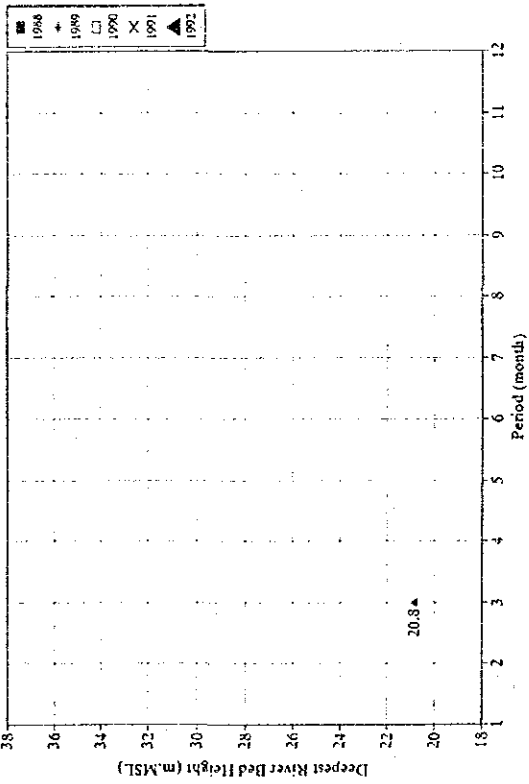
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El Jobal

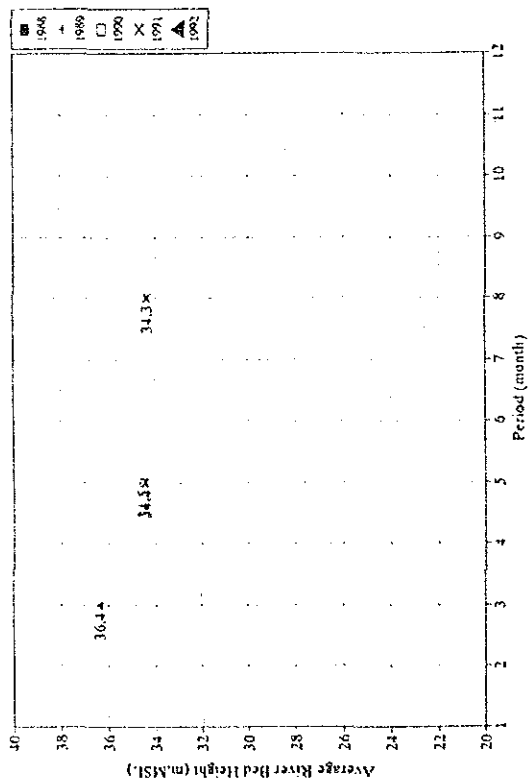


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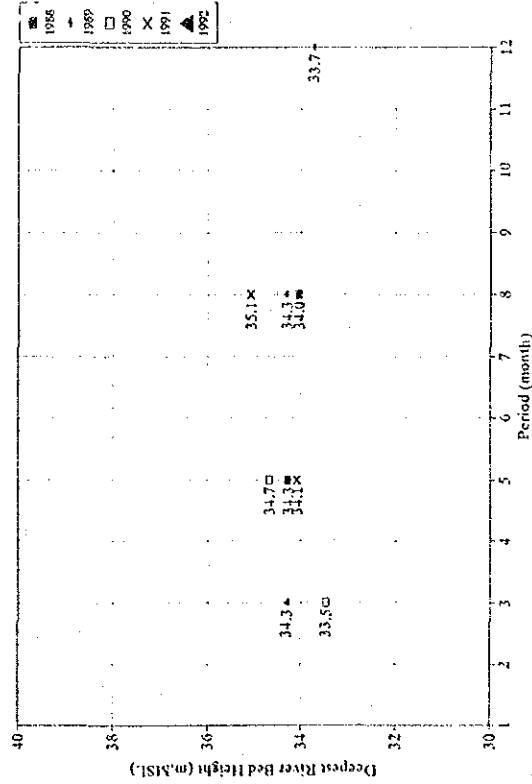
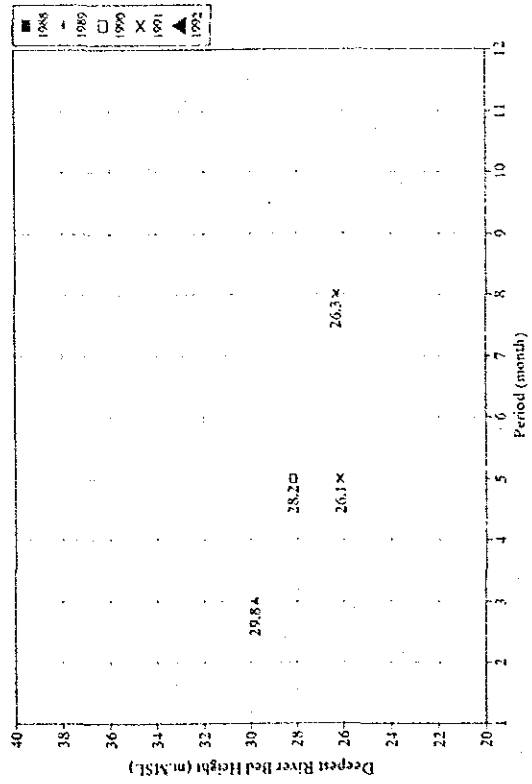
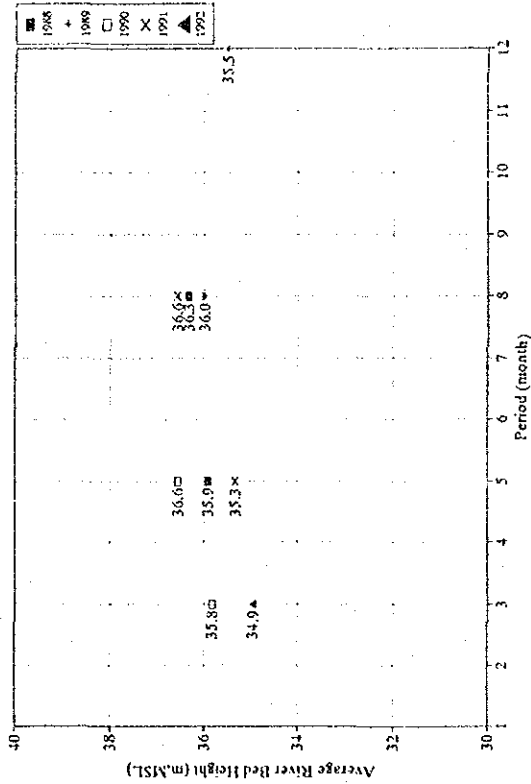


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Chirel I

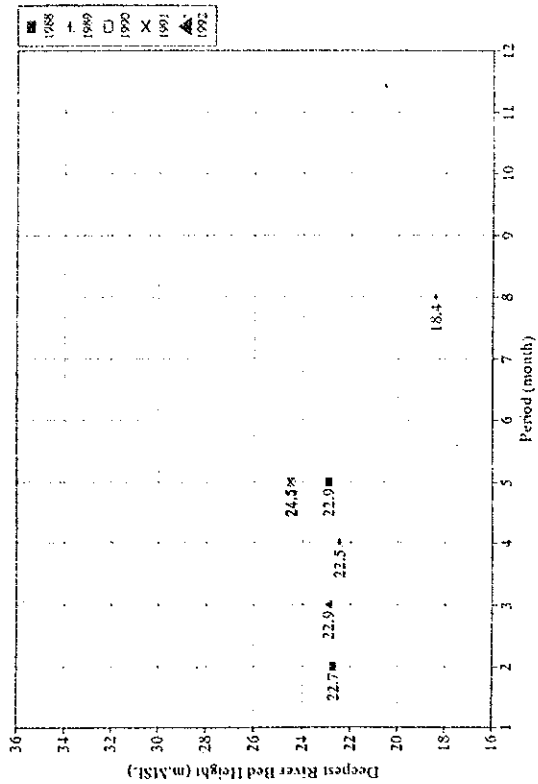
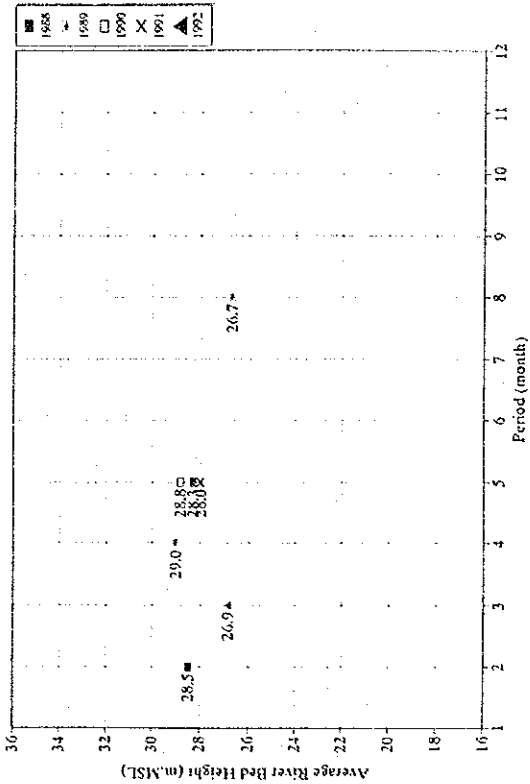


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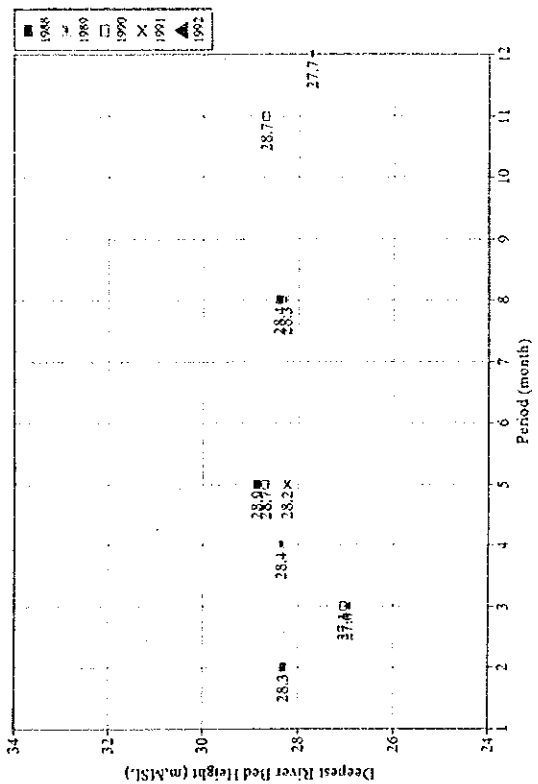
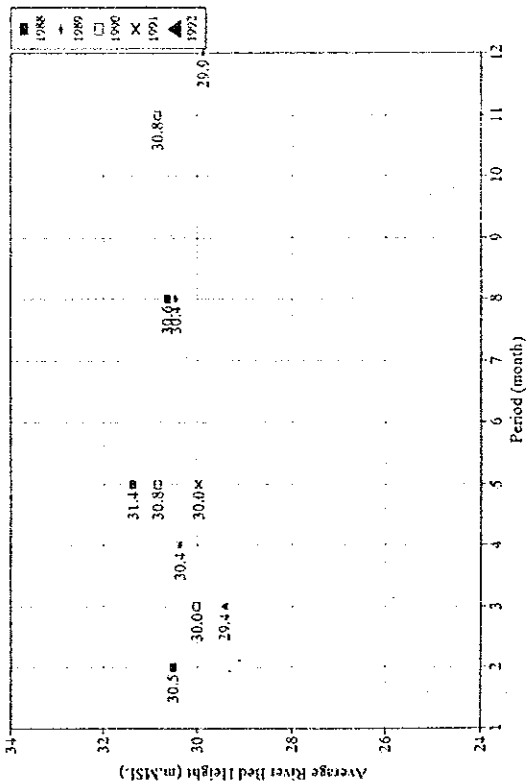


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La Maciera

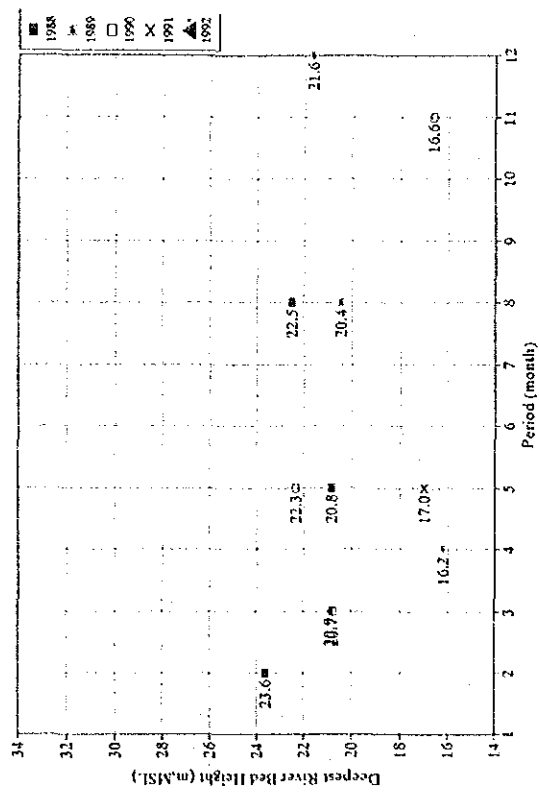
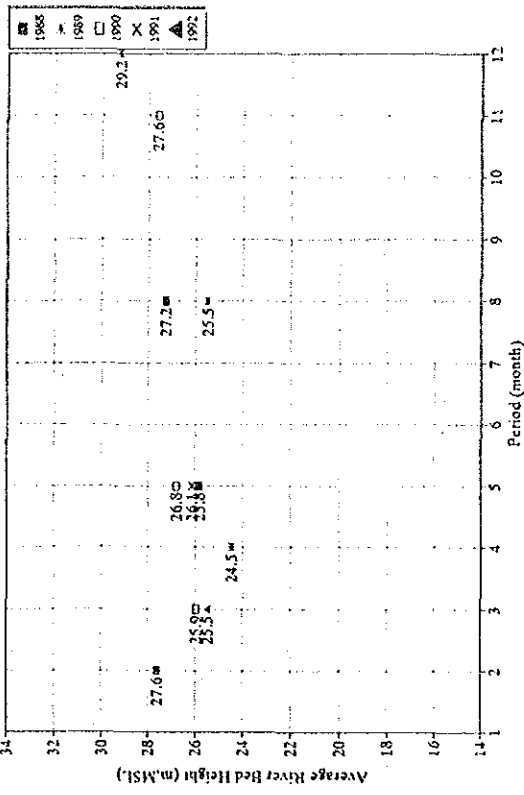


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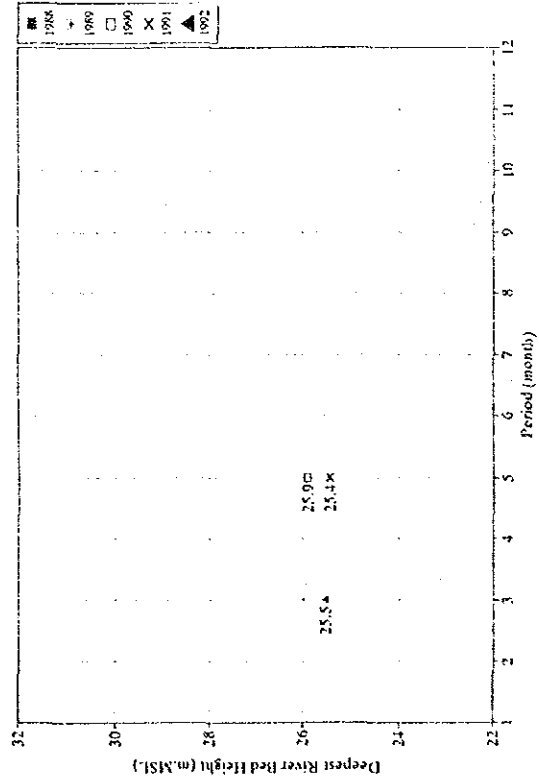
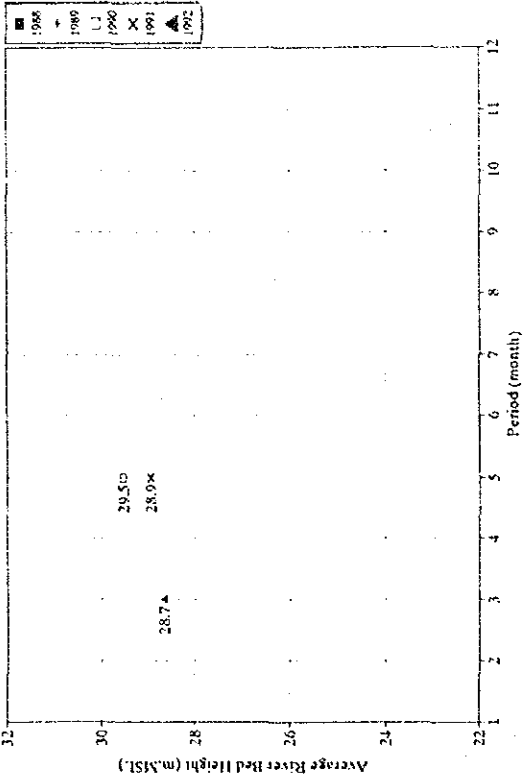


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El Perro

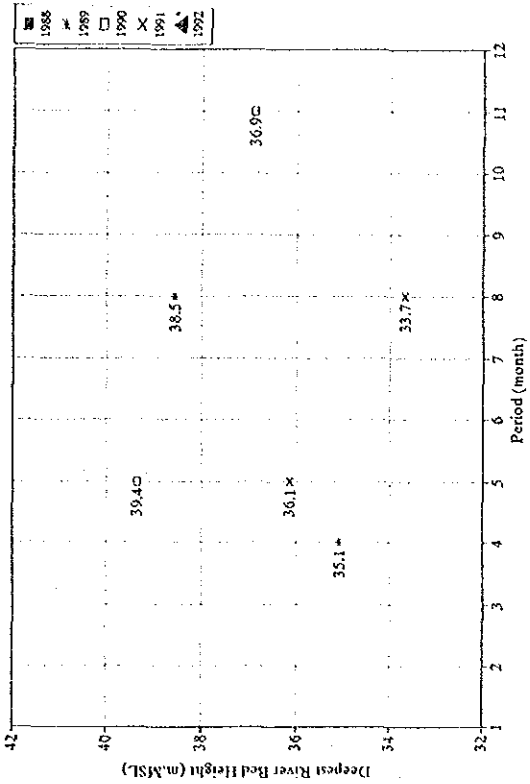
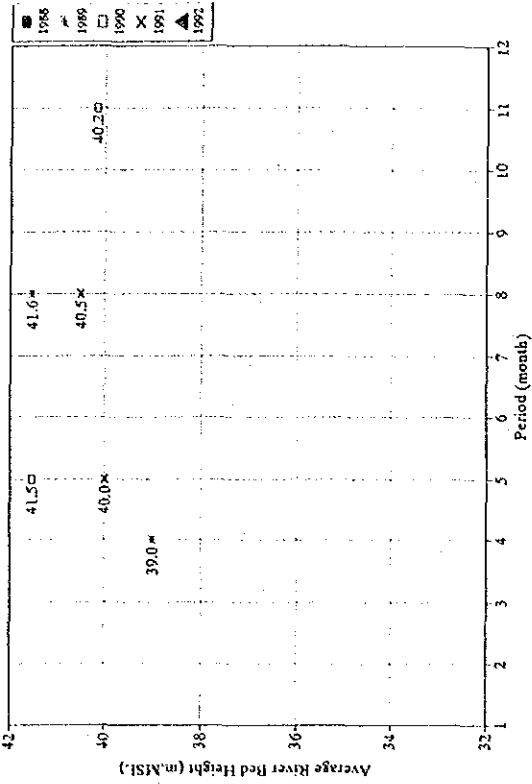


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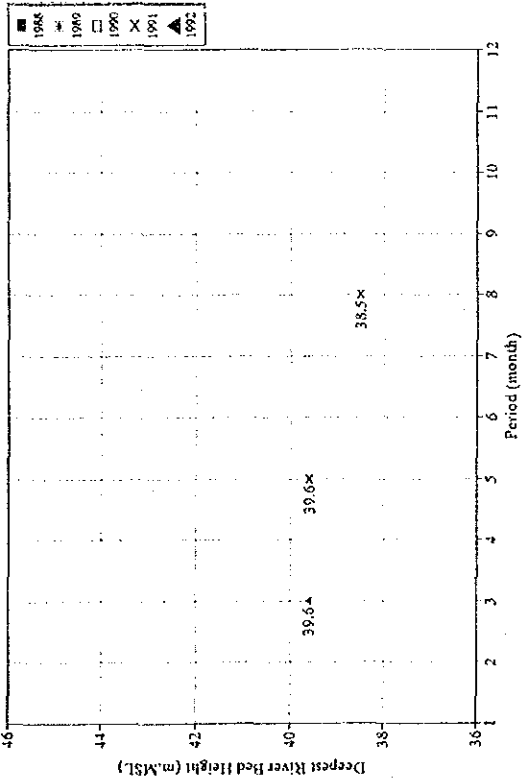
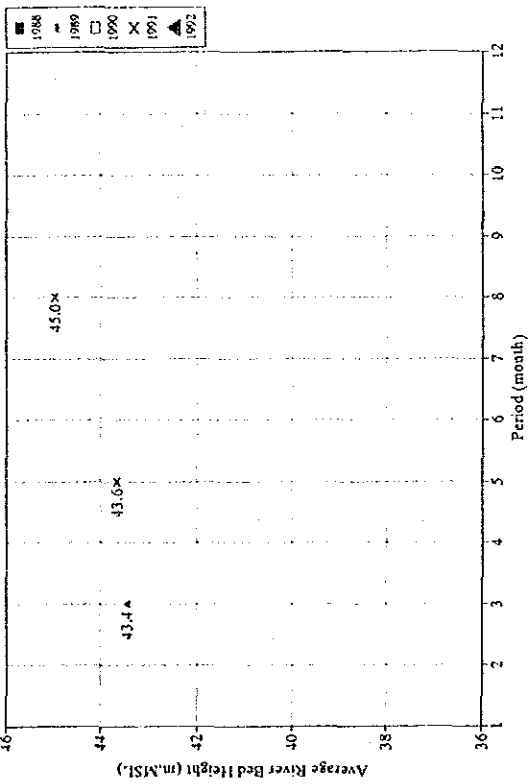


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Camaguan/Portuguesa

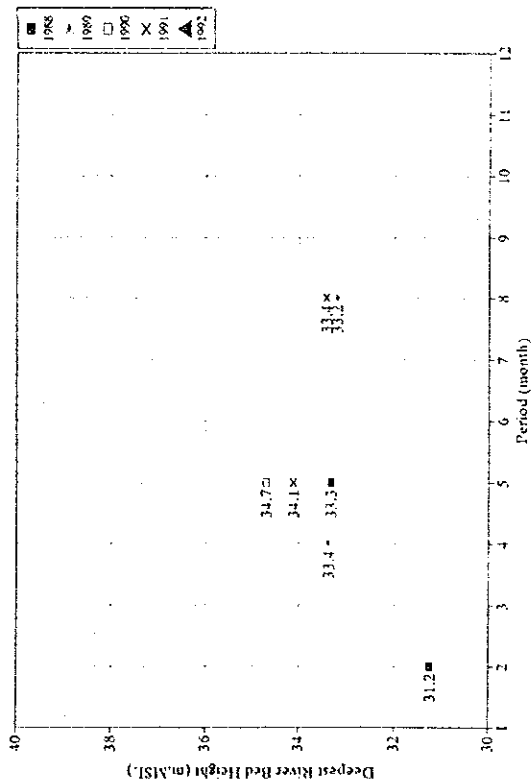
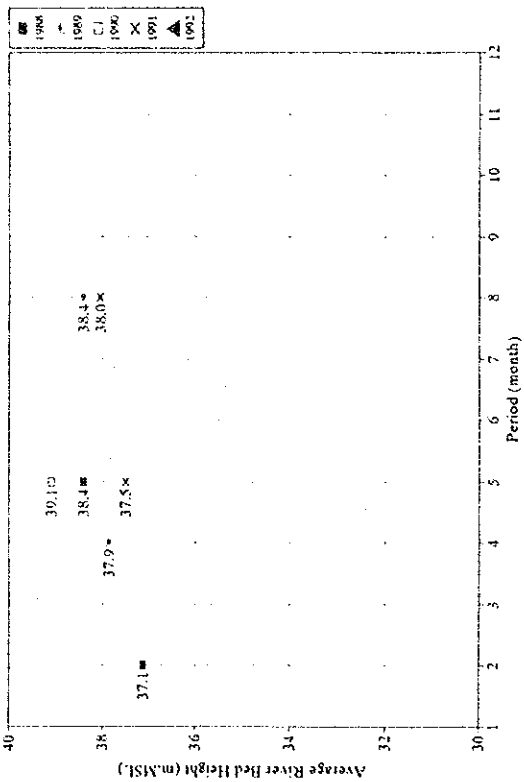


Sta. Rosalia/Portuguesa



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Sombrerito/Portuguesa



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## **DATA - E3**

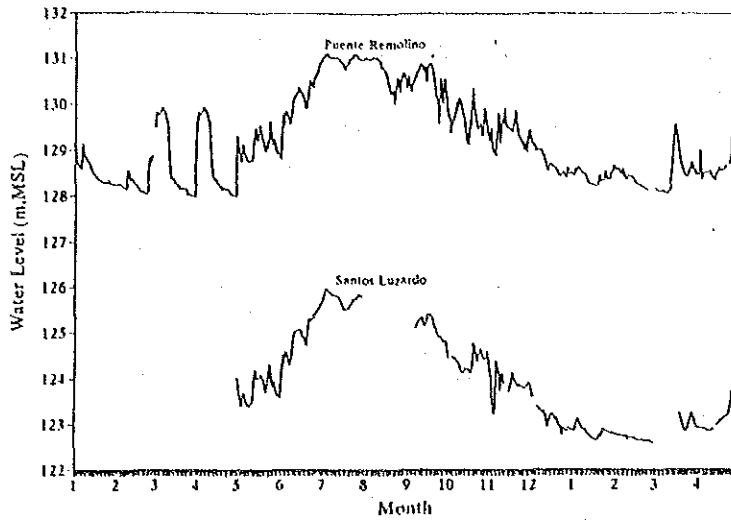
### **CHANNEL OBSERVATION (Jan. '92 - Apr. '93)**

1. Estimation of Roughness
  - a) Guasdalito
  - b) Bruzual
  - c) San Fernando
  - d) Camaguan
2. Water Levels and Estimated n-Values

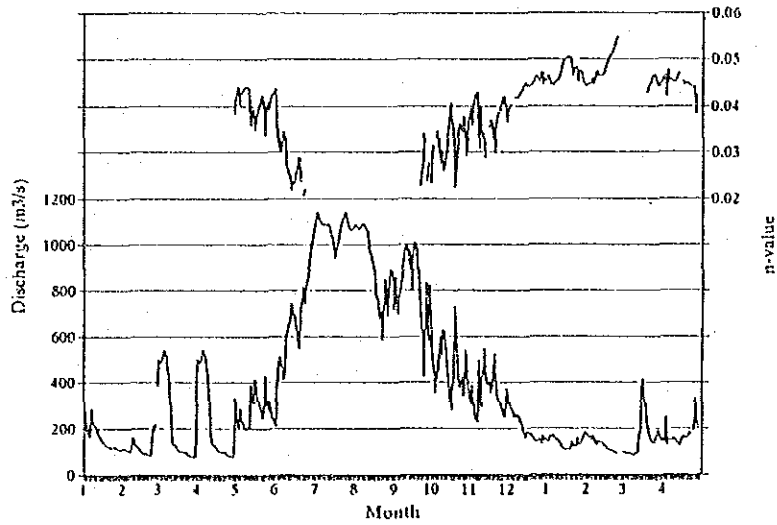




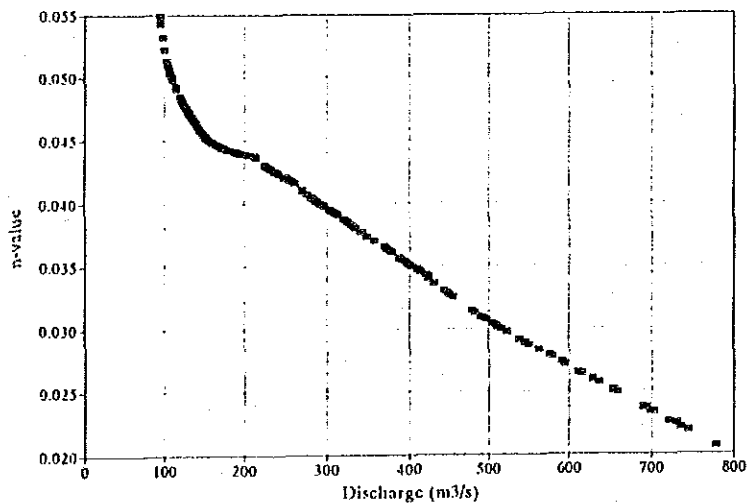
Water Level in 1992 and 1993  
Guasduquito - Santos Lizardo



Change of n-value and Discharge  
Guasduquito-Santos Lizardo('92-'93)



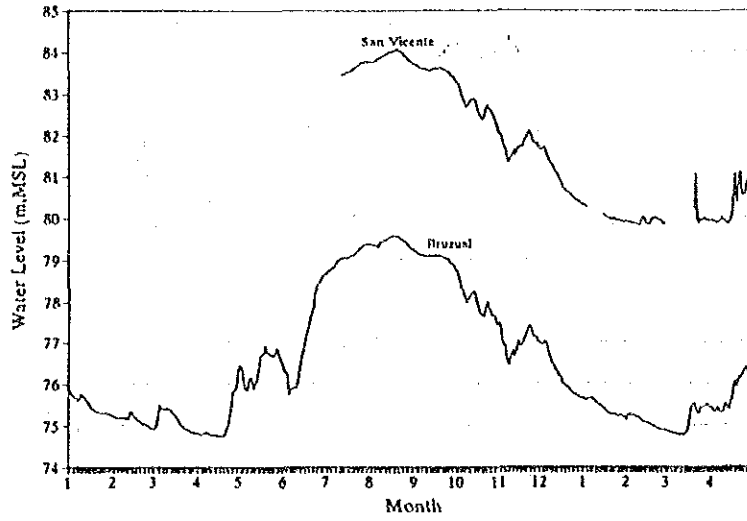
Relation between Discharge and n-value  
Guasduquito - Santos Lizardo



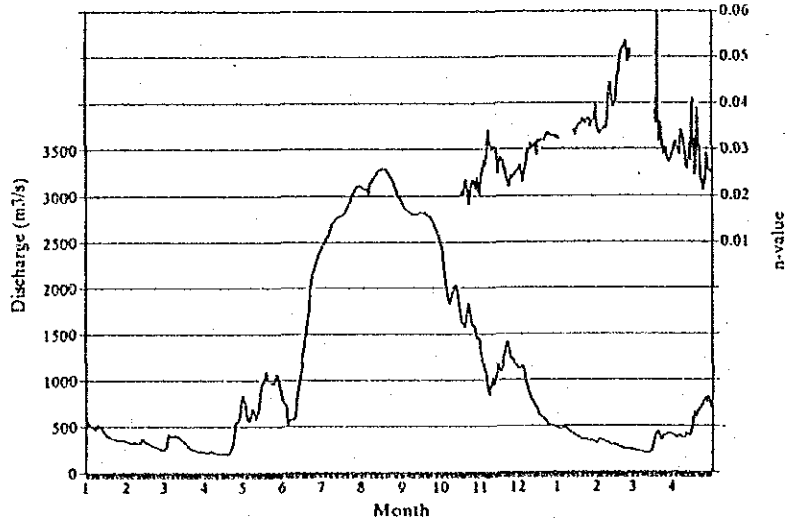
Estimation of Roughness  
: Guasduquito

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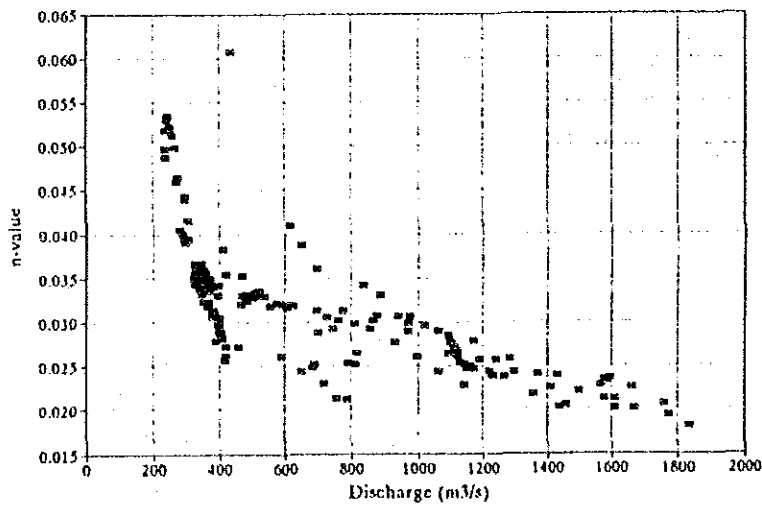
Water Level in 1992 and 1993  
San Vicente - Bruzual



Change of n-value and Discharge  
San Vicente - Bruzual ('92-'93)



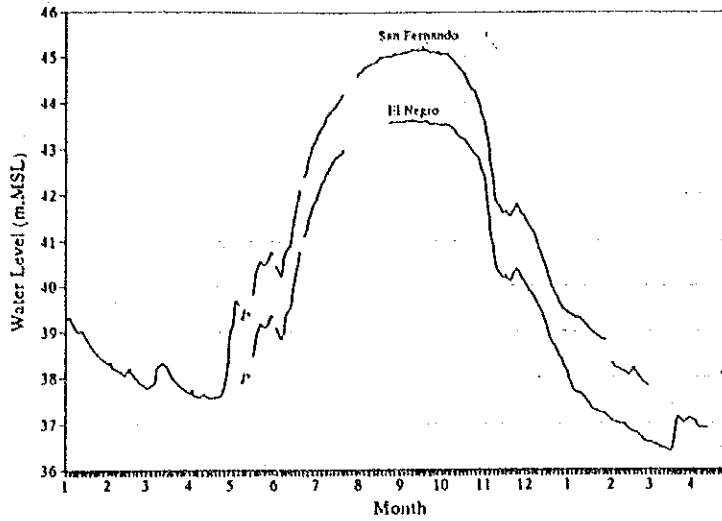
Relation between Discharge and n-value  
San Vicente - Bruzual



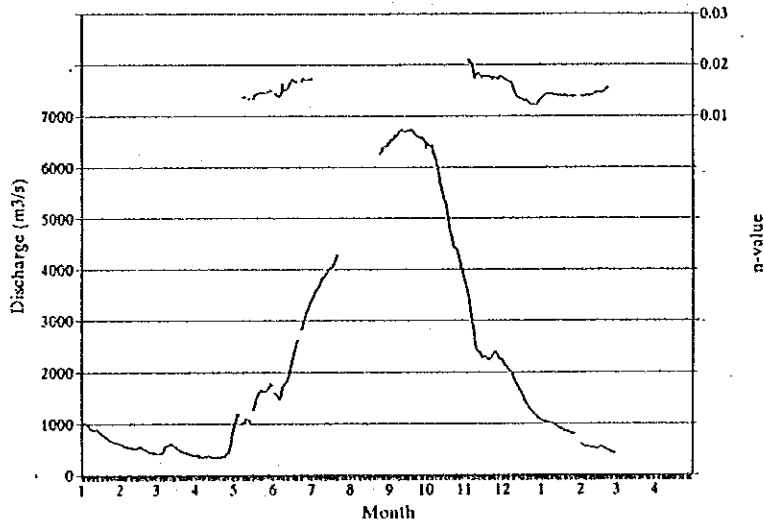
Estimation of Roughness  
: Bruzual

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OF THE APURE RIVER BASIN  
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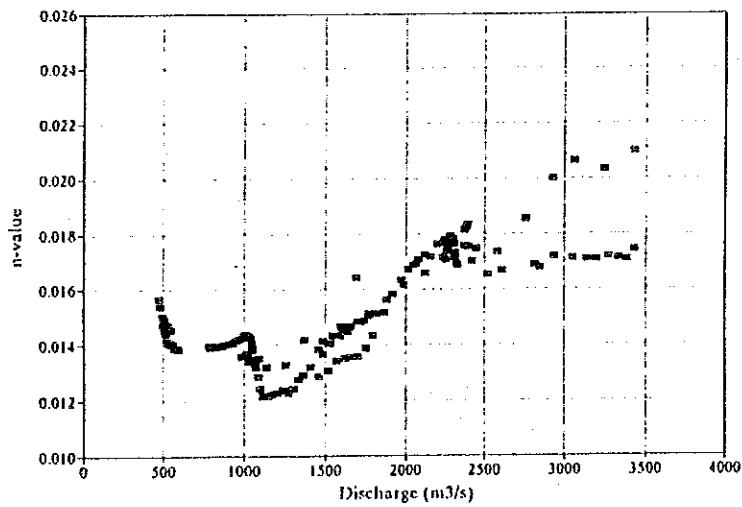
Water Level in 1992 and 1993  
San Fernando - El Negro



Change of n-value and Discharge  
San Fernando - El Negro ('92-'93)



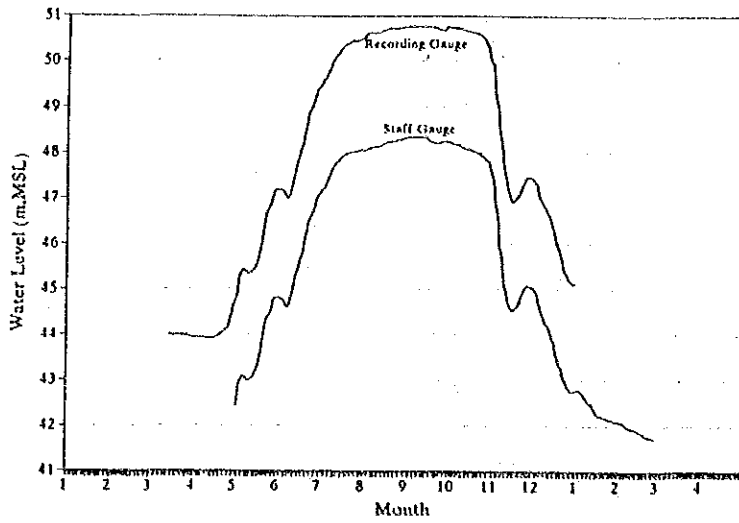
Relation between Discharge and n-value  
San Fernando - El Negro



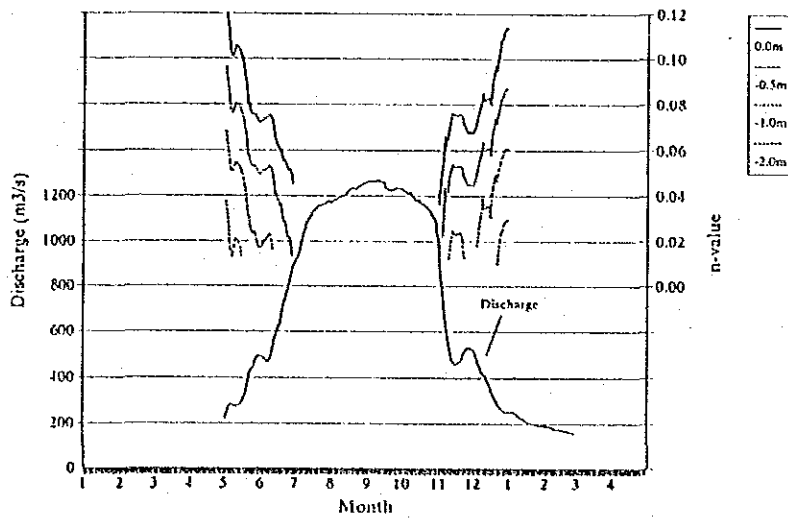
Estimation of Roughness  
: San Fernando

THE REPUBLIC OF VENEZUELA  
COMPREHENSIVE IMPROVEMENT  
OF THE APURE RIVER BASIN  
JAPAN INTERNATIONAL COOPERATION AGENCY

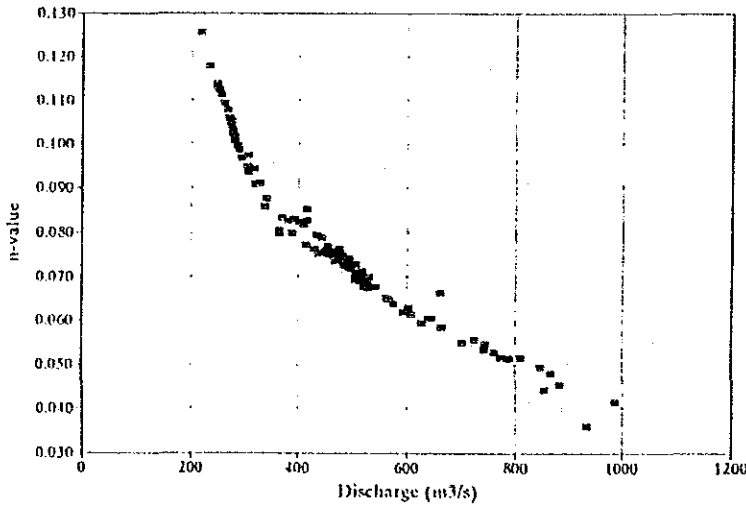
Water Level in 1992 and 1993  
Camaguan



Change of n-value and Discharge  
Camaguan ('92-'93)



Relation between Discharge and n-value  
Camaguan



Estimation of Roughness  
: Camaguan

THE REPUBLIC OF VENEZUELA  
COMPREHENSIVE IMPROVEMENT  
OF THE APURE RIVER BASIN  
JAPAN INTERNATIONAL COOPERATION AGENCY













Table Estimated n-value by Non-uniform Flow Calculation

Trial

Year	Mon.	Date	Pucate Remolino		Santos Luzardo		San Vicente		Druzal		San Fernando		El Negro		Camaguey (Recording) (Staff Gauge)			Water Level H-0.0m
			H (m,MSL)	Q (m <sup>3</sup> /s)	H (m,MSL)	n-value	H (m,MSL)	n-value	H (m,MSL)	Q (m <sup>3</sup> /s)	H (m,MSL)	Q (m <sup>3</sup> /s)	H (m,MSL)	Q (m <sup>3</sup> /s)	H (m,MSL)	n-value	H (m,MSL)	
93	2	24	128.13	94	122.64	0.0549	79.93	74.90	244	0.0533	37.89	441	36.63				41.73	160
93	2	25			122.62		79.93	74.89	241	0.0530	37.87	434	36.61				41.74	159
93	2	26			122.61		79.82	74.88	239	0.0485	37.84	424	36.60				41.73	158
93	2	27			122.60		79.89	74.88	239	0.0518	37.84	424	36.58				41.72	157
93	2	28			122.58		79.84	74.88	239	0.0496	37.82	417	36.58				41.71	157
93	3	1	128.15	96				74.87	236				36.58					
93	3	2	128.12	92				74.86	234				36.57					
93	3	3	128.11	91				74.84	228				36.55					
93	3	4	128.11	91				74.83	226				36.55					
93	3	5	128.10	90				74.82	223				36.53					
93	3	6	128.10	90				74.80	218				36.52					
93	3	7	128.07	85				74.79	216				36.51					
93	3	8	128.06	85				74.79	216				36.49					
93	3	9	128.04	82				74.78	214				36.45					
93	3	10	128.06	85				74.77	211				36.45					
93	3	11	128.09	89				74.76	209				36.45					
93	3	12	128.10	90				74.75	206				36.45					
93	3	13	128.57	163				74.75	206				36.43					
93	3	14	128.71	191				74.77	211				36.42					
93	3	15	129.37	357				74.80	218				36.41					
93	3	16	129.56	417				74.86	234				36.39					
93	3	17	129.36	354				75.08	294				36.39					
93	3	18	129.10	281				75.32	368				36.44					
93	3	19	128.89	230	123.22	0.0428	80.28	75.45	412	0.0383			36.60					
93	3	20	128.72	193	123.12	0.0440	80.22	75.48	422	0.0354			36.84					
93	3	21	128.61	171	123.02	0.0445	81.05	75.52	437	0.0607			37.02					
93	3	22	128.52	154	122.90	0.0451	79.93	75.56	381	0.0314			37.12					
93	3	23	128.44	140	122.84	0.0463	79.85	75.27	352	0.0323			37.12					
93	3	24	128.42	137	122.84	0.0466	79.97	75.27	352	0.0359			37.06					
93	3	25	128.41	135	122.90	0.0467	79.92	75.43	405	0.0287			37.04					
93	3	26	128.55	160	123.02	0.0448	79.95	75.42	401	0.0299			37.01					
93	3	27	128.61	171	123.12	0.0445	79.97	75.42	401	0.0304			37.03					
93	3	28	128.71	191	123.22	0.0440	79.92	75.45	412	0.0281			37.05					
93	3	29	128.55	160	123.12	0.0448	79.92	75.48	422	0.0272			37.07					
93	3	30	128.56	162	123.01	0.0448	79.92	75.48	422	0.0272			37.10					
93	3	31	128.45	142	122.92	0.0461	79.92	75.45	412	0.0281			37.10					
93	4	1	128.49	149	122.91	0.0455	79.93	75.42	401	0.0193			37.03					
93	4	2	128.42	137	122.90	0.0466	79.92	75.40	395	0.0297			37.06					
93	4	3	128.97	249	122.88	0.0421	79.90	75.35	378	0.0309			37.05					
93	4	4	128.34	124	122.90	0.0478	79.88	75.31	365	0.0318			37.04					
93	4	5	128.50	151	122.89	0.0453	79.89	75.35	378	0.0306			36.94					
93	4	6	128.47	146	122.89	0.0457	79.91	75.42	401	0.0288			36.91					
93	4	7	128.50	151	122.88	0.0453	79.93	75.36	381	0.0314			36.89					
93	4	8	128.52	154	122.86	0.0451	79.96	75.31	365	0.0342			36.89					
93	4	9	128.50	151	122.85	0.0453	79.95	75.32	368	0.0335			36.91					
93	4	10	128.53	156	122.84	0.0450	79.91	75.32	368	0.0323			36.88					
93	4	11	128.46	144	122.85	0.0459	79.88	75.48	422	0.0261			36.88					
93	4	12	128.40	134	122.86	0.0468	79.85	75.47	419	0.0257			36.88					
93	4	13	128.39	132	122.88	0.0470	79.84	75.39	391	0.0279			36.88					
93	4	14	128.33	122			79.93	75.37	384	0.0311								
93	4	15	128.49	149	122.96	0.0455	80.03	75.58	458	0.0271								
93	4	16	128.50	151	123.00	0.0453	80.37	75.61	470	0.0352								
93	4	17	128.60	169	123.02	0.0445	81.04	75.97	615	0.0409								
93	4	18	128.56	162	123.07	0.0448	80.44	76.05	650	0.0243								
93	4	19	128.53	160	123.09	0.0448	80.36	75.91	589	0.0260								
93	4	20	128.56	162	123.12	0.0448	81.06	76.05	650	0.0388								
93	4	21	128.61	171	123.14	0.0443	81.08	76.15	696	0.0361								
93	4	22	128.66	181	123.17	0.0442	80.54	76.12	682	0.0248								
93	4	23			123.18		80.55	76.20	719	0.0230			38.05					
93	4	24	128.70	189	123.22	0.0440	80.56	76.28	758	0.0213			38.11					
93	4	25	128.73	195	123.22	0.0439	80.62	76.34	787	0.0211			38.10					
93	4	26	129.27	327	125.72	0.0283	80.88	76.39	812	0.0252			38.10					
93	4	27	128.93	239	123.44	0.0224	80.92	76.26	748	0.0293			38.10					
93	4	28	128.79	208			80.96	76.40	817	0.0265			38.13					
93	4	29					80.84	76.35	792	0.0253			38.31					
93	4	30					80.58	76.14	691	0.0252			38.33					

**DATA - E4**

**LONGITUDINAL PROFILE FOR APURE FLOW MODEL**



No.	Dist. by INC (Km)	Dist. (Km)	Divis No.	Dist. Sta. (Km)	NAB Depth (m)	NAB Om	Actual Depth (m)	Water Level (m,MSL)	River Bed (m,MSL)
1	570	95.74	1	95.74	4.8	31.81			27.01
2		0	2	95.89	10.1	31.82			21.72
3		0	3	96.05	2.8	31.83			29.03
4		0	4	96.20	3.8	31.84			28.04
5		0	5	96.36	2.8	31.85			29.05
6		0	6	96.51	2.9	31.86			28.96
7		0	7	96.66	3.0	31.87			28.87
8		0	8	96.82	2.8	31.88			29.08
9		0	9	96.97	4.8	31.89			27.09
10		0	10	97.12	3.3	31.91			28.61
11		0	11	97.28	3.7	31.92			28.22
12		0	12	97.43	2.8	31.93			29.13
13		0	13	97.59	3.3	31.94			28.64
14	568	97.74	1	97.74	3.3	31.95			28.65
15		0	2	97.89	3.4	31.96			28.56
16		0	3	98.05	3.3	31.97			28.67
17		0	4	98.20	5.8	31.98			26.18
18		0	5	98.36	3.3	31.99			28.69
19		0	6	98.51	3.8	32.00			28.20
20		0	7	98.66	3.8	32.01			28.21
21		0	8	98.82	2.8	32.02			29.22
22		0	9	98.97	3.8	32.03			28.23
23		0	10	99.12	2.3	32.04			29.74
24		0	11	99.28	1.8	32.05			30.25
25		0	12	99.43	2.3	32.06			29.76
26		0	13	99.59	4.3	32.07			27.77
27	566	99.74	1	99.74	3.3	32.08			28.78
28		0	2	99.89	3.8	32.09			28.29
29		0	3	100.05	9.8	32.11			22.31
30		0	4	100.20	12.8	32.12			19.32
31		0	5	100.36	5.6	32.13			26.53
32		0	6	100.51	5.6	32.14			26.54
33		0	7	100.66	0.1	32.15			32.05
34		0	8	100.82	2.6	32.16			29.56
35		0	9	100.97	3.6	32.17			28.57
36		0	10	101.12	6.6	32.18			25.58
37		0	11	101.28	8.6	32.19			23.59
38		0	12	101.43	12.6	32.20			19.60
39		0	13	101.59	8.6	32.21			23.61
40	564	101.74	1	101.74	9.1	32.22			23.12
41		0	2	101.91	7.6	32.23			24.63
42		0	3	102.07	6.1	32.24			26.14
43		0	4	102.24	1.6	32.26			30.66
44		0	5	102.41	2.1	32.27			30.17
45		0	6	102.57	2.6	32.28			29.68
46		0	7	102.74	3.6	32.29			28.69
47		0	8	102.91	7.6	32.30			24.70
48		0	9	103.07	7.6	32.31			24.71
49		0	10	103.24	5.6	32.32			26.72
50		0	11	103.41	8.1	32.34			24.24
51		0	12	103.57	5.1	32.35			27.25
52	562	103.74	1	103.74	5.1	32.36			27.26
53		0	2	103.86	6.6	32.37			25.77
54		0	3	103.98	4.7	32.37			27.67
55		0	4	104.09	4.1	32.38			28.28
56		0	5	104.21	15.6	32.39			16.79
57		0	6	104.33	15.6	32.40			16.80
58		0	7	104.45	15.1	32.41			17.31
59		0	8	104.56	13.6	32.41			18.81
60		0	9	104.68	9.6	32.42			22.82

61		0	10	104.80	1.6	32.43	30.83
62		0	11	104.92	1.0	32.44	31.44
63		0	12	105.03	1.1	32.45	31.35
64		0	13	105.15	1.1	32.45	31.35
65		0	14	105.27	0.3	32.46	32.16
66		0	15	105.39	0.6	32.47	31.87
67		0	16	105.50	0.6	32.48	31.88
68		0	17	105.62	-1.4	32.49	33.89
69	560	105.74	1	105.74	-0.9	32.49	33.39
70		0	2	105.87	0.1	32.50	32.40
71		0	3	106.01	1.6	32.51	30.91
72		0	4	106.14	2.6	32.52	29.92
73		0	5	106.27	7.1	32.53	25.43
74		0	6	106.41	14.1	32.54	18.44
75		0	7	106.54	16.1	32.55	16.45
76		0	8	106.67	14.6	32.56	17.96
77		0	9	106.81	13.1	32.57	19.47
78		0	10	106.94	12.6	32.58	19.98
79		0	11	107.07	6.1	32.59	26.49
80		0	12	107.21	4.0	32.60	28.60
81		0	13	107.34	3.1	32.60	29.50
82		0	14	107.47	2.6	32.61	30.01
83		0	15	107.61	2.1	32.62	30.52
84	558	107.74	1	107.74	1.6	32.63	31.03
85		0	2	107.87	2.1	32.64	30.54
86		0	3	108.01	2.6	32.65	30.05
87		0	4	108.14	0.1	32.66	32.56
88		0	5	108.27	-0.9	32.67	33.57
89		0	6	108.41	-0.4	32.68	33.08
90		0	7	108.54	-0.4	32.69	33.09
91		0	8	108.67	1.1	32.70	31.60
92		0	9	108.81	3.2	32.70	29.50
93		0	10	108.94	9.6	32.71	23.11
94		0	11	109.07	13.1	32.72	19.62
95		0	12	109.21	9.1	32.73	23.63
96		0	13	109.34	3.1	32.74	29.64
97		0	14	109.47	4.6	32.75	28.15
98		0	15	109.61	3.1	32.76	29.66
99	556	109.74	1	109.74	2.4	32.77	30.37
100		0	2	109.89	1.6	32.78	31.18
101		0	3	110.05	1.1	32.79	31.69
102		0	4	110.20	2.8	32.80	30.00
103		0	5	110.36	4.1	32.81	28.71
104		0	6	110.51	5.6	32.82	27.22
105		0	7	110.66	4.1	32.83	28.73
106		0	8	110.82	3.6	32.84	29.24
107		0	9	110.97	3.1	32.85	29.75
108		0	10	111.12	4.1	32.86	28.76
109		0	11	111.28	4.1	32.87	28.77
110		0	12	111.43	3.6	32.88	29.28
111		0	13	111.59	4.1	32.90	28.80
112	554	111.74	1	111.74	4.1	32.91	28.81
113		0	2	111.92	4.6	32.92	28.32
114		0	3	112.10	3.8	32.93	29.13
115		0	4	112.29	4.1	32.94	28.84
116		0	5	112.47	3.1	32.96	29.86
117		0	6	112.65	5.6	32.97	27.37
118		0	7	112.83	5.0	32.98	27.98
119		0	8	113.01	6.6	32.99	26.39
120		0	9	113.19	6.6	33.01	26.41
121		0	10	113.38	8.1	33.02	24.92
122		0	11	113.56	11.0	33.03	22.03
123	552	113.74	1	113.74	5.0	33.04	28.04
124		0	2	113.91	3.5	33.05	29.55
125		0	3	114.07	2.6	33.07	30.47
126		0	4	114.24	2.3	33.08	30.78

127		0	5	114.41	2.1	33.09	30.99
128		0	6	114.57	1.5	33.10	31.60
129		0	7	114.74	1.7	33.11	31.41
130		0	8	114.91	1.5	33.12	31.62
131		0	9	115.07	2.4	33.13	30.73
132		0	10	115.24	1.5	33.15	31.65
133		0	11	115.41	3.2	33.16	29.96
134		0	12	115.57	3.5	33.17	29.67
135	550	115.74	1	115.74	2.5	33.18	30.68
136		0	2	115.91	1.6	33.19	31.59
137		0	3	116.07	2.5	33.20	30.70
138		0	4	116.24	3.0	33.21	30.21
139		0	5	116.41	2.0	33.23	31.23
140		0	6	116.57	-0.5	33.24	33.74
141		0	7	116.74	-0.5	33.25	33.75
142		0	8	116.91	-0.5	33.26	33.76
143		0	9	117.07	-0.7	33.27	33.97
144		0	10	117.24	0.5	33.28	32.78
145		0	11	117.41	0.5	33.29	32.79
146		0	12	117.57	1.5	33.30	31.80
147	548	117.74	1	117.74	1.5	33.32	31.82
148		0	2	117.89	2.5	33.33	30.83
149		0	3	118.05	4.0	33.34	29.34
150		0	4	118.20	8.5	33.35	24.85
151		0	5	118.36	8.0	33.36	25.36
152		0	6	118.51	4.0	33.37	29.37
153		0	7	118.66	6.5	33.38	26.88
154		0	8	118.82	3.5	33.39	29.89
155		0	9	118.97	1.2	33.40	32.20
156		0	10	119.12	1.3	33.41	32.11
157		0	11	119.28	1.5	33.42	31.92
158		0	12	119.43	2.5	33.43	30.93
159		0	13	119.59	2.5	33.44	30.94
160	546	119.74	1	119.74	1.5	33.45	31.95
161		0	2	119.92	1.0	33.47	32.47
162		0	3	120.10	0.5	33.48	32.98
163		0	4	120.29	2.0	33.49	31.49
164		0	5	120.47	-0.5	33.50	34.00
165		0	6	120.65	1.0	33.52	32.52
166		0	7	120.83	0.5	33.53	33.03
167		0	8	121.01	0.3	33.54	33.24
168		0	9	121.19	0.5	33.55	33.05
169		0	10	121.38	0.5	33.57	33.07
170		0	11	121.56	0.9	33.58	32.68
171	544	121.74	1	121.74	0.9	33.59	32.69
172		0	2	121.92	0.9	33.60	32.70
173		0	3	122.10	0.9	33.62	32.72
174		0	4	122.29	1.4	33.63	32.23
175		0	5	122.47	1.9	33.64	31.74
176		0	6	122.65	2.4	33.65	31.25
177		0	7	122.83	2.4	33.66	31.26
178		0	8	123.01	1.4	33.68	32.28
179		0	9	123.19	3.9	33.69	29.79
180		0	10	123.38	2.2	33.70	31.50
181		0	11	123.56	2.4	33.71	31.31
182	542	123.74	1	123.74	0.9	33.73	32.83
183		0	2	123.88	1.4	33.74	32.34
184		0	3	124.03	-0.4	33.75	34.15
185		0	4	124.17	0.4	33.76	33.36
186		0	5	124.31	0.6	33.77	33.17
187		0	6	124.45	1.4	33.78	32.38
188		0	7	124.60	1.6	33.79	32.19
189		0	8	124.74	2.9	33.80	30.90
190		0	9	124.88	6.0	33.81	27.81
191		0	10	125.03	8.9	33.82	24.92
192		0	11	125.17	10.9	33.82	22.92

193		0	12	125.31	11.4	33.83	22.43
194		0	13	125.45	7.4	33.84	26.44
195		0	14	125.60	7.2	33.85	26.65
196	540	125.74	1	125.74	3.4	33.86	30.46
197		0	2	125.89	2.7	33.87	31.17
198		0	3	126.05	2.2	33.88	31.68
199		0	4	126.20	2.2	33.90	31.70
200		0	5	126.36	5.2	33.91	28.71
201		0	6	126.51	1.0	33.92	32.92
202		0	7	126.66	-0.8	33.93	34.73
203		0	8	126.82	0.2	33.94	33.74
204		0	9	126.97	0.1	33.95	33.85
205		0	10	127.12	1.7	33.96	32.26
206		0	11	127.28	7.7	33.97	26.27
207		0	12	127.43	11.2	33.98	22.78
208		0	13	127.59	8.7	33.99	25.29
209	538	127.74	1	127.74	10.7	34.00	23.30
210		0	2	127.94	5.2	34.01	28.81
211		0	3	128.14	4.2	34.03	29.83
212		0	4	128.34	2.2	34.04	31.84
213		0	5	128.54	2.2	34.06	31.86
214		0	6	128.74	10.2	34.07	23.87
215		0	7	128.94	2.2	34.08	31.88
216		0	8	129.14	4.7	34.10	29.40
217		0	9	129.34	2.2	34.11	31.91
218		0	10	129.54	1.7	34.12	32.42
219	536	129.74	1	129.74	2.0	34.14	32.14
220		0	2	129.99	0.7	34.15	33.45
221		0	3	130.24	1.8	34.17	32.37
222		0	4	130.49	4.2	34.19	29.99
223		0	5	130.74	14.2	34.21	20.01
224		0	6	130.99	16.2	34.22	18.02
225		0	7	131.24	6.2	34.24	28.04
226		0	8	131.49	4.2	34.26	30.06
227	534	131.74	1	131.74	2.2	34.27	32.07
228		0	2	131.92	4.1	34.29	30.19
229		0	3	132.10	4.6	34.30	29.70
230		0	4	132.29	4.7	34.31	29.61
231		0	5	132.47	3.7	34.32	30.62
232		0	6	132.65	5.7	34.34	28.64
233		0	7	132.83	6.2	34.35	28.15
234		0	8	133.01	5.0	34.36	29.36
235		0	9	133.19	5.7	34.37	28.67
236		0	10	133.38	5.2	34.39	29.19
237		0	11	133.56	5.2	34.40	29.20
238	532	133.74	1	133.74	3.5	34.41	30.91
239		0	2	133.91	4.2	34.42	30.22
240		0	3	134.07	4.2	34.43	30.23
241		0	4	134.24	4.2	34.45	30.25
242		0	5	134.41	4.0	34.46	30.46
243		0	6	134.57	3.2	34.47	31.27
244		0	7	134.74	4.1	34.48	30.38
245		0	8	134.91	3.0	34.49	31.49
246		0	9	135.07	3.0	34.50	31.50
247		0	10	135.24	4.1	34.51	30.41
248		0	11	135.41	3.6	34.53	30.93
249		0	12	135.57	6.6	34.54	27.94
250	530	135.74	1	135.74	9.6	34.55	24.95
251		0	2	135.89	9.0	34.56	25.56
252		0	3	136.05	8.6	34.57	25.97
253		0	4	136.20	5.6	34.58	28.98
254		0	5	136.36	7.0	34.59	27.59
255		0	6	136.51	6.6	34.60	28.00
256		0	7	136.66	9.5	34.61	25.11
257		0	8	136.82	10.5	34.62	24.12
258		0	9	136.97	10.0	34.63	24.63



259		0	10	137.12		9.0	34.64	25.64
260		0	11	137.28		4.6	34.65	30.05
261		0	12	137.43		3.6	34.66	31.06
262		0	13	137.59		3.1	34.67	31.57
263	528	137.74	1	137.74		4.1	34.69	30.59
264		0	2	137.89		4.1	34.70	30.60
265		0	3	138.05		5.8	34.71	28.91
266		0	4	138.20		5.1	34.72	29.62
267		0	5	138.36		4.6	34.73	30.13
268		0	6	138.51		9.0	34.74	25.74
269		0	7	138.66		9.1	34.75	25.65
270		0	8	138.82		8.0	34.76	26.76
271		0	9	138.97		6.1	34.77	28.67
272		0	10	139.12		2.5	34.78	32.28
273		0	11	139.28		1.9	34.79	32.89
274		0	12	139.43		1.9	34.80	32.90
275		0	13	139.59		4.2	34.81	30.61
276	526	139.74	1	139.74		4.4	34.82	30.42
277		0	2	139.91		5.2	34.83	29.63
278		0	3	140.07		7.5	34.84	27.34
279		0	4	140.24		9.1	34.86	25.76
280		0	5	140.41		7.7	34.87	27.17
281		0	6	140.57		7.8	34.88	27.08
282		0	7	140.74		9.0	34.89	25.89
283		0	8	140.91		11.6	34.90	23.30
284		0	9	141.07		11.4	34.91	23.51
285		0	10	141.24		14.6	34.92	20.32
286		0	11	141.41		6.4	34.94	28.54
287		0	12	141.57		2.4	34.95	32.55
288	524	141.74	1	141.74	CHIREL	9.3	34.96	25.66
289		0	2	141.89		5.4	34.97	29.57
290		0	3	142.05		18.9	34.98	16.08
291		0	4	142.20		29.0	34.99	5.99
292		0	5	142.36		15.4	35.00	19.60
293		0	6	142.51		10.4	35.01	24.61
294		0	7	142.66		7.9	35.02	27.12
295		0	8	142.82		4.8	35.03	30.23
296		0	9	142.97		4.6	35.04	30.44
297		0	10	143.12		4.4	35.05	30.65
298		0	11	143.28	CHIREL	2.9	35.06	32.16
299		0	12	143.43		1.4	35.07	33.67
300		0	13	143.59		0.7	35.09	34.39
301	522	143.74	1	143.74		0.9	35.10	34.20
302		0	2	143.89		0.9	35.11	34.21
303		0	3	144.05		0.9	35.12	34.22
304		0	4	144.20		0.9	35.13	34.23
305		0	5	144.36		1.4	35.14	33.74
306		0	6	144.51		1.9	35.15	33.25
307		0	7	144.66		1.9	35.16	33.26
308		0	8	144.82		0.9	35.17	34.27
309		0	9	144.97		2.4	35.18	32.78
310		0	10	145.12		3.9	35.19	31.29
311		0	11	145.28		10.9	35.20	24.30
312		0	12	145.43		16.9	35.21	18.31
313		0	13	145.59		16.9	35.22	18.32
314	520	145.74	1	145.74		17.9	35.23	17.33
315		0	2	145.88		4.9	35.24	30.34
316		0	3	146.03		2.4	35.25	32.85
317		0	4	146.17		1.9	35.26	33.36
318		0	5	146.31		1.9	35.27	33.37
319		0	6	146.45		1.9	35.28	33.38
320		0	7	146.60		2.4	35.29	32.89
321		0	8	146.74		3.4	35.30	31.90
322		0	9	146.88		3.4	35.31	31.91
323		0	10	147.03		8.9	35.32	26.42
324		0	11	147.17		4.9	35.33	30.43

325		0	12	147.31		4.4	35.34	30.94
326		0	13	147.45		4.4	35.35	30.95
327		0	14	147.60		3.5	35.36	31.86
328	518	147.74	1	147.74		3.9	35.37	31.47
329		0	2	147.88		3.9	35.38	31.48
330		0	3	148.03		3.9	35.39	31.49
331		0	4	148.17		4.9	35.40	30.50
332		0	5	148.31		4.4	35.41	31.01
333		0	6	148.45		3.9	35.42	31.52
334		0	7	148.60		3.9	35.43	31.53
335		0	8	148.74		3.0	35.44	32.44
336		0	9	148.88		3.1	35.45	32.35
337		0	10	149.03		4.4	35.46	31.06
338		0	11	149.17		5.7	35.47	29.77
339		0	12	149.31		10.4	35.48	25.08
340		0	13	149.45		10.4	35.49	25.09
341		0	14	149.60		8.9	35.50	26.60
342	516	149.74	1	149.74		9.9	35.51	25.61
343		0	2	149.89		14.9	35.52	20.62
344		0	3	150.05		15.0	35.53	20.53
345		0	4	150.20		3.4	35.54	32.14
346		0	5	150.36		3.4	35.55	32.15
347		0	6	150.51	BOQUERO	3.4	35.56	32.16
348		0	7	150.66		4.6	35.57	30.97
349		0	8	150.82		6.4	35.58	29.18
350		0	9	150.97		8.6	35.59	26.99
351		0	10	151.12		1.9	35.60	33.70
352		0	11	151.28		2.9	35.61	32.71
353		0	12	151.43		3.0	35.62	32.62
354		0	13	151.59		4.1	35.63	31.53
355	514	151.74	1	151.74		3.0	35.64	32.64
356		0	2	151.91		3.4	35.65	32.25
357		0	3	152.07		1.4	35.67	34.27
358		0	4	152.24		1.4	35.68	34.28
359		0	5	152.41	EL JOBA	1.4	35.69	34.29
360		0	6	152.57		1.8	35.70	33.90
361		0	7	152.74		1.7	35.71	34.01
362		0	8	152.91		1.8	35.72	33.92
363		0	9	153.07		1.9	35.73	33.83
364		0	10	153.24		3.4	35.75	32.35
365		0	11	153.41		4.9	35.76	30.86
366		0	12	153.57		5.4	35.77	30.37
367	512	153.74	1	153.74		7.0	35.78	28.78
368		0	2	153.88		7.4	35.79	28.39
369		0	3	154.03		7.9	35.80	27.90
370		0	4	154.17		9.4	35.81	26.41
371		0	5	154.31		12.3	35.82	23.52
372		0	6	154.45		8.4	35.83	27.43
373		0	7	154.60		9.4	35.84	26.44
374		0	8	154.74		9.0	35.85	26.85
375		0	9	154.88		8.9	35.86	26.96
376		0	10	155.03		9.9	35.87	25.97
377		0	11	155.17		9.0	35.88	26.88
378		0	12	155.31		6.9	35.89	28.99
379		0	13	155.45		2.0	35.90	33.90
380		0	14	155.60		2.4	35.91	33.51
381	510	155.74	1	155.74		2.9	35.92	33.02
382		0	2	155.91		3.0	35.93	32.93
383		0	3	156.07		3.6	35.94	32.34
384		0	4	156.24		3.9	35.95	32.05
385		0	5	156.41		3.9	35.96	32.06
386		0	6	156.57		3.8	35.97	32.17
387		0	7	156.74		3.8	35.99	32.19
388		0	8	156.91		3.3	36.00	32.70
389		0	9	157.07		3.8	36.01	32.21
390		0	10	157.24		4.0	36.02	32.02

391		0	11	157.41	1.8	36.03	34.23
392		0	12	157.57	1.8	36.04	34.24
393	508	157.74	1	157.74	0.8	36.05	35.25
394		0	2	157.91	0.7	36.07	35.37
395		0	3	158.07	0.8	36.08	35.28
396		0	4	158.24	1.3	36.09	34.79
397		0	5	158.41	2.3	36.10	33.80
398		0	6	158.57	3.3	36.11	32.81
399		0	7	158.74	4.3	36.12	31.82
400		0	8	158.91	6.8	36.13	29.33
401		0	9	159.07	1.8	36.15	34.35
402		0	10	159.24	4.8	36.16	31.36
403		0	11	159.41	6.0	36.17	30.17
404		0	12	159.57	6.3	36.18	29.88
405	506	159.74	1	159.74	6.0	36.19	30.19
406		0	2	159.91	6.3	36.20	29.90
407		0	3	160.07	6.3	36.21	29.91
408		0	4	160.24	5.8	36.23	30.43
409		0	5	160.41	5.8	36.24	30.44
410		0	6	160.57	9.7	36.25	26.55
411		0	7	160.74	6.8	36.26	29.46
412		0	8	160.91	6.0	36.27	30.27
413		0	9	161.07	7.3	36.28	28.98
414		0	10	161.24	6.5	36.29	29.79
415		0	11	161.41	7.8	36.31	28.51
416		0	12	161.57	8.8	36.32	27.52
417	504	161.74	1	161.74	8.5	36.33	27.83
418		0	2	161.89	11.0	36.34	25.34
419		0	3	162.05	13.3	36.35	23.05
420		0	4	162.20	12.8	36.36	23.56
421		0	5	162.36	13.8	36.37	22.57
422		0	6	162.51	5.3	36.38	31.08
423		0	7	162.66	5.8	36.39	30.59
424		0	8	162.82	5.8	36.40	30.60
425		0	9	162.97	5.3	36.41	31.11
426		0	10	163.12	5.3	36.42	31.12
427		0	11	163.28	10.3	36.43	26.13
428		0	12	163.43	14.8	36.44	21.64
429		0	13	163.59	24.5	36.45	11.95
430	502	163.74	1	163.74	14.8	36.46	21.66
431		0	2	163.88	5.8	36.47	30.67
432		0	3	164.03	3.8	36.48	32.68
433		0	4	164.17	4.8	36.49	31.69
434		0	5	164.31	2.8	36.50	33.70
435		0	6	164.45	2.3	36.51	34.21
436		0	7	164.60	2.8	36.52	33.72
437		0	8	164.74	2.2	36.53	34.33
438		0	9	164.88	3.3	36.54	33.24
439		0	10	165.03	3.8	36.55	32.75
440		0	11	165.17	3.3	36.56	33.26
441		0	12	165.31	3.3	36.57	33.27
442		0	13	165.45	3.3	36.58	33.28
443		0	14	165.60	2.8	36.59	33.79
444	500	165.74	1	165.74	2.8	36.60	33.80
445		0	2	165.88	2.8	36.61	33.81
446		0	3	166.03	3.1	36.62	33.52
447		0	4	166.17	3.8	36.63	32.83
448		0	5	166.31	2.8	36.64	33.84
449		0	6	166.45	2.8	36.65	33.85
450		0	7	166.60	2.3	36.66	34.36
451		0	8	166.74	2.8	36.67	33.87
452		0	9	166.88	2.8	36.68	33.88
453		0	10	167.03	0.3	36.69	36.39
454		0	11	167.17	0.8	36.70	35.90
455		0	12	167.31	1.3	36.71	35.41
456		0	13	167.45	1.8	36.72	34.92