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# ANALYSIS OF WATER CHEMISTRY DATA FOR 28 RIVERS IN ATLANTIC CANADA Appendices

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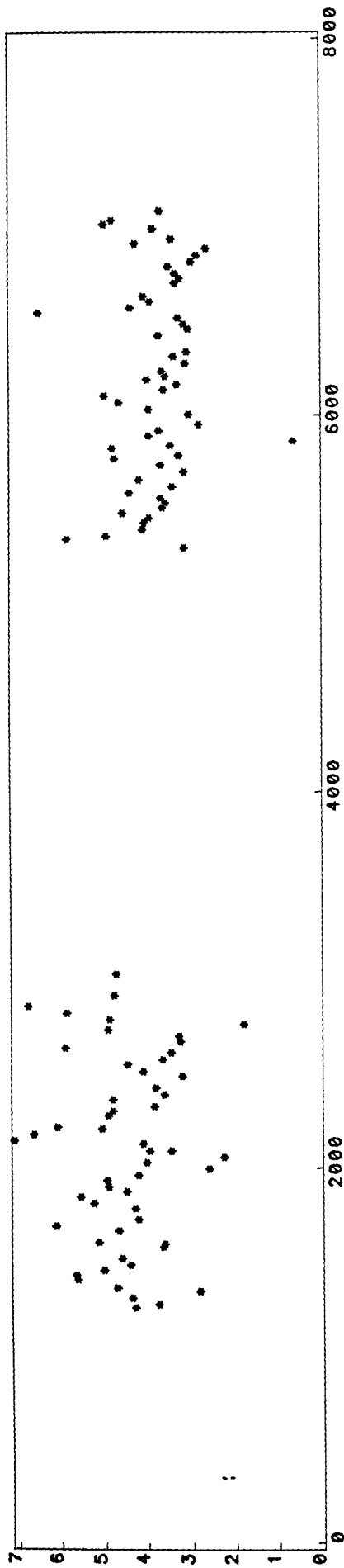
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ATLANTIC REGION  
WATER QUALITY BRANCH  
MONCTON, NEW BRUNSWICK

Analysis of water chemistry data for 25 rivers...

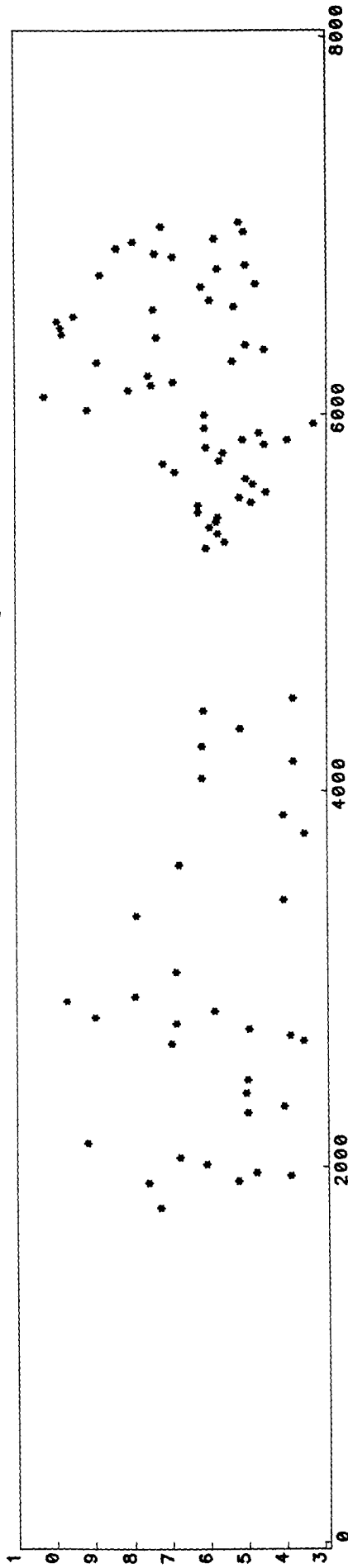
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Appendix 1. Scatter plots of excess sulfate calculated by magnesium ratio for the study rivers.

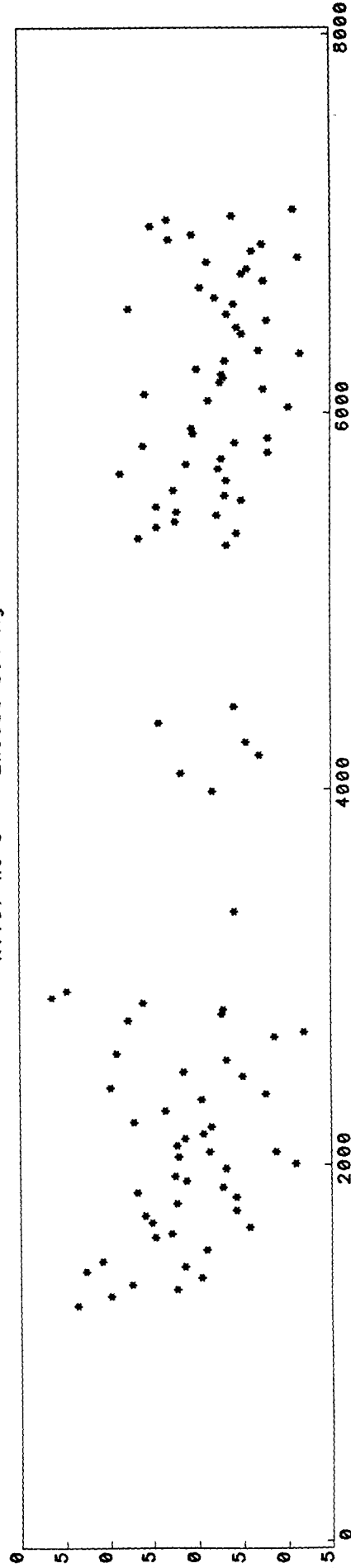
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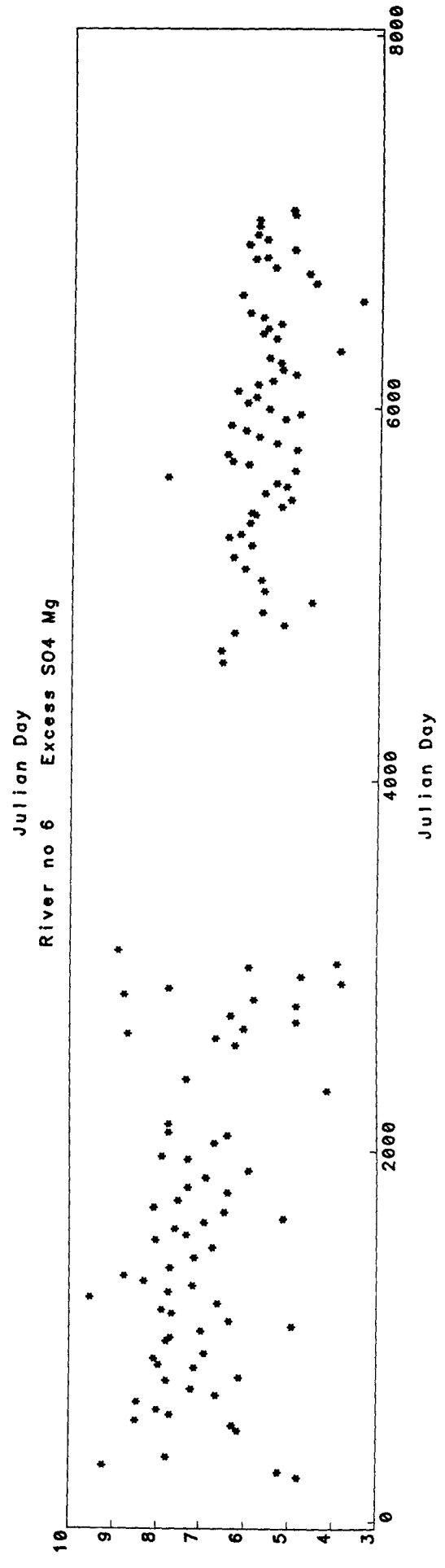
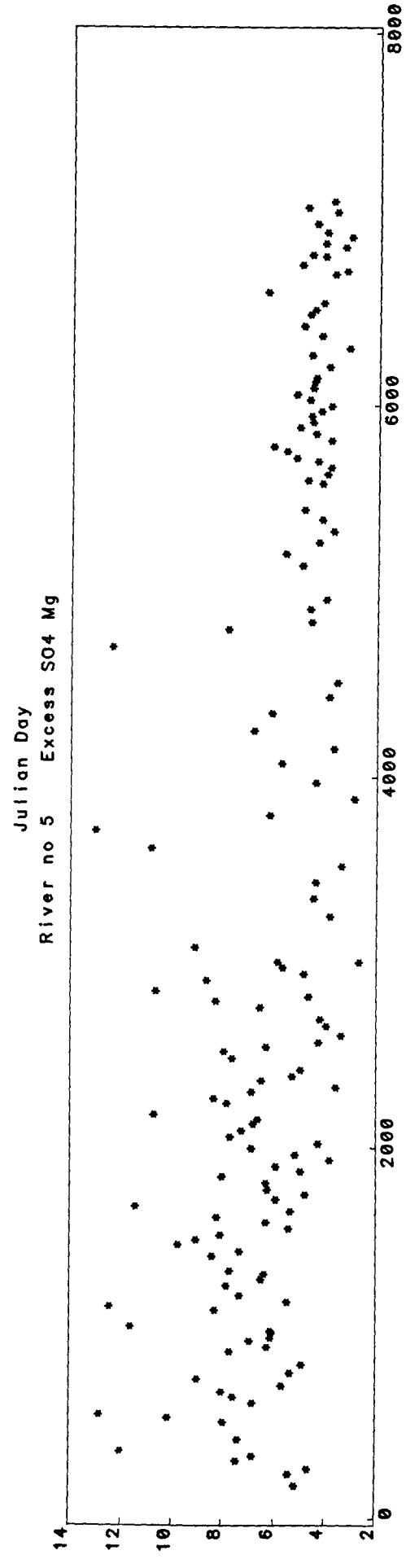
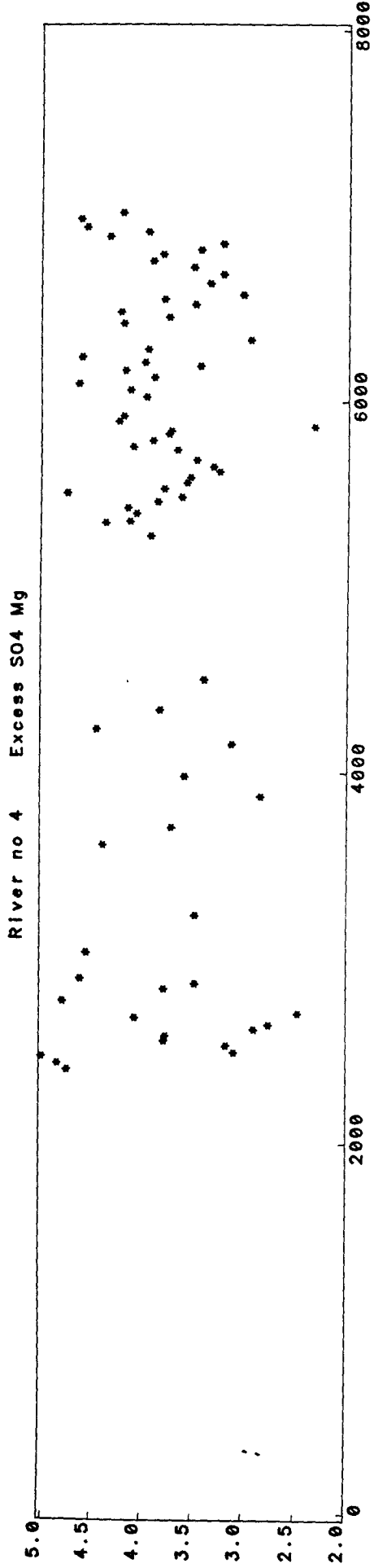


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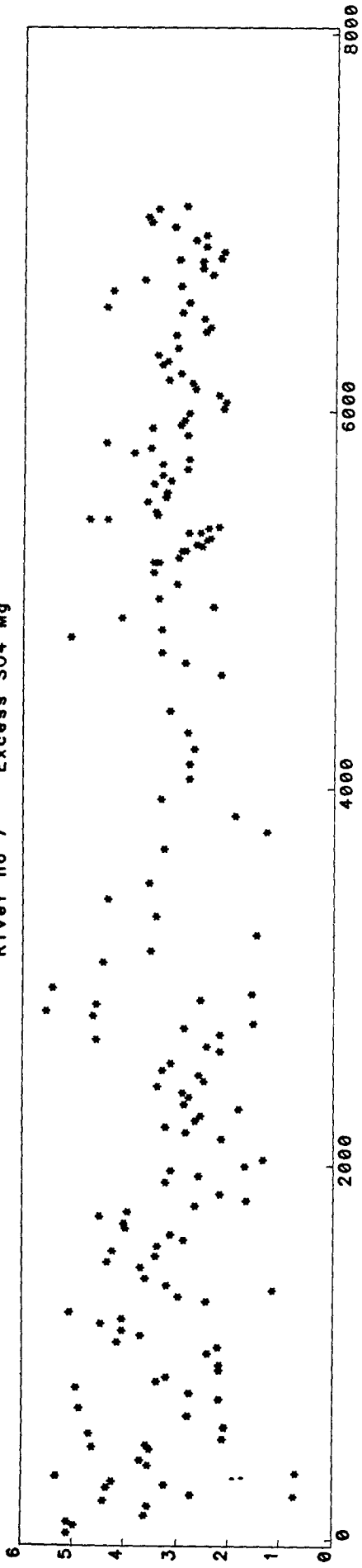


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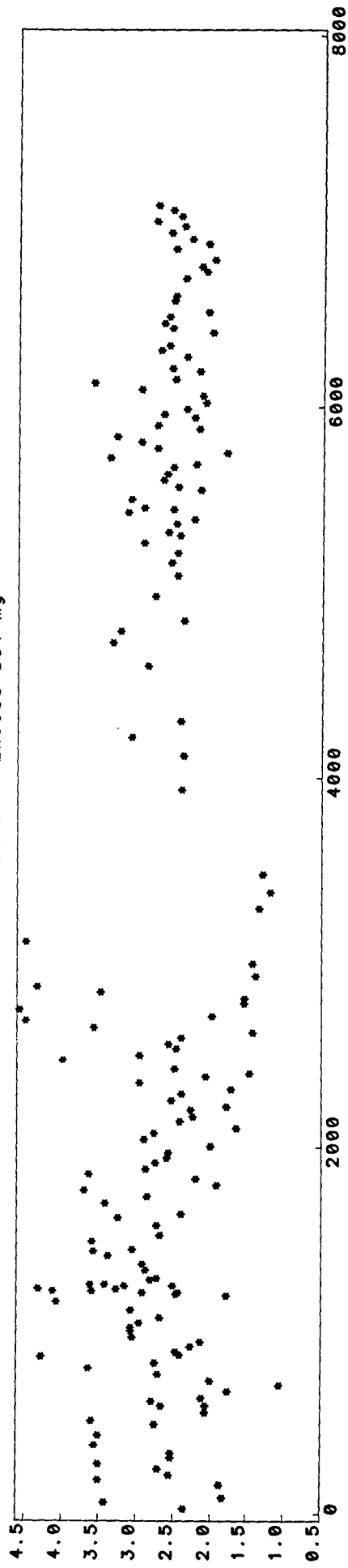




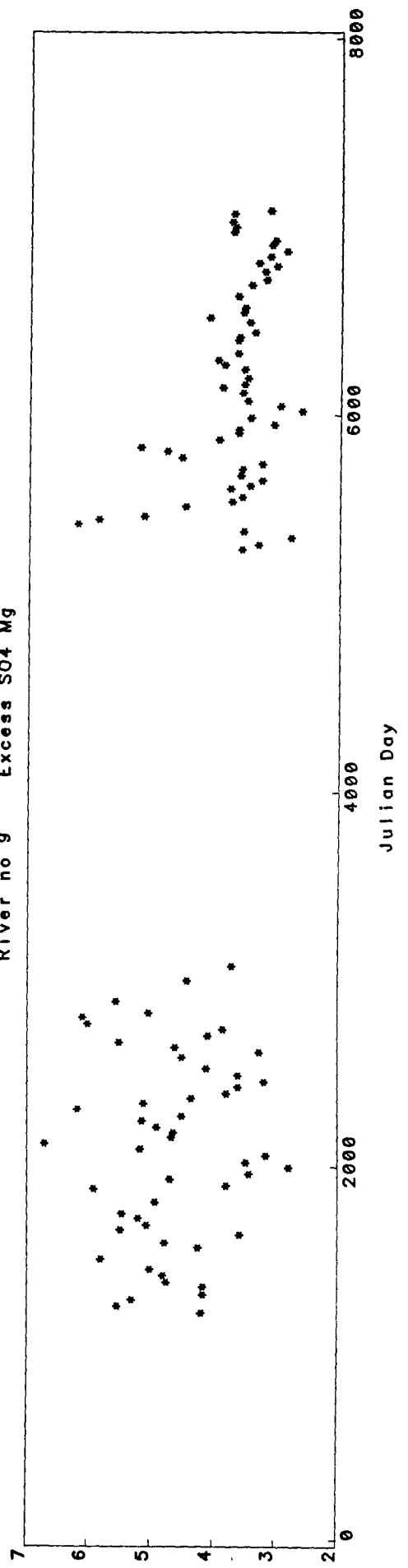
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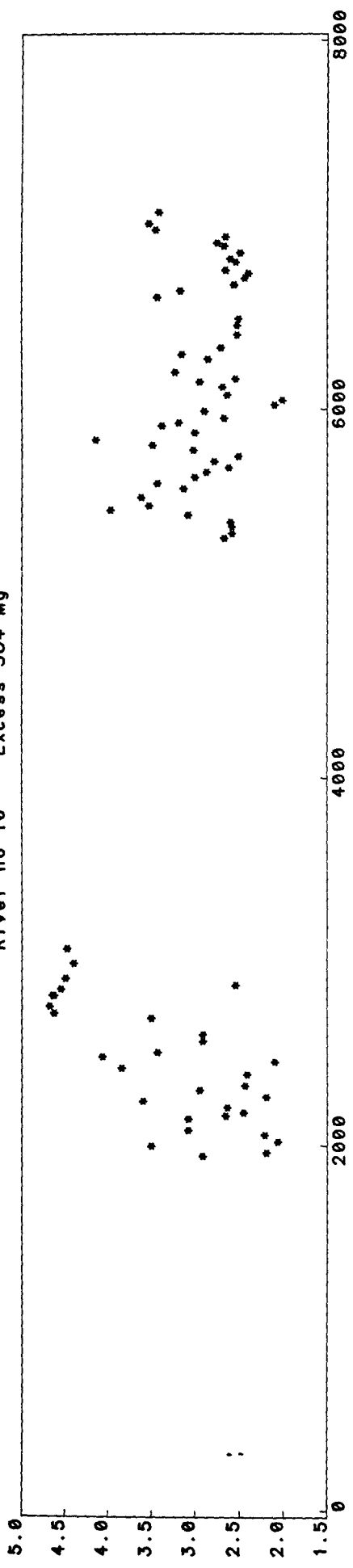
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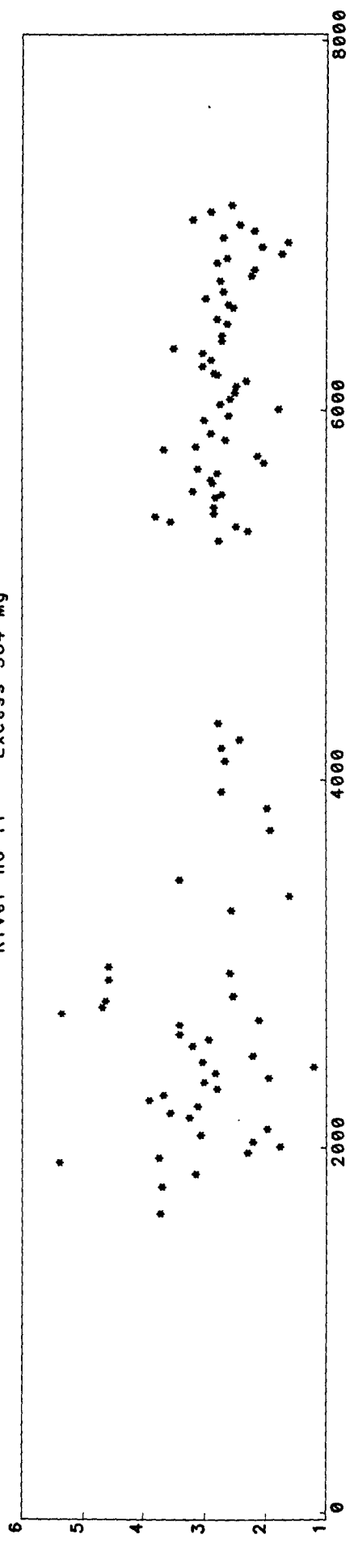
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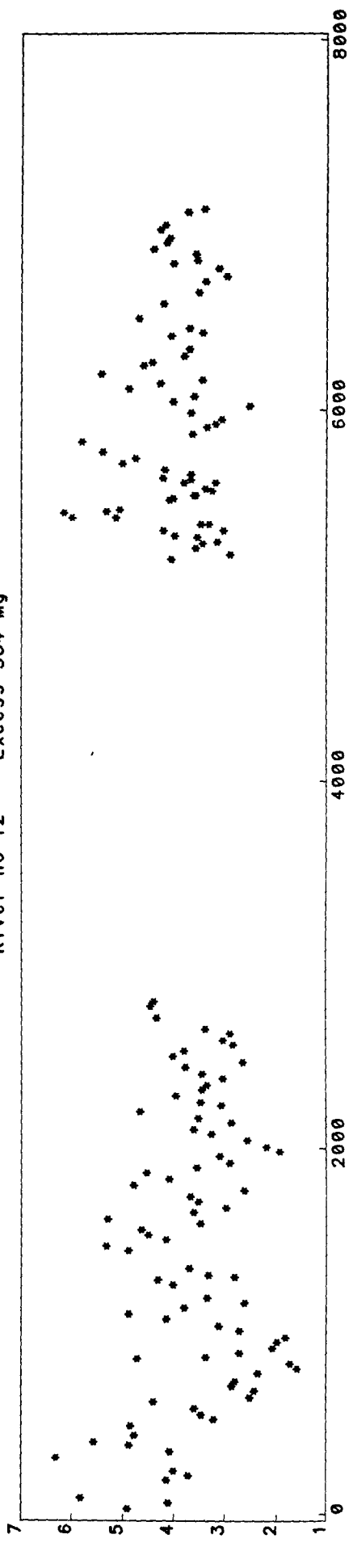
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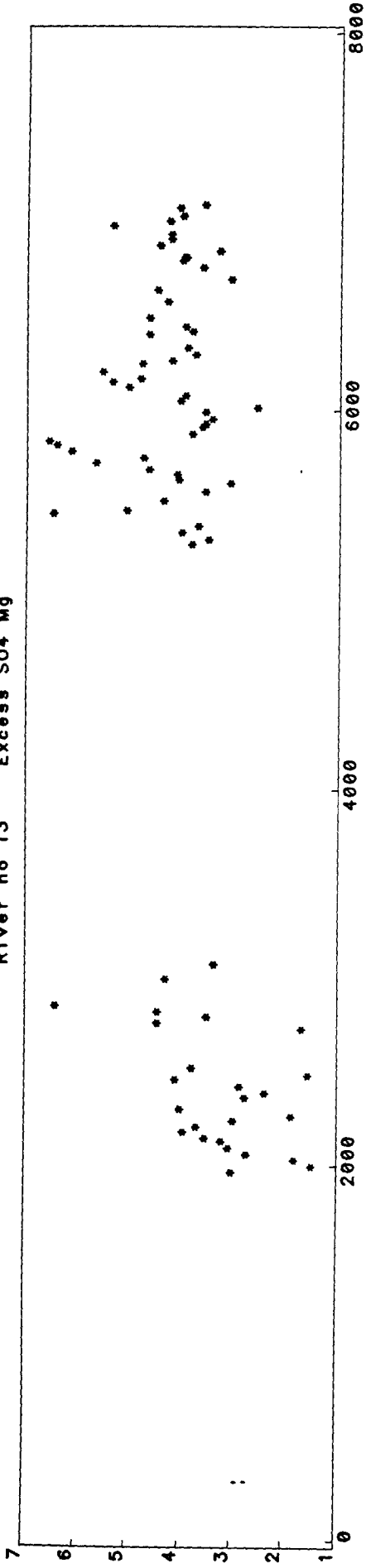
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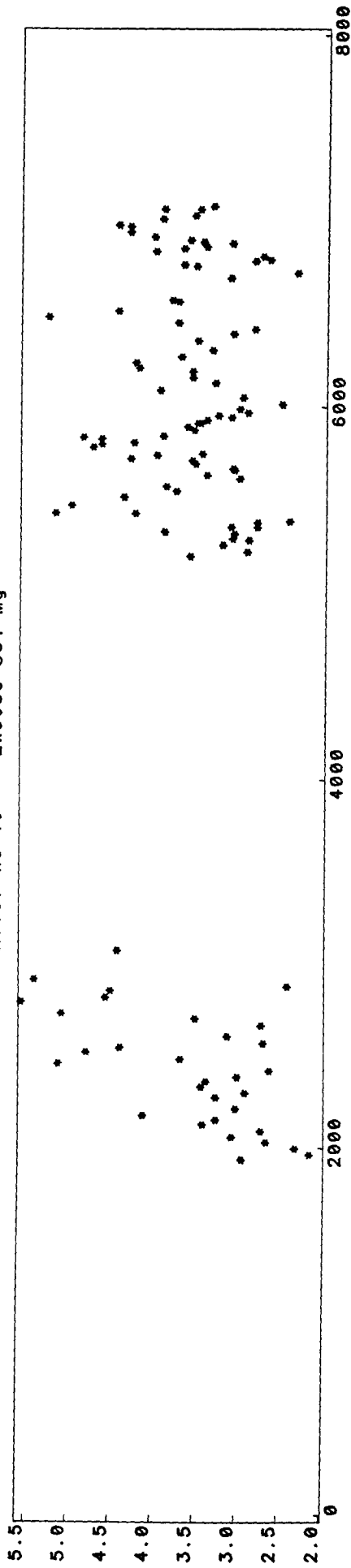
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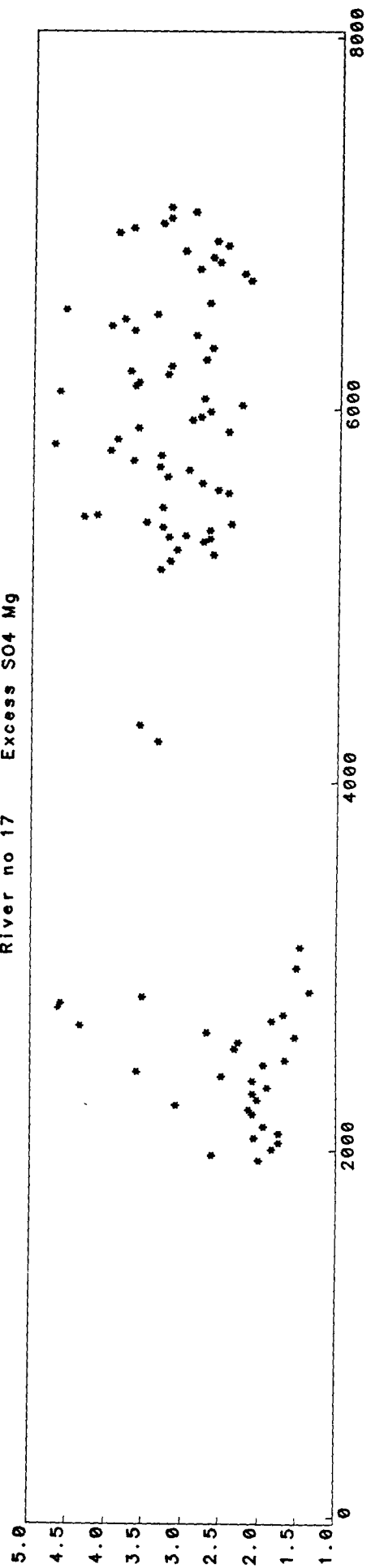
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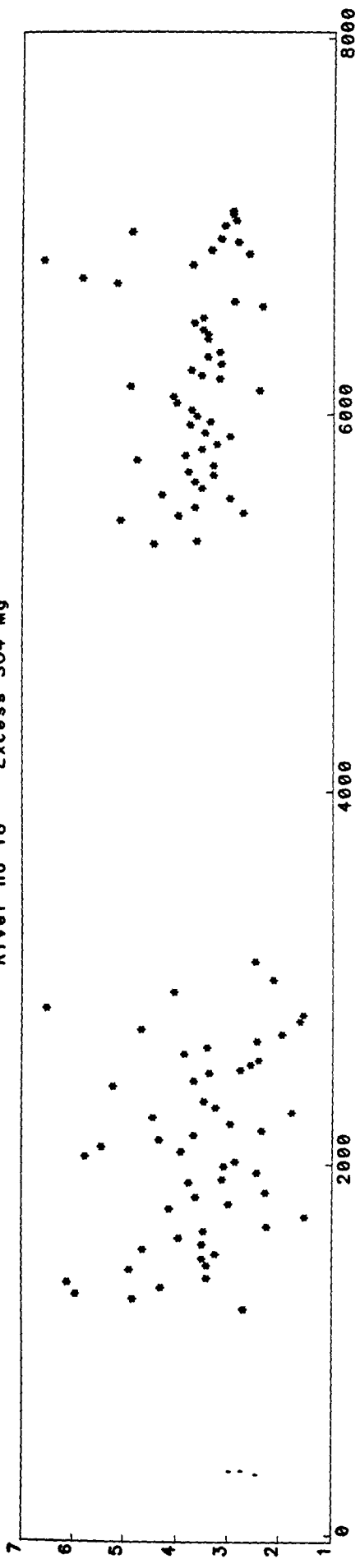
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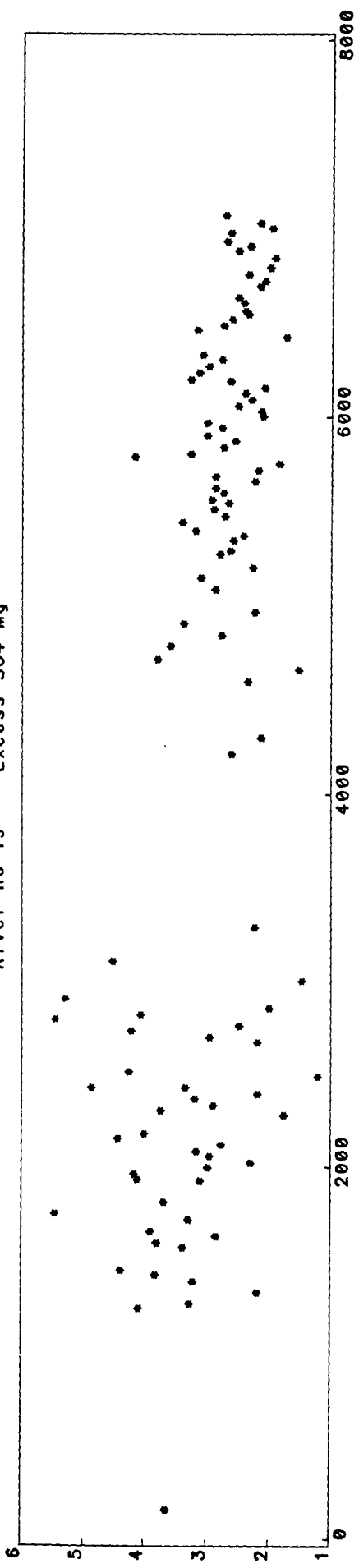
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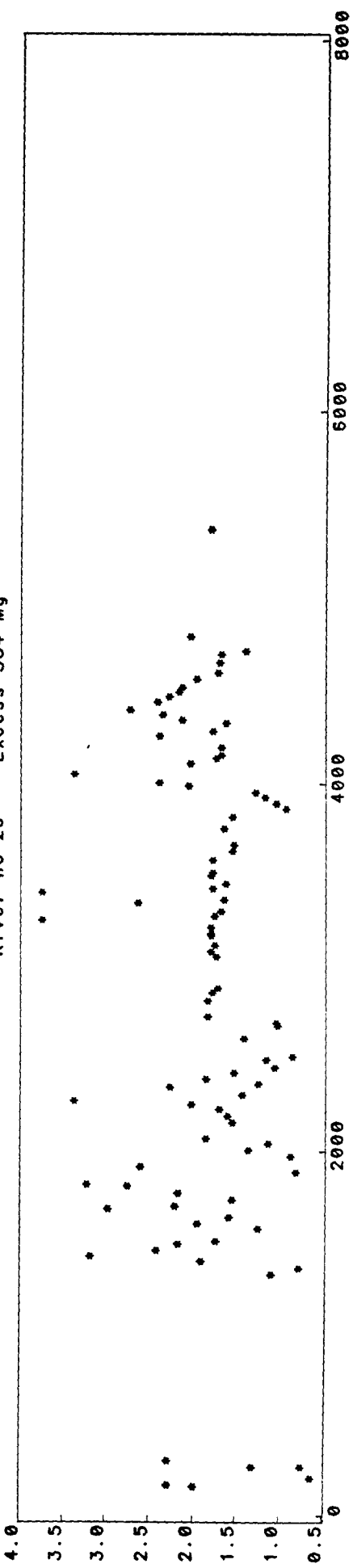
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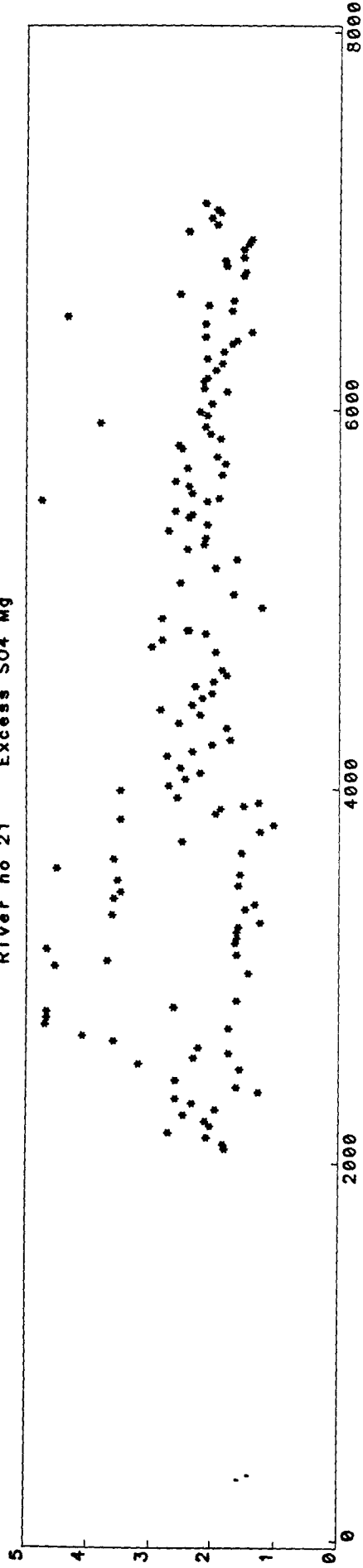


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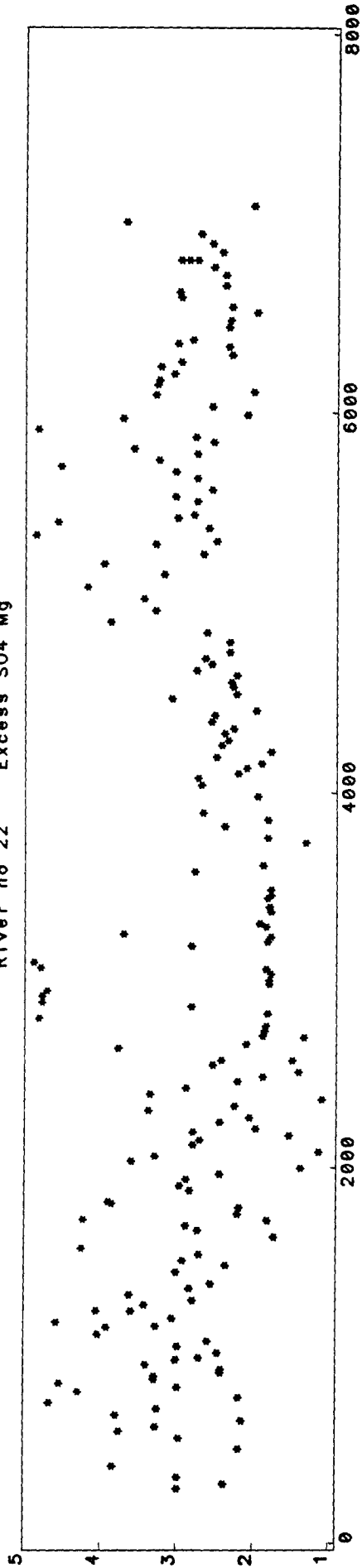




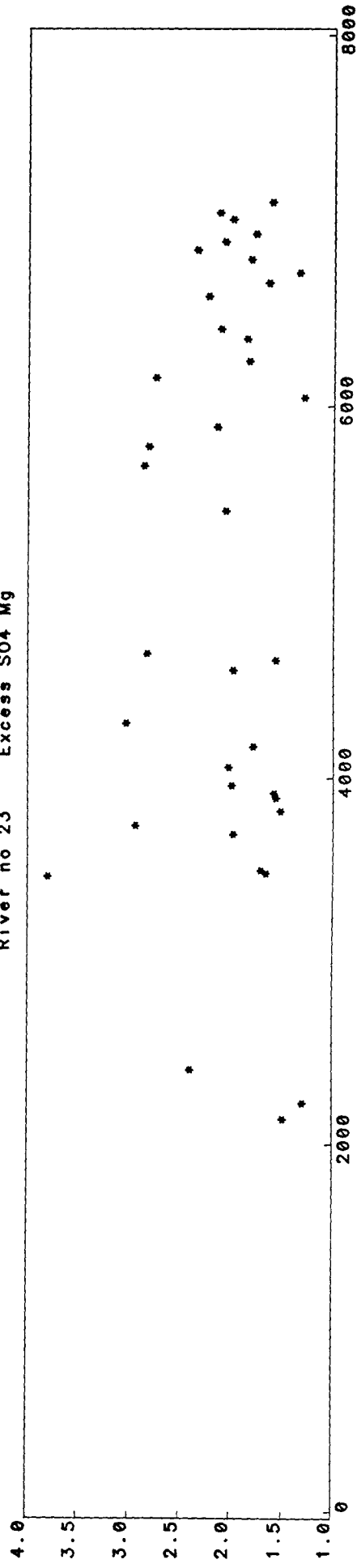
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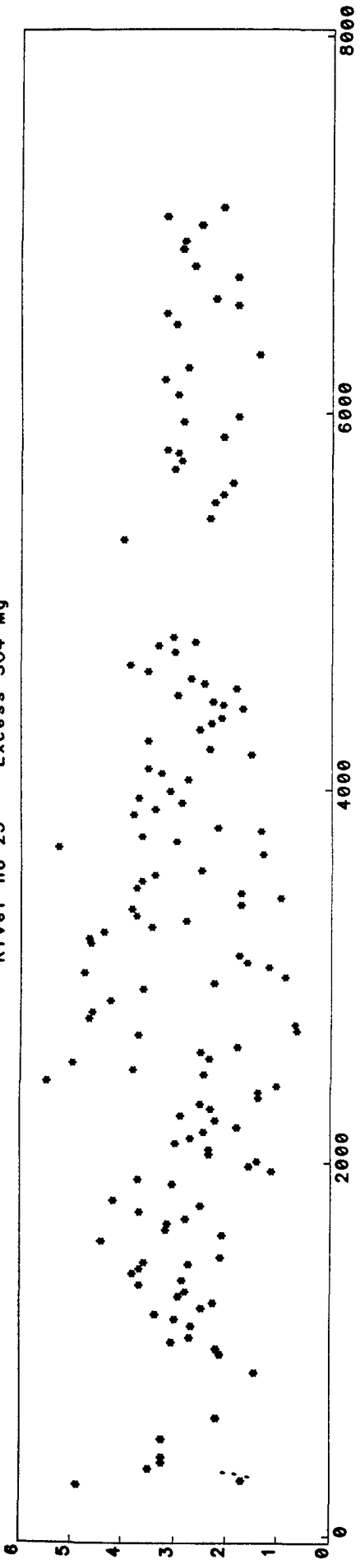
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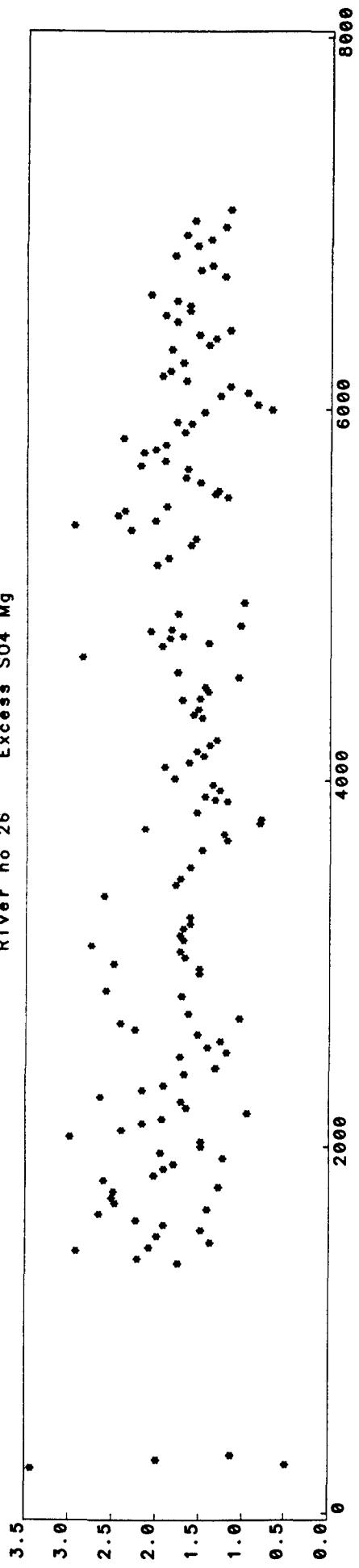
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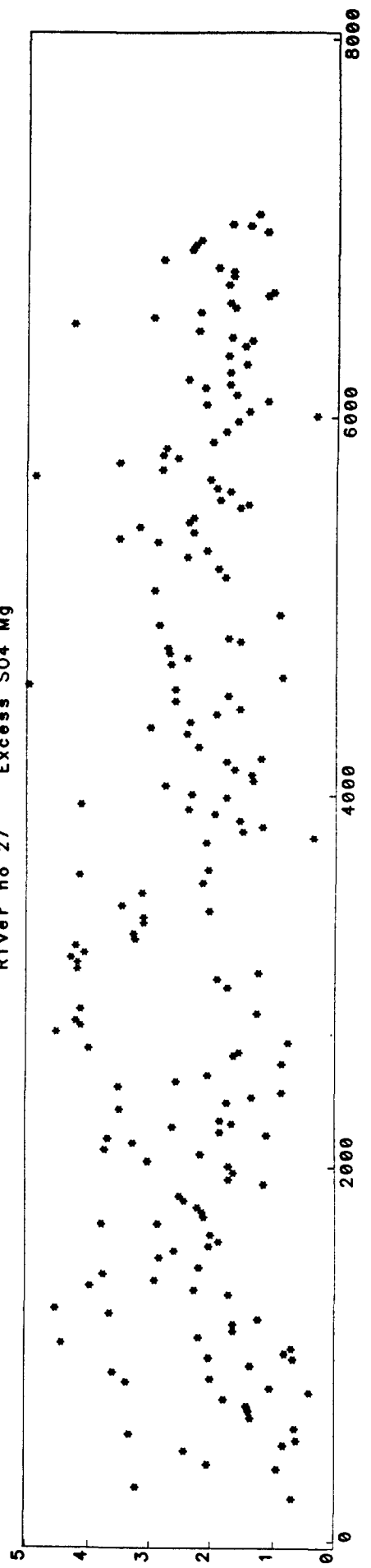
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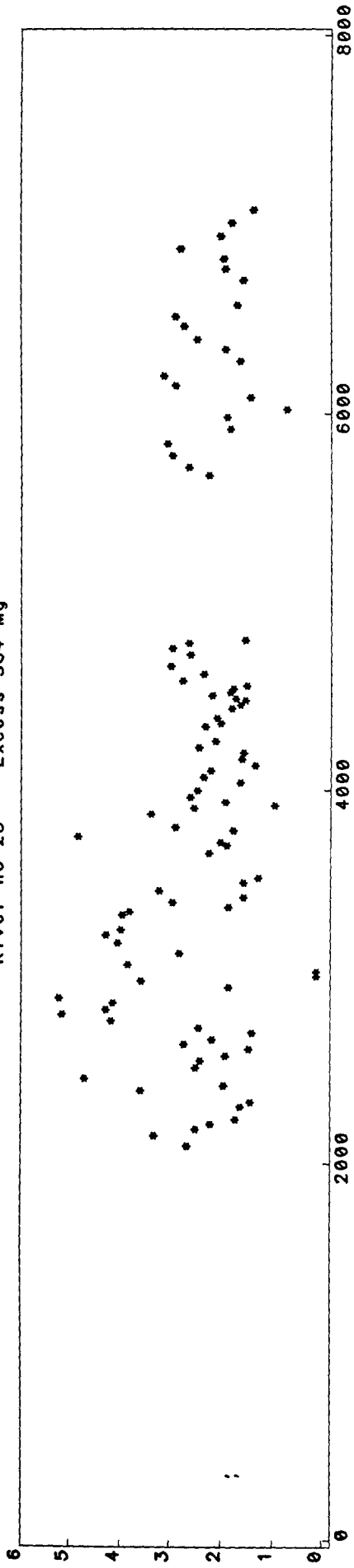
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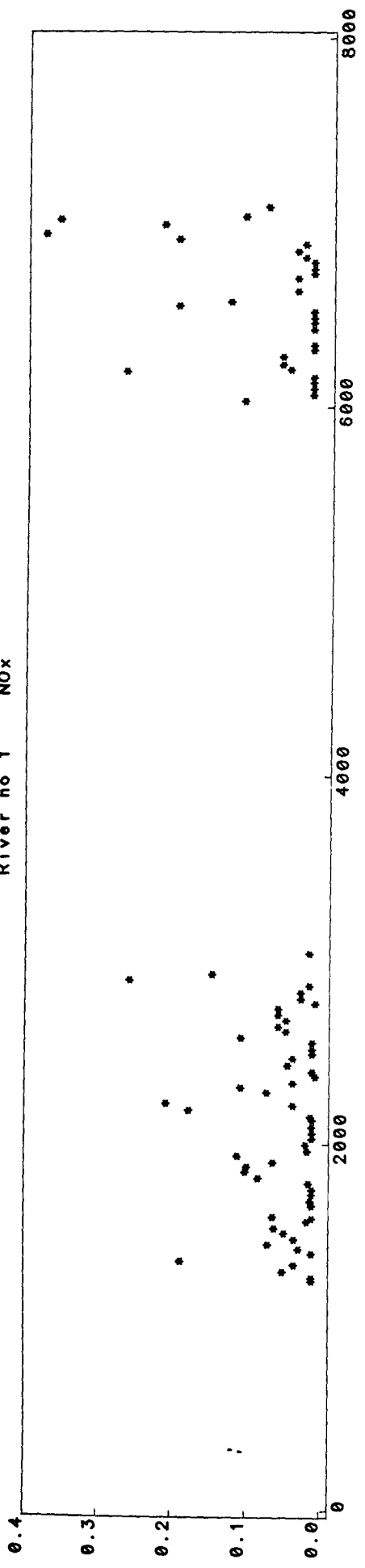


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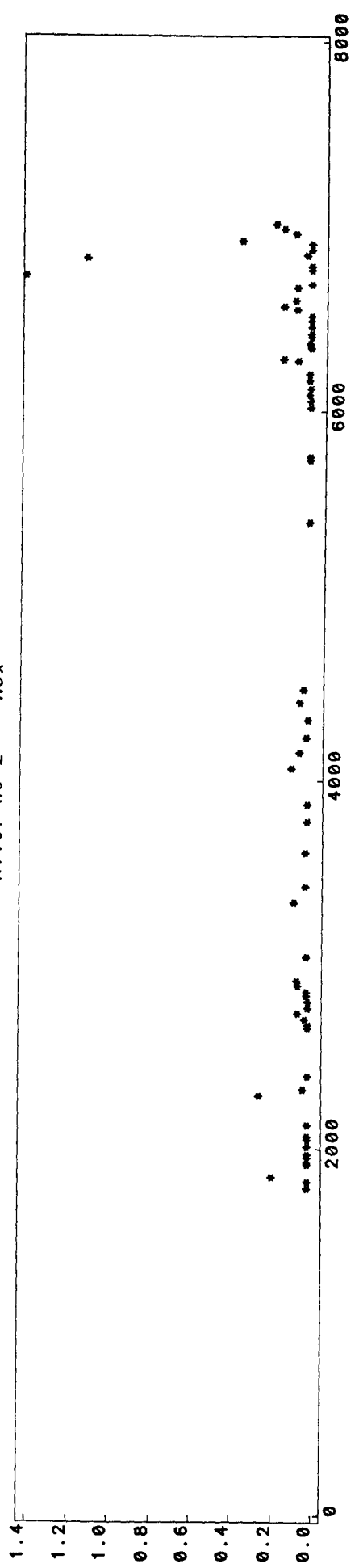


Appendix 2. Scatter plots of  $\text{NO}_3 + \text{NO}_2$  for the study rivers.

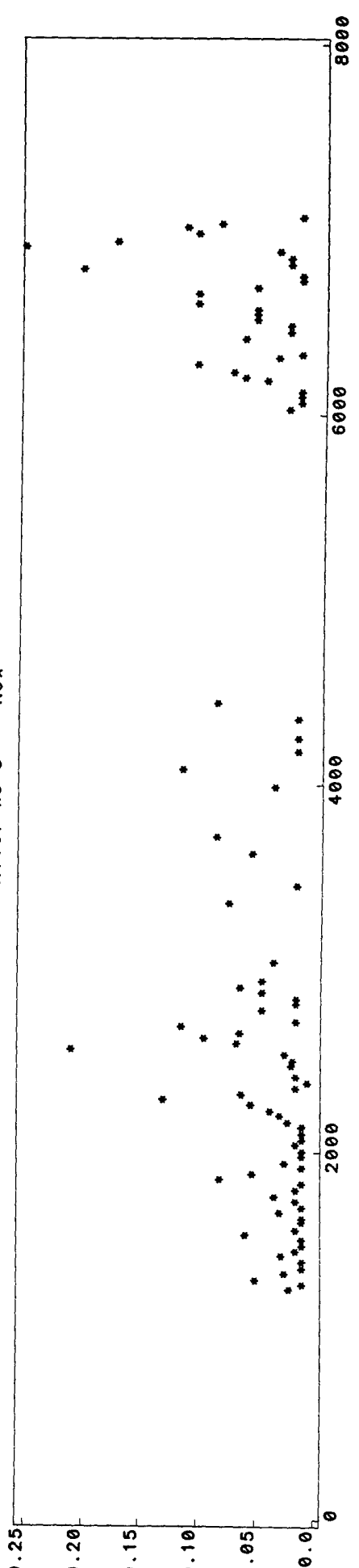
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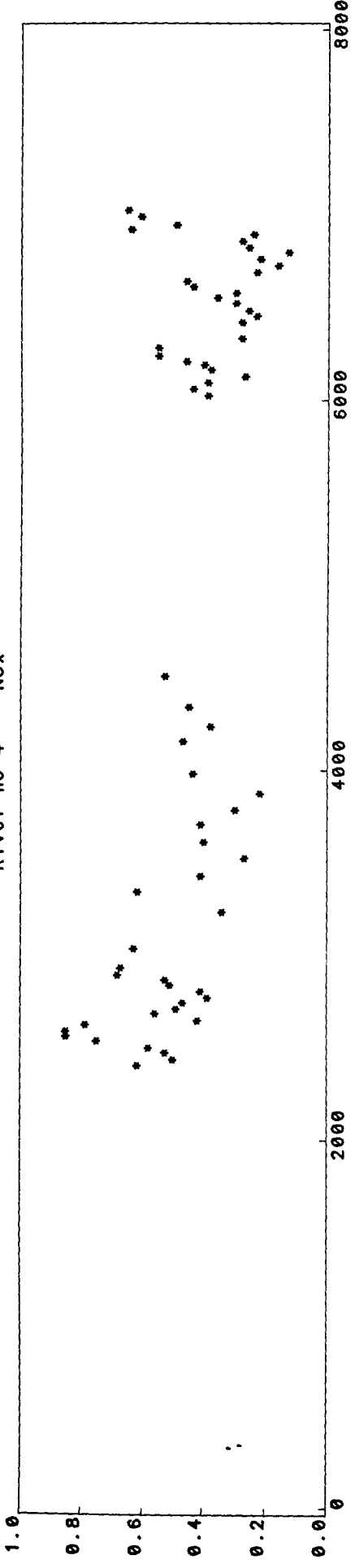
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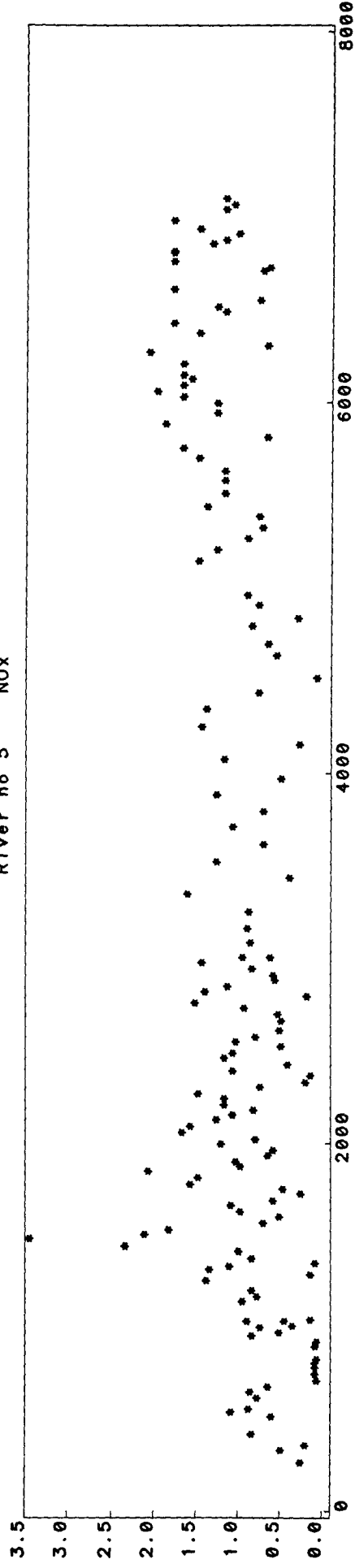
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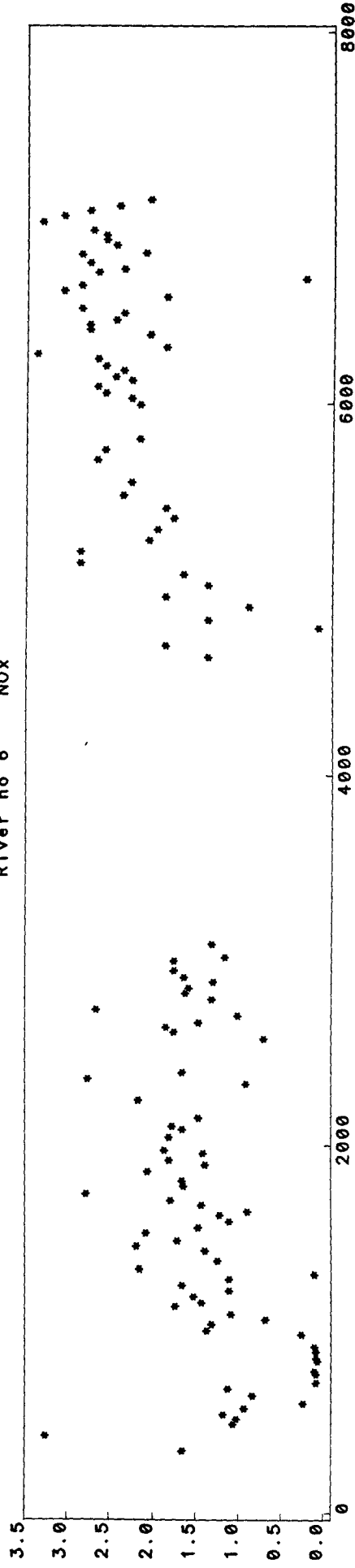
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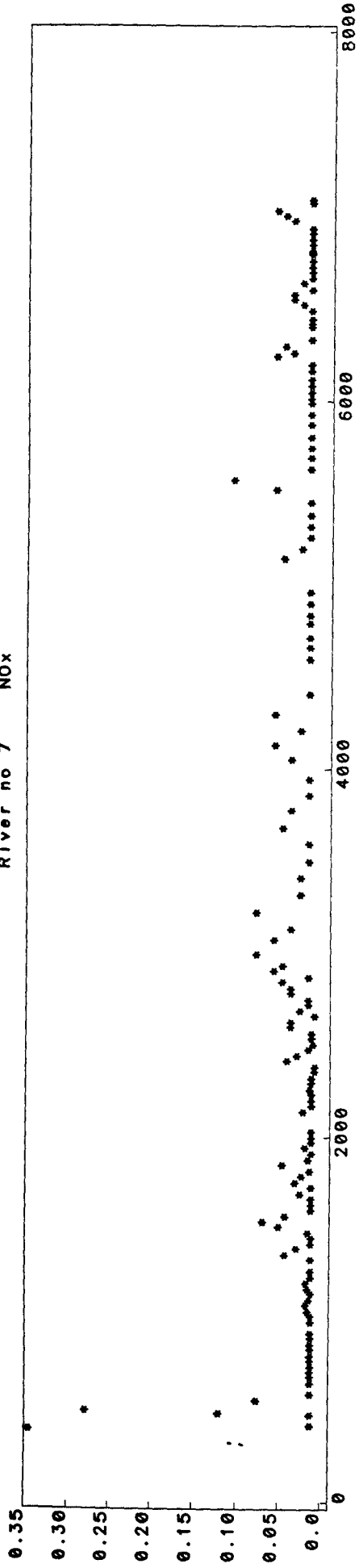
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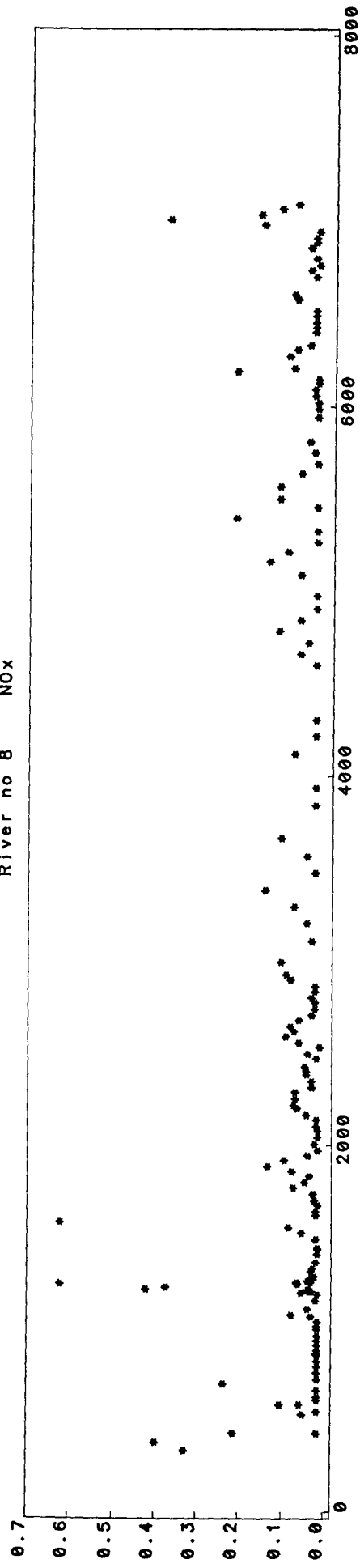
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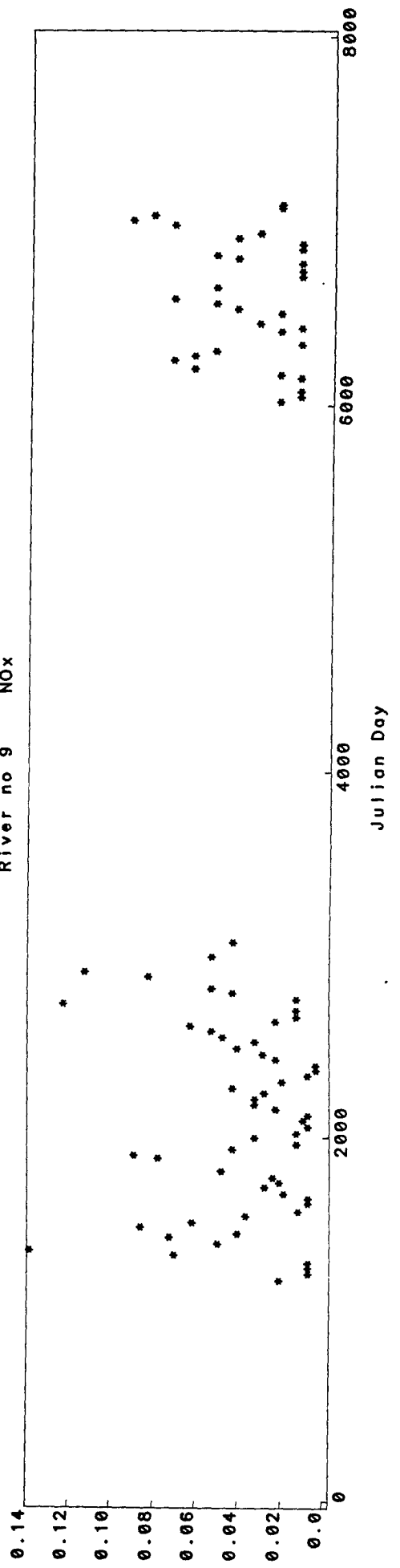
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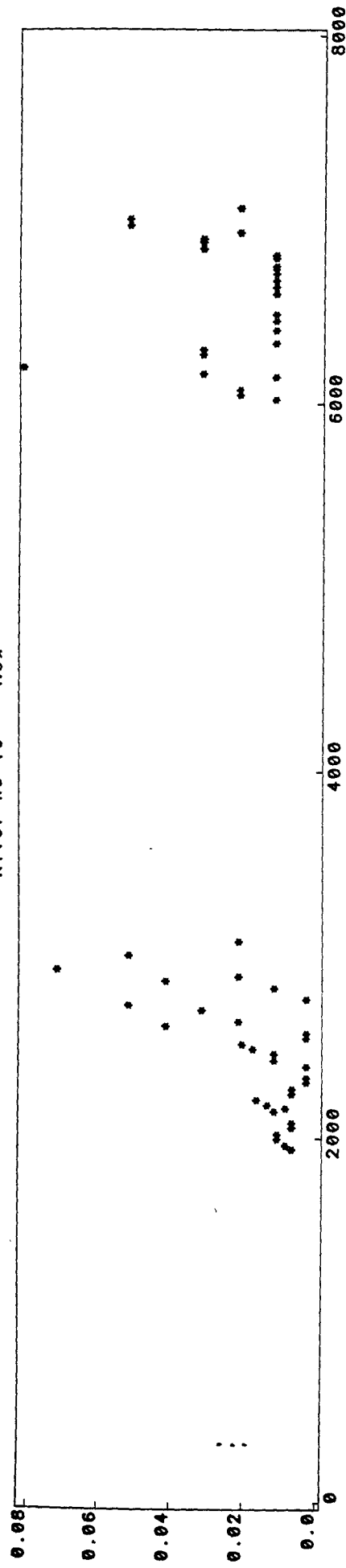
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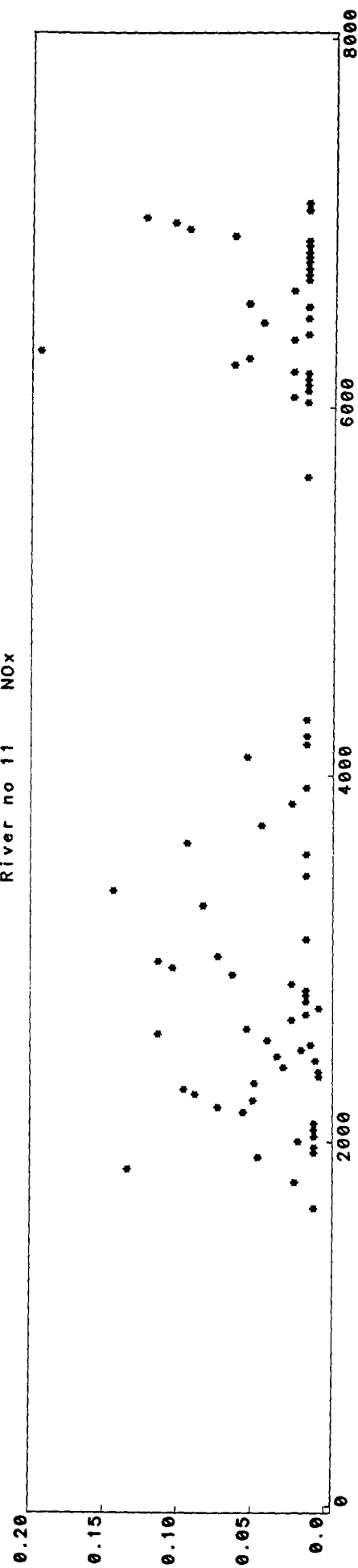
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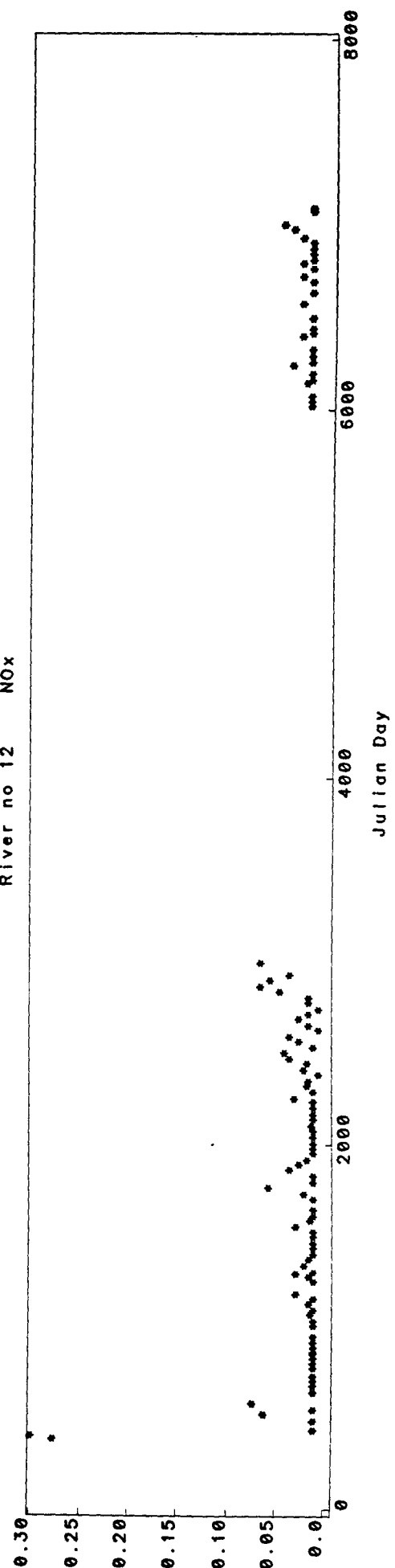
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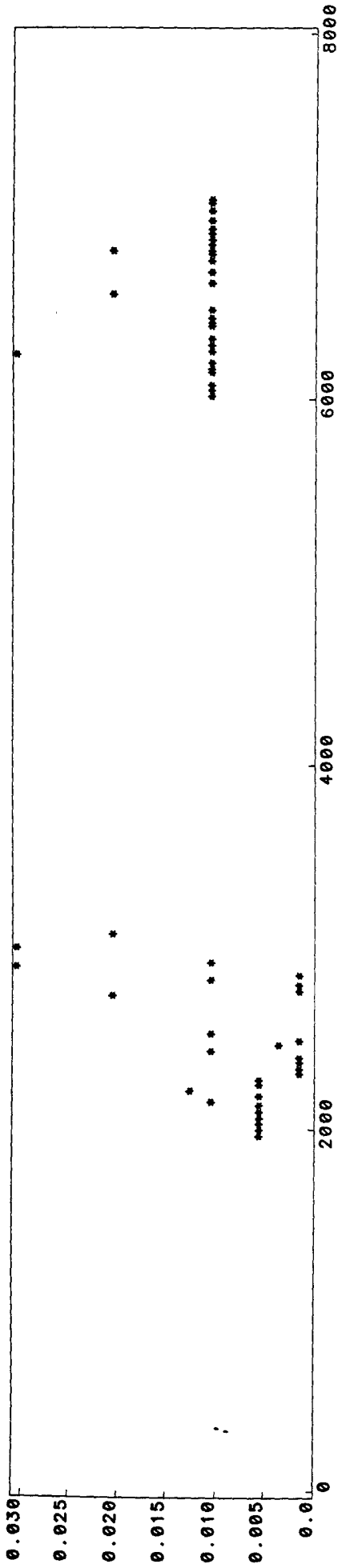


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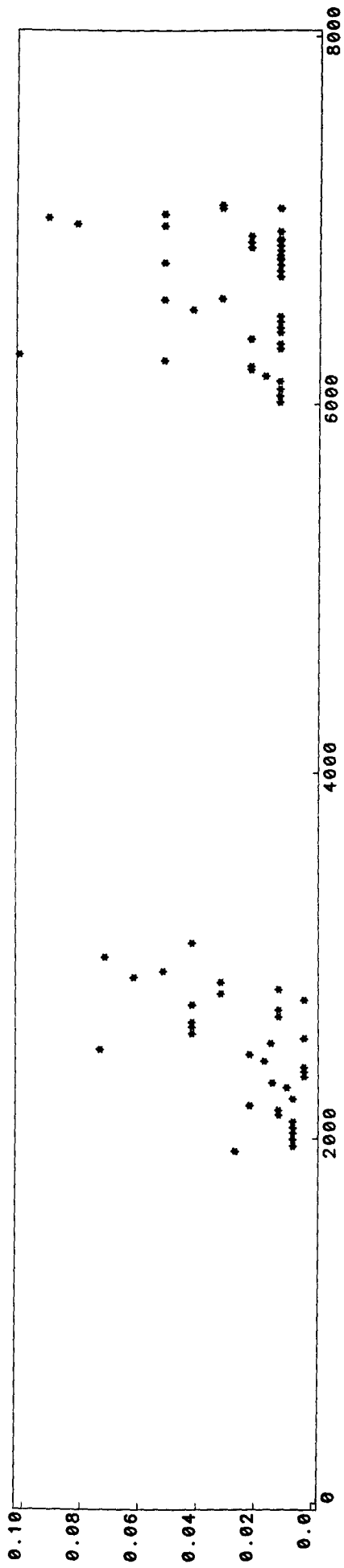




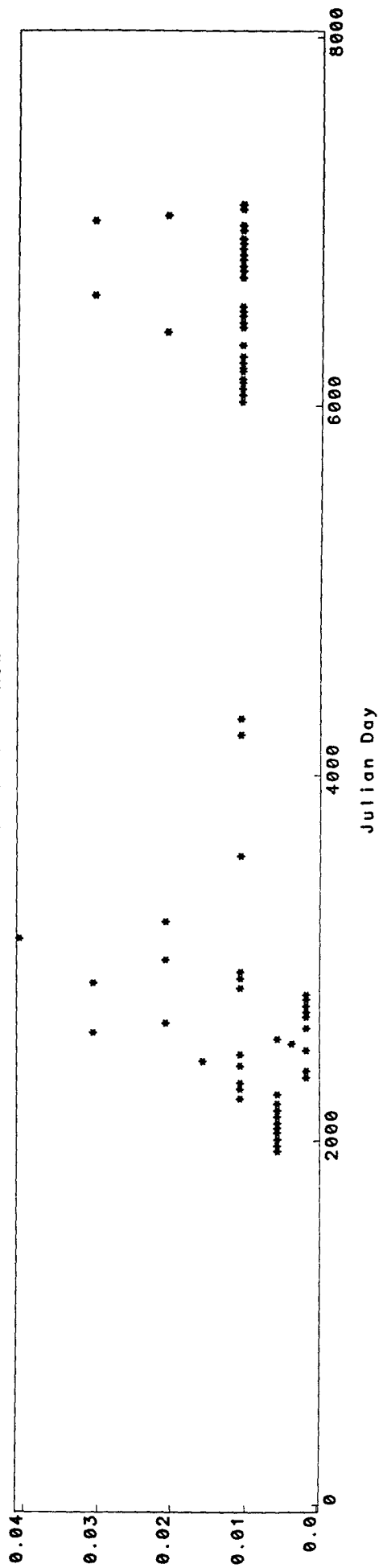
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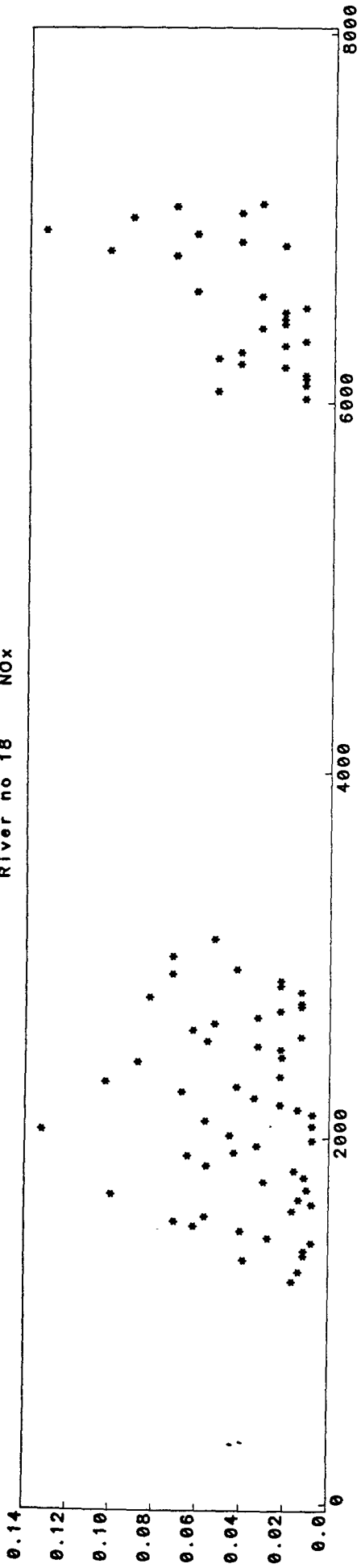
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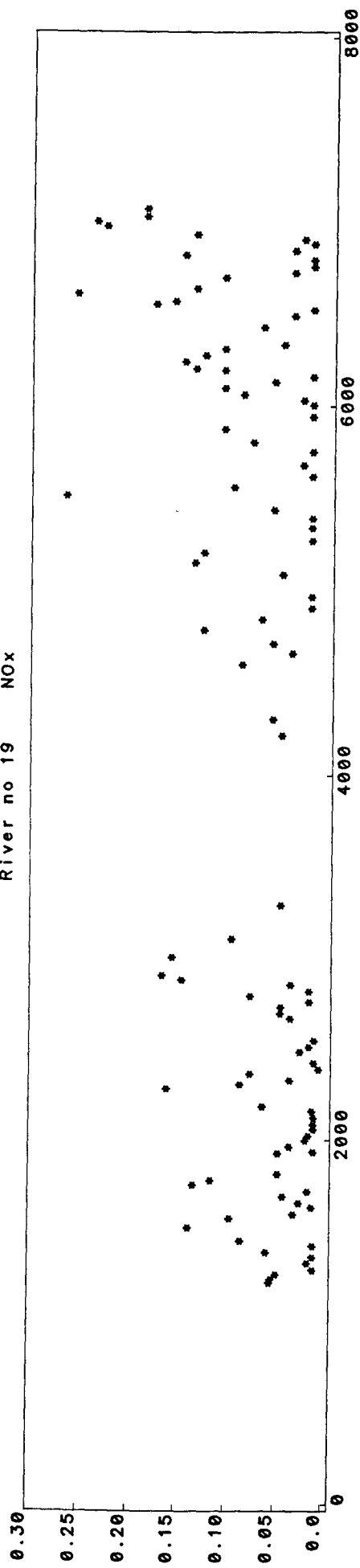
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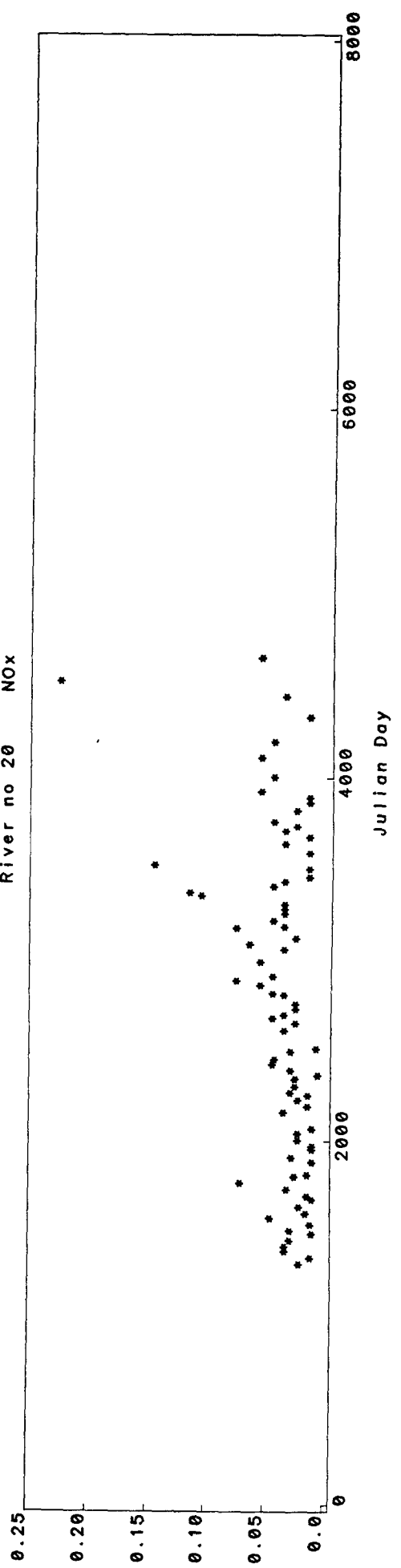
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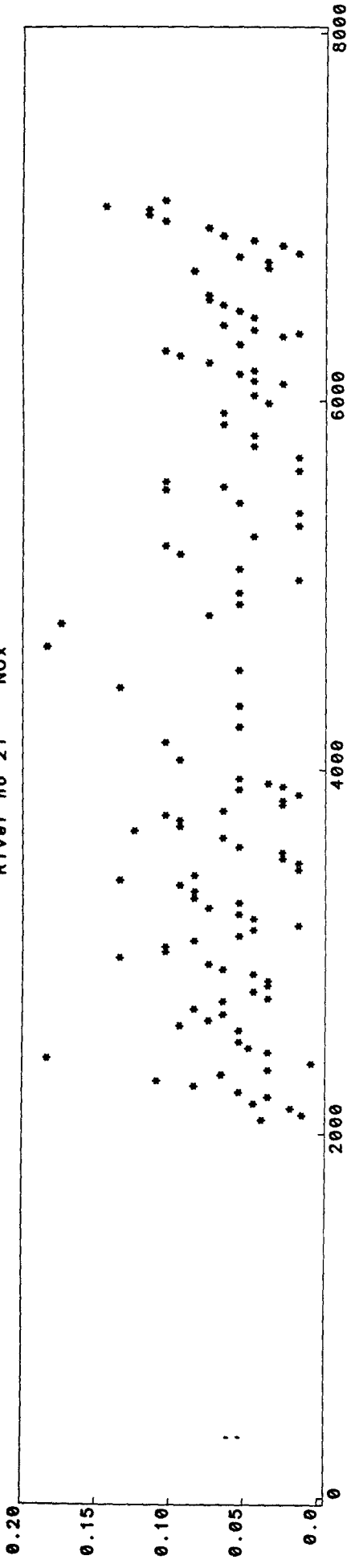
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Julian Day  
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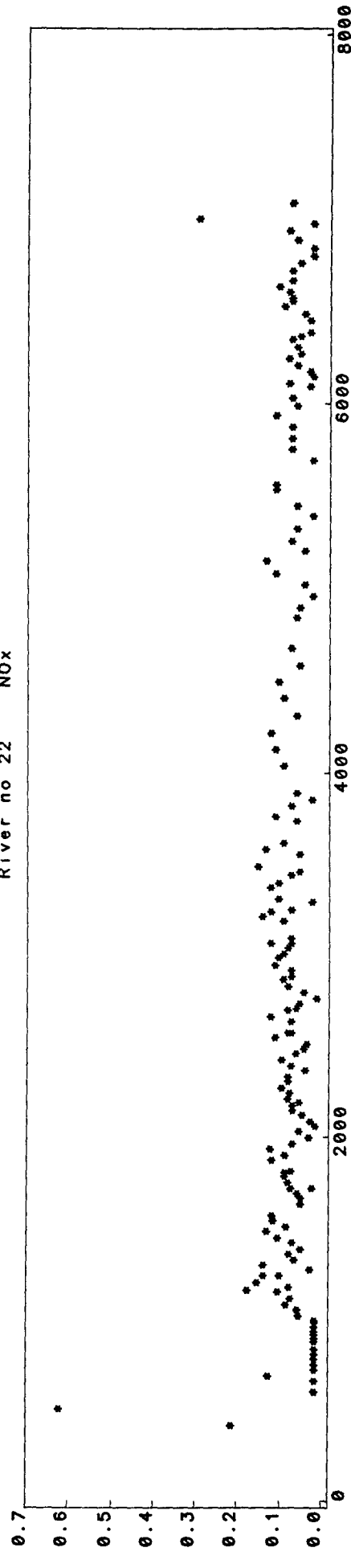


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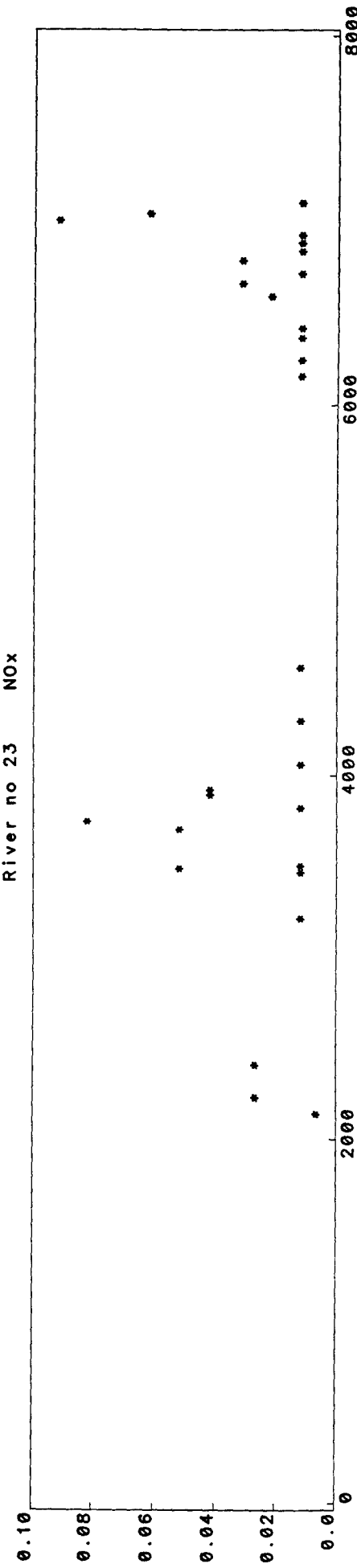
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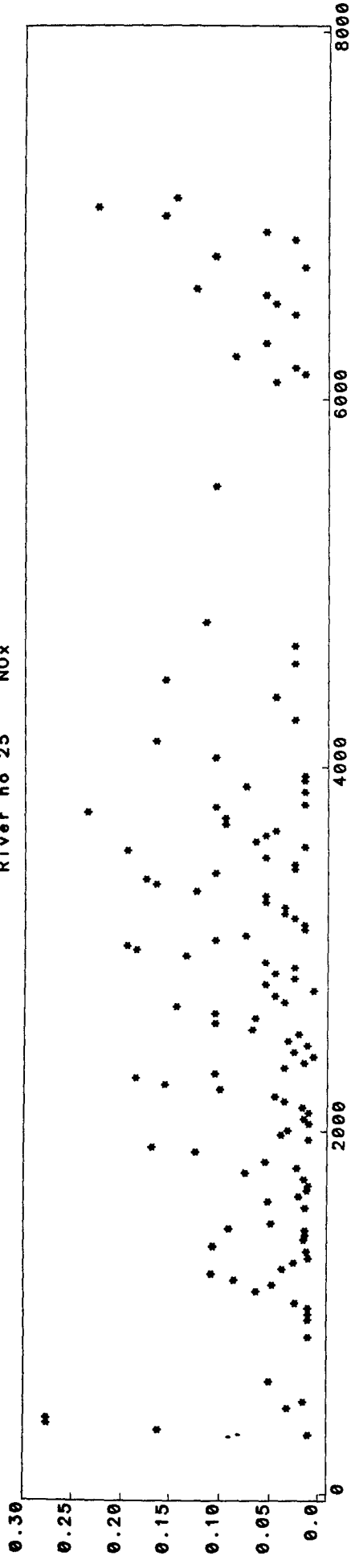
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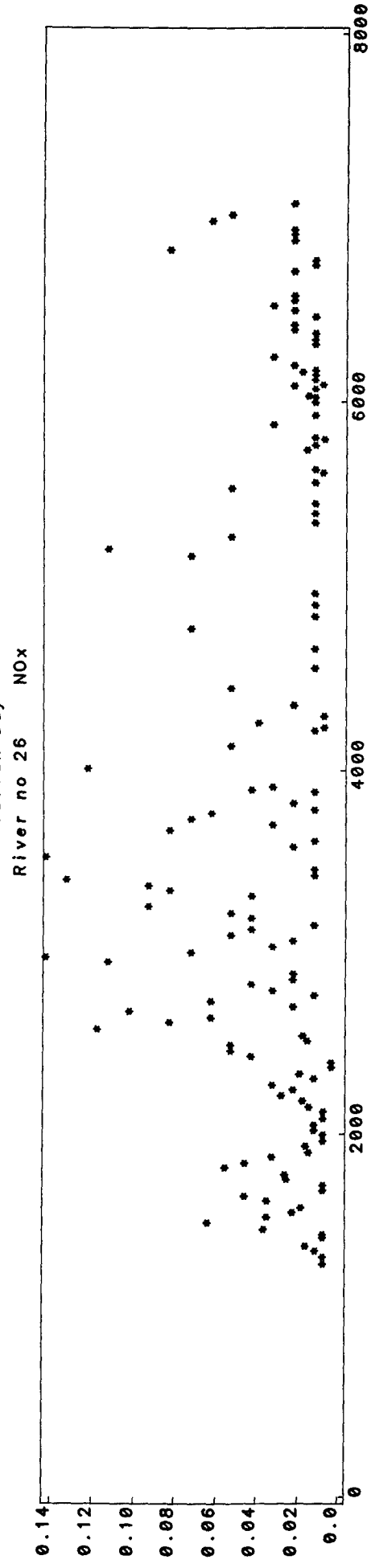


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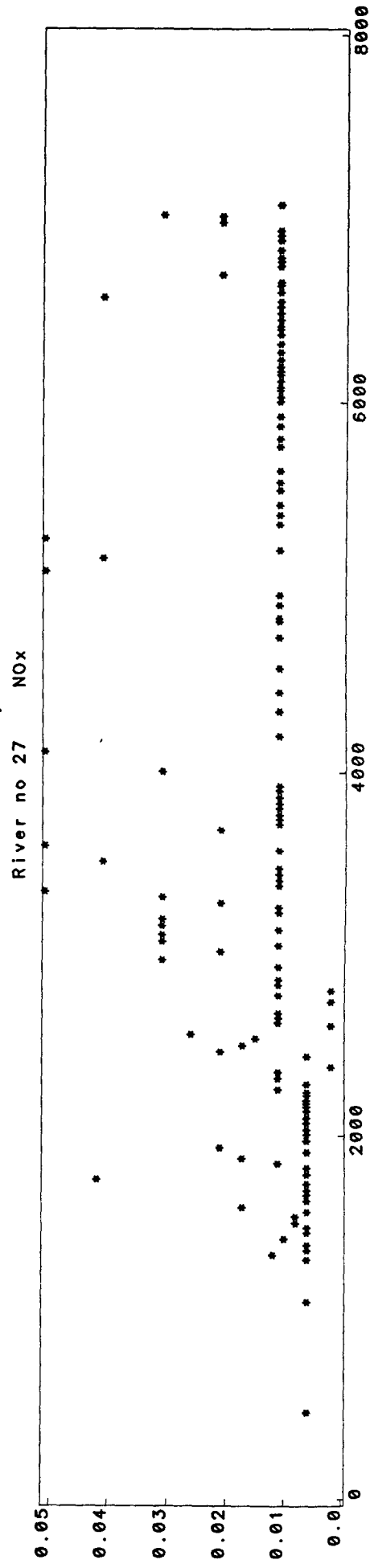
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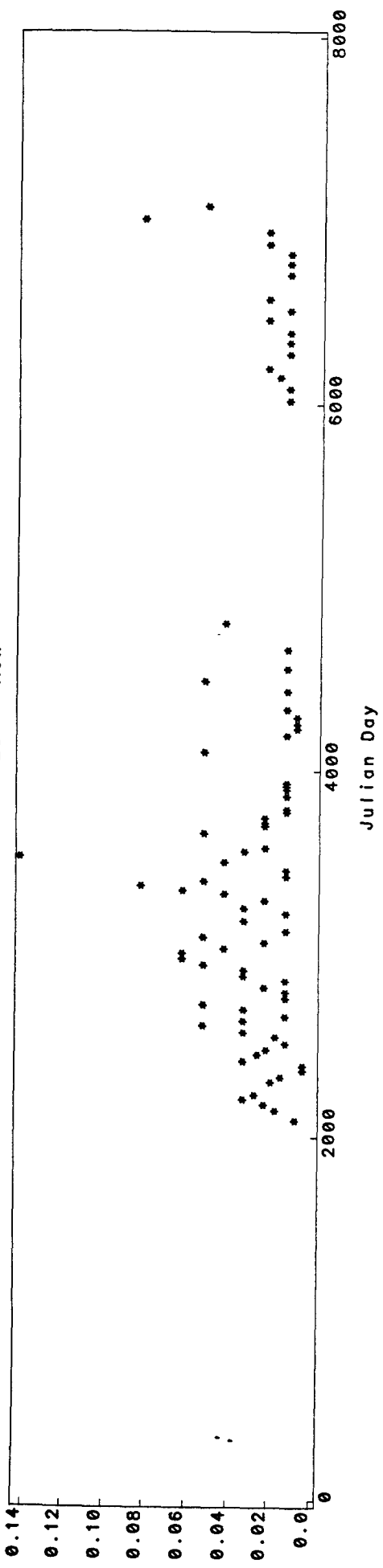
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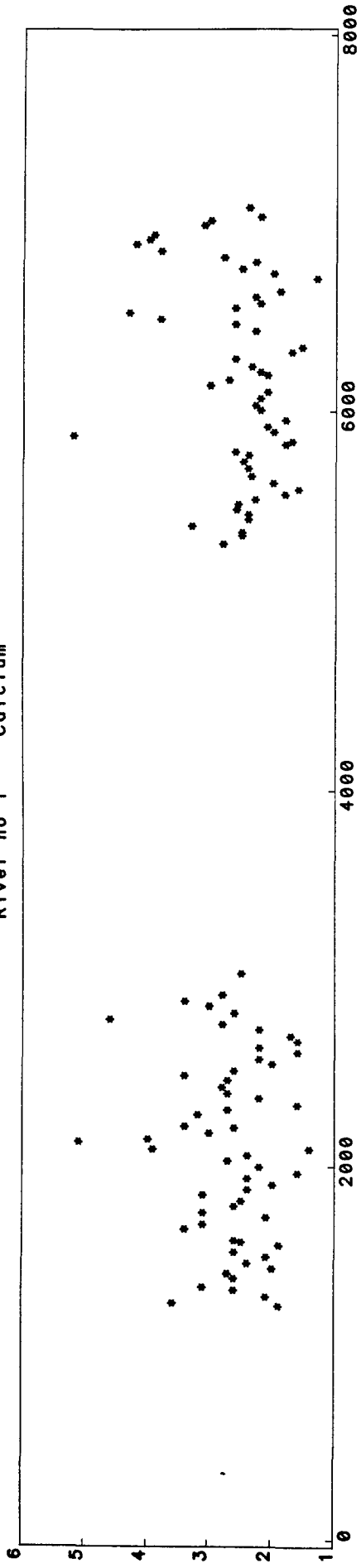


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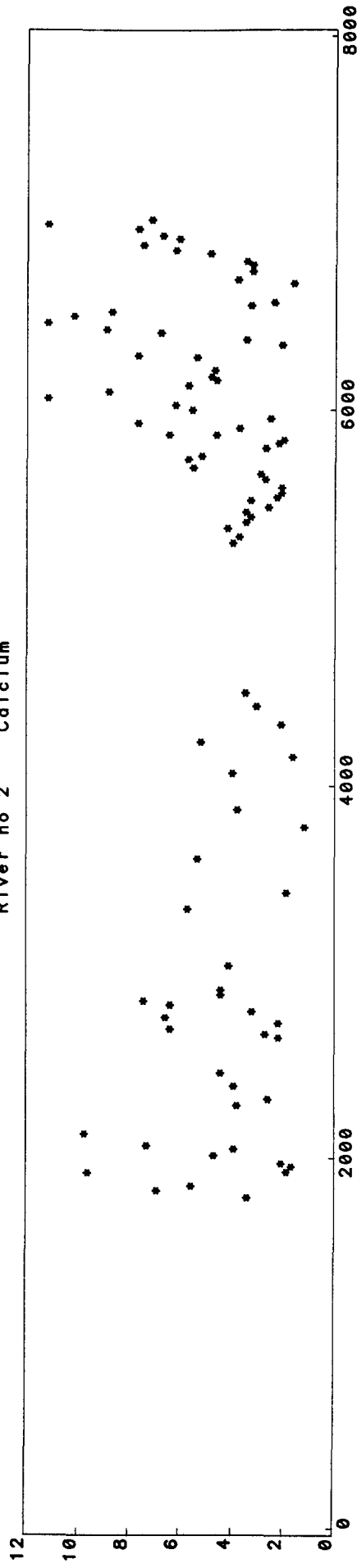


Appendix 3. Scatter plots of calcium for the study rivers.

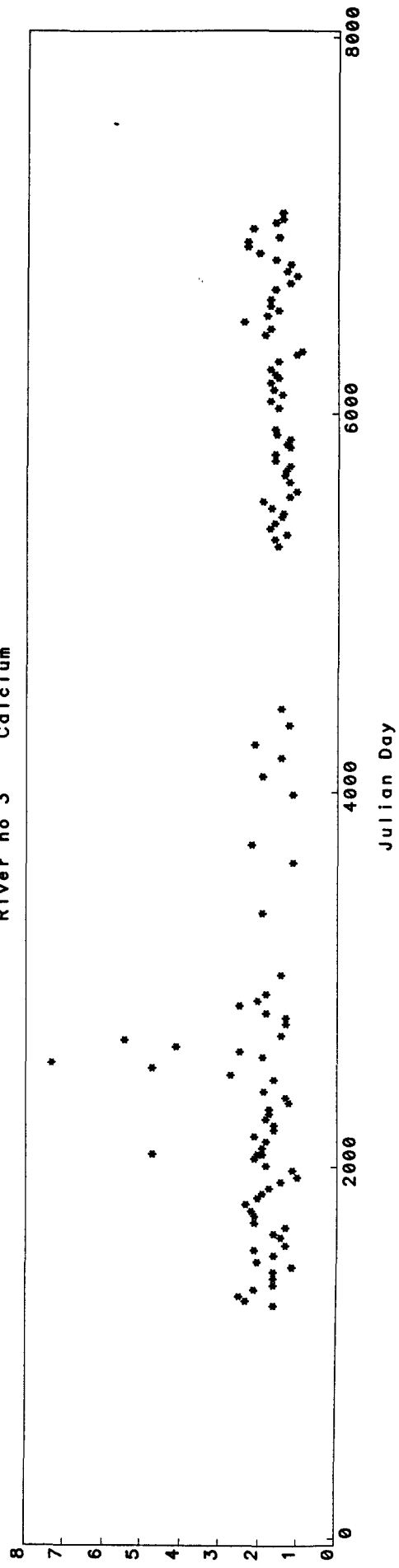
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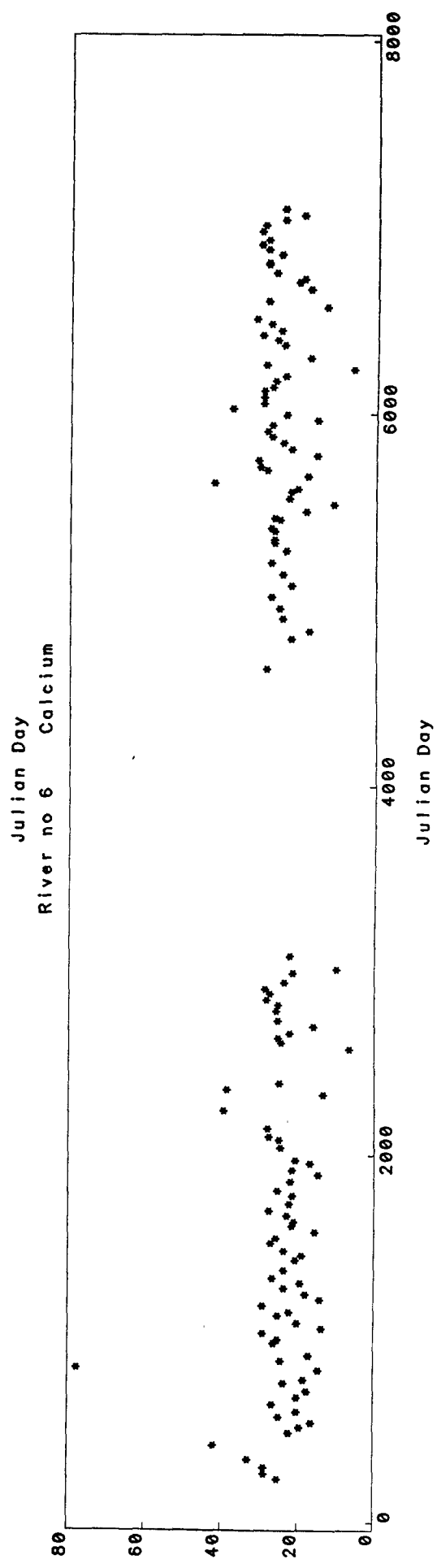
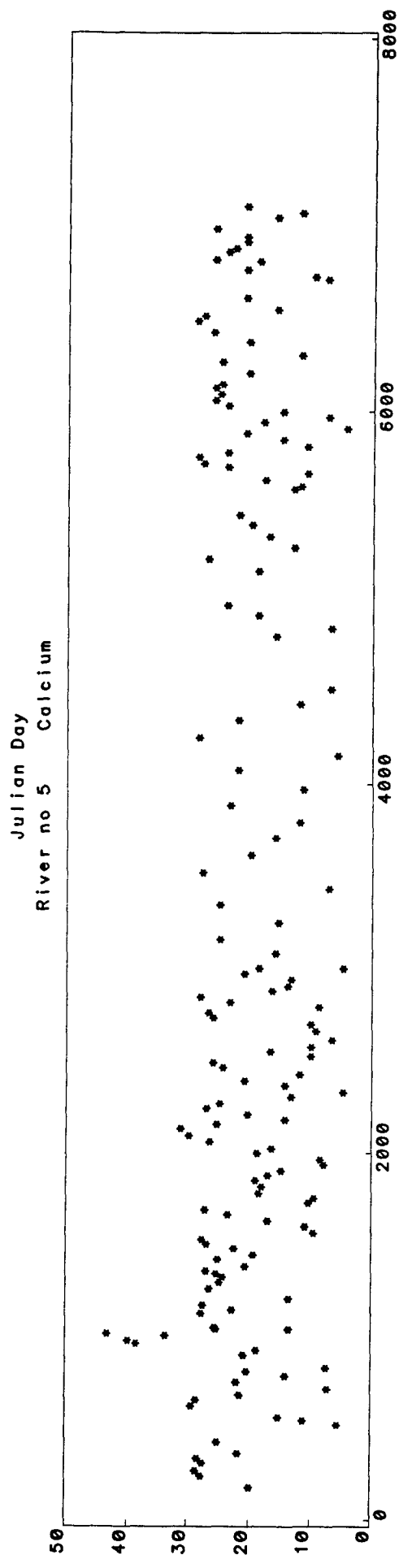
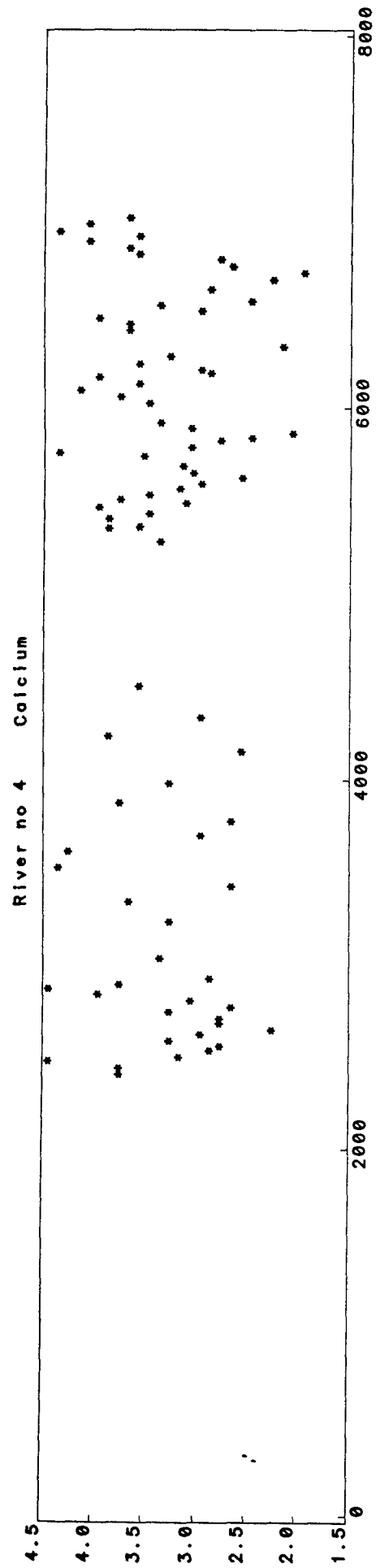


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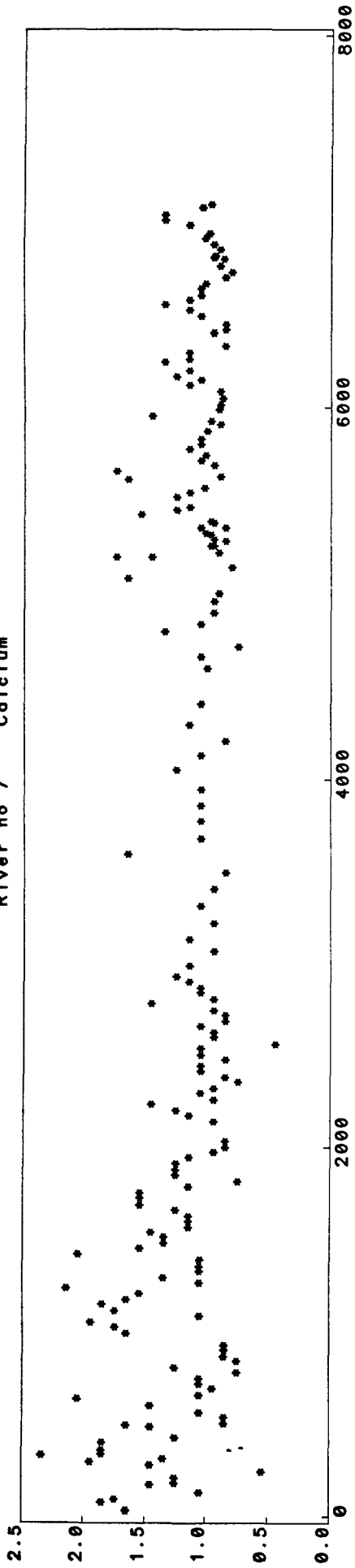
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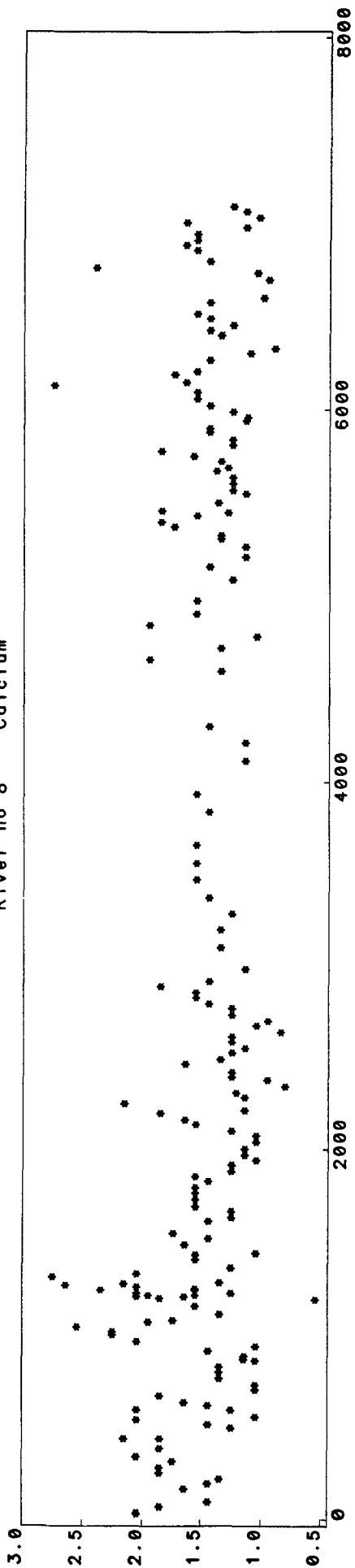




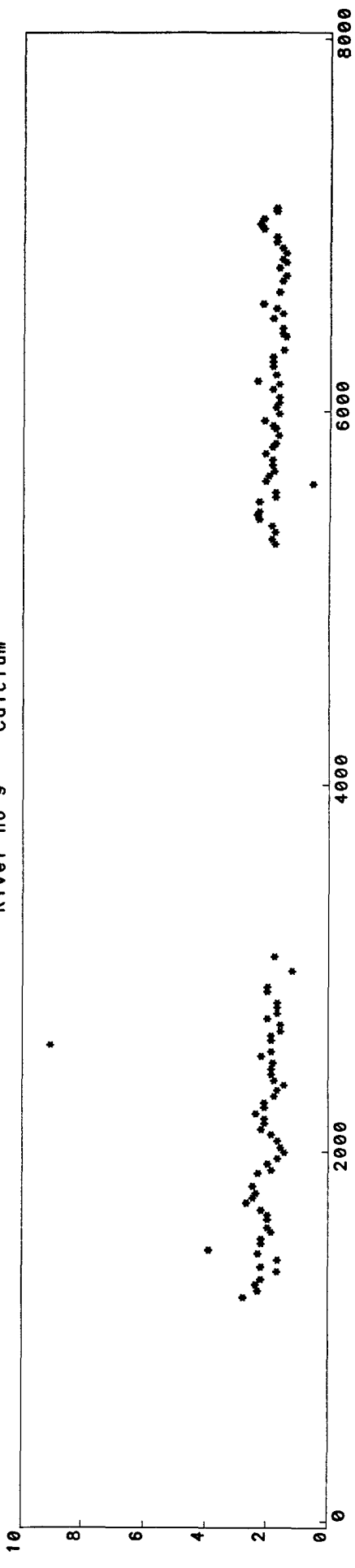
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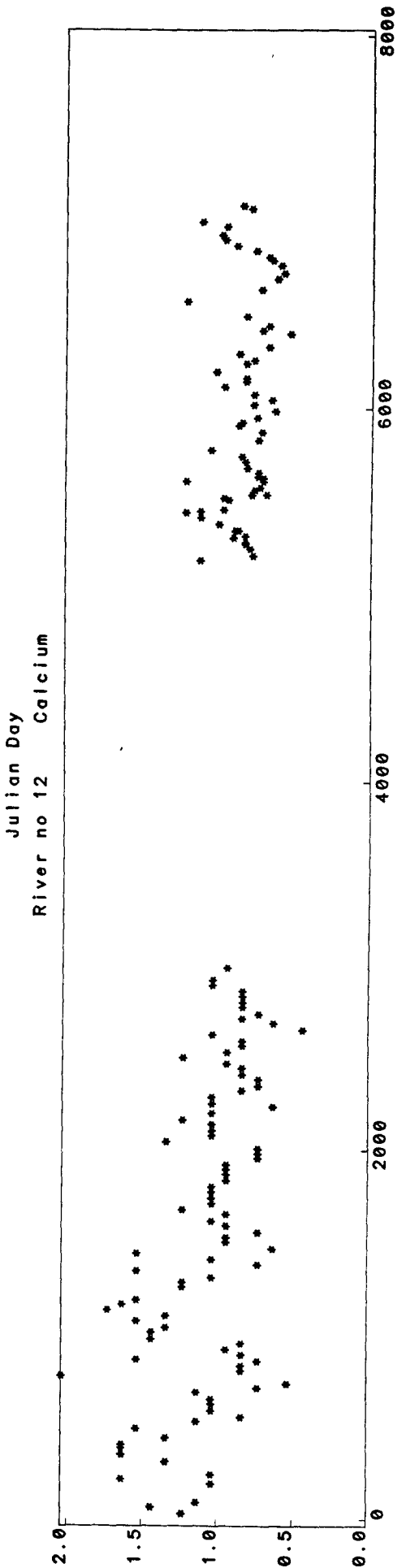
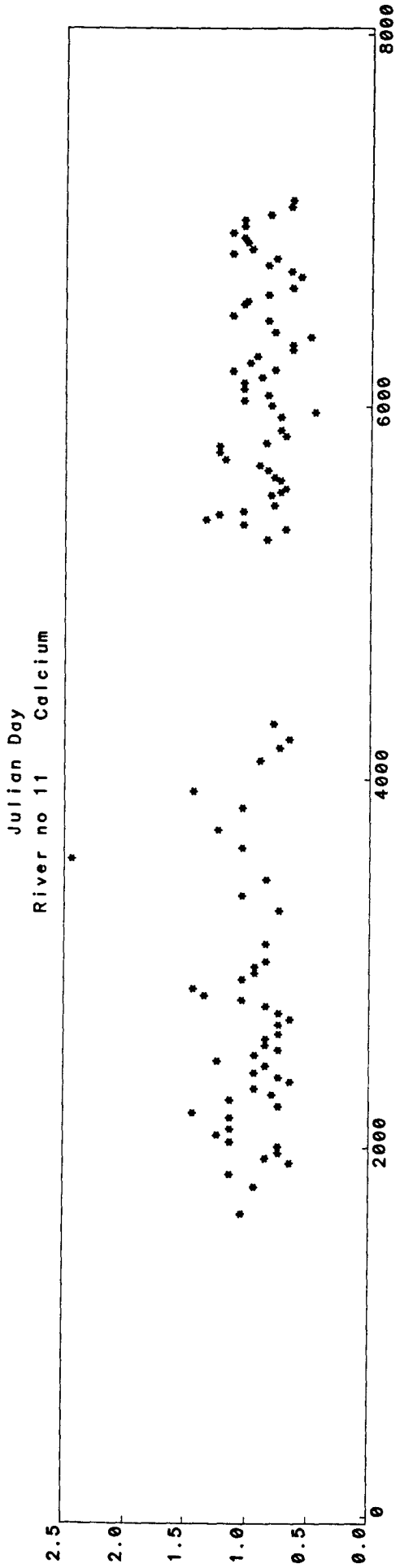
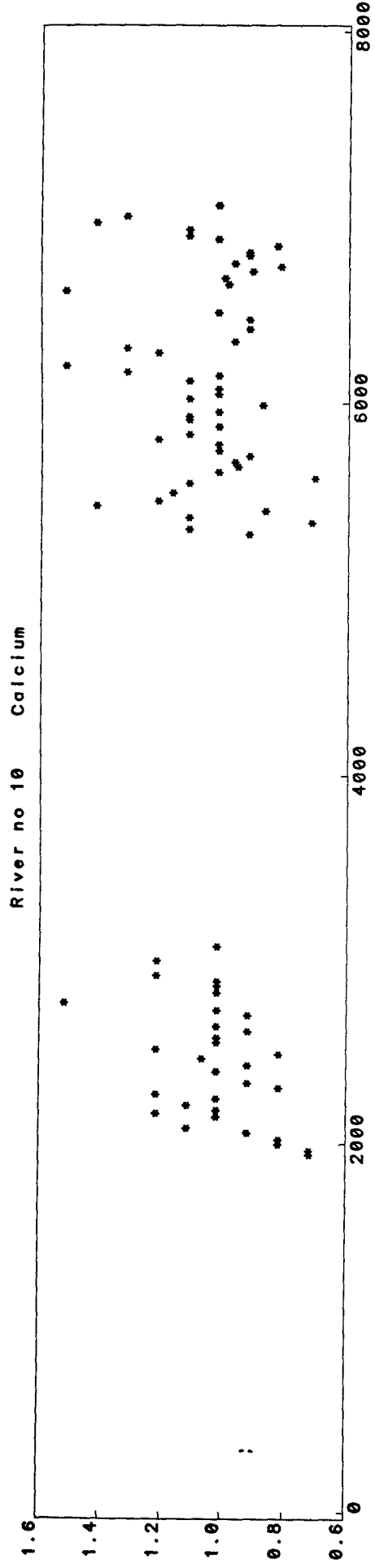


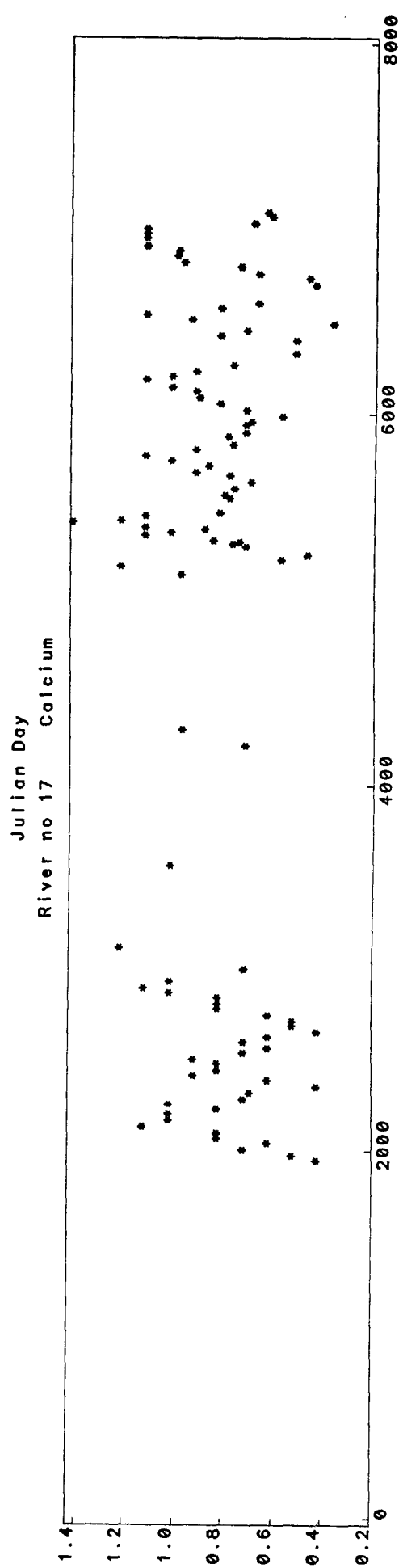
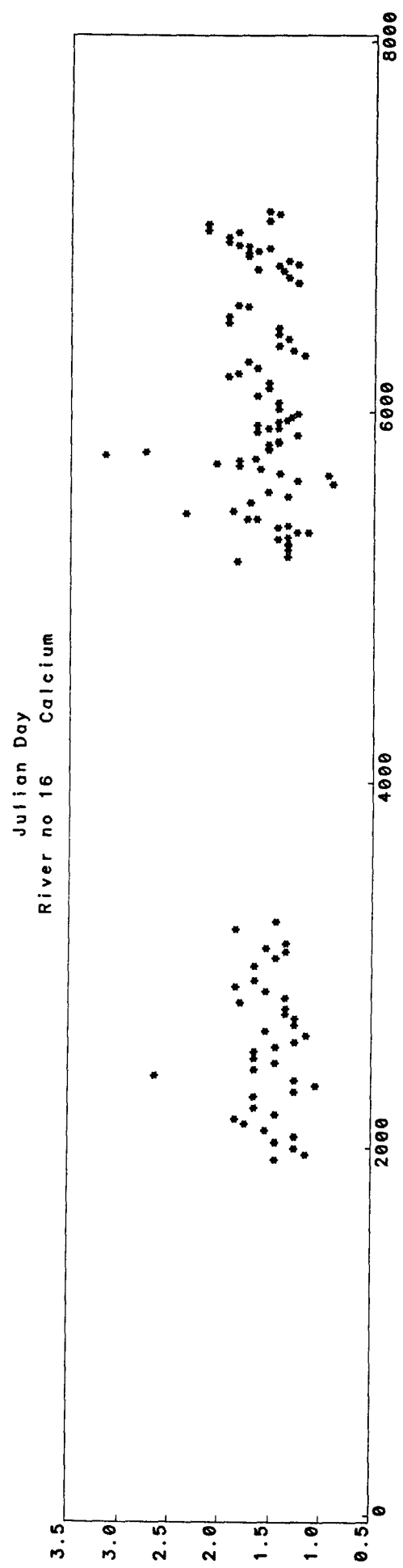
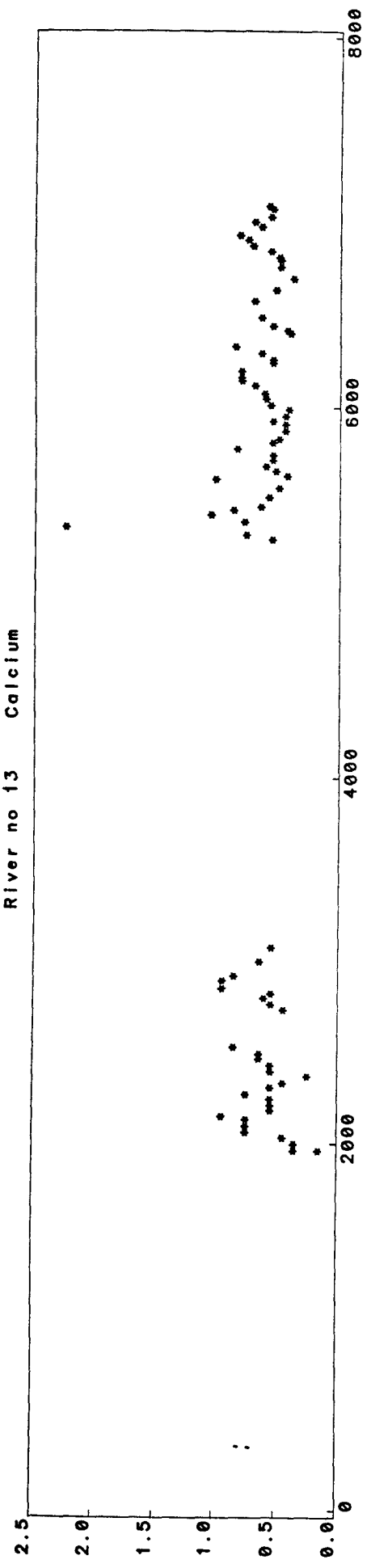
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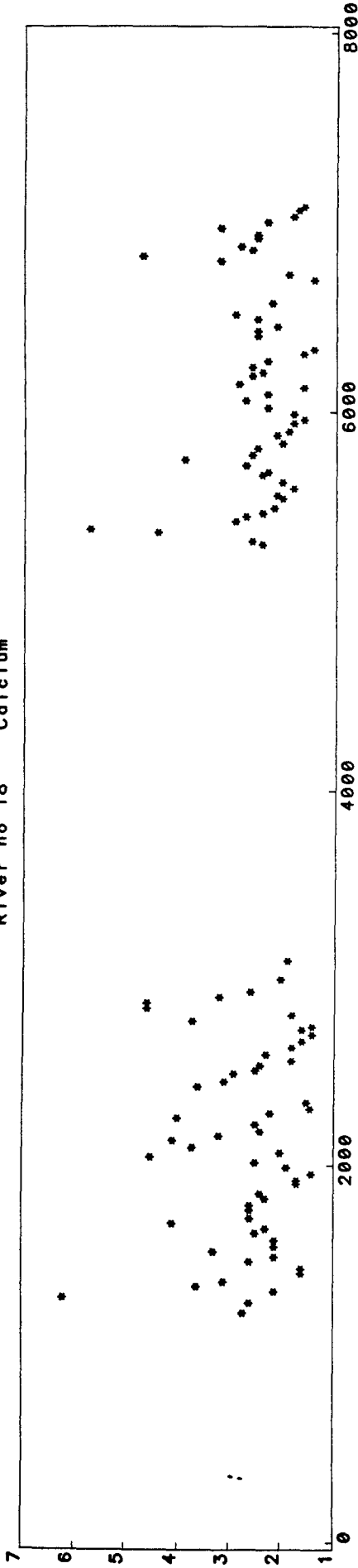
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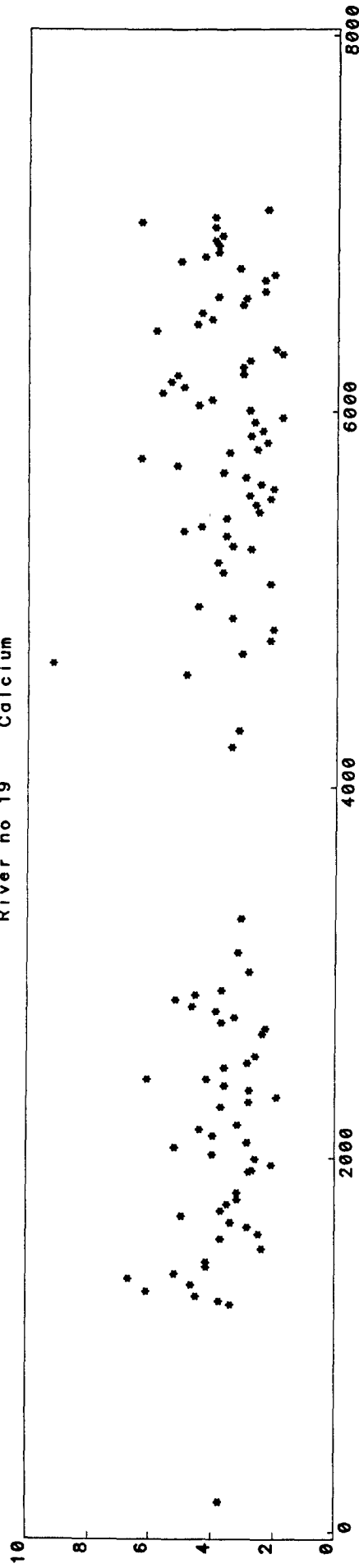




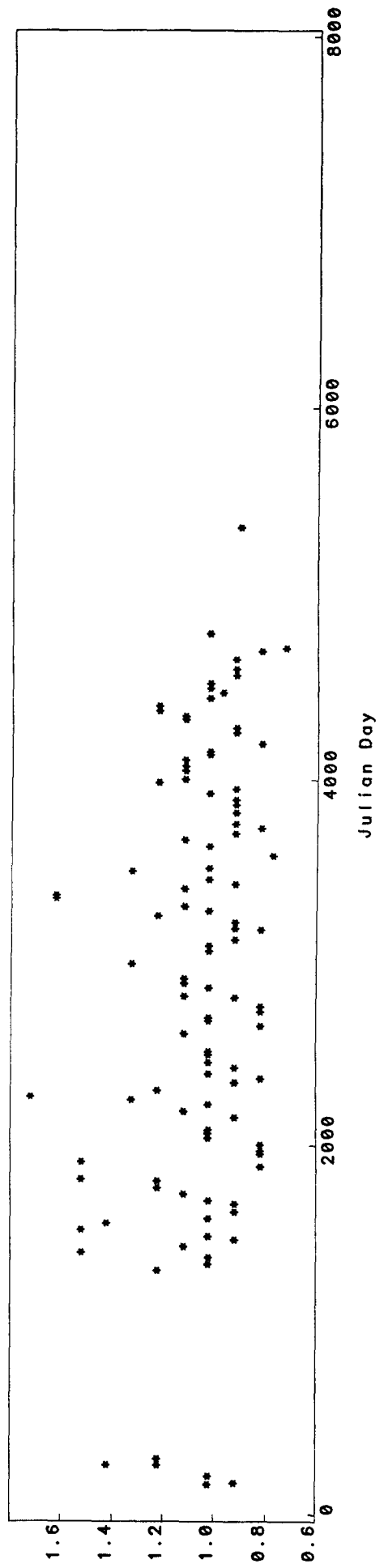
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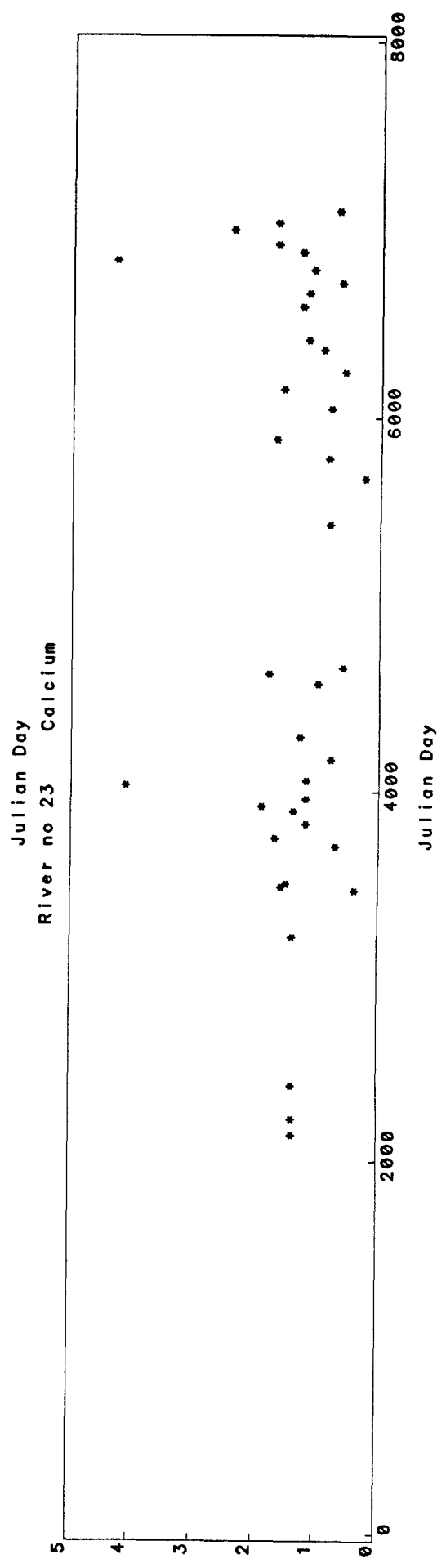
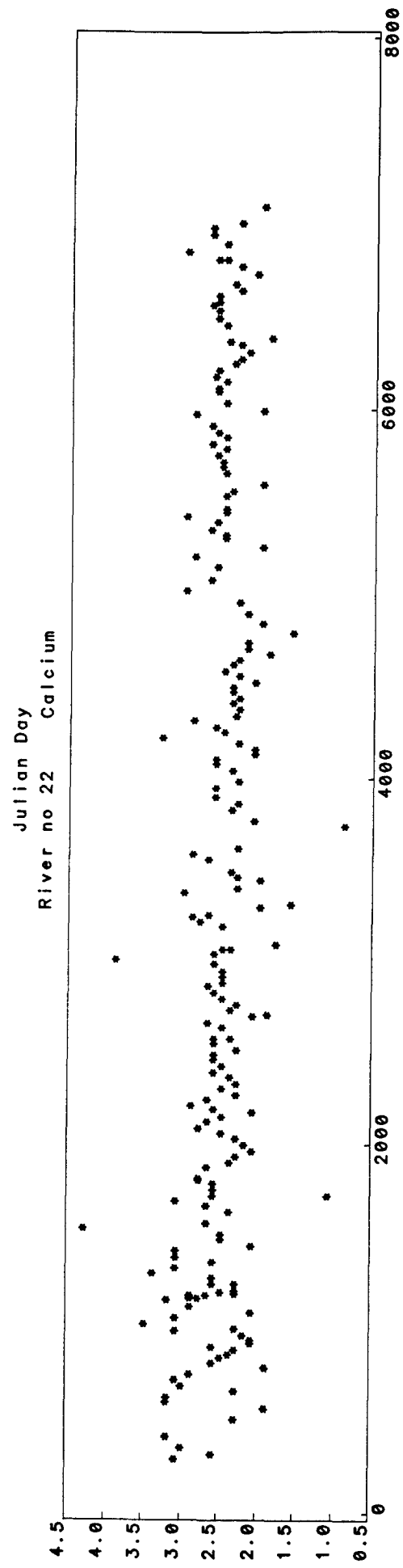
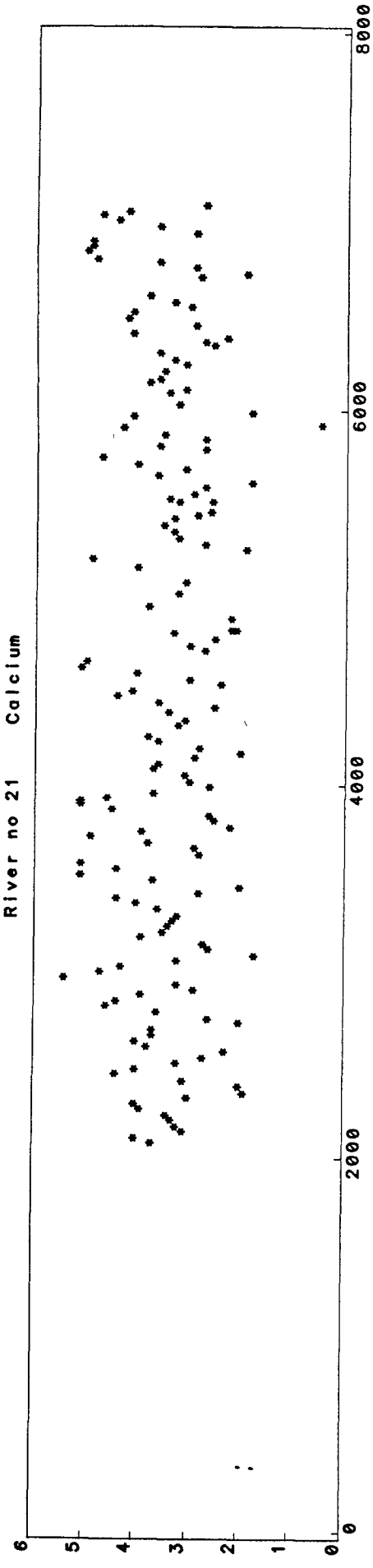


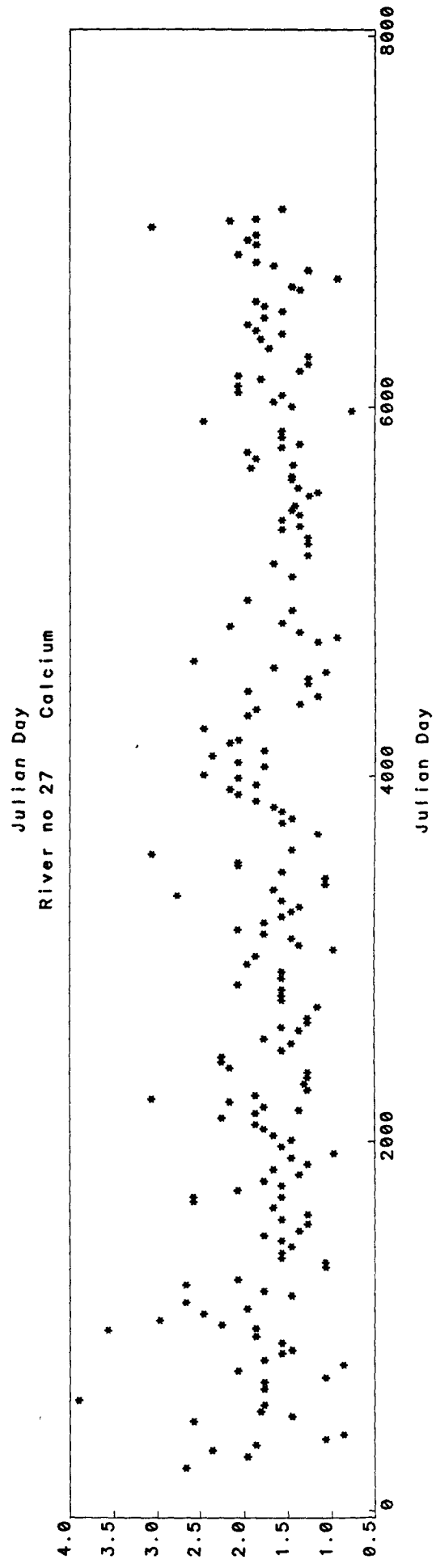
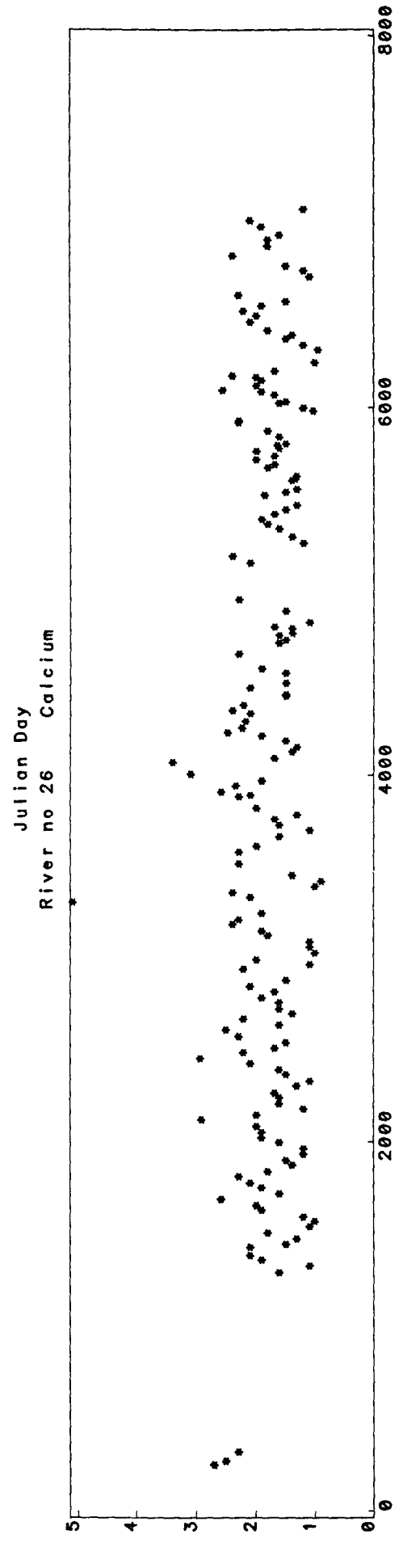
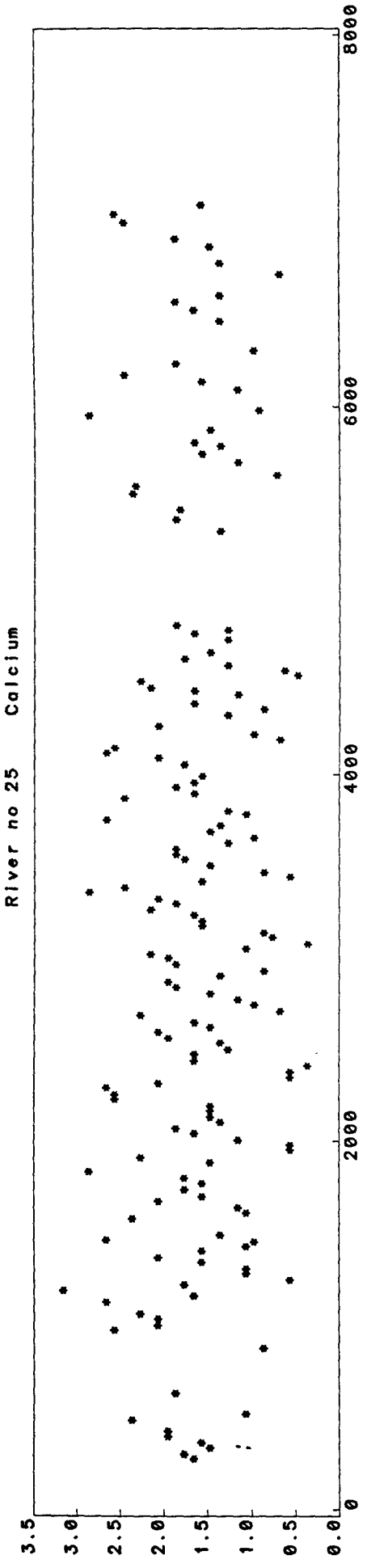
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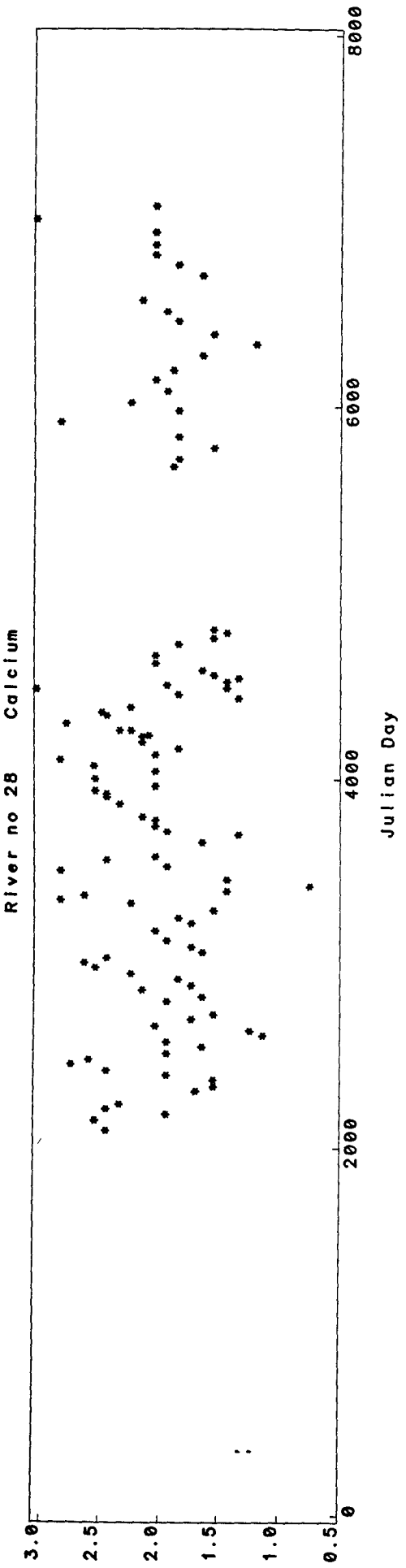


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River no 20 Calcium





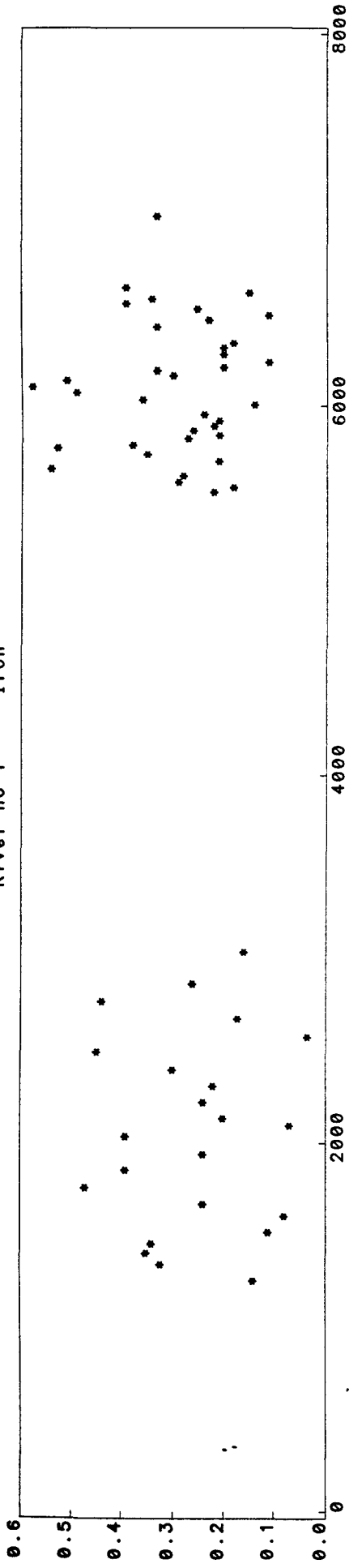




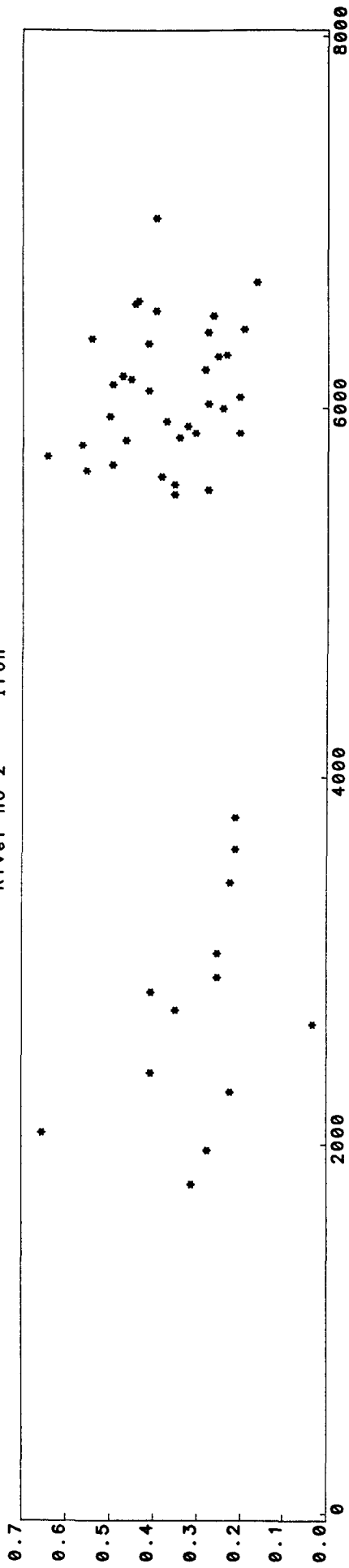
Appendix 4. Scatter plots of iron for the study rivers.



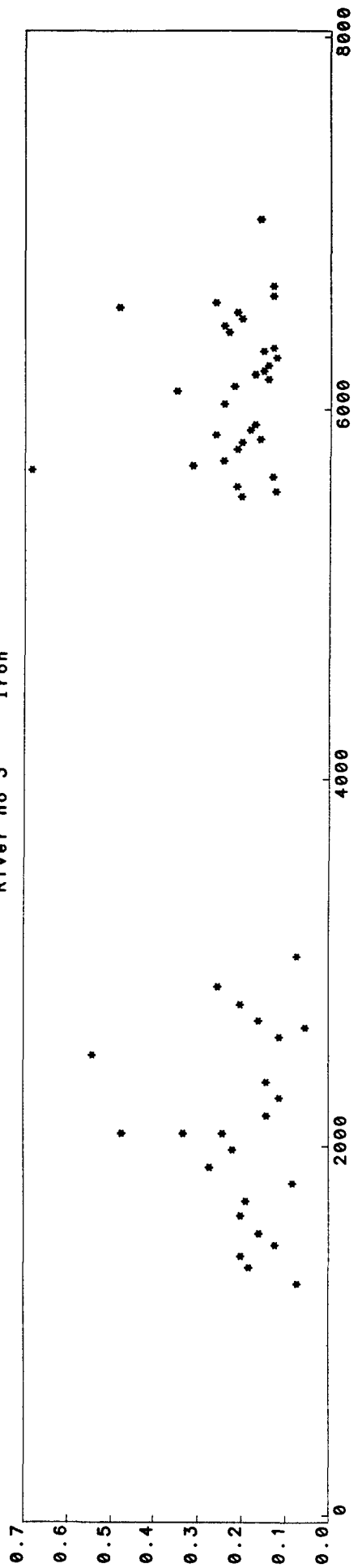
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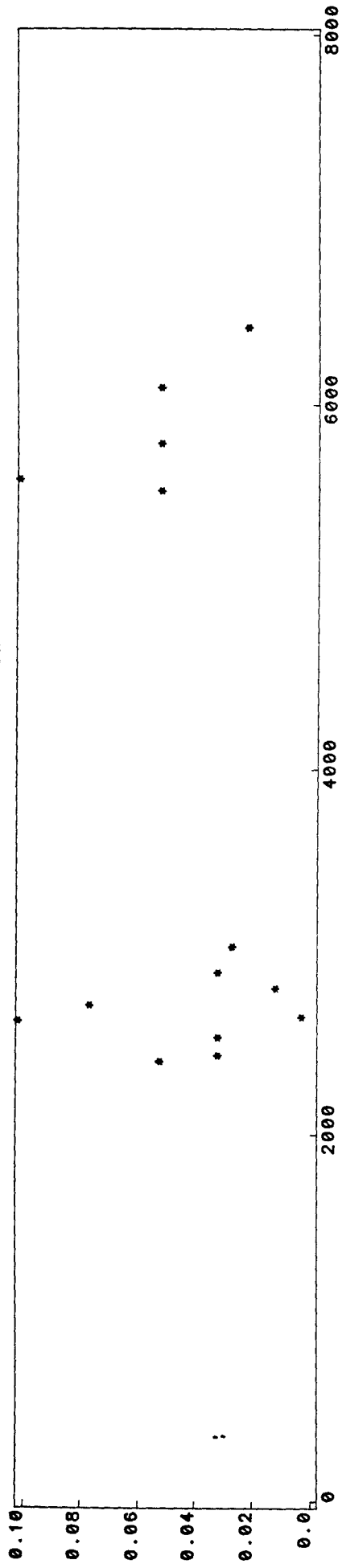
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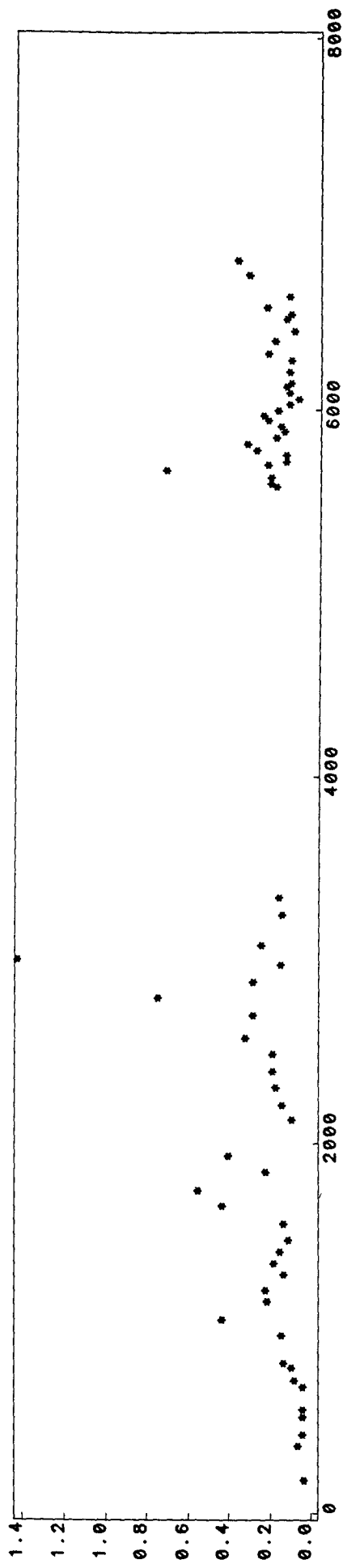
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River no 3 Iron



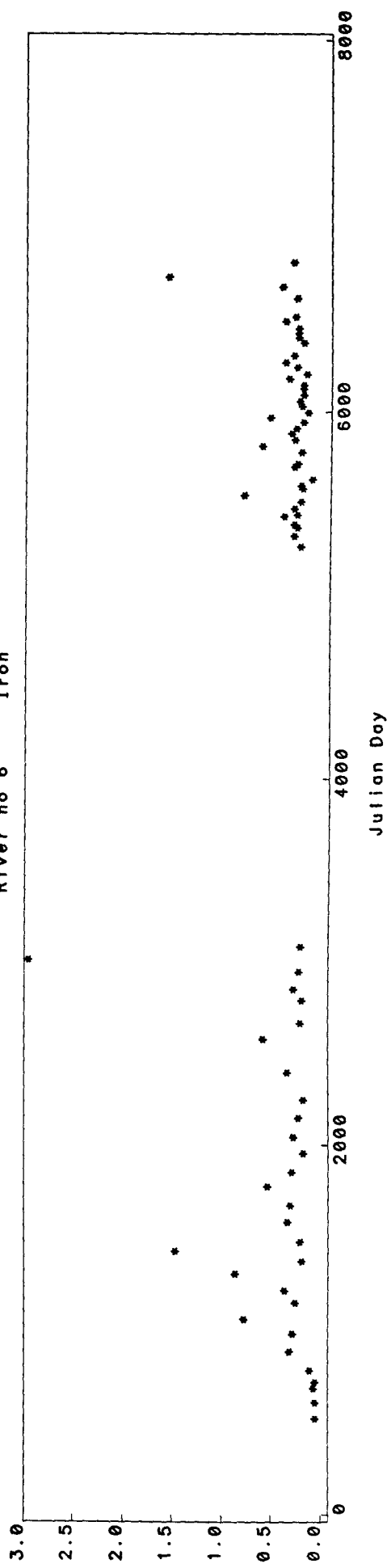
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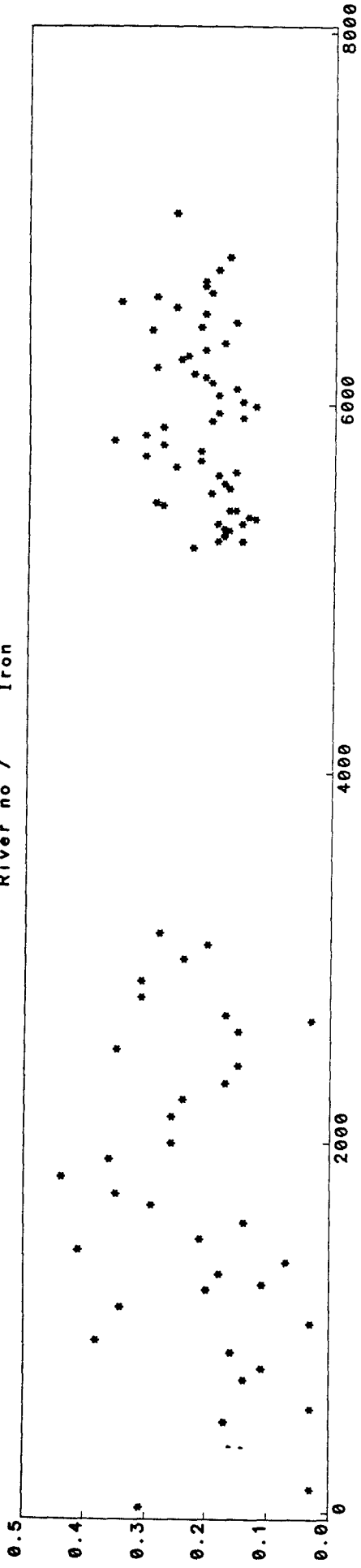
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River no 5 Iron



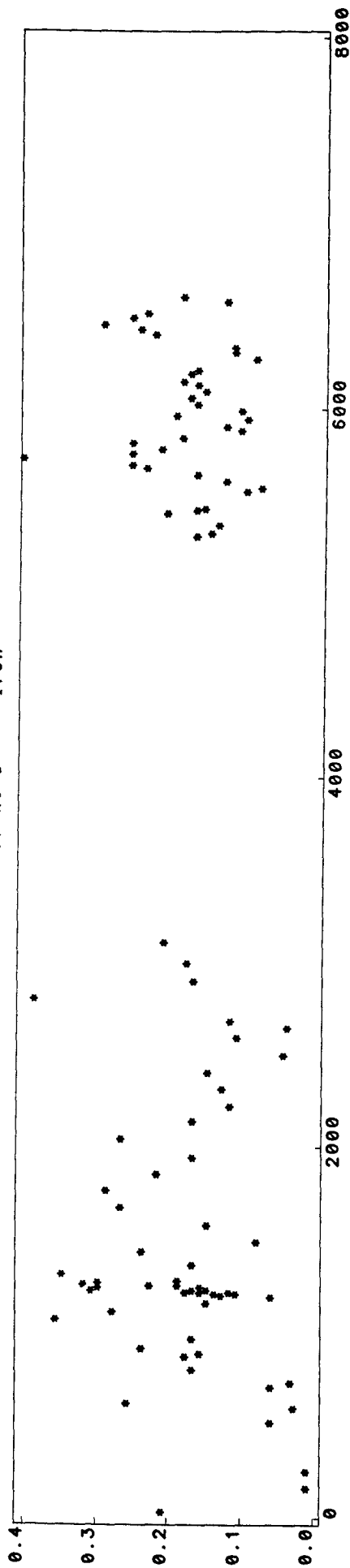
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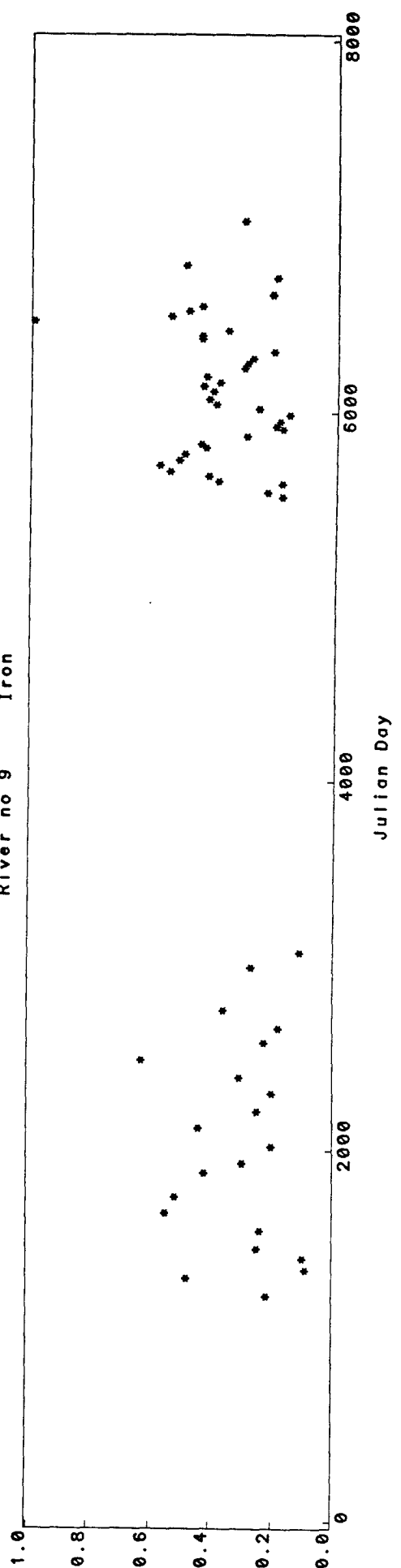
River no 7 Iron



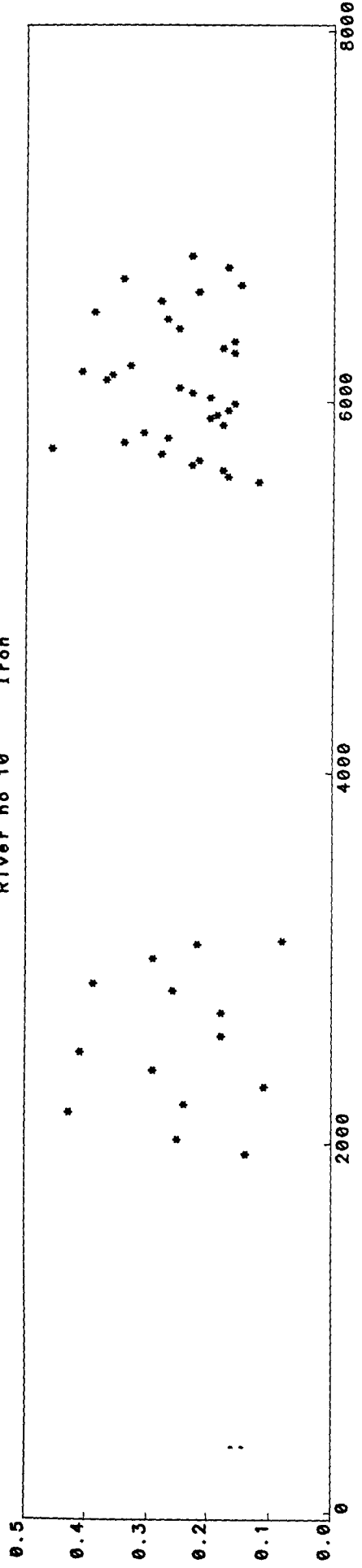
Julian Day  
River no 8 Iron



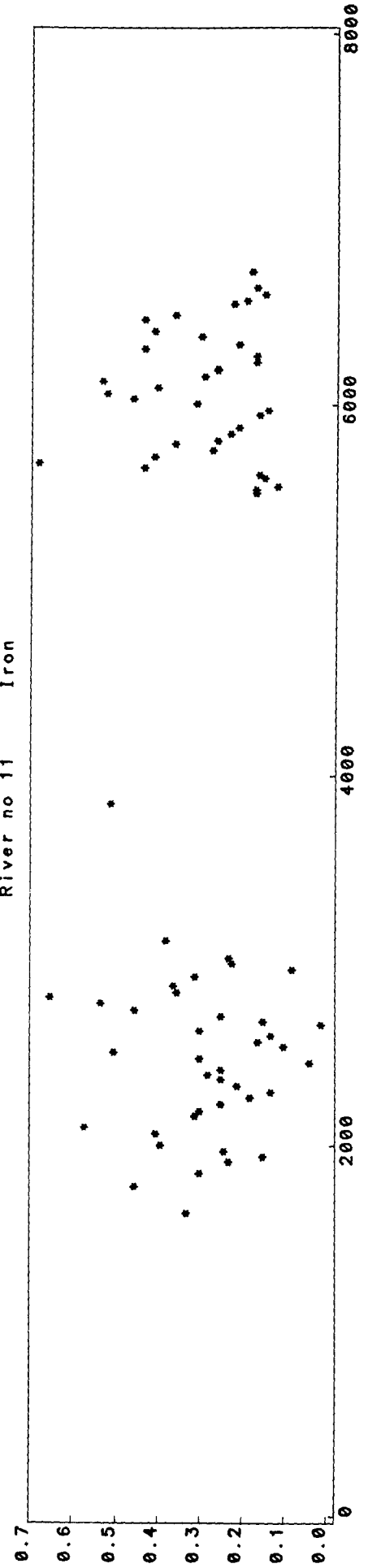
Julian Day  
River no 9 Iron



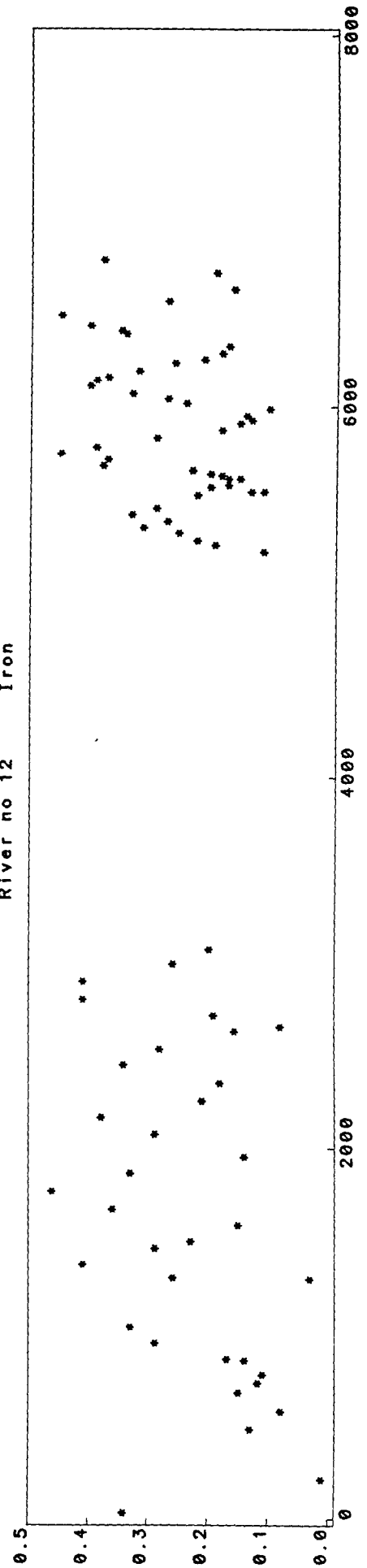
River no 10 Iron



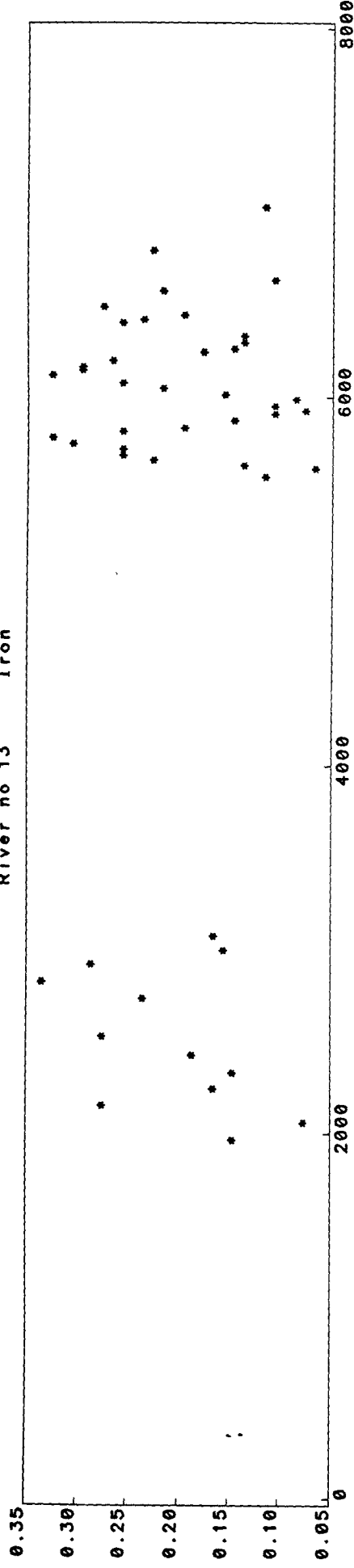
Julian Day  
River no 11 Iron



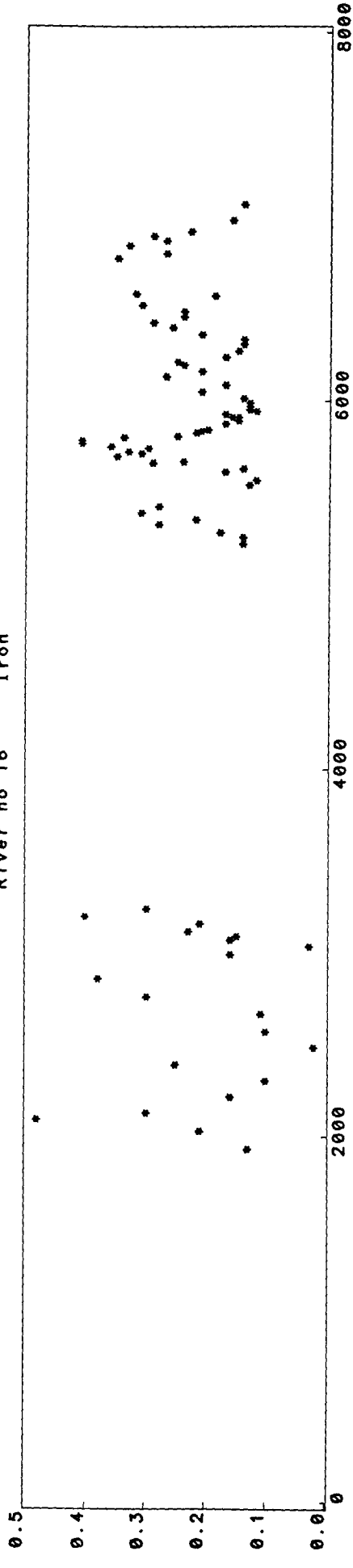
Julian Day  
River no 12 Iron



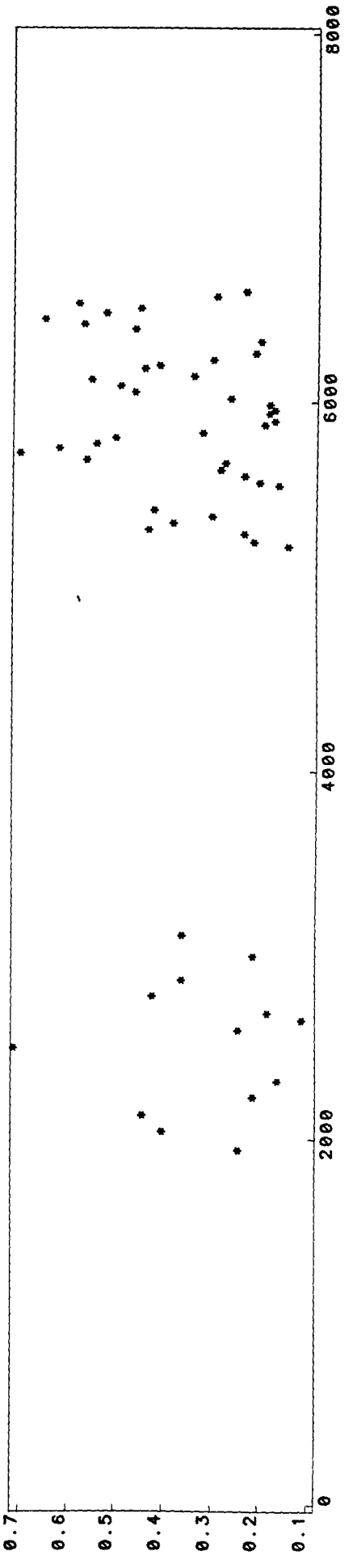
River no 13 Iron



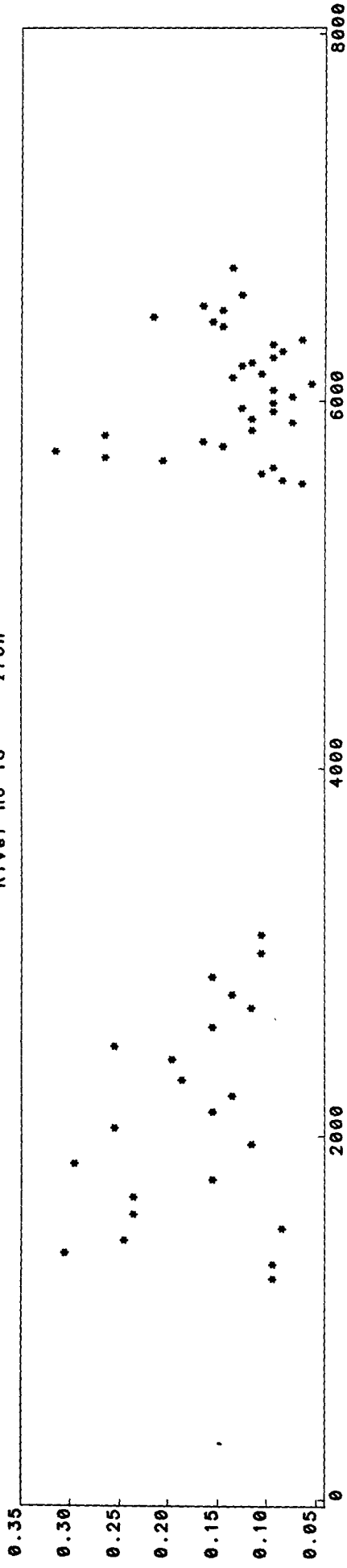
Julian Day  
River no 16 Iron



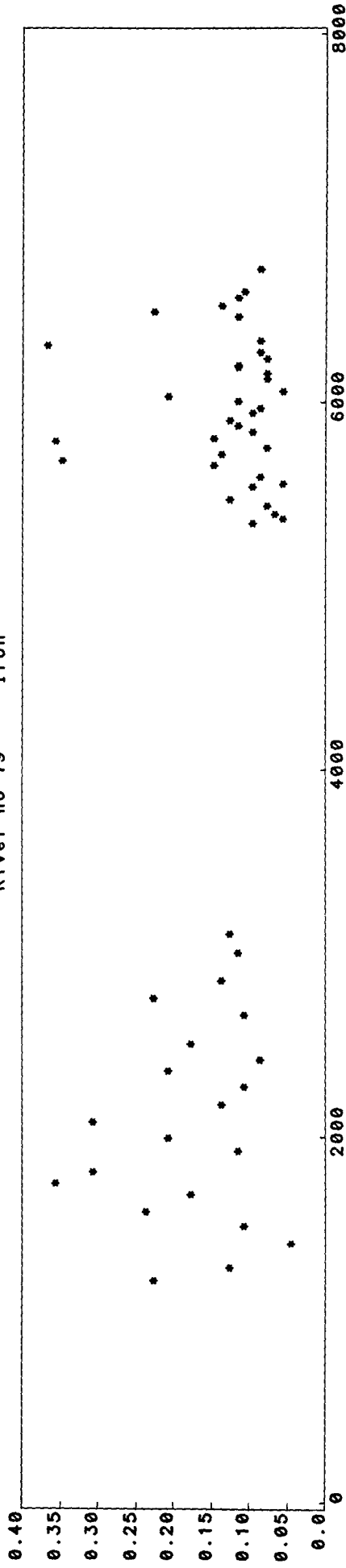
Julian Day  
River no 17 Iron



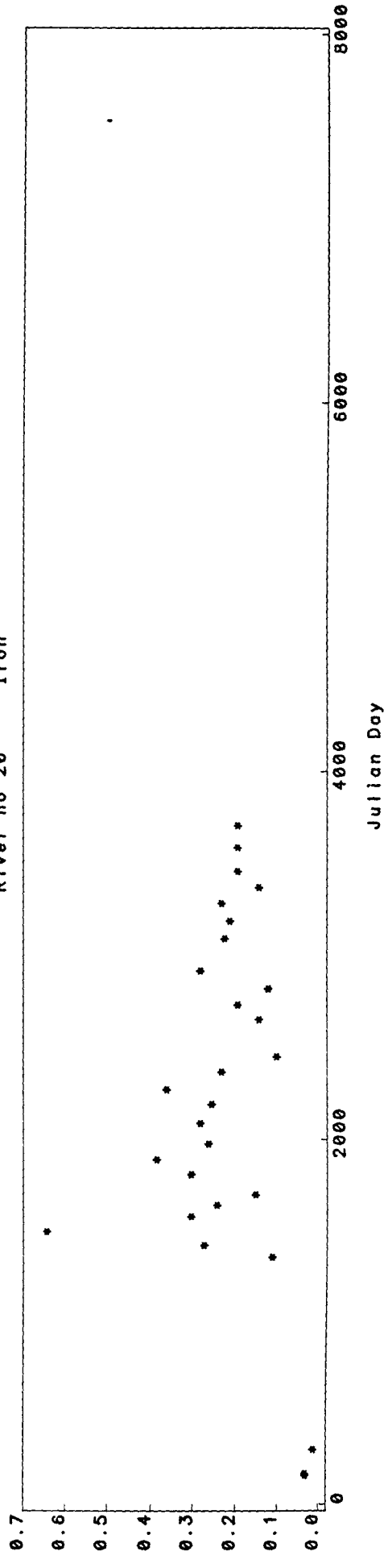
River no 18 Iron



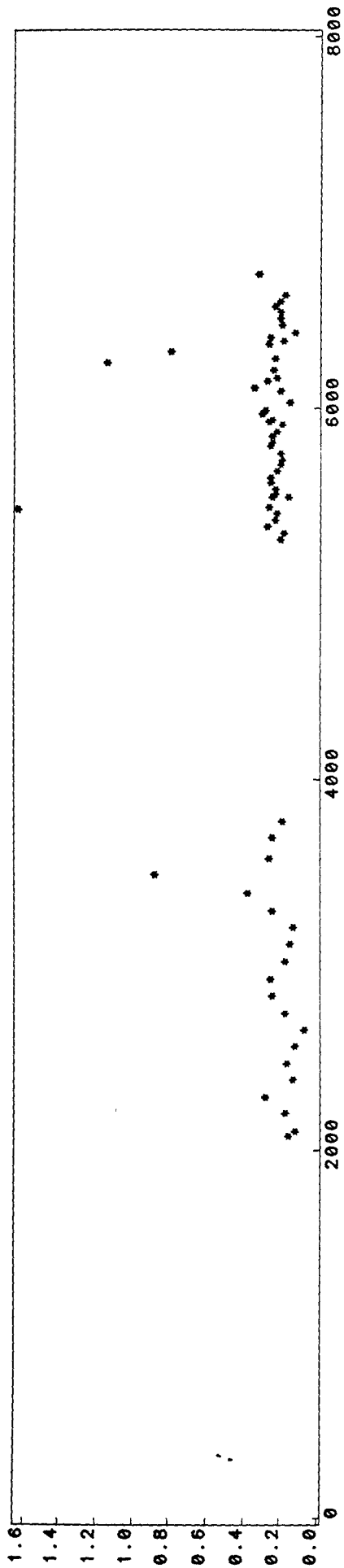
Julian Day  
River no 19 Iron



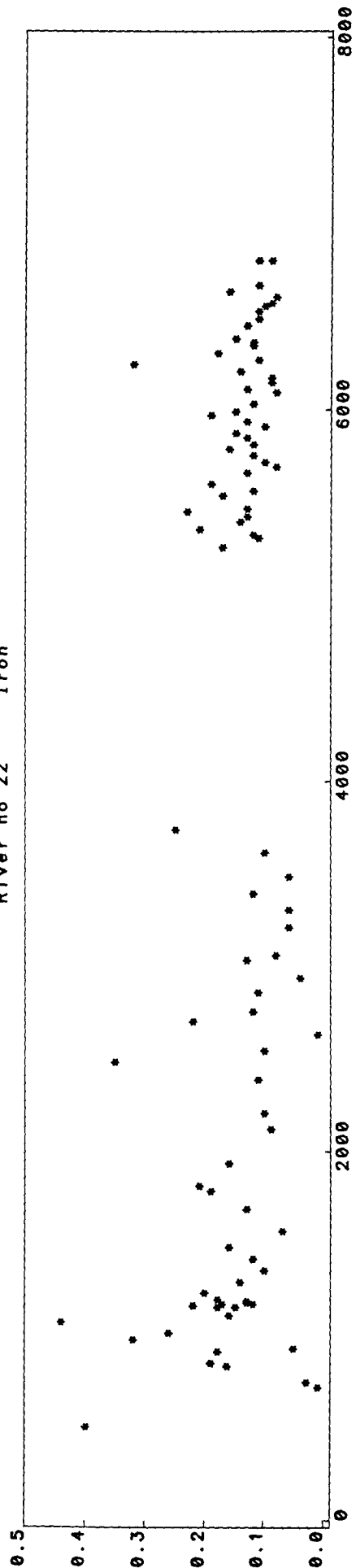
Julian Day  
River no 20 Iron



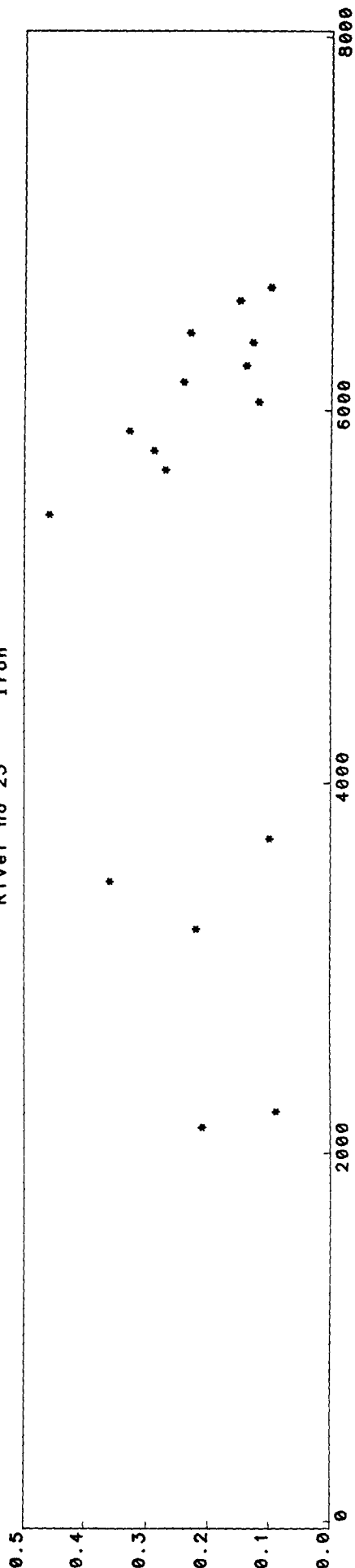
River no 21 Iron



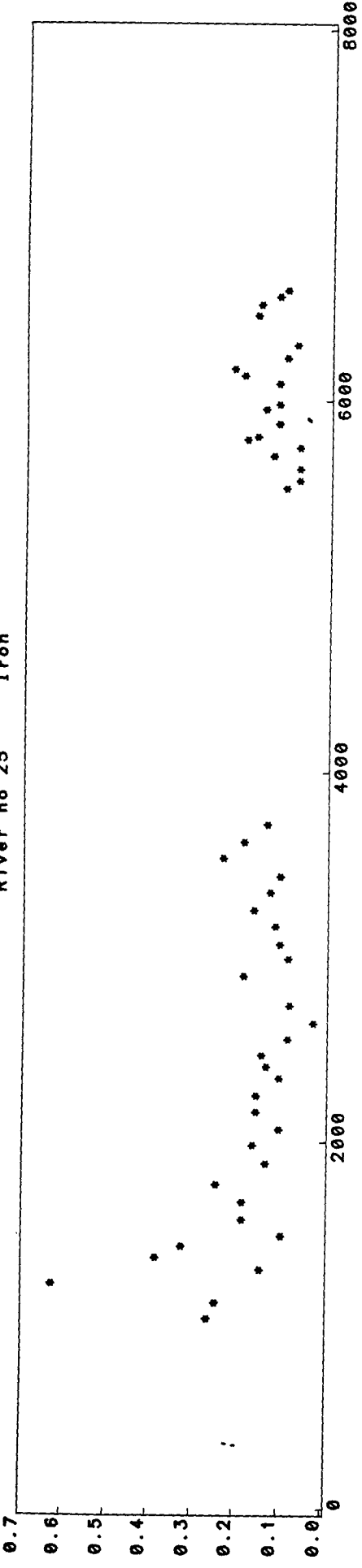
Julian Day  
River no 22 Iron



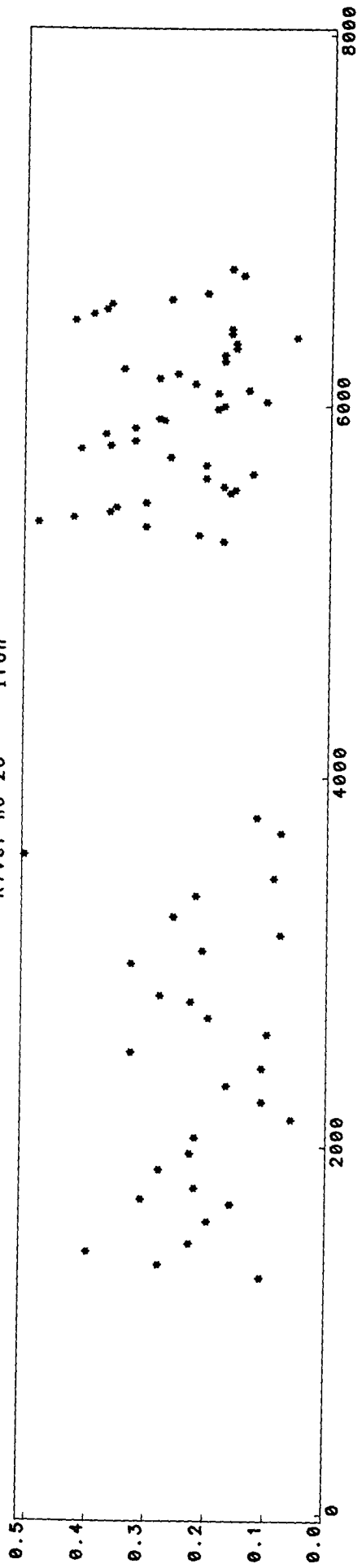
Julian Day  
River no 23 Iron



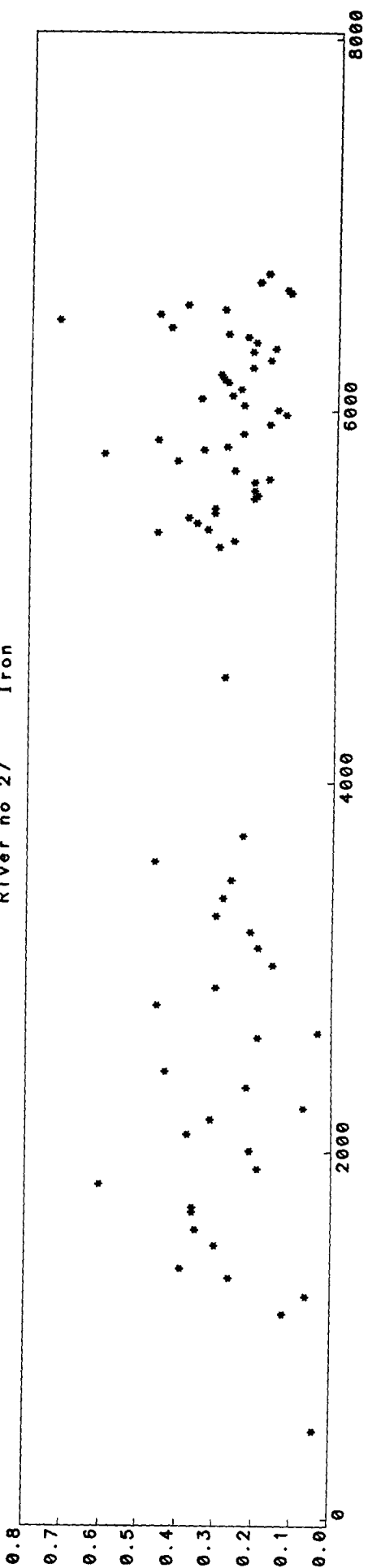
River no 25 Iron



Julian Day  
River no 26 Iron

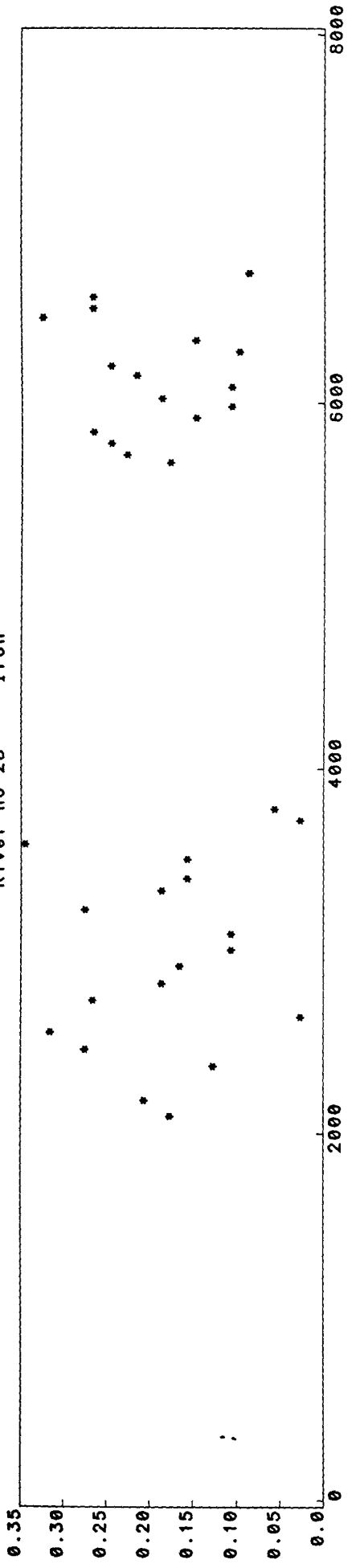


Julian Day  
River no 27 Iron

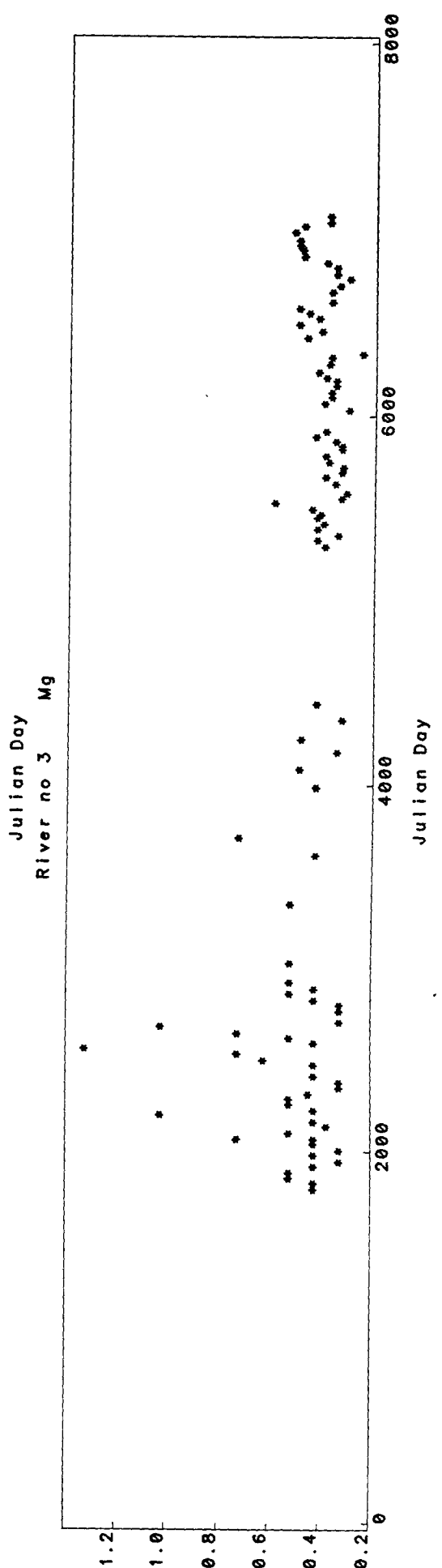
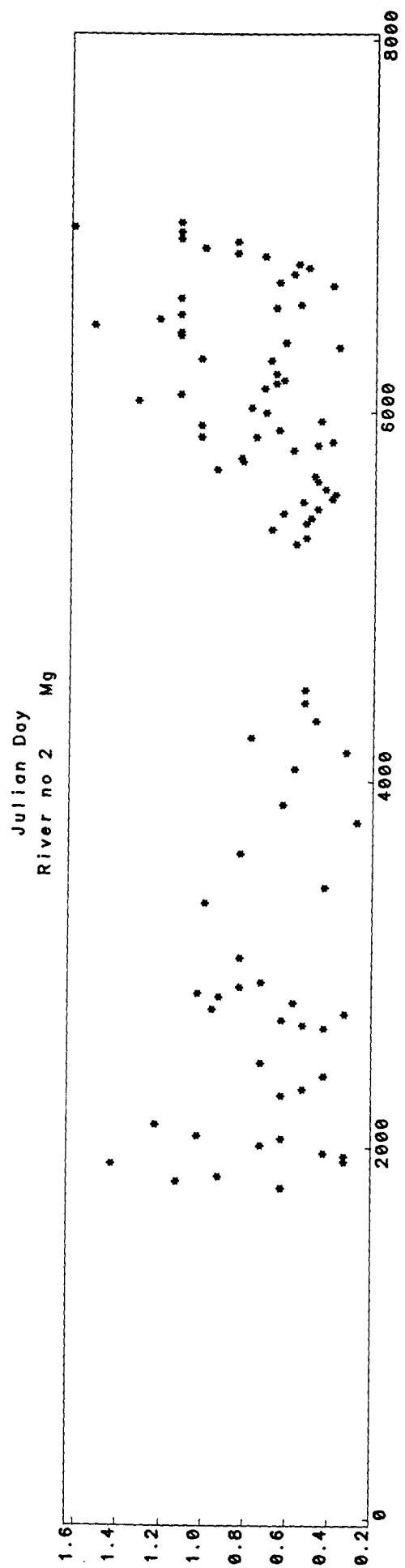
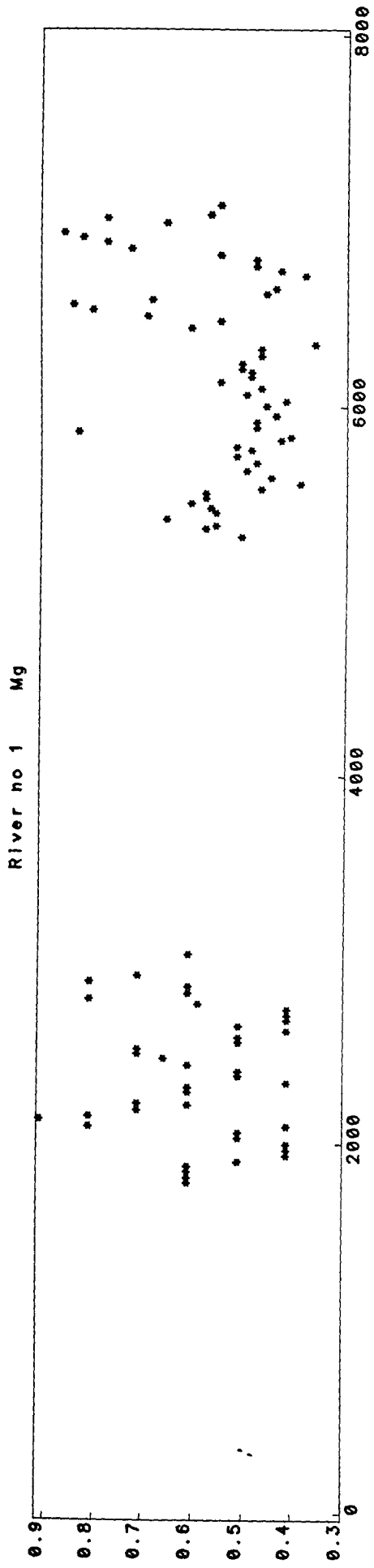




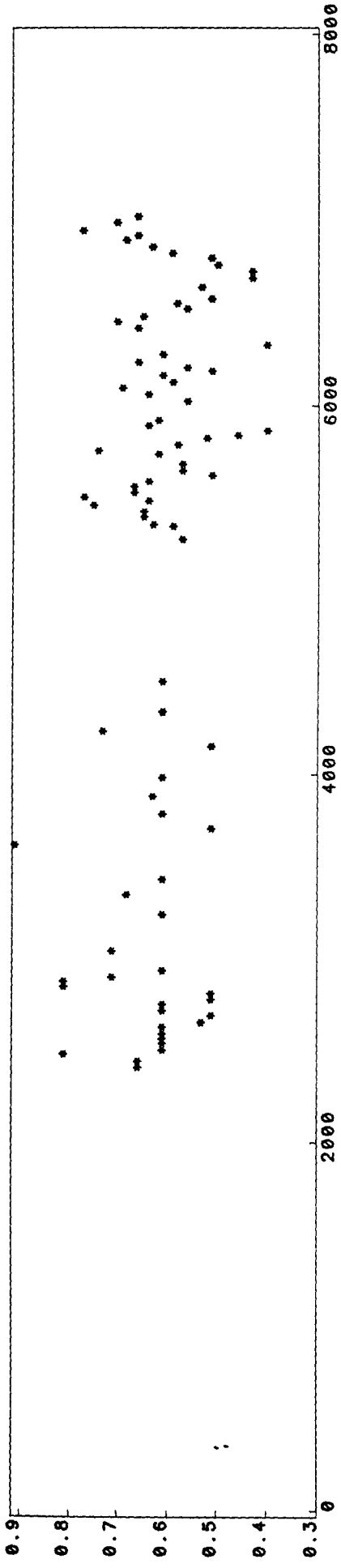
River no 28 Iron



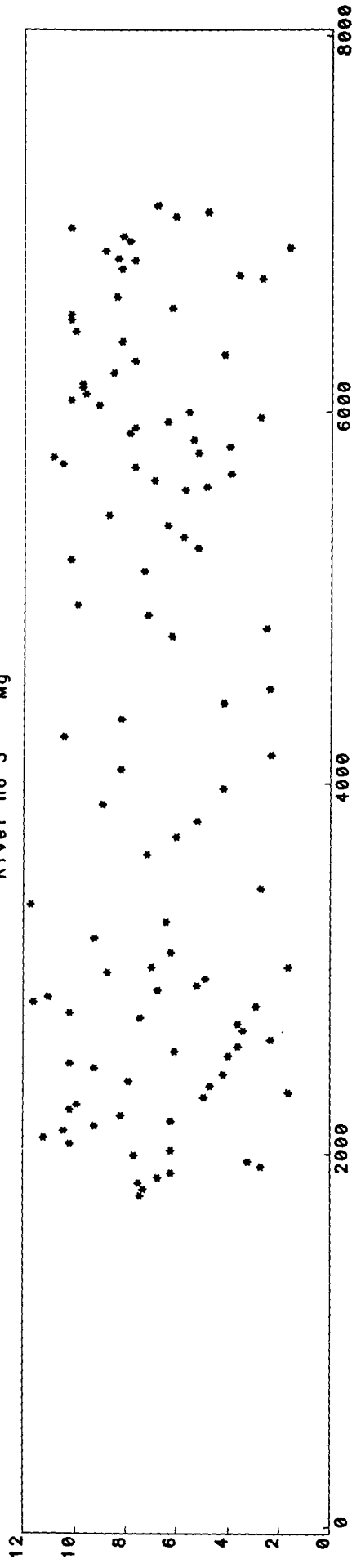
Appendix 5. Scatter plots of magnesium for the study rivers.



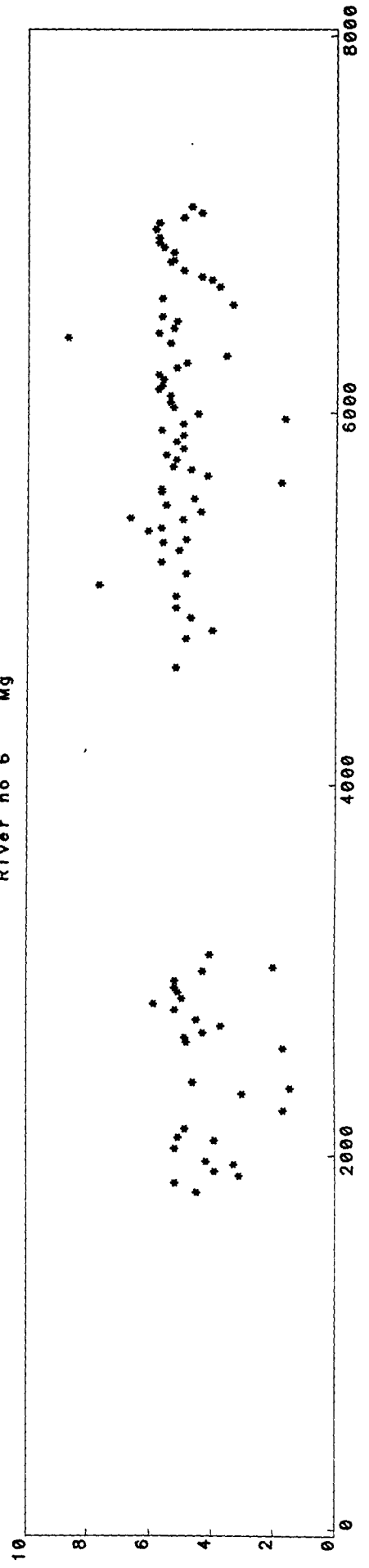
River no 4 Mg



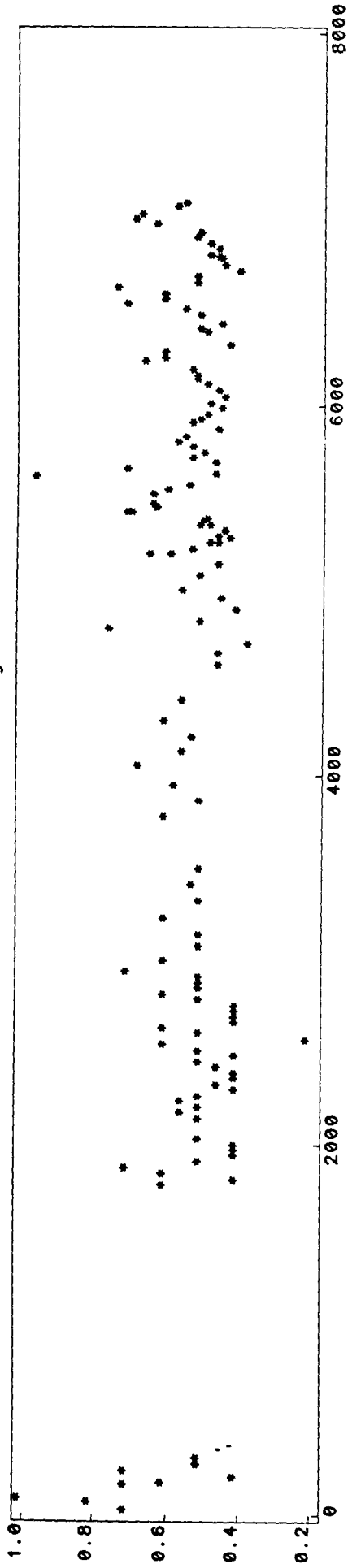
Julian Day  
River no 5 Mg



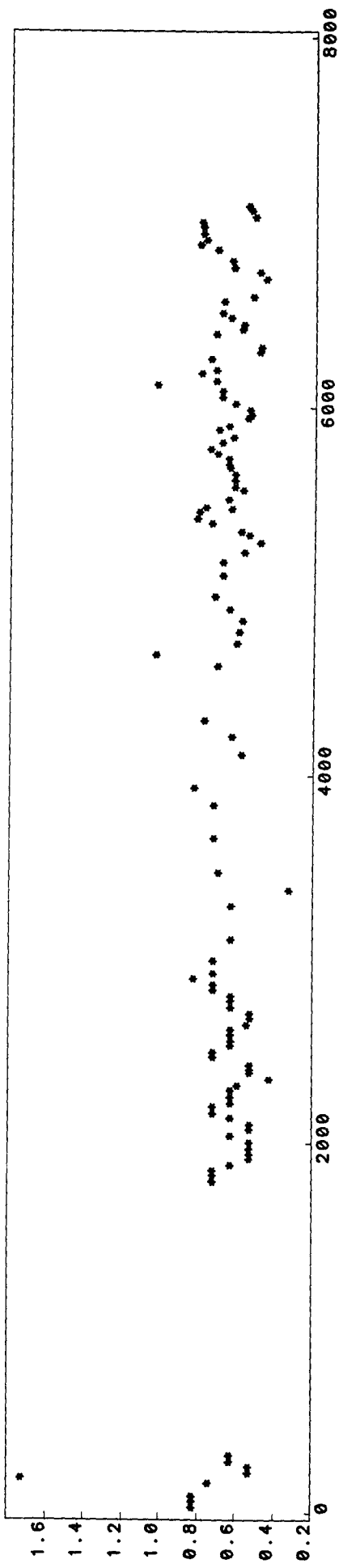
Julian Day  
River no 6 Mg



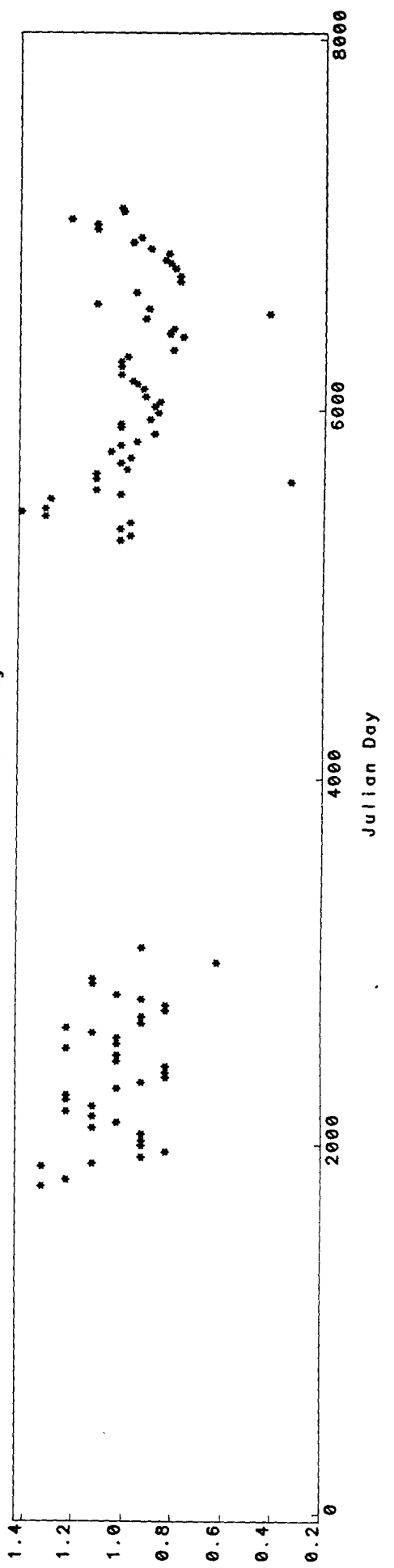
River no 7 Mg

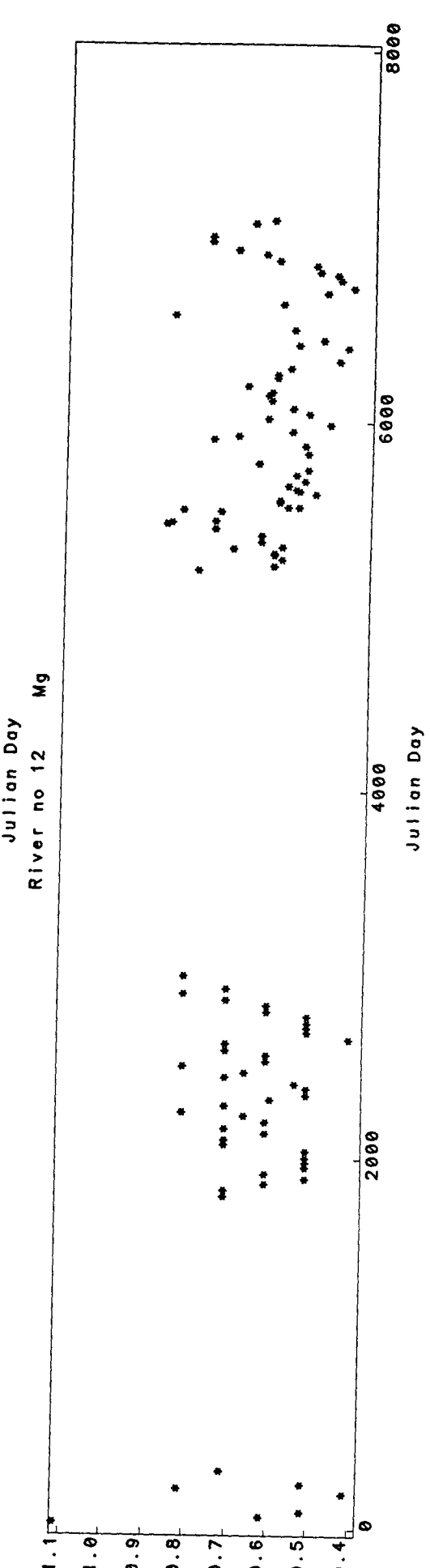
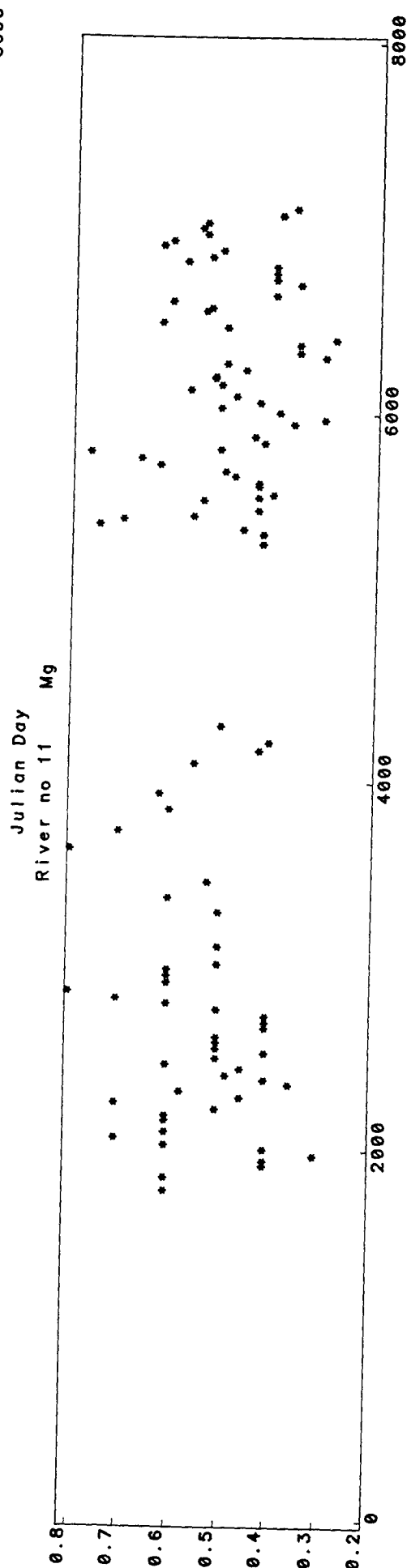
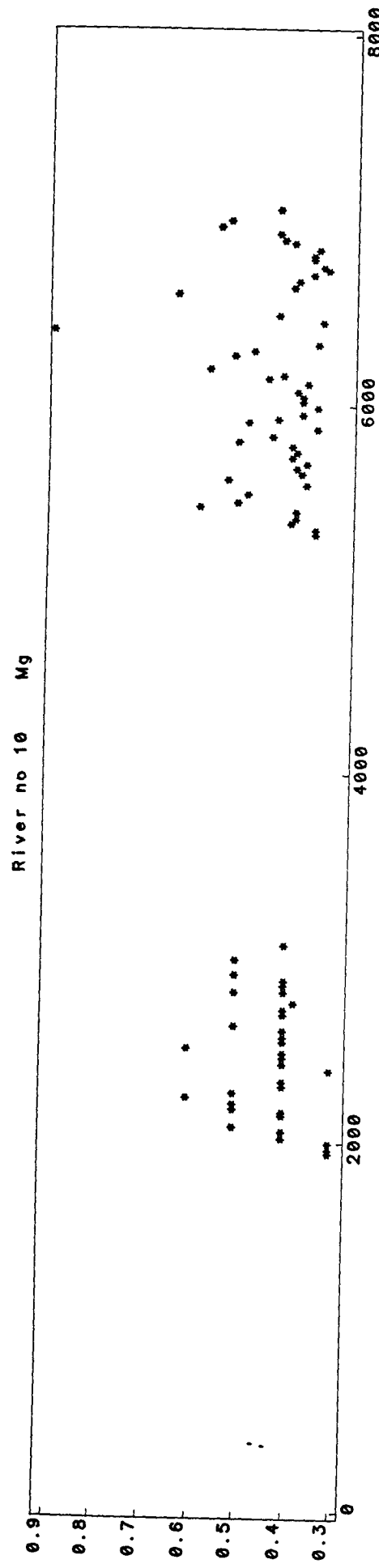


Julian Day  
River no 8 Mg

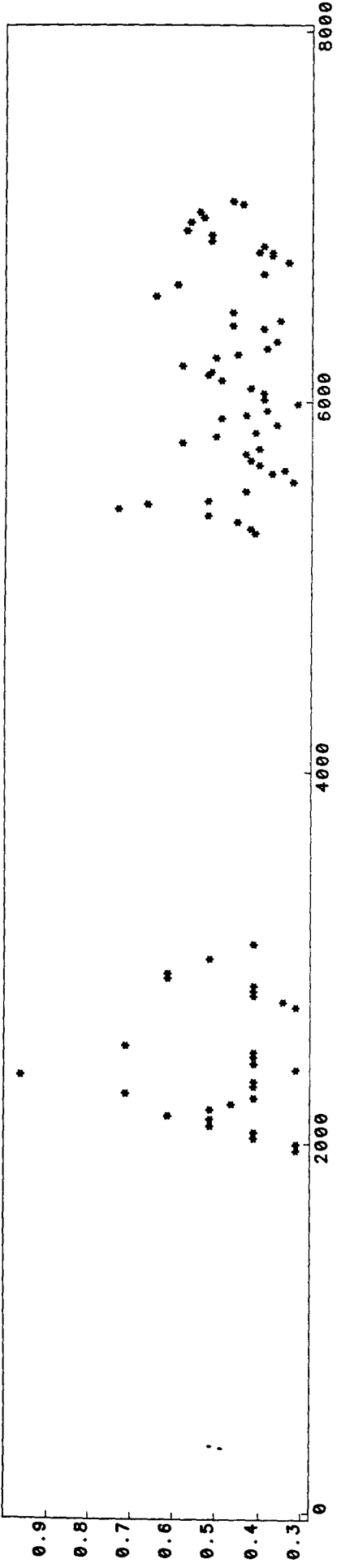


Julian Day  
River no 9 Mg

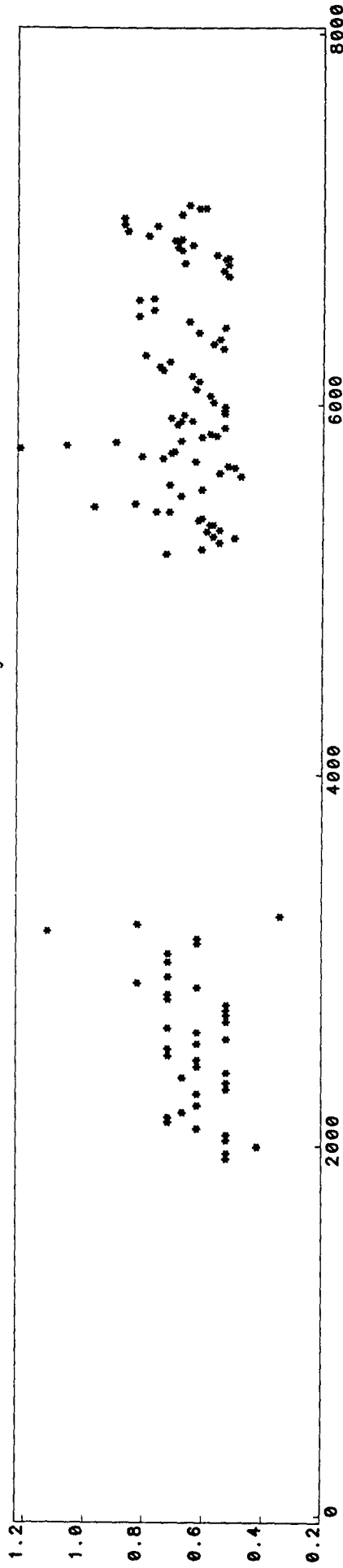




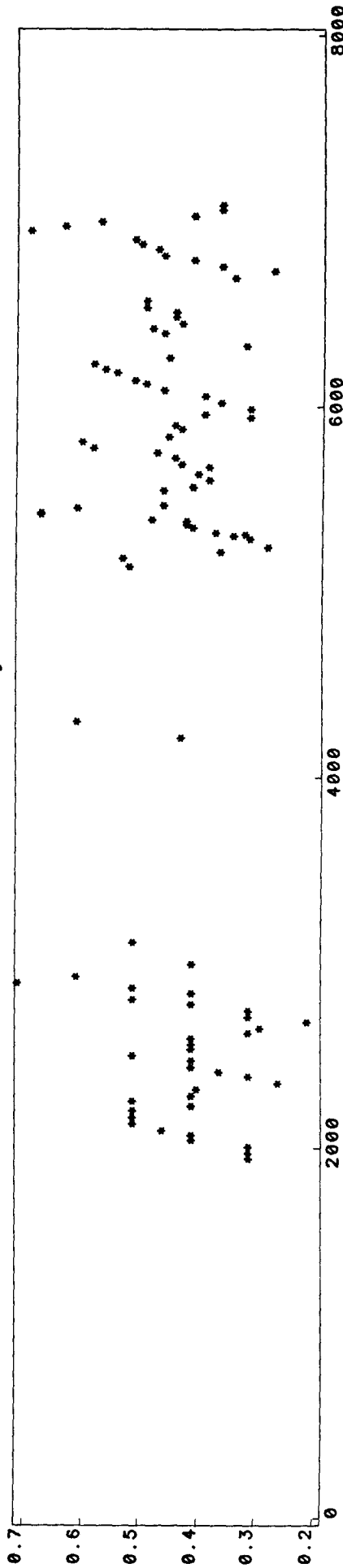
River no 13 Mg



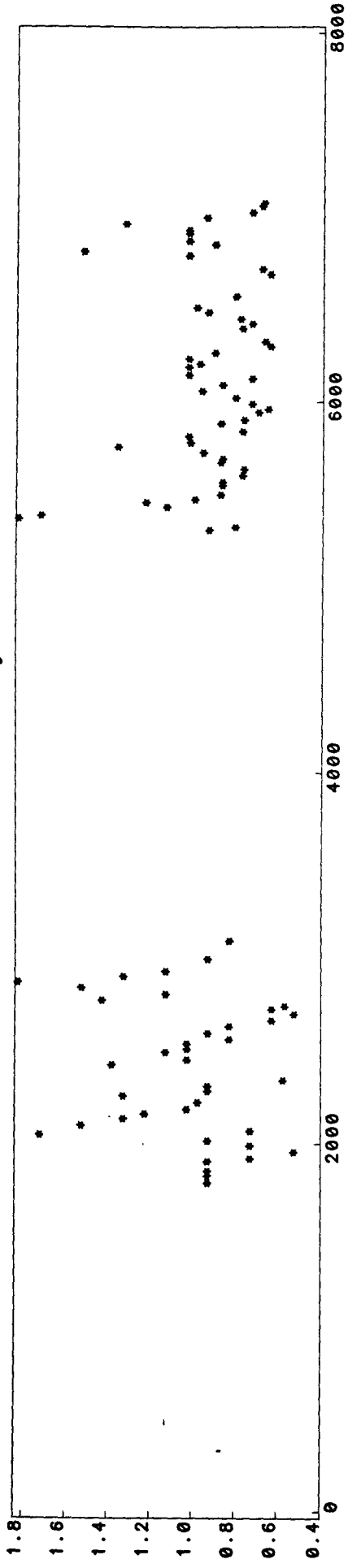
Julian Day  
River no 16 Mg



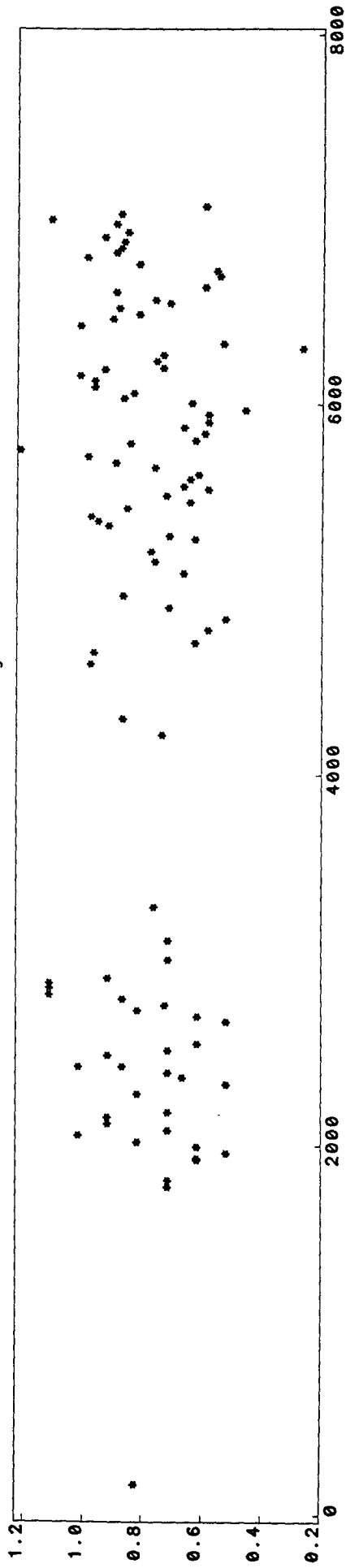
Julian Day  
River no 17 Mg



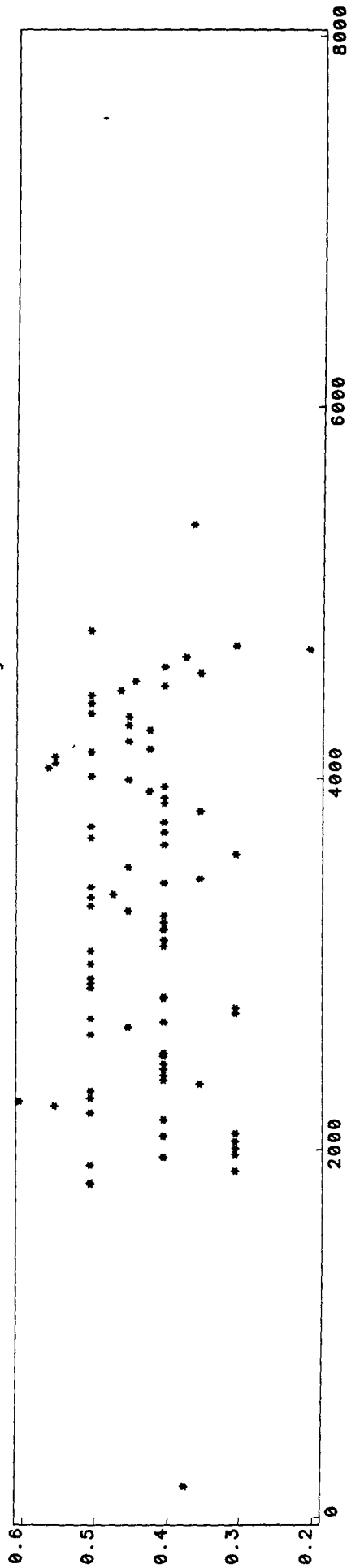
River no 18 Mg



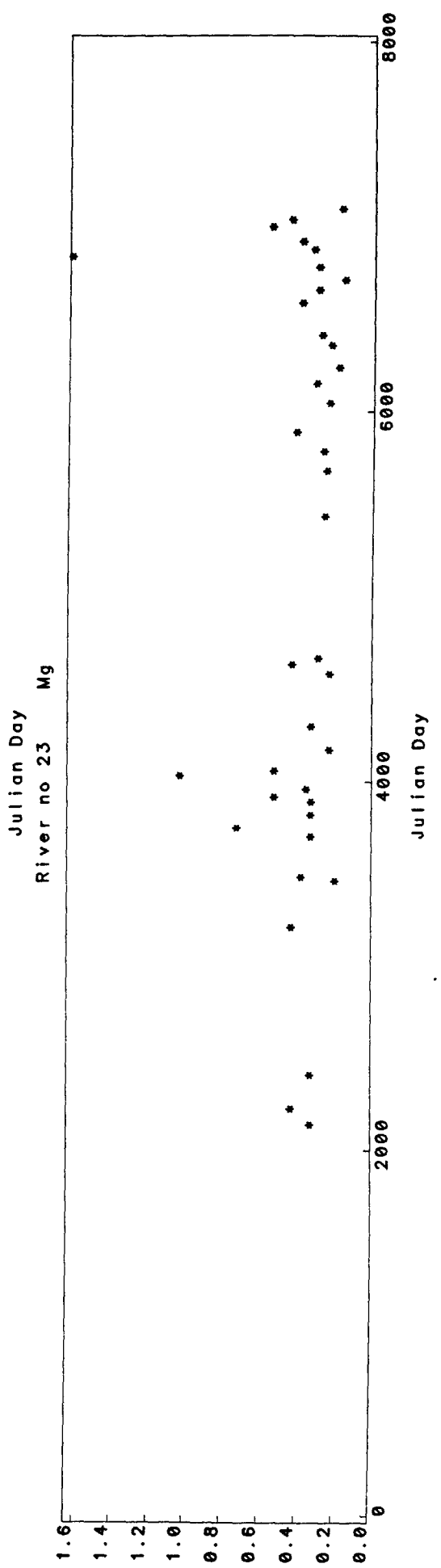
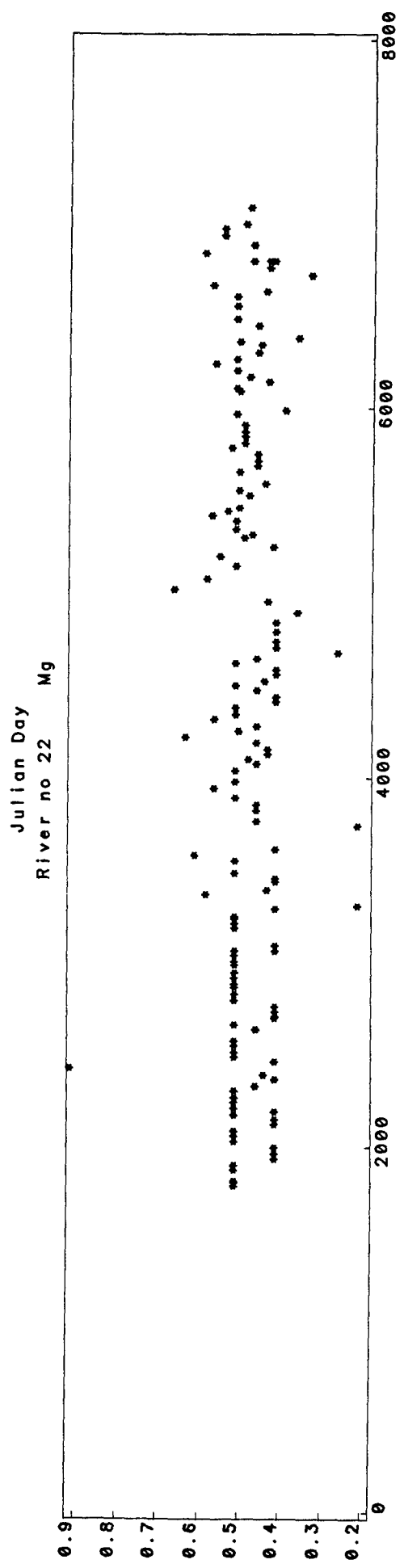
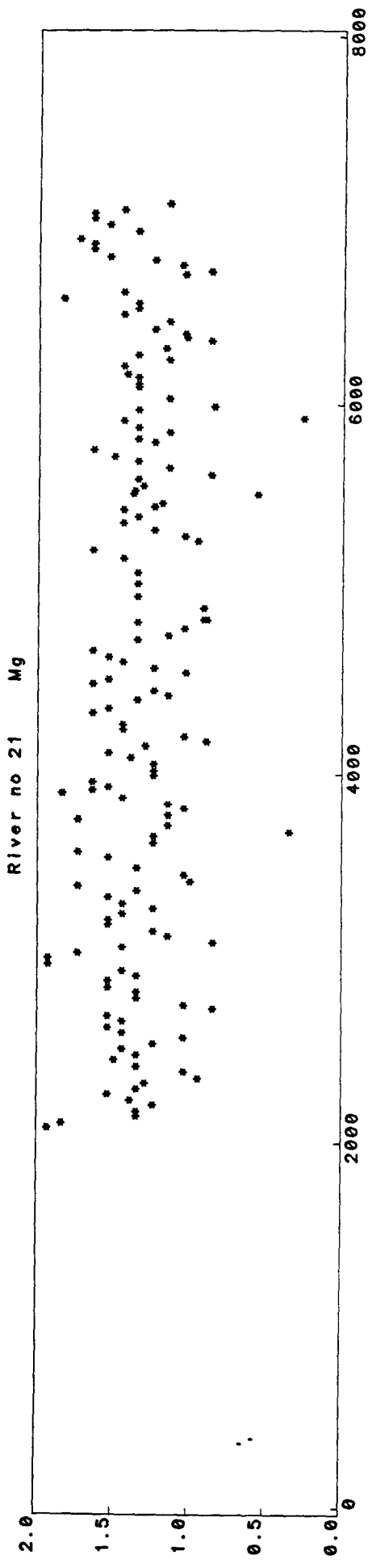
Julian Day  
River no 19 Mg

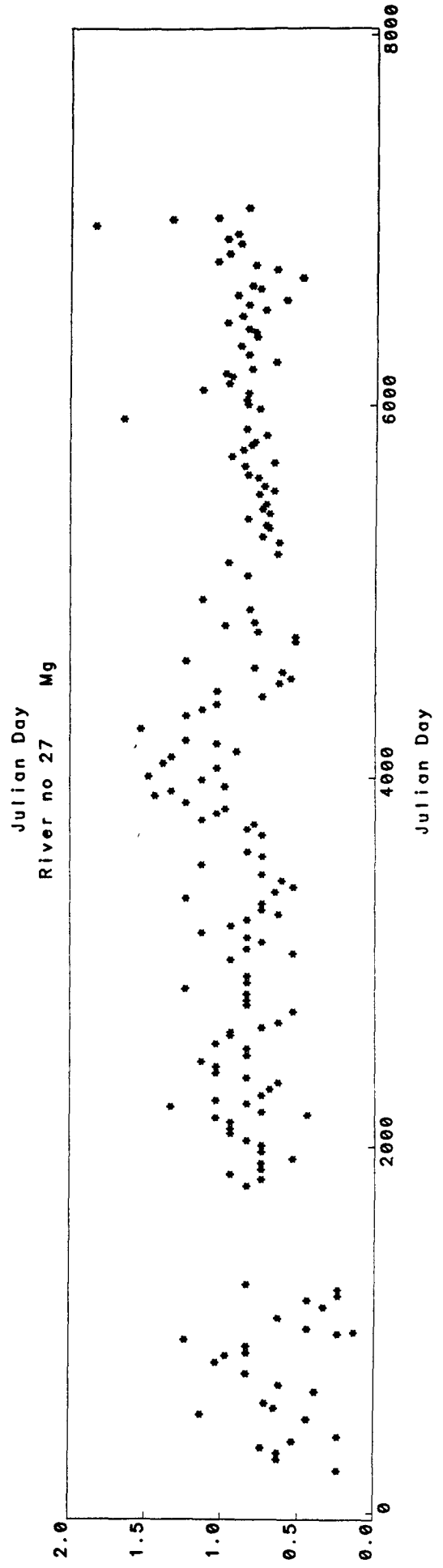
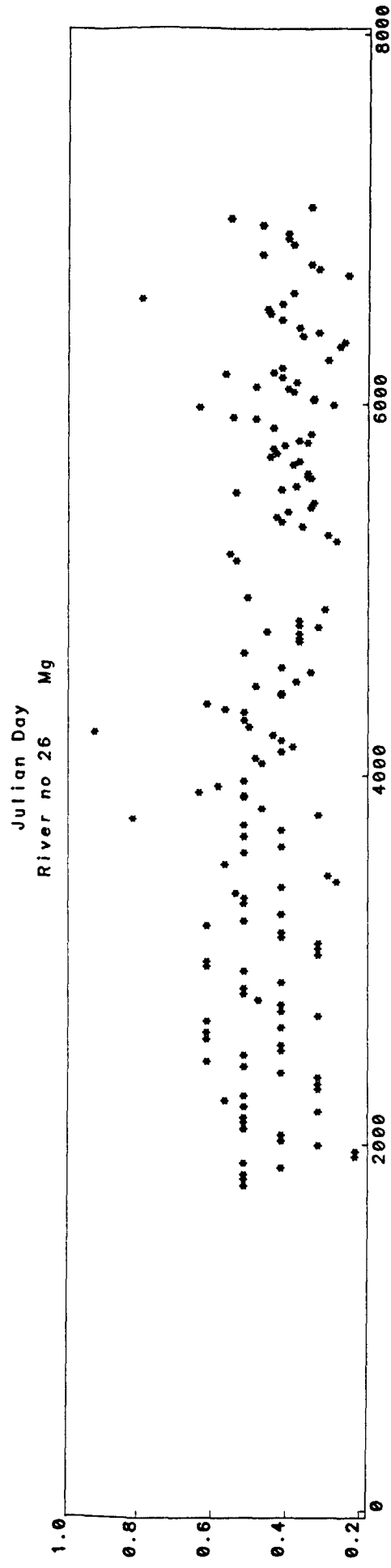
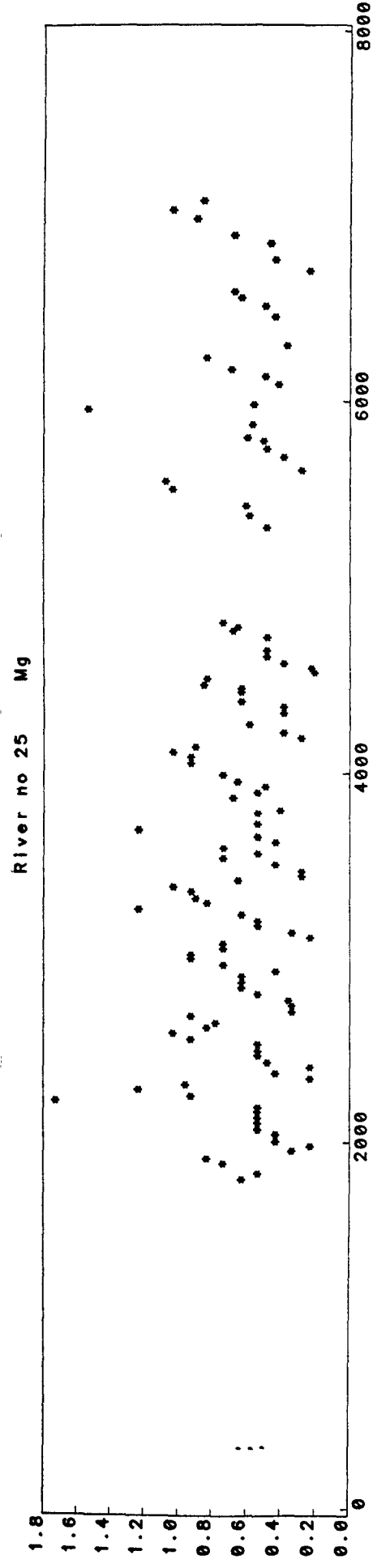


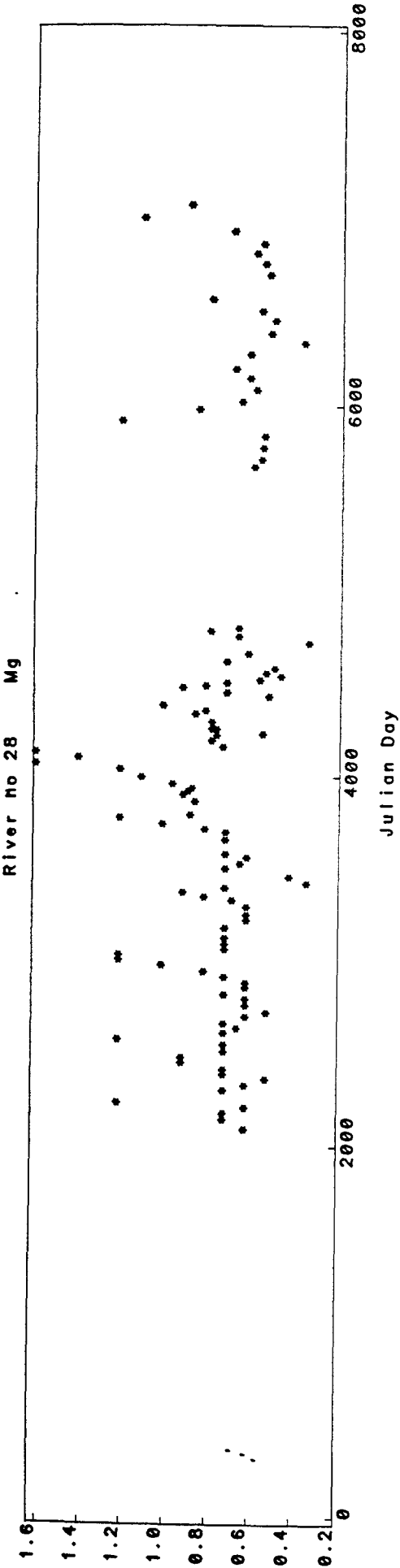
Julian Day  
River no 20 Mg



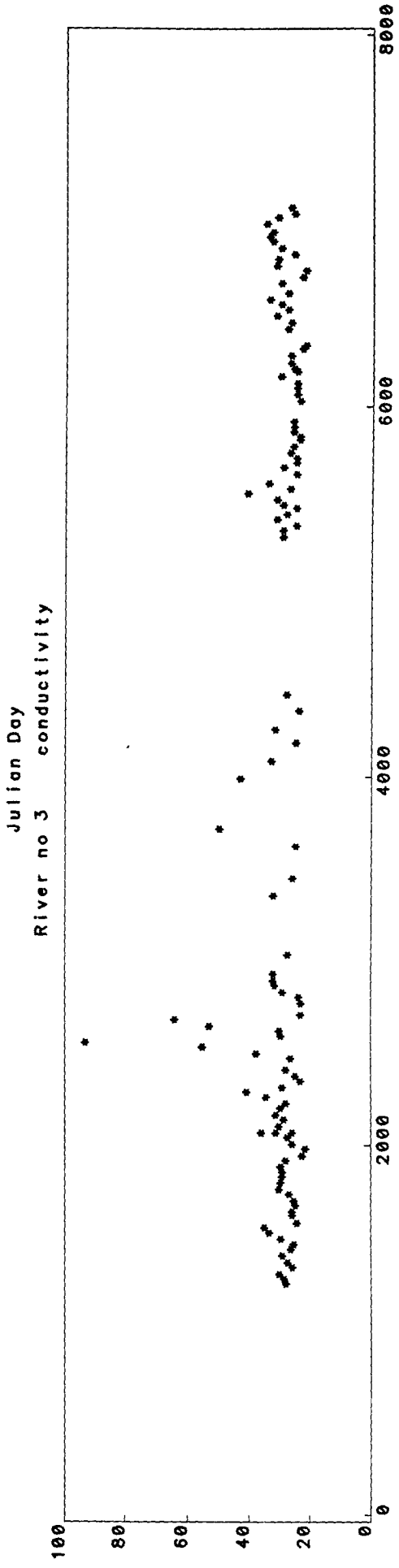
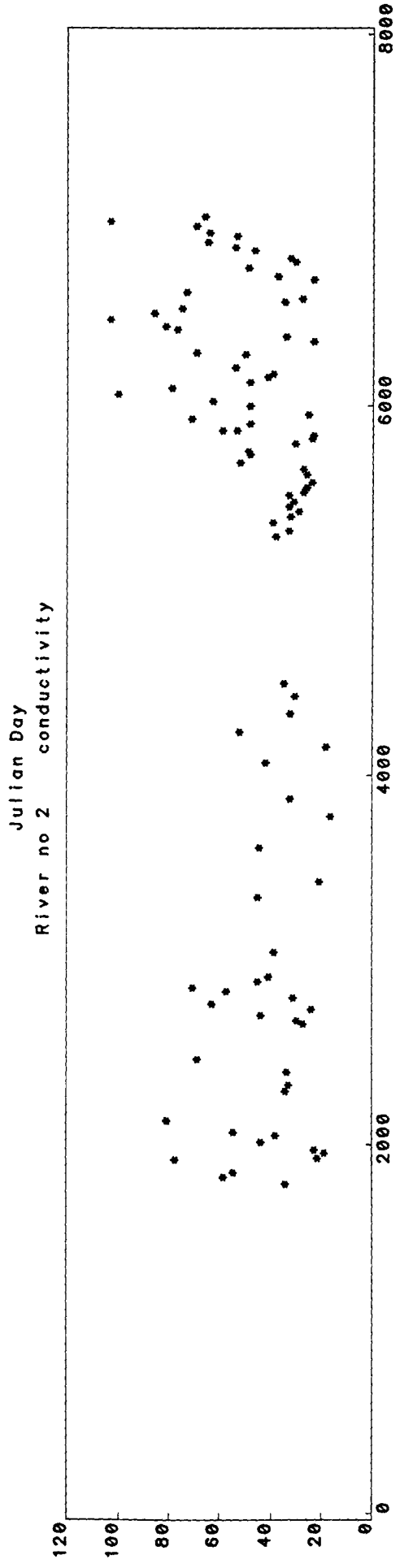
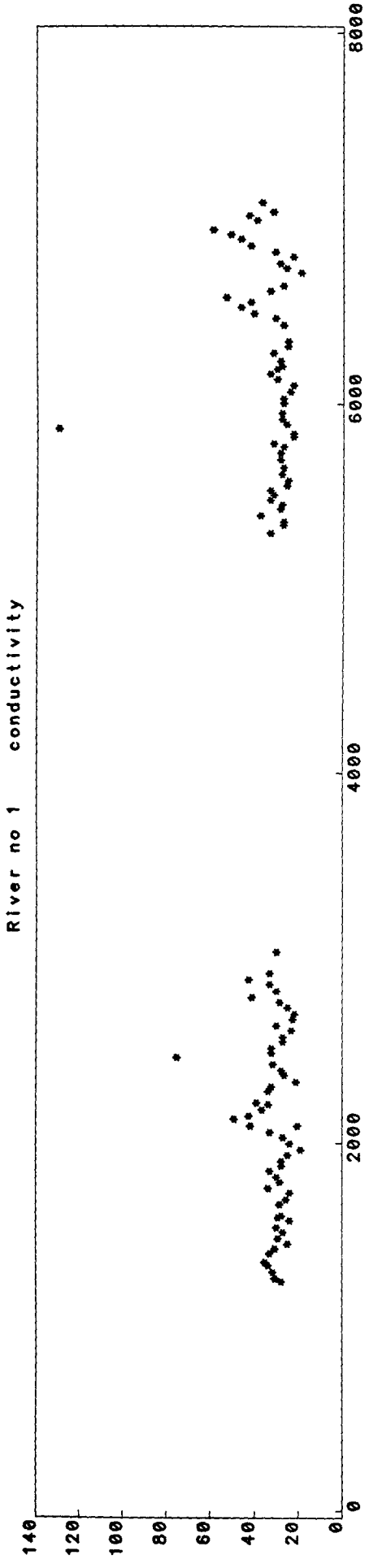




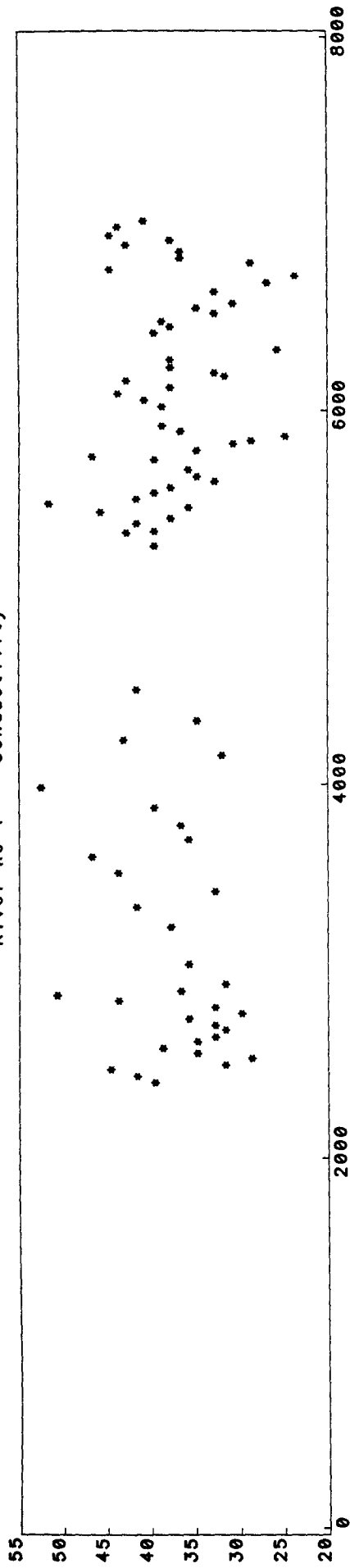




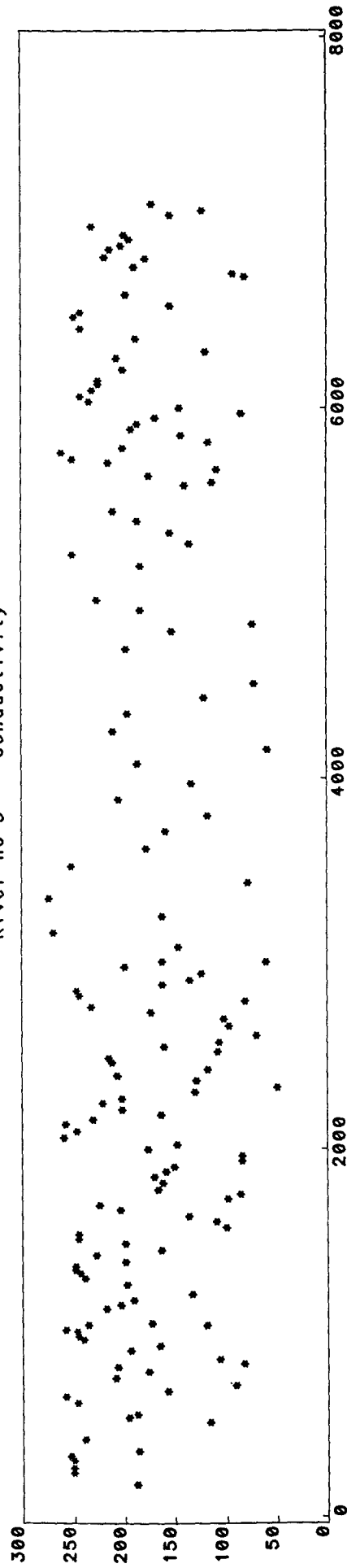
Appendix 6. Scatter plots of conductivity for the study rivers.



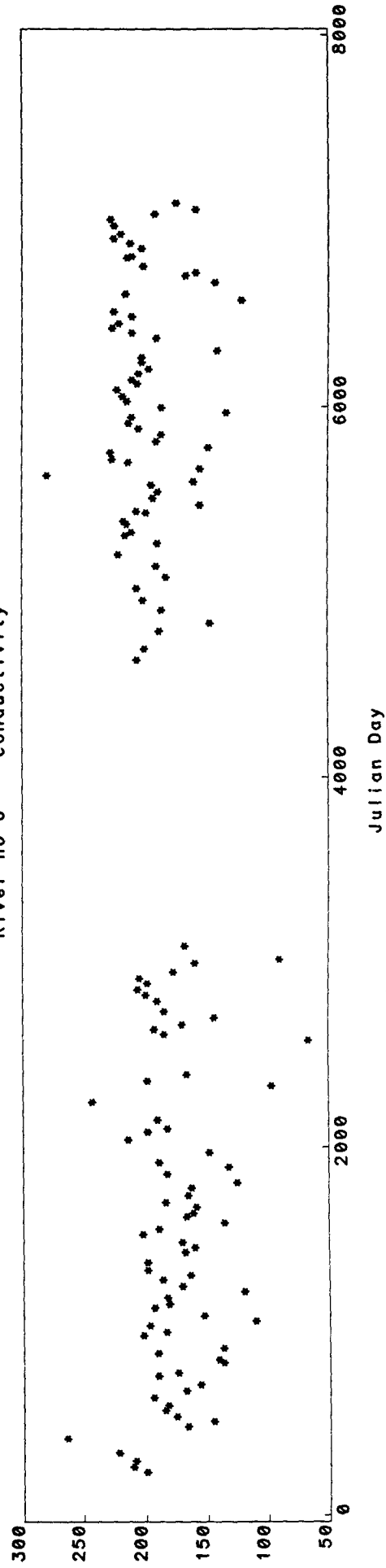
River no 4 conductivity

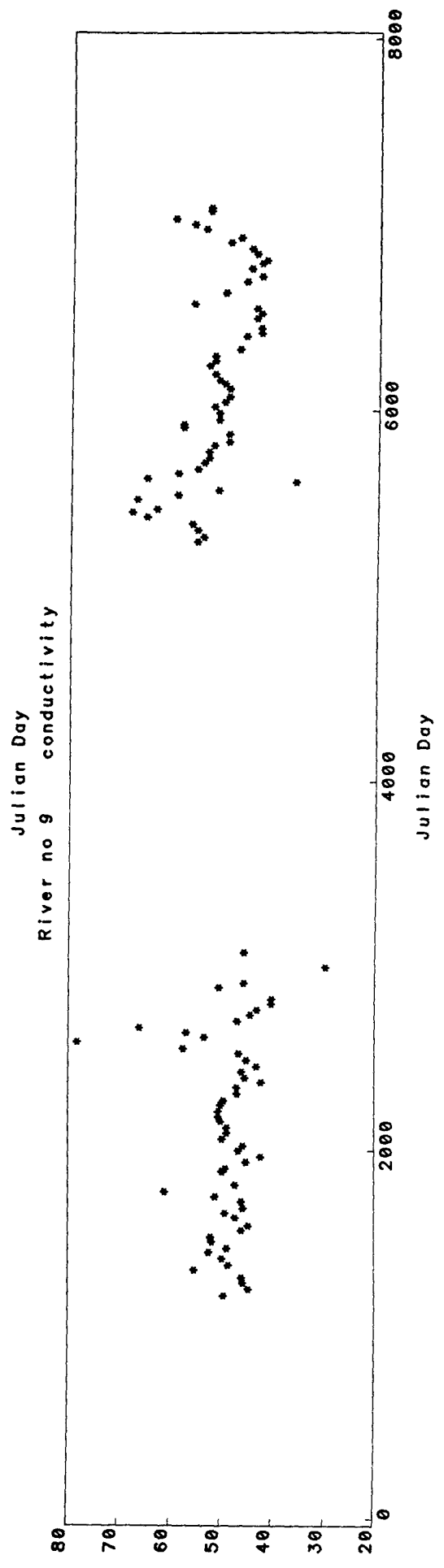
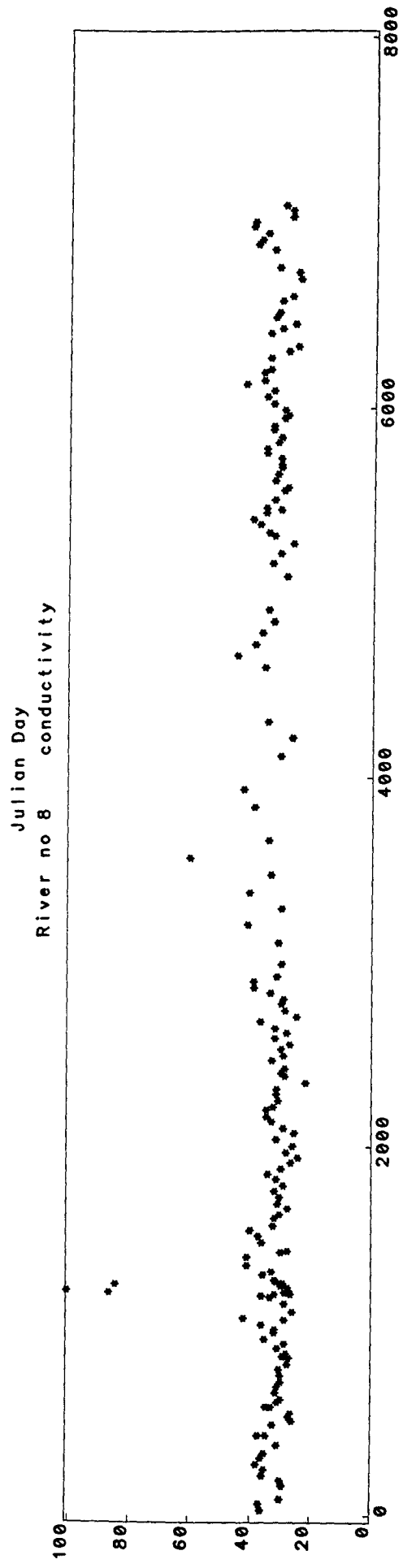
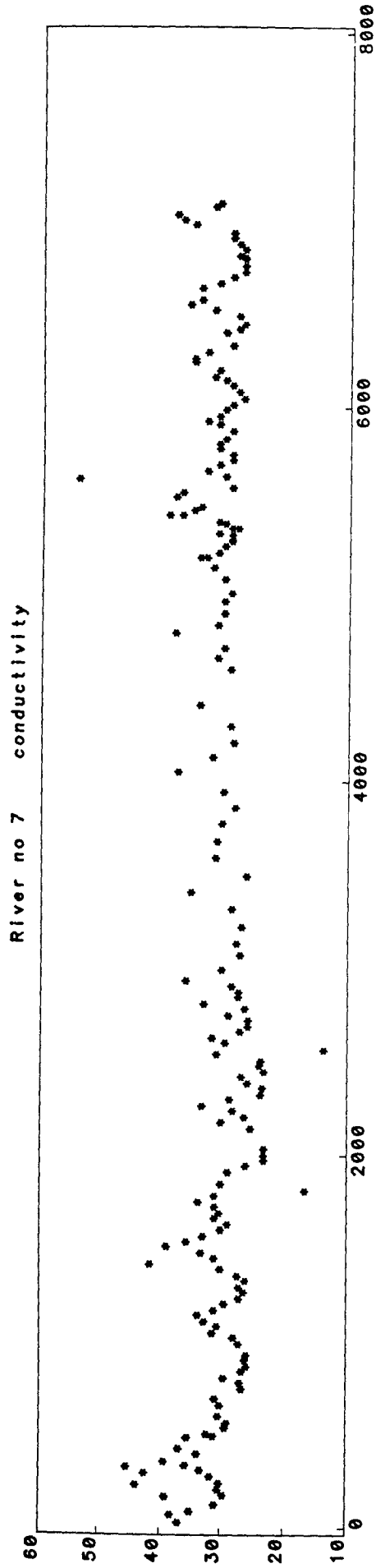


River no 5 conductivity

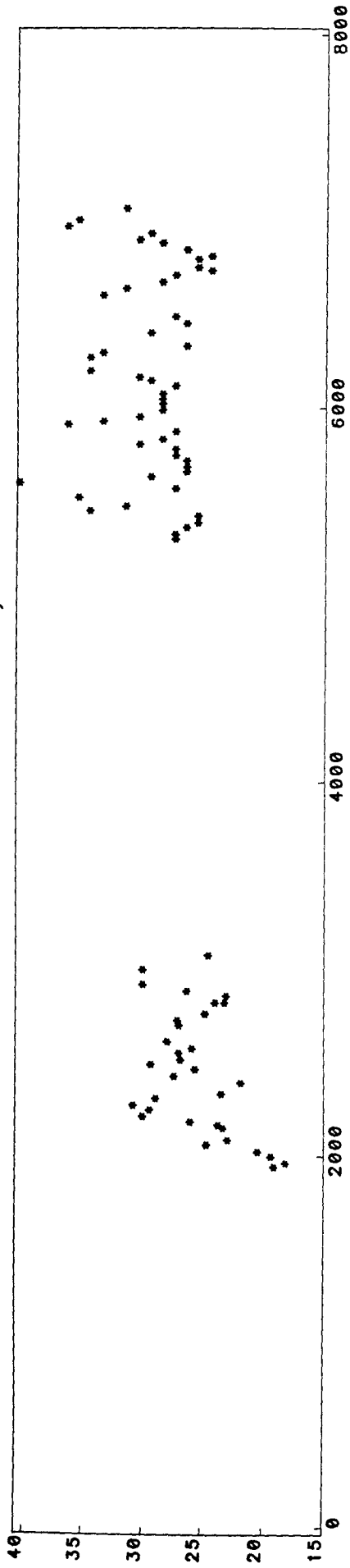


River no 6 conductivity

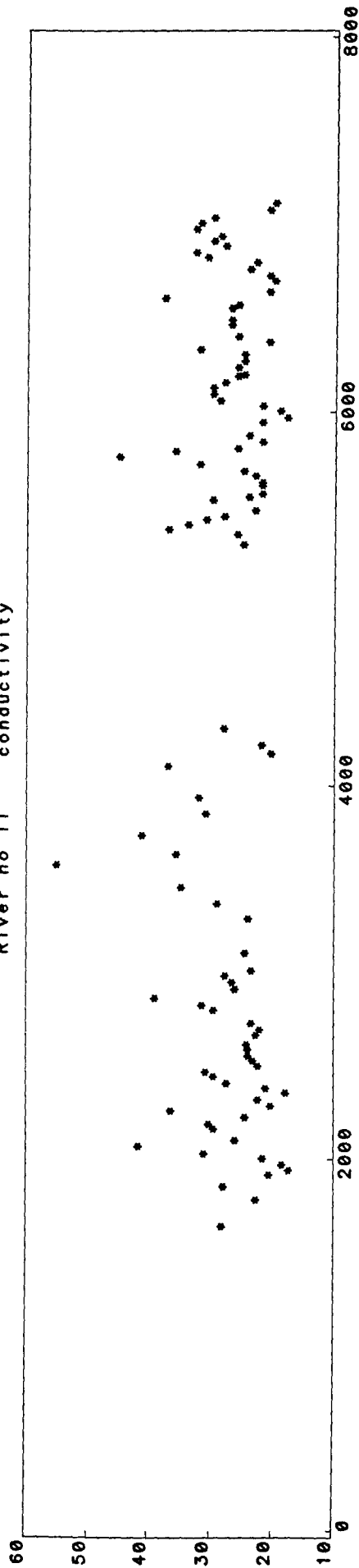




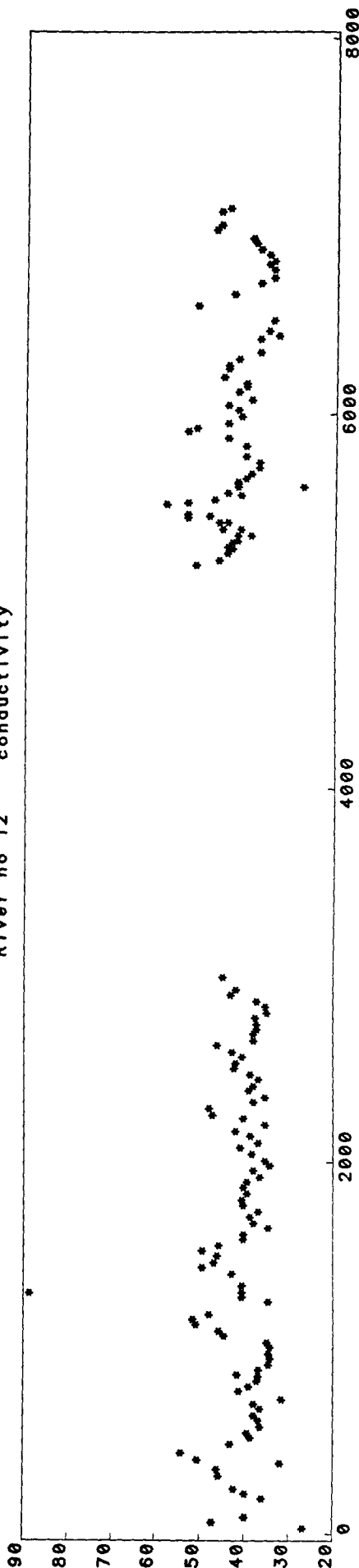
River no 10 conductivity



River no 11 conductivity

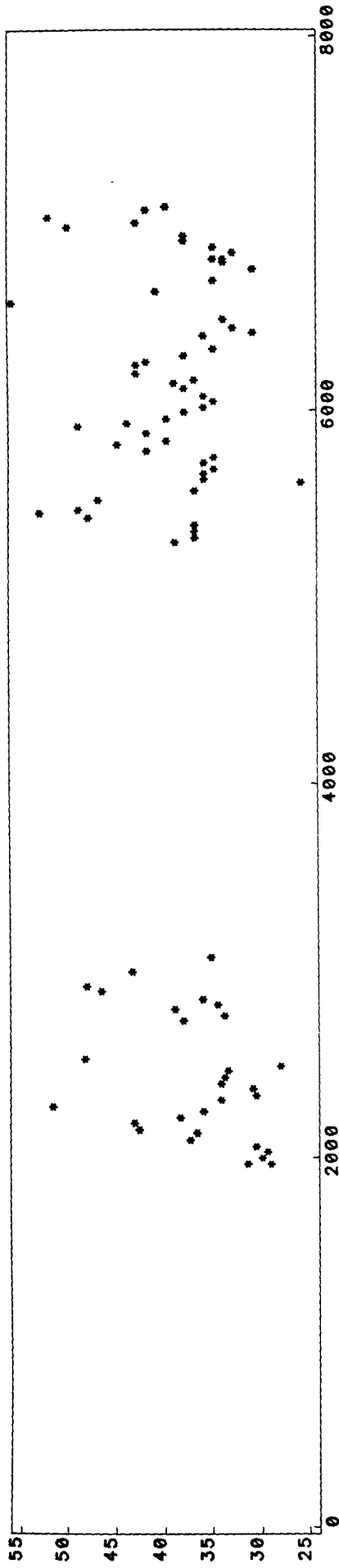


River no 12 conductivity

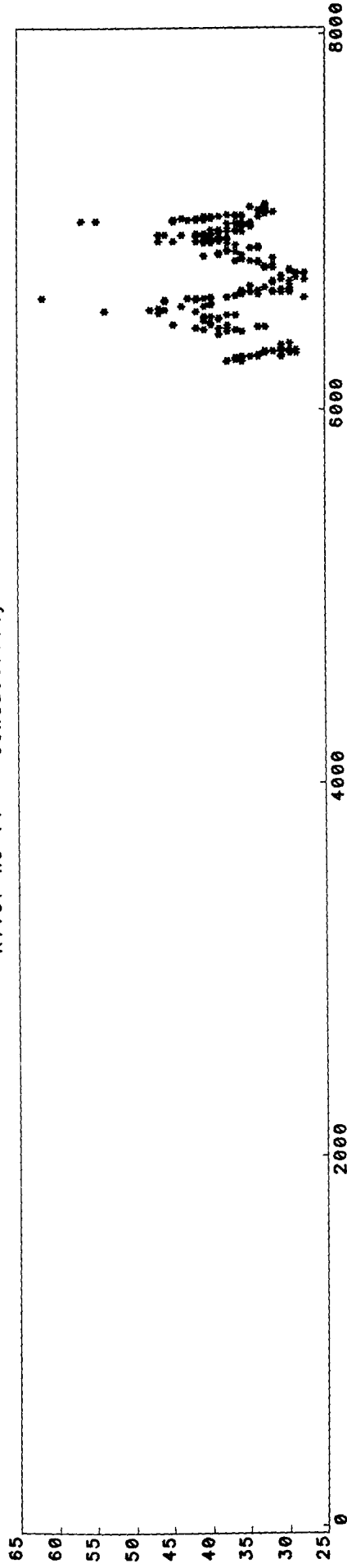




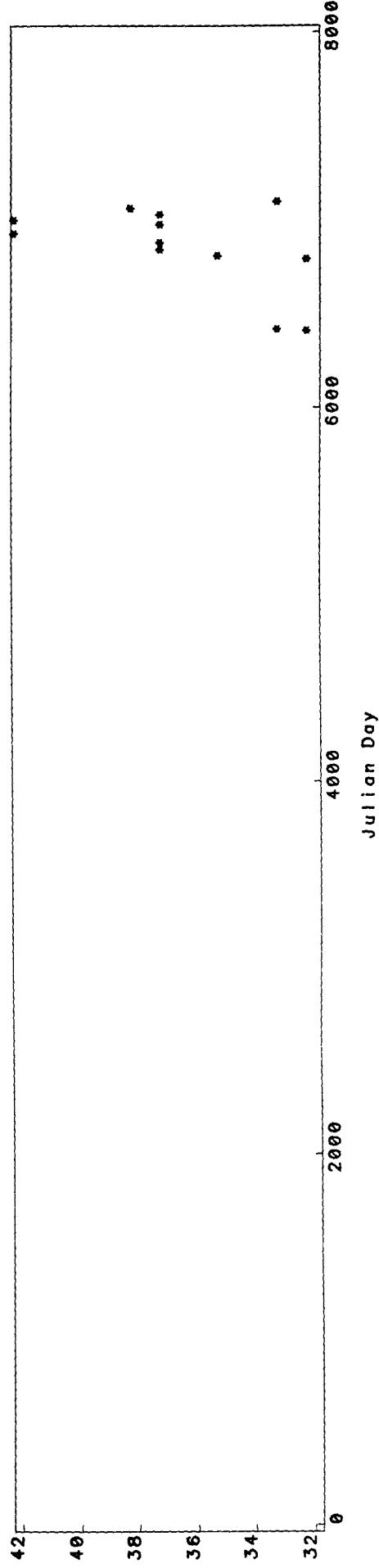
River no 13 conductivity

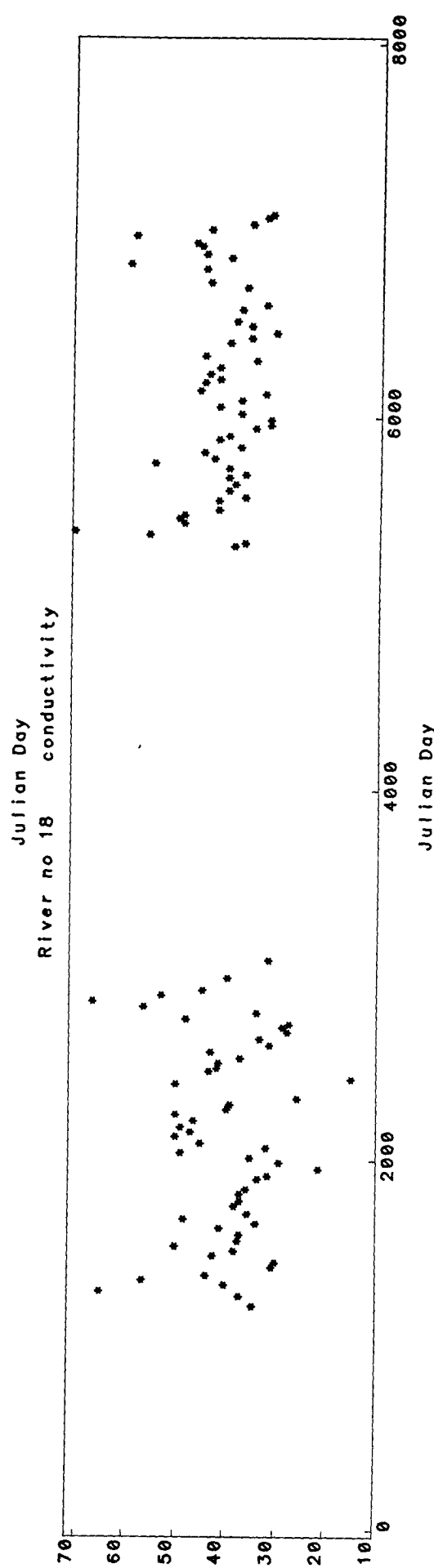
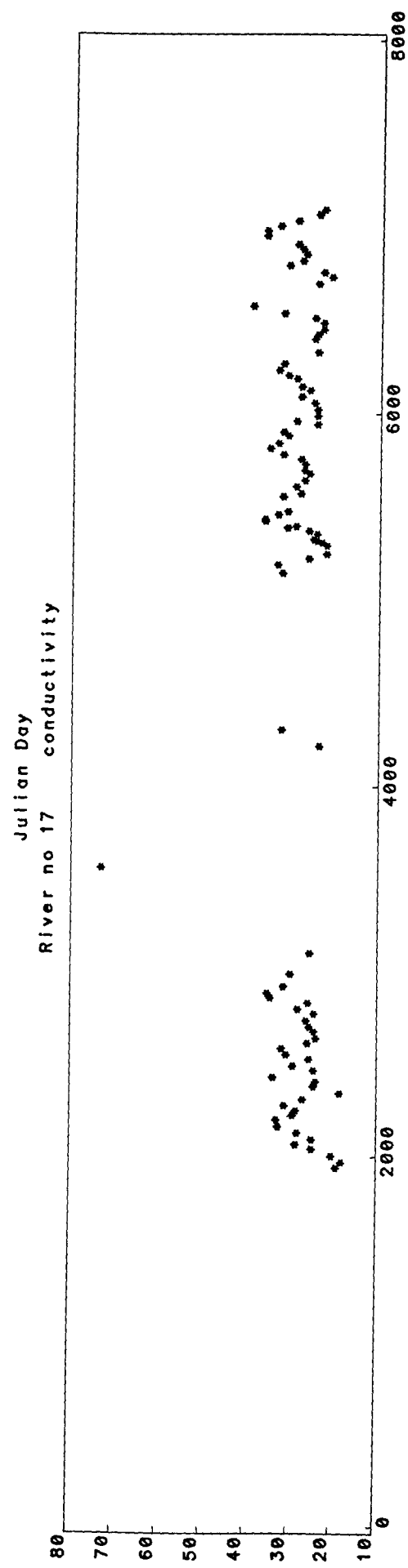
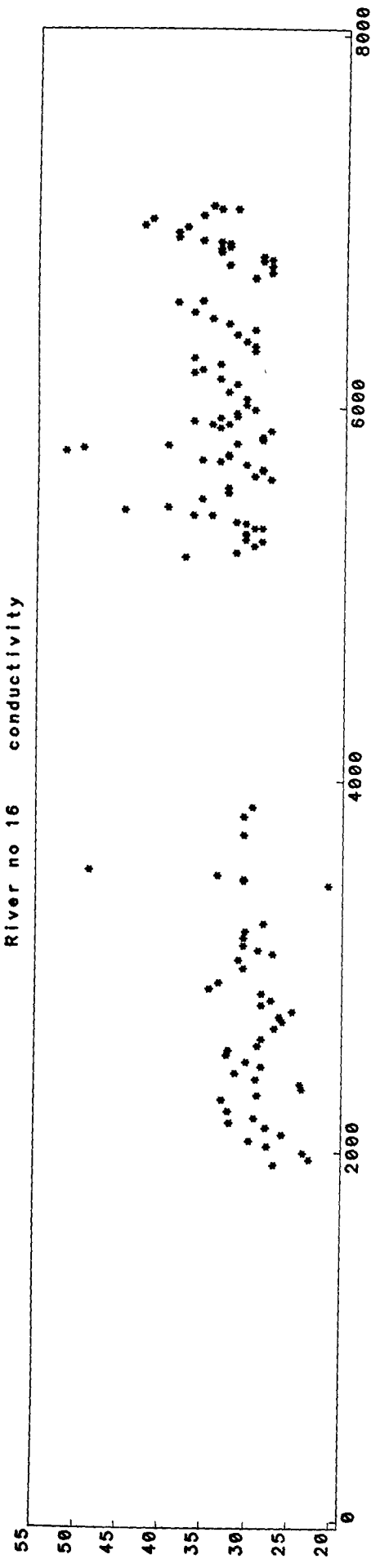


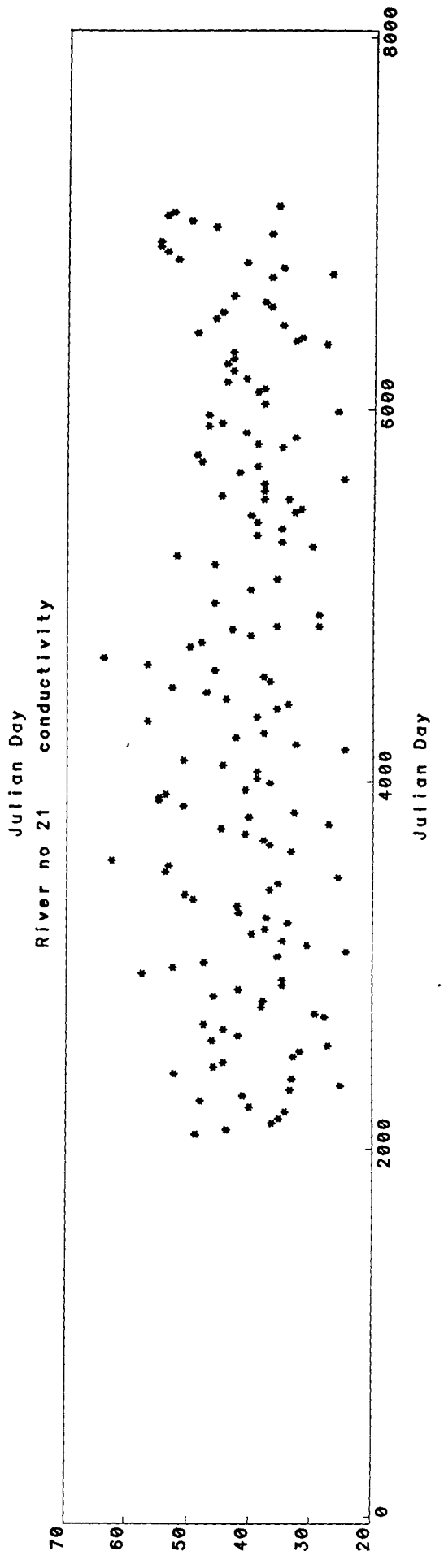
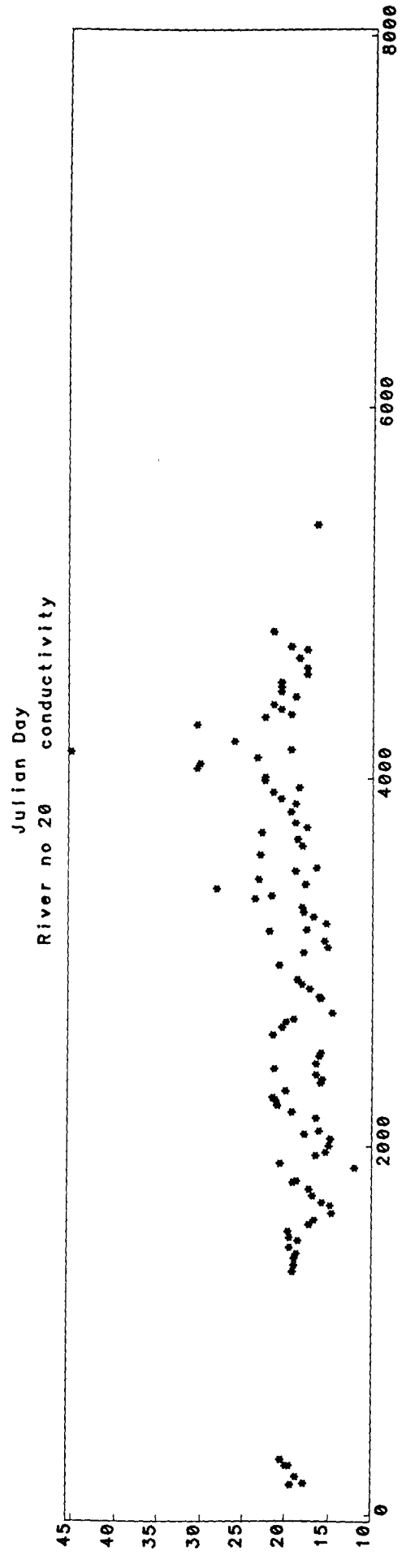
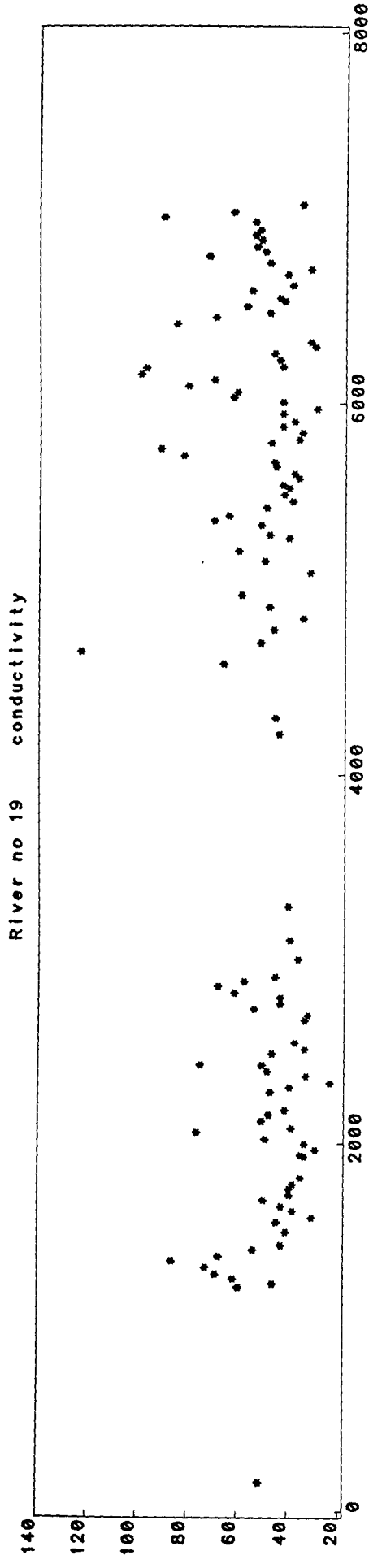
River no 14 conductivity

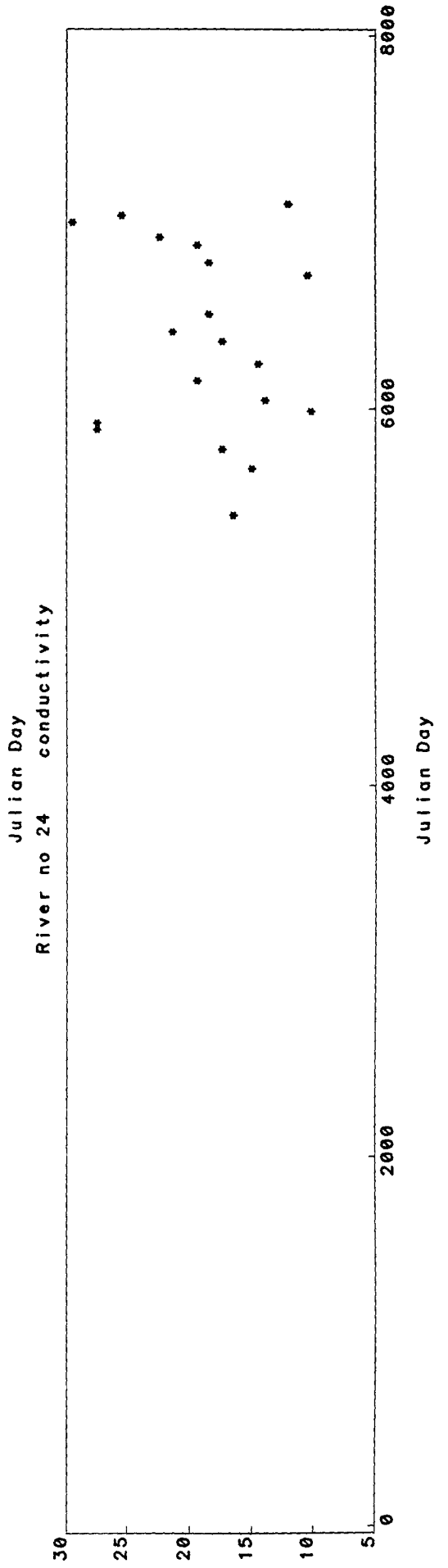
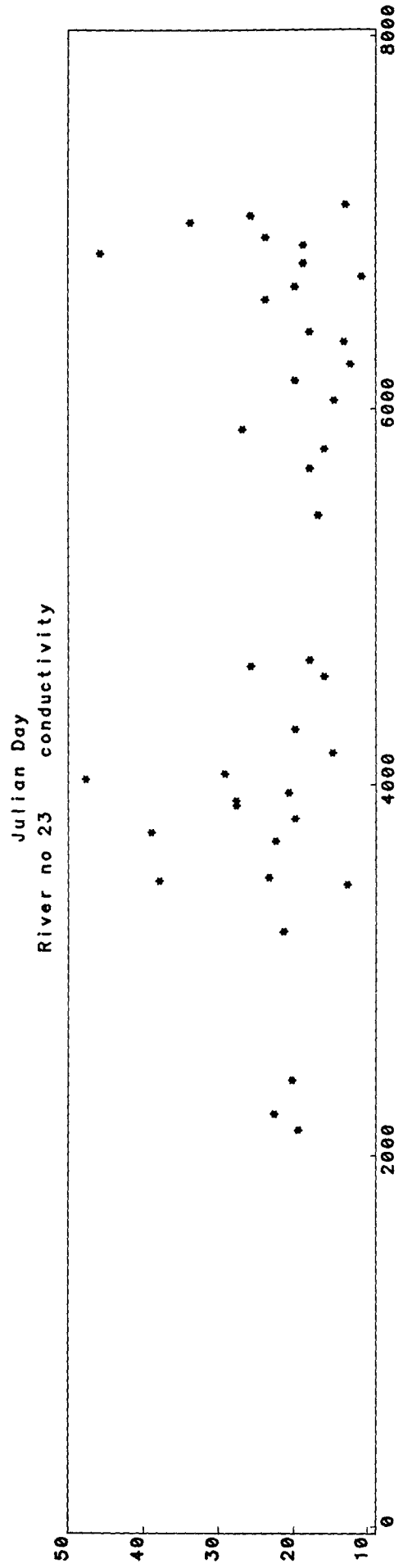
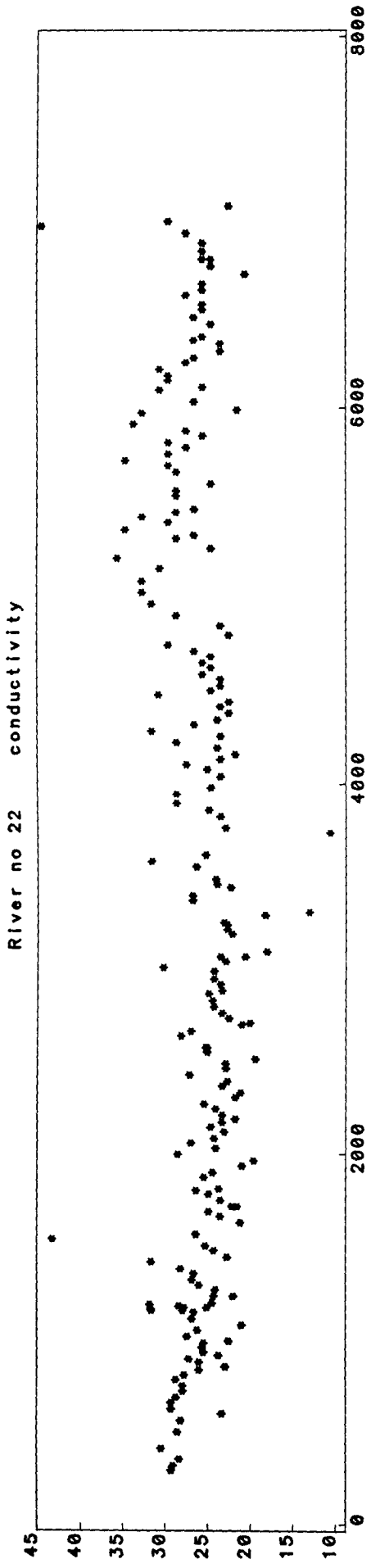


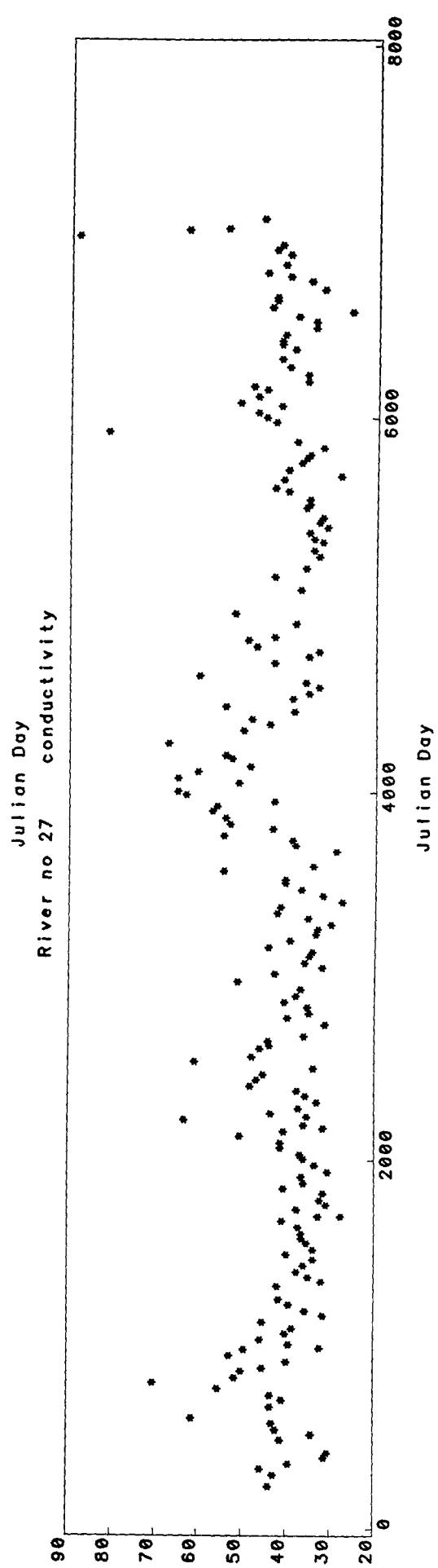
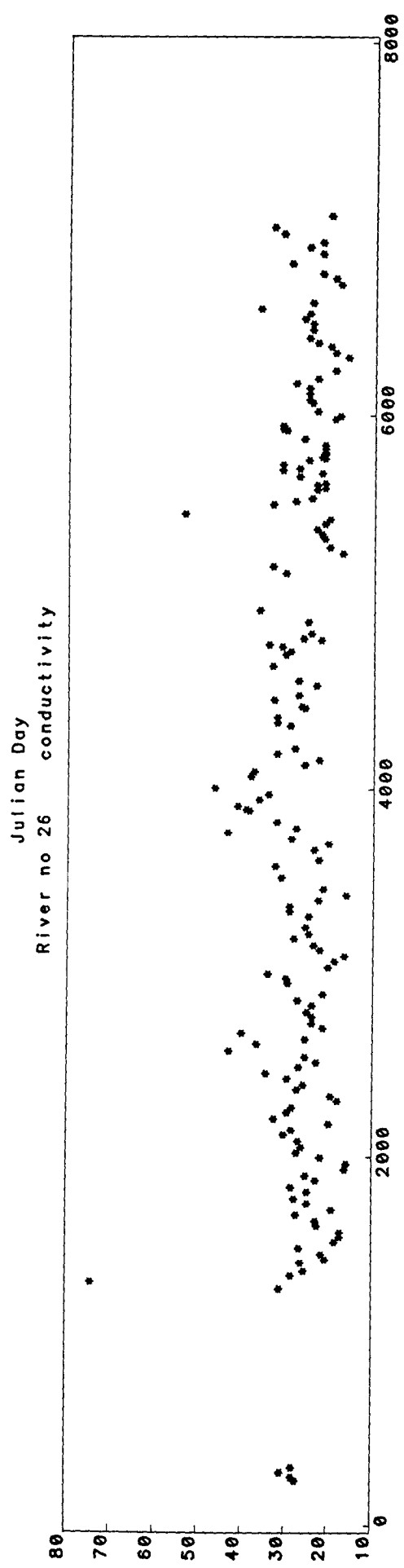
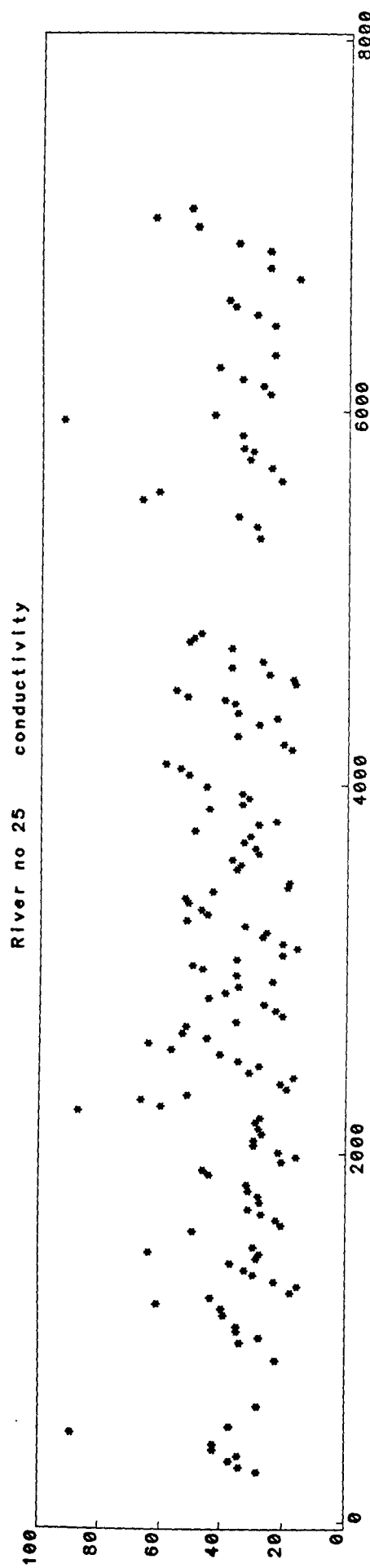
River no 15 conductivity

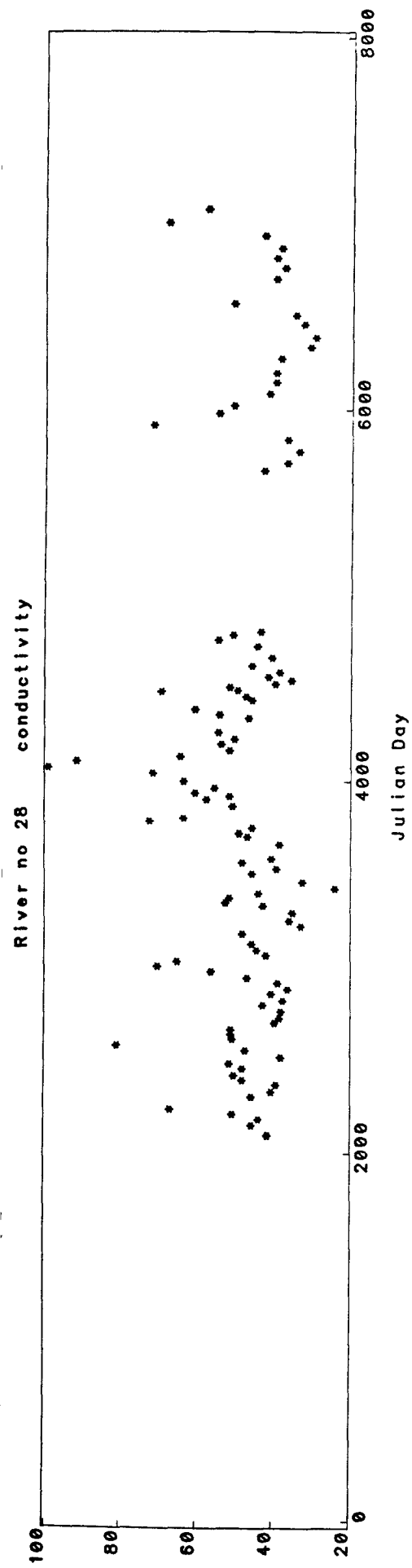






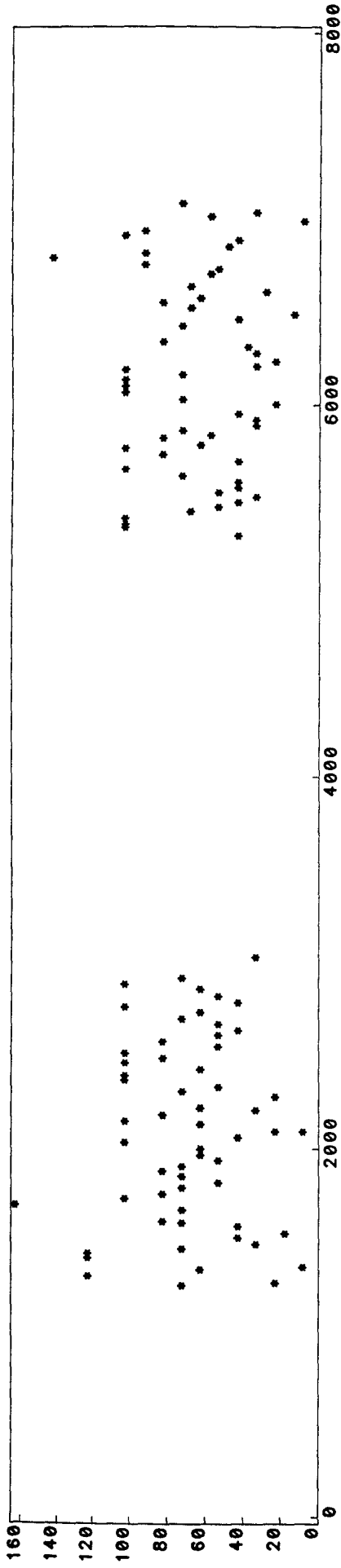




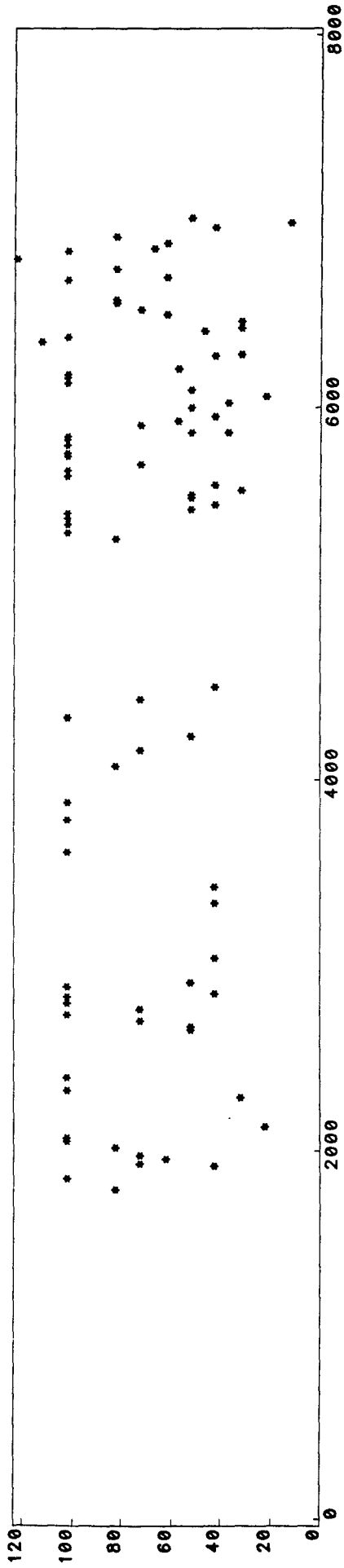


Appendix 7. Scatter plots of colour for the study rivers.

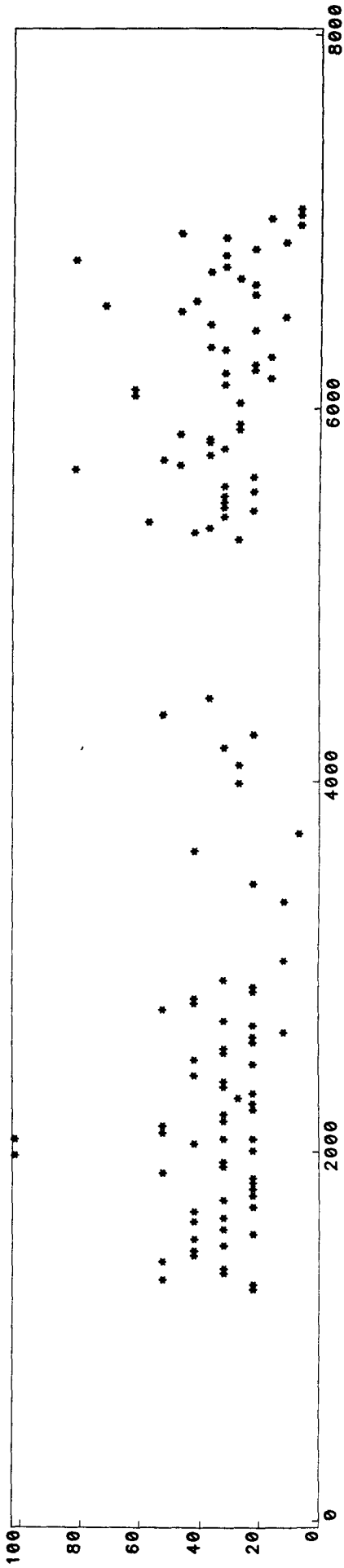
River no 1 colour



Julian Day  
River no 2 colour

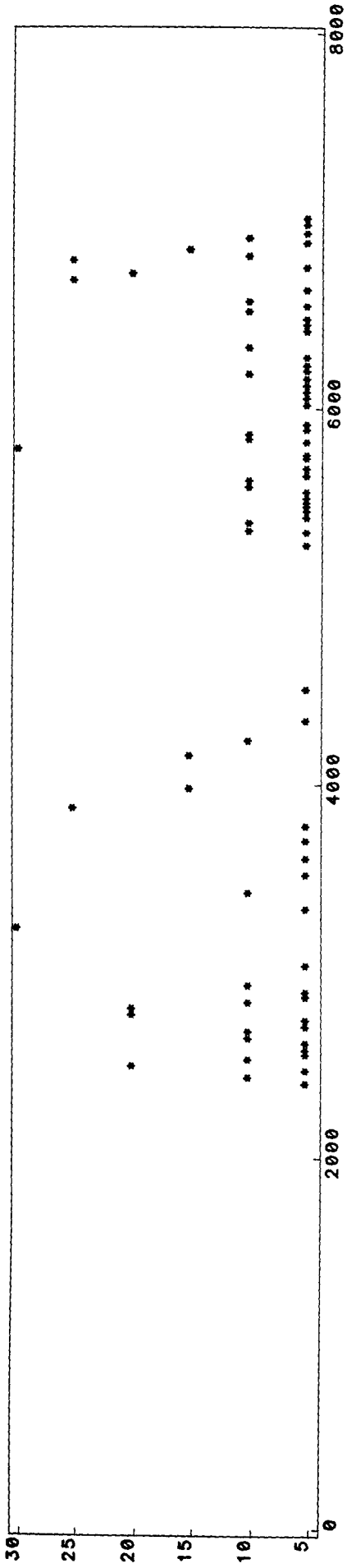


Julian Day  
River no 3 colour

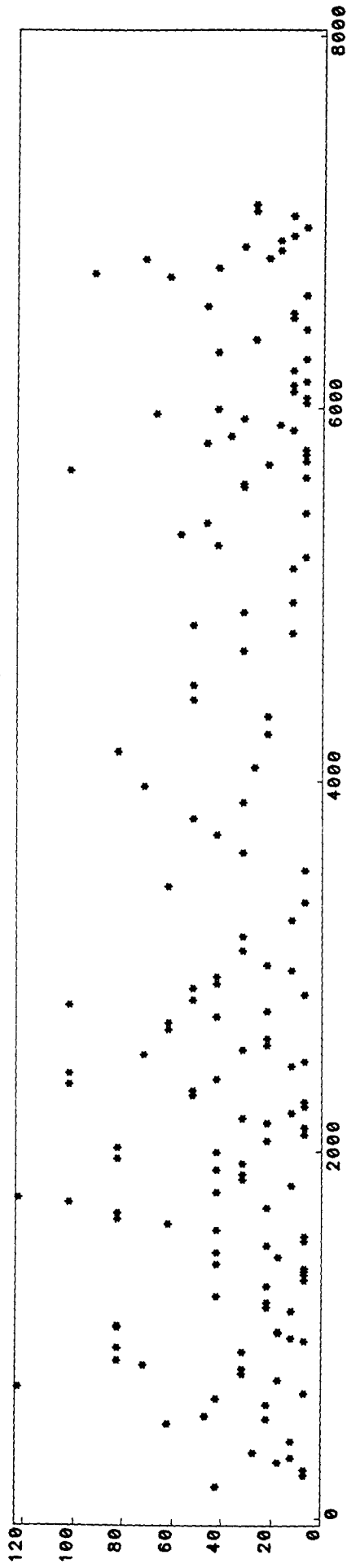




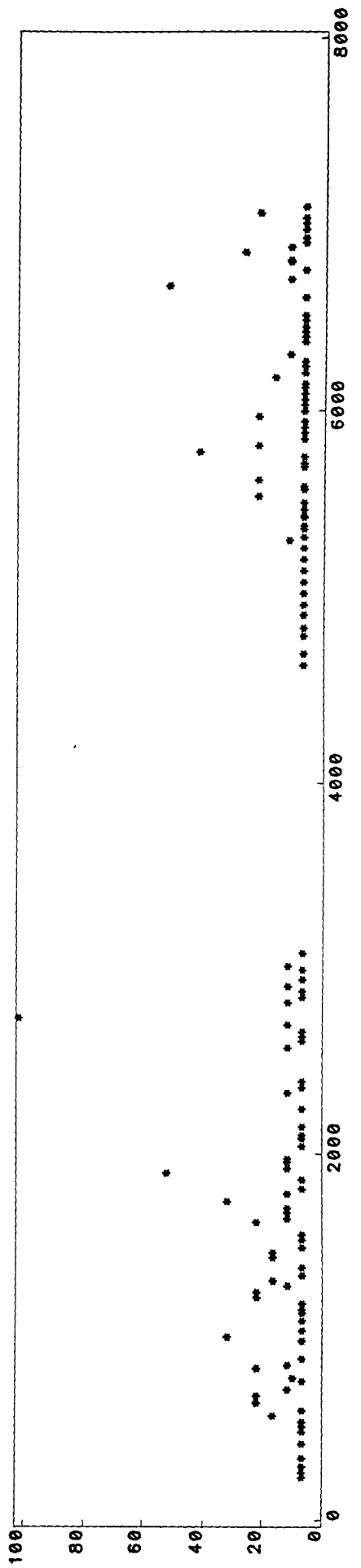
River no 4 colour



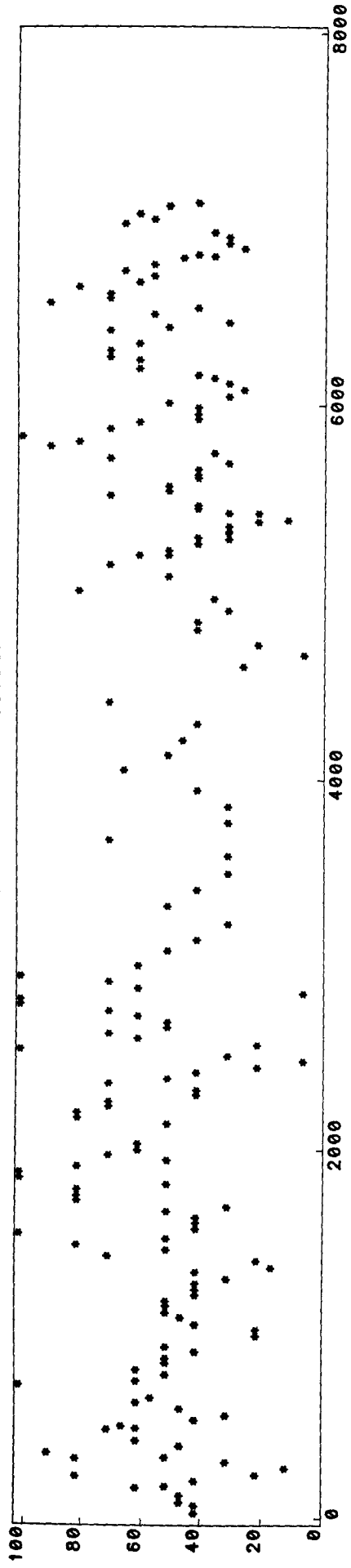
Julian Day  
River no 5 colour



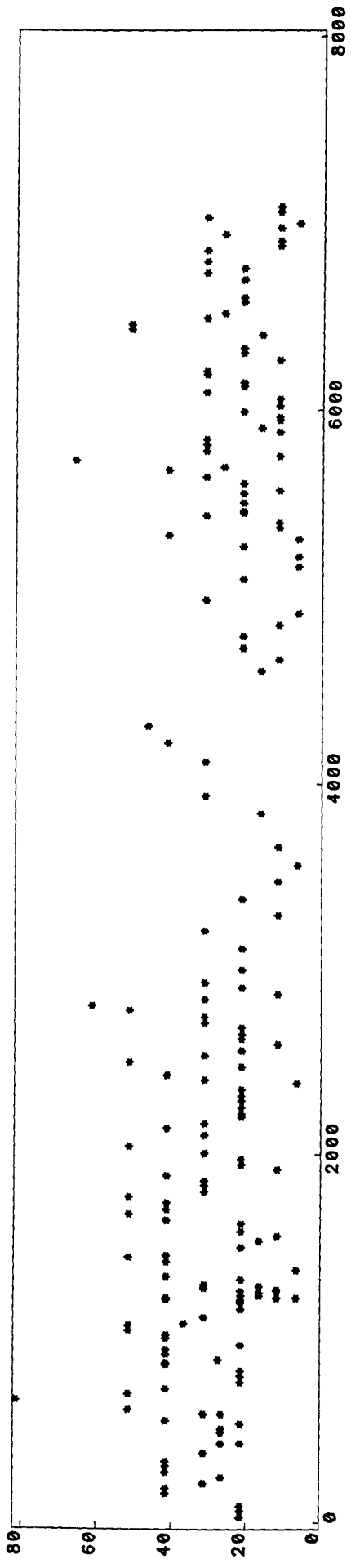
Julian Day  
River no 6 colour



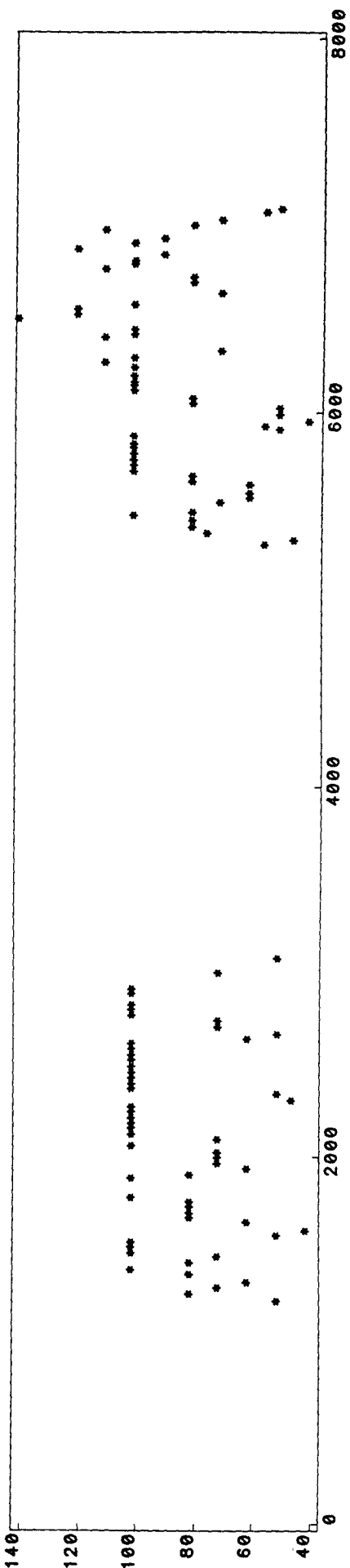
River no 7 colour



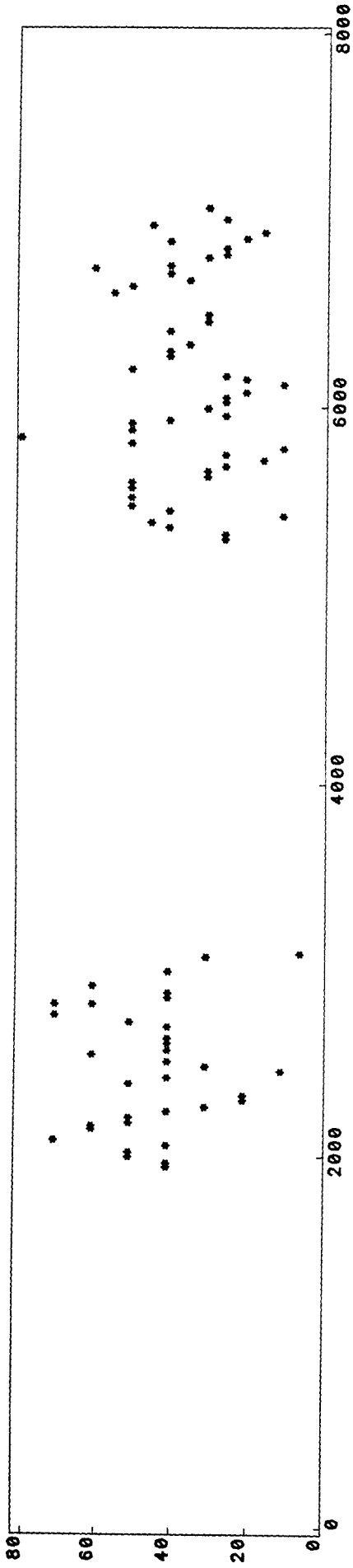
River no 8 colour



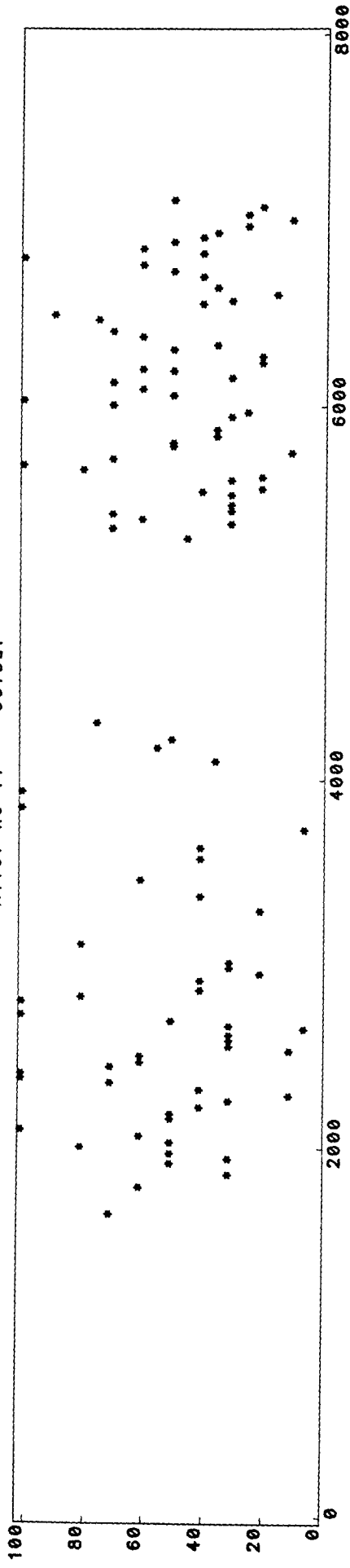
River no 9 colour



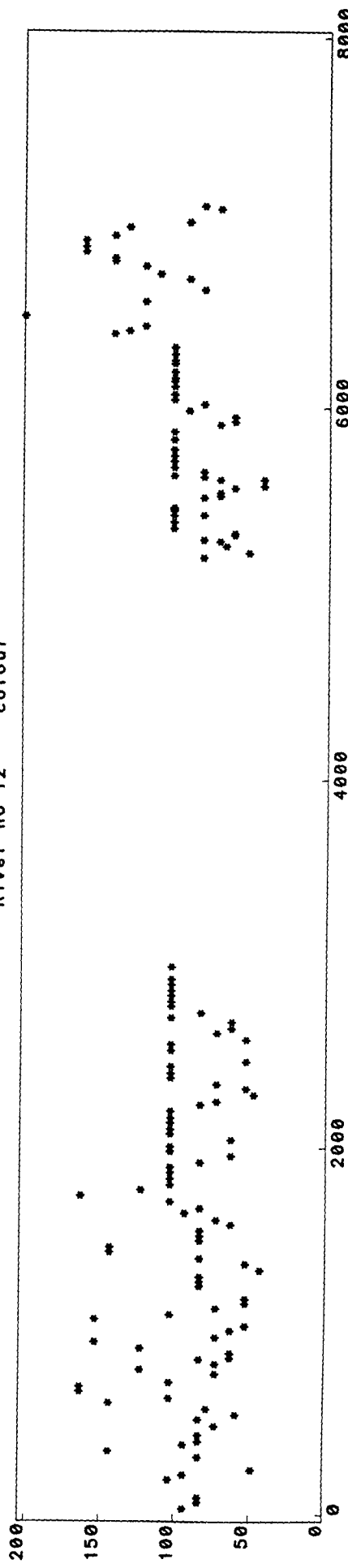
River no 10 colour



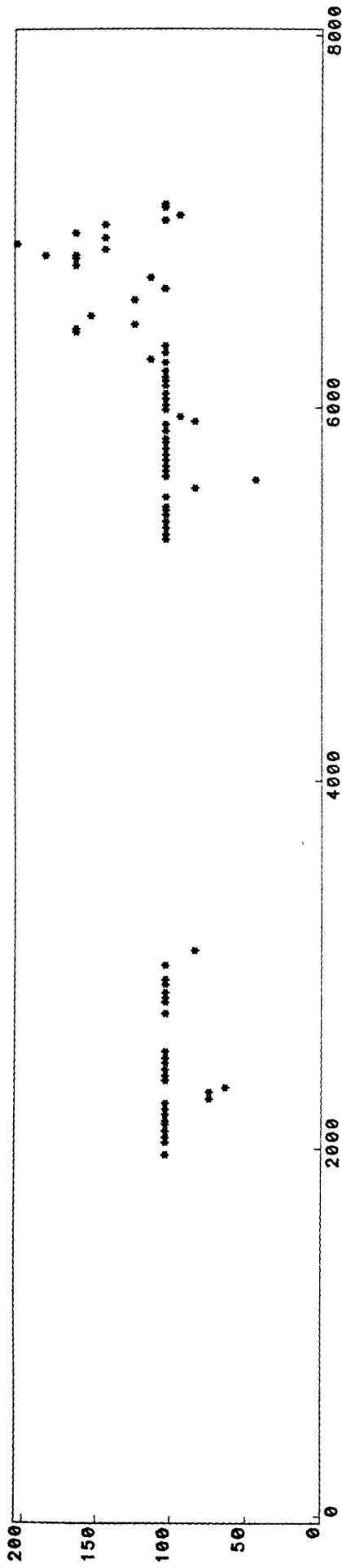
River no 11 colour



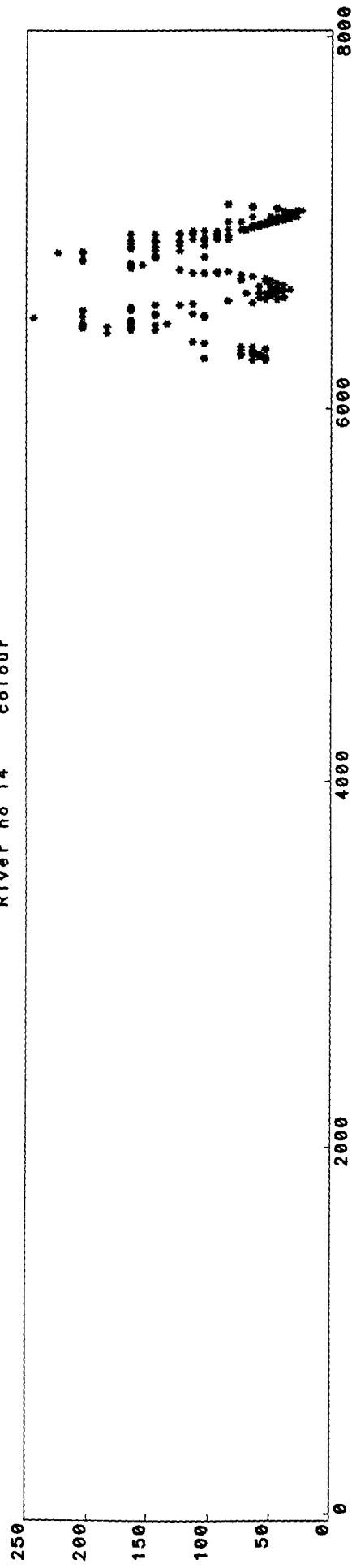
River no 12 colour



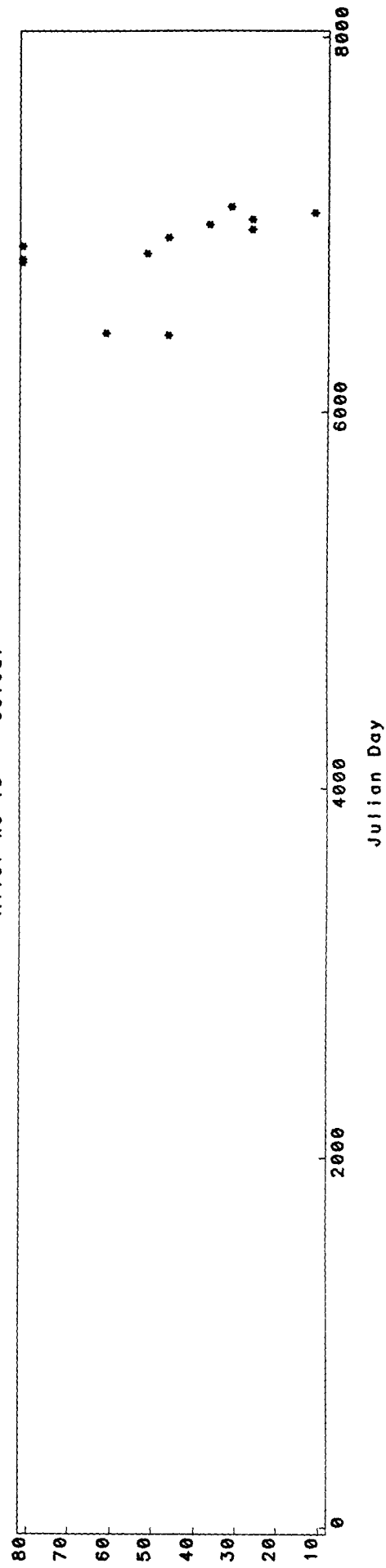
River no 13 colour



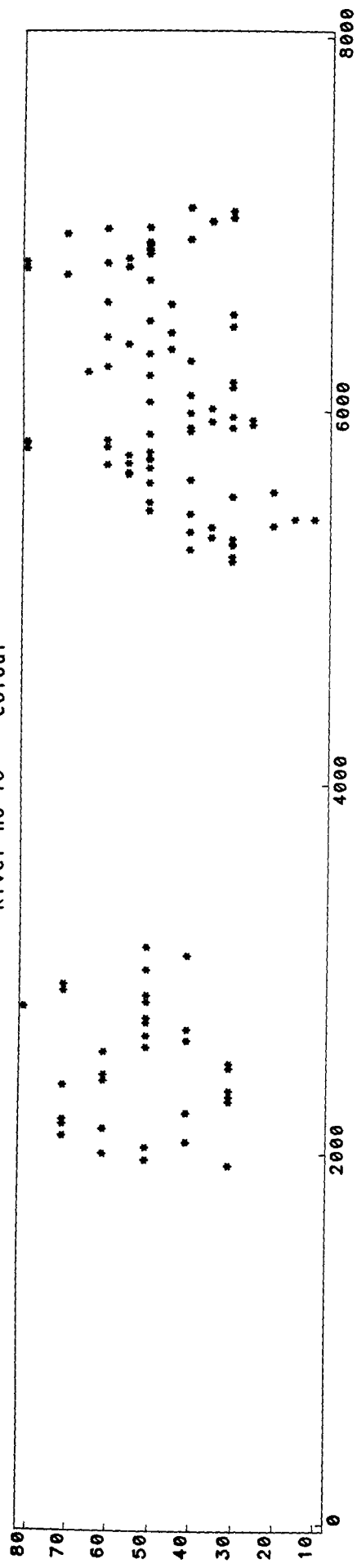
River no 14 colour



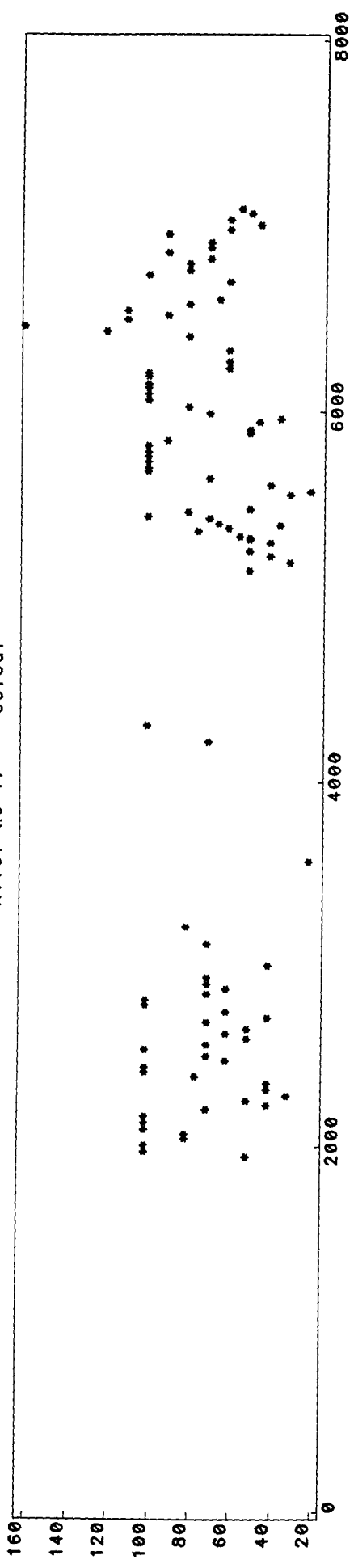
River no 15 colour



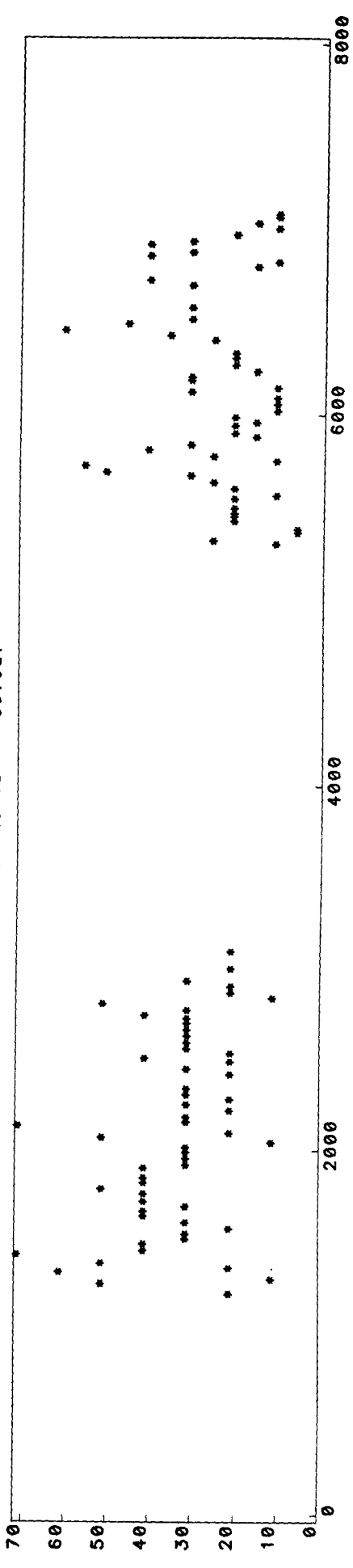
River no 16 colour



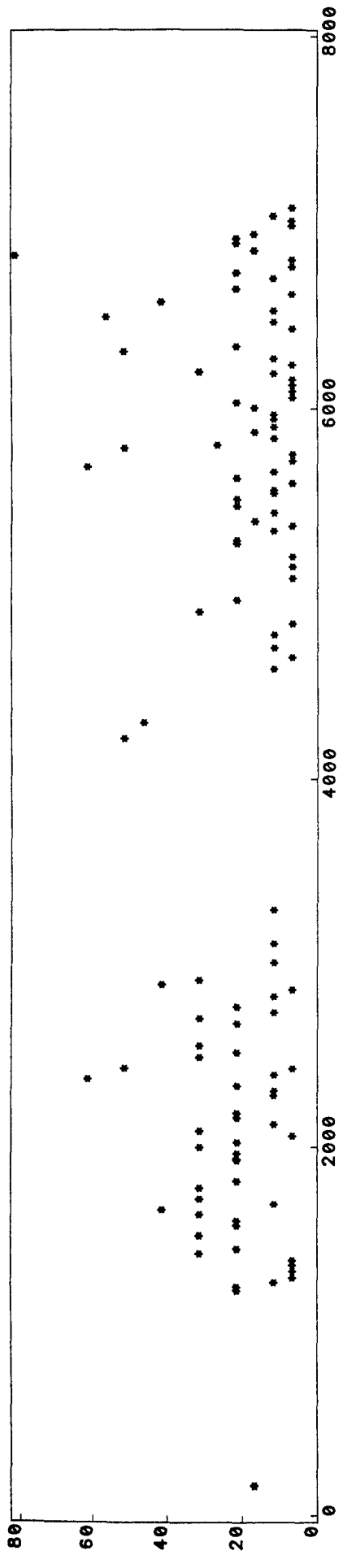
River no 17 colour



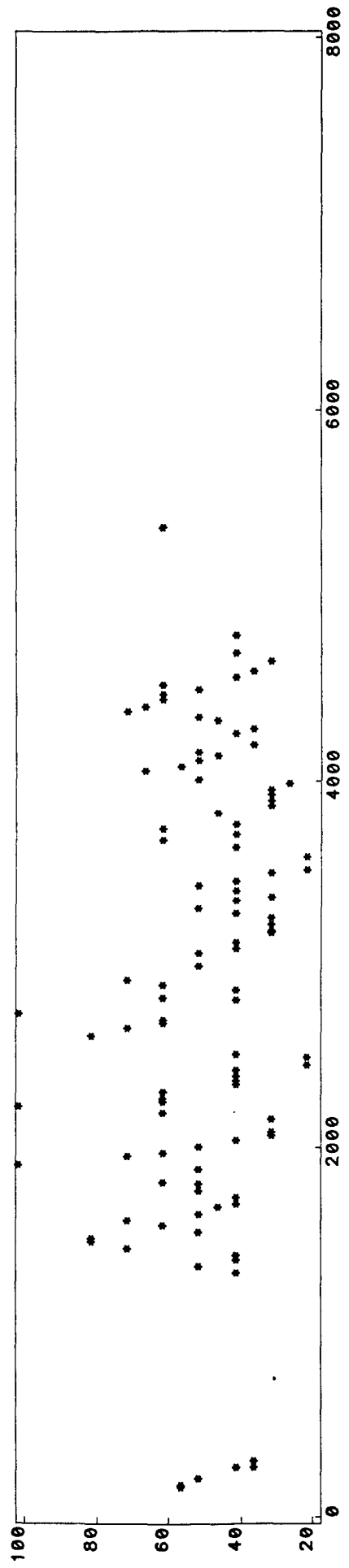
River no 18 colour



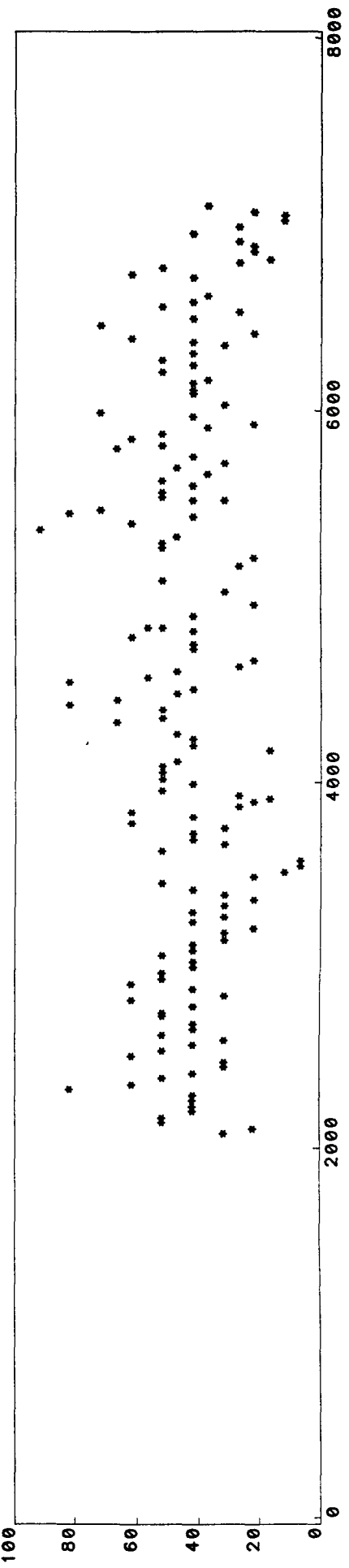
River no 19 colour



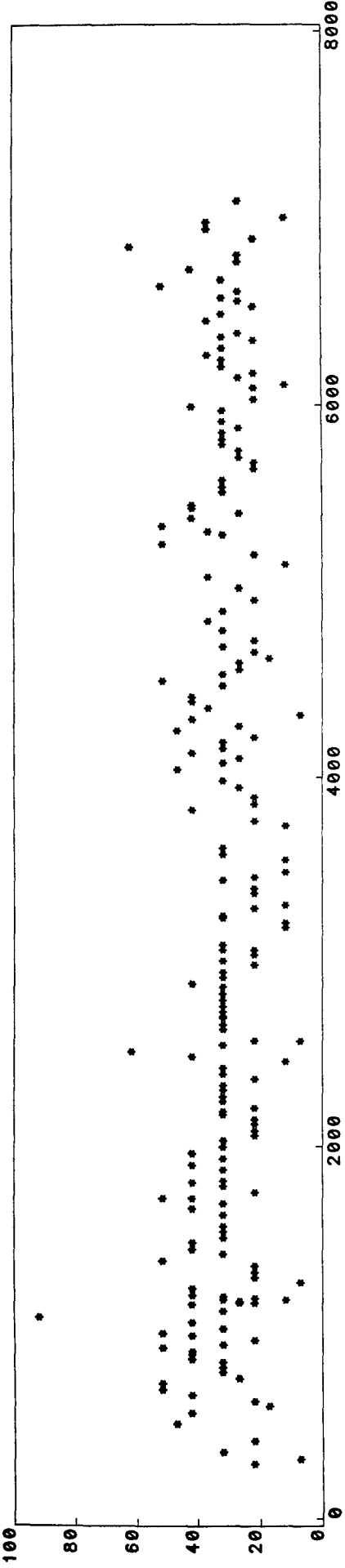
River no 20 colour



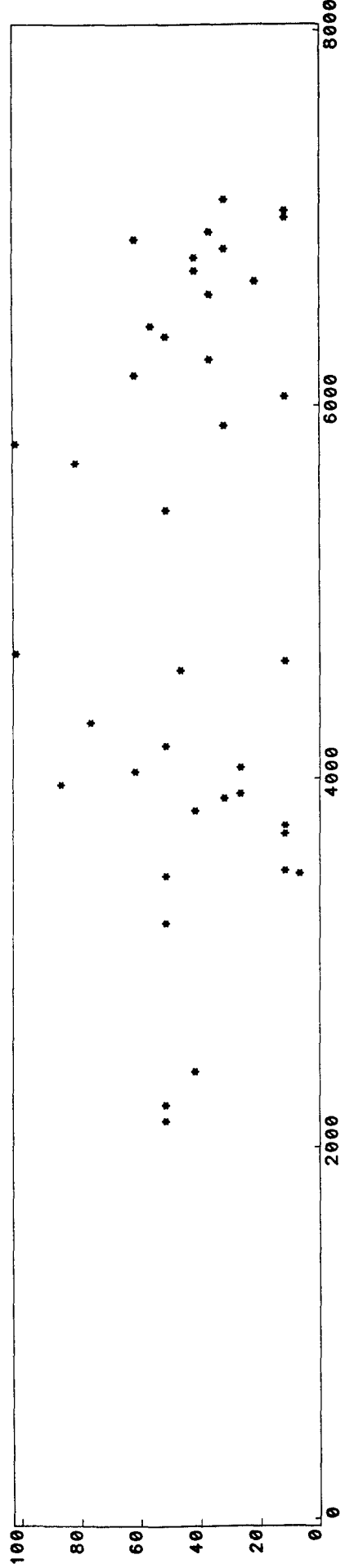
River no 21 colour



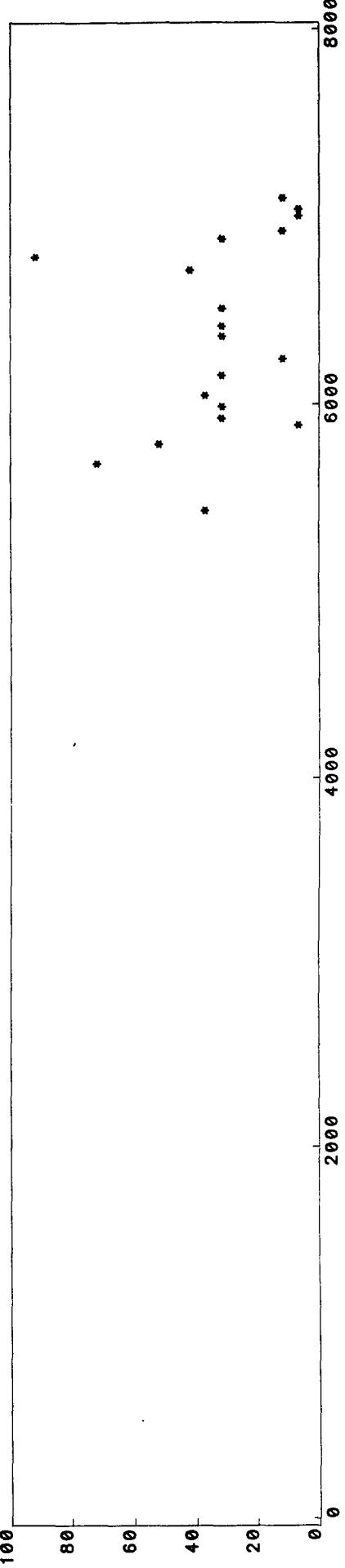
River no 22 colour



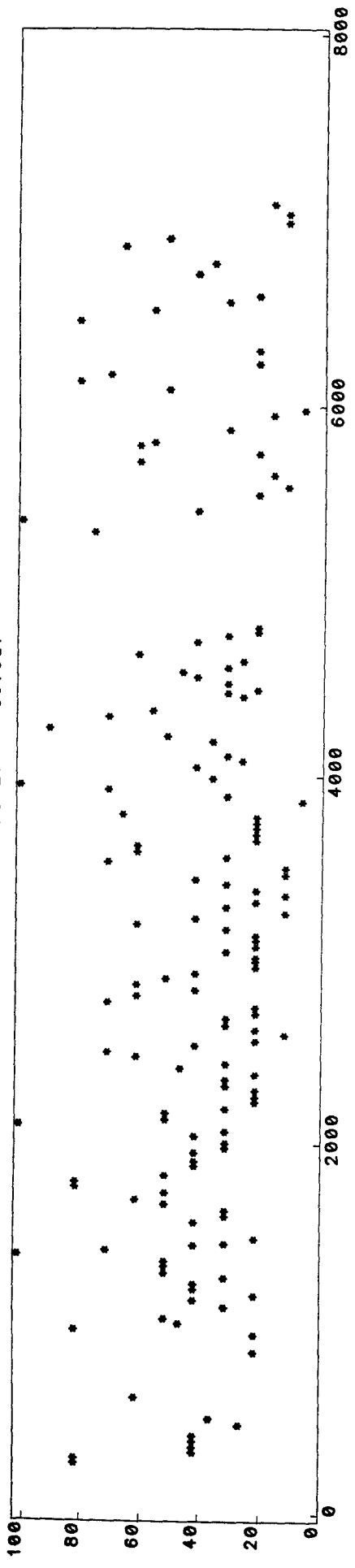
Julian Day  
River no 23 colour



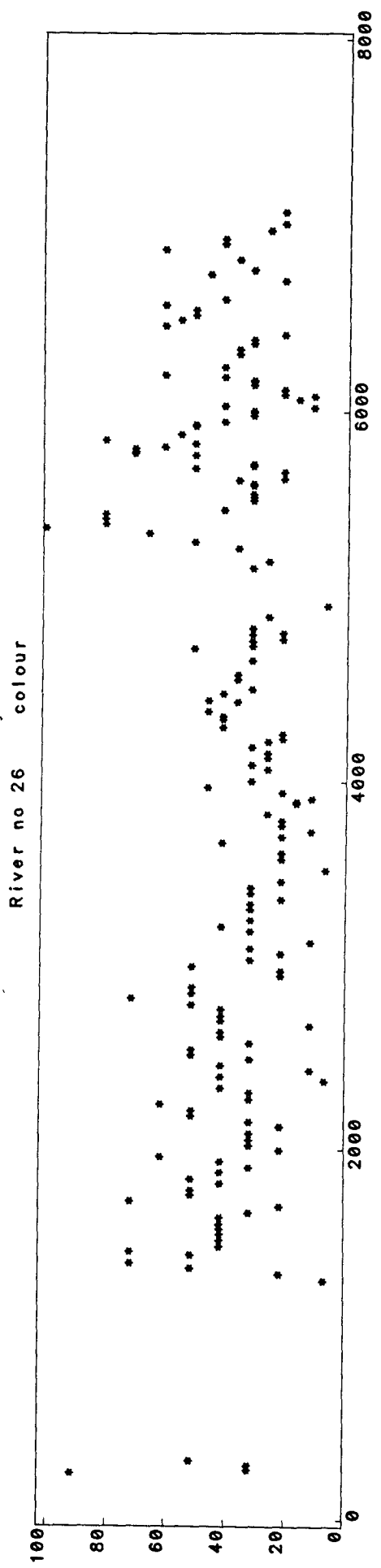
Julian Day  
River no 24 colour



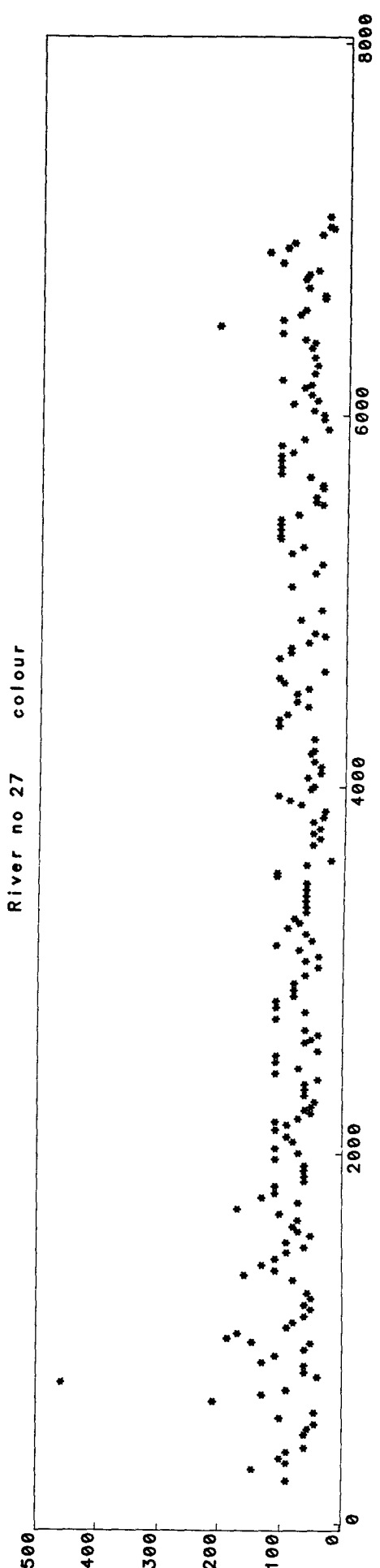
River no 25 colour



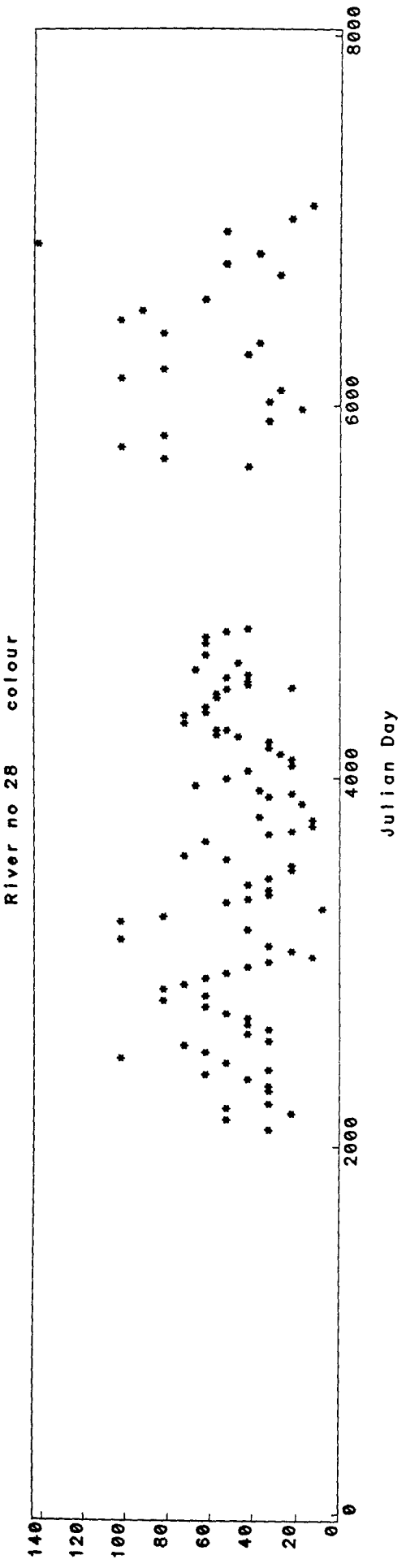
River no 26 colour



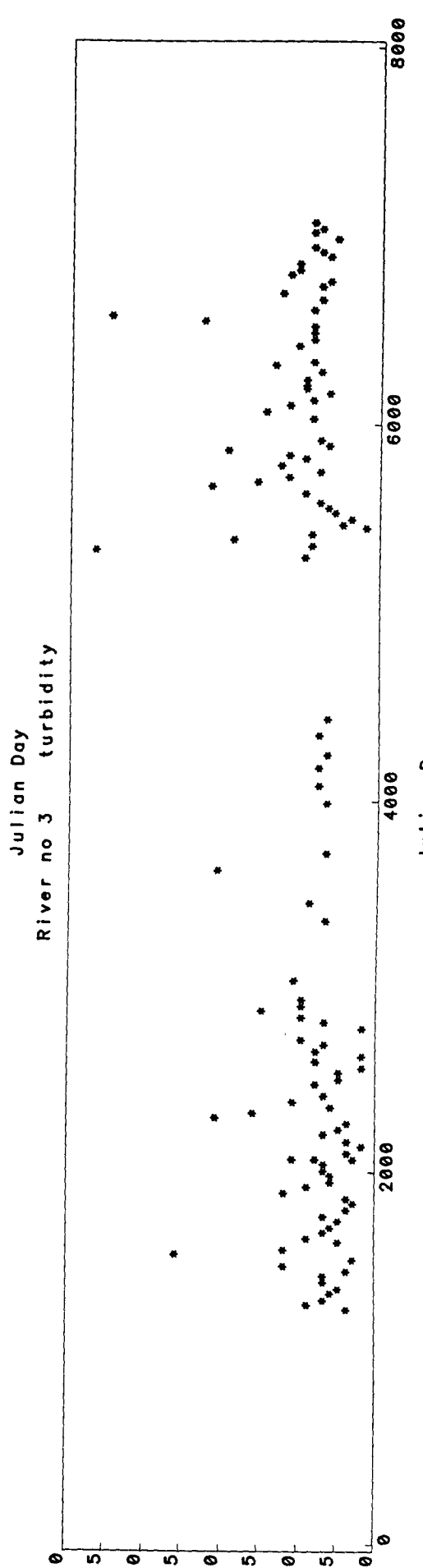
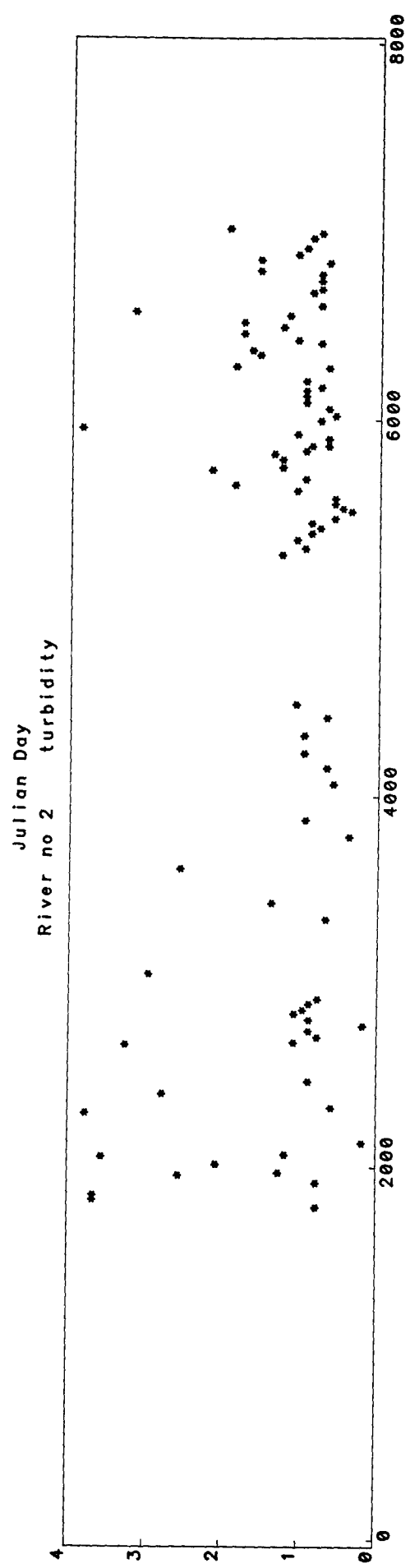
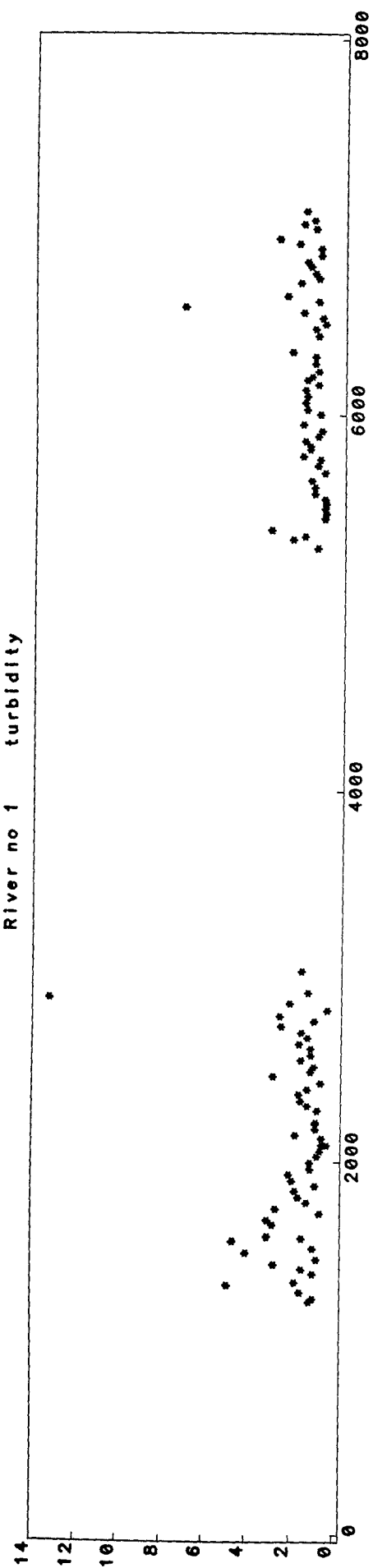
River no 27 colour

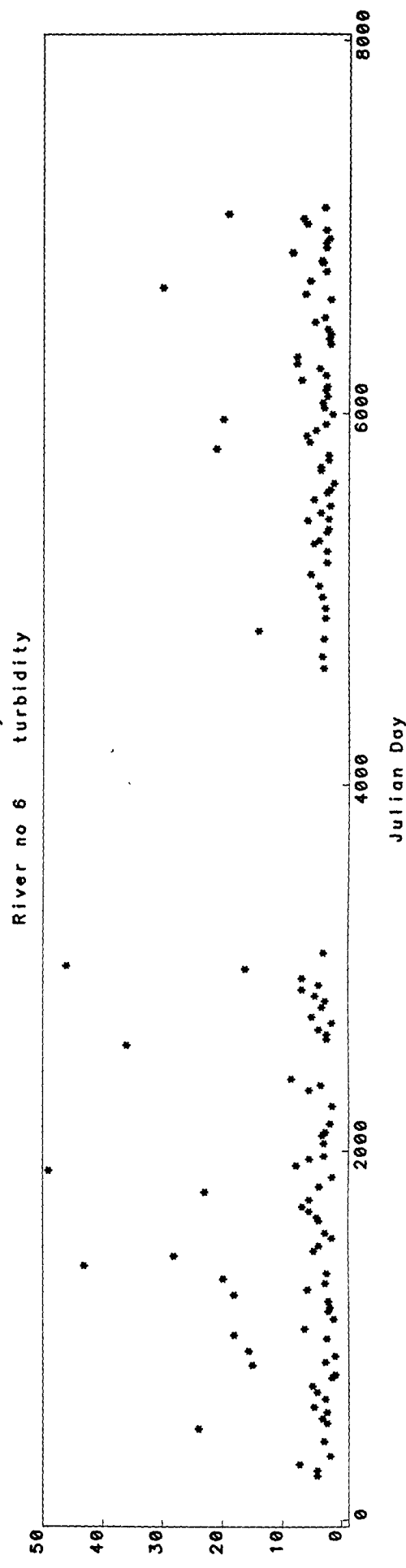
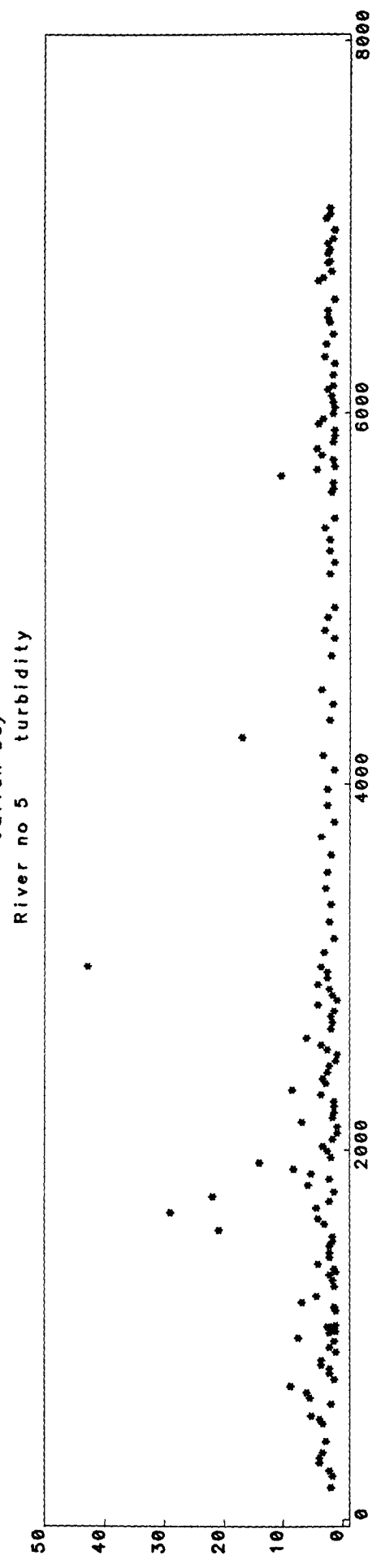
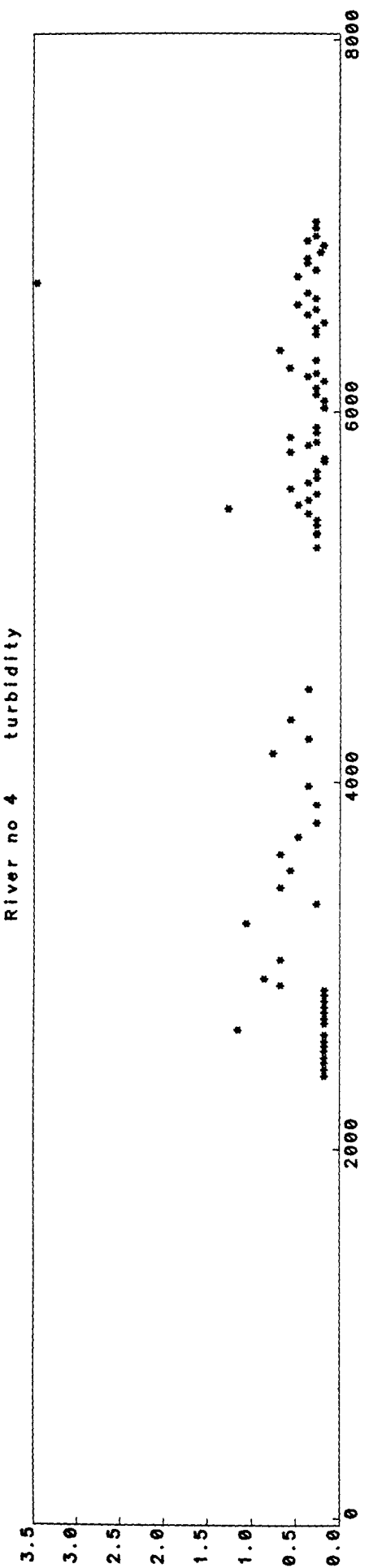




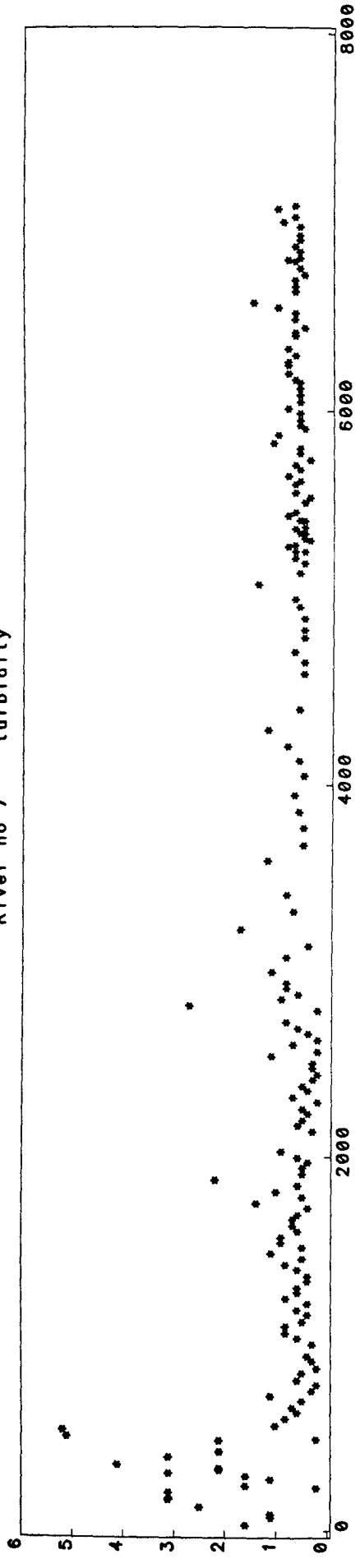


Appendix 8. Scatter plots of turbidity for the study rivers.

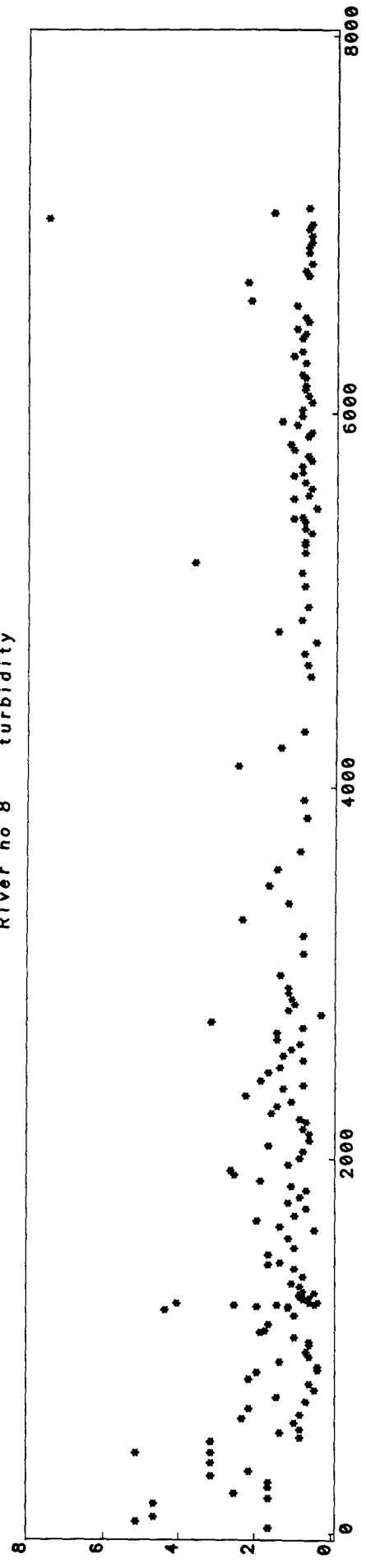




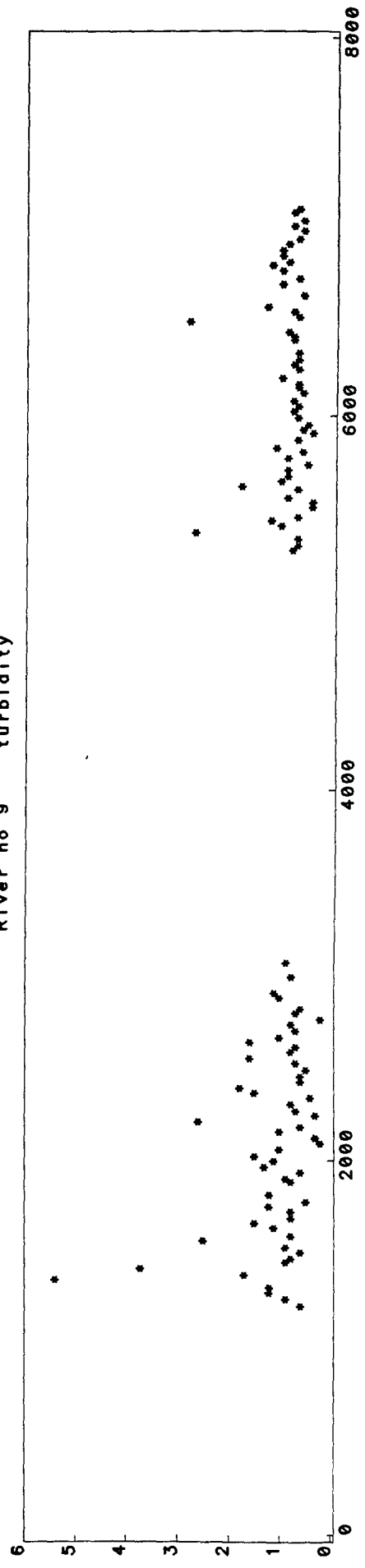
River no 7 turbidity

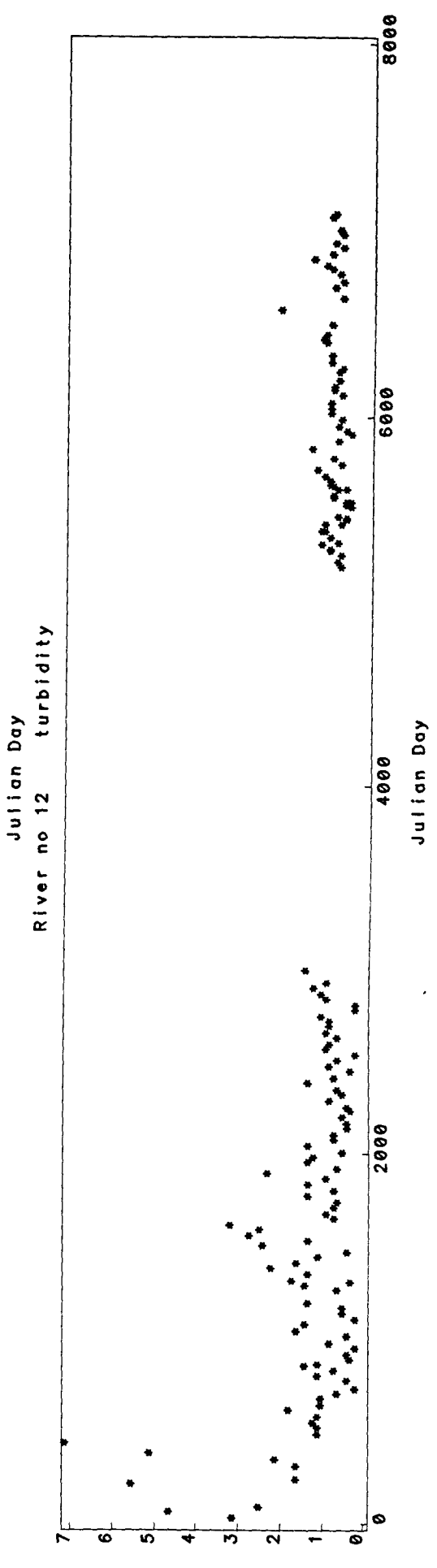
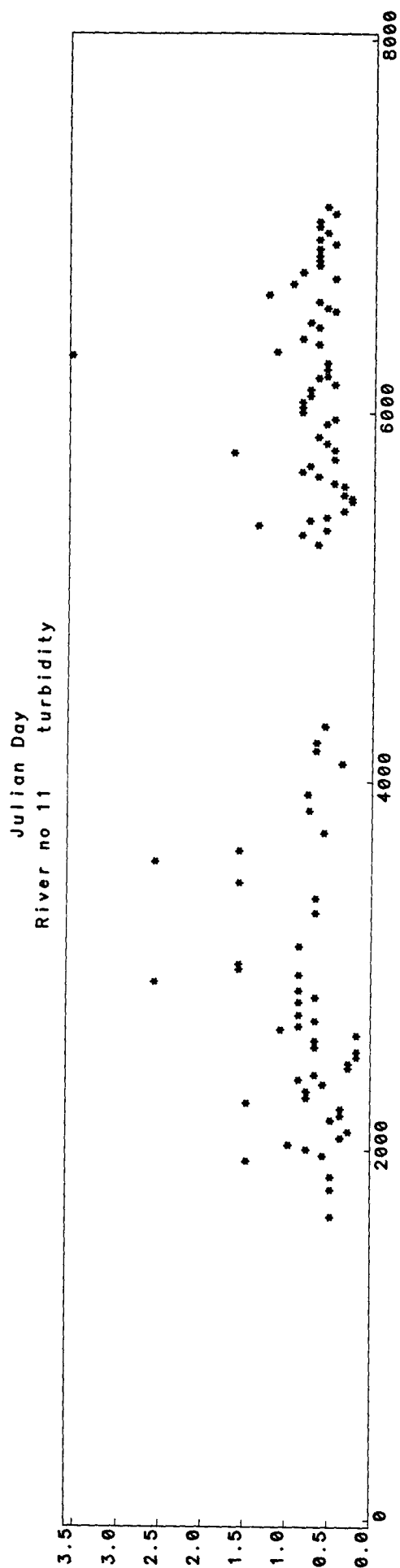
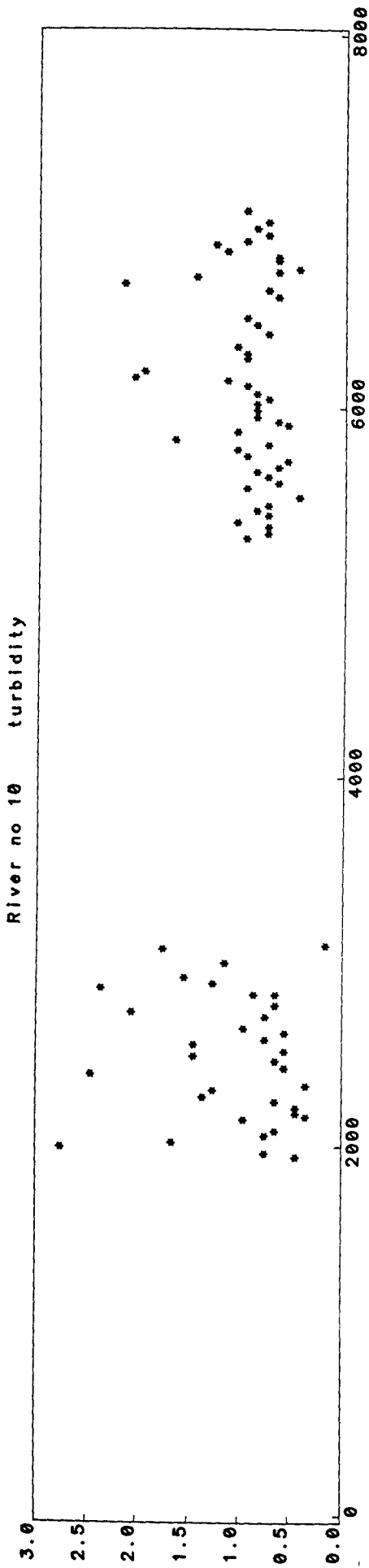


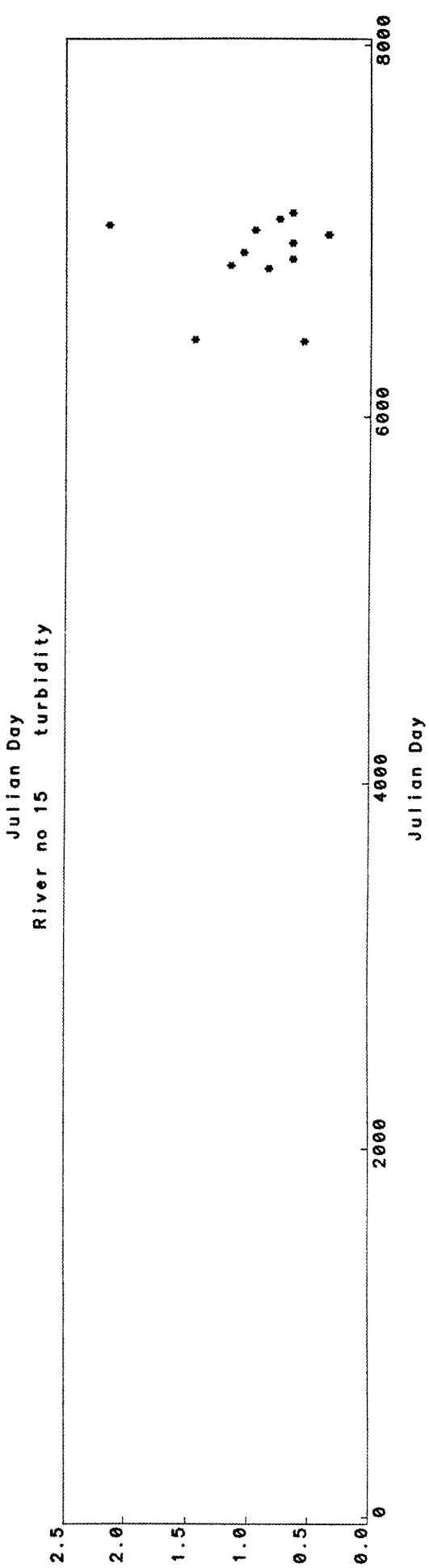
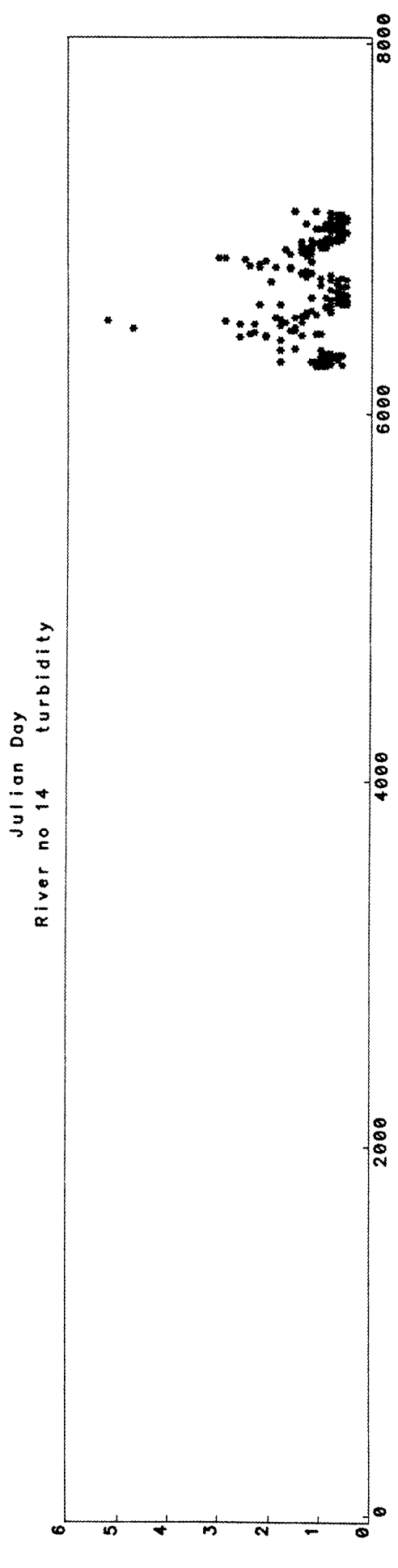
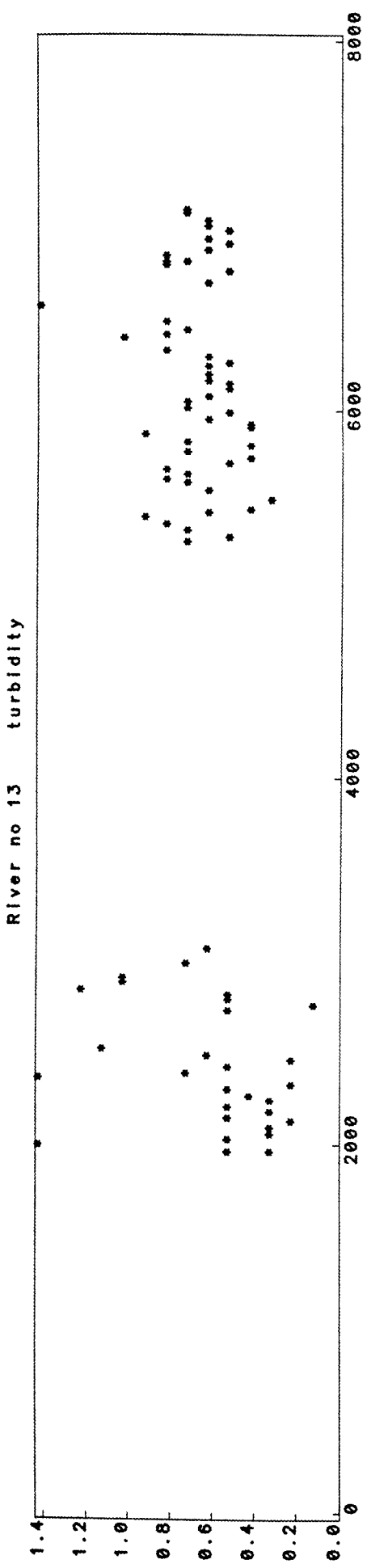
River no 8 turbidity



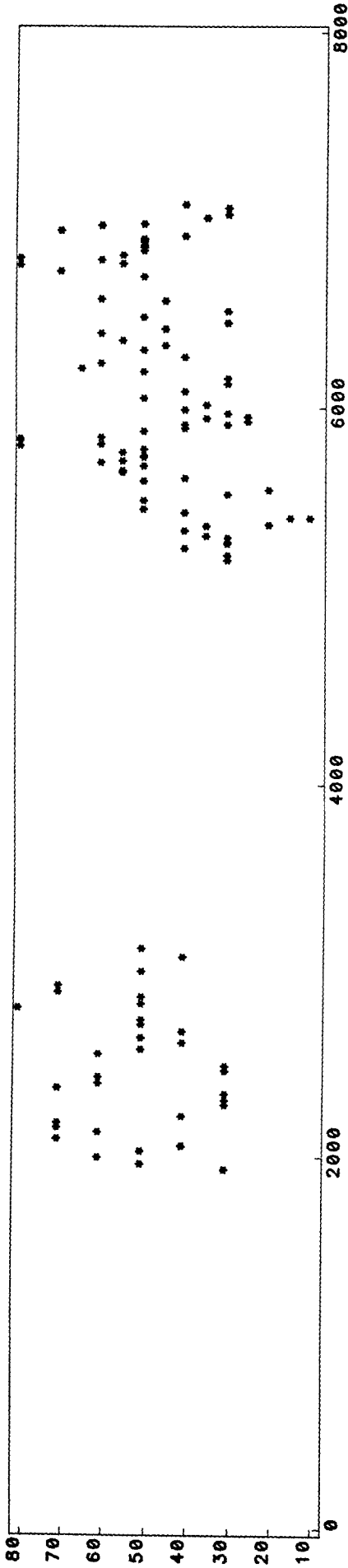
River no 9 turbidity



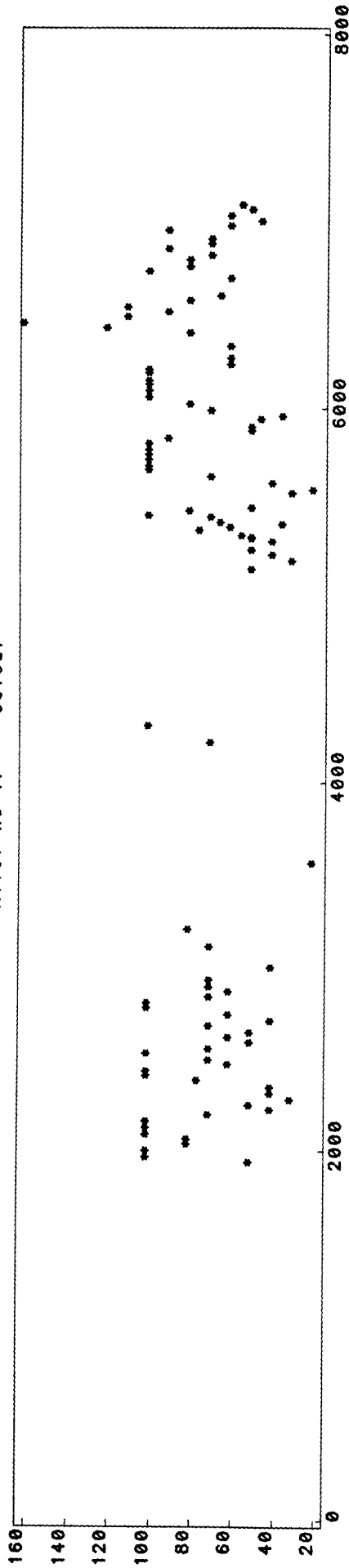




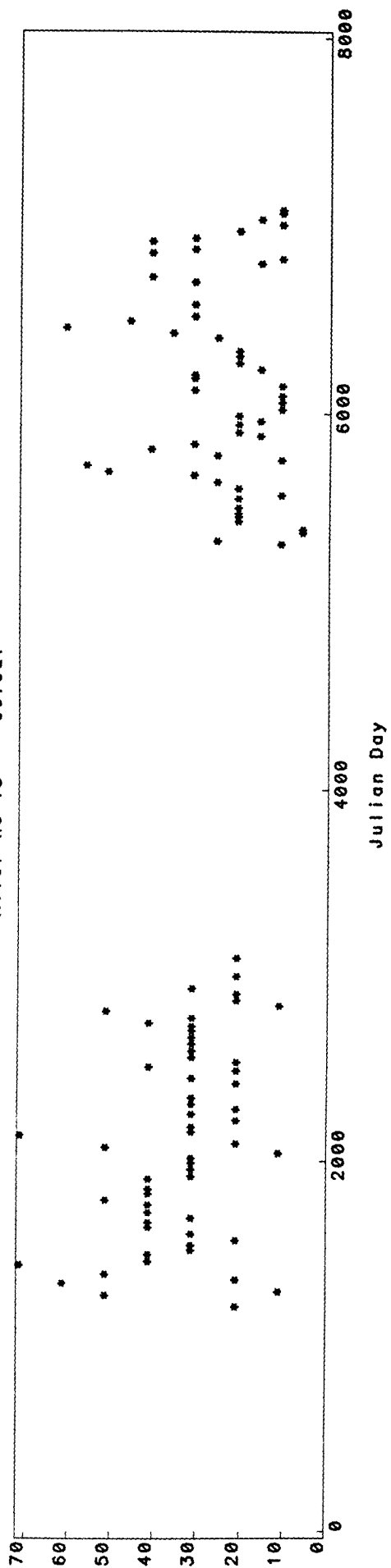
River no 16 colour



Julian Day  
River no 17 colour

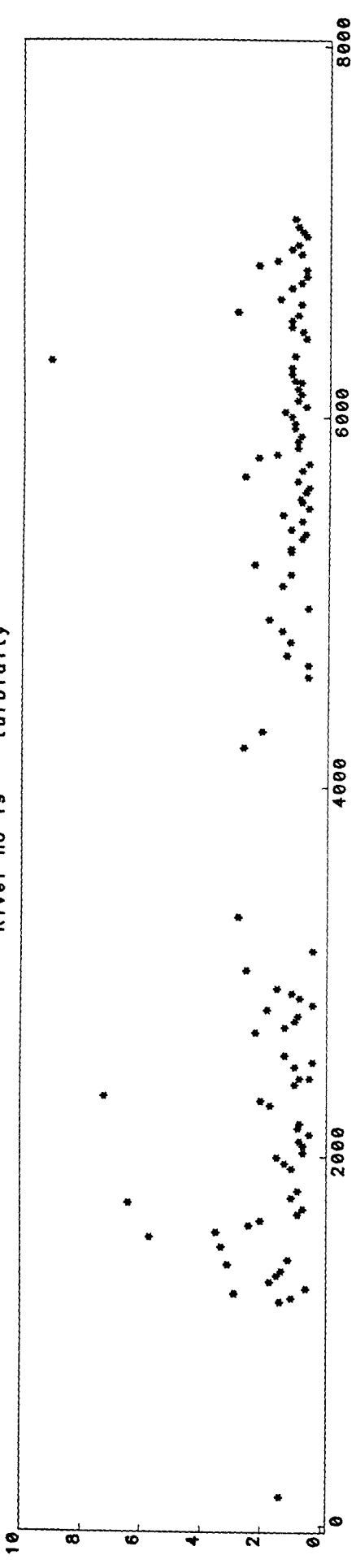


Julian Day  
River no 18 colour

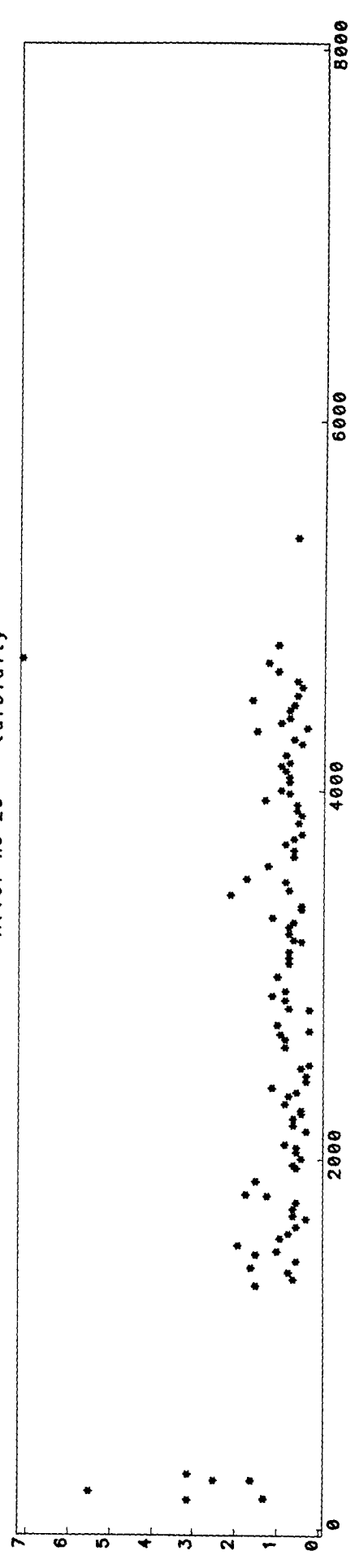




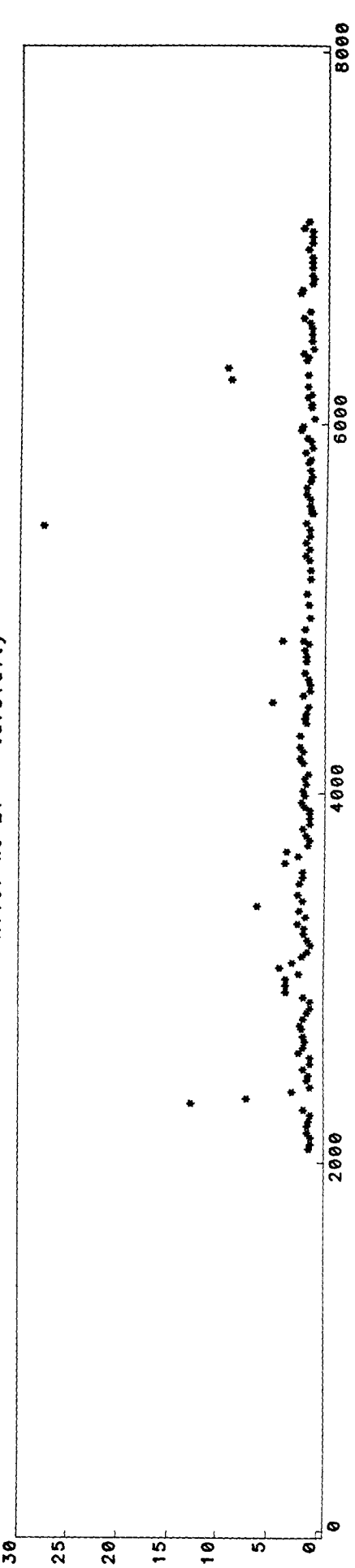
River no 19 turbidity



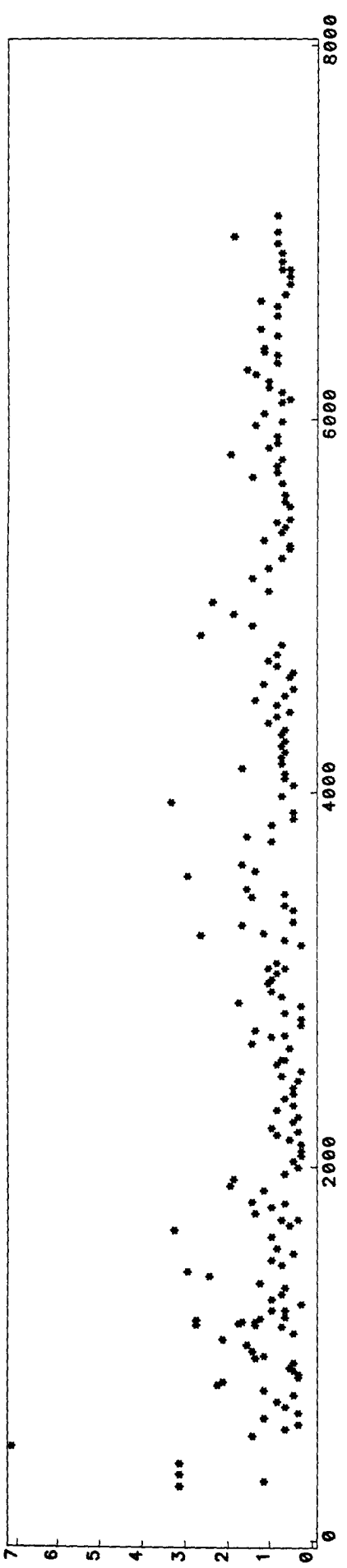
River no 20 turbidity



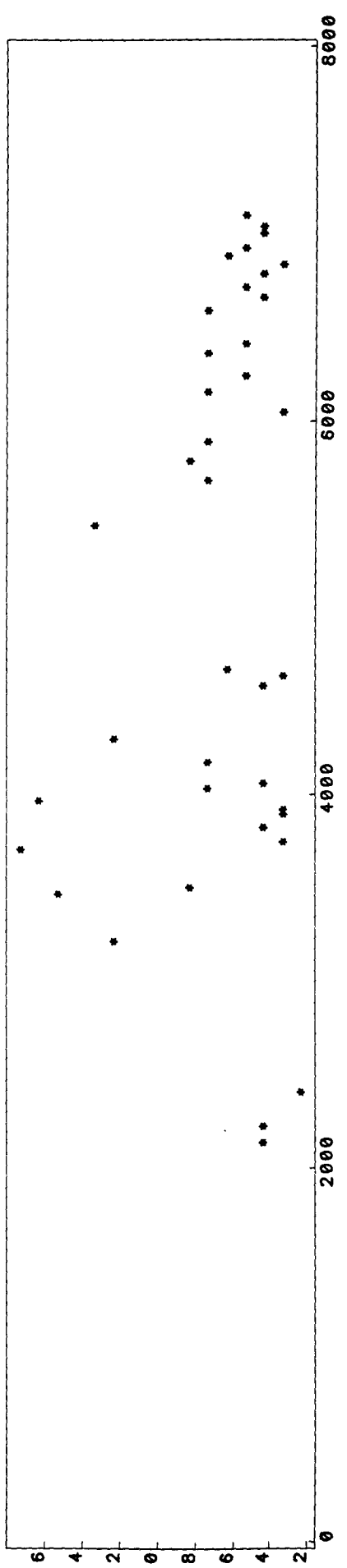
River no 21 turbidity



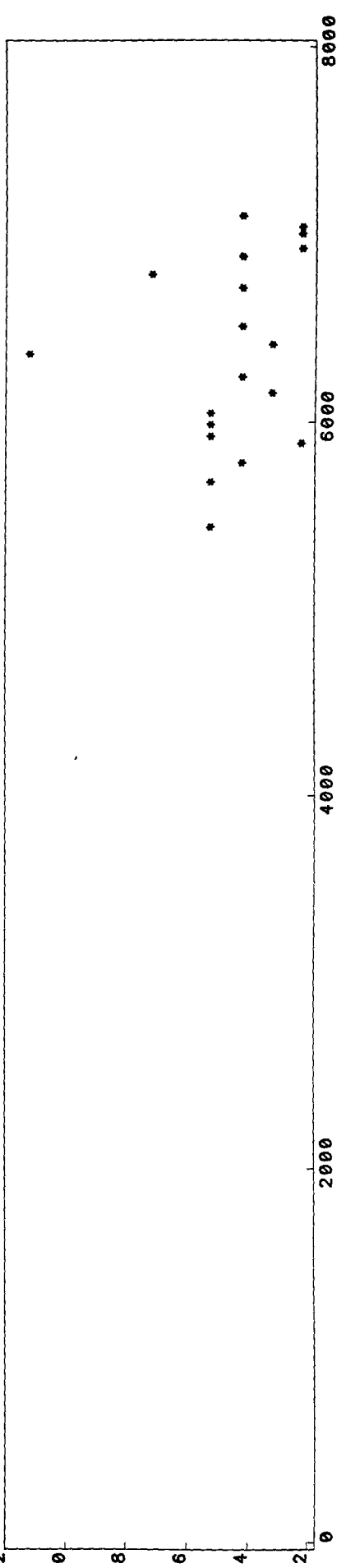
River no 22 turbidity



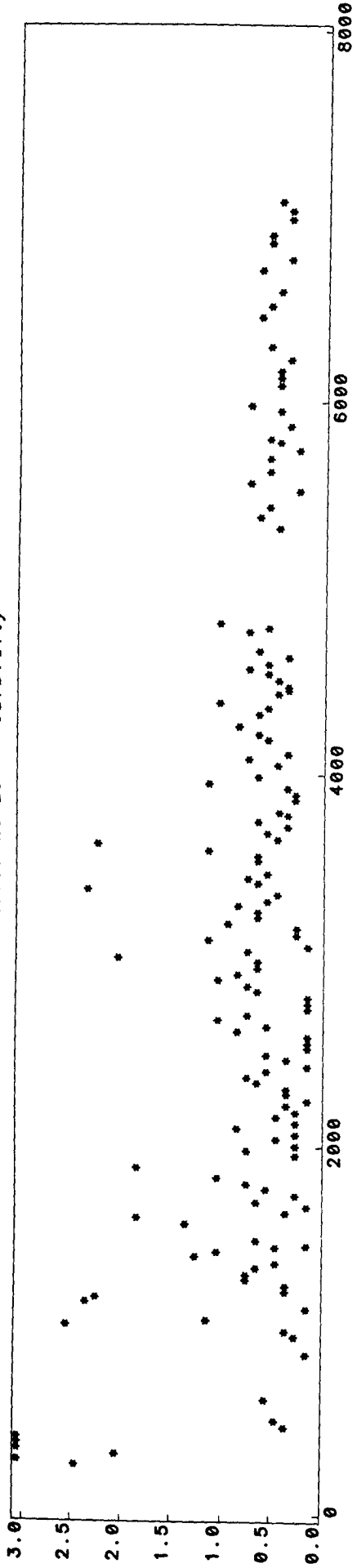
River no 23 turbidity



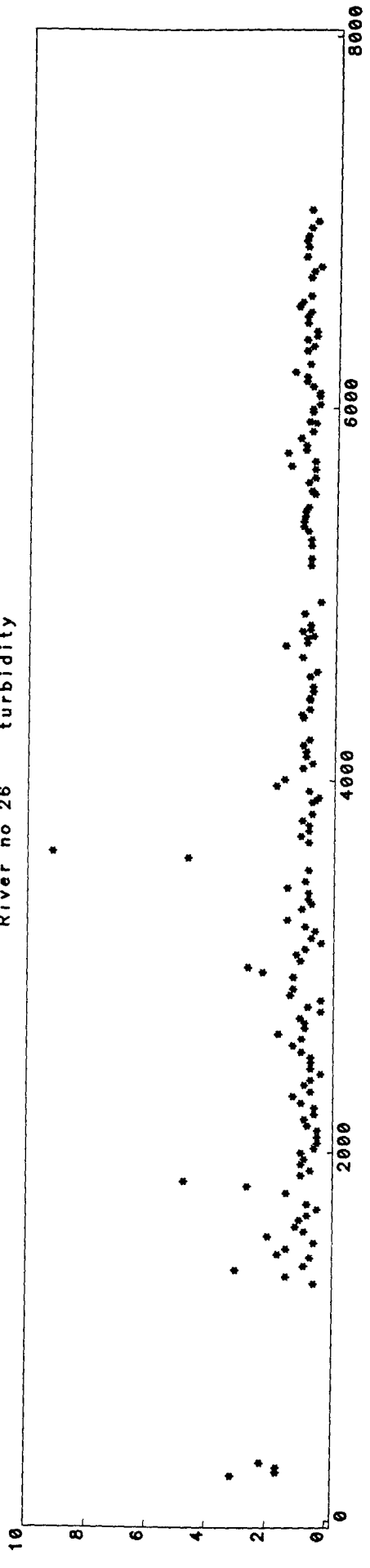
River no 24 turbidity



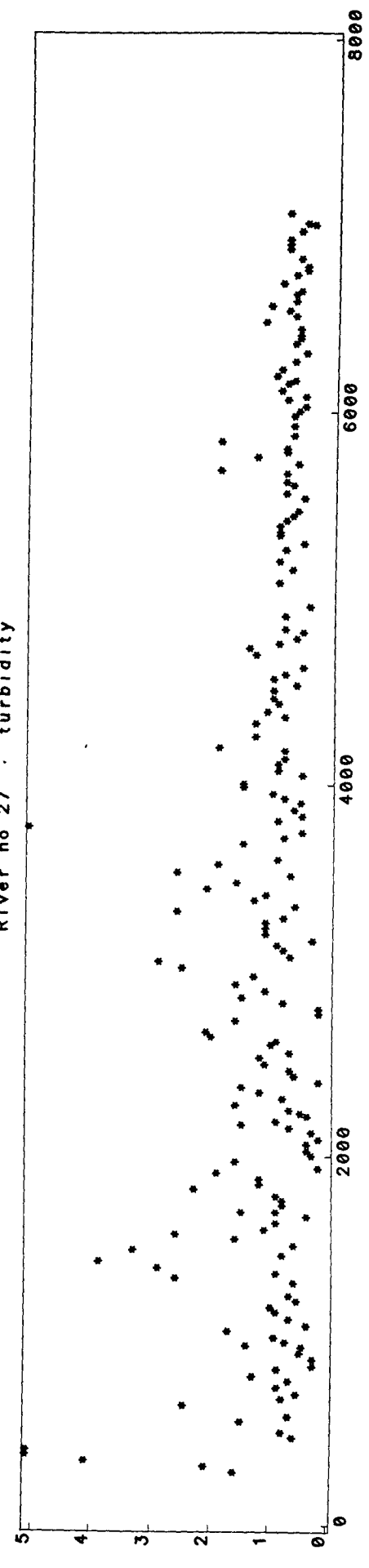
River no 25 turbidity

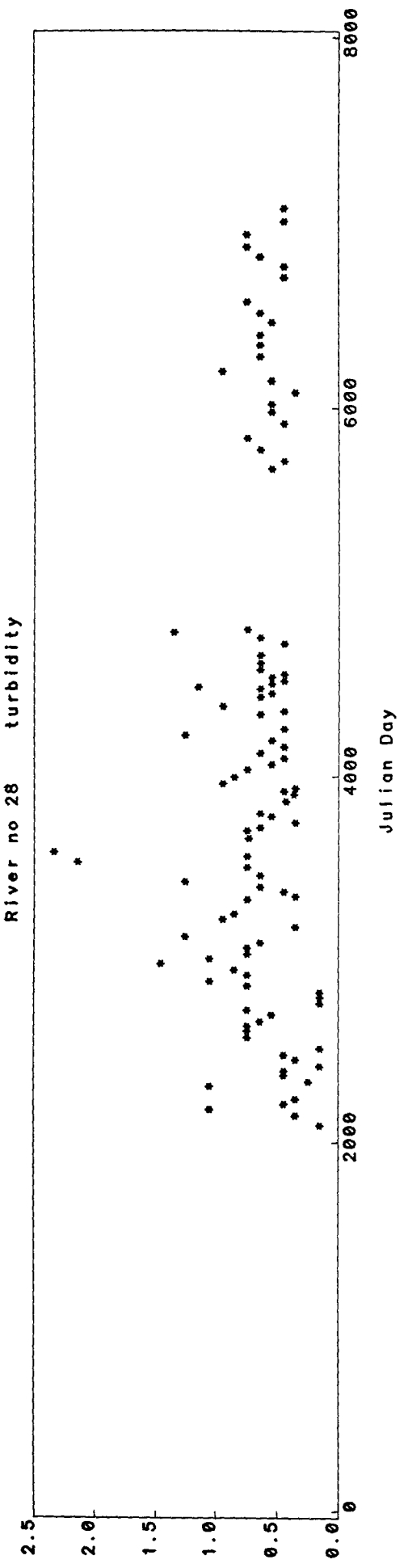


River no 26 turbidity



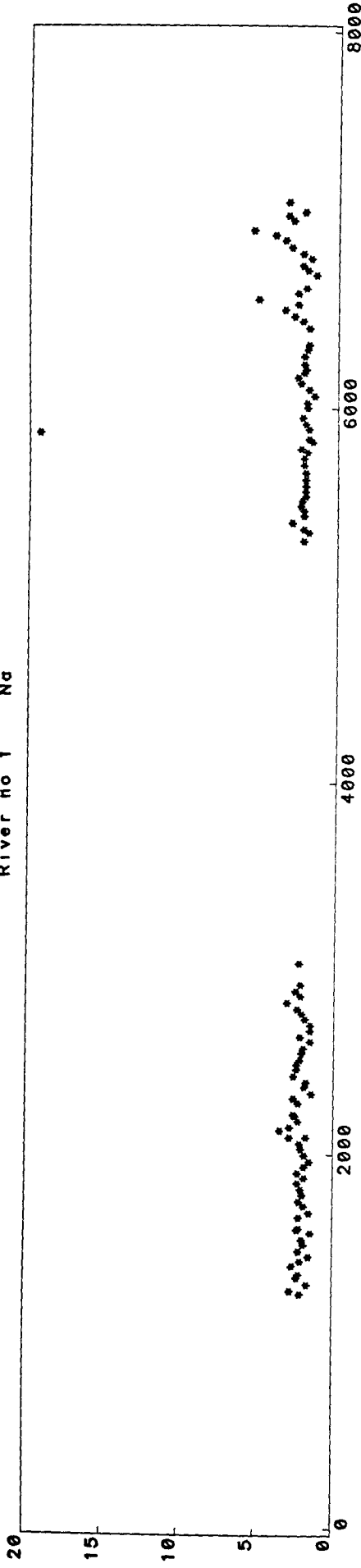
River no 27 turbidity



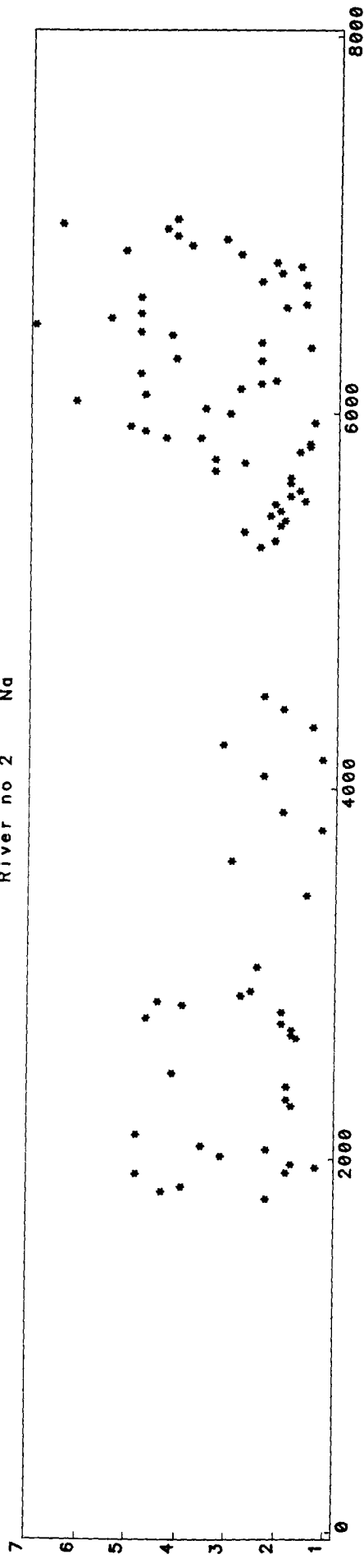


Appendix 9. Scatter plots of sodium for the study rivers.

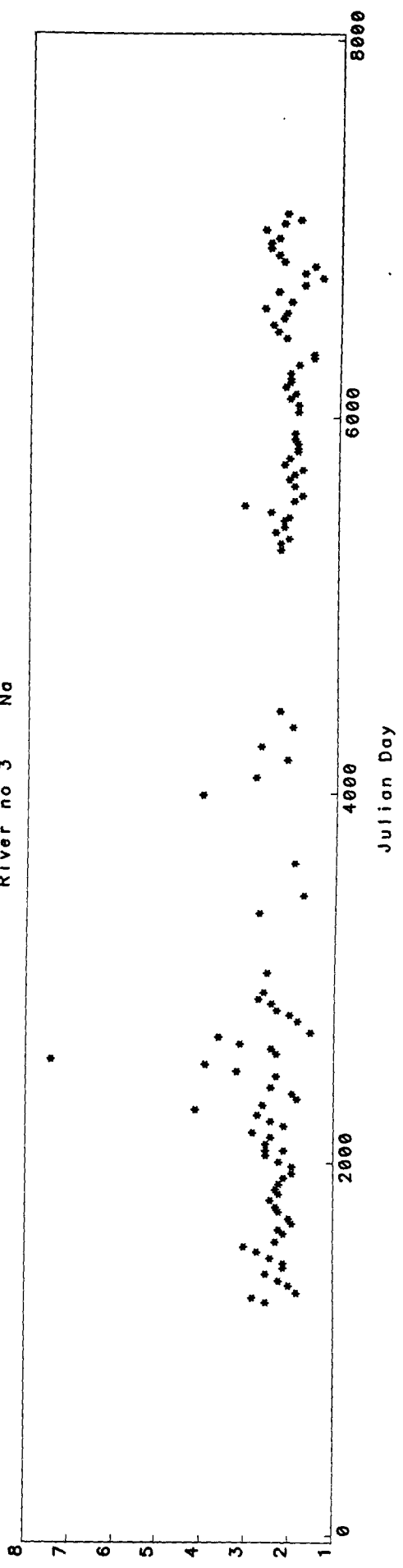
River no 1 Na

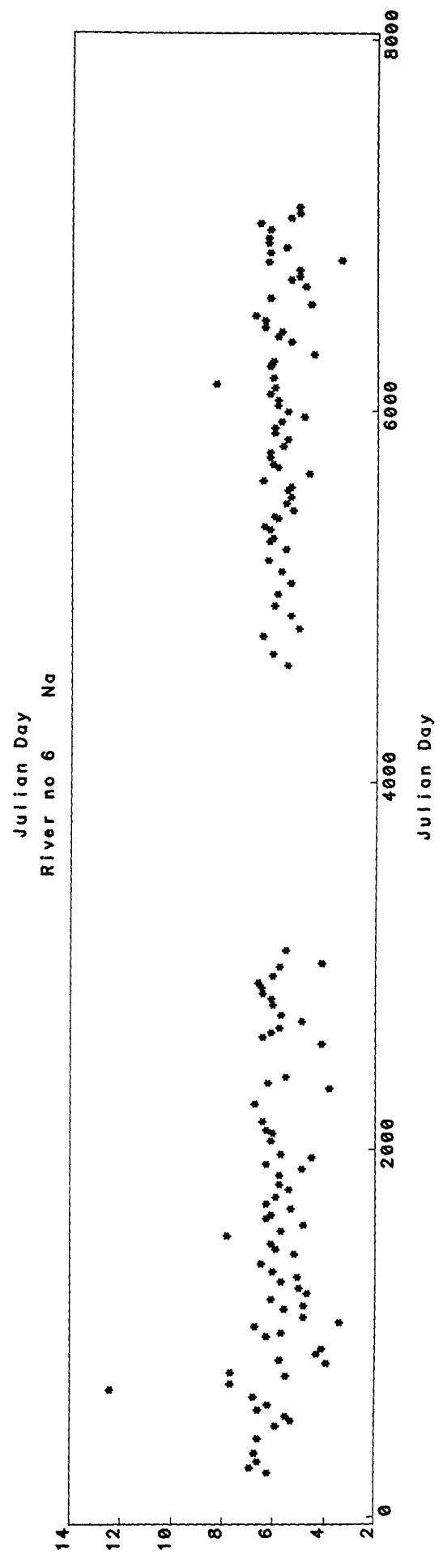
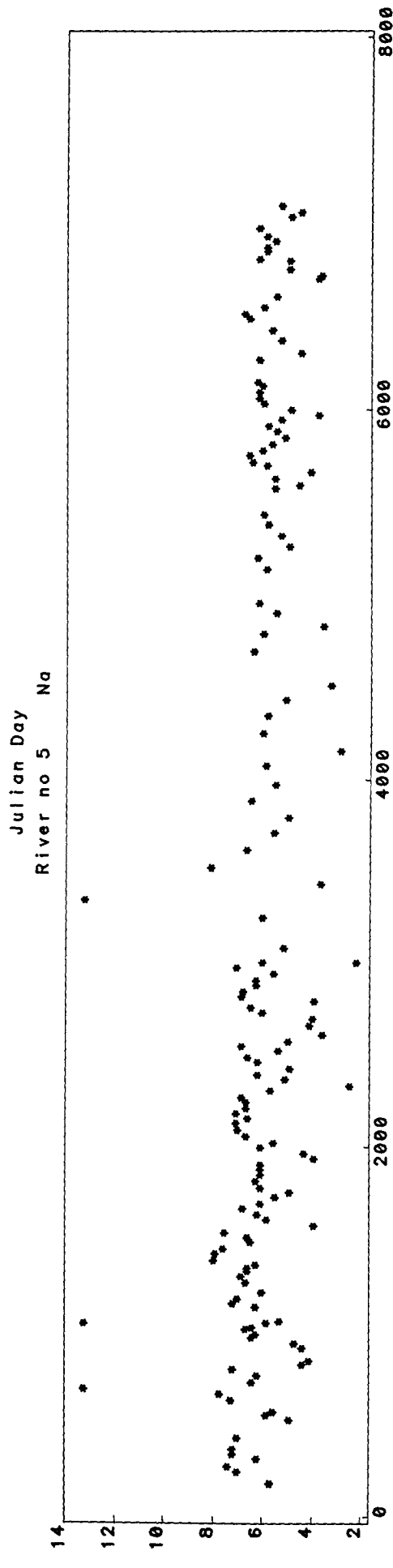
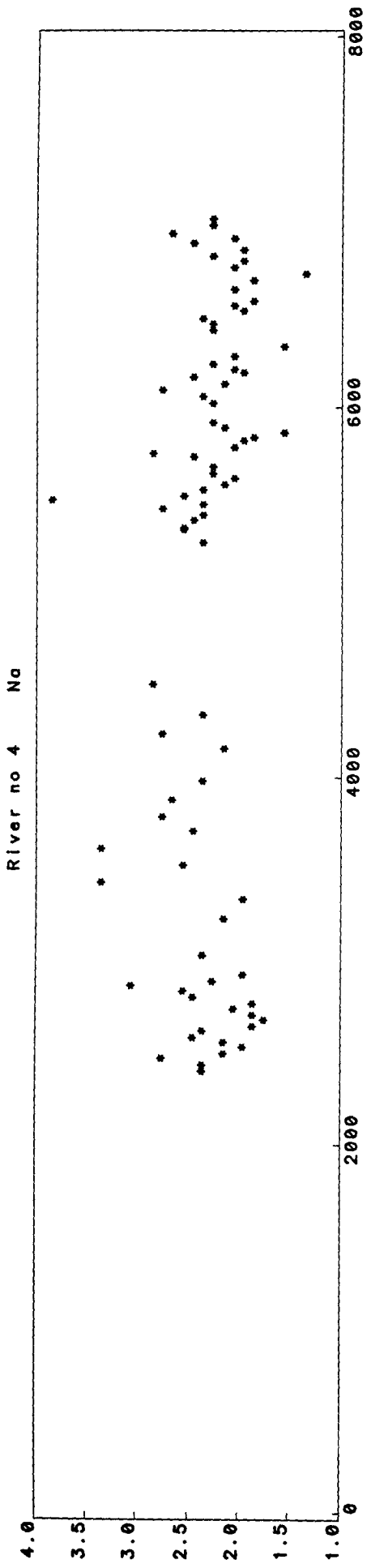


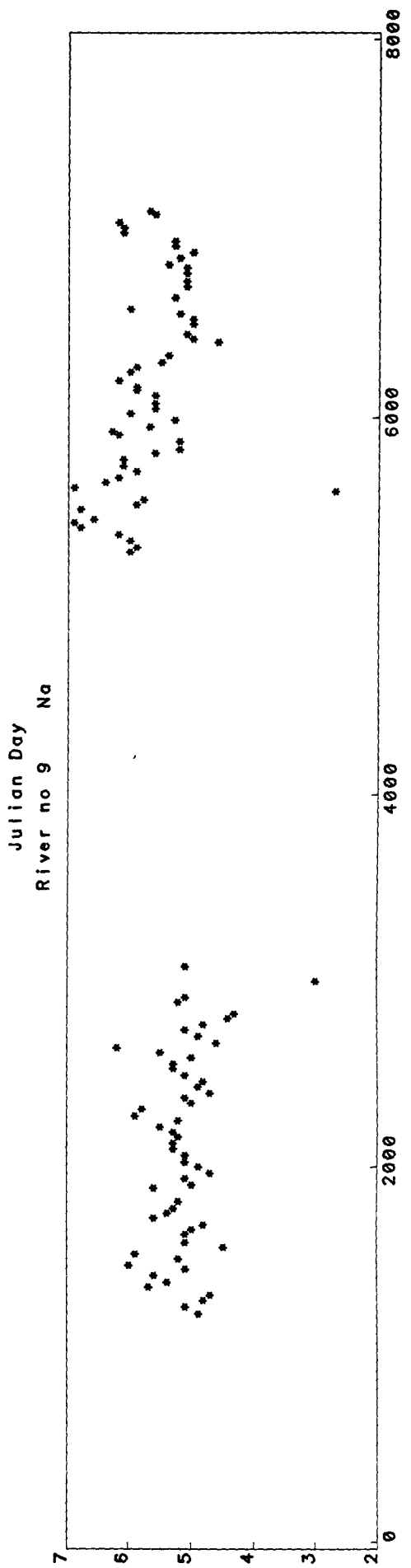
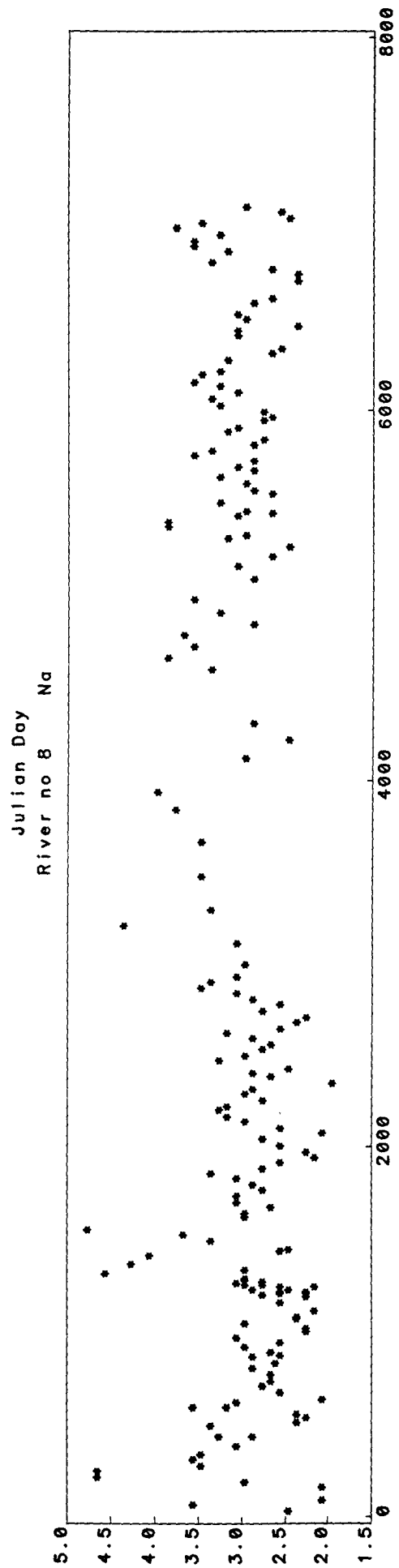
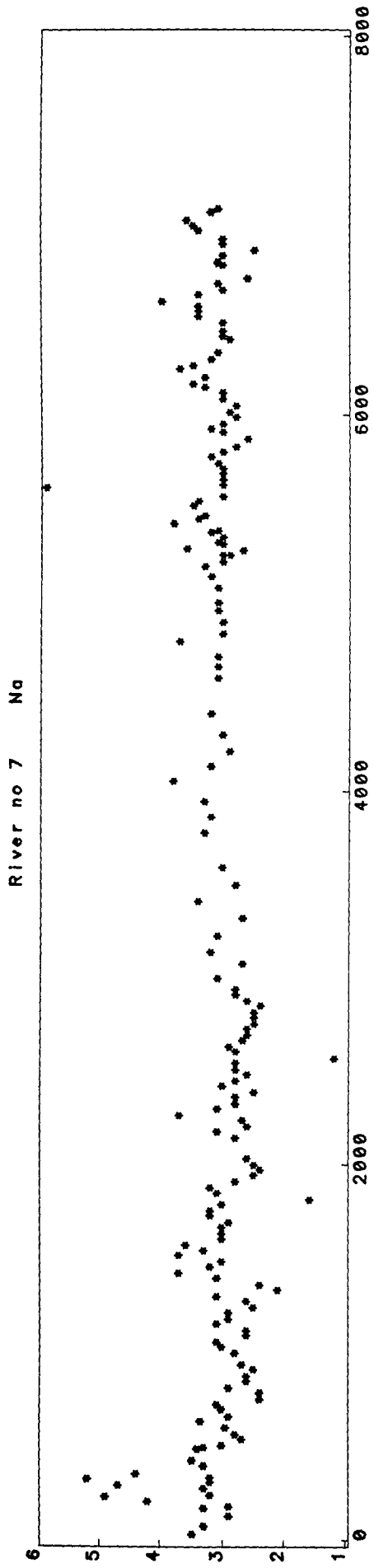
Julian Day  
River no 2 Na



Julian Day  
River no 3 Na

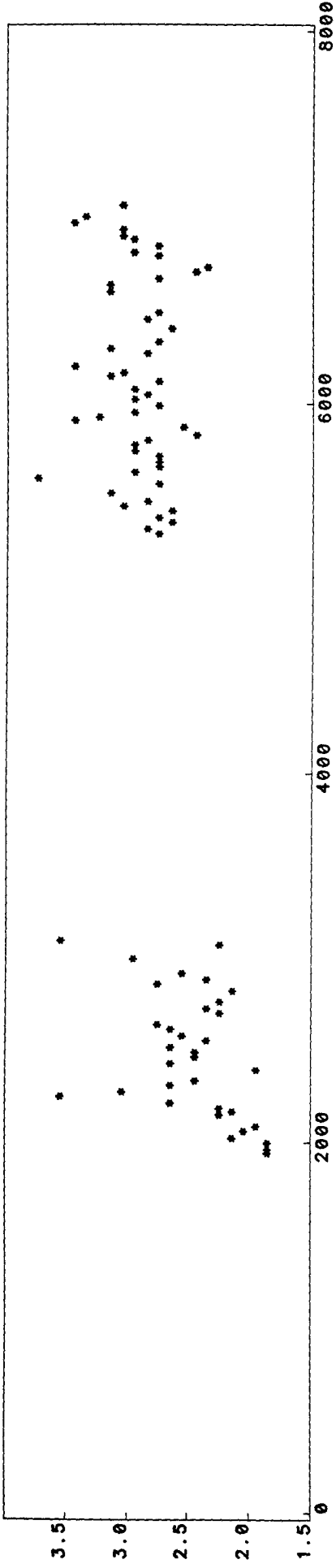




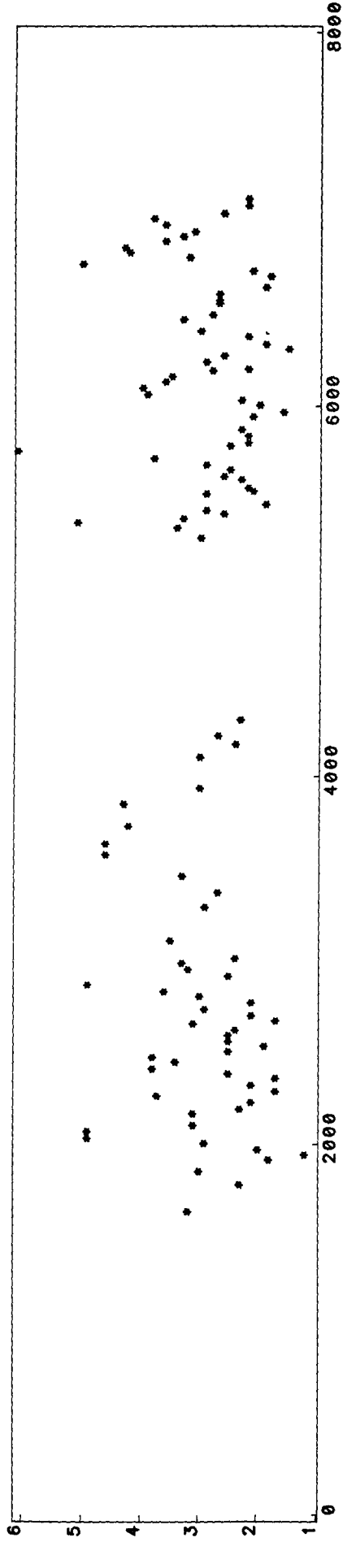




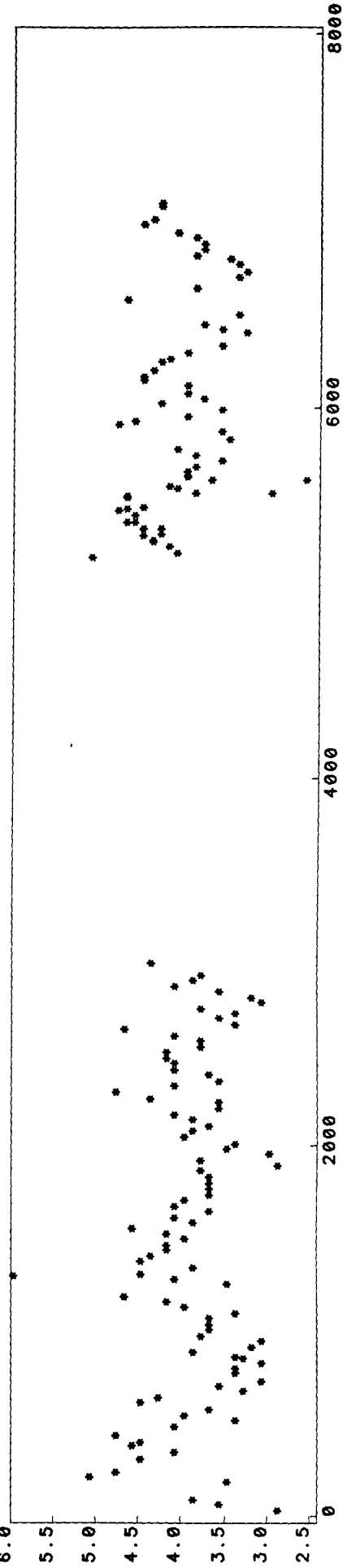
River no 10 Na



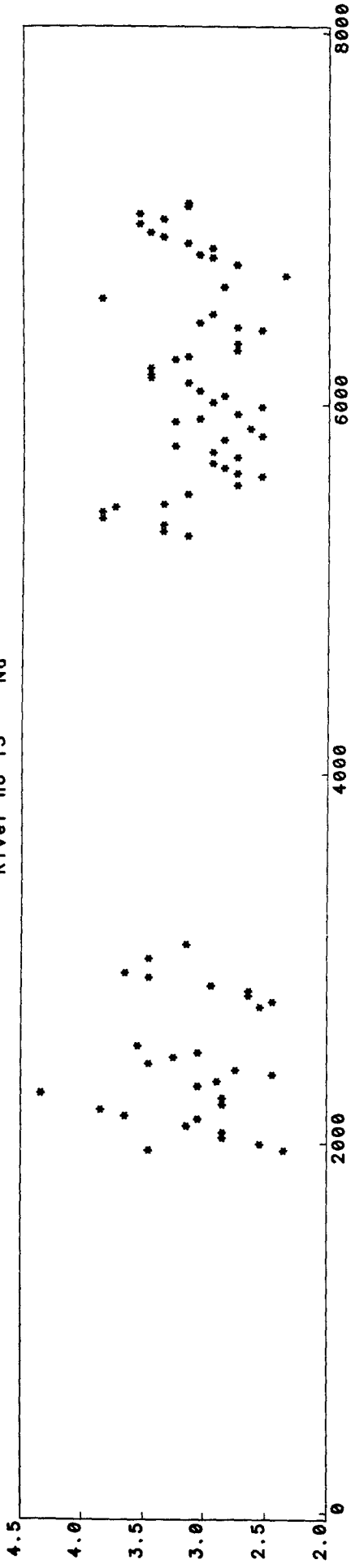
Julian Day  
River no 11 Na



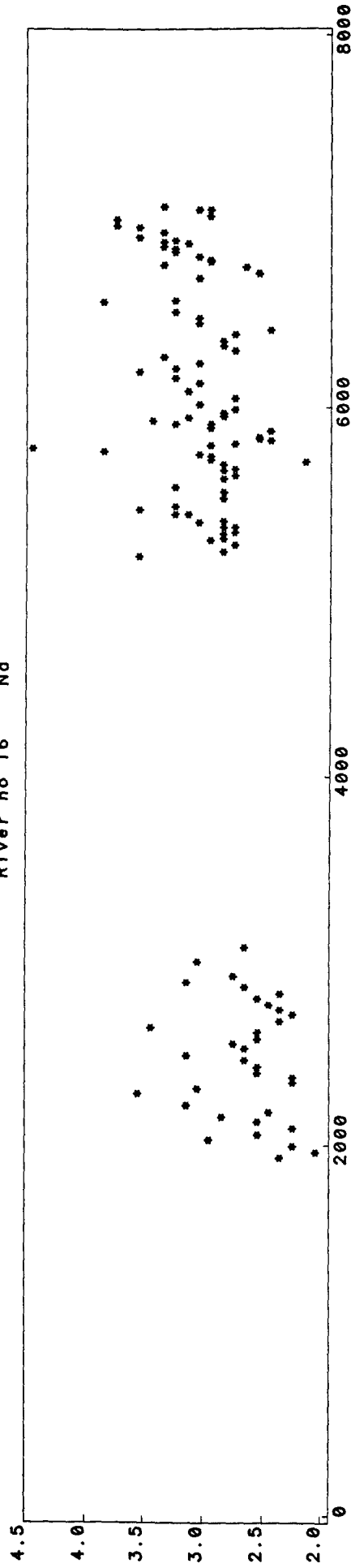
Julian Day  
River no 12 Na



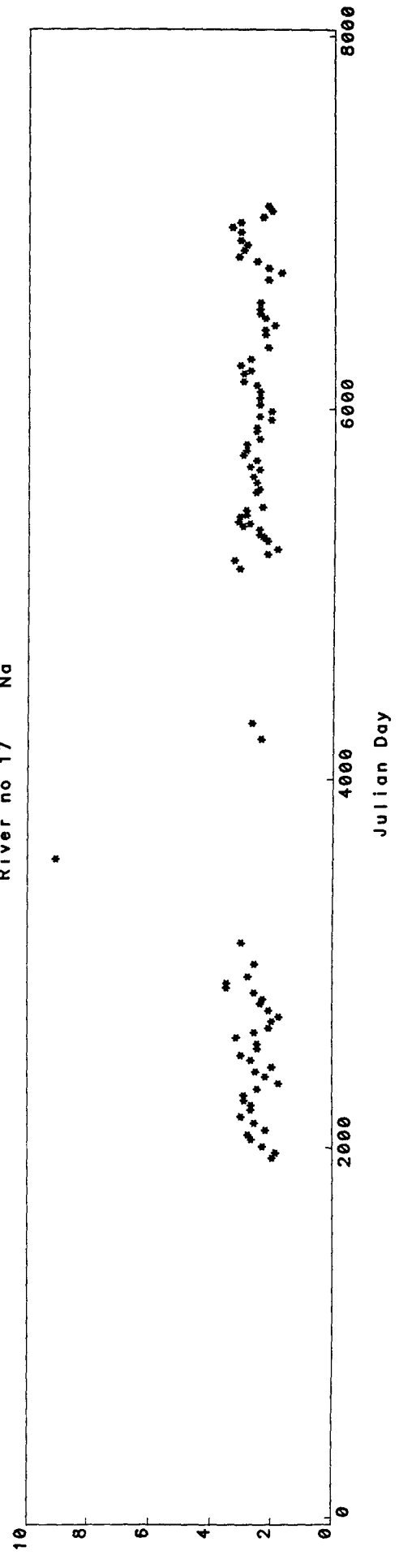
River no 13 Na



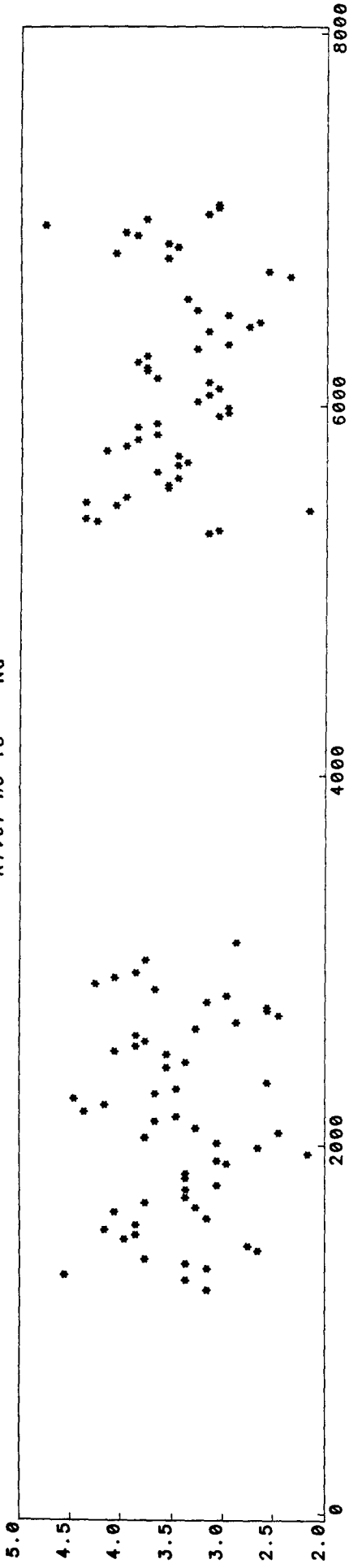
Julian Day  
River no 16 Na



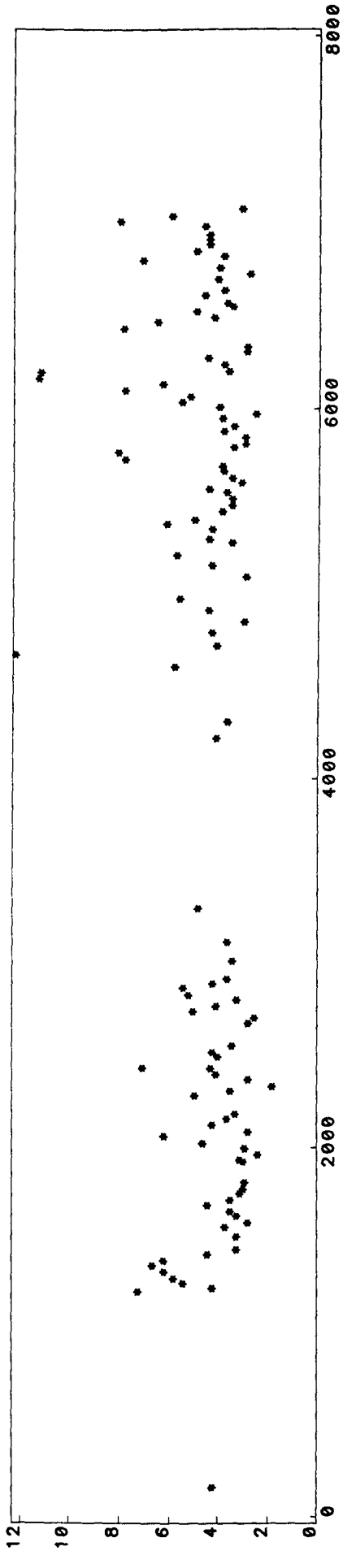
Julian Day  
River no 17 Na



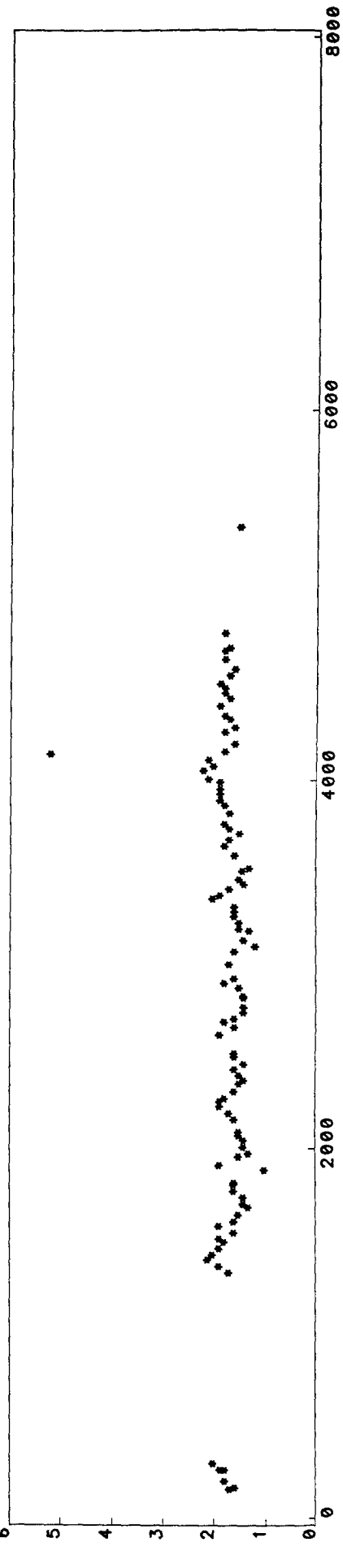
River no 18 Na

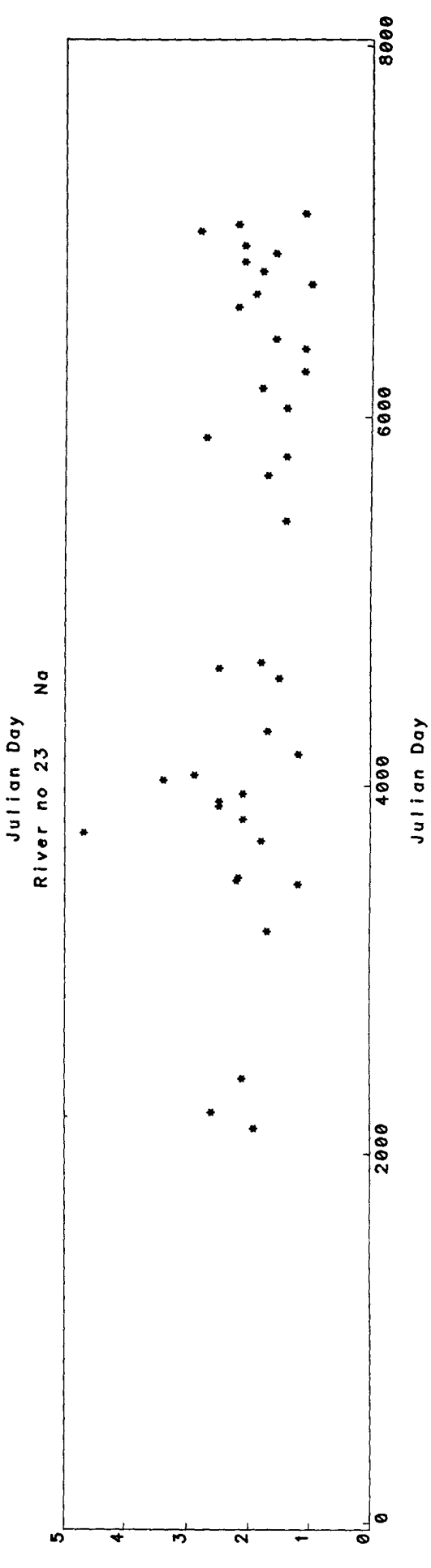
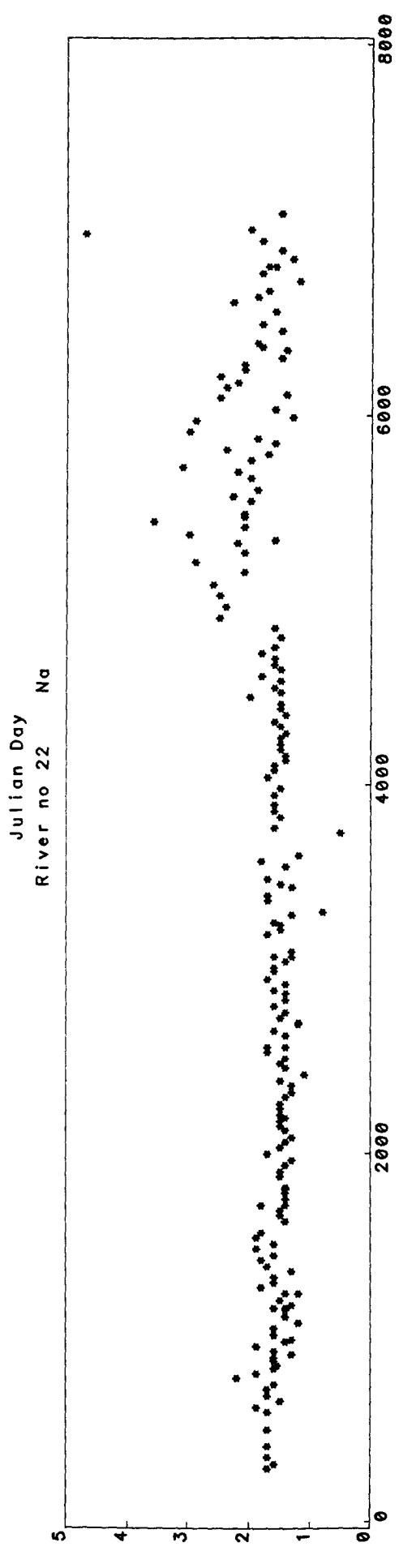
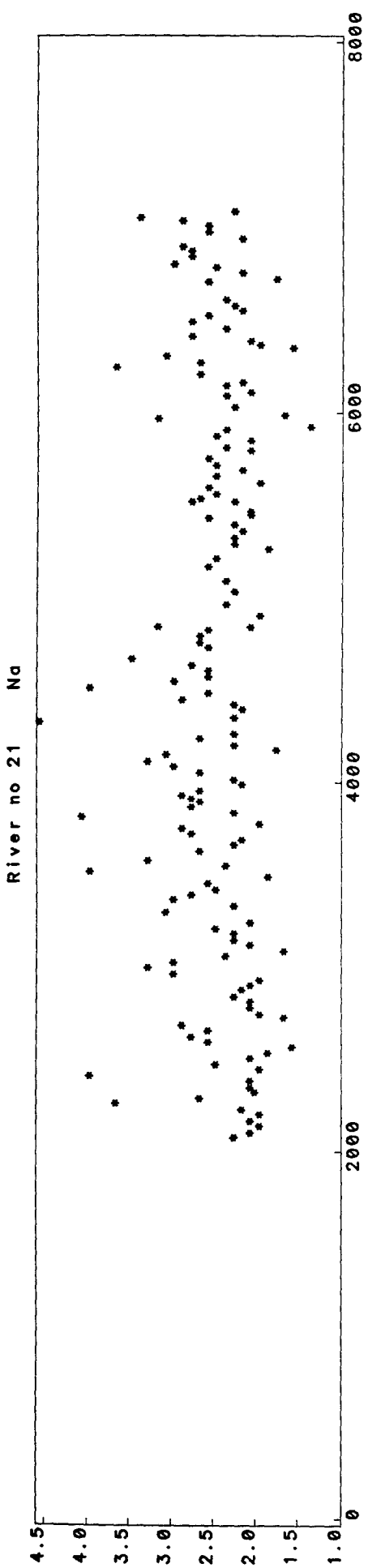


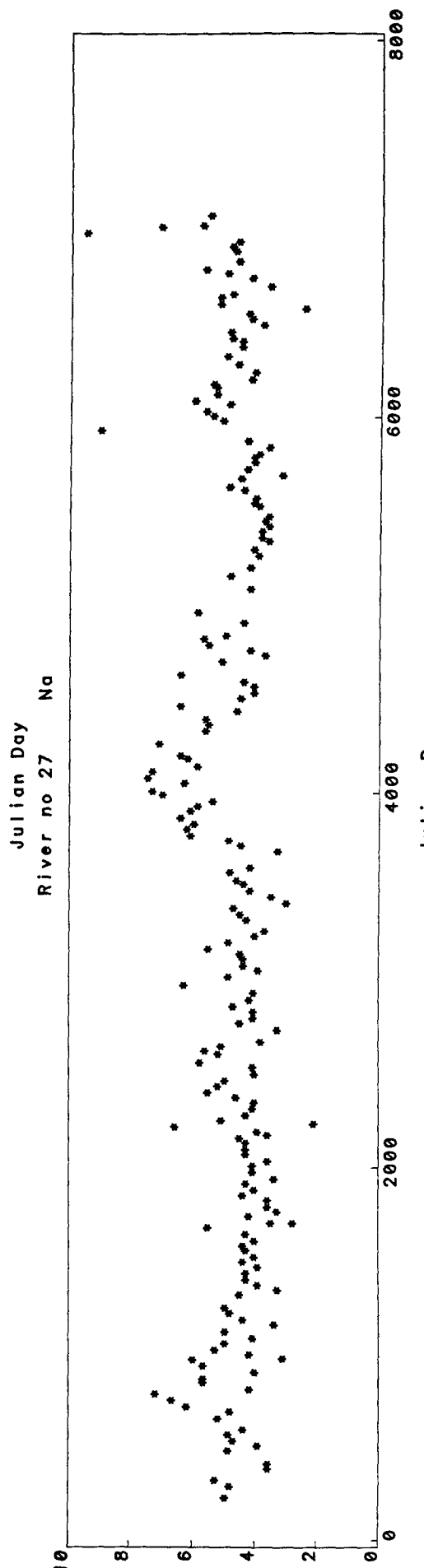
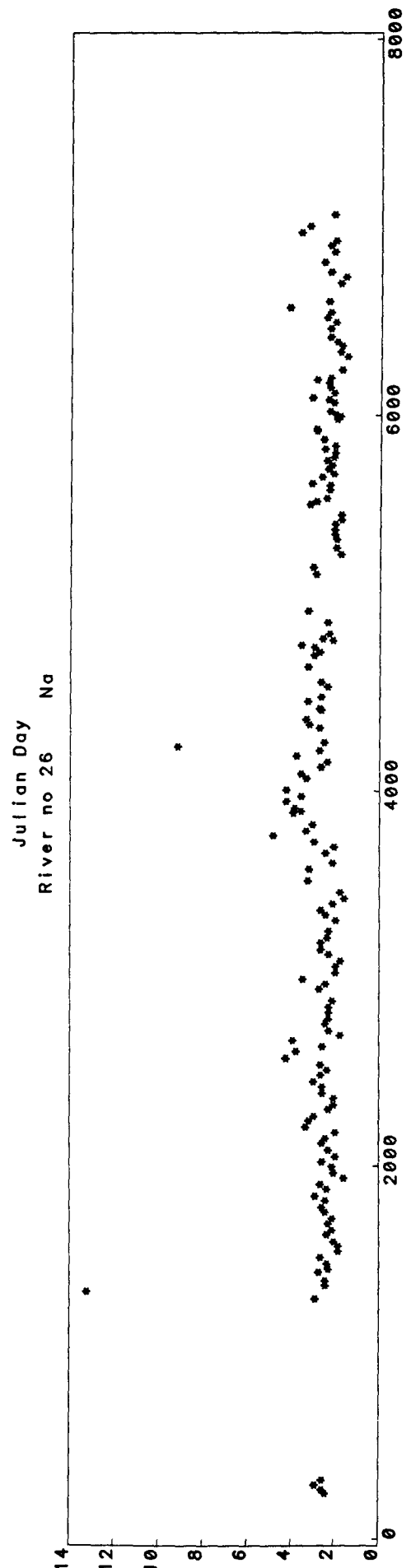
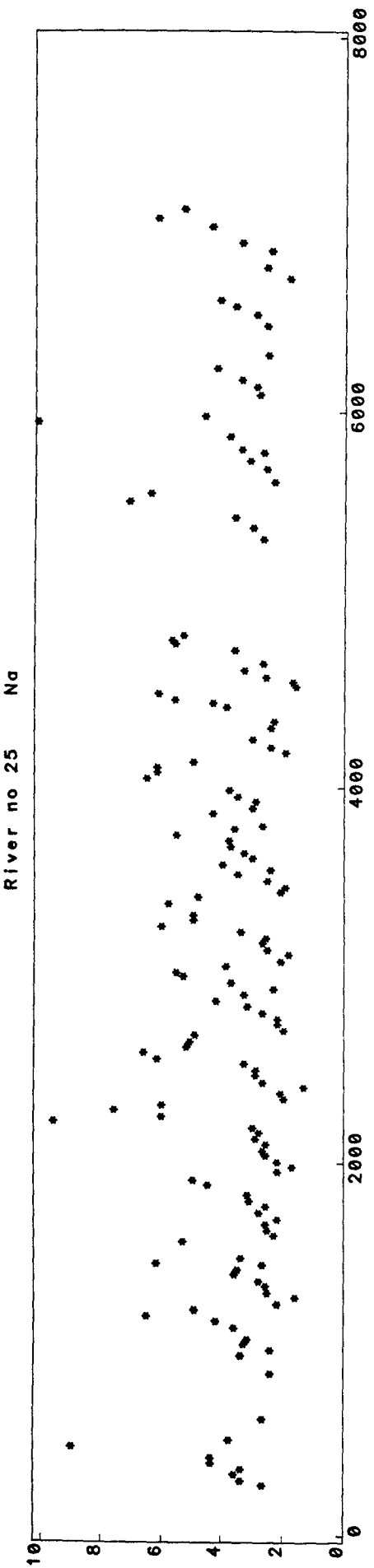
Julian Day  
River no 19 Na



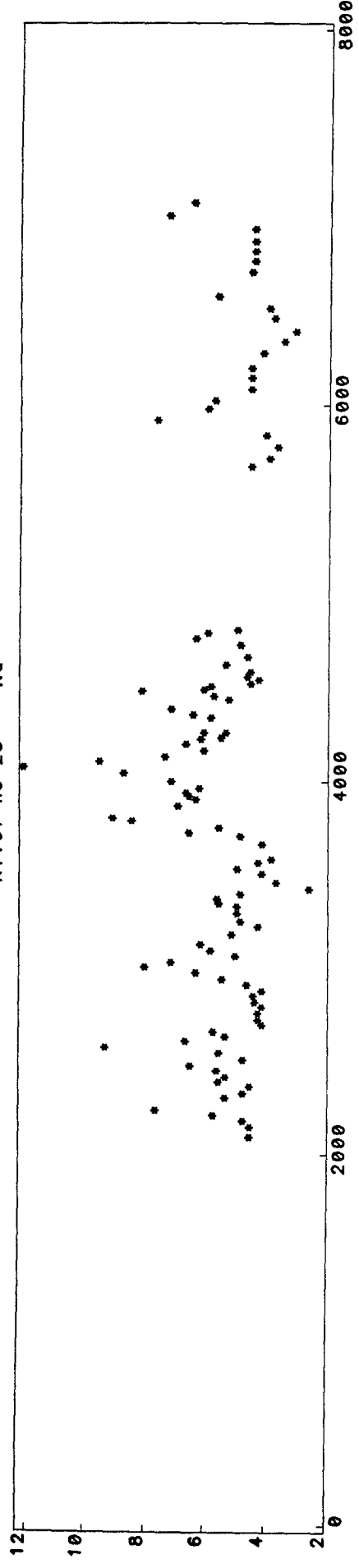
Julian Day  
River no 20 Na







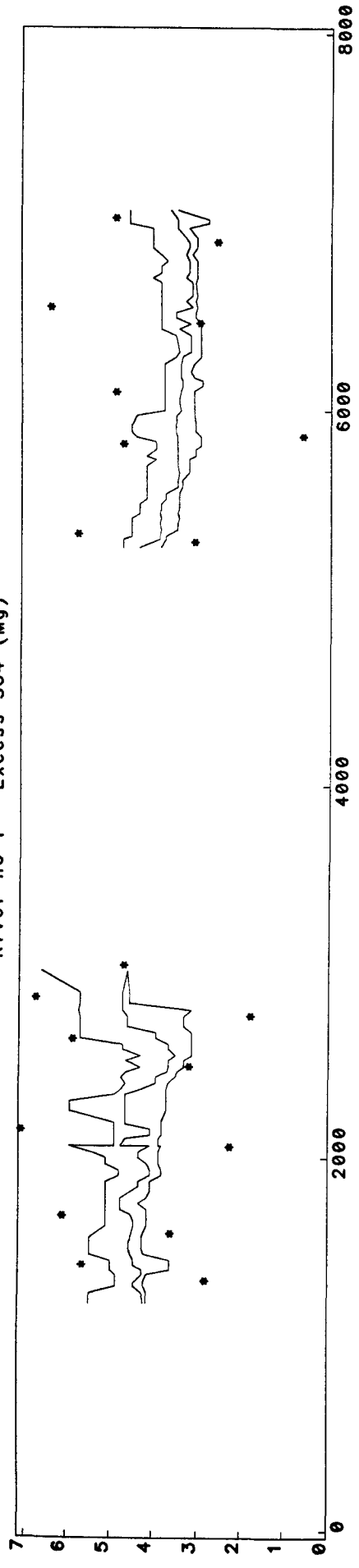
River no 28 Na



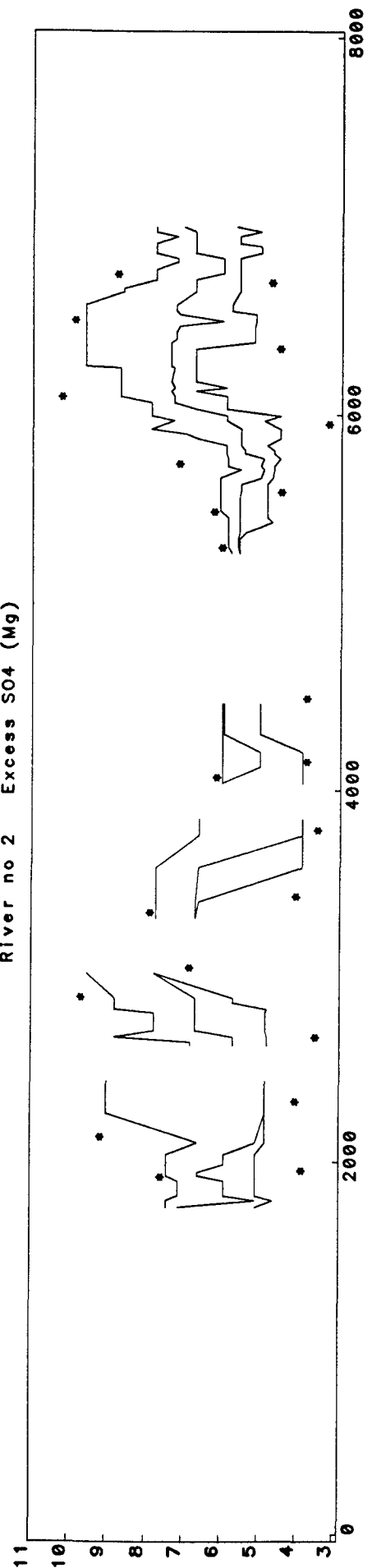
Appendix 10. Running boxplots of excess sulfate calculated by magnesium ratio for the study rivers.

- 6 months.

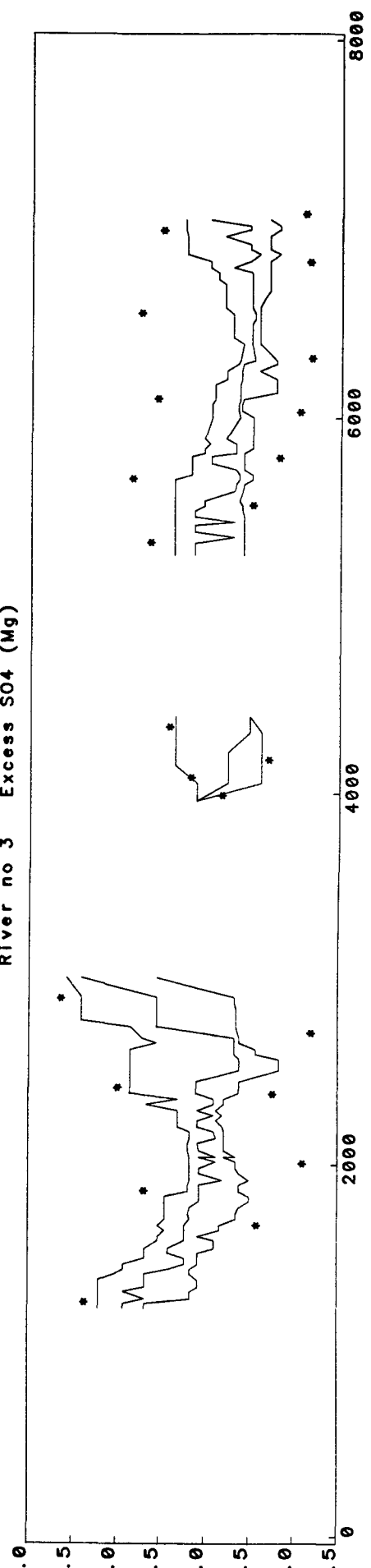
River no 1 Excess SO4 (Mg)



River no 2 Excess SO4 (Mg)



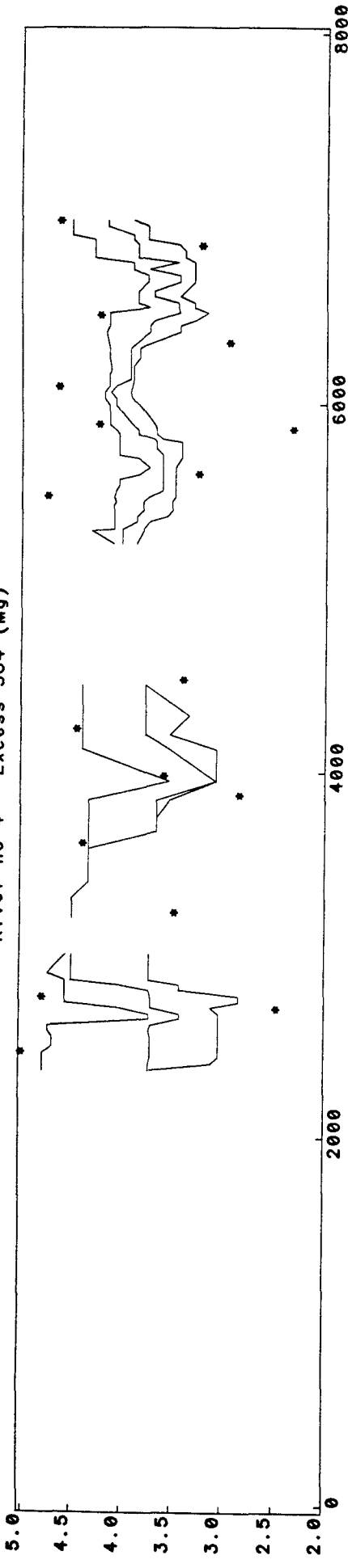
River no 3 Excess SO4 (Mg)



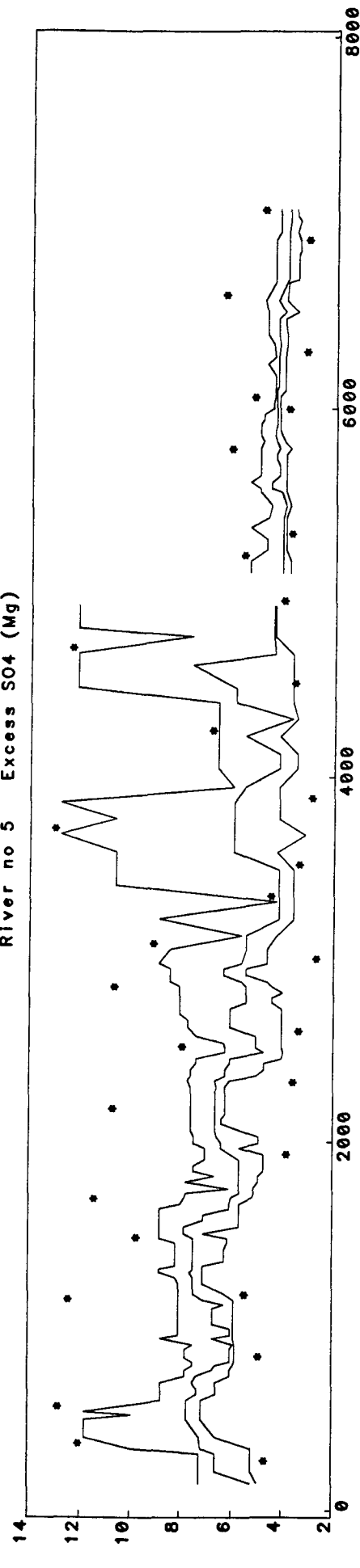
Julian Day



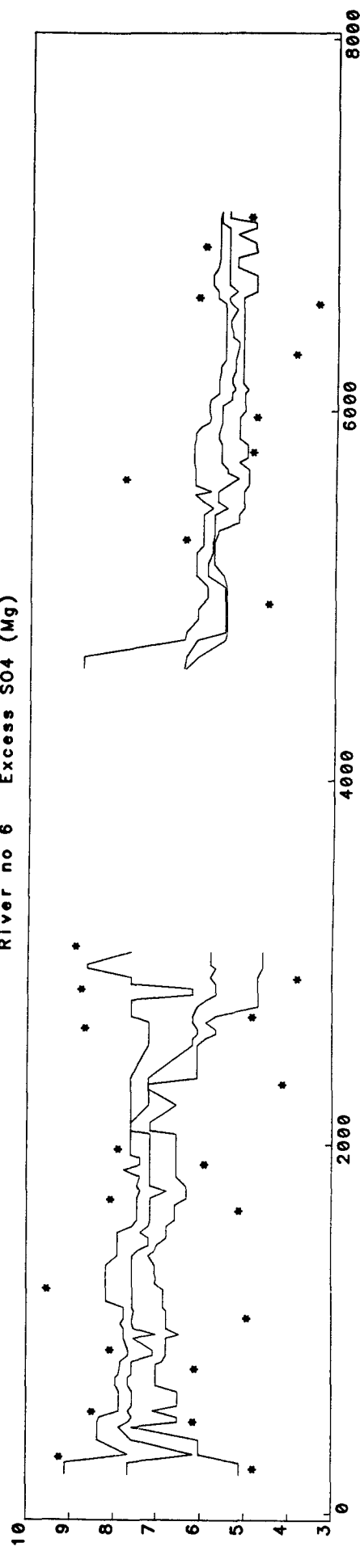
River no 4 Excess SO4 (Mg)

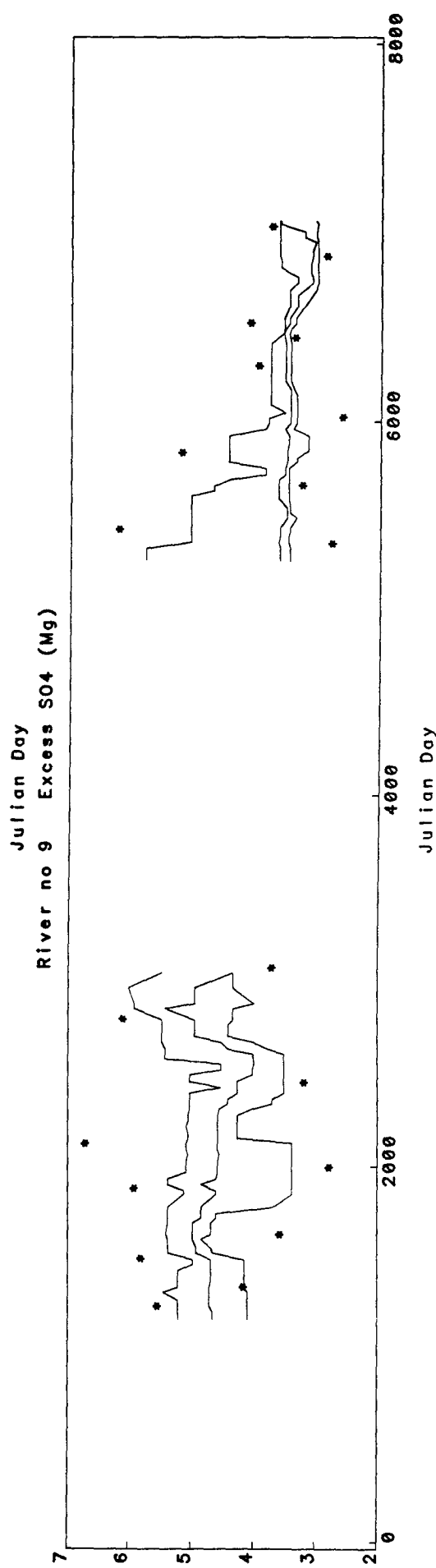
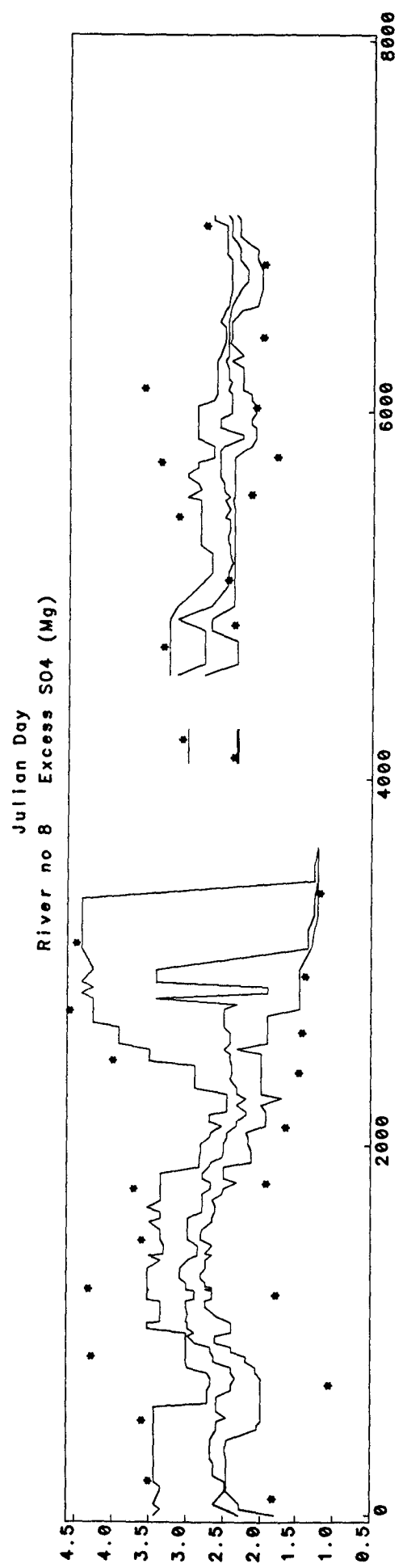
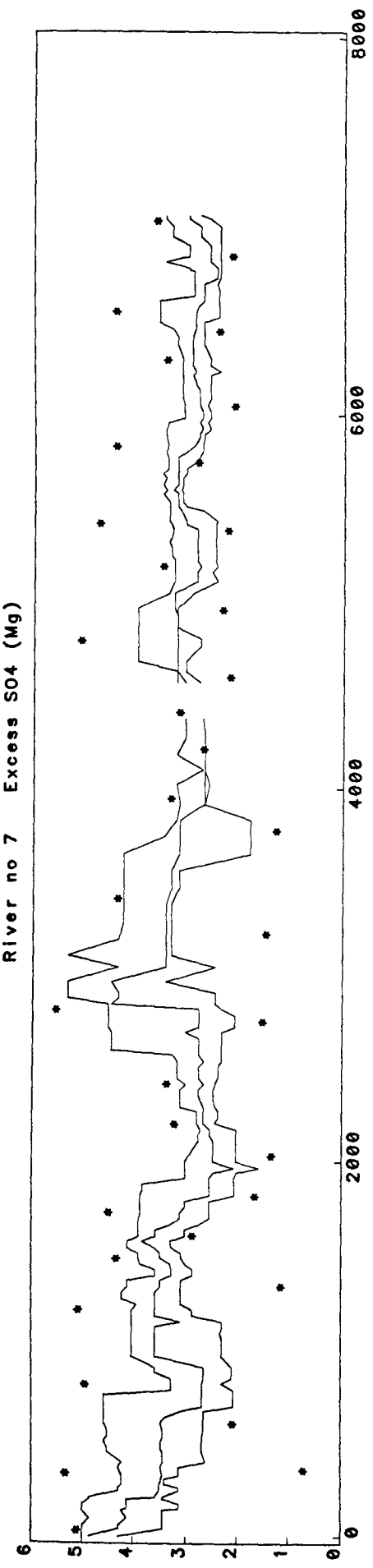


River no 5 Excess SO4 (Mg)

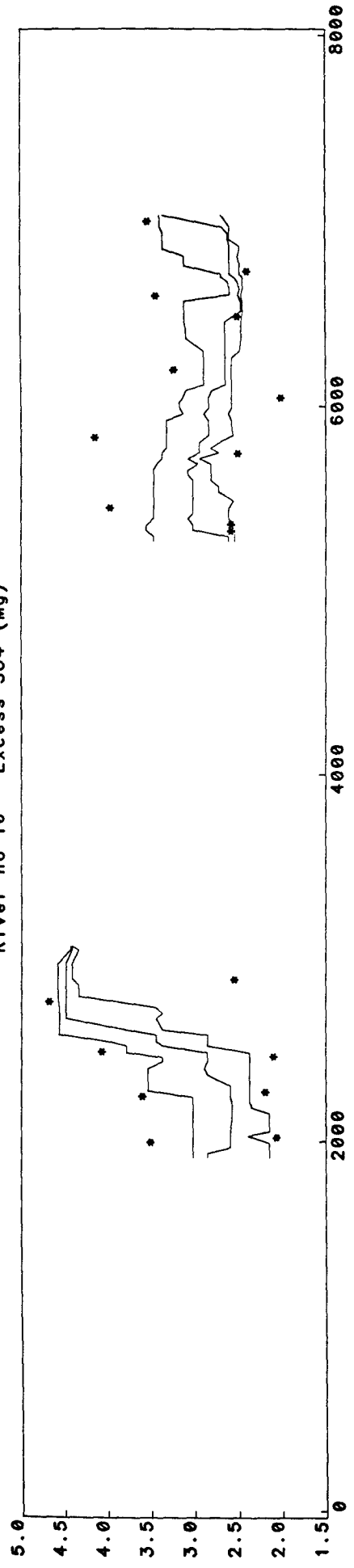


River no 6 Excess SO4 (Mg)

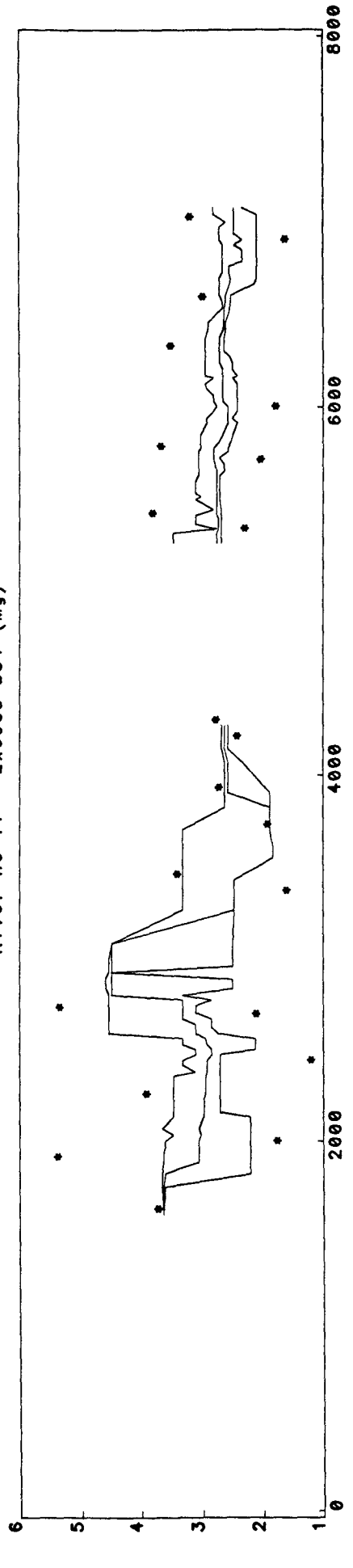




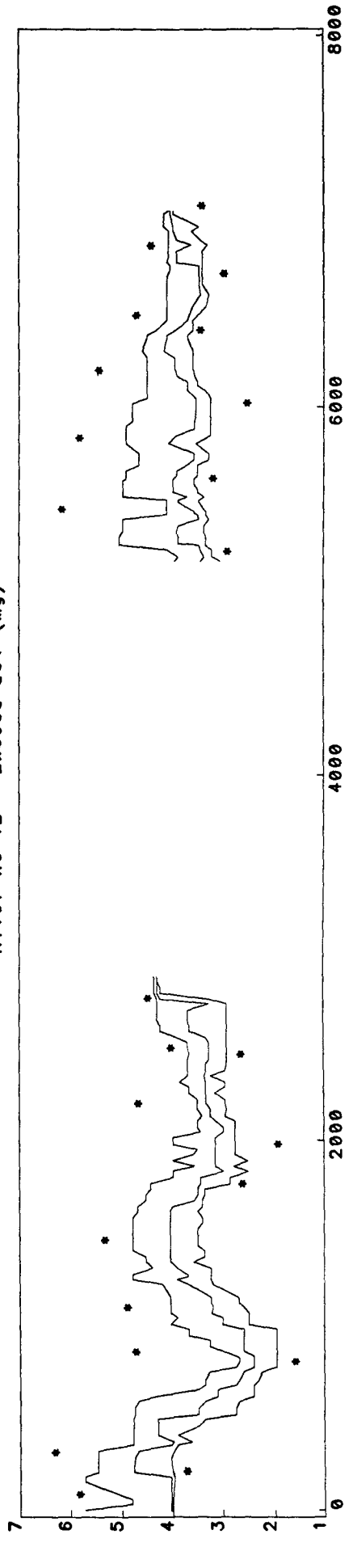
River no 10 Excess SO4 (Mg)



River no 11 Excess SO4 (Mg)

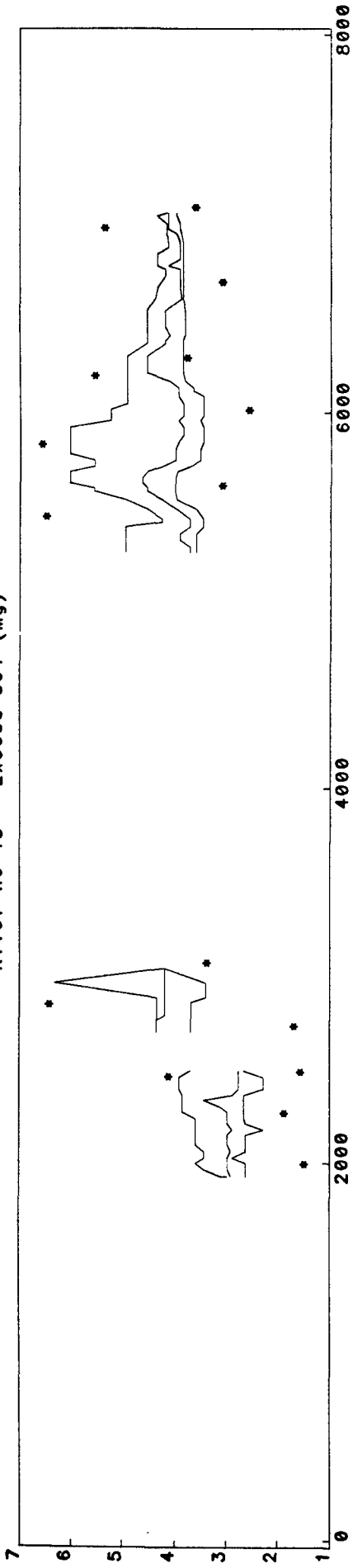


River no 12 Excess SO4 (Mg)

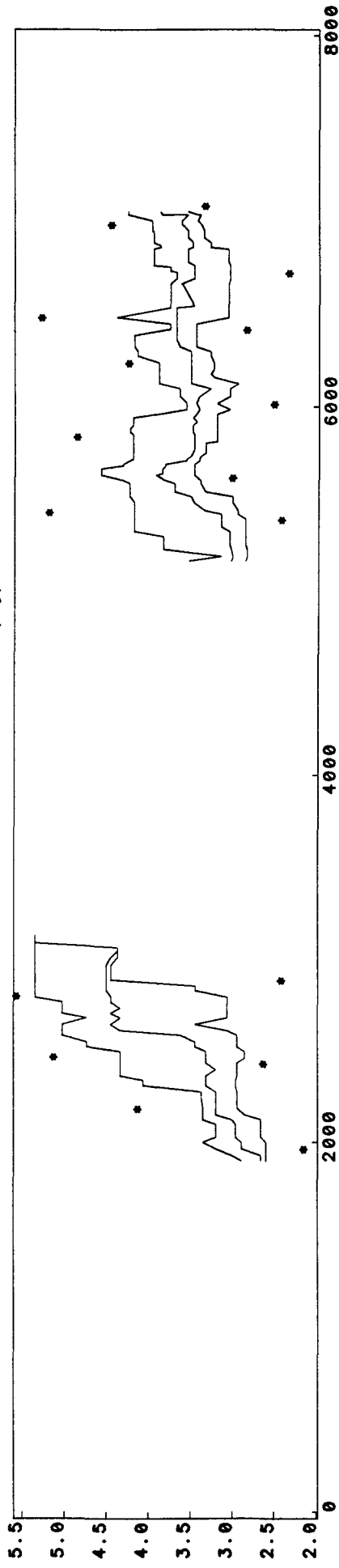


Julian Day

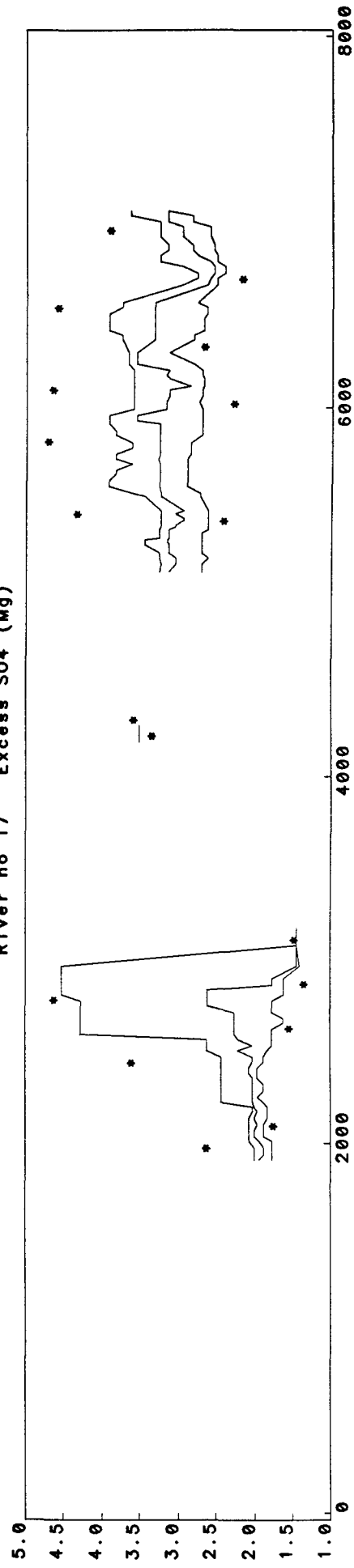
River no 13 Excess S04 (Mg)



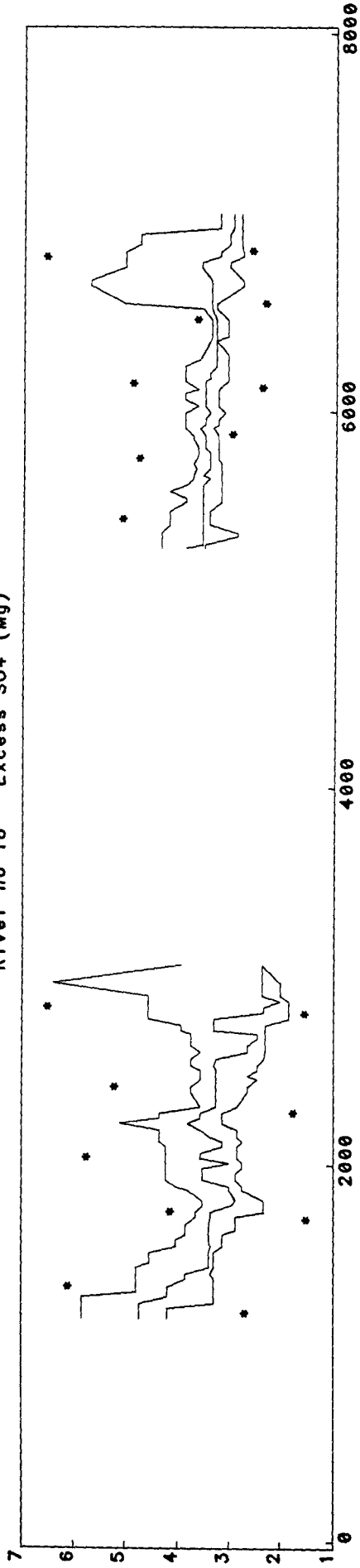
River no 16 Excess S04 (Mg)



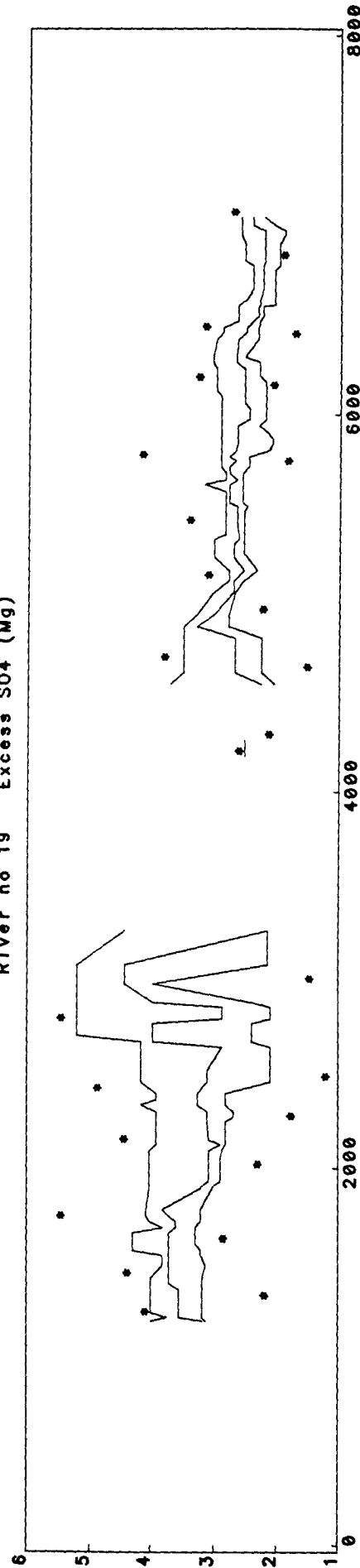
River no 17 Excess S04 (Mg)



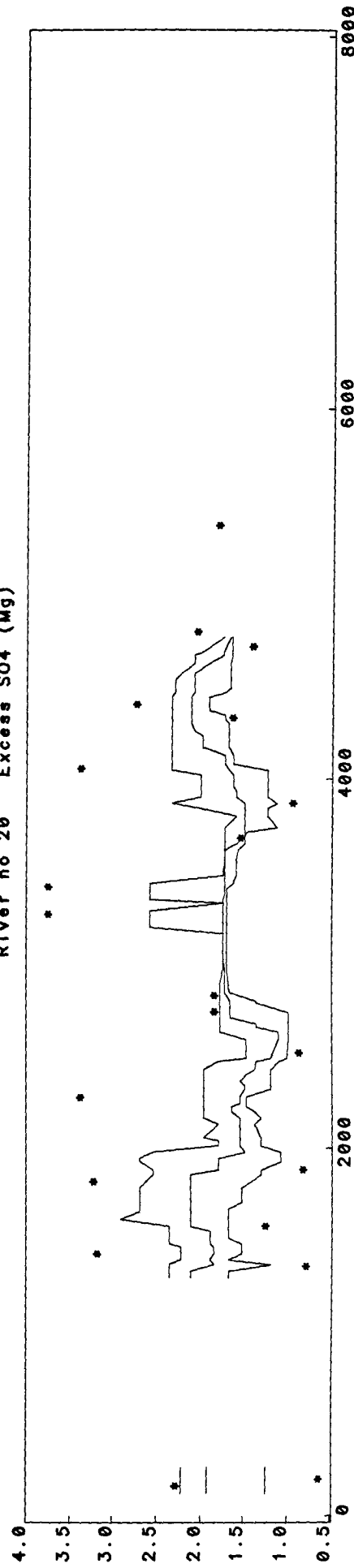
River no 18 Excess SO4 (Mg)



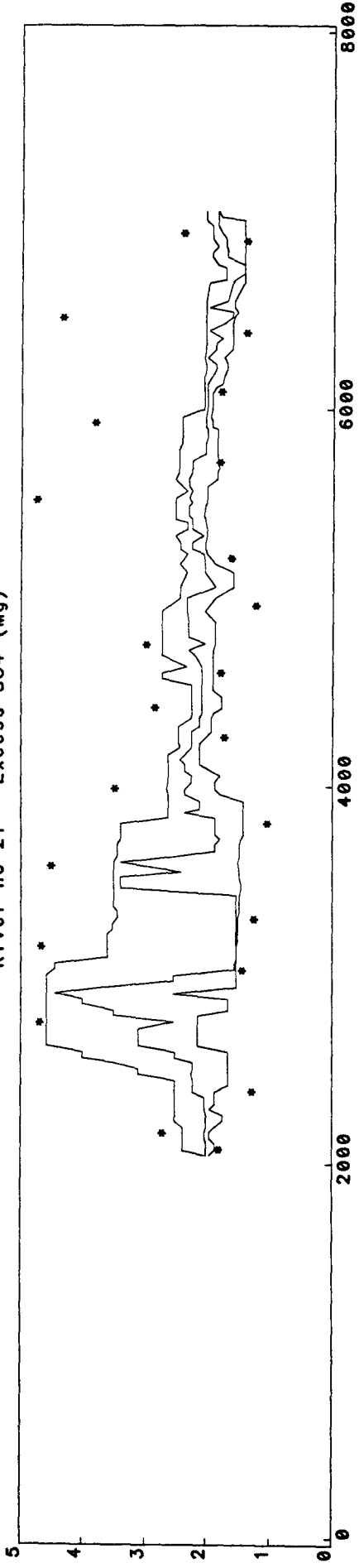
River no 19 Excess SO4 (Mg)



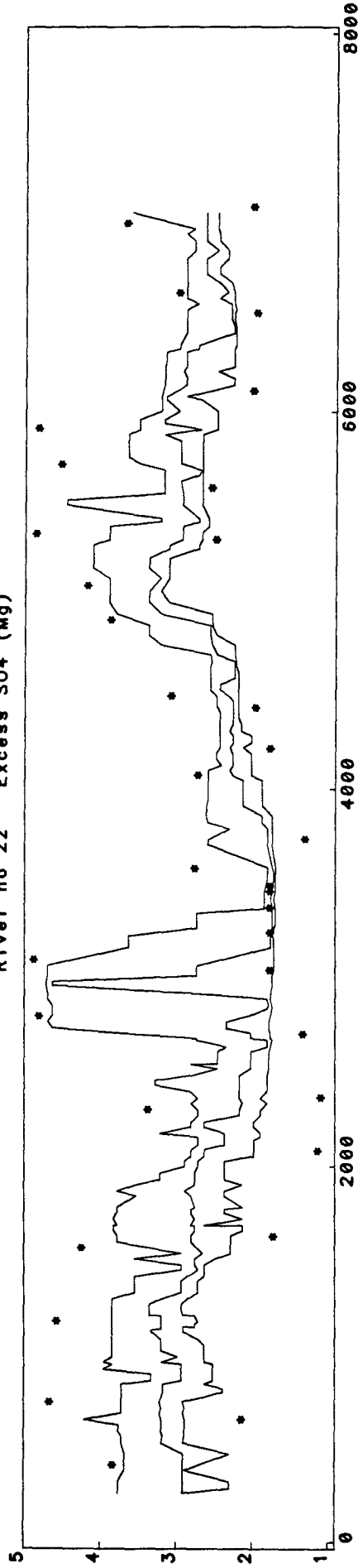
River no 20 Excess SO4 (Mg)



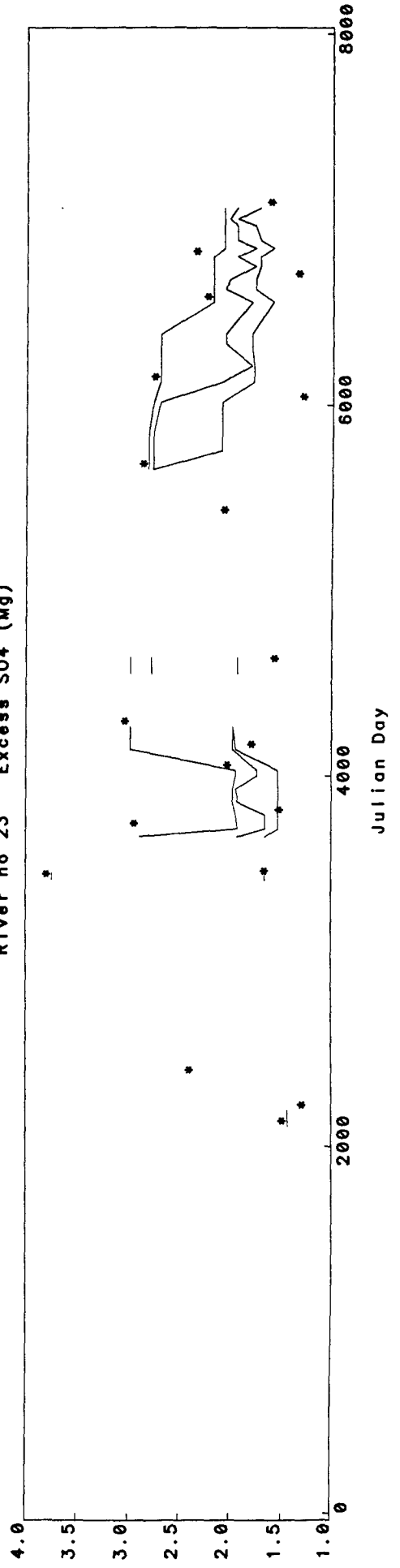
River no 21 Excess S04 (Mg)



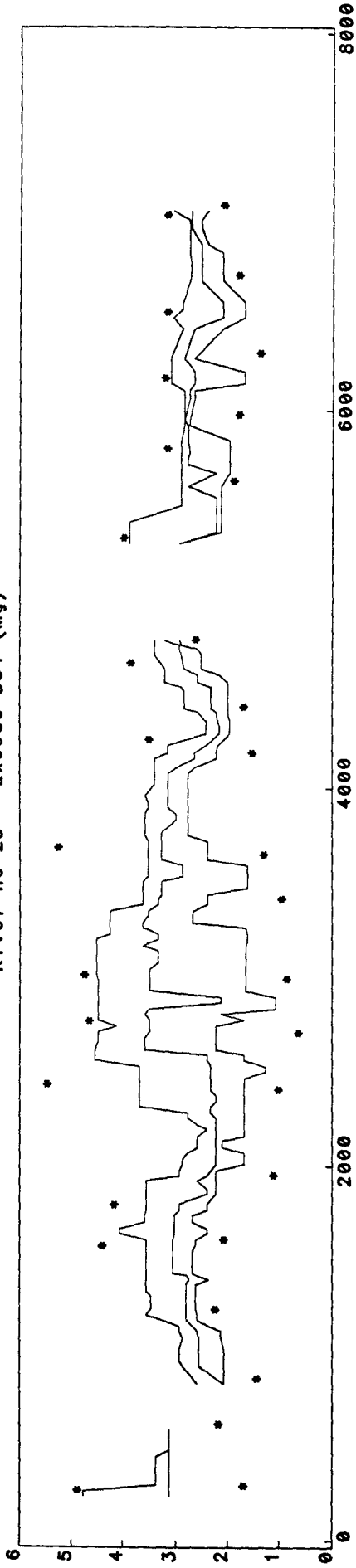
River no 22 Excess S04 (Mg)



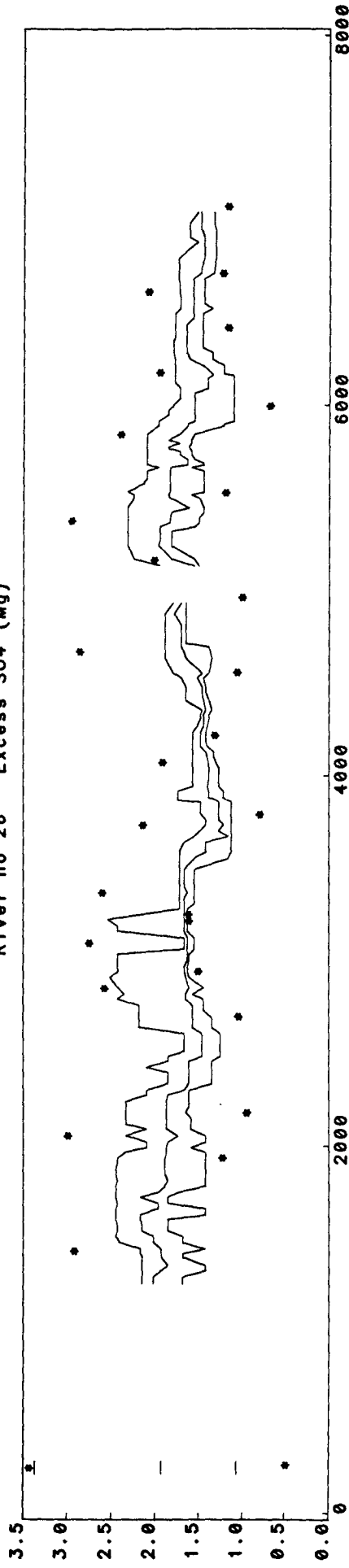
River no 23 Excess S04 (Mg)



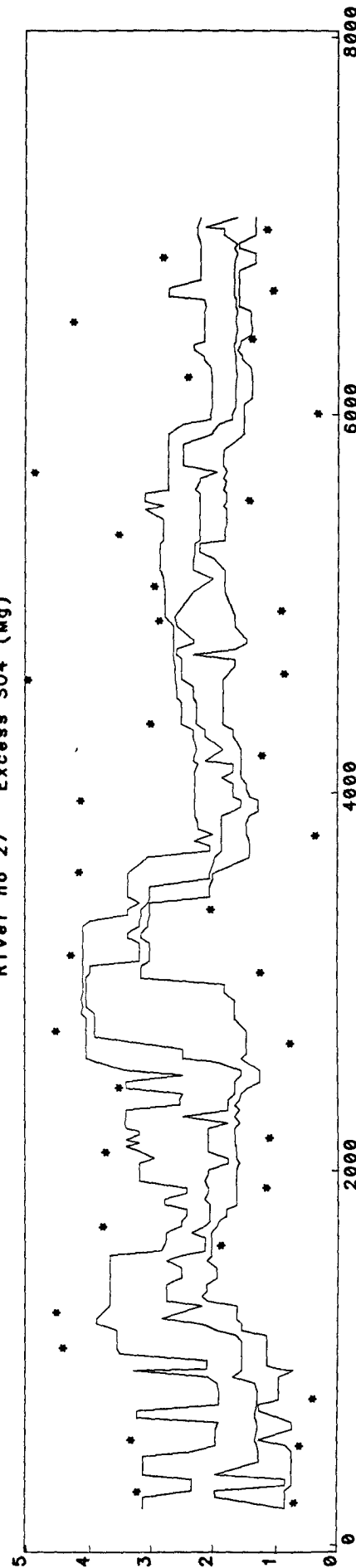
River no 25 Excess SO4 (Mg)



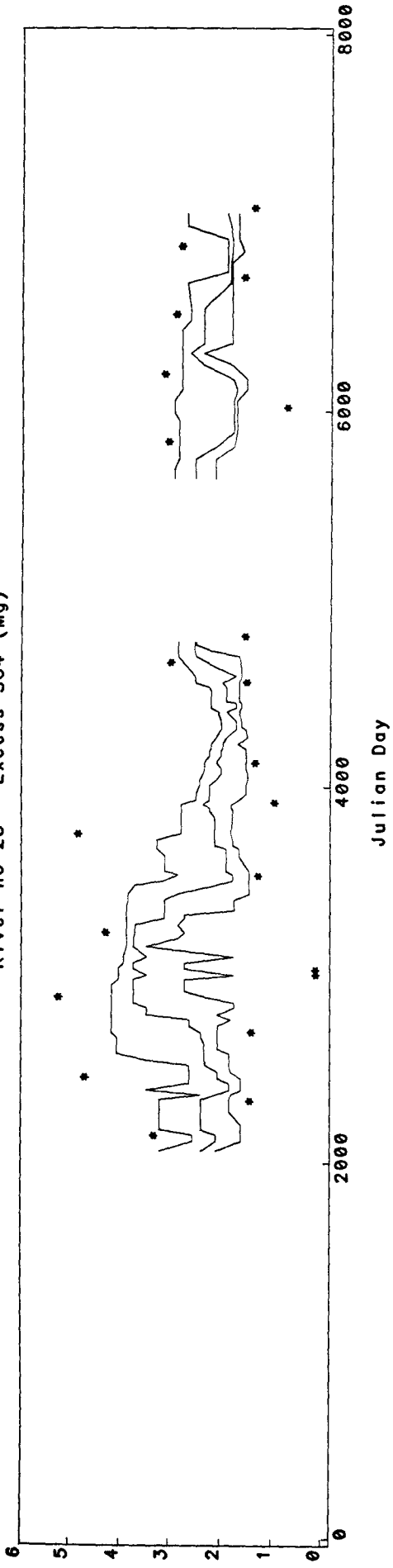
River no 26 Excess SO4 (Mg)



River no 27 Excess SO4 (Mg)

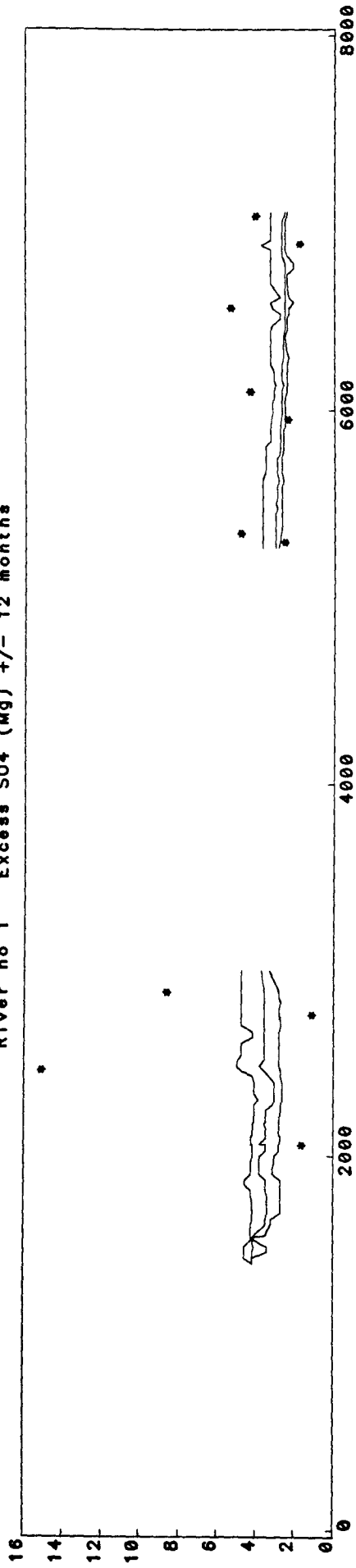


River no 28 Excess S04 (Mg)

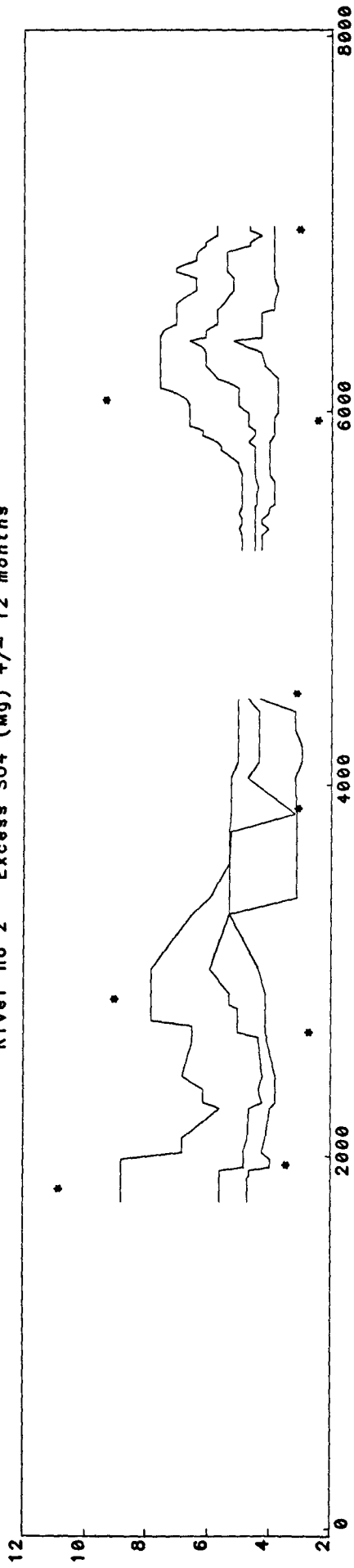




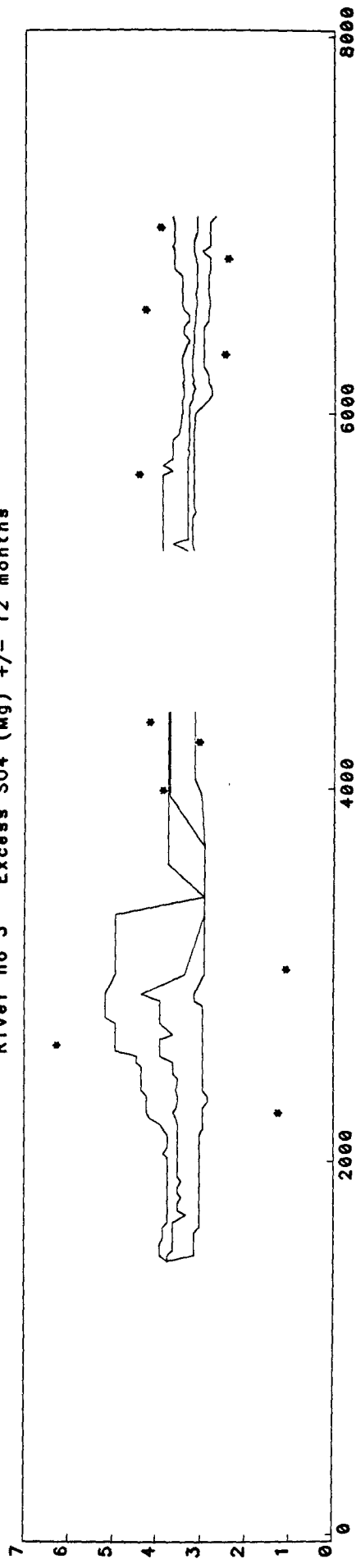
River no 1 Excess SO4 (Mg) +/- 12 months



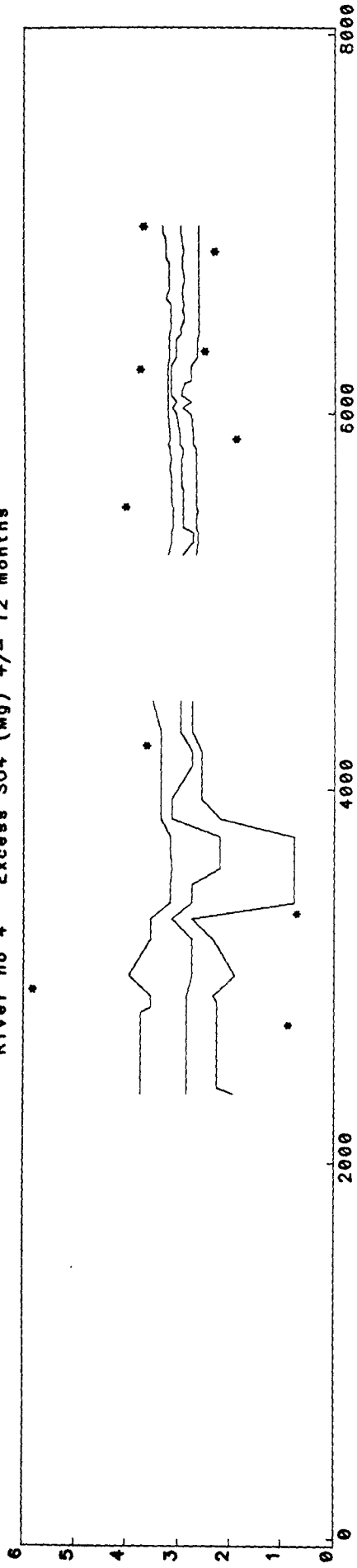
River no 2 Excess SO4 (Mg) +/- 12 months



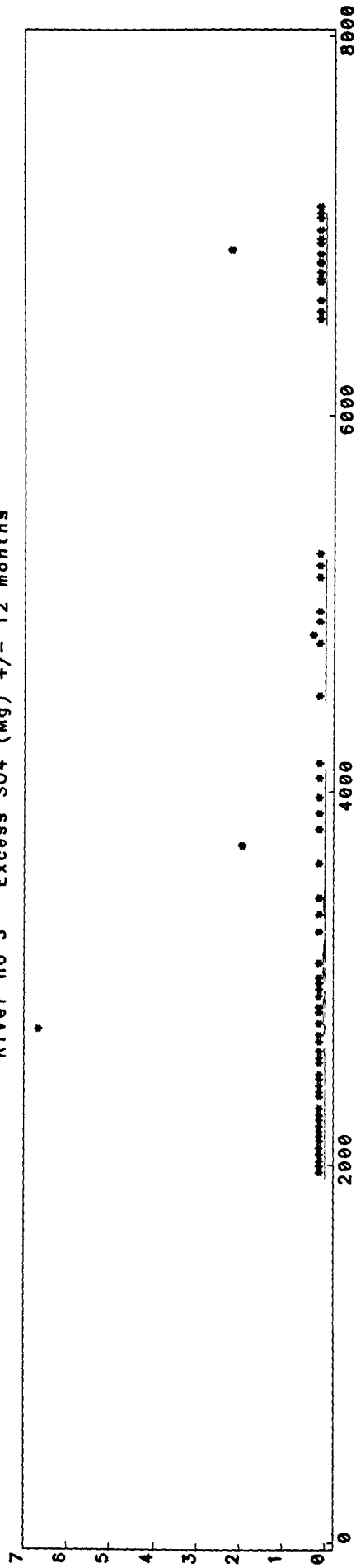
River no 3 Excess SO4 (Mg) +/- 12 months



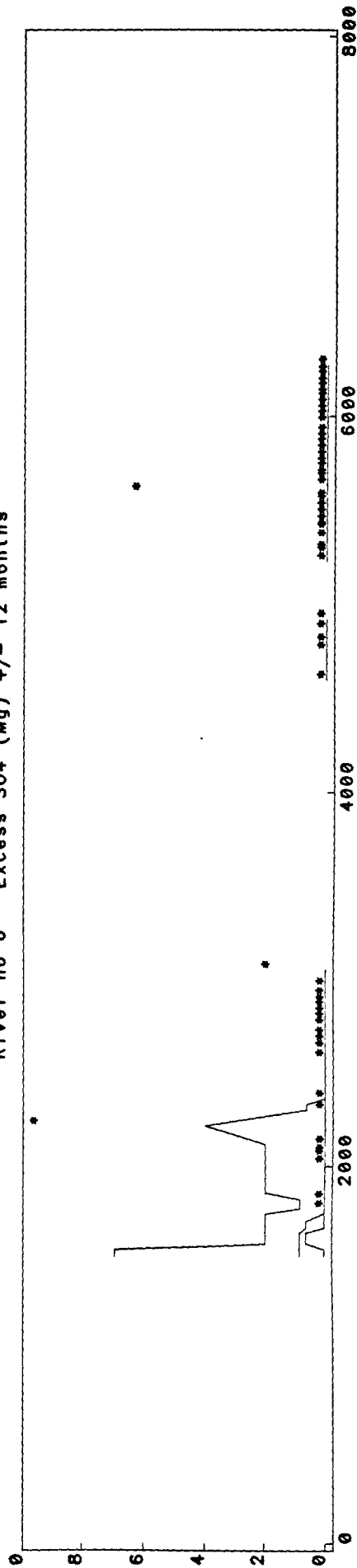
River no 4 Excess SO4 (Mg) +/- 12 months



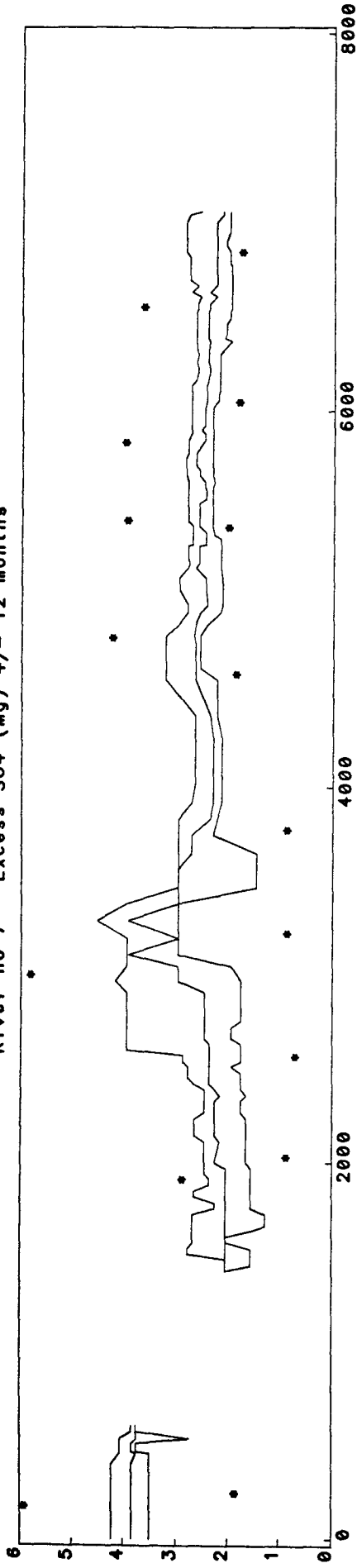
River no 5 Excess SO4 (Mg) +/- 12 months



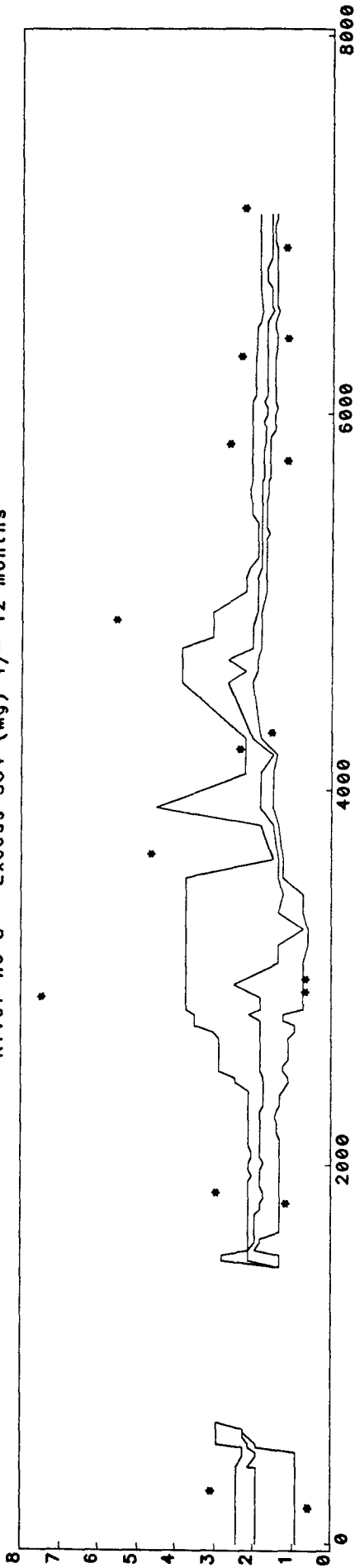
River no 6 Excess SO4 (Mg) +/- 12 months



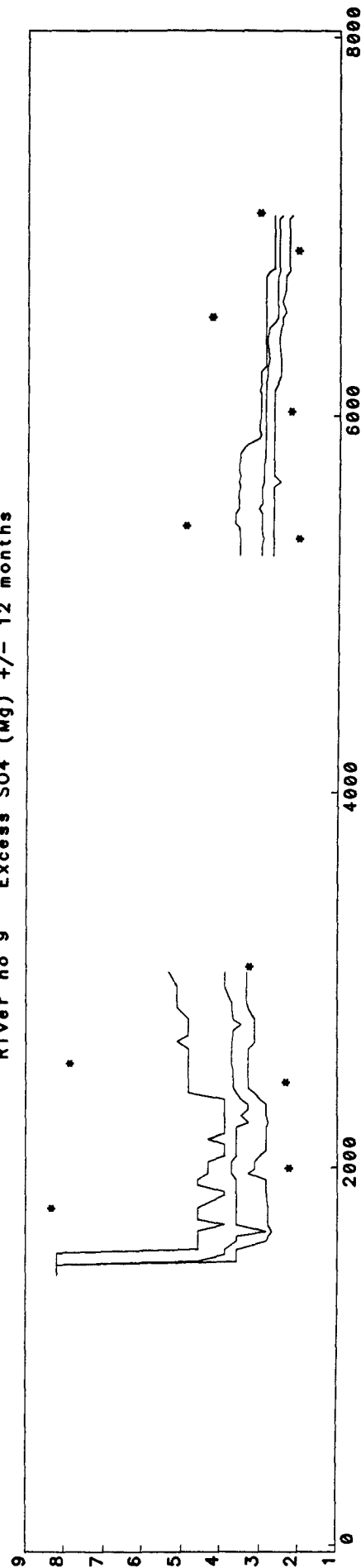
River no 7 Excess SO4 (Mg) +/- 12 months



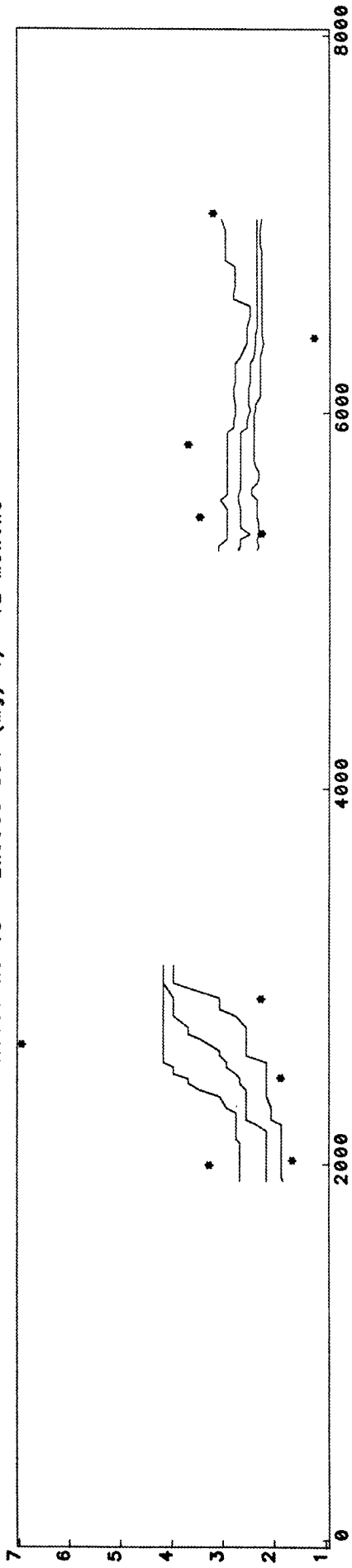
River no 8 Excess SO4 (Mg) +/- 12 months



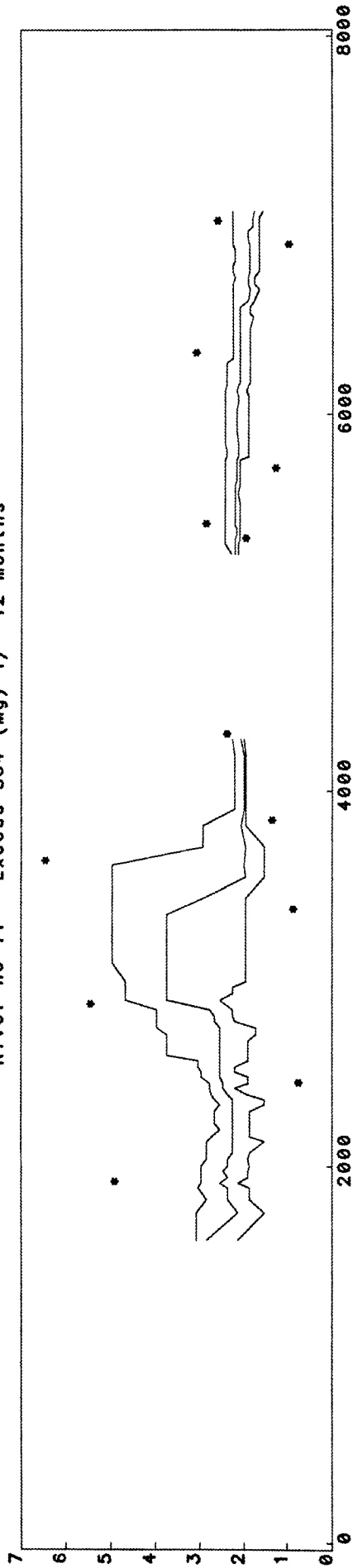
River no 9 Excess SO4 (Mg) +/- 12 months



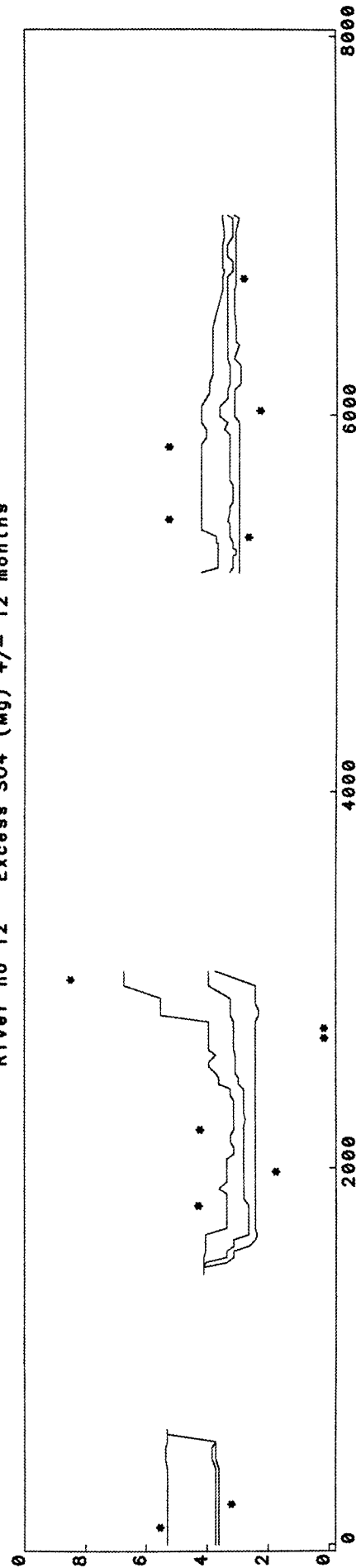
River no 10 Excess SO4 (Mg) +/- 12 months



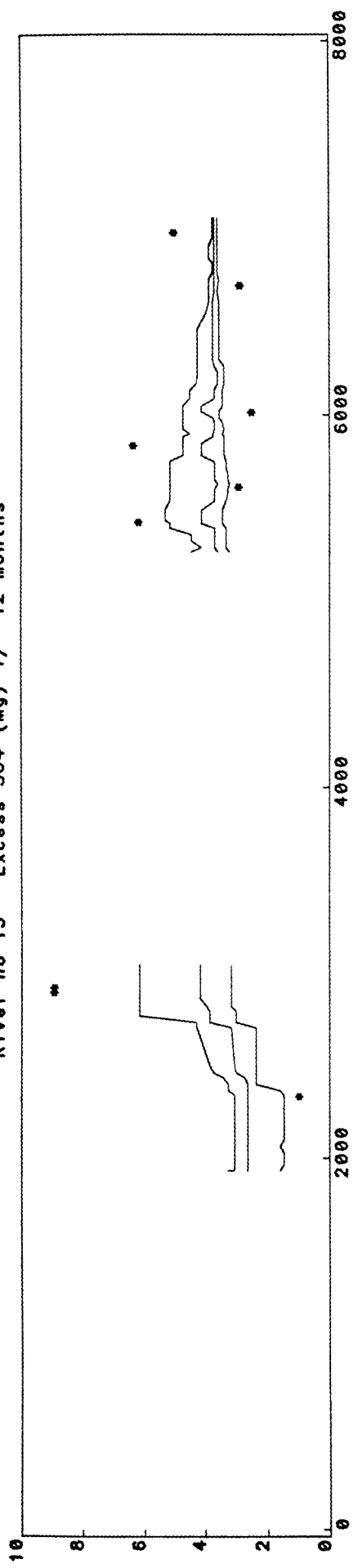
River no 11 Excess SO4 (Mg) +/- 12 months



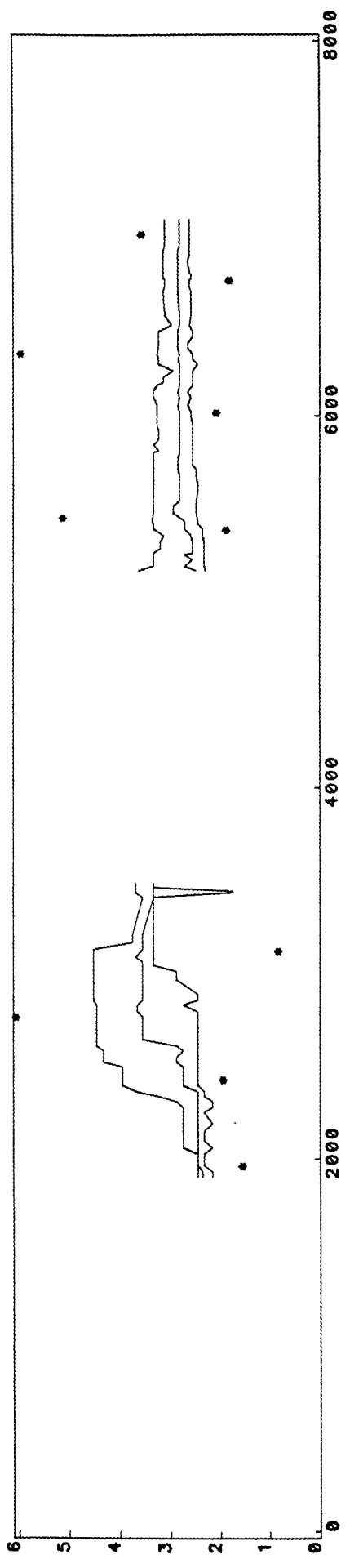
River no 12 Excess SO4 (Mg) +/- 12 months



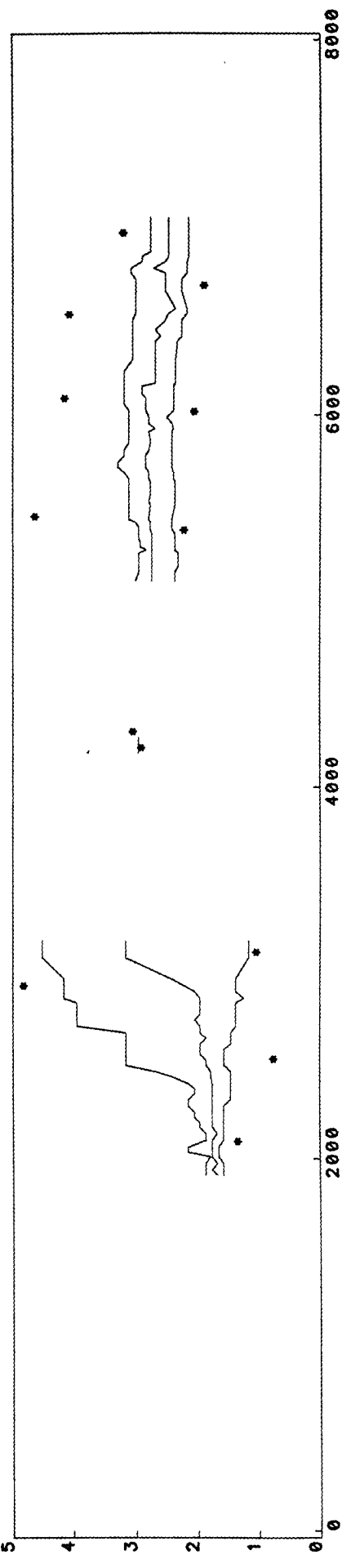
River no 13 Excess S04 (Mg) +/- 12 months



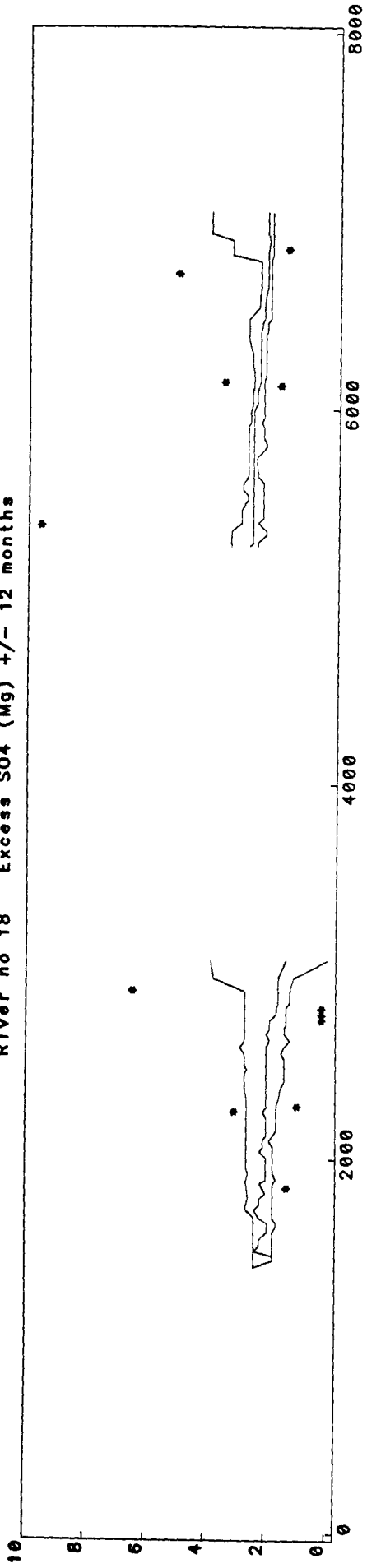
River no 16 Excess S04 (Mg) +/- 12 months



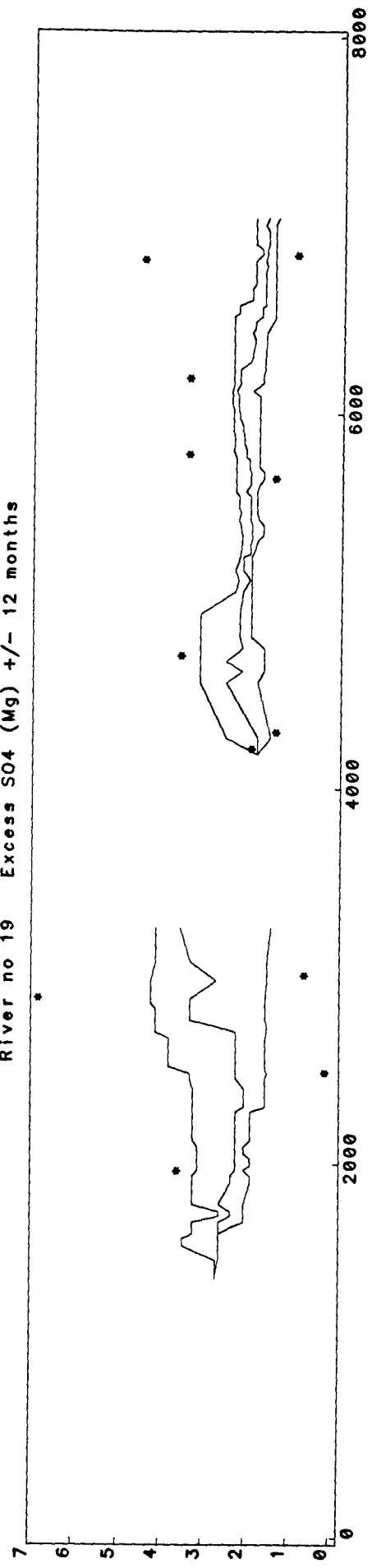
River no 17 Excess S04 (Mg) +/- 12 months



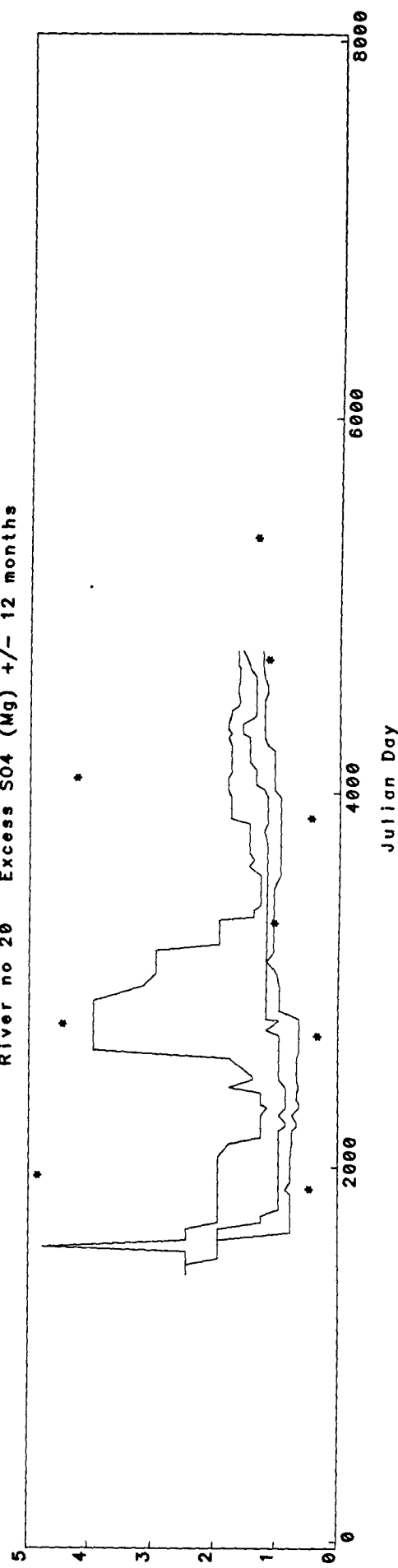
River no 18 Excess SO4 (Mg) +/- 12 months



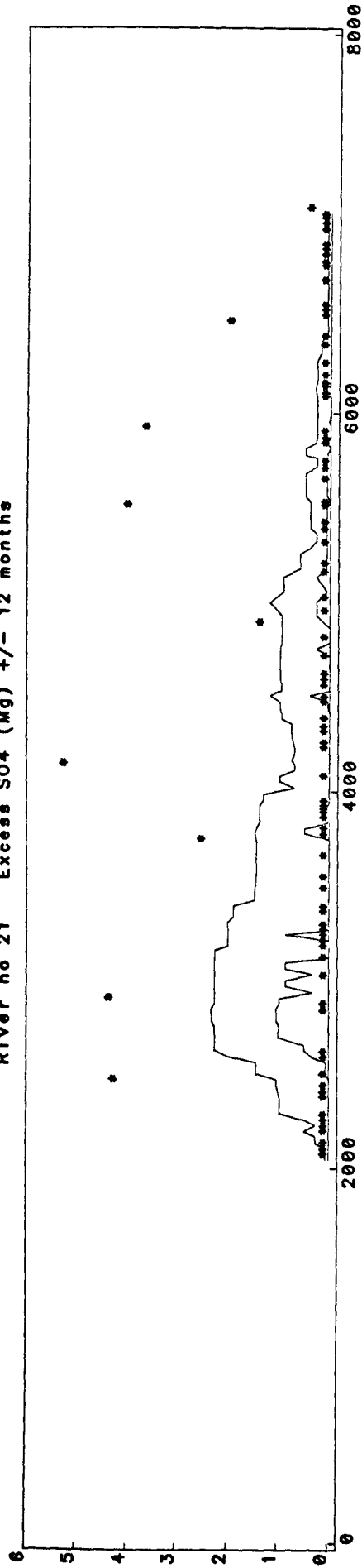
River no 19 Excess SO4 (Mg) +/- 12 months



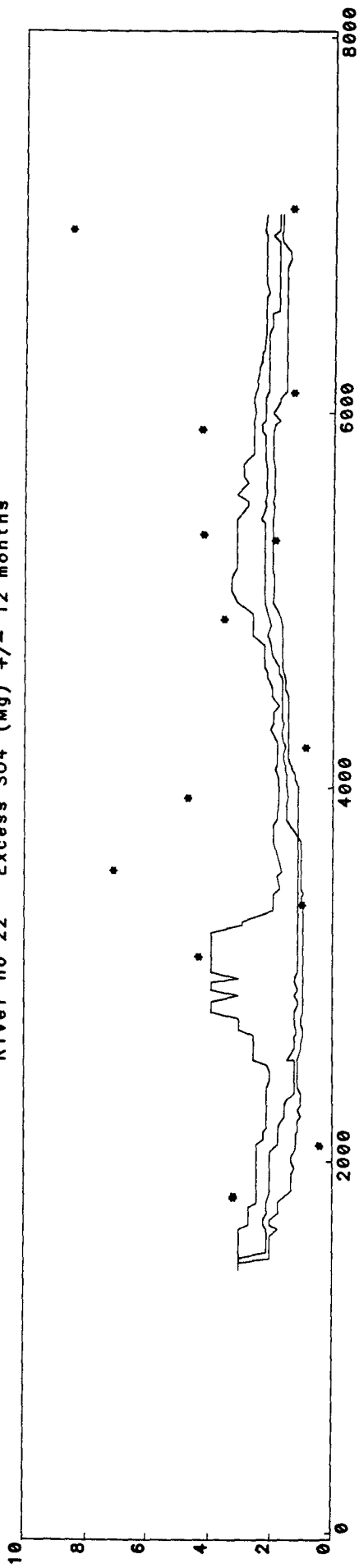
River no 20 Excess SO4 (Mg) +/- 12 months



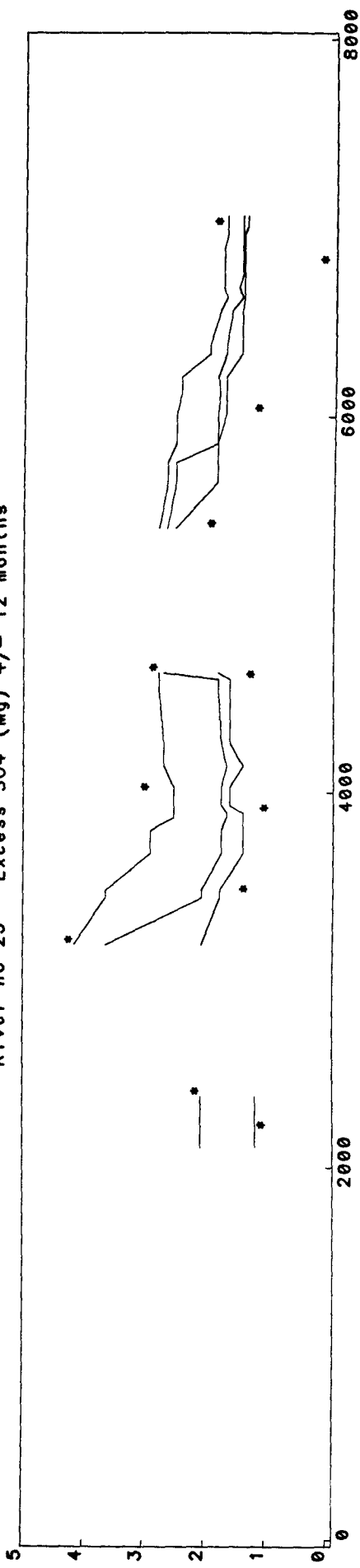
River no 21 Excess SO4 (Mg) +/- 12 months



River no 22 Excess SO4 (Mg) +/- 12 months



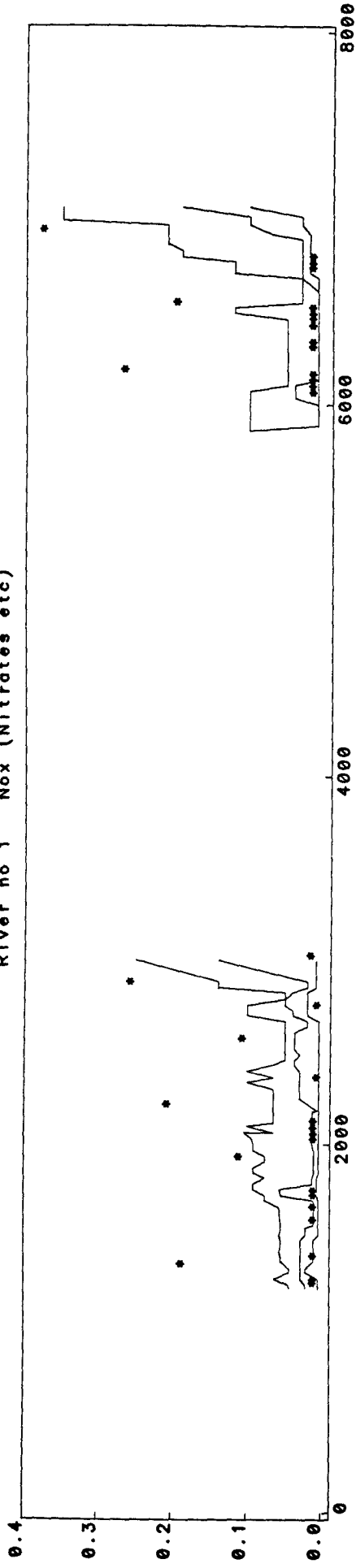
River no 23 Excess SO4 (Mg) +/- 12 months



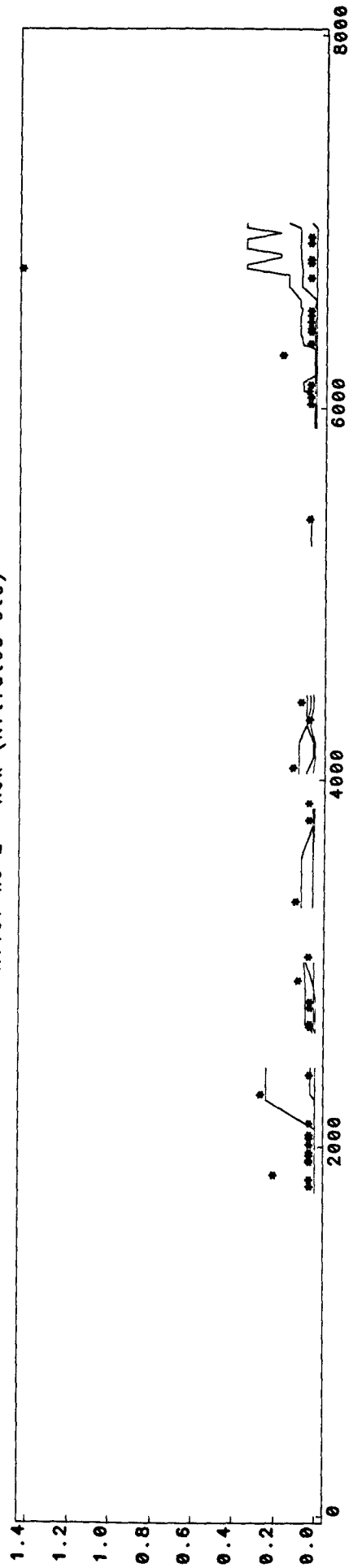
Appendix 11. Running boxplots of  $\text{NO}_3 + \text{NO}_2$  for the study rivers.



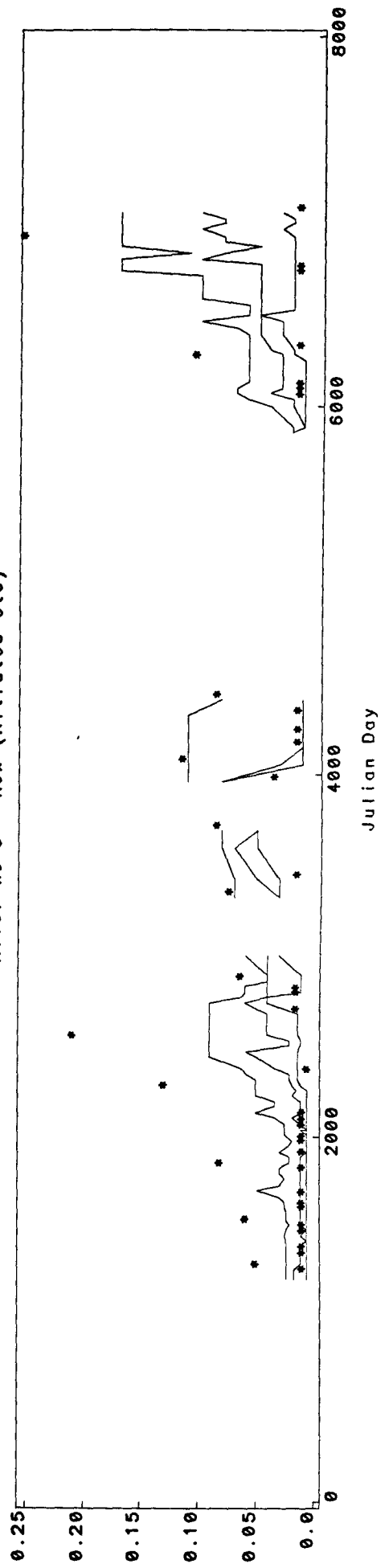
River no 1  
Nox (Nitrates etc)



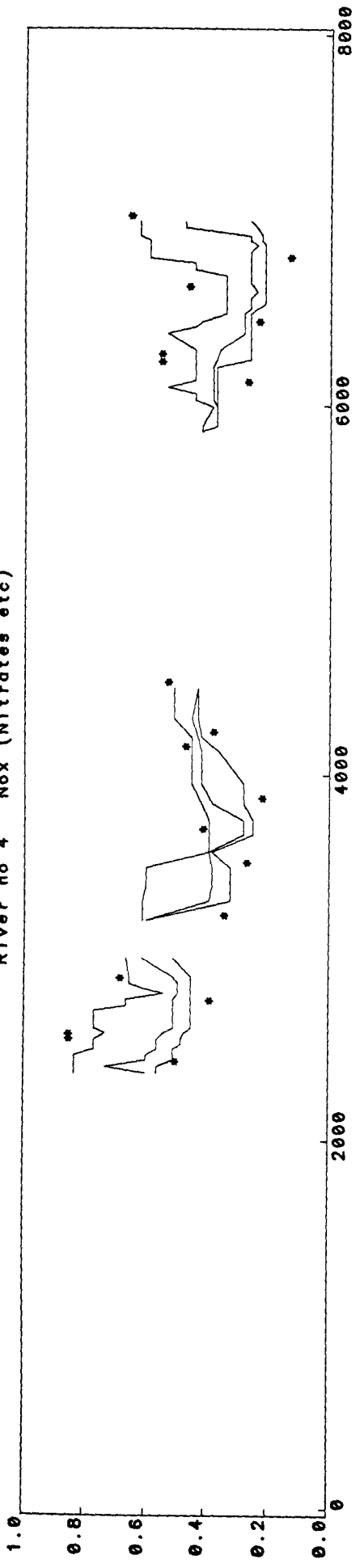
River no 2  
Nox (Nitrates etc)



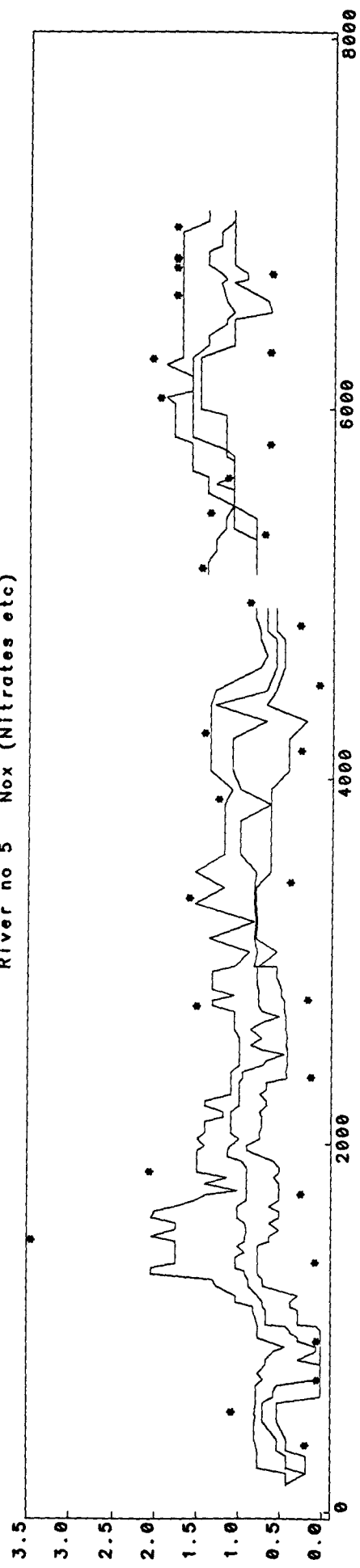
River no 3  
Nox (Nitrates etc)



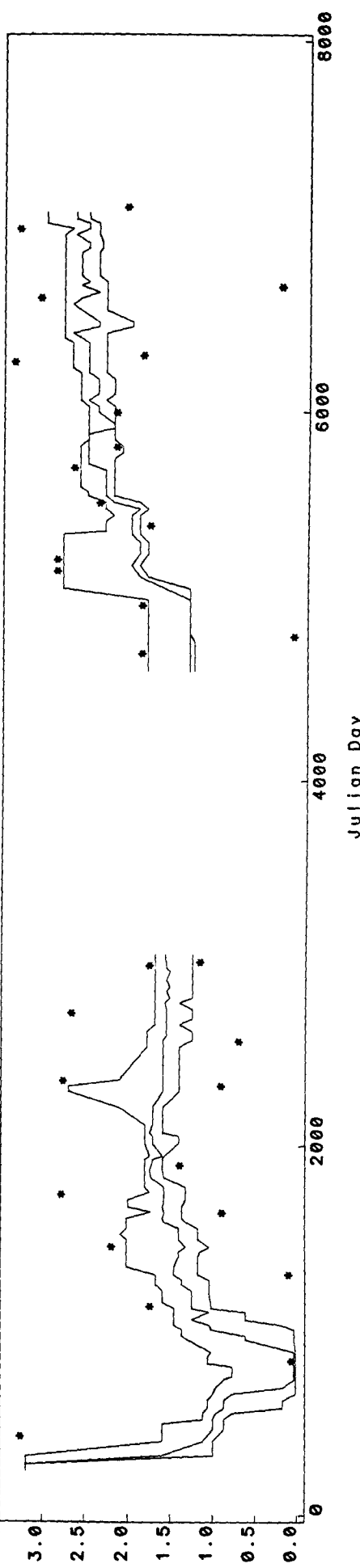
River no 4 Nox (Nitrates etc)



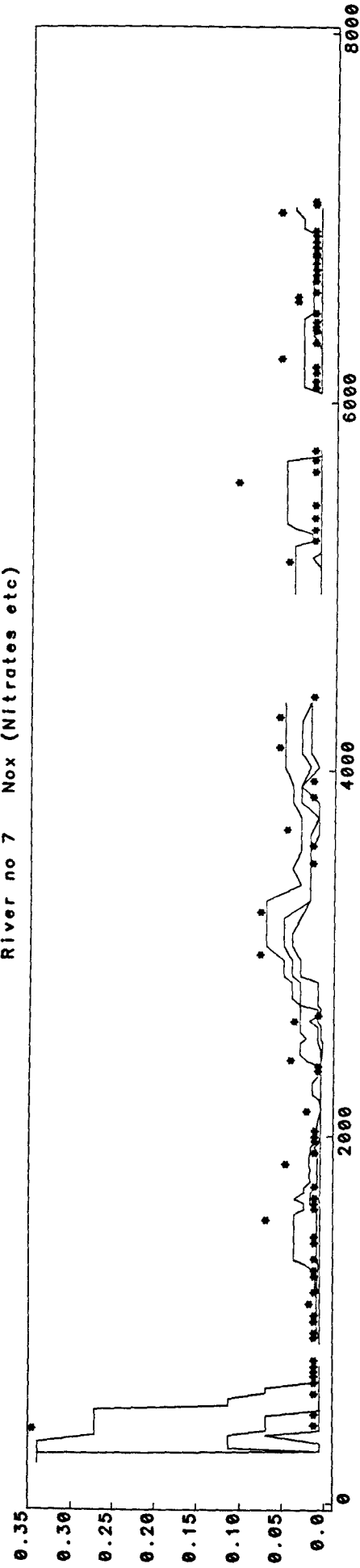
River no 5 Nox (Nitrates etc)



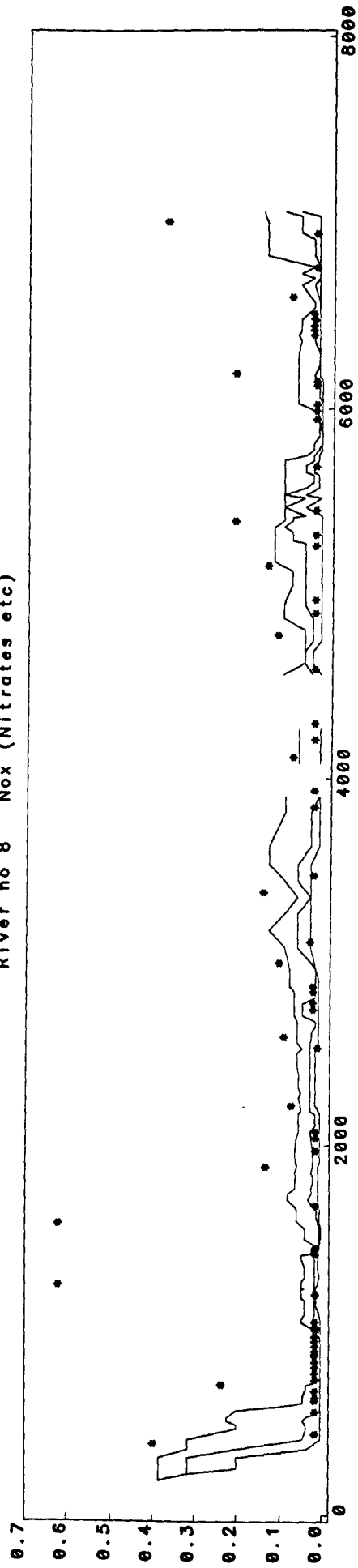
River no 6 Nox (Nitrates etc)



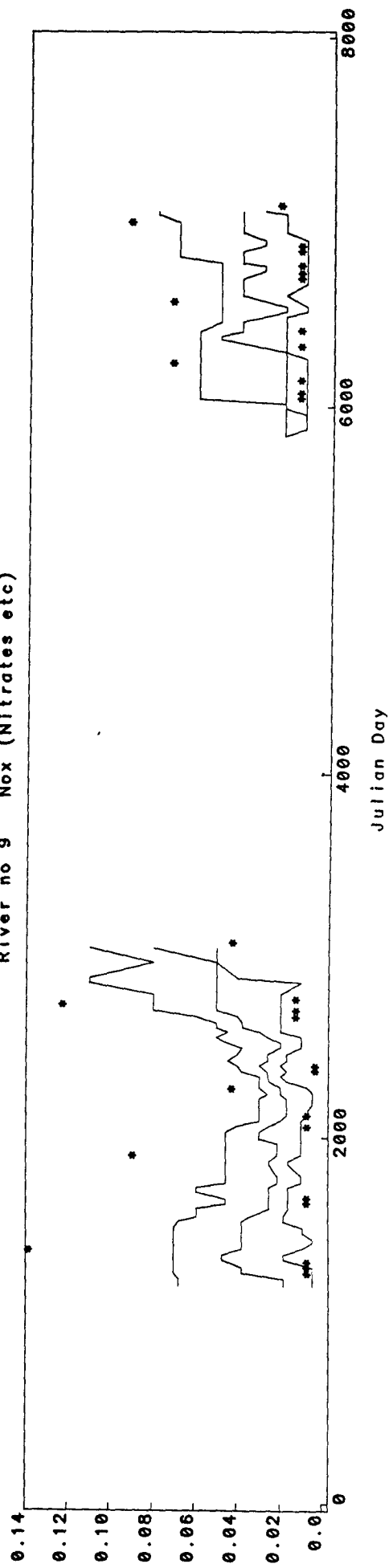
River no 7  
Nox (Nitrates etc)



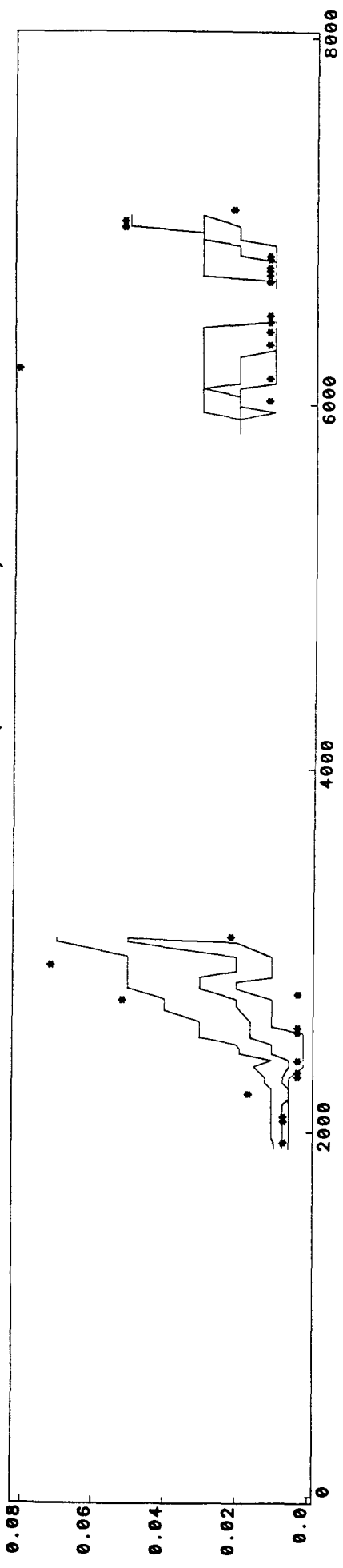
River no 8  
Nox (Nitrates etc)



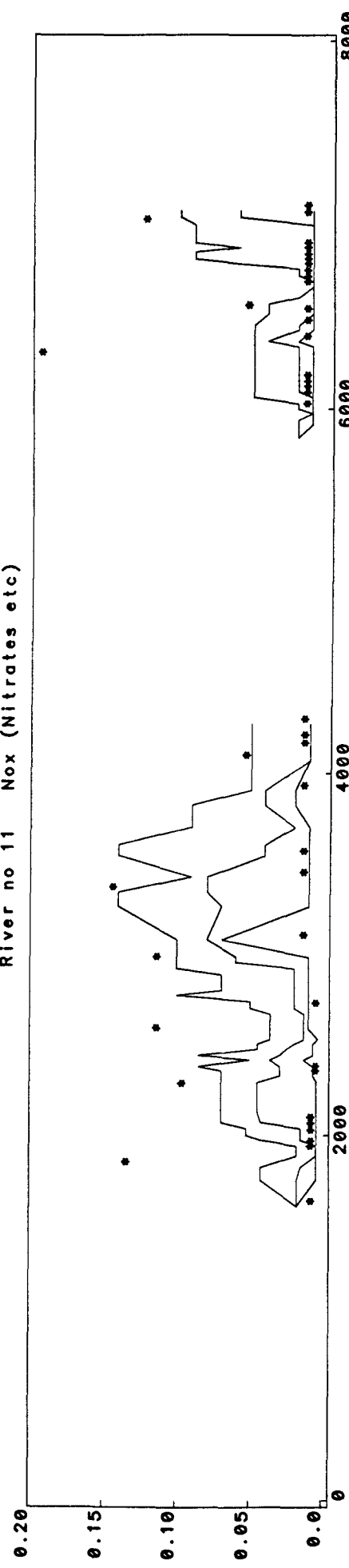
River no 9  
Nox (Nitrates etc)



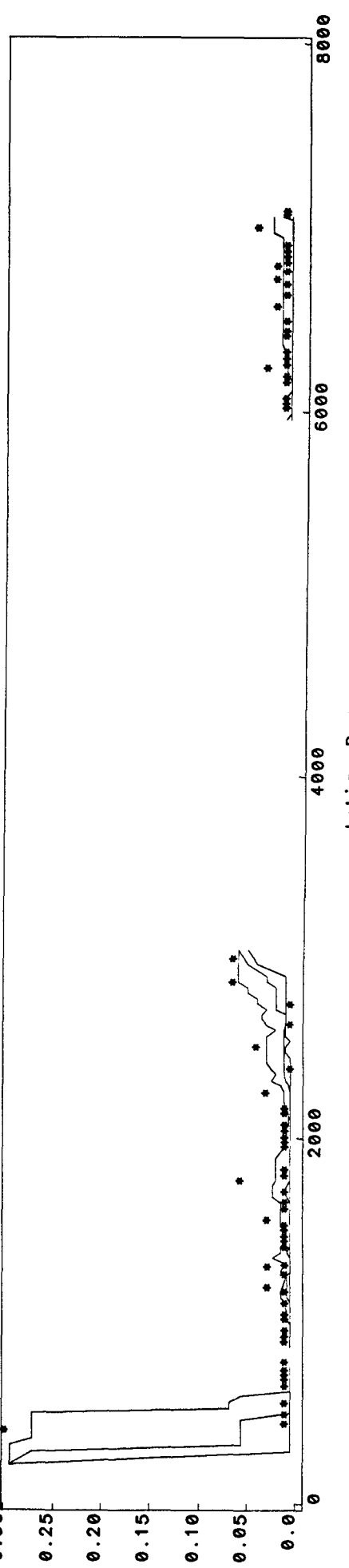
River no 10 Nox (Nitrates etc)



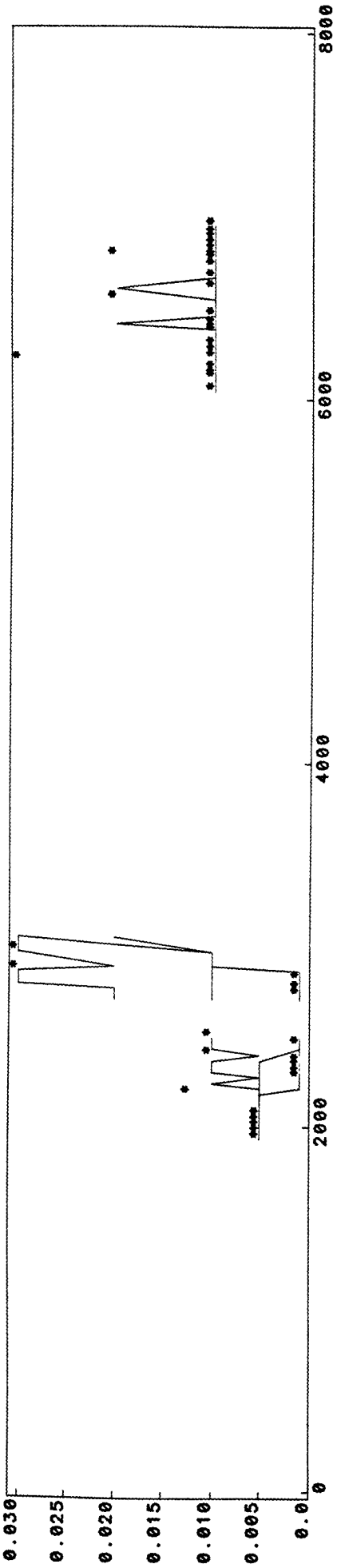
River no 11 Nox (Nitrates etc)



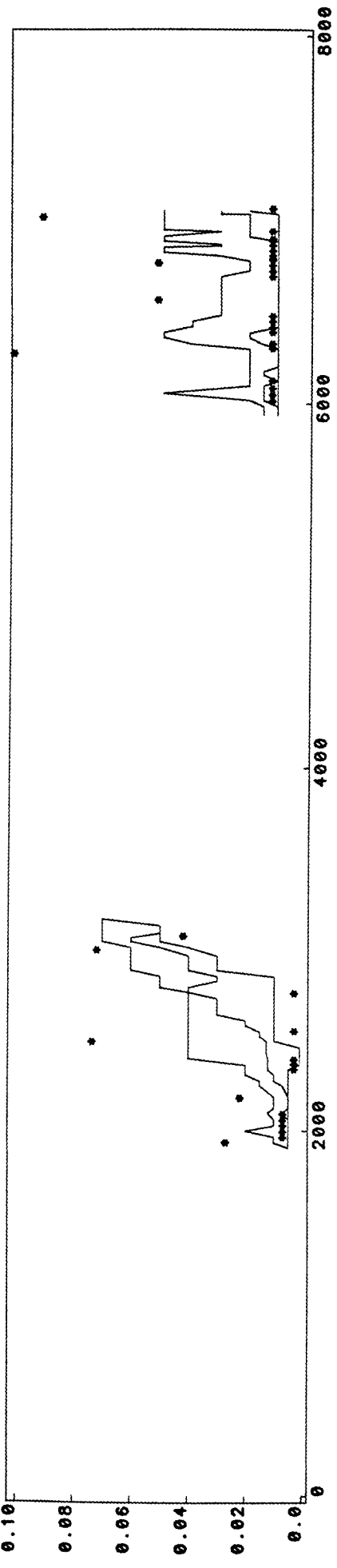
River no 12 Nox (Nitrates etc)



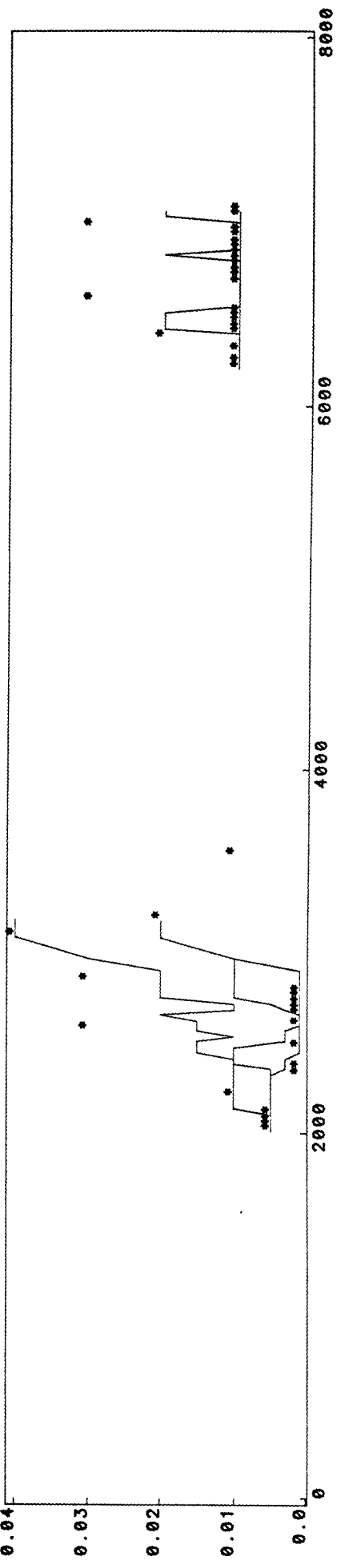
River no 13 Nox (Nitrates etc)



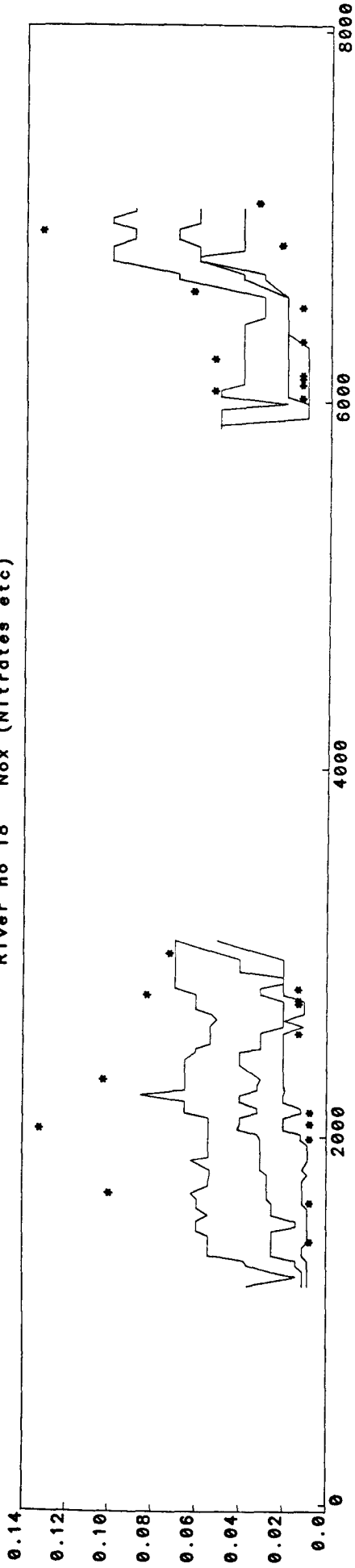
River no 16 Nox (Nitrates etc)



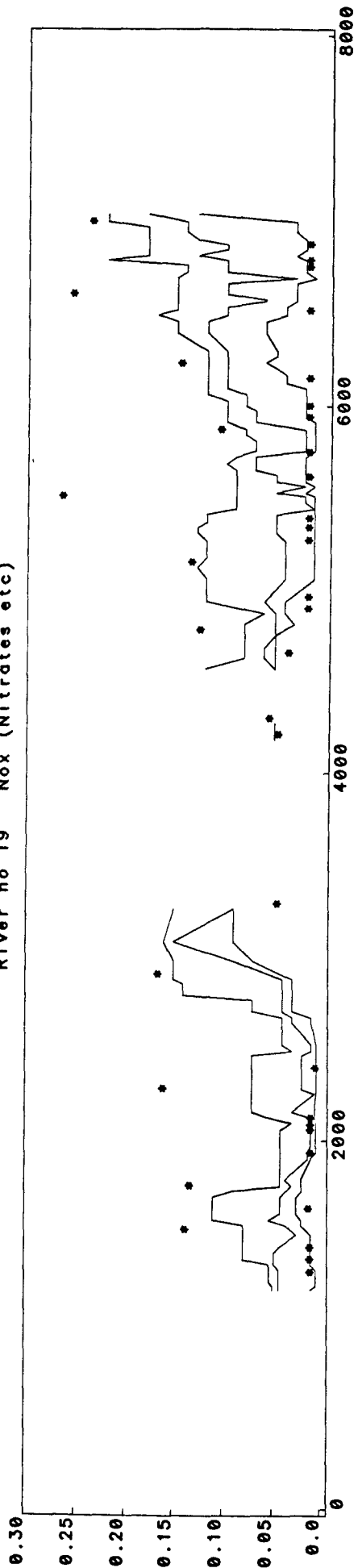
River no 17 Nox (Nitrates etc)



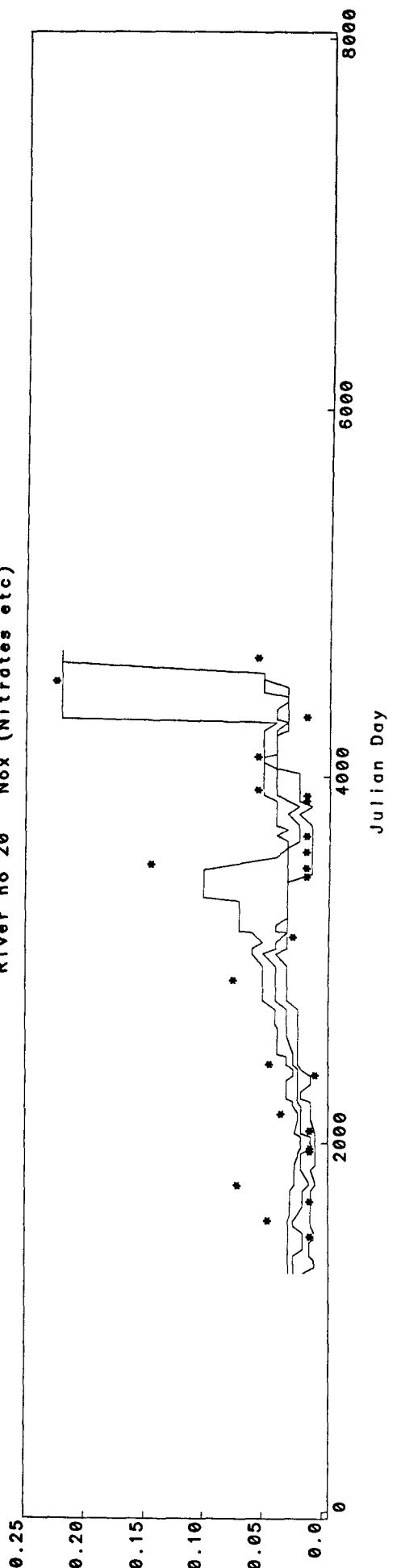
River no 18 Nox (Nitrates etc)



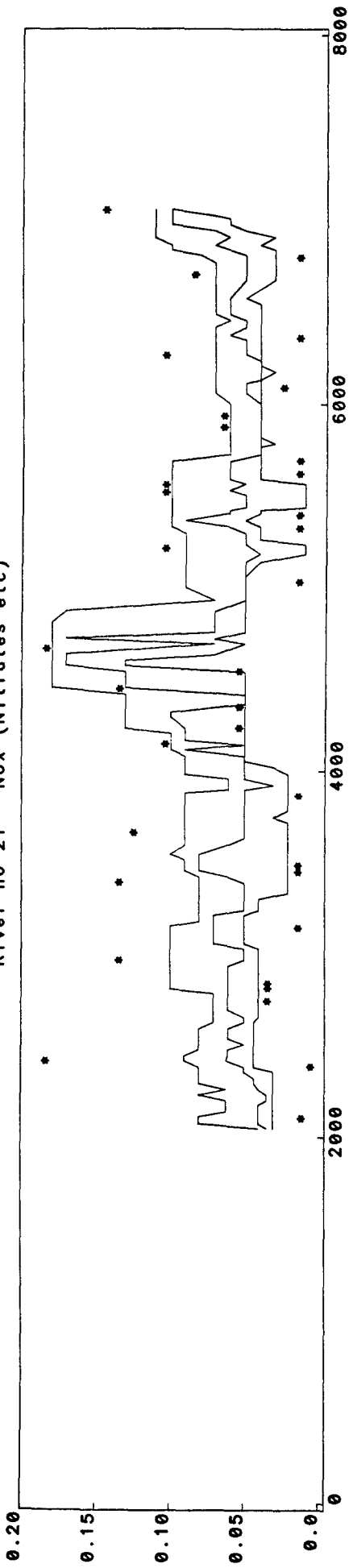
River no 19 Nox (Nitrates etc)



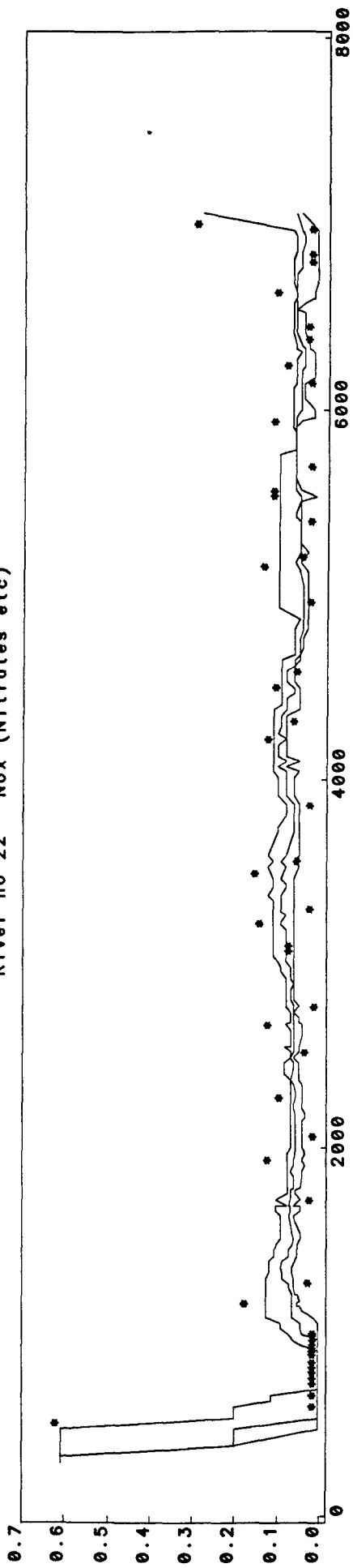
River no 20 Nox (Nitrates etc)



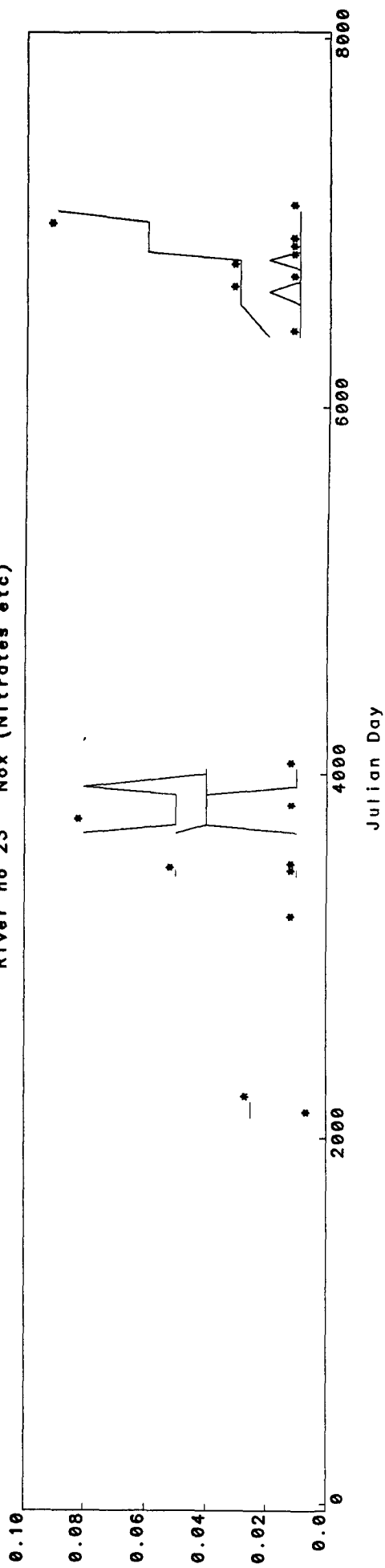
River no 21  
Nox (Nitrates etc)



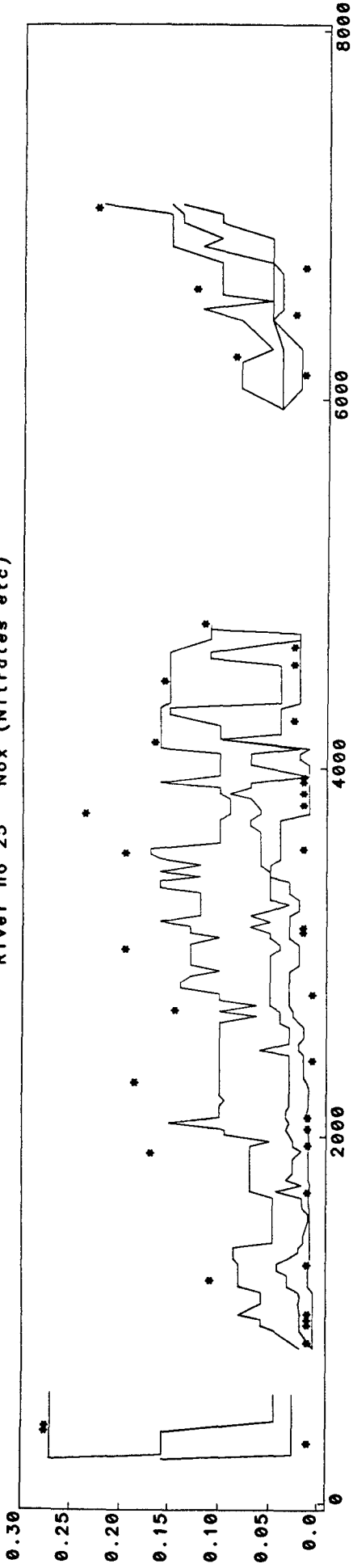
River no 22  
Nox (Nitrates etc)



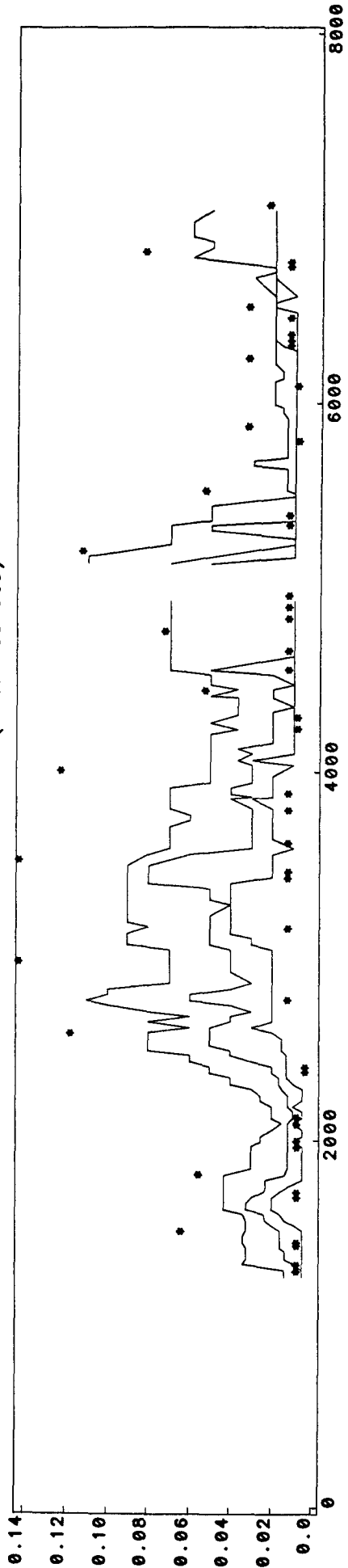
River no 23  
Nox (Nitrates etc)



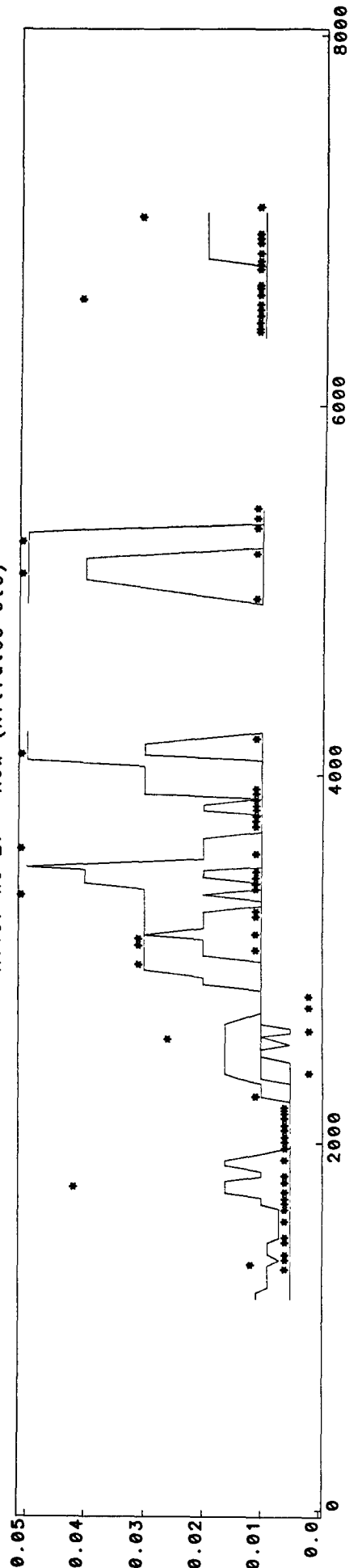
River no 25 Nox (Nitrates etc)



River no 26 Nox (Nitrates etc)



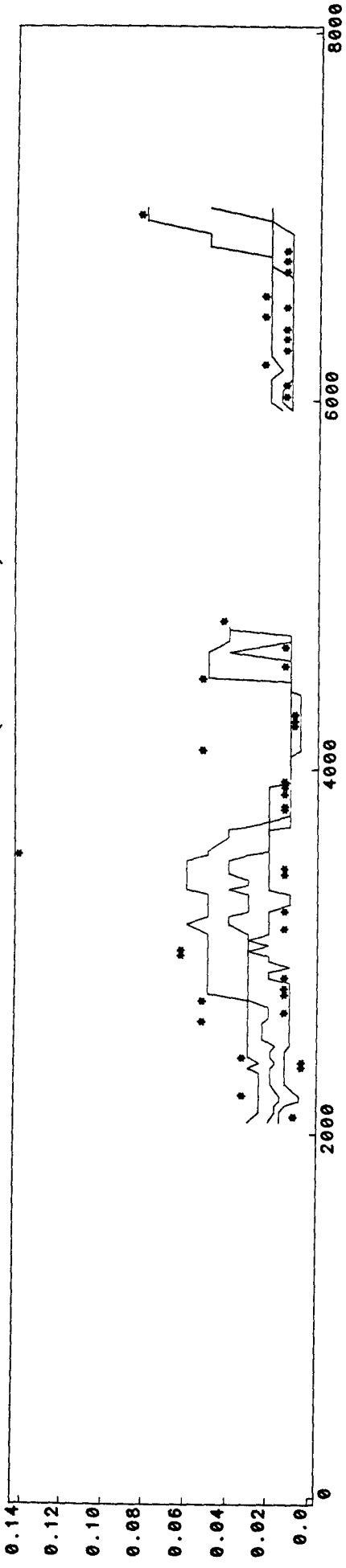
River no 27 Nox (Nitrates etc)



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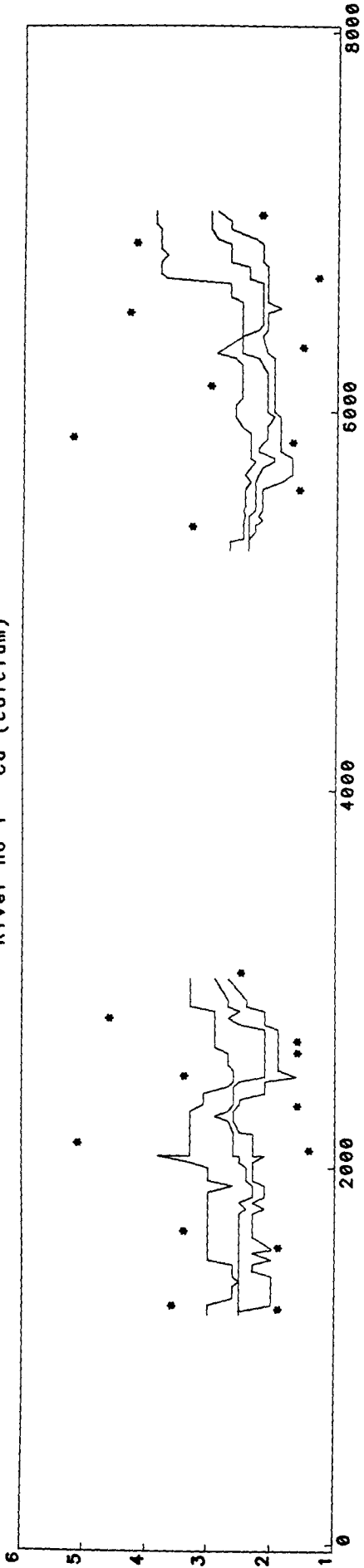
River no 28 Nox (Nitrates etc)



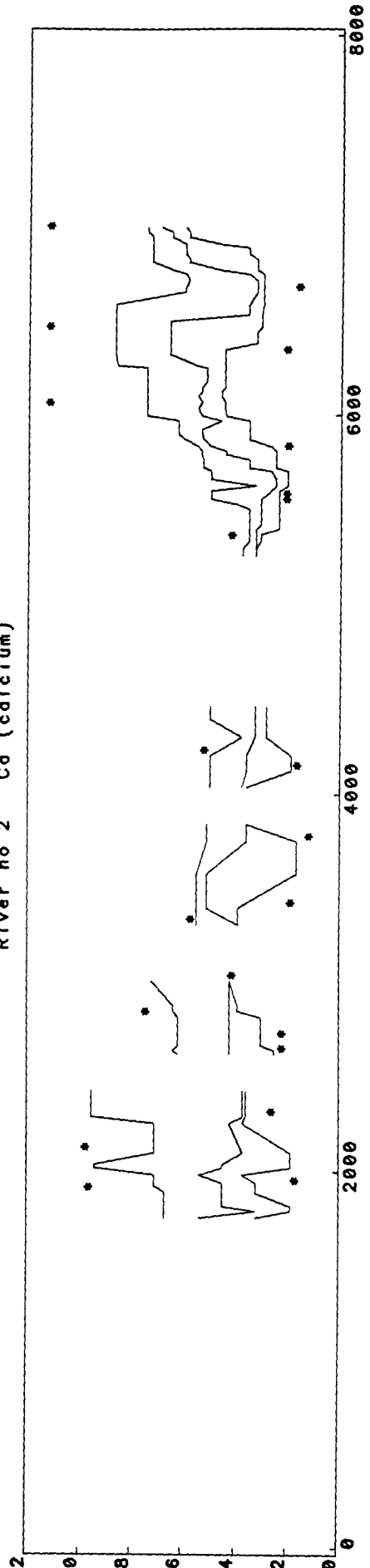
Julian Day

Appendix 12. Running boxplots of calcium for the study rivers.

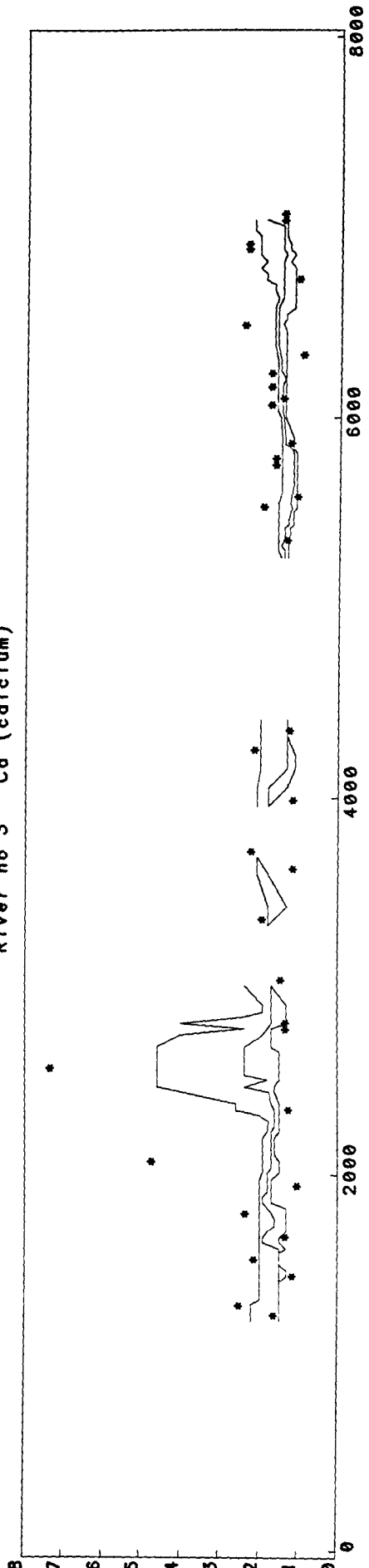
River no 1 Ca (calcium)



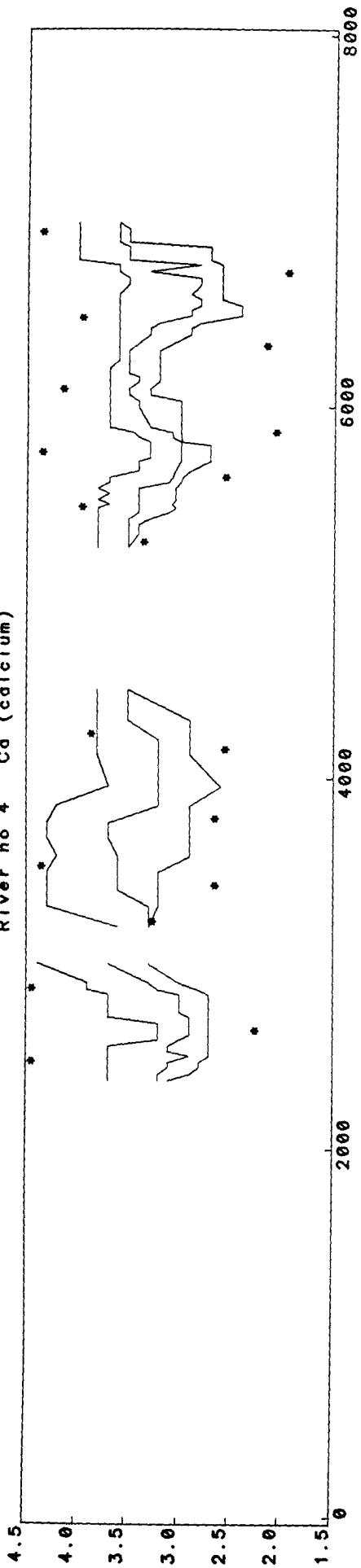
River no 2 Ca (calcium)



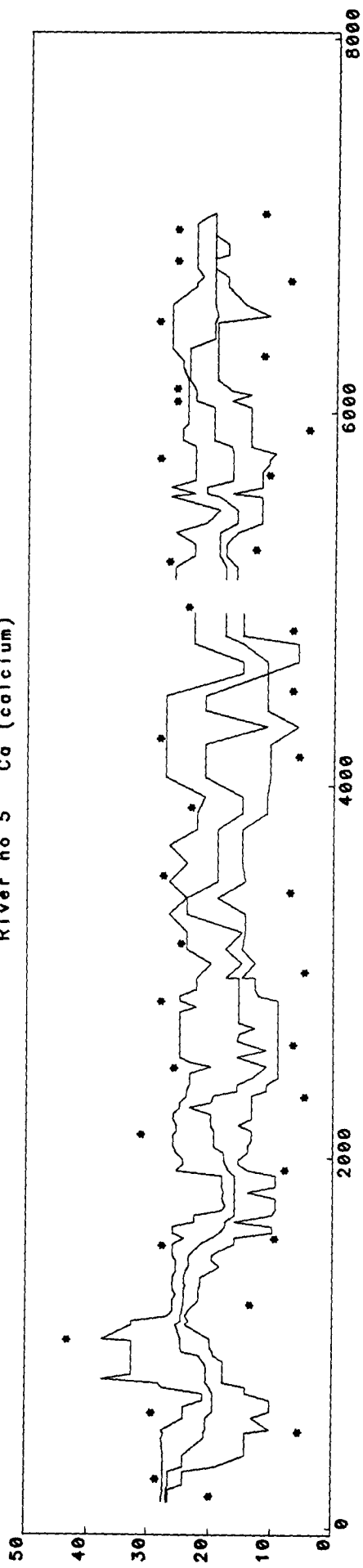
River no 3 Ca (calcium)



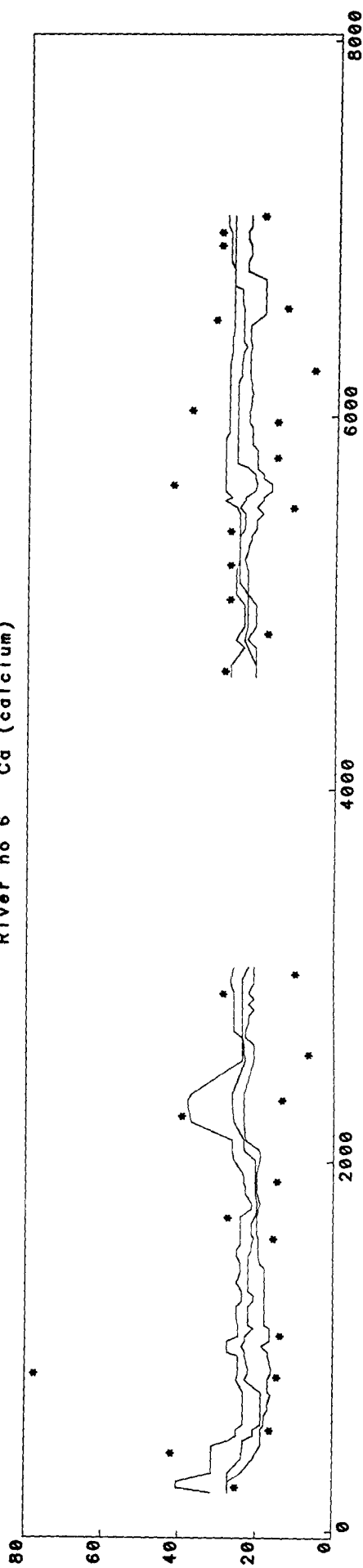
River no 4 Ca (calcium)



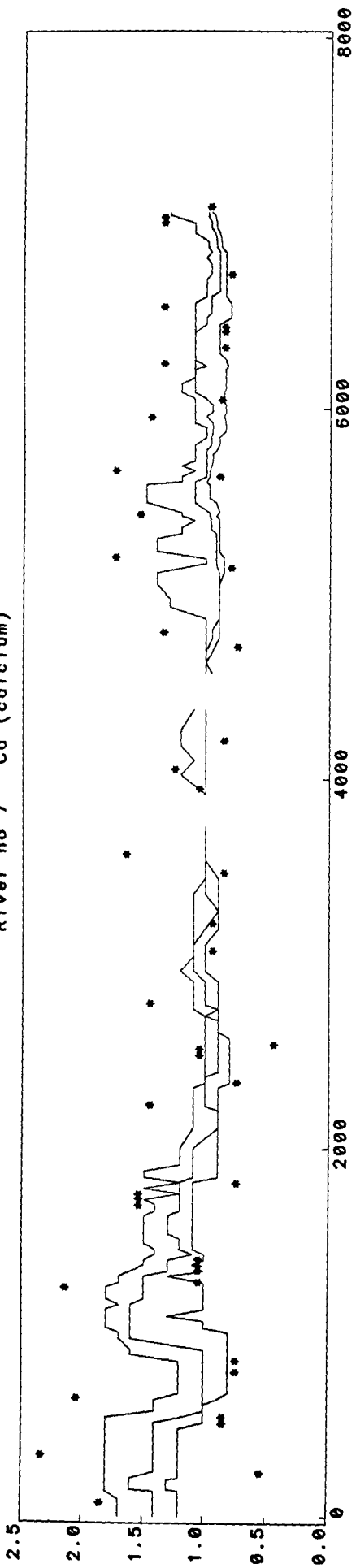
Julian Day  
River no 5 Ca (calcium)



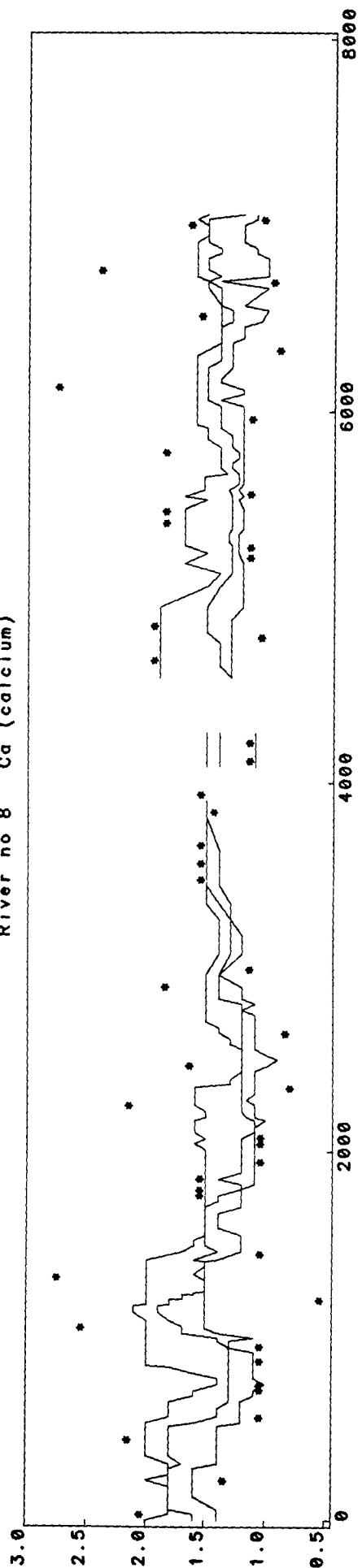
Julian Day  
River no 6 Ca (calcium)



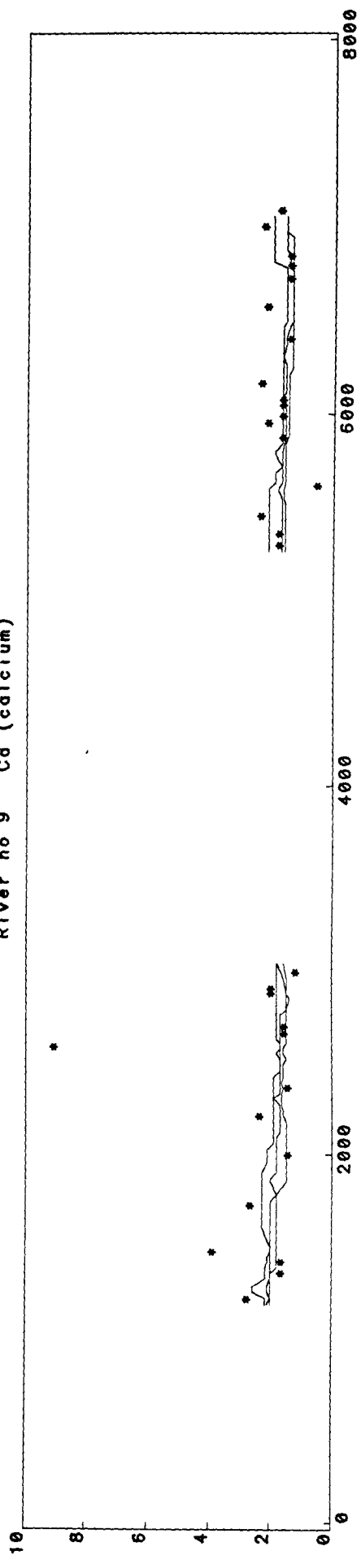
River no 7 Ca (calcium)



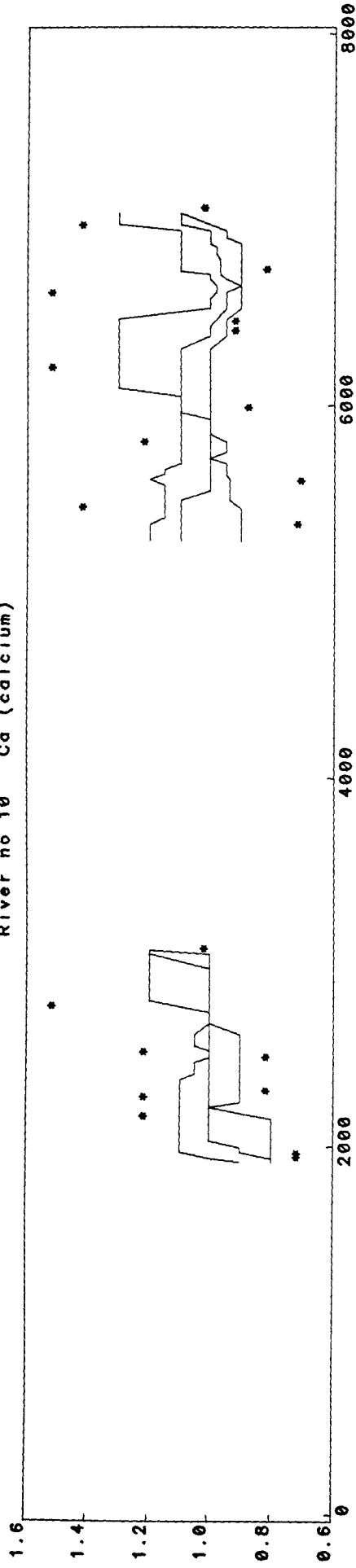
River no 8 Ca (calcium)



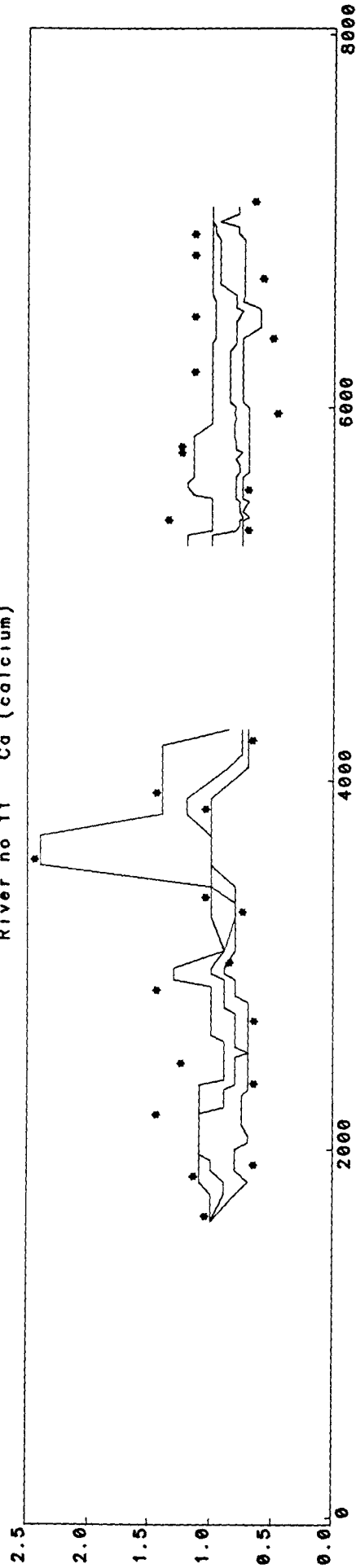
River no 9 Ca (calcium)



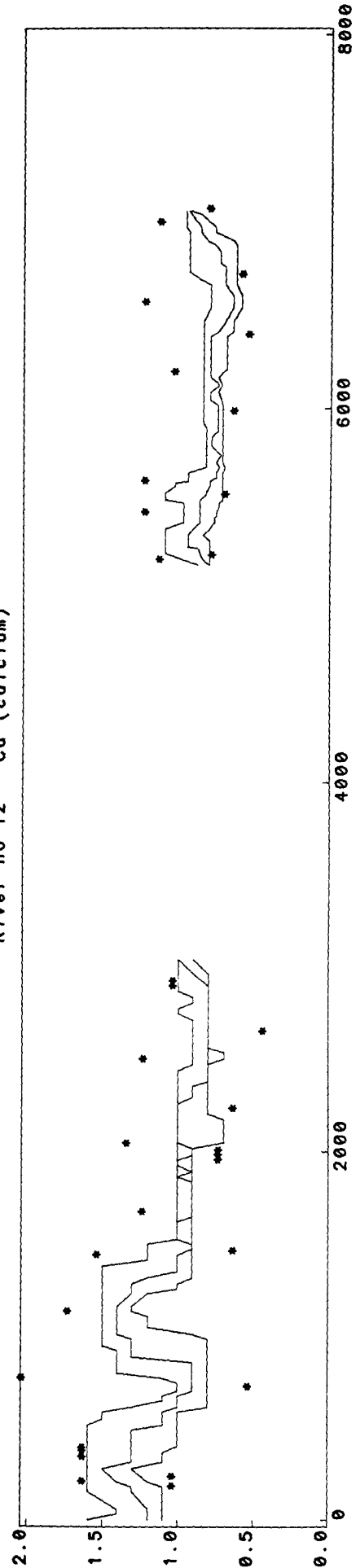
River no 10 Ca (calcium)



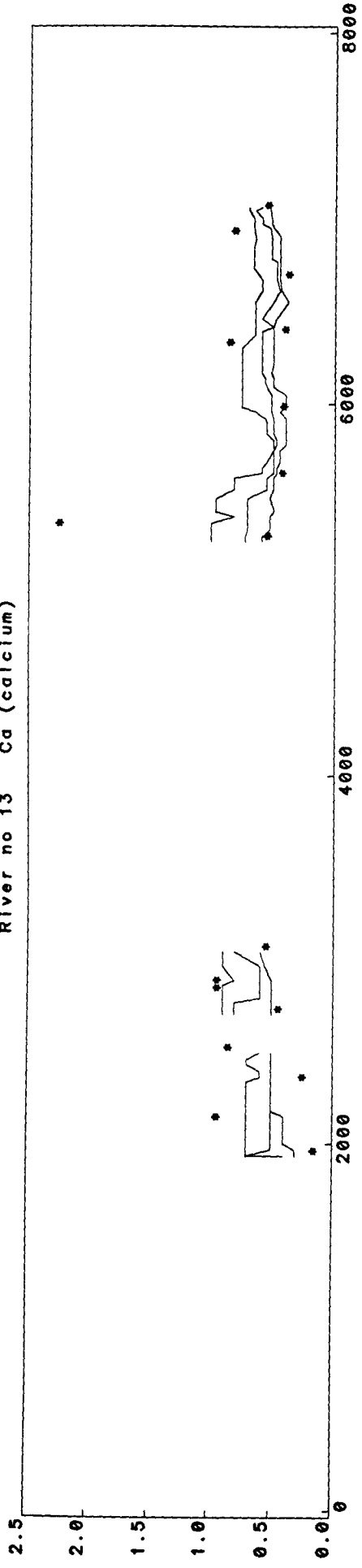
River no 11 Ca (calcium)



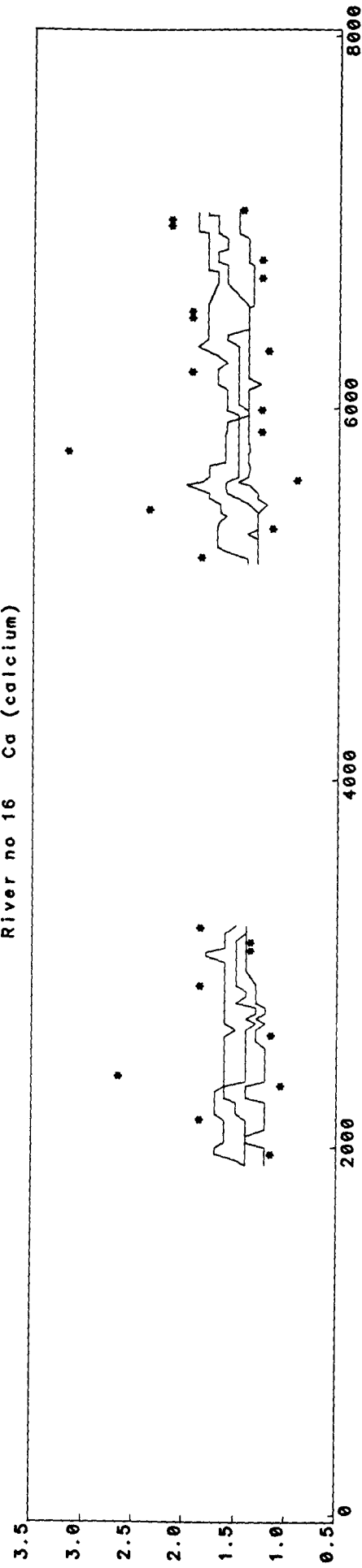
River no 12 Ca (calcium)



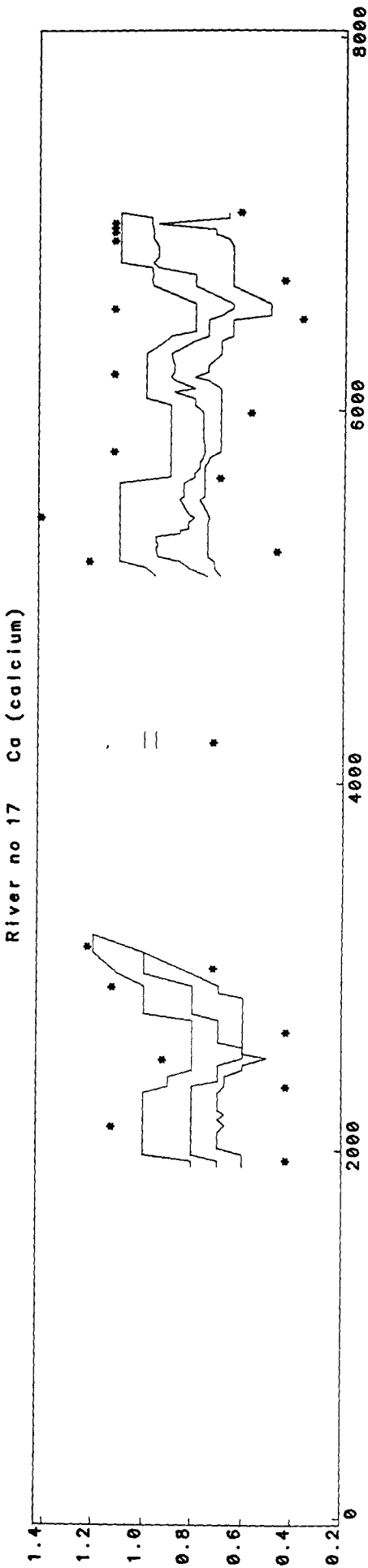
River no 13 Ca (calcium)



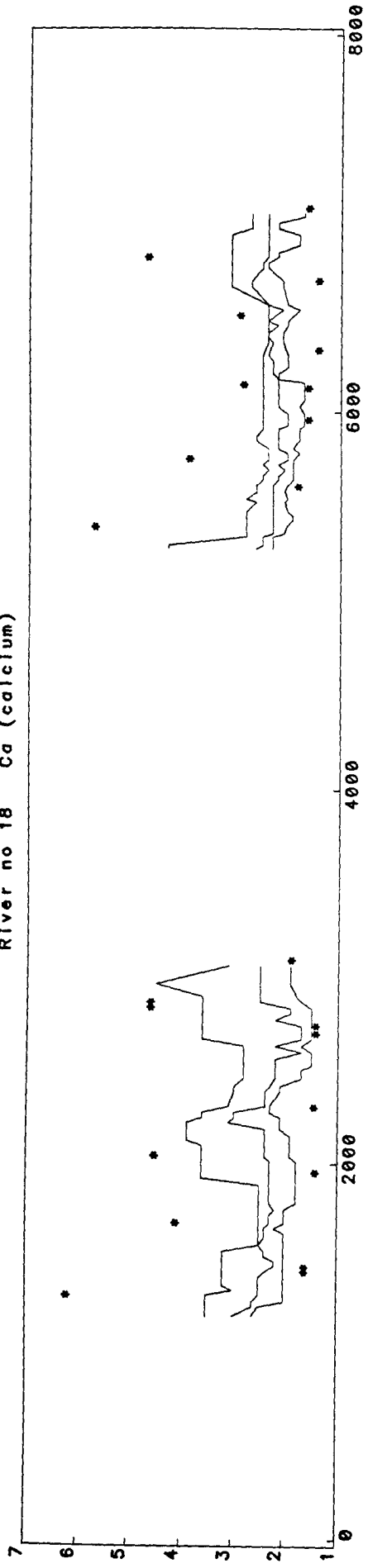
River no 16 Ca (calcium)



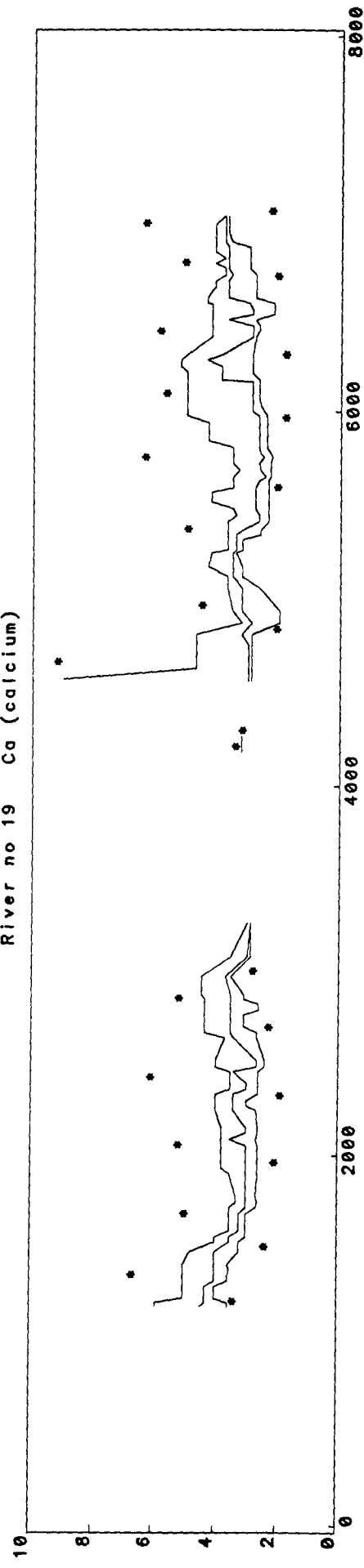
River no 17 Ca (calcium)



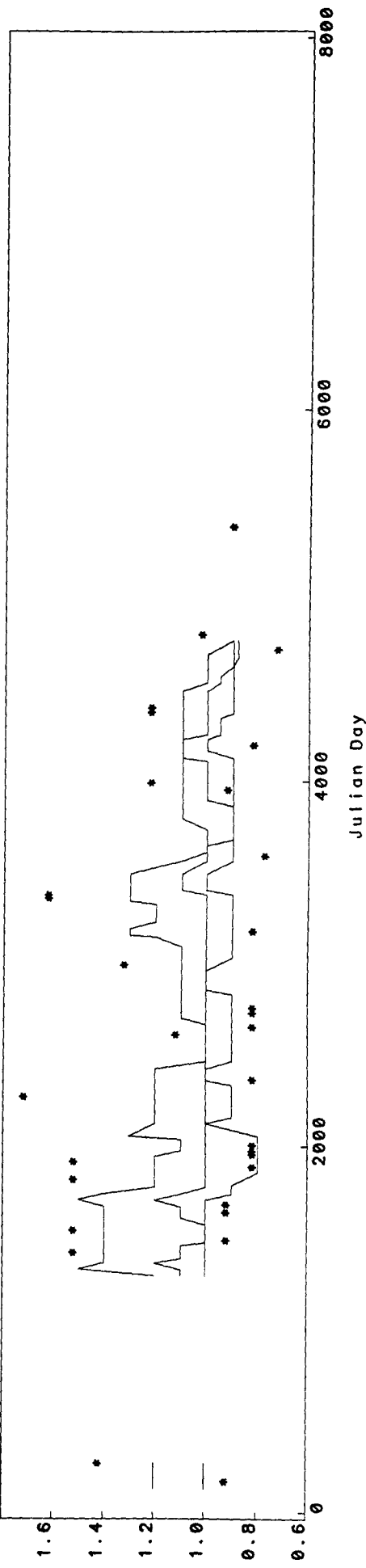
River no 18 Ca (calcium)



River no 19 Ca (calcium)

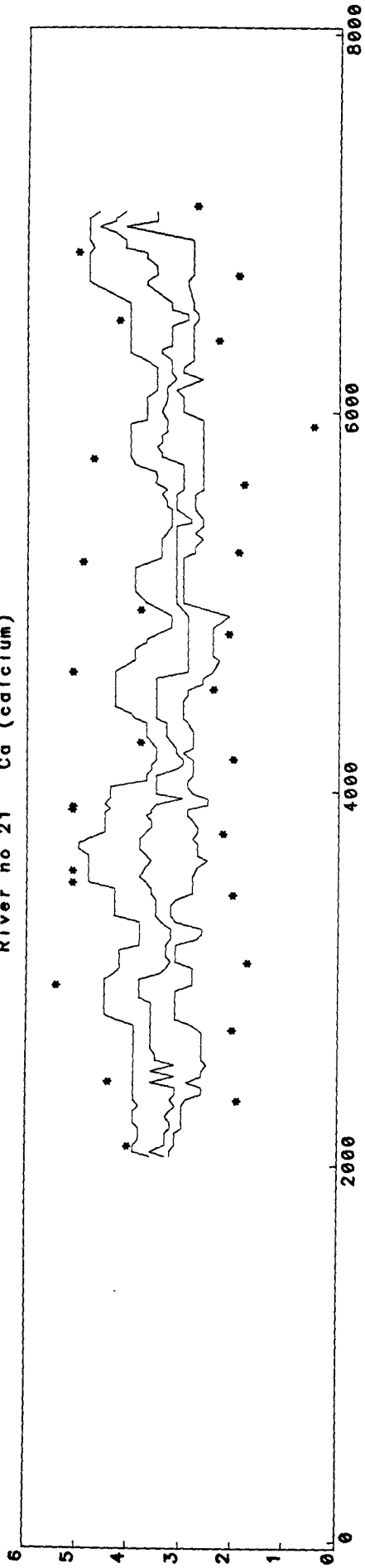


River no 20 Ca (calcium)

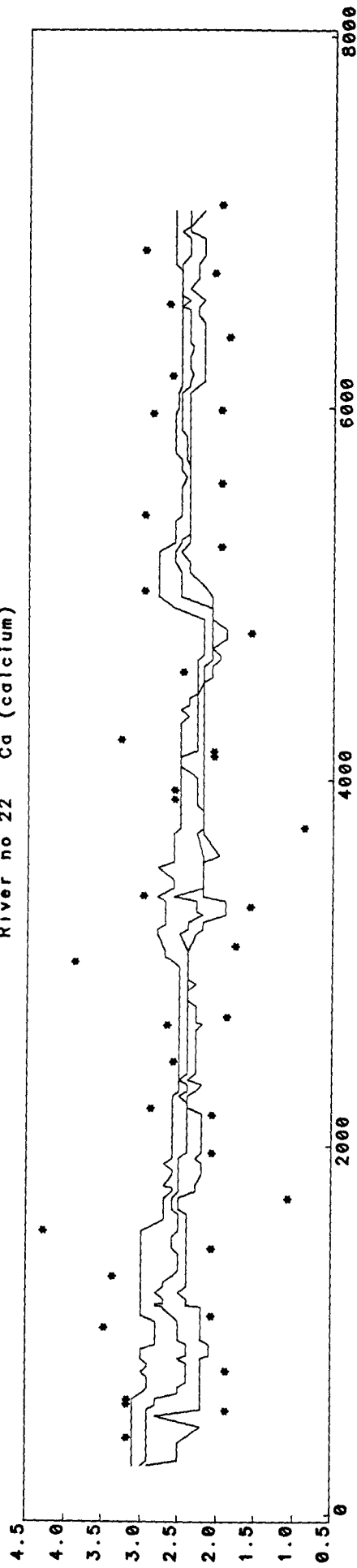




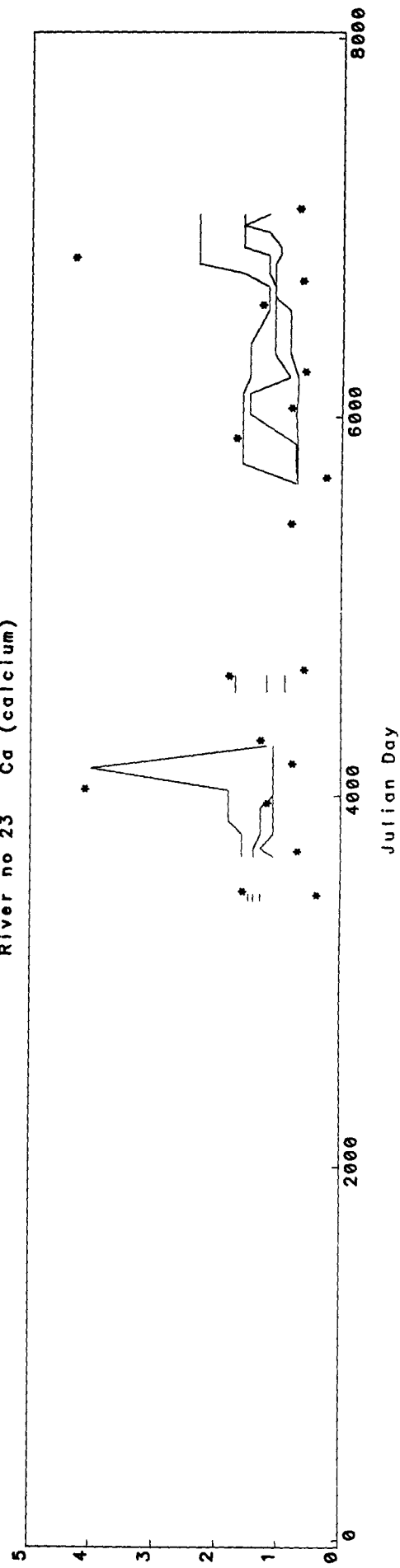
River no 21 Ca (calcium)



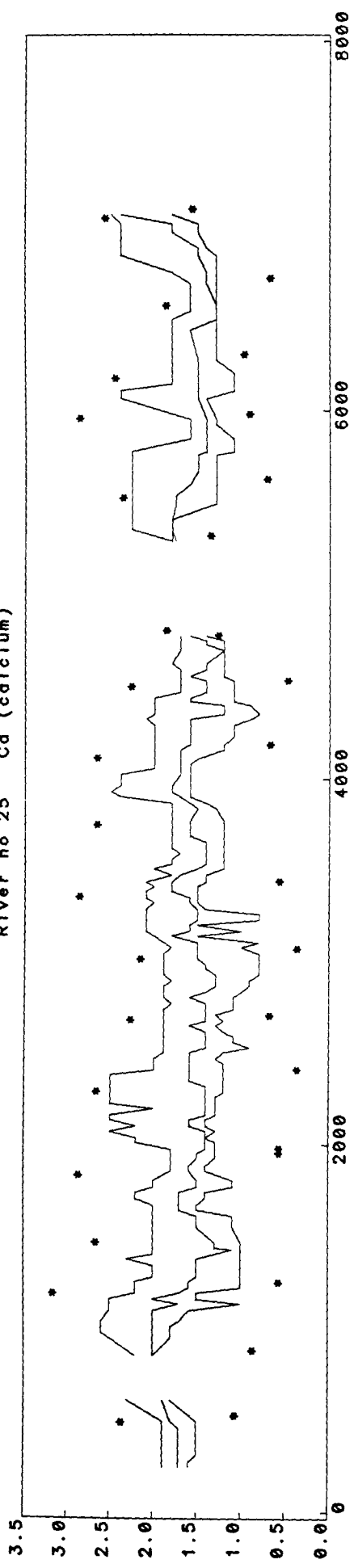
River no 22 Ca (calcium)



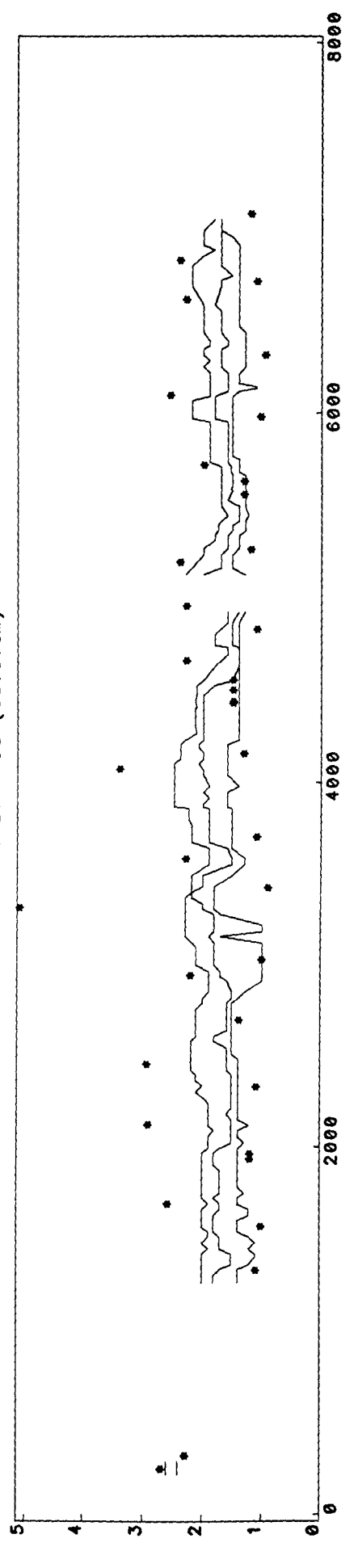
River no 23 Ca (calcium)



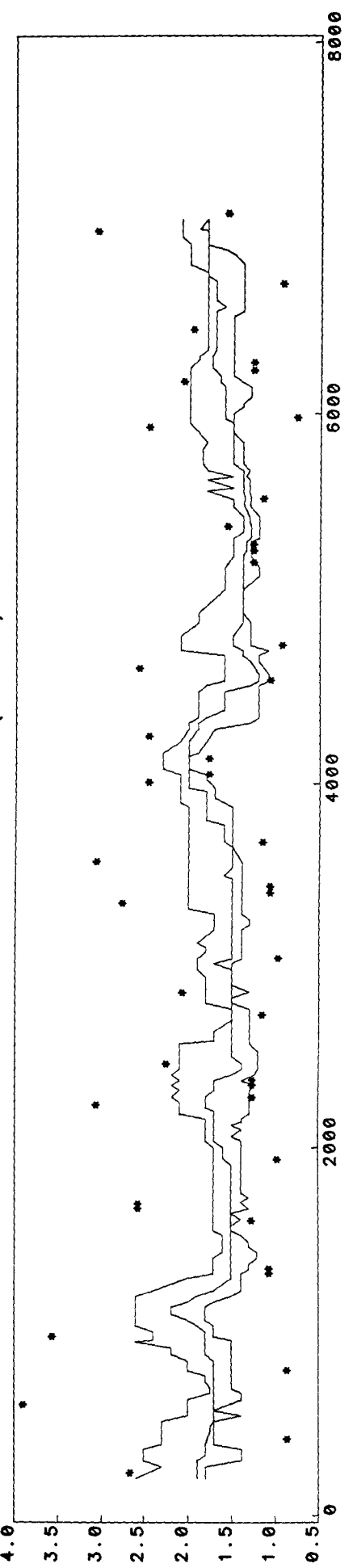
River no 25 Ca (calcium)



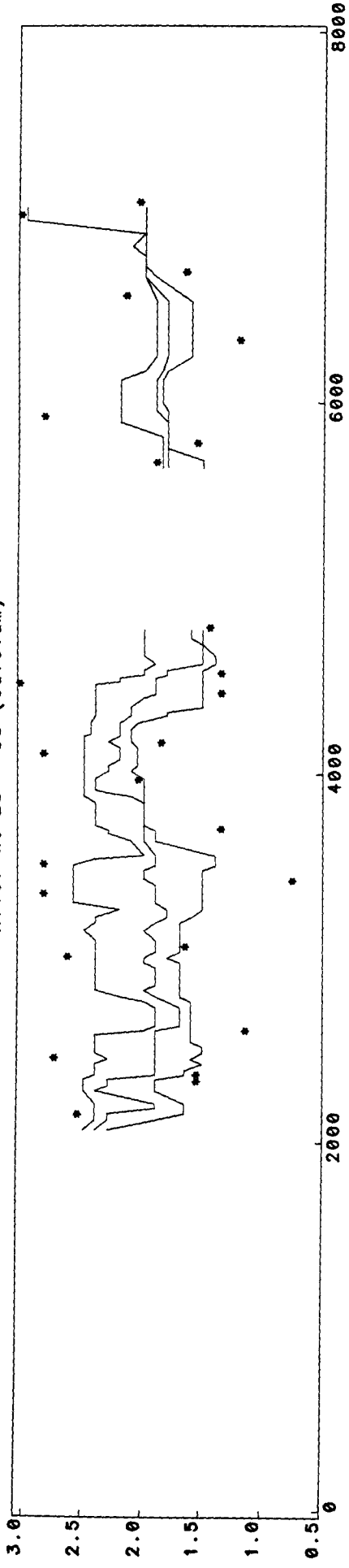
River no 26 Ca (calcium)



River no 27 Ca (calcium)



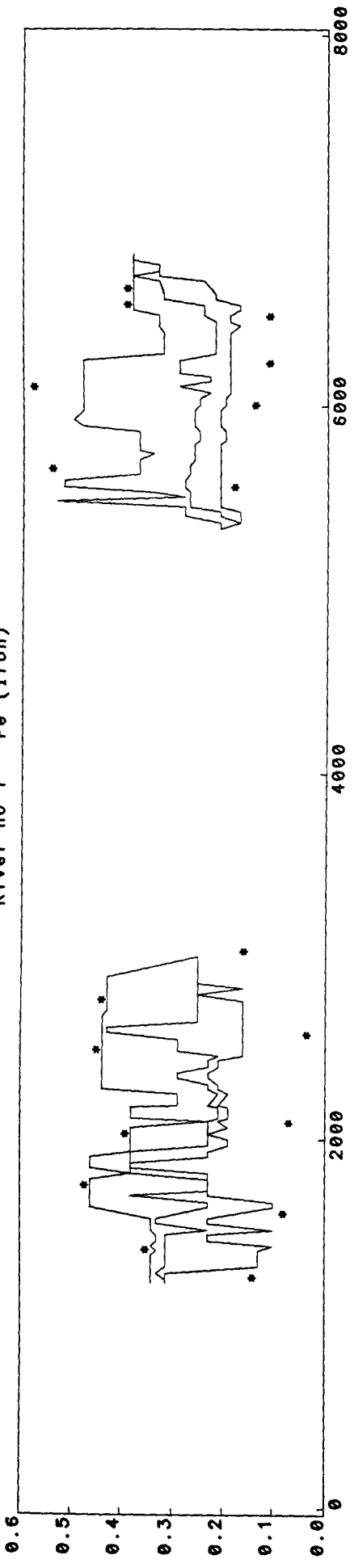
River no 28 Ca (calcium)



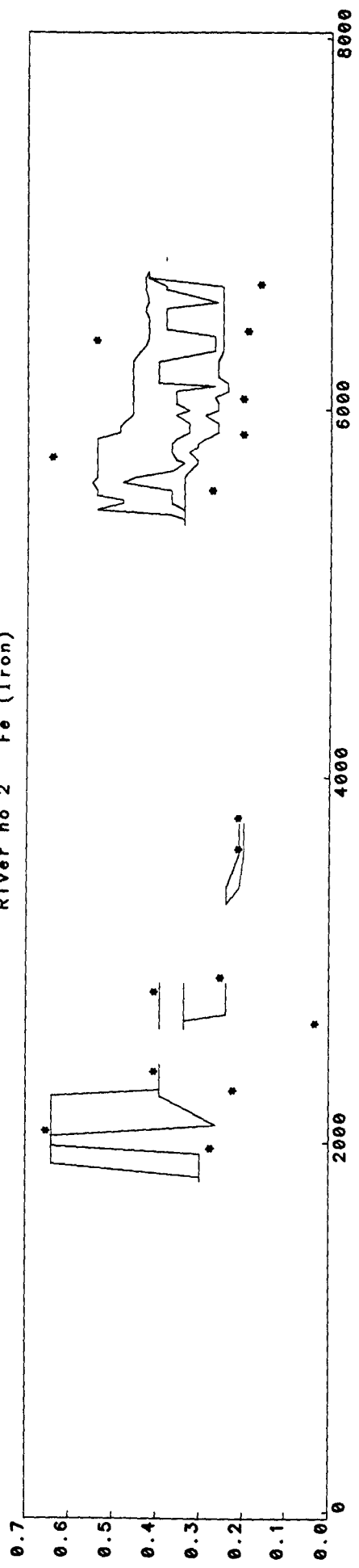
Julian Day

Appendix 13. Running boxplots of iron for the study rivers.

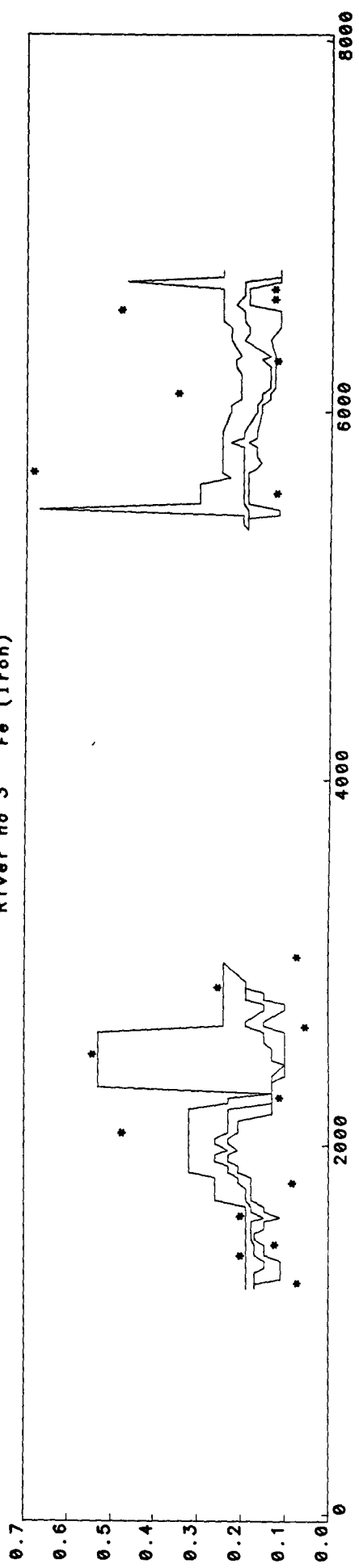
River no 1 Fe (Iron)



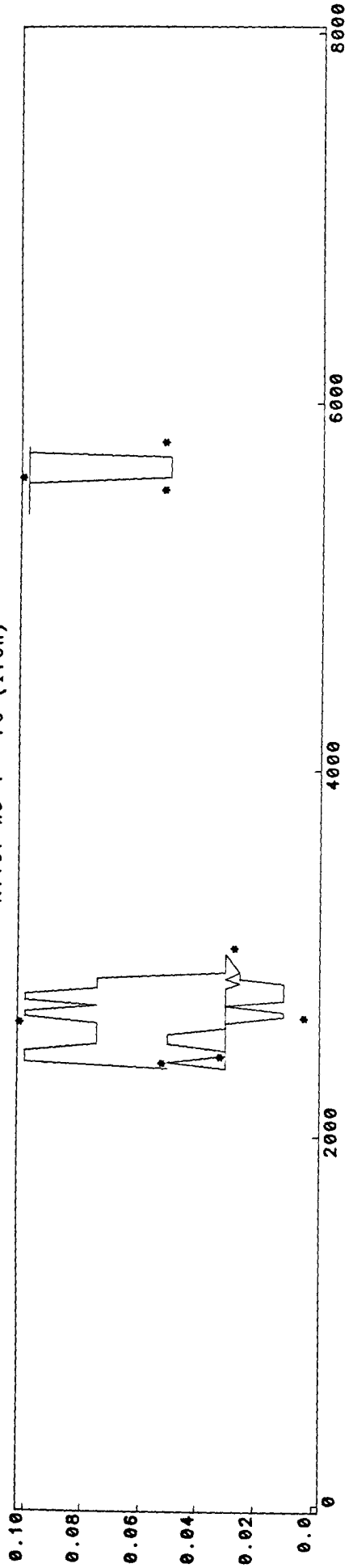
River no 2 Fe (Iron)



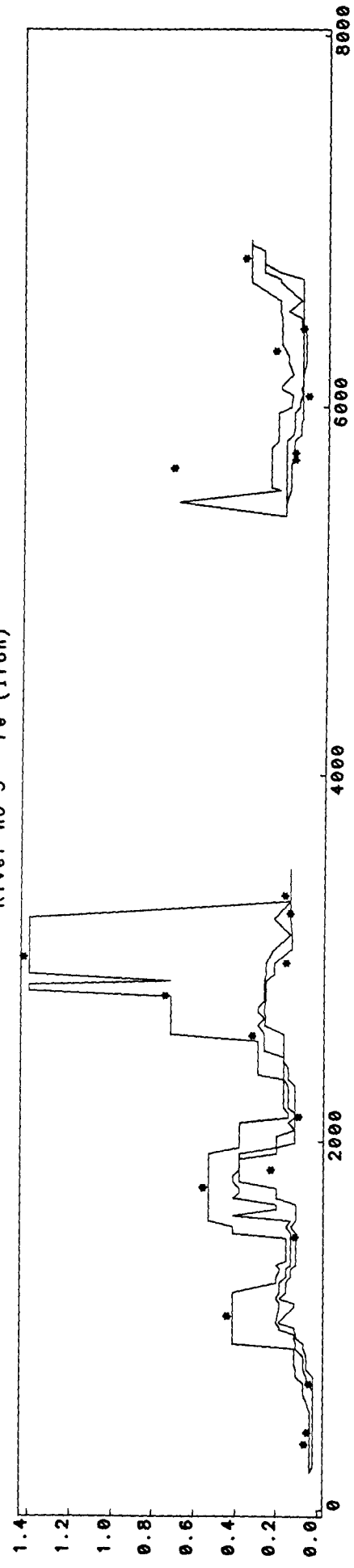
River no 3 Fe (Iron)



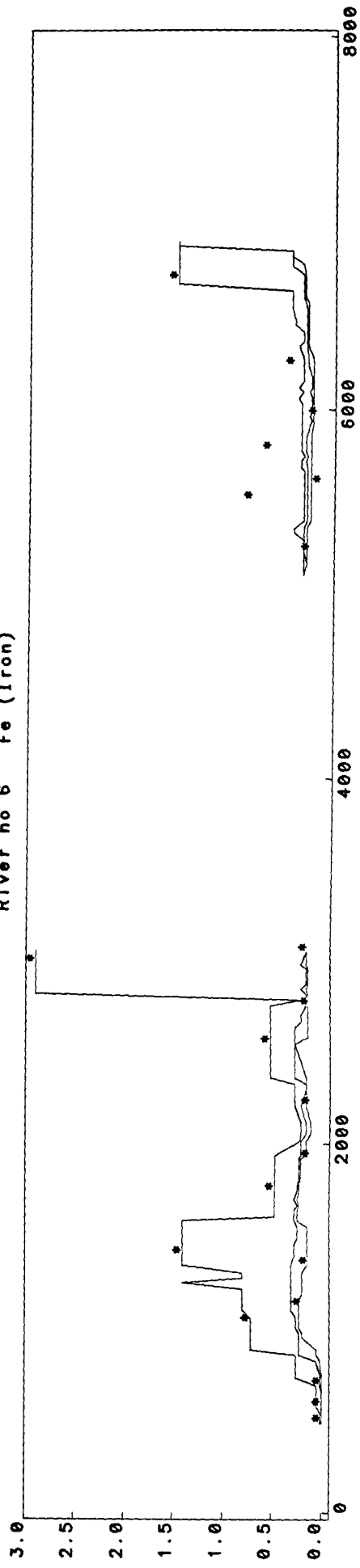
River no 4 Fe (Iron)



Julian Day  
River no 5 Fe (Iron)

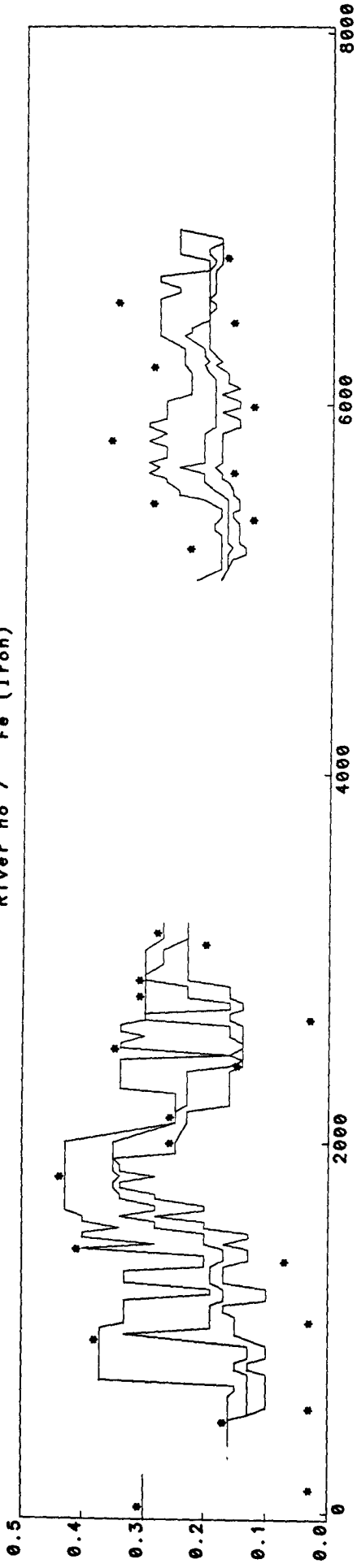


Julian Day  
River no 6 Fe (Iron)

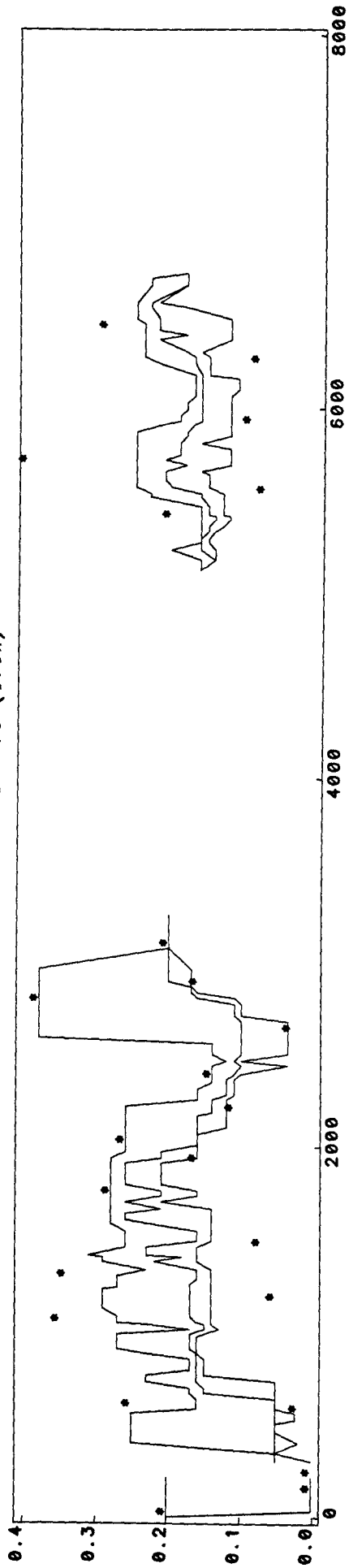


Julian Day

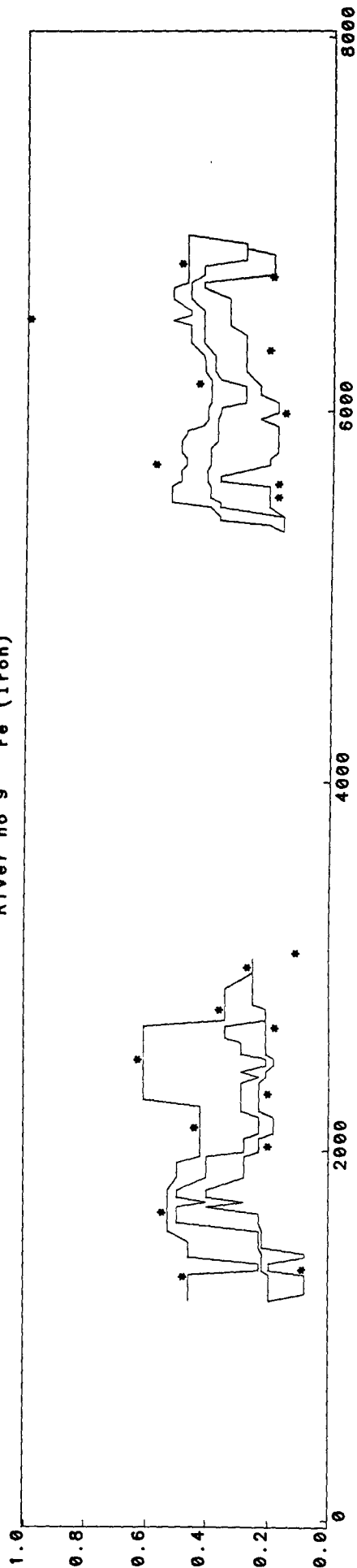
River no 7 Fe (Iron)



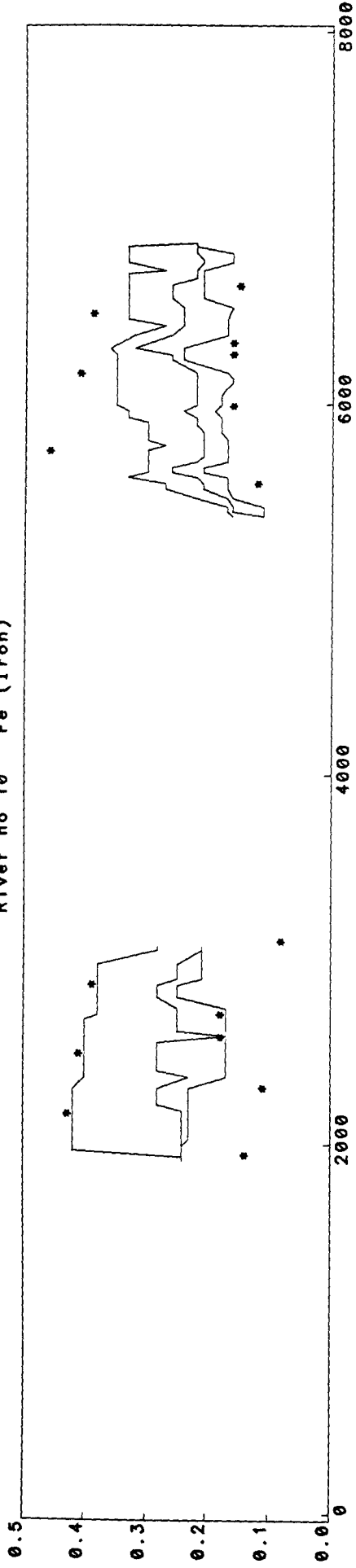
River no 8 Fe (Iron)



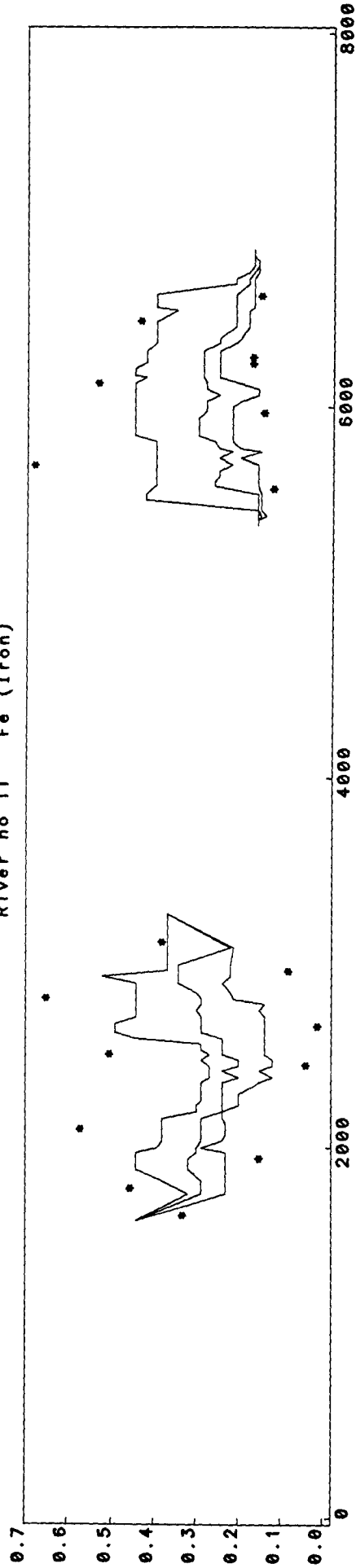
River no 9 Fe (Iron)



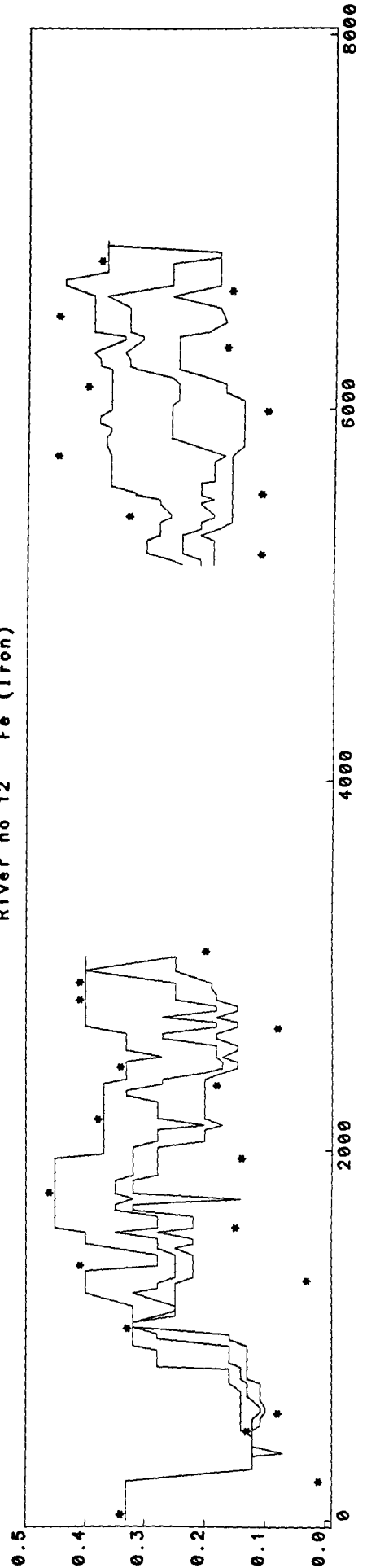
River no 10 Fe (Iron)



Julian Day  
River no 11 Fe (Iron)



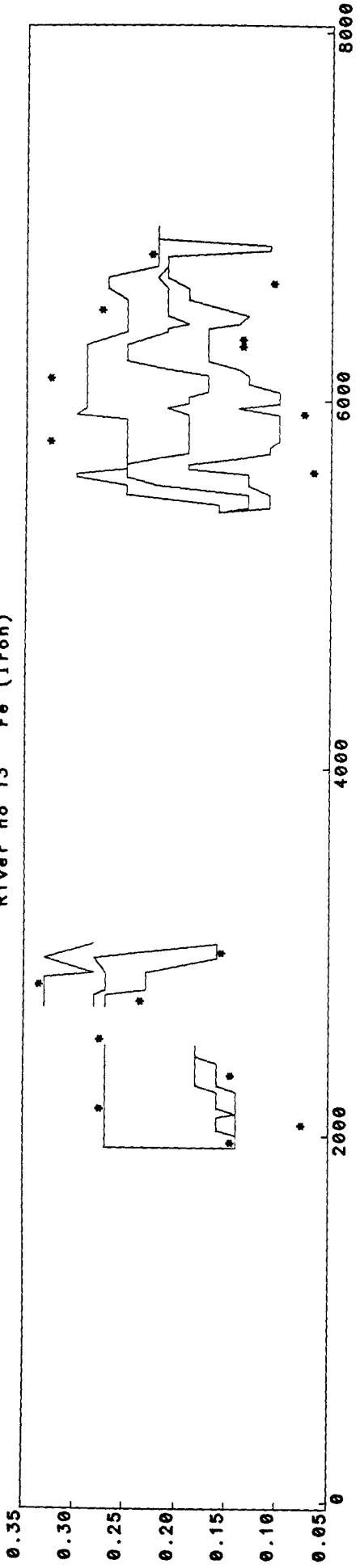
Julian Day  
River no 12 Fe (Iron)



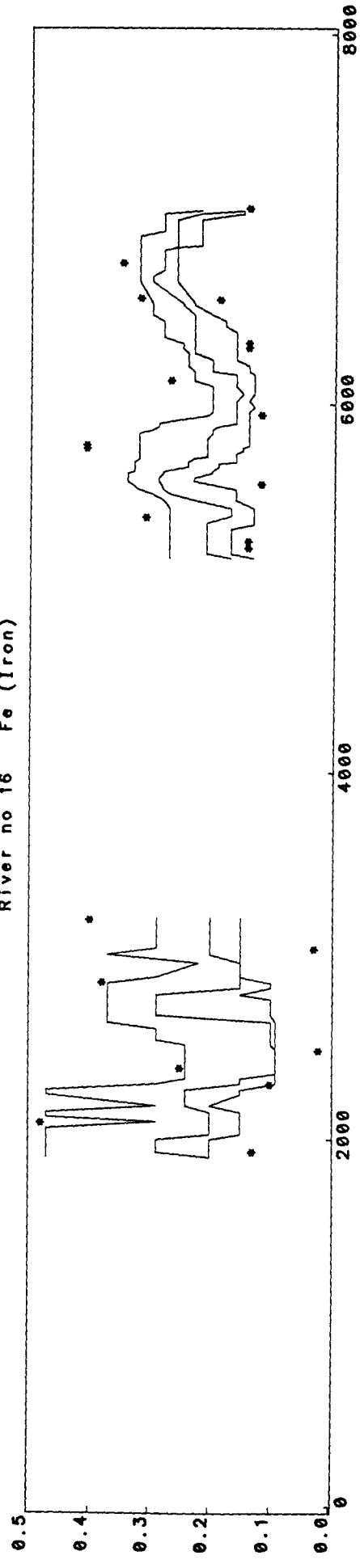
Julian Day



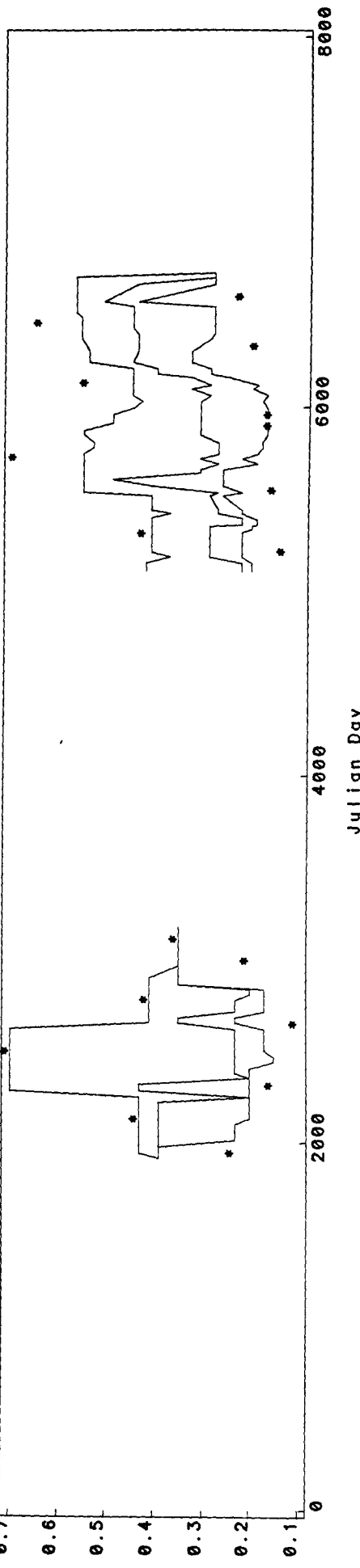
River no 13 Fe (Iron)



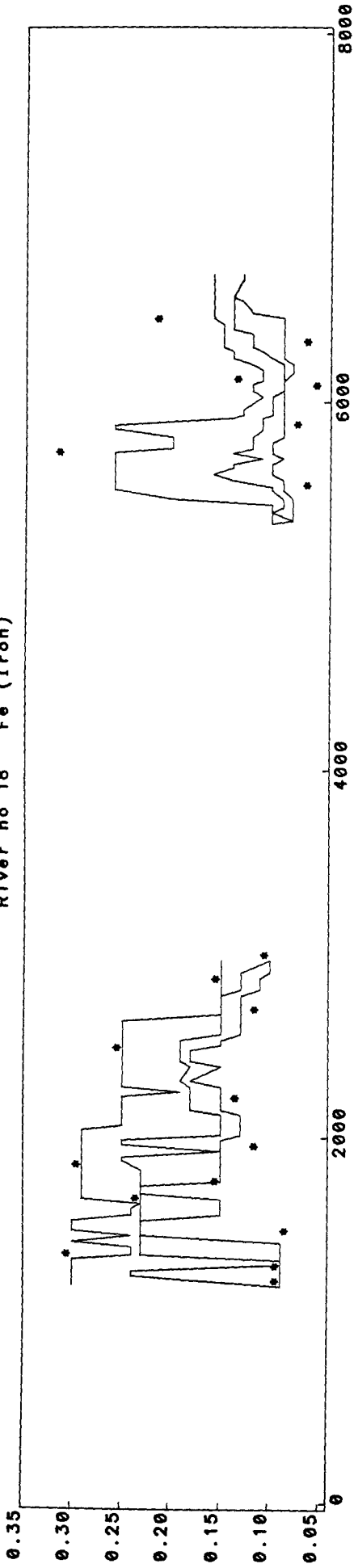
River no 16 Fe (Iron)



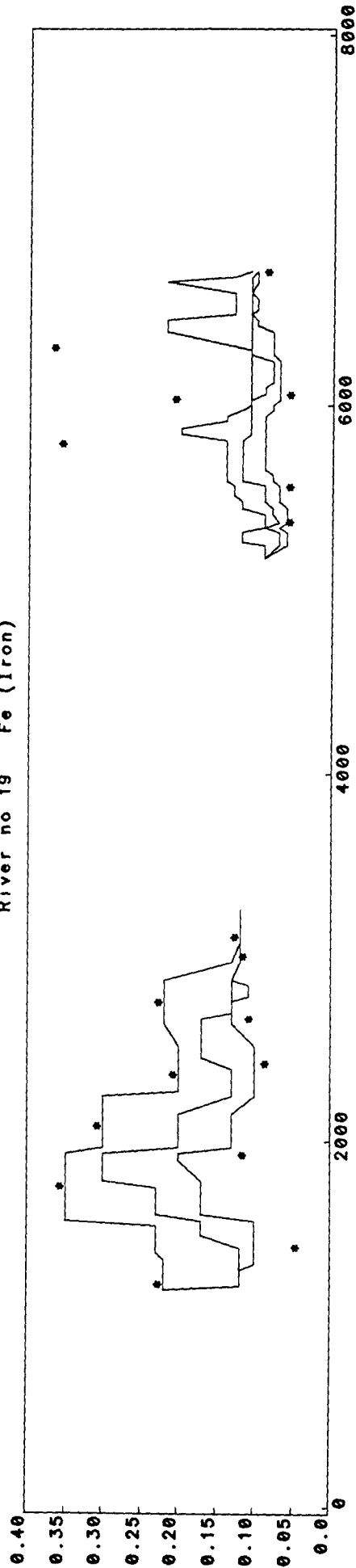
River no 17 Fe (Iron)



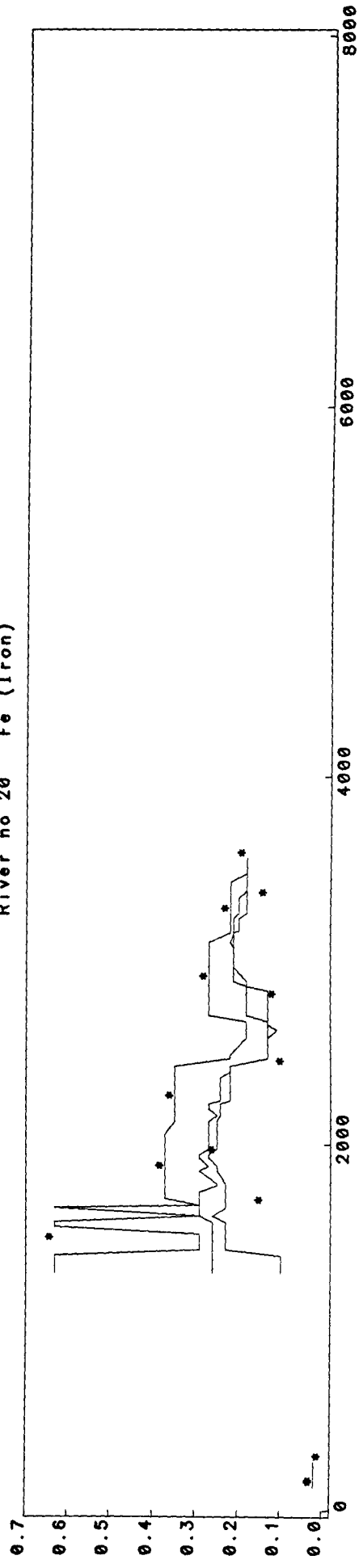
River no 18 Fe (Iron)



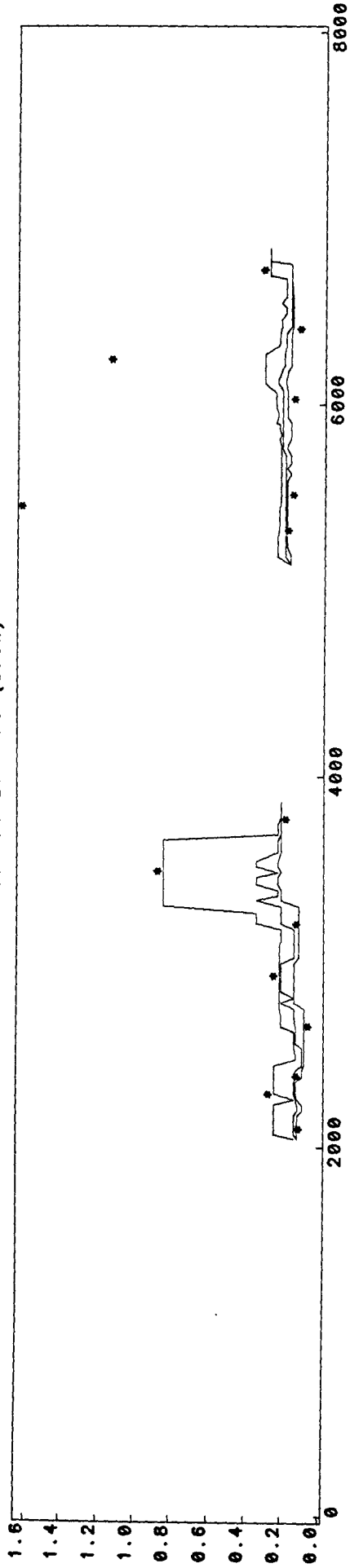
Julian Day  
River no 19 Fe (Iron)



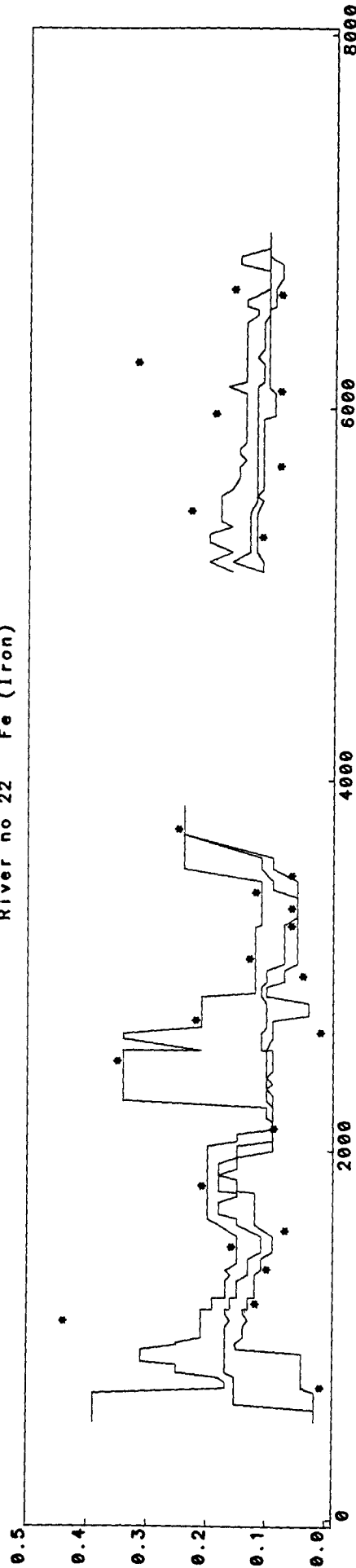
Julian Day  
River no 20 Fe (Iron)



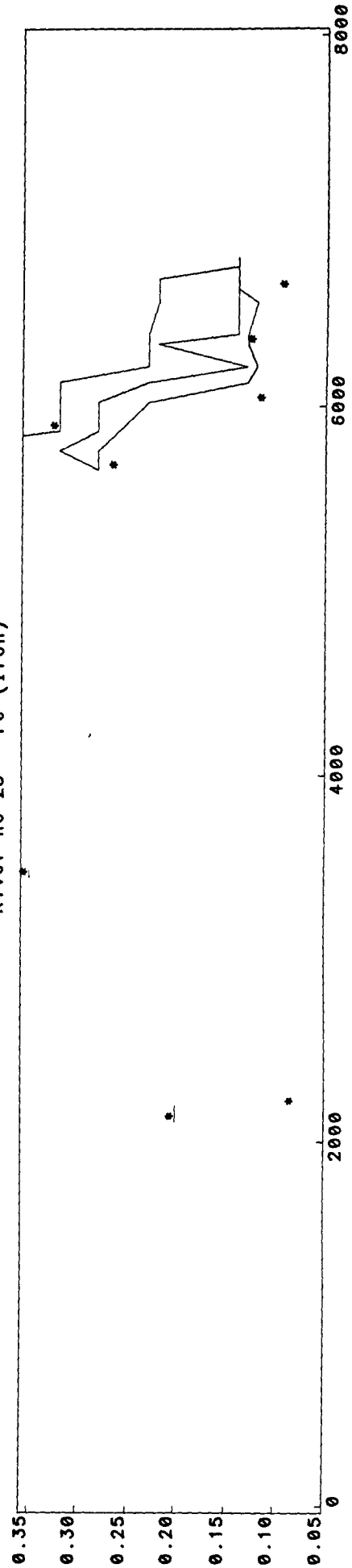
River no 21 Fe (Iron)



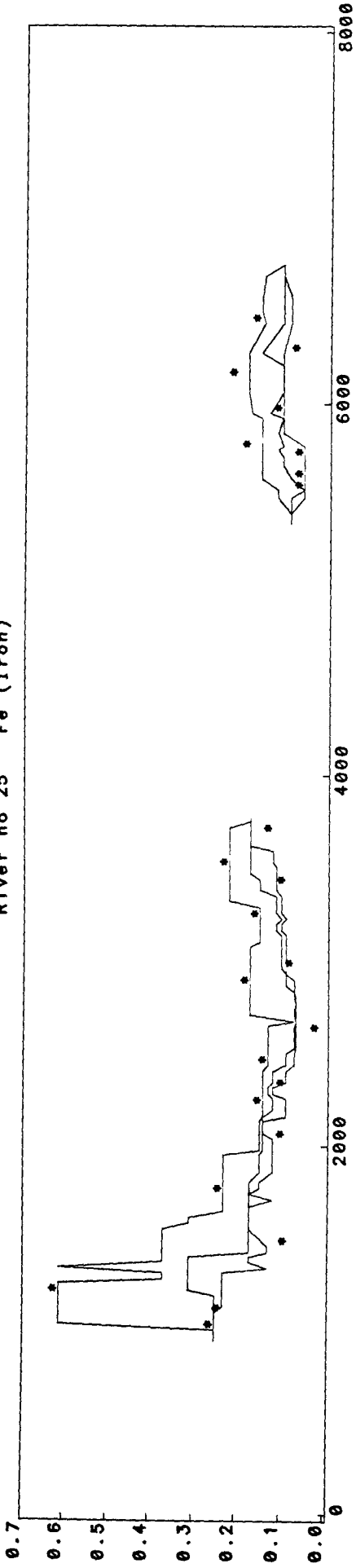
River no 22 Fe (Iron)



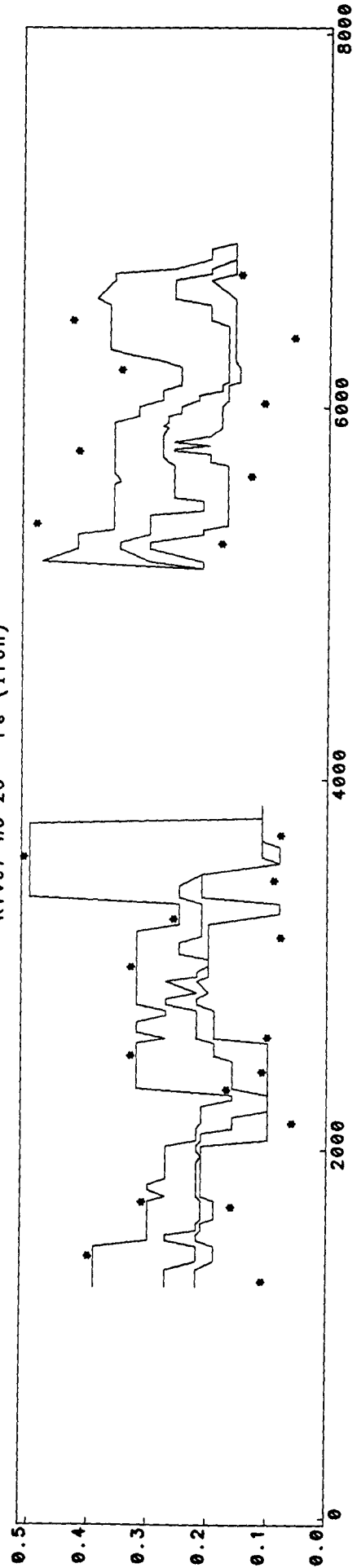
River no 23 Fe (Iron)



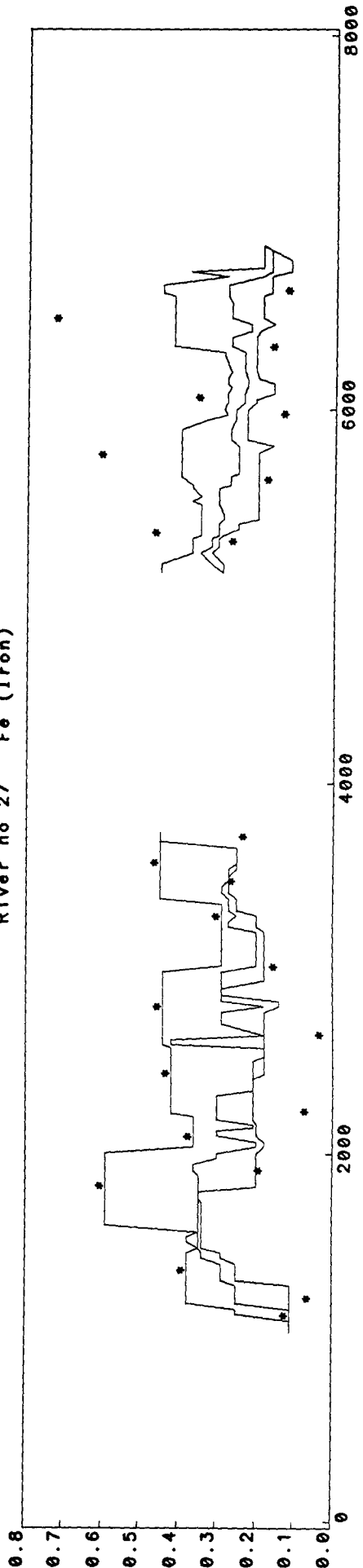
River no 25 Fe (Iron)



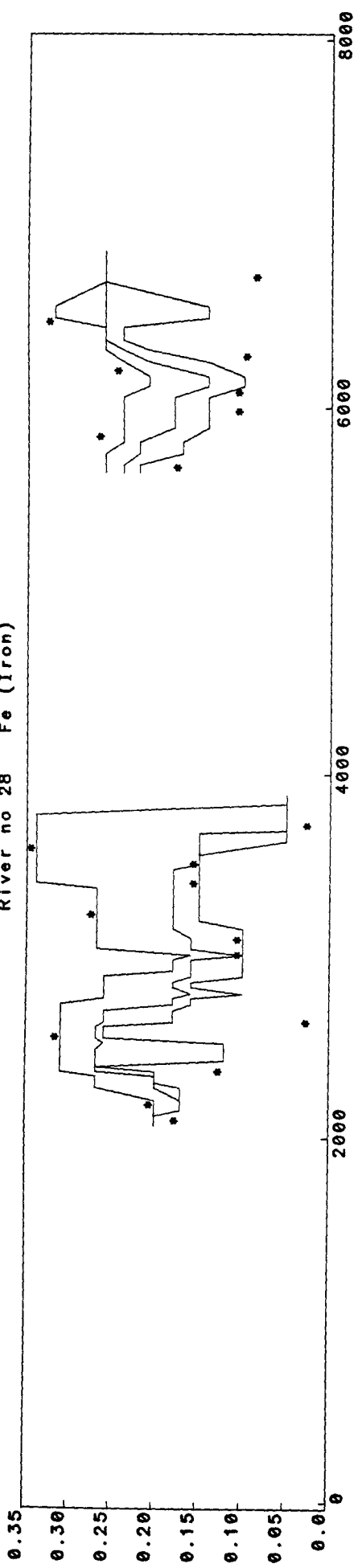
Julian Day  
River no 26 Fe (Iron)



Julian Day  
River no 27 Fe (Iron)

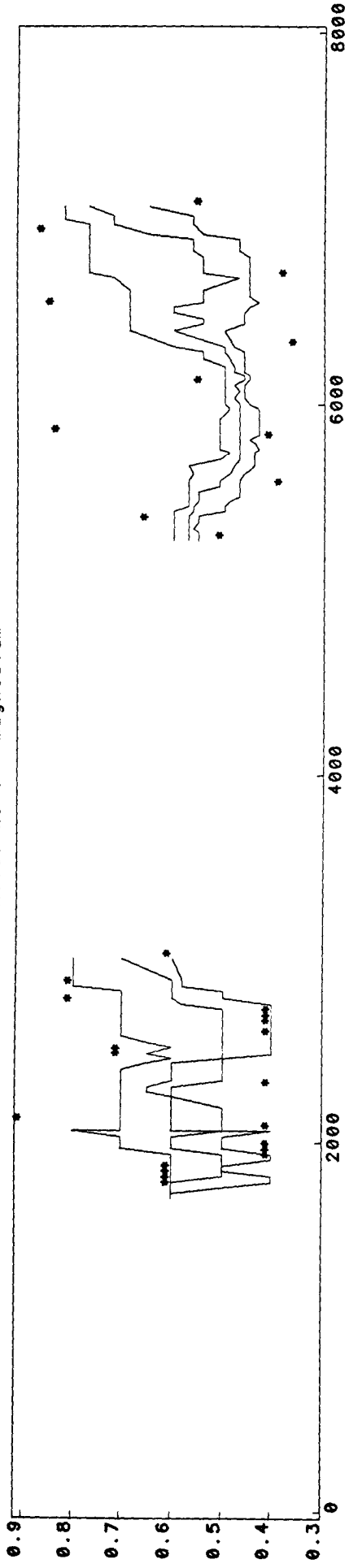


River no 28 Fe (Iron)

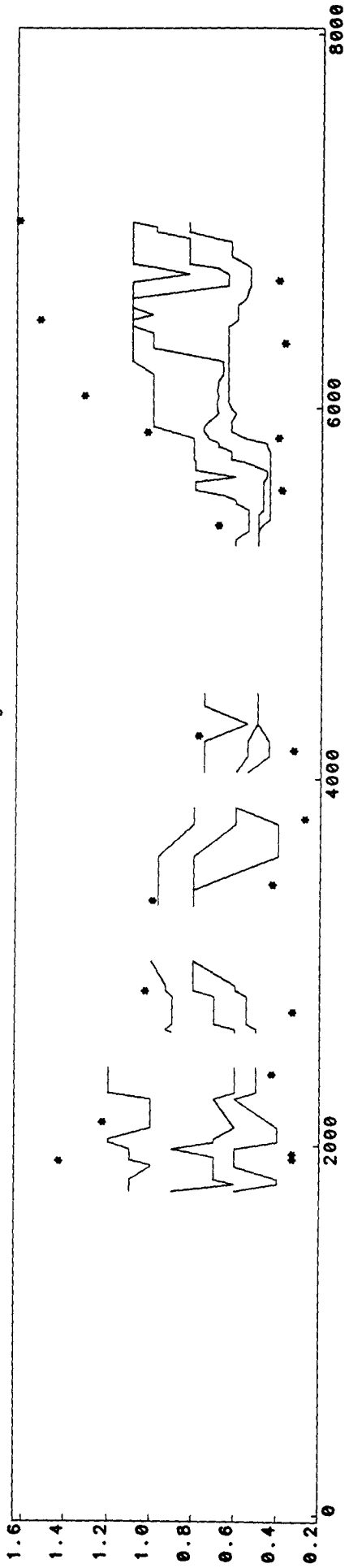


Appendix 14. Running boxplots of magnesium for the study rivers.

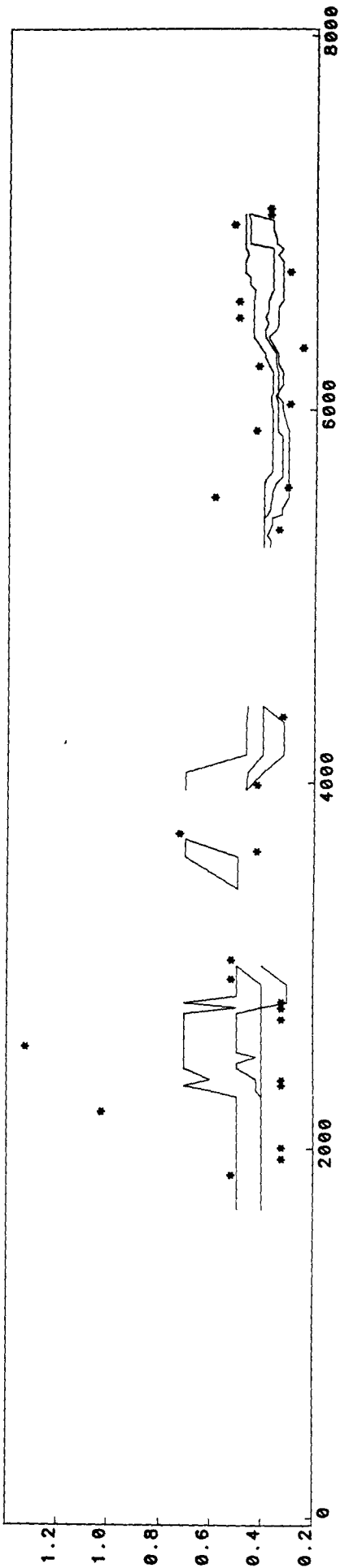
River no 1 Magnesium



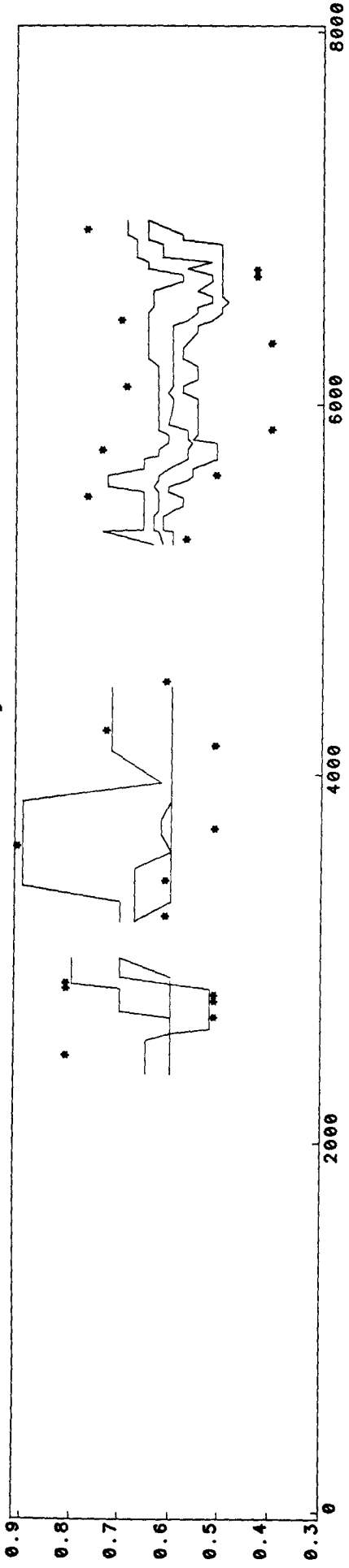
Julian Day  
River no 2 Magnesium



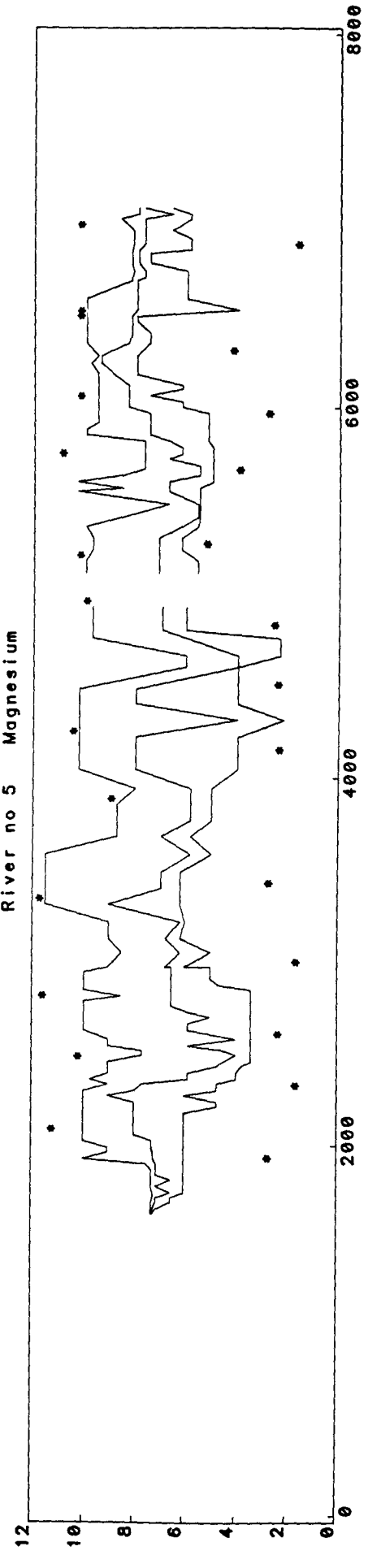
Julian Day  
River no 3 Magnesium



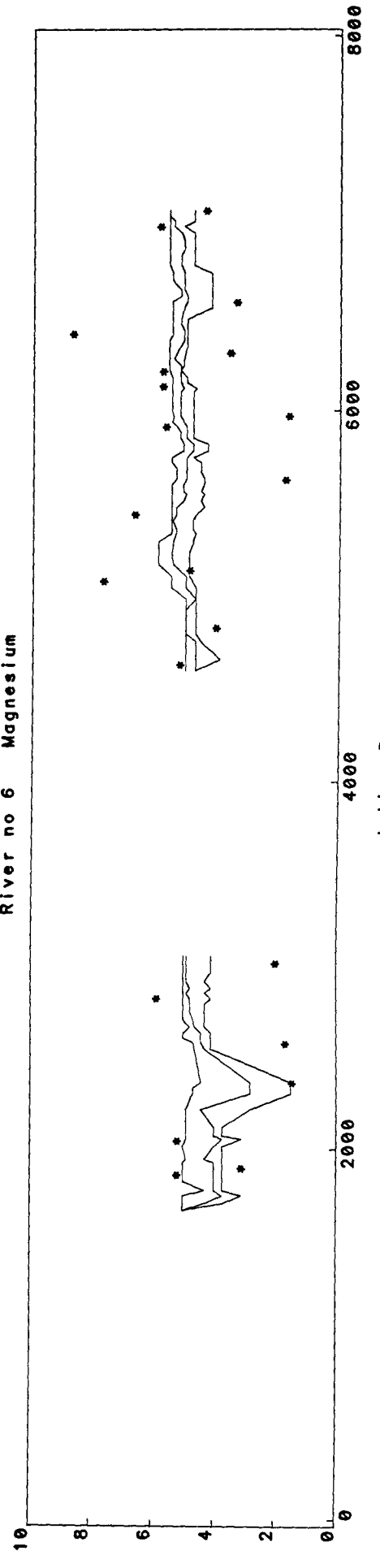
River no 4 Magnesium



River no 5 Magnesium

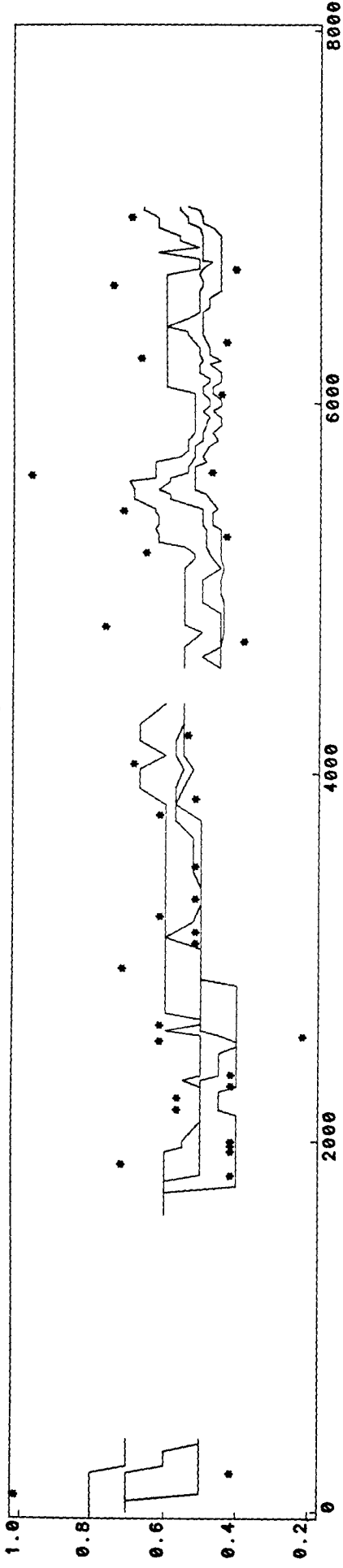


River no 6 Magnesium

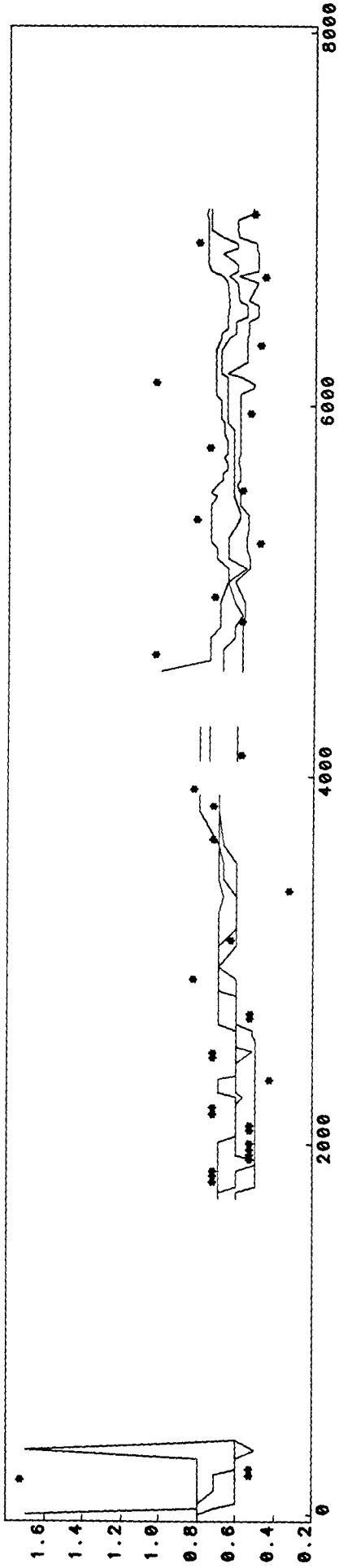




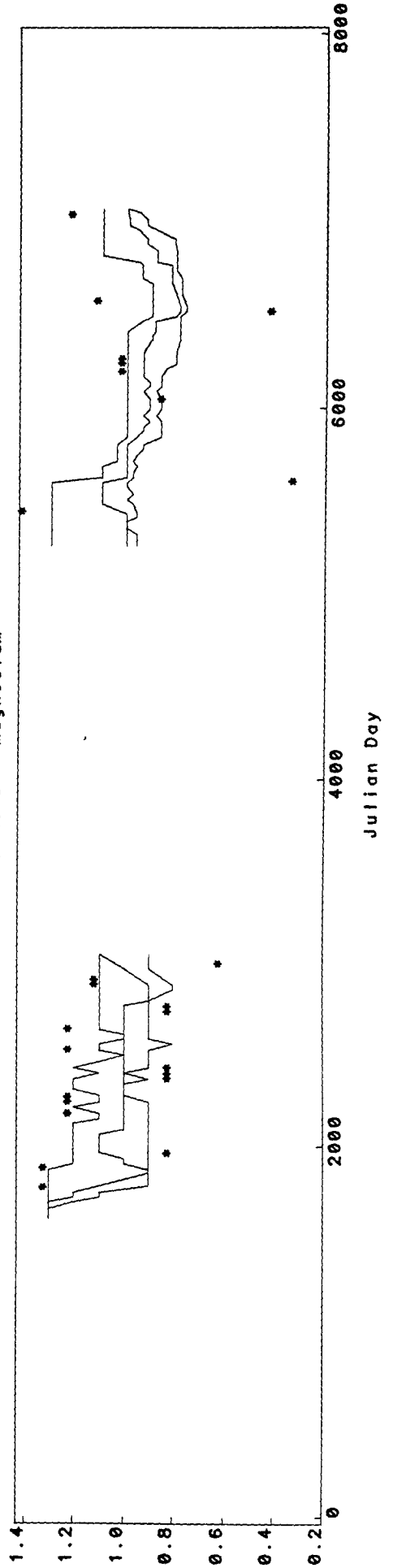
River no 7 Magnesium



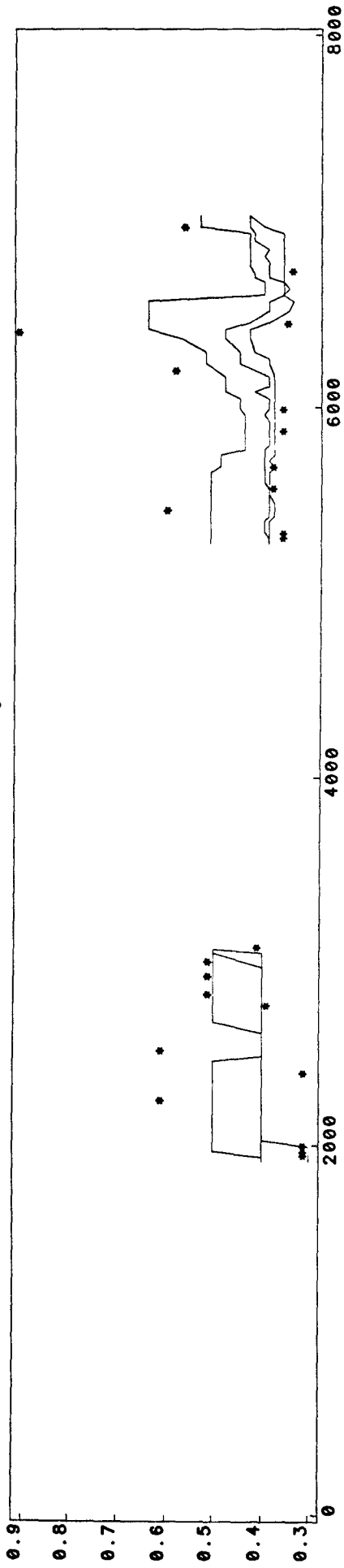
Julian Day  
River no 8 Magnesium



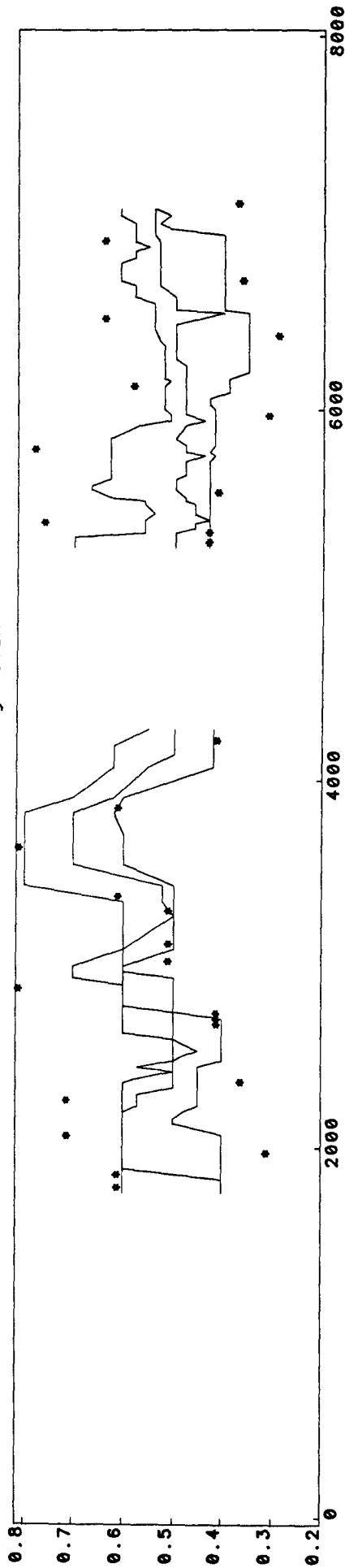
Julian Day  
River no 9 Magnesium



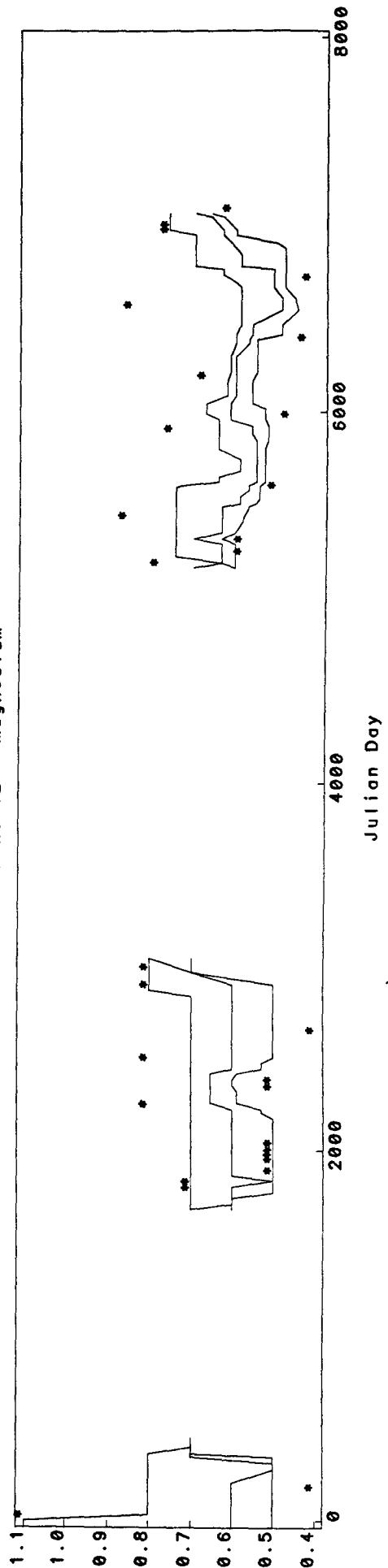
River no 10 Magnesium



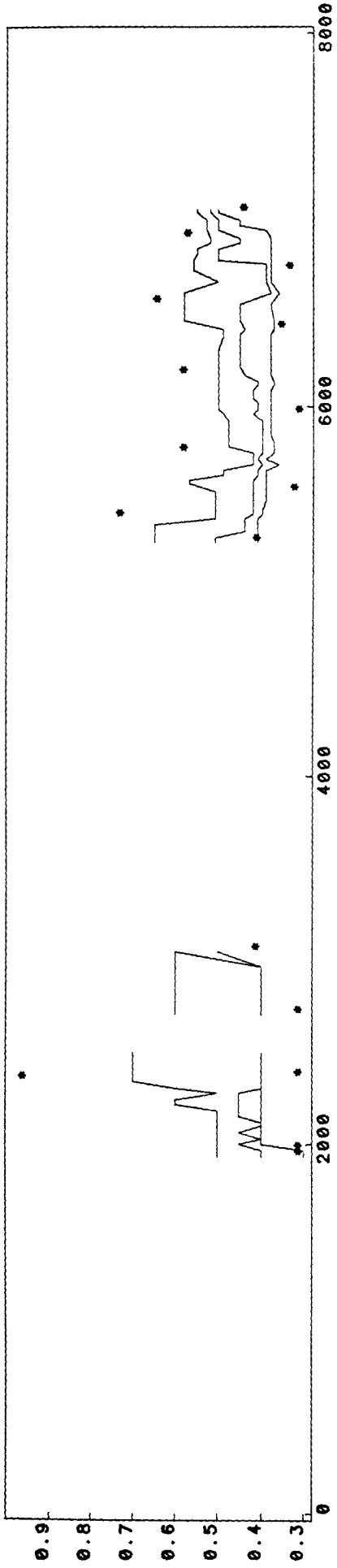
River no 11 Magnesium



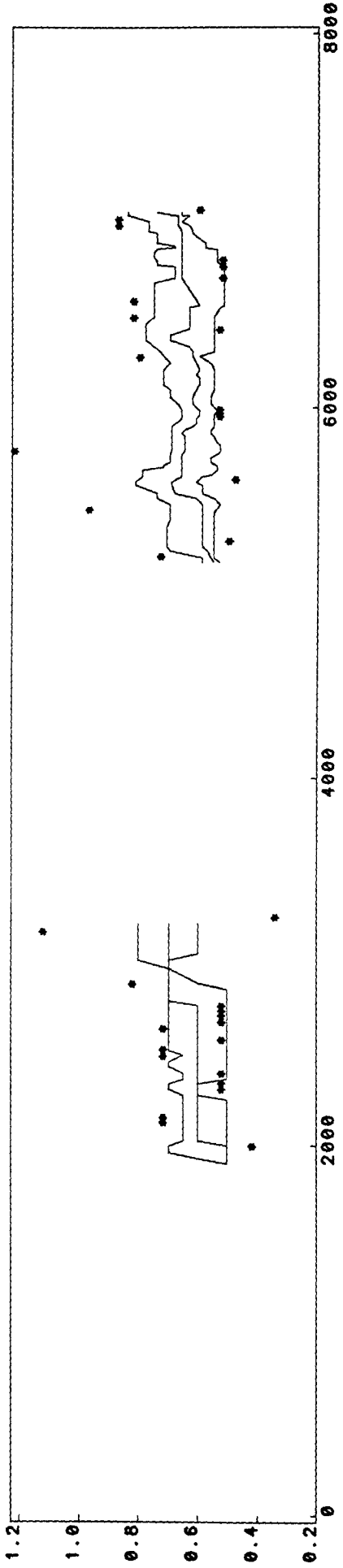
River no 12 Magnesium



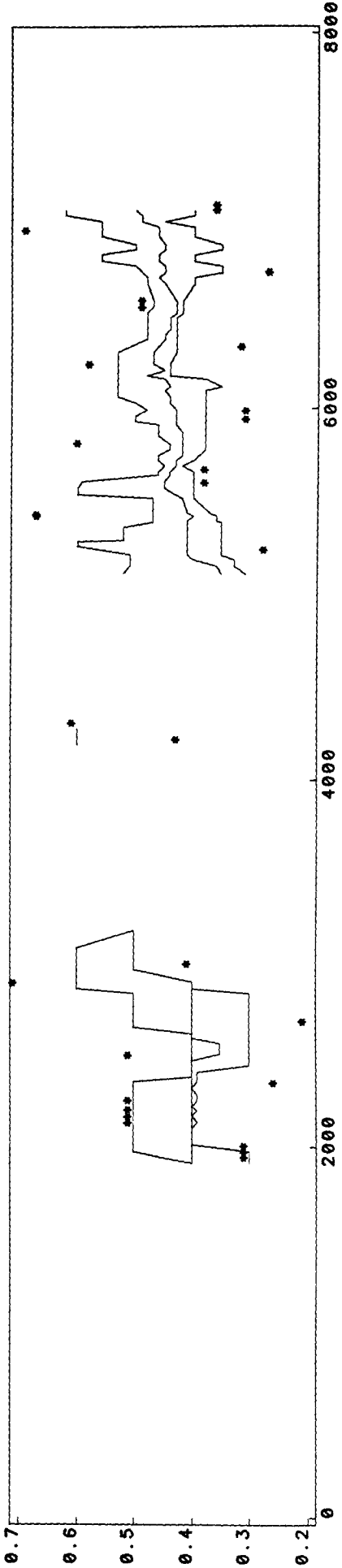
River no 13 Magnesium



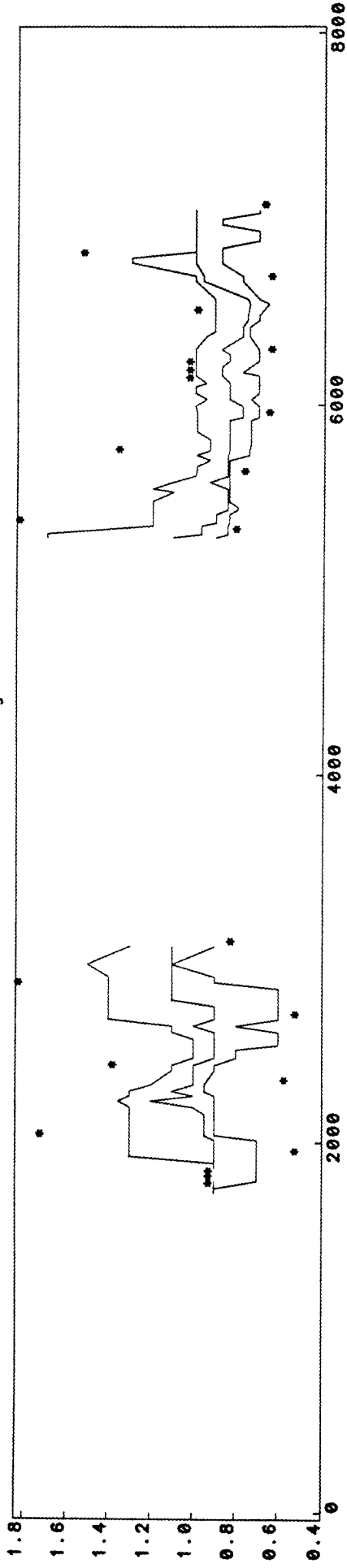
River no 16 Magnesium



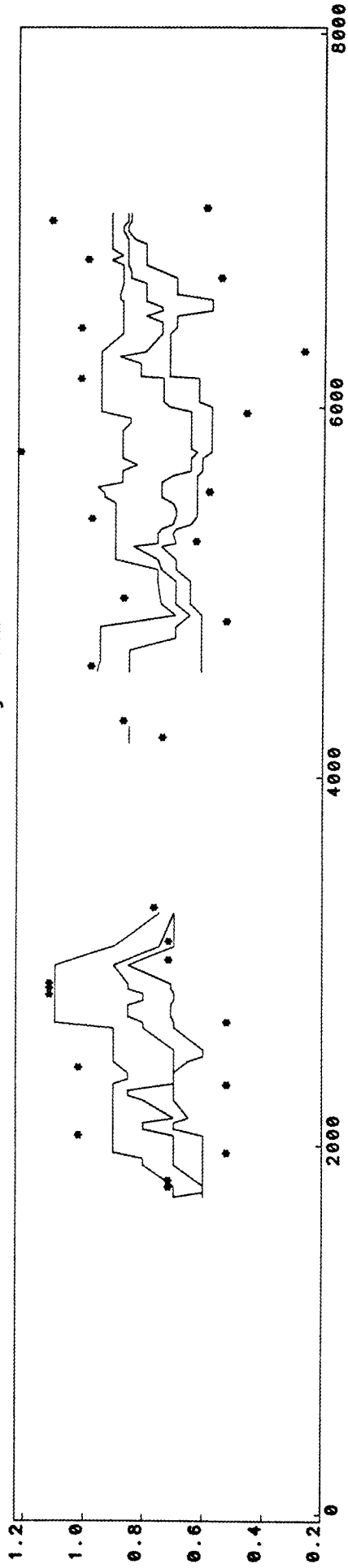
River no 17 Magnesium



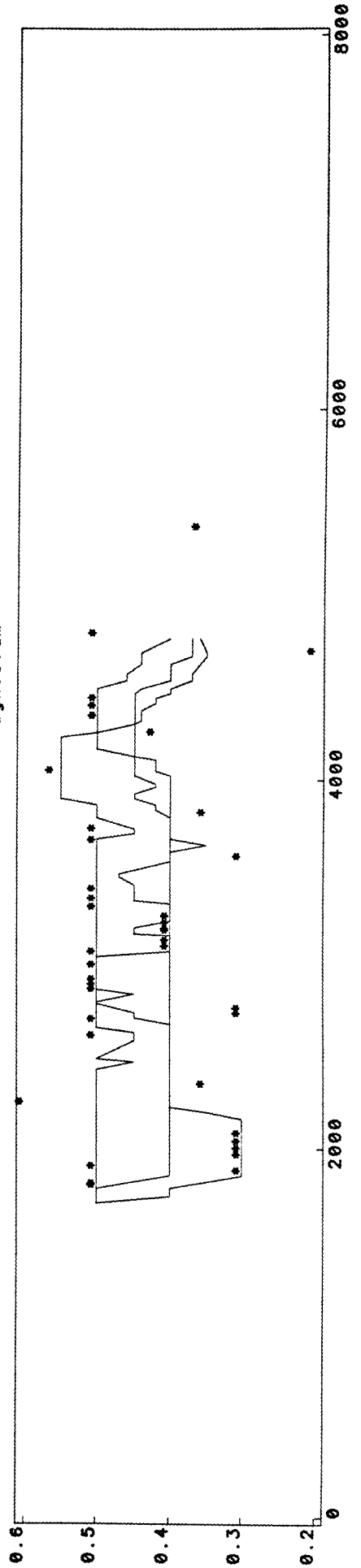
River no 18 Magnesium

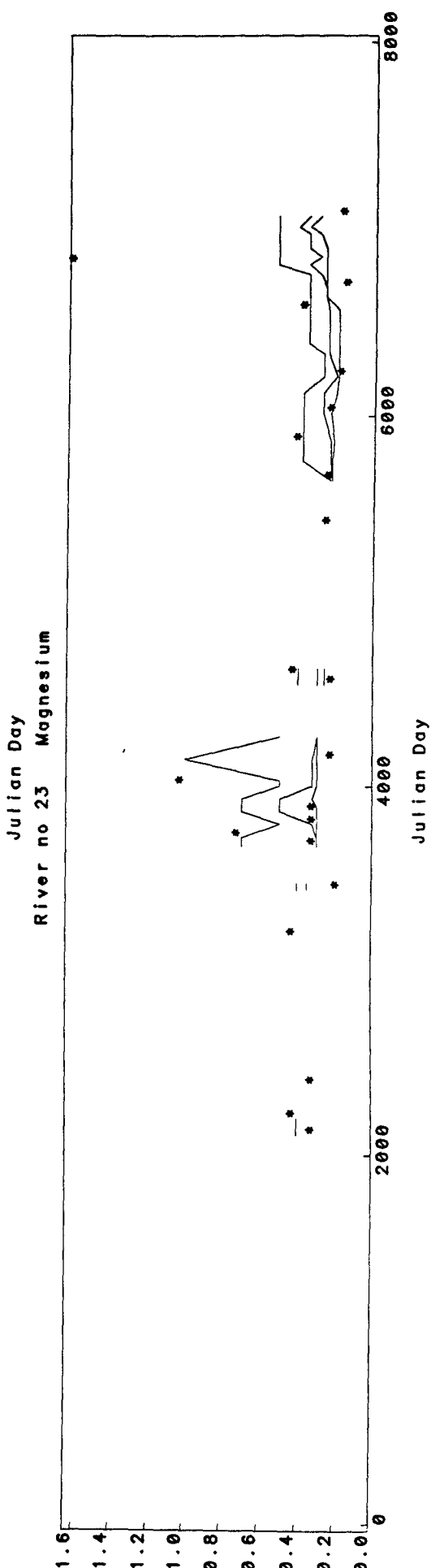
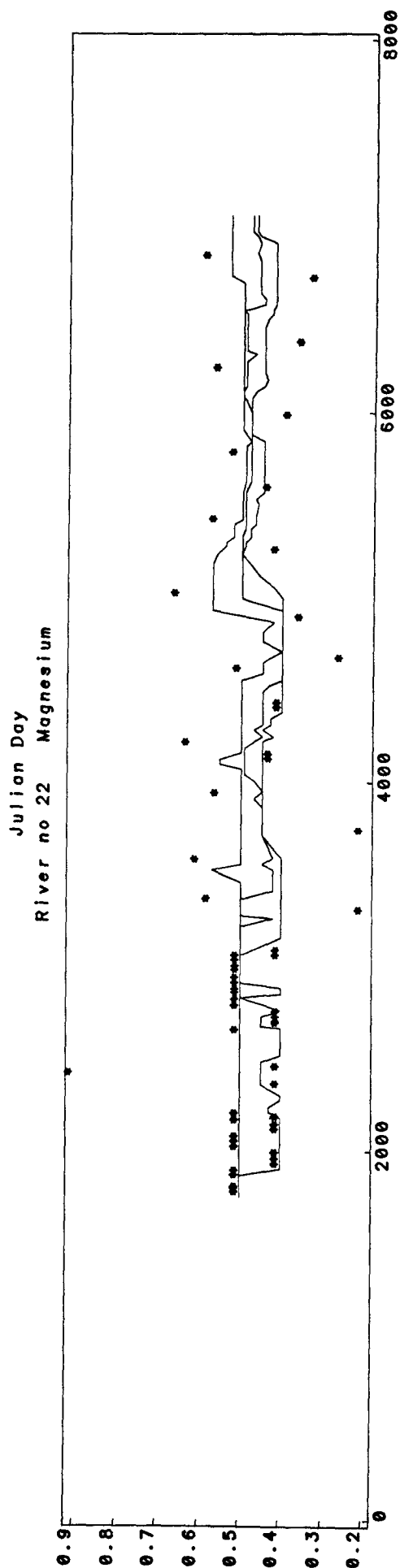
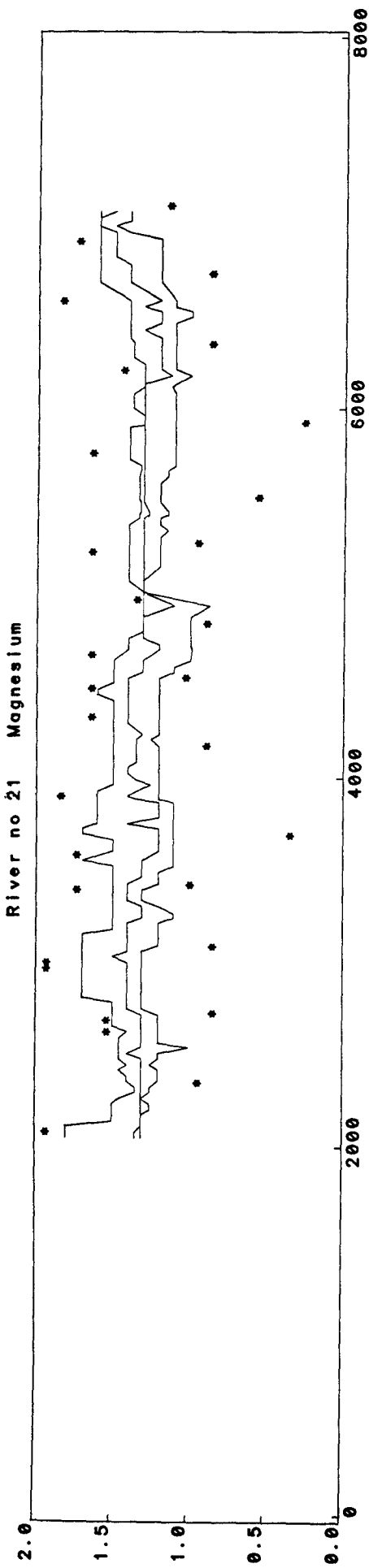


Julian Day  
River no 19 Magnesium

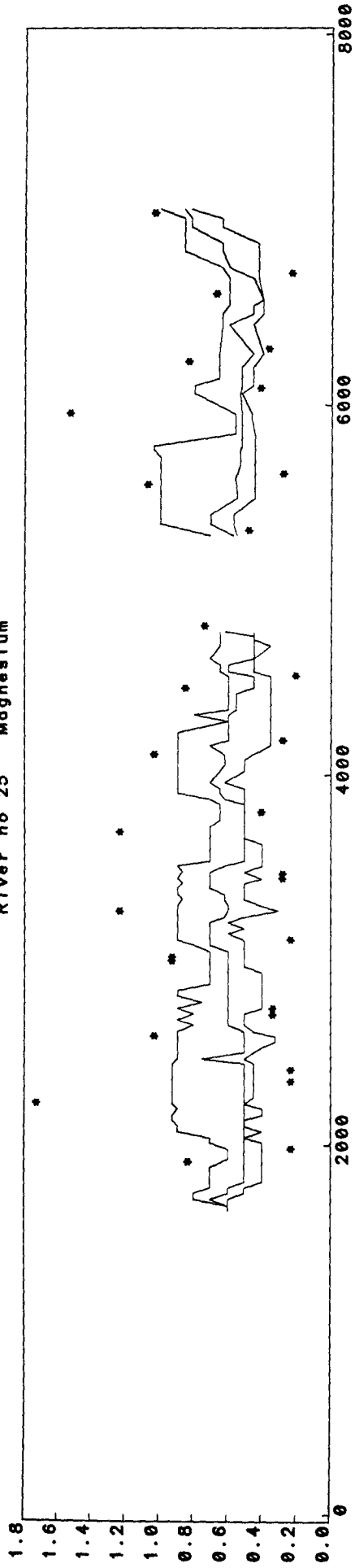


Julian Day  
River no 20 Magnesium

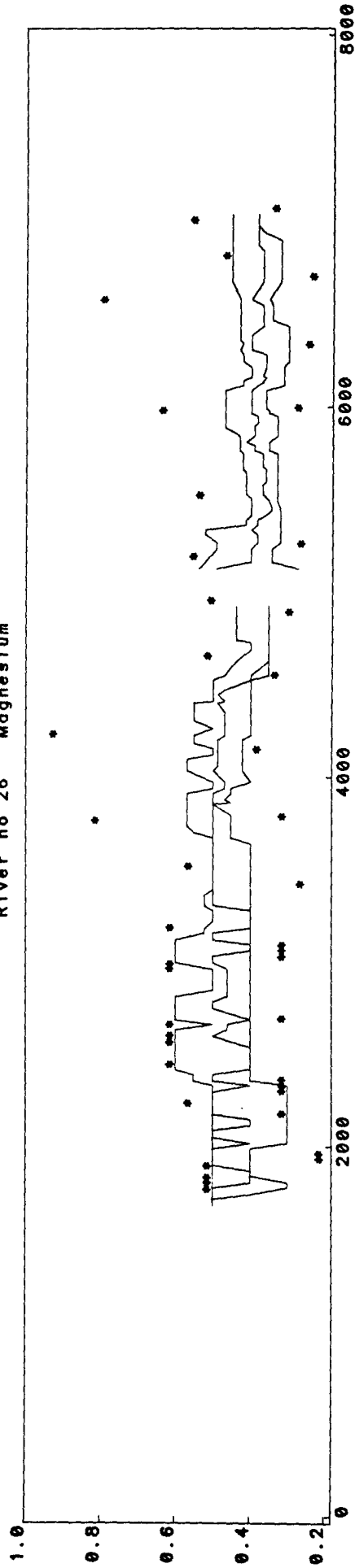




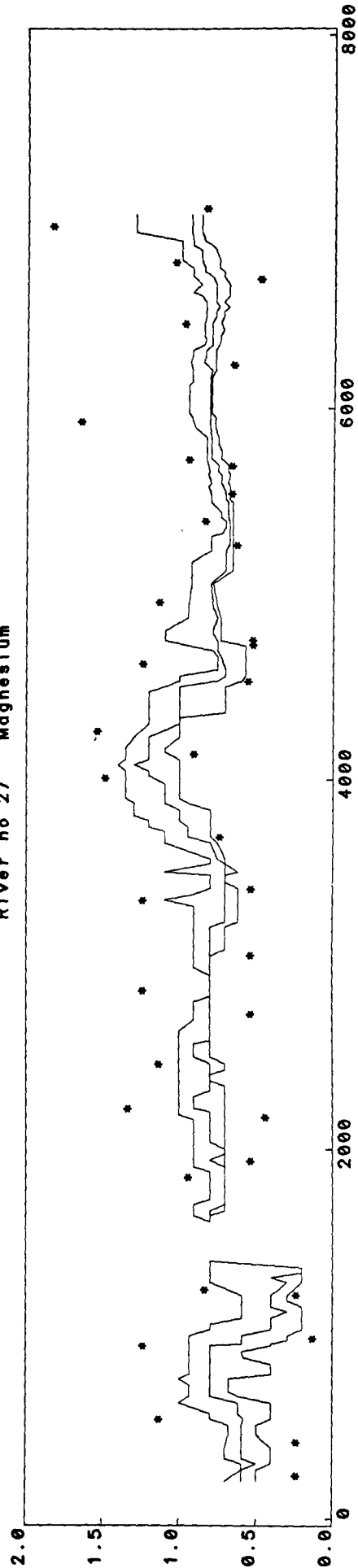
River no 25 Magnesium



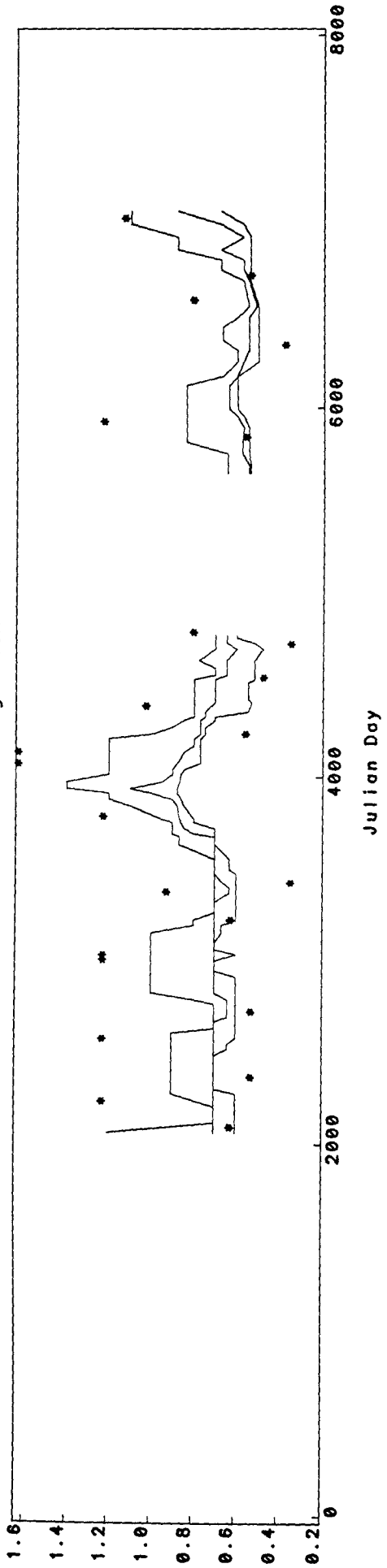
Julian Day  
River no 26 Magnesium



Julian Day  
River no 27 Magnesium



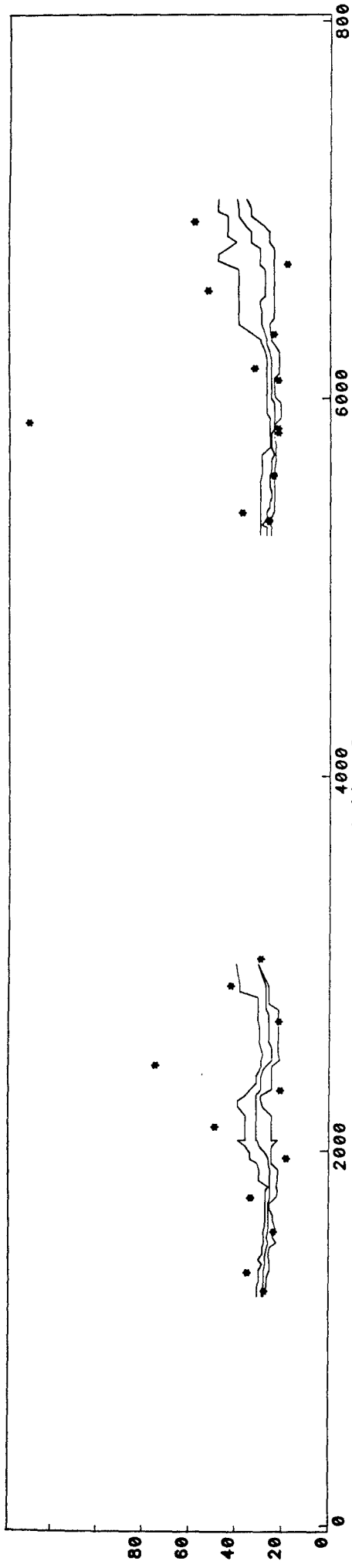
River no 28 Magnesium



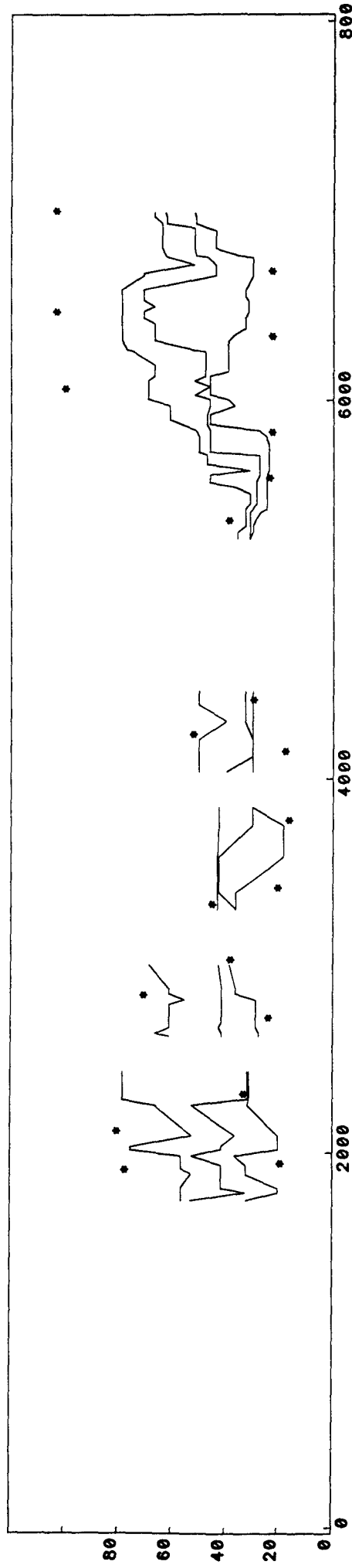
Appendix 15. Running boxplots of conductivity for the study rivers.



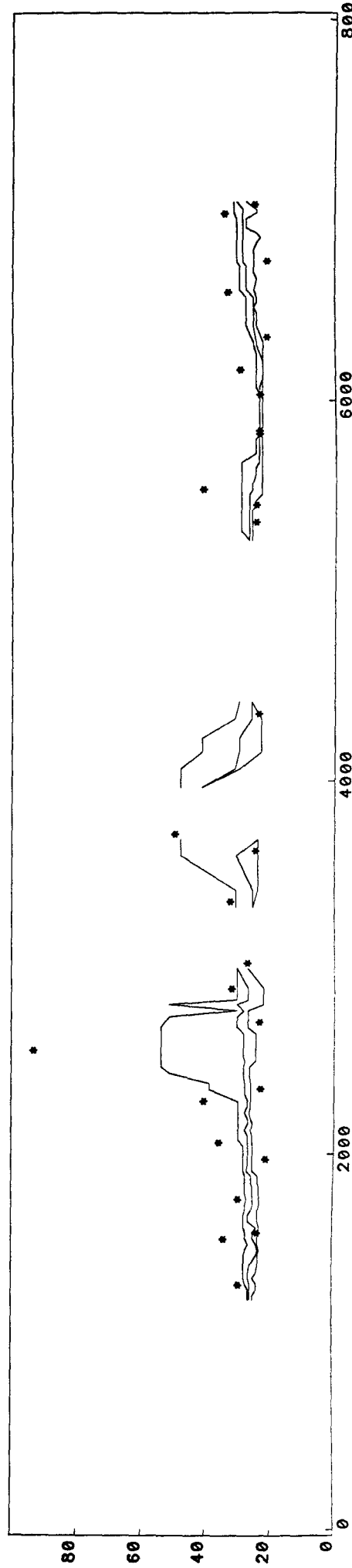
river no 1 conductivity



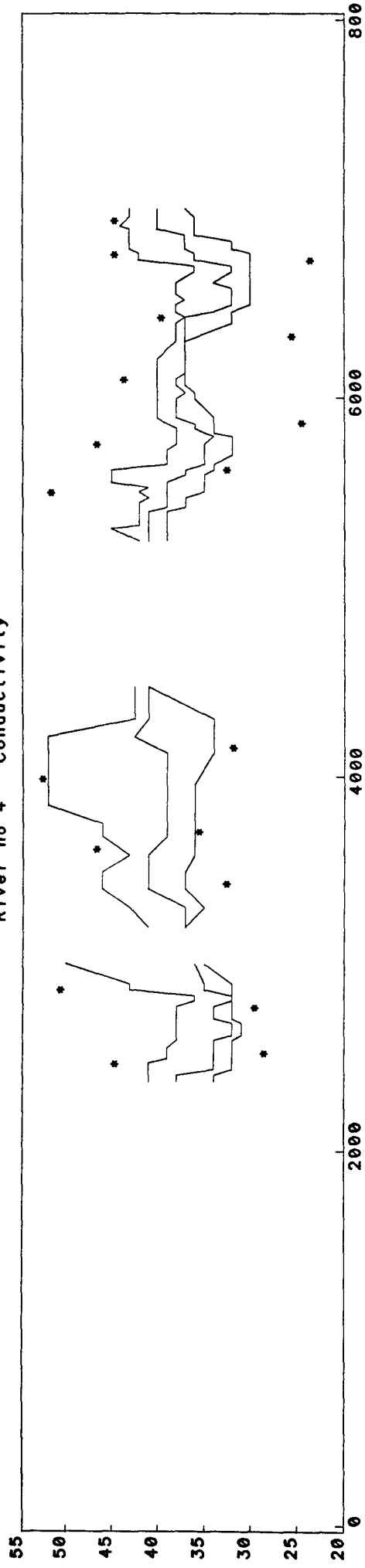
River no 2 Conductivity



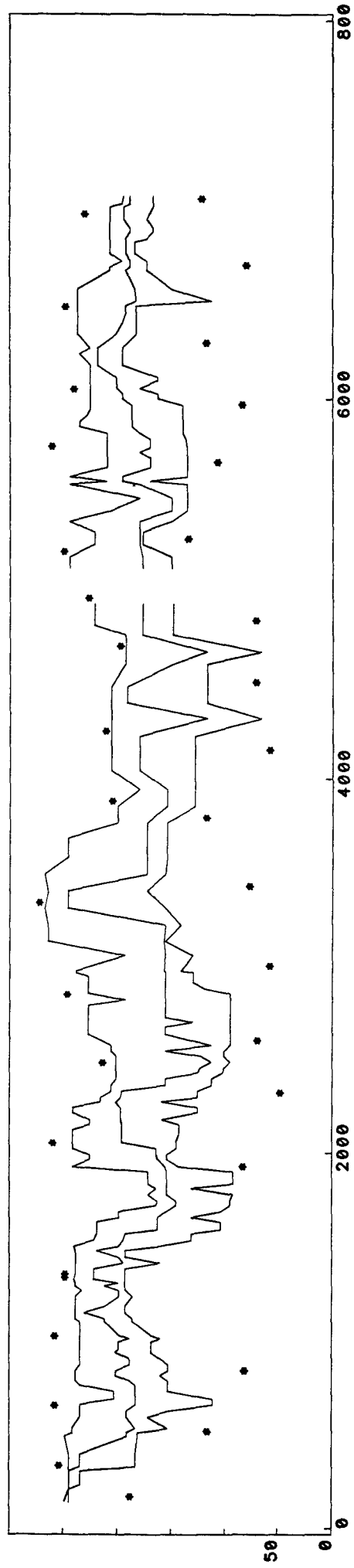
River no 3 Conductivity



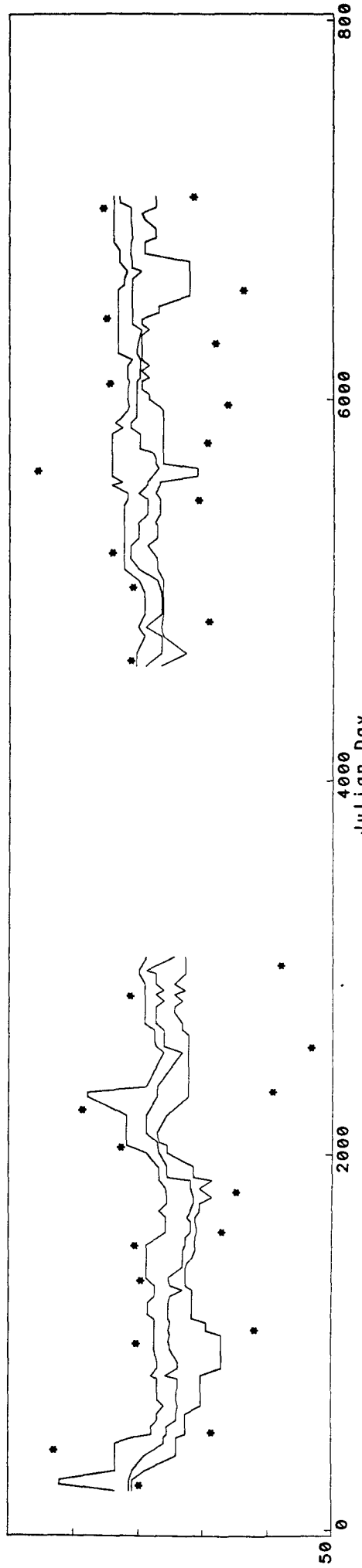
River no + Conductivity



River no 5  
Julian Day  
Conductivity

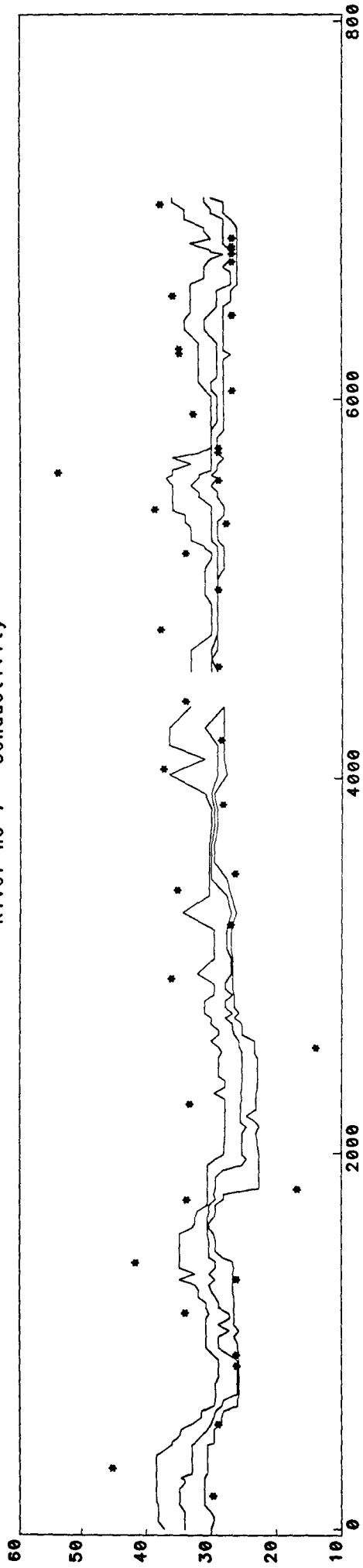


River no 6  
Julian Day  
Conductivity

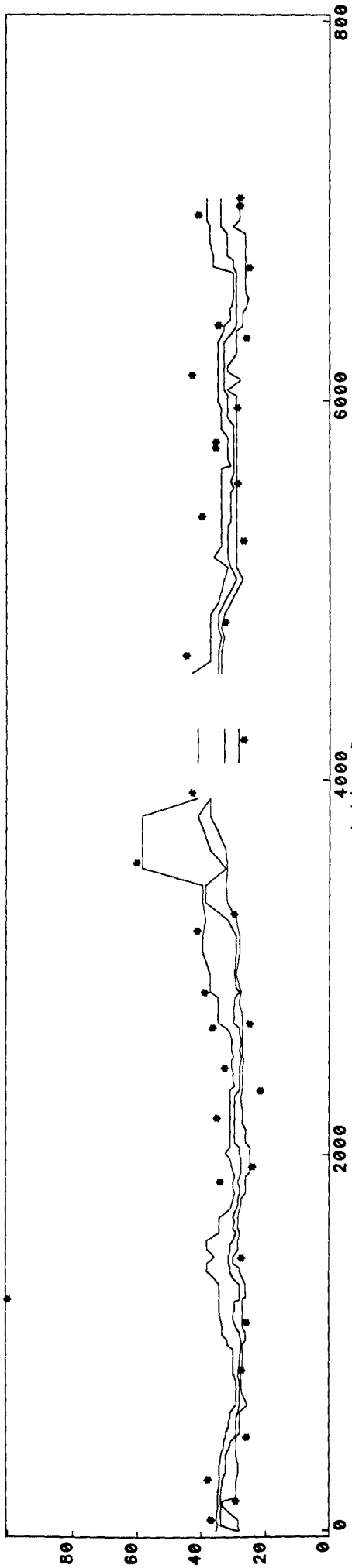


River no 6  
Julian Day  
Conductivity

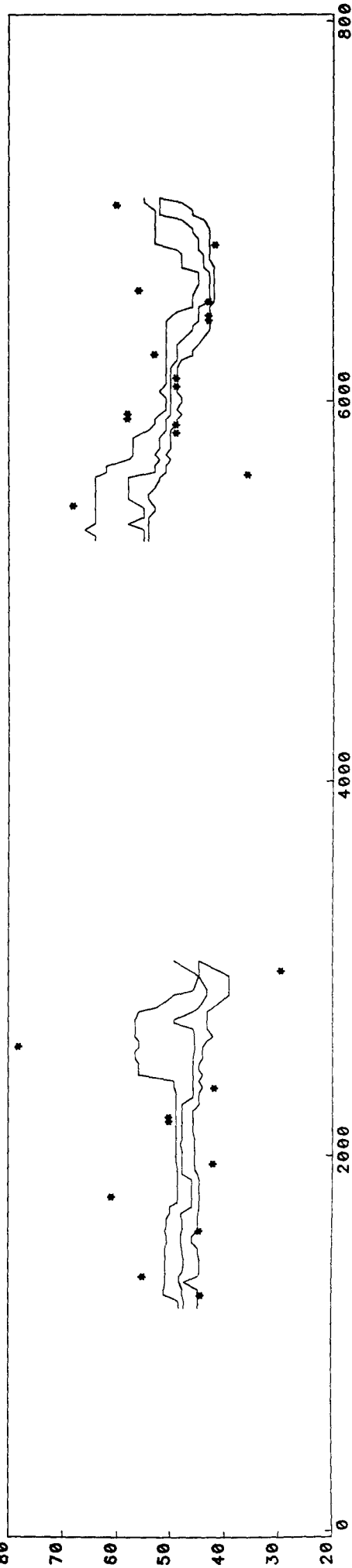
River no 7 Conductivity



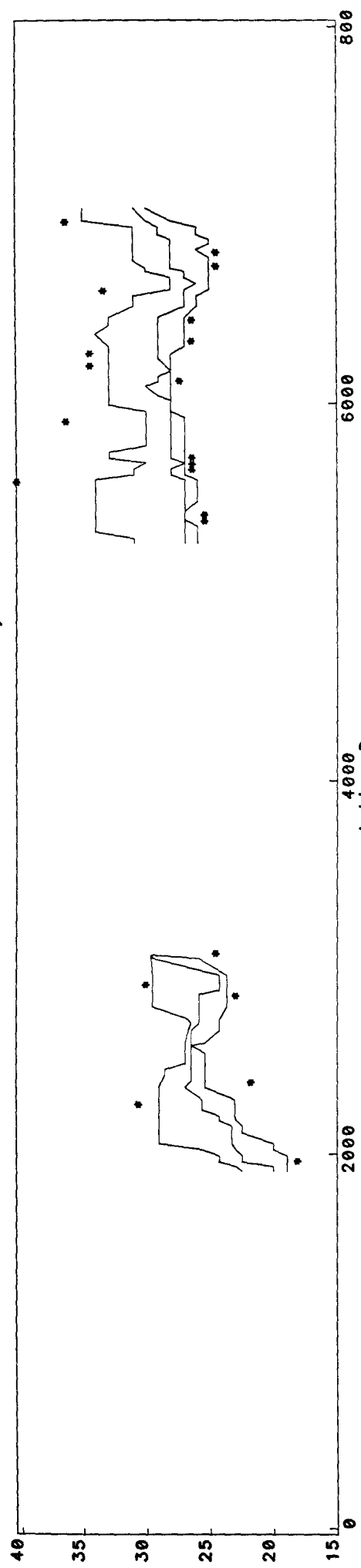
River no 8 Conductivity



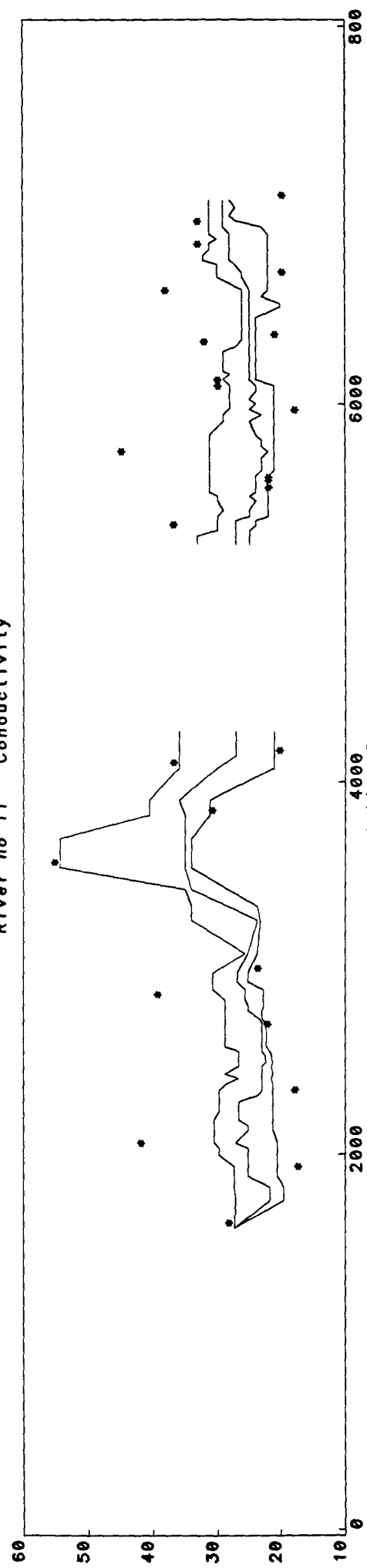
River no 9 Conductivity



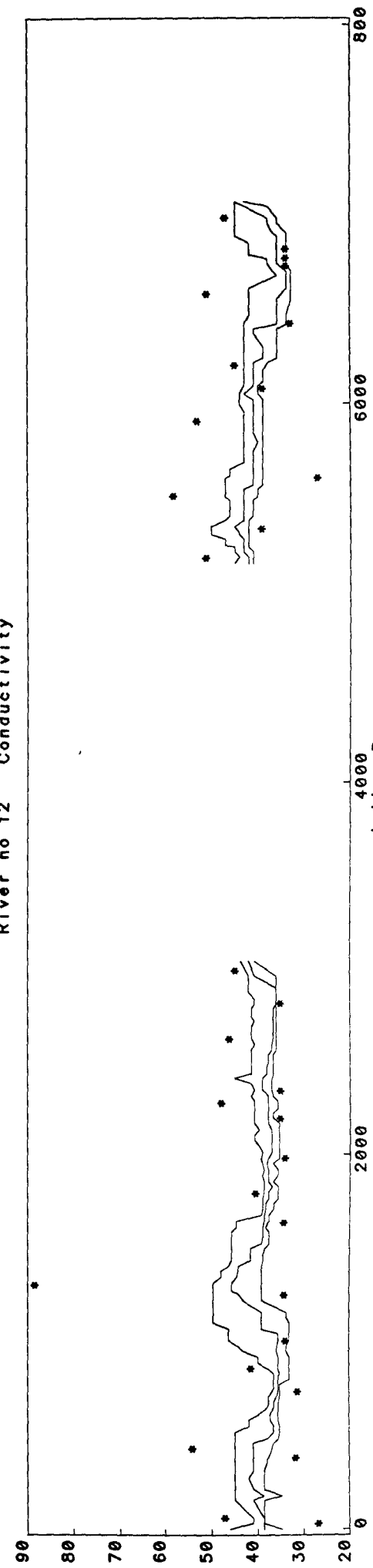
River no 1w Conductivity



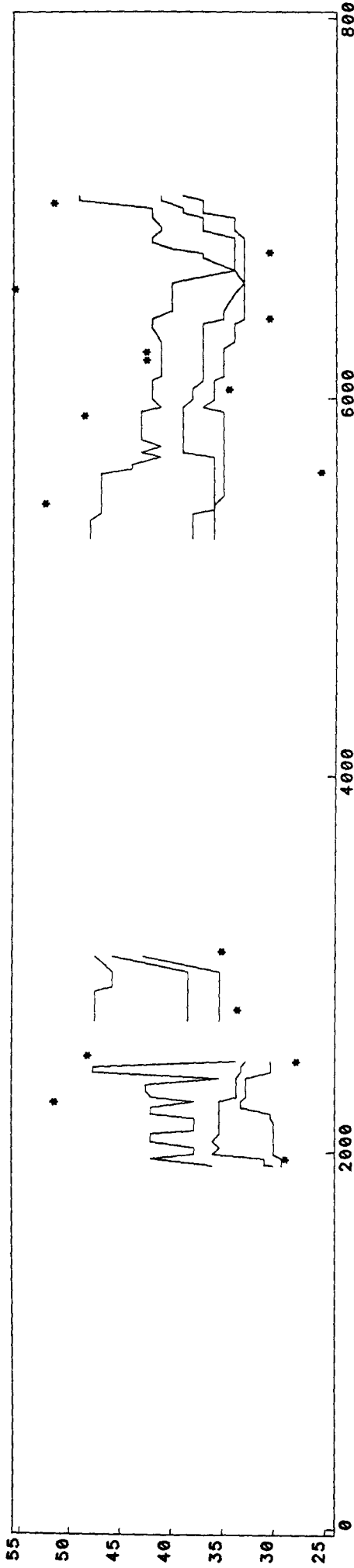
River no 11 Conductivity



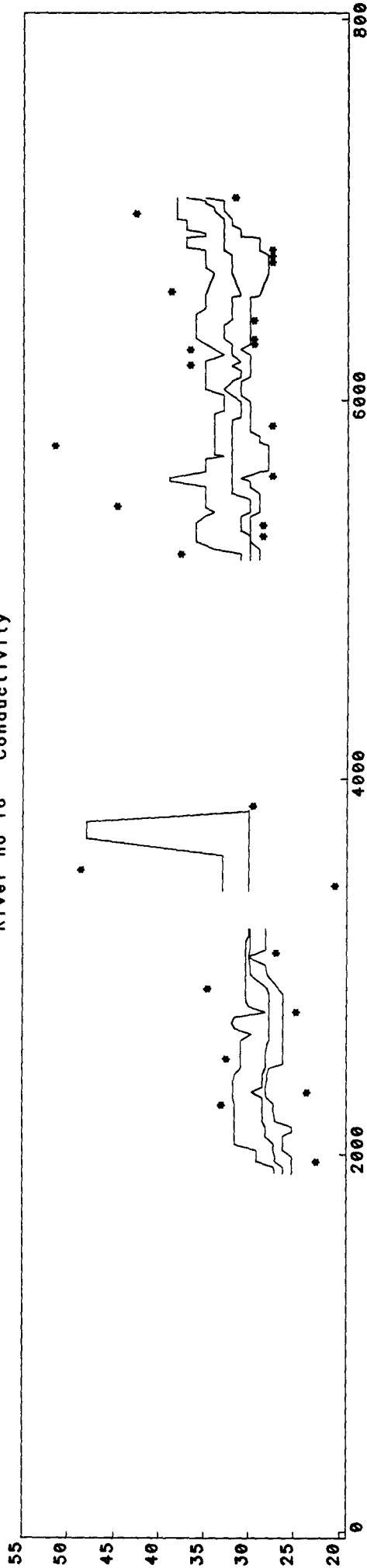
River no 12 Conductivity



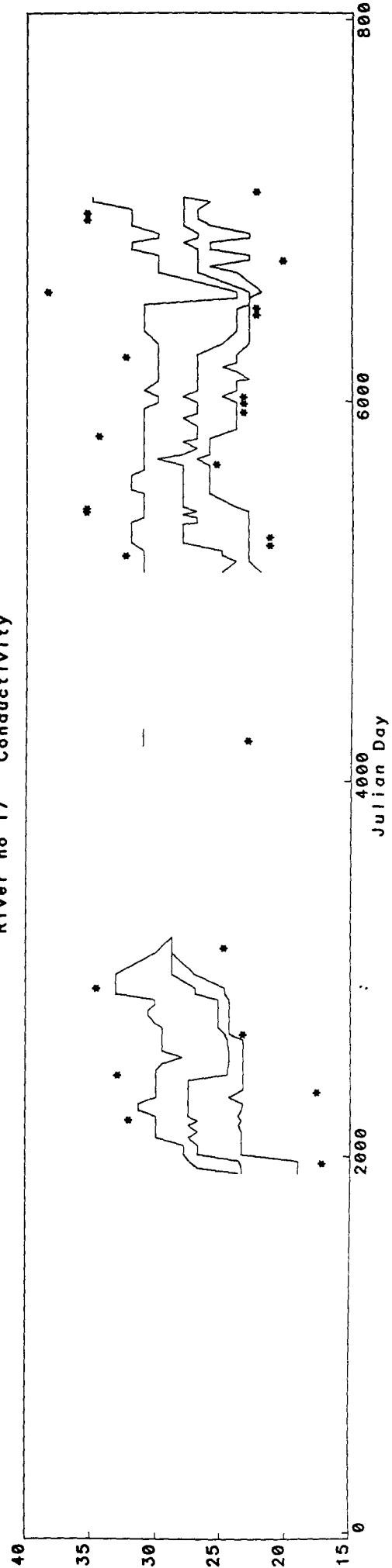
River no 15 Conductivity



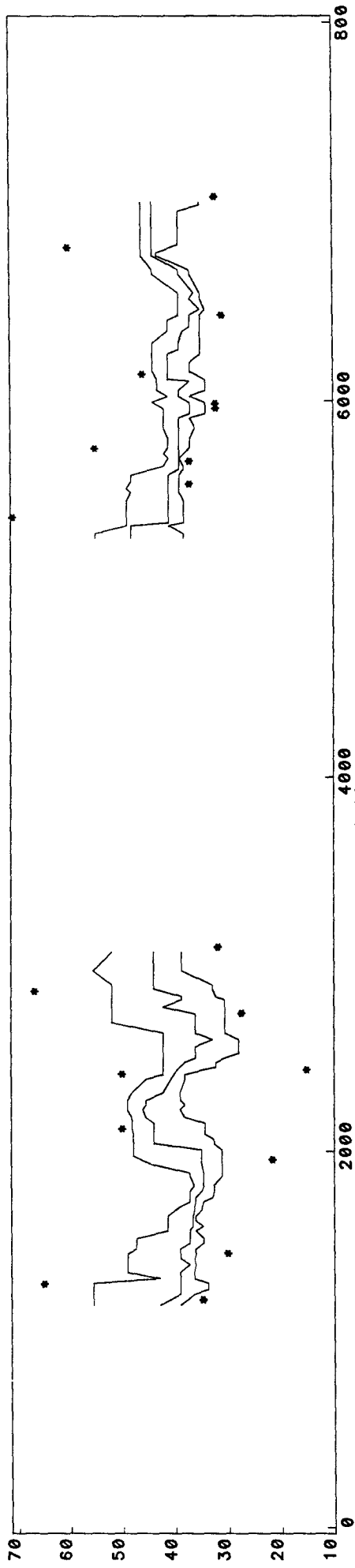
River no 16 Conductivity



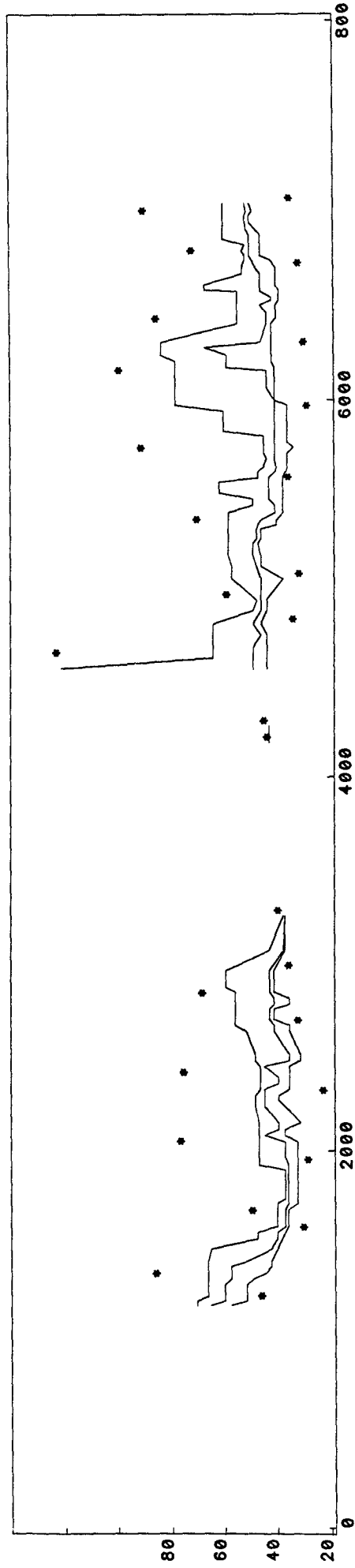
River no 17 Conductivity



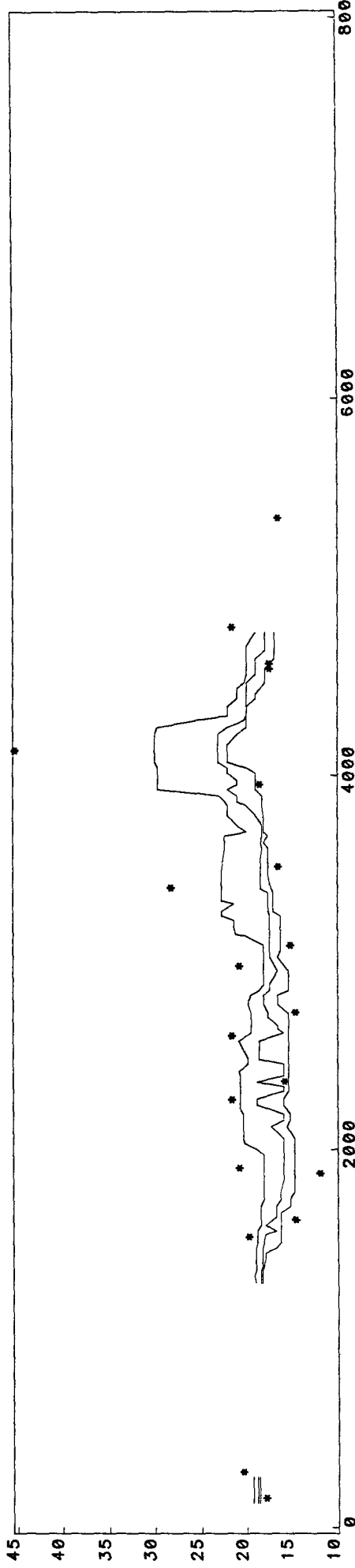
River no 18 Conductivity



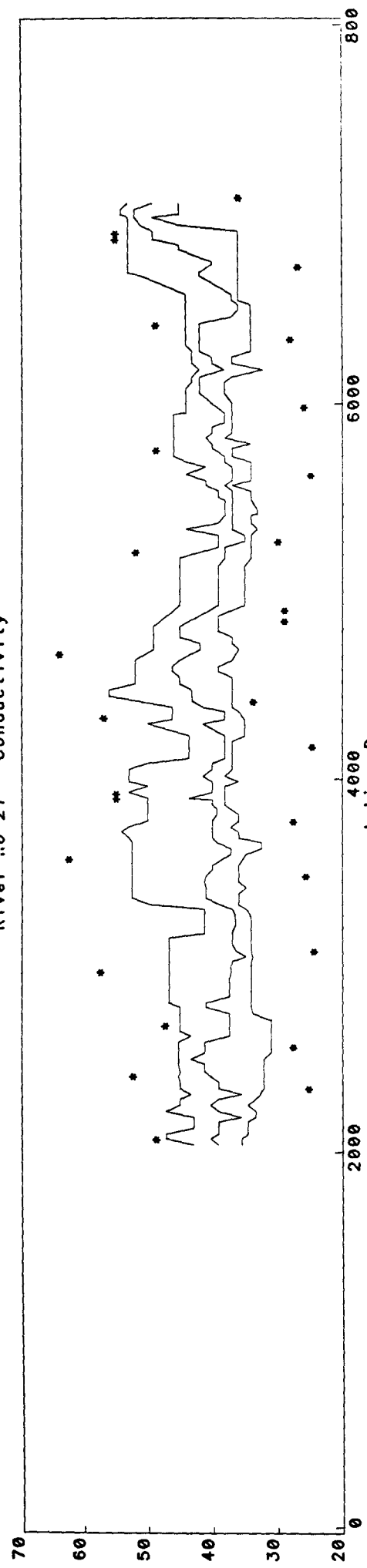
River no 19 Conductivity



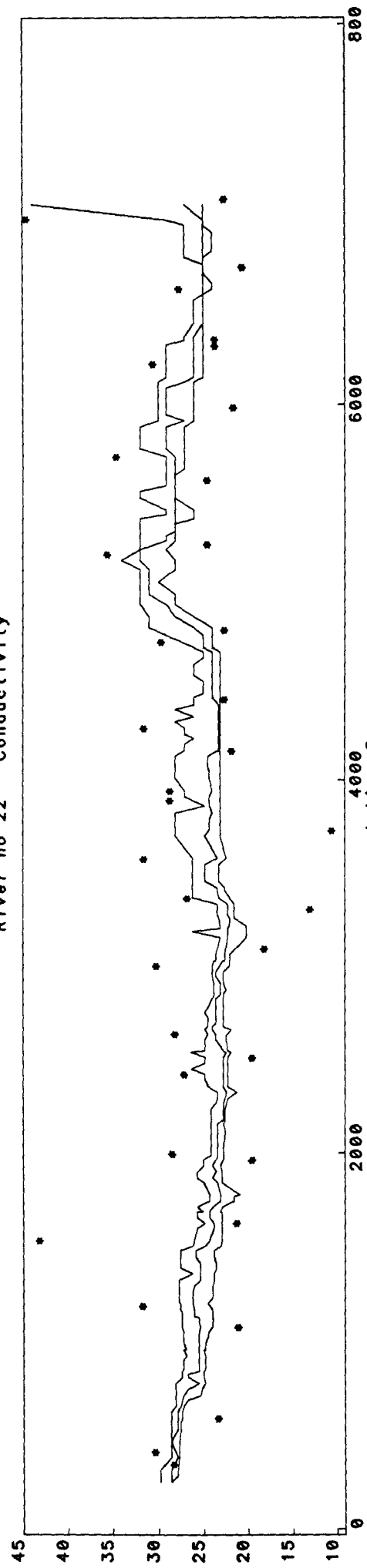
River no 20 Conductivity



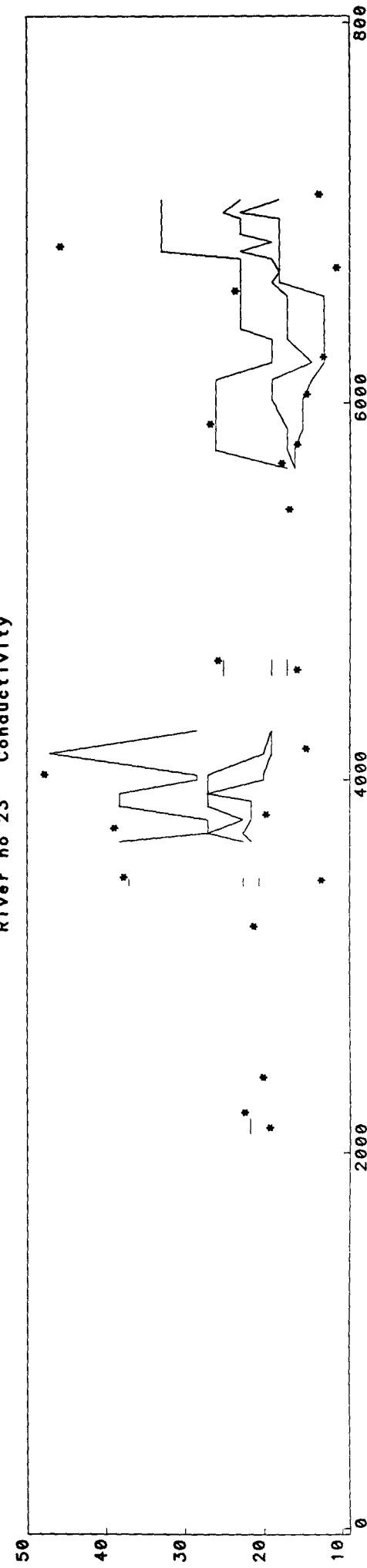
River no 21 Conductivity



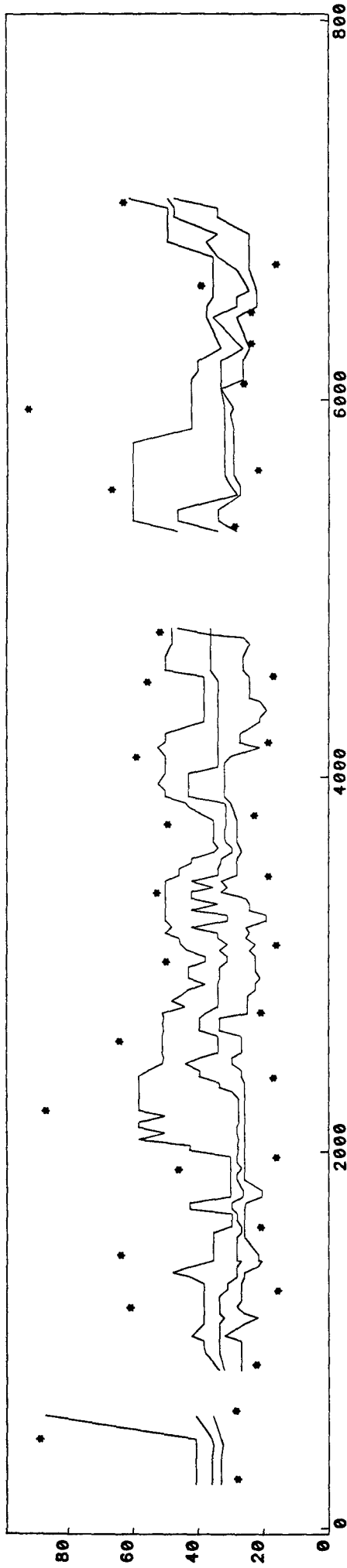
River no 22 Conductivity



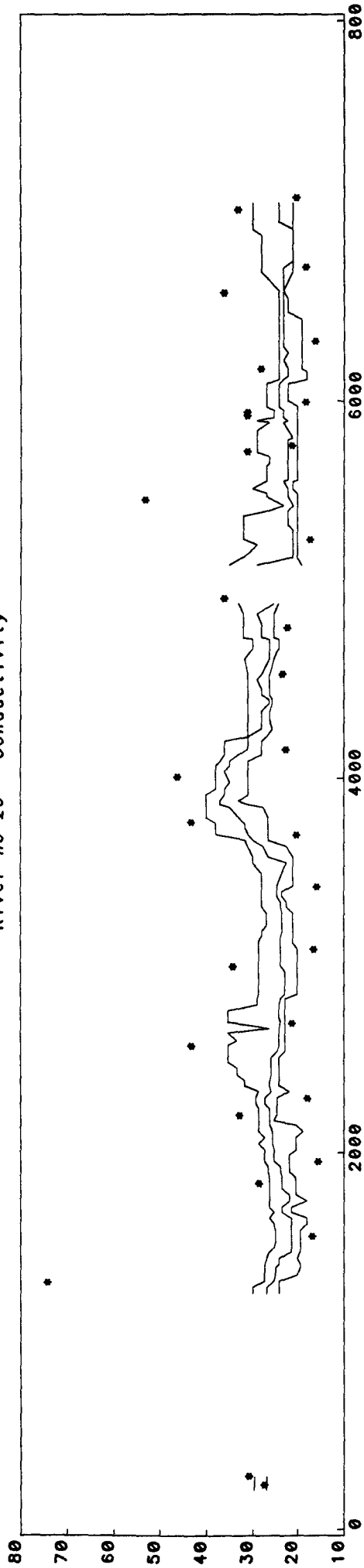
River no 23 Conductivity



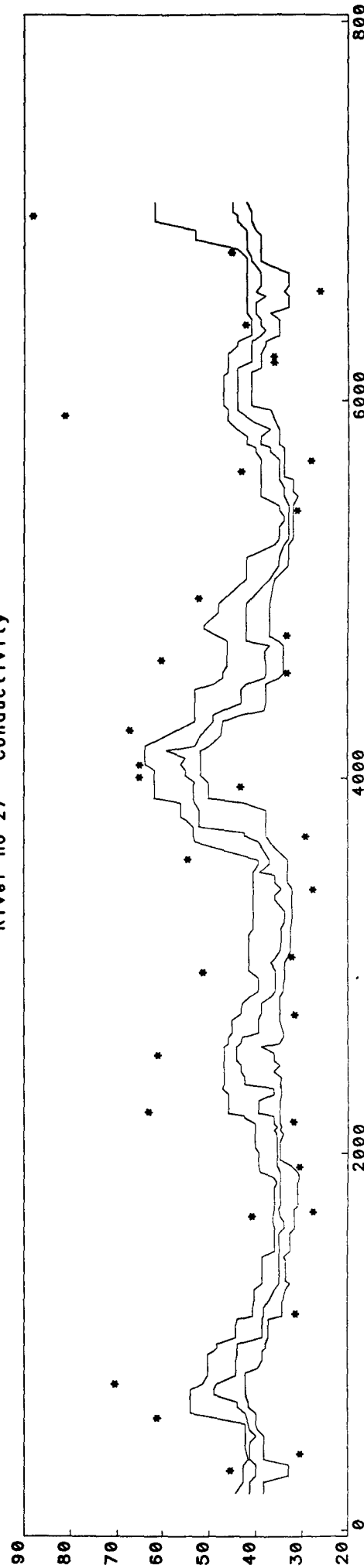
River no 25 Conductivity



River no 26 Conductivity

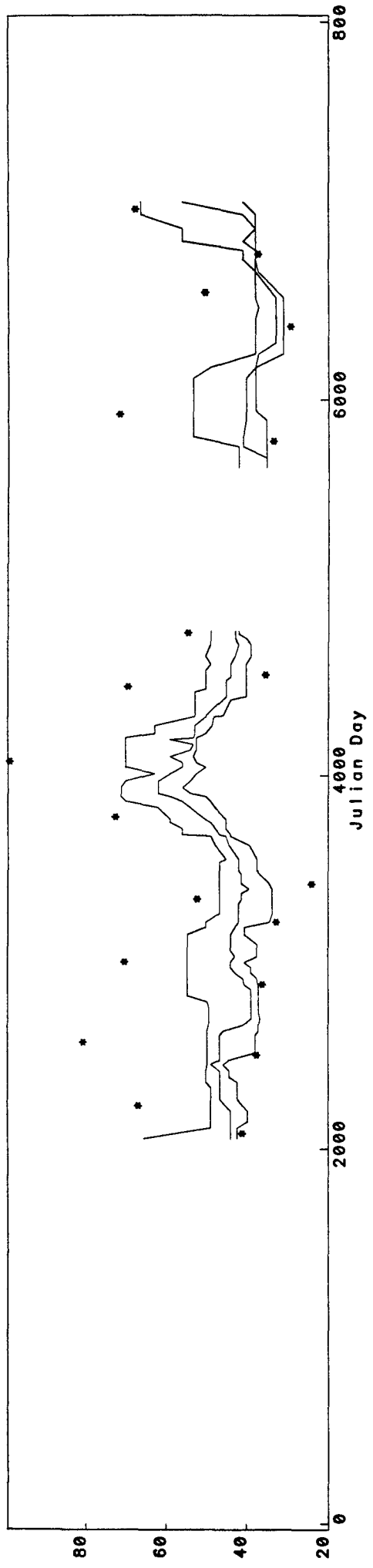


River no 27 Conductivity



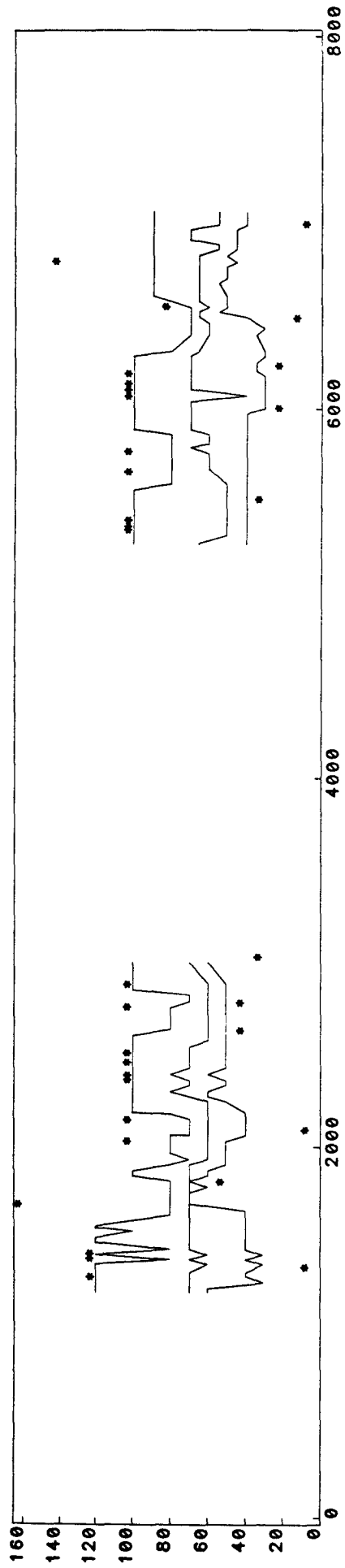


River no 28 Conductivity

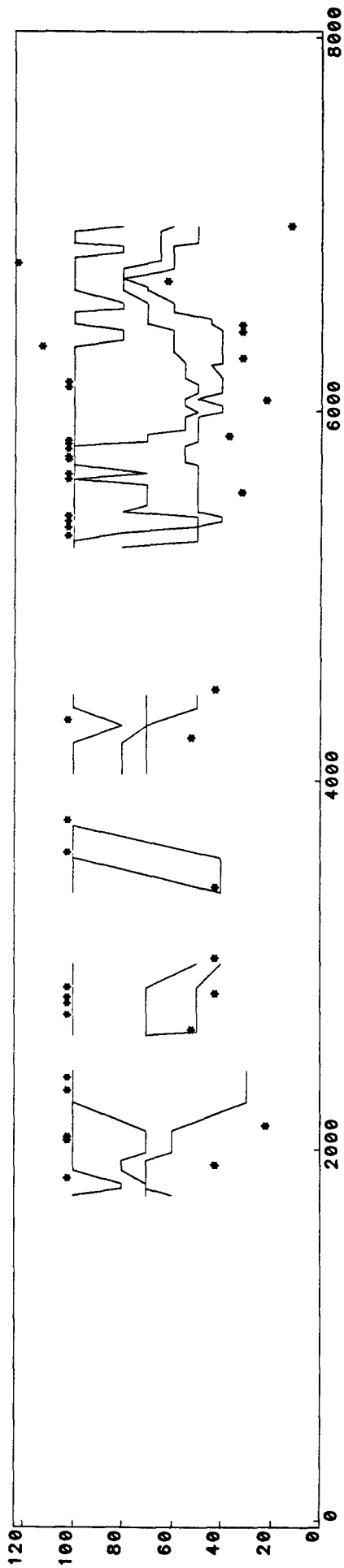


Appendix 16. Running boxplots of colour for the study rivers.

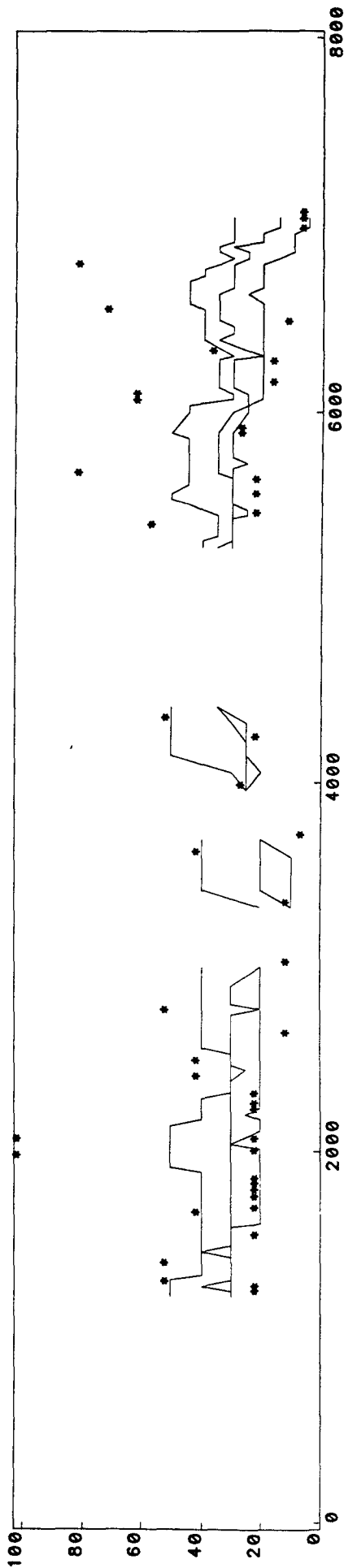
River no 1

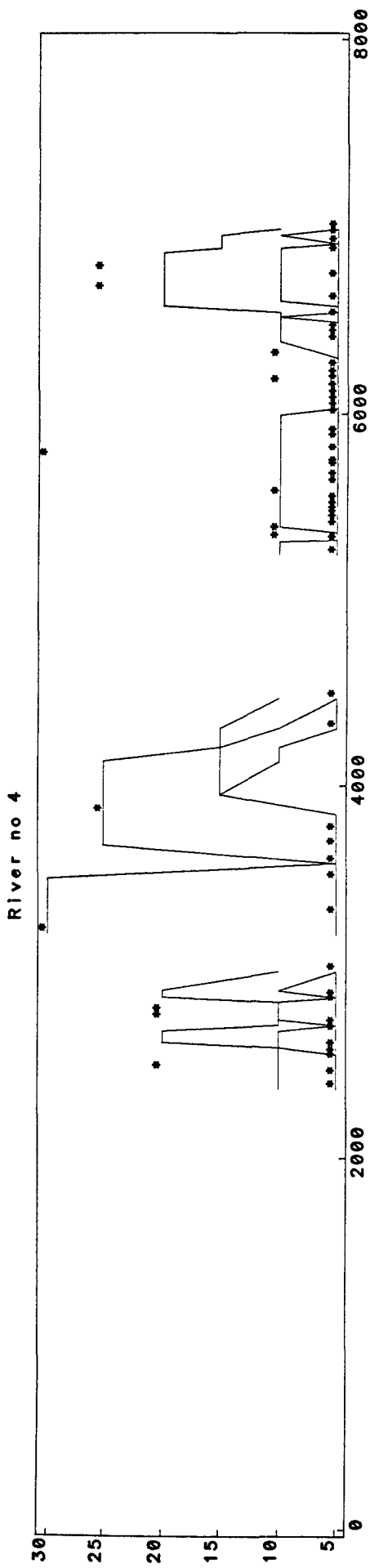


River no 2

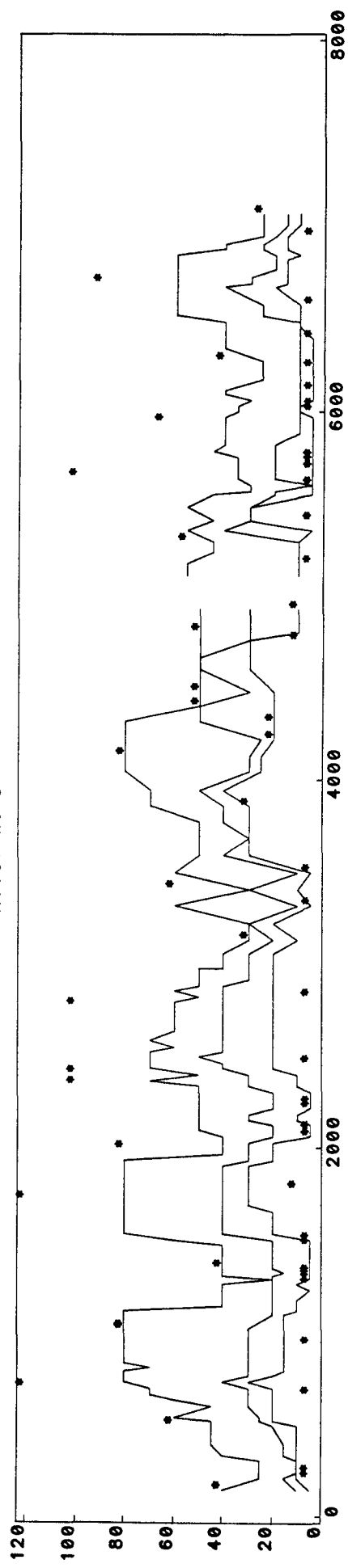


River no 3

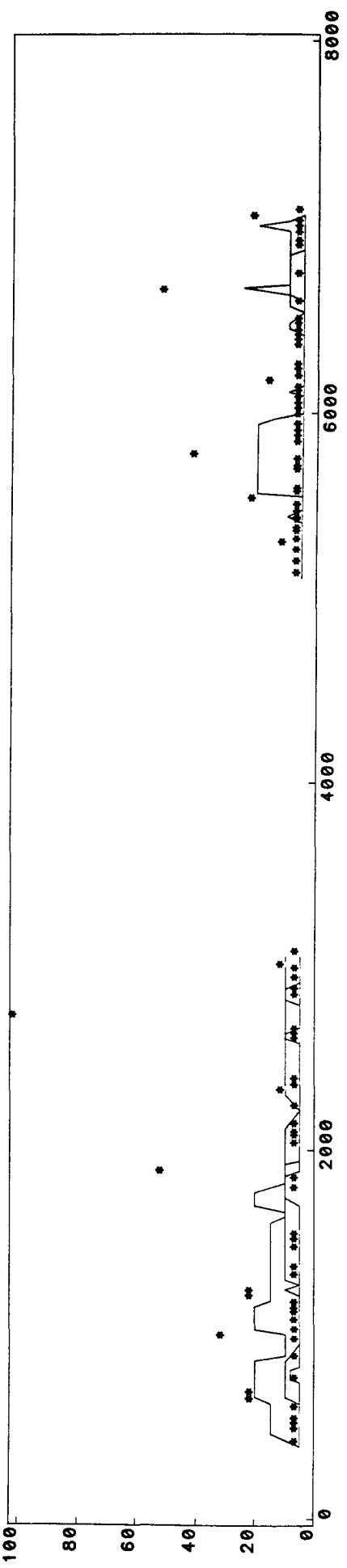




Julian Day  
River no 5

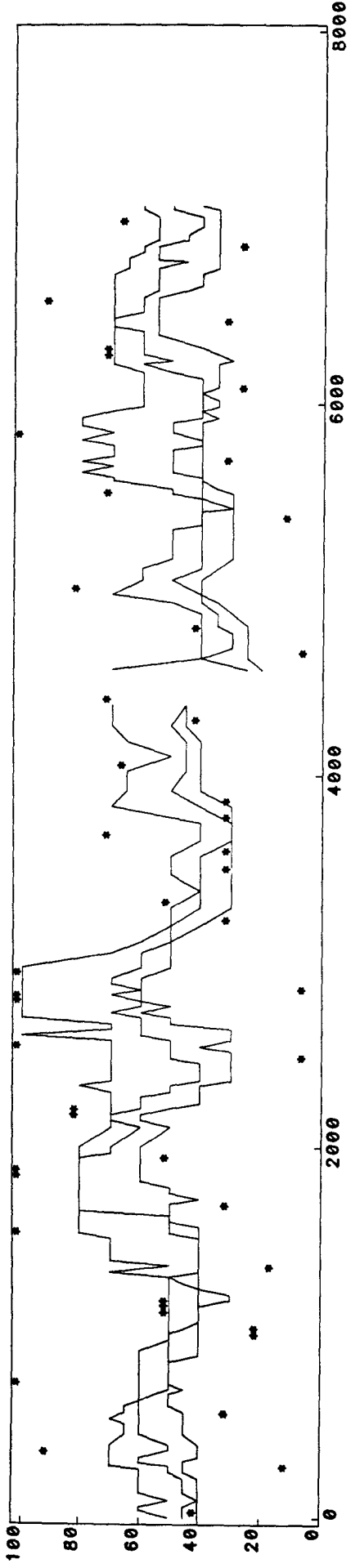


Julian Day  
River no 6

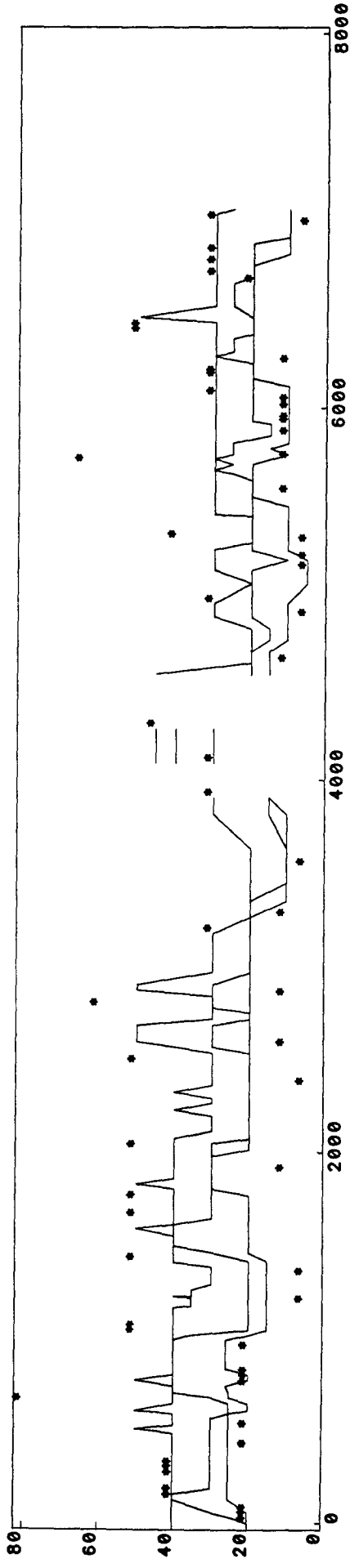


Julian Day

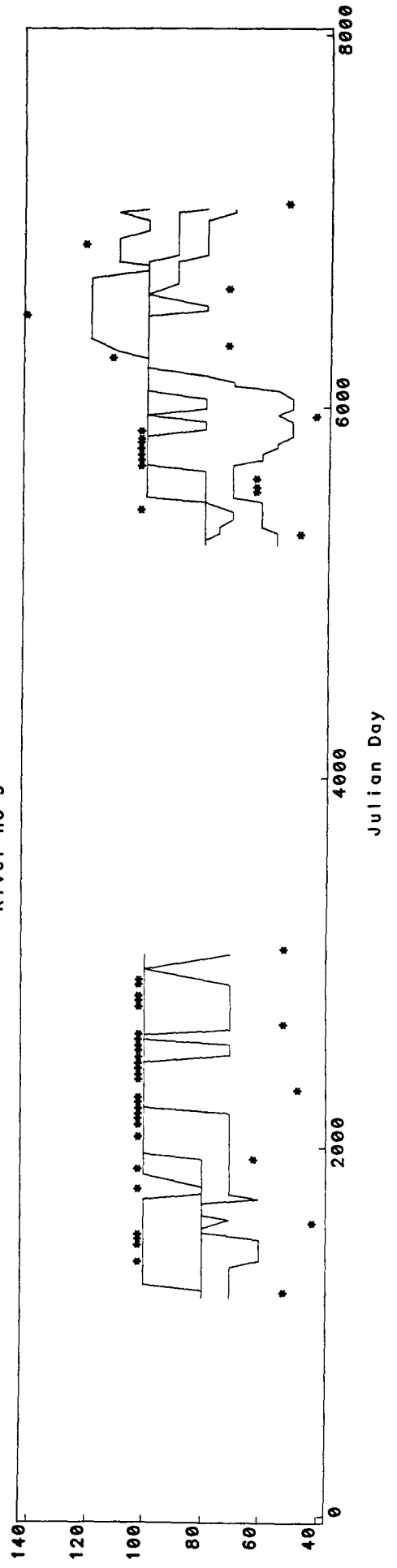
River no 7



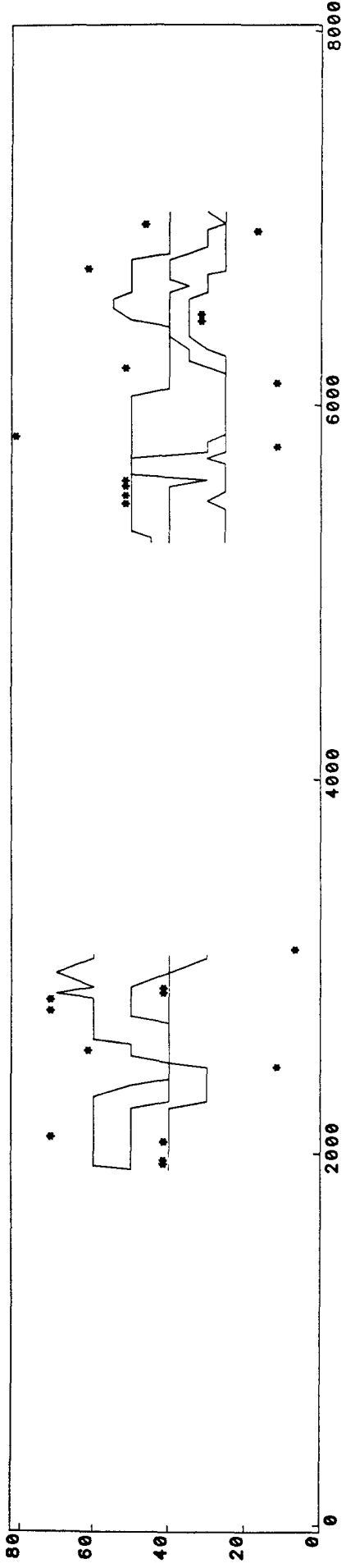
Julian Day  
River no 8



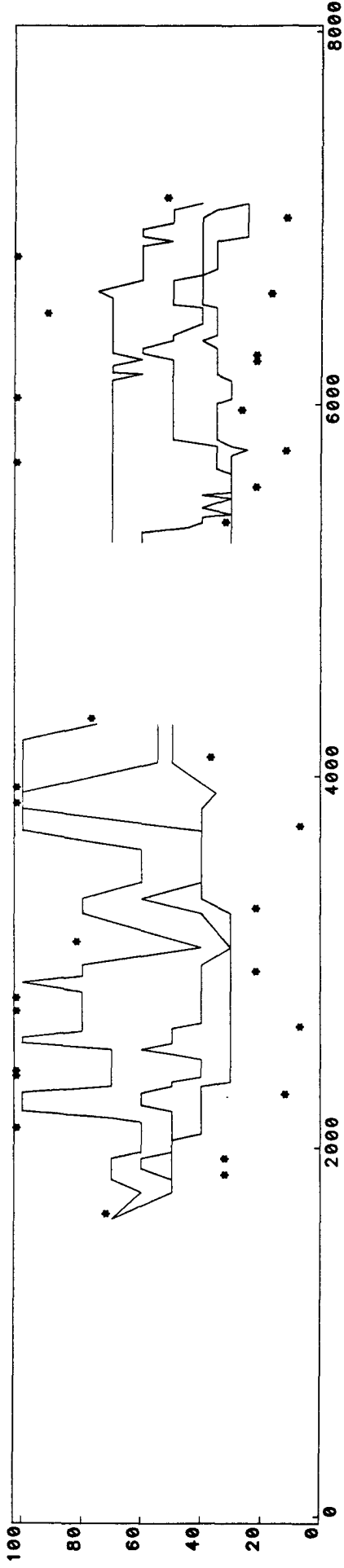
Julian Day  
River no 9



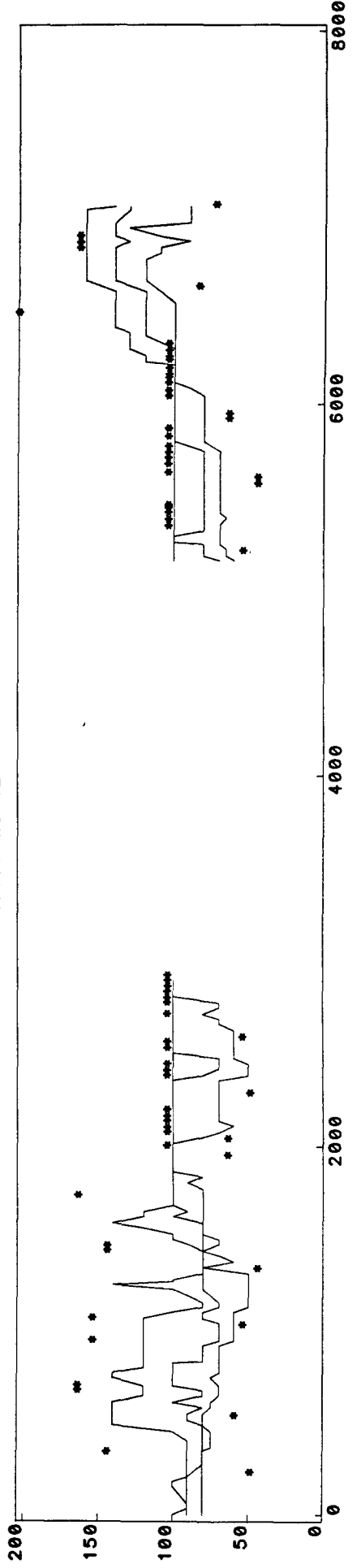
River no 10



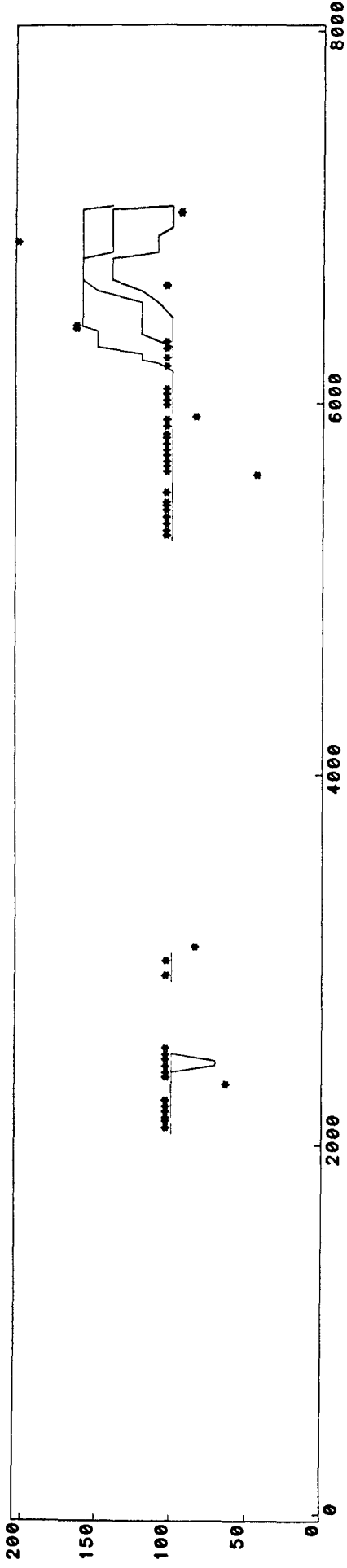
Julian Day  
River no 11



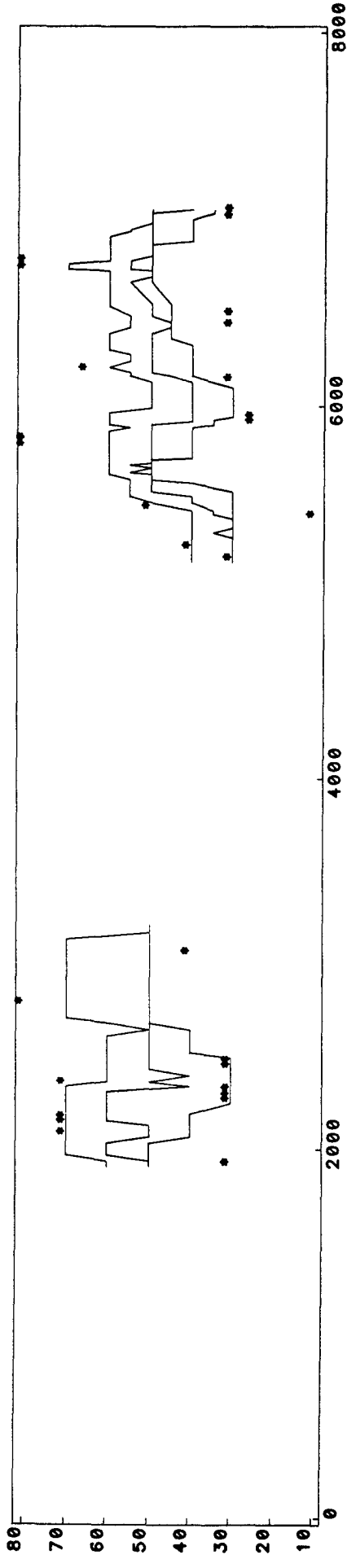
Julian Day  
River no 12



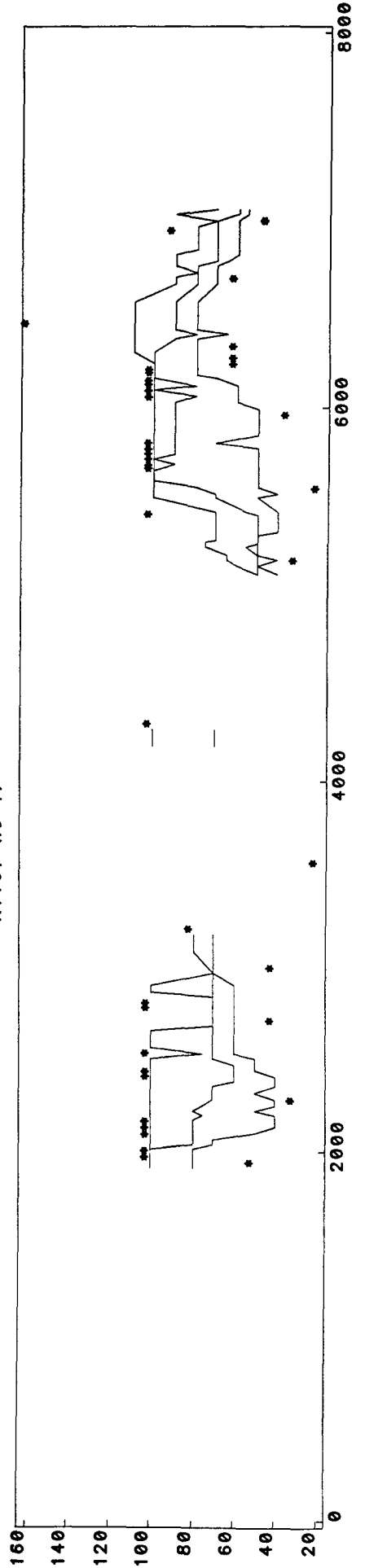
River no 13



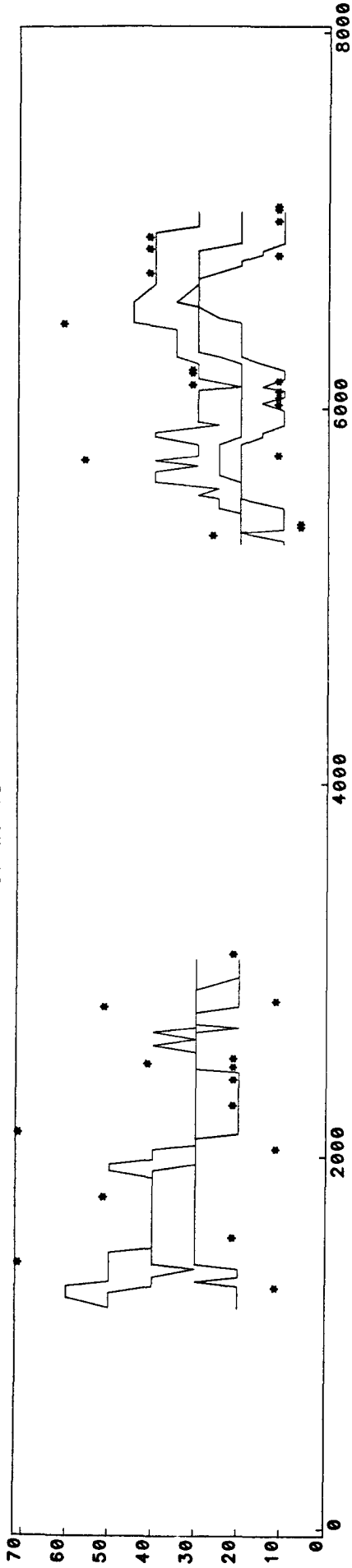
Julian Day  
River no 16



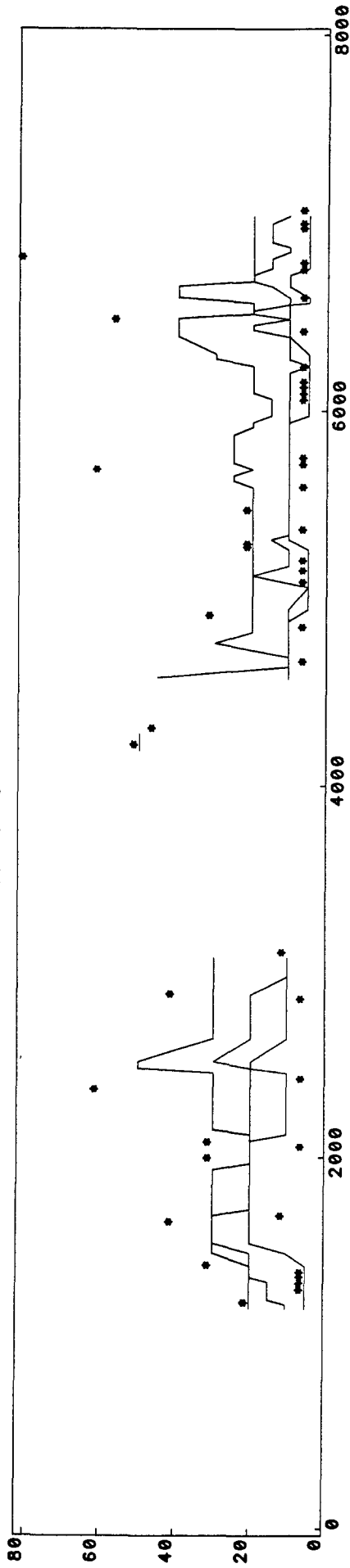
Julian Day  
River no 17



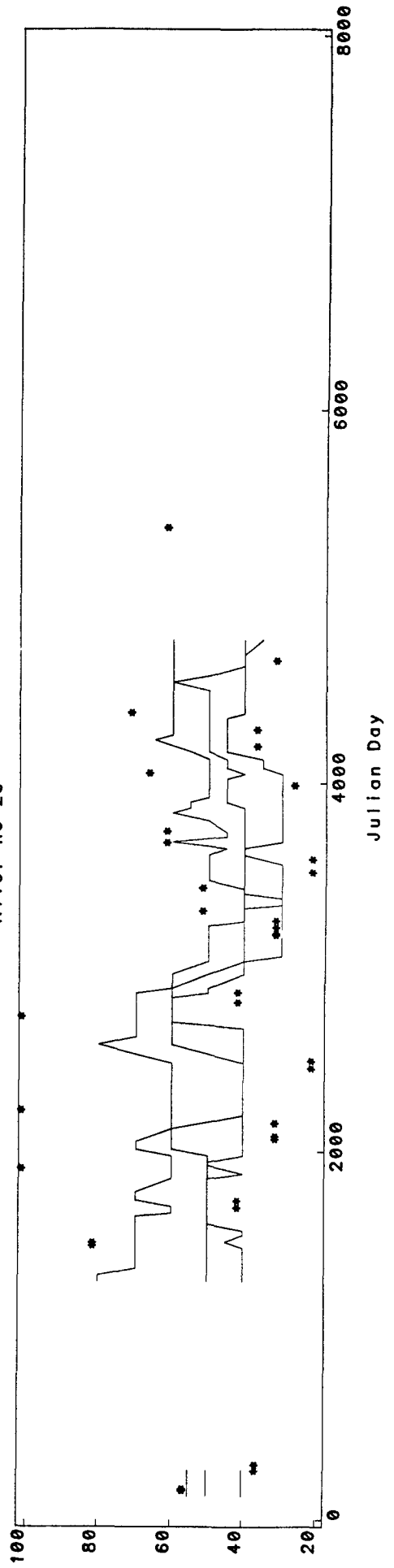
River no 18



Julian Day  
River no 19

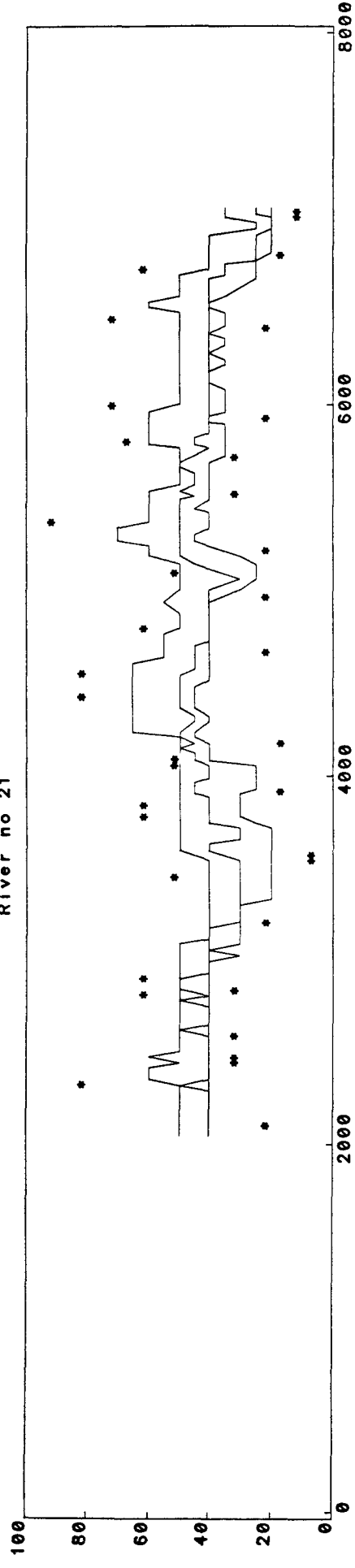


Julian Day  
River no 20



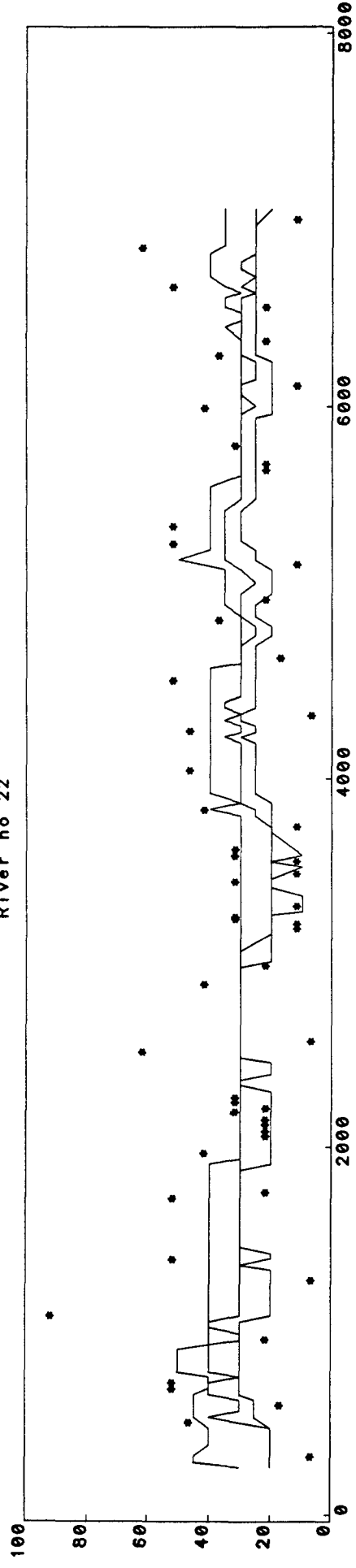


River no 21



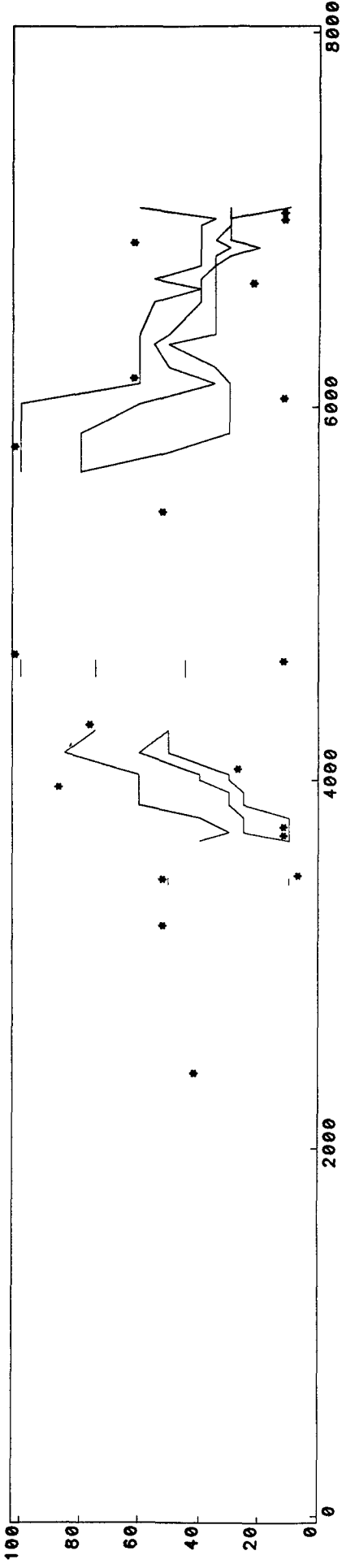
Julian Day

River no 22



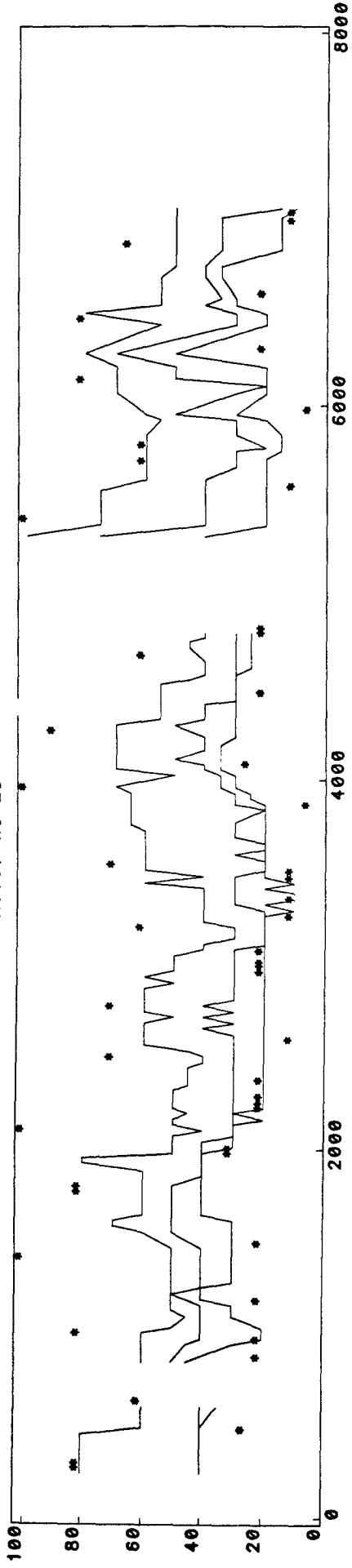
Julian Day

River no 23



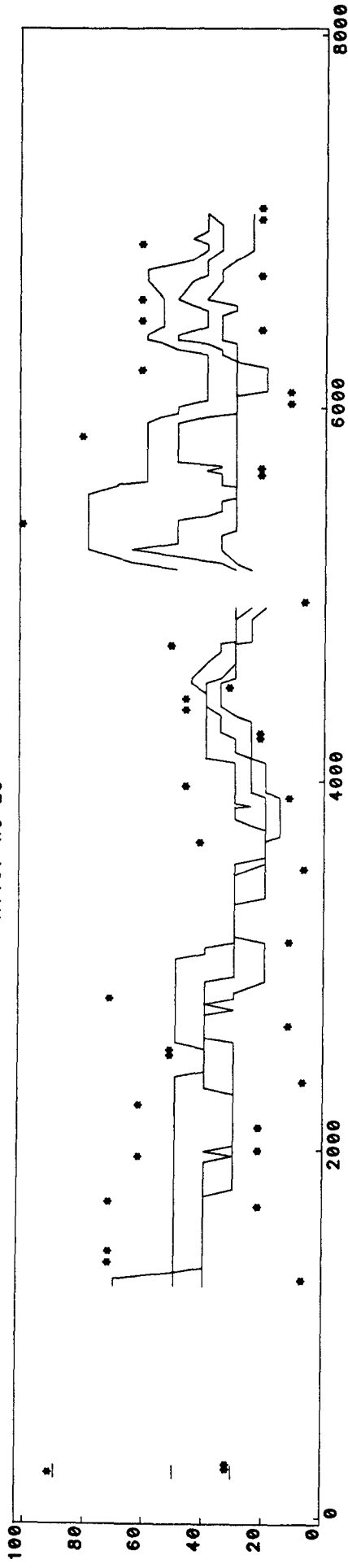
Julian Day

River no 25



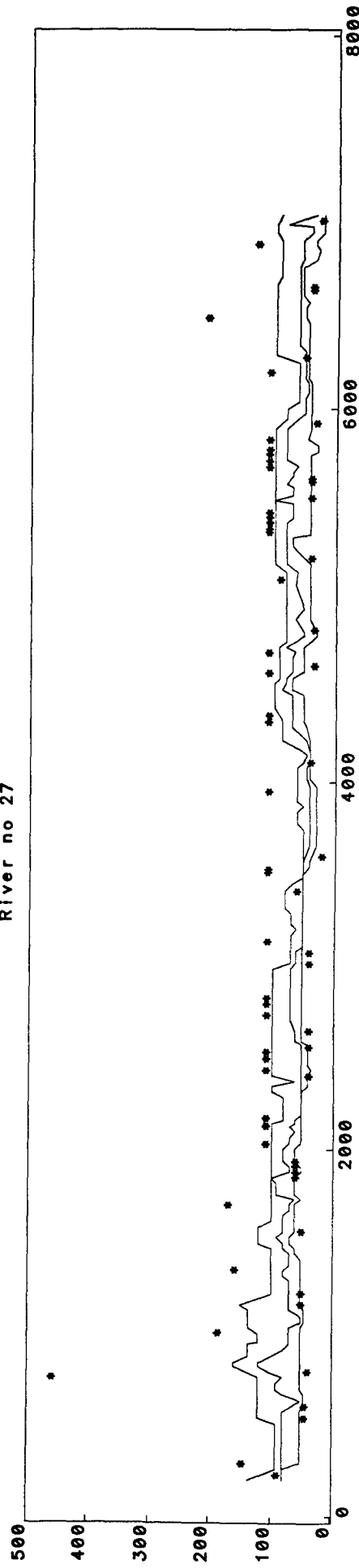
Julian Day

River no 26



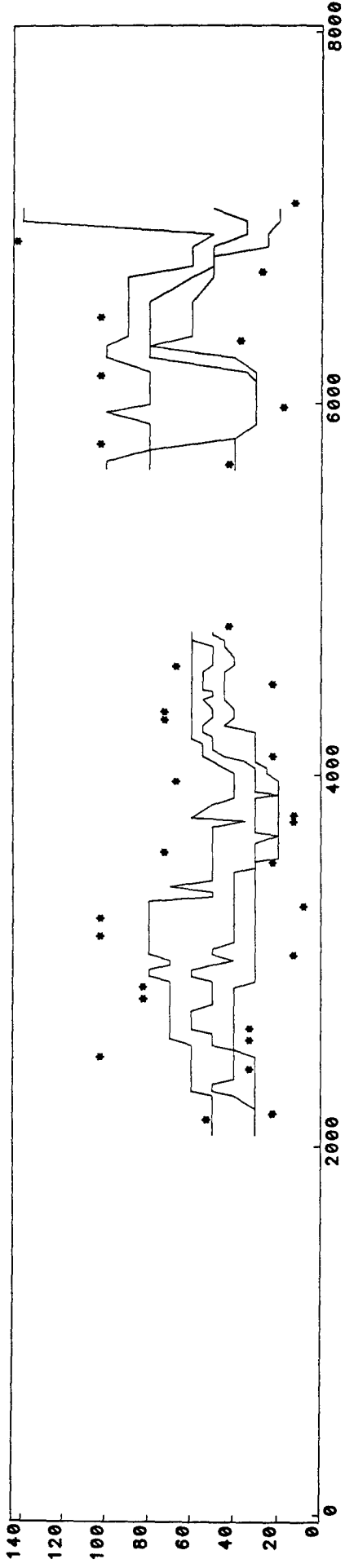
Julian Day

River no 27



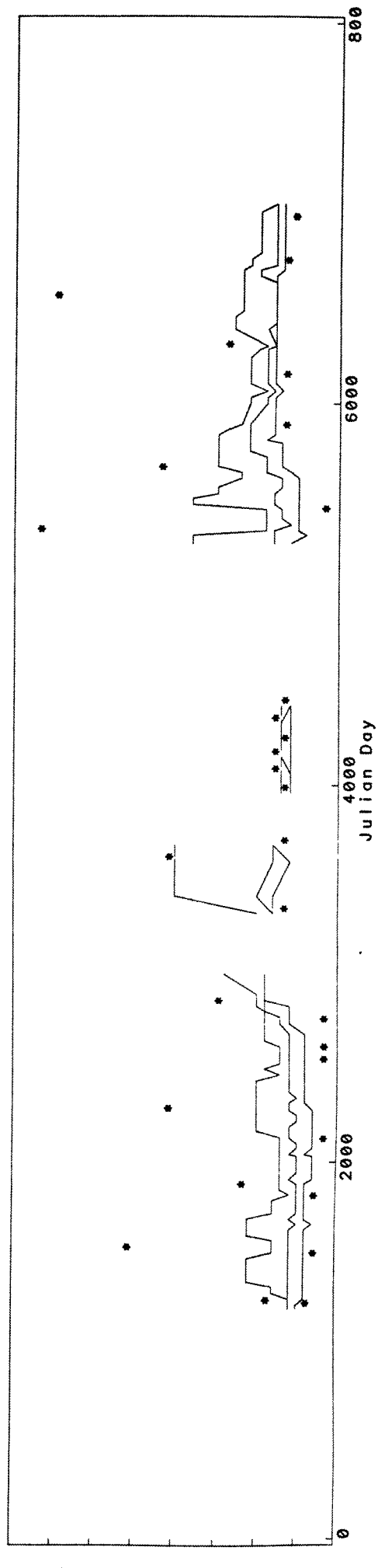
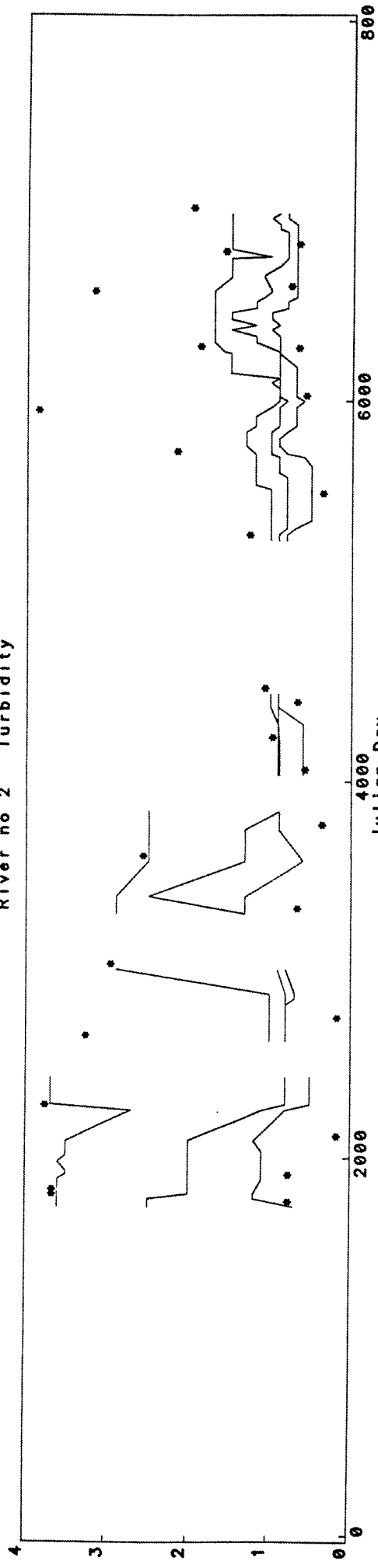
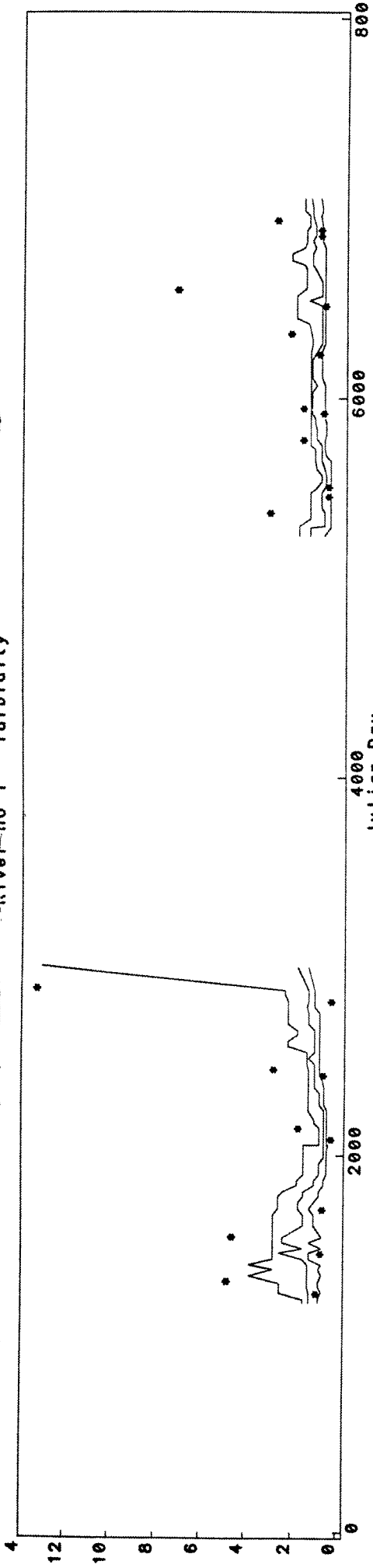
Julian Day

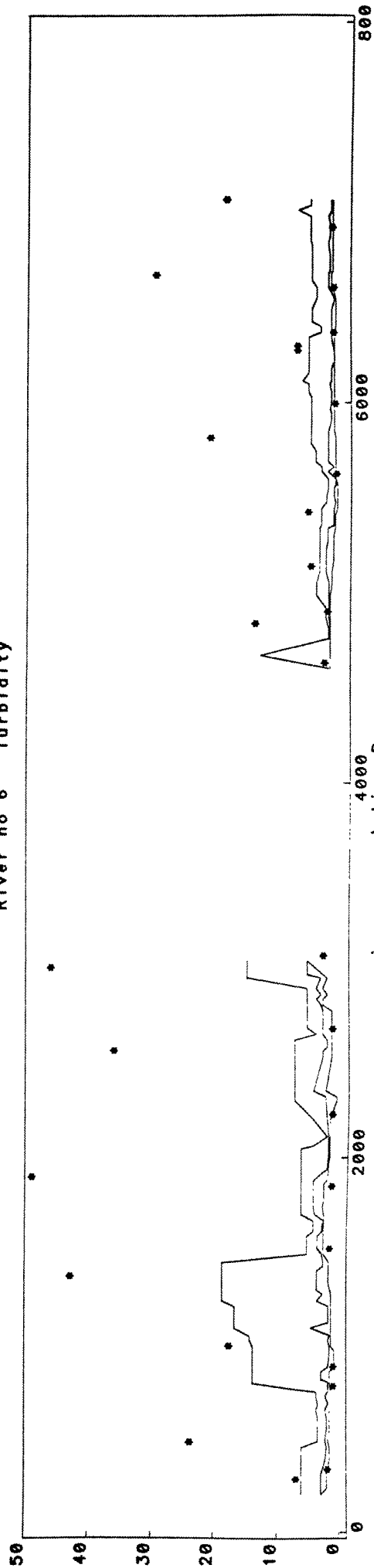
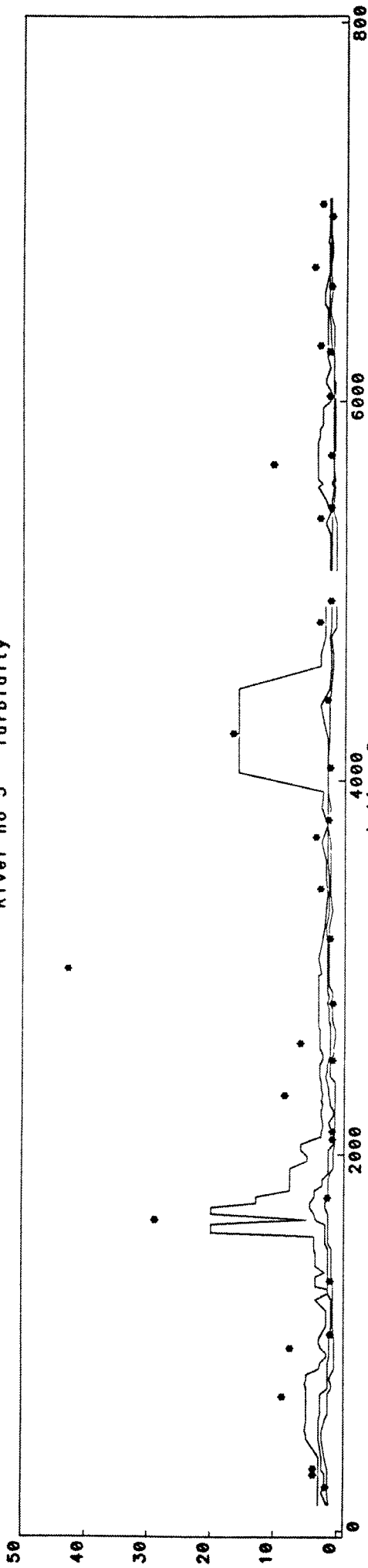
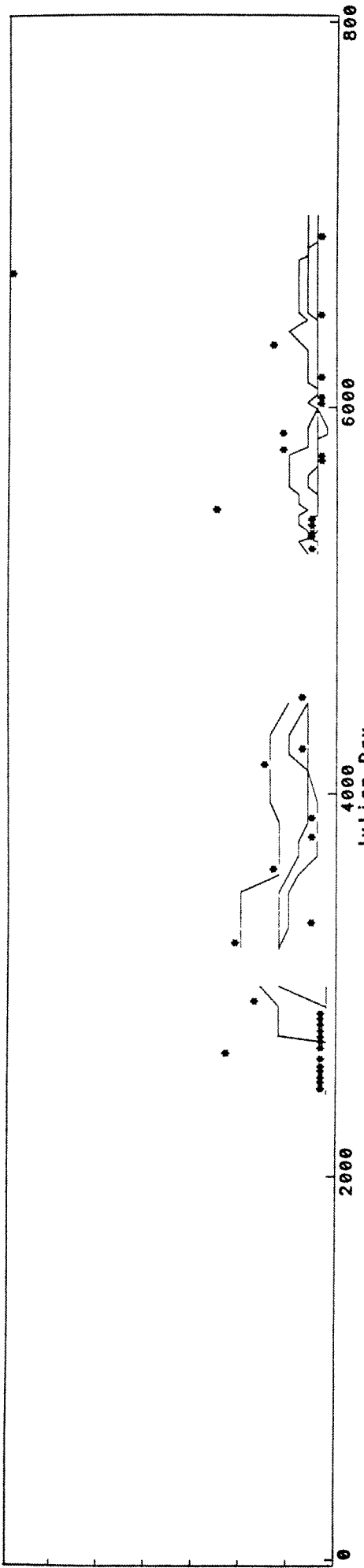
River no 28

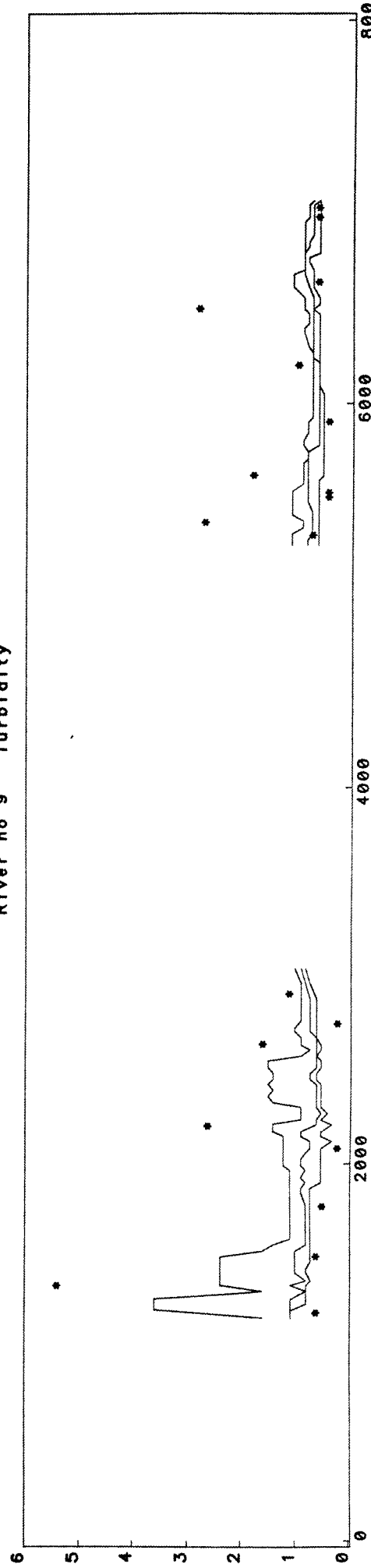
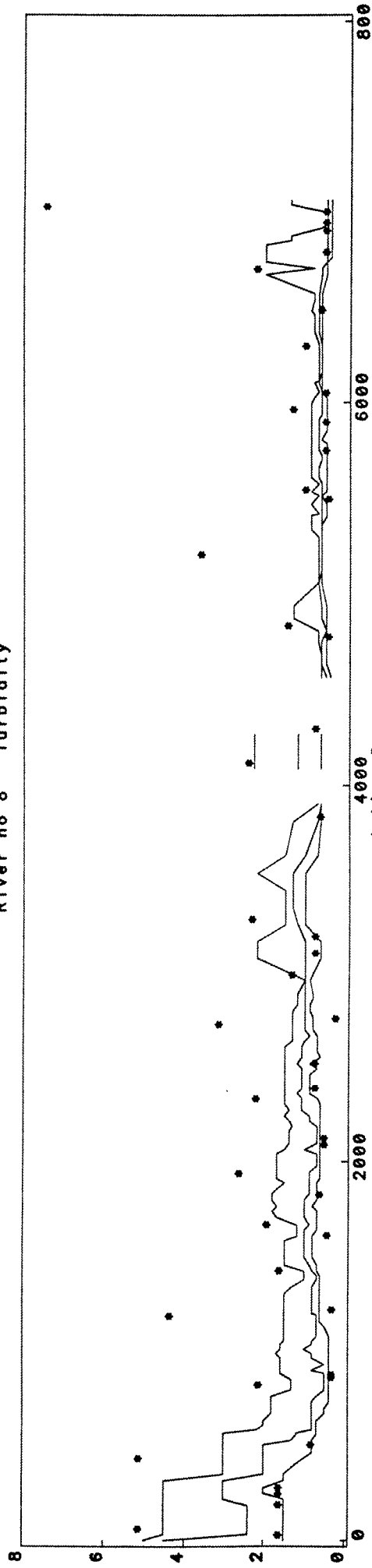
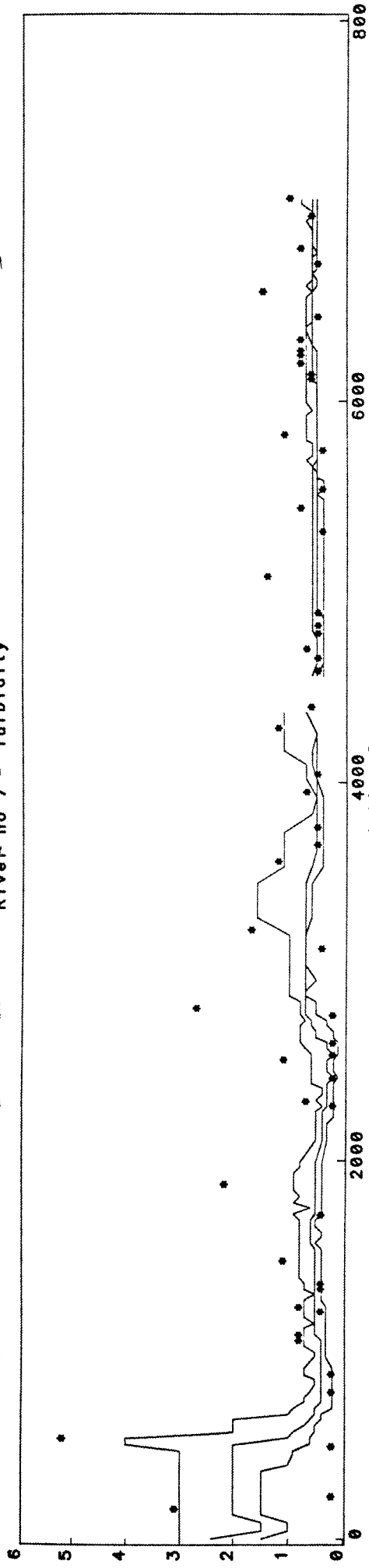


Julian Day

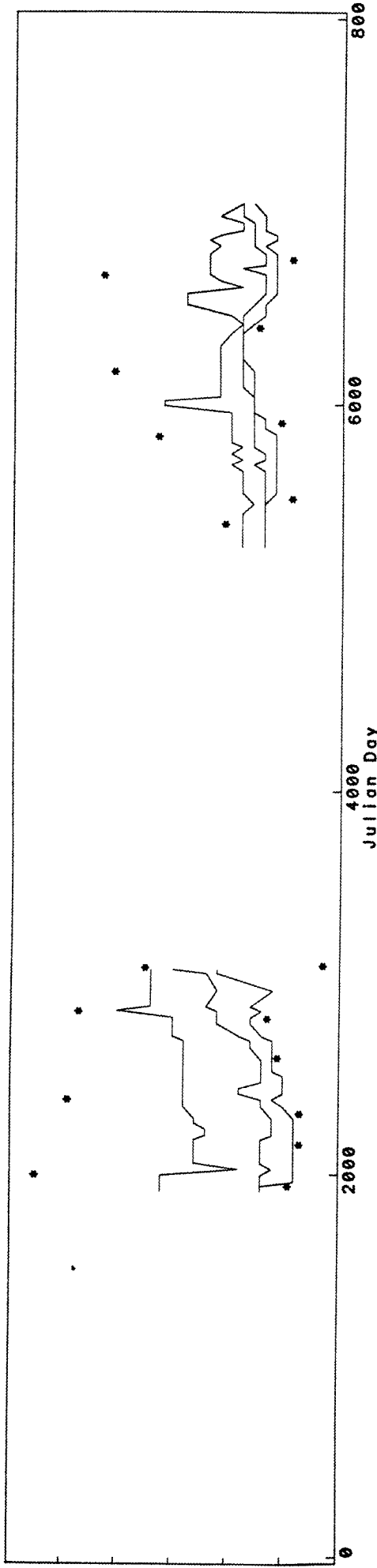
Appendix 17. Running boxplots of turbidity for the study rivers.



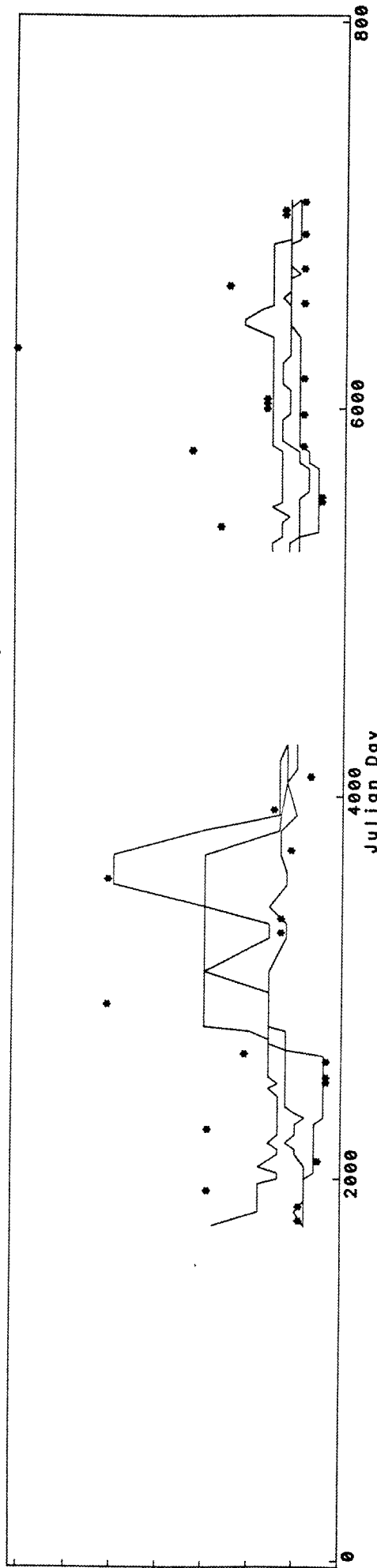




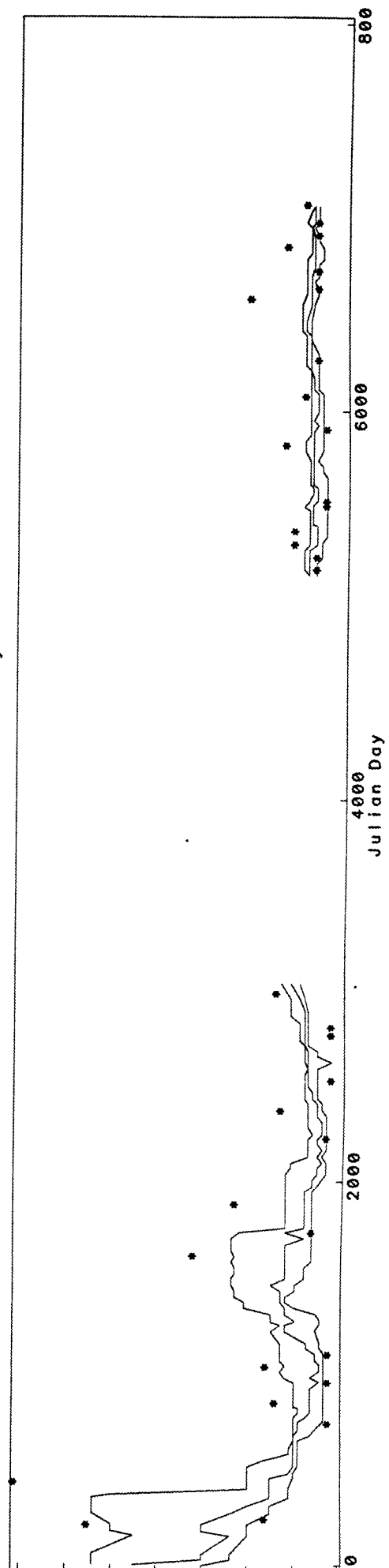
River no 10 Turbidity



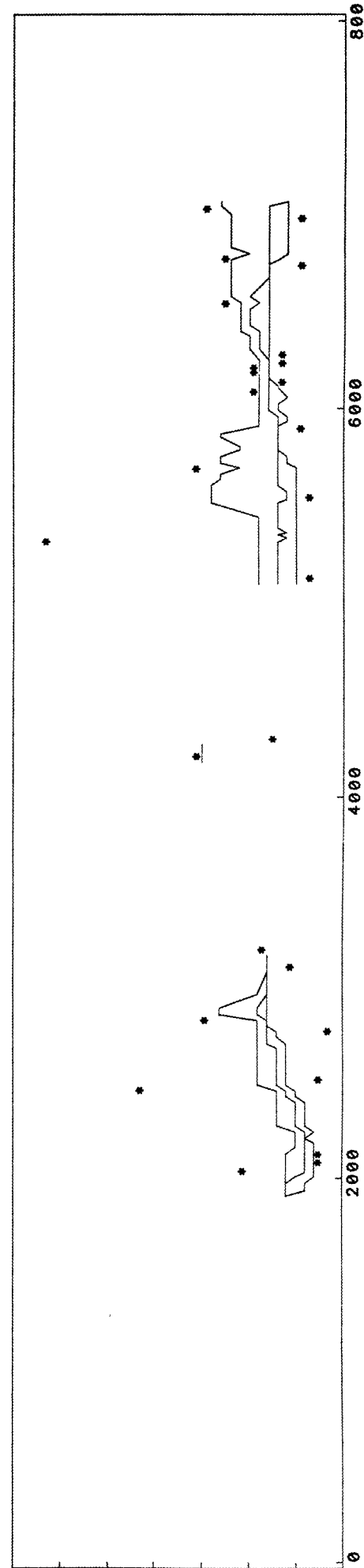
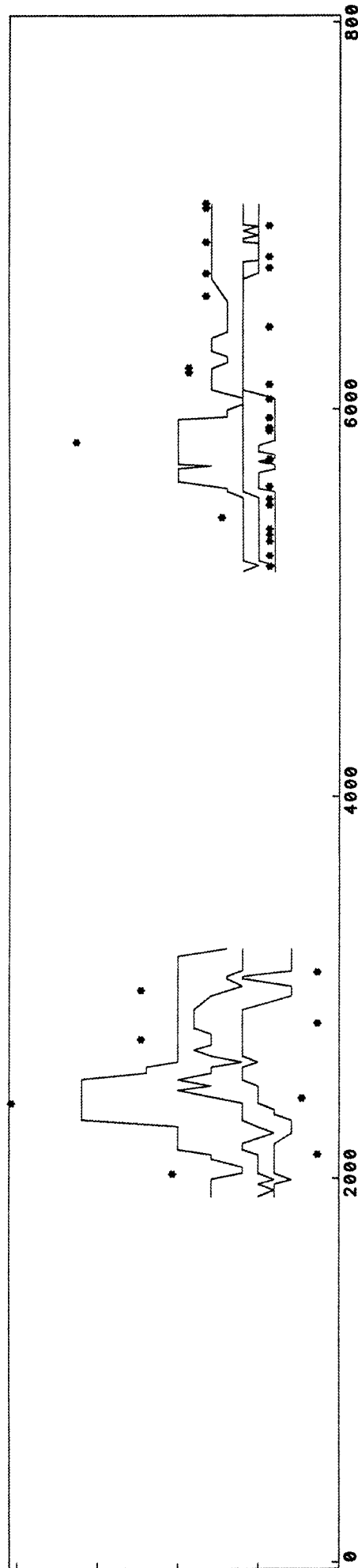
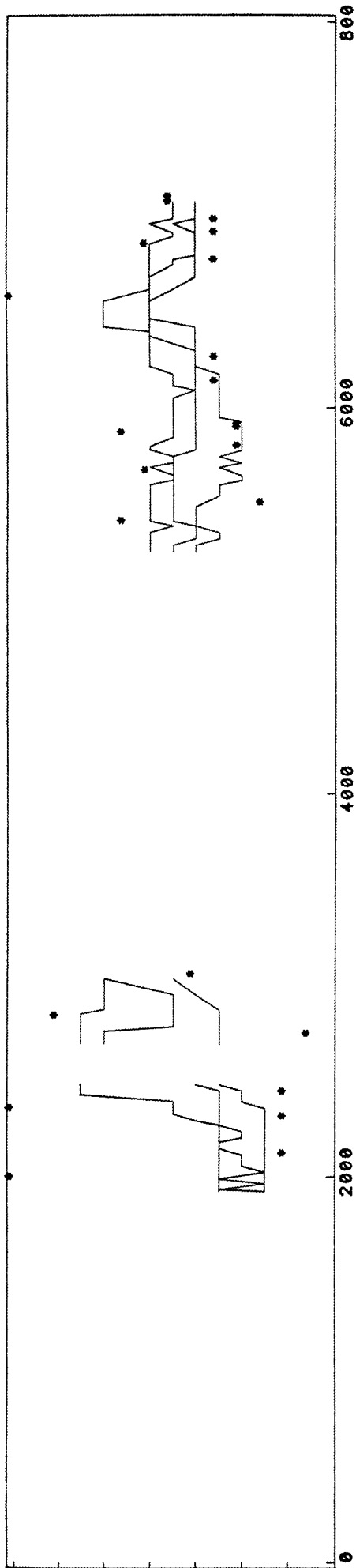
River no 11 Turbidity



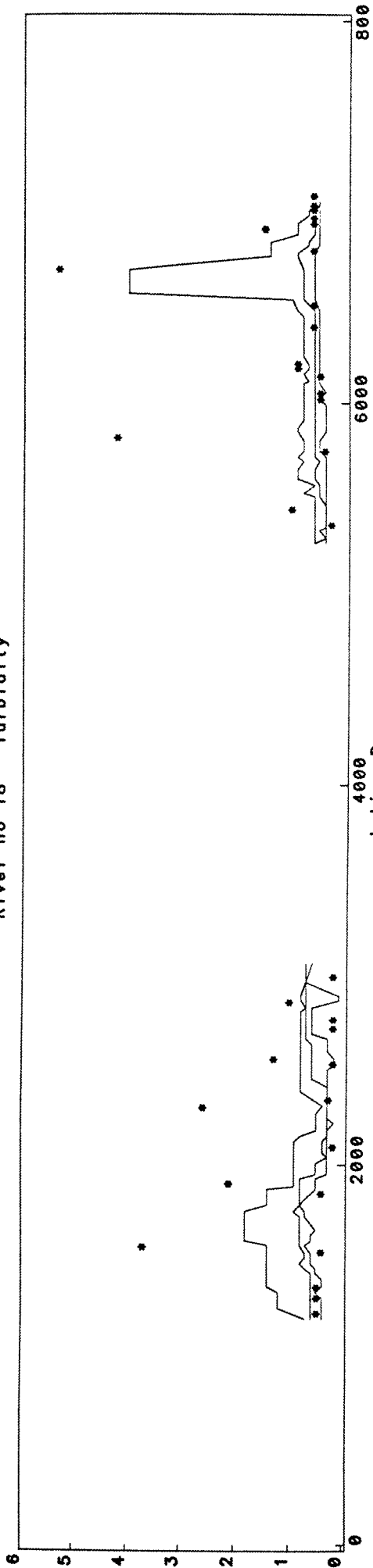
River no 12 Turbidity



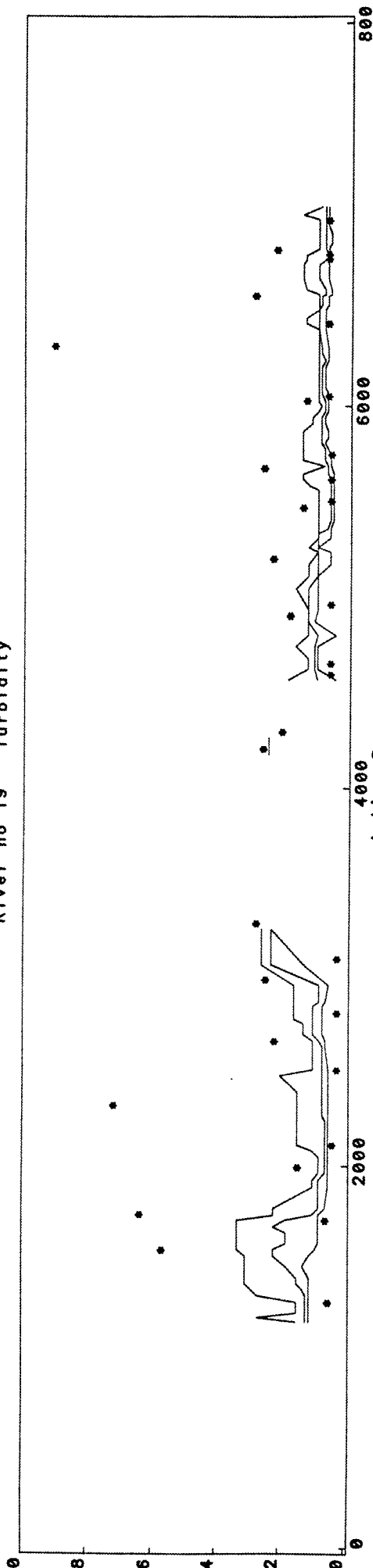




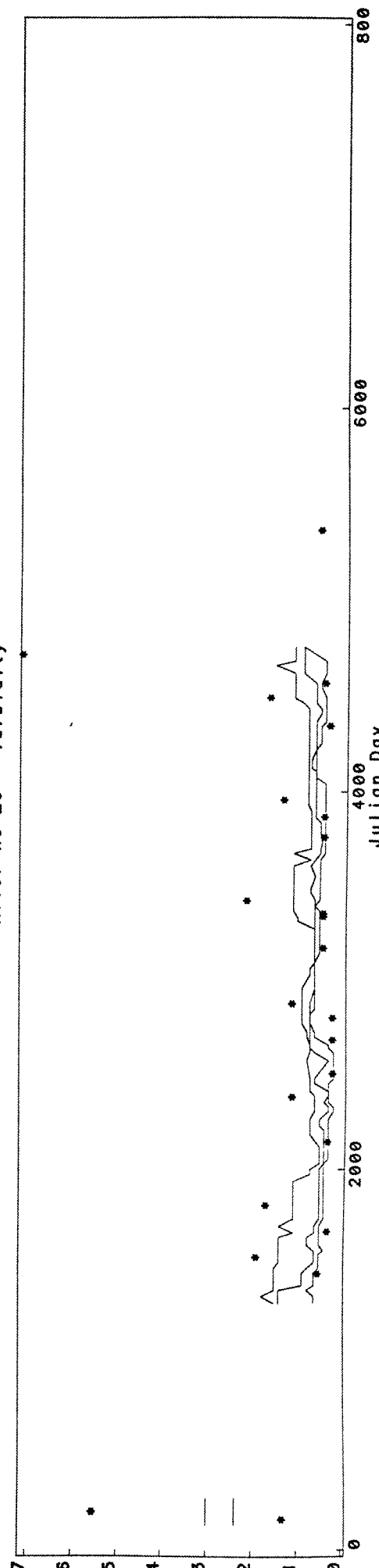
River no 18 Turbidity



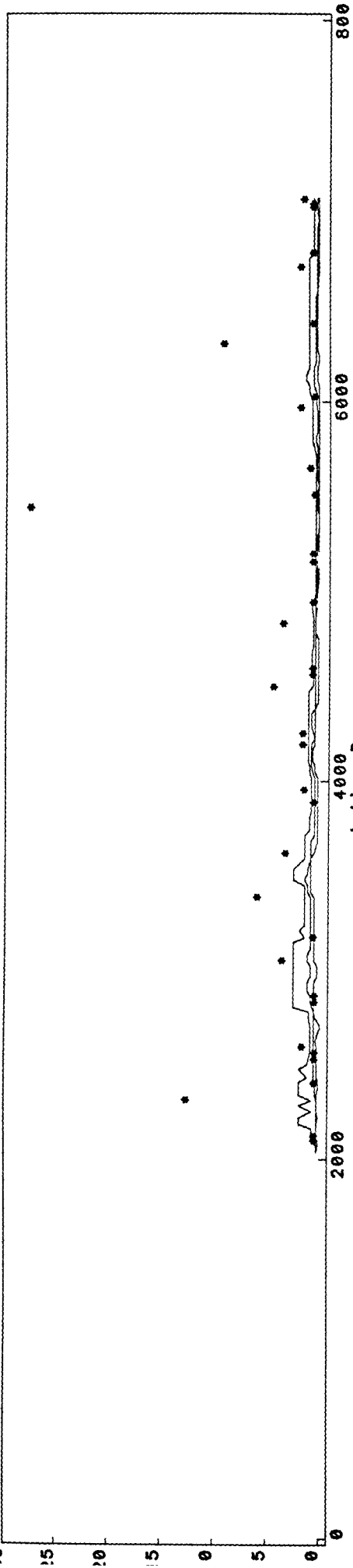
River no 19 Turbidity



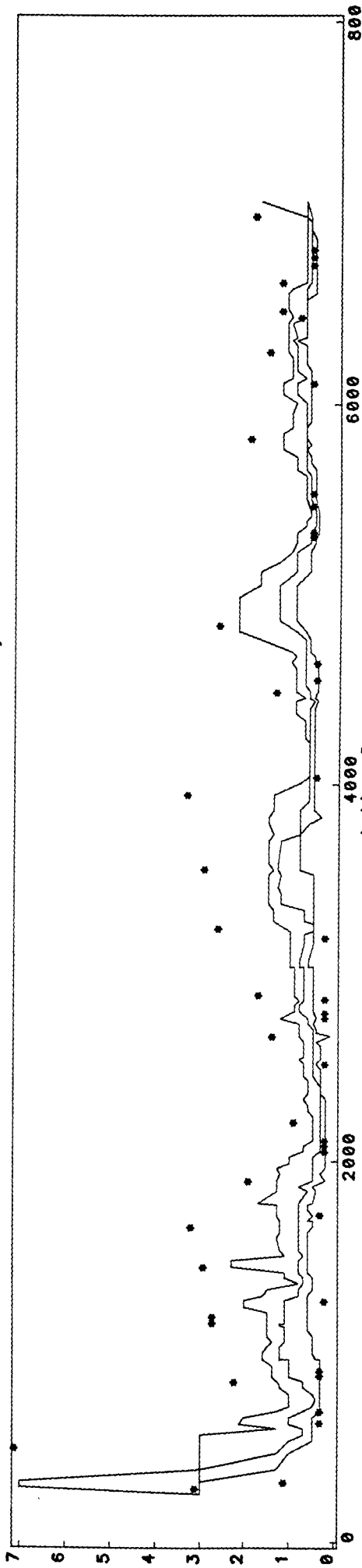
River no 20 Turbidity



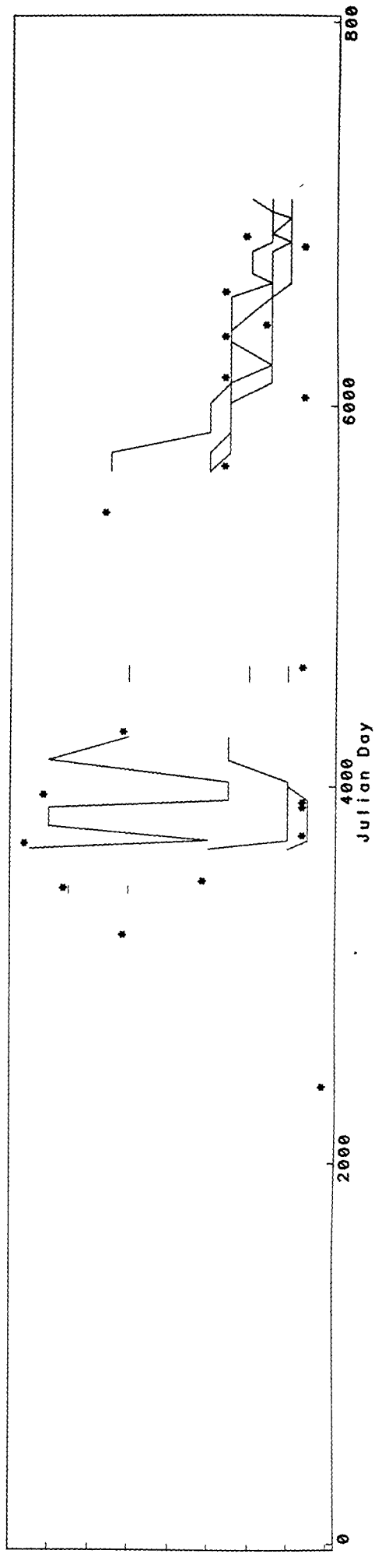
River no 21 Turbidity



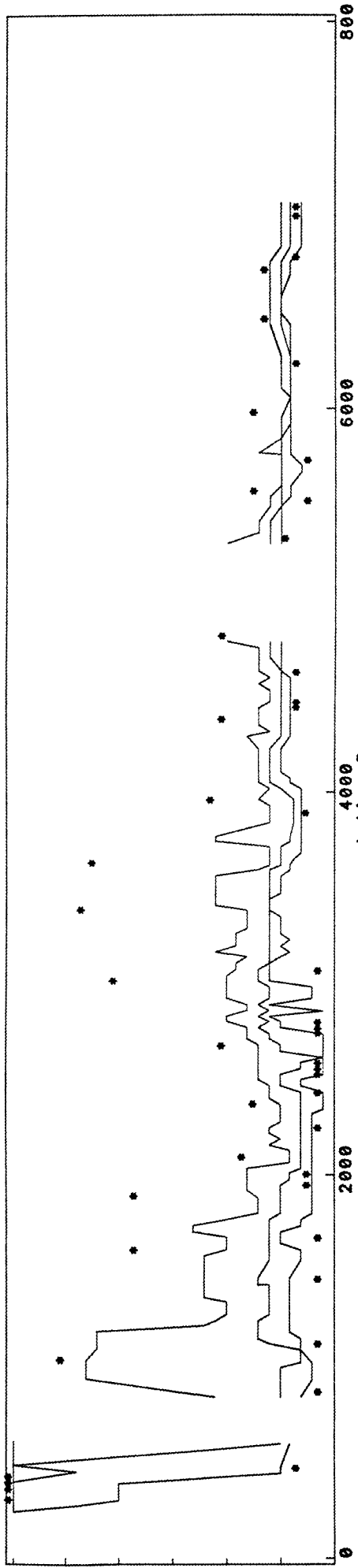
River no 22 Turbidity



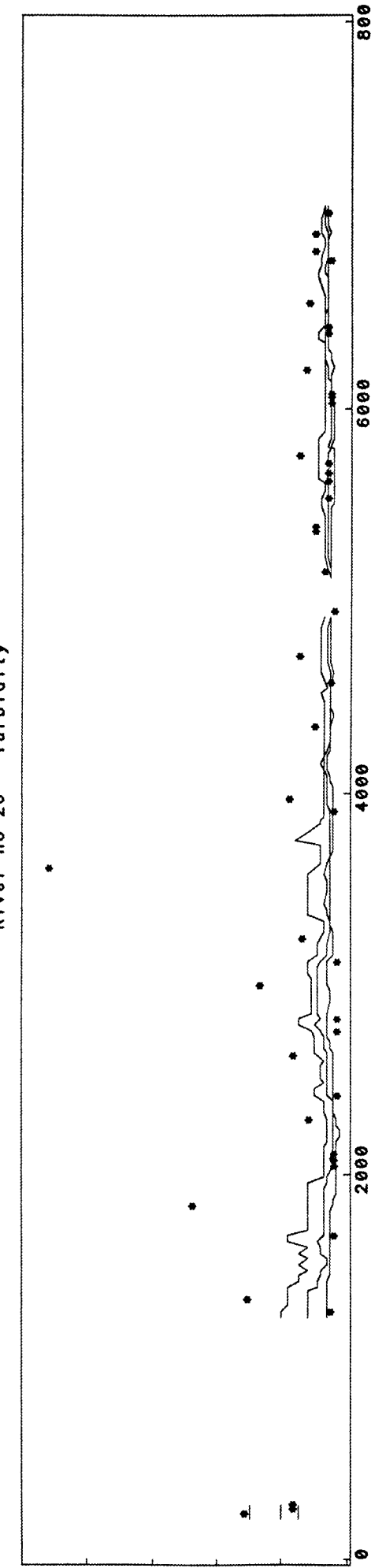
River no 23 Turbidity



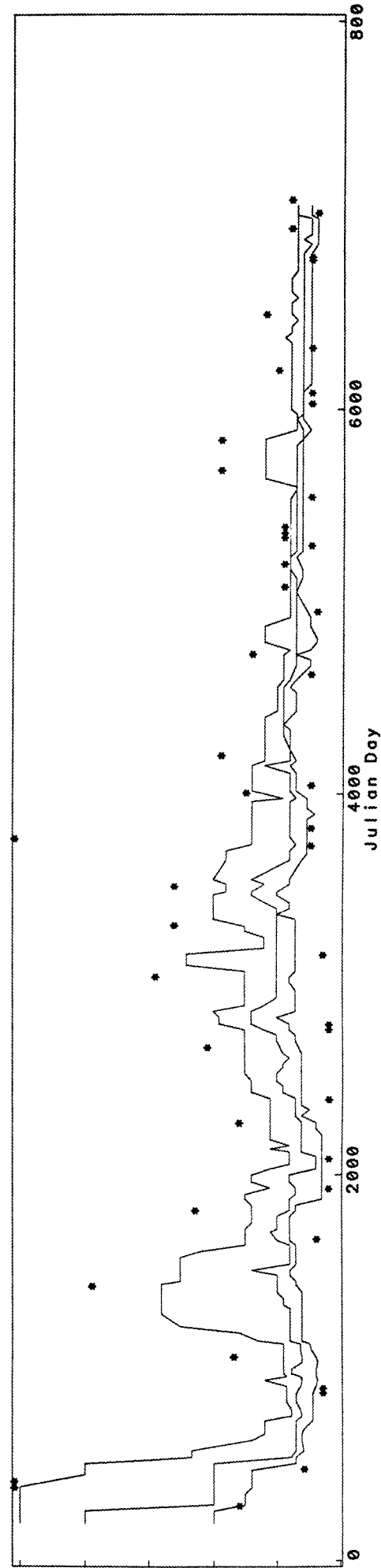
River no 25 Turbidity

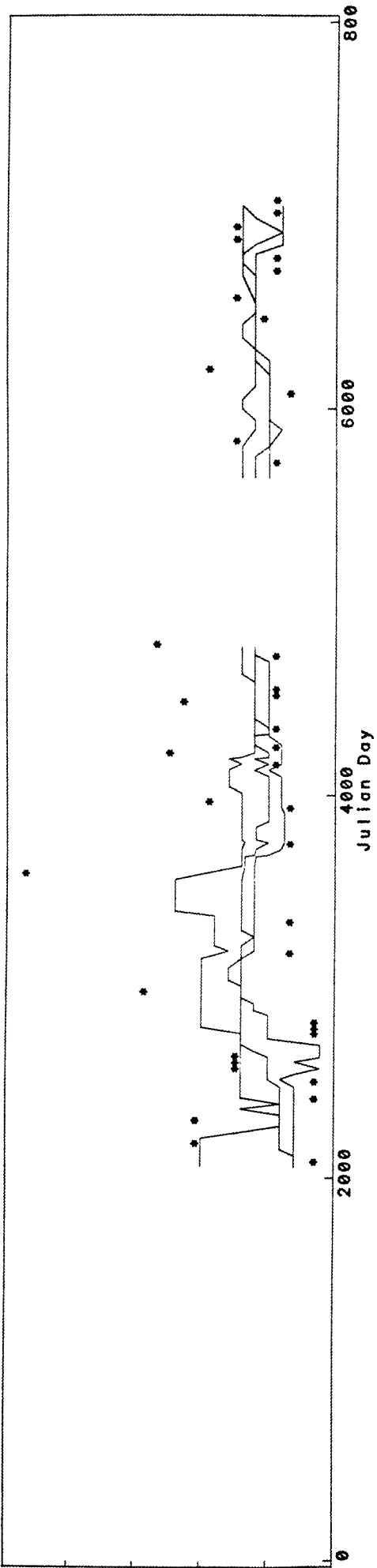


River no 26 Turbidity

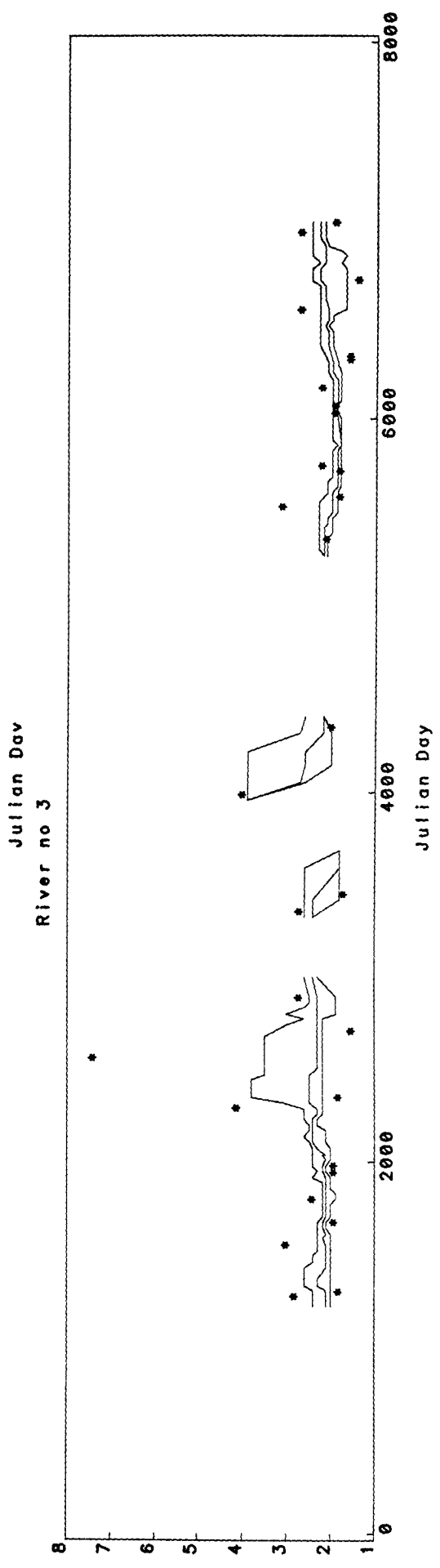
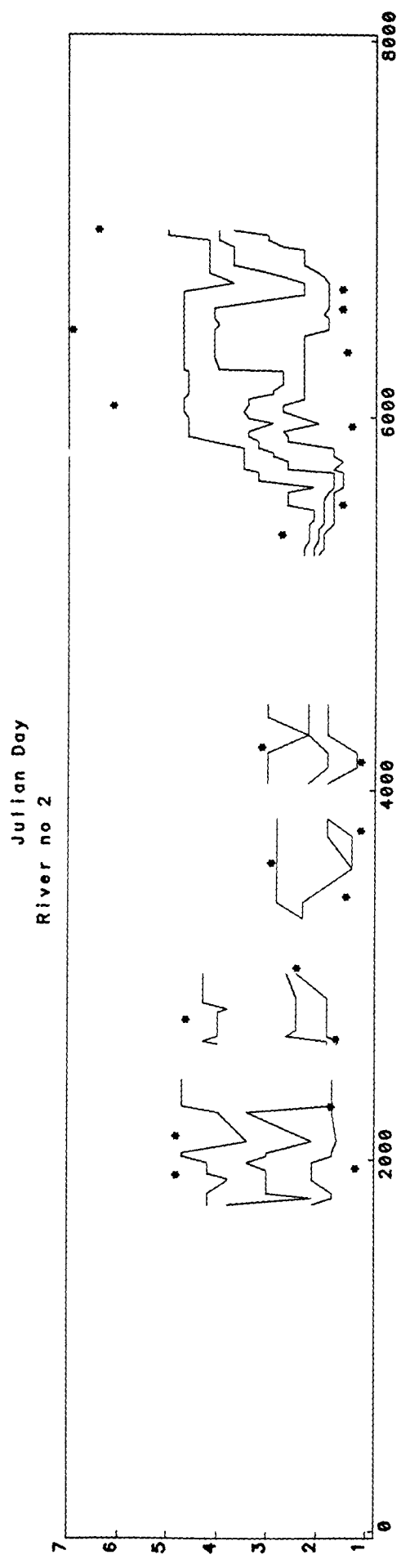
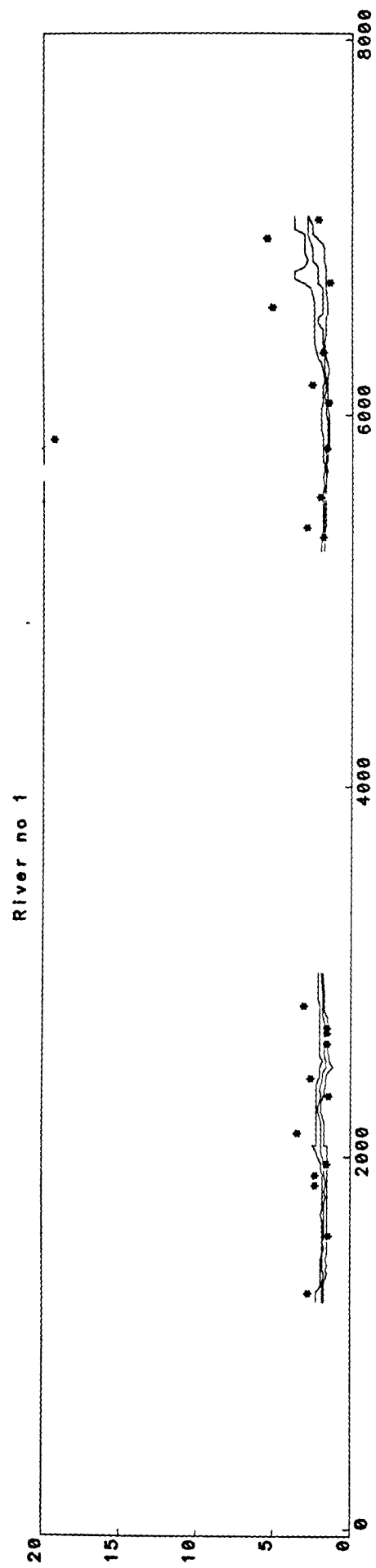


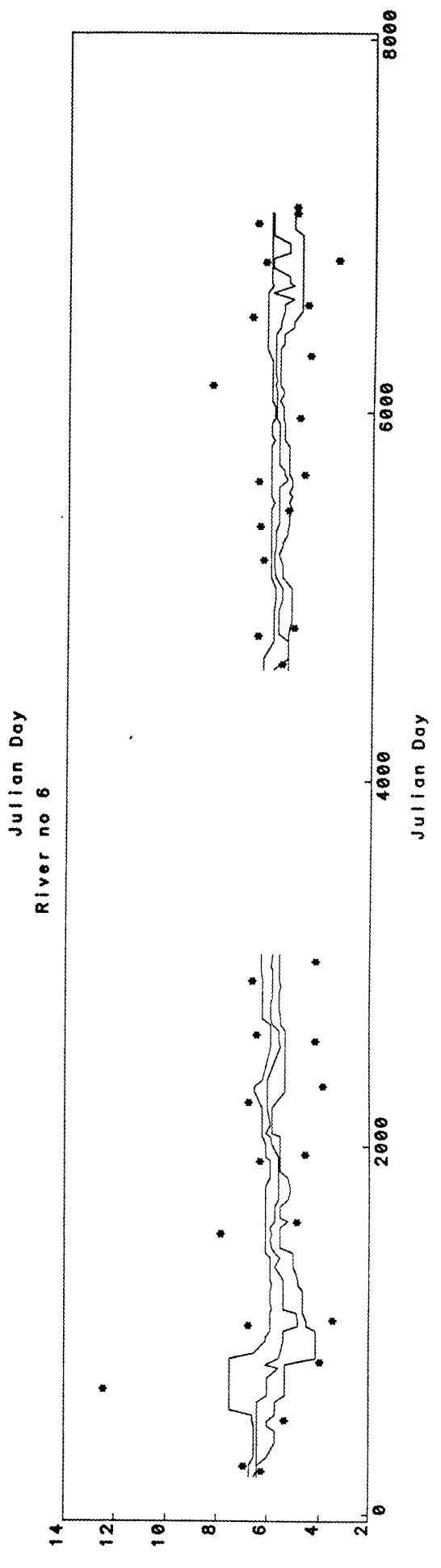
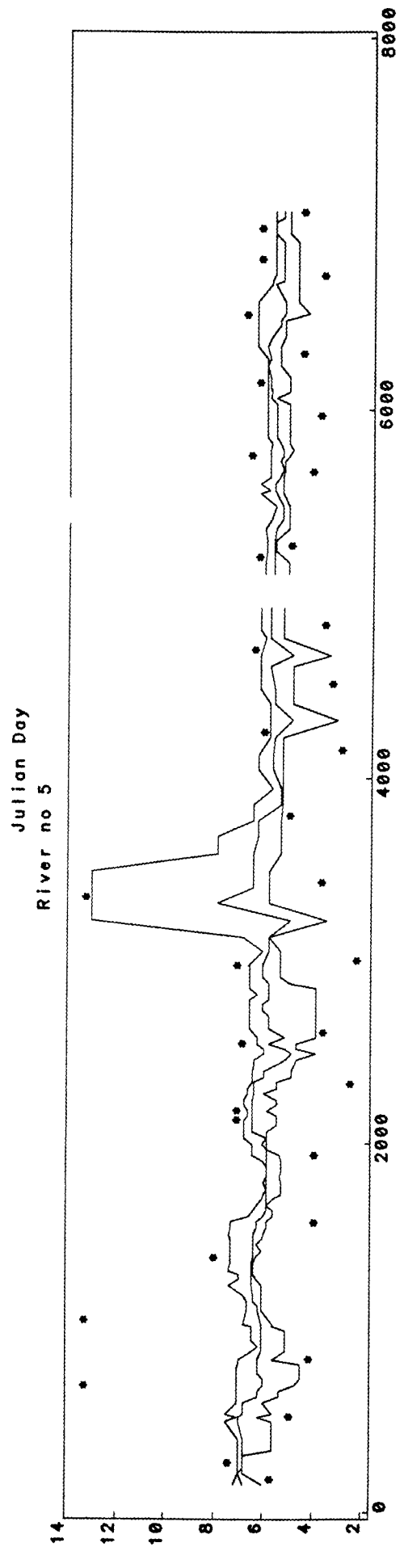
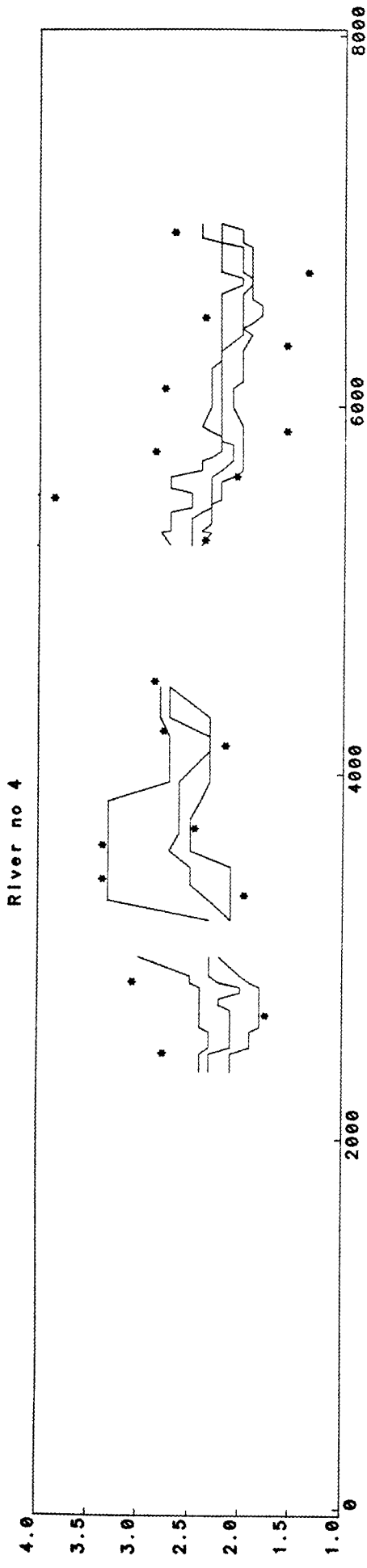
River no 27 Turbidity



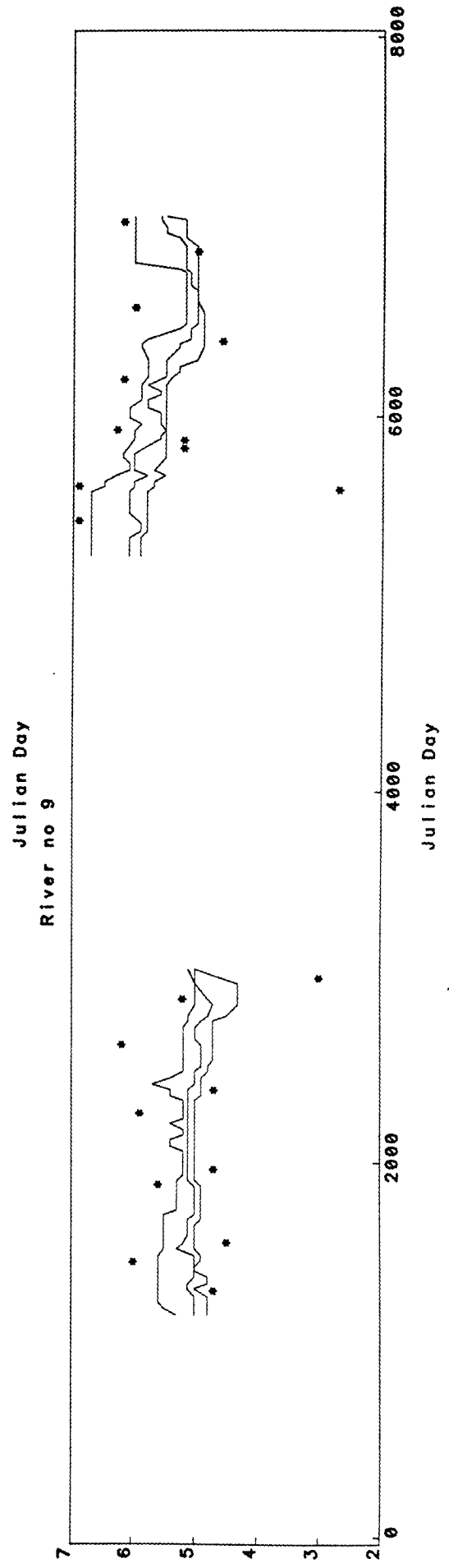
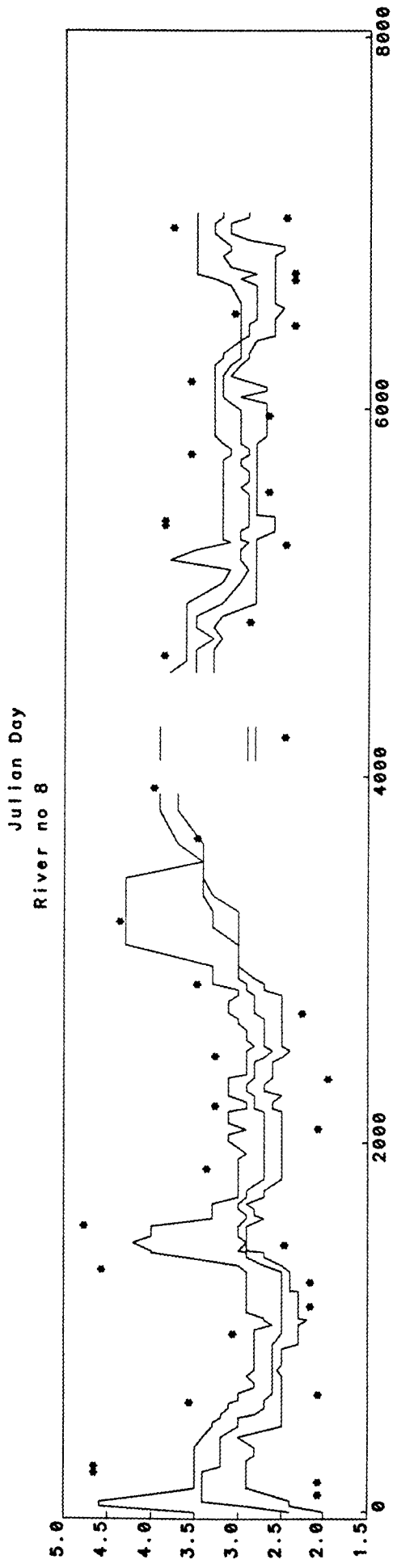
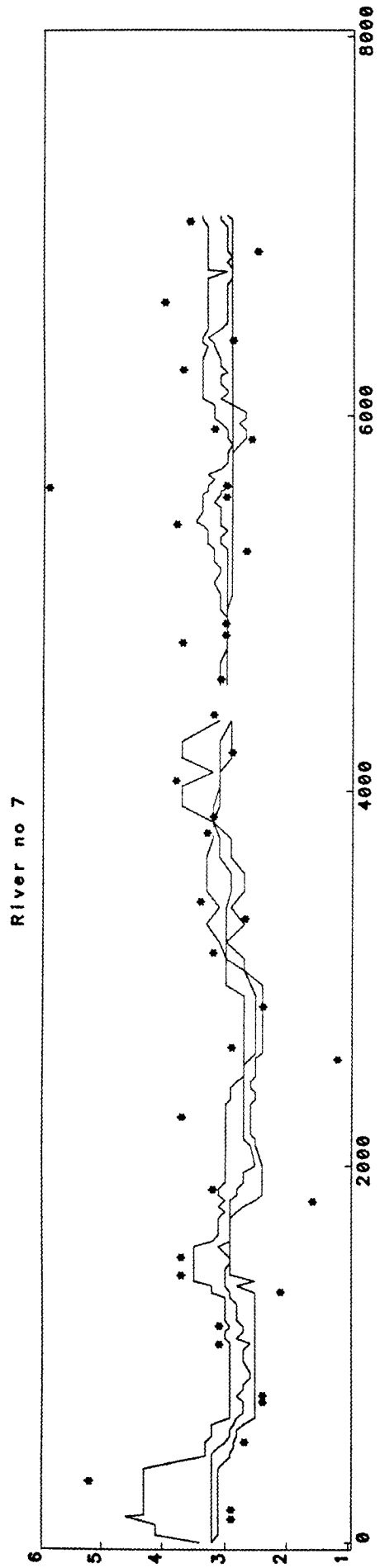


Appendix 18. Running boxplots of sodium for the study rivers.

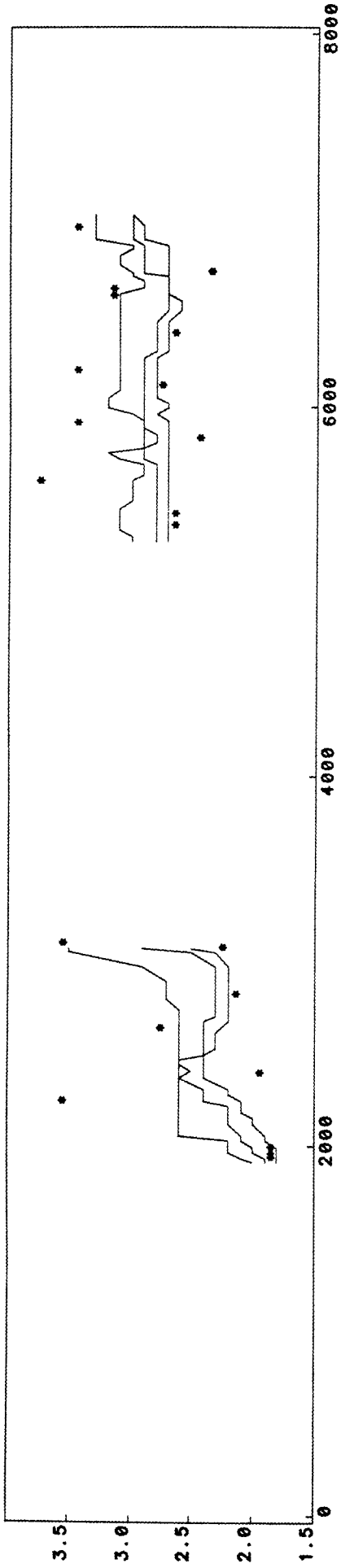






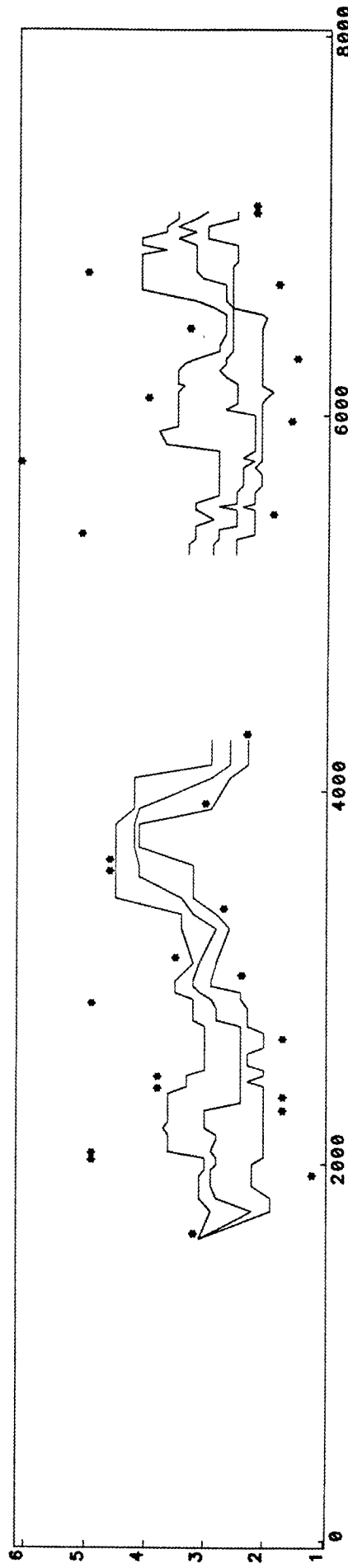


River no 10



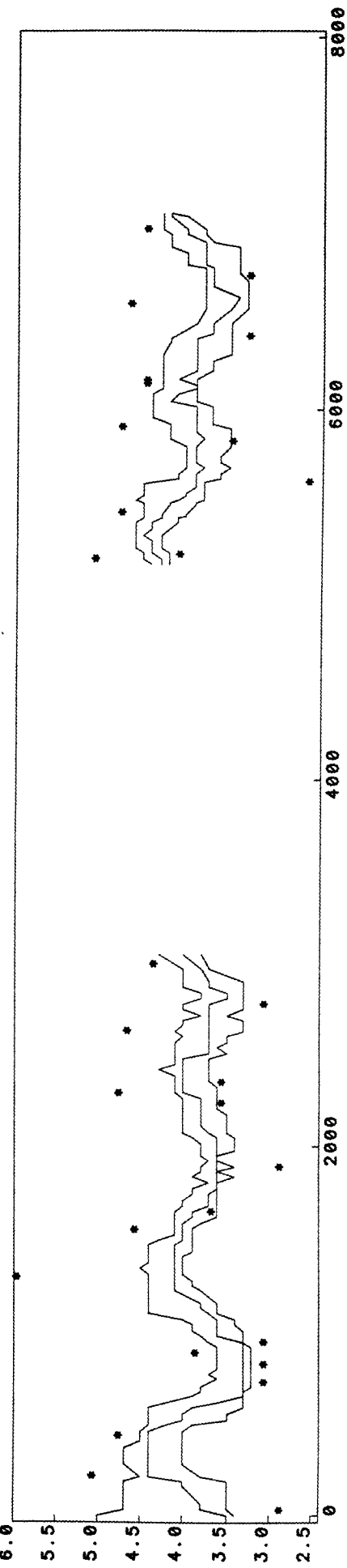
Julian Day

River no 11



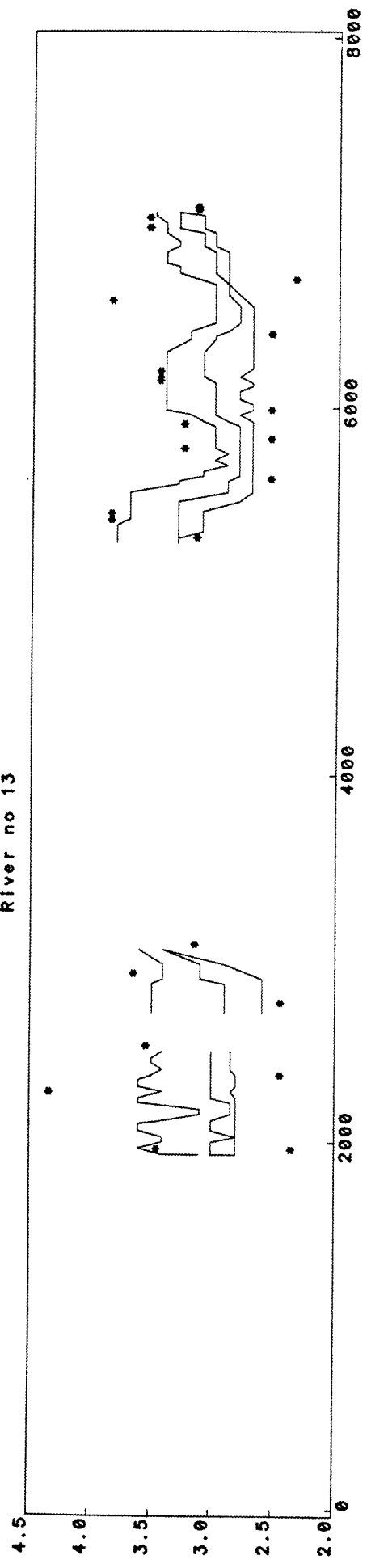
Julian Day

River no 12

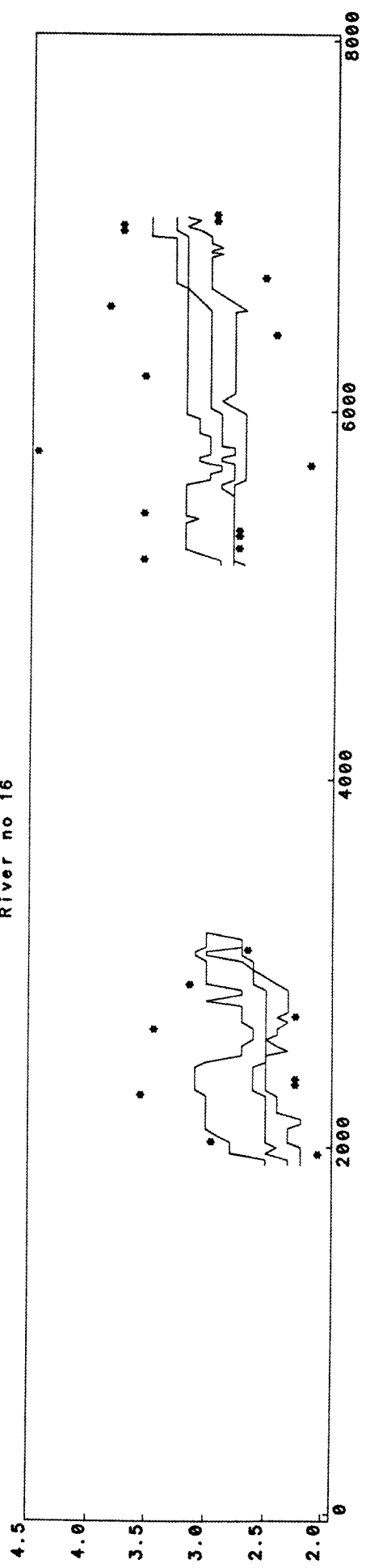


Julian Day

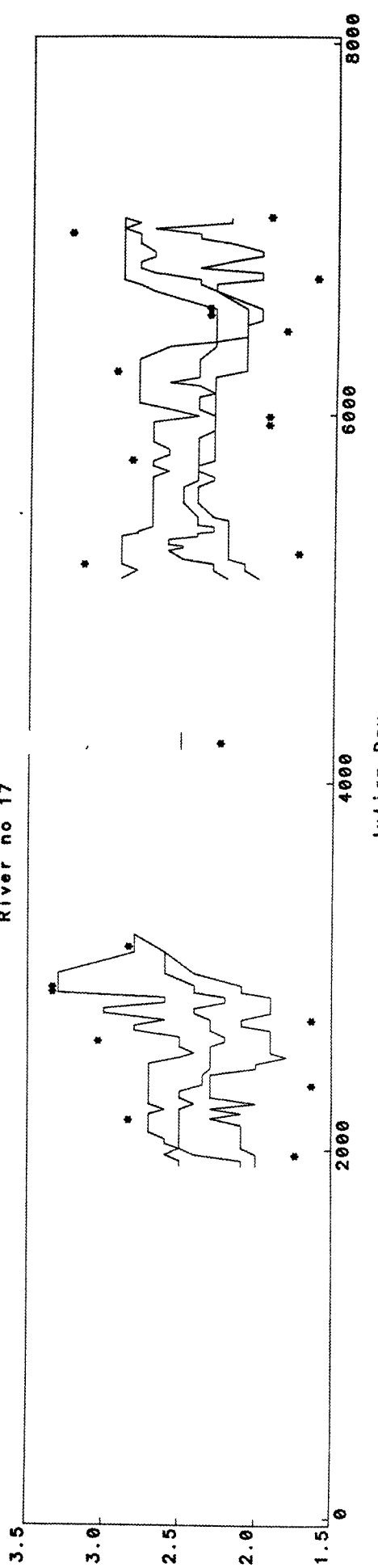
River no 13



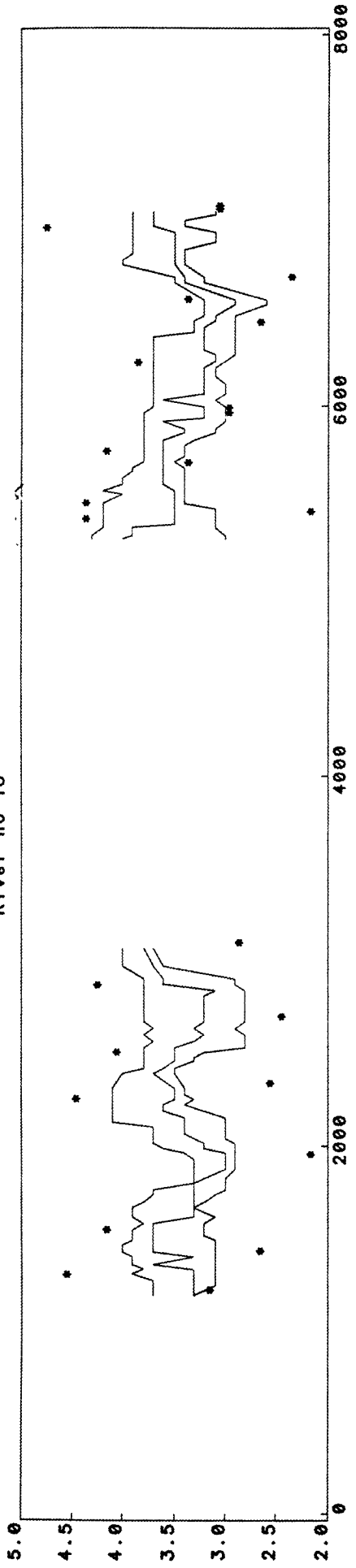
Julian Day  
River no 16



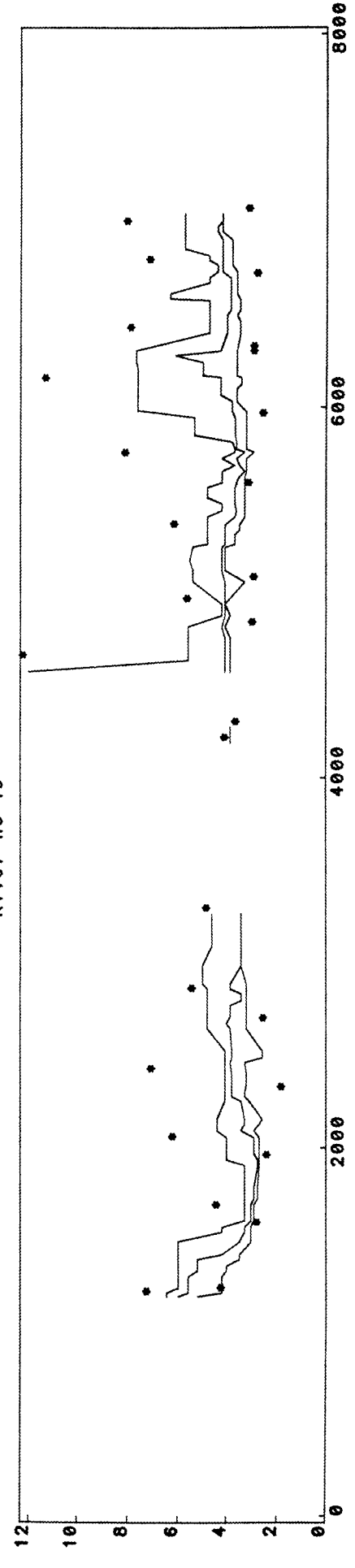
Julian Day  
River no 17



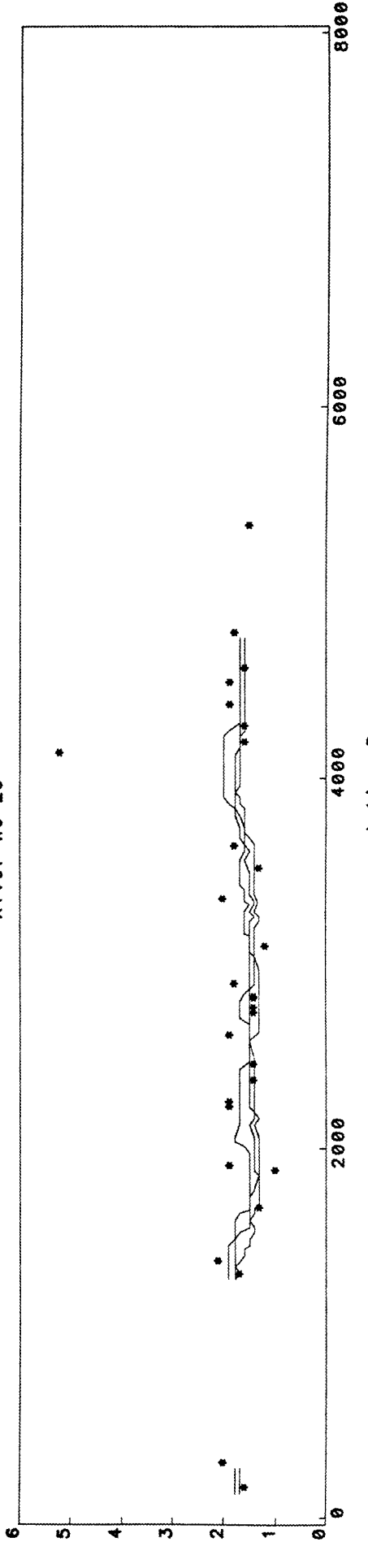
River no 18

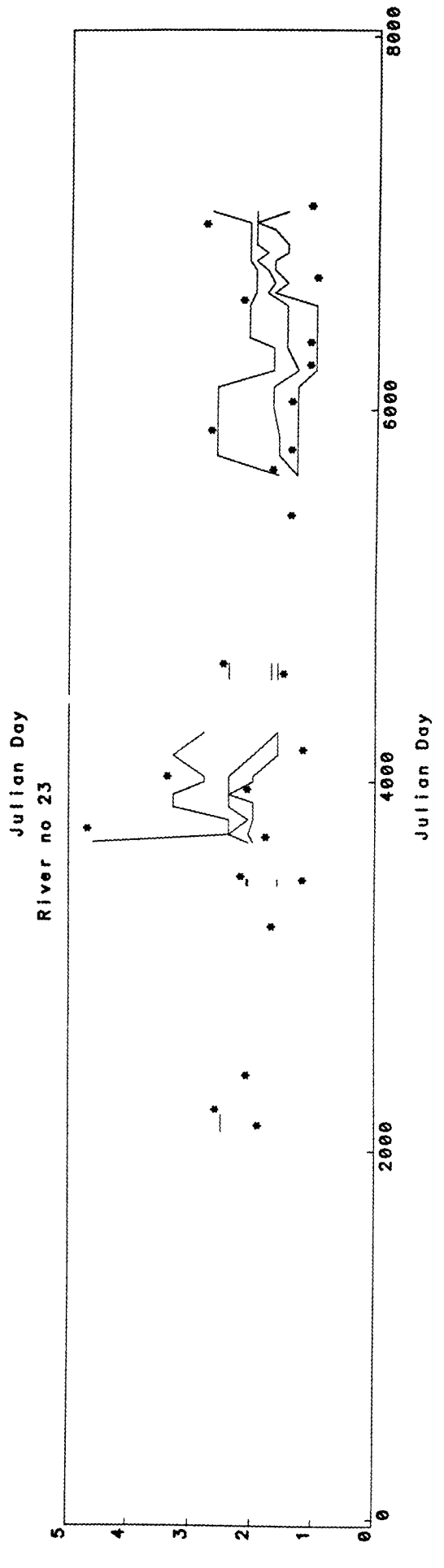
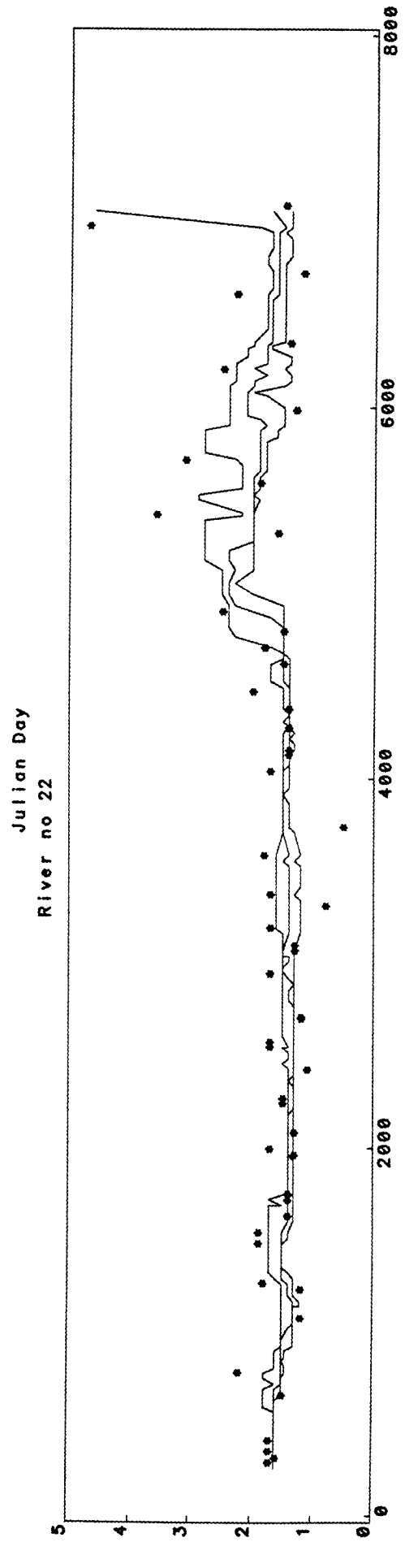
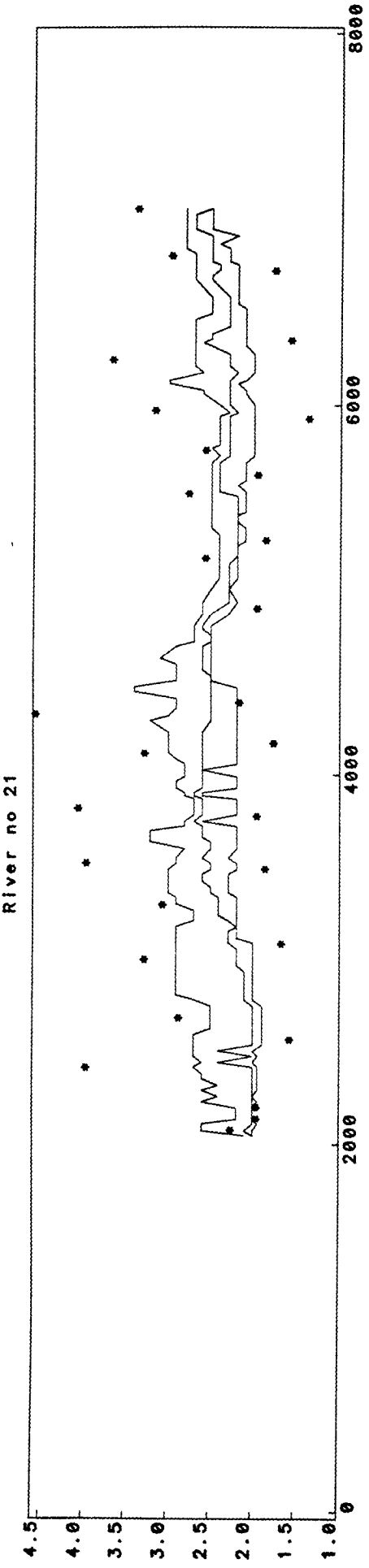


Julian Day  
River no 19

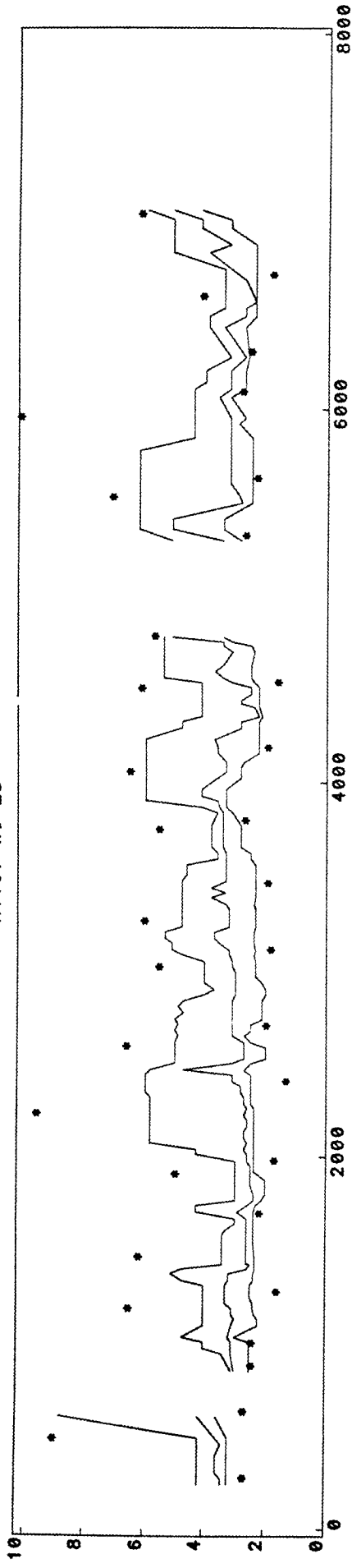


Julian Day  
River no 20

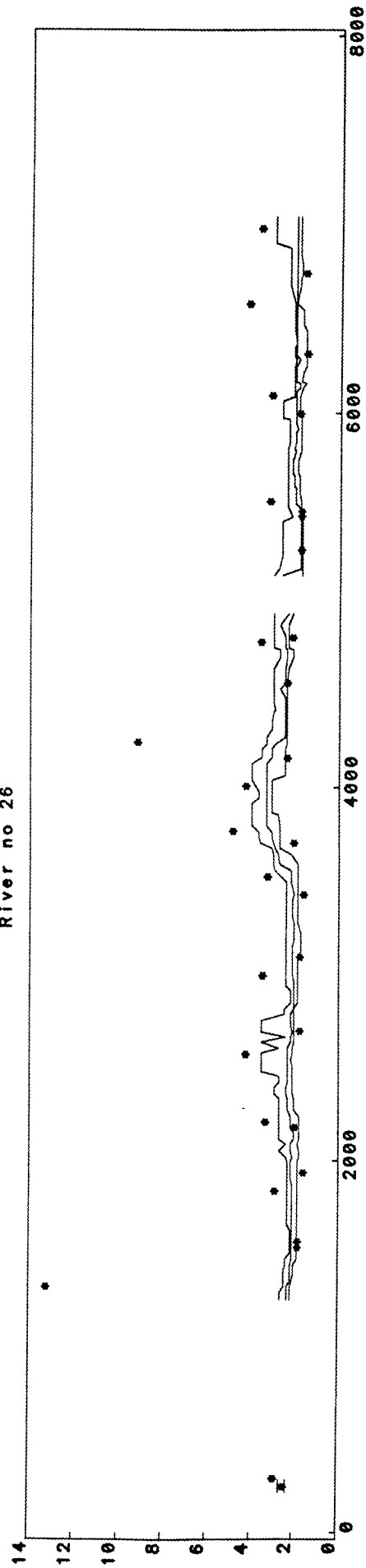




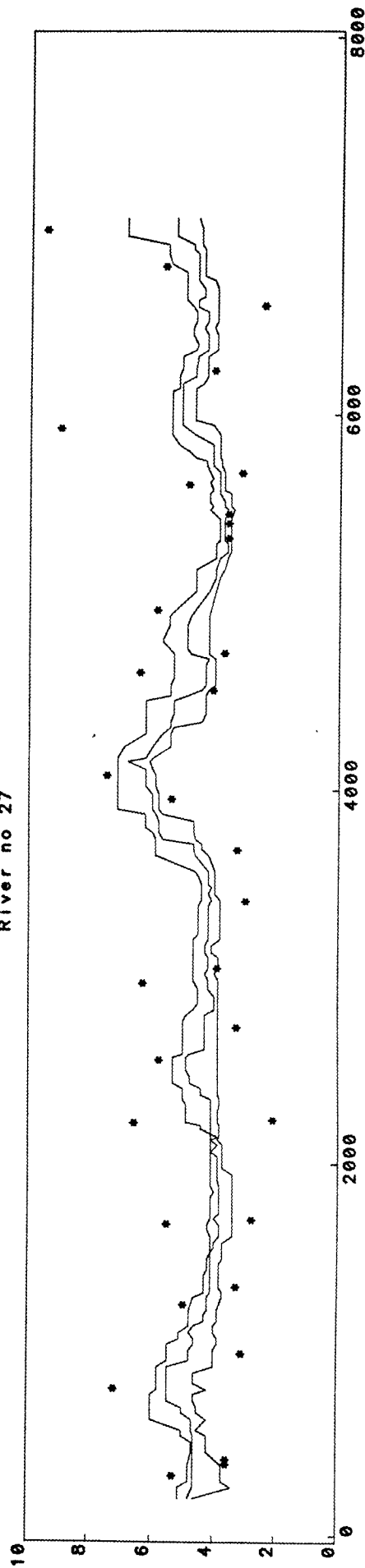
River no 25



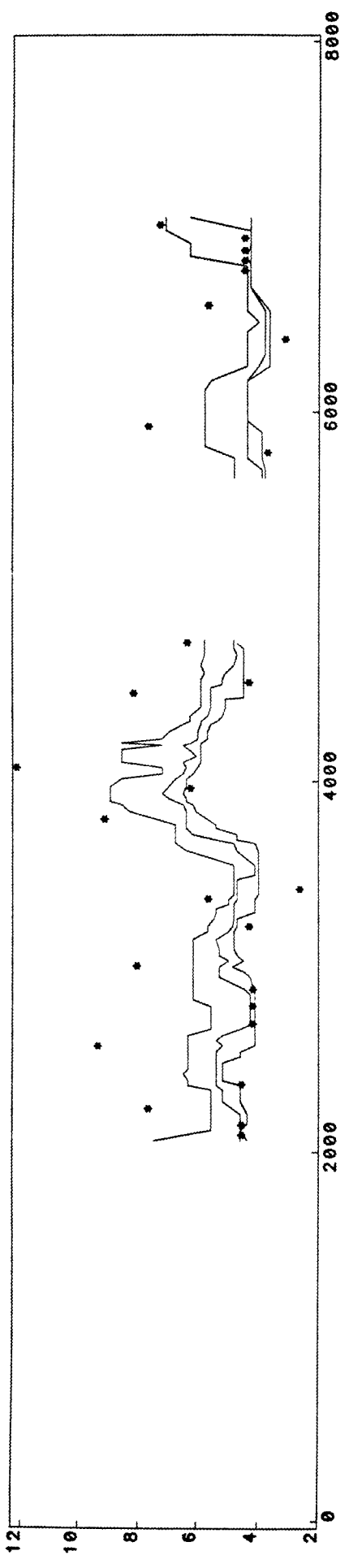
River no 26



River no 27



River no 28

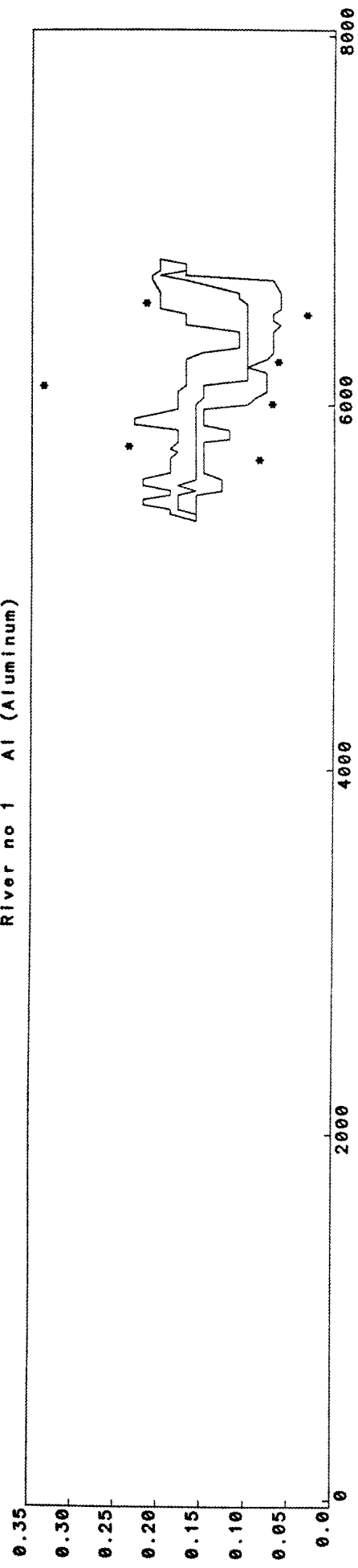


Julian Day

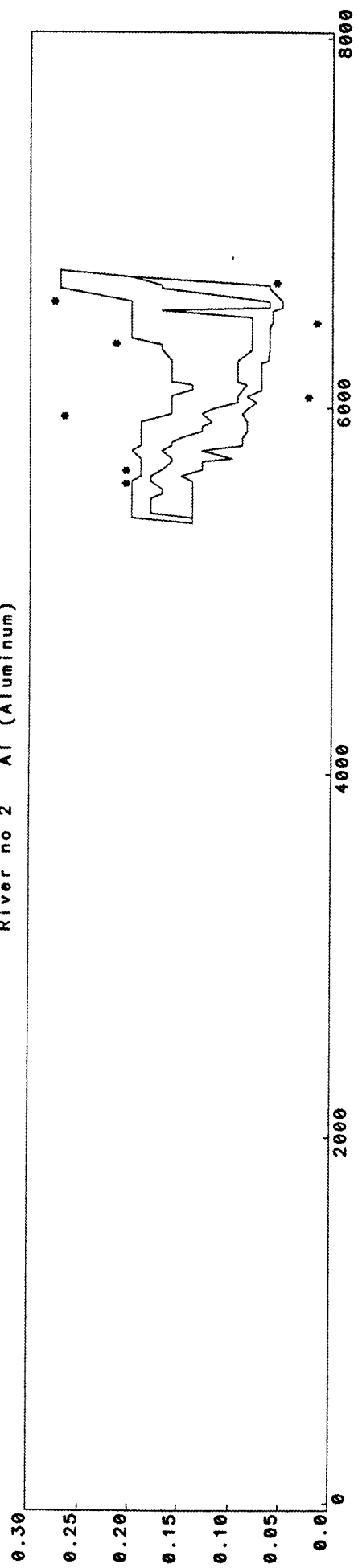
Appendix 19. Running boxplots of aluminum for the study rivers.



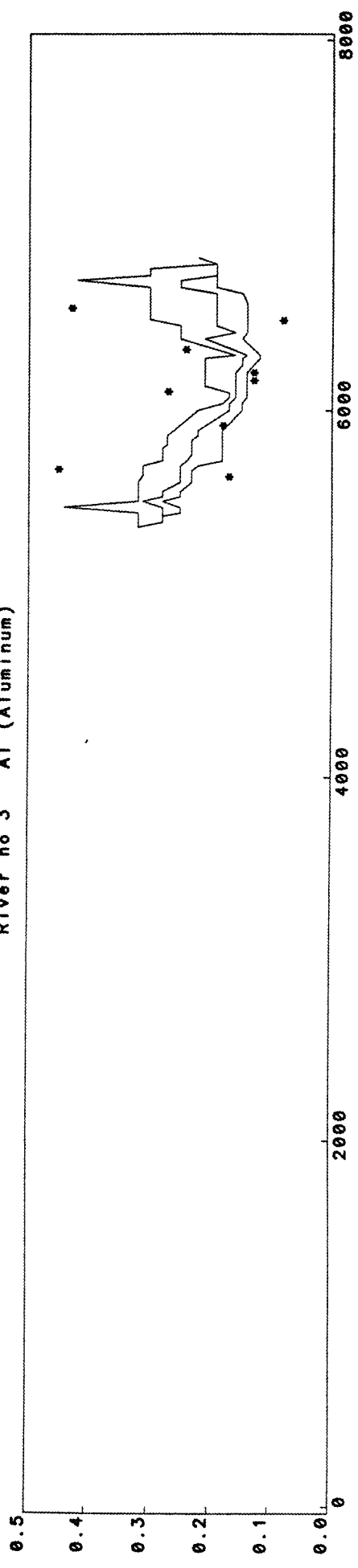
River no 1 Al (Aluminum)



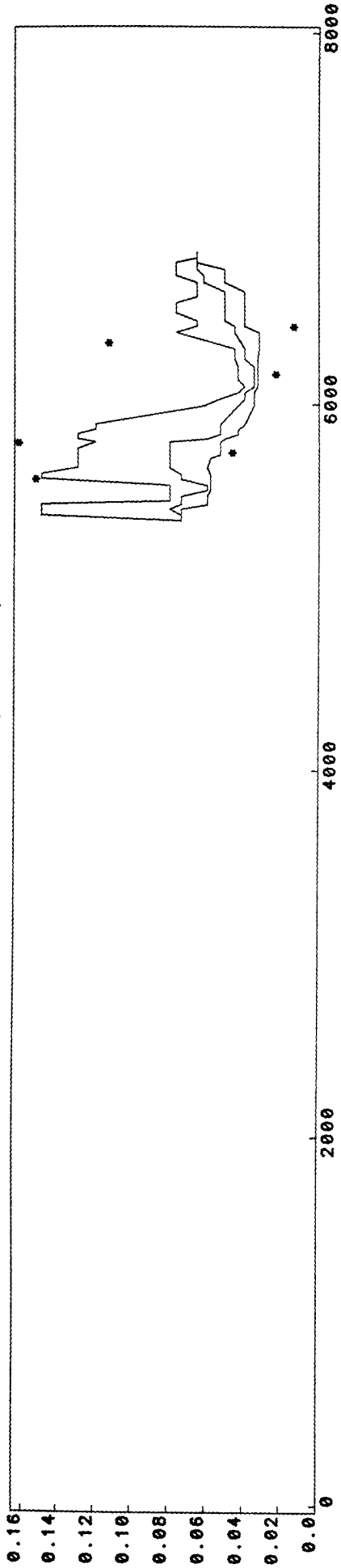
River no 2 Al (Aluminum)



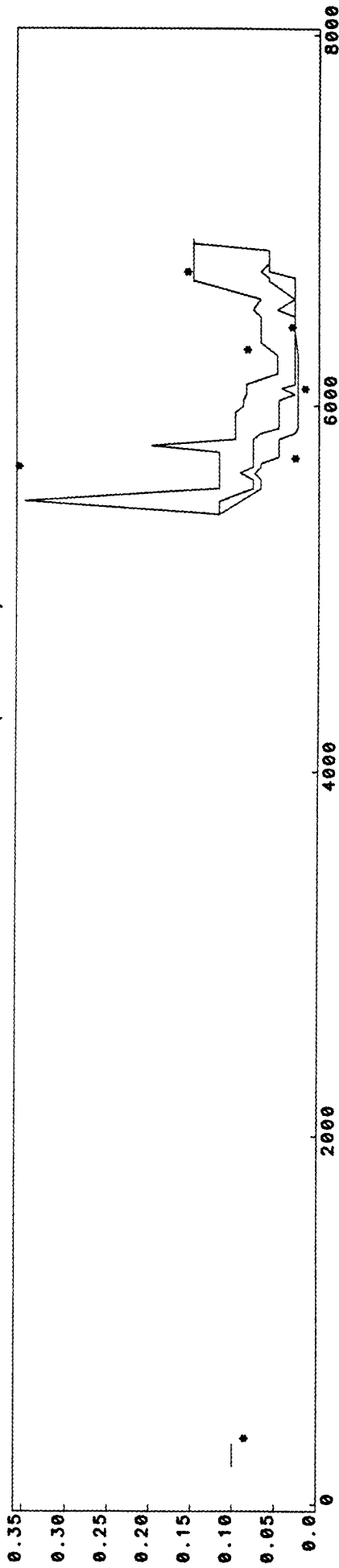
River no 3 Al (Aluminum)



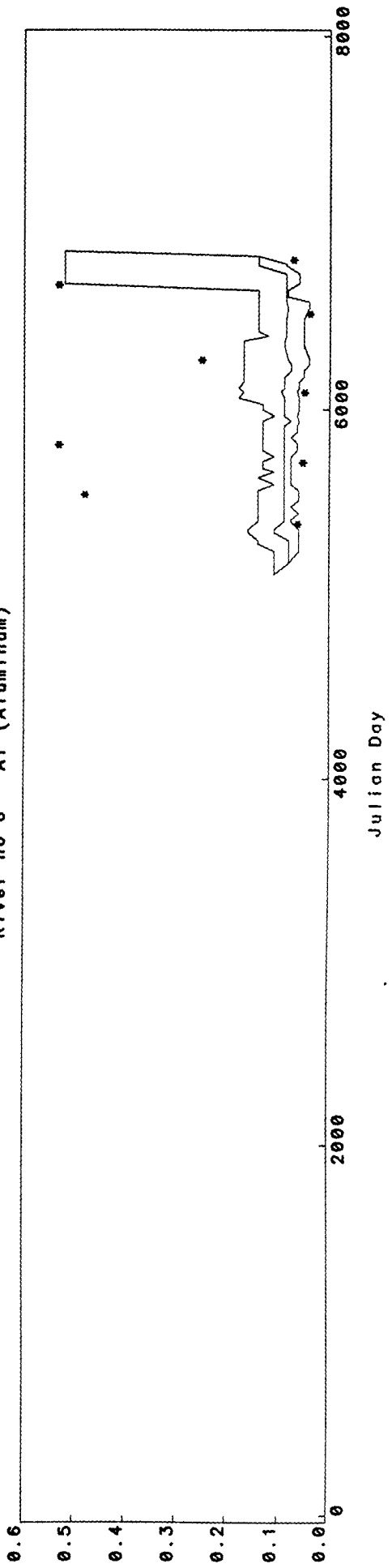
River no 4 Al (Aluminum)



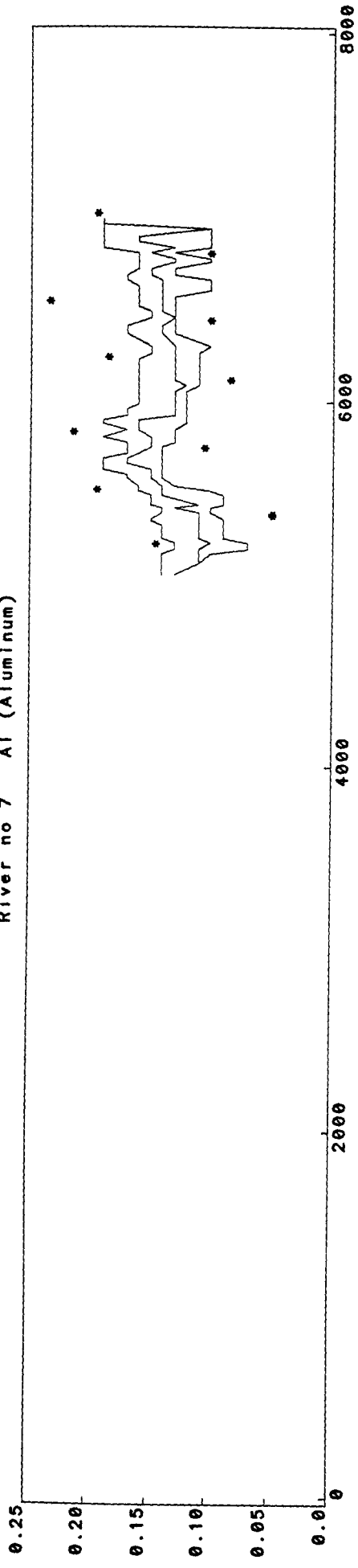
River no 5 Al (Aluminum)



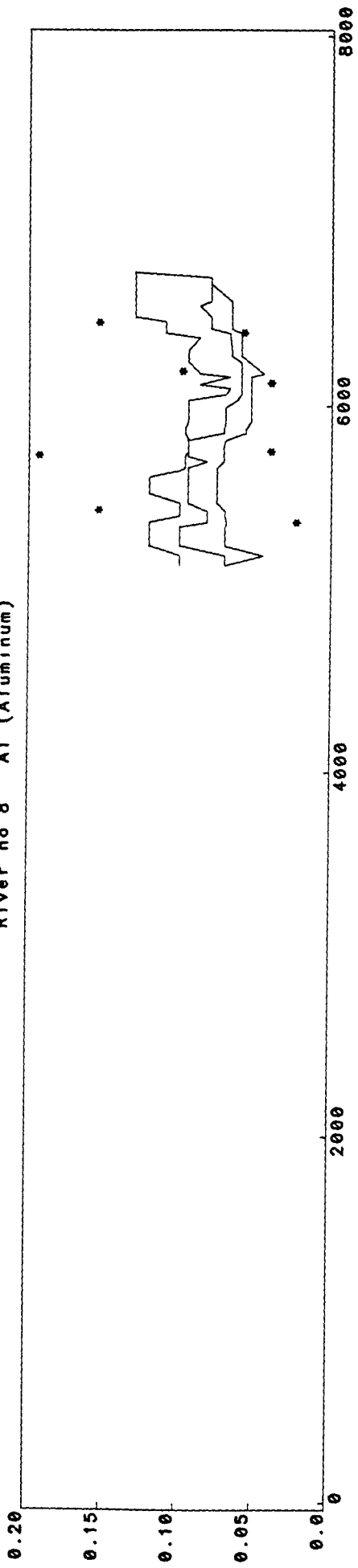
River no 6 Al (Aluminum)



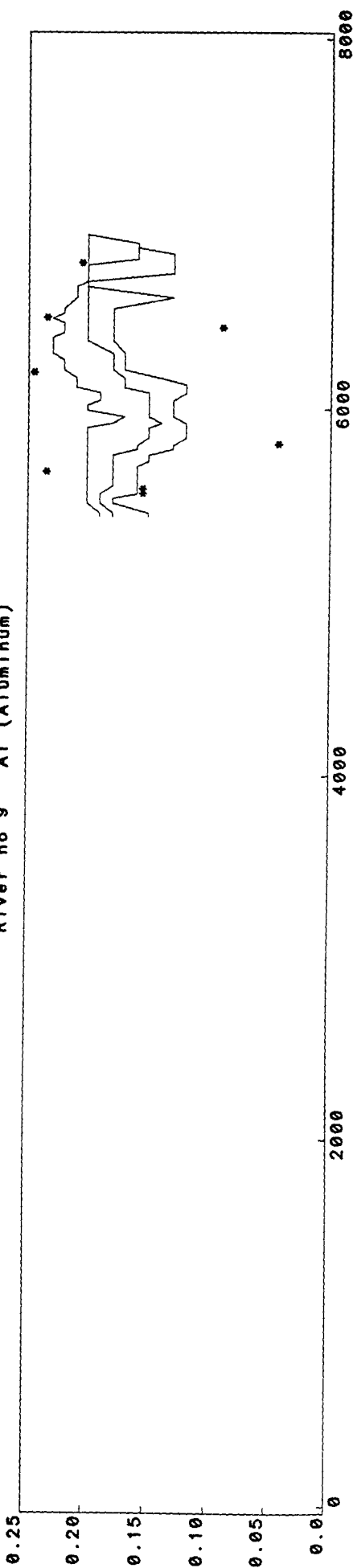
River no 7 Al (Aluminum)



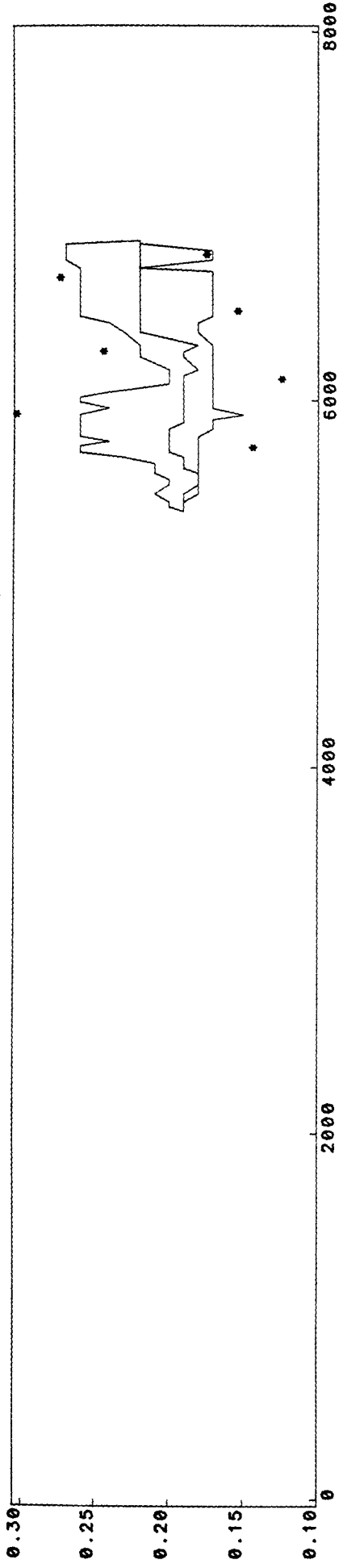
River no 8 Al (Aluminum)



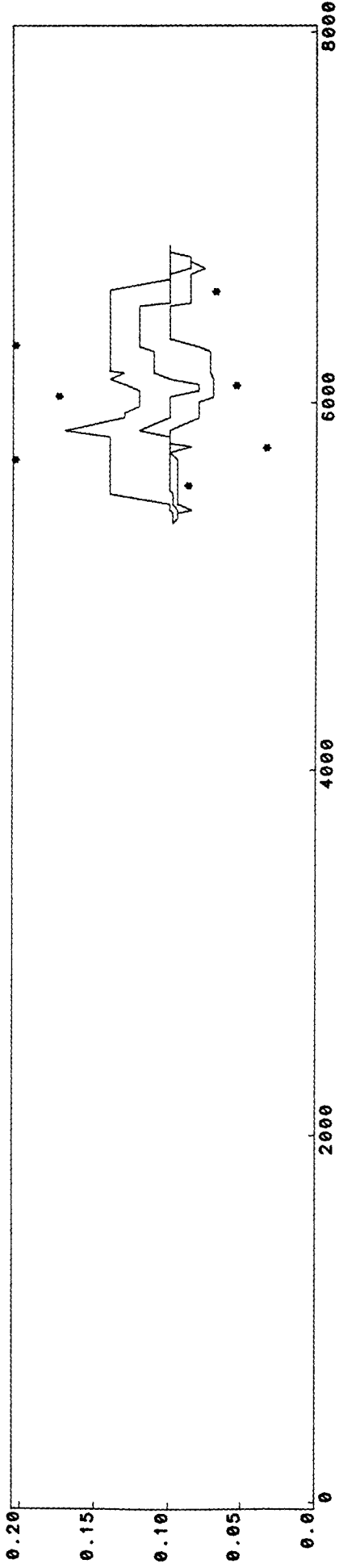
River no 9 Al (Aluminum)



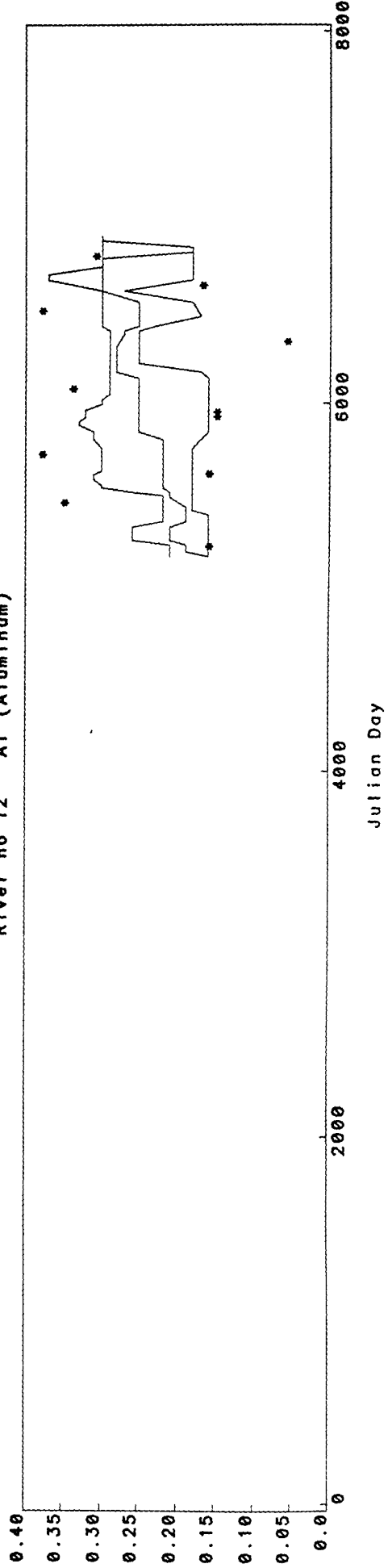
River no 10 Al (Aluminum)



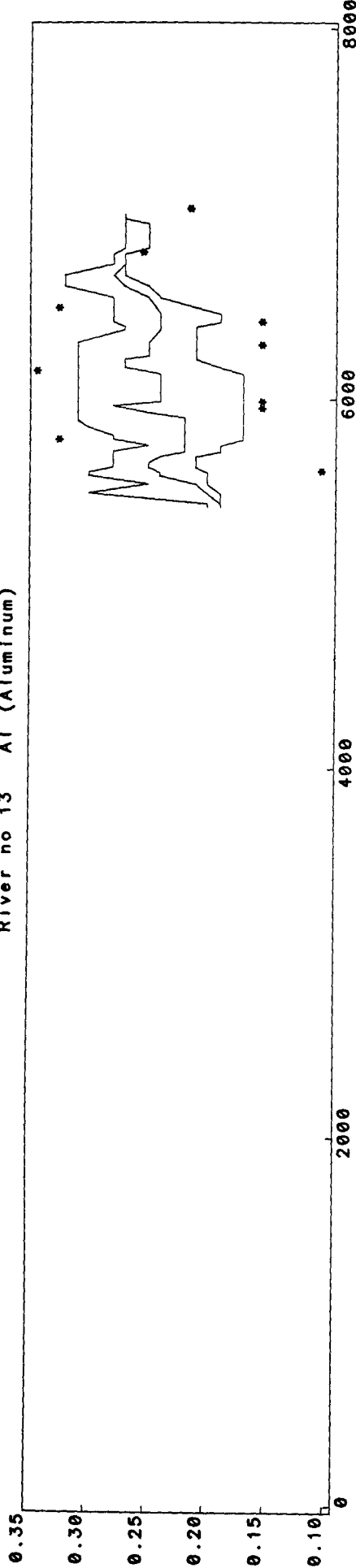
River no 11 Al (Aluminum)



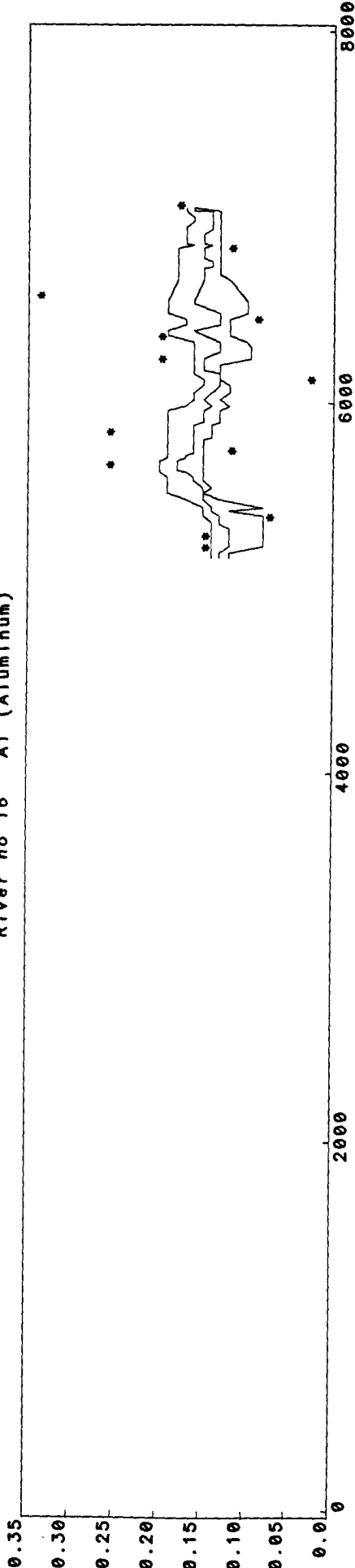
River no 12 Al (Aluminum)



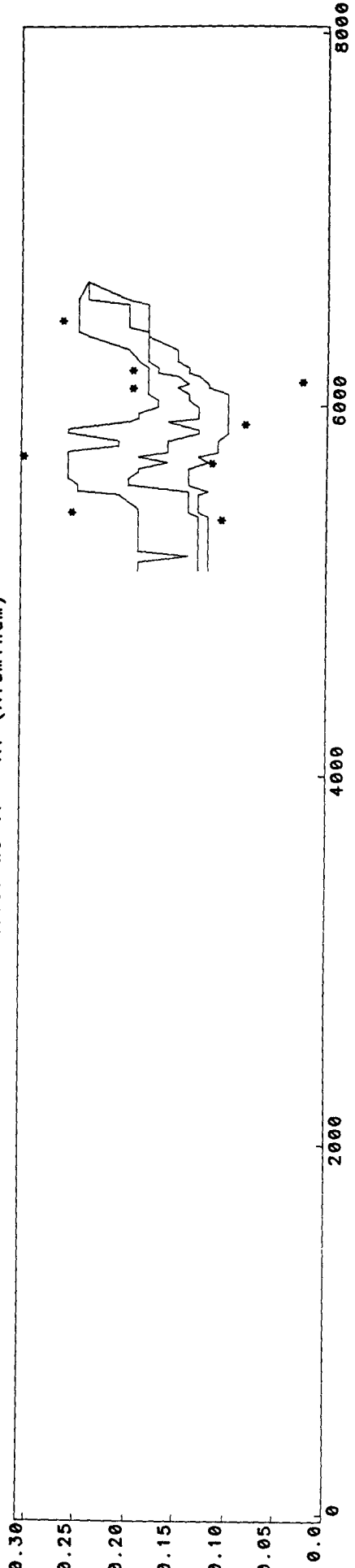
River no 13 Al (Aluminum)



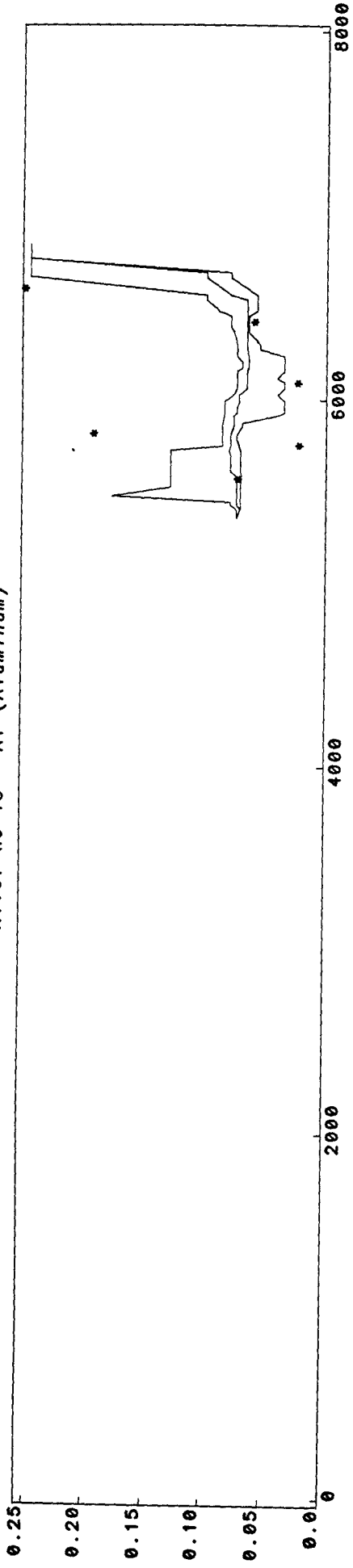
River no 16 Al (Aluminum)



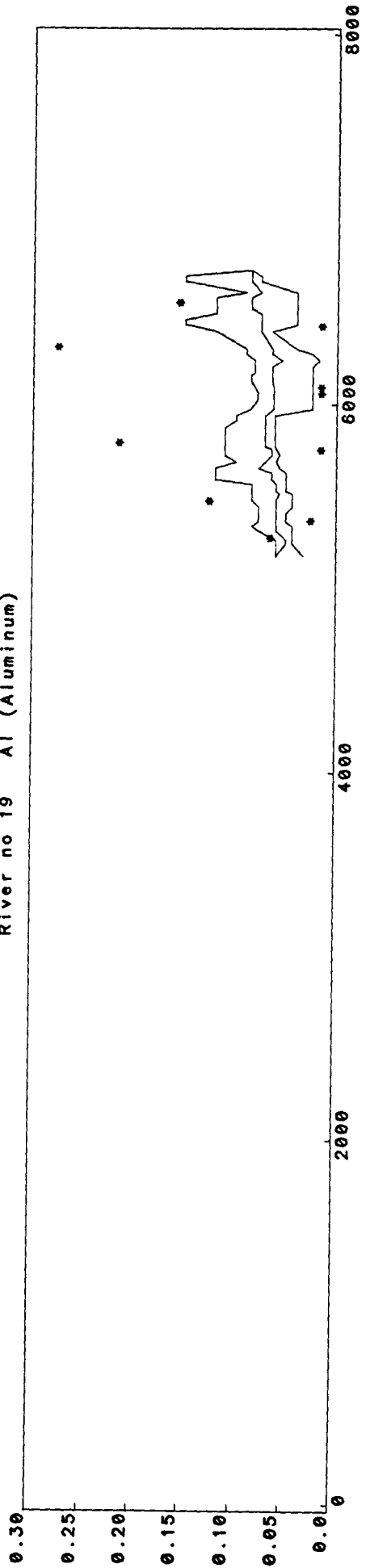
River no 17 Al (Aluminum)



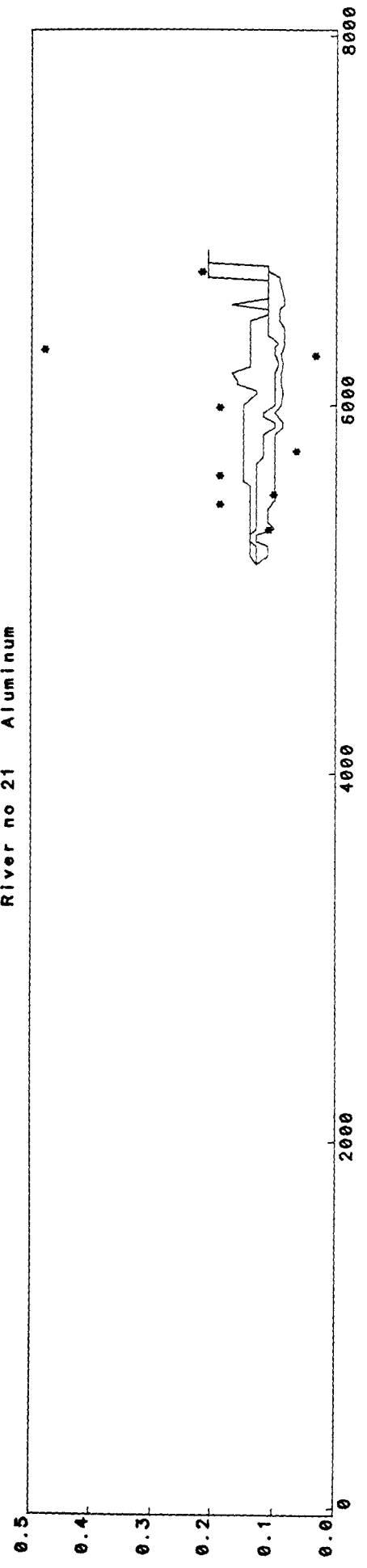
River no 18 Al (Aluminum)



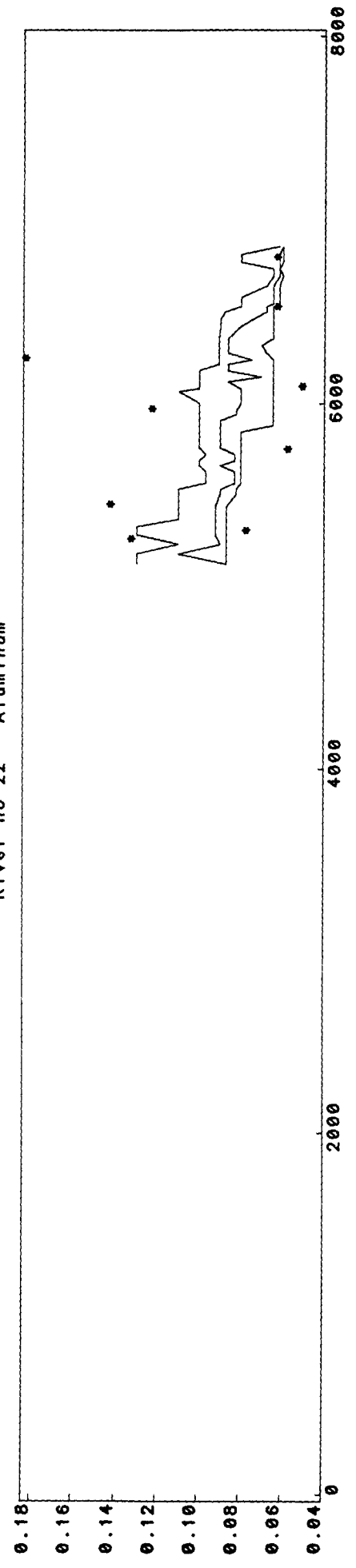
River no 19 Al (Aluminum)



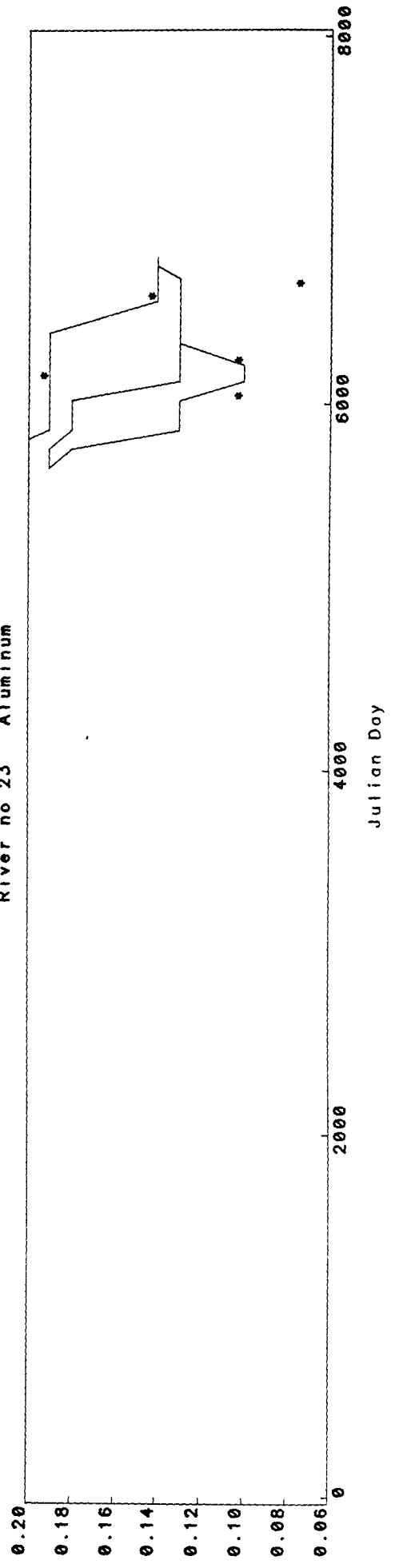
River no 21 Aluminum



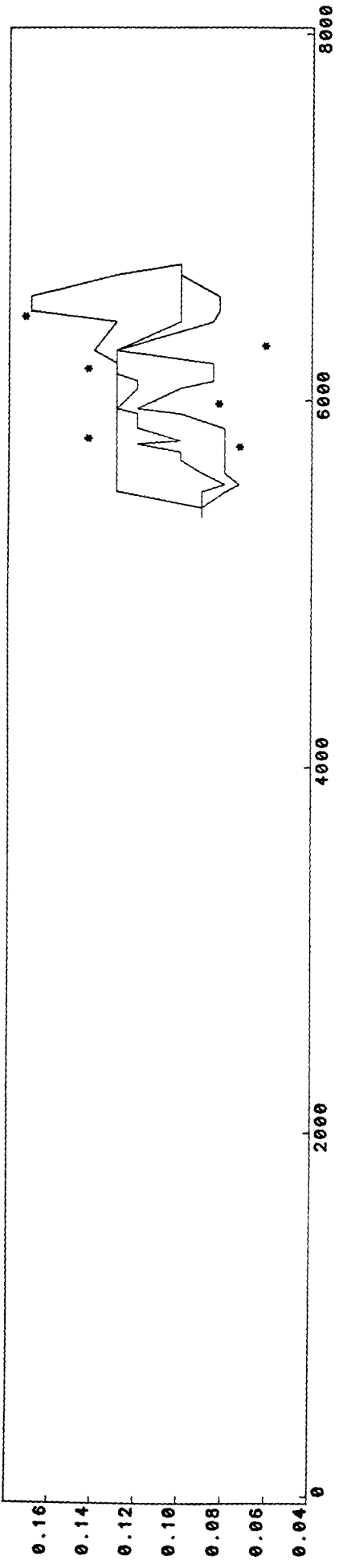
Julian Day  
River no 22 Aluminum



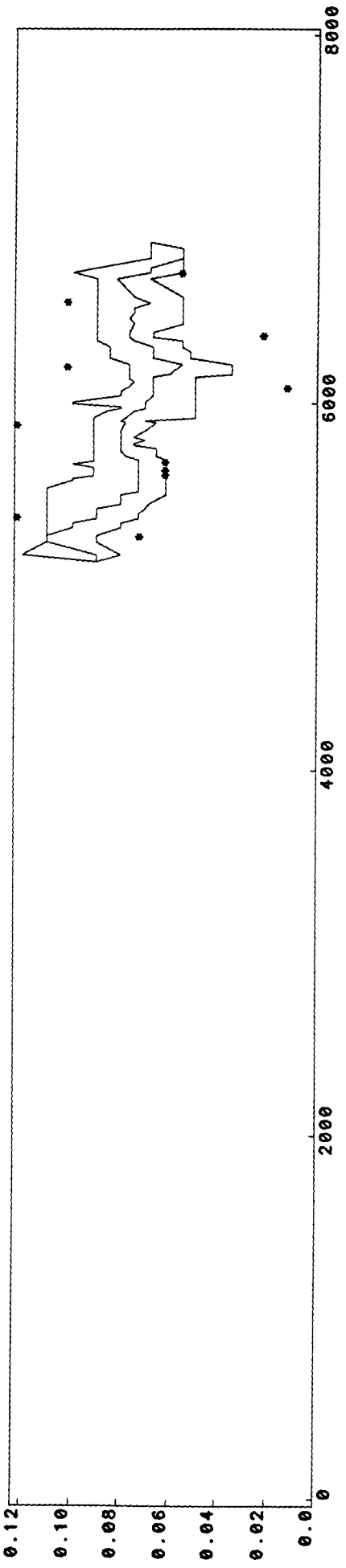
Julian Day  
River no 23 Aluminum



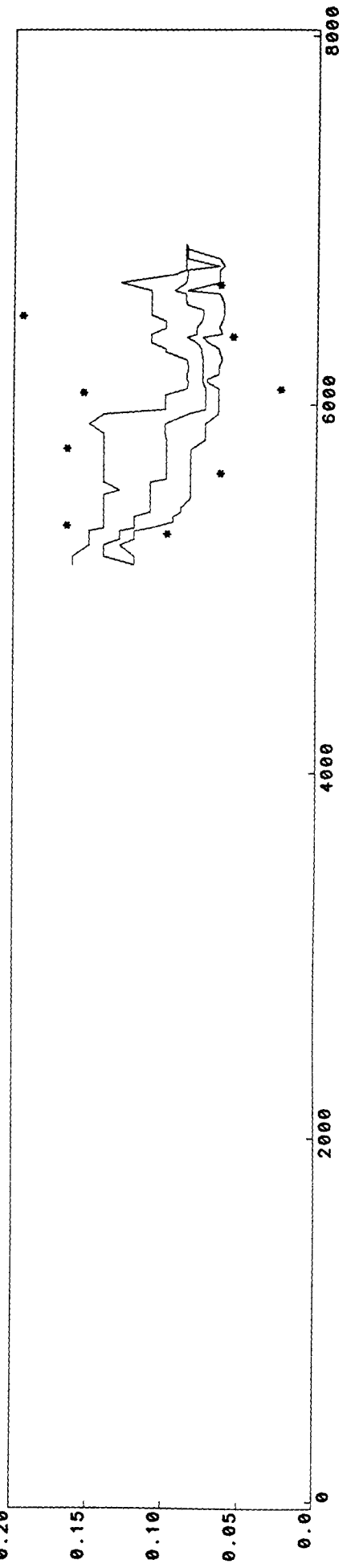
River no 25 Aluminum



Julian Day  
River no 26 Aluminum

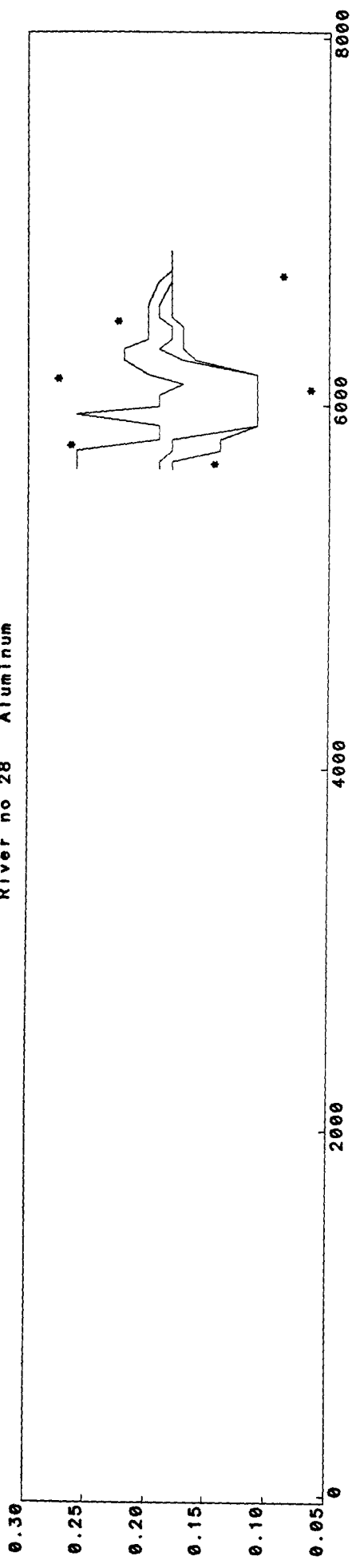


Julian Day  
River no 27 Aluminum



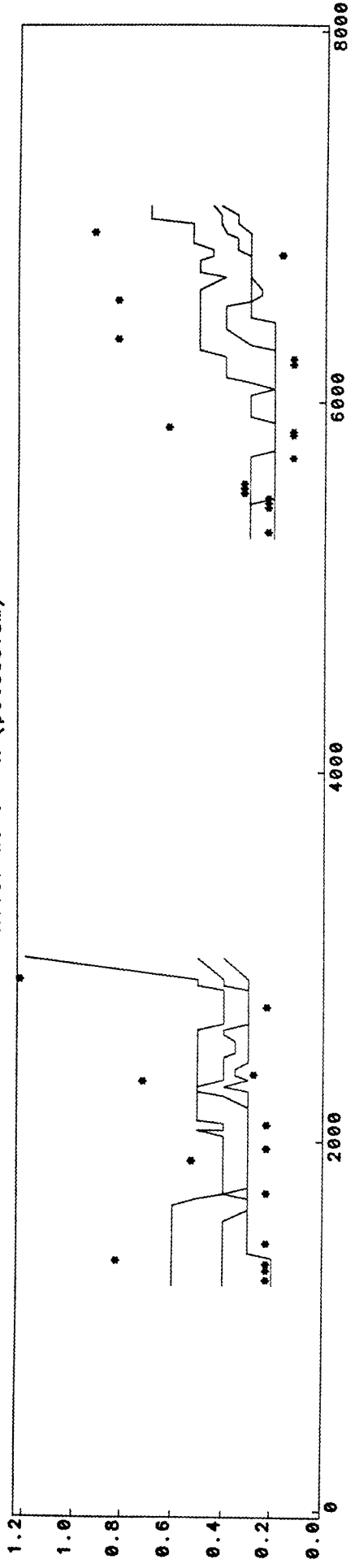


River no 28 Aluminum

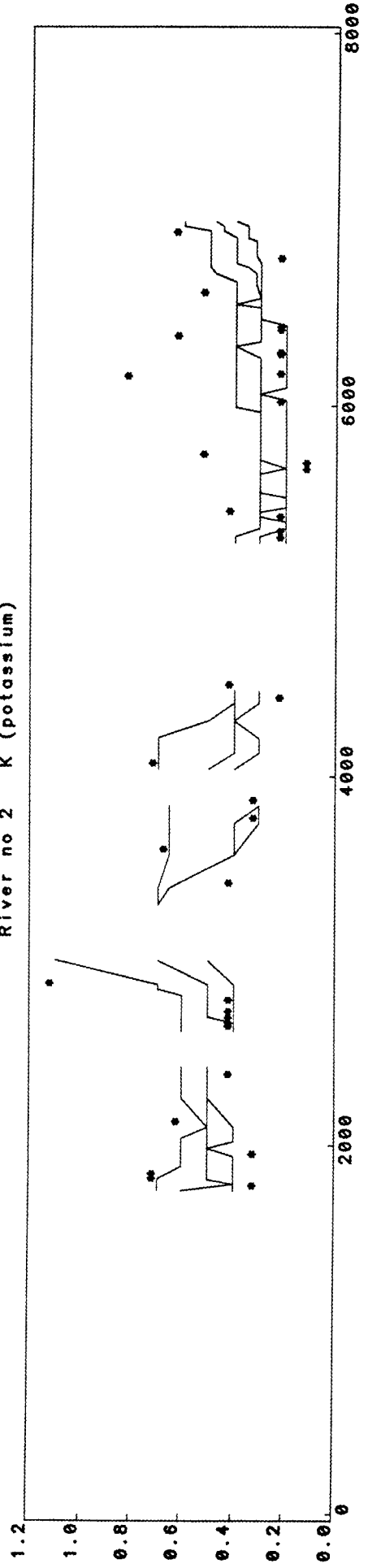


Appendix 20. Running boxplots of potassium for the study rivers.

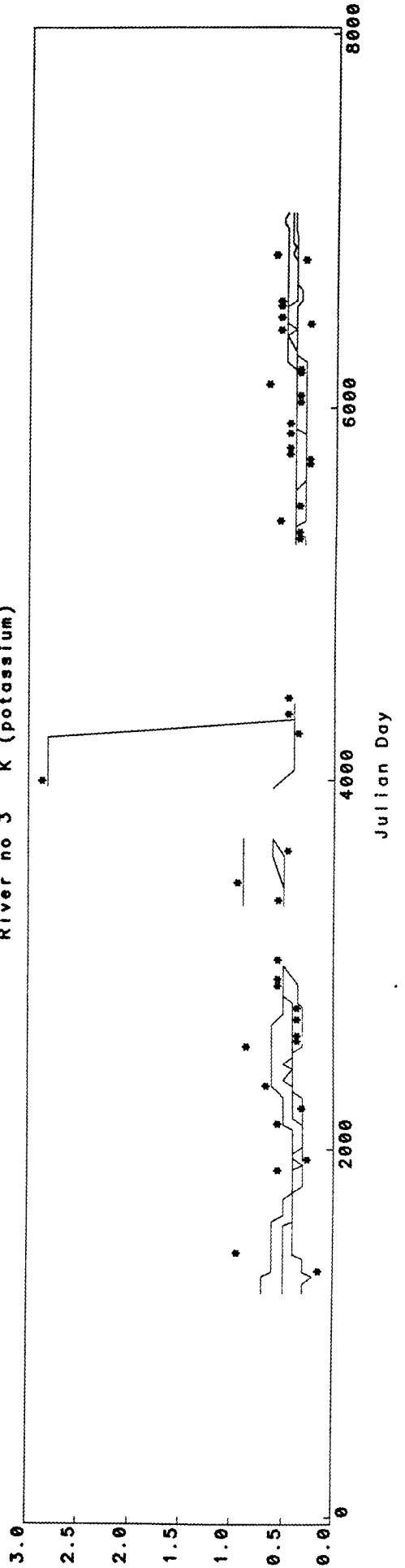
River no 1 K (potassium)



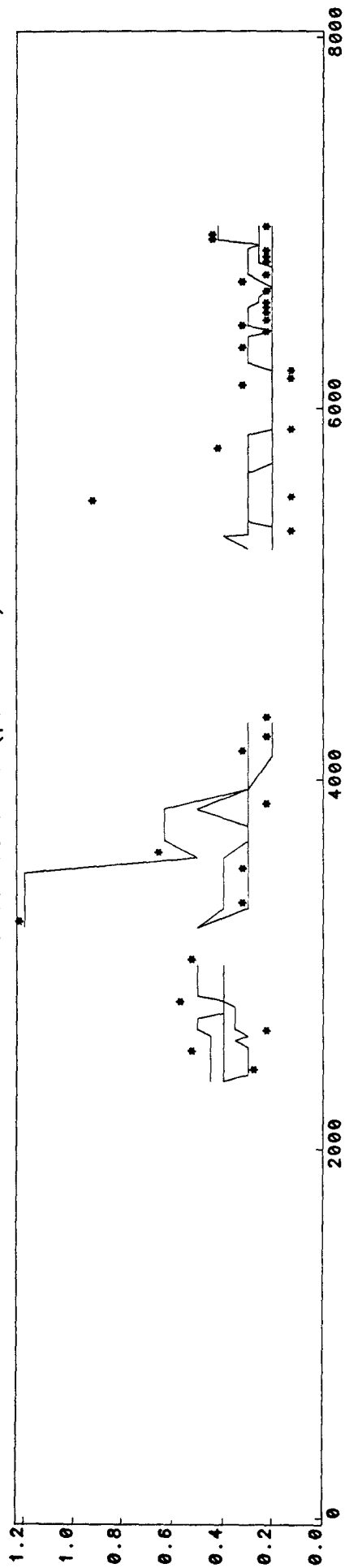
River no 2 K (potassium)



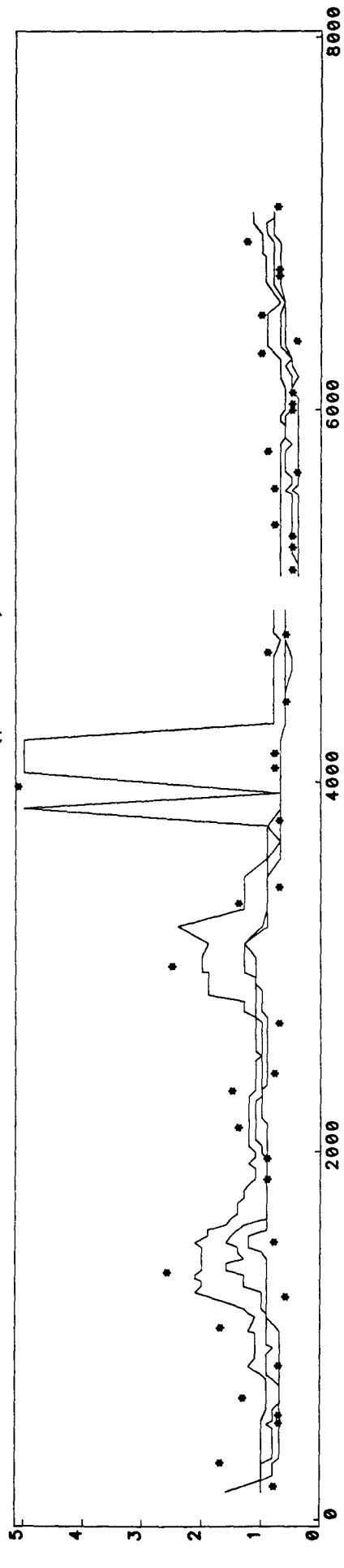
River no 3 K (potassium)



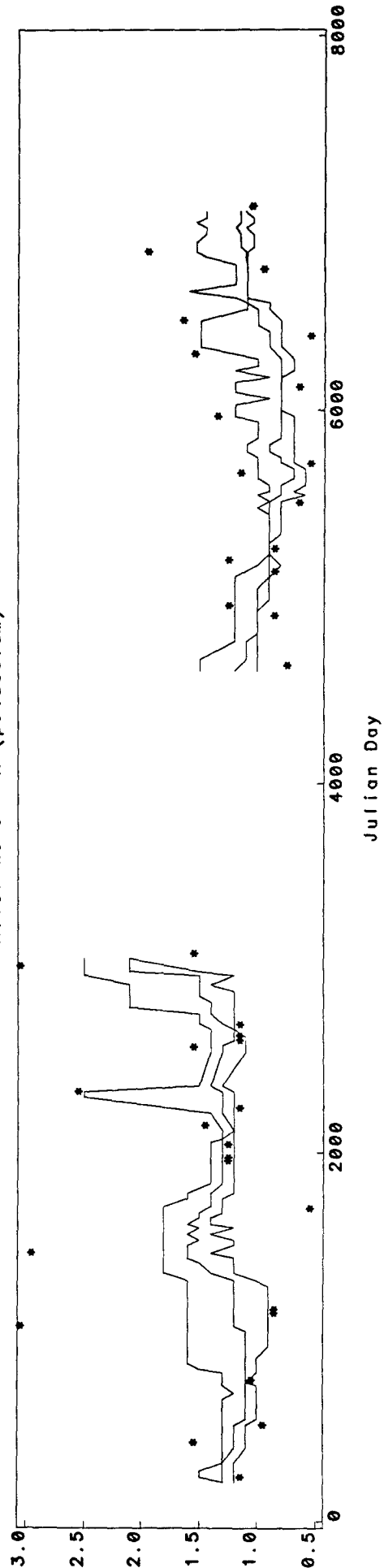
River no 4 K (potassium)



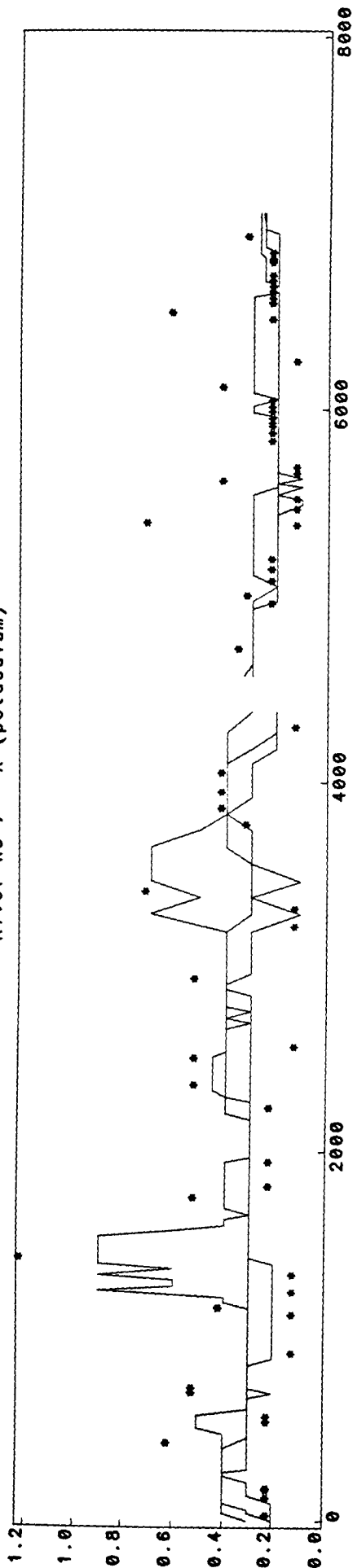
River no 5 K (potassium)



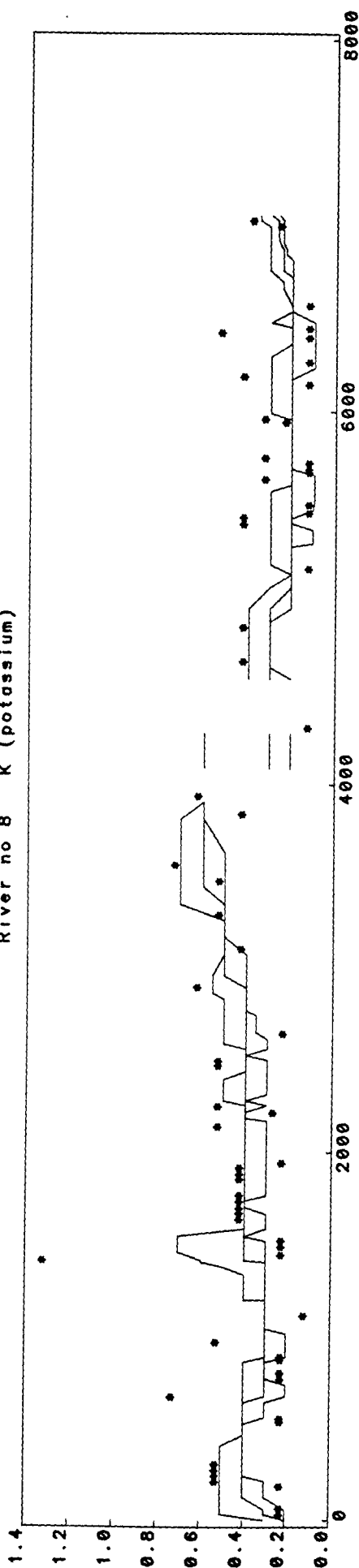
River no 6 K (potassium)



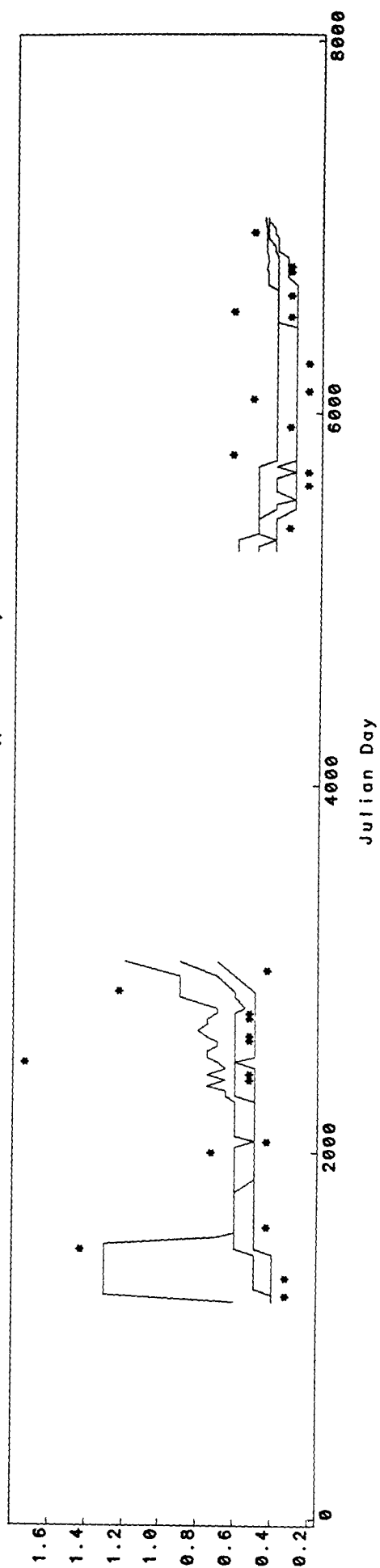
River no 7 K (potassium)



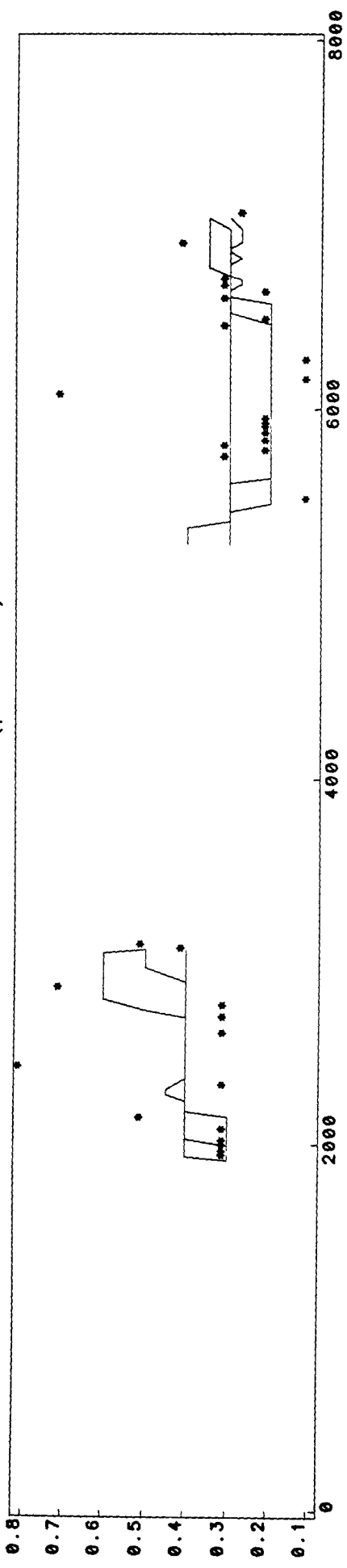
River no 8 K (potassium)



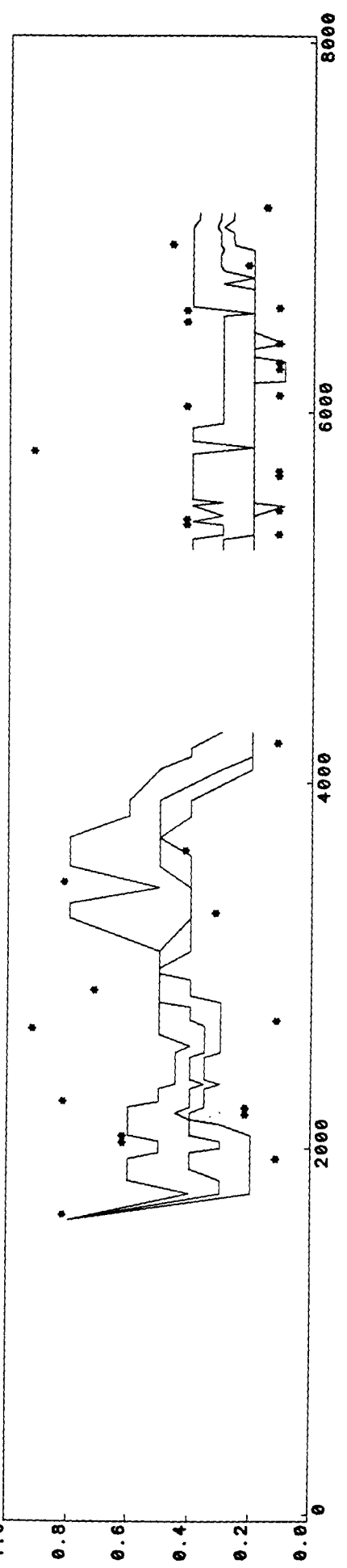
River no 9 K (potassium)



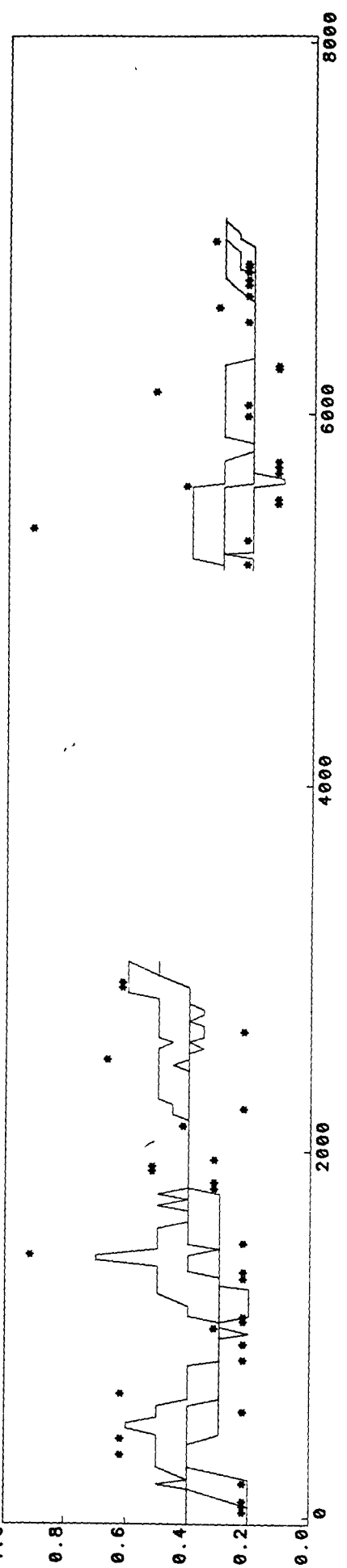
River no 10 K (potassium)



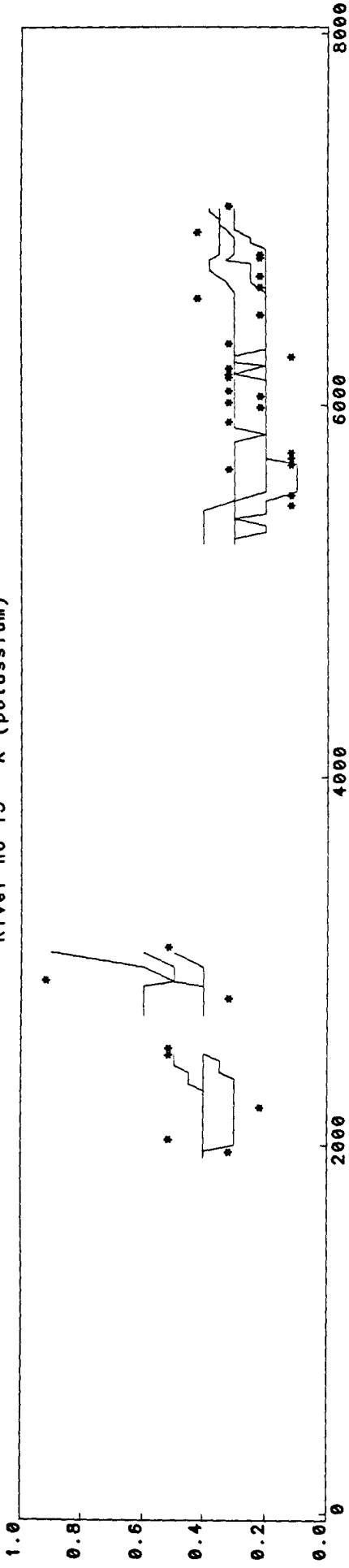
River no 11 K (potassium)



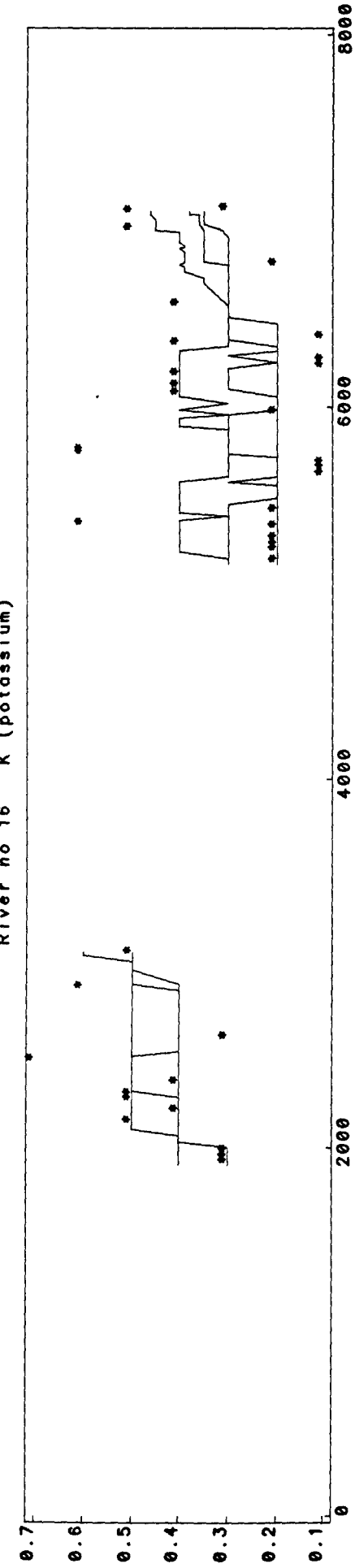
River no 12 K (potassium)



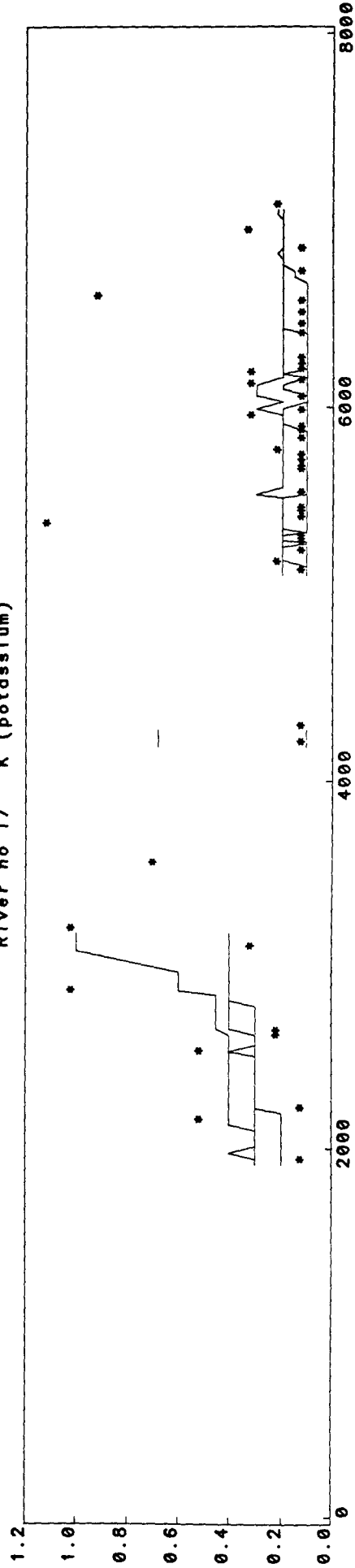
River no 13 K (potassium)



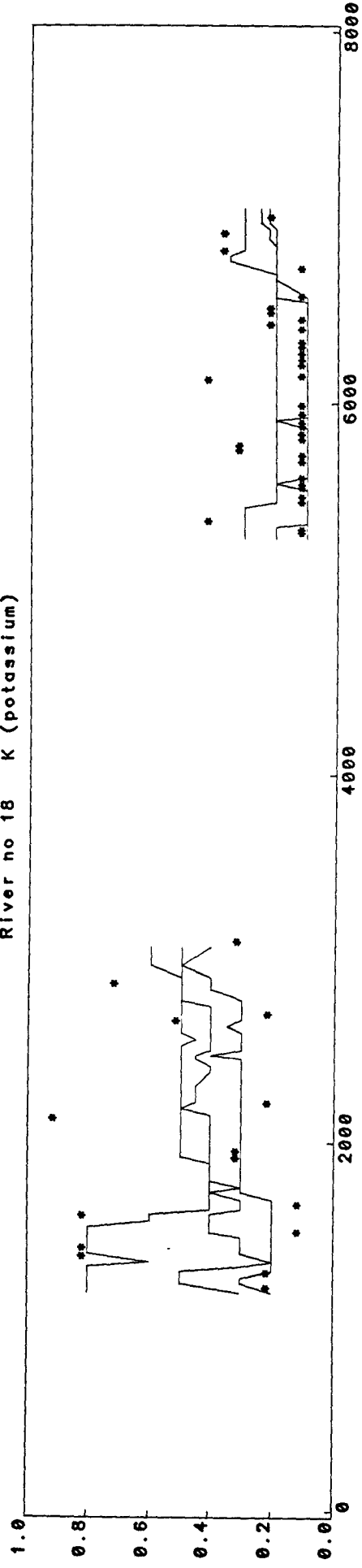
River no 16 K (potassium)



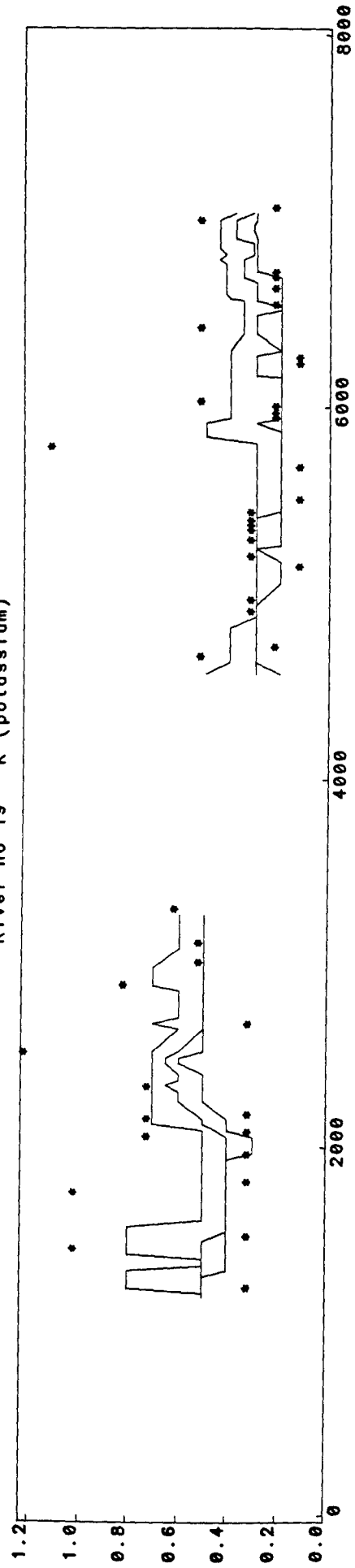
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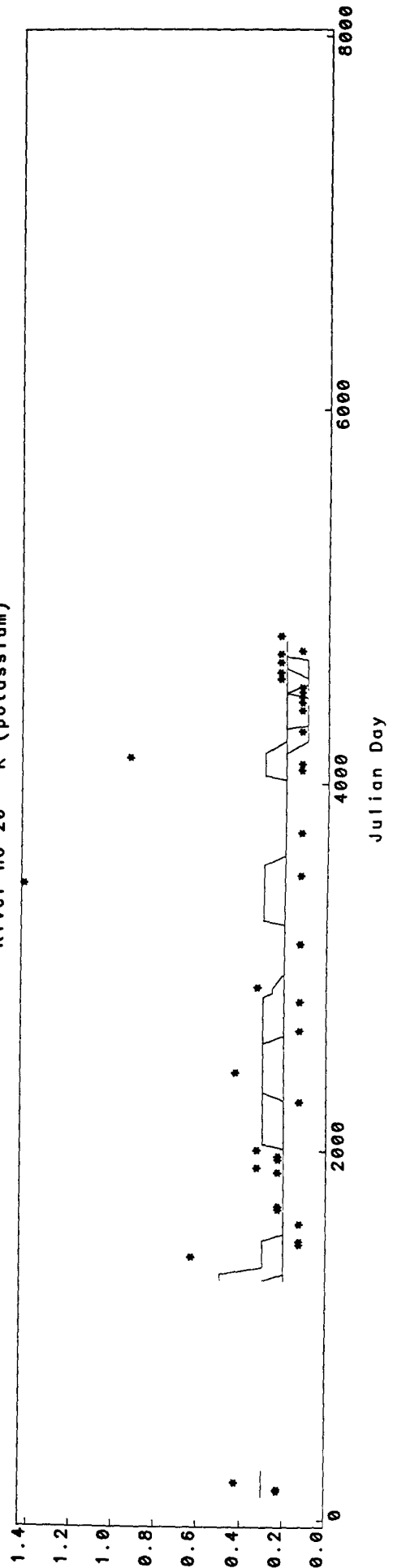
River no 18 K (potassium)



River no 19 K (potassium)

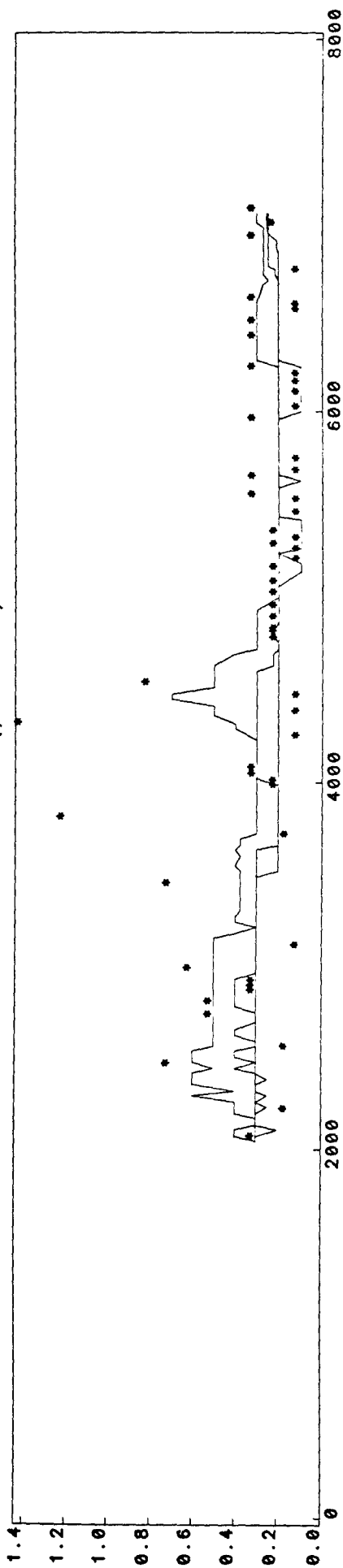


River no 20 K (potassium)

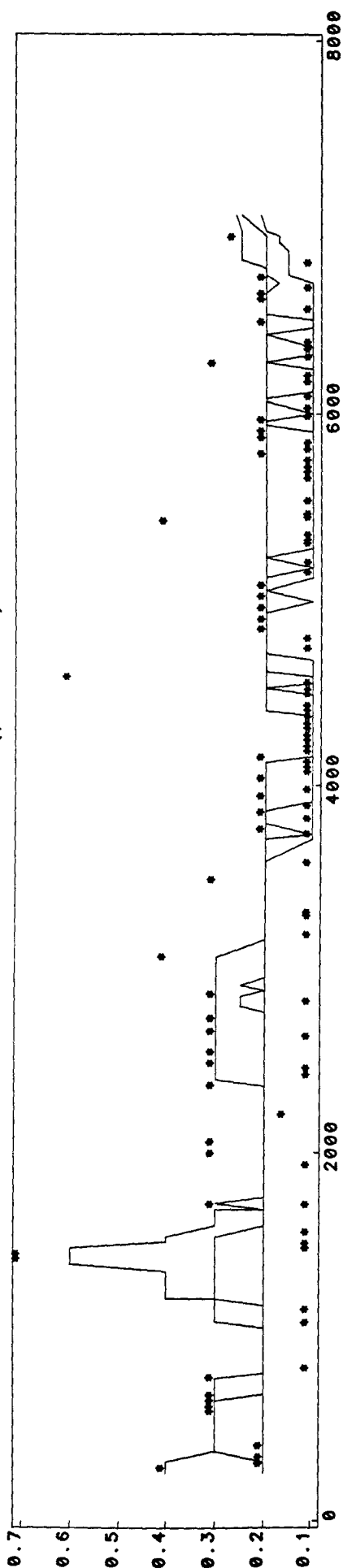




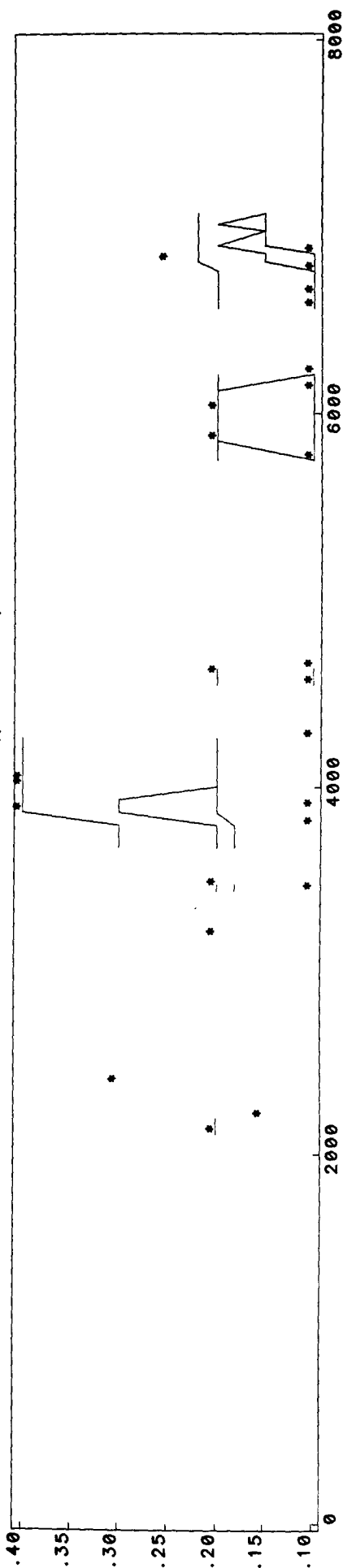
River no 21 K (potassium)



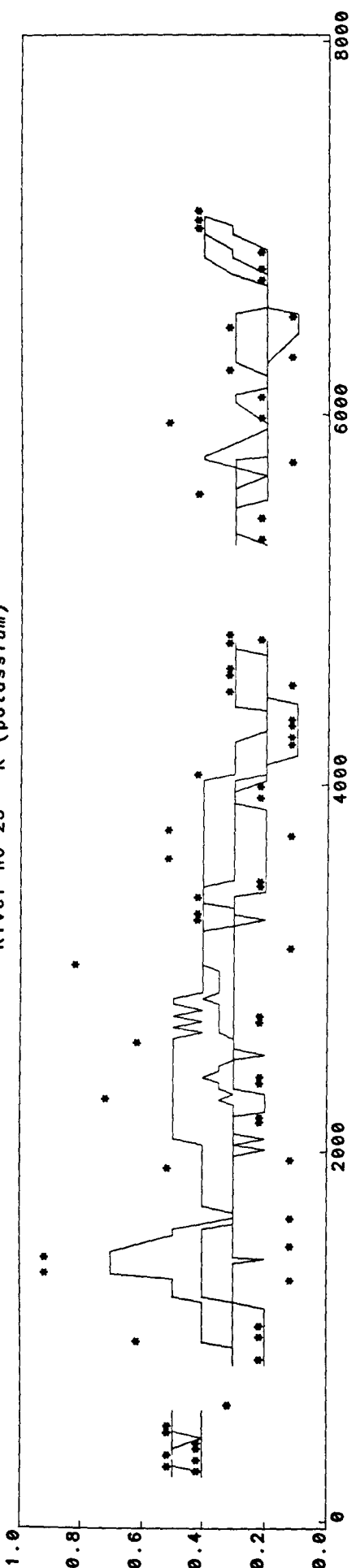
River no 22 K (potassium)



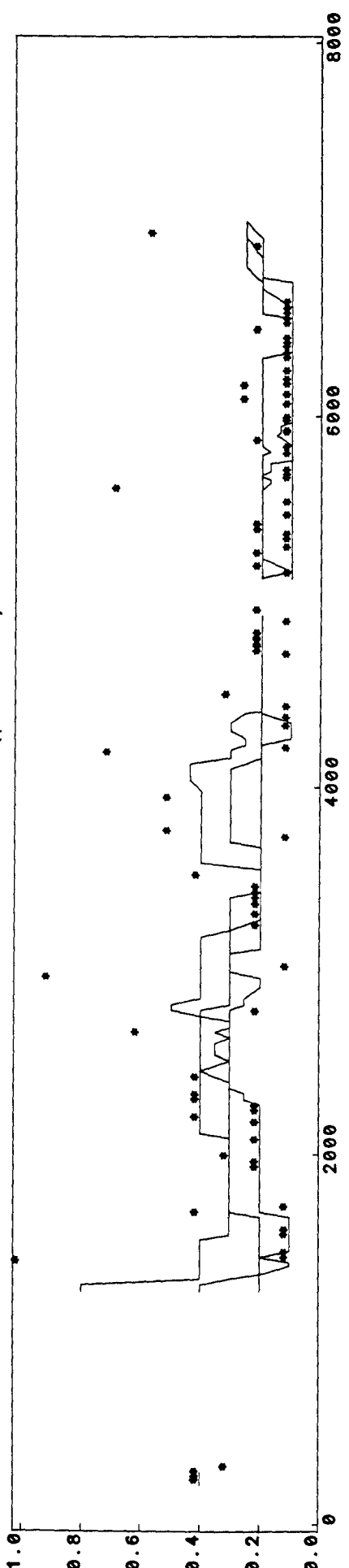
River no 23 K (potassium)



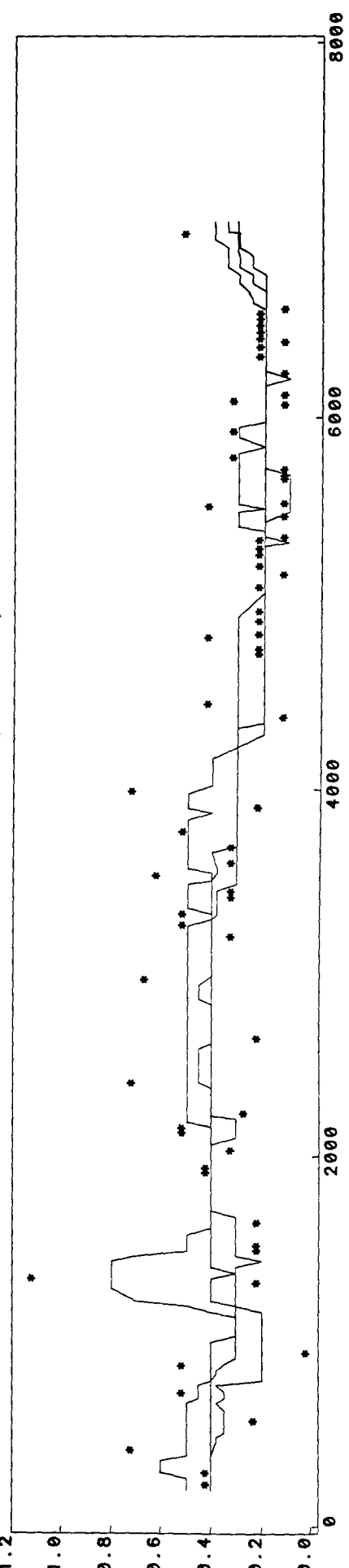
River no 25 K (potassium)



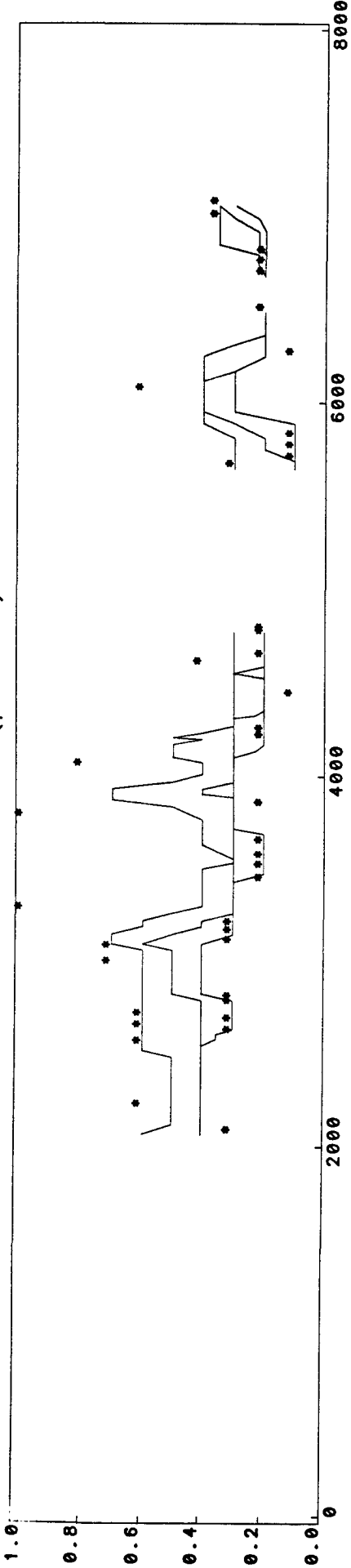
River no 26 K (potassium)



River no 27 K (potassium)



River no 28 K (potassium)



Julian Day

Appendix 21. Mean monthly and mean annual discharge for the study rivers.











# Lepreau River - OONBOIAQOOOI

	J	F	M	A	M	J	J	A	S	O	N	D	Annual	
1965	■	■	■	■	■	·	·	·	·	·	■	■	■	4.80
	·	·	■	■	■	·	·	·	·	■	■	■	■	4.57
	■	■	·	■	■	■	·	·	■	■	■	■	■	8.22
	·	■	■	■	■	·	·	·	·	■	■	■	■	5.69
1970	■	■	■	■	■	·	·	·	·	■	■	■	■	6.91
	■	■	■	■	■	■	■	■	■	■	■	■	■	7.08
	·	■	■	■	■	·	·	·	·	■	■	■	■	5.76
	■	·	■	■	■	■	·	·	·	■	■	■	■	9.33
1975	■	■	■	■	■	■	·	·	·	·	■	■	■	9.06
	■	■	■	■	■	■	·	·	·	■	■	■	■	6.76
	■	·	■	■	■	■	·	·	·	·	■	■	■	6.86
	■	■	■	■	■	·	·	·	·	■	■	■	■	8.73
1980	■	·	■	■	■	■	■	■	■	■	■	■	■	10.30
	■	■	■	■	■	·	·	·	·	■	■	·	■	6.63
	■	·	■	■	■	■	·	·	·	■	■	■	■	11.40
	■	■	■	■	■	■	·	·	·	·	■	■	■	7.02
1984	■	■	■	■	■	■	■	■	■	■	■	■	■	10.40
	■	■	■	■	■	■	·	·	·	·	■	■	■	6.59
	■	■	■	■	■	■	·	·	·	·	■	■	■	7.67
	■	■	■	■	■	■	·	·	·	·	■	■	■	7.27





# Pointe Wolfe River - OONBOIBV0015

	J	F	M	A	M	J	J	A	S	O	N	D	Annual
1965	■	■	■	■	■	.	.	.	.	■	■	■	3.85
	■	■	■	■	■	.	.	.	■	■	■	■	3.99
	■	.	.	■	■	■	■	■	■	■	■	■	6.26
	■	■	■	■	.	■	.	.	.	■	■	■	4.27
	■	■	■	■	■	■	■	.	■	■	■	■	5.30
1970	.	■	■	■	■	■	■	■	■	■	.	■	4.94
	.	■	■	■	■	.	.	■	■	■	■	■	4.62
	■	.	■	■	■	■	■	.	■	■	■	■	6.87
	■	■	■	■	■	■	■	.	.	■	■	■	6.26
	■	■	■	■	■	■	■	.	■	■	■	■	4.96
1975	.	.	■	■	■	■	.	.	■	■	■	■	5.71
	■	■	■	■	■	.	■	■	■	■	■	■	6.36
	.	.	■	■	■	■	■	■	■	■	■	■	6.24
	■	■	■	■	■	■	.	.	.	■	■	.	4.32
	■	.	■	■	■	■	■	■	■	■	■	■	7.87
1980	■	.	■	■	■	■	■	■	■	■	■	■	4.71
	.	■	■	■	■	■	■	.	■	■	■	■	7.82
	■	■	■	■	■	■	■	■	.	■	■	■	4.52
	■	■	■	■	■	■	■	.	.	■	■	■	5.08
1984	■	■	■	■	■	■	■	.	.	.	■	5.00	







# Wallace River - OONSOIDN000I

	J	F	M	A	M	J	J	A	S	O	N	D	Annual
1965	■	■	■	■	■	■	·	·	·	·	■	■	5.68
	·	·	■	■	■	■	·	·	·	■	■	■	6.06
	■	·	■	■	■	■	·	·	·	■	■	■	10.20
	■	·	■	■	■	■	·	·	·	·	■	■	7.27
	■	■	■	■	■	■	·	·	·	·	■	■	6.77
1970	■	■	·	■	■	■	■	■	■	■	■	■	7.66
	·	■	■	■	■	■	·	■	·	■	■	■	10.90
	■	■	■	■	■	■	·	·	·	■	■	■	11.70
	■	■	■	■	■	■	■	■	·	·	■	■	7.93
	·	■	■	■	■	■	■	·	·	■	■	■	8.94
1975	■	·	■	■	■	■	·	·	·	·	■	■	7.94
	■	■	■	■	■	·	·	·	·	■	■	■	8.35
	■	·	■	■	■	■	■	■	■	■	■	■	12.30
	■	■	■	■	■	■	·	·	·	·	■	■	8.00
	■	■	■	■	■	■	■	■	■	■	■	■	13.30
1980	■	·	■	■	■	■	·	·	·	·	■	■	7.50
	■	■	■	■	■	■	·	·	·	■	■	■	11.00
	■	■	■	■	■	■	·	·	·	·	■	■	8.27
	■	■	■	■	■	■	■	·	·	·	■	■	8.86
1984	■	■	■	■	■	■	·	·	·	·	■	■	9.16











# Rocky River - OONF02ZK0001

J F M A M J J A S O N D Annual

Year	J	F	M	A	M	J	J	A	S	O	N	D	Annual
1965	■	■	■	■	■	■	·	·	■	■	■	■	-
	■	■	■	■	■	■	■	■	■	■	■	■	-
	■	■	■	■	·	·	·	■	■	■	■	■	-
	■	■	■	■	■	■	■	■	■	■	■	■	-
1970	■	■	■	■	■	■	■	■	■	■	■	■	-
	■	■	■	■	■	·	■	■	■	■	■	■	-
	■	■	■	■	■	■	■	■	■	■	■	■	-
	■	■	■	■	■	·	·	■	■	■	■	■	11.80
1975	■	■	■	■	■	■	■	■	■	■	■	■	12.10
	■	■	■	■	■	■	■	■	■	■	■	■	12.30
	·	■	■	■	■	·	■	■	■	■	■	■	10.30
	■	■	■	■	■	■	·	■	■	■	■	■	12.20
1980	■	■	■	■	■	■	■	■	■	■	■	■	8.28
	■	■	■	■	■	■	·	■	■	■	■	■	12.30
	■	■	■	■	■	■	■	■	■	■	■	■	10.90
	■	■	■	■	■	■	■	■	■	■	■	■	14.90
1984	■	■	■	■	■	■	■	■	■	■	■	■	12.90
	■	■	■	■	■	■	■	■	■	■	■	■	10.90
	■	■	■	■	■	■	■	■	■	■	■	■	12.00
1984	■	■	■	■	■	·	■	■	■	■	■	11.30	











# Medway River - OONSOIEE000I

	J	F	M	A	M	J	J	A	S	O	N	D	Annual
1965	■	■	■	■	■	·	·	·	·	■	■	■	21.70
	■	■	■	■	■	·	·	·	■	■	■	■	25.30
	■	■	■	■	■	■	■	■	■	■	■	■	53.70
	■	■	■	■	■	■	·	·	·	■	■	■	37.70
	■	■	■	■	■	■	·	·	·	■	■	■	36.50
1970	■	■	■	■	■	■	■	■	■	■	■	■	35.20
	■	■	■	■	■	·	■	■	■	■	■	■	48.70
	■	■	■	■	■	■	·	·	■	■	■	■	53.60
	■	■	■	■	■	■	■	■	·	■	■	■	47.10
	■	■	■	■	■	■	·	■	■	■	■	■	45.80
1975	■	■	■	■	■	·	·	·	■	■	■	■	39.60
	■	■	■	■	■	■	■	·	■	■	■	■	46.60
	■	■	■	■	■	■	■	■	■	■	■	■	49.90
	■	■	■	■	■	■	·	·	·	■	■	■	30.90
	■	■	■	■	■	■	■	■	■	■	■	■	55.90
1980	·	■	■	■	■	■	·	·	·	■	■	■	33.60
	■	■	■	■	■	■	■	·	■	■	■	■	50.50
	■	■	■	■	■	■	■	·	·	■	■	■	34.80
	■	■	■	■	■	■	·	·	·	■	■	■	39.00
1984	■	■	■	■	■	■	·	·	·	·	■	■	39.10

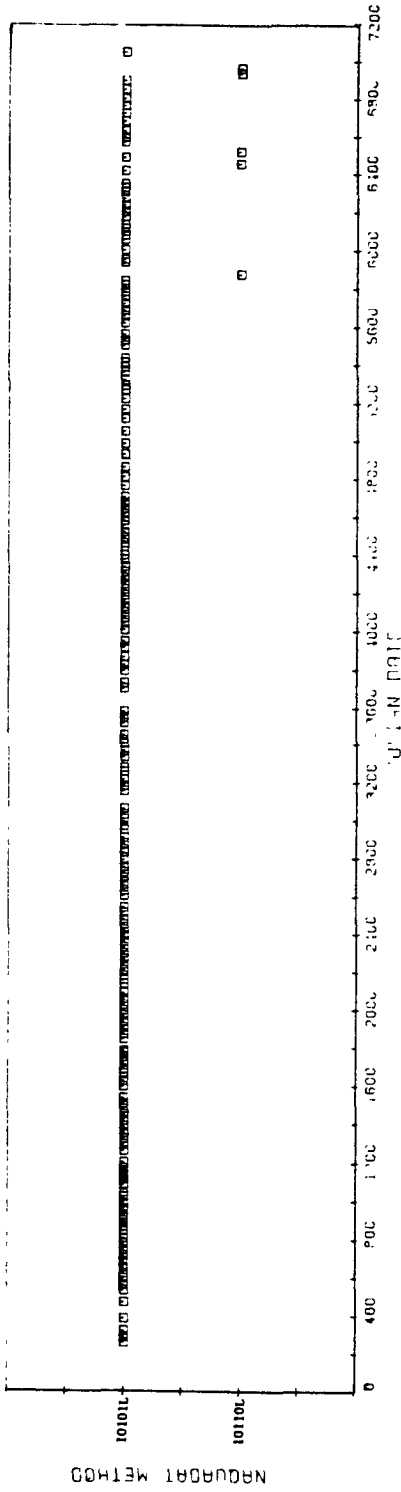


# Clam Hbr. River - OONSOIEROOOI

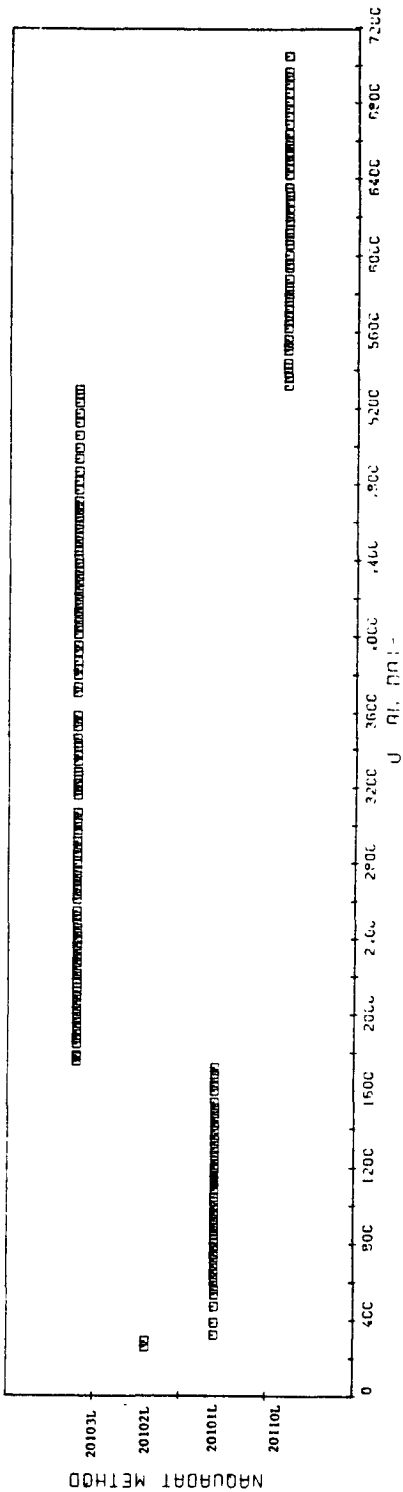
	J	F	M	A	M	J	J	A	S	O	N	D	Annual
1965	■	■	■	■	■	·	■	·	·	■	■	■	1.26
	■	■	■	·	·	·	·	■	■	■	■	■	1.27
	·	■	■	■	■	·	·	·	■	■	■	■	2.08
	·	■	■	■	■	·	■	■	·	■	■	■	1.68
	■	■	■	■	■	·	·	·	■	■	■	■	1.96
1970	■	·	■	■	■	■	■	■	■	■	■	■	1.41
	■	■	■	■	·	·	·	·	■	■	■	■	2.08
	■	■	■	■	■	·	·	·	■	■	■	■	2.34
	■	■	■	■	■	·	·	·	·	■	■	■	1.70
	■	■	■	■	·	·	·	·	■	■	■	■	1.32
1975	·	■	■	■	■				■	■	■	■	1.66
	■	■	■	■	·	·	·	·	■	■	■	■	1.49
	■	■	■	■	■	■	■	■	■	■	■	■	1.75
	·	■	■	■	·	·		·	■	·	■	■	1.08
	■	■	■	■	■	·	■	·	■	■	■	■	1.59
1980	·	■	■	■	·	·	·	·	■	■	■	■	1.54
	■	■	■	■	■	■	·	·	■	■	■	■	-
	■	■	■	■	■	·	·	·	·	■	■	■	1.72
	■	■	■	■	■	■	■	■	·	■	■	■	1.95
1984	■	■	■	■	■	·	·	·	■	■	■	1.41	

Appendix 22. Use of various methods of chemical analysis during the period of record. The Exploits River is taken as being representative.

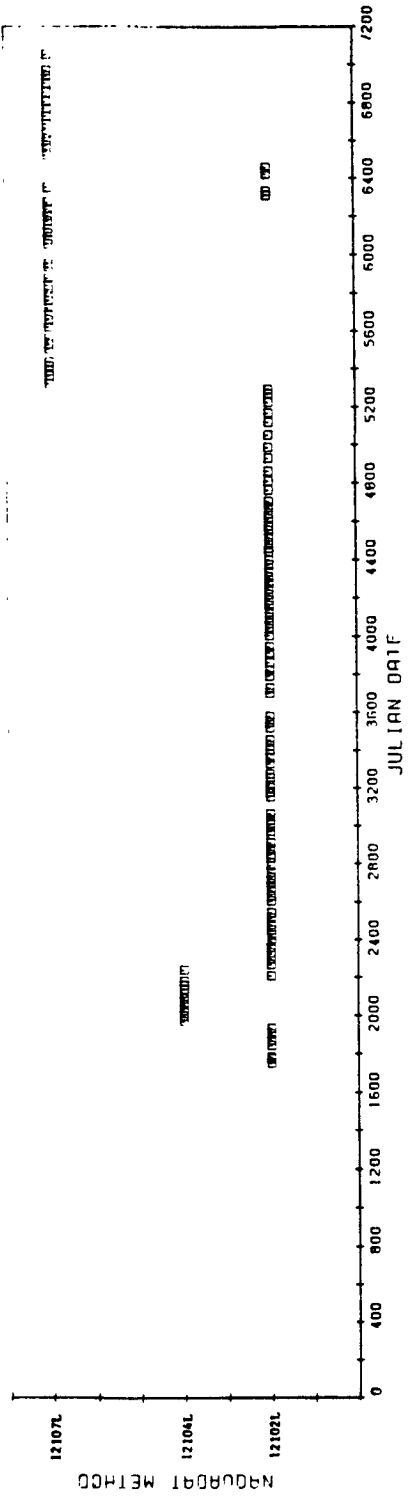
EXPLOITS RIVER METHODS OF ALKALINITY ANALYSIS



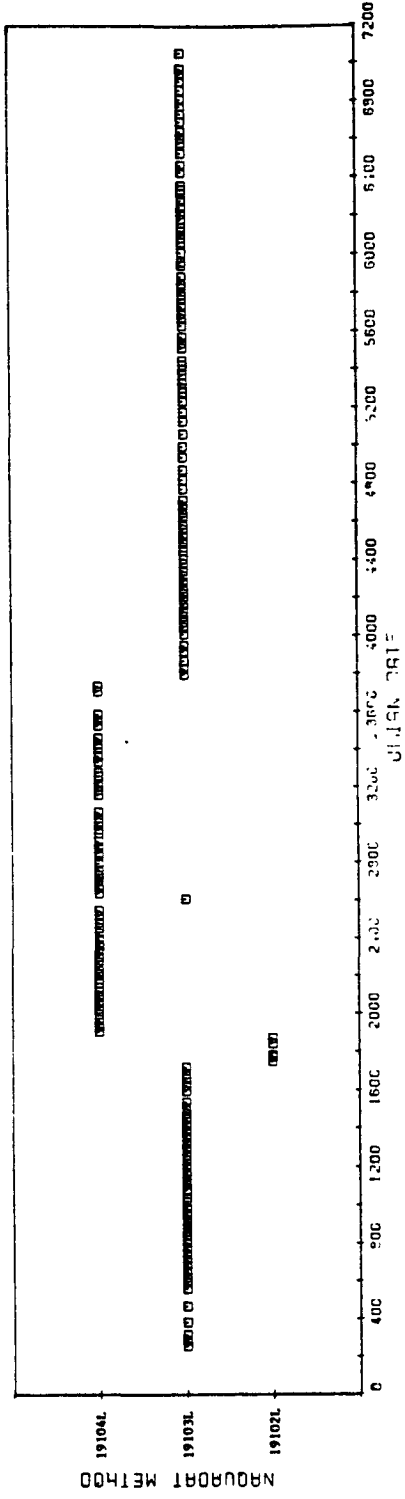
EXPLOITS RIVER METHODS OF CALCIUM ANALYSIS



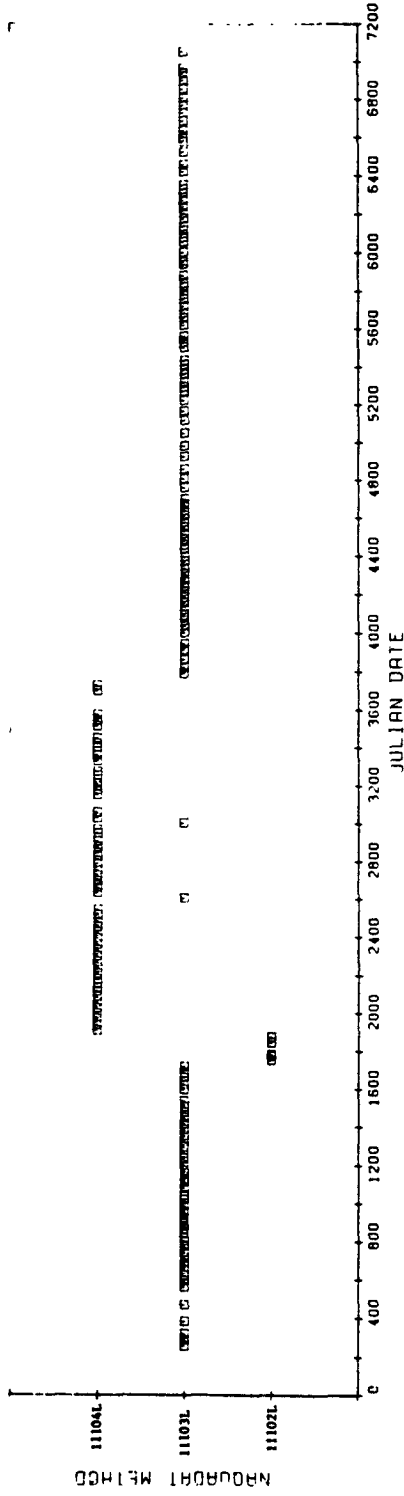
EXPLOITS RIVER METHODS OF MAGNESIUM ANALYSIS



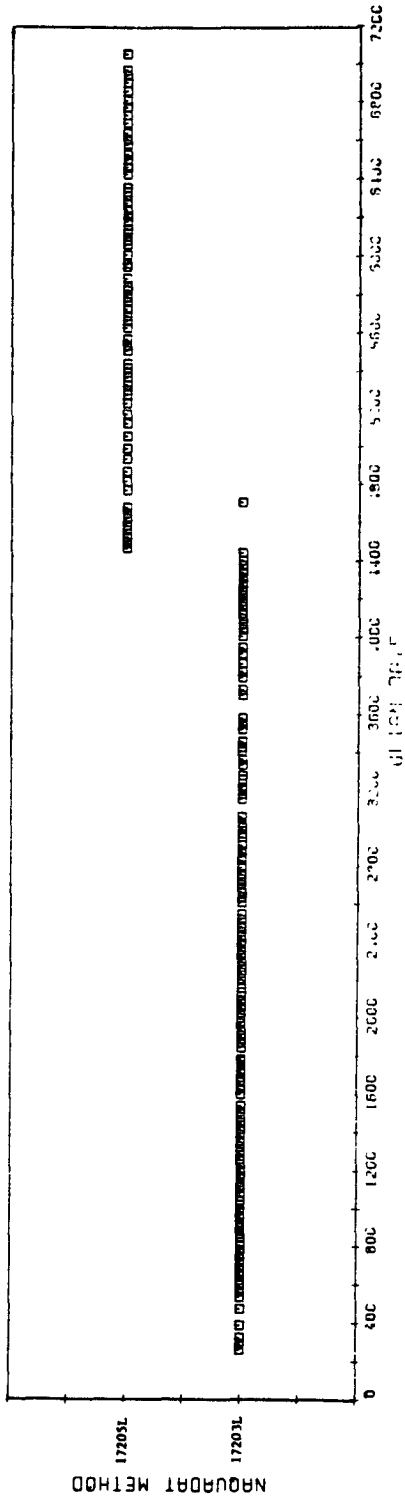
EXPLOITS RIVER METHODS OF POTASSIUM ANALYSIS



EXPLOITS RIVER METHODS OF SOLUBLE ANALYSIS

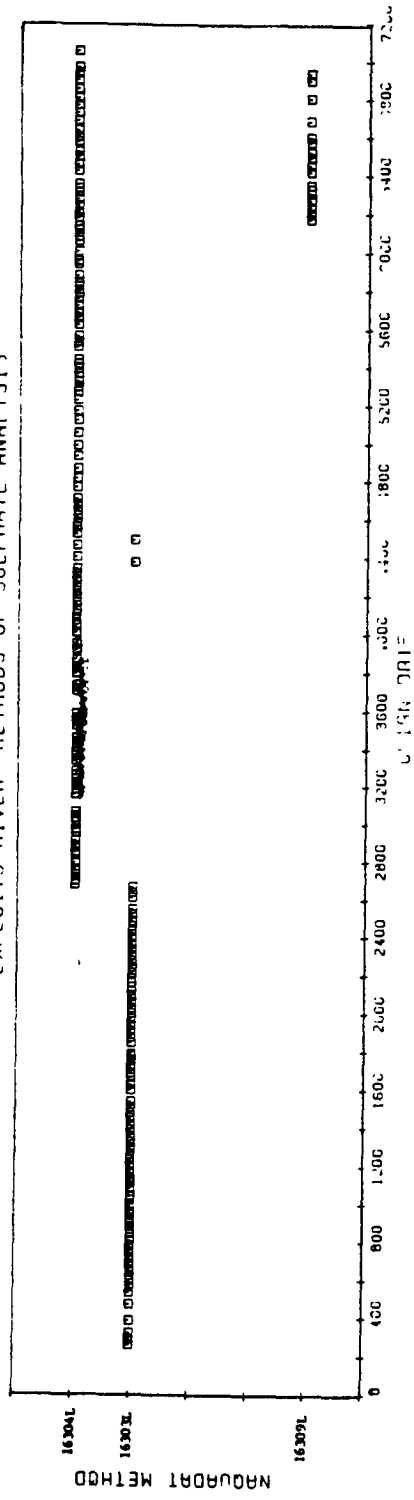


EXPLOITS RIVER METHODS OF CHLORIDE ANALYSIS

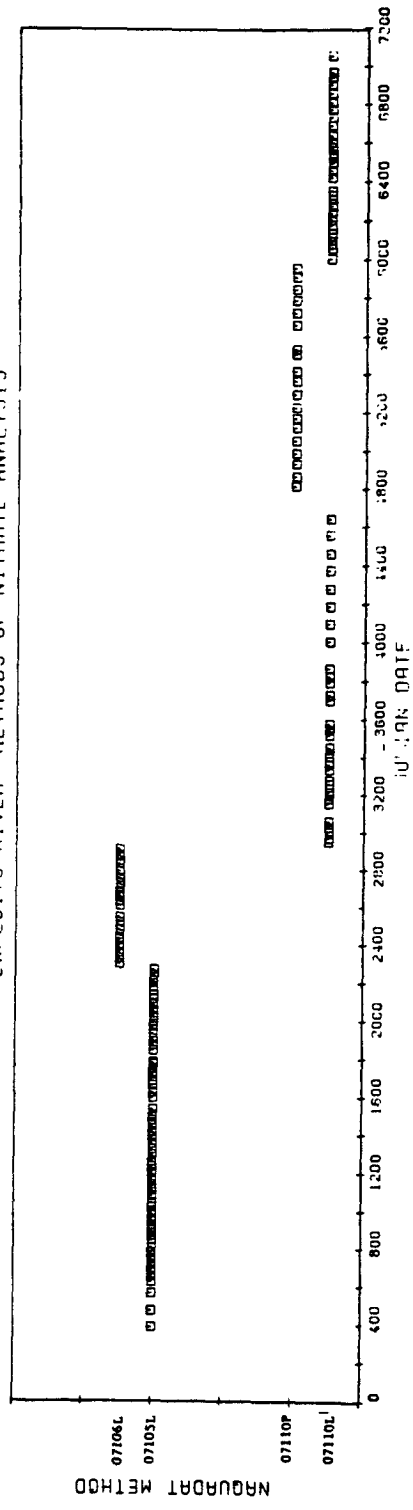




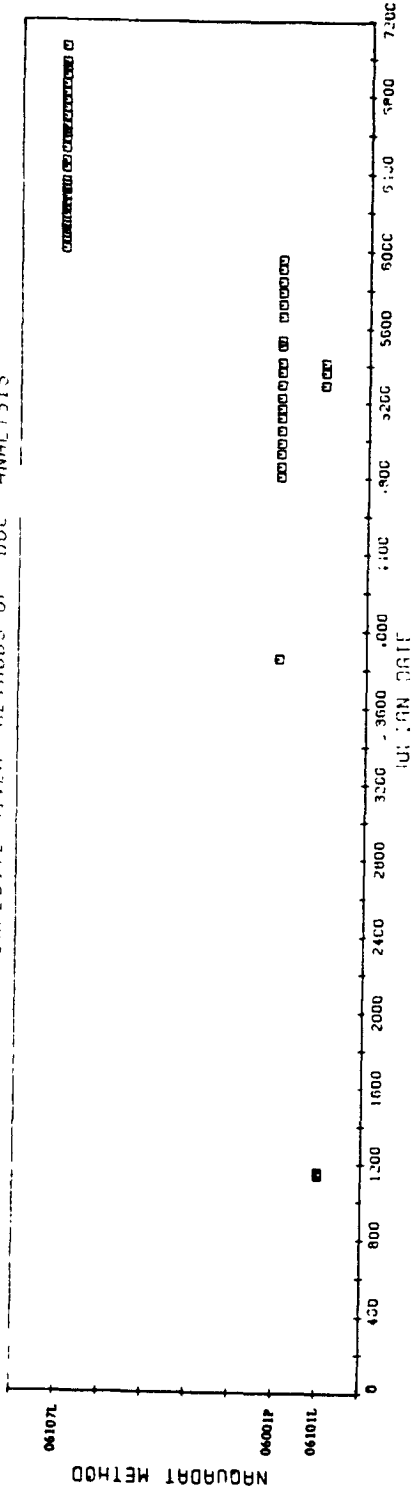
EXPLOITS RIVER METHODS OF SULPHATE ANALYSIS



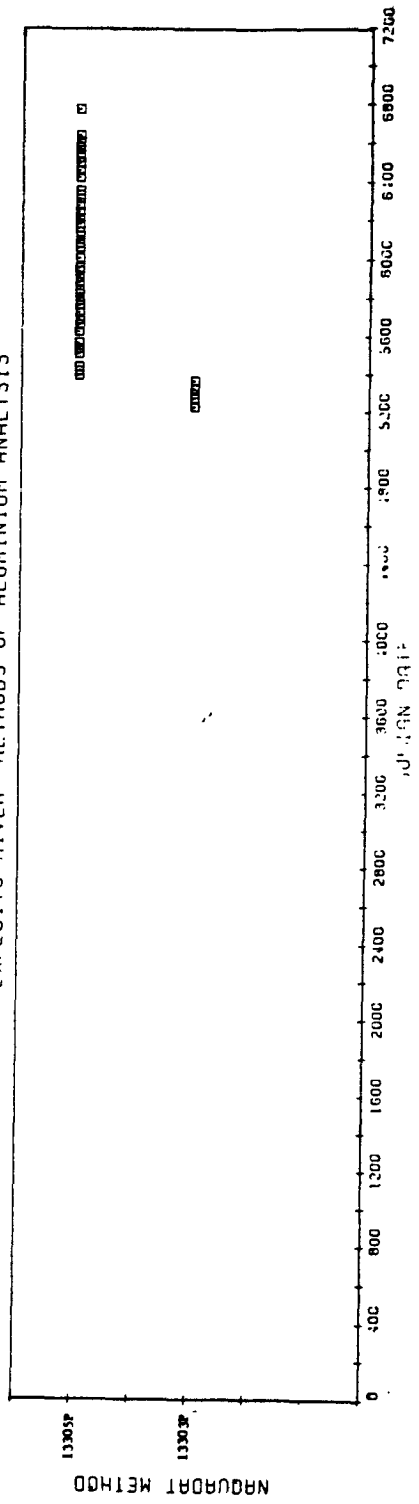
EXPLOITS RIVER METHODS OF NITRATE ANALYSIS



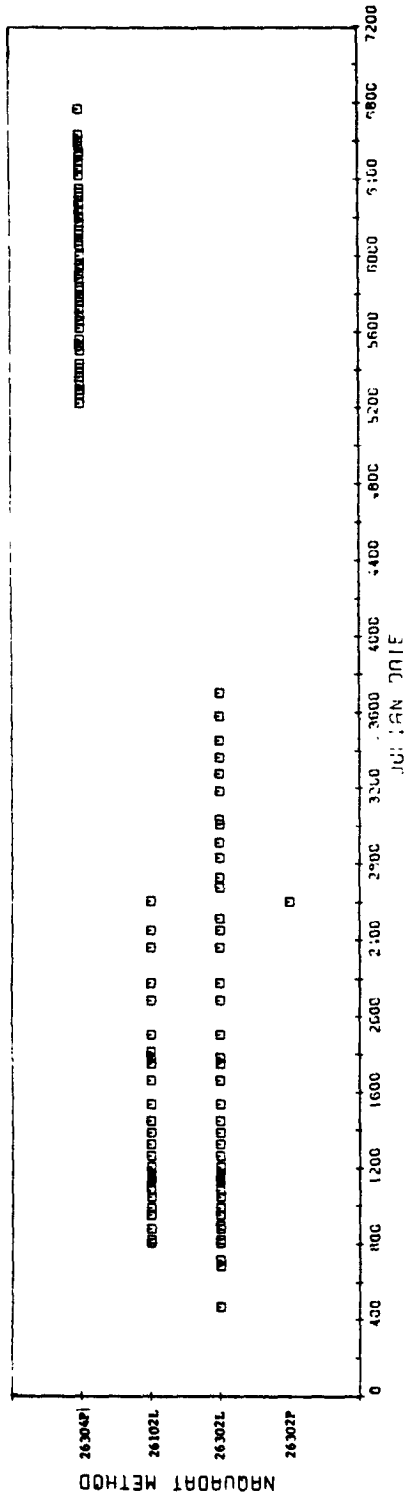
EXPLOITS RIVER METHODS OF 'DOC' ANALYSIS



EXPLOITS RIVER METHODS OF ALUMINIUM ANALYSIS



EXPLOITS RIVER ..METHODS OF IRON ANALYSIS



EXPLOITS RIVER METHODS OF MANGANESE ANALYSIS

