Appendix C - Water Quality Scatterplots
Section I - James River

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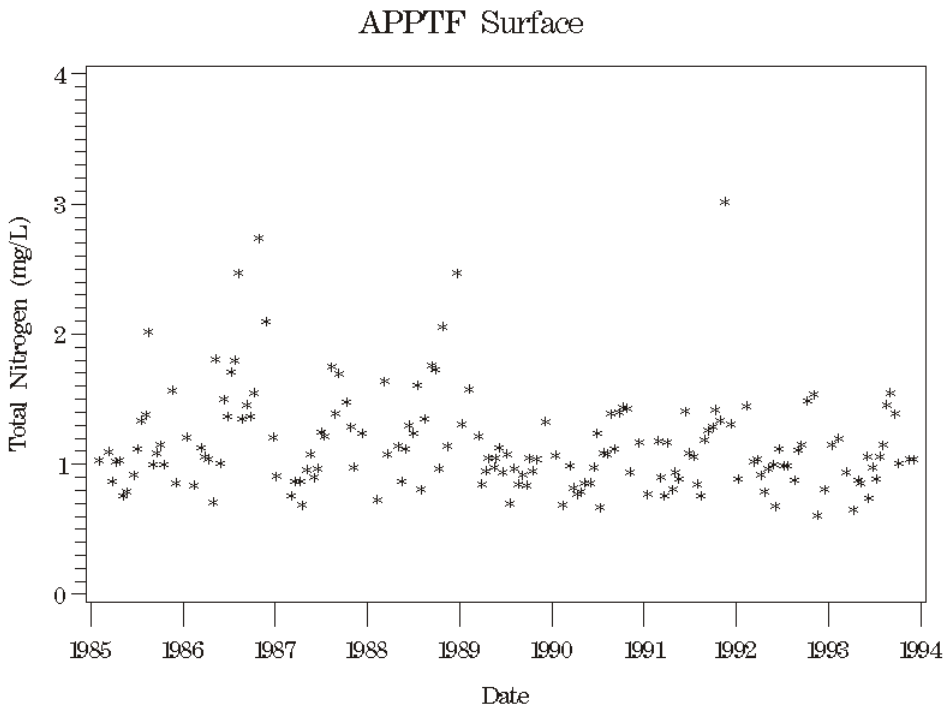

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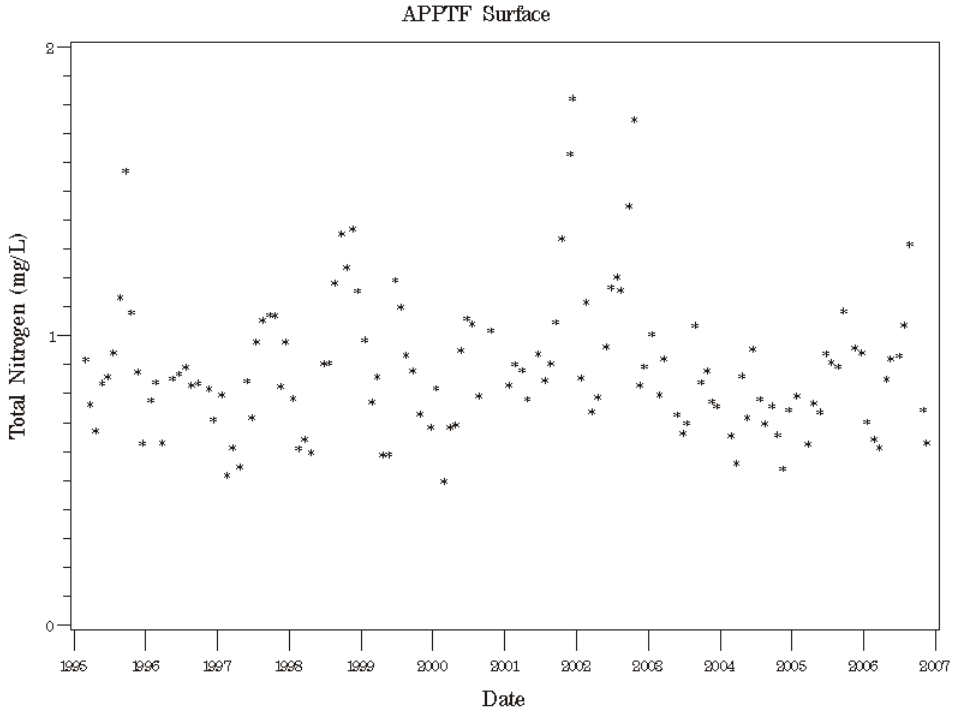

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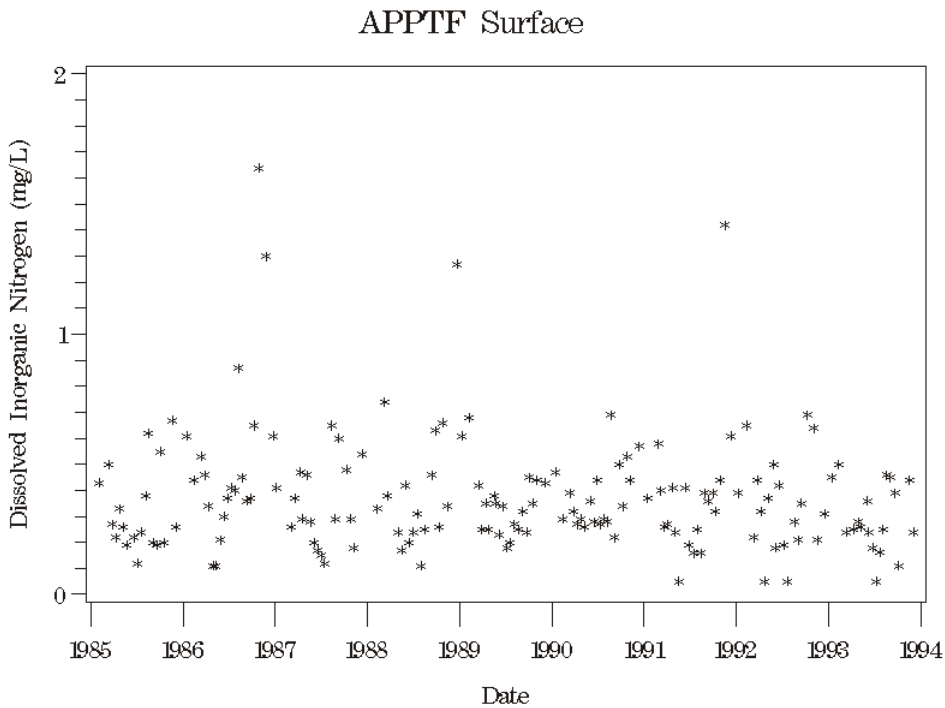

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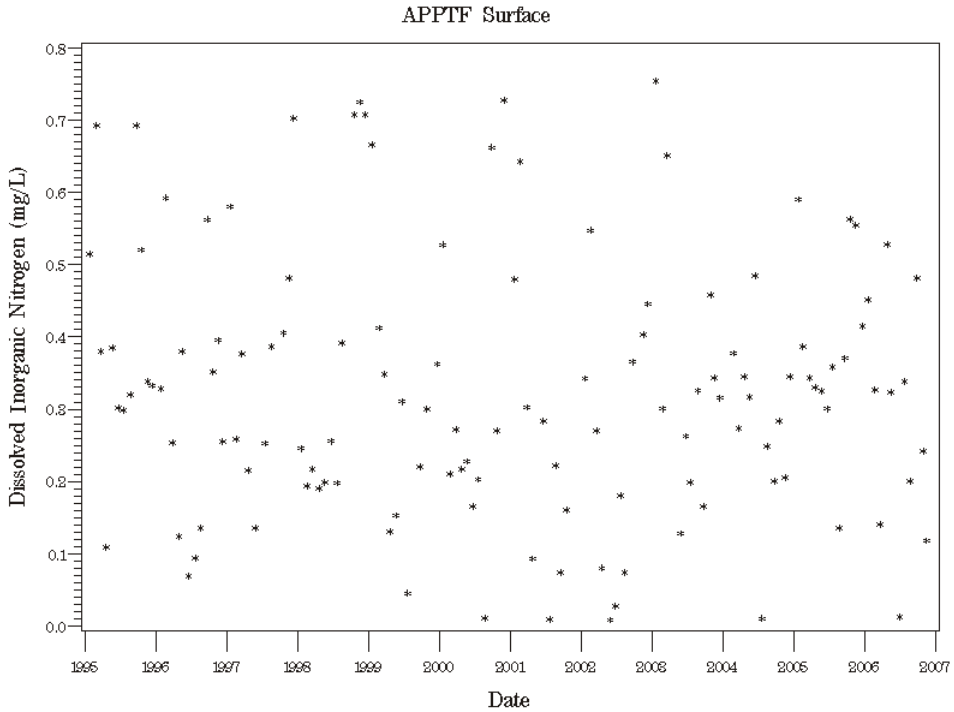

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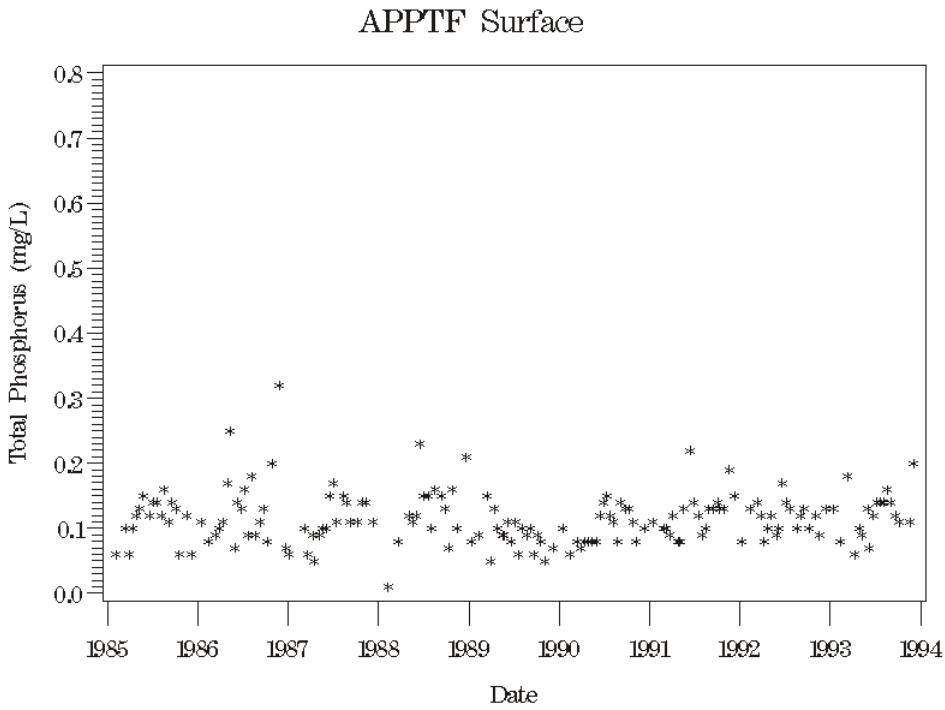

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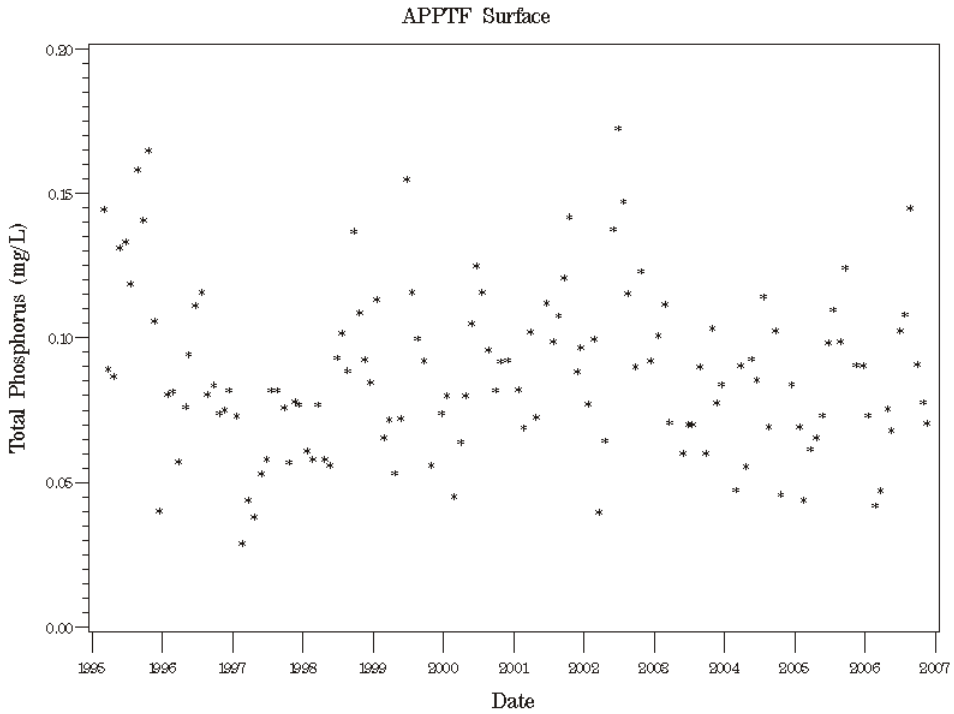

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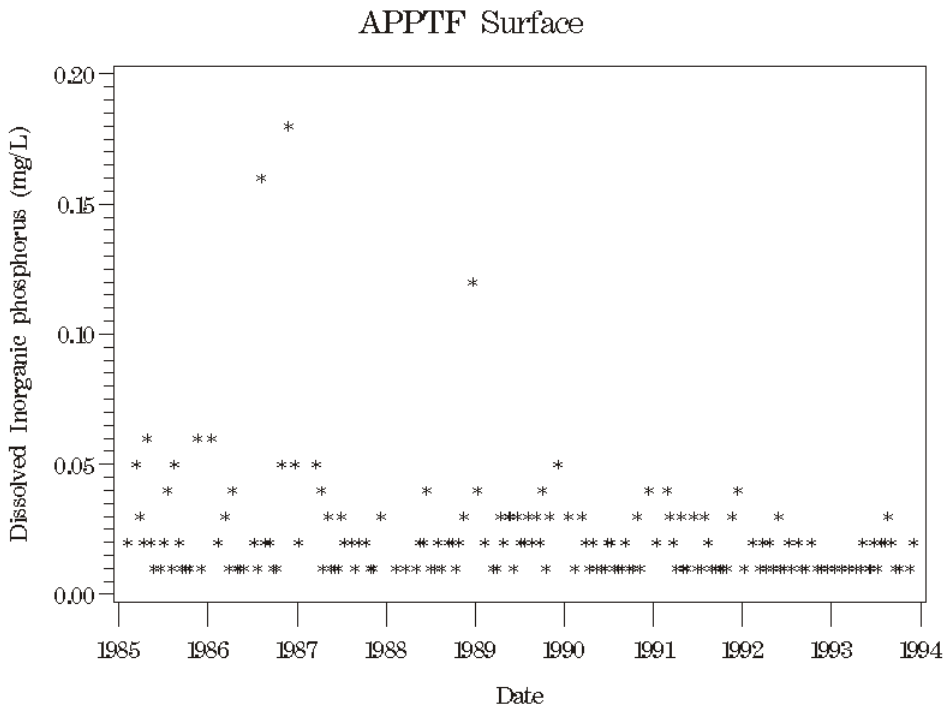

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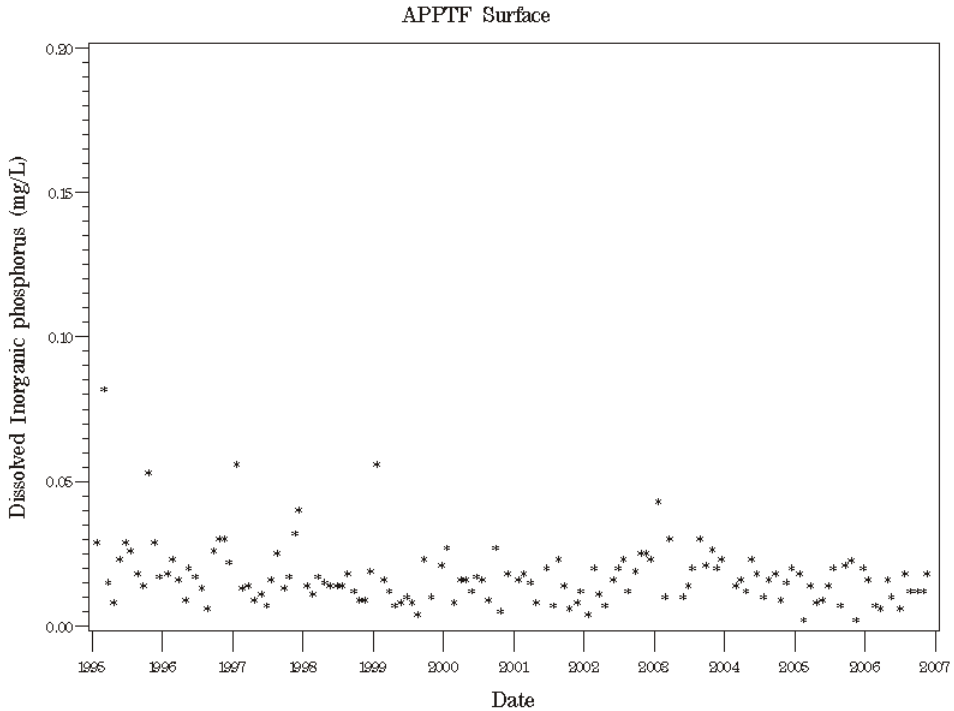

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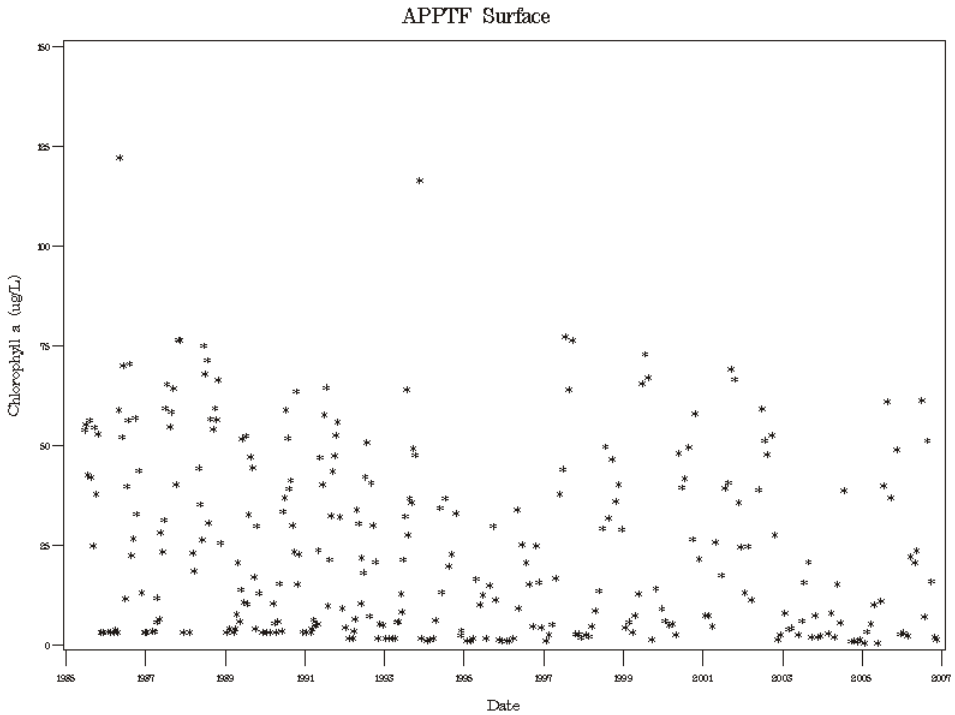

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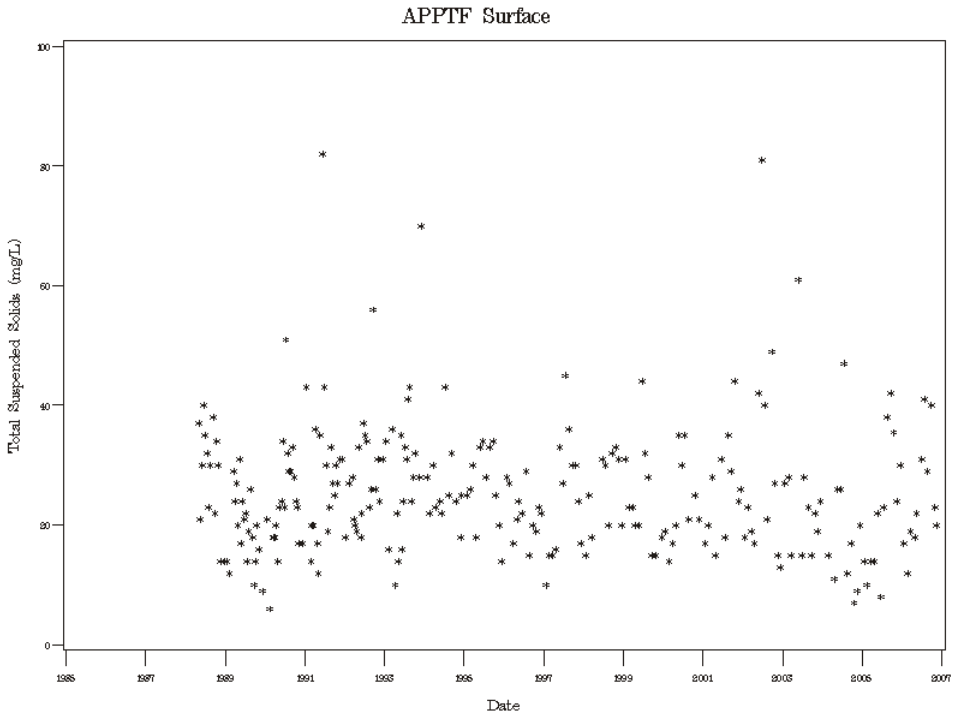

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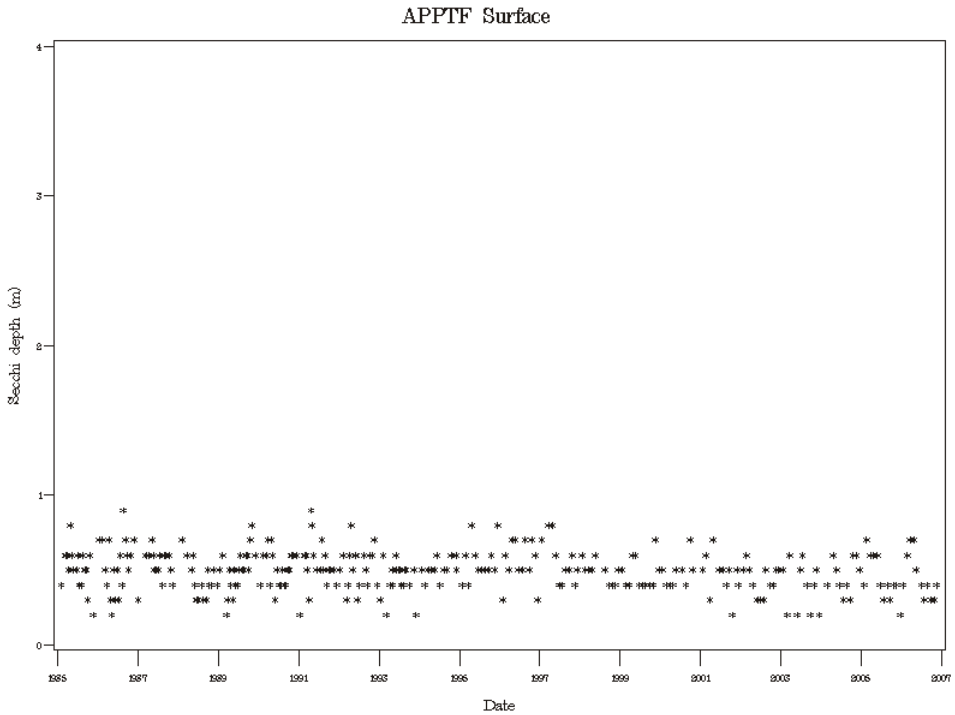

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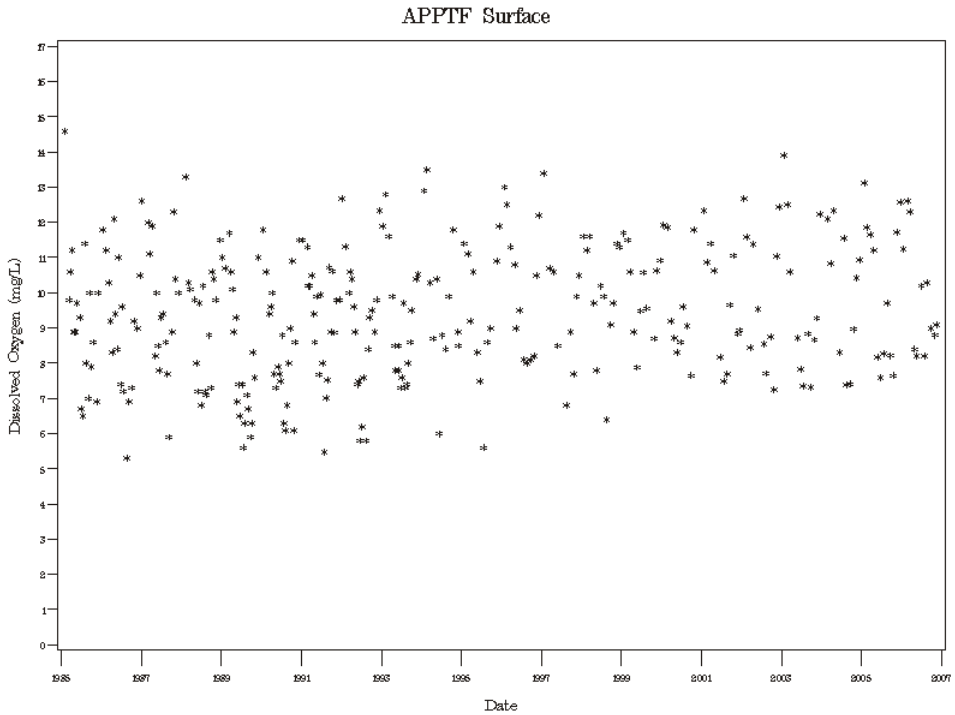

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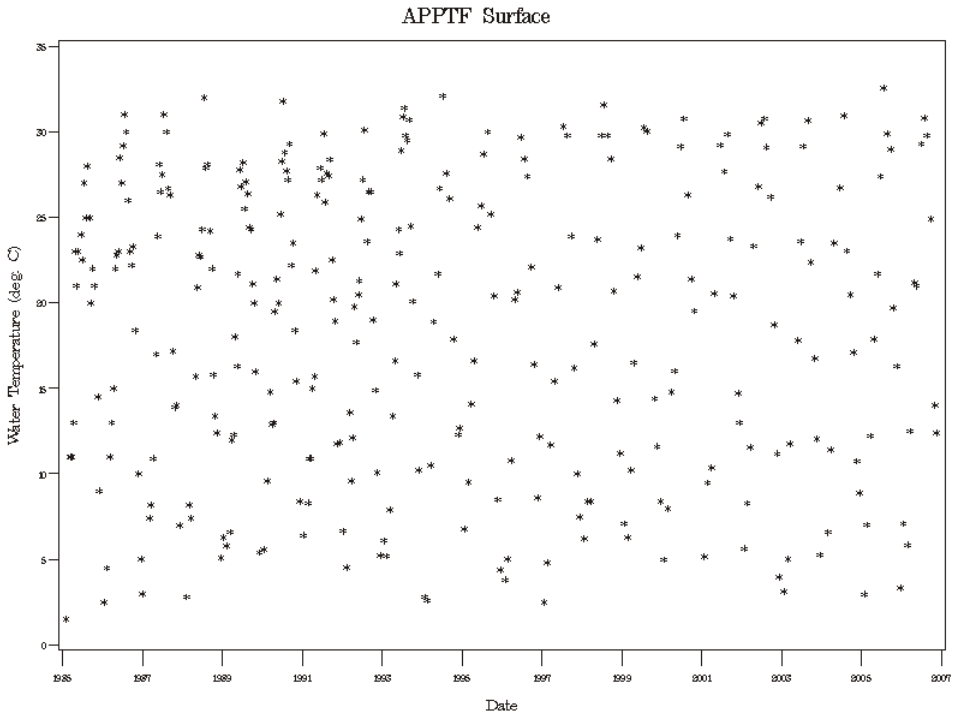

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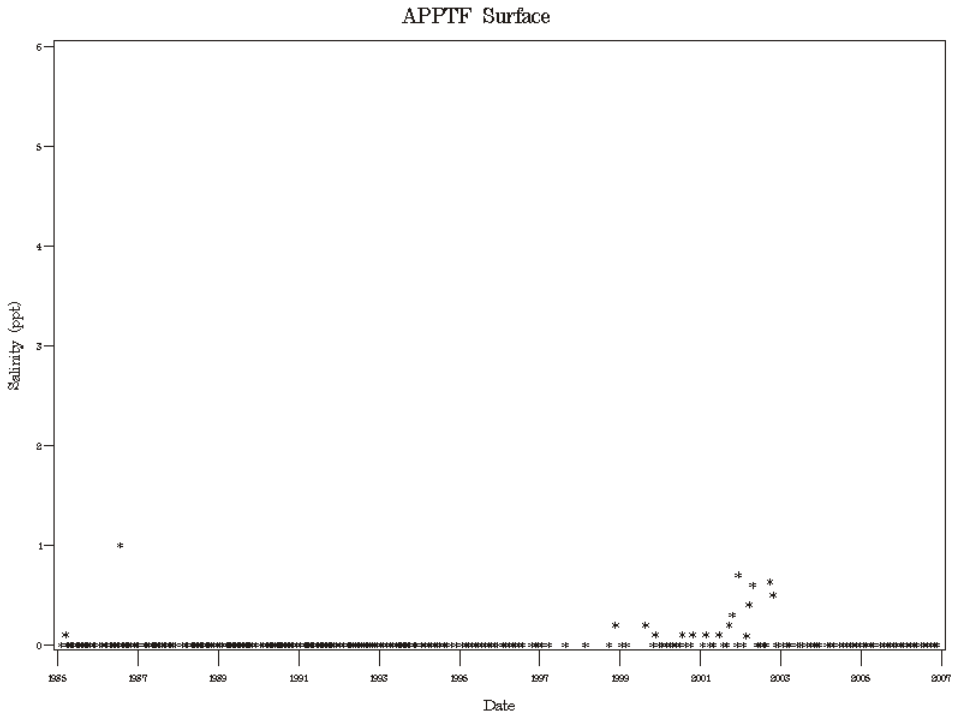

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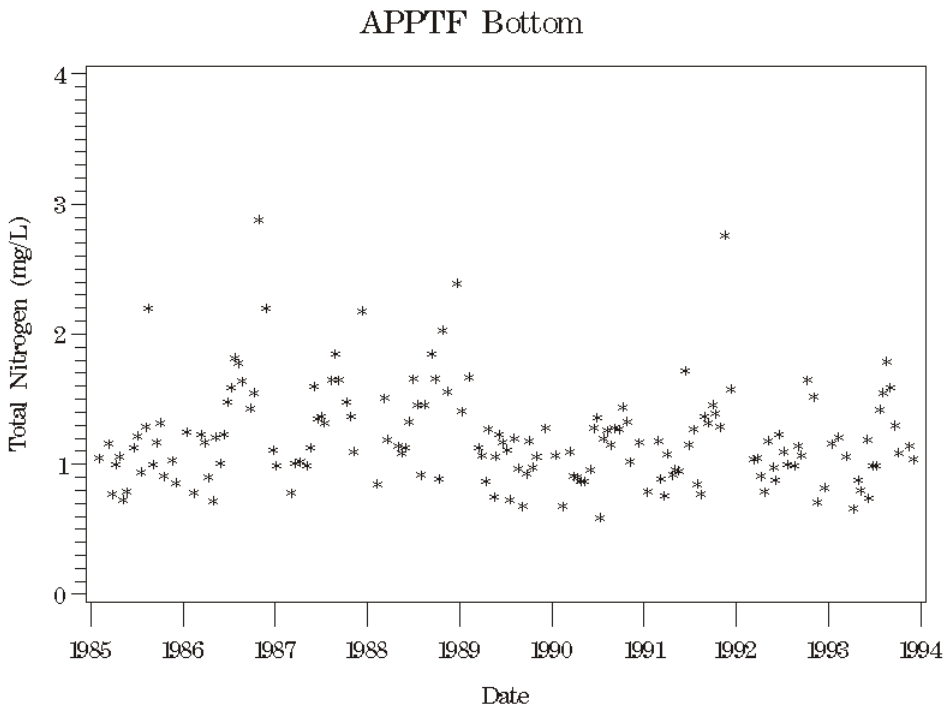

b) Post-method change period

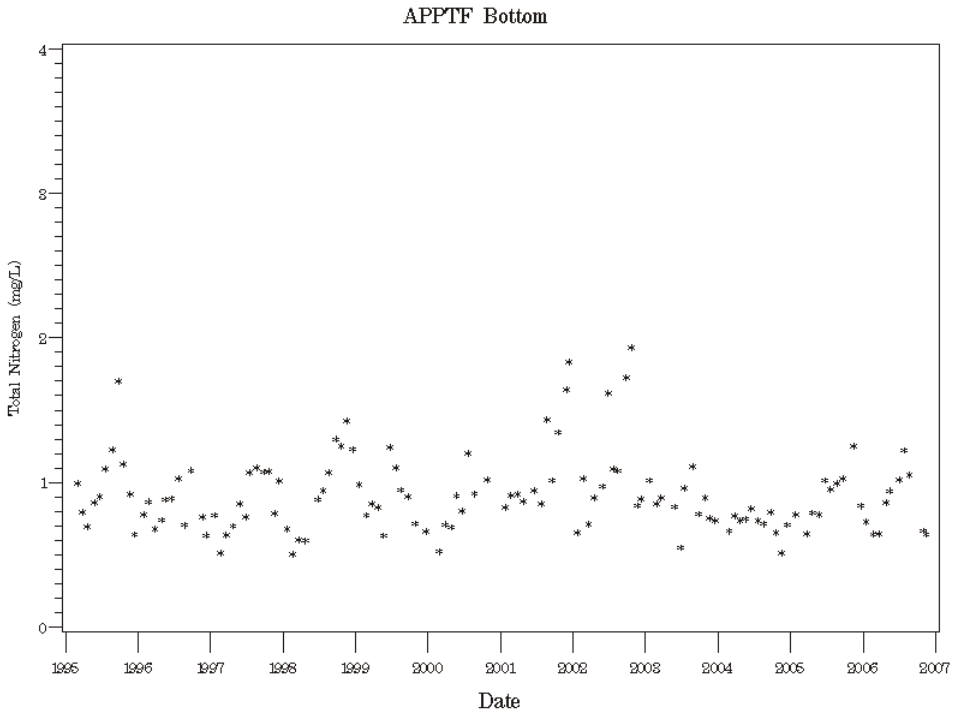

Figure 11. Scatterplots of bottom total nitrogen at segment APPTF during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

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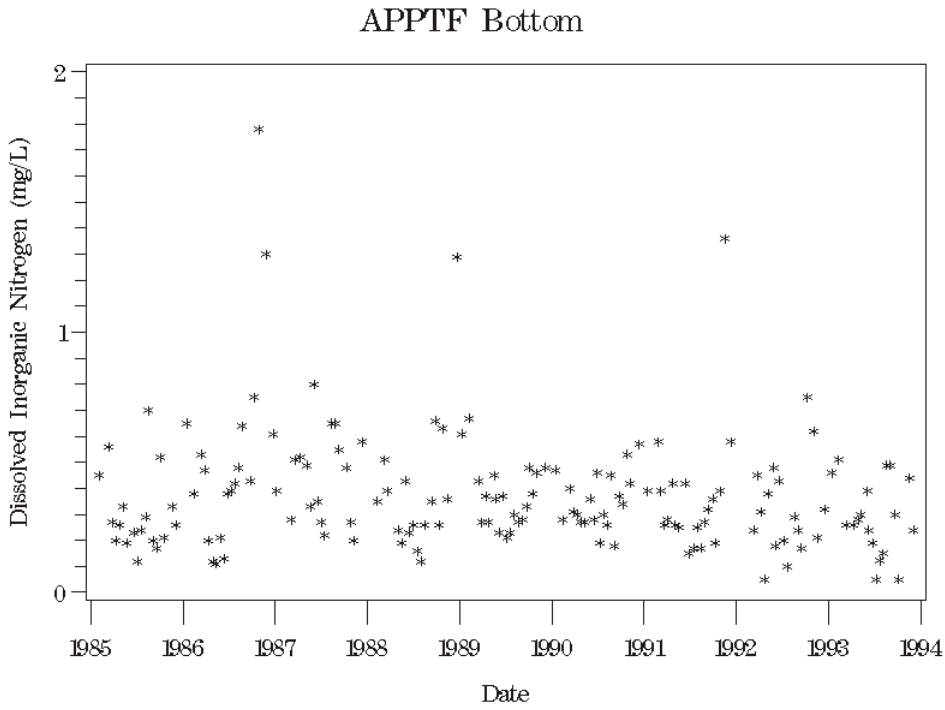
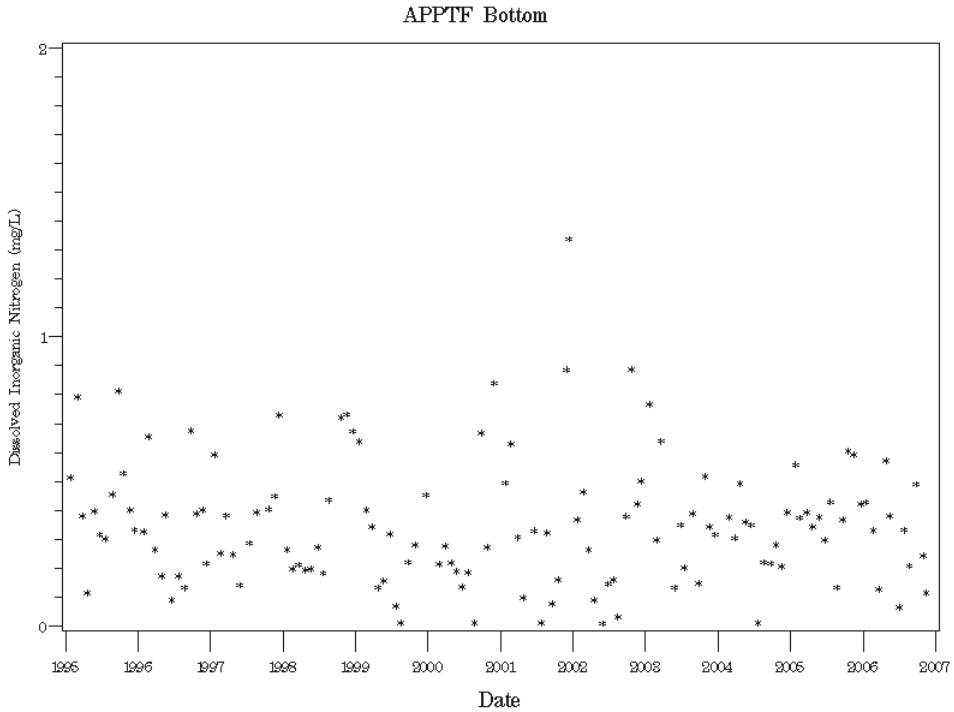


b) Post-method change period



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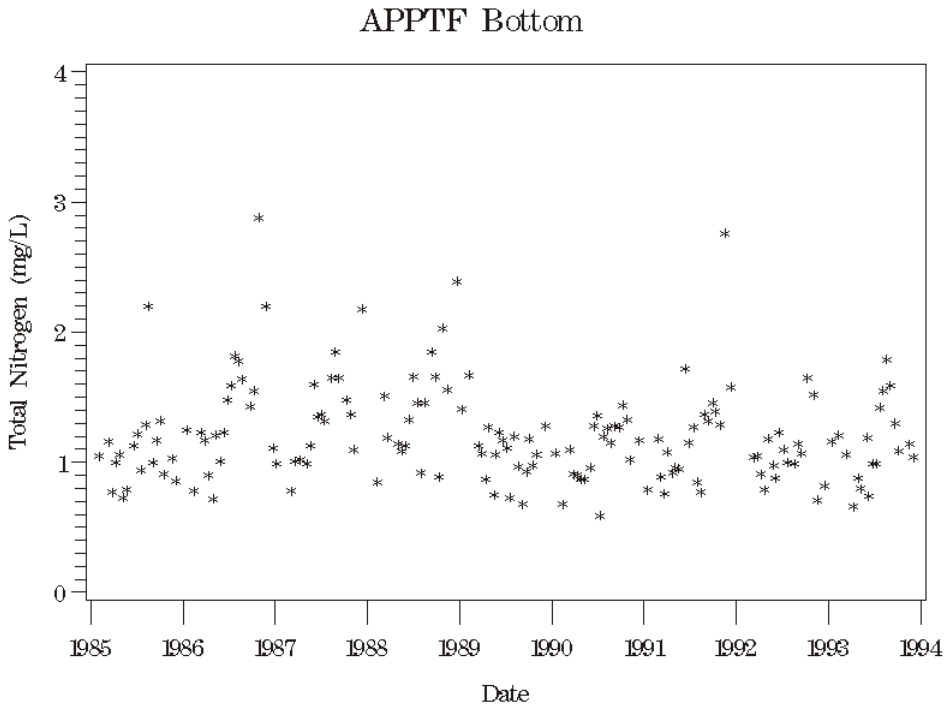
a) Pre-method change period



b) Post-method change period

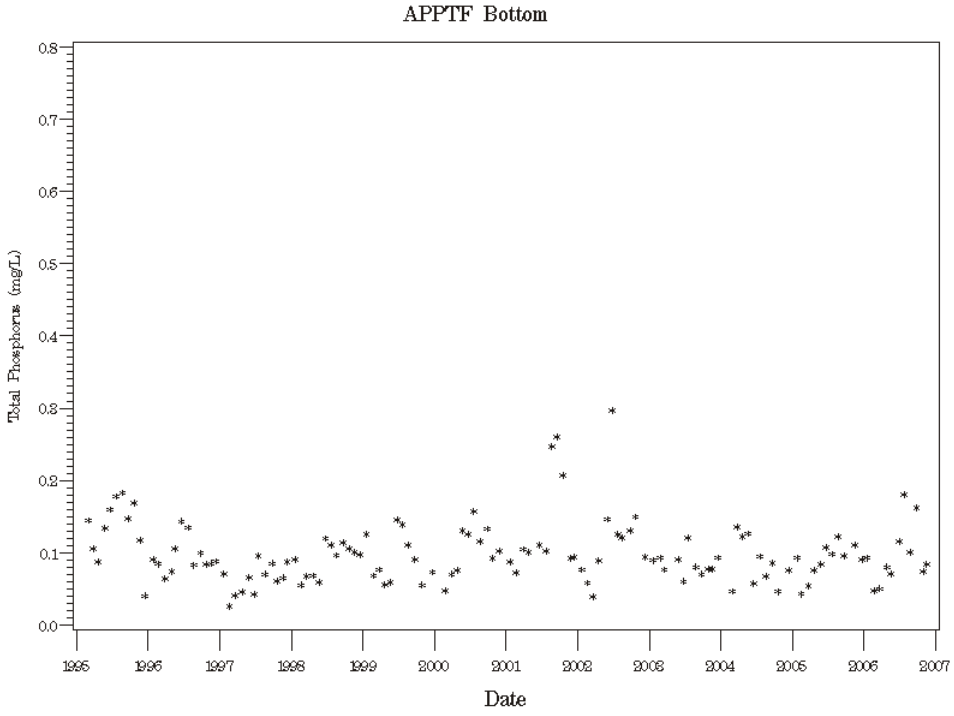
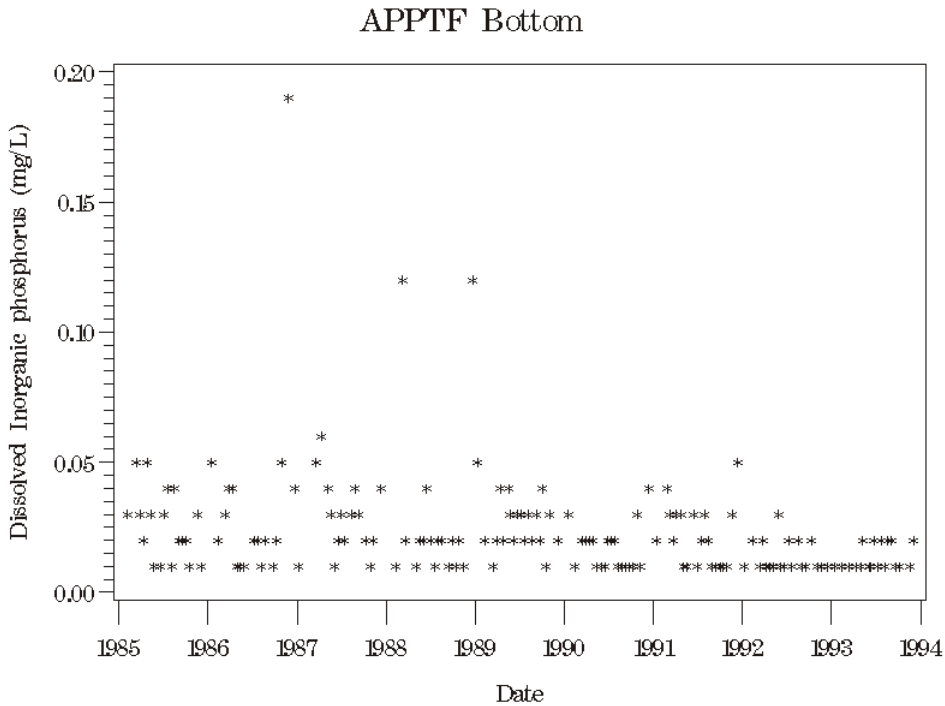


Figure 13. Scatterplots of bottom total phosphorus at segment APPTF during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

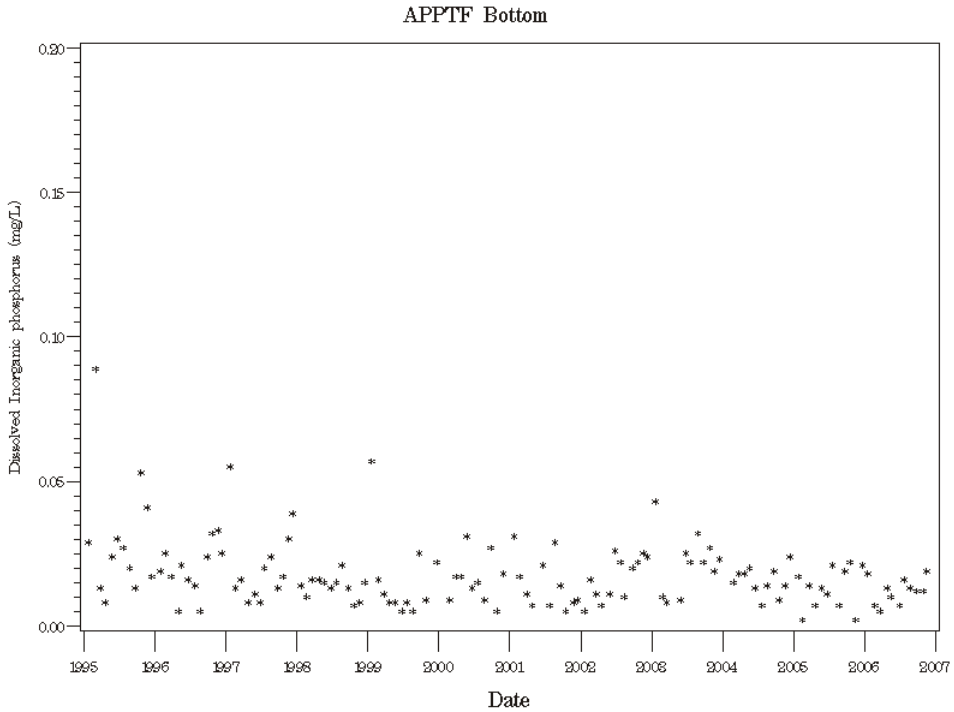


Figure 14. Scatterplots of bottom dissolved inorganic phosphorus at segment APPTF during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

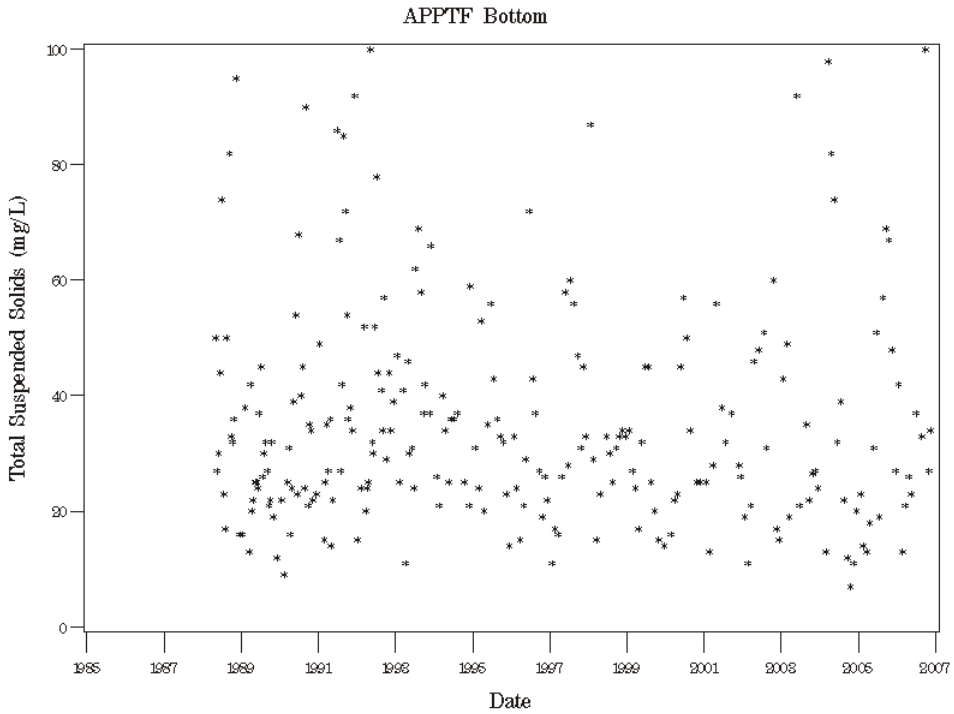


Figure 15. Scatterplot of bottom total suspended solids at segment APPTF during the period 1985 to 2006.

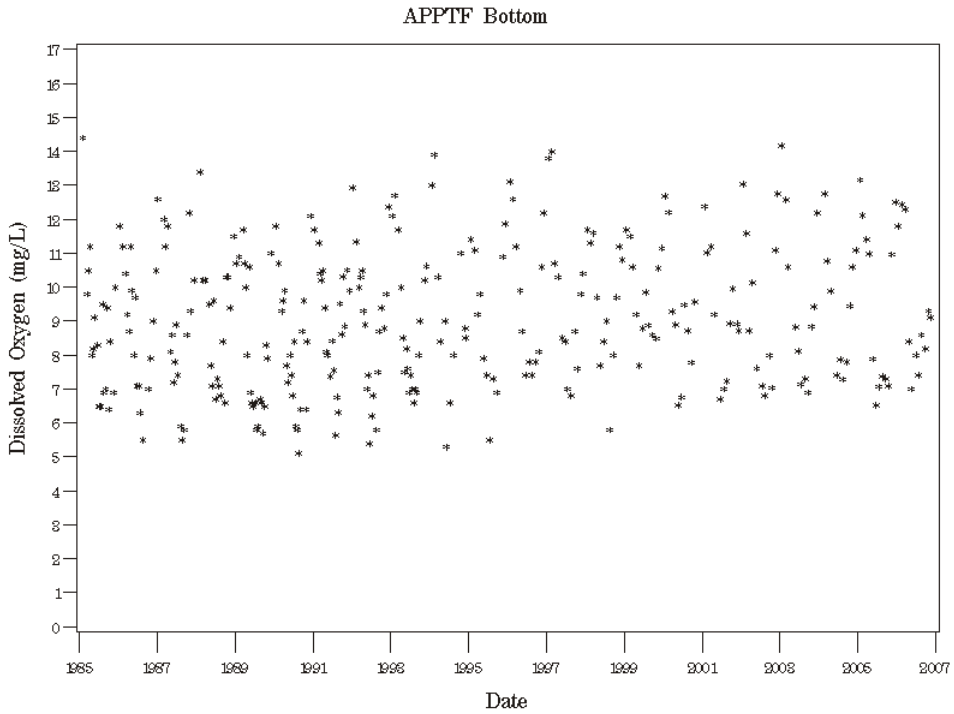


Figure 16. Scatterplot of bottom dissolved oxygen at segment APPTF during the period 1985 to 2006.

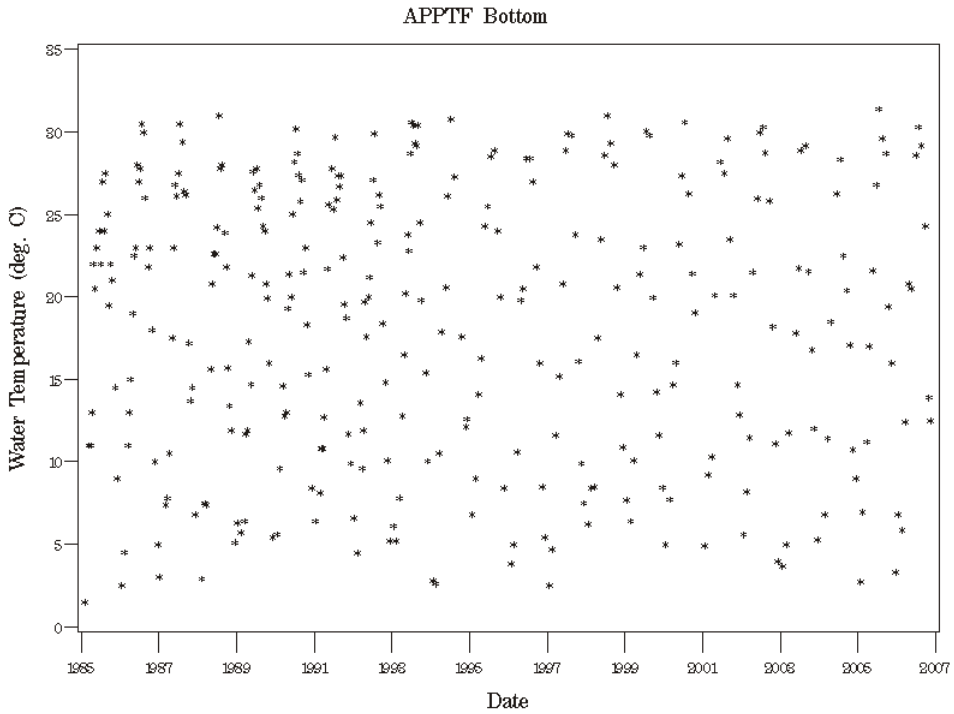


Figure 17. Scatterplot of bottom water temperature at segment APPTF during the period 1985 to 2006.

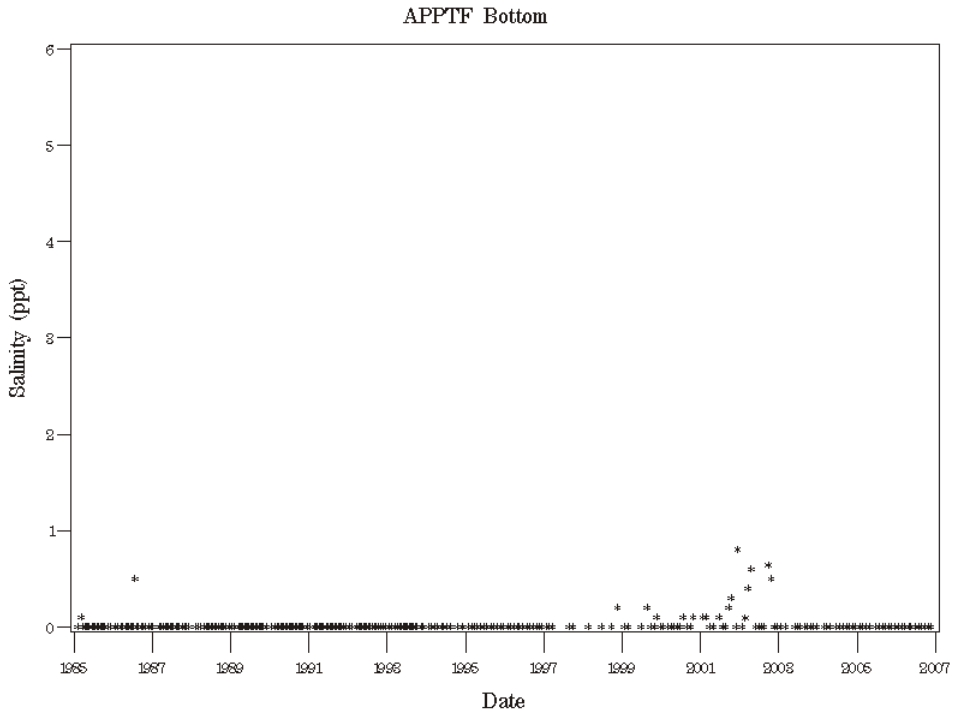
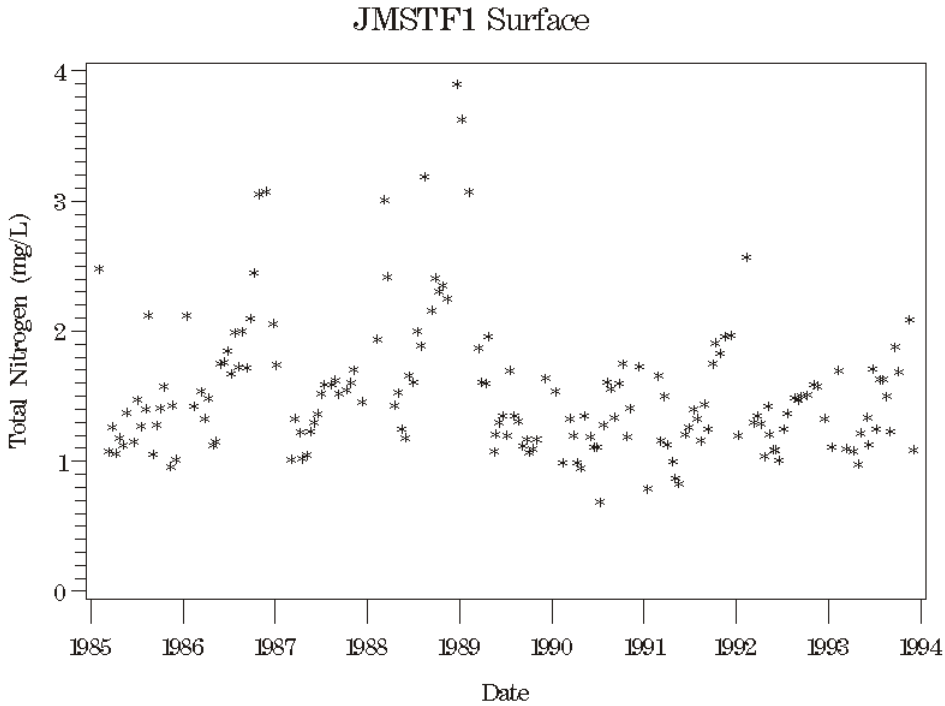


Figure 18. Scatterplot of bottom salinity at segment APPTF during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

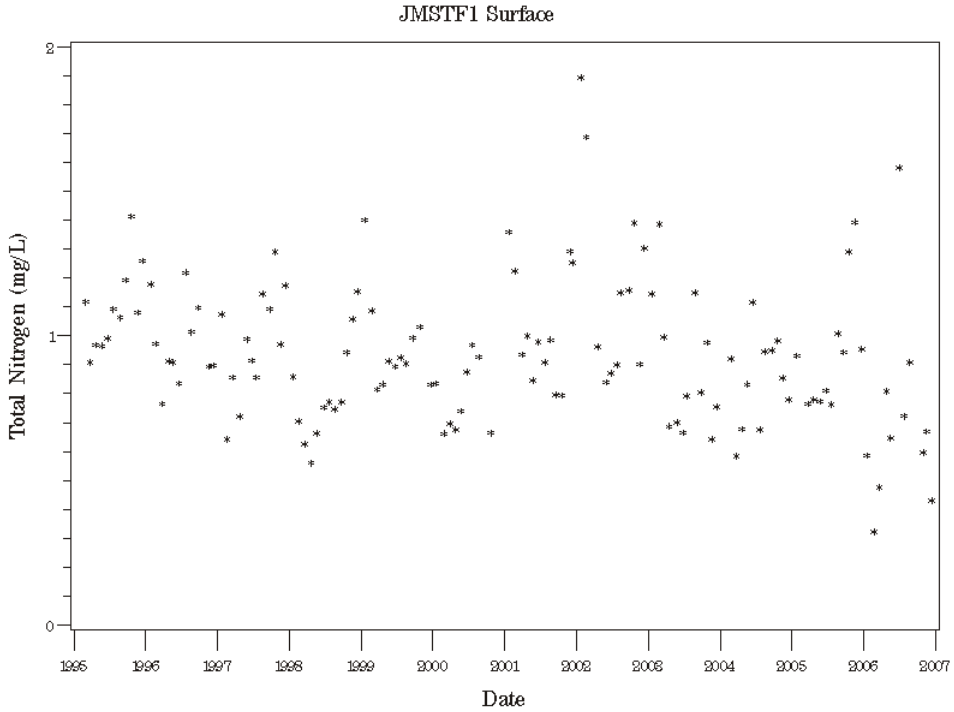
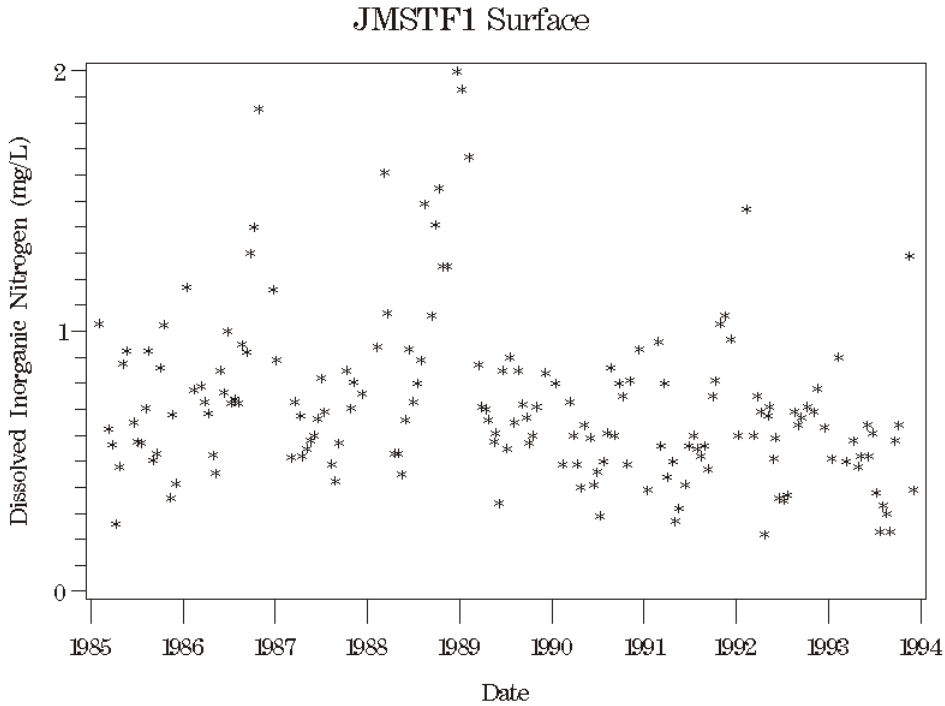


Figure 19. Scatterplots of surface total nitrogen at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

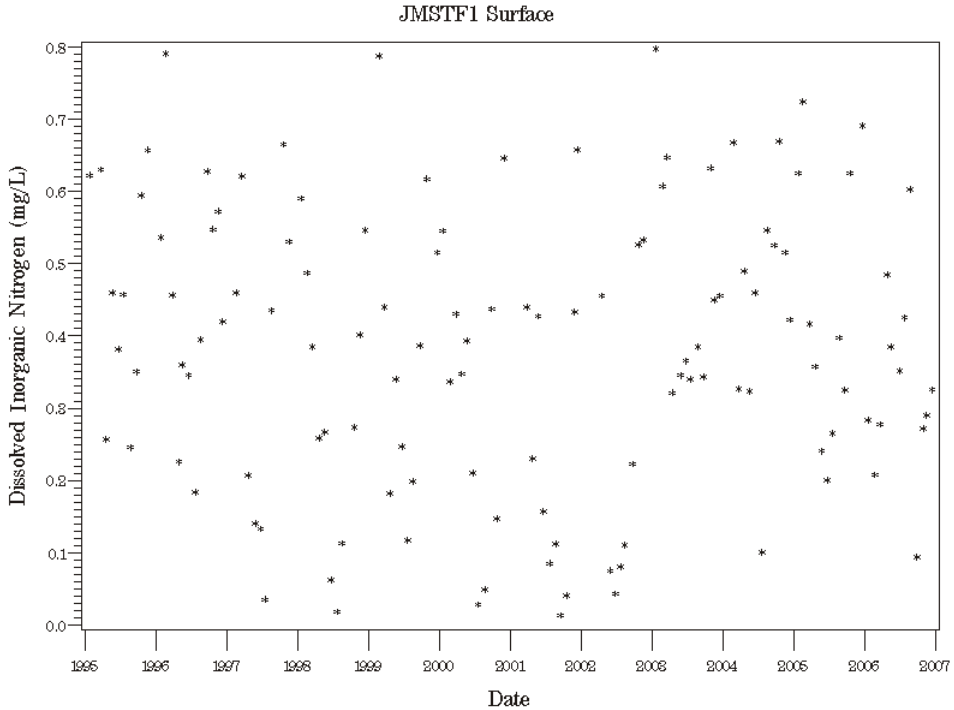
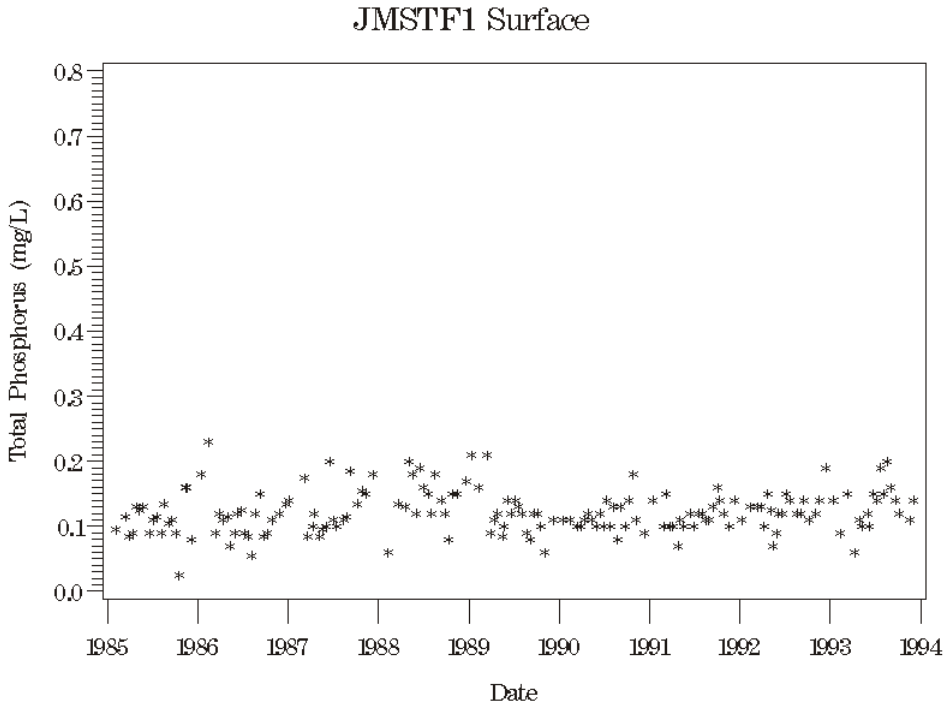


Figure 20. Scatterplots of surface dissolved inorganic nitrogen at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

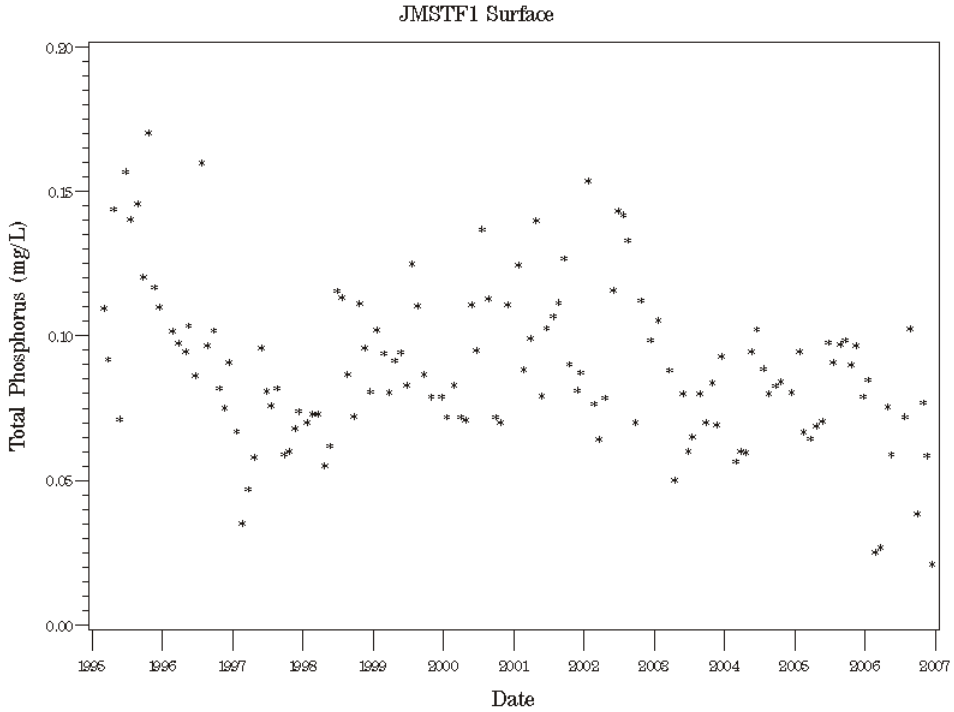
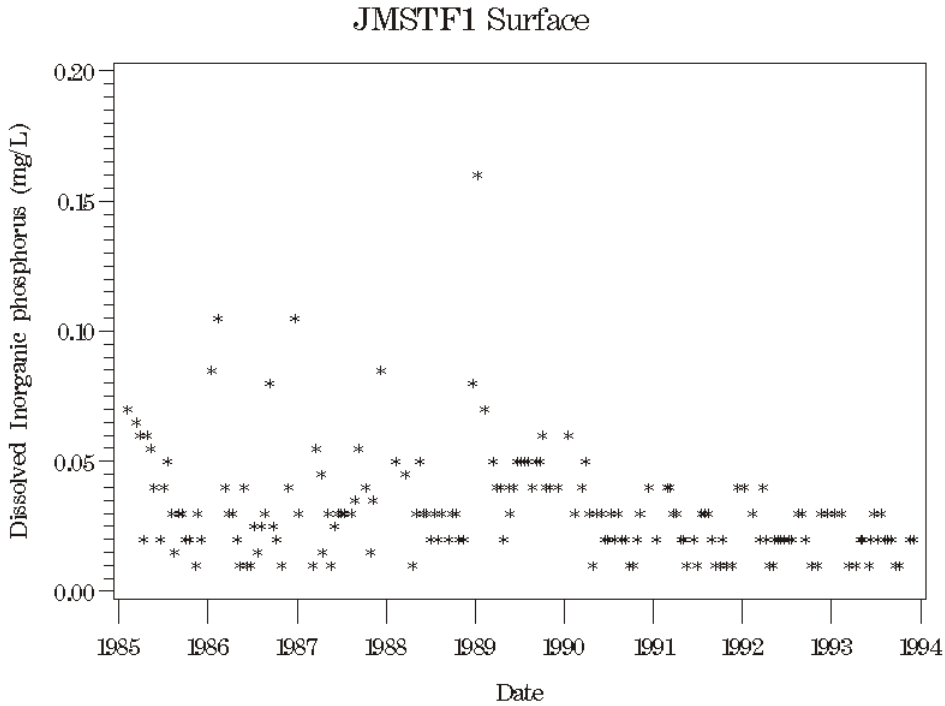


Figure 21. Scatterplots of surface total phosphorus at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

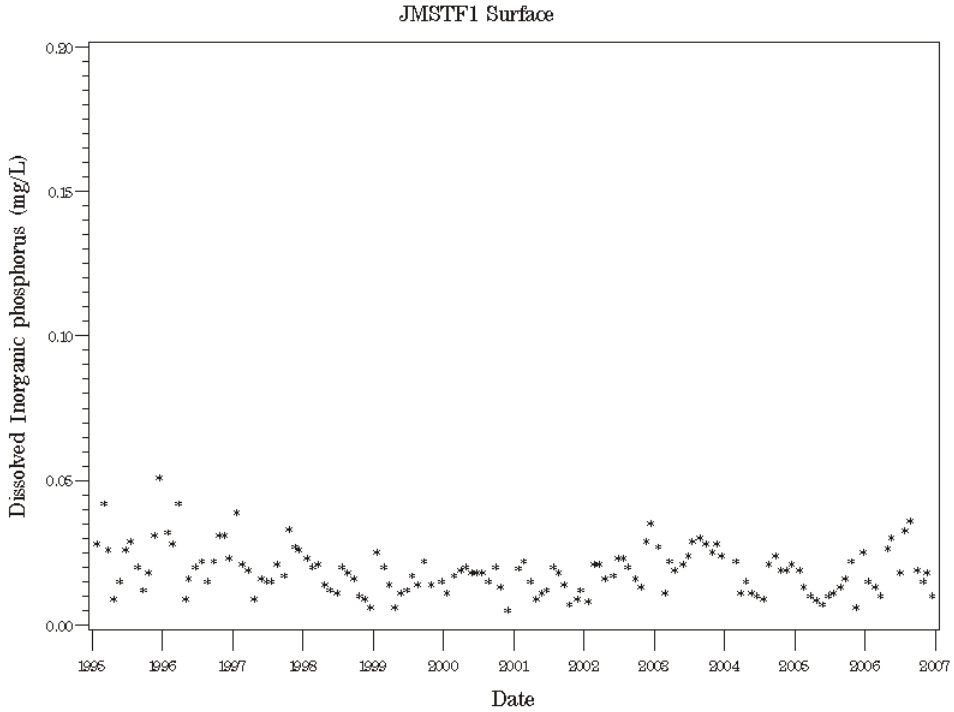


Figure 22. Scatterplots of surface dissolved inorganic phosphorus at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

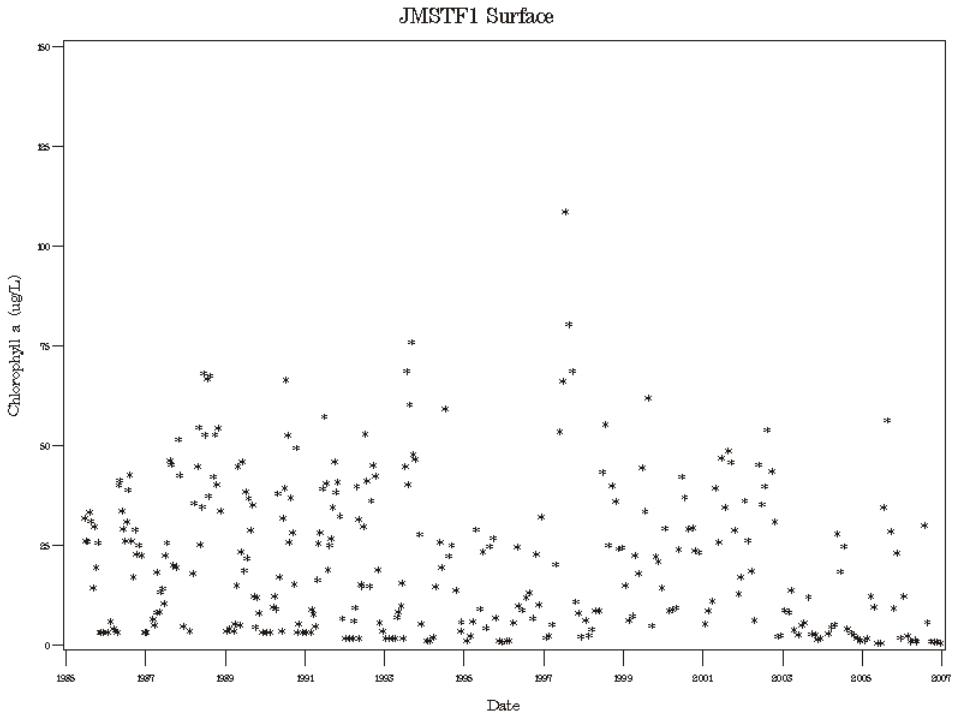


Figure 23. Scatterplot of surface chlorphyll *a* at segment JMSTF1 during the period 1985 to 2006.

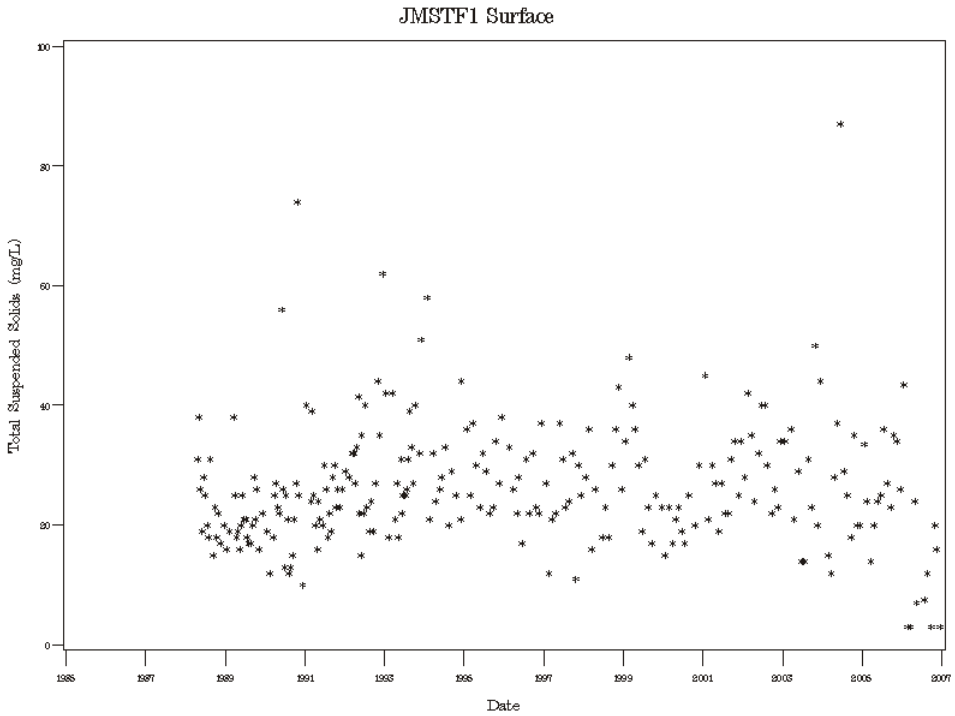


Figure 24. Scatterplot of surface total suspended solids at segment JMSTF1 during the period 1985 to 2006.

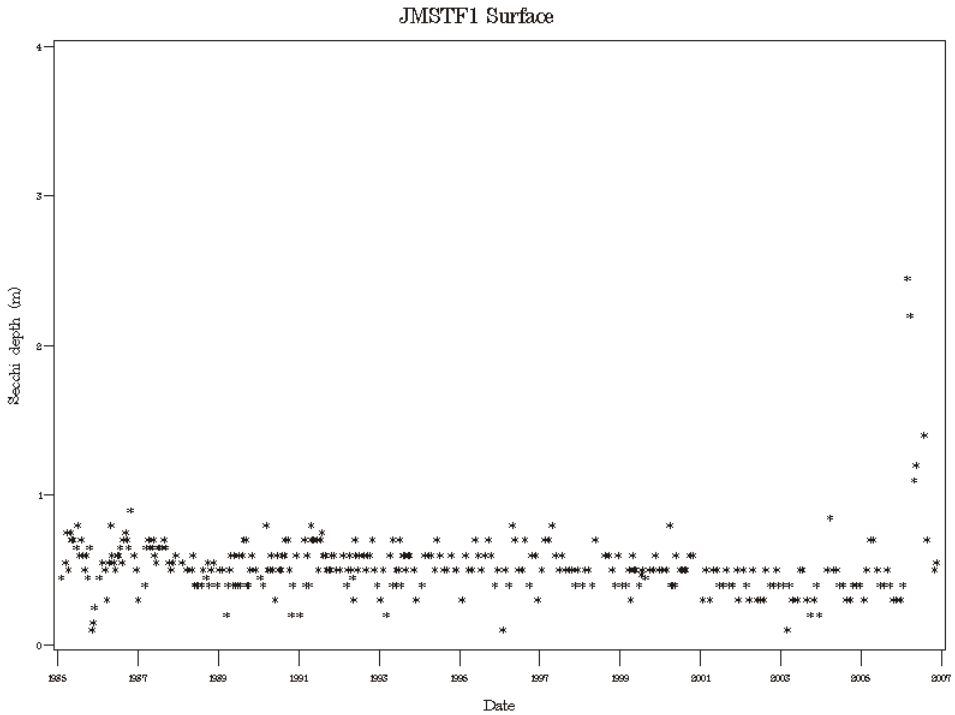


Figure 25. Scatterplot of secchi depth at segment JMSTF1 during the period 1985 to 2006.

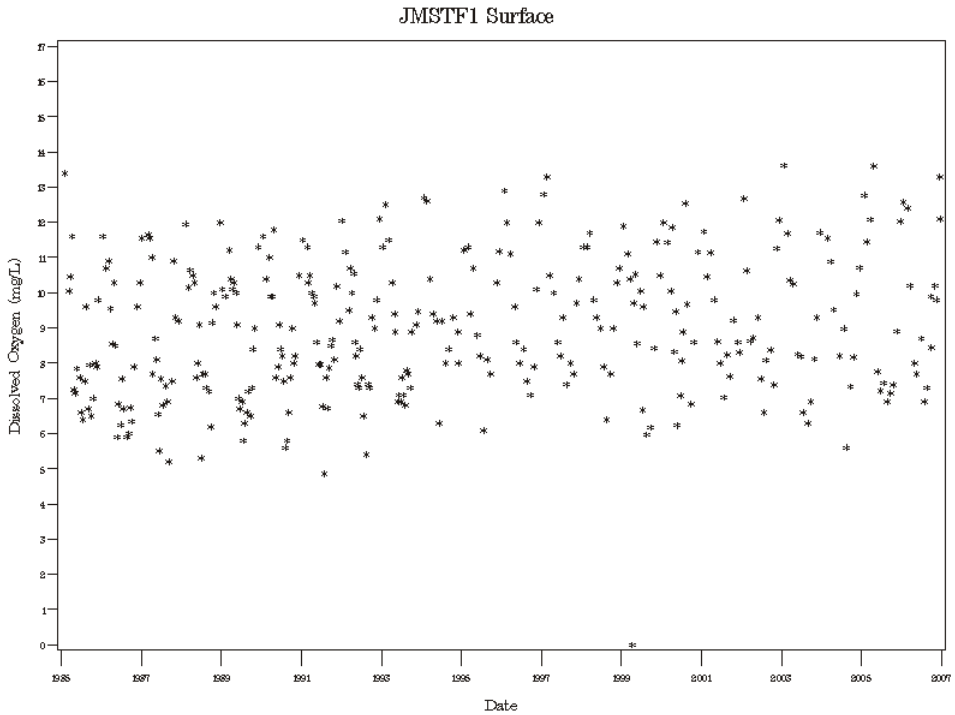


Figure 26. Scatterplot of surface dissolved oxygen at segment JMSTF1 during the period 1985 to 2006.

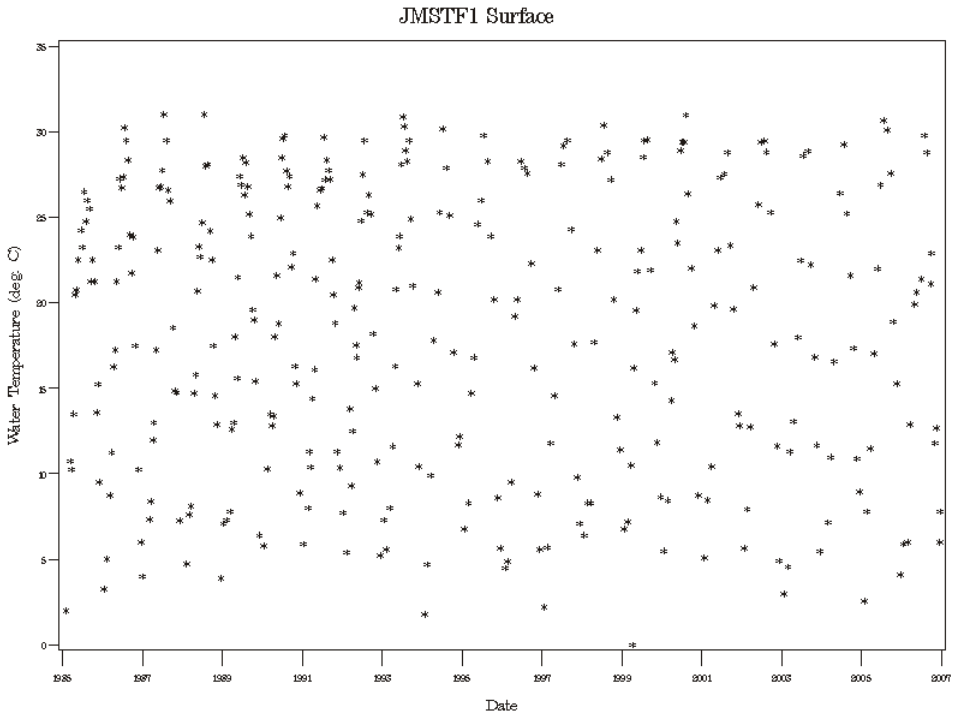


Figure 27. Scatterplot of surface water temperature at segment JMSTF1 during the period 1985 to 2006.

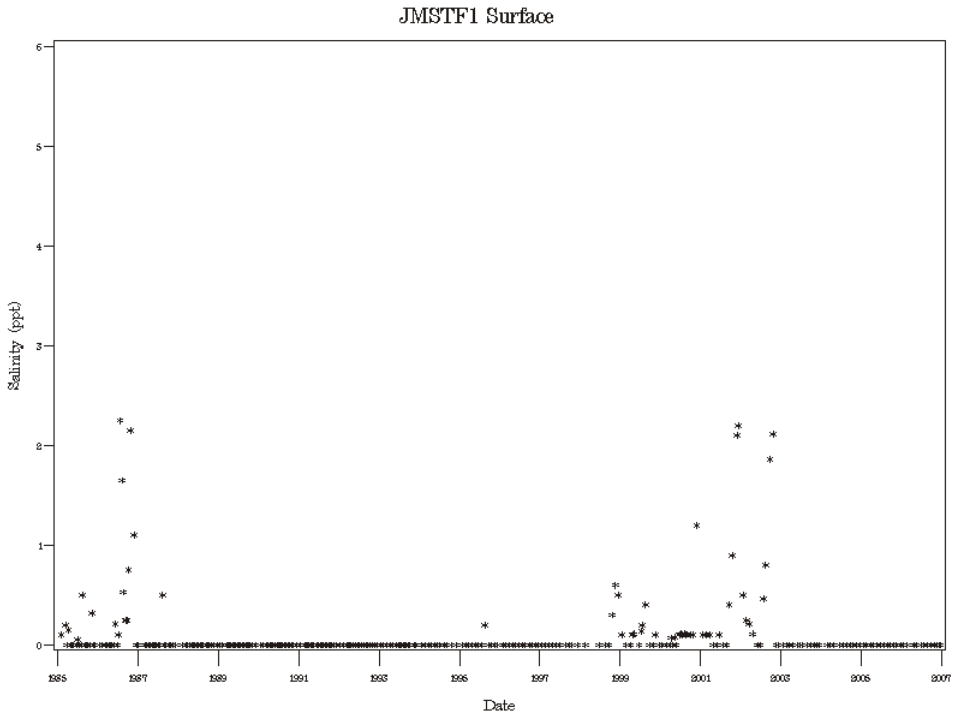
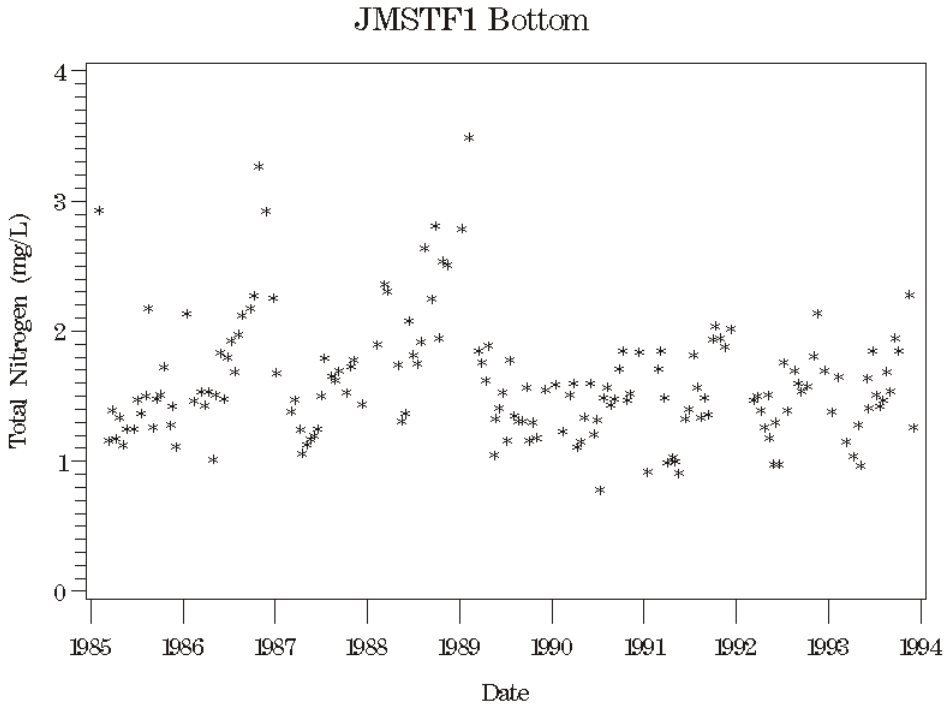


Figure 28. Scatterplot of surface salinity at segment JMSTF1 during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

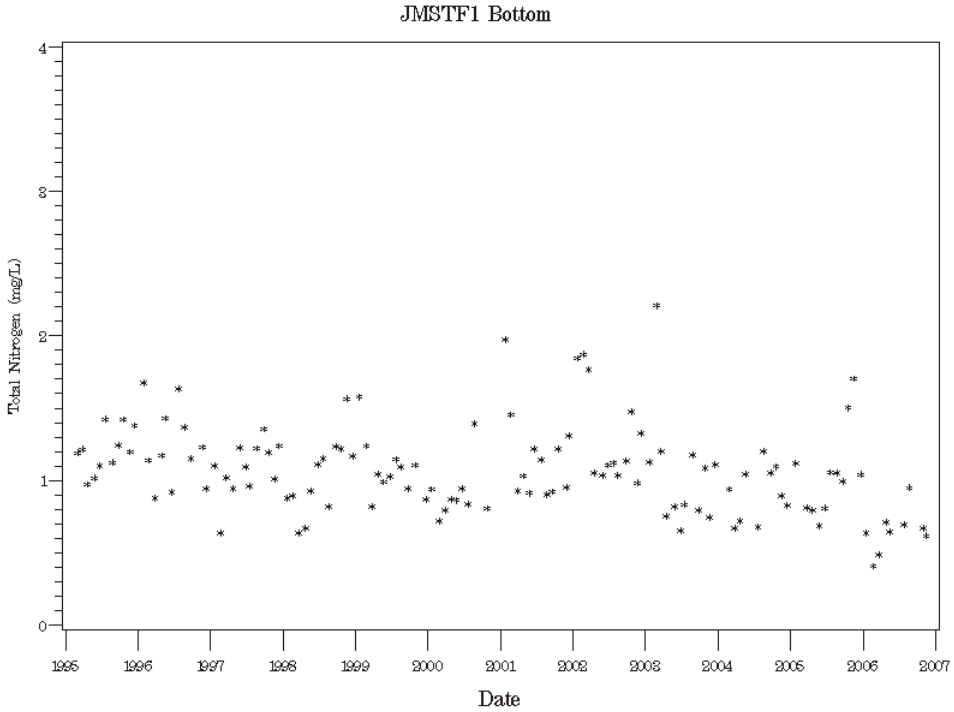
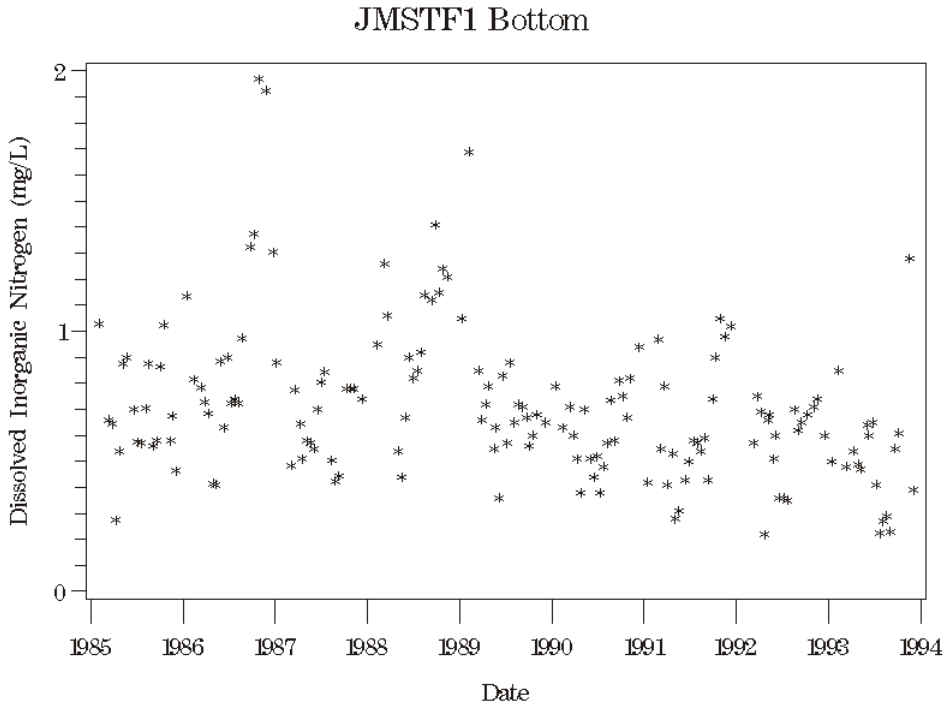


Figure 29. Scatterplots of bottom total nitrogen at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

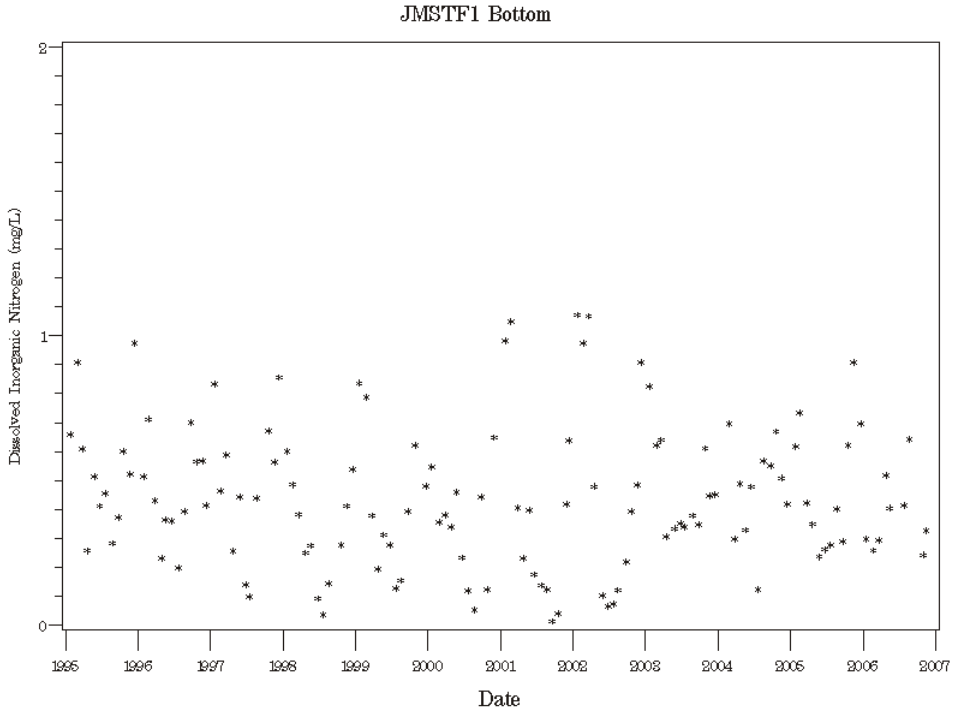
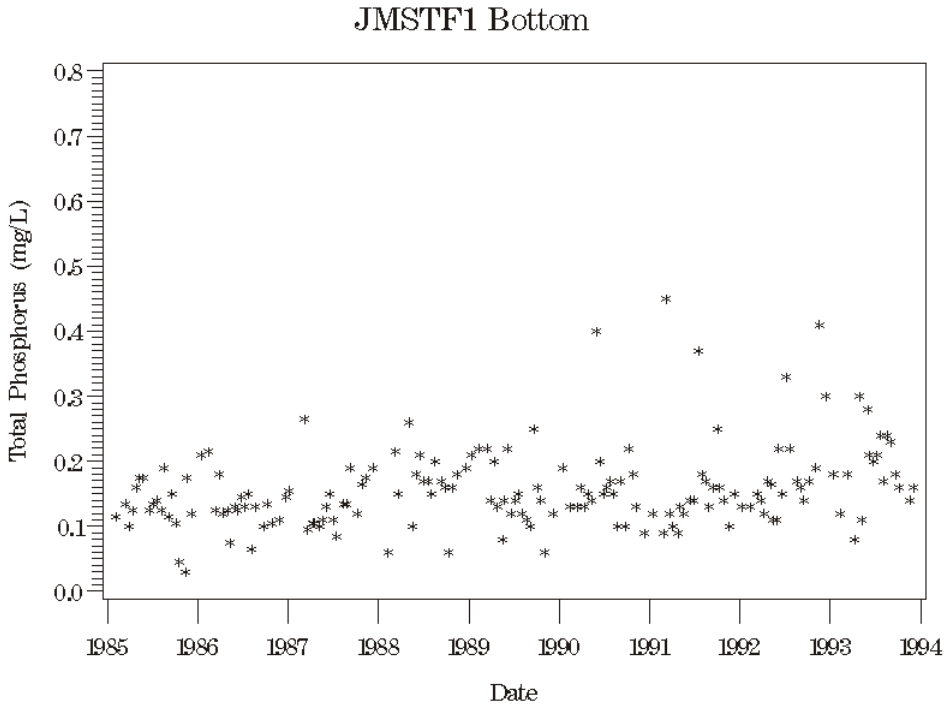


Figure 30. Scatterplots of bottom dissolved inorganic nitrogen at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

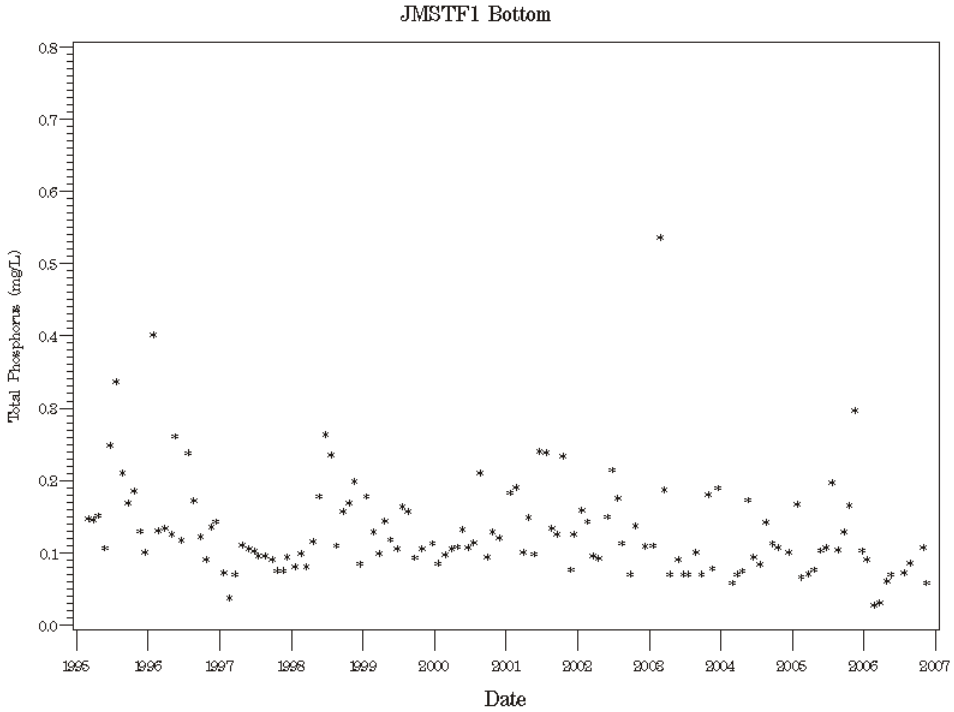
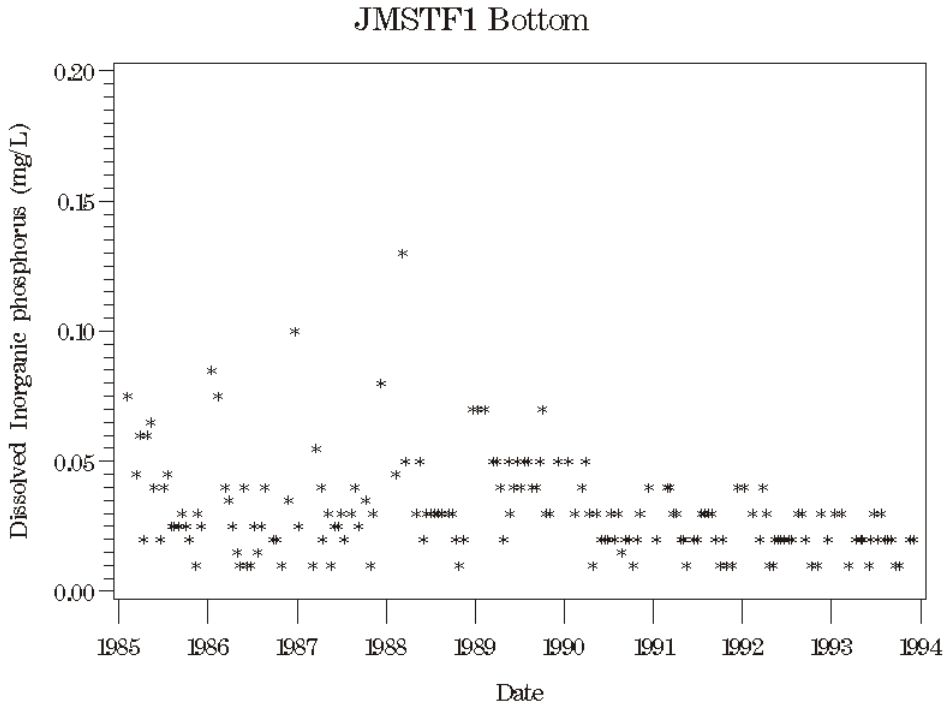


Figure 31. Scatterplots of bottom total phosphorus at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

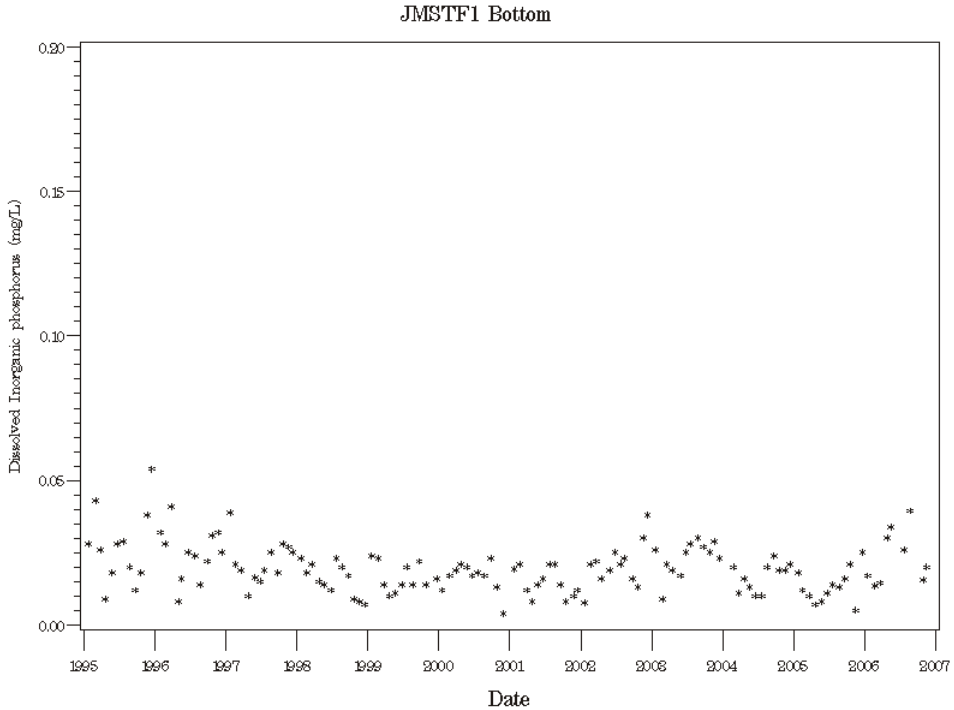


Figure 32. Scatterplots of bottom dissolved inorganic phosphorus at segment JMSTF1 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

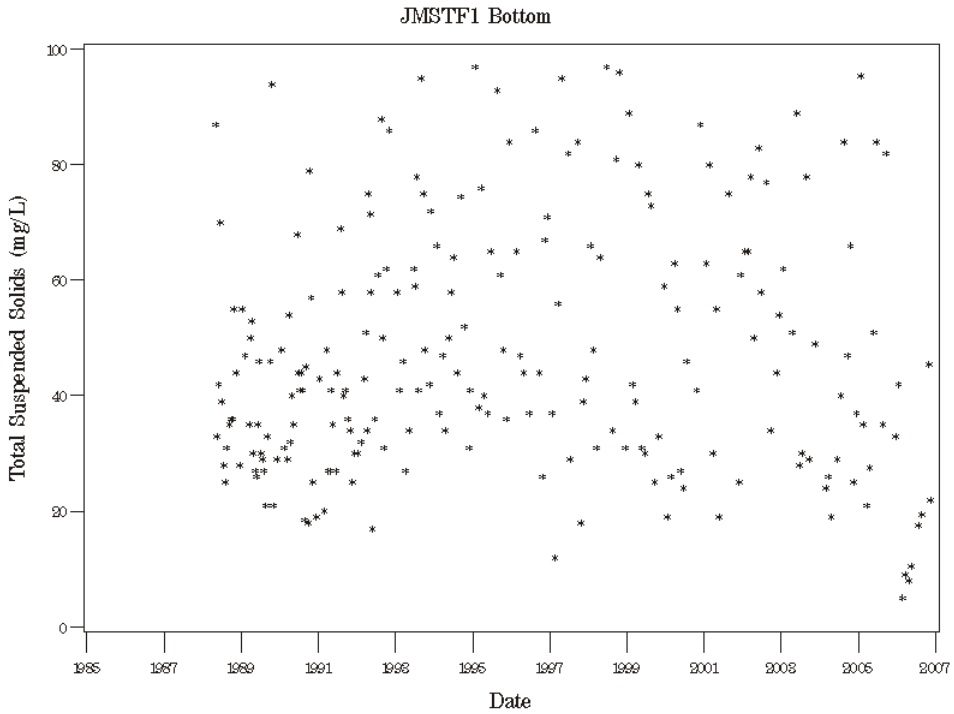


Figure 33. Scatterplot of bottom total suspended solids at segment JMSTF1 during the period 1985 to 2006.

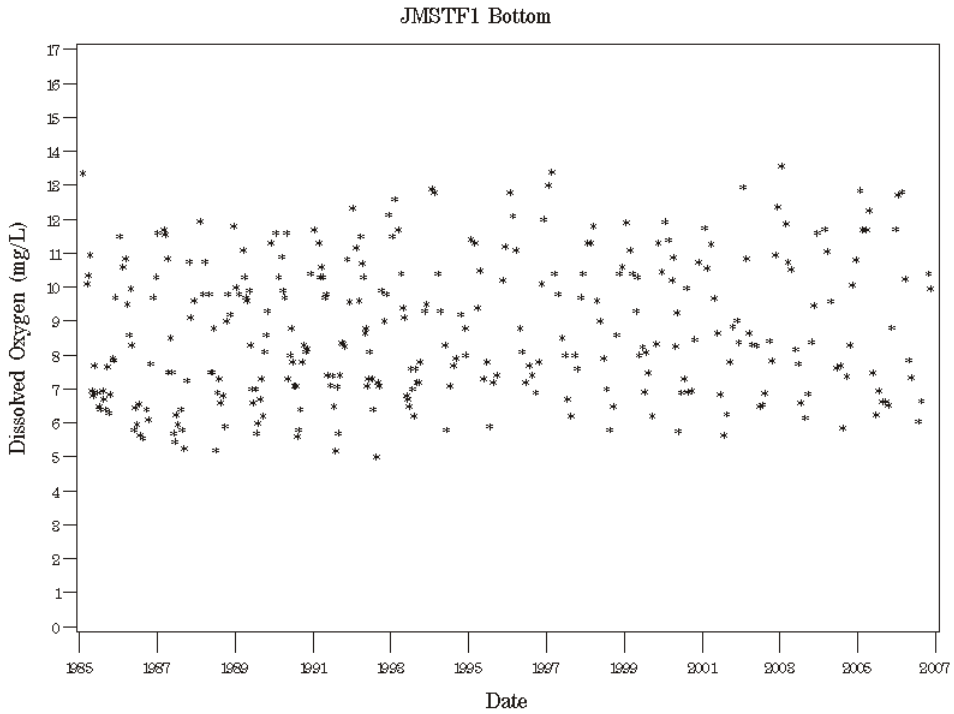


Figure 34. Scatterplot of bottom dissolved oxygen at segment JMSTF1 during the period 1985 to 2006.

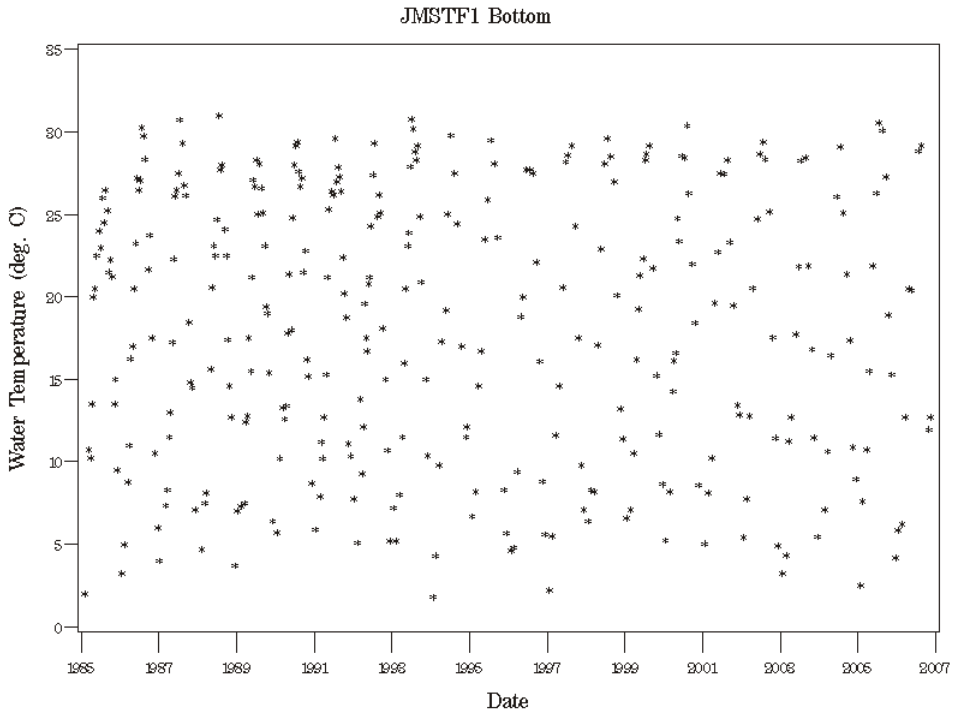


Figure 35. Scatterplot of bottom water temperature at segment JMSTF1 during the period 1985 to 2006.

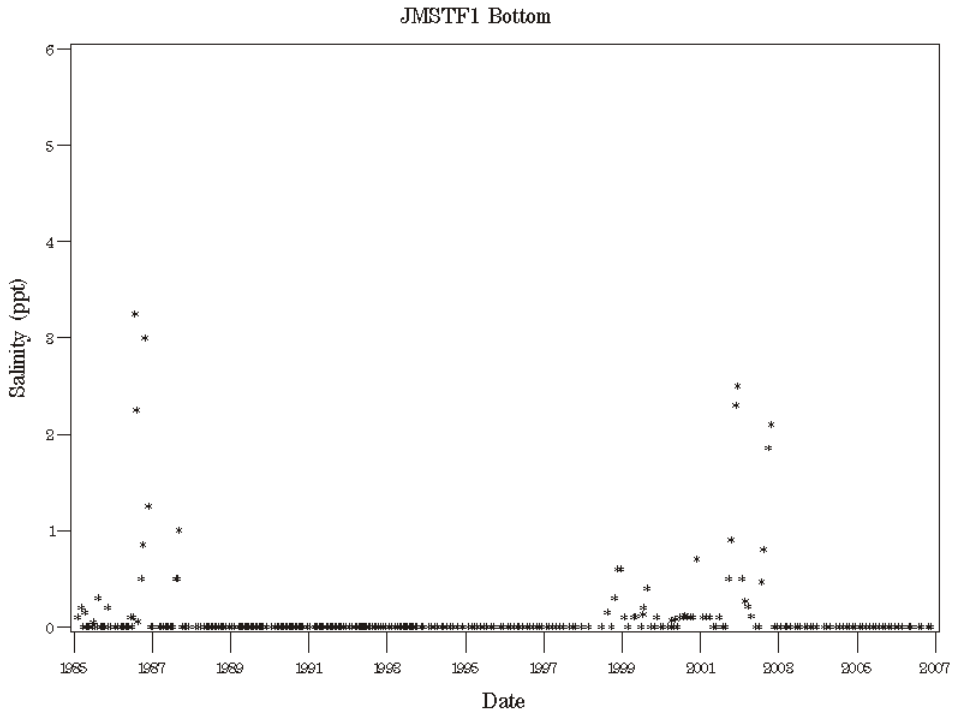
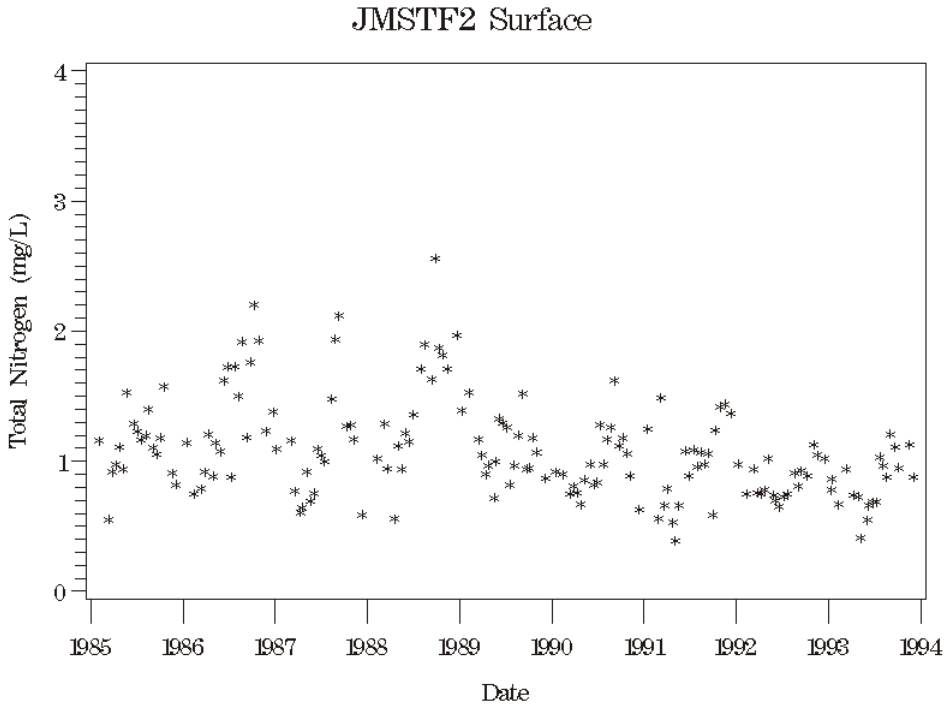


Figure 36. Scatterplot of bottom salinity at segment JMSTF1 during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

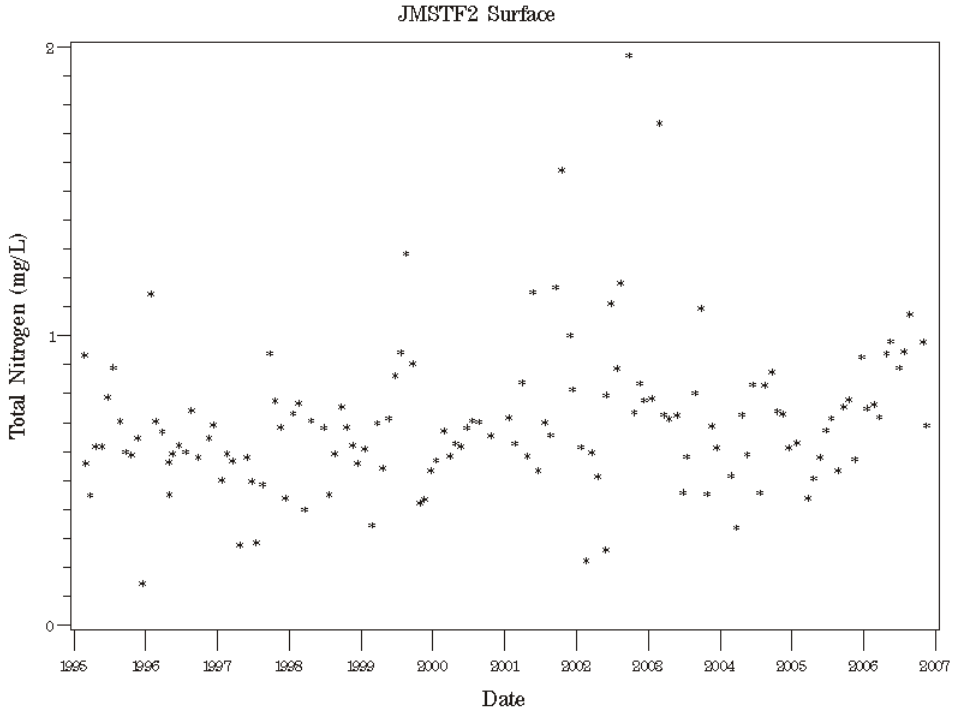
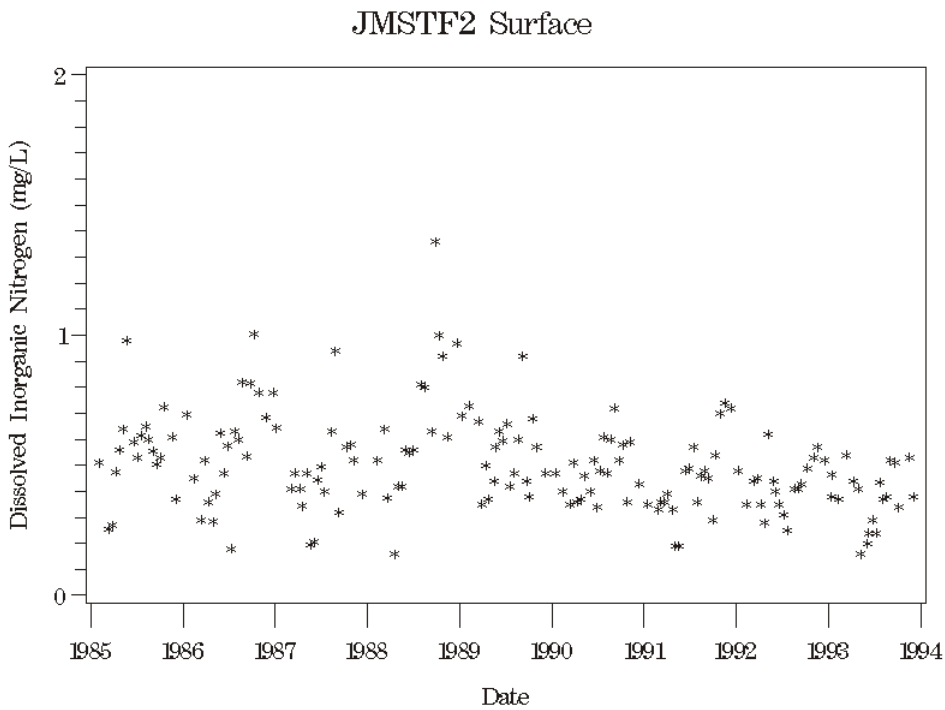
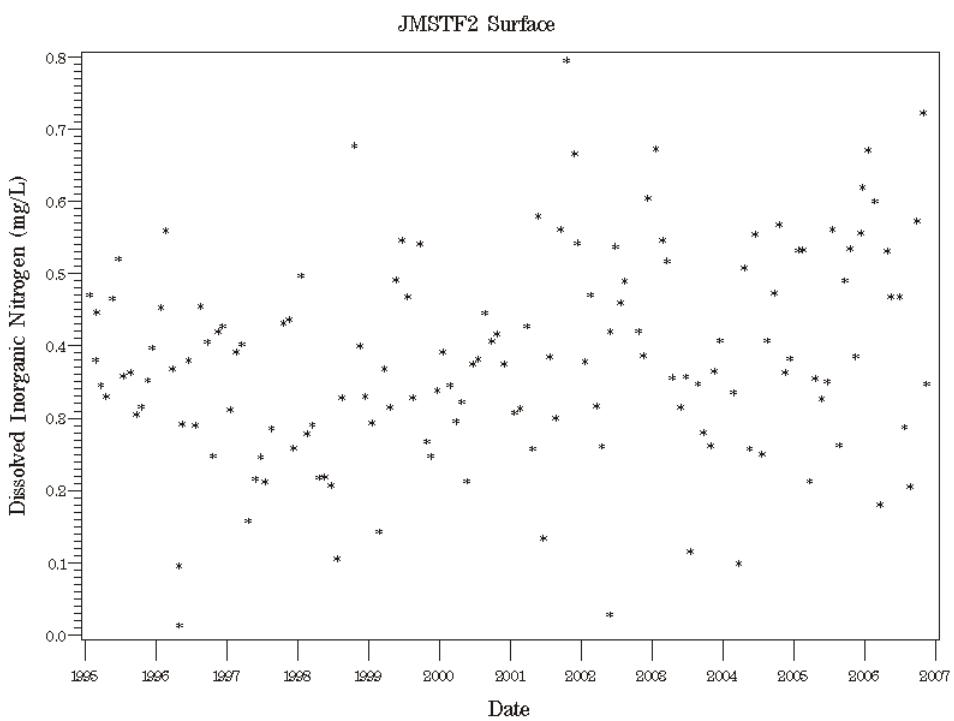


Figure 37. Scatterplots of surface total nitrogen at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

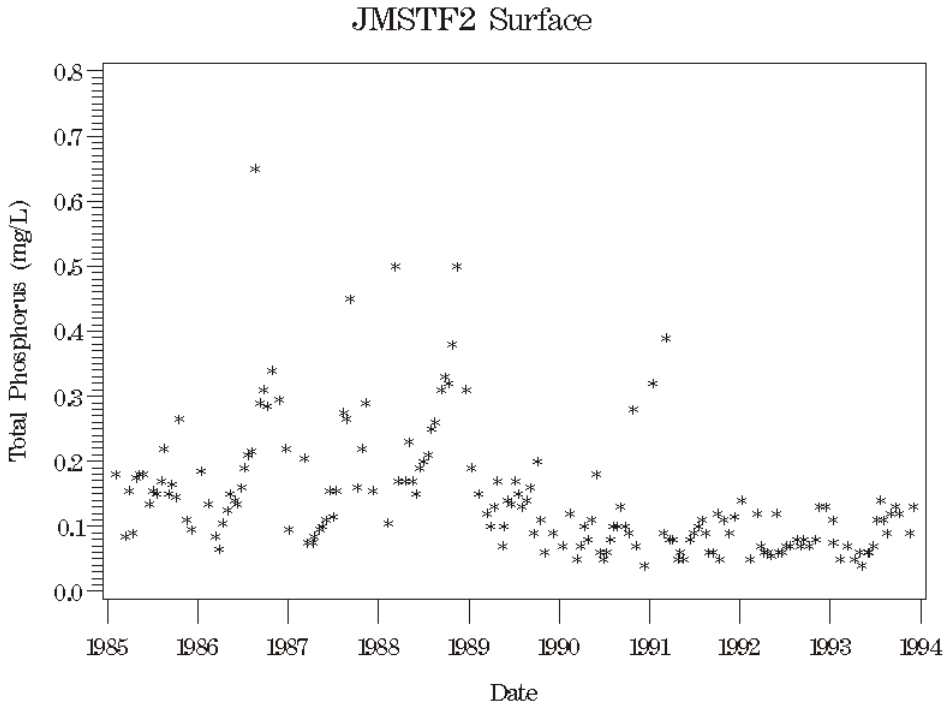
a) Pre-method change period



b) Post-method change period



a) Pre-method change period



b) Post-method change period

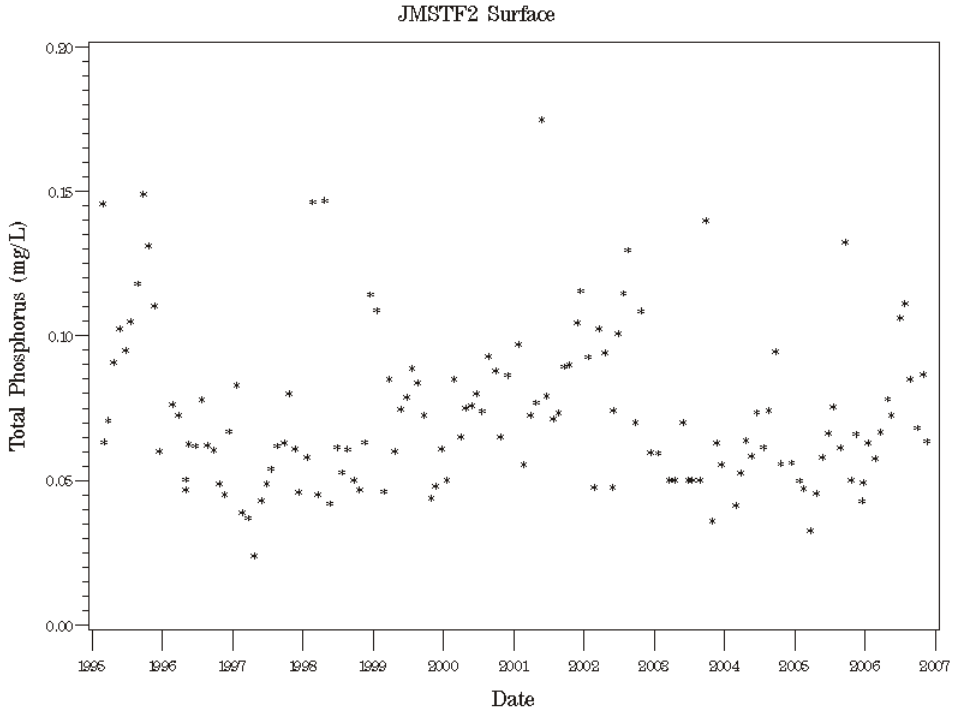
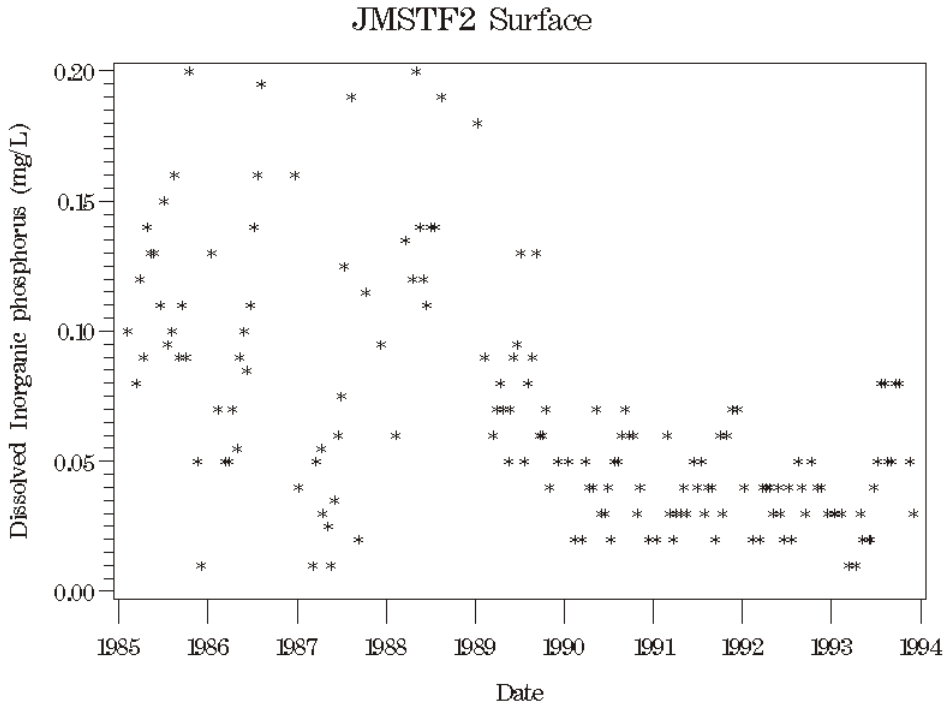


Figure 39. Scatterplots of surface total phosphorus at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

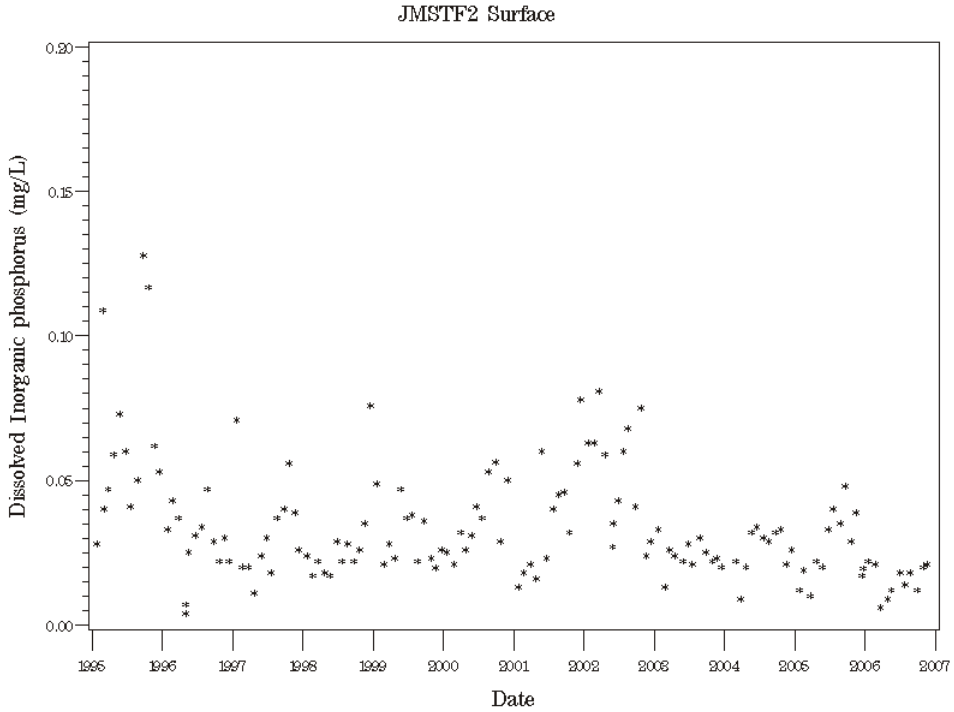


Figure 40. Scatterplots of surface dissolved inorganic phosphorus at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

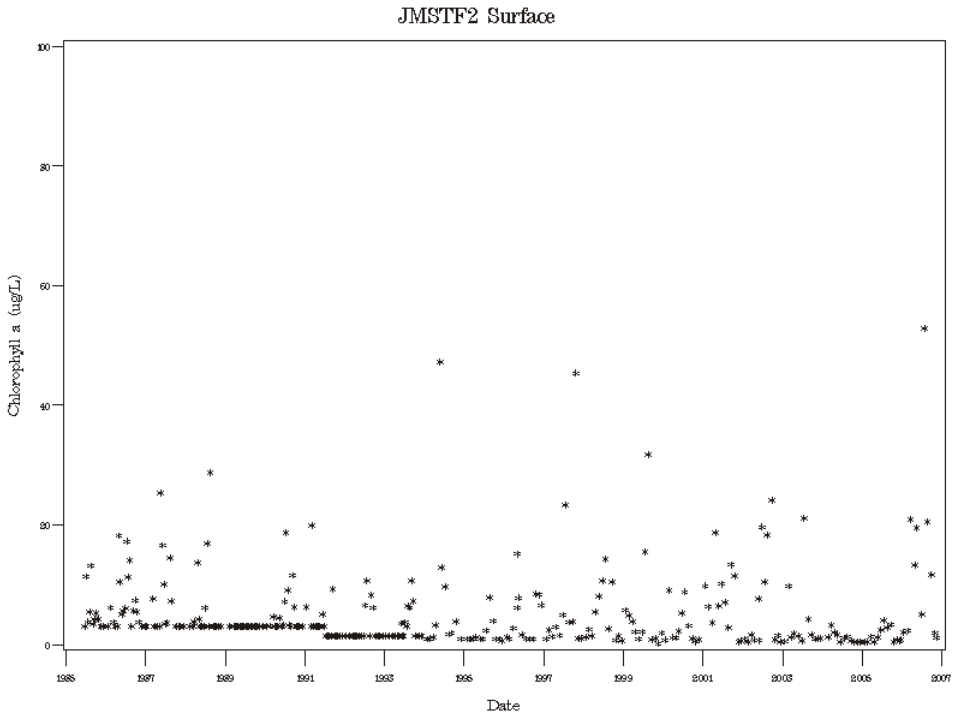


Figure 41. Scatterplot of surface chlorphyll *a* at segment JMSTF2 during the period 1985 to 2006.

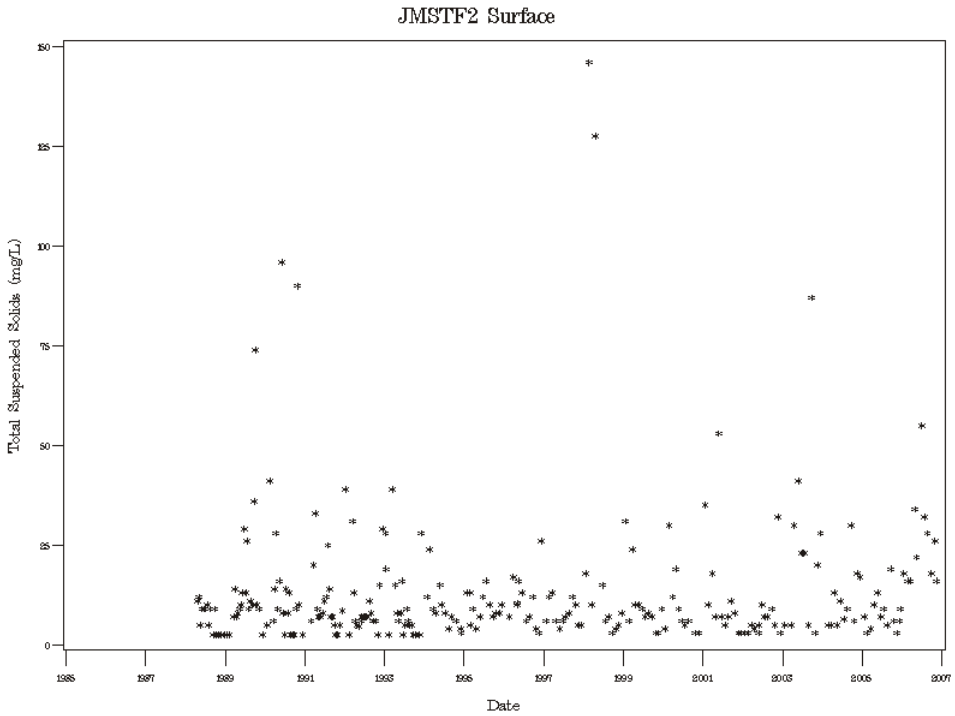


Figure 42. Scatterplot of surface total suspended solids at segment JMSTF2 during the period 1985 to 2006.

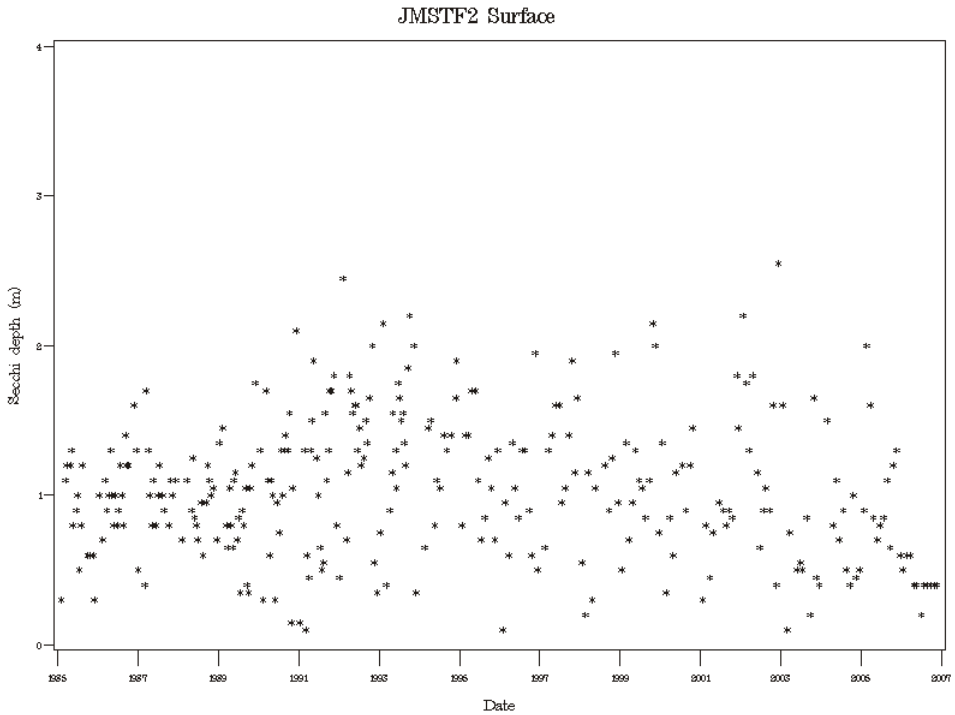


Figure 43. Scatterplot of secchi depth at segment JMSTF2 during the period 1985 to 2006.

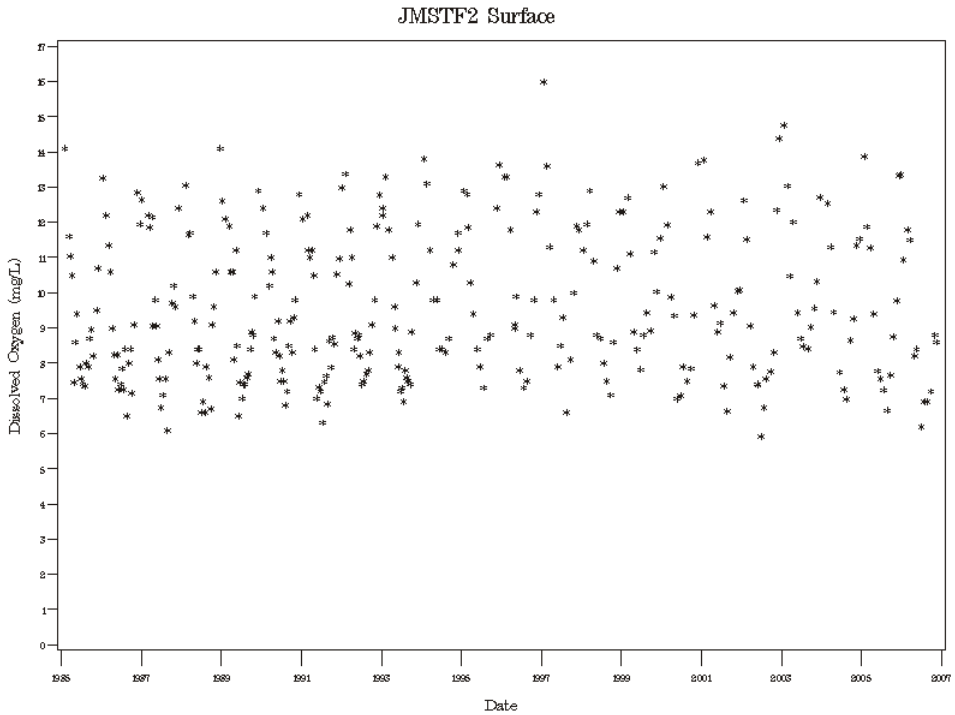


Figure 44. Scatterplot of surface dissolved oxygen at segment JMSTF2 during the period 1985 to 2006.

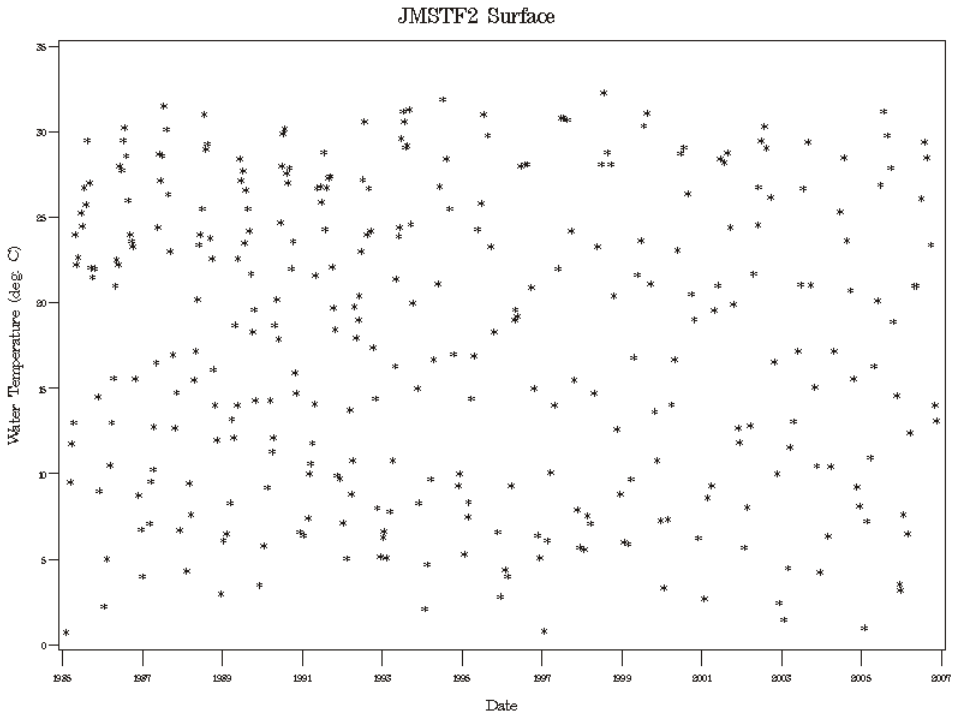


Figure 45. Scatterplot of surface water temperature at segment JMSTF2 during the period 1985 to 2006.

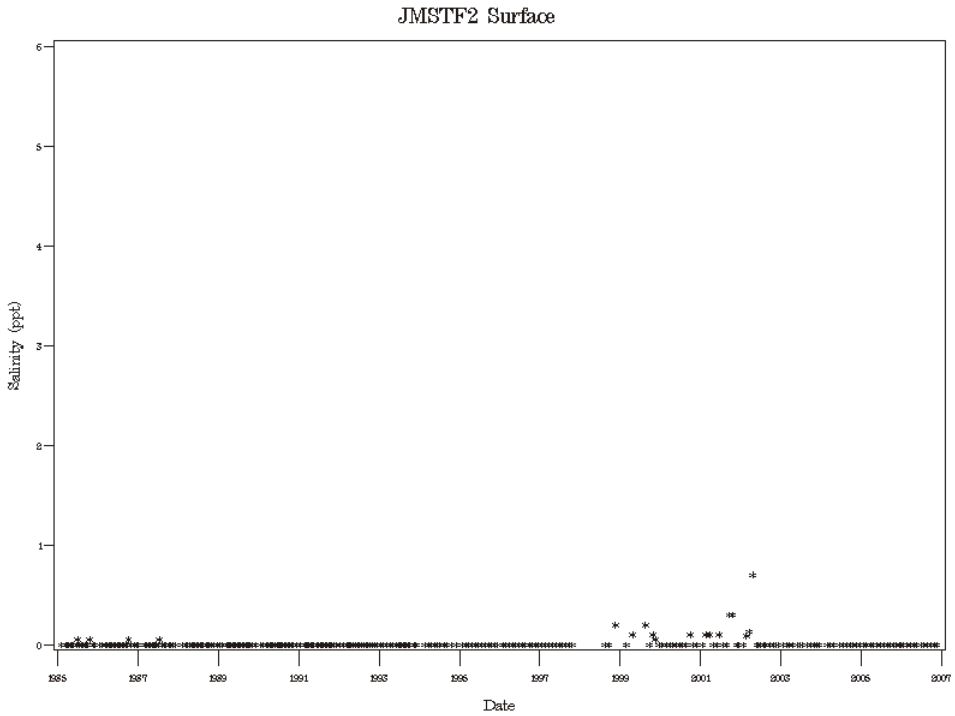
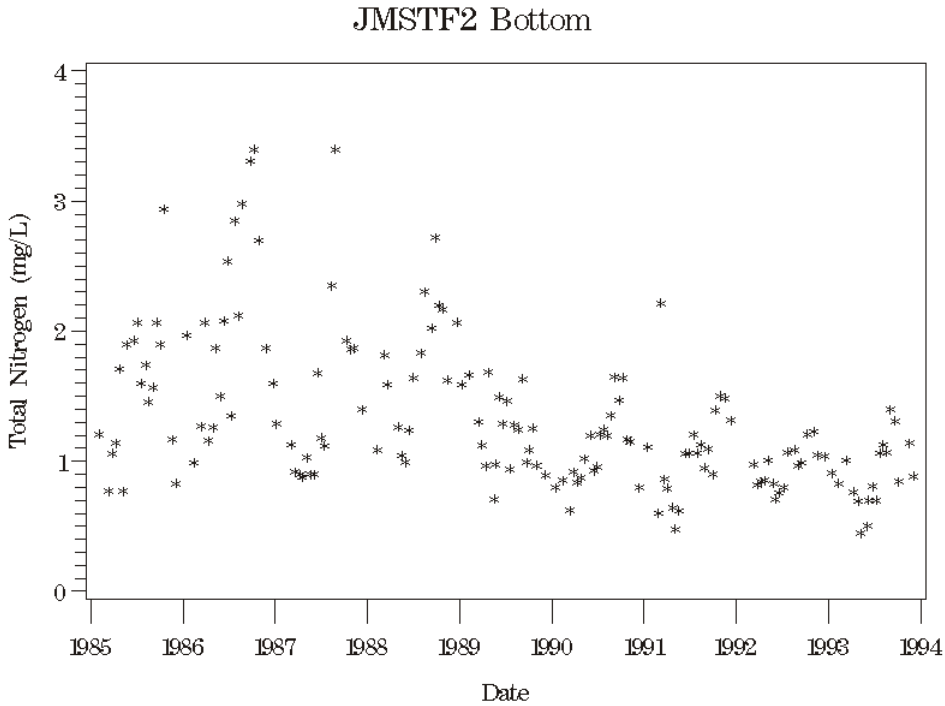


Figure 46. Scatterplot of surface salinity at segment JMSTF2 during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

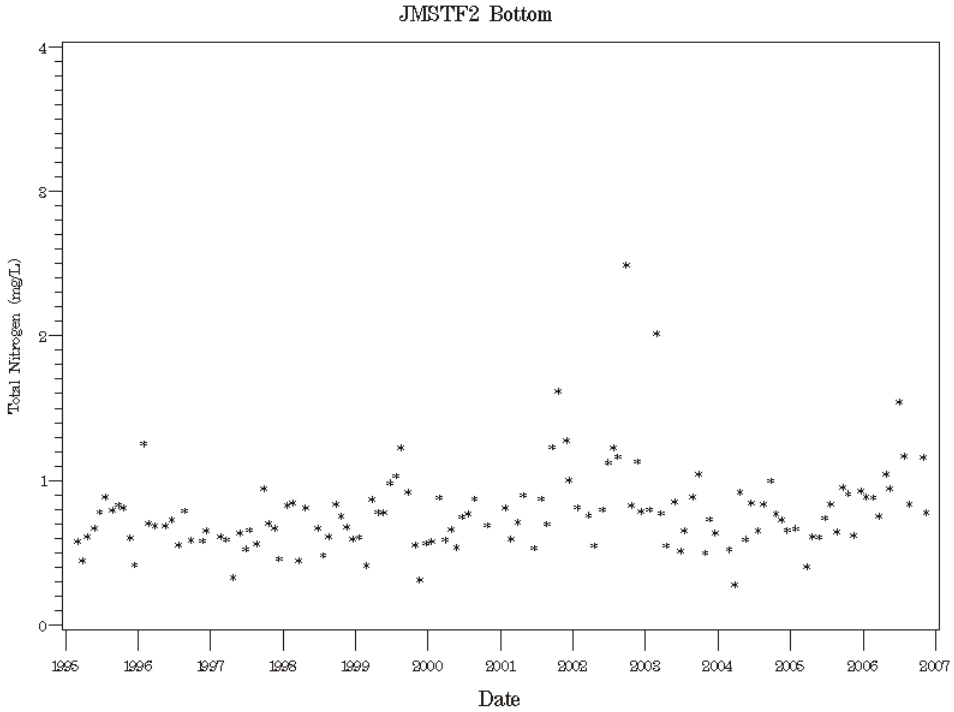
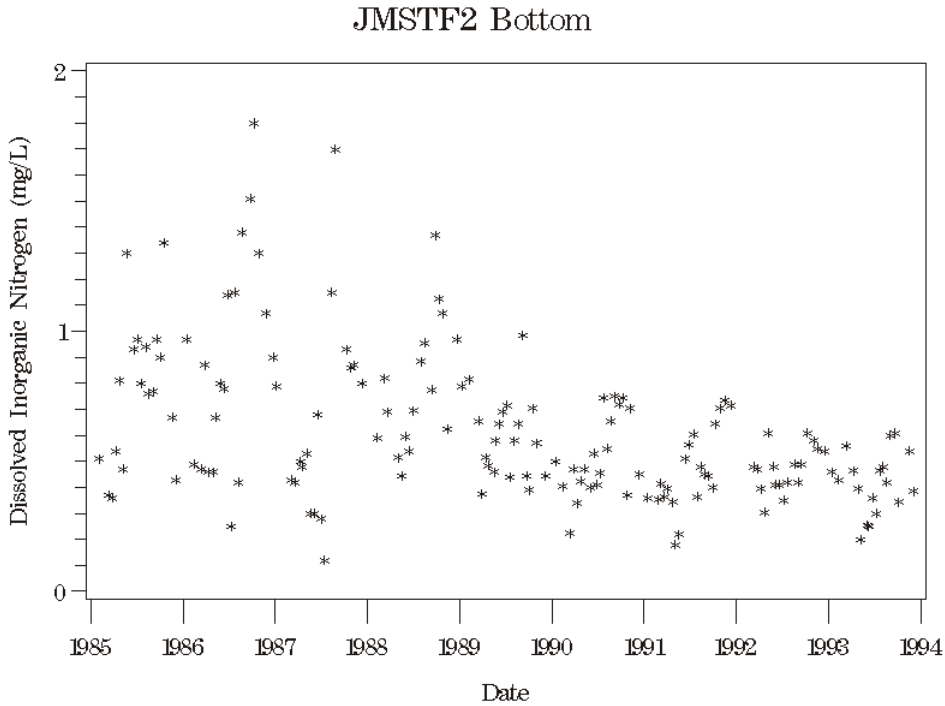


Figure 47. Scatterplots of bottom total nitrogen at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

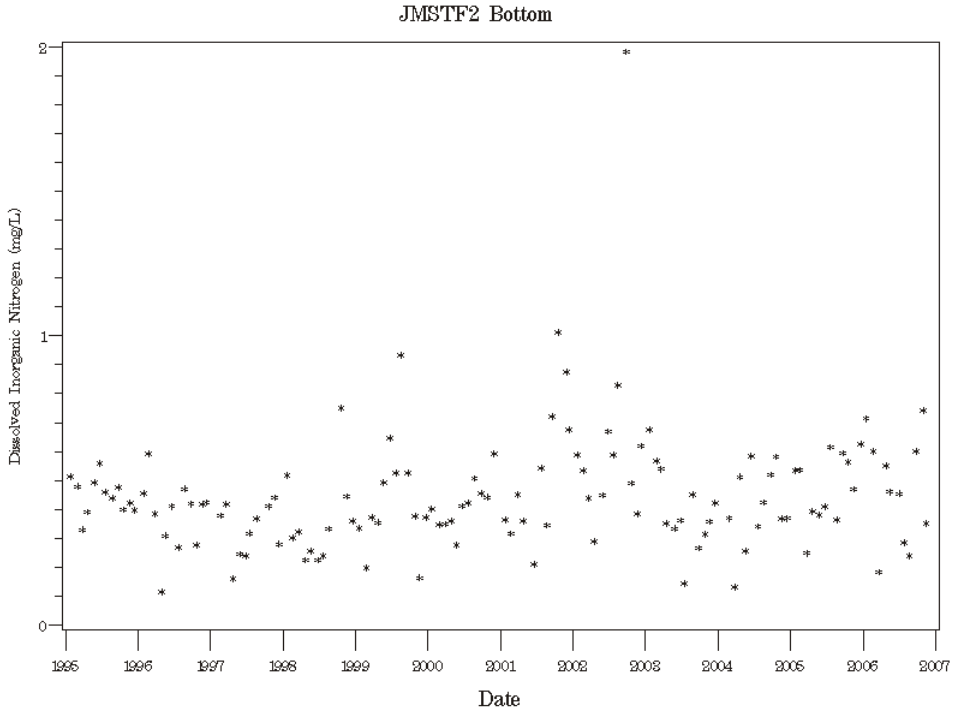
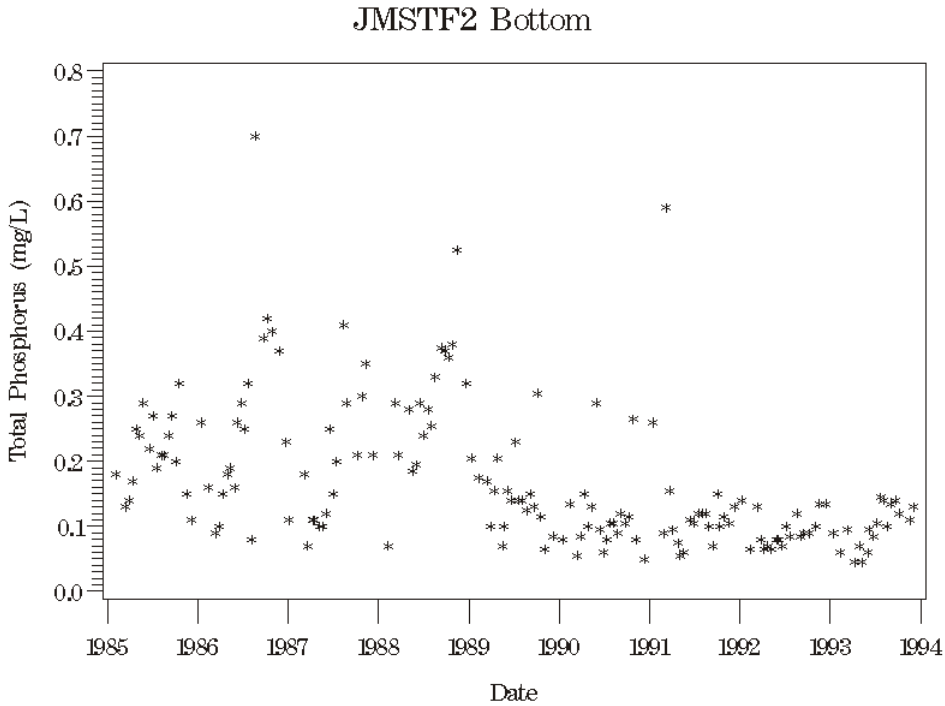


Figure 48. Scatterplots of bottom dissolved inorganic nitrogen at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

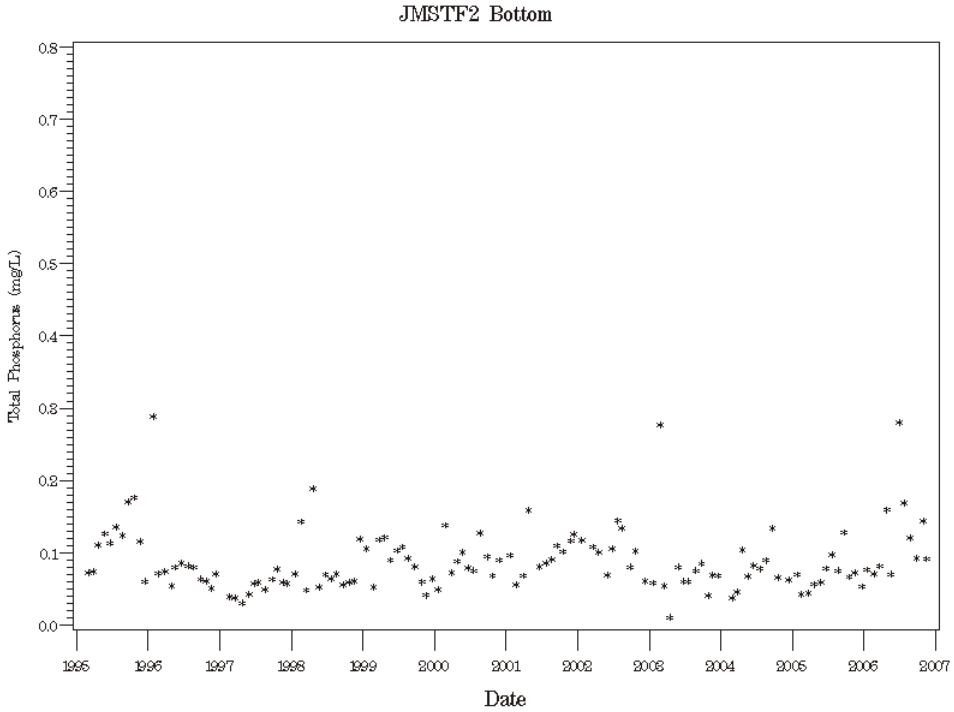
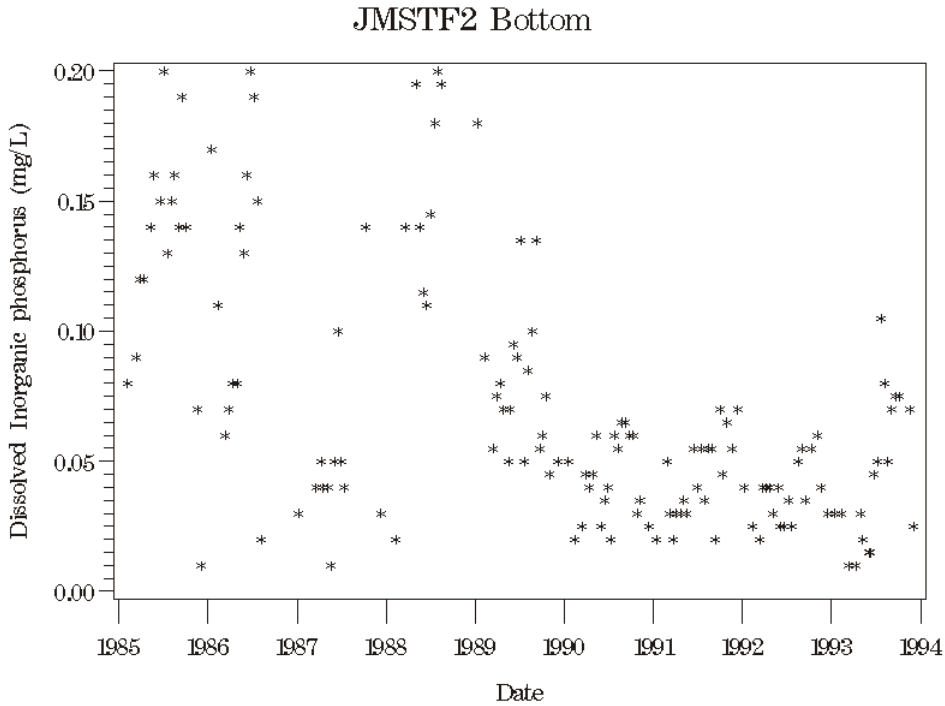


Figure 49. Scatterplots of bottom total phosphorus at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

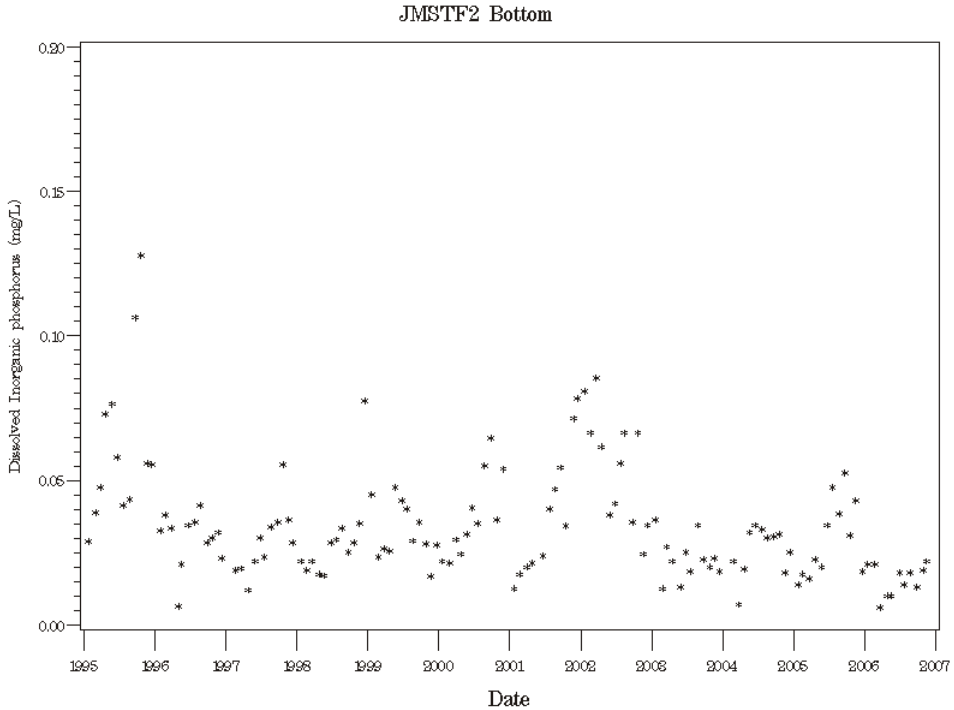


Figure 50. Scatterplots of bottom dissolved inorganic phosphorus at segment JMSTF2 during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

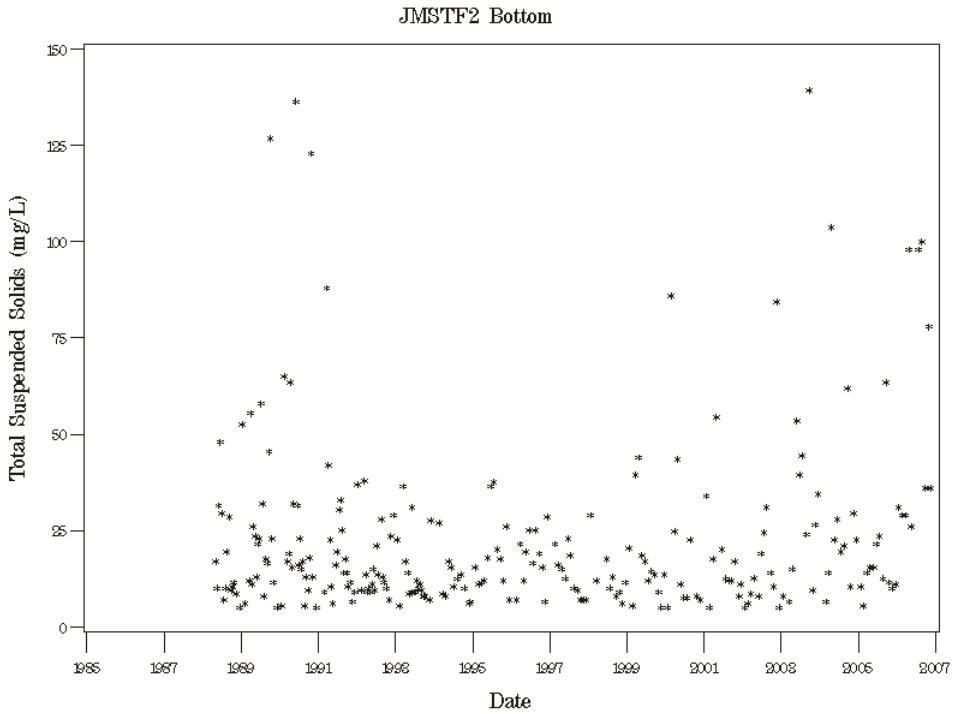


Figure 51. Scatterplot of bottom total suspended solids at segment JMSTF2 during the period 1985 to 2006.

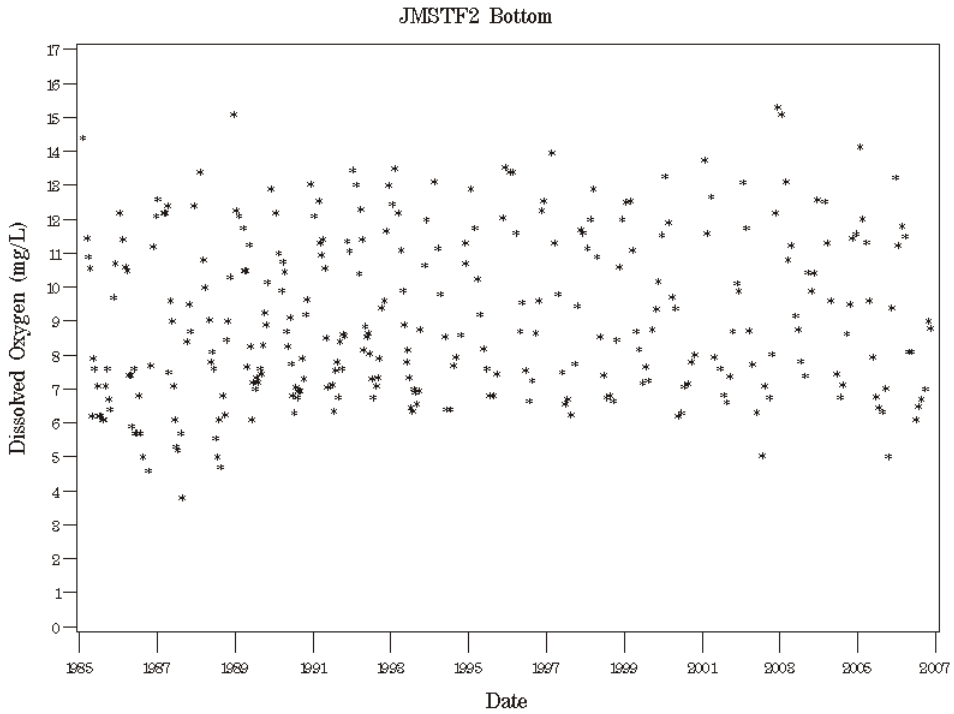


Figure 52. Scatterplot of bottom dissolved oxygen at segment JMSTF2 during the period 1985 to 2006.

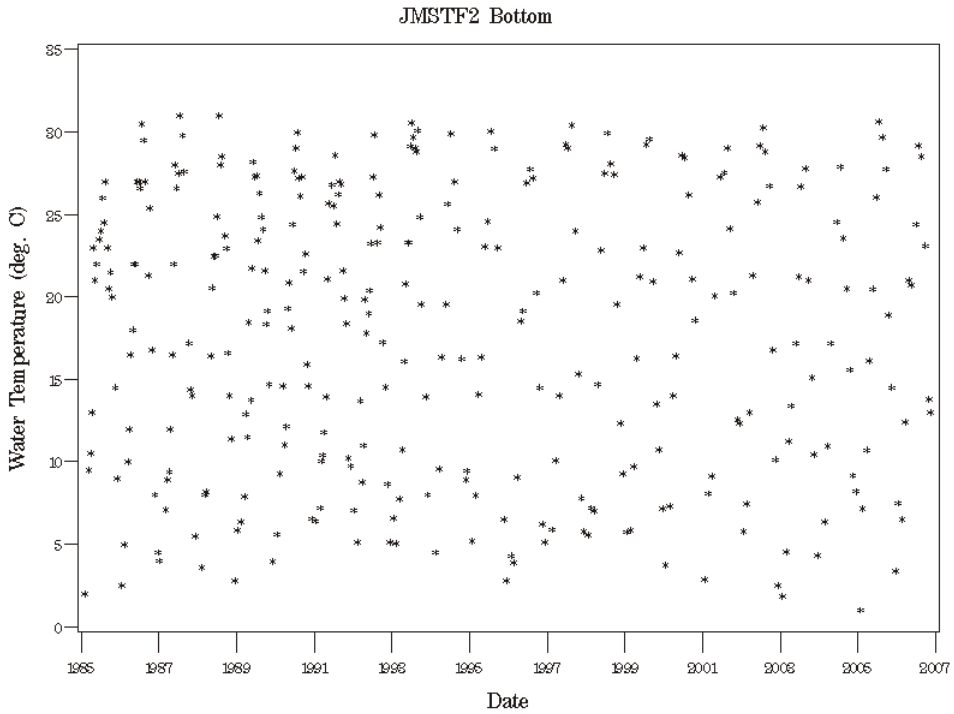


Figure 53. Scatterplot of bottom water temperature at segment JMSTF2 during the period 1985 to 2006.

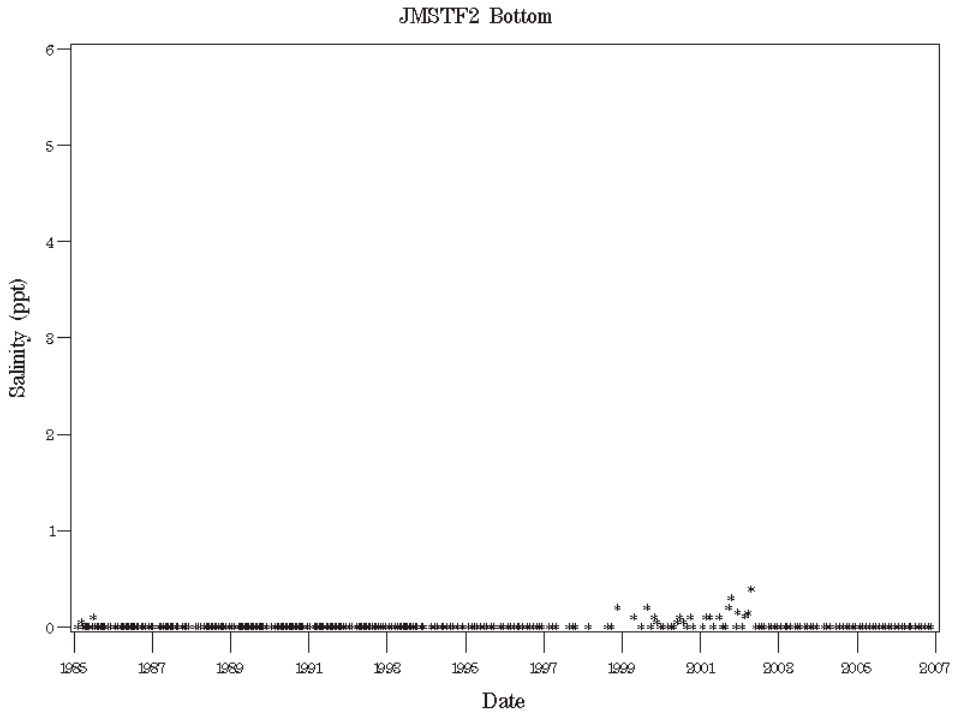
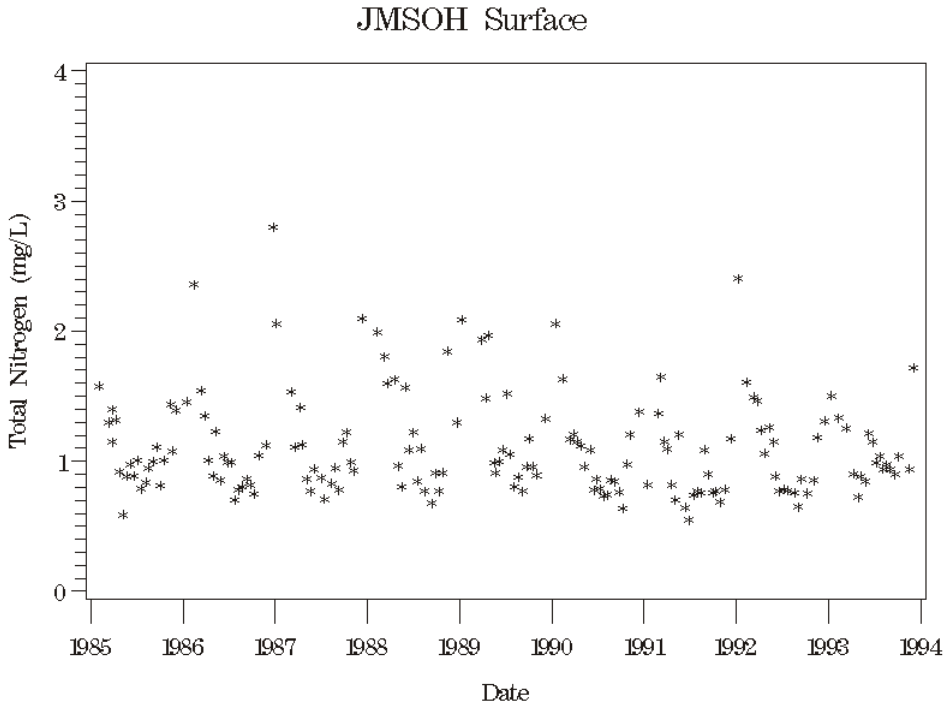


Figure 54. Scatterplot of bottom salinity at segment JMSTF2 during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

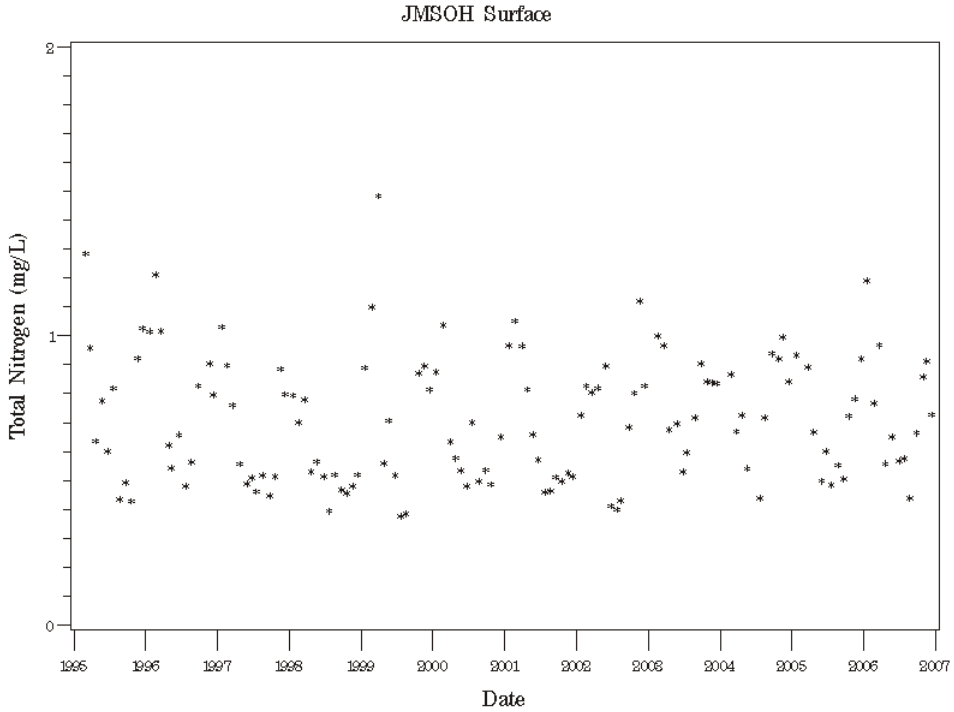
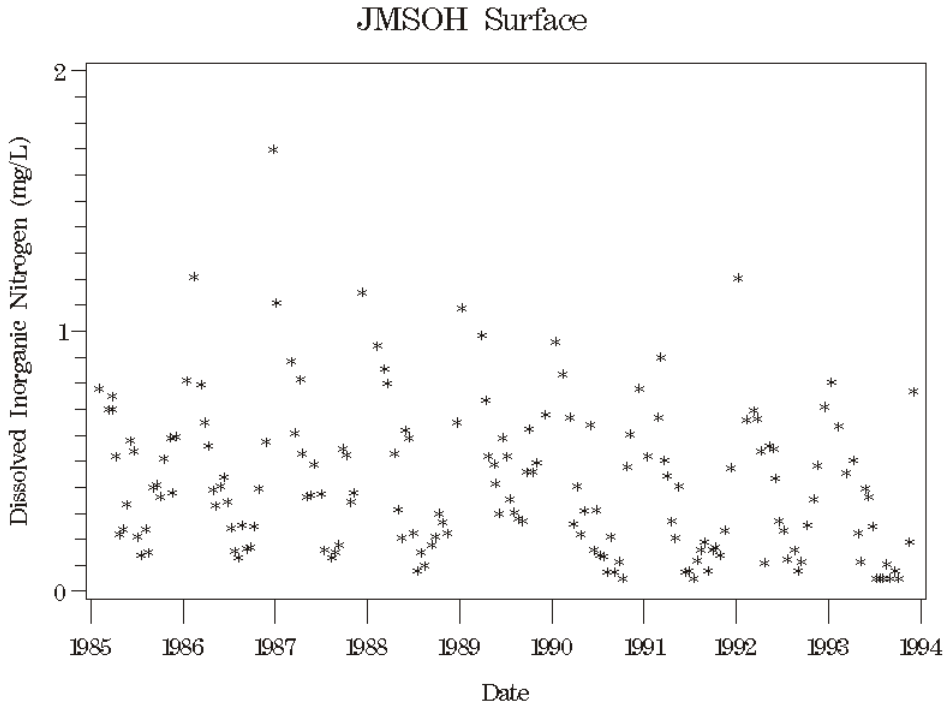


Figure 55. Scatterplots of surface total nitrogen at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

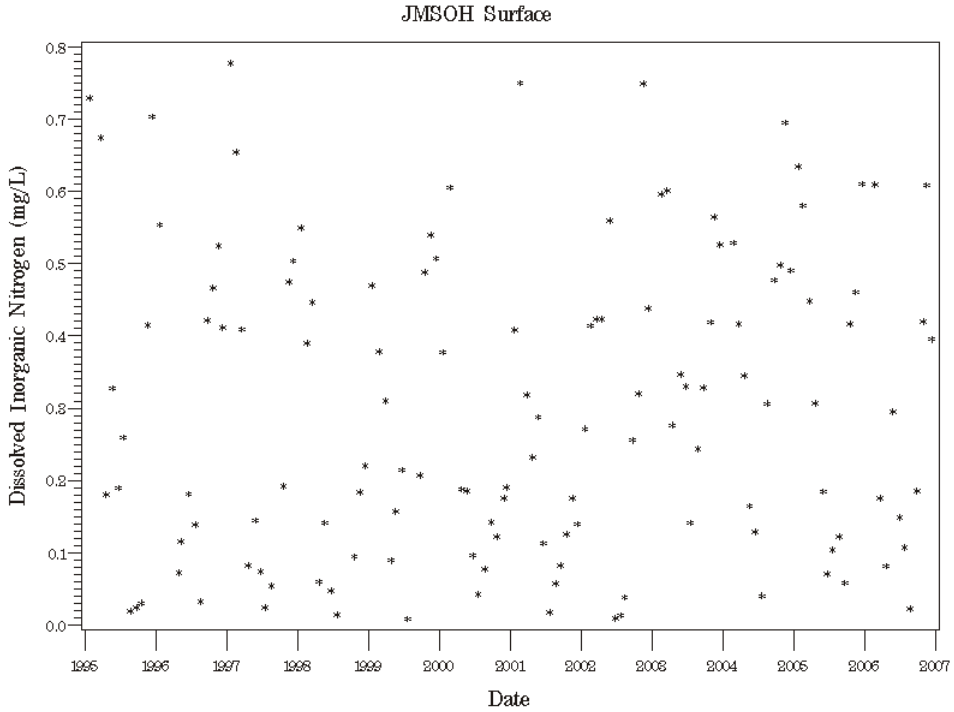
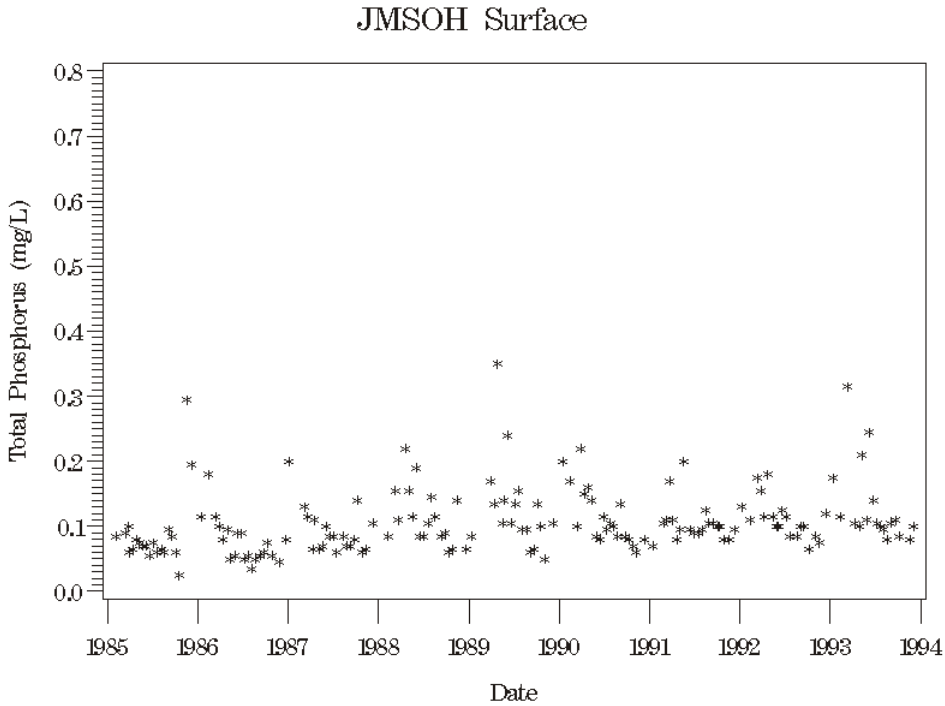


Figure 56. Scatterplots of surface dissolved inorganic nitrogen at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

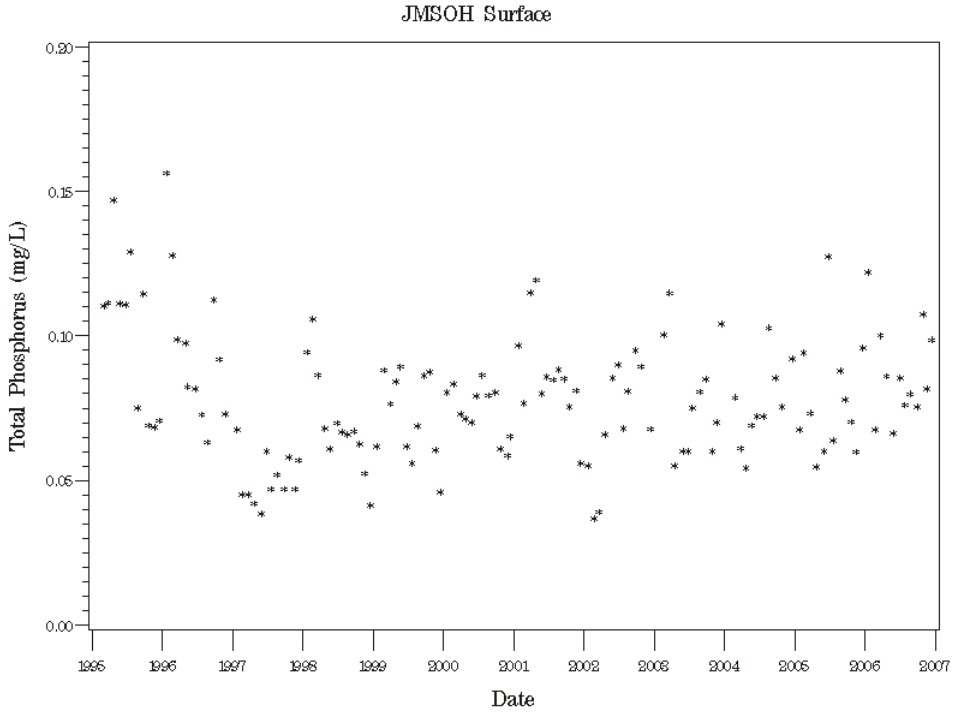
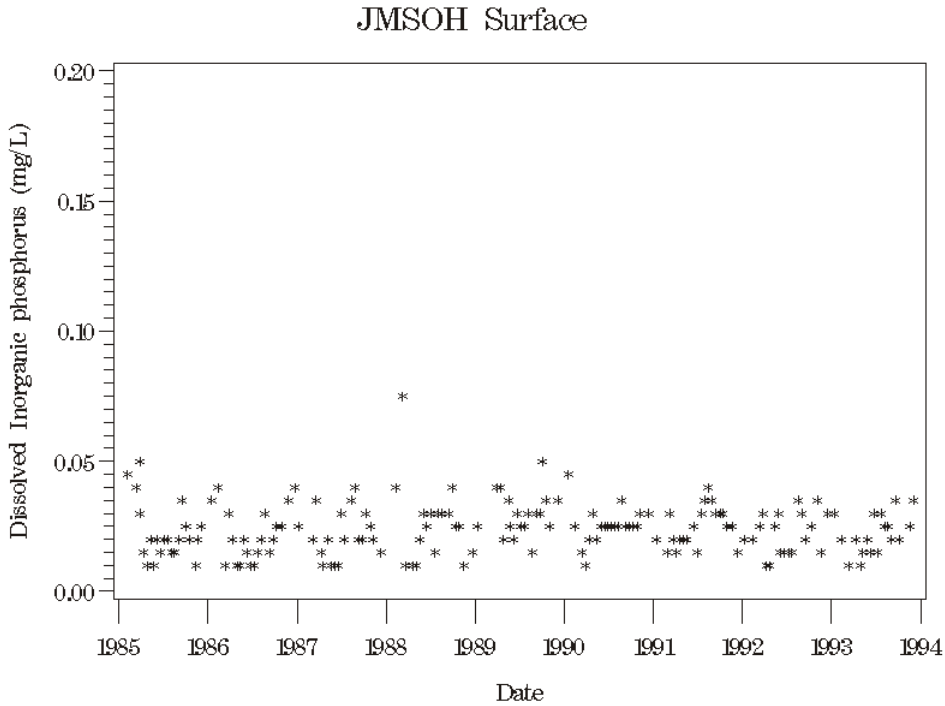


Figure 57. Scatterplots of surface total phosphorus at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

` a) Pre-method change period



b) Post-method change period

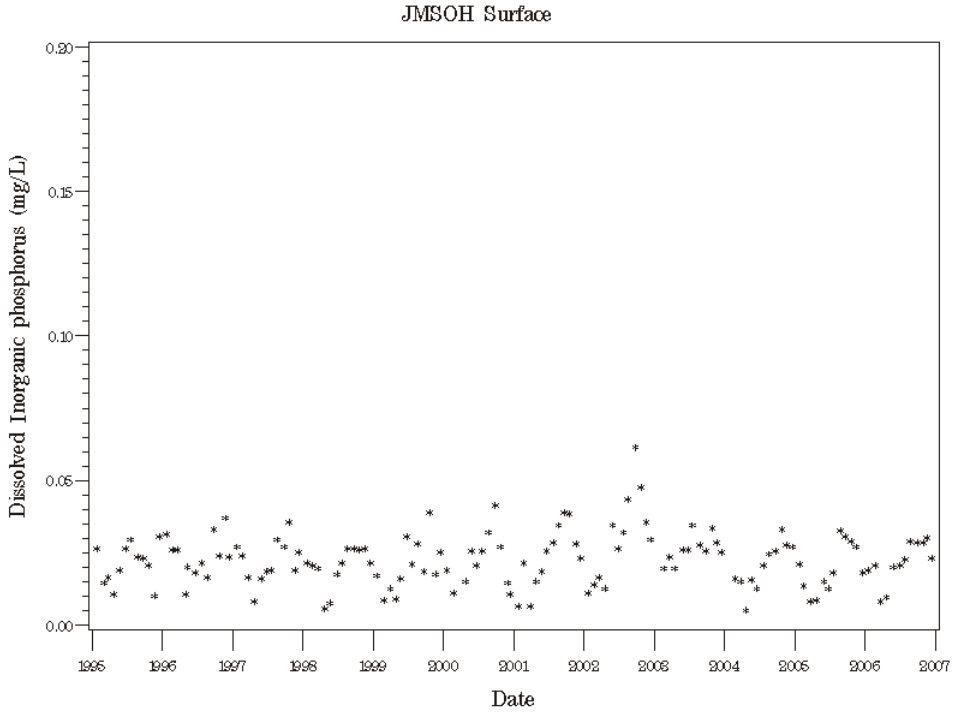


Figure 58. Scatterplots of surface dissolved inorganic phosphorus at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

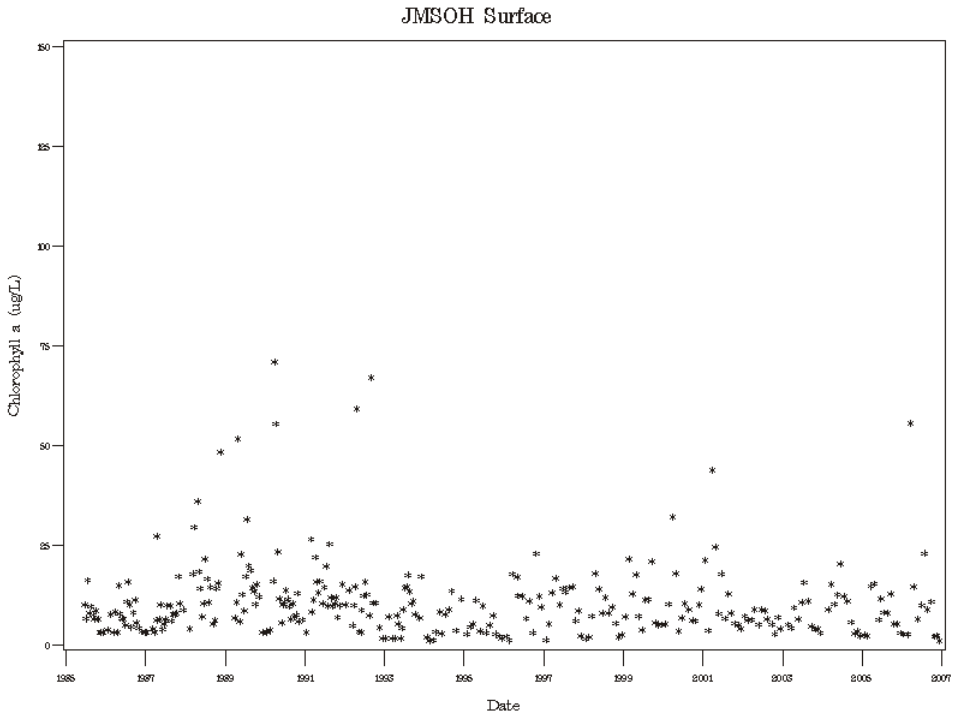


Figure 59. Scatterplot of surface chlorphyll *a* at segment JMSOH during the period 1985 to 2006.

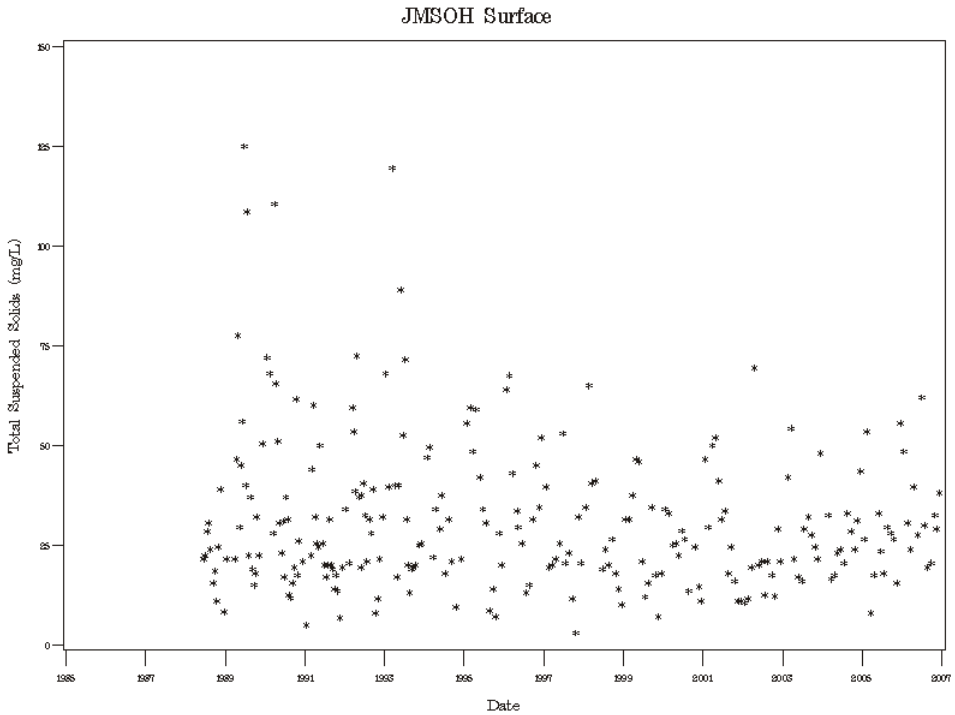


Figure 60. Scatterplot of surface total suspended solids at segment JMSOH during the period 1985 to 2006.

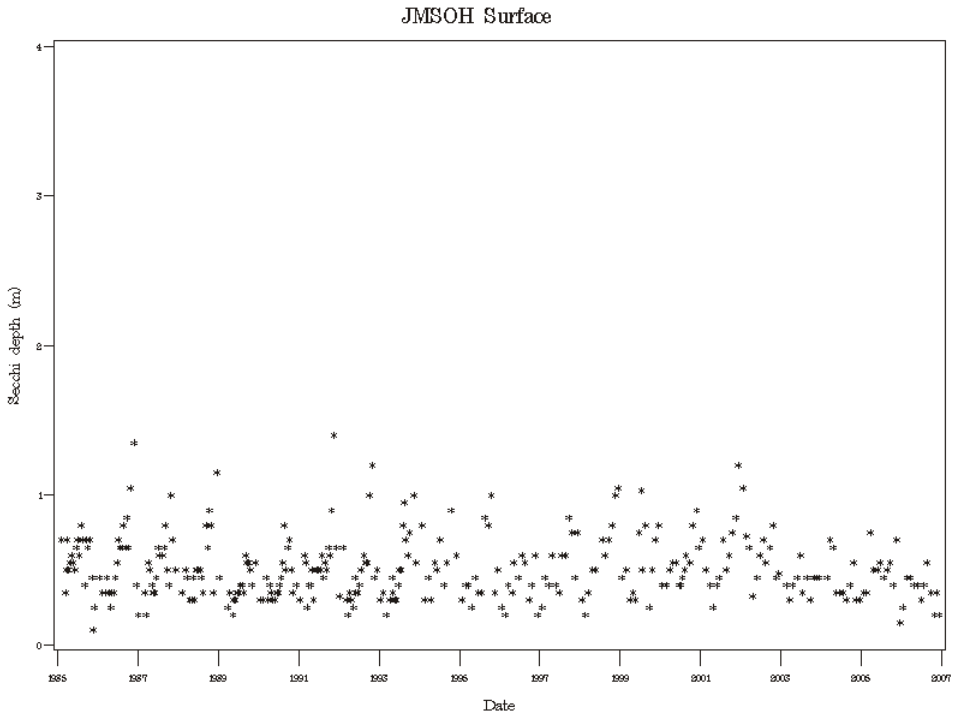


Figure 61. Scatterplot of secchi depth at segment JMSOH during the period 1985 to 2006.

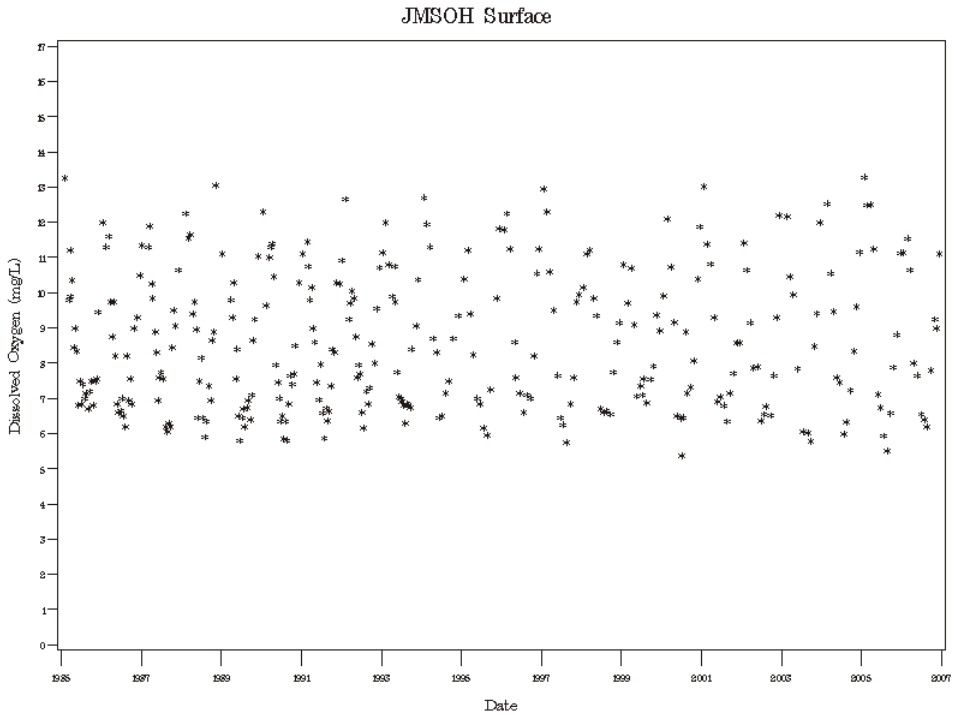


Figure 62. Scatterplot of surface dissolved oxygen at segment JMSOH during the period 1985 to 2006.

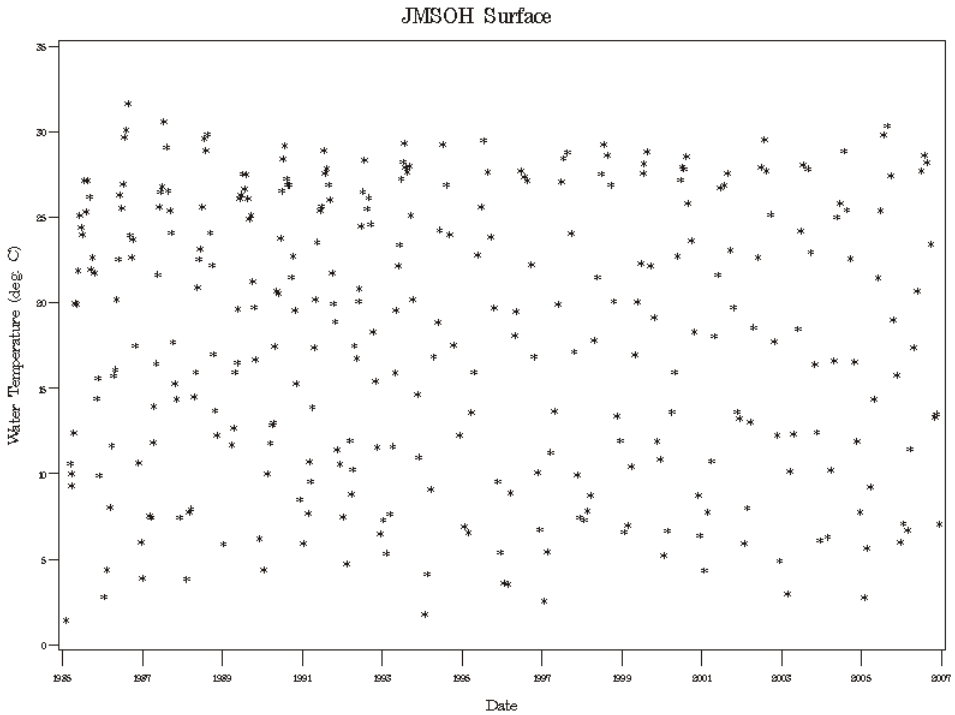


Figure 63. Scatterplot of surface water temperature at segment JMSOH during the period 1985 to 2006.

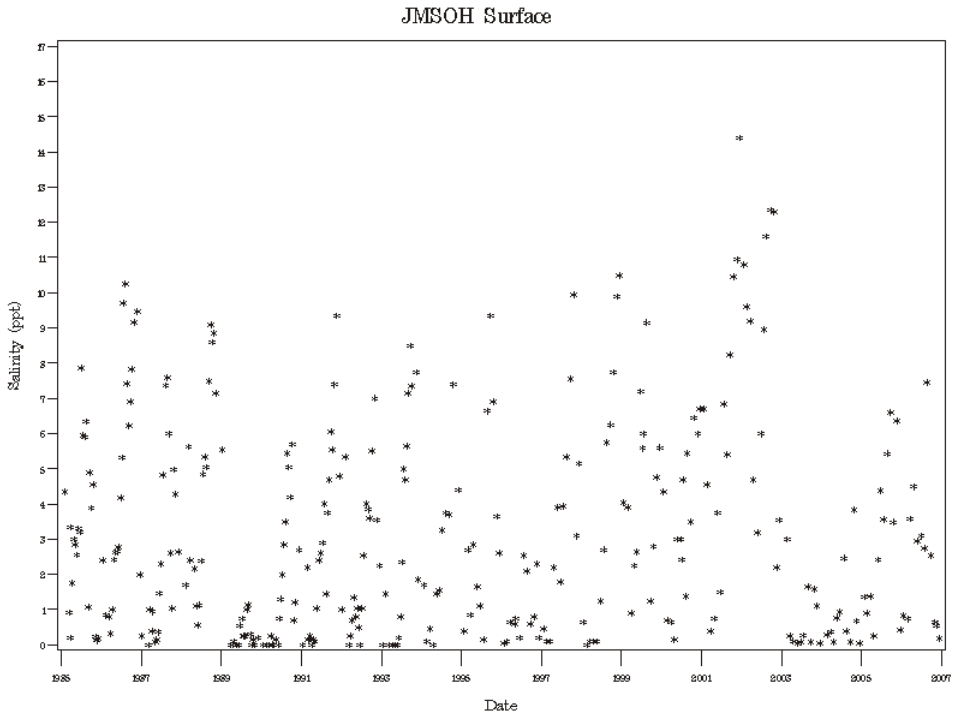
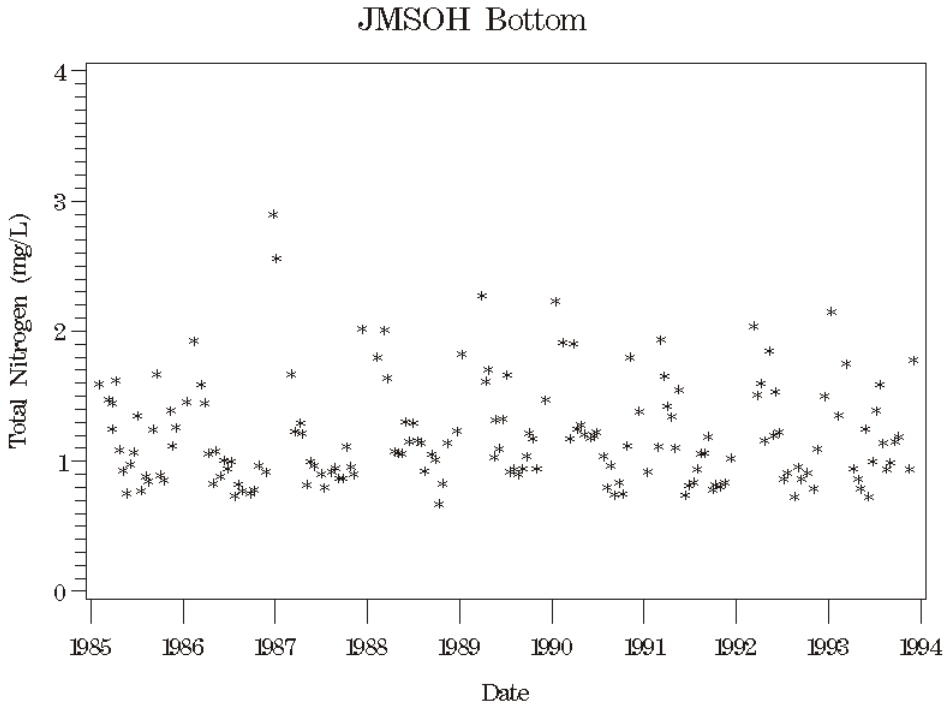


Figure 64. Scatterplot of surface salinity at segment JMSOH during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

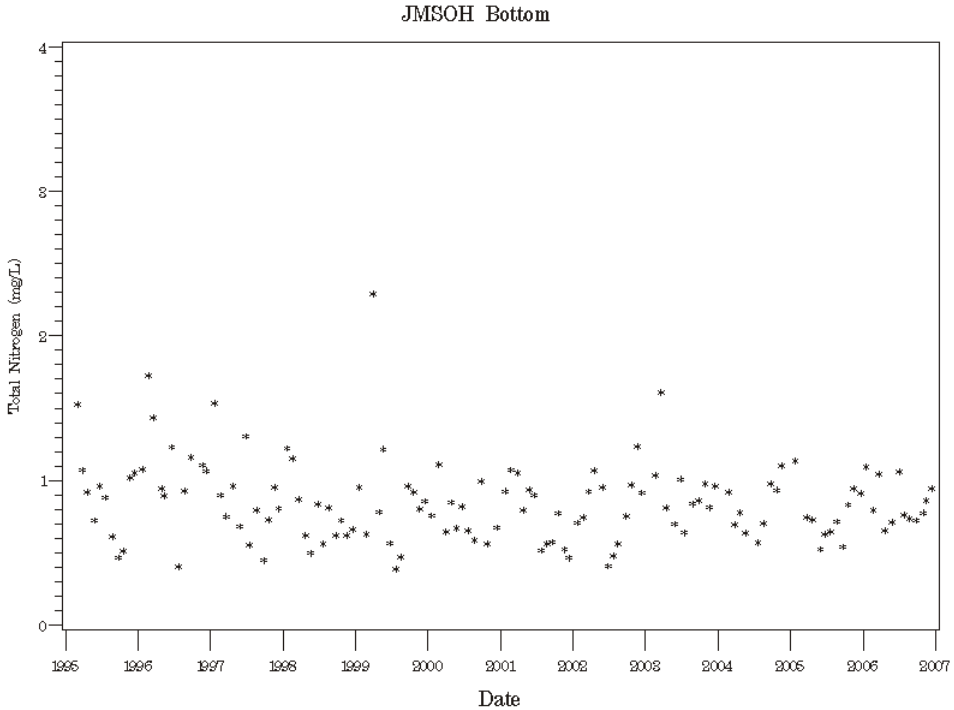
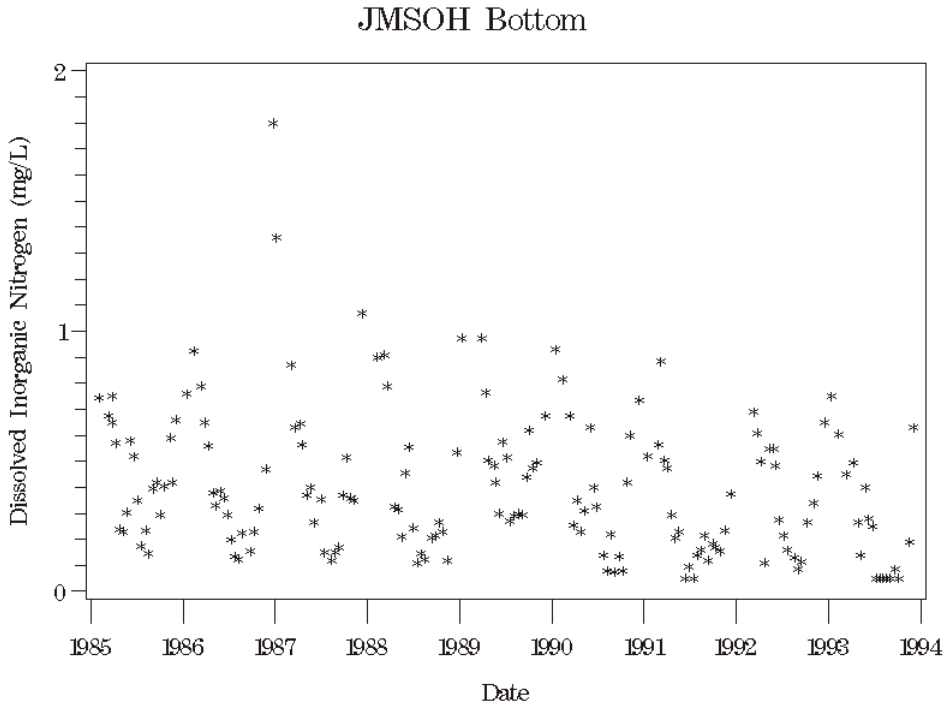


Figure 65. Scatterplots of bottom total nitrogen at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

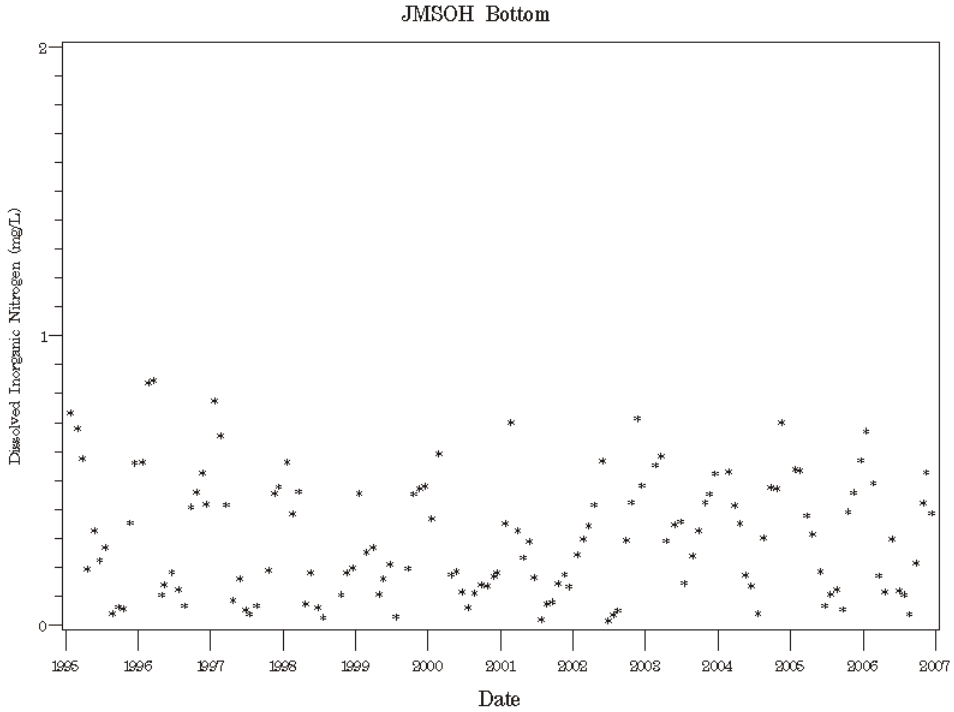
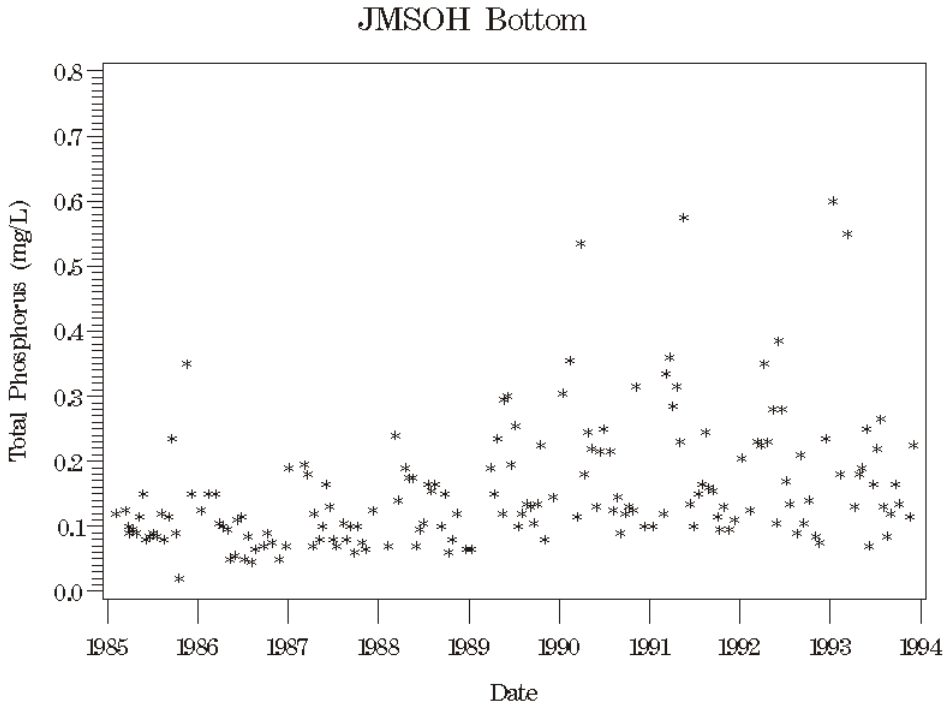


Figure 66. Scatterplots of bottom dissolved inorganic nitrogen at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

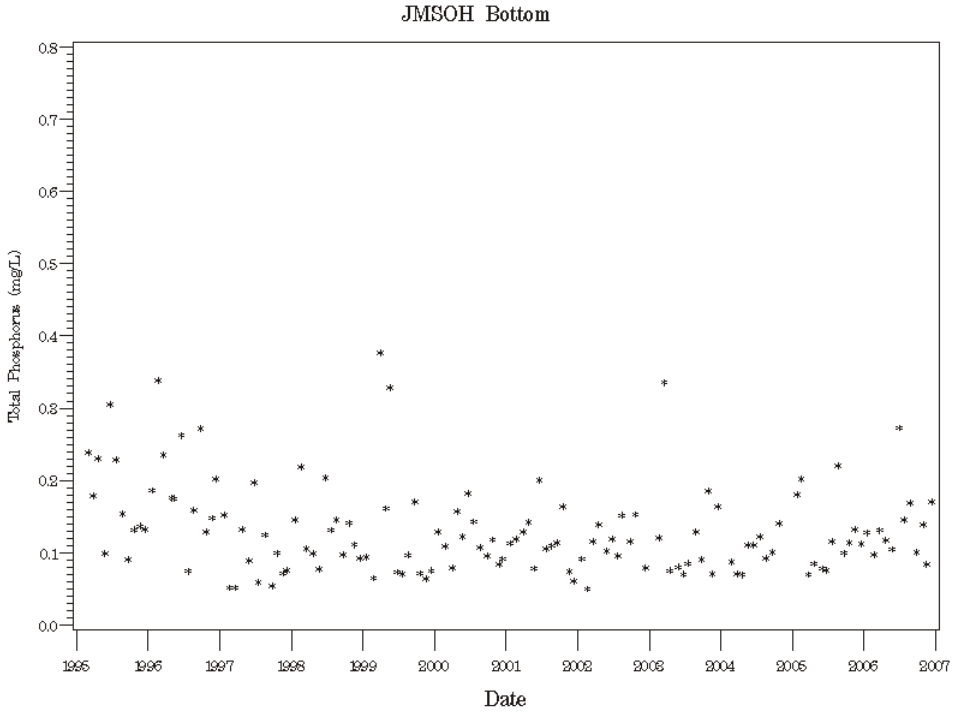
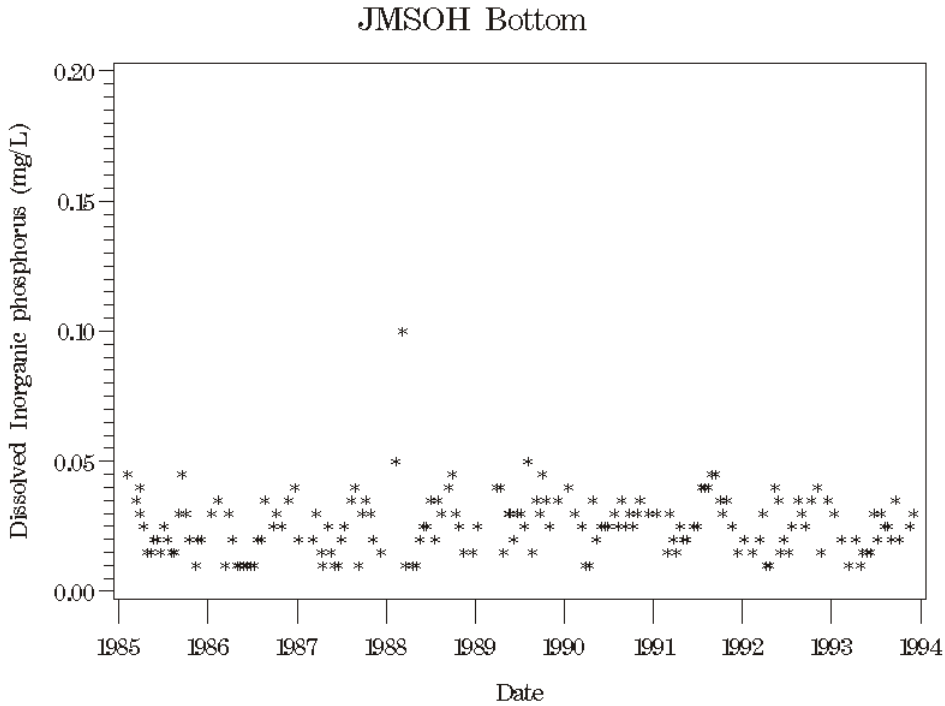


Figure 67. Scatterplots of bottom total phosphorus at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

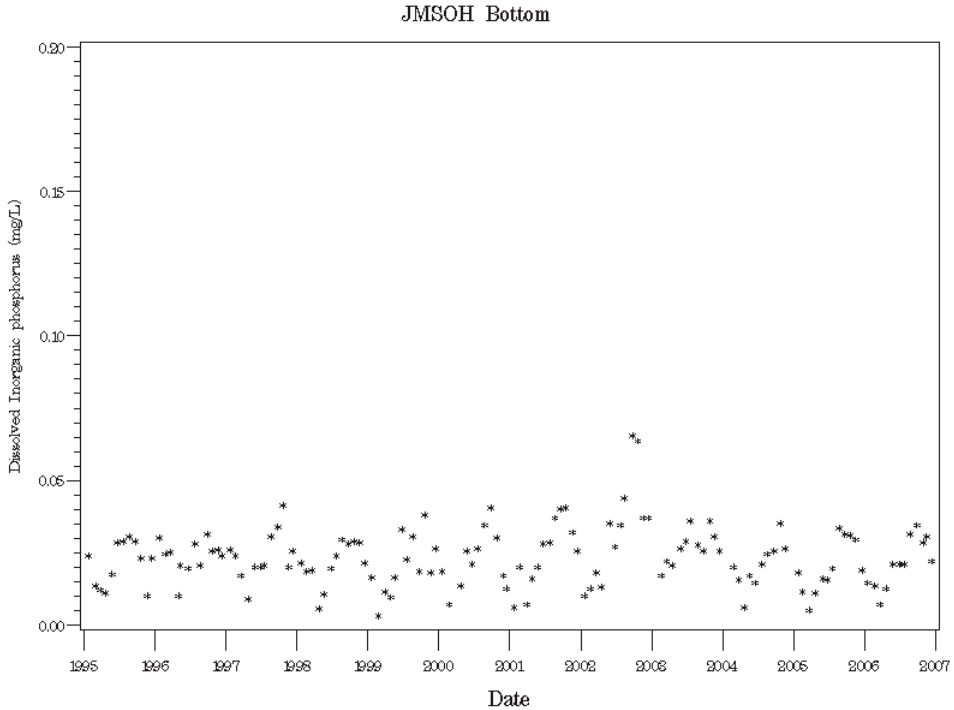


Figure 68. Scatterplots of bottom dissolved inorganic phosphorus at segment JMSOH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

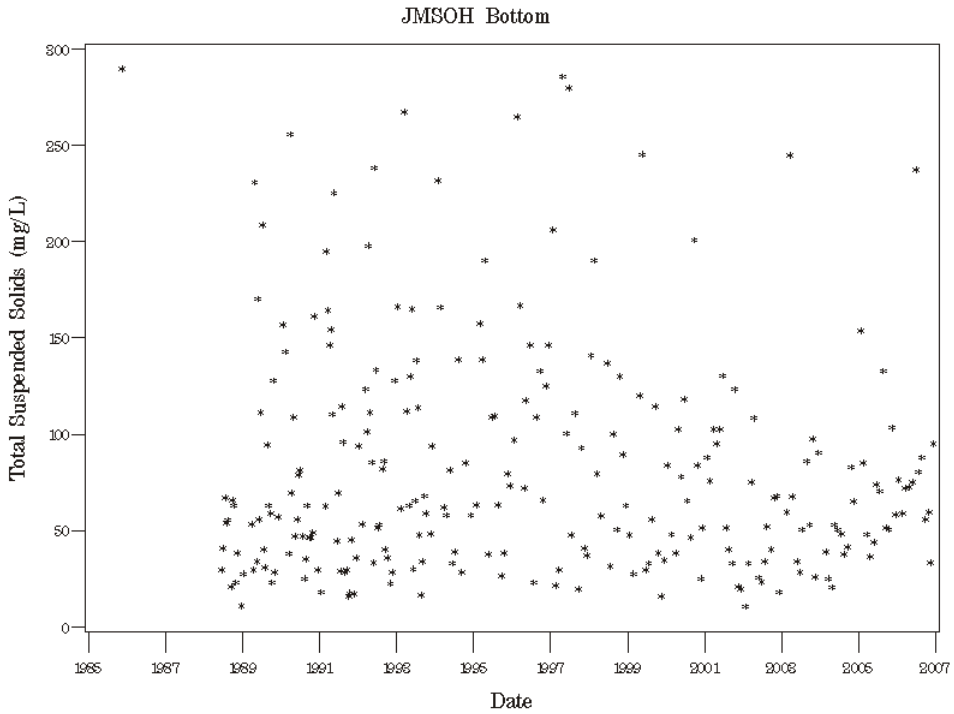


Figure 69. Scatterplot of bottom total suspended solids at segment JMSOH during the period 1985 to 2006.

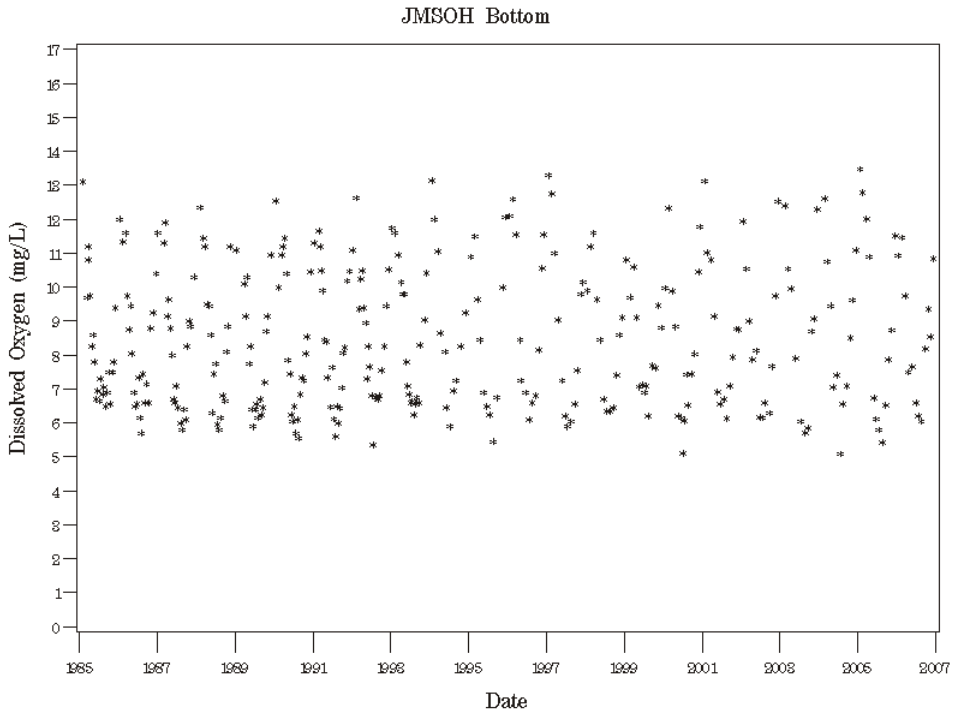


Figure 70. Scatterplot of bottom dissolved oxygen at segment JMSOH during the period 1985 to 2006.

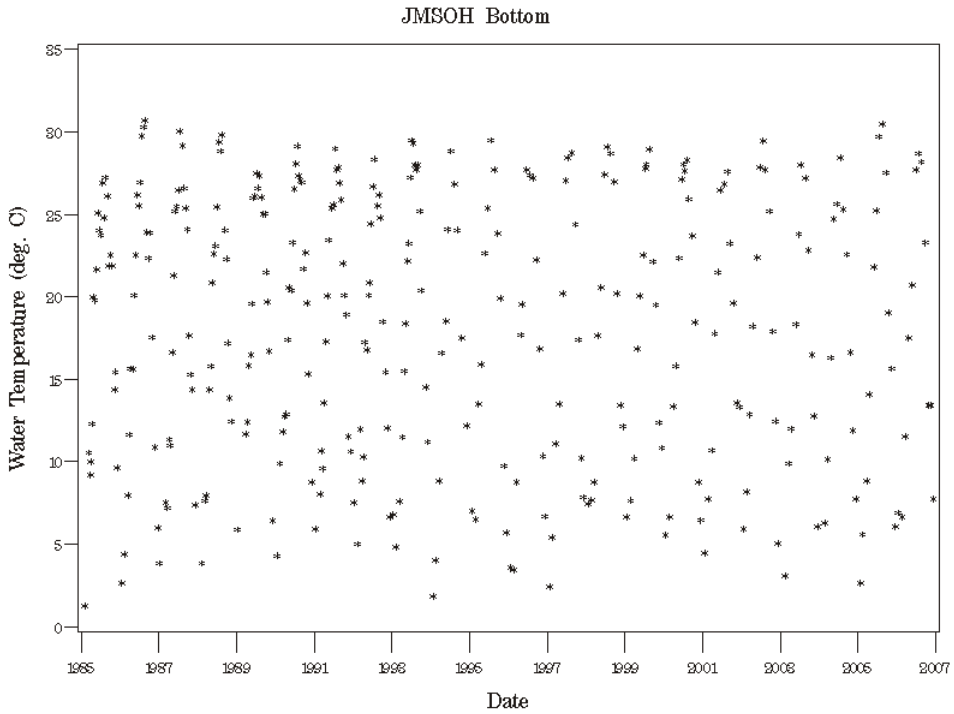


Figure 71. Scatterplot of bottom water temperature at segment JMSOH during the period 1985 to 2006.

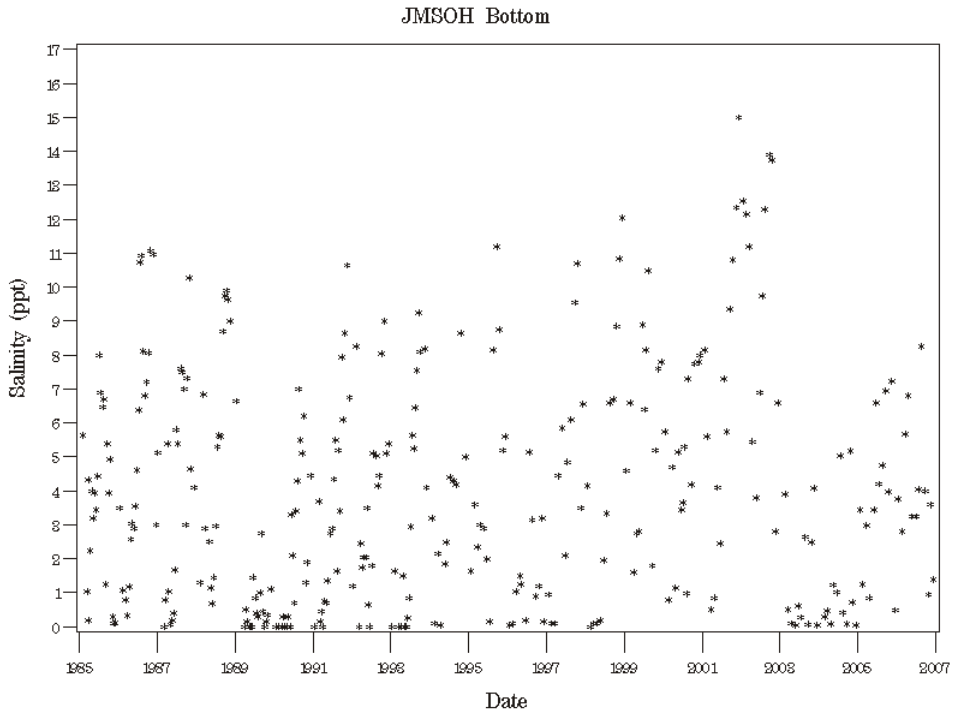
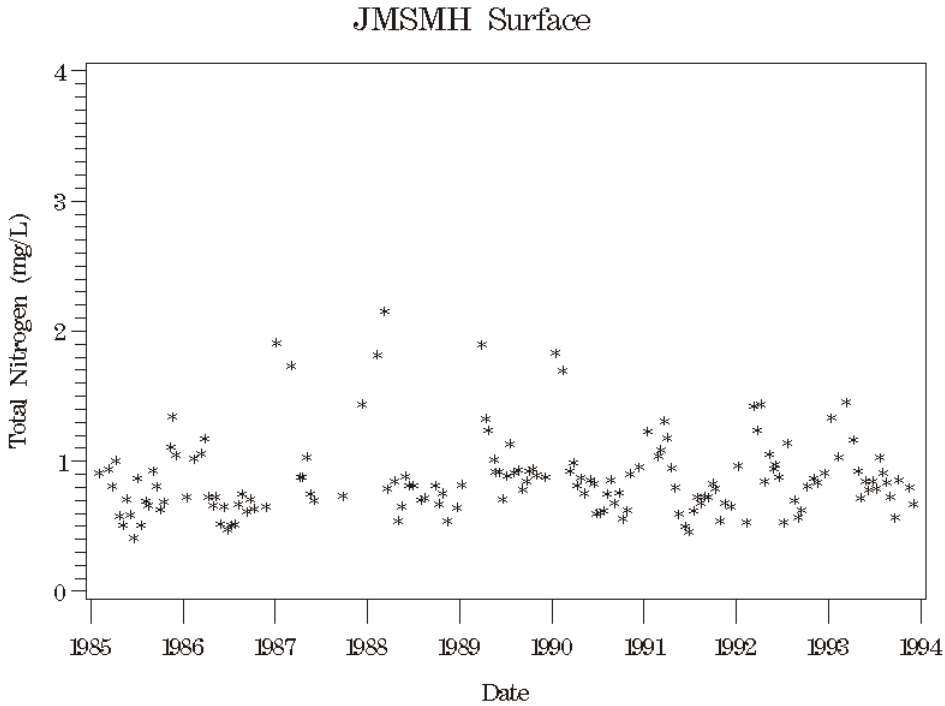


Figure 72. Scatterplot of bottom salinity at segment JMSOH during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

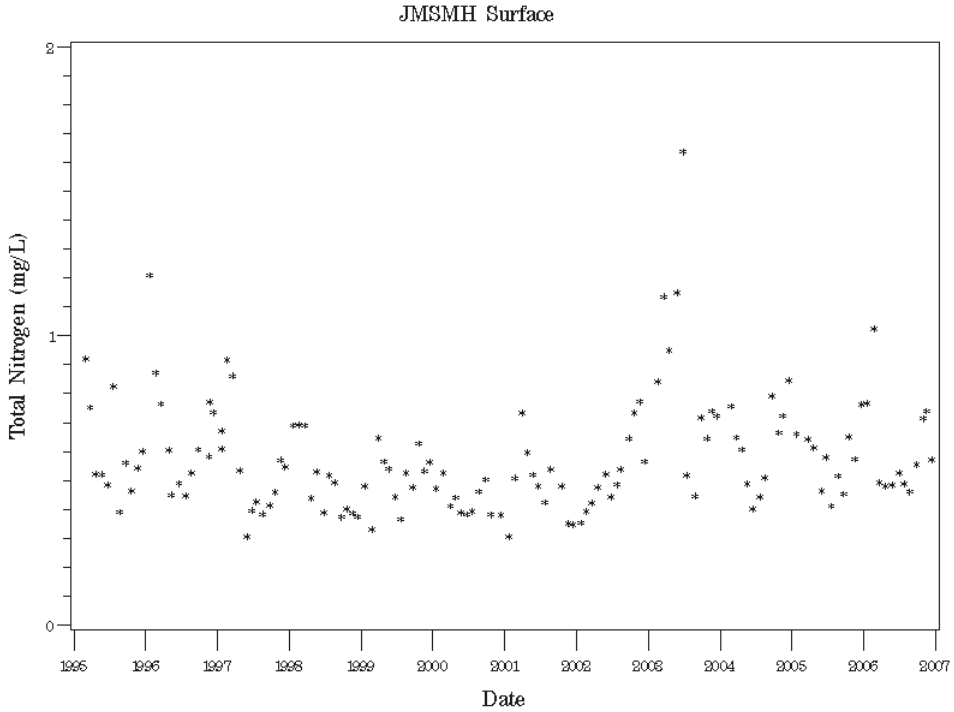
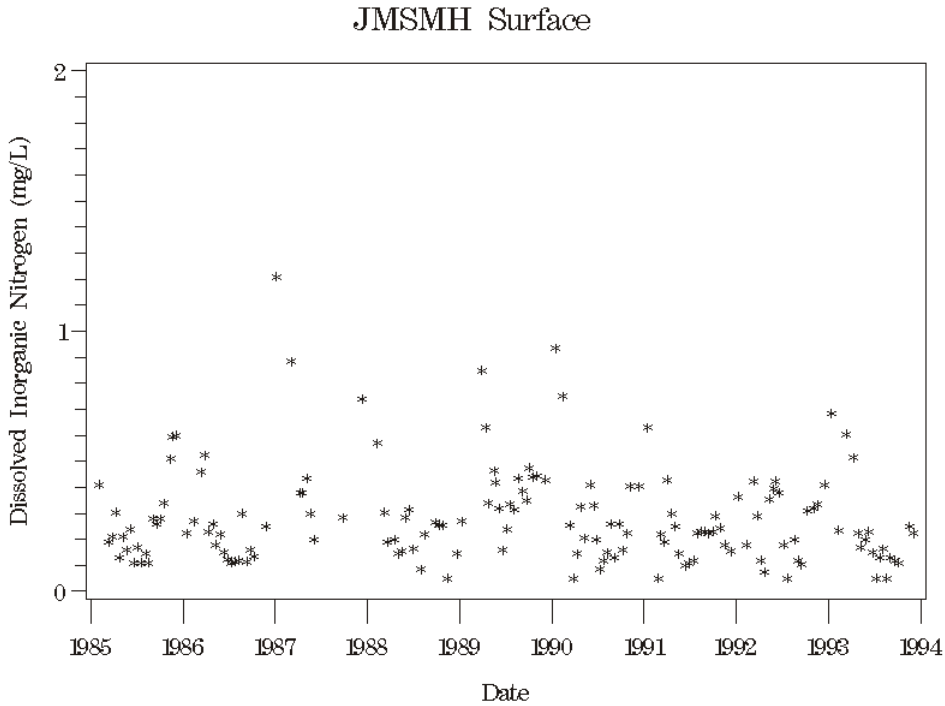


Figure 73. Scatterplots of surface total nitrogen at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

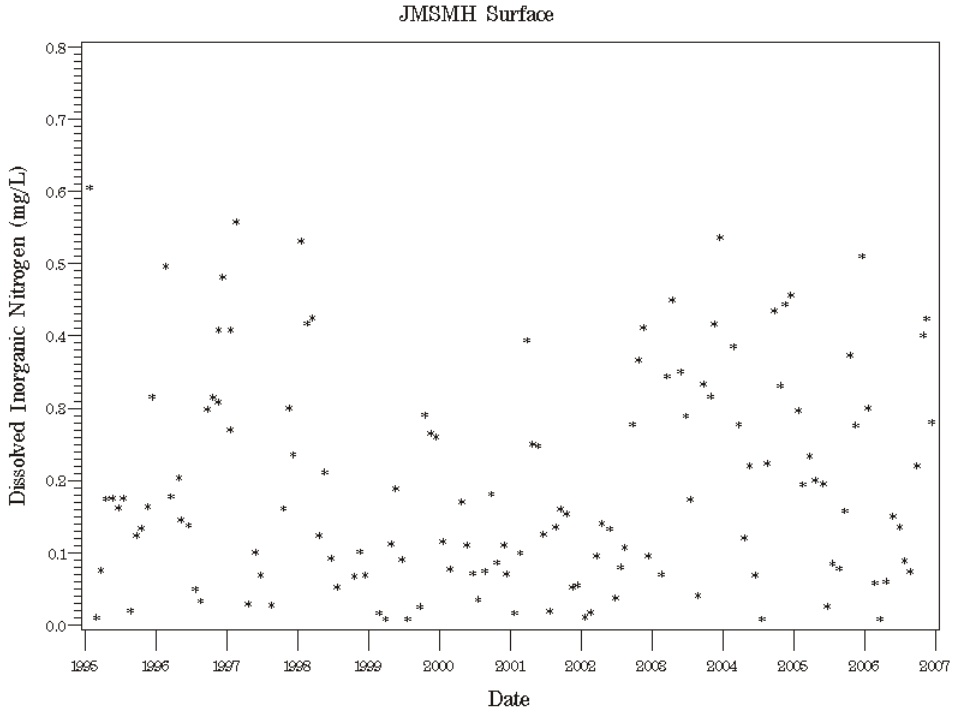
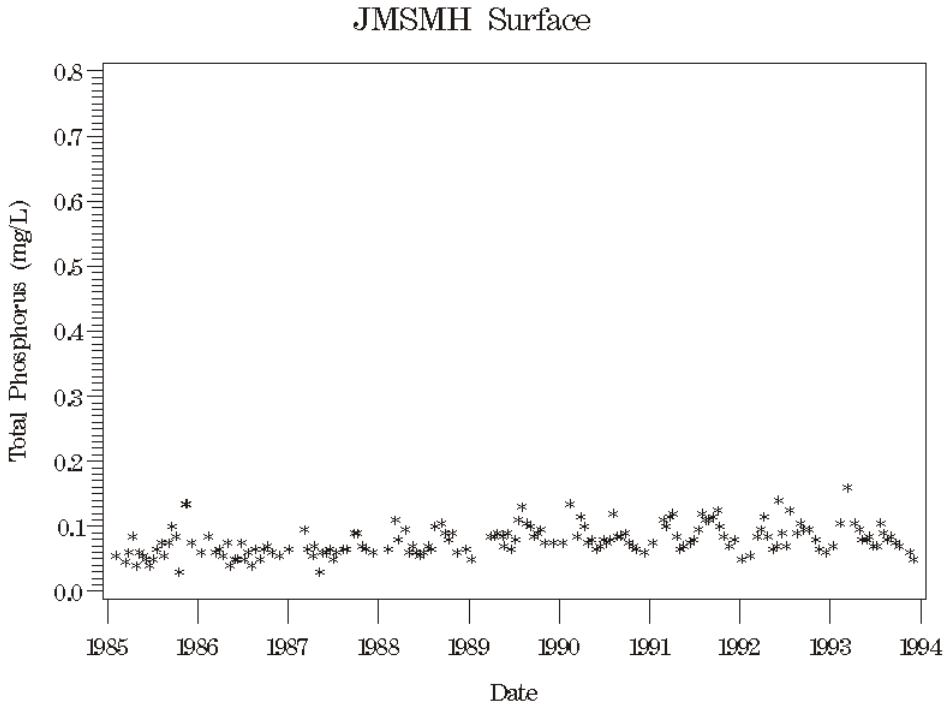


Figure 74. Scatterplots of surface dissolved inorganic nitrogen at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

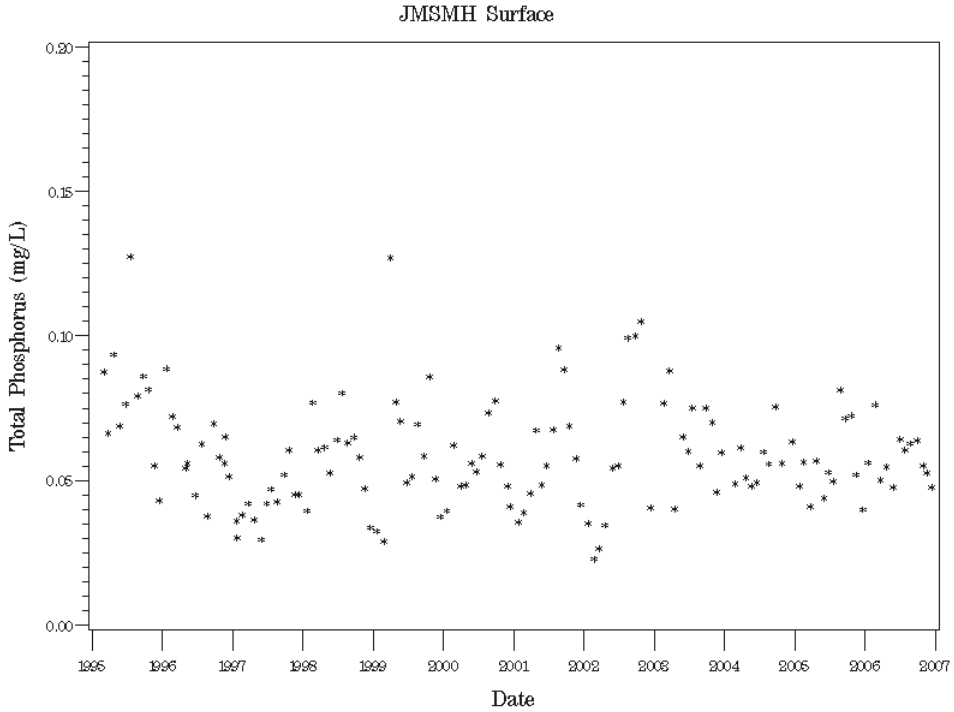
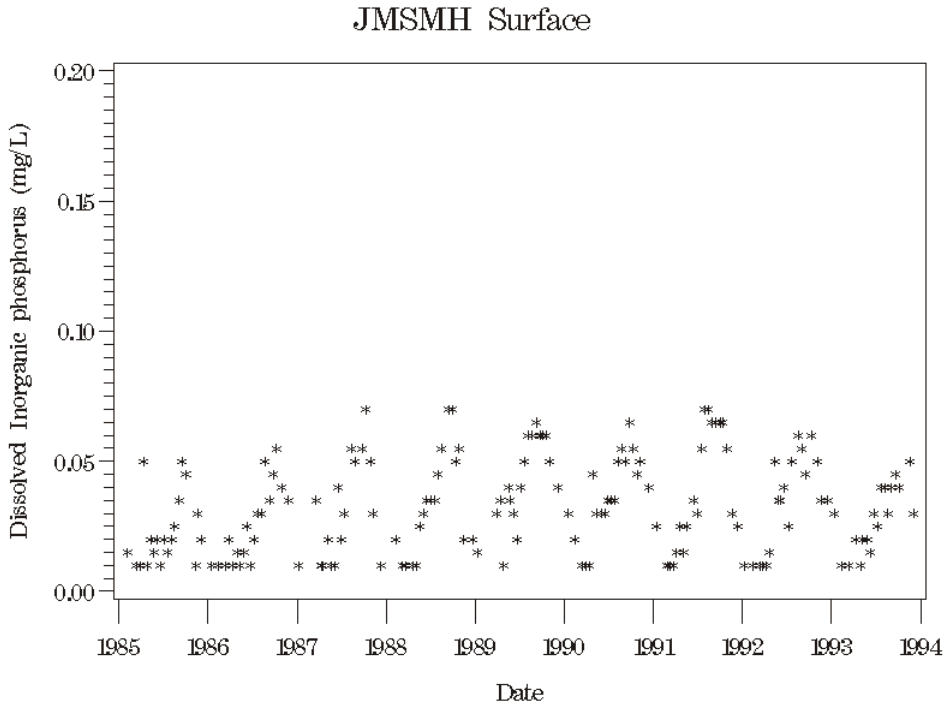


Figure 75. Scatterplots of surface total phosphorus at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

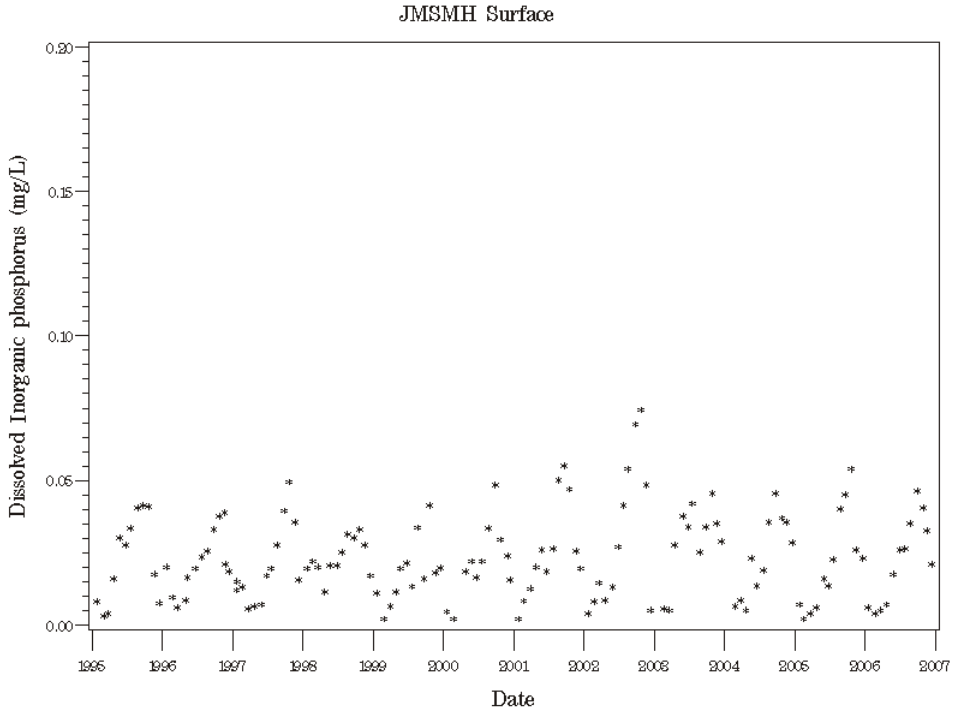


Figure 76. Scatterplots of surface dissolved inorganic phosphorus at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

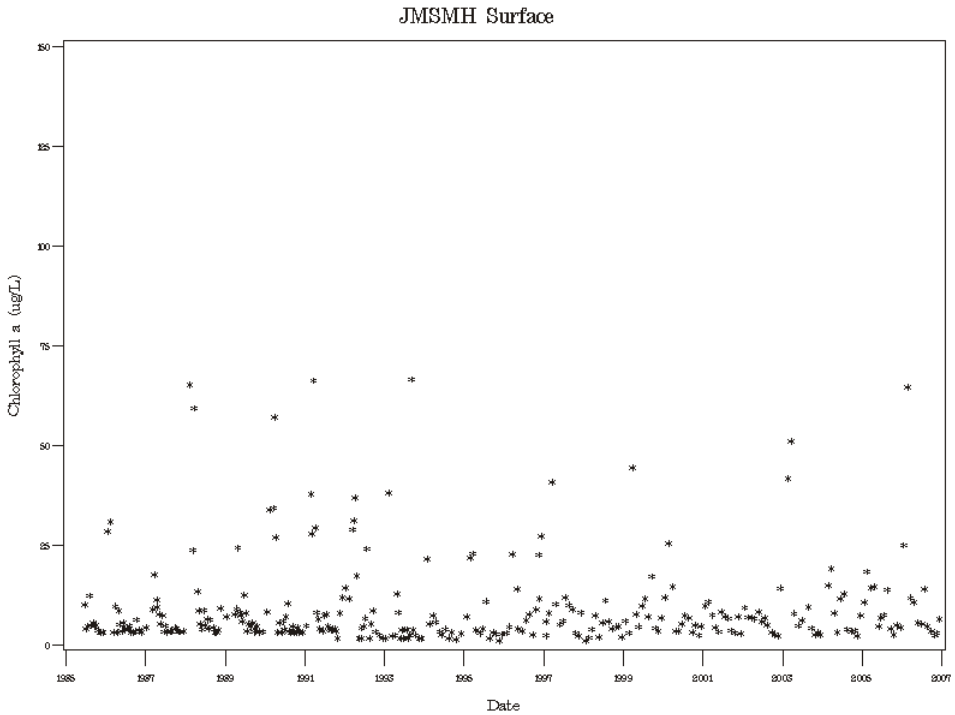


Figure 77. Scatterplot of surface chlorphyll *a* at segment JMSMH during the period 1985 to 2006.

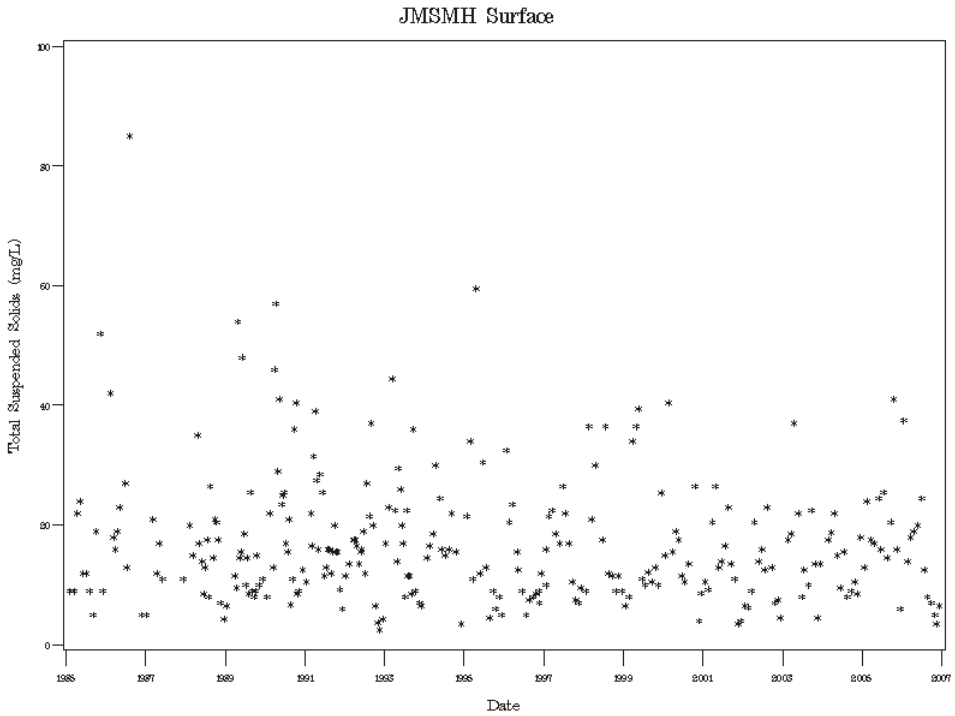


Figure 78. Scatterplot of surface total suspended solids at segment JMSMH during the period 1985 to 2006.

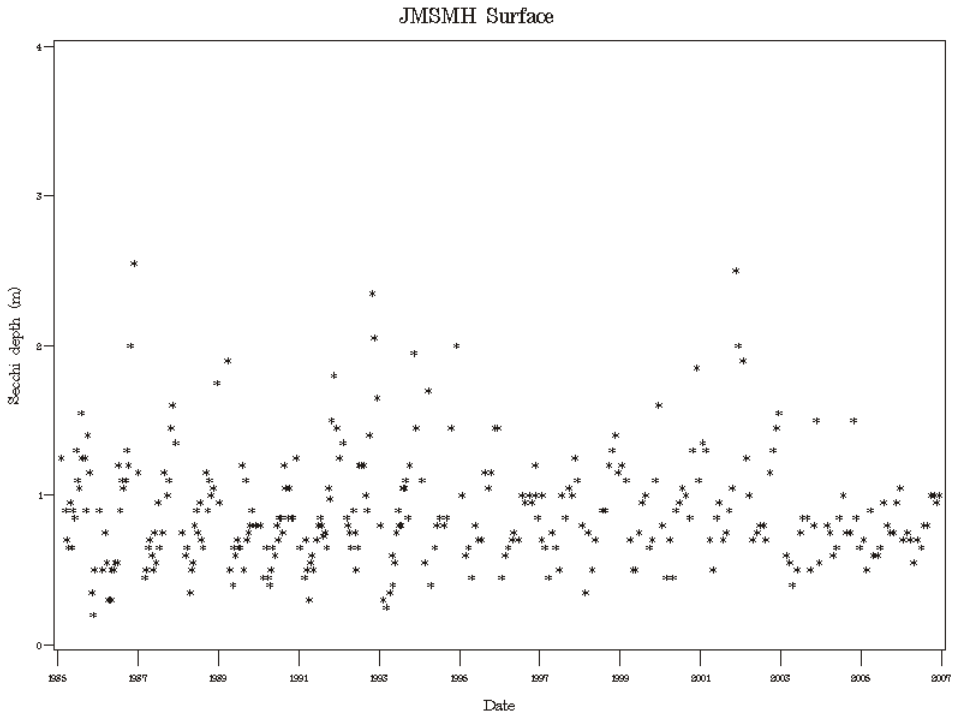


Figure 79. Scatterplot of secchi depth at segment JMSMH during the period 1985 to 2006.

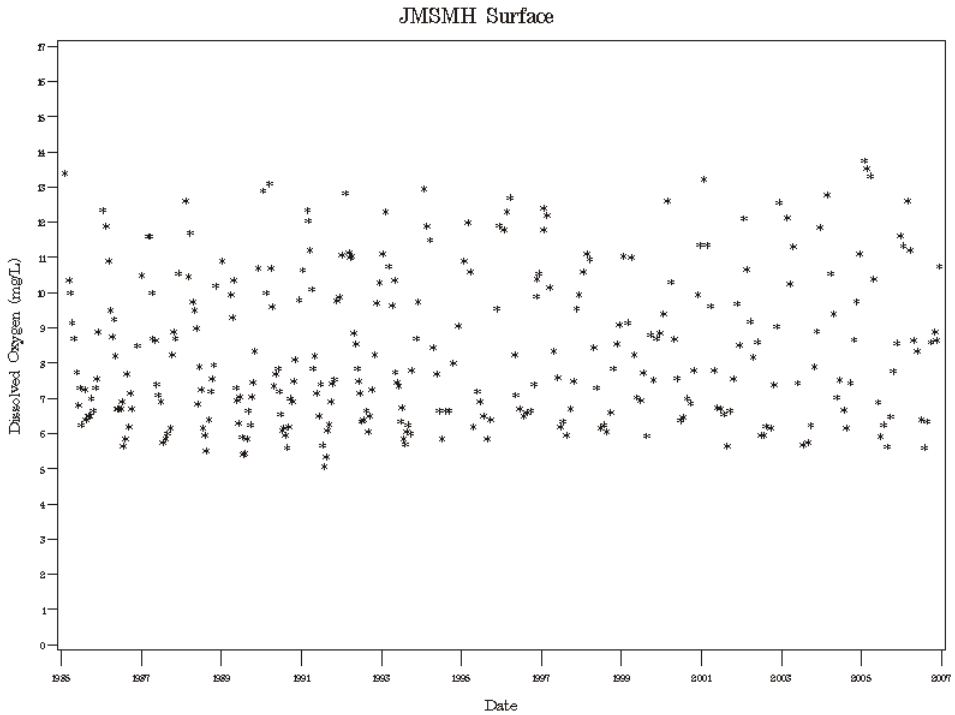


Figure 80. Scatterplot of surface dissolved oxygen at segment JMSMH during the period 1985 to 2006.

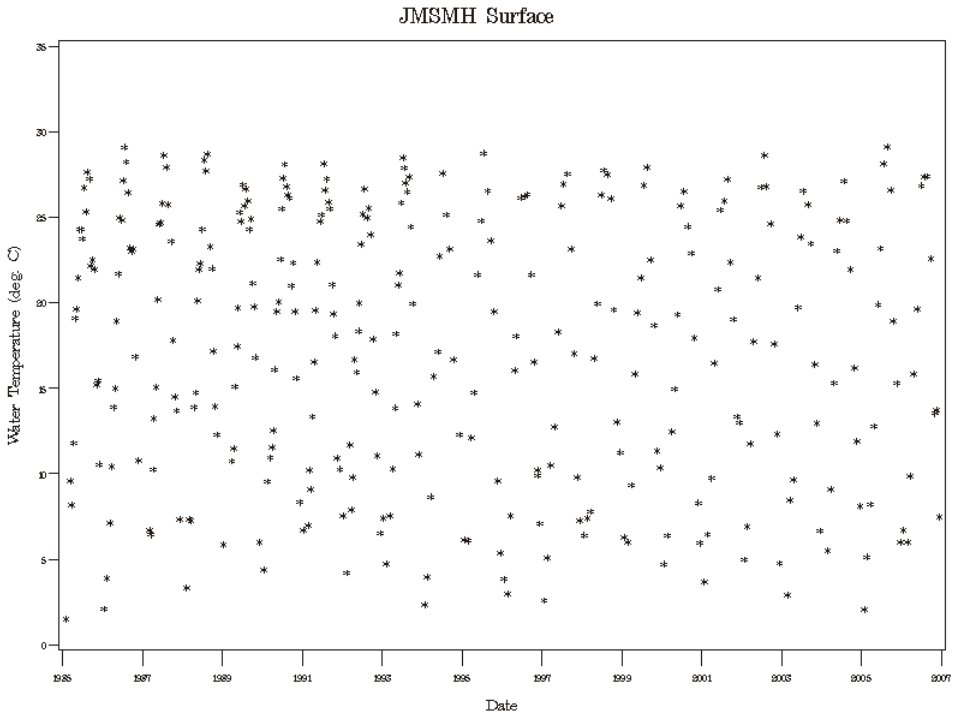


Figure 81. Scatterplot of surface water temperature at segment JMSMH during the period 1985 to 2006.

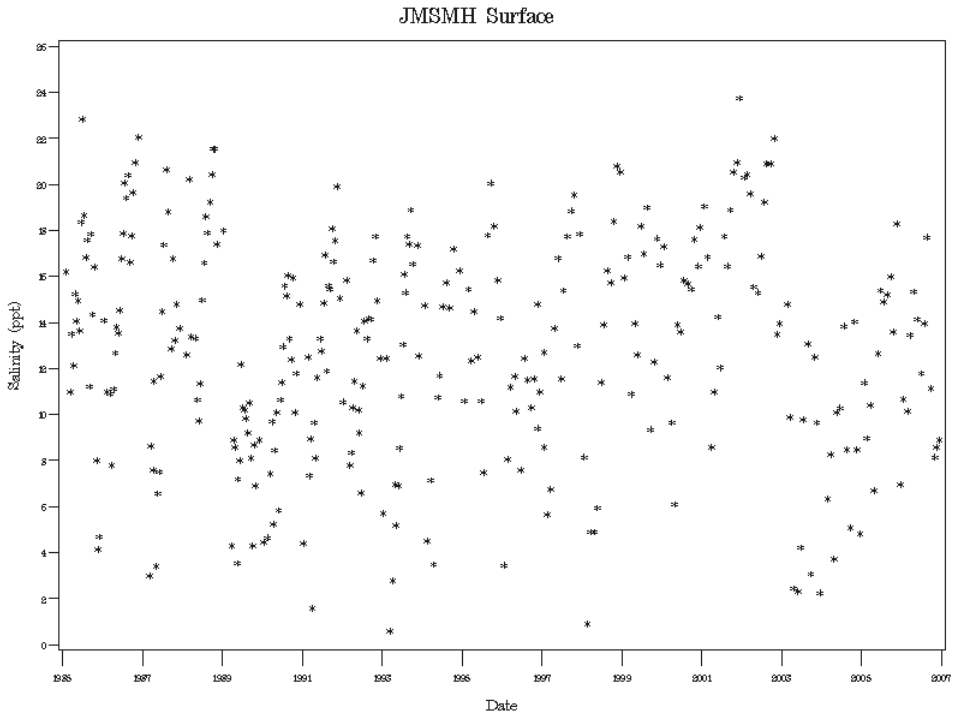
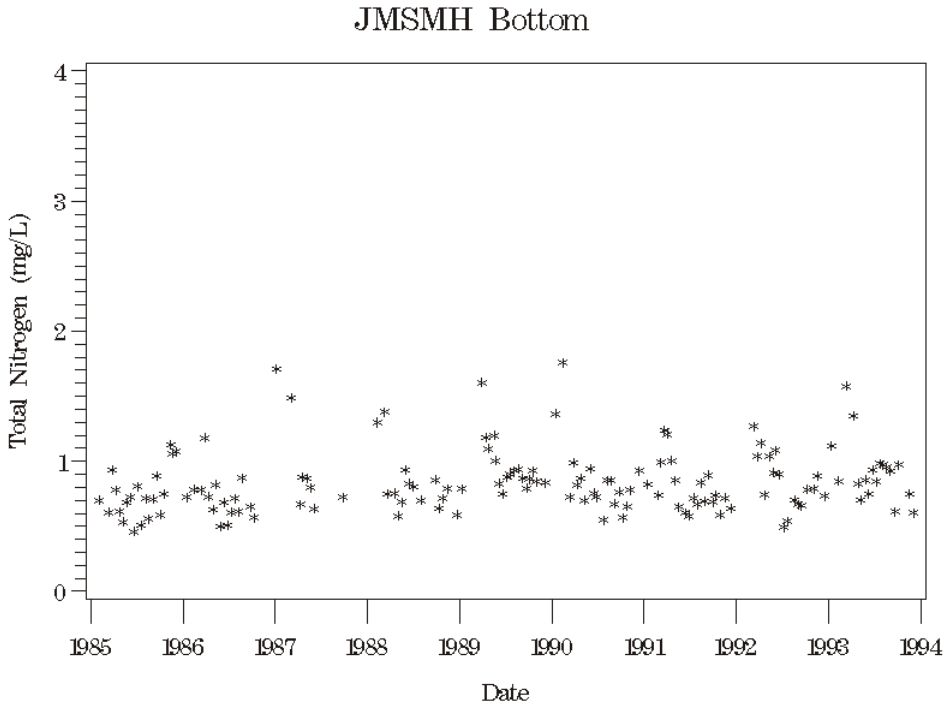


Figure 82. Scatterplot of surface salinity at segment JMSMH during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

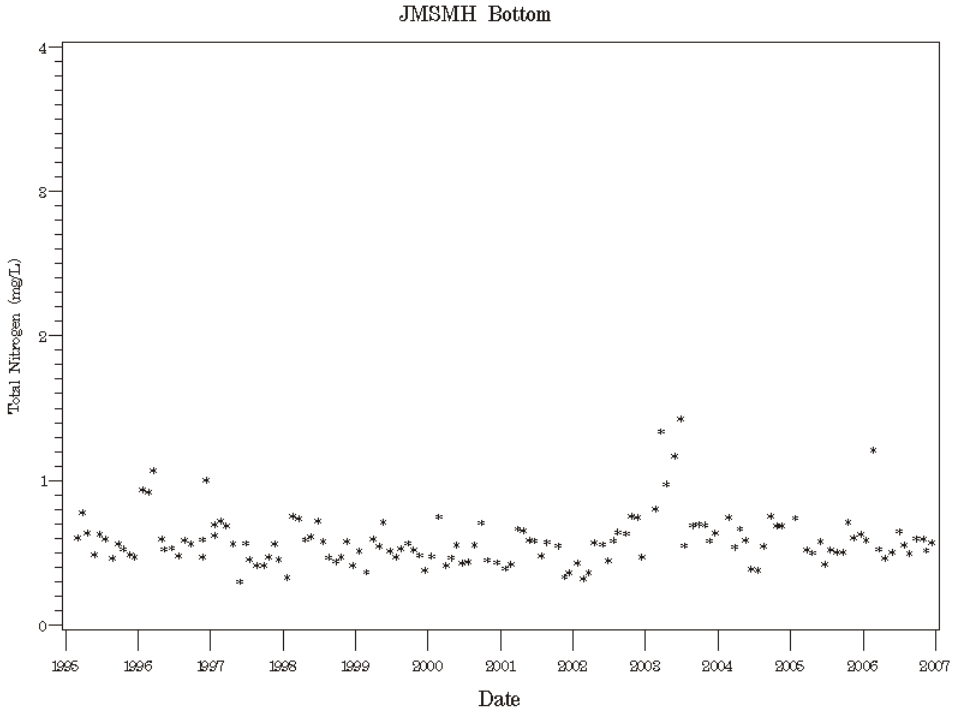
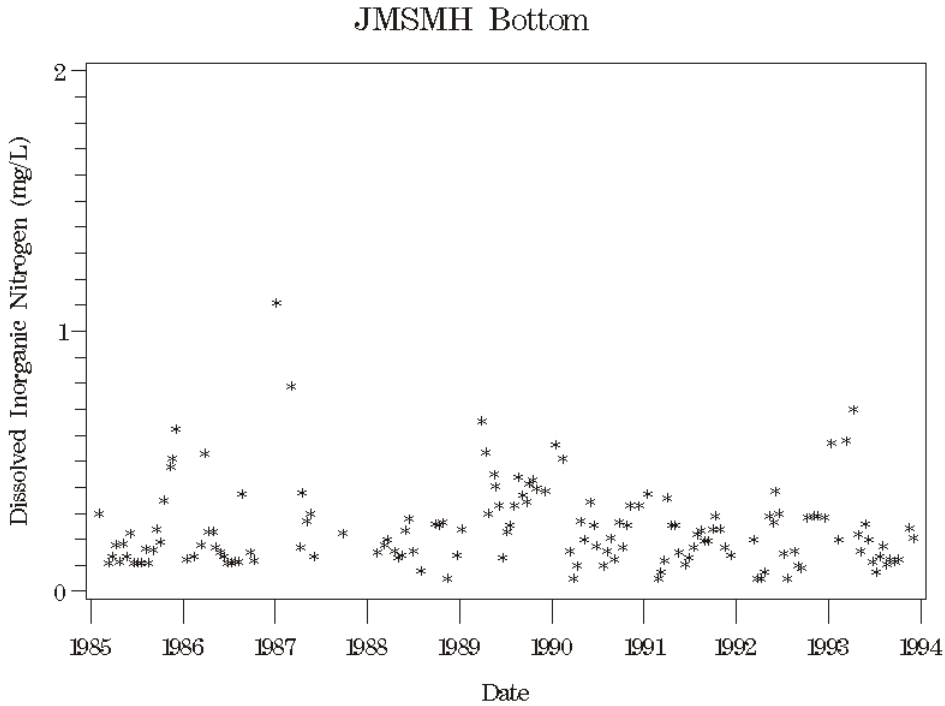


Figure 83. Scatterplots of bottom total nitrogen at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

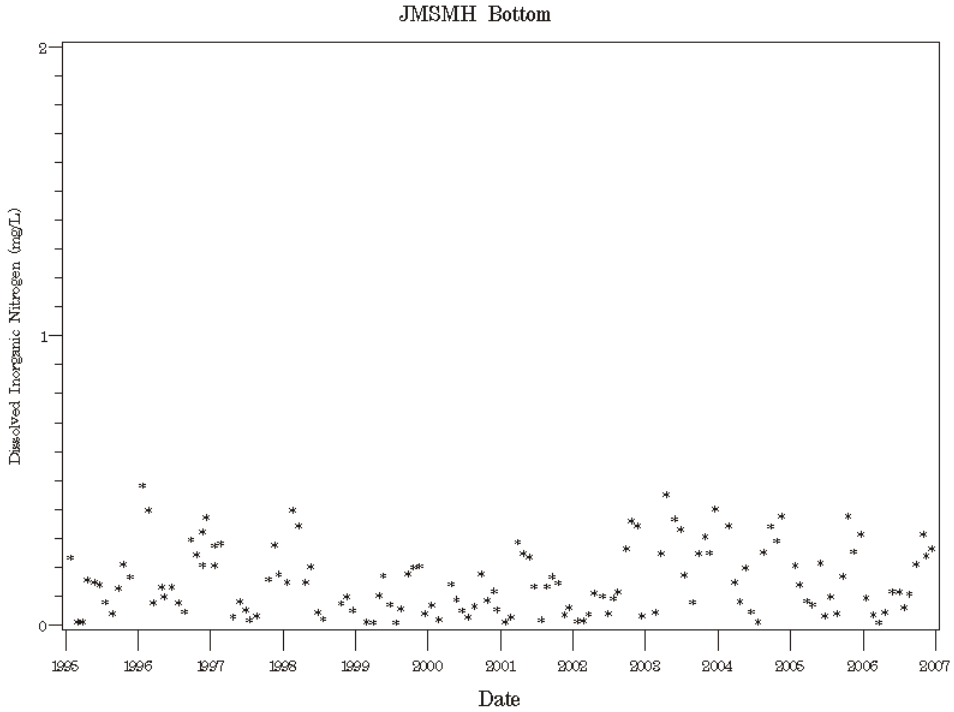
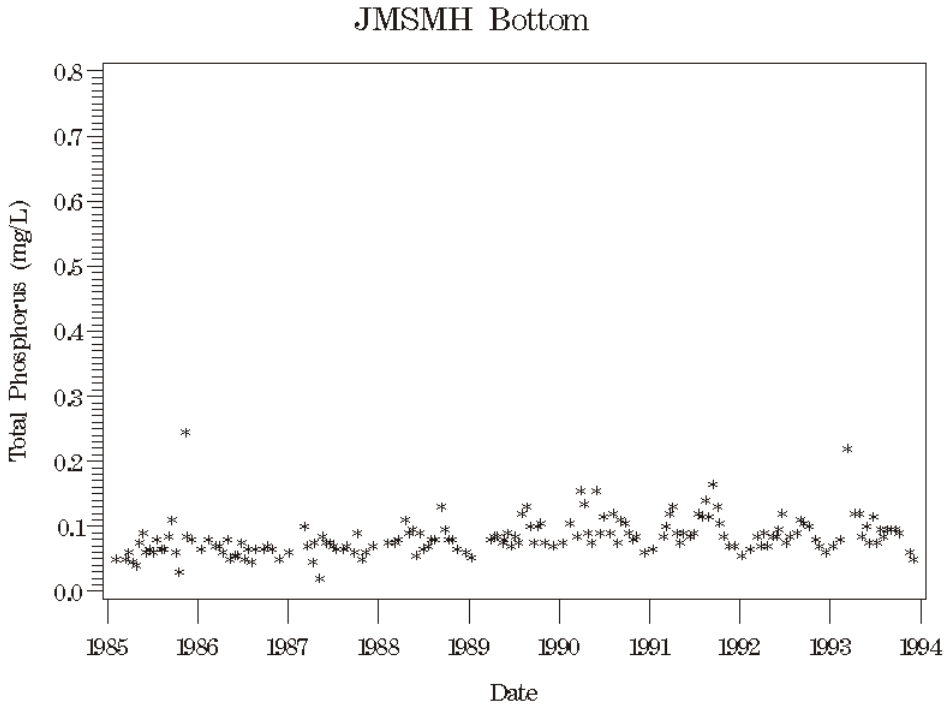


Figure 84. Scatterplots of bottom dissolved inorganic nitrogen at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

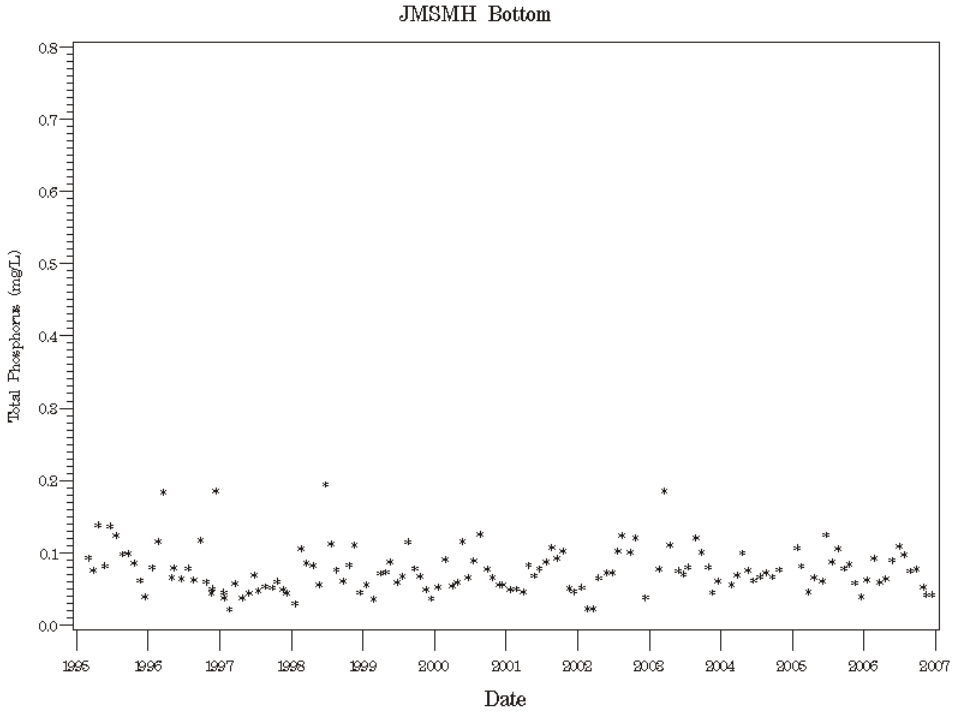
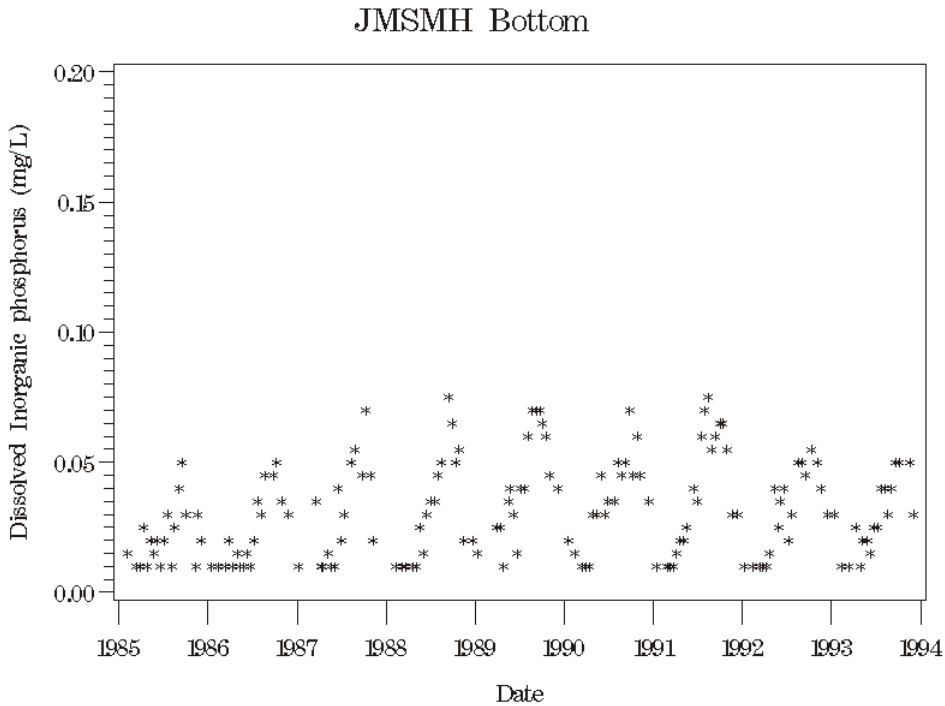


Figure 85. Scatterplots of bottom total phosphorus at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

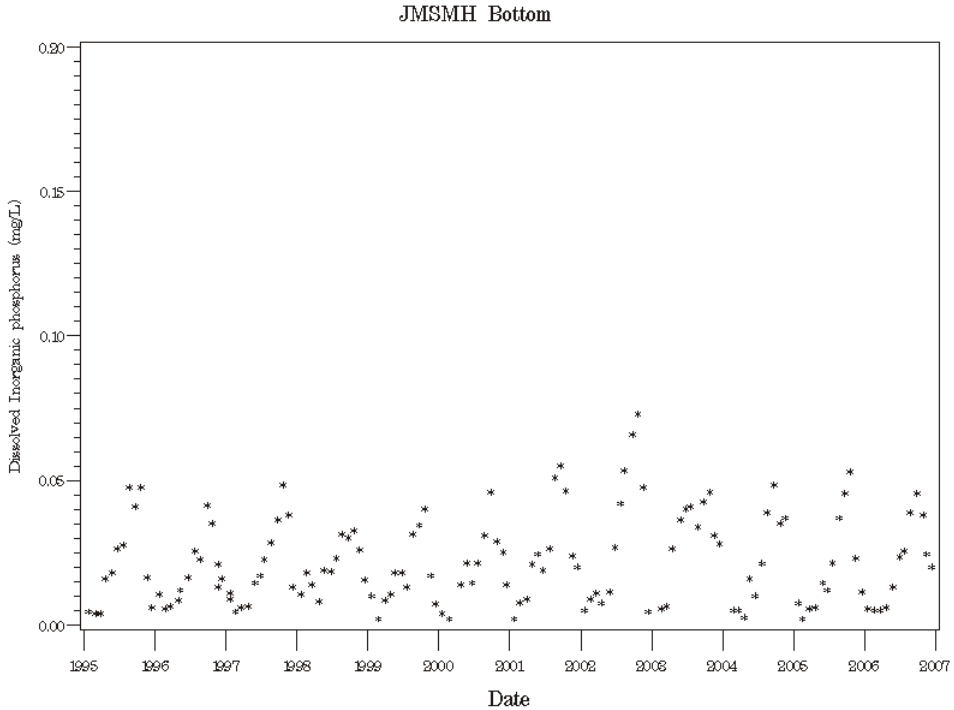


Figure 86. Scatterplots of bottom dissolved inorganic phosphorus at segment JMSMH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

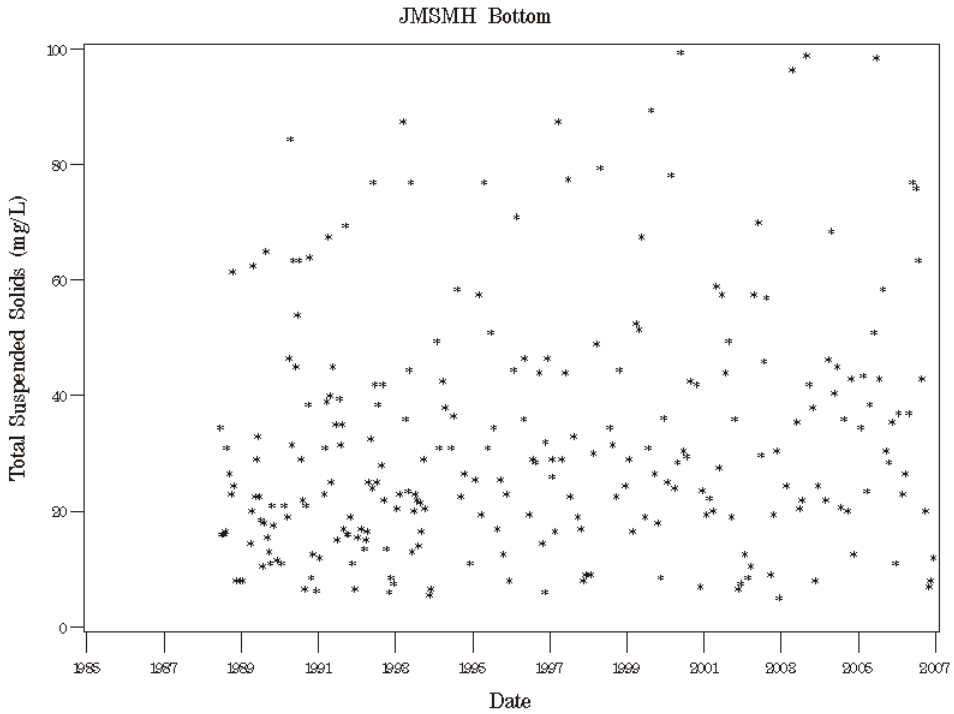


Figure 87. Scatterplot of bottom total suspended solids at segment JMSMH during the period 1985 to 2006.

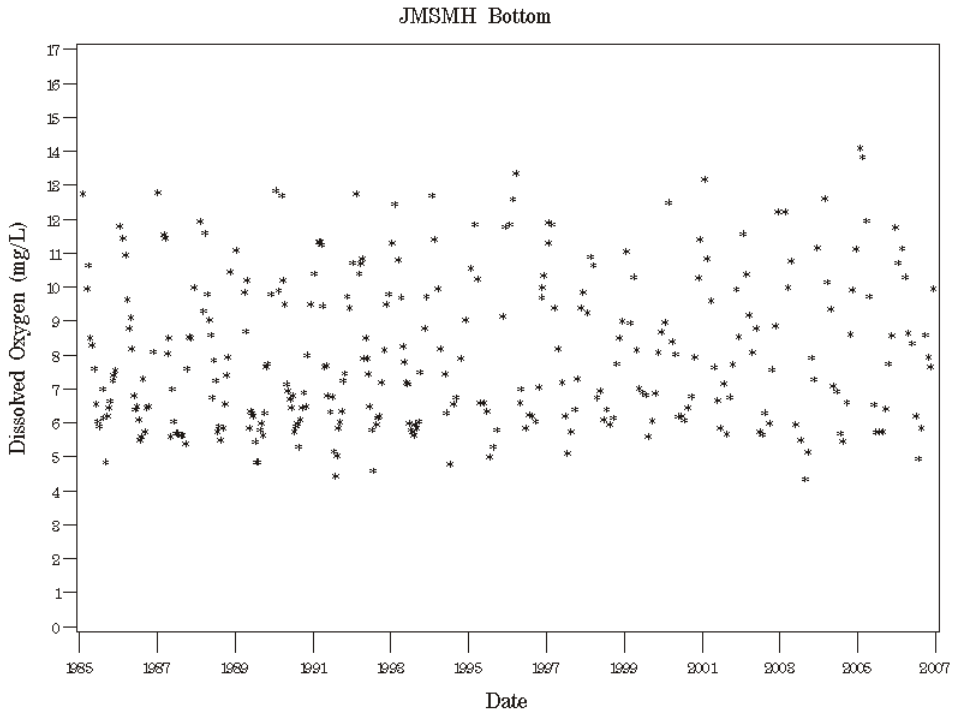


Figure 88. Scatterplot of bottom dissolved oxygen at segment JMSMH during the period 1985 to 2006.

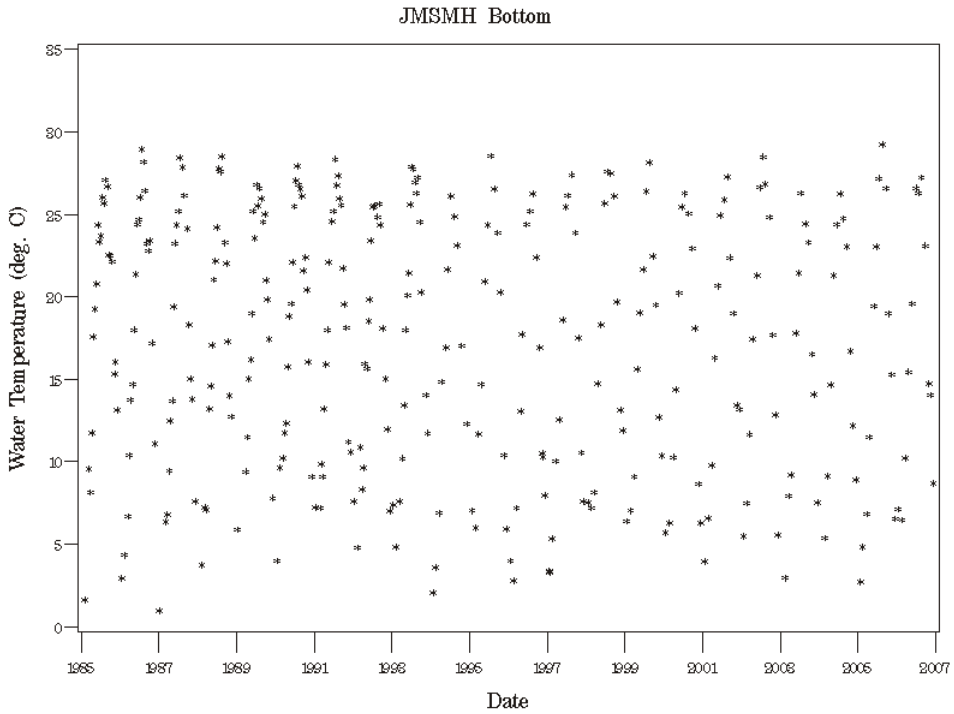


Figure 89. Scatterplot of bottom water temperature at segment JMSMH during the period 1985 to 2006.

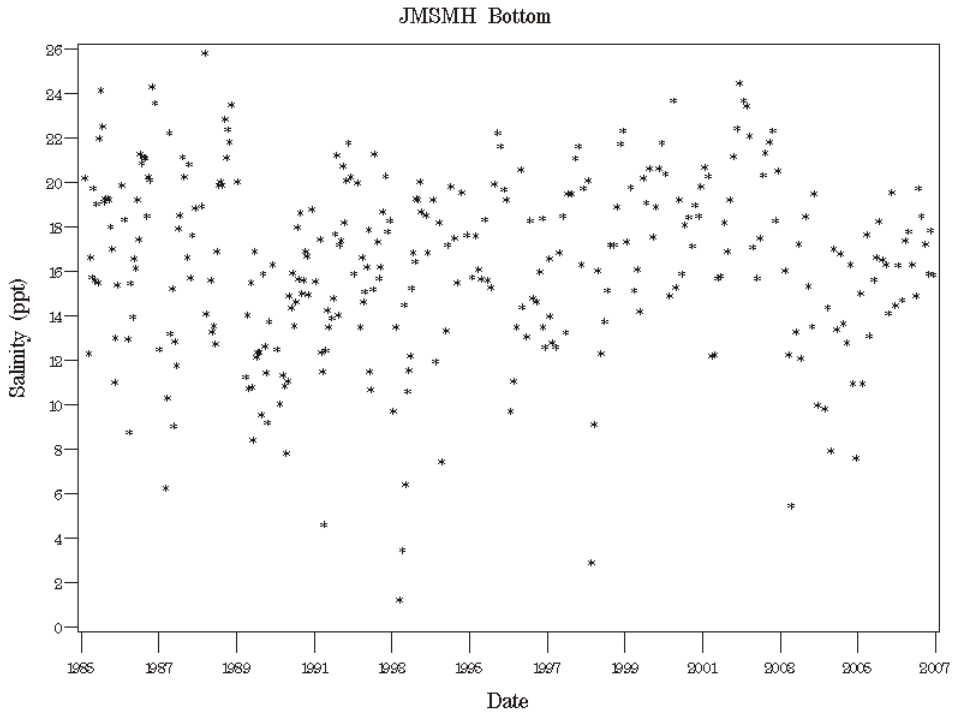
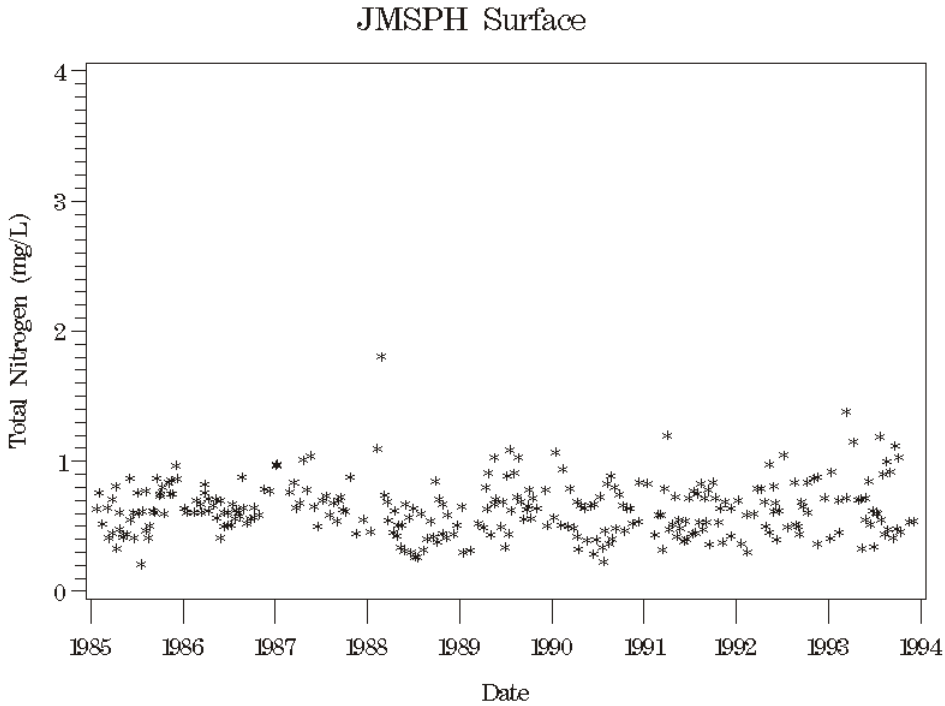


Figure 90. Scatterplot of bottom salinity at segment JMSMH during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

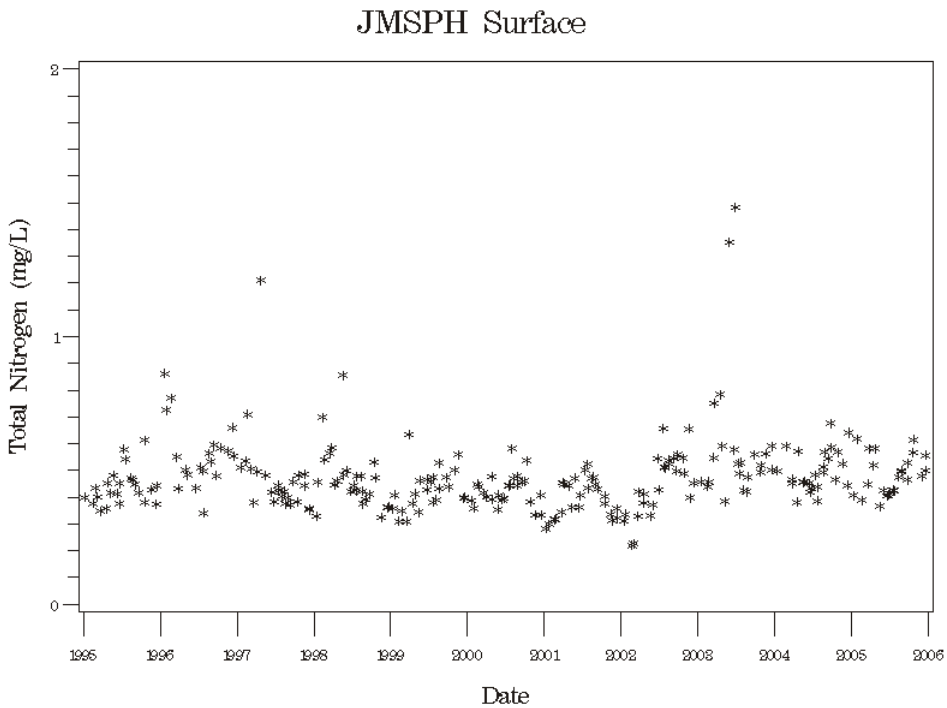
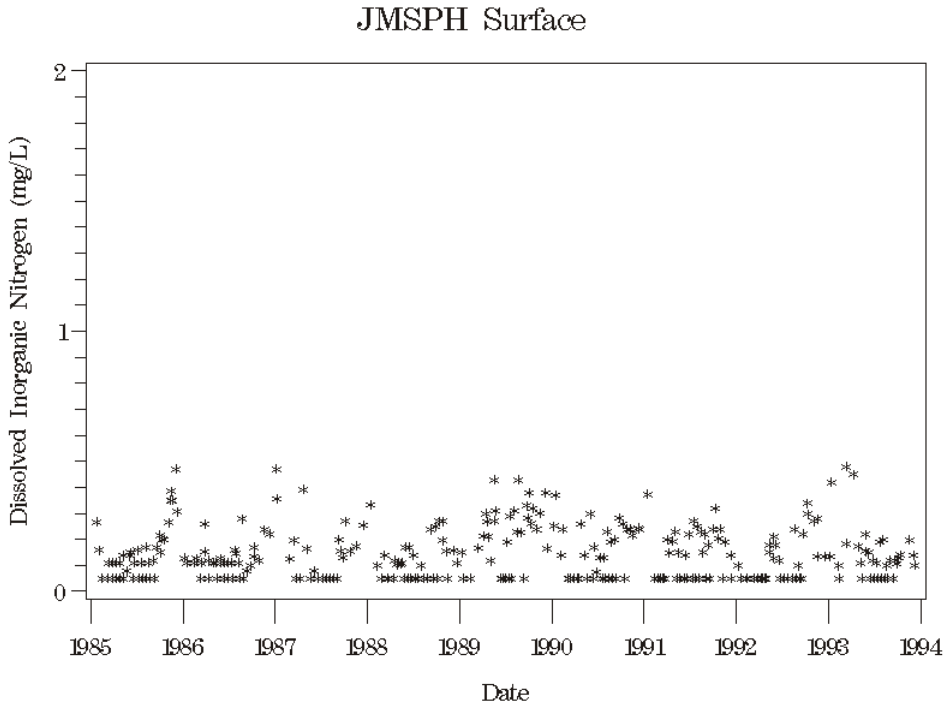


Figure 91. Scatterplots of surface total nitrogen at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

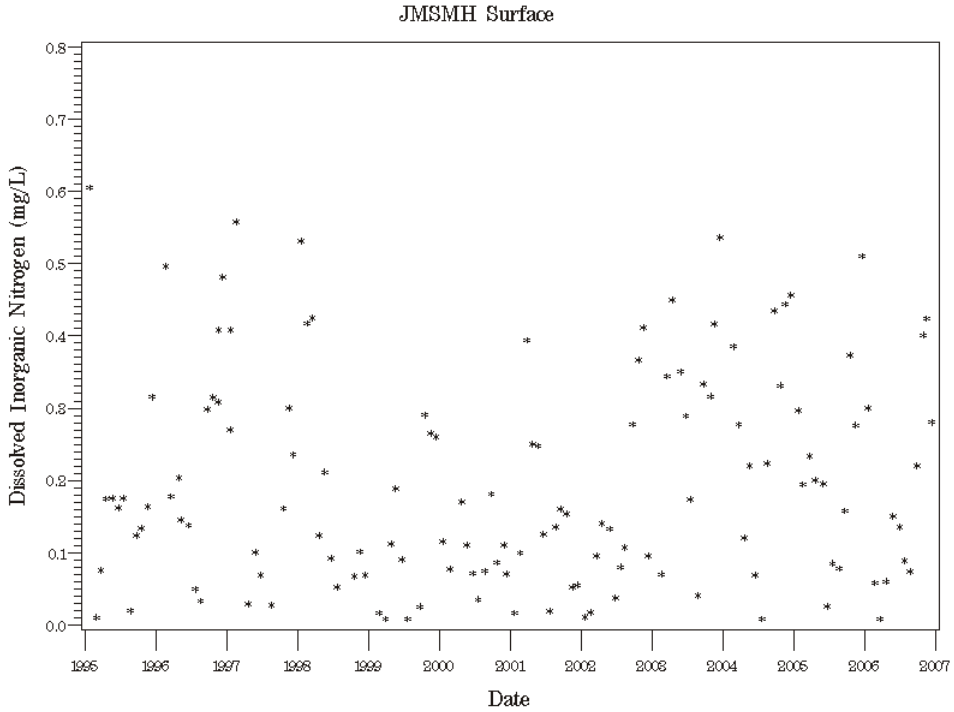
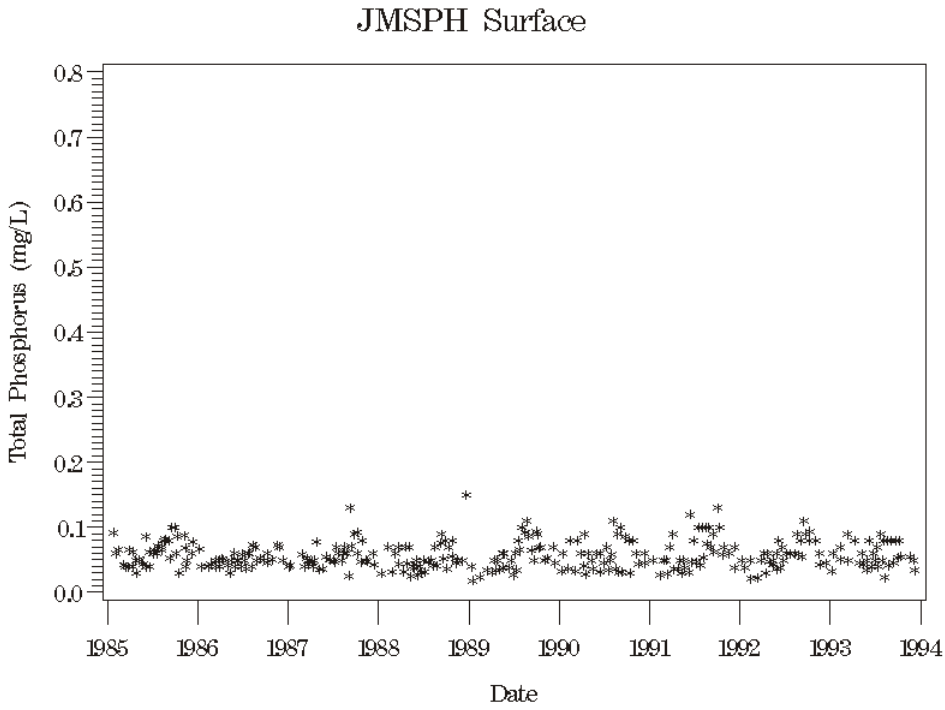


Figure 92. Scatterplots of surface dissolved inorganic nitrogen at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

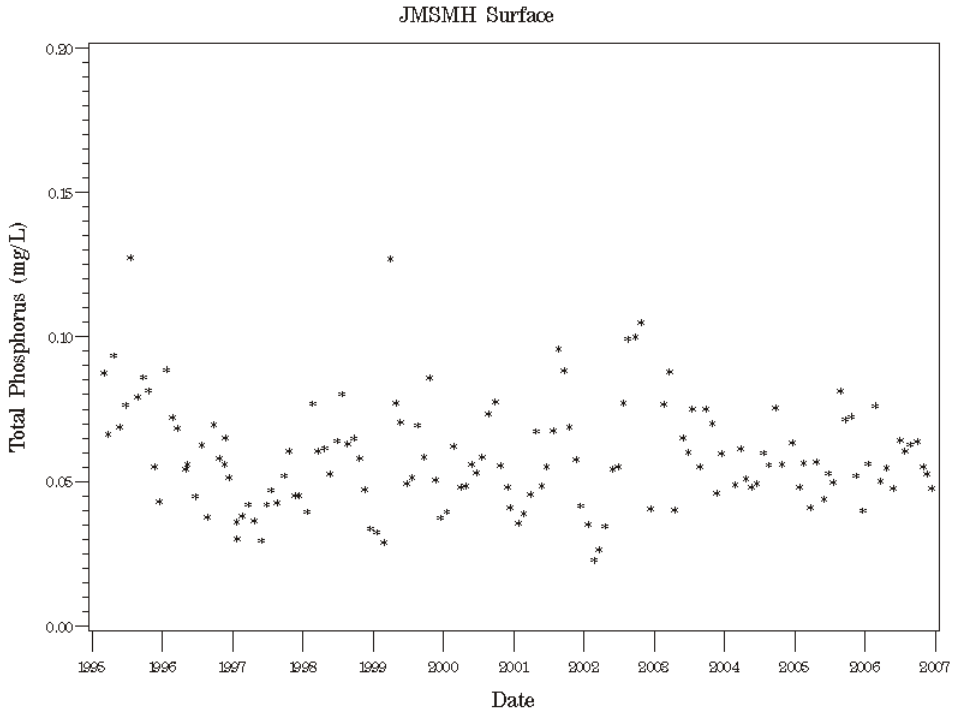
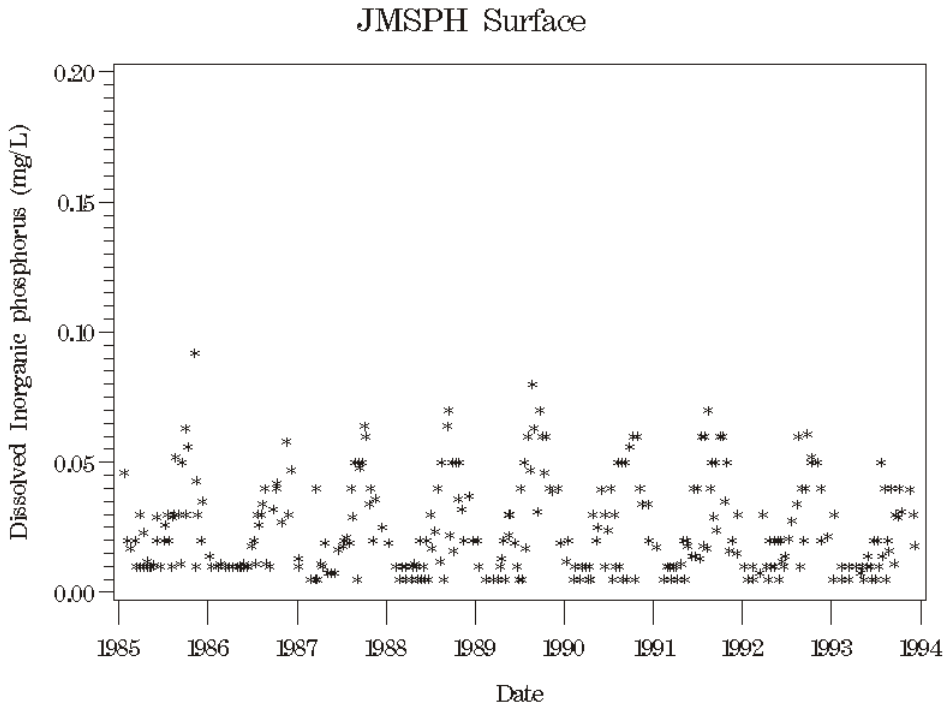


Figure 93. Scatterplots of surface total phosphorus at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

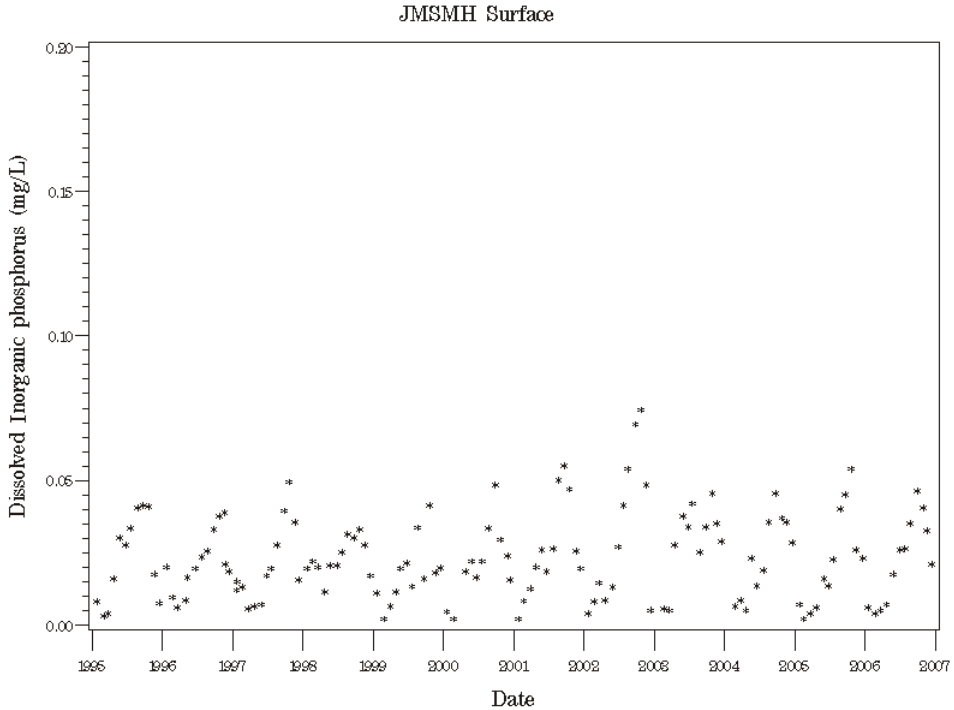


Figure 94. Scatterplots of surface dissolved inorganic phosphorus at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

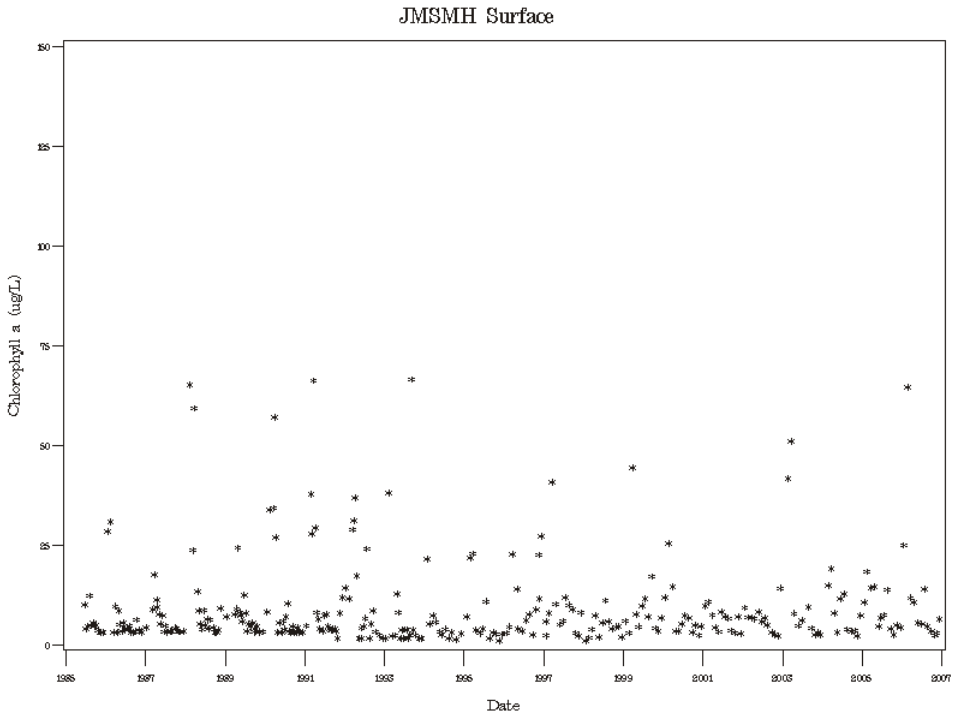


Figure 95. Scatterplot of surface chlorphyll *a* at segment JMSPH during the period 1985 to 2006.

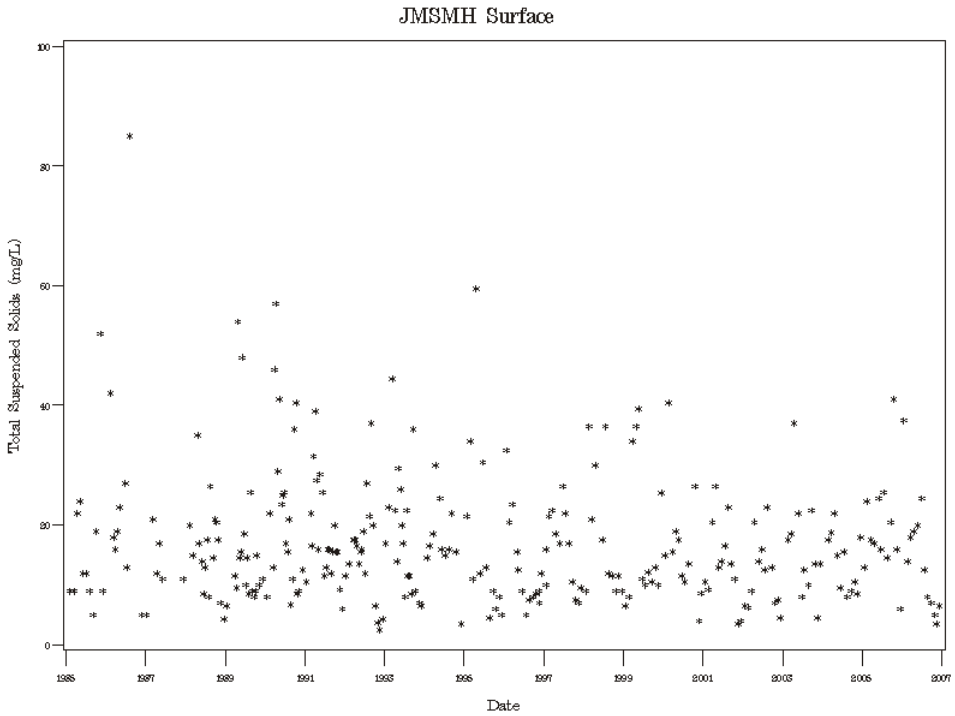


Figure 96. Scatterplot of surface total suspended solids at segment JMSPH during the period 1985 to 2006.

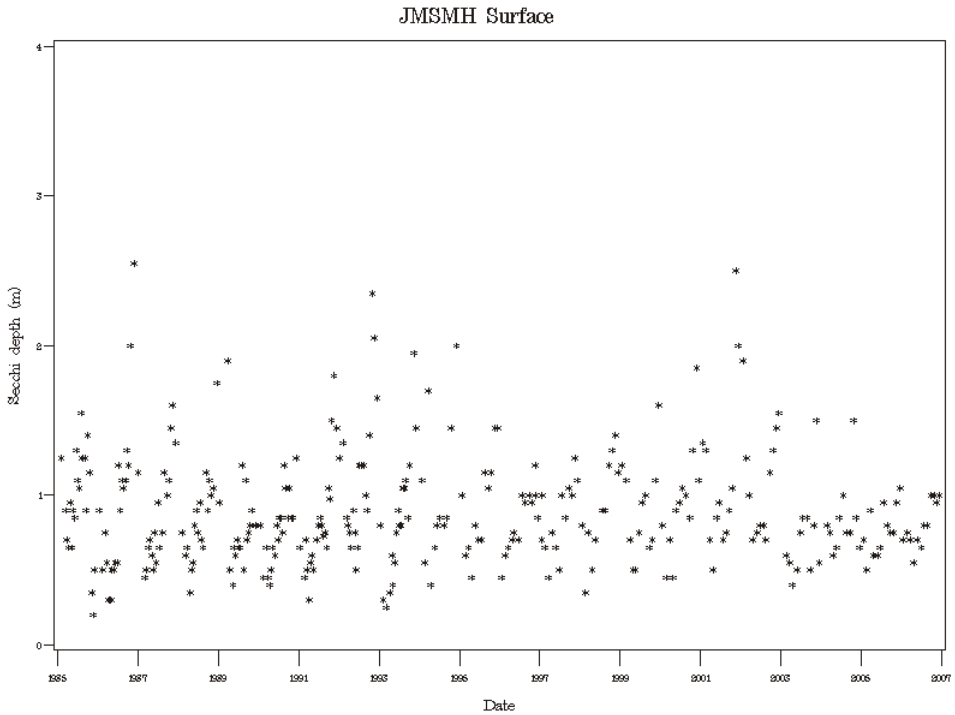


Figure 97. Scatterplot of secchi depth at segment JMSPH during the period 1985 to 2006.

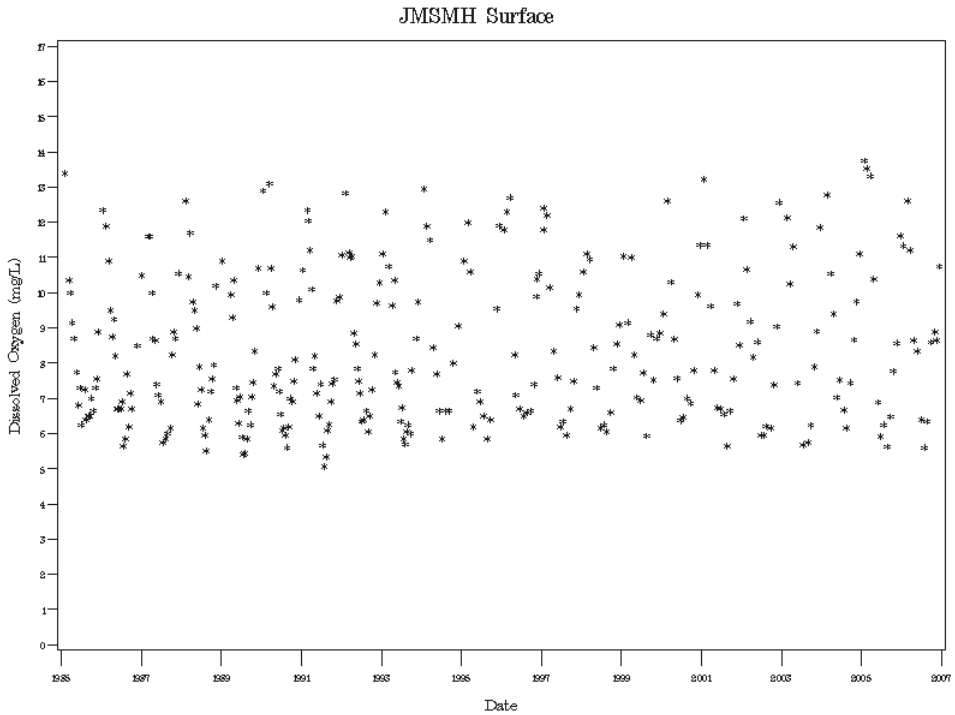


Figure 98. Scatterplot of surface dissolved oxygen at segment JMSPH during the period 1985 to 2006.

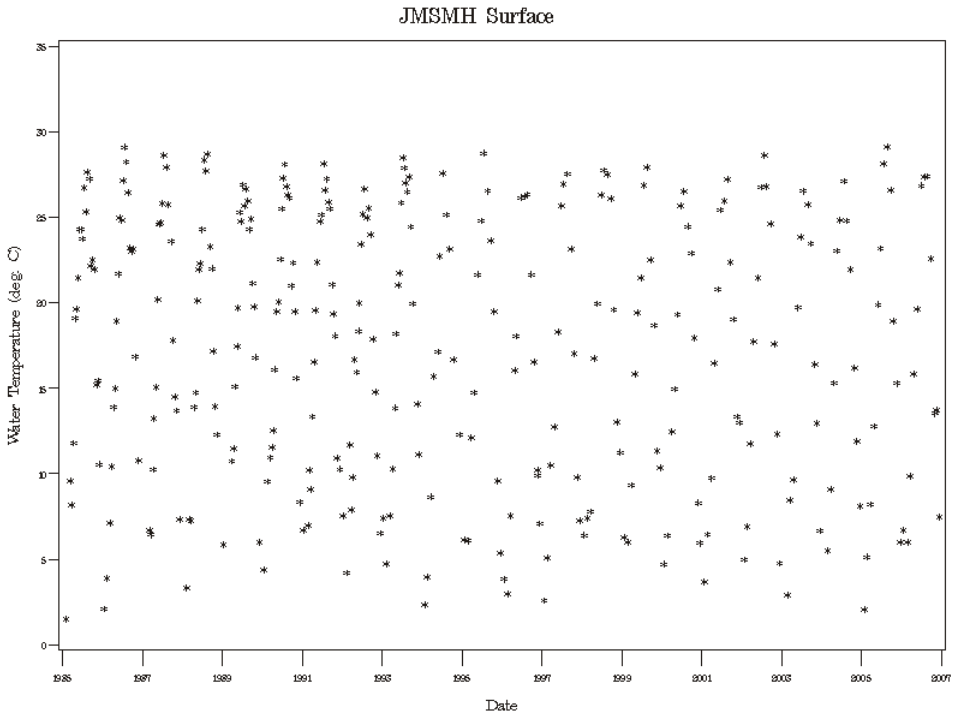


Figure 99. Scatterplot of surface water temperature at segment JMSPH during the period 1985 to 2006.

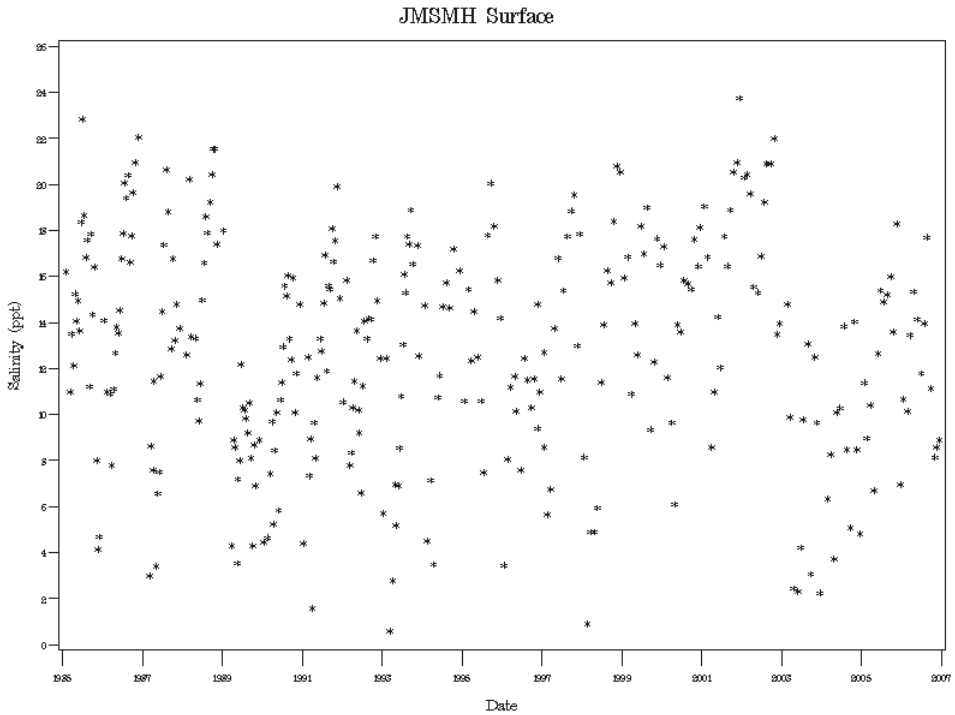
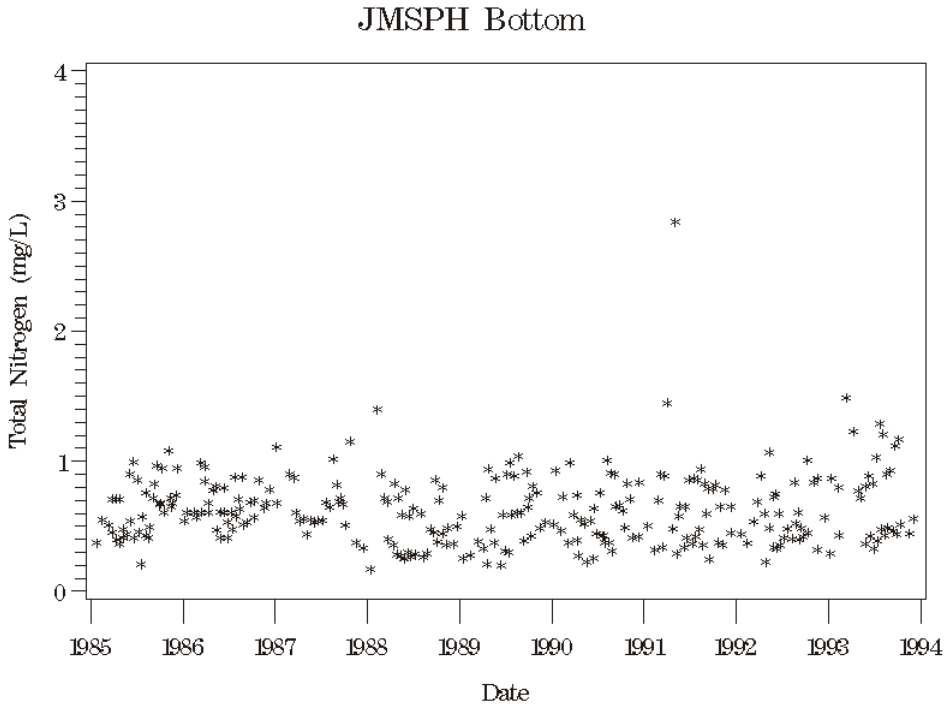


Figure 100. Scatterplot of surface salinity at segment JMSPH during the period 1985 to 2006.

a) Pre-method change period



b) Post-method change period

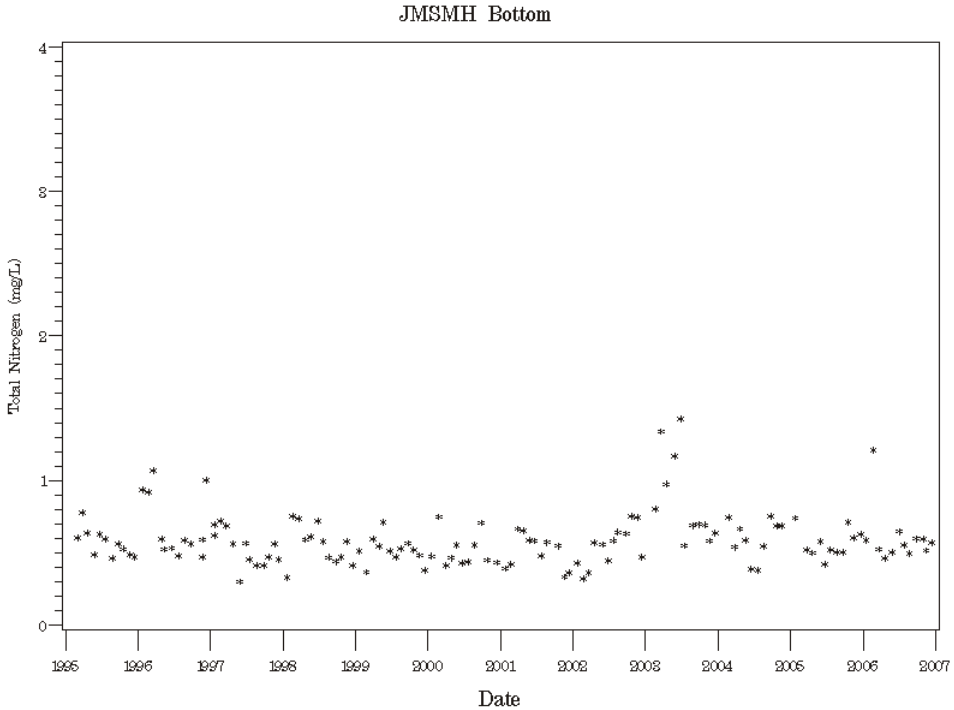
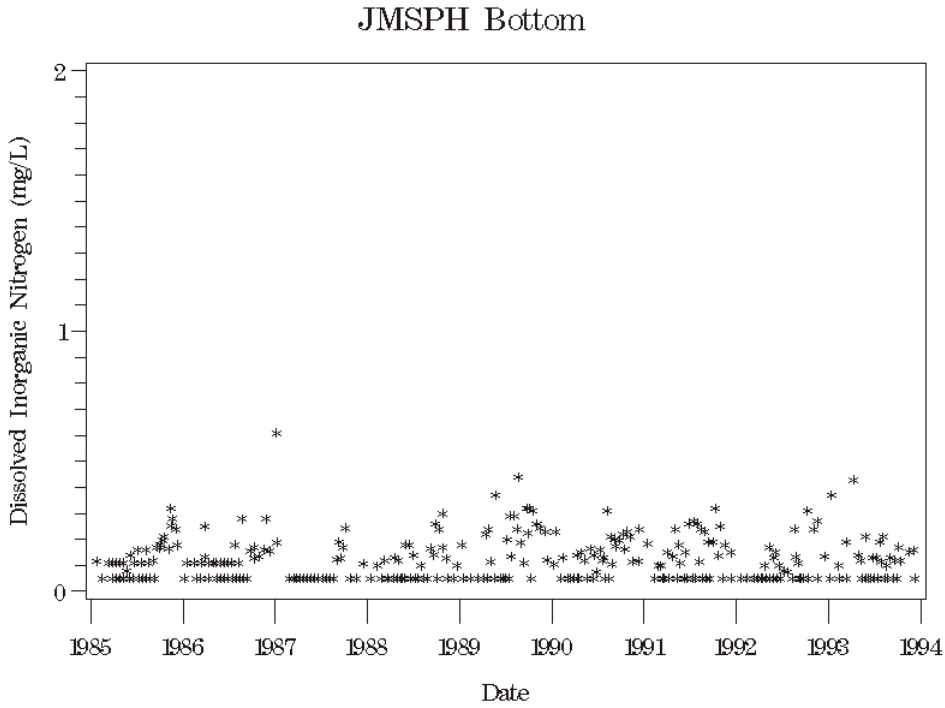


Figure 101. Scatterplots of bottom total nitrogen at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

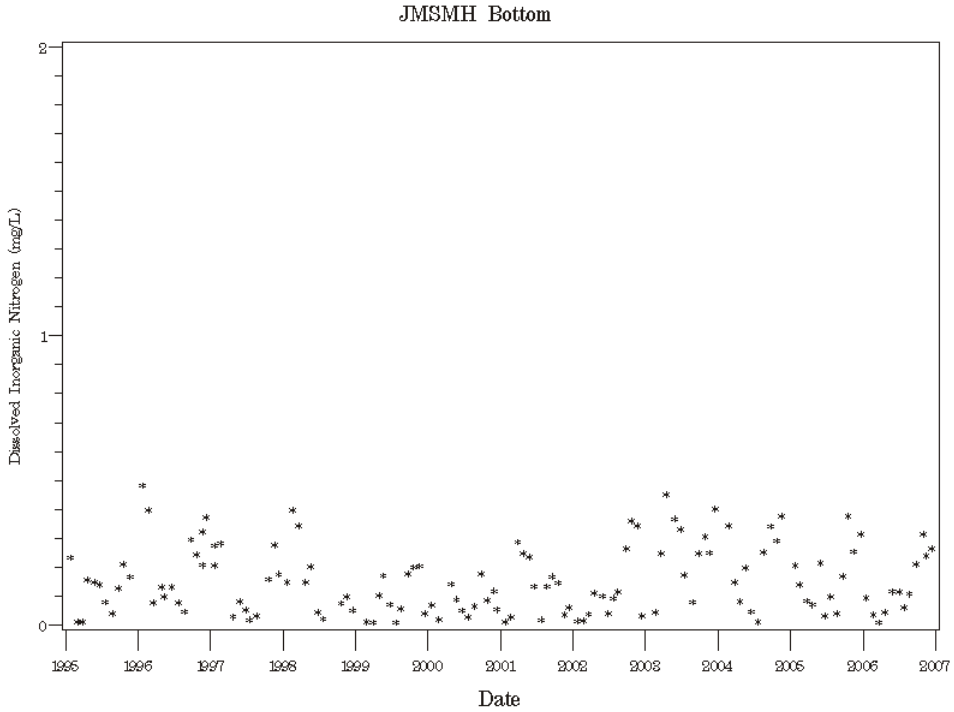
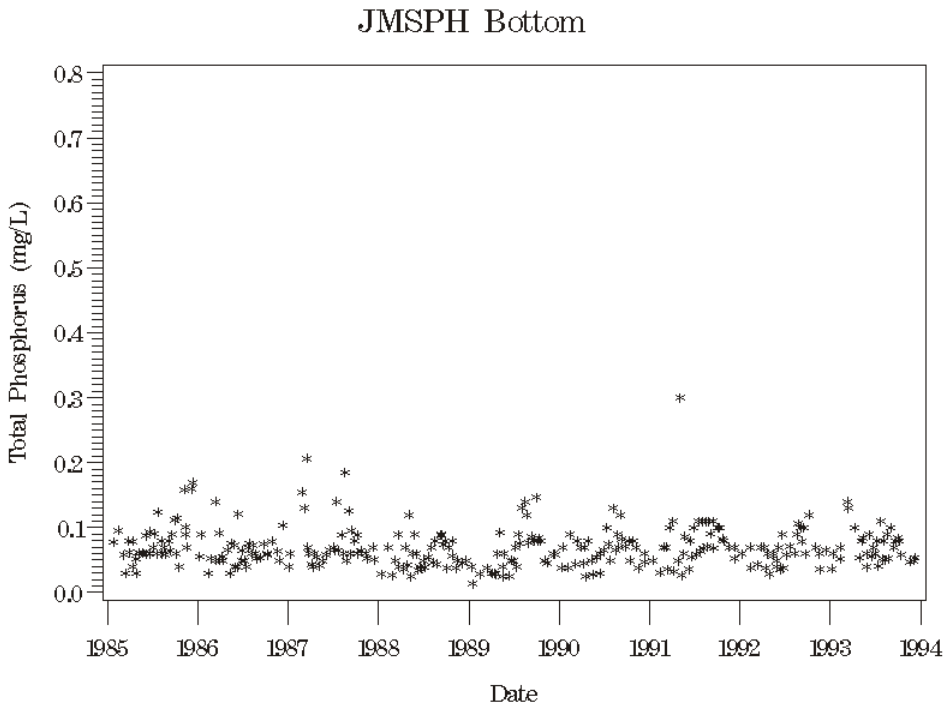


Figure 102 Scatterplots of bottom dissolved inorganic nitrogen at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

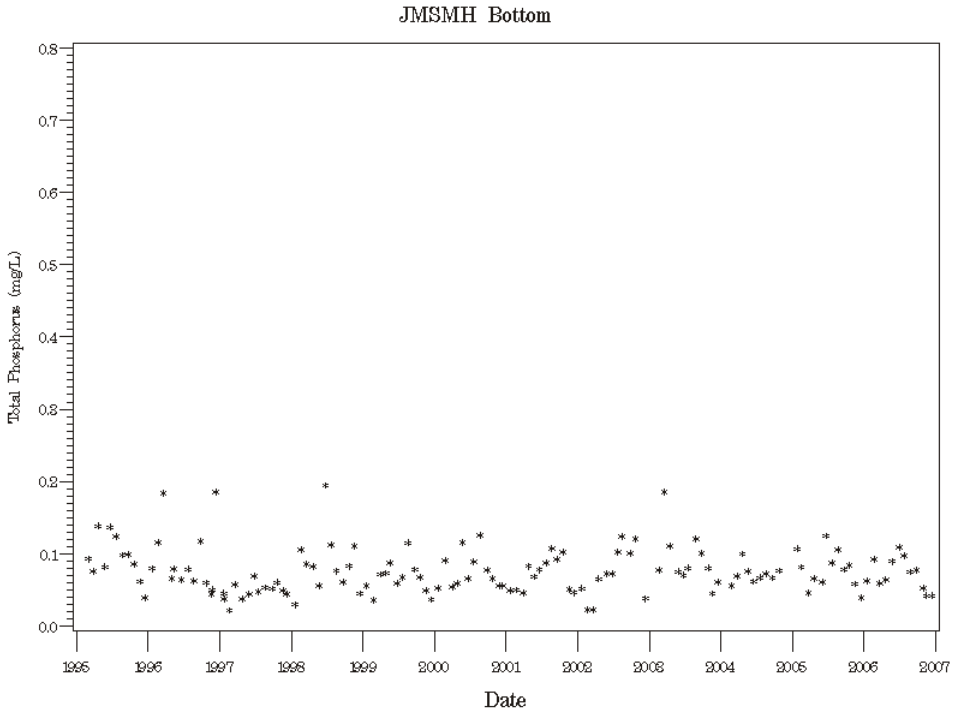
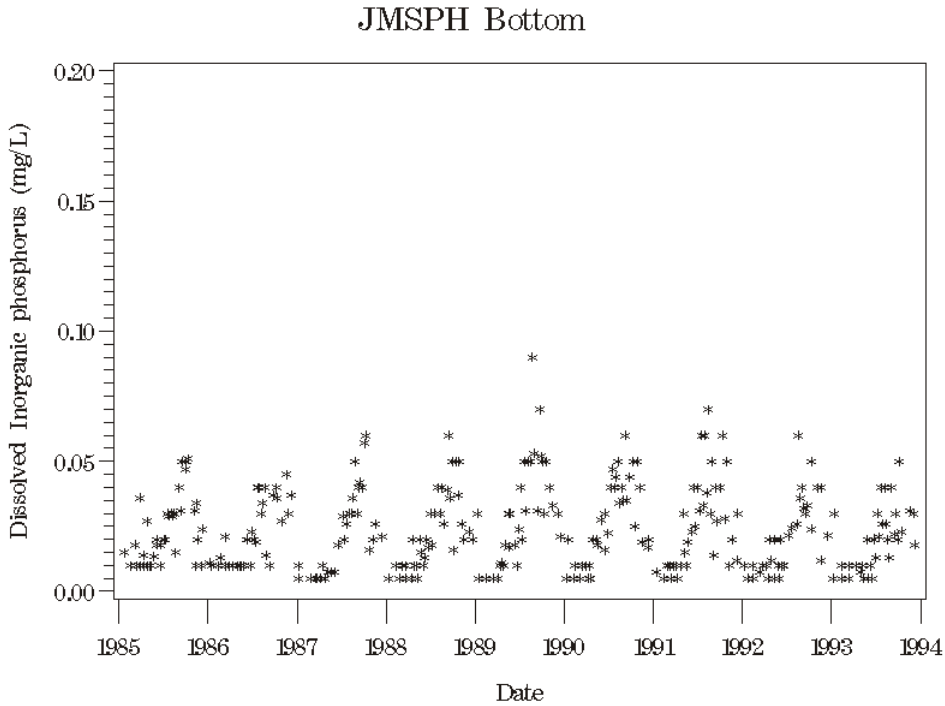


Figure 103. Scatterplots of bottom total phosphorus at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

a) Pre-method change period



b) Post-method change period

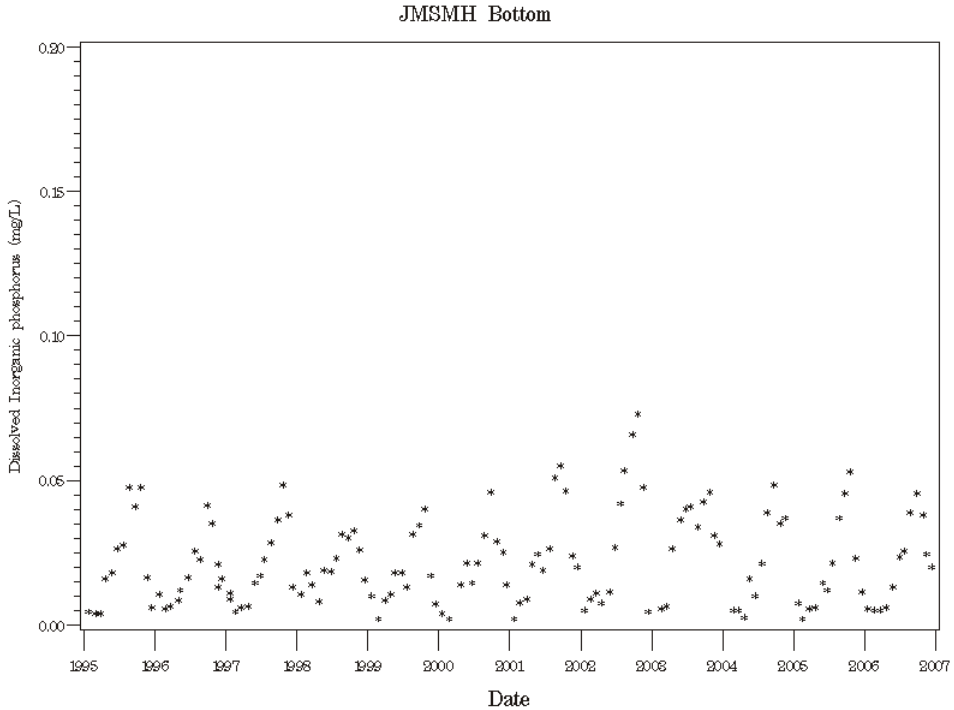


Figure 104. Scatterplots of bottom dissolved inorganic phosphorus at segment JMSPH during the a) Pre-method change (1985-1993) and b) Post-method change (1995-2006) periods.

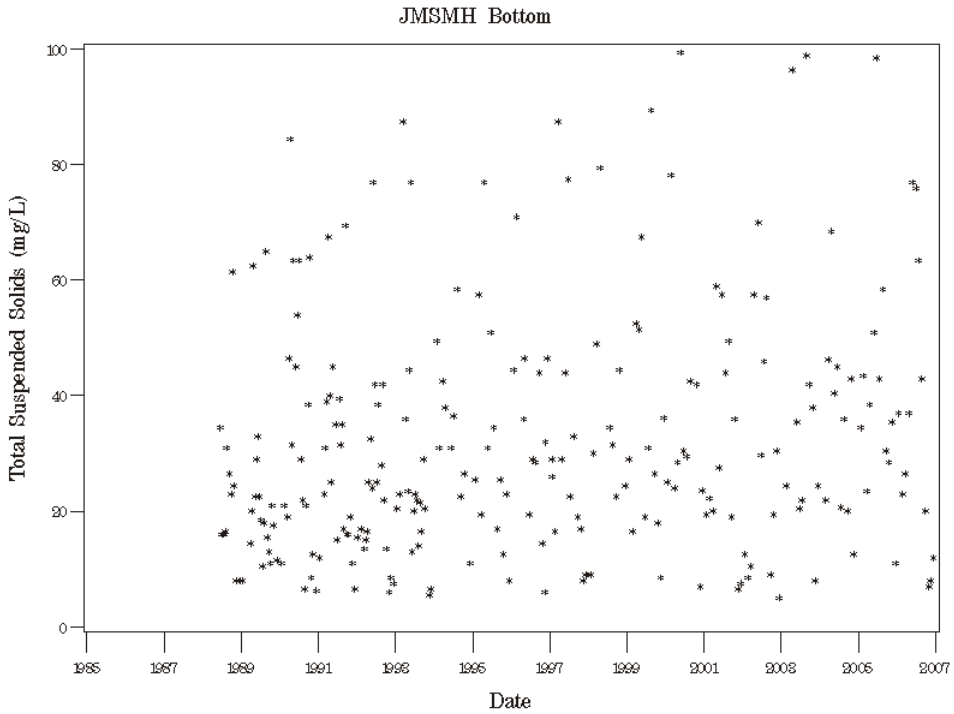


Figure 105. Scatterplot of bottom total suspended solids at segment JMSPH during the period 1985 to 2006.

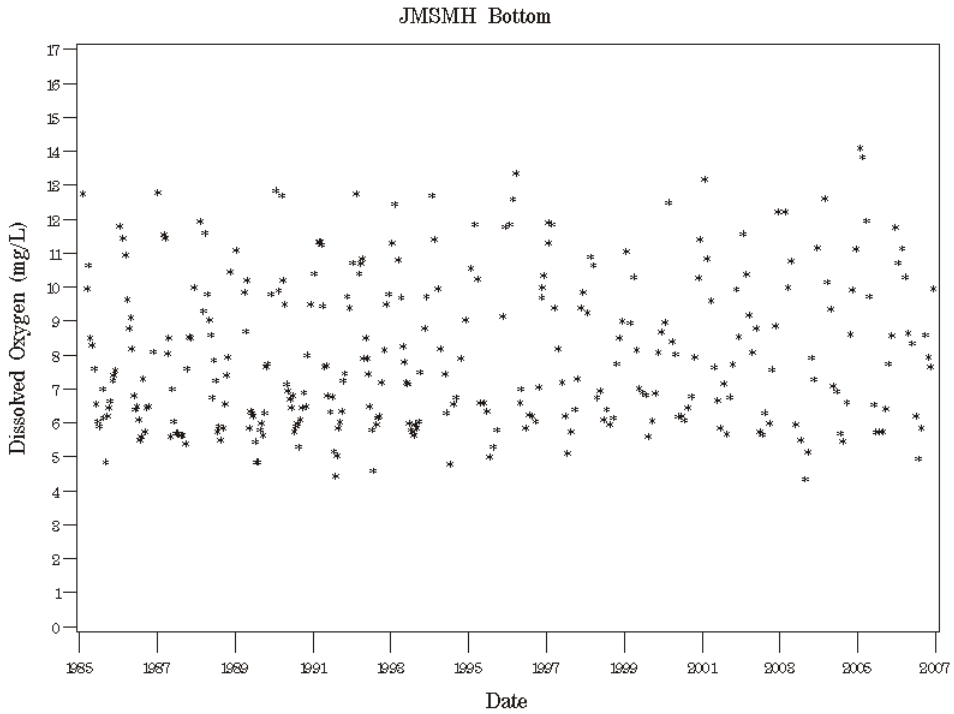


Figure 106. Scatterplot of bottom dissolved oxygen at segment JMSPH during the period 1985 to 2006.

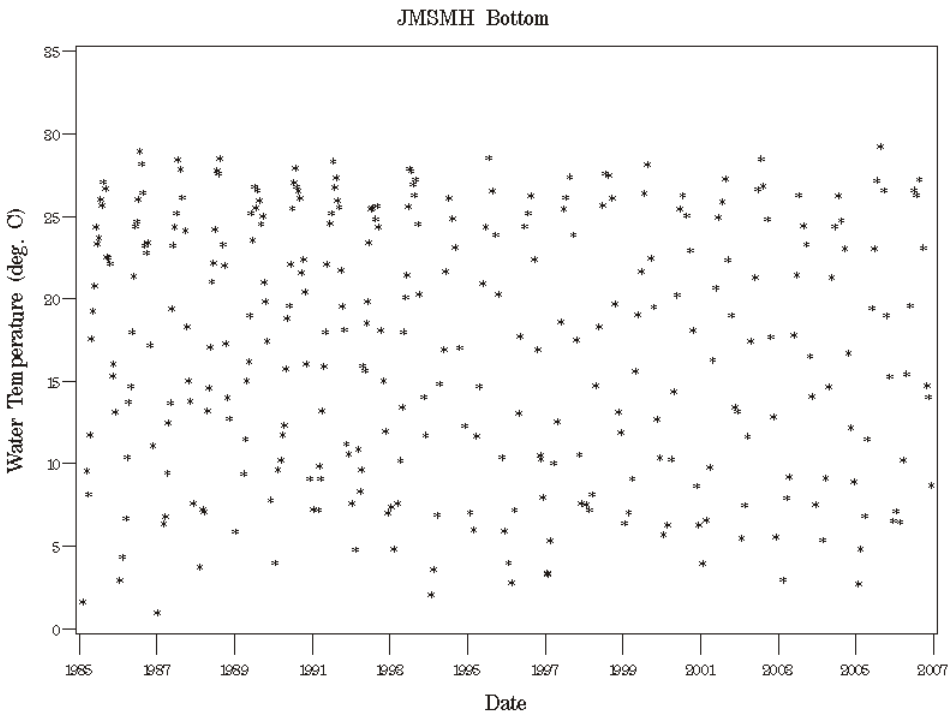


Figure 107. Scatterplot of bottom water temperature at segment JMSPH during the period 1985 to 2006.

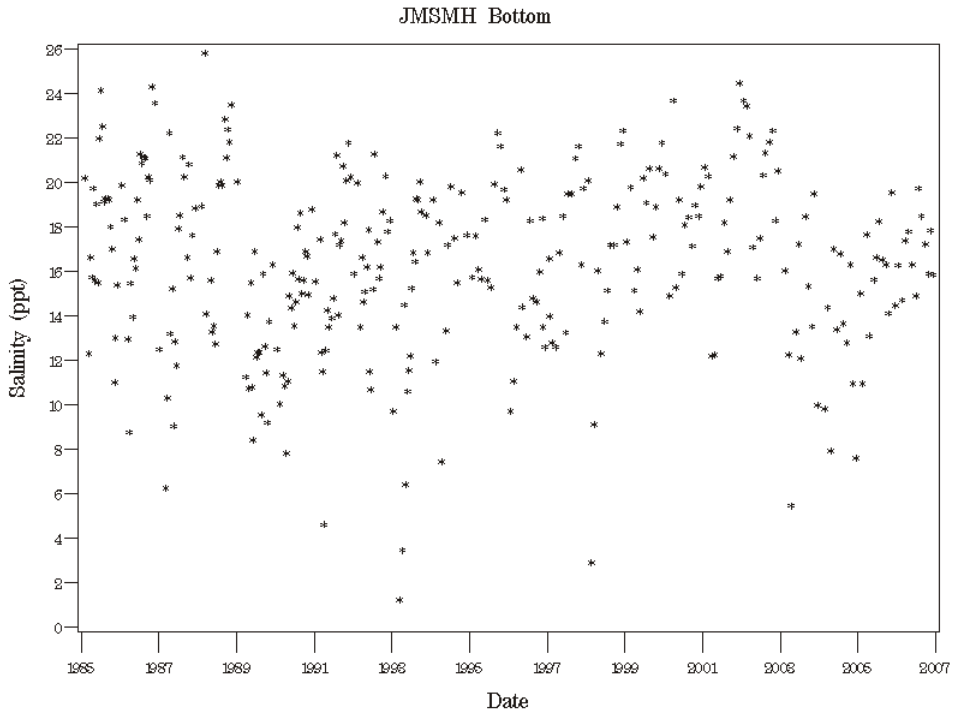


Figure 108. Scatterplot of bottom salinity at segment JMSPH during the period 1985 to 2006.