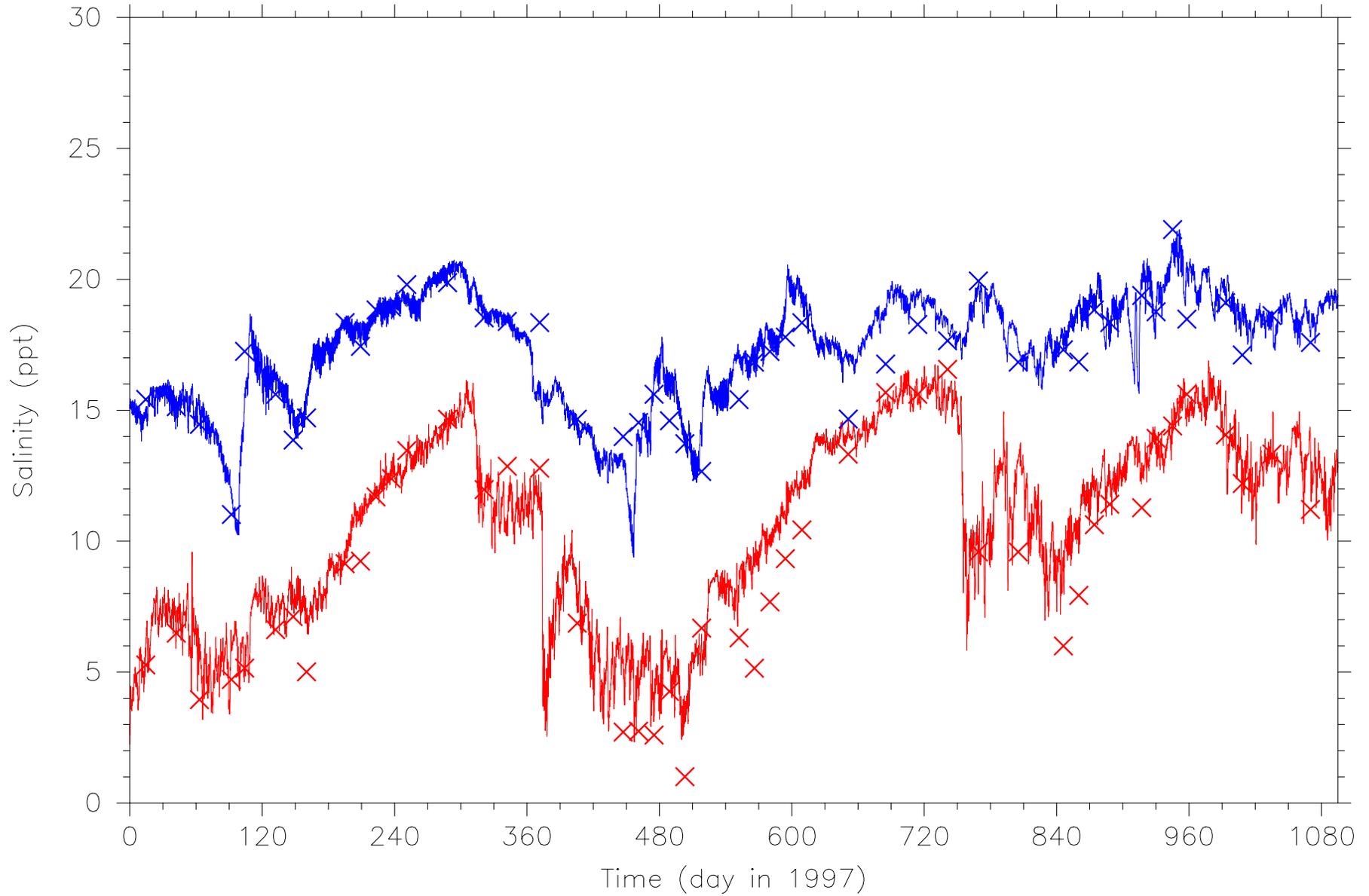


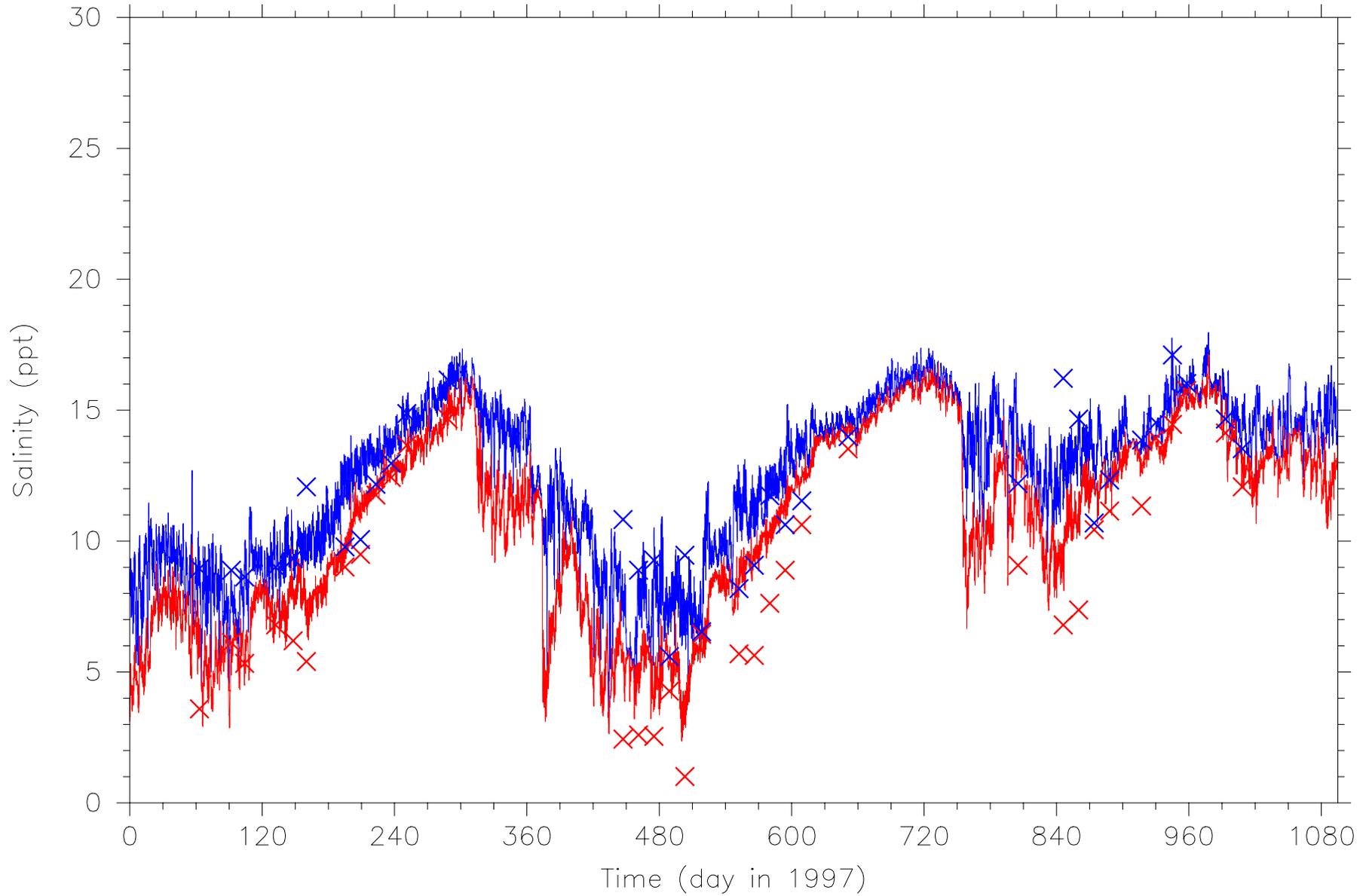
Appendix 4-A

Time series of salinity at selected CBP long-term monitoring stations inside and adjacent the Chester system (CB3.3C, Cb3.3E, CB3.3W, CB4.1C, CB4.1E, CB4.1W, EE1.1, ET4.1, ET4.2, and XGG8251). Blue and red colors represent bottom and surface, respectively. Line denotes the CH3D simulation and cross denotes the observation.

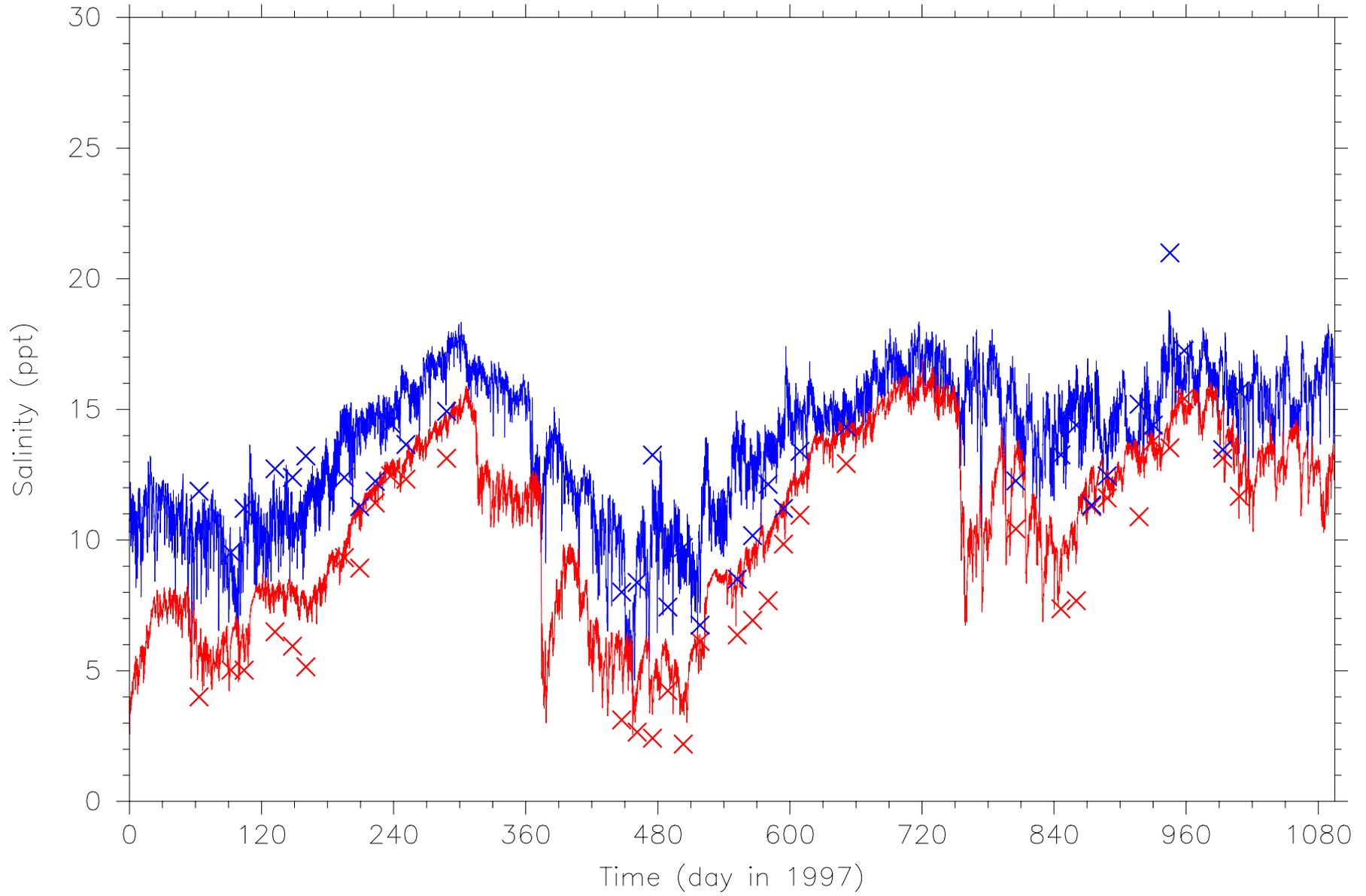
CB3.3C



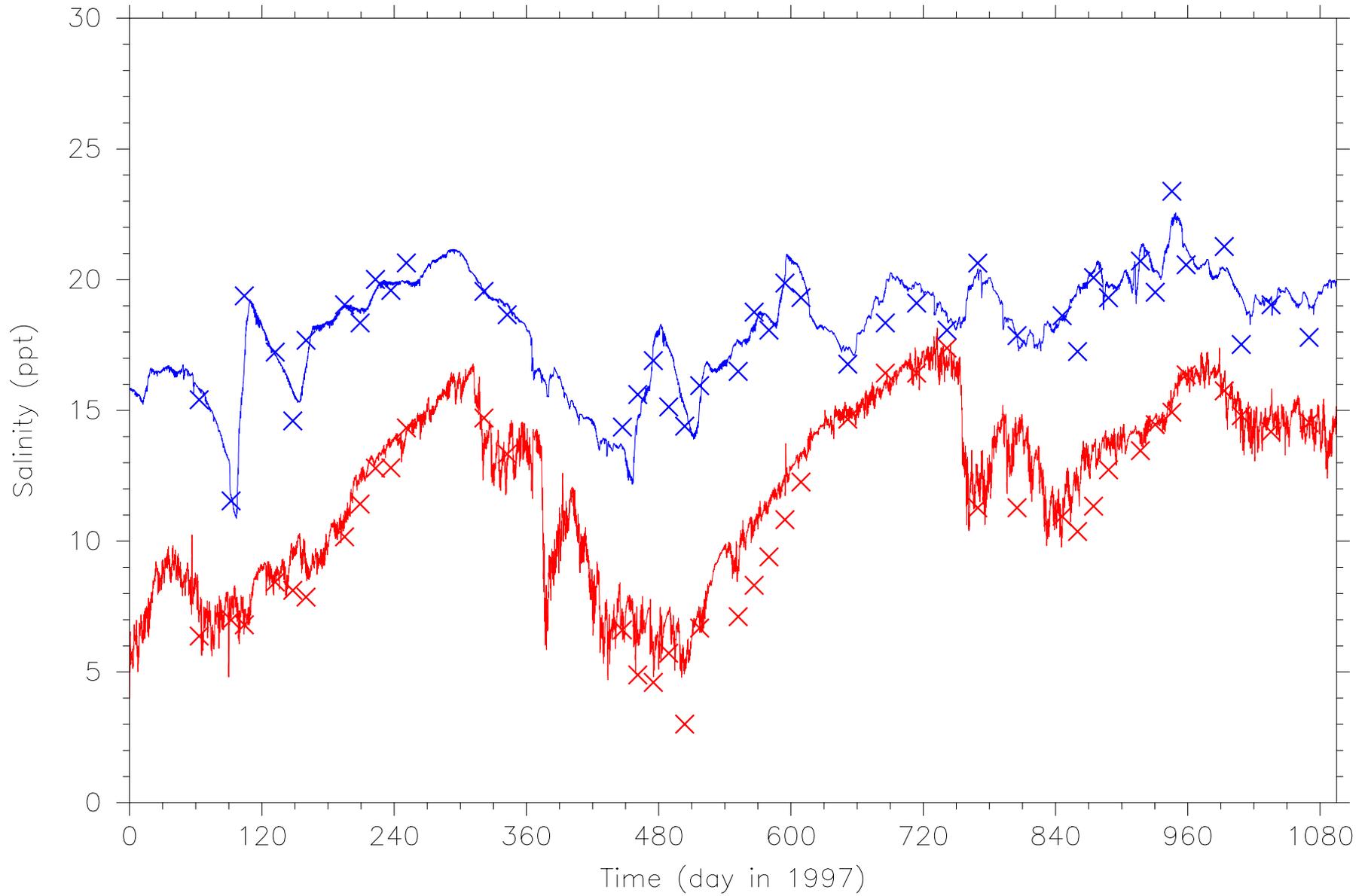
CB3.3E



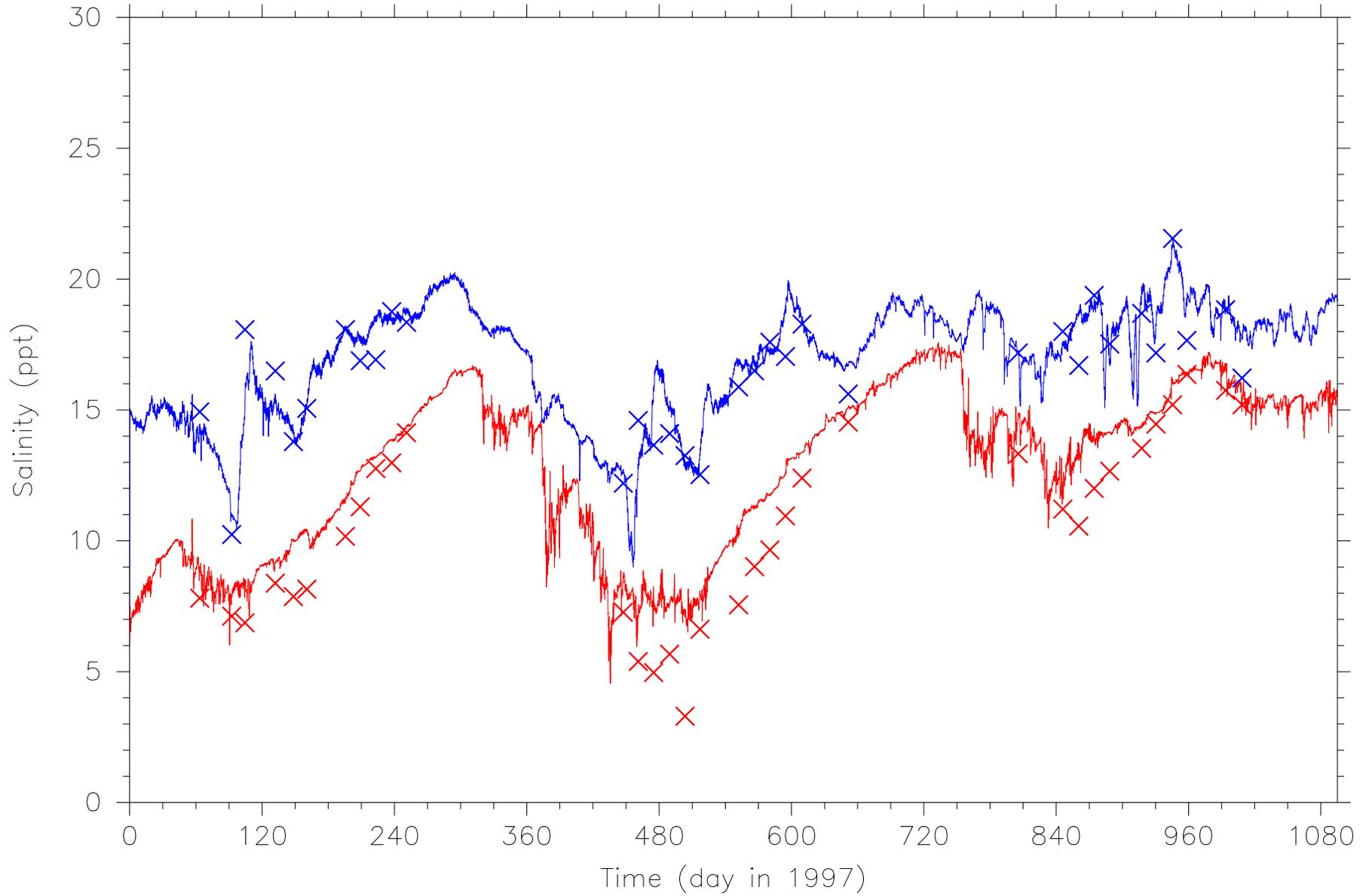
CB3.3W



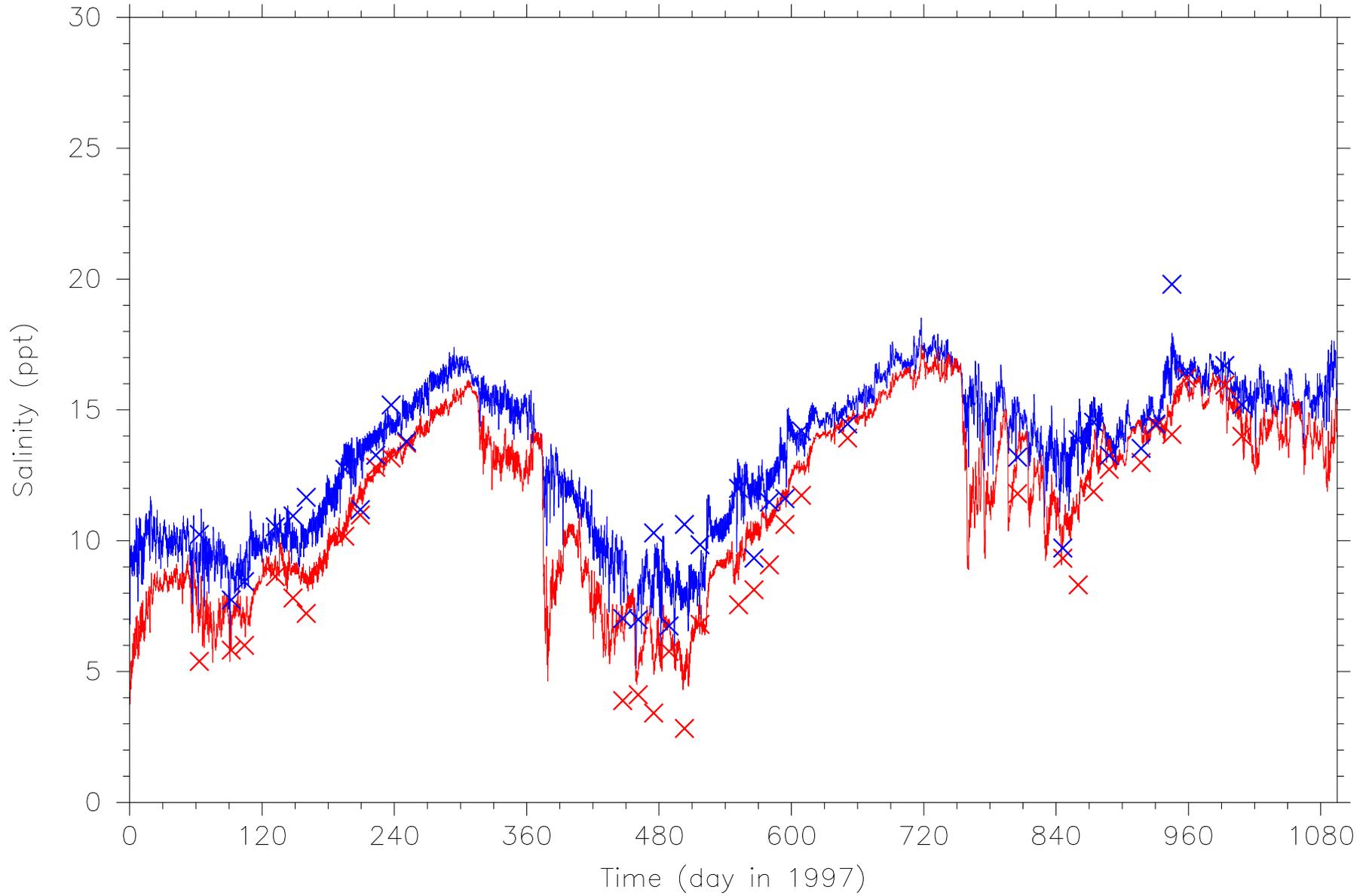
CB4.1C



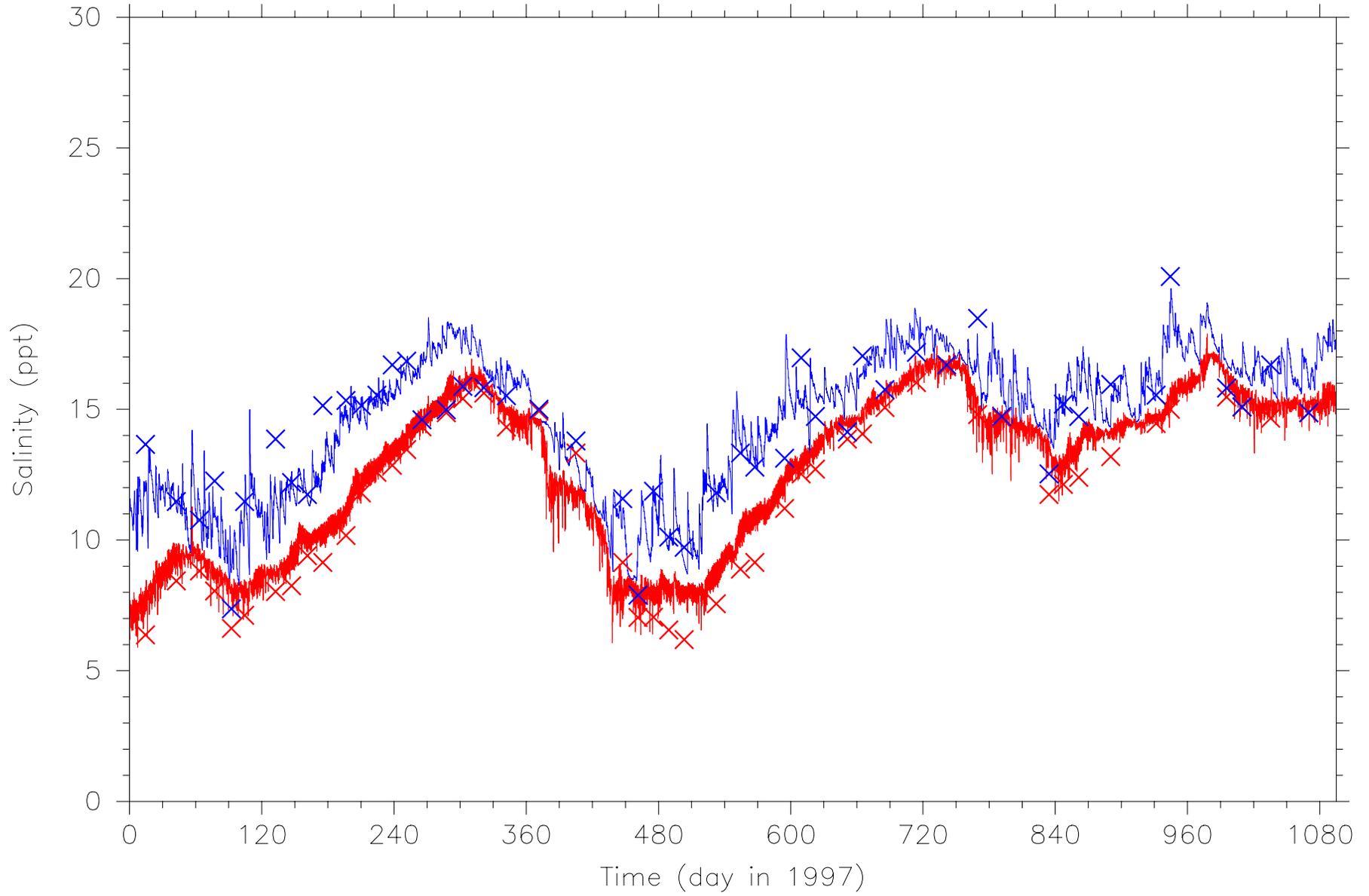
CB4.1E



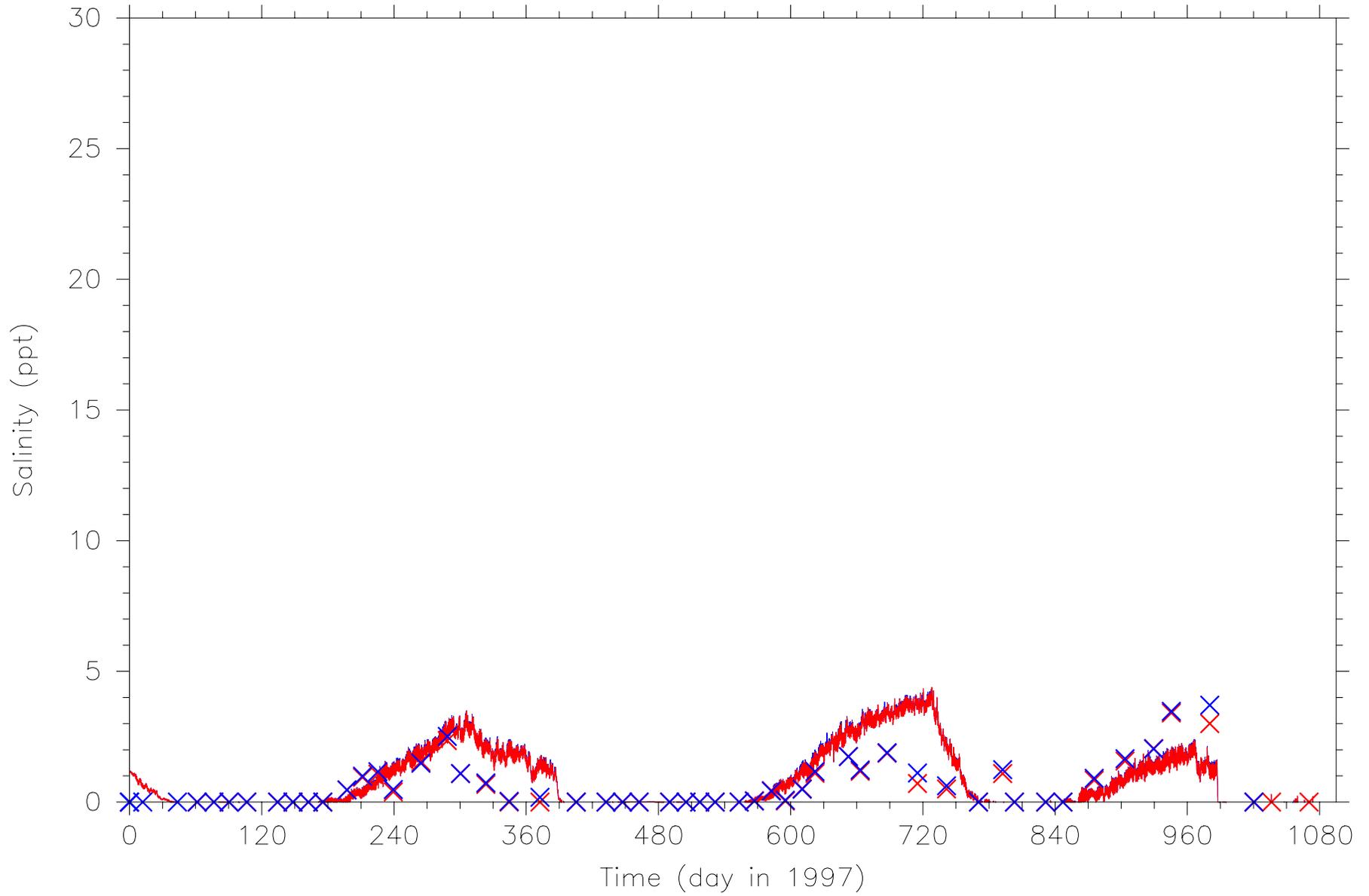
CB4.1W



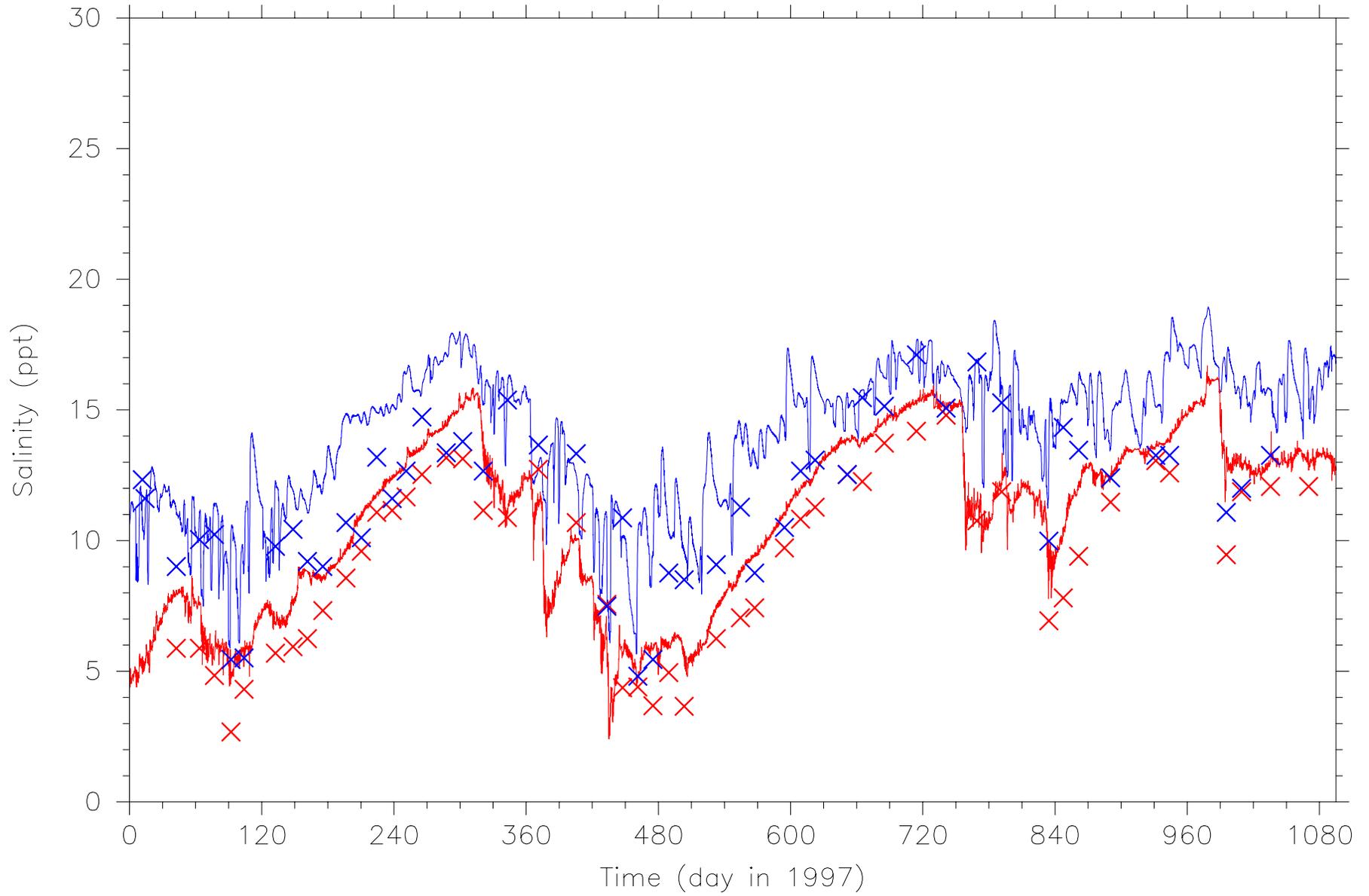
EE1.1



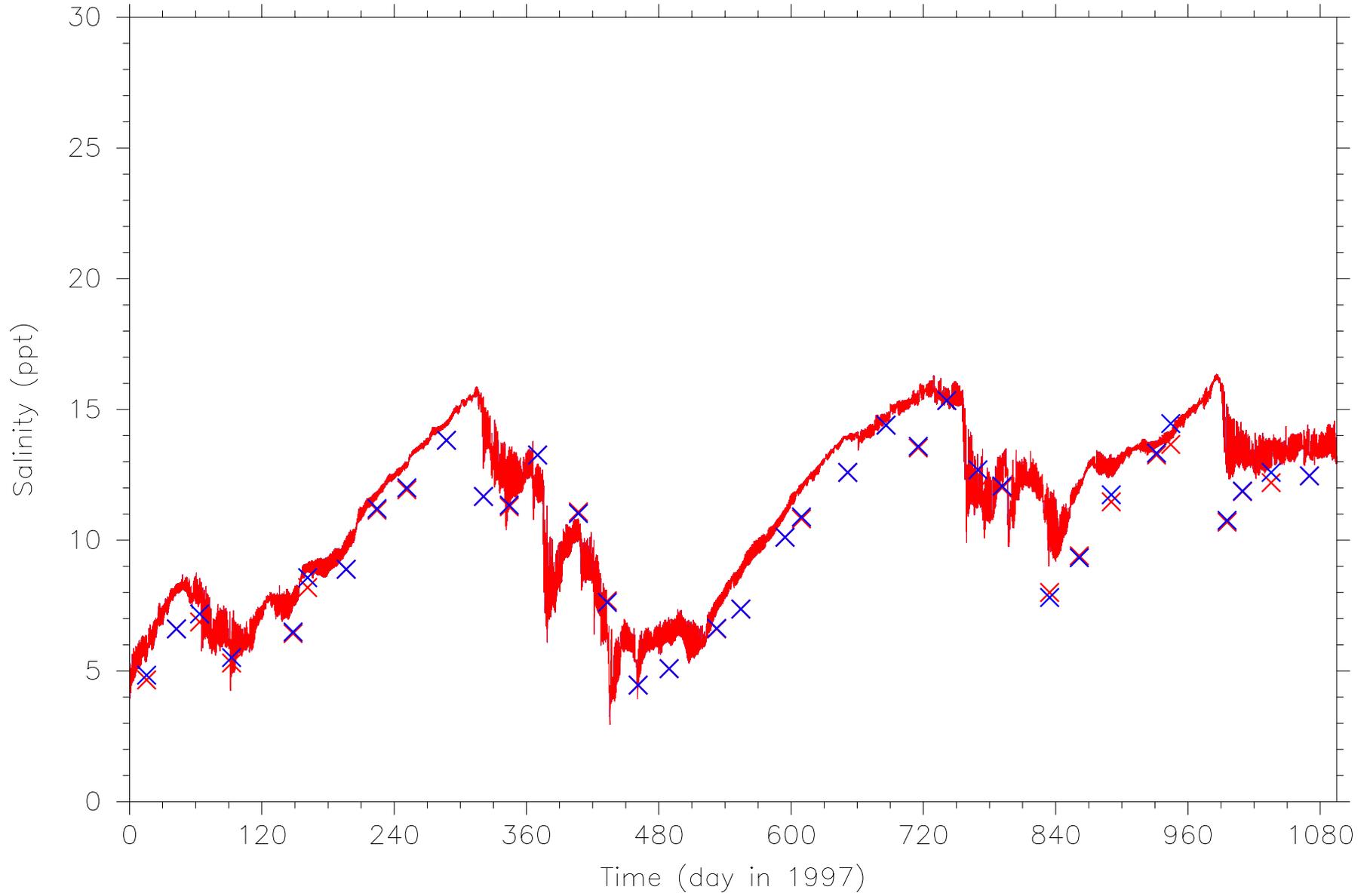
ET4.1



ET4.2

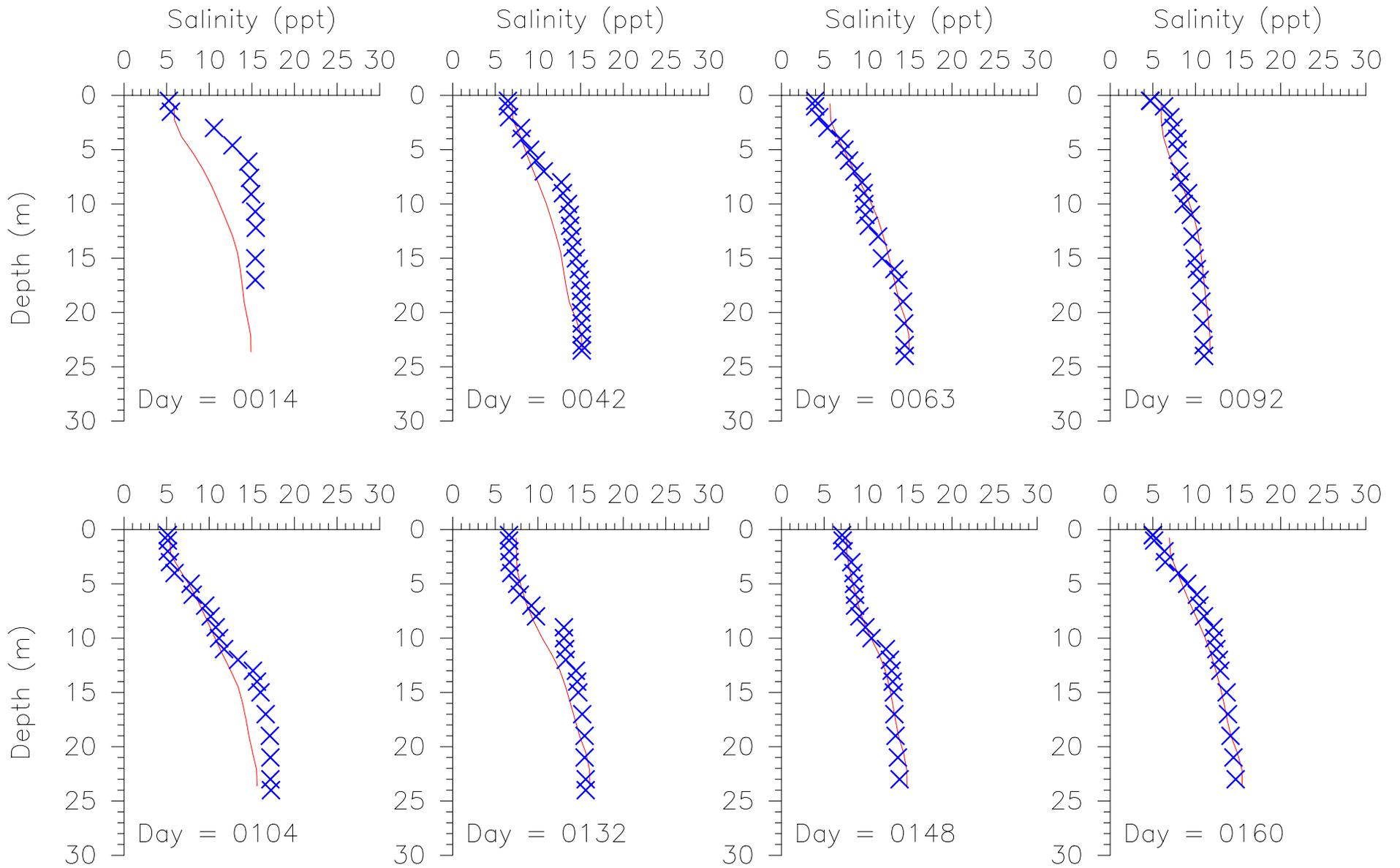


XGG8251

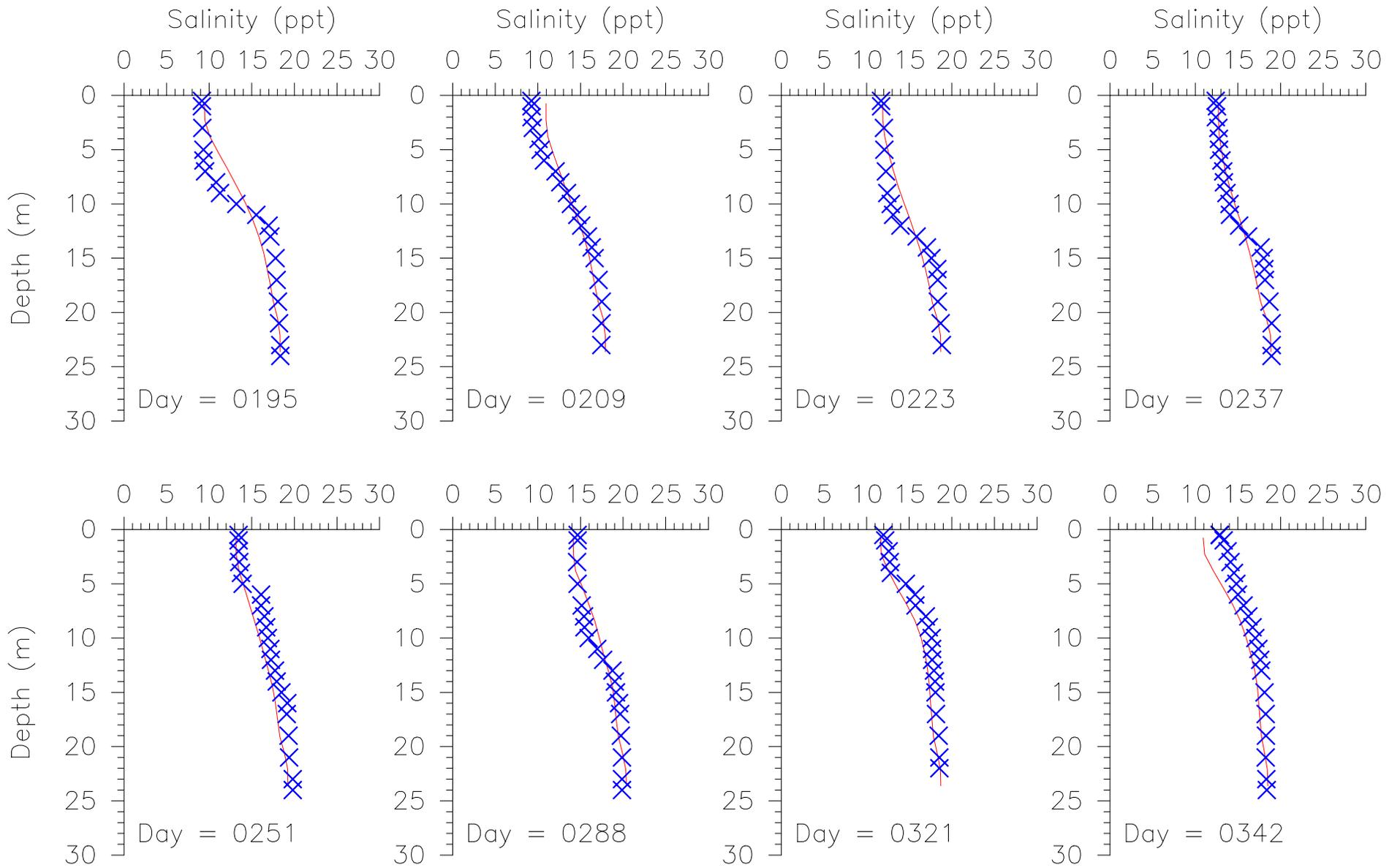


Appendix 4-B

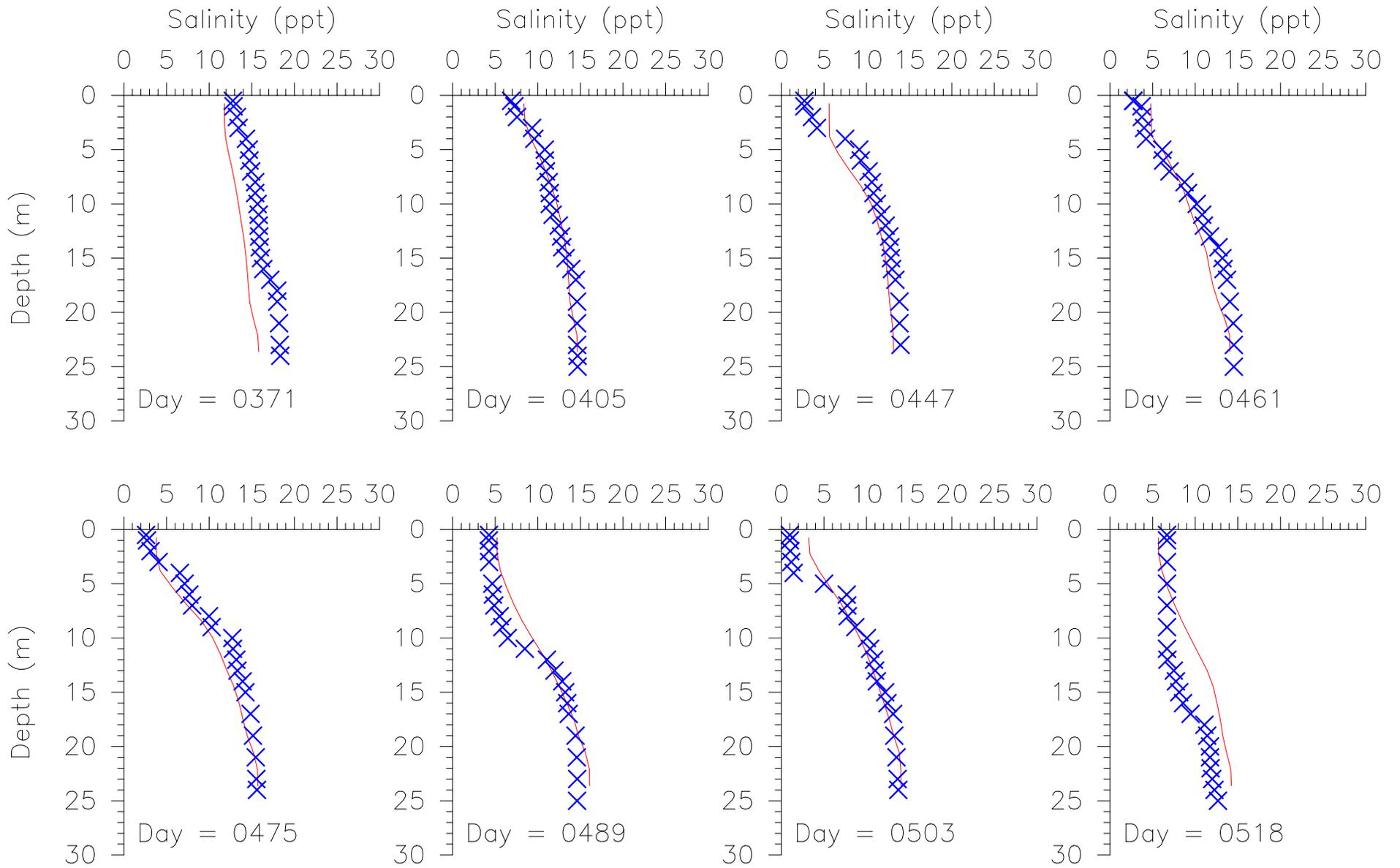
Vertical profiles of salinity at the same CBP stations except XGG8251 which is only one layer thick in the CH3D model. Red line and blue cross represent simulation and observation, respectively.



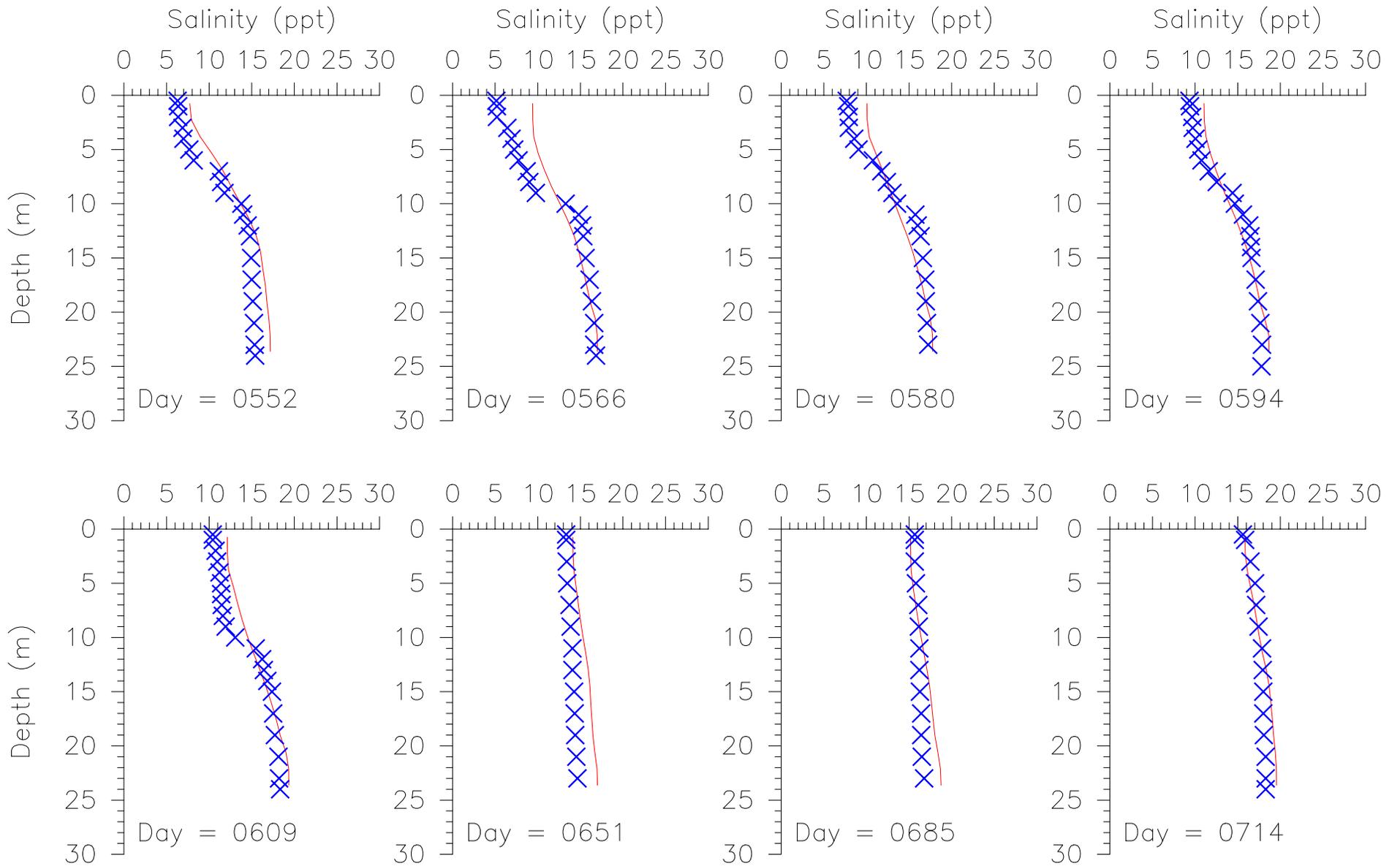
CB3.3C



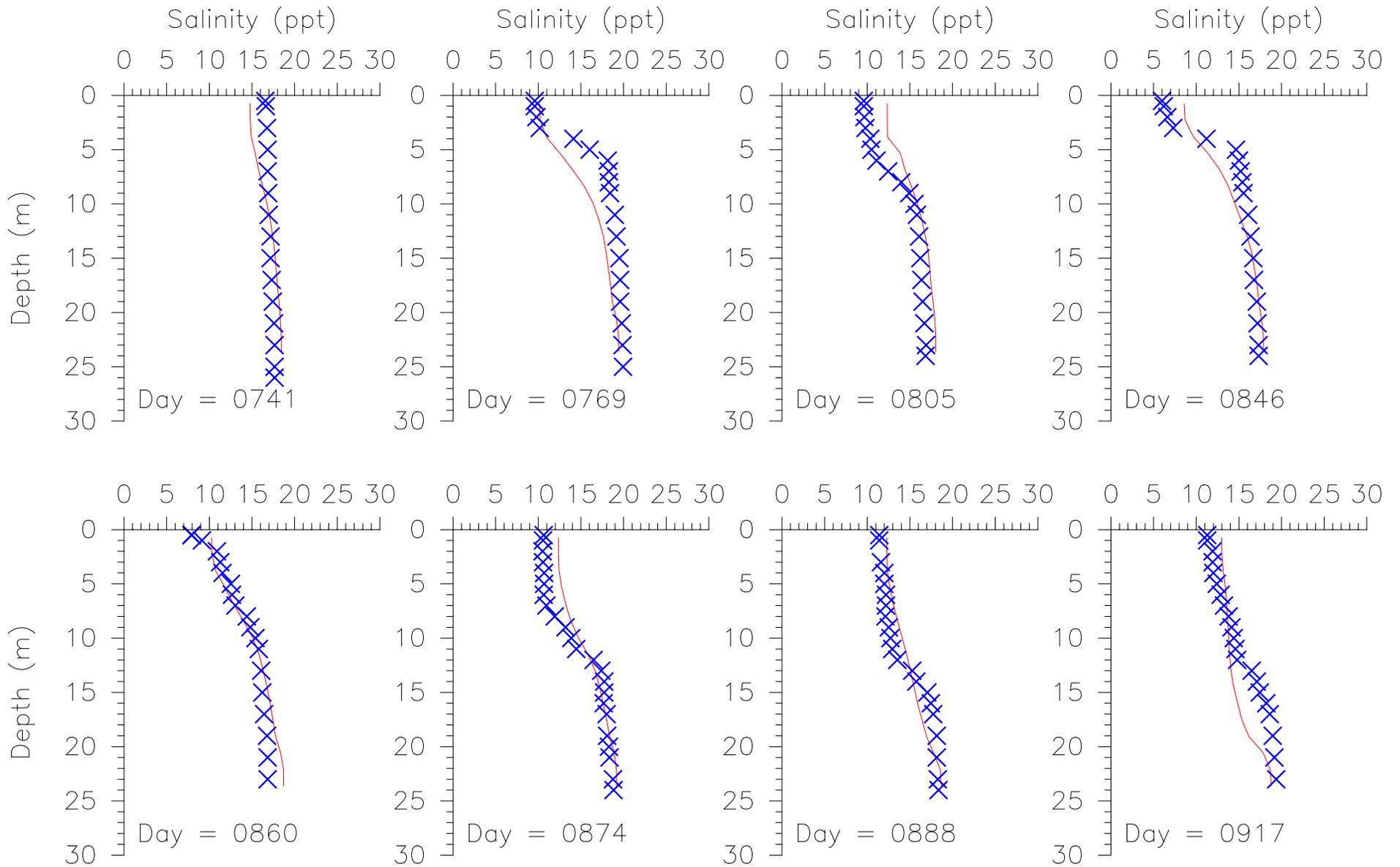
CB3.3C



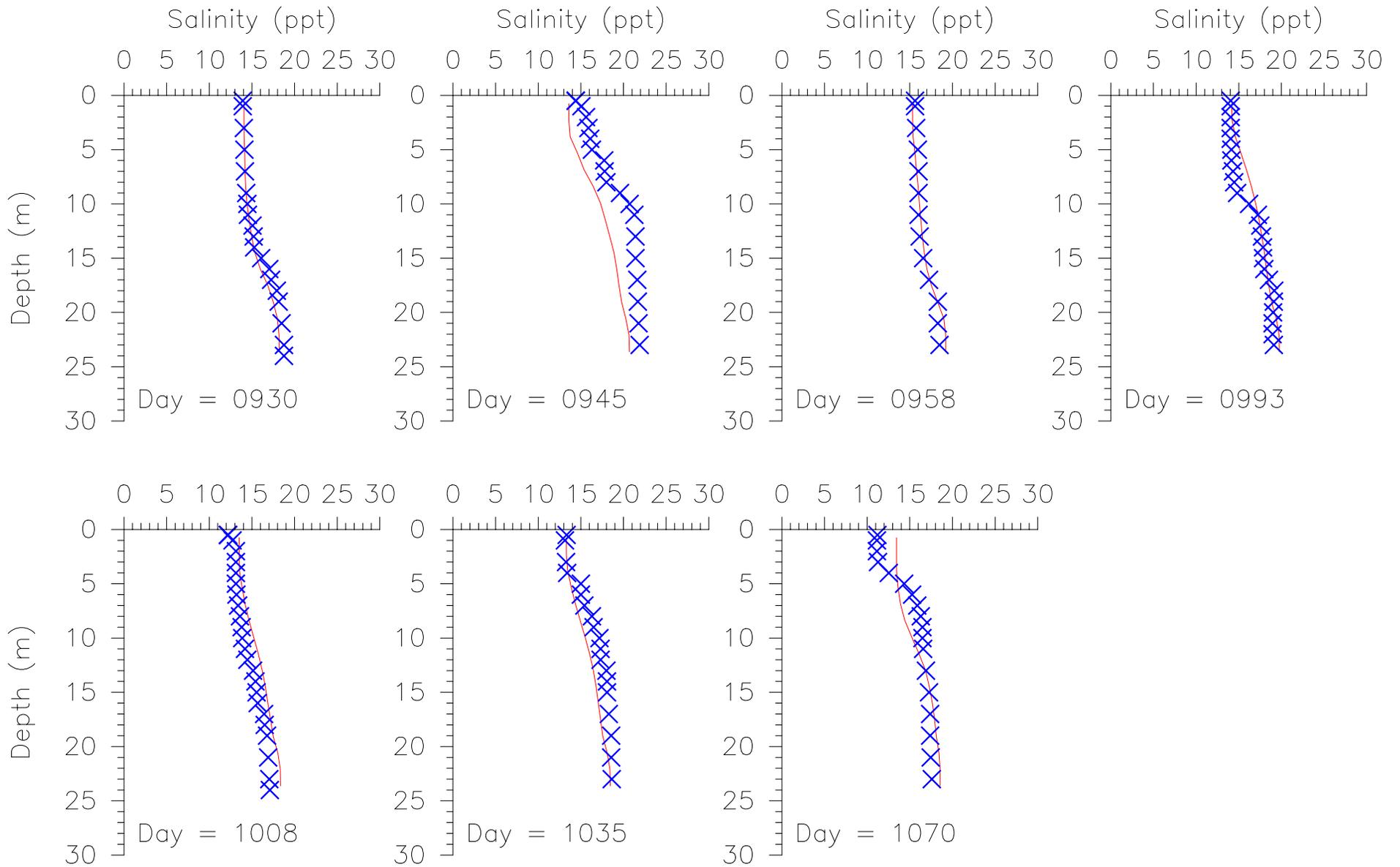
CB3.3C



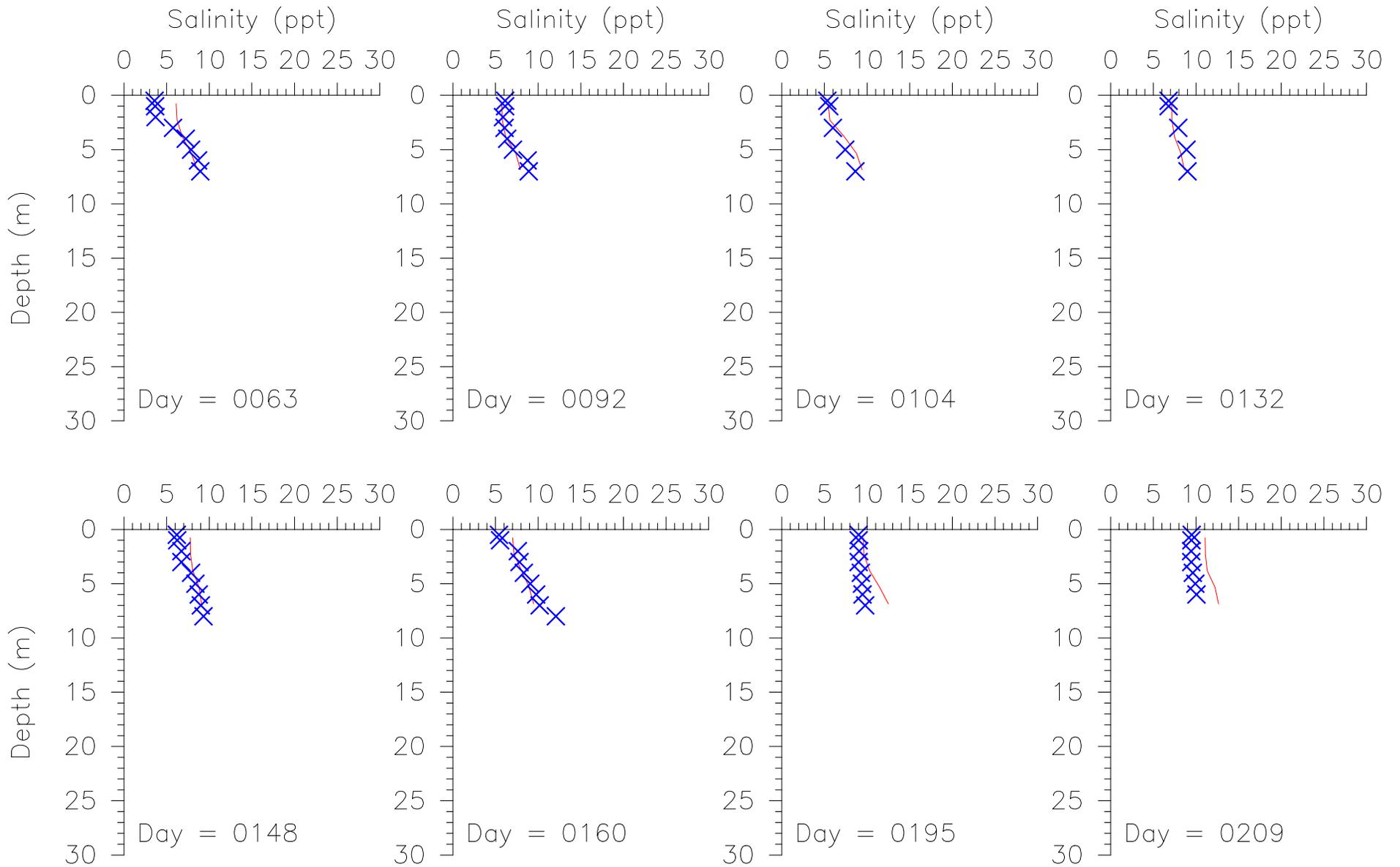
CB3.3C



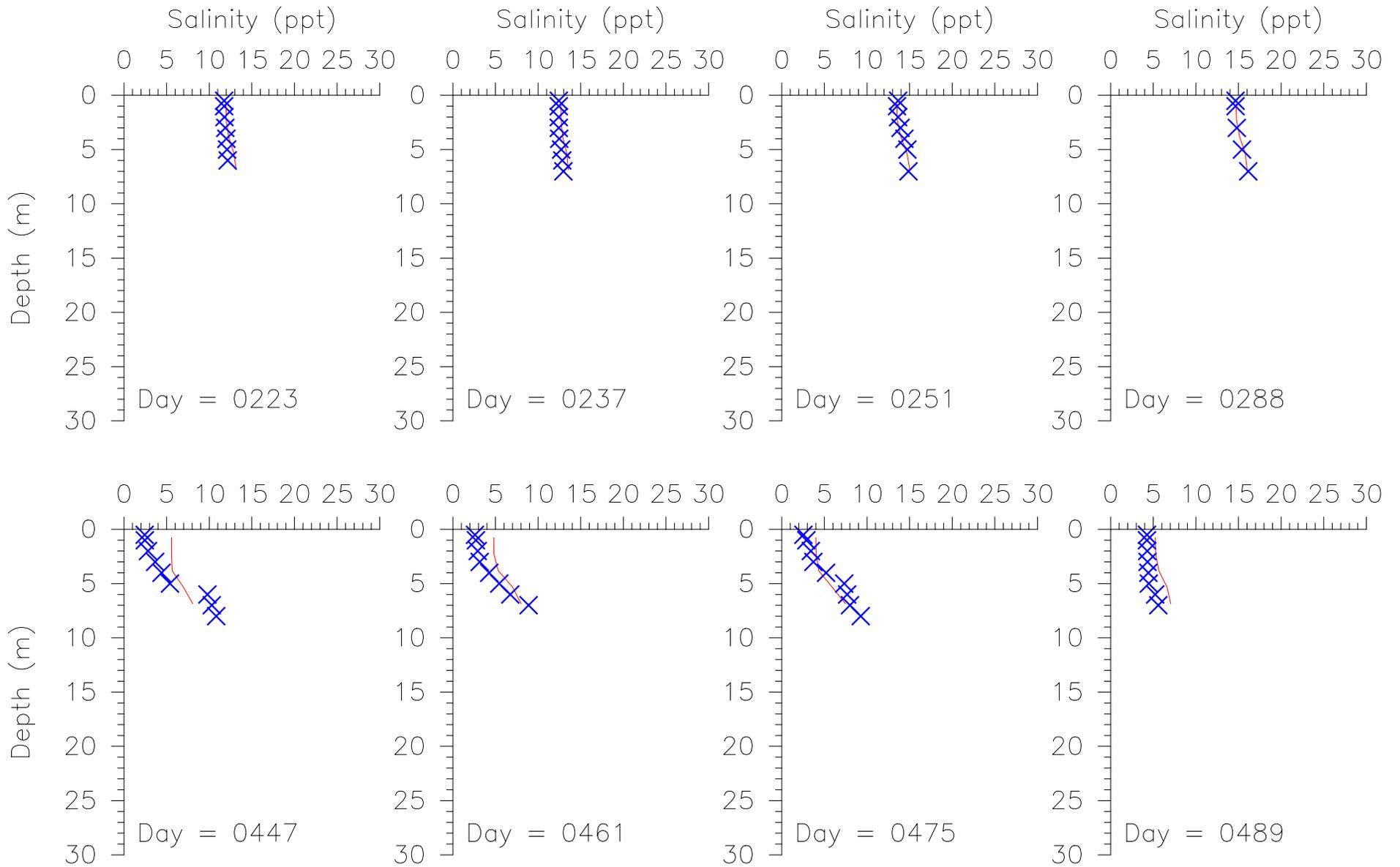
CB3.3C



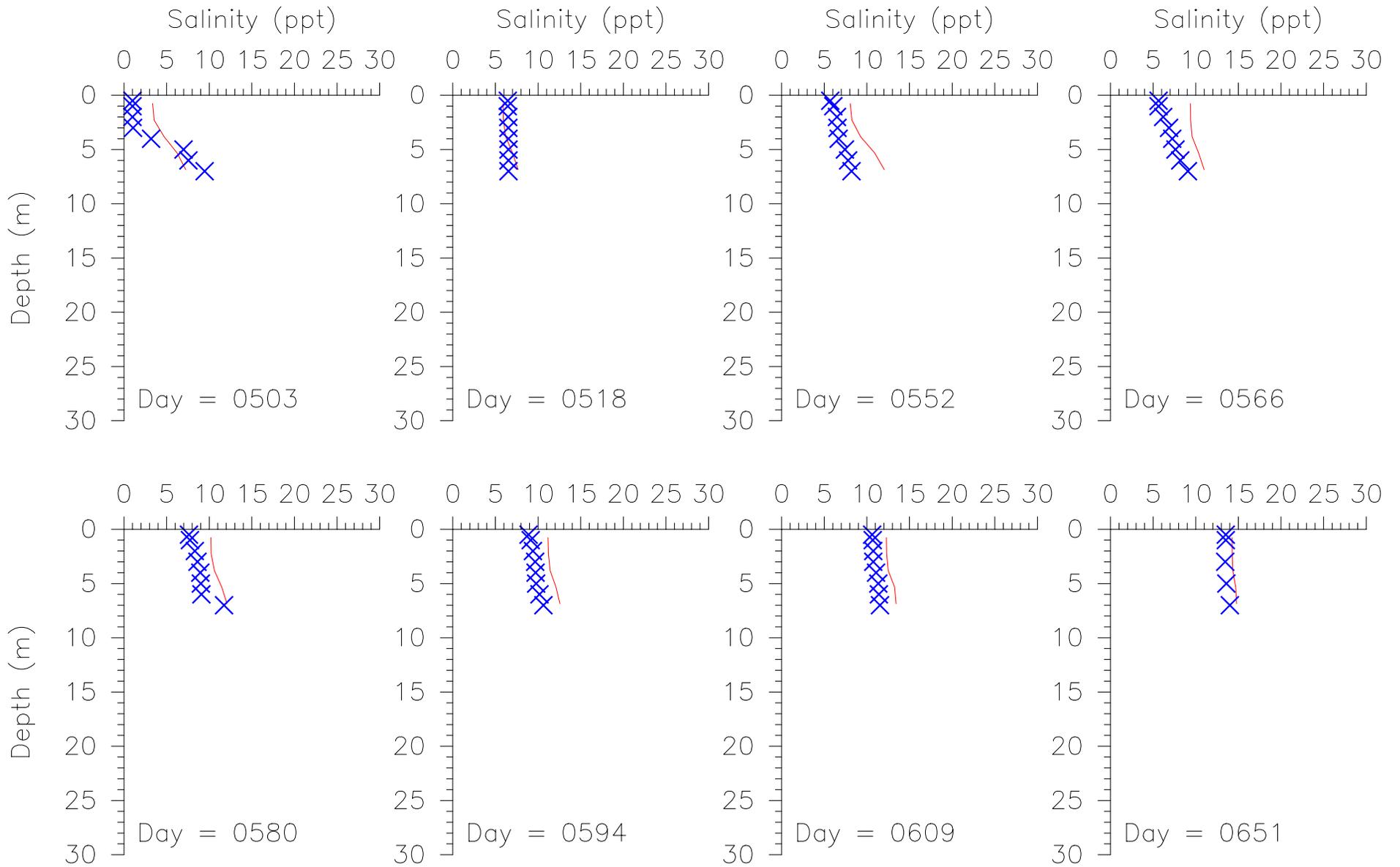
CB3.3C



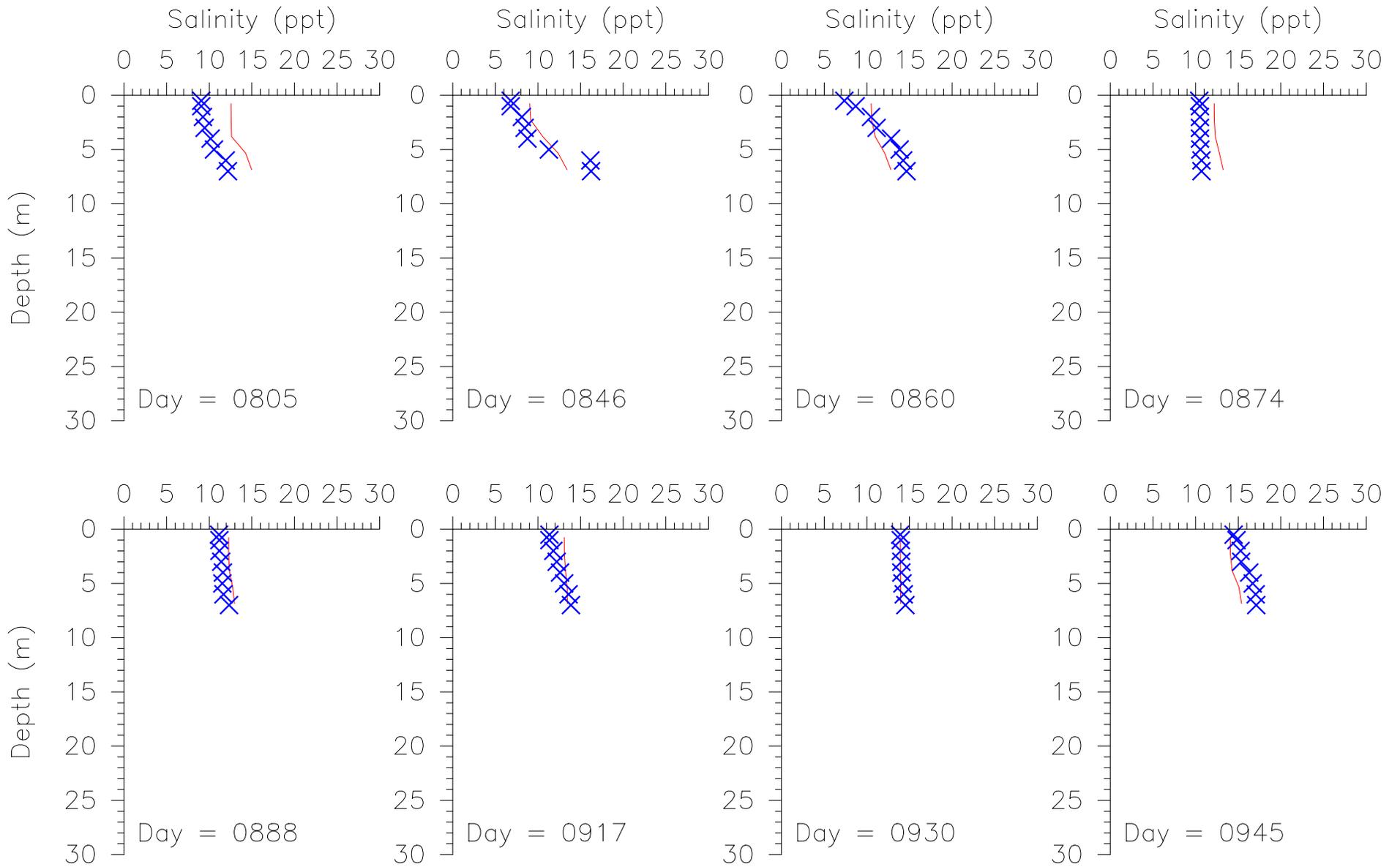
CB3.3E



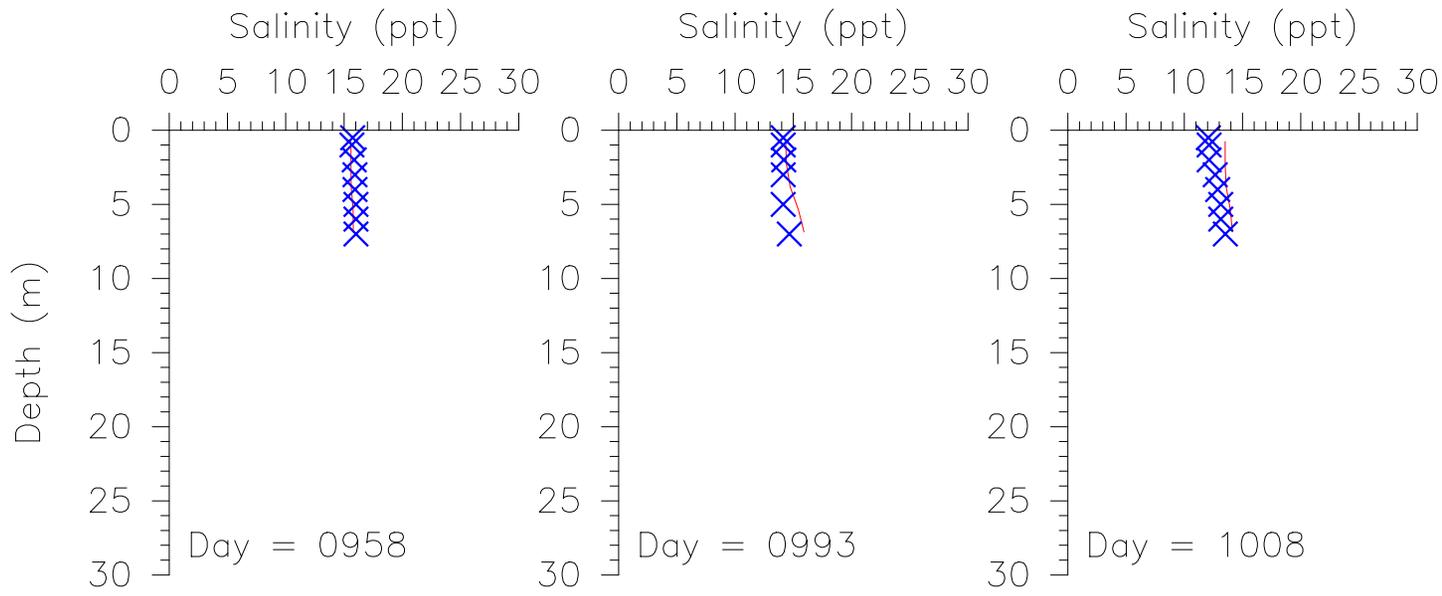
CB3.3E



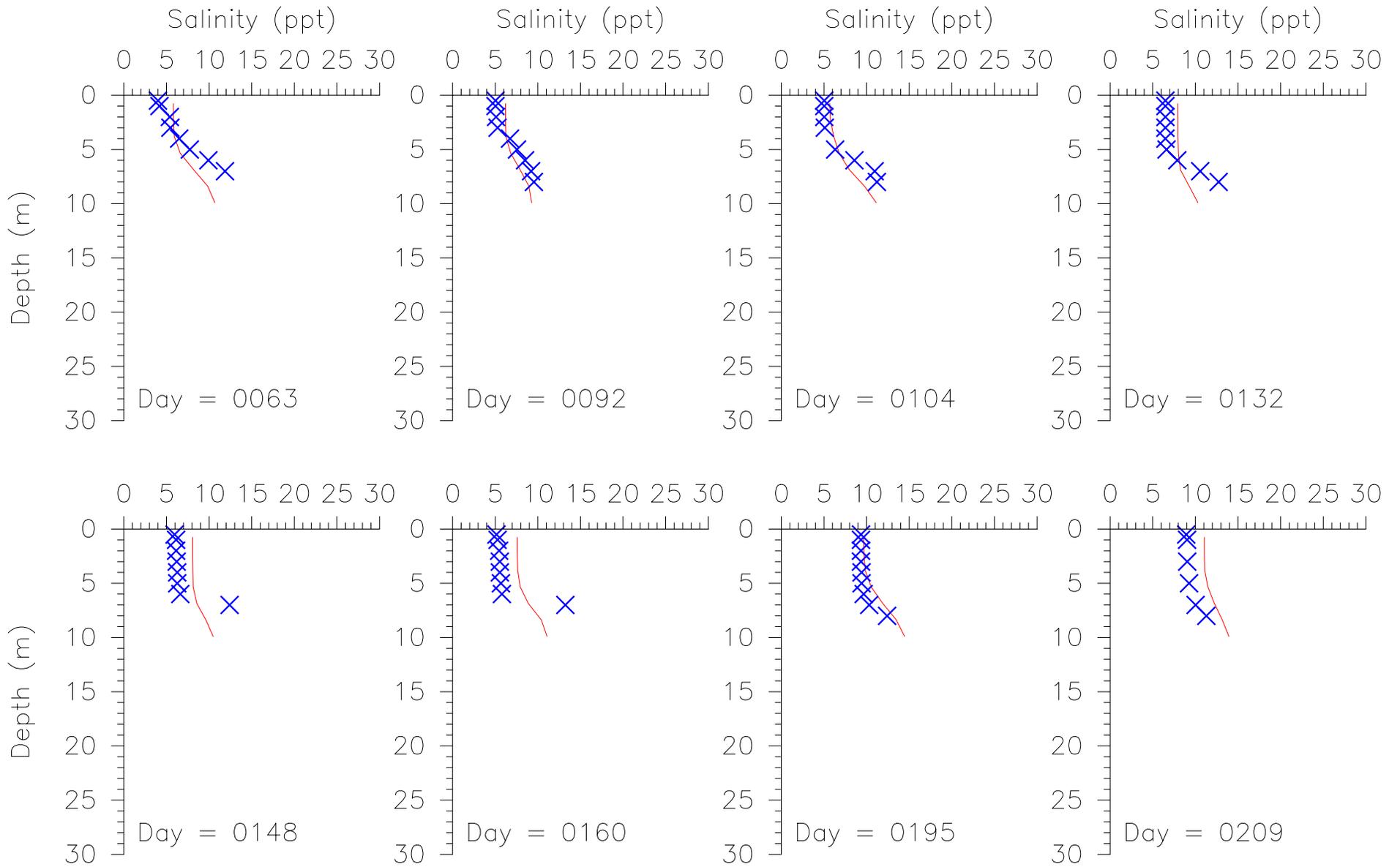
CB3.3E



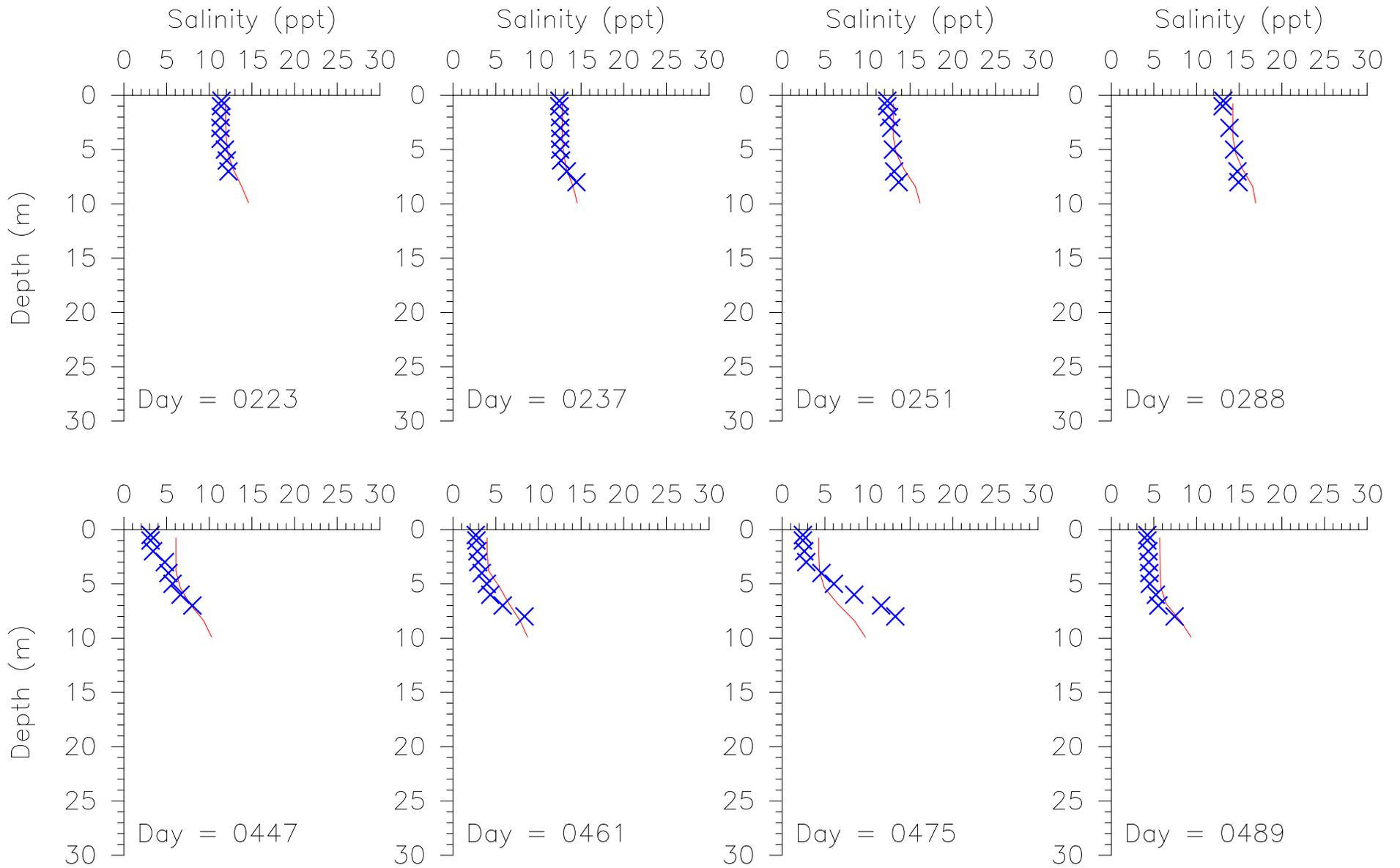
CB3.3E



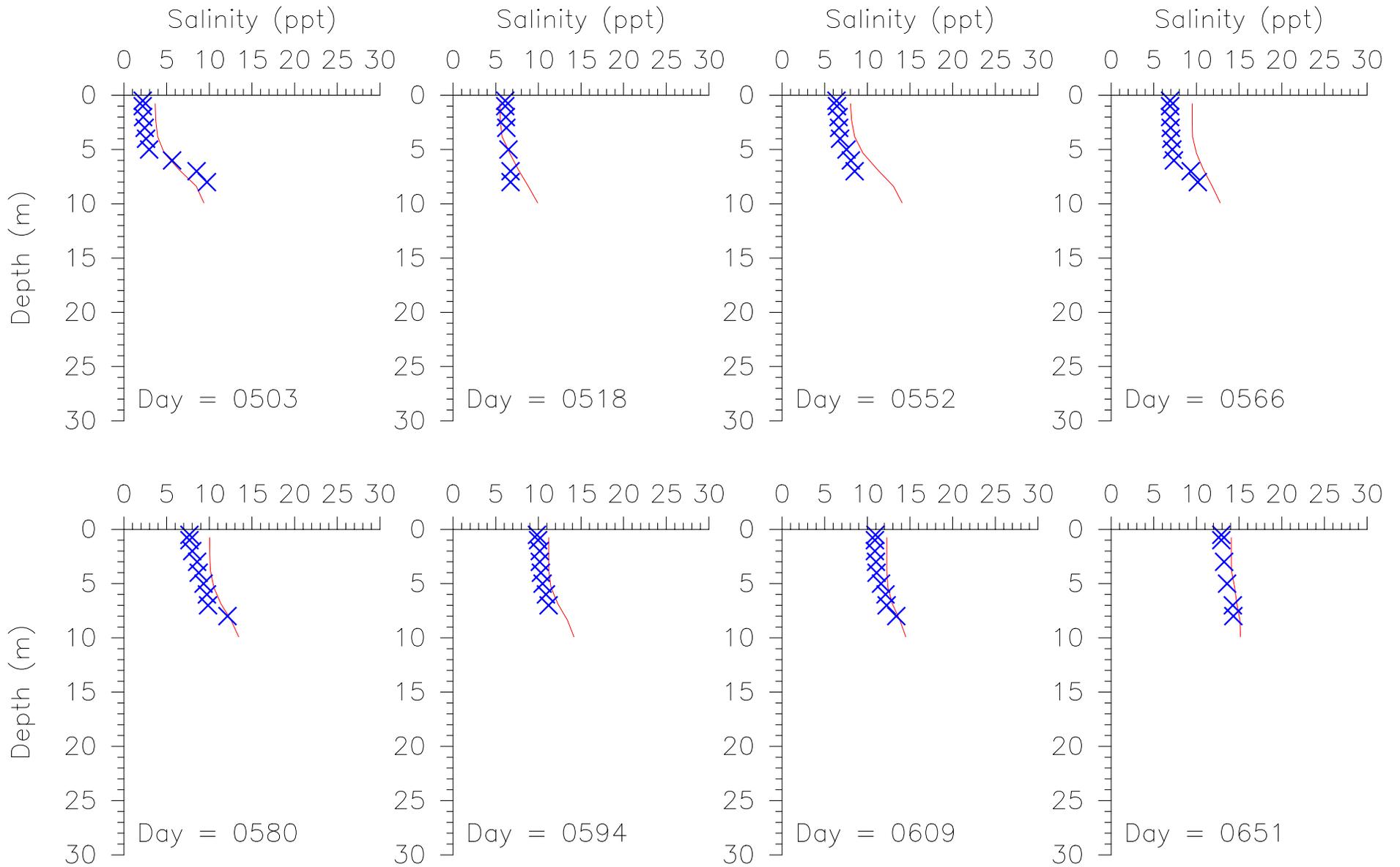
CB3.3E



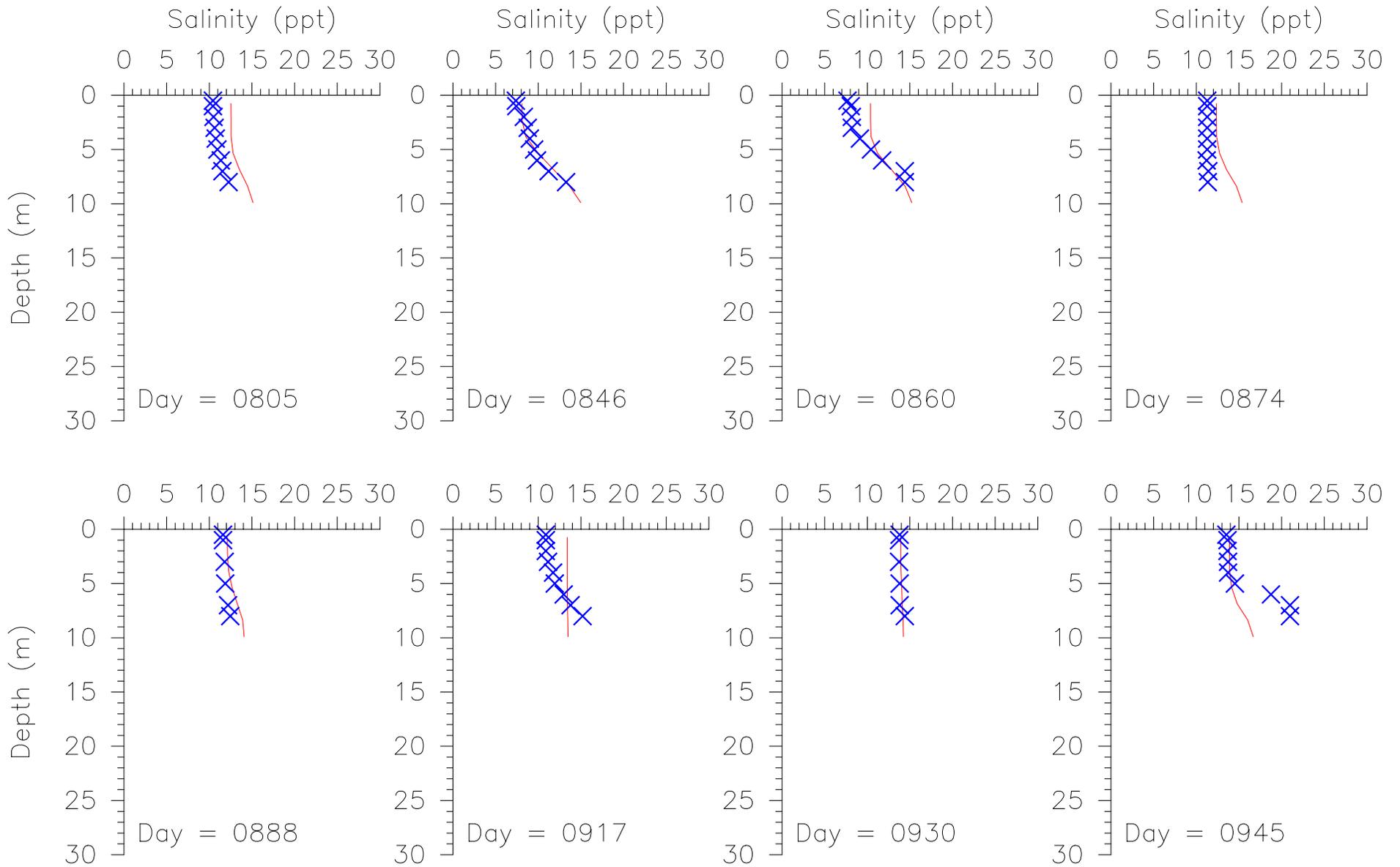
CB3.3W



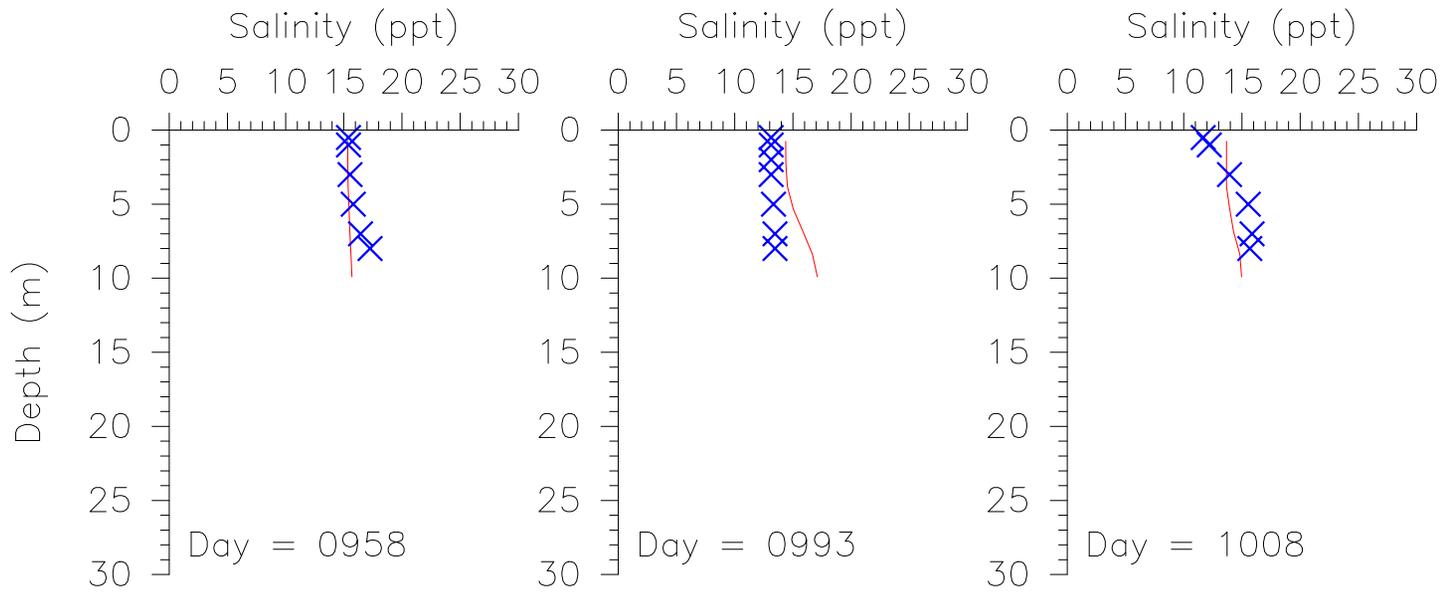
CB3.3W



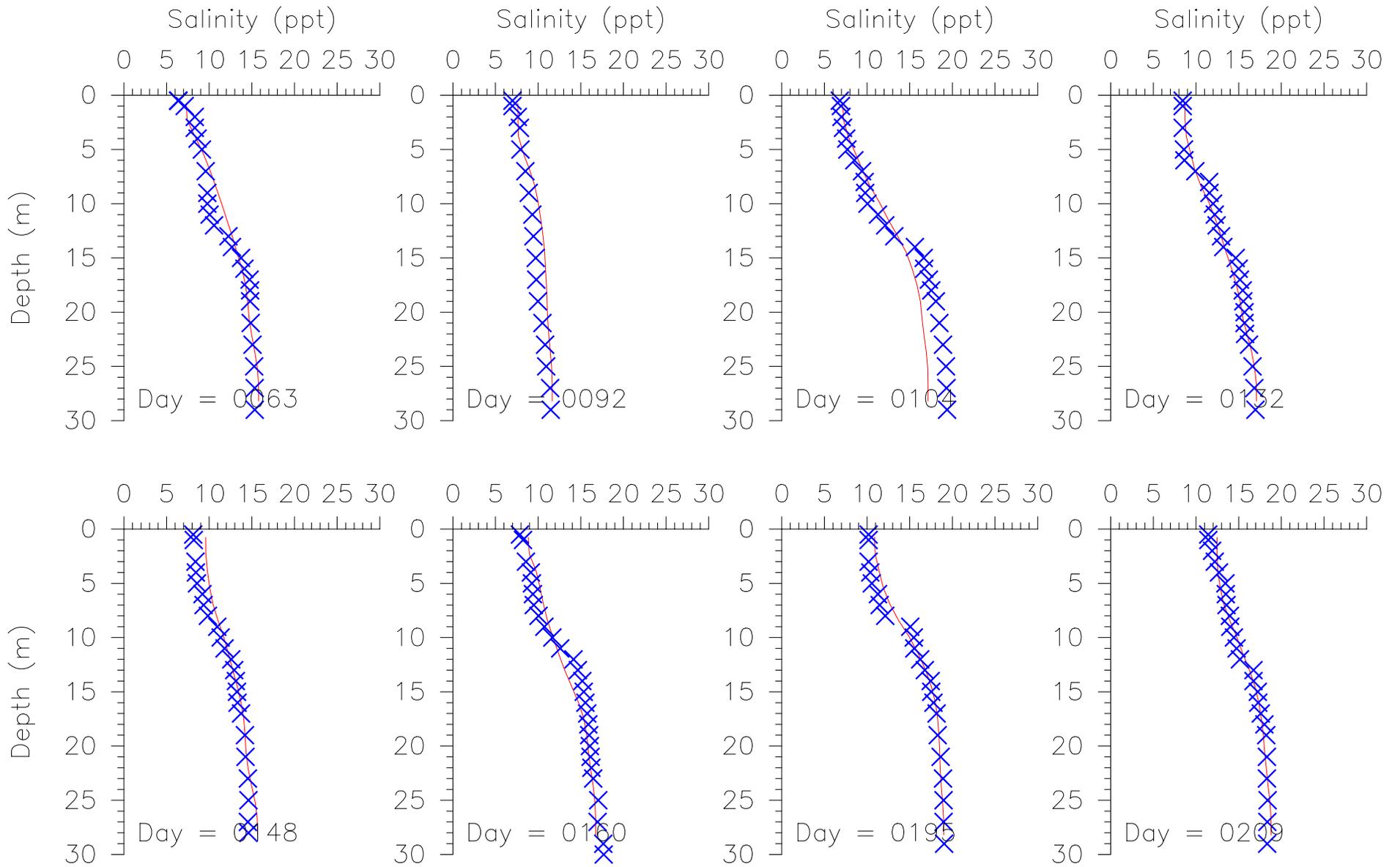
CB3.3W



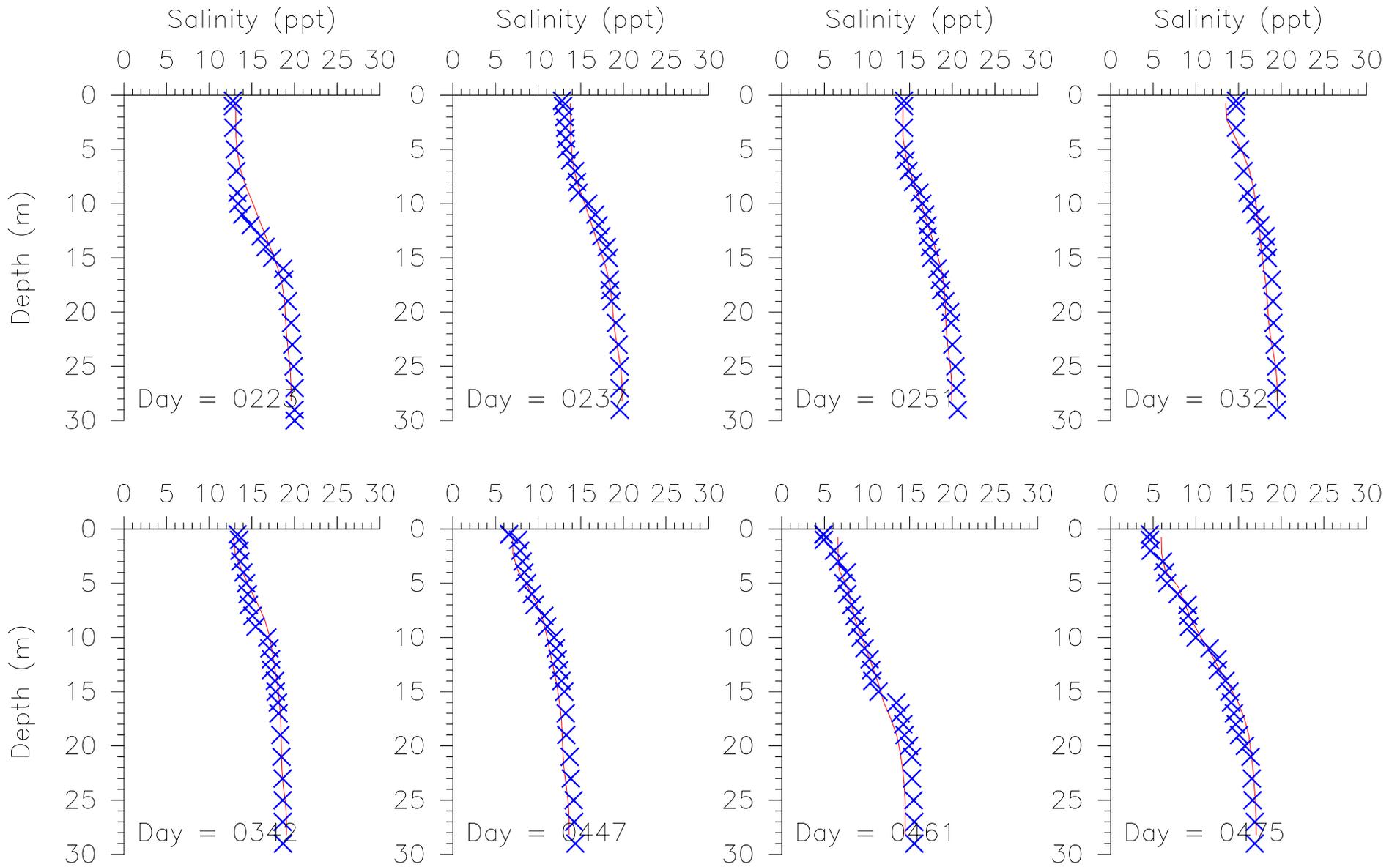
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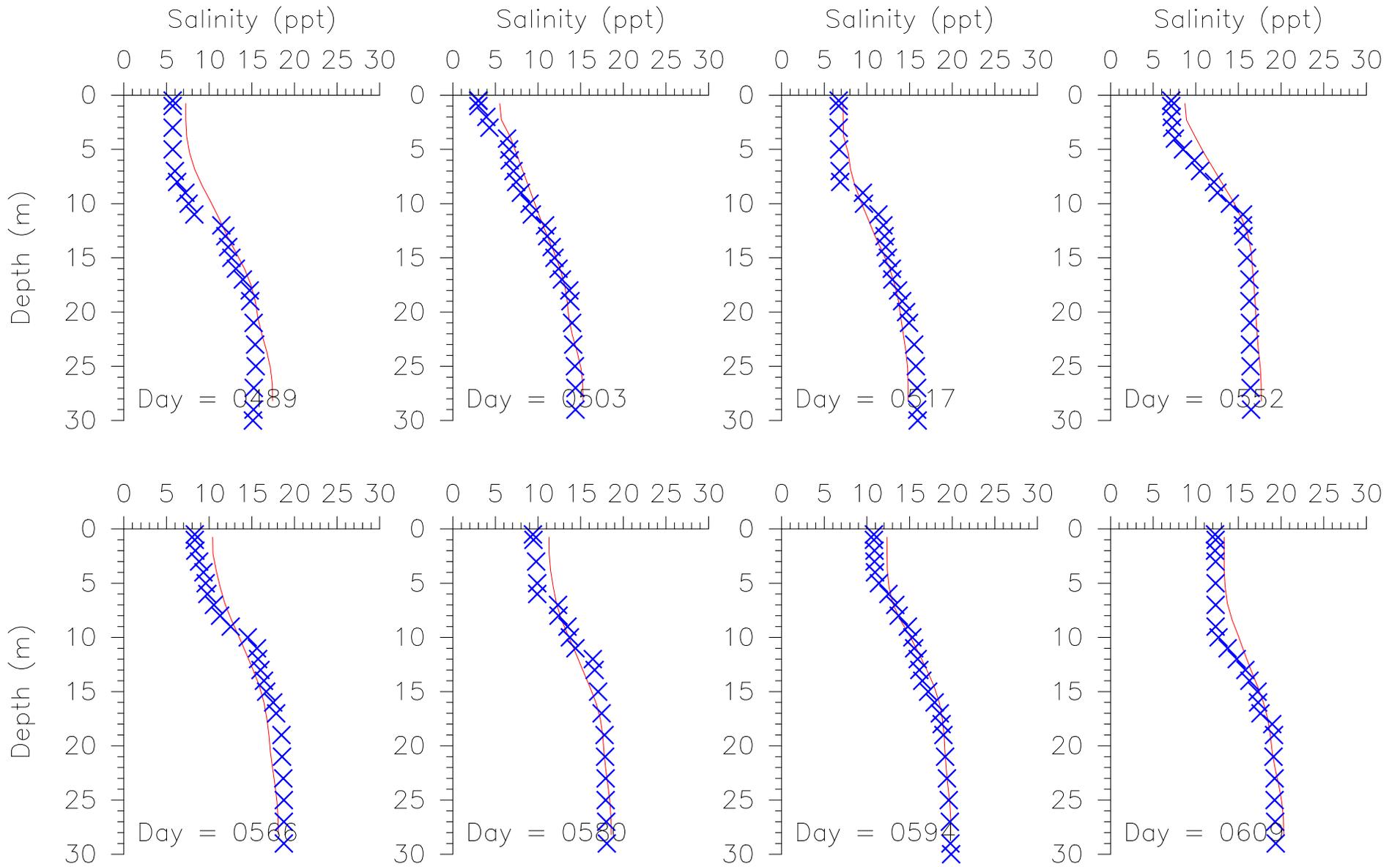
CB3.3W



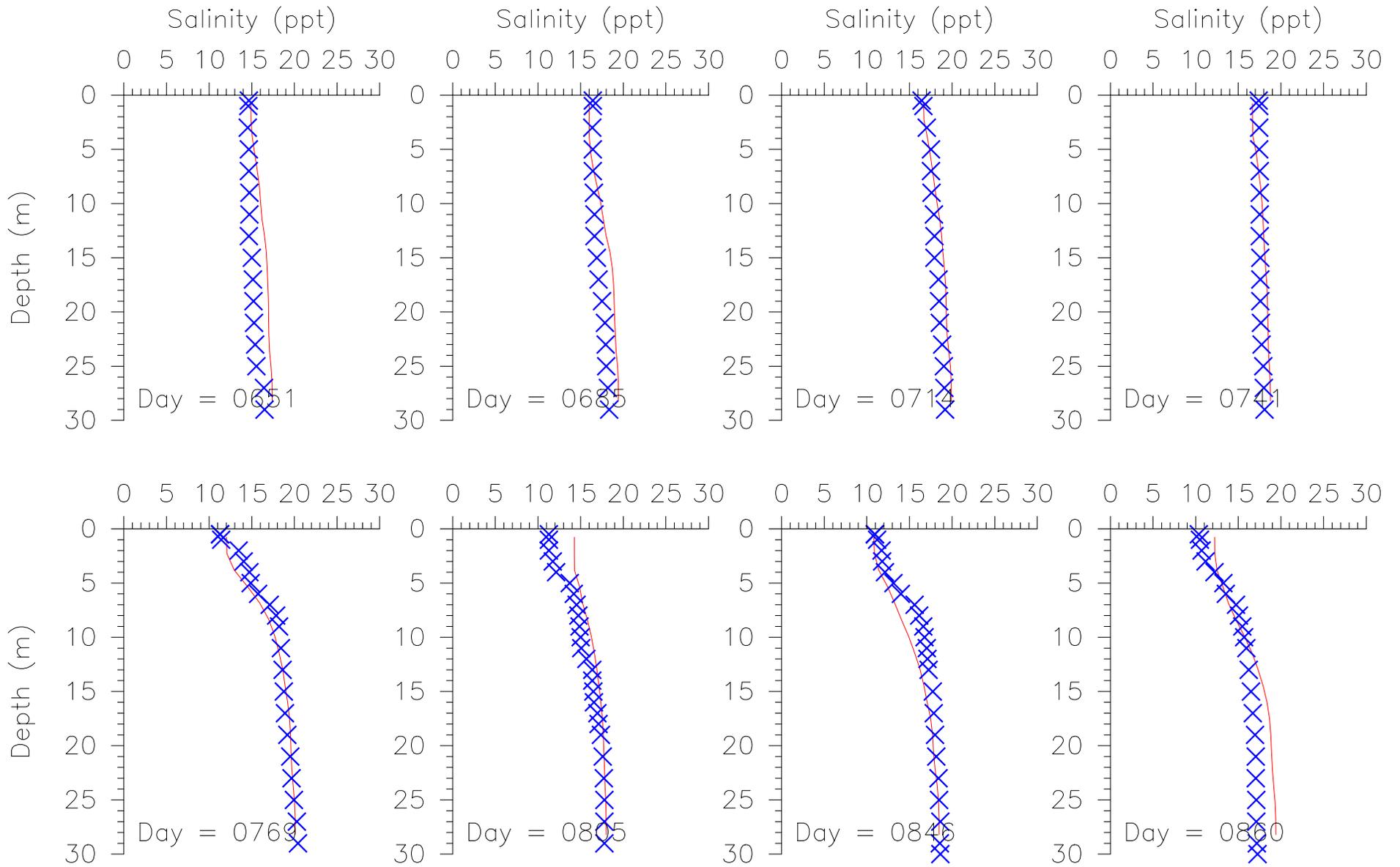
CB4.1C



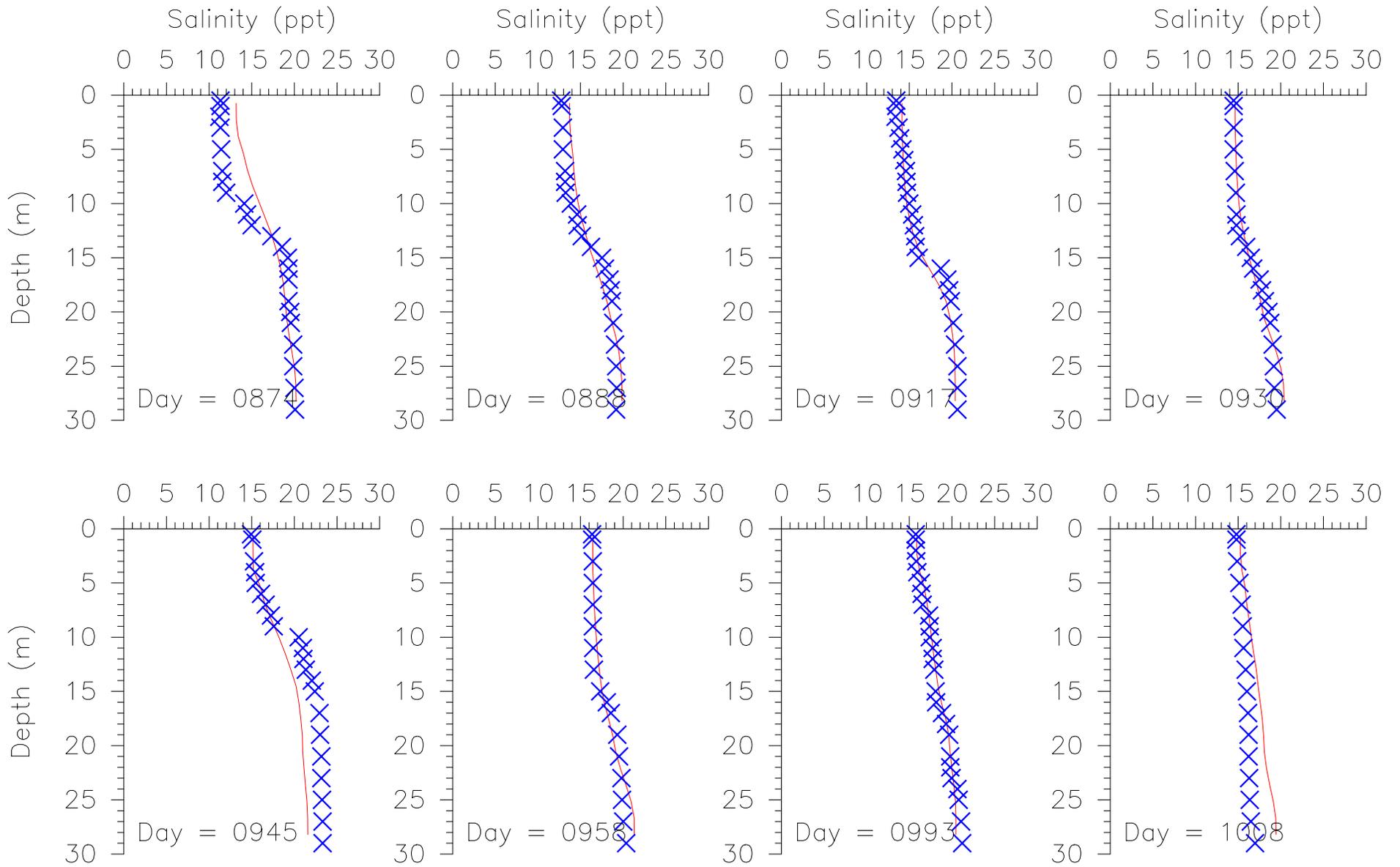
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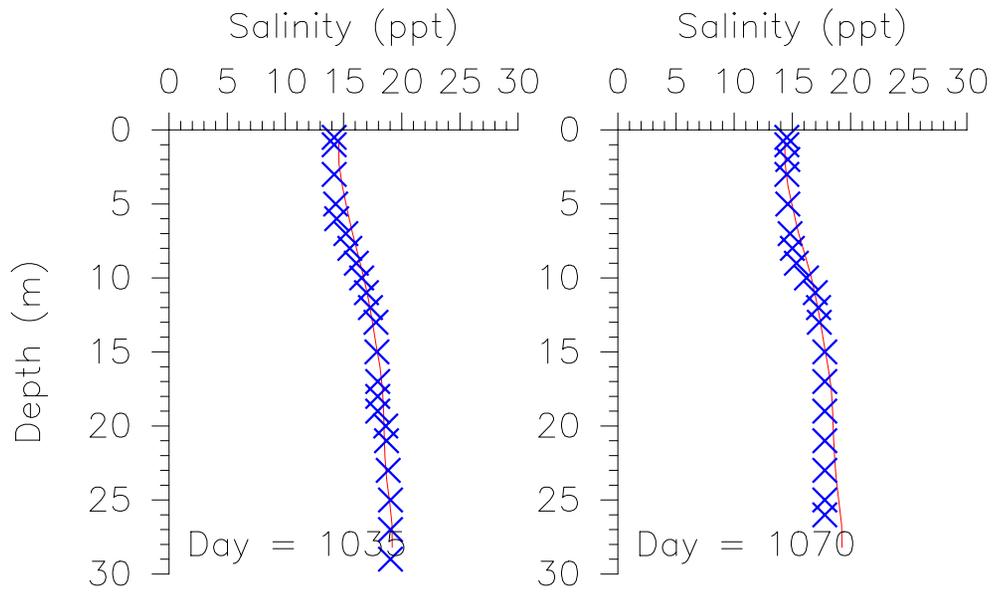
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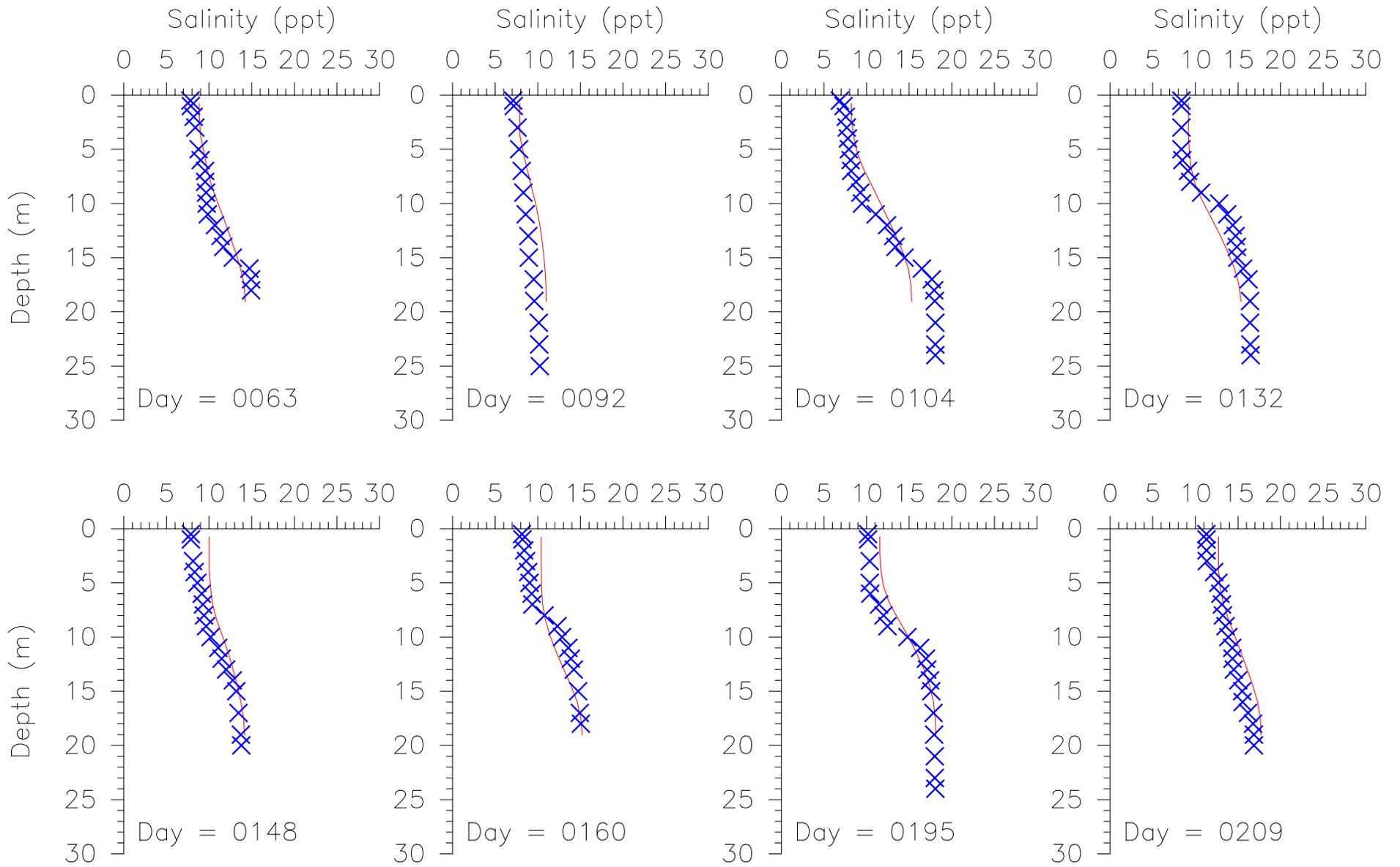
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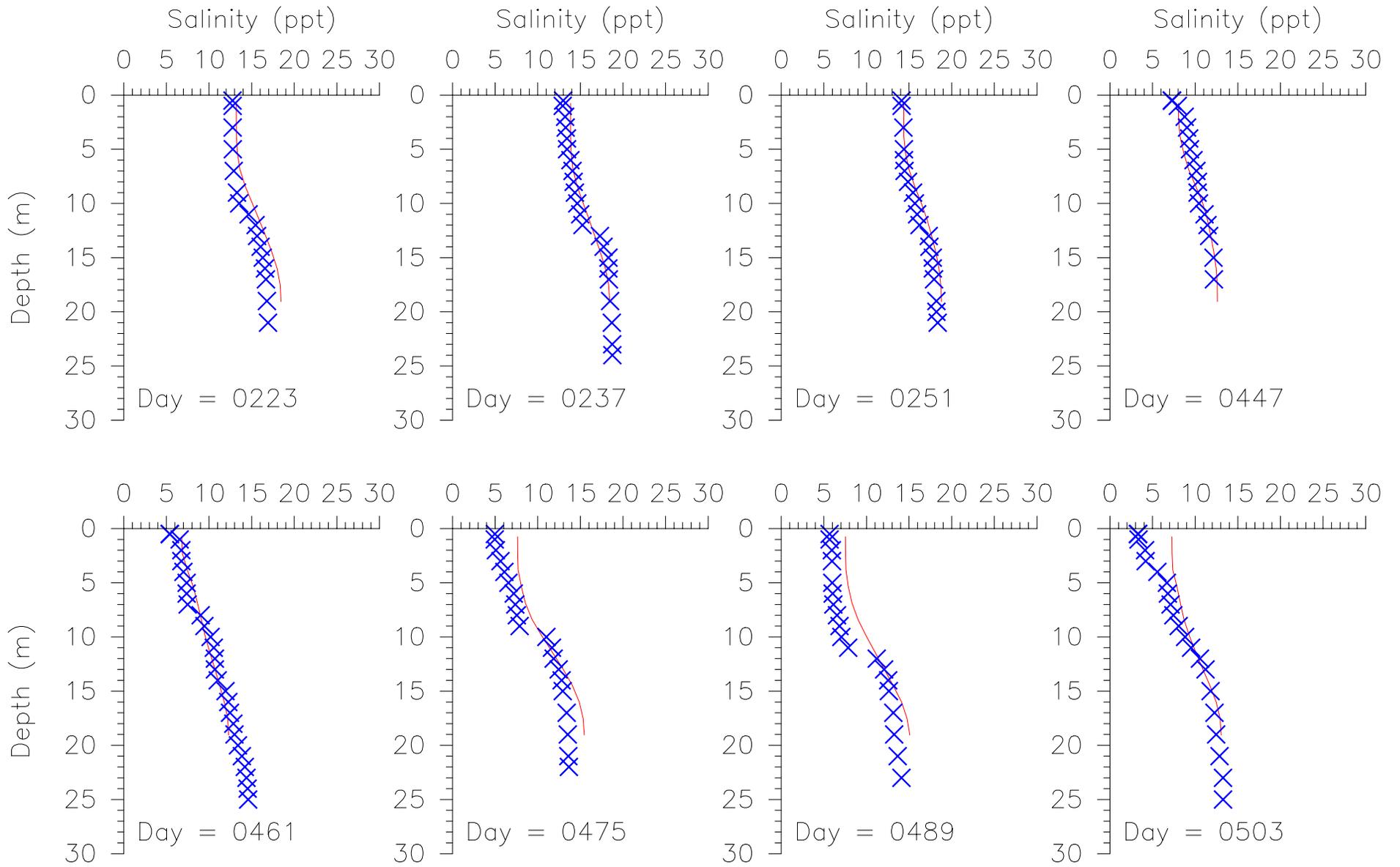
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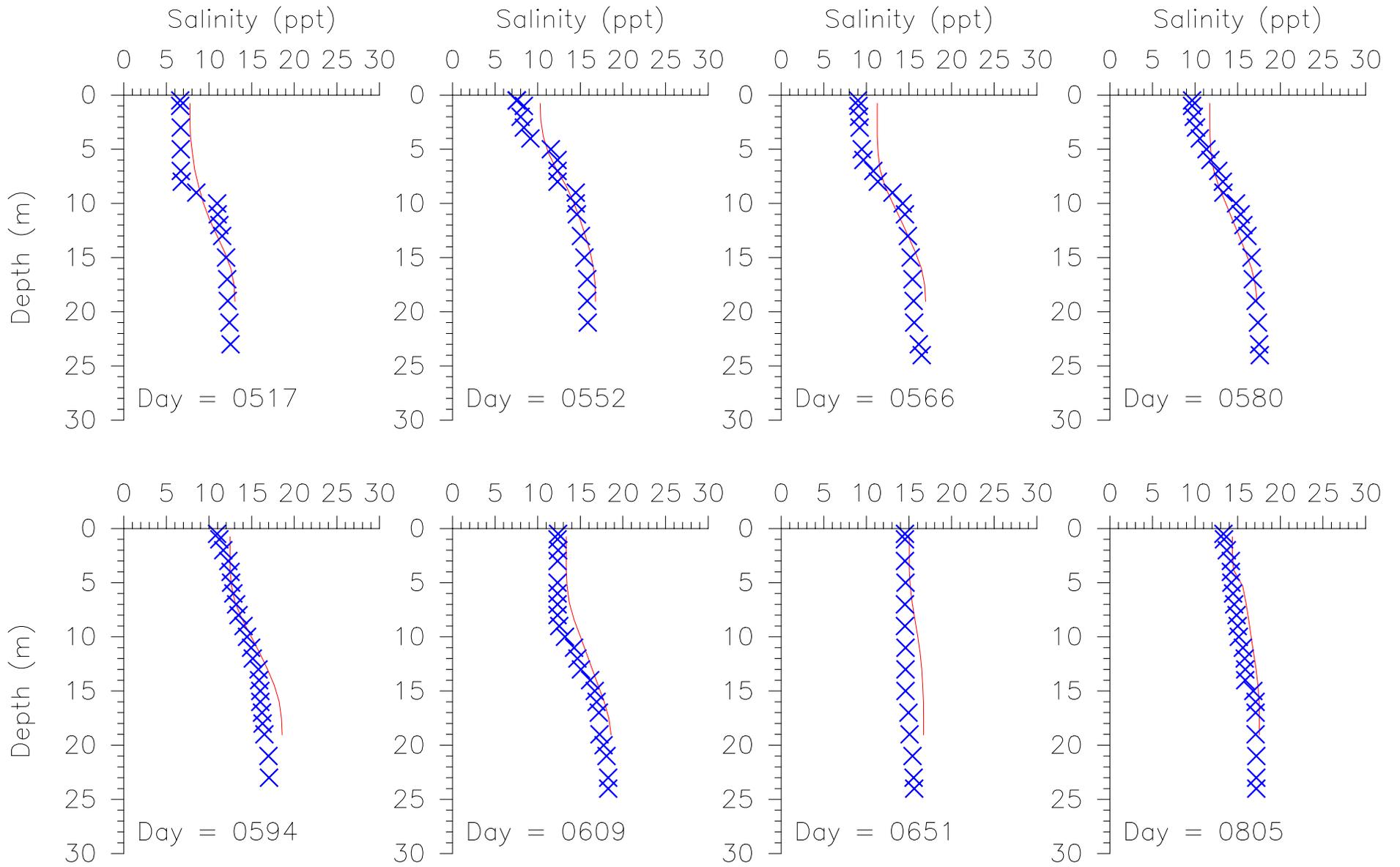
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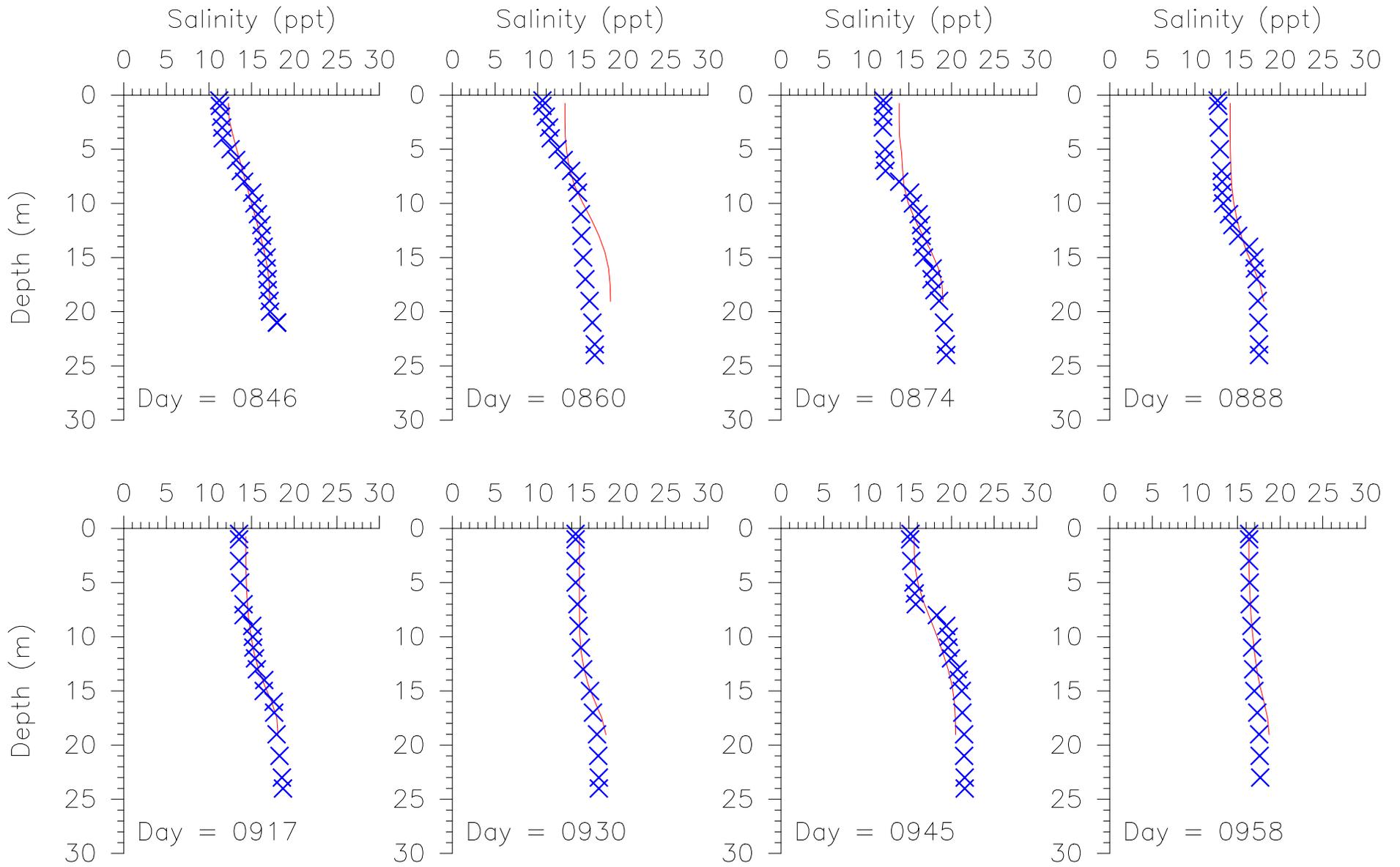
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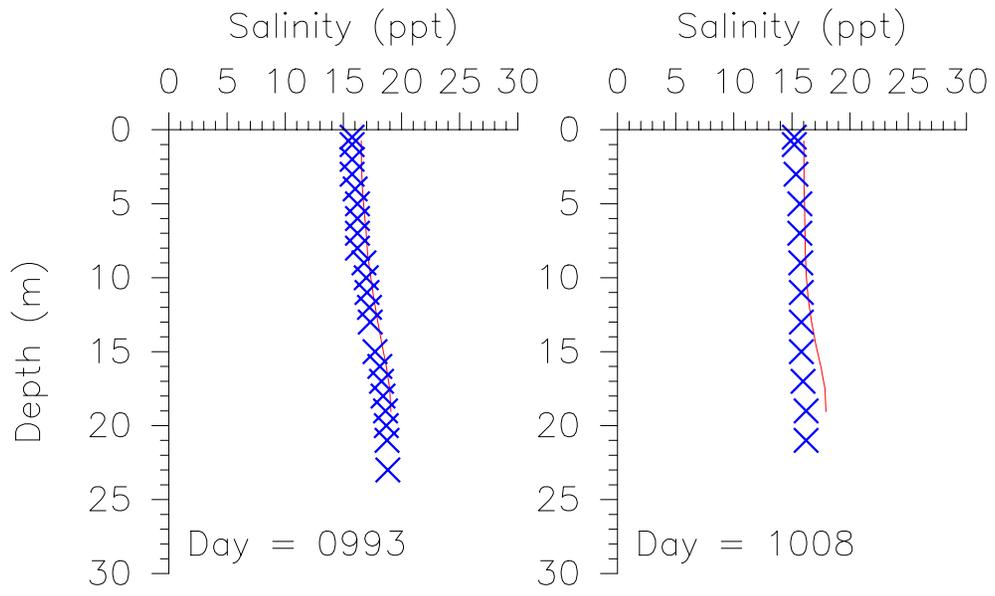
CB4.1E



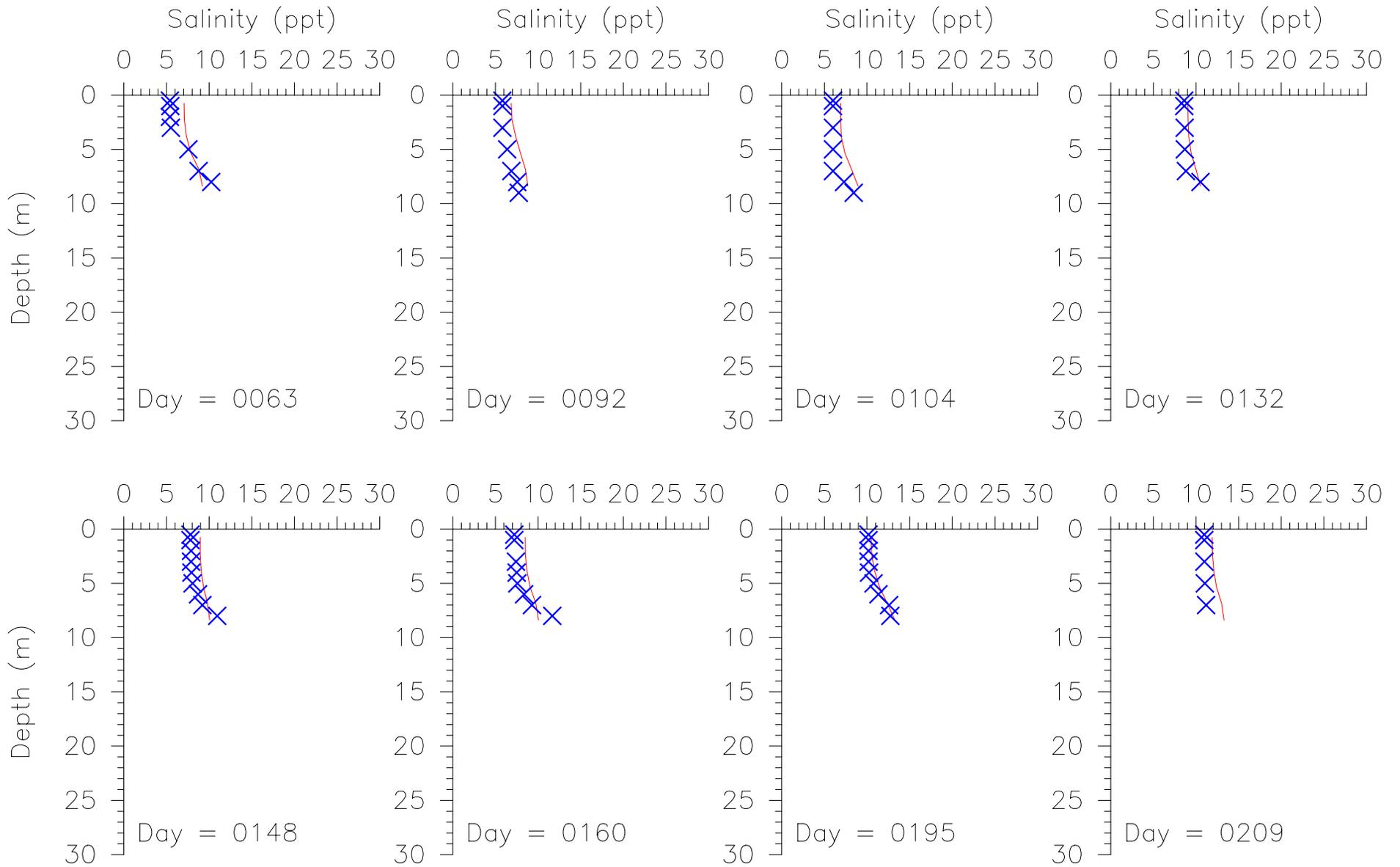
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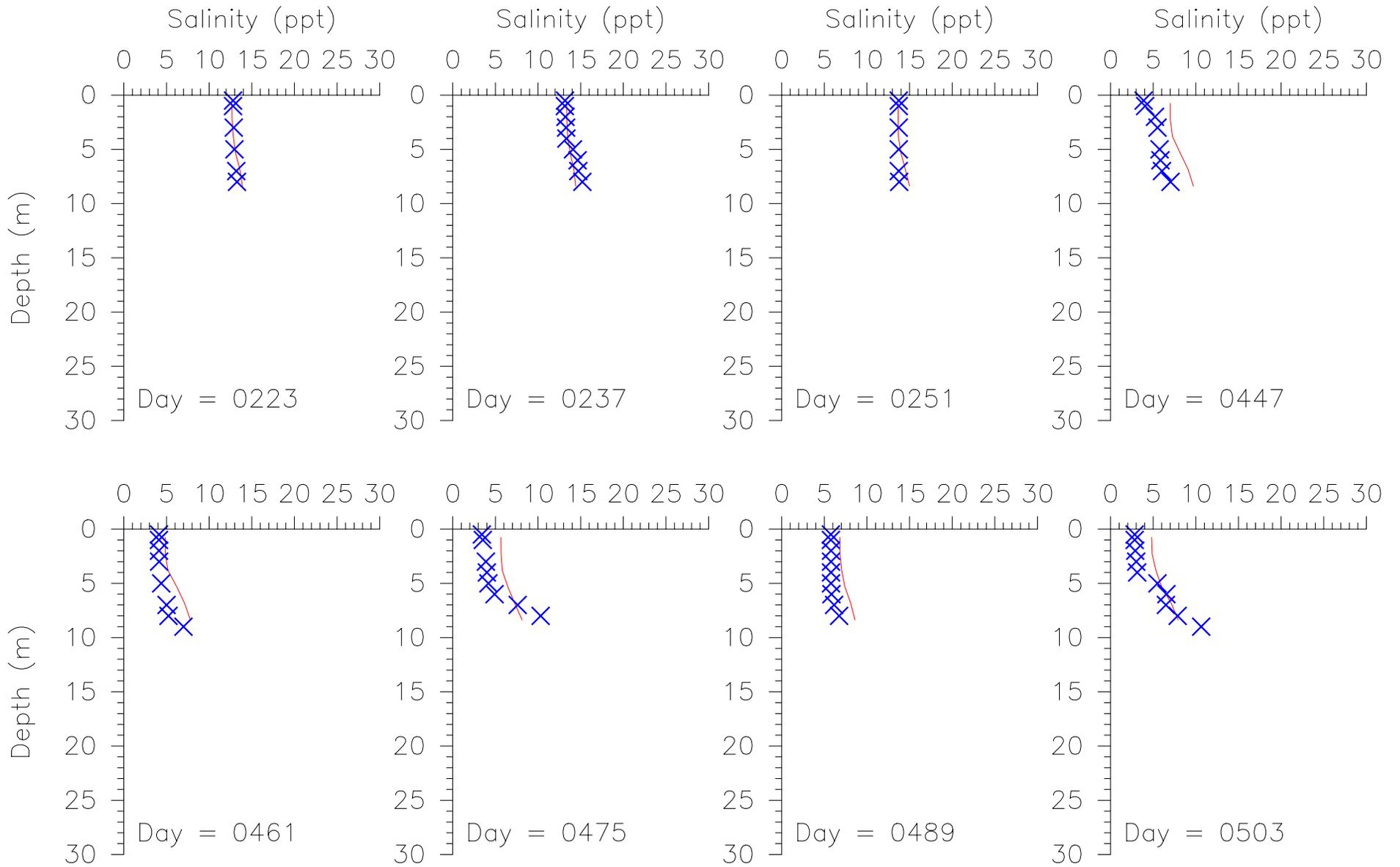
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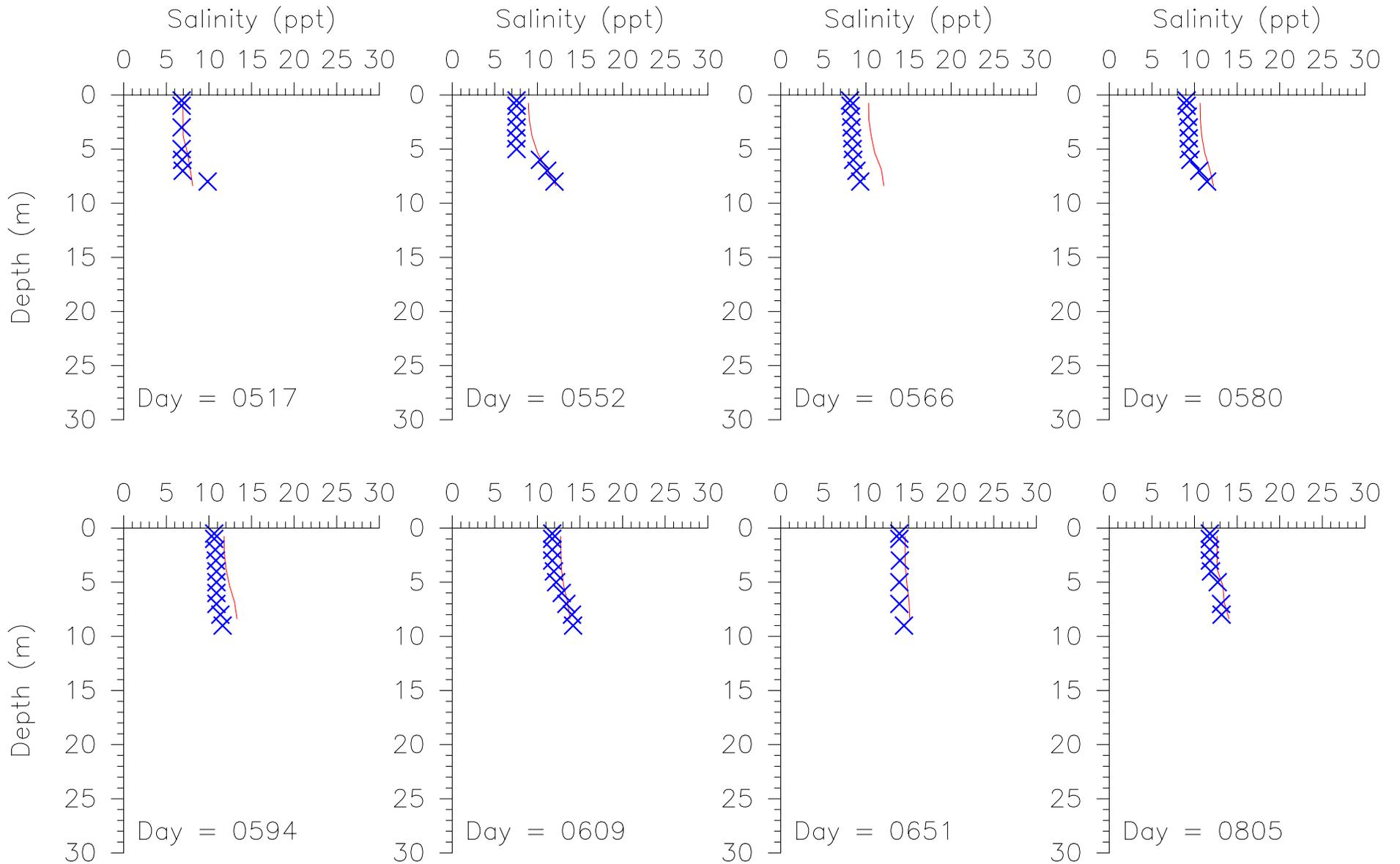
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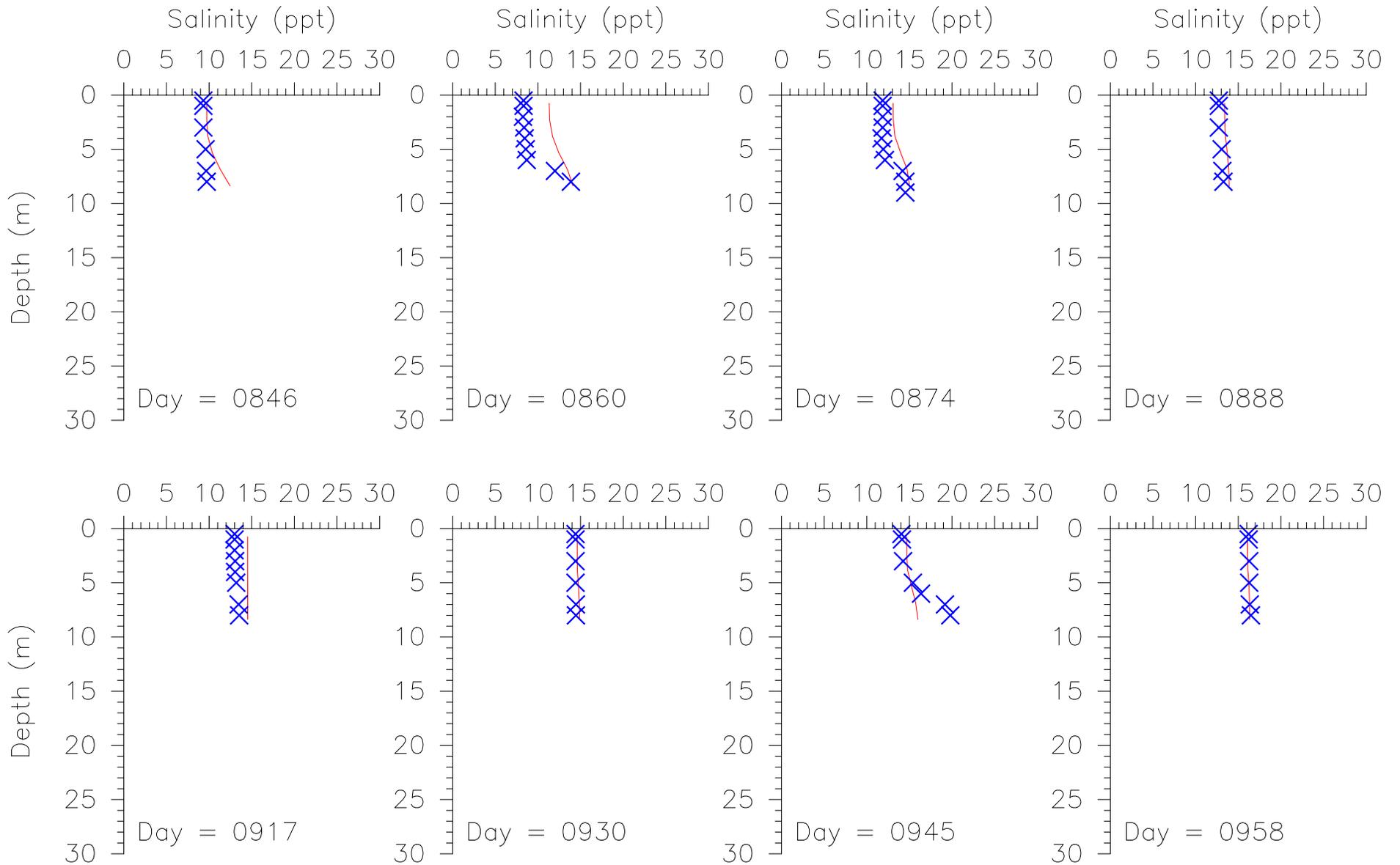
CB4.1W



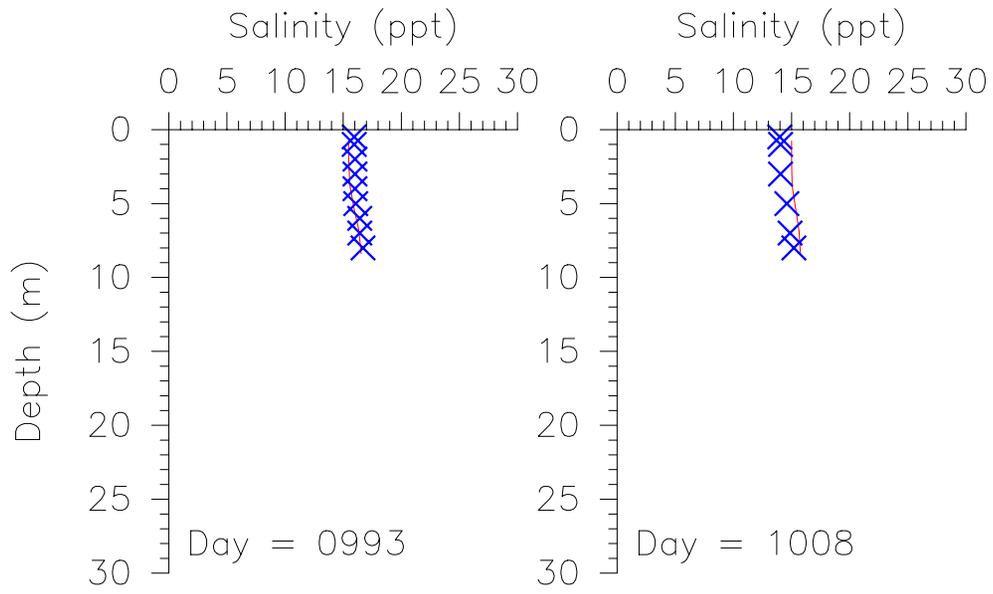
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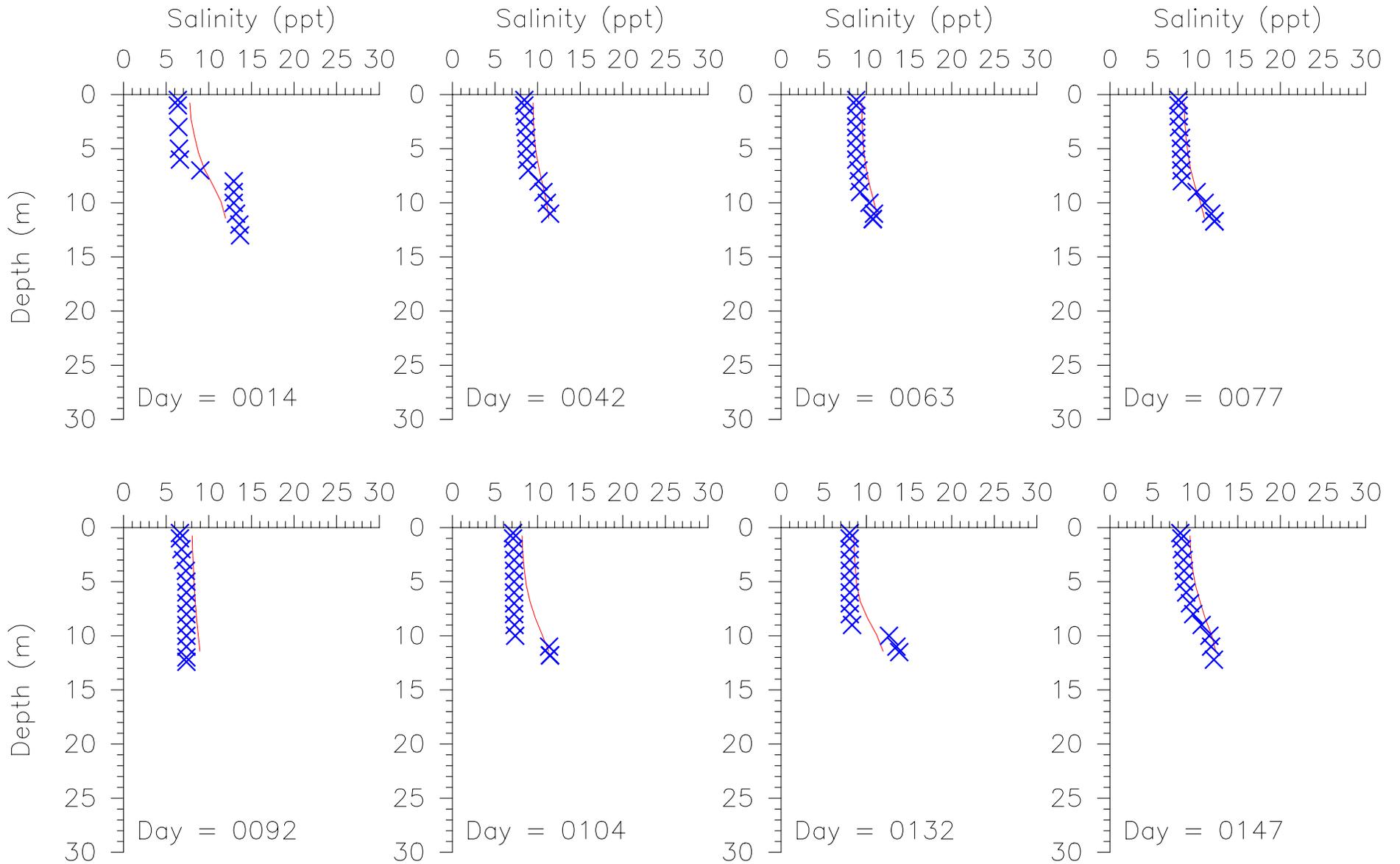
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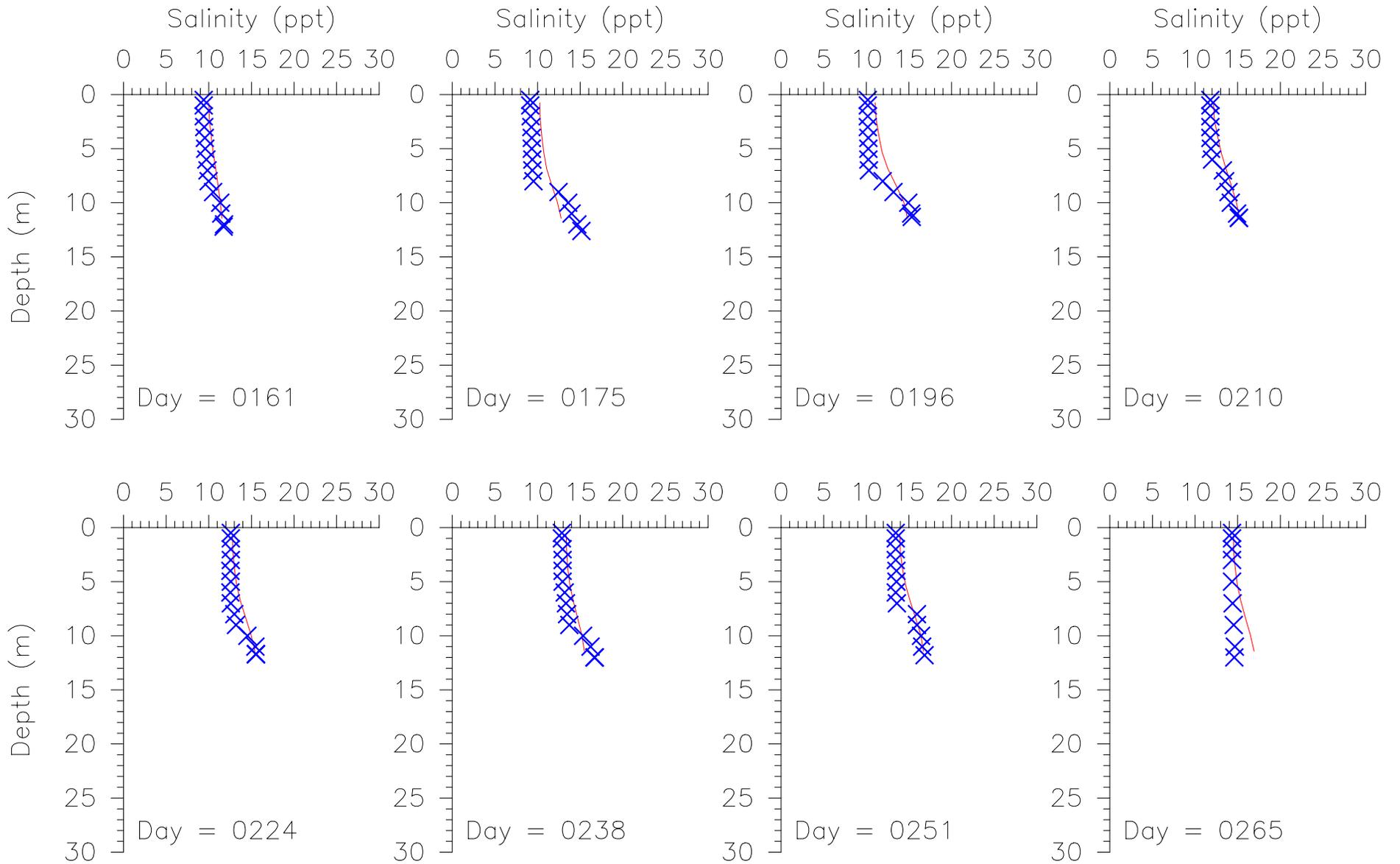
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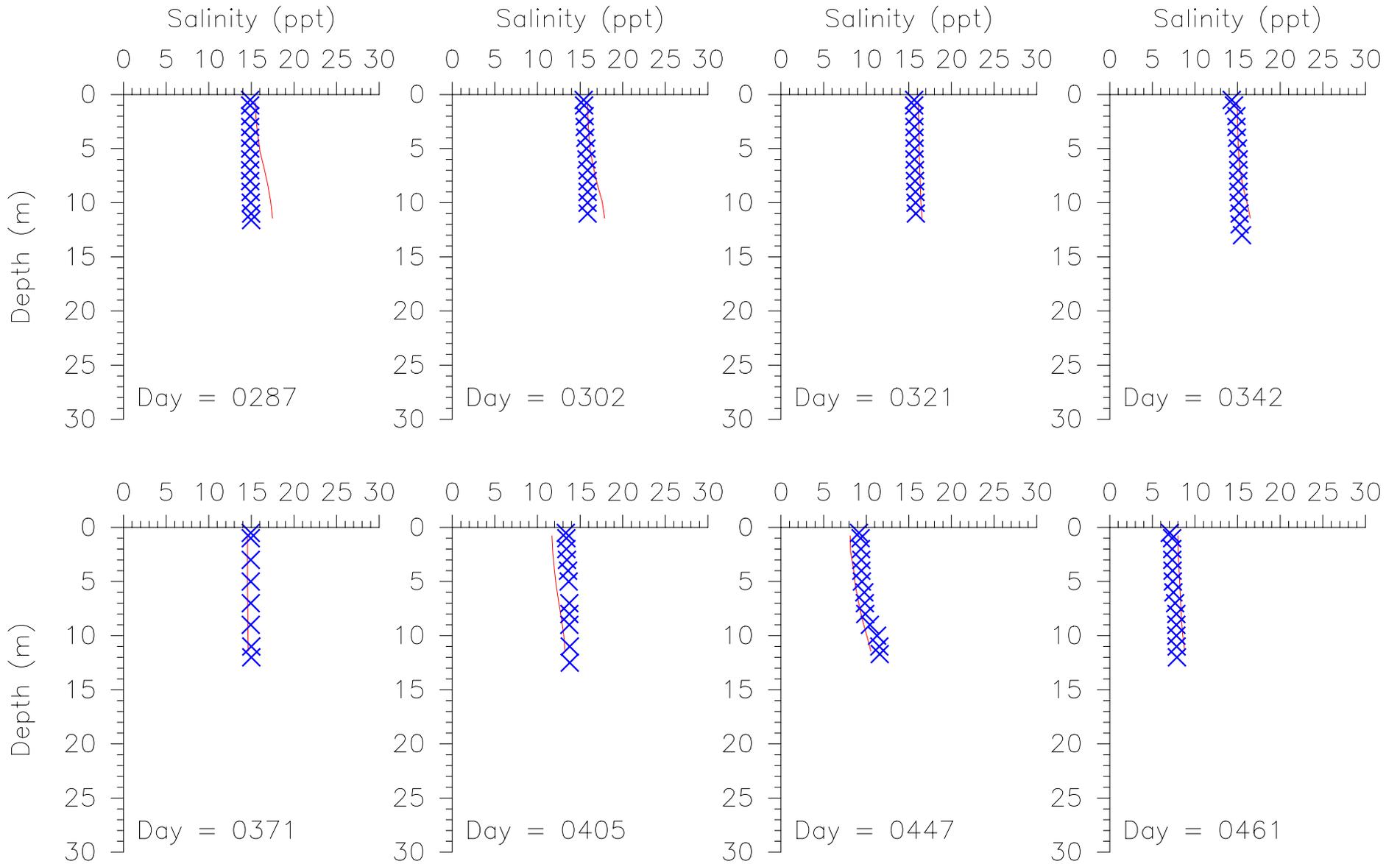
CB4.1W



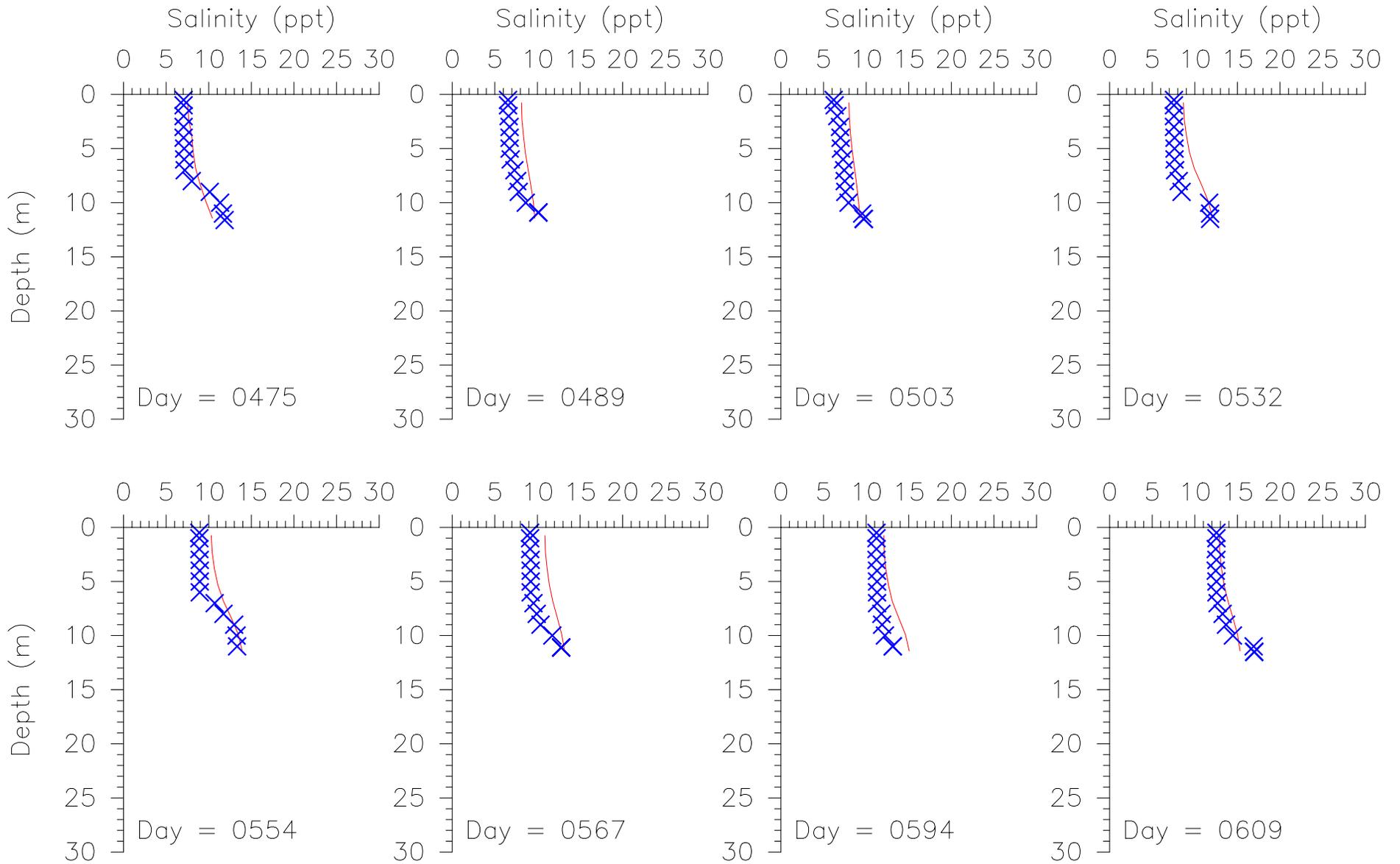
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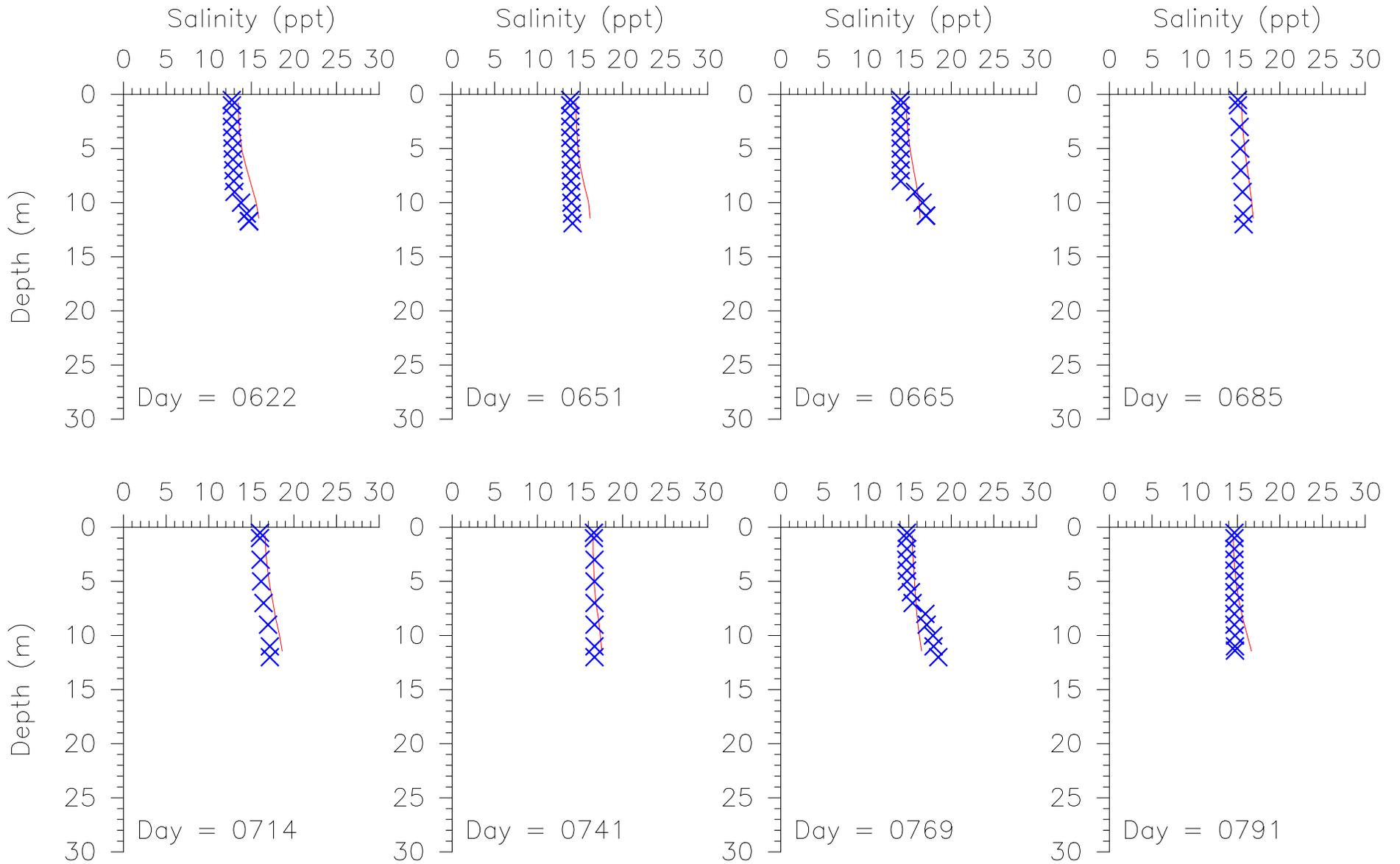
EE1.1



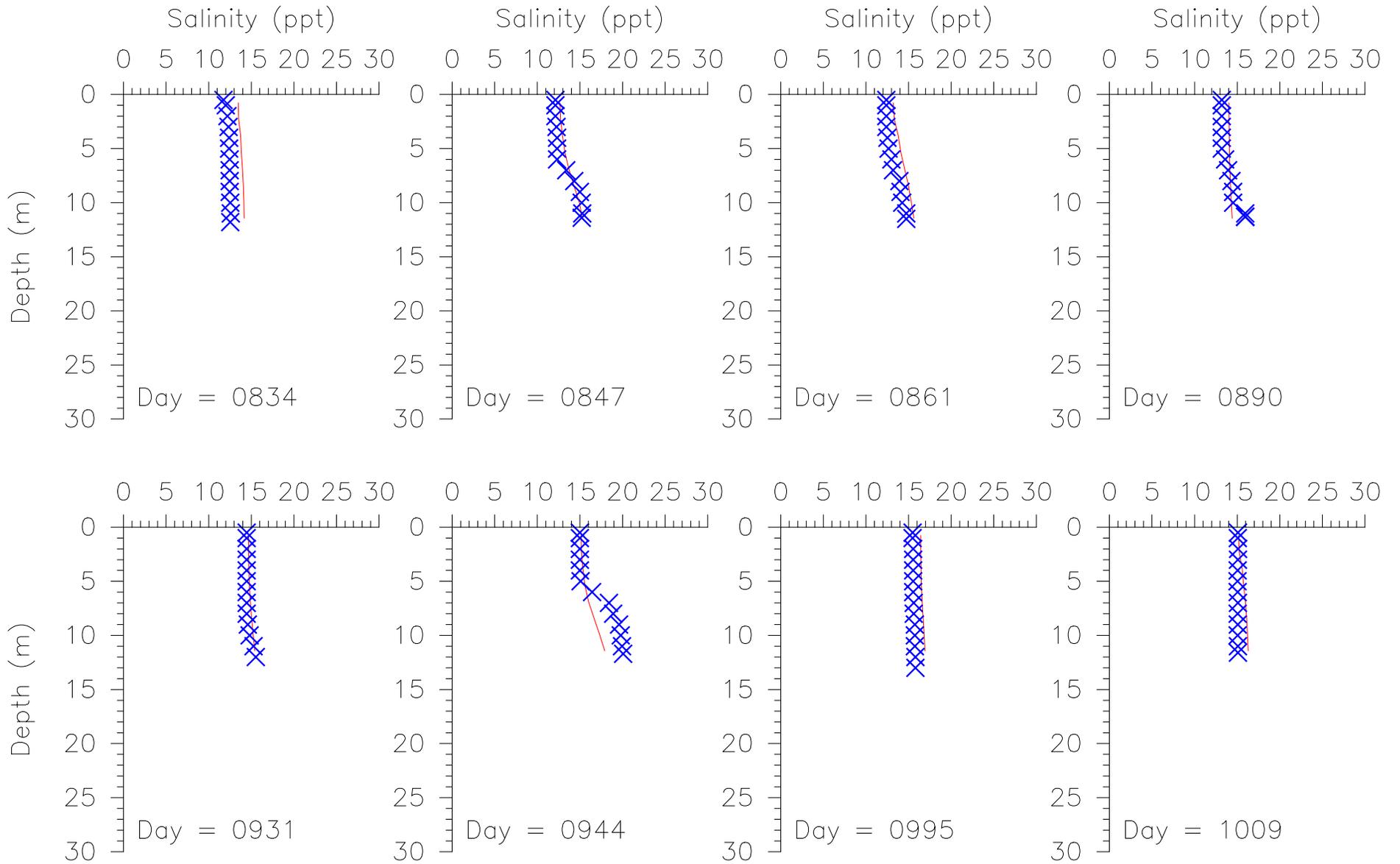
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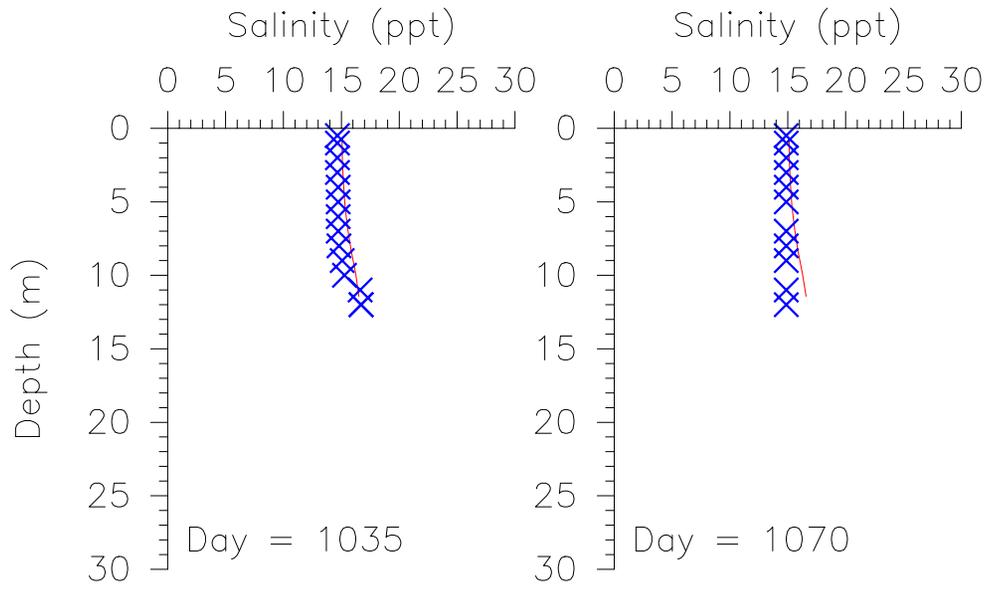
EE1.1



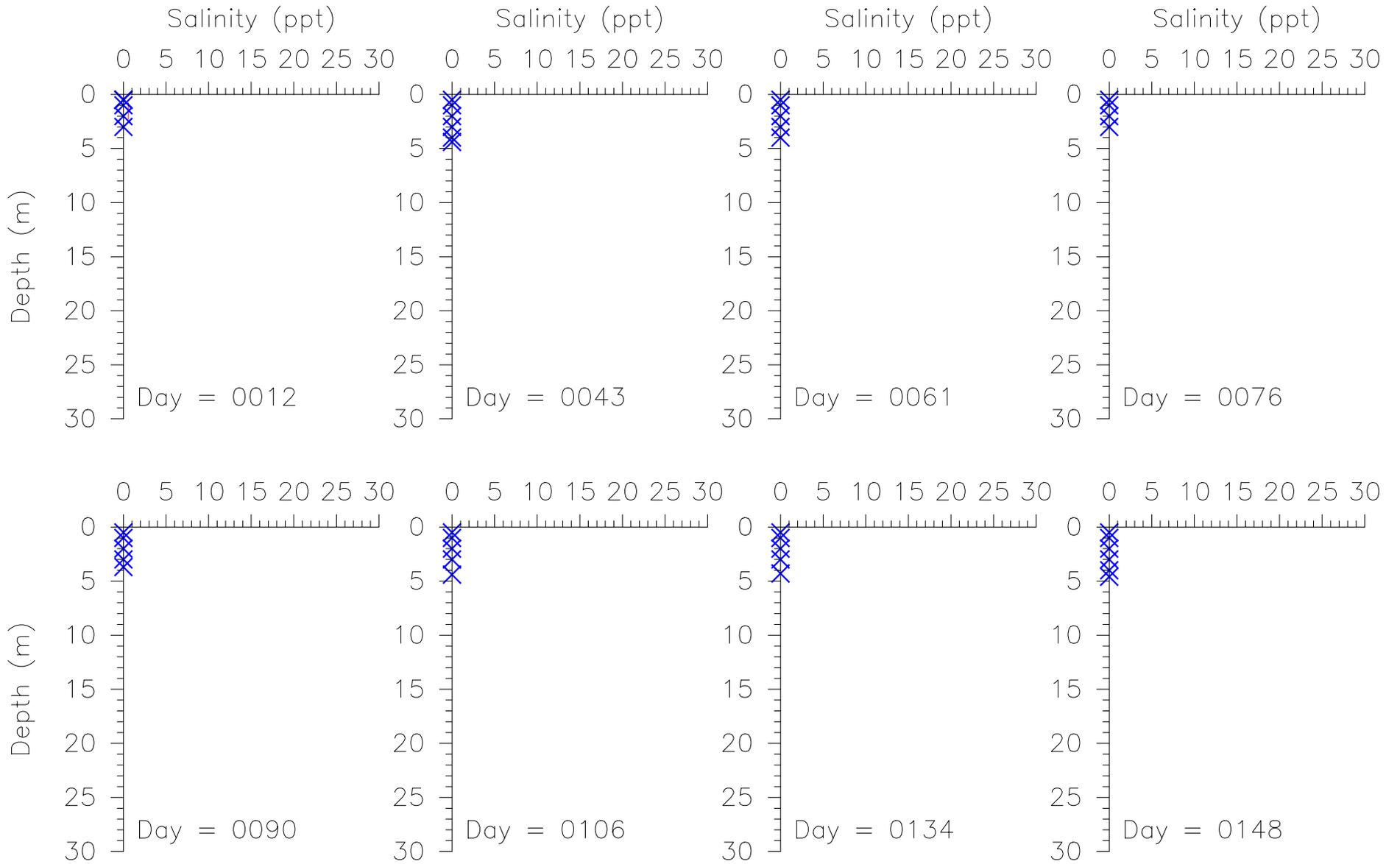
EE1.1



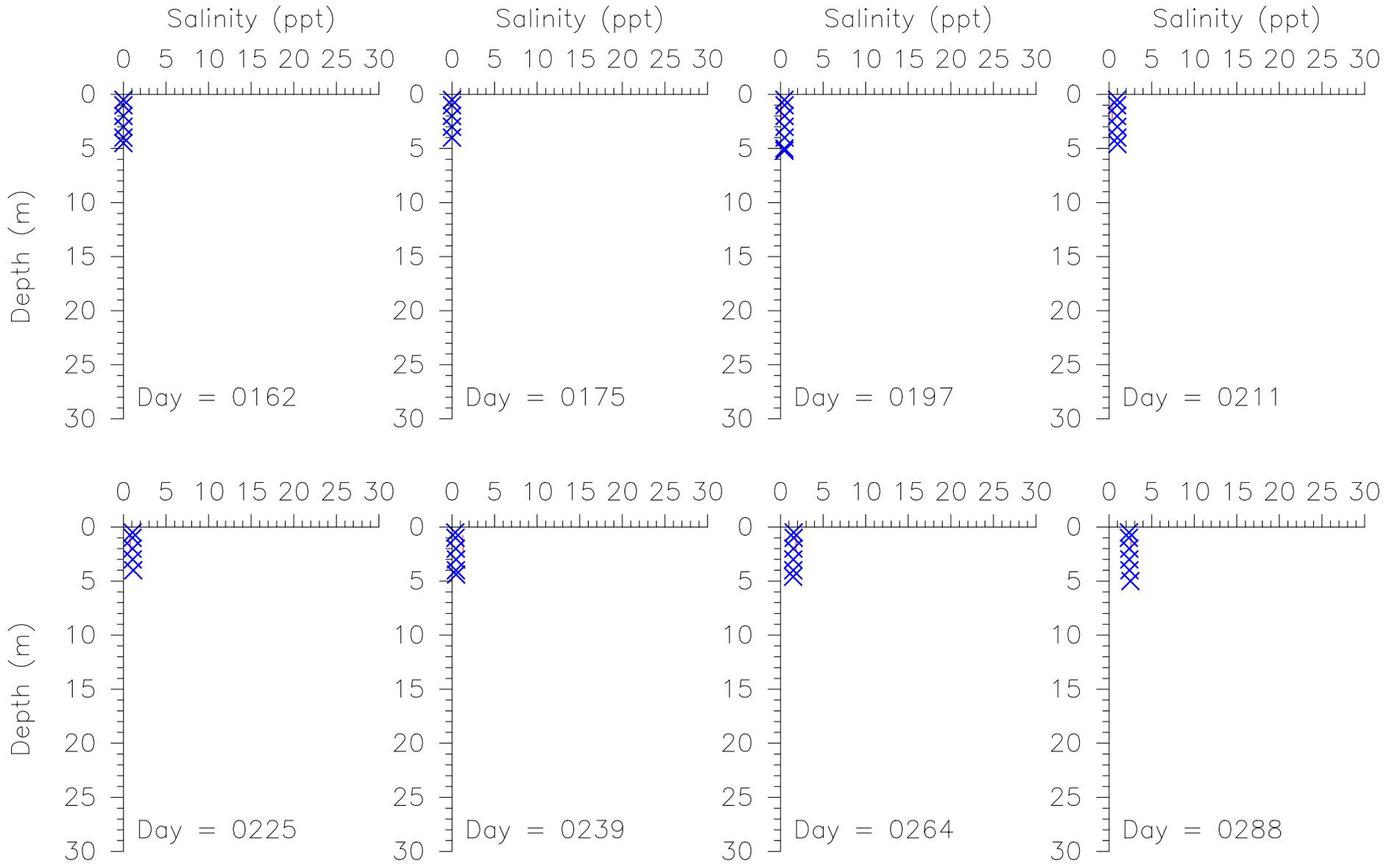
EE1.1



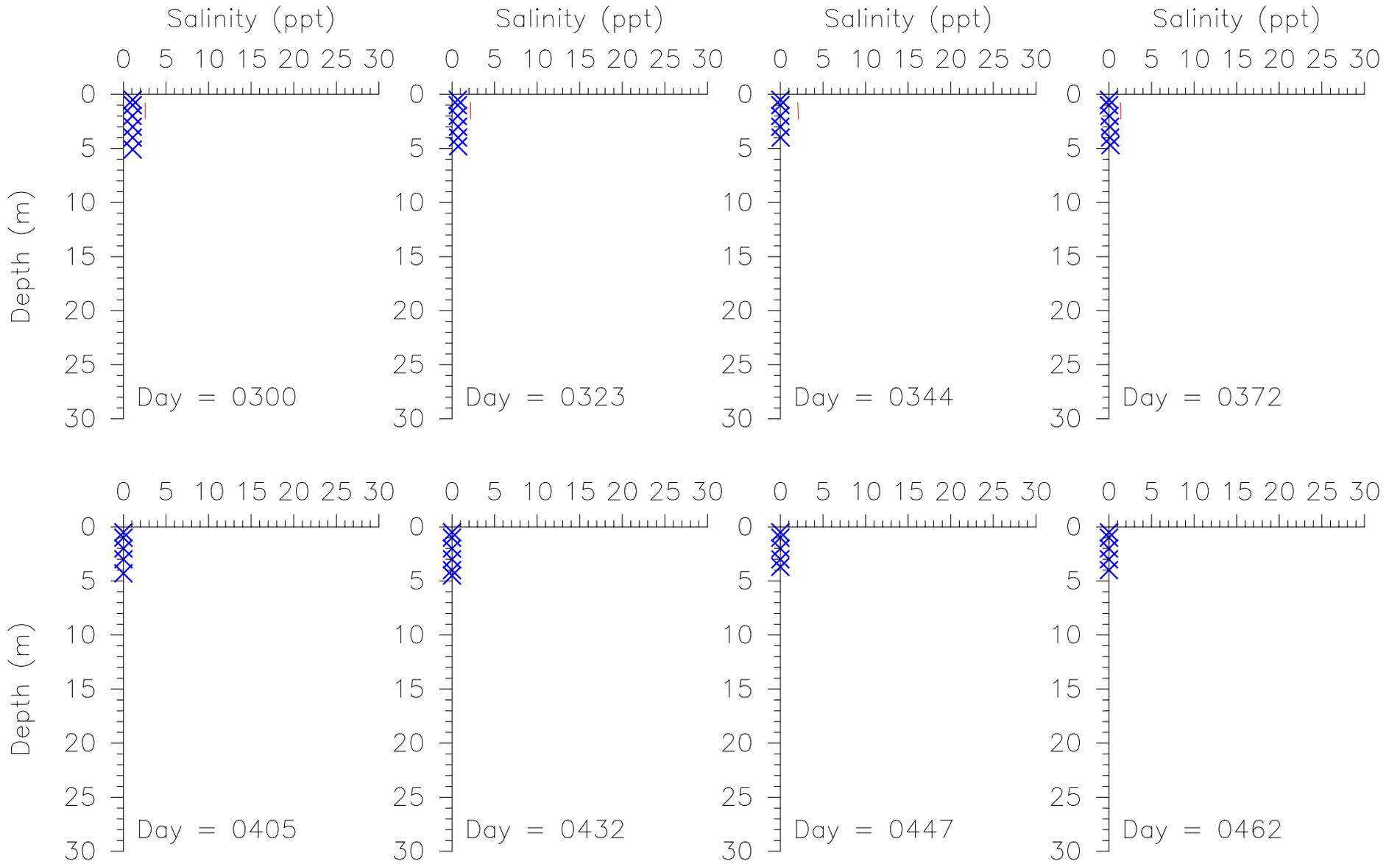
EE1.1



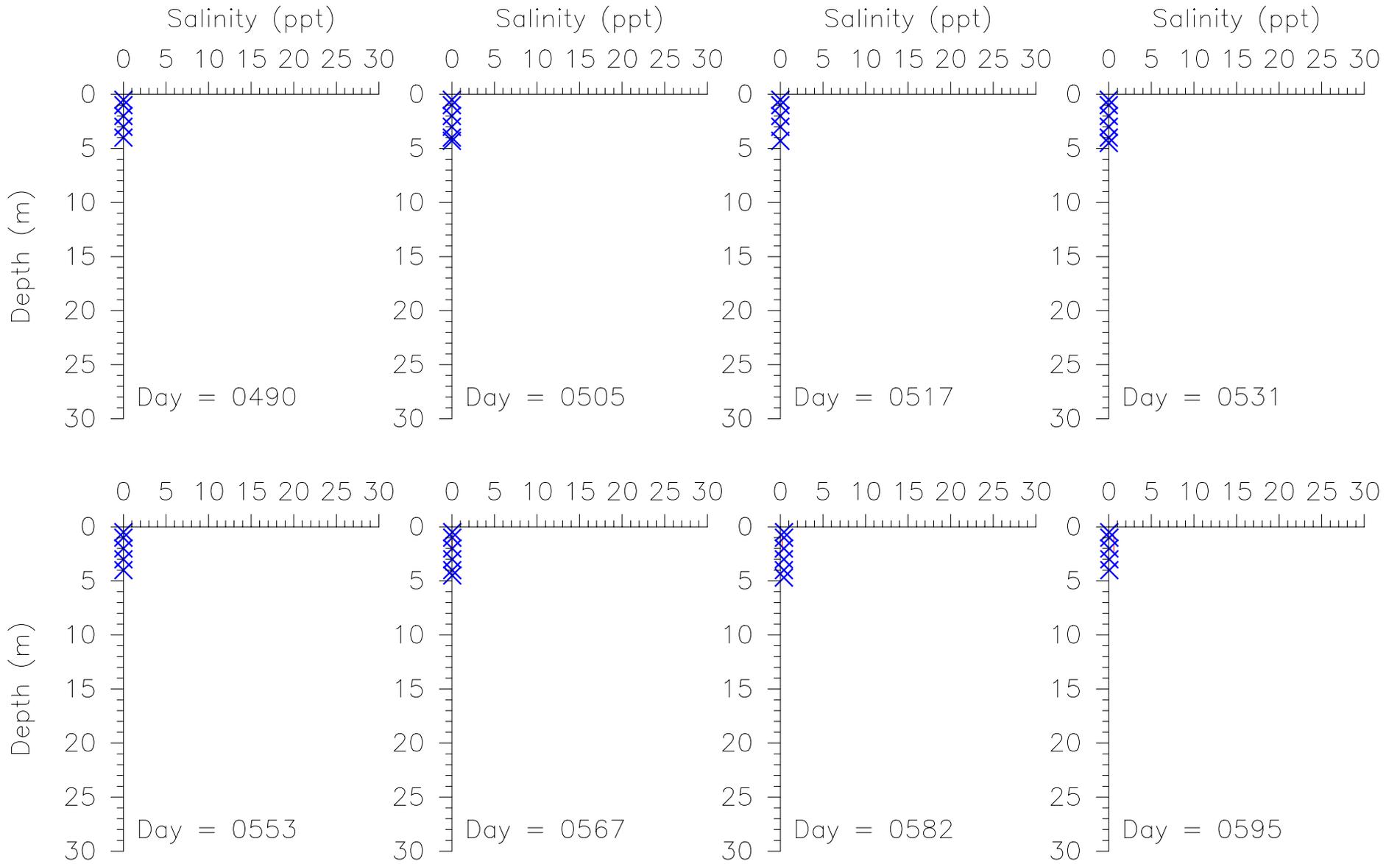
ET4.1



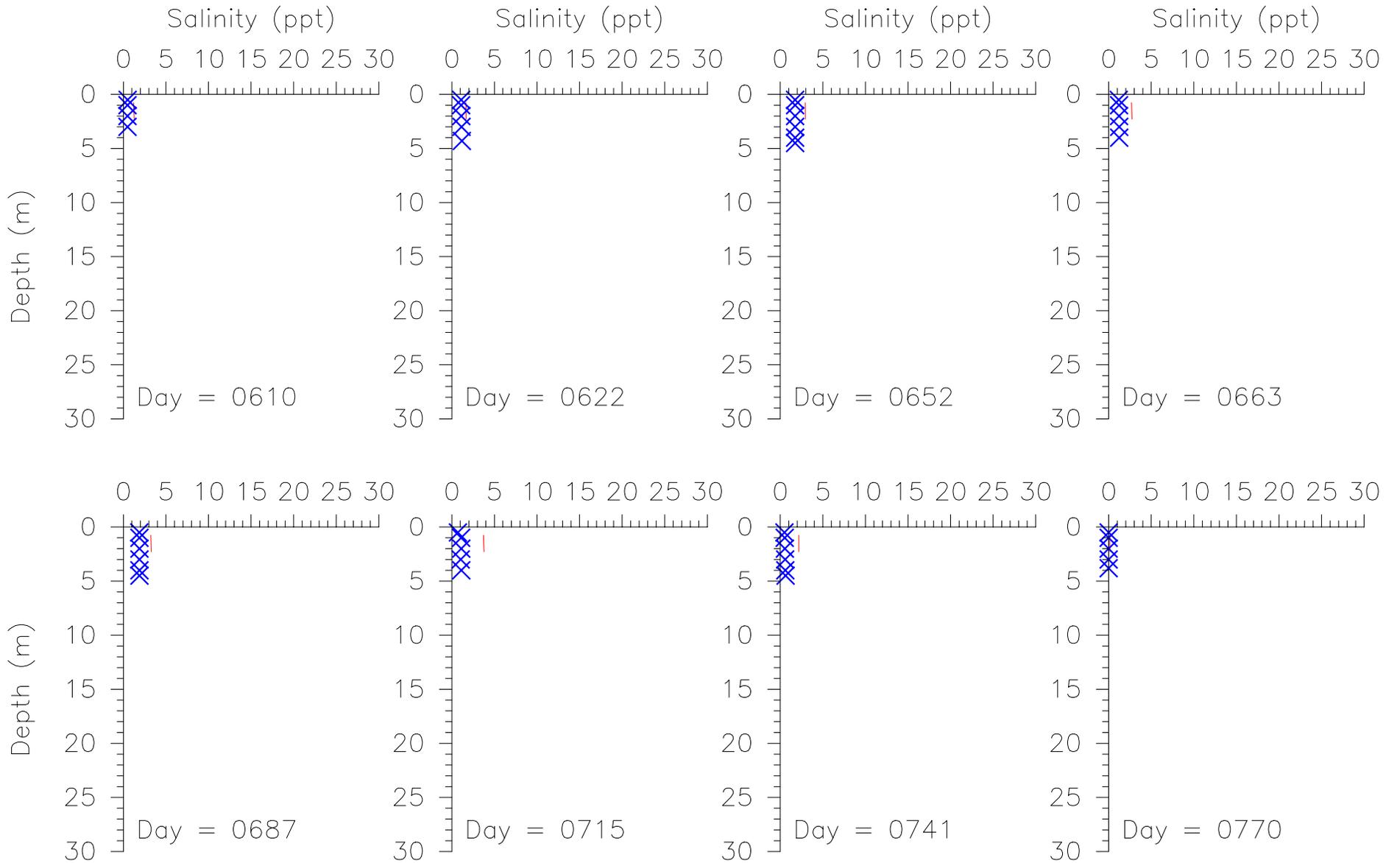
ET4.1



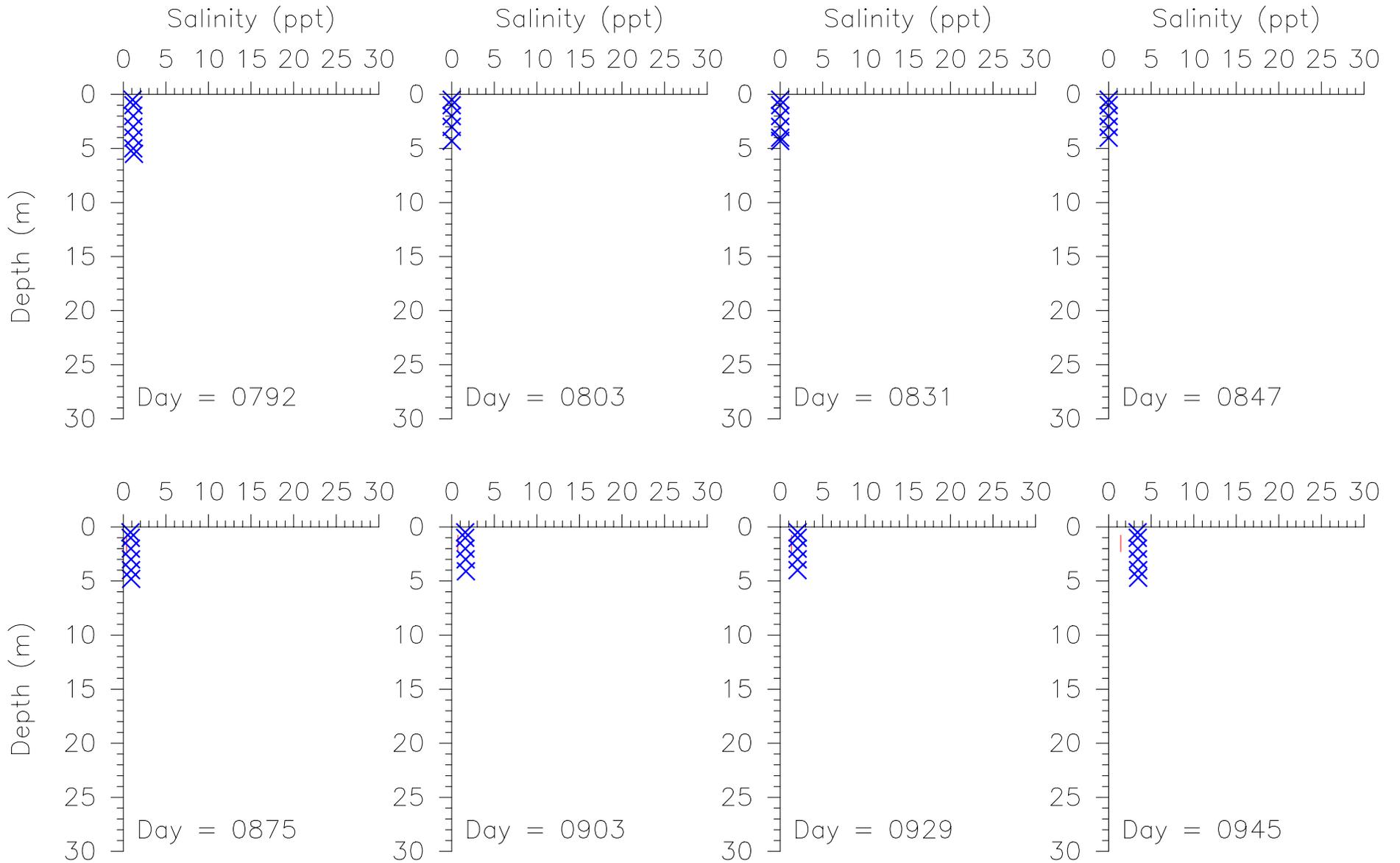
ET4.1



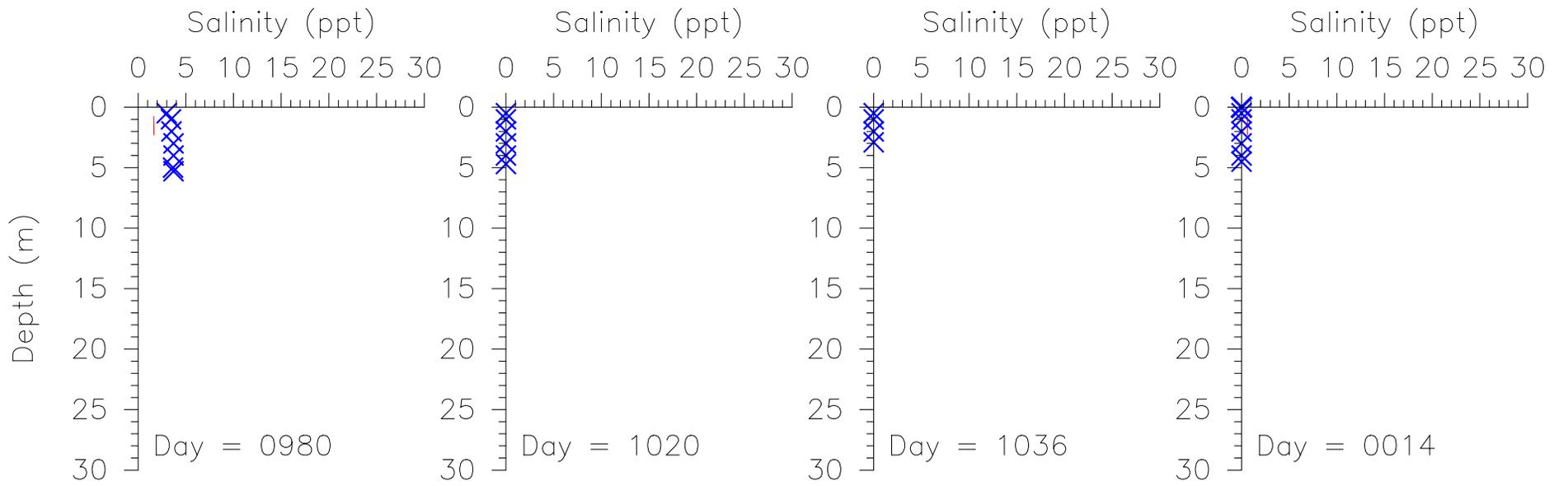
ET4.1



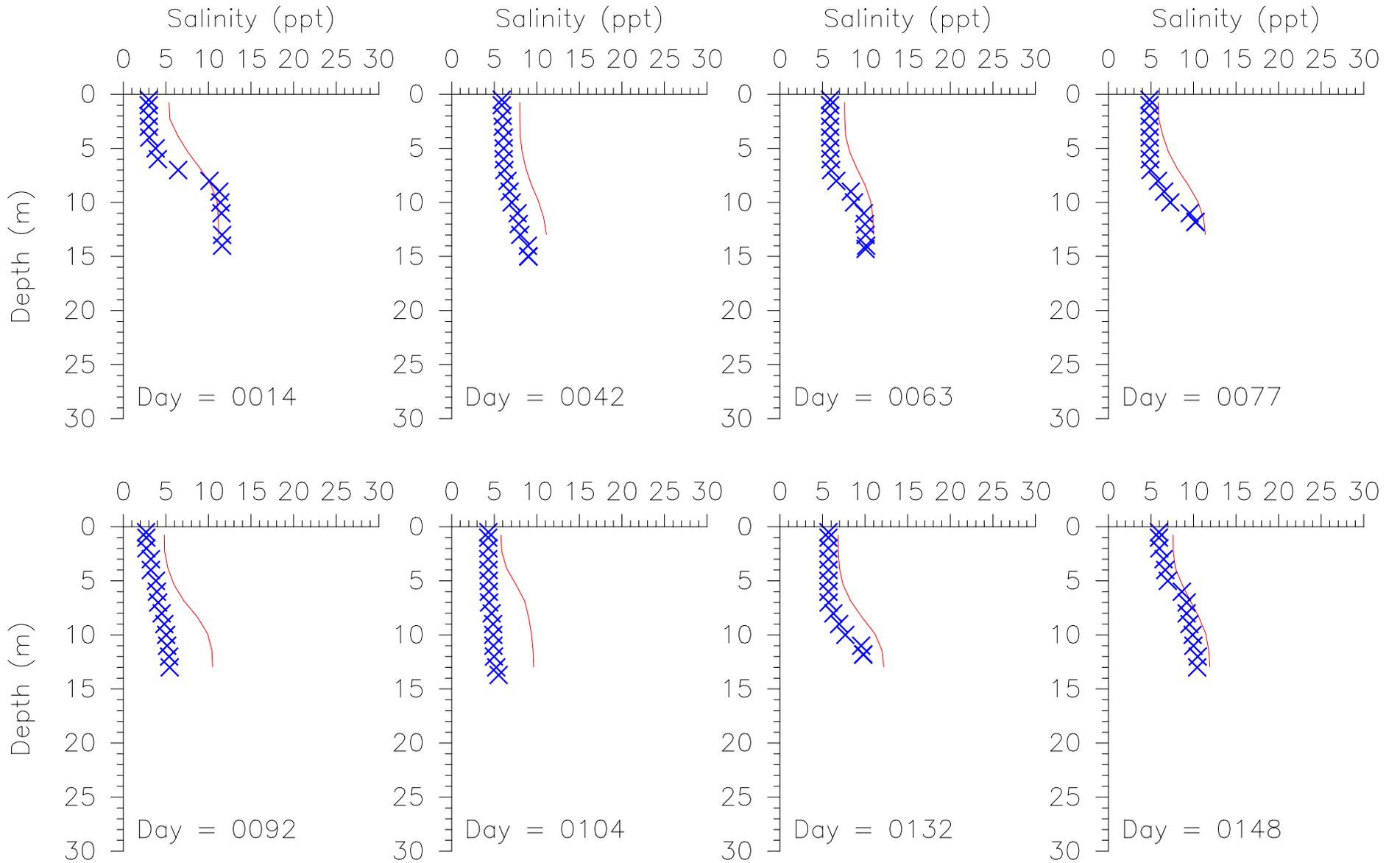
ET4.1



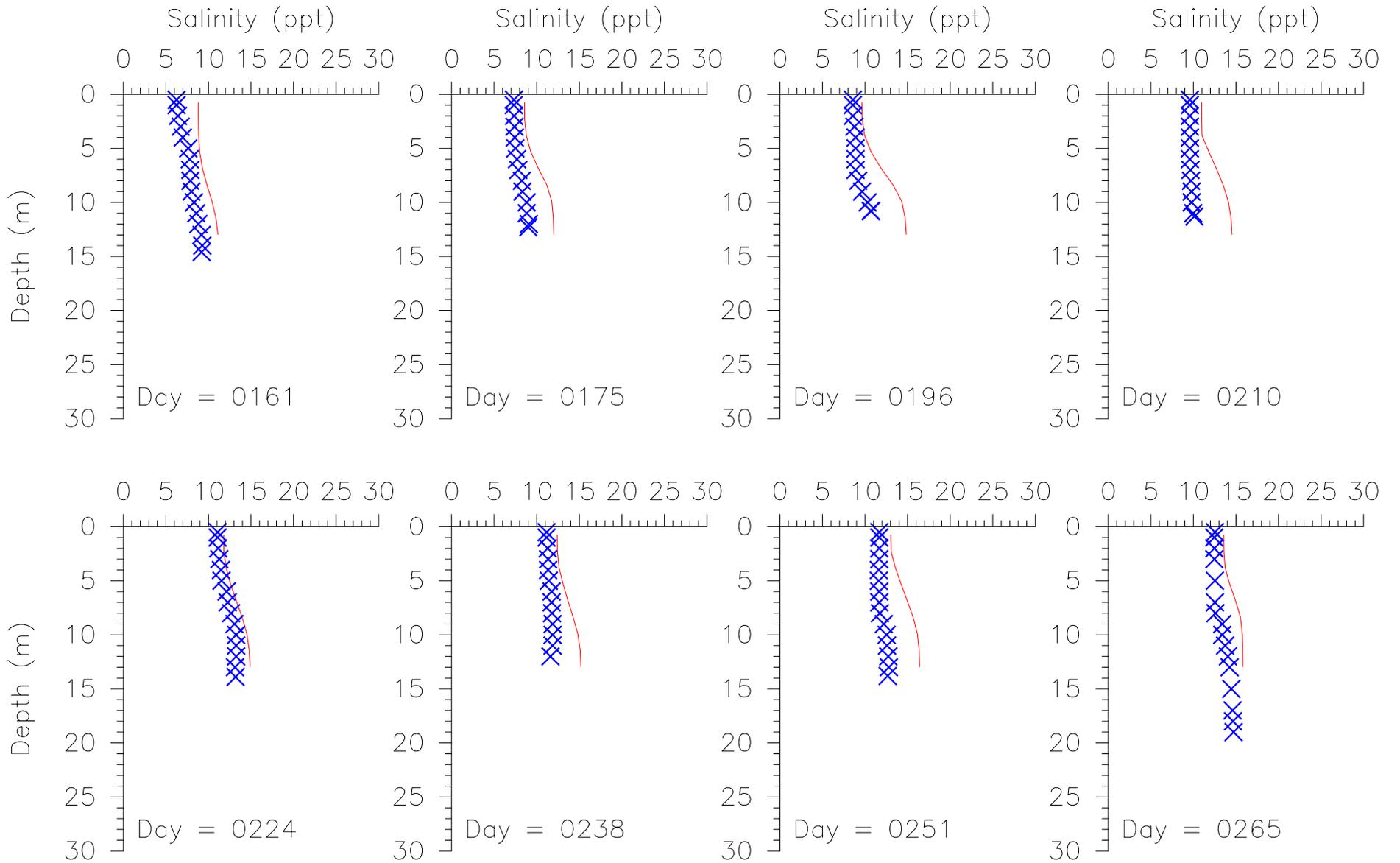
ET4.1



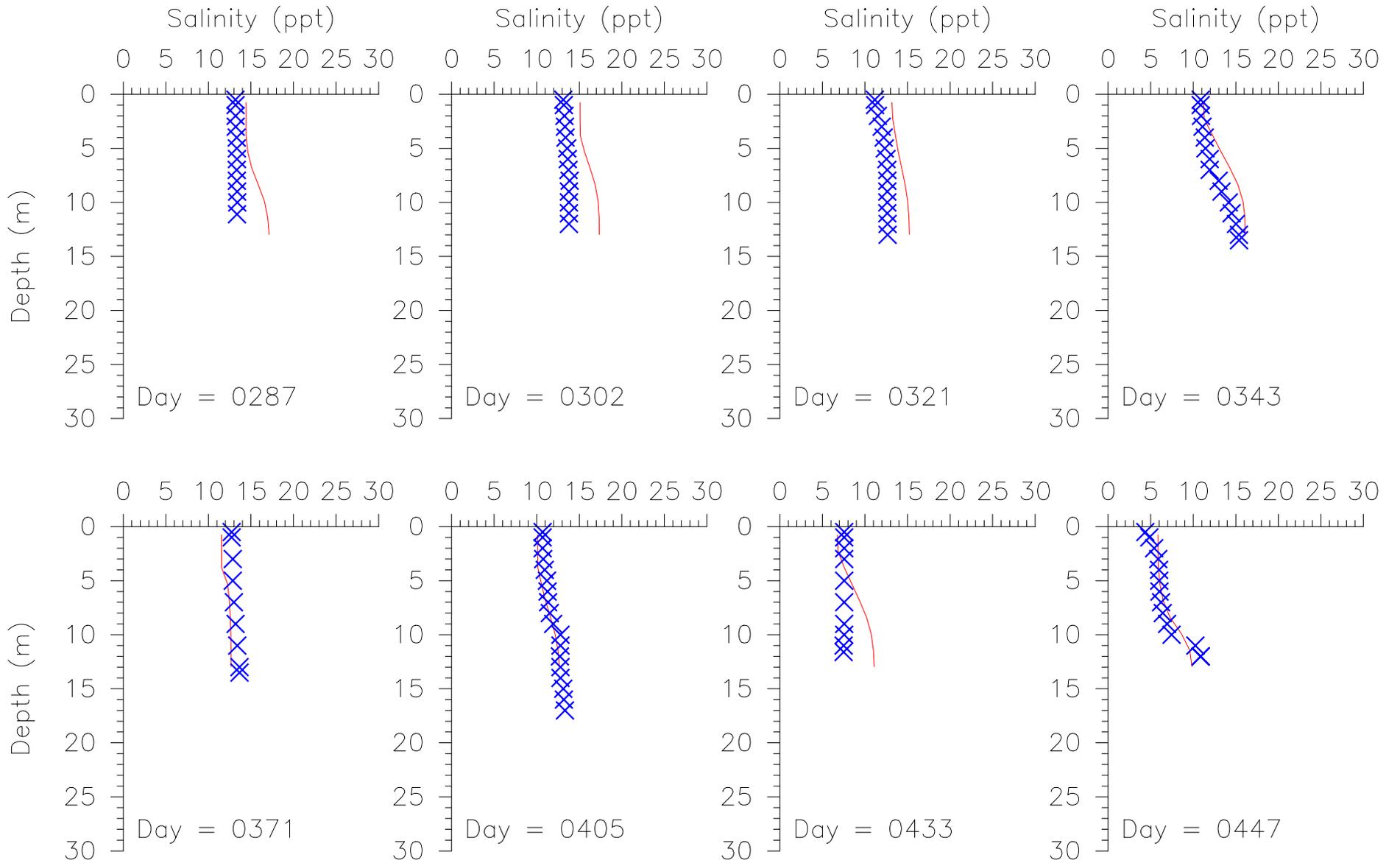
ET4.1



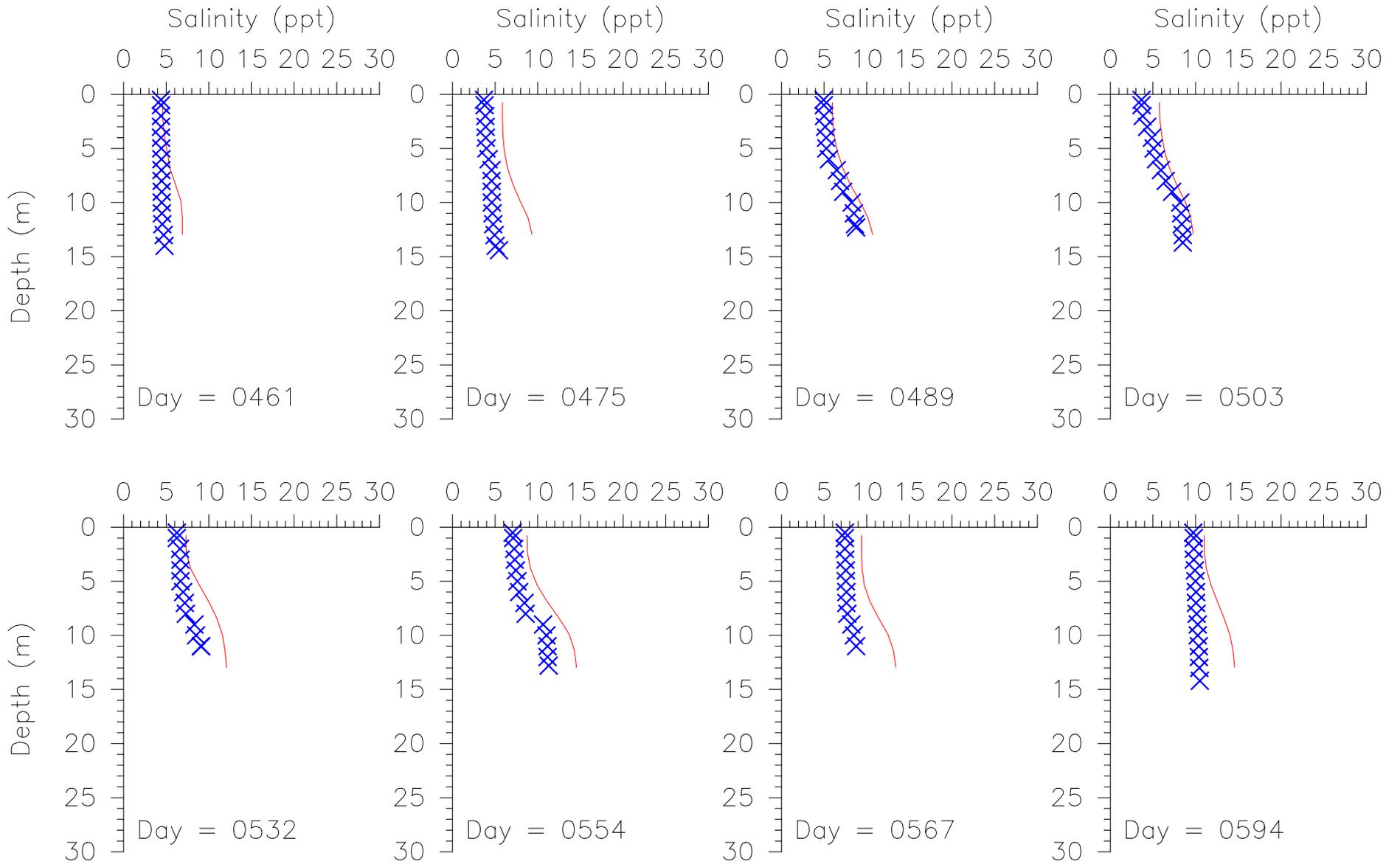
ET4.2



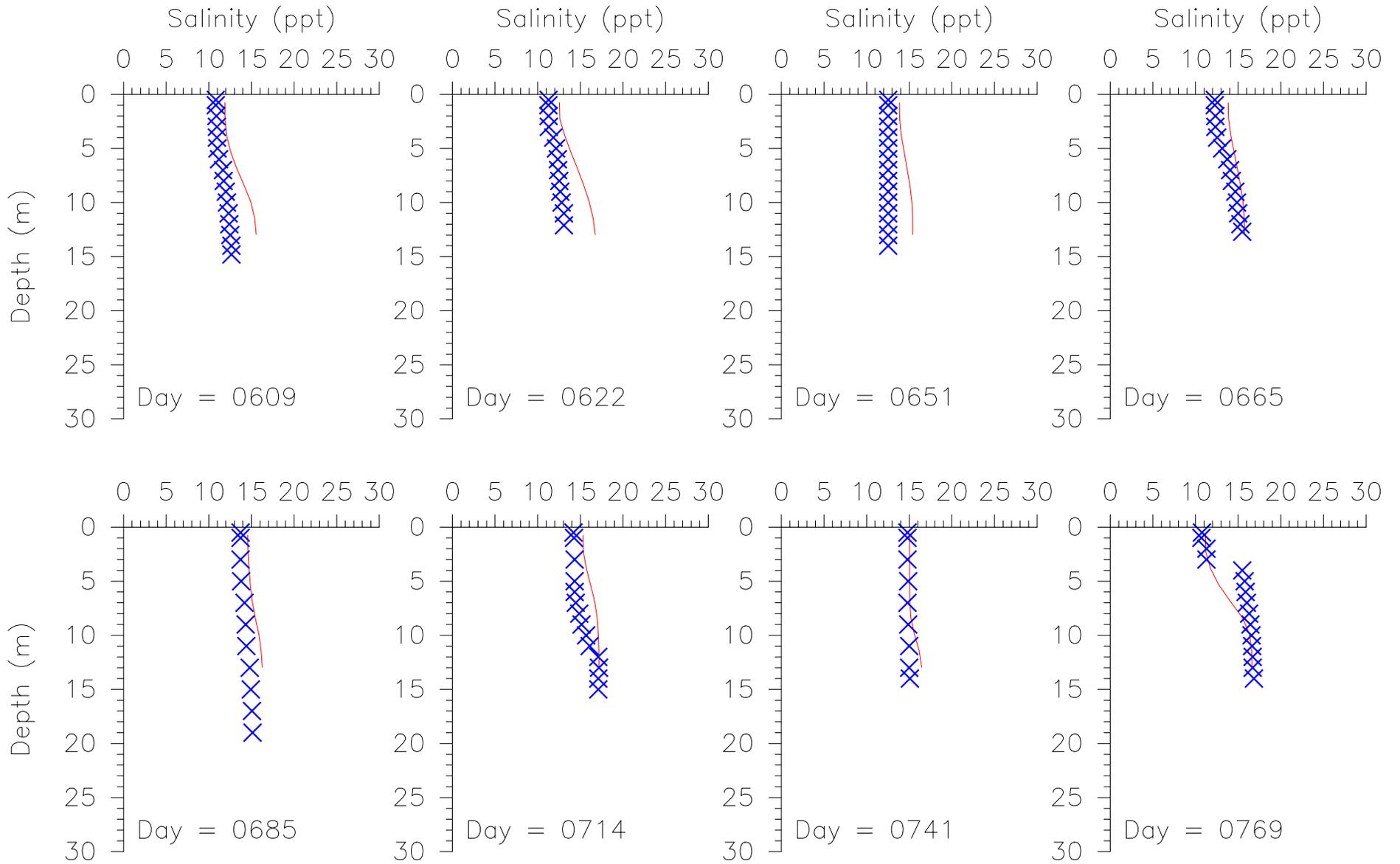
ET4.2



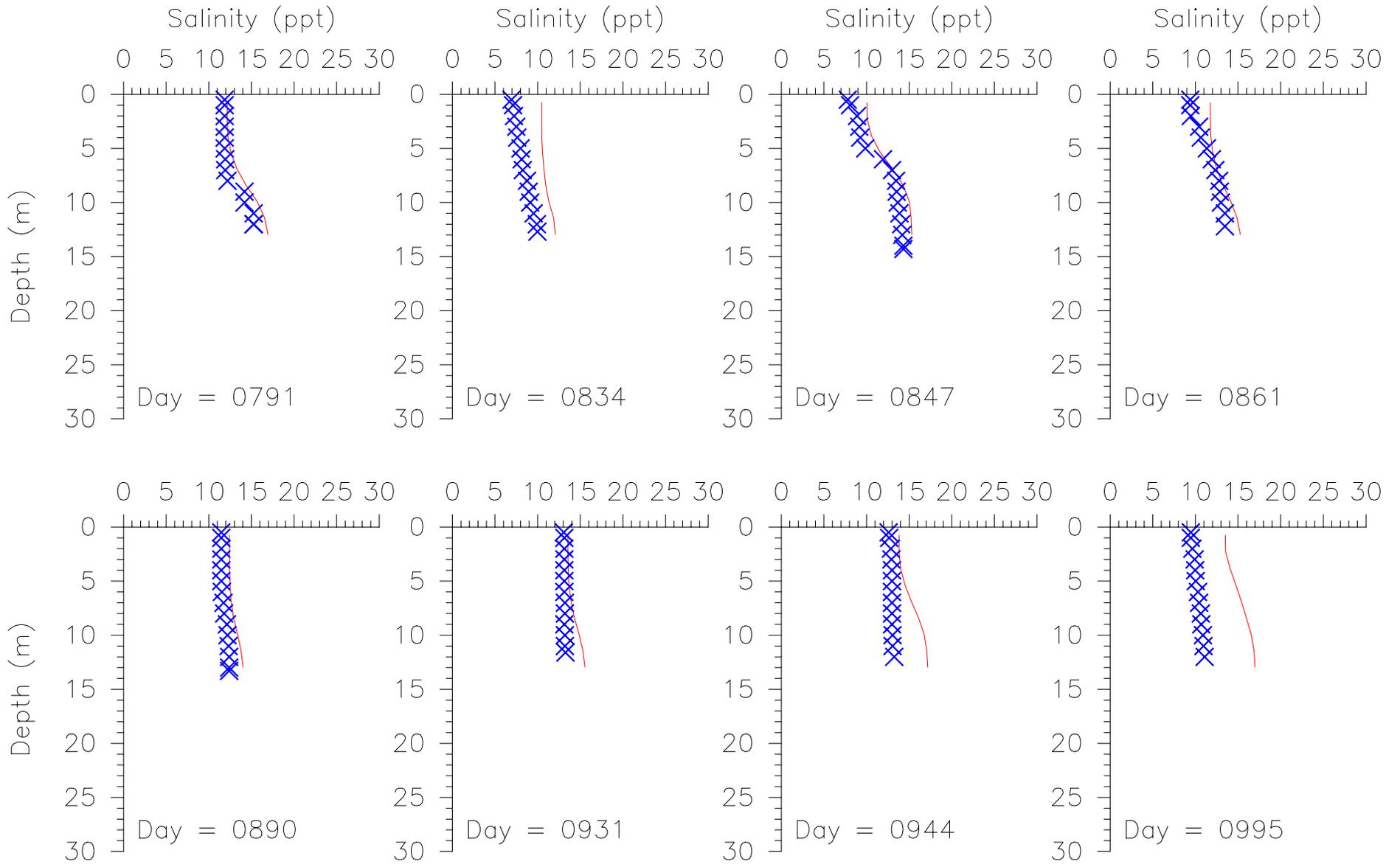
ET4.2



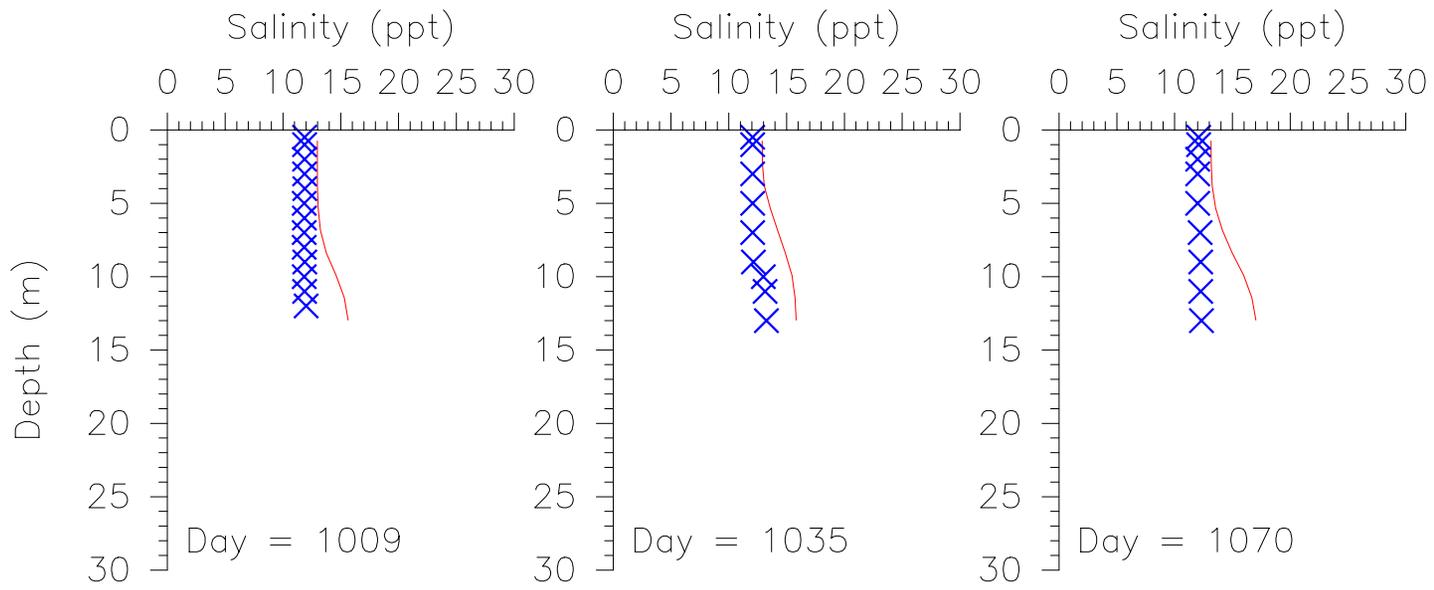
ET4.2



ET4.2



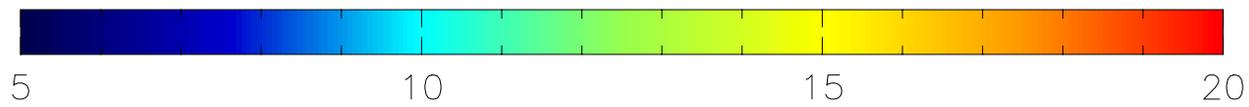
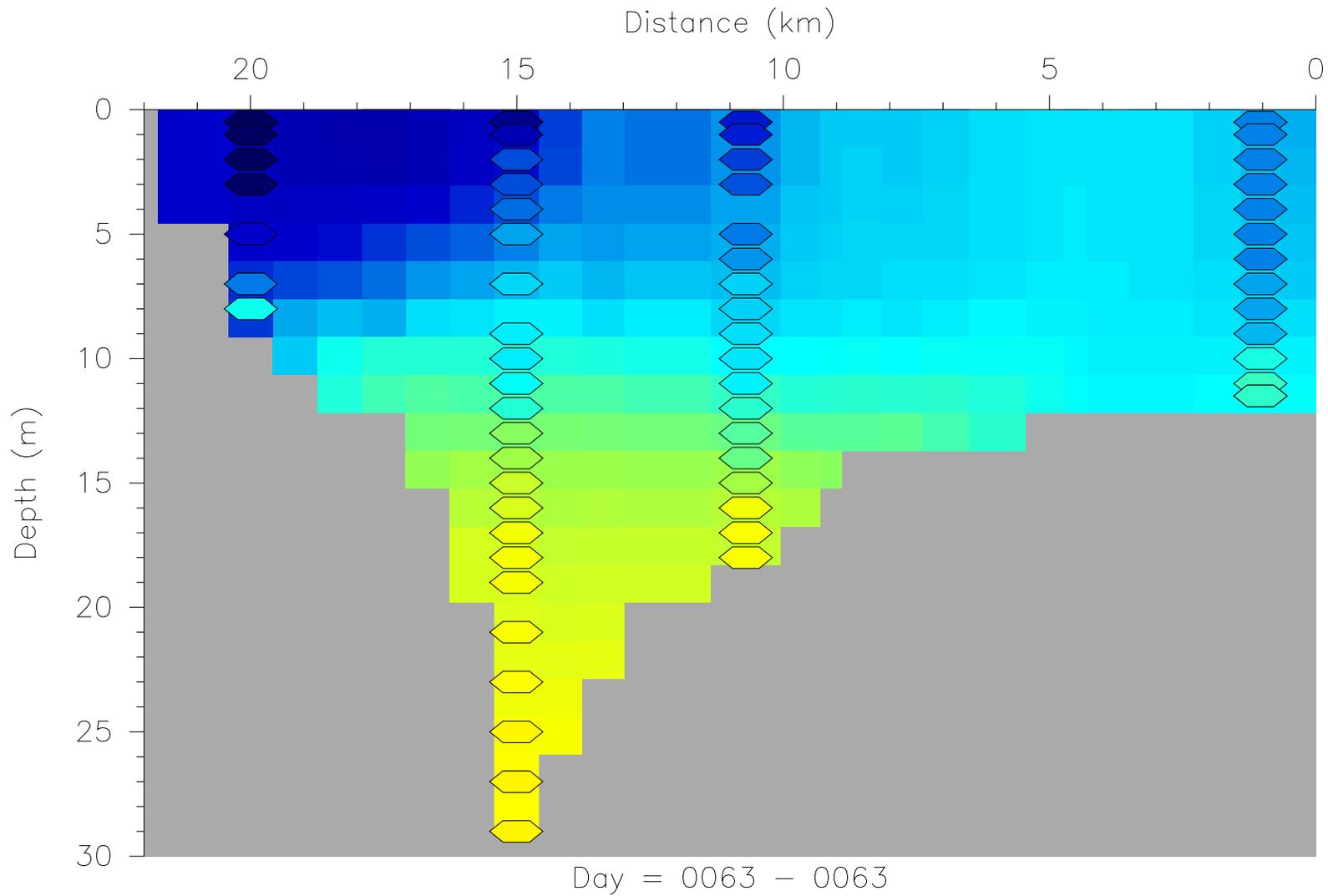
ET4.2



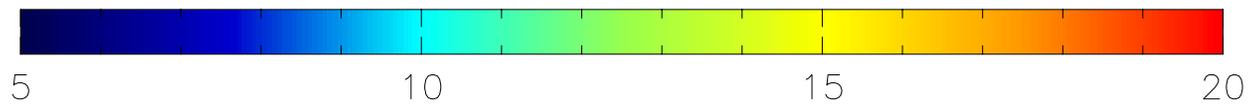
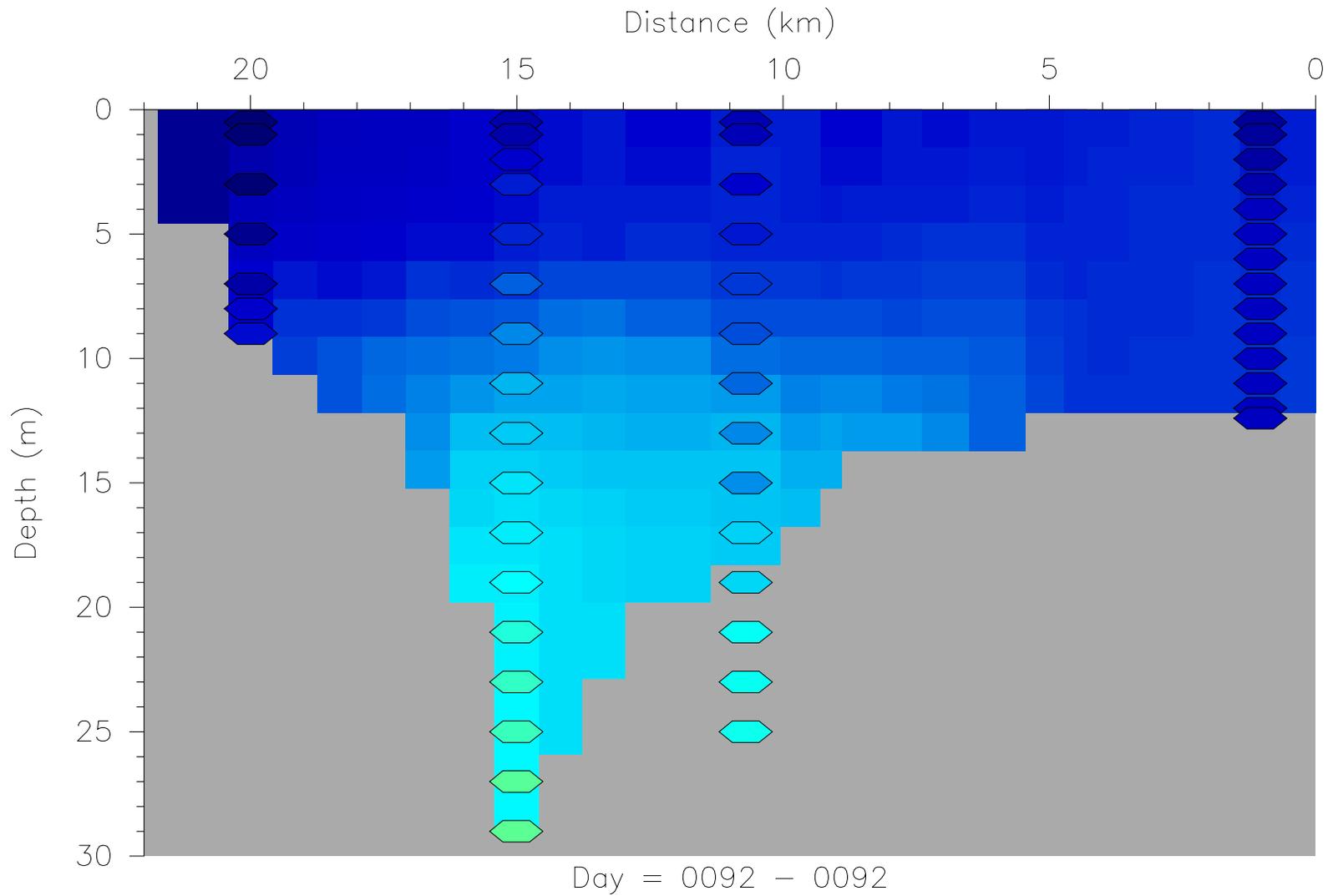
ET4.2

Appendix 4-C

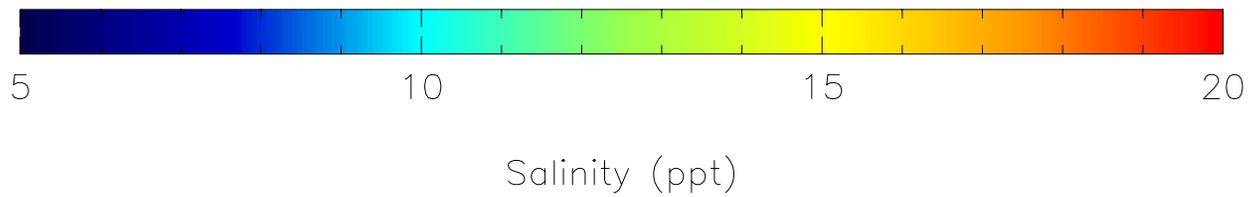
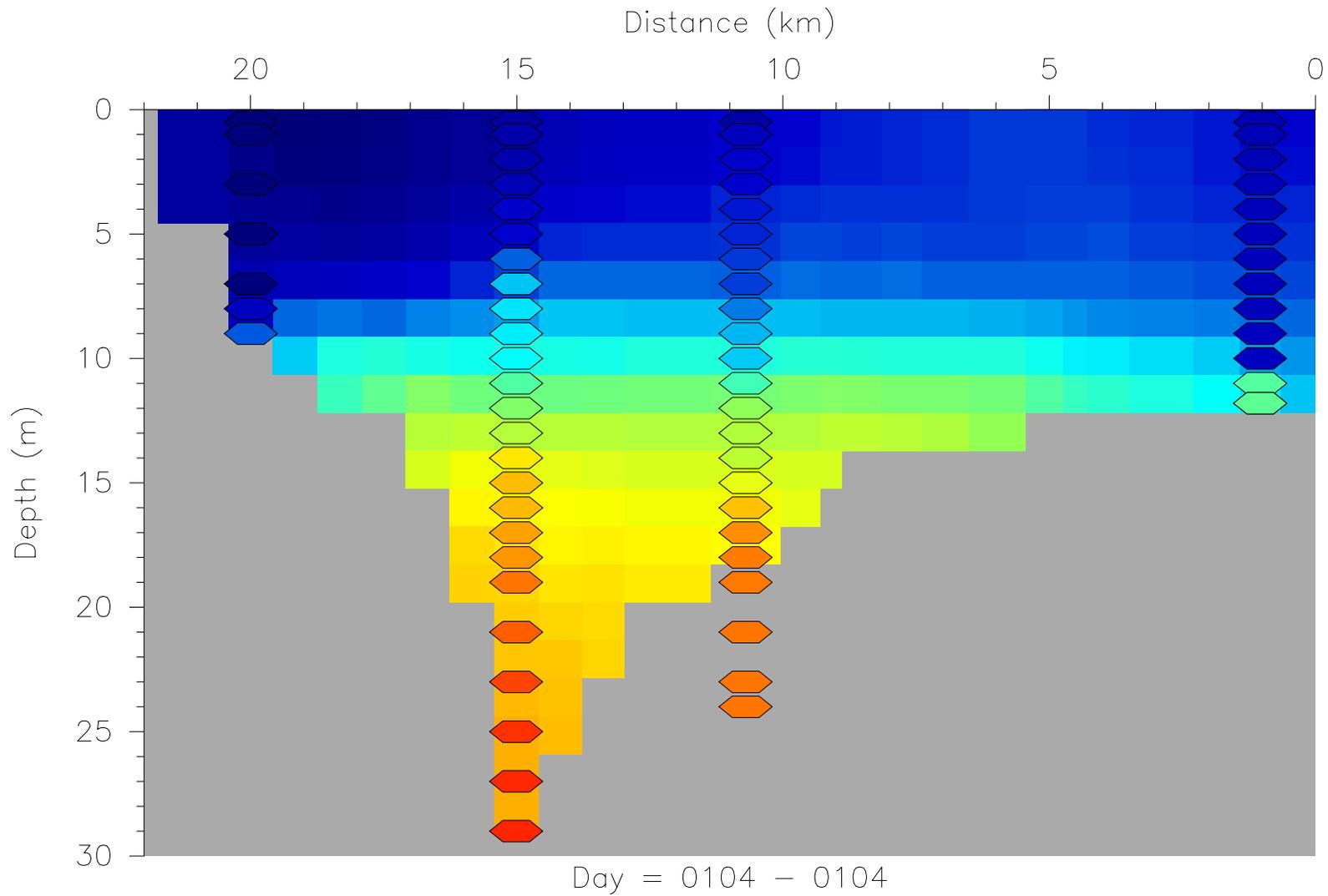
Time variation of salinity exchange between the main Bay and the Eastern Bay. Along the transect from west to east, the stations are CB4.1W, CB4.1C, CB4.1E, and EE1.1. The color in circles represent observation whereas the background color represent model simulation.

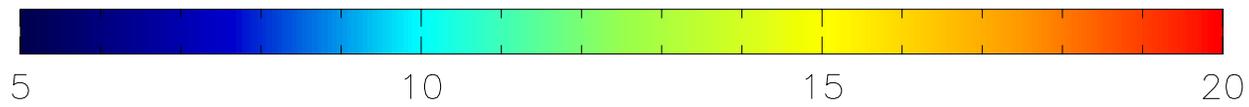
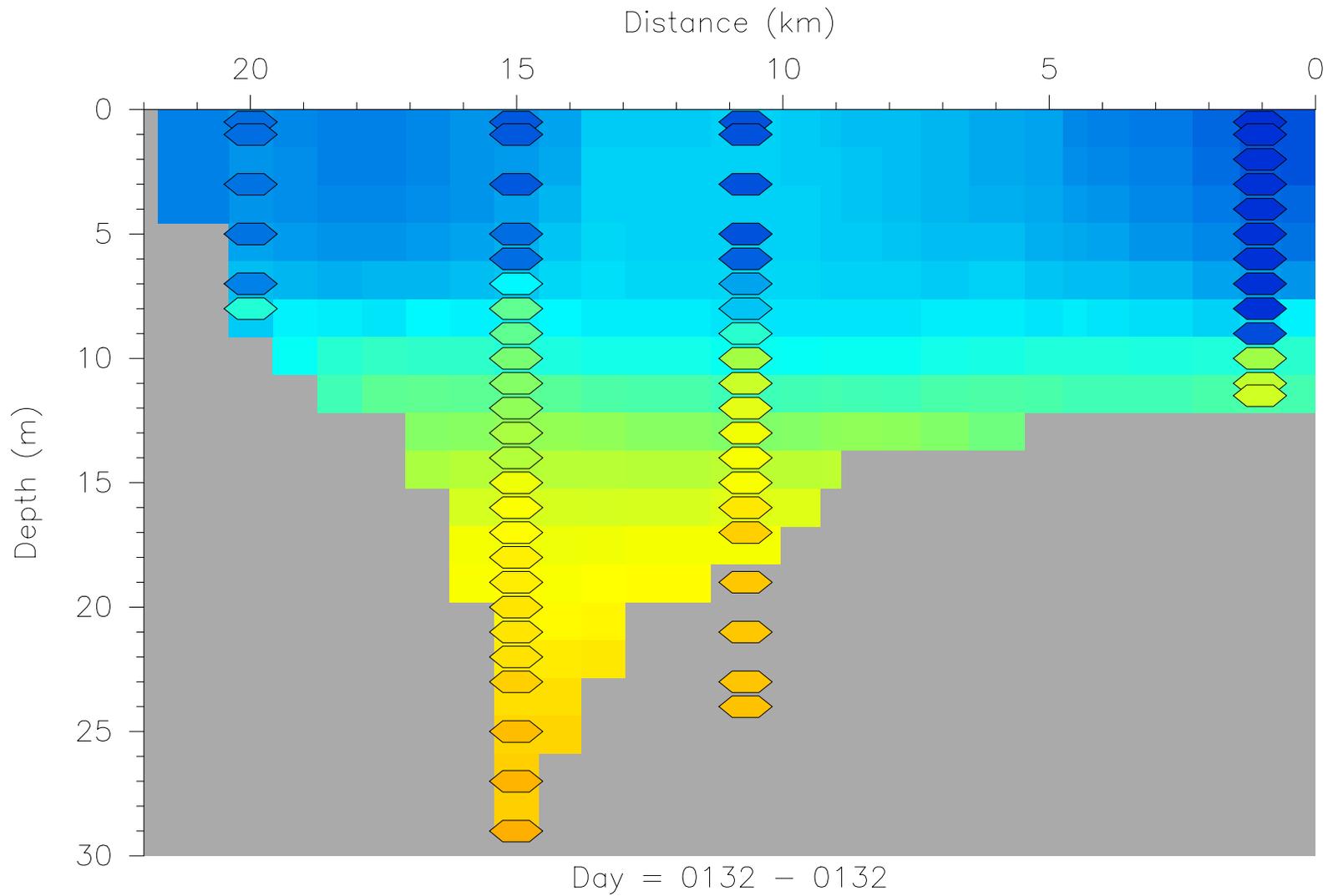


Salinity (ppt)

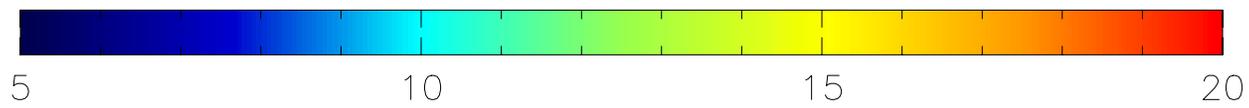
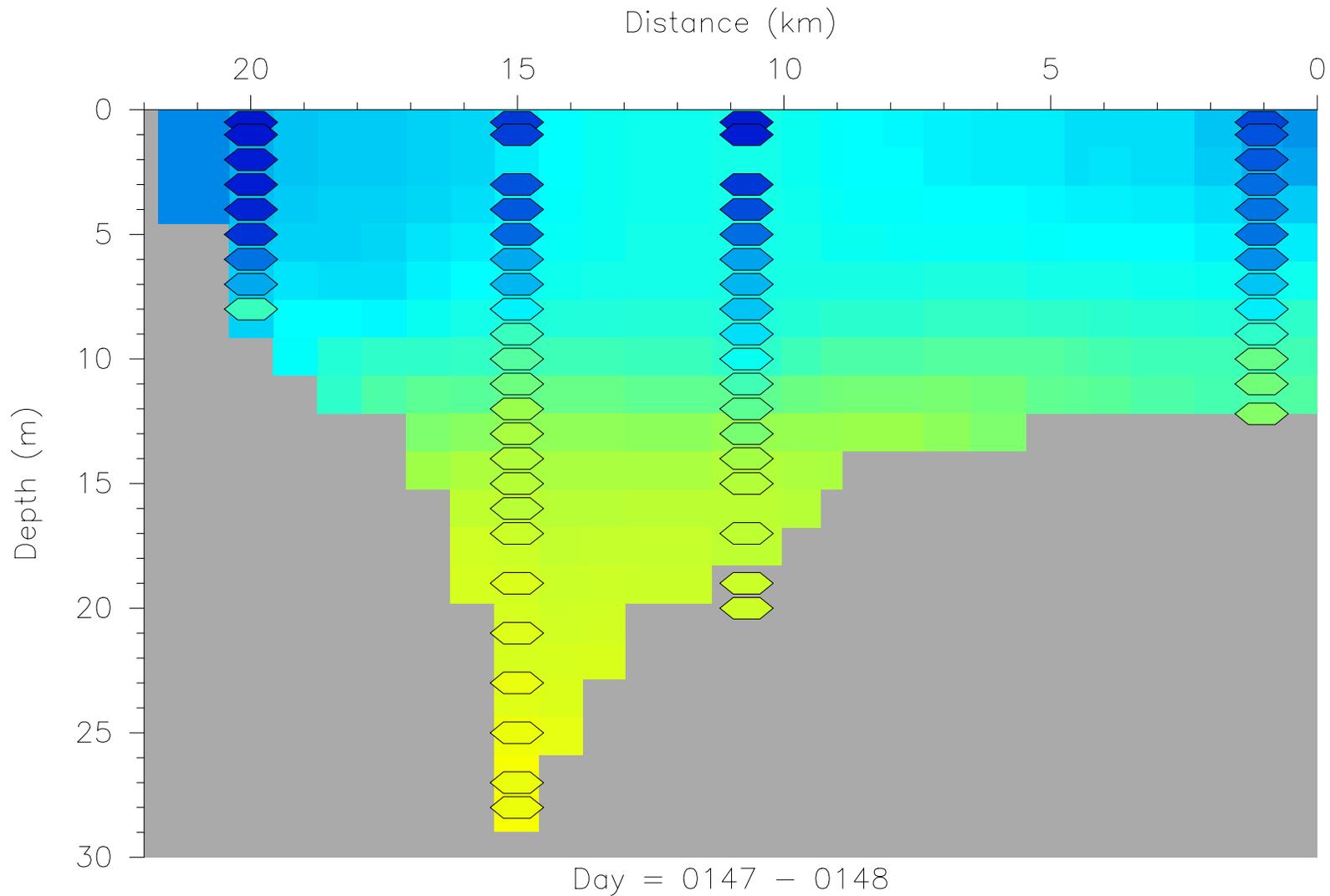


Salinity (ppt)

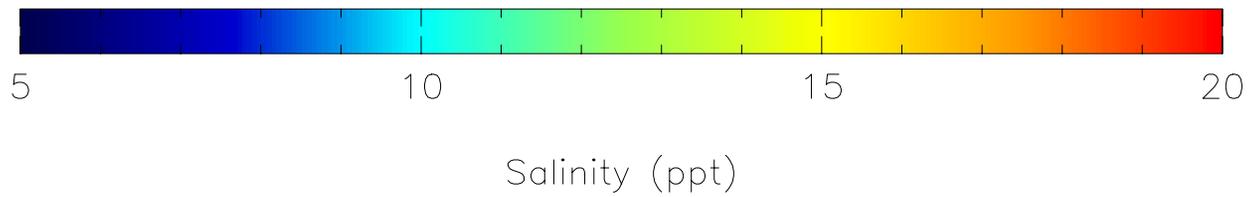
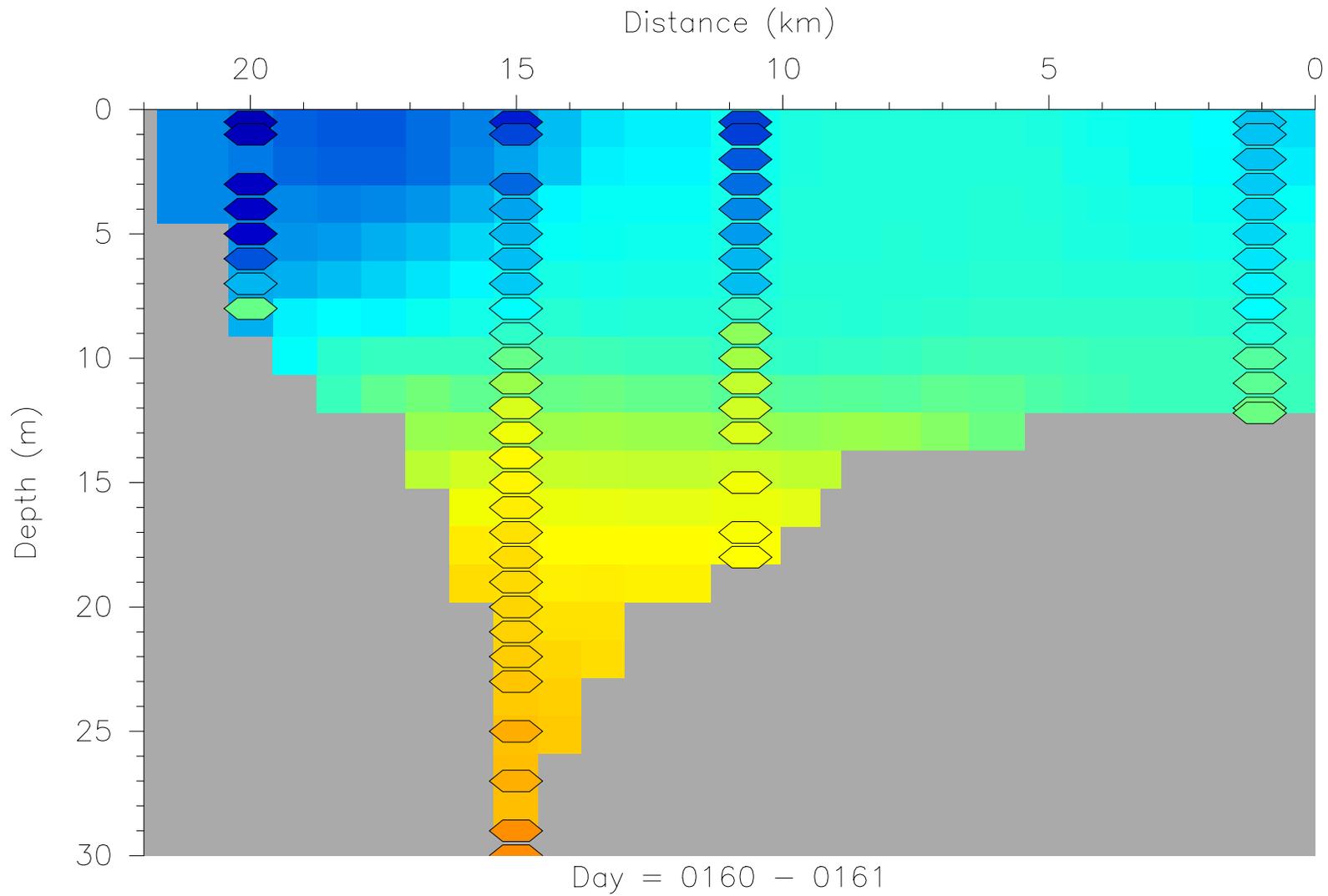


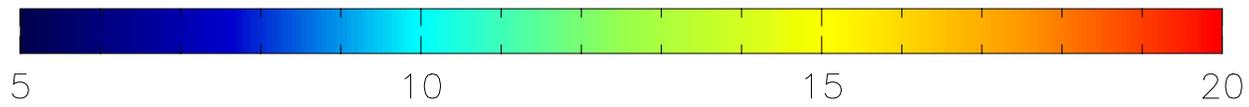
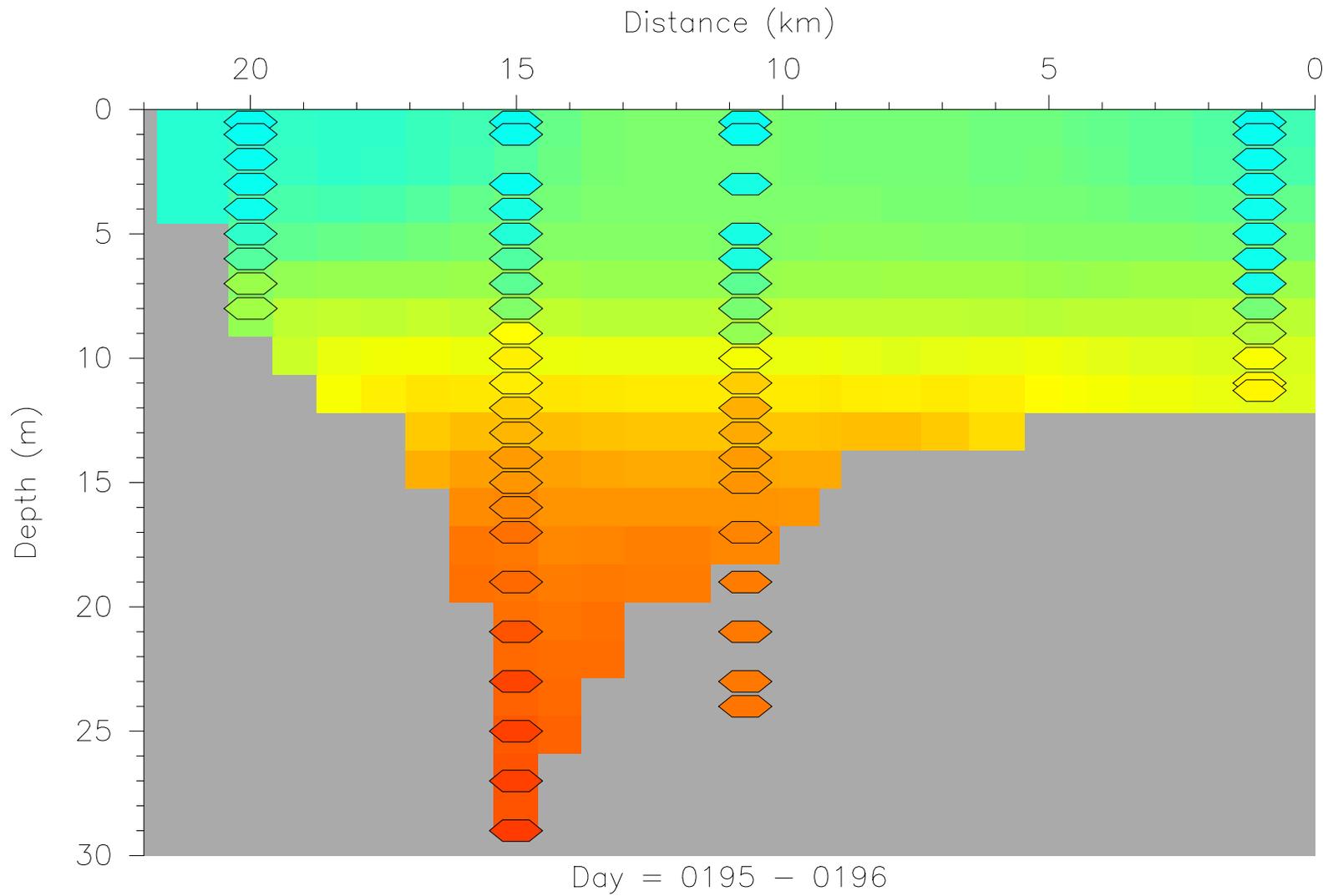


Salinity (ppt)

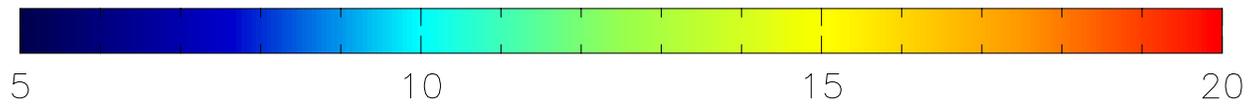
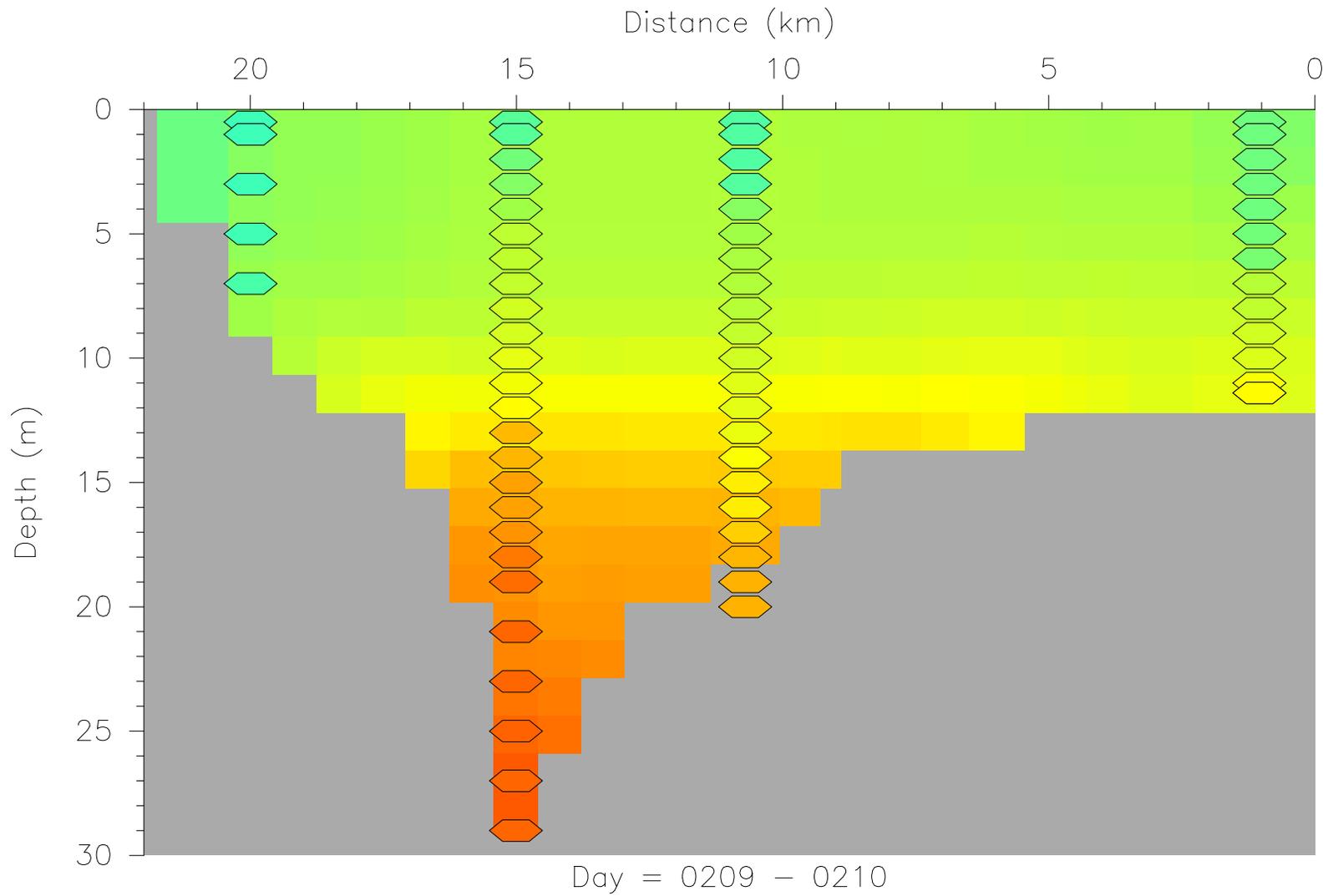


Salinity (ppt)

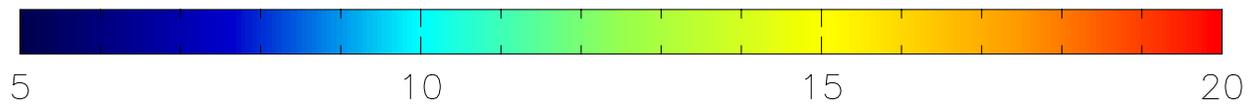
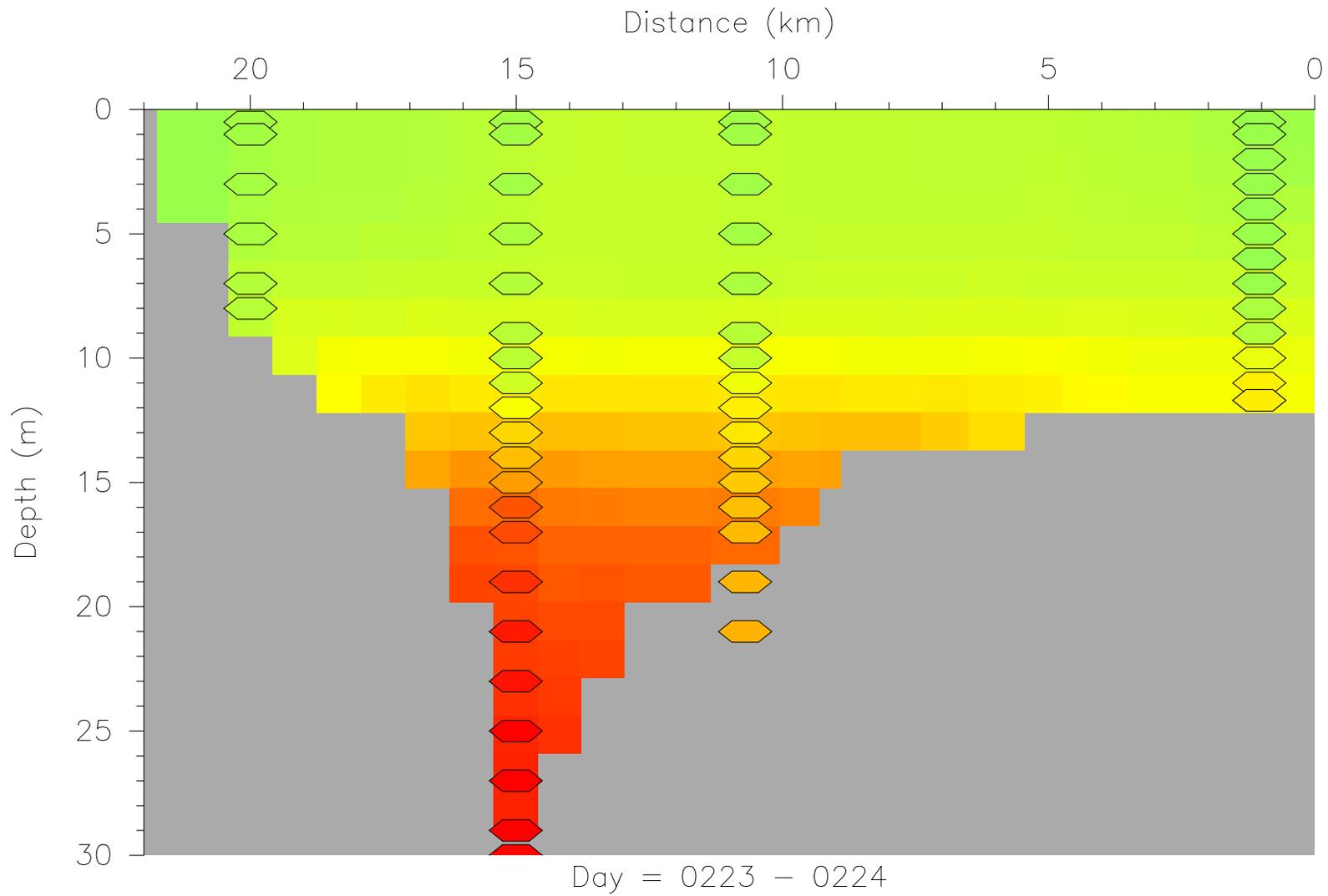




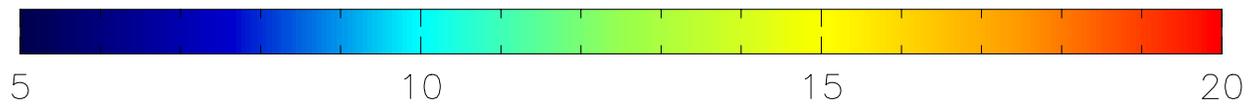
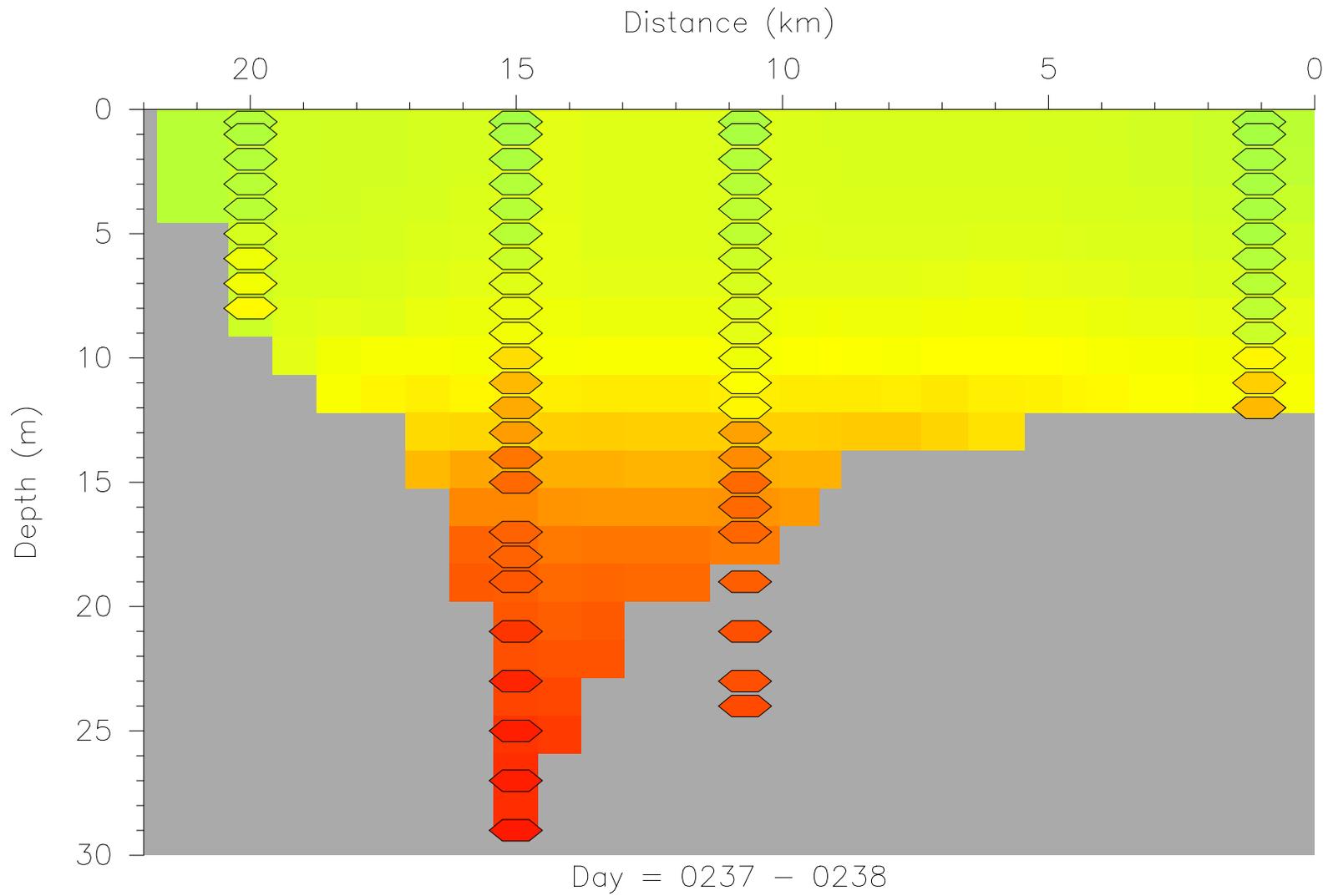
Salinity (ppt)



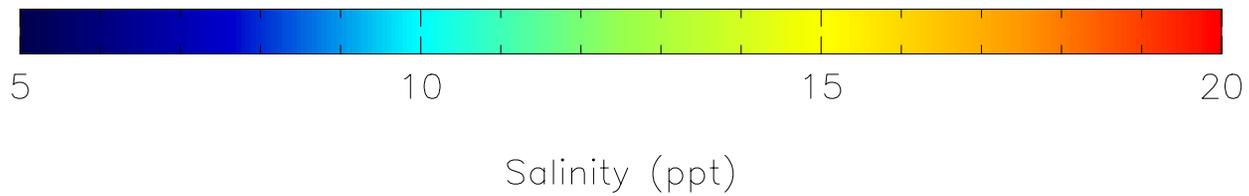
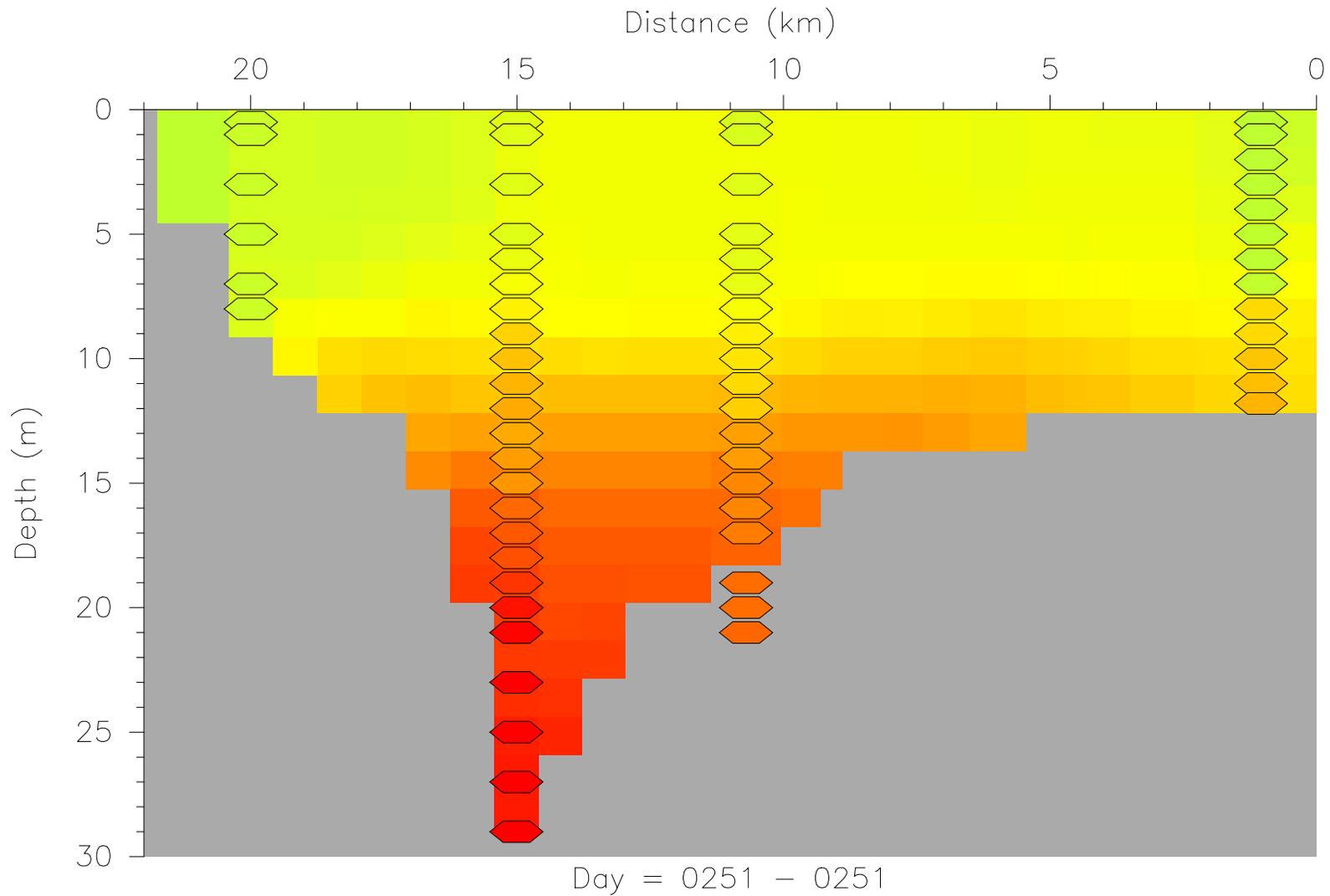
Salinity (ppt)

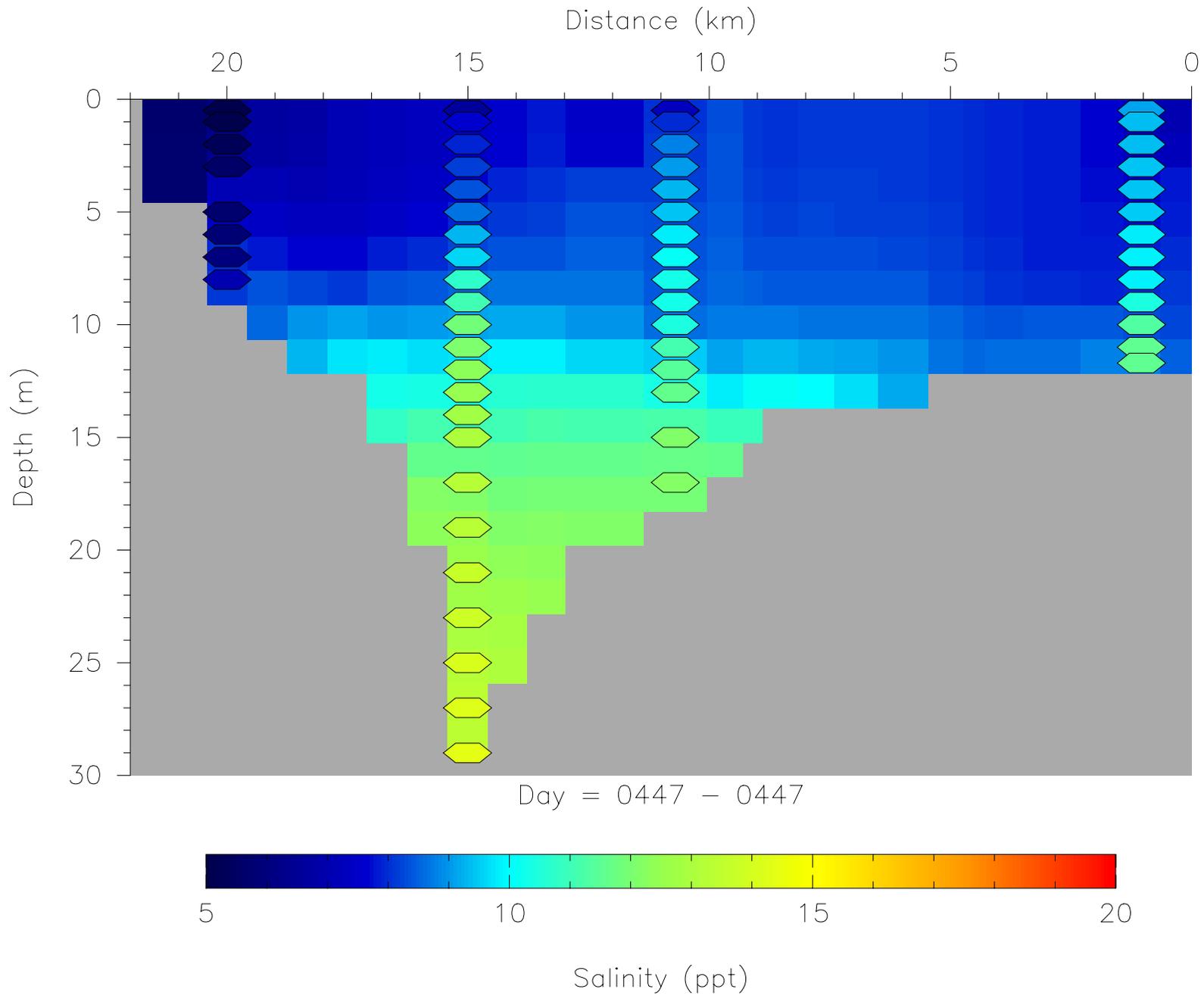


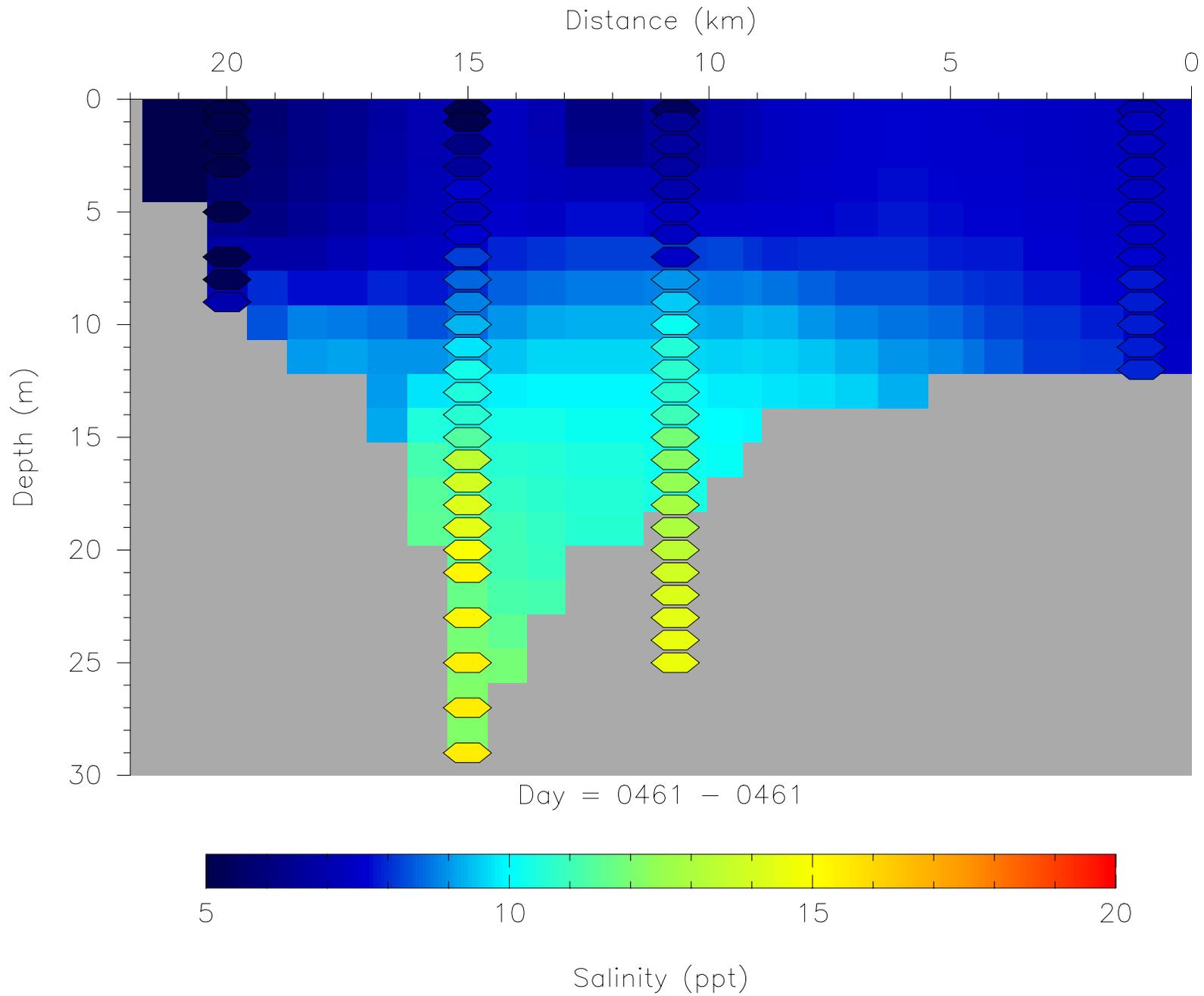
Salinity (ppt)

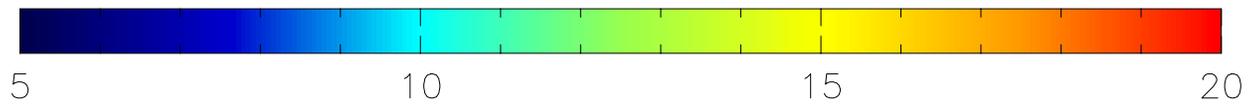
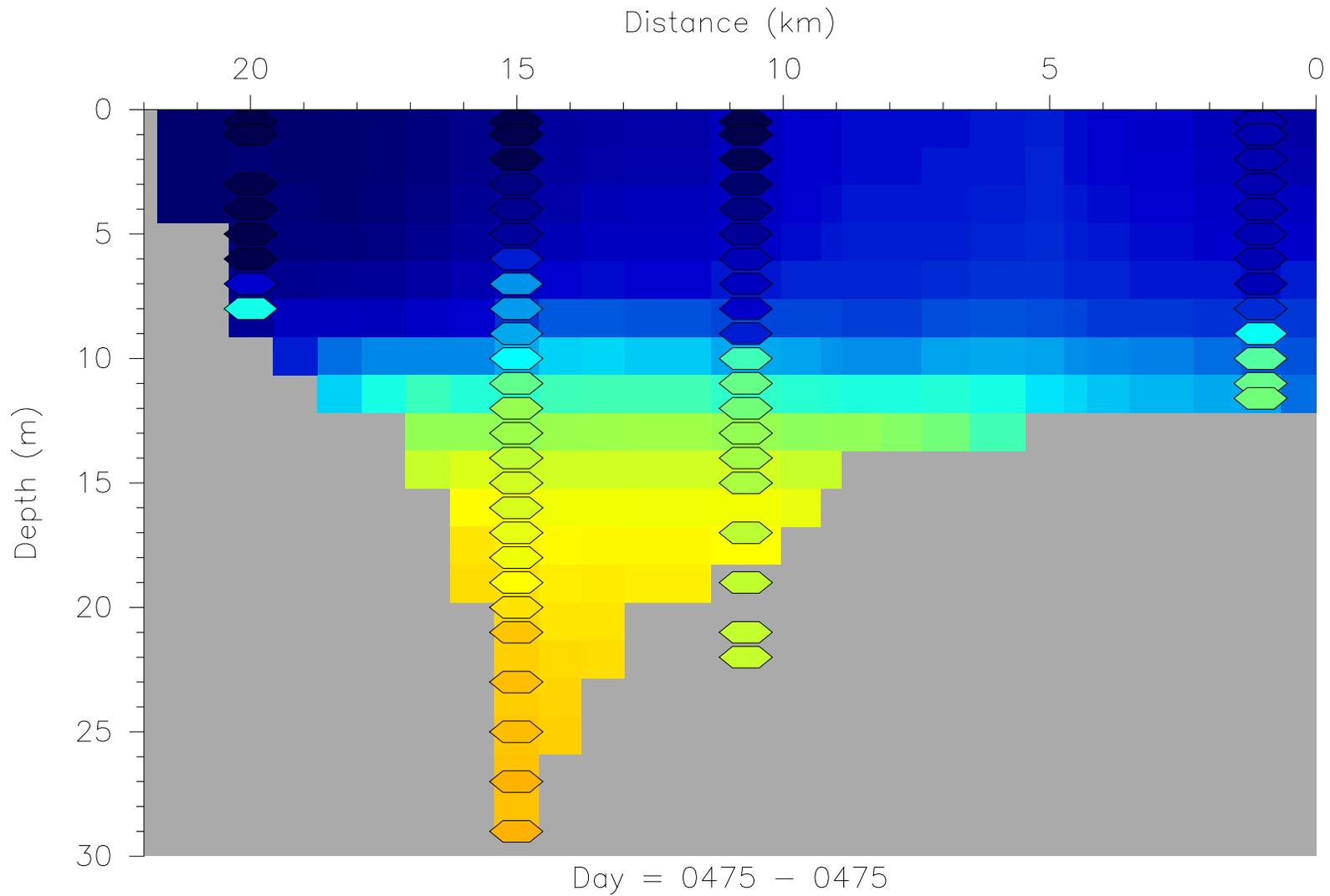


Salinity (ppt)

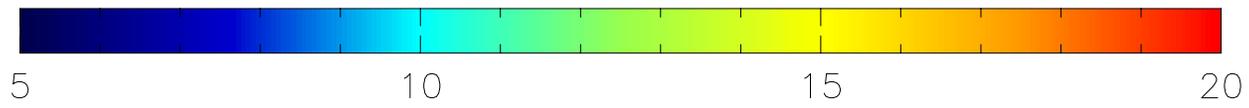
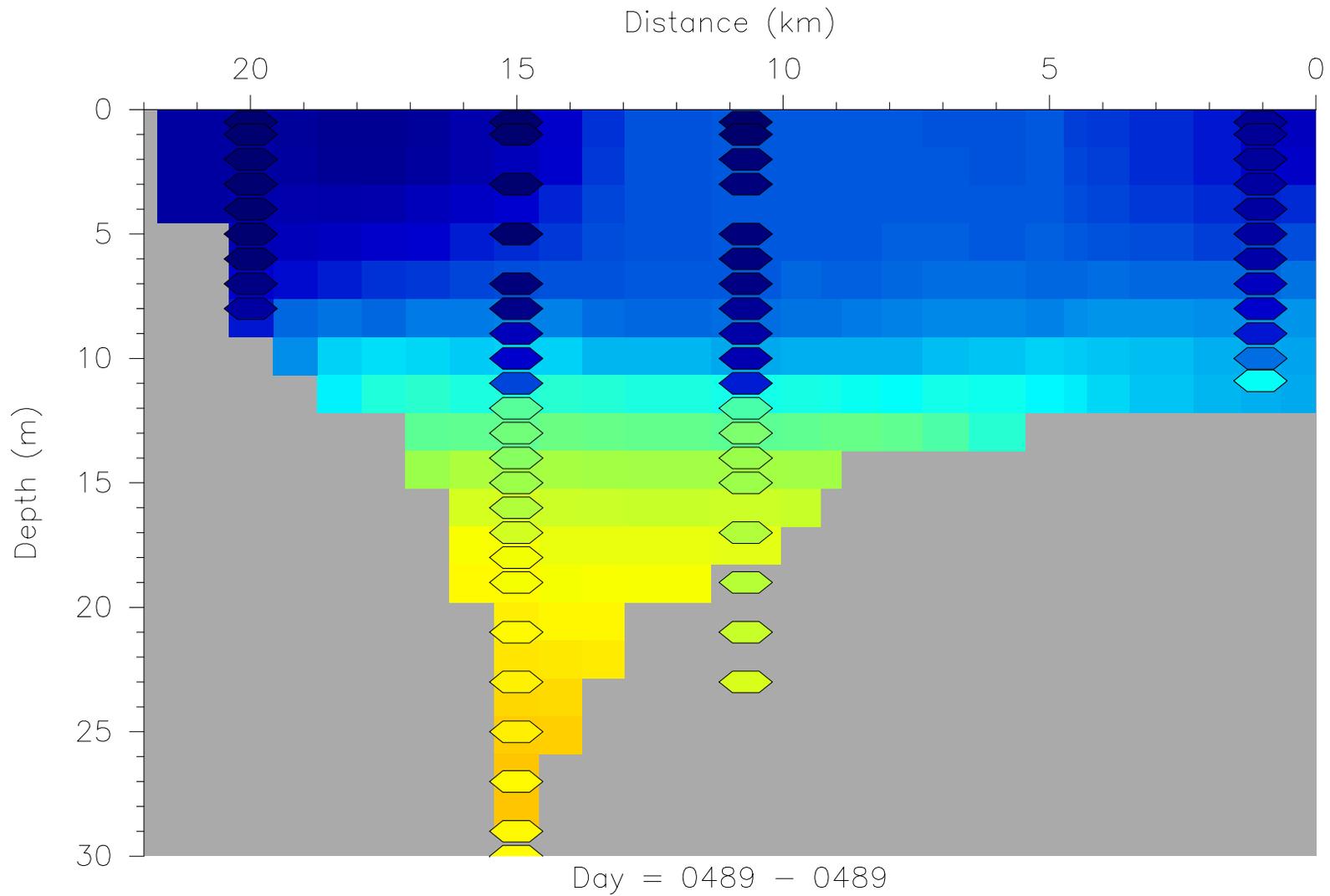




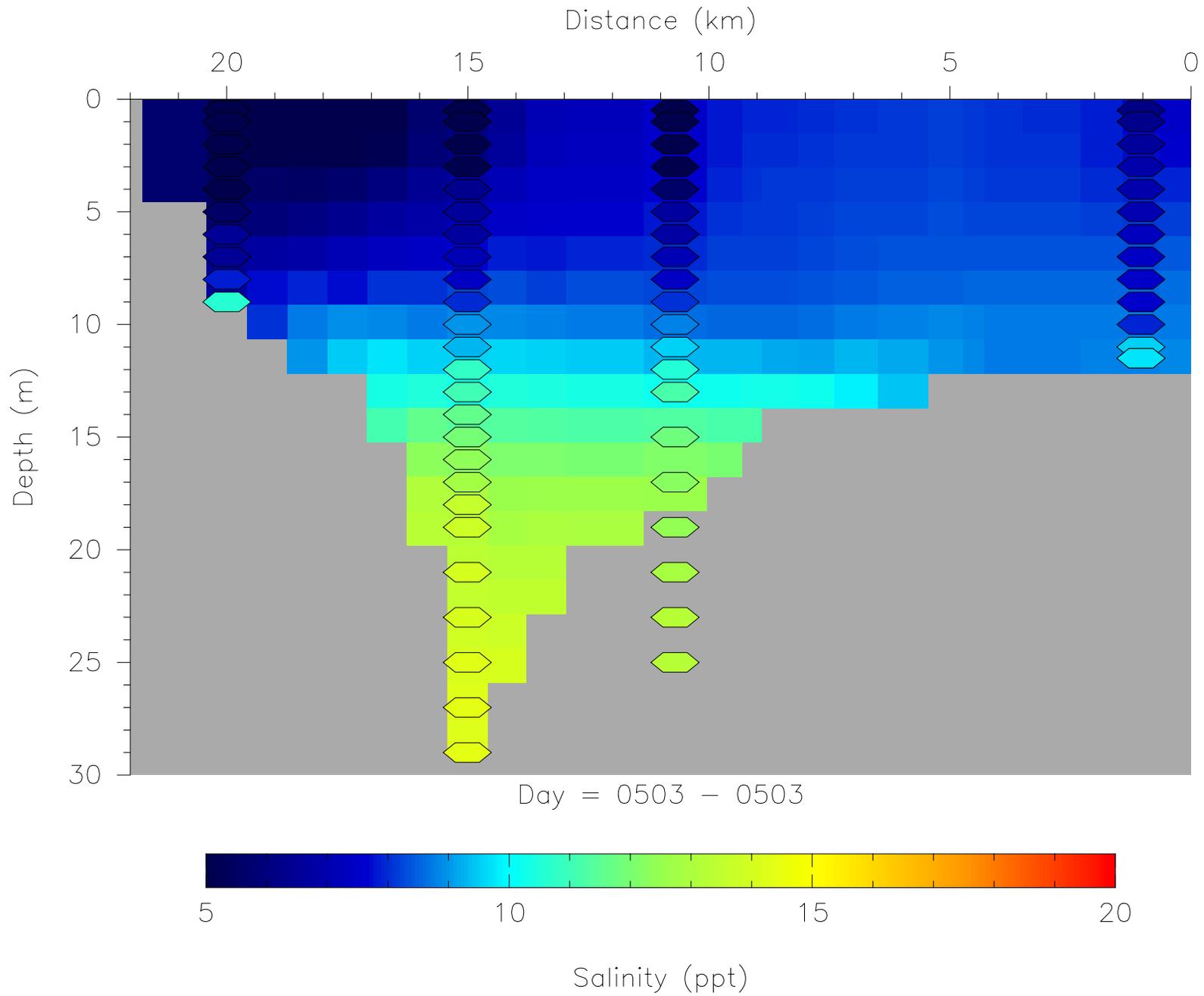


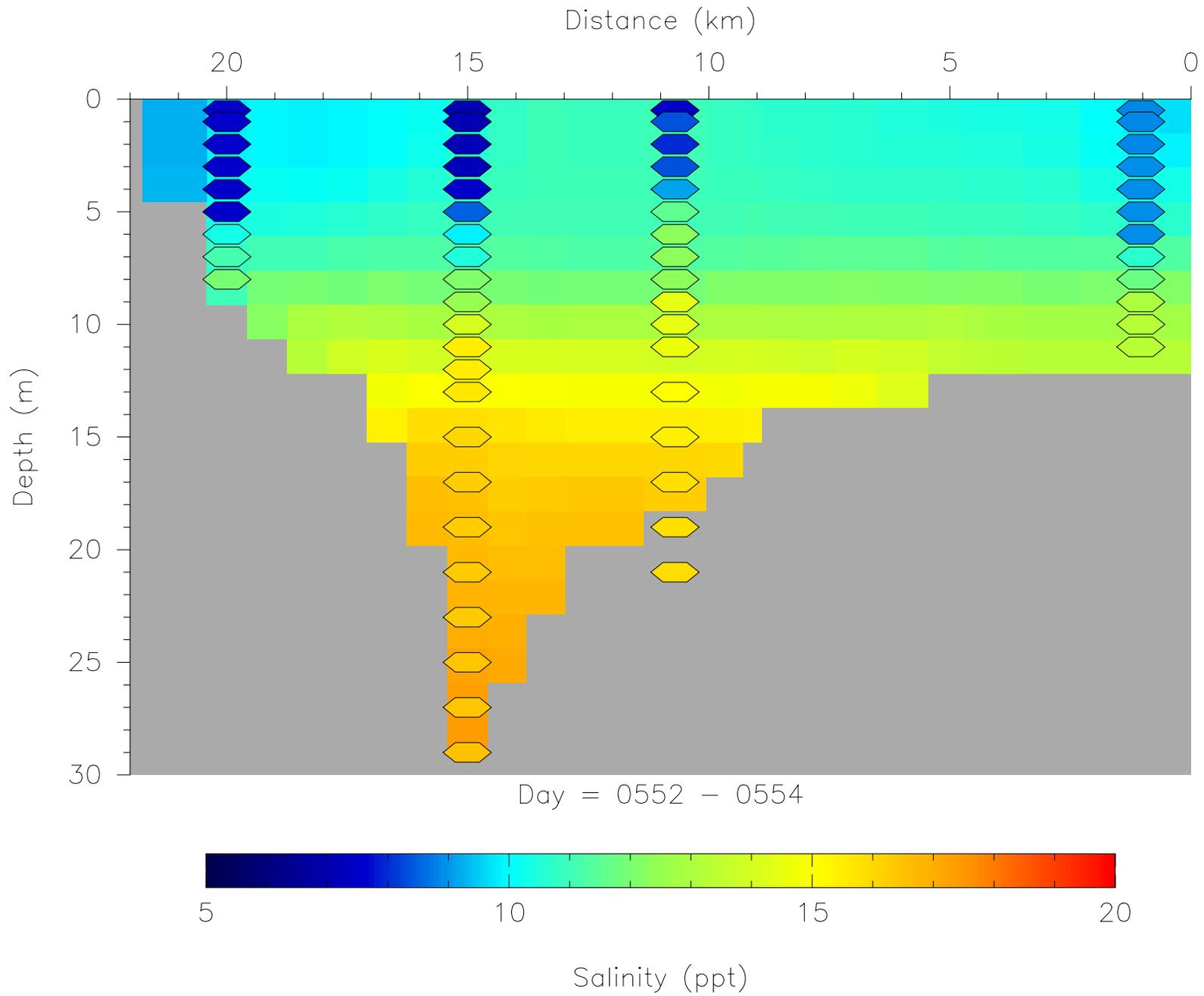


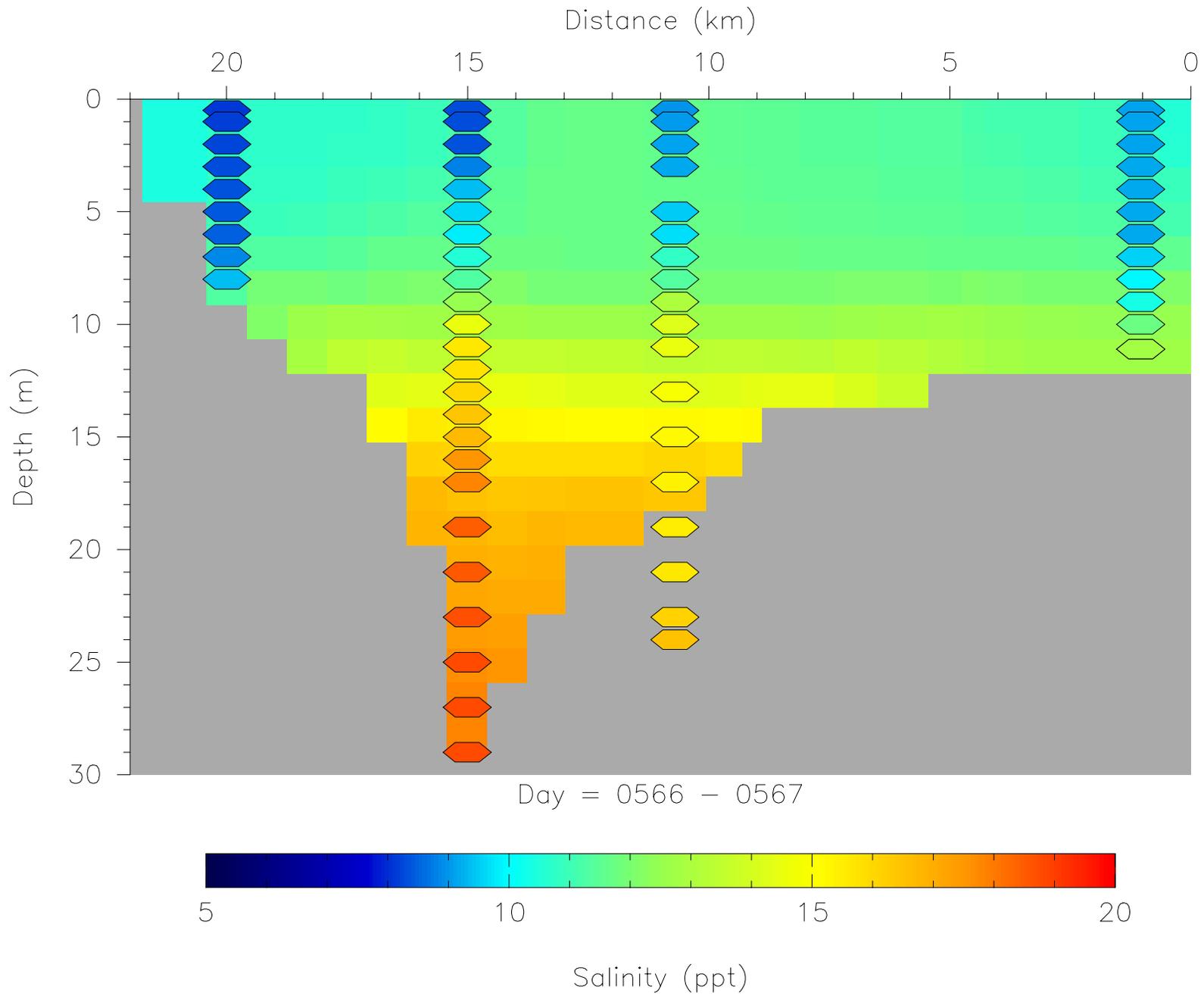
Salinity (ppt)

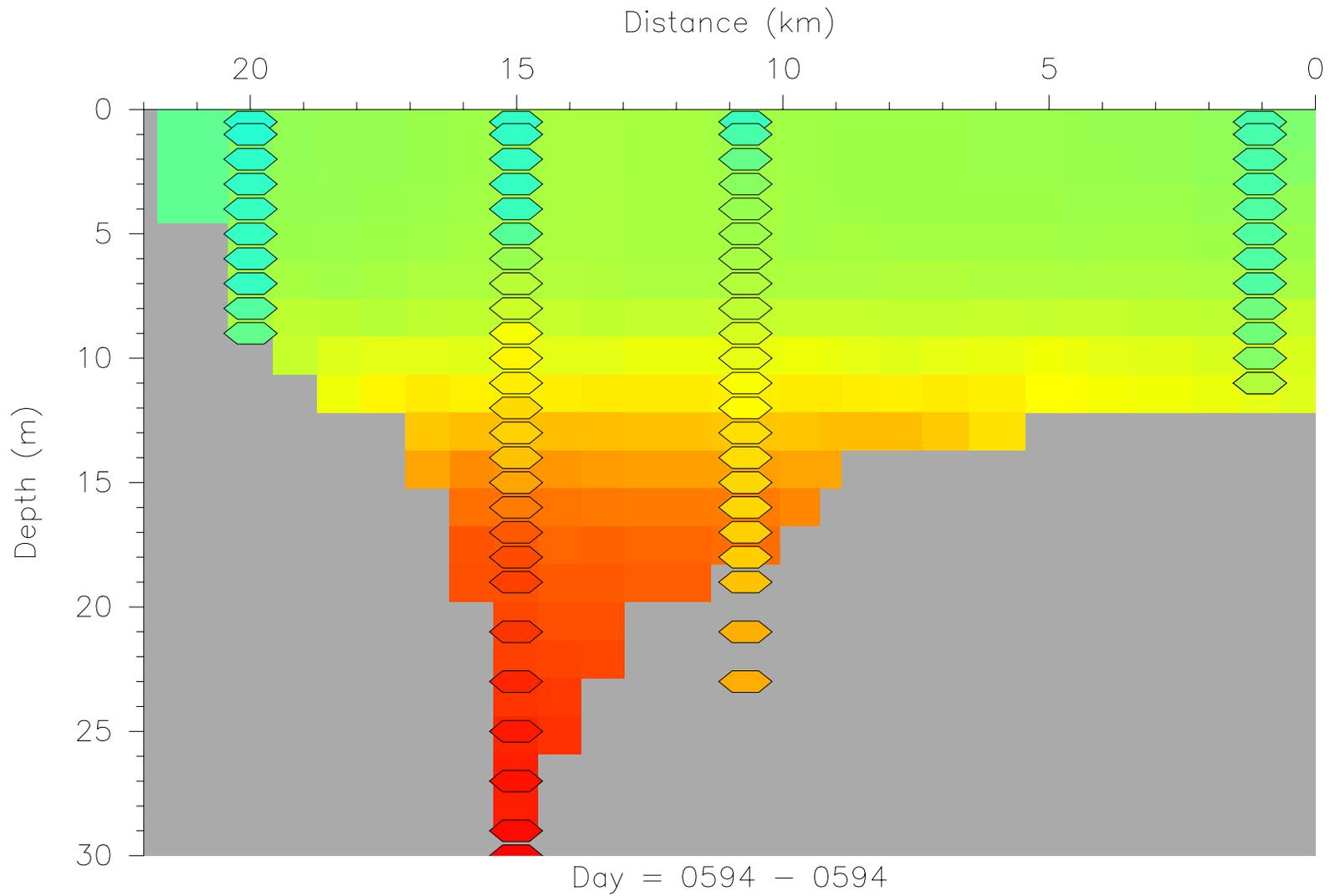


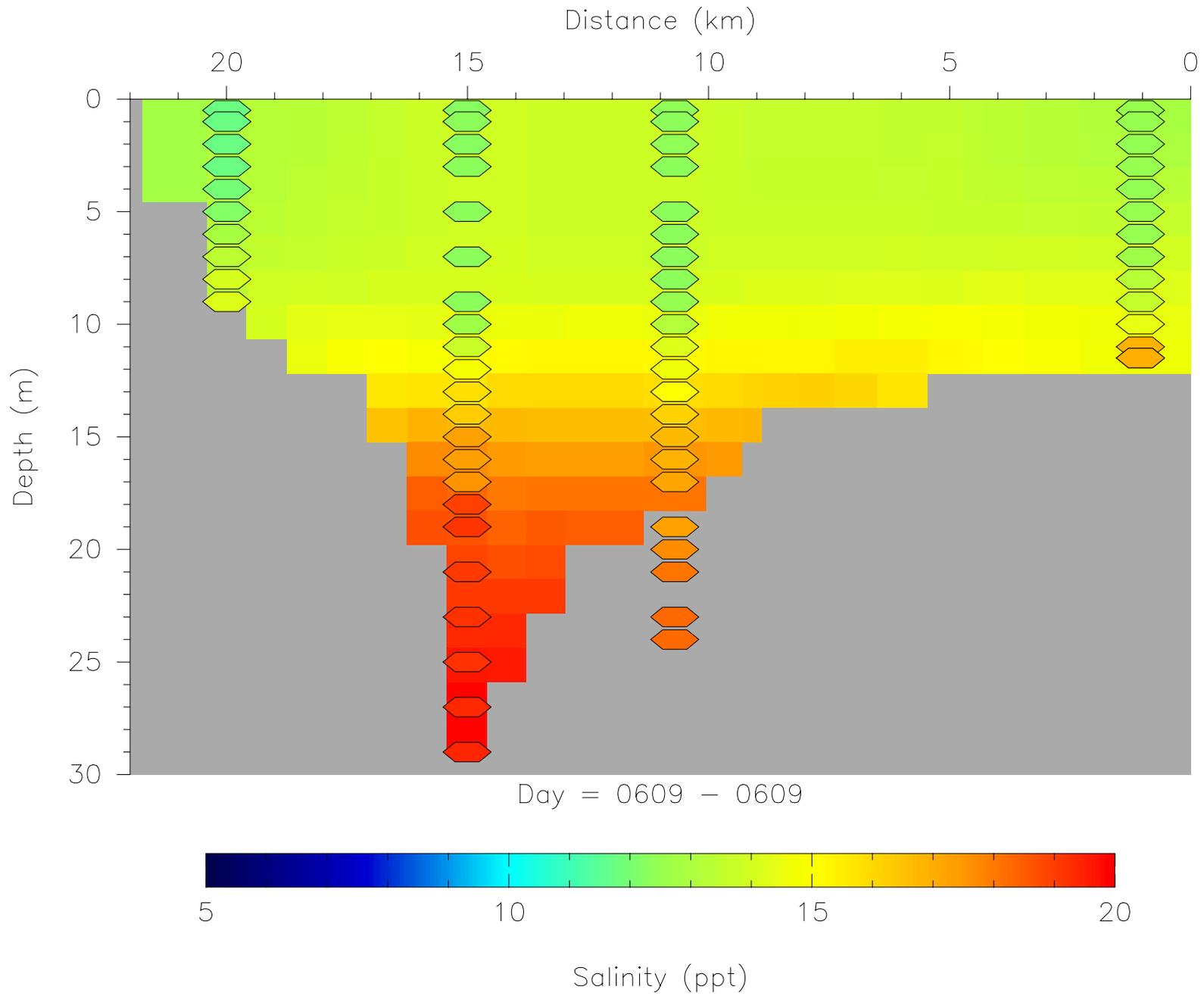
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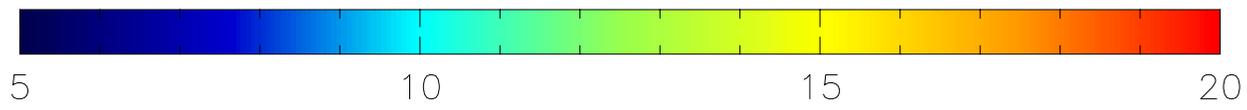
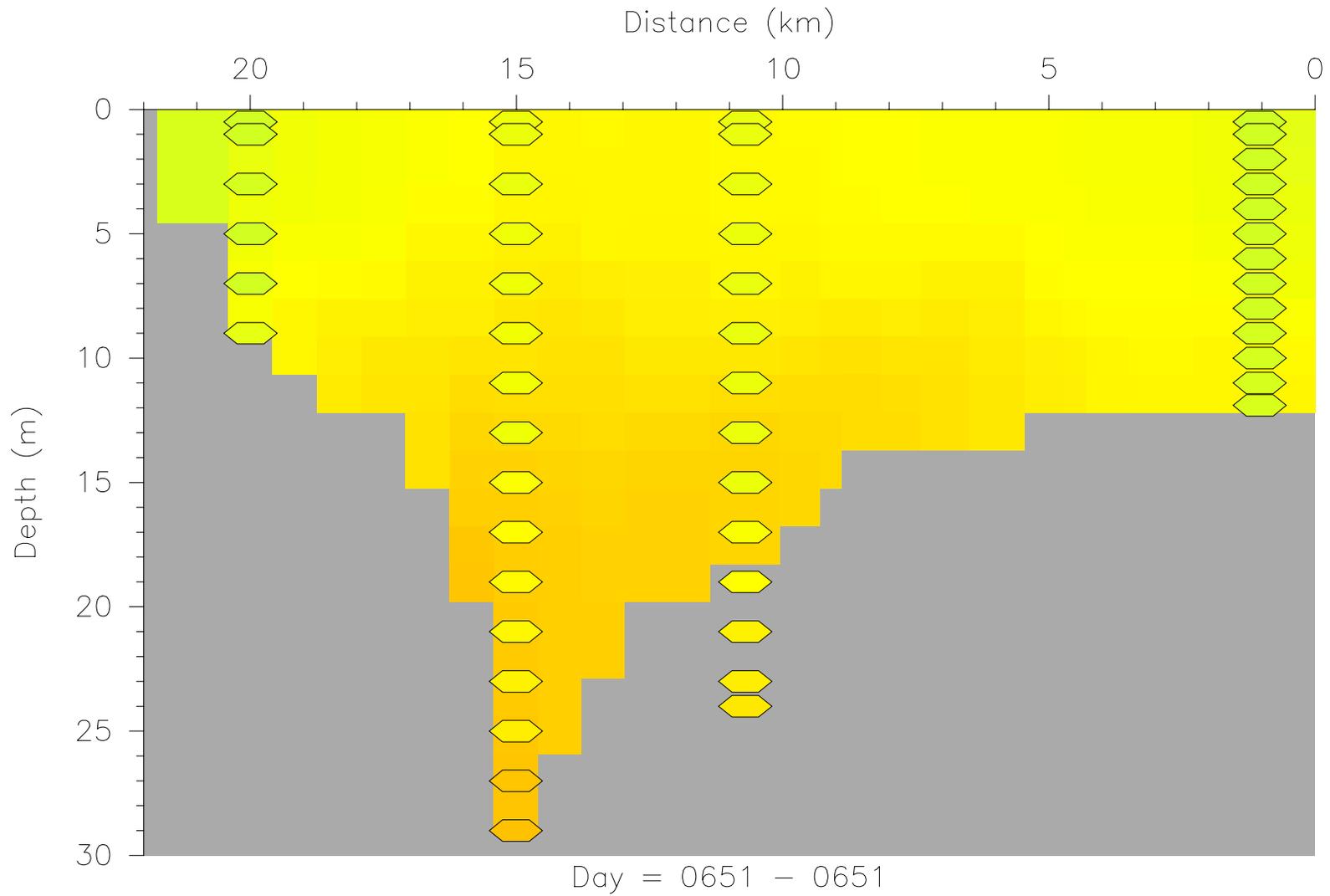




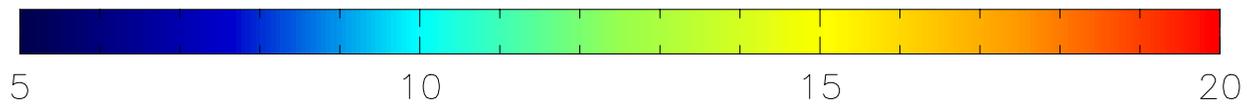
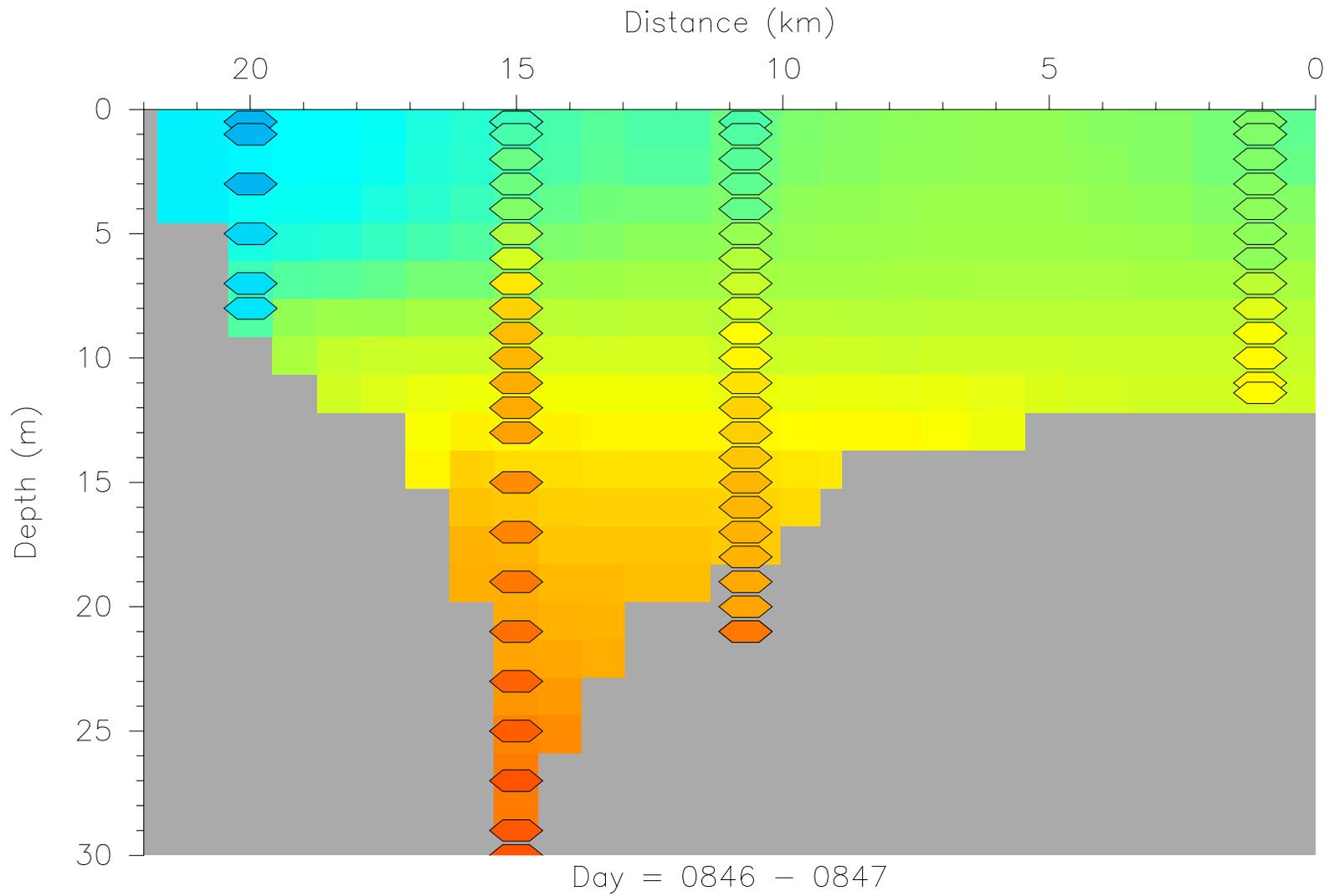




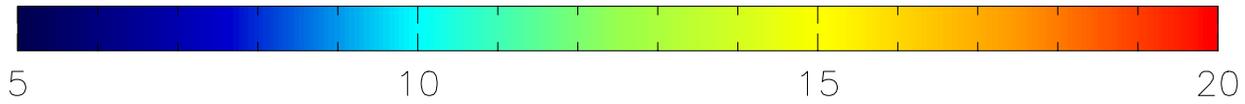
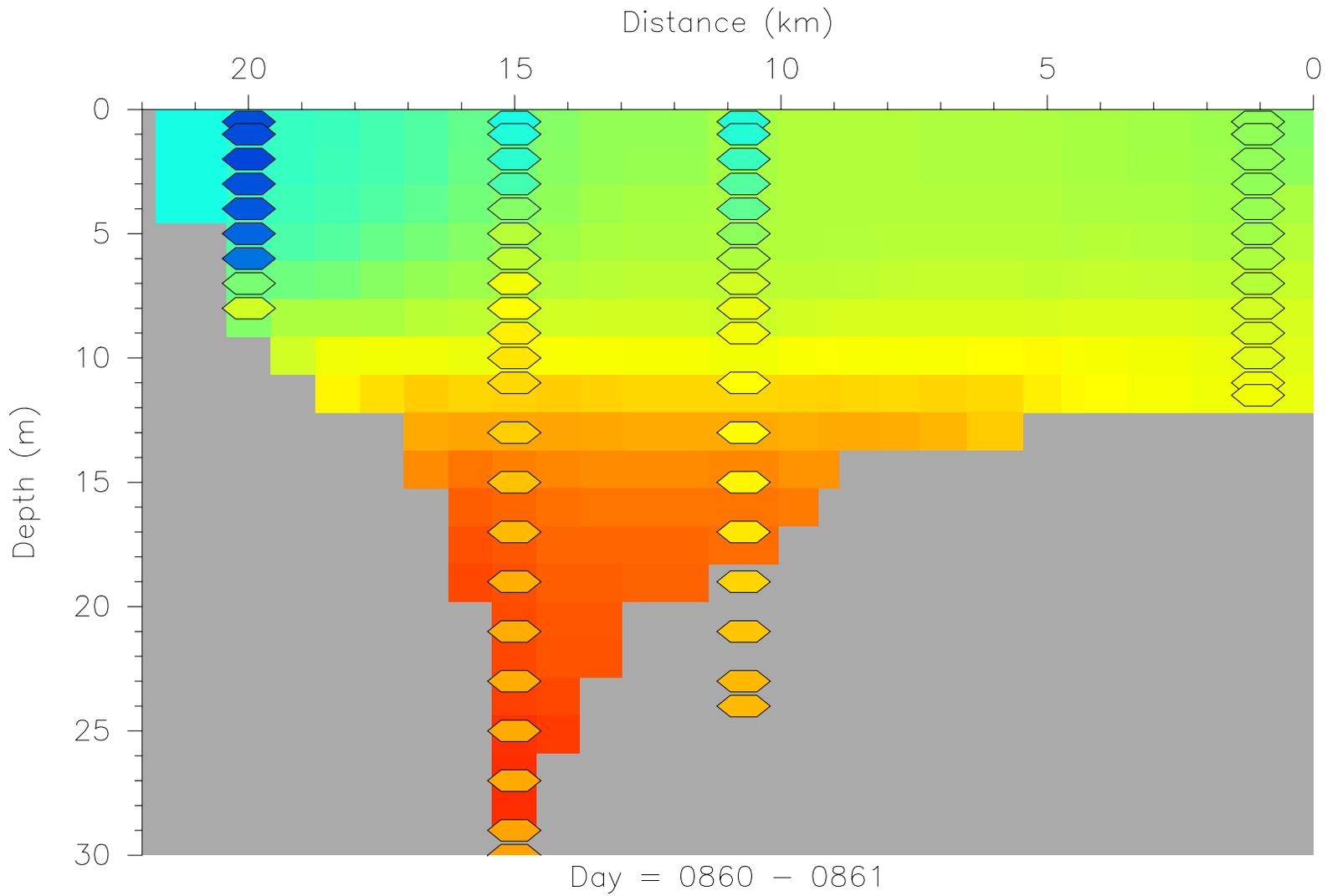




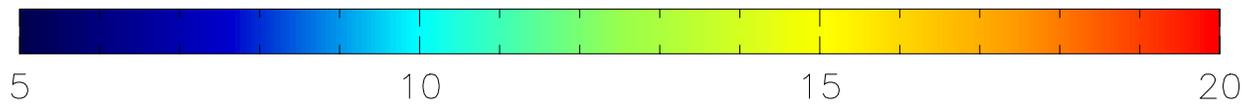
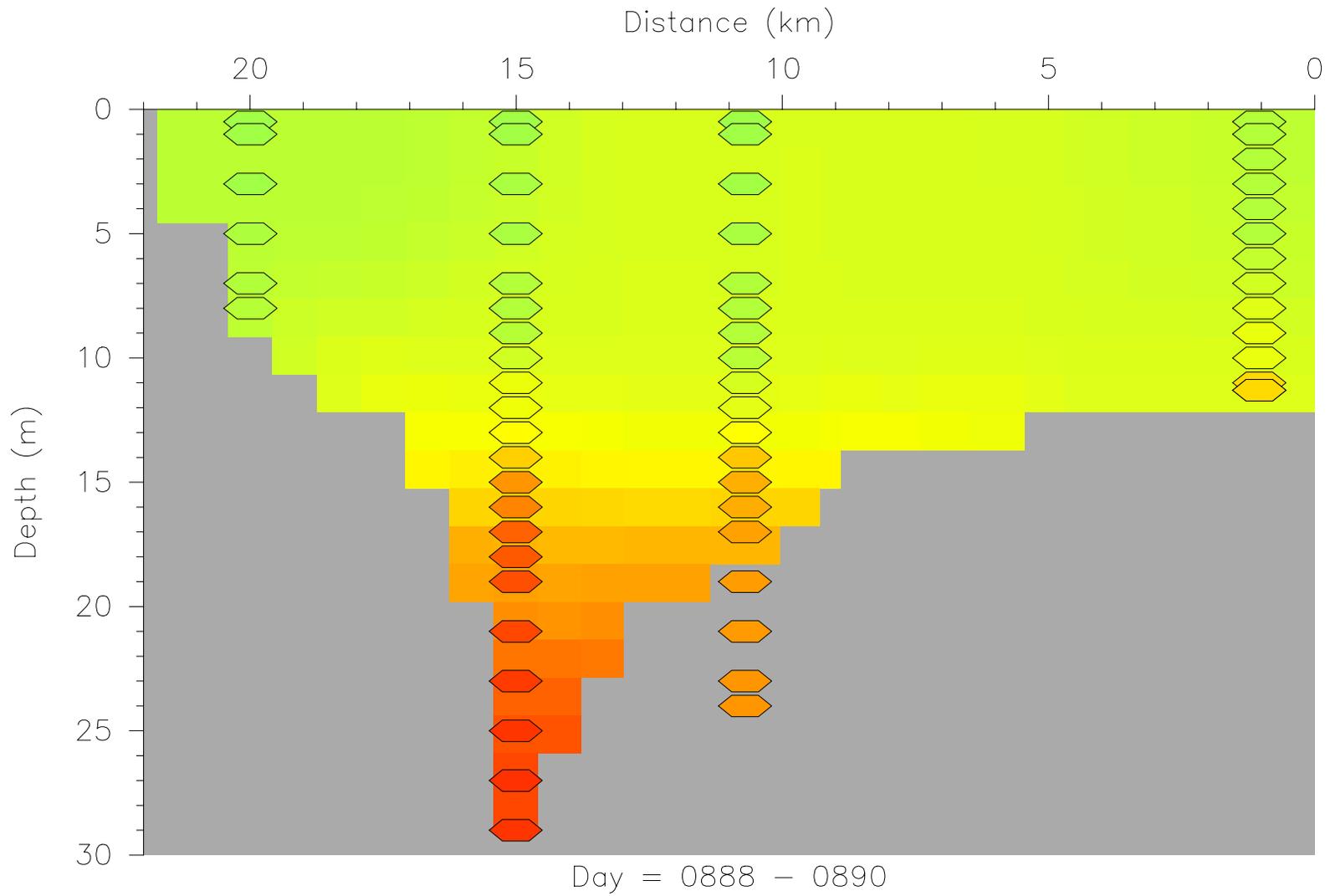
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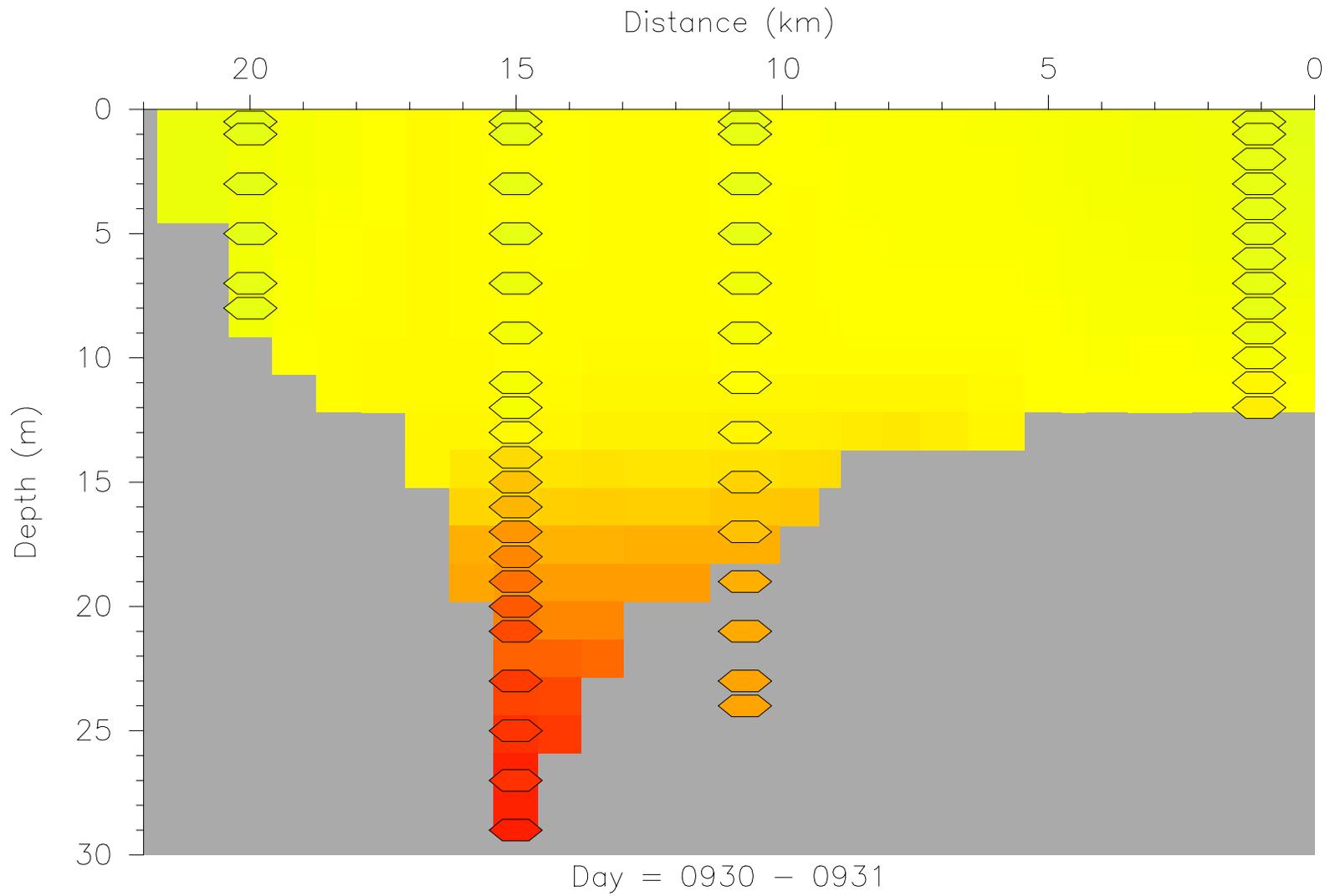
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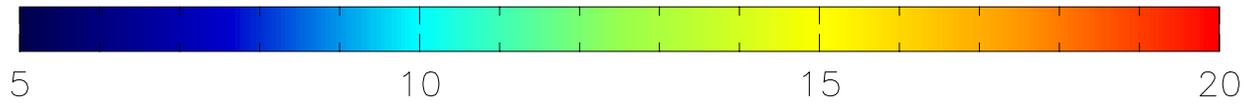
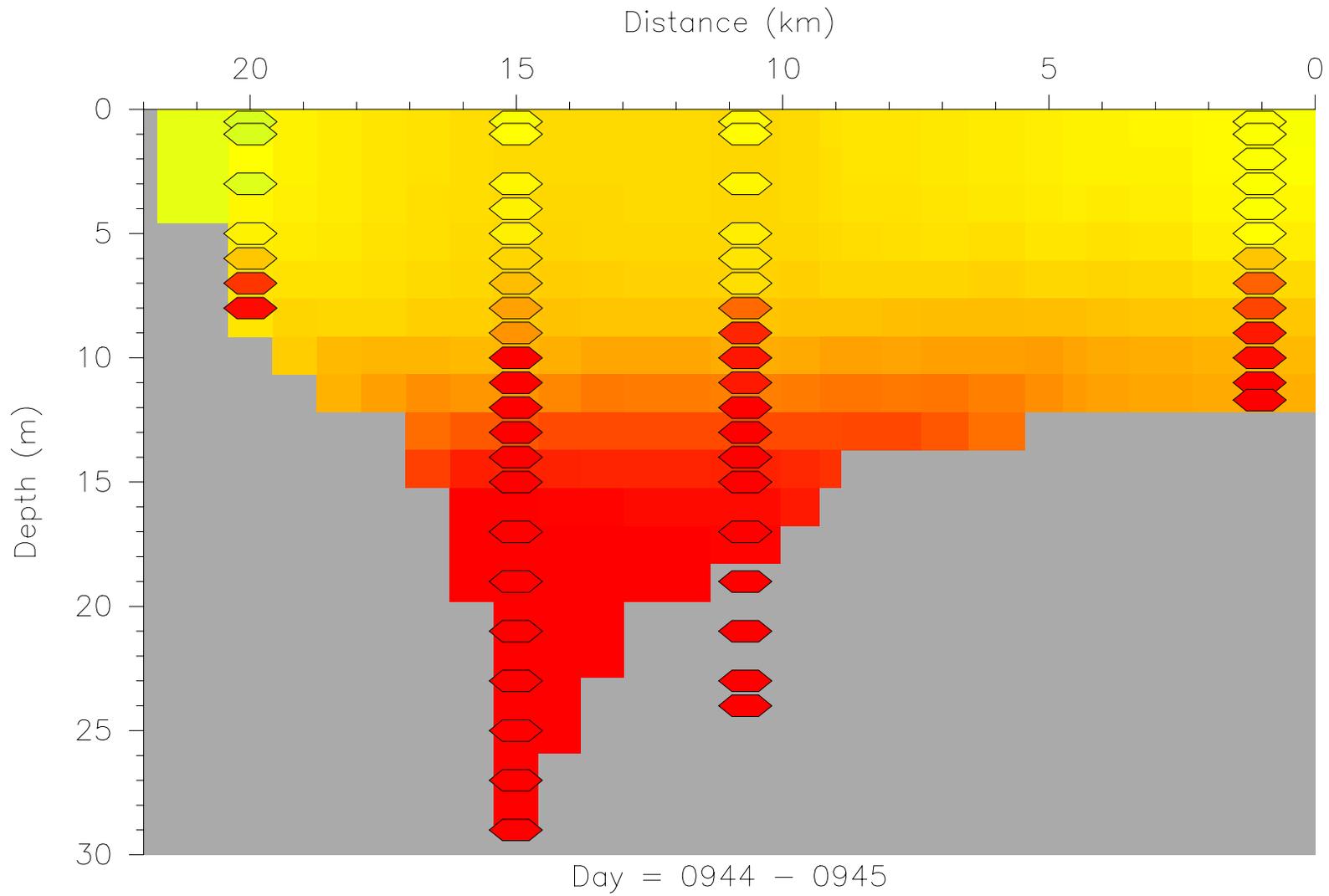
Salinity (ppt)



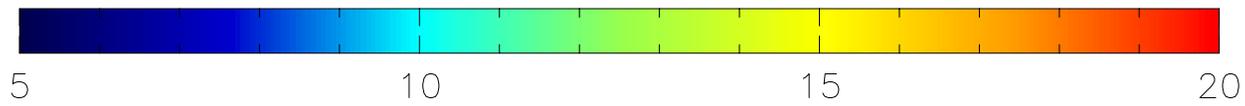
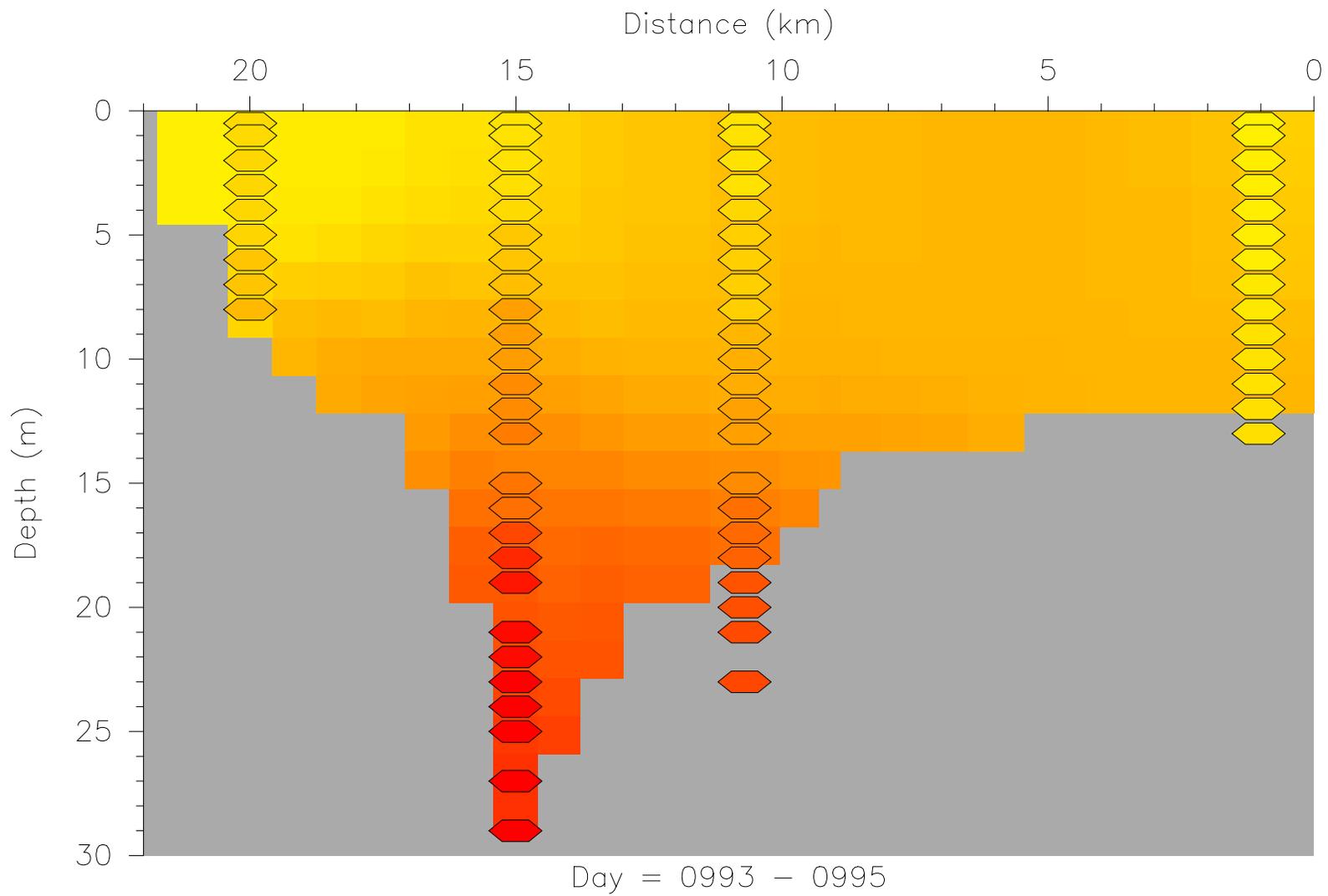
Salinity (ppt)



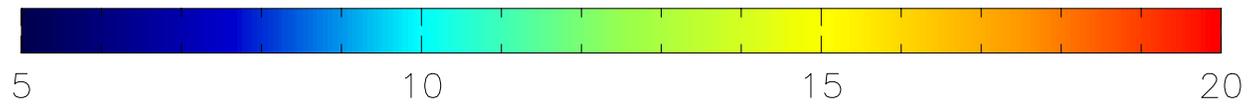
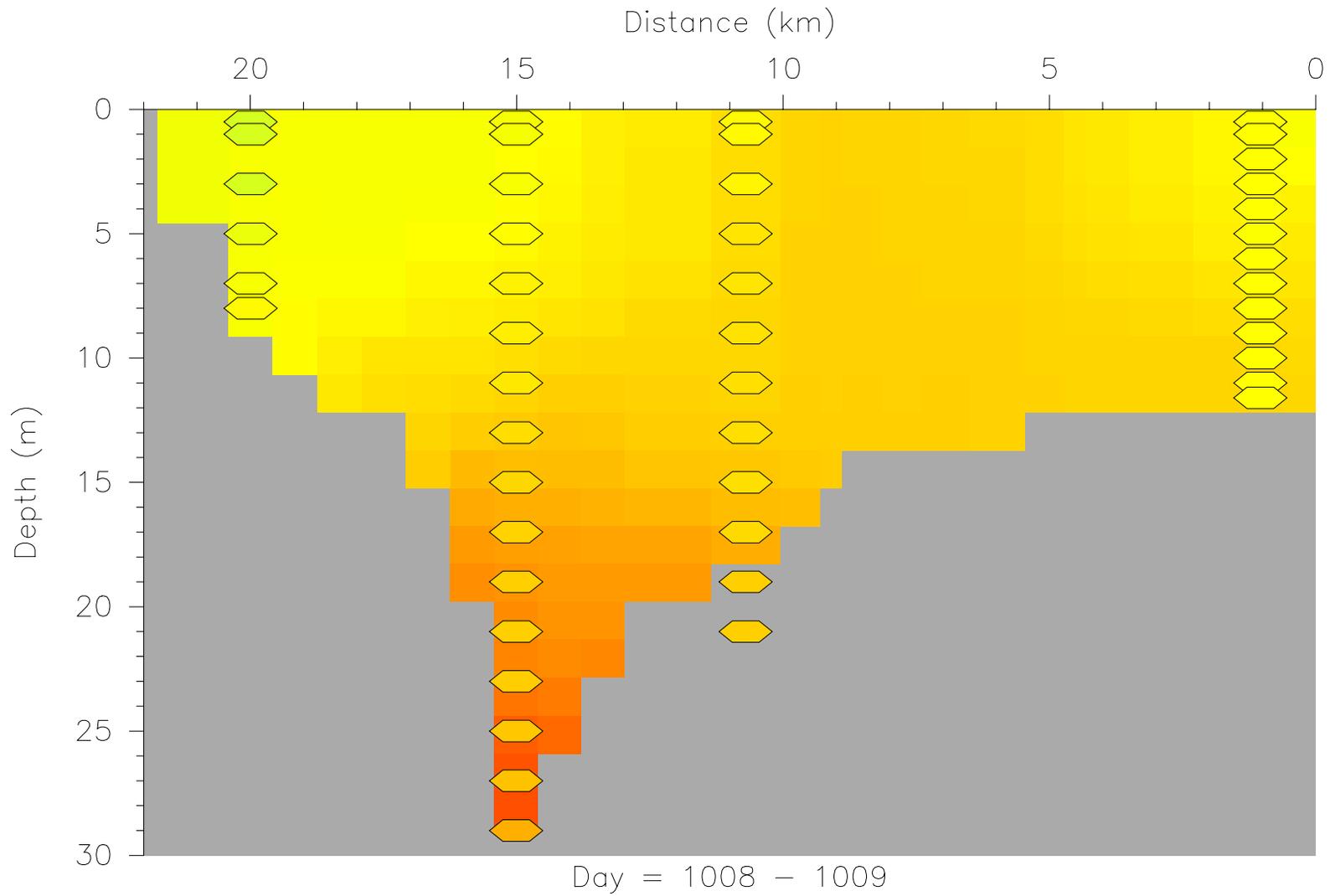
Salinity (ppt)



Salinity (ppt)



Salinity (ppt)

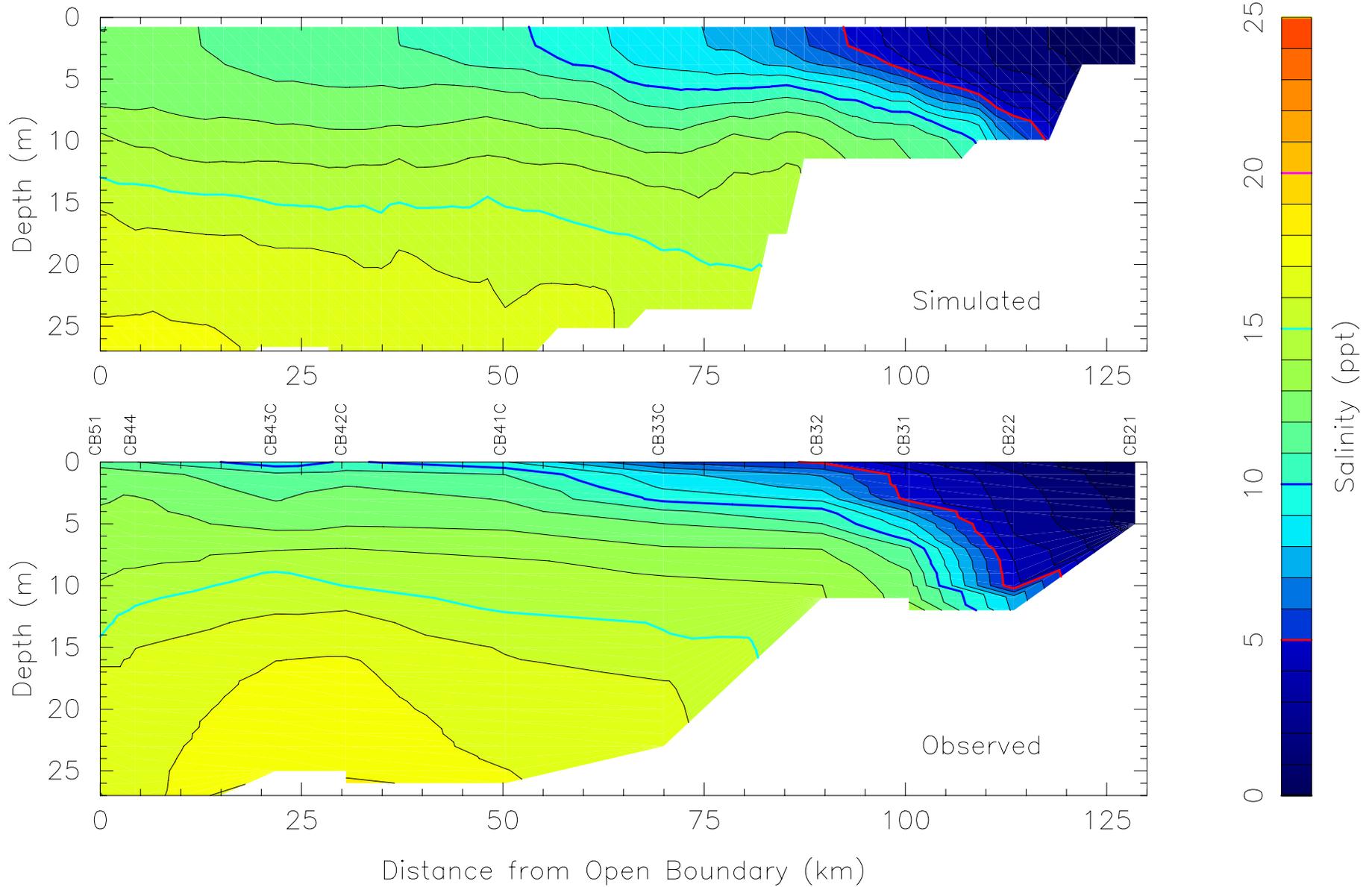


Salinity (ppt)

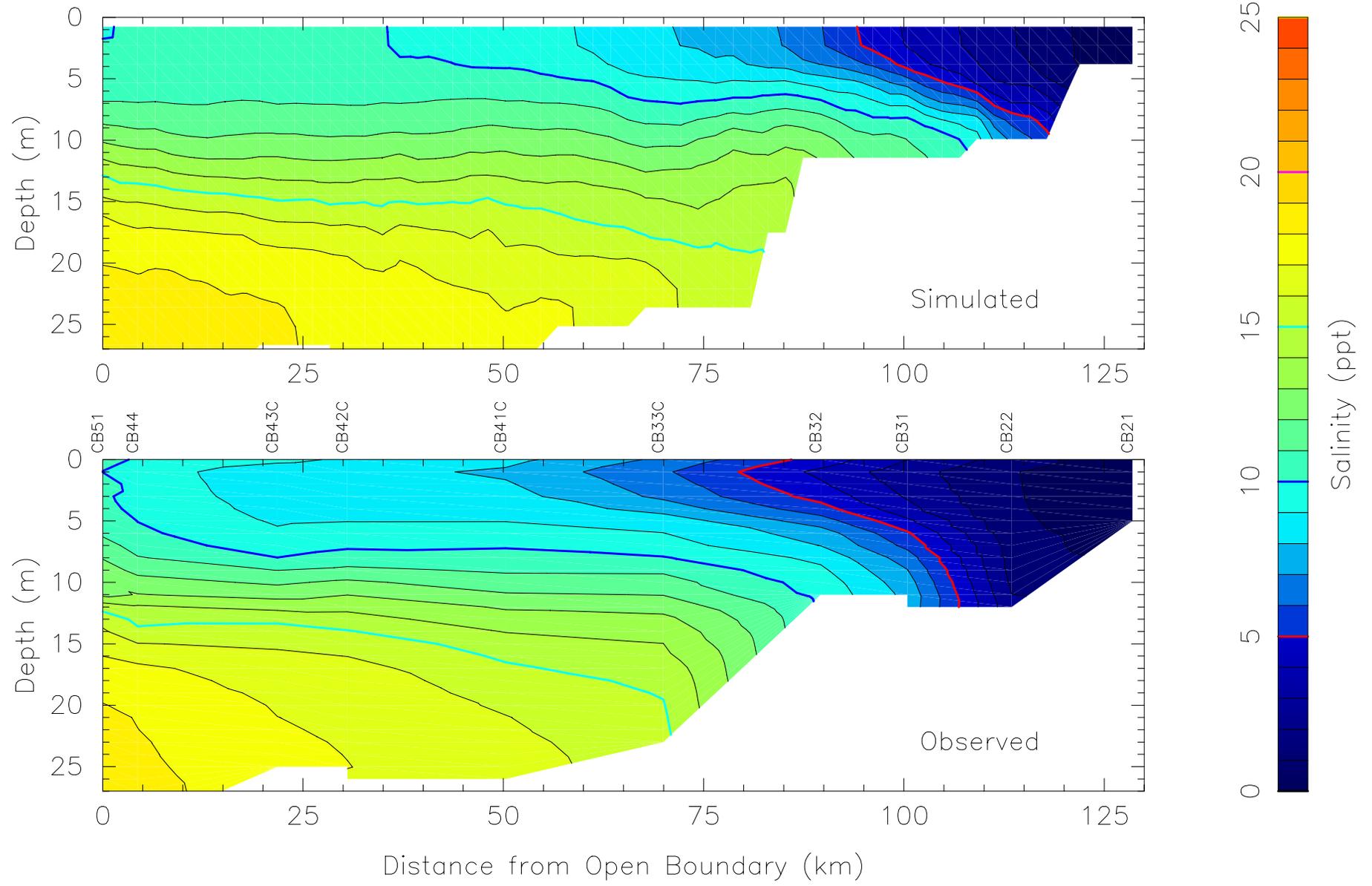
Appendix 4-D

Three-year seasonal average of salinity distribution along the main Bay. Top panel represents simulation and bottom panel shows the composition of observed values.

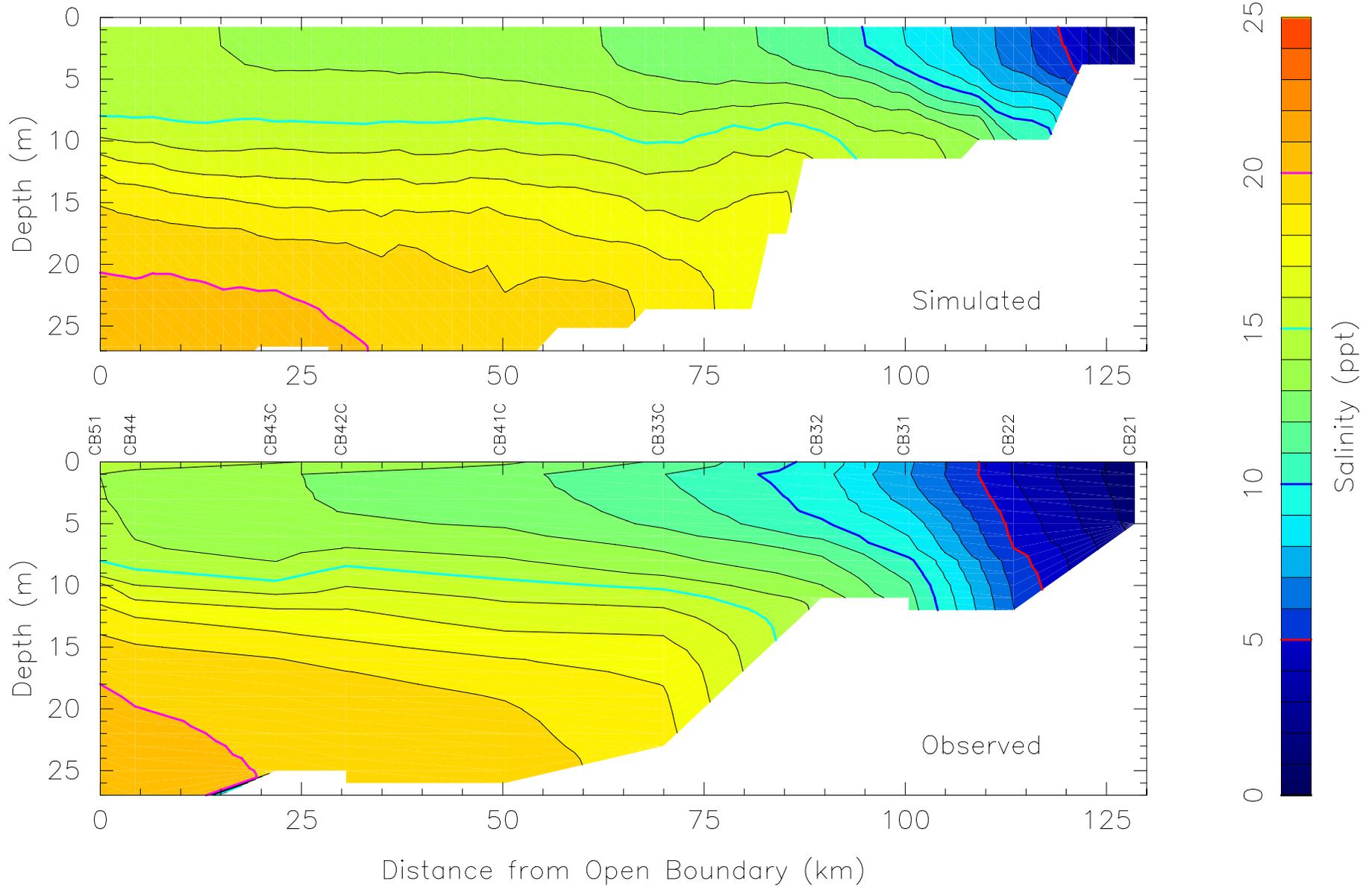
January – March



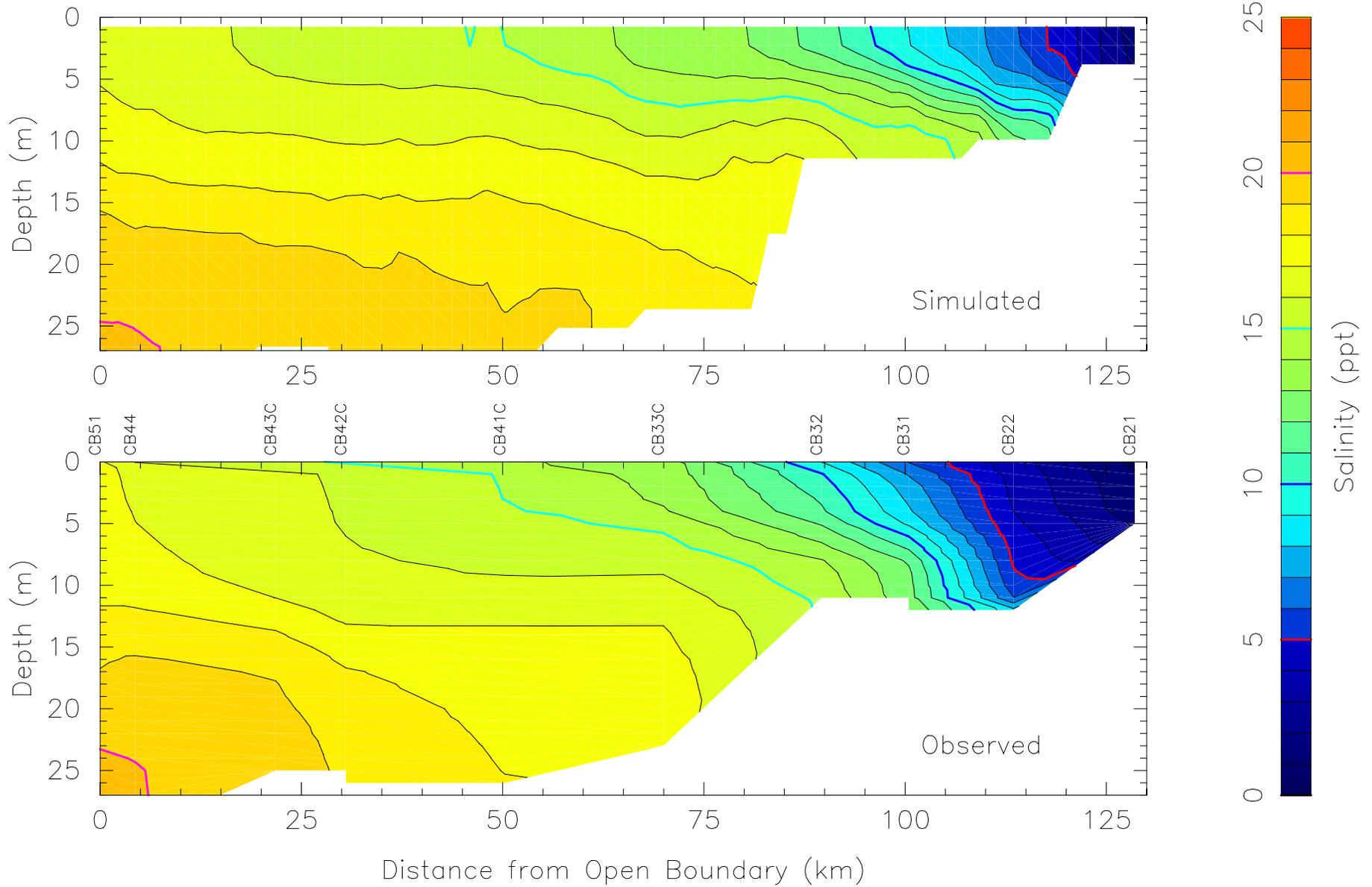
April - June



July – September



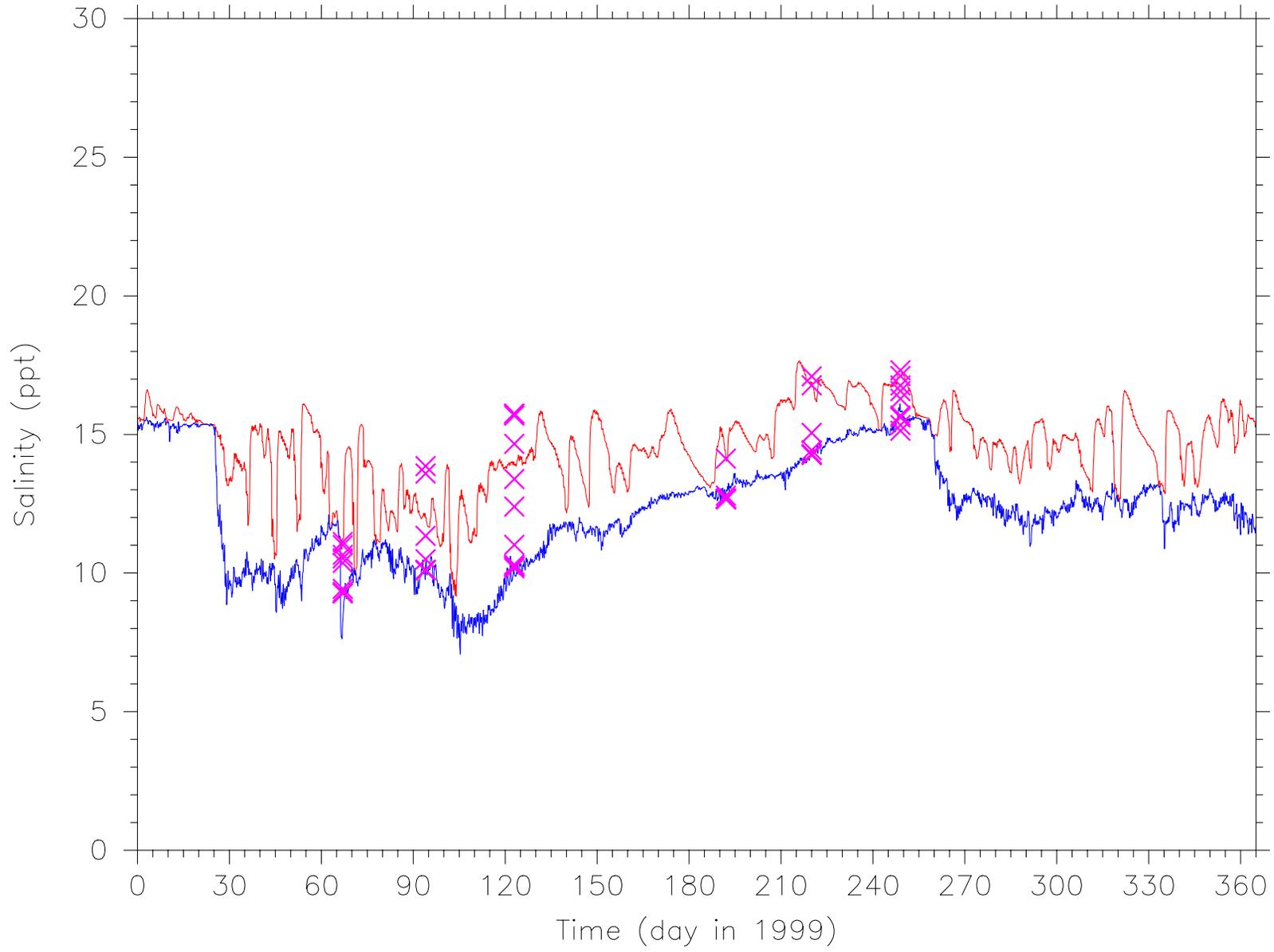
October – December



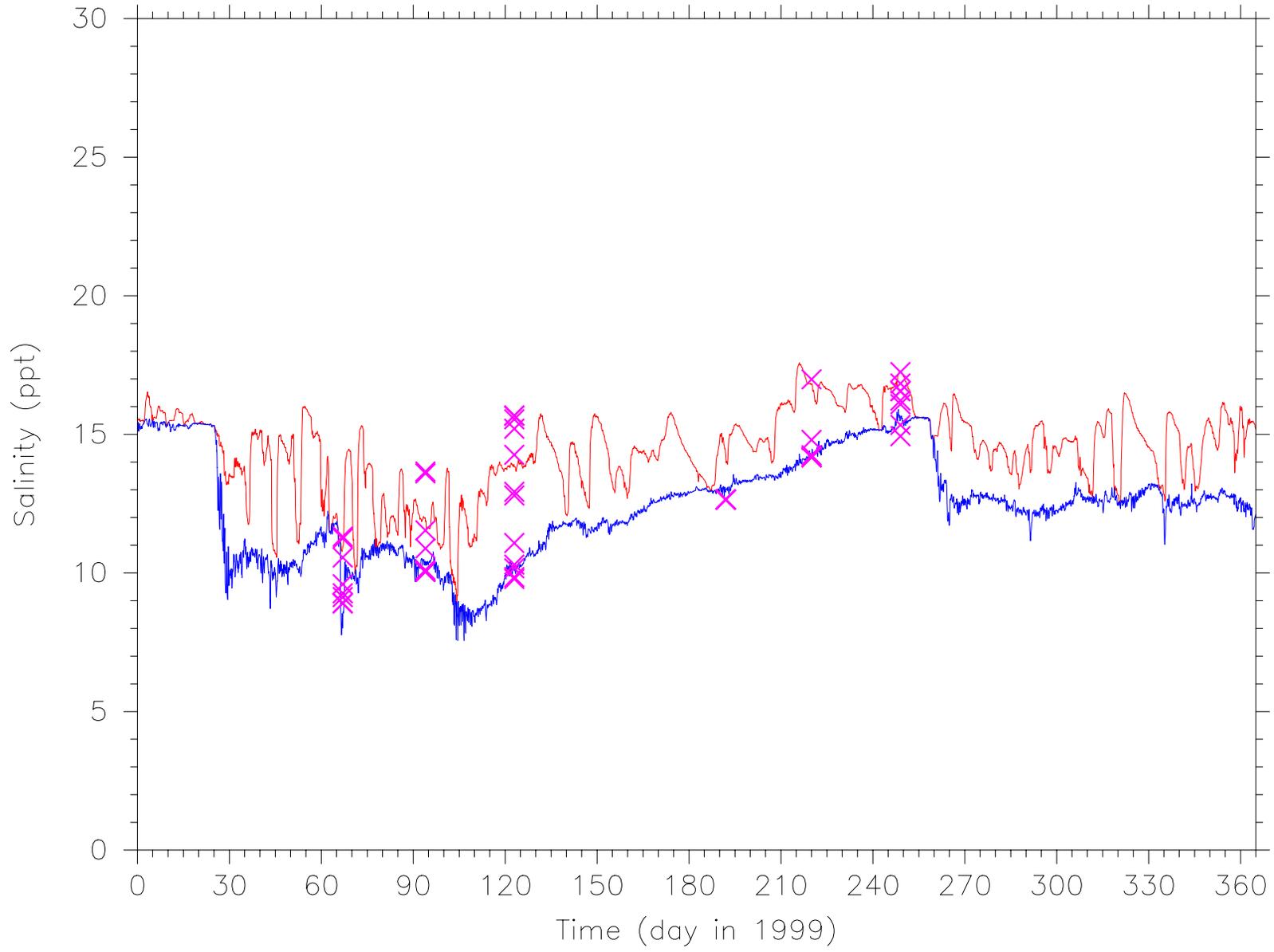
Appendix 4-E

Time series of salinity at the MDE intensive survey stations for 1999. Red and blue lines represent simulation at surface and bottom, respectively. All the observed values at each station were shown by crosses.

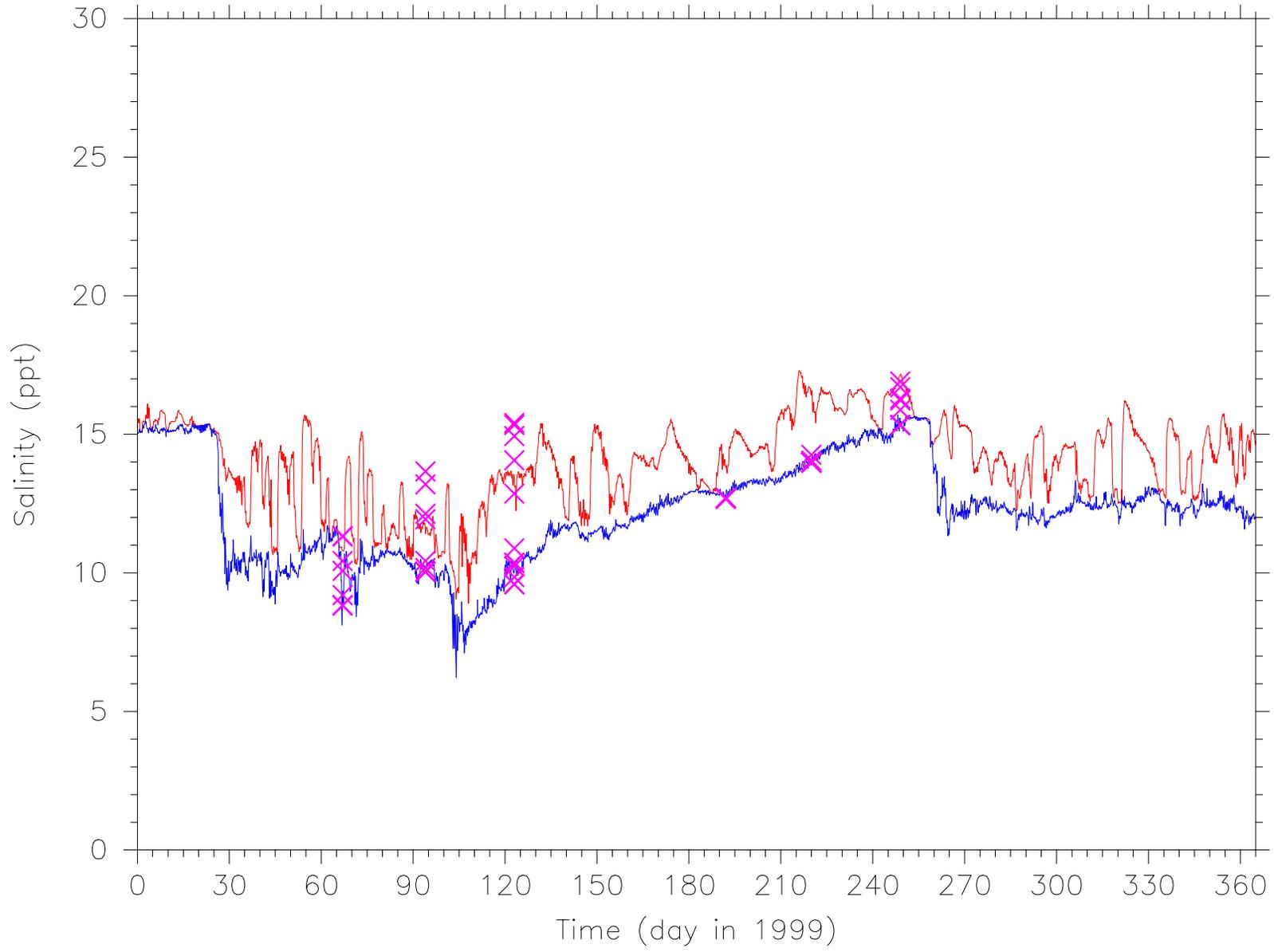
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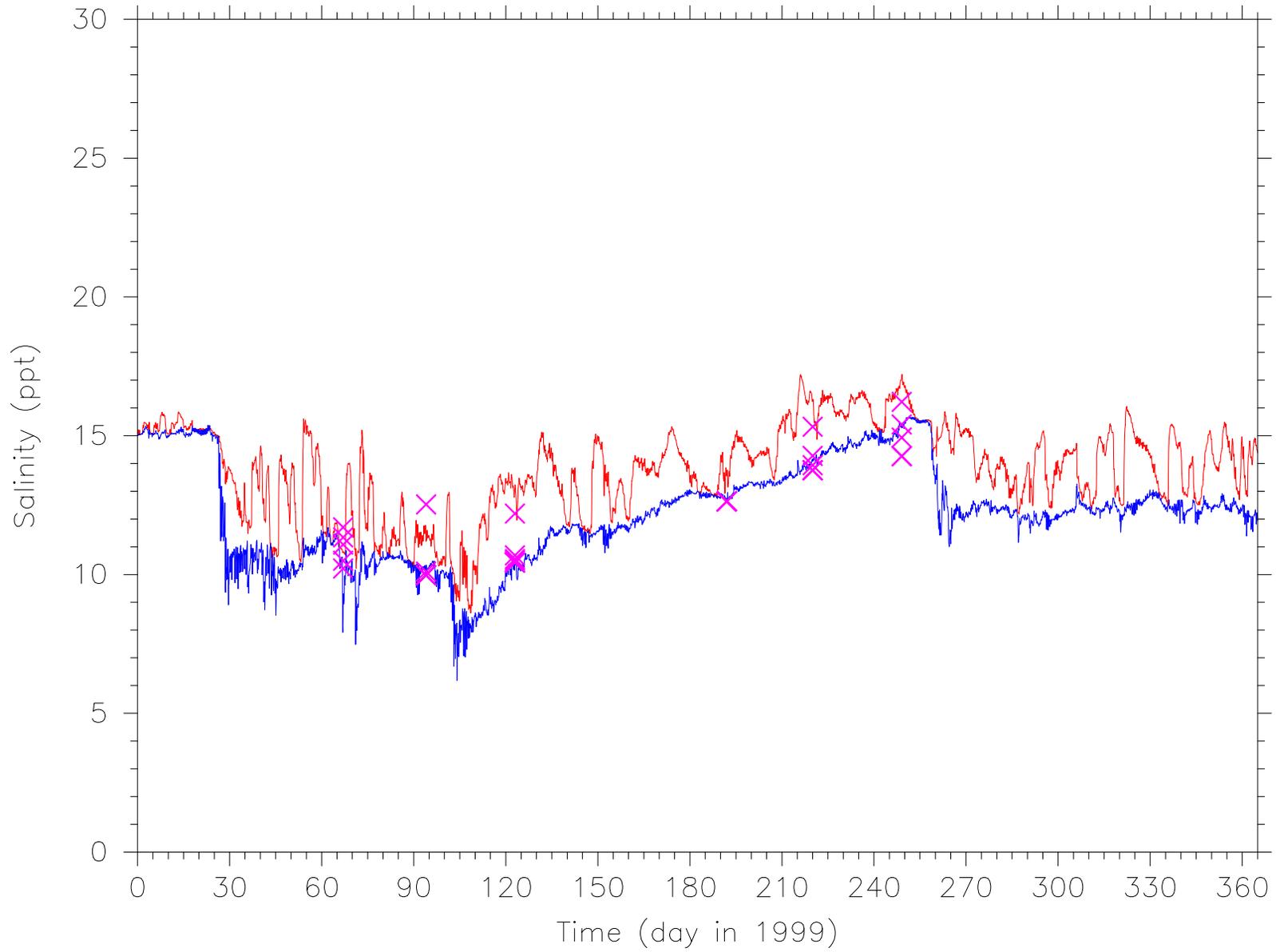
XGG9960



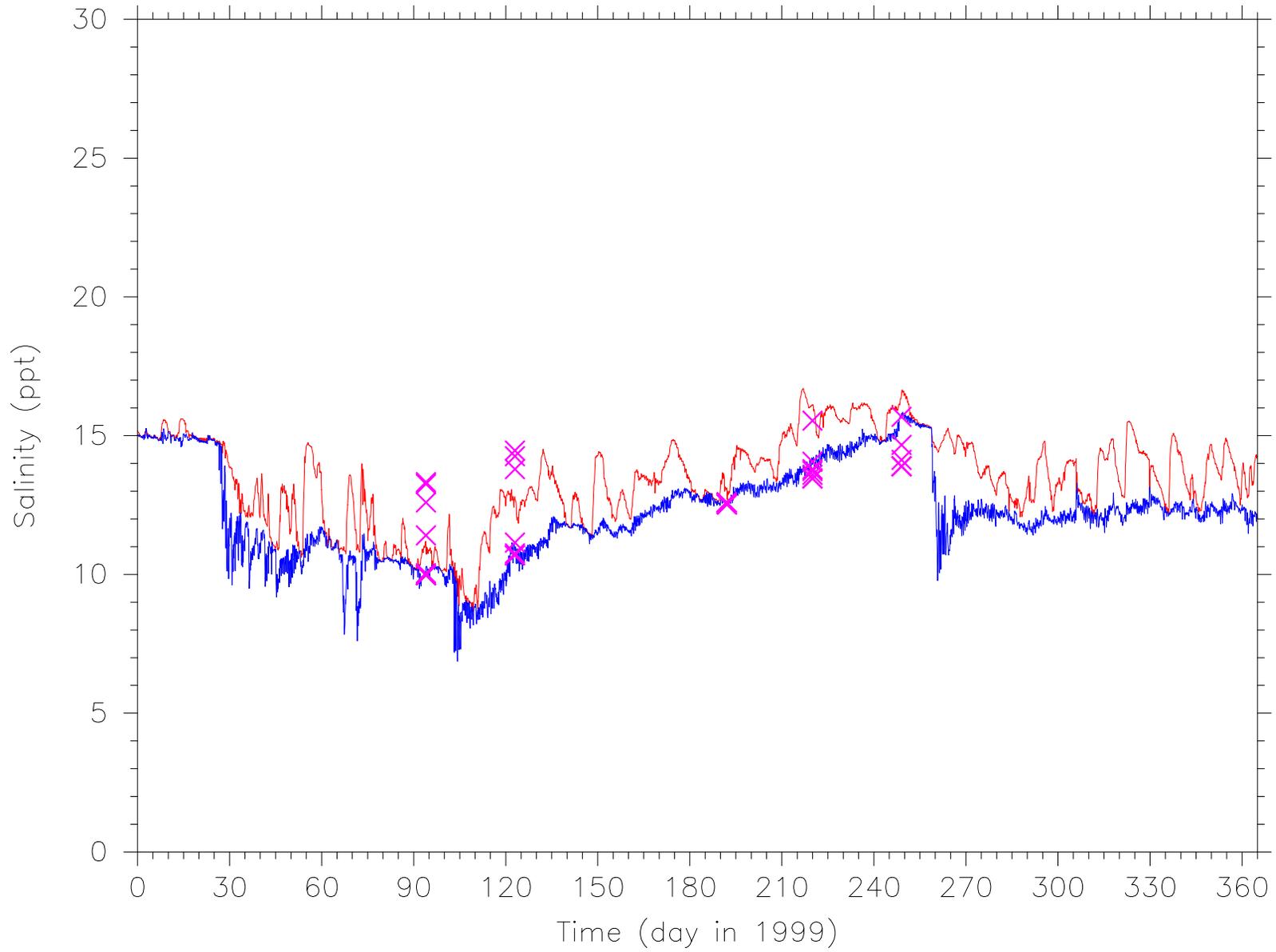
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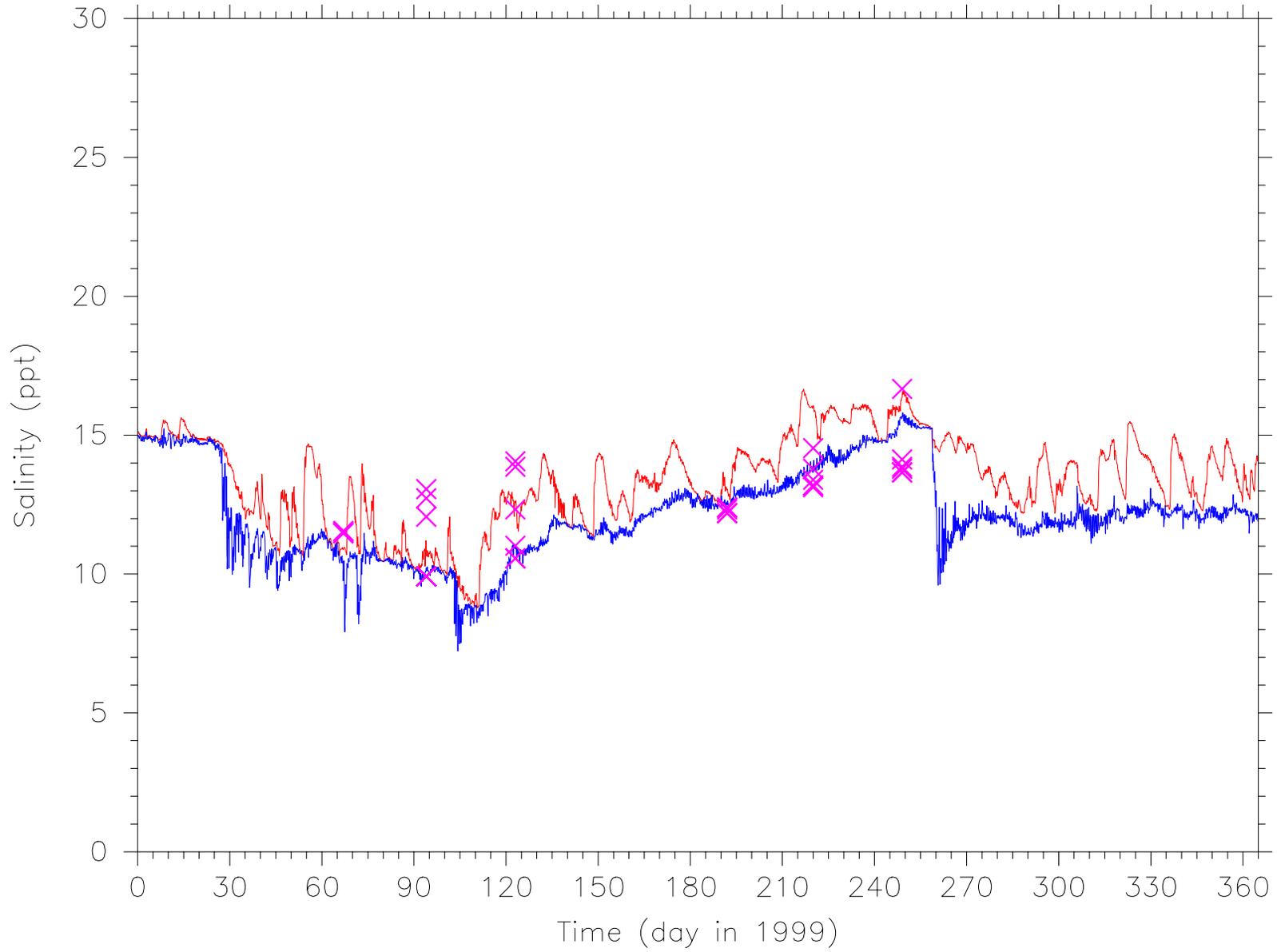
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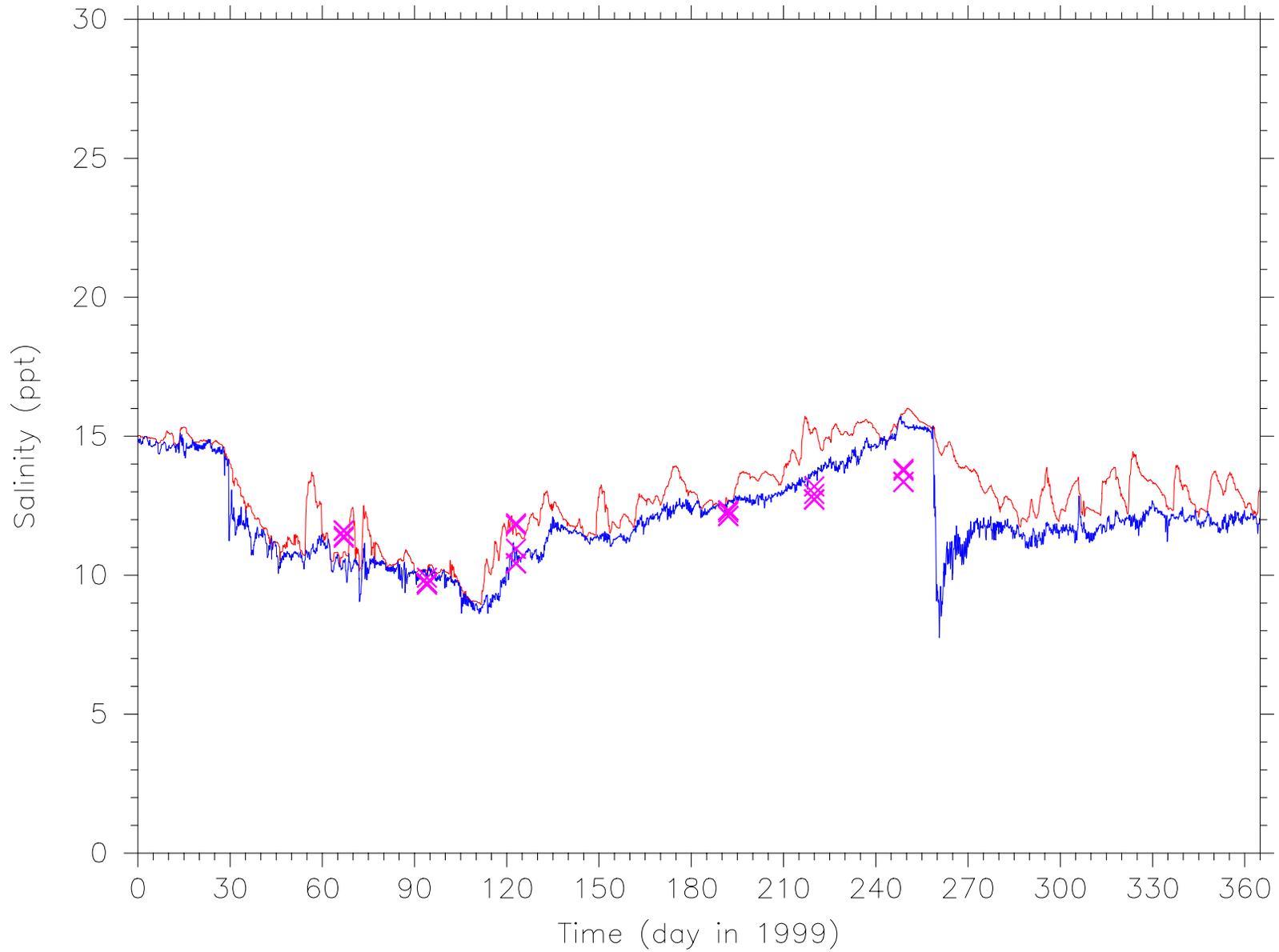
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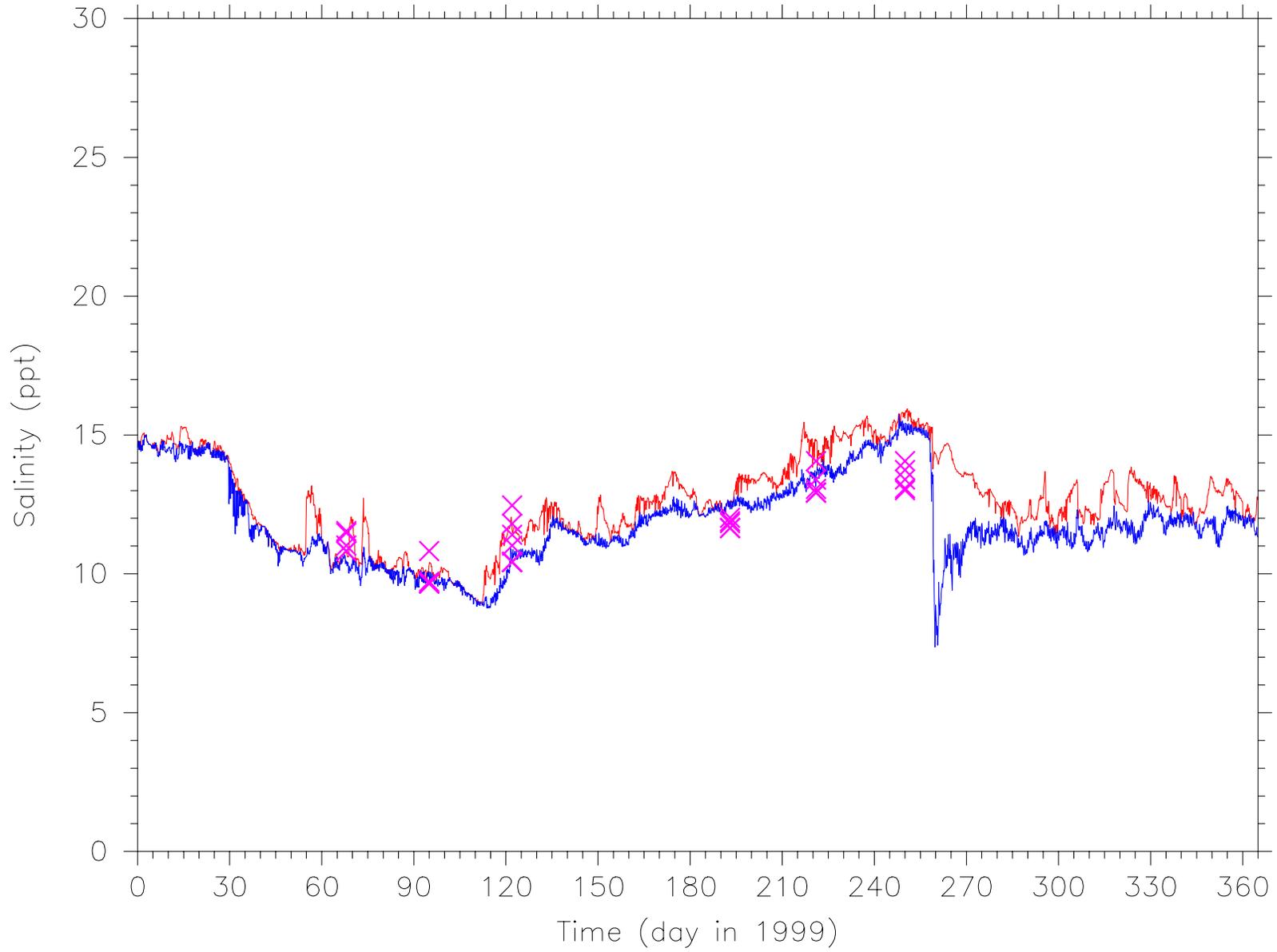
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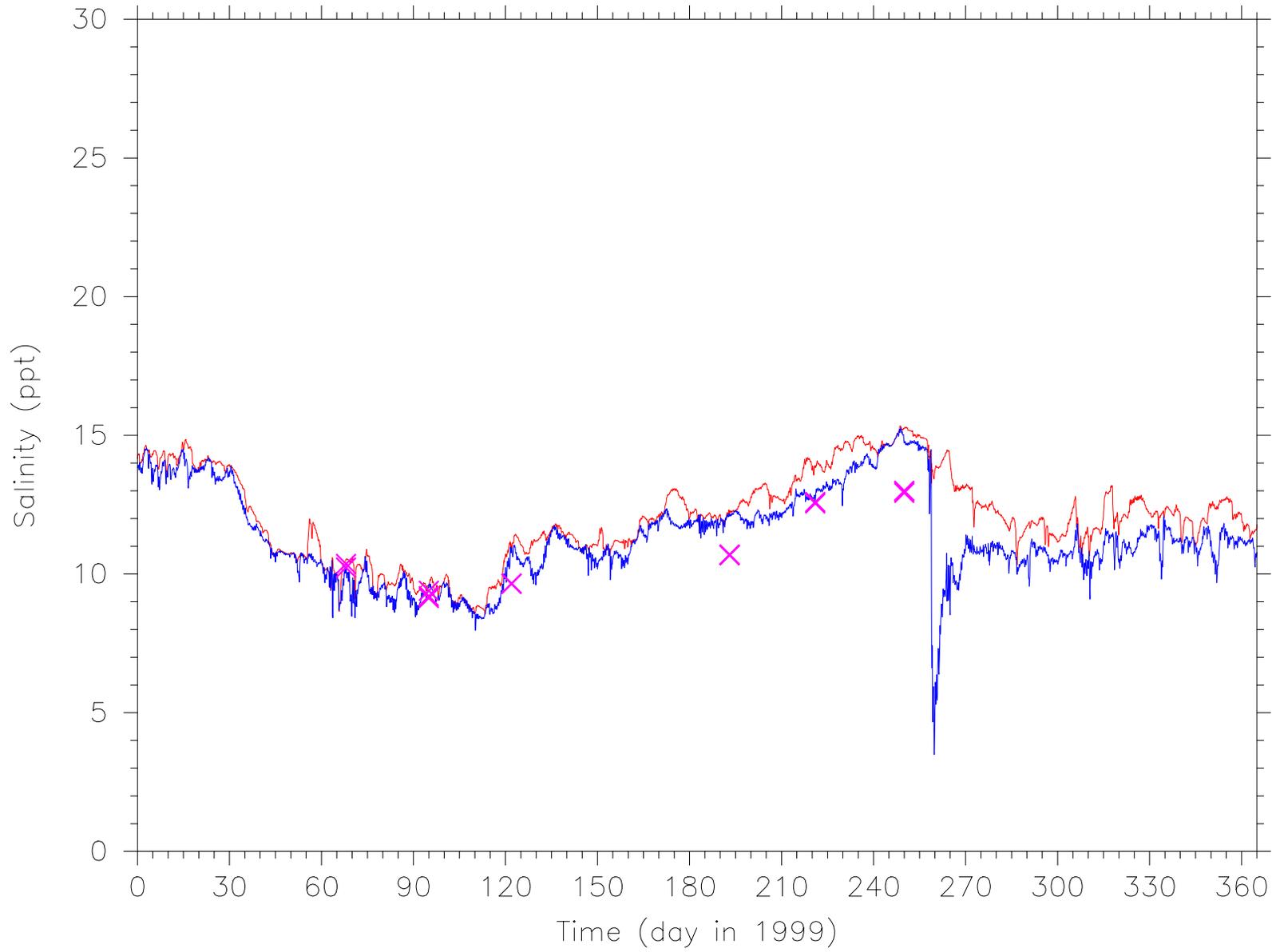
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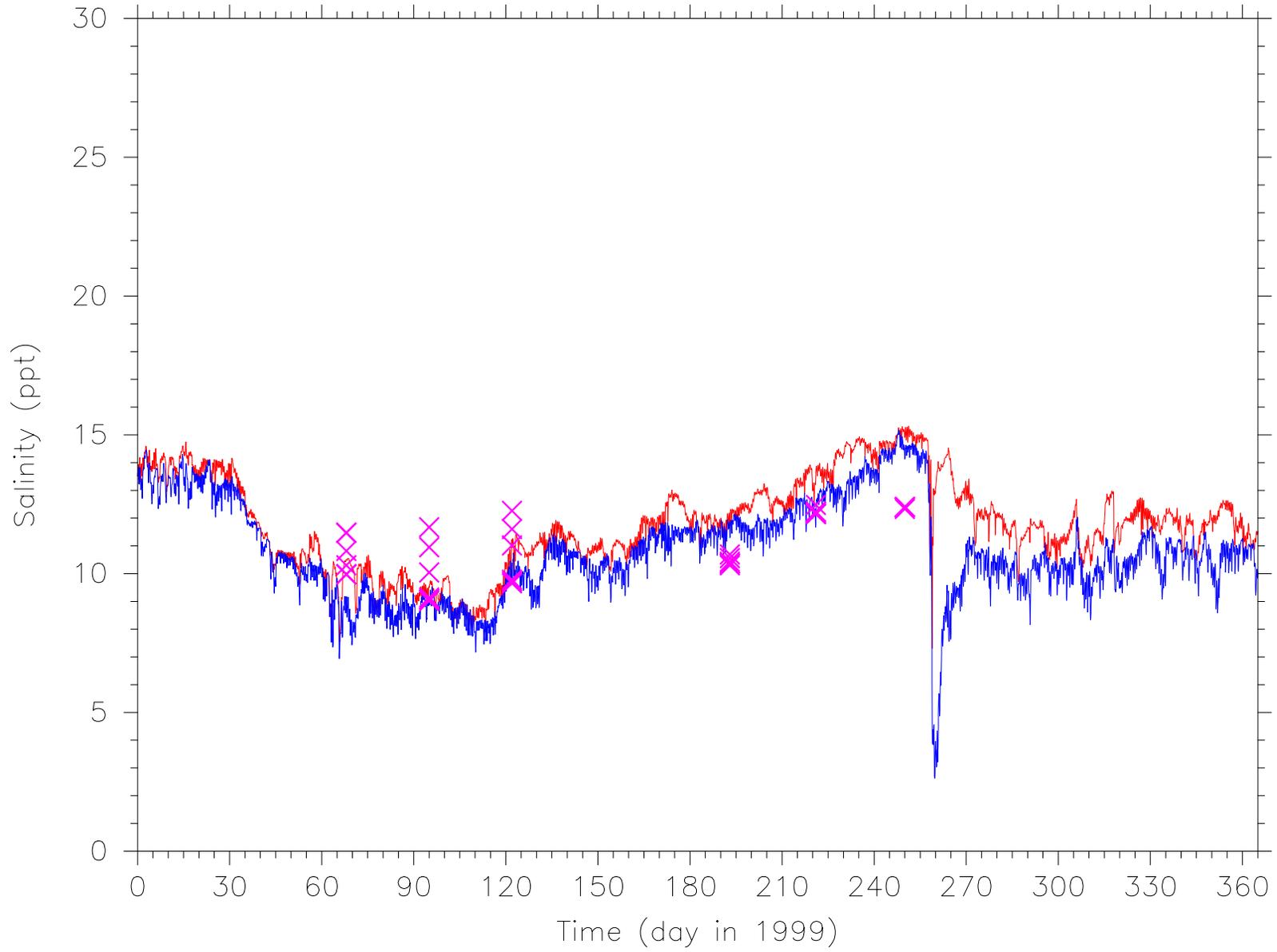
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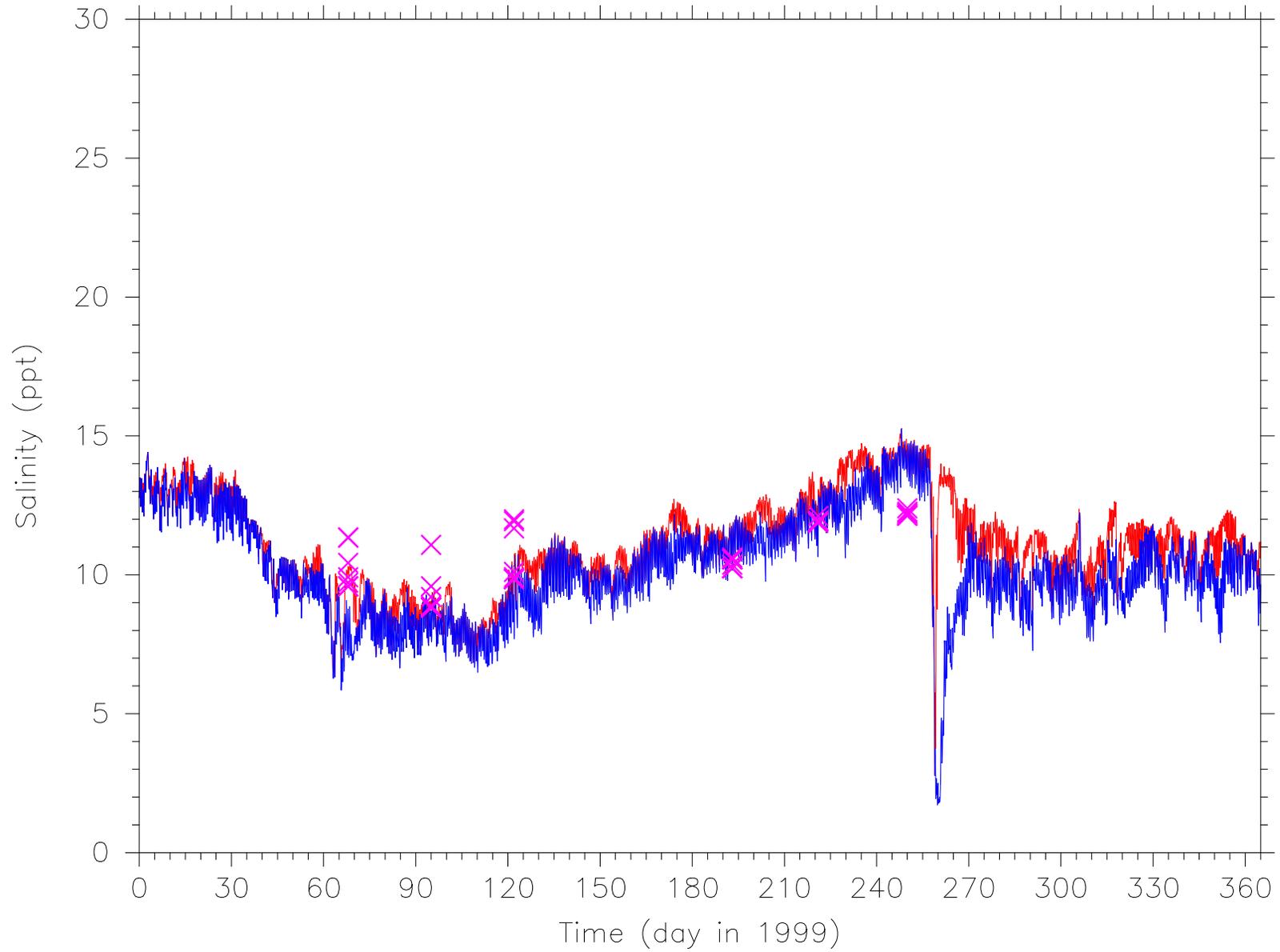
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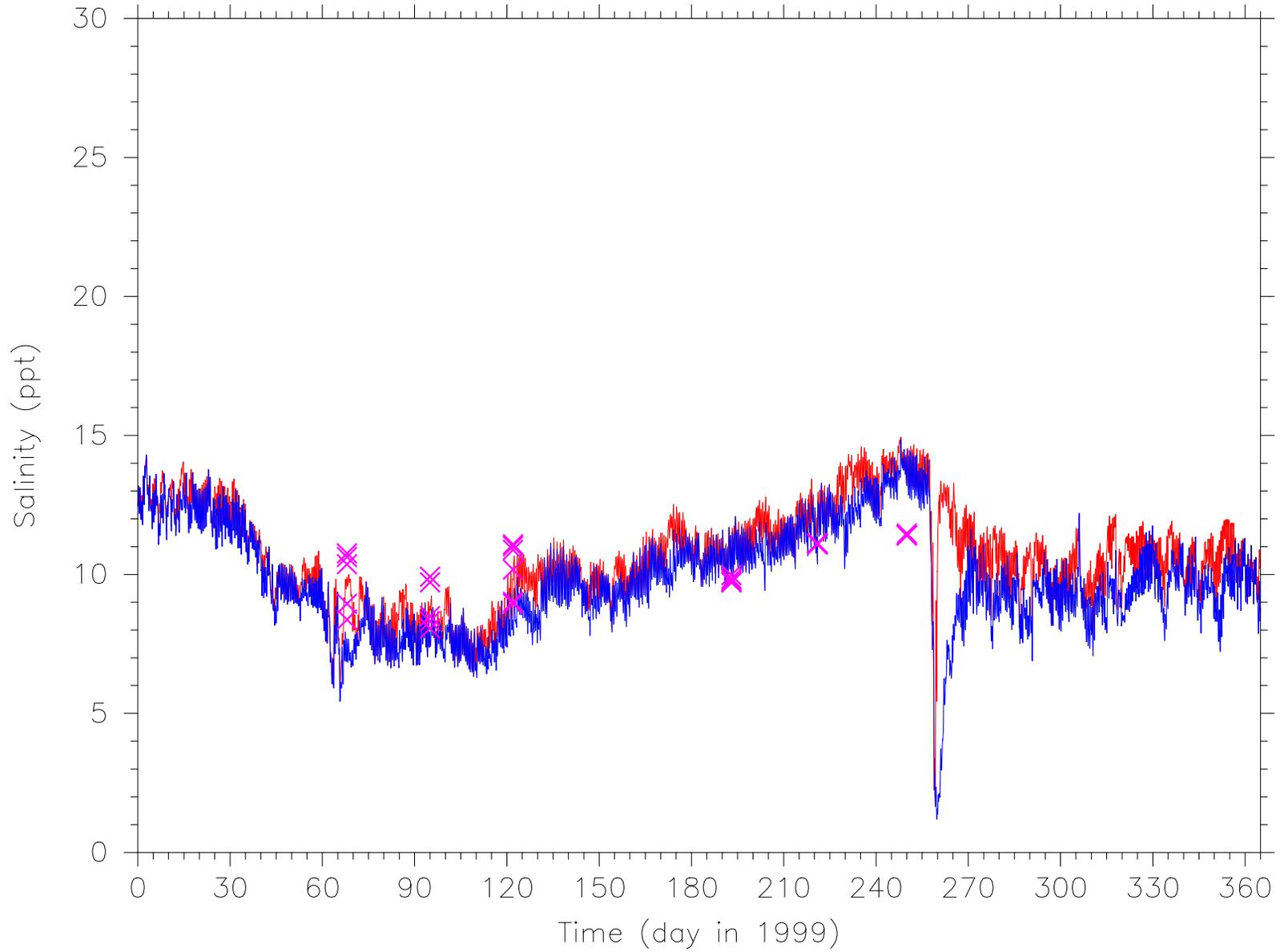
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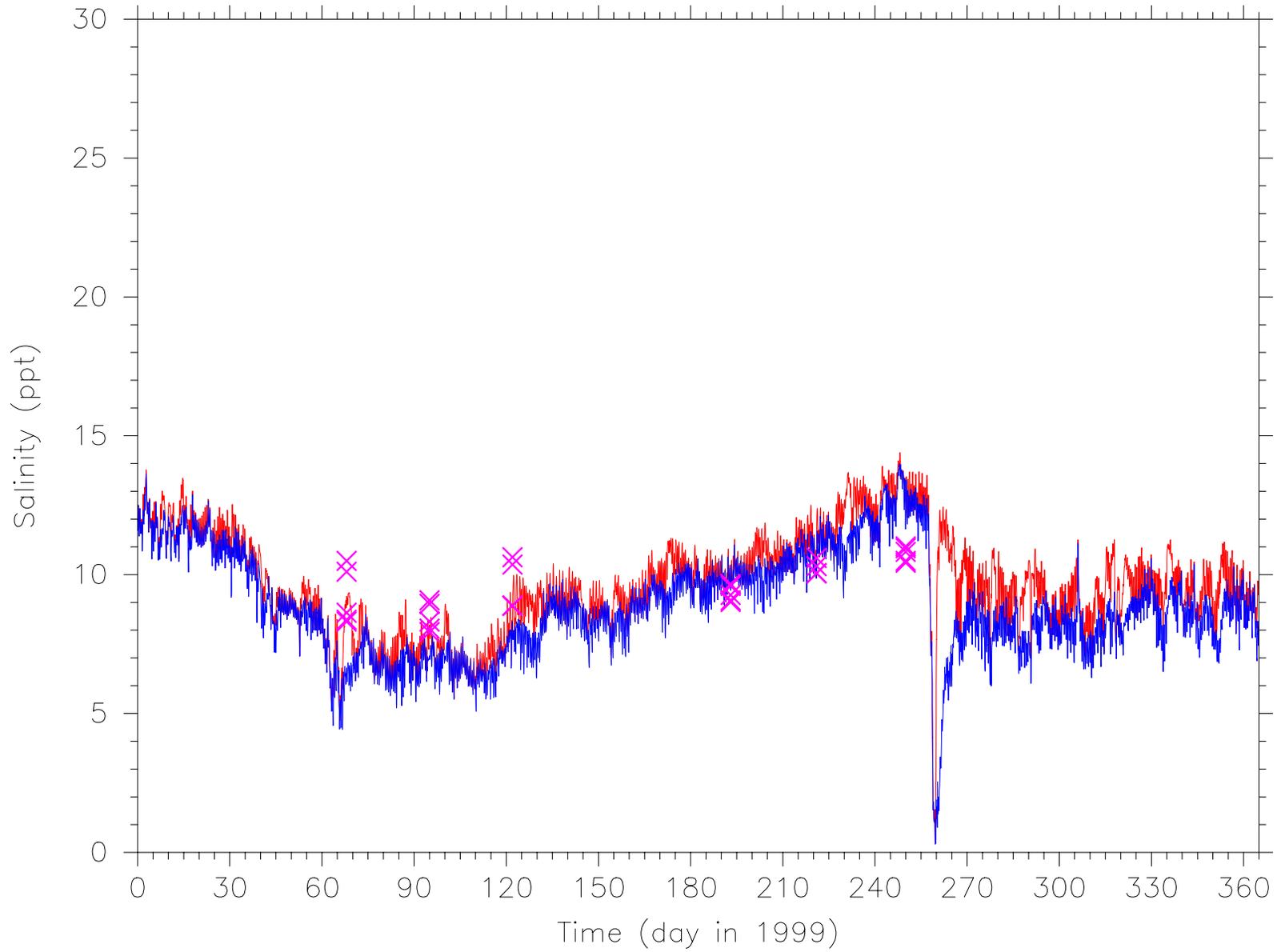
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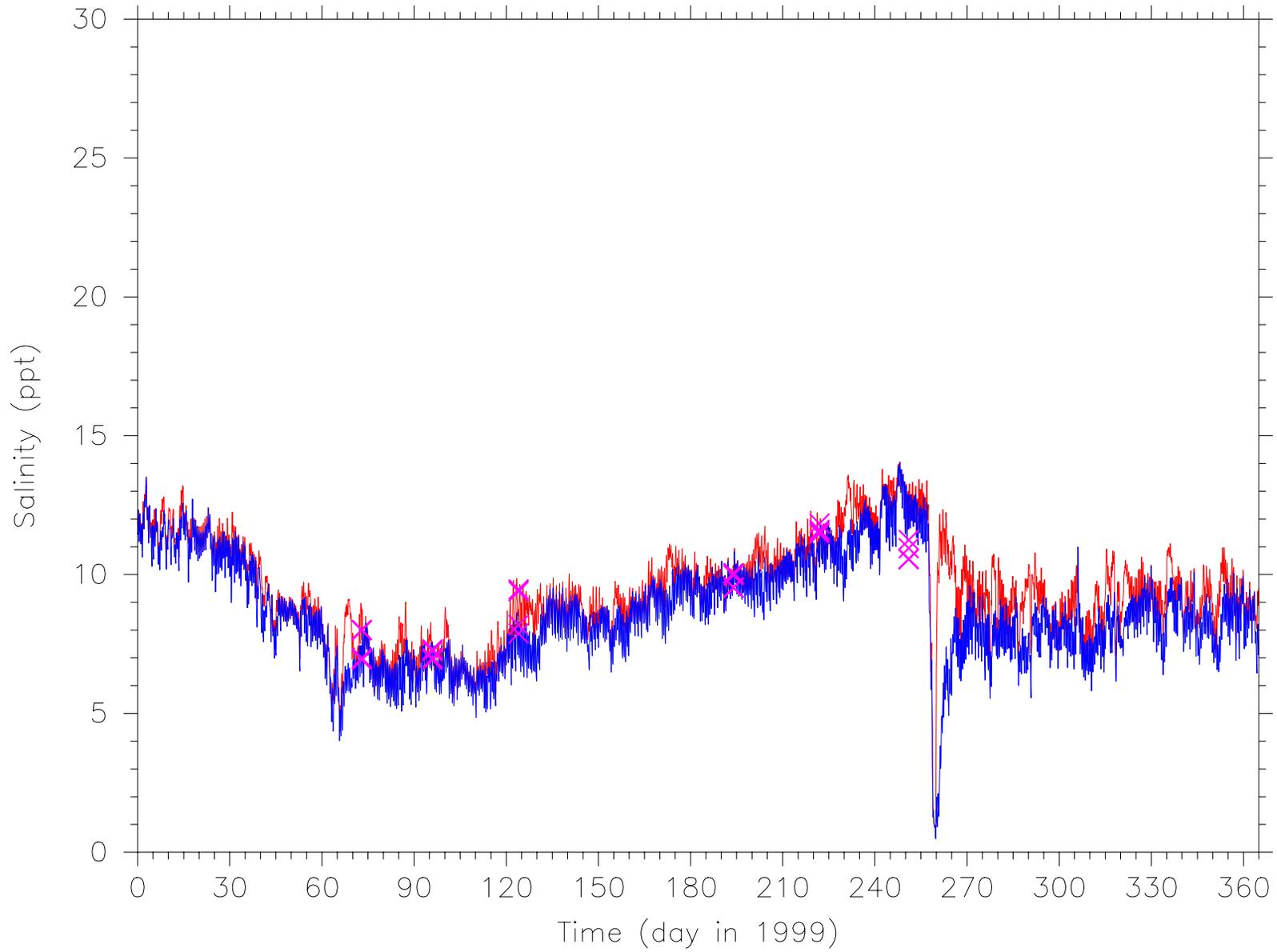
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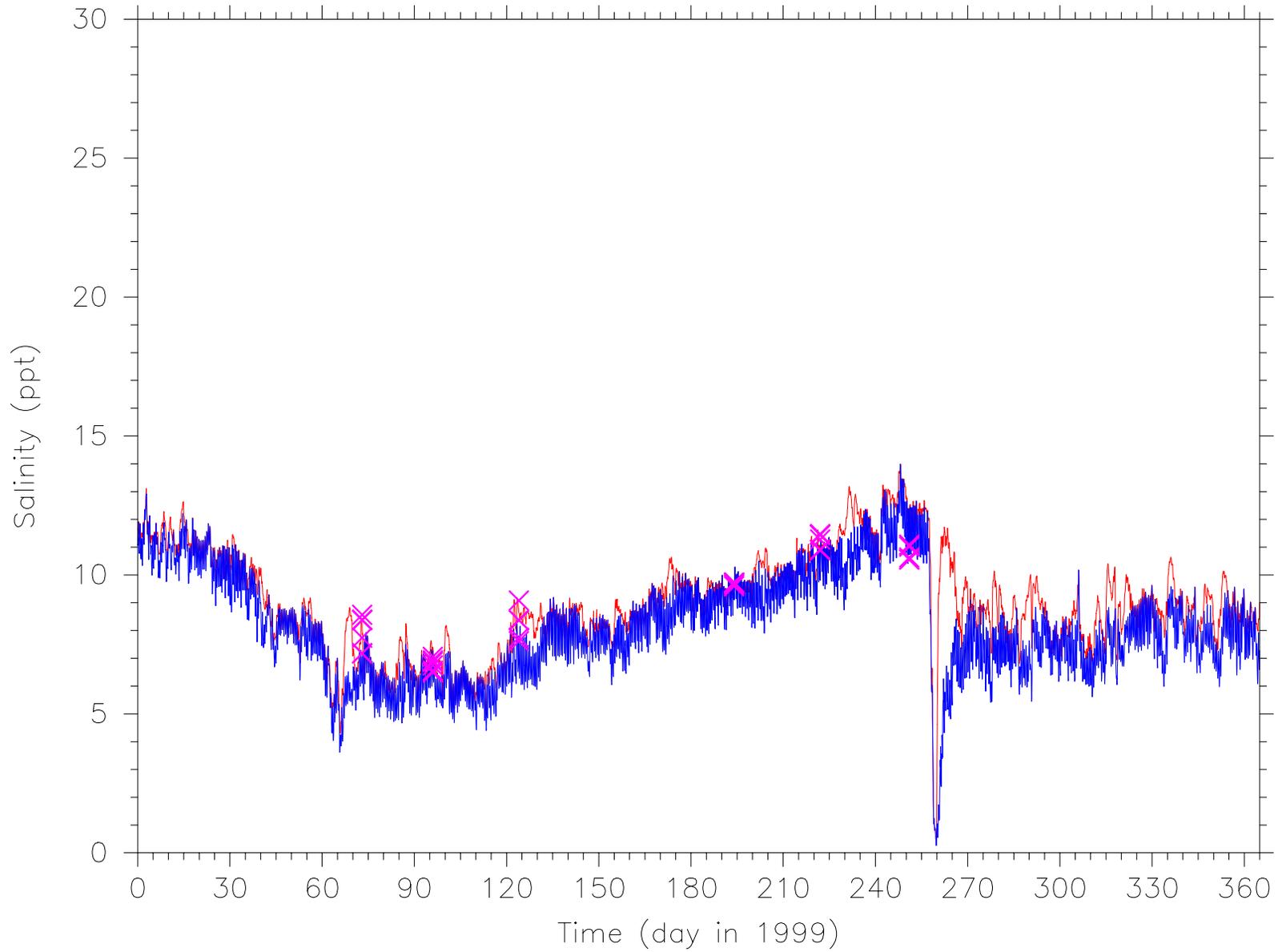
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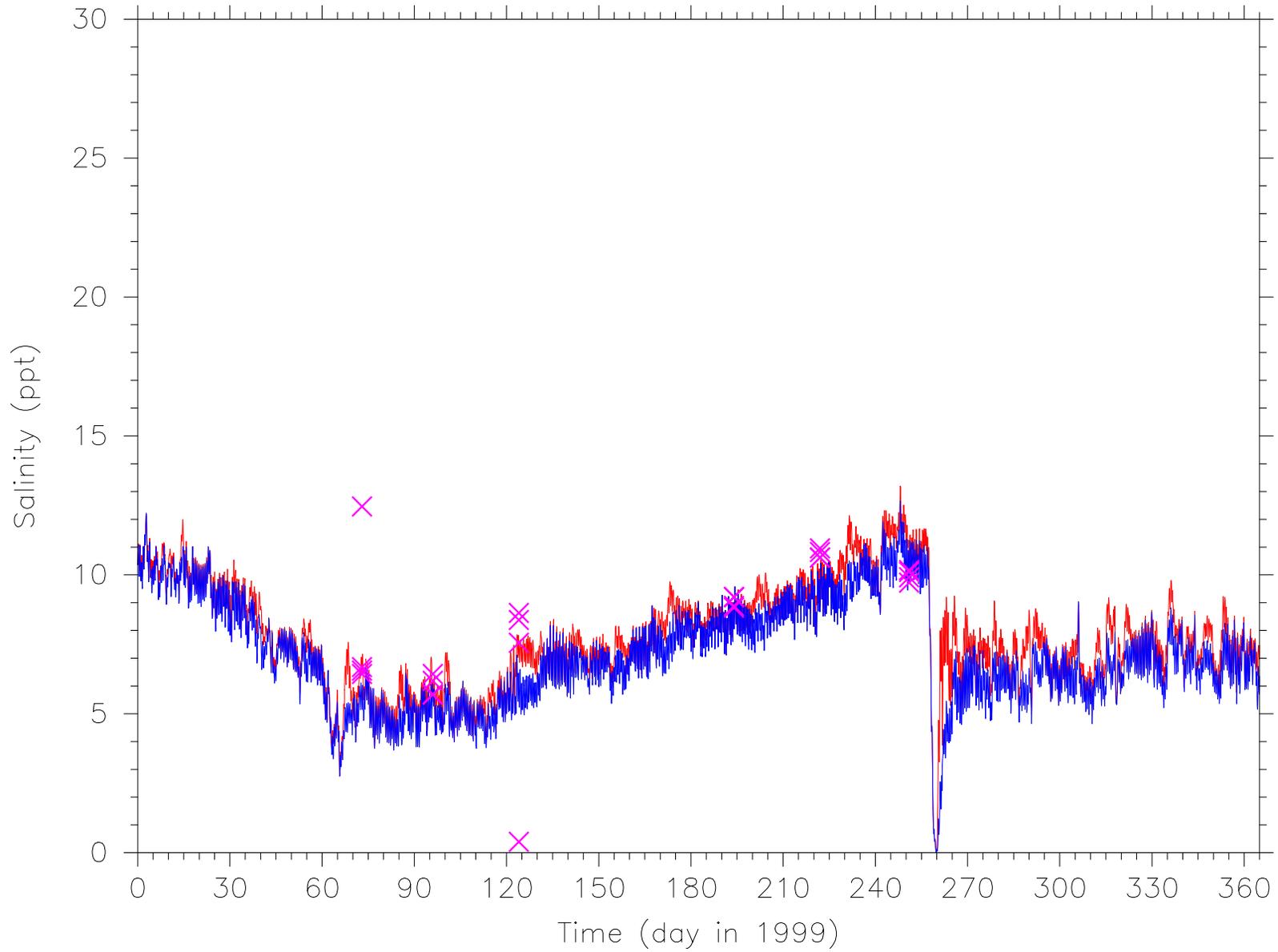
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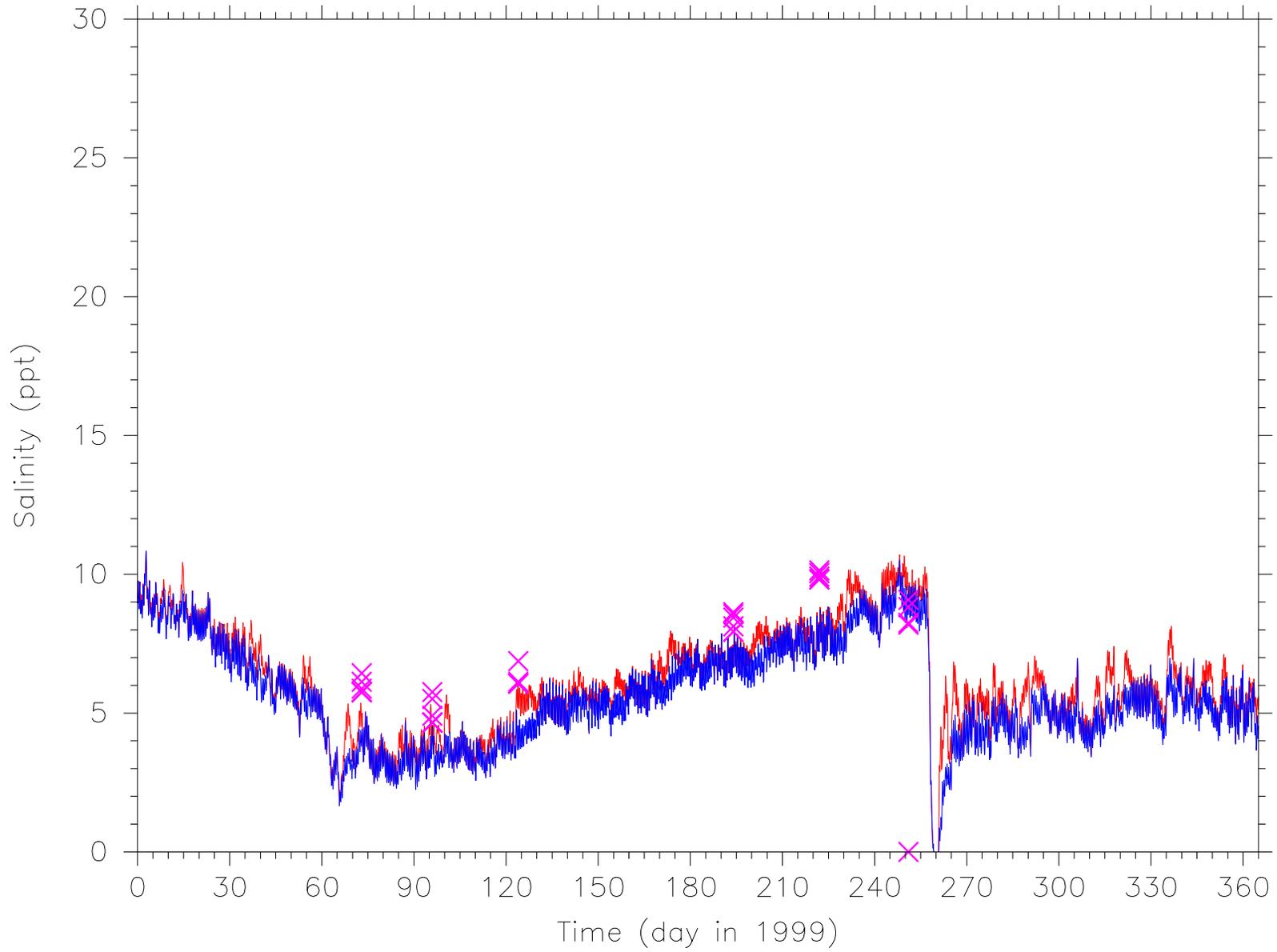
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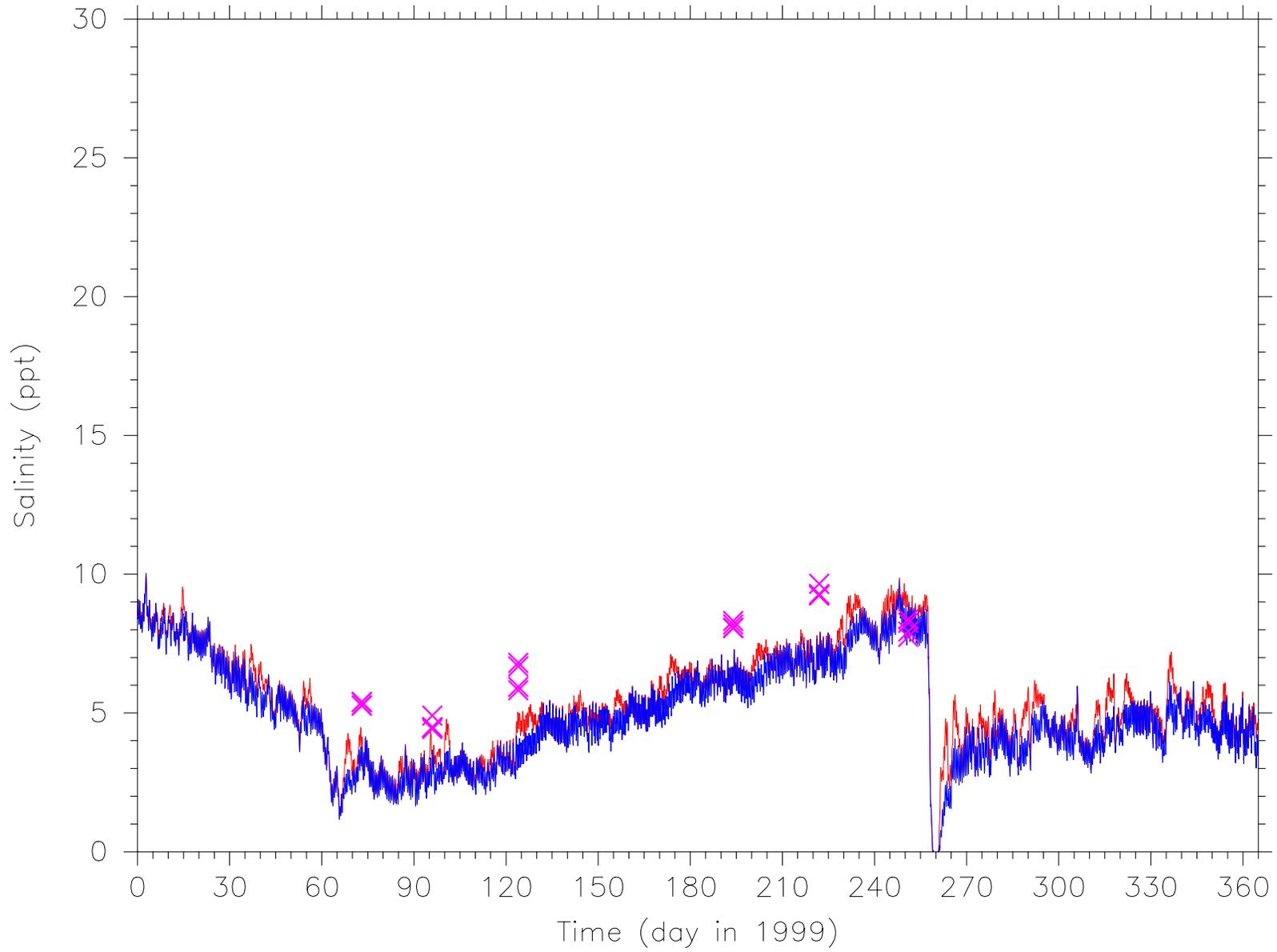
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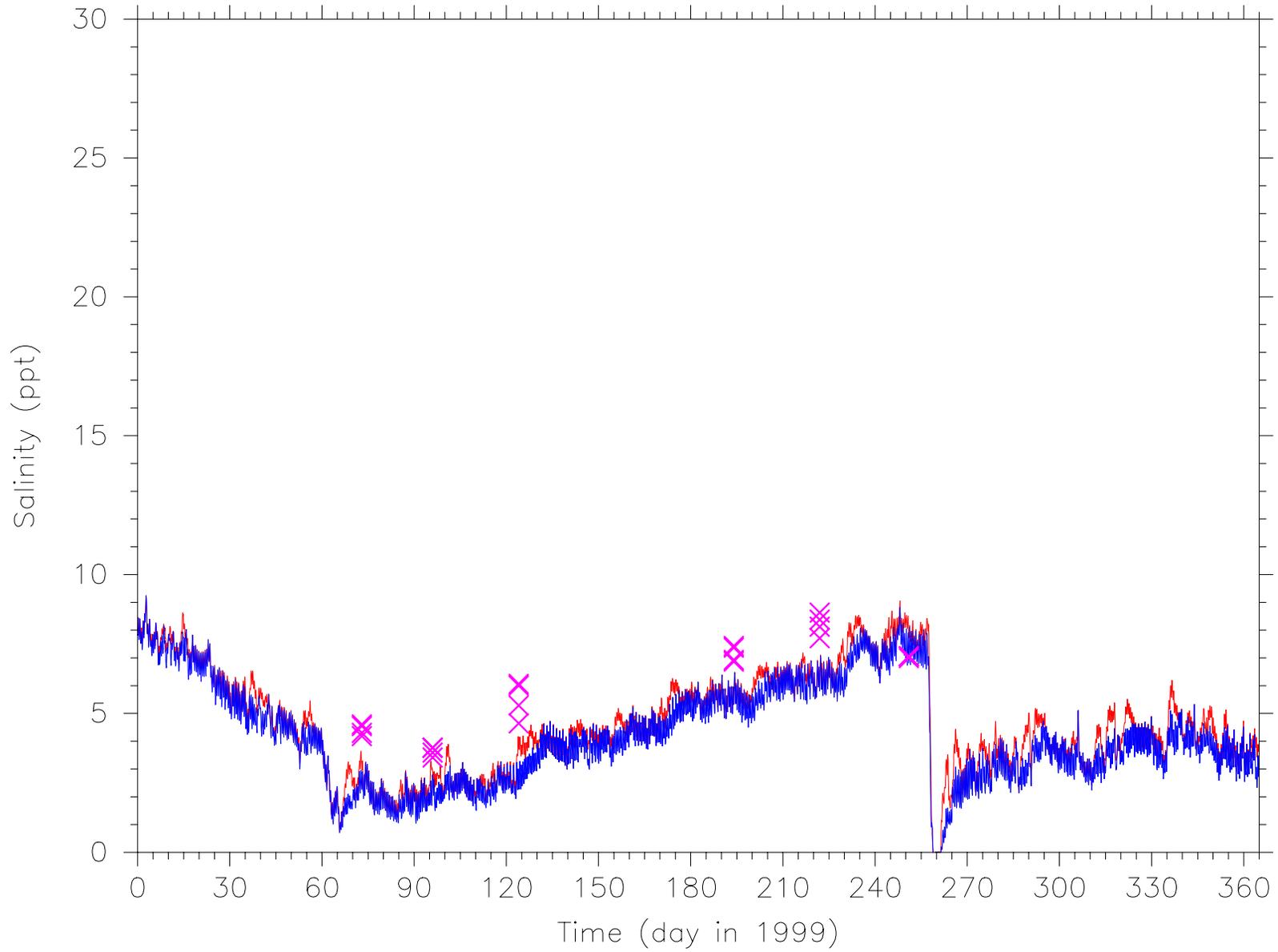
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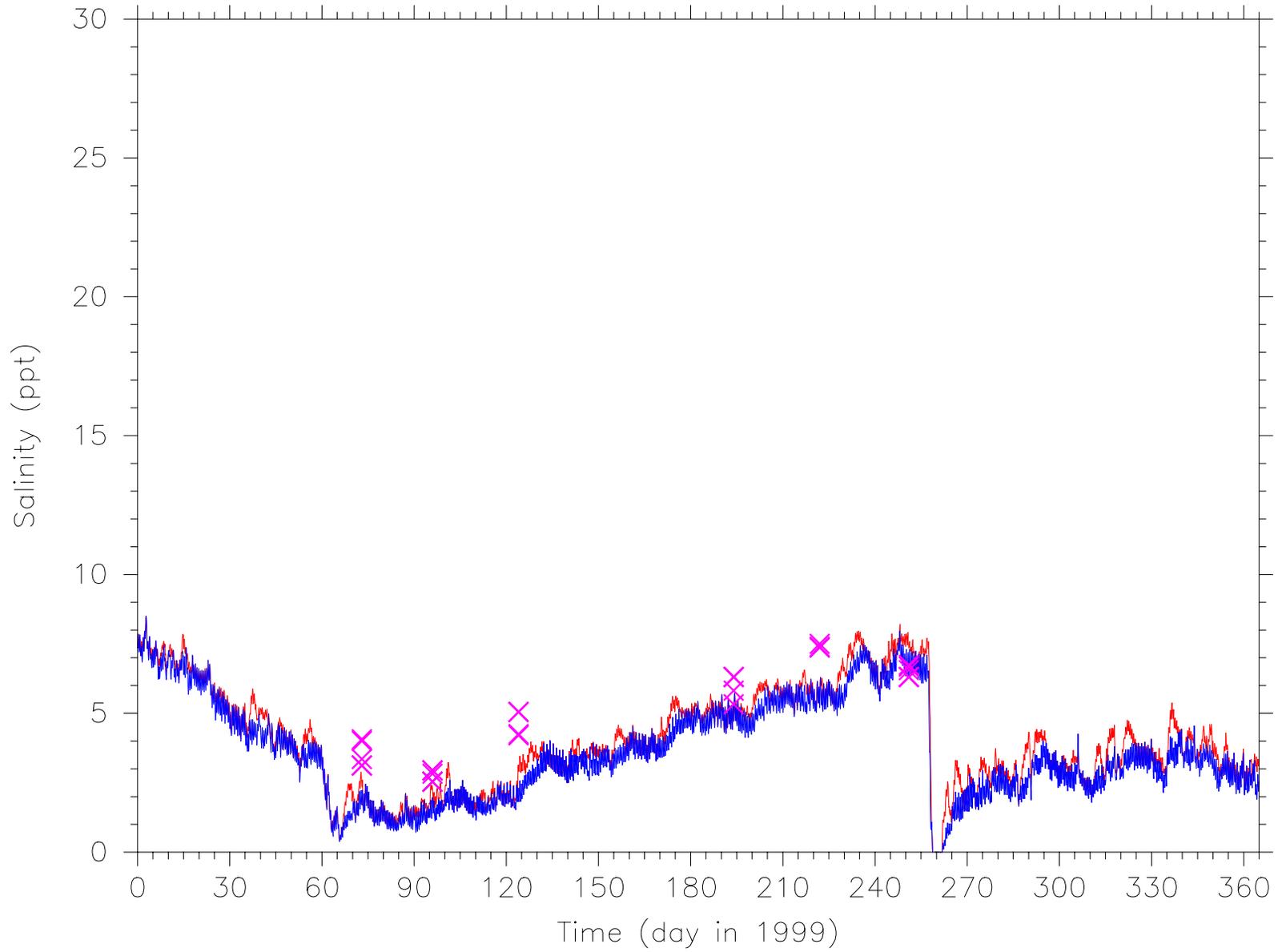
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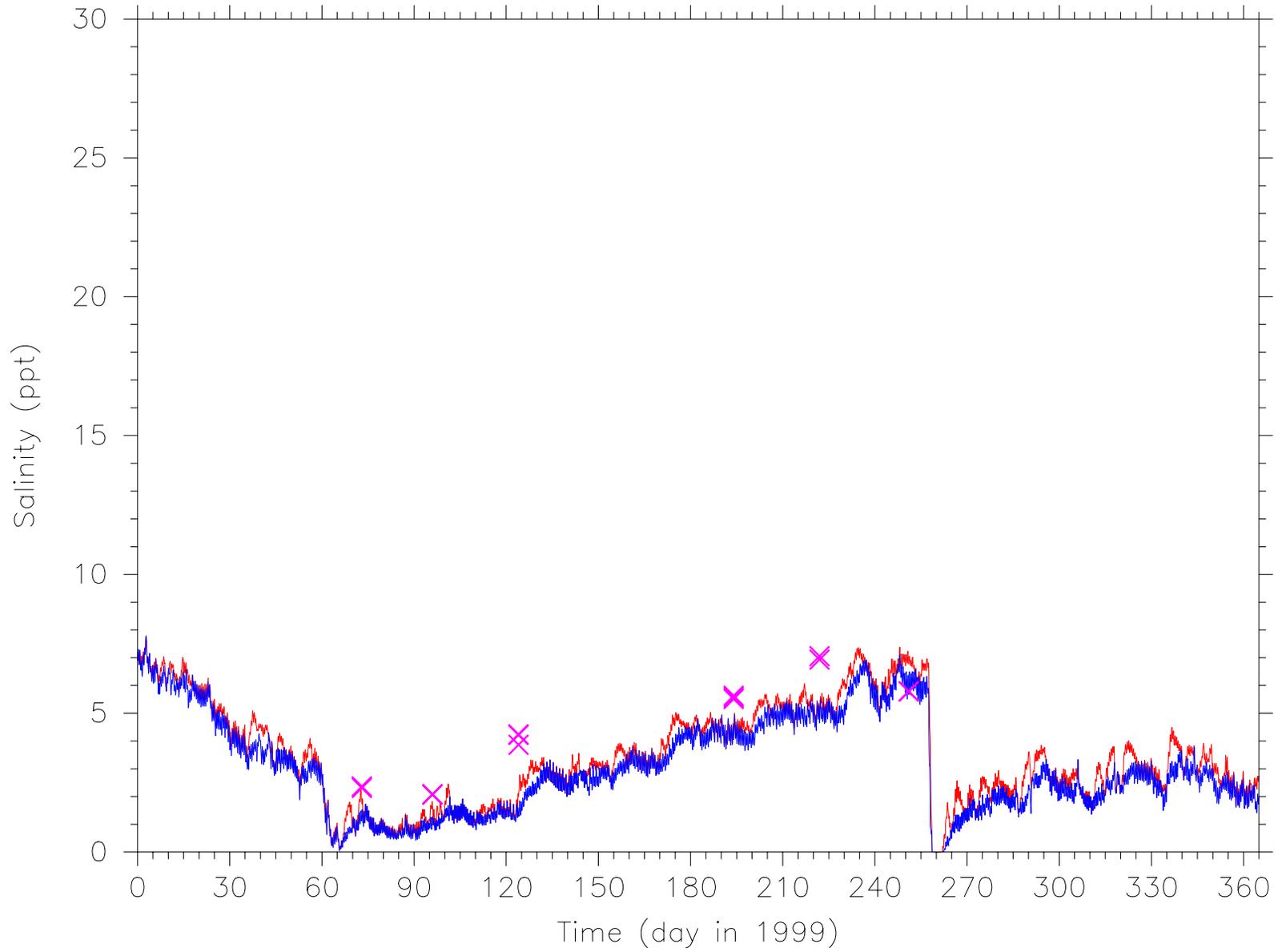
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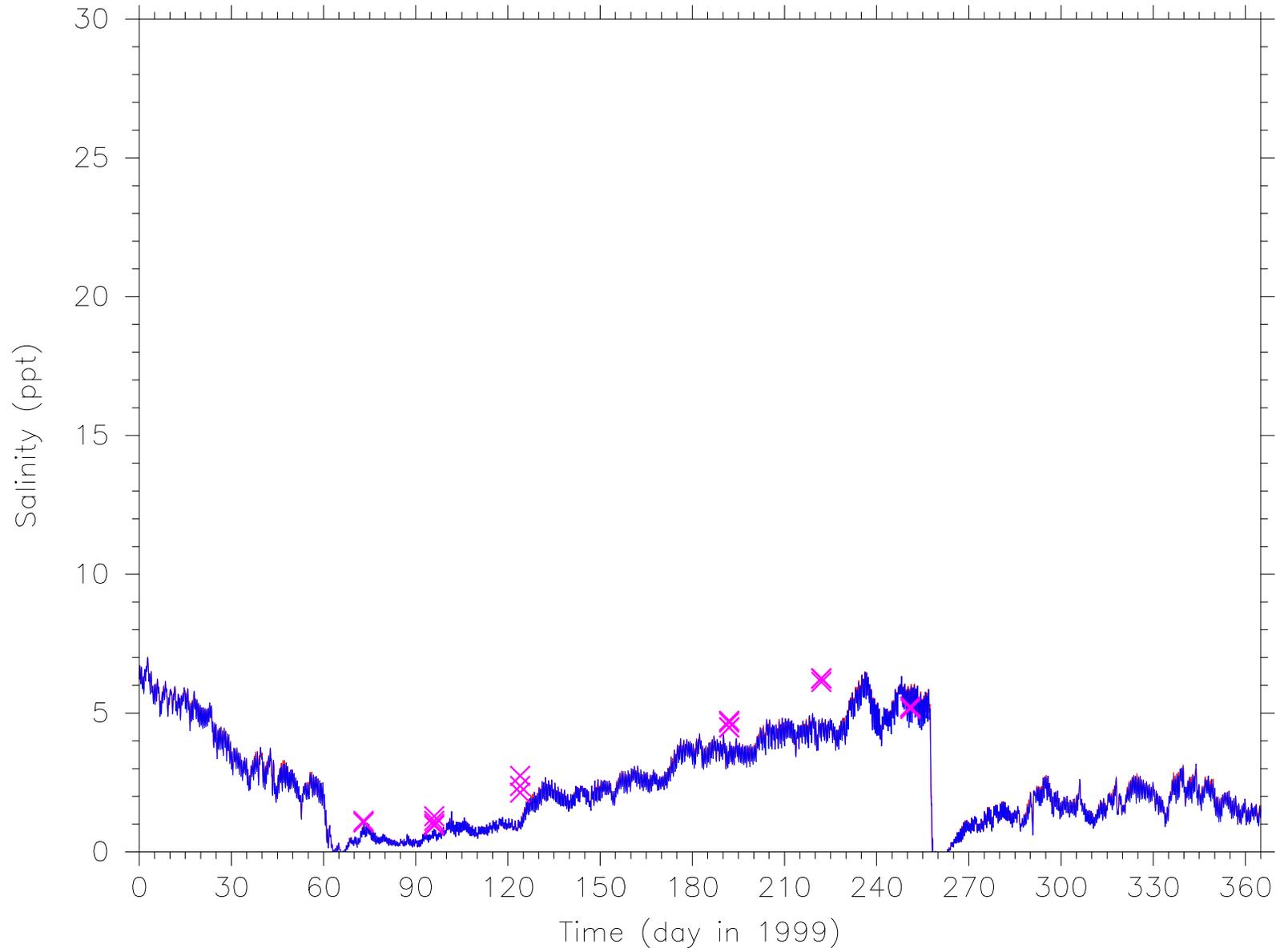
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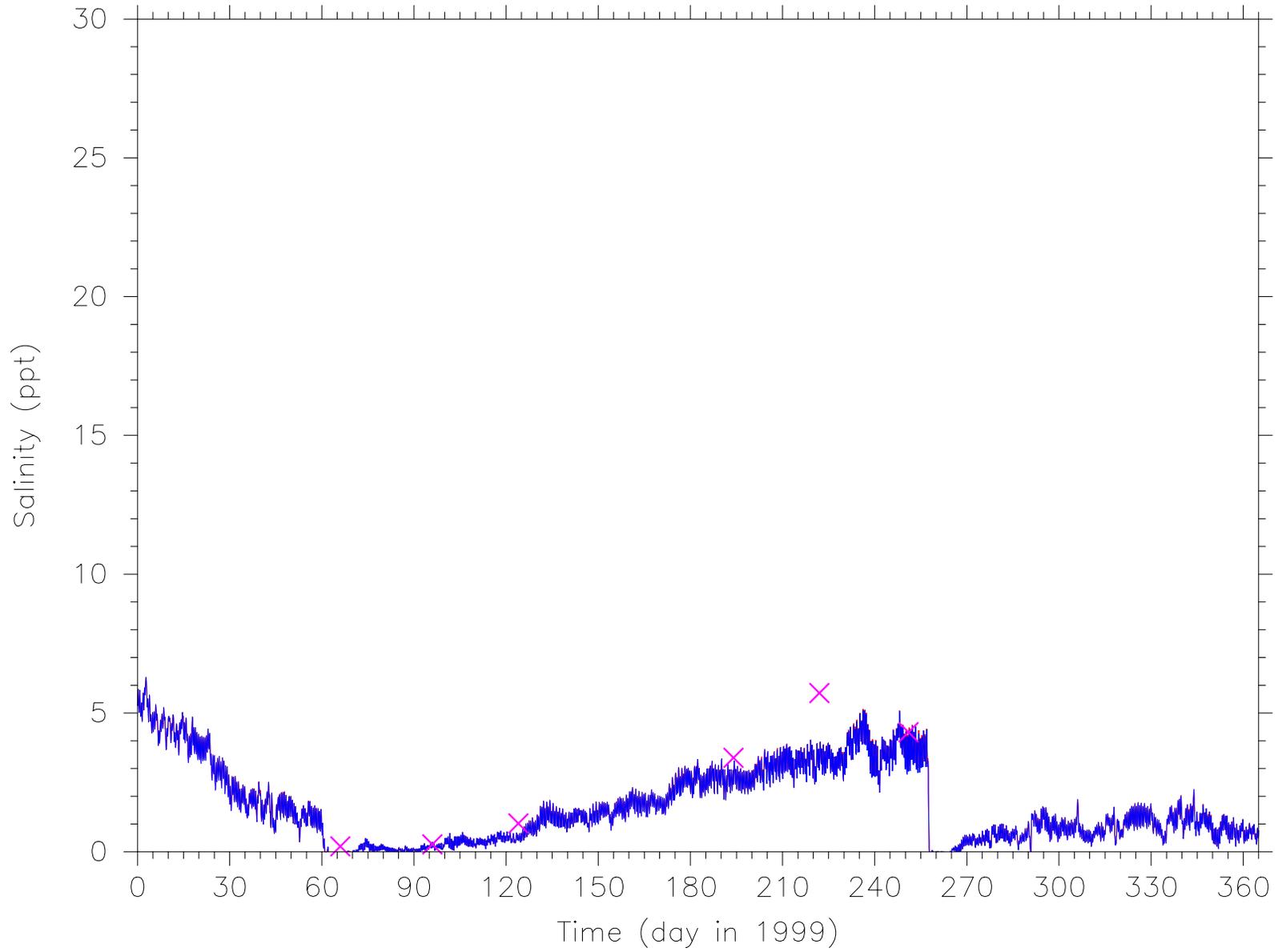
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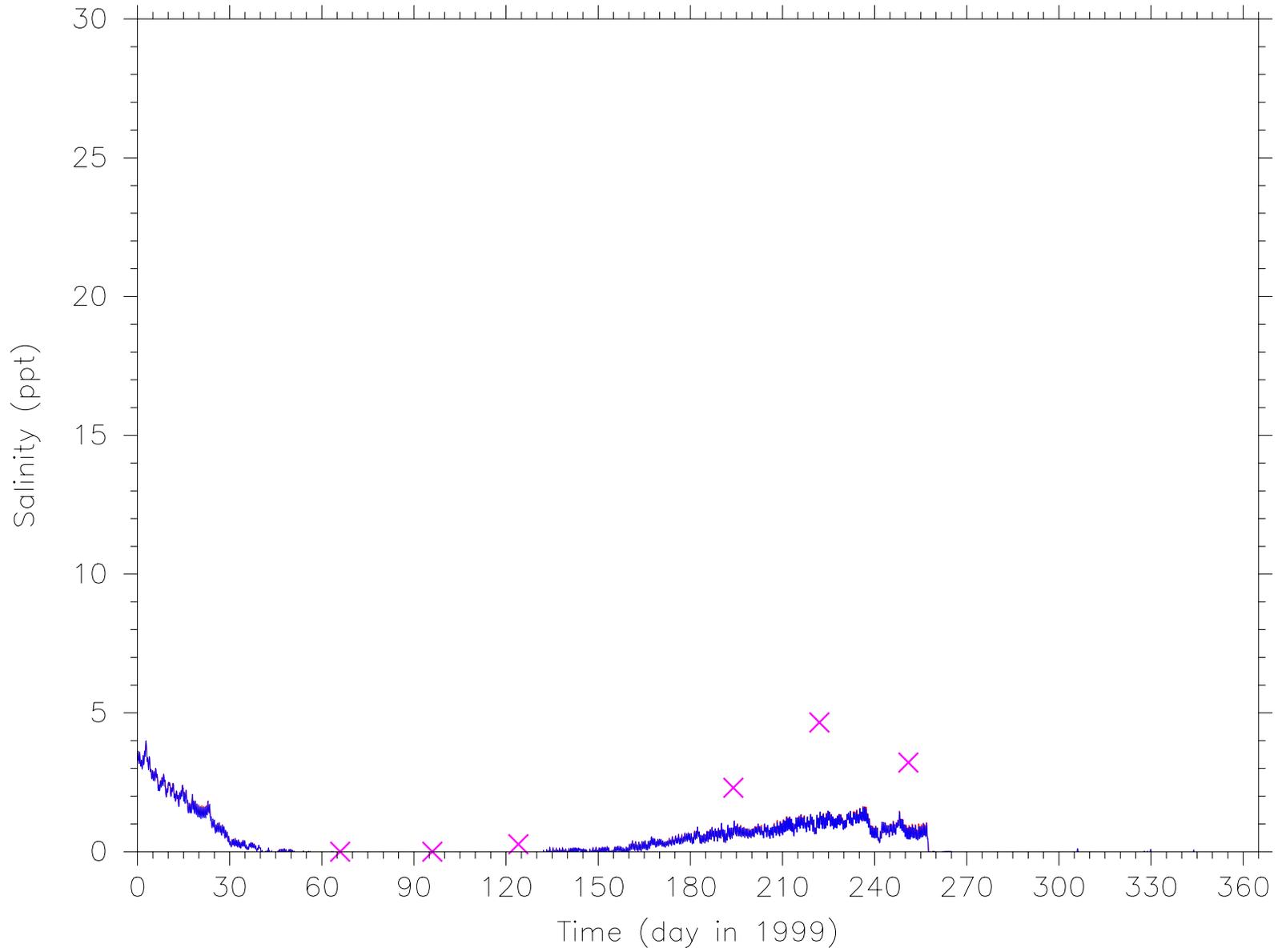
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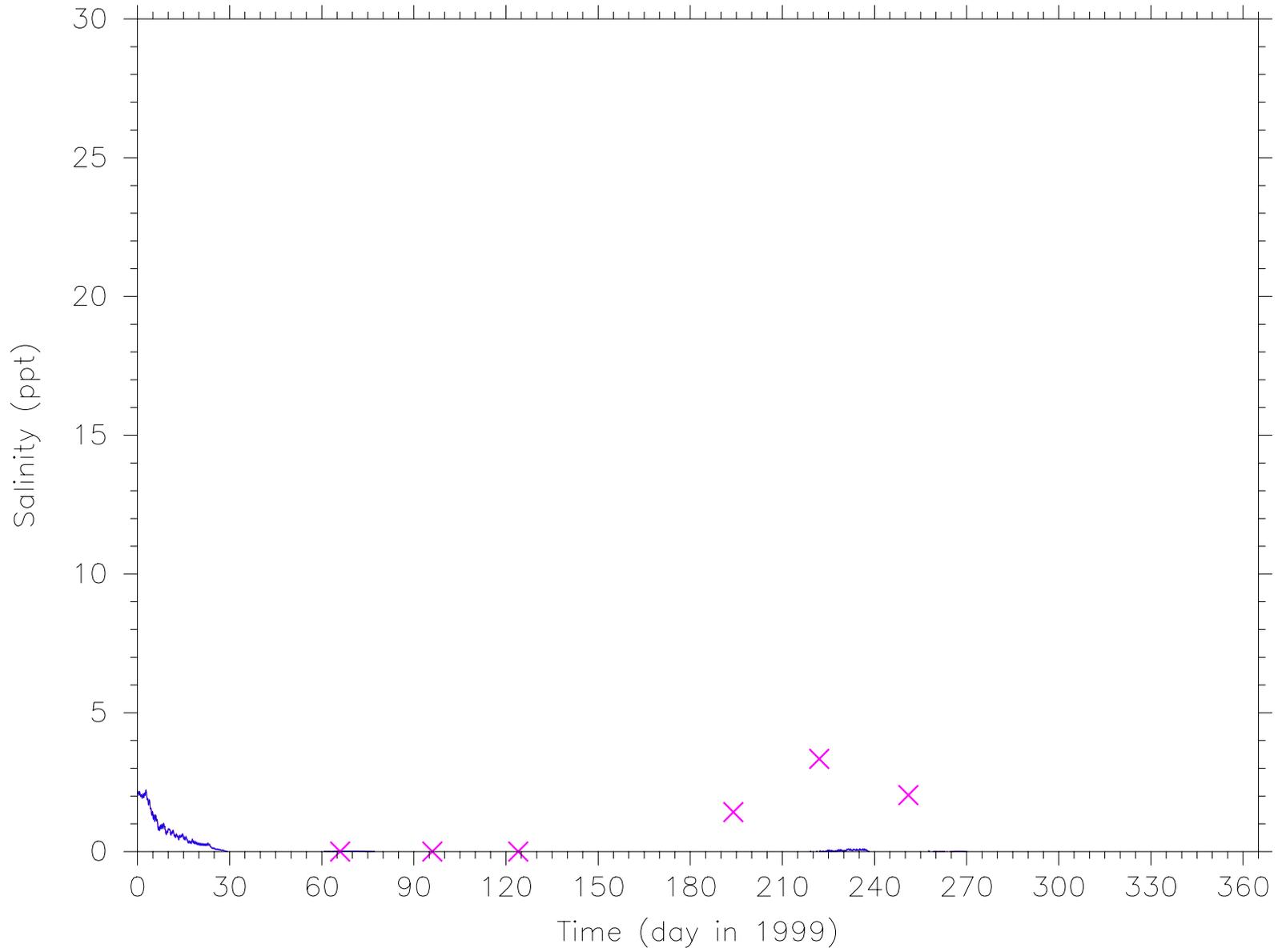
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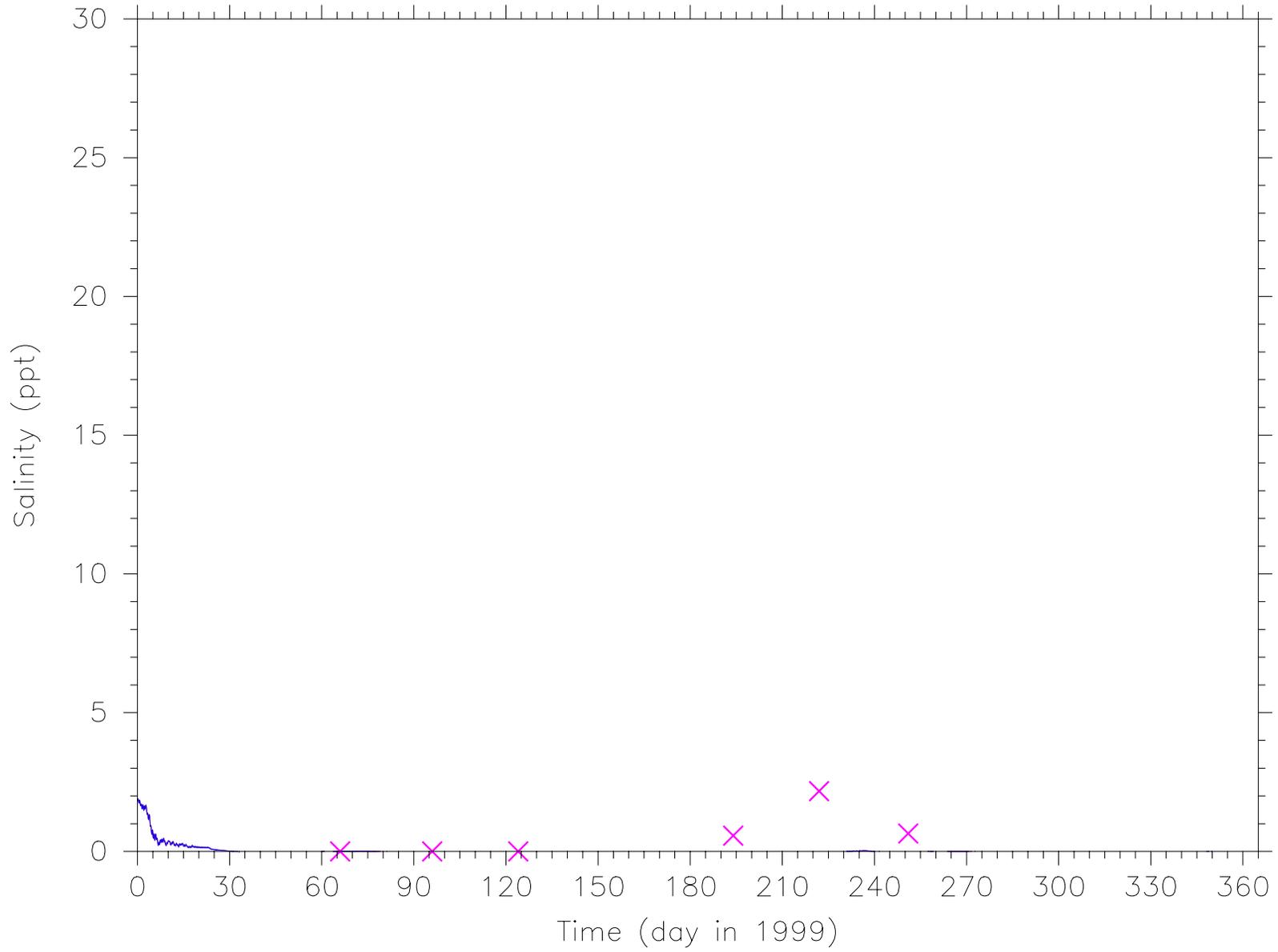
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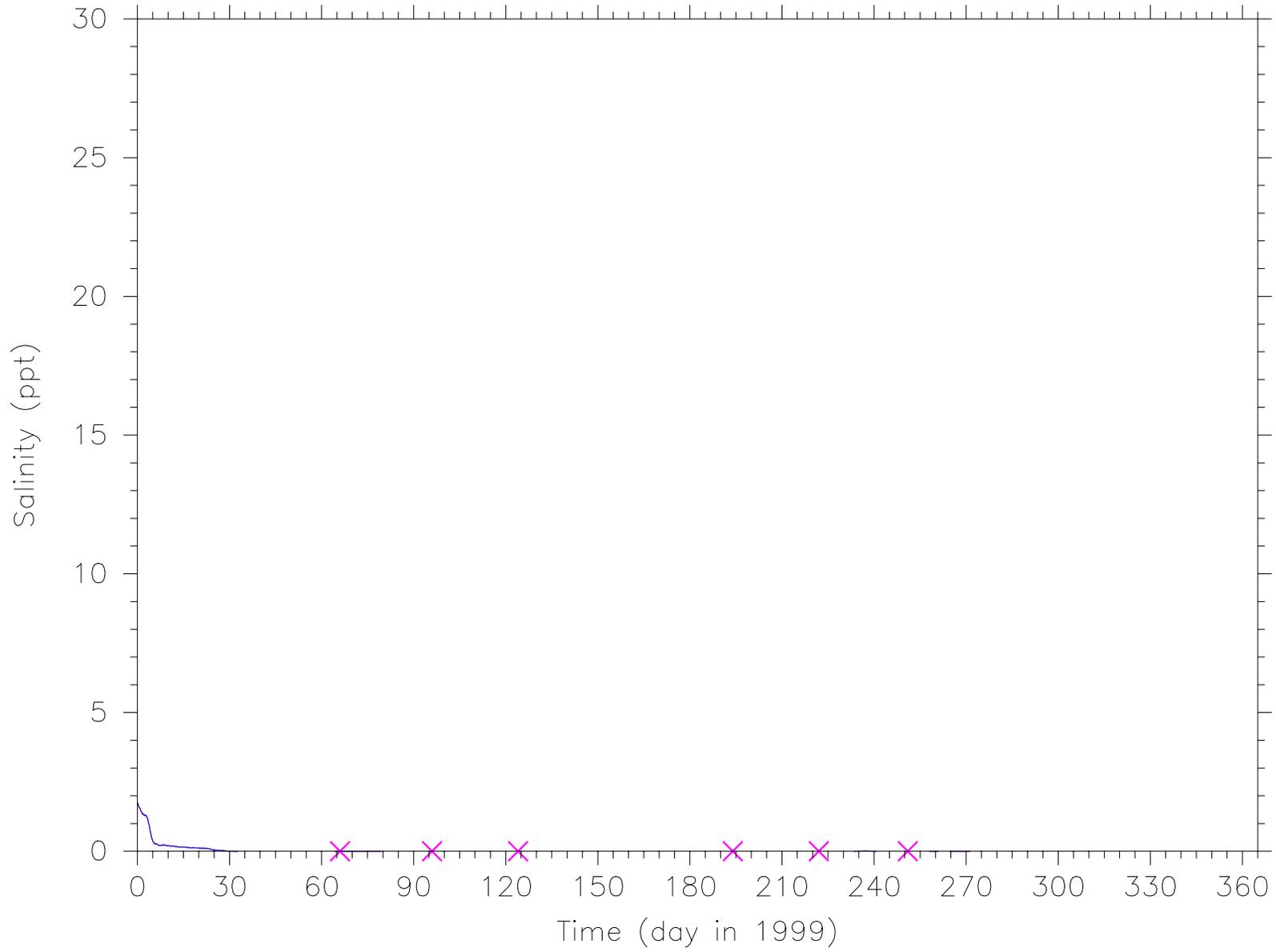
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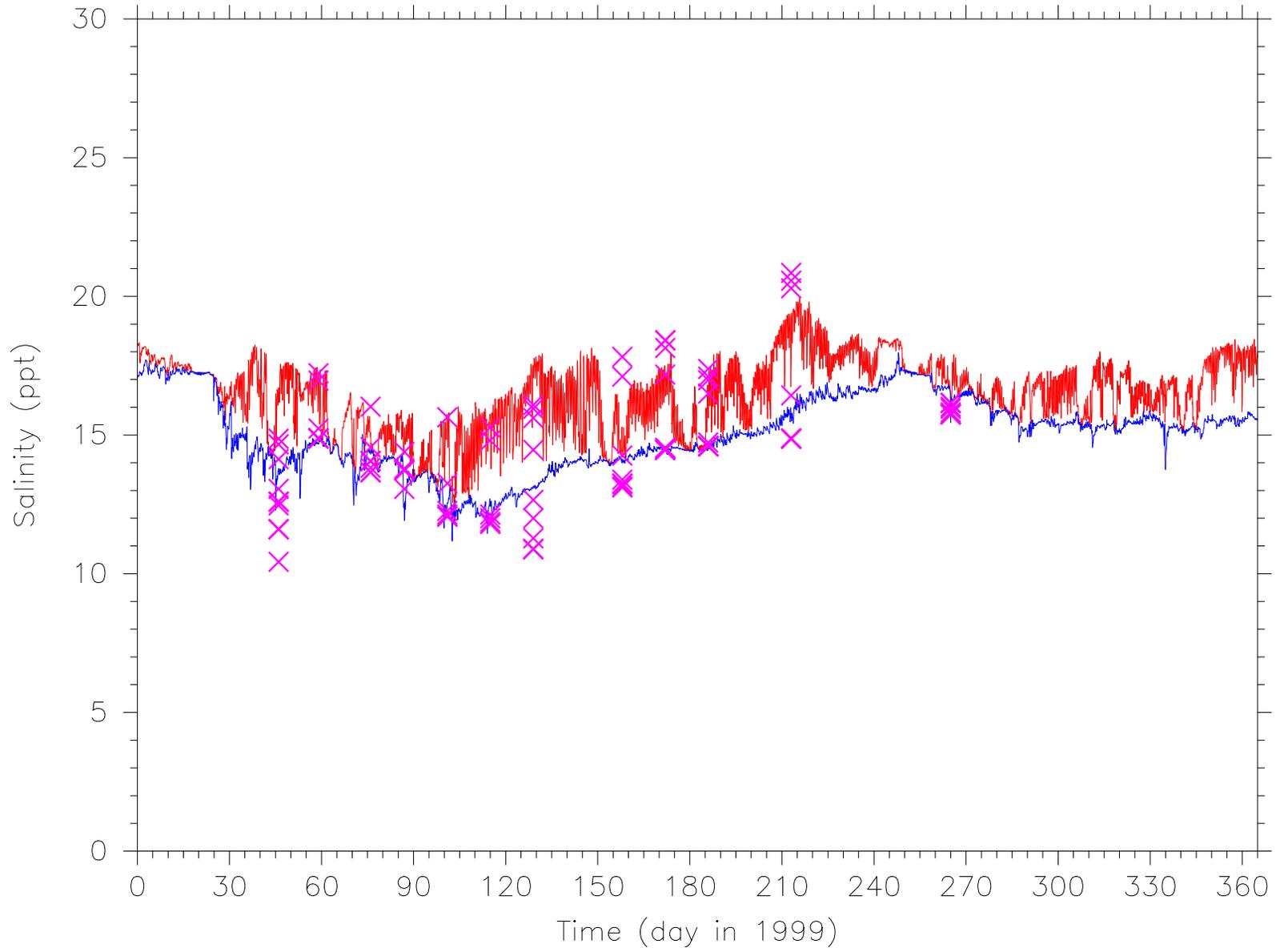
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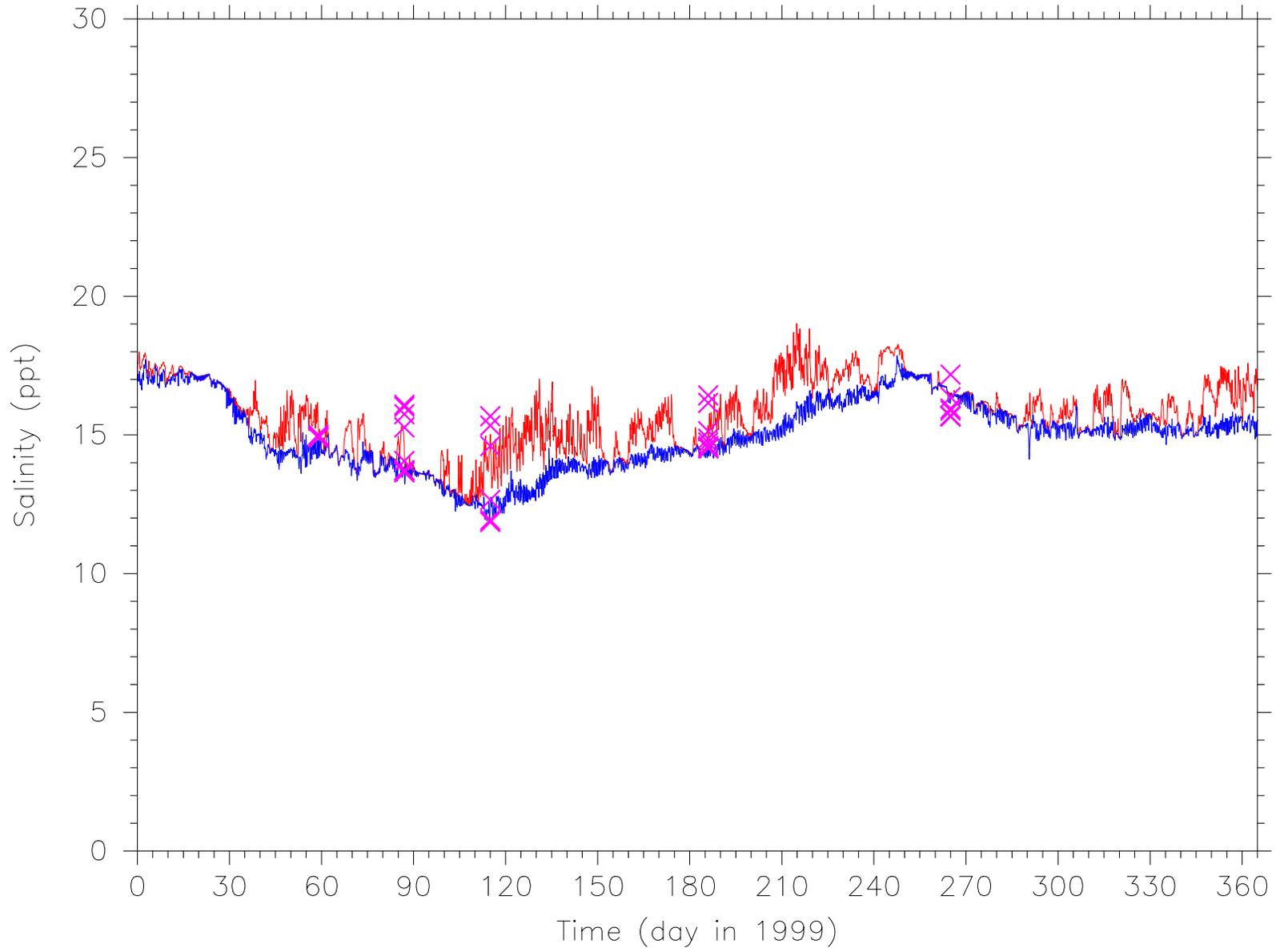
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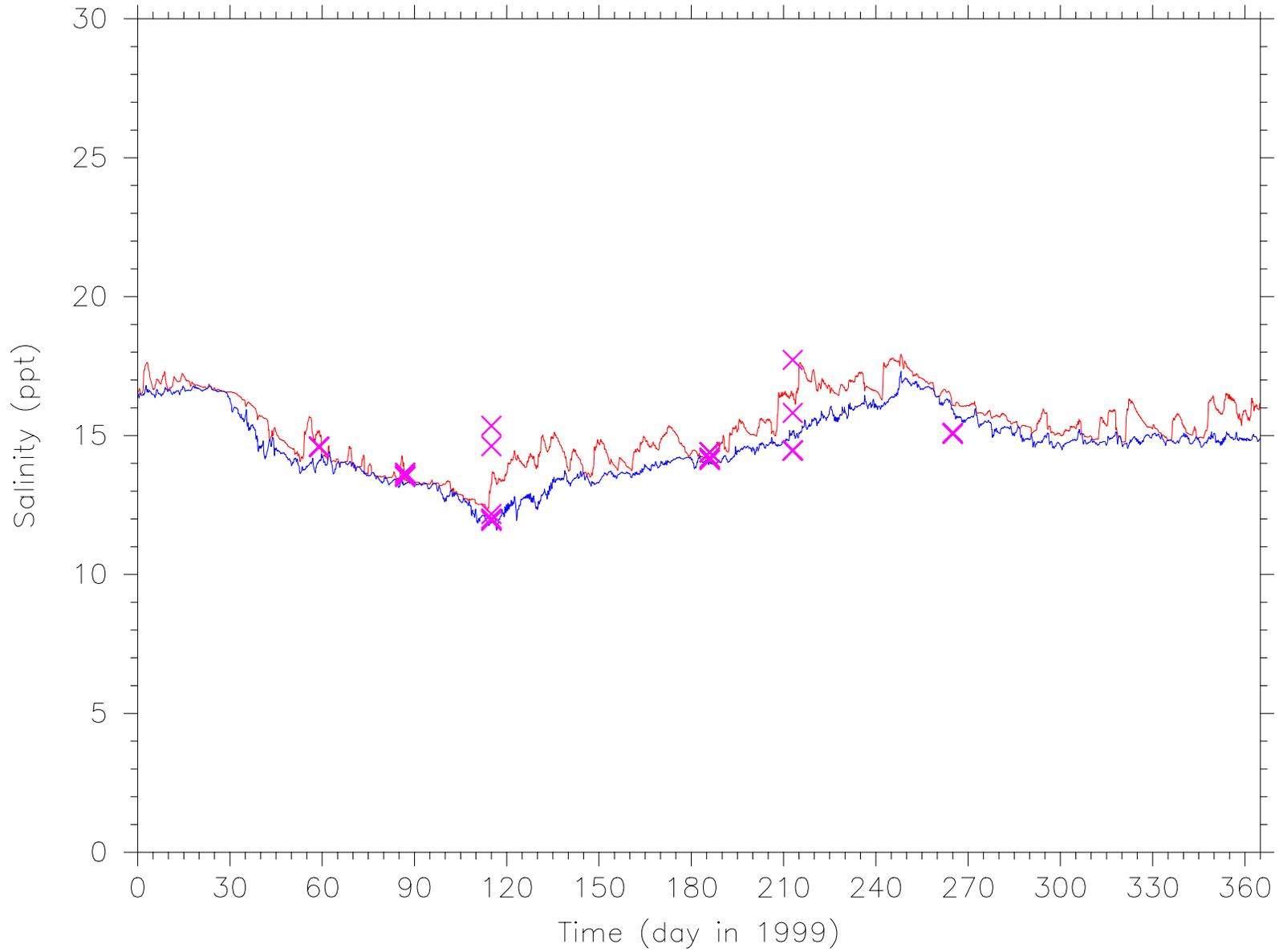
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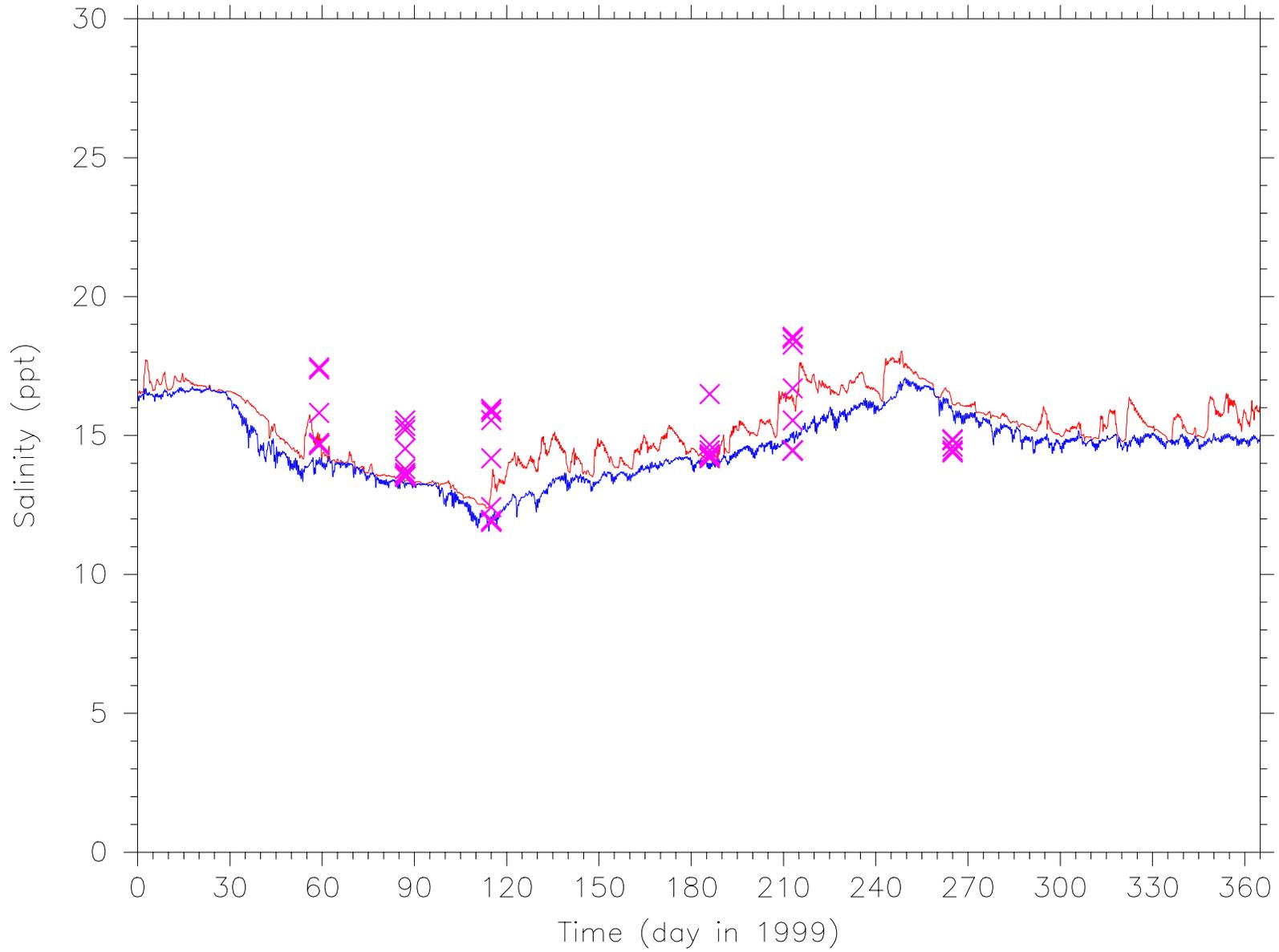
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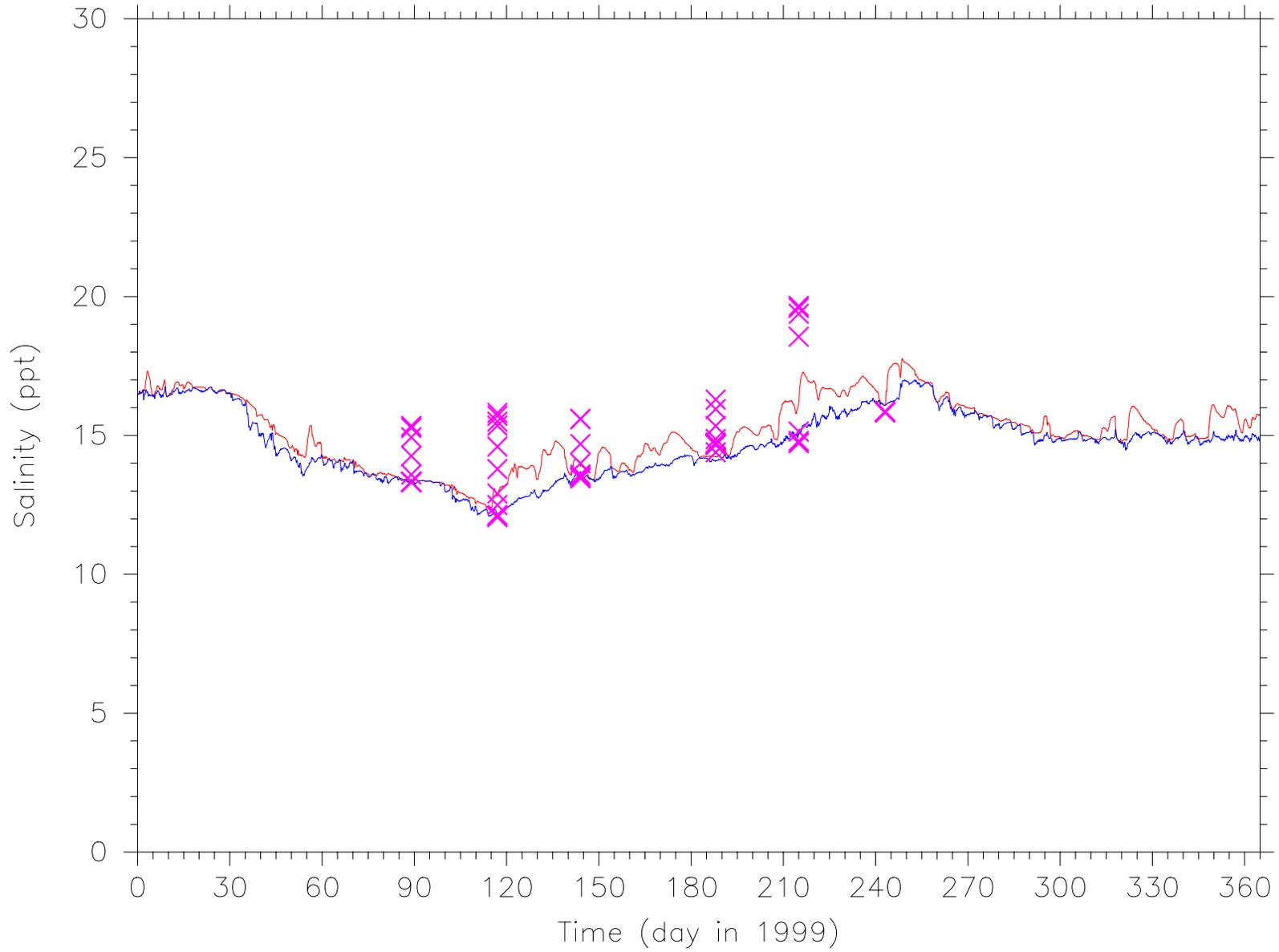
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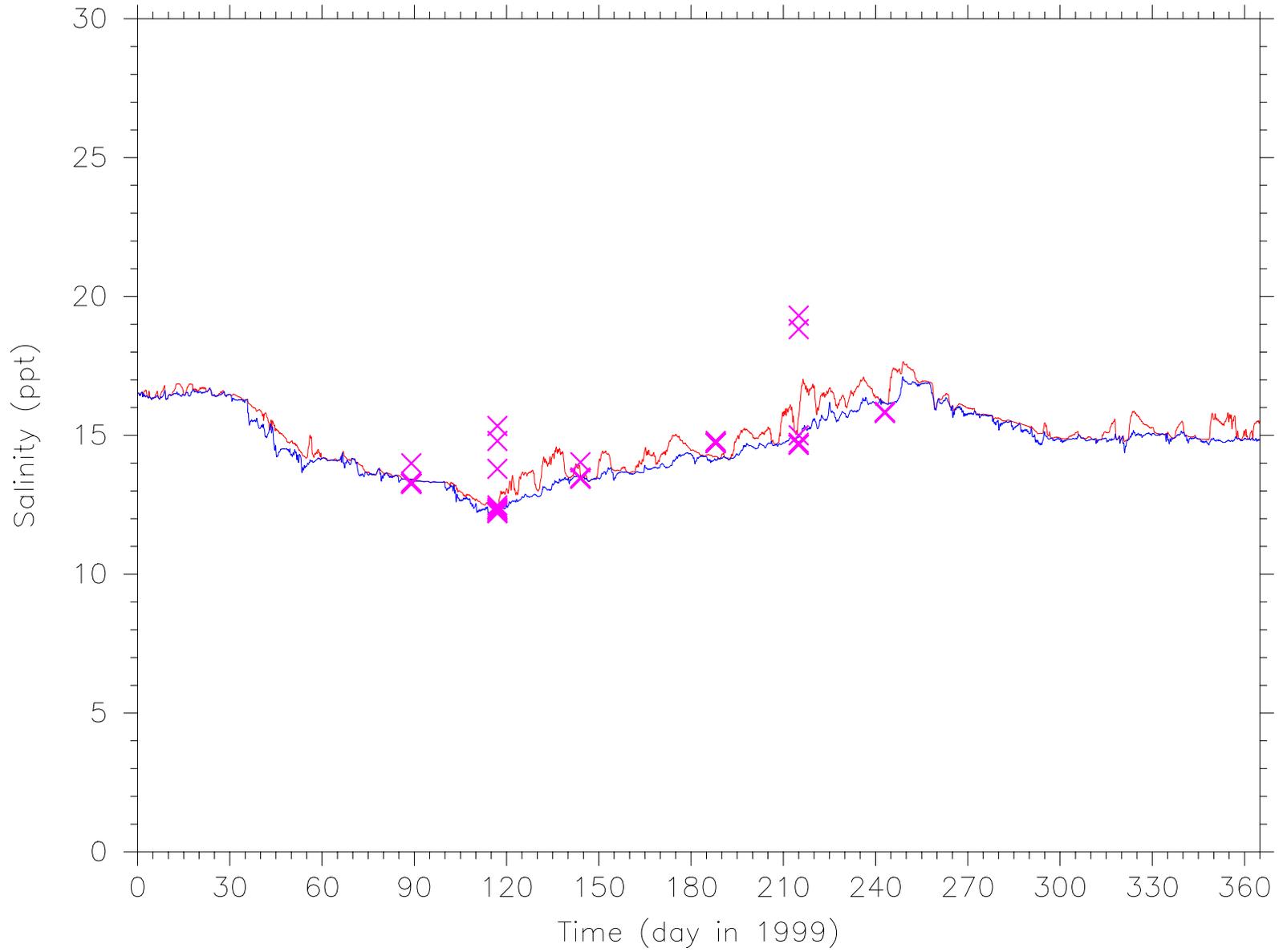
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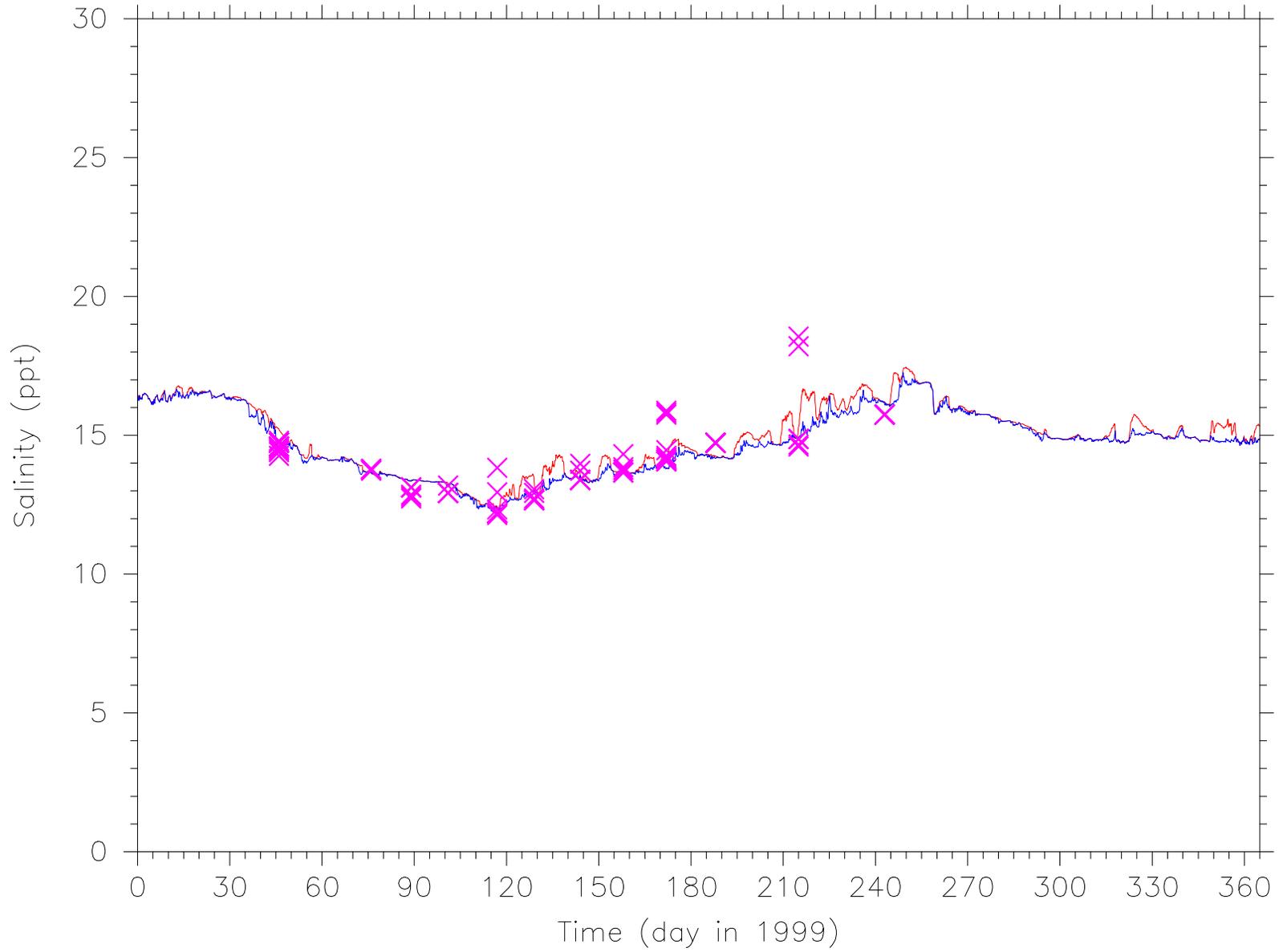
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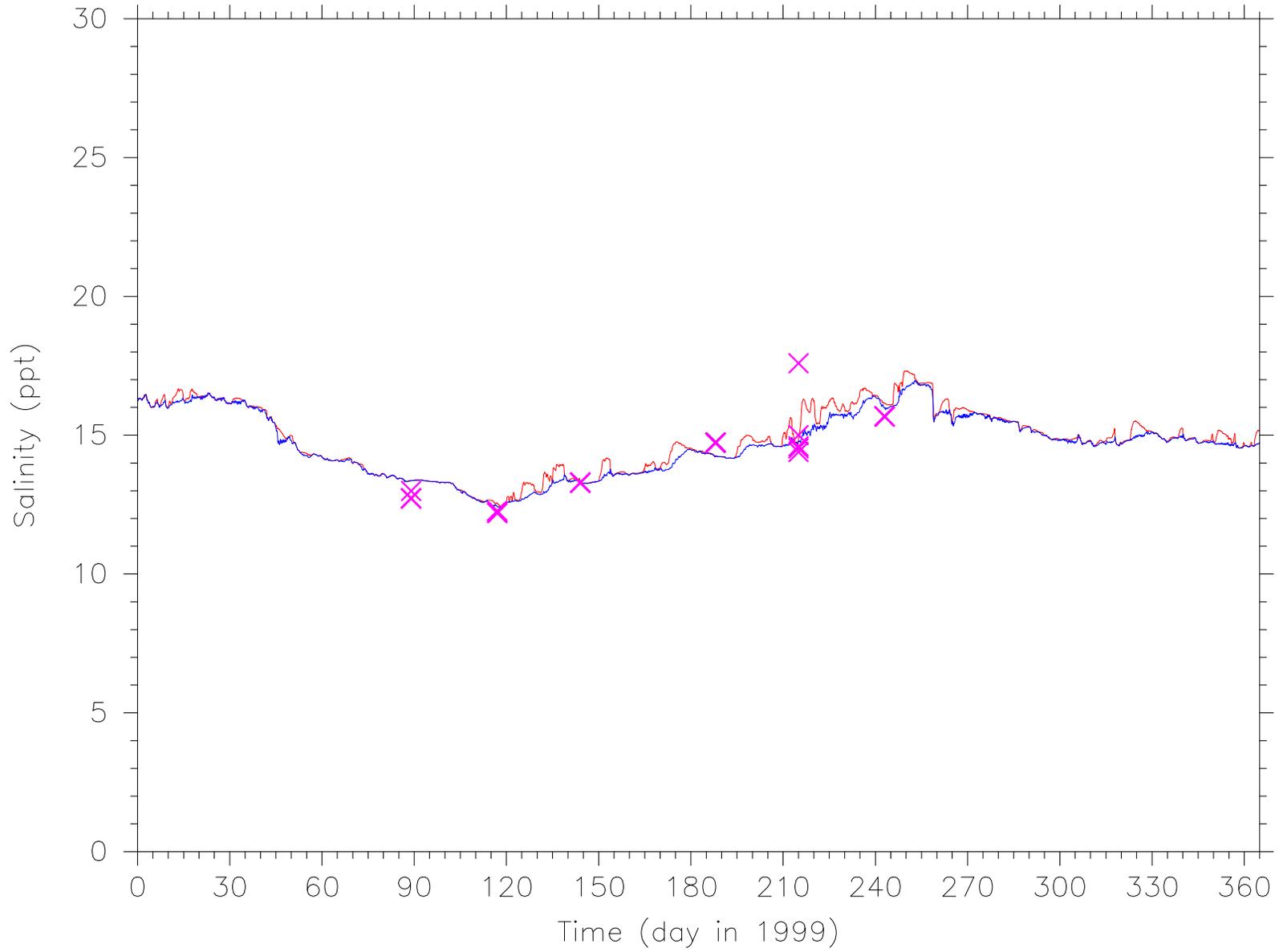
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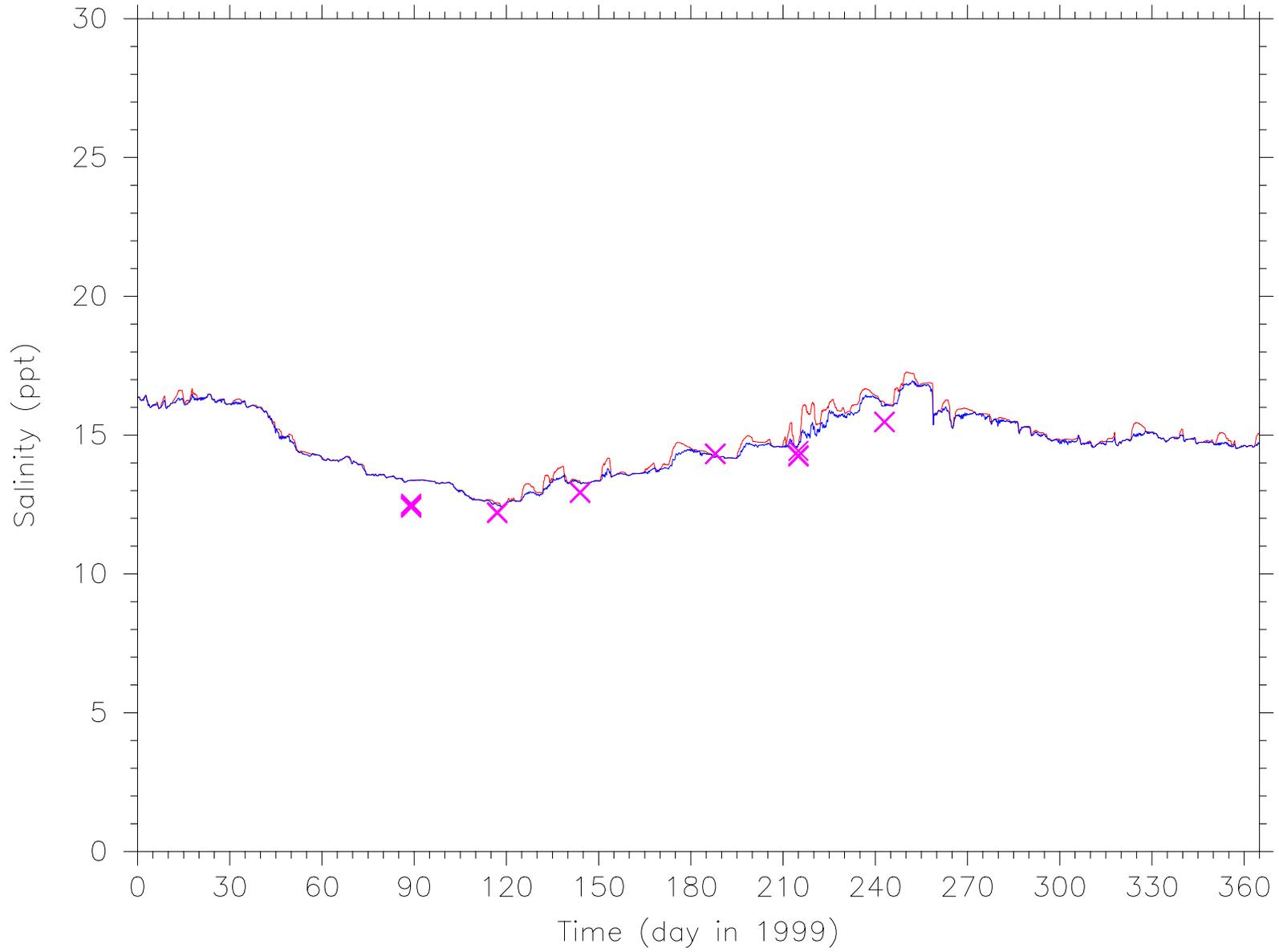
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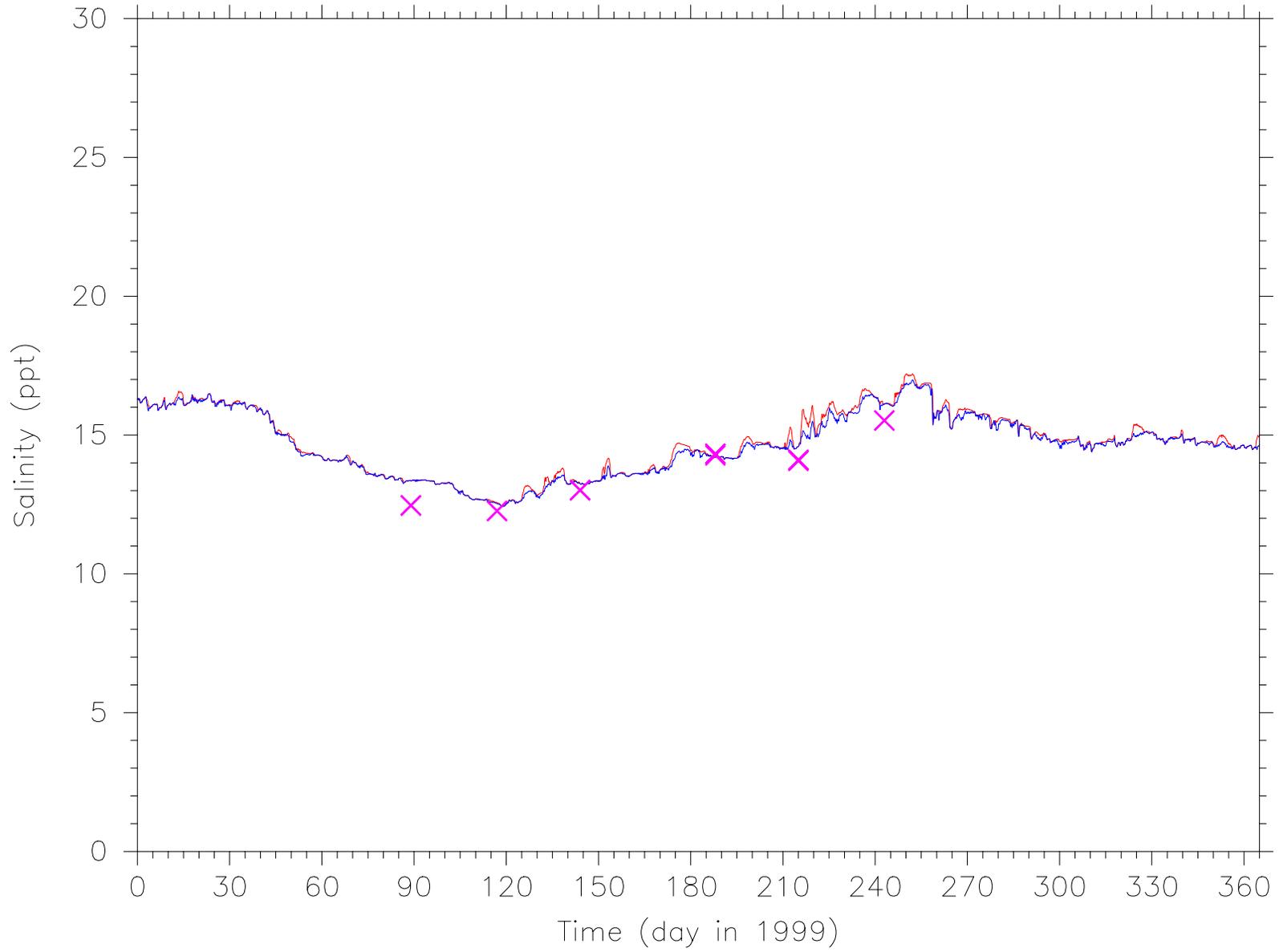
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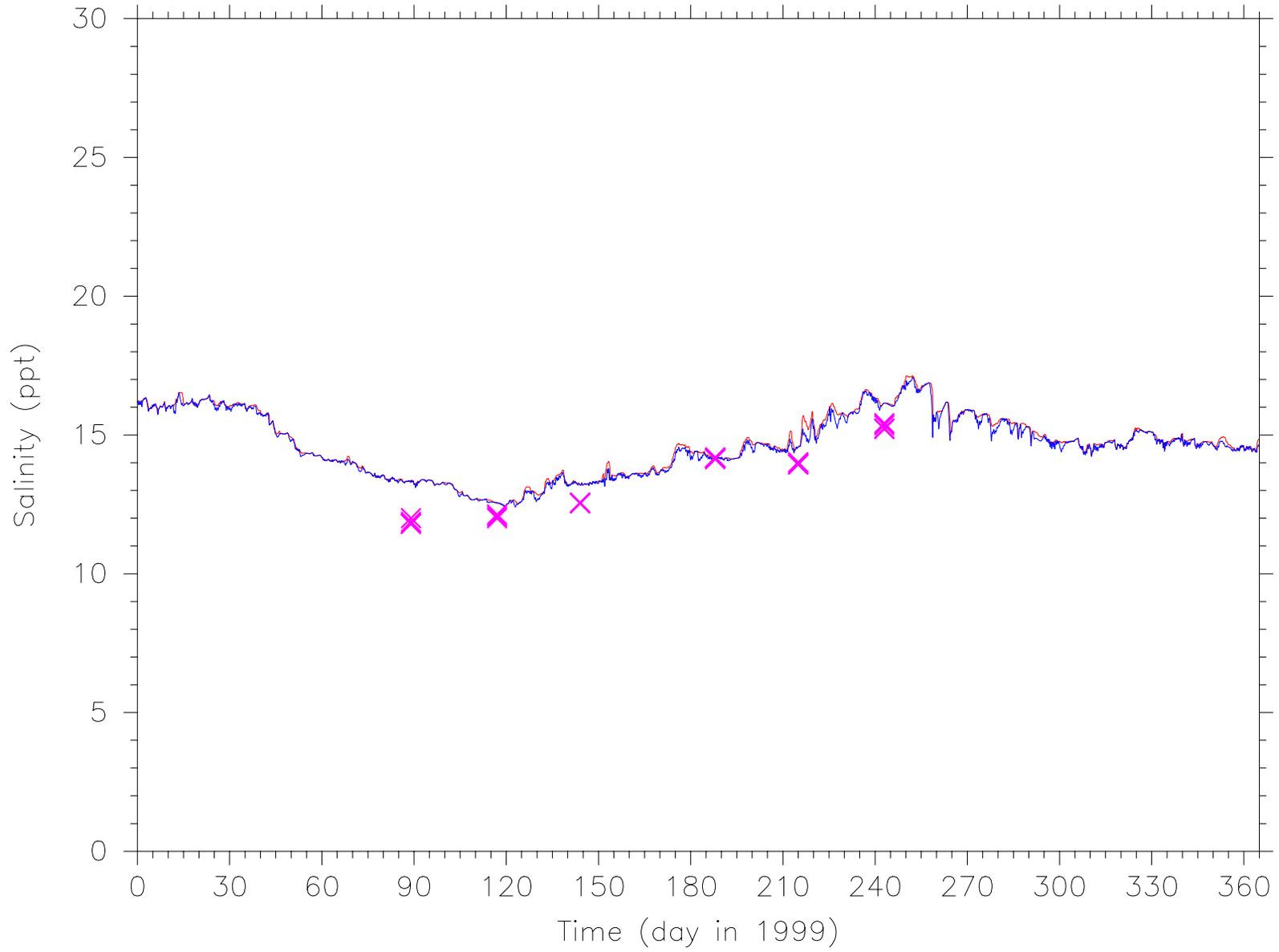
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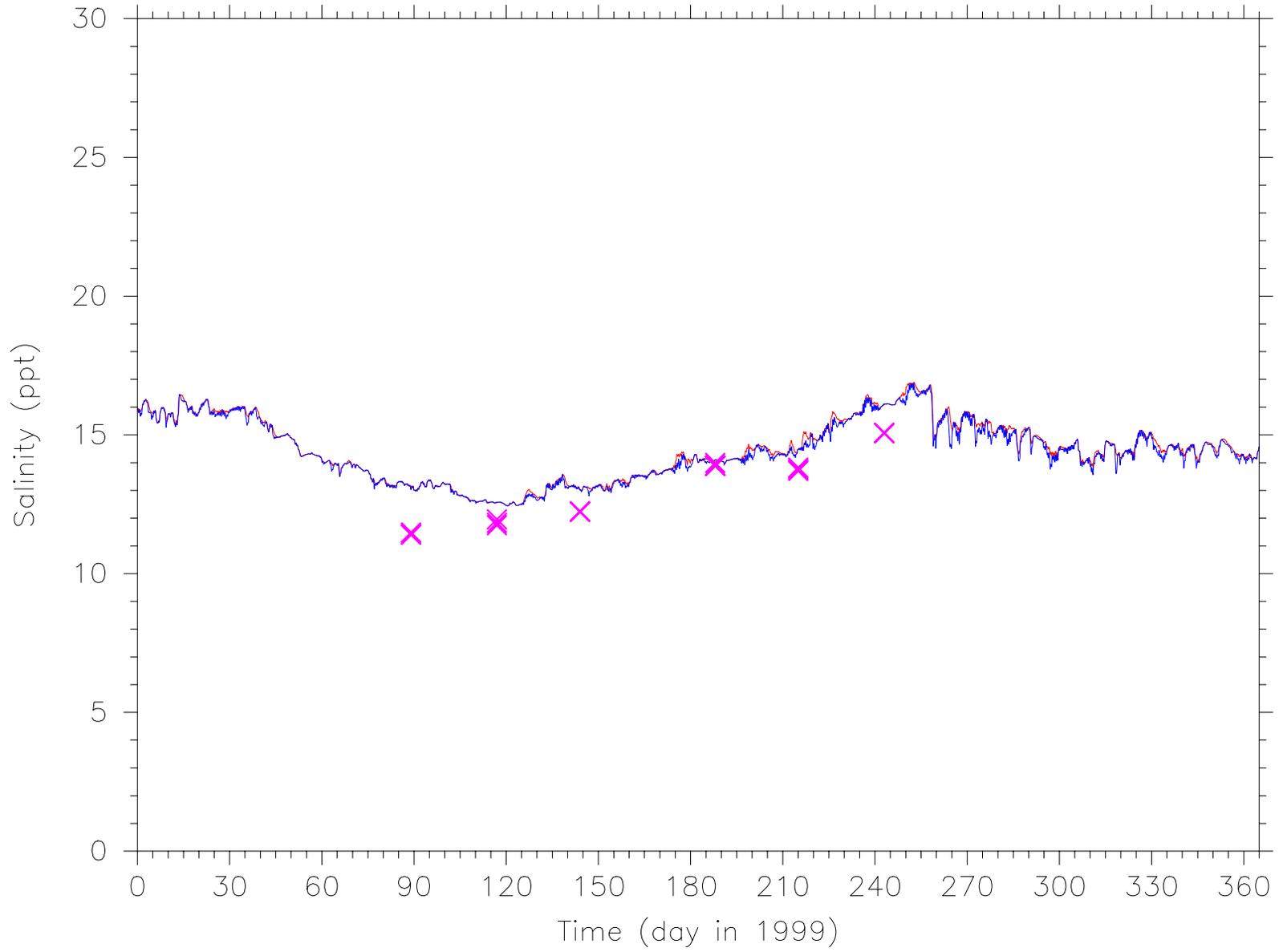
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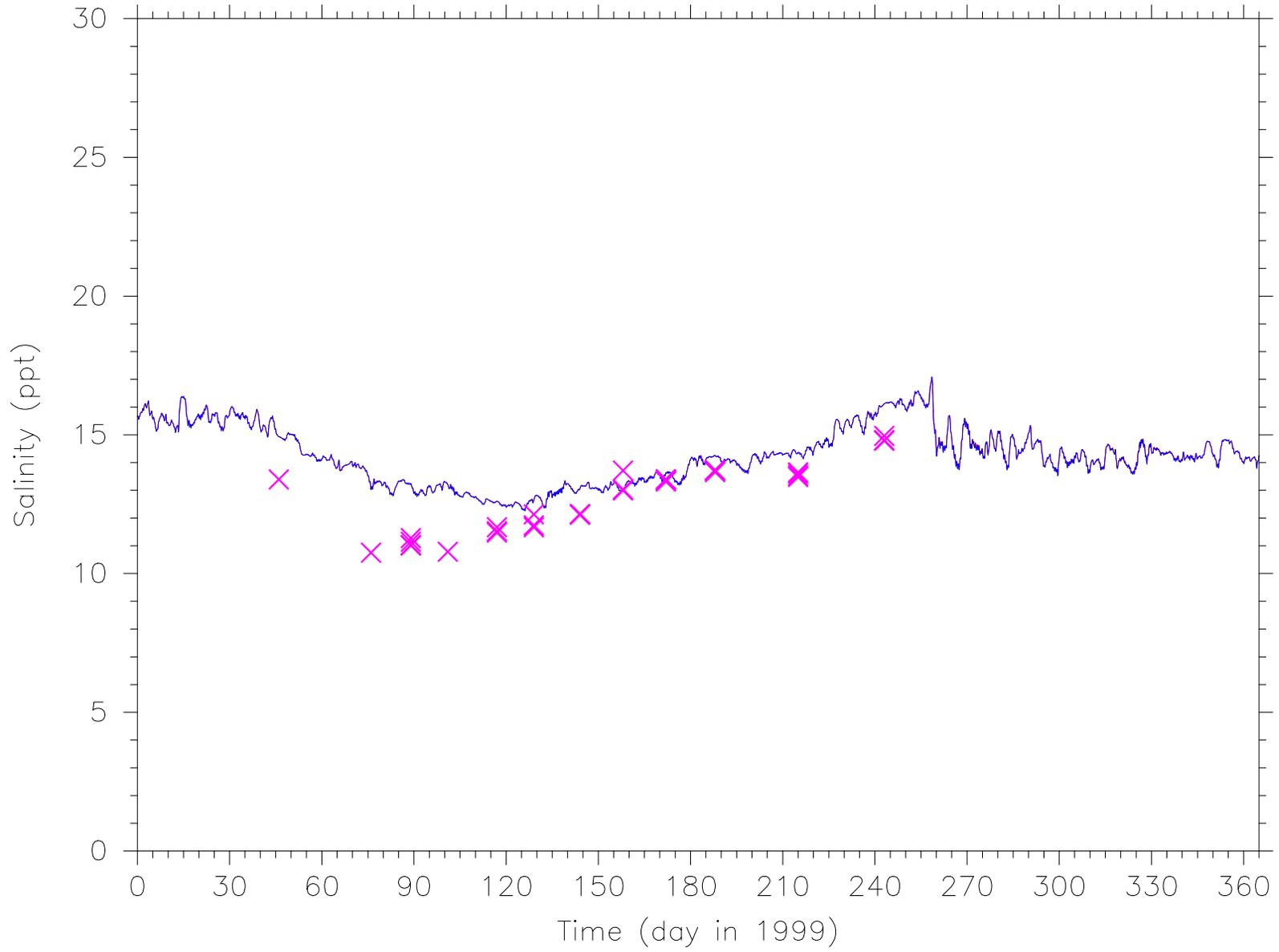
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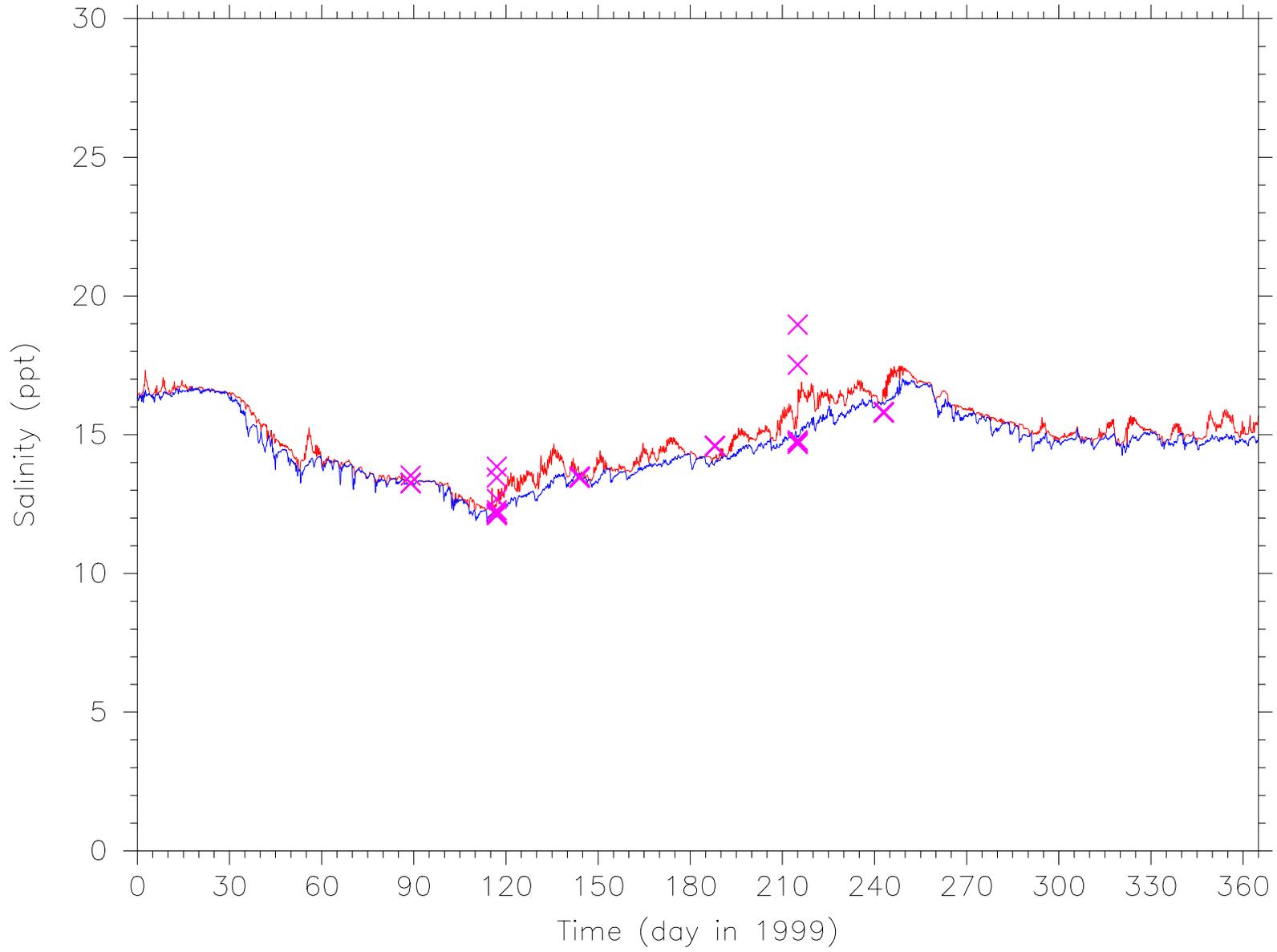
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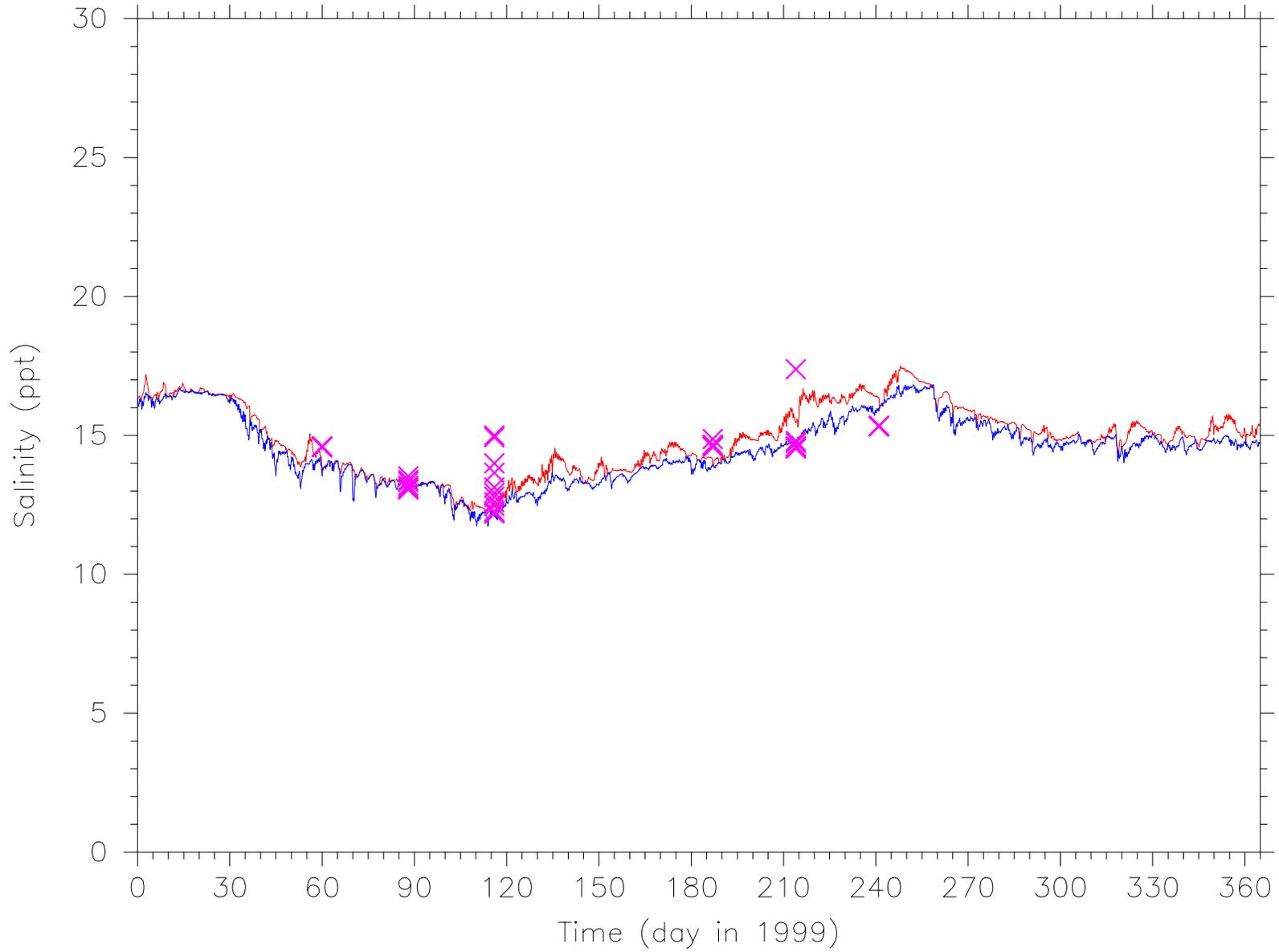
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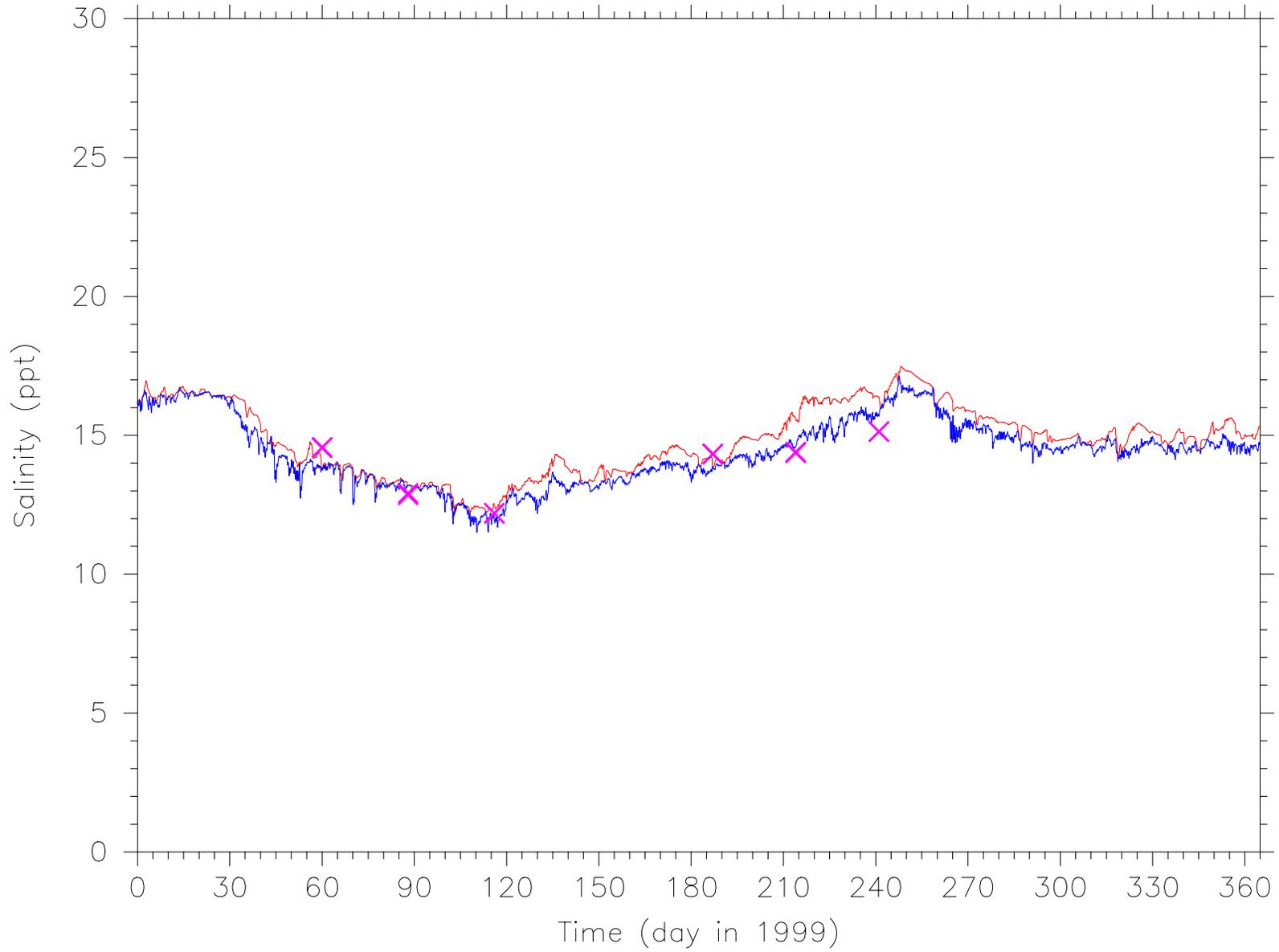
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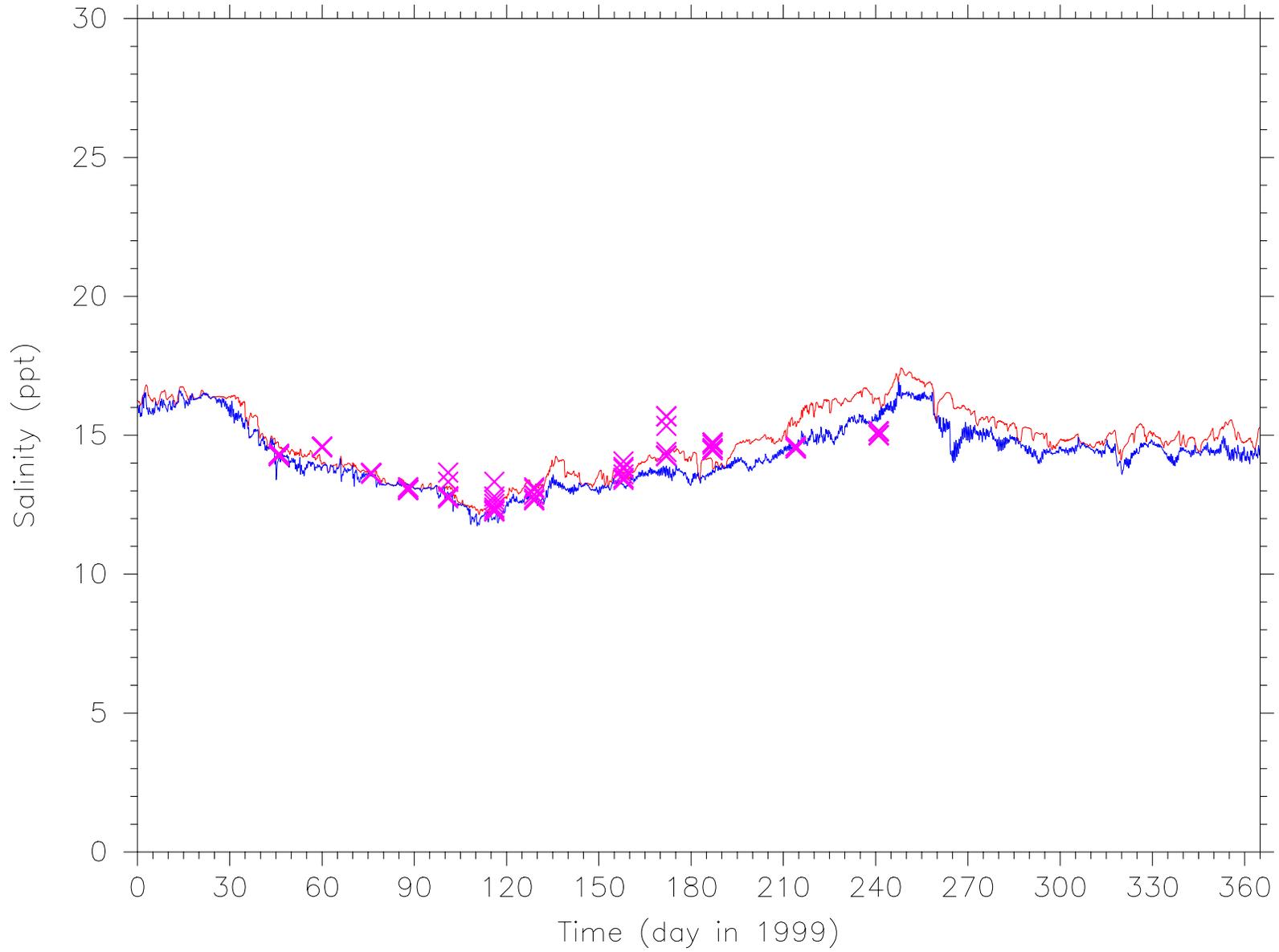
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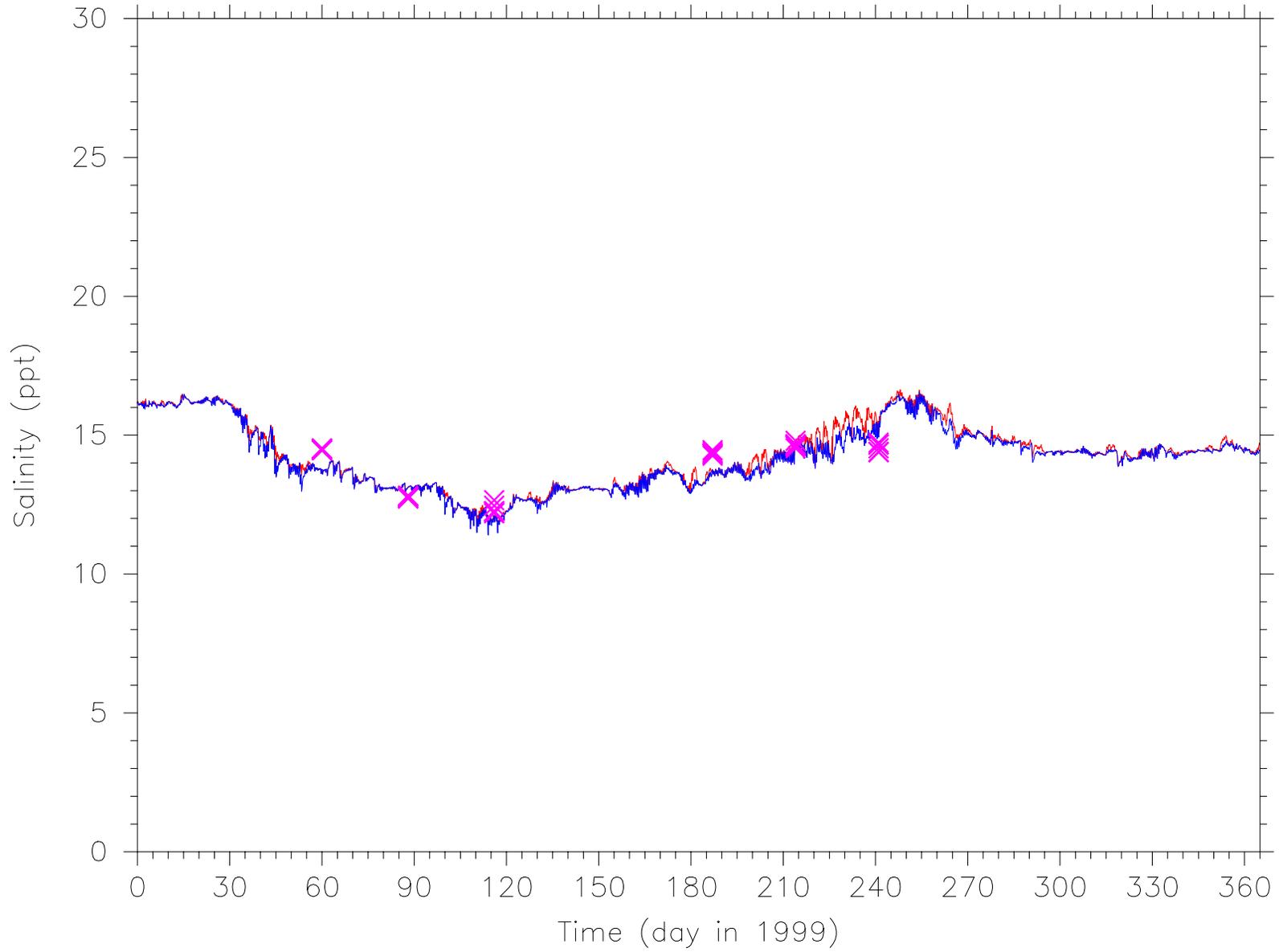
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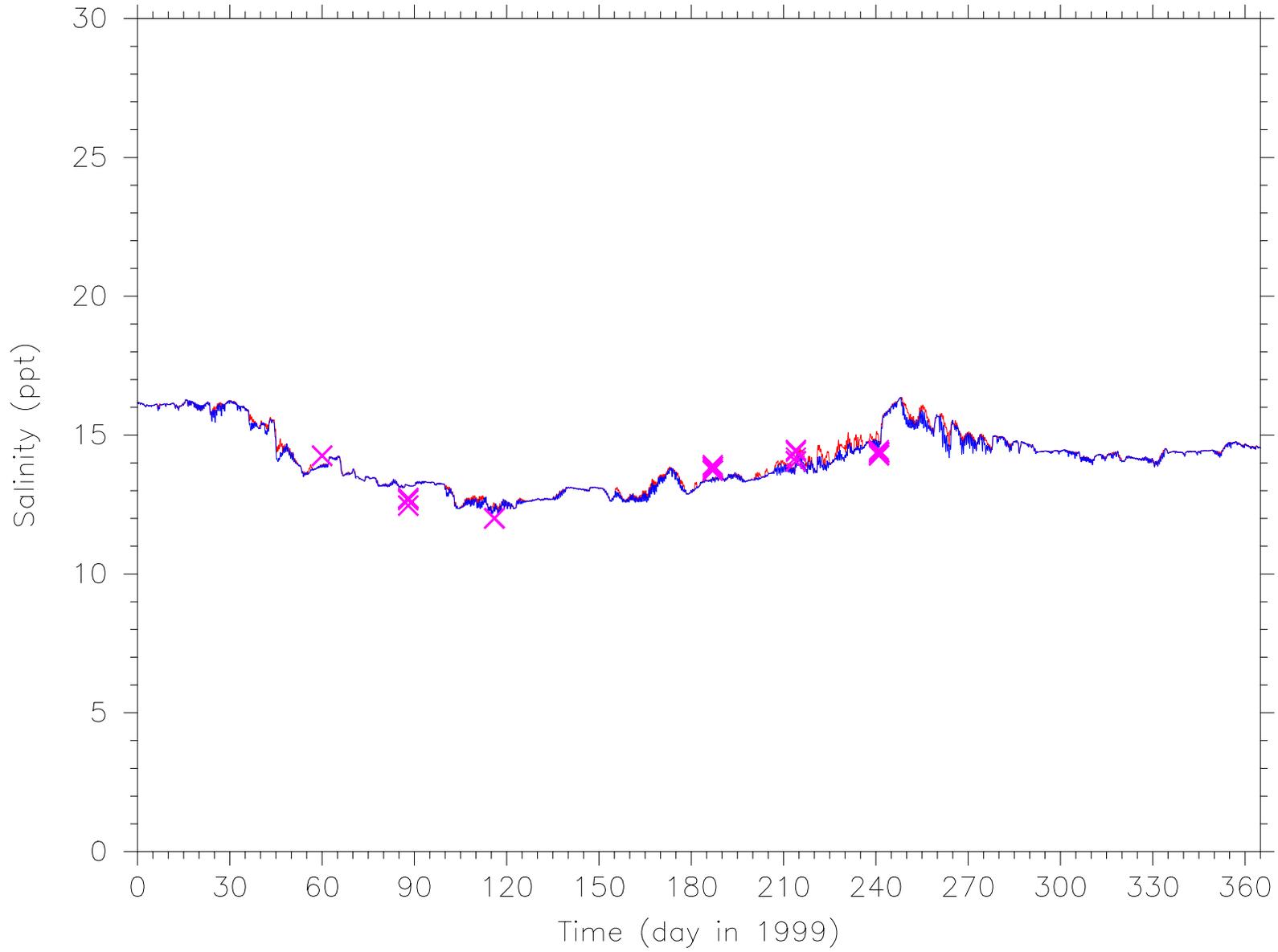
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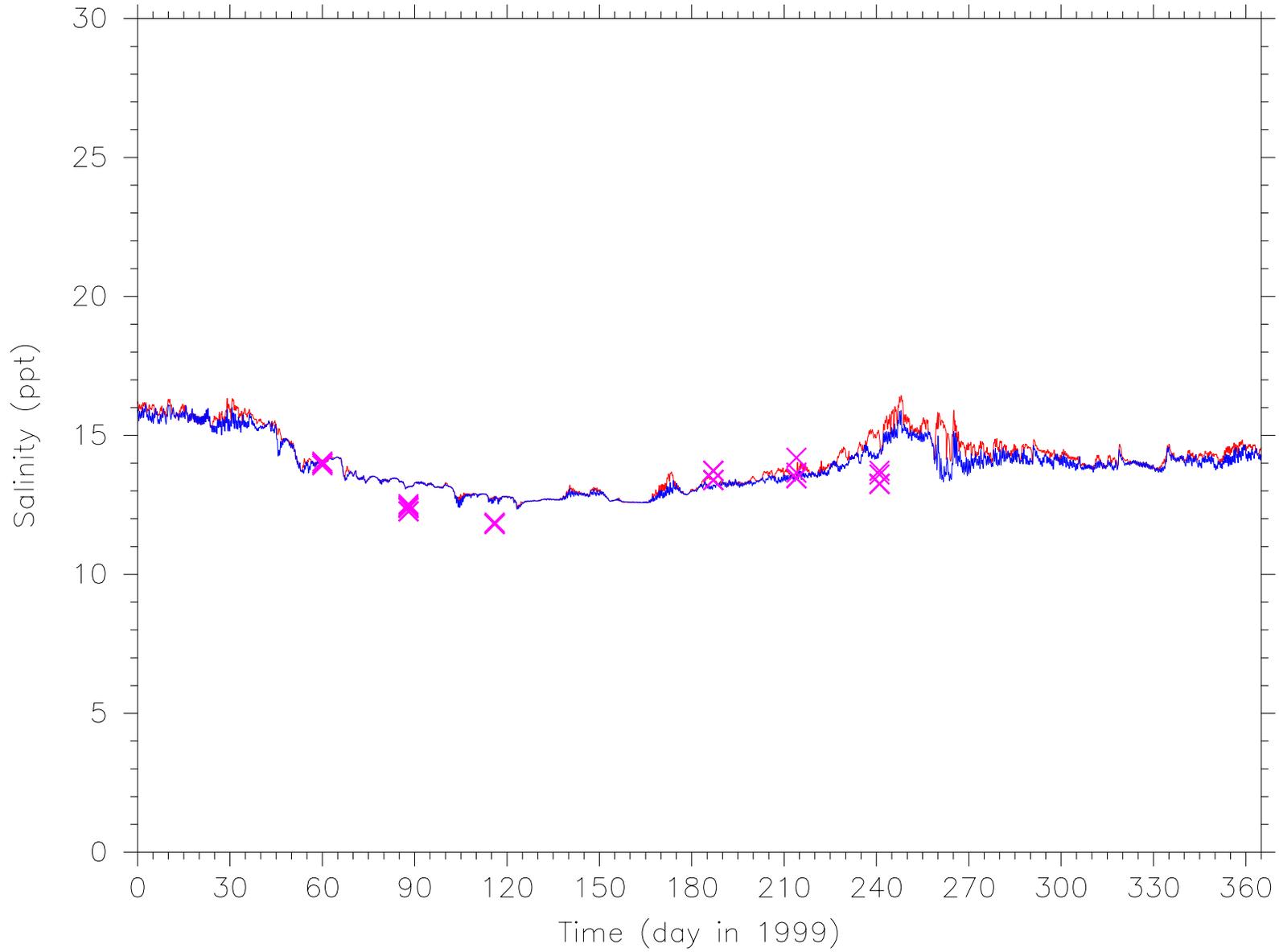
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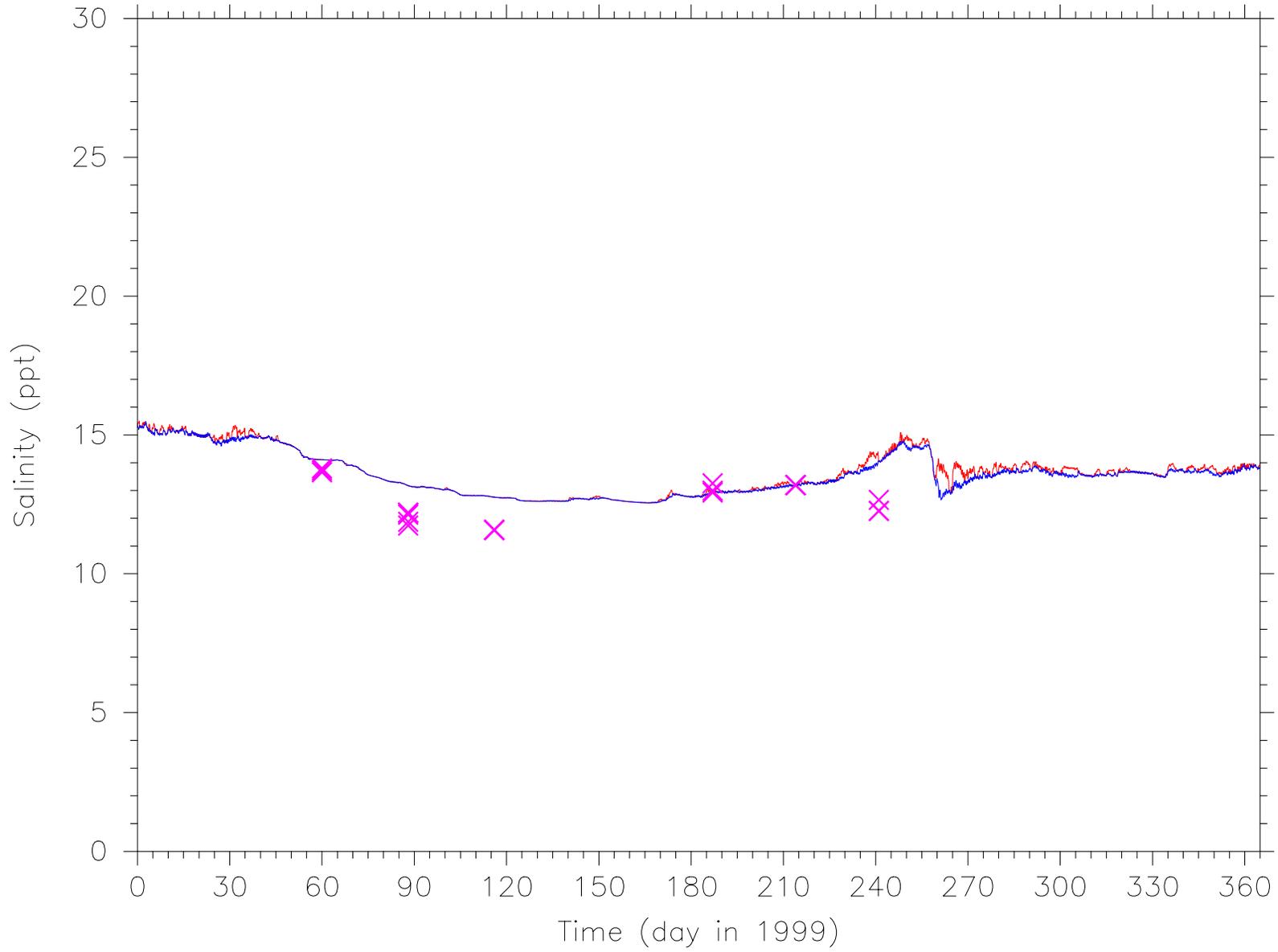
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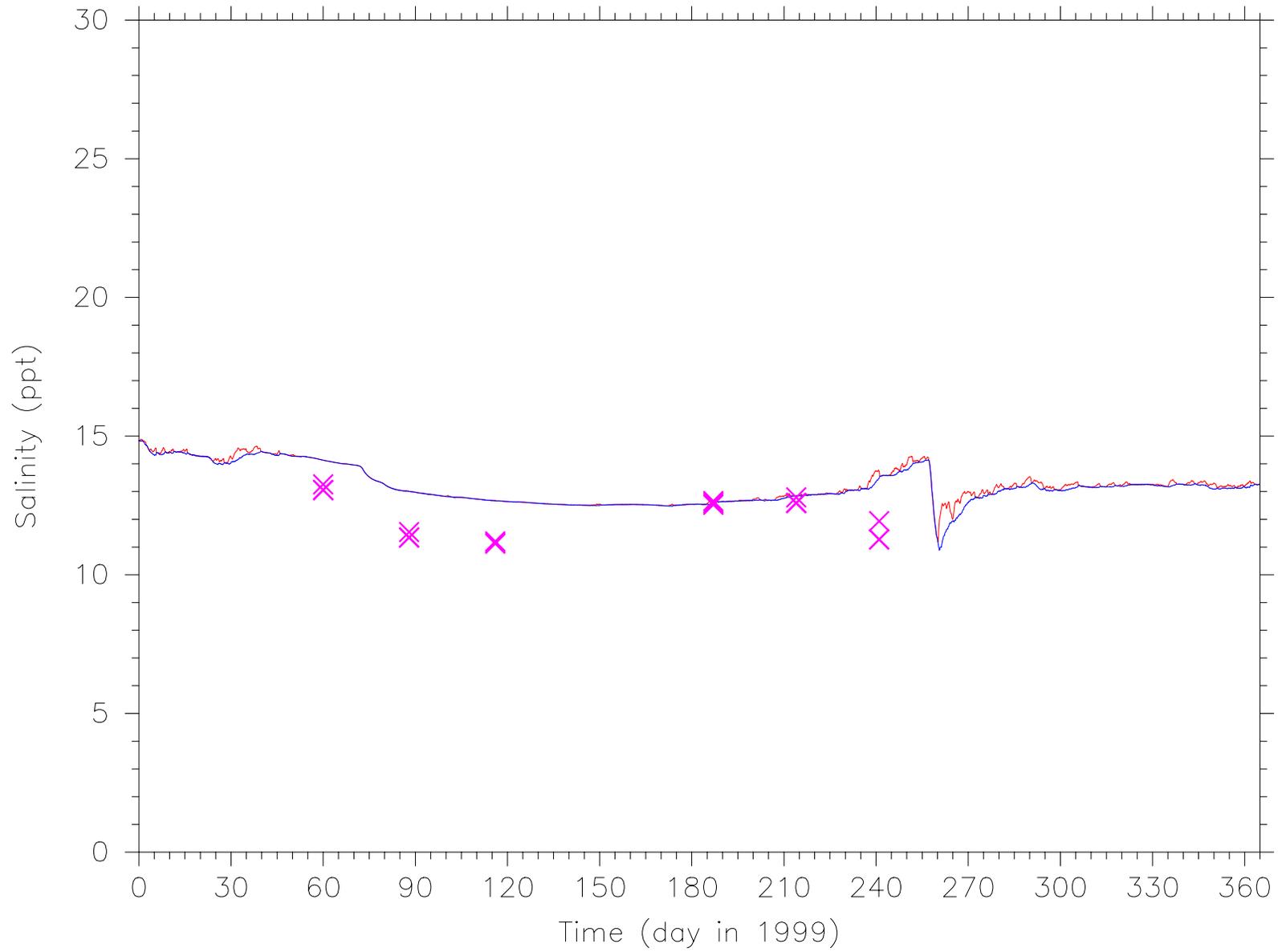
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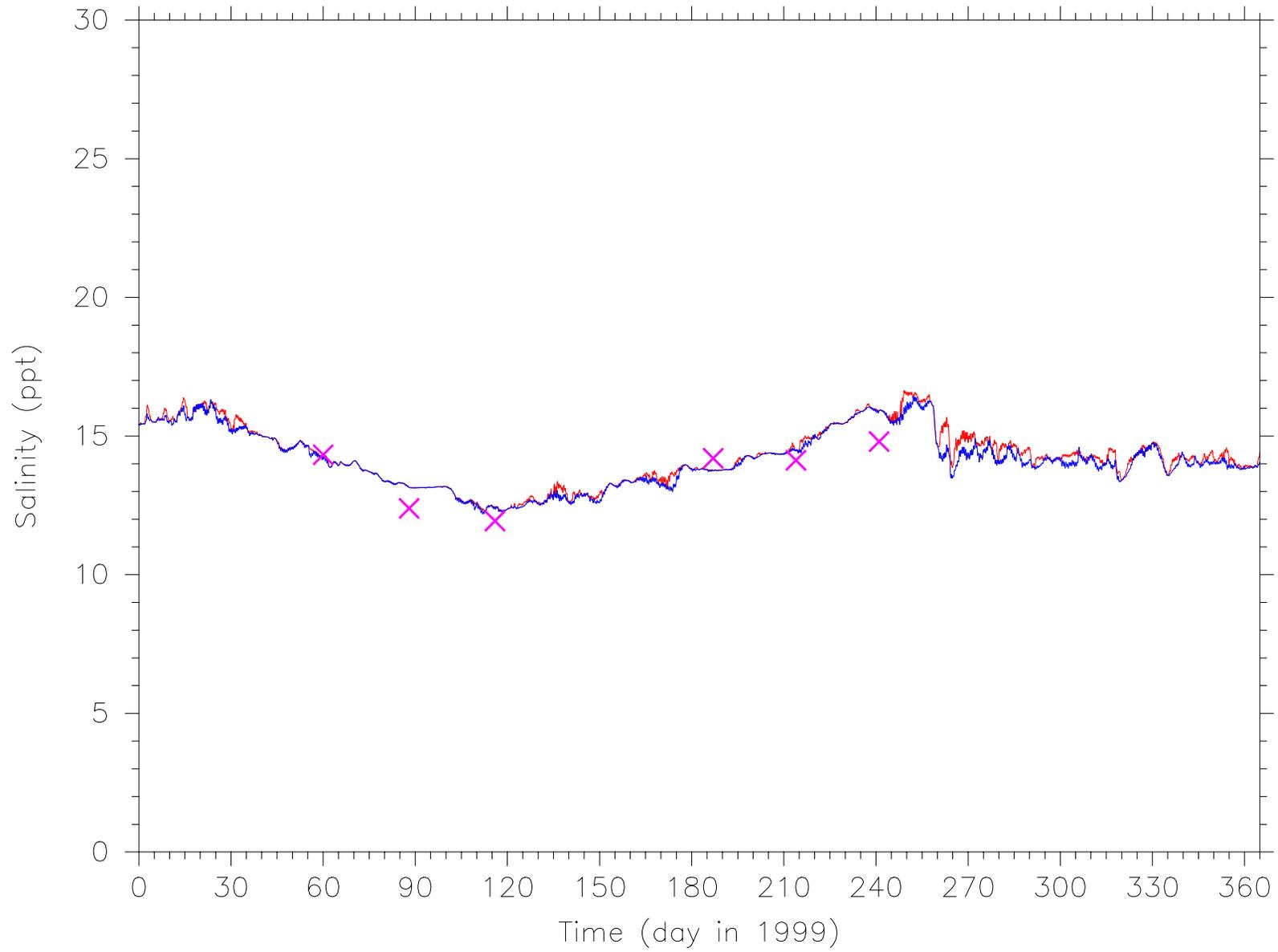
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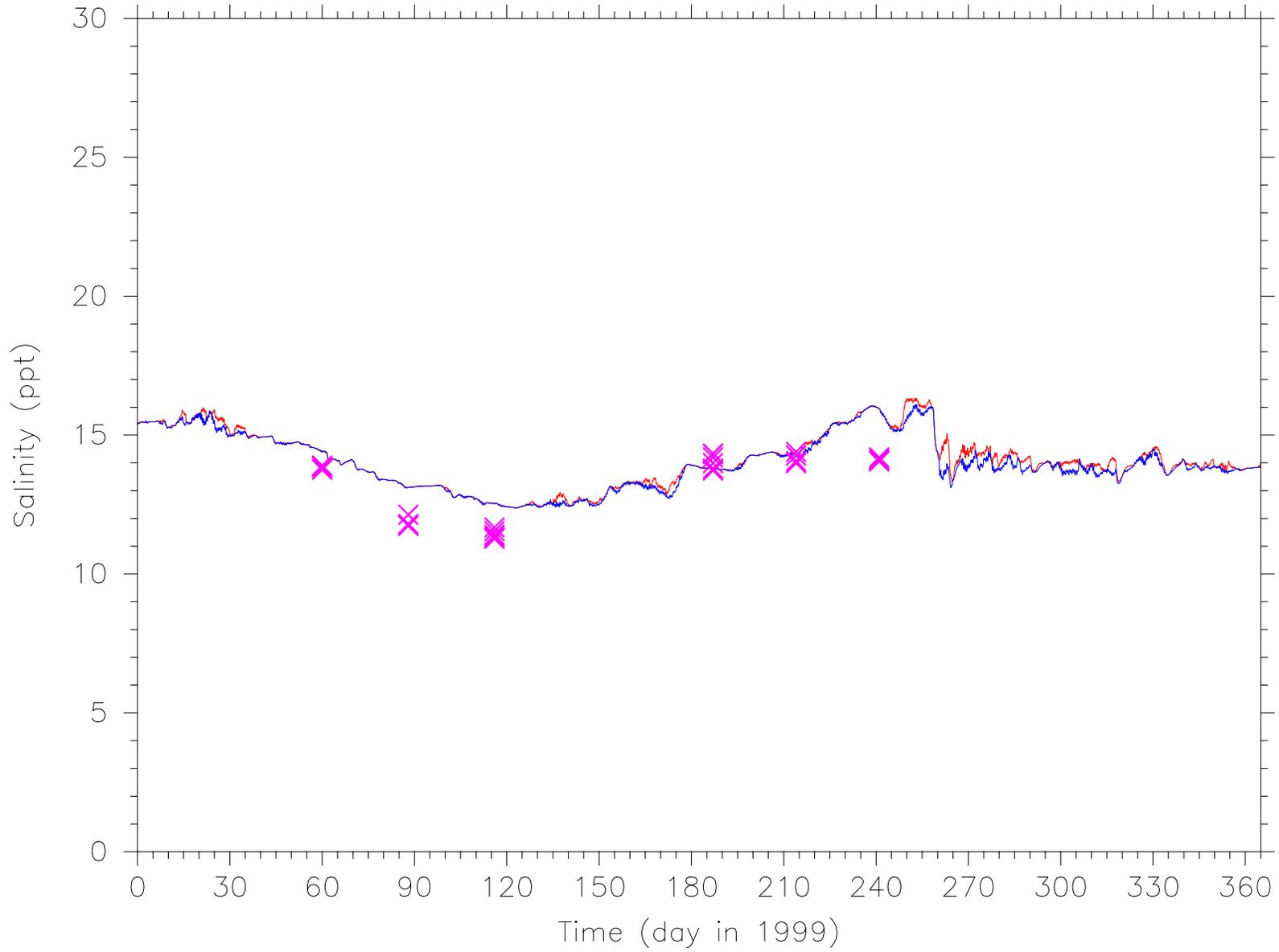
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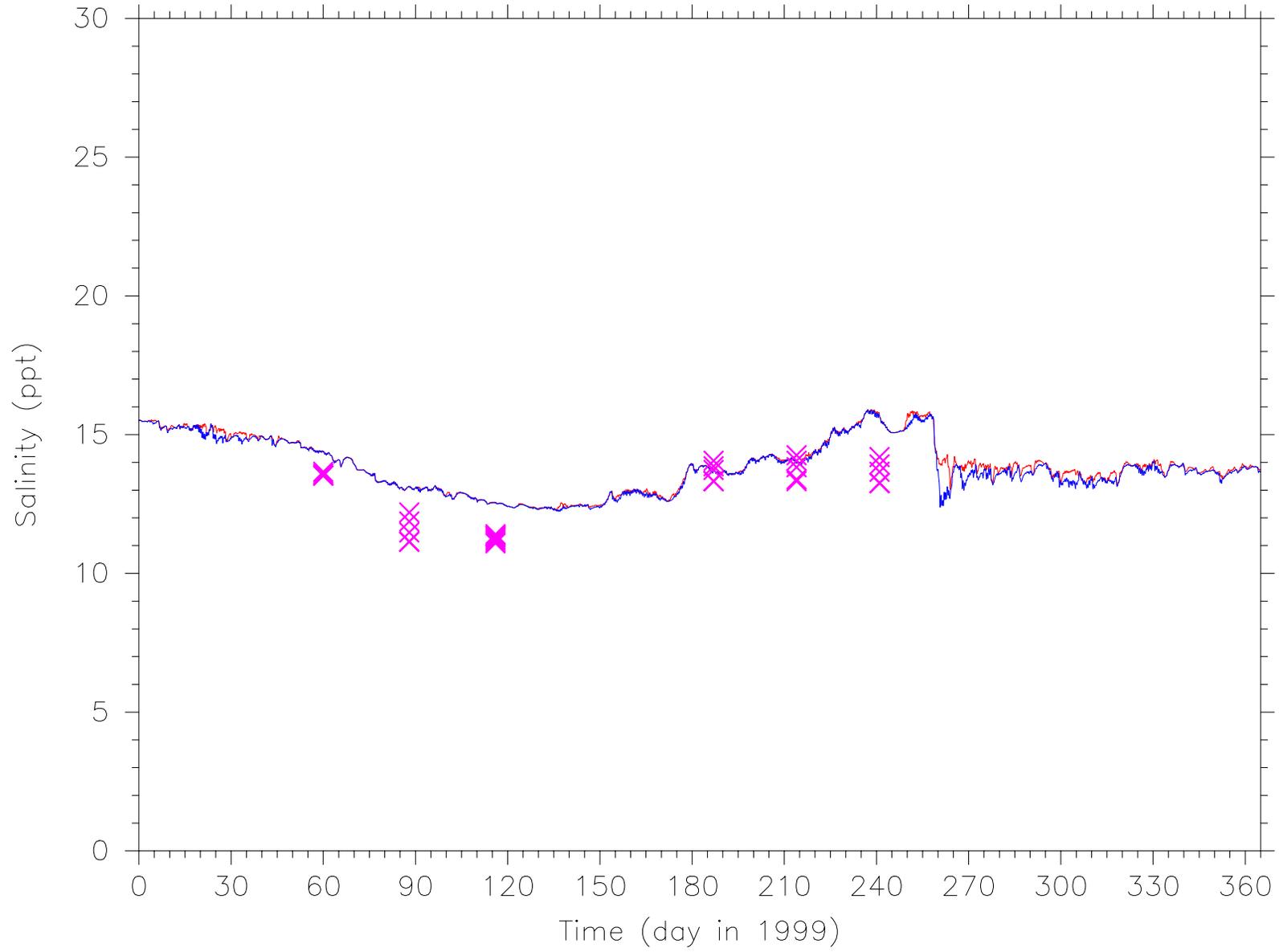
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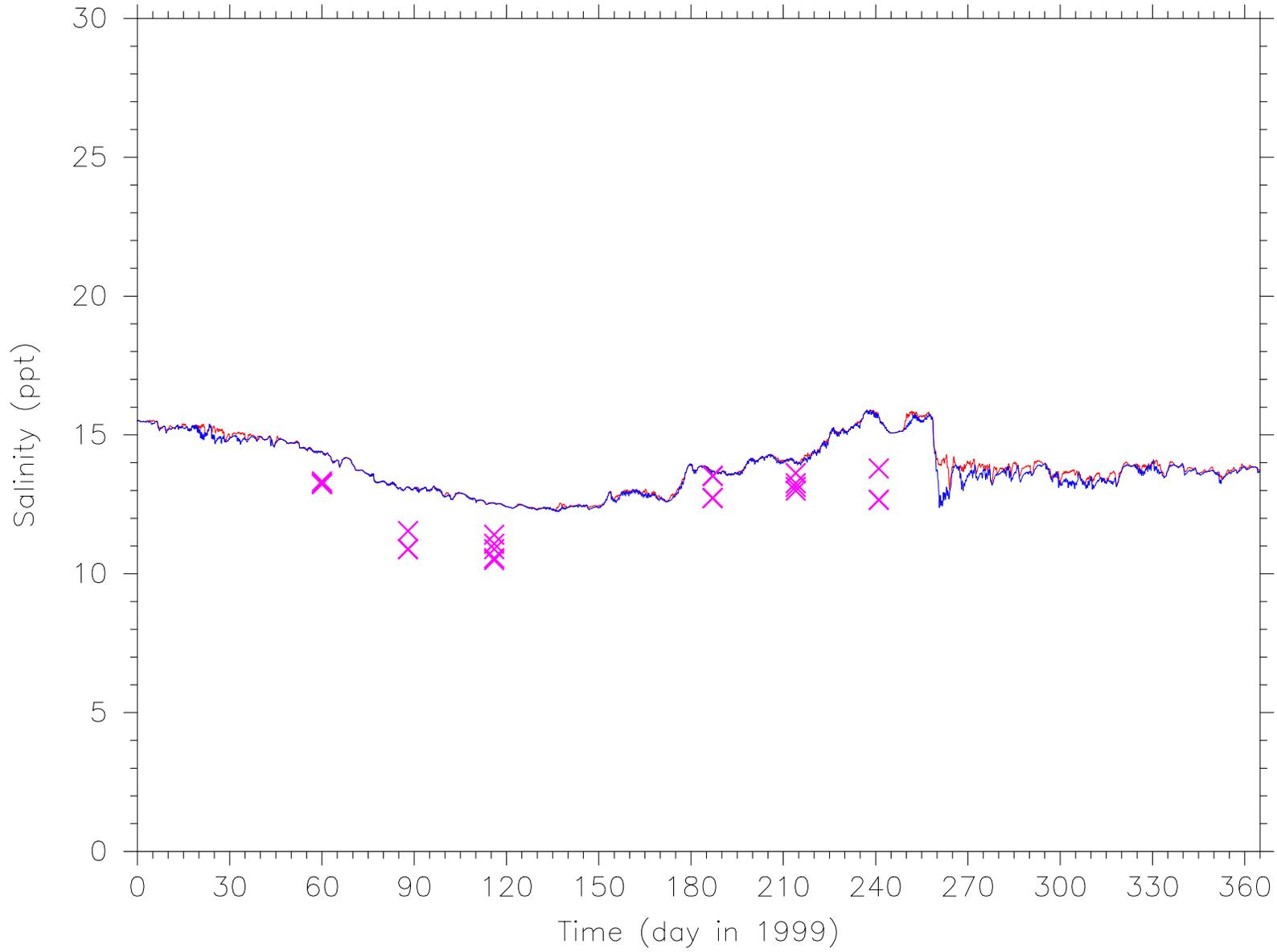
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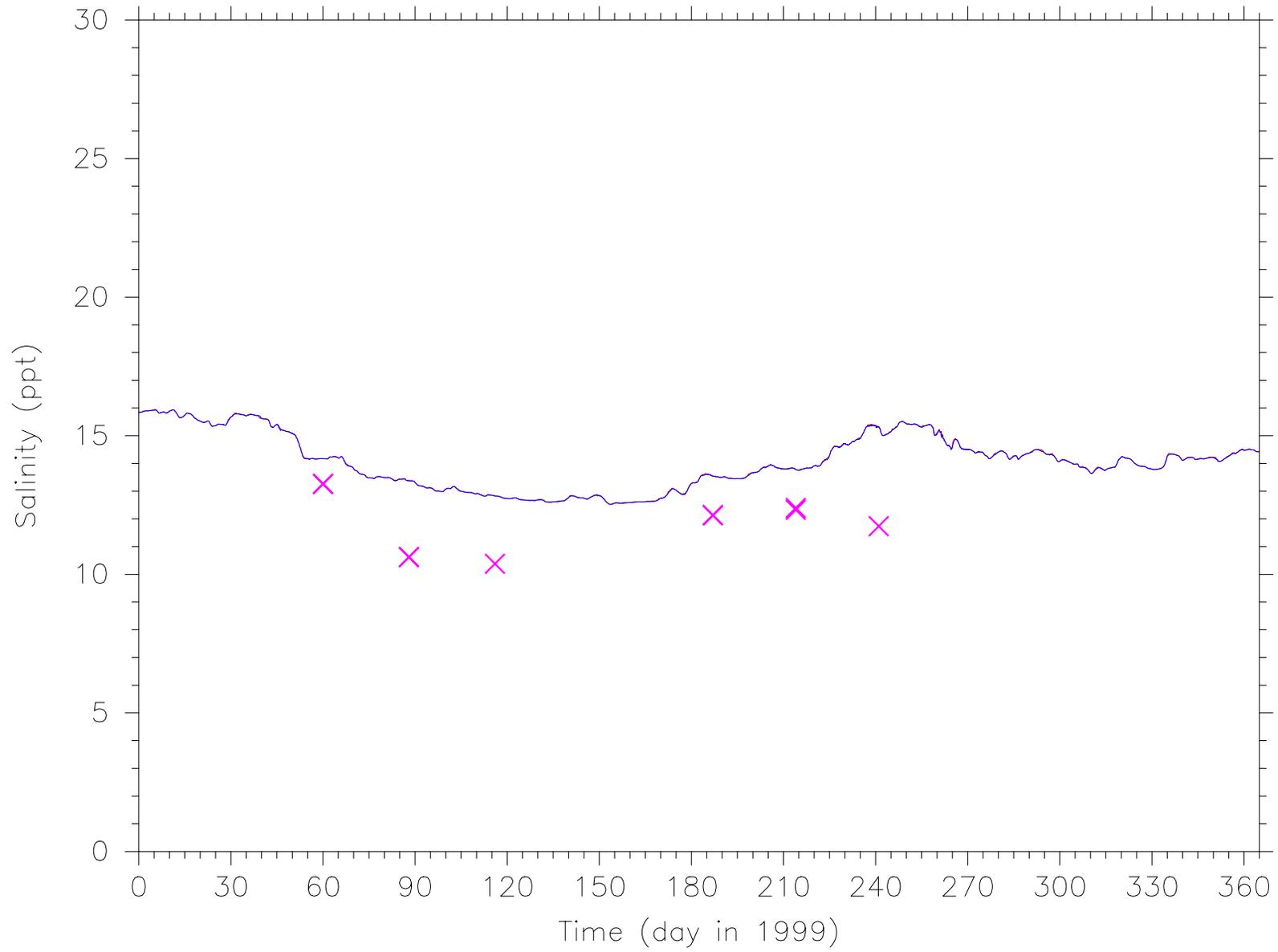
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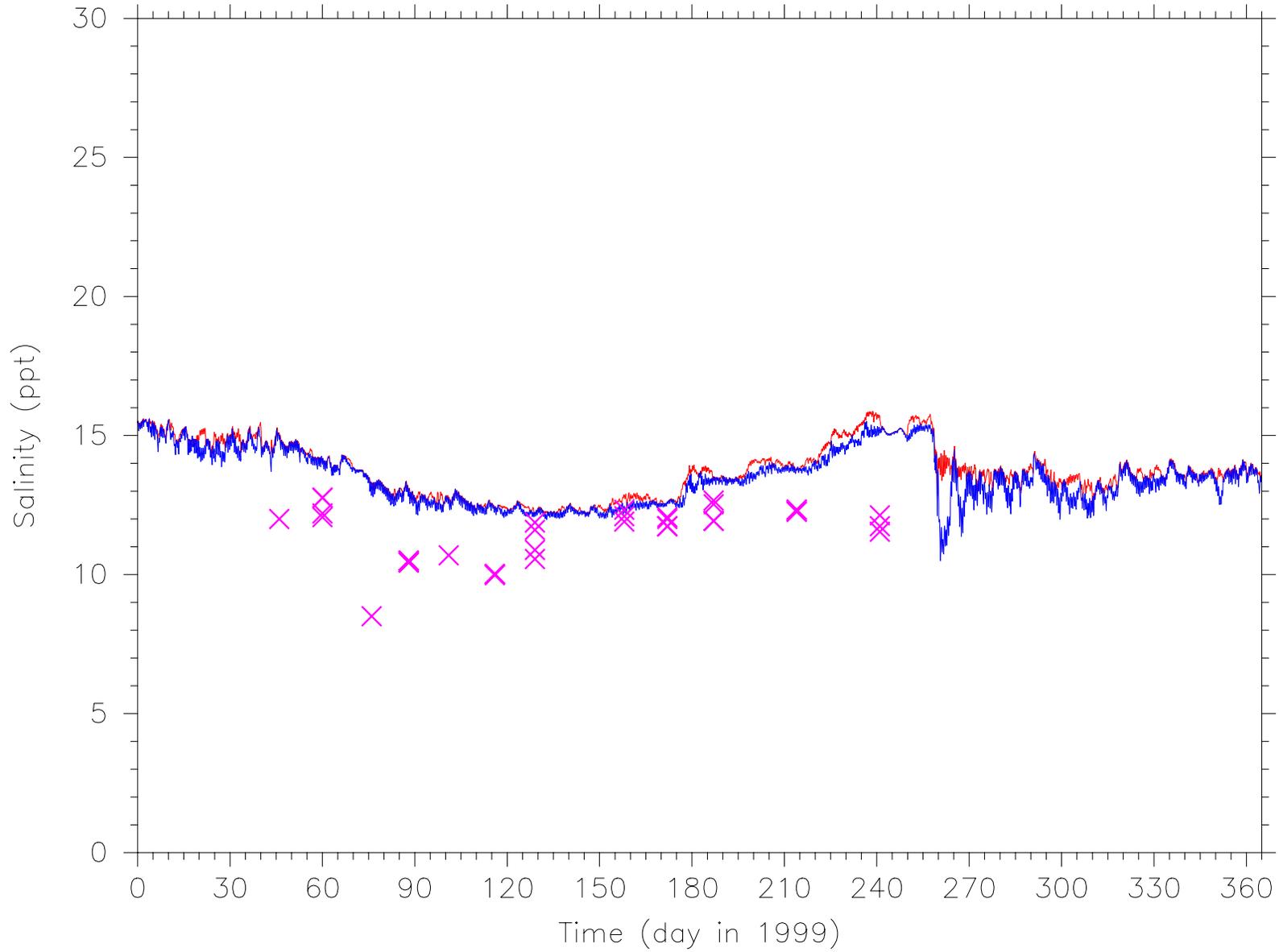
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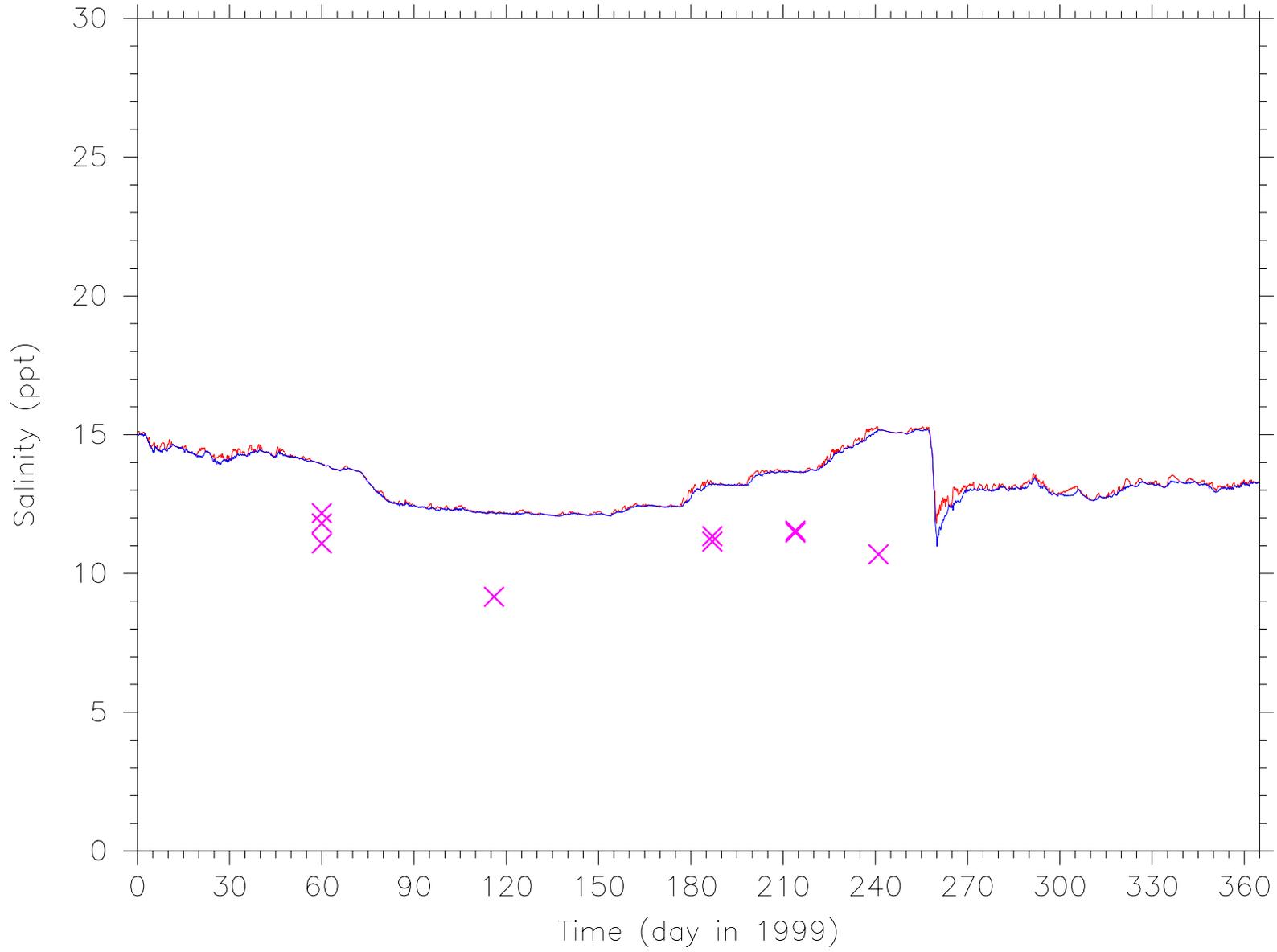
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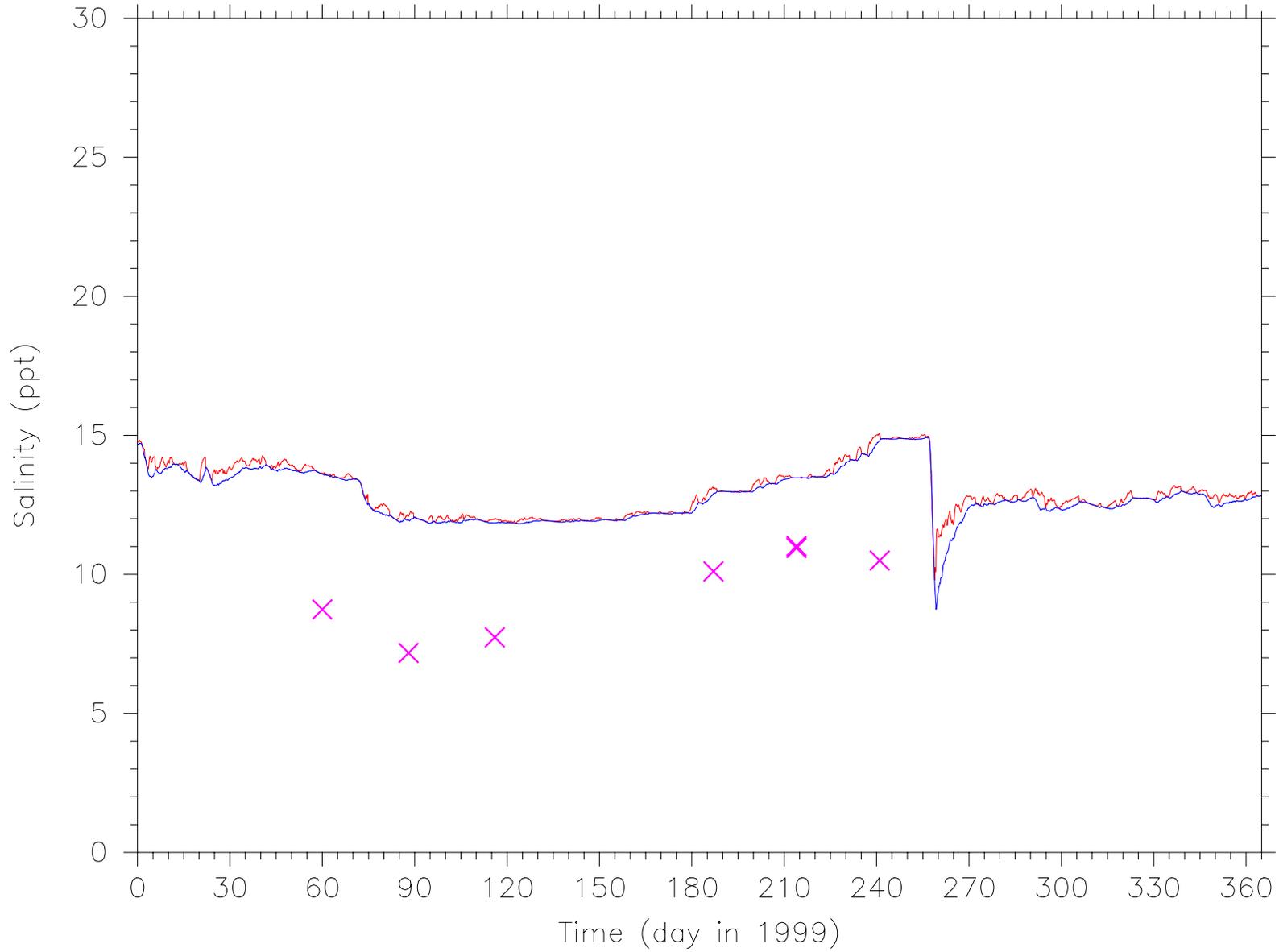
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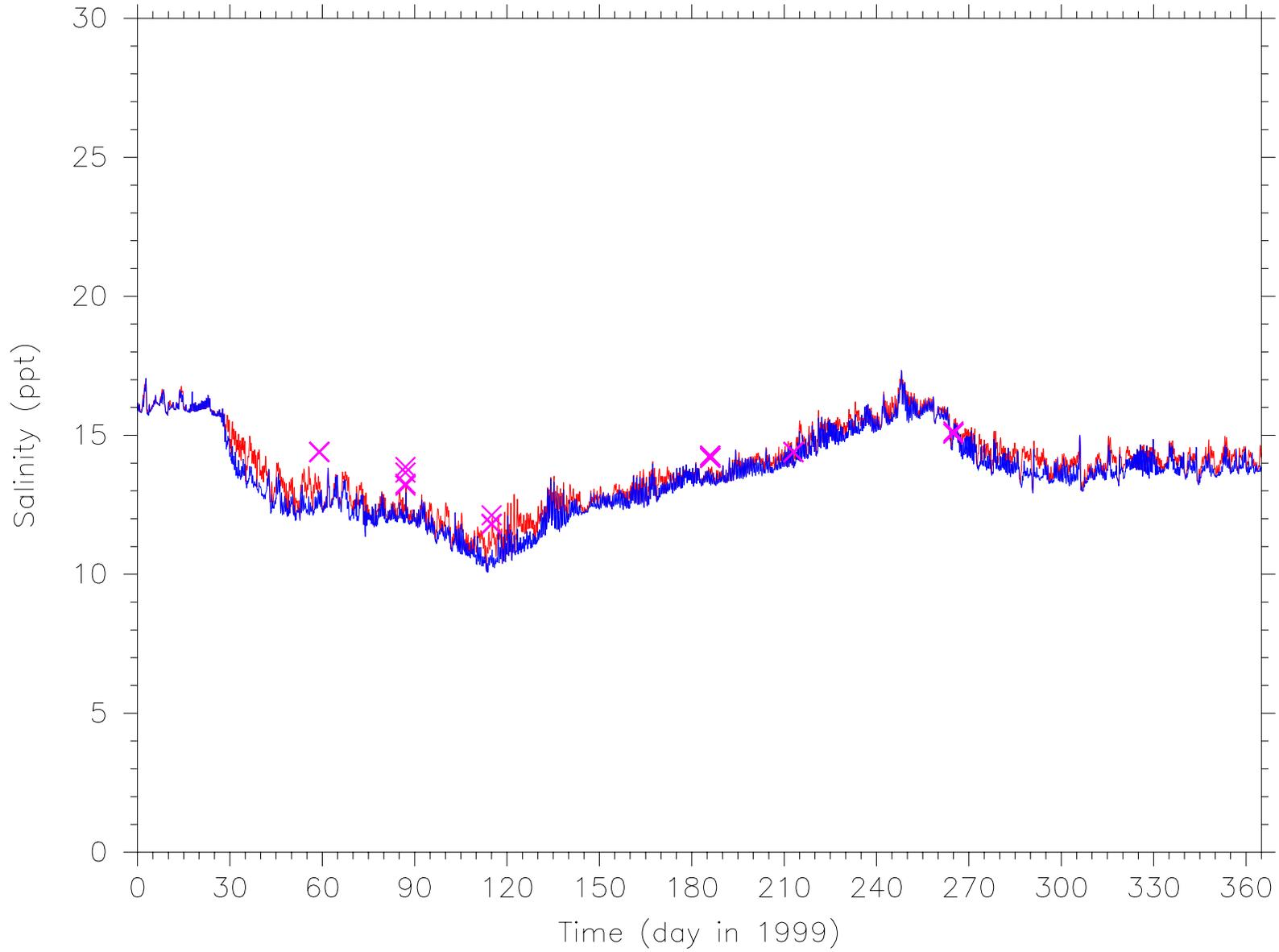
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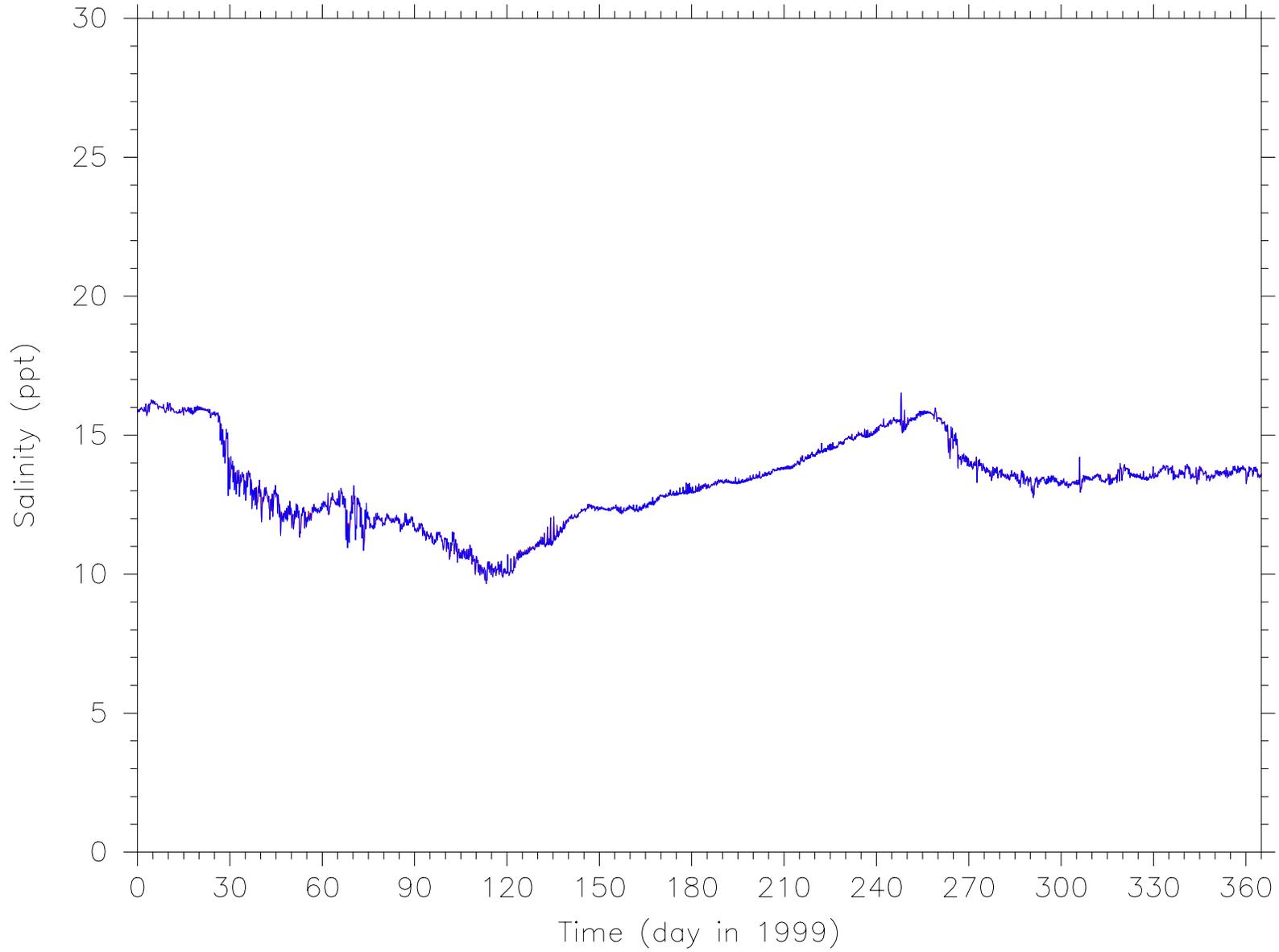
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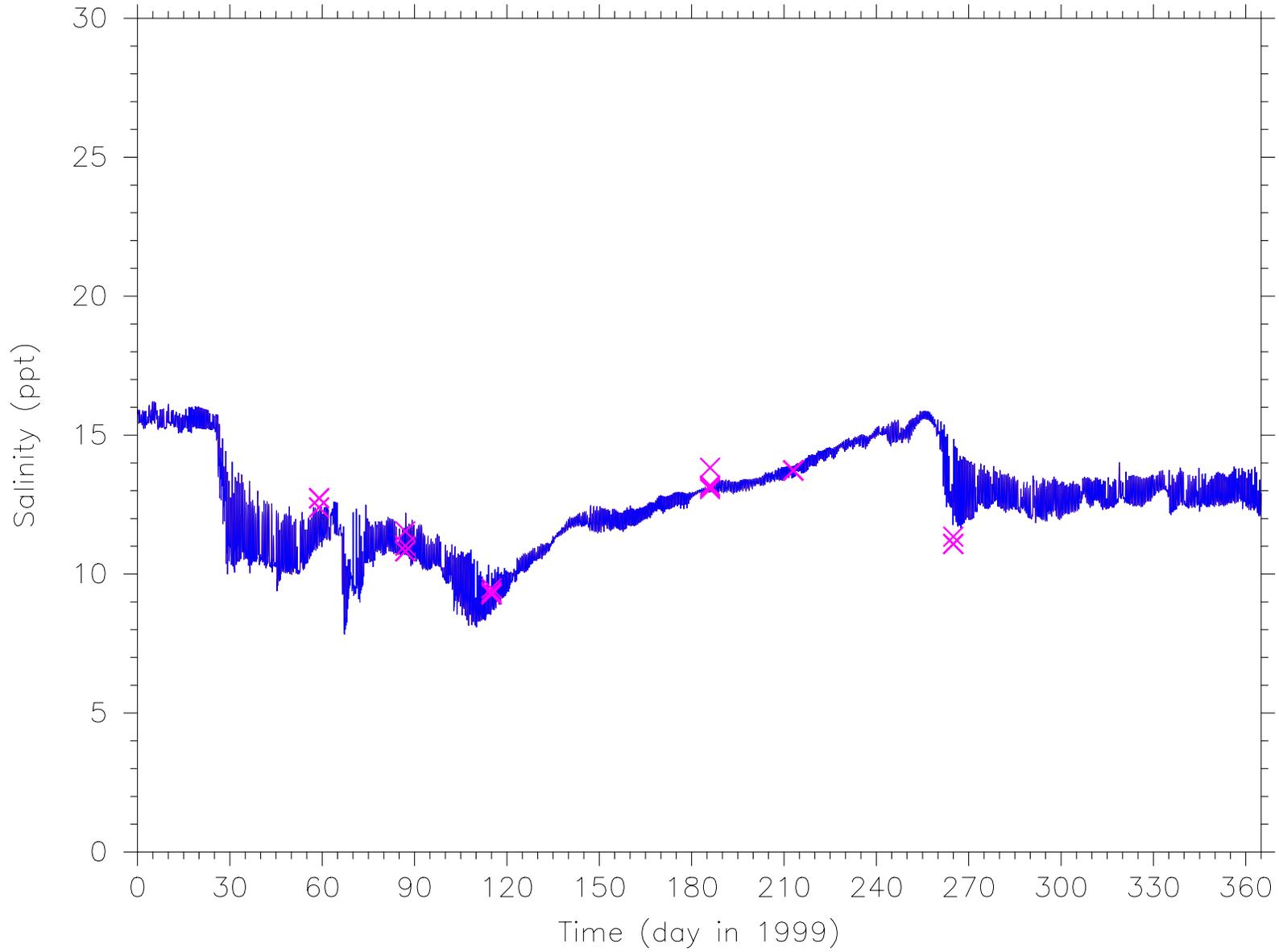
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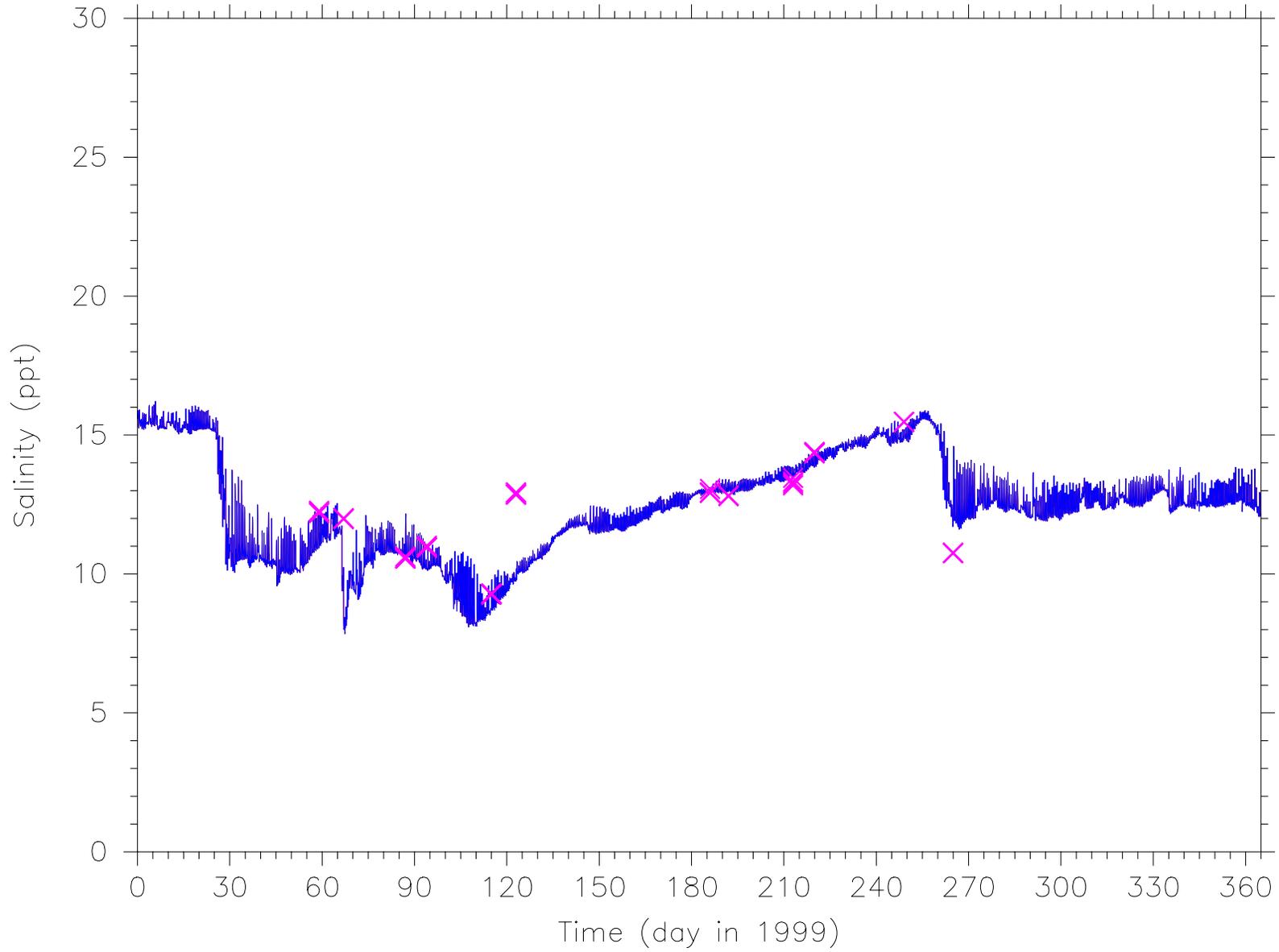
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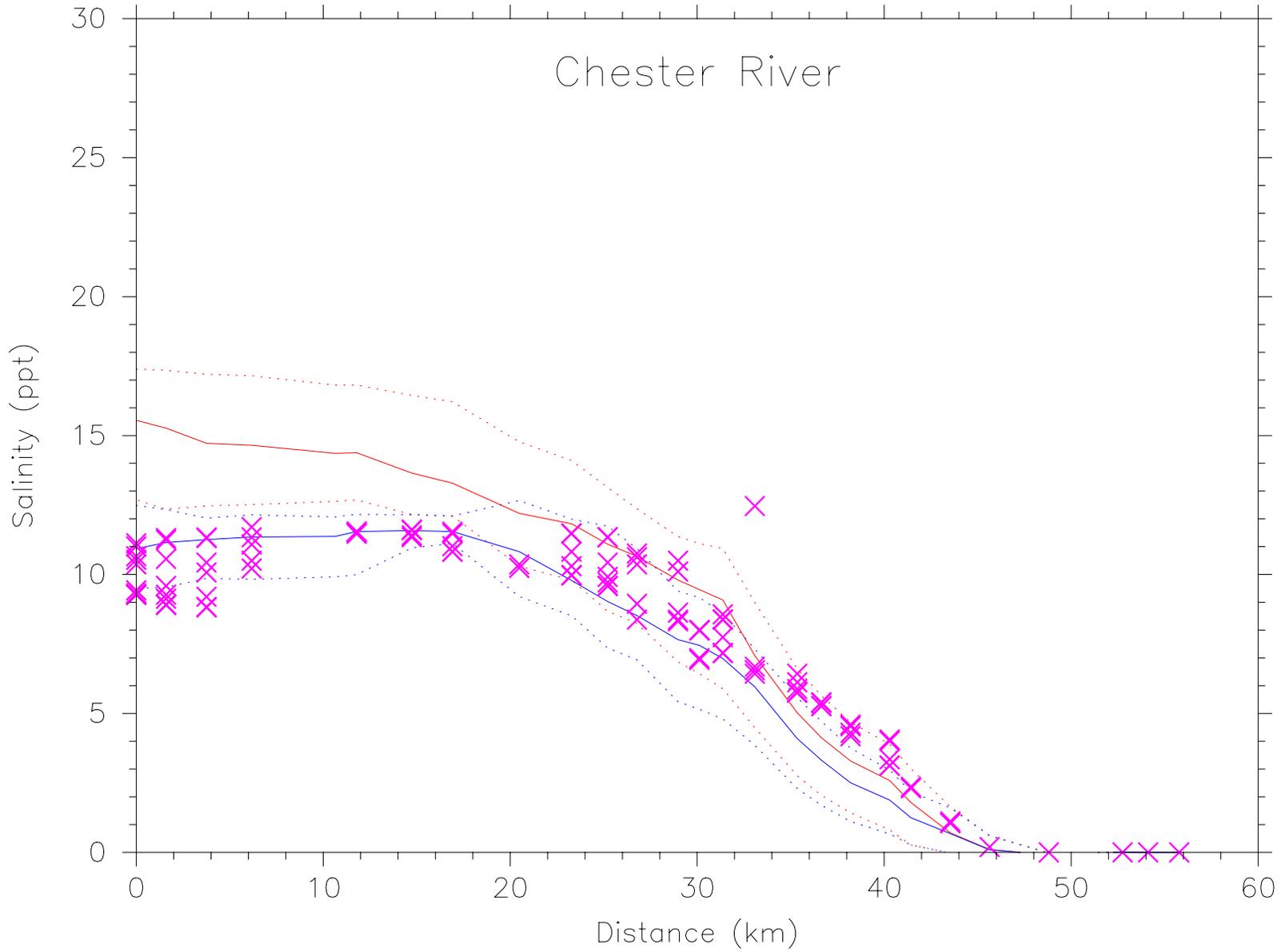
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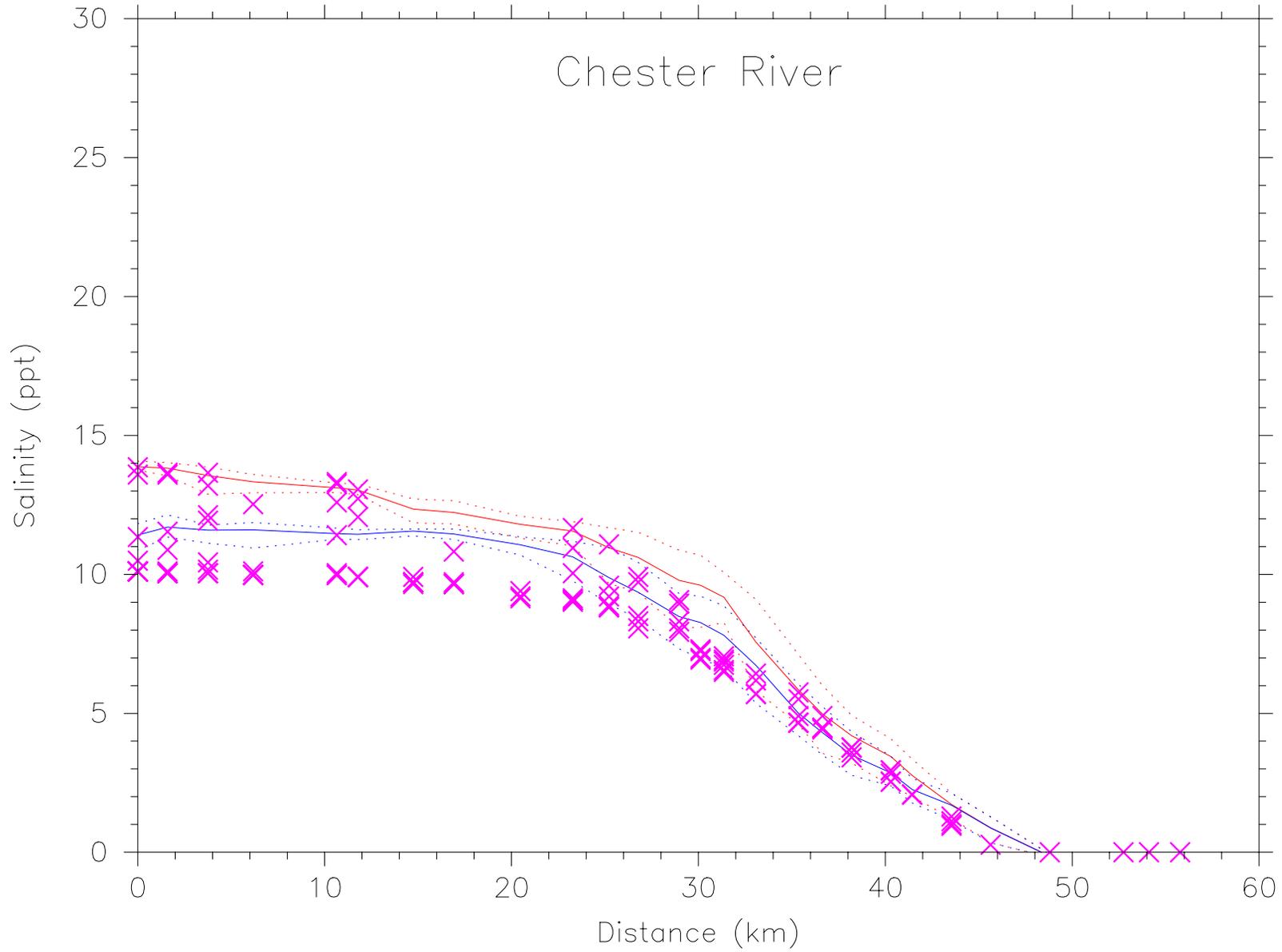
Appendix 4-F

Longitudinal distribution of surface (red) and bottom (blue) salinity during each intensive survey period in the Chester system. Four major river axes were shown: Chester River, Miles River, Wye River, and Wye East River. Dotted lines represent maximum and minimum values during the period.

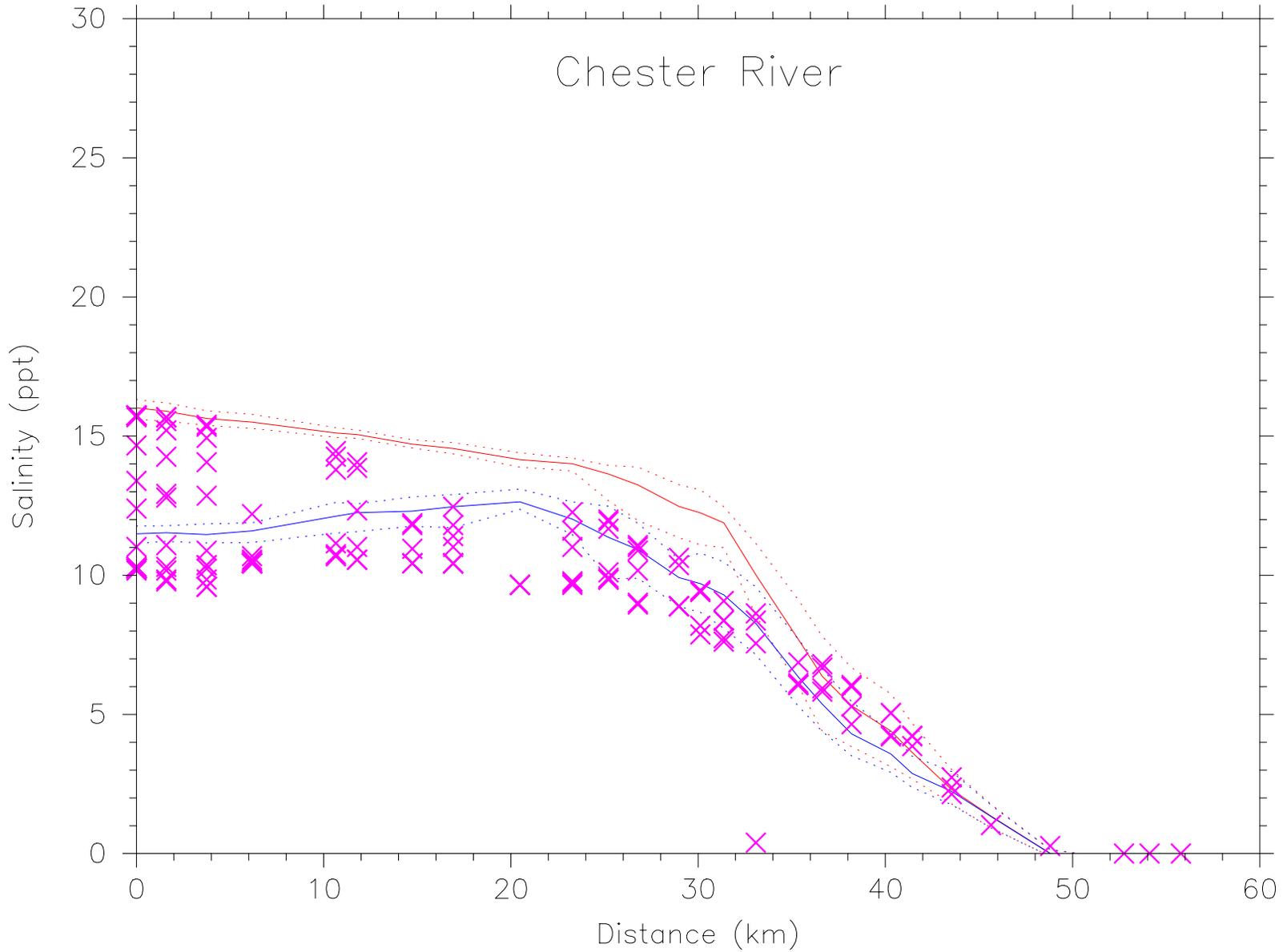
Day 066 - 073, 1999



Day 094 - 096, 1999

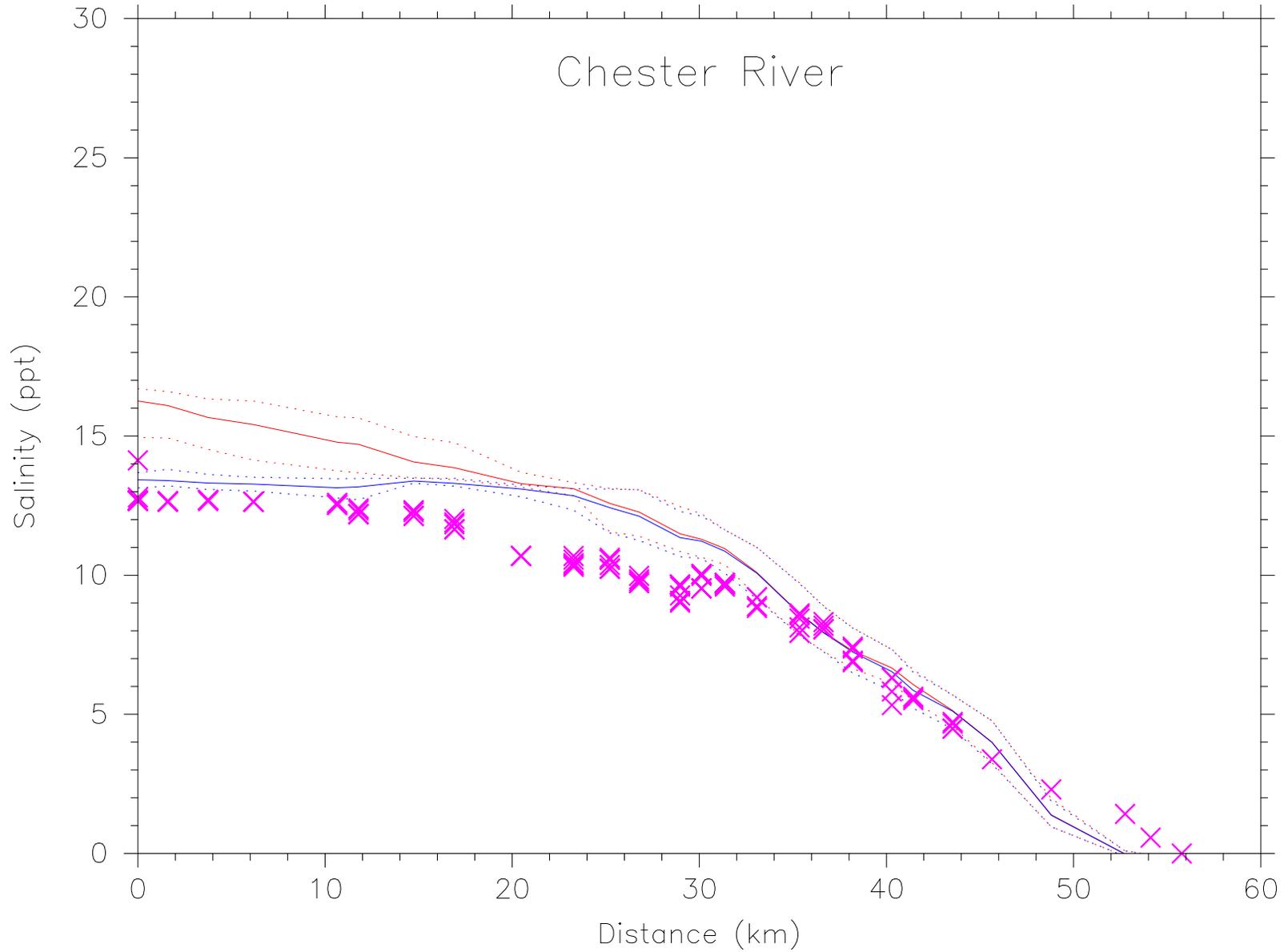


Day 122 - 124, 1999

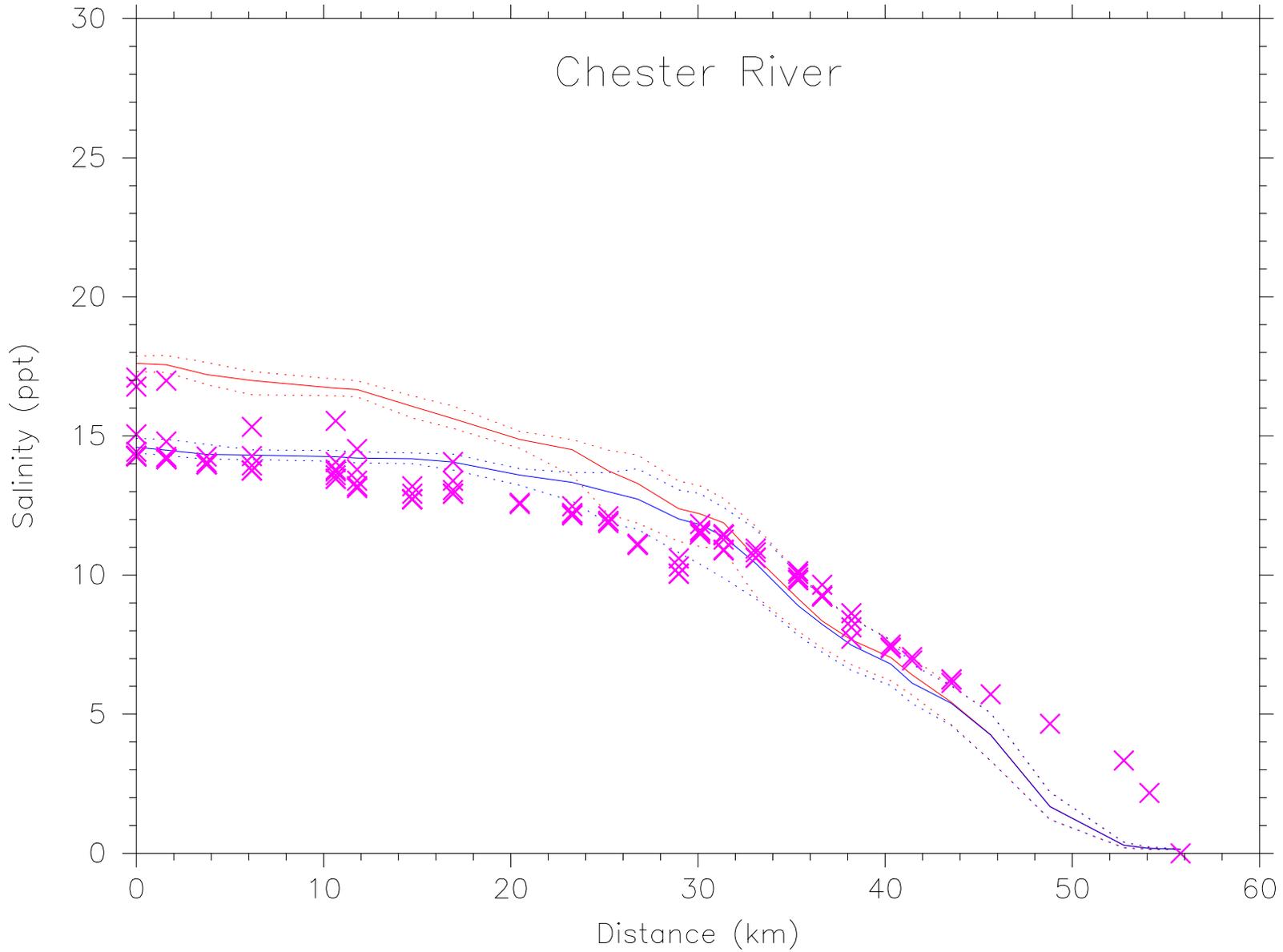


Day 192 - 194, 1999

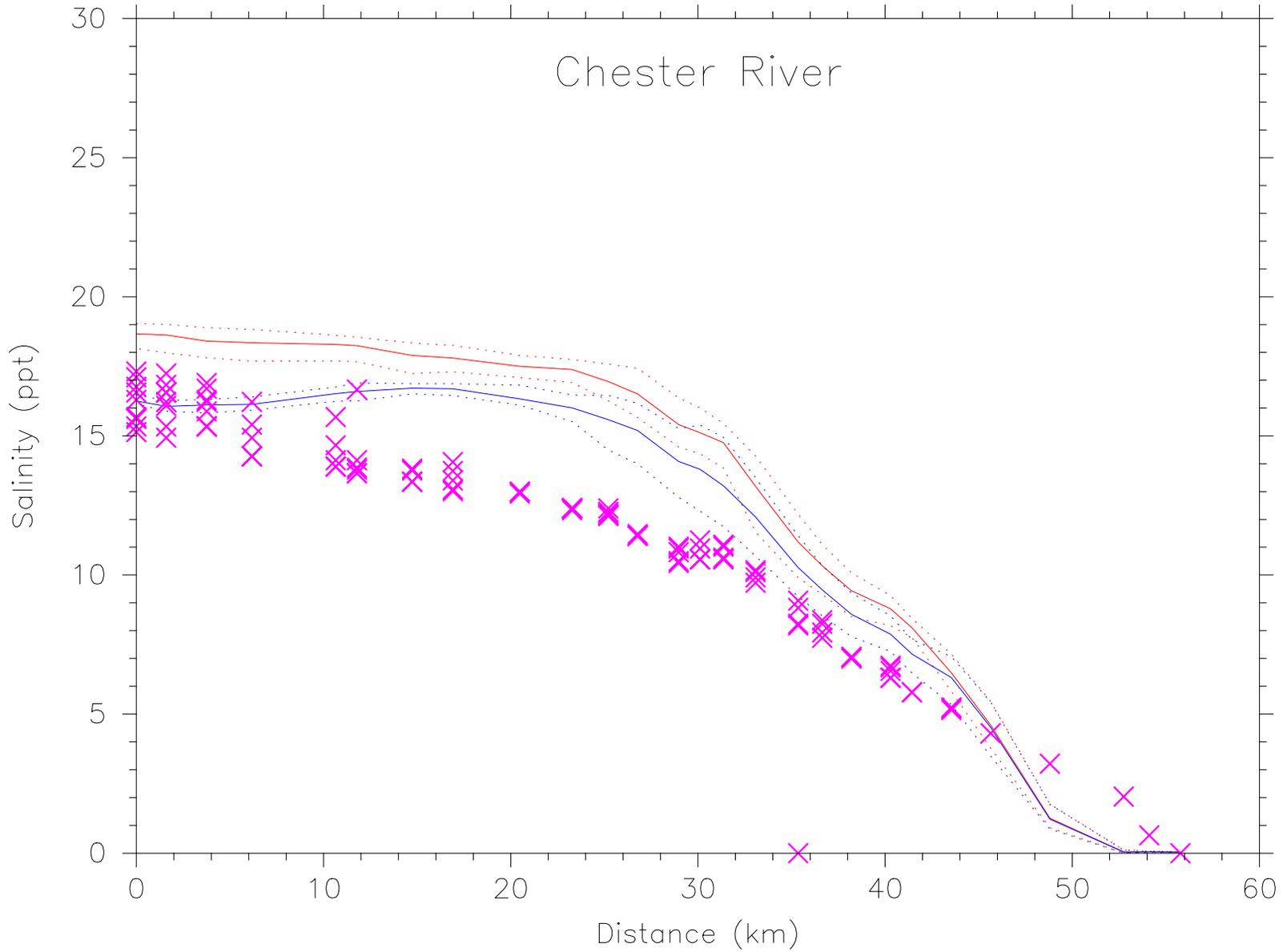
Chester River



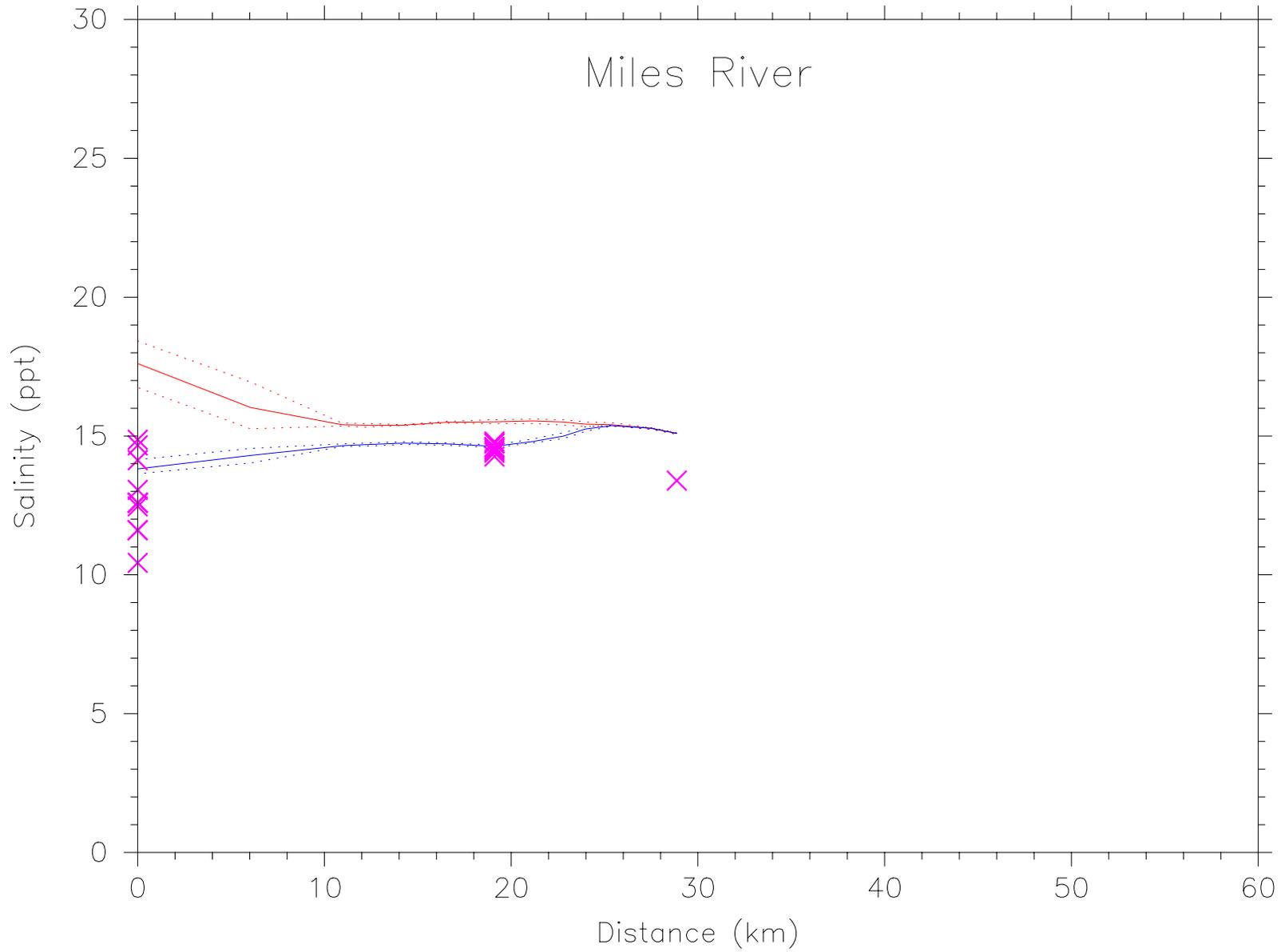
Day 220 - 222, 1999



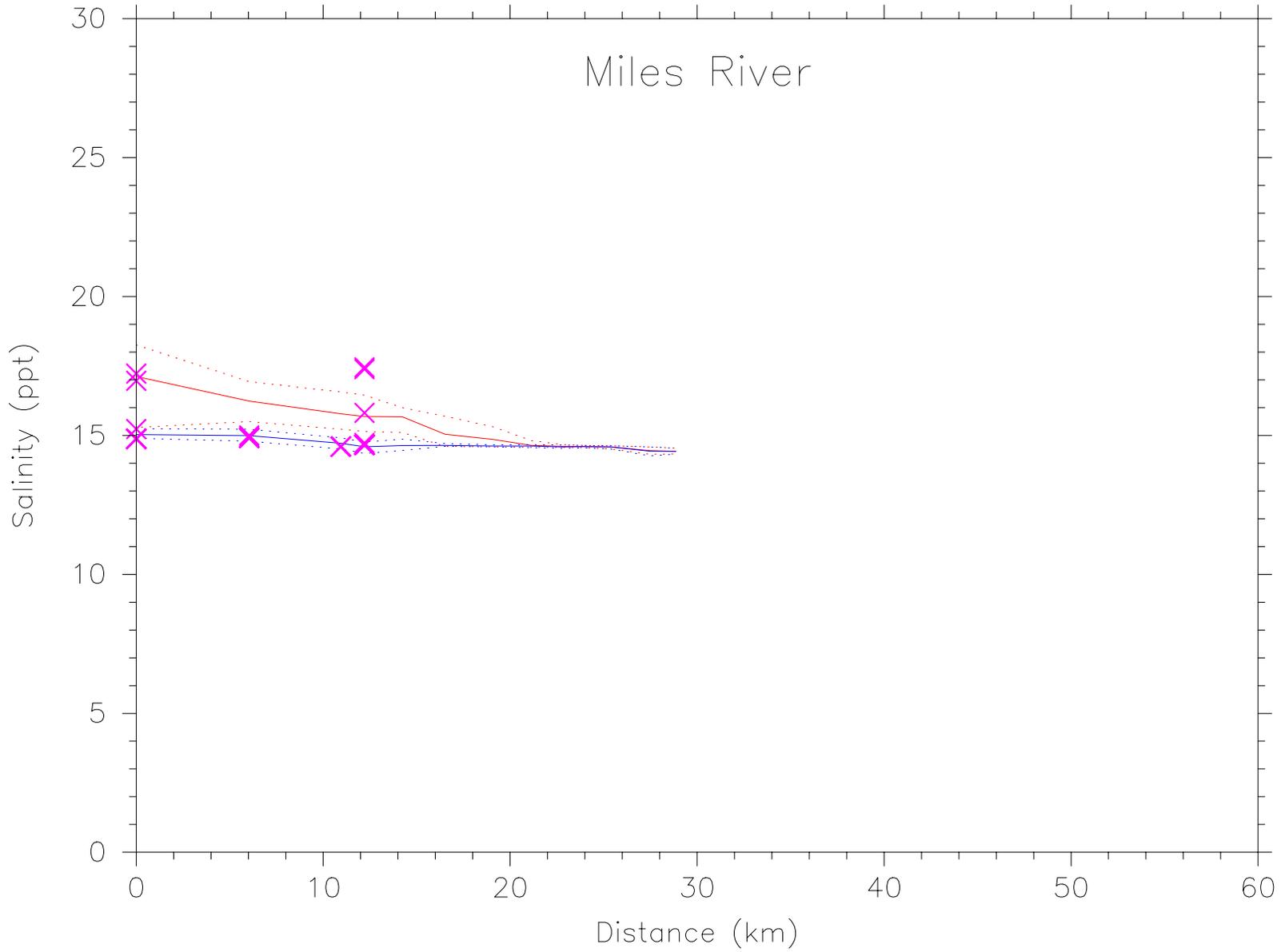
Day 249 - 251, 1999



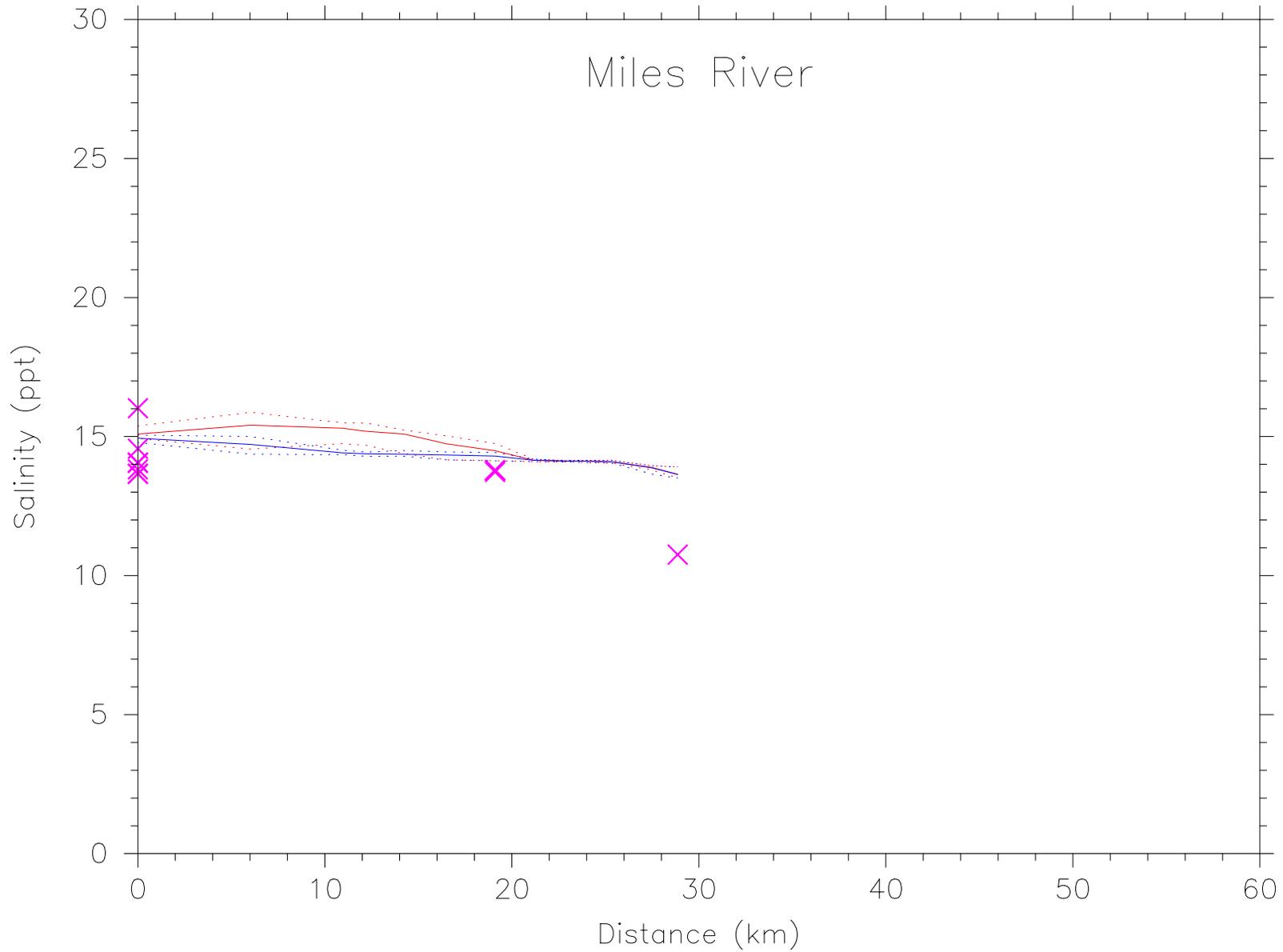
Day 046 - 046, 1999



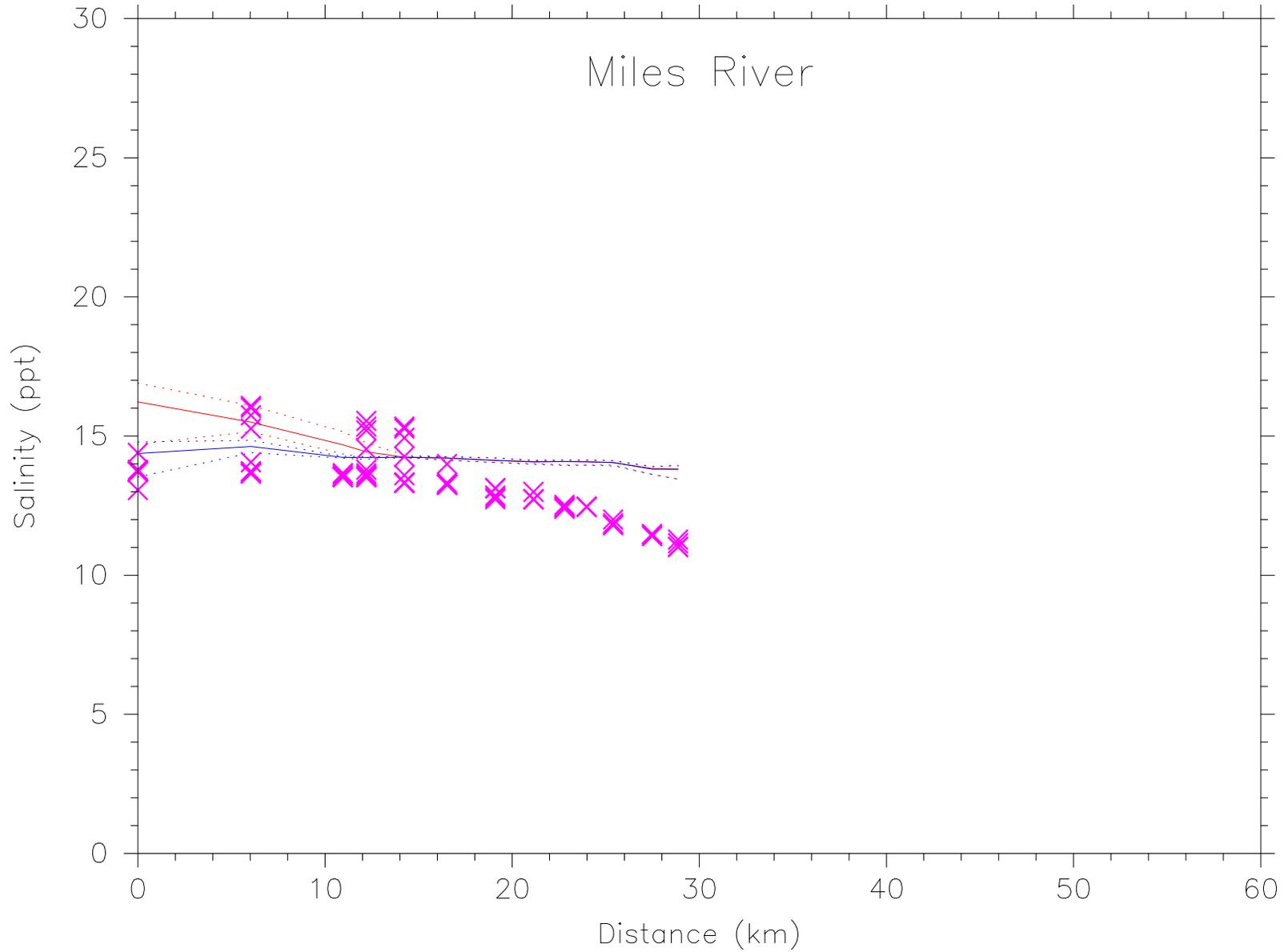
Day 059 - 060, 1999



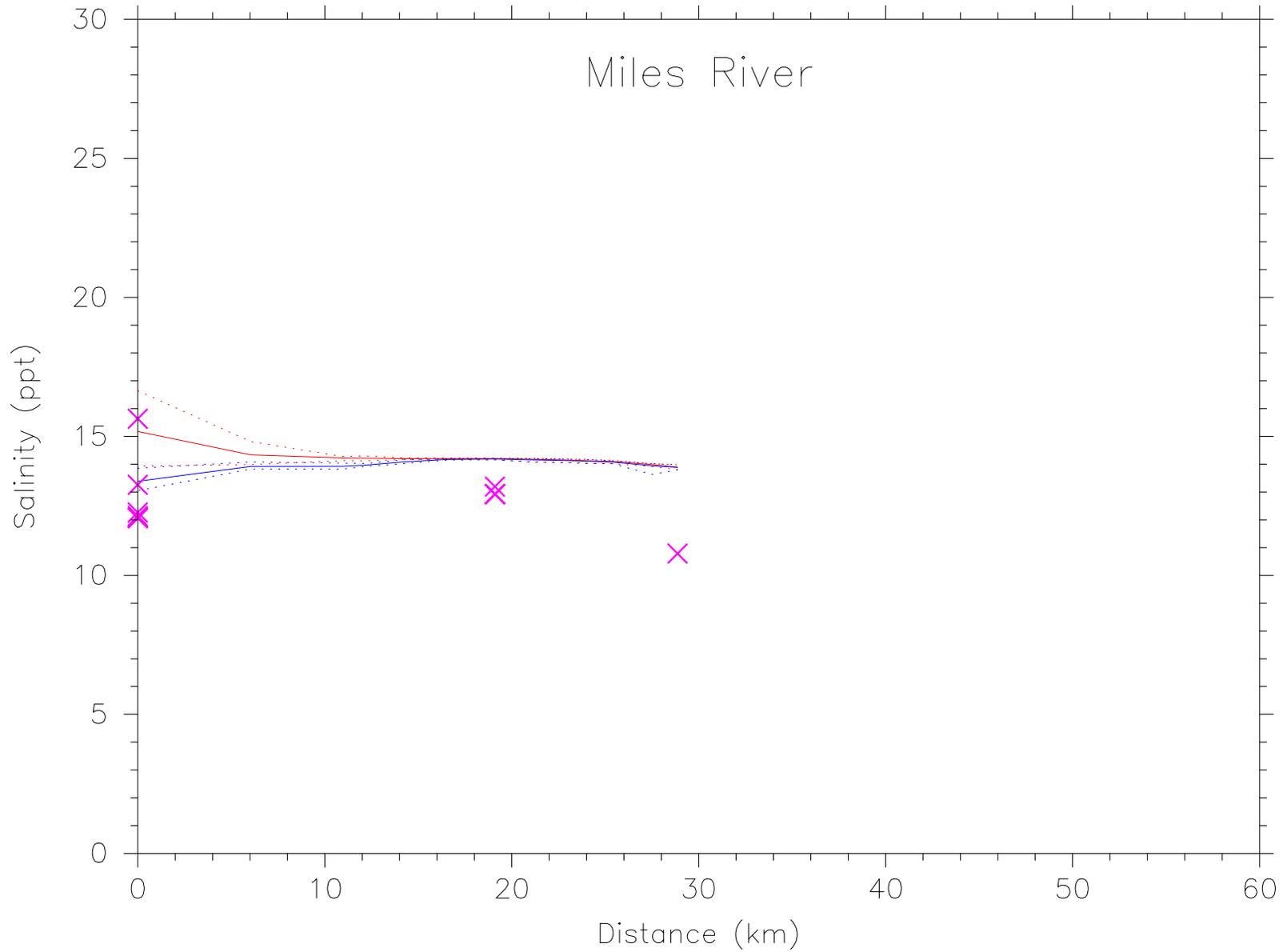
Day 076 - 076, 1999



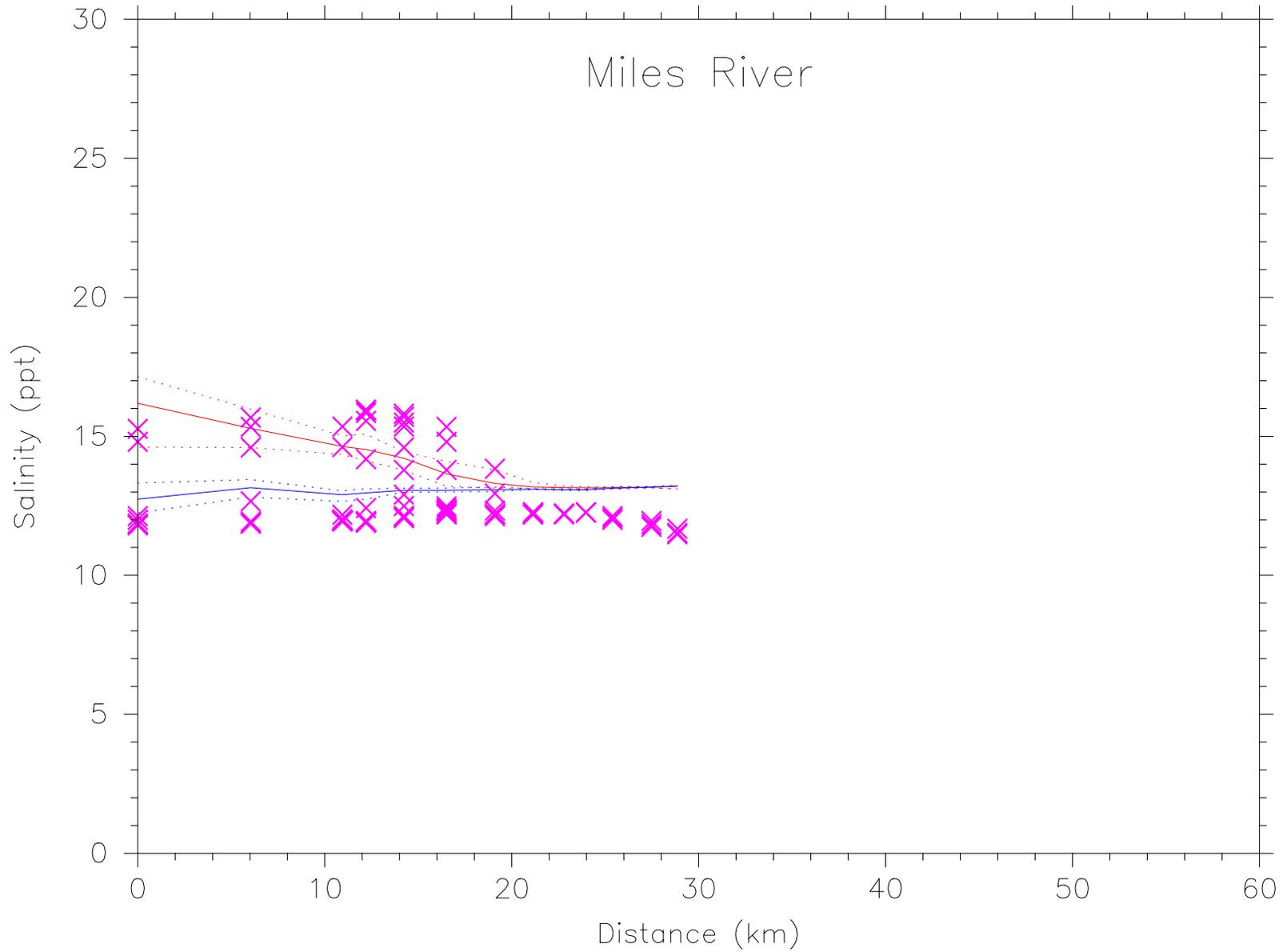
Day 087 - 089, 1999



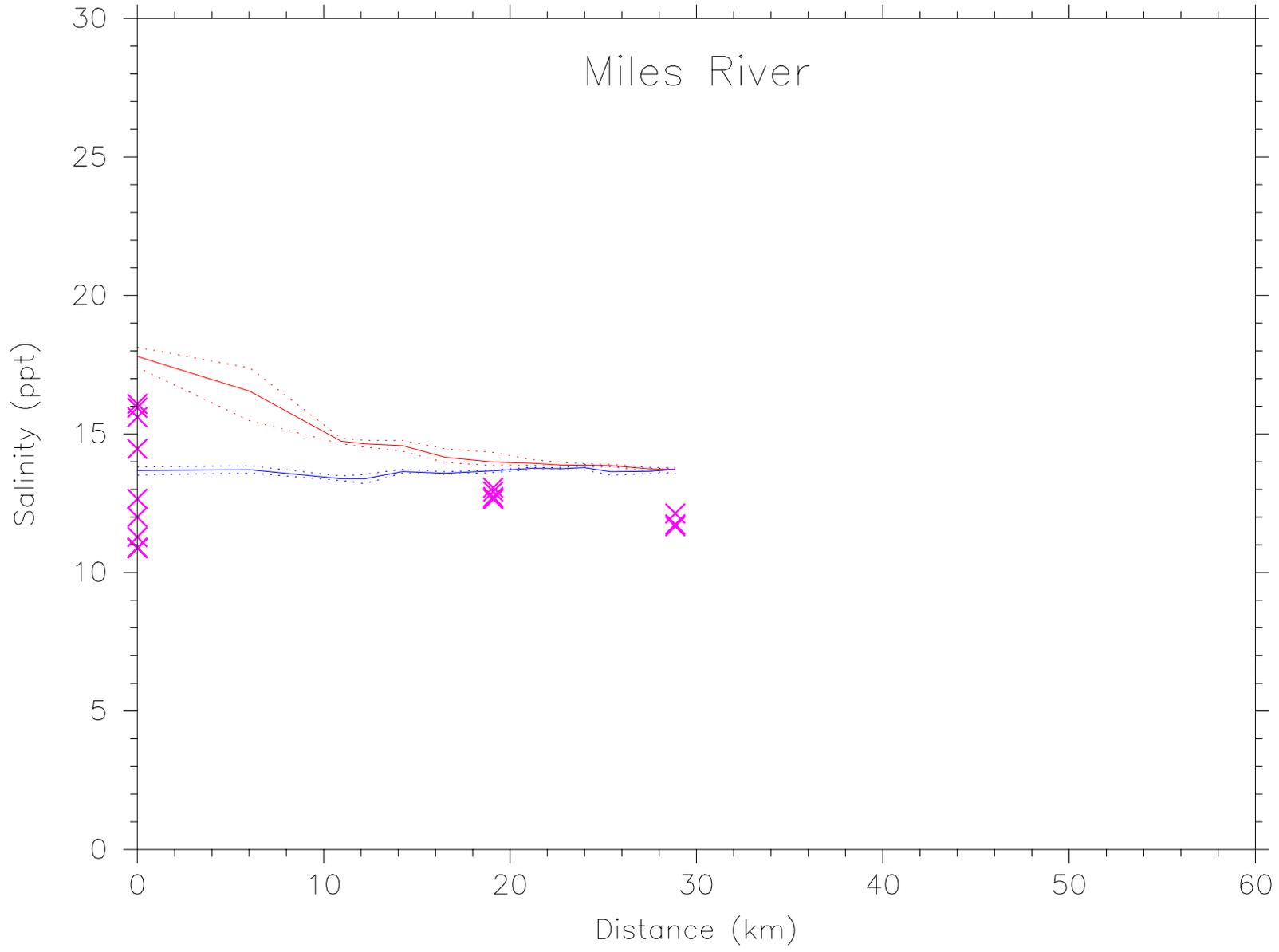
Day 101 - 101, 1999



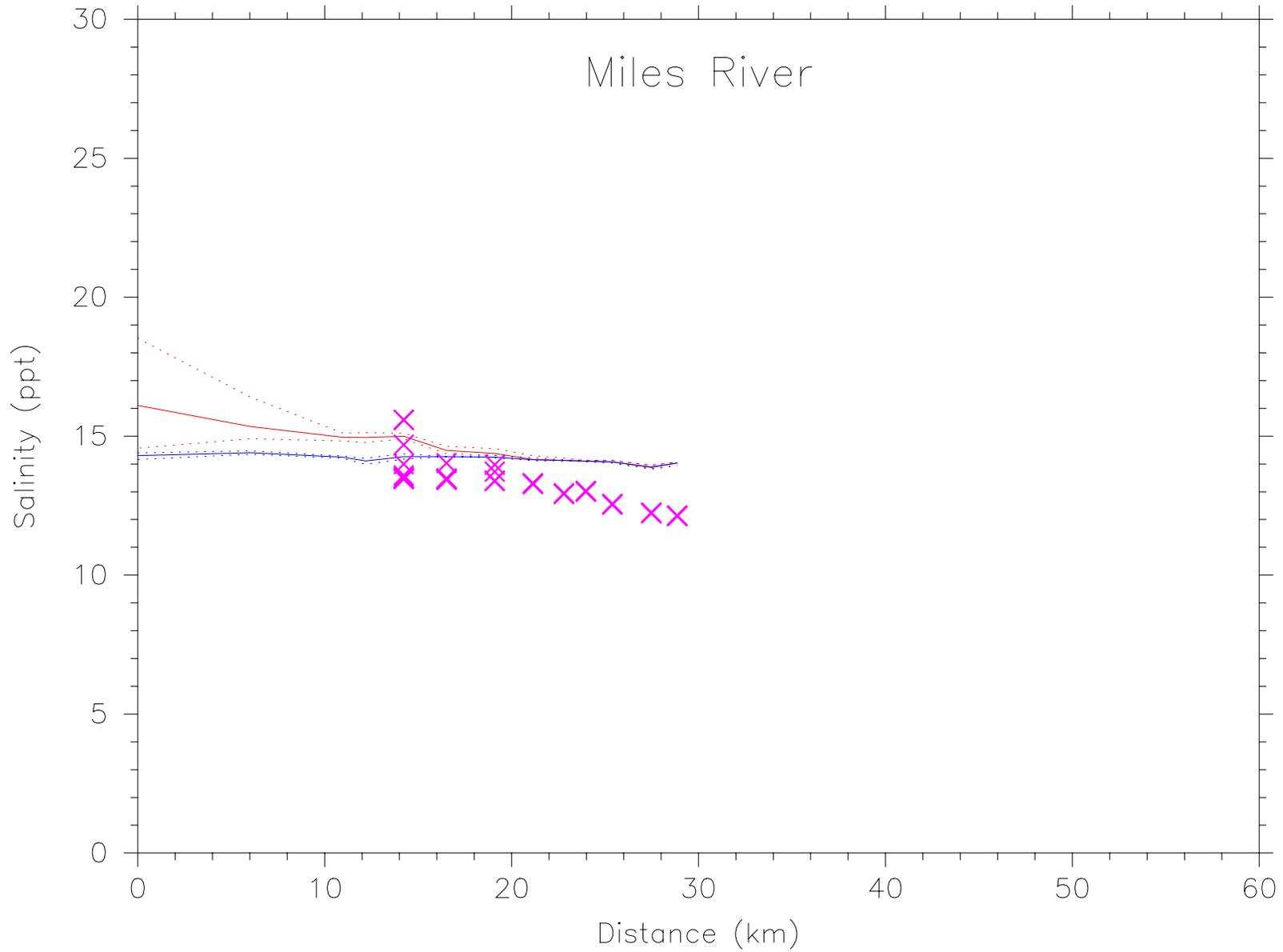
Day 115 - 117, 1999



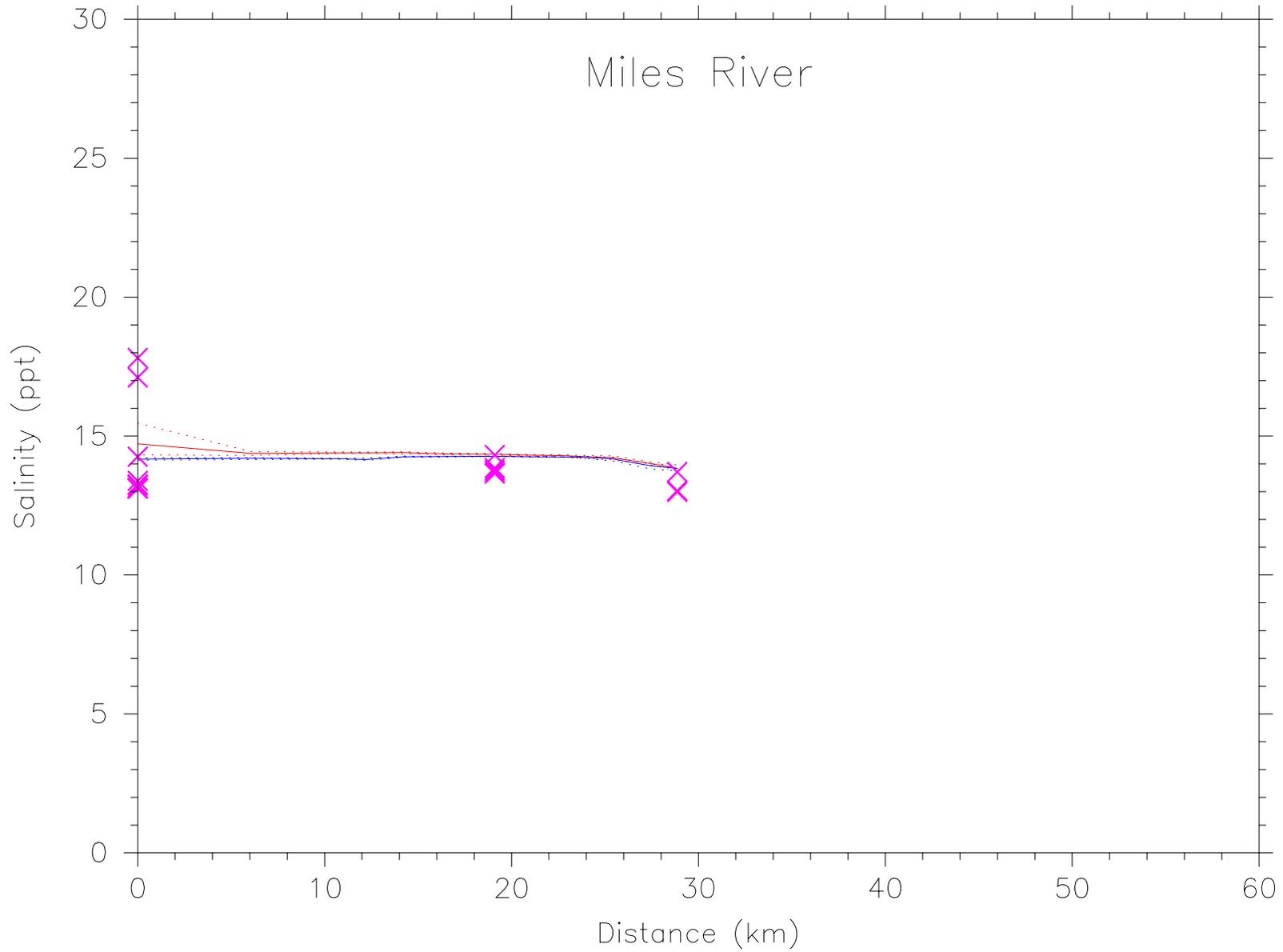
Day 129 - 129, 1999



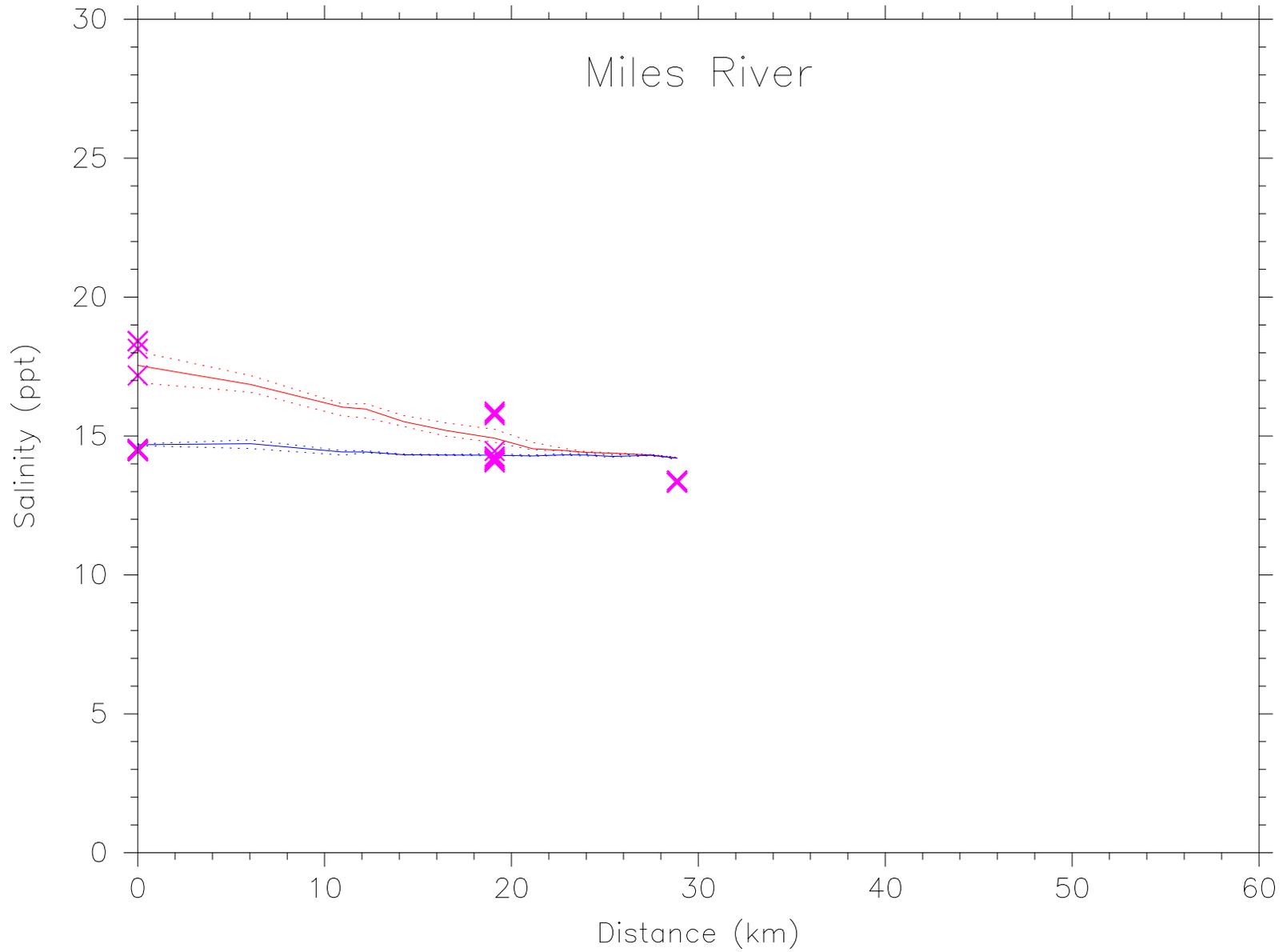
Day 144 - 144, 1999



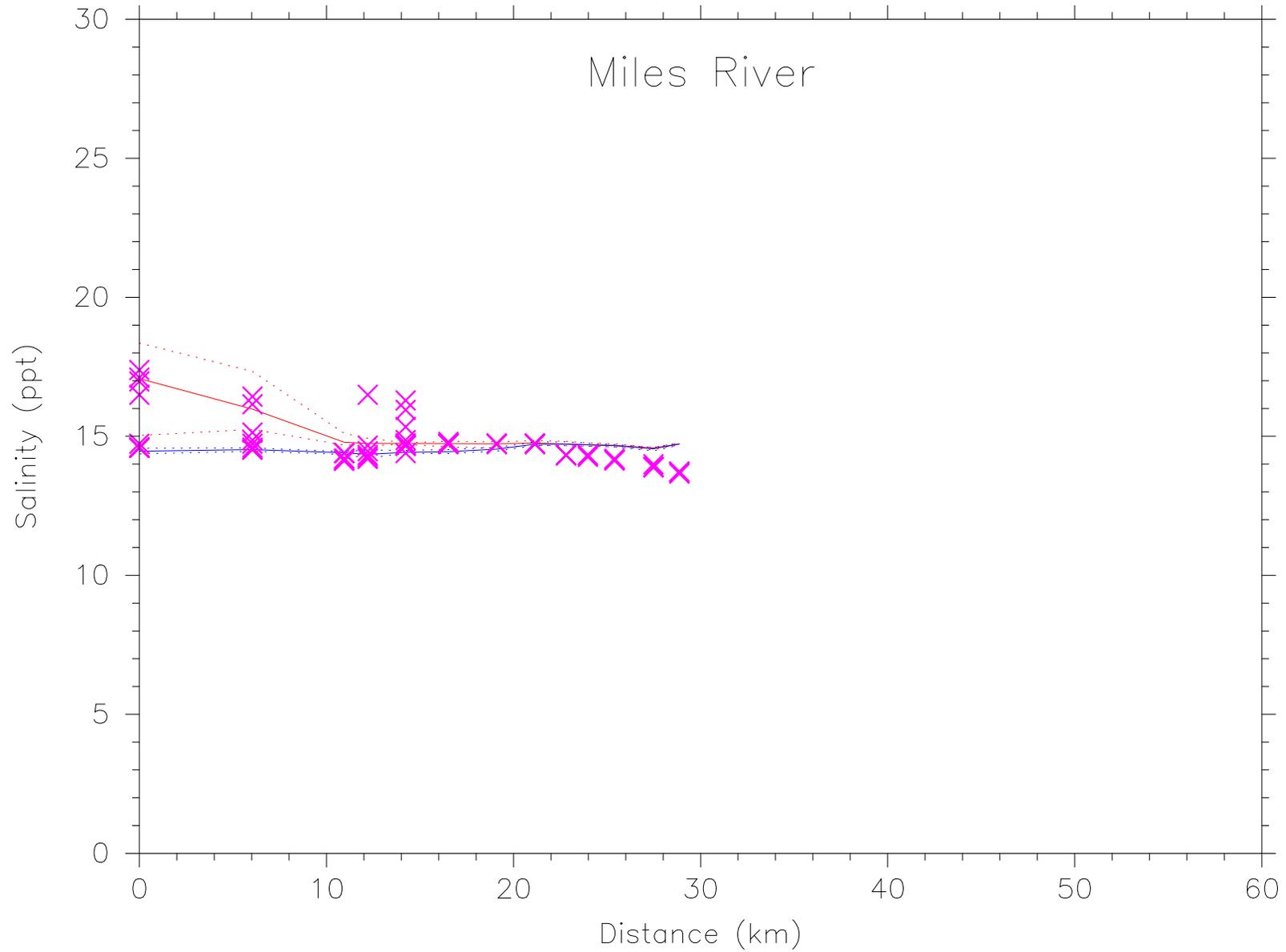
Day 158 - 158, 1999



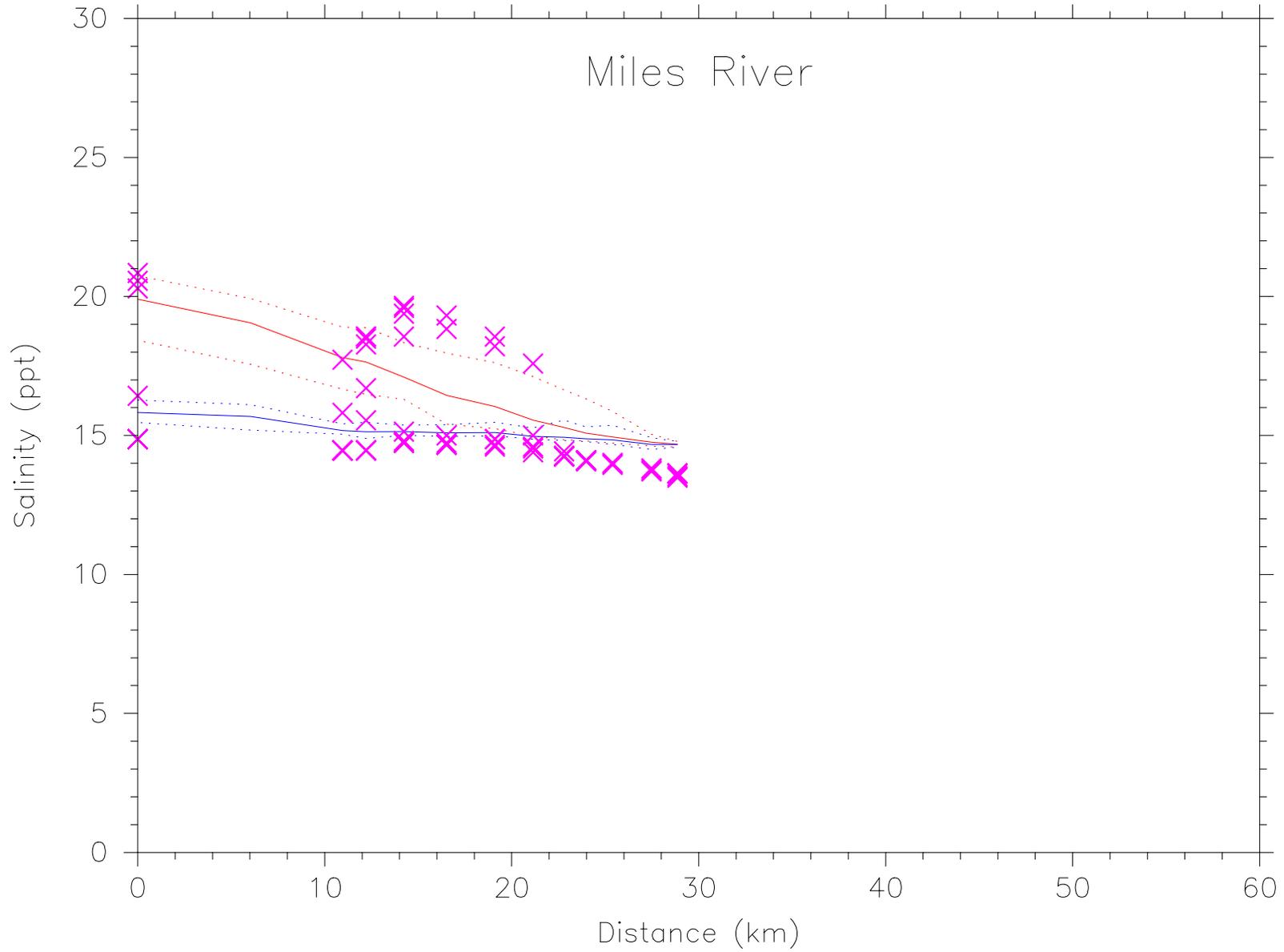
Day 172 - 172, 1999



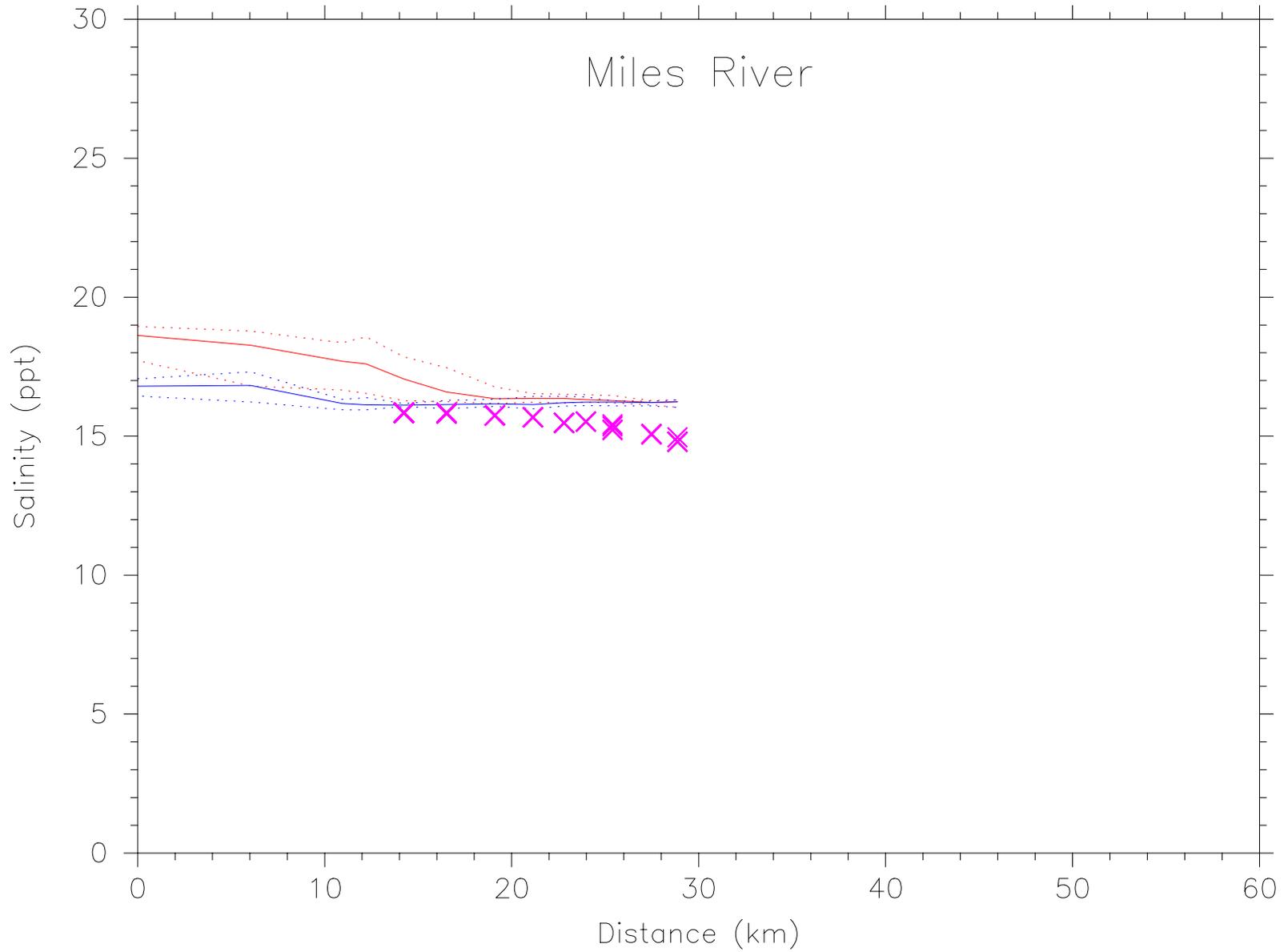
Day 186 - 188, 1999



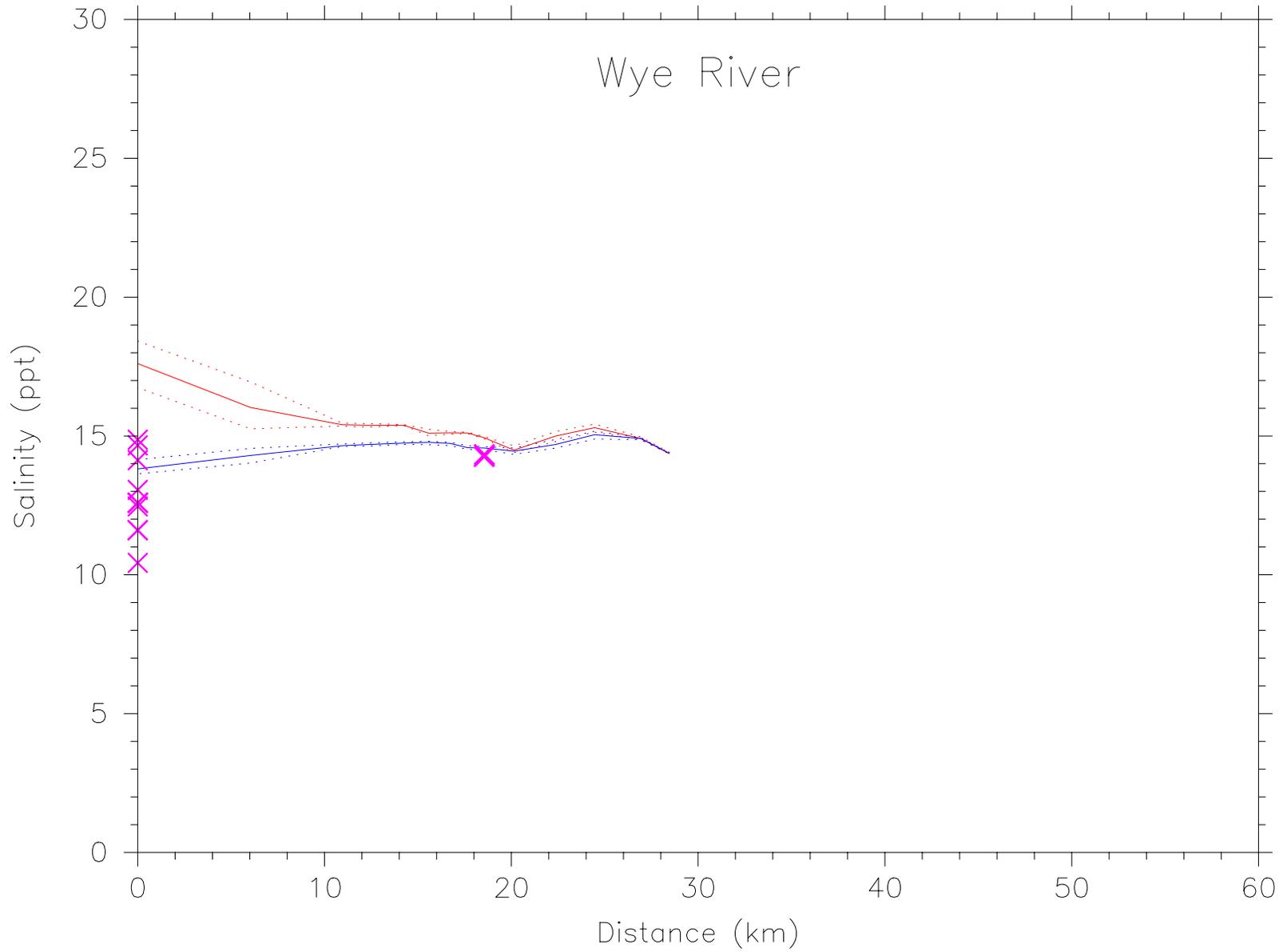
Day 213 - 215, 1999



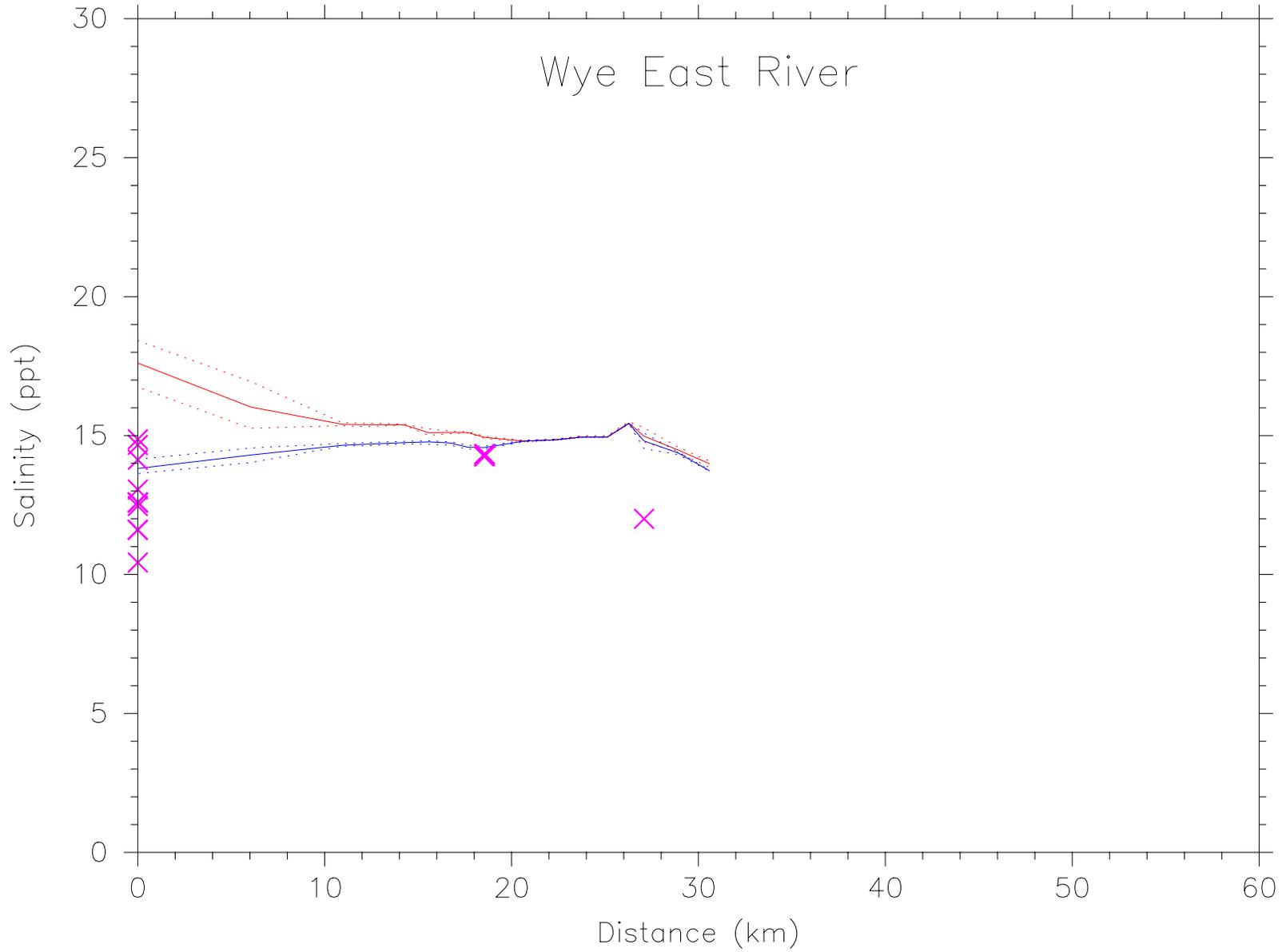
Day 241 - 243, 1999



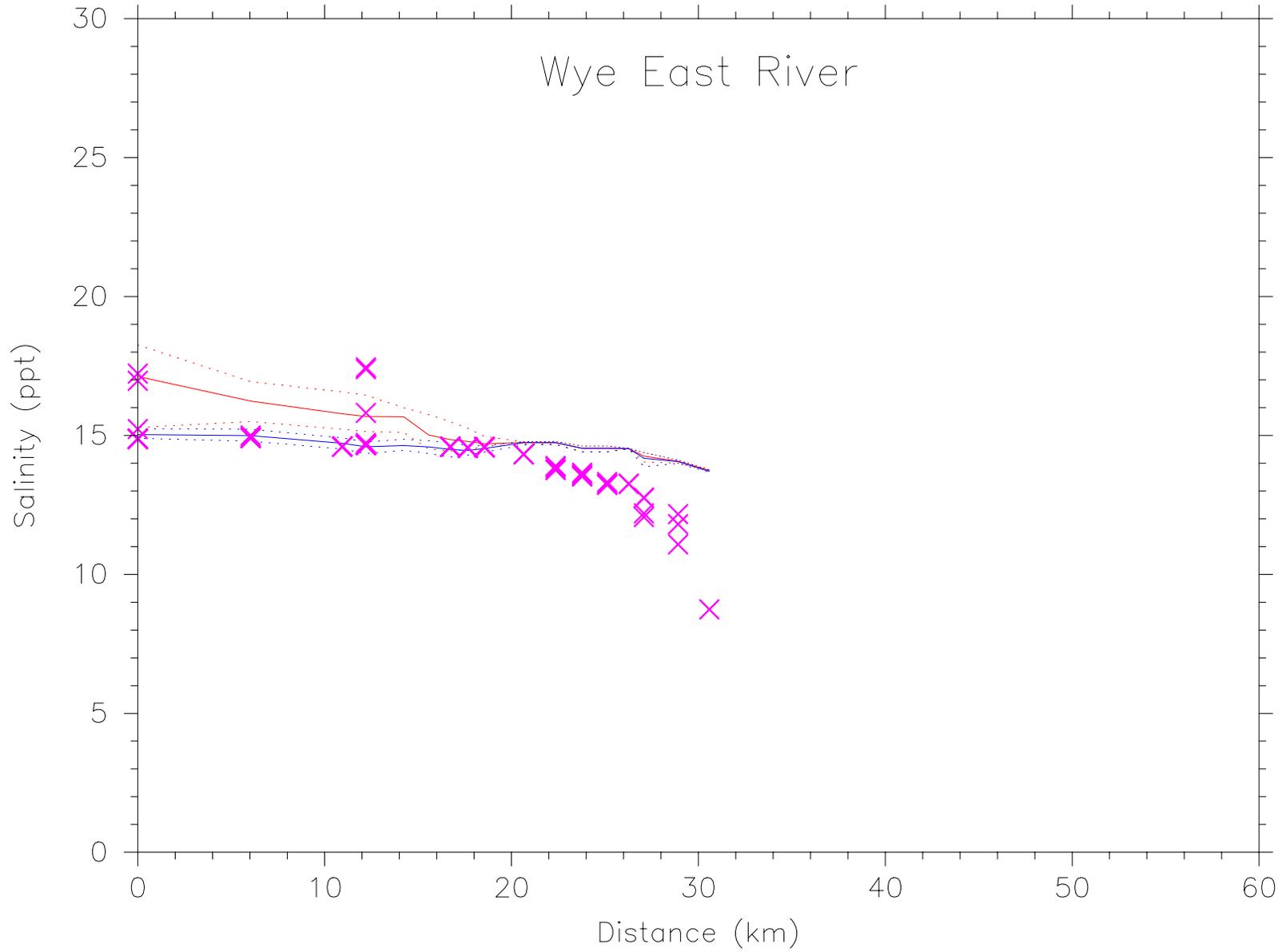
Day 046 - 046, 1999



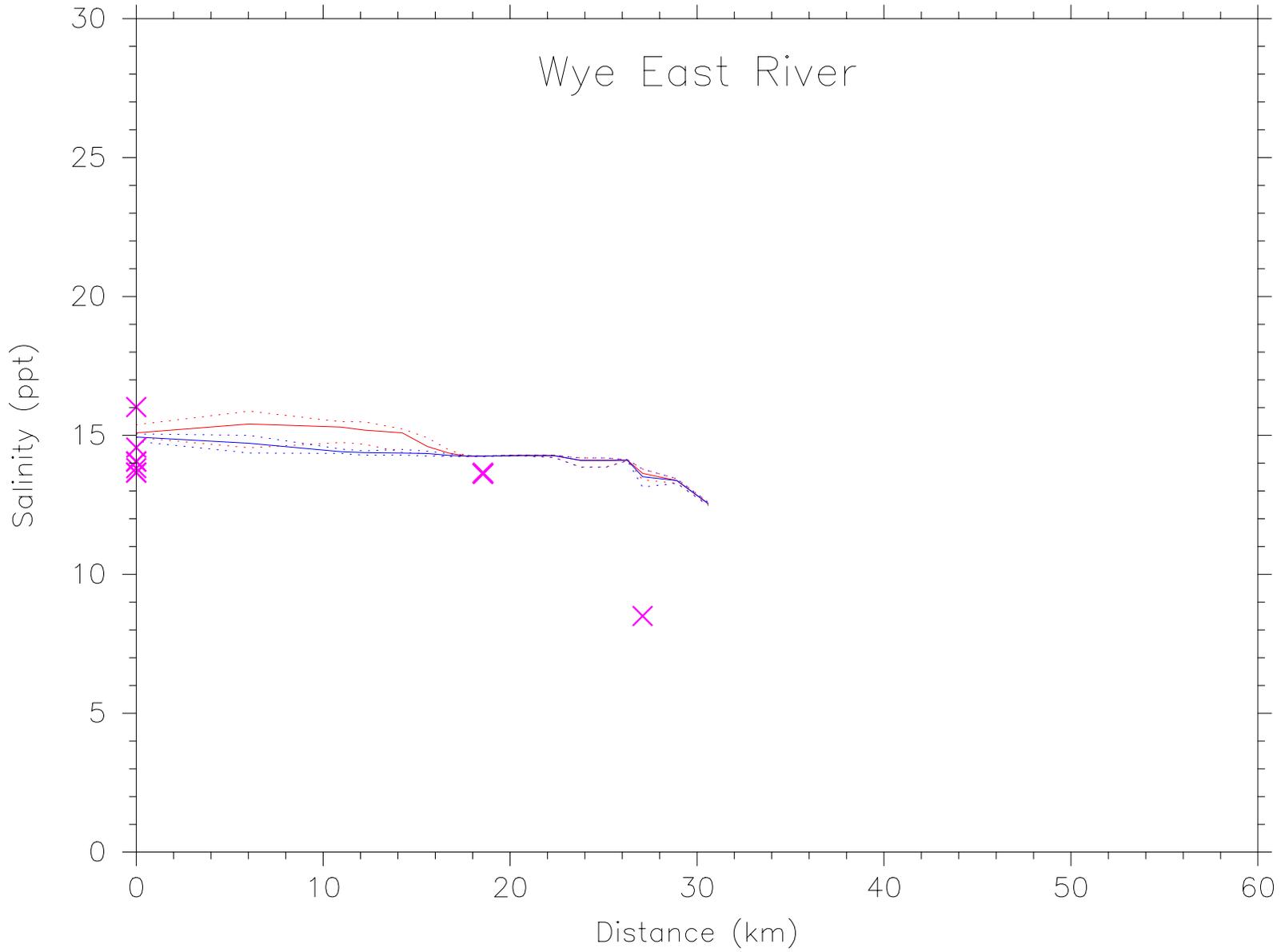
Day 046 - 046, 1999



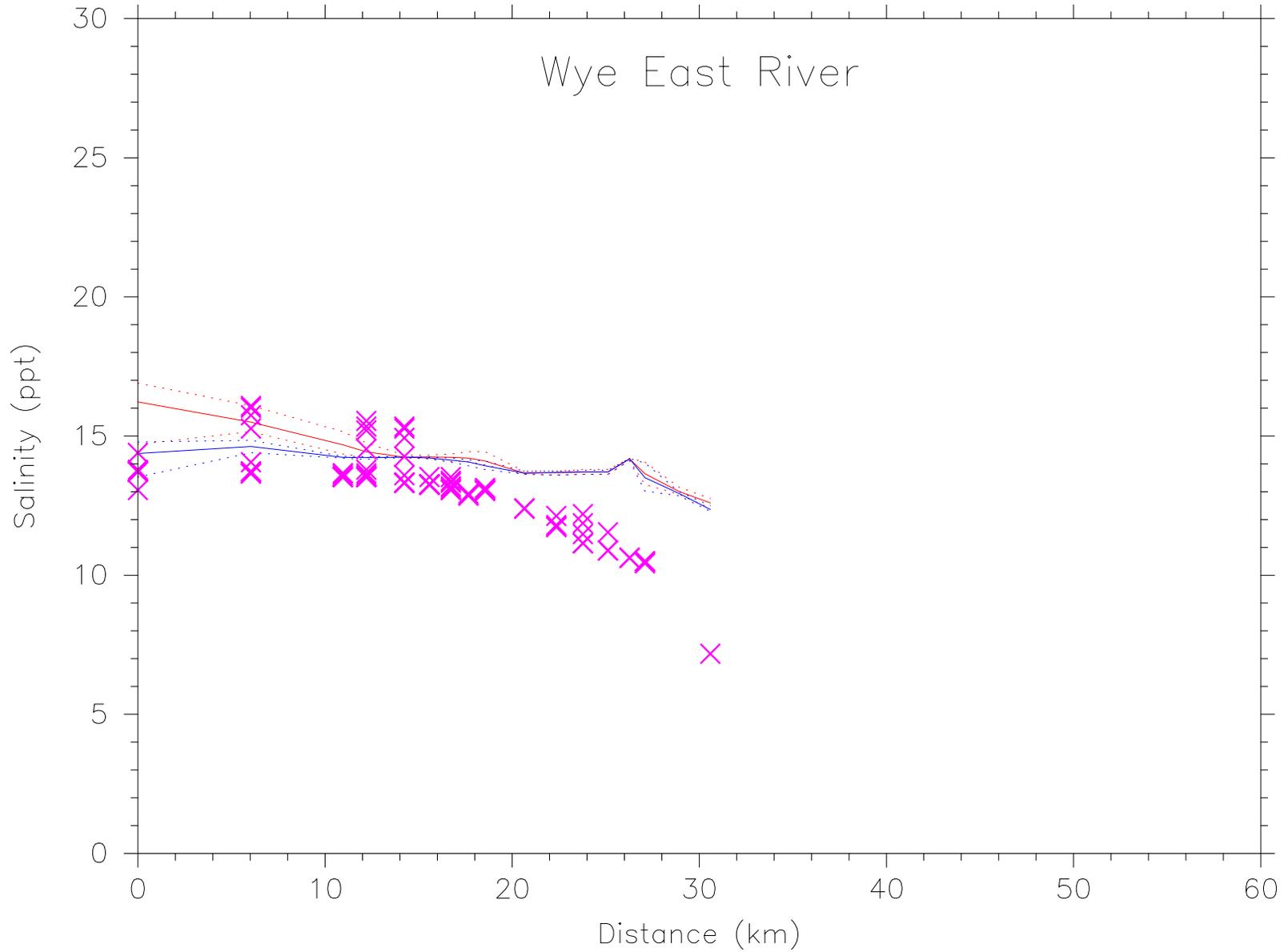
Day 059 - 060, 1999



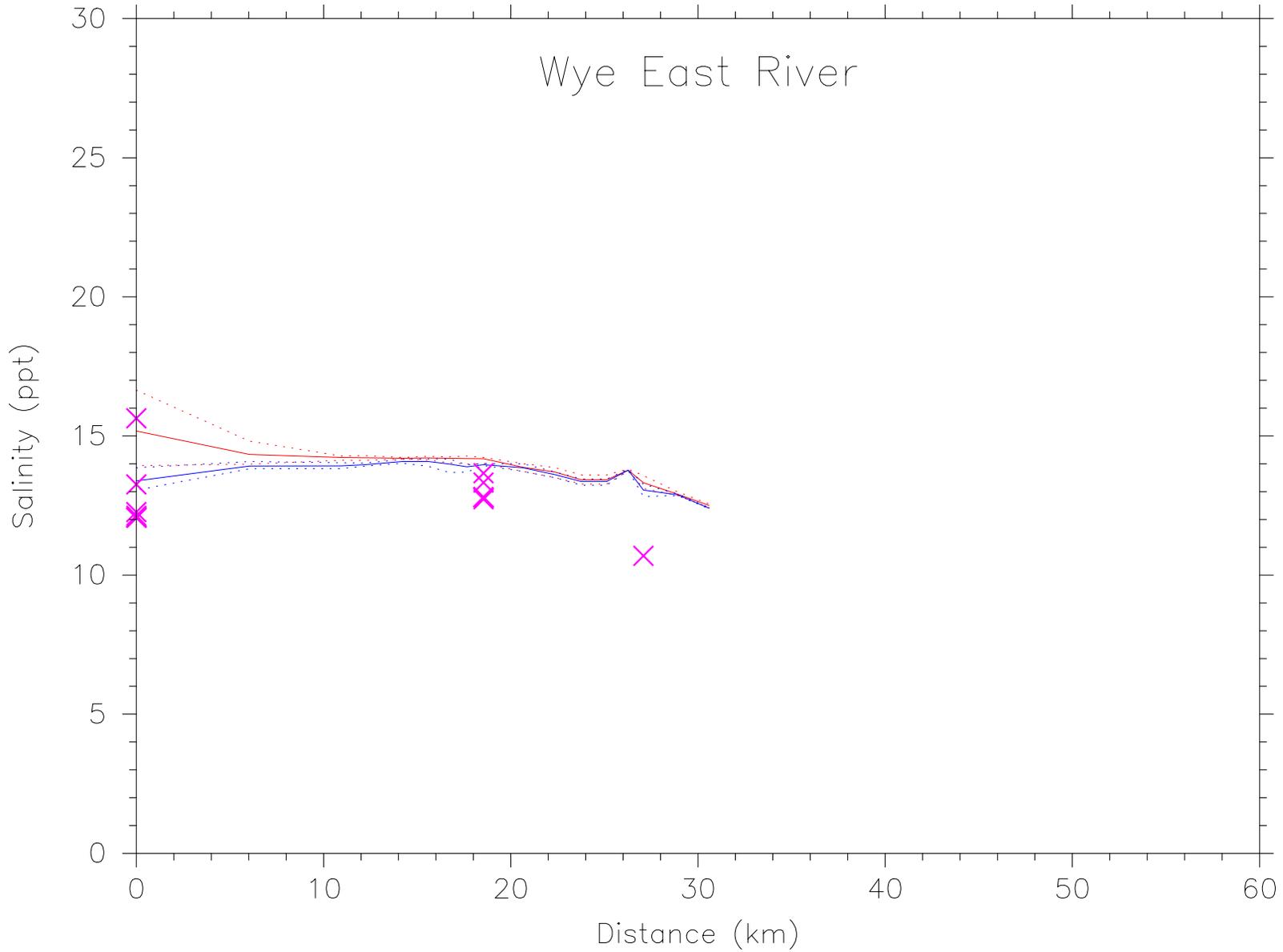
Day 076 - 076, 1999



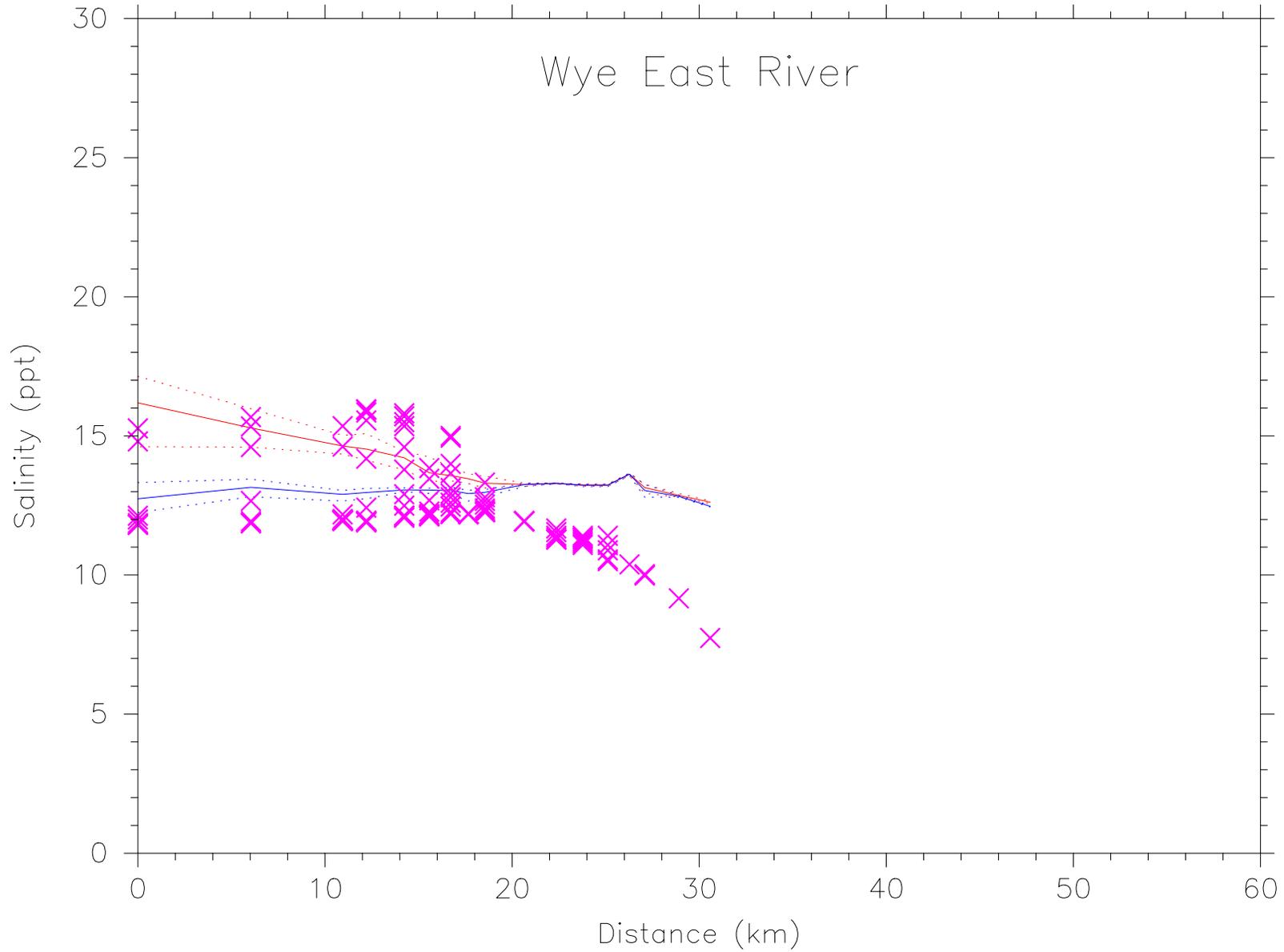
Day 087 - 089, 1999



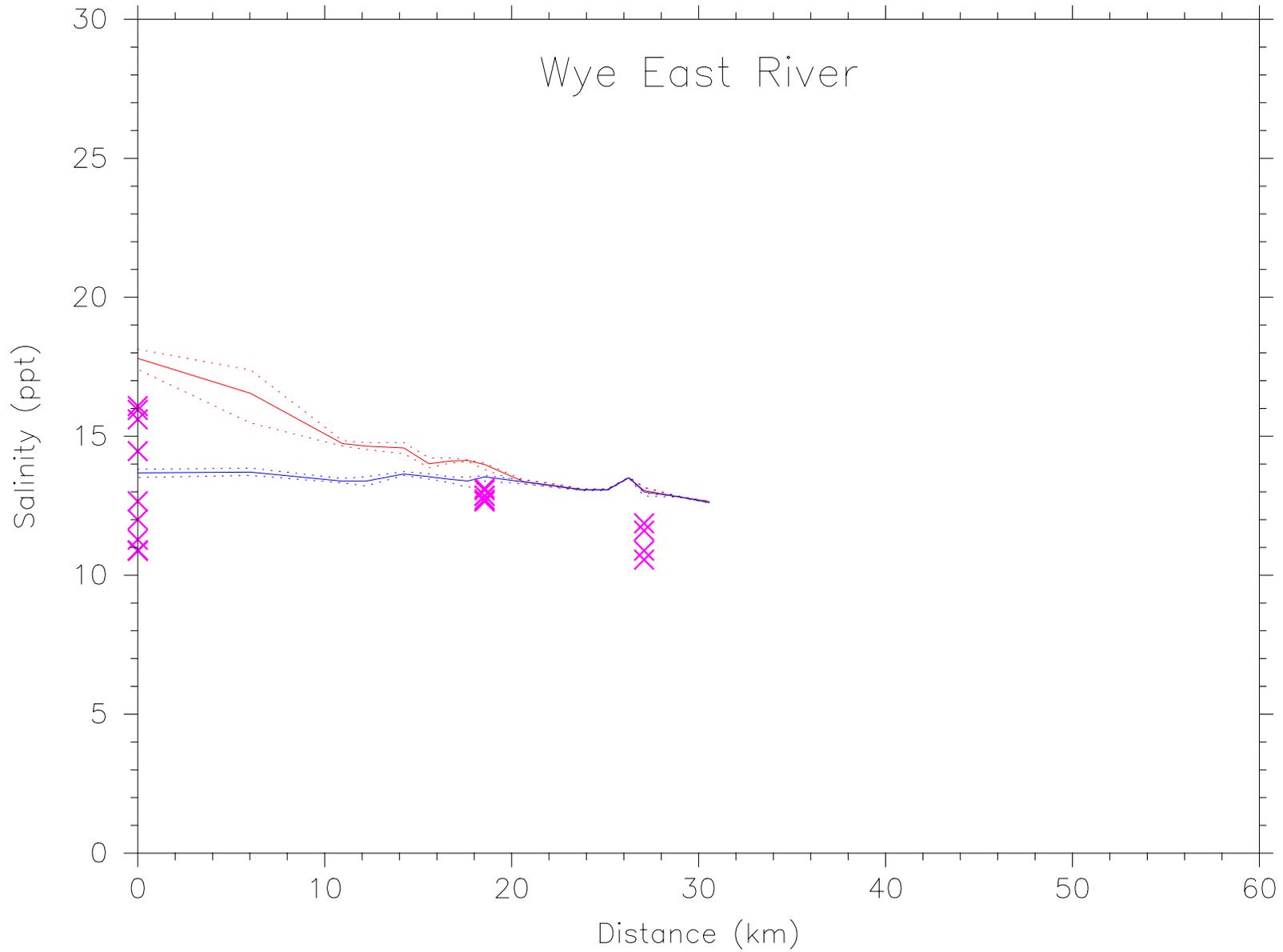
Day 101 - 101, 1999



Day 115 - 117, 1999

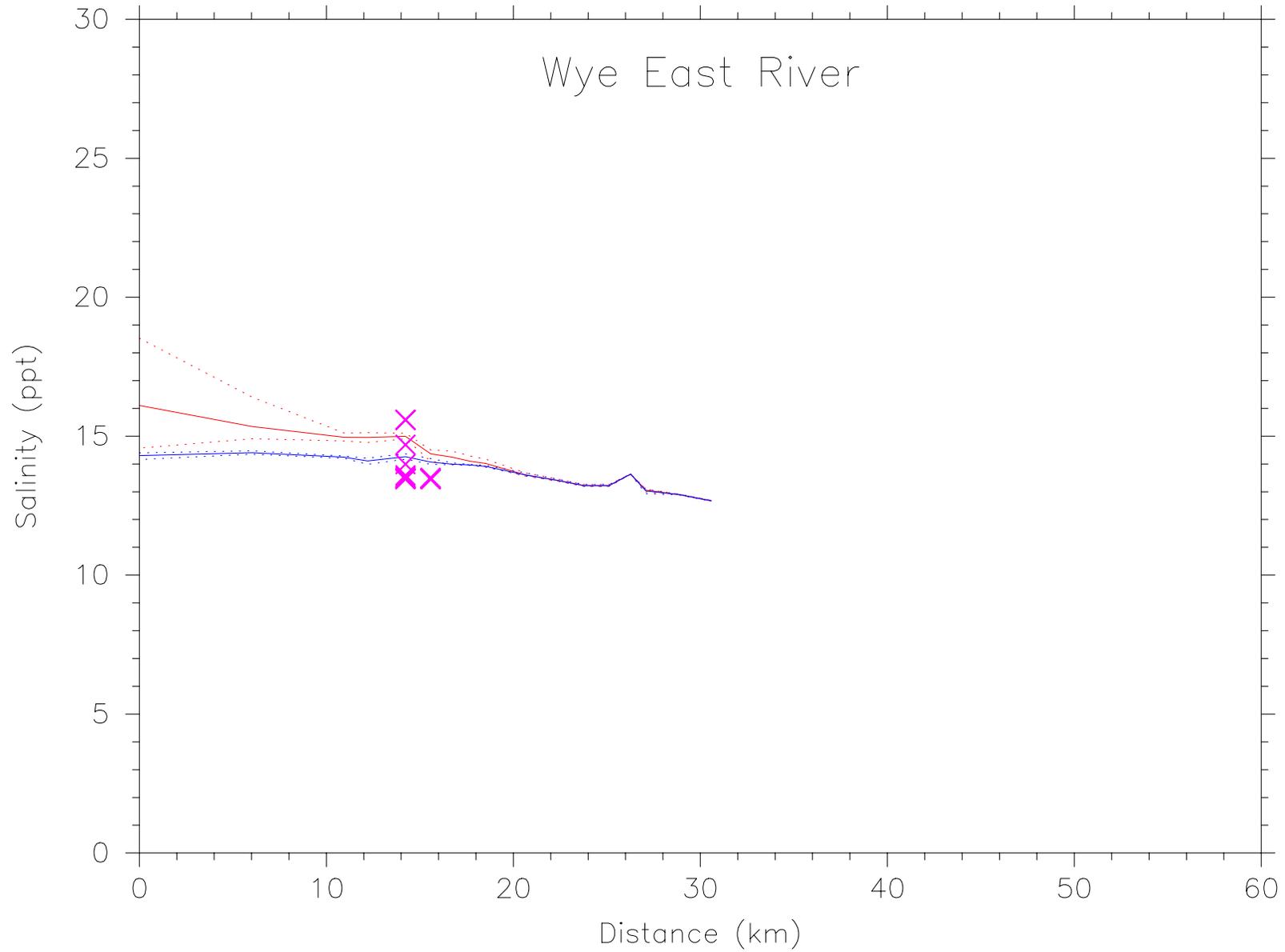


Day 129 - 129, 1999

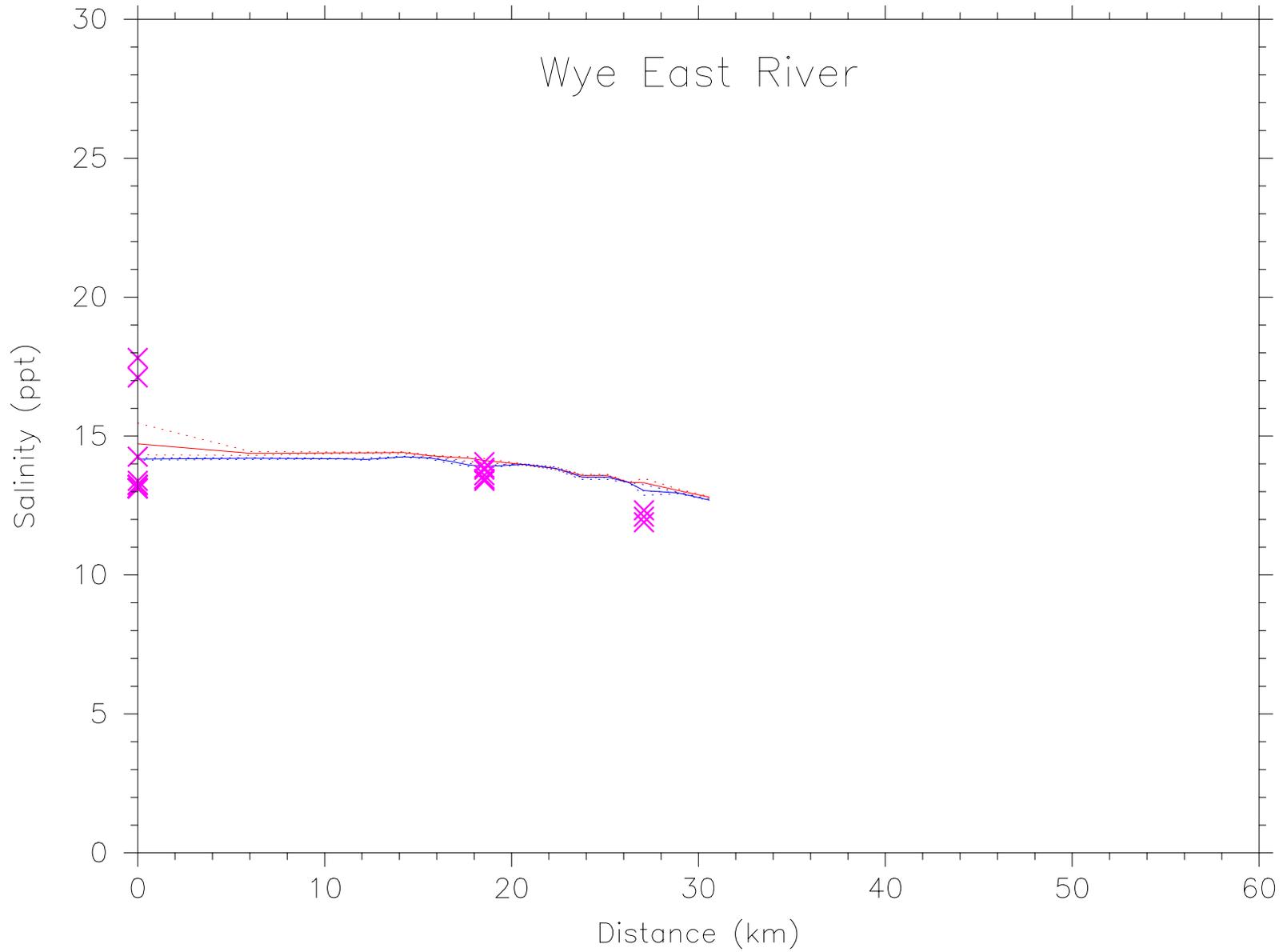


Day 144 - 144, 1999

Wye East River

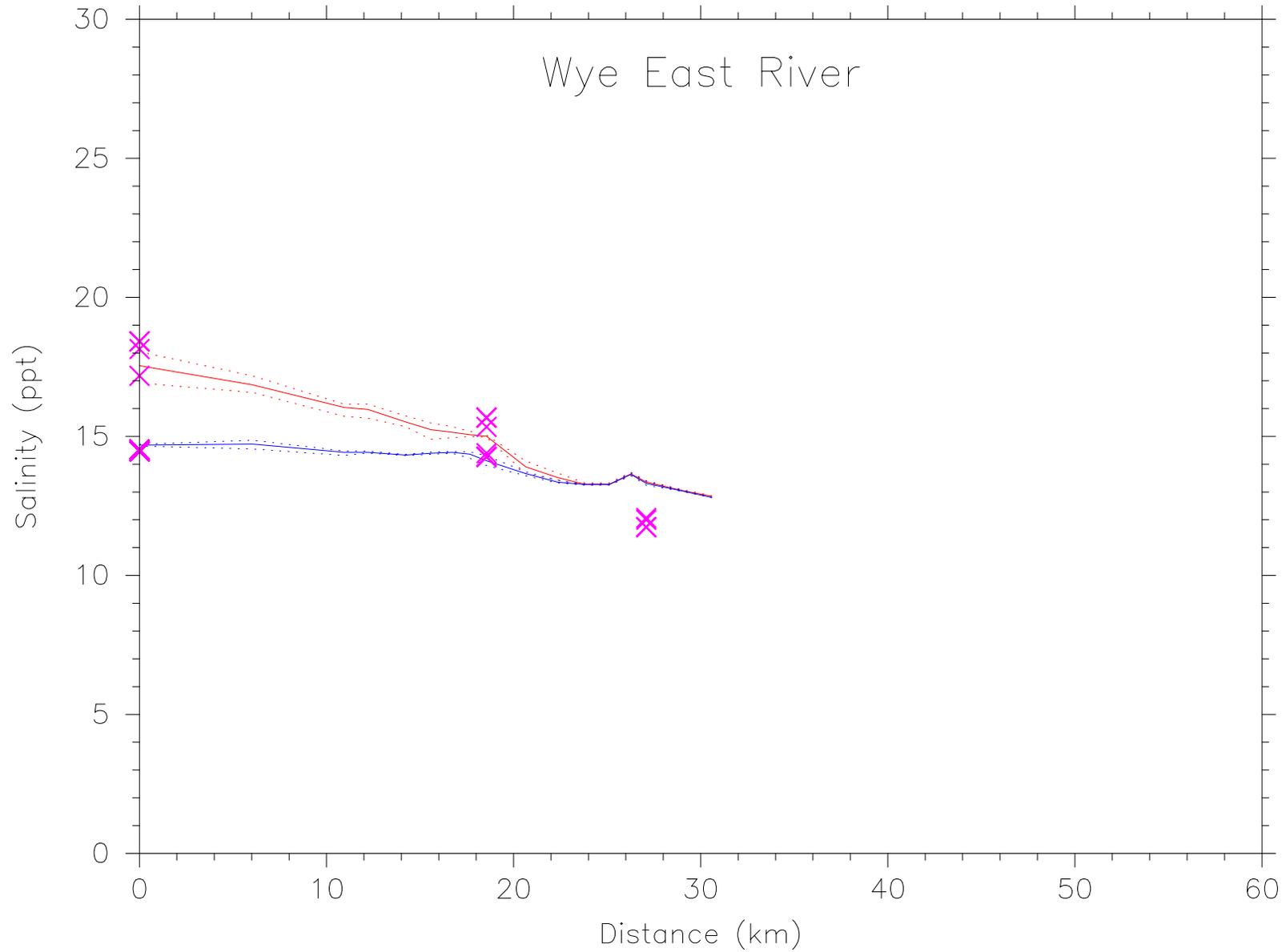


Day 158 - 158, 1999



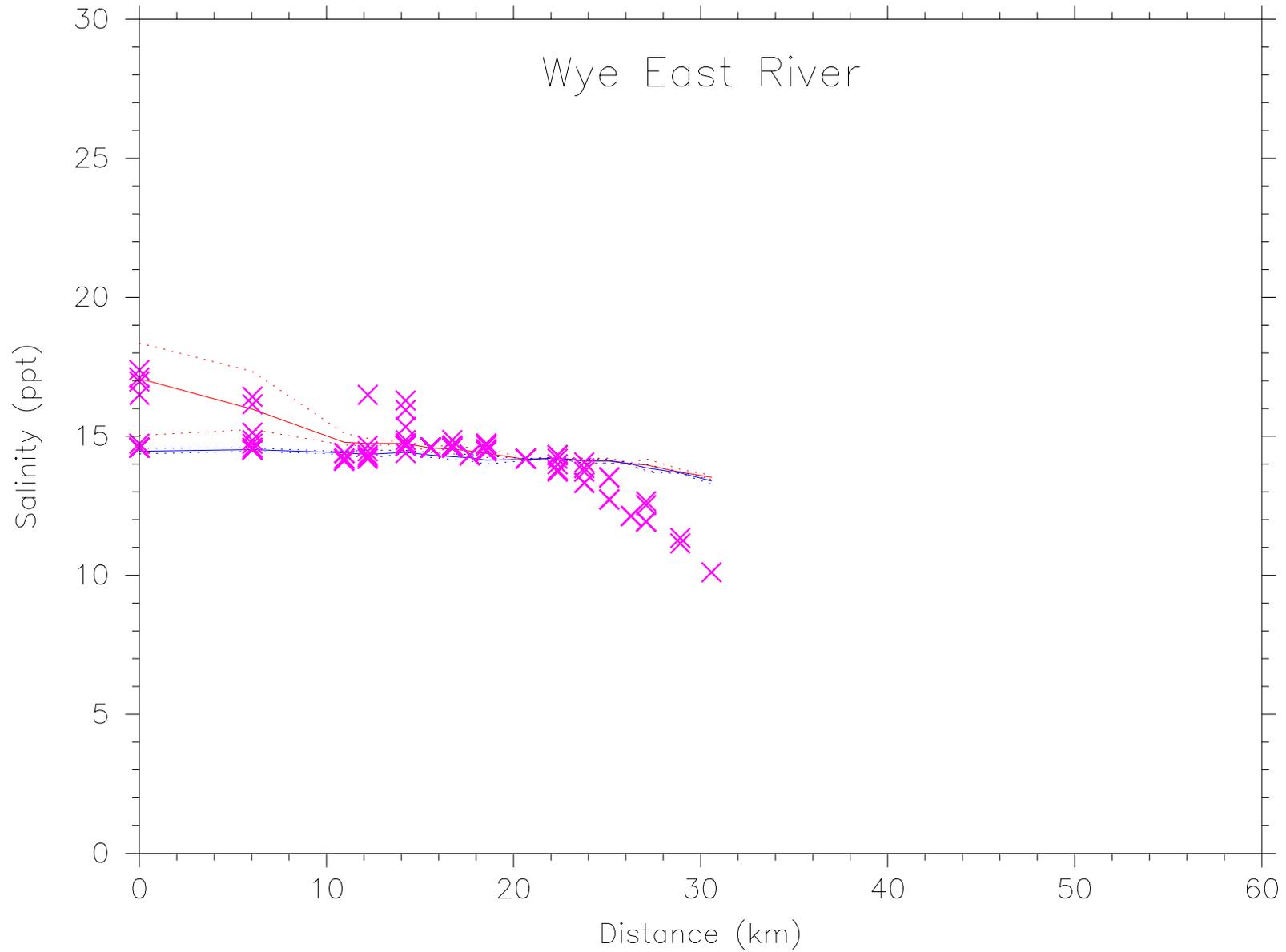
Day 172 - 172, 1999

Wye East River



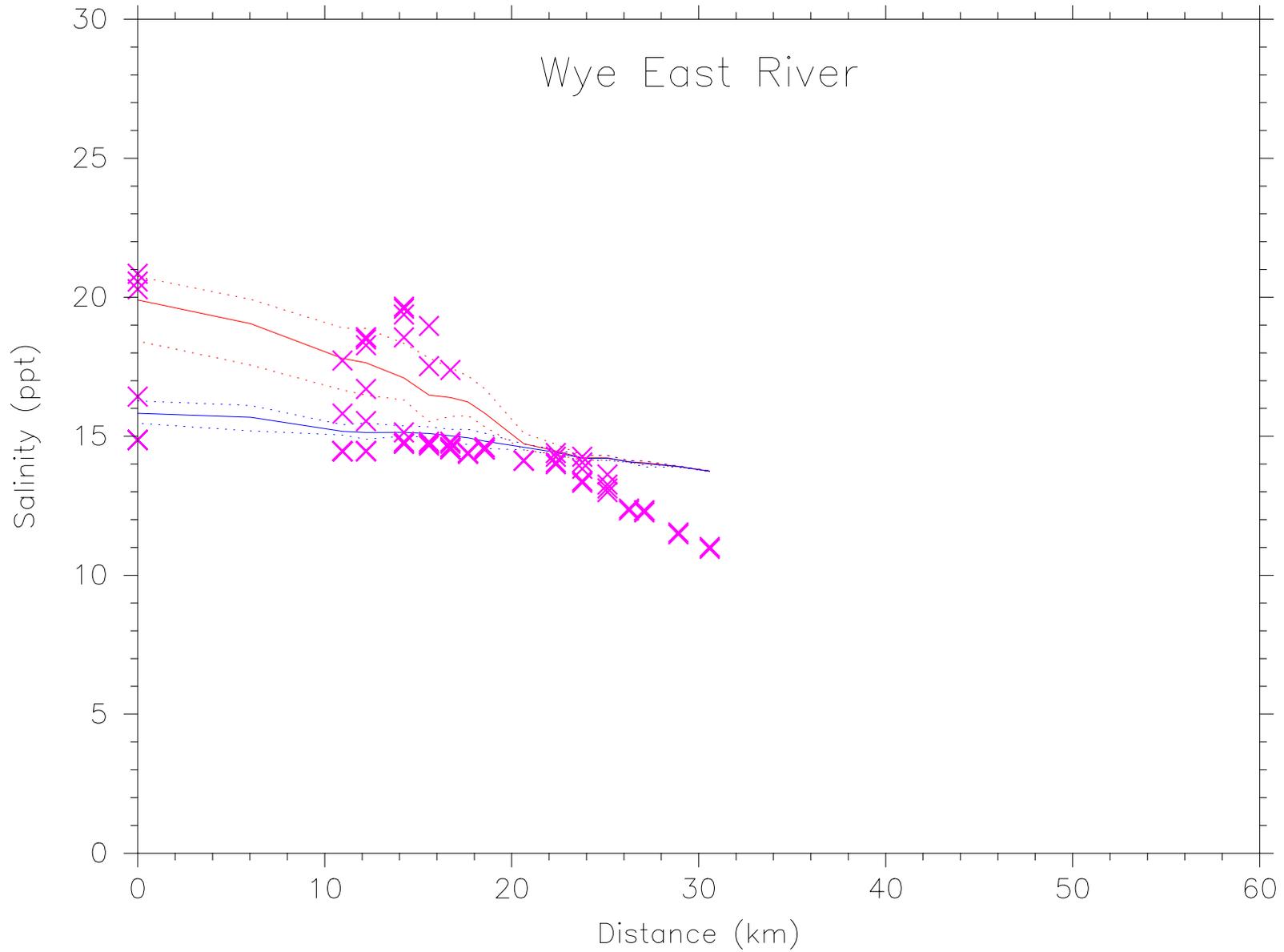
Day 186 - 188, 1999

Wye East River



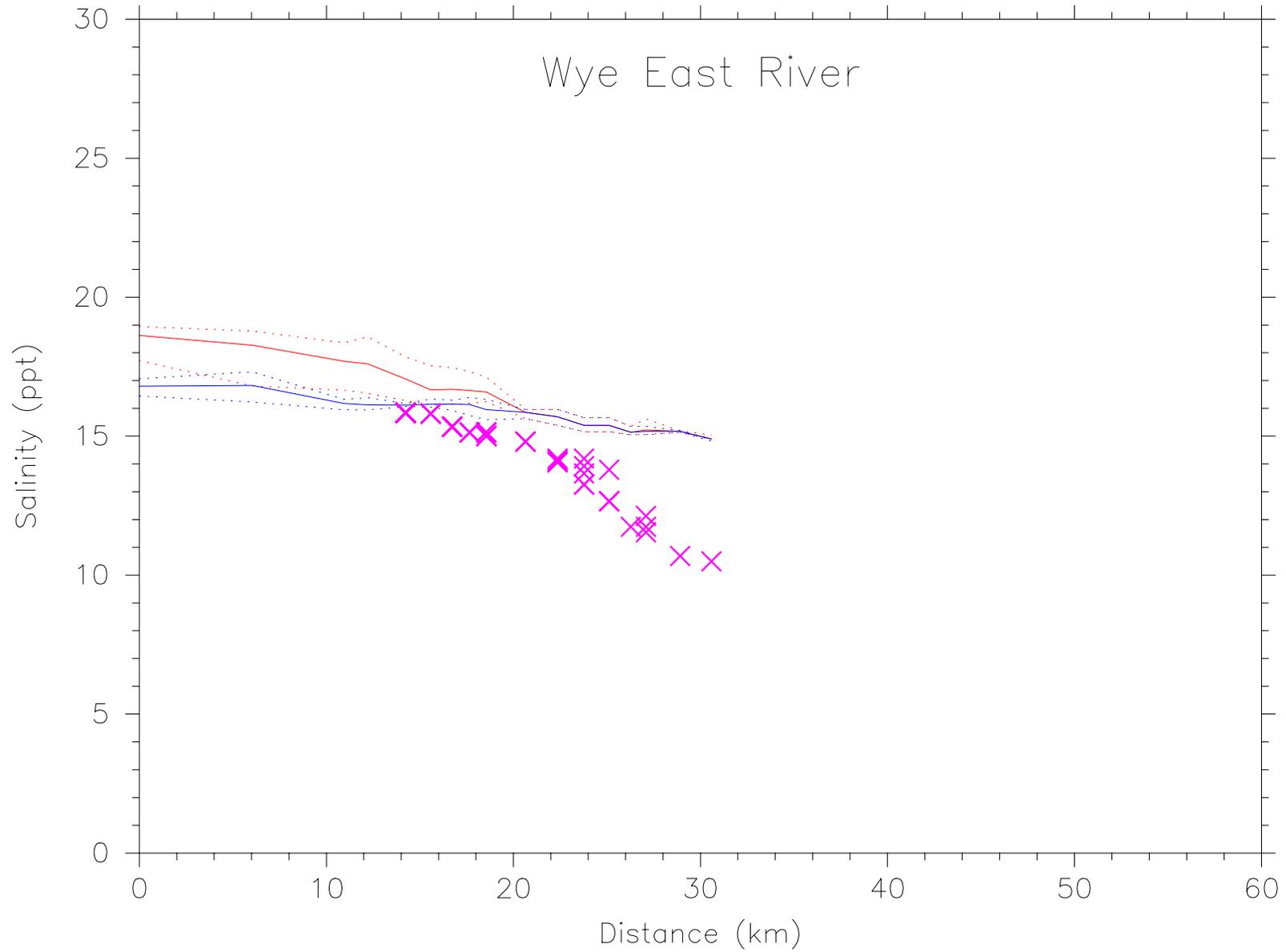
Day 213 - 215, 1999

Wye East River

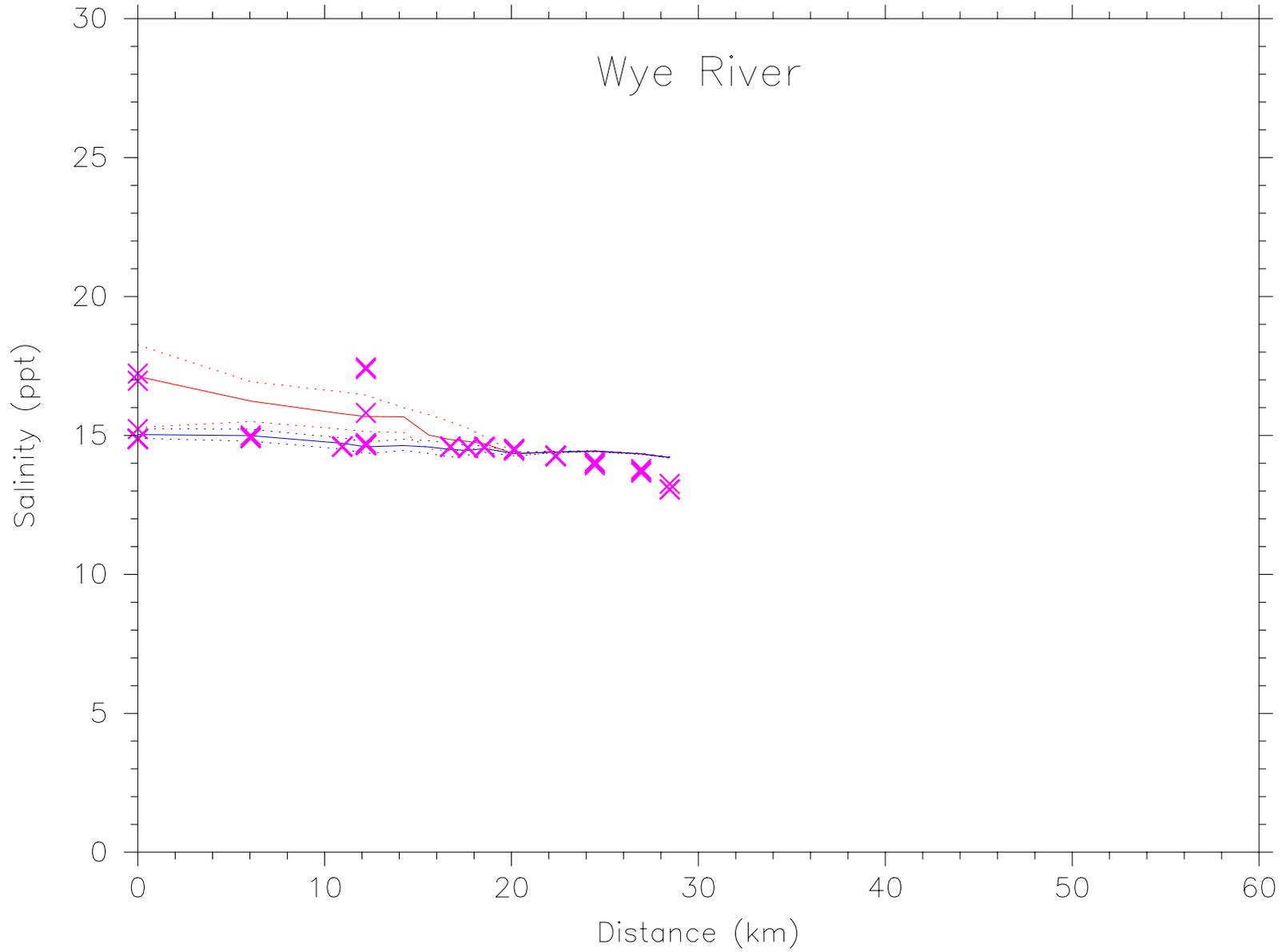


Day 241 - 243, 1999

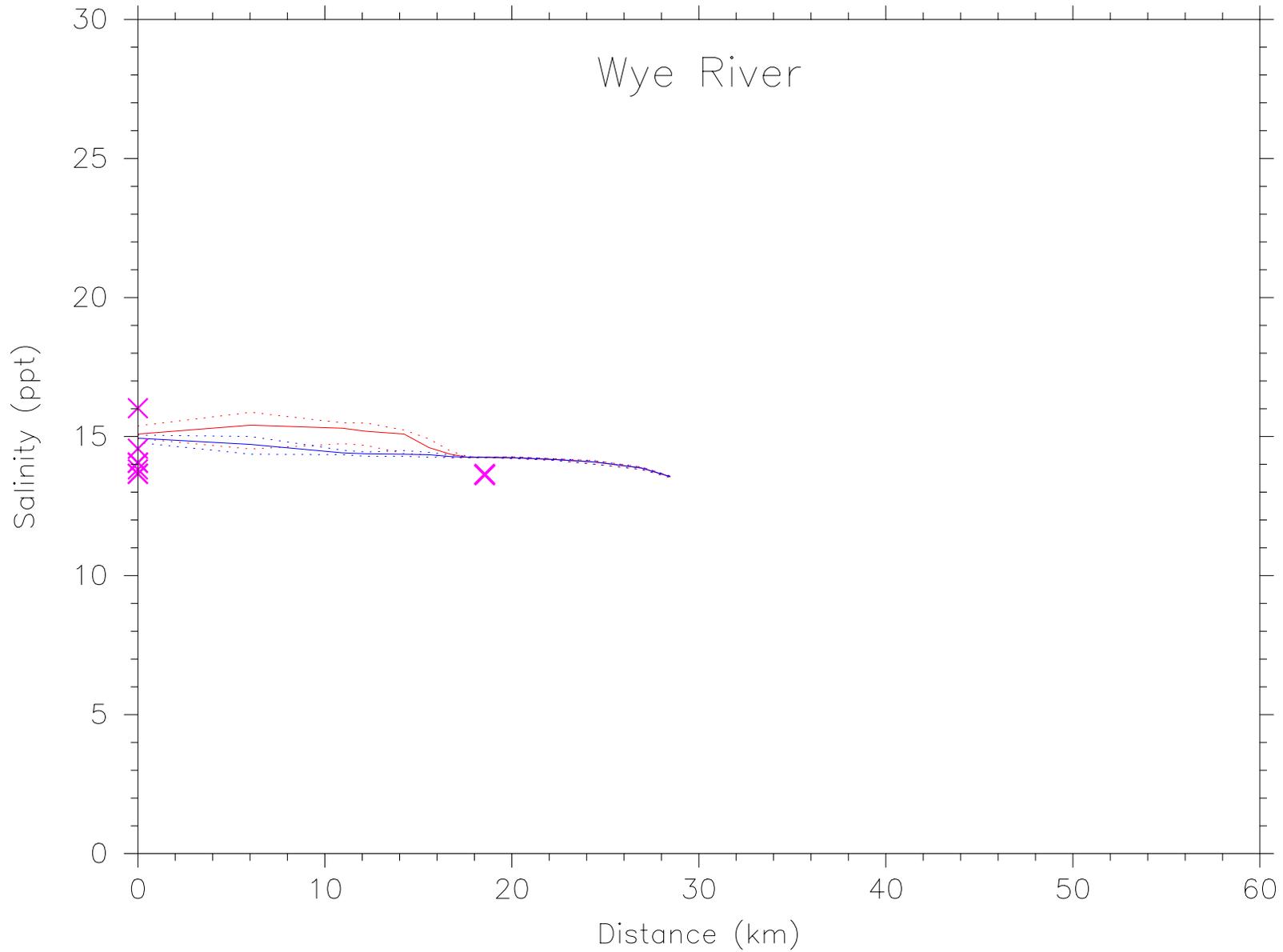
Wye East River



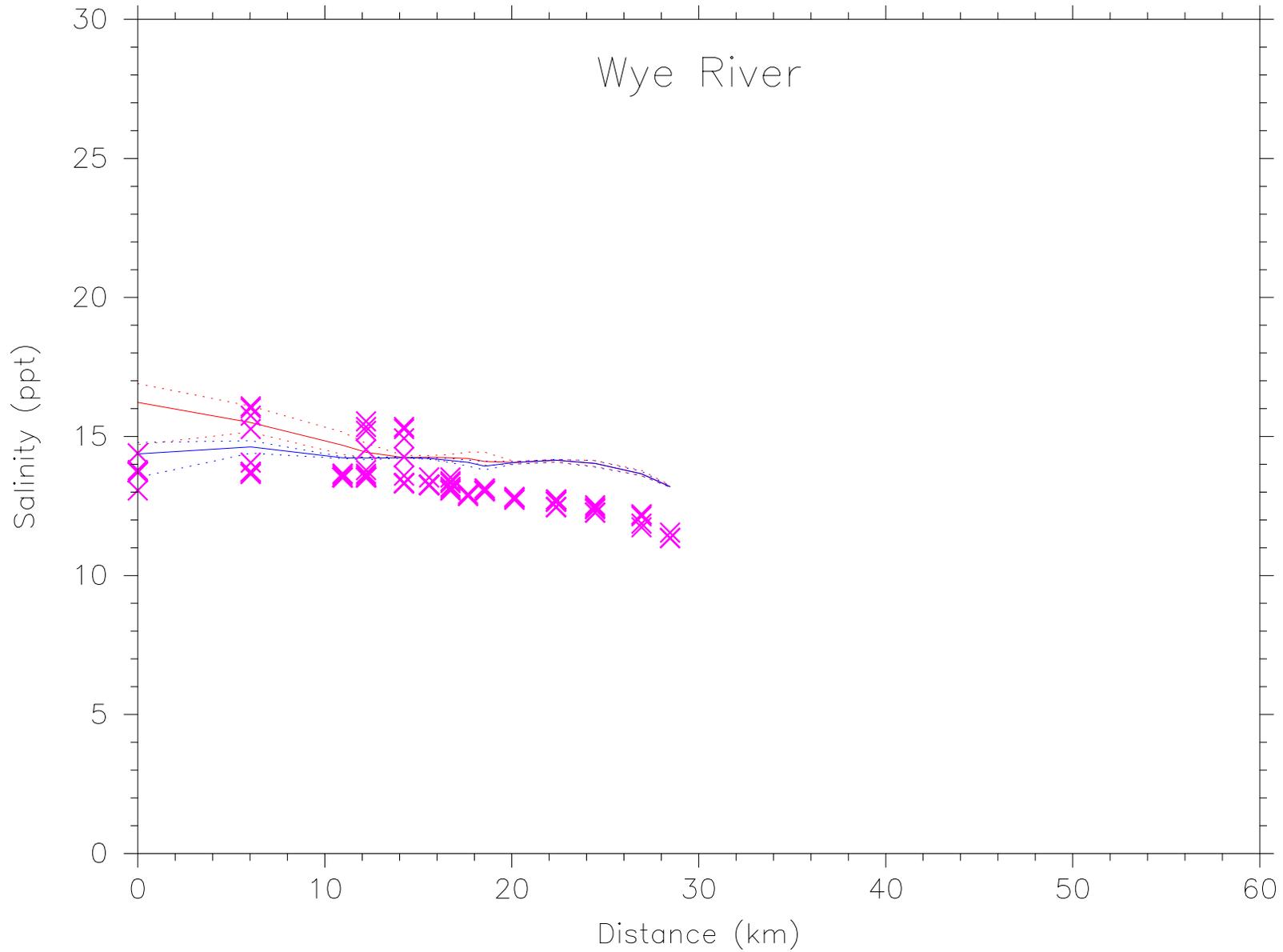
Day 059 - 060, 1999



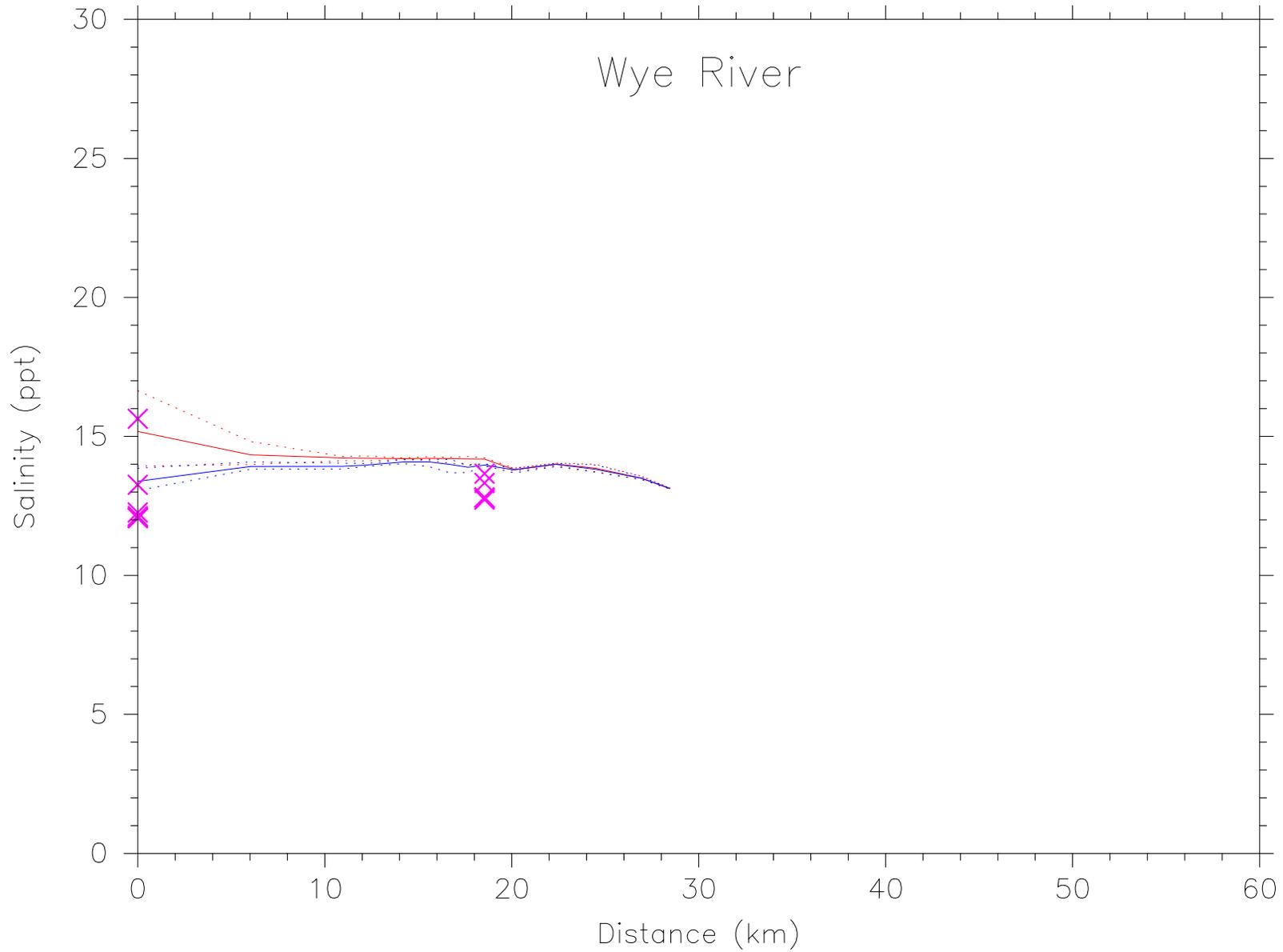
Day 076 - 076, 1999



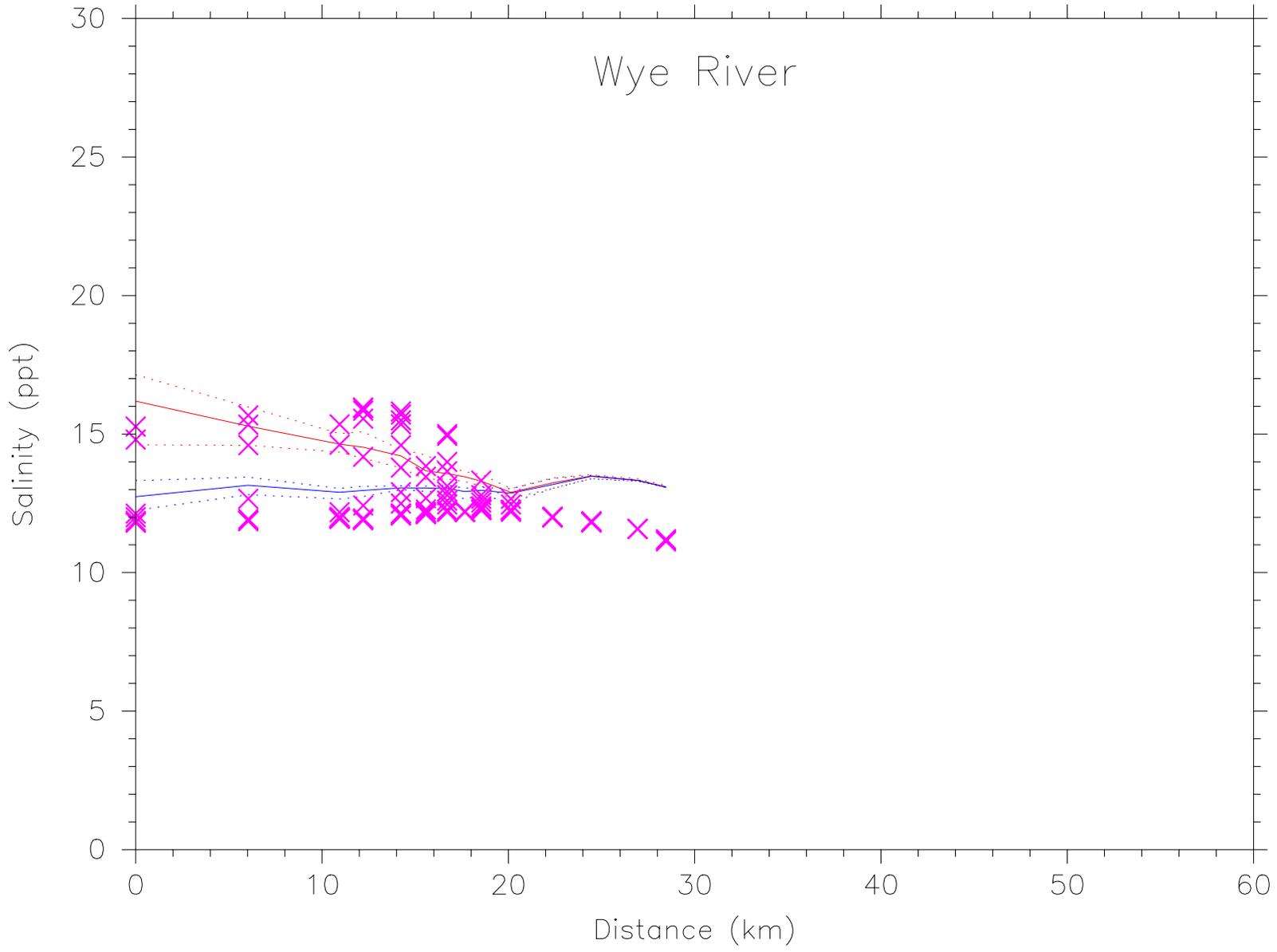
Day 087 - 089, 1999



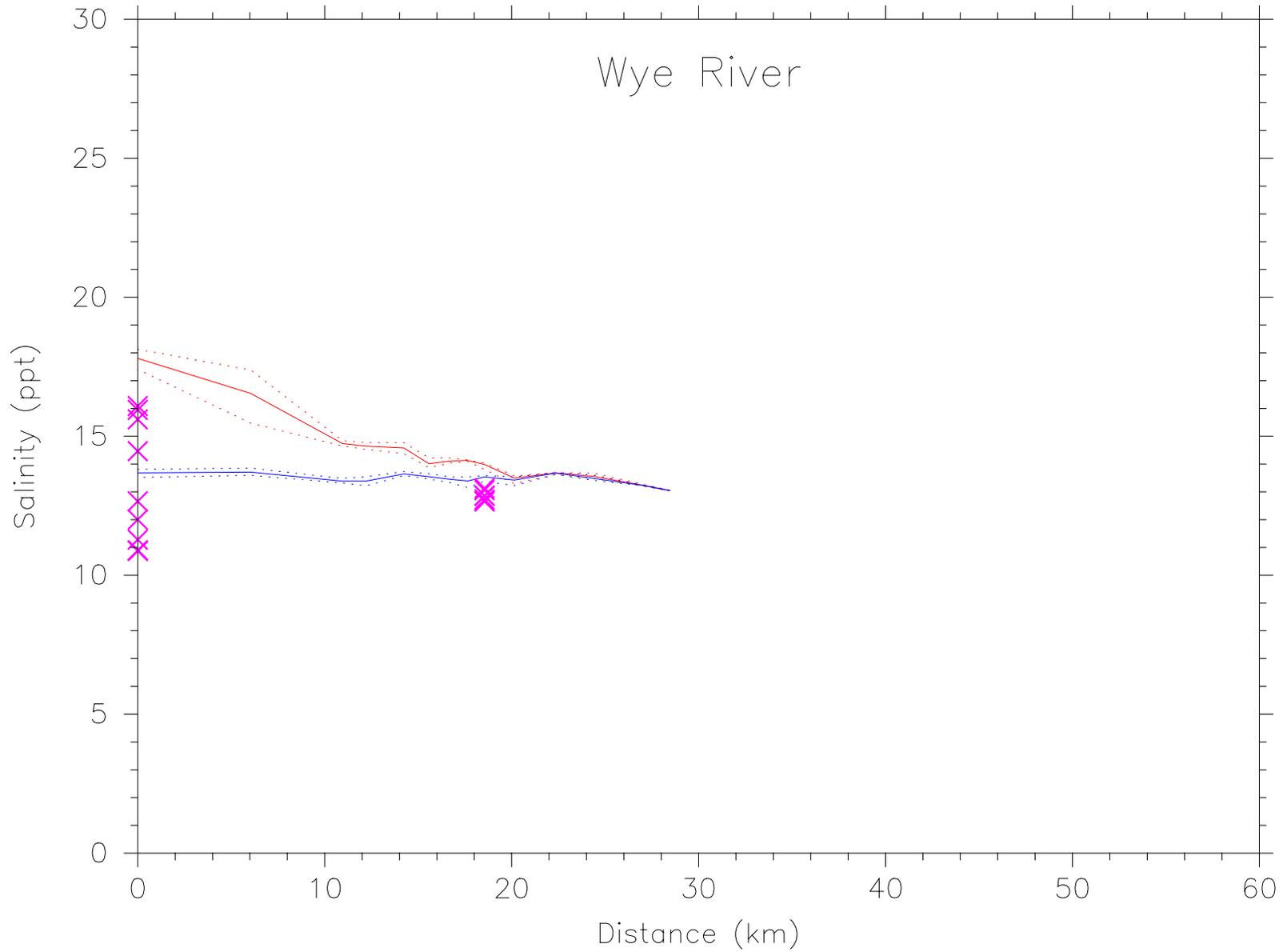
Day 101 - 101, 1999



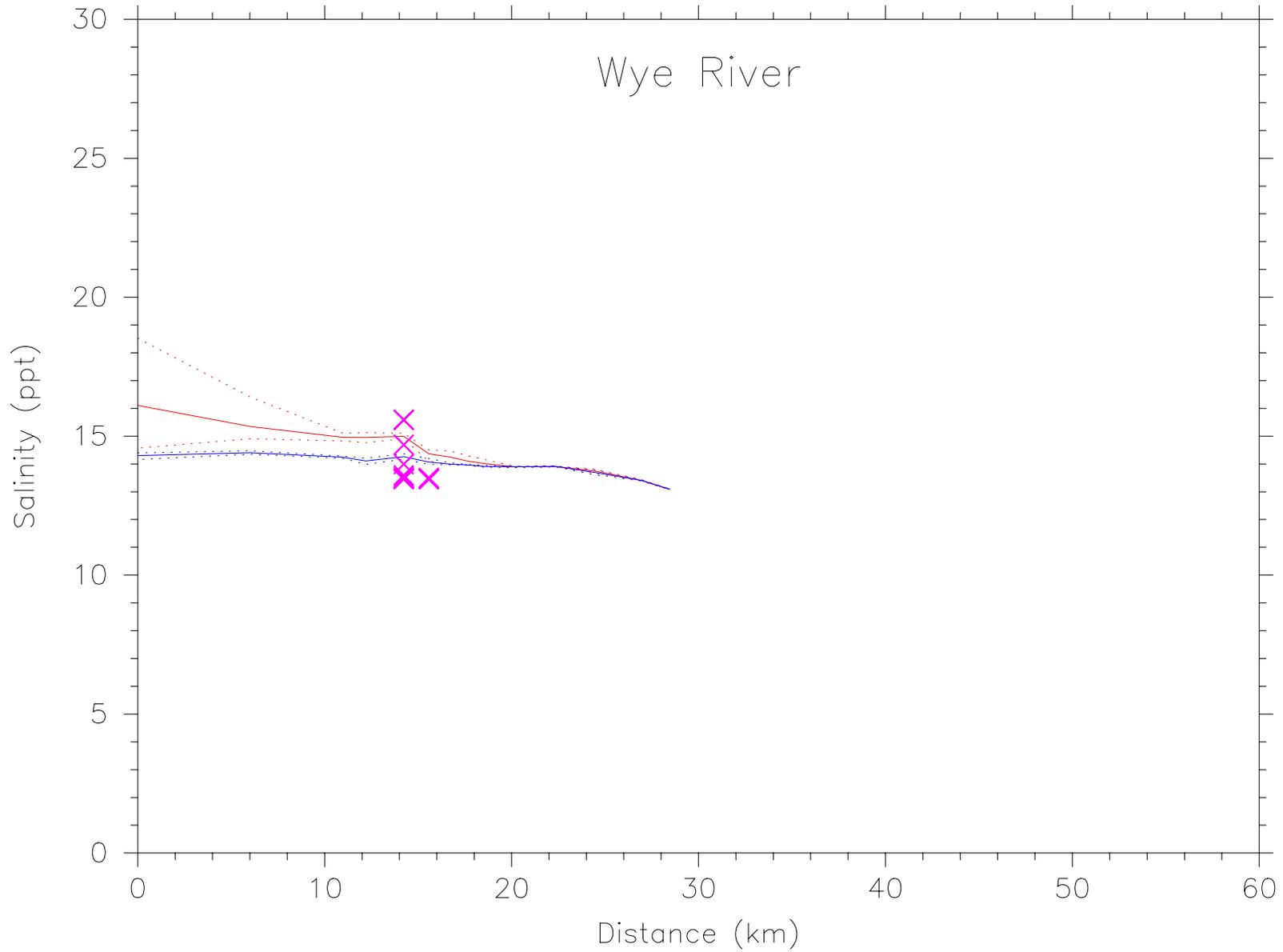
Day 115 - 117, 1999



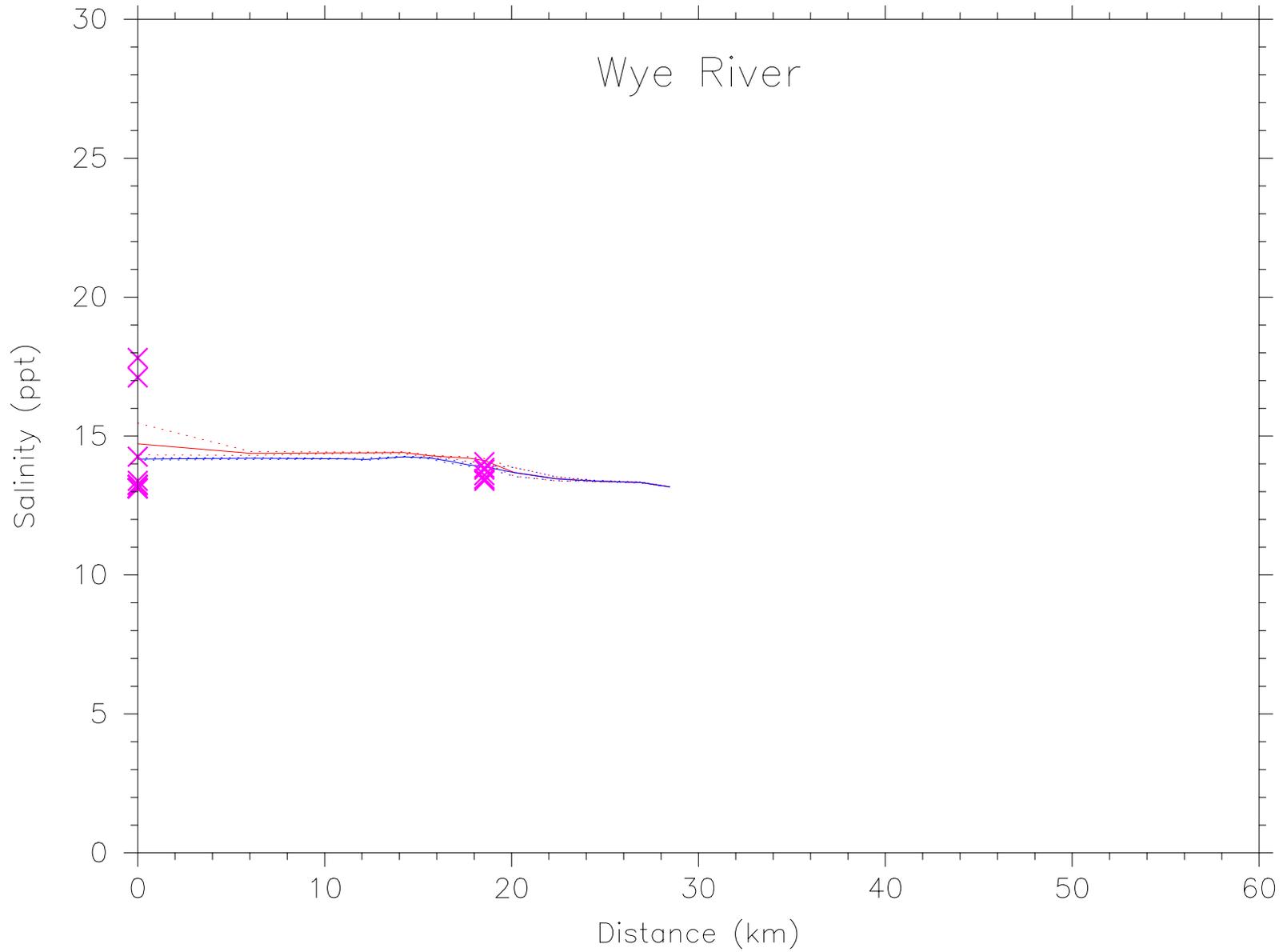
Day 129 - 129, 1999



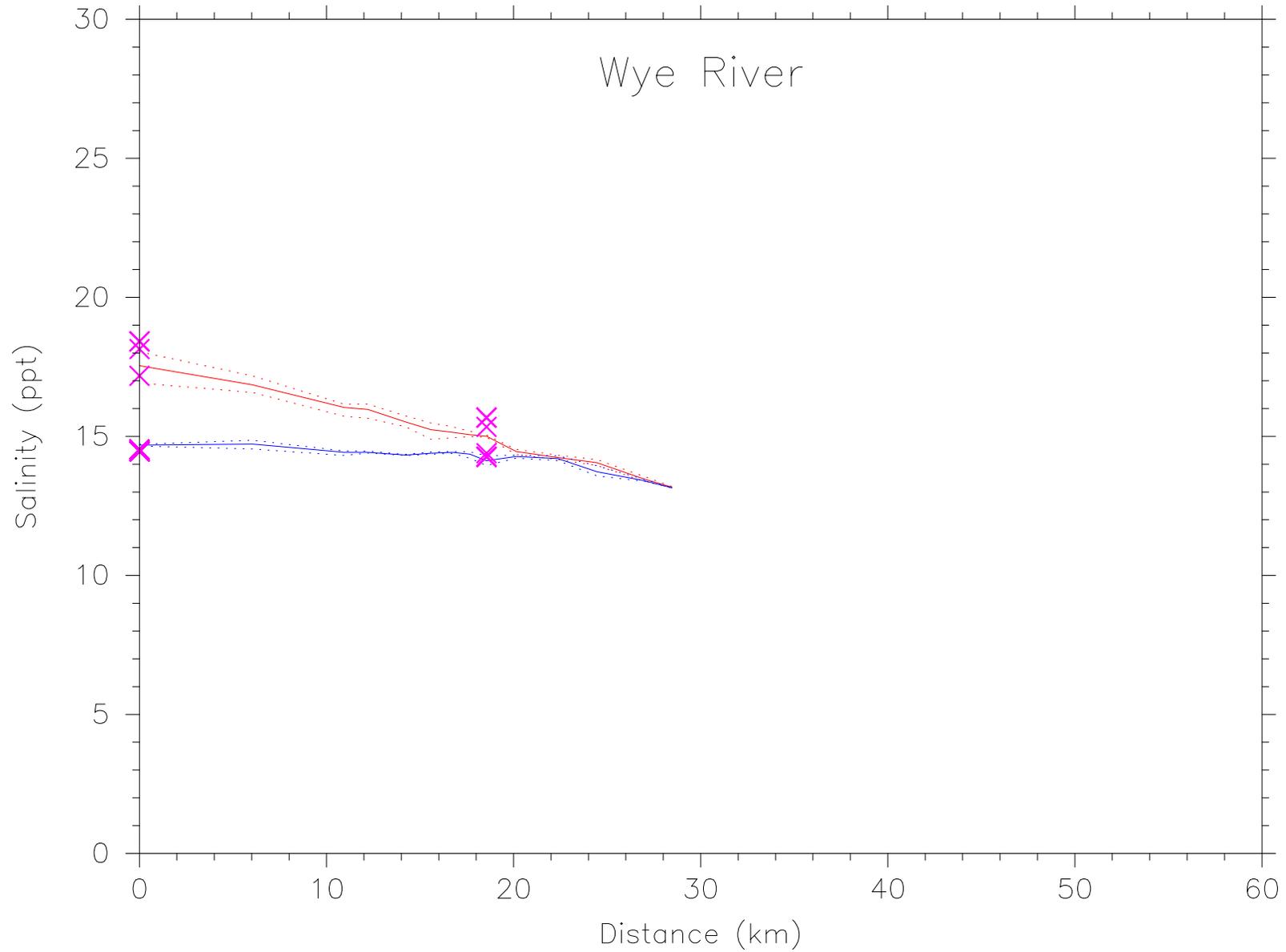
Day 144 - 144, 1999



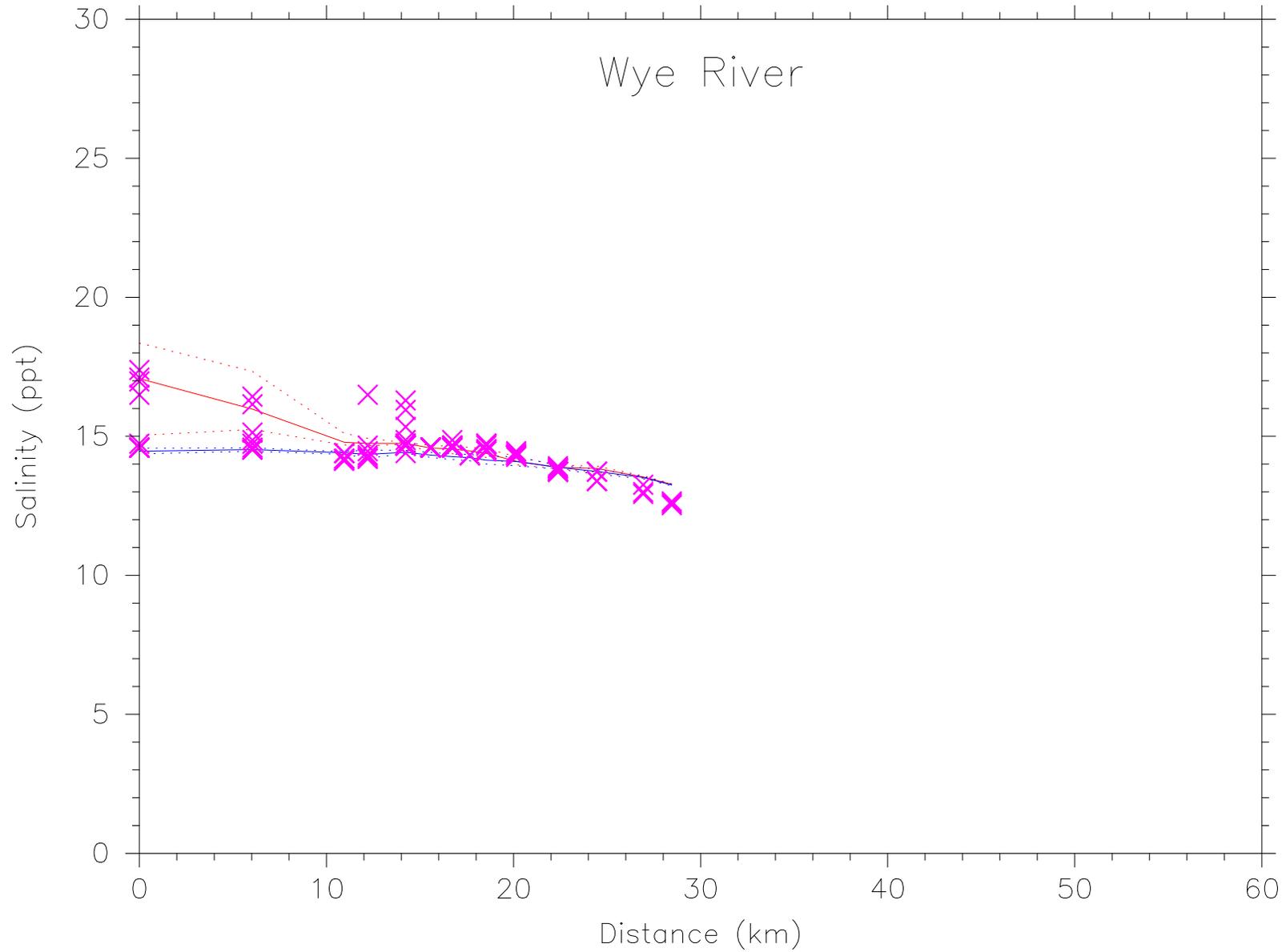
Day 158 - 158, 1999



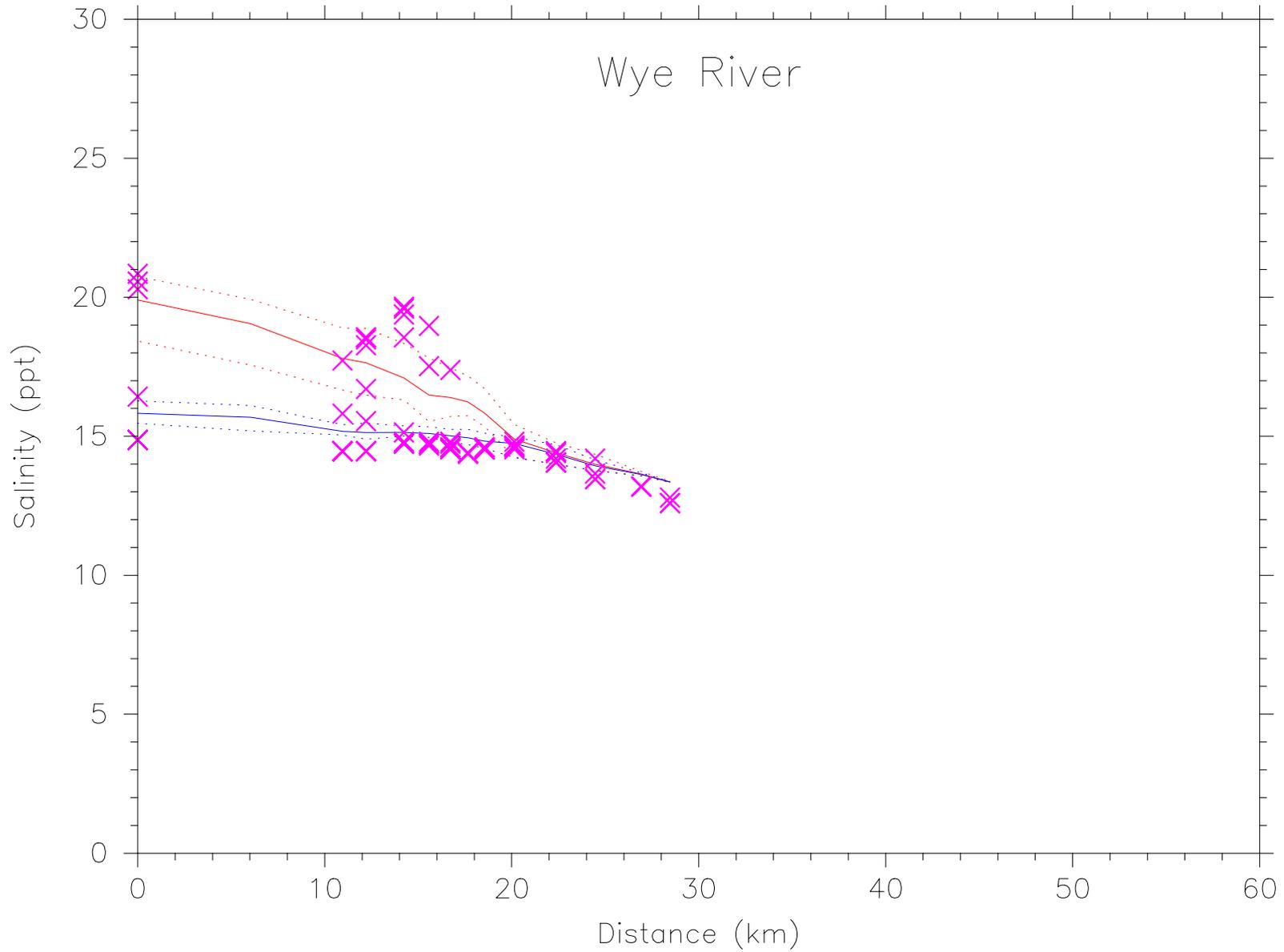
Day 172 - 172, 1999



Day 186 - 188, 1999



Day 213 - 215, 1999



Day 241 - 243, 1999

