

Appendix J

Water Quality Data Summary

4th June, 2010

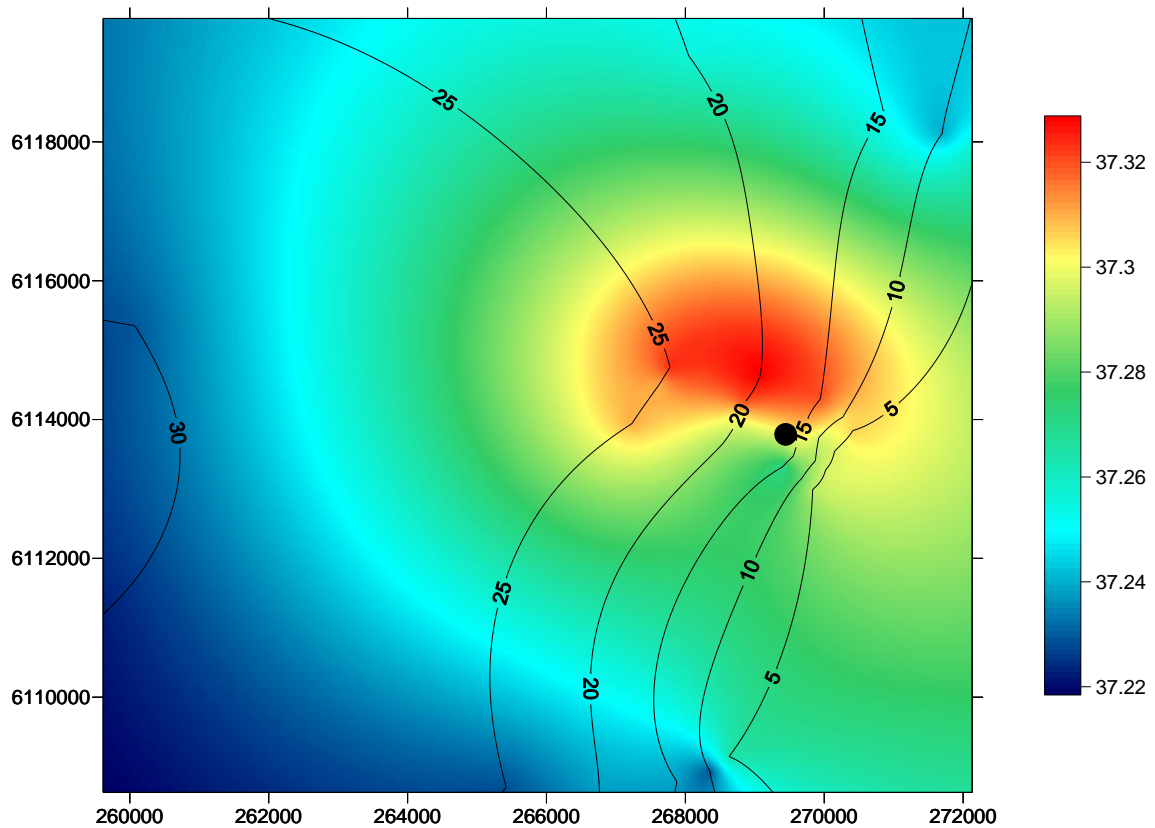


Figure 1 Spatial change in TDS (g/L) concentration, on the seafloor, in the Port Stanvac region. The coloured scale bar represents changes in TDS concentration between 37.2 g/L and 37.3 g/L. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 4th June, 2010.

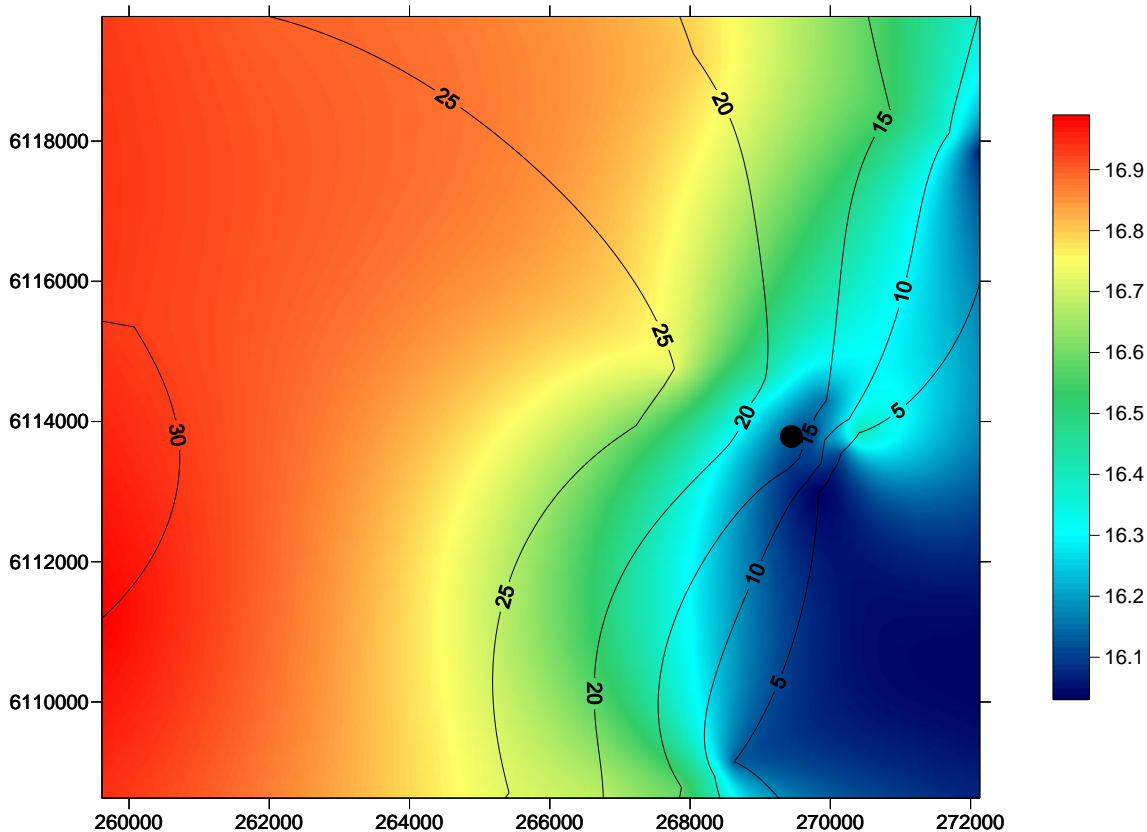


Figure 2 Spatial change in water temperature, on the seafloor, in the Port Stanvac region. The coloured scale bar represents temperature changes between 16.1 °C and 16.9 °C. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 4th June, 2010.

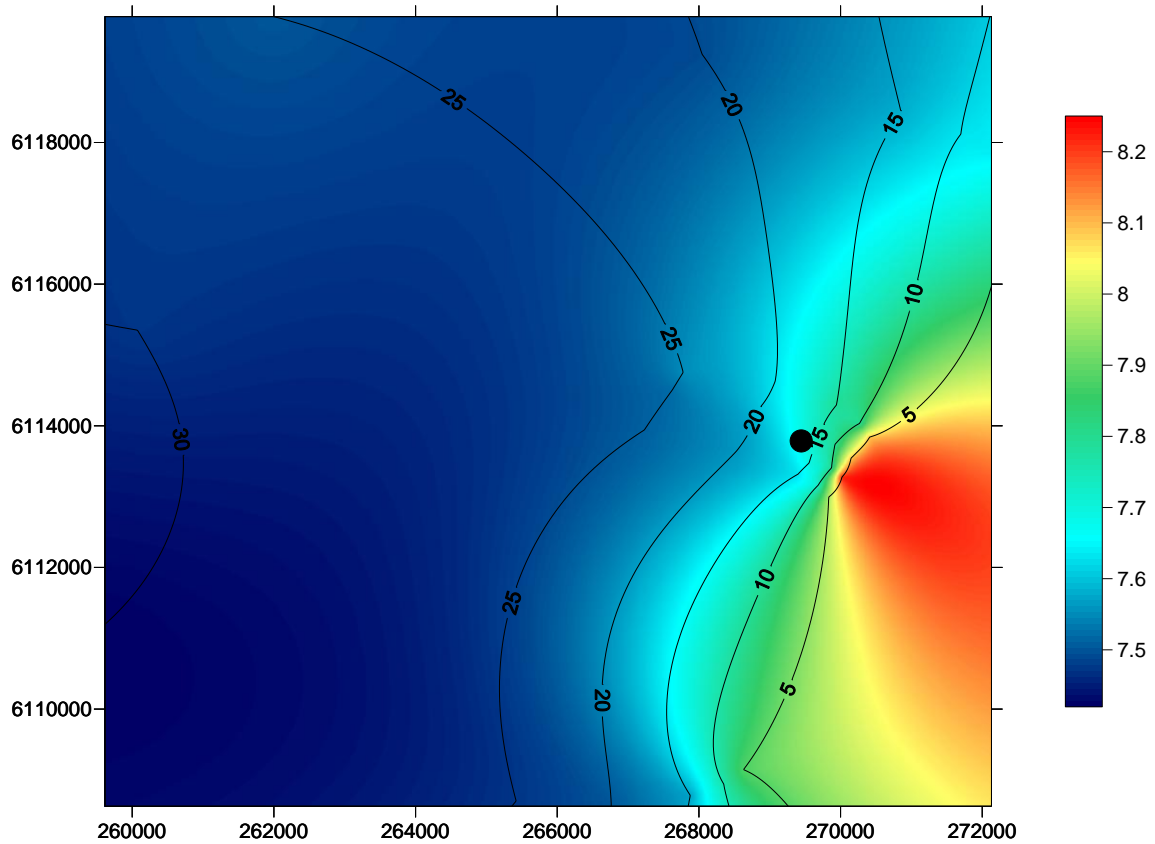


Figure 3 Spatial change in dissolved oxygen concentration, on the seafloor, in the Port Stanvac region. The coloured scale bar represents a change in the dissolved oxygen concentration between 7.4 mg/L and 8.2 mg/L. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 4th June, 2010.

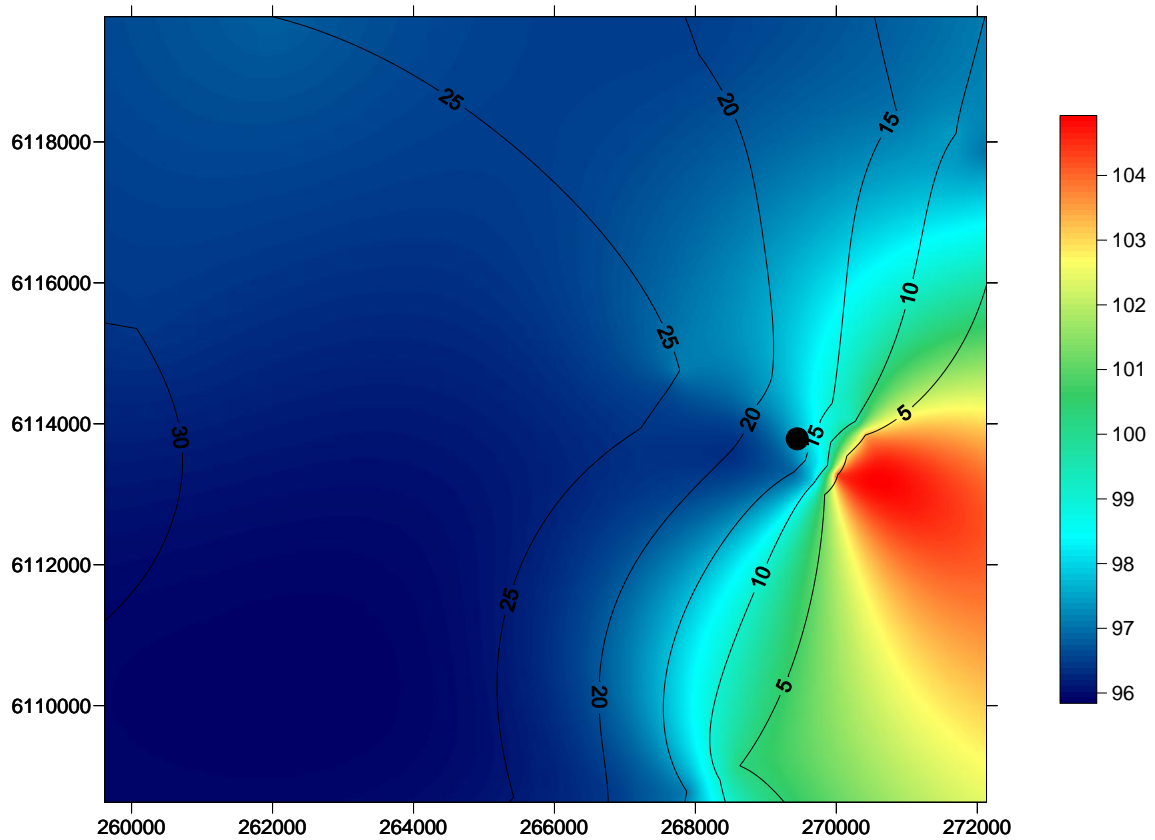


Figure 4 Spatial change in dissolved oxygen concentration (expressed as percentage saturation), on the seafloor, in the Port Stanvac region. The coloured scale bar represents a change in the dissolved oxygen concentration between 96 % and 105 %. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 4th June, 2010.

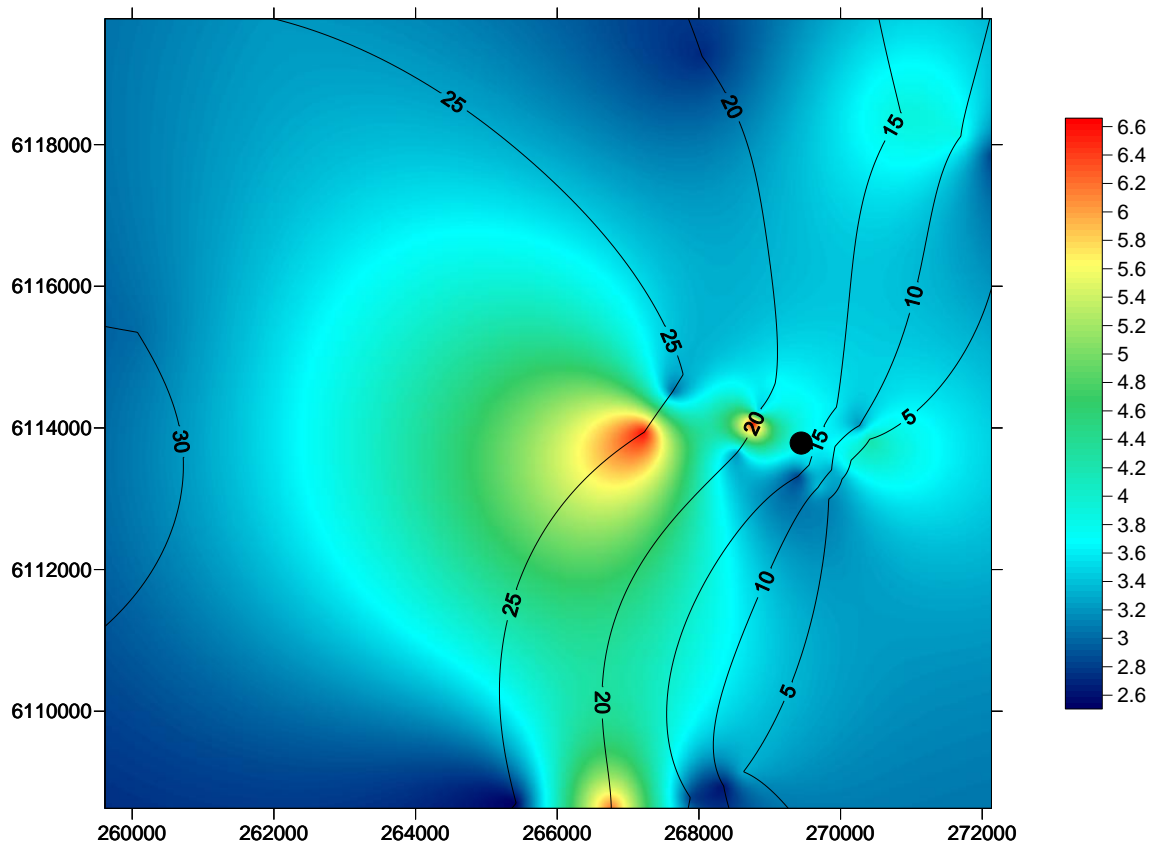


Figure 5 Spatial change in chlorophyll a concentration, one metre below the surface, in the Port Stanvac region. The coloured scale bar represents a change in chlorophyll concentration between 2.6 µg/L and 6.6 µg/L. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 4th June, 2010.

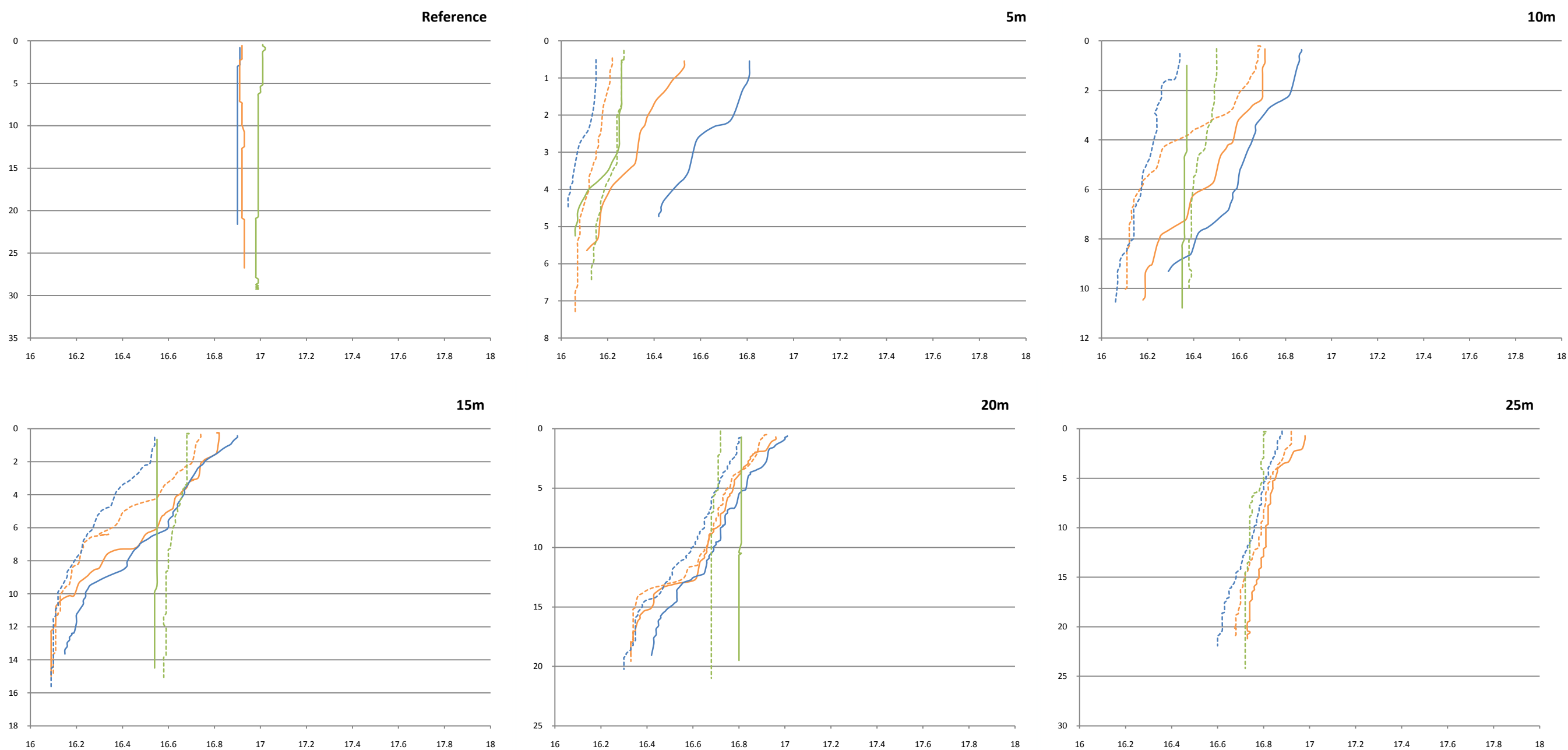


Figure 6 Change in water temperature (x axis; degrees Celsius) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15 m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 4th June, 2010.

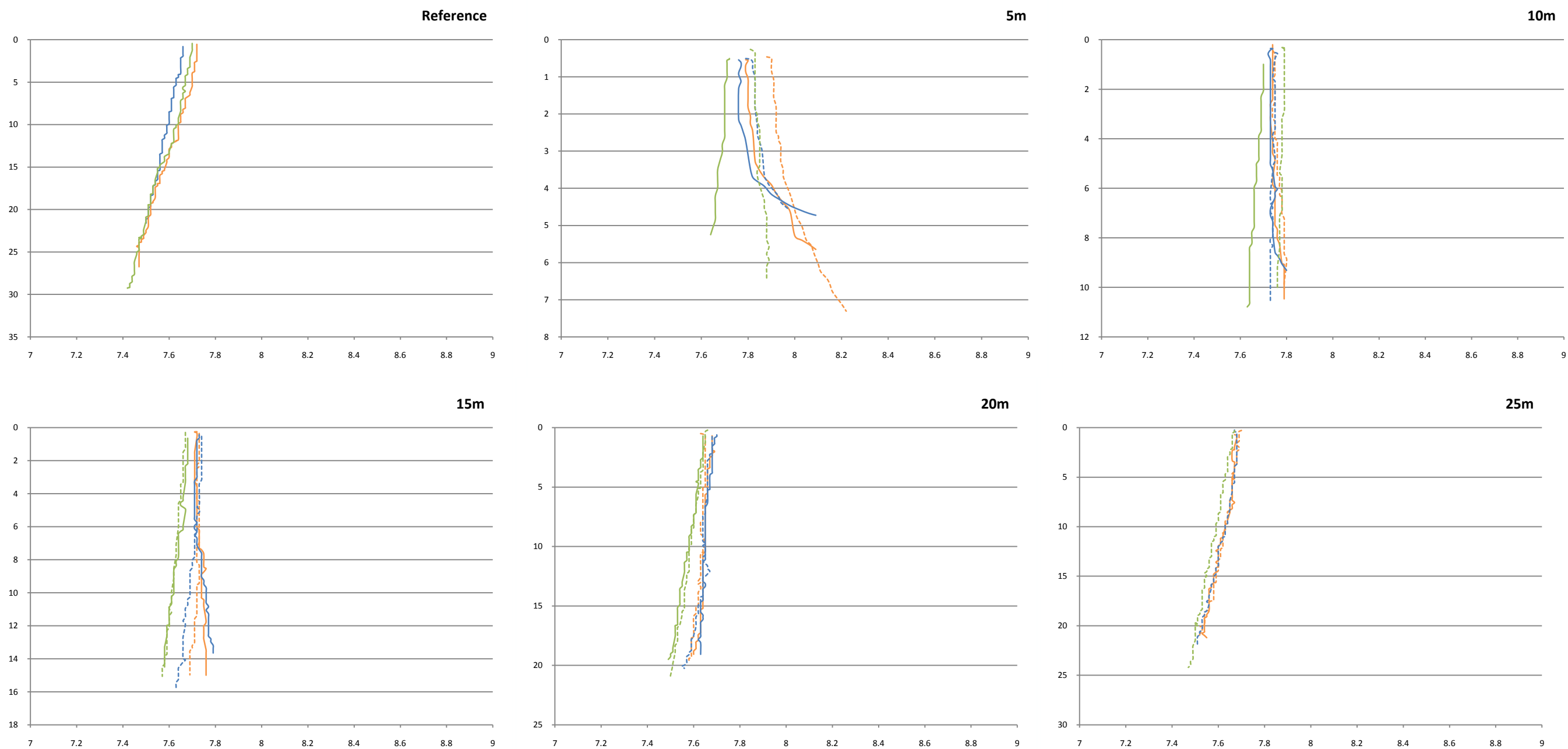


Figure 7 Change in dissolved oxygen (x axis; mg/L) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 4th June, 2010.

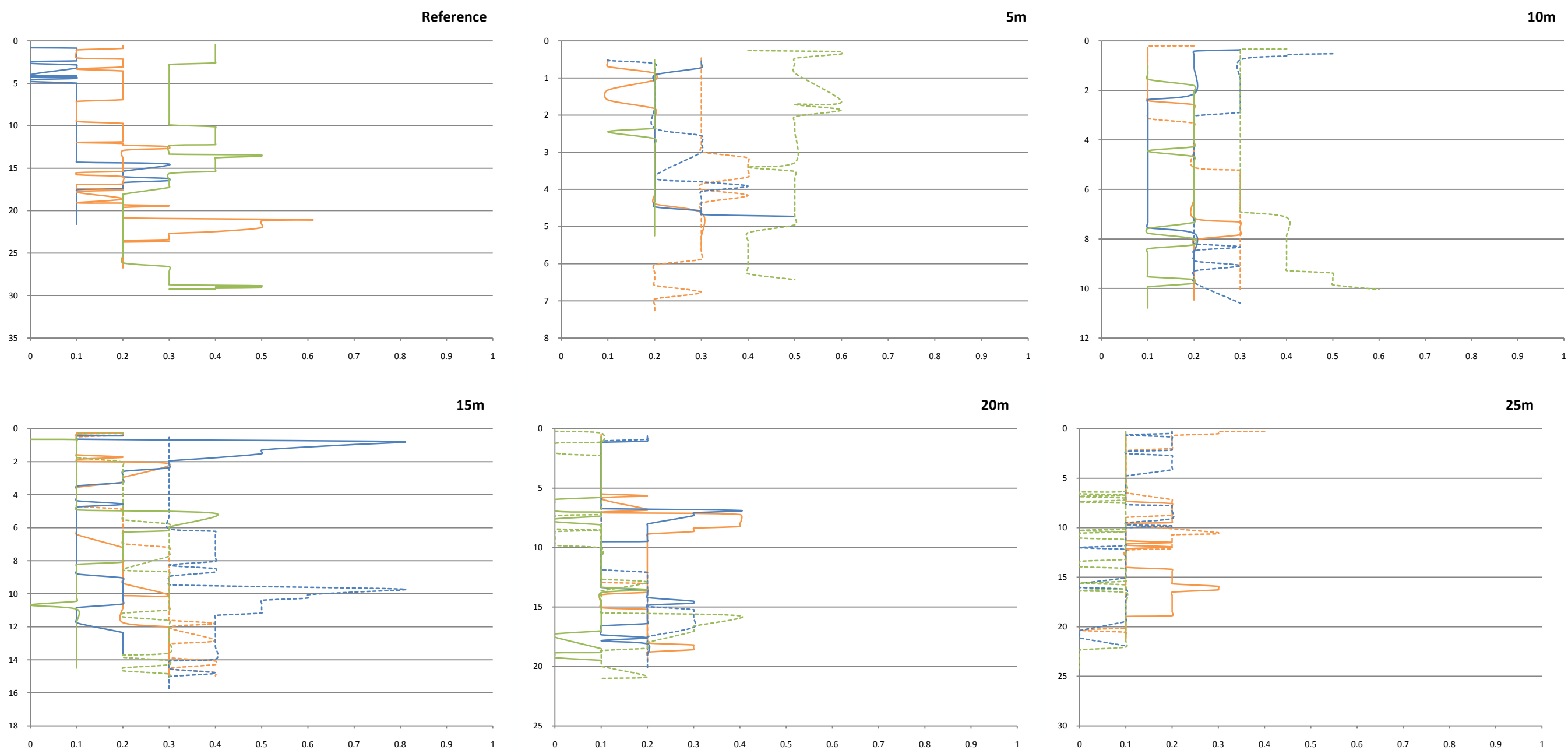


Figure 8 Change in turbidity (x axis; NTU) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 4th June, 2010.

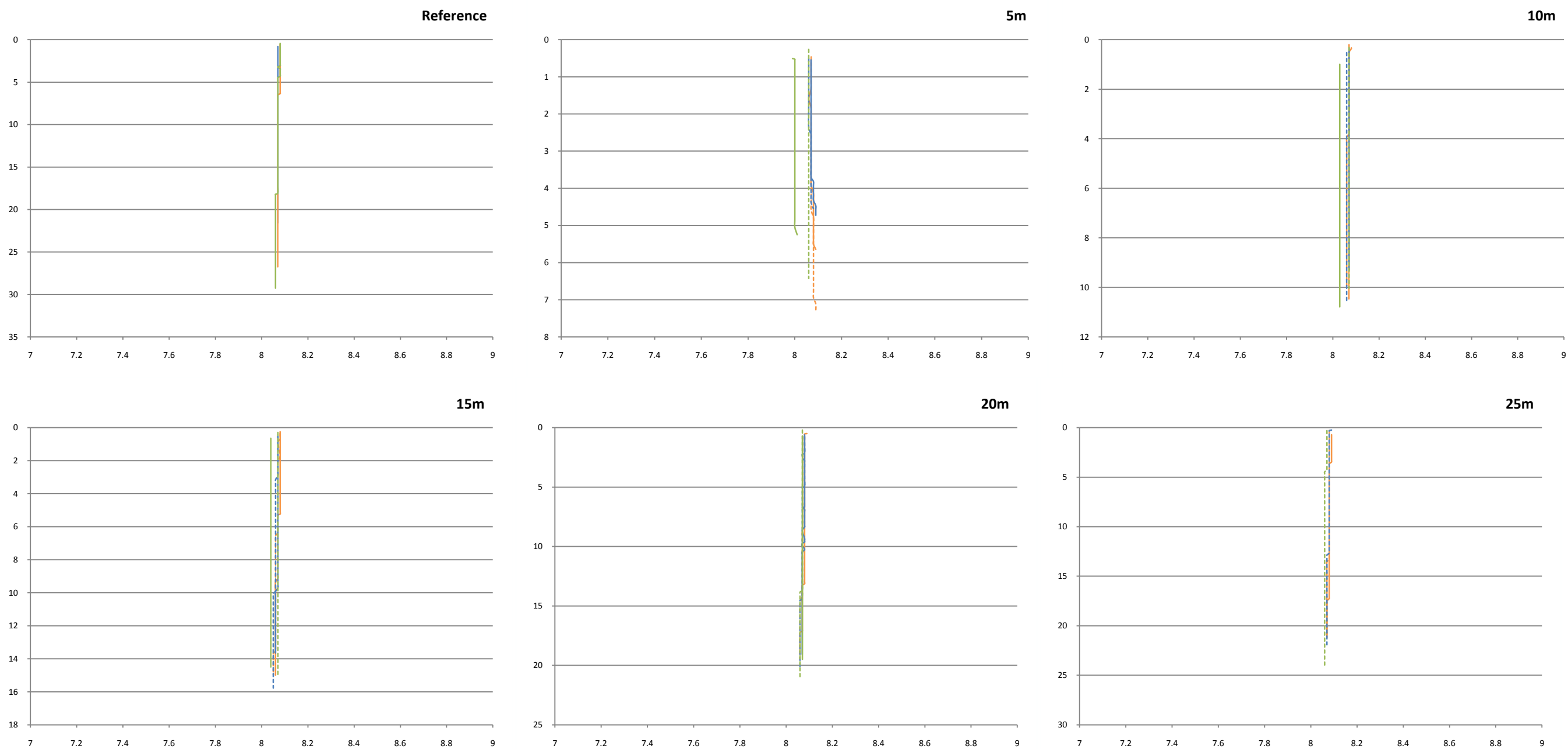


Figure 9 Change in pH (x axis; pH units) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 4th June, 2010.

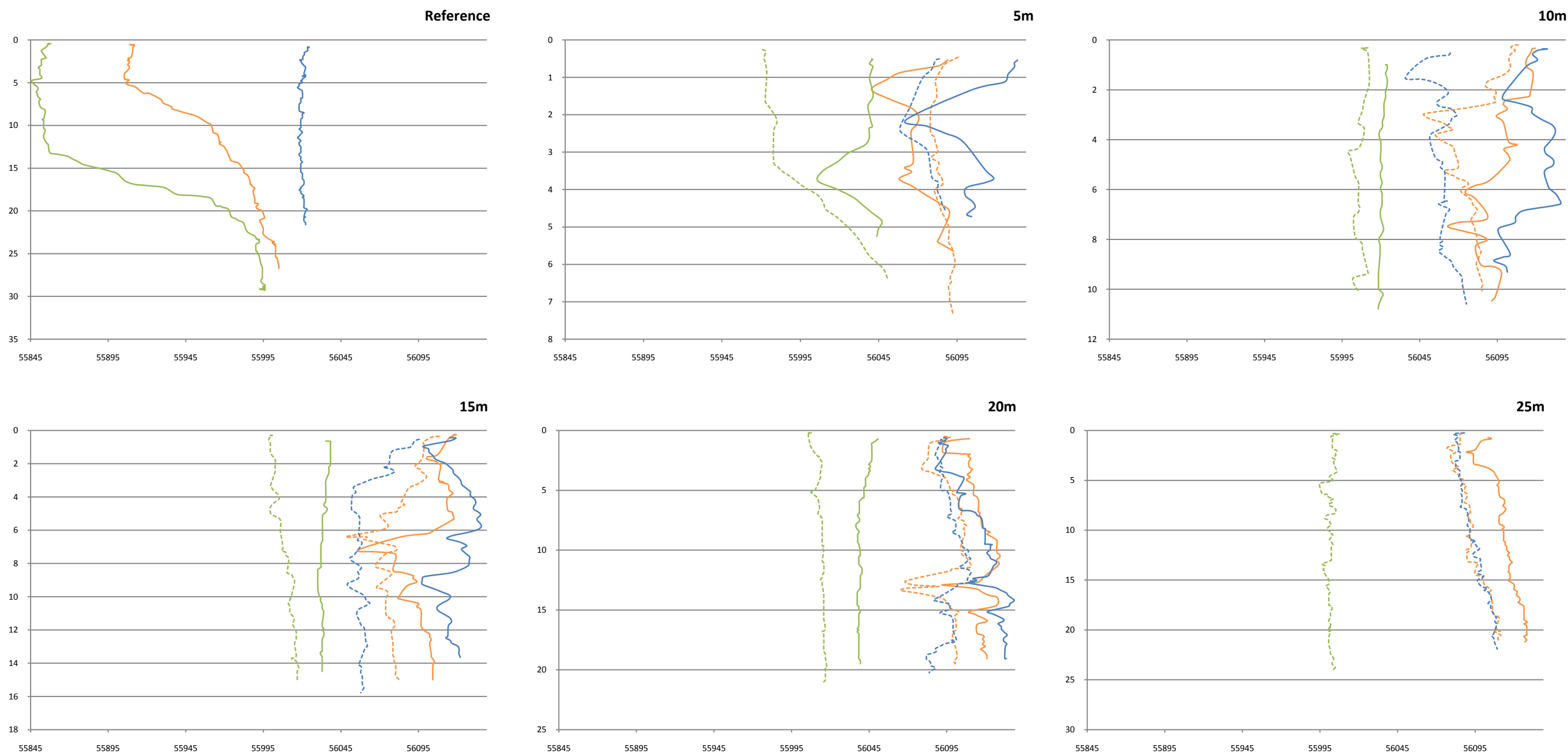


Figure 10 Change in specific conductivity (x axis; $\mu\text{S}/\text{cm}$) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 4th June, 2010.

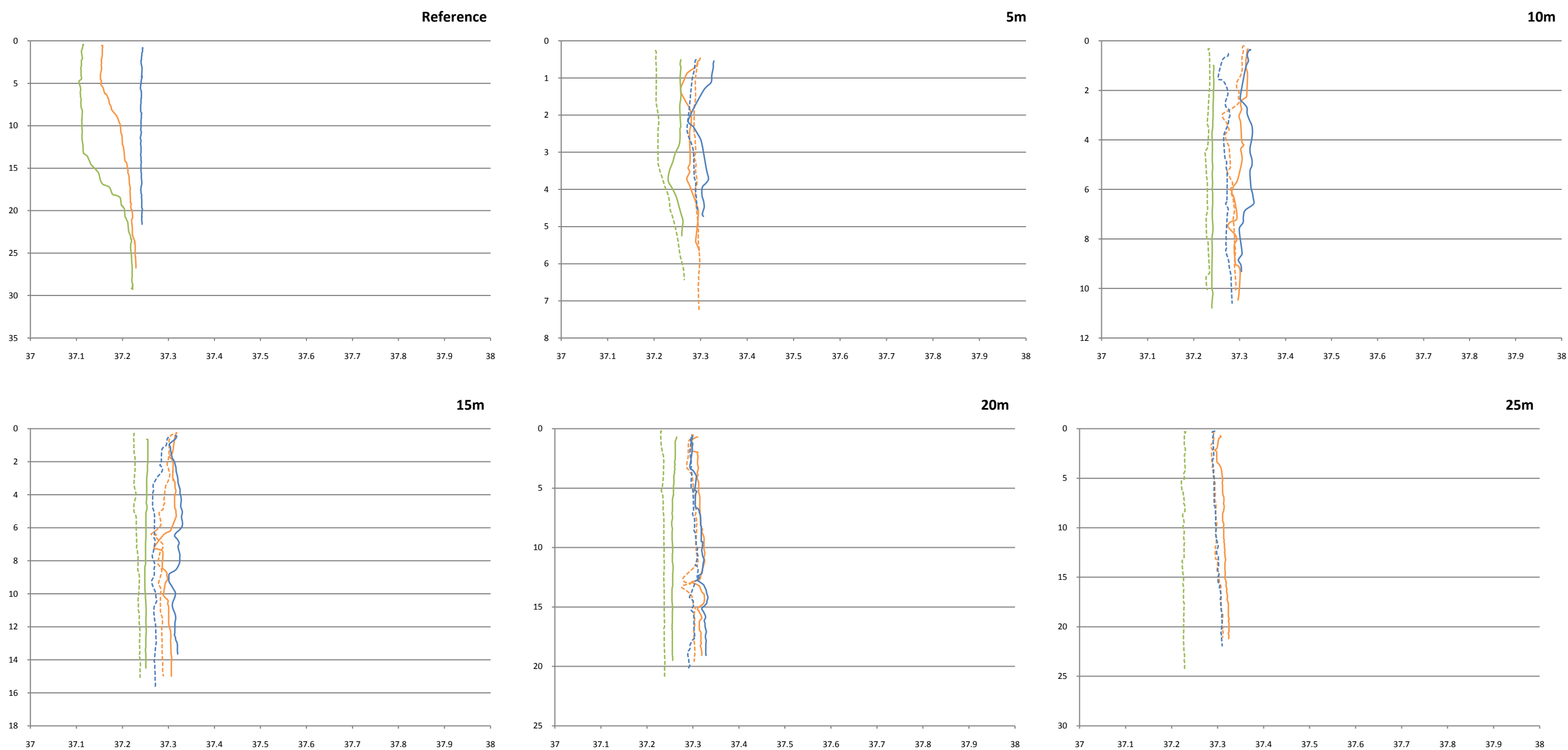


Figure 11 Change in total dissolved solids (x axis; g/L) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 4th June, 2010.