

Appendix D

Water Quality Data Summary

22nd December, 2009

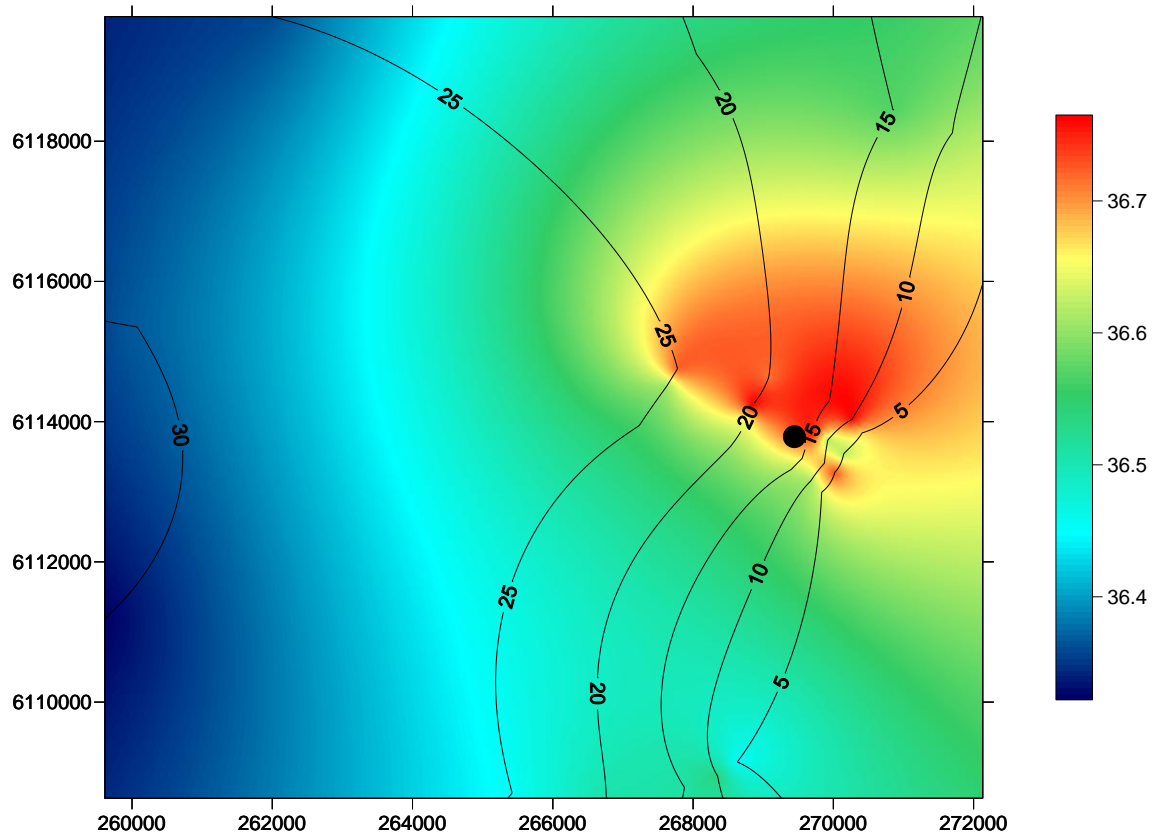


Figure 1 Spatial change in TDS (g/L) concentration, on the seafloor, in the Port Stanvac region. The coloured scale bar represents changes in TDS concentration between 36.3 g/L and 36.8 g/L. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 22nd December, 2009.

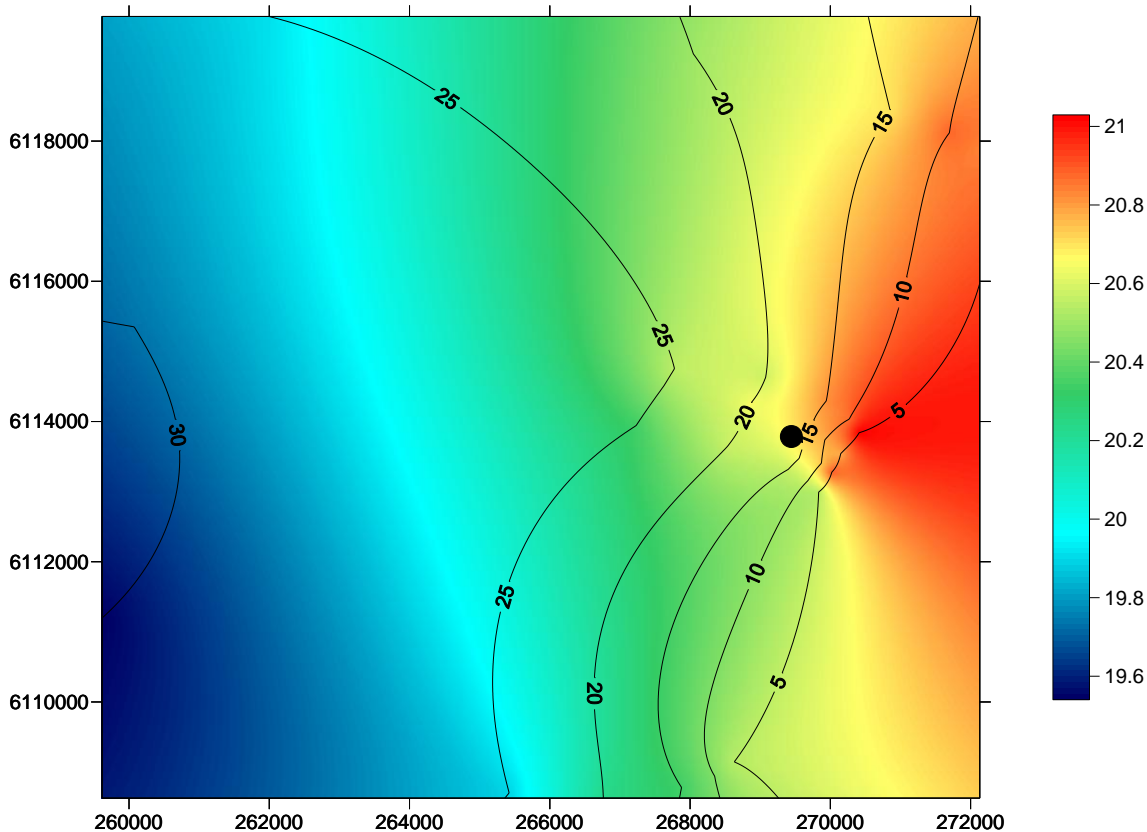


Figure 2 Spatial change in water temperature, on the seafloor, in the Port Stanvac region. The coloured scale bar represents temperature changes between 19.6 °C and 21.0 °C. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 22nd December, 2009.

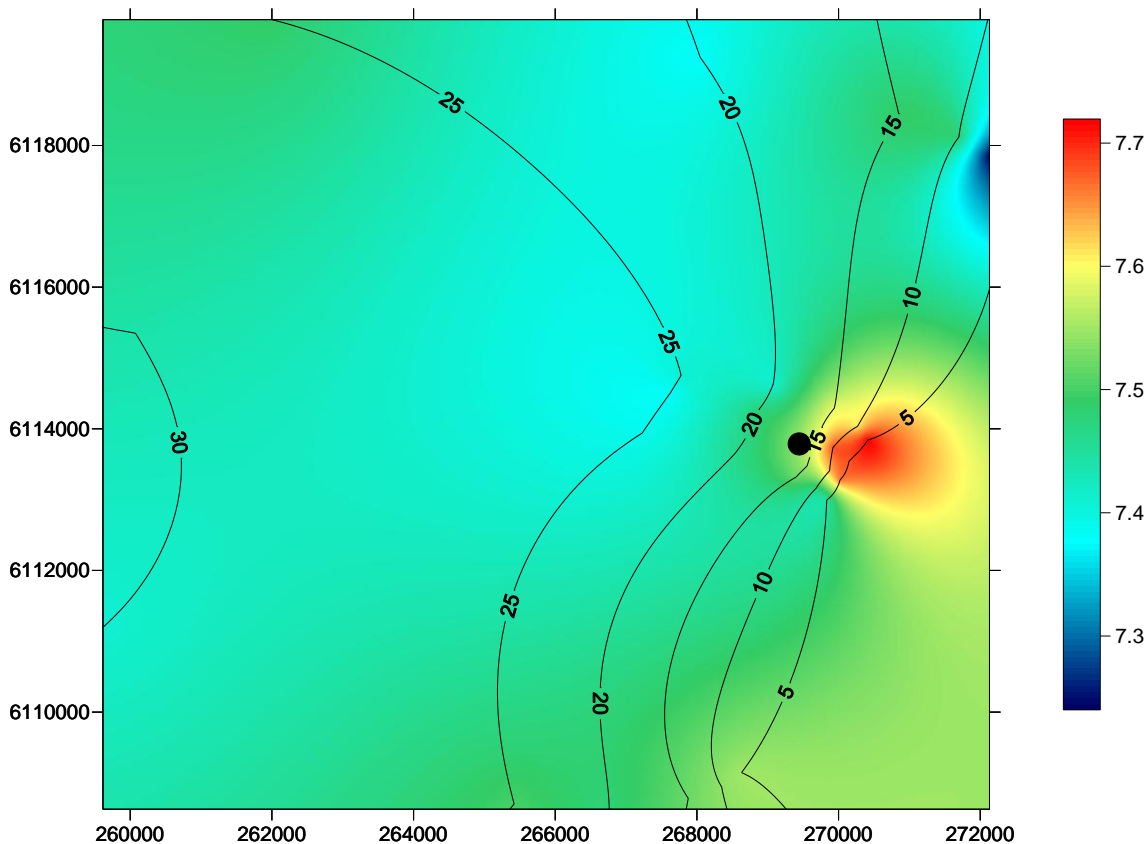


Figure 3 Spatial change in dissolved oxygen concentration, on the seafloor, in the Port Stanvac region. The coloured scale bar represents a change in the dissolved oxygen concentration between 7.3 mg/L and 7.7 mg/L. Contour lines denote a five metre change in depth. X coordinates refer to eastings and Y coordinates refer to northings measured in metres. Black dot represents position of ADP outfall. Water quality survey undertaken on the 22nd December, 2009.

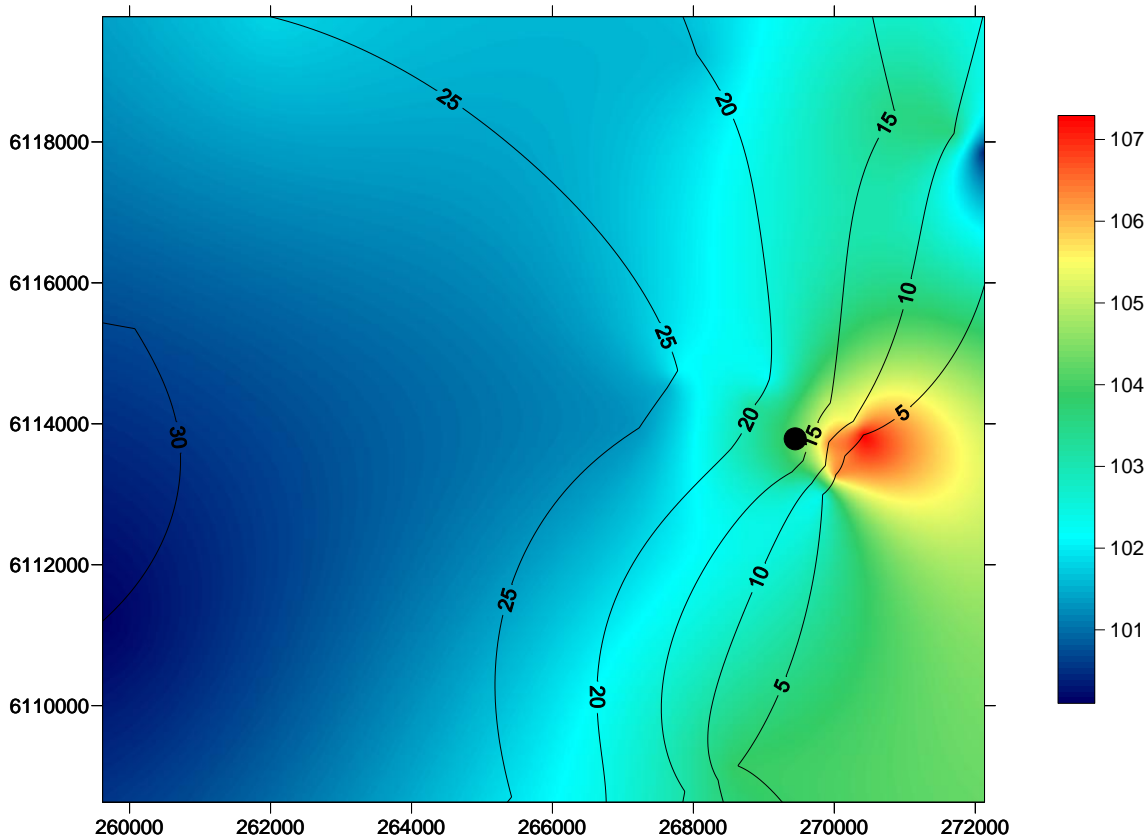


Figure 4 Spatial change in dissolved oxygen concentration (expressed as percentage saturation), on the seafloor, in the Port Stanvac region. The coloured scale bar represents a change in the dissolved oxygen concentration between 100 % and 107 %. Contour lines denote a five metre change in depth. X coordinates 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 22nd December, 2009.

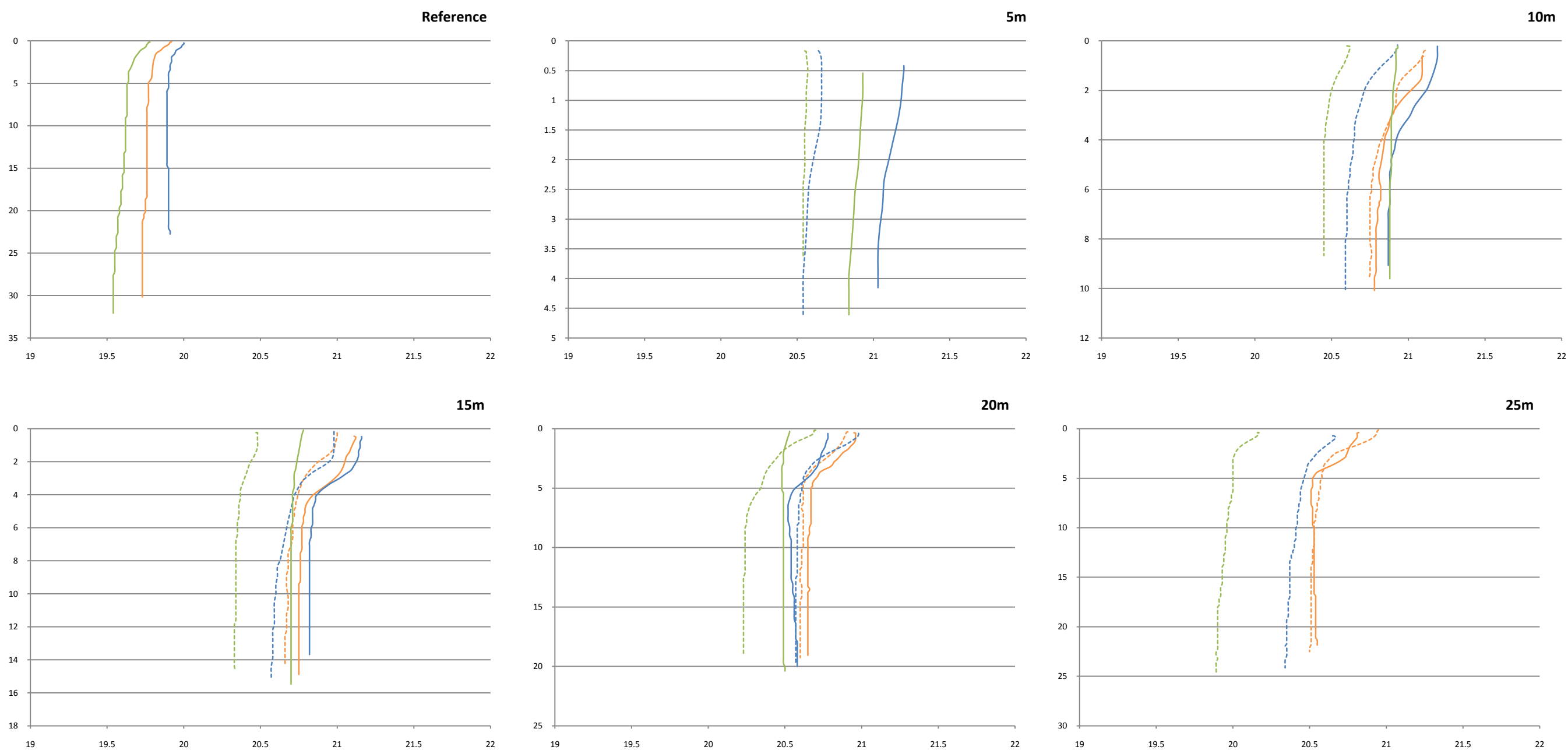


Figure 5 Change in water temperature (x axis; degrees Celsius) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15 m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP 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 22nd December, 2009.

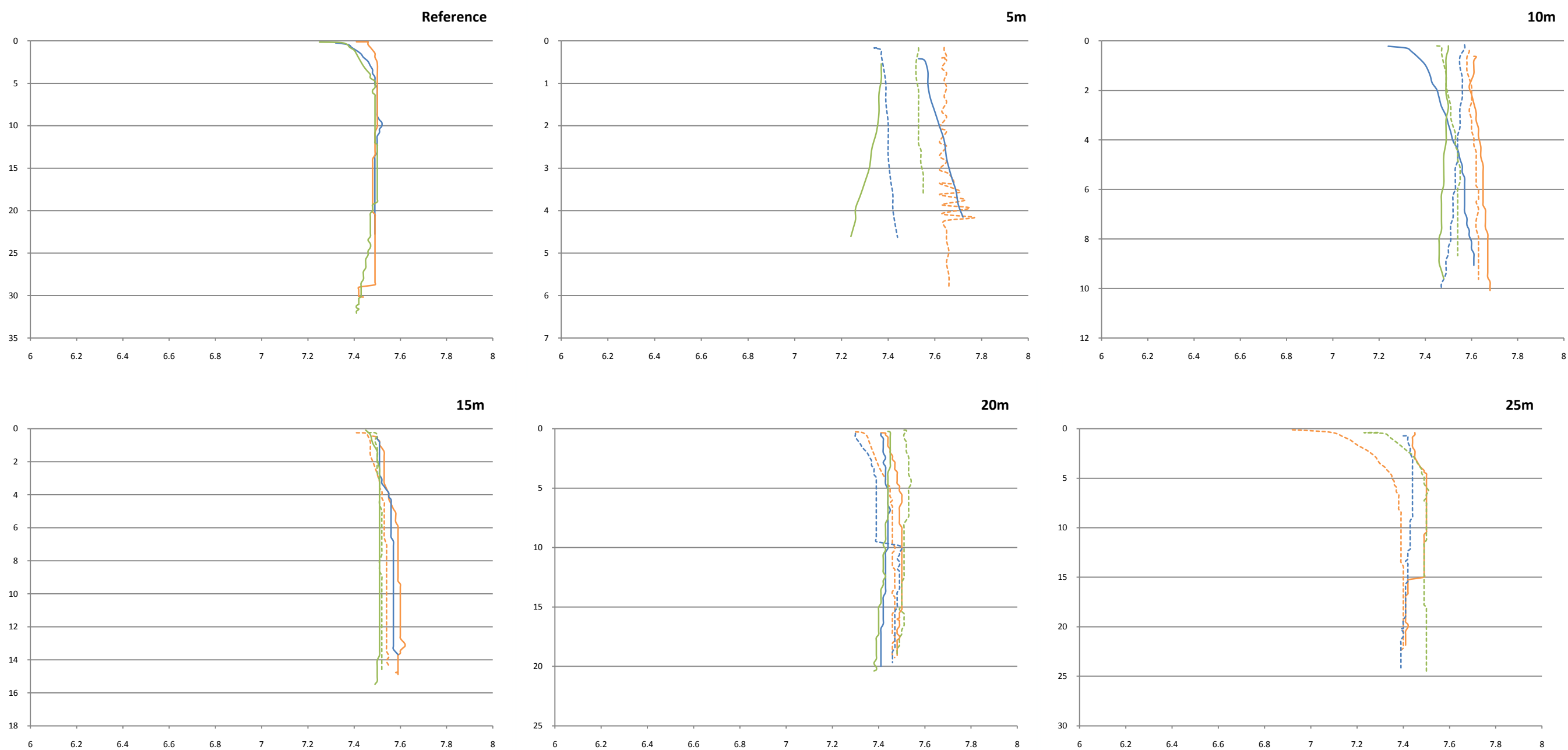


Figure 6 Change in dissolved oxygen (x axis; mg/L) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 22nd December, 2009.

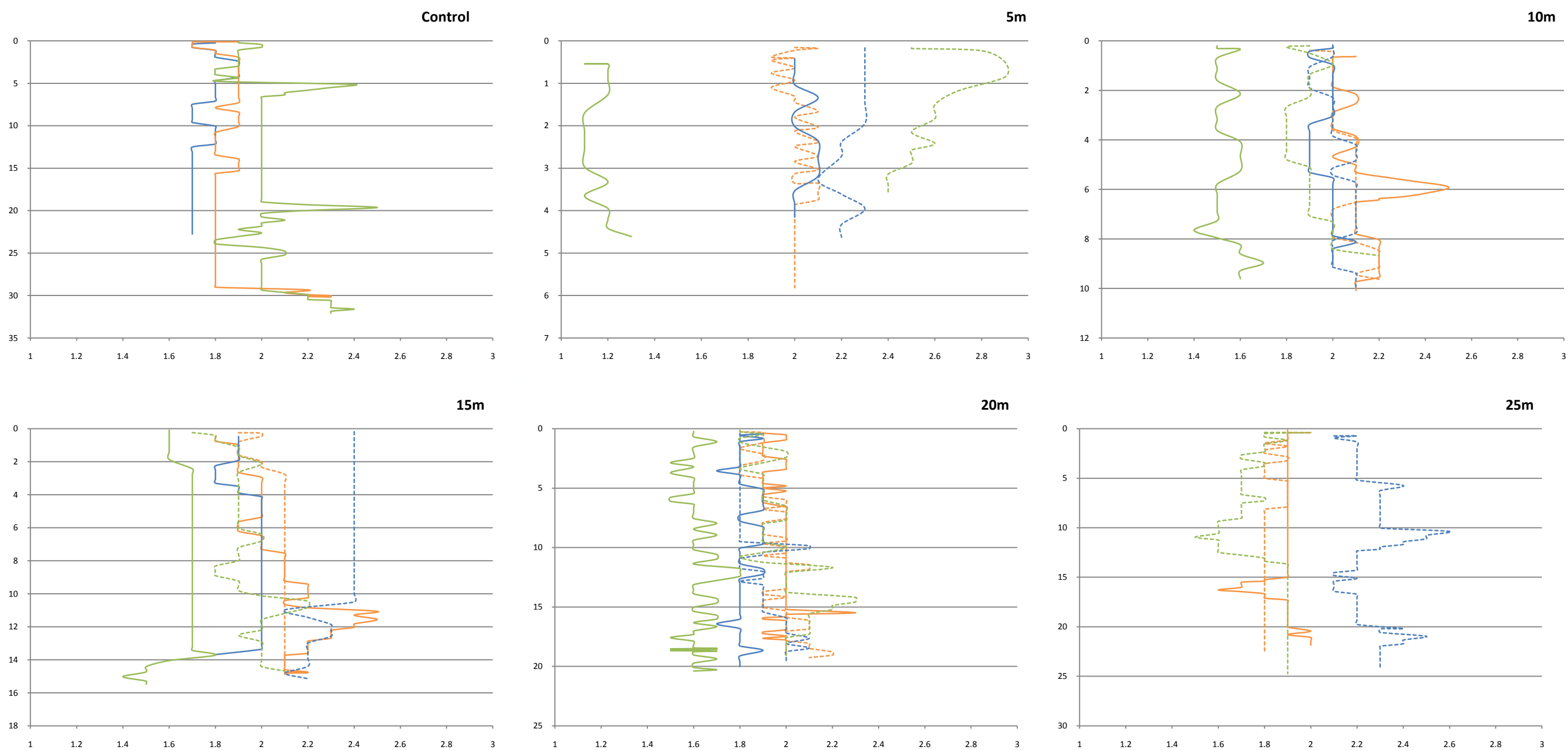


Figure 7 Change in turbidity (x axis; NTU) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 22nd December, 2009.

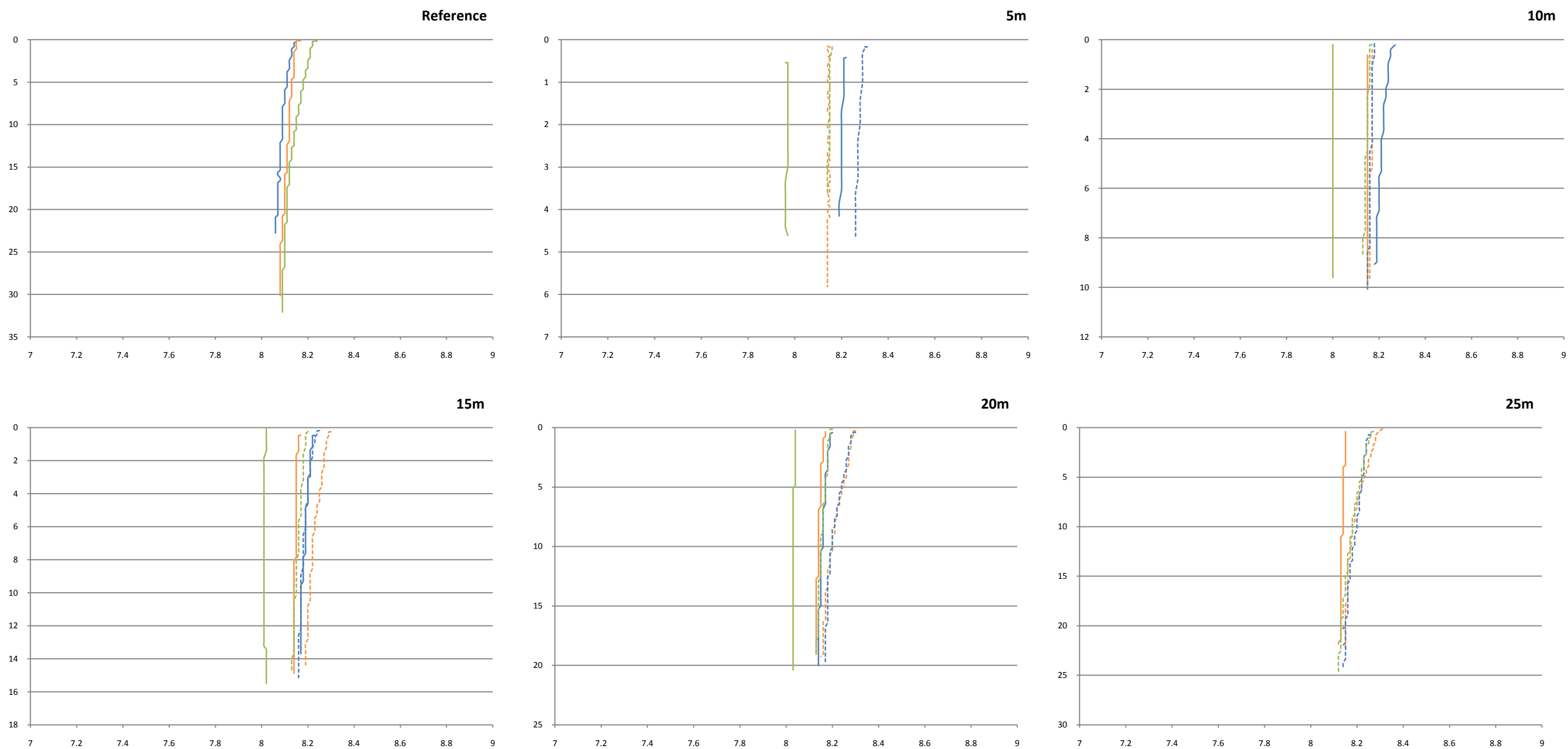


Figure 8 Change in pH (x axis; pH units) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 22nd December, 2009.

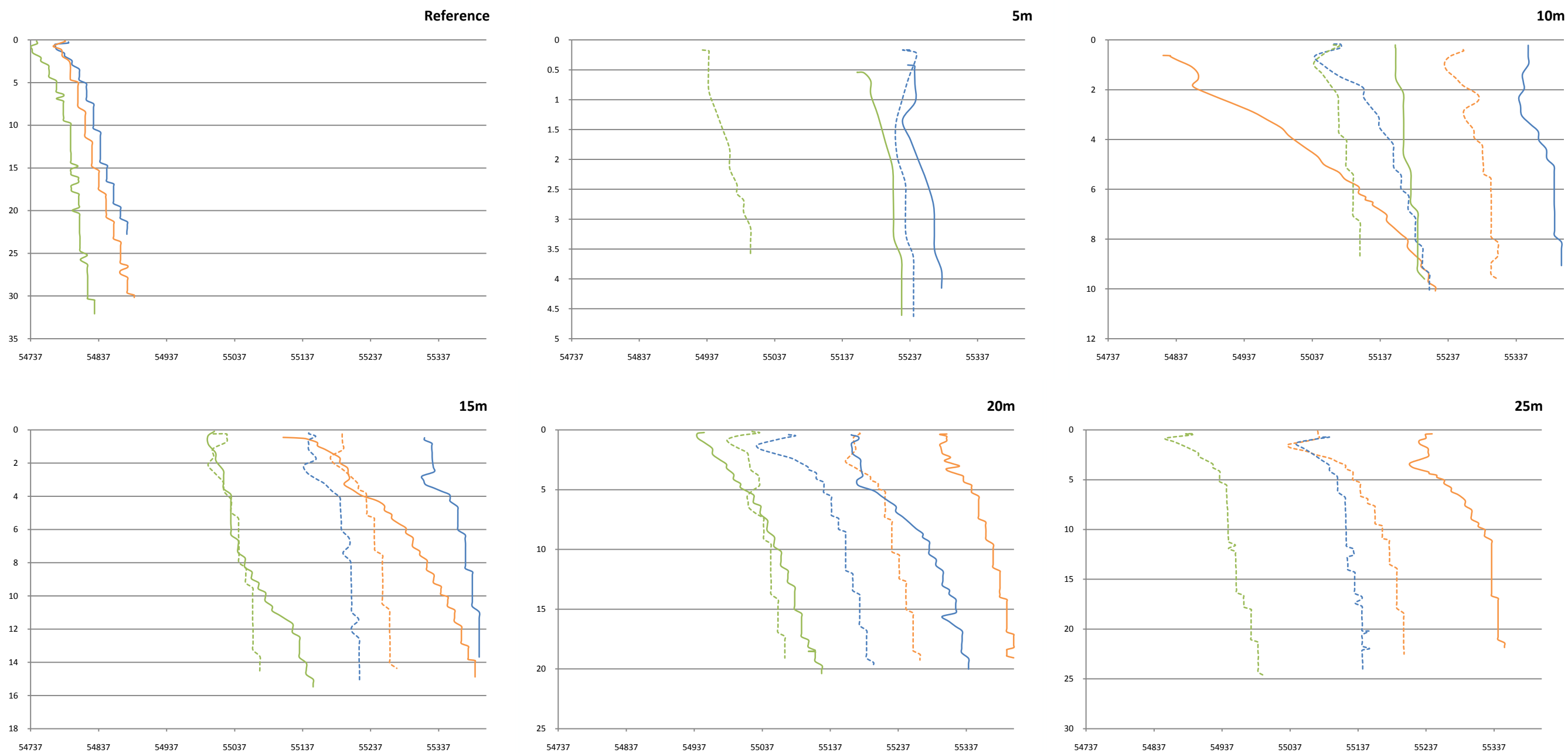


Figure 9 Change in specific conductivity (x axis; $\mu\text{S}/\text{cm}$) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) 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 22nd December, 2009.

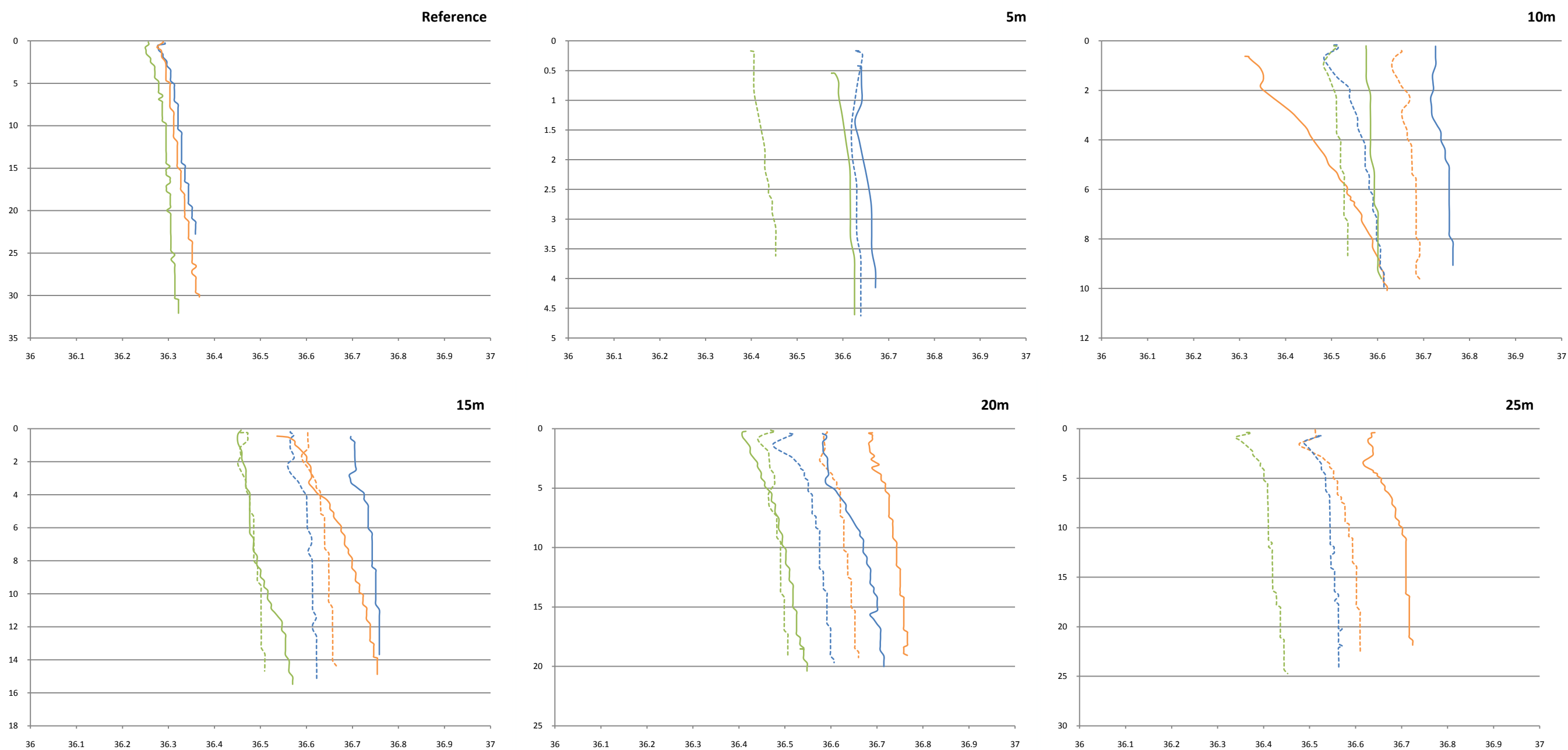


Figure 10 Change in total dissolved solids (x axis; g/L) at different depths (y axis; metres) throughout the water column. Water quality profiles were conducted at a depth of 5 m, 10 m, 15m, 20 m, 25 m and 10 km offshore (Reference sites); north (solid lines) and south (broken line) of the ADP diffuser. Orange represents 100 m, blue 500 m and green 5 km either north or south of the diffuser. Water quality survey undertaken on the 22nd December, 2009.