## **Accessory publication**

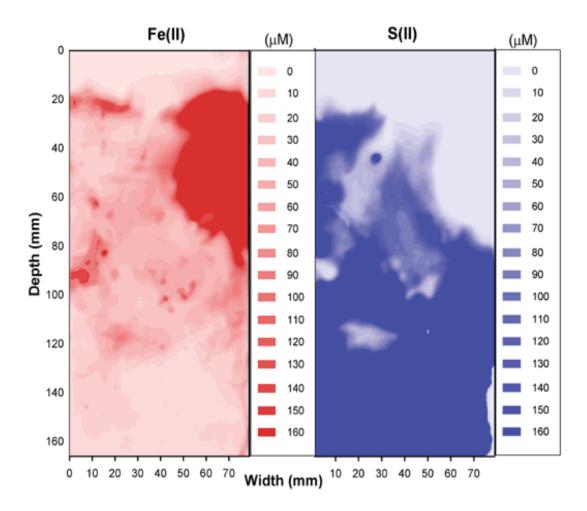
## Investigating biogenic heterogeneity in coastal sediments with two-dimensional measurements of iron(II) and sulfide

David Robertson, A David T. Welsh and Peter R. Teasdale A,B

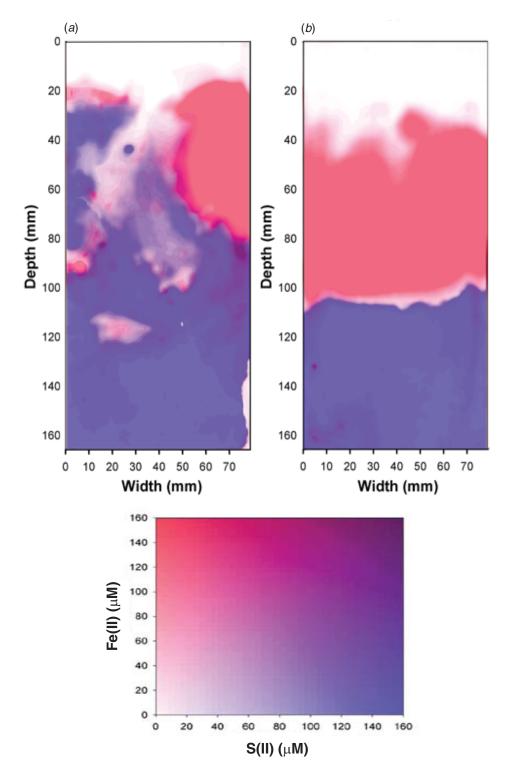
<sup>A</sup>Australian Rivers Institute, Griffith University, Gold Coast campus, Qld 4222, Australia.

<sup>B</sup>Corresponding author. Email: p.teasdale@griffith.edu.au

Figs A1 and A2 show some of the other options by which the data obtained using the DGT–DET technique can be presented. The spectrum approach used in the manuscript dramatically highlights trends and hotspots, which is useful when relating distributions to a particular cause (e.g. burrows). The use of single-colour, side-by-side plots as in Fig. A1 emphasises relative concentrations within and between probes more clearly. Fig. A2 is an attempt to merge the data from both analytes into a single graph to highlight areas of overlap. Areas of a more intense purple colour indicate substantial overlap between the analytes, and are often found at the edges of Fe<sup>II</sup> hot spots in Fig. A2a. It would also be possible to use this type of combined plot at a finer scale to assess two-dimensional overlap in localised areas.



**Fig. A1.** Alternative plot for Fig. 5 with single colours used for each analyte. This is closer to the original appearance of the gel probes and may be easier to interpret as the colour intensity is directly related to the concentration.



**Fig. A2.** Overlay plots showing the combined red (Fe<sup>II</sup>) and blue (S<sup>II</sup>) distributions for (a) Fig. 5, particulate organic matter; and (b) Fig. 3, amphipods with layered sediment. Purple areas represent areas of overlap between the analytes. The colour intensity is related to the overall concentration of Fe<sup>II</sup> and S<sup>II</sup>, whereas the exact shade indicates which substance is dominant, as depicted in the gradient key: a purple shade is indicative of approximately equal concentrations of Fe<sup>II</sup> and S<sup>II</sup>, mauve indicates Fe<sup>II</sup> is at a higher concentration and violet indicates S<sup>II</sup> is higher.