

## Detection, dispersal and biogeochemical contribution of hydrothermal iron in the ocean

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### Table S1. Compilation of hydrothermal iron observations (see MF16335\_TS1.xlsx)

NP, not provided; dFe, dissolved iron (samples filtered through <0.4- $\mu$ m filters before acidification and analysis); PFe, particulate iron (analysis of the fraction of sample not passing through <0.4- $\mu$ m filters); TDFe, total dissolvable iron (unfiltered samples acidified to pH <2 to dissolve all particulates before analysis); dMn, dissolved manganese (samples filtered through <0.4- $\mu$ m filters before acidification and analysis); TDMn, total dissolvable manganese (unfiltered samples acidified to pH <2 to dissolve all particulates before analysis); CIR, Central Indian Ridge; JDF Ridge, Juan de Fuca Ridge; EPR, East Pacific Rise; MAR, Mid-Atlantic Ridge; SEIR, Southeast Indian Ridge; MORB, mid ocean ridge basalt; E-MORB, enriched MORB; N-MORB, normal MORB; BABB, back arc basin basalt; OIB, ocean island basalt; IAB, island arc basalt; FIA, flow injection analysis based on either colorimetric or chemiluminescence detection; ICPAES, inductively coupled plasma atomic emission spectrometry; ICPOES, inductively coupled plasma optical emission spectrometry; GAMOS, geochemical anomaly monitoring system (in-situ analyser based on FIA techniques); FAAS, flame atomic absorption spectrophotometry; GFAAS, graphite-furnace atomic absorption spectrophotometry; SUAVE, system for underwater assessment of vented emissions (in-situ analyser based on FIA techniques); AAS, atomic absorption spectrophotometry; XES, X-ray emission spectrometry; PSA, potentiometric stripping analysis; Colorimetric, Colorimetry with ferrozine; ICPMS, inductively coupled plasma mass spectrometry; ID-ICPMS, isotope dilution inductively coupled plasma mass spectrometry; All Fe and Mn values reported in micromoles per kilogram. Where values were reported in molarity or moles per litre, these values were divided by a conversion factor of 1.0243 (the approximate density of seawater at 22°C), following the method of Mottl (2012).

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