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Dear Editors of Biogeosciences,

Herewith please find the manuscript entitled: "New insights on the role of the organic speciation in the biogeochemical cycle of dissolved cobalt in the southeastern Atlantic and the Southern Ocean." by Johann Bown, Marie Boye and David M. Nelson.

This manuscript is submitted to *BIOGEOSCIENCES* for the special issue "The BONUS-GoodHope IPY project: dynamics and biogeochemistry interactions in the Southern Ocean south off Africa", edited by S. Speich, F. Dehairs, M.-A. Sicre, A. V. Borges, and M. Hoppema.

This work reports the spatial distributions of organic cobalt-binding ligands and the organic speciation of dissolved cobalt in the southeastern Atlantic and the Southern Ocean along the MD166 Bonus-GoodHope section taken place in the austral summer 2008 in the framework of the International Polar Year. The organic speciation of cobalt was determined by Competing Ligand Exchange Adsorptive Stripping Voltammetry (CLE-AdCSV) using nioxime as a competing ligand. This work brings new data and new insights for the understanding of the cobalt biogeochemical cycle in the Atlantic and the Southern Ocean south off the coast of South Africa. It indeed shows that dissolved cobalt occurred predominantly as strong organic complexes (at 60 to $\geq 99.9\%$) in the water column. It shows that the internal cycle of organic ligands, and the bioavailability of organic cobalt were different in the surface waters of the subtropical Atlantic and the Southern Ocean as a result of different biogeochemical functioning within these domains. This work also discusses the importance of the organic complexation in external sources of dissolved cobalt driven by margin inputs and in its transportation in both domains.

This work brings a significant contribution in term of data related to the organic speciation of dissolved cobalt in the open ocean and in understanding the oceanic cycle of dissolved cobalt, that are key issues of the GEOTRACES program.

Your consideration to publication in *Biogeosciences* for the special issue "The BONUS-GoodHope IPY project: dynamics and biogeochemistry interactions in the Southern Ocean south off Africa", will be appreciated.

Yours sincerely,

Johann Bown