

## ***Interactive comment on “An empirical method for absolute calibration of coccolith thickness” by Saúl González-Lemos et al.***

**Saúl González-Lemos et al.**

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The reviewer mentions the idea of employing differences in wavelength when narrow band color filters are used for illumination, as an alternative approach for estimating differential retardation and thickness. This is an interesting idea, for which we are not aware of any previous work, and could be a fruitful direction for future study.

The reviewer comments that it would be useful to estimate the distribution of C axis orientation in coccoliths. The orientation of the crystallographic c-axis has been reviewed thoroughly by Young et al., 2004 : Young, J.R., Herniksen, K., and Probert, I.: Structure and morphogenesis of the coccoliths of the CODENET species. In: Trierstein, H.R., Young, J.R.: Coccolithophores: from molecular processes to global impact; Ed.:

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(eds.), Springer-Verlag Berlin Heidelberg, 2014. We have carried out analysis with an electron microscope only to evaluate the preservation state of the sampled coccoliths.

Finally, we thank the reviewer for suggestions on fixing some minor typographical errors, which could be attended to in revised version of the manuscript.

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