



## **Long chain diol index (LDI) as an organic-based sea surface temperature proxy in the Korean East Sea (NW Pacific)**

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Long chain diol index (LDI) was introduced as an organic-based sea surface temperature (SST) proxy. LDI is expressed as the C30 1,15-diol abundance relative to those of C28 1,13-, C30 1,13- and C30 1,15-diols. There were a few studies which accessed the potential of LDI based on the culture, core top sediments, suspended particulate organic matters, and down-core sediments. However it is still unknown about the source of the diols and robustness as the SST proxy in the various marine environments. In the current study, we examined the applicability of the LDI in the East Sea of Korea where productivity and thus sedimentation rates are high. We will compare the LDI data with those of alkenone-based UK'37 by analyzing two multicores covering the last 100 year.