Inter-annual variation of the depth of sub-surface chlorophyll maximum in western North Pacific

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Most of biological production in subtropical ocean is performed in subsurface chlorophill maximum(SCM) zone, and organisms in higher trophic level depends thier food resources in this zone. depth of SCM is determined by valance bewteen depth-dependent upward nutrient flux from deeper ocean and downward PAR, but few case studies had reported for inter-annual variation of SCM depth in subtropical North Pacific.
Here we report seven-years time series of SCM along 131 E transect (from 10N to 30N) made by R/V Kaiyo-Maru starting 2013. SCM depth varied significantly from year to year, and isopicnals corresponding to SCM also vaired from sigmat=22.5 to sigmat =24.3 depending on year. We will show more detailed descrition of SCM-depth variation in presentation, as well as mechanisms of its variation.

Keywords: subtropical North Pacific, Subsurface chlorophill maximum, interannual variation

