

Review of
MODIS observed phytoplankton dynamics in the Taiwan Strait : an absorption
based analysis (BG-2010-274)

By
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General comments

QAA technique for the IOP extraction from Rrs, developed by Lee et al.(2002) , was applied to MODIS satellite data to derive phytoplankton absorption coefficient(Aph) in the Taiwan Strait. And the obtained Aph by satellite value were compared with in-situ values measured by filter technique for the validation of Aph/QAA. Finally, Aph was used to monitor phytoplankton dynamics in the waters. So this paper show us following scientific achivement;

Significance

1. The authors showed us the validation QAA technique from satellite Rrs data. This kind of practical research applied to satellite data is not easy and enough to find-out. There was quite good relation ship between satellite extracted & in-situ measured values.
2. To monitor ocean ecology, general techniques are used to chlorophyll values as an indicator of primary biomass. But, the author applied here Aph values in place of <chl>. This is can be considered as new approach even though <chl> is directly related to Aph.
3. The authors, at last, applied to identify for the Taiwan Strait water properties in view of ecology, 3 distinct feature of phytoplankton dynamics are identified.

Suggestions

• Page 7796

⇒ Please correct/unify the expression of Aph & aph

• Page 7799

line 9 : Where ρ is the reflectance of spectralon plaque (50%) and F is

⇒ Please correct as " Where ρ is the reflectance (0.5) of spectralon plaque having Lambertian characteristic in all measurement wavelength.

line 20 : Particulate absorption was measured with ...

⇒ Please correct as ; " Particulate absorption was measured by filter technique

(Kiefer and SooHo, 1978 ?) with ..."

• **Page 7800**

line 7-8 : "in situ" => "*in-situ*"

line 16 : " we used the root mean square in log scale (RMSE),"

⇒ Please correct as ; : "we used the root mean square error in log scale (RMSE),"

Recommendation

⇒ Please describe/discuss in some place ; what is the difference / advantage - disadvantage if we use Aph or <chl> to monitor phytoplankton dynamics