



## **Vicarious adjustment of MERIS reflectances using an inverse technique**

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The method that has been used for the vicarious adjustment of the SeaWiFS ocean colour data relies on the assumptions that the water-leaving radiance is negligible in the Near Infra-Red (NIR) in oligotrophic waters, and that the longest NIR band is perfectly calibrated. In this paper a novel approach to vicarious adjustment is proposed that does not require these assumptions: a least-squares inverse technique is used to adjust atmospheric variables and MERIS reflectances within their error bars to obtain a best fit to the buoy observations at all wavelengths. A simple example will be presented using match-up MOBY (Marine Optical Buoy) observations from MERMAID (the MERIS MAtch In-situ Database).