

Multi-stage calibration for sunphotometer

X.M. Liang (1) and K. Arai (2)

(1) Institute of Ocean Energy, Saga University, 1 Honjou, Saga, Japan

(2) Department of Information Science, Saga University, 1 Honjou, Saga, Japan

(george@ip.is.saga-u.ac.jp / Phone: 0081-952-288563)

A multi-stage method for calibration of sunphotometer is proposed by combining comparison calibration method between two different wavelengths with aureole observation method for long wavelength calibration. Its effectiveness in reducing the influences for calibration due to molecular and aerosol's extinction in the unsteady turbidity conditions is clarified. By a calculated result applied to the simulated measurements, it is showed that the higher accuracy for calibration by the proposed method can be obtained compared with the individual method of them.