Abstract

An information on ocean surface wind speed in remote-sensed image is required for accurate application of atmospheric correction algorithm for ocean color remote sensor. A method for retrieval of surface wind speed with Sun glitter intensity in visible range is proposed with the aid of probability distribution of wave facet which varies with change in wind speed. The retrieval accuracy is estimated with the error in the retrieval of wind speed, water-leaving radiance and phytoplankton pigment concentration obtained by atmospheric correction using retrieval wind speed in a model atmosphere-ocean system. This method is applied to ground, vessel and airborne radiance data and the result showed the successive correlation between retrieved wind speed and observed one.