

Satellite monitoring and prediction for the occurrence of the red tide in the coastal areas in the South Sea of Korea

I. The relationship between the occurrence of red tide and the meteorological factors

***Yoon, Hong-Joo Kim, Young-Seup Kim, Sang-Woo**

Department of Satellite Information Science
Pukyong National University, Pusan, Korea
yoonhj@pknu.ac.kr

It is studied on the relationship between the occurrence of red tide(Chlorophyll-a concentration by the in-situ and satellite data) and the meteorological factors (precipitation, air temperature, sunshine and winds) in the coastal areas in the South Sea of Korea. In summer and early-fall which frequently occurred the red tide, the precipitation above 213mm had directly influence on the occurrence of red tide because it carried the nutritive substance which originated from the land into the coastal areas. Then air temperature kept up generally high values as 23~26°C, and sunshine with 187~198hours and wind velocity with 3.1~7.9m/s showed not directly the relationship on the occurrence of red tide.

Key words: SeaWiFS, Chlorophyll-a, red tide, precipitation, air temperature, sunshine, winds