

Using Factor Analysis Method to Classify Variability of Water Quality in Ua-Chong Flooding Plain

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Abstract

Ua-Chong flooding plain is located in Taipei county, across four administrations of Sam-Chun city, Wu-Chu country, Shin-Joun city and Ru-Chou country. The whole area of swamp habitat is about 230 acres. Using water quality from Ua-Chong flooding plain as the input data for factor analysis. Each sample is taken from shallow ponds, and major water inlets: Wein-Zei channel, in February, 1998 and March, 1998. The principal components analysis method was used to identify significant factors among sample variabilities. Both results shows that "salinity factor", including Electroconductivity, Chloride, and Total Dissolved Solid, is the main factor caused by tide. This paper would like to provide some information in wetland environment management.