

Method of Vegetation Indicators Estimate using fy3a Mersi

Qin, Xianlin¹; Li, Zengyuan¹; Deng, Guang¹; Liu, Qingwang¹; Li, Guoqing²; Cai, Huide³; Huang, Zhenchun⁴; J. L., Casanova⁵; A., Calle⁵; Dra., Hulia Sanz⁵; Jphann G., Goldammer⁶

¹Research Institute of Forest Resource Information Technique, The Chinese Academy of Forestry, CHINA; ²Spatial Data Center, CEODE/CAS, CHINA; ³GuangXi forestry survey and design Institute, CHINA; ⁴Tsinghua University, CHINA; ⁵Remote Sensing Laboratory, University of Valladolid, SPAIN; ⁶Global Fire Monitoring Centre (GFMC), Max Planck Institute for Chemistry, GERMANY

Vegetation indicators, such as vegetation relative greenness and vegetation canopy moisture content, are an important factor in determining forest fire risk and forest fire behaviour. In Dargon 2 project, to develop a suitable regional early warning technique to predict forest fire risk, according to the character of FY 3A MERSI image, the indicators of vegetation relative greenness and vegetation canopy moisture content have been calculated by using the reflectance of SWIR, NIR and Red band of FY 3A MERSI. The results showed that the value of relative greenness and vegetation canopy moisture content had the similar trend to the locate observation. These methods can provide efficiently vegetation indicators for forest fire risk prediction.