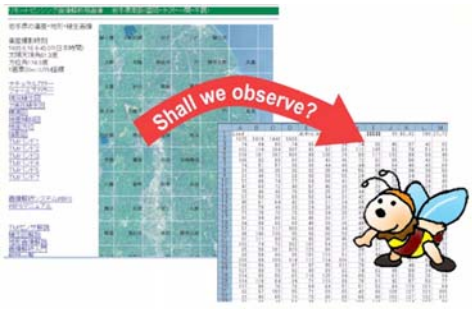
Worksheet Image Processing System



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The name of the software or data set

WIPS, Worksheet Image Processing System

Abstracts

Spreadsheet is a typical end-user programming tool. The spreadsheet programming is effective in the raster image analysis for college students. I applied the spreadsheet programming to remote sensing image analysis with topographical map and vegetation map. In order to achieve for the applications effectively, I have developed image analysis modules, worksheet image processing system (WIPS) and imagery data set that can access by WWW browser. WIPS have many image operation modules made by VBA of Microsoft EXCEL. Imagery data set are 72 pixel 62 line size CSV data of Landsat TM images, topographical map and vegetation map.

1. WIPS control panel

As shown fig.1, WIPS control panel has some image operation for analysis of remote sensing image. Student can obtain to current worksheet by one-click, and also can analyze by push of click-button.

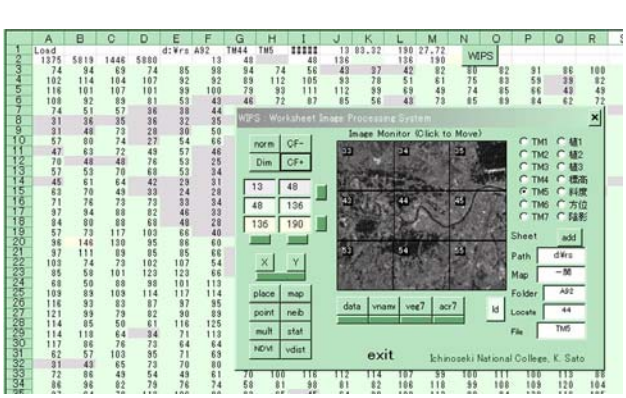

Fig.1 WIPS control panel

2. Analysis example using WIPS

Fig.2 shows an image analysis example by WIPS. The histogram shows vegetation distribution characteristics.

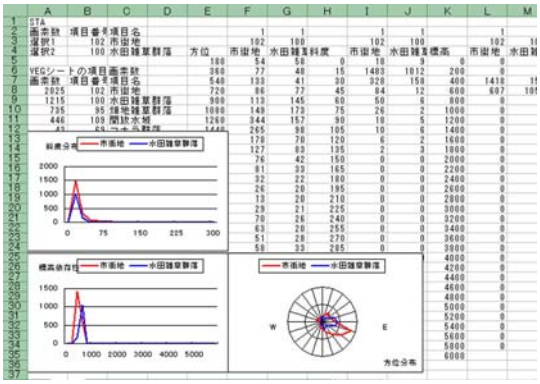

Fig.2 Vegetation distribution characteristics

3. Image dataset for WIPS

The WIPS is supported by many CSV dataset. Fig.3 shows a sample of the dataset on the Web browser. There are 13 images a specified area.

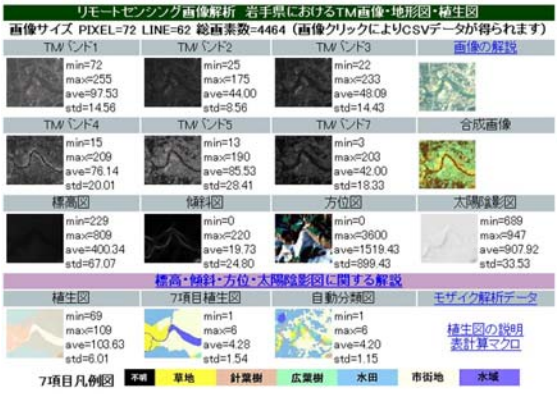

Fig.3 Dataset for remote sensing image analysis

Reference

1) http://www.ichinoseki.ac.jp/satok/kyoiku/rs/INDEX.HTM
2) K. SATO, R. YOKOYAMA, End user programming technique for remote sensing image analysis using spreadsheet, DP4-P27, ACRS2005, Hanoi, Vietnam