SAWADA LAB.

[Global Environment Observation]

International Center for Urban Safety Engineering

http://stlab.iis.u-tokyo.ac.jp/

Department of Civil Engineering

Applied Remote Sensing

Diagnosis of Earth Environment

Satellite remote sensing technology enables us monitor various phenomena on the earth. Especially, such observation datasets have been collected since the first launch of the civilian satellite “Landsat 1” in 1972. We are investigating the characteristics of remotely sensed data and promoting their operational uses. For example, we have developed the wild fire early warning & detection system and the forest development near-real time detection system. We expect that these technologies contribute to diagnosis on earth environment.

- **◆Characteristics of observation data: to develop the satellite data indices**
- **◆Cloud & noise free images: to develop cyclic observation dataset of earth surface**
- **◆SE Asia: operation of the forest development detection system and creation of historical dataset of the development**
- **◆Amazon: Biomass estimation of the whole area based on the environment classification**

Fig.1 MODIS satellite image

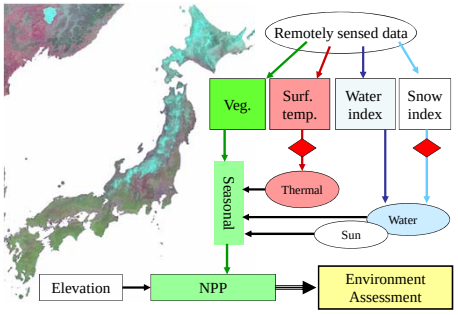

Fig.3 Satellite environment indices

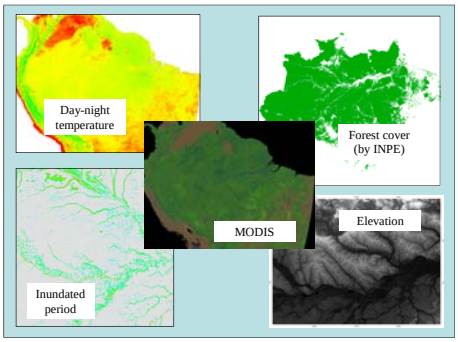

Fig.5 Sources for site classification in Amazon

Fig.2 Near-real development detection

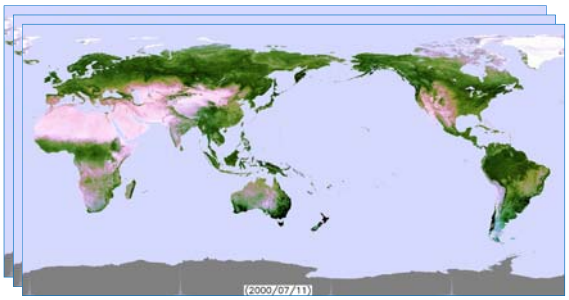

Fig.4 Noise-free images of 10 day interval since 1982

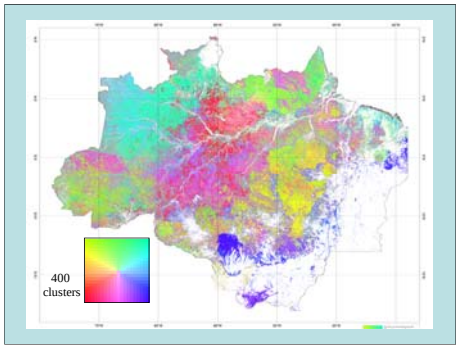

Fig.6 Forest stand environment classes