

DEVELOPMENT OF HYBRID VECTORIZING SOFTWARE FOR DIGITIZATION OF CADASTRAL MAPS

Byoungjun SEO, Jaejoon JEONG, Jaebin LEE and Prof. Yongil KIM, Korea

ABSTRACT

The Cadastral map is a basic data that prescribes lot numbers, the classification of land category, and the boundaries and ownerships of land parcels. In Korea, the government has tried to digitalize cadastral maps and inputted the attribute informations of cadastral maps. But, the efficiency problems have been raised, because the cadastral services mainly depend on the manual works. Also, the figure informations of cadastral maps were not digitalized that there have been many problems in establishing the efficient land information systems.

In this study, we developed the hybrid vectorizing software to enhance the deficiency of the analogue methods and to ensure the accuracy of the cadastral maps. The hybrid vectorizing adopts a screen-digitizing method as a prototype and automates the procedure of searching the intersection of lines with efficiency. Consequently, in the aspect of the accuracy, there is no difference with the screen-digitizing method because the hybrid method is based on the screen-digitizing. In the aspect of the efficiency, we can input the neatline layers at regular intervals and the deformed neatline layers, and shorten the data input time.

CONTACT

Byoungjun Seo
Researcher
School of Civil, Urban & Geo-Systems Engineering
Seoul National University
Shillim Dong
Gwanak Gu
Seoul
KOREA
Tel. + 82 2 880 7371
Fax + 82 2 889 0032
E-mail: ctttrap@chollian.net

Jaejoon Jeong
Researcher
School of Civil, Urban & Geo-Systems Engineering
Seoul National University
Shillim Dong
Gwanak Gu
Seoul
KOREA
Fax + 82 2 889 0032
E-mail: hayoon@chollian.net

Jaebin Lee
Graduate Course
School of Civil, Urban & Geo-Systems Engineering
Seoul National University
Shillim Dong
Gwanak Gu
Seoul
KOREA
Fax + 82 2 889 0032
E-mail: damanegi77@hotmail.com

Assoc. Prof. Yongil Kim
School of Civil, Urban & Geo-Systems Engineering
Seoul National University
Shillim Dong
Gwanak Gu
Seoul
KOREA
Fax + 82 2 889 0032
E-mail: yik@snu.ac.kr