Development of a Gravity Correction Service Using OGC Web Processing Service

Seongkyu Lee[1], Chuluong Choi[2]

Department of Spatial Information Engineering, Pukyong National University,
45, Yongso-ro, Nam-Gu, Busan, South Korea,
[1]geoslegend@gmail.com, [2]cuchoi@pknu.ac.kr

Abstract: With the spread of digital relative gravimeter, gravity data can be measured easily and convenient than analog gravimeter. But relative gravity data needs gravity correction such as earth tide, meter height, absolute gravity conversion and so on. These gravity corrections can be performed using the computer like a laptop. The way has the disadvantage of requiring the installation of the software. So, with the spread of the small devices like smart phones and tablets, the approach that data collected in the field is transferred to a server and then complex operations are carried out on the server is being used. These ways can be implemented using web processing service (WPS) standard proposed by Oepn Geospatial Consoritum (OGC). Therefore, we designed and implements OGC WPS-based gravity correction service is available to gravity correction in real time using the relative gravity data collected in the field. The developed service is expected to be able to use efficiently on low-performance devices.

Keyword: Web Processing Service, Gravity Correction