Strategy for Ionospheric Modeling at Asia using IGS stations

Byung-Kyu Choi[1], Jong-Uk Park[1], Jung-Hyun Jo[1],
Sung-Ki Cho[1], Jeong-Ho Joh[2], and Hyung-Chul Lim[2]

[1]GNSS Technology Group, Korea Astronomy & Space Science Institute
[2]Earth Observing System Research Group, Korea Astronomy & Space Science Institute

GNSS has become a valuable tool for determining total electron contents(TEC) of ionosphere. In order to estimate the TEC in ionosphere, a lot of the ionospheric researches using GNSS networks have been widely implemented for the last decades. In mid-latitude regions, typical spatial and temporal variations in ionospheric models delay tend to minimal. The proposed ionospheric model has a 1.25 degree grid at latitudes and a 2.5 degree grid at longitudes. The precise grid TEC estimated by the inversion technique is compared with Global Ionosphere Maps(GIMs) which have been provided by several analysis centers(ACs). The results of initial investigations into the suitability of the proposed ionospheric modeling scheme in Asia are presented.