

Realtime three-dimensional ionospheric tomography and validation by MU radar

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We have developed a realtime three-dimensional ionospheric tomography system with realtime data from 200 GNSS receivers of a Japanese nationwide reference station network called GEONET. Three-dimensional ionospheric density structures over Japan are reconstructed every 15 minutes with 6 minutes delay. They are available through a website (<http://www.enri.go.jp/cnspub/tomo3/>). The results show good agreement with the foF2 values observed by four ionosonde stations over Japan. Incoherent scatter measurement results by the MU radar located at Shigaraki, Japan are also used to validate the tomography results.