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PEM021-P17

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## Derivation of near real-time TEC for monitoring ionospheric disturbances

Wataru Miyake<sup>1\*</sup>, Hidekatsu Jin<sup>2</sup>

<sup>1</sup>Tokai University, <sup>2</sup>NICT

We have developed a system of the rapid derivation of the total electron content (TEC) of the ionosphere from GEONET (a dense GPS receiver network in Japan), which offers unique opportunities for a permanent monitoring of the ionosphere. The latest TEC values (with a delay of 1-3 hours) are obtained every 3 hours, and most of the values are within 1-2 TEC units of the actual TEC. We have found the system quite powerful for continuously monitoring the progress of ionospheric storms. In addition to the plot of TEC temporal variation at 5 latitude regions over Japan, we have used a two-dimensional TEC map since 2008.

Keywords: TEC, ionospheric disturbances