A statistical study of global ionospheric map total electron content changes prior to occurrences of $M \geq 6.0$ earthquakes during 2000–2014

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Introduction

Here we report figures that include GIM-TEC deviations that exceed $\pm 1\sigma$ and $\pm 3\sigma$ per day for $\pm 15$ days of earthquakes (in the main paper we show figures that use $\pm 2\sigma$). We also include figures using $Kp > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (in the main paper we show figures that use Dst instead of Kp). Lastly, one figure is included that shows data processed using a 24-hr notch filter rather than a 24-hr running average. These additional figures further support the conclusions of our paper.
**Figures S1.** Same as Figure 6 in paper, but using GIM-TEC deviations that exceed $\pm 1\sigma$ (instead of $\pm 2\sigma$).

**Figures S2.** Same as Figure 7 in paper, but using GIM-TEC deviations that exceed $\pm 1\sigma$ (instead of $\pm 2\sigma$).
Figures S3. Same as Figure 8 in paper, but using GIM-TEC deviations that exceed ±1σ (instead of ±2σ).

Figures S4. Same as Figure 9 in paper, but using GIM-TEC deviations that exceed ±1σ (instead of ±2σ).
**Figures S5.** Same as Figure 10 in paper, but using GIM-TEC deviations that exceed $\pm 1\sigma$ (instead of $\pm 2\sigma$).

**Figures S6.** Same as Figure 6 in paper, but using GIM-TEC deviations that exceed $\pm 3\sigma$ (instead of $\pm 2\sigma$).
Figures S7. Same as Figure 7 in paper, but using GIM-TEC deviations that exceed ±3σ (instead of ±2σ).

Figures S8. Same as Figure 8 in paper, but using GIM-TEC deviations that exceed ±3σ (instead of ±2σ).
Figures S9. Same as Figure 9 in paper, but using GIM-TEC deviations that exceed ±3σ (instead of ±2σ).

Figures S10. Same as Figure 10 in paper, but using GIM-TEC deviations that exceed ±3σ (instead of ±2σ).
Figures S11. Same as Figure 6 in paper, but using GIM-TEC deviations that exceed $\pm 1\sigma$ (instead of $\pm 2\sigma$) and $K_p > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (instead of $Dst$ criteria described in paper).

Figures S12. Same as Figure 7 in paper, but using GIM-TEC deviations that exceed $\pm 1\sigma$ (instead of $\pm 2\sigma$) and $K_p > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (instead of $Dst$ criteria described in paper).
Figures S13. Same as Figure 8 in paper, but using GIM-TEC deviations that exceed $\pm 1 \sigma$ (instead of $\pm 2 \sigma$) and $Kp > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (instead of $Dst$ criteria described in paper).

Figures S14. Same as Figure 9 in paper, but using GIM-TEC deviations that exceed $\pm 1 \sigma$ (instead of $\pm 2 \sigma$) and $Kp > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (instead of $Dst$ criteria described in paper).
Figures S15. Same as Figure 10 in paper, but using GIM-TEC deviations that exceed ±1σ (instead of ±2σ) and Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).

Figures S16. Same as Figure 6 in paper, but using Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).
Figures S17. Same as Figure 7 in paper, but using Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).

Figures S18. Same as Figure 8 in paper, but using Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).
Figures S19. Same as Figure 9 in paper, but using Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).

Figures S20. Same as Figure 10 in paper, but using Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).
Figures S21. Same as Figure 6 in paper, but using GIM-TEC deviations that exceed $\pm 3\sigma$ (instead of $\pm 2\sigma$) and Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).

Figures S22. Same as Figure 7 in paper, but using GIM-TEC deviations that exceed $\pm 3\sigma$ (instead of $\pm 2\sigma$) and Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).
Figures S23. Same as Figure 8 in paper, but using GIM-TEC deviations that exceed $\pm 3\sigma$ (instead of $\pm 2\sigma$) and $K_p > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).

Figures S24. Same as Figure 9 in paper, but using GIM-TEC deviations that exceed $\pm 3\sigma$ (instead of $\pm 2\sigma$) and $K_p > 3$ to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).
Figures S25. Same as Figure 10 in paper, but using GIM-TEC deviations that exceed ±3σ (instead of ±2σ) and Kp > 3 to remove GIM-TEC data related to geomagnetically disturbed days (instead of Dst criteria described in paper).

Figures S26. Same as Figure 6 in paper, but using a 24-hr notch filter rather than a 24-hr running average filter.