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# Calibrating high-precision Faraday rotation measurements for LOFAR and the next generation of low-frequency radio telescopes *(Corrigendum)*

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This erratum corrects Figs. 2 and 3 of our original paper (Sotomayor-Beltran et al. 2013). Due to a simple error in plotting the input data, these maps of ionospheric total electron content (TEC) were inverted north-south and improperly stretched to match the underlying cartographic projection. The properly mapped figures are presented here (see also the Appendix of

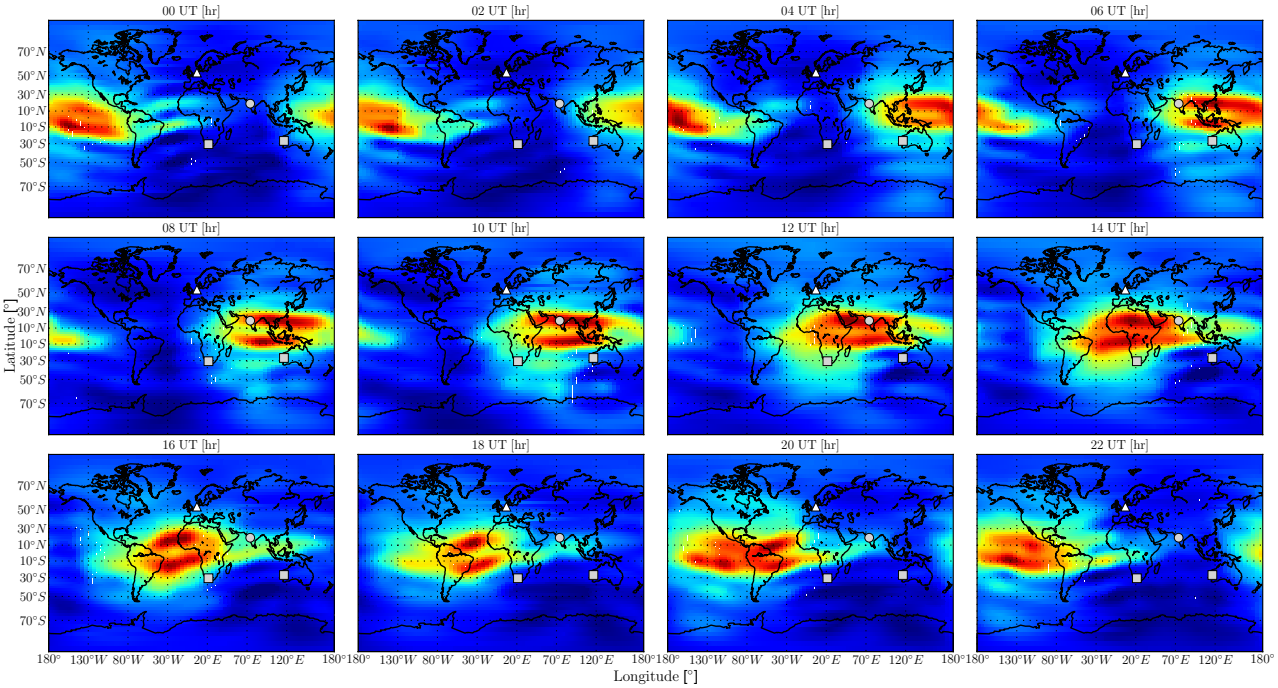


**Fig. 2.** GIMs representing the VTEC across the globe for April 11th, 2011 (the date of the first LOFAR observing campaign, see Sect. 5) obtained courtesy of CODE. The maps range from minimum (blue) to maximum (red) VTEC values of 0.0–87.2 TECU (1 TECU = $10^{16}$ electrons/m$^2$). The triangles indicate the location of the LOFAR core stations in the Netherlands, the squares mark the SKA core sites in South Africa and Western Australia, and the circles indicate the site of the GMRT.

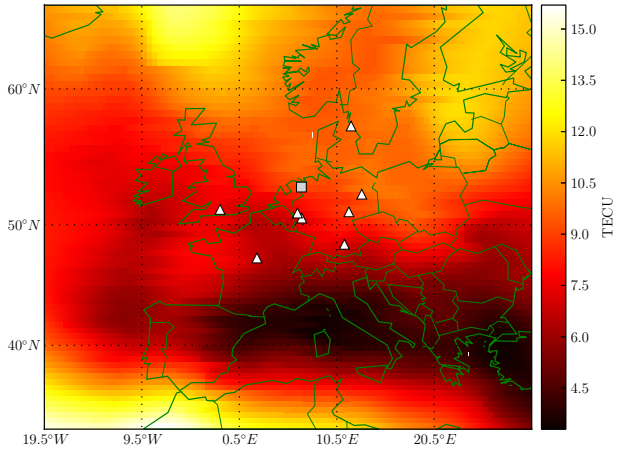


**Fig. 3.** The VTEC across Europe for March 23rd, 2012 (the date of the third LOFAR campaign, see Sect. 5) at 00:00 UT, obtained courtesy of ROB. The square indicates the LOFAR core stations and the triangles represent the locations of the international stations.

Arora et al. 2015). The ionospheric prediction code, `ionFR`, and other figures presented in the paper were not affected by this inversion error, which was purely a plotting error applying to Figs. 2 and 3.

This mapping error led to the incorrect conclusion that the Equatorial Ionization Anomaly (EIA) can sometimes pass directly over the planned sites of the Square Kilometre Array (SKA). Though ionospheric calibration is a challenging problem, it is a challenge that is being met (e.g., Arora et al. 2015). Unfortunately, the incorrect assertion that the EIA passes over the chosen sites for the SKA overstated the severity of the problem for these locations, which have been meticulously chosen and proven to be excellent sites for low-frequency radio astronomy.

All other conclusions in the paper remain unaffected.

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## References

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