Erratum for "An agile high-frequency radar used for ionospheric research"

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Abstract

The original article to which this erratum refers was published in the Journal of Space Weather and Space Climate. (https://doi.org/10.1051/swsc/2021010). In this erratum, we add two citations that was ignored in the original article and rectify an error. The conclusions of th he paper are unchanged.

Key Words: Erratum

Figure 8 was adapted from another accepted technical paper on the same instrument (Deng et al., 2021). The citation should be added to the captions of Figure 8, thus reading:

> Figure 1. Phases of the echoes from meteor trails received by 16 receivers before correction. (a) The unwrapped phases of the 16 channels and the fitted straight lines. The dots with different colors denote different sets of phases of the 16 channels. The lines with different colors represent different fitted straight lines. (b) The phase deviation from the fitted lines. The dots with different colors denote the deviation between measured phases from different meteors and the fitted phases. The means of the deviations are presented as red circles. The means are between -10° and 10°, with a standard deviation (STD) of ~3°. (Deng et al., 2021)

Figure 10 and 11 were adapted from another accepted technical paper on the same instrument (Yan et al., 2020). Citations should be added to the captions of Figure 10 and 11, thus reading:

> Figure 20. Schematic diagram of beam forming for transmitting and receiving in the AgileDARN radar. (a) Typical DBF for transmitting with a beamwidth of 3.25°. (b) Seven sub-beam forming for receiving to separate 3.25° into seven sub-beams of 0.464°. (Yan et al., 2020)
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> Figure 11. Power distribution in FOV. (a) Power distribution in FOV with the angular separation of 0.464° (seven sub-beam forming). (b) Power distribution in FOV with the angular separation of 3.25° (typical beam forming). (c) Power distribution in the range of

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855 km varying in azimuthal with a separation of 0.464°. (d) Power distribution in the range of 855 km varying in azimuthal with a separation of 3.25°. (Yan et al., 2020)

The data sets used in Figure 8 and 9 were not identical. The same data should be used in the two figures. Thus, Figure 9 should be

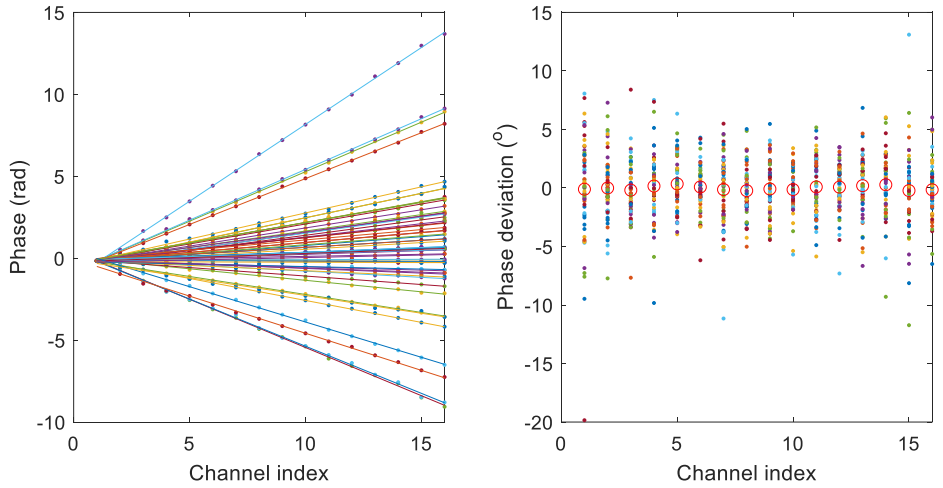

Figure 3. Phases of the echoes from meteor trails received by 16 receivers after correction. (a) The unwrapped phases of the 16 channels after correction and the re-fitted straight lines. The dots with different colors denote different sets of phases after correction of the 16 channels. The lines with different colors represent different re-fitted straight lines. (b) The phase deviation from the re-fitted lines. The dots with different colors denote the deviation between corrected phases from different meteors and the re-fitted phases. The means of the deviations after correction are presented as red circles. Comparing to Figure 1, the means after correction are reduced significantly to ±1°, with the same STD.

References

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