

Comments and Corrections

Corrections to “A Gain and Phase Autocalibration Approach for Large-Scale Planar Antenna Arrays”

Zheng Dai^{ID}, *Member, IEEE*, Weimin Su, and Hong Gu

IN THE above letter [1], several characters were presented incorrectly. The correct details are given here.

On Page 1646, φ_D should be ϕ_D on the fourth line above Eq. (2), i.e., $\mathbf{A} = [\mathbf{a}(\theta_1, \phi_1), \mathbf{a}(\theta_2, \phi_2), \dots, \mathbf{a}(\theta_D, \phi_D)]$ should be $\mathbf{A} = [\mathbf{a}(\theta_1, \phi_1), \mathbf{a}(\theta_2, \phi_2), \dots, \mathbf{a}(\theta_D, \phi_D)]$.

On Page 1646, φ_d should be ϕ_d in Eq. (2), i.e. $\langle \mathbf{a}(\theta_d, \varphi_d) \rangle_m = e^{j\eta(x_m \cos \theta_d \sin \phi_d + y_m \sin \theta_d \sin \phi_d)}$ should be $\langle \mathbf{a}(\theta_d, \phi_d) \rangle_m = e^{j\eta(x_m \cos \theta_d \sin \phi_d + y_m \sin \theta_d \sin \phi_d)}$.

On Page 1646, φ_d should be ϕ_d on the second line above Eq. (5), i.e., (θ_d, φ_d) should be (θ_d, ϕ_d) .

On Page 1646, φ_d should be ϕ_d in Eq. (5), i.e., $\langle \mathbf{b}(\theta_d, \varphi_d) \rangle_m = \rho_m e^{j\varphi_m} \cdot \langle \mathbf{a}(\theta_d, \varphi_d) \rangle_m$ should be $\langle \mathbf{b}(\theta_d, \phi_d) \rangle_m = \rho_m e^{j\varphi_m} \cdot \langle \mathbf{a}(\theta_d, \phi_d) \rangle_m$.

On page 1646, γ_d should be ϕ_d in Eq. (8), i.e., Eq. (8) should be $\hat{\gamma}_{m,d} = \rho_m e^{j\varphi_m} e^{j\eta x_m (\cos \theta_d \sin \phi_d - h_d)} e^{j\eta y_m (\sin \theta_d \sin \phi_d - k_d)}$

$\hat{\varphi}_{m,d} = \eta x_m (\cos \theta_d \sin \phi_d - h_d) + \eta y_m (\sin \theta_d \sin \phi_d - k_d) + \varphi_m + 2\pi l_m$

On page 1647, in Algorithm 1, $\mathbf{A}$ should be $\mathbf{X}$ in **Input** and **Step 1**.

On page 1648, $\hat{\theta}_p$ and θ_p should be hold because they represent column vectors.

REFERENCES

- [1] Z. Dai, E. Su, and H. Gu, “A gain and phase autocalibration approach for large-scale planar antenna arrays,” *IEEE Commun. Lett.*, vol. 25, no. 5, pp. 1645–1649, May 2021, doi: [10.1109/LCOMM.2020.3047050](https://doi.org/10.1109/LCOMM.2020.3047050).

Manuscript received September 28, 2021; accepted September 28, 2021. Date of current version December 10, 2021. This work was supported in part by the National Natural Science Foundation of China under Grant 62101264, in part by the Natural Science Foundation of Jiangsu Province under Grant BK20210334, and in part by the Jiangsu Province Postdoctoral Science Foundation under Grant 2021K100A. (Corresponding author: Zheng Dai.)

The authors are with the School of Electronic and Optical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China (e-mail: daizheng@njjust.edu.cn; suweimin_njust@126.com; guhong666@njjust.edu.cn).

Digital Object Identifier 10.1109/LCOMM.2021.3116624