Erratum

Erratum to "Application of Dirichlet-to-Neumann Map Boundary Condition for Low Frequency Electromagnetic Problems"

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In the above article, an error in (16) and (19) in Section II-D, page 3, and (24) in Section II-E, page 4, was discovered and corrected as follows.

Equation (16) should have been written as follows:

$$\begin{aligned}\boldsymbol{A}_r = &-\sum_{l=1}^{+\infty}\sum_{m=-l}^{l}\mathcal{M}^{\phi}_{\mathrm{lm}}[\boldsymbol{A}_r]\frac{l+1}{R_{\mathrm{BCD}}^{l+2}}\boldsymbol{Y}_{\mathrm{lm}}\\ &+\sum_{l=1}^{+\infty}\sum_{m=-l}^{l}\mathcal{M}^{\phi}_{\mathrm{lm}}[\boldsymbol{A}_r]\frac{1}{R_{\mathrm{BCD}}^{l+2}}\boldsymbol{U}_{\mathrm{lm}}\\ &+\sum_{l=1}^{+\infty}\sum_{m=-l}^{l}\mathcal{M}^{\psi}_{\mathrm{lm}}[\boldsymbol{A}_r]\frac{1}{R_{\mathrm{BCD}}^{l+1}}\boldsymbol{V}_{\mathrm{lm}}. \qquad (16)\end{aligned}$$

Equation (19) should have been written as follows:

$$\begin{aligned}\nu_0\nabla\times\boldsymbol{A}_r = &\nu_0\sum_{l=1}^{+\infty}\sum_{m=-l}^{l}\mathcal{M}^{\psi}_{\mathrm{lm}}[\boldsymbol{A}_r]\frac{l(l+1)}{R_{\mathrm{BCD}}^{l+2}}\boldsymbol{Y}_{\mathrm{lm}}\\ &-\nu_0\sum_{l=1}^{+\infty}\sum_{m=-l}^{l}\mathcal{M}^{\psi}_{\mathrm{lm}}[\boldsymbol{A}_r]\frac{l}{R_{\mathrm{BCD}}^{l+2}}\boldsymbol{U}_{\mathrm{lm}}. \qquad (19)\end{aligned}$$

Equation (24) should have been written as follows:

$$\boldsymbol{\Lambda}_{nk} = \boldsymbol{\Lambda}^{\psi}_{nk}. \qquad (24)$$

Following (24), operator Λ^{ϕ} should be disregarded in [1]. Specifically, (25), (28), and (31) should be discarded. Moreover, the authors have rerun all the simulations with the corrected equations and found that the effects of these corrections on the numerical results presented in [1] are negligible.

REFERENCES

[1] A. Efremov, S. Ventre, L. Udpa, and A. Tamburrino, "Application of Dirichlet-to-Neumann map boundary condition for low-frequency electromagnetic problems," *IEEE Trans. Magn.*, vol. 56, no. 11, Nov. 2020, Art. no. 7401308.

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