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Correction

Correction: Renaudin, V. *et al.* Use of Earth's Magnetic Field for Mitigating Gyroscope Errors Regardless of Magnetic Perturbation. *Sensors* 2011, *11*, 11390-11414

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Although the equations' derivation in our paper published in Sensors 2011 [1] is correct, a typo has been found in the summarizing Equations (48) and (49). The dot on the B in the skew matrix should be removed. Equations (48) and (49) should be corrected as:

$$\delta\dot{\mathbf{B}}^{b}_{QSF_{k+1}} = \left[\mathbf{0}_{3\times3} \quad -\left[\mathbf{B}^{b}_{QSF_{k+1}}\times\right]\right]\begin{bmatrix}\boldsymbol{\varepsilon}^{n}\\ \delta\mathbf{b}_{\omega}\end{bmatrix} + \begin{bmatrix}\mathbf{0}_{1\times3} & \mathbf{0}_{1\times3}\\ \mathbf{0}_{1\times3} & \left[\hat{\boldsymbol{\omega}}^{b}_{\mathbf{B}}\times\right]\end{bmatrix}\begin{bmatrix}\mathbf{0}_{3\times1}\\ \boldsymbol{\eta}_{\mathbf{B}}\end{bmatrix} \tag{48}$$

$$\underbrace{\begin{bmatrix}\delta\mathbf{B}^{n}_{QSF_{k+1}}\\ \delta\dot{\mathbf{B}}^{b}_{QSF_{k+1}}\end{bmatrix}}_{\delta\mathbf{z}} = \underbrace{\begin{bmatrix}-\left[\mathbf{B}^{n}_{QSF_{k}}\times\right] & \mathbf{0}_{3\times3}\\ \mathbf{0}_{3\times3} & -\left[\mathbf{B}^{b}_{QSF_{k+1}}\times\right]\end{bmatrix}}_{\mathbf{H}_{QSF}}\underbrace{\begin{bmatrix}\boldsymbol{\varepsilon}^{n}\\ \delta\mathbf{b}_{\omega}\end{bmatrix}}_{\delta\mathbf{x}} + \begin{bmatrix}-\mathbf{C}^{n}_{b}\\ \left[\hat{\boldsymbol{\omega}}^{b}_{B}\times\right]\end{bmatrix}\boldsymbol{\eta}_{\mathbf{B}} \tag{49}$$

Reference

1. Afzal, M.H.; Renaudin, V.; Lachapelle, G. Use of Earth's Magnetic Field for Mitigating Gyroscope Errors Regardless of Magnetic Perturbation. *Sensors* **2011**, *11*, 11390–11414.