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Letter to the Editor

Erratum to "The geometry of hemi-slant submanifolds of a locally product Riemannian manifold"

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We realized that in our paper [1] the proof of Theorem 4.8 has two mistakes. Here, we explicitly give some details:

Since the tensor field Ω of type (0,2) defined by $\Omega(\bar{U},\bar{V}) = g(F\bar{U},\bar{V})$ is not skew-symmetric, its differential cannot be taken in the usual sense. Moreover, after re-calculation of the equality

$$3\,d\Omega(\bar{V},\bar{W},\bar{U}) = \mathcal{G}(\nabla_{\bar{U}}\Omega)(\bar{V},\bar{W}),\tag{0.1}$$

we see that equation (0.1) does not hold. Therefore, the proof of Theorem 4.8 of [1] is not valid. Then Corollary 4.9 is also not valid. Moreover, equation (4.22) in Corollary 4.9 affects the validity of Theorem 7.1.

However, with an additional hypothesis, i.e. "integrability of the anti-invariant distribution \mathcal{D}^{\perp} " in Corollary 4.9 and Theorem 7.1, these results continue to be true.

References

 Taştan HM, Özdemir F. The geometry of hemi-slant submanifolds of a locally product Riemannian manifold. Turk J Math 2015; 39: 268-284.

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