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

Hakan Mete TAŞTAN¹,*, Fatma ÖZDEMİR²
¹Department of Mathematics, İstanbul University, Vezneciler, İstanbul, Turkey
²Department of Mathematics, İstanbul Technical University, Maslak, İstanbul, Turkey

Received: 02.09.2015 • Accepted/Published Online: 21.01.2016 • Final Version: 02.12.2016

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 Ω(Ũ, V) = g(Ũ F, V) is not skew-symmetric, its differential cannot be taken in the usual sense. Moreover, after re-calculation of the equality

\[ 3 dΩ(V, W, U) = \mathcal{G}(\nabla_Ω)(V, W), \]  
(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 \( \mathcal{D}^⊥ \)” in Corollary 4.9 and Theorem 7.1, these results continue to be true.

References


*Correspondence: hakmete@istanbul.edu.tr