浮子の投下位置による流下軌跡の違いに着目した 河川流量観測の不確実性の評価

Assessing the uncertainty of river flow observation by focusing on the differences in flow trajectories depending on the drop position of floats

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要旨

日本での高水流量観測の標準手法である浮子測法について、浮子の流下軌跡や更正係数といった観測上の誤差の要因になり得る課題や、観測の安全性の課題などが指摘されている。浮子観測の諸問題の中でも、先行研究において実河川における流下軌跡に関する研究が少ない事を踏まえ、本研究では異なる吃水深を持つ2種類の浮子を15箇所から投下した際の流下軌跡を観測した。結果としては河川形状の影響で浮子が直進しない事で、分割断面内を正しく流下しない事が確認できた。

ABSTRACT

The Japanese standard method of flood flow rate observation, the float method, has been pointed out as a potential source of error in observation, such as the trajectory of the floats and the correction coefficient, as well as an issue of safety in observation. Among the problems of float observation, there have been few studies on the trajectory of floats in actual rivers, so in this study, two types of floats with different draft depths were dropped from 15 different locations and their trajectories were observed. As a result, it was confirmed that the floats did not flow down correctly in the divided section because they did not go straight due to the influence of the river geometry.