Each month, we highlight one recently published paper with outstanding methods that attracted our attention. Important factors can be particularly creative setups for experiments, groundbreaking new approaches or results from out of the box thinking. You think you’ve read something that might nominate? Shoot us a message and we are happy to read it!

Head and neck injury potential during water sports falls: examining the effects of helmets

Among a lot of great papers this month, in The Week in Biomechanics #CW18 we presented you this exciting paper by Scher, Stepan, and Hoover on the effects of helmets on injury potential during water sports falls. We decided that the methods used in this paper are the most creative ones we read this month.

As a quick reminder, the group set up a pool in their Motion Capturing Lab allowing them to simulate head-first and feet-first crashes using an instrumented dummy on a swing. They were able to recreate highly standardized falls both with a helmet and without a helmet, allowing interesting insight into the effects of the helmet on drag and deceleration once the head hits the water, but also alter speed and angle at the moment of impact. It might be absolutely impossible to gather this kind of data in field-testing, yet it also appears quite hard to let someone ride a wakeboard in your MoCap-Lab.

Therefore this paper really caught our attention and we call it our Method of the Month. Give it a full read here or read our summary!
You’ve stumbled across some creative Methods? Send us an E-Mail or leave a comment!