This study introduced a method for discharge monitoring of mountain streams using deep learning and a low-cost solar-powered commercial camera. Discharge monitoring at rocky upstream mountain streams has been a difficult task for a long time due to the complex topography. Although the image-based method was only tested at one single site, it provides a different idea that could serve as an alternative apparatus, or integrated into traditional approaches to improve data quality. The paper tackled a few important issues in streamflow image processing, including the treatment of images affected by the disturbances of water reflection and vegetation shadow, and the tradeoff between speed and accuracy when using different color enhancing methods. These attempts could provide useful reference for streamflow observation at other sites facing similar challenges. In the revised version of the manuscript, the authors have addressed most of the concerns raised by previous reviewers. I recommend acceptance after minor revisions.

(1) “acoustic doppler current profiler”, the word doppler should be capitalized.
(2) In Introduction, the authors have focused on explaining image methods: PIV, PTV, STIV. Have deep learning techniques ever been used in hydrological monitoring? Previous studies on this topic should be discussed in this section.
(3) L61, lacking should be replaced by lack.
(4) 3.3.2 Comparison of discharge models. What is “discharge model”? It needs to be clarified because you have used “discharge classification model” through the paper.