

Z118a Update of u2k multi-band photometric catalog in the HSC-SSP Deep/Ultra-Deep fields

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The PFS-SSP Galaxy Evolution survey targets galaxies and active galactic nuclei across a wide redshift range from $z \sim 0.7$ to 7. The target fields are selected from the HSC-SSP Deep/Ultra-Deep fields to fully take advantage of the deep and wide optical imaging data from HSC-SSP. In order to capture important spectral features of galaxies across the targeted redshift range, however, obtaining the photometric information outside of the HSC wavelength coverage is also critical. HSC joint data collaboration aims to construct a multi-band photometric catalog in the HSC-SSP Deep/Ultra-Deep fields by combining the HSC-SSP BB/NB data and external survey data from u to K -band, namely, u from CLAUDS, multiple NB from CHORUS, NIR data from DUNES², UKIDSS DXS/UDS, VIDEO, and UltraVISTA. This multi-band photometric catalog is called the u2k catalog, and the first version based on the HSC-SSP PDR2 is available to the collaboration. We are now updating the u2k photometric catalog with the HSC-SSP DR4 and the latest data release version of the external data (if any). This updated version of the u2k catalog is planned to be used for the target selection for the PFS-SSP GE survey, and also, will be useful for research projects with HSC especially targeting galaxies at higher redshift. We will share the current status of the u2k catalog update together with the major improvements from the previous version.