

V216a SuMIRe-PFS[31]: Development of the PFS target database and the connection to the fiber allocation process

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Prime Focus Spectrograph (PFS) is the next flagship instrument at Subaru Telescope currently under commissioning and is planned to be online for science operation in 2023. The massive multiplexity of PFS enables us to obtain spectra of about 2400 objects from 380nm to 1260nm simultaneously in a field-of-view (FoV) of 1.3 degrees in diameter. To efficiently use this unique capability, we are planning to operate it under queue observing mode by accommodating fibers allocated to multiple different programs in a single pointing, and it is necessary to develop a mechanism to store target information, save information on the executed exposures, and keep track of the progress of the observation on the basis of individual object and each program over the semester(s). This mechanism is realized by multiple databases and communication between them. The target database (targetDB) is aimed at hosting information on all targets from observers as well as calibration sources and serve them to the fiber allocation process. In this contribution, we present the status of the development of targetDB including database schema and implementation, and how it is connected to the fiber allocation procedure to design the prime focus instrument. We also discuss our plan of how duplications of targets are handled, and how targetDB is related to other databases which are also under commissioning and development.