

reports

obsproc working group:

Arai, He, Ishigaki, Jeschke, Kackley, Koshida, Moritani, Onodera,
Passegger, Pyo, I. Tanaka, M. Tanaka, Yabe

1: Data releases

release	run(s) included
run21_June2025	run21 (Mar 2025)
run22_July2025	run22 (May 2025)
run23_August2025	run23 (July2025)
S25A_November2025	run21-23
run24_November2025	run24 (Sep 2025)
run25_February2026	run25 (Nov 2025)
S25A_April2026	run21-23
coming soon: run26_June2026	Run26 (May 2026)

**If you write a paper based on data from PFS,
please acknowledge us!**

2: Observatory filler in S25A

- As we reported at the last UM, a fraction of the community filler targets were observed as observatory filler and made public in the run21-23 releases. The problem has been fixed in the S25A releases.
- We first thought the problem was due to priority setting, but it was not.
- The code to make fiber configuration designs applies a magnitude cut to filler targets to ensure that bright sources ($\text{mag} < 17$) do not contaminate the designs.
- The cut was (erroneously) applied in the g-band, but some community filler programs did not provide target brightness in that band.
- As a result, all targets from those programs without g-band fluxes were entirely excluded from the target pool. This was the main problem.
- The issue has been fixed, and we check duplication between observatory filler targets and other science targets. The same problem will not happen again.

3: FLUXSTDs duplicated with SCIENCE

- Some of the FLUXSTDs are targeted as SCIENCE by open-use programs. Because the calibration objects have a high priority, they are observed as FLUXSTD (not as SCIENCE) in S25A. These duplicated FLUXSTDs were processed and delivered to the PIs.
- The following mitigation/preventive actions were taken:
 - We make an online tool to check the duplication with FLUXSTDs so that the PI is aware which science targets can also be targeted as FLUXSTD.
 - When FLUXSTDs are targeted by a science program, we observe them with special ob_code. The pipeline uses them as FLUXSTDs up through the flux calibration stage, and the coadd spectra are delivered only to the PIs as SCIENCE.

4: Science Platform failure

- A file server on PFS SP failed on 19 Feb JST, and the entire system stopped working.
- We replaced the failed file server with a new one and brought the system back online on 27 Feb JST.
- We are sorry for the trouble, but fortunately, no data is lost.
- We, NAOJ, do our best to keep your data (e.g., we are building a back-up system), but be sure to take a backup copy on your local disk on a regular basis. Computers may fail at any time.

5: Next-day quick-look data delivery

- There have been a lot of requests for quick-look (QL) data to check the data quality mostly from PIs of classical programs.
- We have so far shared the QL data upon request and on the best-effort basis, but we will test the next-day QL data delivery in July.
- The QL data will be served at SP, and we deliver QL data for all programs, not limited to classical programs.
- The QL data includes only pfsCalibrated, which are wavelength and flux calibrated spectra for each visit. No coadd spectra are included, but we plan to provide a sample code to make coadds at SP.
- **The QL data are only for a quick quality check, not for science!** The QL data may be removed from SP after a run release.

discussions

1: Calibration objects

- There are two types of calibration objects in each exposure: SKY and FLUXSTD. These calibration data are included in the reduced data distribution for each proposal. In our releases so far:

	Queue	Classical
visit	available to everyone as part of the observatory filler data	available only to PI
coadd	Not available	Not available

- They can be useful to check the sky subtraction and flux calibration quality in each visit and coadd.
- One of the reasons for this uneven data distribution is because the calibration objects include coordinates. It is hard to separate coadds for queue and classical, and queue coadds are withdrawn as well.

1: Spectra of calibration objects

- To make things simple and fair, we propose to make all calibration spectra available to everyone regardless of data type and program type in run/semester releases. Calibration objects are for everyone.
- We understand that the pointing coordinates can potentially be sensitive information for ToO programs.
- Thoughts?
- If we make calib objects public, we want to make all of them public; due to the way the pipeline works, it is hard for us to release a subset of these calib objects, especially coadds. ToO is the only exception we can afford to make.
- For obsproc team; there is currently no way to make ToO data private at the pipeline level. ToO programs have to be processed separately. Work is needed to make filler targets observed in ToO available to the community.

2: Public release of reduced data

- The first release of the reduced data happened in June 2026. When will this release go public?
- Subaru does not have a specific policy about the release of reduced data.
- One option might be to adopt the same proprietary period as the raw data (i.e., 1.5 years) by default.
- We start the clock when we make a release. E.g., if we make a release today, then it will go public in 1.5 years later.
- If we adopt 1.5 years, then the first public release will happen in December 2026.

2: Public release of reduced data

- There are a few points to consider:
 - There has been an issue with the n-arm; the n-arm spectra may not be fully useful for scientific analyses due to persistence.
 - A possible extension of the raw data proprietary period is also being discussed due to this issue.
 - The reduced n-arm spectra, even if released publicly, will be equally useless to the public user.
 - On the pipeline side, we plan to implement a crude persistence reduction algorithm by the end of the year.
- Thoughts?
- If we do not reach a conclusion today, I will summarize your comments and discuss with the observatory and SAC.

3: Extension of open-use data access

- As you might recall, the pipeline team is granted access to all open-use data for 1 year at the last UM. The pipeline team would like to extend this period for another year for mutual benefits.
- Any concerns?

