

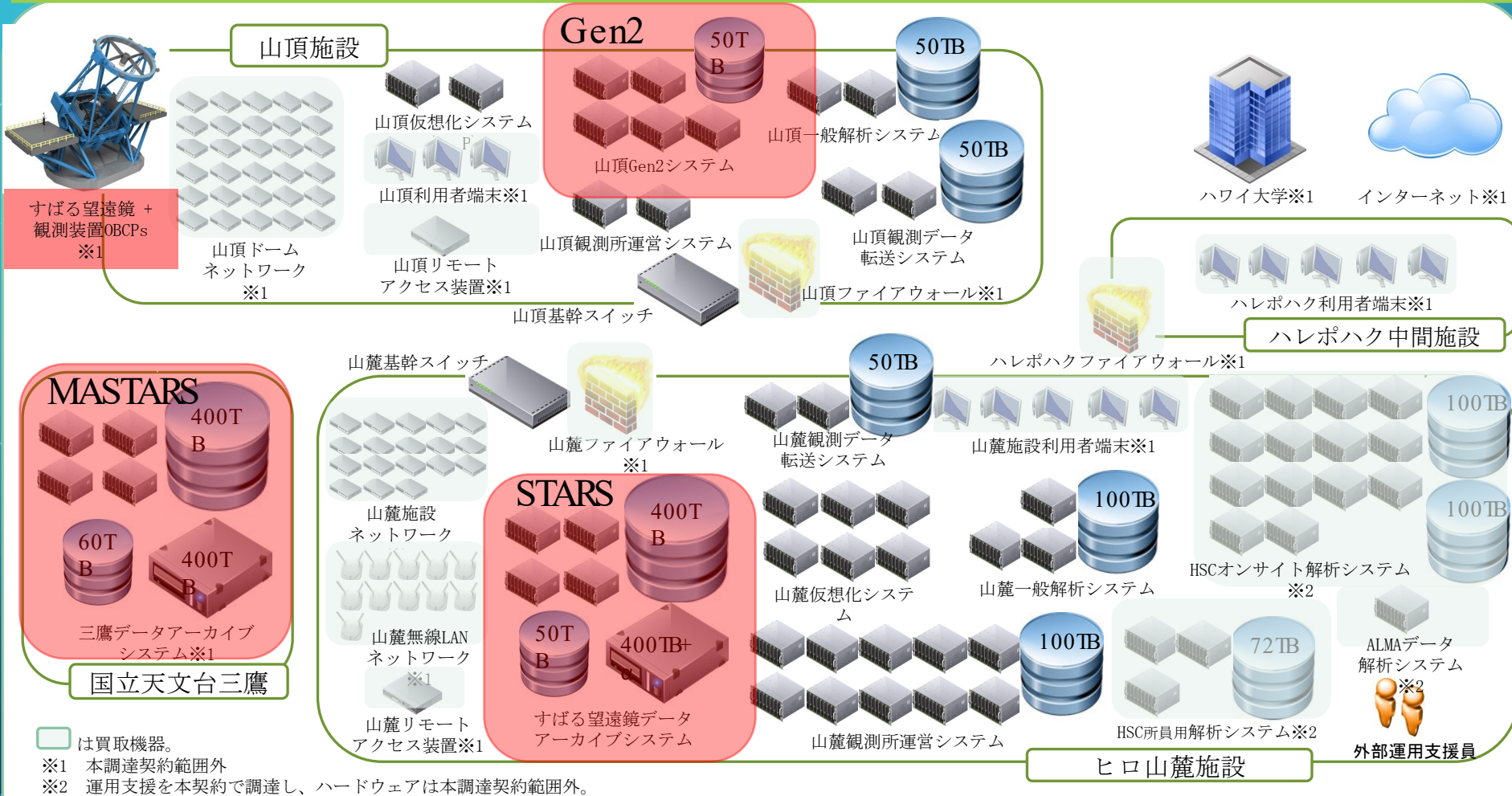


DATA ARCHIVE OF SUBARU TELESCOPE

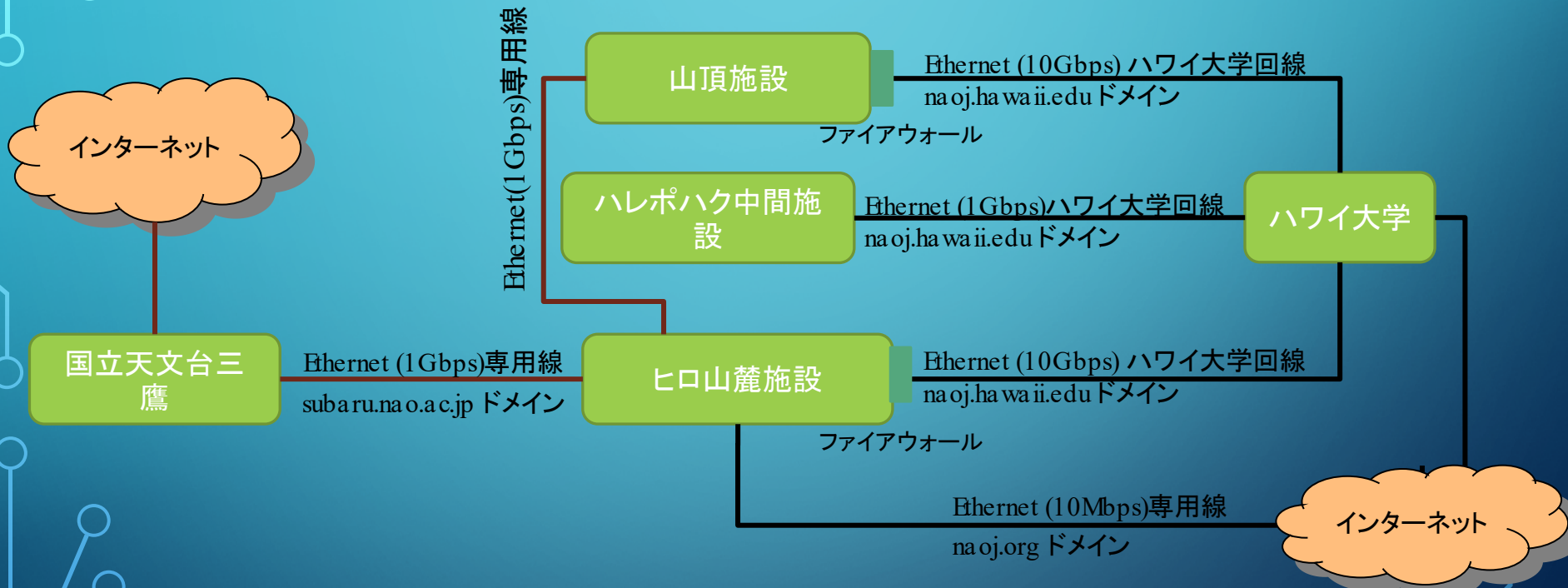
TAE-SOO PYO

SUBARU TELESCOPE

STN5システム概要



ネットワーク構成概念図



PURPOSE OF DATA ARCHIVE

- STARS and MASTARS, Subaru Telescope's data archive is designed to keep the **raw data of all observed data** available to observers.
 - 基本はfacility instrumentsを対象にしていた。PI装置についても共同利用公開にはFITS規約を従うことを前提にしている。
- SMOKA provides raw data to worldwide researchers. SMOKA (Subaru Mitaka Okayama Kiso Archive) has been developed and is operated by NAOJ Astronomical Data Center (ADC). Subaru shares the partial cost of the operation.
- Currently **only raw data** is archived at Subaru Telescope because of shortage of manpower since the beginning of operation and because reduced data archive has been put to low priority by NAOJ and the Subaru Telescope management.

OWNERSHIP OF DATA

- Observers of Subaru Telescope will have exclusive access to their data for a period of **18 months** from the time of observation, after which the data will be made open to the public in the Subaru archival database.
- Conventionally all data obtained by using Subaru Telescope are attributed to the **observer(s) and Subaru Telescope.**

STARS AND MASTARS OPERATIONS

- Only current observers and past observers have an account for STARS/ MASTARS. We are not deleting any user accounts.
- STARS/ MASTARS user accounts are shared with the HSC off-site data analysis cluster in Mitaka.
- STARS has only a simple query functions and have functions such as image preview because it is designed for observers to download data they took during the night. any STARS users to download data that is open to public is the secondary function.
- Further search functions are provided by SMOKA for the public data.

TECHNICAL PERSPECTIVE AND FUTURE PLAN

- STARS and MASTARS serve as the primary repository of observing data for archaeological purpose and for provision to observers.
- Need to increase the size of the storage as time goes by, and to increase performance of data processing as data rate increases.
- Data Quality check
 - (On-site QA/ IQA/ FQA) for HSC Queue data. FITS header should be updated after FQA.
 - SAIによるPUBLIC_FLAG=OFF/ ON
- Archiving Reduced Data: HSC SSP team public release (古澤さんの発表)
- The observatory needs to review the current use of archived data and projected number of use of reduced data by the public and to estimate the cost vs. the return before moving forward the reduced-data archiving for other instruments.

ARCHIVING PROCESSED DATA

- Aim: Maximize scientific output
 - Archived data + reduction tool
 - (basic pipeline?)
 - PFS : provide processed data (?)
 - Multiple proposals for one exposure frames → separate spectra data into individual proposal ID.
 - STARS managed frames with PID.
- * Check points: manpower & budget shortage

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