SMOKA

CURRENT STATUS AND FUTURE PLANS

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SMOKA

SUBARU-MITAKA-OKAYAMA-KISO-ARCHIVE SYSTEM

- ✓ The archival system for astronomical observation data from Japan's optical-infrared telescopes
  https://smoka.nao.ac.jp/index.jsp
- ✓ To facilitate the generation of new research findings, validation of research outcomes, and advancement of research education: primarily release raw data
- ✓ already released ↓

Subaru: S-Cam, FOCAS, HDS, OHS/CISCO, IRCS, CIAO, COMICS, CAC, MIRTOS, MOIRCS, Kyoto-3DII, HiCIAO, FMOS, HSC, CHARIS, IRD, SWIMS, MIMIZUKU, VAMPIRES

Okayama: ISLE, KOOLS, HIDES, OASIS, SNG, MuSCAT

Kiso: 1kCCD, 2kCCD, KWFC

MITSuME: MTA, MTO

Kanata: HOWPol, HONIR

Nayuta: NIC

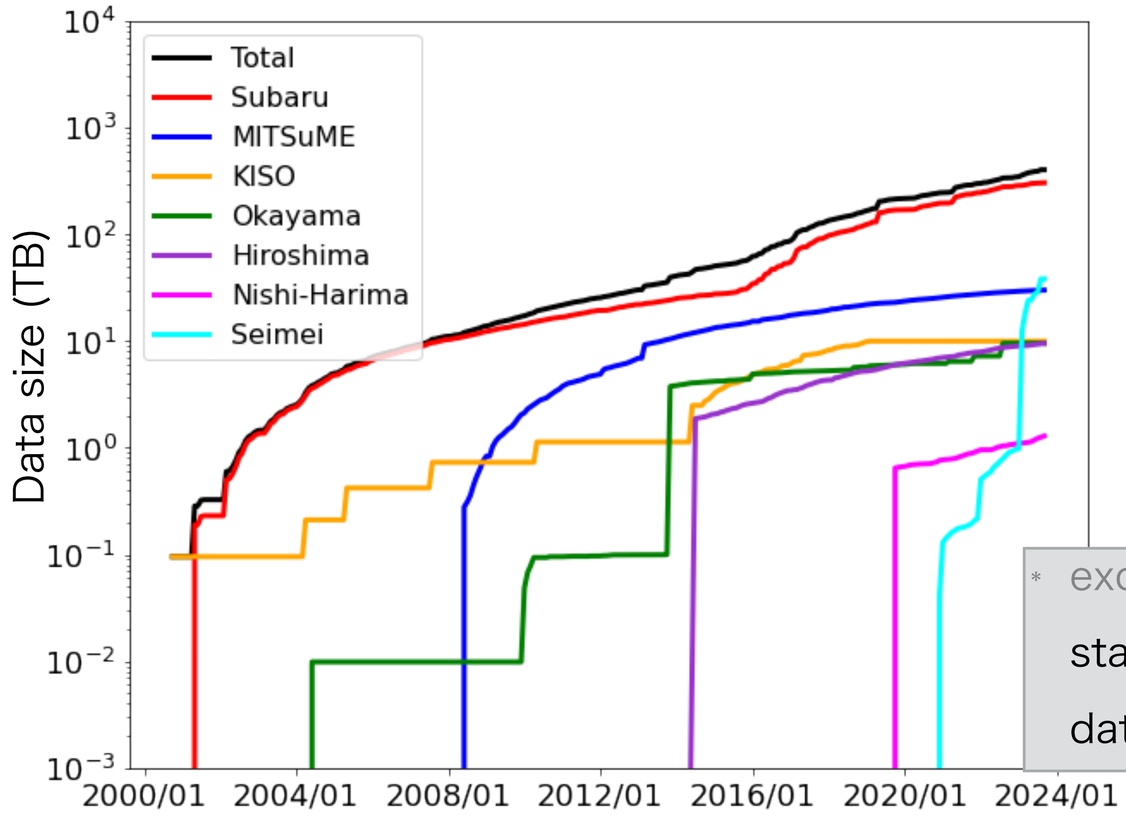
Seimei: KOOLS-IFU, TriCCS

* Using a similar system, also relased
Sky monitor imaging data,
Tomo-e Gozen stacked data,
Digitalized data of photographic plate

THE AMOUNT OF PUBLIC DATA

THE TREND OF SMOKA'S CUMULATIVE RELEASED DATA OVER TIME.

✓38.72 million frames、453TB (at 2024/1/1)



* excluding the Tomo-e Gozen stacked data, digitalized photographic data, and sky monitor data

SMOKA FEATURES

DATA SEARCH AND DATA REQUEST

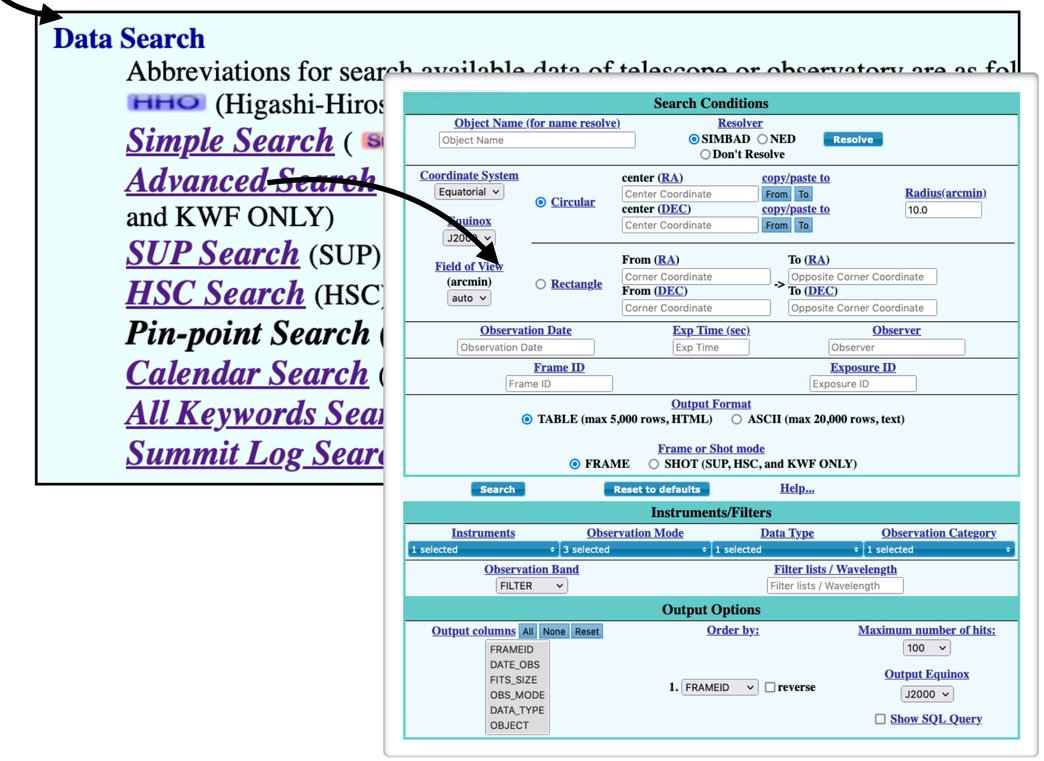
https://smoka.nao.ac.jp/index.jsp

✓ **Data Search**

Simple Search, Advanced Search,
Suprime-Cam Search, HSC Search,
Pinpoint Search, Calendar Search,
All Keywords Search

✓ **Data Request**

Request from the search result,
Mail-based request



THE USAGE STATUS OF SMOKA

REGISTRATION AND DATA REQUEST

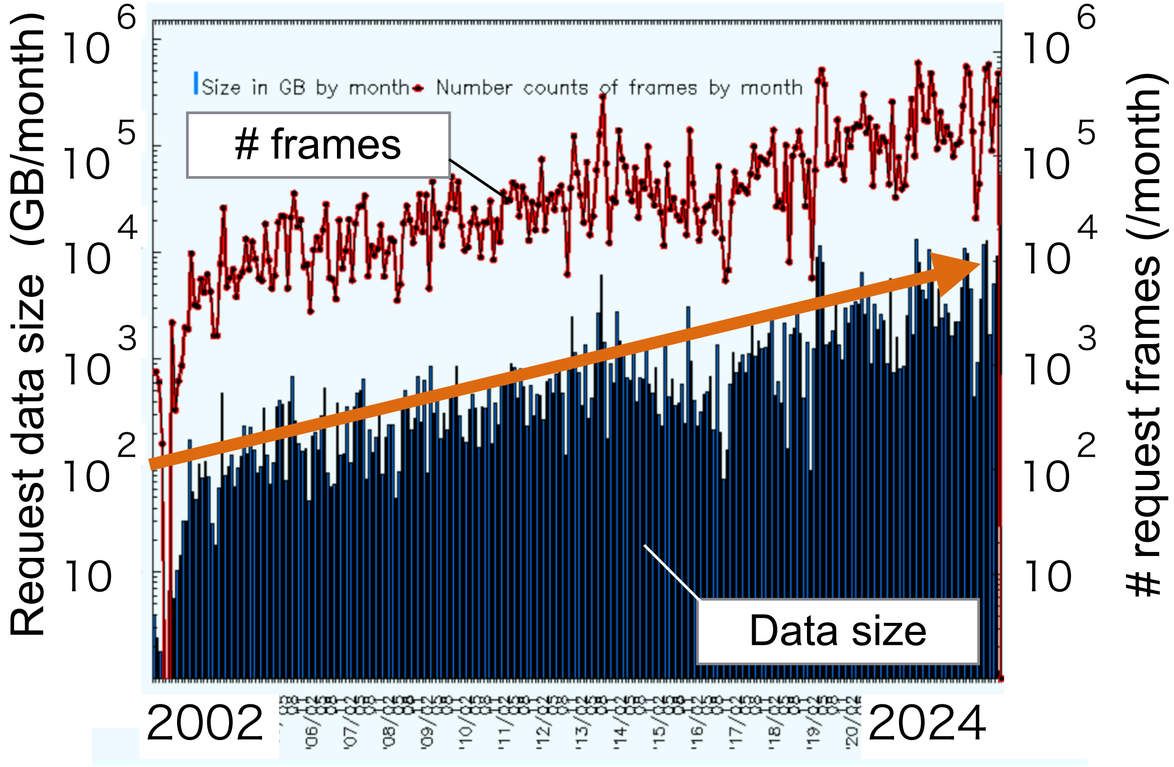
✓ **# registered users**

~250/year ※reset every accodemic year

✓ **Recent data request volume**

frames ~ 0.1-1 million/month

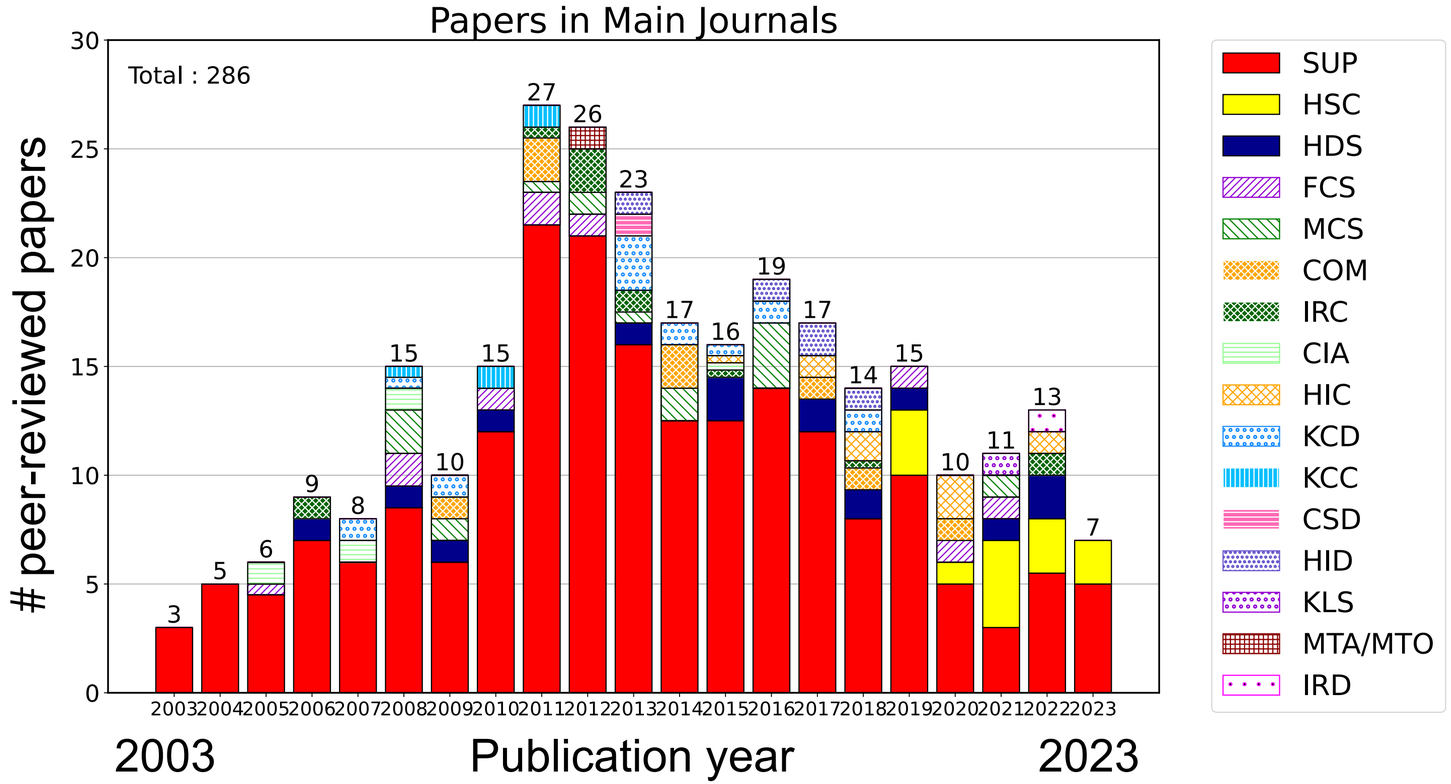
data size ~ 1-10 TB/month



PUBLICATIONS

PUBLISHED PAPERS USING DATA OBTAINED VIA SMOKA (EXCLUDING DATA AVAILABILITY)

- ✓ Total # 286 (at 2024/1/1) ： ~14/year
- ✓ ApJ, ApJL, ApJS, A&A, PASJ, PASP, MNRAS, ICARUS, Nature, Science



RECENT STATUS

RECENT DEVELOPMENTS IN SMOKA'S DATA RELEASE

✓ **Data release of new instruments**

- Seimei/TriCCS (2023-02-07)

✓ **Preparation for data release**

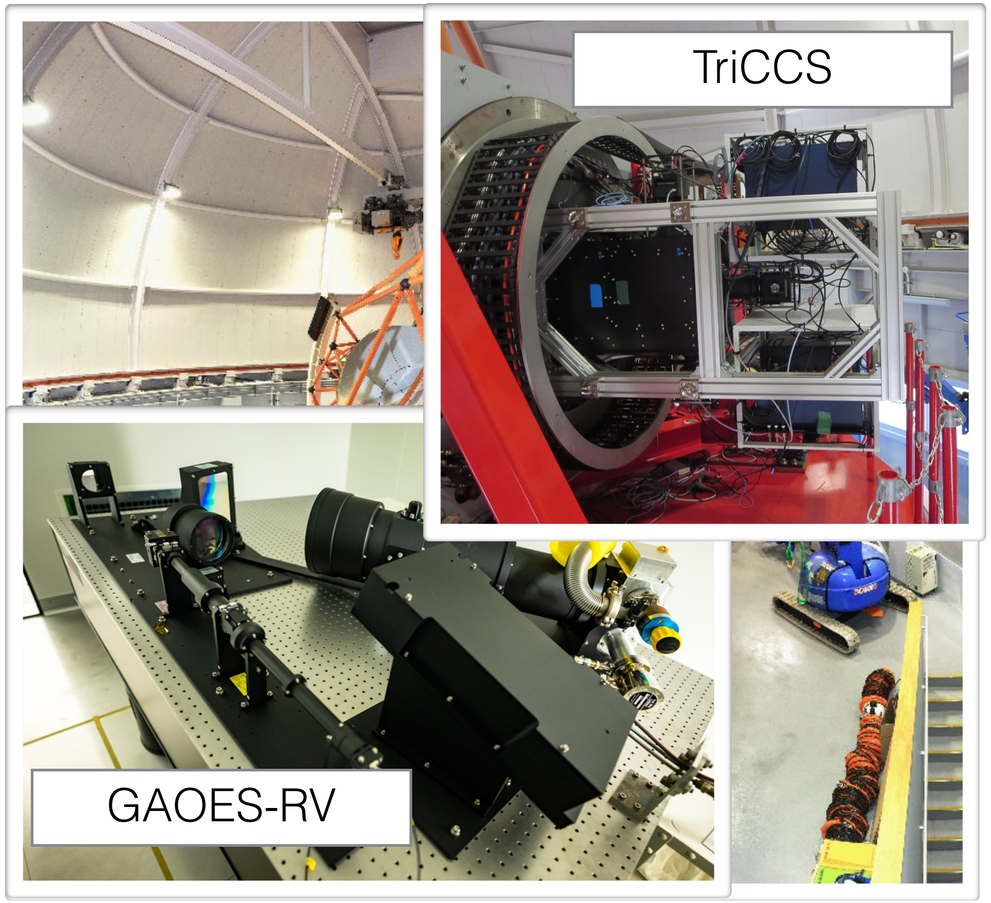
- Seimei/GAOES-RV

  discussion of header

  2023/7~Start of data transfer

- TAO

  NICE header under discussion



FUTURE DIRECTIONS

FUTURE PLANS FOR THE RELEASE OF DATA FROM NEW INSTRUMENTS

- ✓ **Subaru Telescope**
  - Fast PDI, MEC, PFS
- ✓ **Seimei telescope**
  - GAOES-RV, NIRPol
- ✓ **Kiso Schmidt**
  - Tomo-e Gozen raw data

  (First 100 shots of all-sky survey for each observation day + flat + dark)
- ✓ **TAO**
  - NICE, MIMIZUKU, SWIMS, …

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SUMMARY

CURRENT STATUS AND FUTURE PLANS

SMOKA
Subaru-Mitaka-Okayama-
Kiso-Archive system

- ✓ An archive system for astronomical observation data from Japanese optical and infrared telescopes
- ✓ Mainly releasing and providing raw data for the purpose of creating new research results, verifying research results, and promoting research and educational activities.
- ✓ Release of approximately 38 million frames of data with a data size of approximately 400 TB
- ✓ Various data search and request functions
- ✓ More than 280 peer-reviewed papers using SMOKA (average of about 14 per year)
- ✓ Upcoming plans to release data from Fast PDI, MEC, and PFS in the future.