

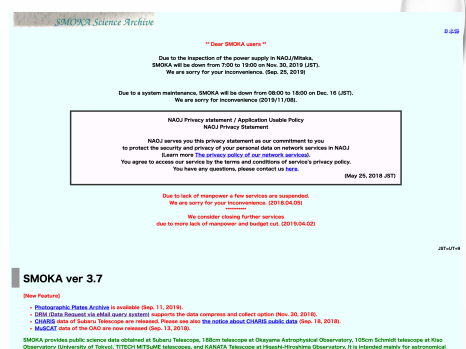
Current Status of SMOKA

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<https://smoka.nao.ac.jp/>

SMOKA (Subaru-Mitaka-Okayama-Kiso-Archive system)

is the science archive system providing access to public data of the Subaru Telescope, the 188cm telescope at the Okayama Astrophysical Observatory, the 105cm Schmidt telescope at the Kiso Observatory of the University of Tokyo, MITSuME telescopes of Tokyo Institute of Technology, the 150cm KANATA telescope of Hiroshima University, NAYUTA telescope at Nishi-Harima Observatory, and Seimei telescope of Kyoto University. Everyone can get the data for the purposes of astronomical research or education. SMOKA is developed and operated by the Astronomy Data Center of National Astronomical Observatory of Japan. For Subaru Telescope, IRD, MIMIZUKU and SWIMS data have been newly released since the last Users Meeting. The HSC search and request service has also been enhanced.



Current Status of SMOKA (Ver. 3.7)

34 Instruments

- Subaru : Suprime-Cam (SUP), FOCAS, HDS, OHS/CISCO, IRCS, CIAO, COMICS, CAC, MIRTOS, MOIRCS, Kyoto-3DII, HiCIAO, FMOS, HSC, CHARIS, **IRD, SWIMS, MIMIZUKU**
- Okayama : ISLE, KOOLS, HIDES, OASIS, SNG, MuSCAT
- Kiso : 1kCCD, 2kCCD, KWFC, **KISO Schmidt Plates digitized data (2019 Sep. 11)**
- MITSuME : MTA, MTO
- Higashi-Hiroshima : HOWPol, HONIR
- Nishi-Harima: **NIC**
- Seimei : **KOOLS-IFU**

Statistics

Registered Users

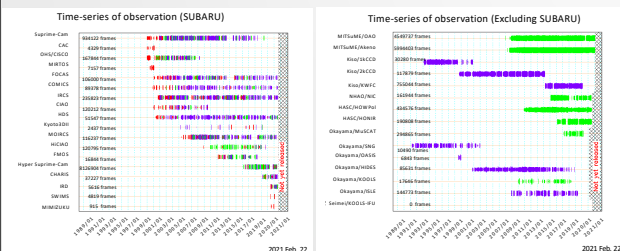
(necessary for data request):
246 (current fiscal year)

Data Request (/month):

100,000-100,000 frames
(10-100 TB)

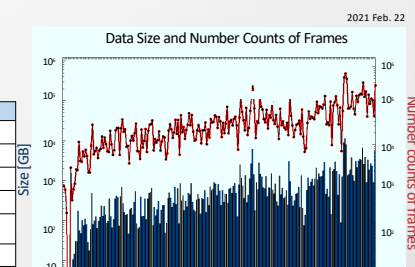
Archived Data

SMOKA mainly provides **raw data**. **Quick look images (QLI)** and **Weather information** (temperature, humidity, images taken by the sky monitor, etc.) are offered as well.



	Frames	(TB)	Occupation	Since
Subaru	12,614,979	202.3	18 months	1999~
Okayama	983,238	6.2	2 years	1991~
Kiso	1,554,928	10.0	1 year	1993~
MITSuME	12,885,677	25.0	1 year	2007~
Higashi-Hiroshima	789,689	7.0	18 months	2010~
Nishi-Harima	202,900	0.8	18 months	2019~
Total	29,031,411	252.2		

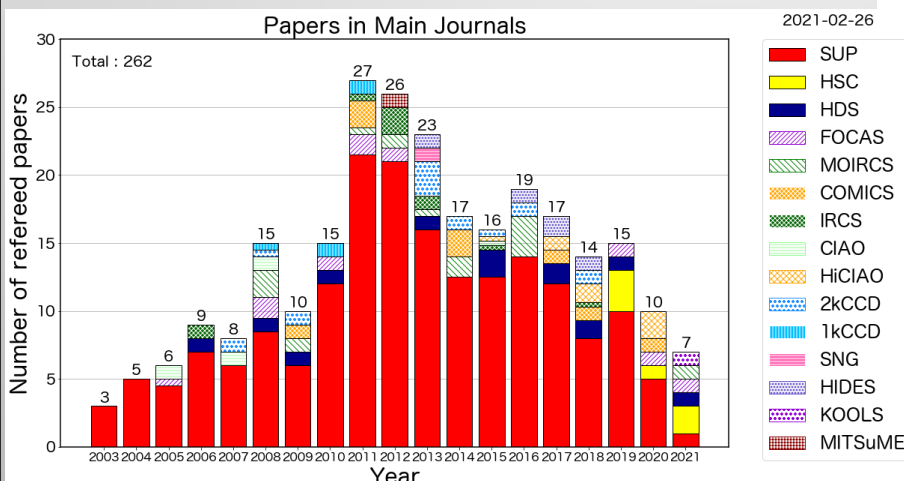
Increased size over the past year: 50 TB



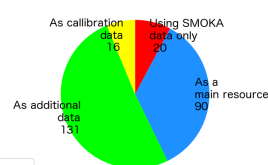
Products of SMOKA

Refereed Papers using SMOKA data

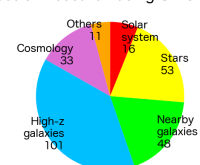
2003-2021: **262** papers (A&A, ApJ, AJ, PASJ, MNRAS, PASP, etc.)



Use Cases of SMOKA Data



Subject of Research using SMOKA Data



Future Works

- **VAMPIRES** (2021-08-01)
- **REACH** (Rigorous Exoplanetary Atmosphere Characterization with High dispersion coronagraphy) (2022-02-01)
- **Fast PDI** (Fast NIR Polarization Differential Imaging)
- **MEC** (MKID Exoplanet Camera)
- **PFS** (Prime Focus Spectrograph)
- Okayama/HIDES-F ?
- Kiso/Tomo-e Gozen ?