

Current Status of SMOKA

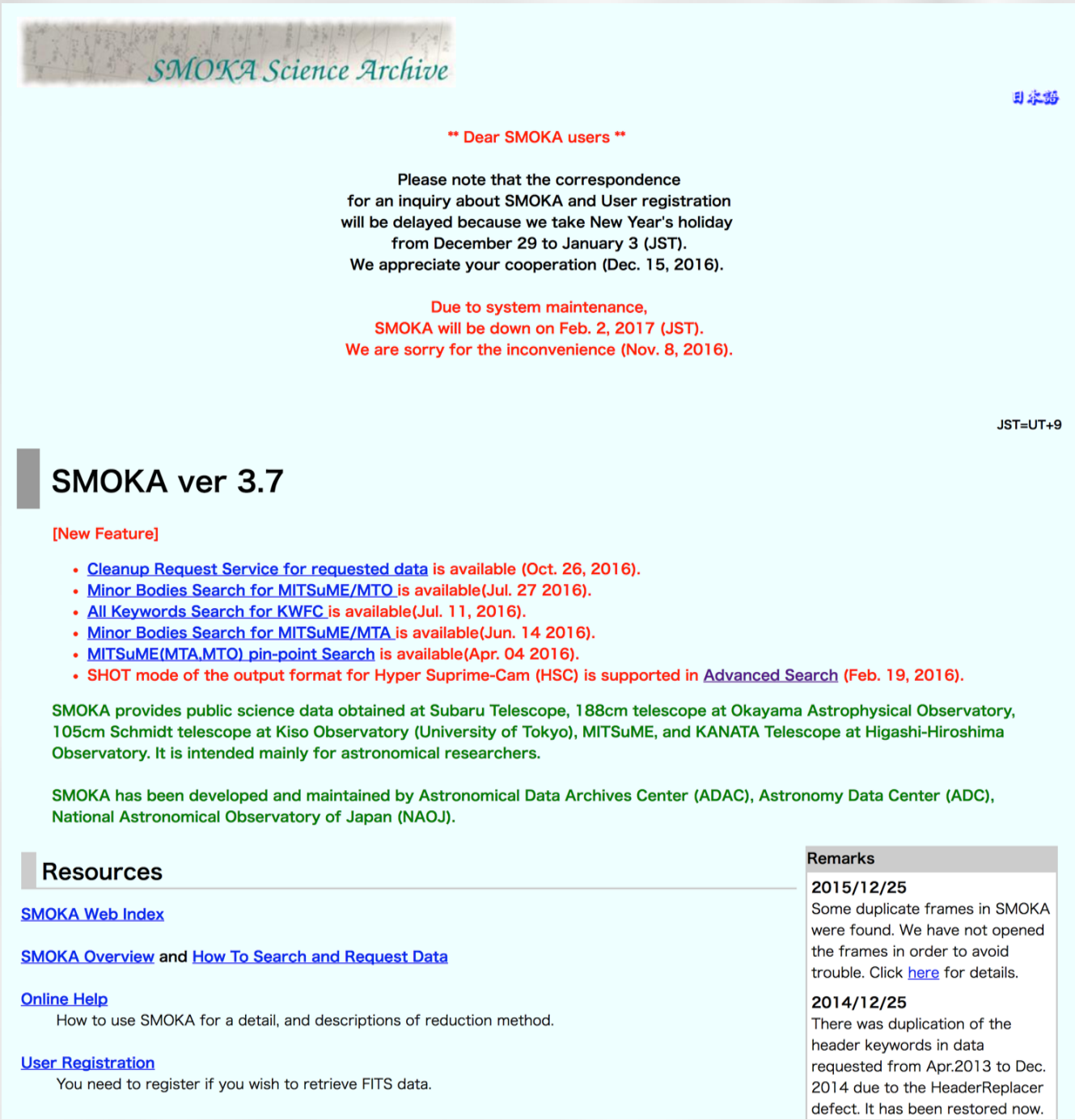
2017 Jan. 10

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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, and the 150cm KANATA telescope of Hiroshima 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.

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



SMOKA Staff Members

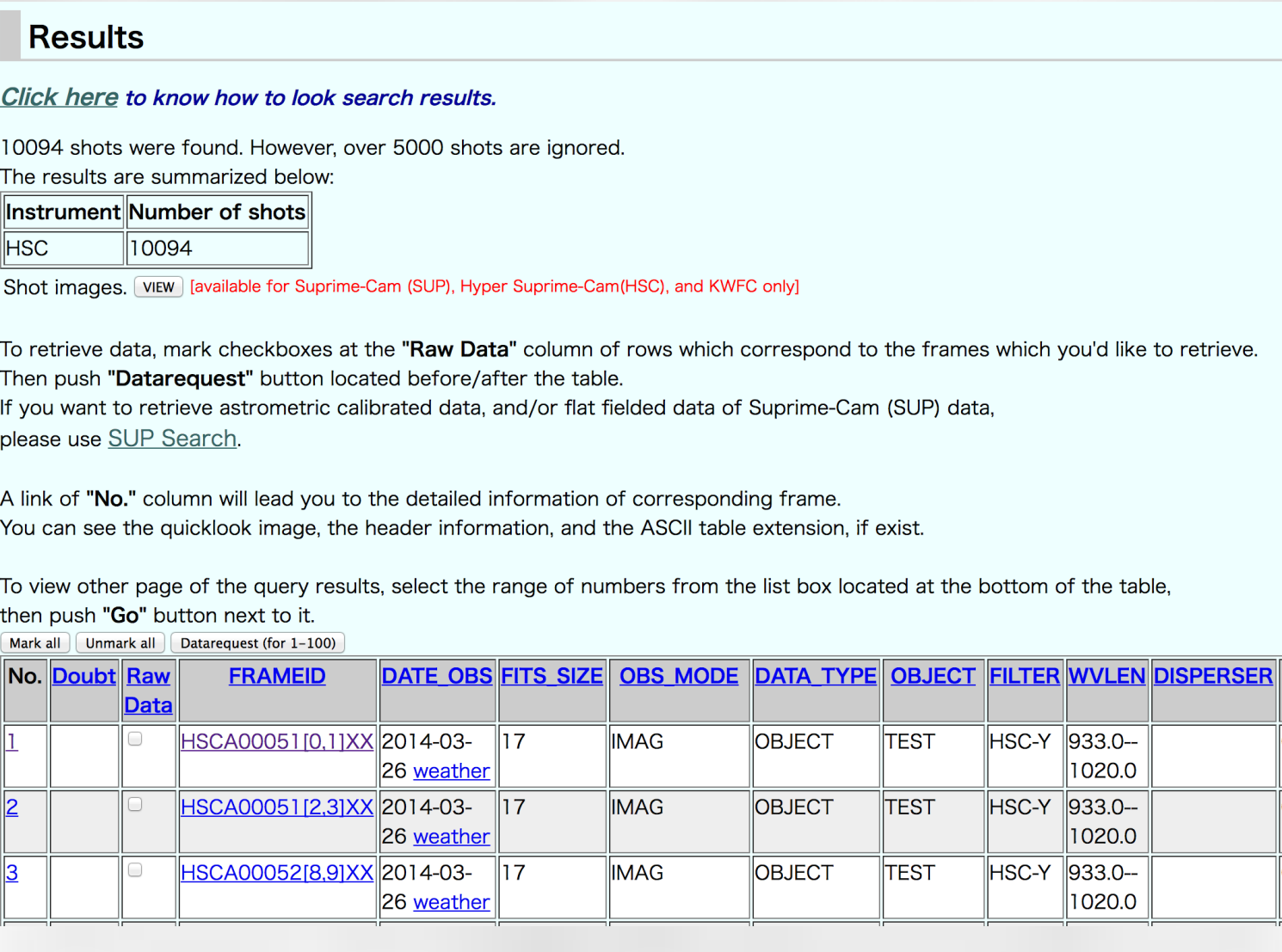
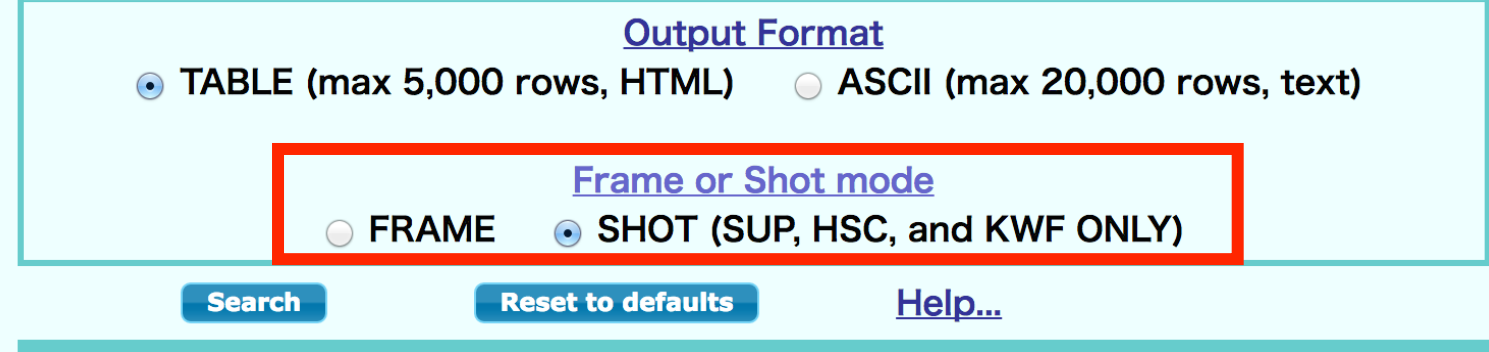
Current Status of SMOKA (Ver. 3.7)

Development Status (in the past year)

- (2016 Jan. 08) MITSuME data include our astrometric calibration
- (2016 Feb 19) SHOT mode of the output format for Hyper Suprime-Cam (HSC) is supported
- (2016 Apr. 04) MITSuME pin-point Search is available
- (2016 Jun. 14) Minor Bodies Search is available (MITSuME/Akeno)
- (2016 Jul. 11) All Keywords Search is available (Kiso/KWFC)
- (2016 Jul. 27) Minor Bodies Search is available (MITSuME/Okayama)
- (2016 Nov. 26) Requested Data Cleanup Service is available

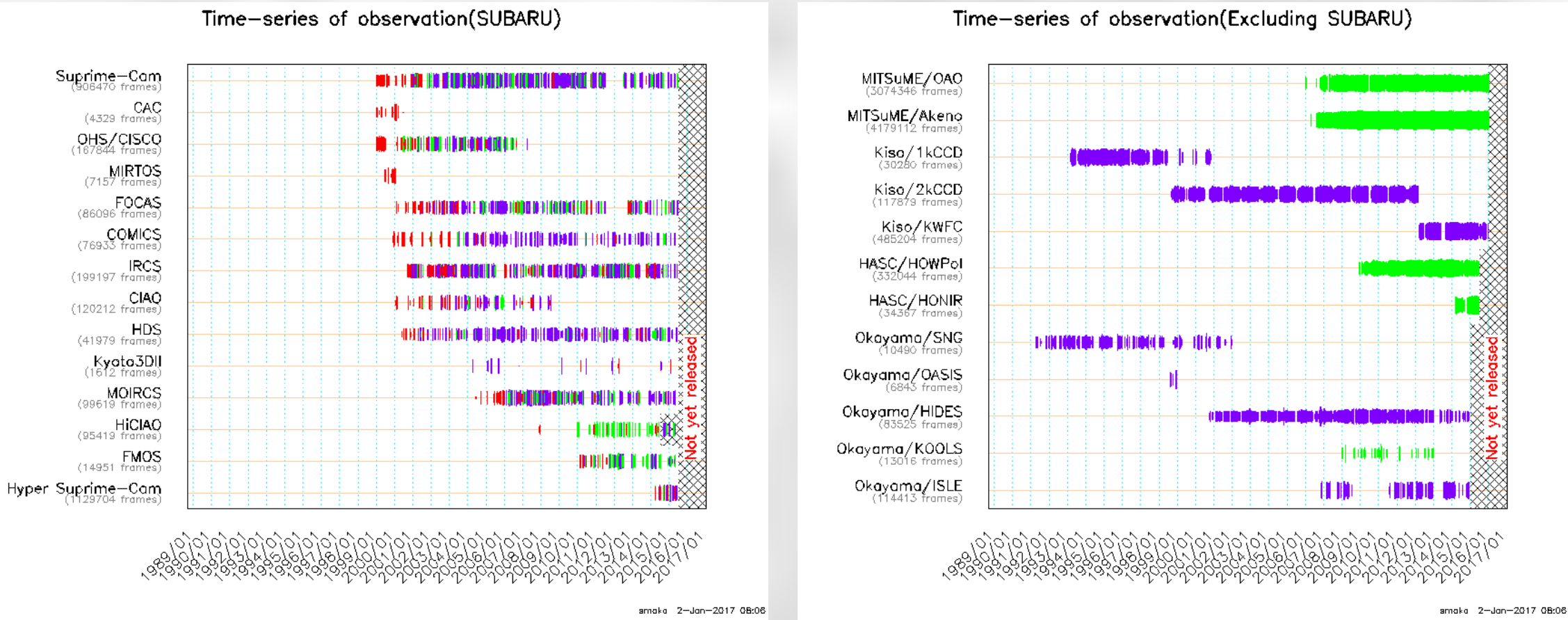
SHOT mode for Hyper Suprime-Cam (HSC) data

The "SHOT mode" is available in "Advanced Search" of SMOKA. You can select "FRAME" or "SHOT" in the form of search system (see left panel). A shot means a group of the multiple frames which had been observed by a same exposure. The result is displayed in a shot-by-shot basis by row (see right panel). Therefore, when you use SHOT mode, you can easily get all frames in a same exposure.



Archived Data

At present, 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.



Status

	Frames	(TB)	Occupation	Since
Subaru	4,257,912	61.5	18 months	1999~
Okayama	545,497	5.2	2 years	1991~
Kiso	1,016,192	7.3	1 year	1993~
MITSuME	8,608,312	17.7	1 year	2007~
Higashi-Hiroshima	425,379	3.5	18 months	2010~
Total	14,853,292	95.2		

2017 Jan. 01

Total amount of raw data: 95TB
Increased size over the past year: 25TB

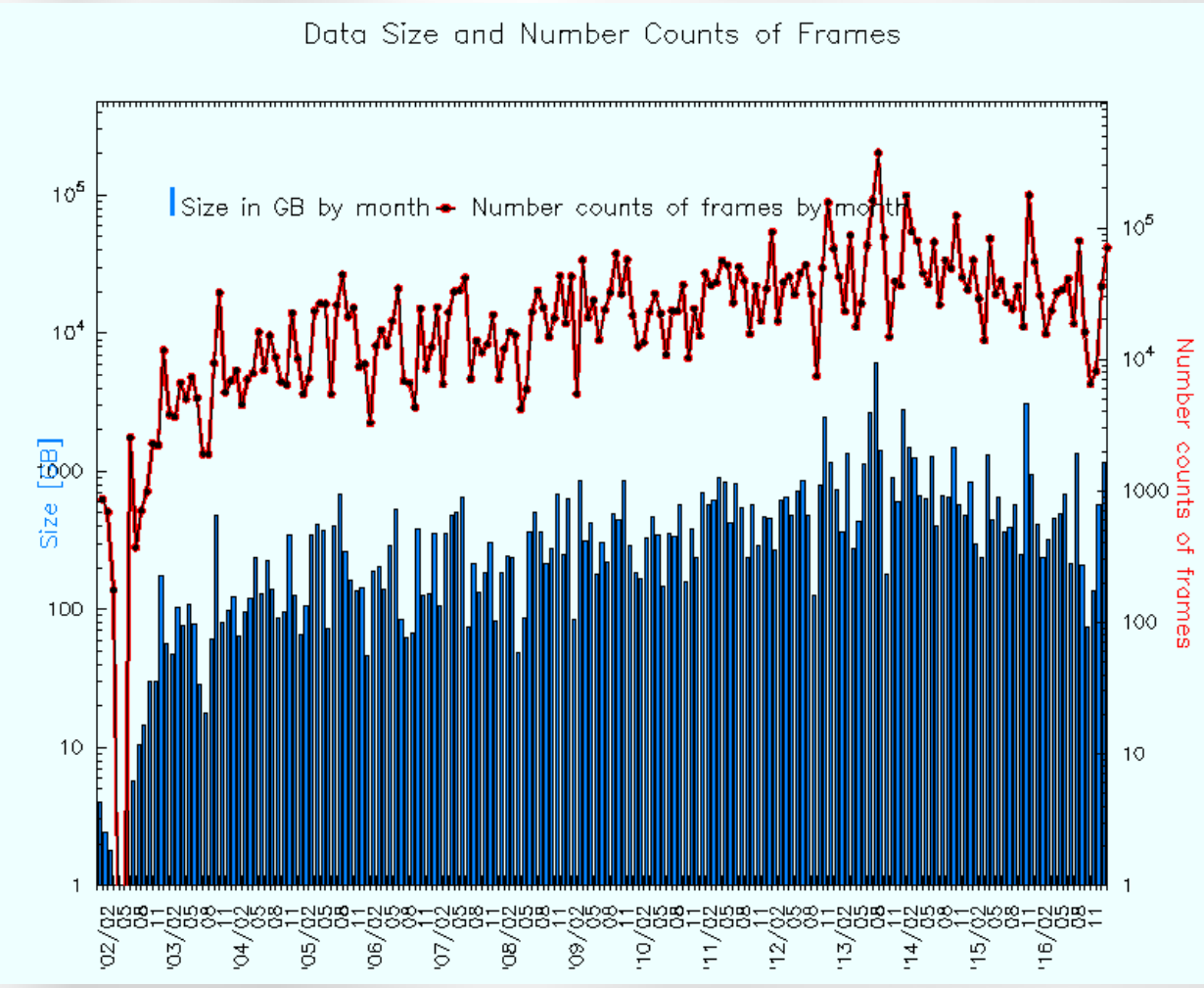
Statistics

Users (current fiscal year):

220 (2016.04.01 - 2017.01.04)

Data Request (/month):

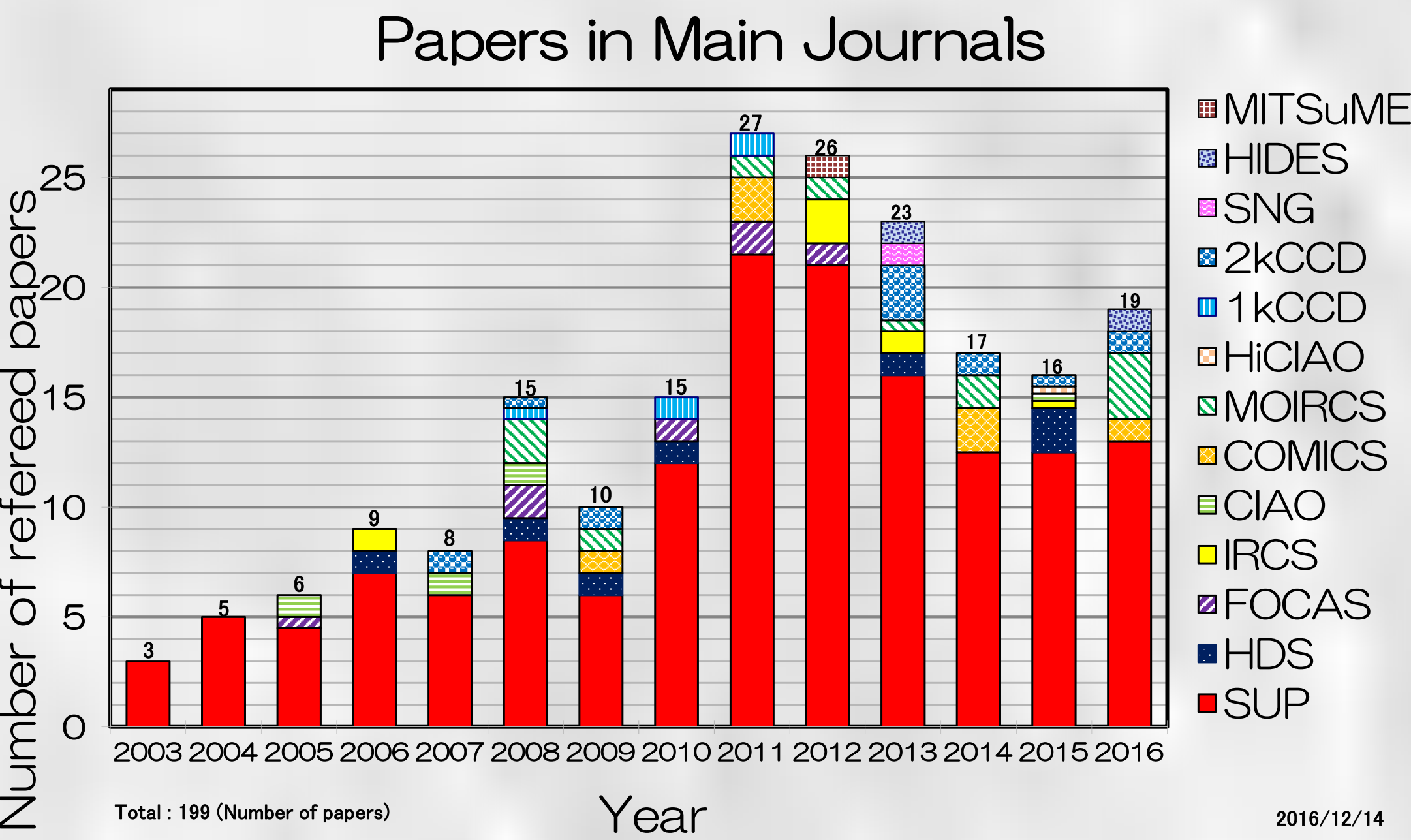
10,000-100,000 frames (100-1,000 GB)



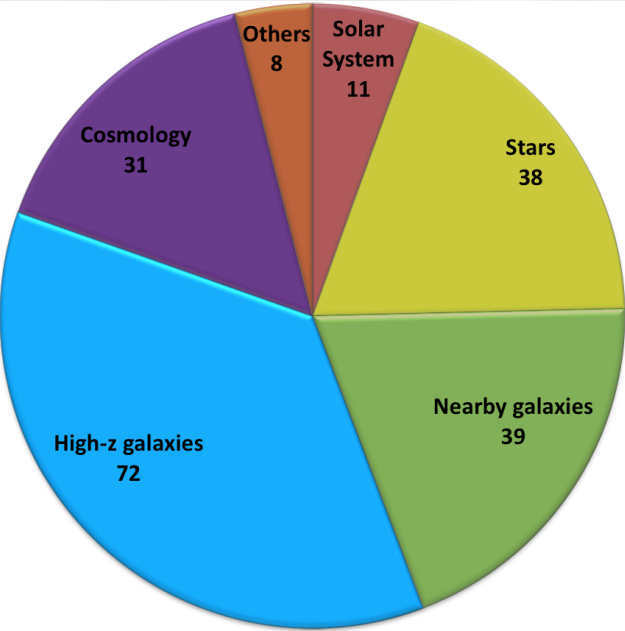
Products of SMOKA

Refereed Papers using SMOKA data

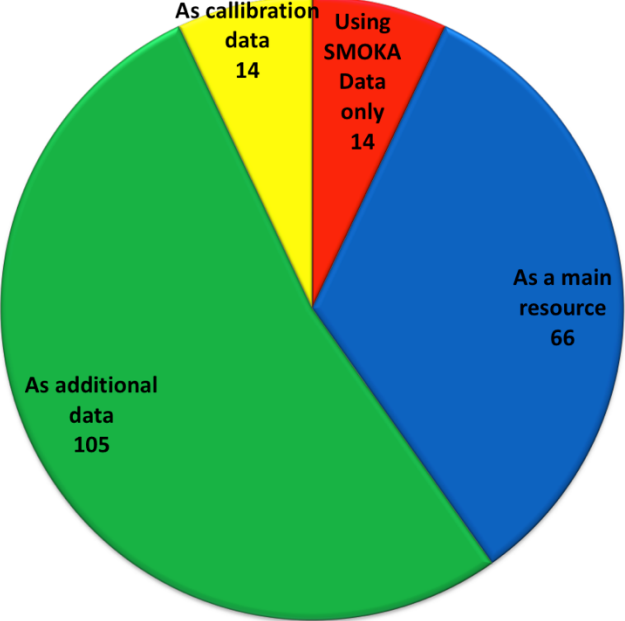
2003-2016: **199** papers (A&A, ApJ, AJ, PASJ, MNRAS, PASP, etc.)



Subject of Research



Use Cases of SMOKA Data



- Solar System : 11
- Stars : 38
- Nearby galaxies : 39
- High-z galaxies : 72
- Cosmology : 31
- Others : 8

- Using SMOKA data
- Only : 14
- Main resource : 66
- Additional data : 105
- Calibration data : 14

Future Works

Shortly (a half to one year)

- Provide data applied astrometric calibration: Subaru/Suprime-Cam, Kiso/KWFC...
- Provide images applied astrometric calibration: SkyMonitor Imaging Data Service System (Okayama, Akeno, Higashi-Hiroshima)
- Provide known Supernova Search System

Future Works

- Provide data of the new observational instruments: Kiso/Tomo-e Gozen
- Query using indices of quality assessment