

Current Status of SMOKA



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@Subaru Users Meeting

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SMOKA (Subaru-Mitaka-Okayama-Kiso-Archive)
is science archive system providing public data

SMOKA is developed and operated by ADC / NAOJ.

What is SMOKA ?

- **SMOKA** (Subaru-Mitaka-Okayama-Kiso-Archive) is science archive system providing public data
 - 8.2m Subaru Telescope (Hawaii)
 - 188 cm telescope (OAO)
 - 105 cm Schmidt telescope (Kiso Obs.)
 - 50 cm telescope (Akeno Obs. & OAO)
- Observed data after proprietary period become open.
- SMOKA provides several ways of data search.
- Data request and downloading with FTP, DDS4, LTO are available after registration.

	frames	occupation	
Subaru	1220217	18 months	1999~
Okayama	114483	2 years	1991~
Kiso	144697	1 year	1993~
MITSuME	376836	1 year	2007~

Stored frames in SMOKA (Jan 2009)

SMOKA Science Archive

SMOKA ver 3.2

ver 3.2 : The server operating SMOKA is replaced. Replacement has mostly been completed though there still remains imperfect parts. (Jun.17, 2008)

SMOKA provides public science data obtained at Subaru Telescope, 188cm telescope at Okayama Astrophysical Observatory, and 105cm Schmidt telescope at Kiso Observatory (University of Tokyo). It is intended mainly for astronomical researchers.

SMOKA has been developed and maintained by Astronomical Data Archives Center (ADAC), Astronomy Data Center (ADC), National Astronomical Observatory of Japan (NAOJ).

Resources

- [SMOKA Web Index](#)
- [SMOKA Overview](#) and [How To Search and Request Data](#)
- [Online Help](#)
How to use SMOKA for a detail, and descriptions of reduction method.
- [User Registration](#)
You need to register if you wish to retrieve FITS data.

Data Search

- [Simple Search](#) : search data from a list of object names
- [Advanced Search](#) : search data from various search constraints
- [SUP Search](#) : search Supreme-Cam (SUP) Data (raw data, astrometric calibrated data and reduced data)

Remarks

2008/06/02
We found total SUP 299 frames being unexpectedly replaced. Of which, 162 frames are changed in data padding, note however that original data paddings did not follow the FITS convention. For the rest of 137 frames, values of data in 1 or 2 pixels are changed. For both cases, FITS header is kept unchanged. Now we have already fixed them. We recommend that you should retrieve data if

SMOKA Top Page
<http://smoka.nao.ac.jp/>

Development Status of SMOKA

Current version is **Ver. 3.2**

- **Computers Replacement**

Processing capacity considerably improved

- **Data Request System via e-mail (DRM)**

Available from Sep.29 2008

coming soon ...

- **Providing Data of New Instrument**

HowPol (KANATA telescope, Higashi-Hiroshima)

- **Replacement of data transfer system**

Data Request System via e-mail

http://smoka.nao.ac.jp/help/help_mail_req.jsp

Get a list of frames

- Search results with plain text format
Select "ASCII" option at the output format in search page.

The screenshot shows a search interface with fields for 'Frame ID' and 'Exposure ID'. Below these is a radio button for 'TABLE (max 1,000 rows, HTML)' and a selected radio button for 'ASCII (max 20,000 rows, text)'. There are also 'Search', 'Reset to defaults', and 'Help...' buttons. Below the search area are filter buttons for 'Imagers', 'Spectrographs', and 'Data Type', each with 'All' and 'None' options.

- All Frame List

We prepare the lists of all observed data for each instrument in a plain text format.

Frames registered in the SMOKA database are plotted on the Celestial Time-series plots are also given. 1205529 object frames are archived (2009/01/11).

List of All Frames
List of all frames archived in SMOKA.

[Publishing Results from SMOKA Data](#)
A notation of acknowledgment and a list of published papers using SMOKA.

List of All Frames

[Click here to know how to use.](#)

Subaru

Suprime-Cam	<input type="text" value="select year"/>	*
HDS	<input type="text" value="select year"/>	
FOCAS	<input type="text" value="select year"/>	
OHS/CISCO	<input type="text" value="select year"/>	
IRAC	<input type="text" value="select year"/>	
CIAO	<input type="text" value="select year"/>	
COMICS	<input type="text" value="select year"/>	
CAC	<input type="text" value="select year"/>	

Edit the frame list

Remove the unnecessary lines of frame from the list using vi, emacs, etc in a specified format.

#FRAME_ID	DATE_OBS	FILTER01	FILTER02	WAVELEN	WAV_MIN	WAV_MAX	SLT_WID	SLT_LEN	RA20
HIDB30601	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	20:5
HIDB30602	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	20:5
HIDB30603	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	20:5
HIDB30604	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	20:5
HIDB30605	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	20:5
HIDB30606	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	20:5
HIDB30607	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	22:2
HIDB30608	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	22:4
HIDB30609	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	23:3
HIDB30610	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	00:3
HIDB30611	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	01:0
HIDB30612	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	02:3
HIDB30613	2004-01-01	QUARTZ	----	570.48	515.48	625.48	199.485	2.100	02:3

Data Request System via e-mail

http://smoka.nao.ac.jp/help/help_mail_req.jsp



Send an e-mail of a predetermined format

- The number of request frame is limited to 10,000 per one mail.
 - * The maximum number of frames via current web interface is 1000.

```
# Your-ID means your SMOKA ID. Please replace it.
ID                Your-ID

#-----
# Your-purpose means your purpose to get data.
# Please select from below list.
#PURPOSE          Research(solar system)
#PURPOSE          Research(stars)
#PURPOSE          Research(galaxies)
#PURPOSE          Research(star formation)
#PURPOSE          Research(cosmology)
#PURPOSE          Research(software development)
#PURPOSE          Research(instrument development)
#PURPOSE          Research(other)
#PURPOSE          Education(teaching)
#PURPOSE          Education(extracurricular)
#PURPOSE          Education(museum/planetarium)
#PURPOSE          Education(other)
PURPOSE          Your-purpose

#-----
# Request frame list: This list needs FRAME_ID and DATE_OBS.
#  FRAME_ID      DATE_OBS
HDSA00000017 2000-05-25 ND1      KV389      0.00 1000.00 0.00 ----abbr.
HDSA00000018 2000-05-25 ND1      KV389      0.00 1000.00 0.00 ----abbr.
SUPA00001673 1999-01-22 W-C-RC      09:43:02.793 +46:58:56.77 12:03:42.905 ----abbr.
SUPA0026660X 2004-01-14 W-C-RC      20:13:58.019 +19:49:07.27 23:06:28.953 ----abbr.
```



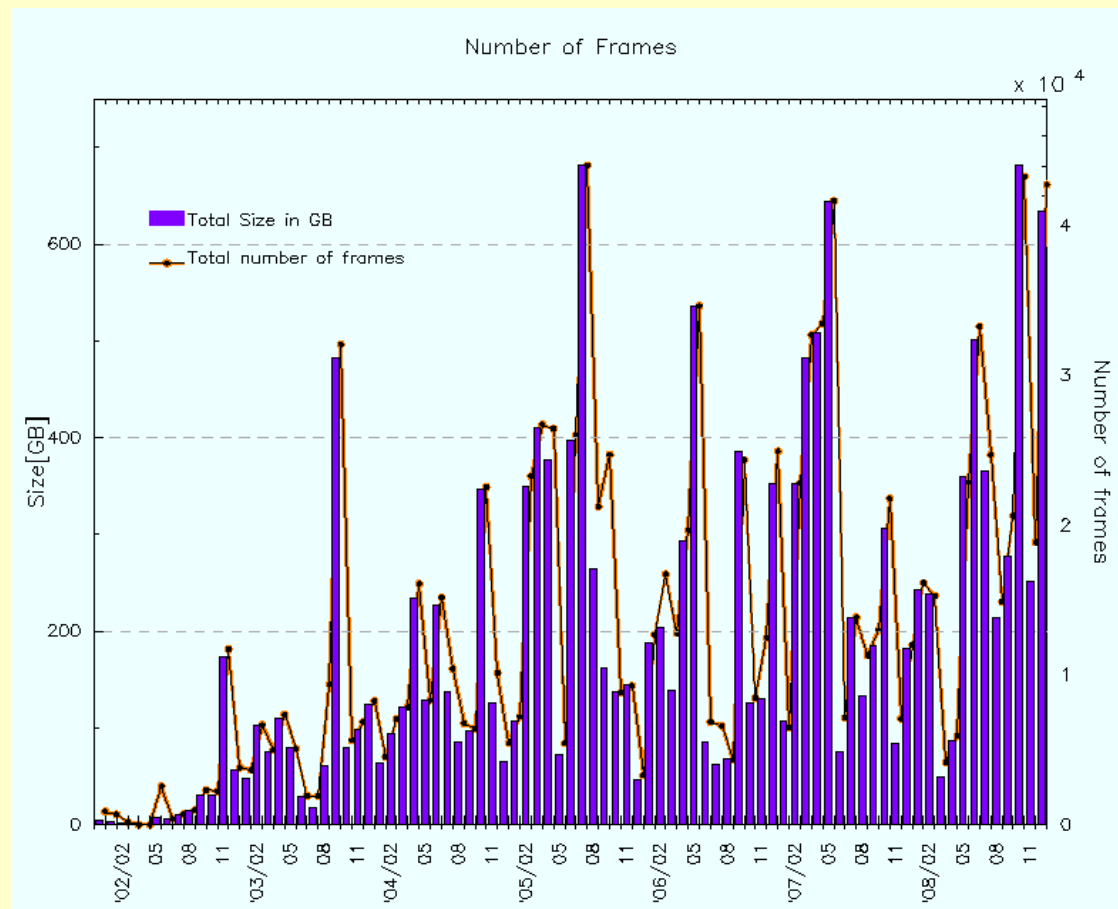
Wait and Get Data

- After you receive the completion notice, download data via FTP.

Usage of SMOKA (Users & Data Request)

<http://smoka.nao.ac.jp/http://smoka.nao.ac.jp/about/drstat.jsp>

- Number of Users
 - 242 (2009/01/15)
cf) 2008/01/15 : 211
2008/03/31 : 245
- Data Request per Month
 - 5000~40000 frames
 - 100~600 GB
- Subaru/Suprime-Cam Data is most requested



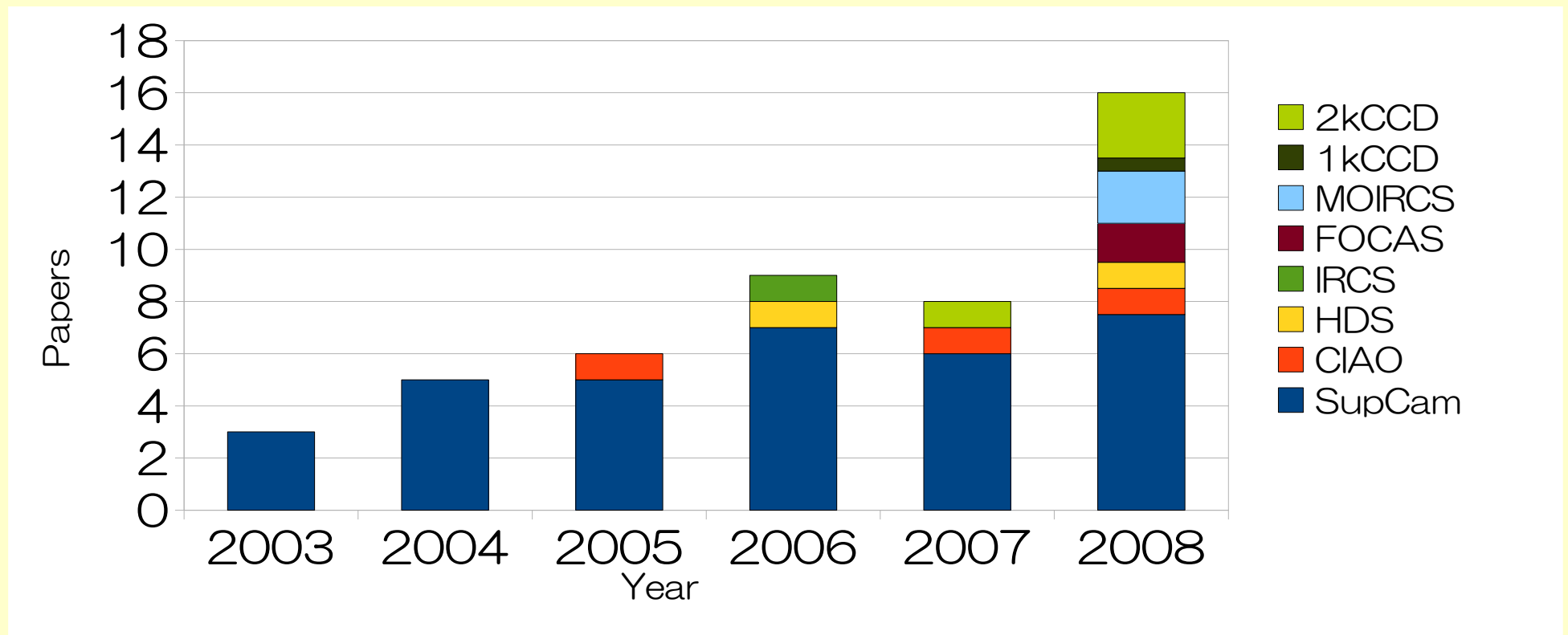
Products of SMOKA

<http://smoka.nao.ac.jp/about/publish.jsp>

- Papers using SMOKA

- 2003-2009 : 48 papers

- (A&A, ApJ, AJ, PASJ, MNRAS, PASP, etc.)



- Thesis : 1 (Yoshino 2005)

- Astronomical Teaching Materials

- by PAOFITS-WG (<http://paofits.dc.nao.ac.jp>)