

# Current Status of SMOKA

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# Introduction

## What's **SMOKA**?

**Subaru-Mitaka-Okayama-Kiso-Archive (SMOKA)**  
is the science archive system providing **public** data  
observed with Japanese ground-based telescopes;

- ◆ **Subaru** Telescope (8.2m)
- ◆ **Okayama** 188-cm telescope
- ◆ **Kiso** 105-cm Schmidt telescope

SMOKA has been developed and operated  
by **Astronomy Data Center (ADC)**,  
**National Astronomical Observatory of Japan (NAOJ)**  
at **Mitaka**, Tokyo, Japan.

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

# New Features of SMOKA

SMOKA Ver. 3.0

## **New search interfaces (May 2006~)**

### ★ SUP Search

Searching Suprime-Cam data

### ★ All Keywords Search

Searching frames with all FITS header keywords

### ★ Full-Text Search

Searching frames from any words in FITS headers

## **Release data of new instruments (July 2006~)**

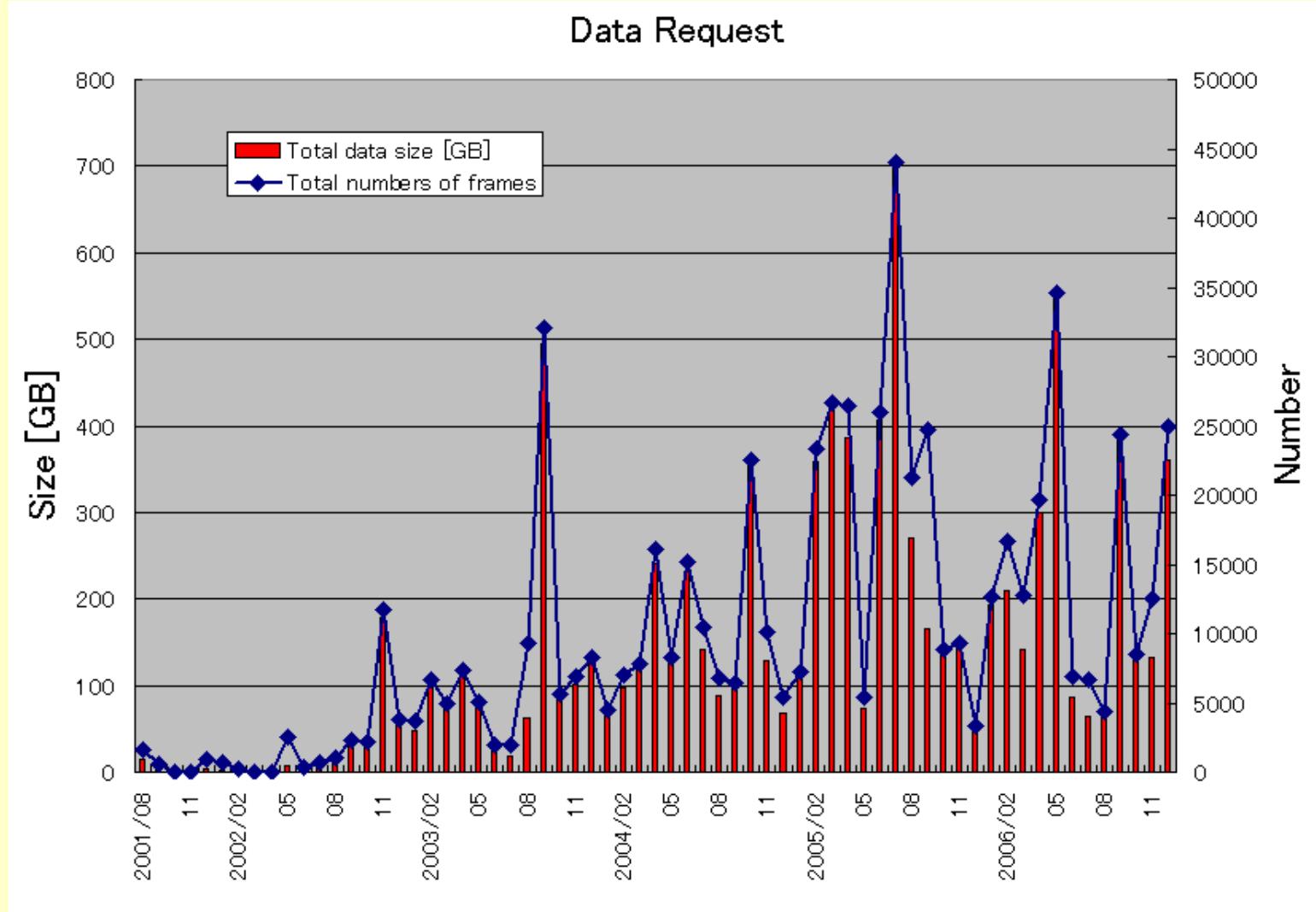
### ★ MOIRCS

Multi-Object InfraRed Camera and Spectrograph

### ★ Kyoto-3DII

Kyoto Tridimensional Spectrograph II

# Status of Data Request



5,000-20,000 frames (~100-300GB) are requested in a month.  
Now 185 user is registered (as of Jan 2007).

## Products of SMOKA

- Total 26 papers using SMOKA have been published in major journals (ApJ, AJ, PASP, PASJ, MNRAS) .
  - 3 papers in 2003 (SupCam 3)
  - 5 papers in 2004 (SupCam 5)
  - 6 papers in 2005 (SupCam 5, CIAO 1)
  - 9 papers in 2006 (SupCam 7, HDS 1, IRCS 1)
  - 3 papers in 2007 (SupCam 1, CIAO 1, 2kCCD 1)
- SMOKA data is used for educational purposes.

PAOFITS-WG (<http://paofits.dc.nao.ac.jp>) has developed some teaching materials for high school students.

# Future Plans of SMOKA

- Release data of new telescopes /instruments  
    MITSuME, ISLE, FMOS,...
- Making original catalogs of objects :  
    We are planning to release the original catalog of objects in deep fields  
    and will proceed astronomical studies.
- Data supply to Virtual Observatory (VO) :  
    SMOKA is expected to be the major resource of Subaru Telescope and  
    other optical-IR telescopes in Japan for VO.
- Development of data quality assessment system, *NAQATA* :

# Data Quality Assessment System, *NAQATA*

*NAQATA* is a data quality assessment system for observed data obtained by the Subaru Telescope.

- Verification of FITS Data
- Evaluation of Data Quality

Final goal:

To construct a quality control system

=> Real time feedback of data quality operation.

=> Such a feedback system gives us materials to consider the observation strategy (target, integral time, etc.).

**SMOKA** uses some components of *NAQATA* so that data quality indices are available for archival search.

=> SUP Search