MAISON

(Multi-wavelength Astronomical Image Service ON-line)

Masaru Watanabe

(Japan Science and Technology Corporation / Institute of Space and Astronautical Science)

Kentaro Aoki

(Japan Science and Technology Corporation / National Astronomical Observatory of Japan)

Akira Miura

(Institute of Space and Astronautical Sciecne)

Center for Planning and Information Systems

Institute of Space and Astronautical Science

Astronomical Data Analysis Center

National Astronomical Observatory of Japan

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渡辺 大

(科学技術振興事業団)

青木賢太郎

(科学技術振興事業団)

三浦 昭

(宇宙科学研究所)

宇宙科学企画情報解析センター

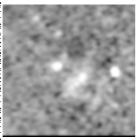
宇宙科学研究所

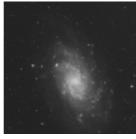
天文学データ解析計算センター

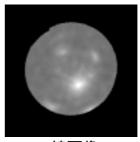
国立天文台



天体の対応付けは?



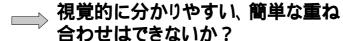




電波画像

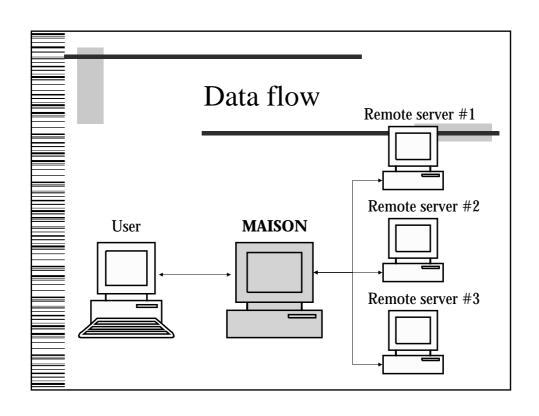
可視光画像

X線画像



MAISONの目的

- ◆ Web agent between user and separate remote archive servers (ASCA, HST, Subaru, ...)
- Viewer for multiple images/cataloged objects
 - ⇒ To be serving like *SkyView* and *Aladin* but for pointing observation archives



Condition of accessible remote servers

- Serving archived files via http protocol (Making URL and QUERY_STRING open on the web)
- Serving image files in the FITS format with WCS information in the header
- Supporting the Astronomical Servers URL (ASU) syntax is highly preferable

Implemented remote servers

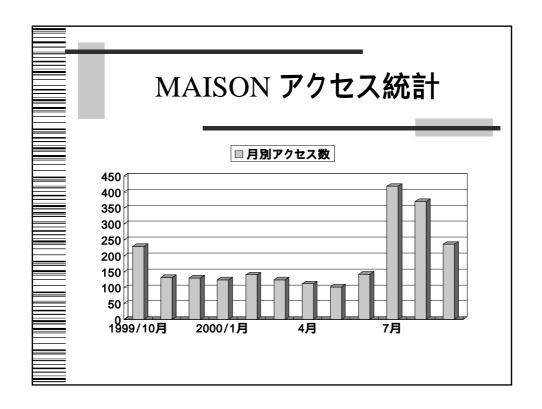
- ◆ DARTS (ISAS)
 - ASCA (Rev.2)
- Survey image server (NAOJ)
 - Digitized Sky Survey 1, 2 (*B*, *R*)
 - IRAS Sky Survey Atlas (12, 25, 60, 100 µ m)
 - Green Bank Sky Map (1.4GHz, 4.85GHz)
 - FIRST Survey (20cm continuum)
 (No catalog servers implemented yet)

Development of MAISON

- ◆ The 1st version : Started in Apr. 1999, opened in Oct. 1999.
- A heterogeneous program
 - User interface (CGI-bin) Perl (from DARTS)
 - Image processing C (cfitsio), Fortran

(fitsio), IRAF

■ Image display Pgplot, Java



Plan for New MAISON

- ◆ Making the best use of Java
 - Reinforcement of the image viewer
 - Flexible image handling
 - Increasing the number of overlaid images
 - Improvement of system extensibility
- Implementing catalog server (*VizieR*)
 for overlaying cataloged objects
 (ASU syntax available)

ASU (Astronomical Server URL)

- A proposal on a URL syntax for astronomical information exchange among remote astronomical services with the http protocol
- E.g., http://maison.isas.ac.jp/cgi-bin/maison?
 - -source=GSC,TYCHO &

-c.ra=0:41:0 & -c.dec=+41:30:10

-c.eq=J2000 & -c.bd=3.5/5 &

-mime=fits & -out.max=100

MAISONの開発

◆ 1st version: 開発開始 Apr. 1999,

公開 Oct. 1999.

◆ 開発言語

■ User interface (CGI-bin) Perl (from DARTS)

■ Image processing C (cfitsio), Fortran

(fitsio), IRAF

&

■ Image display Pgplot, Java

New MAISONの開発

- ◆ Java言語の使用
 - Image viewerの強化
 - ユーザによるインタラクティブ操作
 - ●重ね合わせ画像数の拡大
- ◆ カタログサーバの取り込み (VizieR) (ASU syntax available)