



ESO
European Organisation
for Astronomical
Research in the
Southern Hemisphere

Facility Identifiers - How they are (or aren't) used

Christopher Erdmann & Uta Grothkopf
European Southern Observatory Library





Background

- ESO Library tracks papers that use data from ESO facilities and compiles this further into statistics that can be used to gauge our productivity and effectiveness within the astronomy community



The Problem

- What is the problem?
 - Tracking papers that use facilities is troublesome
- Why is this happening?
 - Varying degrees of facility information provided
- Why is this a problem?
 - More time spent tracking and tagging papers



Acknowledgement Example

The GOODS Web site²² provides further details of the project and access to the GOODS data. Support for the **GOODS *HST*** Treasury Program was provided by NASA through grants HST-GO09425.01-A and HST-GO-09583.01. Additional support for this work, which is also part of the *SIRTF* Legacy Science Program, was provided by NASA through contract 1224666 issued by the Jet Propulsion Laboratory, California Institute of Technology, under NASA contract 1407. P. M. acknowledges support from NASA through grant NAG5-11513.

Footnote Example

* Based on observations collected at the **La Silla Parana Observatory**, ESO (Chile) with the **UVES** spectrograph at the 8.2-m Kueyen telescope, under programs 079.C-0131 and 66.D-0457.

¹ For a recent general review of the properties of the known exoplanets see [Udry & Santos \(2007\)](#).

First Steps Toward a Solution

- Common facility list (AAS)



Facility Keywords Sorted by Location

Space:
[- select facility -]

Airborne:
[- select facility -]

Africa and Canary Islands:
[- select facility -]

Antarctica:
[- select facility -]

Asia:
[- select facility -]

Australia:
[- select facility -]

Europe:
[- select facility -]

North America and Hawaii:
[- select facility -]

South America:
[- select facility -]

Earth:
[- select facility -]

Cut-and-paste the facility keyword list generated here into your AASTeX document. To clear the text frame, click the "Erase Text Area" button.

Click here for examples: [HST Facility example](#) [Long facilities example](#)

AAS Find Facility by Location Tool

Cut-and-paste the facility keyword list generated here into your AASTeX document. To clear the text frame, click the "Erase Text Area" button.

```
{\it Facilities:} \facility{HST {}}, \facility{VLT:Antu {}}
```

Erase Text Area

Click here for examples: [HST Facility example](#) [Long facilities example](#)

First Steps Toward a Solution

- Common facility list (AAS)
- Facilities/Programs section in papers

Facilities Example

Facilities: *HST* (ACS), Magellan:Baade (IMACS), *XMM*, VLA, MMT (Hectospec).

2. DATA AND SAMPLE

COSMOS (Scoville et al. 2007a), a *Hubble Space Telescope* Treasury project, includes coverage of a 2 deg^2 field from X-ray wavelengths to UV, optical, IR, and radio. The cornerstone data set, which we use for the bulk of our analysis, consists of 583 orbits taken with Hubble's Advanced Camera for Surveys (ACS) with the F814W filter (see Koekemoer et al. 2007 for a complete description). Ancillary observations include *XMM-Newton* X-ray imaging (Hasinger et al. 2007), VLA radio maps (Schinnerer et al. 2007), and VLT/VIMOS (Lilly et al. 2007) and Magellan/IMACS optical spectroscopy (Trump et al. 2007, 2008, in preparation).

Our sample selection focuses on AGN candidates in the COSMOS field with spectroscopic redshifts. An object is identified as an AGN candidate through detection as an X-ray point source above the $\sim 10^{-15} \text{ erg cm}^{-2} \text{ s}^{-1}$ flux limit in the 0.5–2 keV or 2–10 keV flux bands (Cappelluti et al. 2007; Brusa et al. 2007), or a radio source above the 0.1 mJy flux limit at 1.4 GHz (Schinnerer et al. 2007). Optical counterparts to these candidates with $I_{AB} < 24$ are identified in the Magellan/IMACS spectroscopic survey, whose selection of



AAS_{TeX} Facilities Example

From the AAS sample.tex

```
{\it Facilities:} \facility{Nickel}, \facility{HST (STIS)}, \facility{CXO (ASIS)}.
```

Even better...

```
{\it Facilities:} \facility{VLT: (UVES)}
```

```
{\it Programs:} \program{ESO (079.C-0131)}, \program{ESO (66.D-0457)}
```

<http://ucpjournals.uchicago.edu/AAS/AAS_{TeX}/samples.html>

Retrieval

[Sign on](#)

[SAO/NASA ADS](#) Astronomy Query Form for Thu Jul 23 14:59:41 2009

[Sitemap](#) [What's New](#) [Feedback](#) [Basic Search](#) [Preferences](#) [FAQ](#) [HELP](#)

Request: If you know of a published article or Ph. D. Thesis that is not in the ADS, please submit it through our [form](#).

Databases to query: ☒ [Astronomy](#) ☐ [Physics](#) ☒ [arXiv e-prints](#)

Authors: (Last, First M, one per line) ☒ [SIMBAD](#) ☒ [NED](#) ☒ [ADS Objects](#)

☐ [Exact name matching](#) ☐ [Object name/position search](#)

☐ Require author for selection ☐ Require object for selection

(☐ OR ☐ AND ☐ [simple logic](#)) (Combine with: ☐ OR ☐ AND)

Publication Date between (MM) (YYYY) (MM) (YYYY)

Enter [Title Words](#) ☐ Require ☐ [simple logic](#)

Enter [Abstract Words/Keywords](#) ☐ Require ☐ [simple logic](#)

Return items starting with n

[Full Text Search](#): Search OCRd text of

[mvADS](#): Personalized notification

[Private Library](#) and [Recently read articles](#)

Facilities/Programs cannot be searched easily via the ADS at the moment...

... so other methods must be used (i.e. ESO Library FUSE – full text search tool)

fuse
fulltext search

Search

» [Insert](#)
» [Queue](#)

Admin

» [Journals](#)
» [Displays](#)
» [Stop Words](#)
» [Keywords](#)
» [Searches](#)
» [Help](#)

Last Resort

» [Insert](#)
» [Manual](#)

Current Query

User: Uta
Query Date: 2009-07-09 14:09:36
Journals Searched: A&A, +A&ARV, +AJ, +ApJ, +ApJS, +ARA&A, +EM&P, +Icar, +MNRAS, +Natur, +NewA, +NewAR, +PASP, +Sci
Query Link: http://esoads.eso.org/cgi-bin/nph-abs_connect?db_k...
Dates Searched: 2009-04-17 ~ 2009-04-24
Notes: telbib 17/4/09 - before 24/4/09 (171 records)
Records Searched: 4
Keywords found: 104

[View Search Log](#)

| | [Fulltext Search](#) |

ID#	Status	Search	Record/Keyword(s)	LookInside	Online	Delete	Debug
6023		Not Included	2009Icar...201..172L Laver, Connor The global distribution of sulfur dioxide ice on Io, observed with OSIRIS on the W.M. Keck telescope Icarus, Volume 201, Issue 1, p. 172-181. "kurucz.harvard.edu/stars. 2 Ref. http://www.eso.org/sci/facilities/paranal/instruments/isaac/to " "uch as the Integral Field Spectrometers <i>SINFONI</i> at the VLT, and OSIRIS at the W.M. Keck Observa" "on spectrum of the Sun published on the <i>ISAAC</i> website,2 and then convolved it to the OSIRIS spe" "gral Field Spectrometers <i>SINFONI</i> at the VLT, and OSIRIS at the W.M. Keck Observatory. These ins"	6023.txt	PDF/HTML	<input type="checkbox"/>	debug
6002		Not Included	2009NewA...14..521H Helminiak, Krzysztof G. Impact of the atmospheric refraction on the precise astrometry with adaptive optics in infrared New Astronomy, Volume 14, Issue 6, p. 521-527. "0 las was already achieved with the 8-m VLT (Neuhauser et al., 2006) and 200-in Hale teles" "zin from ESO for the information on the VLT observatory weather station, and an anon- ymous ref" "n Telescope or the Euro- pean Extremely Large Telescope , equipped	6002.txt	PDF/HTML	<input type="checkbox"/>	debug

Looking Forward

- Establish a **more complete facility list**
- **Motivate publishers** to include facilities/programs sections
- **Encourage authors** to use facilities/programs sections
- Modify **institutional policies**
- Request the ADS to **index** these sections and **add search**
- Spark interest among **proposal committees** to convince authors