

Edinburgh Activities

- Science Ready Archives
- Virtual Observatory
- Key Projects
- Current Interests

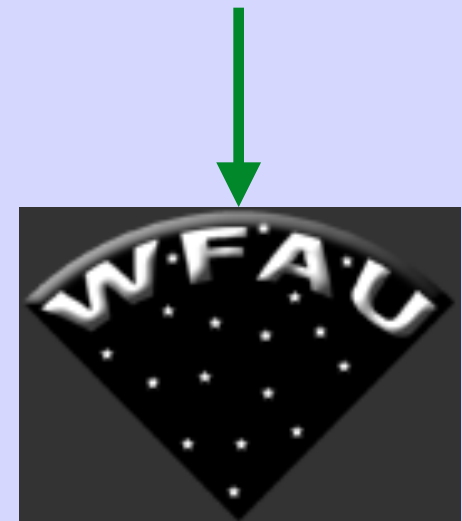
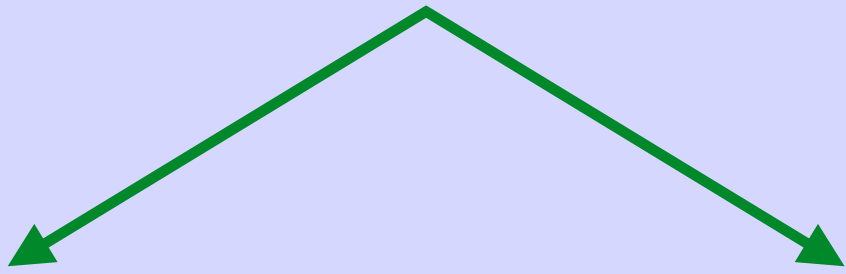
ASTERICS WP3 Tech Forum

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Science Ready Archives

- Large queryable databases
- Images, catalogues, spectra
- Beginners and power-users



The screenshot shows the WFCAM Science Archive website. The top navigation bar includes links for Home, Overview, Browser, Access, Login, Cookbook, and nonSurvey, along with the WSA logo. The user is logged in as 'User and Lawrence' with the email 'Community.roe.ac.uk'. The main heading is 'WSA - SQL Query menu form'. Below this, a note states: 'This forms allows you to submit an SQL query to the WSA database (notes and tips)'. A text area contains an SQL statement:

```
select
sourceID,ra,dec,ylperMag3,s_l1perMag3,h1perMag3,k1perMag3,VAPERMAG3
- J_1APERMAG3
from ukideadr1plus..1aeSource
where ra > 355.0 and
ra < 355.0 and
dec > 0.00 and
dec < 0.00 and
ylperMag3 < 17 and
VAPERMAG3 - J_1APERMAG3 < -0.2
```

 At the bottom, there is an 'Email Address:' field and a note: 'the results of long running queries will be sent by email'.

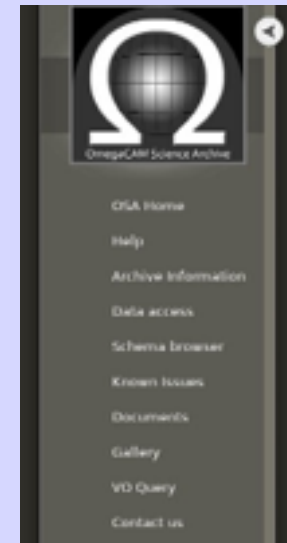
*Millions of queries run
Billions of rows extracted*

Primary archives:

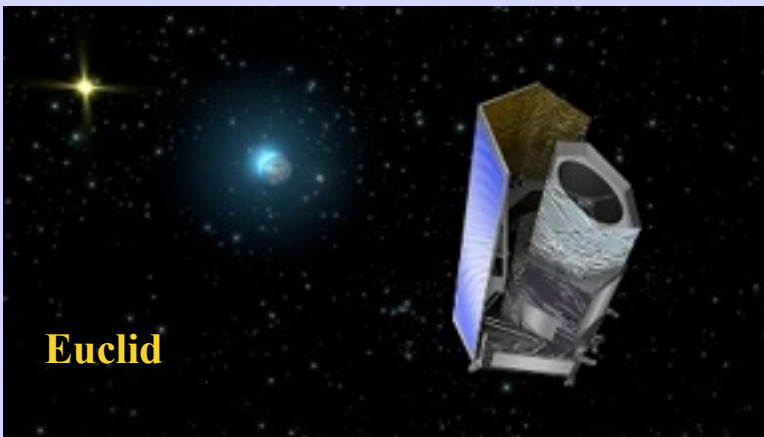
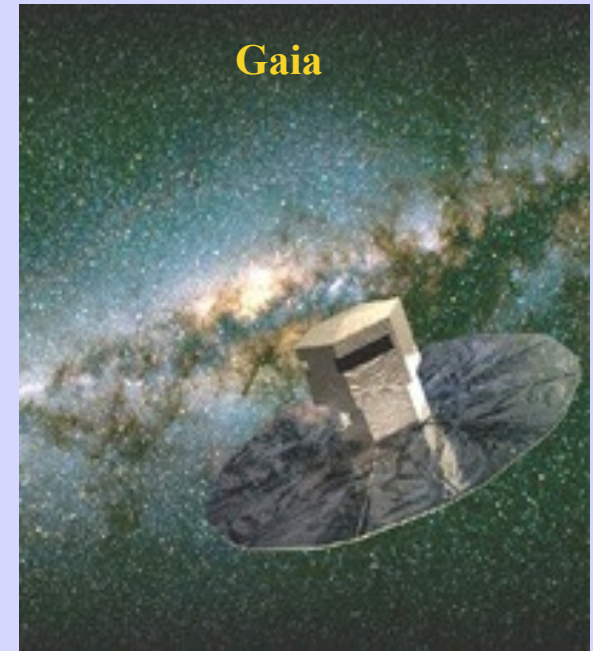
SuperCOSMOS, WFCAM, VISTA, OmegaCam

Secondary x-matched archives: many, including SDSS, 2MASS, NVSS, XMM, IRAS etc

- integration with VO with archives
- lead Institution for AstroGrid
- key IVOA interests:
Exec/policy, Registry, DAL, VOSpace
- core partner in Euro-VO
esp. Tech Forum and IVOA input
- Astrotrop: technology sharing with
tropical forest community



Key projects



Current interests

- Faster queries with column-oriented DBMS
- User interfaces for time domain astronomy
- Better VO integration / flexible interface
- Distributed querying and cross-match
- Cloud data services (MyDB etc)
- Executing user code

Crossmatch in the cloud

