VOGCLUSTERS
A web application for globular clusters

Marco Castellani, Massimo Brescia, Ettore Mancini, Luca Pellecchia, Giuseppe Longo

VO Publish, Trieste 27-29 February 2012
Hand in hand with the progress of astronomical instruments, the amount of data and parameters for the galactic globular clusters becomes larger and larger.

Problems:

- Fragmentation of data
- Heterogeneity of archives
A uniform archive is **required** by the scientific community

*W.E. Harris, A Catalog of Parameters for Globular Clusters in the Milky Way*

Our project

- VOGCLUSTERS is intended as a web application for Data and Text Mining focused on globular clusters research. It should provide the scientific community a modern tool for the standardized collection of data archives related to astronomical observations with modern instruments (from Earth and from sky), for data navigation and exploration.

- The whole application (being part of DAME) has been built upon the GRID infrastructure of S.Co.P.E. (Sistema Cooperativo per Esperimenti scientifici ad alte prestazioni) project. It consists of a computational grid “structure oriented”, realized and managed from the collaboration between Università Federico II and INFN section of Naples.
Inside Vogclusters

layers structure
**VOGCACCESS**: the back-end level of the application. It belongs to the Data Access Layer;  
**VOGERROR**: error handling  
**DATATYPE**: it contains all info about type of data used by the application  
**SERVER**: it collects and handle the requests by the users and elaborate data received from the database  
**VOGCFINAL**: it is the part that interacts with the user. It contains all the classes concerning the GUI (Presentation Layer)
VOGCLUSTERS (alpha release)
Web Application for Globular Clusters Research

This page is the entry point to the VOGCLUSTERS Web Application (alpha release) specialized for data and text mining on globular clusters. It is a toolset of DAME Program to manage and explore GC data in various formats. In this page the users can obtain news, documentation and technical support about the web application.

Release Notes

⚠️ Release currently available:

- The alpha 2 release available [here](http://dame.dsf.unina.it/vogclusters.html). This is the last version, running on a stable platform, deployed at the end of November 2011.
- The alpha 1 release available [here](http://dame.dsf.unina.it/vogclusters.html). This was the first official deployed version.
- The current releases are the first version of the web application, made available to a selected testing team, in order to evaluate first basic features and tools. If you are interested to become a tester for this resource, please contact the project board.

The goal of the project VOGCLUSTERS is the design and development of a web application specialized in the data and text mining activities for astronomical archives related to globular clusters. Main services are employed for the simple and quick navigation in the archives (uniformed under VO standards and constraints) and their manipulation to correlate and integrate internal scientific information. The project has not to be intended as a straightforward website for the globular clusters, but as a web application. A website usually refers to the front-end interface through which the public interact with your information online. Websites are typically informational in nature with a limited amount of advanced functionality. Simple websites consist primarily of static content where the data displayed is the same for every visitor and content changes are infrequent. More advanced websites may have management and interactive content. A web
VOGLUSTERS, the entrance...
Showing results after a query...
Database(s)... 

* The set of data is composed by the union of information coming from different archives that are on the web

* Data must be represented in VO complaint format.

* Data are informations related to globular clusters (magnitude, position, metallicity, distance, luminosity, tidal radius, variability, color-magnitude diagrams, sky maps, bibliographic items, etc...)

lunedì 5 marzo 12
DAME

*DAME (DAta Mining & Exploration)* is an innovative, general purpose, Web-based, distributed data mining infrastructure specialized in *Massive Data Sets exploration* with machine learning methods.

Initially fine tuned to deal with astronomical data only, DAME has evolved in a general purpose platform program, hosting a *cloud of applications and services* useful also in other domains of human endeavor.

DAME is an evolving platform and new services as well as additional features are continuously added. The modular architecture of DAME can also be exploited to build applications (such as VOGCLUSTERS), finely tuned to specific needs.
S.Co.P.E.

S.Co.P.E. (Università degli Studi di Napoli Federico II).

* general purpose supercomputing *

* GRID & distributed environment *
VOGCLUSTERS vs. VO

- Evolution toward a *full integration* with VO archives
- Make research *into* VO from VOGCLUSTERS
- *Ingest* VO data into VOGCLUSTERS
To make *real research*

taking advantage of a whole GRID

(and eventually of a whole cat...)

Photo by V. Belmont, http://www.flickr.com/photos/earlysound/4490601295/
Links...

- http://dame.dsf.unina.it/vogclusters.html
- http://www.facebook.com/gclusters

Marco Castellani
INAF - Rome Astronomical Observatory
http://mcastel.weebly.com
http://www.researchgate.net/profile/Marco_Castellani/