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Database activity in the Italian Astronet: DIRA 2.

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The development and utilization of informational archives and databases started, in the Italian Astronet Project, in the middle of 1983. In that year a small group of astronomers and some more technical people met together in an Astronet working group, with a common, painful experience in managing astronomical catalogues and archives with computers.

Nowadays, some years later, some software packages and the contents of both, a relative general database and several local databases represent the work and the effort of the group. The systems have been conceived and developed keeping in mind the original goal of the Group: to allow the single astronomer to make a free use of original data.

The main package: DIRA was rewritten, after some years of use, to fully take advantage of the several suggestions of the astronomers that used it and gathered experiences in the astronomical catalogues management.

A more technical goal was to install the whole system, born and developed in the vms environment, on unix and unix-like systems.

This new version, DIRA2 has a new user interface, a query language with SQL style commands supporting numerical and character functions also and a set of commands to create new catalogues from existing data. The graphics commands are also more powerful with respect to the previous version.

DIRA (and DIRA2 of course) philosophy and design are very simple and proved to be very appreciated by astronomers, namely, to normalize and homogenize, at minimum, astronomical catalogues, to collect satisfactory astronomical documentation on their contents and, finally, to allow an astronomical approach to the dialogue with the database.

DIRA2 is currently used in most Italian astronomical institutes to retrieve data from a still growing database of about 140 well documented and controlled astronomical catalogues, for the identification of objects, for the preparation of "medium size" survey, in astrometry and in the creation of new catalogues.