

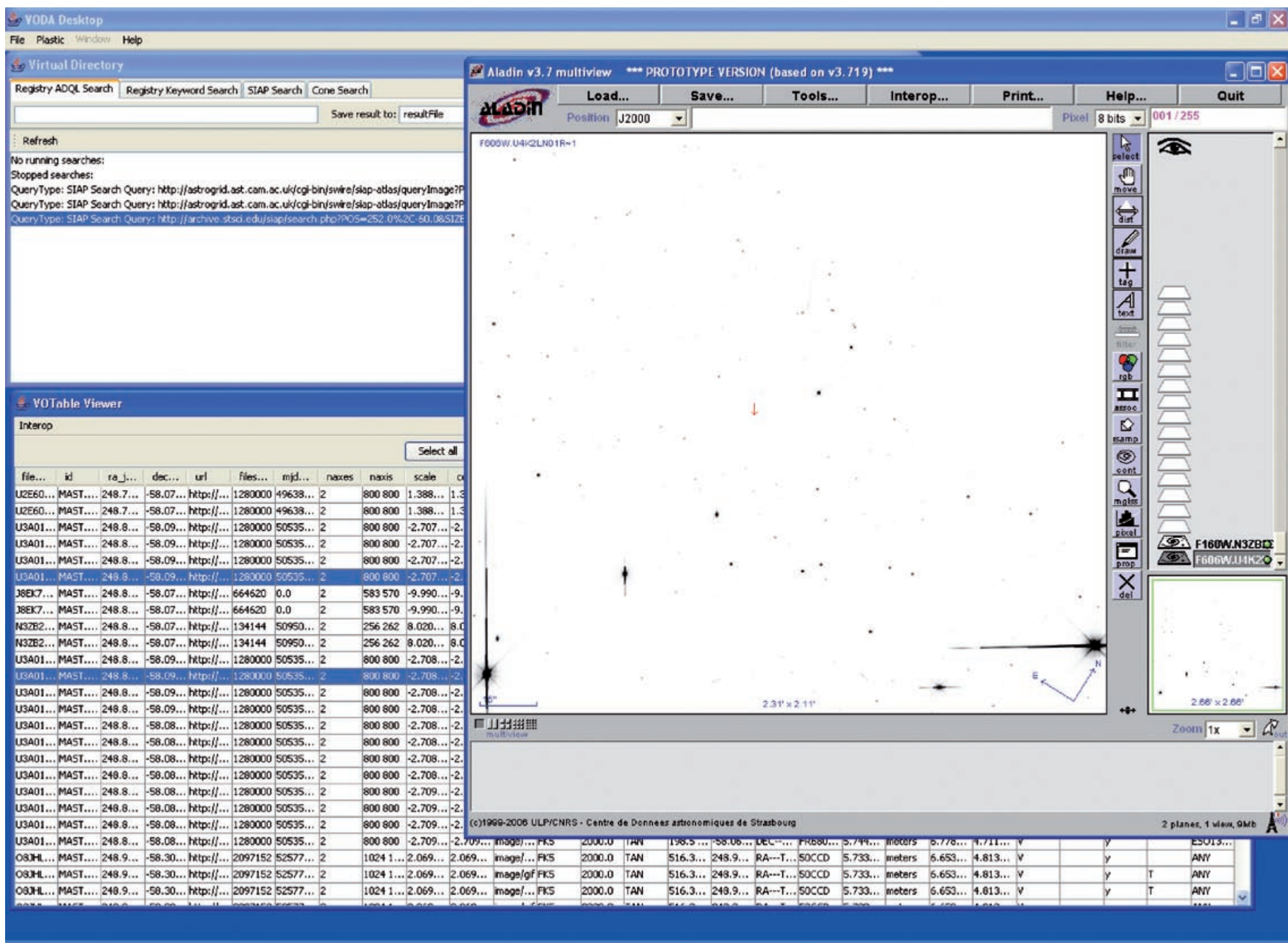
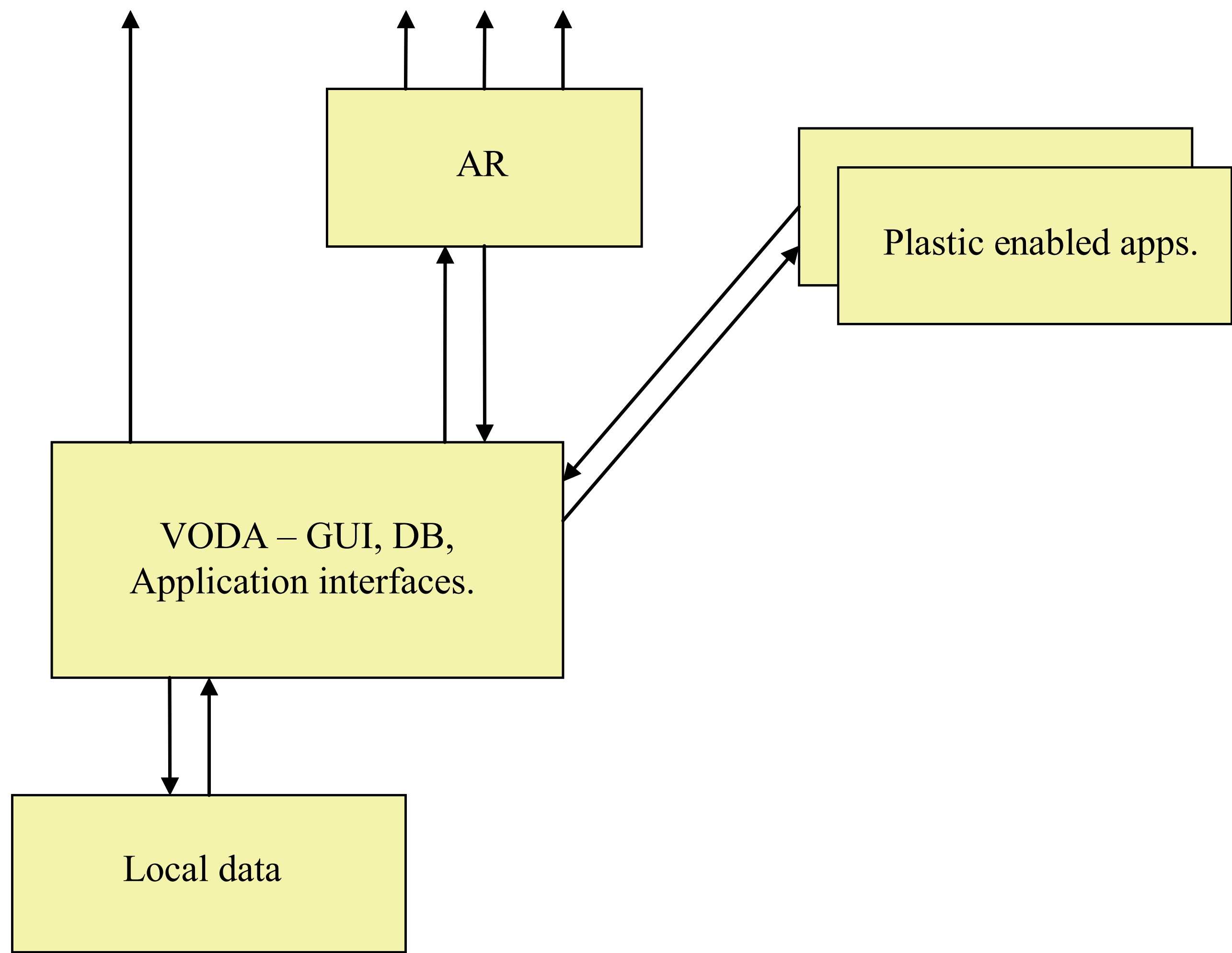
VODA – A SAMPO PROJECT

INTRODUCTION

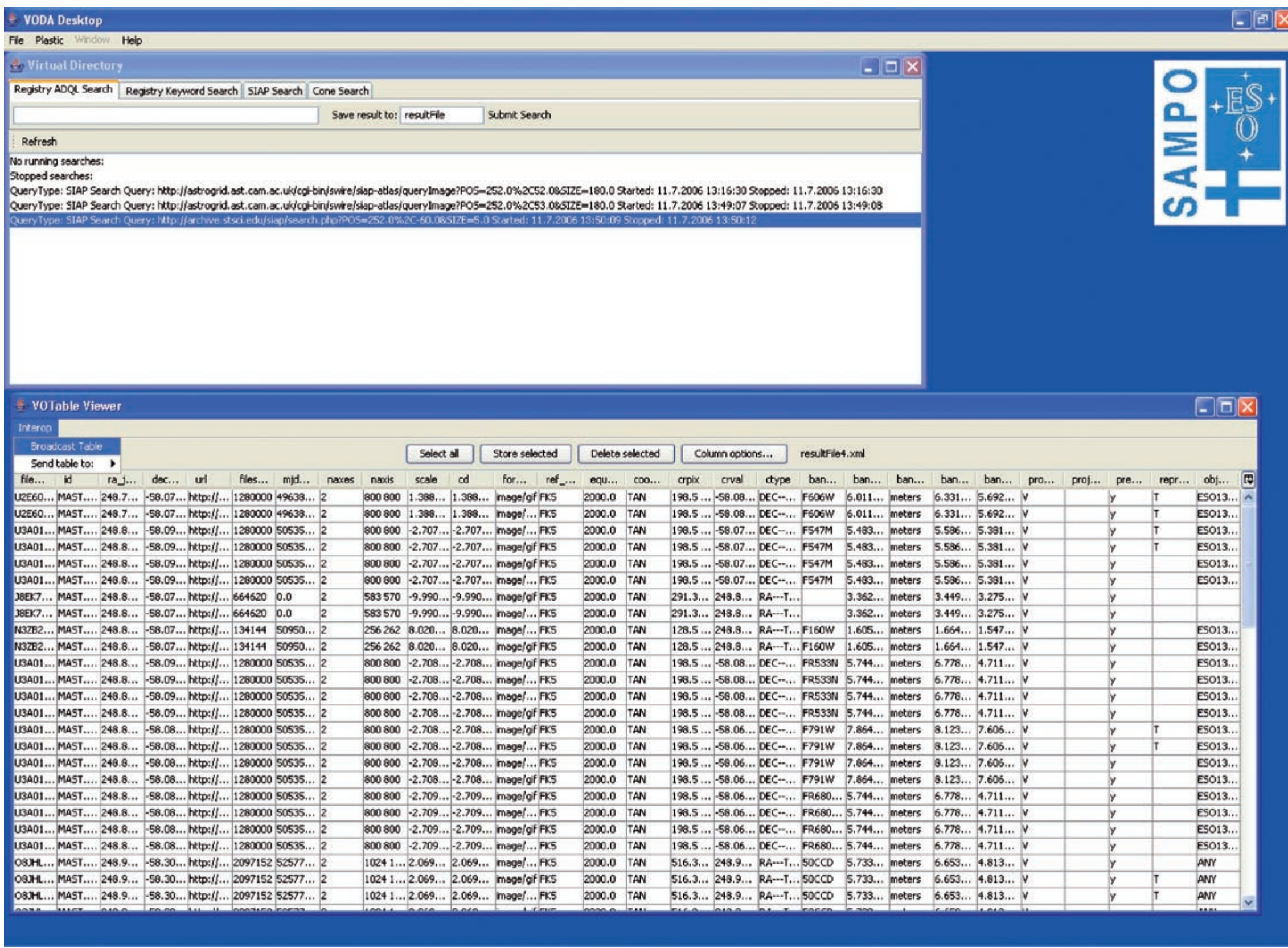
Sampo is a collaborative project between Finland and ESO to investigate future data processing requirements and technologies in astronomy, and to perform pilot studies. A sub-project of Sampo has been investigating the Virtual Observatory, and specifically the relationship between remote Virtual Observatory (VO) resources and local data analysis applications. VODA is an experiment to establish a personal, persistent local “Virtual Directory” of Virtual Observatory data resources and to link this with visualization tools and the Virtual Observatory itself, mainly using the Astro Runtime (AR) and PLASTIC.

HIGH-LEVEL ARCHITECTURE

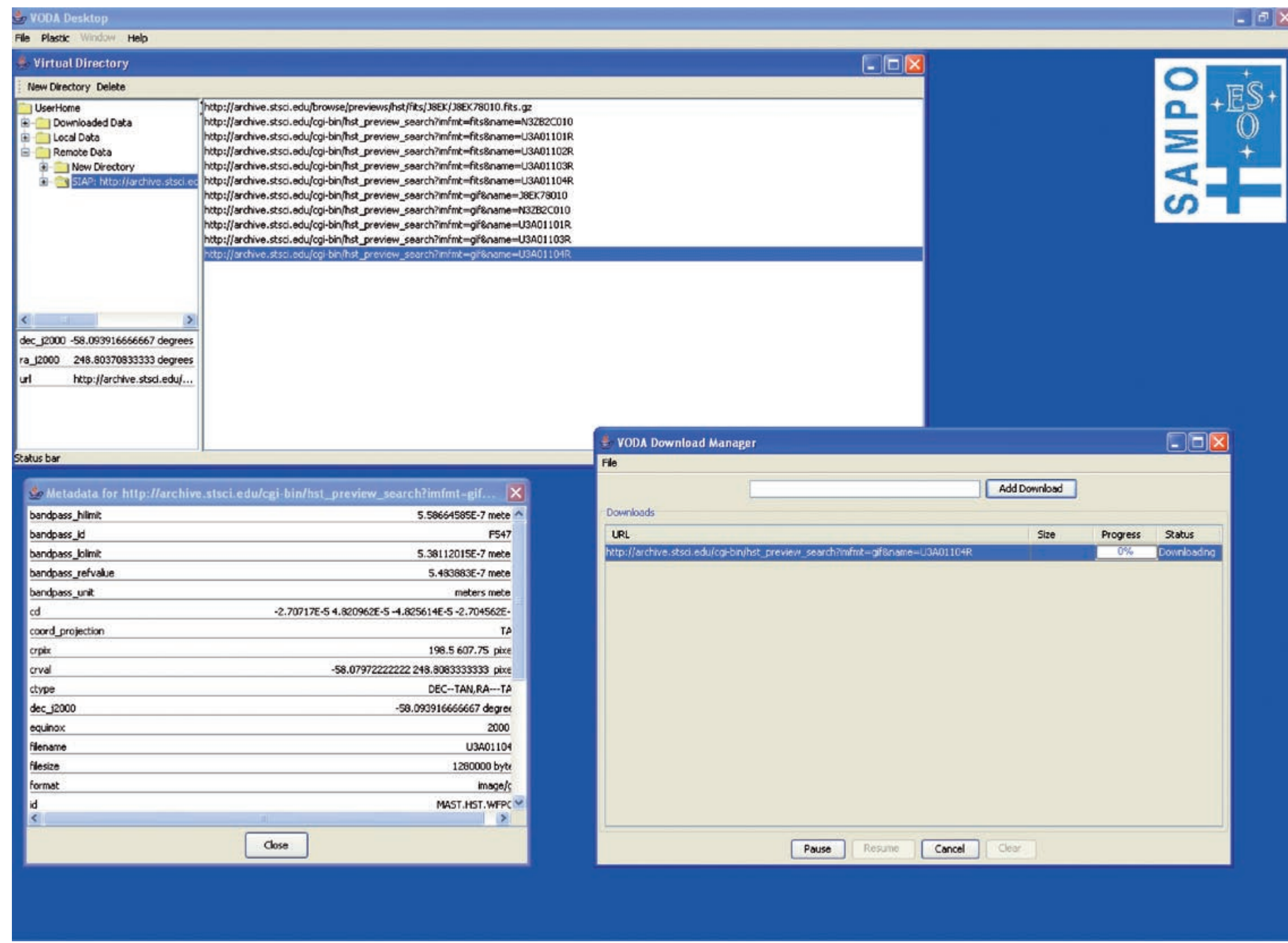
A high-level description of the VODA system.



From VODA it is possible to load remote images into Aladin.



Viewing query results and other VOTable based data is possible.



VODA has an internal download manager handling all necessary downloads for visualization and analysis.

VIRTUAL DIRECTORY

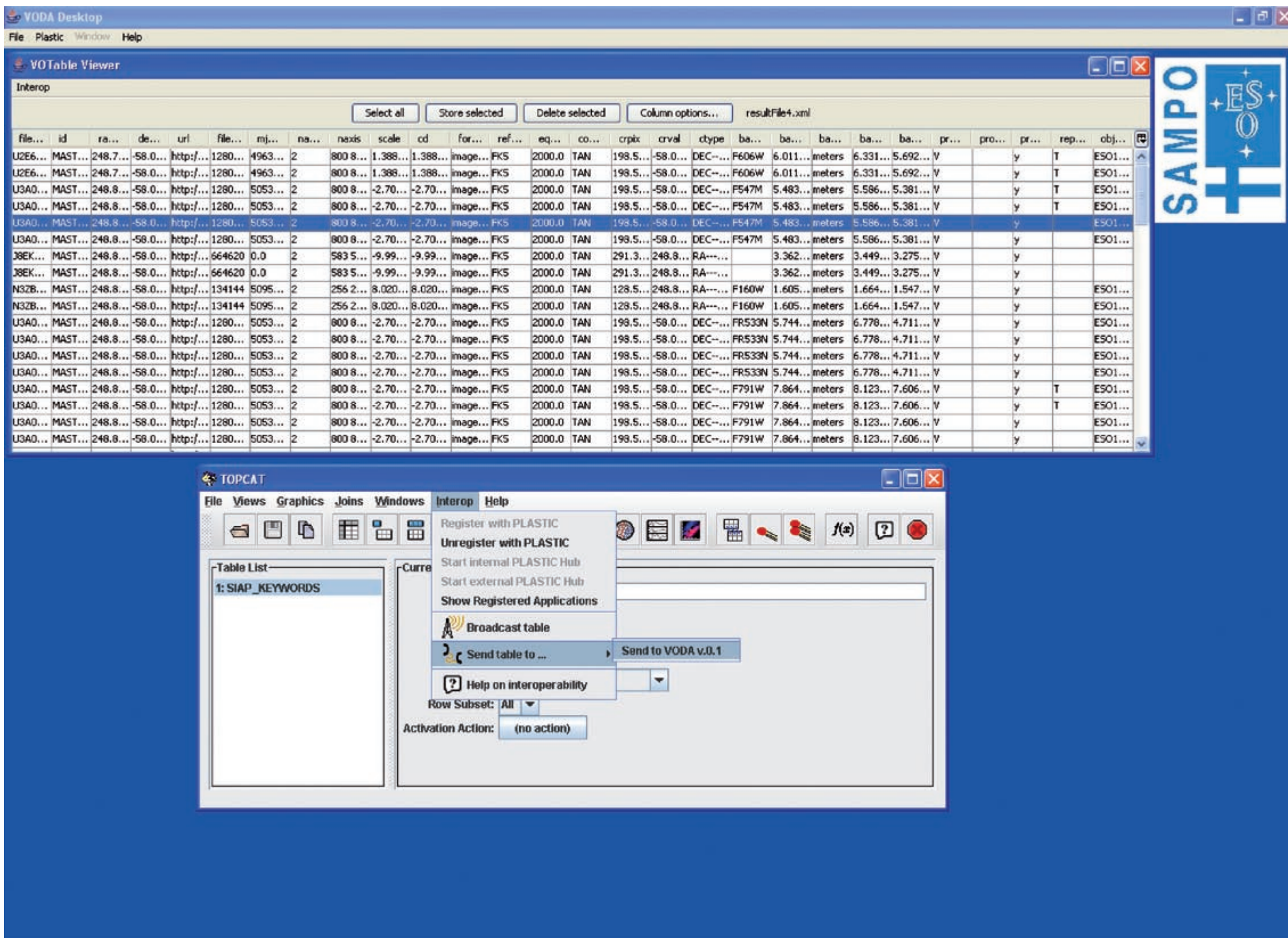
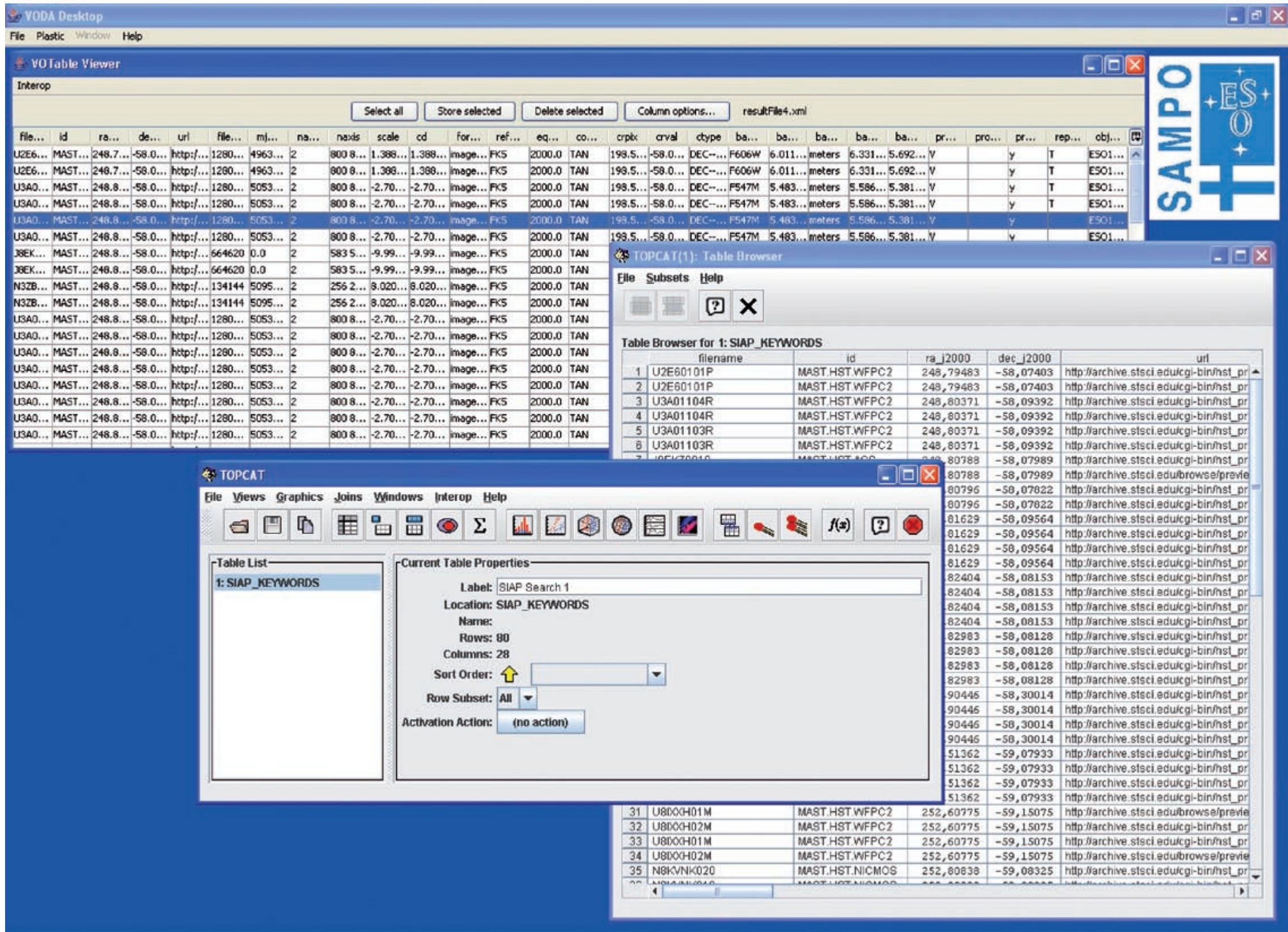
The Virtual Directory is a local, persistent and private “view” of the Virtual Observatory resources. It stores references to remote and local data and metadata from query results. The user can manage this view dynamically and organize the references according to his requirements. All the data references can be visualized in several ways (Aladin, TOPCAT, DS9, etc.) this is made possible with the use of PLASTIC. User may add new resources to his “library” from new queries or from external sources. The Virtual Directory can be managed and accessed through an application interface.

DATA DISCOVERY FUNCTIONALITY

VODA uses the Astrogrid Astro Runtime (AR) for access to VO resources through standard IVOA protocols (Registry, SIAP, SSAP, Cone, etc.). Results can be stored in the Virtual Directory, visualized directly by local tools, downloaded, or passed to PLASTIC-aware applications. The Virtual Directory can be updated with search results from any search tool that is PLASTIC-aware and produces a VOTable.

DATA DOWNLOAD

References in the Virtual Directory can be downloaded to a local disk when required. A possible additional feature could be to allow access to VOSpace resources, making it possible to store and control data within the VOSpace. To view metadata a full download is not necessary. VODA automatically handles all required downloads for external tools that require local data (e.g., DS9).



Through PLASTIC one can send VOTables from VODA to Topcat or the other way around.

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