An OSF/Motif-based graphical user interface has been developed to facilitate the use of the database and data analysis software packages available from the High Energy Astrophysics Science Archive Research Center (HEASARC). It can also be used as an interface to other, similar, routines. A small number of tables are constructed to specify the possible commands and command parameters for a given set of analysis routines. These tables can be modified by a designer to affect the appearance of the interface screens. They can also be dynamically changed in response to parameter adjustments made while the underlying program is running. Additionally, a communication protocol has been designed so that the interface can operate locally or across a network. It is intended that this software be able to run on a variety of workstations and X terminals.