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CORONAL DIAGNOSTIC SPECTROMETER

**SoHO**

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CDS SOFTWARE NOTE No. 24

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Version 1.0

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## THE CDS TECHNICAL PLANNING SOFTWARE

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## 1 Introduction

The CDS instrument has many operating modes. The technical planning software is provided as a tool to help setup the instrument in the correct way to achieve the desired observational result.

A basic CDS observation is defined in terms of the parameters of a RASTER. This defines parameters like the detector to be used, the slit size, the integration time and the number of exposures and their location.

The setup of the CDS can be achieved through use of the program `mk_raster`. Rasters may be defined by this program *ab initio* or they be recalled from existing databases and tailored to some other use.

Any raster designed with `mk_raster` can be entered into a database, this is intended for ‘permanent’ storage, stored in an IDL save file for future recall, or passed into the IDL environment via a structure variable.

## 2 Starting `mk_raster`

`Mk_raster` takes one optional parameter. If this is defined on input it must be a structure variable of the form used by `mk_raster`. Its contents on exit will reflect the raster designed during the running of the program.

`Mk_raster` can take up to three keywords. The only one applicable to normal use is the `FONT` keyword which sets the font used in the widgets to something other than the internal default. It may be necessary to use this when using certain types of screen in order to size the widgets to fit within the screen boundaries.

## 3 On-line HELP

It is important to note that, in addition to the normal help script available within the program, `mk_raster` can also be set into an ‘ON-LINE HELP’ mode. In this mode the normal operation of the widgets is suspended and help is provided on any particular aspect of the display when that item is selected. To enter this mode, choose the first item under the help menu.